

Pantheon Report

Generated at 2018-01-25 21:11:48 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

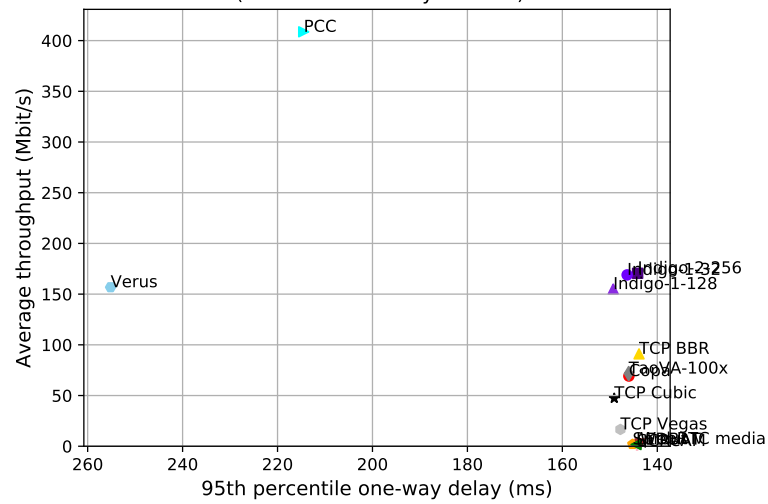
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

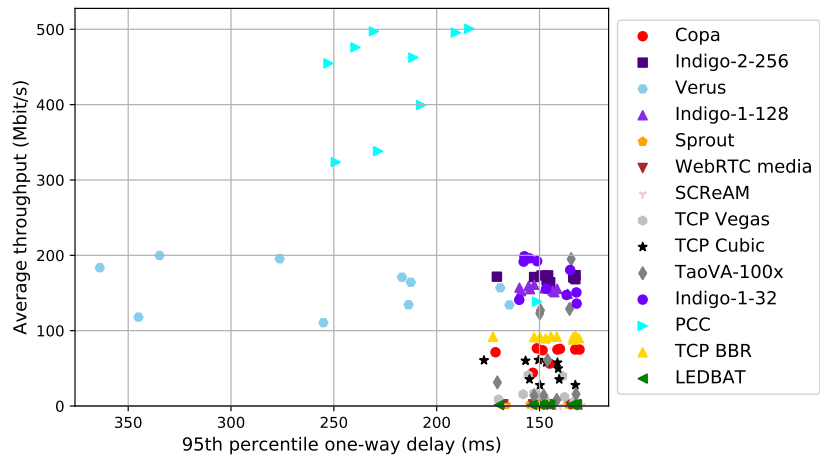
Git summary:

```
branch: master @ f23294ec38436c9f802847d477a41b7343ec76e6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeab30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 423cbca3e8ea1d599e7b5cf725835e8a2b6bfac6
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	91.09	143.85	0.95
TCP Cubic	10	47.33	149.07	1.19
LEDBAT	10	1.63	144.48	1.48
PCC	10	408.67	214.48	2.58
QUIC Cubic	0	N/A	N/A	N/A
SCReAM	9	0.21	144.26	0.79
WebRTC media	9	2.22	143.64	0.87
Sprout	10	1.98	145.20	2.00
TaoVA-100x	10	71.65	146.03	0.64
TCP Vegas	10	16.57	147.77	1.66
Verus	10	156.80	255.17	4.31
Copa	9	69.22	145.99	0.59
Indigo-2-256	10	170.53	144.14	0.80
Indigo-1-32	10	168.96	146.35	0.81
Indigo-1-128	10	154.98	149.29	0.81

Run 1: Statistics of TCP BBR

Start at: 2018-01-25 16:28:57

End at: 2018-01-25 16:29:27

Below is generated by plot.py at 2018-01-25 20:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.32 Mbit/s

95th percentile per-packet one-way delay: 144.433 ms

Loss rate: 0.87%

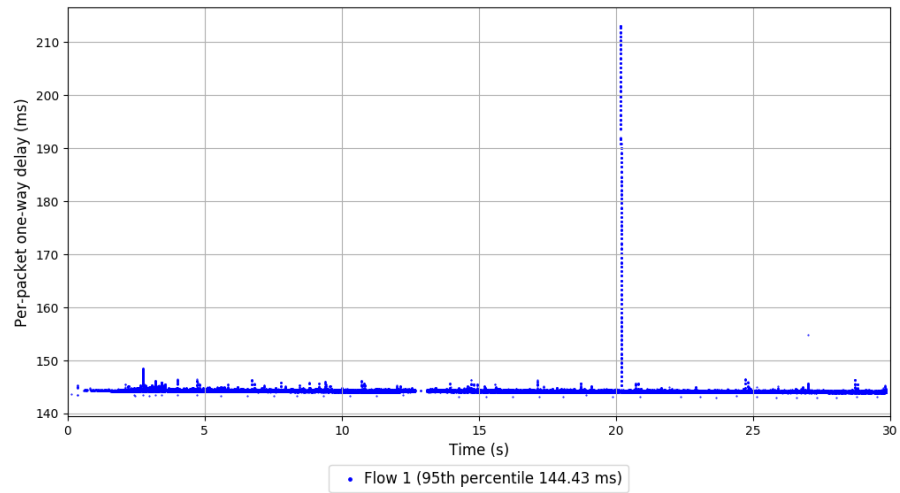
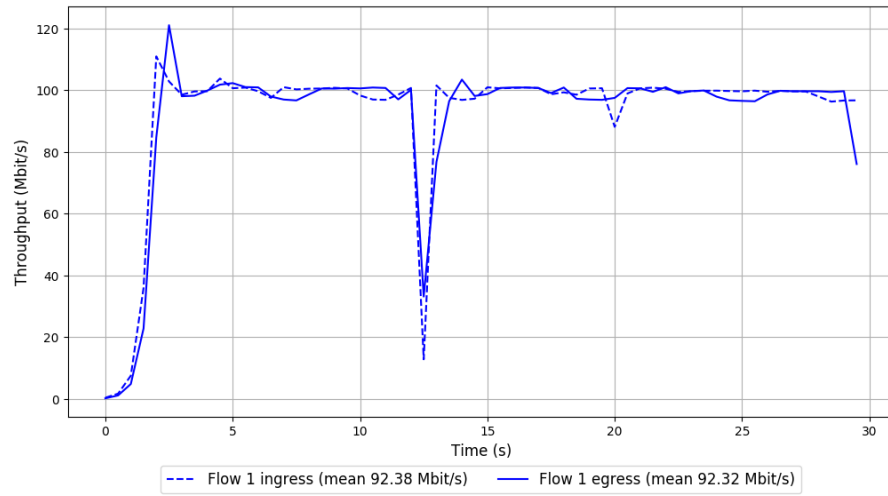
-- Flow 1:

Average throughput: 92.32 Mbit/s

95th percentile per-packet one-way delay: 144.433 ms

Loss rate: 0.87%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-25 16:41:48

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

Below is generated by plot.py at 2018-01-25 20:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.41 Mbit/s

95th percentile per-packet one-way delay: 149.783 ms

Loss rate: 1.01%

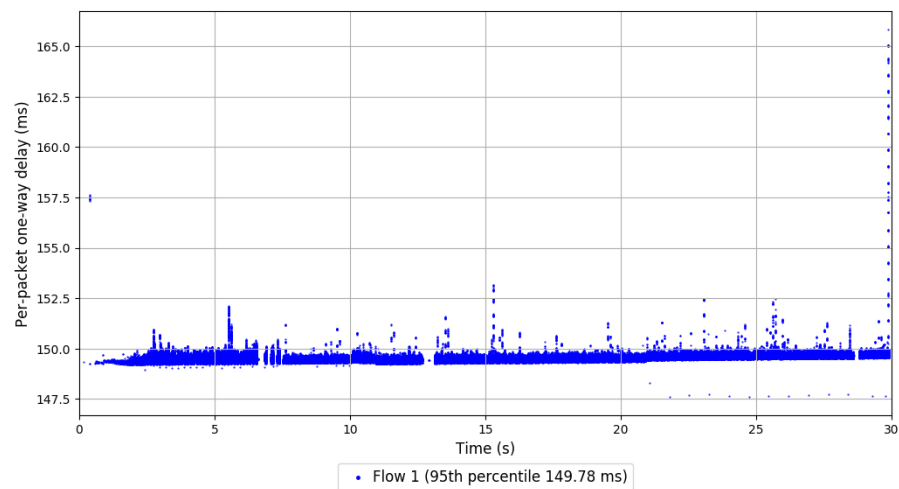
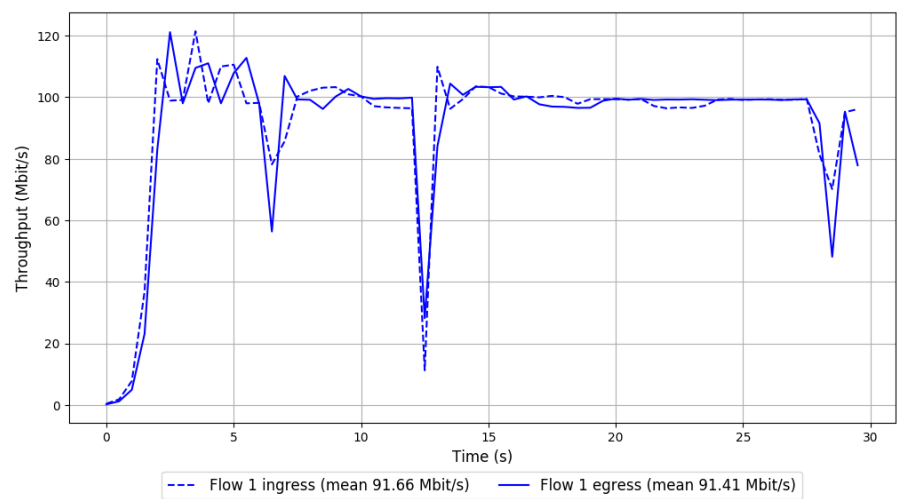
-- Flow 1:

Average throughput: 91.41 Mbit/s

95th percentile per-packet one-way delay: 149.783 ms

Loss rate: 1.01%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-25 16:54:40

End at: 2018-01-25 16:55:10

Below is generated by plot.py at 2018-01-25 20:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.79 Mbit/s

95th percentile per-packet one-way delay: 172.621 ms

Loss rate: 0.78%

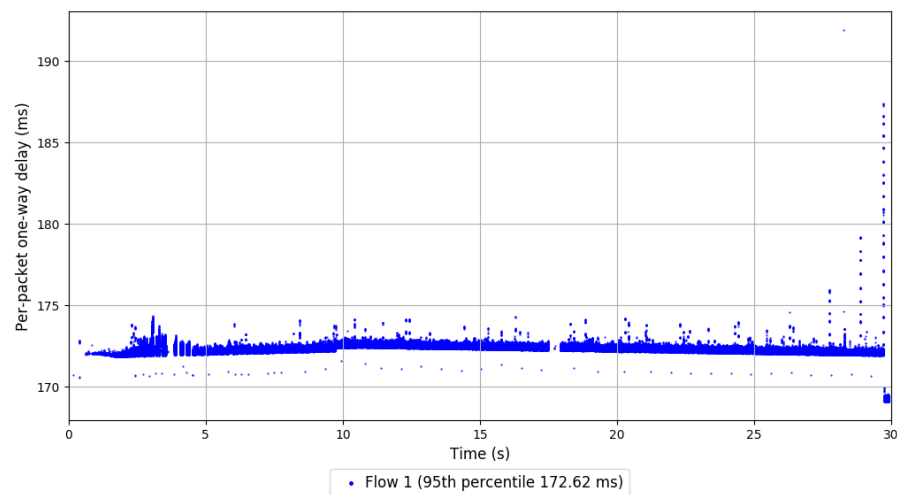
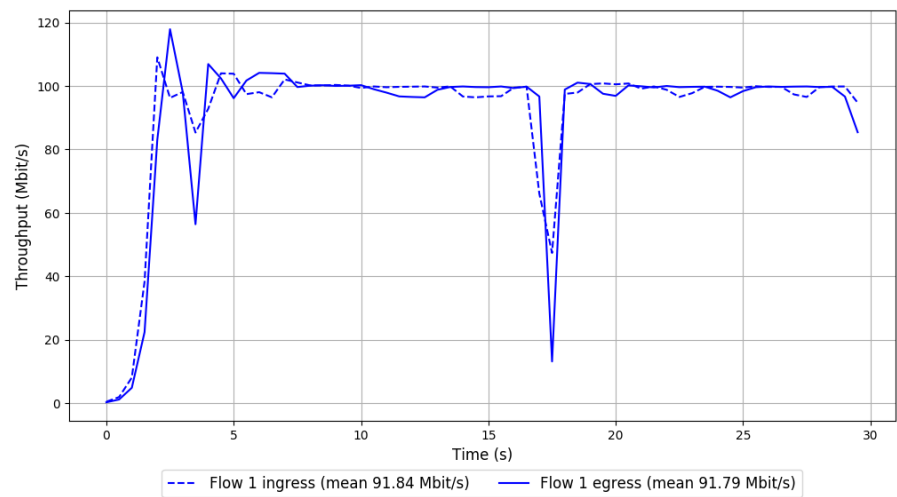
-- Flow 1:

Average throughput: 91.79 Mbit/s

95th percentile per-packet one-way delay: 172.621 ms

Loss rate: 0.78%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-25 17:07:28

End at: 2018-01-25 17:07:58

Below is generated by plot.py at 2018-01-25 20:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.39 Mbit/s

95th percentile per-packet one-way delay: 152.619 ms

Loss rate: 0.85%

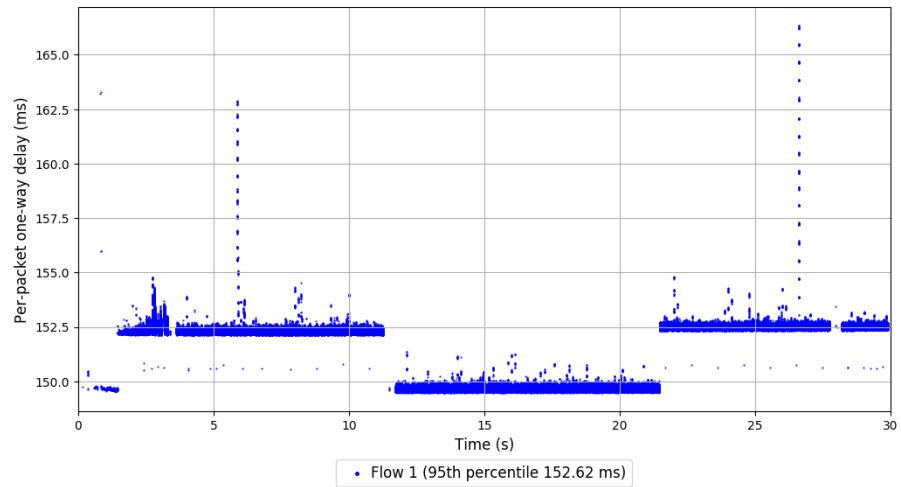
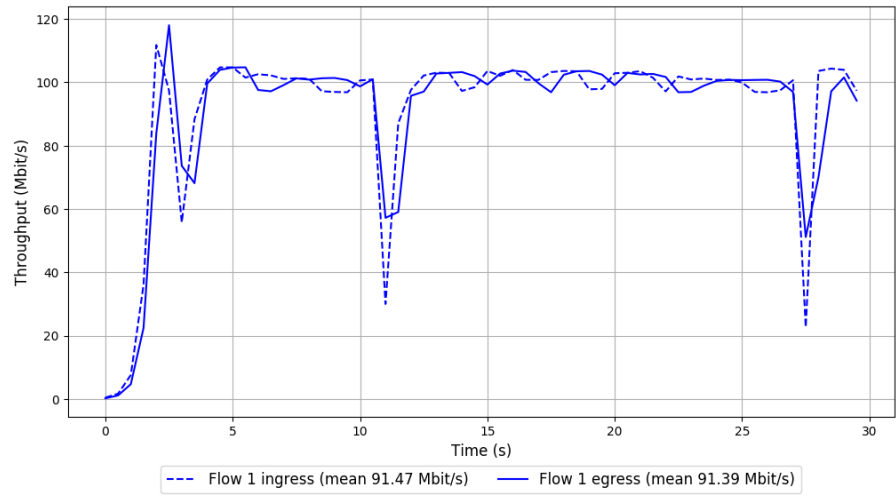
-- Flow 1:

Average throughput: 91.39 Mbit/s

95th percentile per-packet one-way delay: 152.619 ms

Loss rate: 0.85%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-25 17:20:12

End at: 2018-01-25 17:20:42

Below is generated by plot.py at 2018-01-25 20:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.64 Mbit/s

95th percentile per-packet one-way delay: 147.020 ms

Loss rate: 1.26%

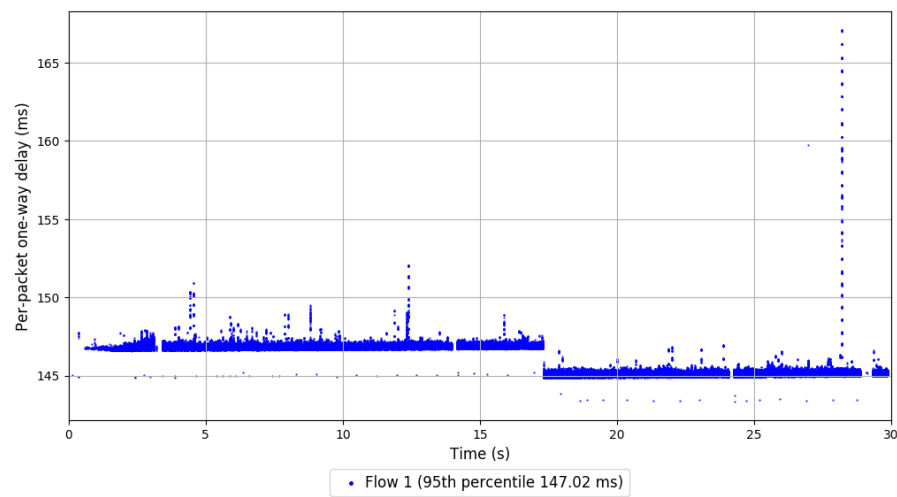
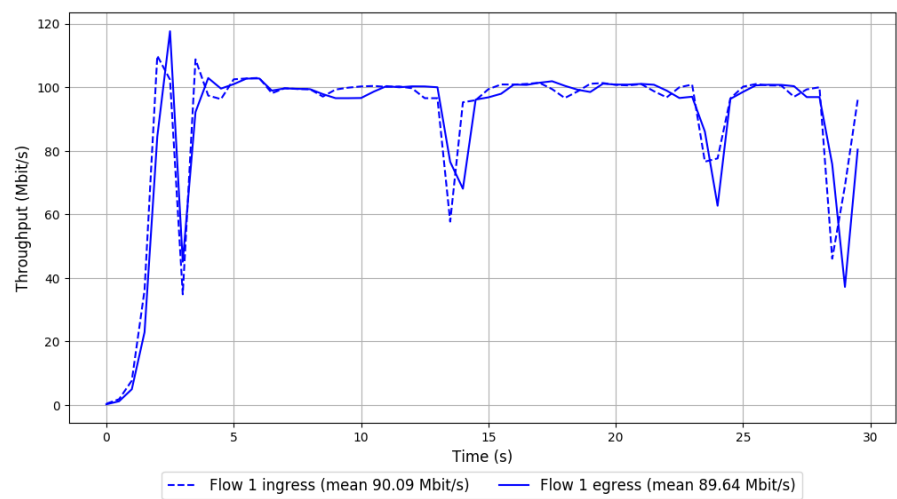
-- Flow 1:

Average throughput: 89.64 Mbit/s

95th percentile per-packet one-way delay: 147.020 ms

Loss rate: 1.26%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-25 17:33:04

End at: 2018-01-25 17:33:34

Below is generated by plot.py at 2018-01-25 20:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.91 Mbit/s

95th percentile per-packet one-way delay: 141.547 ms

Loss rate: 0.80%

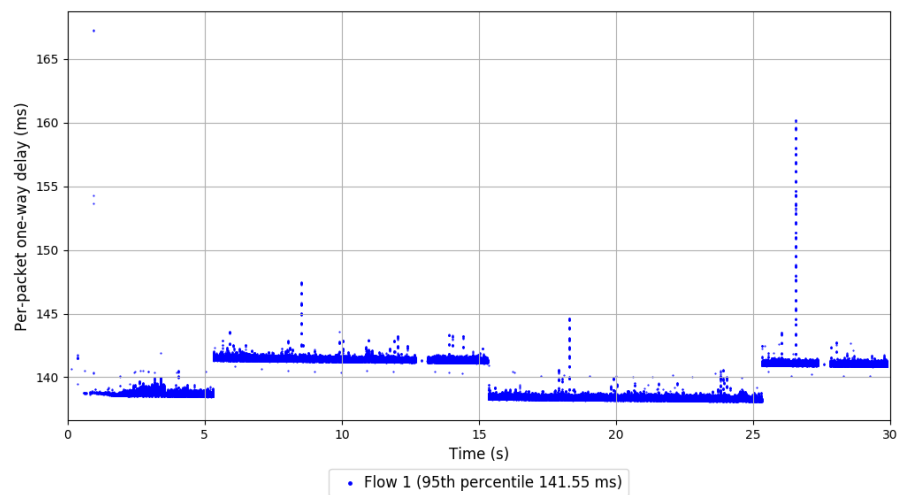
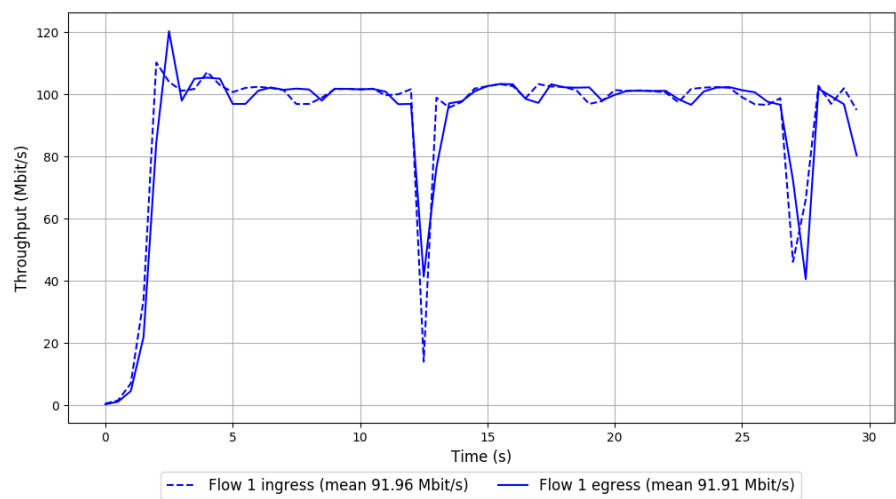
-- Flow 1:

Average throughput: 91.91 Mbit/s

95th percentile per-packet one-way delay: 141.547 ms

Loss rate: 0.80%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-25 17:45:35

End at: 2018-01-25 17:46:05

Below is generated by plot.py at 2018-01-25 20:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.85 Mbit/s

95th percentile per-packet one-way delay: 132.400 ms

Loss rate: 0.77%

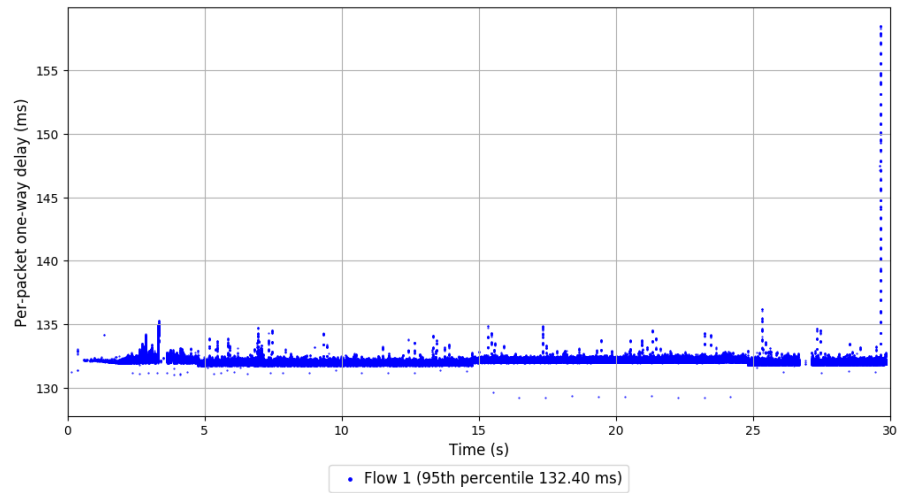
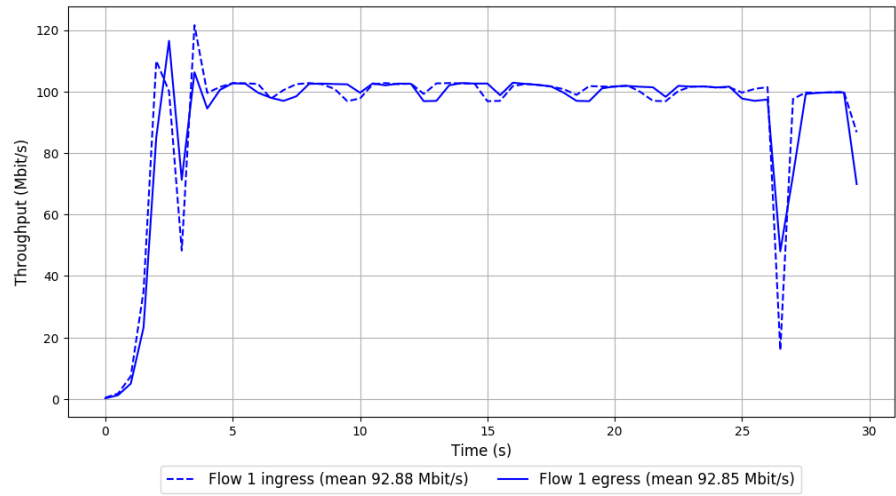
-- Flow 1:

Average throughput: 92.85 Mbit/s

95th percentile per-packet one-way delay: 132.400 ms

Loss rate: 0.77%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-25 17:58:21

End at: 2018-01-25 17:58:51

Below is generated by plot.py at 2018-01-25 20:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.32 Mbit/s

95th percentile per-packet one-way delay: 133.589 ms

Loss rate: 0.79%

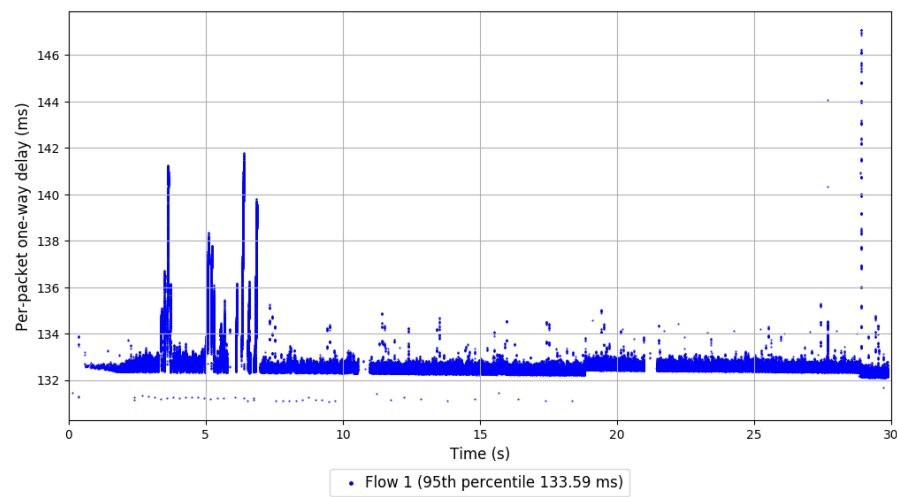
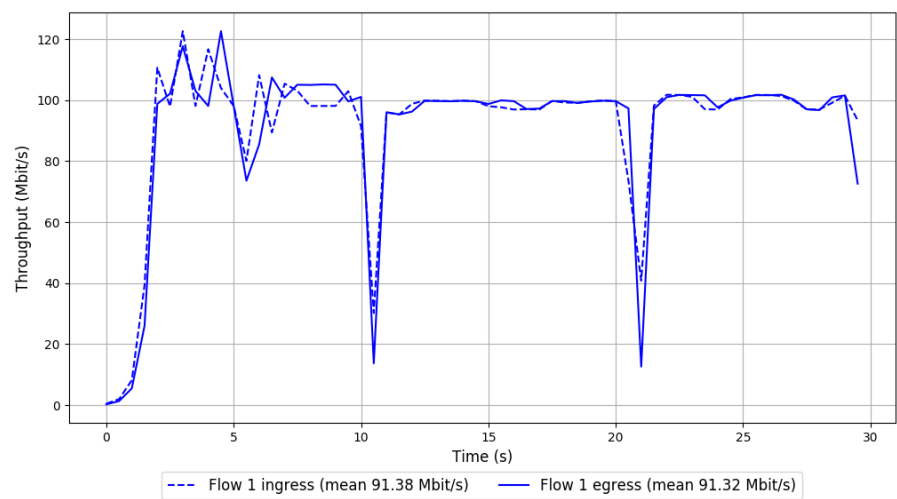
-- Flow 1:

Average throughput: 91.32 Mbit/s

95th percentile per-packet one-way delay: 133.589 ms

Loss rate: 0.79%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-25 18:10:59

End at: 2018-01-25 18:11:30

Below is generated by plot.py at 2018-01-25 20:38:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.09 Mbit/s

95th percentile per-packet one-way delay: 130.826 ms

Loss rate: 0.86%

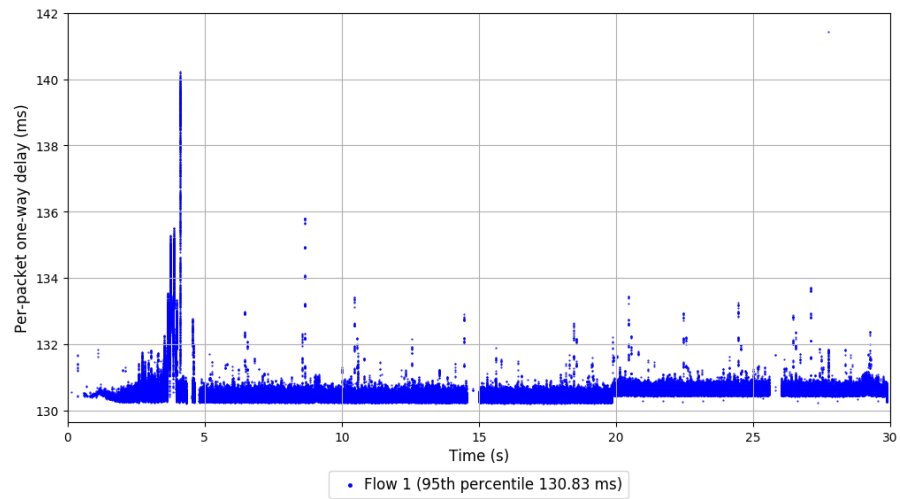
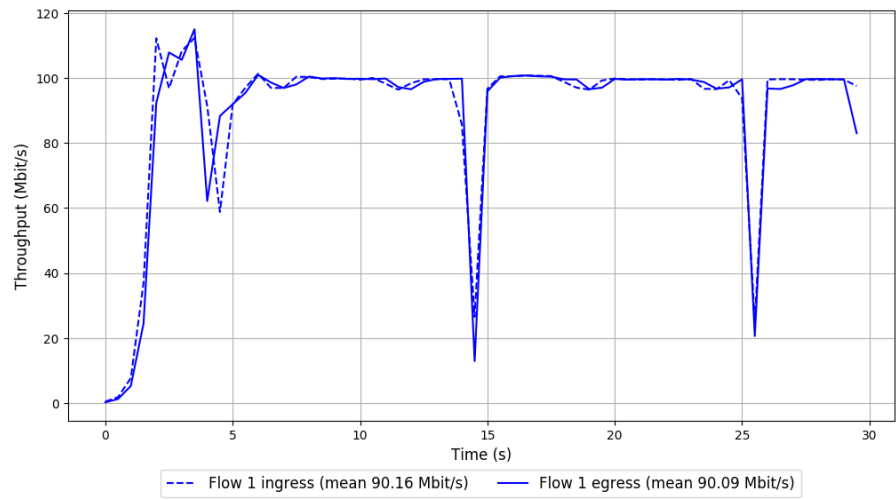
-- Flow 1:

Average throughput: 90.09 Mbit/s

95th percentile per-packet one-way delay: 130.826 ms

Loss rate: 0.86%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-25 18:23:57

End at: 2018-01-25 18:24:27

Below is generated by plot.py at 2018-01-25 20:38:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.21 Mbit/s

95th percentile per-packet one-way delay: 133.613 ms

Loss rate: 1.50%

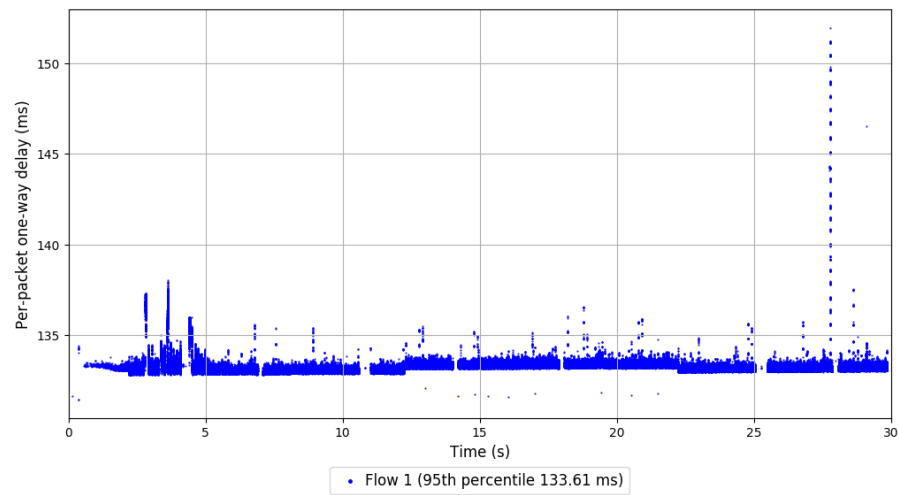
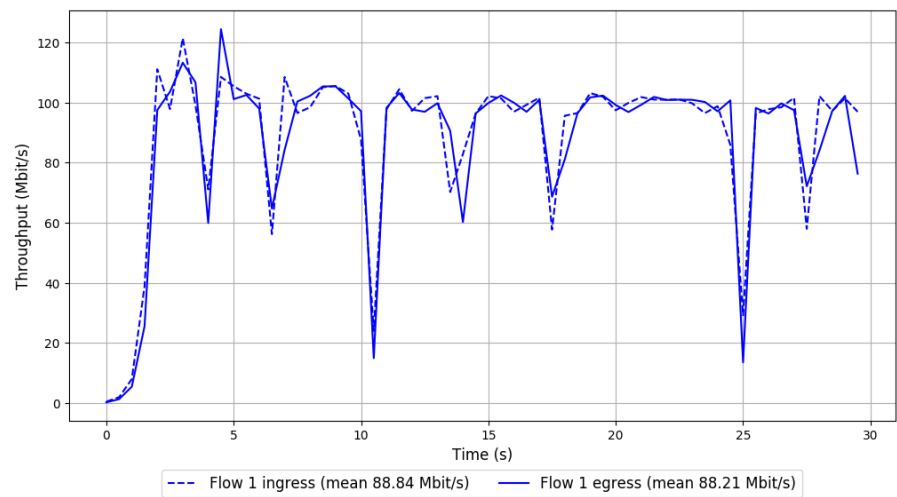
-- Flow 1:

Average throughput: 88.21 Mbit/s

95th percentile per-packet one-way delay: 133.613 ms

Loss rate: 1.50%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

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

End at: 2018-01-25 16:17:19

Below is generated by plot.py at 2018-01-25 20:38:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.29 Mbit/s

95th percentile per-packet one-way delay: 140.409 ms

Loss rate: 1.73%

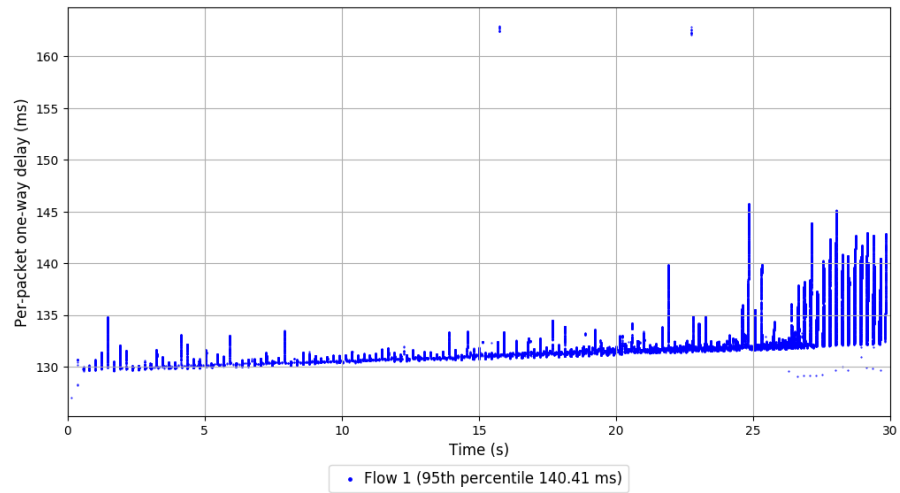
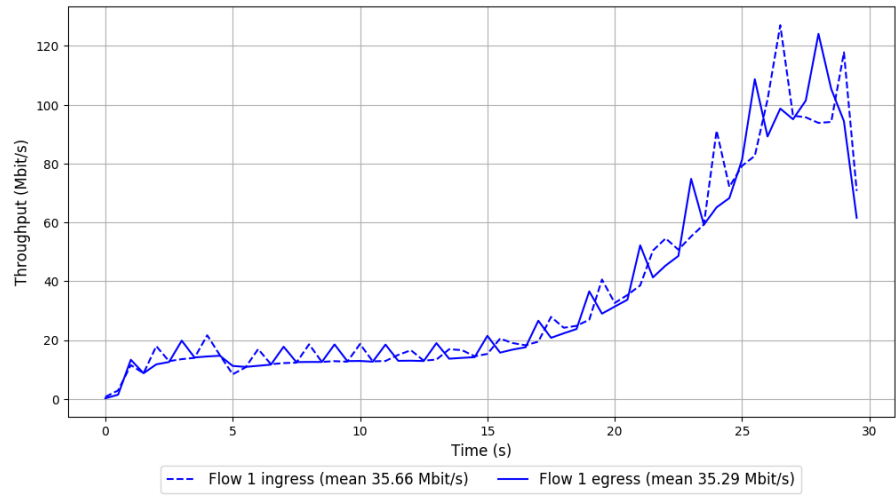
-- Flow 1:

Average throughput: 35.29 Mbit/s

95th percentile per-packet one-way delay: 140.409 ms

Loss rate: 1.73%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-25 16:29:45

End at: 2018-01-25 16:30:15

Below is generated by plot.py at 2018-01-25 20:38:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.11 Mbit/s

95th percentile per-packet one-way delay: 150.434 ms

Loss rate: 0.45%

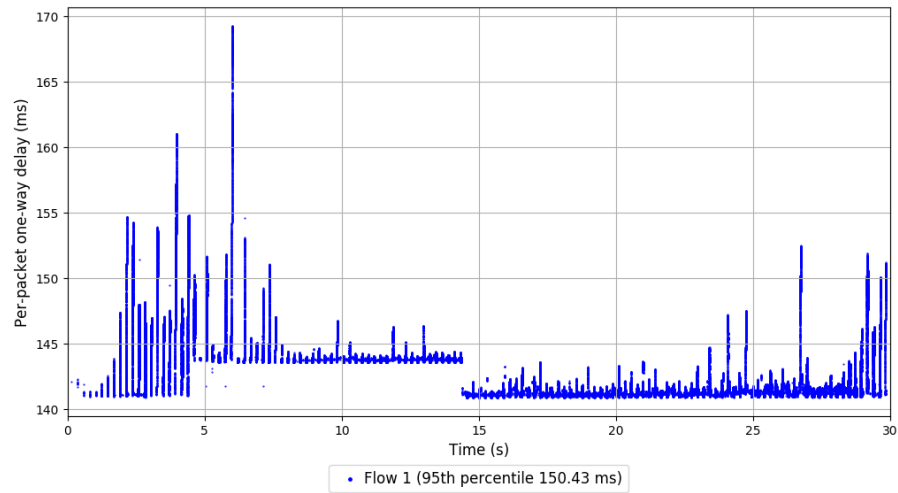
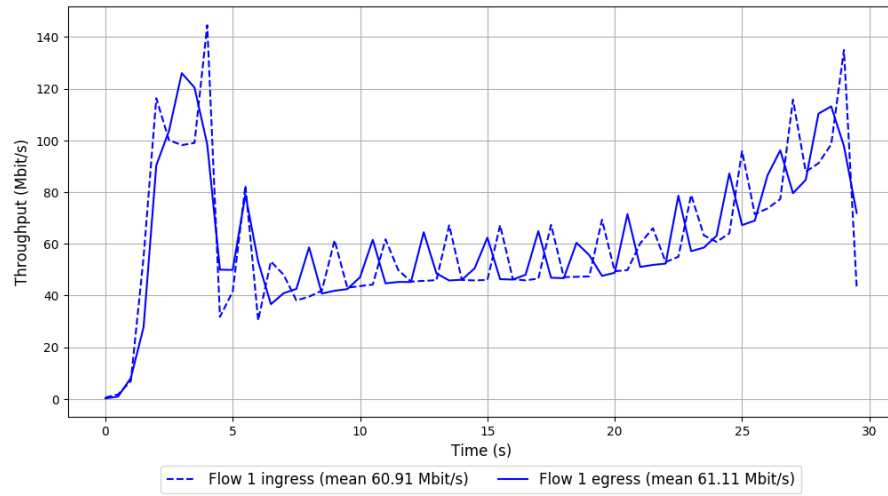
-- Flow 1:

Average throughput: 61.11 Mbit/s

95th percentile per-packet one-way delay: 150.434 ms

Loss rate: 0.45%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

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

End at: 2018-01-25 16:43:06

Below is generated by plot.py at 2018-01-25 20:38:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.70 Mbit/s

95th percentile per-packet one-way delay: 149.786 ms

Loss rate: 1.11%

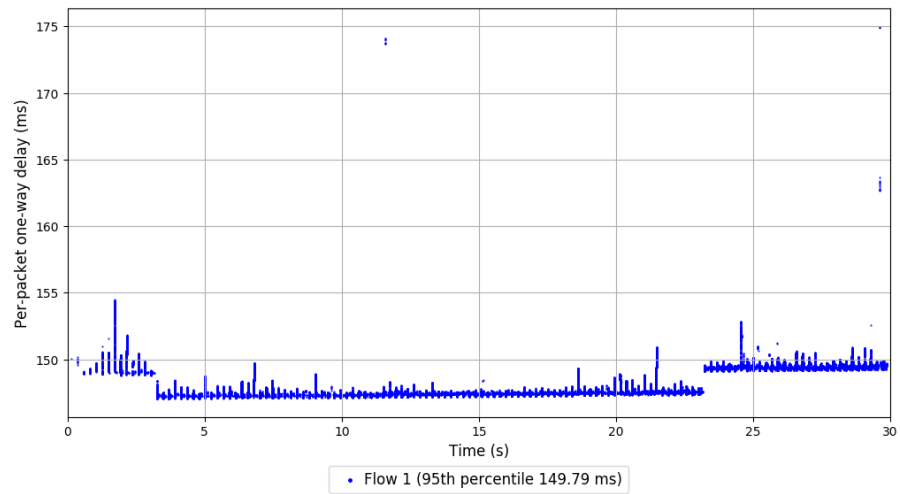
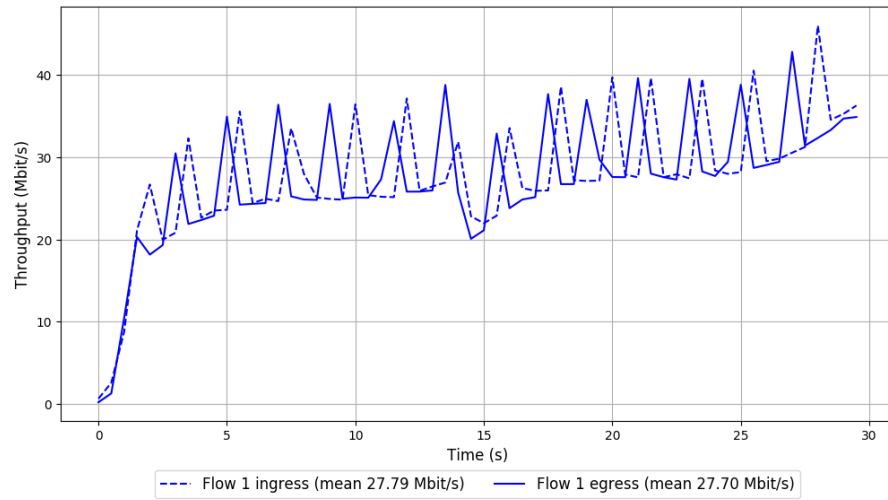
-- Flow 1:

Average throughput: 27.70 Mbit/s

95th percentile per-packet one-way delay: 149.786 ms

Loss rate: 1.11%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-25 16:55:27

End at: 2018-01-25 16:55:57

Below is generated by plot.py at 2018-01-25 20:38:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.66 Mbit/s

95th percentile per-packet one-way delay: 176.963 ms

Loss rate: 0.71%

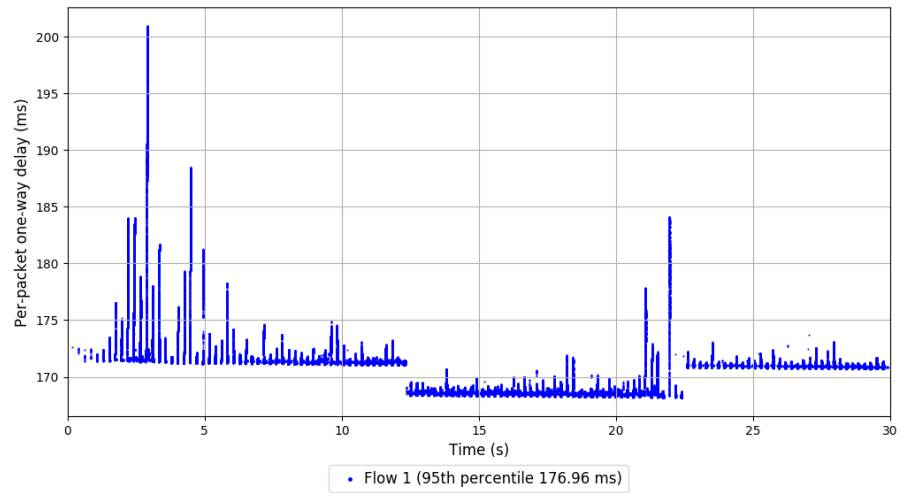
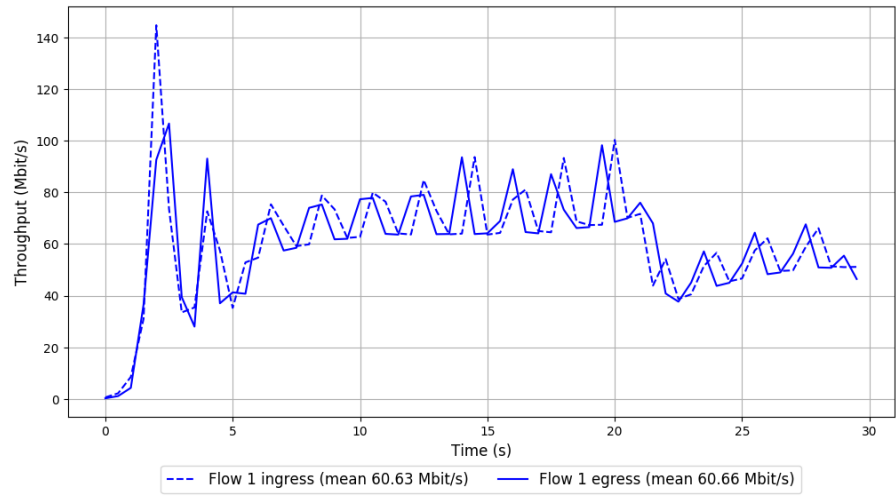
-- Flow 1:

Average throughput: 60.66 Mbit/s

95th percentile per-packet one-way delay: 176.963 ms

Loss rate: 0.71%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-25 17:08:16

End at: 2018-01-25 17:08:46

Below is generated by plot.py at 2018-01-25 20:38:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.46 Mbit/s

95th percentile per-packet one-way delay: 154.860 ms

Loss rate: 3.19%

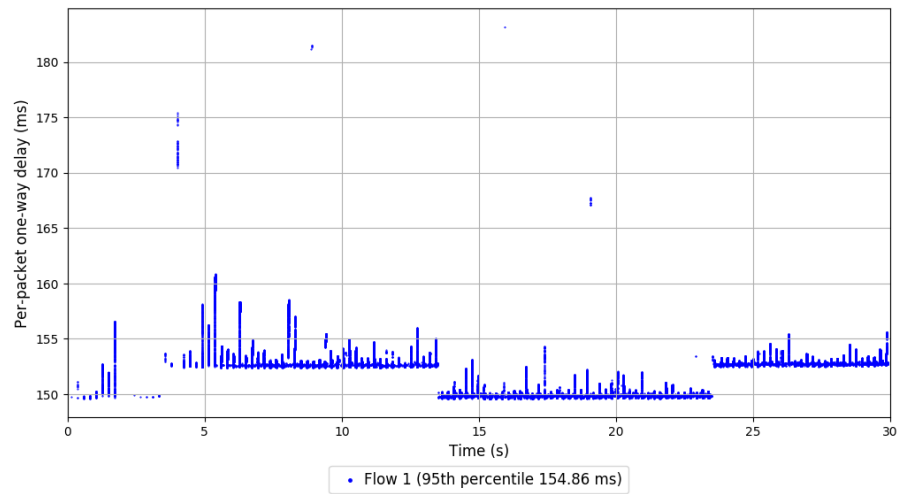
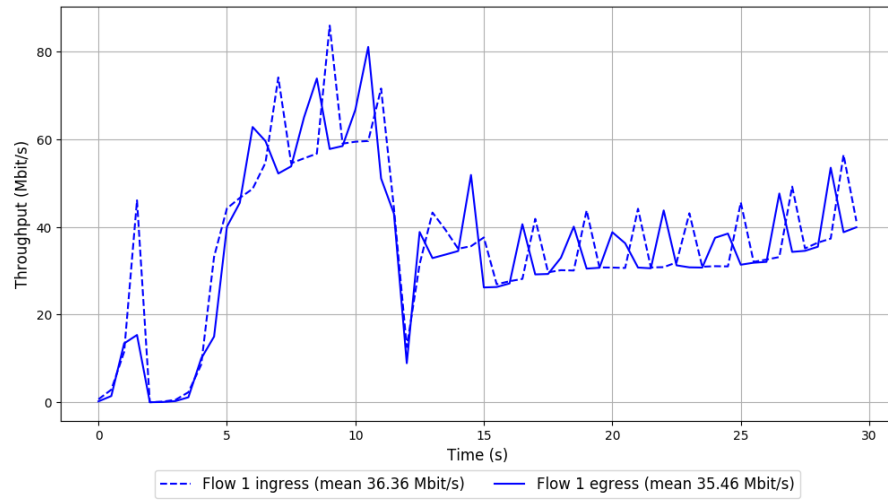
-- Flow 1:

Average throughput: 35.46 Mbit/s

95th percentile per-packet one-way delay: 154.860 ms

Loss rate: 3.19%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-25 17:21:00

End at: 2018-01-25 17:21:30

Below is generated by plot.py at 2018-01-25 20:38:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.09 Mbit/s

95th percentile per-packet one-way delay: 156.771 ms

Loss rate: 1.02%

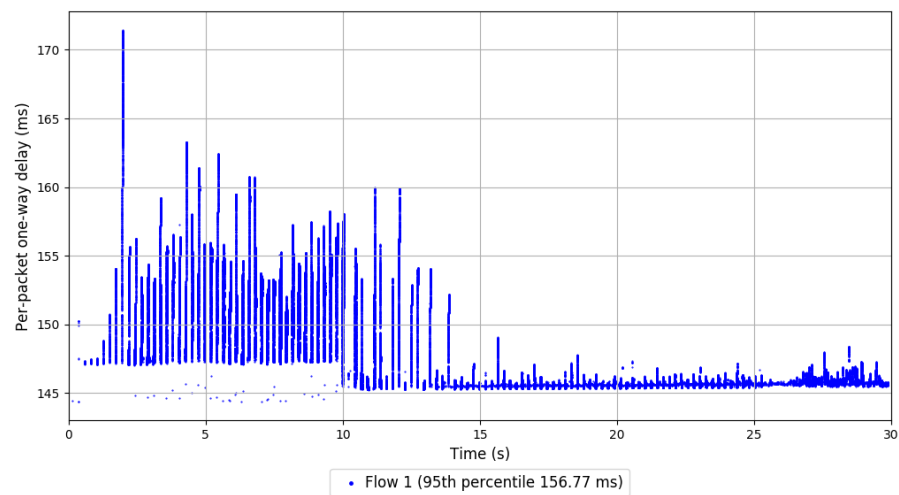
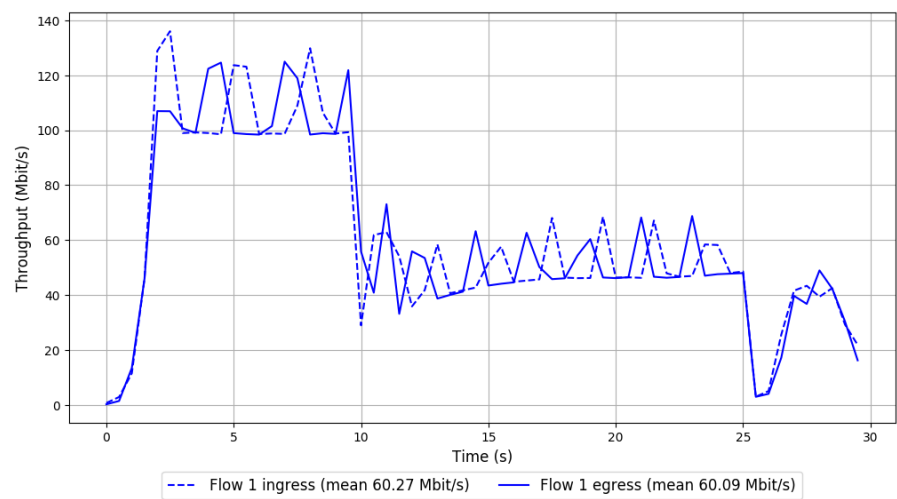
-- Flow 1:

Average throughput: 60.09 Mbit/s

95th percentile per-packet one-way delay: 156.771 ms

Loss rate: 1.02%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-25 17:33:52

End at: 2018-01-25 17:34:22

Below is generated by plot.py at 2018-01-25 20:38:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.90 Mbit/s

95th percentile per-packet one-way delay: 146.721 ms

Loss rate: 0.68%

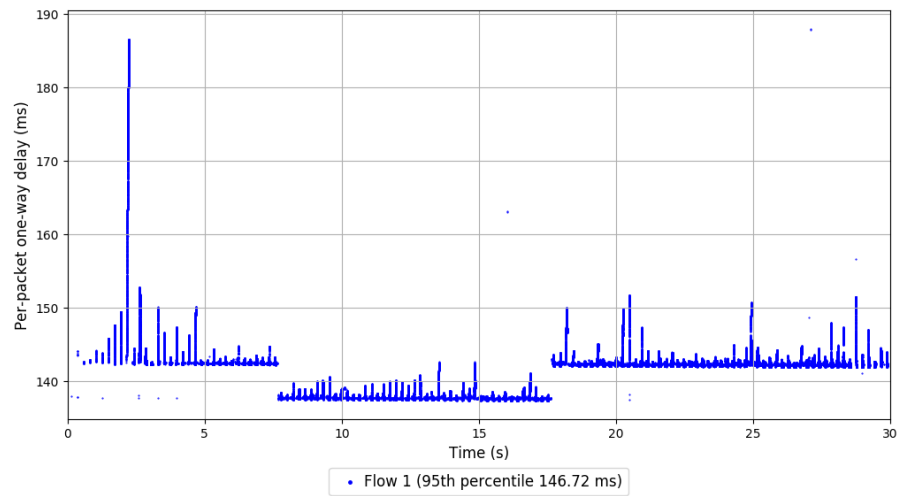
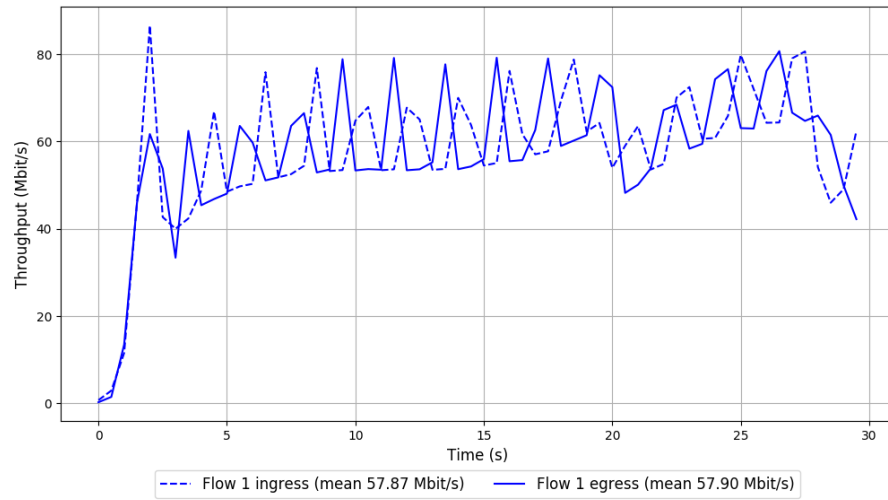
-- Flow 1:

Average throughput: 57.90 Mbit/s

95th percentile per-packet one-way delay: 146.721 ms

Loss rate: 0.68%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-25 17:46:23

End at: 2018-01-25 17:46:53

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.55 Mbit/s

95th percentile per-packet one-way delay: 141.260 ms

Loss rate: 0.92%

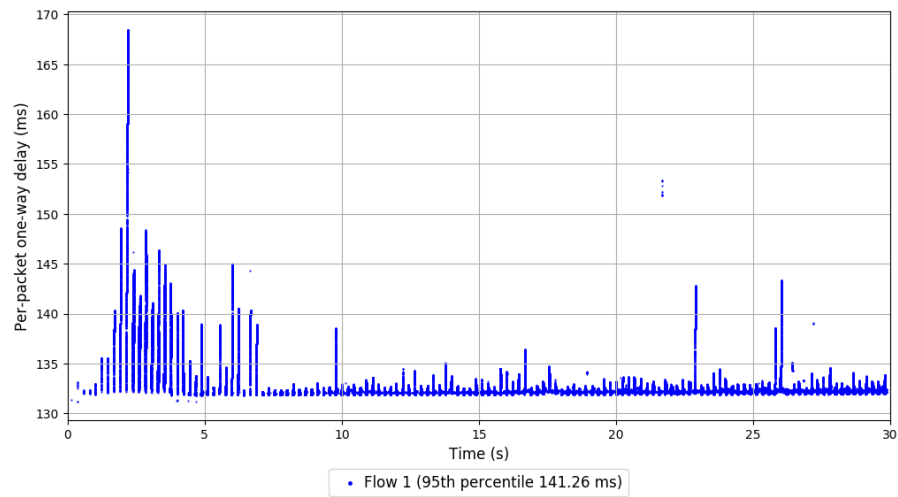
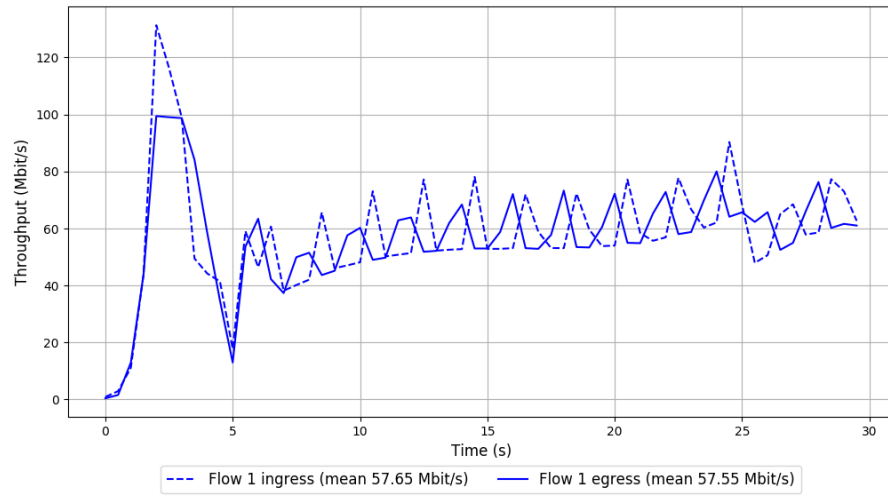
-- Flow 1:

Average throughput: 57.55 Mbit/s

95th percentile per-packet one-way delay: 141.260 ms

Loss rate: 0.92%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-25 17:59:08

End at: 2018-01-25 17:59:38

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.68 Mbit/s

95th percentile per-packet one-way delay: 140.904 ms

Loss rate: 1.01%

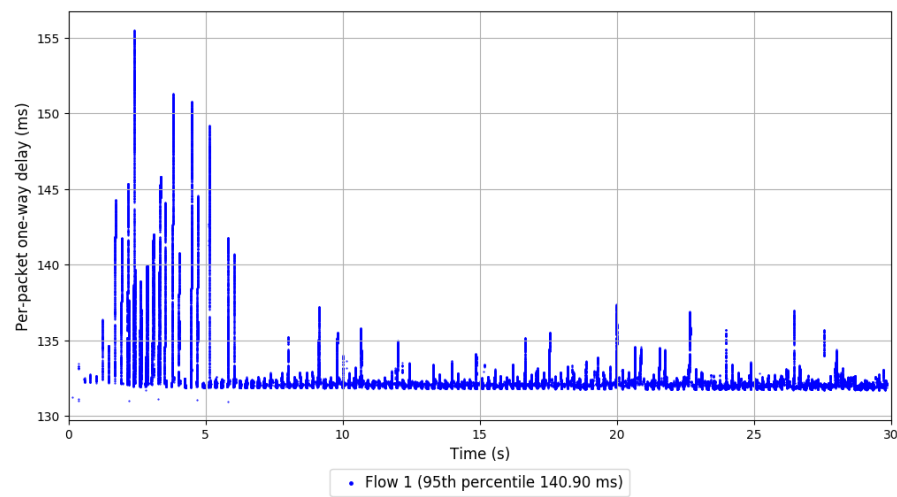
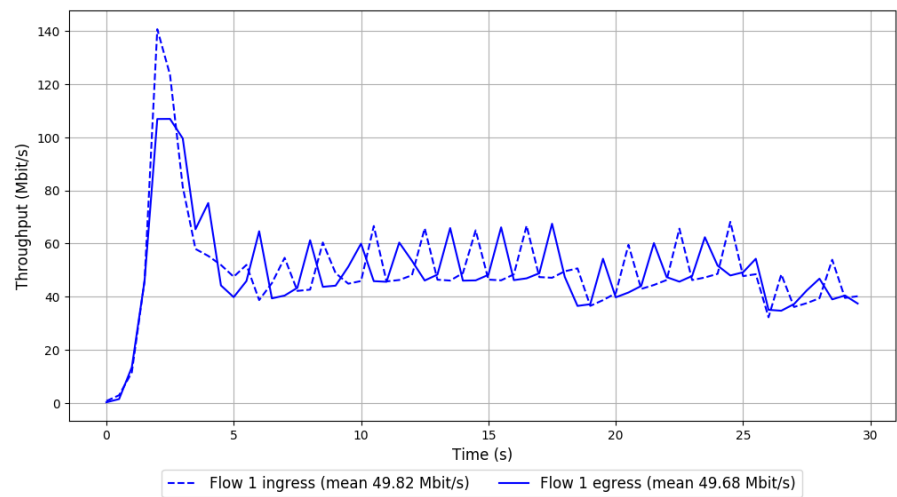
-- Flow 1:

Average throughput: 49.68 Mbit/s

95th percentile per-packet one-way delay: 140.904 ms

Loss rate: 1.01%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-25 18:11:47

End at: 2018-01-25 18:12:17

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.85 Mbit/s

95th percentile per-packet one-way delay: 132.558 ms

Loss rate: 1.12%

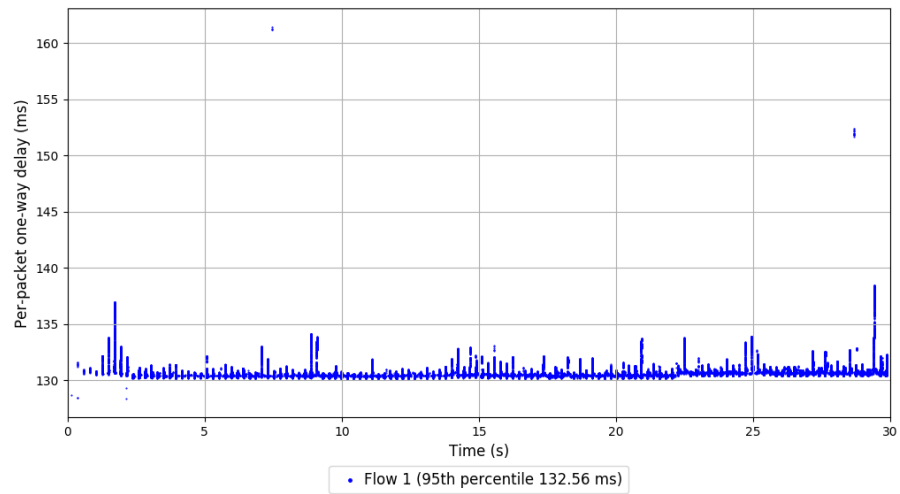
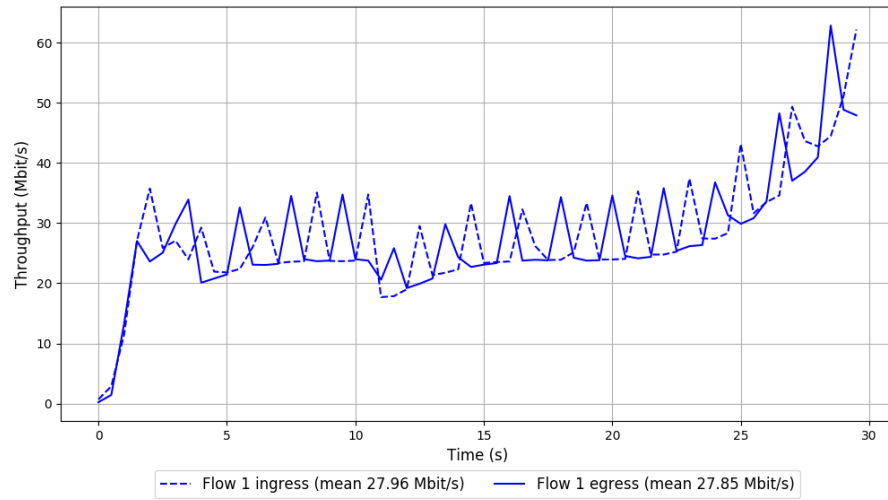
-- Flow 1:

Average throughput: 27.85 Mbit/s

95th percentile per-packet one-way delay: 132.558 ms

Loss rate: 1.12%

Run 10: Report of TCP Cubic — Data Link

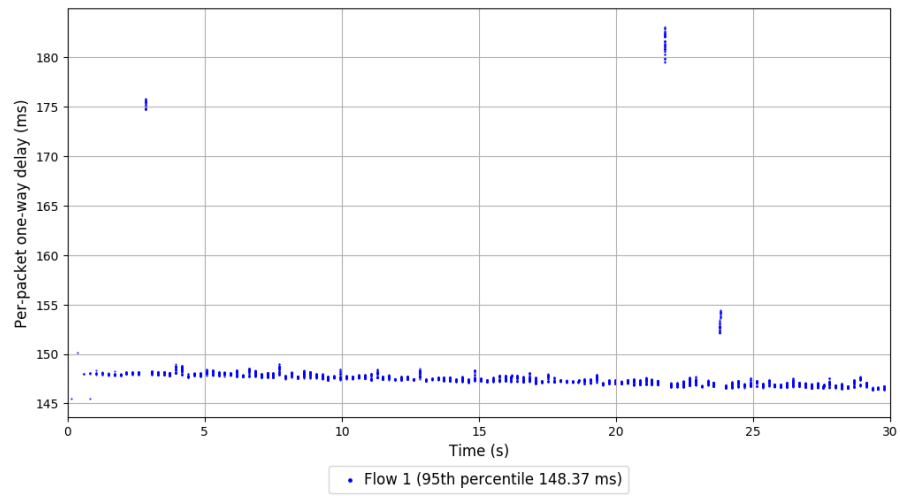
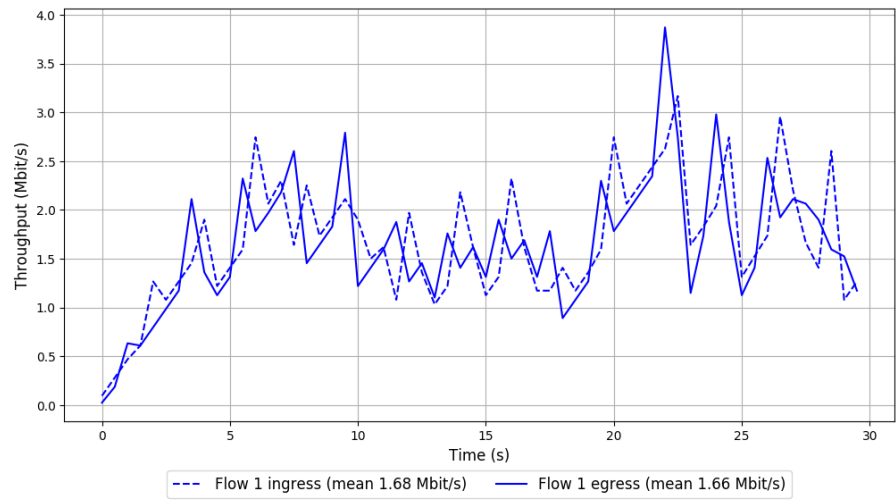


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-25 16:27:20
End at: 2018-01-25 16:27:50

# Below is generated by plot.py at 2018-01-25 20:39:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 148.370 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 148.370 ms
Loss rate: 1.84%
```


Run 1: Report of LEDBAT — Data Link

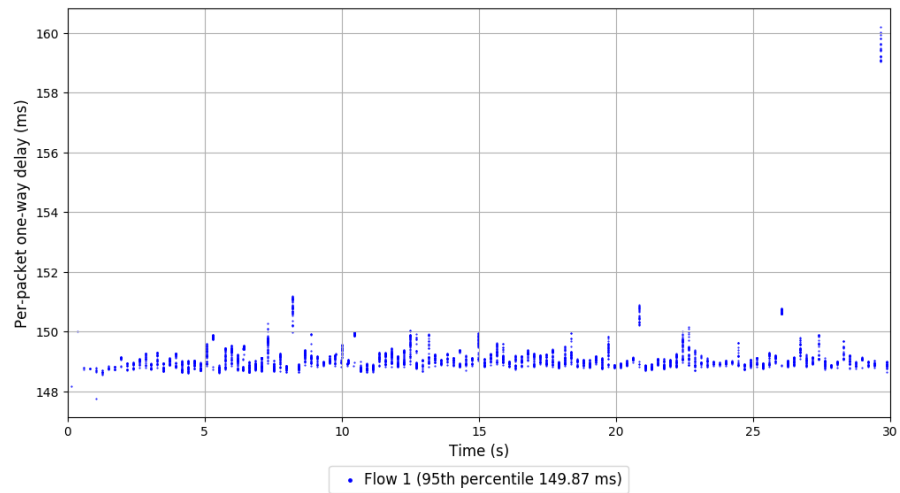
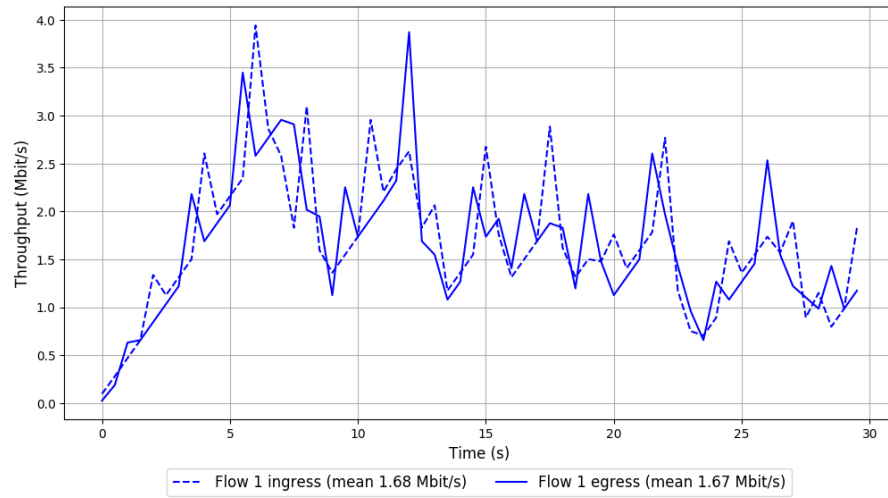


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-25 16:40:12
End at: 2018-01-25 16:40:42

# Below is generated by plot.py at 2018-01-25 20:39:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 149.866 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 149.866 ms
Loss rate: 1.31%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-25 16:53:04

End at: 2018-01-25 16:53:34

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 169.698 ms

Loss rate: 0.82%

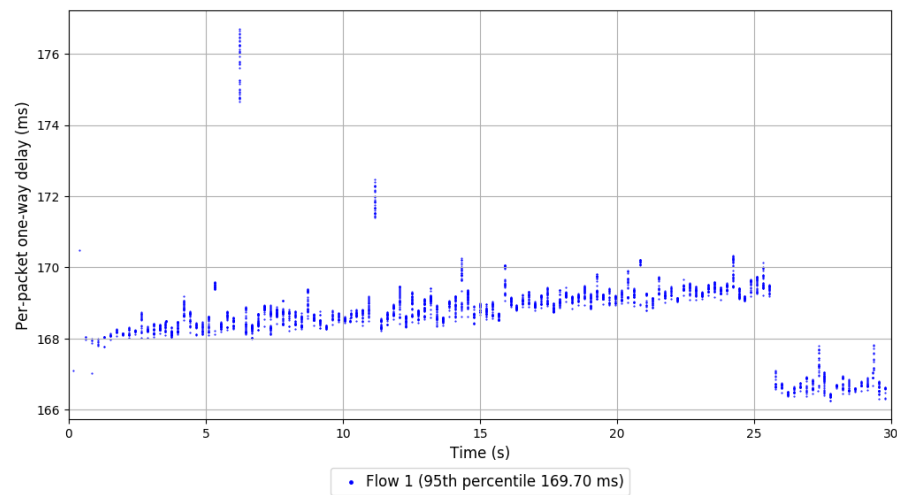
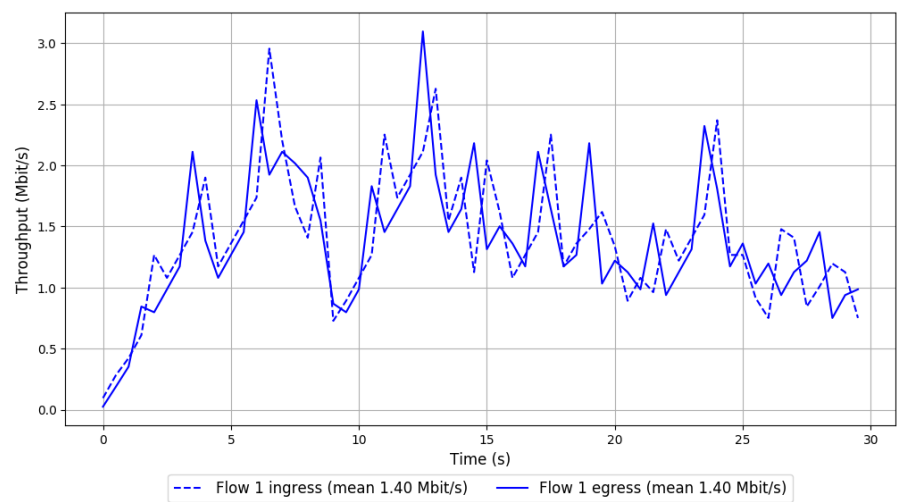
-- Flow 1:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 169.698 ms

Loss rate: 0.82%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-25 17:05:51

End at: 2018-01-25 17:06:21

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 153.590 ms

Loss rate: 0.66%

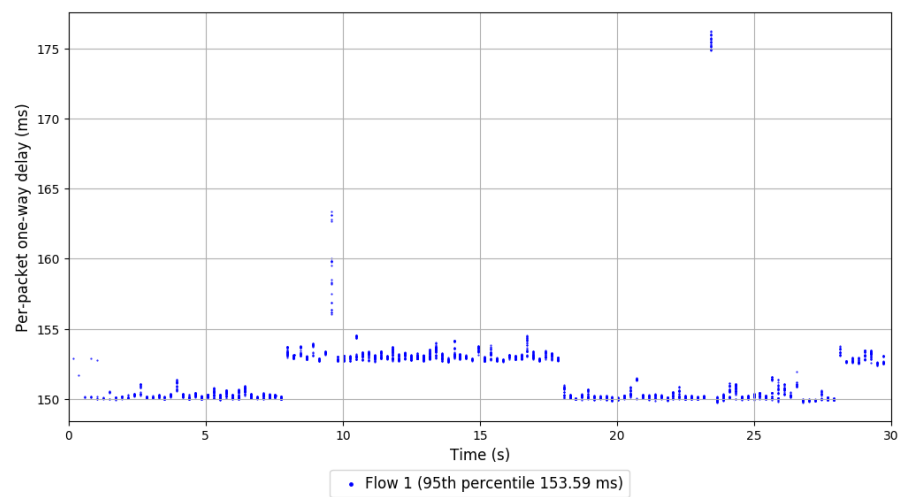
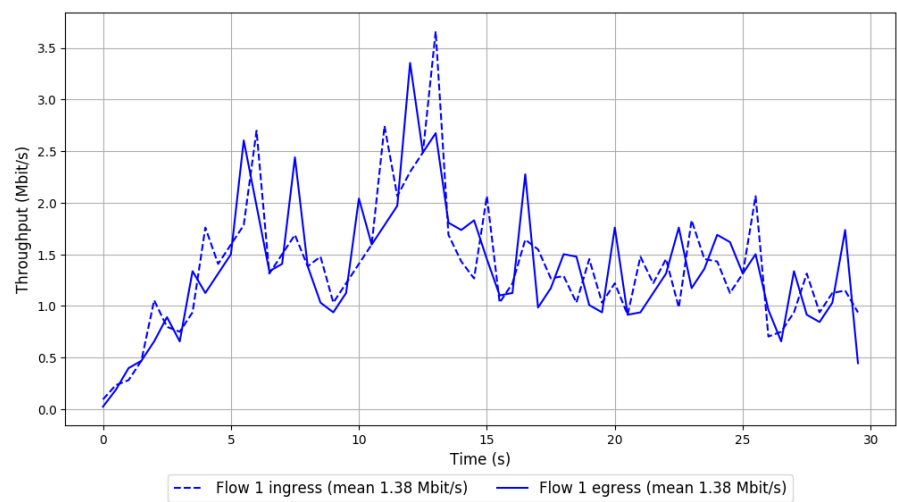
-- Flow 1:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 153.590 ms

Loss rate: 0.66%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-25 17:18:36

End at: 2018-01-25 17:19:06

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 145.507 ms

Loss rate: 1.19%

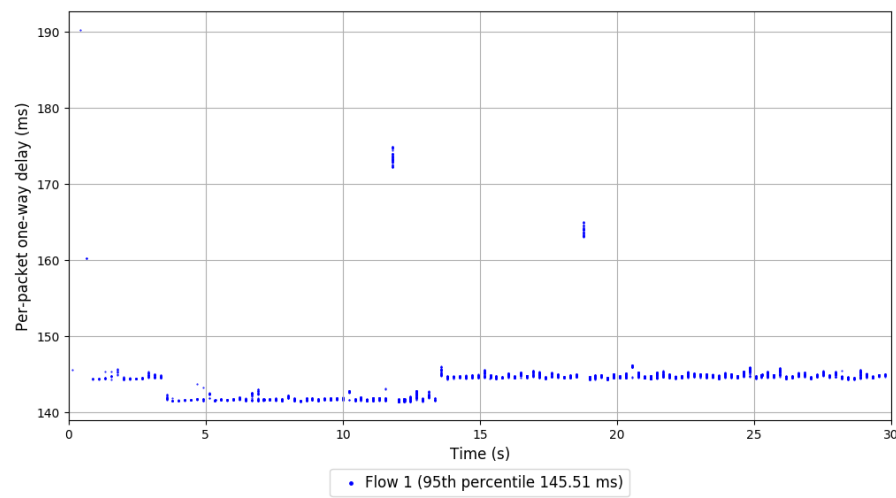
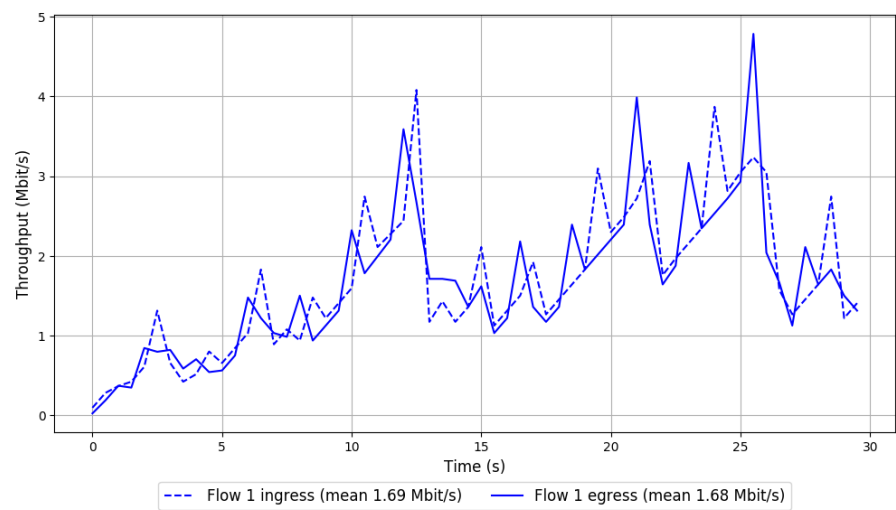
-- Flow 1:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 145.507 ms

Loss rate: 1.19%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-25 17:31:27

End at: 2018-01-25 17:31:57

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 144.773 ms

Loss rate: 2.20%

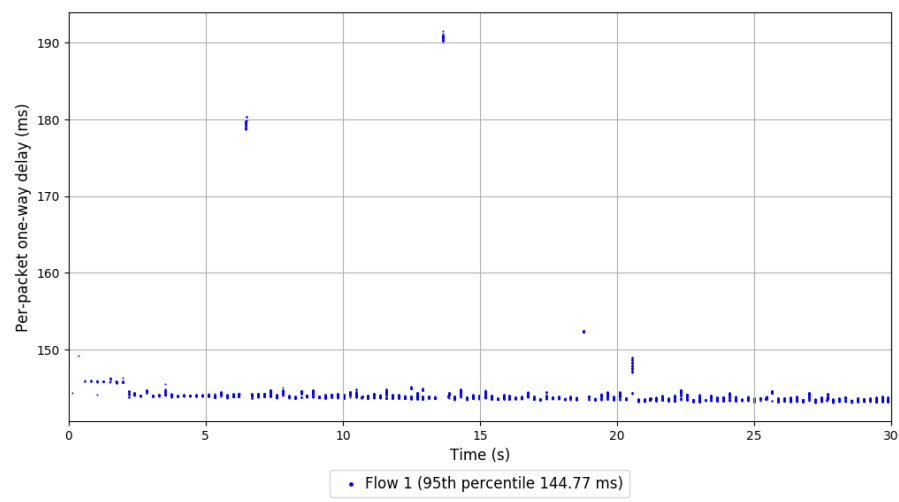
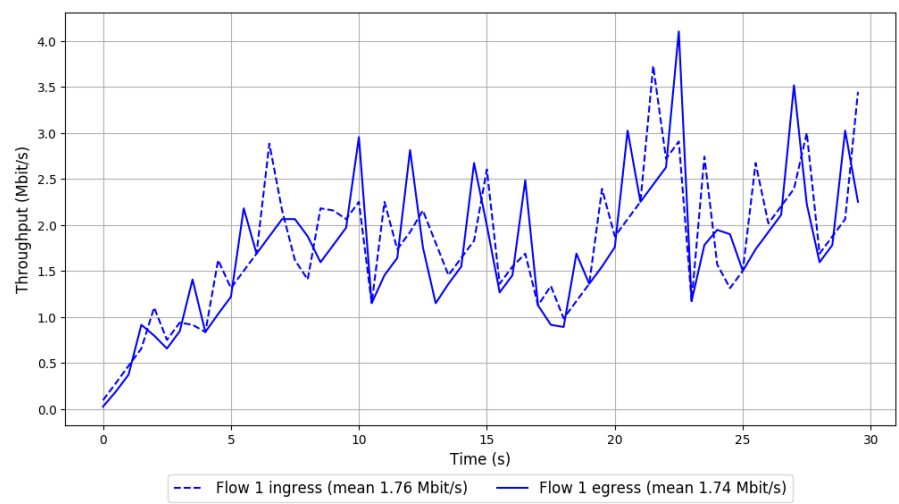
-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 144.773 ms

Loss rate: 2.20%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-25 17:43:58

End at: 2018-01-25 17:44:28

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 133.075 ms

Loss rate: 2.25%

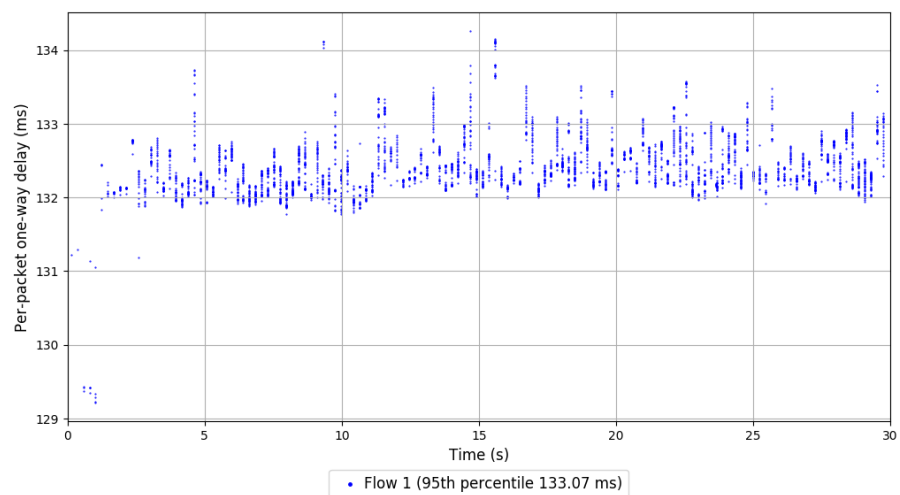
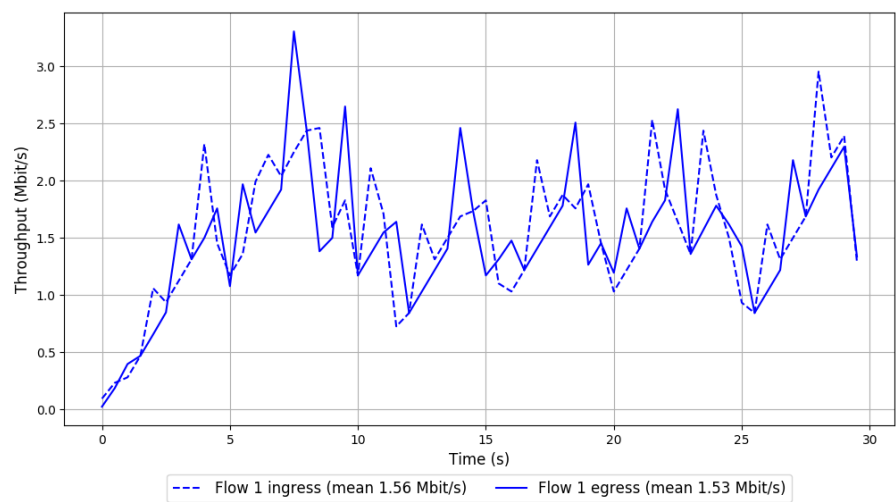
-- Flow 1:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 133.075 ms

Loss rate: 2.25%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-25 17:56:44

End at: 2018-01-25 17:57:14

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 134.358 ms

Loss rate: 1.56%

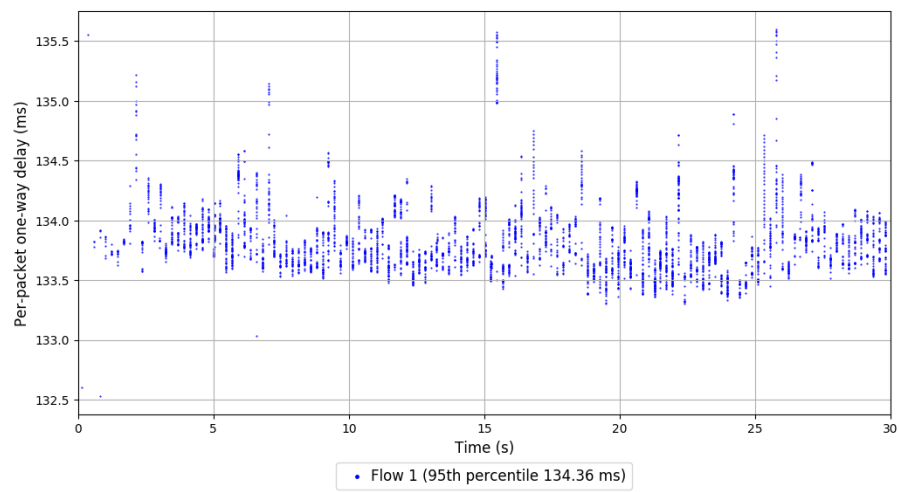
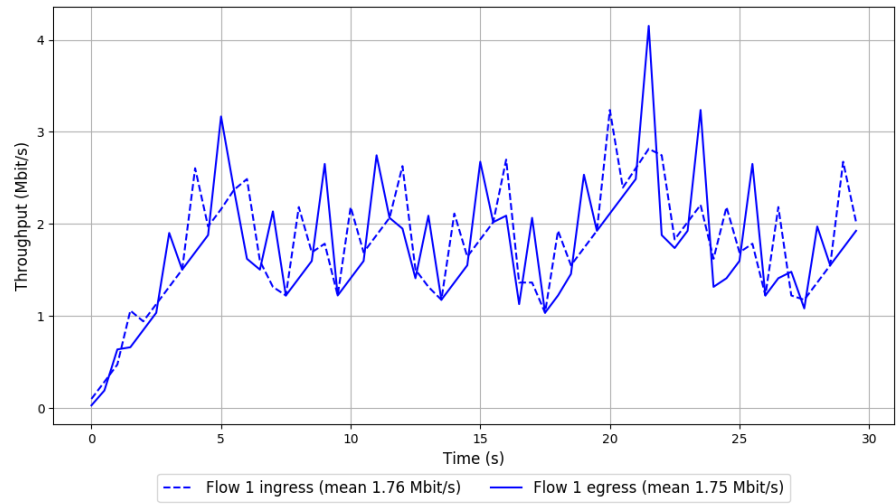
-- Flow 1:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 134.358 ms

Loss rate: 1.56%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-25 18:09:23

End at: 2018-01-25 18:09:53

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 131.777 ms

Loss rate: 1.54%

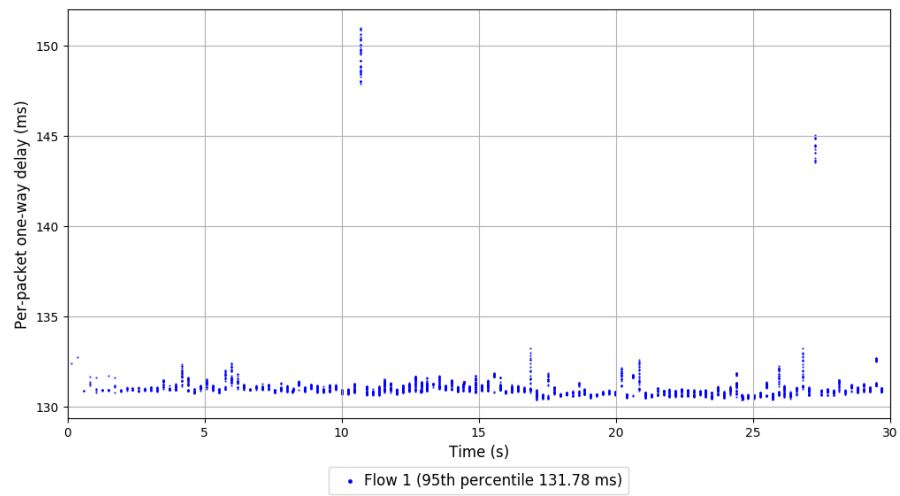
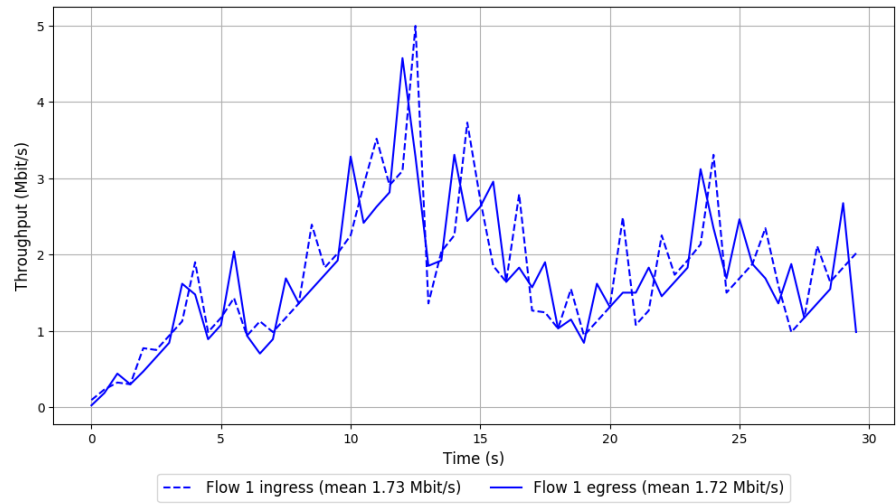
-- Flow 1:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 131.777 ms

Loss rate: 1.54%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-25 18:22:20

End at: 2018-01-25 18:22:50

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 133.817 ms

Loss rate: 1.41%

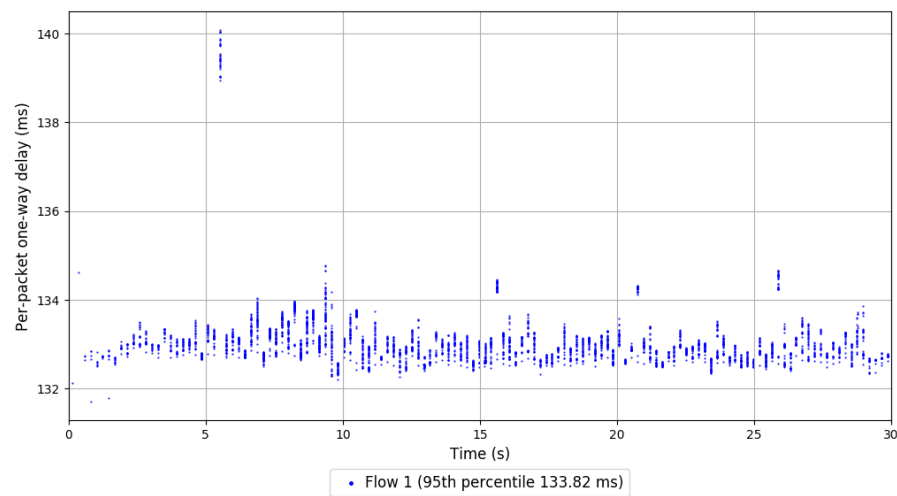
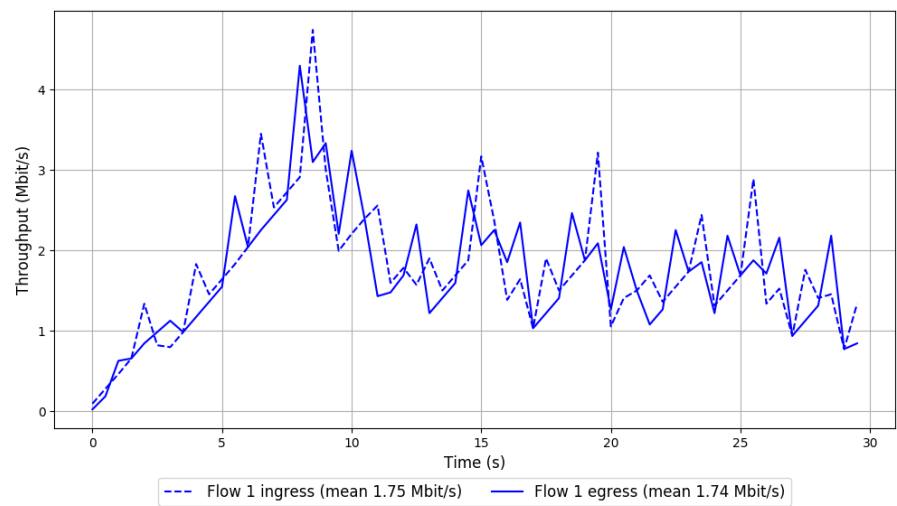
-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 133.817 ms

Loss rate: 1.41%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC

Start at: 2018-01-25 16:24:54

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

Below is generated by plot.py at 2018-01-25 20:48:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 500.66 Mbit/s

95th percentile per-packet one-way delay: 184.128 ms

Loss rate: 1.90%

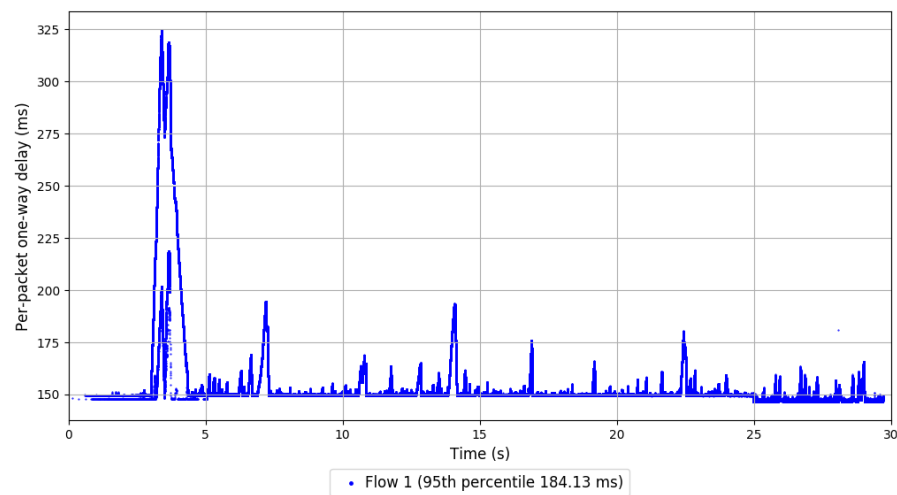
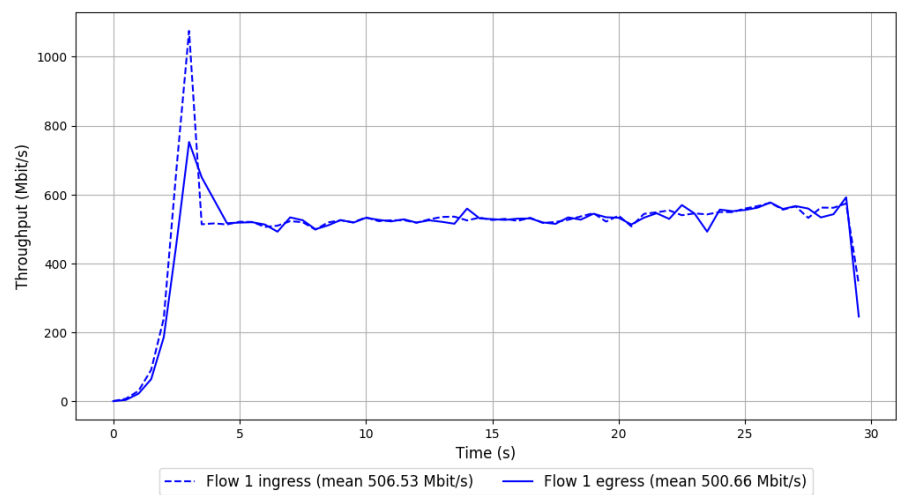
-- Flow 1:

Average throughput: 500.66 Mbit/s

95th percentile per-packet one-way delay: 184.128 ms

Loss rate: 1.90%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-25 16:37:47

End at: 2018-01-25 16:38:17

Below is generated by plot.py at 2018-01-25 20:48:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 495.62 Mbit/s

95th percentile per-packet one-way delay: 190.651 ms

Loss rate: 3.39%

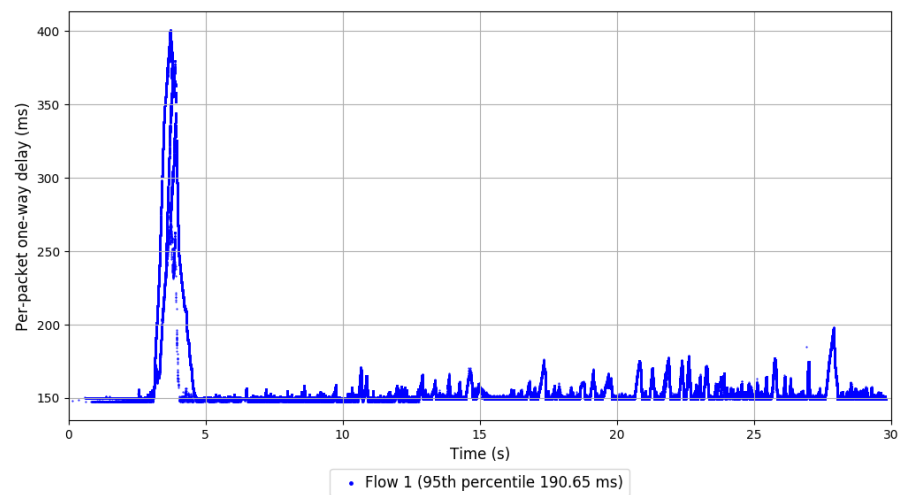
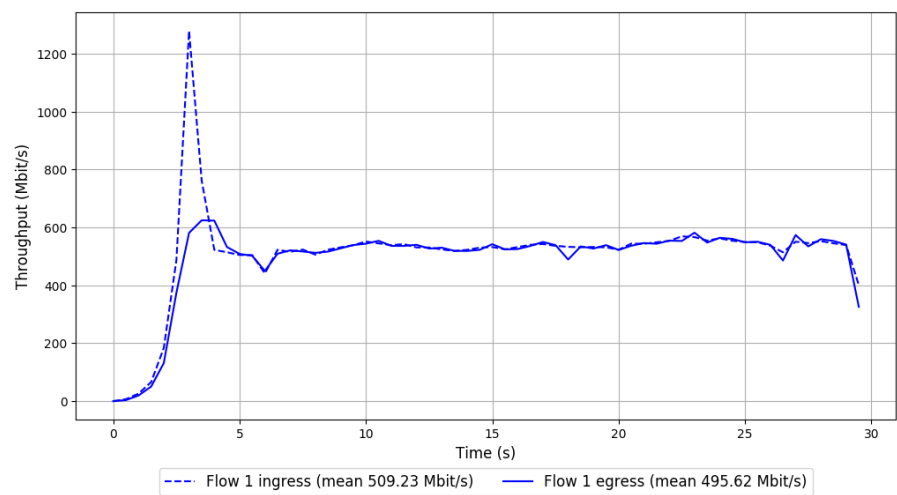
-- Flow 1:

Average throughput: 495.62 Mbit/s

95th percentile per-packet one-way delay: 190.651 ms

Loss rate: 3.39%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-25 16:50:39

End at: 2018-01-25 16:51:09

Below is generated by plot.py at 2018-01-25 20:48:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 475.99 Mbit/s

95th percentile per-packet one-way delay: 239.455 ms

Loss rate: 3.86%

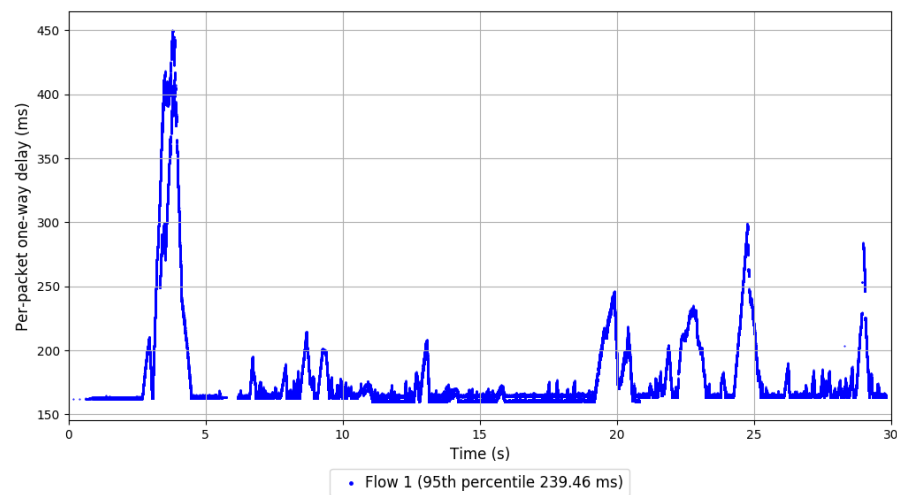
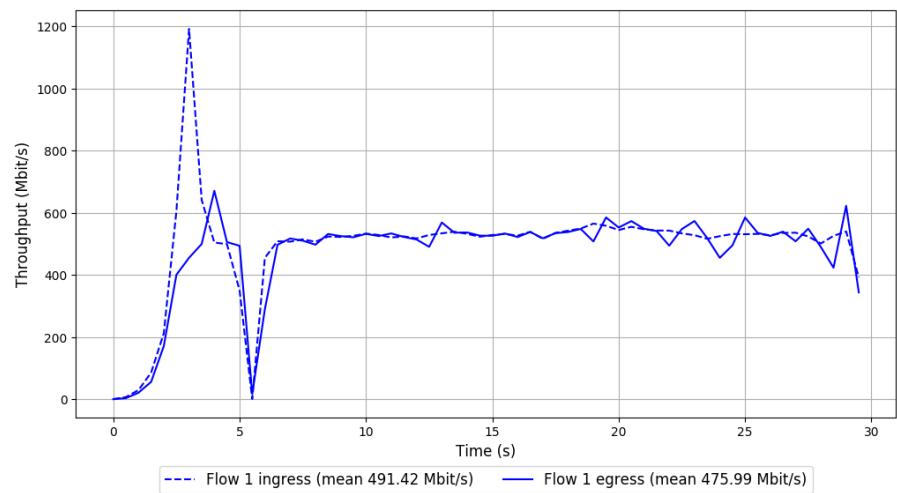
-- Flow 1:

Average throughput: 475.99 Mbit/s

95th percentile per-packet one-way delay: 239.455 ms

Loss rate: 3.86%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-25 17:03:23

End at: 2018-01-25 17:03:53

Below is generated by plot.py at 2018-01-25 20:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 497.27 Mbit/s

95th percentile per-packet one-way delay: 230.479 ms

Loss rate: 1.18%

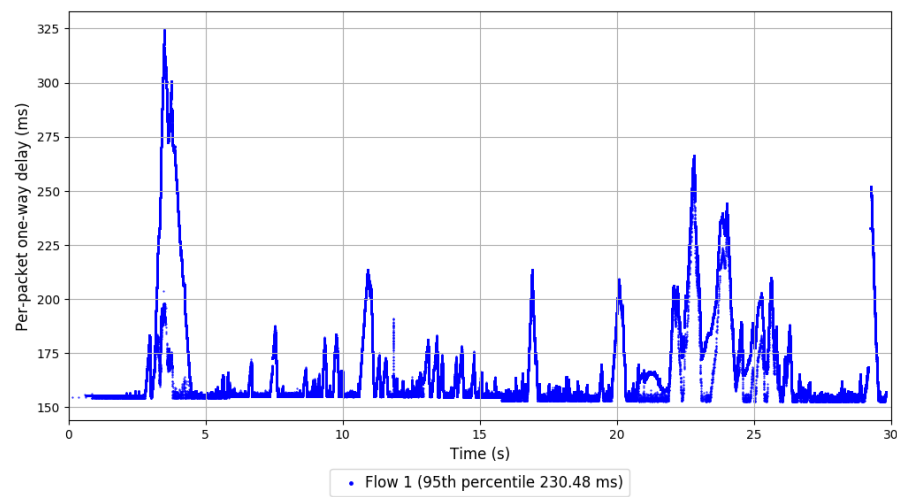
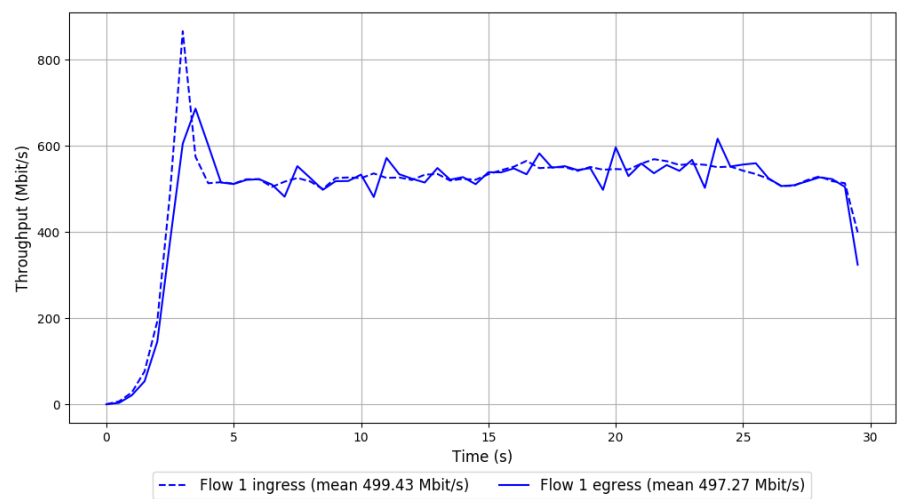
-- Flow 1:

Average throughput: 497.27 Mbit/s

95th percentile per-packet one-way delay: 230.479 ms

Loss rate: 1.18%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-25 17:16:11

End at: 2018-01-25 17:16:41

Below is generated by plot.py at 2018-01-25 20:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 462.44 Mbit/s

95th percentile per-packet one-way delay: 211.310 ms

Loss rate: 2.82%

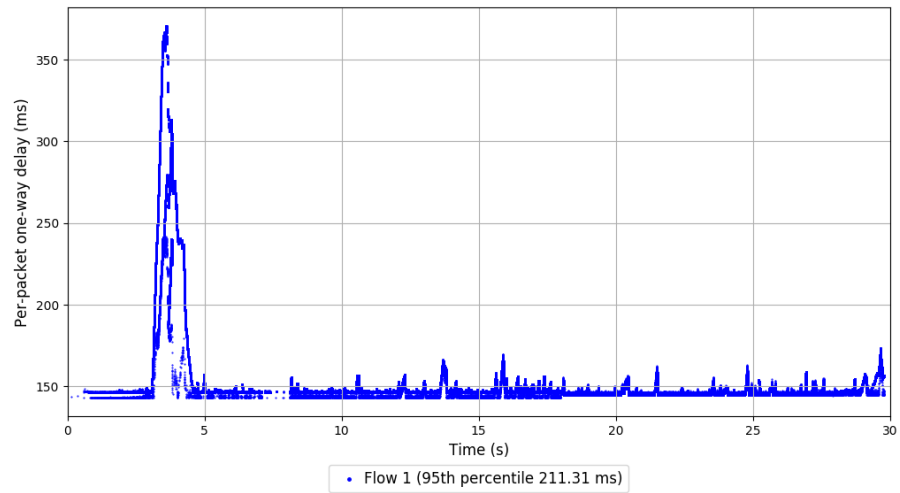
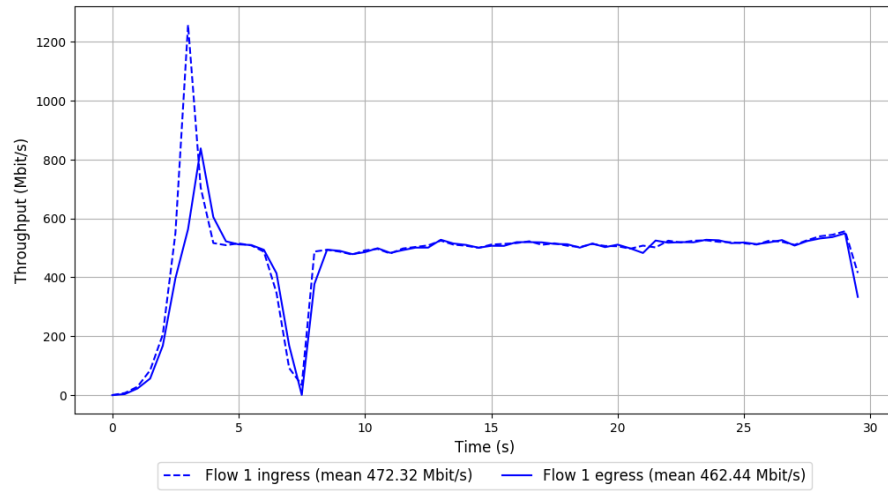
-- Flow 1:

Average throughput: 462.44 Mbit/s

95th percentile per-packet one-way delay: 211.310 ms

Loss rate: 2.82%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-25 17:29:03

End at: 2018-01-25 17:29:33

Below is generated by plot.py at 2018-01-25 20:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 454.75 Mbit/s

95th percentile per-packet one-way delay: 252.600 ms

Loss rate: 3.50%

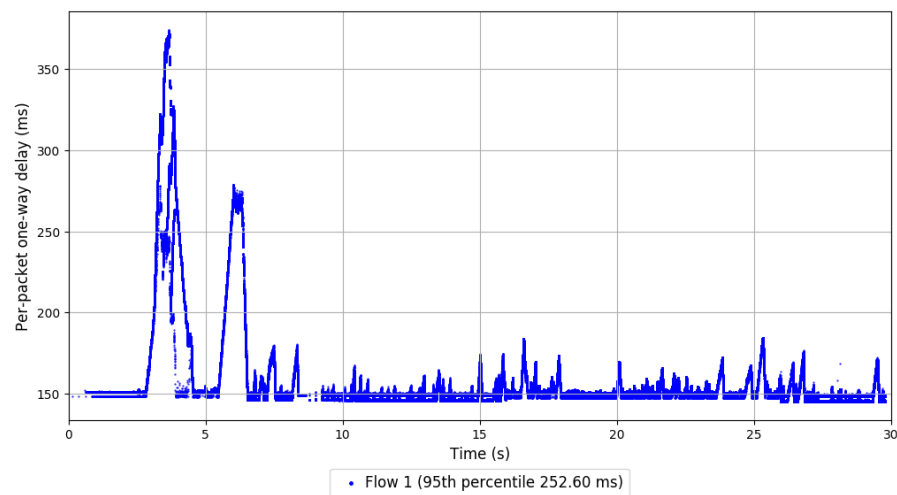
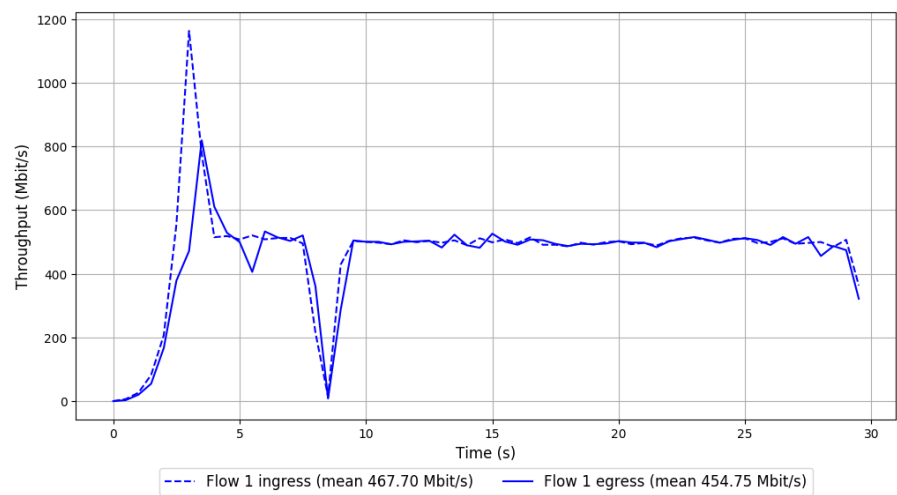
-- Flow 1:

Average throughput: 454.75 Mbit/s

95th percentile per-packet one-way delay: 252.600 ms

Loss rate: 3.50%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-25 17:41:48

End at: 2018-01-25 17:42:18

Below is generated by plot.py at 2018-01-25 20:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 138.48 Mbit/s

95th percentile per-packet one-way delay: 151.150 ms

Loss rate: 1.80%

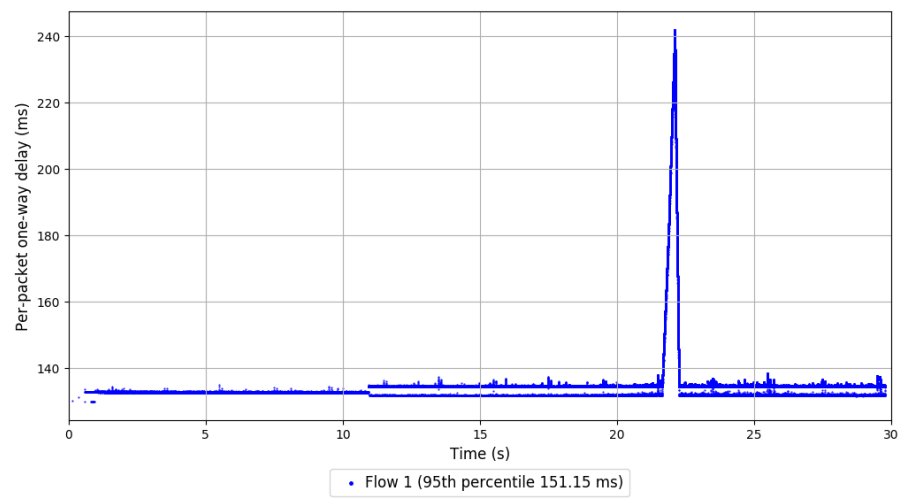
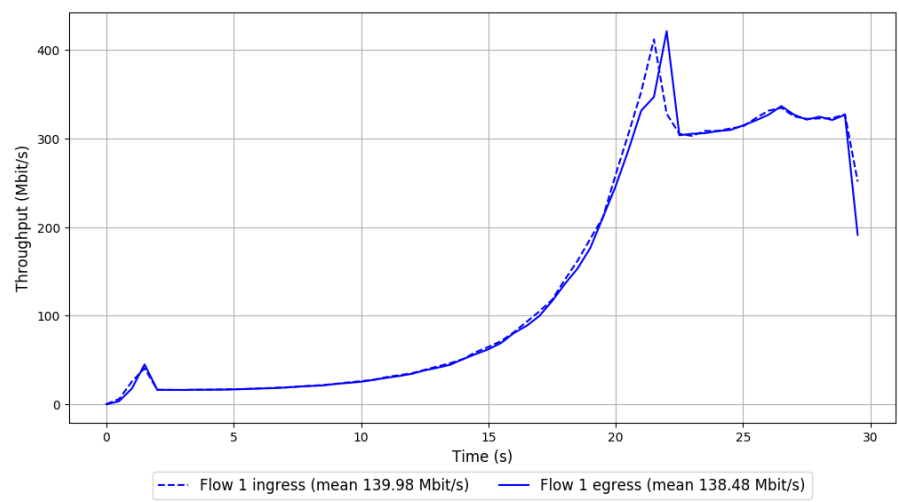
-- Flow 1:

Average throughput: 138.48 Mbit/s

95th percentile per-packet one-way delay: 151.150 ms

Loss rate: 1.80%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-25 17:54:26

End at: 2018-01-25 17:54:56

Below is generated by plot.py at 2018-01-25 20:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 323.68 Mbit/s

95th percentile per-packet one-way delay: 249.031 ms

Loss rate: 4.38%

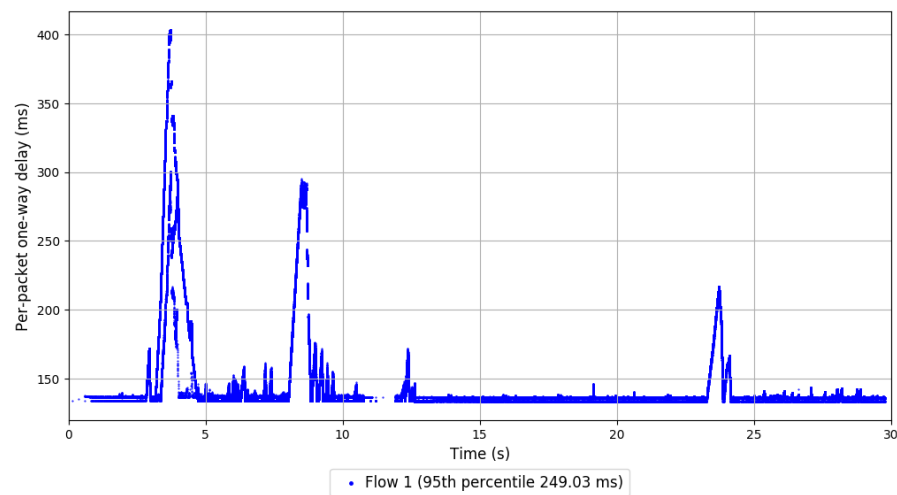
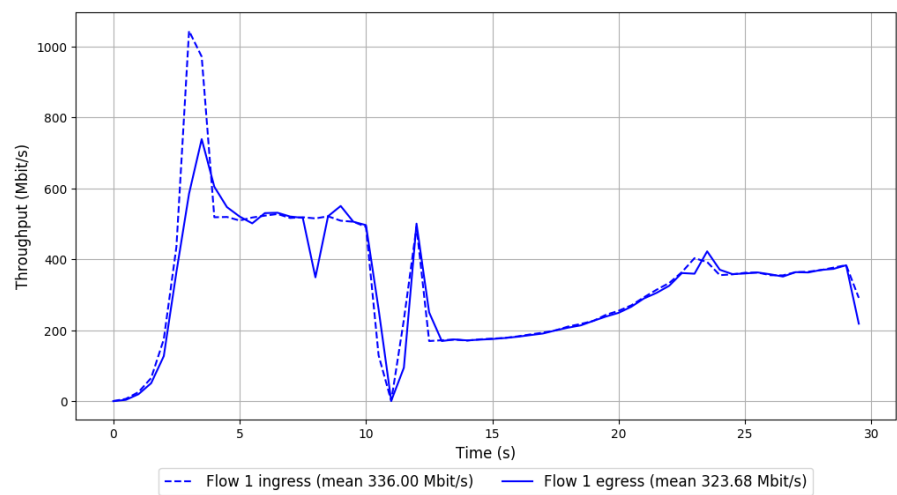
-- Flow 1:

Average throughput: 323.68 Mbit/s

95th percentile per-packet one-way delay: 249.031 ms

Loss rate: 4.38%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-25 18:07:04

End at: 2018-01-25 18:07:34

Below is generated by plot.py at 2018-01-25 20:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 338.26 Mbit/s

95th percentile per-packet one-way delay: 228.487 ms

Loss rate: 1.43%

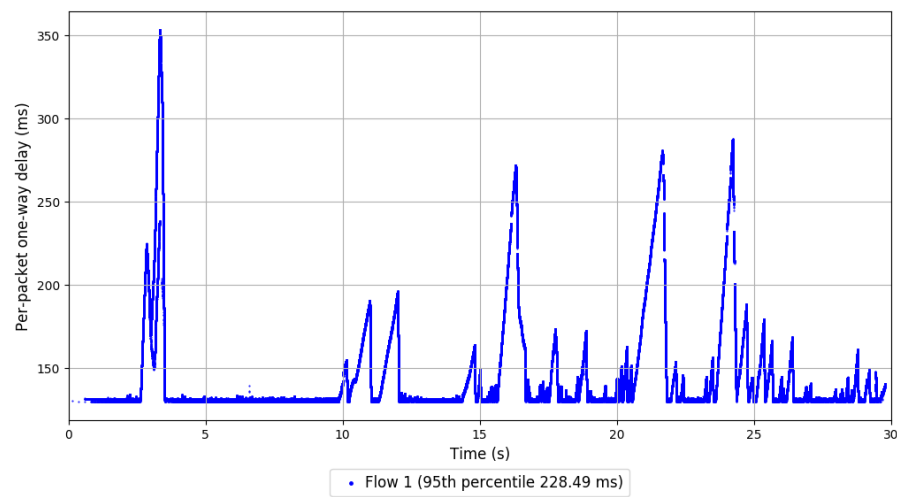
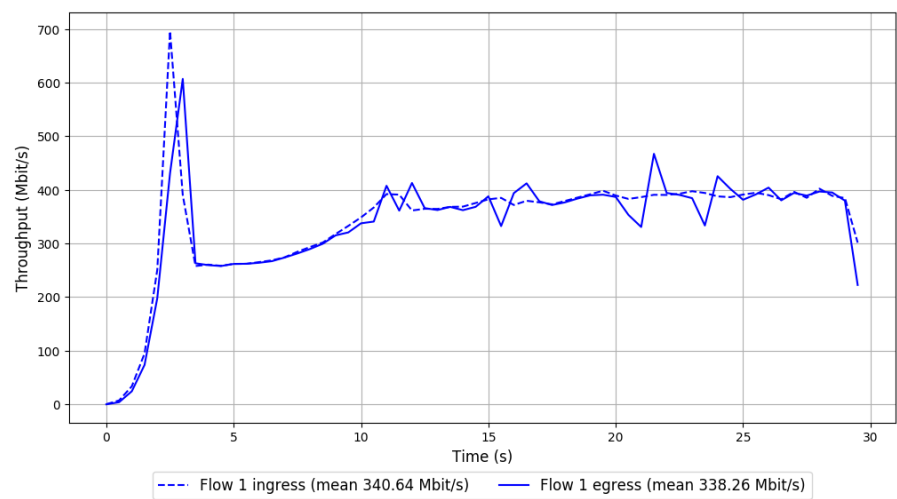
-- Flow 1:

Average throughput: 338.26 Mbit/s

95th percentile per-packet one-way delay: 228.487 ms

Loss rate: 1.43%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-25 18:19:58

End at: 2018-01-25 18:20:28

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 399.51 Mbit/s

95th percentile per-packet one-way delay: 207.538 ms

Loss rate: 1.54%

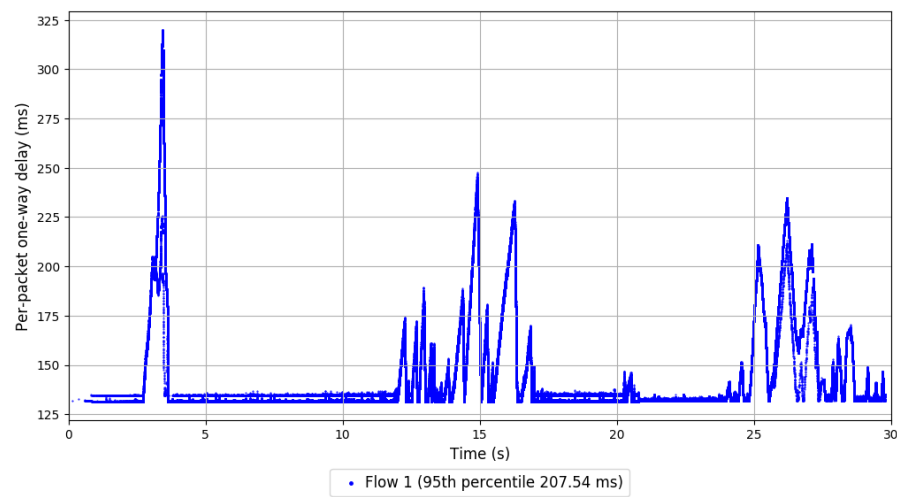
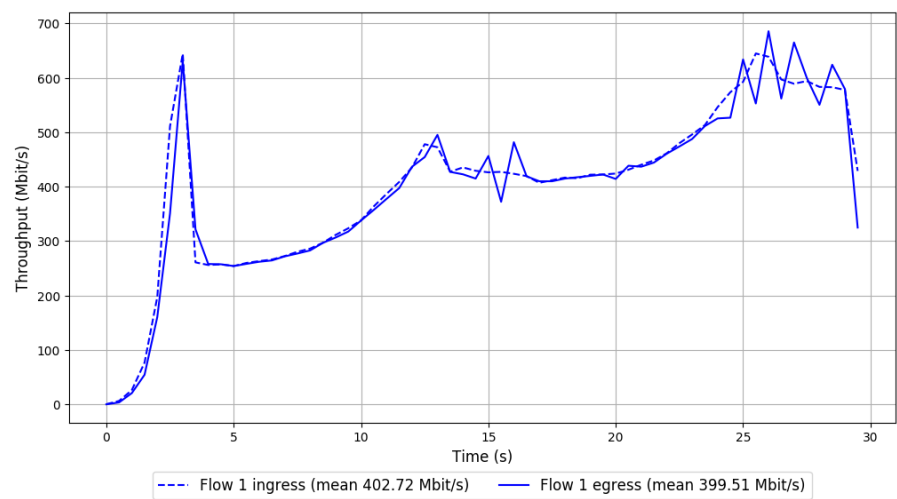
-- Flow 1:

Average throughput: 399.51 Mbit/s

95th percentile per-packet one-way delay: 207.538 ms

Loss rate: 1.54%

Run 10: Report of PCC — Data Link

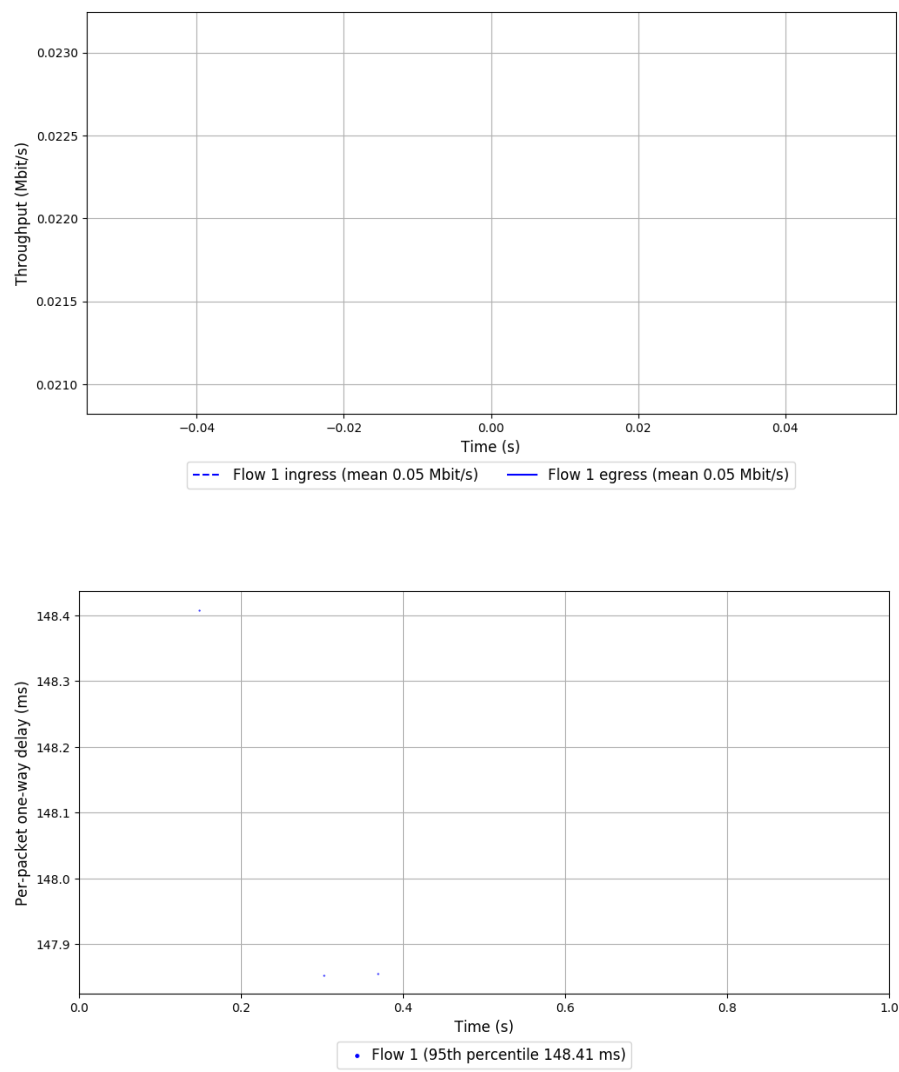


Run 1: Statistics of QUIC Cubic

Start at: 2018-01-25 16:20:48

End at: 2018-01-25 16:21:18

Run 1: Report of QUIC Cubic — Data Link

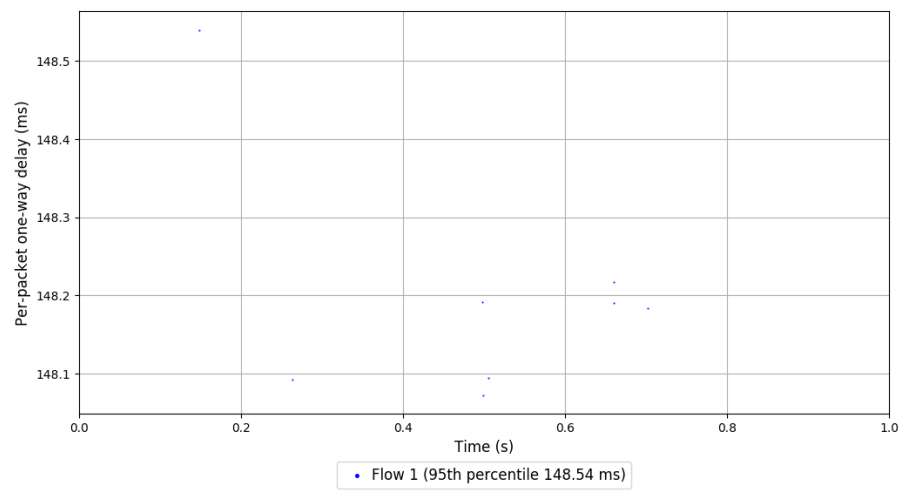
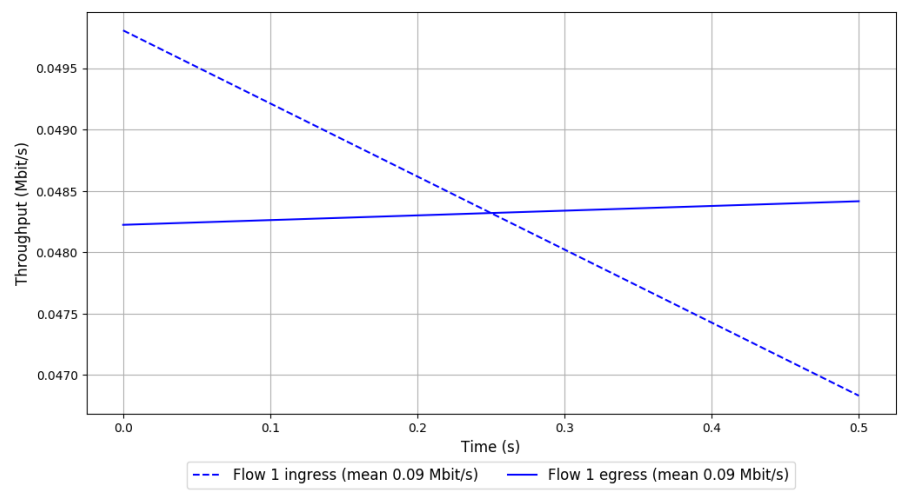


Run 2: Statistics of QUIC Cubic

Start at: 2018-01-25 16:33:40

End at: 2018-01-25 16:34:10

Run 2: Report of QUIC Cubic — Data Link

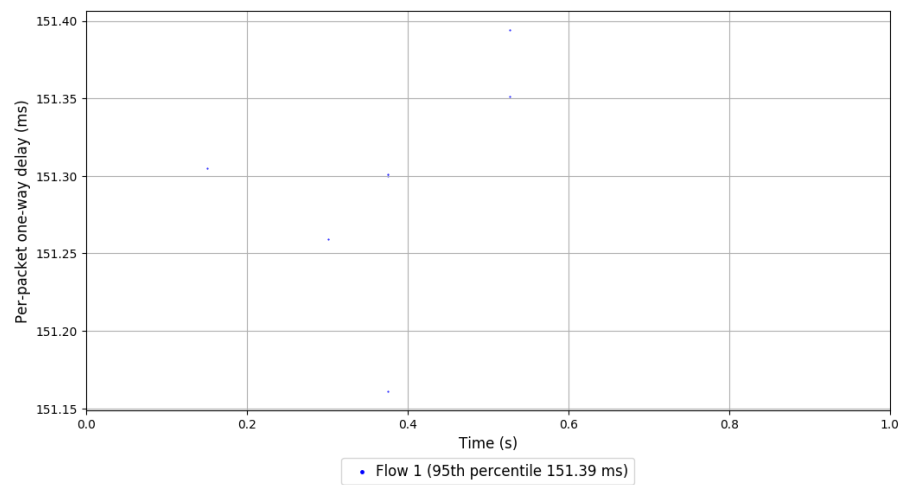
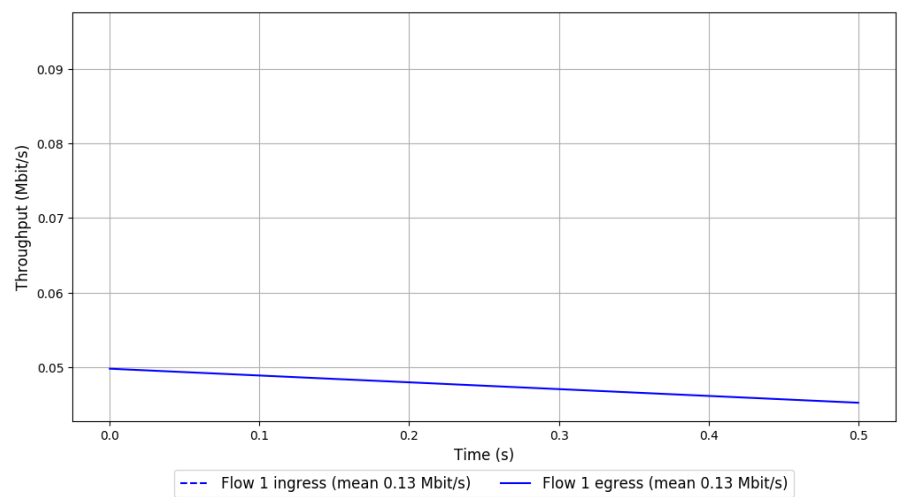


Run 3: Statistics of QUIC Cubic

Start at: 2018-01-25 16:46:33

End at: 2018-01-25 16:47:03

Run 3: Report of QUIC Cubic — Data Link

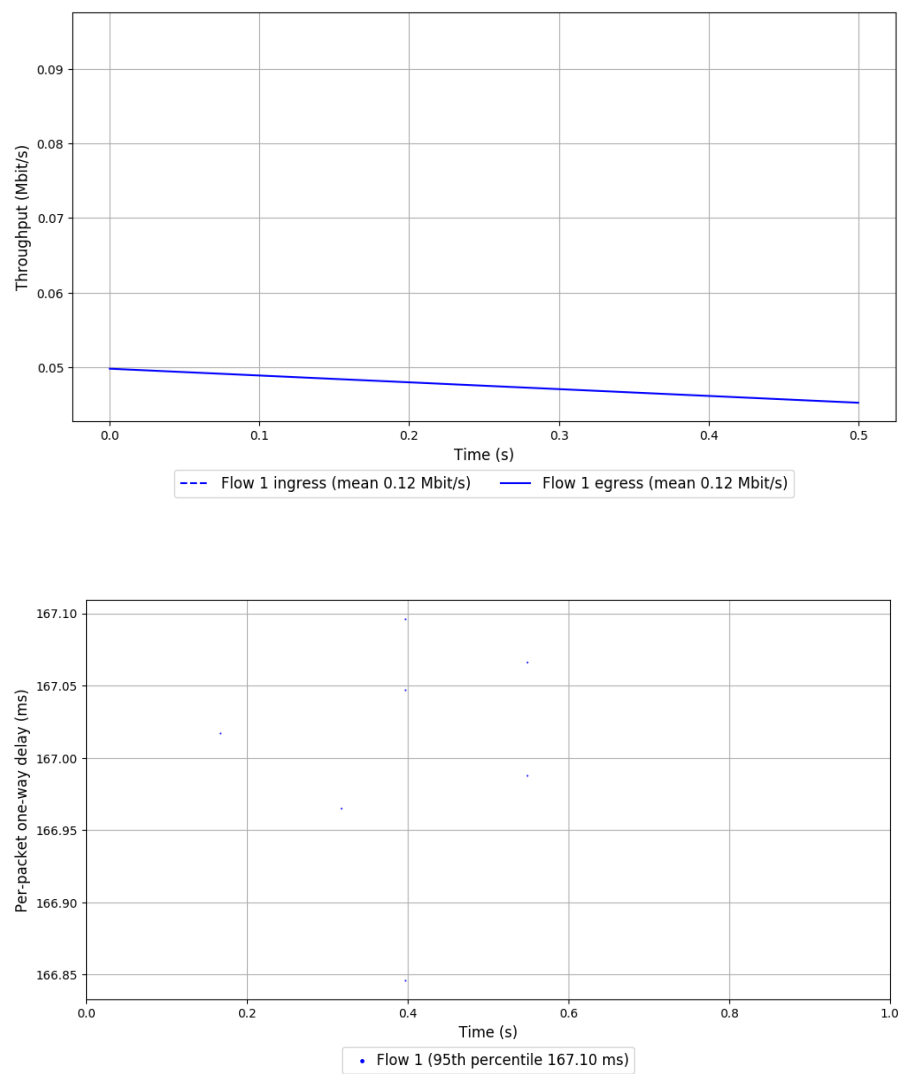


Run 4: Statistics of QUIC Cubic

Start at: 2018-01-25 16:59:21

End at: 2018-01-25 16:59:51

Run 4: Report of QUIC Cubic — Data Link

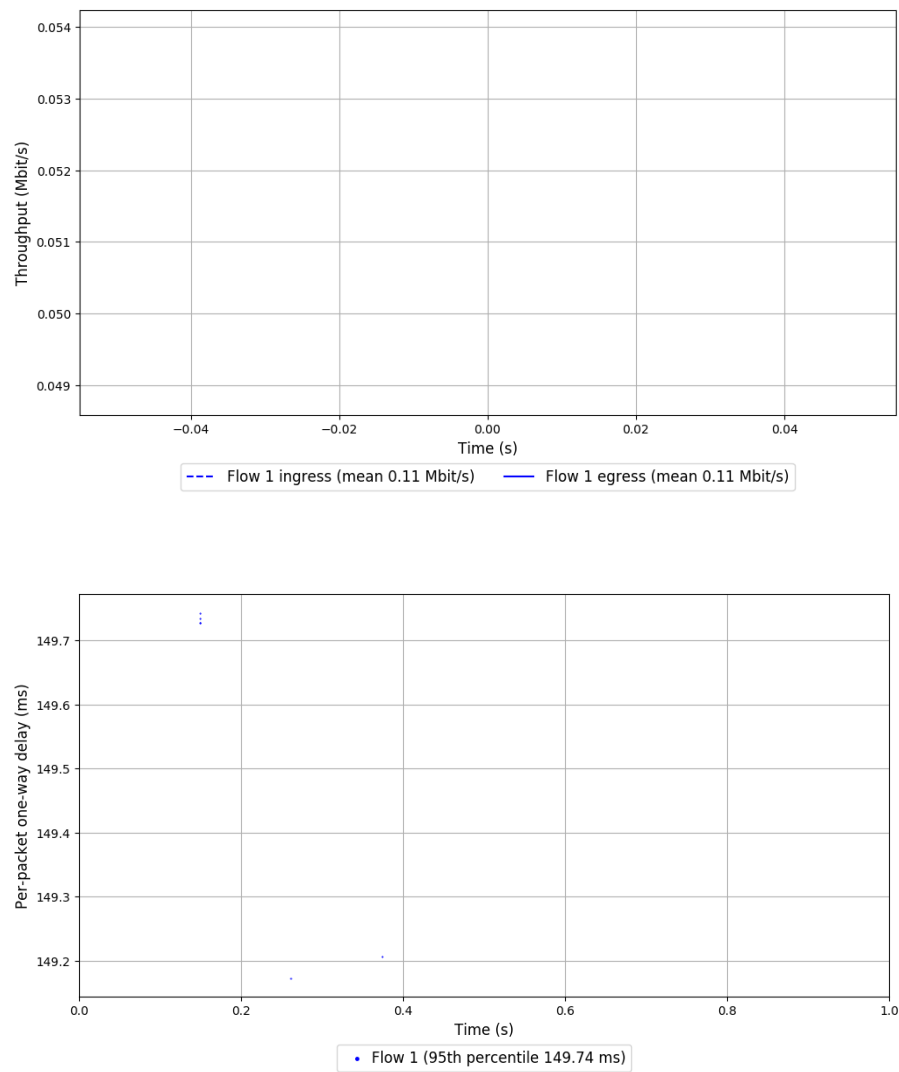


Run 5: Statistics of QUIC Cubic

Start at: 2018-01-25 17:12:06

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

Run 5: Report of QUIC Cubic — Data Link

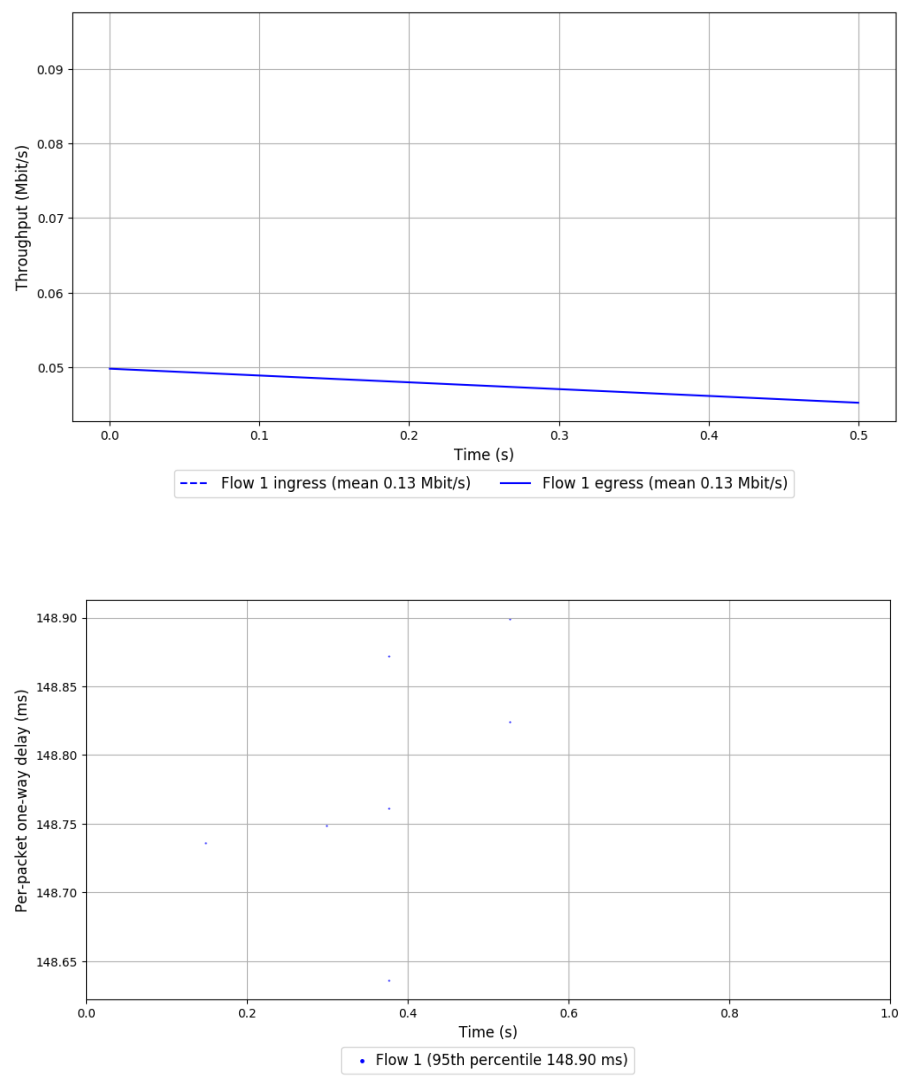


Run 6: Statistics of QUIC Cubic

Start at: 2018-01-25 17:24:53

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

Run 6: Report of QUIC Cubic — Data Link

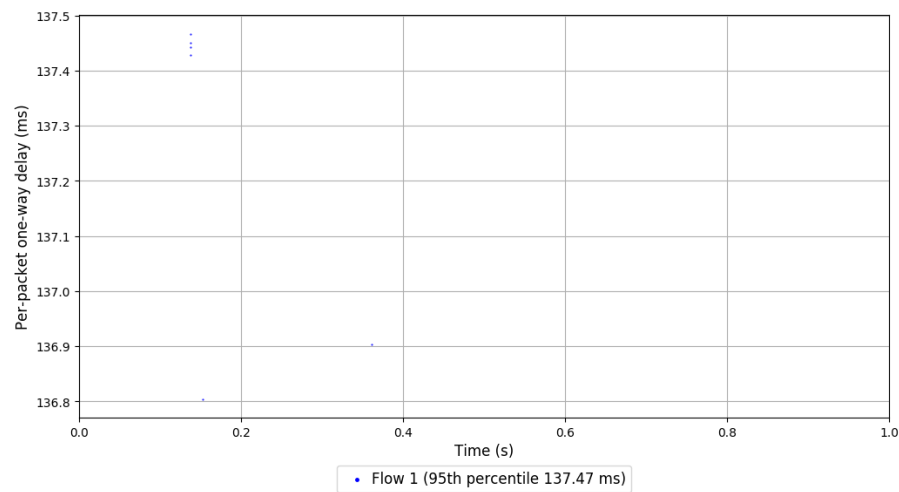
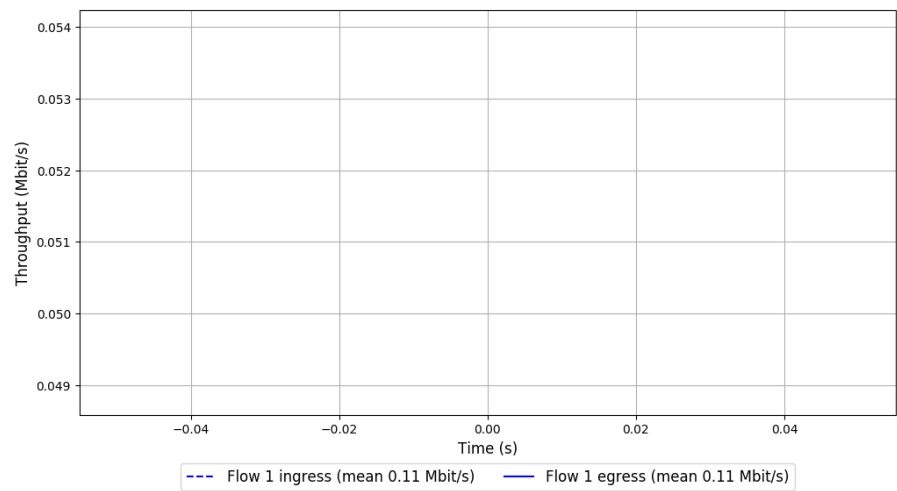


Run 7: Statistics of QUIC Cubic

Start at: 2018-01-25 17:37:42

End at: 2018-01-25 17:38:12

Run 7: Report of QUIC Cubic — Data Link

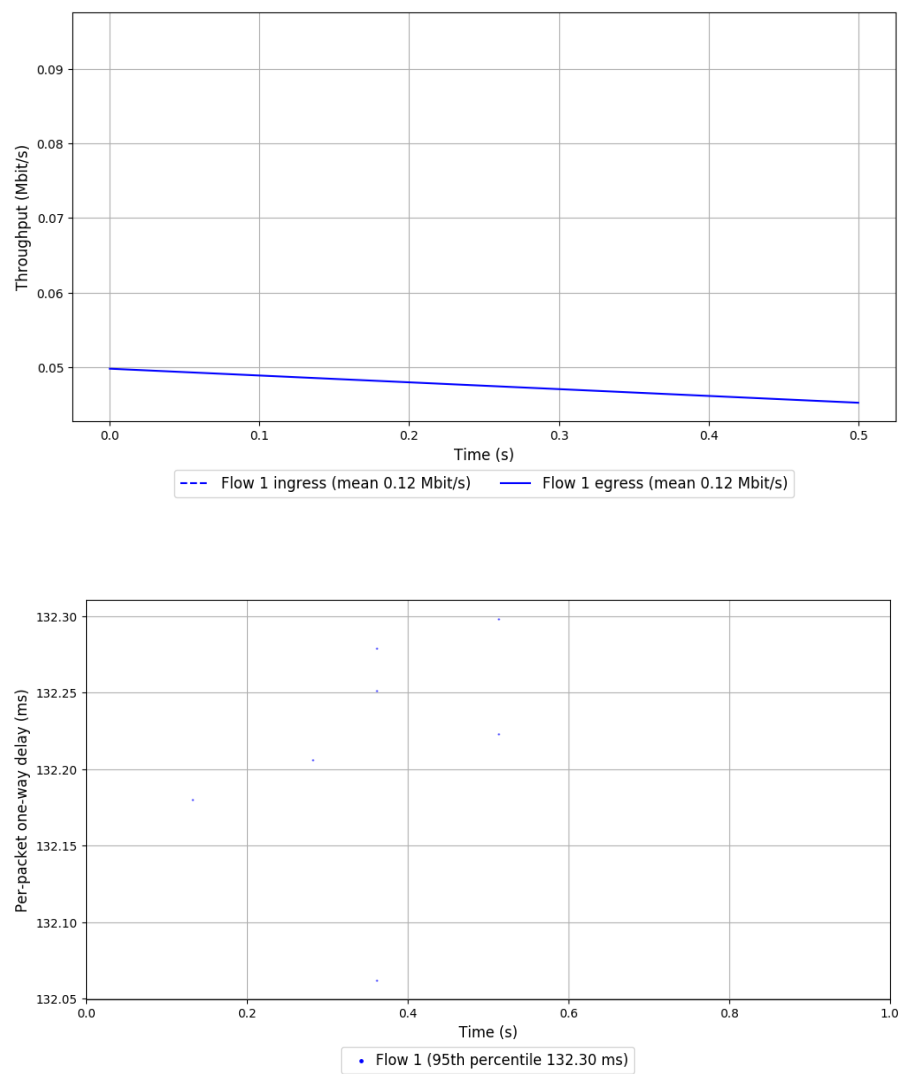


Run 8: Statistics of QUIC Cubic

Start at: 2018-01-25 17:50:20

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

Run 8: Report of QUIC Cubic — Data Link

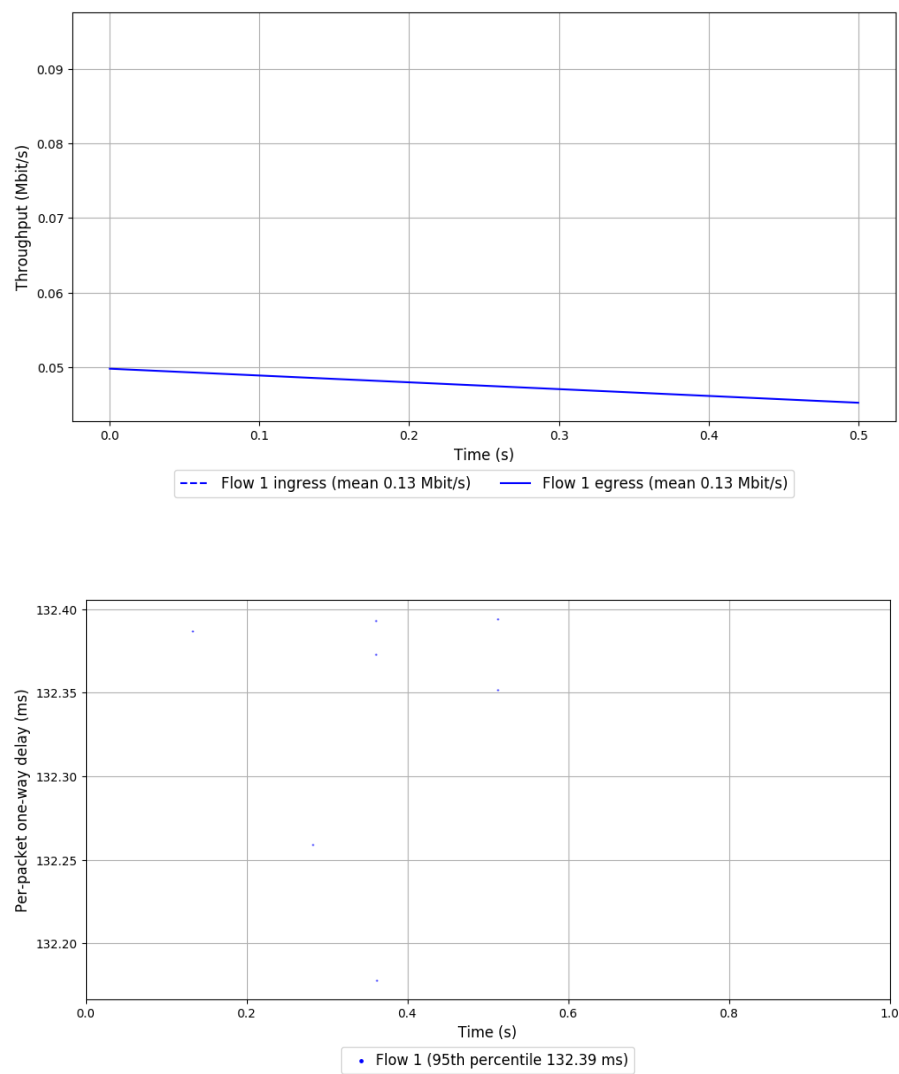


Run 9: Statistics of QUIC Cubic

Start at: 2018-01-25 18:03:02

End at: 2018-01-25 18:03:32

Run 9: Report of QUIC Cubic — Data Link

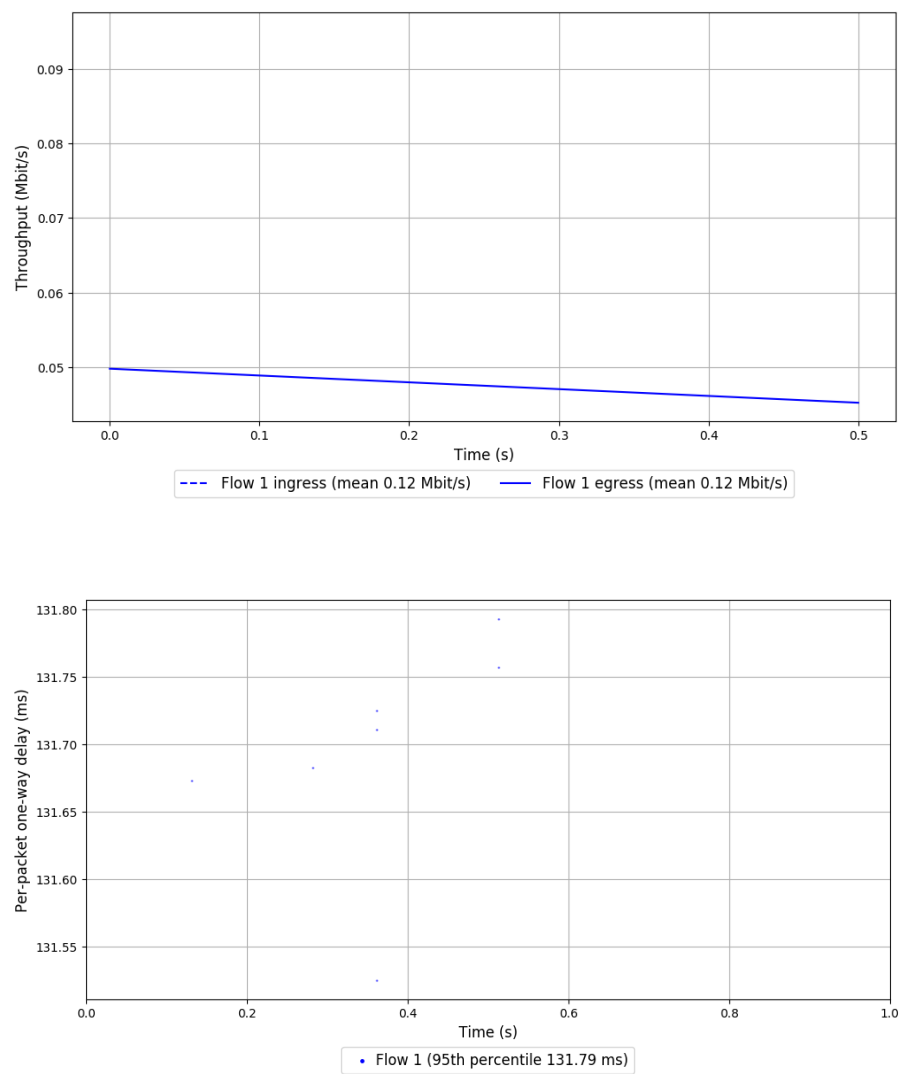


Run 10: Statistics of QUIC Cubic

Start at: 2018-01-25 18:15:58

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

Run 10: Report of QUIC Cubic — Data Link

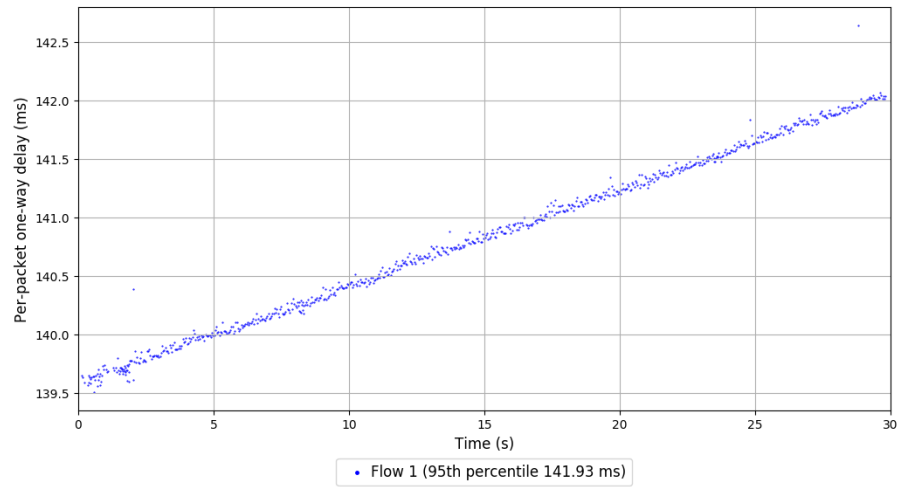
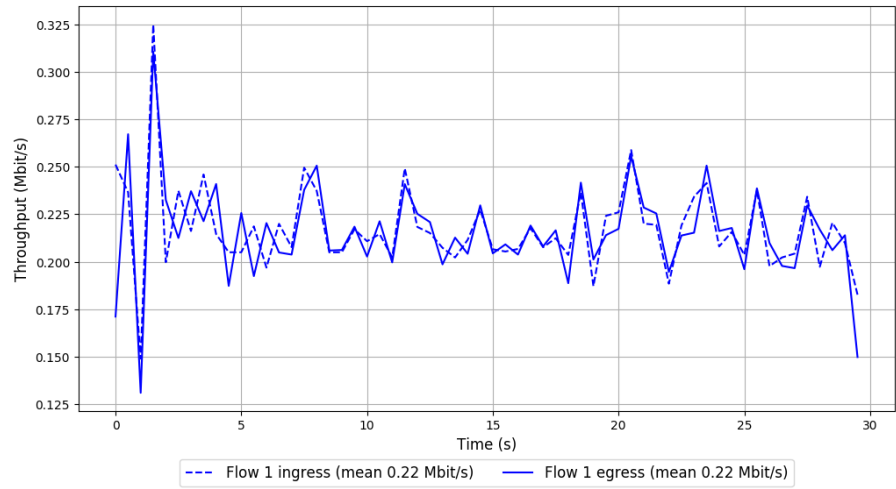


```
Run 1: Statistics of SCReAM

Start at: 2018-01-25 16:19:15
End at: 2018-01-25 16:19:45

# Below is generated by plot.py at 2018-01-25 20:54:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 141.933 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 141.933 ms
Loss rate: 0.76%
```

Run 1: Report of SReAM — Data Link

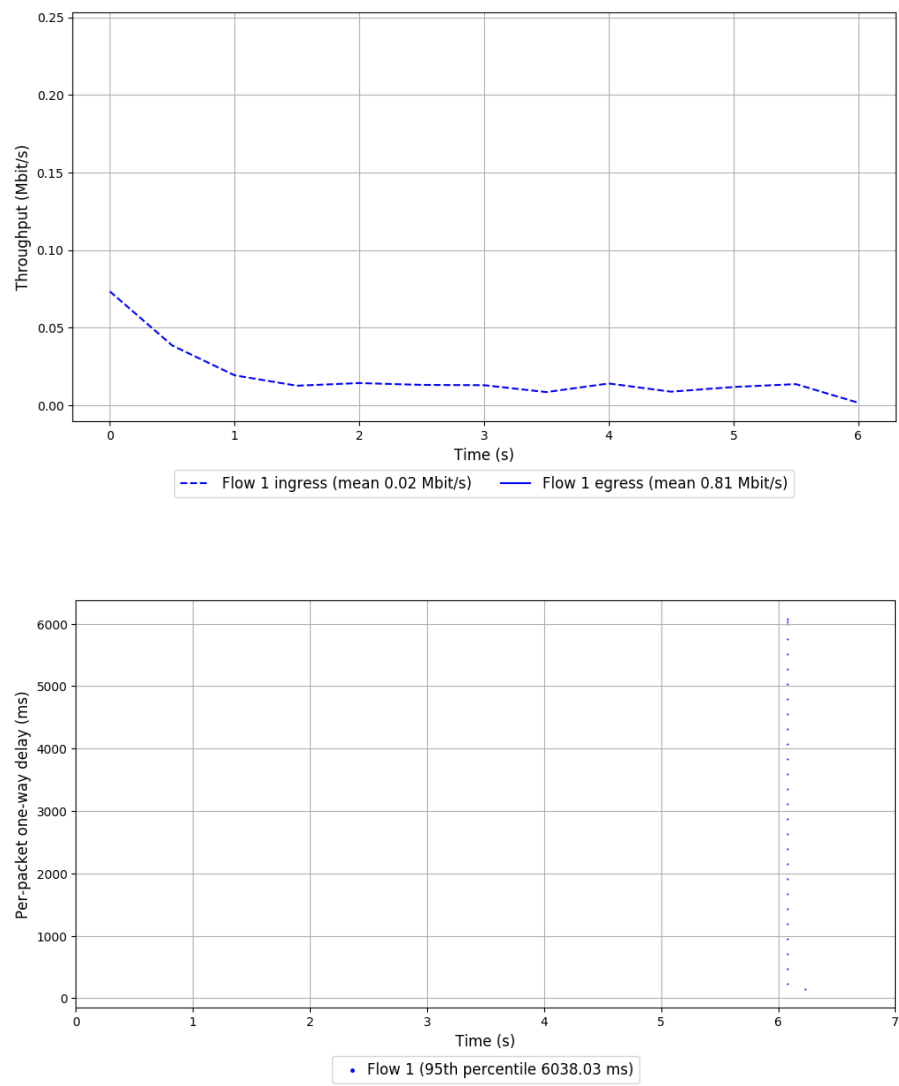


Run 2: Statistics of SReAM

Start at: 2018-01-25 16:32:05

End at: 2018-01-25 16:32:36

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-25 16:45:02

End at: 2018-01-25 16:45:32

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 153.298 ms

Loss rate: 0.88%

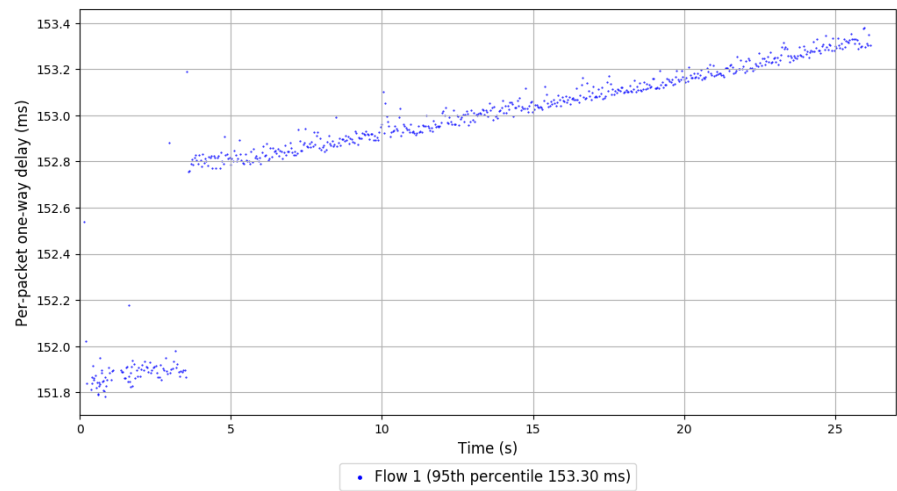
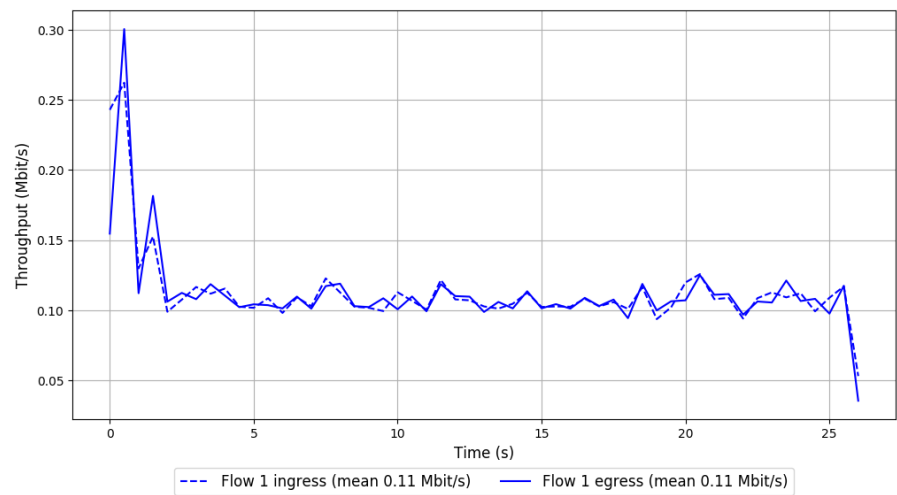
-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 153.298 ms

Loss rate: 0.88%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

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

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

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 167.798 ms

Loss rate: 0.76%

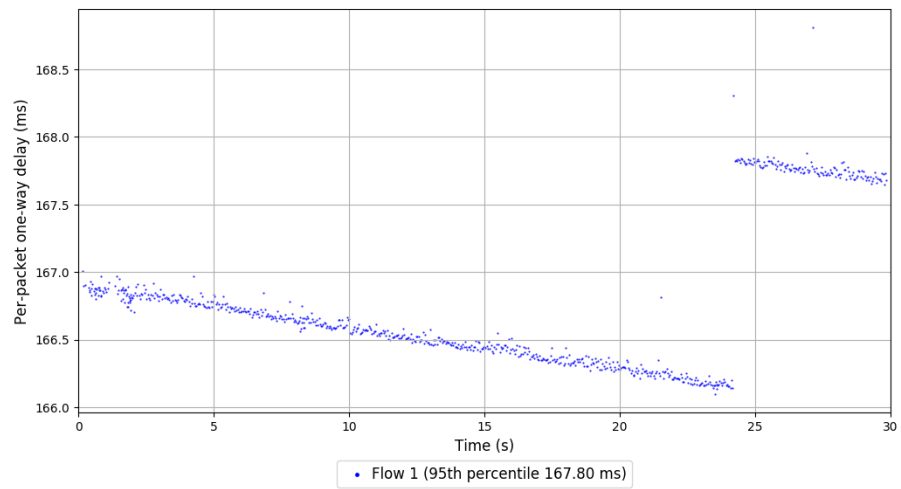
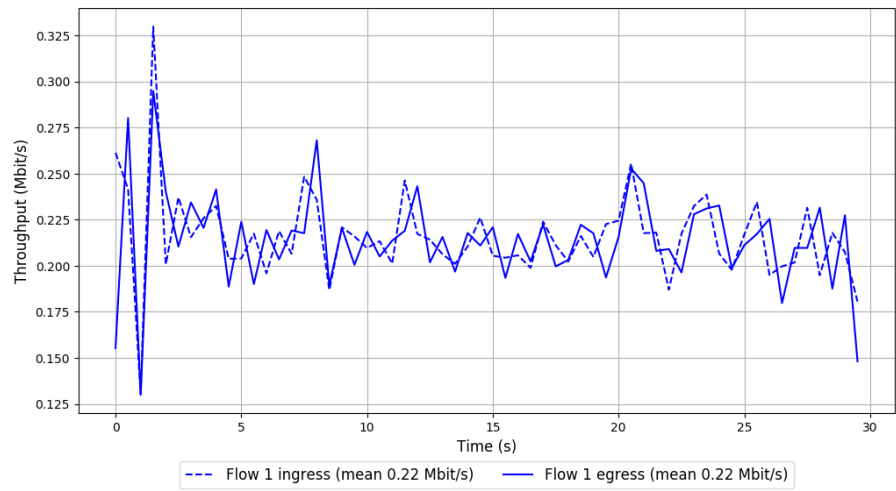
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 167.798 ms

Loss rate: 0.76%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-25 17:10:28

End at: 2018-01-25 17:10:58

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 154.084 ms

Loss rate: 0.76%

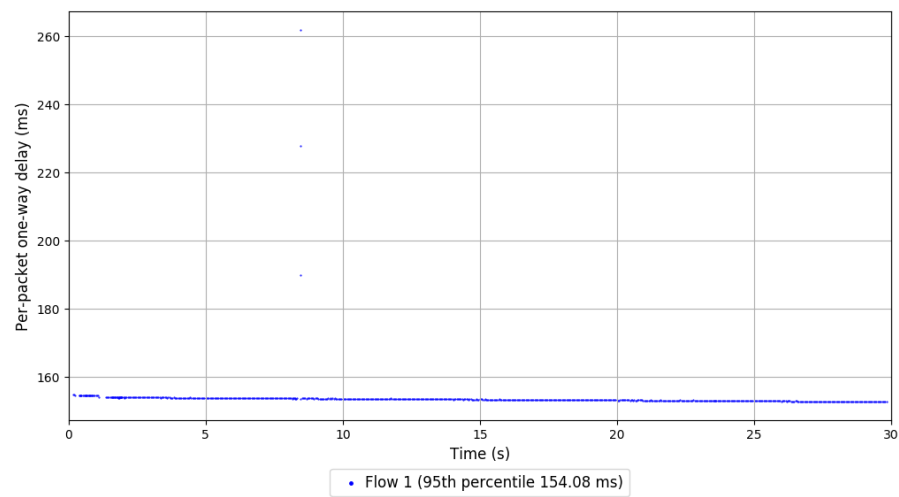
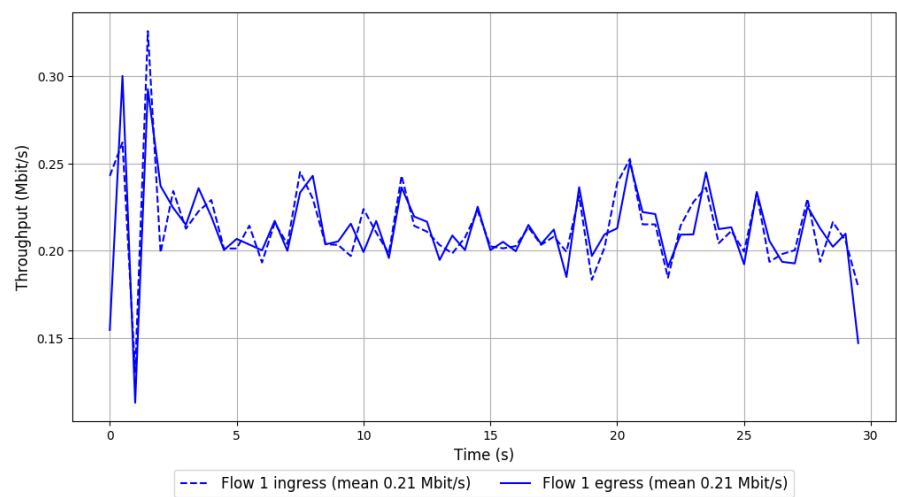
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 154.084 ms

Loss rate: 0.76%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

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

End at: 2018-01-25 17:23:46

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 148.518 ms

Loss rate: 0.77%

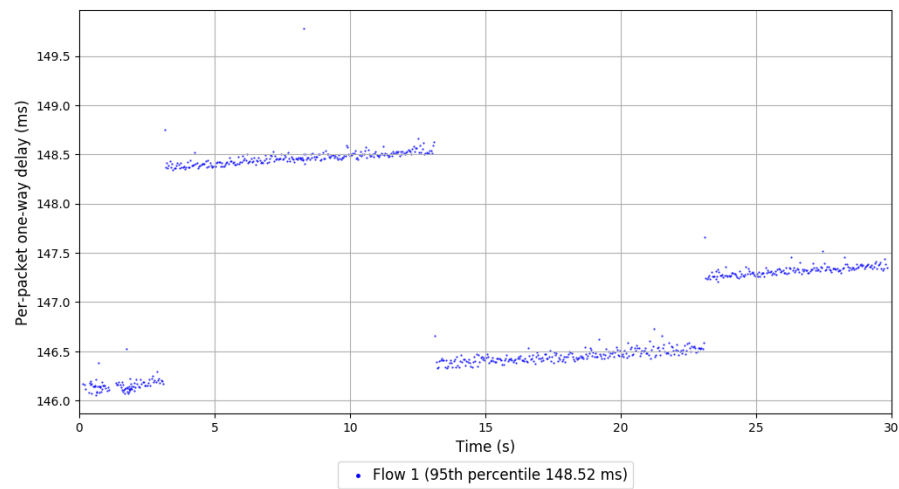
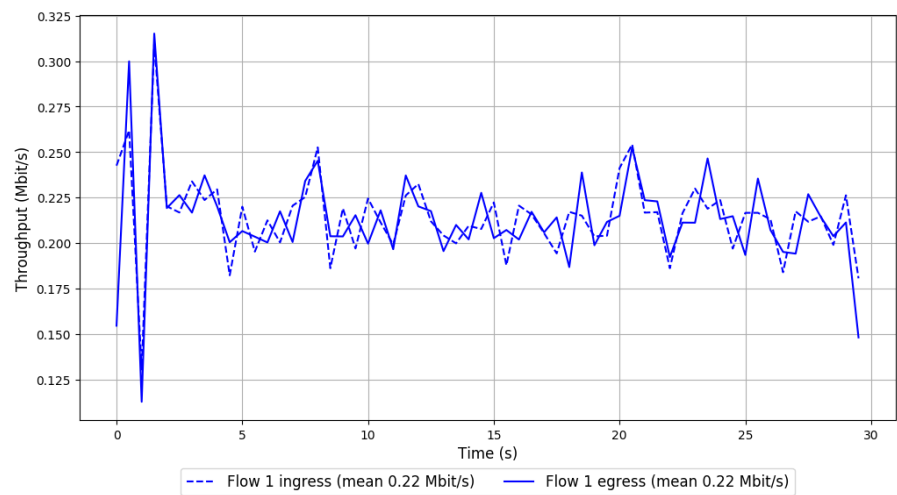
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 148.518 ms

Loss rate: 0.77%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

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

End at: 2018-01-25 17:36:39

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 139.848 ms

Loss rate: 0.76%

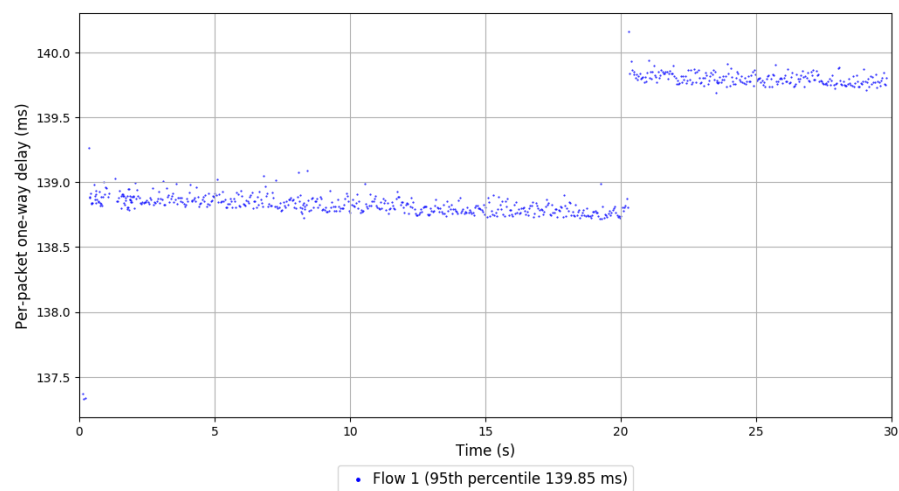
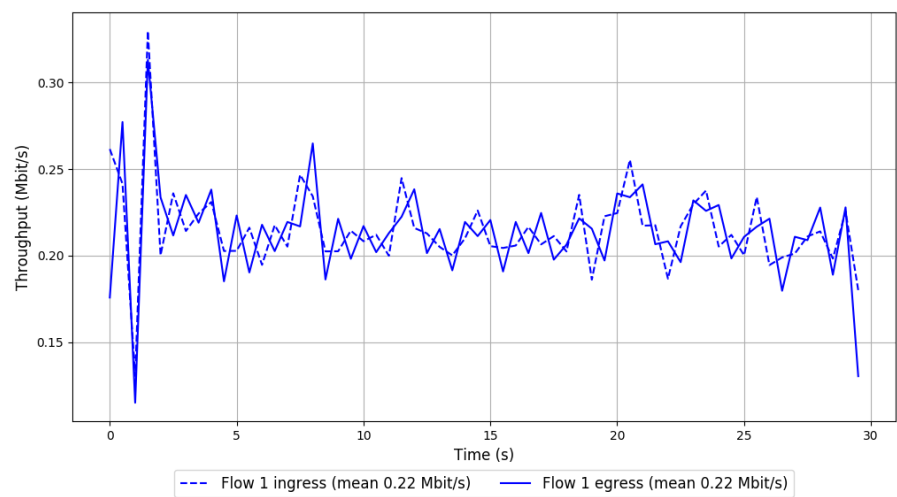
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 139.848 ms

Loss rate: 0.76%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-25 17:48:41

End at: 2018-01-25 17:49:11

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 131.434 ms

Loss rate: 0.77%

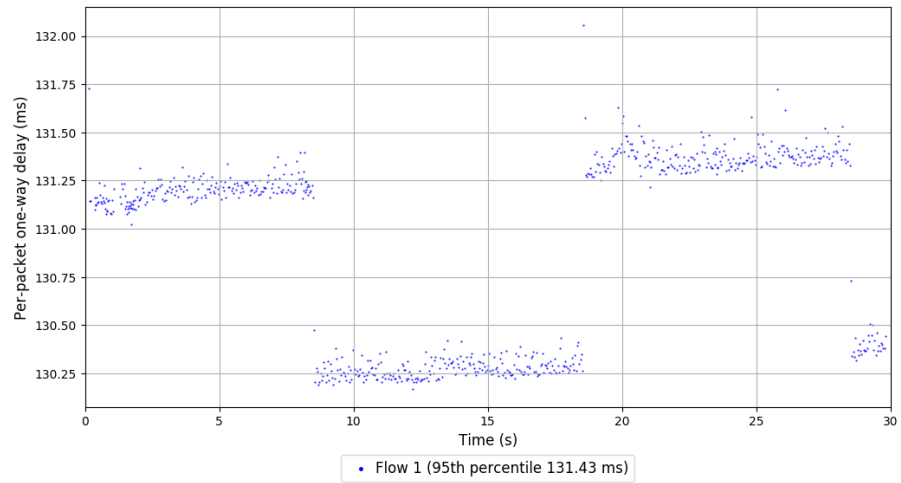
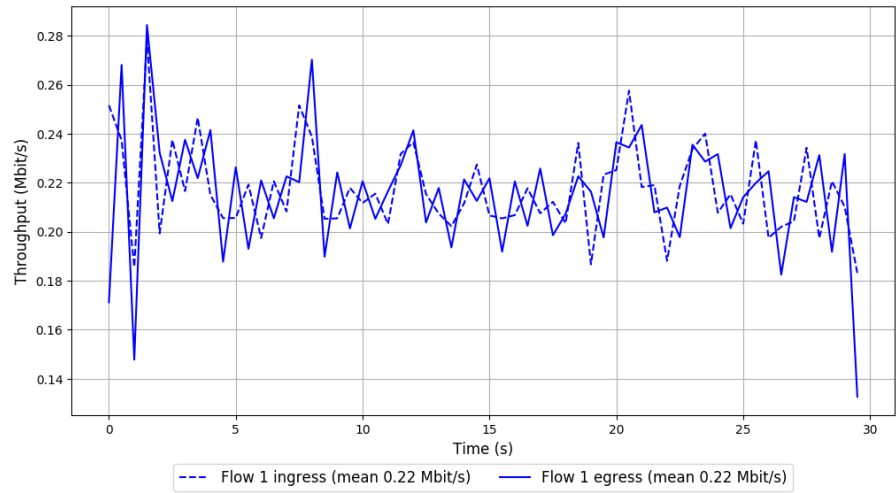
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 131.434 ms

Loss rate: 0.77%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-25 18:01:30

End at: 2018-01-25 18:02:00

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 131.997 ms

Loss rate: 0.89%

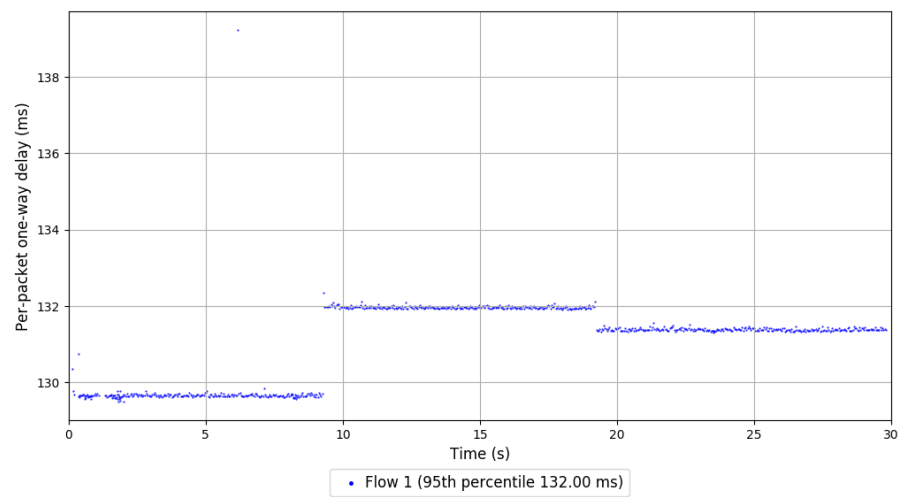
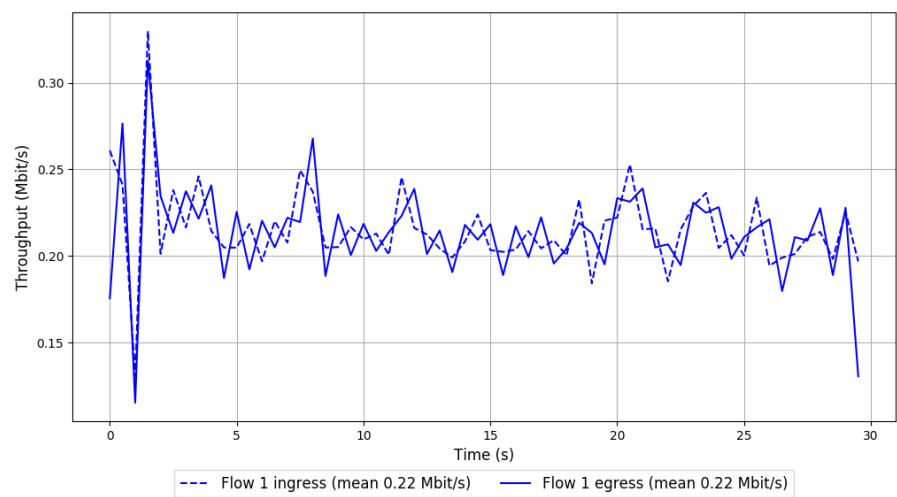
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 131.997 ms

Loss rate: 0.89%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-01-25 18:14:22

End at: 2018-01-25 18:14:52

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 129.423 ms

Loss rate: 0.76%

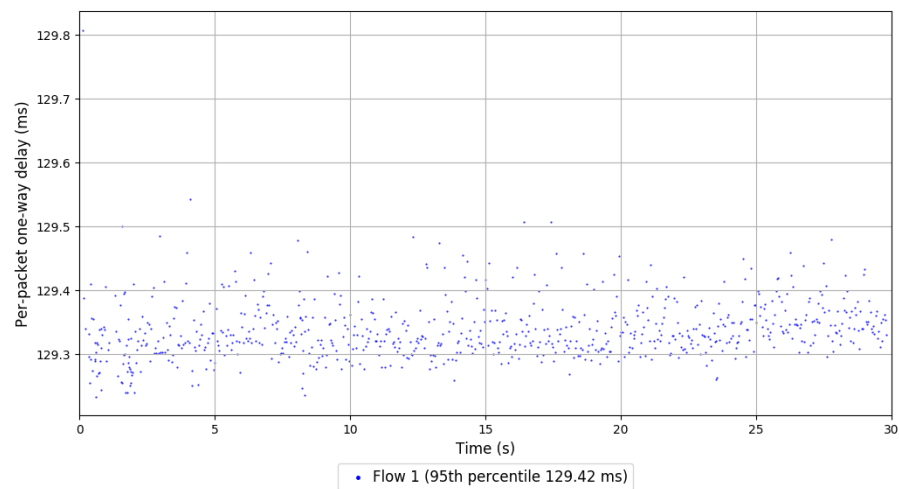
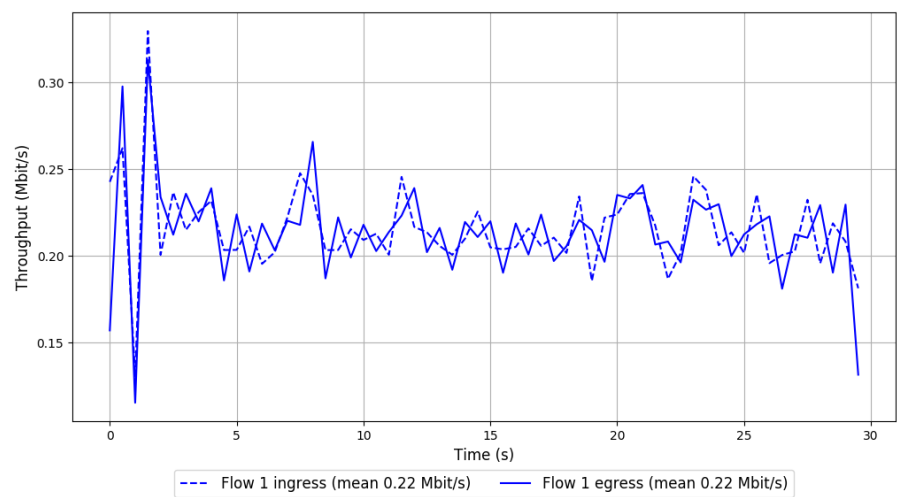
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 129.423 ms

Loss rate: 0.76%

Run 10: Report of SReAM — Data Link

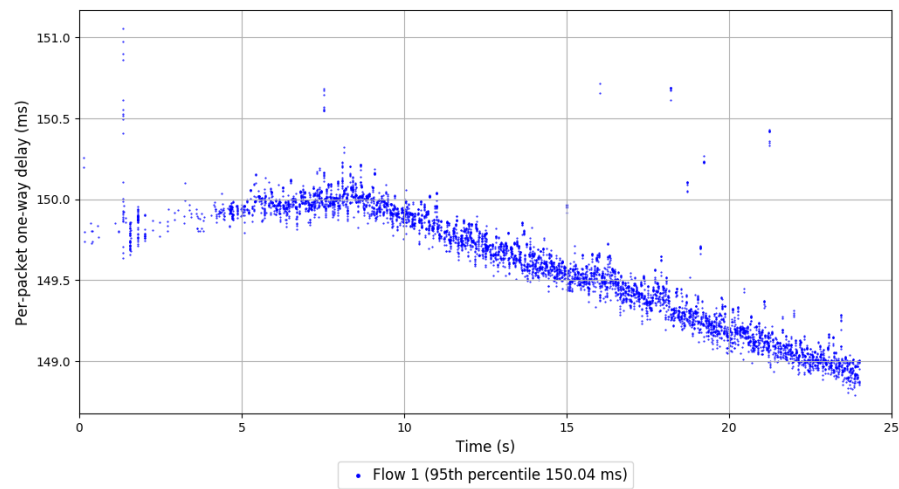
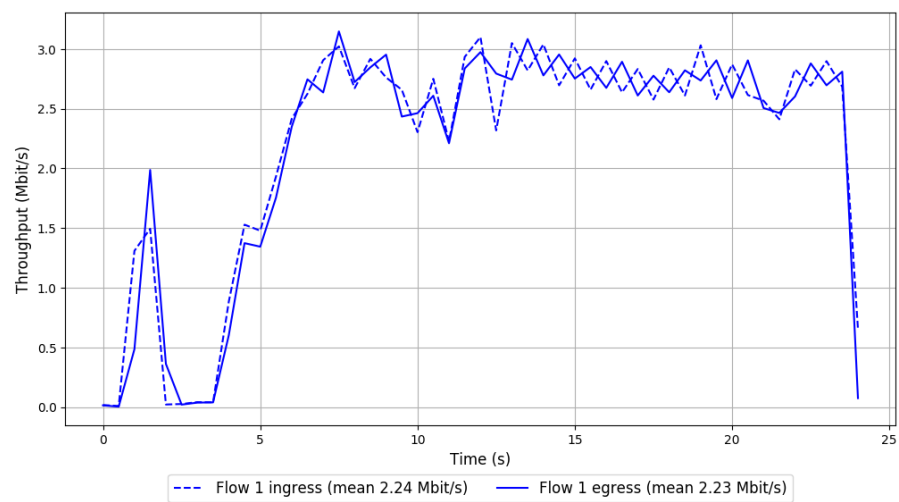


Run 1: Statistics of WebRTC media

Start at: 2018-01-25 16:26:39

End at: 2018-01-25 16:27:09

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-25 16:39:31

End at: 2018-01-25 16:40:01

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 148.041 ms

Loss rate: 0.97%

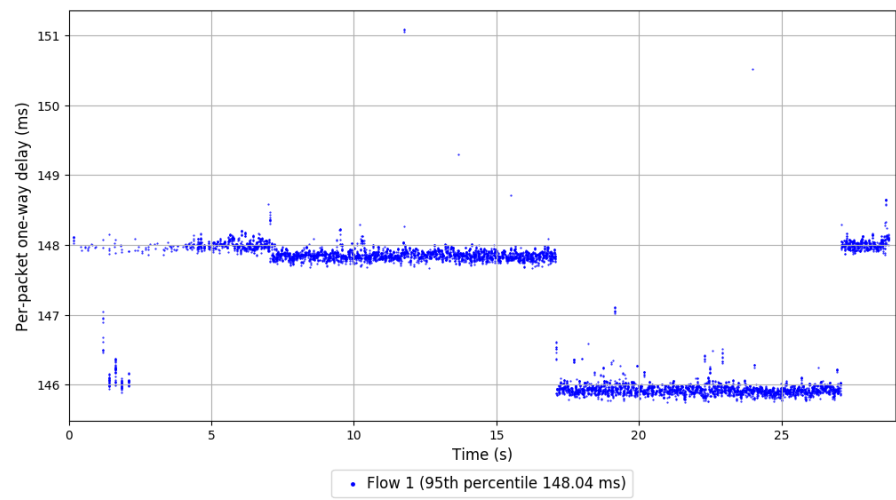
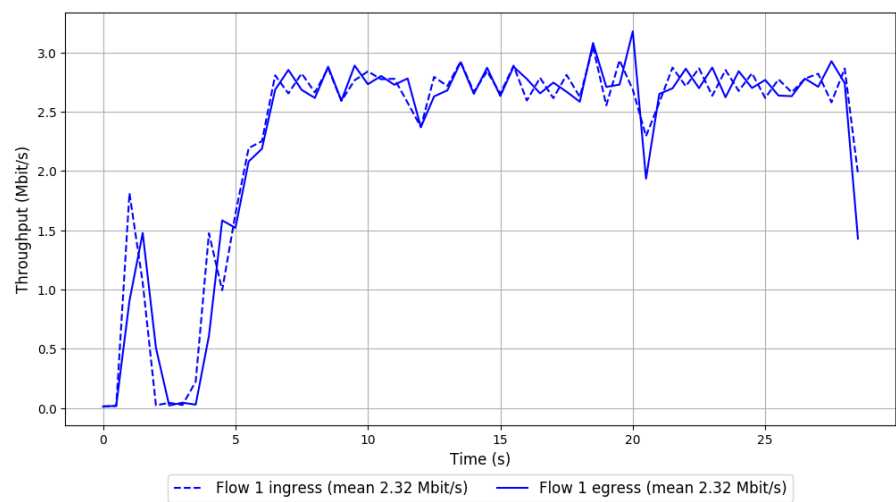
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 148.041 ms

Loss rate: 0.97%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-25 16:52:23

End at: 2018-01-25 16:52:53

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 167.552 ms

Loss rate: 0.83%

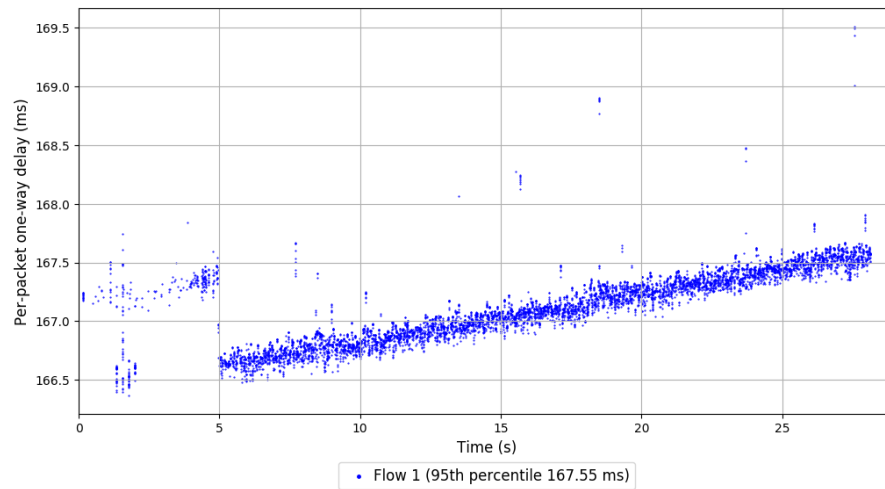
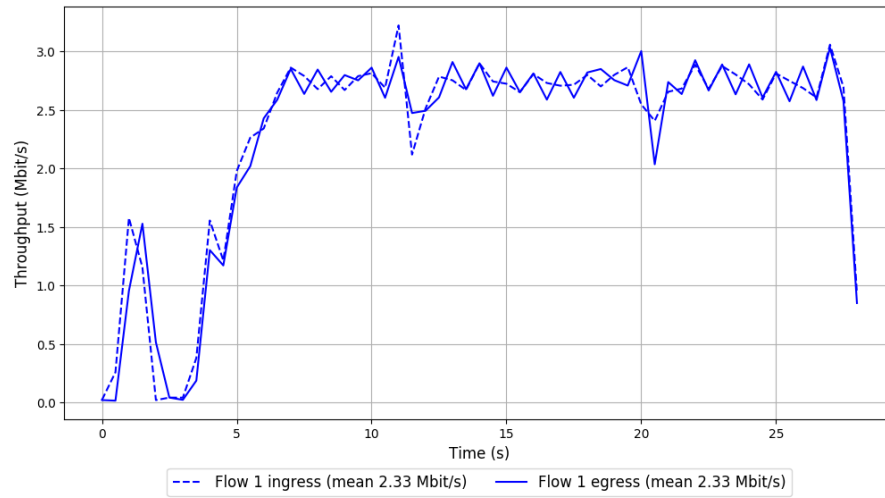
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 167.552 ms

Loss rate: 0.83%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-25 17:05:10

End at: 2018-01-25 17:05:40

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 153.125 ms

Loss rate: 0.91%

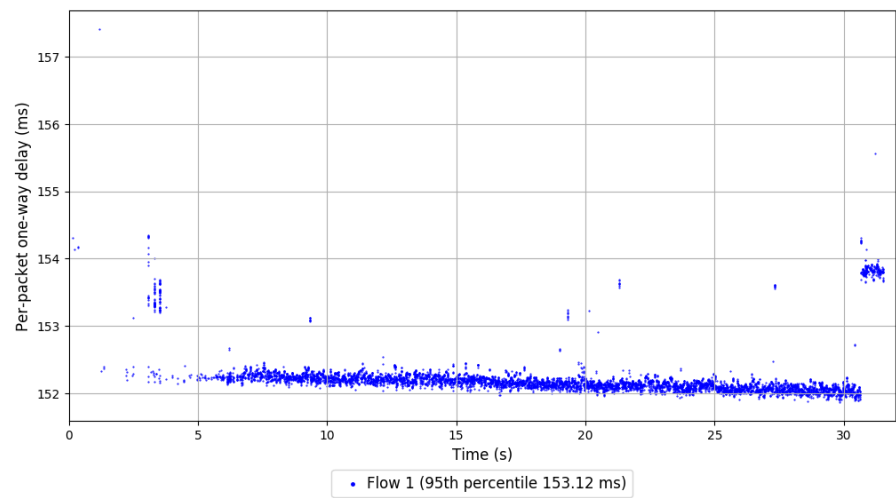
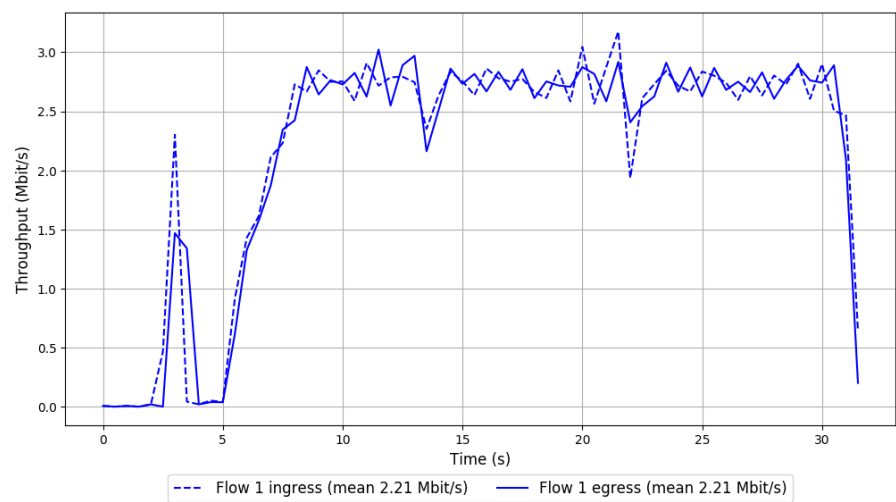
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 153.125 ms

Loss rate: 0.91%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

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

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

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 145.638 ms

Loss rate: 0.93%

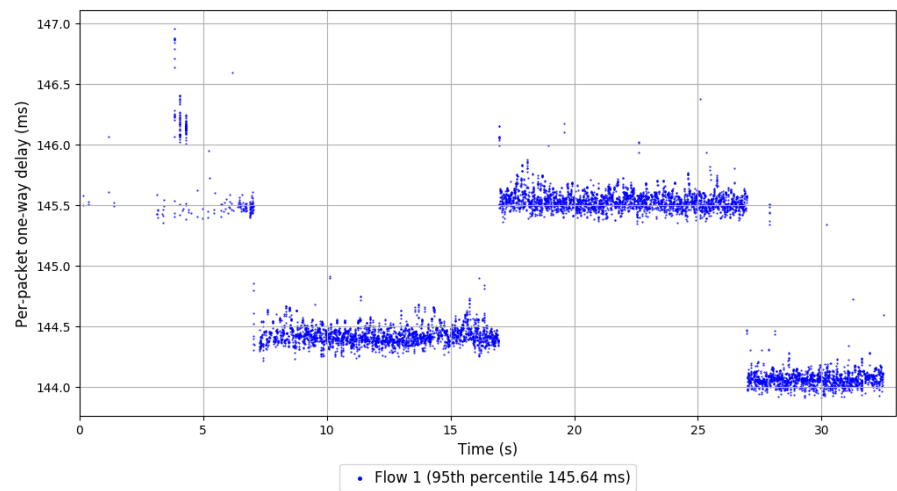
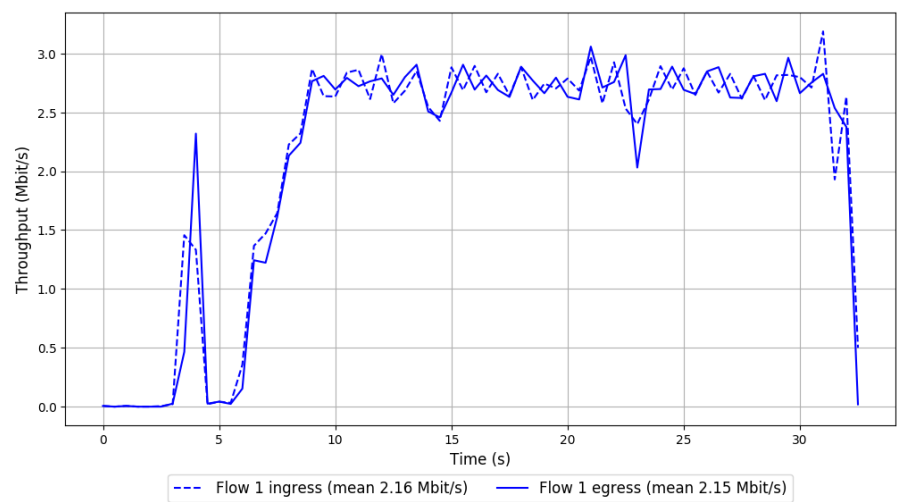
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 145.638 ms

Loss rate: 0.93%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-25 17:30:47

End at: 2018-01-25 17:31:17

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 144.660 ms

Loss rate: 0.76%

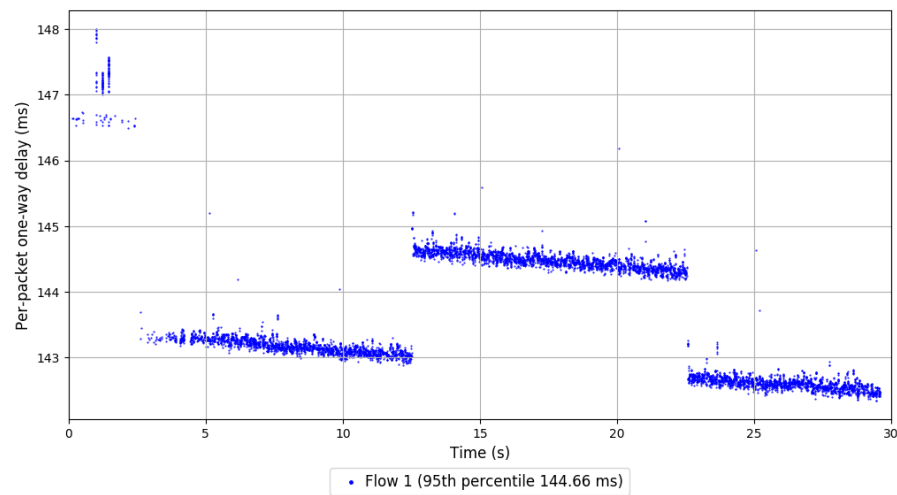
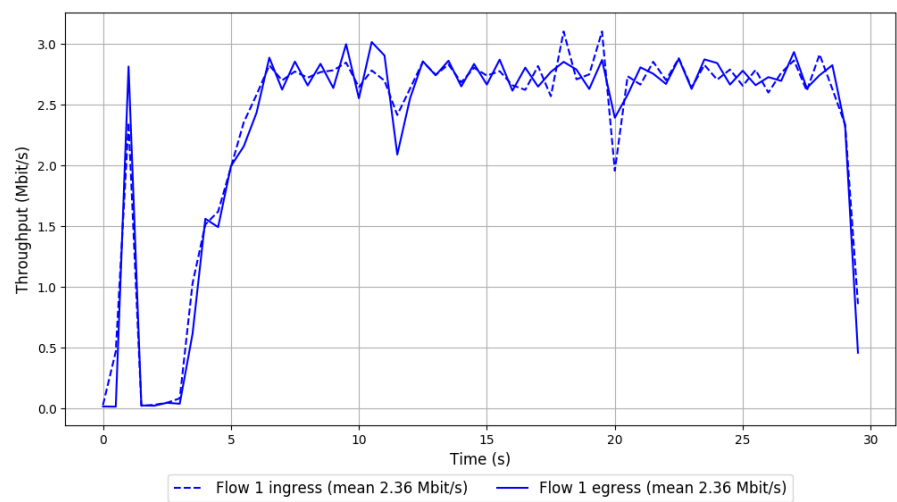
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 144.660 ms

Loss rate: 0.76%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

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

End at: 2018-01-25 17:43:47

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 132.207 ms

Loss rate: 0.92%

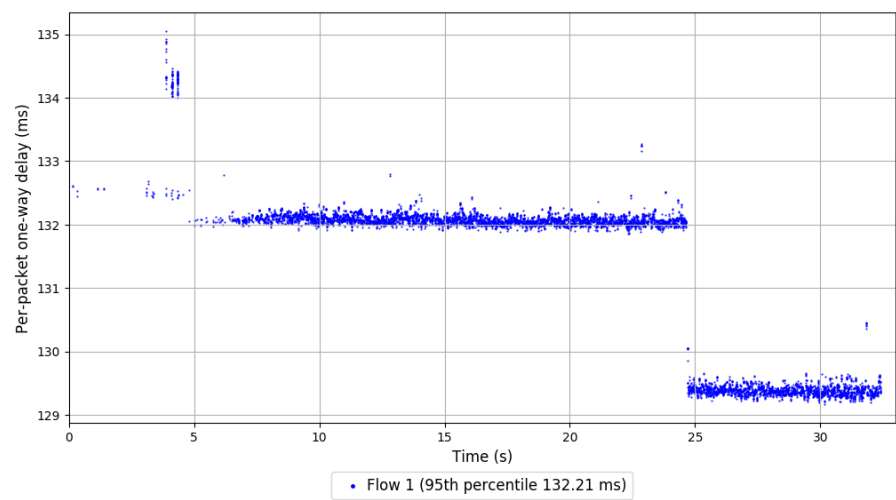
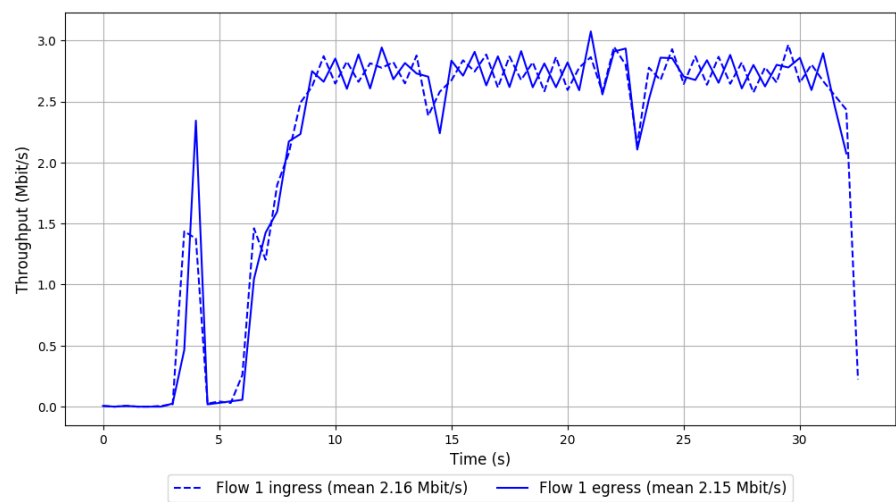
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 132.207 ms

Loss rate: 0.92%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-25 17:56:03

End at: 2018-01-25 17:56:33

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 134.450 ms

Loss rate: 0.77%

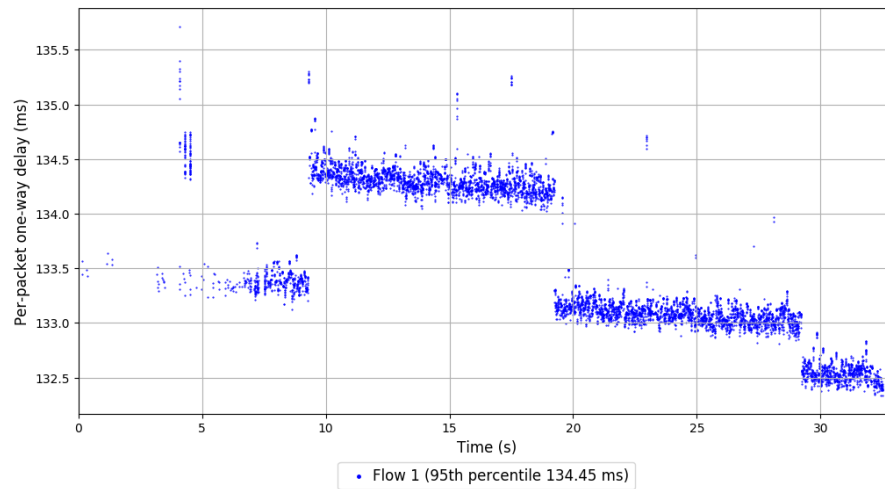
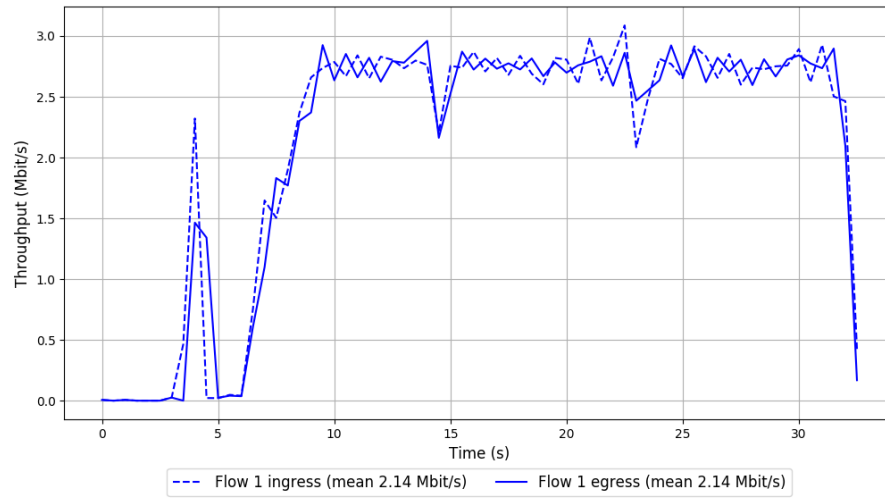
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 134.450 ms

Loss rate: 0.77%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-25 18:08:42

End at: 2018-01-25 18:09:12

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 131.848 ms

Loss rate: 0.93%

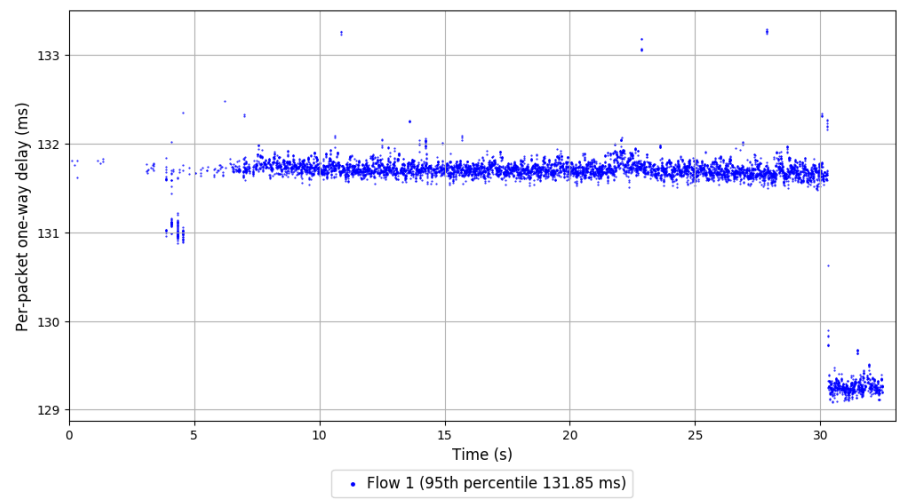
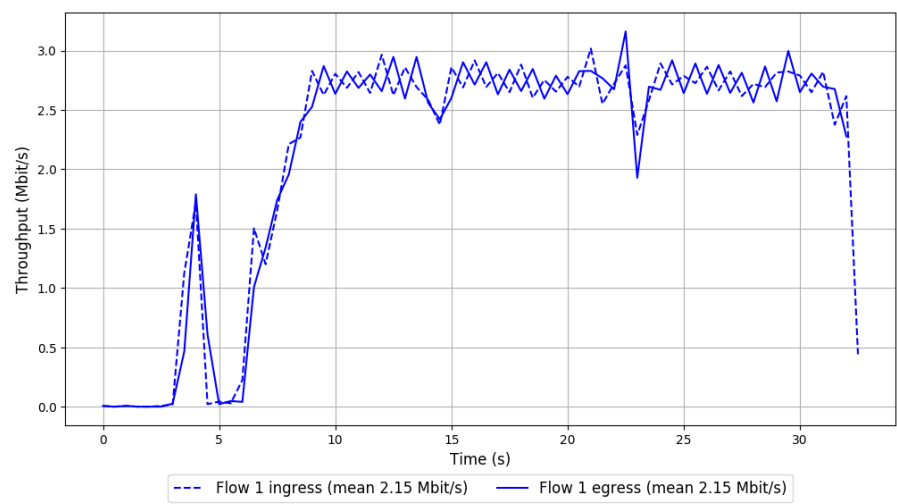
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 131.848 ms

Loss rate: 0.93%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-25 18:21:39

End at: 2018-01-25 18:22:09

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 135.271 ms

Loss rate: 0.80%

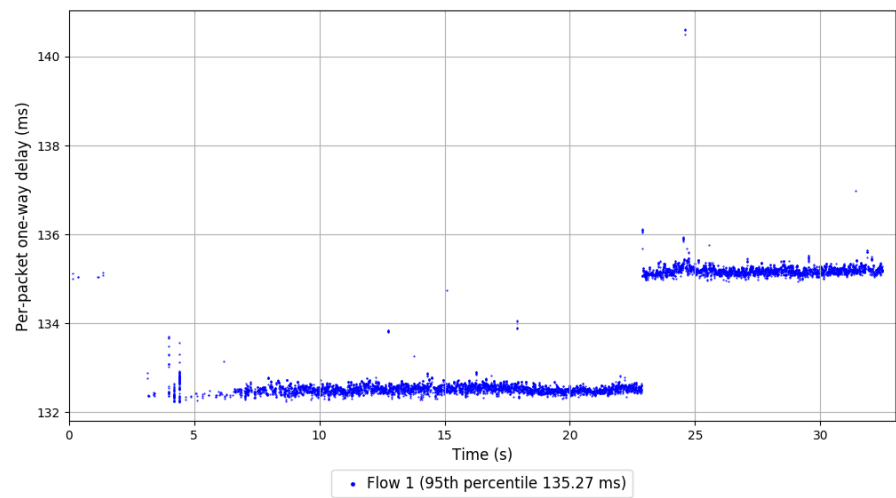
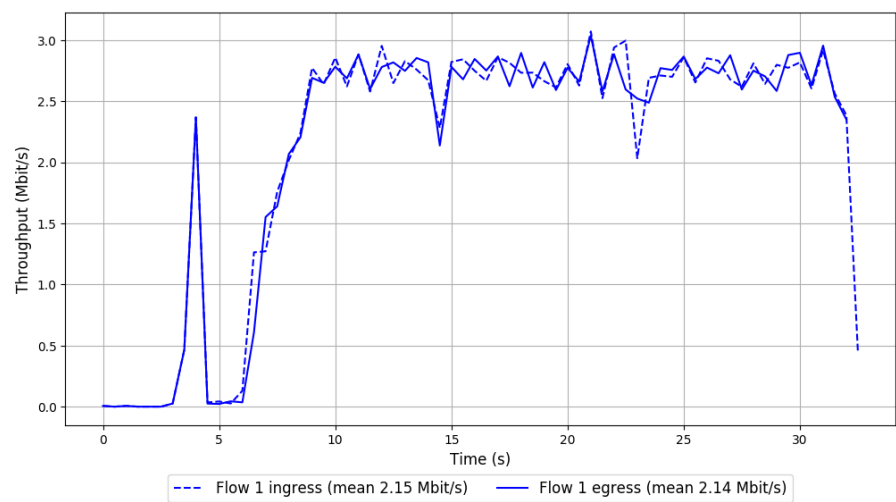
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 135.271 ms

Loss rate: 0.80%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

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

End at: 2018-01-25 16:26:28

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 150.063 ms

Loss rate: 3.14%

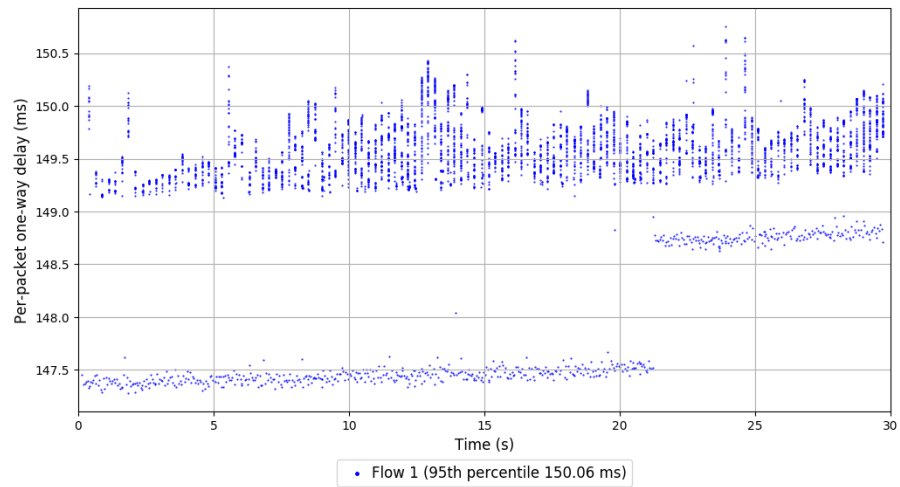
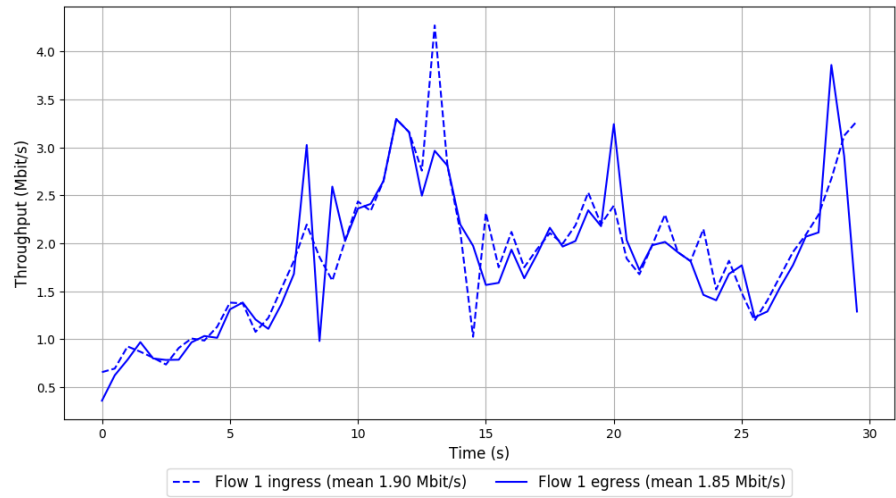
-- Flow 1:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 150.063 ms

Loss rate: 3.14%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-25 16:38:50

End at: 2018-01-25 16:39:20

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 149.708 ms

Loss rate: 2.32%

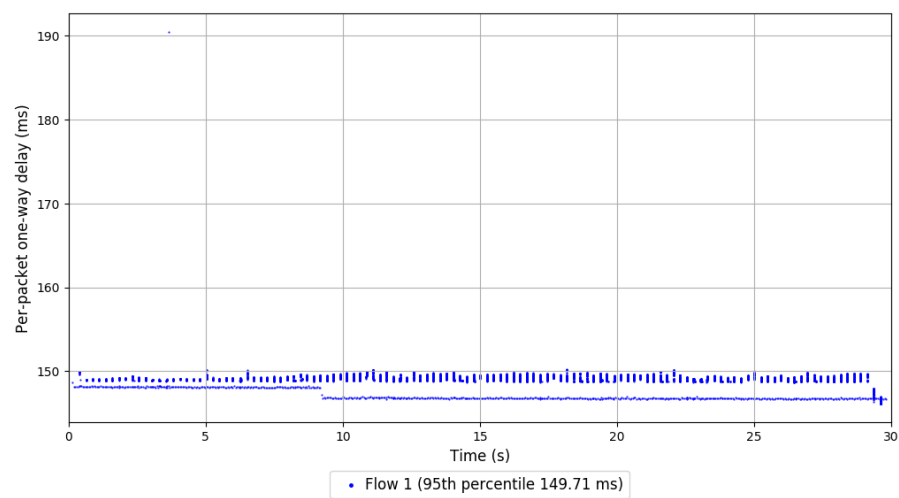
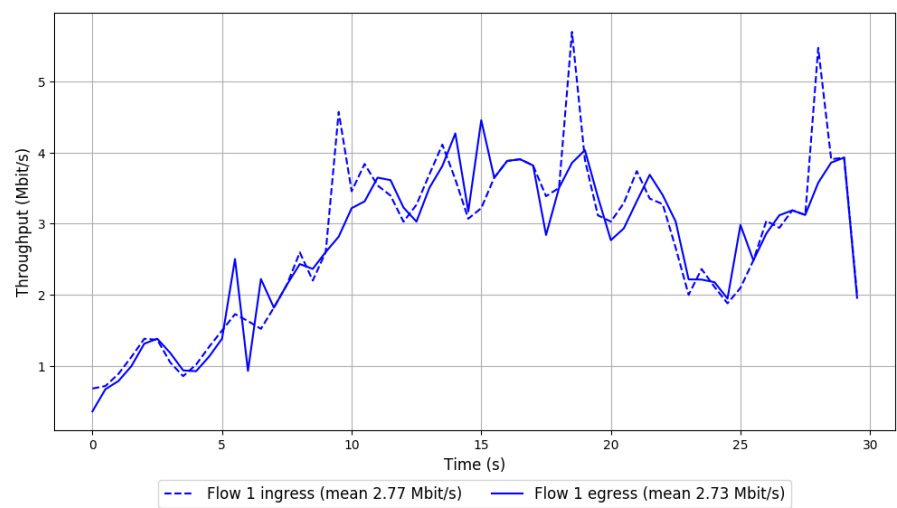
-- Flow 1:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 149.708 ms

Loss rate: 2.32%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-25 16:51:42

End at: 2018-01-25 16:52:12

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 166.322 ms

Loss rate: 0.98%

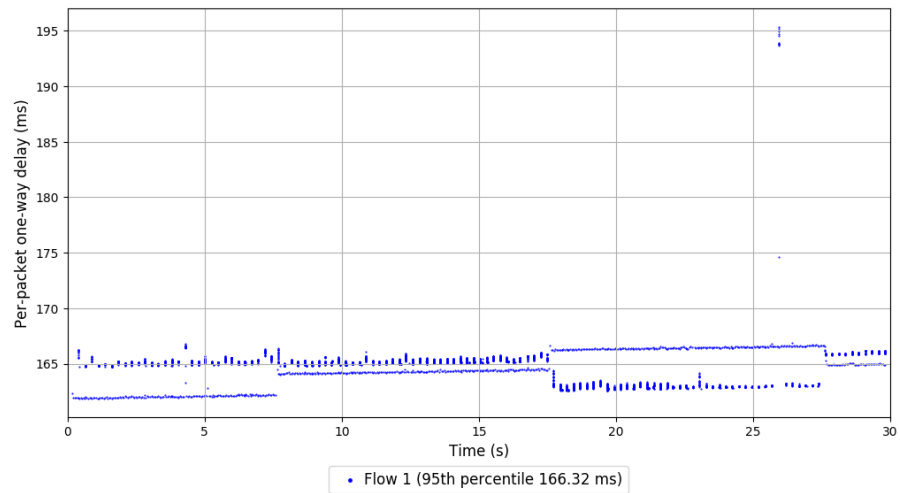
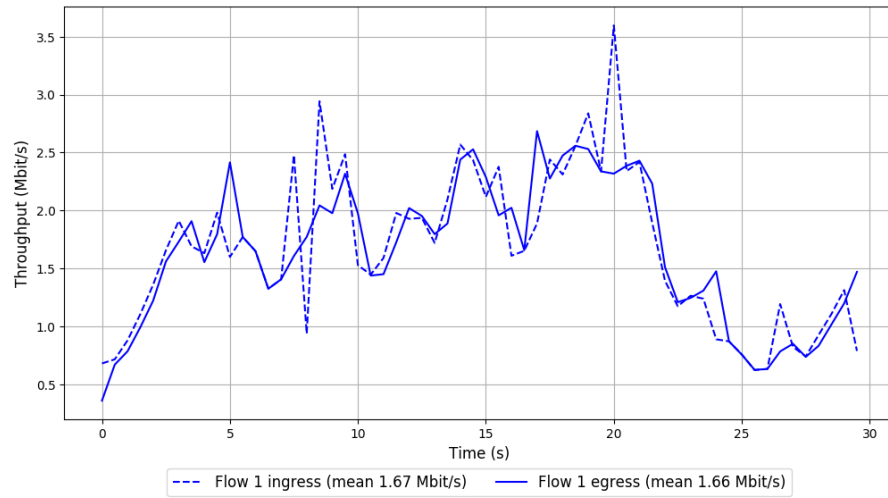
-- Flow 1:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 166.322 ms

Loss rate: 0.98%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-25 17:04:29

End at: 2018-01-25 17:04:59

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 154.504 ms

Loss rate: 1.33%

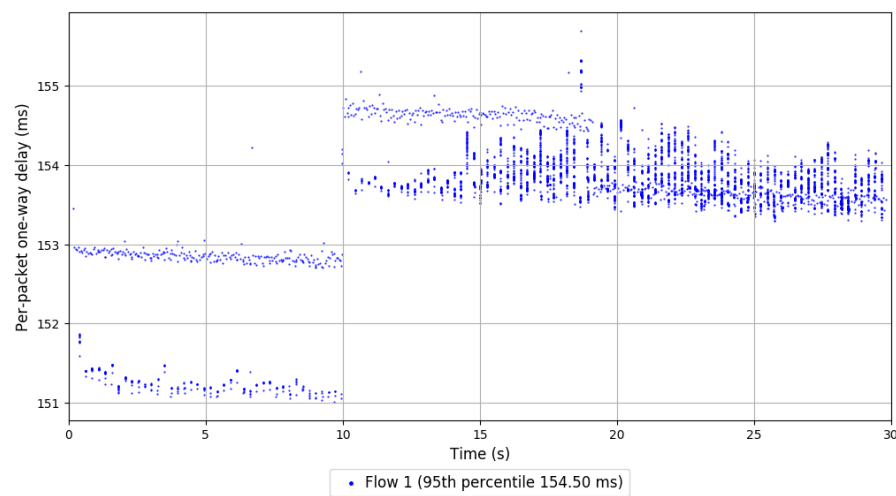
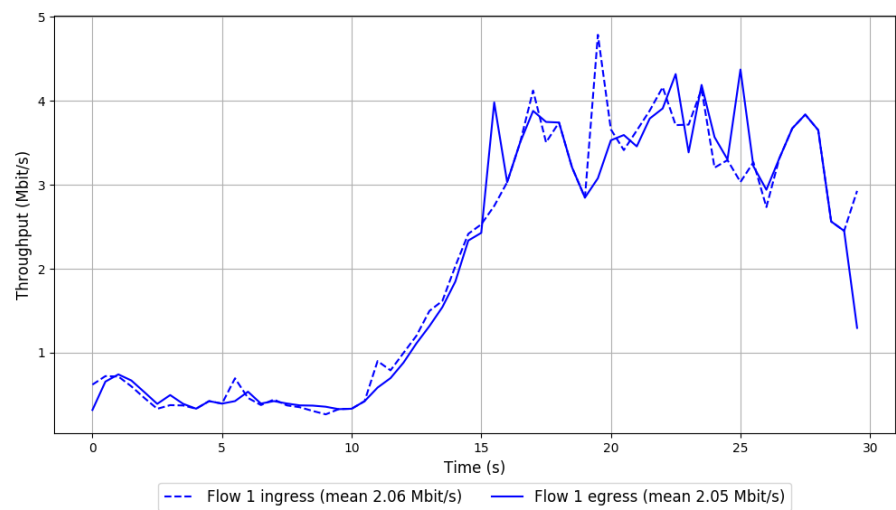
-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 154.504 ms

Loss rate: 1.33%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

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

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

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 146.321 ms

Loss rate: 1.95%

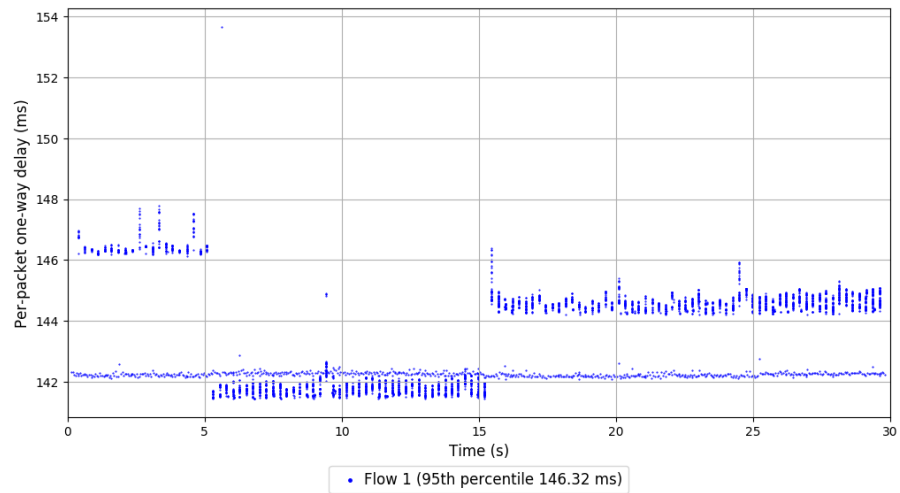
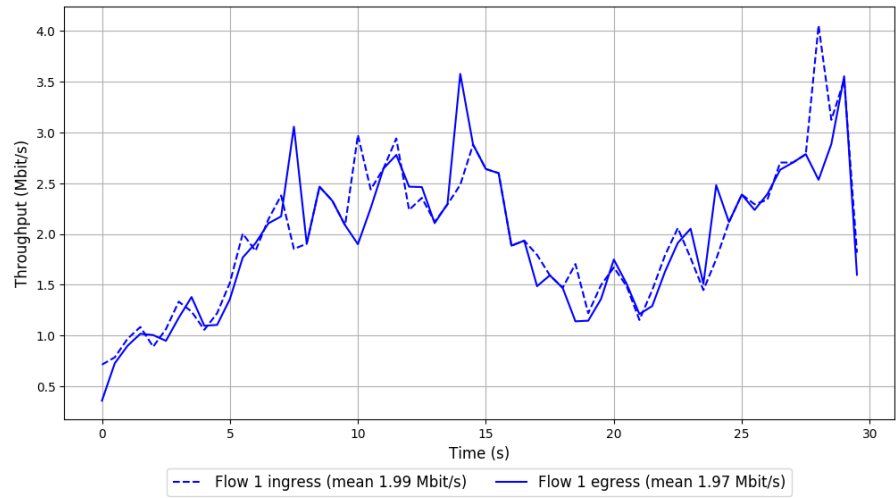
-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 146.321 ms

Loss rate: 1.95%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-25 17:30:06

End at: 2018-01-25 17:30:36

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 149.135 ms

Loss rate: 1.57%

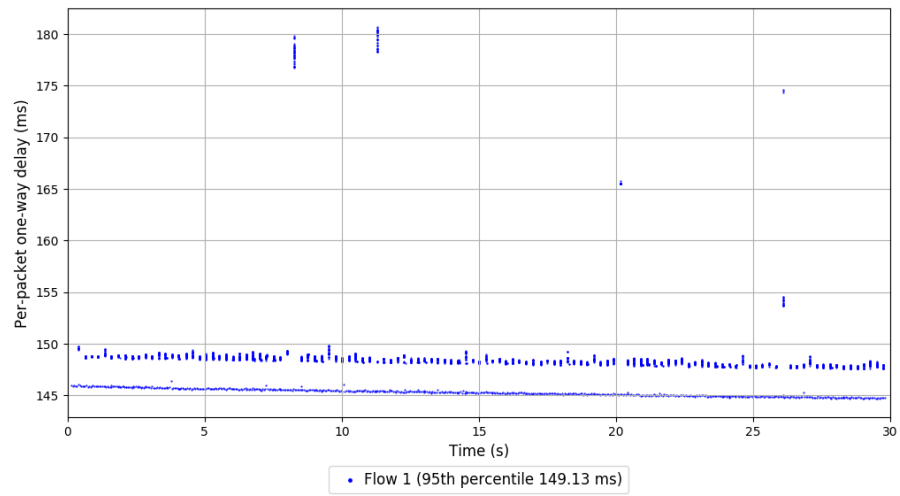
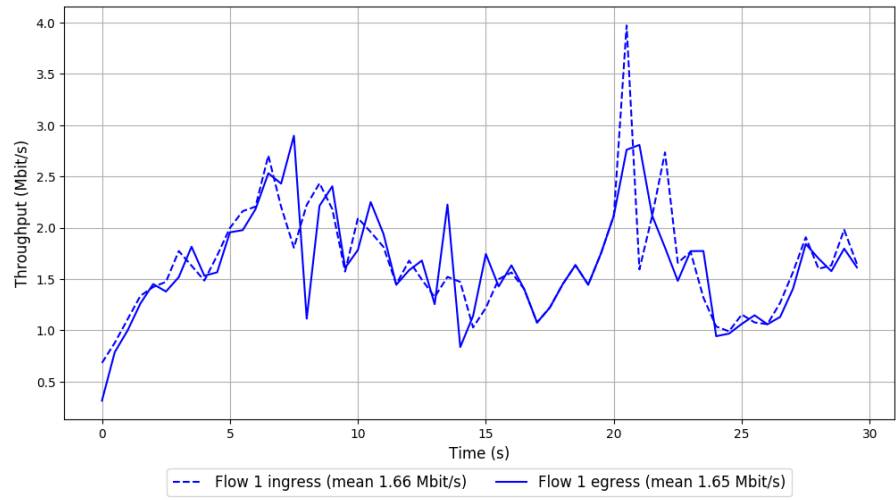
-- Flow 1:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 149.135 ms

Loss rate: 1.57%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

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

End at: 2018-01-25 17:43:06

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 134.831 ms

Loss rate: 1.68%

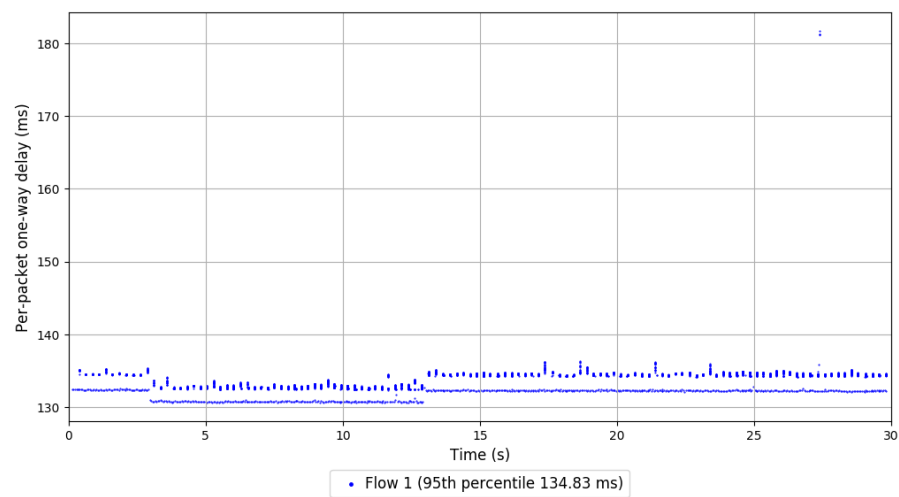
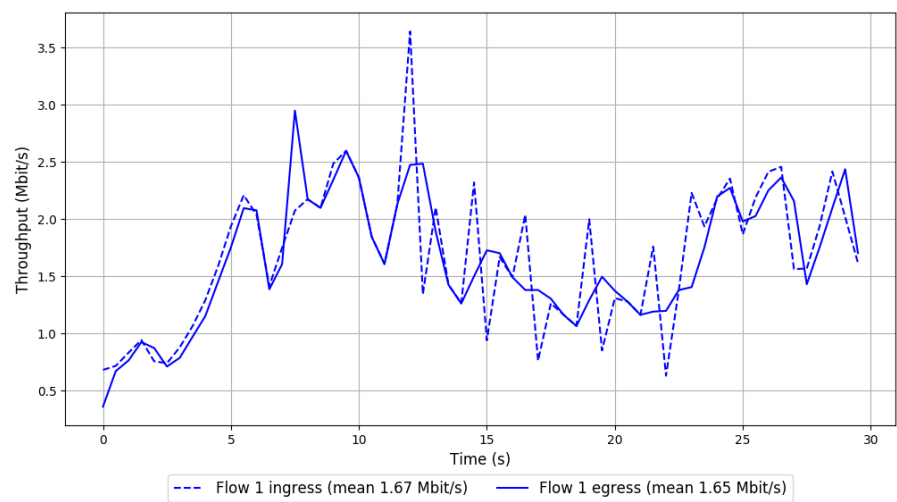
-- Flow 1:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 134.831 ms

Loss rate: 1.68%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-25 17:55:22

End at: 2018-01-25 17:55:52

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 135.968 ms

Loss rate: 2.13%

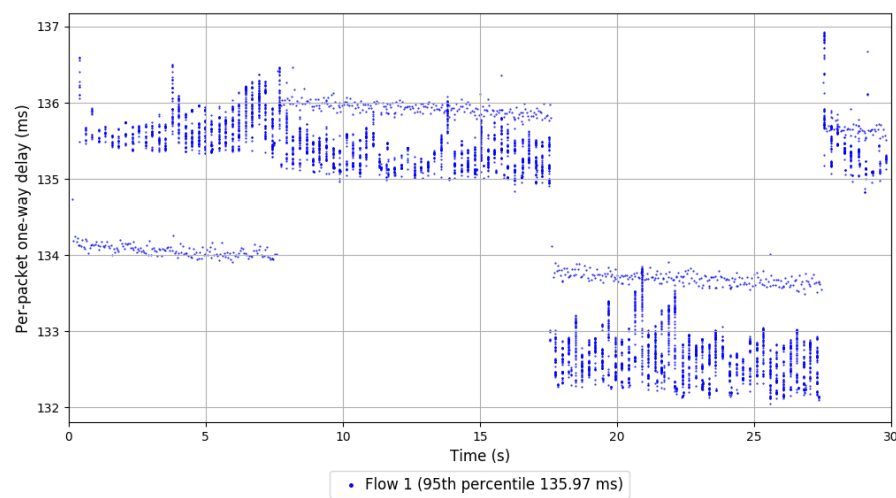
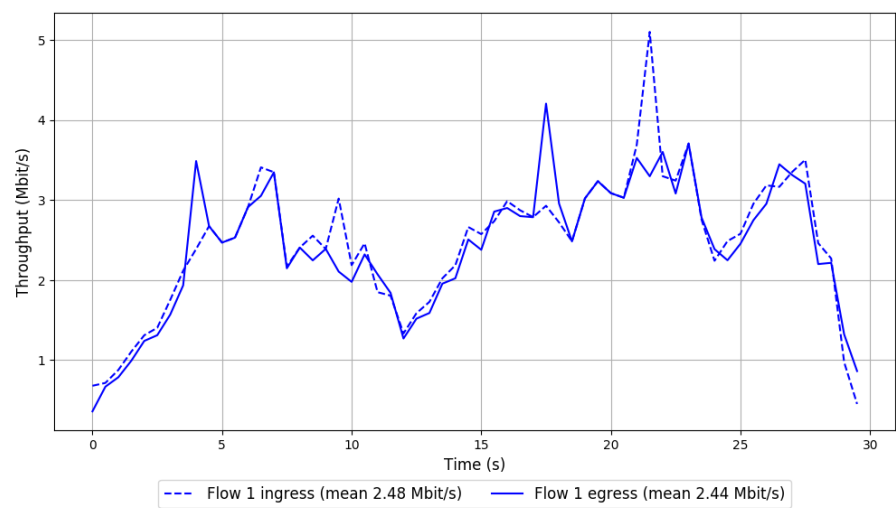
-- Flow 1:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 135.968 ms

Loss rate: 2.13%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

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

End at: 2018-01-25 18:08:31

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 132.423 ms

Loss rate: 2.52%

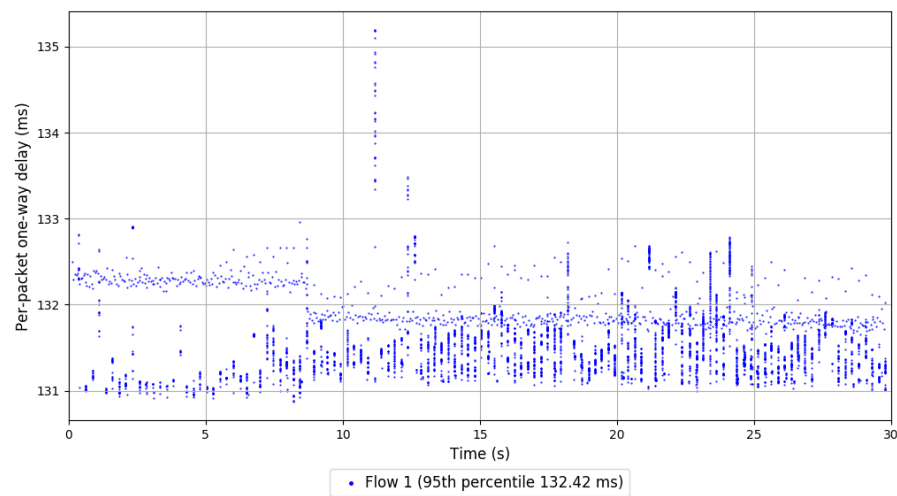
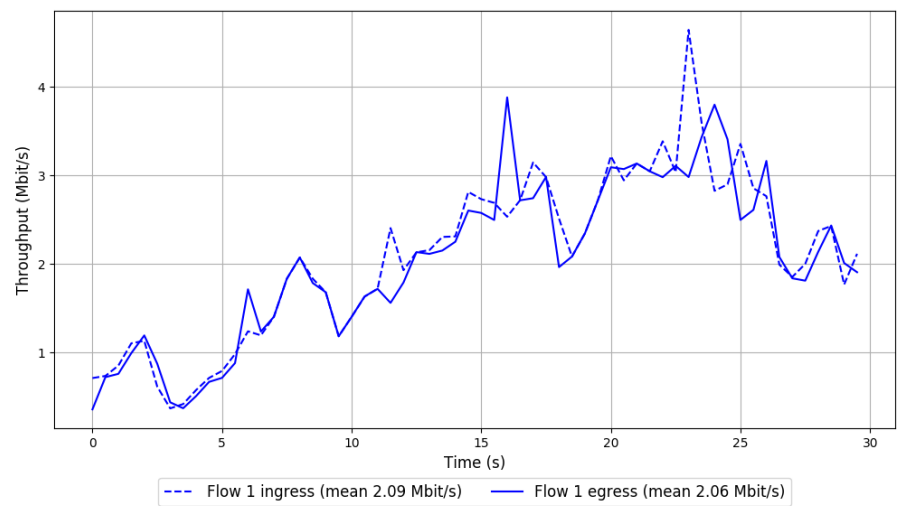
-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 132.423 ms

Loss rate: 2.52%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-25 18:20:58

End at: 2018-01-25 18:21:28

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 132.757 ms

Loss rate: 2.37%

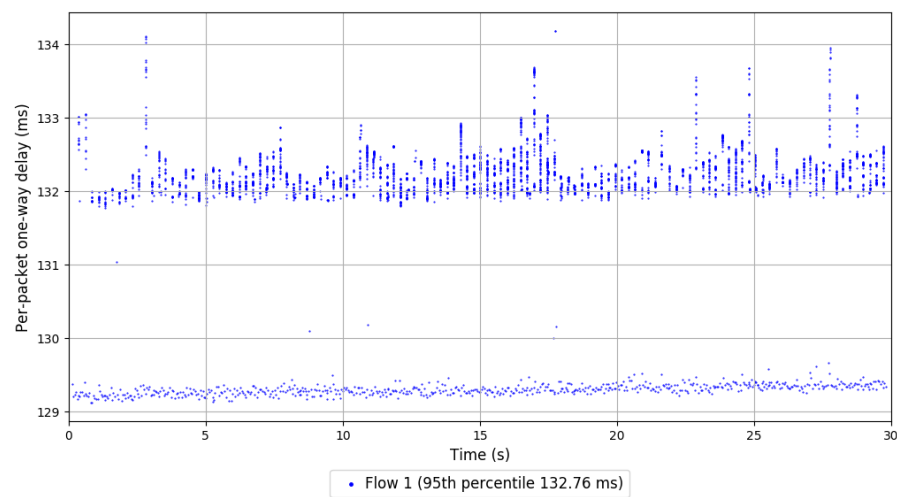
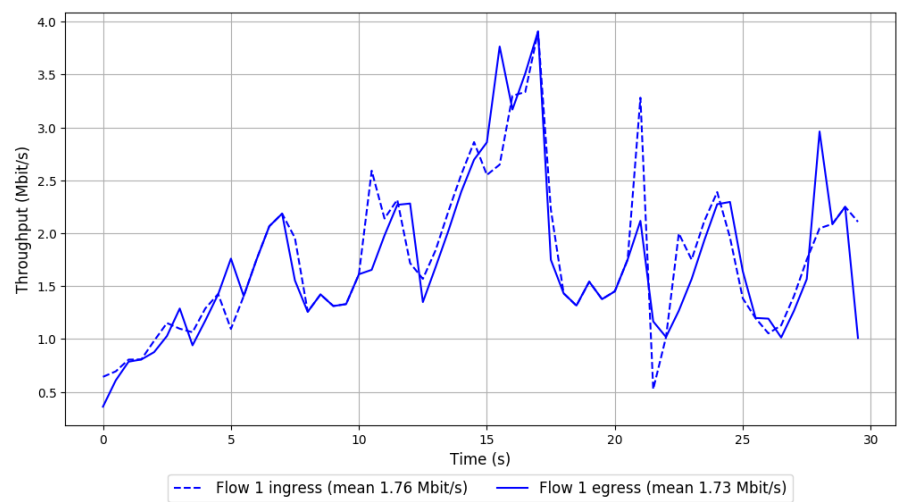
-- Flow 1:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 132.757 ms

Loss rate: 2.37%

Run 10: Report of Sprout — Data Link

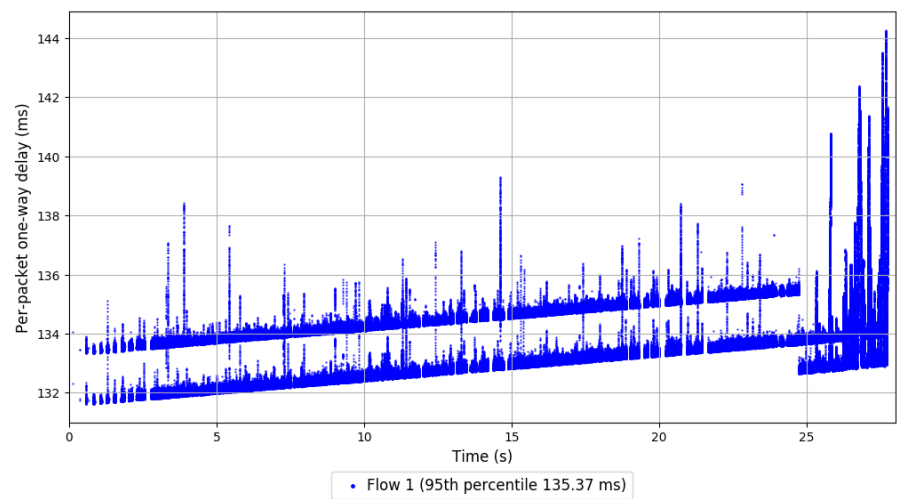
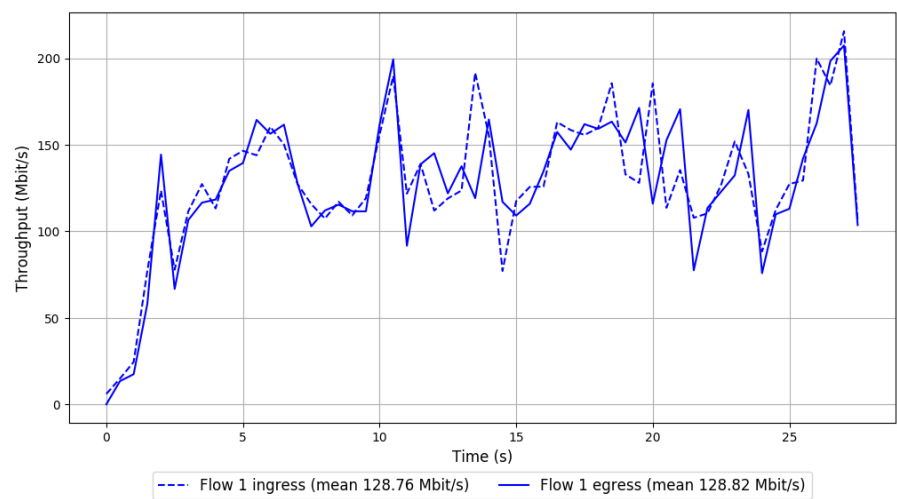


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-25 16:17:33
End at: 2018-01-25 16:18:03

# Below is generated by plot.py at 2018-01-25 20:54:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 128.82 Mbit/s
95th percentile per-packet one-way delay: 135.372 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 128.82 Mbit/s
95th percentile per-packet one-way delay: 135.372 ms
Loss rate: 0.90%
```


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

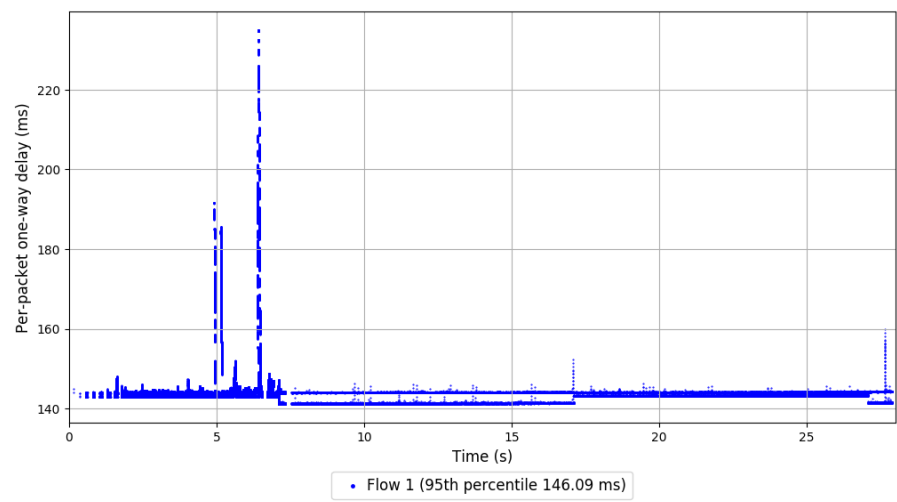
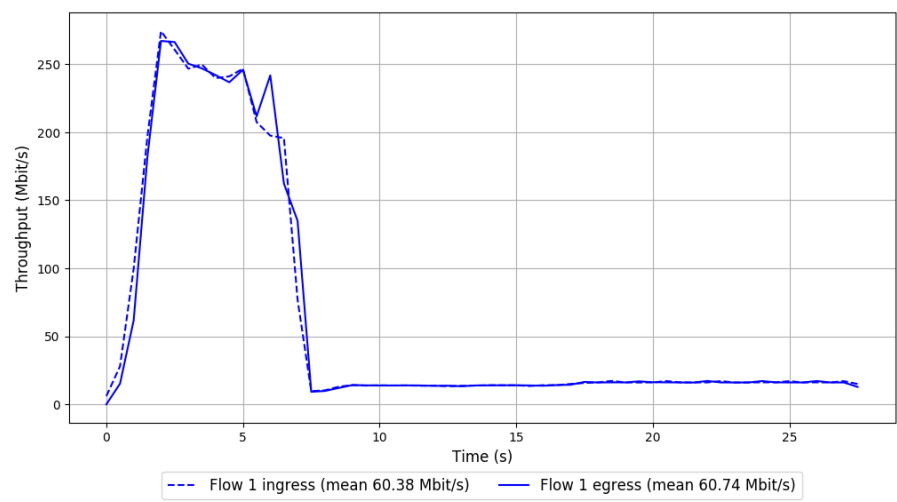


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-25 16:30:30
End at: 2018-01-25 16:31:00

# Below is generated by plot.py at 2018-01-25 20:54:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.74 Mbit/s
95th percentile per-packet one-way delay: 146.090 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 60.74 Mbit/s
95th percentile per-packet one-way delay: 146.090 ms
Loss rate: 0.21%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-01-25 16:43:19

End at: 2018-01-25 16:43:49

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.90 Mbit/s

95th percentile per-packet one-way delay: 149.867 ms

Loss rate: 0.27%

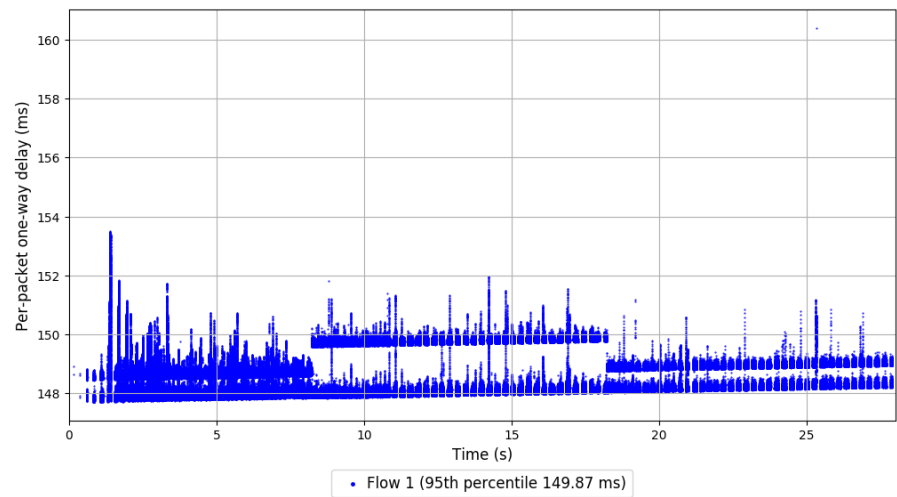
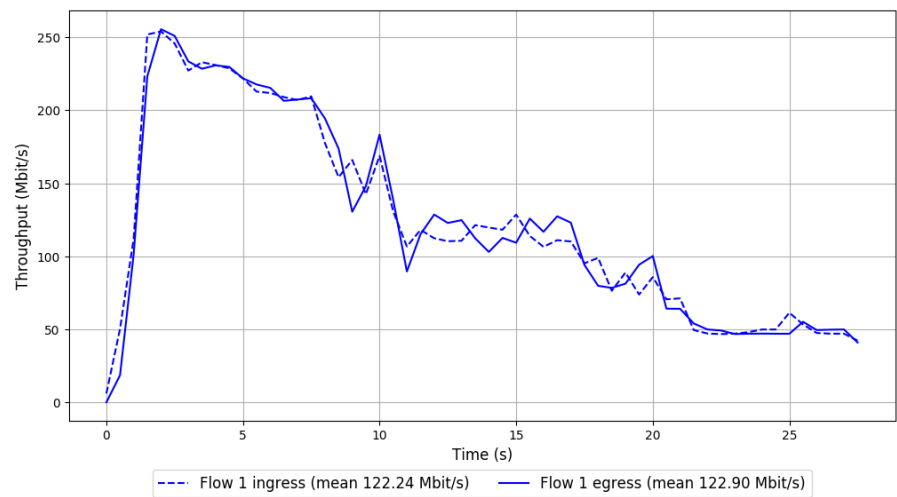
-- Flow 1:

Average throughput: 122.90 Mbit/s

95th percentile per-packet one-way delay: 149.867 ms

Loss rate: 0.27%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-25 16:56:12

End at: 2018-01-25 16:56:42

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.31 Mbit/s

95th percentile per-packet one-way delay: 170.467 ms

Loss rate: 0.16%

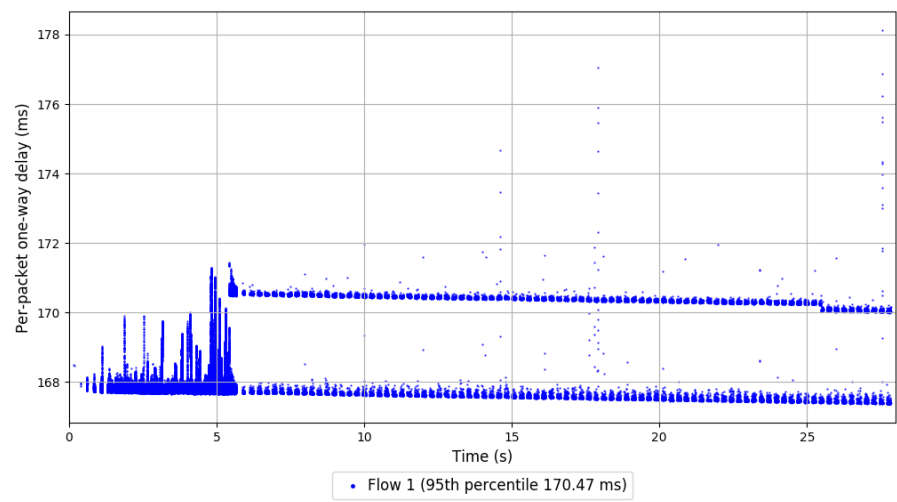
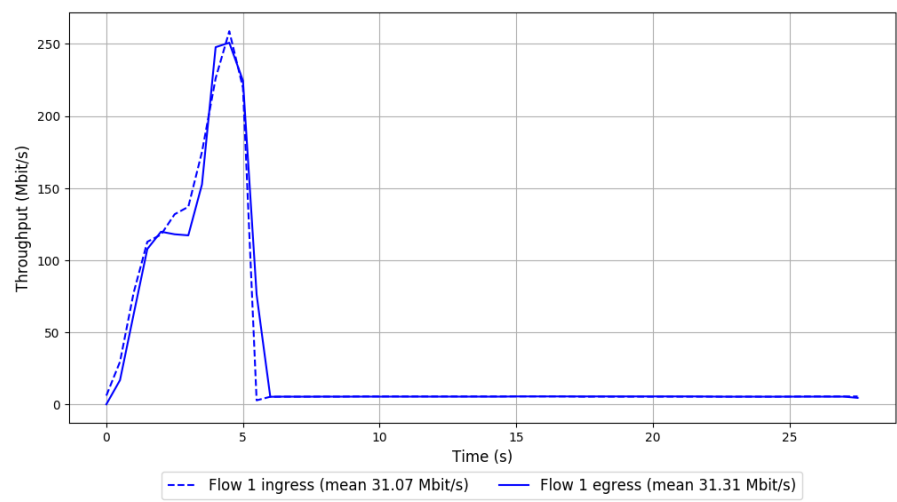
-- Flow 1:

Average throughput: 31.31 Mbit/s

95th percentile per-packet one-way delay: 170.467 ms

Loss rate: 0.16%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-25 17:08:59

End at: 2018-01-25 17:09:29

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.40 Mbit/s

95th percentile per-packet one-way delay: 152.592 ms

Loss rate: 0.83%

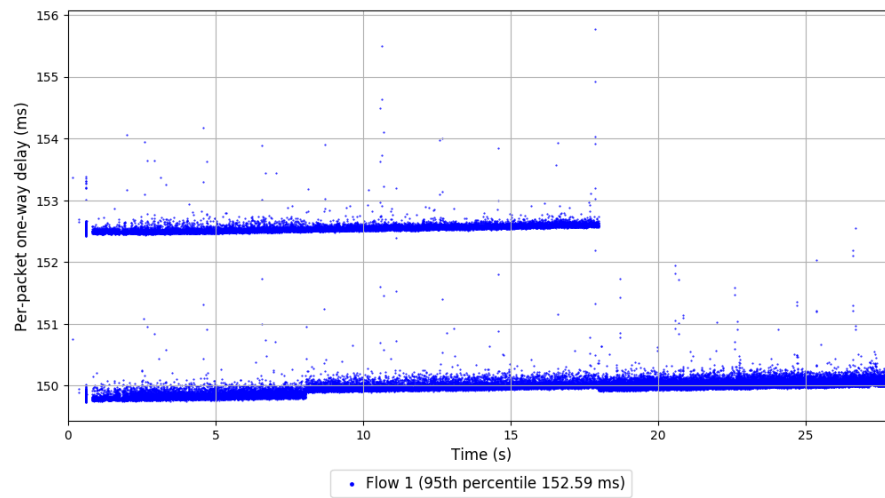
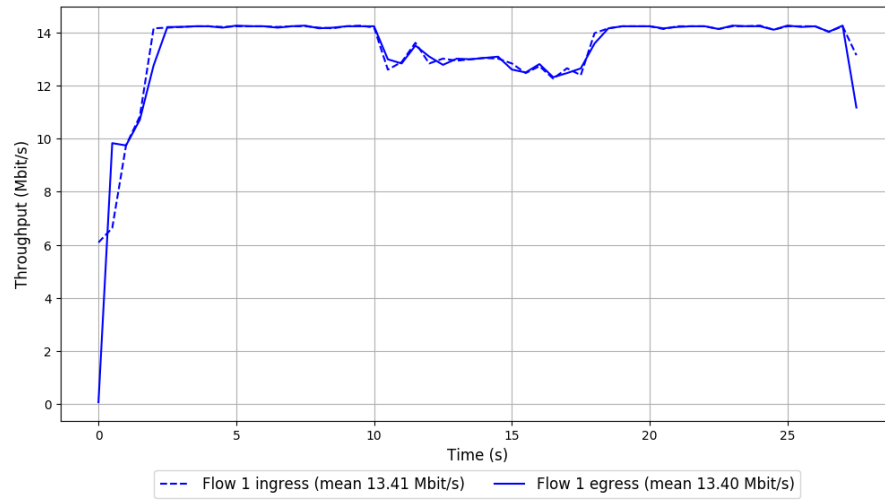
-- Flow 1:

Average throughput: 13.40 Mbit/s

95th percentile per-packet one-way delay: 152.592 ms

Loss rate: 0.83%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-25 17:21:45

End at: 2018-01-25 17:22:15

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.67 Mbit/s

95th percentile per-packet one-way delay: 147.937 ms

Loss rate: 0.84%

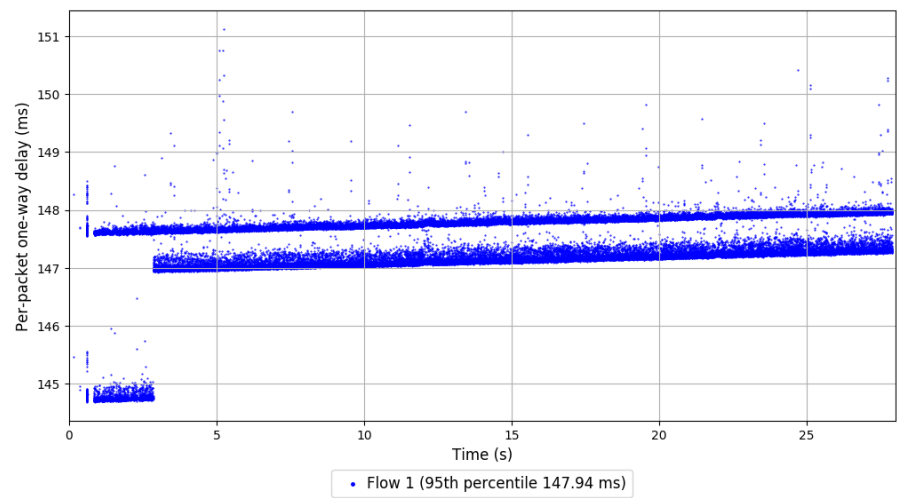
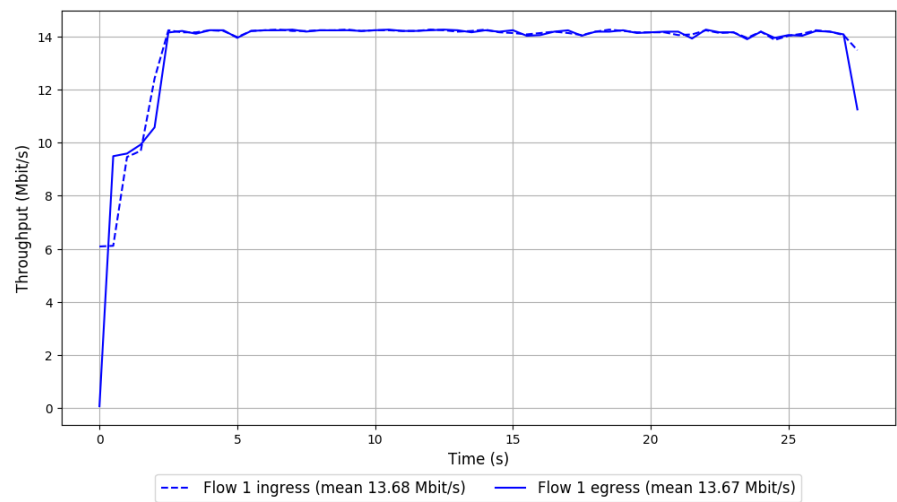
-- Flow 1:

Average throughput: 13.67 Mbit/s

95th percentile per-packet one-way delay: 147.937 ms

Loss rate: 0.84%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-25 17:34:37

End at: 2018-01-25 17:35:07

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.07 Mbit/s

95th percentile per-packet one-way delay: 141.596 ms

Loss rate: 0.59%

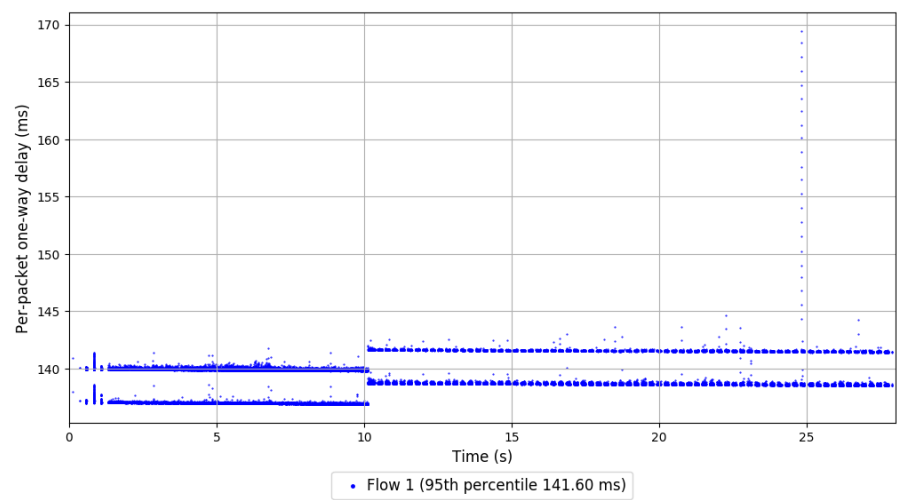
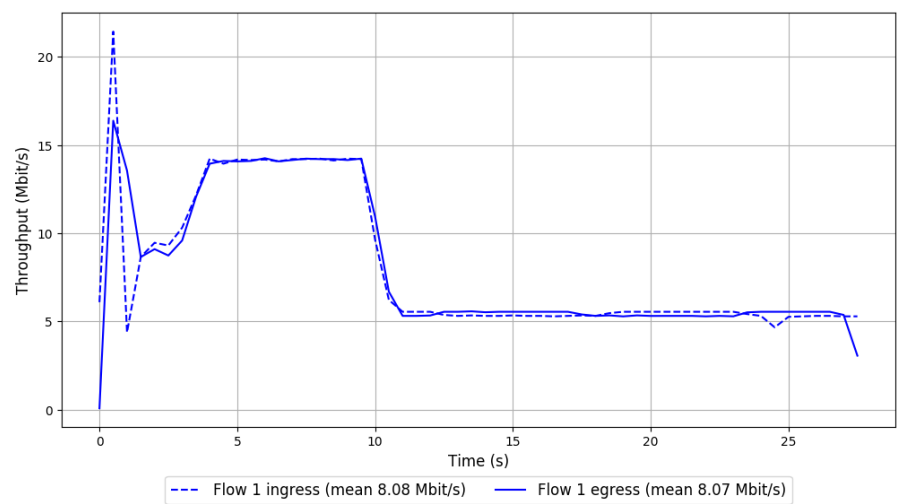
-- Flow 1:

Average throughput: 8.07 Mbit/s

95th percentile per-packet one-way delay: 141.596 ms

Loss rate: 0.59%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-25 17:47:08

End at: 2018-01-25 17:47:38

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.68 Mbit/s

95th percentile per-packet one-way delay: 132.225 ms

Loss rate: 0.74%

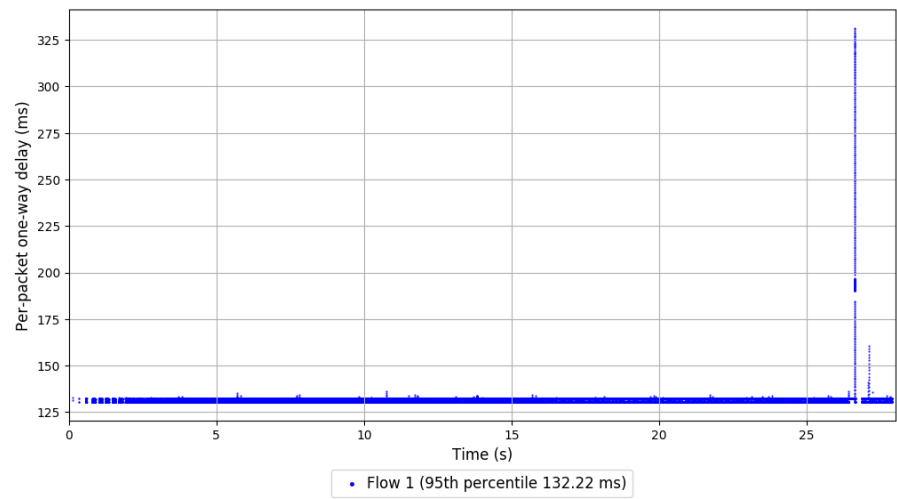
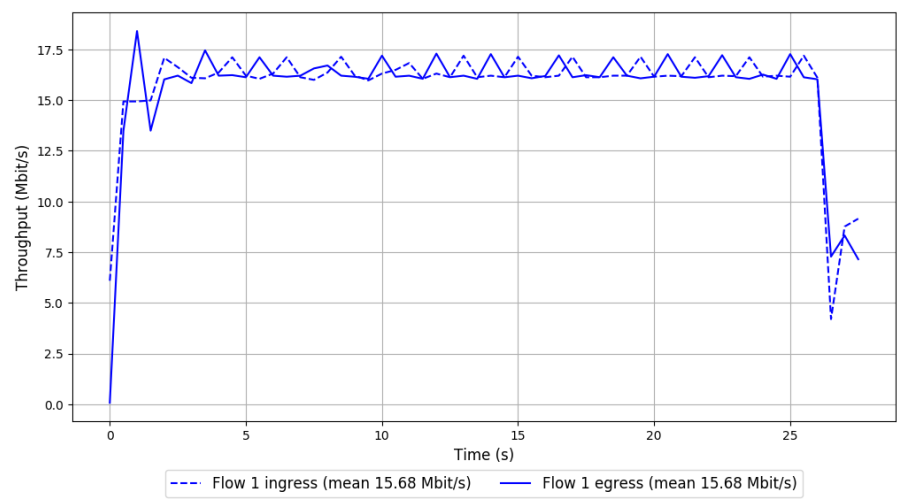
-- Flow 1:

Average throughput: 15.68 Mbit/s

95th percentile per-packet one-way delay: 132.225 ms

Loss rate: 0.74%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-25 17:59:52

End at: 2018-01-25 18:00:22

Below is generated by plot.py at 2018-01-25 20:54:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 126.96 Mbit/s

95th percentile per-packet one-way delay: 149.540 ms

Loss rate: 0.90%

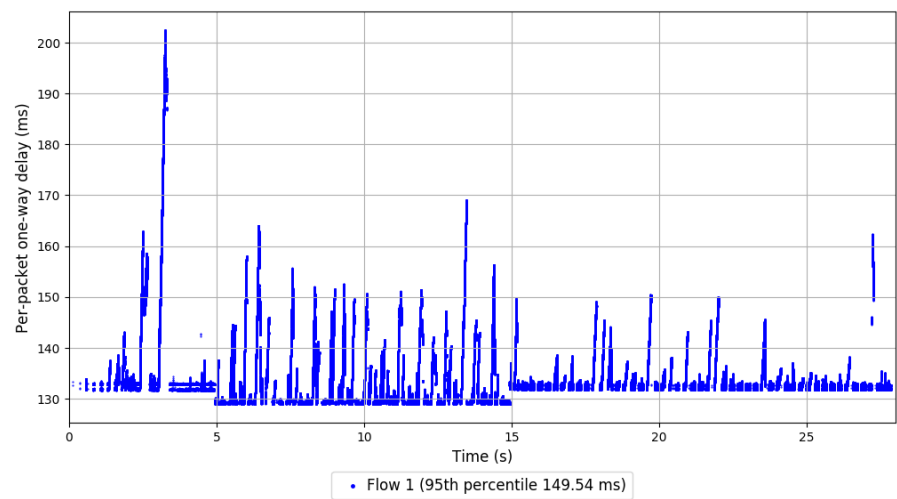
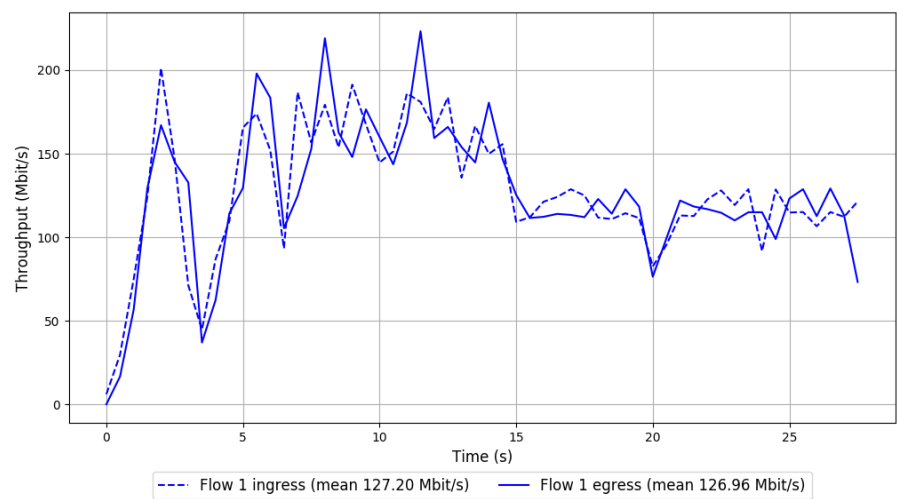
-- Flow 1:

Average throughput: 126.96 Mbit/s

95th percentile per-packet one-way delay: 149.540 ms

Loss rate: 0.90%

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

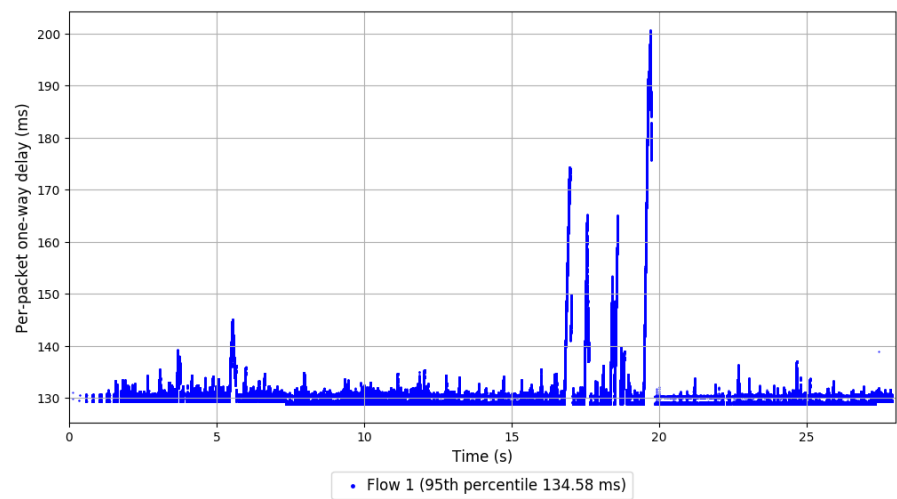
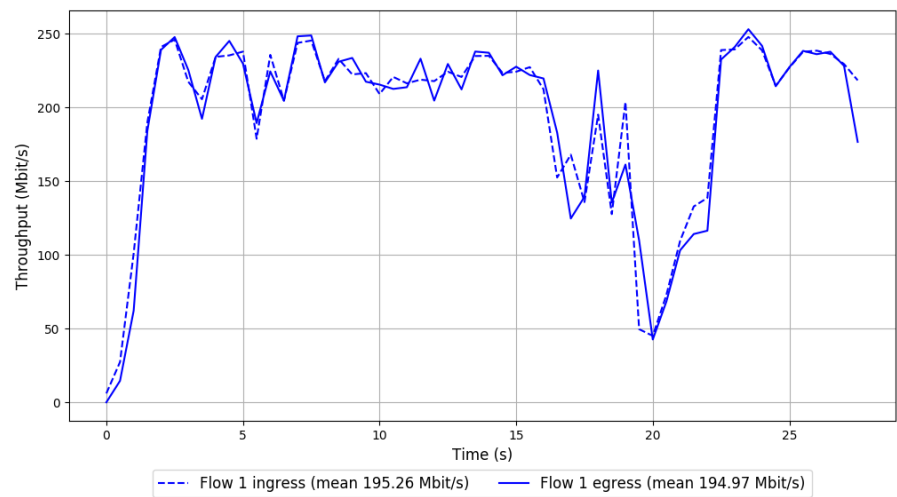


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-25 18:12:30
End at: 2018-01-25 18:13:00

# Below is generated by plot.py at 2018-01-25 20:56:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 194.97 Mbit/s
95th percentile per-packet one-way delay: 134.583 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 194.97 Mbit/s
95th percentile per-packet one-way delay: 134.583 ms
Loss rate: 0.94%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-25 16:24:12

End at: 2018-01-25 16:24:42

Below is generated by plot.py at 2018-01-25 20:56:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.01 Mbit/s

95th percentile per-packet one-way delay: 152.683 ms

Loss rate: 0.42%

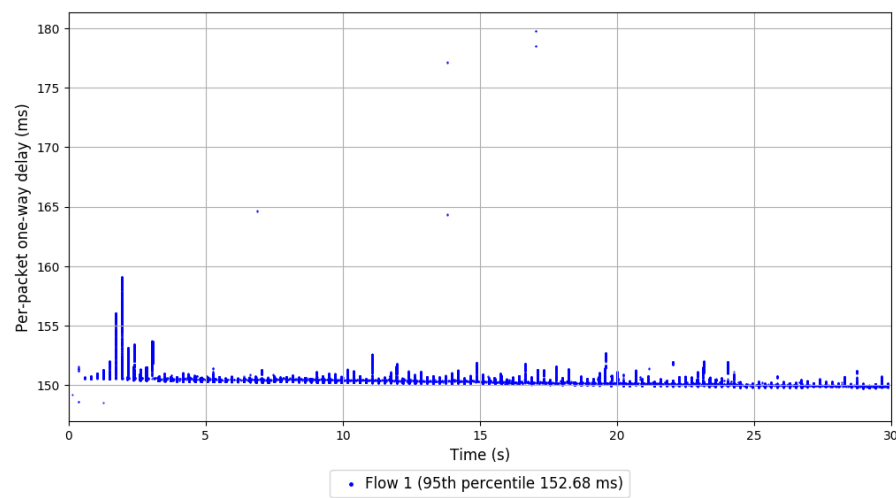
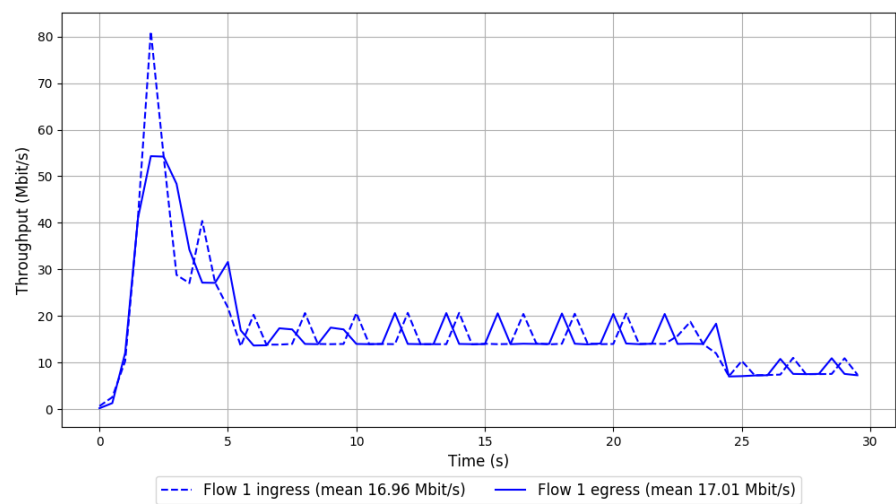
-- Flow 1:

Average throughput: 17.01 Mbit/s

95th percentile per-packet one-way delay: 152.683 ms

Loss rate: 0.42%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-25 16:37:05

End at: 2018-01-25 16:37:35

Below is generated by plot.py at 2018-01-25 20:56:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.90 Mbit/s

95th percentile per-packet one-way delay: 151.609 ms

Loss rate: 0.75%

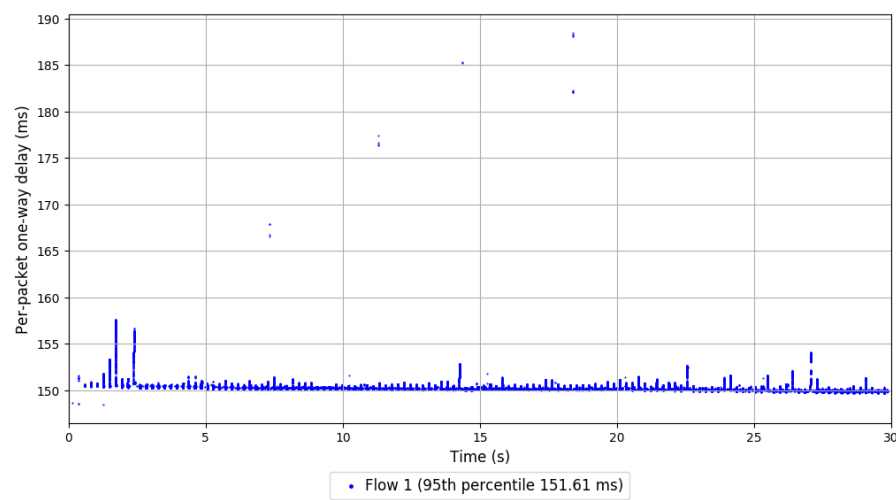
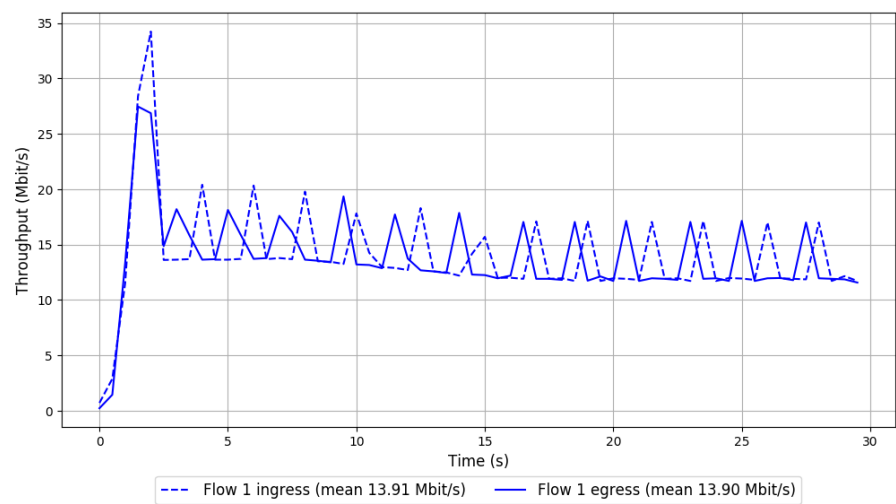
-- Flow 1:

Average throughput: 13.90 Mbit/s

95th percentile per-packet one-way delay: 151.609 ms

Loss rate: 0.75%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-25 16:49:57

End at: 2018-01-25 16:50:27

Below is generated by plot.py at 2018-01-25 20:56:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.81 Mbit/s

95th percentile per-packet one-way delay: 169.906 ms

Loss rate: 7.84%

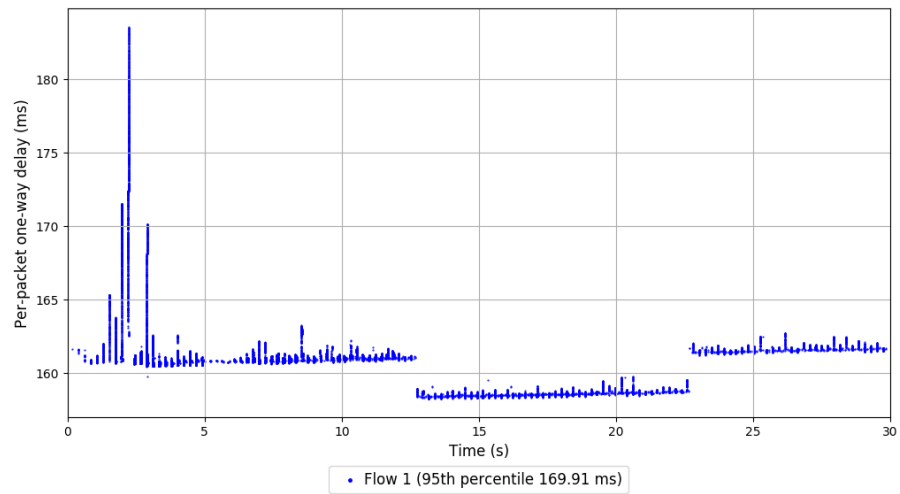
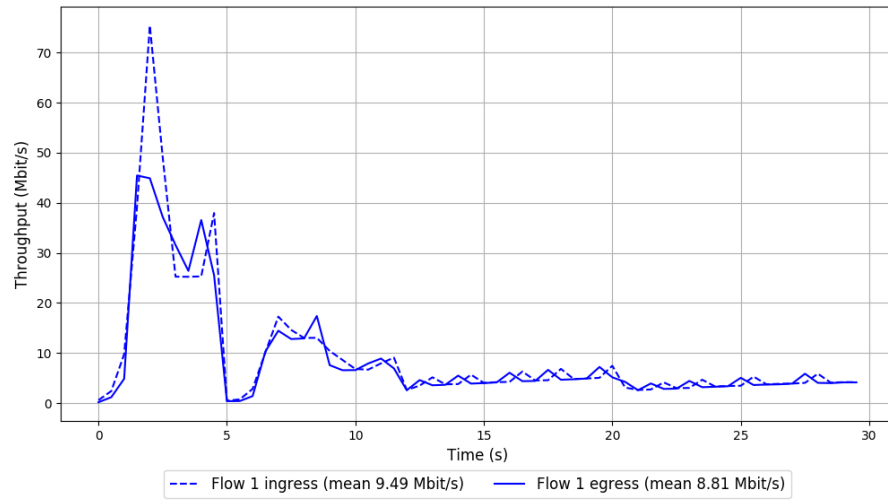
-- Flow 1:

Average throughput: 8.81 Mbit/s

95th percentile per-packet one-way delay: 169.906 ms

Loss rate: 7.84%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-25 17:02:41

End at: 2018-01-25 17:03:11

Below is generated by plot.py at 2018-01-25 20:56:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.52 Mbit/s

95th percentile per-packet one-way delay: 157.952 ms

Loss rate: 2.47%

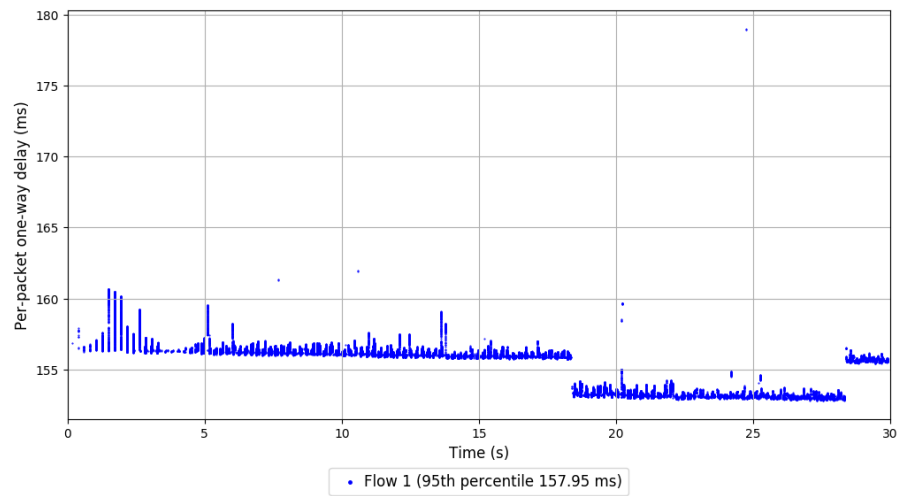
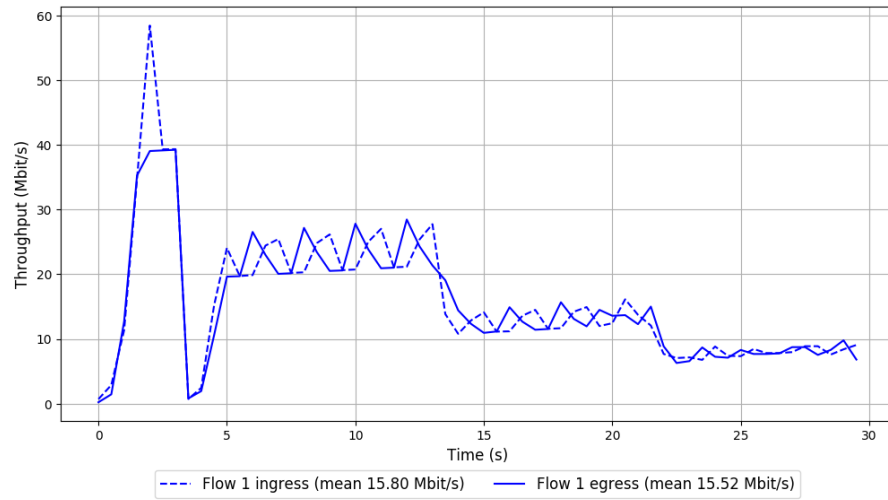
-- Flow 1:

Average throughput: 15.52 Mbit/s

95th percentile per-packet one-way delay: 157.952 ms

Loss rate: 2.47%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-25 17:15:29

End at: 2018-01-25 17:15:59

Below is generated by plot.py at 2018-01-25 20:56:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 147.219 ms

Loss rate: 0.83%

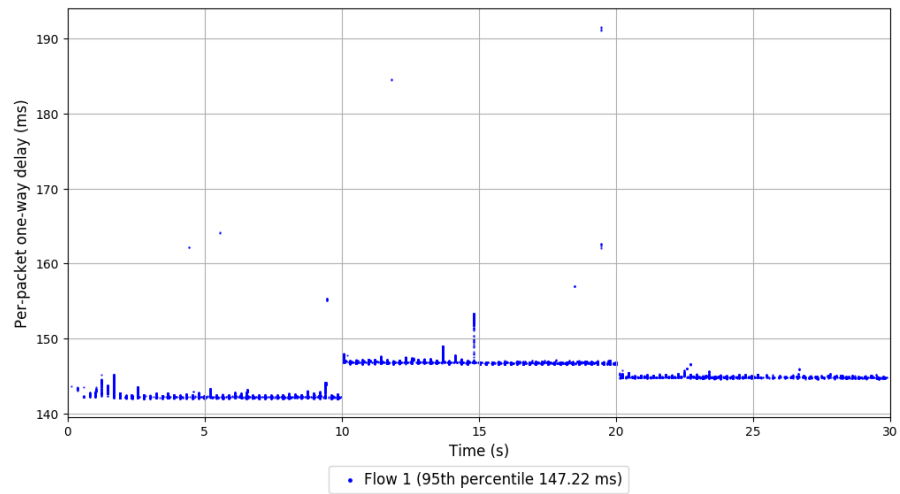
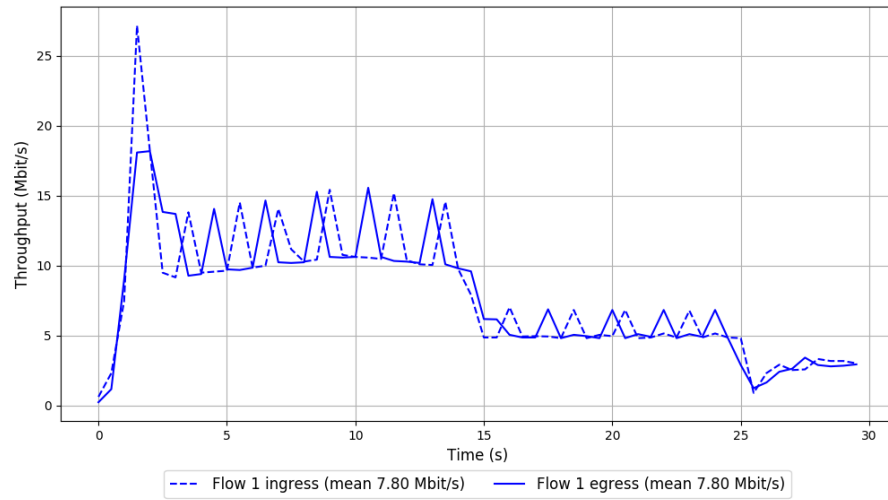
-- Flow 1:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 147.219 ms

Loss rate: 0.83%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-25 17:28:19

End at: 2018-01-25 17:28:49

Below is generated by plot.py at 2018-01-25 20:56:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.95 Mbit/s

95th percentile per-packet one-way delay: 155.498 ms

Loss rate: 0.74%

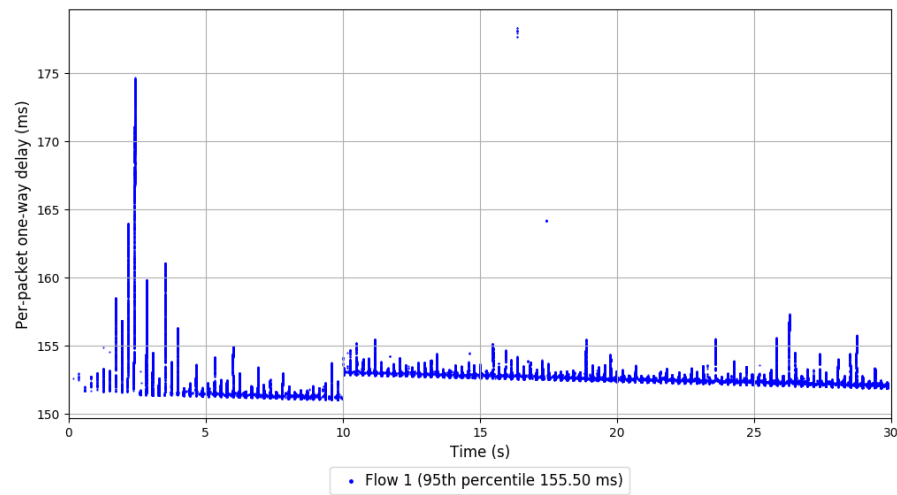
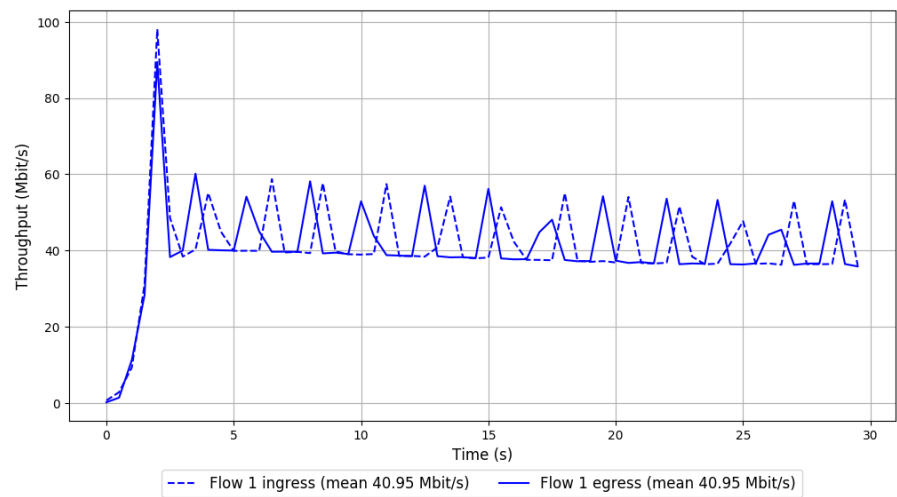
-- Flow 1:

Average throughput: 40.95 Mbit/s

95th percentile per-packet one-way delay: 155.498 ms

Loss rate: 0.74%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-25 17:41:04

End at: 2018-01-25 17:41:34

Below is generated by plot.py at 2018-01-25 20:56:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.67 Mbit/s

95th percentile per-packet one-way delay: 138.810 ms

Loss rate: 0.38%

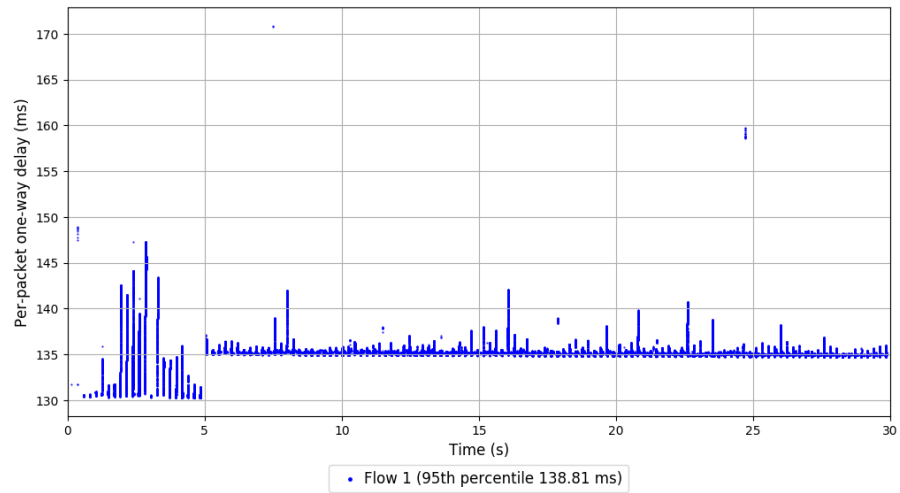
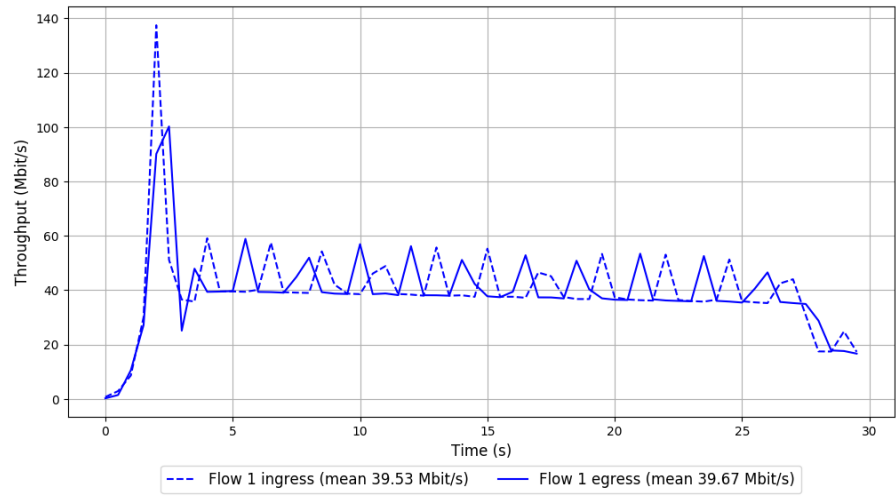
-- Flow 1:

Average throughput: 39.67 Mbit/s

95th percentile per-packet one-way delay: 138.810 ms

Loss rate: 0.38%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-25 17:53:44

End at: 2018-01-25 17:54:14

Below is generated by plot.py at 2018-01-25 20:56:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.94 Mbit/s

95th percentile per-packet one-way delay: 137.826 ms

Loss rate: 1.00%

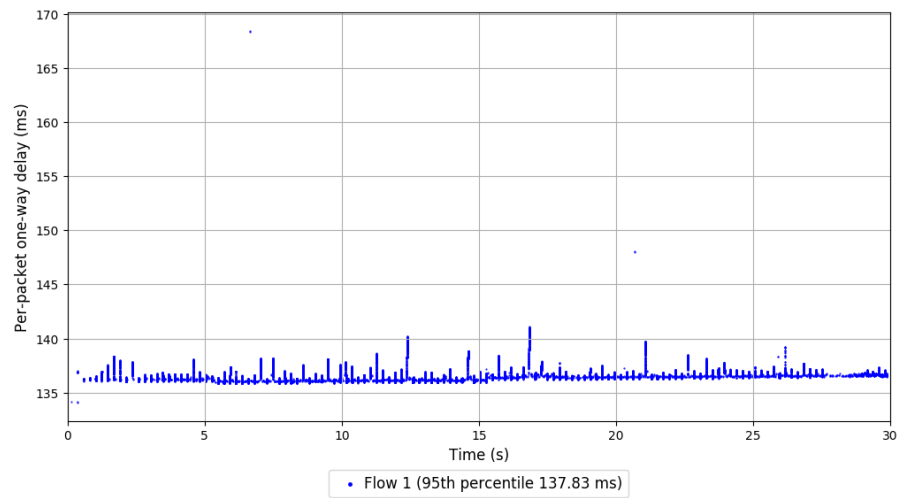
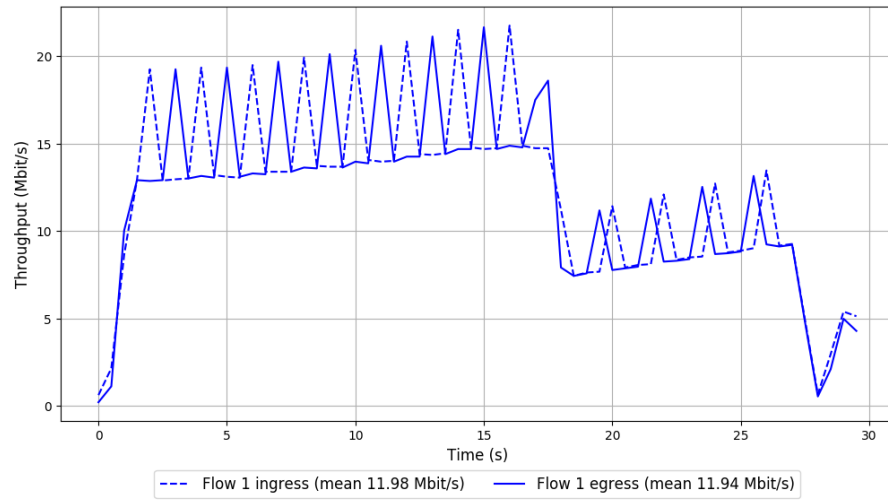
-- Flow 1:

Average throughput: 11.94 Mbit/s

95th percentile per-packet one-way delay: 137.826 ms

Loss rate: 1.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-25 18:06:22

End at: 2018-01-25 18:06:53

Below is generated by plot.py at 2018-01-25 20:56:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 133.212 ms

Loss rate: 1.19%

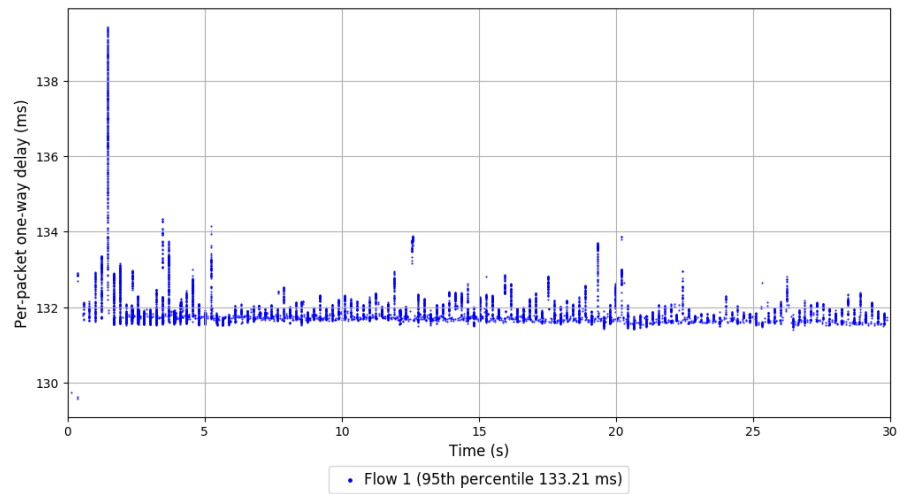
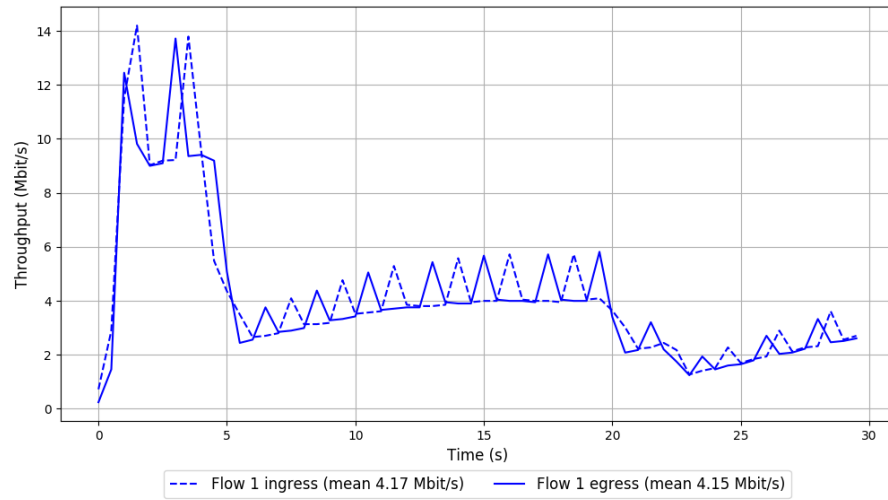
-- Flow 1:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 133.212 ms

Loss rate: 1.19%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-25 18:19:17

End at: 2018-01-25 18:19:47

Below is generated by plot.py at 2018-01-25 20:56:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.99 Mbit/s

95th percentile per-packet one-way delay: 133.006 ms

Loss rate: 0.93%

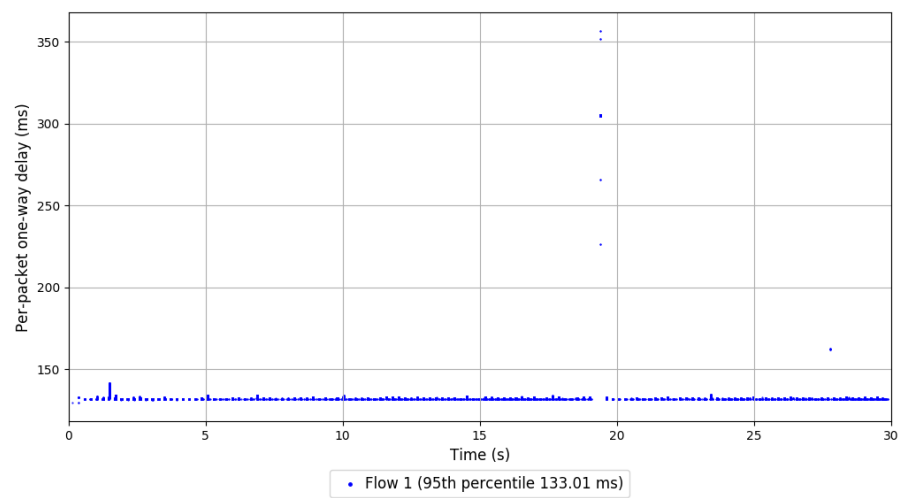
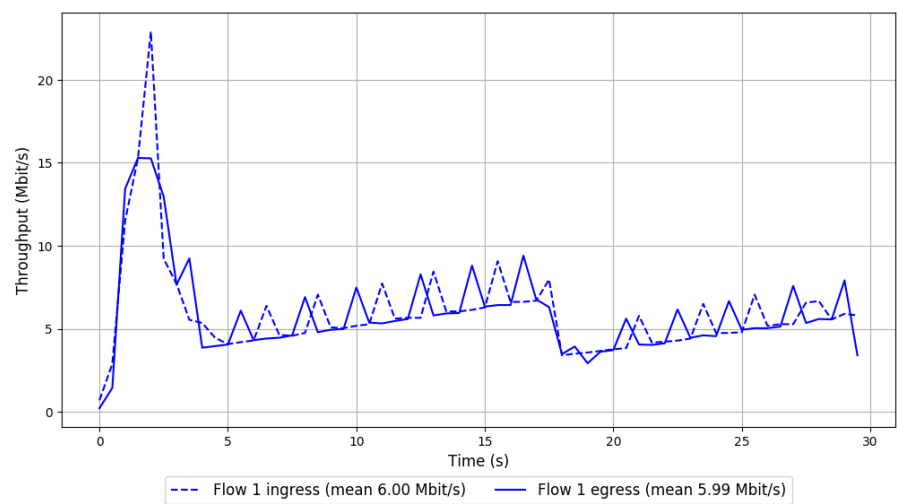
-- Flow 1:

Average throughput: 5.99 Mbit/s

95th percentile per-packet one-way delay: 133.006 ms

Loss rate: 0.93%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-25 16:19:56

End at: 2018-01-25 16:20:26

Below is generated by plot.py at 2018-01-25 20:56:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 134.39 Mbit/s

95th percentile per-packet one-way delay: 213.670 ms

Loss rate: 2.63%

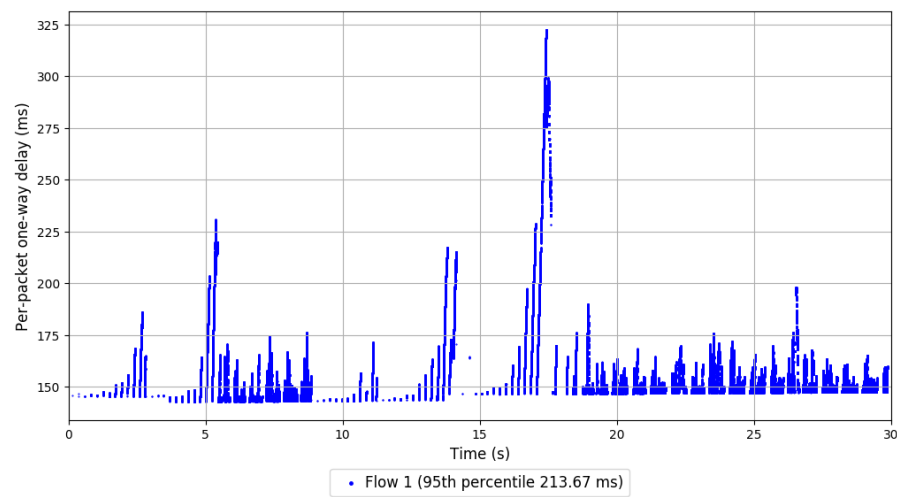
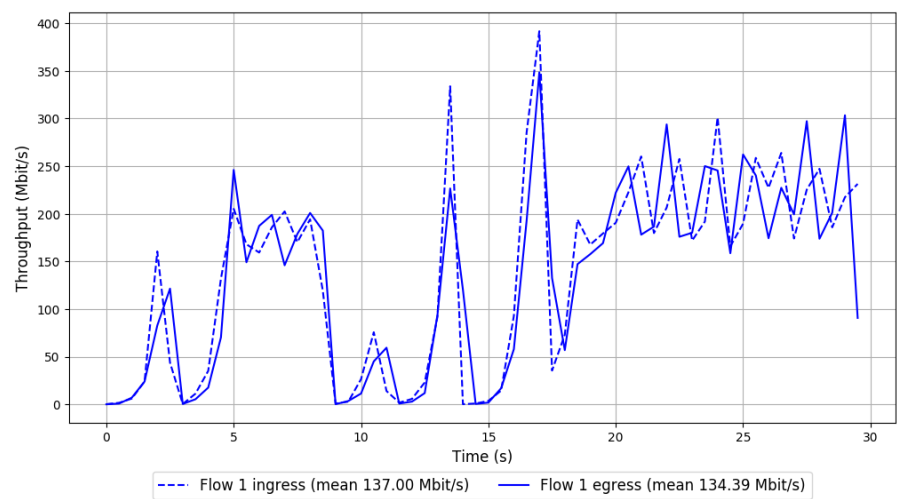
-- Flow 1:

Average throughput: 134.39 Mbit/s

95th percentile per-packet one-way delay: 213.670 ms

Loss rate: 2.63%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-25 16:32:46

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

Below is generated by plot.py at 2018-01-25 20:56:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 156.91 Mbit/s

95th percentile per-packet one-way delay: 169.055 ms

Loss rate: 0.78%

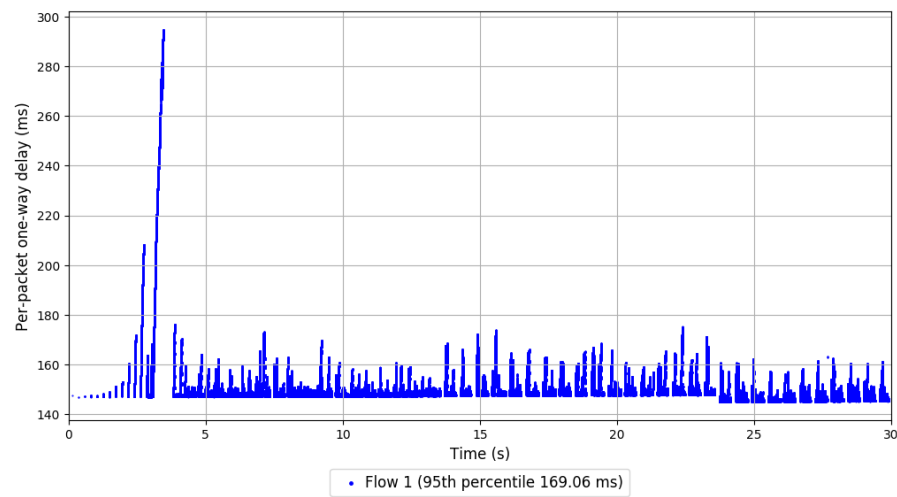
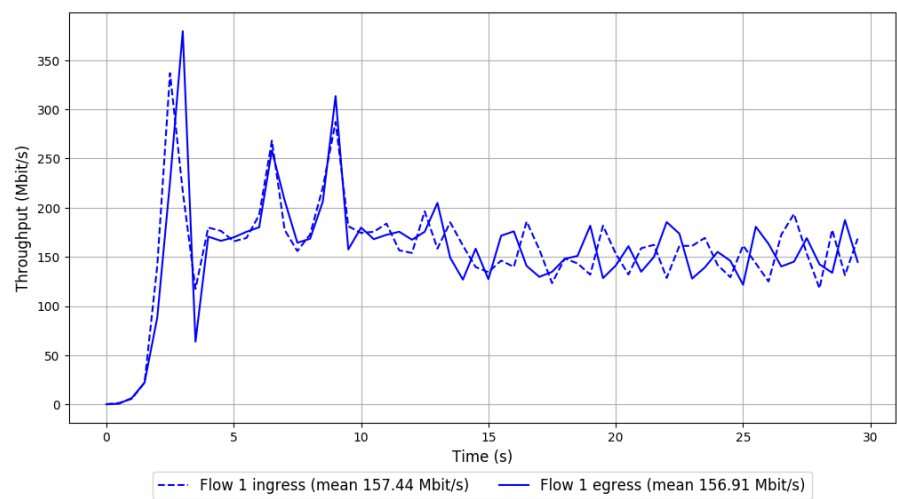
-- Flow 1:

Average throughput: 156.91 Mbit/s

95th percentile per-packet one-way delay: 169.055 ms

Loss rate: 0.78%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-25 16:45:43

End at: 2018-01-25 16:46:13

Below is generated by plot.py at 2018-01-25 20:56:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.57 Mbit/s

95th percentile per-packet one-way delay: 255.074 ms

Loss rate: 3.02%

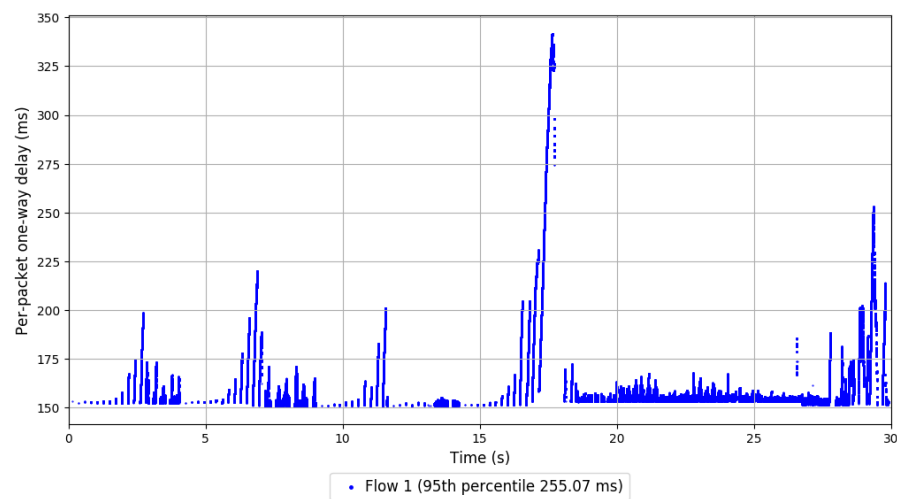
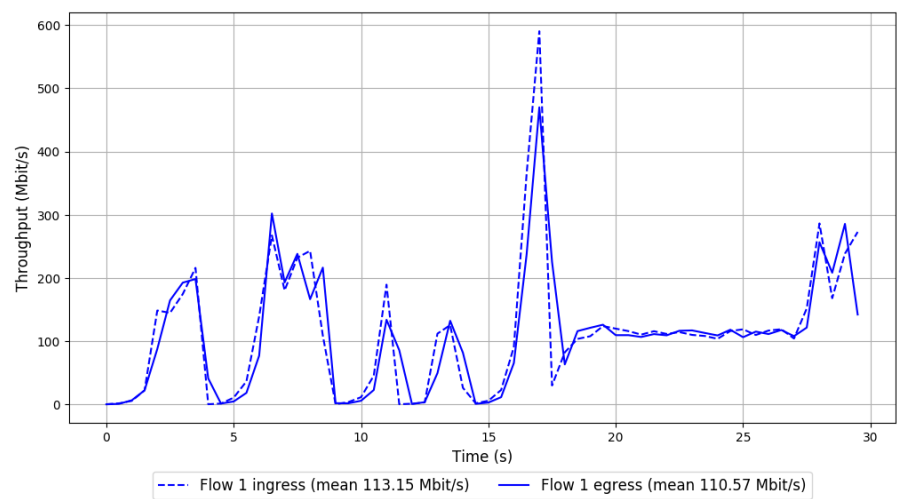
-- Flow 1:

Average throughput: 110.57 Mbit/s

95th percentile per-packet one-way delay: 255.074 ms

Loss rate: 3.02%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-25 16:58:26

End at: 2018-01-25 16:58:56

Below is generated by plot.py at 2018-01-25 20:56:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 164.25 Mbit/s

95th percentile per-packet one-way delay: 212.585 ms

Loss rate: 1.95%

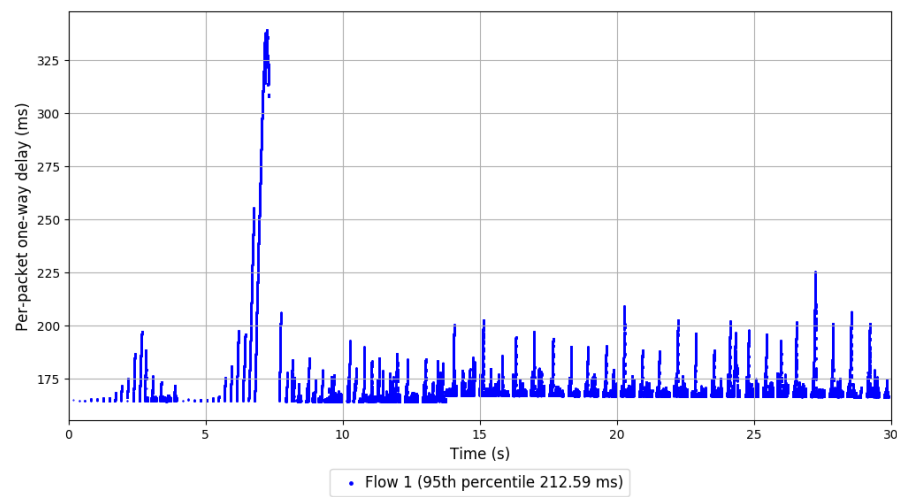
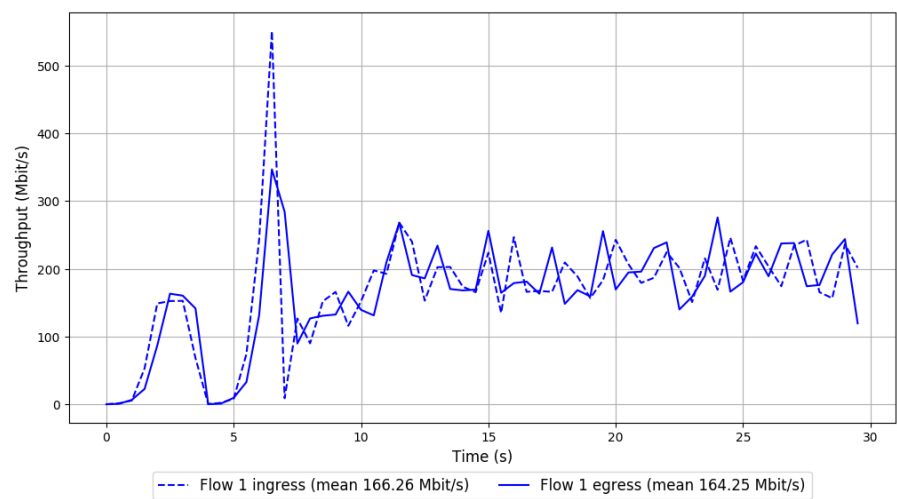
-- Flow 1:

Average throughput: 164.25 Mbit/s

95th percentile per-packet one-way delay: 212.585 ms

Loss rate: 1.95%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-25 17:11:09

End at: 2018-01-25 17:11:39

Below is generated by plot.py at 2018-01-25 20:57:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.42 Mbit/s

95th percentile per-packet one-way delay: 276.341 ms

Loss rate: 3.39%

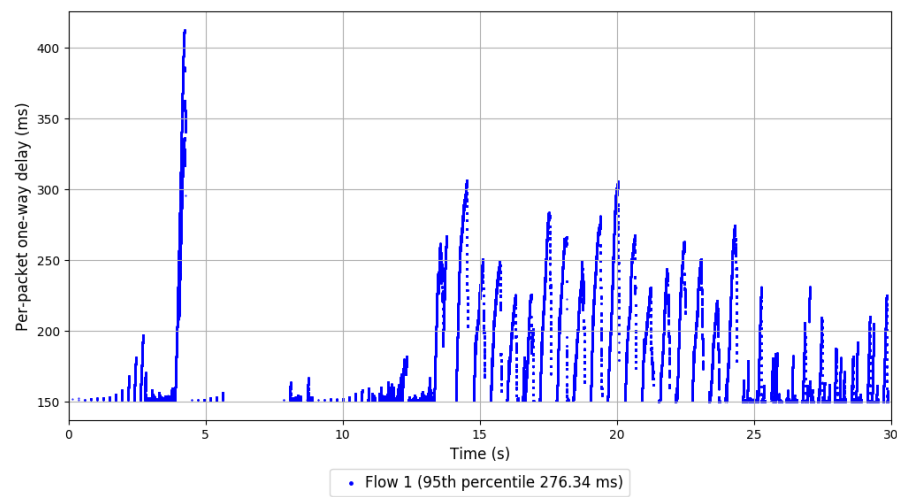
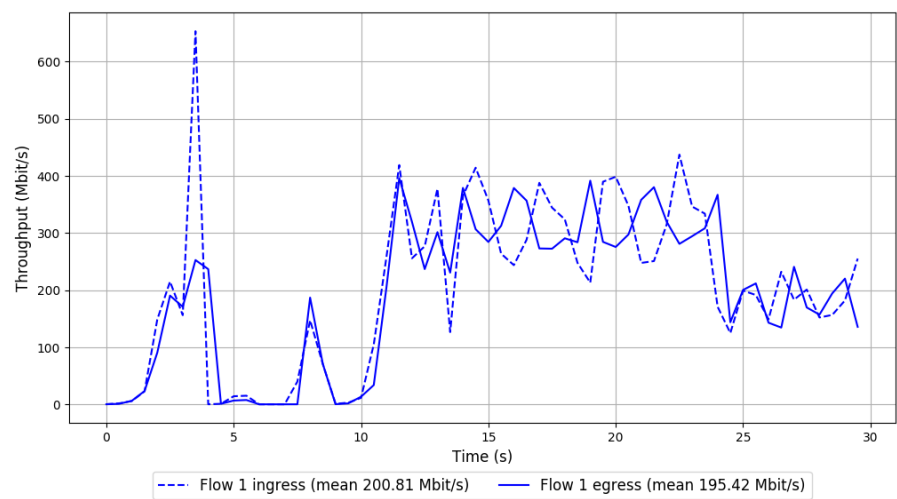
-- Flow 1:

Average throughput: 195.42 Mbit/s

95th percentile per-packet one-way delay: 276.341 ms

Loss rate: 3.39%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-25 17:23:57

End at: 2018-01-25 17:24:27

Below is generated by plot.py at 2018-01-25 20:57:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.54 Mbit/s

95th percentile per-packet one-way delay: 363.798 ms

Loss rate: 8.62%

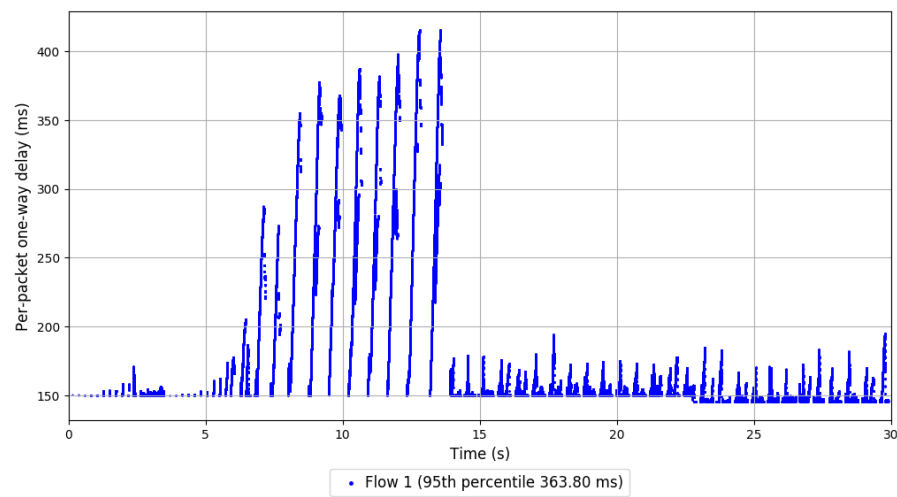
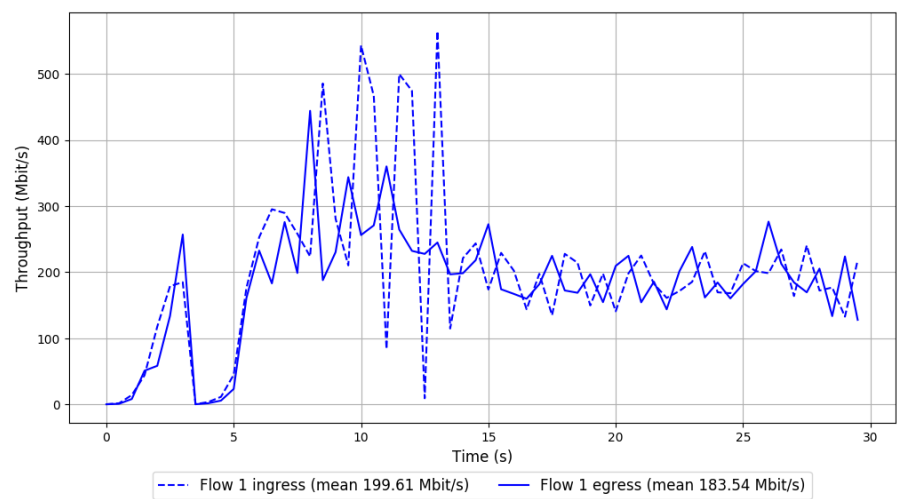
-- Flow 1:

Average throughput: 183.54 Mbit/s

95th percentile per-packet one-way delay: 363.798 ms

Loss rate: 8.62%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-25 17:36:50

End at: 2018-01-25 17:37:20

Below is generated by plot.py at 2018-01-25 20:57:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 134.17 Mbit/s

95th percentile per-packet one-way delay: 164.615 ms

Loss rate: 1.00%

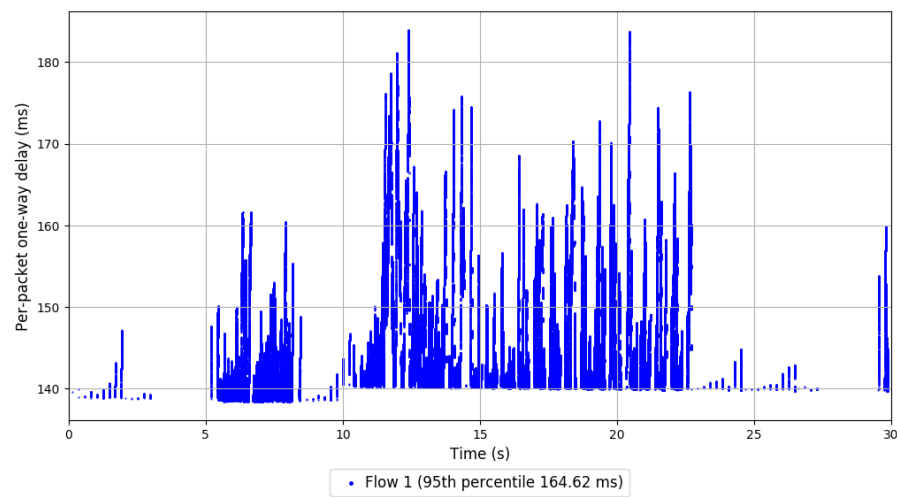
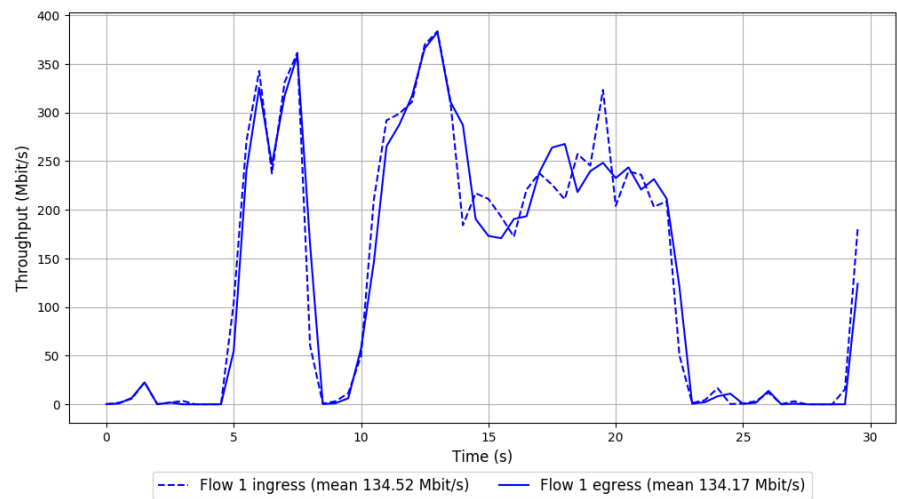
-- Flow 1:

Average throughput: 134.17 Mbit/s

95th percentile per-packet one-way delay: 164.615 ms

Loss rate: 1.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-25 17:49:21

End at: 2018-01-25 17:49:51

Below is generated by plot.py at 2018-01-25 20:58:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.83 Mbit/s

95th percentile per-packet one-way delay: 334.752 ms

Loss rate: 8.60%

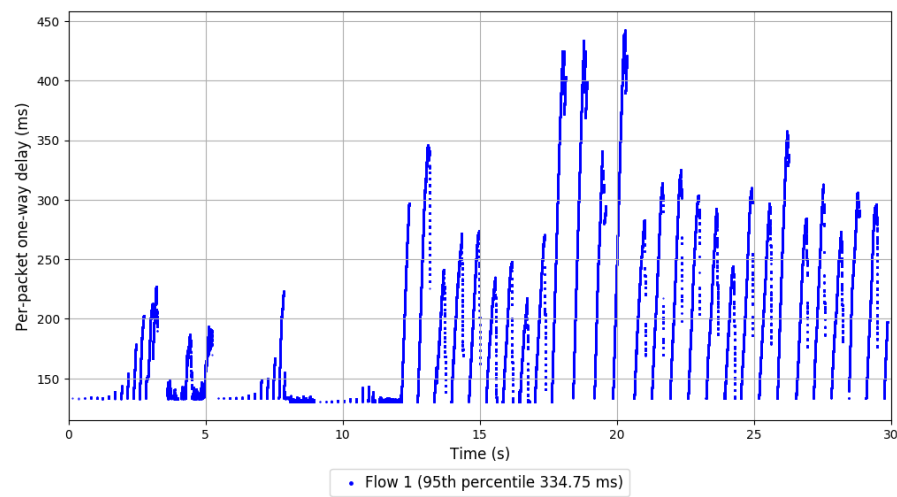
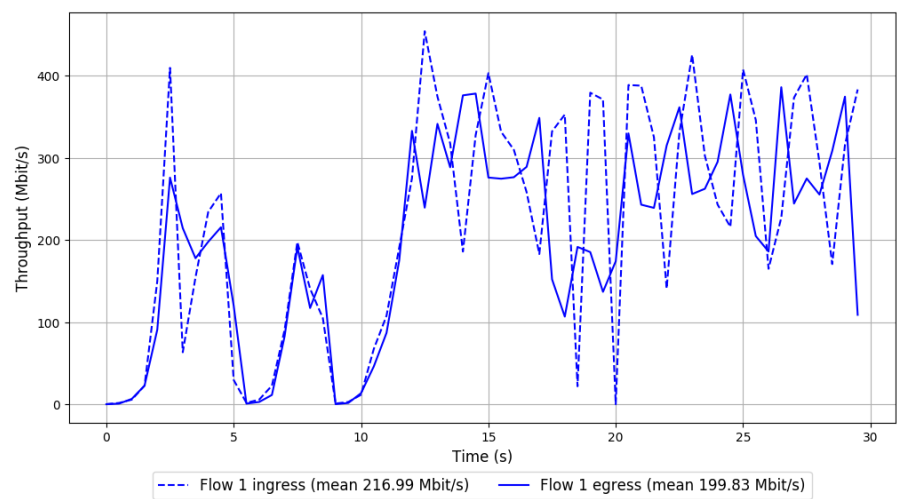
-- Flow 1:

Average throughput: 199.83 Mbit/s

95th percentile per-packet one-way delay: 334.752 ms

Loss rate: 8.60%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-25 18:02:11

End at: 2018-01-25 18:02:41

Below is generated by plot.py at 2018-01-25 20:58:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.96 Mbit/s

95th percentile per-packet one-way delay: 344.999 ms

Loss rate: 12.72%

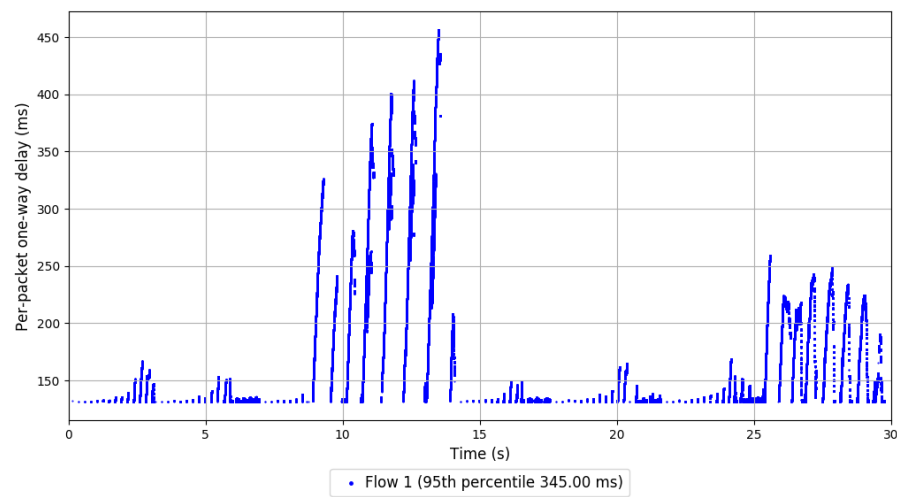
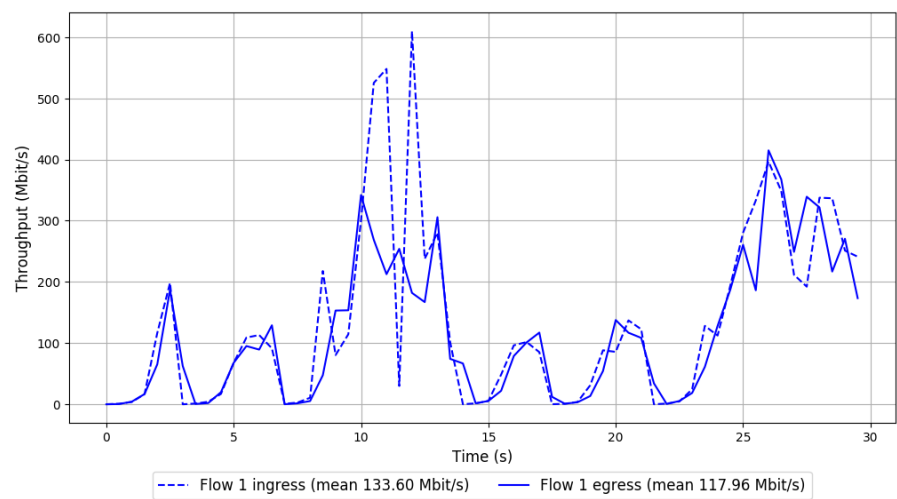
-- Flow 1:

Average throughput: 117.96 Mbit/s

95th percentile per-packet one-way delay: 344.999 ms

Loss rate: 12.72%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-25 18:15:02

End at: 2018-01-25 18:15:32

Below is generated by plot.py at 2018-01-25 20:58:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.98 Mbit/s

95th percentile per-packet one-way delay: 216.855 ms

Loss rate: 0.38%

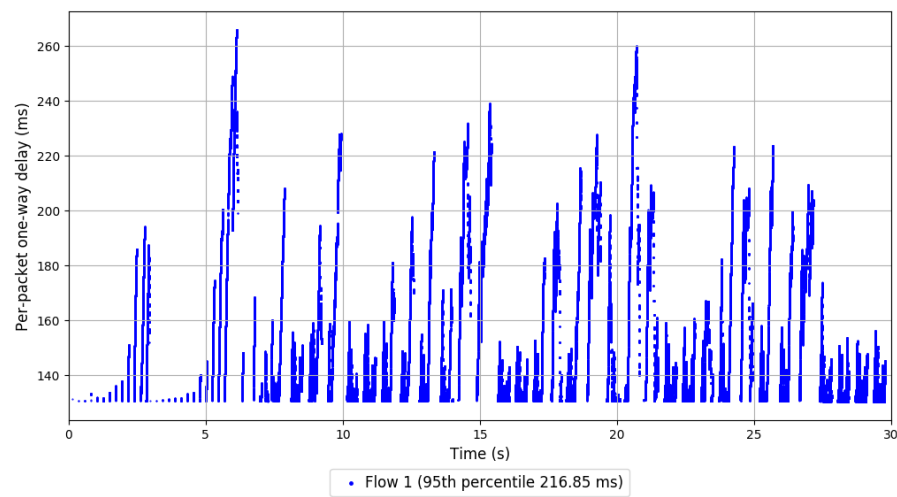
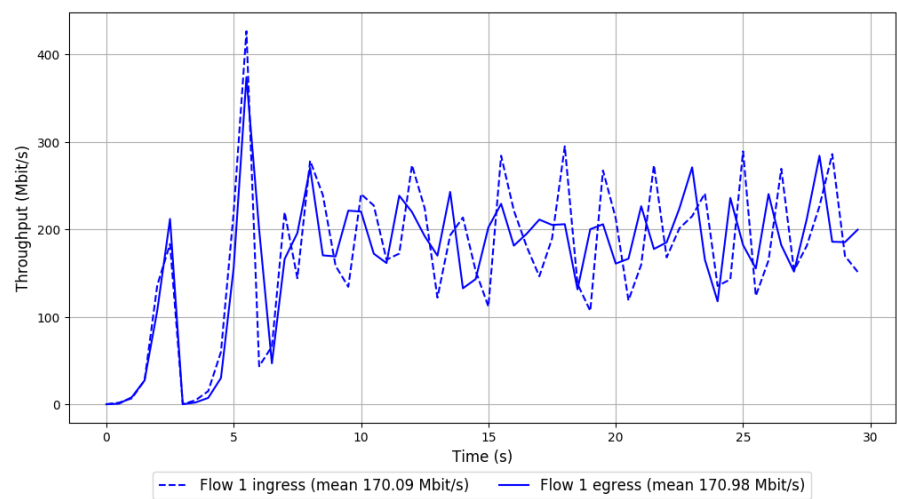
-- Flow 1:

Average throughput: 170.98 Mbit/s

95th percentile per-packet one-way delay: 216.855 ms

Loss rate: 0.38%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-01-25 16:18:26

End at: 2018-01-25 16:18:56

Below is generated by plot.py at 2018-01-25 20:59:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.78 Mbit/s

95th percentile per-packet one-way delay: 140.039 ms

Loss rate: 0.85%

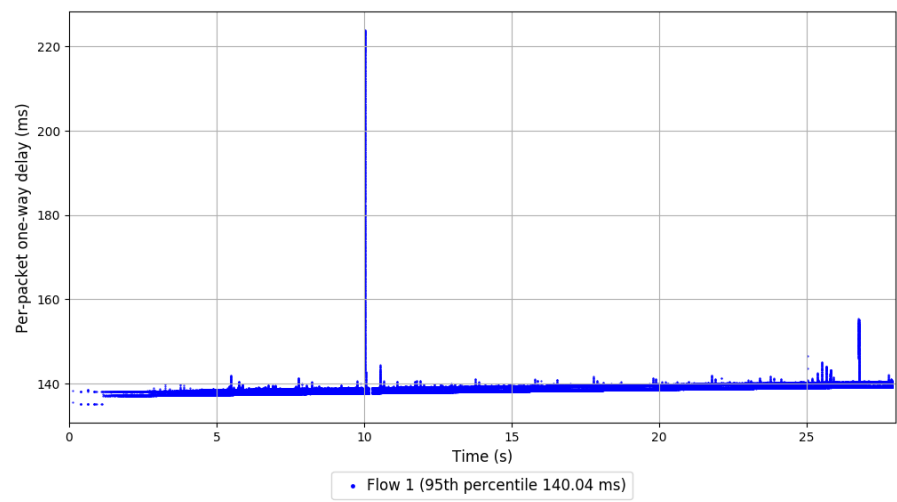
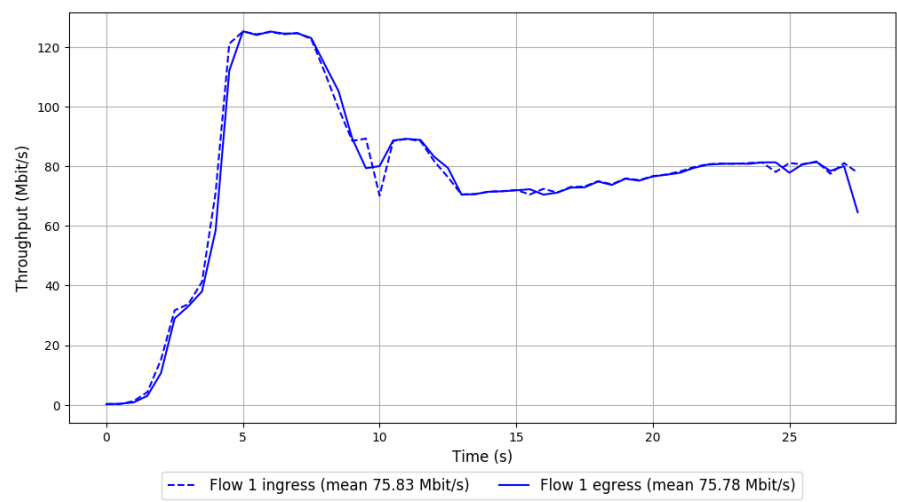
-- Flow 1:

Average throughput: 75.78 Mbit/s

95th percentile per-packet one-way delay: 140.039 ms

Loss rate: 0.85%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-25 16:31:18

End at: 2018-01-25 16:31:48

Below is generated by plot.py at 2018-01-25 20:59:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.33 Mbit/s

95th percentile per-packet one-way delay: 145.032 ms

Loss rate: 0.19%

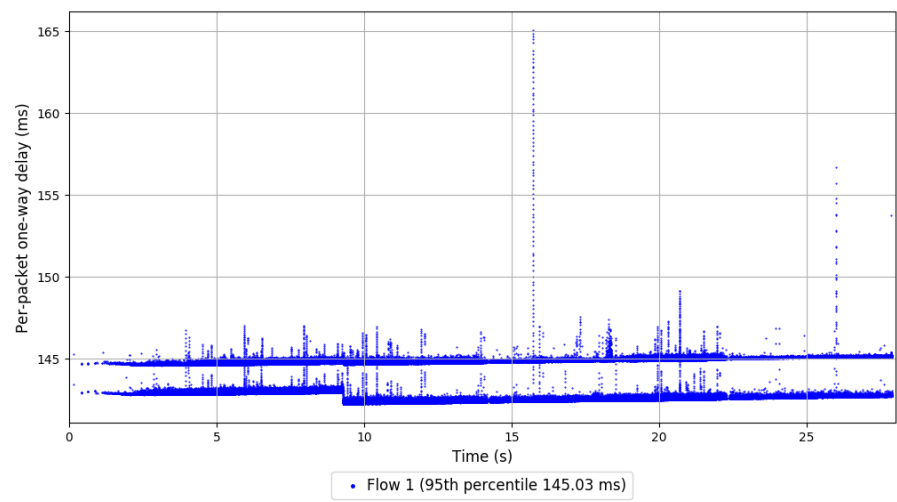
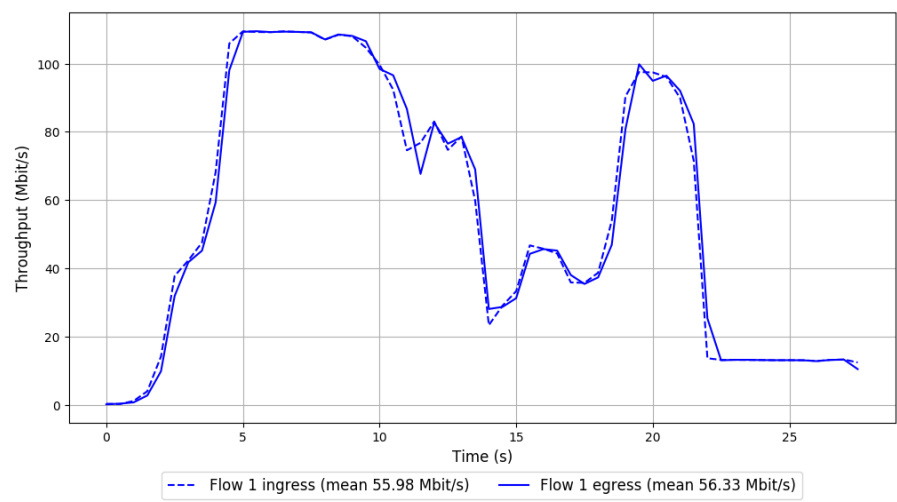
-- Flow 1:

Average throughput: 56.33 Mbit/s

95th percentile per-packet one-way delay: 145.032 ms

Loss rate: 0.19%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-25 16:44:13

End at: 2018-01-25 16:44:43

Below is generated by plot.py at 2018-01-25 20:59:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.54 Mbit/s

95th percentile per-packet one-way delay: 151.275 ms

Loss rate: 0.41%

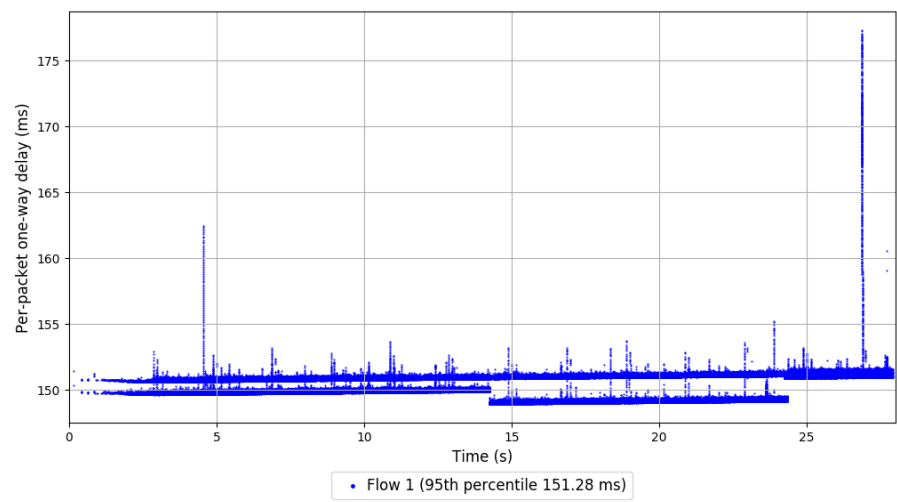
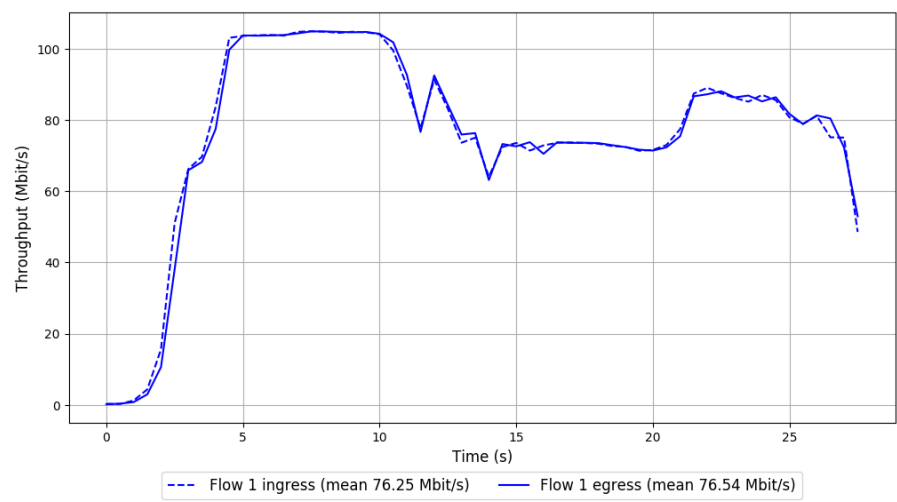
-- Flow 1:

Average throughput: 76.54 Mbit/s

95th percentile per-packet one-way delay: 151.275 ms

Loss rate: 0.41%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-25 16:56:57

End at: 2018-01-25 16:57:27

Below is generated by plot.py at 2018-01-25 20:59:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.38 Mbit/s

95th percentile per-packet one-way delay: 171.372 ms

Loss rate: 0.28%

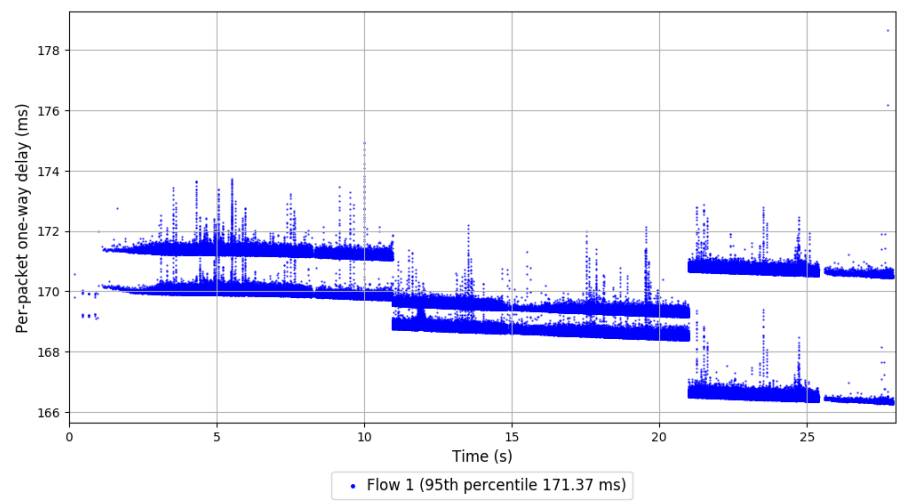
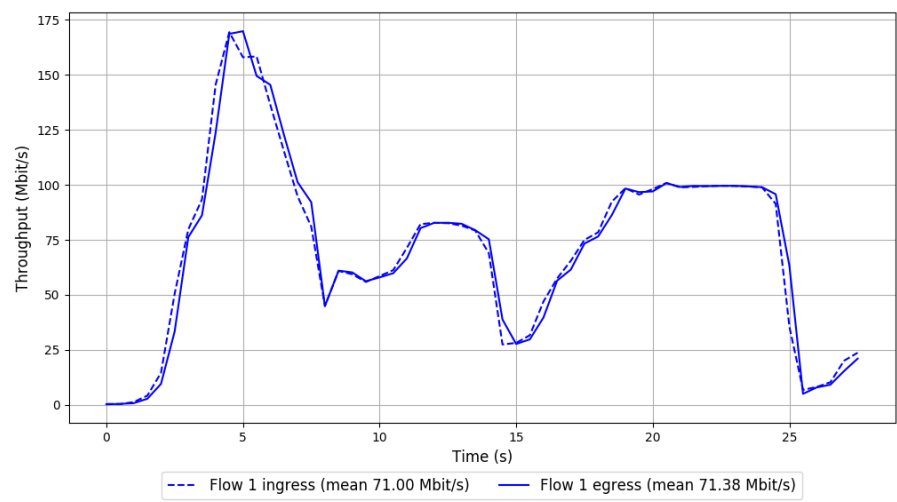
-- Flow 1:

Average throughput: 71.38 Mbit/s

95th percentile per-packet one-way delay: 171.372 ms

Loss rate: 0.28%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-25 17:09:42

End at: 2018-01-25 17:10:12

Below is generated by plot.py at 2018-01-25 20:59:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.04 Mbit/s

95th percentile per-packet one-way delay: 153.223 ms

Loss rate: 0.20%

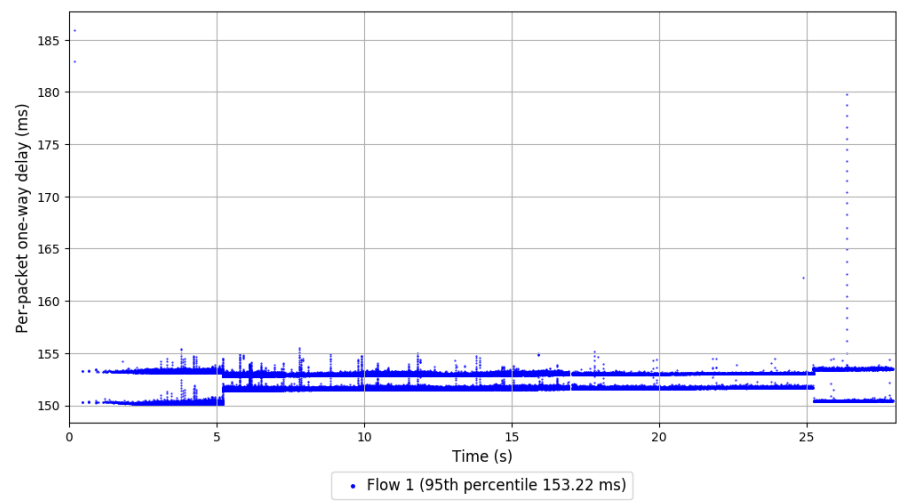
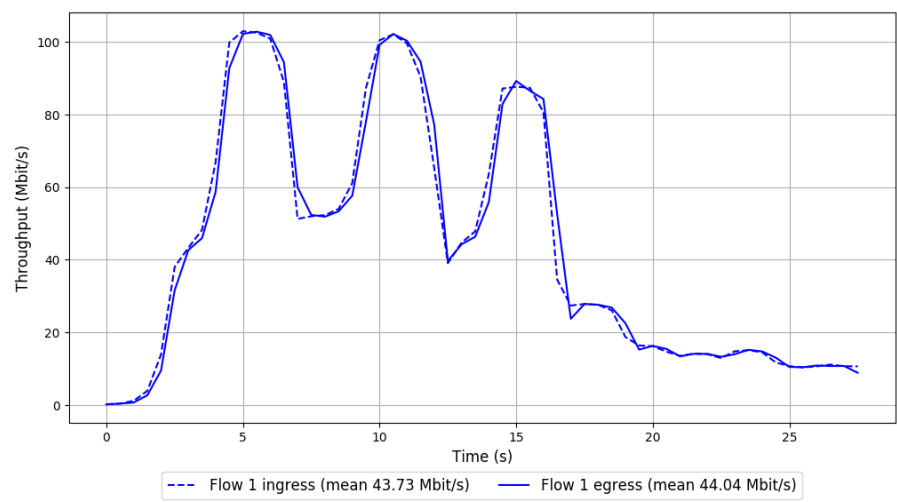
-- Flow 1:

Average throughput: 44.04 Mbit/s

95th percentile per-packet one-way delay: 153.223 ms

Loss rate: 0.20%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-25 17:22:27

End at: 2018-01-25 17:22:57

Below is generated by plot.py at 2018-01-25 21:00:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.97 Mbit/s

95th percentile per-packet one-way delay: 148.485 ms

Loss rate: 0.80%

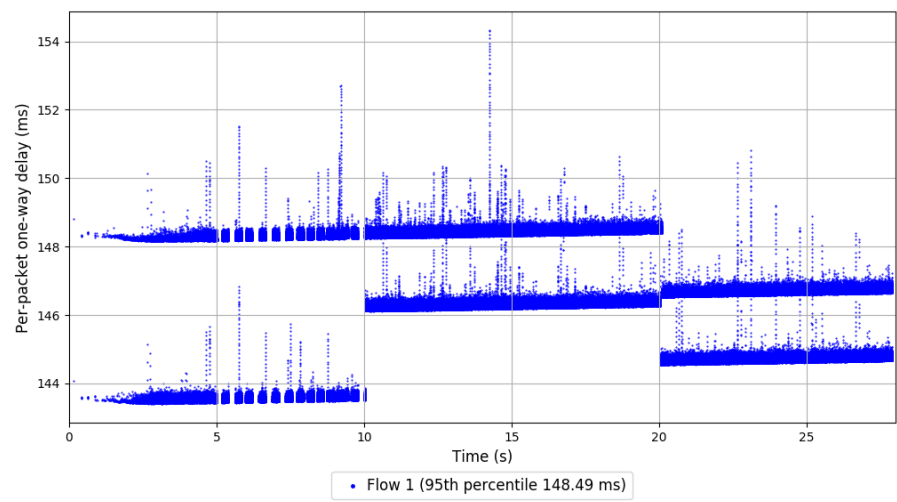
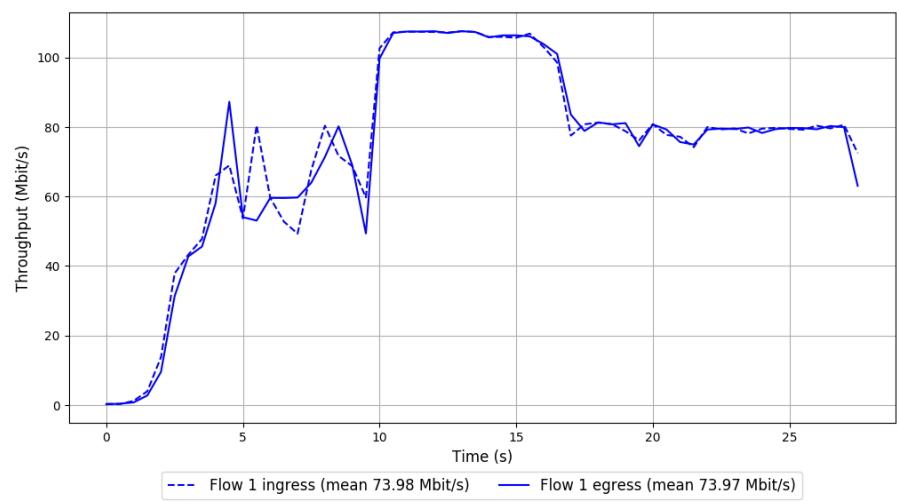
-- Flow 1:

Average throughput: 73.97 Mbit/s

95th percentile per-packet one-way delay: 148.485 ms

Loss rate: 0.80%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

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

End at: 2018-01-25 17:35:49

Below is generated by plot.py at 2018-01-25 21:00:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.95 Mbit/s

95th percentile per-packet one-way delay: 141.295 ms

Loss rate: 0.96%

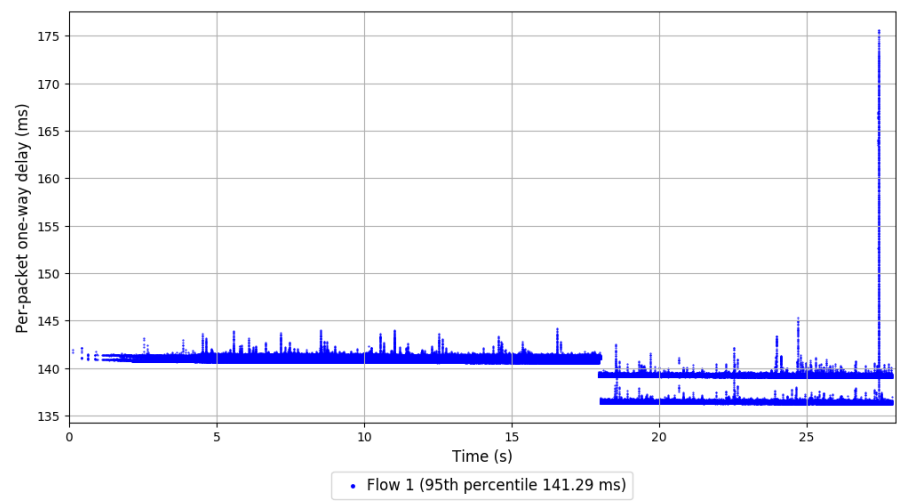
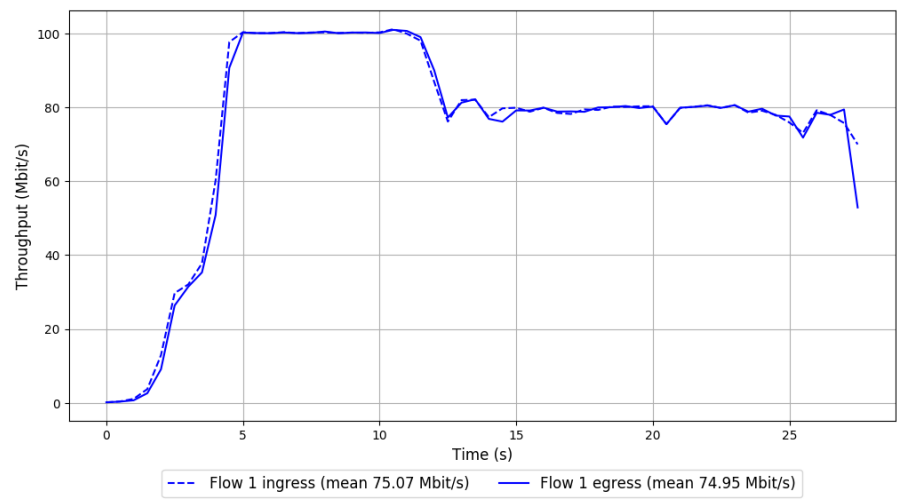
-- Flow 1:

Average throughput: 74.95 Mbit/s

95th percentile per-packet one-way delay: 141.295 ms

Loss rate: 0.96%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-25 17:47:51

End at: 2018-01-25 17:48:21

Below is generated by plot.py at 2018-01-25 21:00:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.02 Mbit/s

95th percentile per-packet one-way delay: 132.630 ms

Loss rate: 0.82%

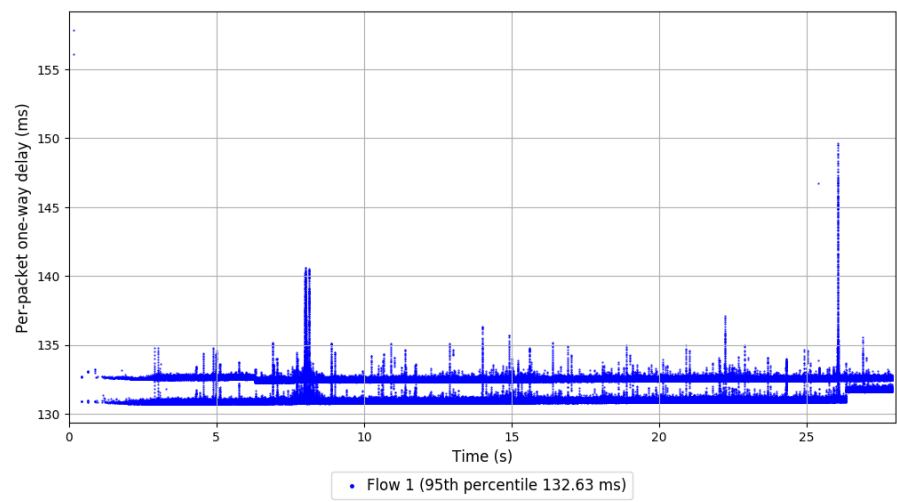
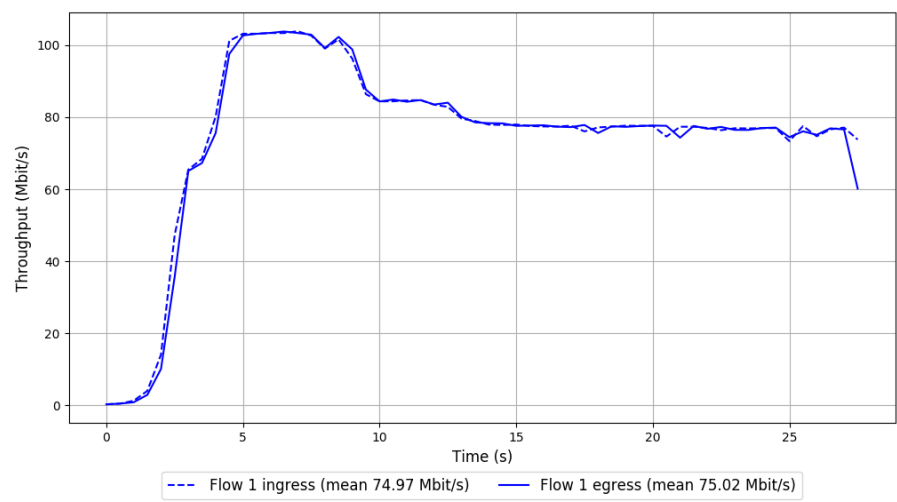
-- Flow 1:

Average throughput: 75.02 Mbit/s

95th percentile per-packet one-way delay: 132.630 ms

Loss rate: 0.82%

Run 8: Report of Copa — Data Link

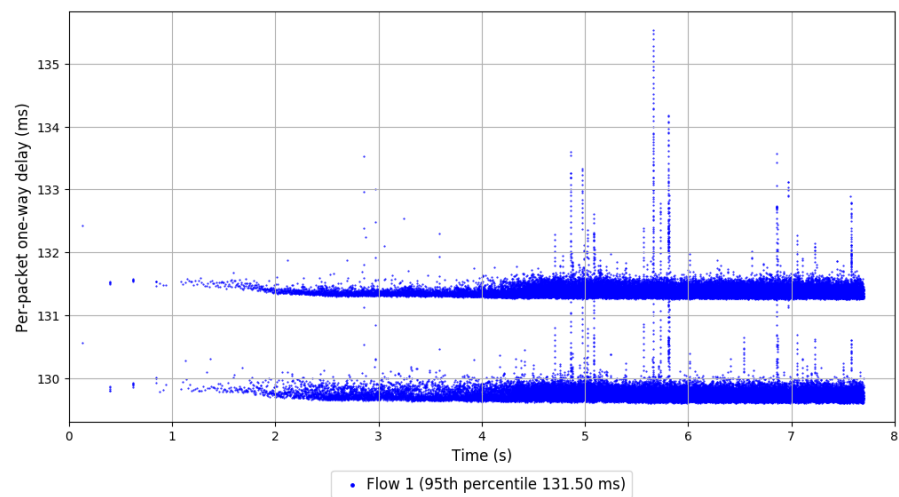
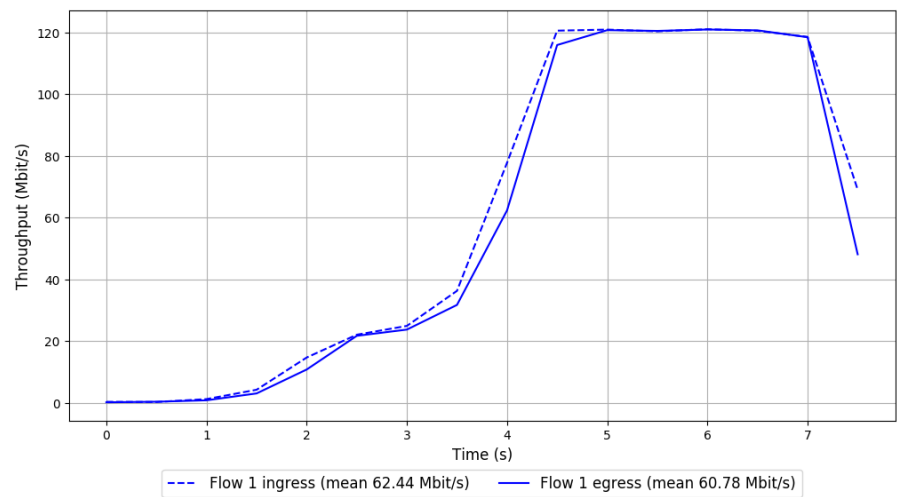


Run 9: Statistics of Copa

Start at: 2018-01-25 18:00:47

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

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-25 18:13:31

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

Below is generated by plot.py at 2018-01-25 21:01:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.93 Mbit/s

95th percentile per-packet one-way delay: 130.526 ms

Loss rate: 0.83%

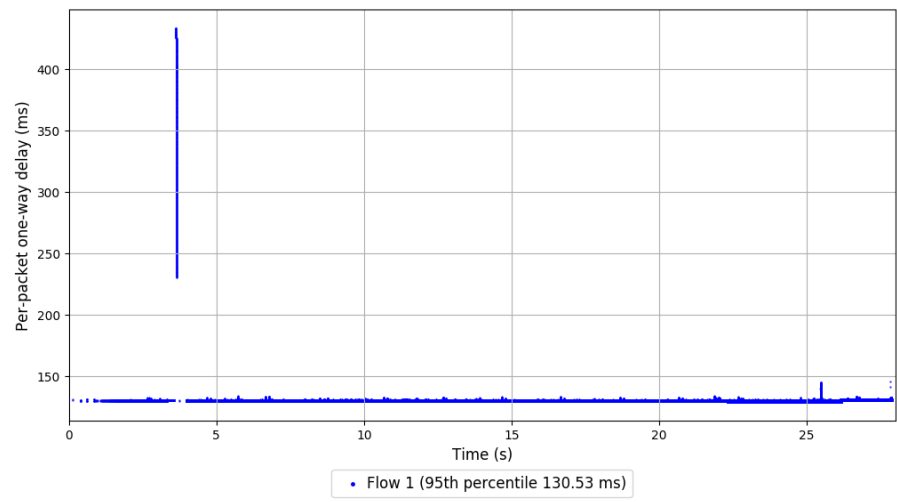
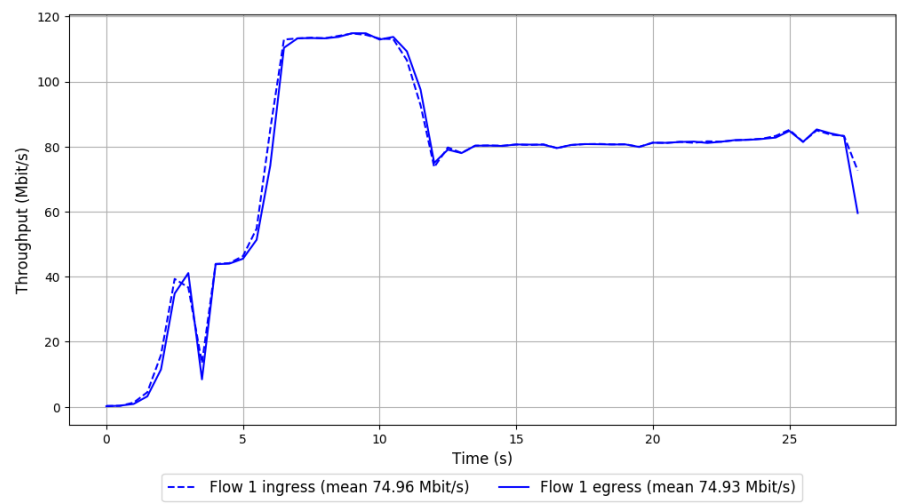
-- Flow 1:

Average throughput: 74.93 Mbit/s

95th percentile per-packet one-way delay: 130.526 ms

Loss rate: 0.83%

Run 10: Report of Copa — Data Link

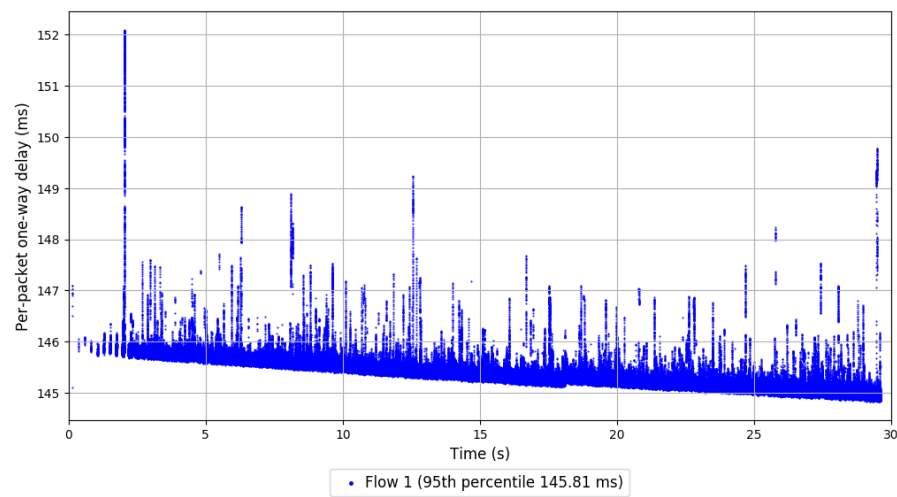
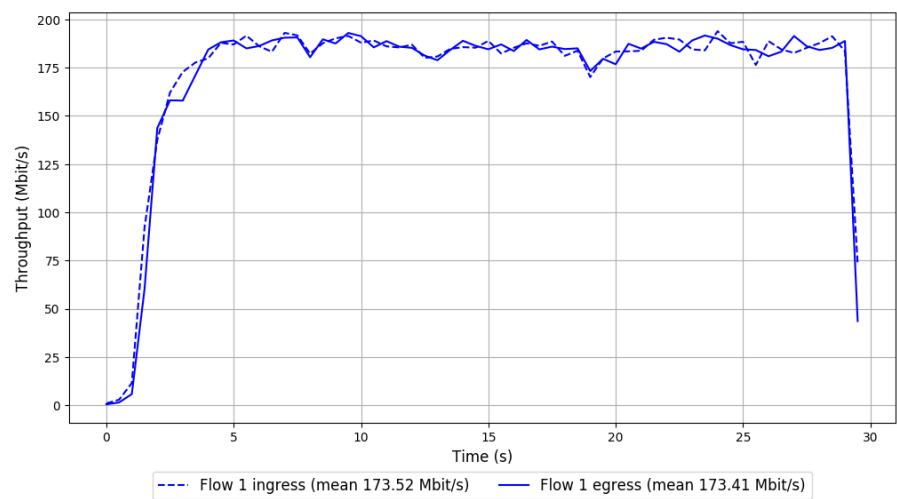


```
Run 1: Statistics of Indigo-2-256

Start at: 2018-01-25 16:28:01
End at: 2018-01-25 16:28:31

# Below is generated by plot.py at 2018-01-25 21:02:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 173.41 Mbit/s
95th percentile per-packet one-way delay: 145.809 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 173.41 Mbit/s
95th percentile per-packet one-way delay: 145.809 ms
Loss rate: 0.81%
```


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



Run 2: Statistics of Indigo-2-256

Start at: 2018-01-25 16:40:53

End at: 2018-01-25 16:41:23

Below is generated by plot.py at 2018-01-25 21:02:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.24 Mbit/s

95th percentile per-packet one-way delay: 149.005 ms

Loss rate: 0.79%

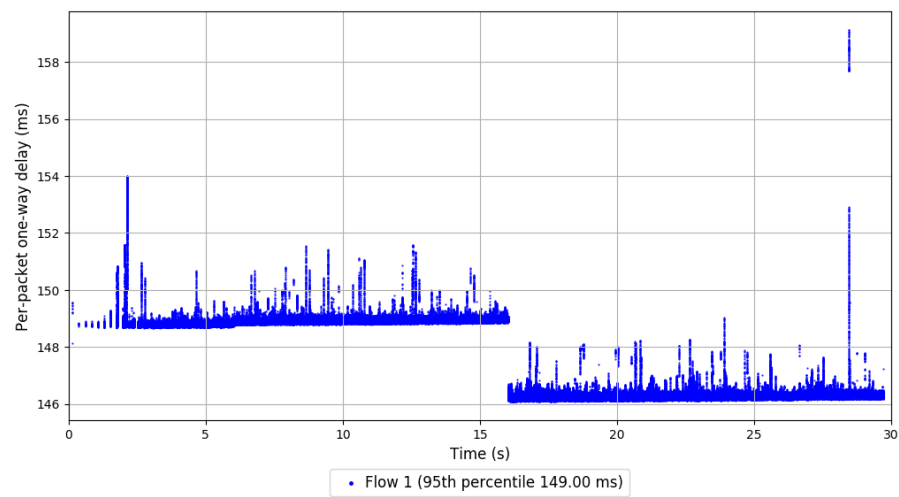
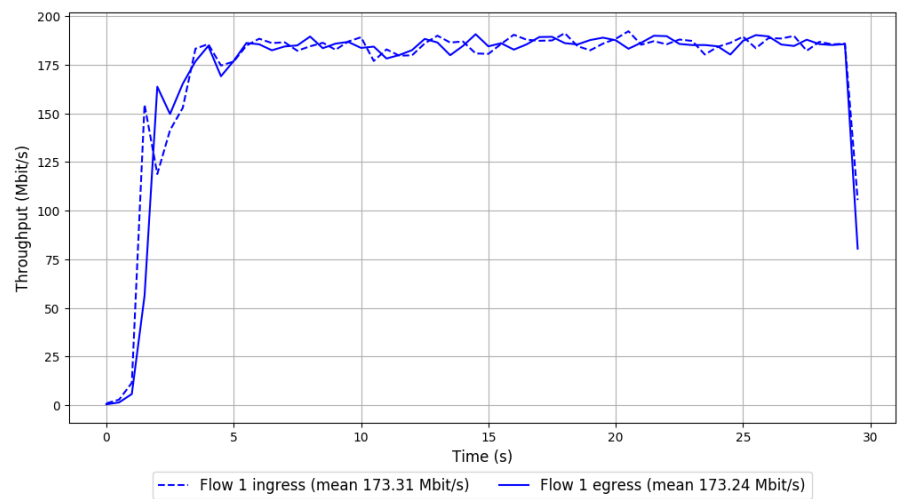
-- Flow 1:

Average throughput: 173.24 Mbit/s

95th percentile per-packet one-way delay: 149.005 ms

Loss rate: 0.79%

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



Run 3: Statistics of Indigo-2-256

Start at: 2018-01-25 16:53:44

End at: 2018-01-25 16:54:14

Below is generated by plot.py at 2018-01-25 21:02:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.60 Mbit/s

95th percentile per-packet one-way delay: 170.718 ms

Loss rate: 0.73%

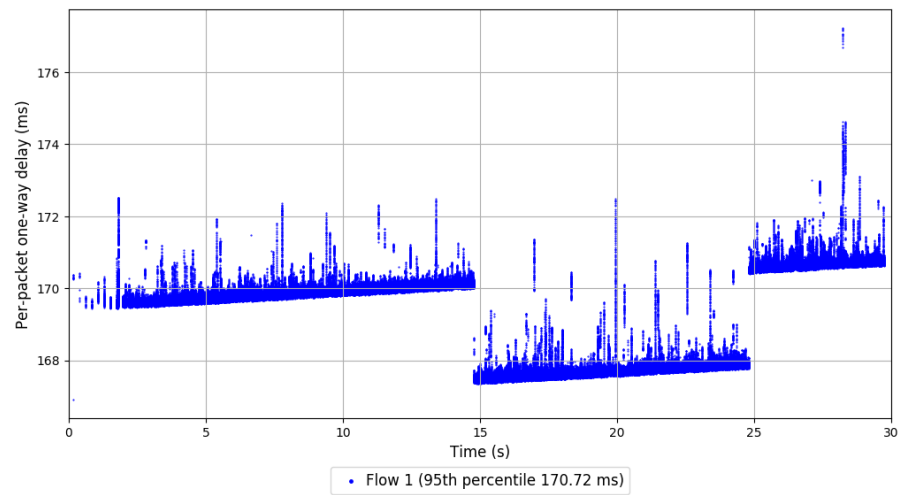
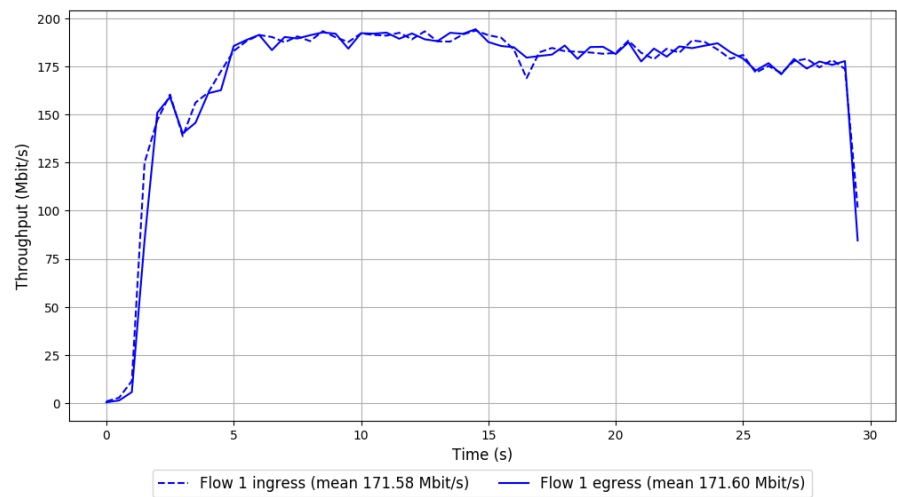
-- Flow 1:

Average throughput: 171.60 Mbit/s

95th percentile per-packet one-way delay: 170.718 ms

Loss rate: 0.73%

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



Run 4: Statistics of Indigo-2-256

Start at: 2018-01-25 17:06:32

End at: 2018-01-25 17:07:02

Below is generated by plot.py at 2018-01-25 21:03:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.17 Mbit/s

95th percentile per-packet one-way delay: 152.610 ms

Loss rate: 0.75%

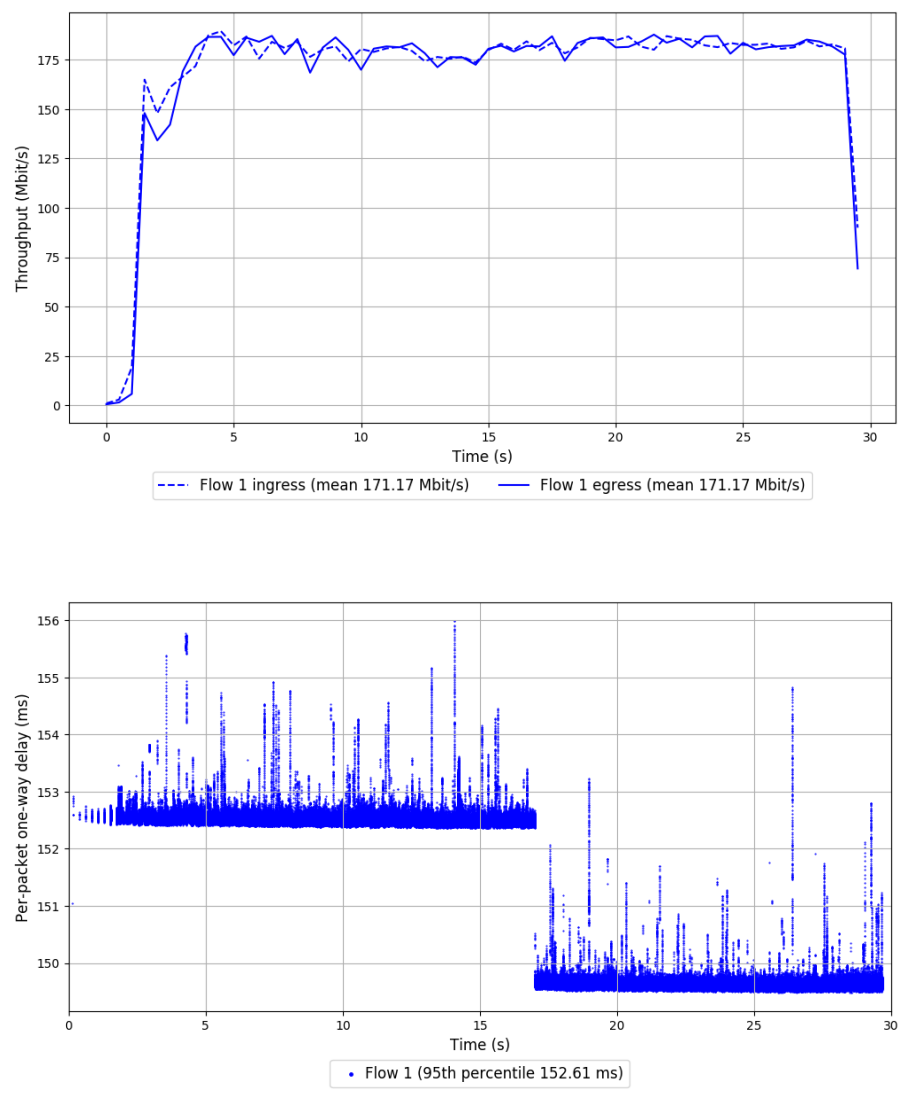
-- Flow 1:

Average throughput: 171.17 Mbit/s

95th percentile per-packet one-way delay: 152.610 ms

Loss rate: 0.75%

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



Run 5: Statistics of Indigo-2-256

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

End at: 2018-01-25 17:19:47

Below is generated by plot.py at 2018-01-25 21:03:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.75 Mbit/s

95th percentile per-packet one-way delay: 146.521 ms

Loss rate: 0.84%

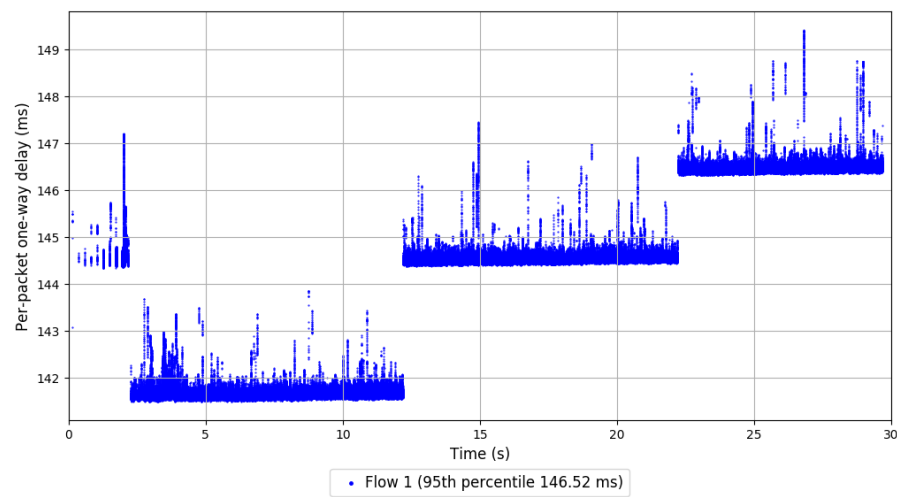
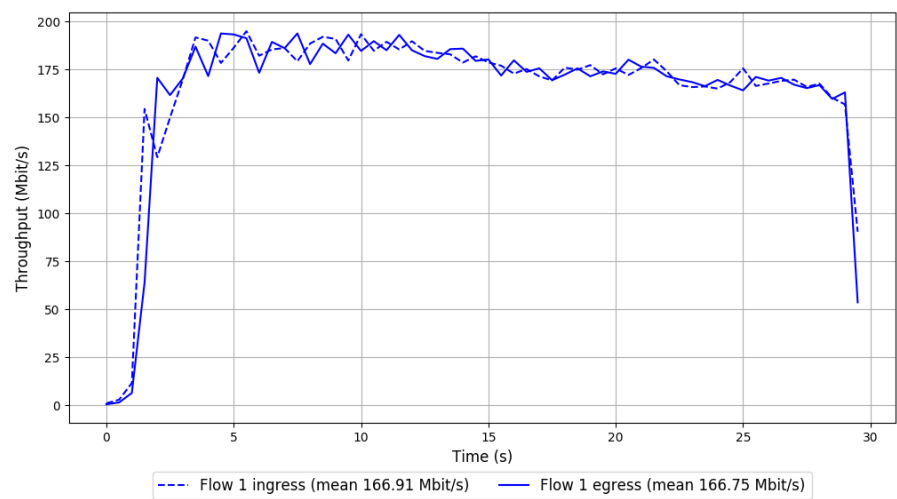
-- Flow 1:

Average throughput: 166.75 Mbit/s

95th percentile per-packet one-way delay: 146.521 ms

Loss rate: 0.84%

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



Run 6: Statistics of Indigo-2-256

Start at: 2018-01-25 17:32:08

End at: 2018-01-25 17:32:38

Below is generated by plot.py at 2018-01-25 21:04:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 164.23 Mbit/s

95th percentile per-packet one-way delay: 144.807 ms

Loss rate: 0.83%

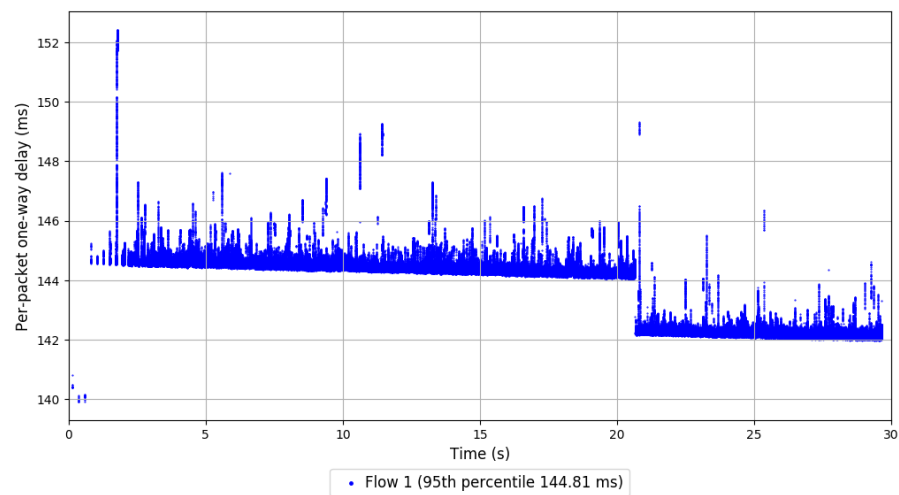
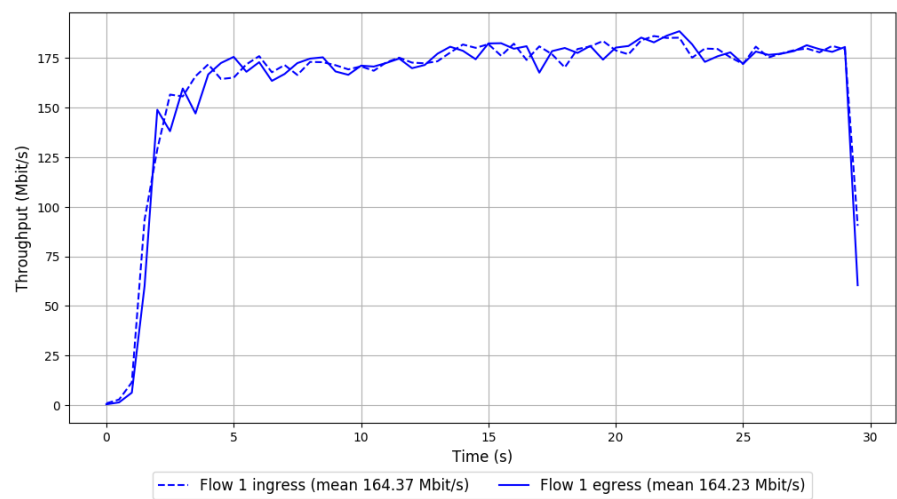
-- Flow 1:

Average throughput: 164.23 Mbit/s

95th percentile per-packet one-way delay: 144.807 ms

Loss rate: 0.83%

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



Run 7: Statistics of Indigo-2-256

Start at: 2018-01-25 17:44:39

End at: 2018-01-25 17:45:09

Below is generated by plot.py at 2018-01-25 21:04:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 168.35 Mbit/s

95th percentile per-packet one-way delay: 132.567 ms

Loss rate: 0.80%

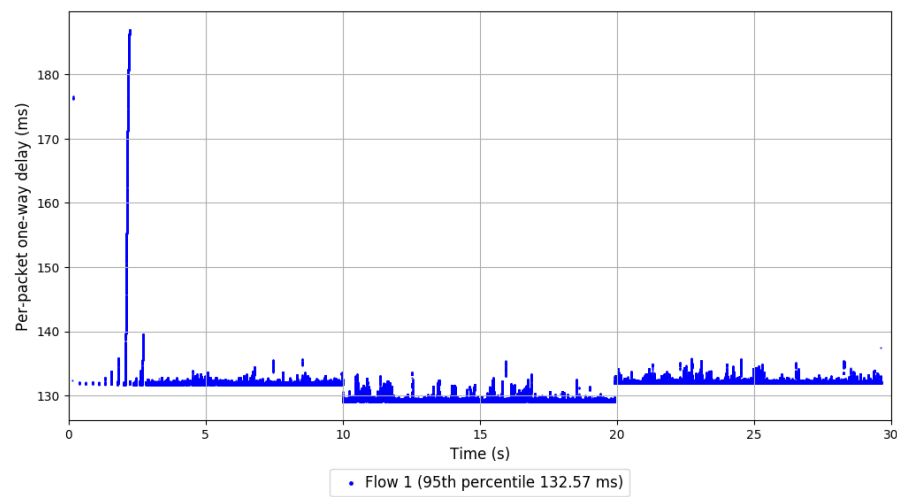
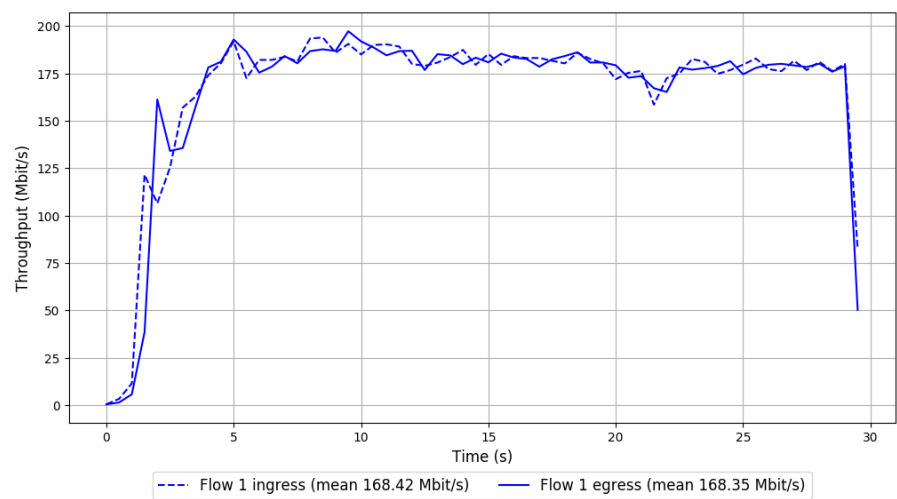
-- Flow 1:

Average throughput: 168.35 Mbit/s

95th percentile per-packet one-way delay: 132.567 ms

Loss rate: 0.80%

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



Run 8: Statistics of Indigo-2-256

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

End at: 2018-01-25 17:57:55

Below is generated by plot.py at 2018-01-25 21:05:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.50 Mbit/s

95th percentile per-packet one-way delay: 133.553 ms

Loss rate: 0.83%

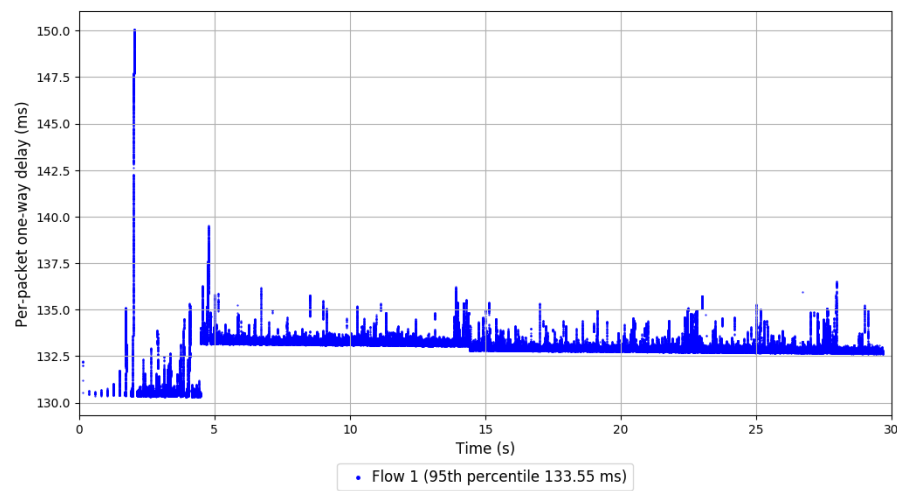
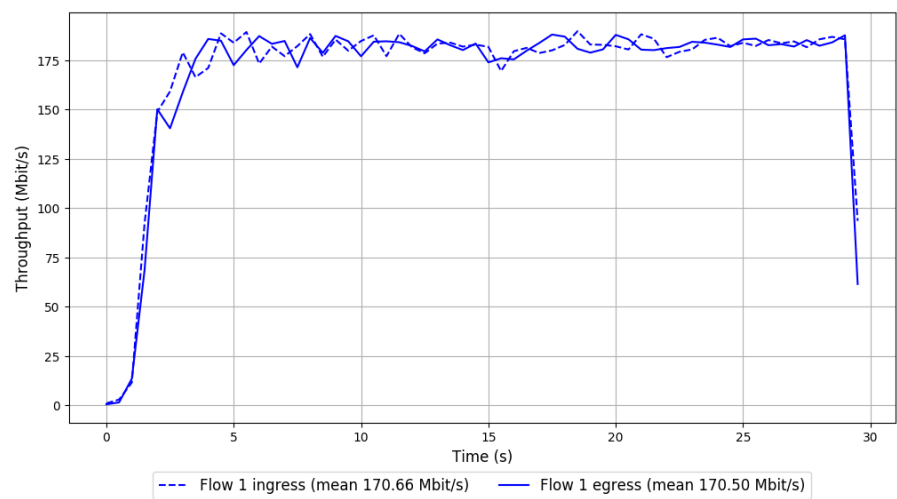
-- Flow 1:

Average throughput: 170.50 Mbit/s

95th percentile per-packet one-way delay: 133.553 ms

Loss rate: 0.83%

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



Run 9: Statistics of Indigo-2-256

Start at: 2018-01-25 18:10:03

End at: 2018-01-25 18:10:33

Below is generated by plot.py at 2018-01-25 21:06:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.66 Mbit/s

95th percentile per-packet one-way delay: 132.468 ms

Loss rate: 0.78%

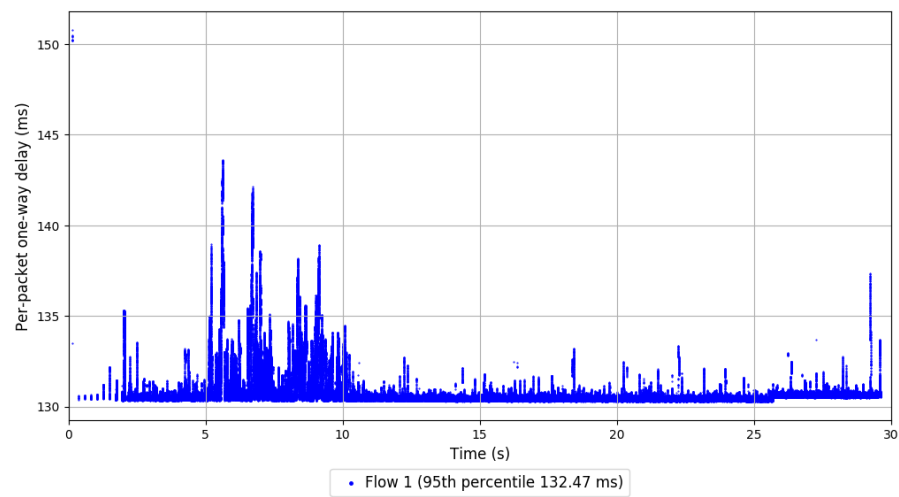
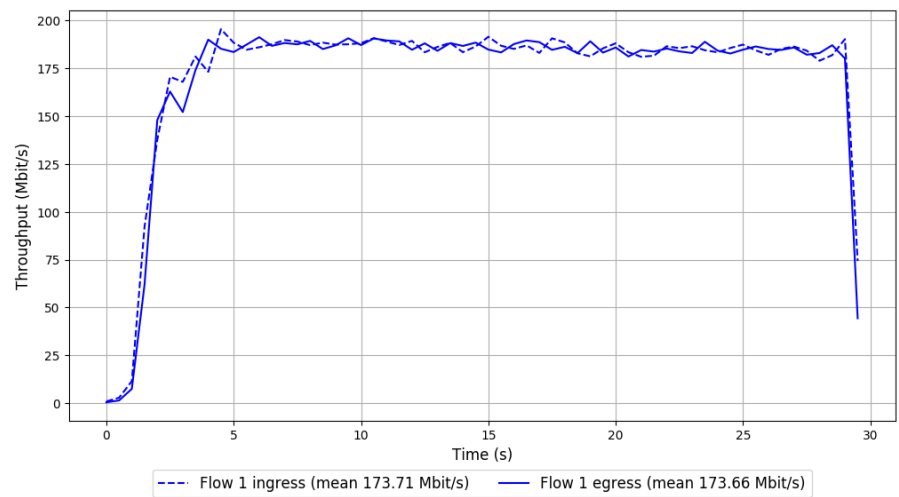
-- Flow 1:

Average throughput: 173.66 Mbit/s

95th percentile per-packet one-way delay: 132.468 ms

Loss rate: 0.78%

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



Run 10: Statistics of Indigo-2-256

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

End at: 2018-01-25 18:23:31

Below is generated by plot.py at 2018-01-25 21:06:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.41 Mbit/s

95th percentile per-packet one-way delay: 133.368 ms

Loss rate: 0.81%

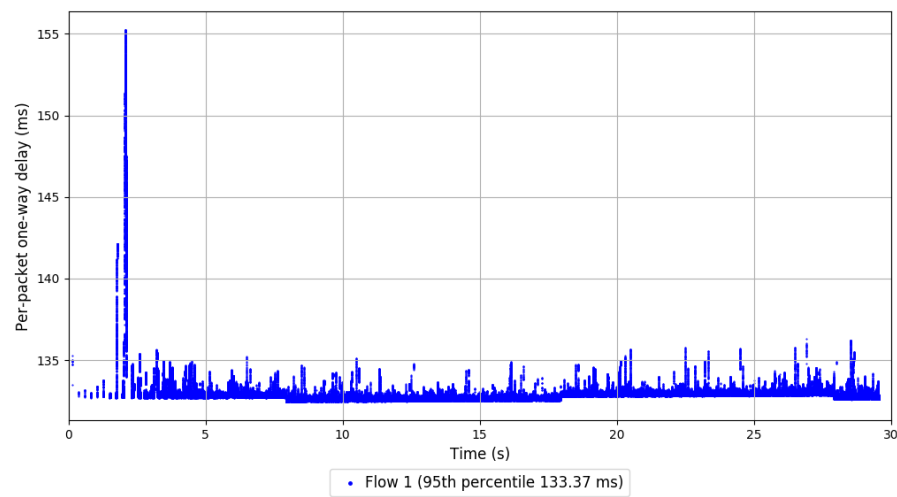
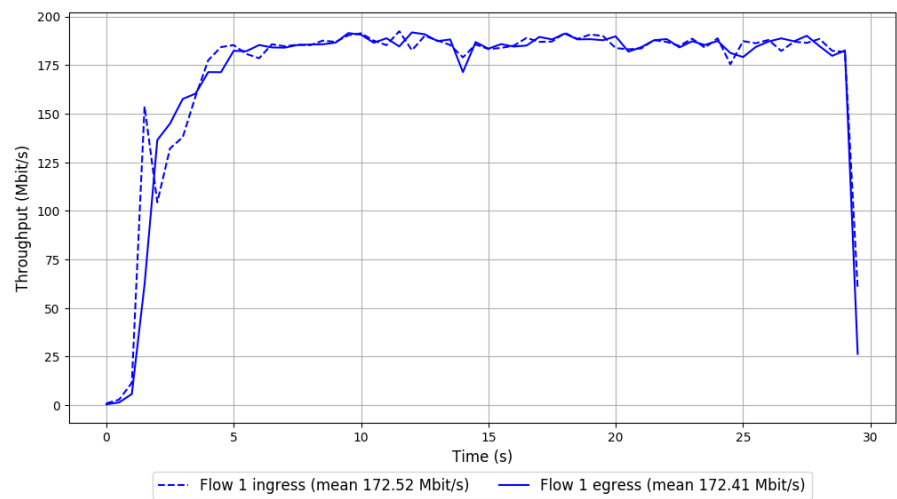
-- Flow 1:

Average throughput: 172.41 Mbit/s

95th percentile per-packet one-way delay: 133.368 ms

Loss rate: 0.81%

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

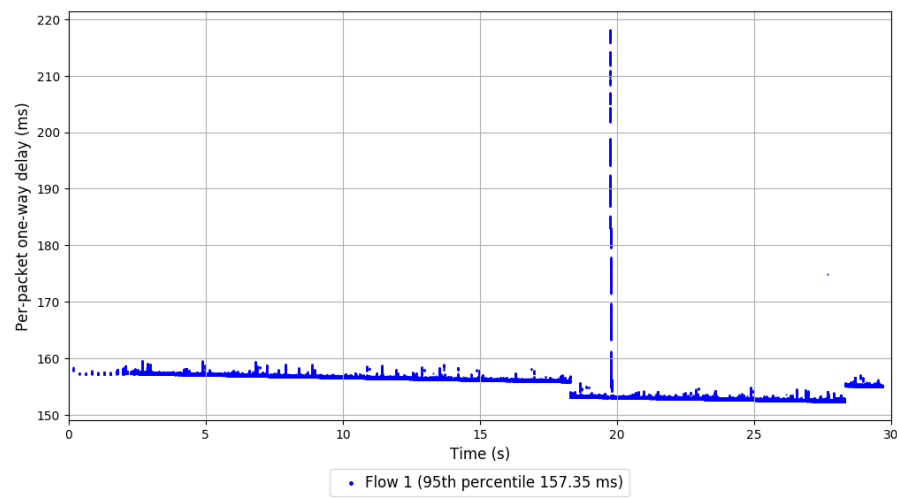
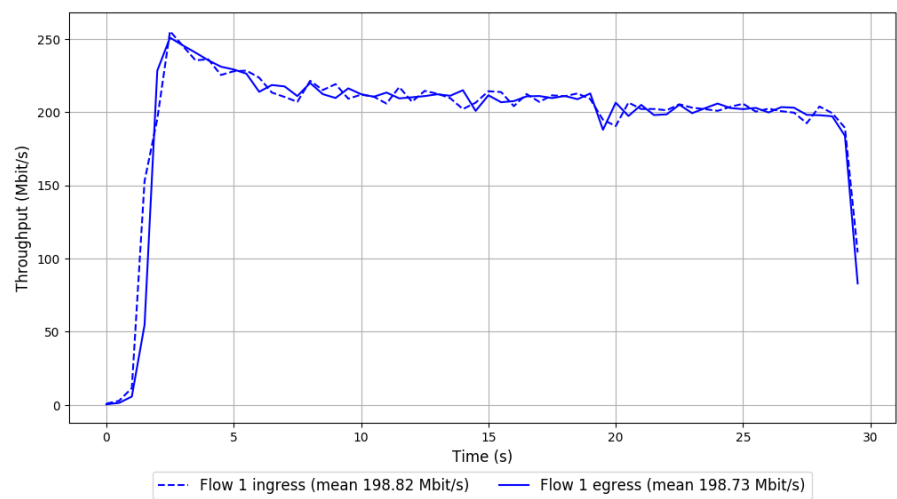


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-01-25 16:22:21
End at: 2018-01-25 16:22:51

# Below is generated by plot.py at 2018-01-25 21:06:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 198.73 Mbit/s
95th percentile per-packet one-way delay: 157.352 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 198.73 Mbit/s
95th percentile per-packet one-way delay: 157.352 ms
Loss rate: 0.81%
```

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



Run 2: Statistics of Indigo-1-32

Start at: 2018-01-25 16:35:15

End at: 2018-01-25 16:35:45

Below is generated by plot.py at 2018-01-25 21:06:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.98 Mbit/s

95th percentile per-packet one-way delay: 154.836 ms

Loss rate: 0.83%

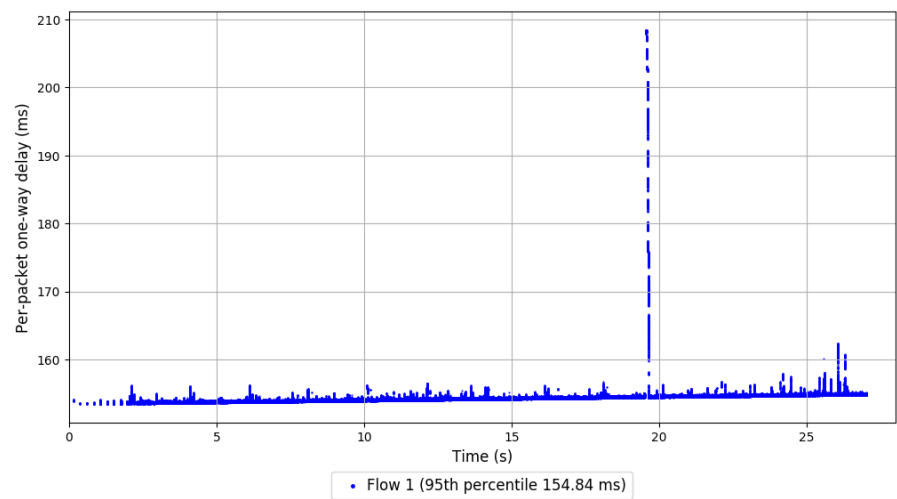
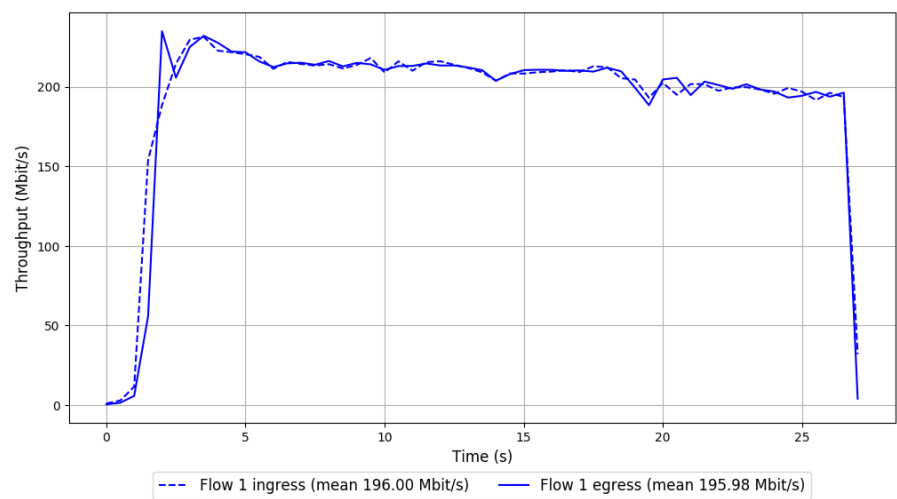
-- Flow 1:

Average throughput: 195.98 Mbit/s

95th percentile per-packet one-way delay: 154.836 ms

Loss rate: 0.83%

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-01-25 16:48:08

End at: 2018-01-25 16:48:38

Below is generated by plot.py at 2018-01-25 21:06:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.59 Mbit/s

95th percentile per-packet one-way delay: 157.721 ms

Loss rate: 0.81%

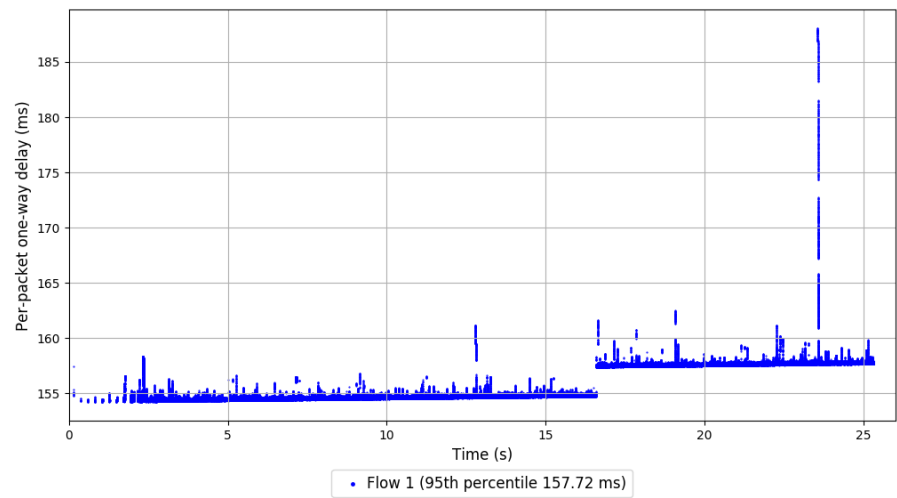
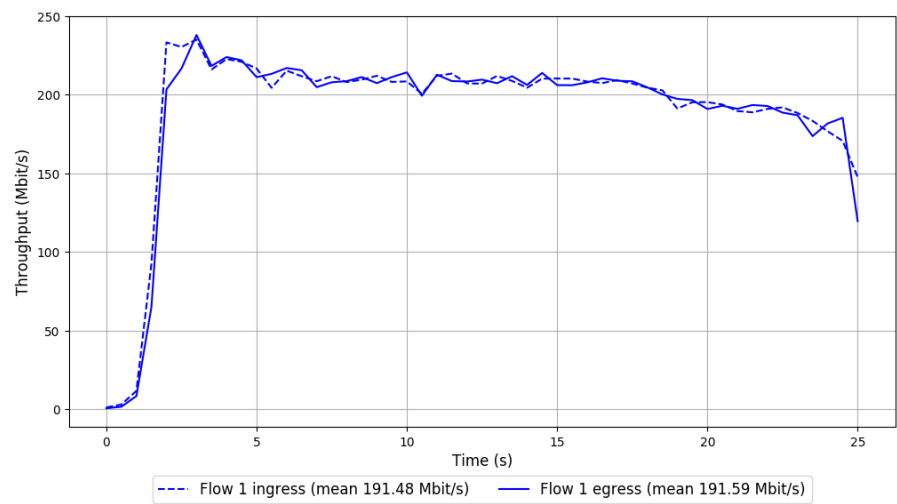
-- Flow 1:

Average throughput: 191.59 Mbit/s

95th percentile per-packet one-way delay: 157.721 ms

Loss rate: 0.81%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-01-25 17:00:55

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

Below is generated by plot.py at 2018-01-25 21:06:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 140.88 Mbit/s

95th percentile per-packet one-way delay: 159.844 ms

Loss rate: 0.81%

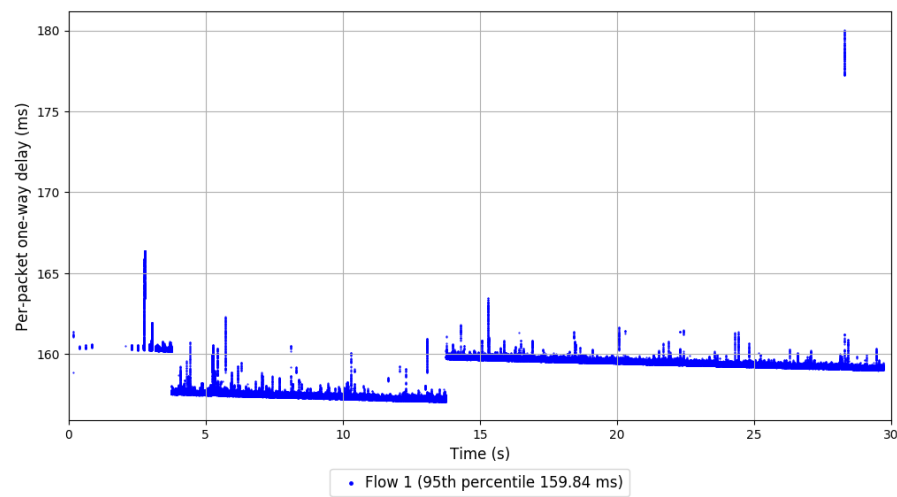
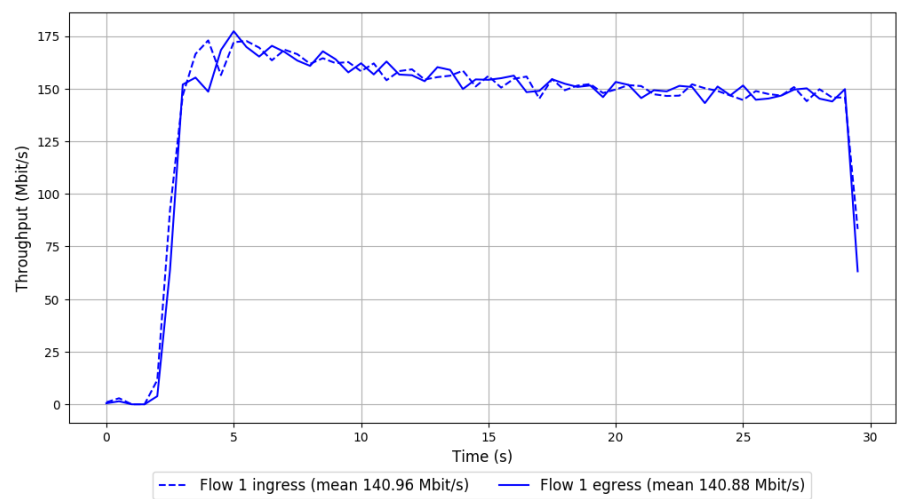
-- Flow 1:

Average throughput: 140.88 Mbit/s

95th percentile per-packet one-way delay: 159.844 ms

Loss rate: 0.81%

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



Run 5: Statistics of Indigo-1-32

Start at: 2018-01-25 17:13:41

End at: 2018-01-25 17:14:11

Below is generated by plot.py at 2018-01-25 21:07:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 155.60 Mbit/s

95th percentile per-packet one-way delay: 146.751 ms

Loss rate: 0.78%

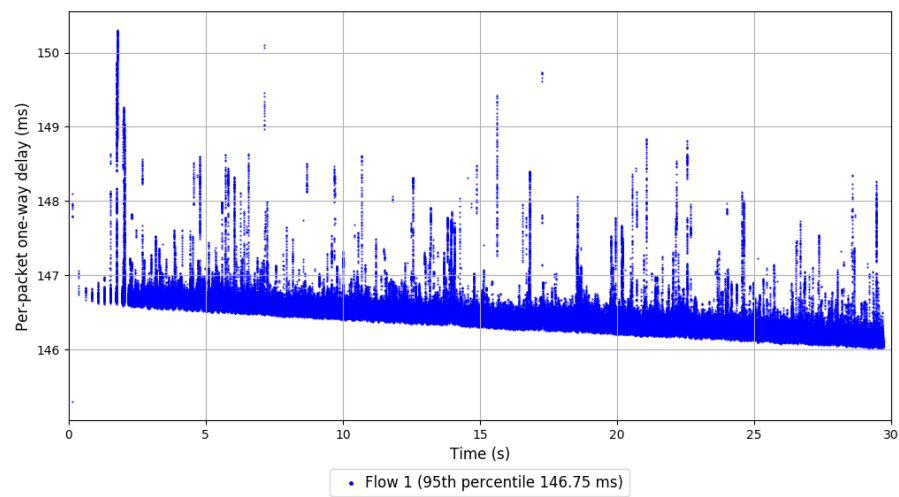
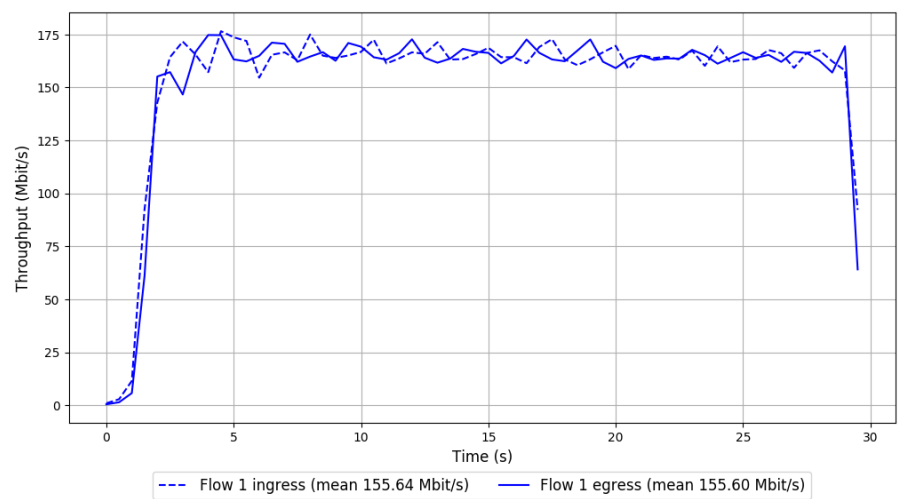
-- Flow 1:

Average throughput: 155.60 Mbit/s

95th percentile per-packet one-way delay: 146.751 ms

Loss rate: 0.78%

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



Run 6: Statistics of Indigo-1-32

Start at: 2018-01-25 17:26:29

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

Below is generated by plot.py at 2018-01-25 21:08:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.26 Mbit/s

95th percentile per-packet one-way delay: 151.151 ms

Loss rate: 0.80%

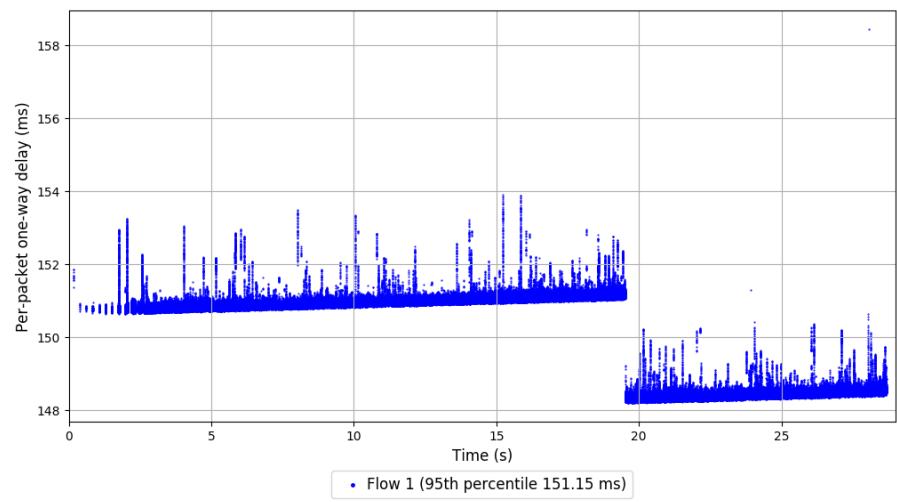
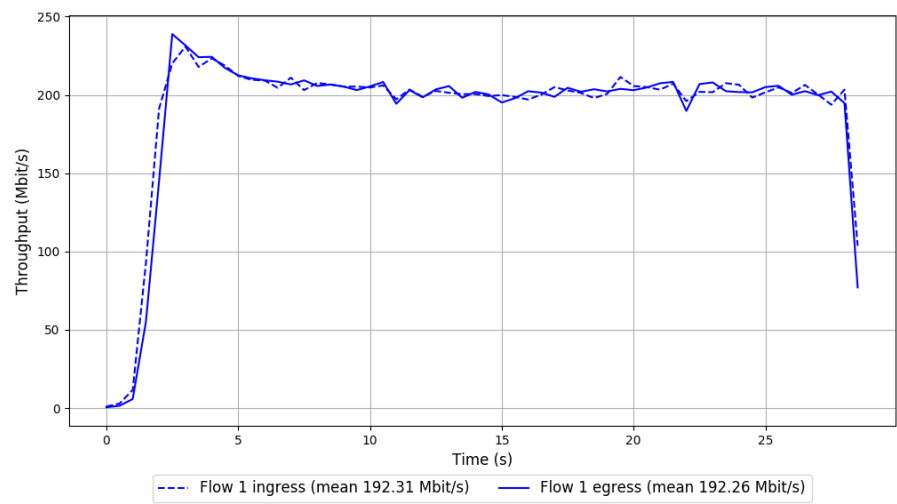
-- Flow 1:

Average throughput: 192.26 Mbit/s

95th percentile per-packet one-way delay: 151.151 ms

Loss rate: 0.80%

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



Run 7: Statistics of Indigo-1-32

Start at: 2018-01-25 17:39:18

End at: 2018-01-25 17:39:48

Below is generated by plot.py at 2018-01-25 21:08:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 147.38 Mbit/s

95th percentile per-packet one-way delay: 136.828 ms

Loss rate: 0.89%

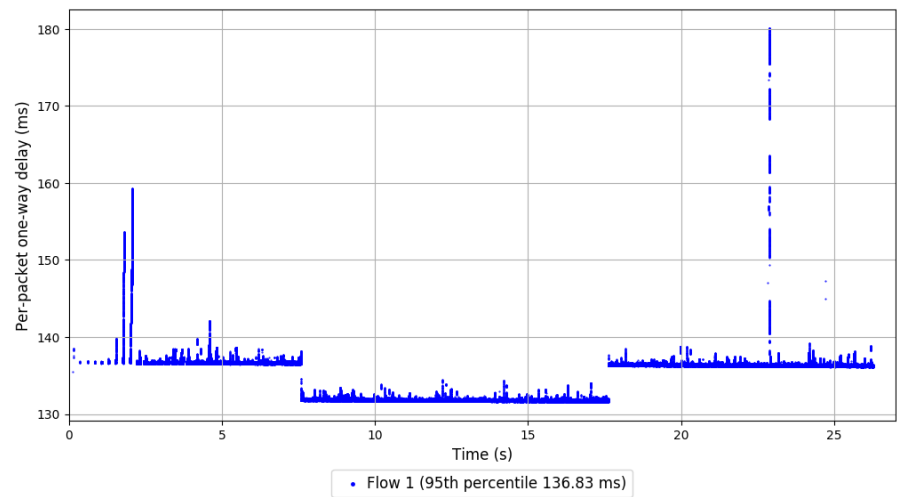
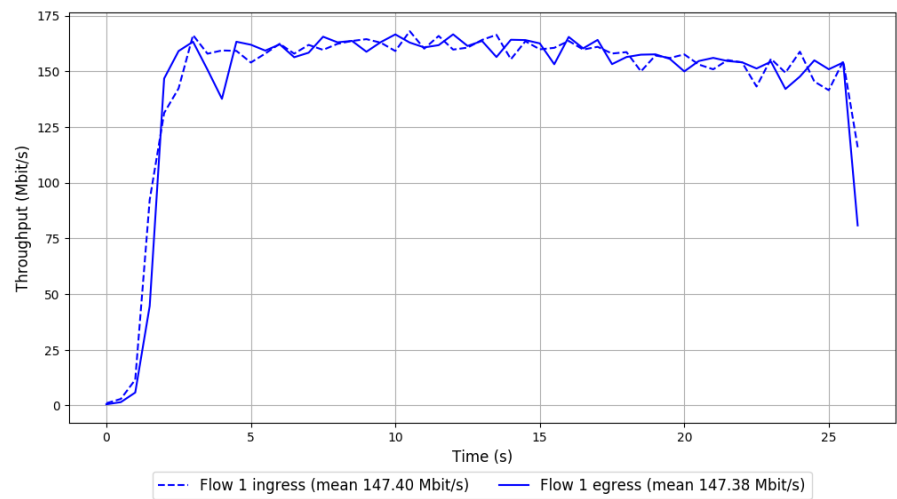
-- Flow 1:

Average throughput: 147.38 Mbit/s

95th percentile per-packet one-way delay: 136.828 ms

Loss rate: 0.89%

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



Run 8: Statistics of Indigo-1-32

Start at: 2018-01-25 17:51:55

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

Below is generated by plot.py at 2018-01-25 21:09:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.57 Mbit/s

95th percentile per-packet one-way delay: 135.068 ms

Loss rate: 0.56%

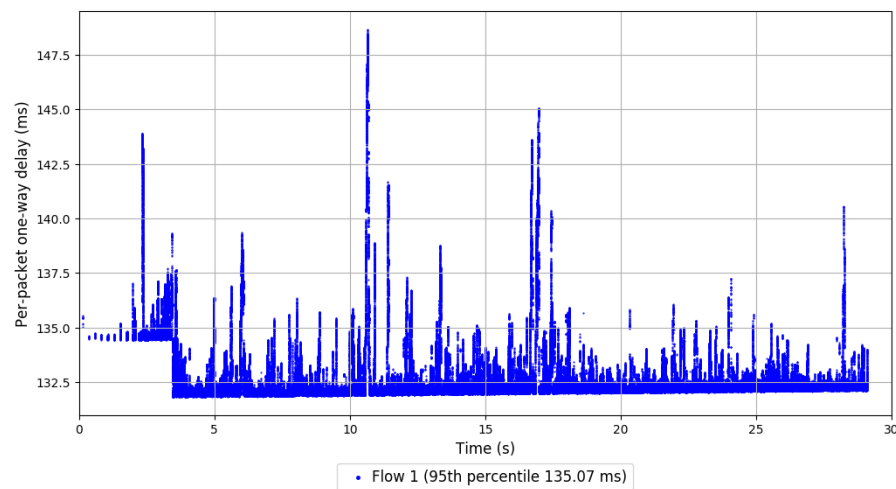
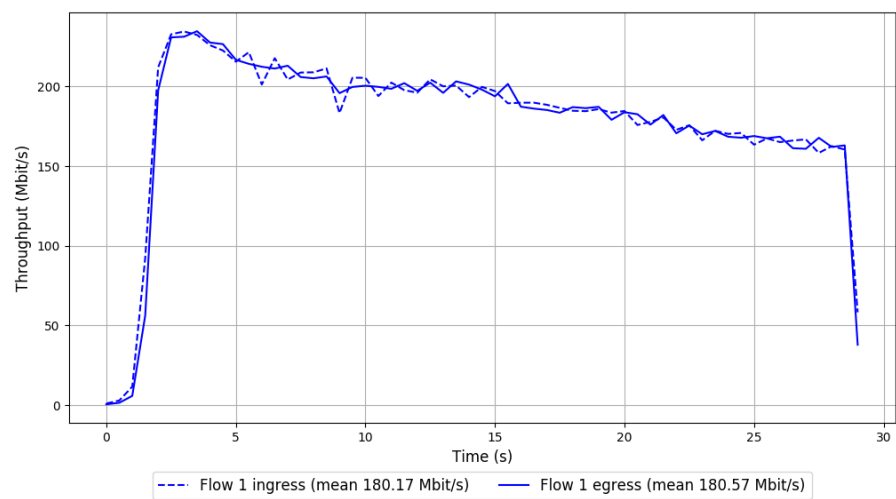
-- Flow 1:

Average throughput: 180.57 Mbit/s

95th percentile per-packet one-way delay: 135.068 ms

Loss rate: 0.56%

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



Run 9: Statistics of Indigo-1-32

Start at: 2018-01-25 18:04:38

End at: 2018-01-25 18:05:08

Below is generated by plot.py at 2018-01-25 21:09:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 135.86 Mbit/s

95th percentile per-packet one-way delay: 131.939 ms

Loss rate: 0.93%

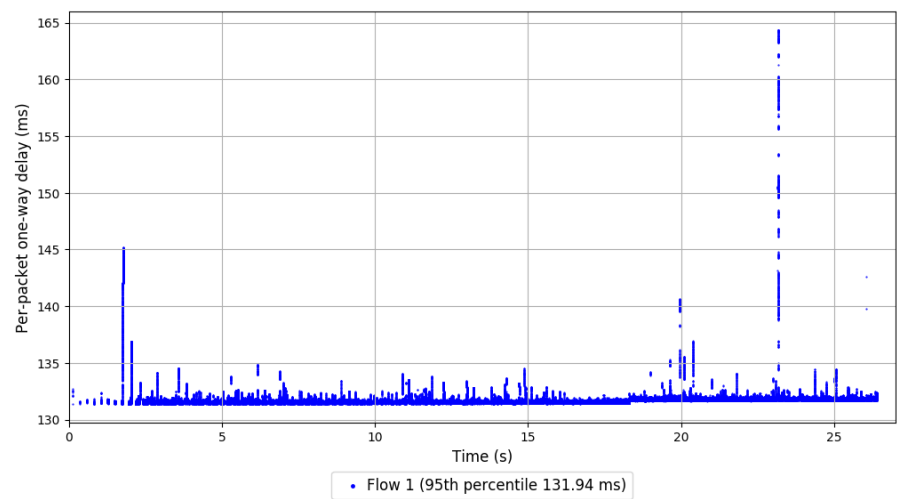
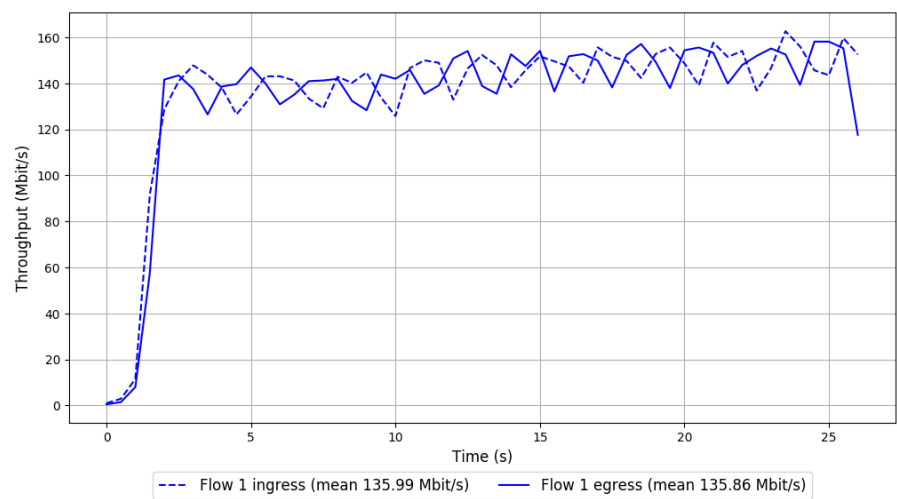
-- Flow 1:

Average throughput: 135.86 Mbit/s

95th percentile per-packet one-way delay: 131.939 ms

Loss rate: 0.93%

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



Run 10: Statistics of Indigo-1-32

Start at: 2018-01-25 18:17:27

End at: 2018-01-25 18:17:57

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 150.74 Mbit/s

95th percentile per-packet one-way delay: 132.052 ms

Loss rate: 0.89%

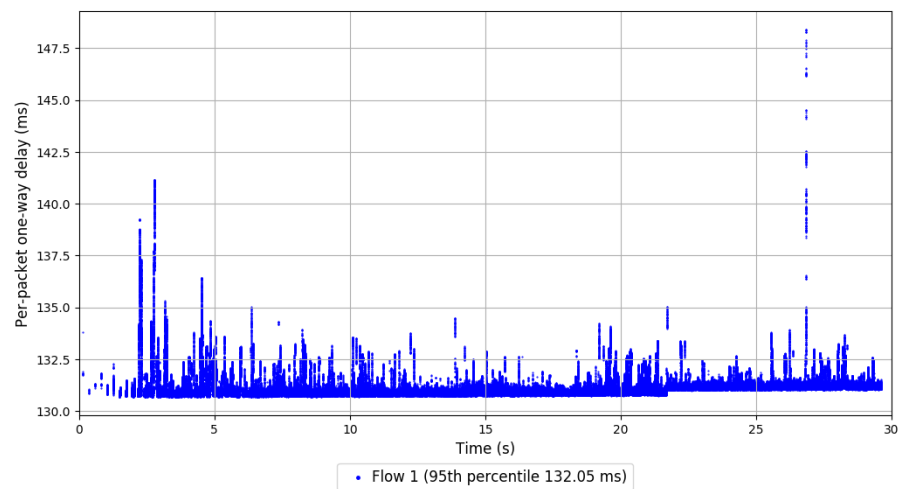
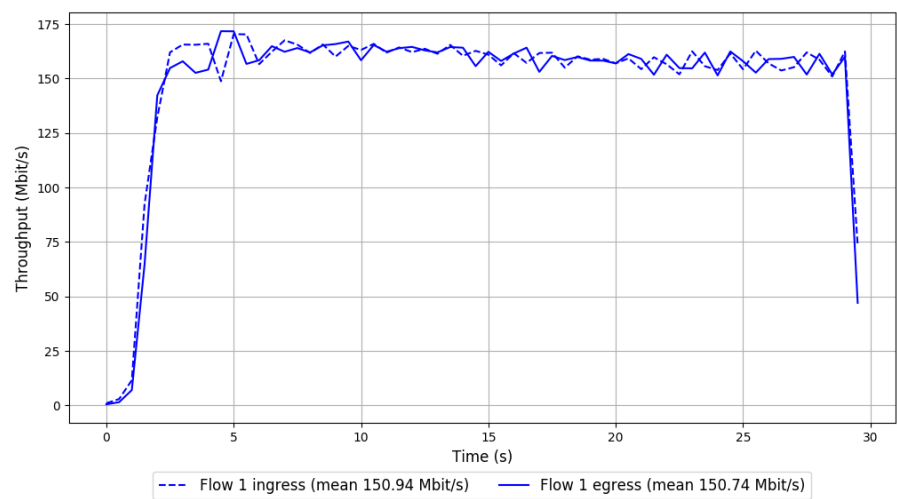
-- Flow 1:

Average throughput: 150.74 Mbit/s

95th percentile per-packet one-way delay: 132.052 ms

Loss rate: 0.89%

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

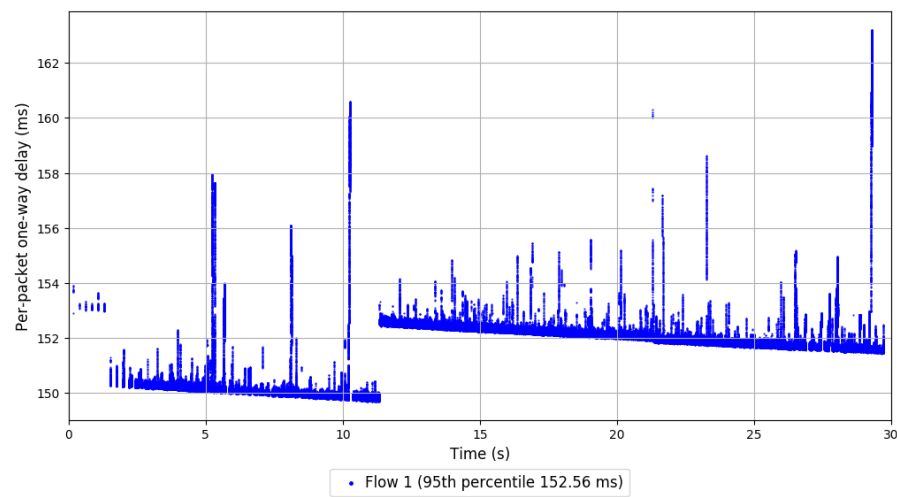
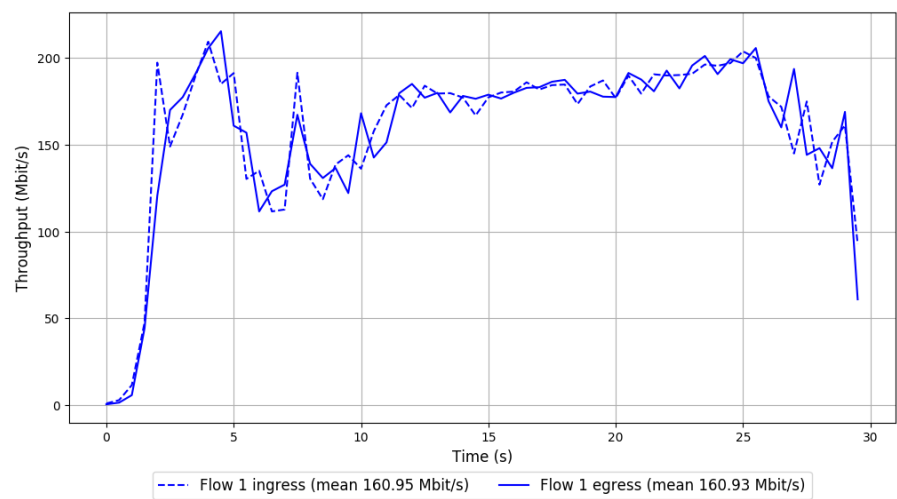


```
Run 1: Statistics of Indigo-1-128

Start at: 2018-01-25 16:23:18
End at: 2018-01-25 16:23:48

# Below is generated by plot.py at 2018-01-25 21:09:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 160.93 Mbit/s
95th percentile per-packet one-way delay: 152.556 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 160.93 Mbit/s
95th percentile per-packet one-way delay: 152.556 ms
Loss rate: 0.76%
```


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



Run 2: Statistics of Indigo-1-128

Start at: 2018-01-25 16:36:11

End at: 2018-01-25 16:36:41

Below is generated by plot.py at 2018-01-25 21:09:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 159.35 Mbit/s

95th percentile per-packet one-way delay: 155.299 ms

Loss rate: 0.58%

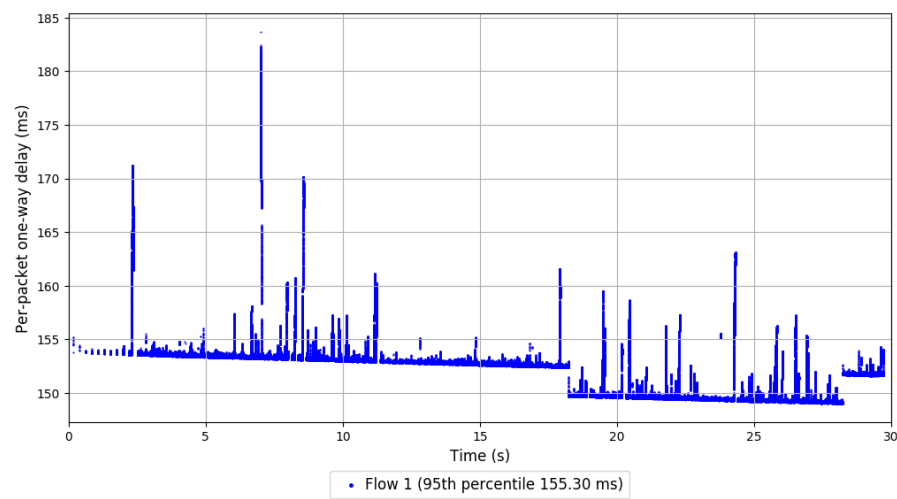
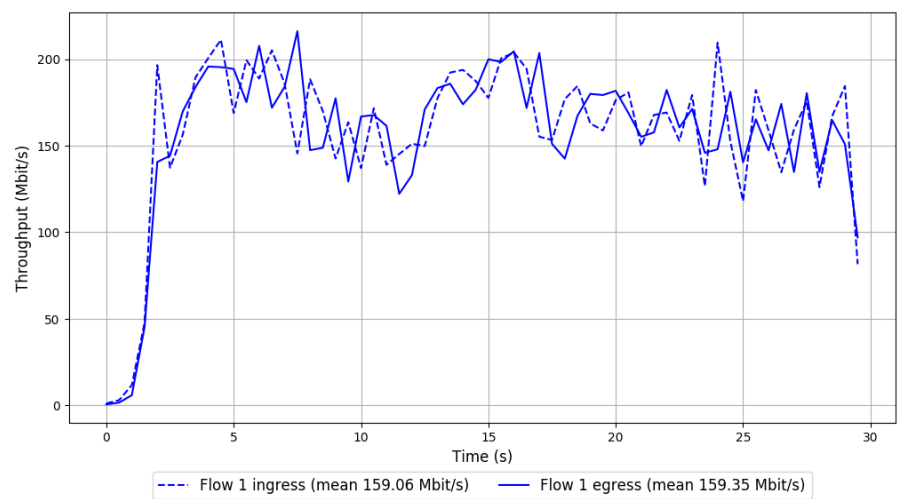
-- Flow 1:

Average throughput: 159.35 Mbit/s

95th percentile per-packet one-way delay: 155.299 ms

Loss rate: 0.58%

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



Run 3: Statistics of Indigo-1-128

Start at: 2018-01-25 16:49:02

End at: 2018-01-25 16:49:32

Below is generated by plot.py at 2018-01-25 21:10:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 157.12 Mbit/s

95th percentile per-packet one-way delay: 159.756 ms

Loss rate: 0.91%

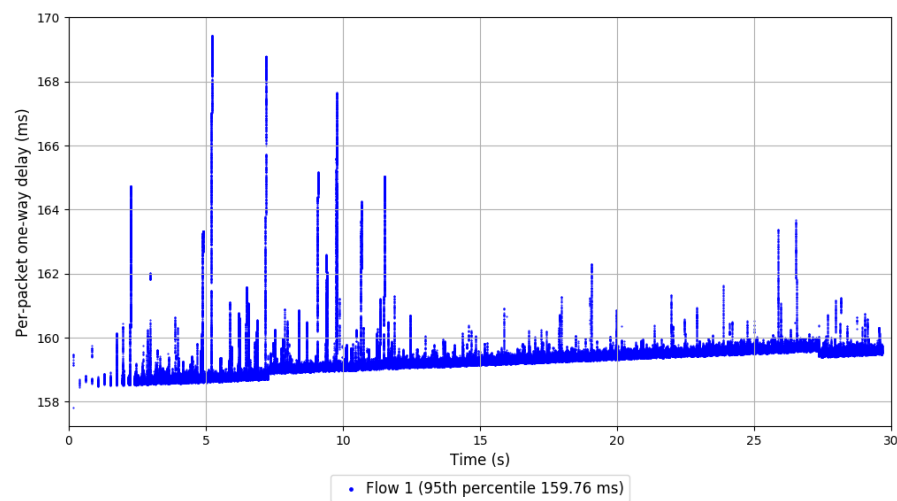
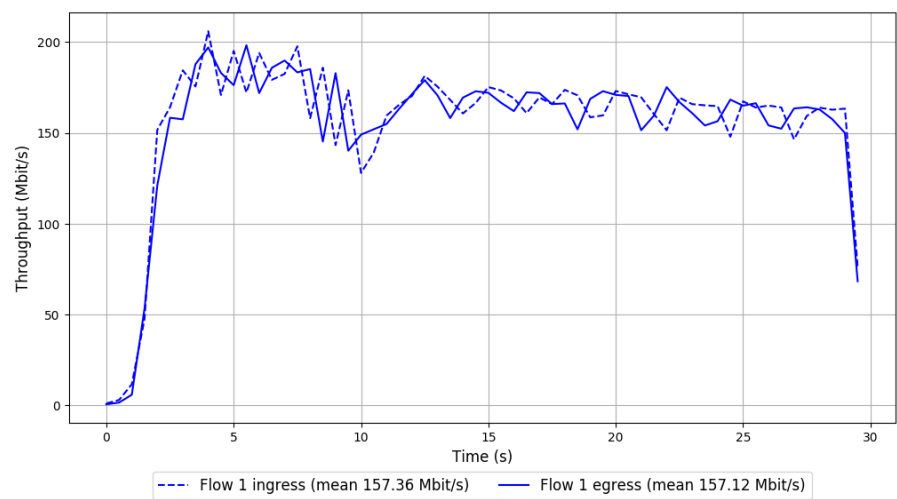
-- Flow 1:

Average throughput: 157.12 Mbit/s

95th percentile per-packet one-way delay: 159.756 ms

Loss rate: 0.91%

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



Run 4: Statistics of Indigo-1-128

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

End at: 2018-01-25 17:02:18

Below is generated by plot.py at 2018-01-25 21:11:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.45 Mbit/s

95th percentile per-packet one-way delay: 158.965 ms

Loss rate: 0.96%

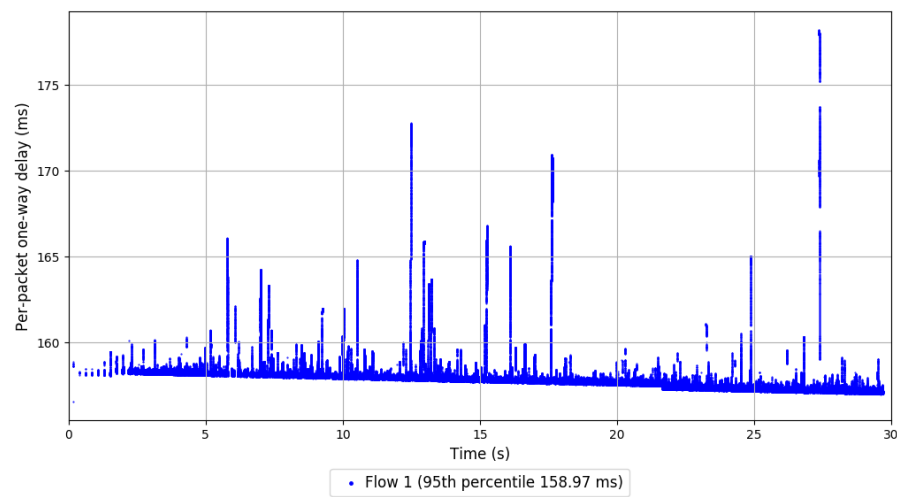
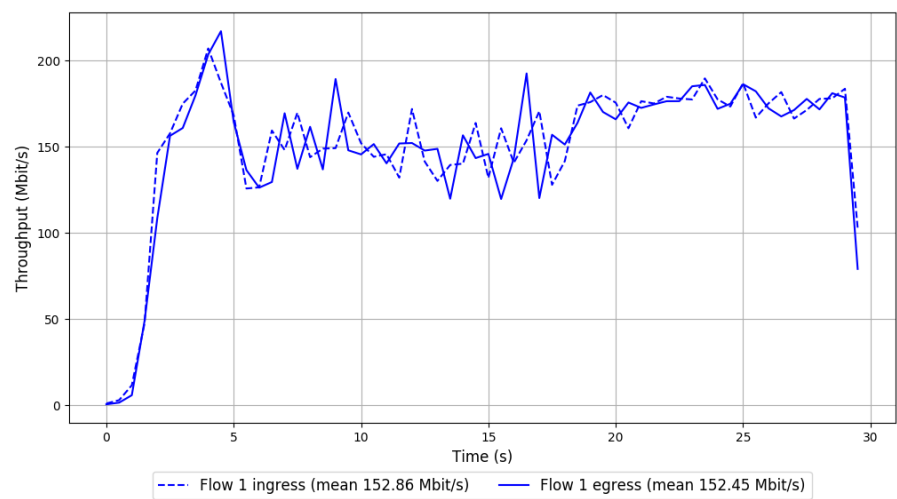
-- Flow 1:

Average throughput: 152.45 Mbit/s

95th percentile per-packet one-way delay: 158.965 ms

Loss rate: 0.96%

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



Run 5: Statistics of Indigo-1-128

Start at: 2018-01-25 17:14:36

End at: 2018-01-25 17:15:06

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 156.10 Mbit/s

95th percentile per-packet one-way delay: 147.571 ms

Loss rate: 0.80%

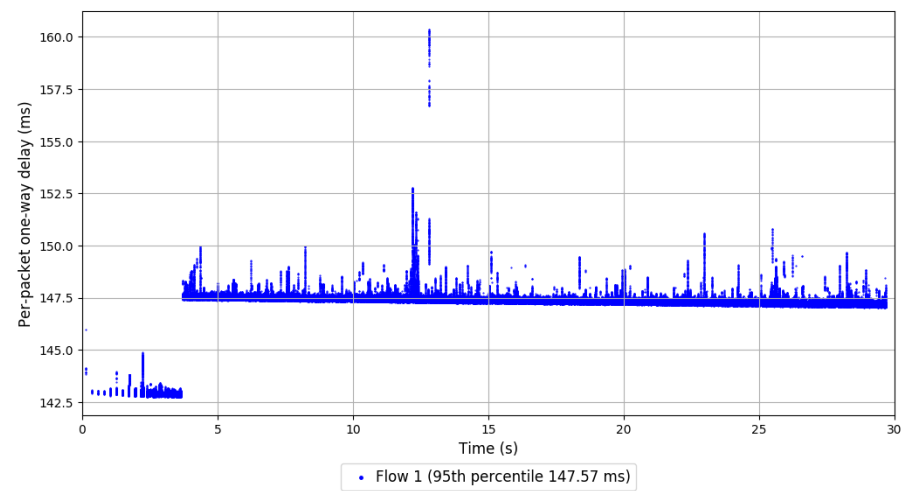
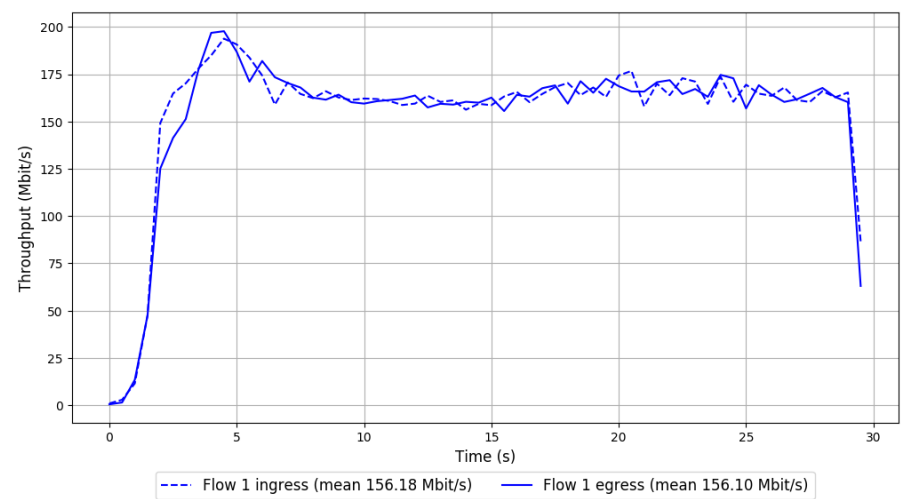
-- Flow 1:

Average throughput: 156.10 Mbit/s

95th percentile per-packet one-way delay: 147.571 ms

Loss rate: 0.80%

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



Run 6: Statistics of Indigo-1-128

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

End at: 2018-01-25 17:27:55

Below is generated by plot.py at 2018-01-25 21:11:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 155.05 Mbit/s

95th percentile per-packet one-way delay: 154.575 ms

Loss rate: 0.77%

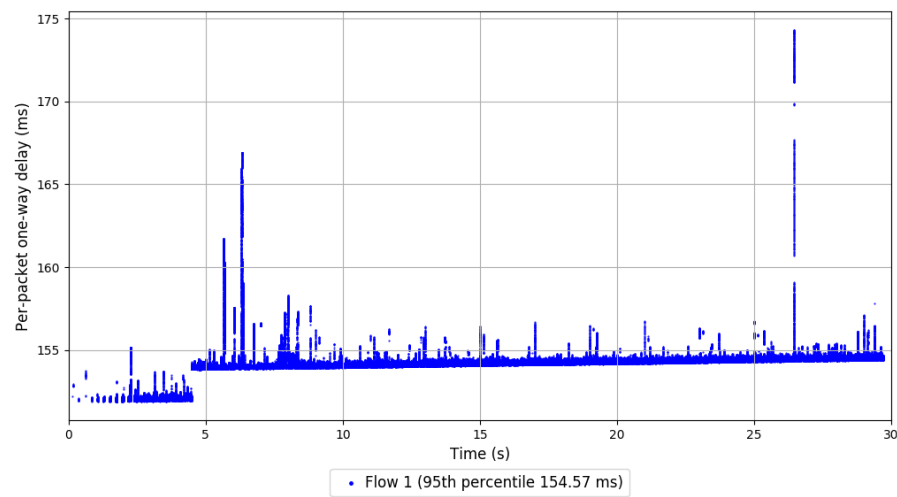
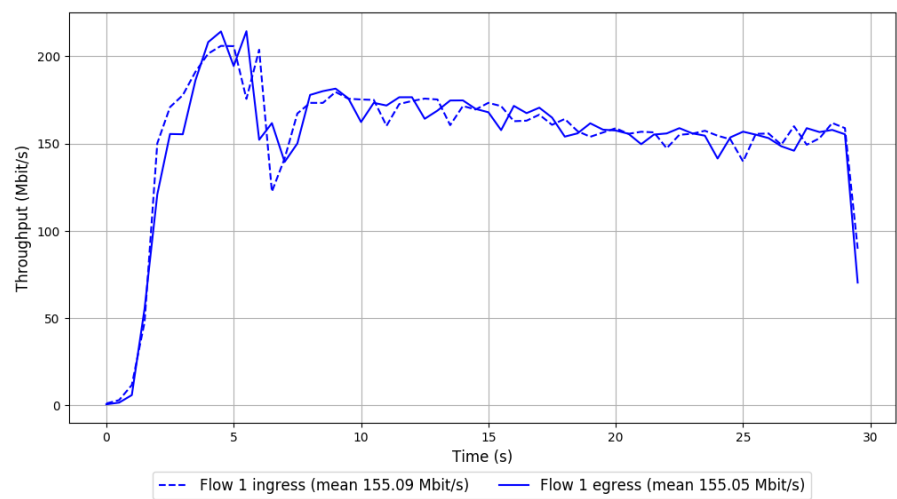
-- Flow 1:

Average throughput: 155.05 Mbit/s

95th percentile per-packet one-way delay: 154.575 ms

Loss rate: 0.77%

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



Run 7: Statistics of Indigo-1-128

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

End at: 2018-01-25 17:40:41

Below is generated by plot.py at 2018-01-25 21:11:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.07 Mbit/s

95th percentile per-packet one-way delay: 142.739 ms

Loss rate: 1.07%

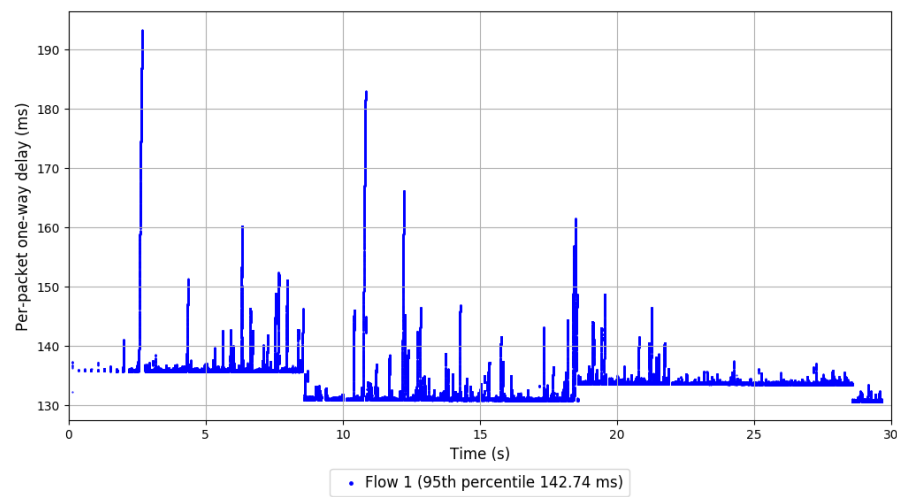
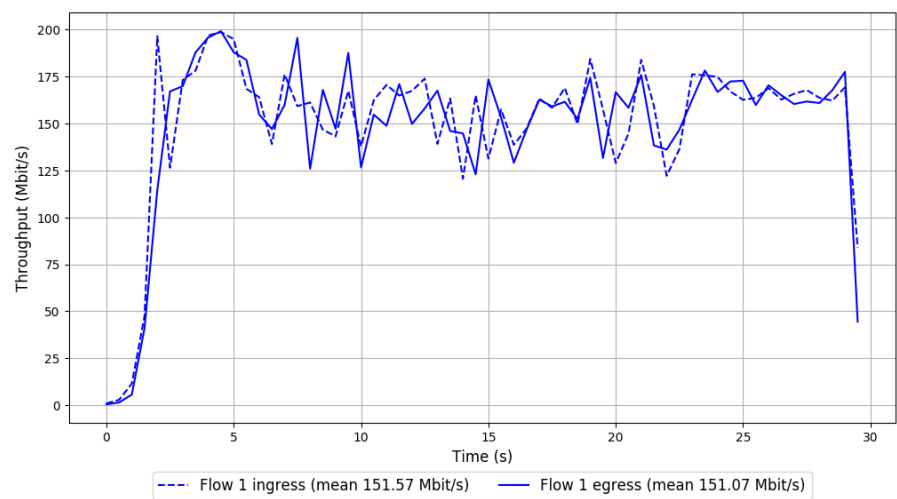
-- Flow 1:

Average throughput: 151.07 Mbit/s

95th percentile per-packet one-way delay: 142.739 ms

Loss rate: 1.07%

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



Run 8: Statistics of Indigo-1-128

Start at: 2018-01-25 17:52:51

End at: 2018-01-25 17:53:21

Below is generated by plot.py at 2018-01-25 21:11:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 153.35 Mbit/s

95th percentile per-packet one-way delay: 143.659 ms

Loss rate: 0.67%

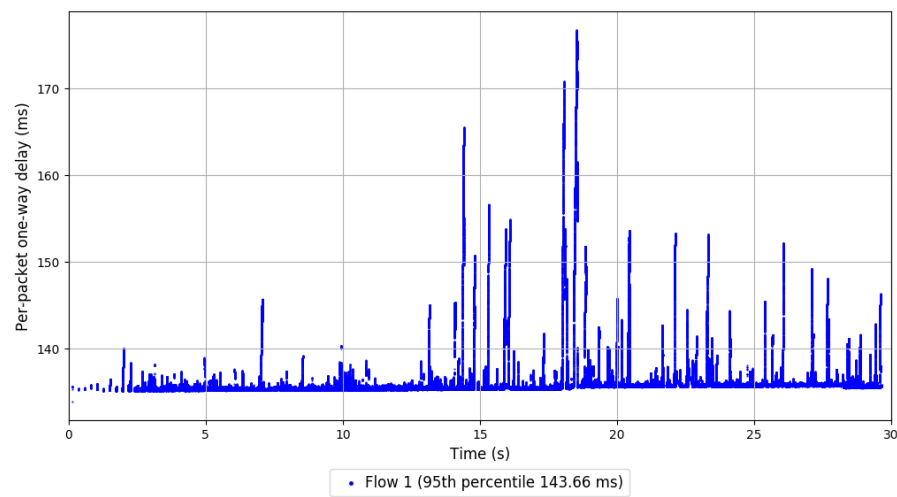
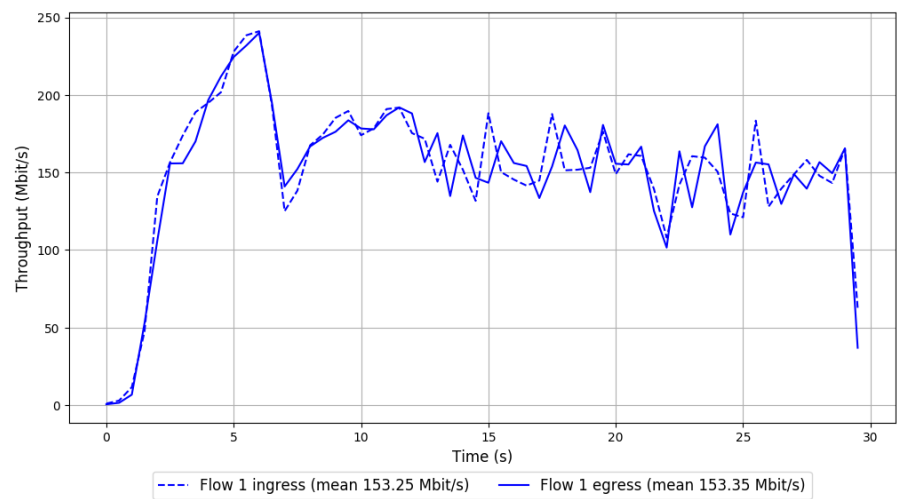
-- Flow 1:

Average throughput: 153.35 Mbit/s

95th percentile per-packet one-way delay: 143.659 ms

Loss rate: 0.67%

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



Run 9: Statistics of Indigo-1-128

Start at: 2018-01-25 18:05:28

End at: 2018-01-25 18:05:58

Below is generated by plot.py at 2018-01-25 21:11:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 148.88 Mbit/s

95th percentile per-packet one-way delay: 136.320 ms

Loss rate: 0.73%

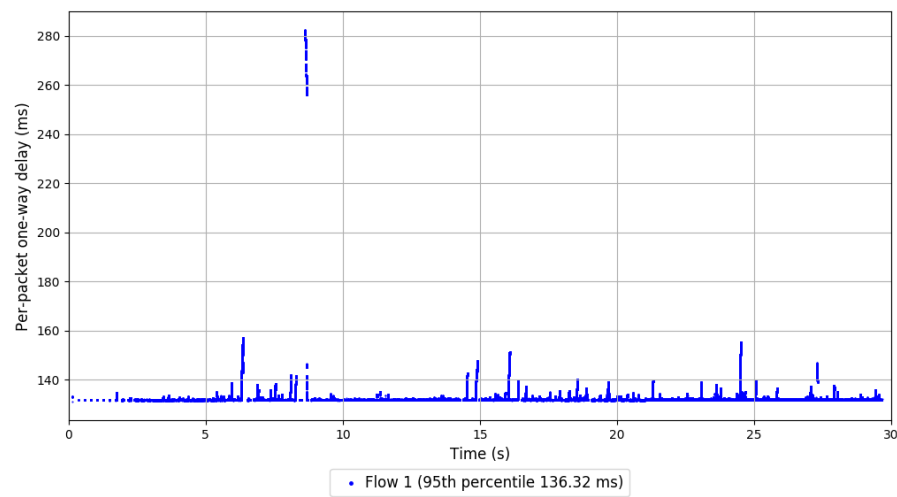
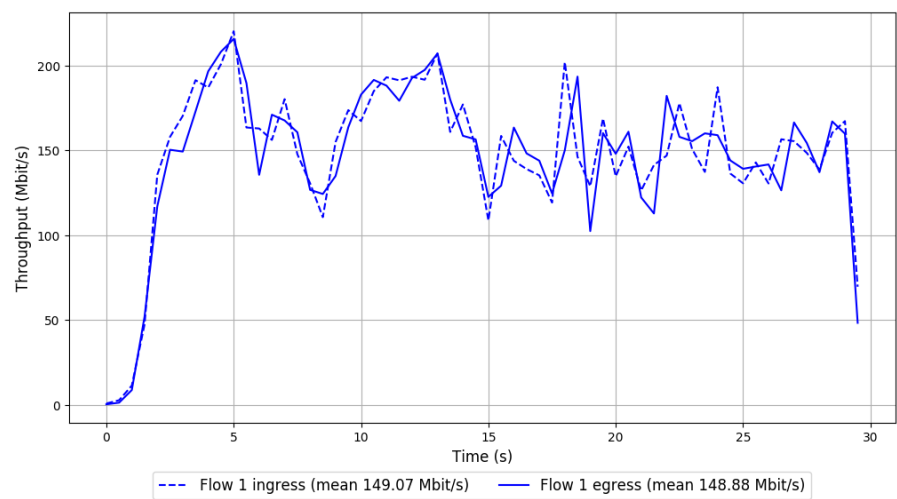
-- Flow 1:

Average throughput: 148.88 Mbit/s

95th percentile per-packet one-way delay: 136.320 ms

Loss rate: 0.73%

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



Run 10: Statistics of Indigo-1-128

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

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

Below is generated by plot.py at 2018-01-25 21:11:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 155.53 Mbit/s

95th percentile per-packet one-way delay: 141.414 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 155.53 Mbit/s

95th percentile per-packet one-way delay: 141.414 ms

Loss rate: 0.80%

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

