

Pantheon Report

Generated at 2018-01-02 02:35:31 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

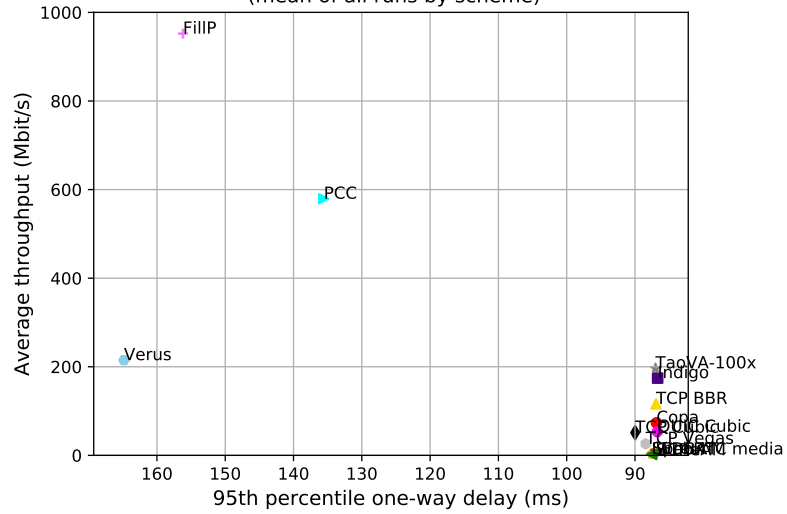
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

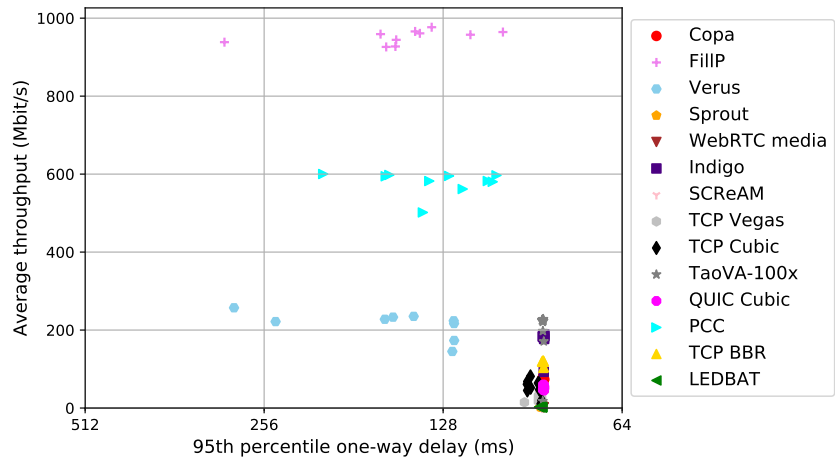
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeab30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	9	116.19	86.92	0.78
TCP Cubic	10	51.19	89.98	1.37
LEDBAT	10	2.29	87.58	1.32
PCC	10	579.30	135.57	1.76
QUIC Cubic	9	53.21	86.73	0.88
SCReAM	10	0.22	86.89	0.53
WebRTC media	10	2.13	86.94	0.73
Sprout	10	3.29	87.49	1.96
TaoVA-100x	10	196.46	87.00	0.78
TCP Vegas	10	26.00	88.43	1.57
Verus	9	214.88	164.84	2.50
Copa	9	73.36	86.86	0.46
FillP	10	952.12	156.19	1.70
Indigo	10	174.44	86.68	0.75

Run 1: Statistics of TCP BBR

Start at: 2018-01-01 21:35:47

End at: 2018-01-01 21:36:17

Below is generated by plot.py at 2018-01-02 01:41:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.57 Mbit/s

95th percentile per-packet one-way delay: 87.293 ms

Loss rate: 0.62%

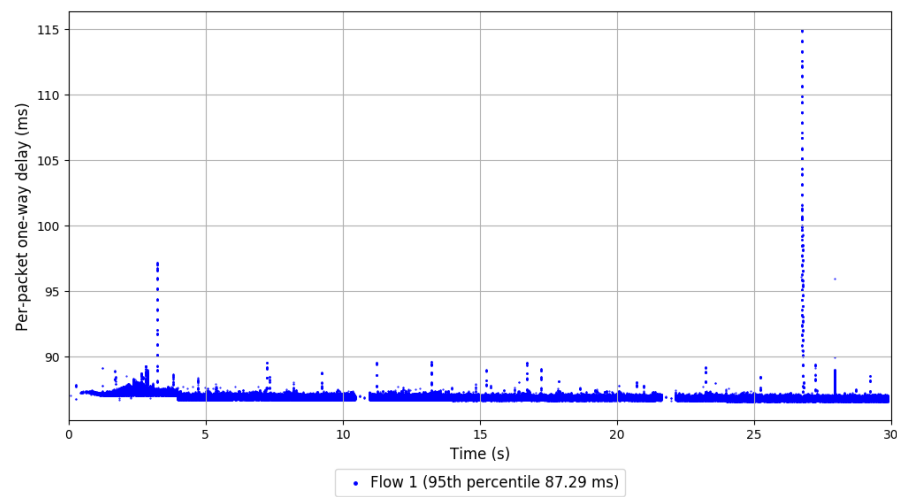
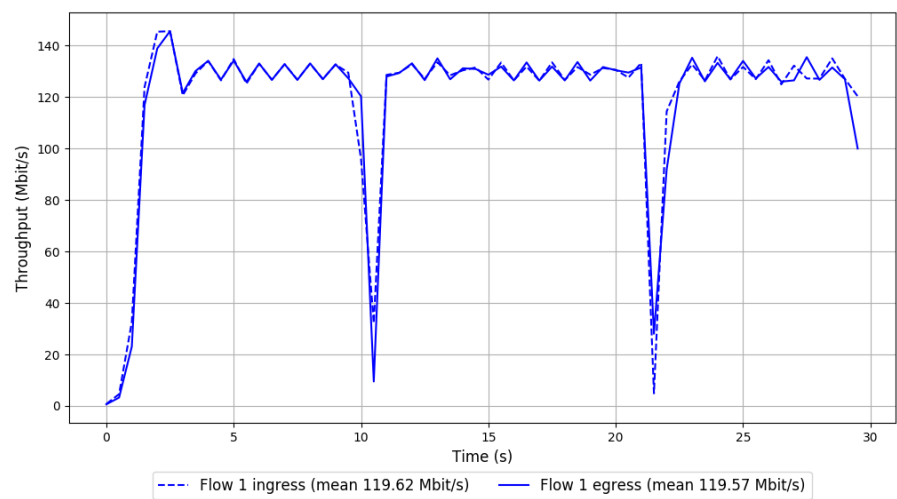
-- Flow 1:

Average throughput: 119.57 Mbit/s

95th percentile per-packet one-way delay: 87.293 ms

Loss rate: 0.62%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-01 21:47:50

End at: 2018-01-01 21:48:20

Below is generated by plot.py at 2018-01-02 01:41:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.51 Mbit/s

95th percentile per-packet one-way delay: 87.131 ms

Loss rate: 0.80%

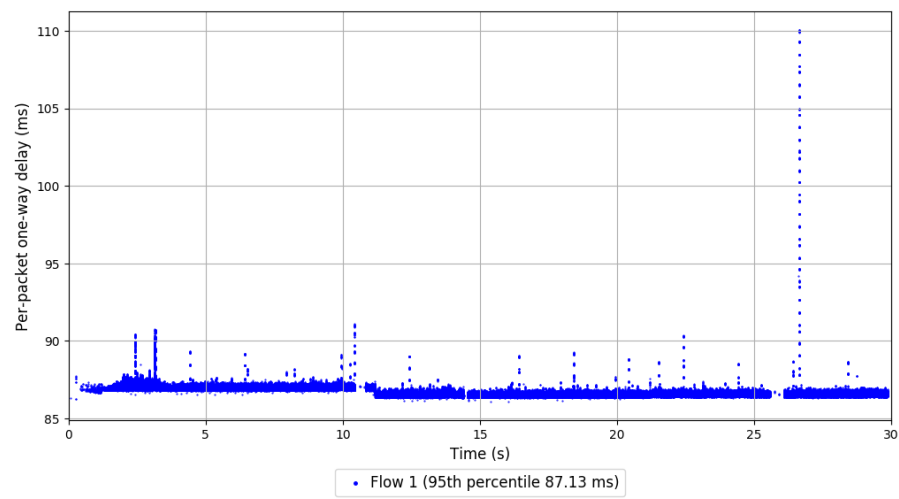
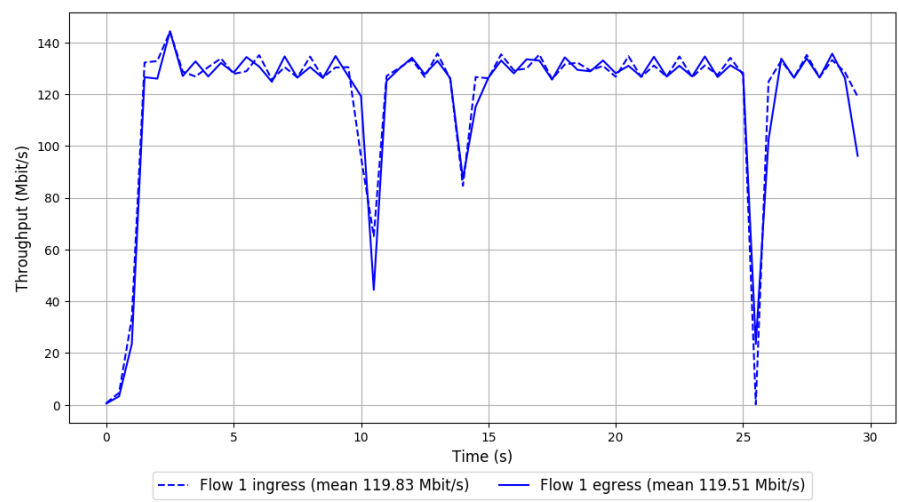
-- Flow 1:

Average throughput: 119.51 Mbit/s

95th percentile per-packet one-way delay: 87.131 ms

Loss rate: 0.80%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-01 22:00:04

End at: 2018-01-01 22:00:34

Below is generated by plot.py at 2018-01-02 01:41:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 118.30 Mbit/s

95th percentile per-packet one-way delay: 87.108 ms

Loss rate: 1.00%

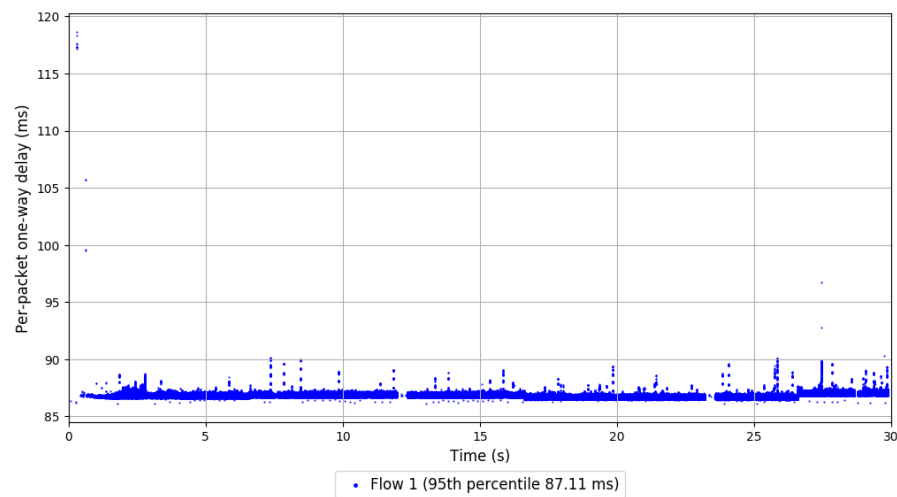
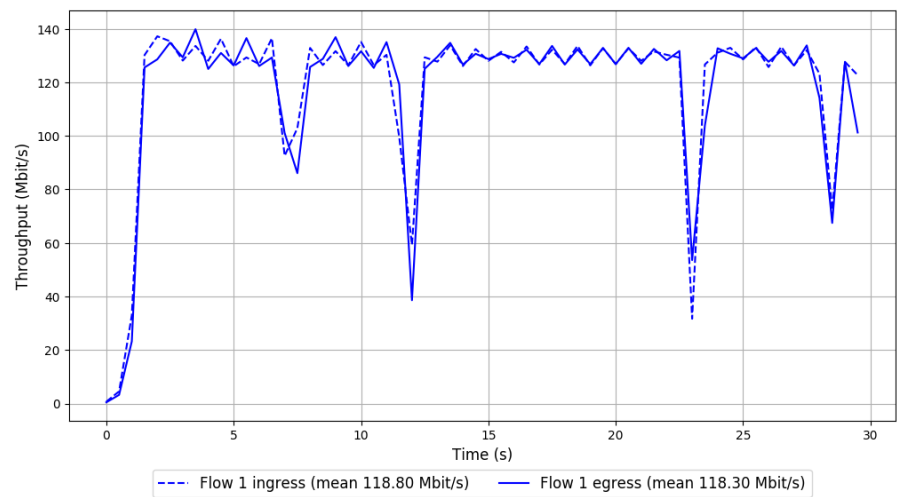
-- Flow 1:

Average throughput: 118.30 Mbit/s

95th percentile per-packet one-way delay: 87.108 ms

Loss rate: 1.00%

Run 3: Report of TCP BBR — Data Link

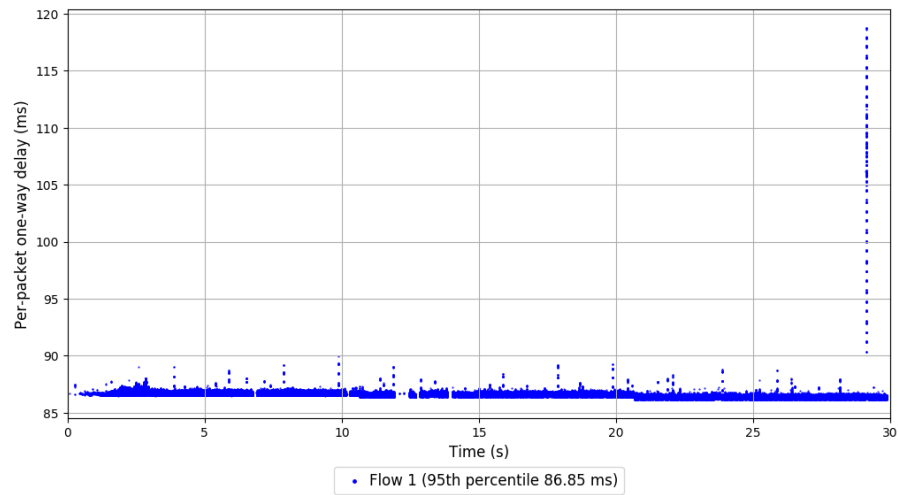
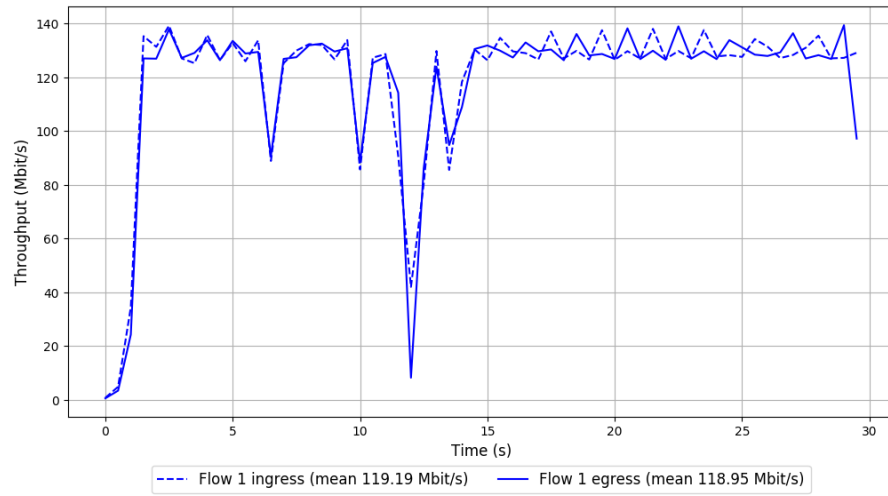


```
Run 4: Statistics of TCP BBR

Start at: 2018-01-01 22:12:20
End at: 2018-01-01 22:12:50

# Below is generated by plot.py at 2018-01-02 01:41:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 118.95 Mbit/s
95th percentile per-packet one-way delay: 86.847 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 118.95 Mbit/s
95th percentile per-packet one-way delay: 86.847 ms
Loss rate: 0.81%
```

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-01 22:24:18

End at: 2018-01-01 22:24:48

Below is generated by plot.py at 2018-01-02 01:41:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.06 Mbit/s

95th percentile per-packet one-way delay: 86.670 ms

Loss rate: 0.58%

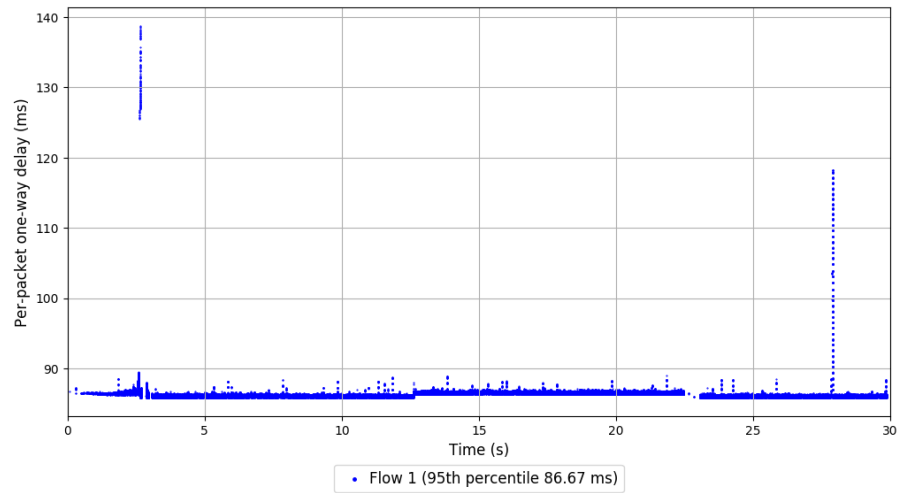
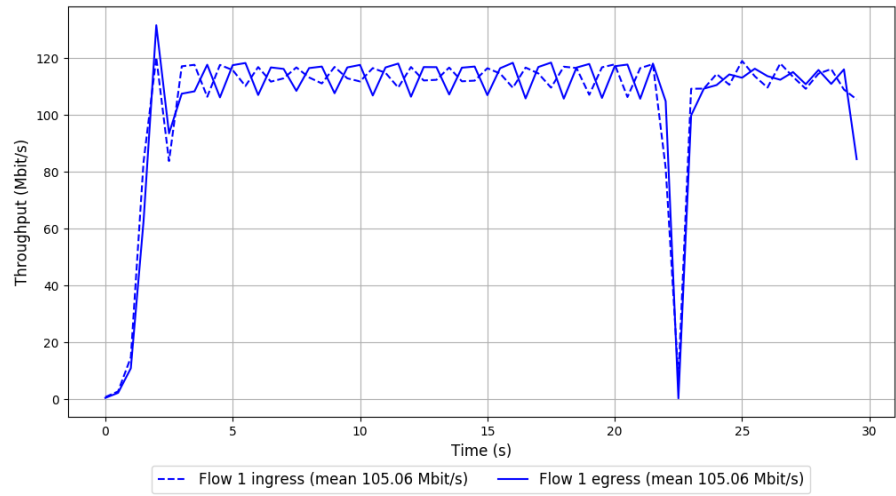
-- Flow 1:

Average throughput: 105.06 Mbit/s

95th percentile per-packet one-way delay: 86.670 ms

Loss rate: 0.58%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-01 22:36:41

End at: 2018-01-01 22:37:12

Below is generated by plot.py at 2018-01-02 01:41:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.96 Mbit/s

95th percentile per-packet one-way delay: 86.834 ms

Loss rate: 0.83%

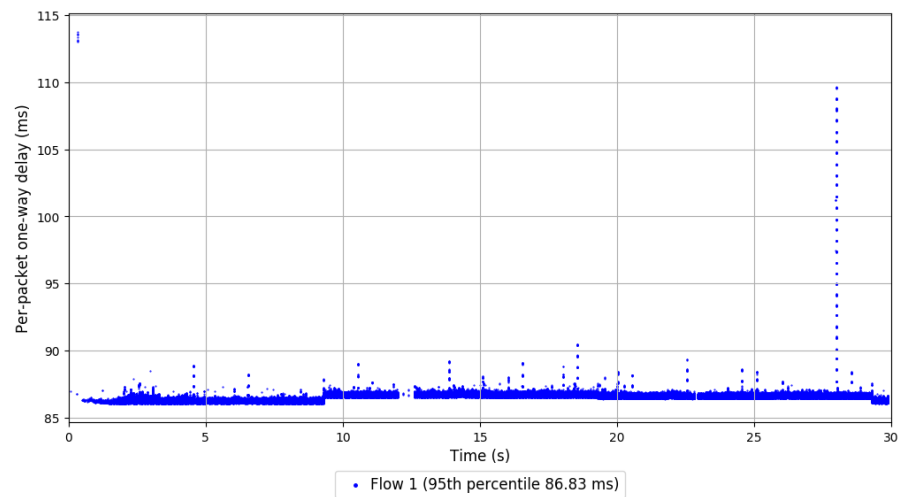
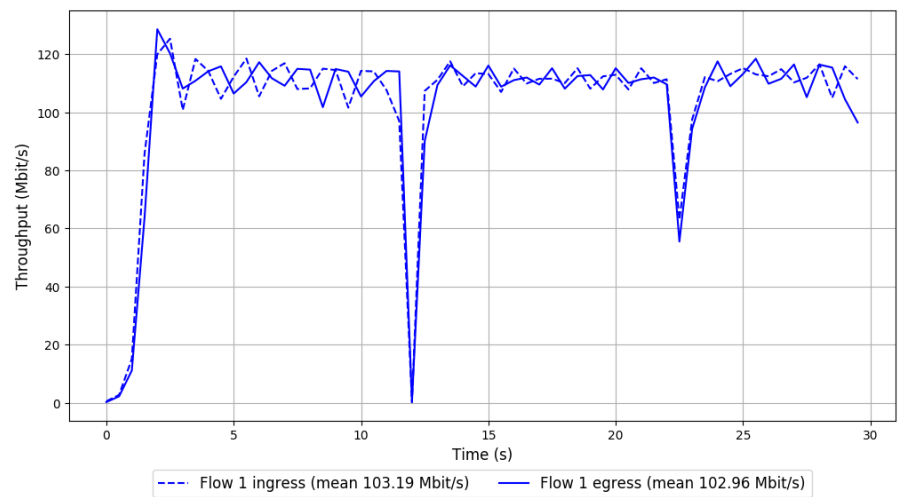
-- Flow 1:

Average throughput: 102.96 Mbit/s

95th percentile per-packet one-way delay: 86.834 ms

Loss rate: 0.83%

Run 6: Report of TCP BBR — Data Link

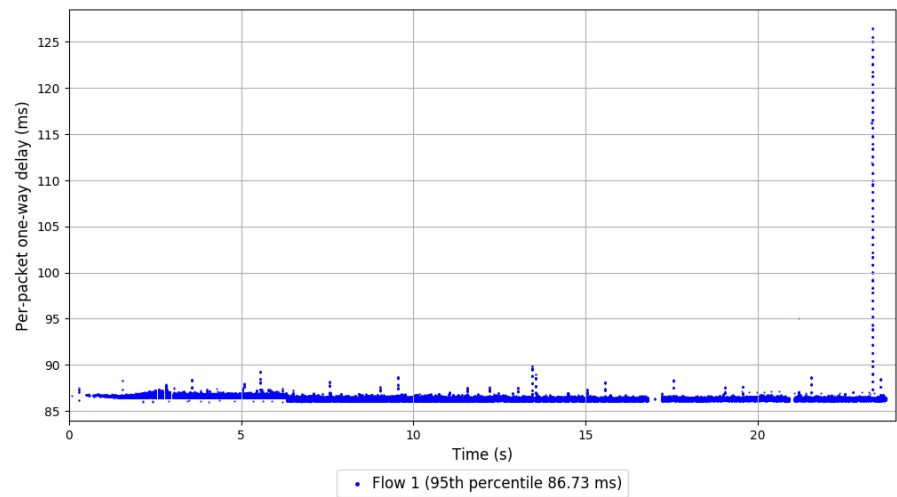
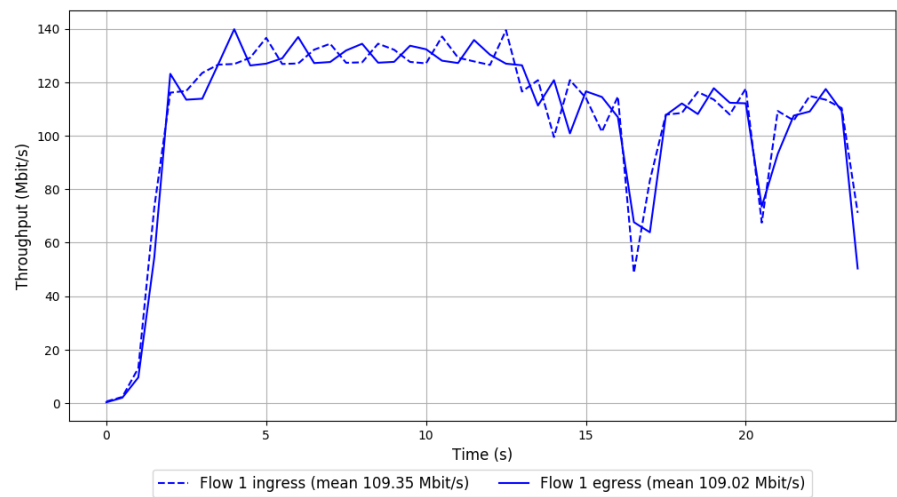


Run 7: Statistics of TCP BBR

Start at: 2018-01-01 22:48:58

End at: 2018-01-01 22:49:28

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

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

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

Below is generated by plot.py at 2018-01-02 01:41:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.75 Mbit/s

95th percentile per-packet one-way delay: 86.752 ms

Loss rate: 0.78%

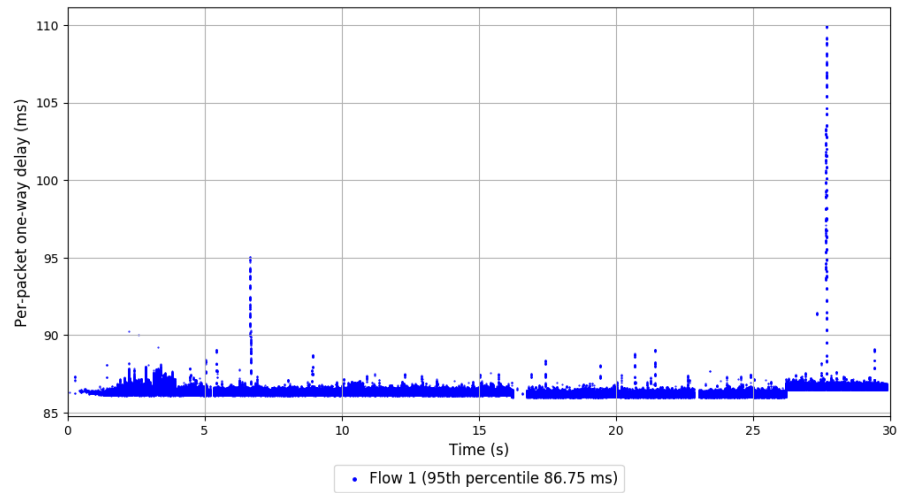
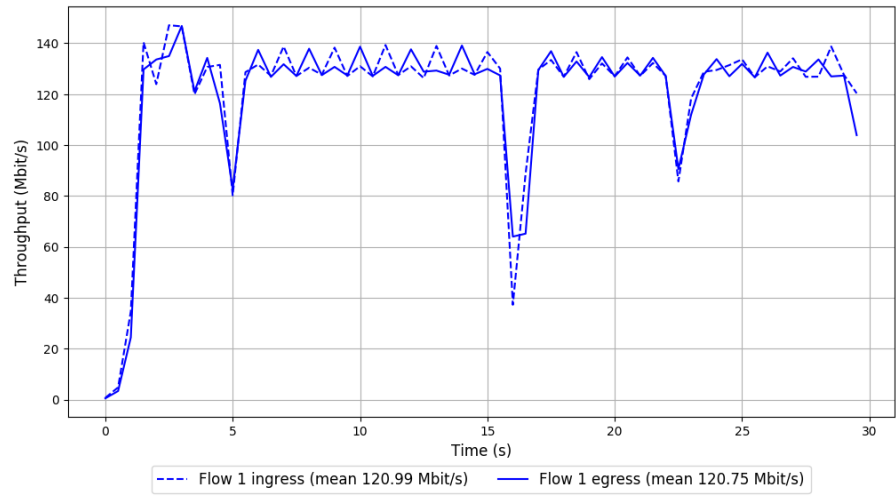
-- Flow 1:

Average throughput: 120.75 Mbit/s

95th percentile per-packet one-way delay: 86.752 ms

Loss rate: 0.78%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-01 23:13:30

End at: 2018-01-01 23:14:00

Below is generated by plot.py at 2018-01-02 01:42:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 118.42 Mbit/s

95th percentile per-packet one-way delay: 86.756 ms

Loss rate: 1.02%

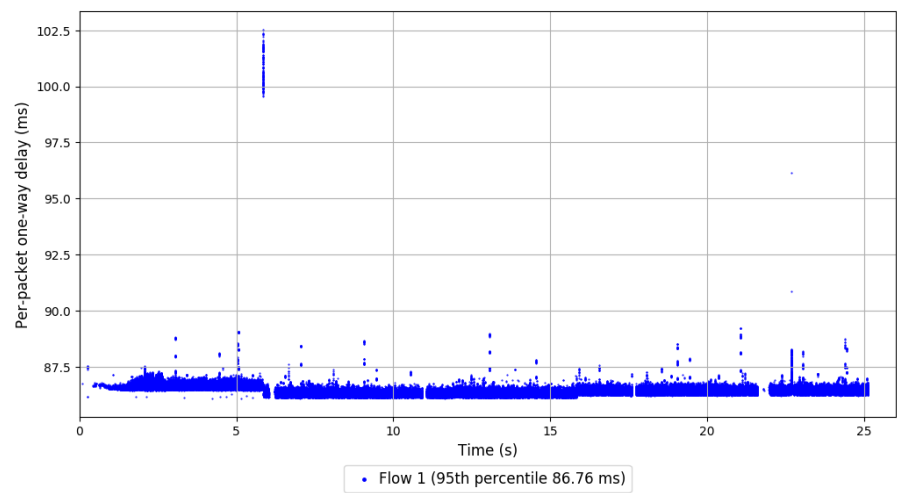
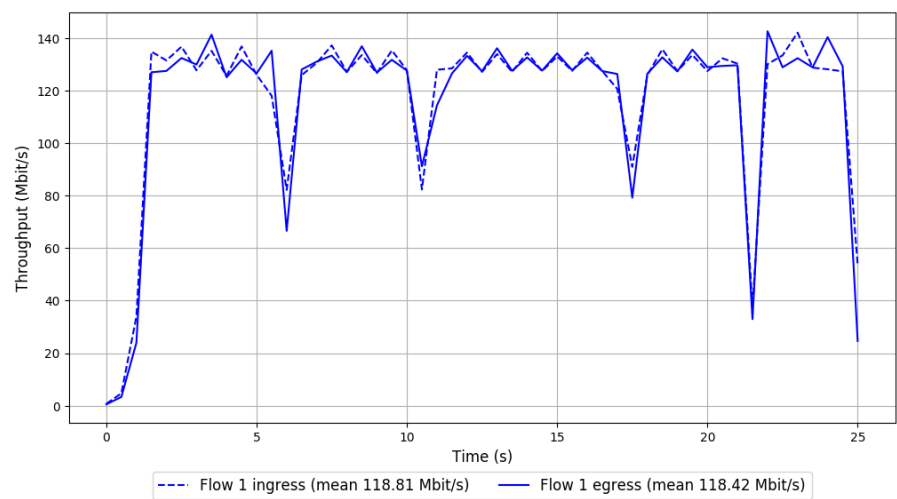
-- Flow 1:

Average throughput: 118.42 Mbit/s

95th percentile per-packet one-way delay: 86.756 ms

Loss rate: 1.02%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-01 23:25:49

End at: 2018-01-01 23:26:19

Below is generated by plot.py at 2018-01-02 01:43:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.18 Mbit/s

95th percentile per-packet one-way delay: 86.933 ms

Loss rate: 0.59%

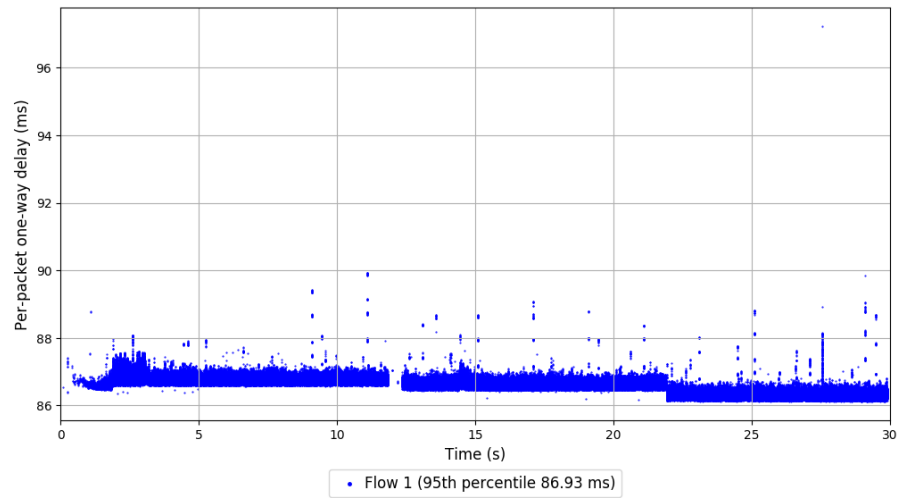
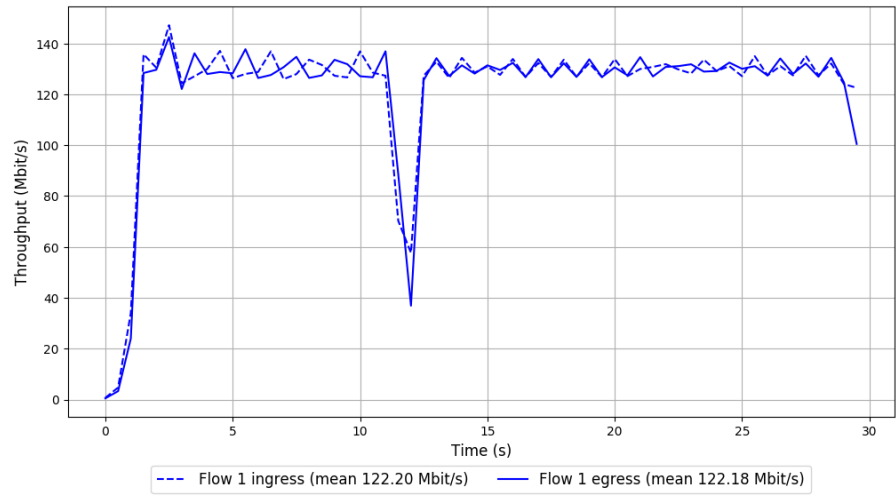
-- Flow 1:

Average throughput: 122.18 Mbit/s

95th percentile per-packet one-way delay: 86.933 ms

Loss rate: 0.59%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-01 21:45:26

End at: 2018-01-01 21:45:56

Below is generated by plot.py at 2018-01-02 01:43:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.06 Mbit/s

95th percentile per-packet one-way delay: 92.372 ms

Loss rate: 1.56%

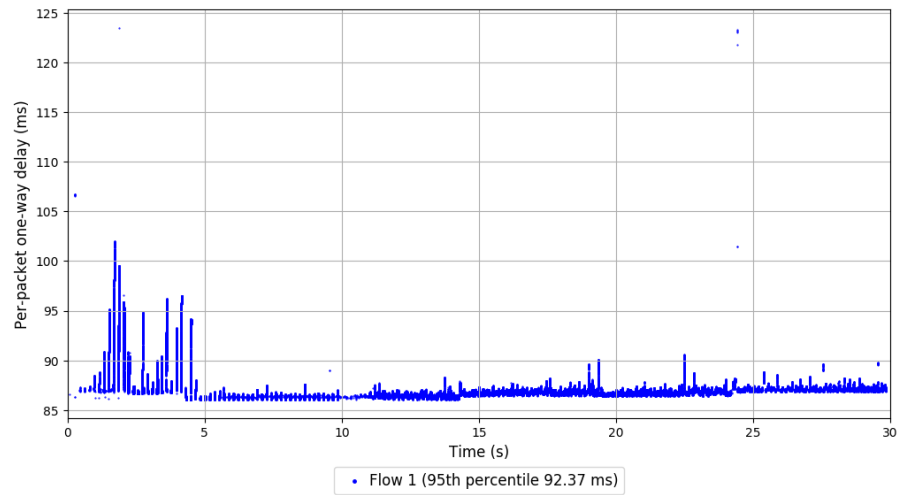
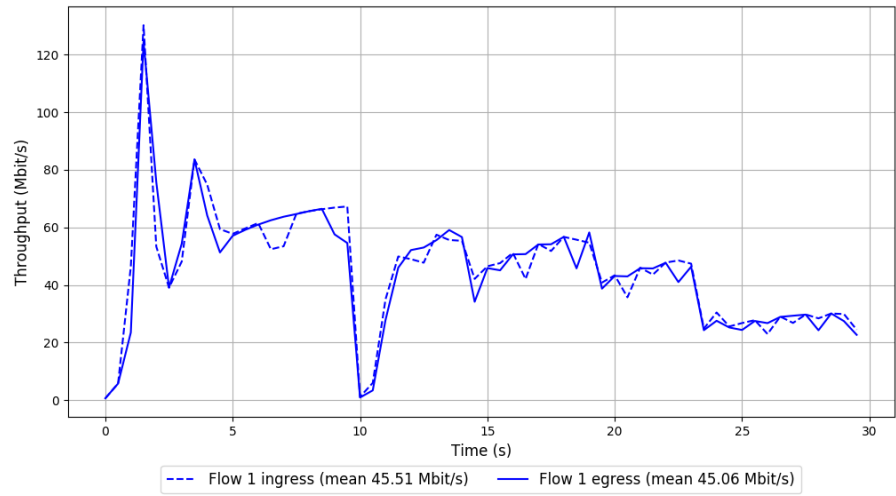
-- Flow 1:

Average throughput: 45.06 Mbit/s

95th percentile per-packet one-way delay: 92.372 ms

Loss rate: 1.56%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-01 21:57:44

End at: 2018-01-01 21:58:14

Below is generated by plot.py at 2018-01-02 01:43:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.77 Mbit/s

95th percentile per-packet one-way delay: 87.416 ms

Loss rate: 1.19%

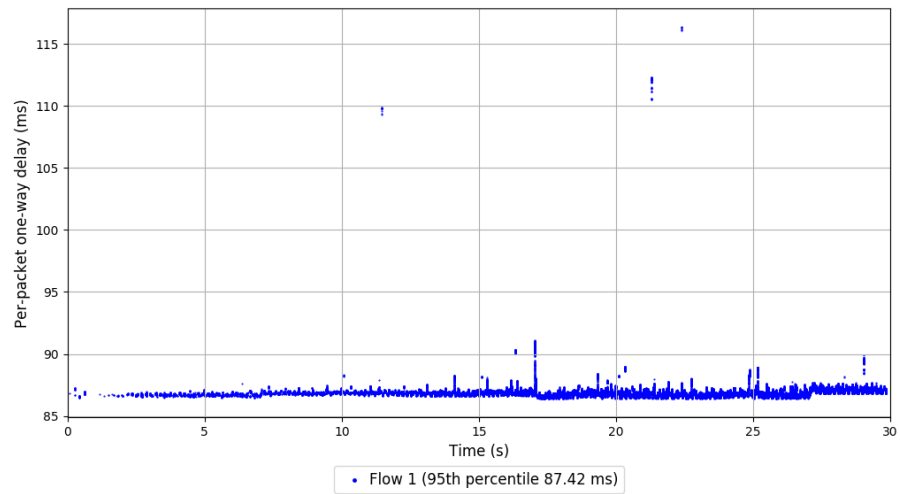
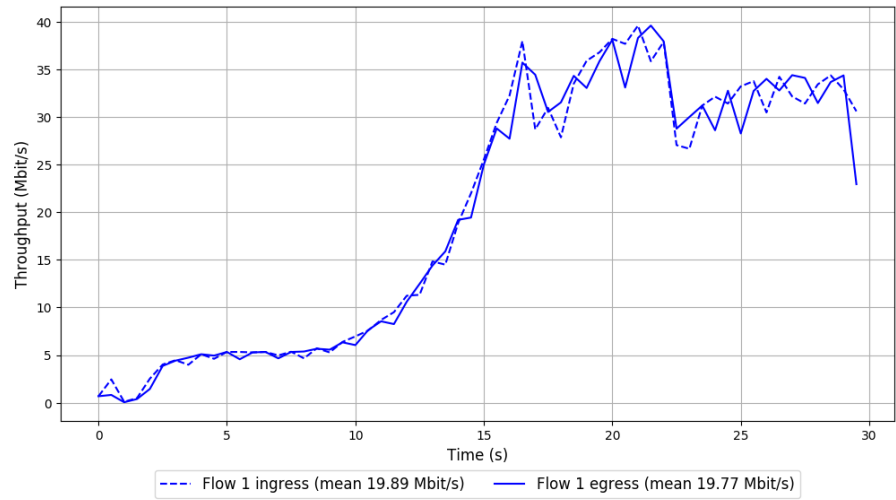
-- Flow 1:

Average throughput: 19.77 Mbit/s

95th percentile per-packet one-way delay: 87.416 ms

Loss rate: 1.19%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

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

End at: 2018-01-01 22:10:32

Below is generated by plot.py at 2018-01-02 01:43:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.06 Mbit/s

95th percentile per-packet one-way delay: 91.211 ms

Loss rate: 1.06%

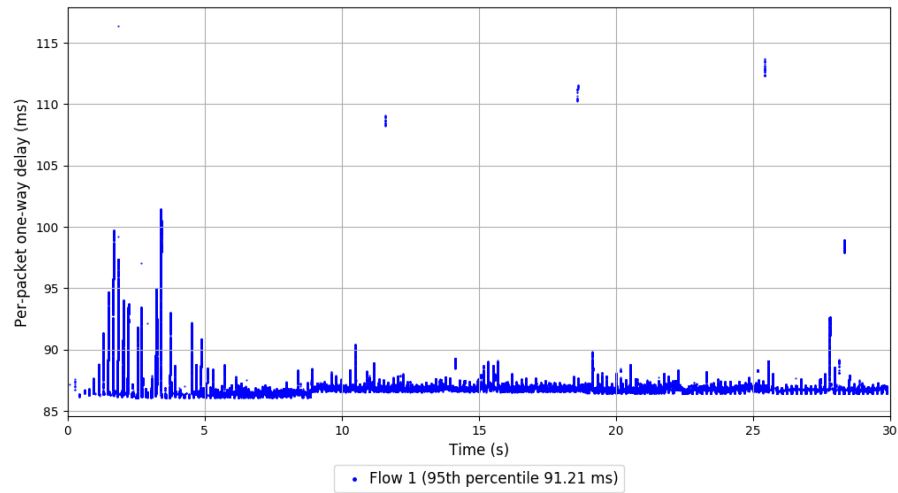
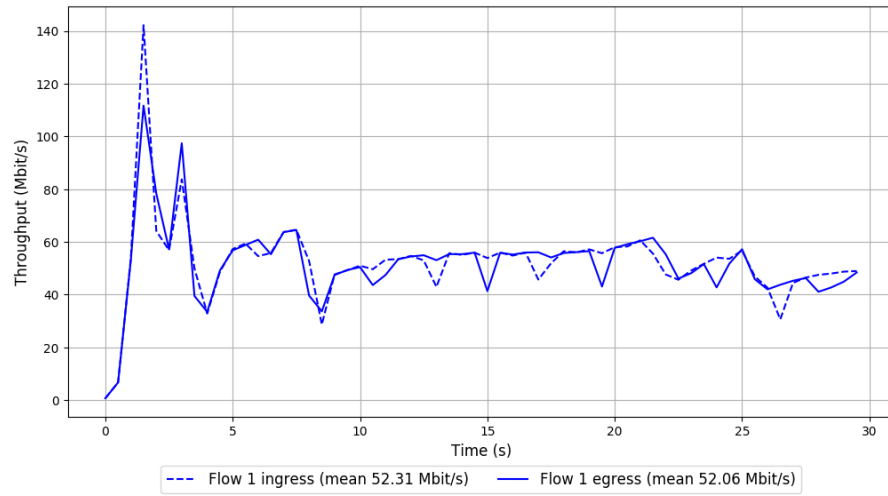
-- Flow 1:

Average throughput: 52.06 Mbit/s

95th percentile per-packet one-way delay: 91.211 ms

Loss rate: 1.06%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

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

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

Below is generated by plot.py at 2018-01-02 01:43:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.14 Mbit/s

95th percentile per-packet one-way delay: 88.590 ms

Loss rate: 1.27%

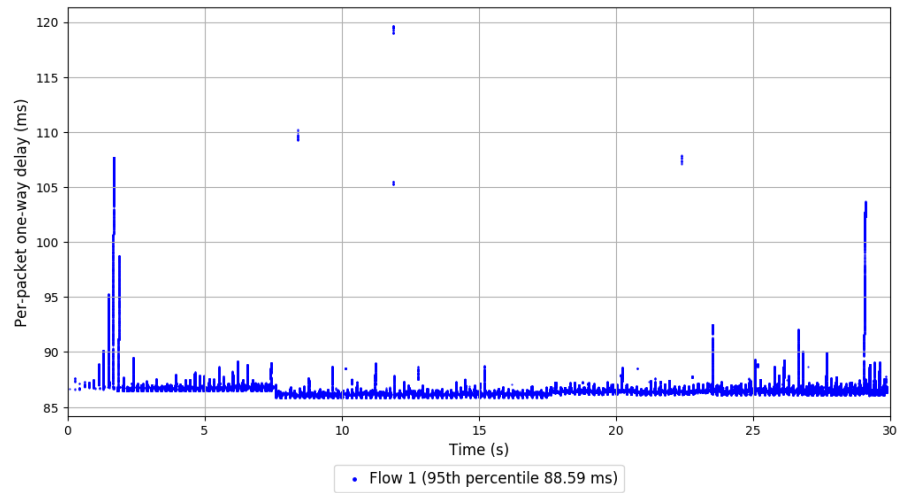
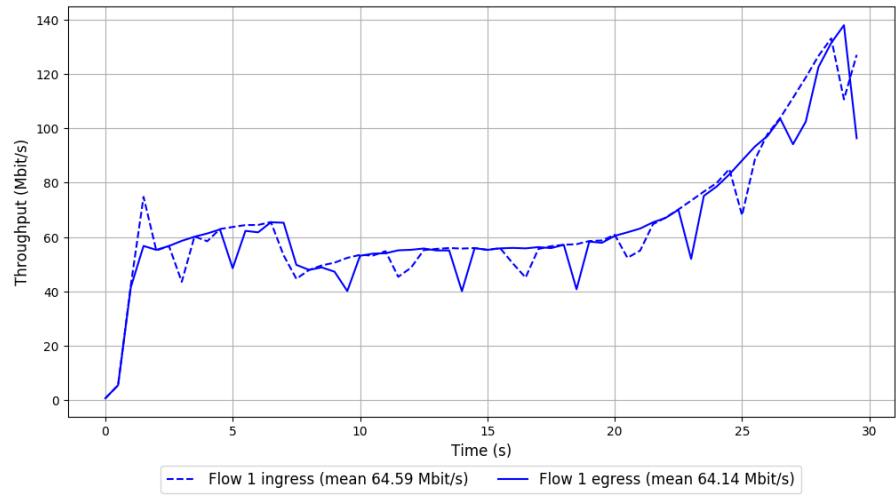
-- Flow 1:

Average throughput: 64.14 Mbit/s

95th percentile per-packet one-way delay: 88.590 ms

Loss rate: 1.27%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-01 22:34:17

End at: 2018-01-01 22:34:47

Below is generated by plot.py at 2018-01-02 01:43:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.67 Mbit/s

95th percentile per-packet one-way delay: 88.245 ms

Loss rate: 1.33%

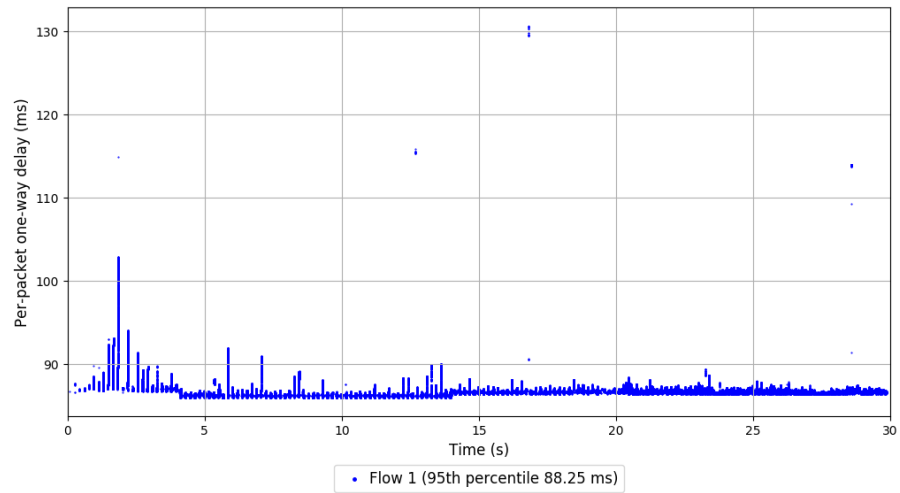
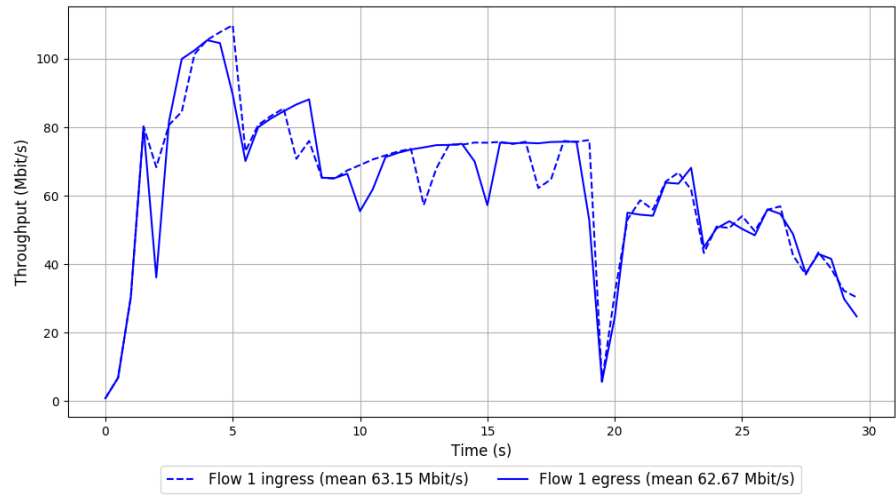
-- Flow 1:

Average throughput: 62.67 Mbit/s

95th percentile per-packet one-way delay: 88.245 ms

Loss rate: 1.33%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-01 22:46:37

End at: 2018-01-01 22:47:07

Below is generated by plot.py at 2018-01-02 01:43:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.70 Mbit/s

95th percentile per-packet one-way delay: 87.690 ms

Loss rate: 2.59%

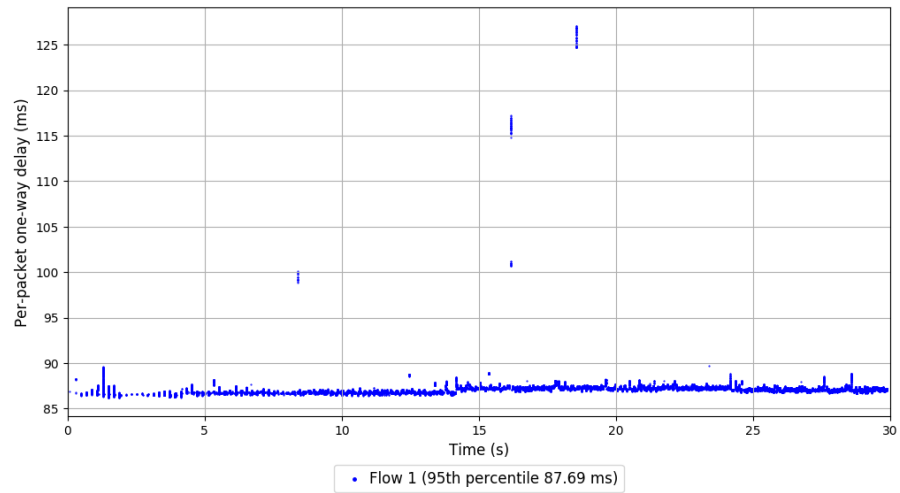
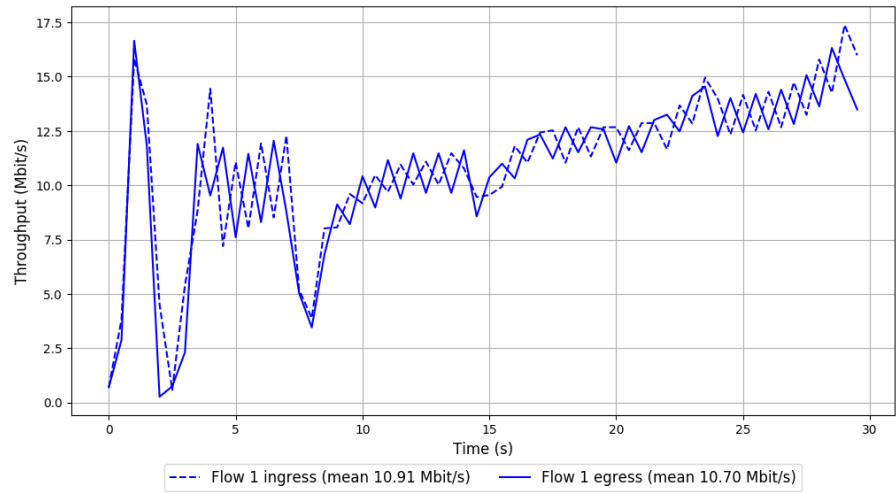
-- Flow 1:

Average throughput: 10.70 Mbit/s

95th percentile per-packet one-way delay: 87.690 ms

Loss rate: 2.59%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-01 22:58:49

End at: 2018-01-01 22:59:19

Below is generated by plot.py at 2018-01-02 01:43:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.92 Mbit/s

95th percentile per-packet one-way delay: 92.331 ms

Loss rate: 1.05%

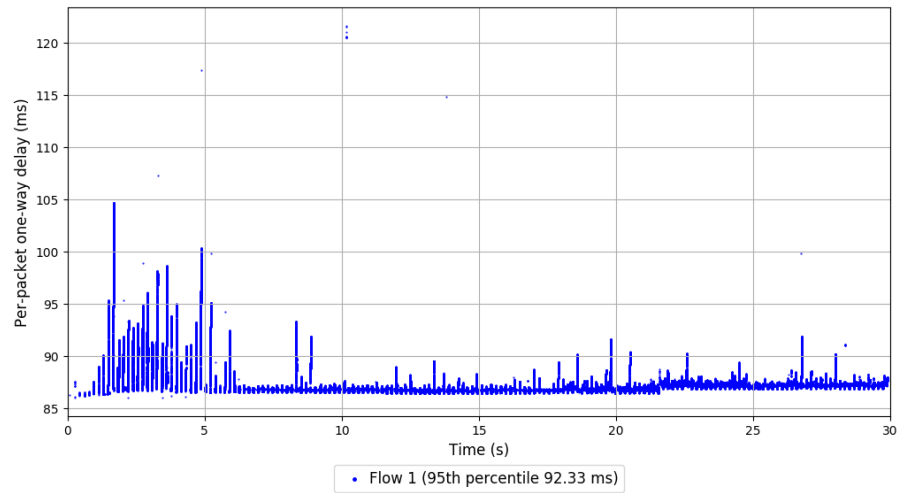
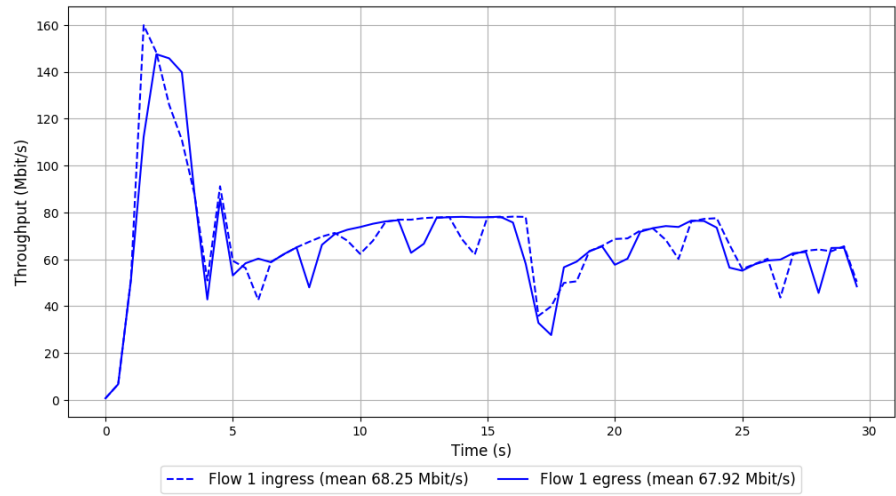
-- Flow 1:

Average throughput: 67.92 Mbit/s

95th percentile per-packet one-way delay: 92.331 ms

Loss rate: 1.05%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-01 23:11:08

End at: 2018-01-01 23:11:38

Below is generated by plot.py at 2018-01-02 01:43:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.37 Mbit/s

95th percentile per-packet one-way delay: 88.172 ms

Loss rate: 1.04%

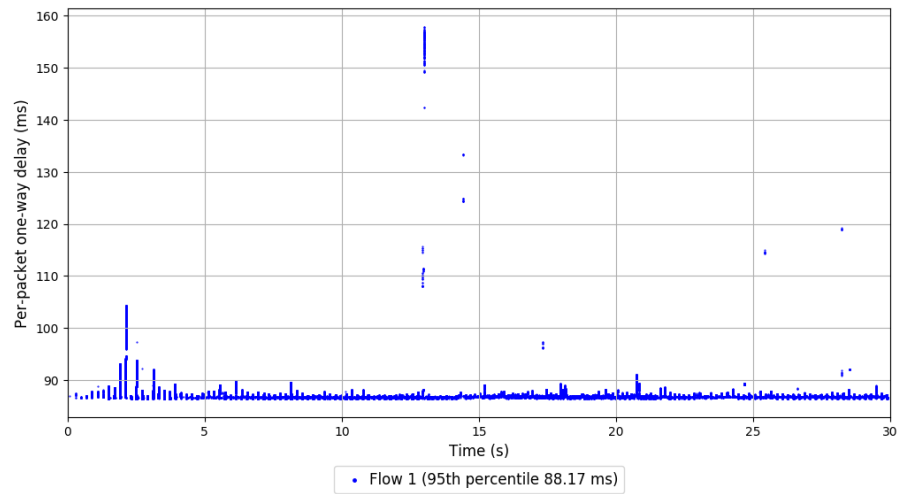
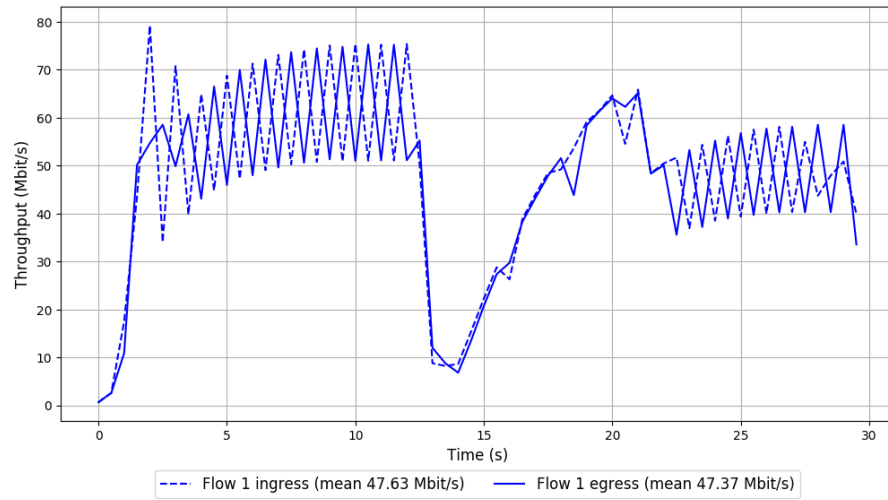
-- Flow 1:

Average throughput: 47.37 Mbit/s

95th percentile per-packet one-way delay: 88.172 ms

Loss rate: 1.04%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

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

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

Below is generated by plot.py at 2018-01-02 01:43:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.30 Mbit/s

95th percentile per-packet one-way delay: 91.267 ms

Loss rate: 0.70%

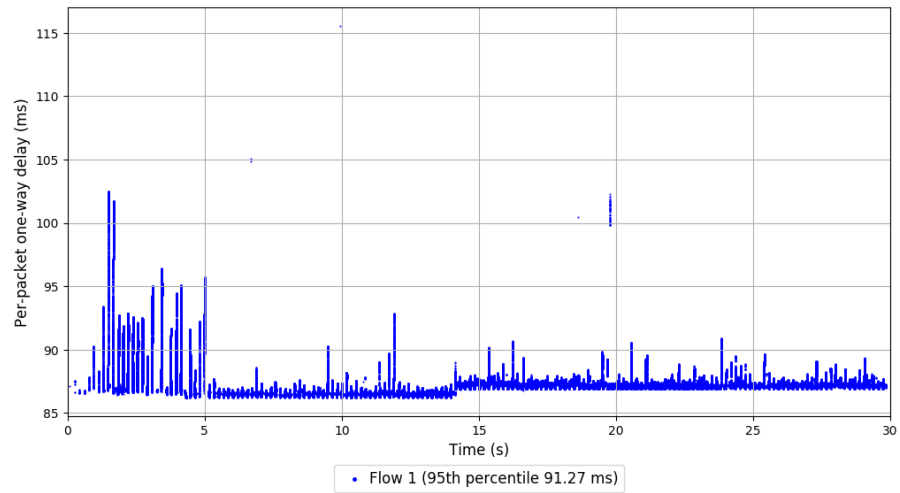
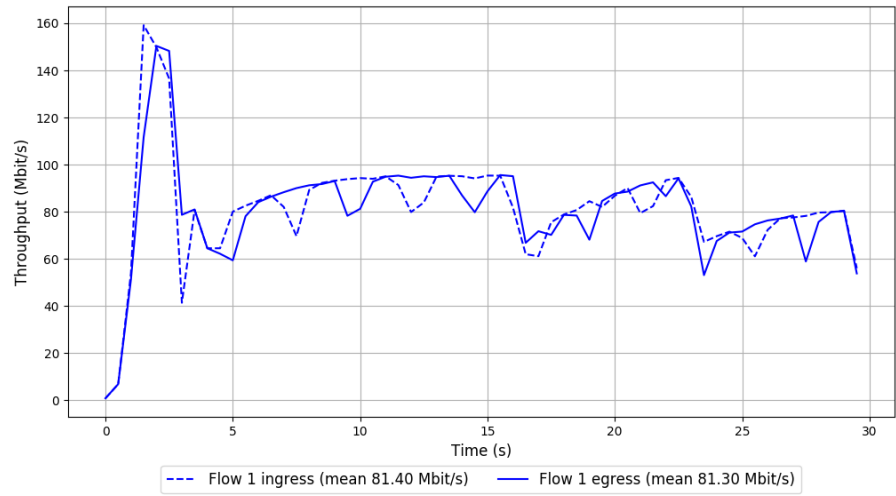
-- Flow 1:

Average throughput: 81.30 Mbit/s

95th percentile per-packet one-way delay: 91.267 ms

Loss rate: 0.70%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-01 23:35:46

End at: 2018-01-01 23:36:16

Below is generated by plot.py at 2018-01-02 01:43:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.92 Mbit/s

95th percentile per-packet one-way delay: 92.472 ms

Loss rate: 1.92%

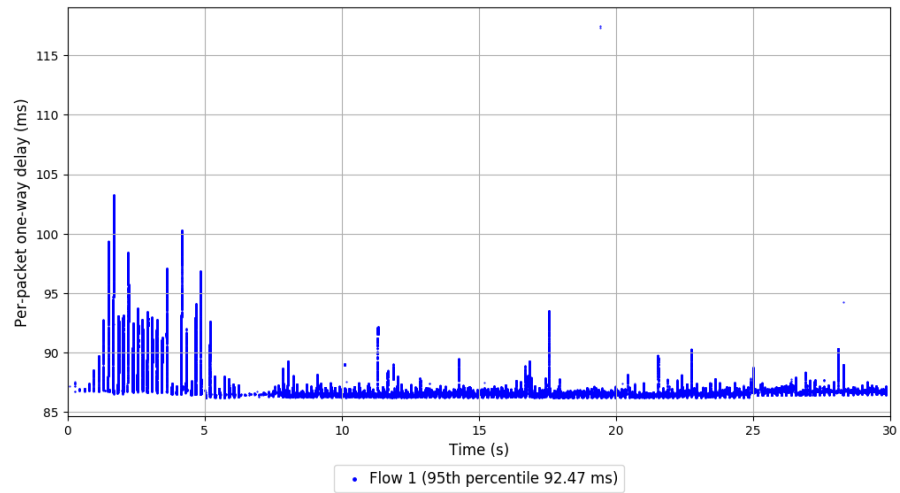
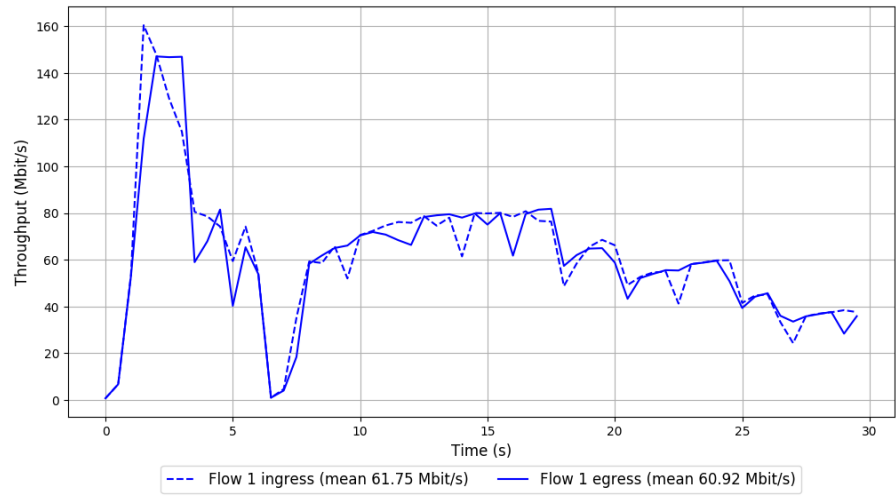
-- Flow 1:

Average throughput: 60.92 Mbit/s

95th percentile per-packet one-way delay: 92.472 ms

Loss rate: 1.92%

Run 10: Report of TCP Cubic — Data Link

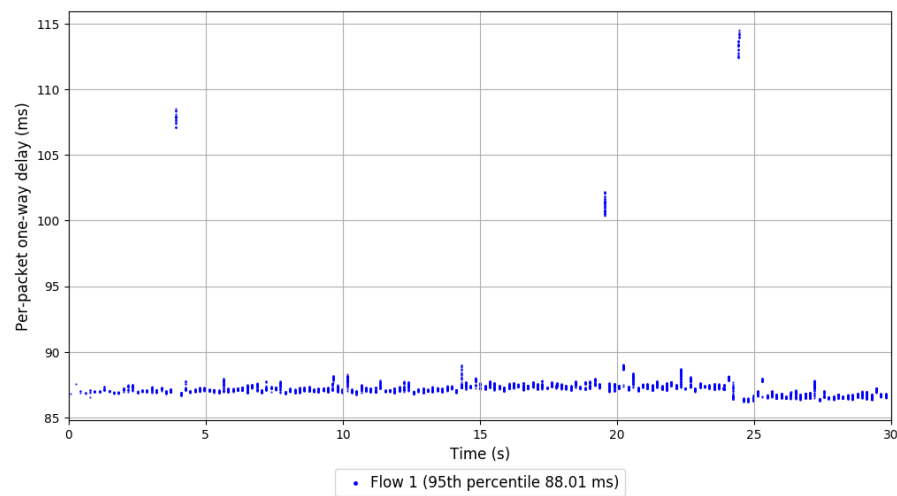
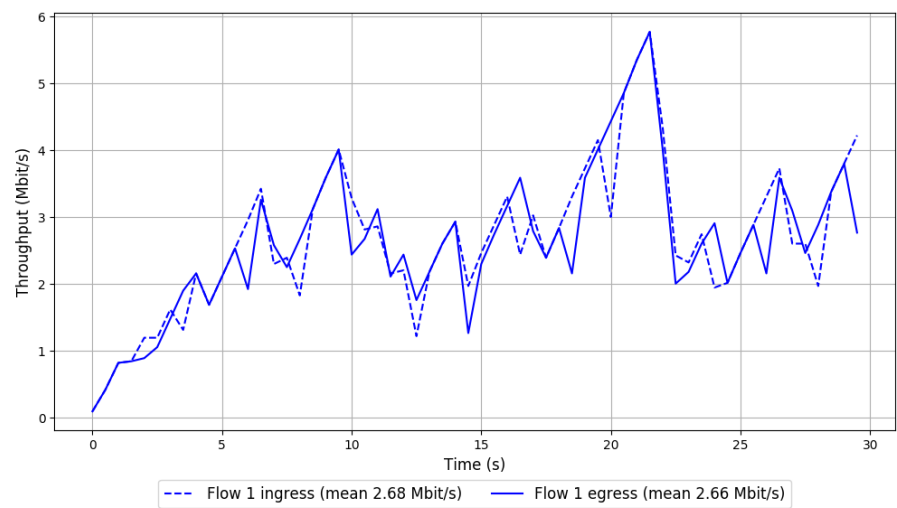


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Run 1: Statistics of LEDBAT

Start at: 2018-01-01 21:34:07
End at: 2018-01-01 21:34:37

# Below is generated by plot.py at 2018-01-02 01:43:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 88.009 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 88.009 ms
Loss rate: 1.25%
```

Run 1: Report of LEDBAT — Data Link

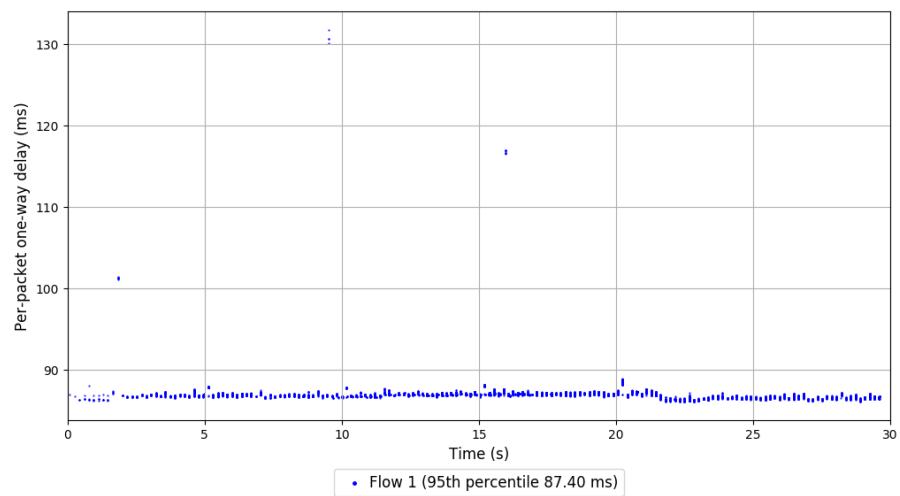
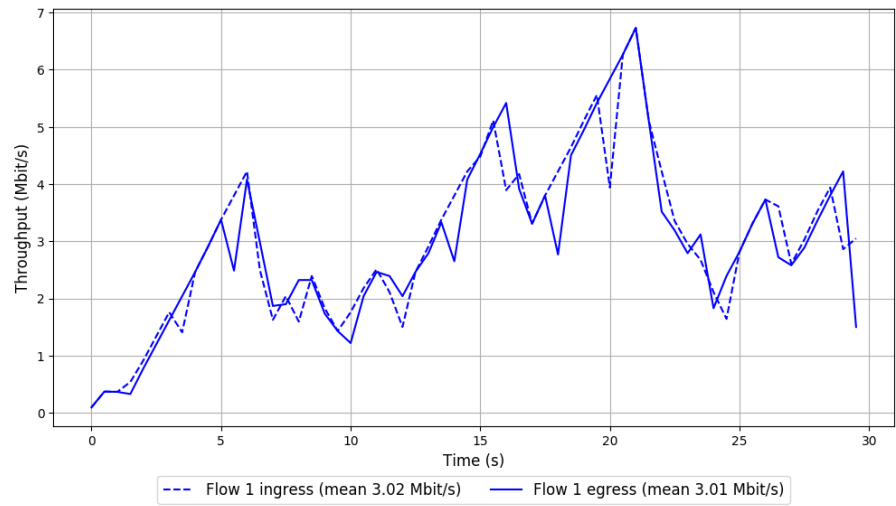


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-01 21:46:09
End at: 2018-01-01 21:46:39

# Below is generated by plot.py at 2018-01-02 01:43:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.01 Mbit/s
95th percentile per-packet one-way delay: 87.403 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 3.01 Mbit/s
95th percentile per-packet one-way delay: 87.403 ms
Loss rate: 1.19%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-01 21:58:25

End at: 2018-01-01 21:58:55

Below is generated by plot.py at 2018-01-02 01:43:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 87.217 ms

Loss rate: 0.73%

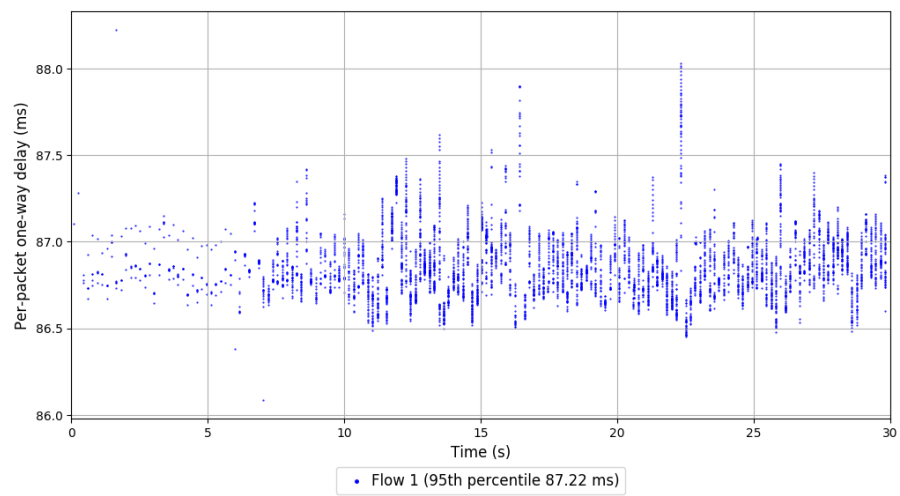
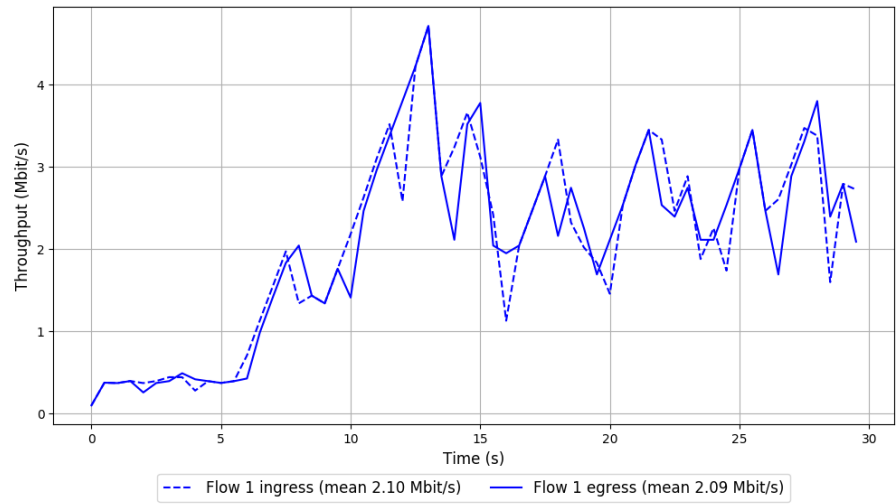
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 87.217 ms

Loss rate: 0.73%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-01 22:10:45

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

Below is generated by plot.py at 2018-01-02 01:43:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 87.179 ms

Loss rate: 0.93%

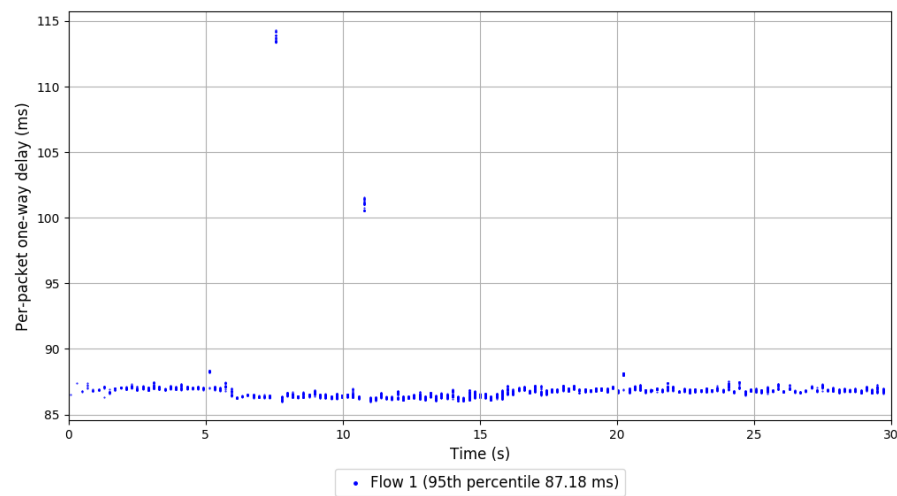
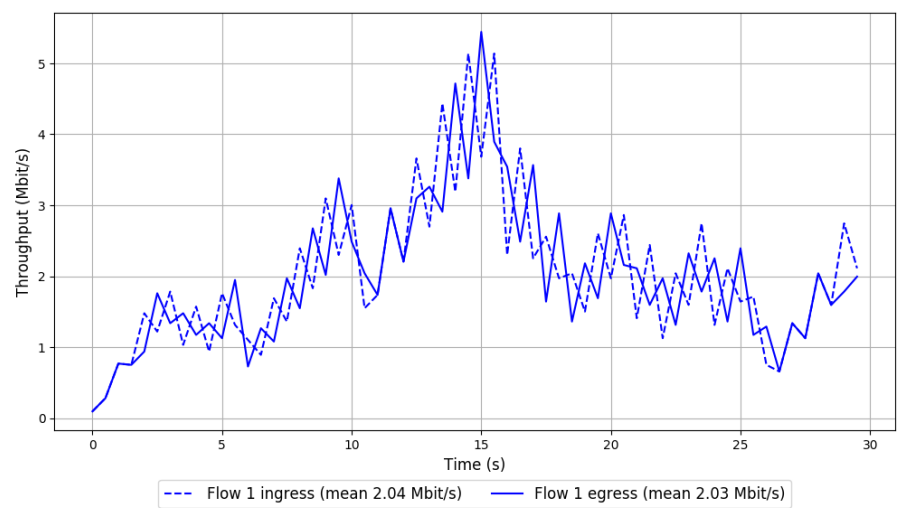
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 87.179 ms

Loss rate: 0.93%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

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

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

Below is generated by plot.py at 2018-01-02 01:43:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 88.021 ms

Loss rate: 1.18%

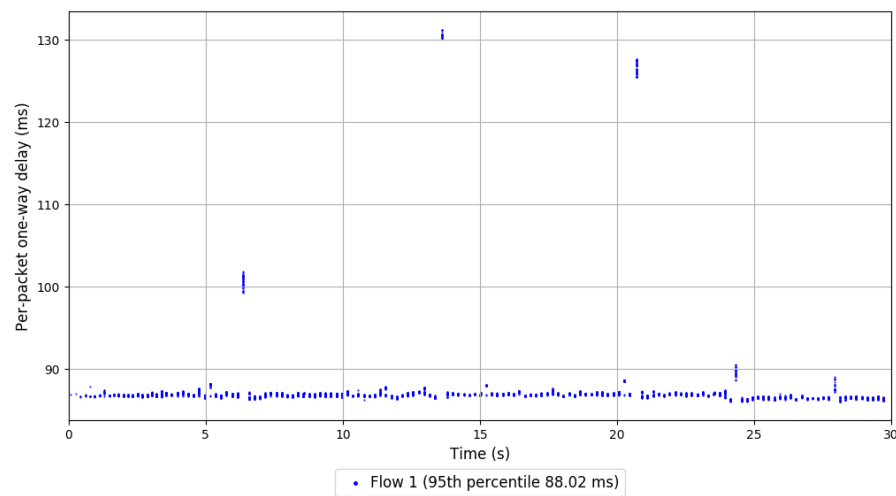
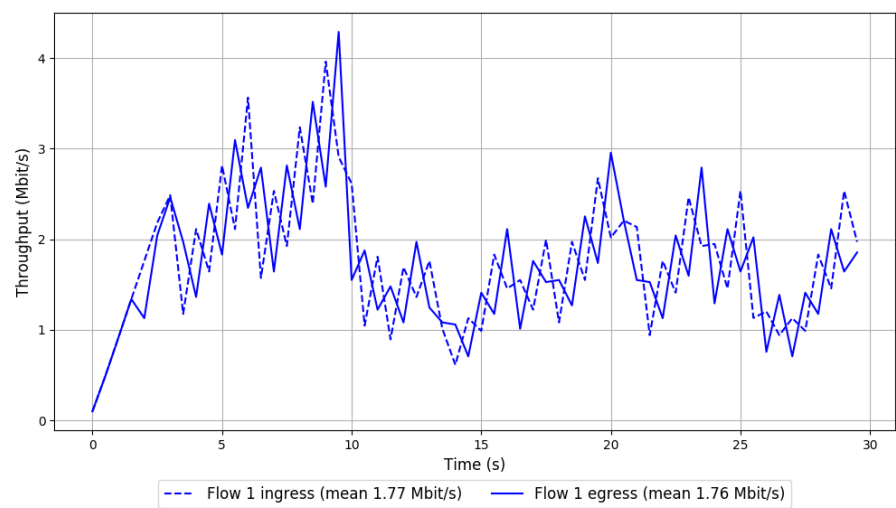
-- Flow 1:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 88.021 ms

Loss rate: 1.18%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-01 22:35:00

End at: 2018-01-01 22:35:30

Below is generated by plot.py at 2018-01-02 01:43:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 87.415 ms

Loss rate: 1.67%

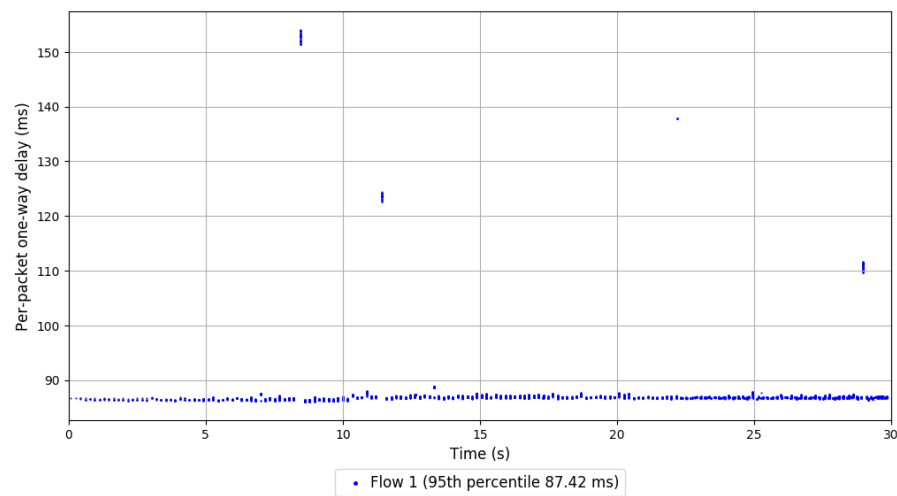
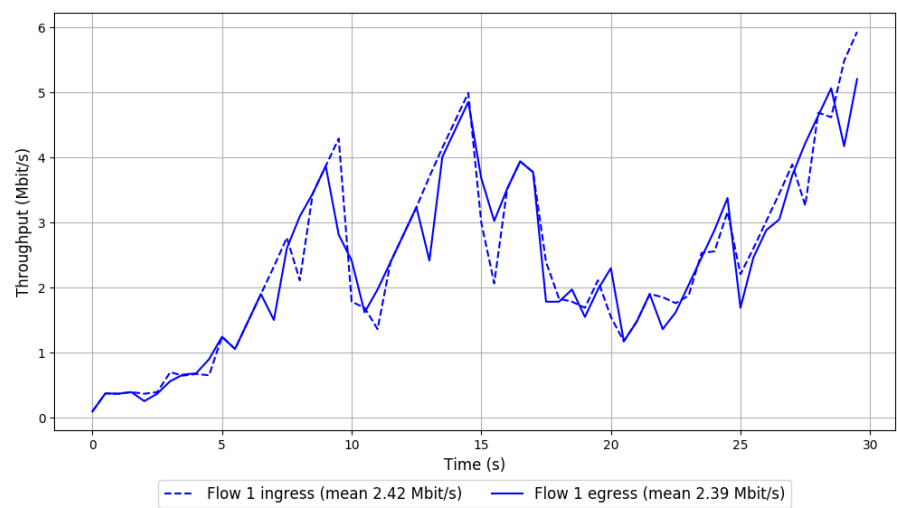
-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 87.415 ms

Loss rate: 1.67%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-01 22:47:17

End at: 2018-01-01 22:47:48

Below is generated by plot.py at 2018-01-02 01:43:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.623 ms

Loss rate: 1.98%

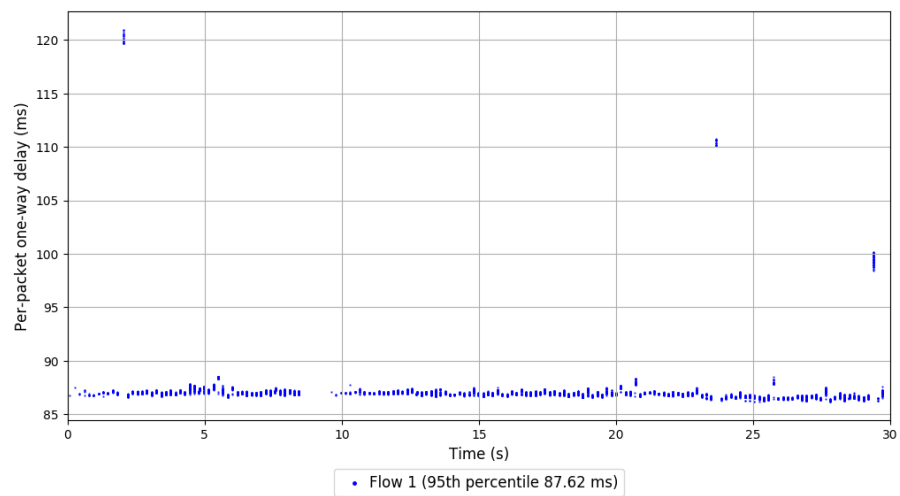
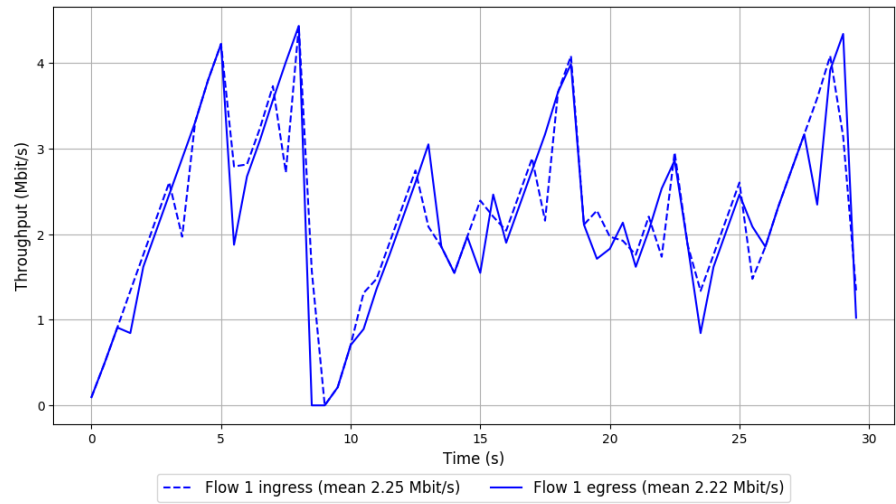
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.623 ms

Loss rate: 1.98%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-01 22:59:33

End at: 2018-01-01 23:00:03

Below is generated by plot.py at 2018-01-02 01:43:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 87.285 ms

Loss rate: 2.09%

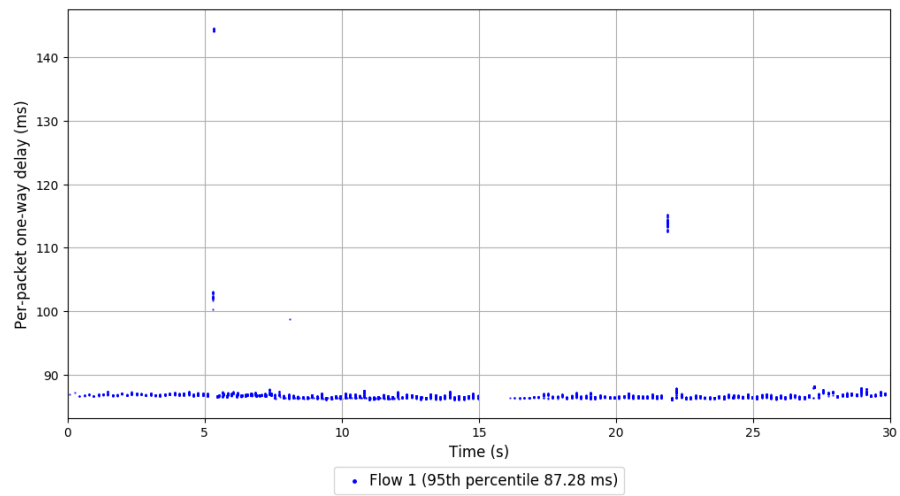
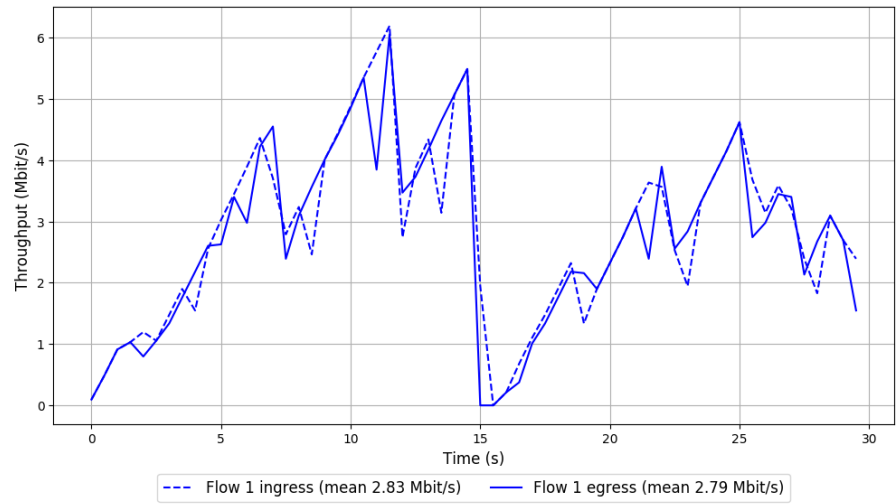
-- Flow 1:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 87.285 ms

Loss rate: 2.09%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-01 23:11:51

End at: 2018-01-01 23:12:21

Below is generated by plot.py at 2018-01-02 01:43:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 87.298 ms

Loss rate: 0.05%

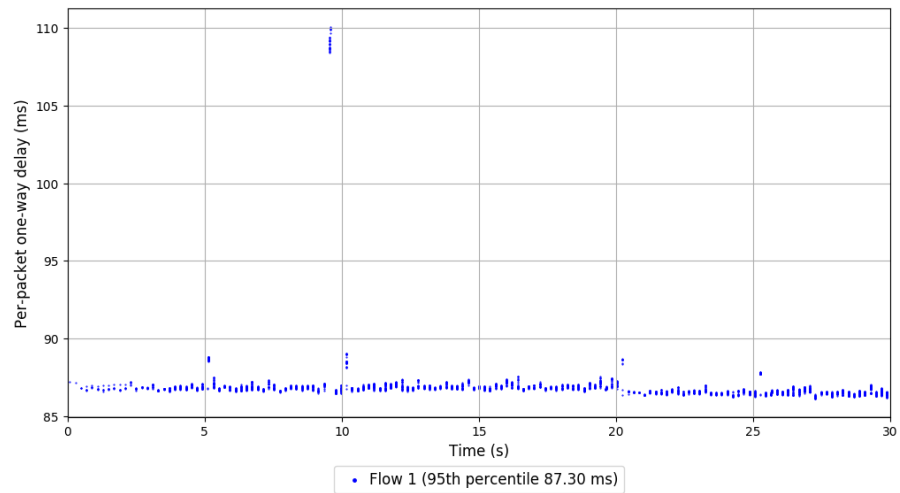
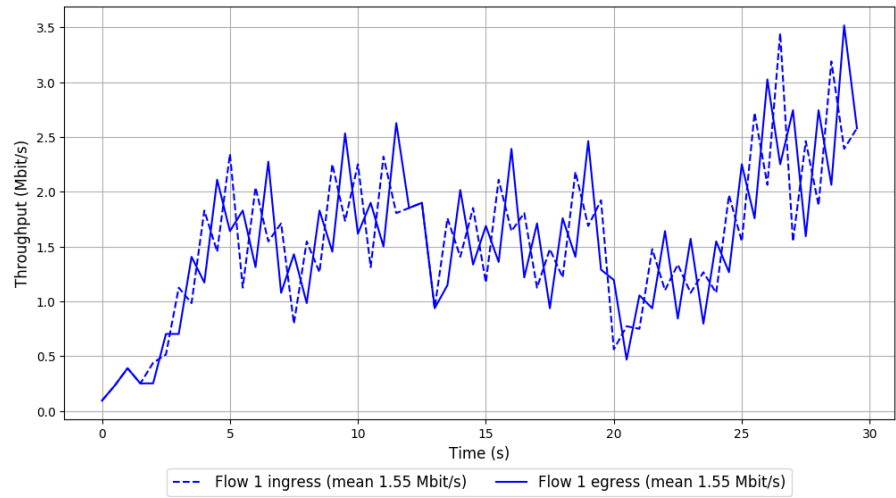
-- Flow 1:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 87.298 ms

Loss rate: 0.05%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-01 23:24:11

End at: 2018-01-01 23:24:41

Below is generated by plot.py at 2018-01-02 01:43:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 88.323 ms

Loss rate: 2.12%

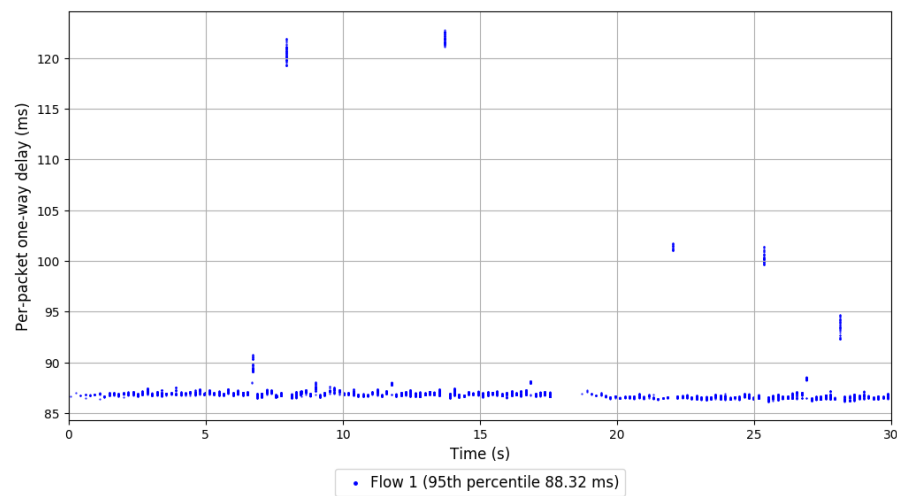
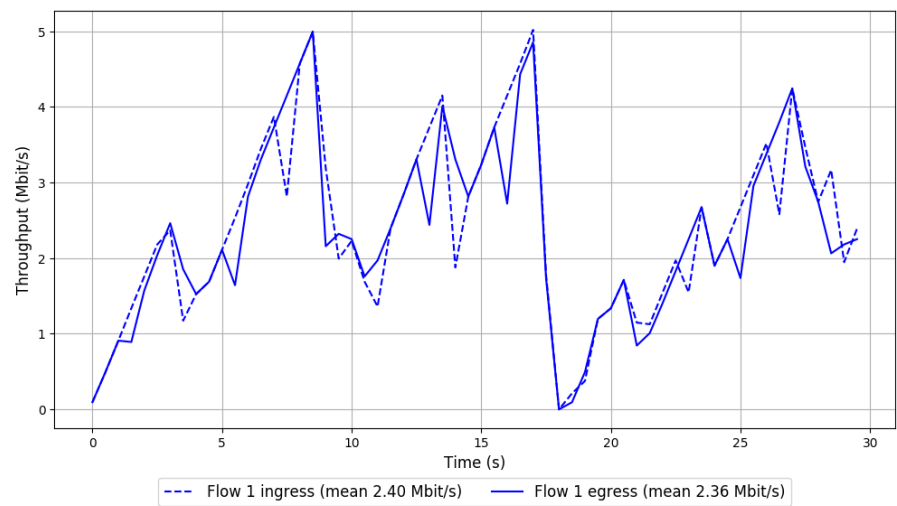
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 88.323 ms

Loss rate: 2.12%

Run 10: Report of LEDBAT — Data Link

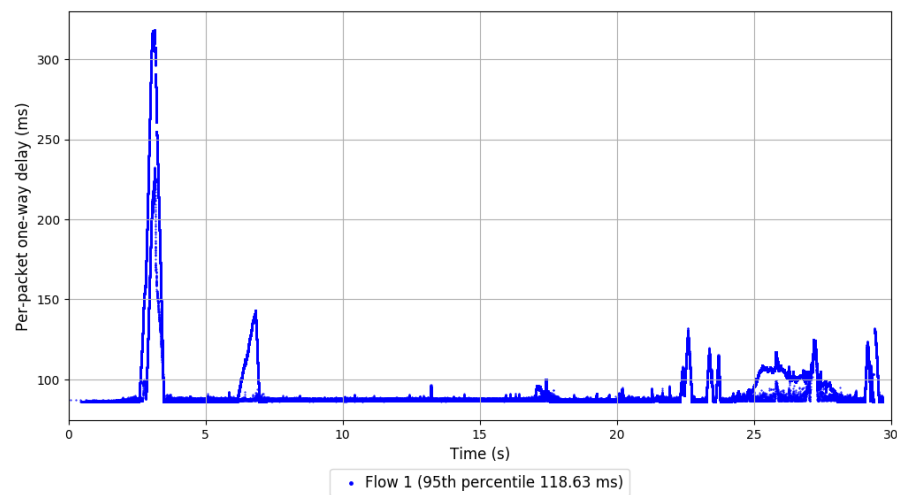
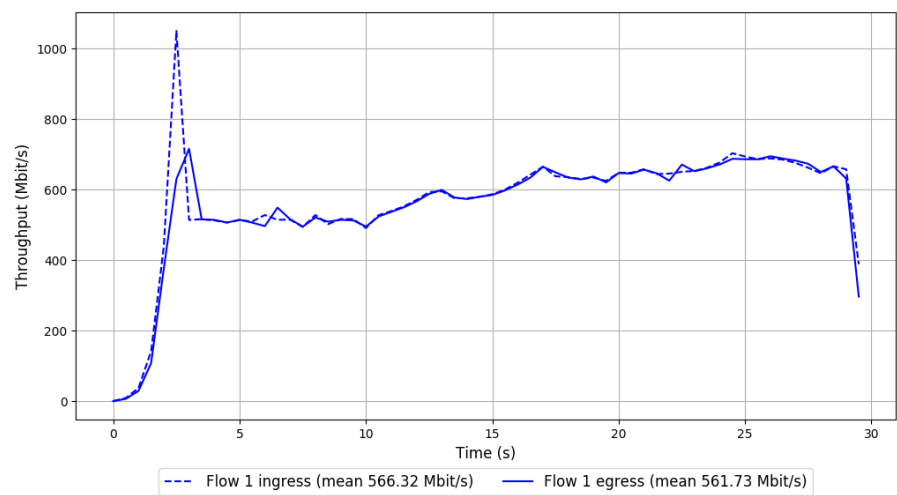


```
Run 1: Statistics of PCC

Start at: 2018-01-01 21:43:03
End at: 2018-01-01 21:43:33

# Below is generated by plot.py at 2018-01-02 01:52:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 561.73 Mbit/s
95th percentile per-packet one-way delay: 118.633 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 561.73 Mbit/s
95th percentile per-packet one-way delay: 118.633 ms
Loss rate: 1.39%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-01 21:55:20

End at: 2018-01-01 21:55:50

Below is generated by plot.py at 2018-01-02 01:52:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 596.89 Mbit/s

95th percentile per-packet one-way delay: 104.081 ms

Loss rate: 2.27%

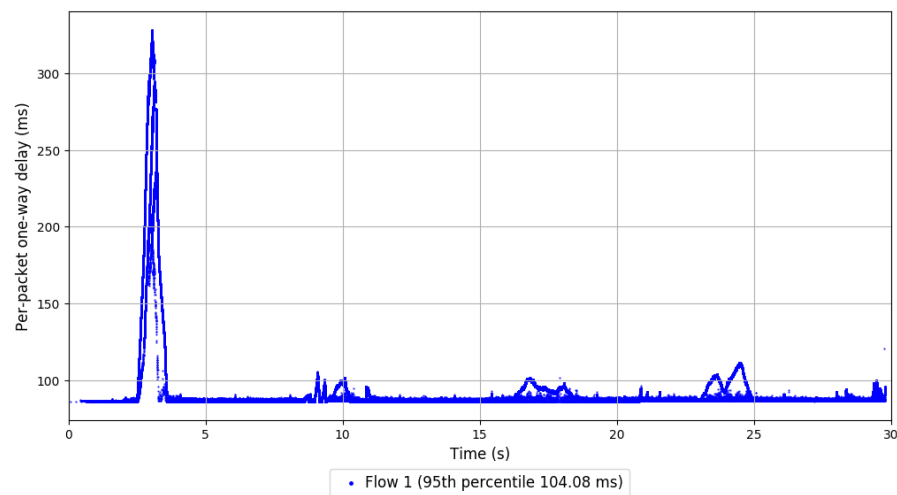
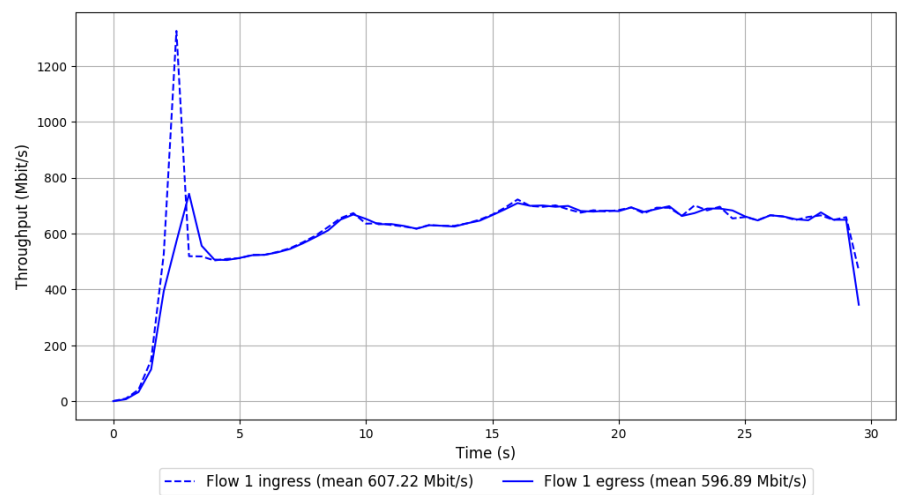
-- Flow 1:

Average throughput: 596.89 Mbit/s

95th percentile per-packet one-way delay: 104.081 ms

Loss rate: 2.27%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-01 22:07:38

End at: 2018-01-01 22:08:08

Below is generated by plot.py at 2018-01-02 01:52:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 597.85 Mbit/s

95th percentile per-packet one-way delay: 157.609 ms

Loss rate: 1.34%

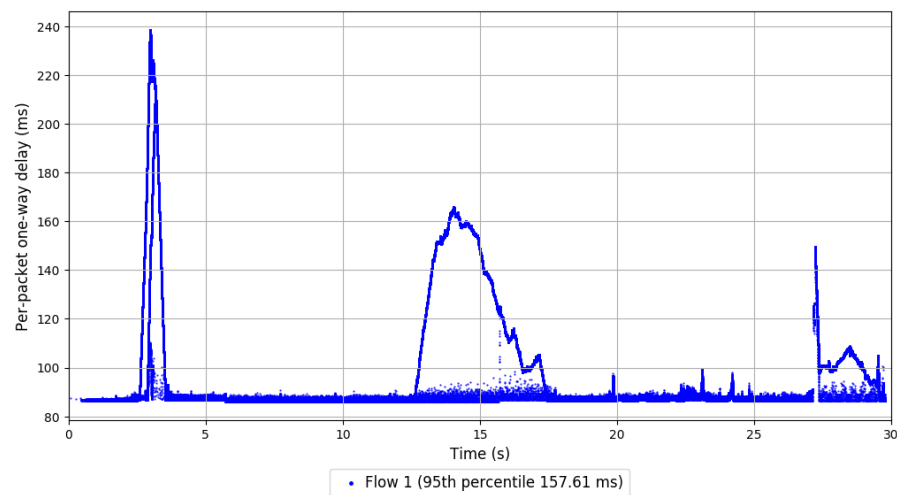
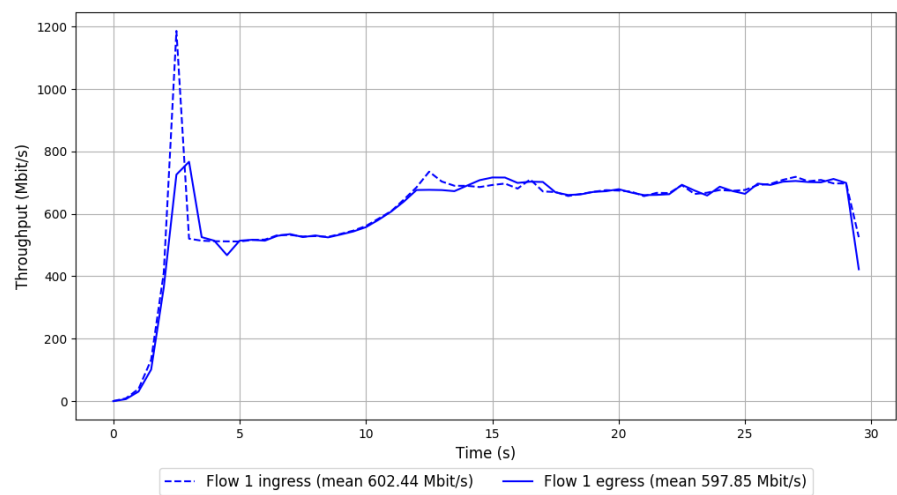
-- Flow 1:

Average throughput: 597.85 Mbit/s

95th percentile per-packet one-way delay: 157.609 ms

Loss rate: 1.34%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-01 22:19:49

End at: 2018-01-01 22:20:19

Below is generated by plot.py at 2018-01-02 01:52:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 594.40 Mbit/s

95th percentile per-packet one-way delay: 159.862 ms

Loss rate: 1.59%

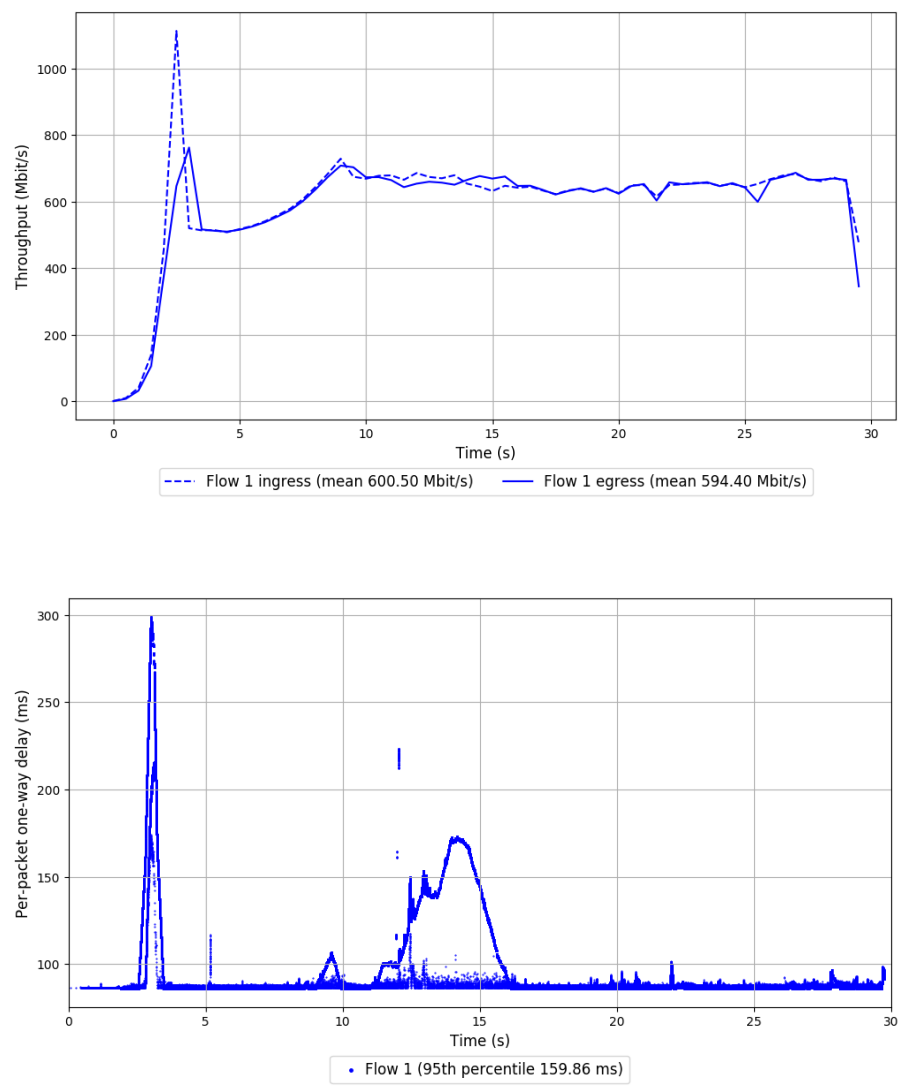
-- Flow 1:

Average throughput: 594.40 Mbit/s

95th percentile per-packet one-way delay: 159.862 ms

Loss rate: 1.59%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-01 22:31:53

End at: 2018-01-01 22:32:23

Below is generated by plot.py at 2018-01-02 01:52:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 580.32 Mbit/s

95th percentile per-packet one-way delay: 105.618 ms

Loss rate: 1.58%

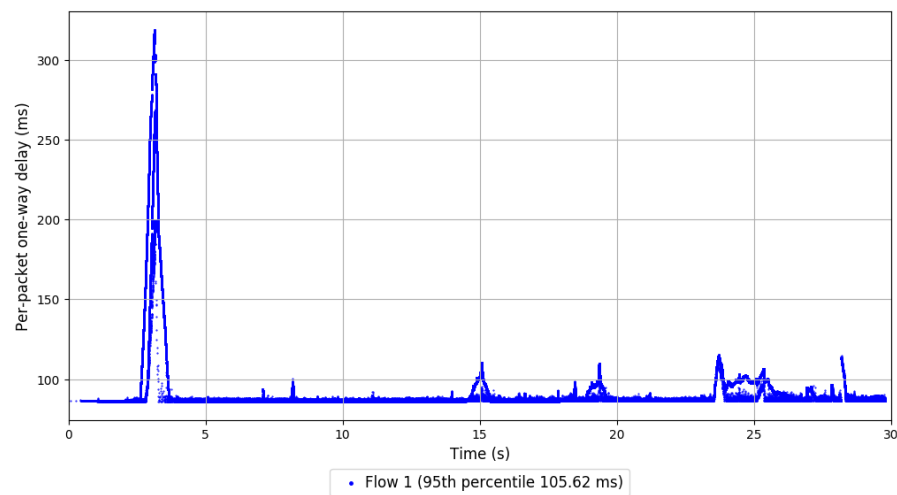
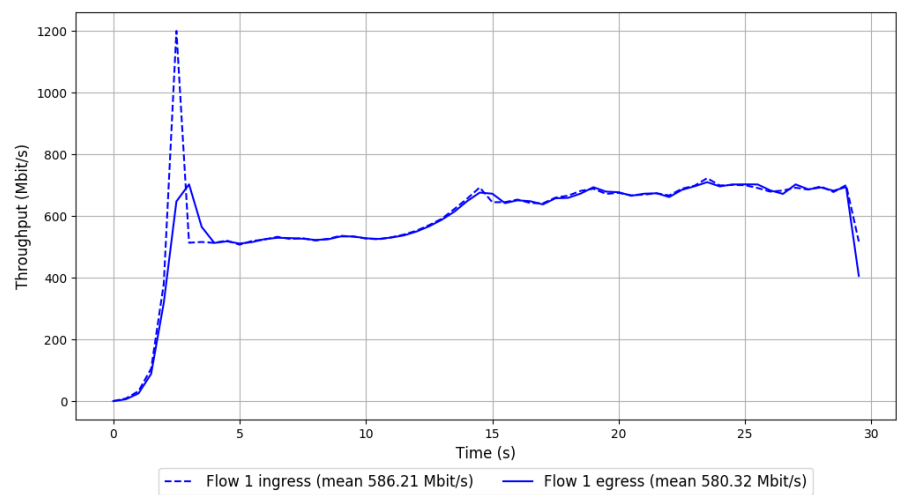
-- Flow 1:

Average throughput: 580.32 Mbit/s

95th percentile per-packet one-way delay: 105.618 ms

Loss rate: 1.58%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-01 22:44:11

End at: 2018-01-01 22:44:41

Below is generated by plot.py at 2018-01-02 01:53:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 582.21 Mbit/s

95th percentile per-packet one-way delay: 135.045 ms

Loss rate: 1.21%

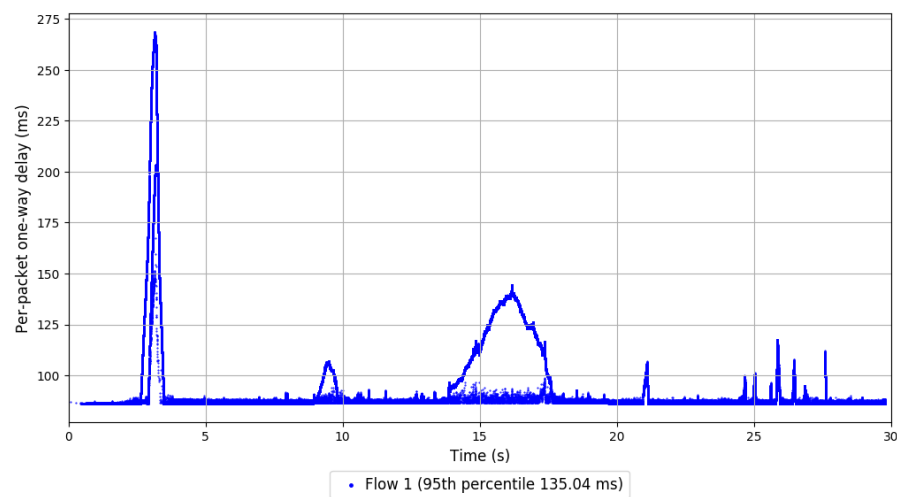
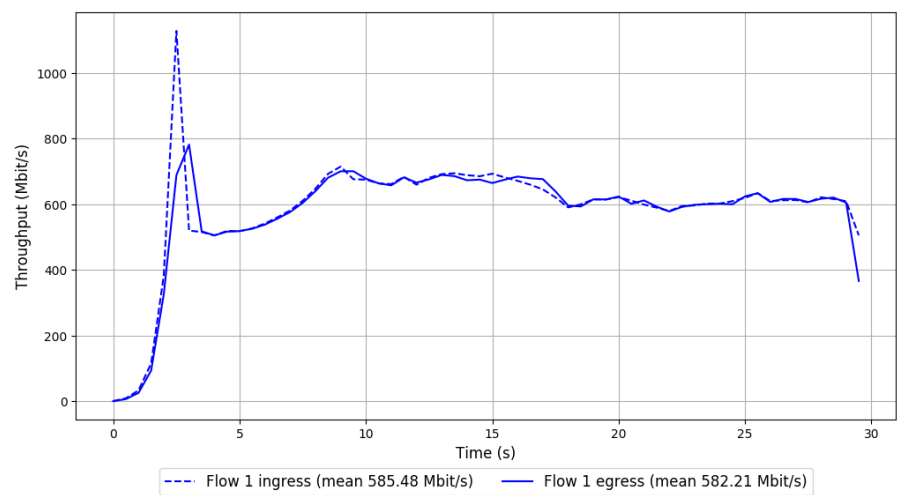
-- Flow 1:

Average throughput: 582.21 Mbit/s

95th percentile per-packet one-way delay: 135.045 ms

Loss rate: 1.21%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-01 22:56:29

End at: 2018-01-01 22:56:59

Below is generated by plot.py at 2018-01-02 01:53:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 501.67 Mbit/s

95th percentile per-packet one-way delay: 138.446 ms

Loss rate: 2.47%

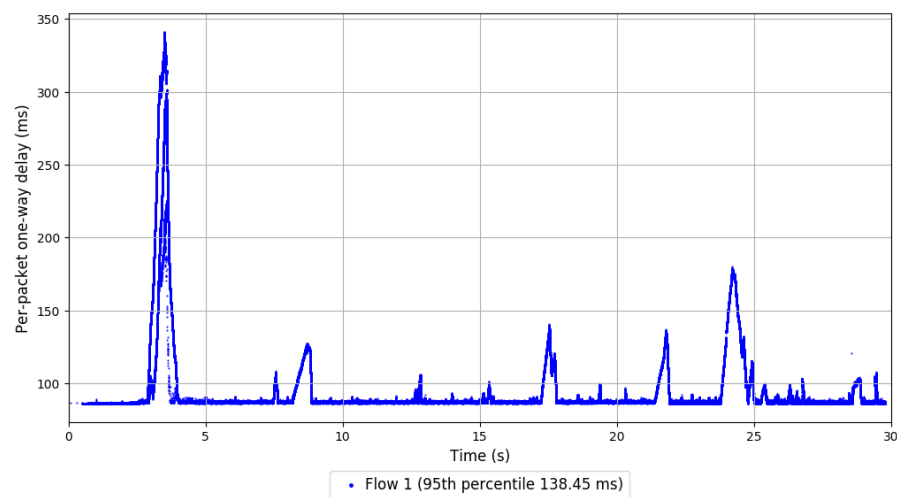
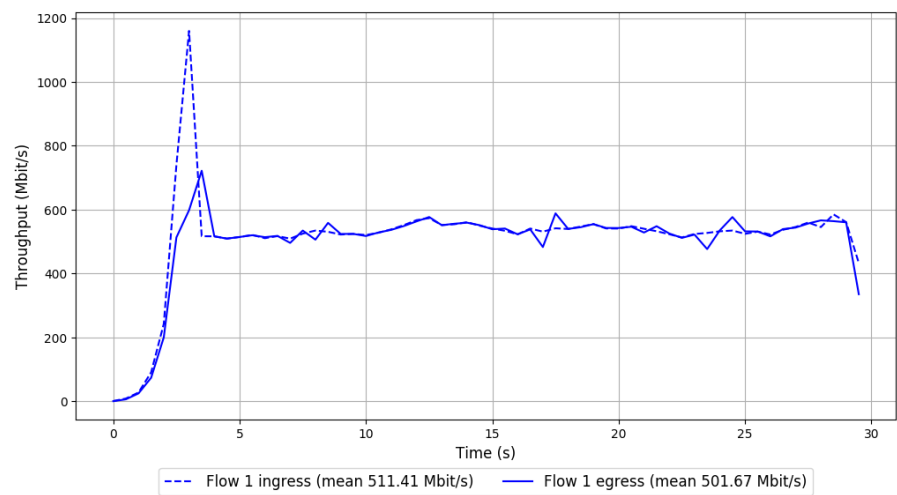
-- Flow 1:

Average throughput: 501.67 Mbit/s

95th percentile per-packet one-way delay: 138.446 ms

Loss rate: 2.47%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-01 23:08:46

End at: 2018-01-01 23:09:16

Below is generated by plot.py at 2018-01-02 01:53:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 595.36 Mbit/s

95th percentile per-packet one-way delay: 125.089 ms

Loss rate: 1.26%

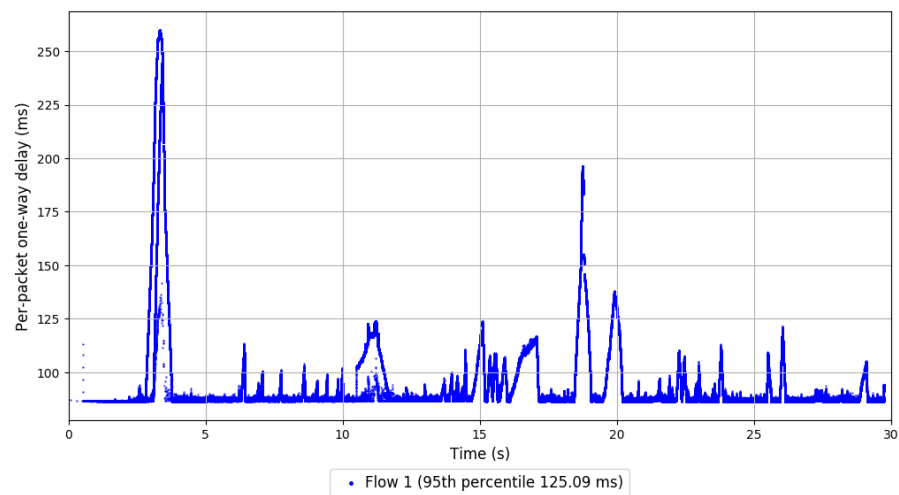
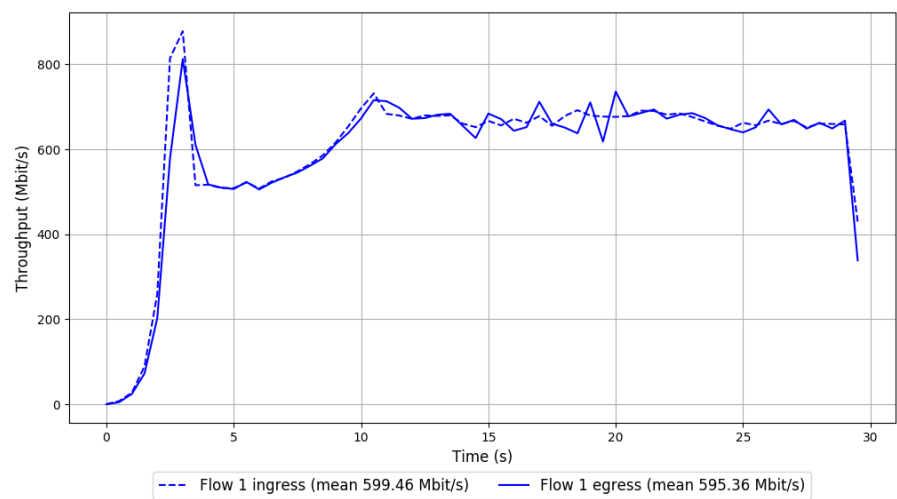
-- Flow 1:

Average throughput: 595.36 Mbit/s

95th percentile per-packet one-way delay: 125.089 ms

Loss rate: 1.26%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-01 23:21:03

End at: 2018-01-01 23:21:33

Below is generated by plot.py at 2018-01-02 02:02:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 582.30 Mbit/s

95th percentile per-packet one-way delay: 107.659 ms

Loss rate: 2.08%

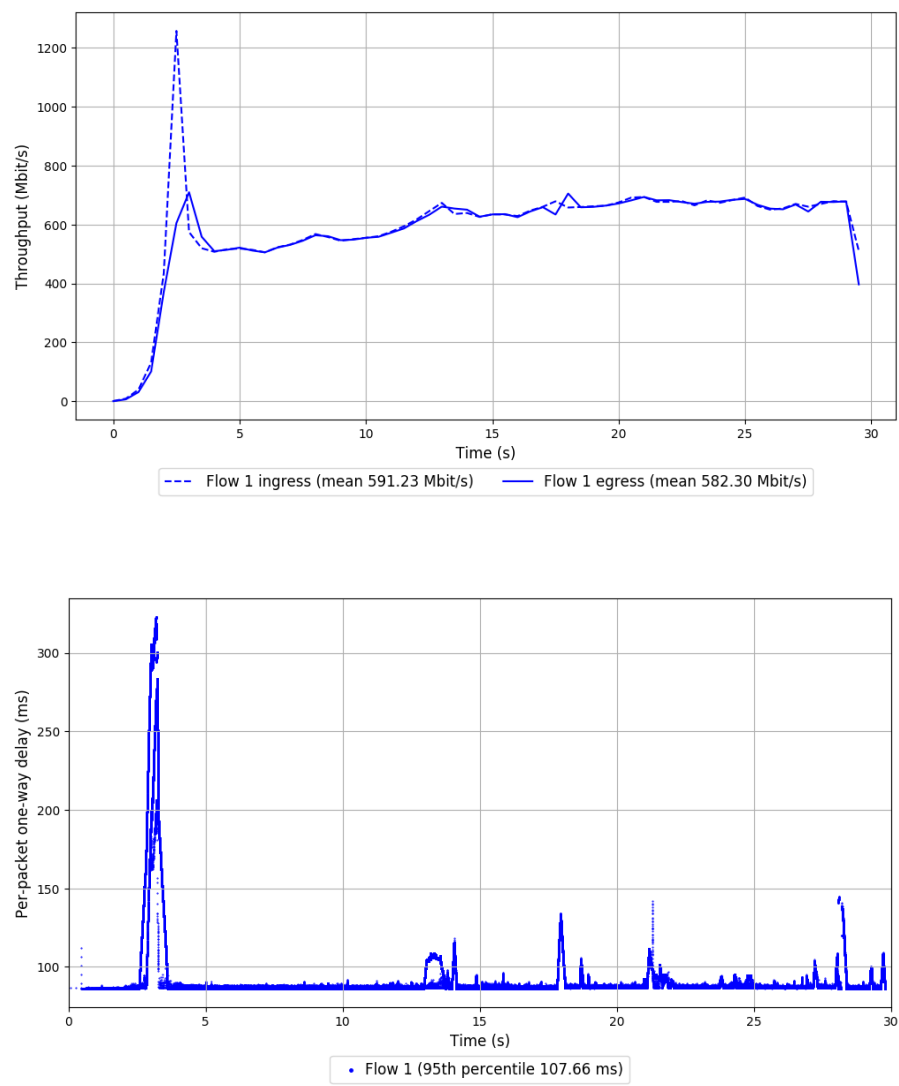
-- Flow 1:

Average throughput: 582.30 Mbit/s

95th percentile per-packet one-way delay: 107.659 ms

Loss rate: 2.08%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-01 23:33:22

End at: 2018-01-01 23:33:52

Below is generated by plot.py at 2018-01-02 02:02:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 600.27 Mbit/s

95th percentile per-packet one-way delay: 203.661 ms

Loss rate: 2.44%

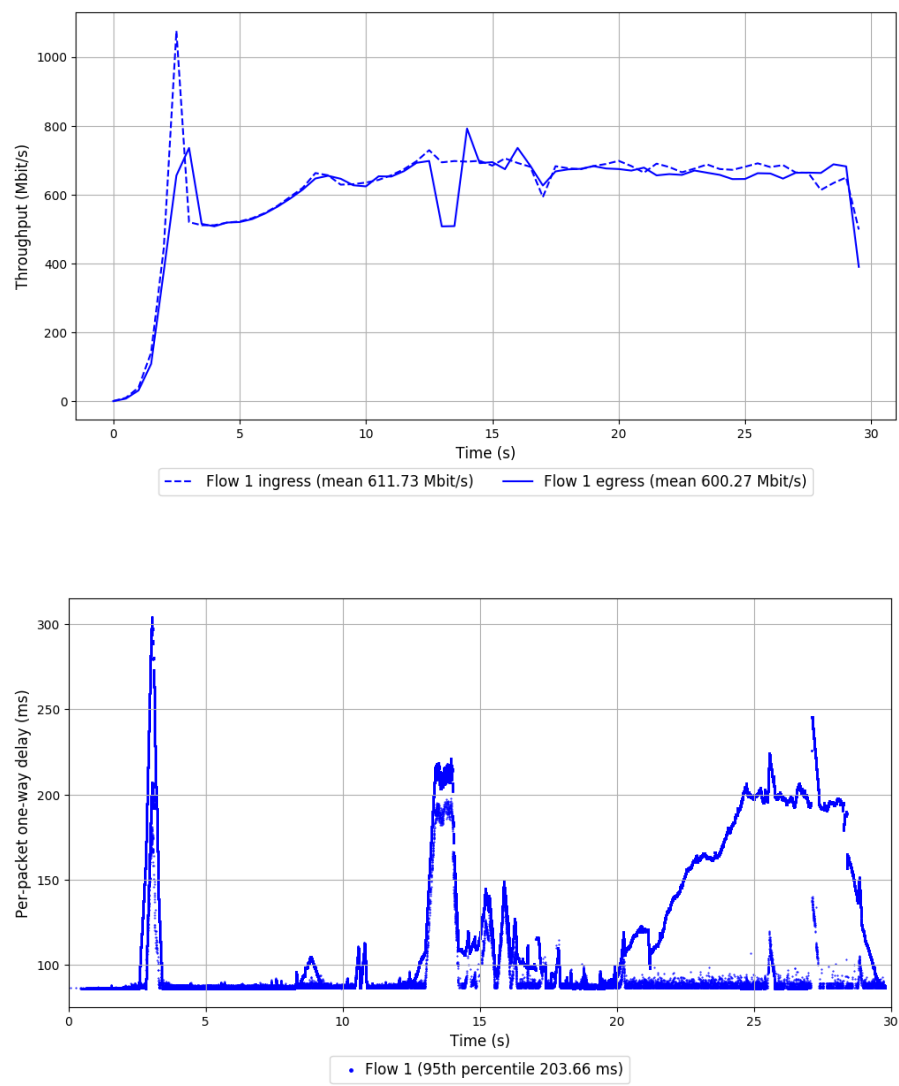
-- Flow 1:

Average throughput: 600.27 Mbit/s

95th percentile per-packet one-way delay: 203.661 ms

Loss rate: 2.44%

Run 10: Report of PCC — Data Link

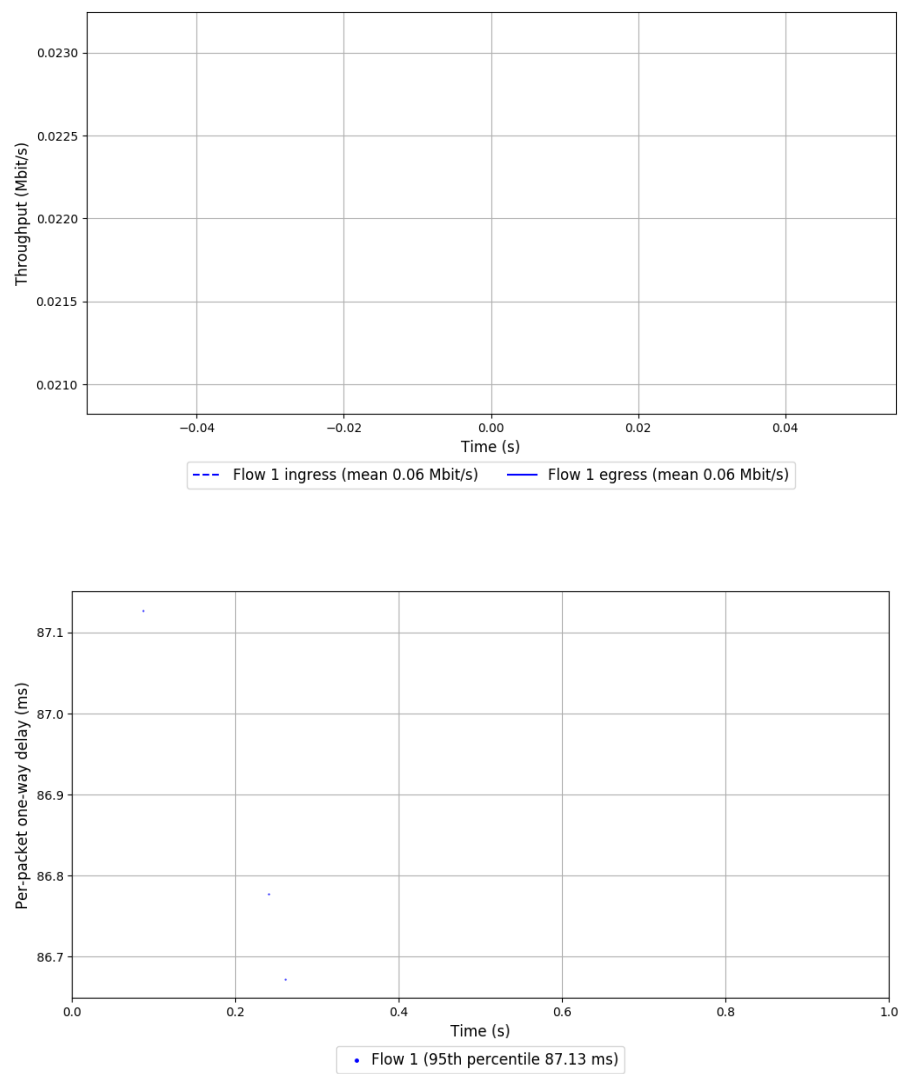


Run 1: Statistics of QUIC Cubic

Start at: 2018-01-01 21:39:28

End at: 2018-01-01 21:39:58

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-01 21:51:30

End at: 2018-01-01 21:52:00

Below is generated by plot.py at 2018-01-02 02:02:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.82 Mbit/s

95th percentile per-packet one-way delay: 86.533 ms

Loss rate: 1.07%

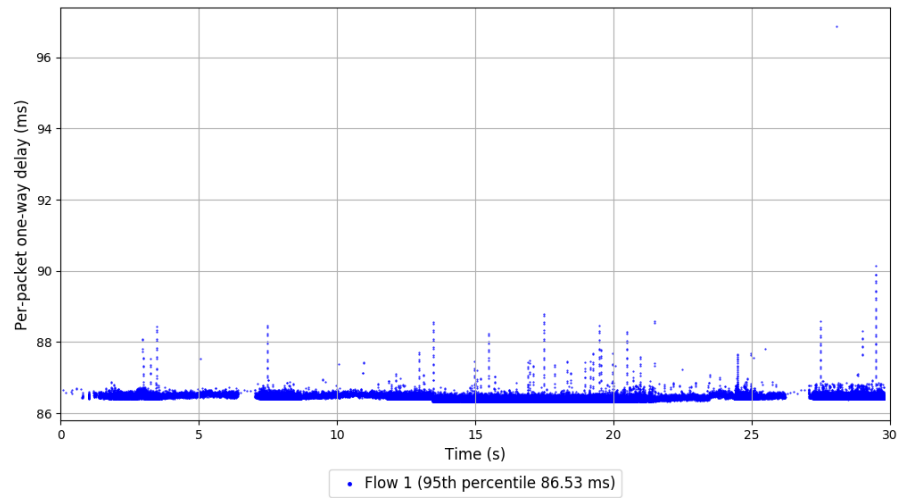
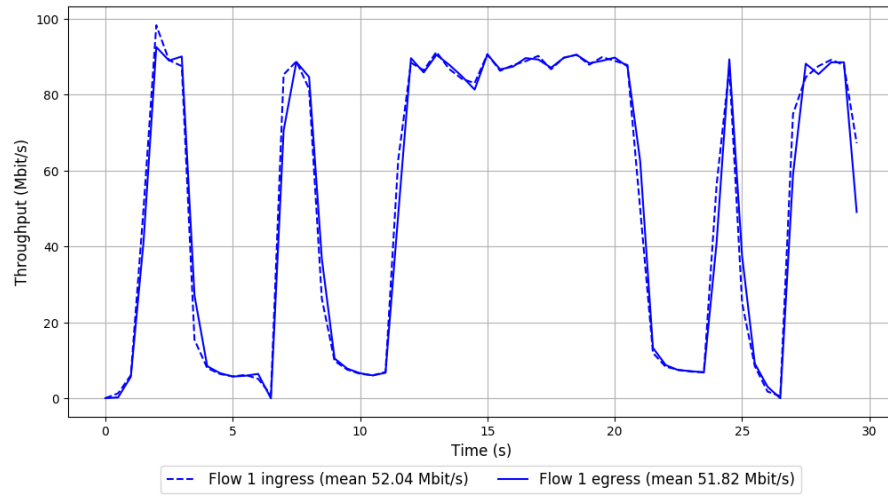
-- Flow 1:

Average throughput: 51.82 Mbit/s

95th percentile per-packet one-way delay: 86.533 ms

Loss rate: 1.07%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-01 22:03:48

End at: 2018-01-01 22:04:18

Below is generated by plot.py at 2018-01-02 02:02:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.48 Mbit/s

95th percentile per-packet one-way delay: 86.730 ms

Loss rate: 0.88%

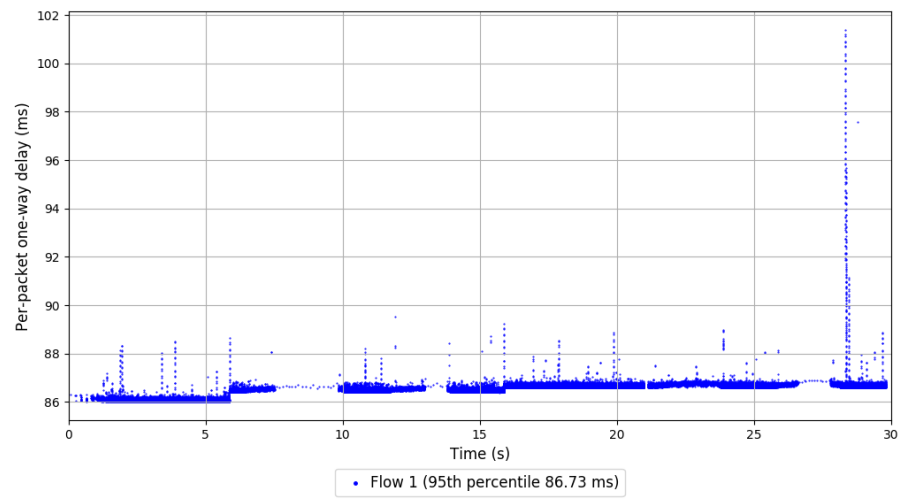
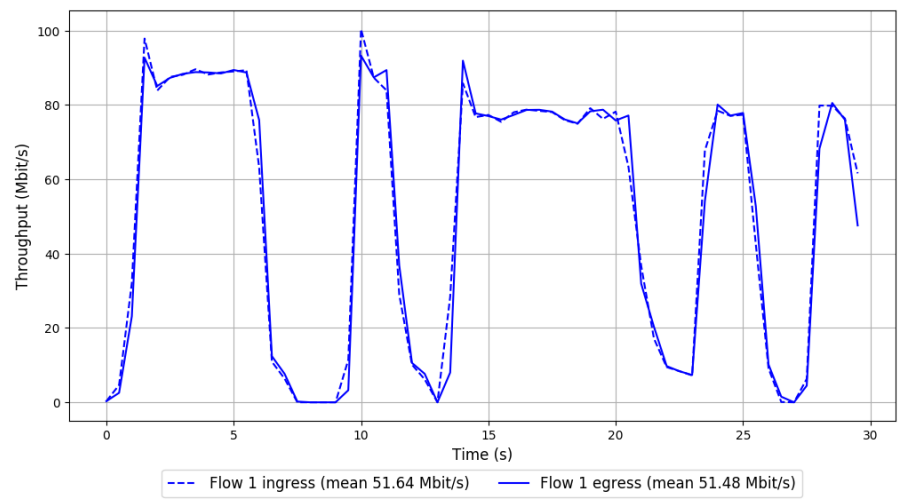
-- Flow 1:

Average throughput: 51.48 Mbit/s

95th percentile per-packet one-way delay: 86.730 ms

Loss rate: 0.88%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-01 22:16:04

End at: 2018-01-01 22:16:34

Below is generated by plot.py at 2018-01-02 02:02:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.56 Mbit/s

95th percentile per-packet one-way delay: 86.898 ms

Loss rate: 0.85%

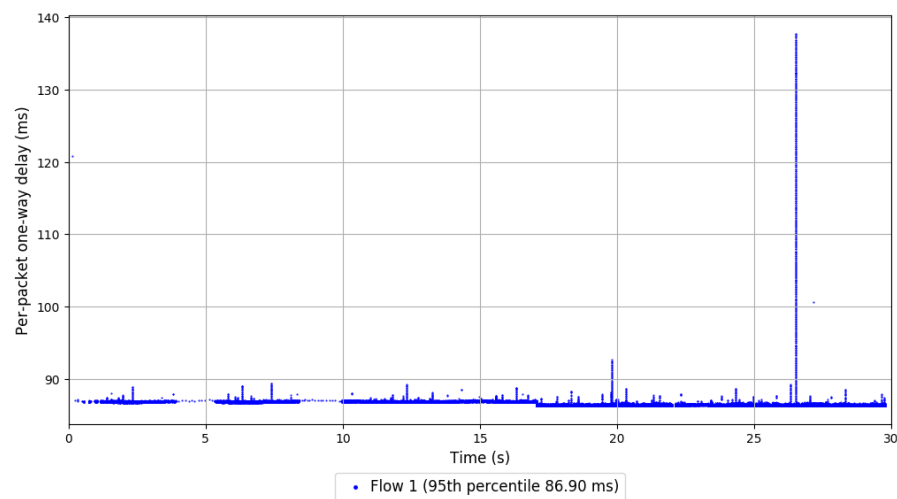
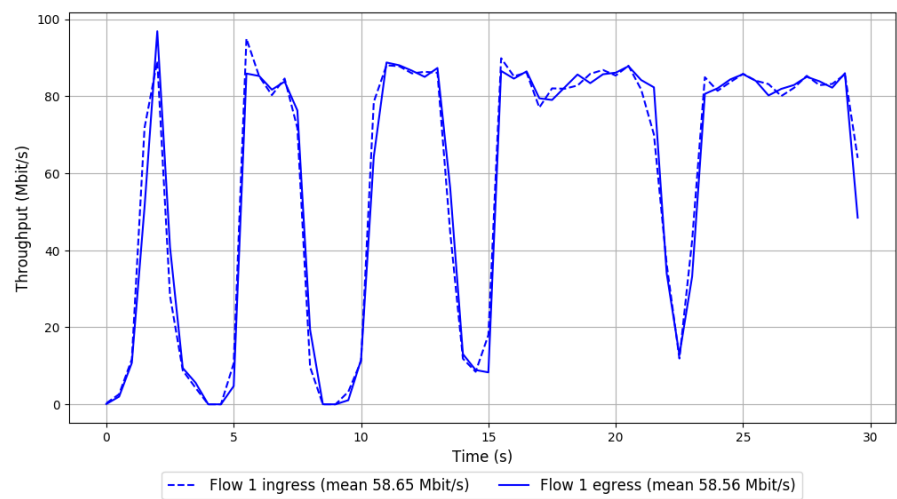
-- Flow 1:

Average throughput: 58.56 Mbit/s

95th percentile per-packet one-way delay: 86.898 ms

Loss rate: 0.85%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

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

End at: 2018-01-01 22:28:31

Below is generated by plot.py at 2018-01-02 02:02:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.24 Mbit/s

95th percentile per-packet one-way delay: 86.501 ms

Loss rate: 0.86%

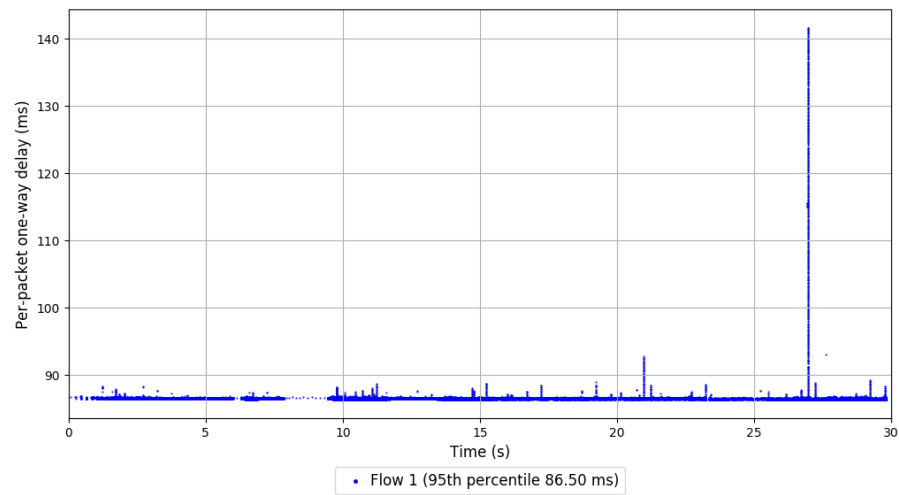
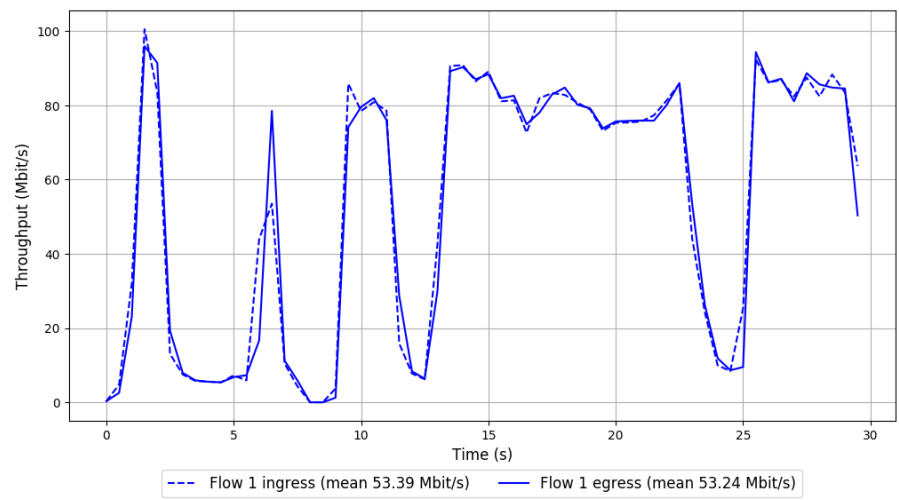
-- Flow 1:

Average throughput: 53.24 Mbit/s

95th percentile per-packet one-way delay: 86.501 ms

Loss rate: 0.86%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-01 22:40:21

End at: 2018-01-01 22:40:51

Below is generated by plot.py at 2018-01-02 02:02:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.58 Mbit/s

95th percentile per-packet one-way delay: 86.603 ms

Loss rate: 0.82%

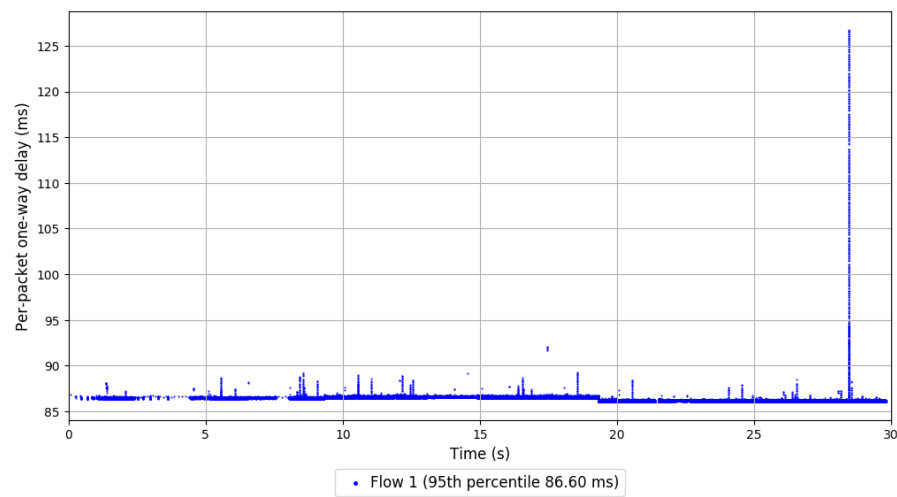
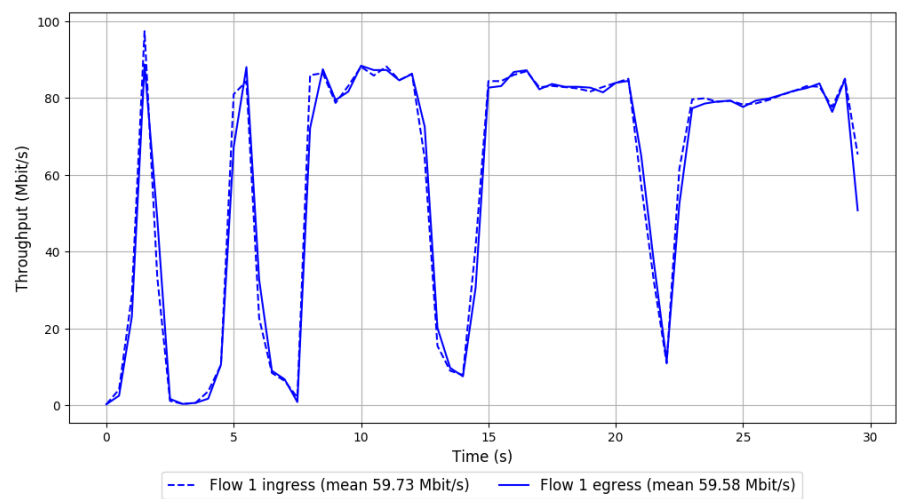
-- Flow 1:

Average throughput: 59.58 Mbit/s

95th percentile per-packet one-way delay: 86.603 ms

Loss rate: 0.82%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-01 22:52:39

End at: 2018-01-01 22:53:09

Below is generated by plot.py at 2018-01-02 02:02:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.50 Mbit/s

95th percentile per-packet one-way delay: 86.993 ms

Loss rate: 0.86%

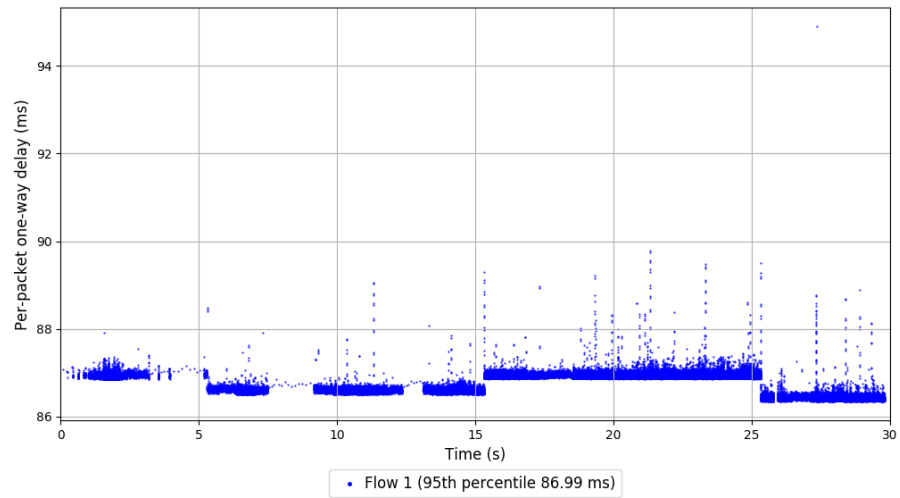
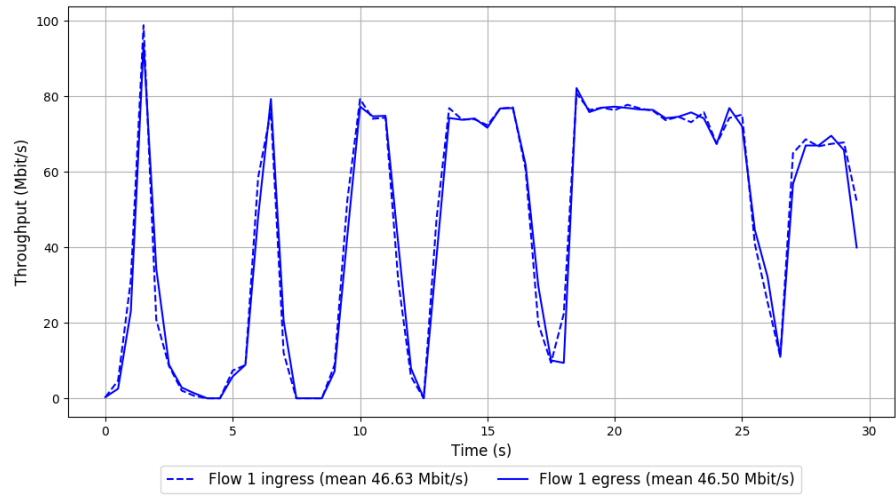
-- Flow 1:

Average throughput: 46.50 Mbit/s

95th percentile per-packet one-way delay: 86.993 ms

Loss rate: 0.86%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-01 23:05:00

End at: 2018-01-01 23:05:30

Below is generated by plot.py at 2018-01-02 02:02:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.30 Mbit/s

95th percentile per-packet one-way delay: 86.913 ms

Loss rate: 0.85%

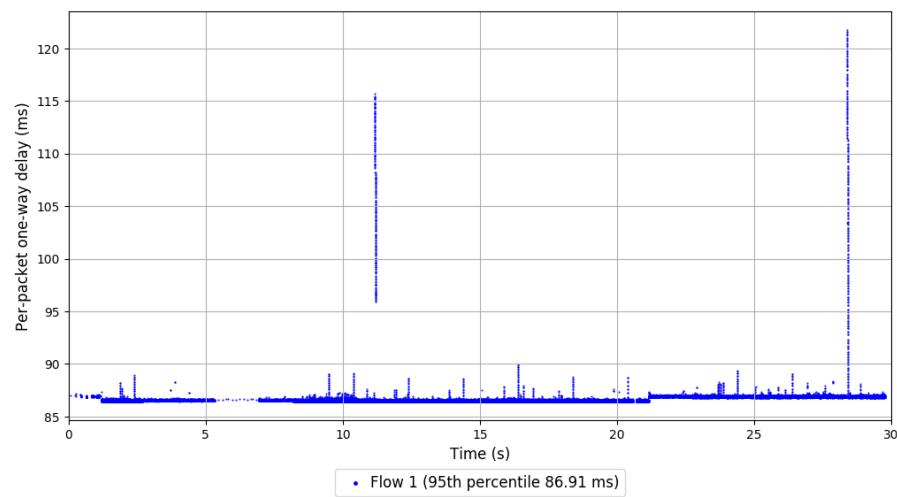
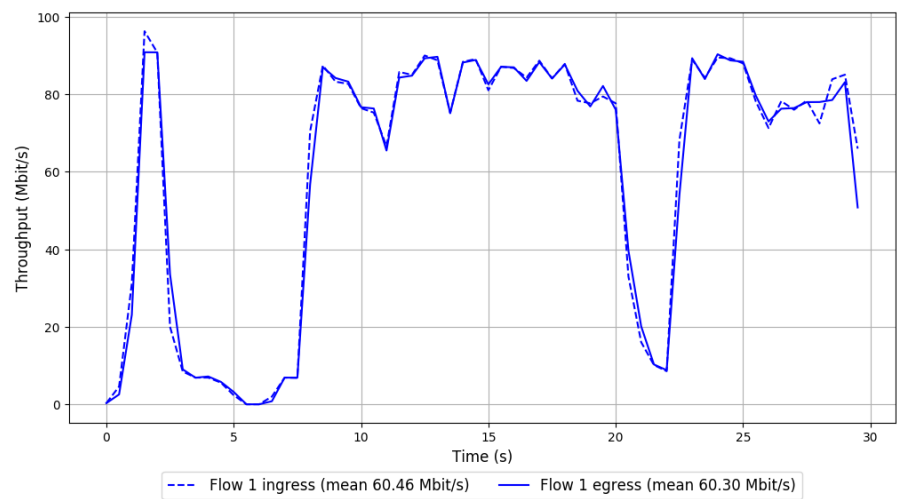
-- Flow 1:

Average throughput: 60.30 Mbit/s

95th percentile per-packet one-way delay: 86.913 ms

Loss rate: 0.85%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-01 23:17:13

End at: 2018-01-01 23:17:43

Below is generated by plot.py at 2018-01-02 02:02:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.89 Mbit/s

95th percentile per-packet one-way delay: 86.565 ms

Loss rate: 0.78%

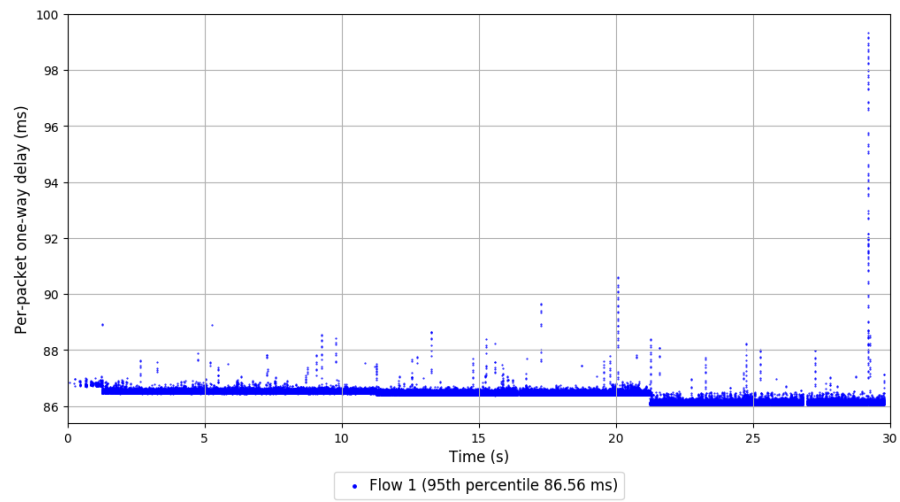
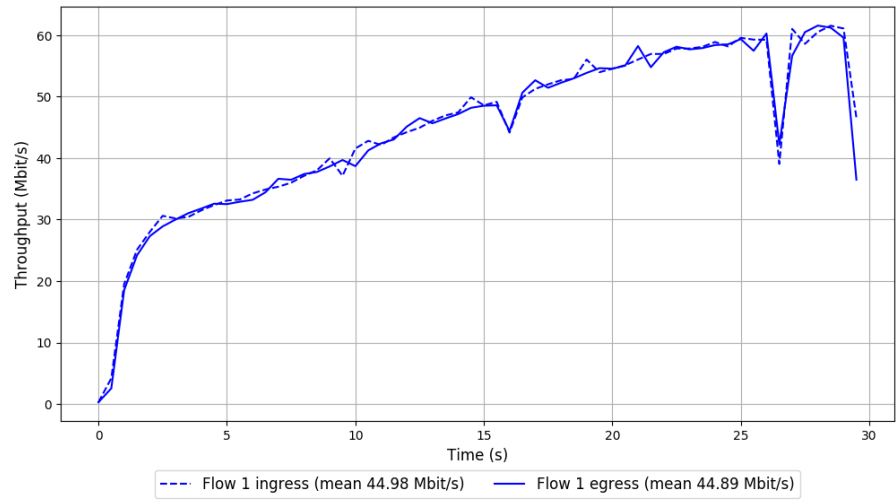
-- Flow 1:

Average throughput: 44.89 Mbit/s

95th percentile per-packet one-way delay: 86.565 ms

Loss rate: 0.78%

Run 9: Report of QUIC Cubic — Data Link

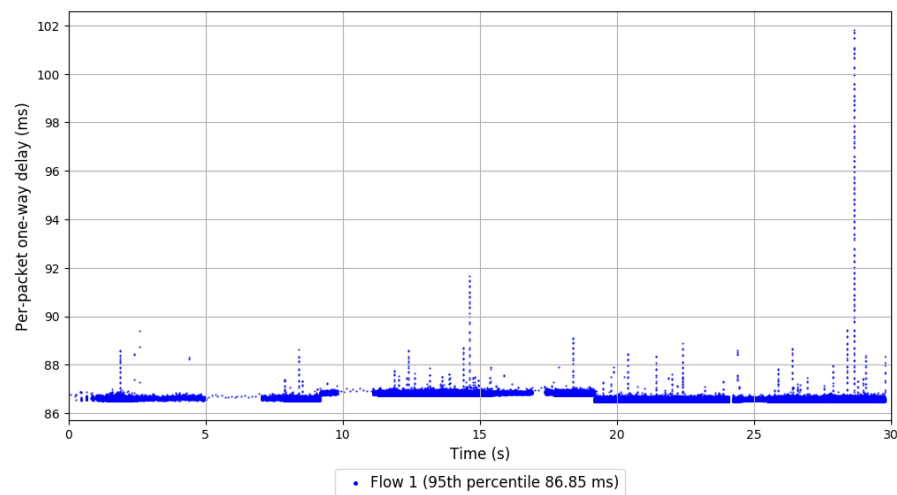
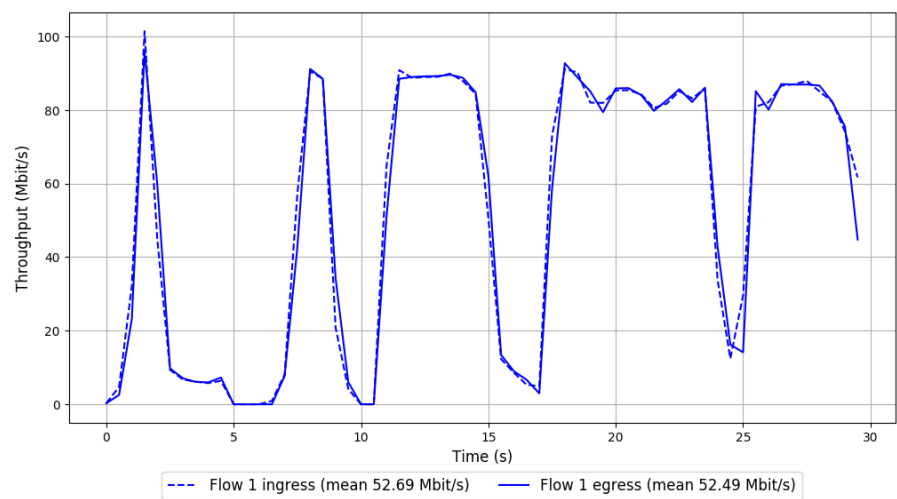


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-01 23:29:32
End at: 2018-01-01 23:30:02

# Below is generated by plot.py at 2018-01-02 02:02:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.49 Mbit/s
95th percentile per-packet one-way delay: 86.848 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 52.49 Mbit/s
95th percentile per-packet one-way delay: 86.848 ms
Loss rate: 0.94%
```

Run 10: Report of QUIC Cubic — Data Link

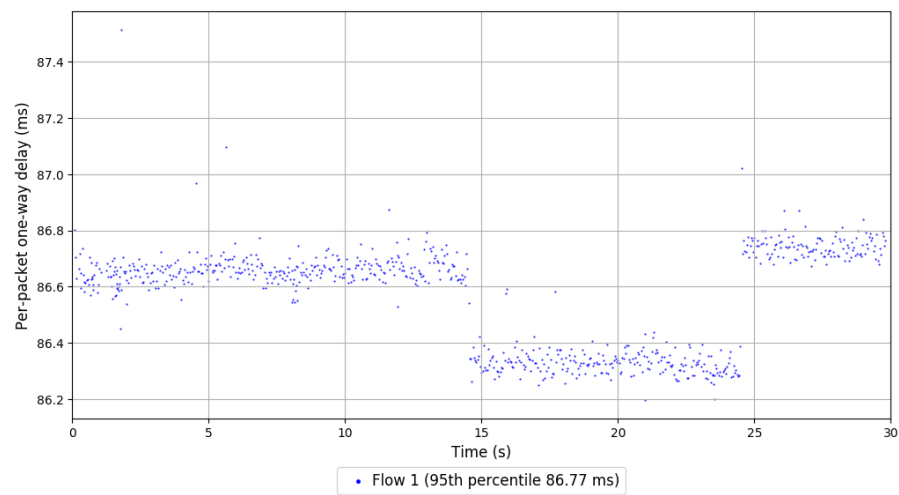
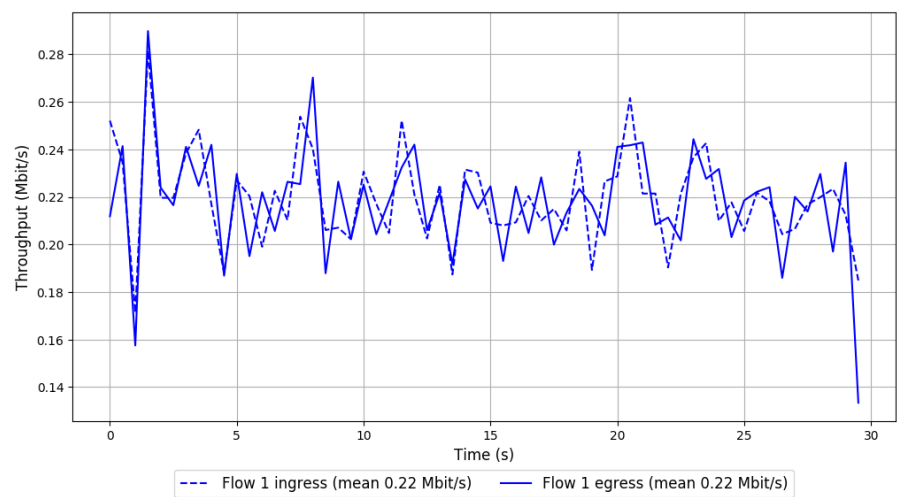


```
Run 1: Statistics of SCReAM

Start at: 2018-01-01 21:38:49
End at: 2018-01-01 21:39:19

# Below is generated by plot.py at 2018-01-02 02:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.769 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.769 ms
Loss rate: 0.64%
```

Run 1: Report of SReAM — Data Link

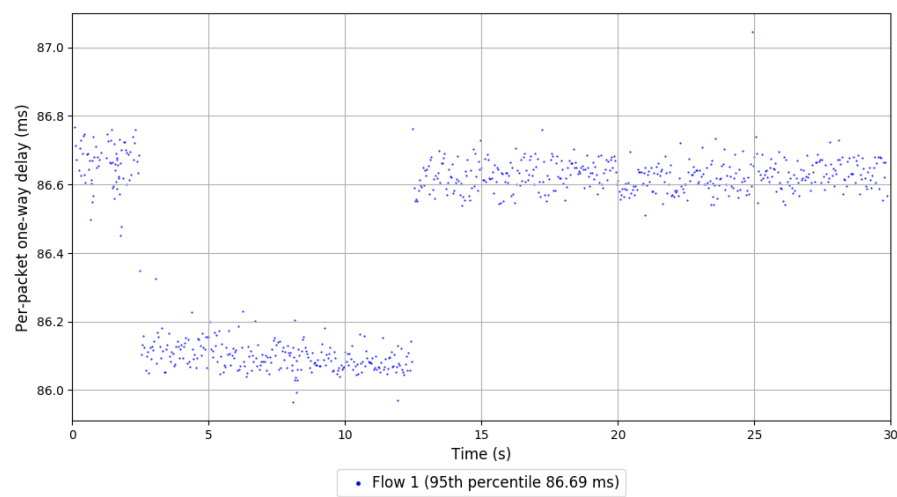
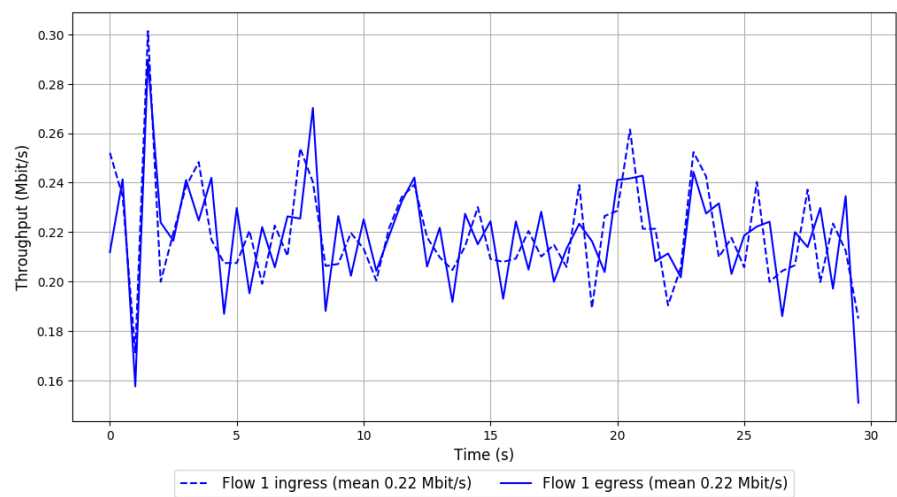


```
Run 2: Statistics of SCReAM

Start at: 2018-01-01 21:50:51
End at: 2018-01-01 21:51:22

# Below is generated by plot.py at 2018-01-02 02:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.694 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.694 ms
Loss rate: 0.51%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-01 22:03:09

End at: 2018-01-01 22:03:39

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.115 ms

Loss rate: 0.51%

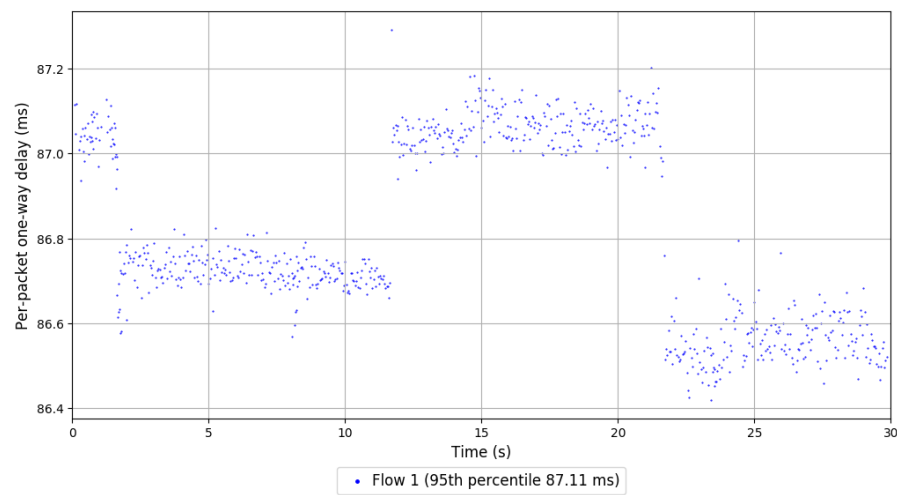
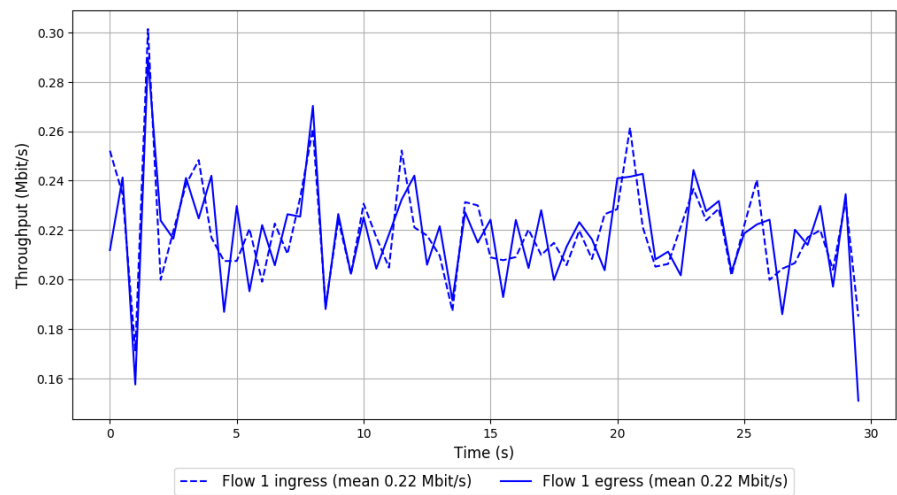
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.115 ms

Loss rate: 0.51%

Run 3: Report of SReAM — Data Link

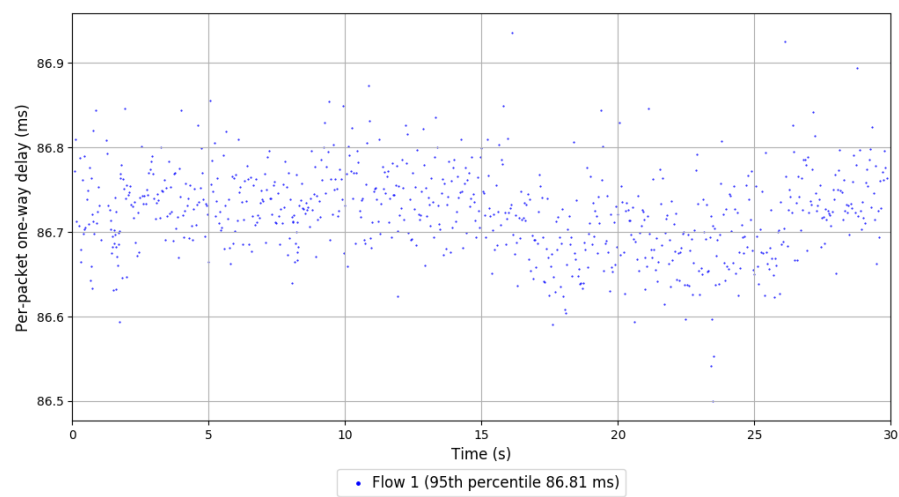
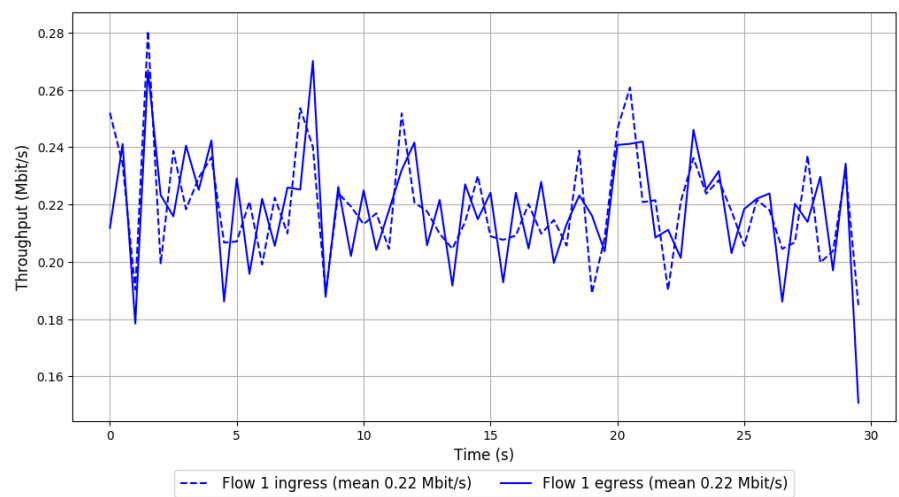


```
Run 4: Statistics of SCReAM

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

# Below is generated by plot.py at 2018-01-02 02:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.805 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.805 ms
Loss rate: 0.51%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-01 22:27:22

End at: 2018-01-01 22:27:52

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.590 ms

Loss rate: 0.51%

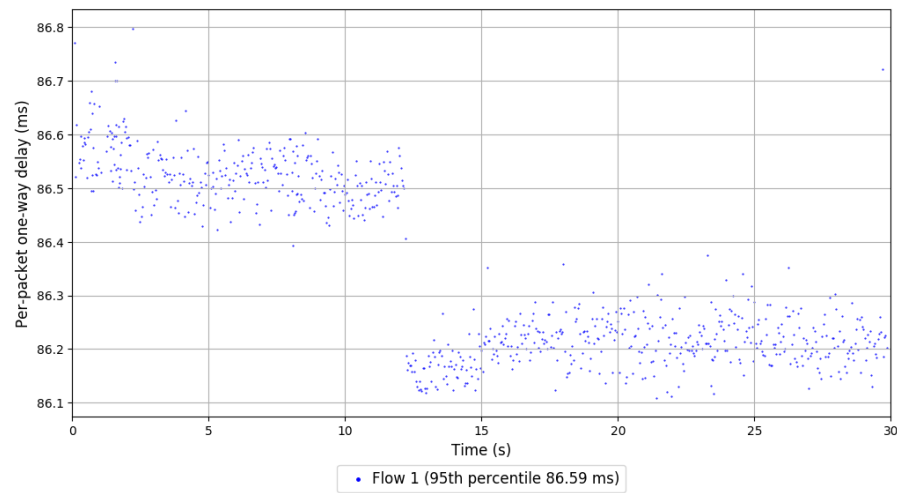
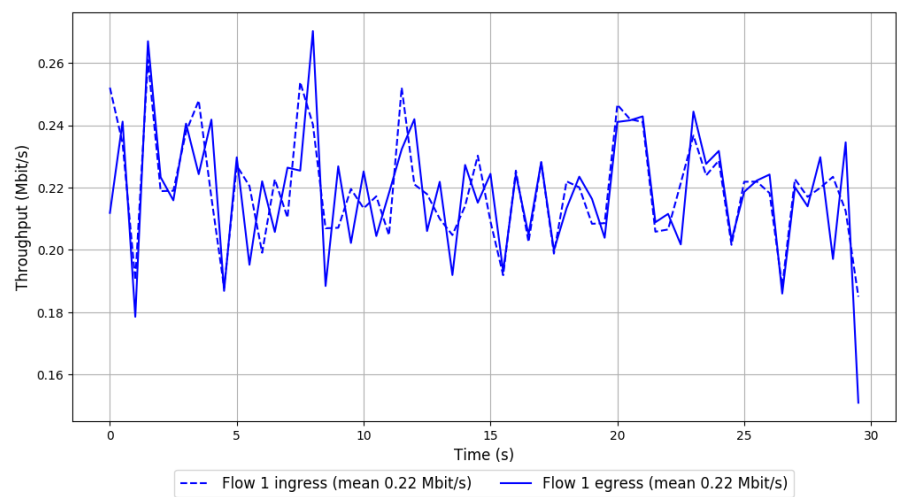
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.590 ms

Loss rate: 0.51%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-01 22:39:42

End at: 2018-01-01 22:40:12

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.140 ms

Loss rate: 0.51%

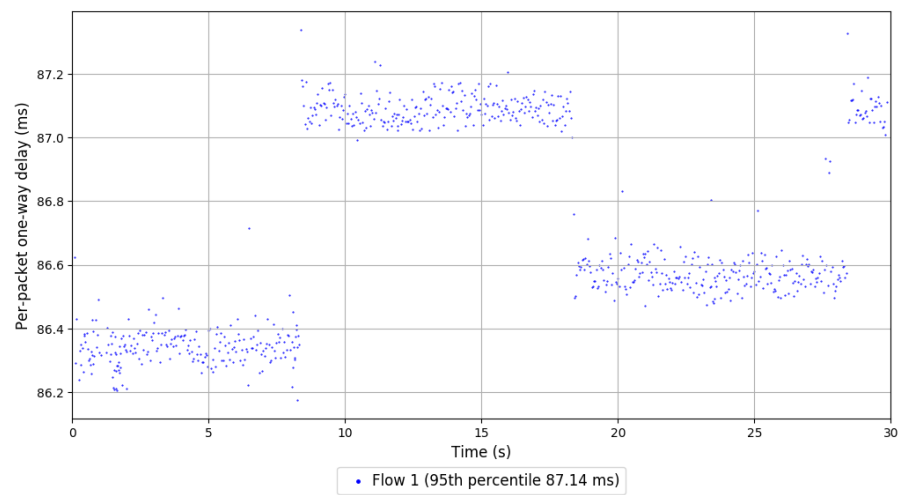
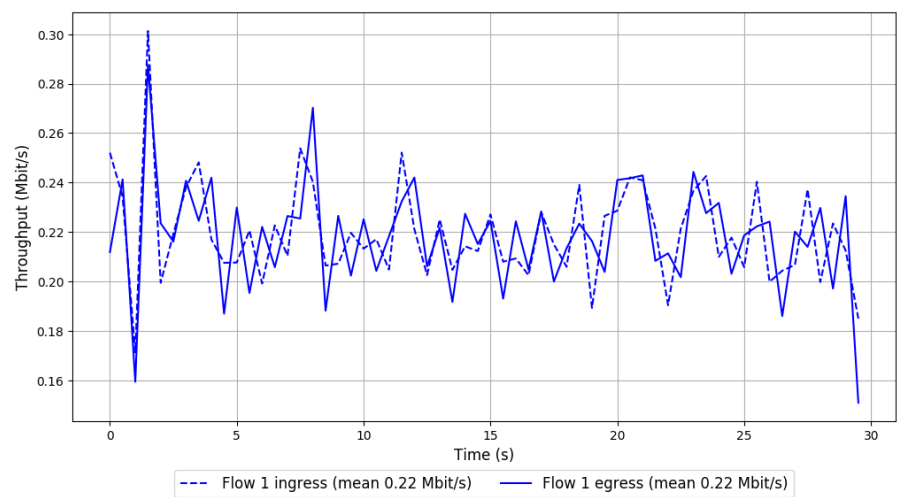
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.140 ms

Loss rate: 0.51%

Run 6: Report of SReAM — Data Link

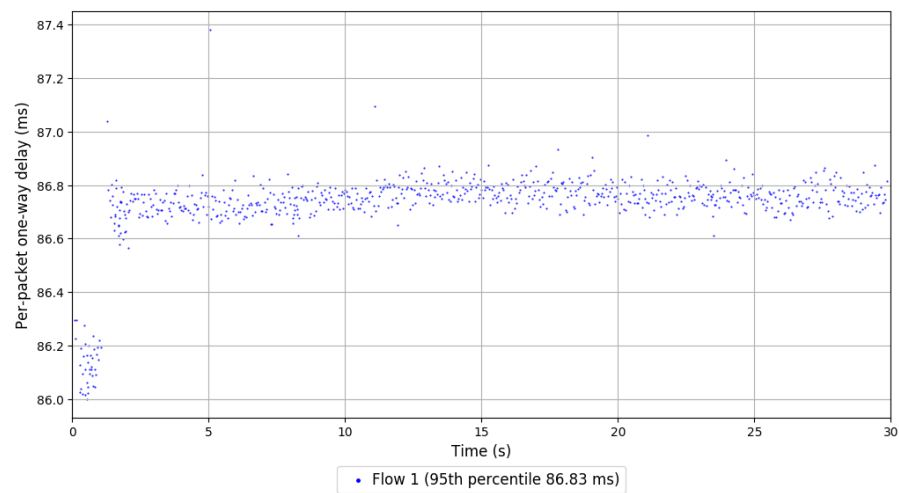
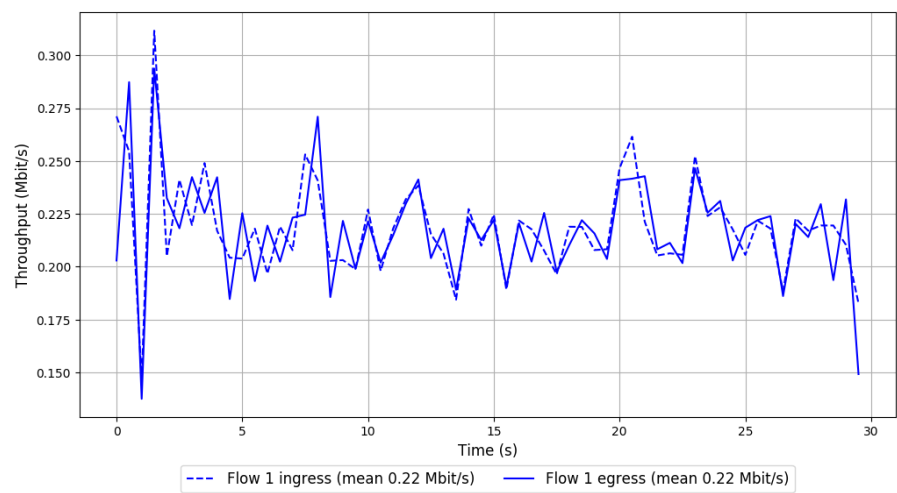


```
Run 7: Statistics of SCReAM

Start at: 2018-01-01 22:52:00
End at: 2018-01-01 22:52:30

# Below is generated by plot.py at 2018-01-02 02:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.832 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.832 ms
Loss rate: 0.50%
```

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-01 23:04:20

End at: 2018-01-01 23:04:51

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.099 ms

Loss rate: 0.51%

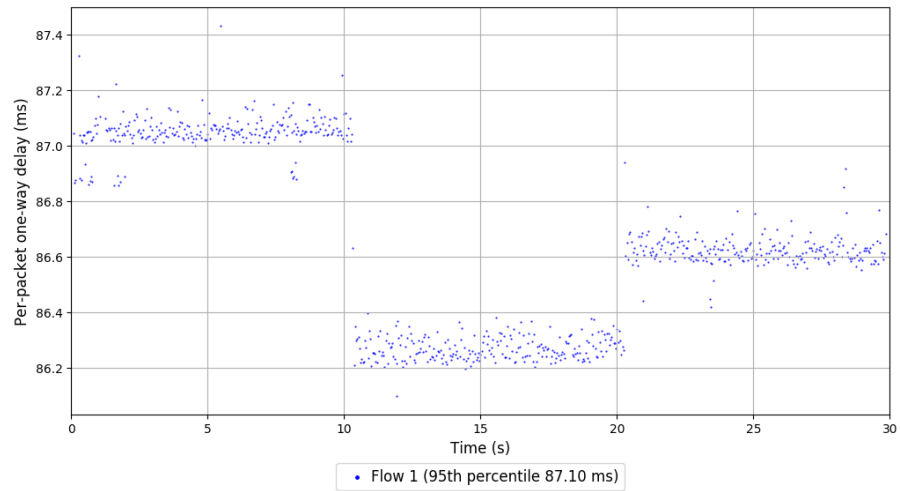
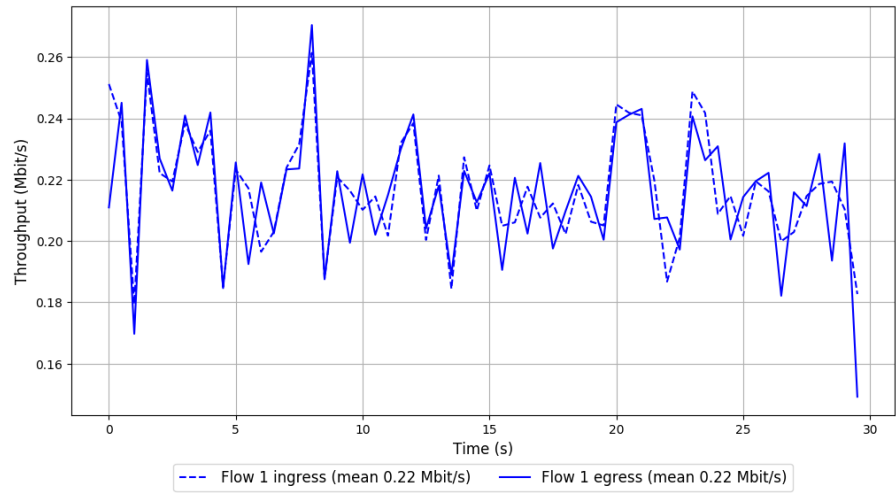
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.099 ms

Loss rate: 0.51%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-01 23:16:33

End at: 2018-01-01 23:17:03

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.968 ms

Loss rate: 0.64%

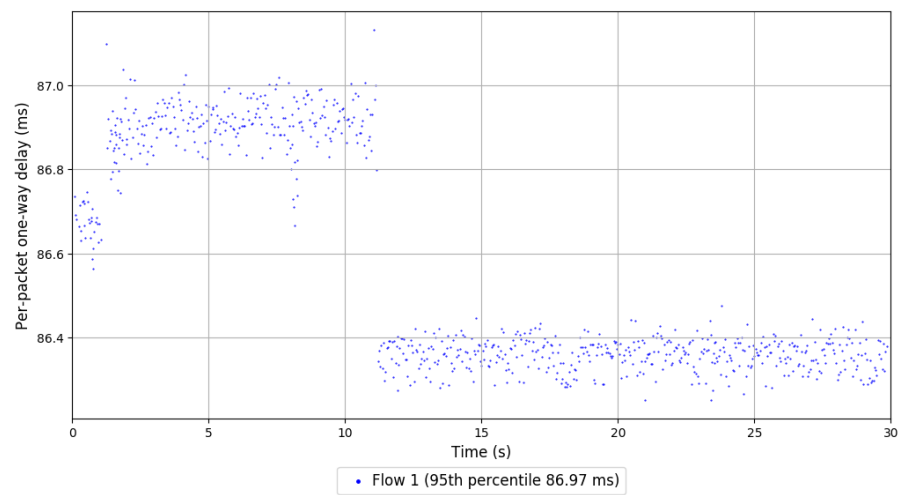
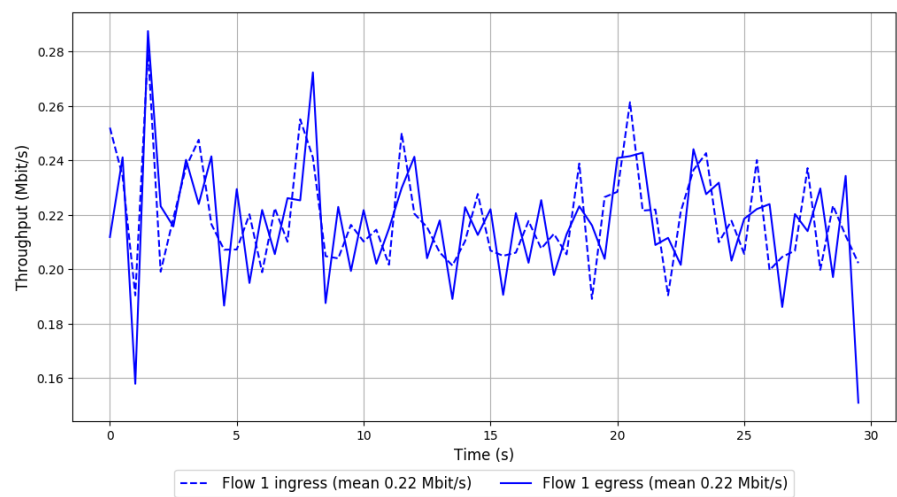
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.968 ms

Loss rate: 0.64%

Run 9: Report of SReAM — Data Link

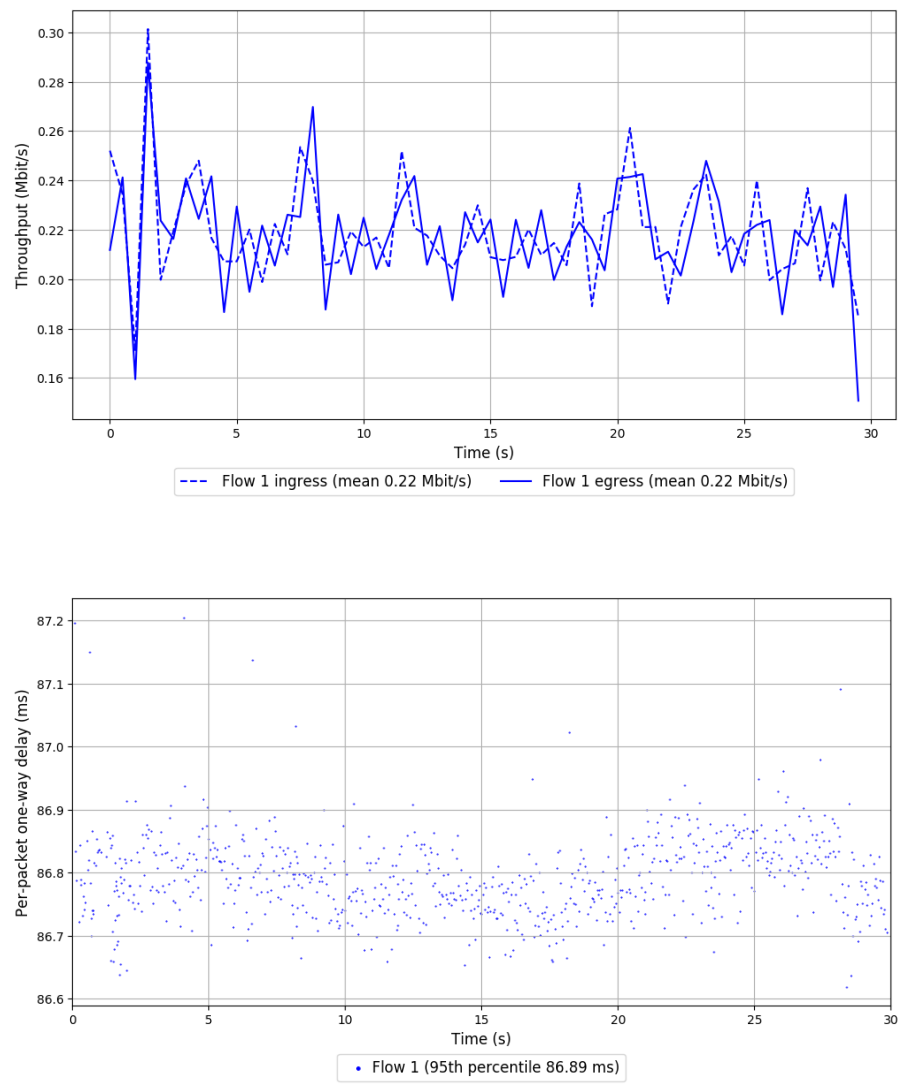


```
Run 10: Statistics of SReAM

Start at: 2018-01-01 23:28:53
End at: 2018-01-01 23:29:23

# Below is generated by plot.py at 2018-01-02 02:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.888 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.888 ms
Loss rate: 0.51%
```

Run 10: Report of SReAM — Data Link

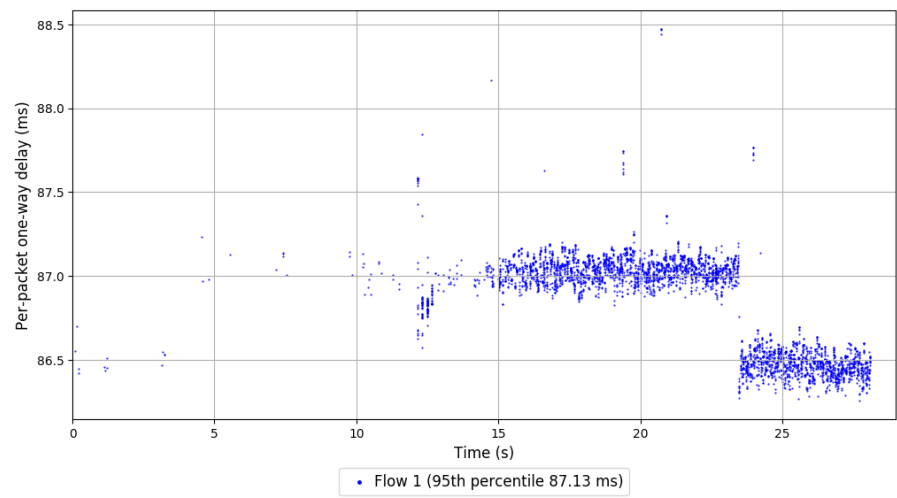
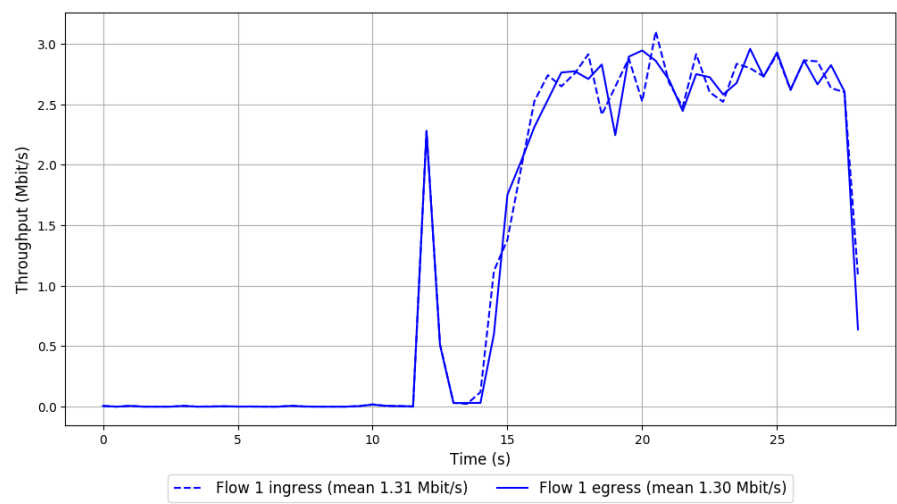


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-01 21:44:06
End at: 2018-01-01 21:44:36

# Below is generated by plot.py at 2018-01-02 02:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 87.133 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 87.133 ms
Loss rate: 1.18%
```

Run 1: Report of WebRTC media — Data Link

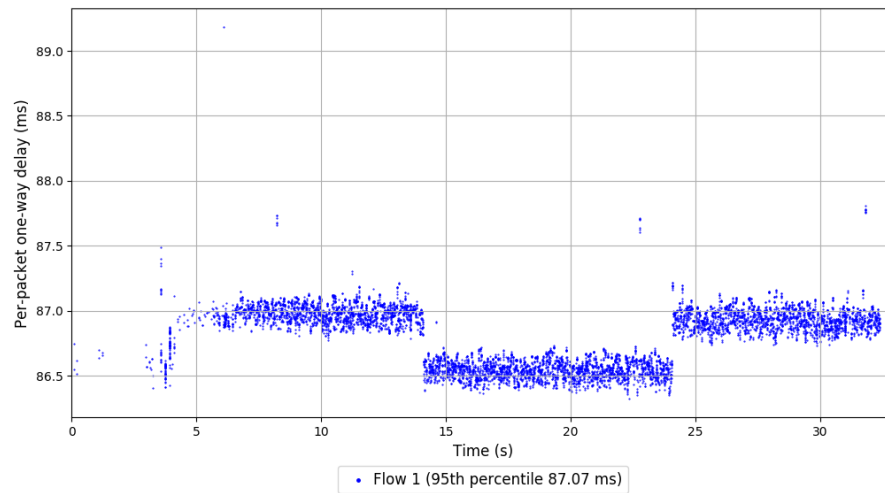
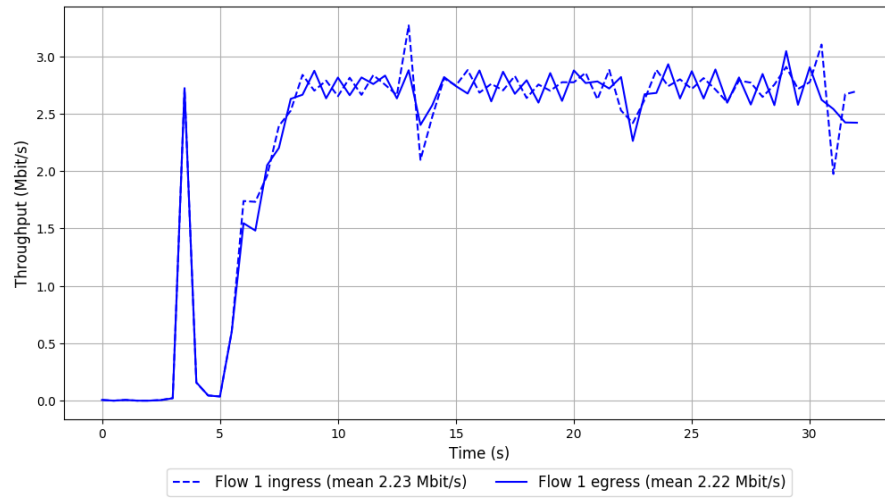


```
Run 2: Statistics of WebRTC media

Start at: 2018-01-01 21:56:22
End at: 2018-01-01 21:56:52

# Below is generated by plot.py at 2018-01-02 02:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 87.067 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 87.067 ms
Loss rate: 0.62%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-01 22:08:41

End at: 2018-01-01 22:09:11

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 86.899 ms

Loss rate: 0.61%

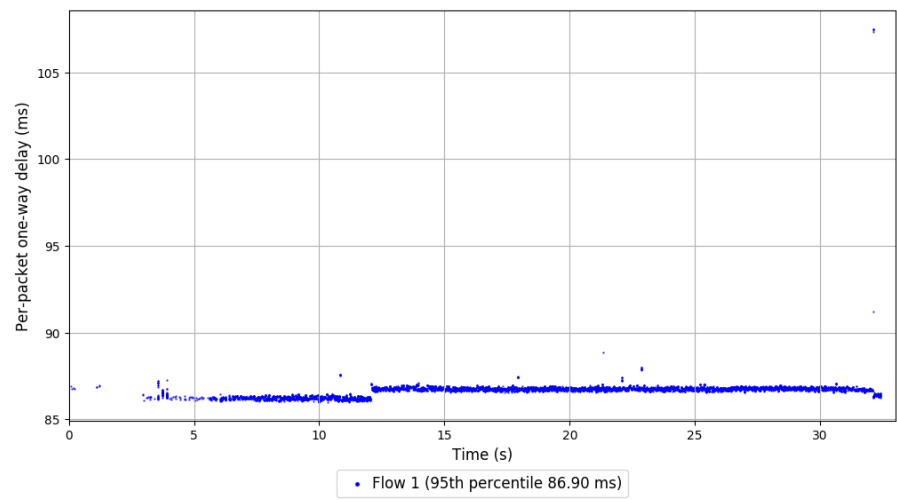
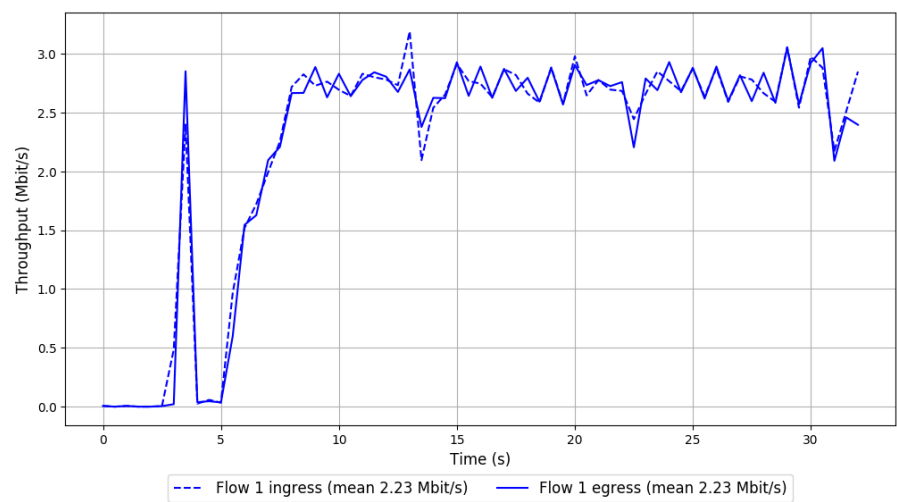
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 86.899 ms

Loss rate: 0.61%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-01 22:20:52

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.747 ms

Loss rate: 0.79%

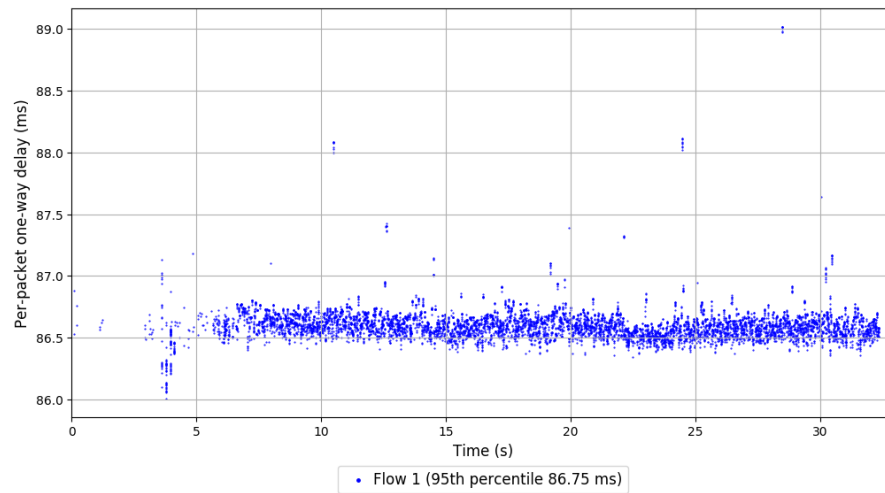
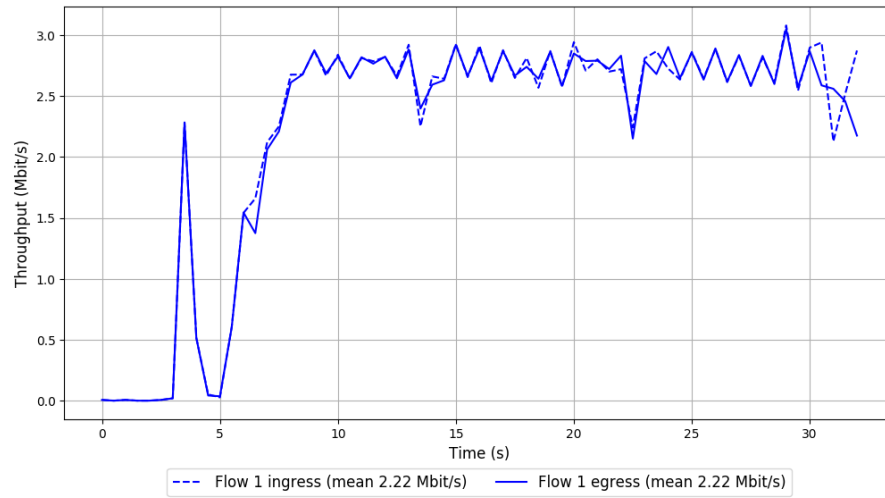
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.747 ms

Loss rate: 0.79%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-01 22:32:55

End at: 2018-01-01 22:33:26

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.253 ms

Loss rate: 0.66%

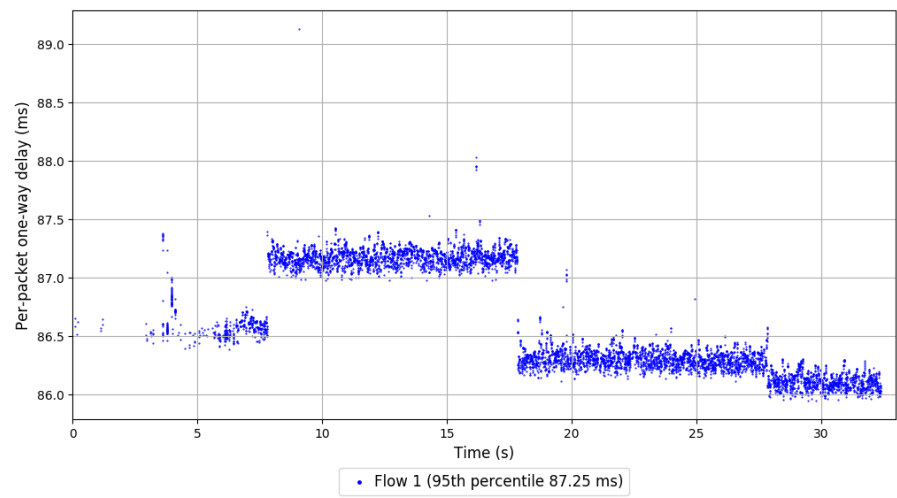
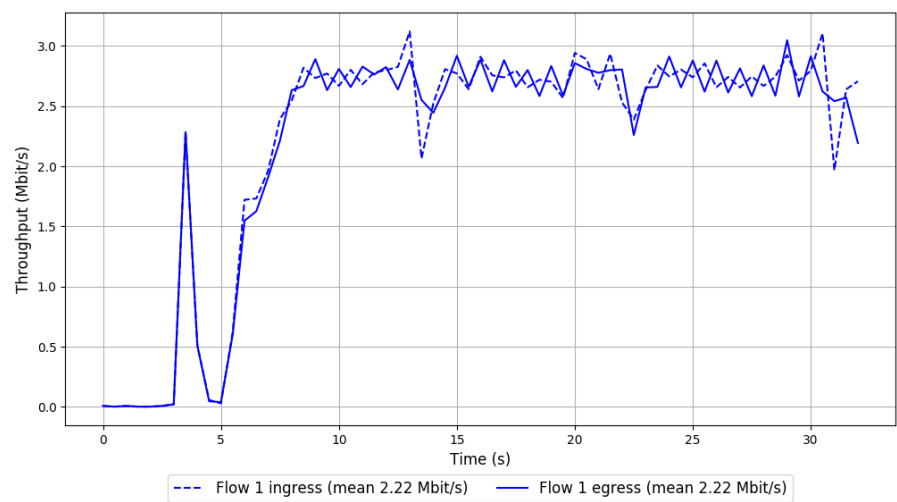
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.253 ms

Loss rate: 0.66%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-01 22:45:16

End at: 2018-01-01 22:45:46

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.791 ms

Loss rate: 0.72%

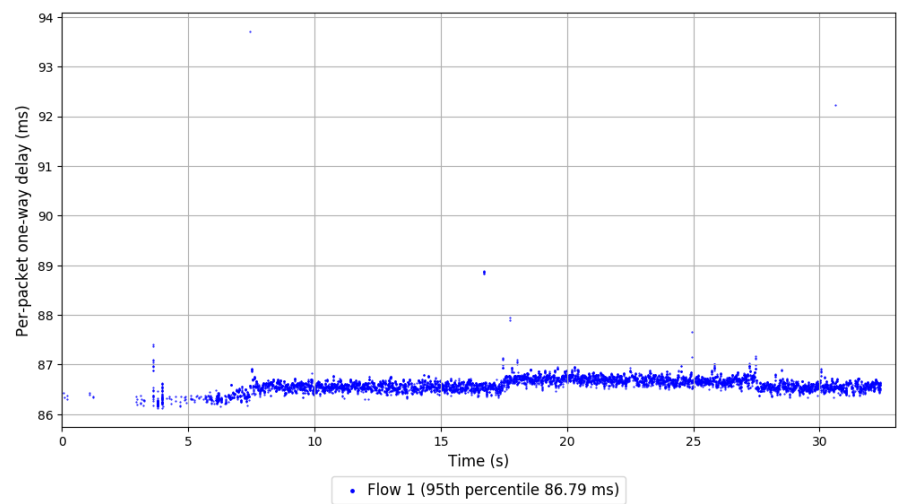
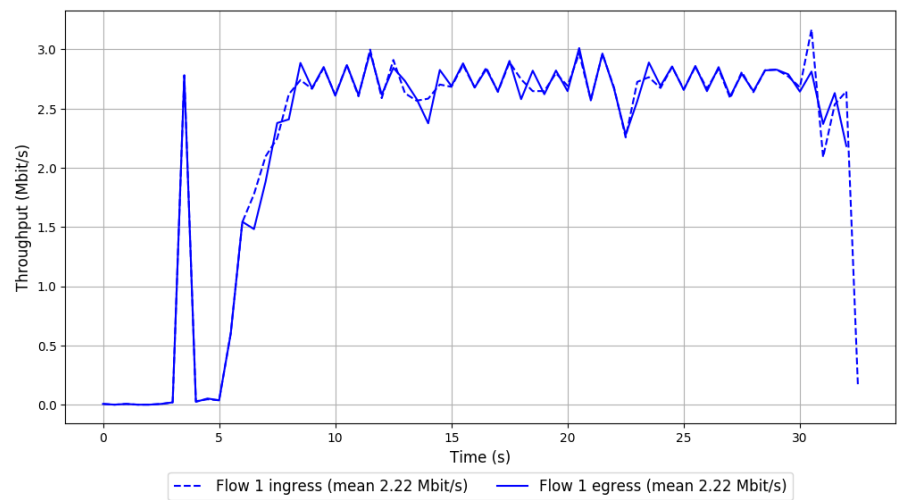
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.791 ms

Loss rate: 0.72%

Run 6: Report of WebRTC media — Data Link

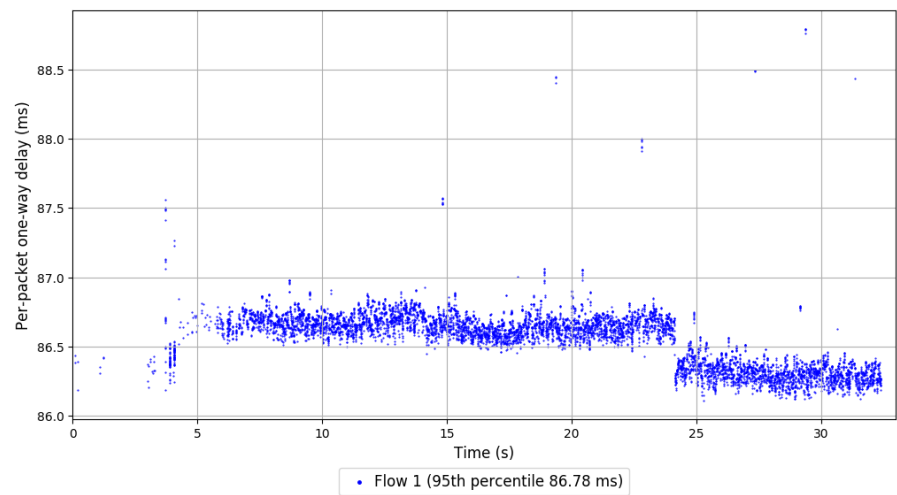
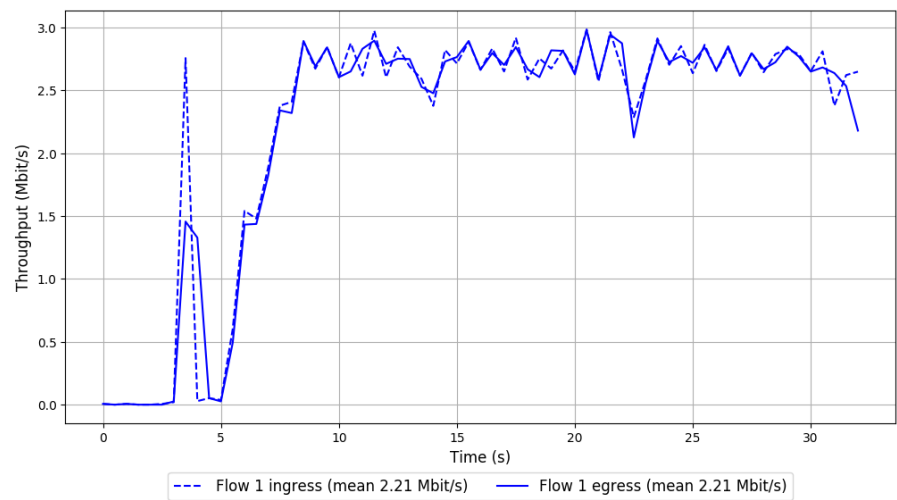


```
Run 7: Statistics of WebRTC media

Start at: 2018-01-01 22:57:29
End at: 2018-01-01 22:57:59

# Below is generated by plot.py at 2018-01-02 02:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 86.780 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 86.780 ms
Loss rate: 0.63%
```

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-01 23:09:49

End at: 2018-01-01 23:10:19

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 86.853 ms

Loss rate: 0.77%

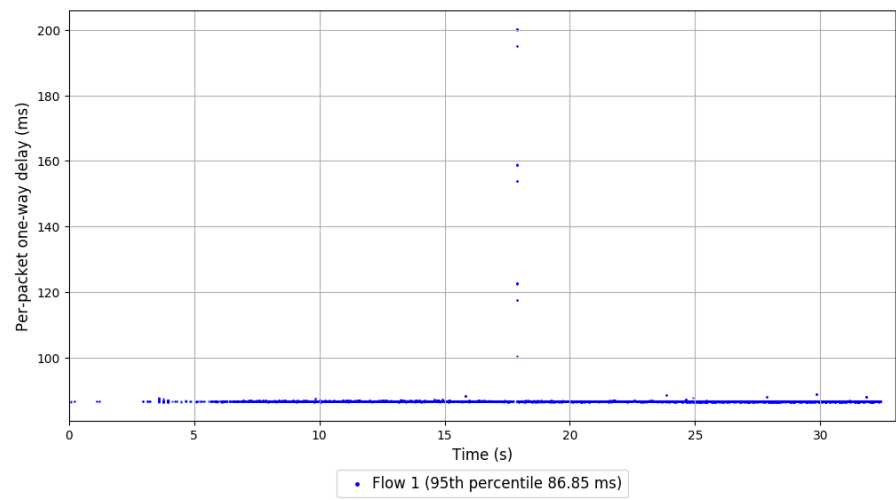
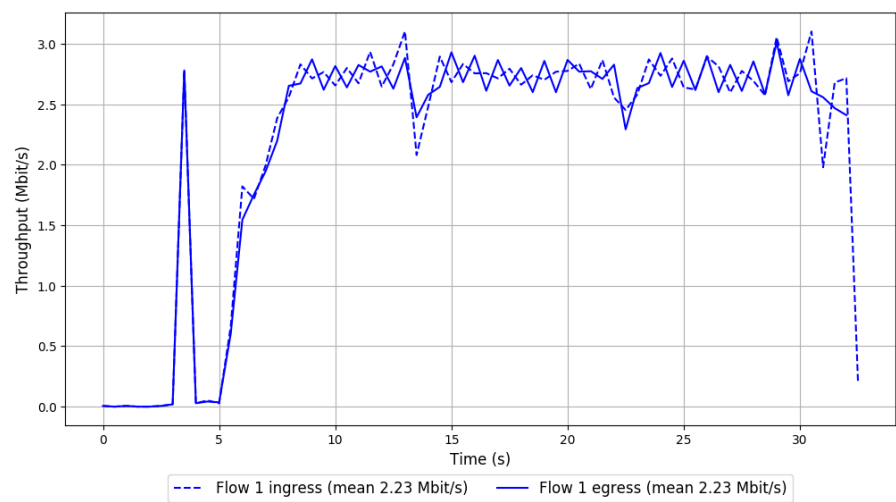
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 86.853 ms

Loss rate: 0.77%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-01 23:22:06

End at: 2018-01-01 23:22:36

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.887 ms

Loss rate: 0.67%

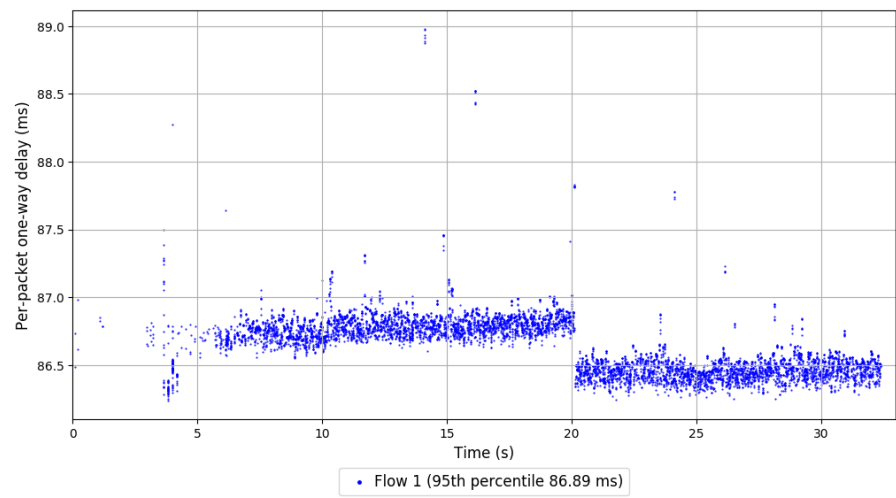
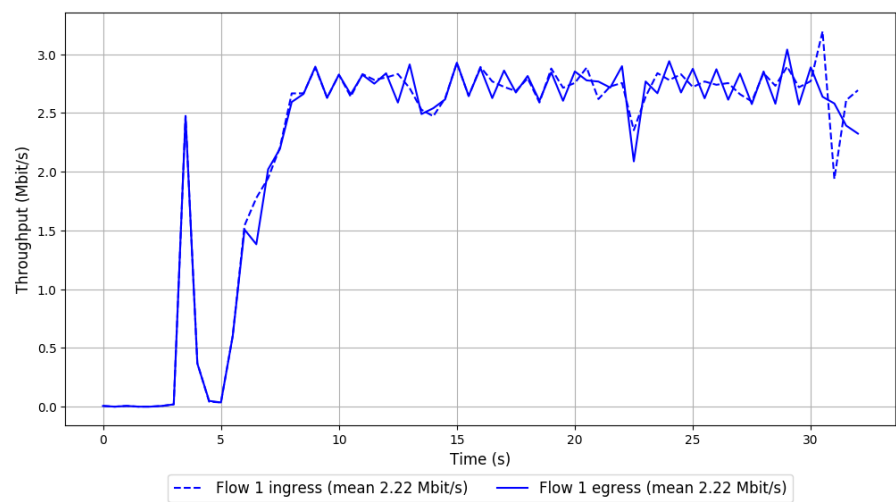
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.887 ms

Loss rate: 0.67%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-01 23:34:26

End at: 2018-01-01 23:34:56

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.943 ms

Loss rate: 0.63%

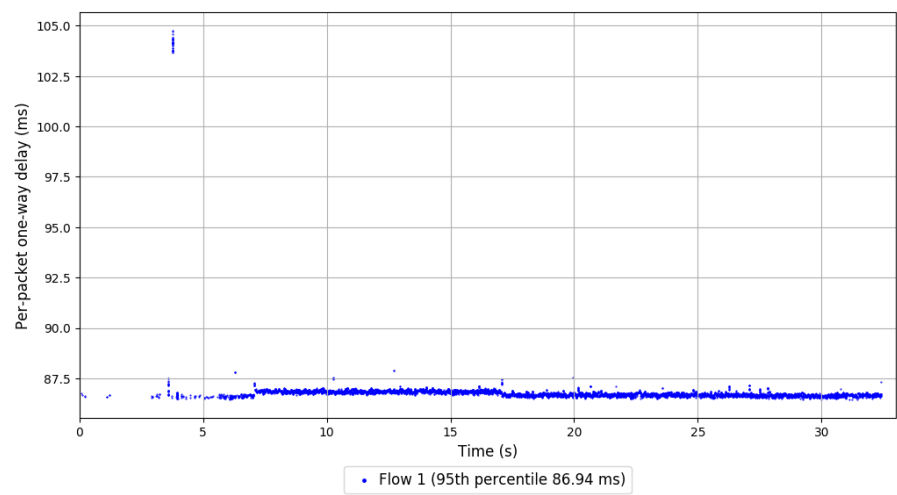
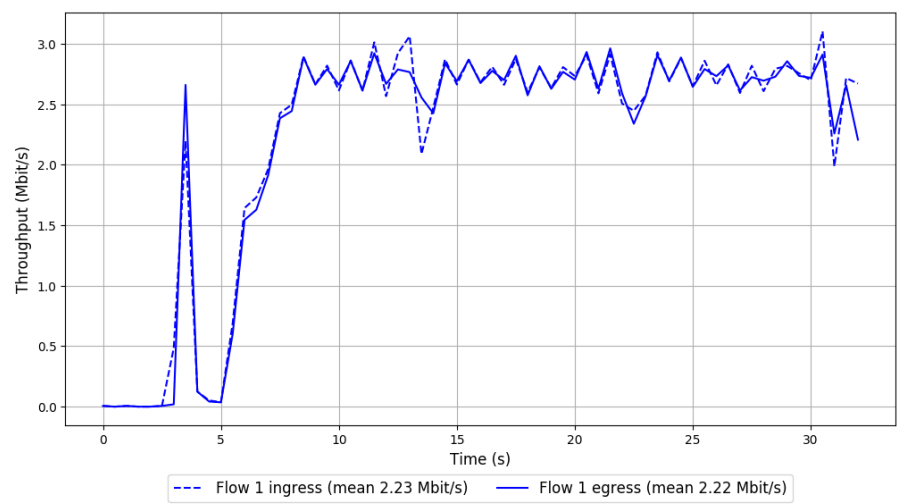
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.943 ms

Loss rate: 0.63%

Run 10: Report of WebRTC media — Data Link

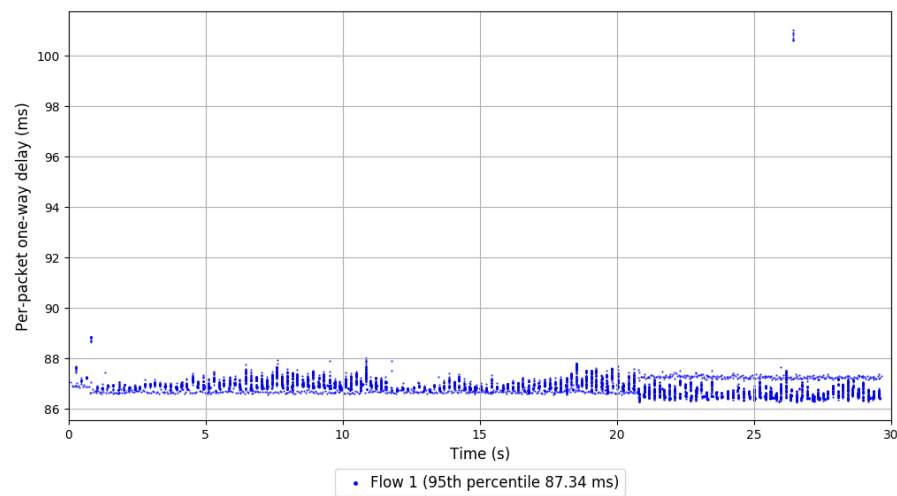
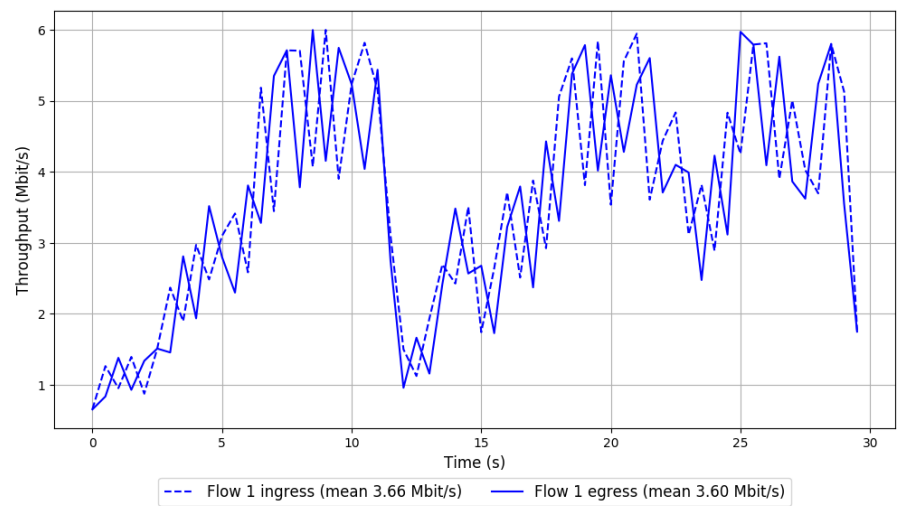


```
Run 1: Statistics of Sprout

Start at: 2018-01-01 21:38:10
End at: 2018-01-01 21:38:40

# Below is generated by plot.py at 2018-01-02 02:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.60 Mbit/s
95th percentile per-packet one-way delay: 87.338 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 3.60 Mbit/s
95th percentile per-packet one-way delay: 87.338 ms
Loss rate: 2.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-01 21:50:12

End at: 2018-01-01 21:50:42

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 87.462 ms

Loss rate: 1.77%

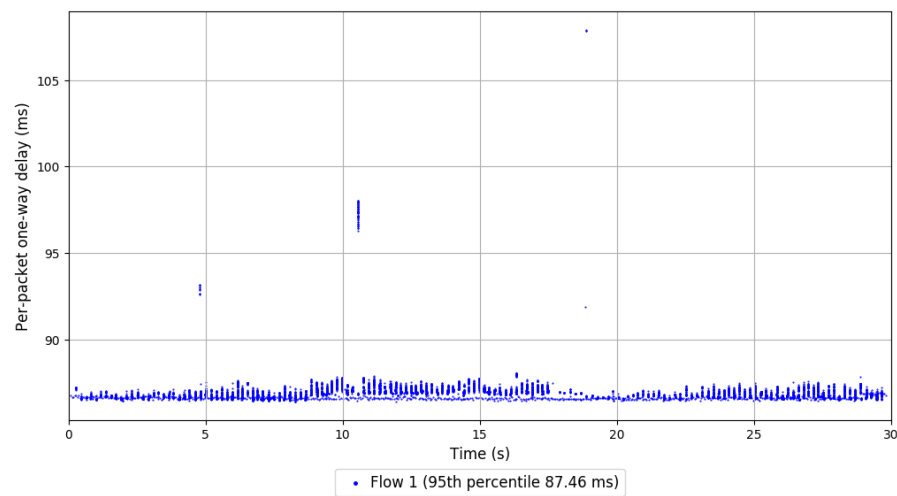
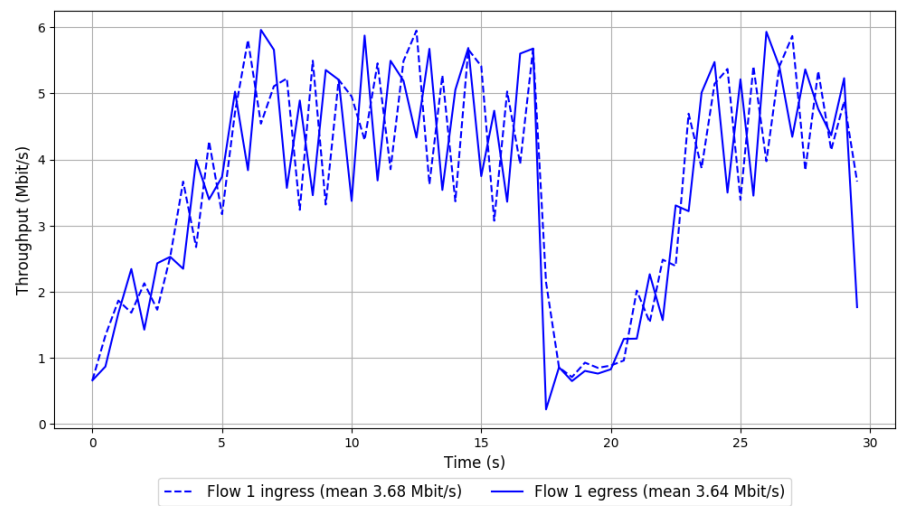
-- Flow 1:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 87.462 ms

Loss rate: 1.77%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-01 22:02:29

End at: 2018-01-01 22:02:59

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 87.517 ms

Loss rate: 0.83%

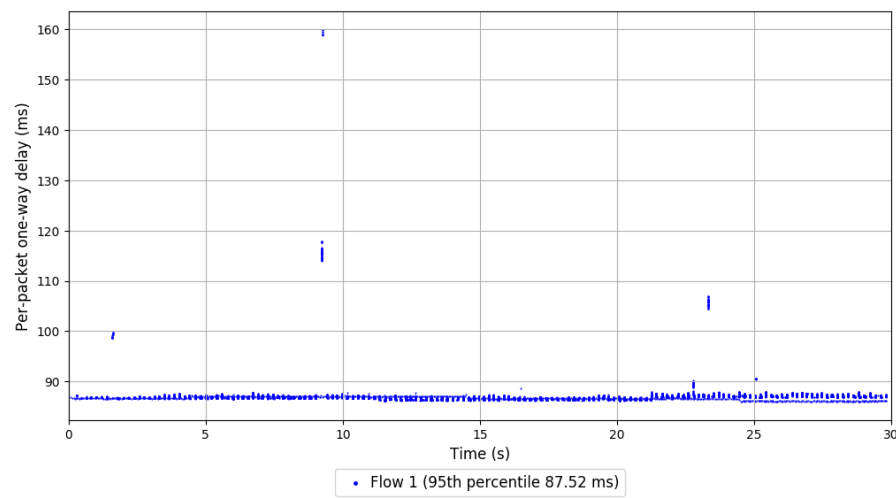
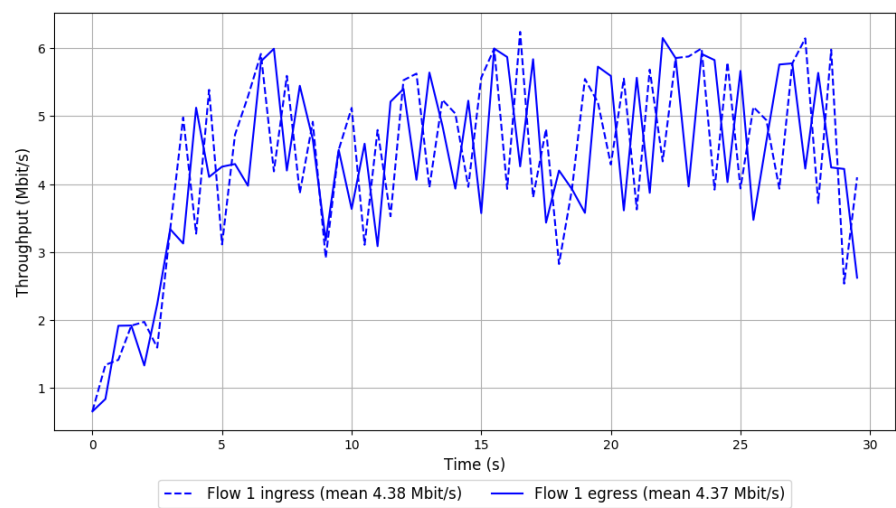
-- Flow 1:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 87.517 ms

Loss rate: 0.83%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-01 22:14:45

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.20 Mbit/s

95th percentile per-packet one-way delay: 87.341 ms

Loss rate: 2.52%

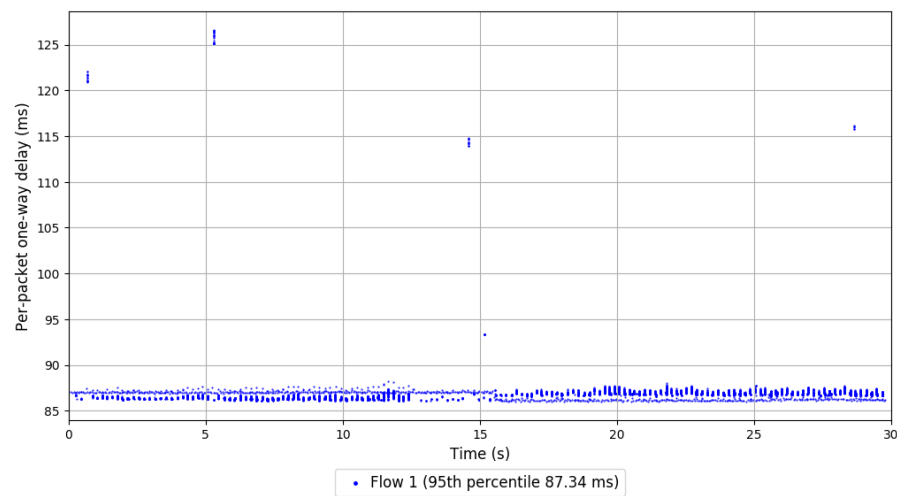
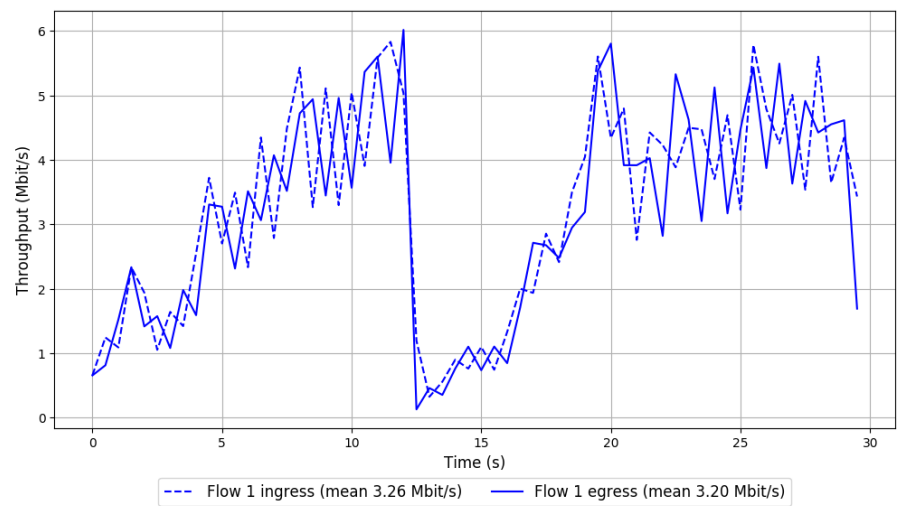
-- Flow 1:

Average throughput: 3.20 Mbit/s

95th percentile per-packet one-way delay: 87.341 ms

Loss rate: 2.52%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-01 22:26:42

End at: 2018-01-01 22:27:12

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 87.177 ms

Loss rate: 3.53%

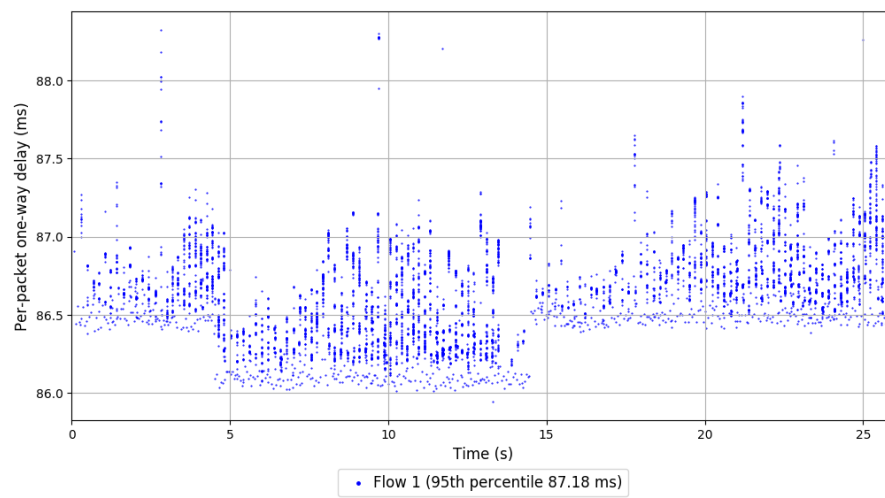
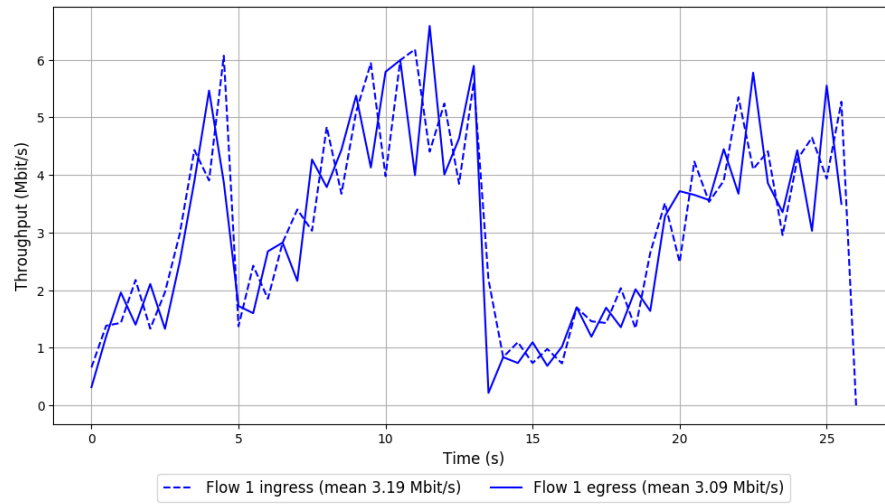
-- Flow 1:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 87.177 ms

Loss rate: 3.53%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-01 22:39:03

End at: 2018-01-01 22:39:33

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 87.701 ms

Loss rate: 1.68%

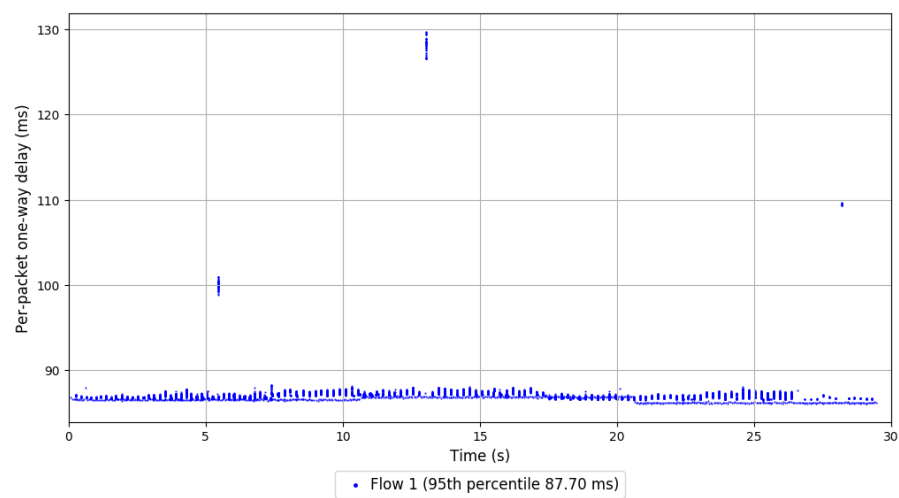
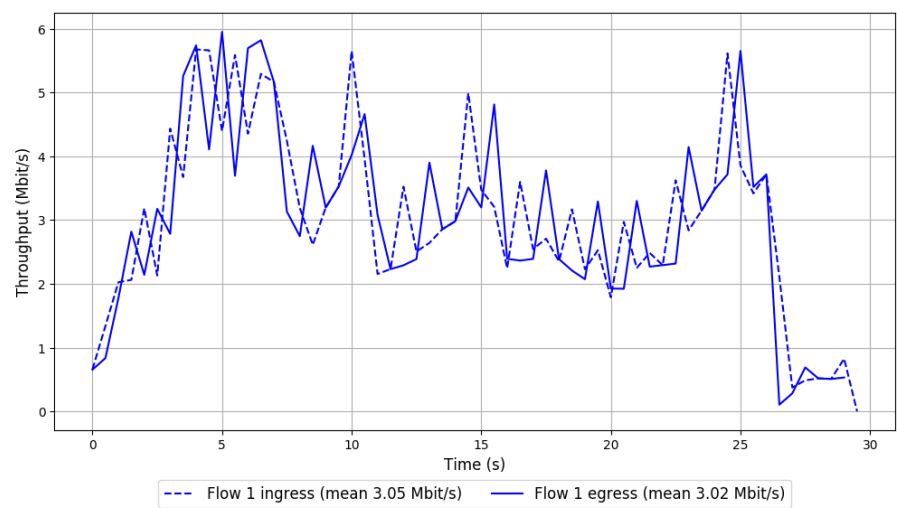
-- Flow 1:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 87.701 ms

Loss rate: 1.68%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-01 22:51:20

End at: 2018-01-01 22:51:50

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 87.483 ms

Loss rate: 1.37%

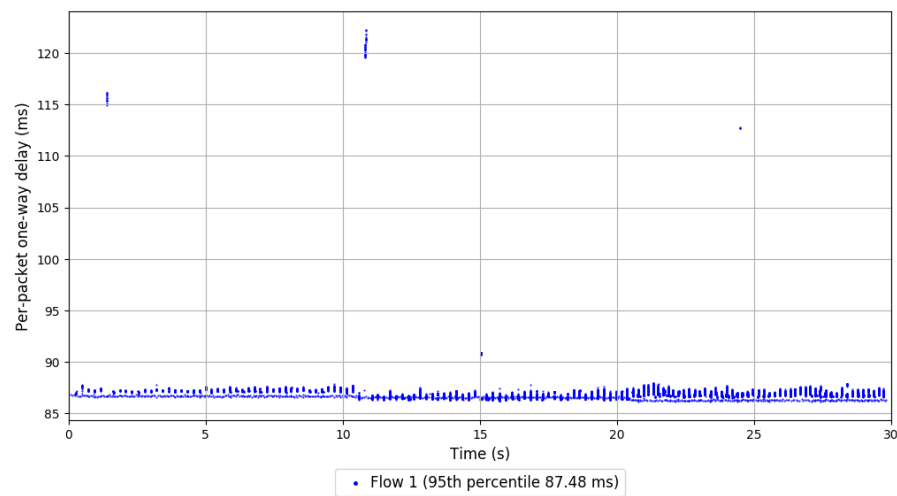
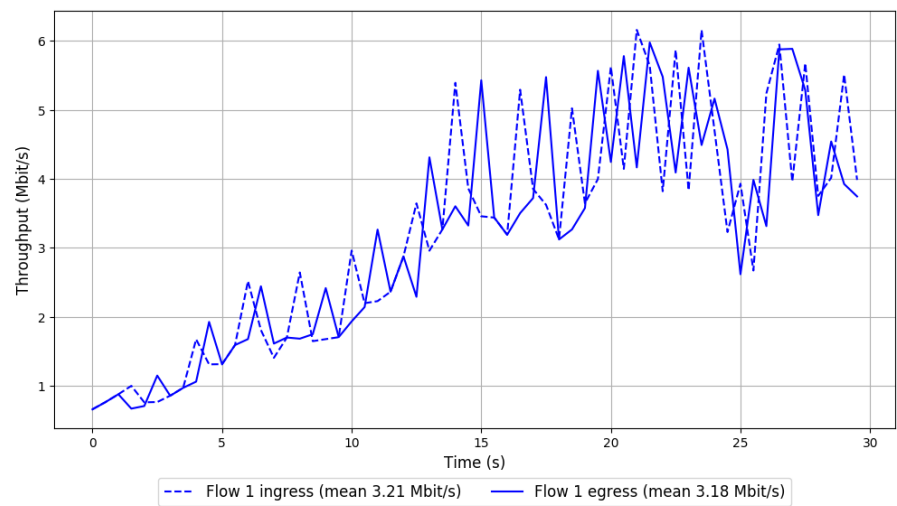
-- Flow 1:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 87.483 ms

Loss rate: 1.37%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-01 23:03:41

End at: 2018-01-01 23:04:11

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 87.399 ms

Loss rate: 1.28%

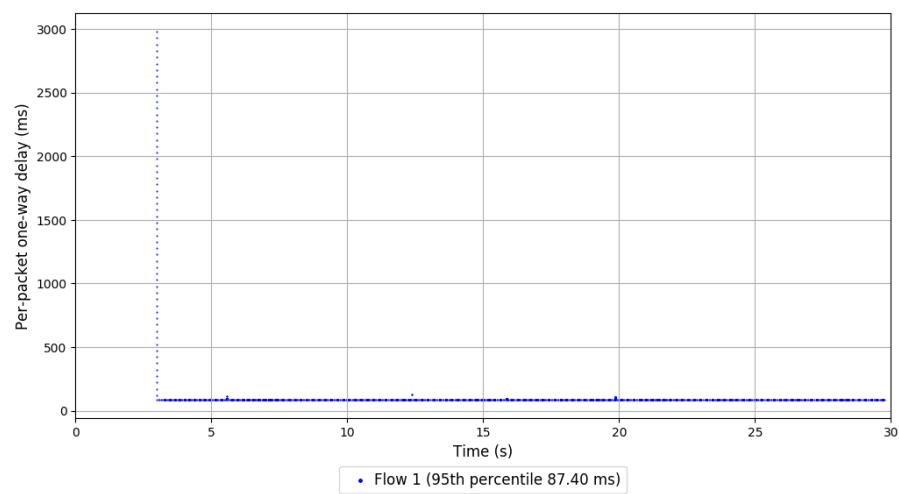
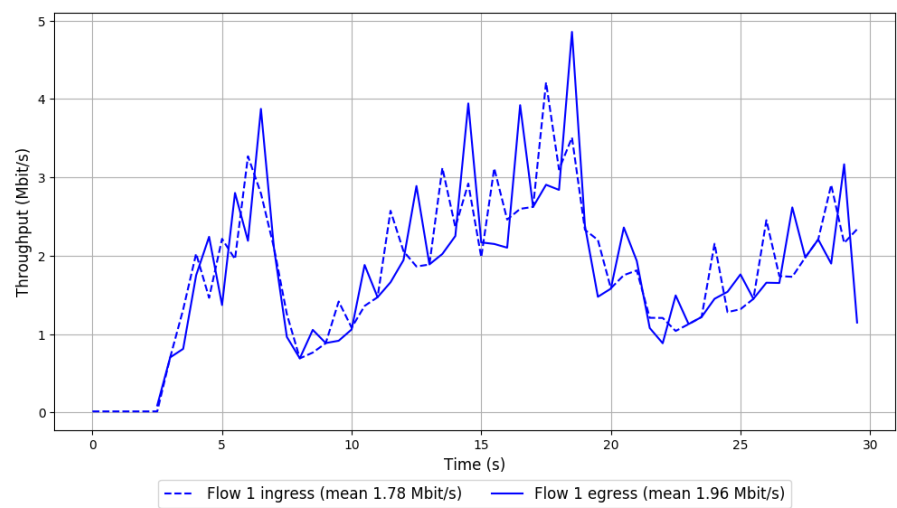
-- Flow 1:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 87.399 ms

Loss rate: 1.28%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

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

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 87.914 ms

Loss rate: 3.12%

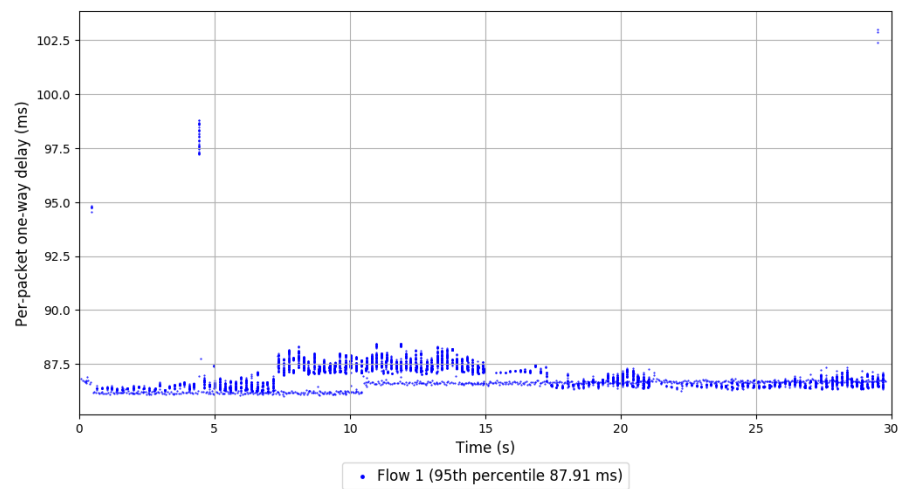
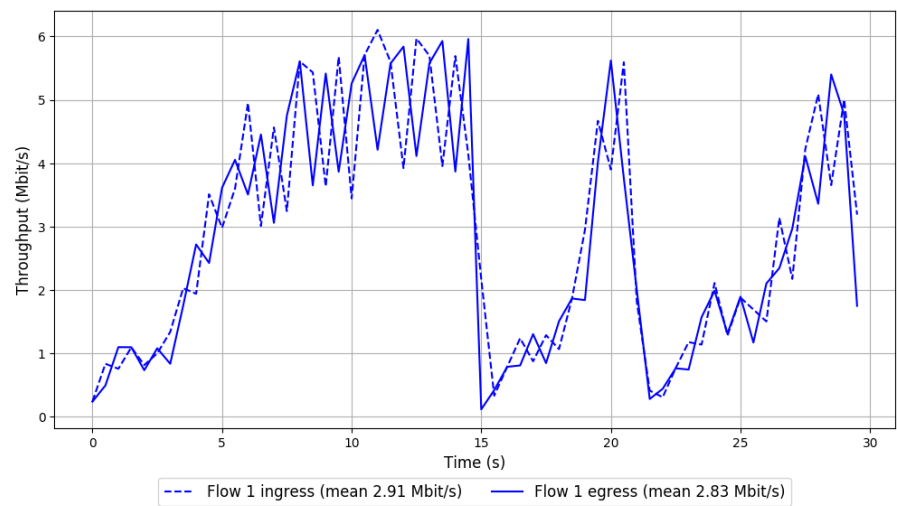
-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 87.914 ms

Loss rate: 3.12%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-01 23:28:13

End at: 2018-01-01 23:28:43

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 87.569 ms

Loss rate: 1.51%

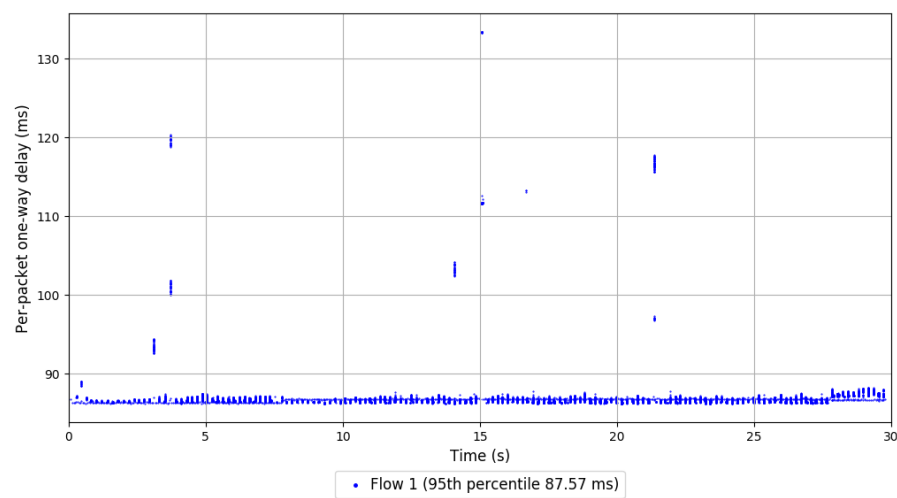
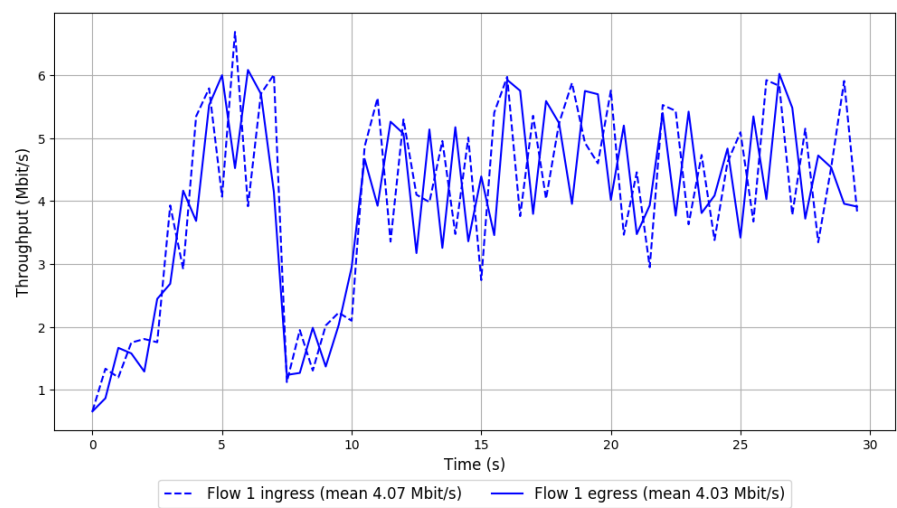
-- Flow 1:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 87.569 ms

Loss rate: 1.51%

Run 10: Report of Sprout — Data Link

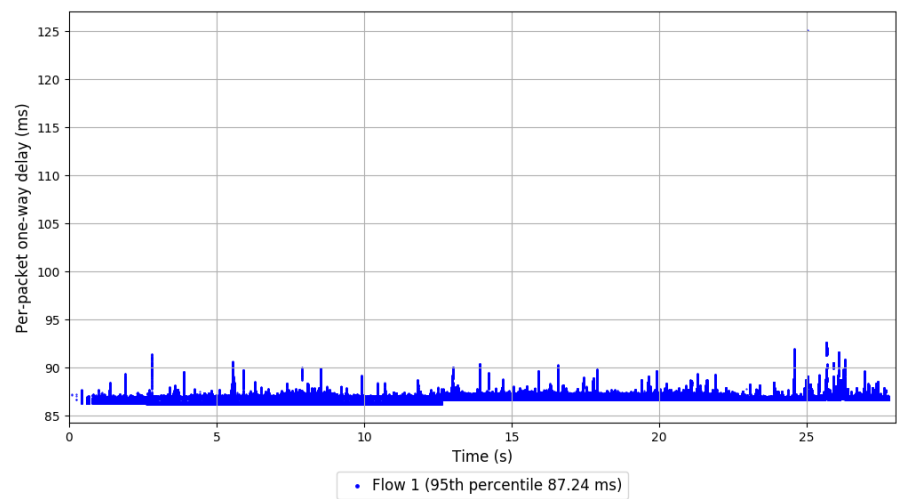
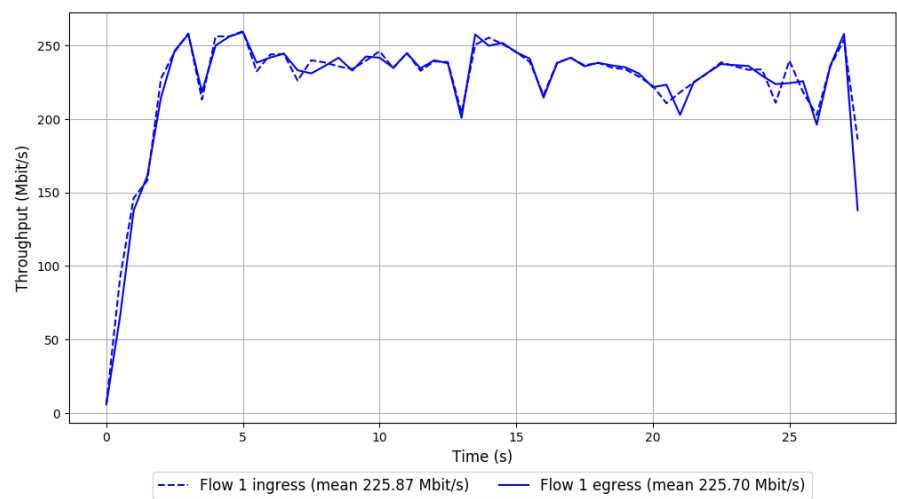


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-01 21:34:46
End at: 2018-01-01 21:35:16

# Below is generated by plot.py at 2018-01-02 02:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.70 Mbit/s
95th percentile per-packet one-way delay: 87.244 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 225.70 Mbit/s
95th percentile per-packet one-way delay: 87.244 ms
Loss rate: 0.70%
```

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

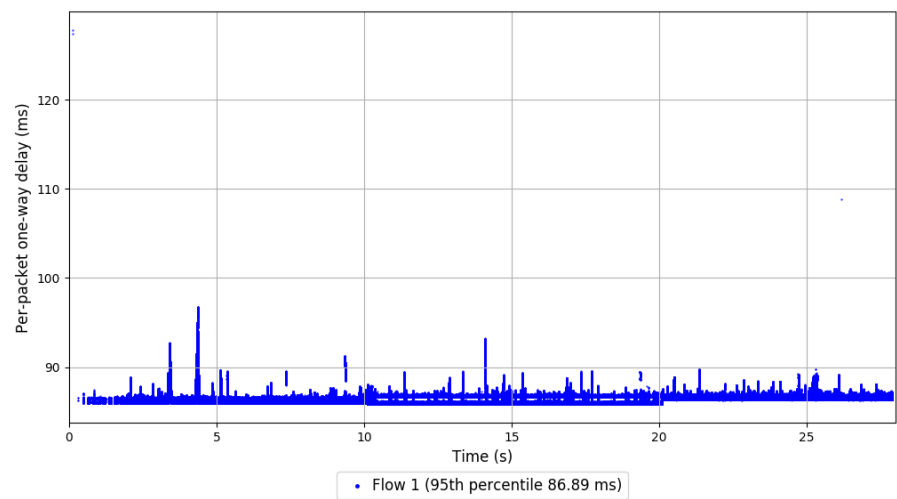
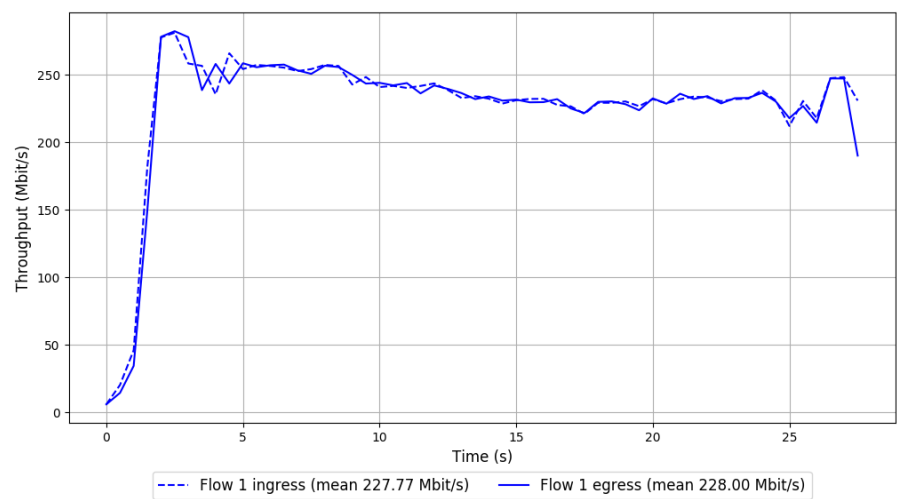


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-01 21:46:49
End at: 2018-01-01 21:47:19

# Below is generated by plot.py at 2018-01-02 02:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 228.00 Mbit/s
95th percentile per-packet one-way delay: 86.895 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 228.00 Mbit/s
95th percentile per-packet one-way delay: 86.895 ms
Loss rate: 0.66%
```

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

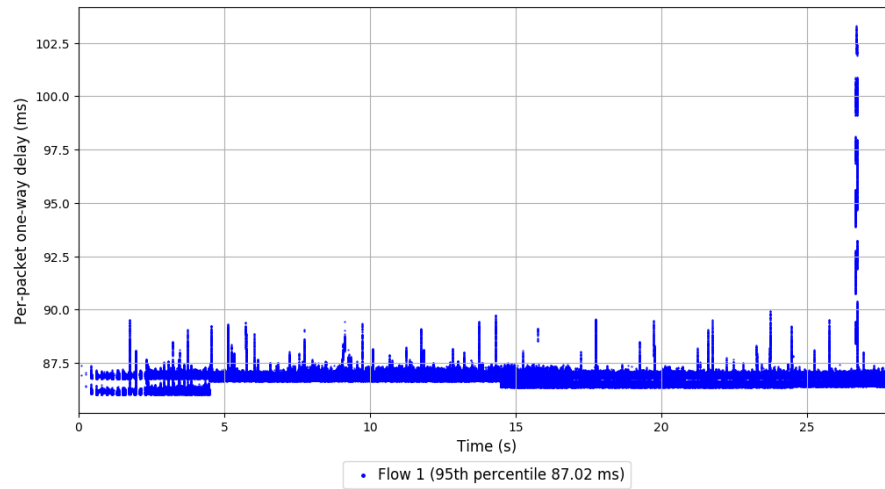
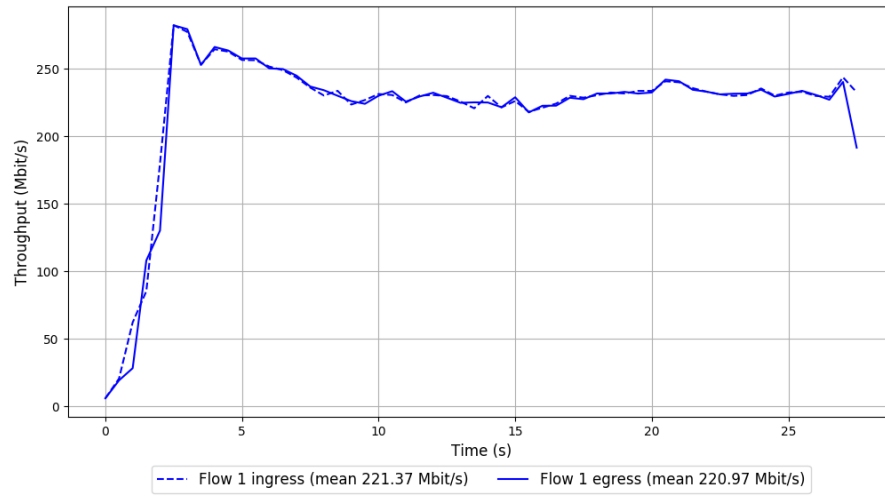


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-01 21:59:04
End at: 2018-01-01 21:59:34

# Below is generated by plot.py at 2018-01-02 02:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.97 Mbit/s
95th percentile per-packet one-way delay: 87.020 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 220.97 Mbit/s
95th percentile per-packet one-way delay: 87.020 ms
Loss rate: 0.80%
```

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

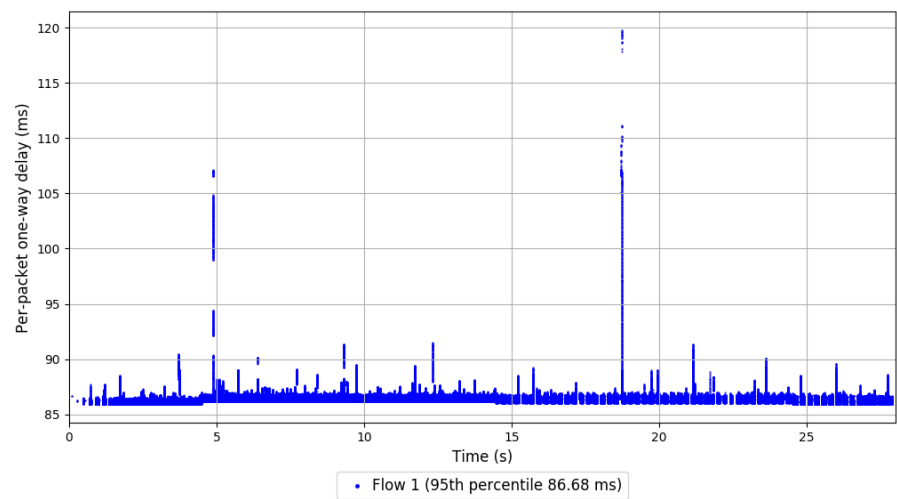
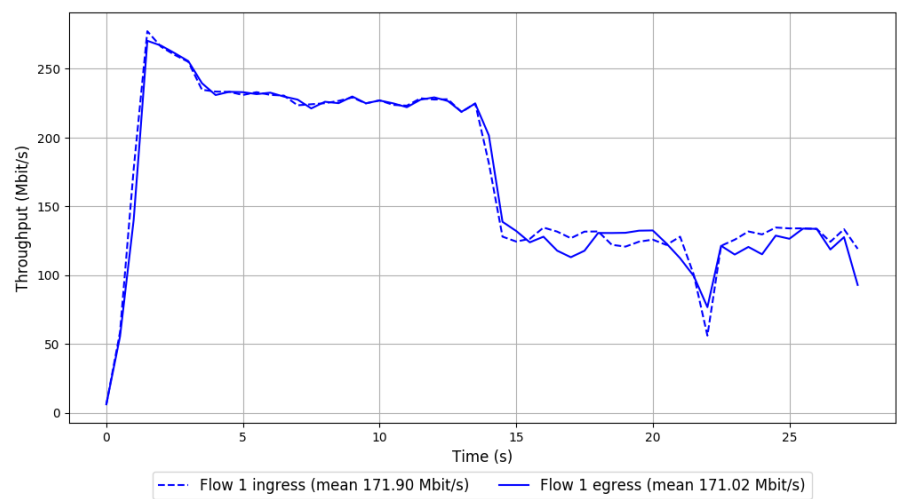


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-01 22:11:24
End at: 2018-01-01 22:11:54

# Below is generated by plot.py at 2018-01-02 02:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 171.02 Mbit/s
95th percentile per-packet one-way delay: 86.684 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 171.02 Mbit/s
95th percentile per-packet one-way delay: 86.684 ms
Loss rate: 1.07%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-01 22:23:36

End at: 2018-01-01 22:24:06

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.85 Mbit/s

95th percentile per-packet one-way delay: 87.015 ms

Loss rate: 0.92%

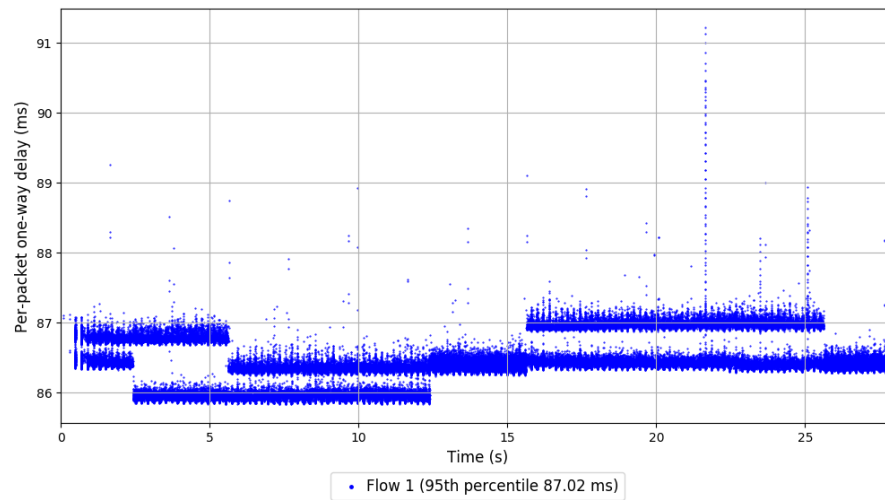
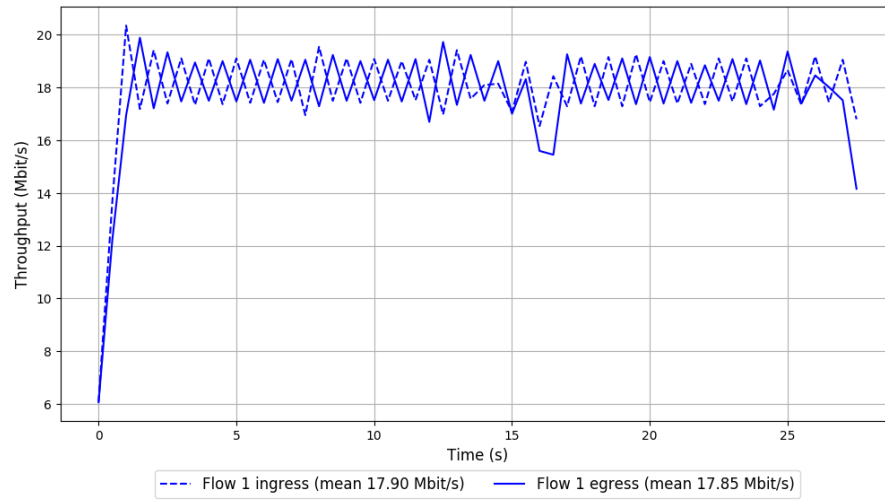
-- Flow 1:

Average throughput: 17.85 Mbit/s

95th percentile per-packet one-way delay: 87.015 ms

Loss rate: 0.92%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-01 22:35:40

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.52 Mbit/s

95th percentile per-packet one-way delay: 87.190 ms

Loss rate: 0.82%

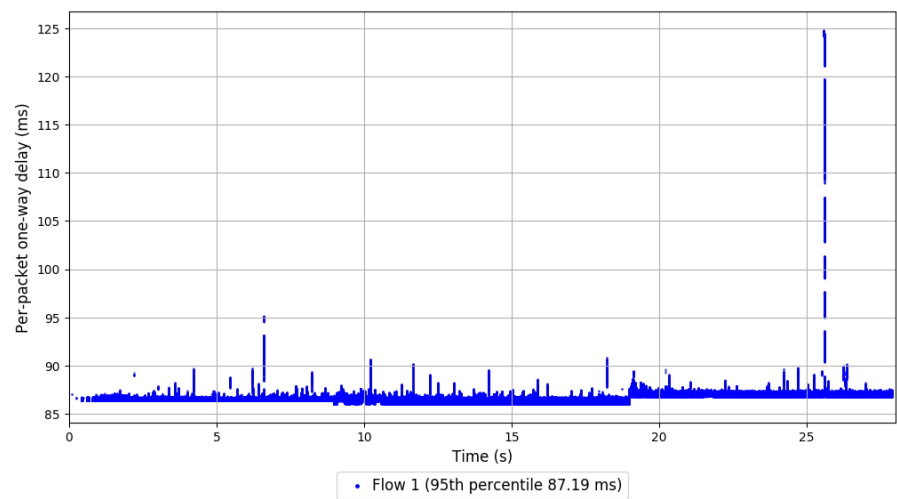
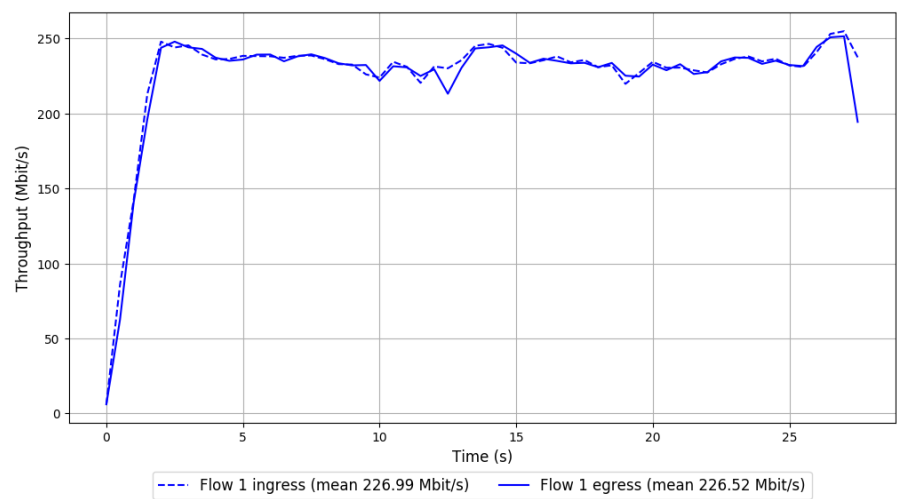
-- Flow 1:

Average throughput: 226.52 Mbit/s

95th percentile per-packet one-way delay: 87.190 ms

Loss rate: 0.82%

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

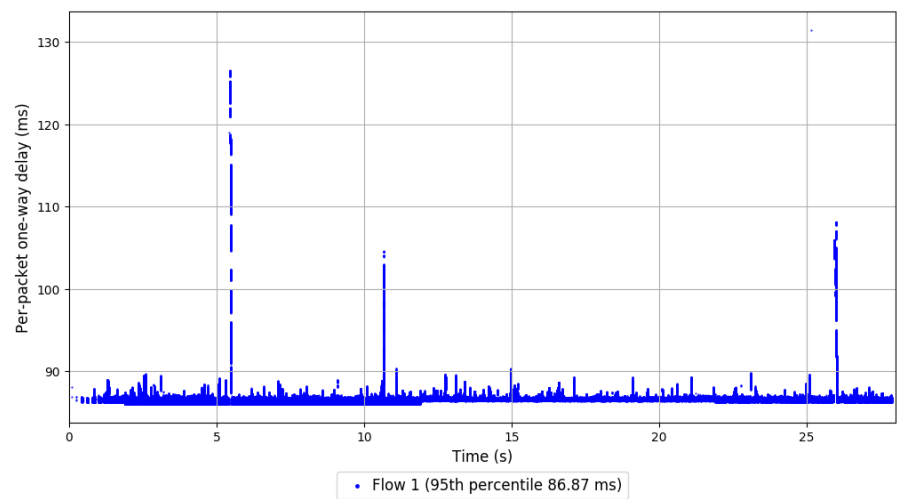
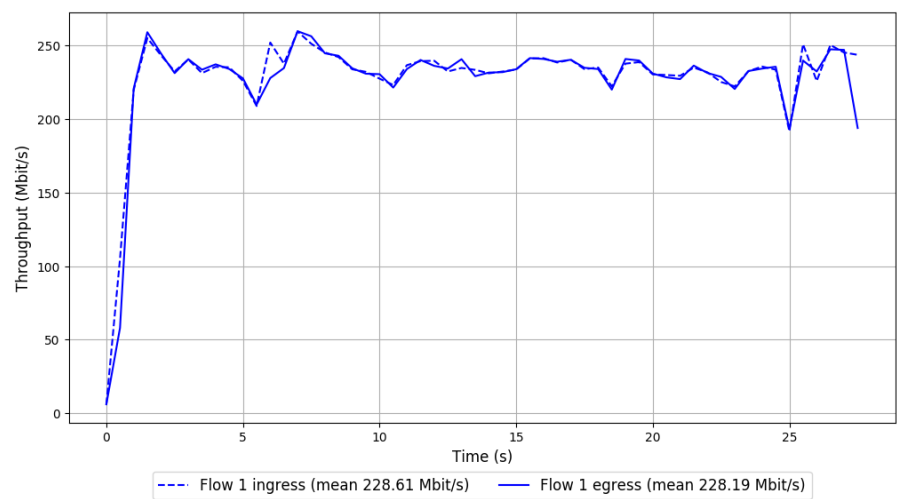


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-01 22:47:57
End at: 2018-01-01 22:48:27

# Below is generated by plot.py at 2018-01-02 02:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 228.19 Mbit/s
95th percentile per-packet one-way delay: 86.874 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 228.19 Mbit/s
95th percentile per-packet one-way delay: 86.874 ms
Loss rate: 0.86%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-01 23:00:13

End at: 2018-01-01 23:00:43

Below is generated by plot.py at 2018-01-02 02:07:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 224.80 Mbit/s

95th percentile per-packet one-way delay: 87.278 ms

Loss rate: 0.57%

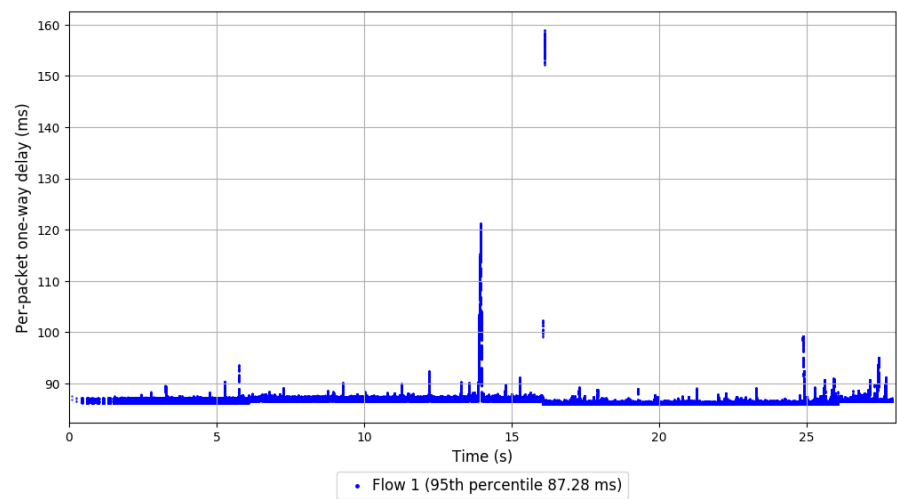
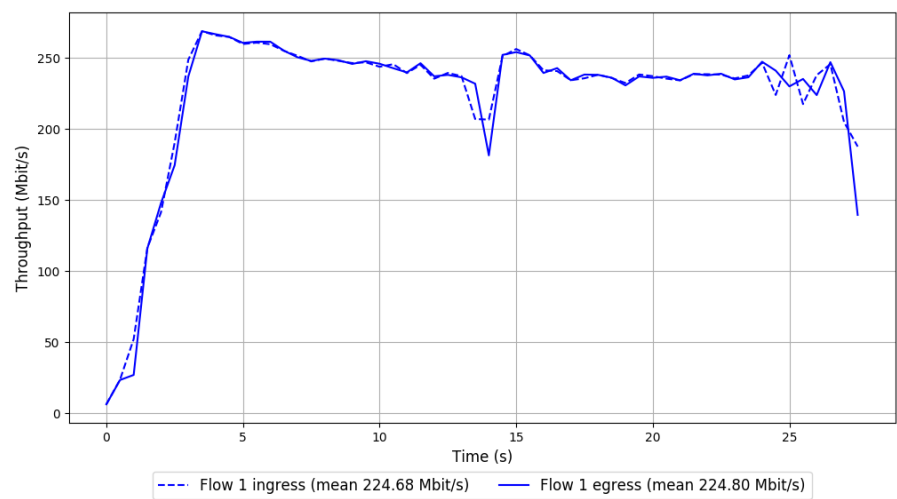
-- Flow 1:

Average throughput: 224.80 Mbit/s

95th percentile per-packet one-way delay: 87.278 ms

Loss rate: 0.57%

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

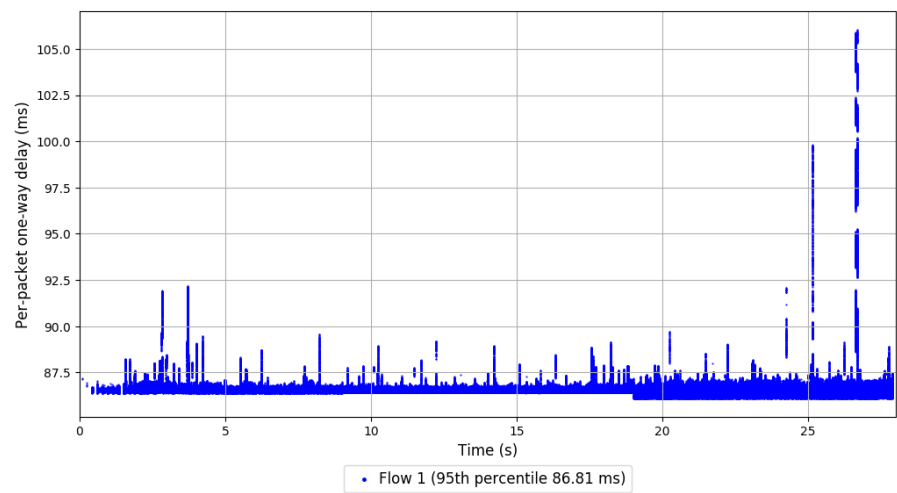
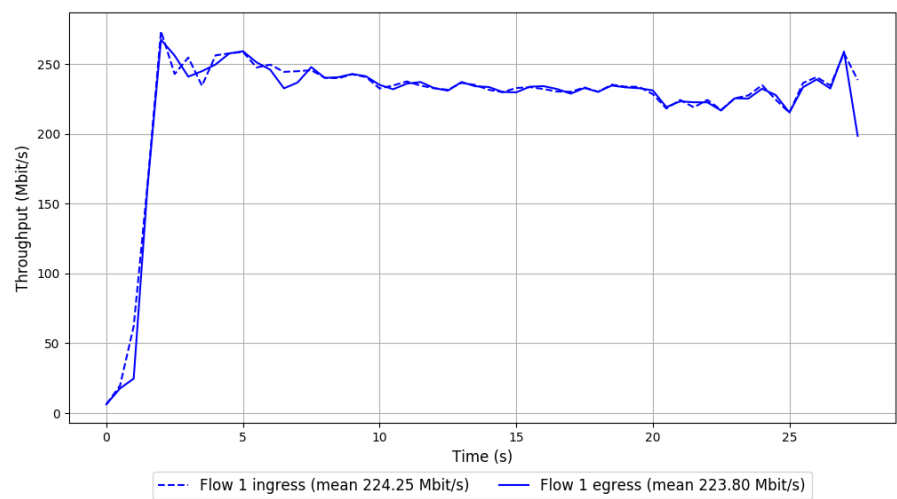


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-01 23:12:30
End at: 2018-01-01 23:13:00

# Below is generated by plot.py at 2018-01-02 02:07:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.80 Mbit/s
95th percentile per-packet one-way delay: 86.807 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 223.80 Mbit/s
95th percentile per-packet one-way delay: 86.807 ms
Loss rate: 0.82%
```

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

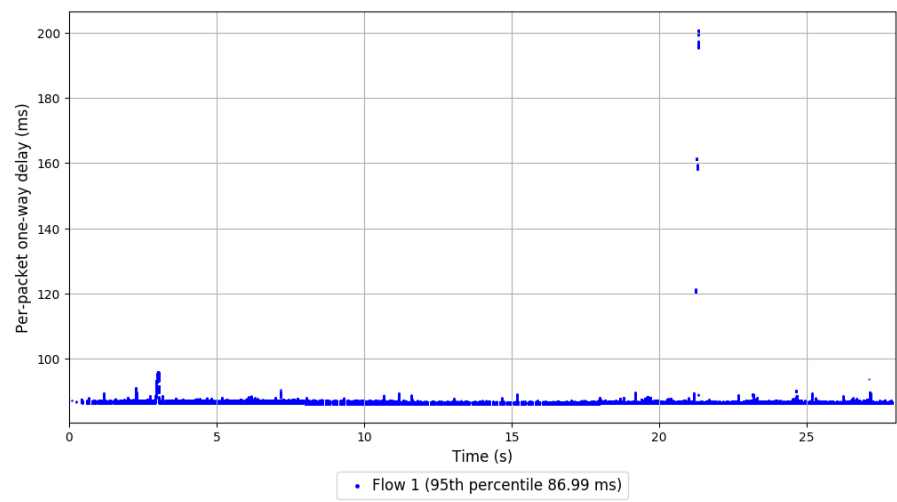
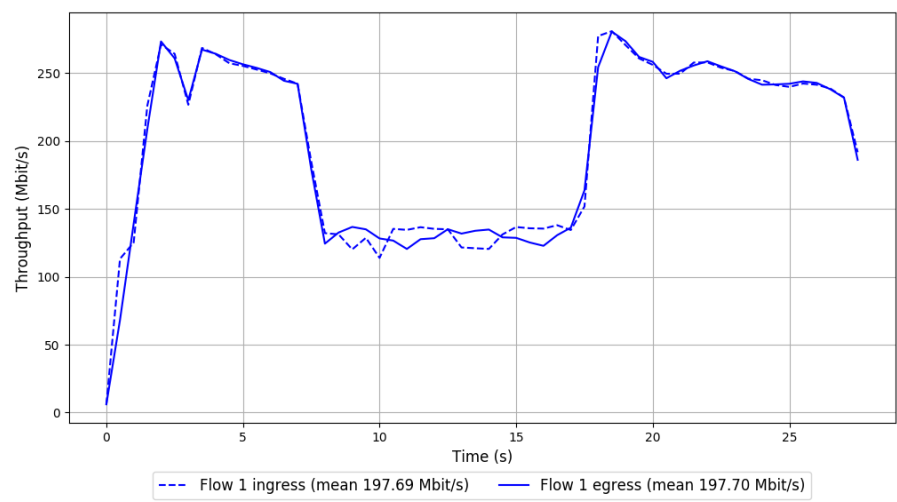


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-01 23:24:51
End at: 2018-01-01 23:25:21

# Below is generated by plot.py at 2018-01-02 02:07:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 197.70 Mbit/s
95th percentile per-packet one-way delay: 86.986 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 197.70 Mbit/s
95th percentile per-packet one-way delay: 86.986 ms
Loss rate: 0.62%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-01 21:44:45

End at: 2018-01-01 21:45:15

Below is generated by plot.py at 2018-01-02 02:07:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.62 Mbit/s

95th percentile per-packet one-way delay: 87.913 ms

Loss rate: 0.26%

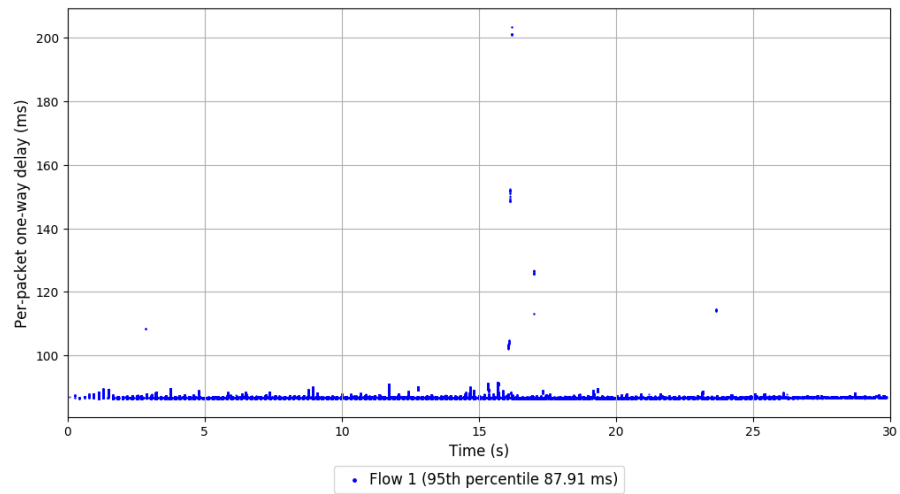
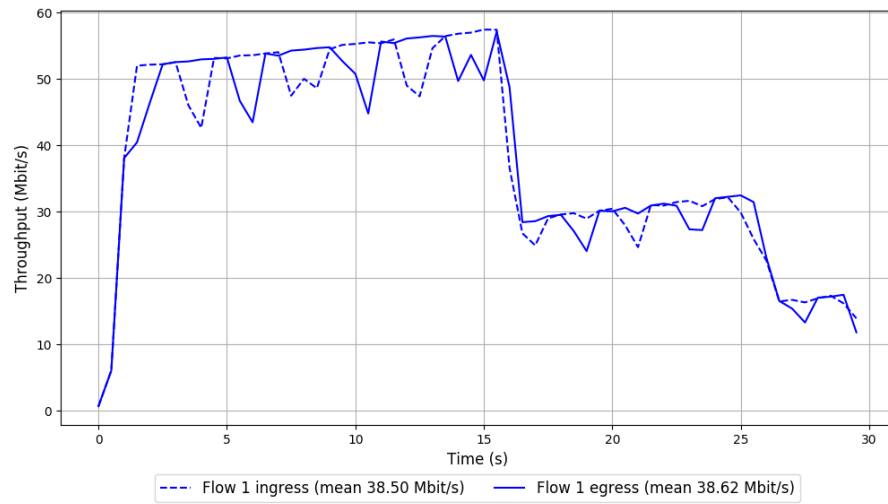
-- Flow 1:

Average throughput: 38.62 Mbit/s

95th percentile per-packet one-way delay: 87.913 ms

Loss rate: 0.26%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-01 21:57:02

End at: 2018-01-01 21:57:32

Below is generated by plot.py at 2018-01-02 02:07:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.96 Mbit/s

95th percentile per-packet one-way delay: 87.561 ms

Loss rate: 0.58%

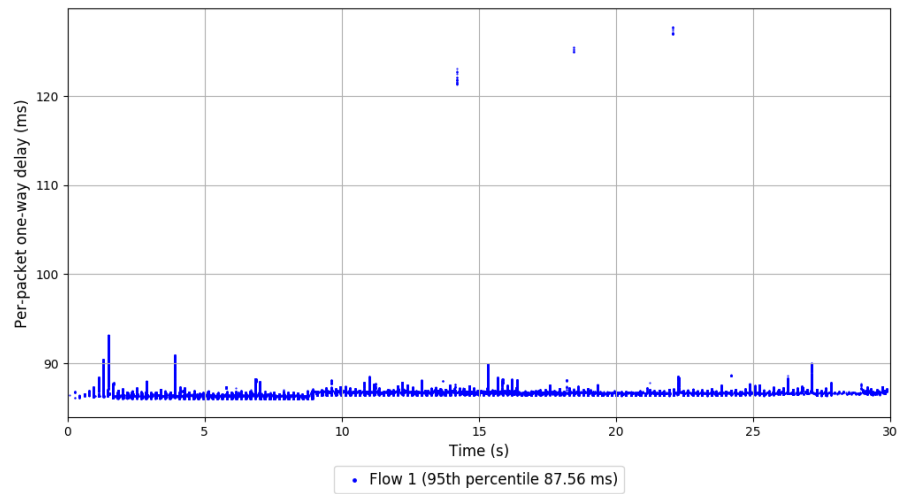
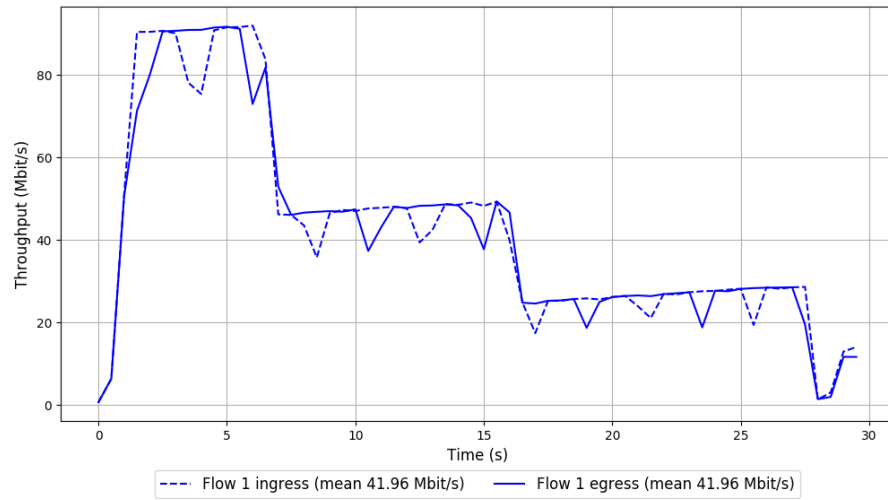
-- Flow 1:

Average throughput: 41.96 Mbit/s

95th percentile per-packet one-way delay: 87.561 ms

Loss rate: 0.58%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-01 22:09:21

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

Below is generated by plot.py at 2018-01-02 02:07:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.68 Mbit/s

95th percentile per-packet one-way delay: 88.525 ms

Loss rate: 0.65%

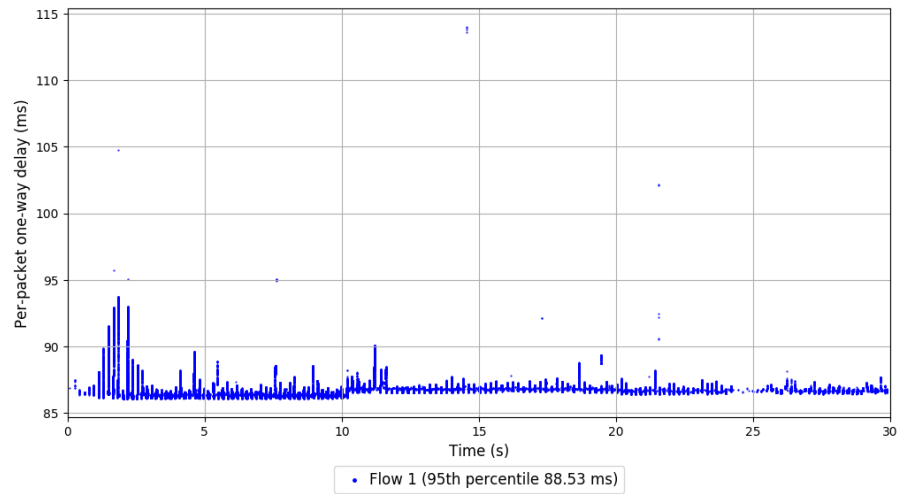
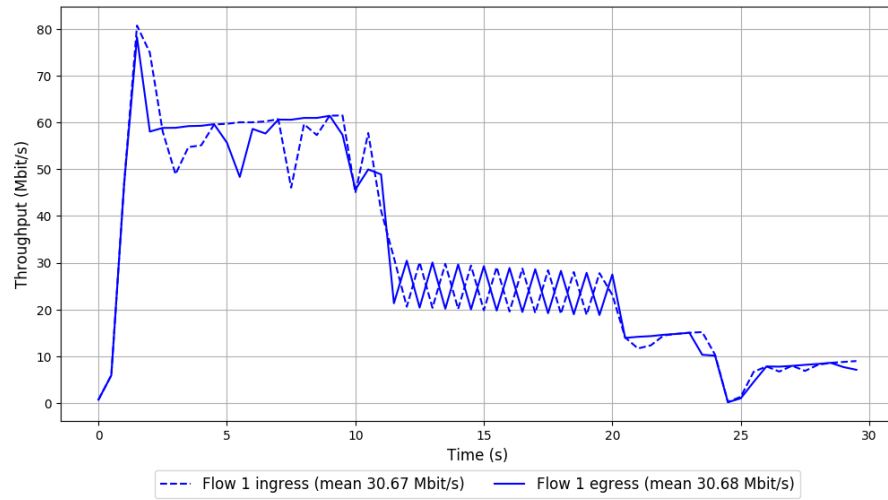
-- Flow 1:

Average throughput: 30.68 Mbit/s

95th percentile per-packet one-way delay: 88.525 ms

Loss rate: 0.65%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-01 22:21:31

End at: 2018-01-01 22:22:01

Below is generated by plot.py at 2018-01-02 02:07:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.50 Mbit/s

95th percentile per-packet one-way delay: 87.769 ms

Loss rate: 1.19%

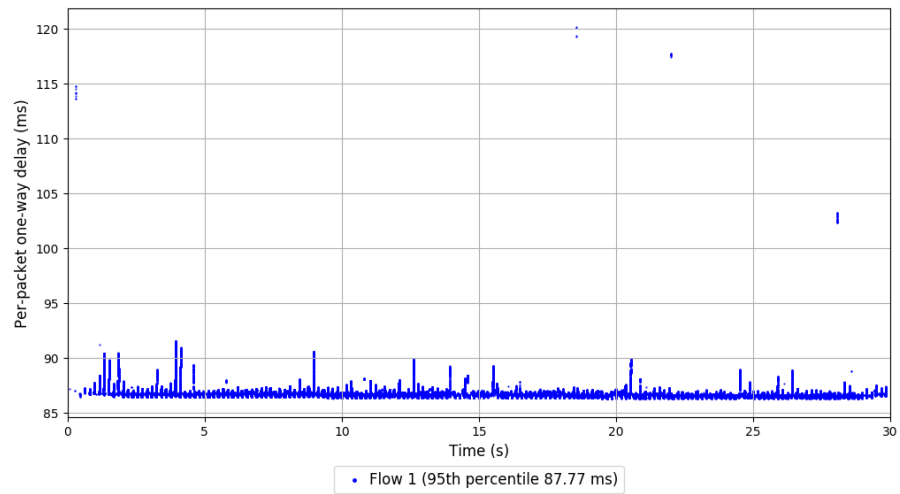
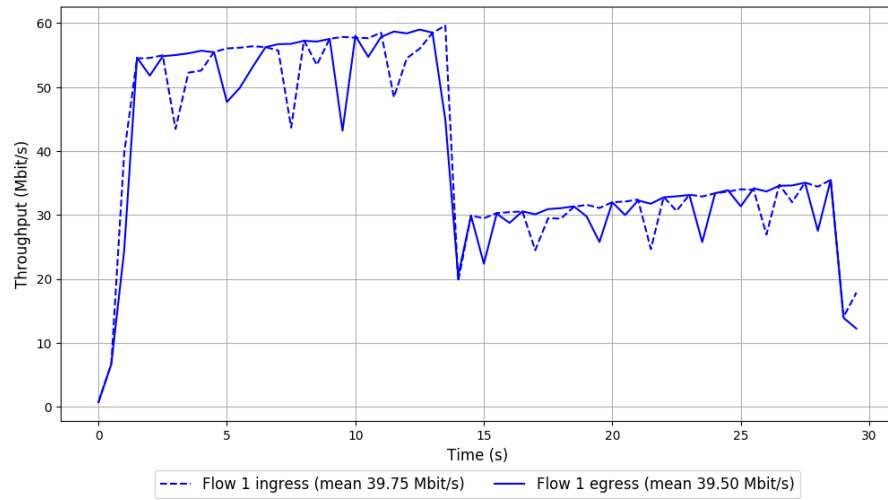
-- Flow 1:

Average throughput: 39.50 Mbit/s

95th percentile per-packet one-way delay: 87.769 ms

Loss rate: 1.19%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-01 22:33:35

End at: 2018-01-01 22:34:05

Below is generated by plot.py at 2018-01-02 02:07:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.45 Mbit/s

95th percentile per-packet one-way delay: 88.169 ms

Loss rate: 1.60%

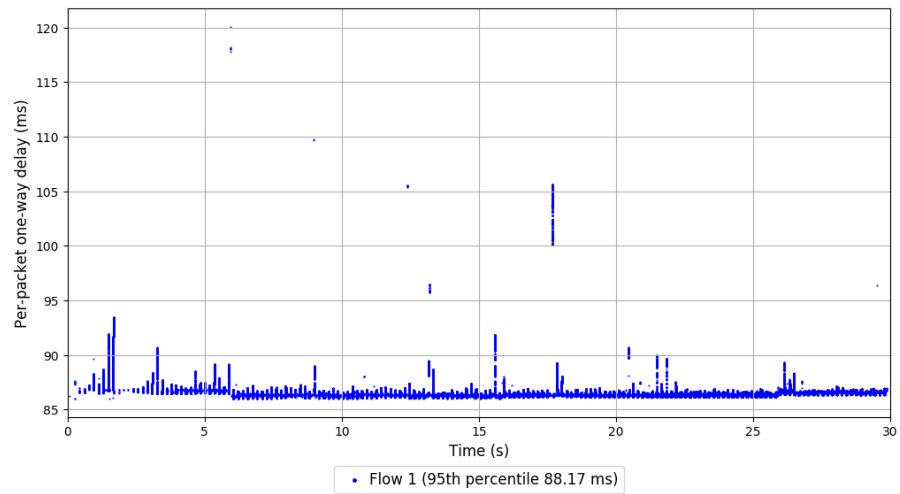
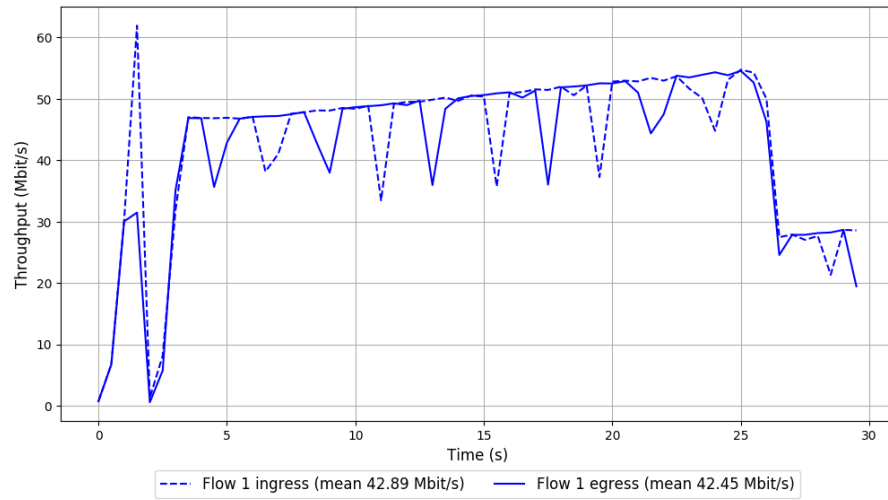
-- Flow 1:

Average throughput: 42.45 Mbit/s

95th percentile per-packet one-way delay: 88.169 ms

Loss rate: 1.60%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-01 22:45:56

End at: 2018-01-01 22:46:26

Below is generated by plot.py at 2018-01-02 02:07:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 24.78 Mbit/s

95th percentile per-packet one-way delay: 87.386 ms

Loss rate: 1.59%

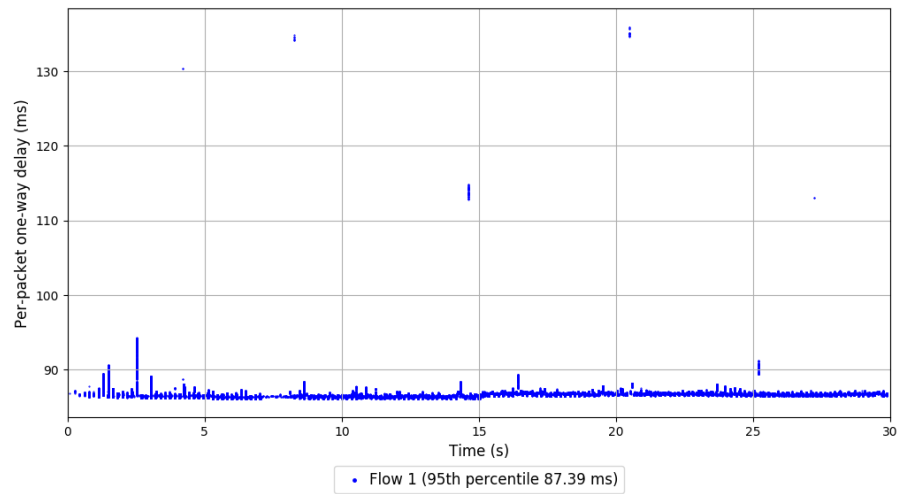
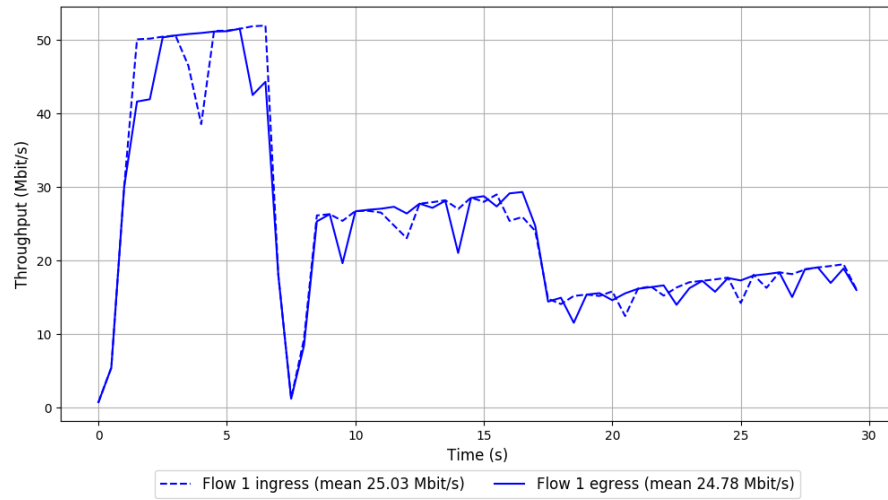
-- Flow 1:

Average throughput: 24.78 Mbit/s

95th percentile per-packet one-way delay: 87.386 ms

Loss rate: 1.59%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-01 22:58:09

End at: 2018-01-01 22:58:39

Below is generated by plot.py at 2018-01-02 02:07:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.51 Mbit/s

95th percentile per-packet one-way delay: 88.533 ms

Loss rate: 2.03%

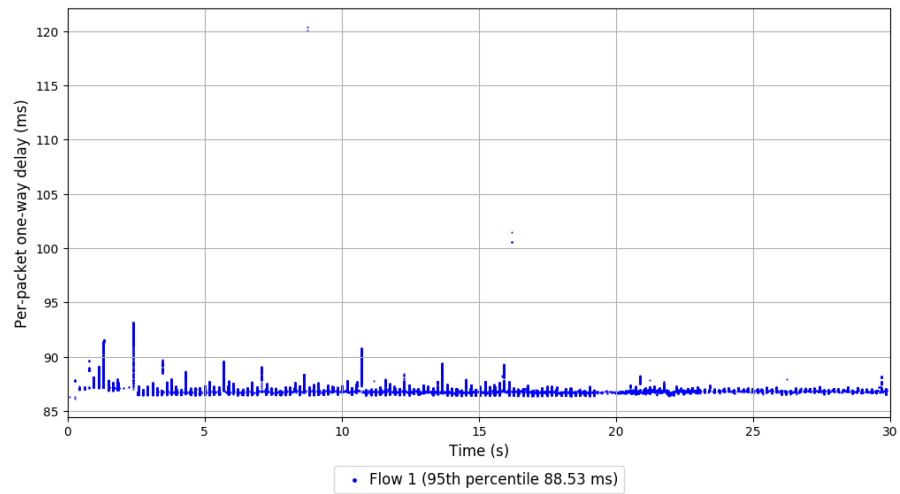
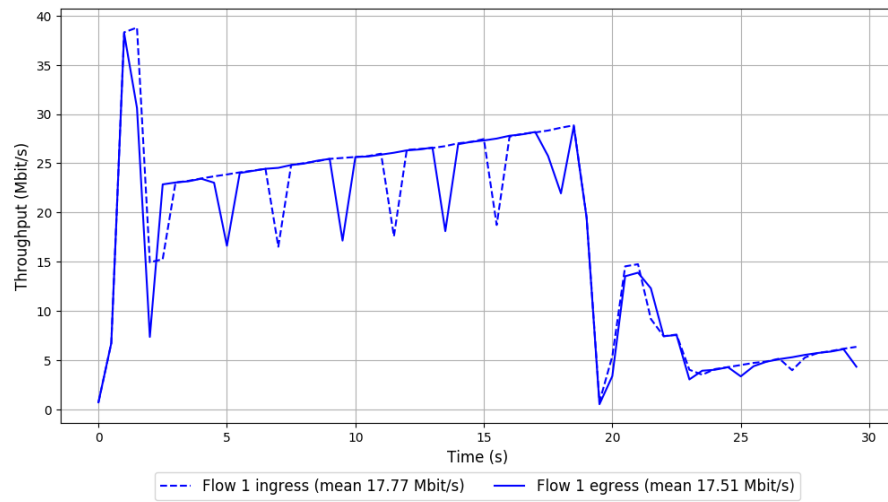
-- Flow 1:

Average throughput: 17.51 Mbit/s

95th percentile per-packet one-way delay: 88.533 ms

Loss rate: 2.03%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-01 23:10:28

End at: 2018-01-01 23:10:58

Below is generated by plot.py at 2018-01-02 02:07:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.43 Mbit/s

95th percentile per-packet one-way delay: 87.492 ms

Loss rate: 3.09%

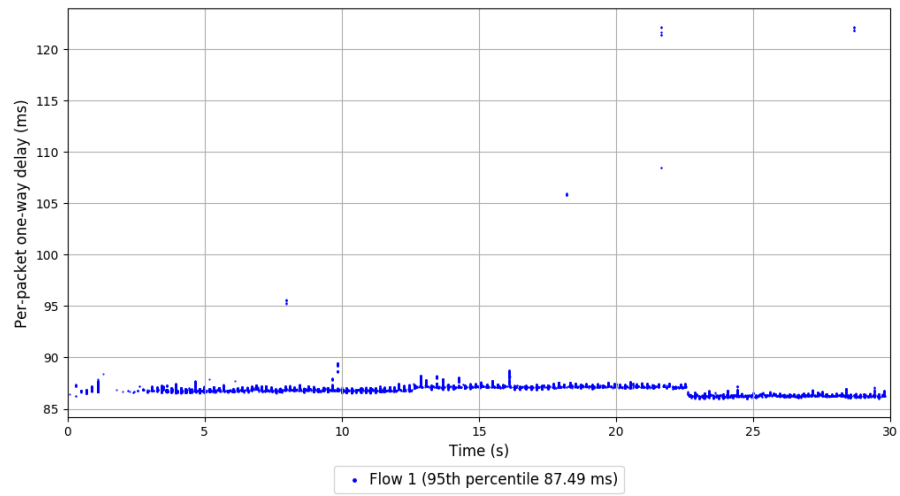
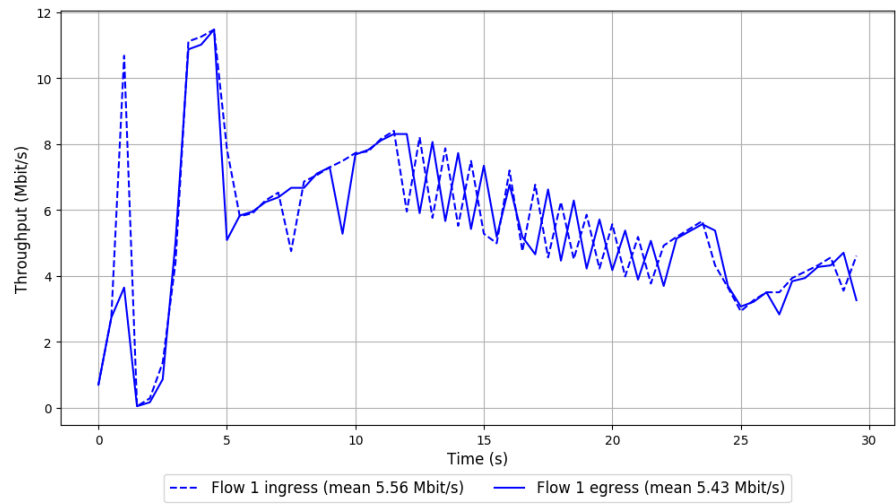
-- Flow 1:

Average throughput: 5.43 Mbit/s

95th percentile per-packet one-way delay: 87.492 ms

Loss rate: 3.09%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-01 23:22:46

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

Below is generated by plot.py at 2018-01-02 02:07:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.61 Mbit/s

95th percentile per-packet one-way delay: 93.421 ms

Loss rate: 1.95%

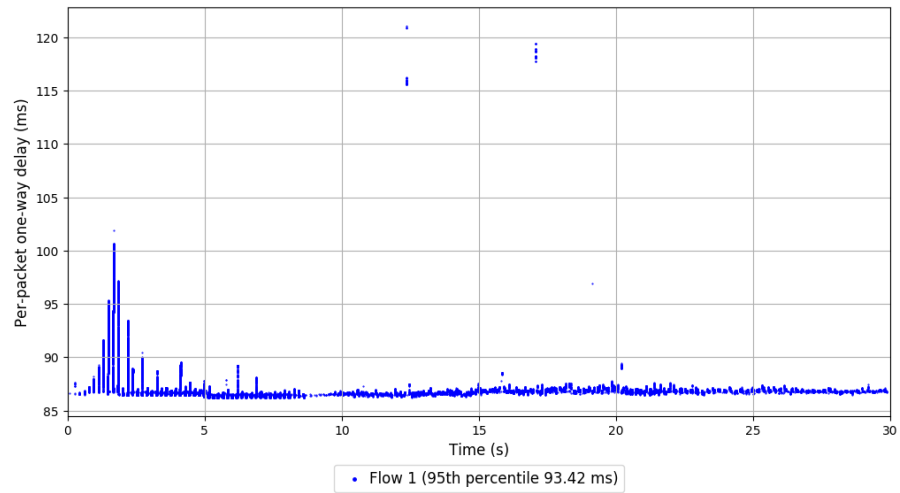
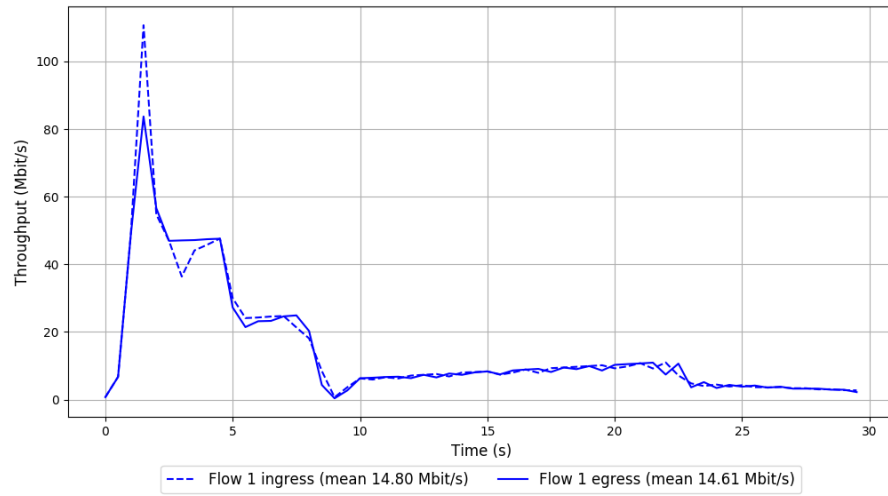
-- Flow 1:

Average throughput: 14.61 Mbit/s

95th percentile per-packet one-way delay: 93.421 ms

Loss rate: 1.95%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-01 23:35:06

End at: 2018-01-01 23:35:36

Below is generated by plot.py at 2018-01-02 02:07:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 87.550 ms

Loss rate: 2.74%

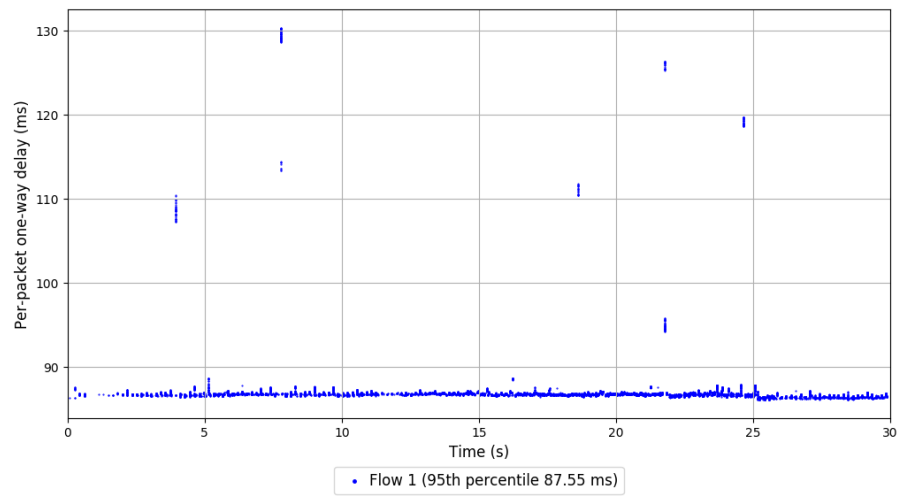
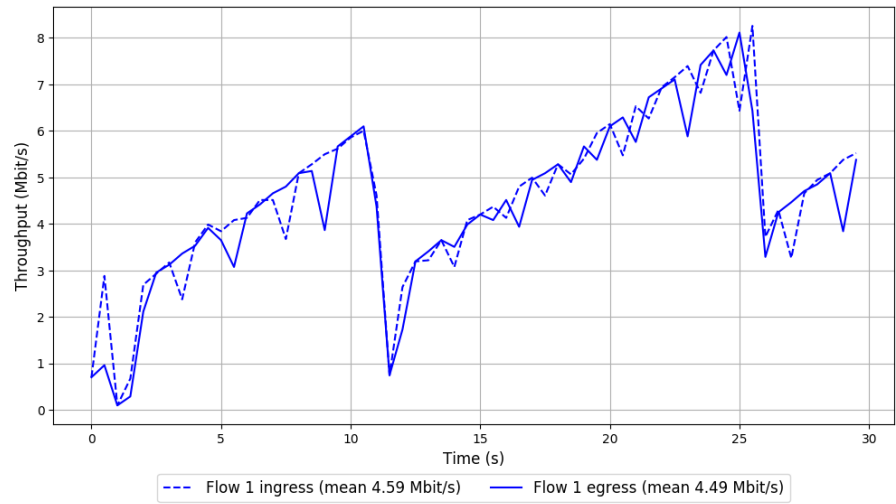
-- Flow 1:

Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 87.550 ms

Loss rate: 2.74%

Run 10: Report of TCP Vegas — Data Link

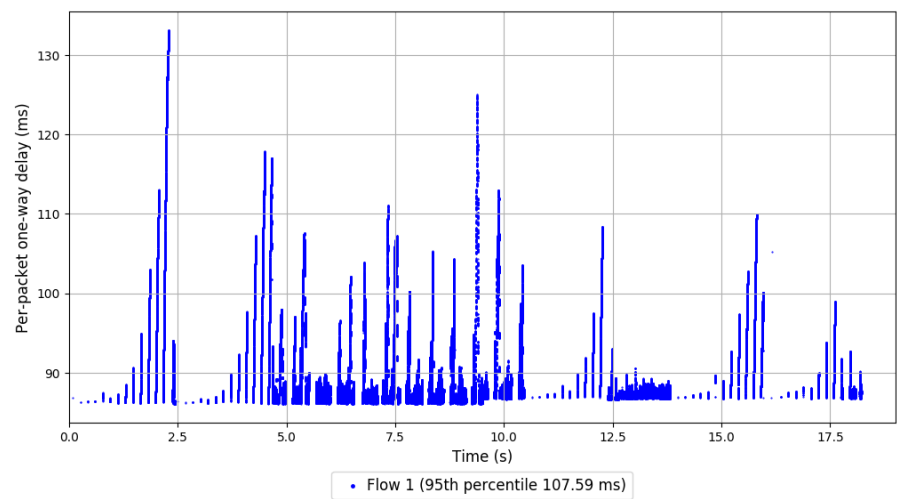
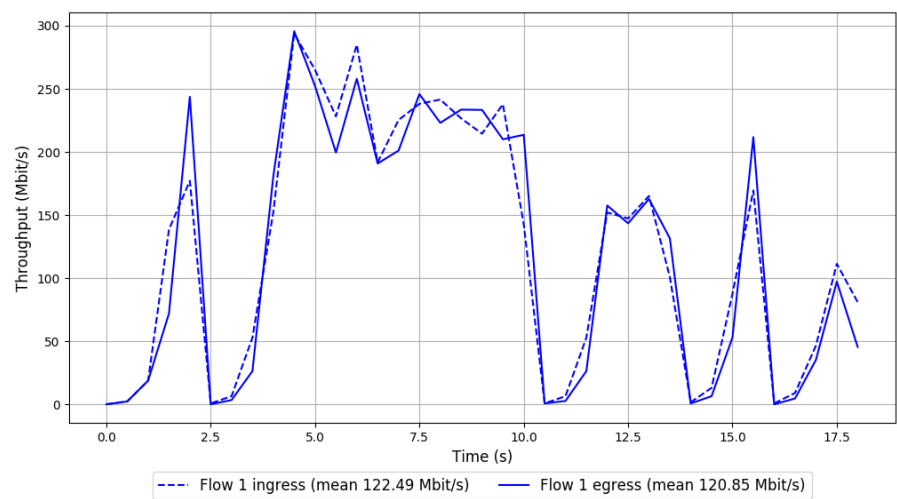


Run 1: Statistics of Verus

Start at: 2018-01-01 21:41:00

End at: 2018-01-01 21:41:30

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-01 21:53:06

End at: 2018-01-01 21:53:36

Below is generated by plot.py at 2018-01-02 02:07:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 216.76 Mbit/s

95th percentile per-packet one-way delay: 122.696 ms

Loss rate: 0.75%

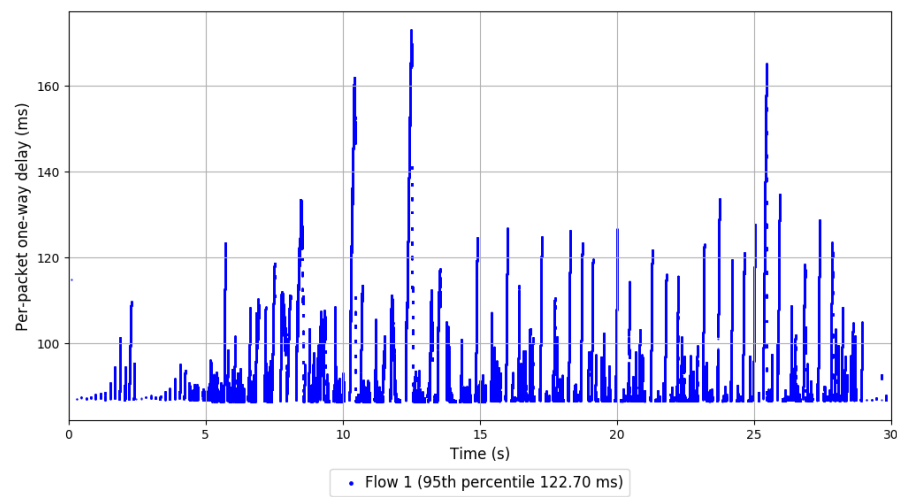
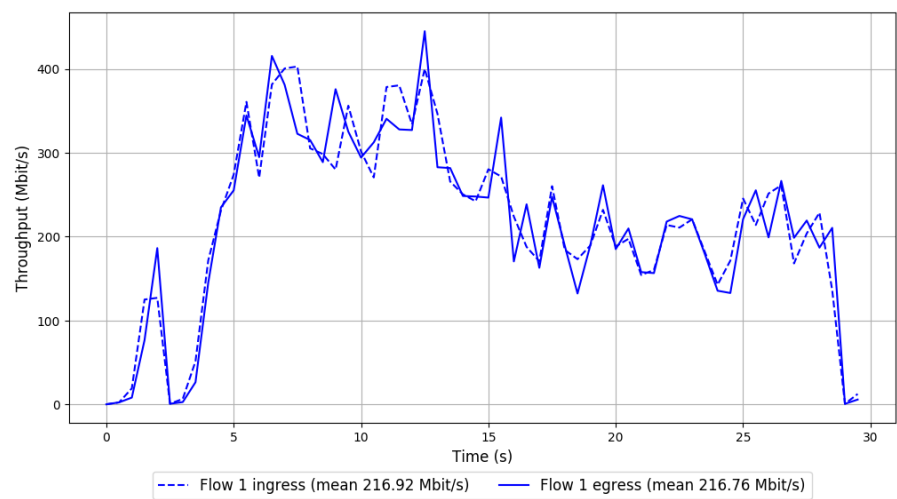
-- Flow 1:

Average throughput: 216.76 Mbit/s

95th percentile per-packet one-way delay: 122.696 ms

Loss rate: 0.75%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-01 22:05:23

End at: 2018-01-01 22:05:53

Below is generated by plot.py at 2018-01-02 02:07:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 235.16 Mbit/s

95th percentile per-packet one-way delay: 143.457 ms

Loss rate: 1.67%

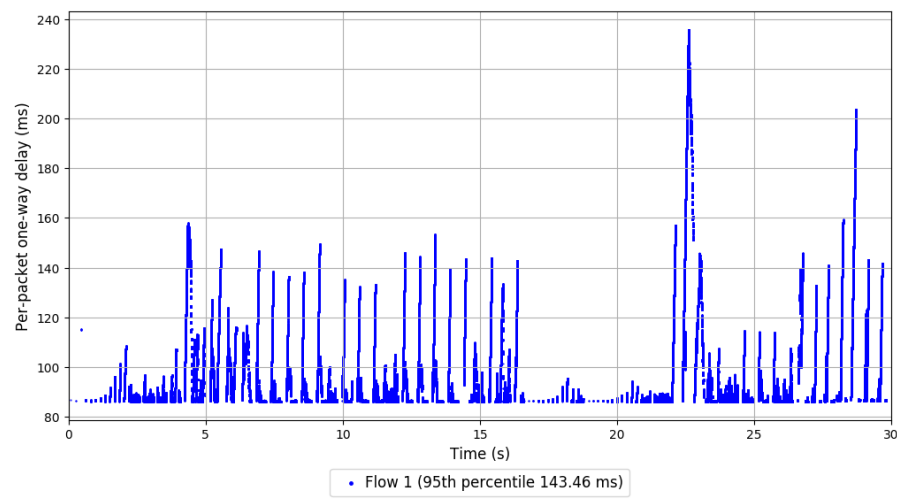
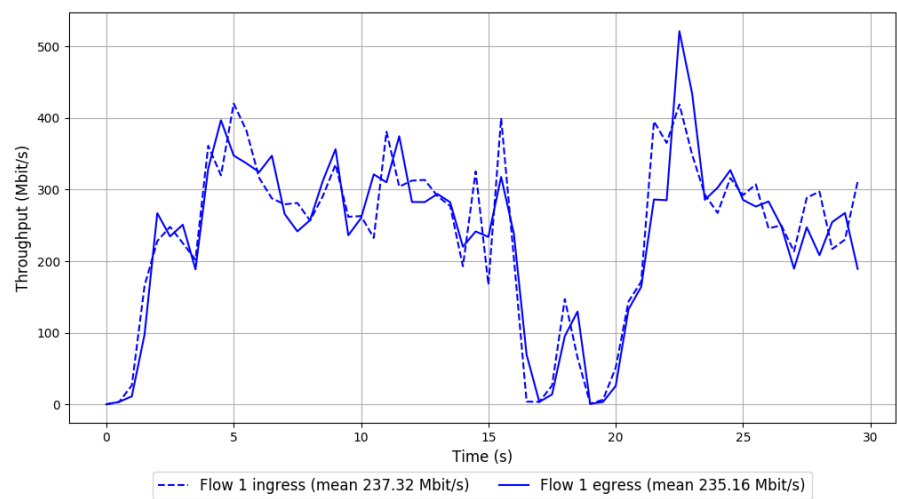
-- Flow 1:

Average throughput: 235.16 Mbit/s

95th percentile per-packet one-way delay: 143.457 ms

Loss rate: 1.67%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-01 22:17:39

End at: 2018-01-01 22:18:09

Below is generated by plot.py at 2018-01-02 02:07:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 145.18 Mbit/s

95th percentile per-packet one-way delay: 123.520 ms

Loss rate: 2.21%

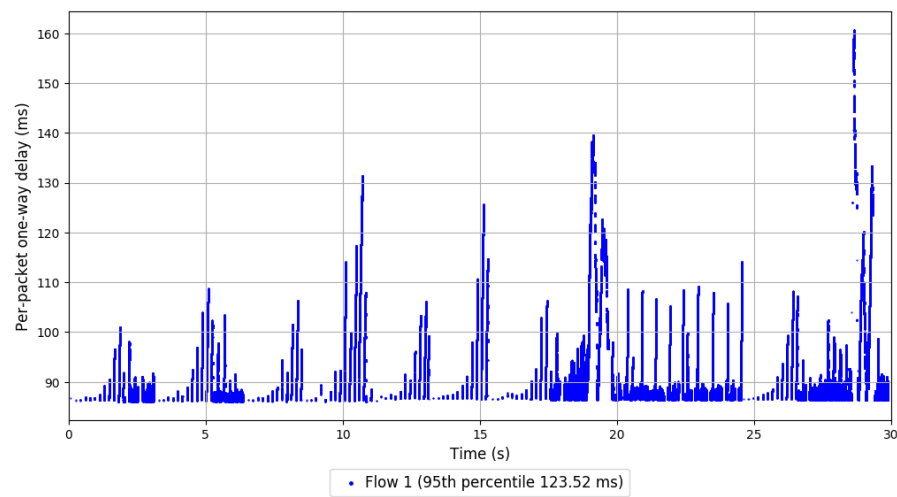
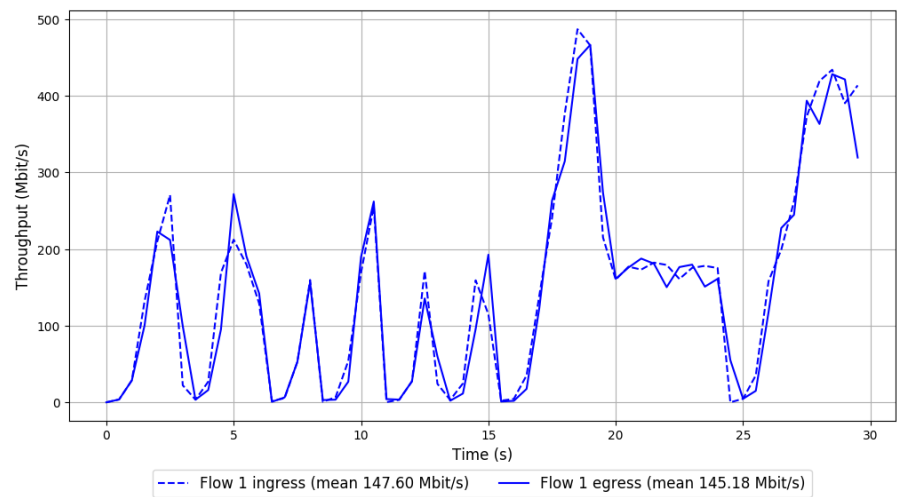
-- Flow 1:

Average throughput: 145.18 Mbit/s

95th percentile per-packet one-way delay: 123.520 ms

Loss rate: 2.21%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-01 22:29:35

End at: 2018-01-01 22:30:05

Below is generated by plot.py at 2018-01-02 02:07:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 257.17 Mbit/s

95th percentile per-packet one-way delay: 287.667 ms

Loss rate: 8.07%

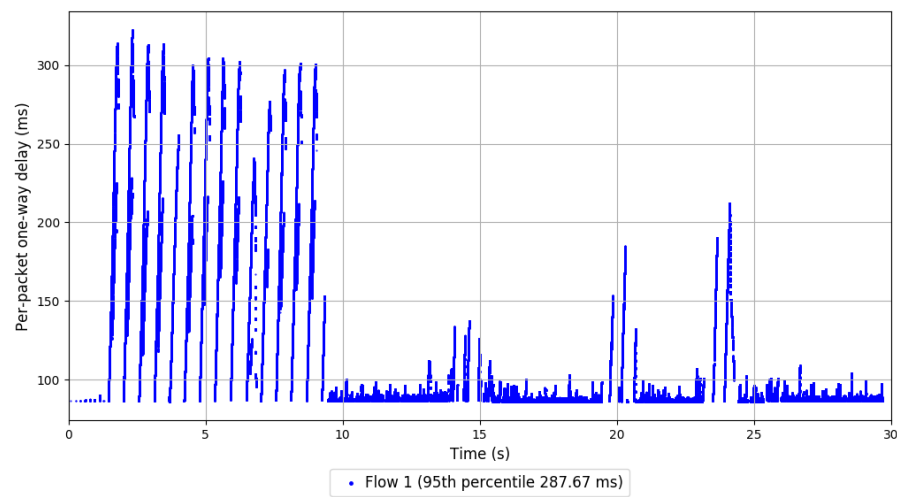
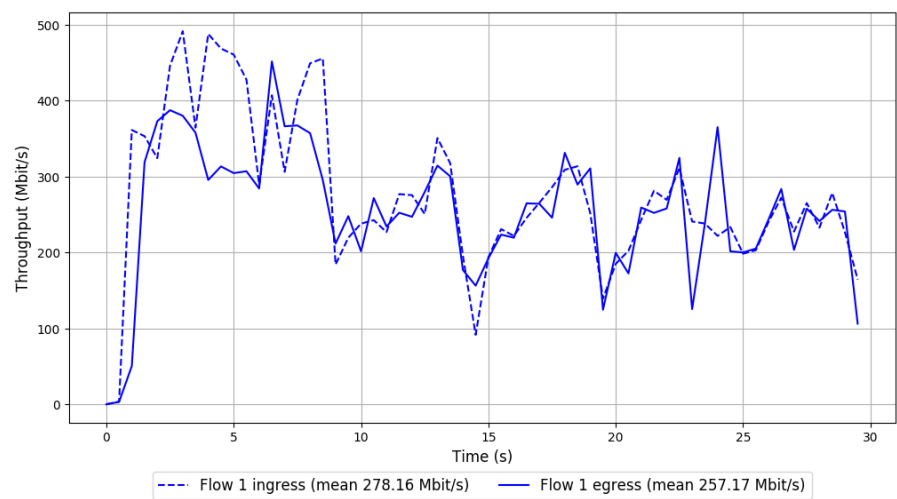
-- Flow 1:

Average throughput: 257.17 Mbit/s

95th percentile per-packet one-way delay: 287.667 ms

Loss rate: 8.07%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

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

End at: 2018-01-01 22:42:27

Below is generated by plot.py at 2018-01-02 02:08:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 227.70 Mbit/s

95th percentile per-packet one-way delay: 160.423 ms

Loss rate: 1.16%

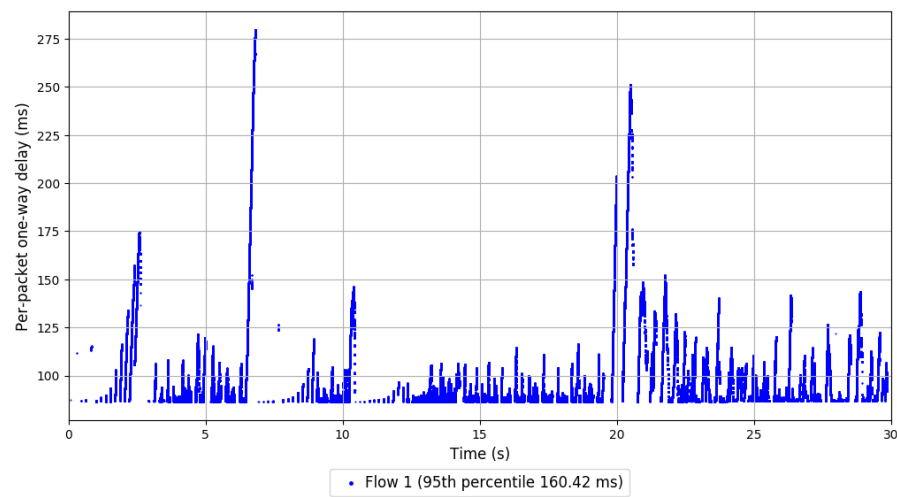
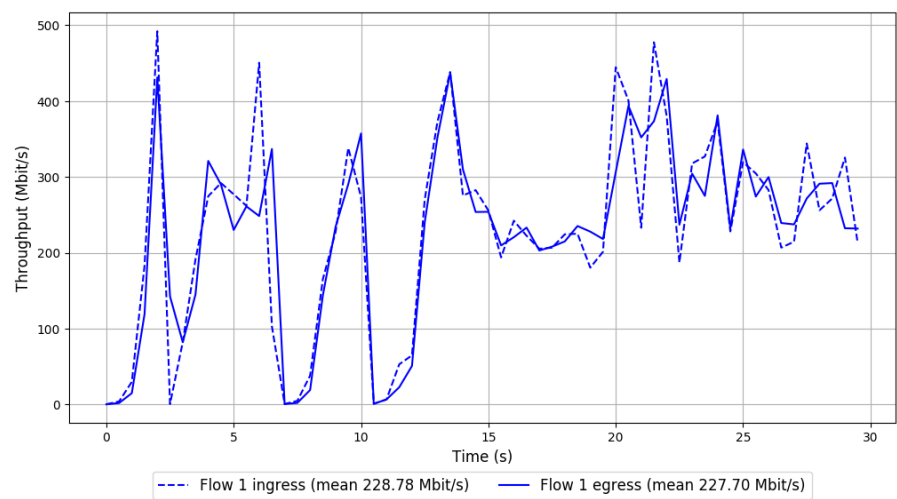
-- Flow 1:

Average throughput: 227.70 Mbit/s

95th percentile per-packet one-way delay: 160.423 ms

Loss rate: 1.16%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

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

End at: 2018-01-01 22:54:45

Below is generated by plot.py at 2018-01-02 02:08:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.30 Mbit/s

95th percentile per-packet one-way delay: 122.641 ms

Loss rate: 1.57%

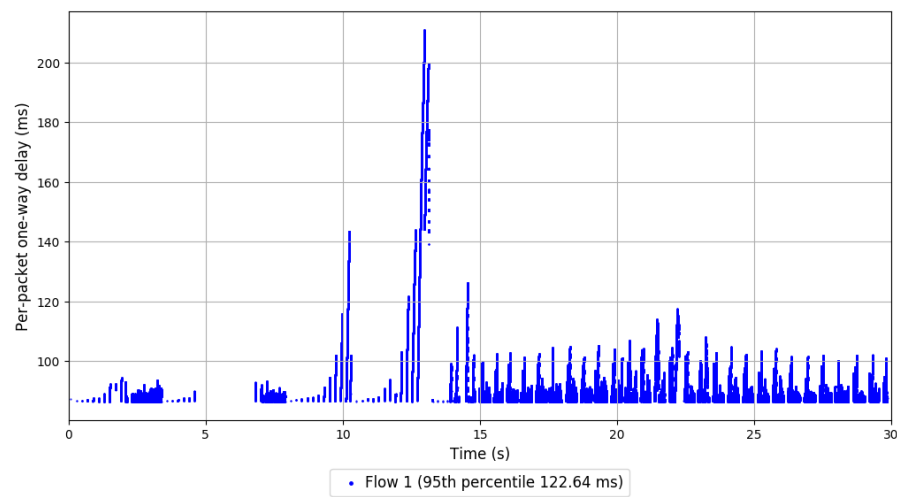
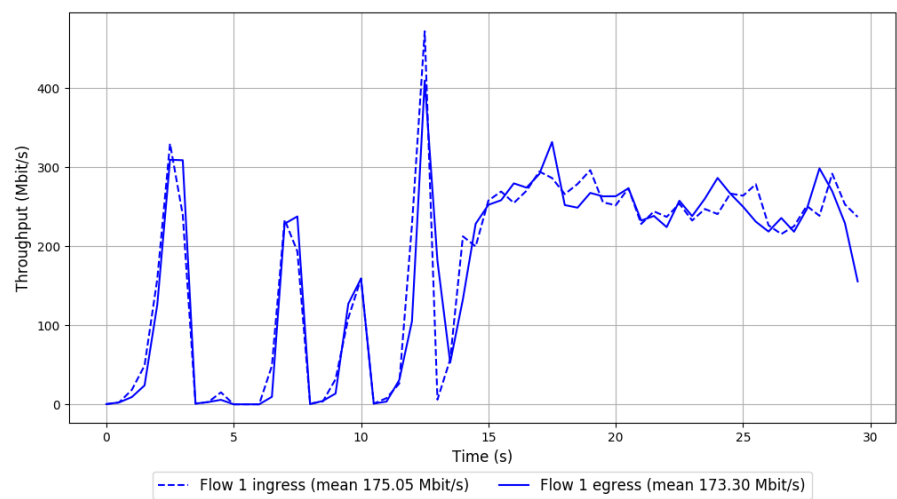
-- Flow 1:

Average throughput: 173.30 Mbit/s

95th percentile per-packet one-way delay: 122.641 ms

Loss rate: 1.57%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-01 23:06:29

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

Below is generated by plot.py at 2018-01-02 02:10:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 223.81 Mbit/s

95th percentile per-packet one-way delay: 122.854 ms

Loss rate: 1.32%

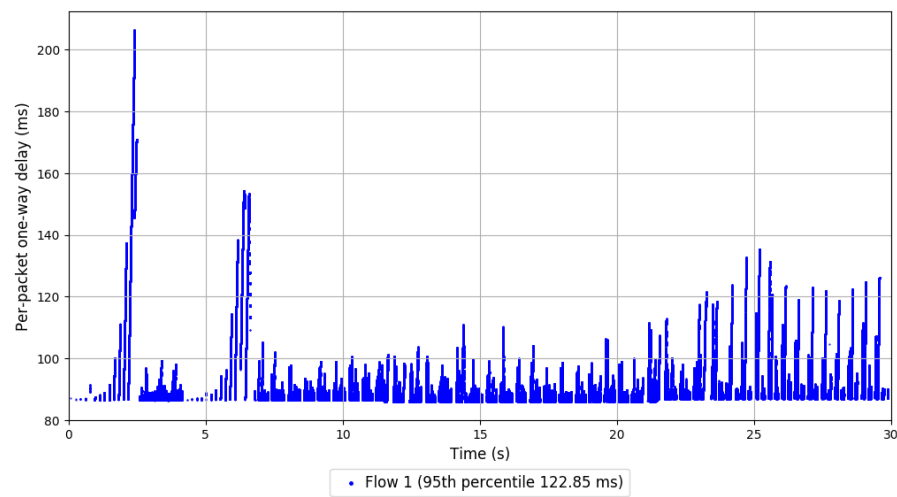
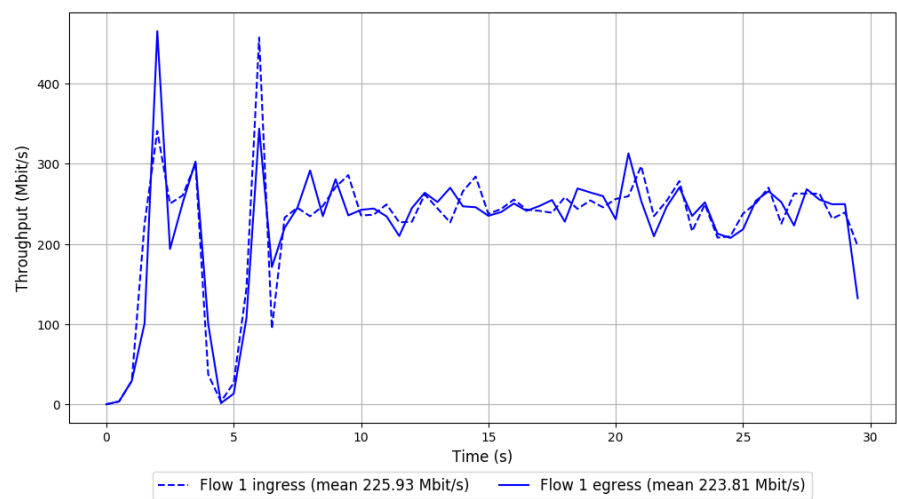
-- Flow 1:

Average throughput: 223.81 Mbit/s

95th percentile per-packet one-way delay: 122.854 ms

Loss rate: 1.32%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-01 23:18:47

End at: 2018-01-01 23:19:17

Below is generated by plot.py at 2018-01-02 02:10:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.74 Mbit/s

95th percentile per-packet one-way delay: 244.883 ms

Loss rate: 3.02%

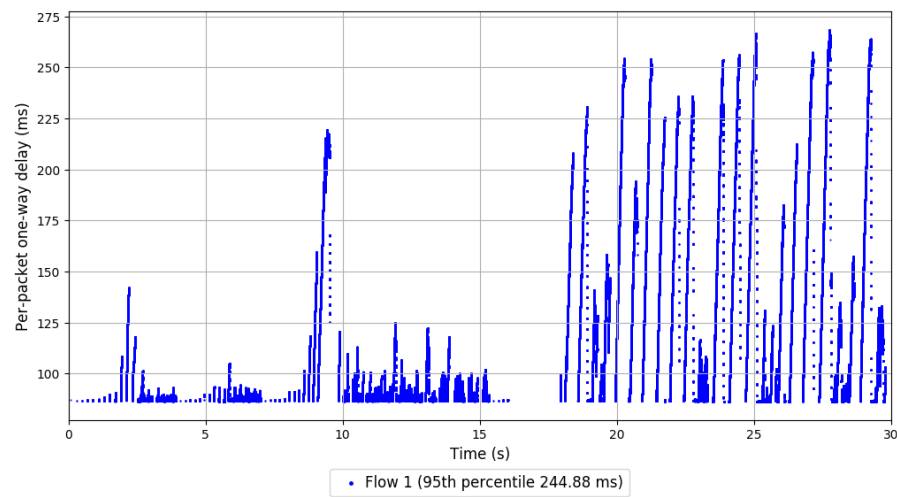
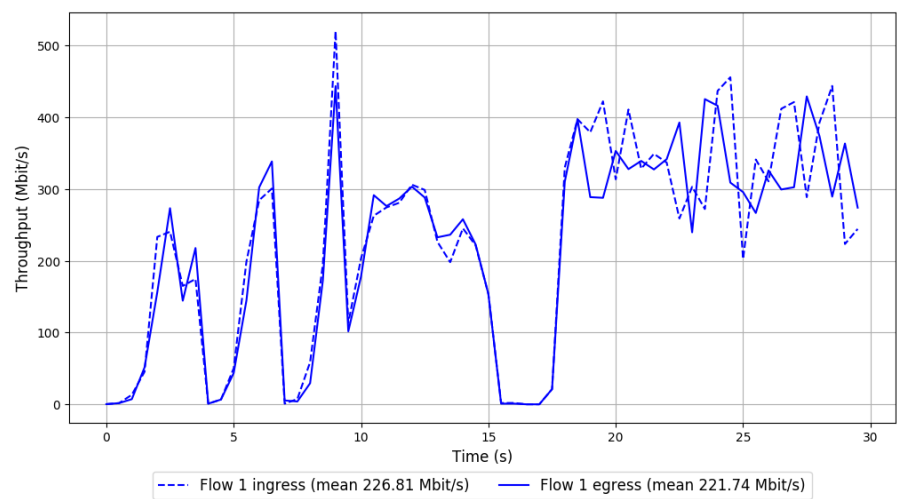
-- Flow 1:

Average throughput: 221.74 Mbit/s

95th percentile per-packet one-way delay: 244.883 ms

Loss rate: 3.02%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-01 23:31:06

End at: 2018-01-01 23:31:36

Below is generated by plot.py at 2018-01-02 02:10:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 233.13 Mbit/s

95th percentile per-packet one-way delay: 155.384 ms

Loss rate: 2.77%

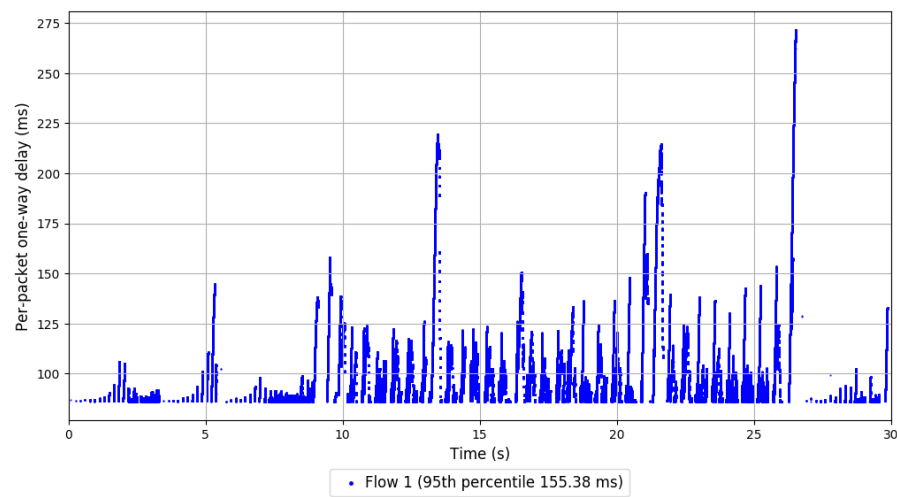
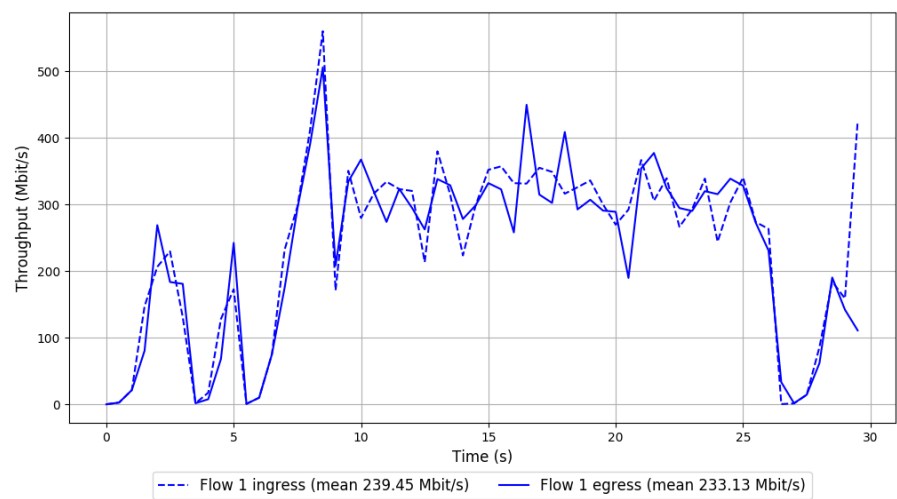
-- Flow 1:

Average throughput: 233.13 Mbit/s

95th percentile per-packet one-way delay: 155.384 ms

Loss rate: 2.77%

Run 10: Report of Verus — Data Link

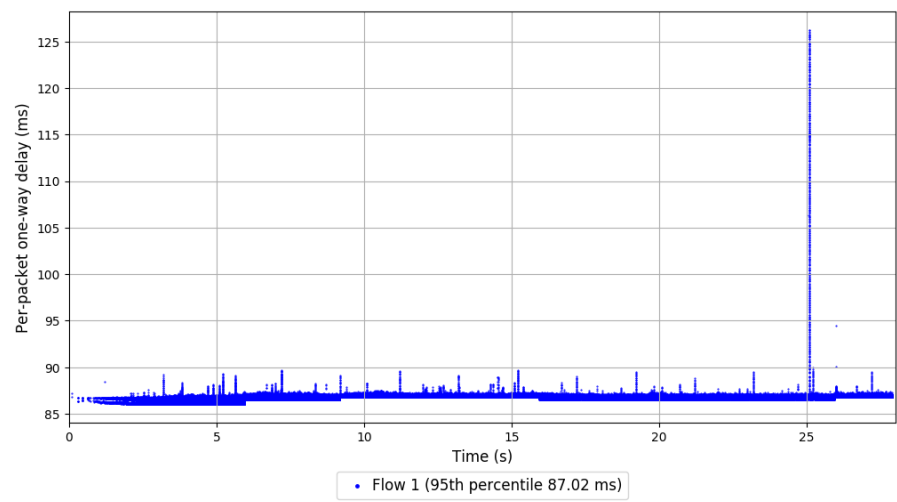
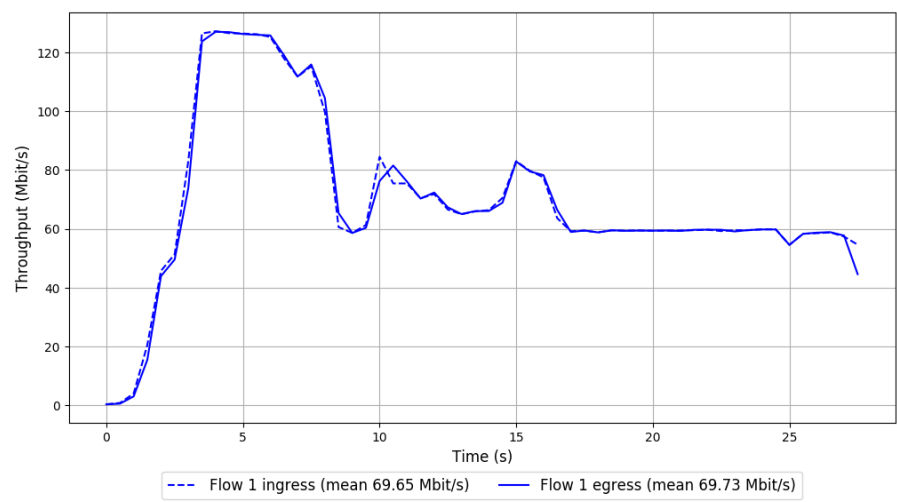


```
Run 1: Statistics of Copa

Start at: 2018-01-01 21:36:33
End at: 2018-01-01 21:37:03

# Below is generated by plot.py at 2018-01-02 02:10:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.73 Mbit/s
95th percentile per-packet one-way delay: 87.019 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 69.73 Mbit/s
95th percentile per-packet one-way delay: 87.019 ms
Loss rate: 0.51%
```

Run 1: Report of Copa — Data Link

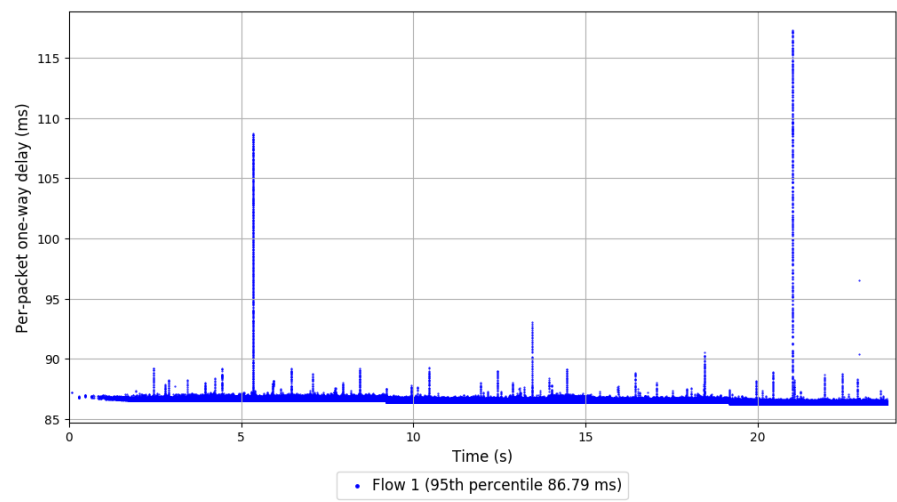
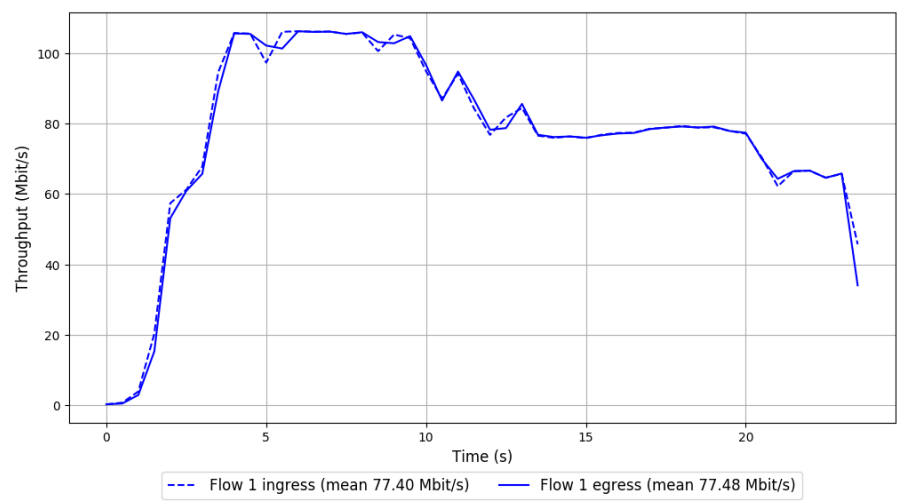


Run 2: Statistics of Copa

Start at: 2018-01-01 21:48:35

End at: 2018-01-01 21:49:05

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-01 22:00:50

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

Below is generated by plot.py at 2018-01-02 02:10:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.75 Mbit/s

95th percentile per-packet one-way delay: 86.934 ms

Loss rate: 0.58%

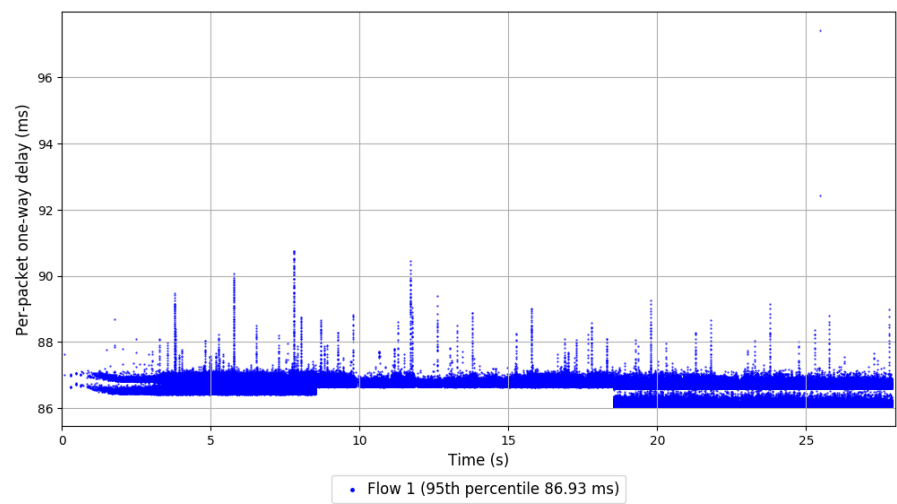
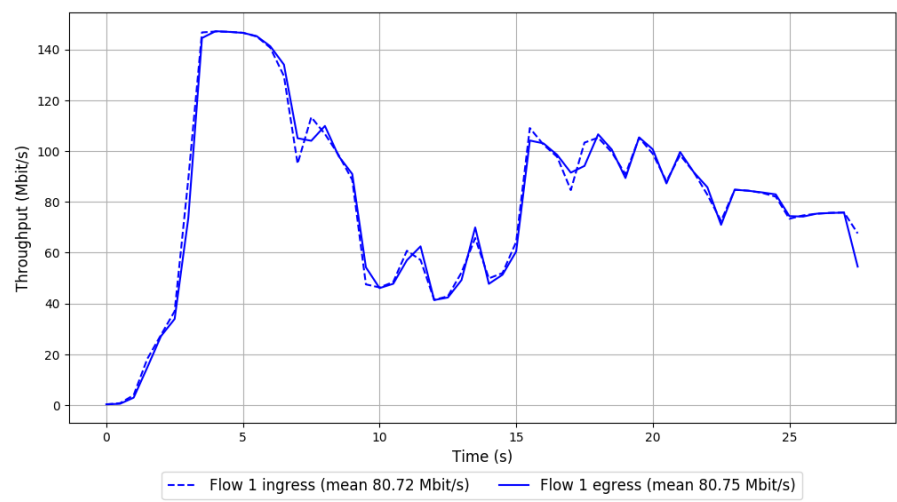
-- Flow 1:

Average throughput: 80.75 Mbit/s

95th percentile per-packet one-way delay: 86.934 ms

Loss rate: 0.58%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-01 22:13:06

End at: 2018-01-01 22:13:36

Below is generated by plot.py at 2018-01-02 02:10:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.23 Mbit/s

95th percentile per-packet one-way delay: 86.961 ms

Loss rate: 0.63%

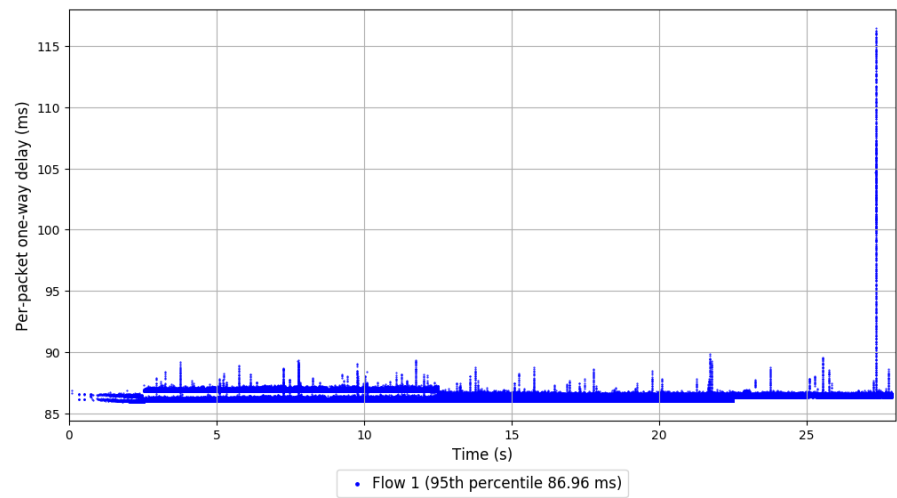
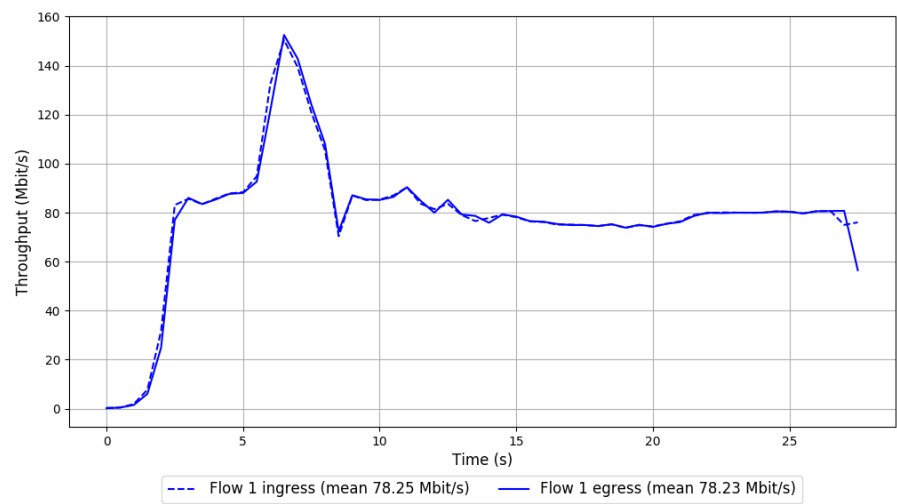
-- Flow 1:

Average throughput: 78.23 Mbit/s

95th percentile per-packet one-way delay: 86.961 ms

Loss rate: 0.63%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-01 22:25:03

End at: 2018-01-01 22:25:33

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.65 Mbit/s

95th percentile per-packet one-way delay: 86.846 ms

Loss rate: 0.63%

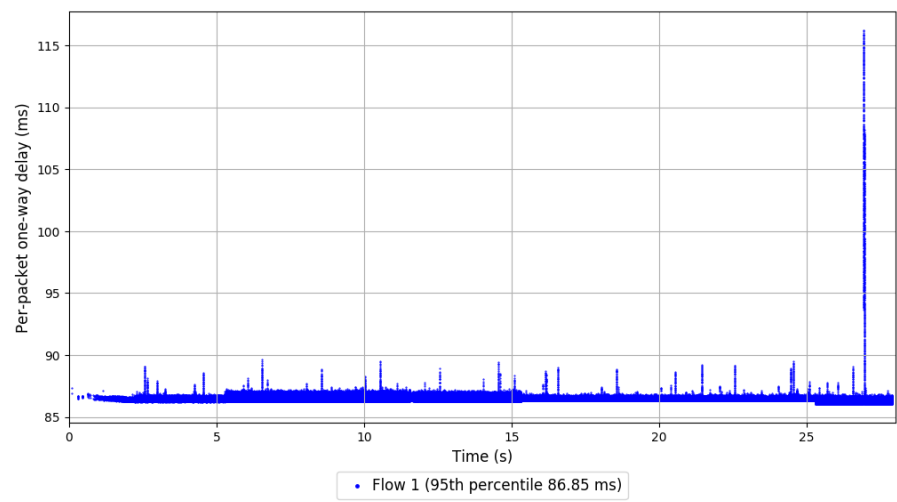
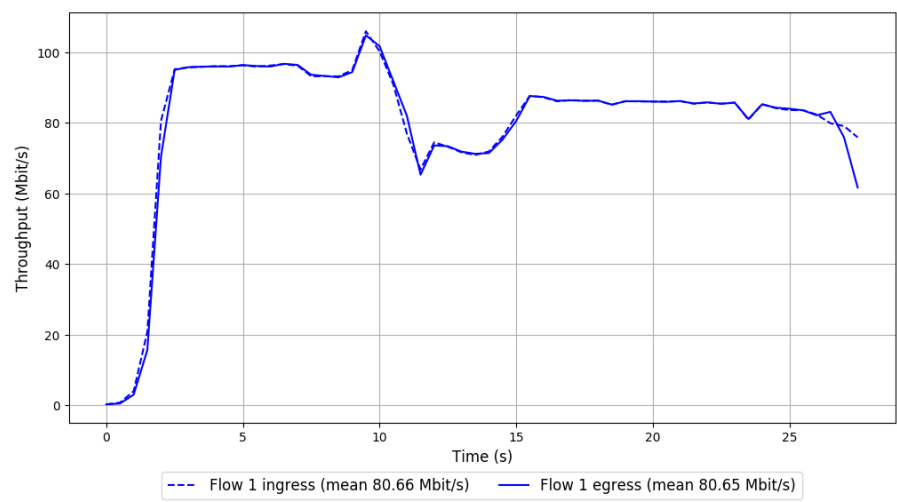
-- Flow 1:

Average throughput: 80.65 Mbit/s

95th percentile per-packet one-way delay: 86.846 ms

Loss rate: 0.63%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-01 22:37:27

End at: 2018-01-01 22:37:57

Below is generated by plot.py at 2018-01-02 02:11:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.91 Mbit/s

95th percentile per-packet one-way delay: 86.516 ms

Loss rate: 0.57%

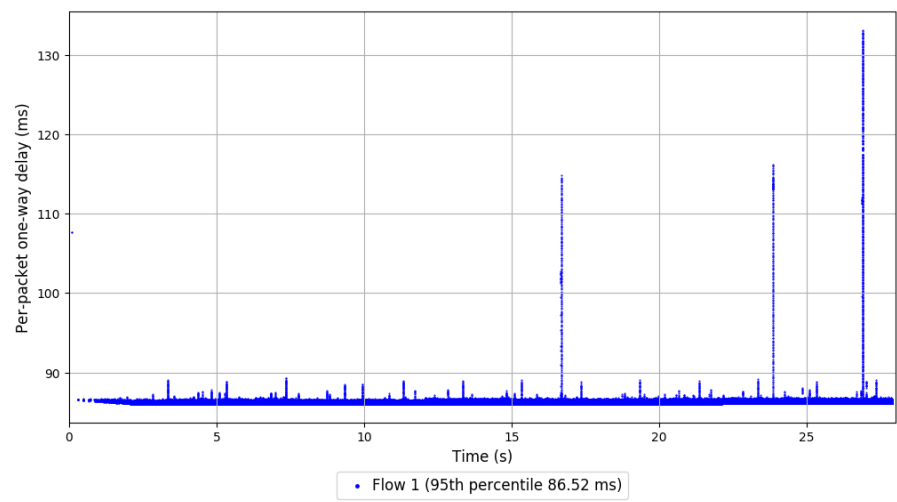
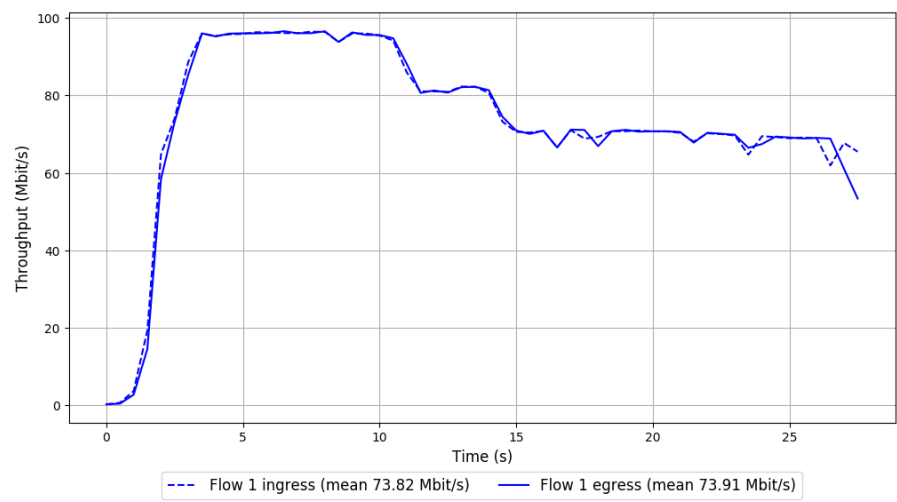
-- Flow 1:

Average throughput: 73.91 Mbit/s

95th percentile per-packet one-way delay: 86.516 ms

Loss rate: 0.57%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-01 22:49:43

End at: 2018-01-01 22:50:13

Below is generated by plot.py at 2018-01-02 02:11:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.65 Mbit/s

95th percentile per-packet one-way delay: 86.865 ms

Loss rate: 0.00%

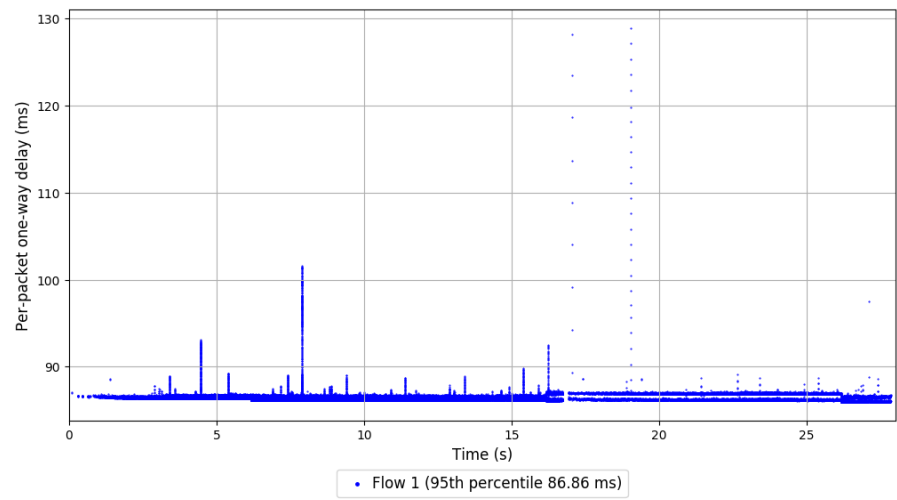
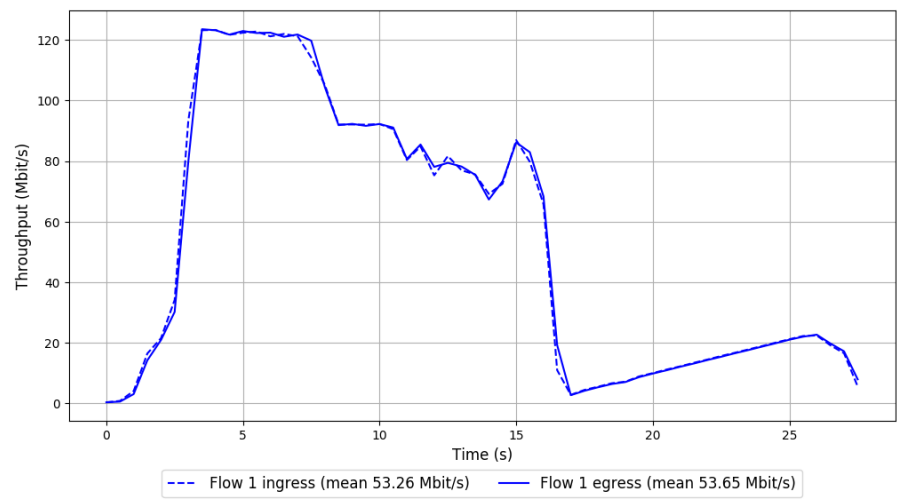
-- Flow 1:

Average throughput: 53.65 Mbit/s

95th percentile per-packet one-way delay: 86.865 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

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

End at: 2018-01-01 23:02:31

Below is generated by plot.py at 2018-01-02 02:12:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.68 Mbit/s

95th percentile per-packet one-way delay: 86.940 ms

Loss rate: 0.44%

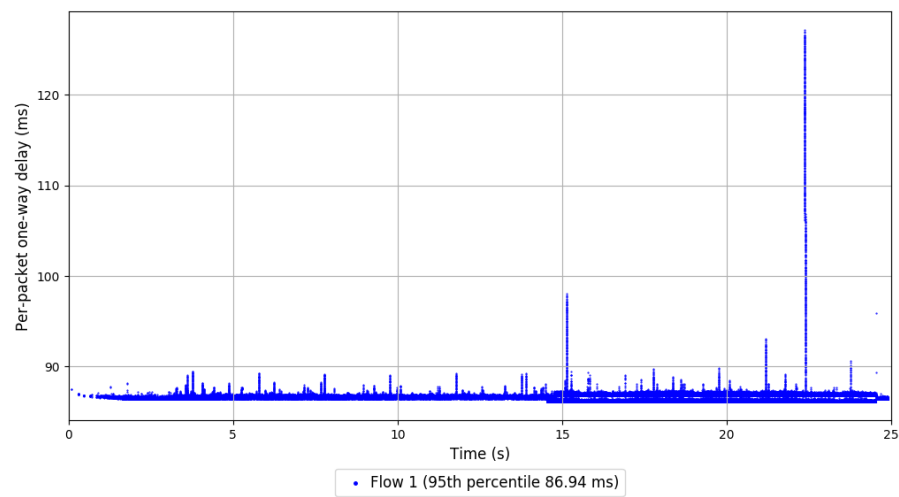
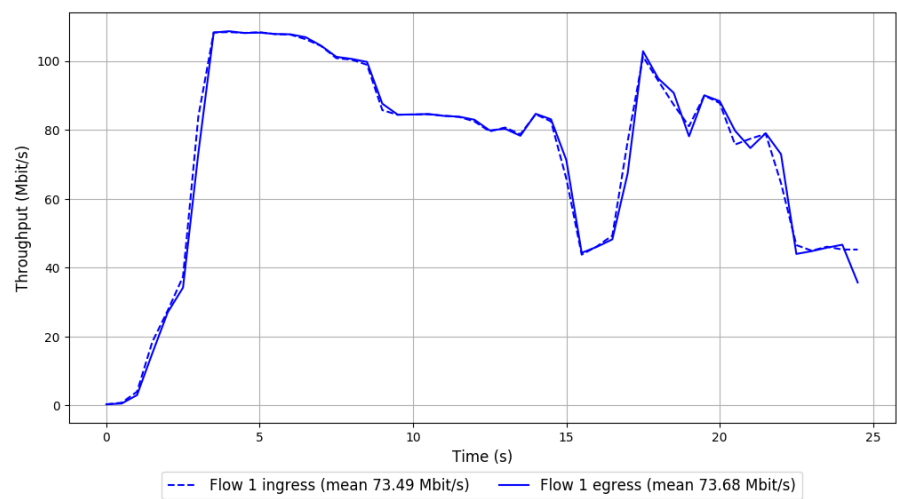
-- Flow 1:

Average throughput: 73.68 Mbit/s

95th percentile per-packet one-way delay: 86.940 ms

Loss rate: 0.44%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

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

End at: 2018-01-01 23:14:45

Below is generated by plot.py at 2018-01-02 02:12:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.54 Mbit/s

95th percentile per-packet one-way delay: 86.657 ms

Loss rate: 0.09%

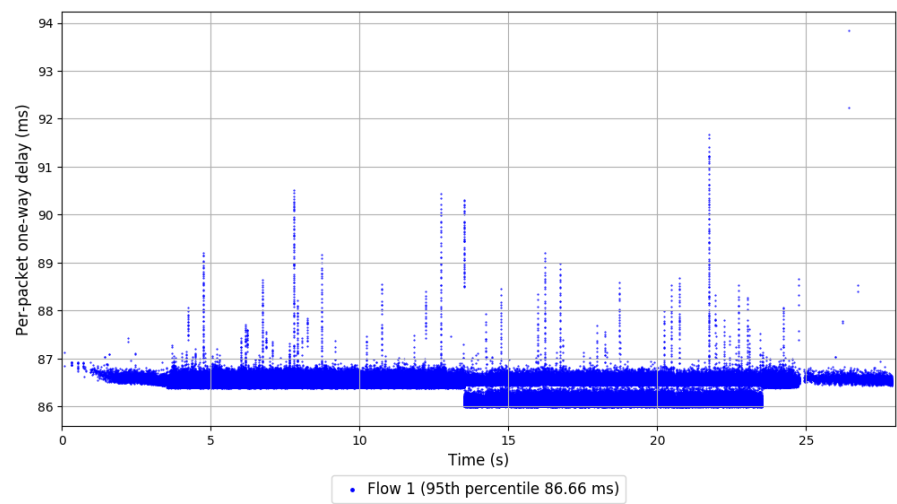
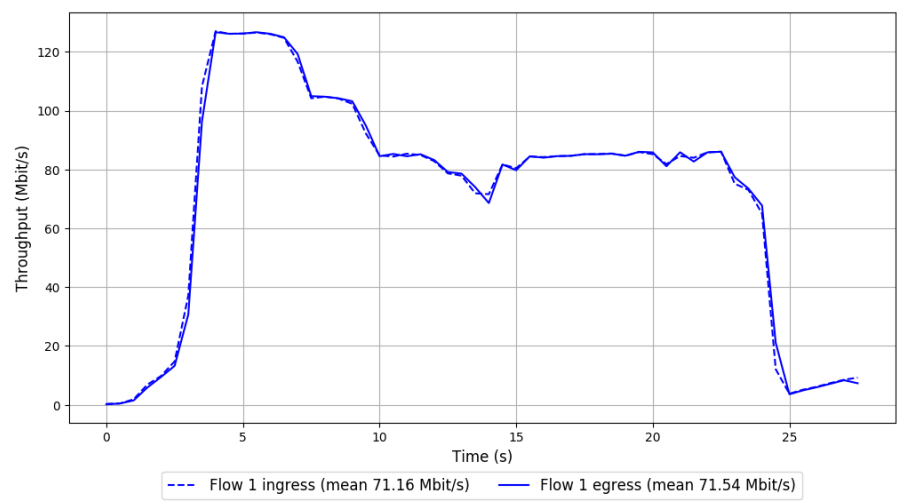
-- Flow 1:

Average throughput: 71.54 Mbit/s

95th percentile per-packet one-way delay: 86.657 ms

Loss rate: 0.09%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-01 23:26:35

End at: 2018-01-01 23:27:05

Below is generated by plot.py at 2018-01-02 02:12:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.14 Mbit/s

95th percentile per-packet one-way delay: 86.996 ms

Loss rate: 0.67%

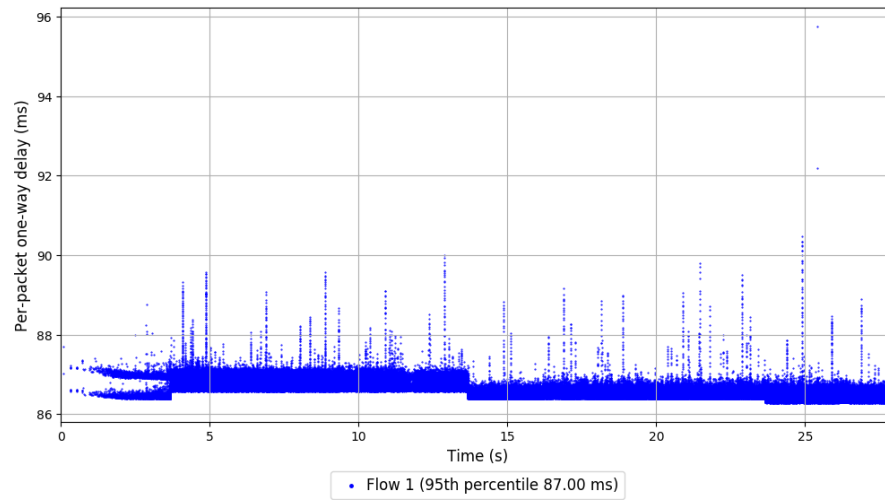
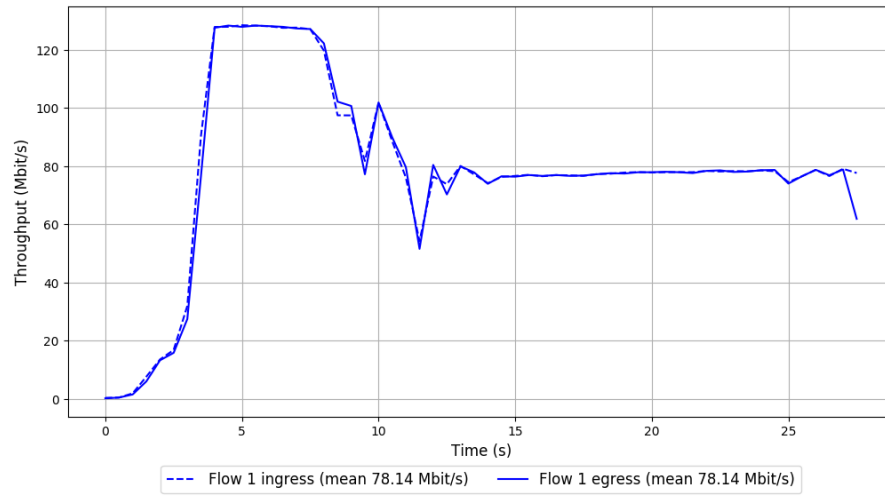
-- Flow 1:

Average throughput: 78.14 Mbit/s

95th percentile per-packet one-way delay: 86.996 ms

Loss rate: 0.67%

Run 10: Report of Copa — Data Link

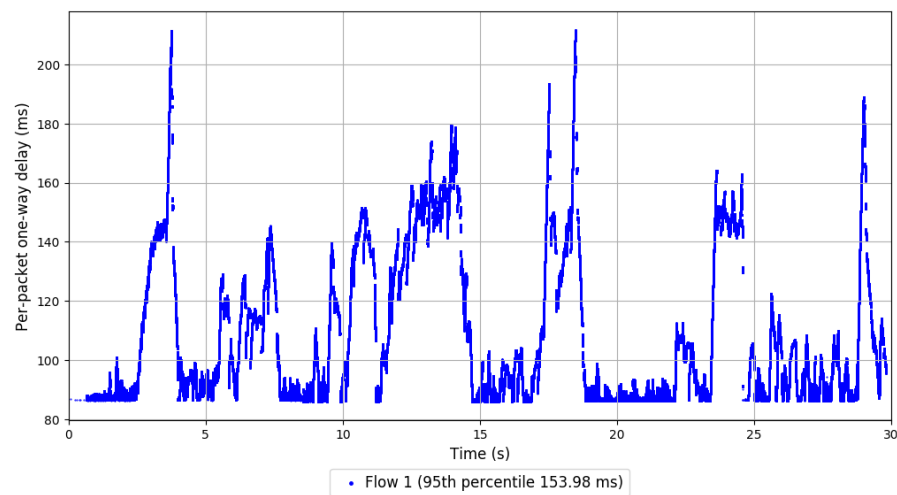
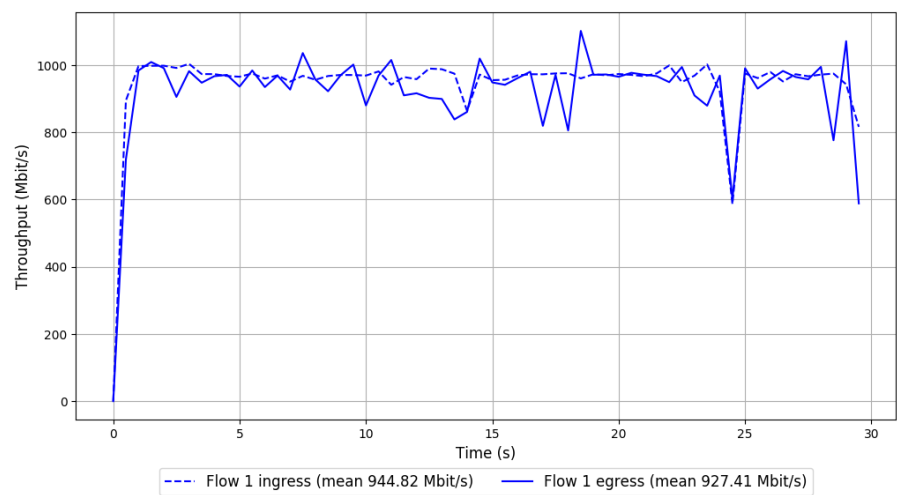


```
Run 1: Statistics of FillP

Start at: 2018-01-01 21:41:45
End at: 2018-01-01 21:42:15

# Below is generated by plot.py at 2018-01-02 02:28:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 927.41 Mbit/s
95th percentile per-packet one-way delay: 153.978 ms
Loss rate: 2.41%
-- Flow 1:
Average throughput: 927.41 Mbit/s
95th percentile per-packet one-way delay: 153.978 ms
Loss rate: 2.41%
```

Run 1: Report of FillP — Data Link

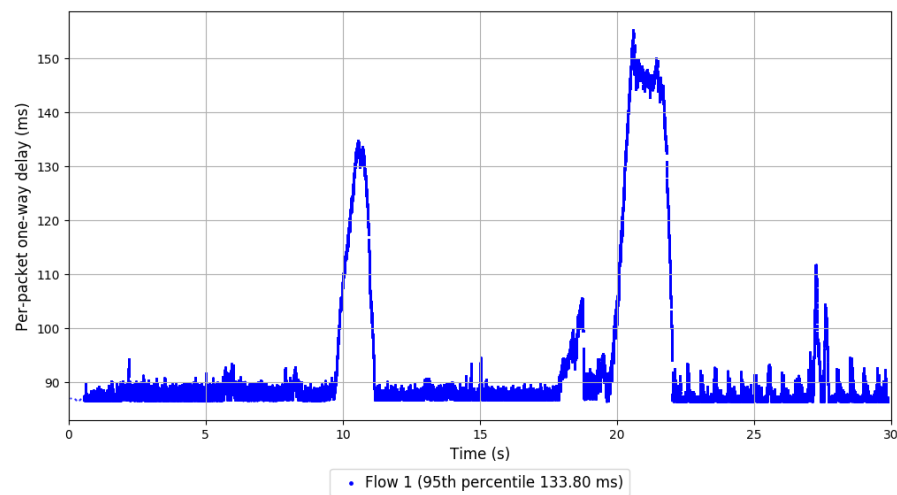
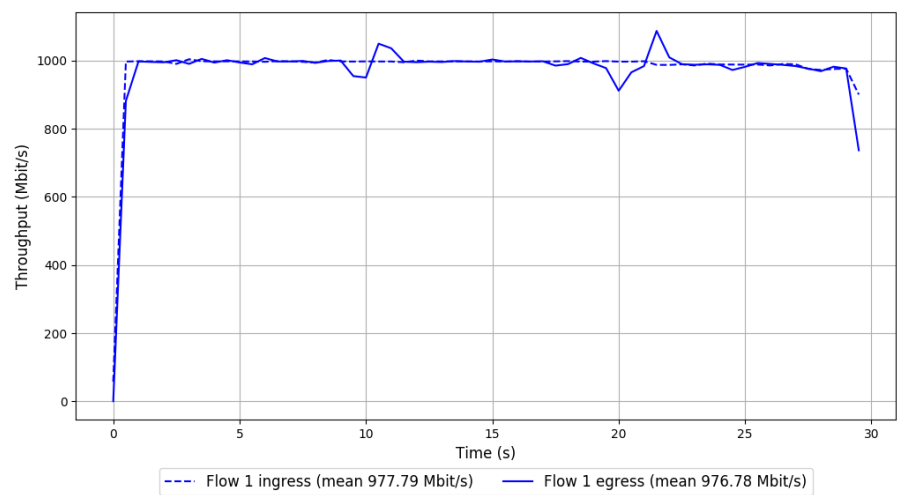


```
Run 2: Statistics of FillP

Start at: 2018-01-01 21:54:01
End at: 2018-01-01 21:54:31

# Below is generated by plot.py at 2018-01-02 02:28:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 976.78 Mbit/s
95th percentile per-packet one-way delay: 133.803 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 976.78 Mbit/s
95th percentile per-packet one-way delay: 133.803 ms
Loss rate: 0.68%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-01 22:06:20

End at: 2018-01-01 22:06:50

Below is generated by plot.py at 2018-01-02 02:28:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 964.39 Mbit/s

95th percentile per-packet one-way delay: 101.540 ms

Loss rate: 0.55%

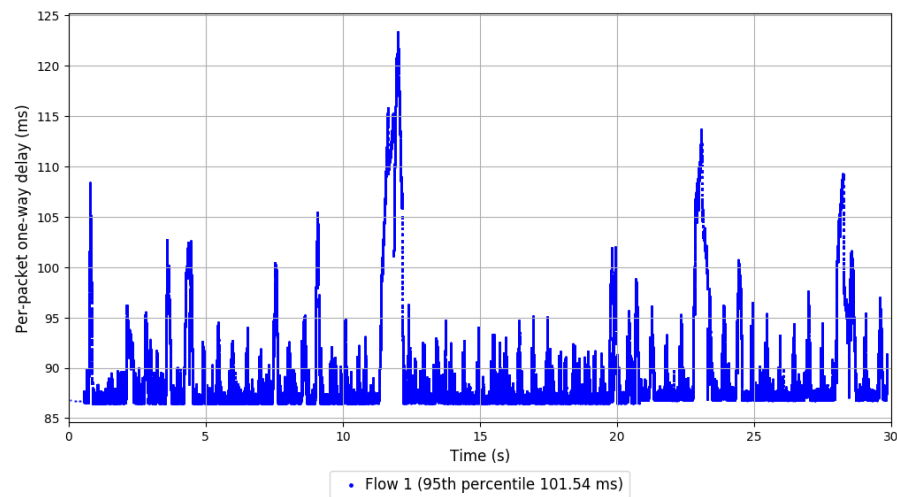
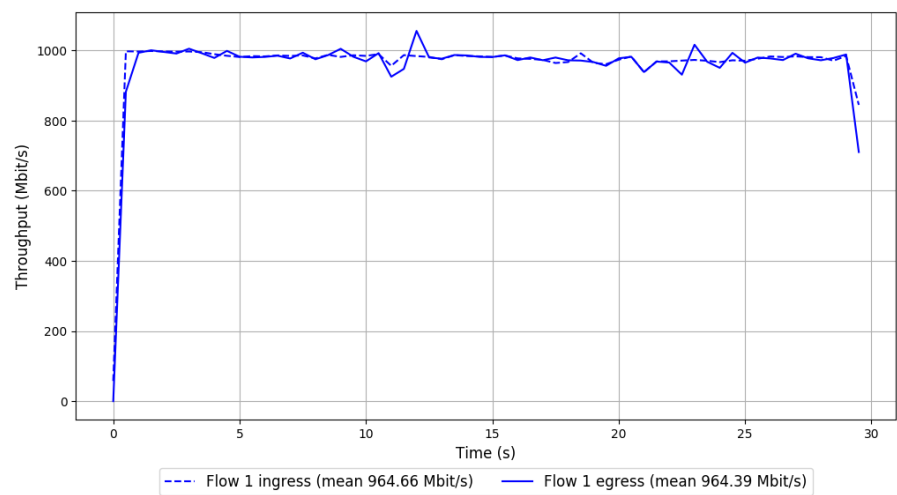
-- Flow 1:

Average throughput: 964.39 Mbit/s

95th percentile per-packet one-way delay: 101.540 ms

Loss rate: 0.55%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-01 22:18:30

End at: 2018-01-01 22:19:00

Below is generated by plot.py at 2018-01-02 02:28:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 961.05 Mbit/s

95th percentile per-packet one-way delay: 140.074 ms

Loss rate: 0.95%

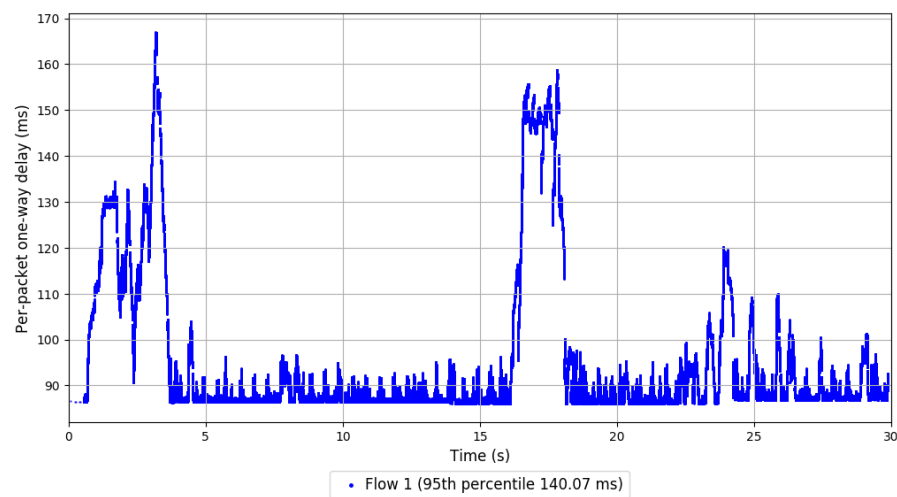
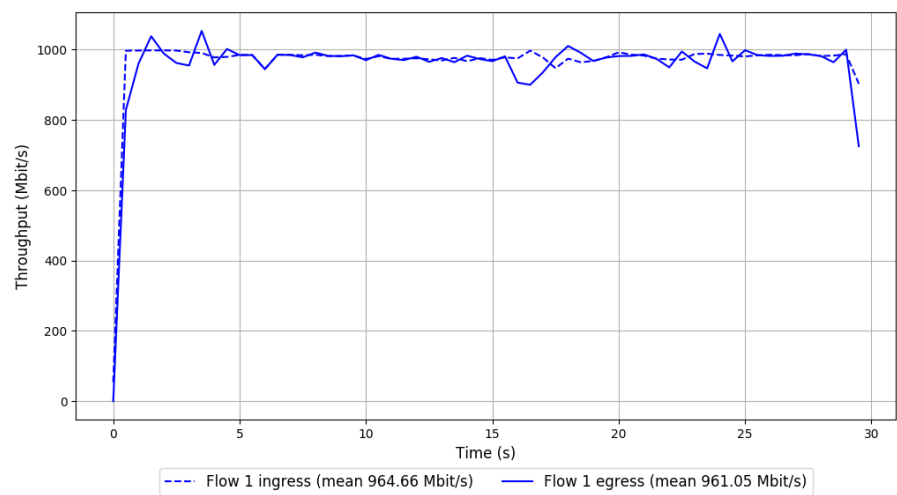
-- Flow 1:

Average throughput: 961.05 Mbit/s

95th percentile per-packet one-way delay: 140.074 ms

Loss rate: 0.95%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-01 22:30:34

End at: 2018-01-01 22:31:04

Below is generated by plot.py at 2018-01-02 02:28:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 938.44 Mbit/s

95th percentile per-packet one-way delay: 298.528 ms

Loss rate: 2.63%

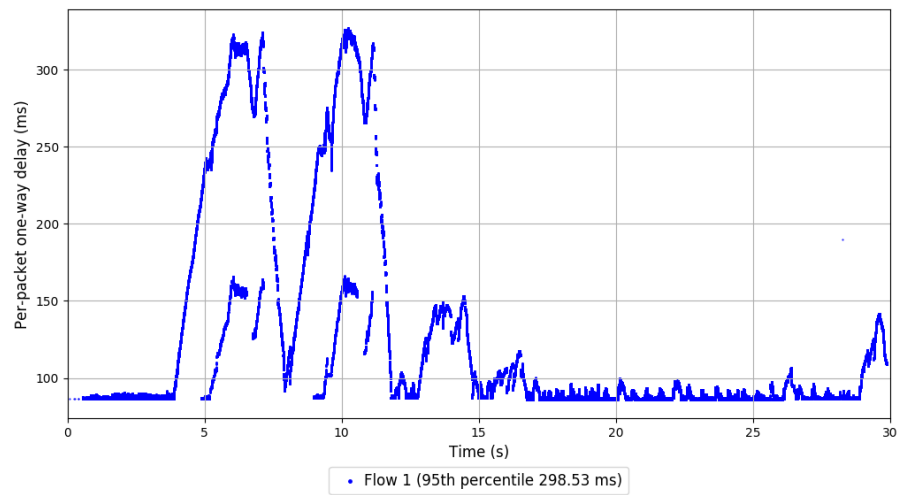
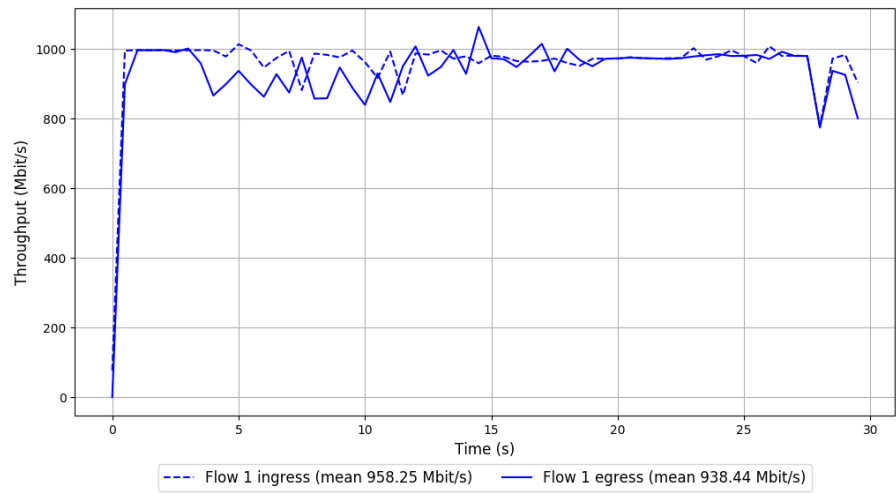
-- Flow 1:

Average throughput: 938.44 Mbit/s

95th percentile per-packet one-way delay: 298.528 ms

Loss rate: 2.63%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-01 22:42:53

End at: 2018-01-01 22:43:23

Below is generated by plot.py at 2018-01-02 02:29:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 926.22 Mbit/s

95th percentile per-packet one-way delay: 159.569 ms

Loss rate: 3.45%

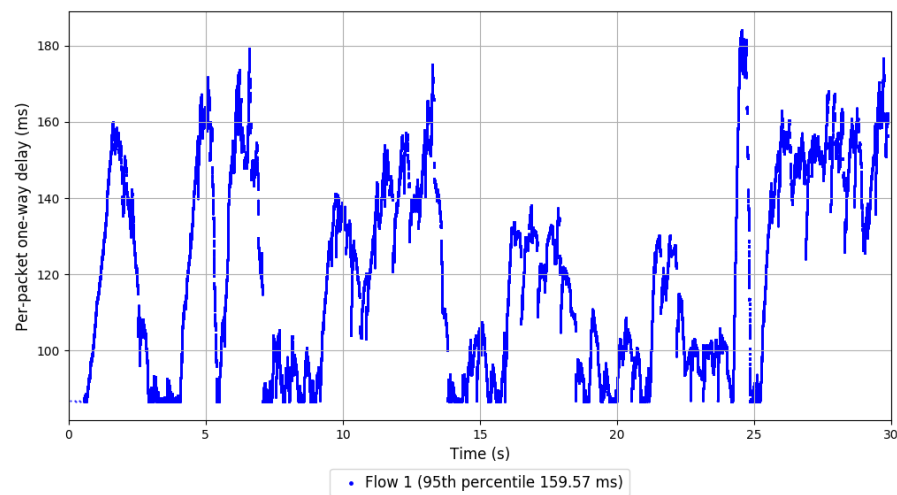
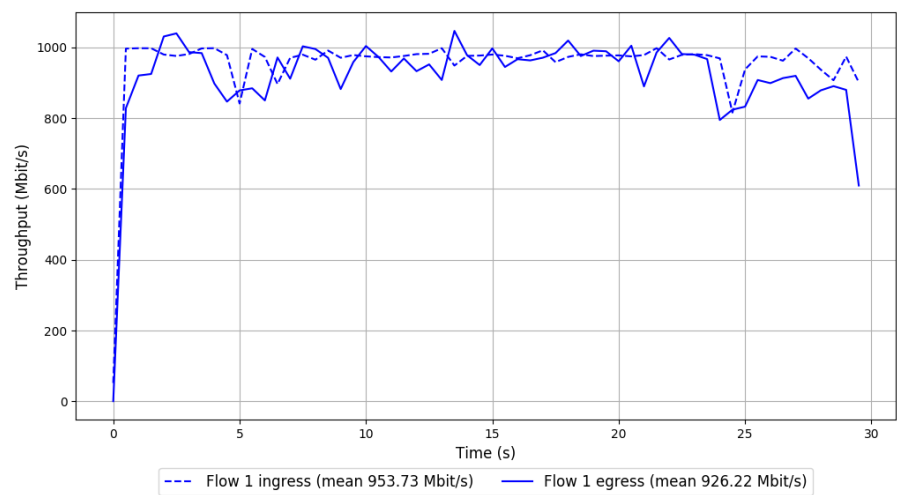
-- Flow 1:

Average throughput: 926.22 Mbit/s

95th percentile per-packet one-way delay: 159.569 ms

Loss rate: 3.45%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-01 22:55:08

End at: 2018-01-01 22:55:38

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 944.39 Mbit/s

95th percentile per-packet one-way delay: 153.501 ms

Loss rate: 2.31%

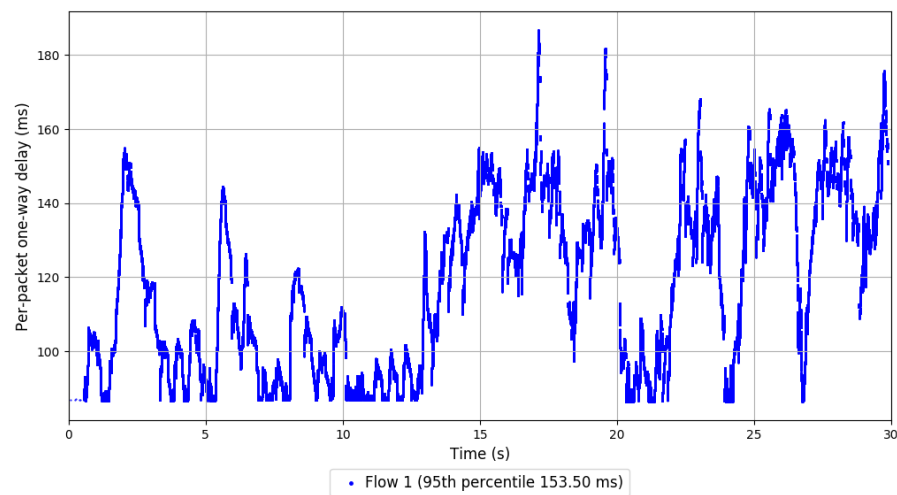
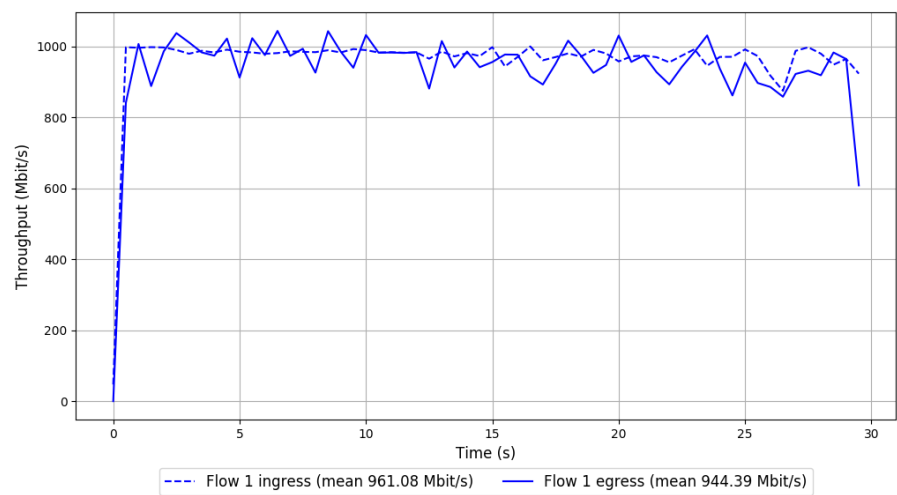
-- Flow 1:

Average throughput: 944.39 Mbit/s

95th percentile per-packet one-way delay: 153.501 ms

Loss rate: 2.31%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-01 23:07:27

End at: 2018-01-01 23:07:57

Below is generated by plot.py at 2018-01-02 02:30:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 957.49 Mbit/s

95th percentile per-packet one-way delay: 115.169 ms

Loss rate: 0.90%

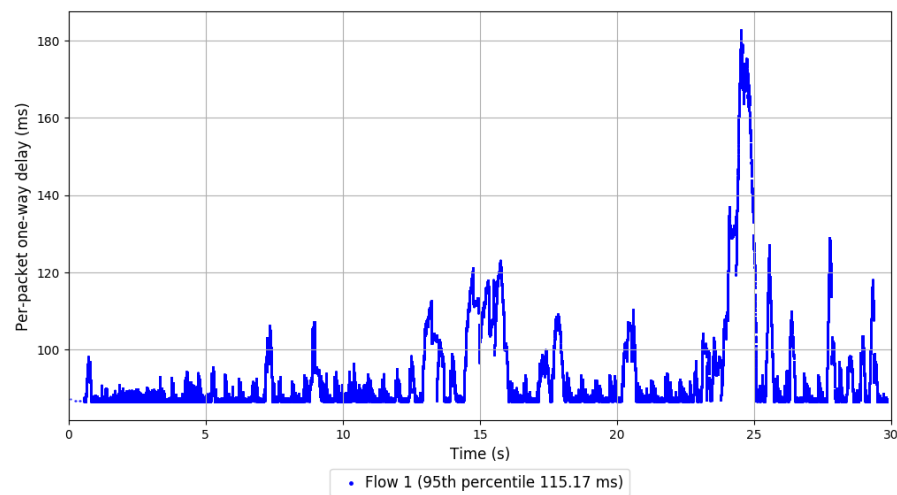
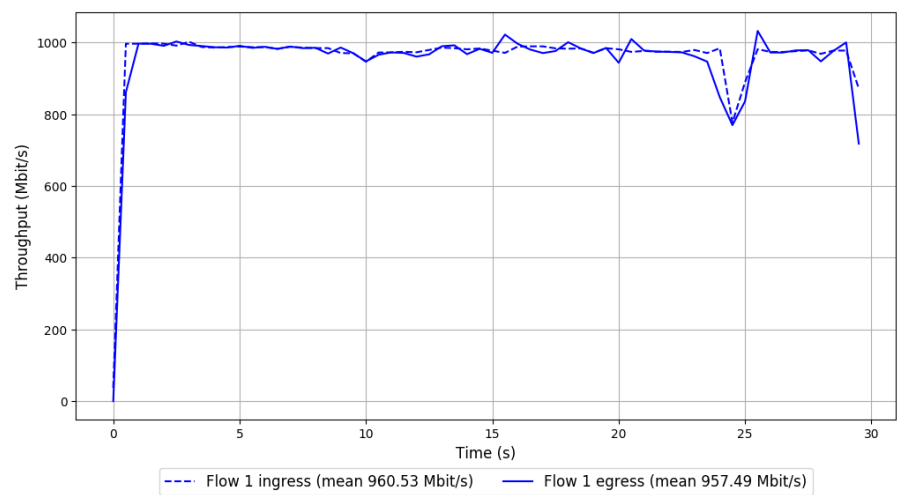
-- Flow 1:

Average throughput: 957.49 Mbit/s

95th percentile per-packet one-way delay: 115.169 ms

Loss rate: 0.90%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-01 23:19:44

End at: 2018-01-01 23:20:14

Below is generated by plot.py at 2018-01-02 02:35:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 959.08 Mbit/s

95th percentile per-packet one-way delay: 163.114 ms

Loss rate: 1.70%

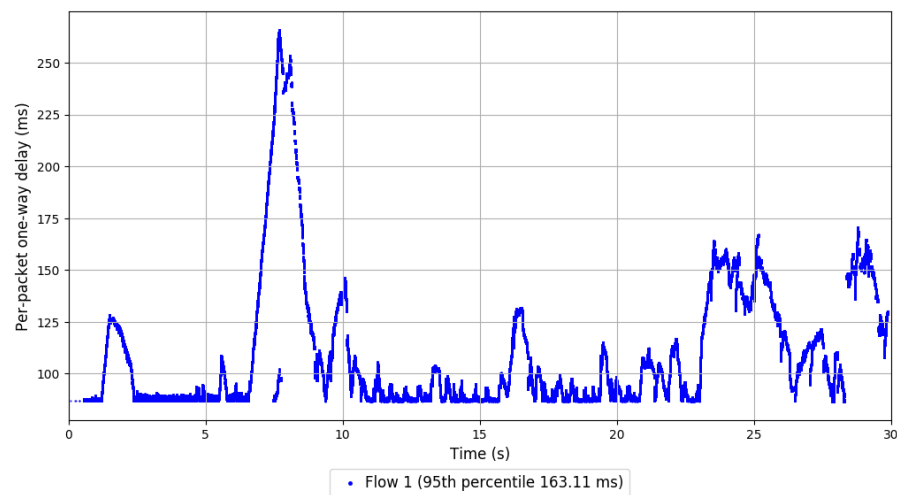
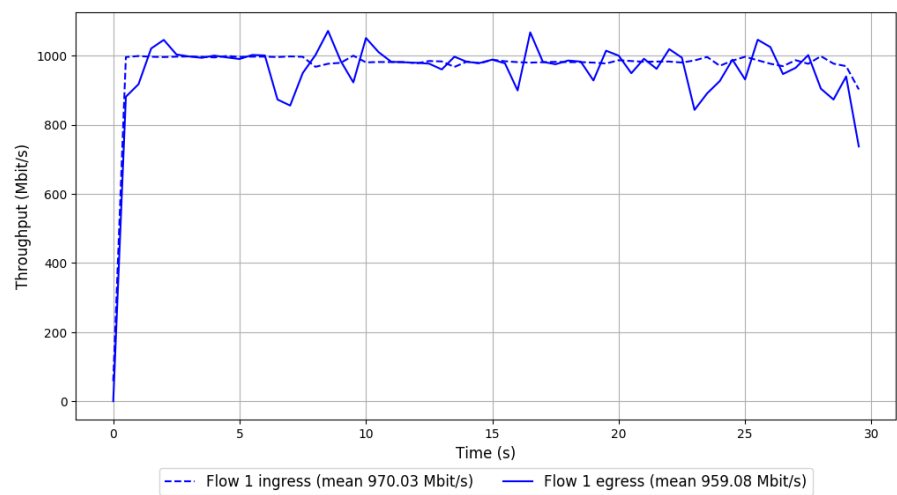
-- Flow 1:

Average throughput: 959.08 Mbit/s

95th percentile per-packet one-way delay: 163.114 ms

Loss rate: 1.70%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-01 23:32:03

End at: 2018-01-01 23:32:33

Below is generated by plot.py at 2018-01-02 02:35:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 965.93 Mbit/s

95th percentile per-packet one-way delay: 142.666 ms

Loss rate: 1.39%

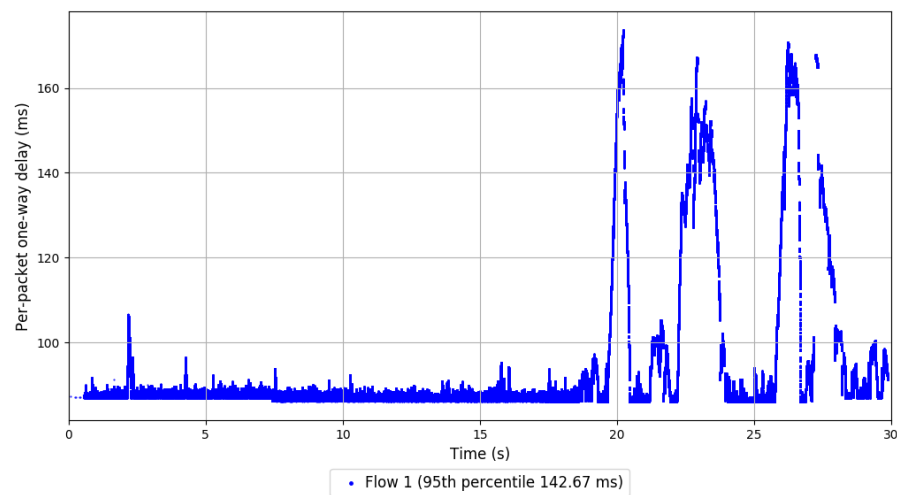
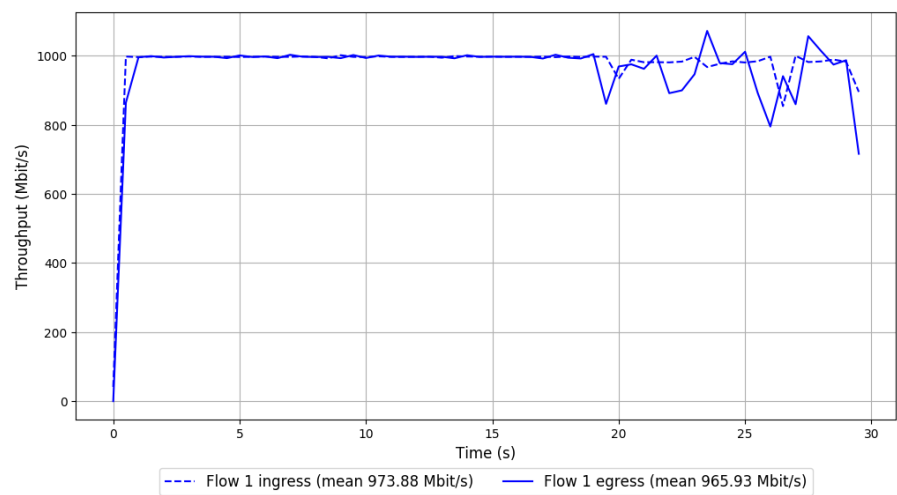
-- Flow 1:

Average throughput: 965.93 Mbit/s

95th percentile per-packet one-way delay: 142.666 ms

Loss rate: 1.39%

Run 10: Report of FillP — Data Link

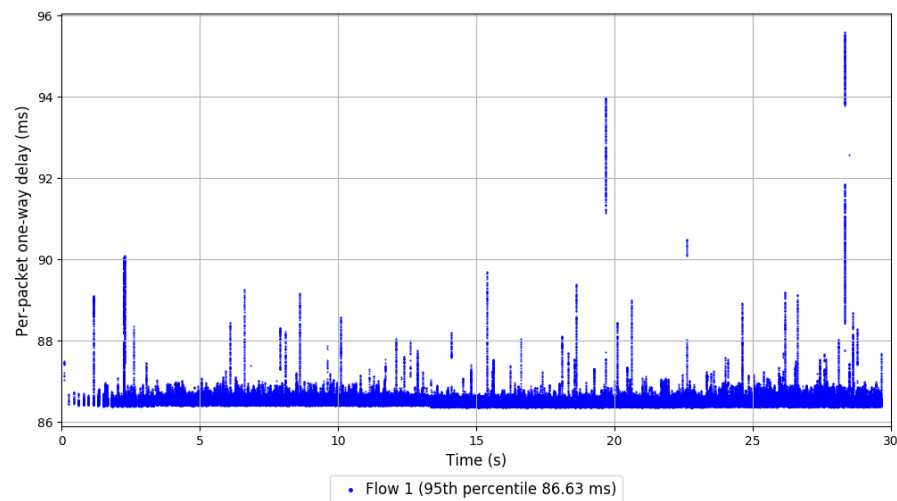
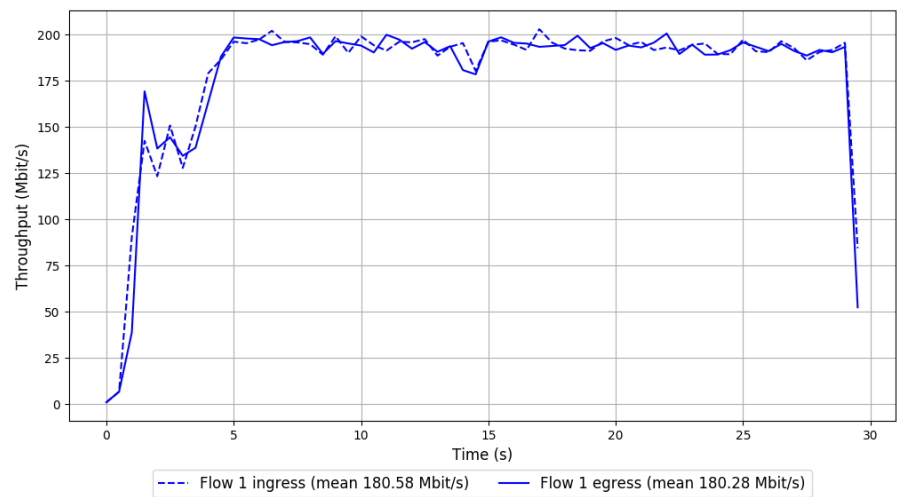


```
Run 1: Statistics of Indigo

Start at: 2018-01-01 21:40:07
End at: 2018-01-01 21:40:37

# Below is generated by plot.py at 2018-01-02 02:35:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 180.28 Mbit/s
95th percentile per-packet one-way delay: 86.631 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 180.28 Mbit/s
95th percentile per-packet one-way delay: 86.631 ms
Loss rate: 0.76%
```

Run 1: Report of Indigo — Data Link

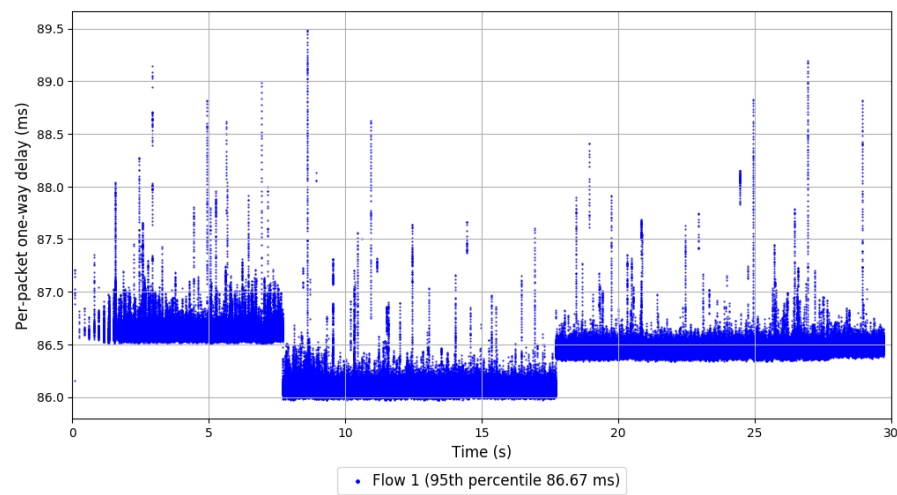
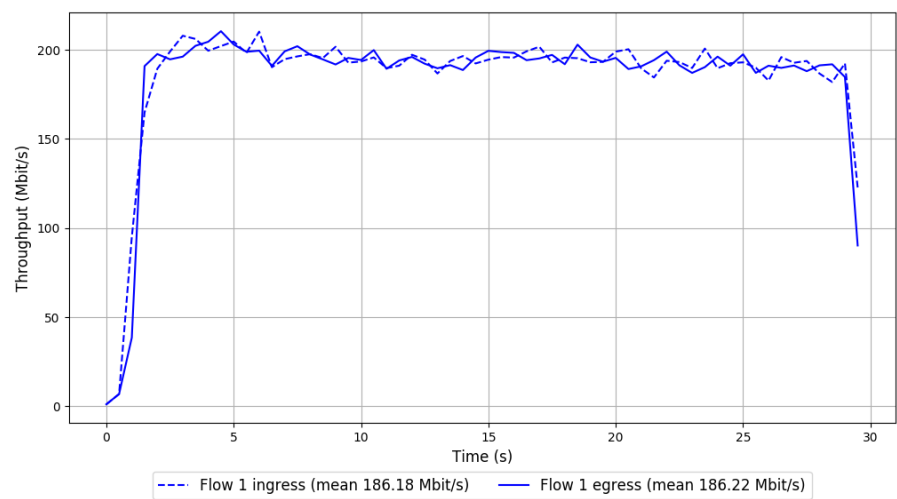


```
Run 2: Statistics of Indigo

Start at: 2018-01-01 21:52:13
End at: 2018-01-01 21:52:43

# Below is generated by plot.py at 2018-01-02 02:35:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.22 Mbit/s
95th percentile per-packet one-way delay: 86.669 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 186.22 Mbit/s
95th percentile per-packet one-way delay: 86.669 ms
Loss rate: 0.59%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-01 22:04:31

End at: 2018-01-01 22:05:01

Below is generated by plot.py at 2018-01-02 02:35:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.77 Mbit/s

95th percentile per-packet one-way delay: 86.978 ms

Loss rate: 0.76%

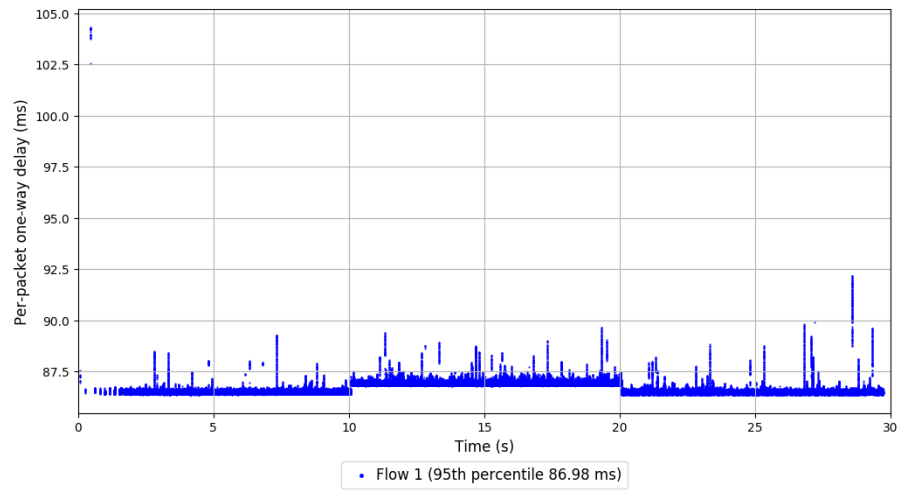
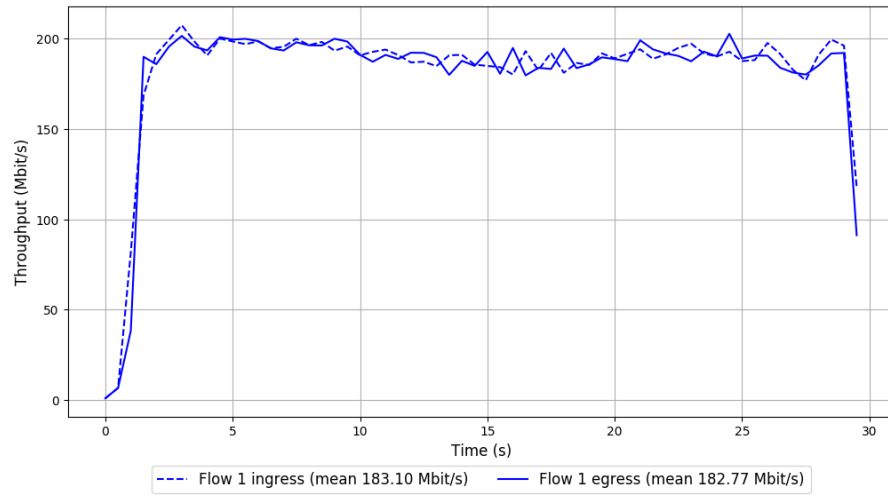
-- Flow 1:

Average throughput: 182.77 Mbit/s

95th percentile per-packet one-way delay: 86.978 ms

Loss rate: 0.76%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-01 22:16:46

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

Below is generated by plot.py at 2018-01-02 02:35:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.64 Mbit/s

95th percentile per-packet one-way delay: 86.495 ms

Loss rate: 0.60%

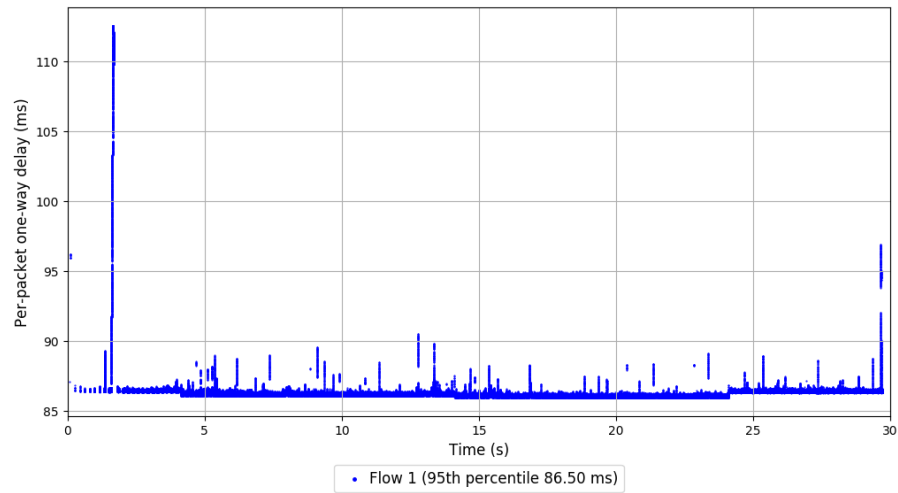
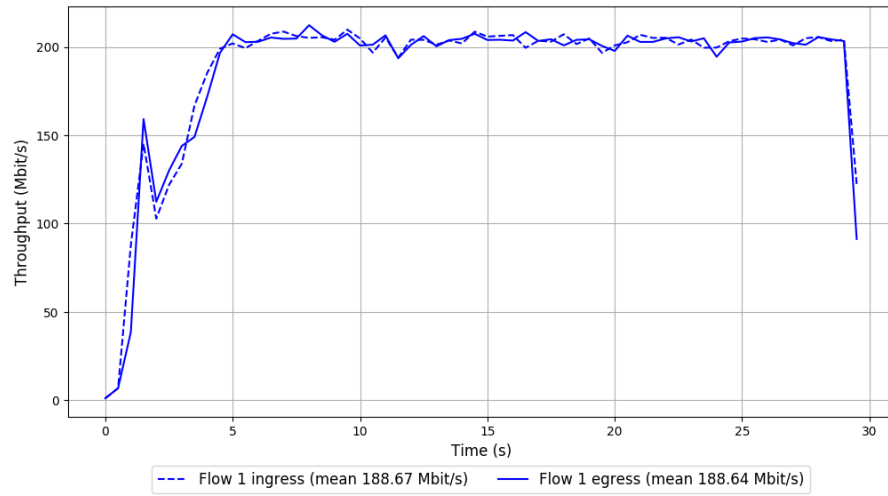
-- Flow 1:

Average throughput: 188.64 Mbit/s

95th percentile per-packet one-way delay: 86.495 ms

Loss rate: 0.60%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-01 22:28:43

End at: 2018-01-01 22:29:13

Below is generated by plot.py at 2018-01-02 02:35:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.16 Mbit/s

95th percentile per-packet one-way delay: 86.574 ms

Loss rate: 0.69%

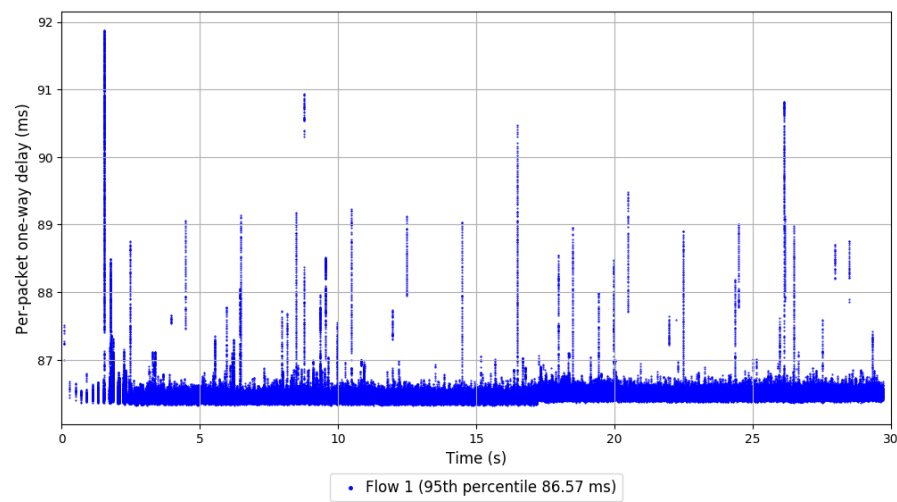
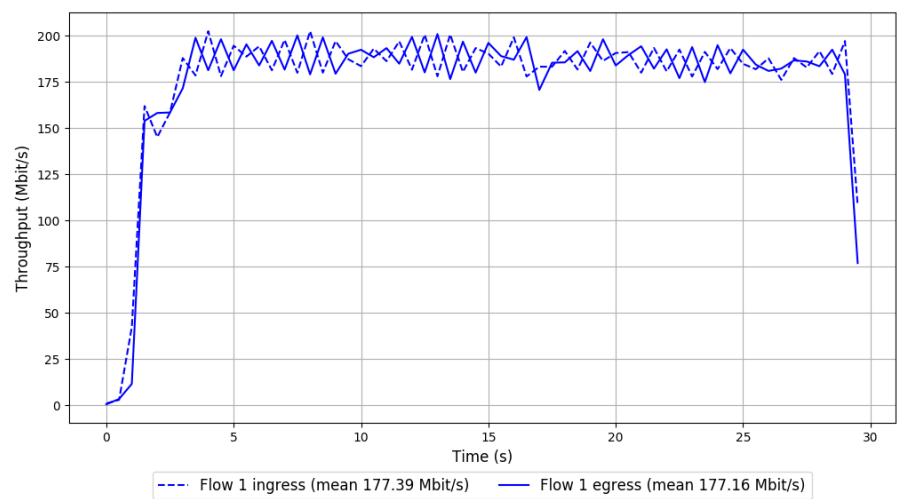
-- Flow 1:

Average throughput: 177.16 Mbit/s

95th percentile per-packet one-way delay: 86.574 ms

Loss rate: 0.69%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-01 22:41:04

End at: 2018-01-01 22:41:34

Below is generated by plot.py at 2018-01-02 02:35:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.76 Mbit/s

95th percentile per-packet one-way delay: 86.555 ms

Loss rate: 0.74%

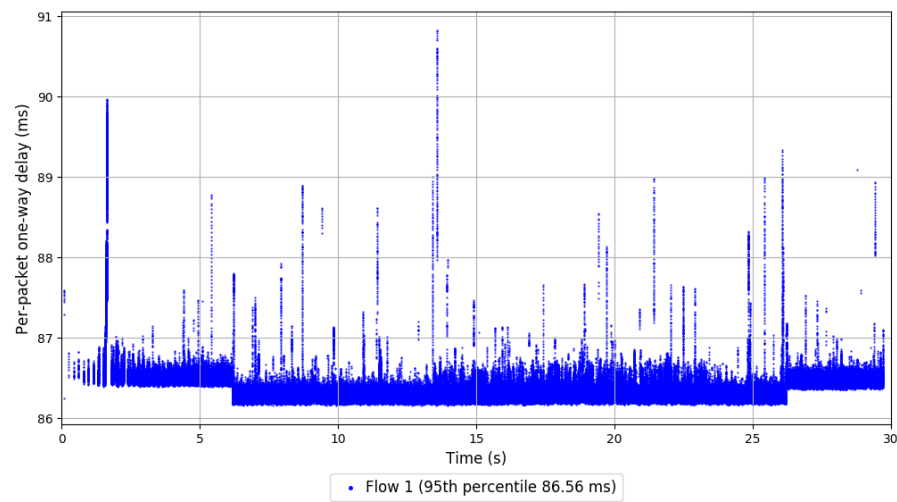
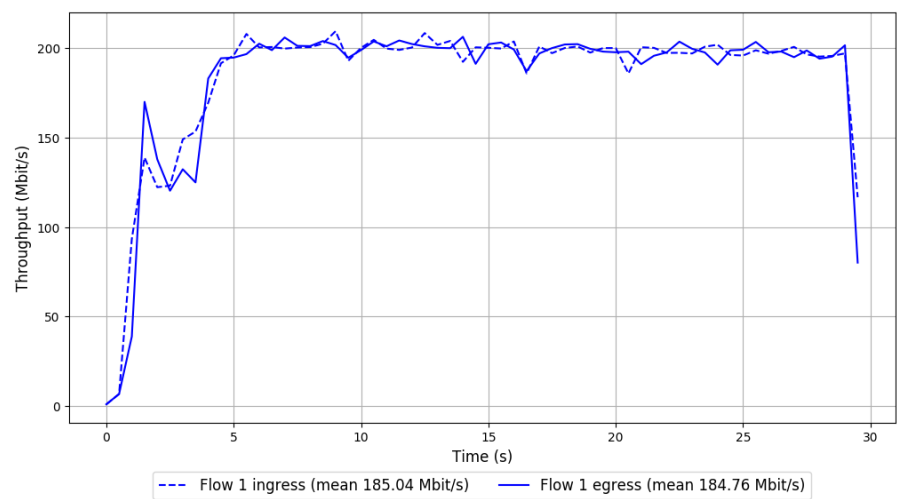
-- Flow 1:

Average throughput: 184.76 Mbit/s

95th percentile per-packet one-way delay: 86.555 ms

Loss rate: 0.74%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

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

End at: 2018-01-01 22:53:52

Below is generated by plot.py at 2018-01-02 02:35:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.07 Mbit/s

95th percentile per-packet one-way delay: 86.613 ms

Loss rate: 0.70%

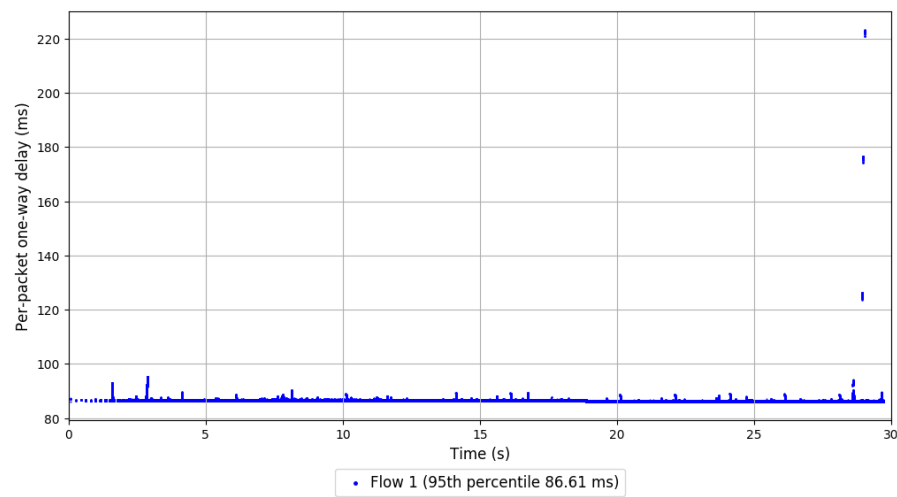
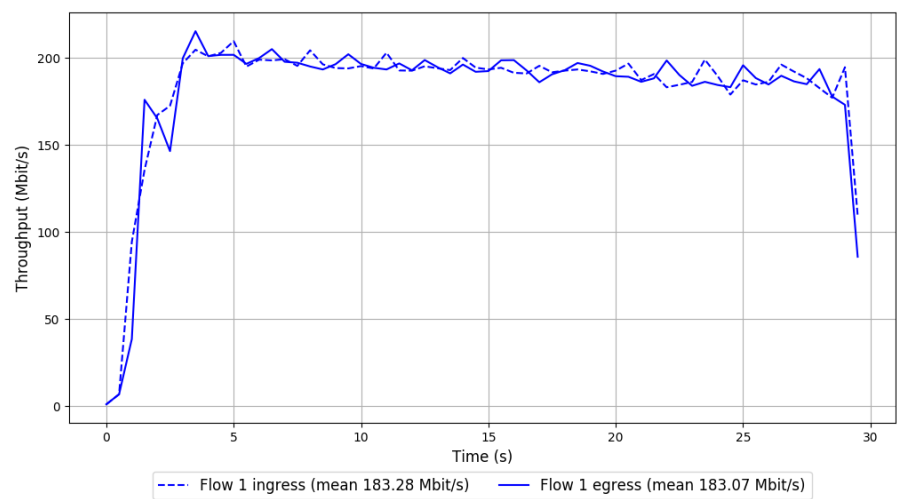
-- Flow 1:

Average throughput: 183.07 Mbit/s

95th percentile per-packet one-way delay: 86.613 ms

Loss rate: 0.70%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-01 23:05:43

End at: 2018-01-01 23:06:13

Below is generated by plot.py at 2018-01-02 02:35:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.93 Mbit/s

95th percentile per-packet one-way delay: 86.697 ms

Loss rate: 1.27%

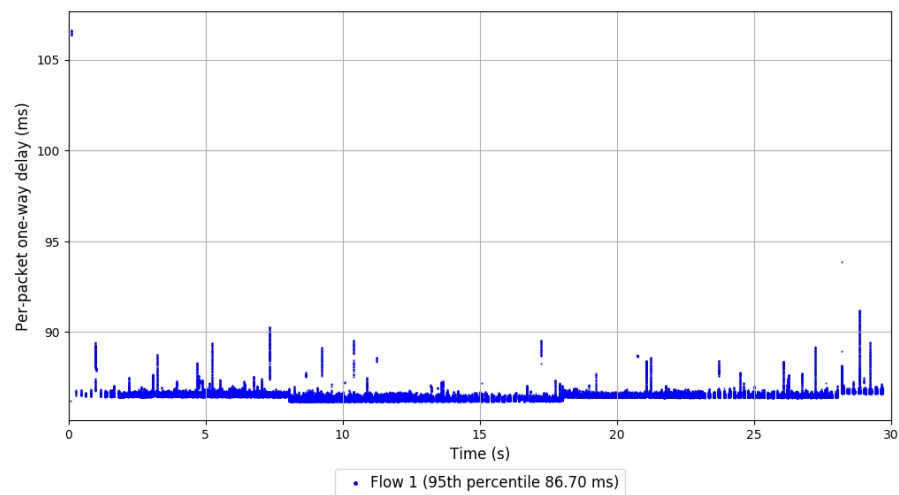
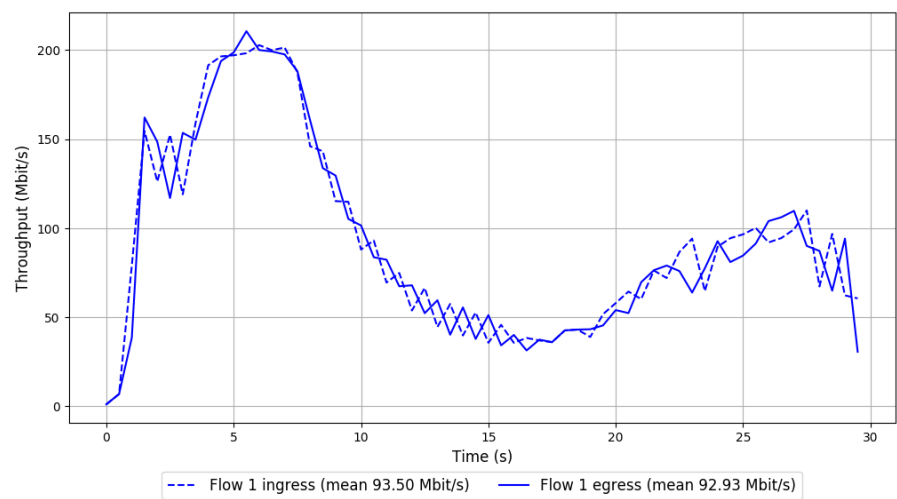
-- Flow 1:

Average throughput: 92.93 Mbit/s

95th percentile per-packet one-way delay: 86.697 ms

Loss rate: 1.27%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-01 23:17:55

End at: 2018-01-01 23:18:25

Below is generated by plot.py at 2018-01-02 02:35:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.06 Mbit/s

95th percentile per-packet one-way delay: 87.012 ms

Loss rate: 0.78%

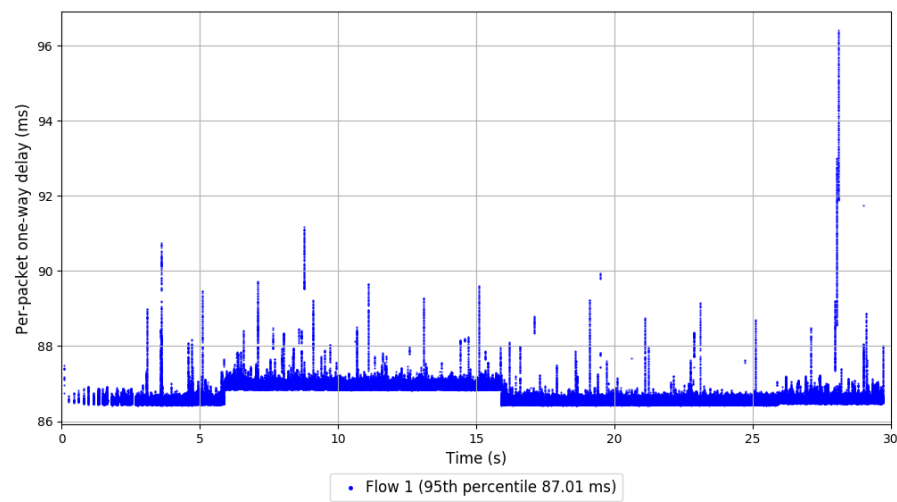
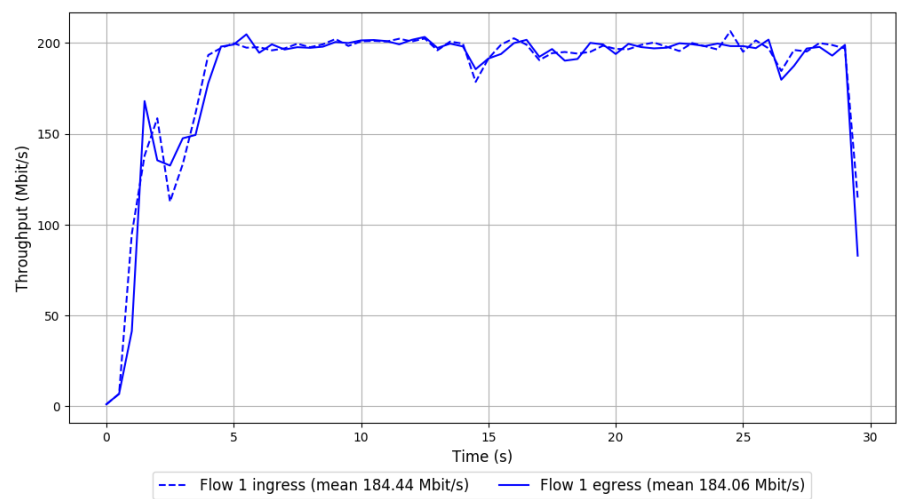
-- Flow 1:

Average throughput: 184.06 Mbit/s

95th percentile per-packet one-way delay: 87.012 ms

Loss rate: 0.78%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-01 23:30:14

End at: 2018-01-01 23:30:44

Below is generated by plot.py at 2018-01-02 02:35:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.46 Mbit/s

95th percentile per-packet one-way delay: 86.617 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 184.46 Mbit/s

95th percentile per-packet one-way delay: 86.617 ms

Loss rate: 0.61%

Run 10: Report of Indigo — Data Link

