

Pantheon Report

Generated at 2017-12-05 10:32:25 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

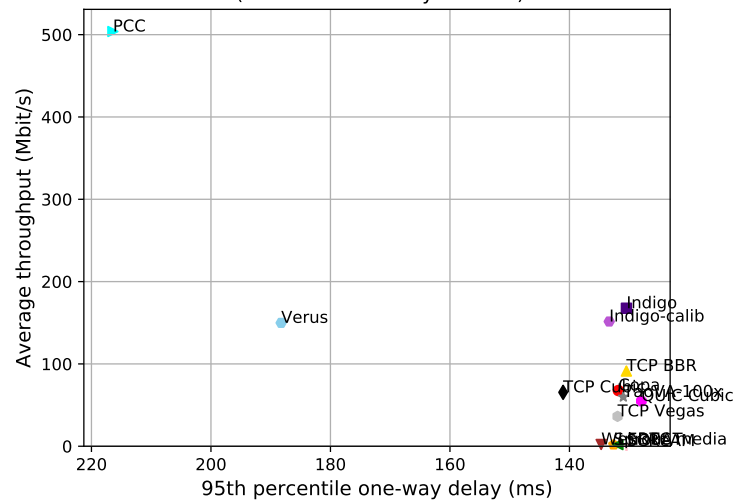
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

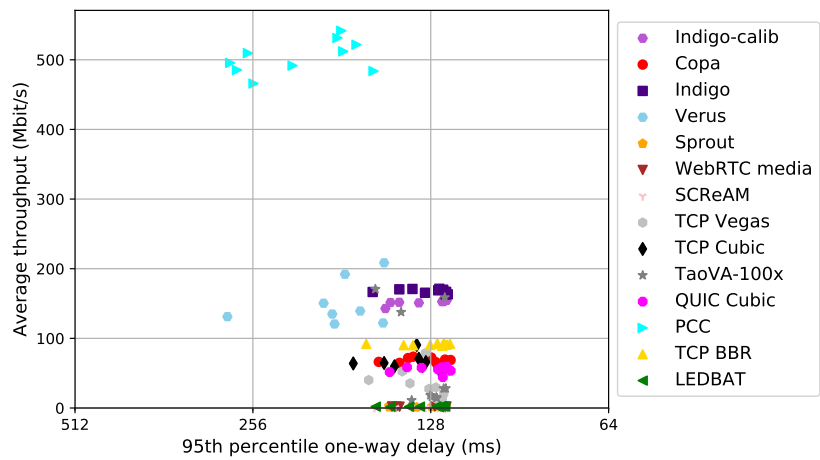
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/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	91.37	130.47	0.80
TCP Cubic	8	65.47	141.06	0.81
LEDBAT	10	2.01	131.89	1.04
PCC	10	503.83	216.41	2.84
QUIC Cubic	9	54.97	127.96	0.97
SCReAM	10	0.21	130.46	0.74
WebRTC media	6	2.14	134.69	0.92
Sprout	10	1.85	132.62	0.86
TaoVA-100x	10	59.84	130.99	0.93
TCP Vegas	10	36.28	131.95	0.66
Verus	8	149.87	188.25	1.29
Copa	10	67.67	131.82	0.73
Indigo	10	167.63	130.46	0.86
Indigo-calib	8	151.52	133.35	0.89

Run 1: Statistics of TCP BBR

Start at: 2017-12-05 06:27:44

End at: 2017-12-05 06:28:14

Below is generated by plot.py at 2017-12-05 10:02:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.09 Mbit/s

95th percentile per-packet one-way delay: 164.584 ms

Loss rate: 0.75%

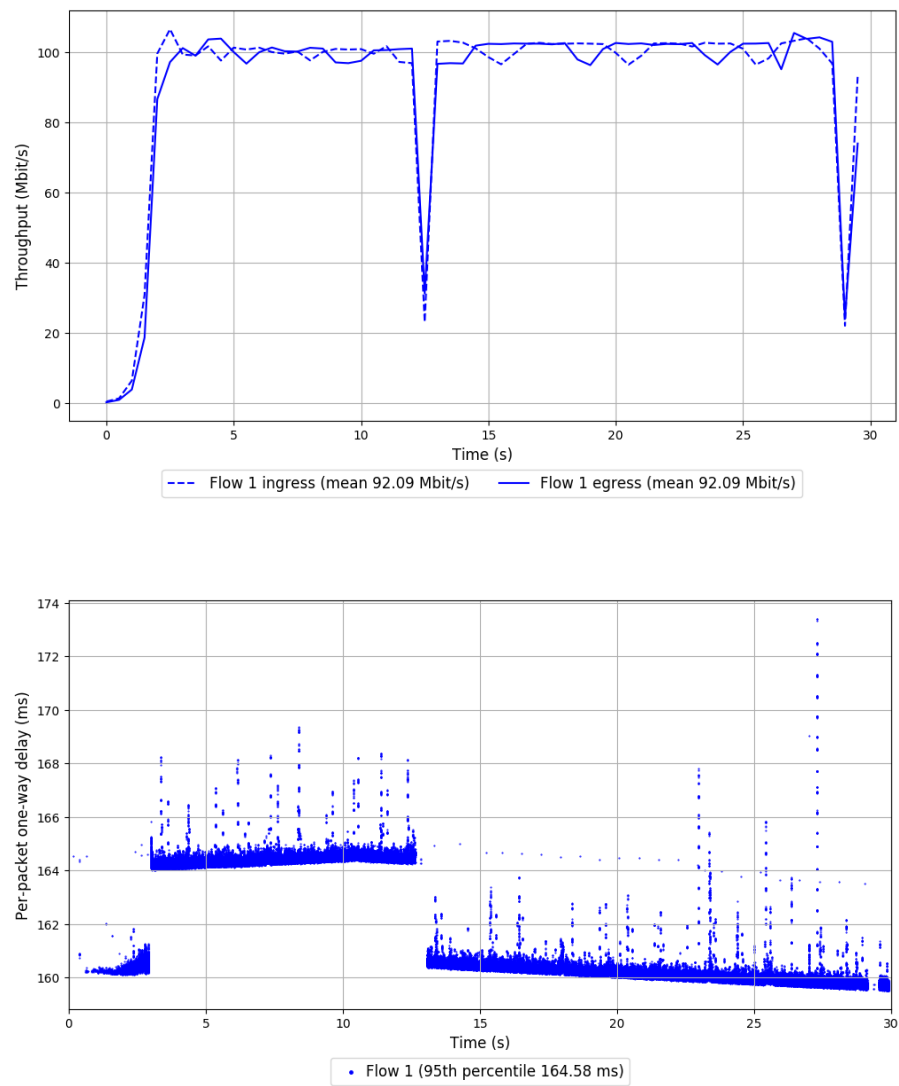
-- Flow 1:

Average throughput: 92.09 Mbit/s

95th percentile per-packet one-way delay: 164.584 ms

Loss rate: 0.75%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-05 06:38:54

End at: 2017-12-05 06:39:24

Below is generated by plot.py at 2017-12-05 10:02:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.27 Mbit/s

95th percentile per-packet one-way delay: 142.245 ms

Loss rate: 0.79%

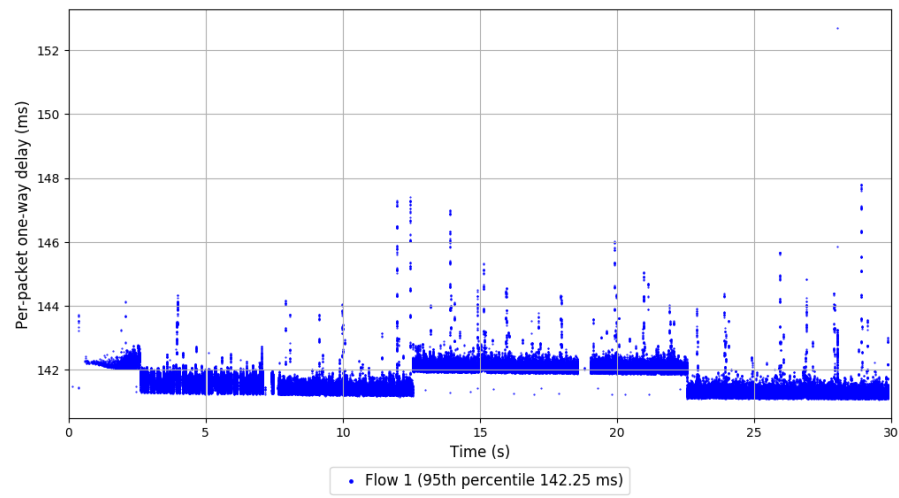
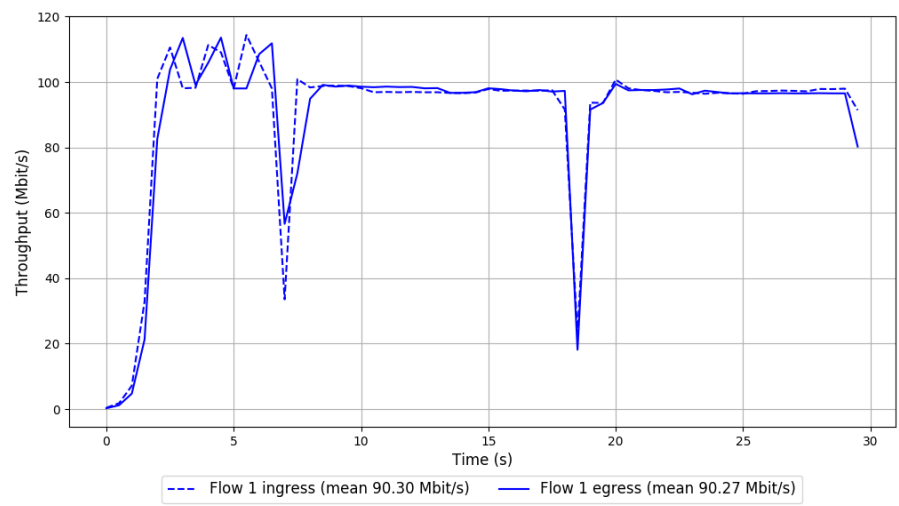
-- Flow 1:

Average throughput: 90.27 Mbit/s

95th percentile per-packet one-way delay: 142.245 ms

Loss rate: 0.79%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-05 06:50:06

End at: 2017-12-05 06:50:36

Below is generated by plot.py at 2017-12-05 10:02:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.16 Mbit/s

95th percentile per-packet one-way delay: 137.181 ms

Loss rate: 0.90%

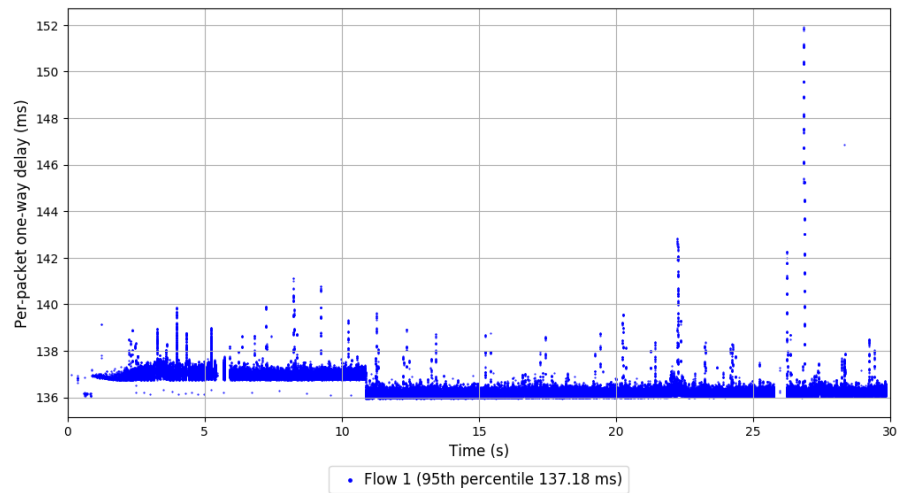
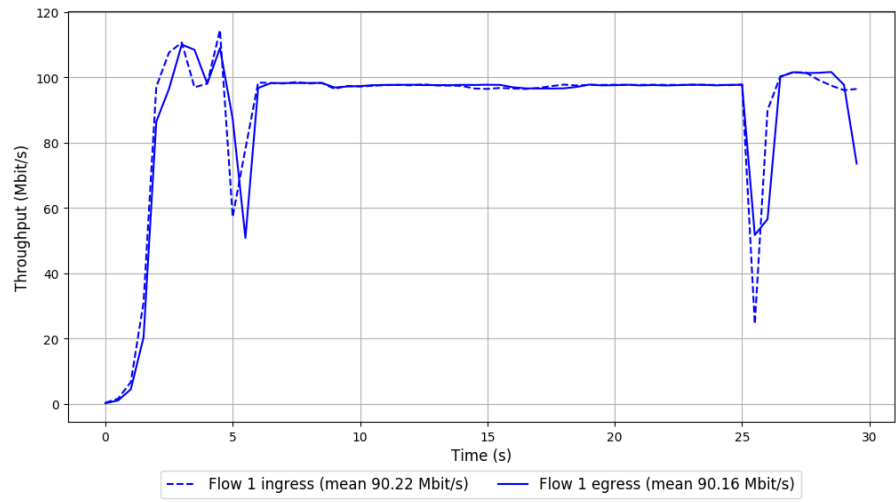
-- Flow 1:

Average throughput: 90.16 Mbit/s

95th percentile per-packet one-way delay: 137.181 ms

Loss rate: 0.90%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-05 07:01:04

End at: 2017-12-05 07:01:34

Below is generated by plot.py at 2017-12-05 10:02:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.52 Mbit/s

95th percentile per-packet one-way delay: 128.325 ms

Loss rate: 0.69%

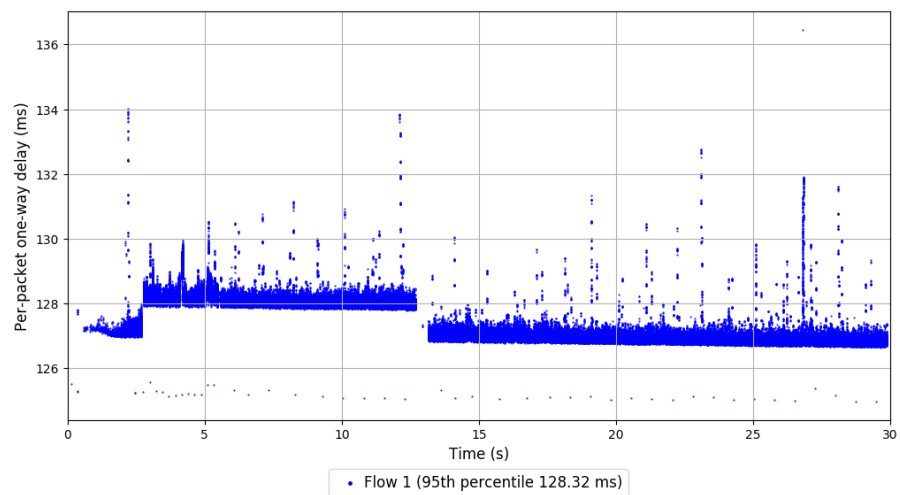
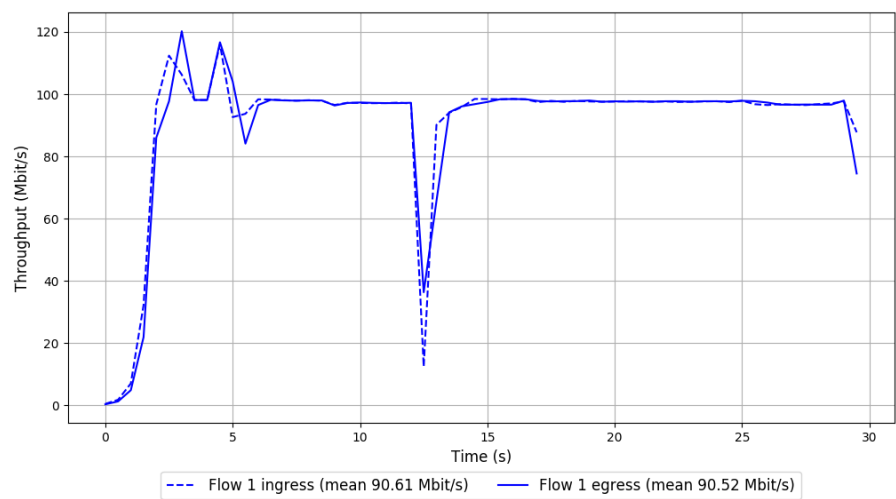
-- Flow 1:

Average throughput: 90.52 Mbit/s

95th percentile per-packet one-way delay: 128.325 ms

Loss rate: 0.69%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-05 07:12:01

End at: 2017-12-05 07:12:31

Below is generated by plot.py at 2017-12-05 10:02:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.34 Mbit/s

95th percentile per-packet one-way delay: 124.780 ms

Loss rate: 0.79%

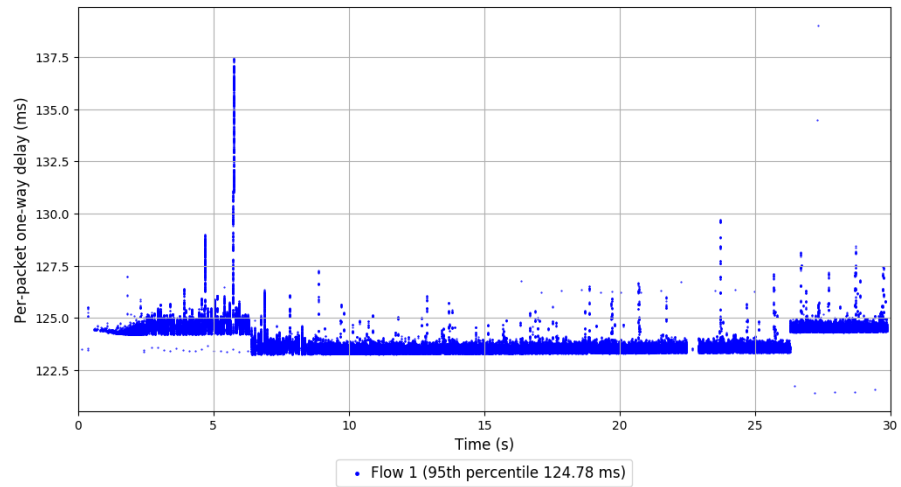
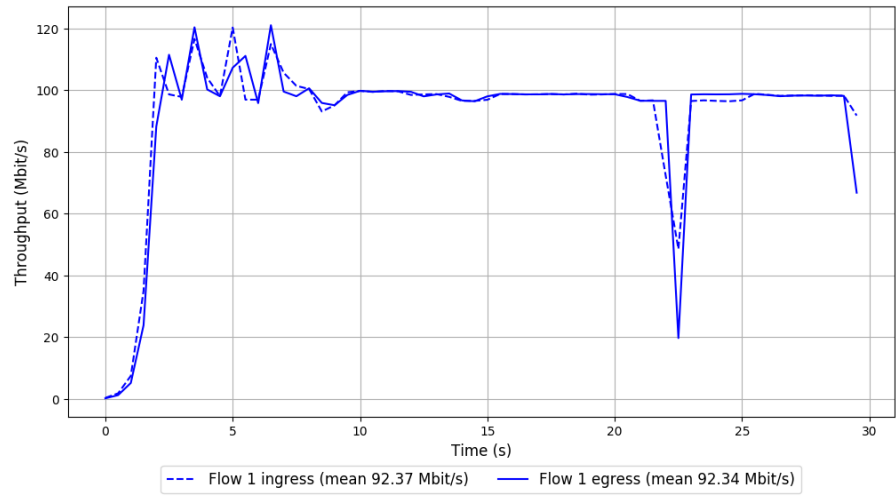
-- Flow 1:

Average throughput: 92.34 Mbit/s

95th percentile per-packet one-way delay: 124.780 ms

Loss rate: 0.79%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-05 07:22:54

End at: 2017-12-05 07:23:24

Below is generated by plot.py at 2017-12-05 10:02:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.85 Mbit/s

95th percentile per-packet one-way delay: 120.149 ms

Loss rate: 0.86%

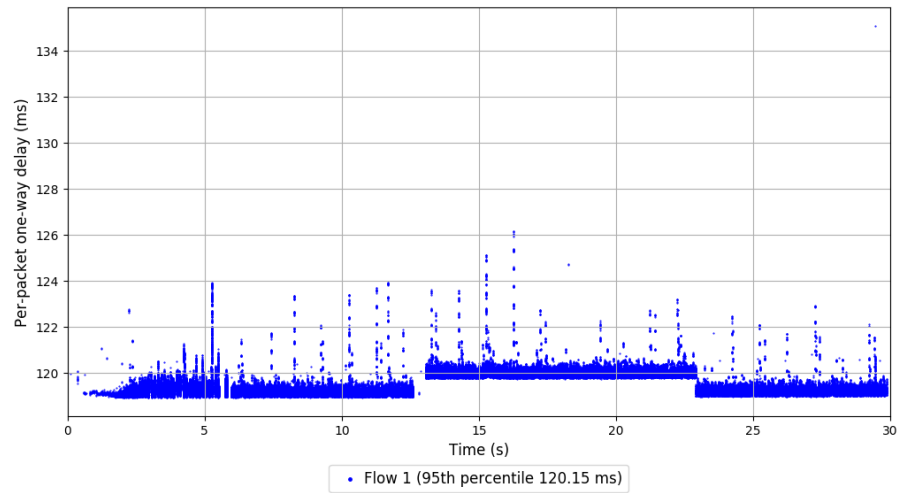
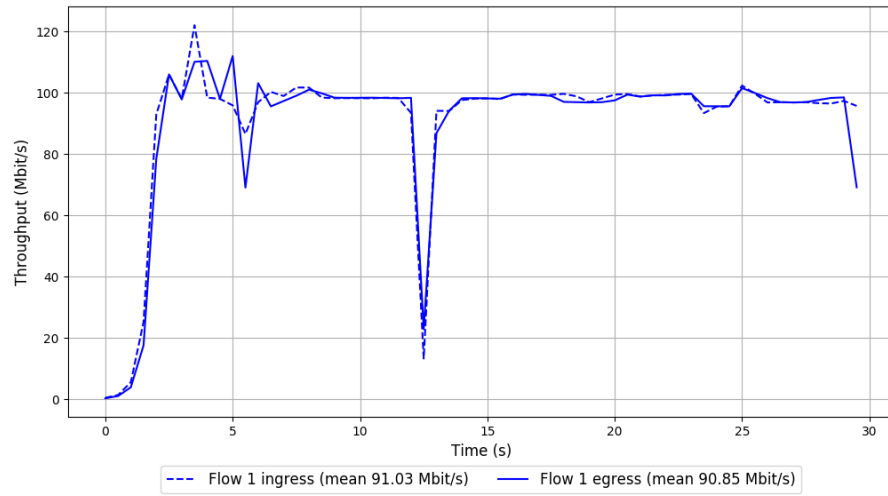
-- Flow 1:

Average throughput: 90.85 Mbit/s

95th percentile per-packet one-way delay: 120.149 ms

Loss rate: 0.86%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-05 07:34:12

End at: 2017-12-05 07:34:42

Below is generated by plot.py at 2017-12-05 10:02:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.52 Mbit/s

95th percentile per-packet one-way delay: 122.384 ms

Loss rate: 0.85%

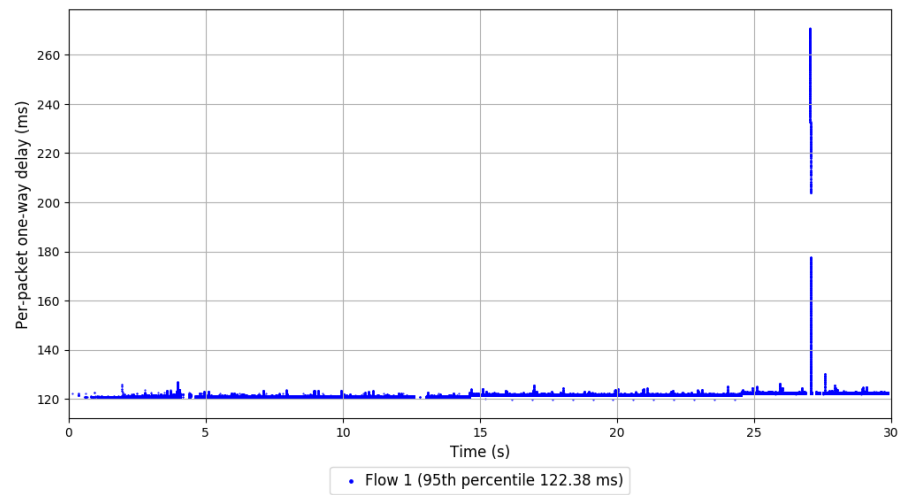
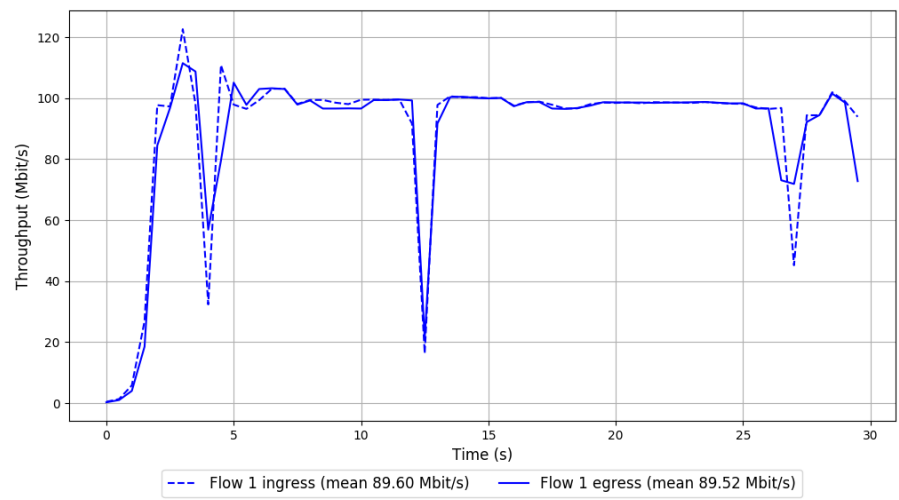
-- Flow 1:

Average throughput: 89.52 Mbit/s

95th percentile per-packet one-way delay: 122.384 ms

Loss rate: 0.85%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-05 07:45:06

End at: 2017-12-05 07:45:36

Below is generated by plot.py at 2017-12-05 10:02:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.12 Mbit/s

95th percentile per-packet one-way delay: 124.735 ms

Loss rate: 0.80%

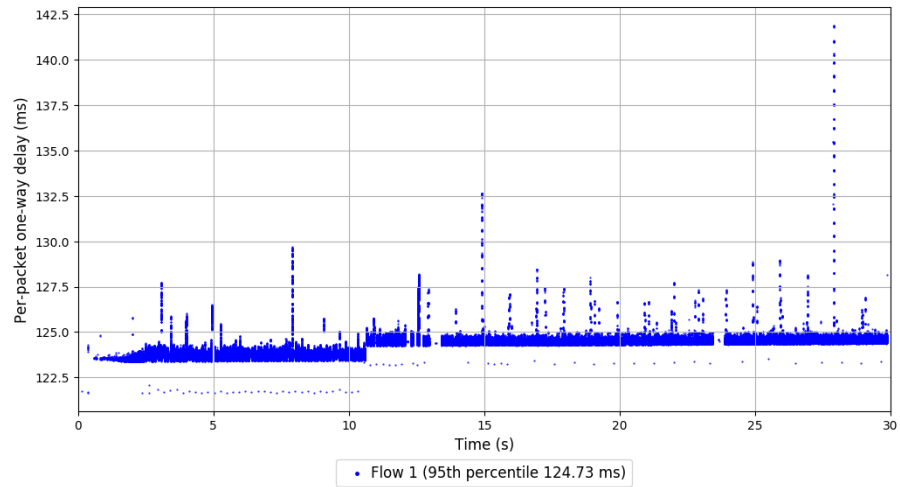
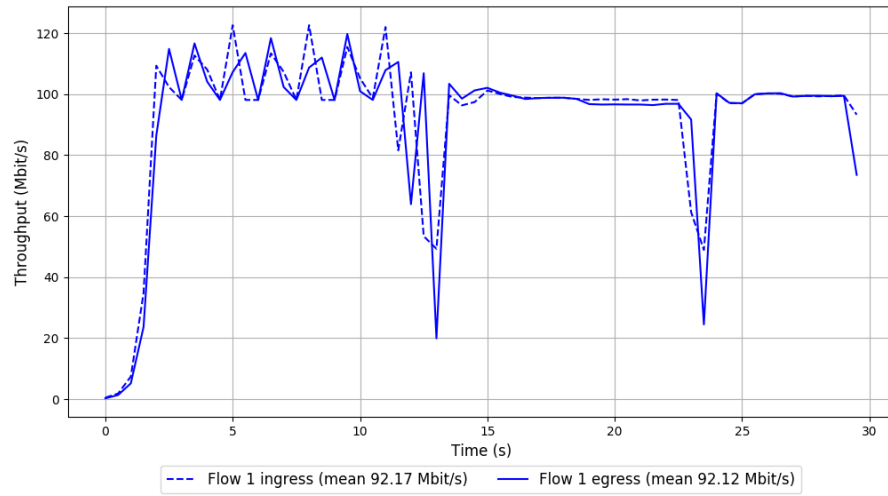
-- Flow 1:

Average throughput: 92.12 Mbit/s

95th percentile per-packet one-way delay: 124.735 ms

Loss rate: 0.80%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-05 07:56:06

End at: 2017-12-05 07:56:36

Below is generated by plot.py at 2017-12-05 10:04:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.57 Mbit/s

95th percentile per-packet one-way delay: 121.544 ms

Loss rate: 0.78%

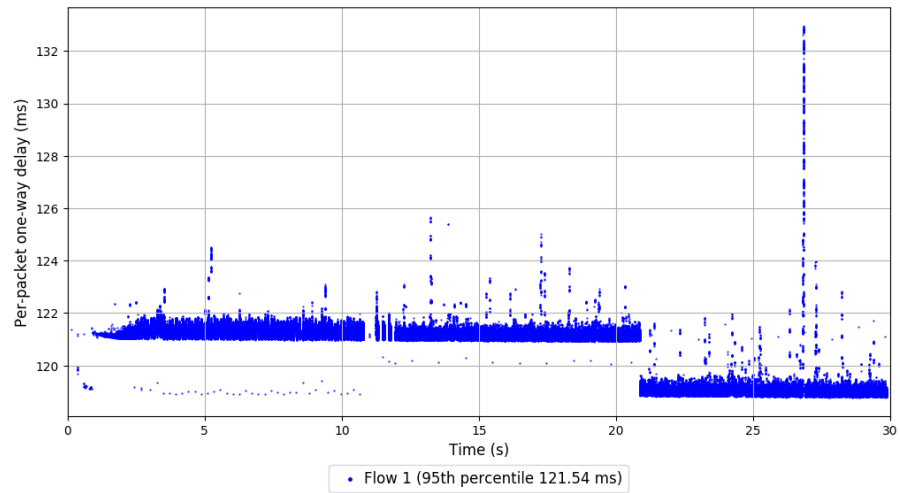
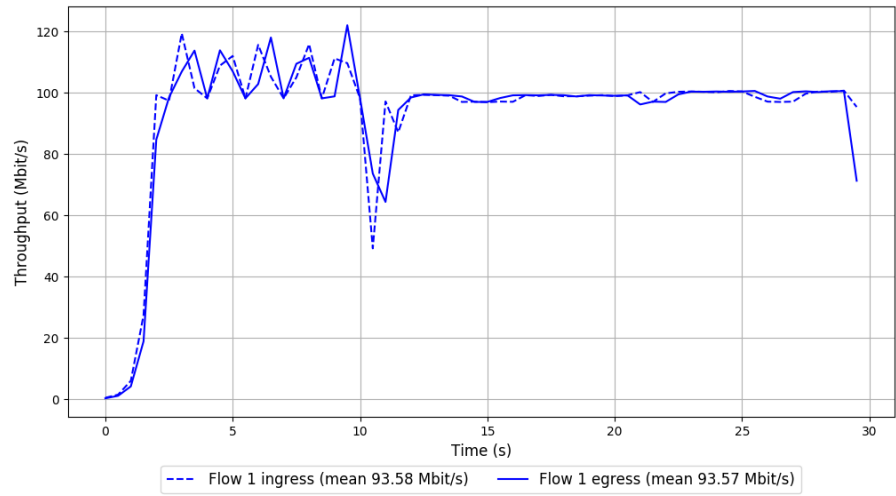
-- Flow 1:

Average throughput: 93.57 Mbit/s

95th percentile per-packet one-way delay: 121.544 ms

Loss rate: 0.78%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-05 08:07:01

End at: 2017-12-05 08:07:31

Below is generated by plot.py at 2017-12-05 10:04:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.24 Mbit/s

95th percentile per-packet one-way delay: 118.772 ms

Loss rate: 0.81%

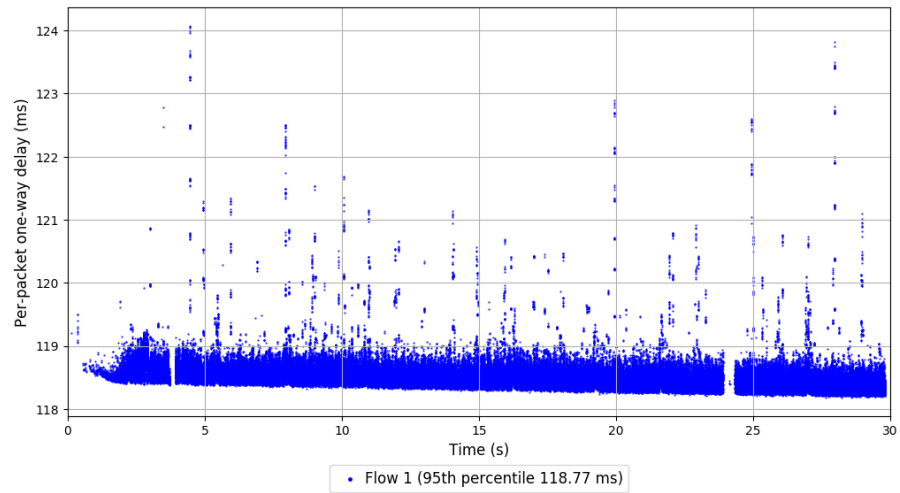
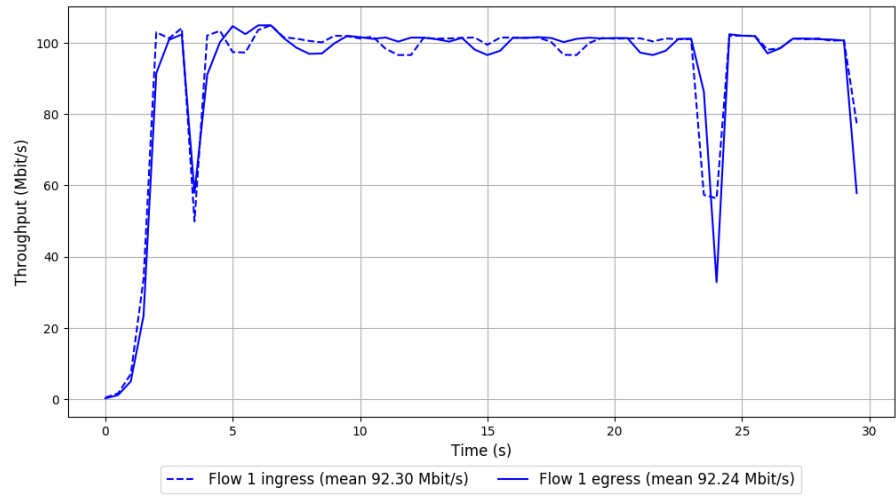
-- Flow 1:

Average throughput: 92.24 Mbit/s

95th percentile per-packet one-way delay: 118.772 ms

Loss rate: 0.81%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-05 06:26:58

End at: 2017-12-05 06:27:28

Below is generated by plot.py at 2017-12-05 10:04:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.97 Mbit/s

95th percentile per-packet one-way delay: 173.103 ms

Loss rate: 0.85%

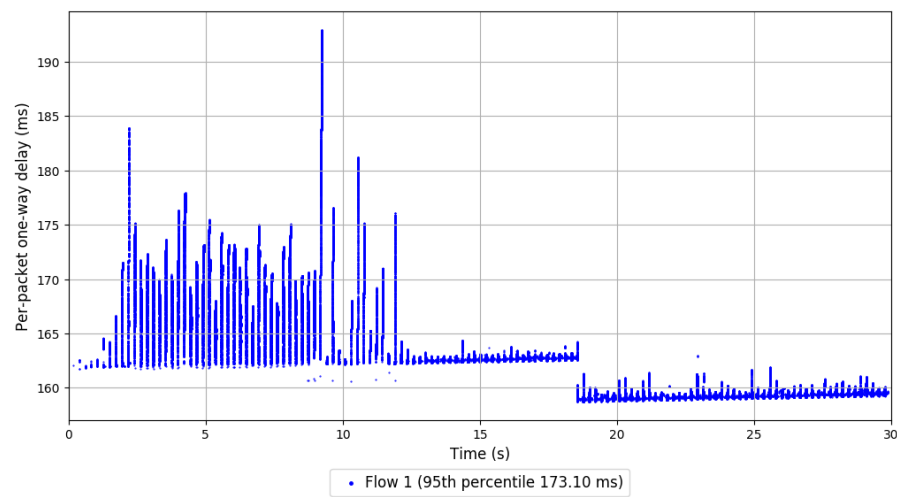
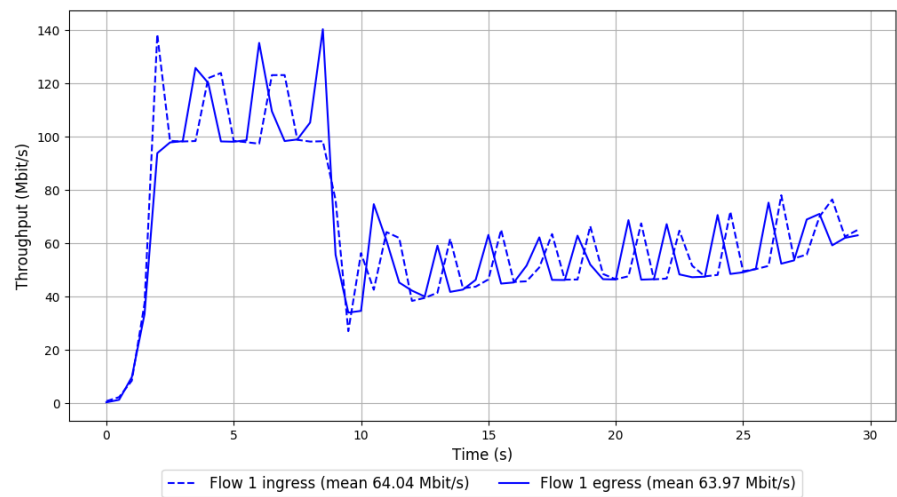
-- Flow 1:

Average throughput: 63.97 Mbit/s

95th percentile per-packet one-way delay: 173.103 ms

Loss rate: 0.85%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-05 06:38:08

End at: 2017-12-05 06:38:38

Below is generated by plot.py at 2017-12-05 10:04:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.65 Mbit/s

95th percentile per-packet one-way delay: 153.506 ms

Loss rate: 0.71%

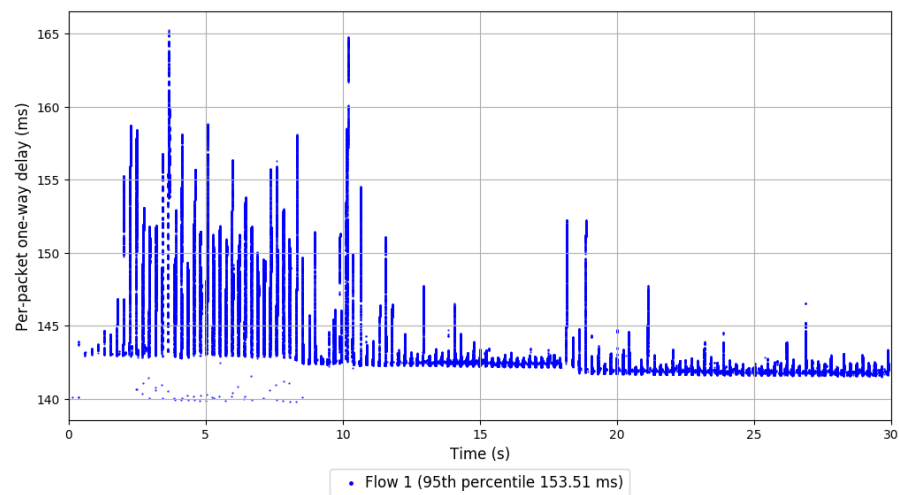
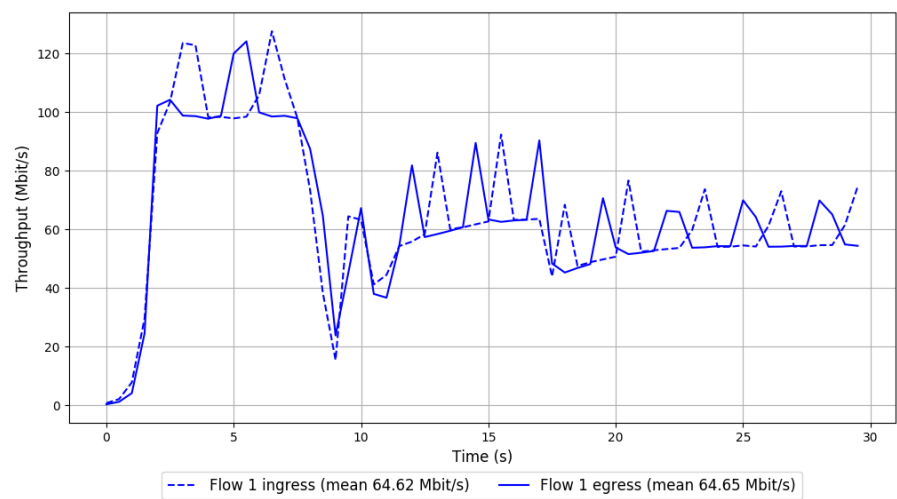
-- Flow 1:

Average throughput: 64.65 Mbit/s

95th percentile per-packet one-way delay: 153.506 ms

Loss rate: 0.71%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-05 06:49:20

End at: 2017-12-05 06:49:51

Below is generated by plot.py at 2017-12-05 10:04:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.86 Mbit/s

95th percentile per-packet one-way delay: 147.447 ms

Loss rate: 1.03%

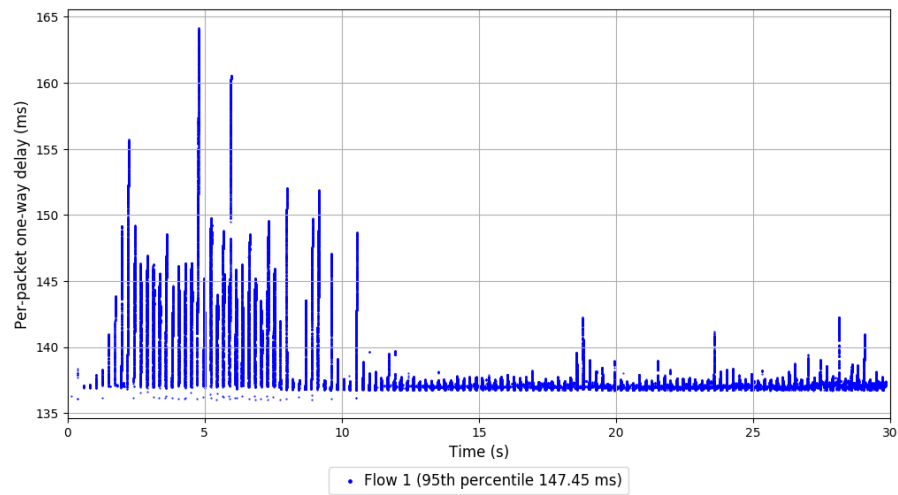
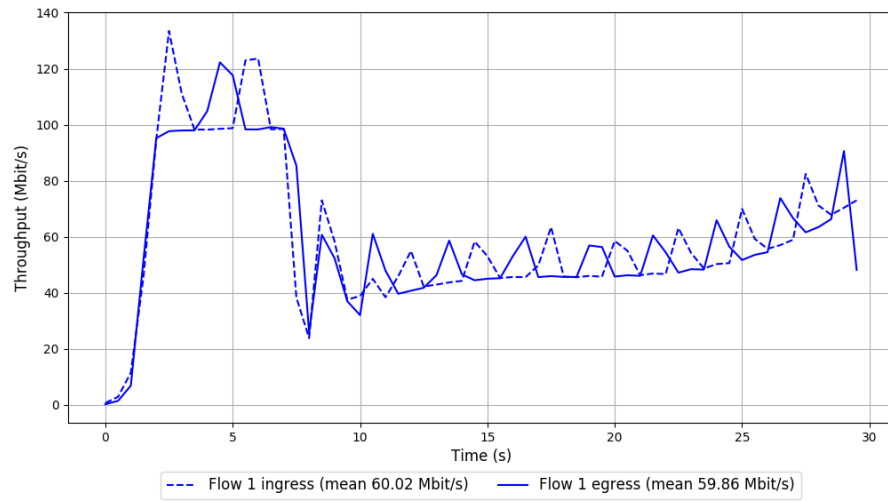
-- Flow 1:

Average throughput: 59.86 Mbit/s

95th percentile per-packet one-way delay: 147.447 ms

Loss rate: 1.03%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-05 07:00:19

End at: 2017-12-05 07:00:49

Below is generated by plot.py at 2017-12-05 10:04:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.44 Mbit/s

95th percentile per-packet one-way delay: 132.239 ms

Loss rate: 0.53%

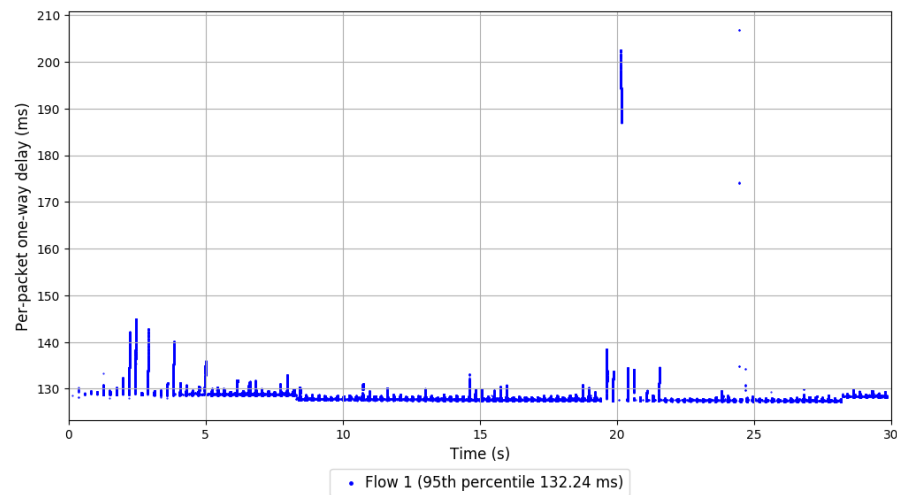
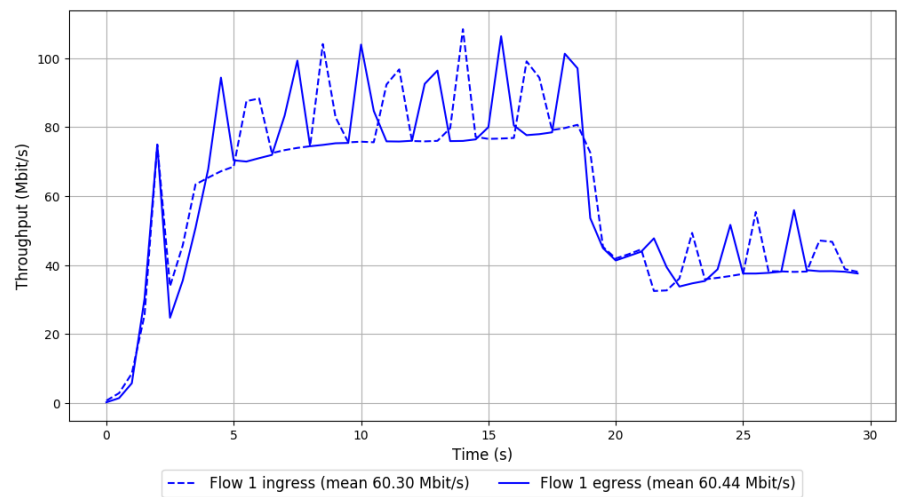
-- Flow 1:

Average throughput: 60.44 Mbit/s

95th percentile per-packet one-way delay: 132.239 ms

Loss rate: 0.53%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-05 07:11:13

End at: 2017-12-05 07:11:43

Below is generated by plot.py at 2017-12-05 10:04:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.54 Mbit/s

95th percentile per-packet one-way delay: 135.162 ms

Loss rate: 0.48%

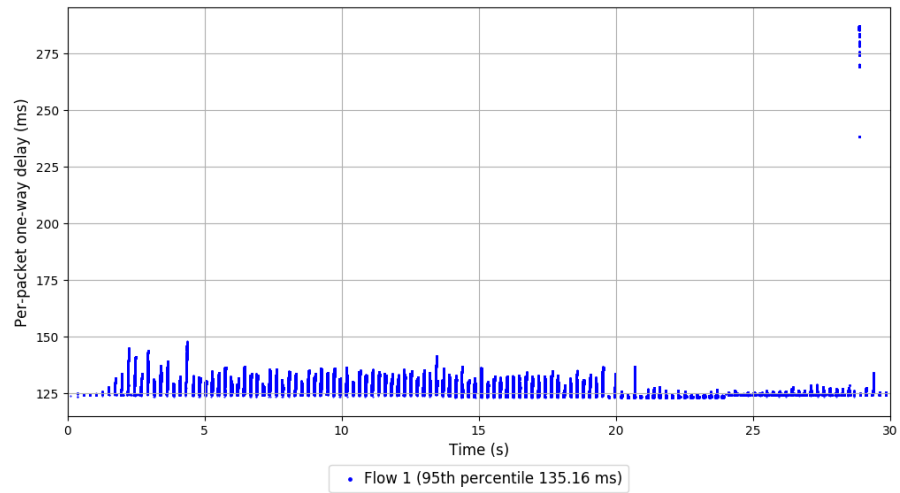
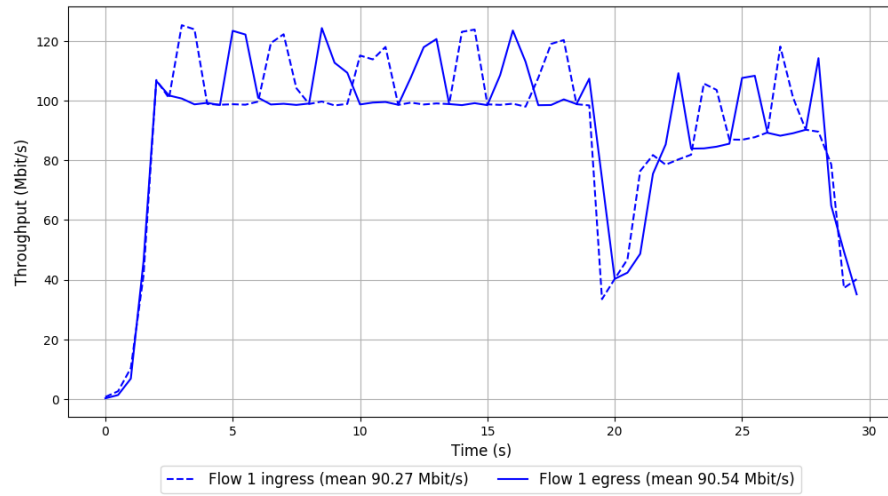
-- Flow 1:

Average throughput: 90.54 Mbit/s

95th percentile per-packet one-way delay: 135.162 ms

Loss rate: 0.48%

Run 5: Report of TCP Cubic — Data Link

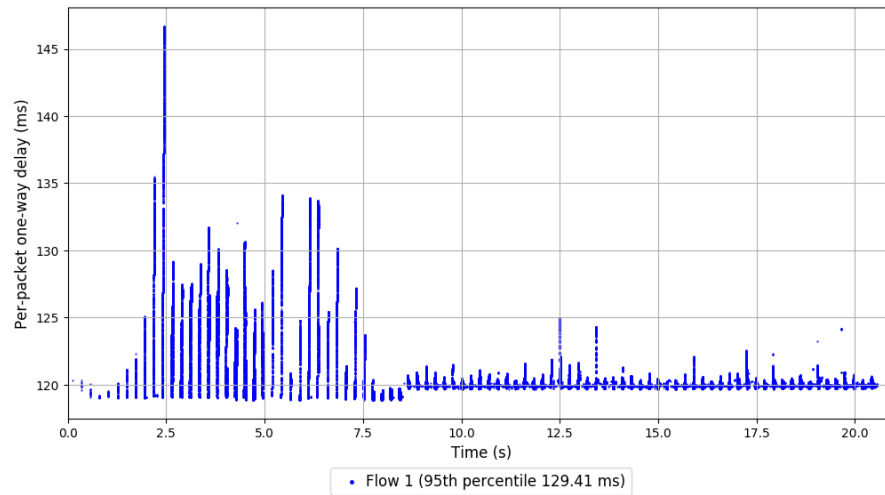
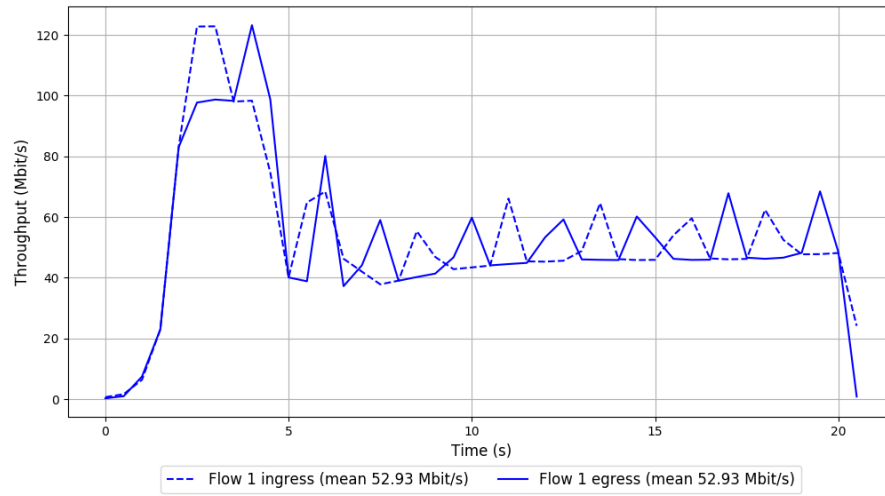


Run 6: Statistics of TCP Cubic

Start at: 2017-12-05 07:22:09

End at: 2017-12-05 07:22:39

Run 6: Report of TCP Cubic — Data Link

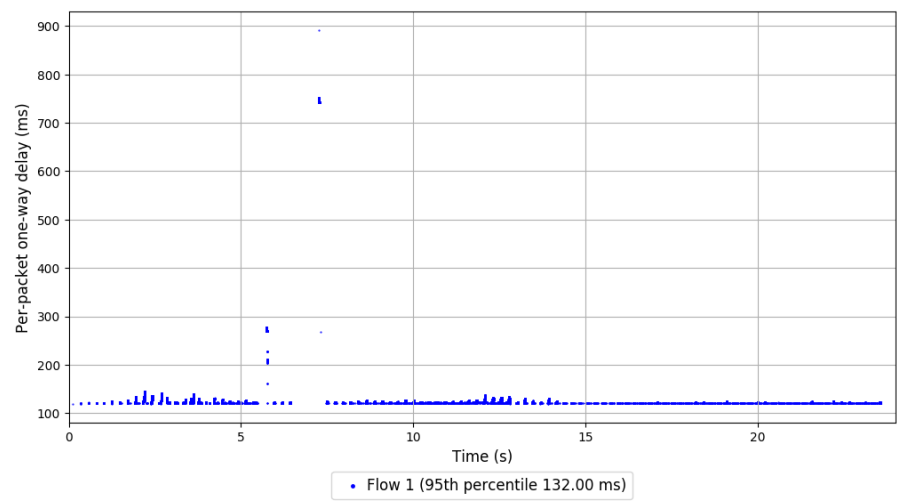
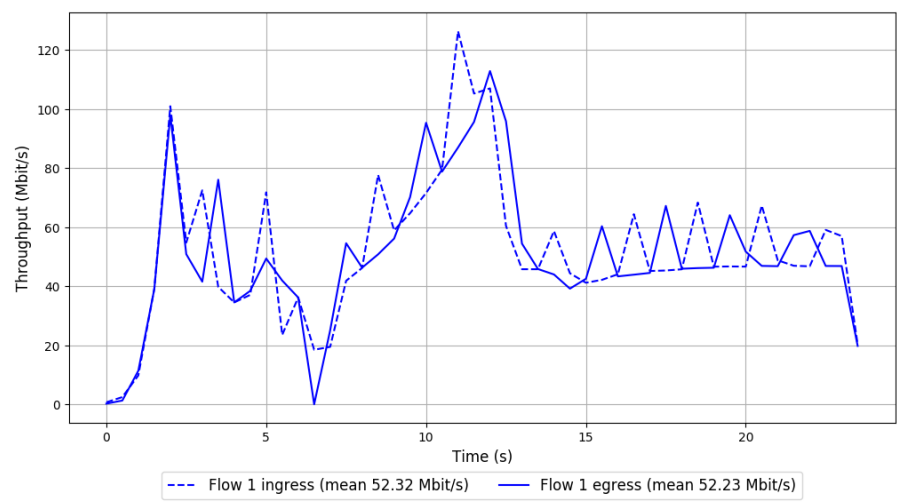


Run 7: Statistics of TCP Cubic

Start at: 2017-12-05 07:33:28

End at: 2017-12-05 07:33:58

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-05 07:44:20

End at: 2017-12-05 07:44:50

Below is generated by plot.py at 2017-12-05 10:05:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.72 Mbit/s

95th percentile per-packet one-way delay: 134.086 ms

Loss rate: 1.12%

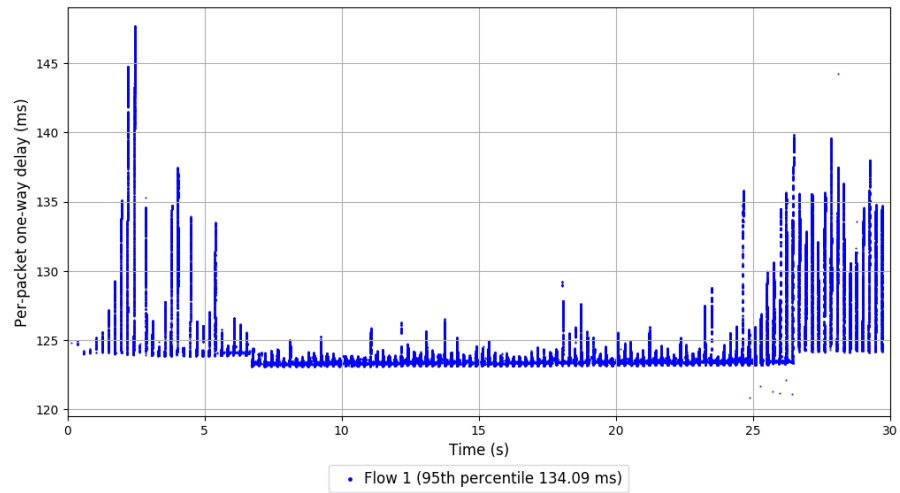
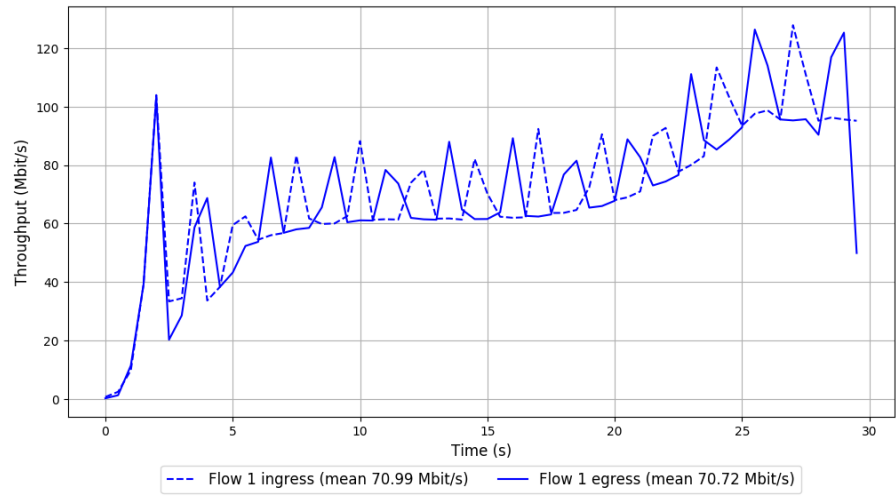
-- Flow 1:

Average throughput: 70.72 Mbit/s

95th percentile per-packet one-way delay: 134.086 ms

Loss rate: 1.12%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-05 07:55:21

End at: 2017-12-05 07:55:51

Below is generated by plot.py at 2017-12-05 10:05:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.60 Mbit/s

95th percentile per-packet one-way delay: 122.518 ms

Loss rate: 1.05%

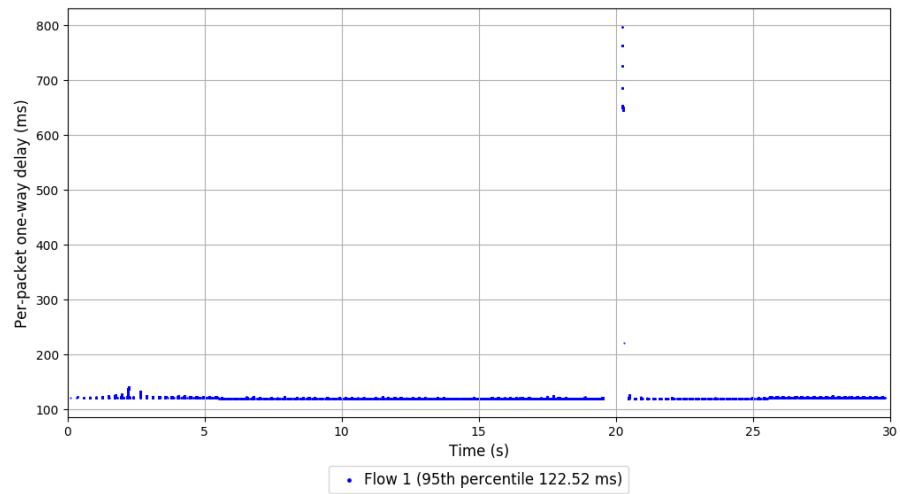
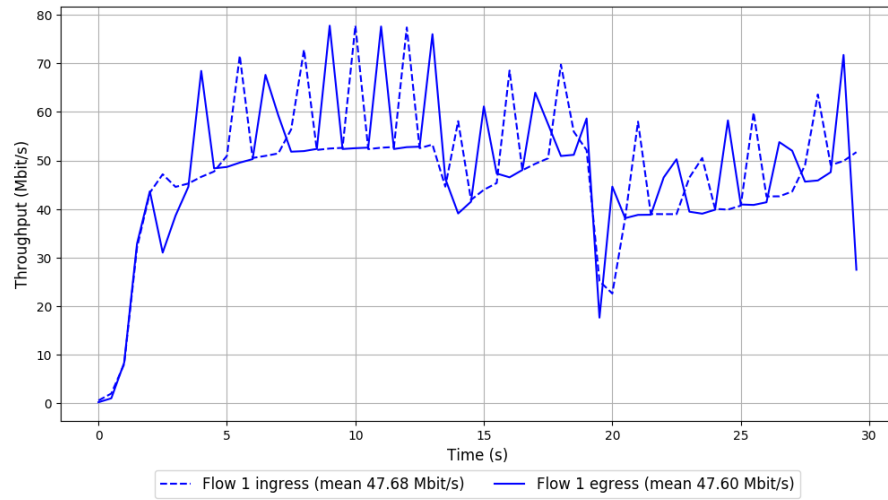
-- Flow 1:

Average throughput: 47.60 Mbit/s

95th percentile per-packet one-way delay: 122.518 ms

Loss rate: 1.05%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-05 08:06:15

End at: 2017-12-05 08:06:45

Below is generated by plot.py at 2017-12-05 10:05:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.95 Mbit/s

95th percentile per-packet one-way delay: 130.443 ms

Loss rate: 0.69%

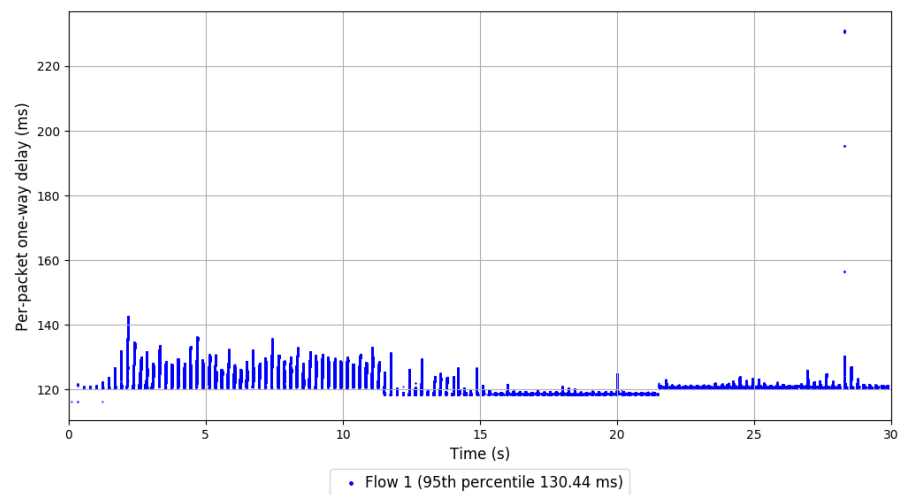
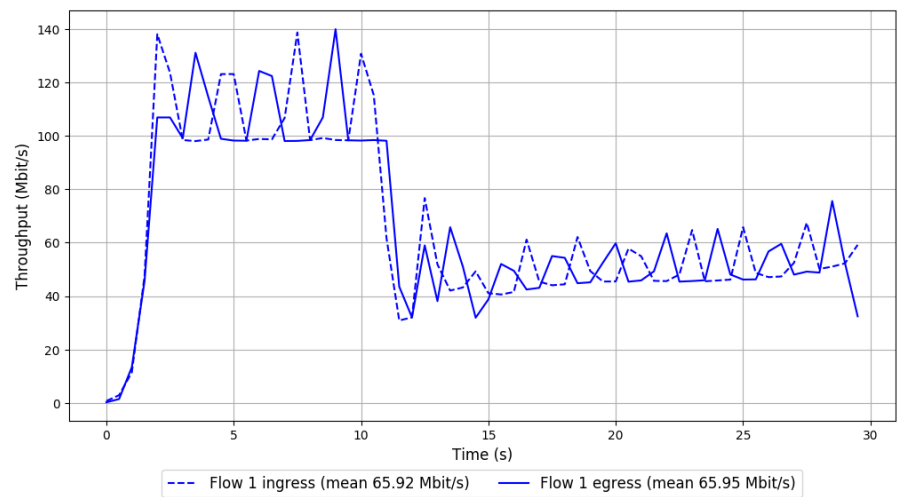
-- Flow 1:

Average throughput: 65.95 Mbit/s

95th percentile per-packet one-way delay: 130.443 ms

Loss rate: 0.69%

Run 10: Report of TCP Cubic — Data Link

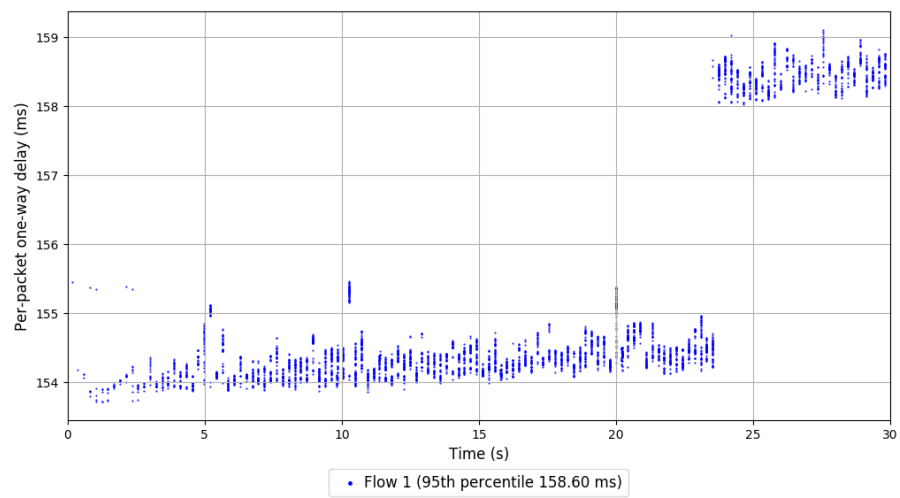
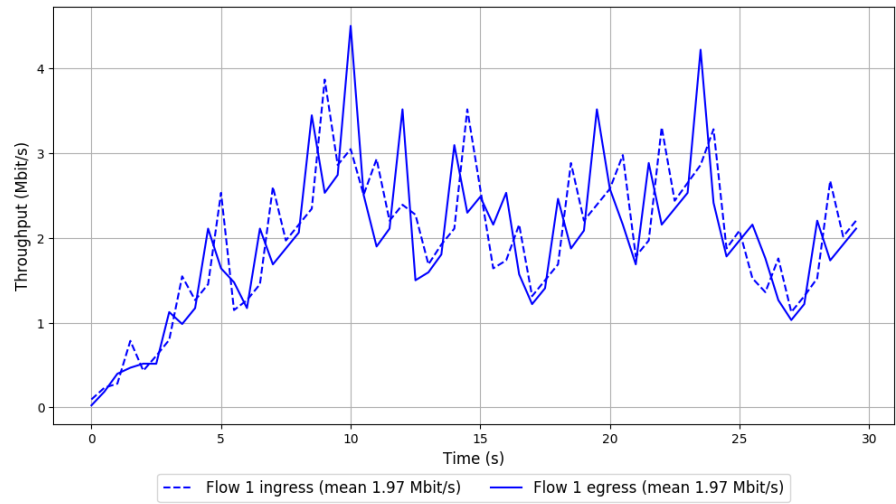


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-05 06:24:43
End at: 2017-12-05 06:25:13

# Below is generated by plot.py at 2017-12-05 10:05:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 158.599 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 158.599 ms
Loss rate: 1.00%
```

Run 1: Report of LEDBAT — Data Link

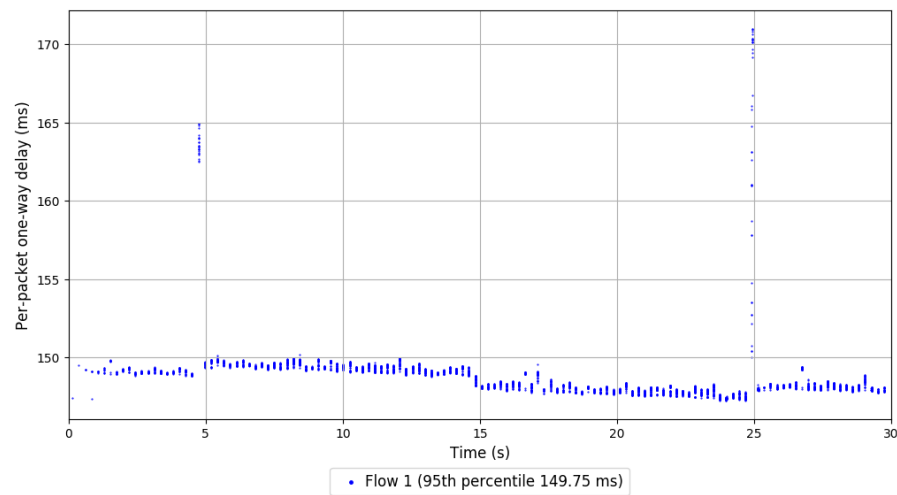
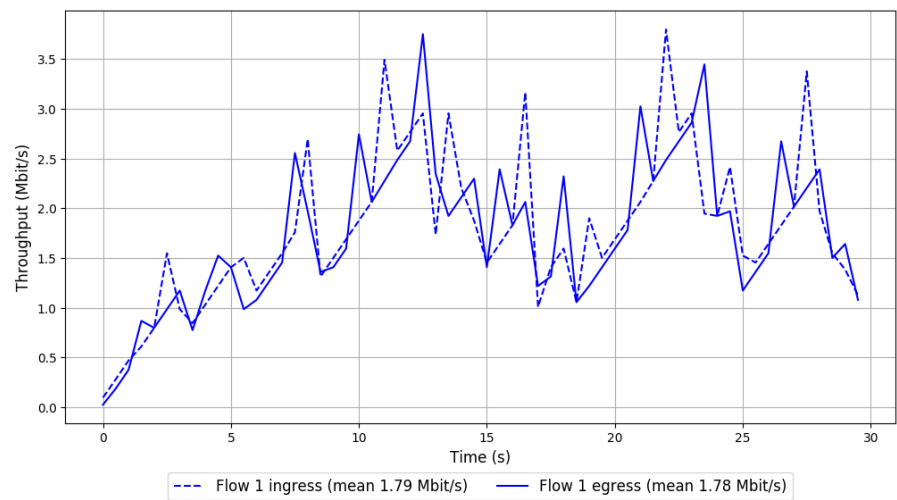


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-05 06:35:52
End at: 2017-12-05 06:36:22

# Below is generated by plot.py at 2017-12-05 10:05:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 149.749 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 149.749 ms
Loss rate: 0.93%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-05 06:47:04

End at: 2017-12-05 06:47:34

Below is generated by plot.py at 2017-12-05 10:05:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 139.320 ms

Loss rate: 1.22%

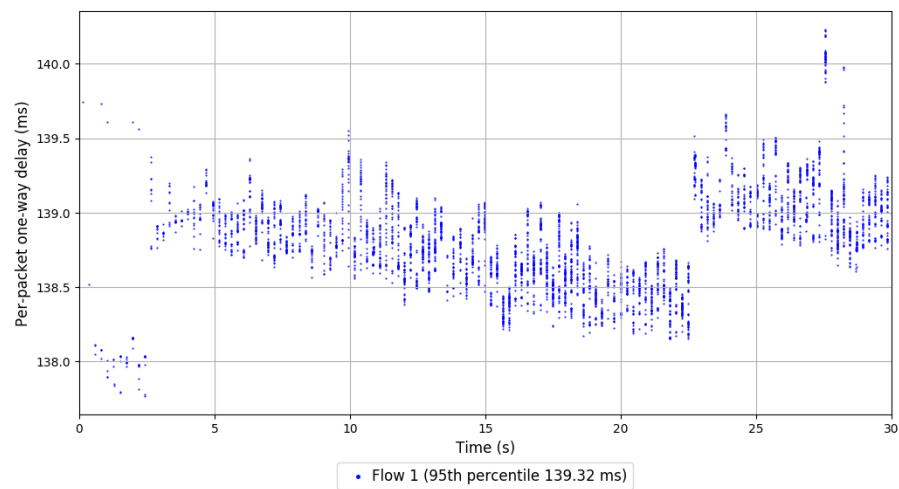
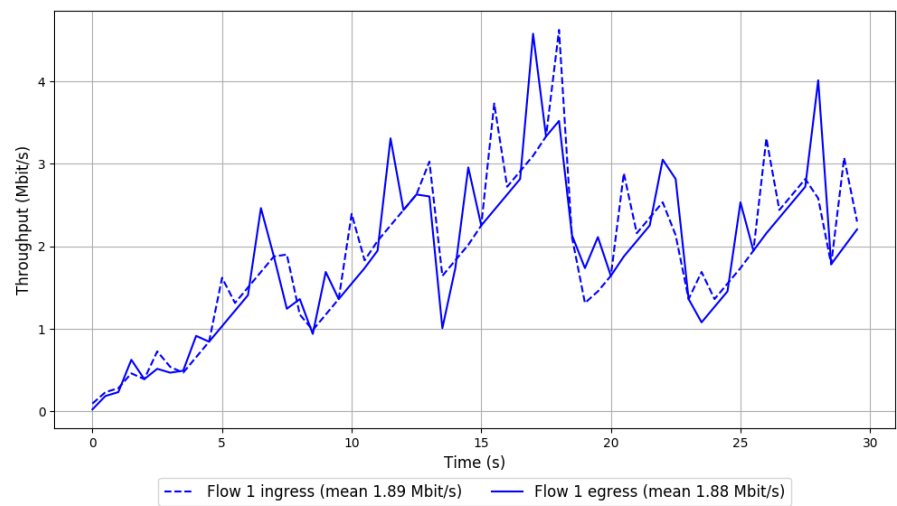
-- Flow 1:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 139.320 ms

Loss rate: 1.22%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-05 06:58:03

End at: 2017-12-05 06:58:33

Below is generated by plot.py at 2017-12-05 10:05:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 133.535 ms

Loss rate: 0.91%

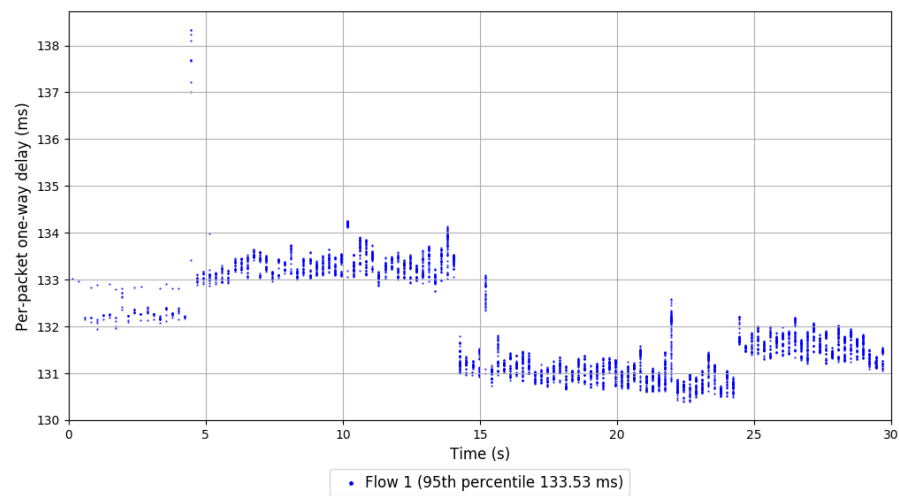
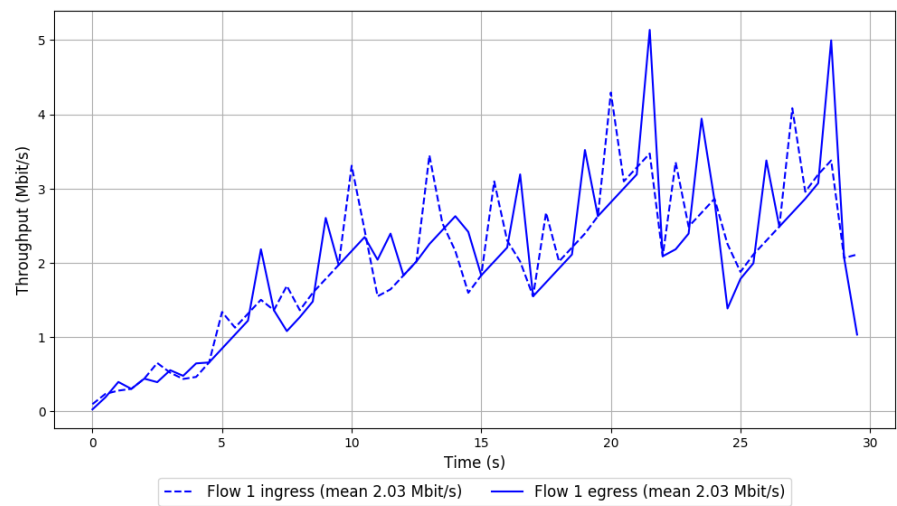
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 133.535 ms

Loss rate: 0.91%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-05 07:08:57

End at: 2017-12-05 07:09:27

Below is generated by plot.py at 2017-12-05 10:05:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 125.164 ms

Loss rate: 1.12%

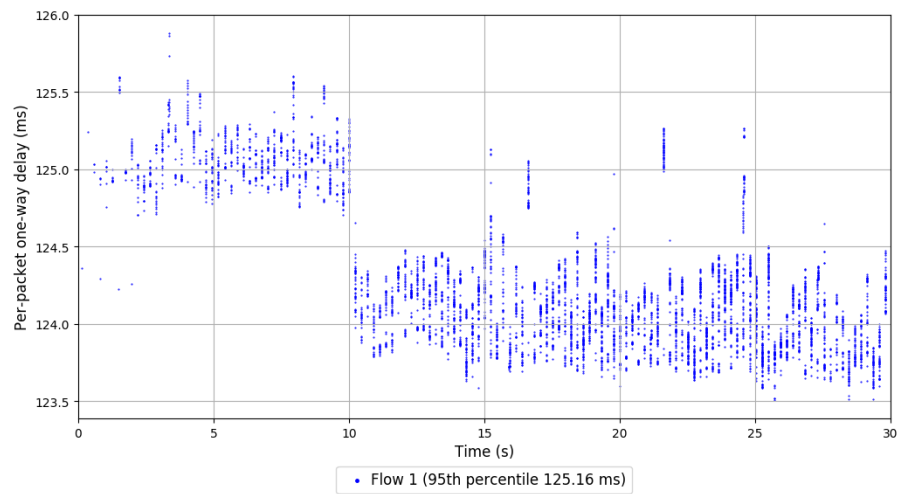
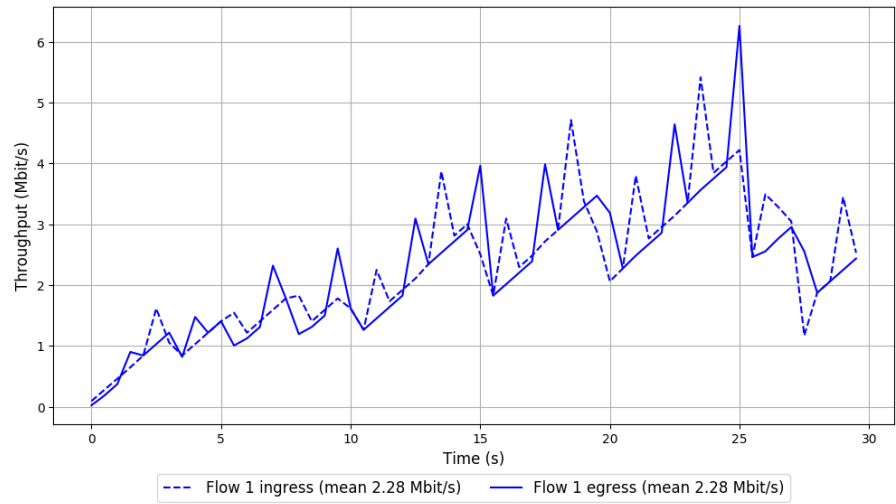
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 125.164 ms

Loss rate: 1.12%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-05 07:19:53

End at: 2017-12-05 07:20:23

Below is generated by plot.py at 2017-12-05 10:05:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 121.762 ms

Loss rate: 1.39%

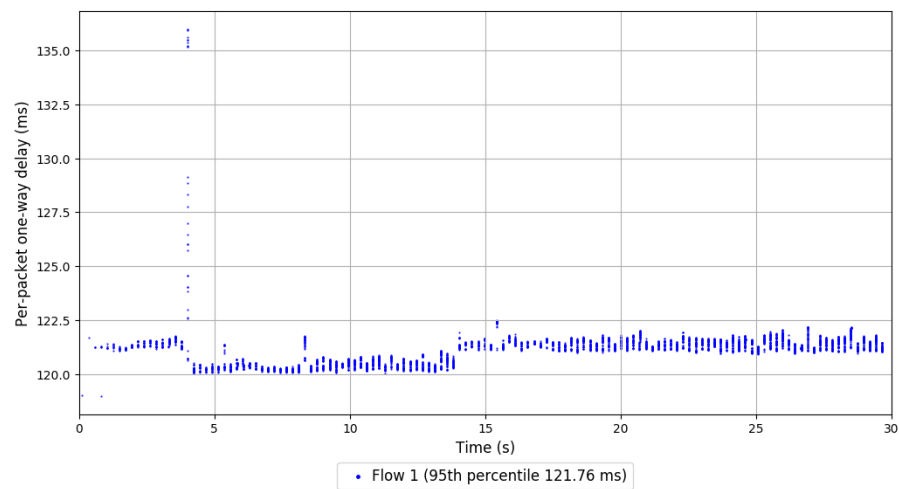
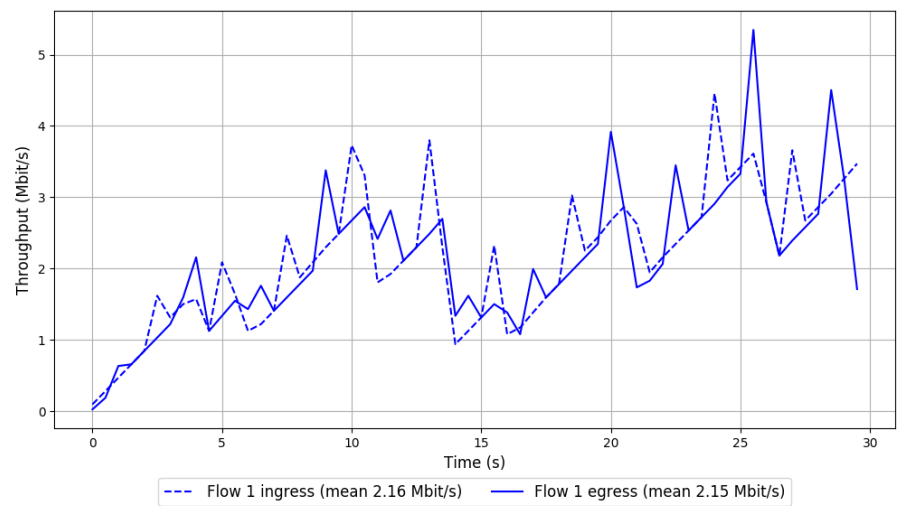
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 121.762 ms

Loss rate: 1.39%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-05 07:31:12

End at: 2017-12-05 07:31:42

Below is generated by plot.py at 2017-12-05 10:05:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 122.963 ms

Loss rate: 0.59%

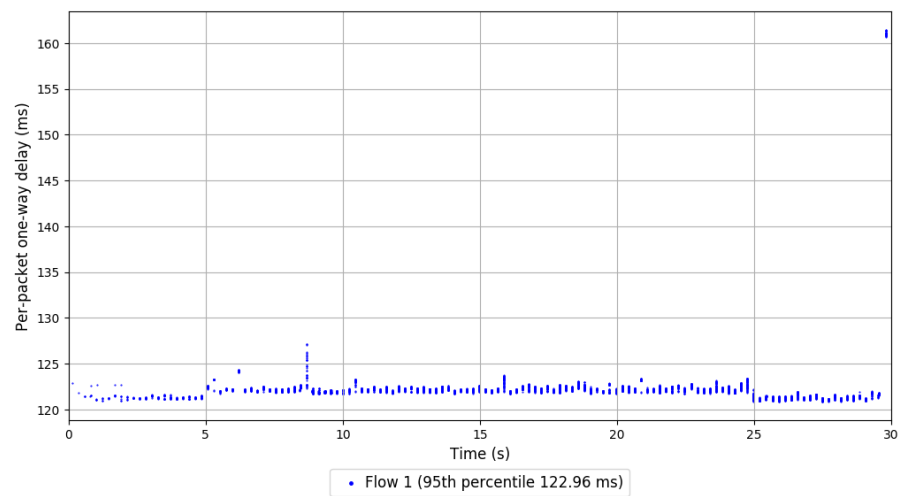
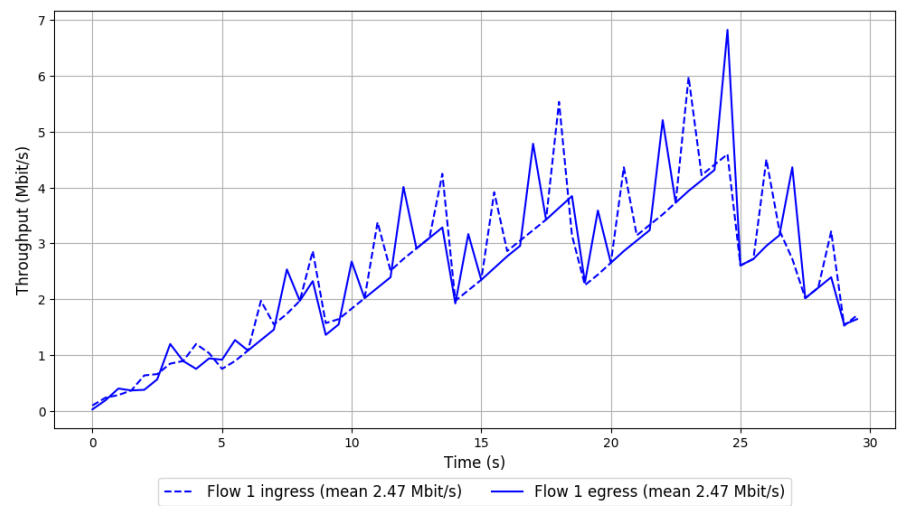
-- Flow 1:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 122.963 ms

Loss rate: 0.59%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-05 07:42:05

End at: 2017-12-05 07:42:35

Below is generated by plot.py at 2017-12-05 10:05:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 123.936 ms

Loss rate: 1.53%

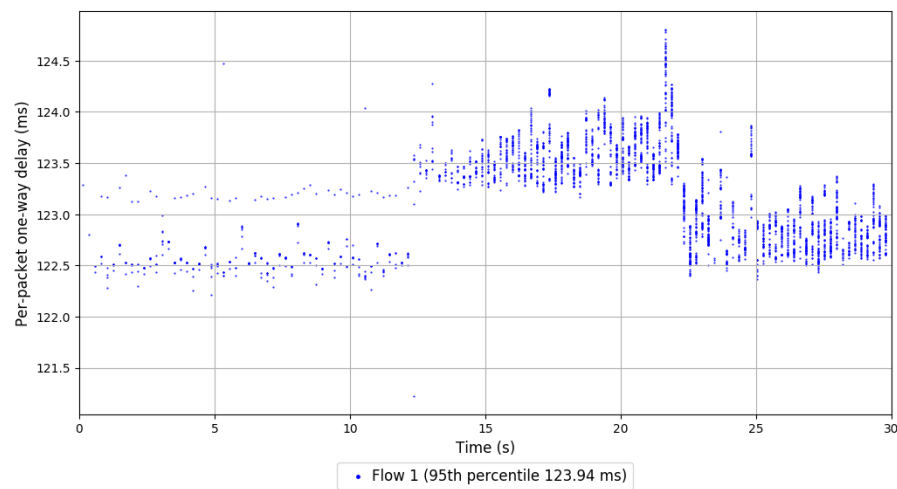
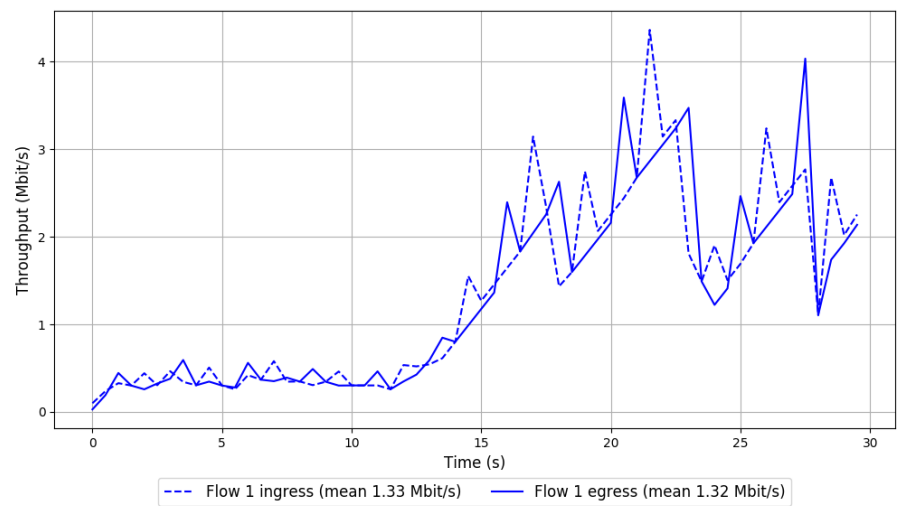
-- Flow 1:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 123.936 ms

Loss rate: 1.53%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-05 07:53:06

End at: 2017-12-05 07:53:36

Below is generated by plot.py at 2017-12-05 10:05:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 122.951 ms

Loss rate: 0.86%

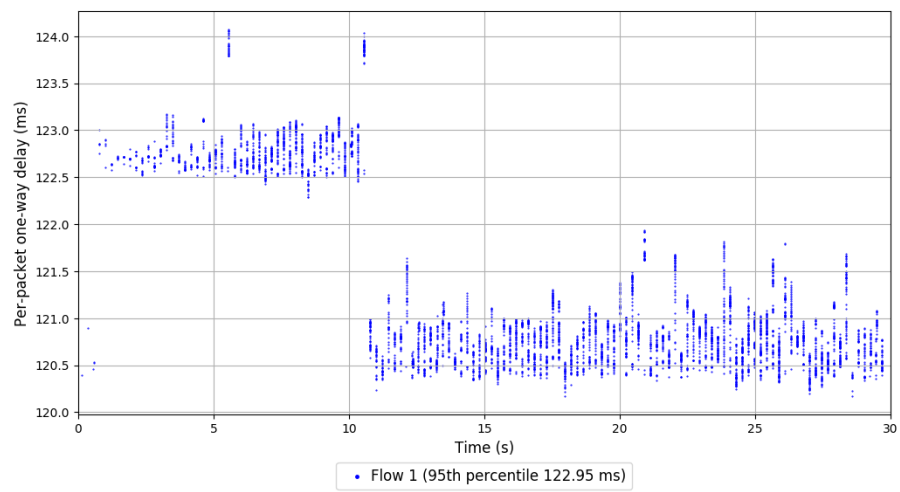
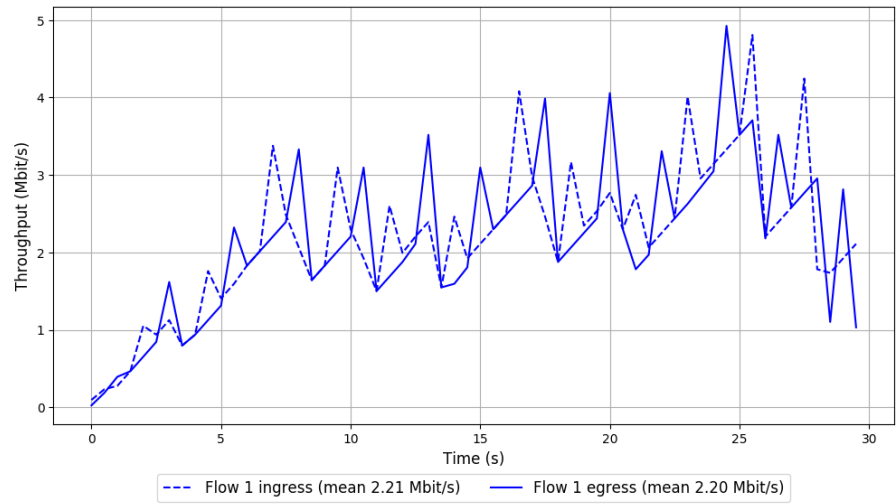
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 122.951 ms

Loss rate: 0.86%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-05 08:04:01

End at: 2017-12-05 08:04:31

Below is generated by plot.py at 2017-12-05 10:05:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 120.966 ms

Loss rate: 0.82%

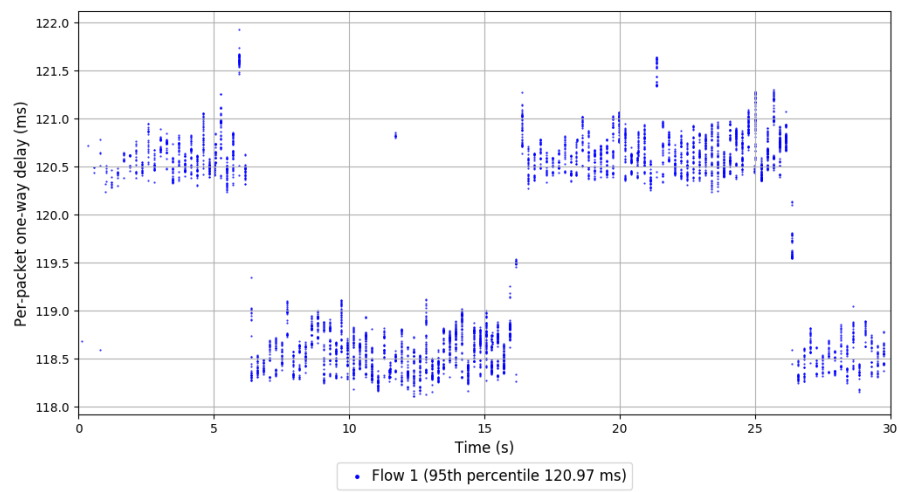
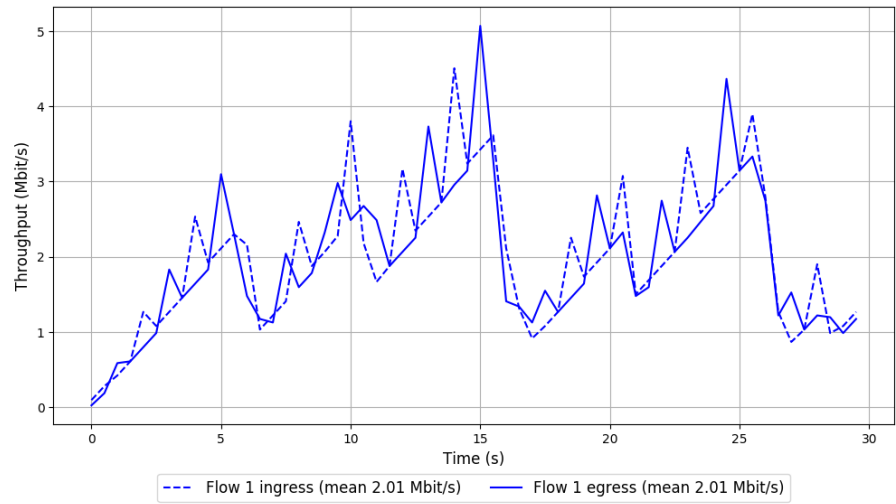
-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 120.966 ms

Loss rate: 0.82%

Run 10: Report of LEDBAT — Data Link

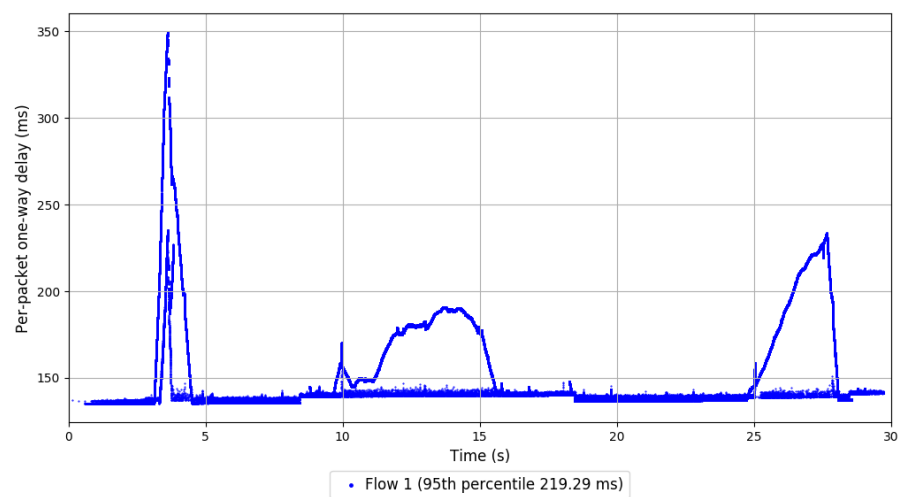
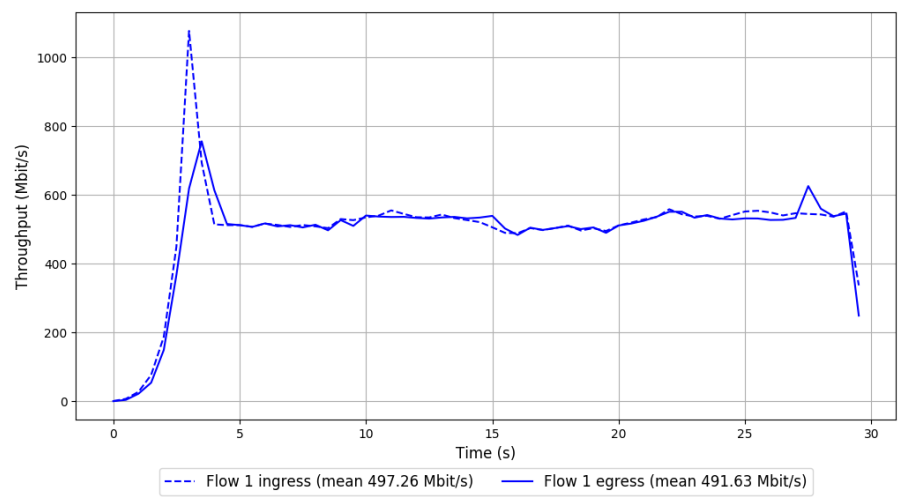


```
Run 1: Statistics of PCC

Start at: 2017-12-05 06:20:48
End at: 2017-12-05 06:21:18

# Below is generated by plot.py at 2017-12-05 10:12:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 491.63 Mbit/s
95th percentile per-packet one-way delay: 219.291 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 491.63 Mbit/s
95th percentile per-packet one-way delay: 219.291 ms
Loss rate: 1.86%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-05 06:31:50

End at: 2017-12-05 06:32:20

Below is generated by plot.py at 2017-12-05 10:13:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 512.08 Mbit/s

95th percentile per-packet one-way delay: 179.983 ms

Loss rate: 2.73%

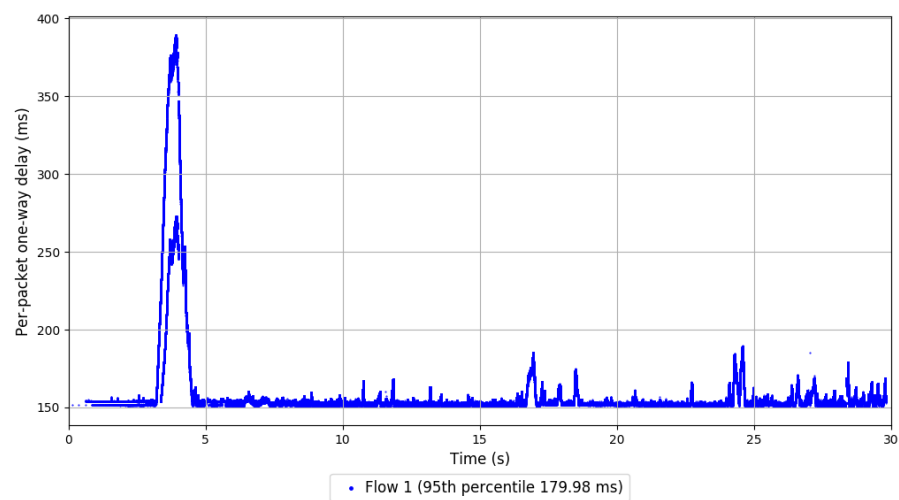
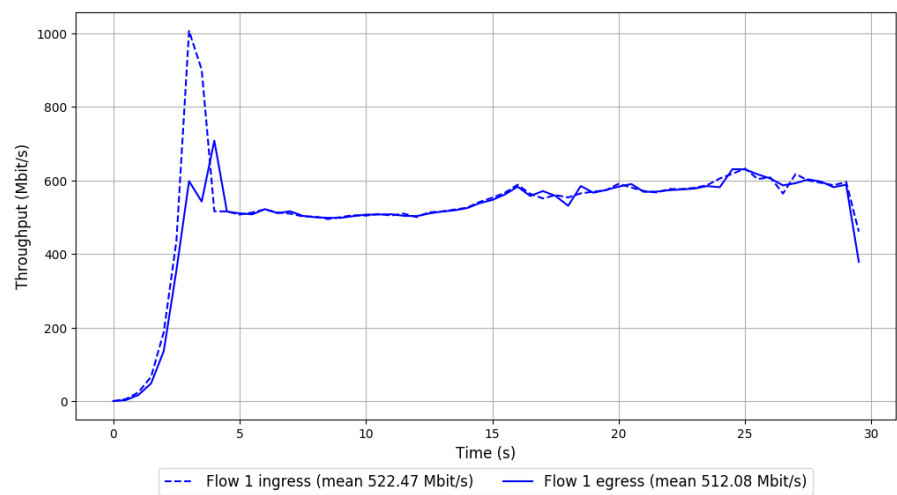
-- Flow 1:

Average throughput: 512.08 Mbit/s

95th percentile per-packet one-way delay: 179.983 ms

Loss rate: 2.73%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-05 06:43:00

End at: 2017-12-05 06:43:30

Below is generated by plot.py at 2017-12-05 10:13:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 541.68 Mbit/s

95th percentile per-packet one-way delay: 181.374 ms

Loss rate: 1.93%

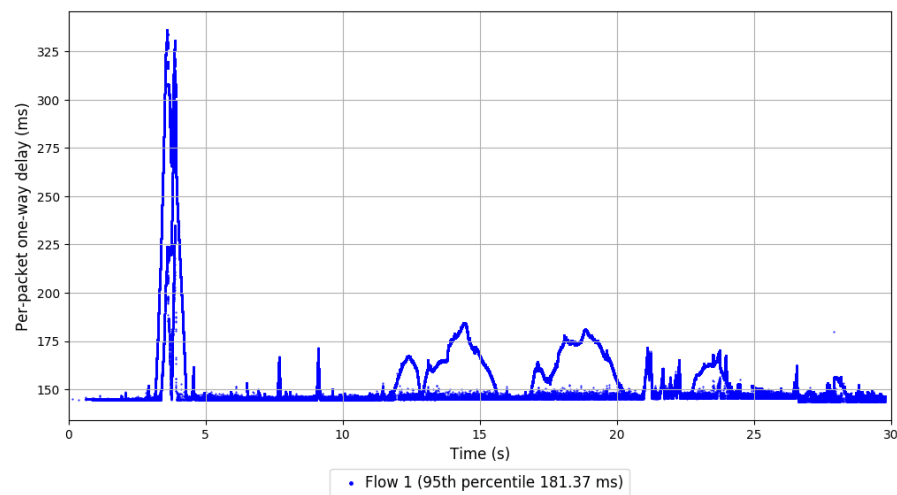
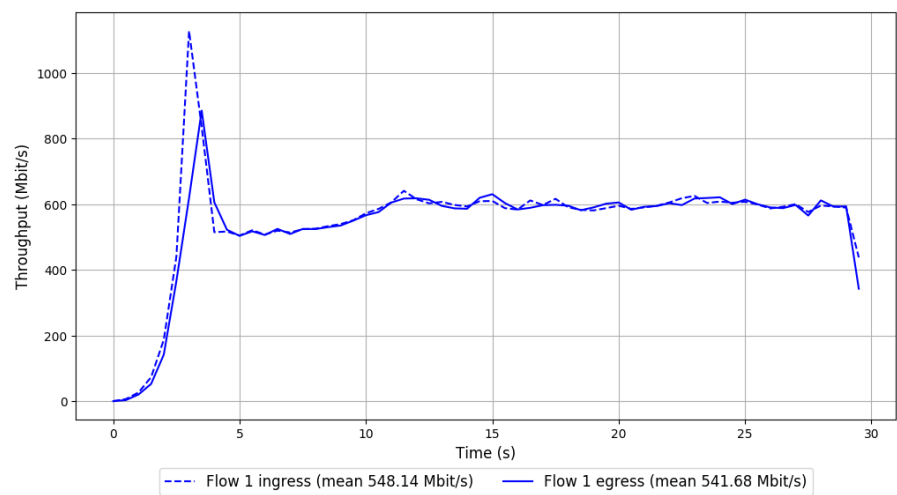
-- Flow 1:

Average throughput: 541.68 Mbit/s

95th percentile per-packet one-way delay: 181.374 ms

Loss rate: 1.93%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-05 06:54:00

End at: 2017-12-05 06:54:30

Below is generated by plot.py at 2017-12-05 10:13:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 495.54 Mbit/s

95th percentile per-packet one-way delay: 279.717 ms

Loss rate: 3.13%

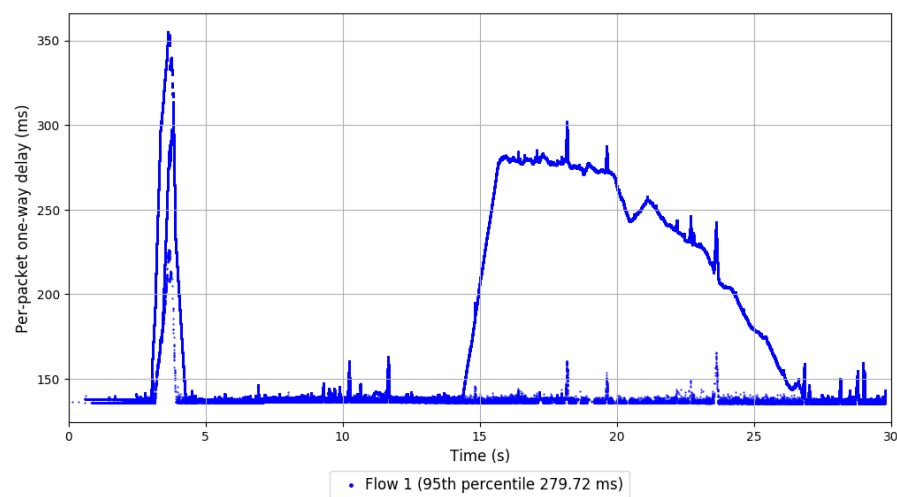
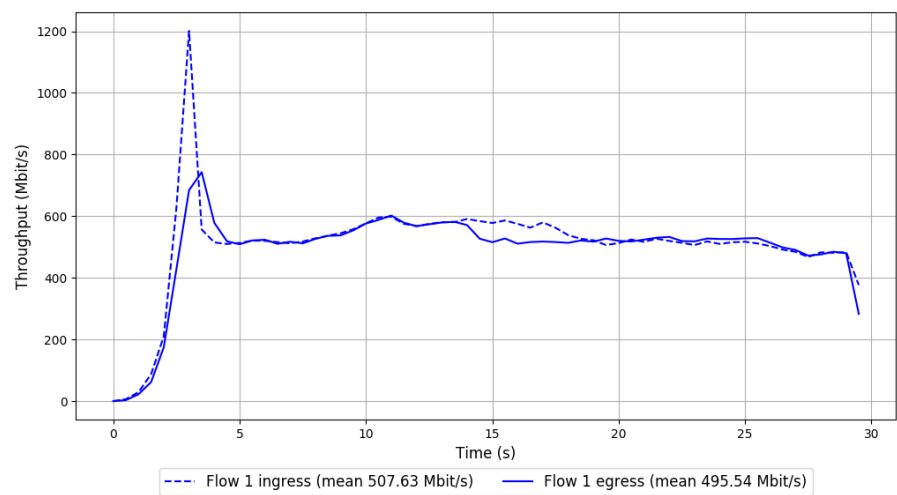
-- Flow 1:

Average throughput: 495.54 Mbit/s

95th percentile per-packet one-way delay: 279.717 ms

Loss rate: 3.13%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-05 07:04:59

End at: 2017-12-05 07:05:29

Below is generated by plot.py at 2017-12-05 10:13:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 485.28 Mbit/s

95th percentile per-packet one-way delay: 272.347 ms

Loss rate: 5.05%

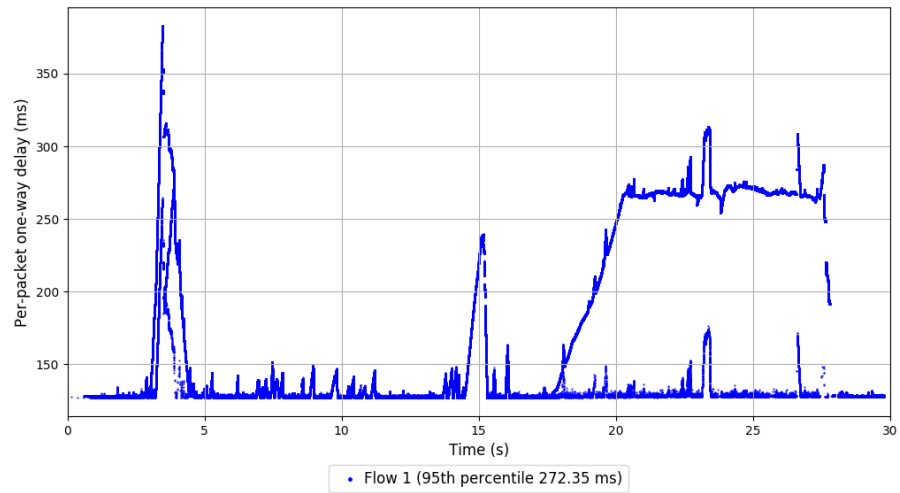
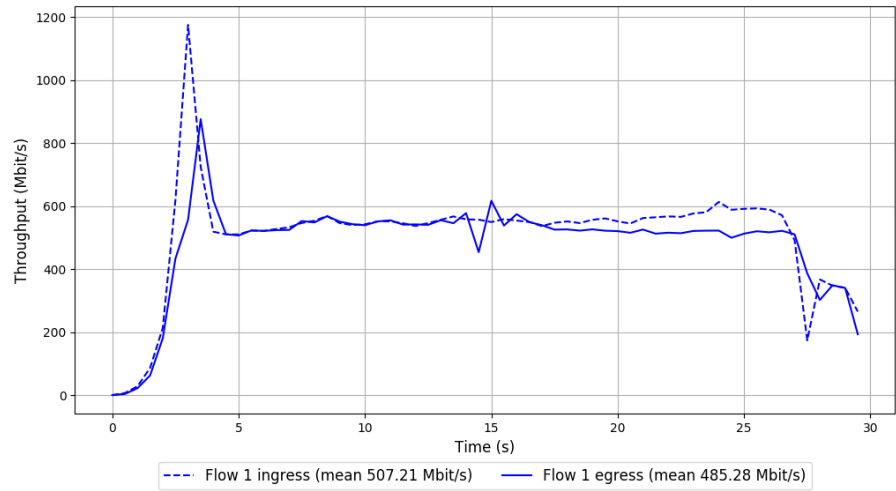
-- Flow 1:

Average throughput: 485.28 Mbit/s

95th percentile per-packet one-way delay: 272.347 ms

Loss rate: 5.05%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-05 07:15:51

End at: 2017-12-05 07:16:21

Below is generated by plot.py at 2017-12-05 10:13:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 509.53 Mbit/s

95th percentile per-packet one-way delay: 261.021 ms

Loss rate: 2.50%

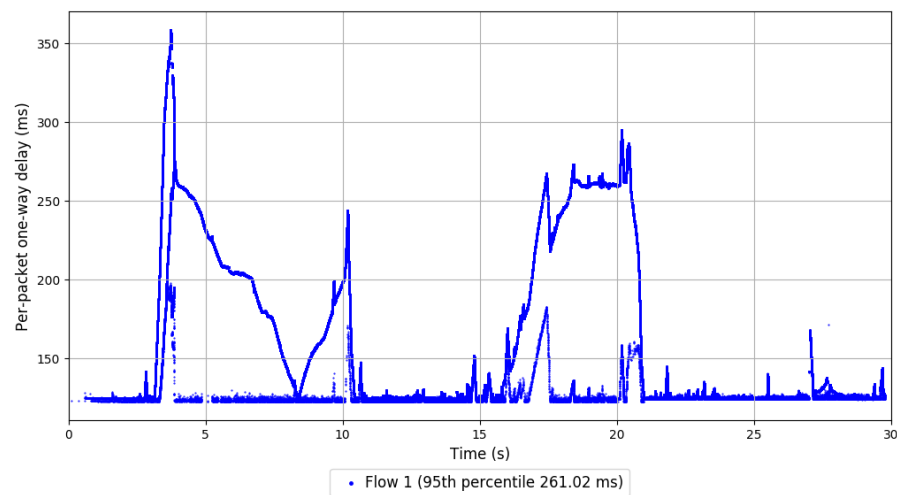
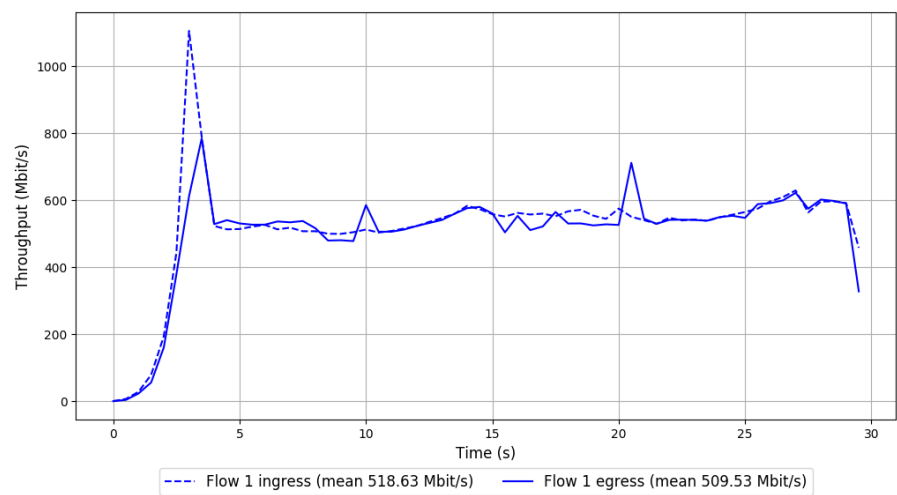
-- Flow 1:

Average throughput: 509.53 Mbit/s

95th percentile per-packet one-way delay: 261.021 ms

Loss rate: 2.50%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-05 07:27:08

End at: 2017-12-05 07:27:38

Below is generated by plot.py at 2017-12-05 10:14:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 521.66 Mbit/s

95th percentile per-packet one-way delay: 170.955 ms

Loss rate: 2.37%

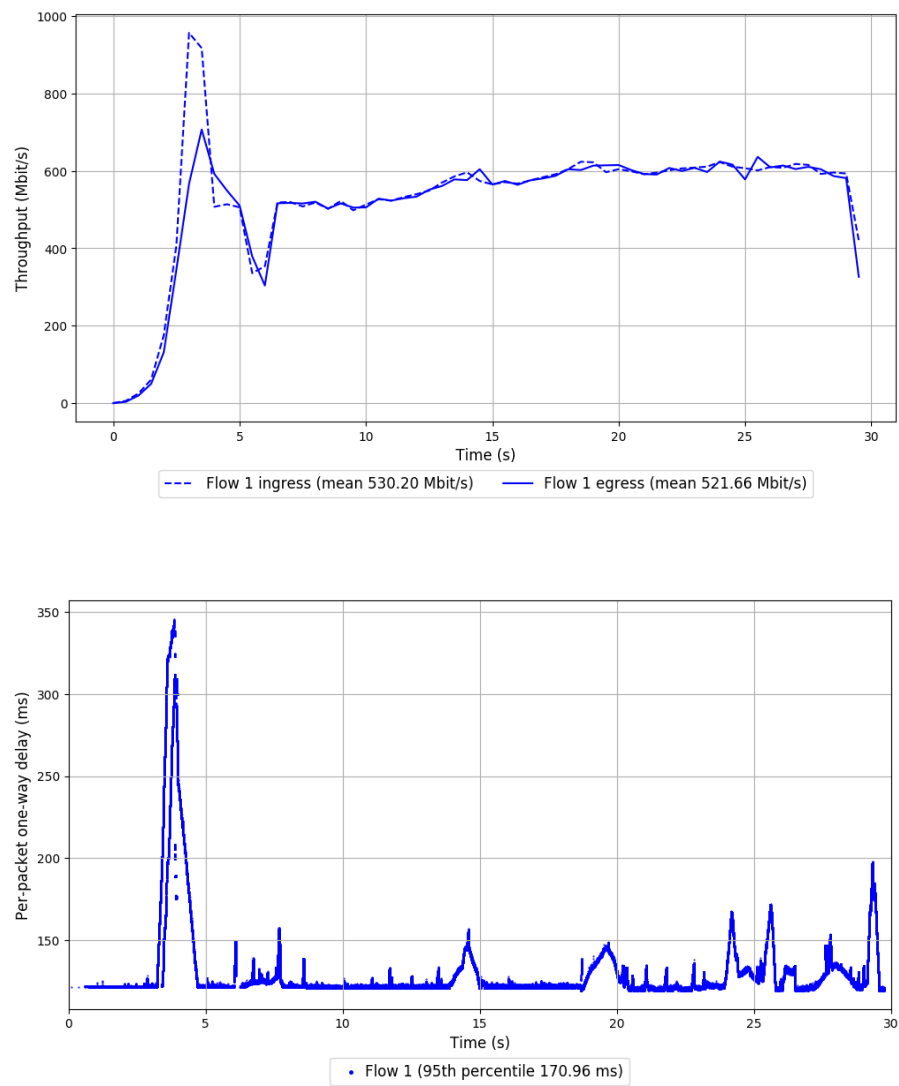
-- Flow 1:

Average throughput: 521.66 Mbit/s

95th percentile per-packet one-way delay: 170.955 ms

Loss rate: 2.37%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-05 07:38:06

End at: 2017-12-05 07:38:36

Below is generated by plot.py at 2017-12-05 10:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 531.32 Mbit/s

95th percentile per-packet one-way delay: 184.077 ms

Loss rate: 3.20%

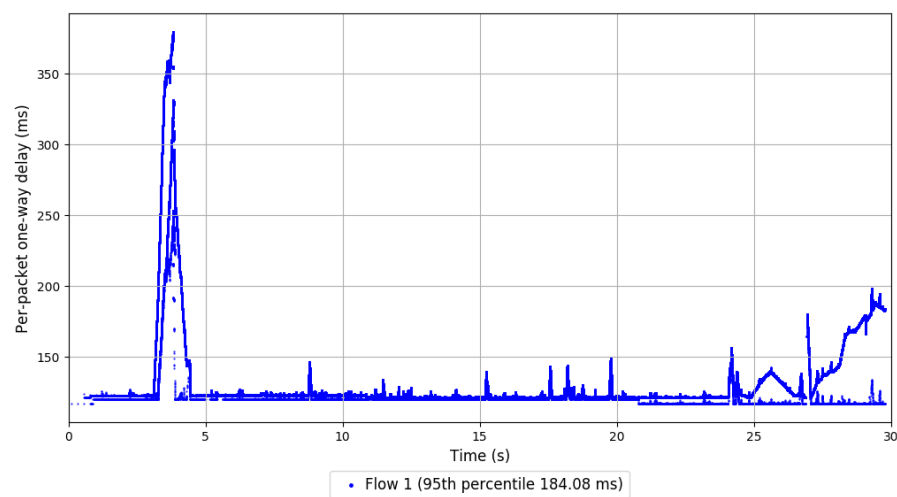
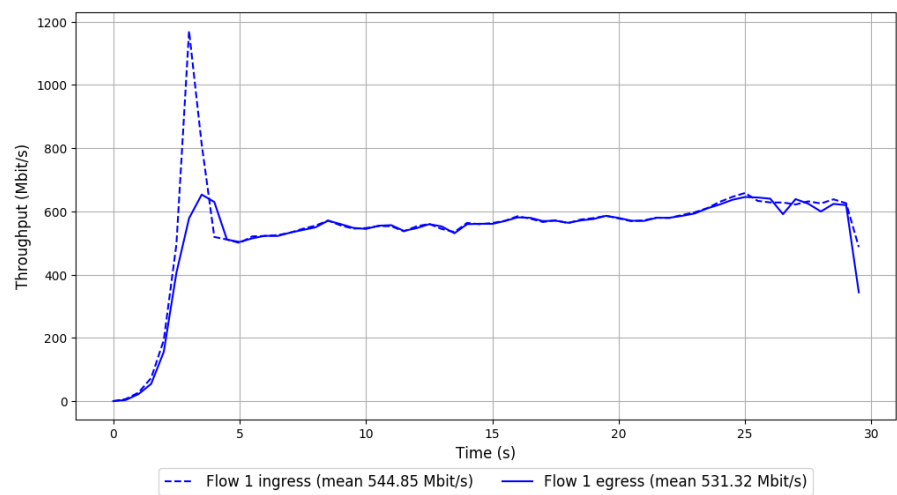
-- Flow 1:

Average throughput: 531.32 Mbit/s

95th percentile per-packet one-way delay: 184.077 ms

Loss rate: 3.20%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-05 07:49:04

End at: 2017-12-05 07:49:34

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 483.75 Mbit/s

95th percentile per-packet one-way delay: 159.961 ms

Loss rate: 3.18%

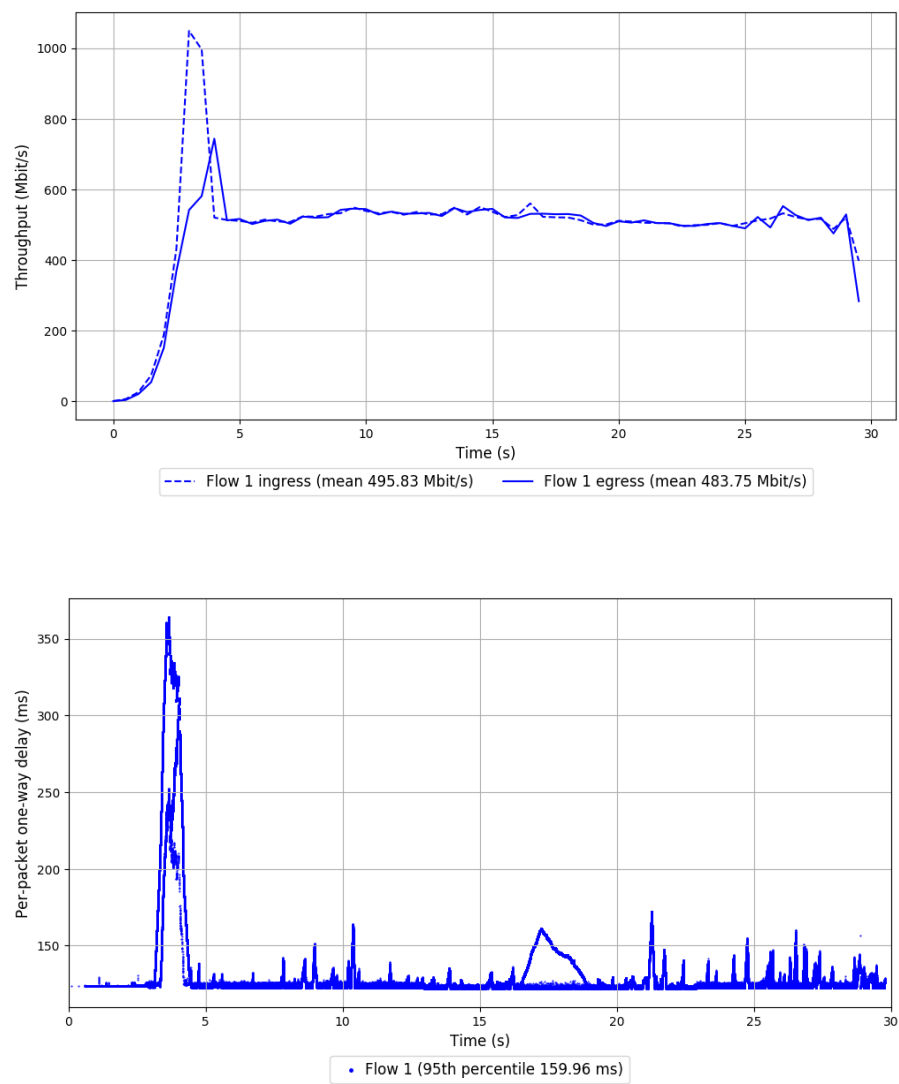
-- Flow 1:

Average throughput: 483.75 Mbit/s

95th percentile per-packet one-way delay: 159.961 ms

Loss rate: 3.18%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-05 08:00:00

End at: 2017-12-05 08:00:30

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 465.83 Mbit/s

95th percentile per-packet one-way delay: 255.352 ms

Loss rate: 2.49%

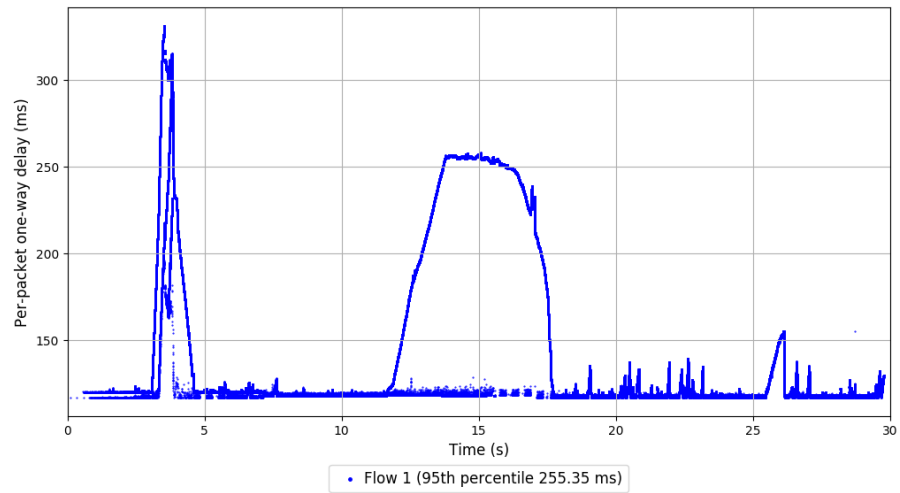
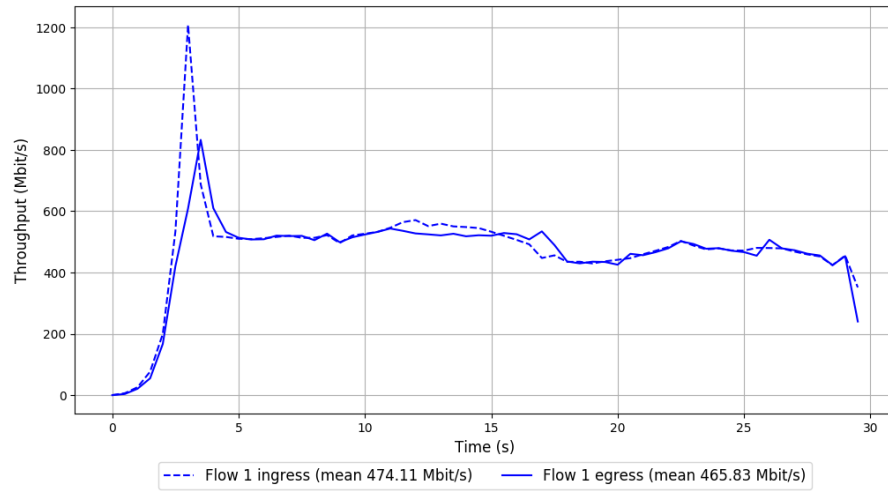
-- Flow 1:

Average throughput: 465.83 Mbit/s

95th percentile per-packet one-way delay: 255.352 ms

Loss rate: 2.49%

Run 10: Report of PCC — Data Link

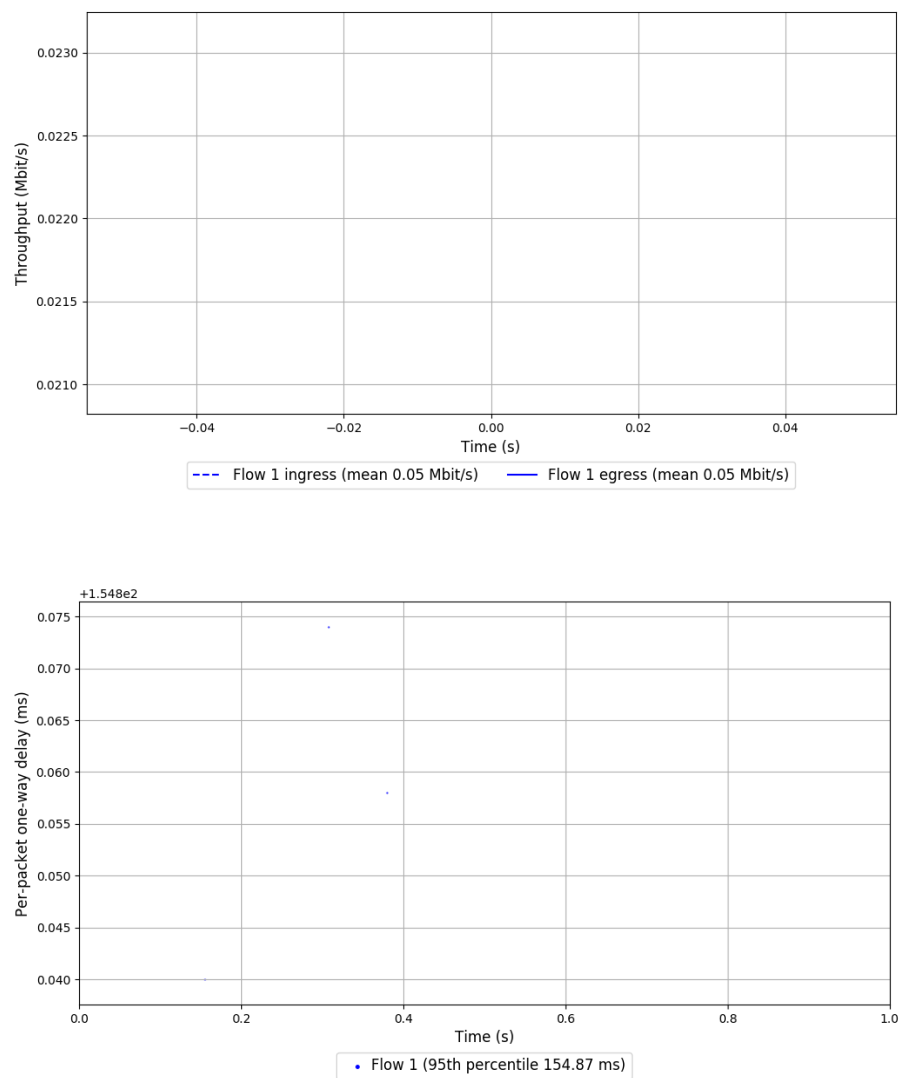


Run 1: Statistics of QUIC Cubic

Start at: 2017-12-05 06:24:03

End at: 2017-12-05 06:24:33

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-05 06:35:08

End at: 2017-12-05 06:35:38

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.58 Mbit/s

95th percentile per-packet one-way delay: 150.211 ms

Loss rate: 1.08%

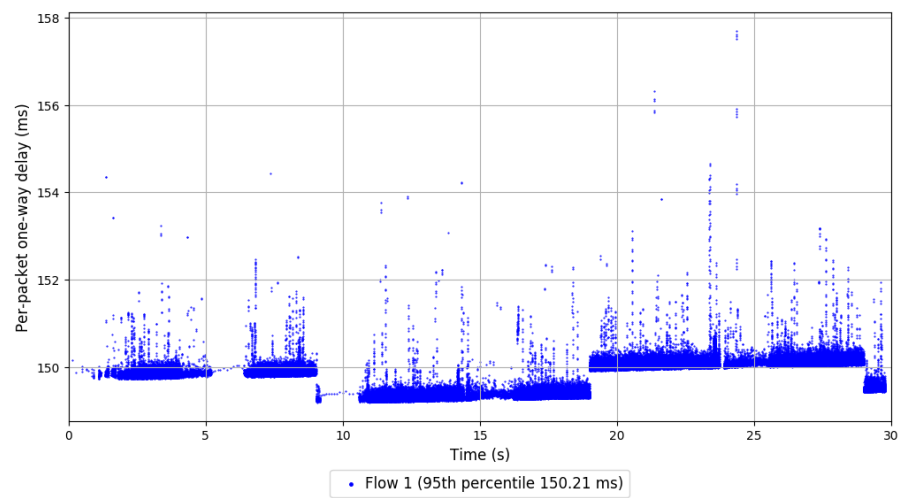
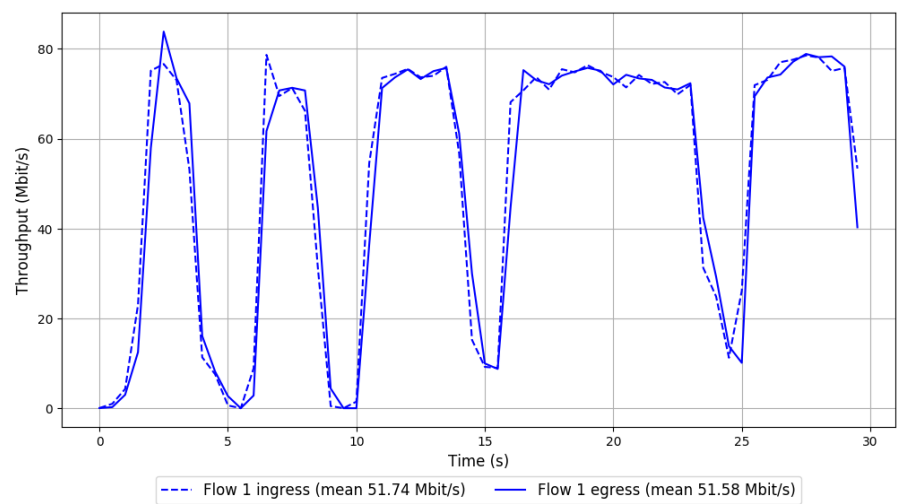
-- Flow 1:

Average throughput: 51.58 Mbit/s

95th percentile per-packet one-way delay: 150.211 ms

Loss rate: 1.08%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-05 06:46:19

End at: 2017-12-05 06:46:49

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.40 Mbit/s

95th percentile per-packet one-way delay: 140.394 ms

Loss rate: 0.97%

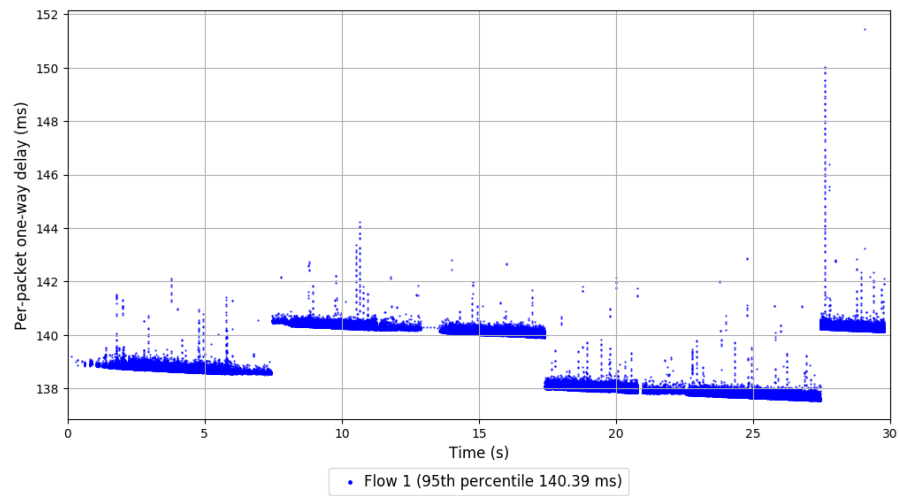
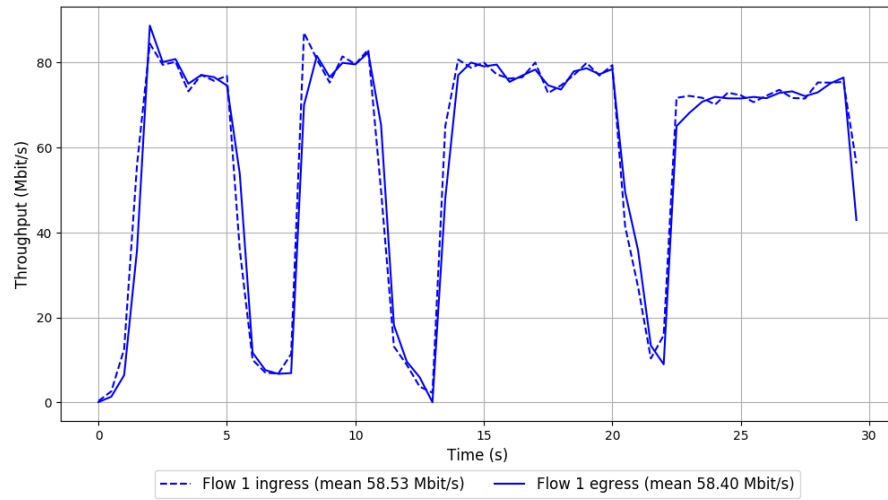
-- Flow 1:

Average throughput: 58.40 Mbit/s

95th percentile per-packet one-way delay: 140.394 ms

Loss rate: 0.97%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-05 06:57:18

End at: 2017-12-05 06:57:48

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.74 Mbit/s

95th percentile per-packet one-way delay: 132.645 ms

Loss rate: 1.01%

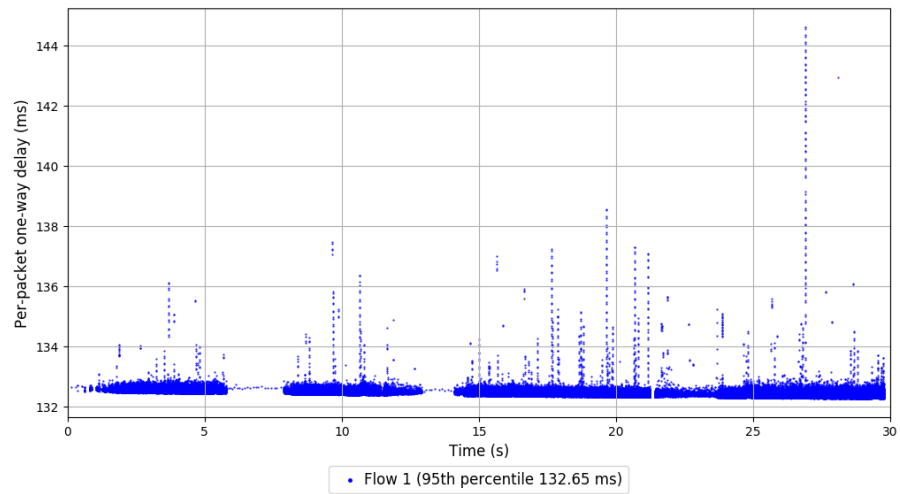
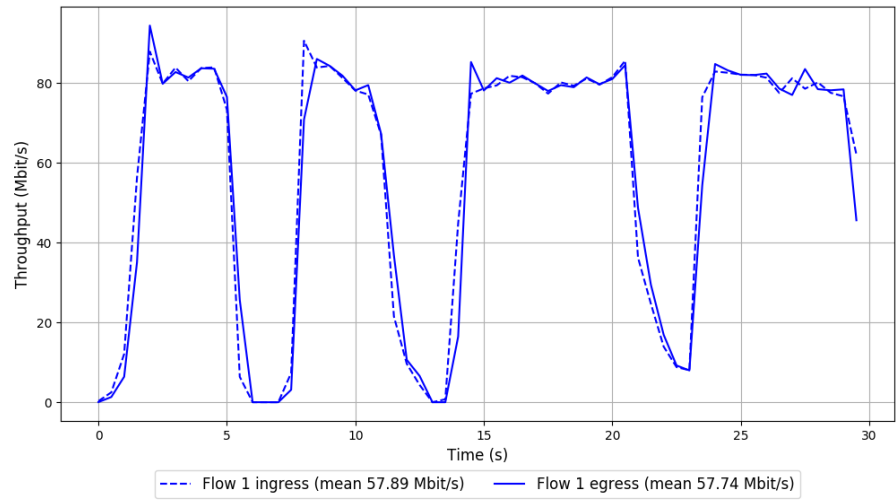
-- Flow 1:

Average throughput: 57.74 Mbit/s

95th percentile per-packet one-way delay: 132.645 ms

Loss rate: 1.01%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-05 07:08:12

End at: 2017-12-05 07:08:42

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.31 Mbit/s

95th percentile per-packet one-way delay: 124.420 ms

Loss rate: 1.15%

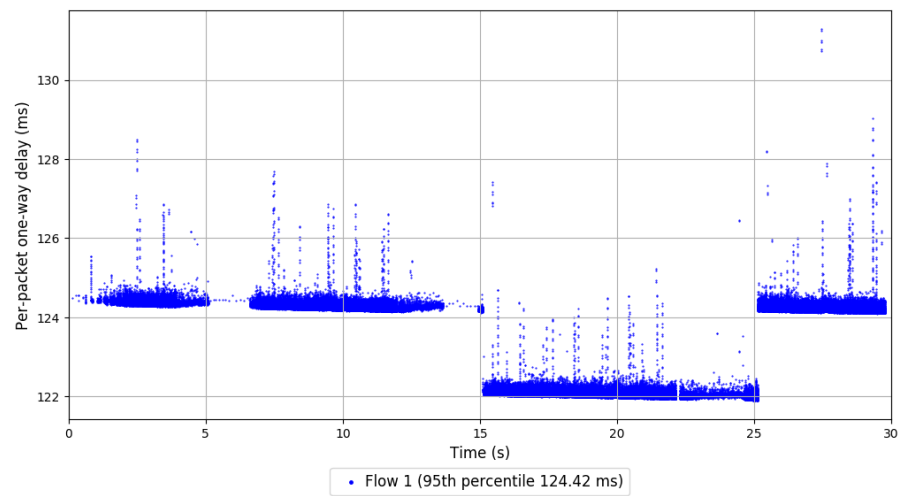
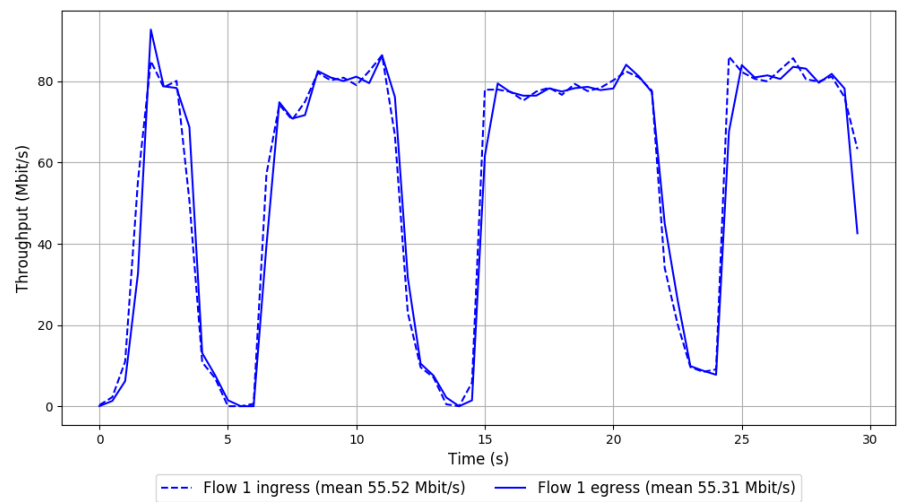
-- Flow 1:

Average throughput: 55.31 Mbit/s

95th percentile per-packet one-way delay: 124.420 ms

Loss rate: 1.15%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-05 07:19:08

End at: 2017-12-05 07:19:38

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.98 Mbit/s

95th percentile per-packet one-way delay: 120.623 ms

Loss rate: 1.12%

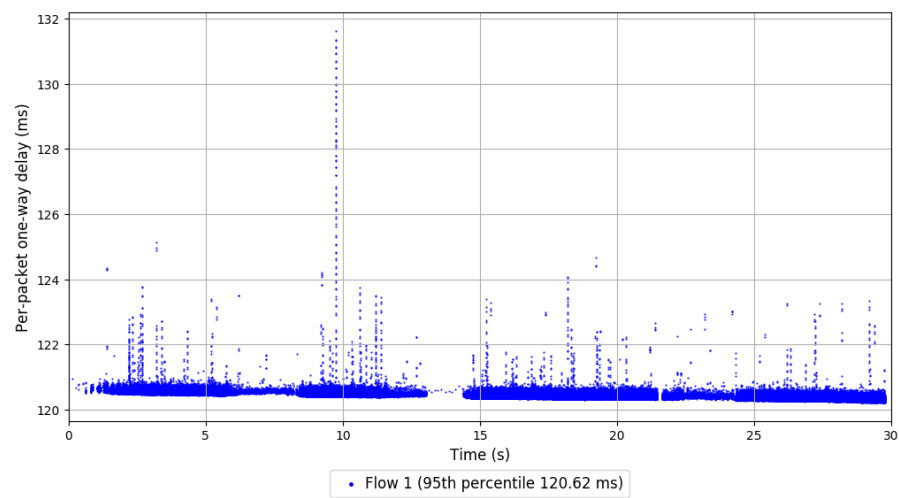
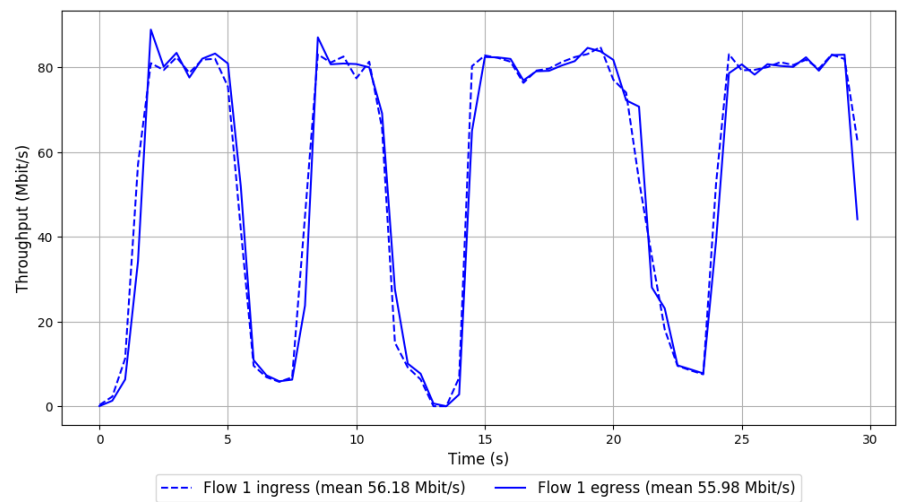
-- Flow 1:

Average throughput: 55.98 Mbit/s

95th percentile per-packet one-way delay: 120.623 ms

Loss rate: 1.12%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-05 07:30:27

End at: 2017-12-05 07:30:57

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.41 Mbit/s

95th percentile per-packet one-way delay: 120.264 ms

Loss rate: 1.01%

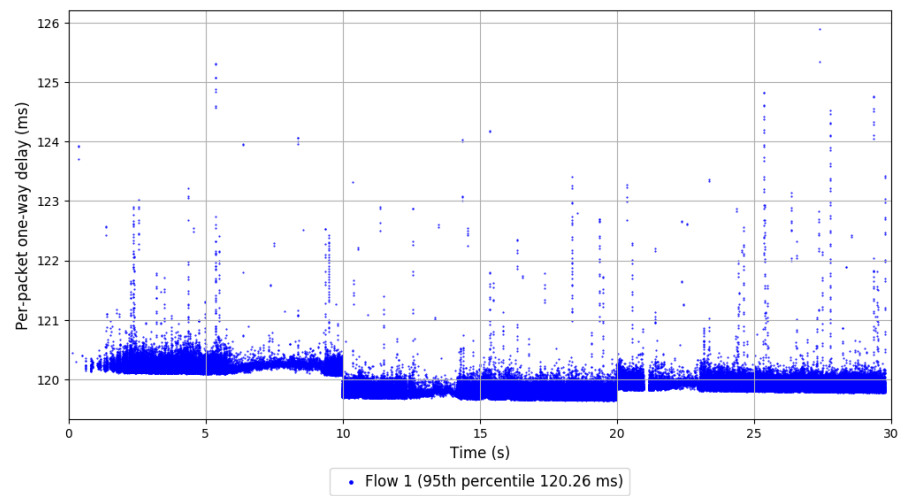
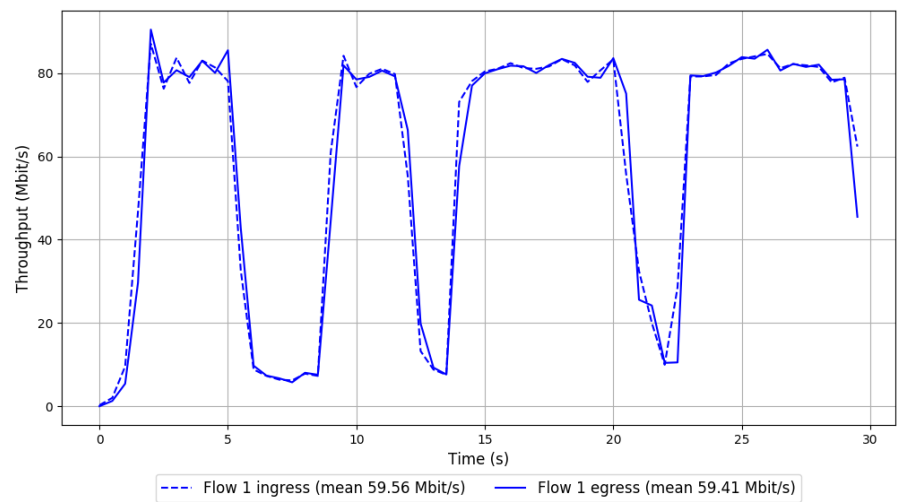
-- Flow 1:

Average throughput: 59.41 Mbit/s

95th percentile per-packet one-way delay: 120.264 ms

Loss rate: 1.01%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-05 07:41:21

End at: 2017-12-05 07:41:51

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.28 Mbit/s

95th percentile per-packet one-way delay: 122.127 ms

Loss rate: 1.20%

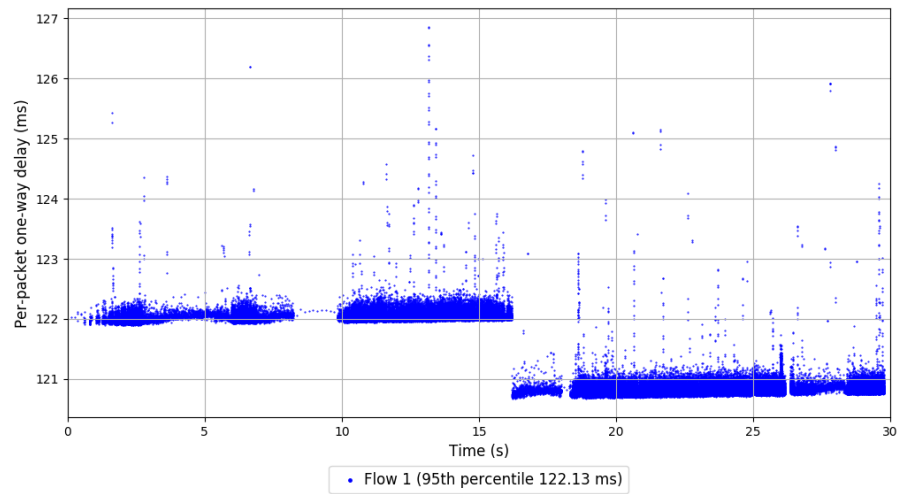
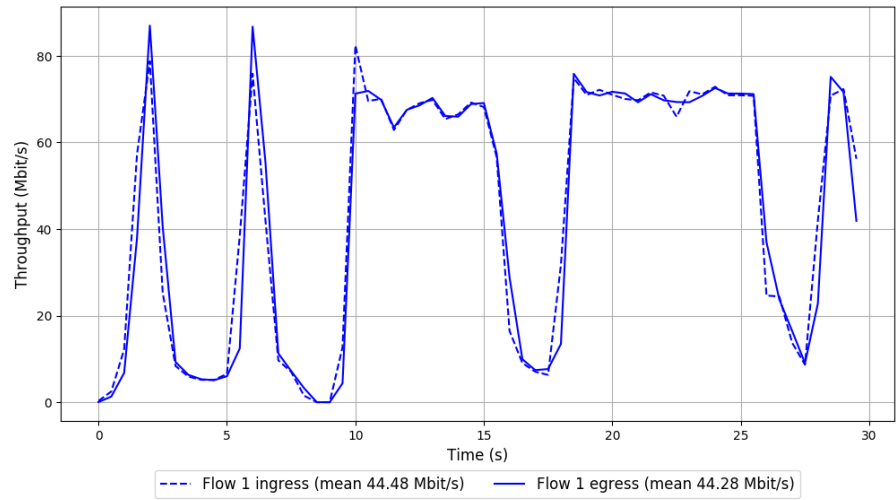
-- Flow 1:

Average throughput: 44.28 Mbit/s

95th percentile per-packet one-way delay: 122.127 ms

Loss rate: 1.20%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-05 07:52:21

End at: 2017-12-05 07:52:51

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.55 Mbit/s

95th percentile per-packet one-way delay: 122.590 ms

Loss rate: 0.99%

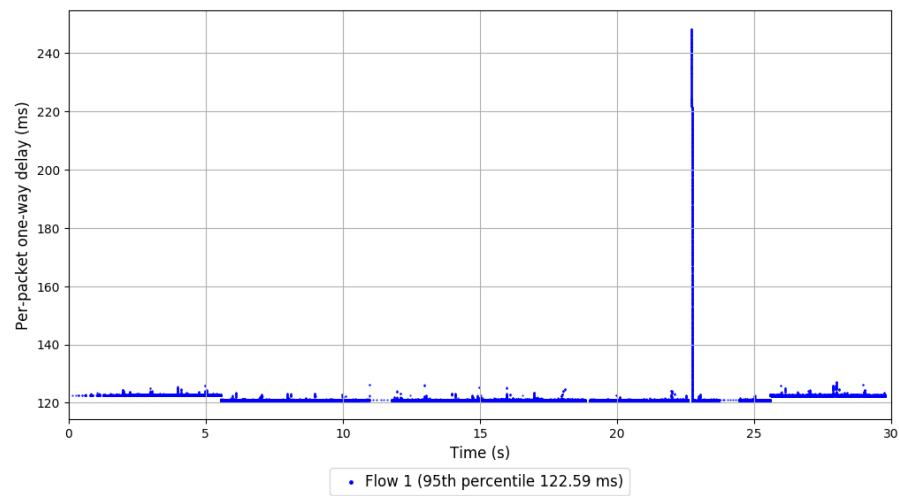
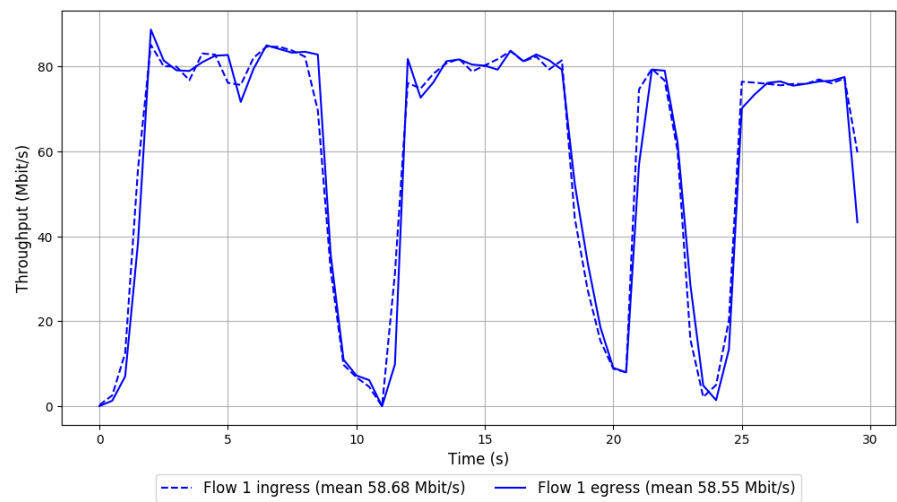
-- Flow 1:

Average throughput: 58.55 Mbit/s

95th percentile per-packet one-way delay: 122.590 ms

Loss rate: 0.99%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-05 08:03:16

End at: 2017-12-05 08:03:46

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.48 Mbit/s

95th percentile per-packet one-way delay: 118.408 ms

Loss rate: 0.16%

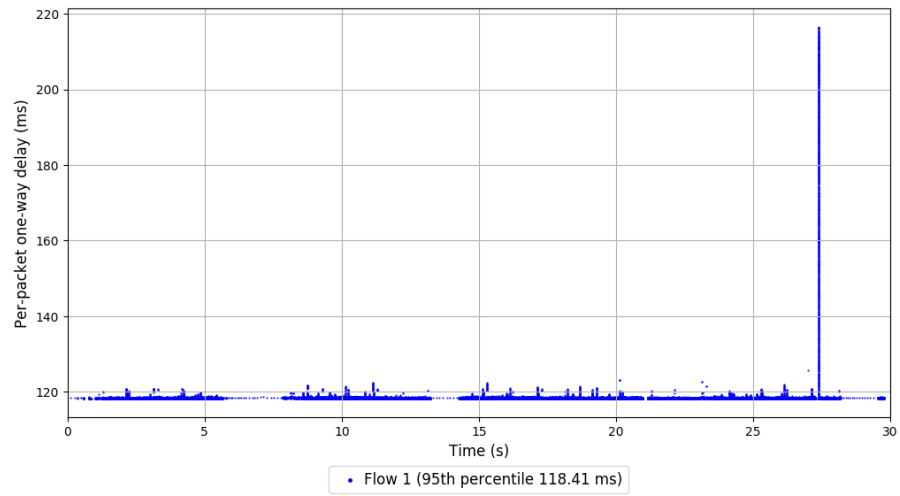
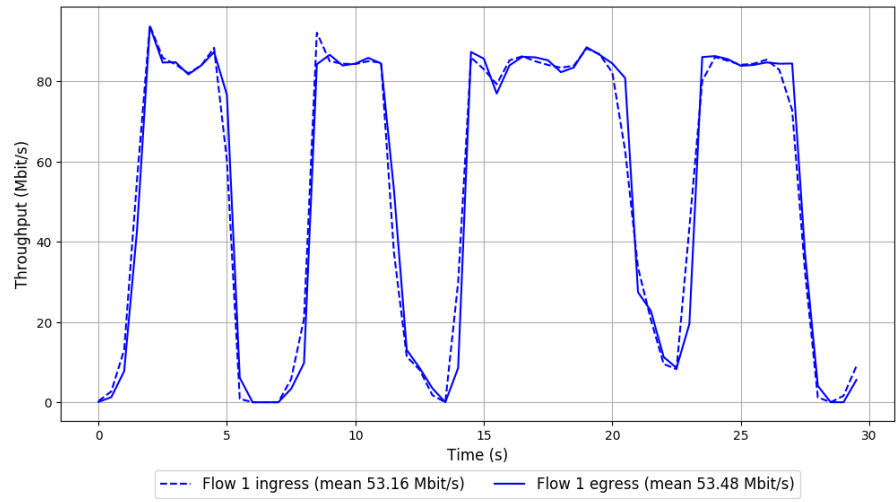
-- Flow 1:

Average throughput: 53.48 Mbit/s

95th percentile per-packet one-way delay: 118.408 ms

Loss rate: 0.16%

Run 10: Report of QUIC Cubic — Data Link

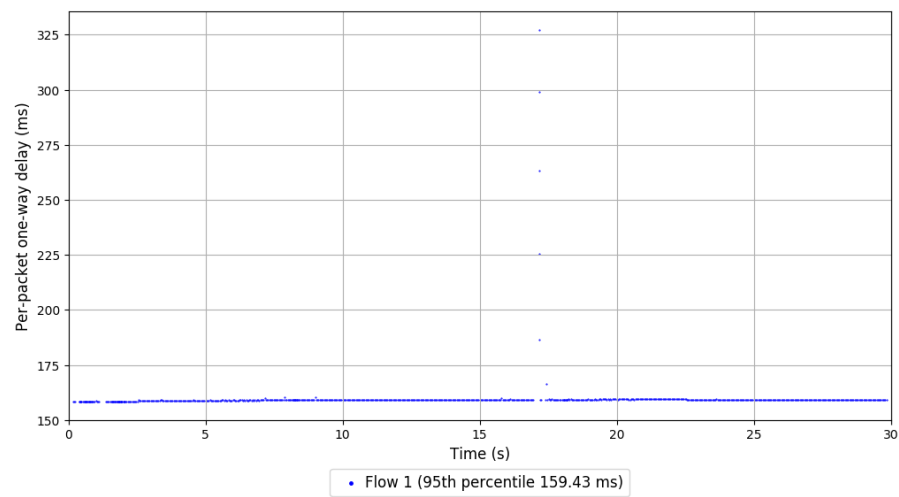
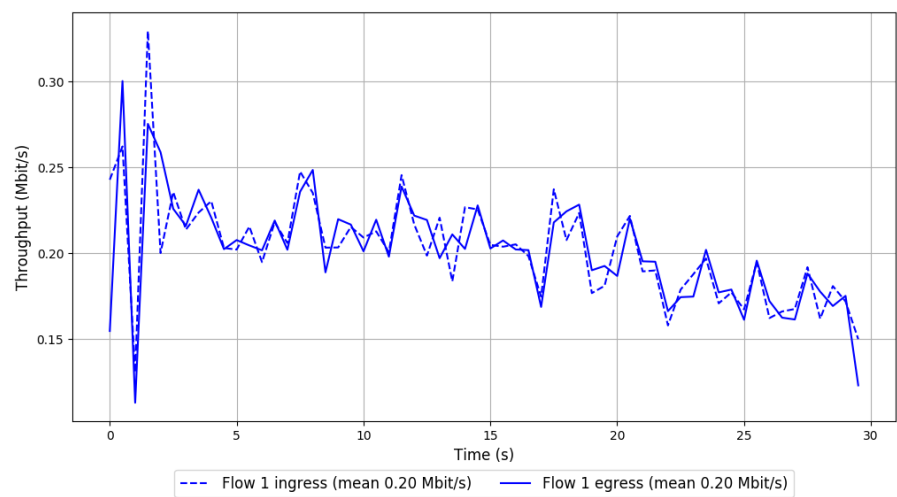


```
Run 1: Statistics of SCReAM

Start at: 2017-12-05 06:25:24
End at: 2017-12-05 06:25:54

# Below is generated by plot.py at 2017-12-05 10:22:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 159.428 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 159.428 ms
Loss rate: 0.67%
```

Run 1: Report of SReAM — Data Link

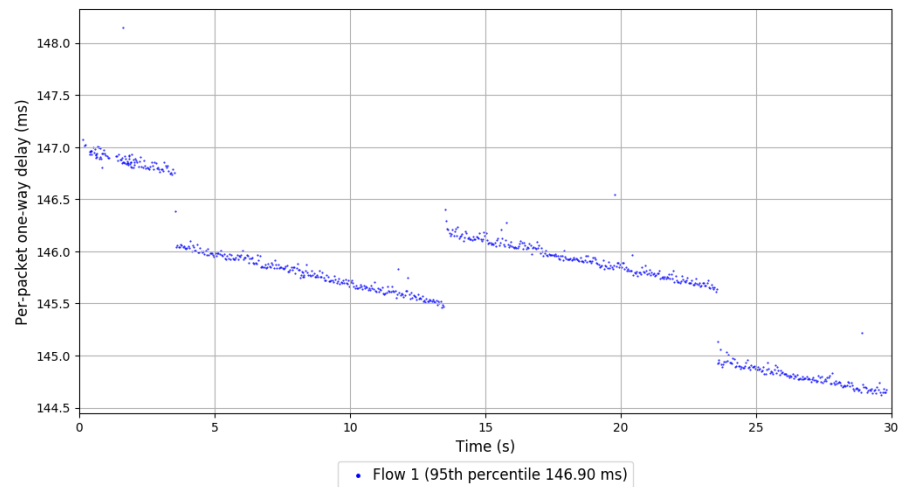
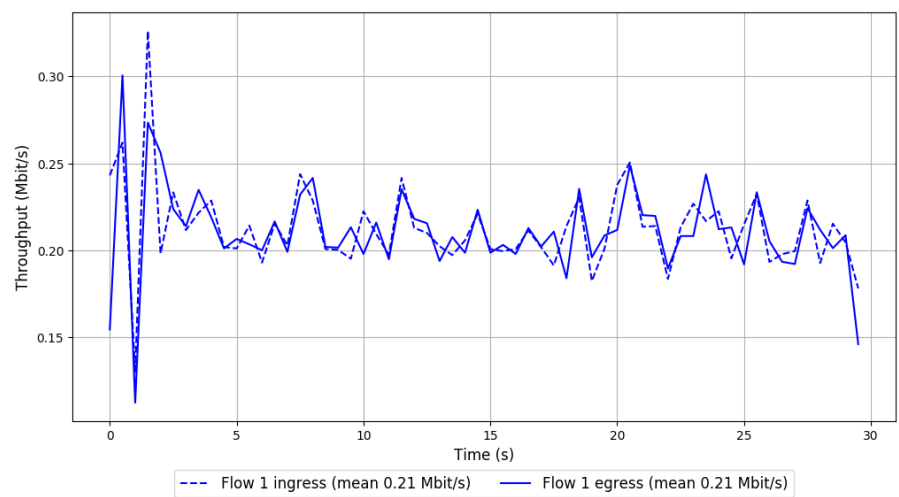


```
Run 2: Statistics of SCReAM

Start at: 2017-12-05 06:36:33
End at: 2017-12-05 06:37:03

# Below is generated by plot.py at 2017-12-05 10:22:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 146.895 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 146.895 ms
Loss rate: 0.76%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-05 06:47:46

End at: 2017-12-05 06:48:16

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 137.615 ms

Loss rate: 0.77%

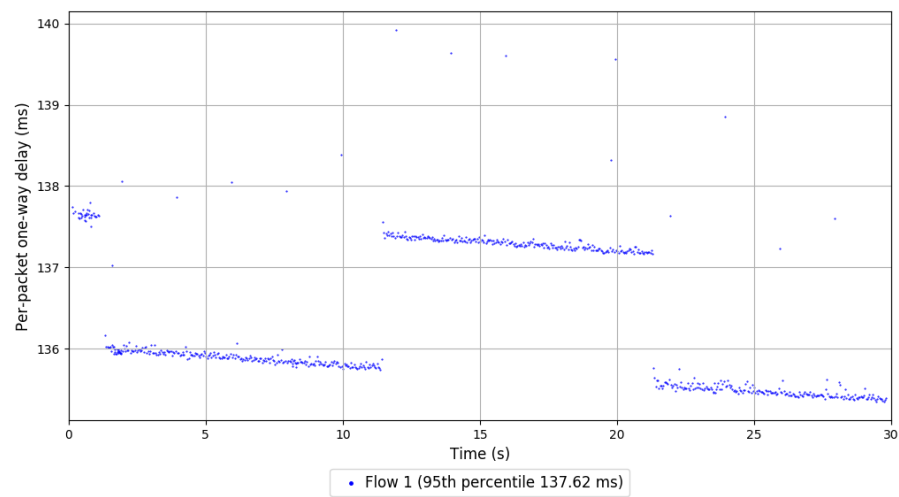
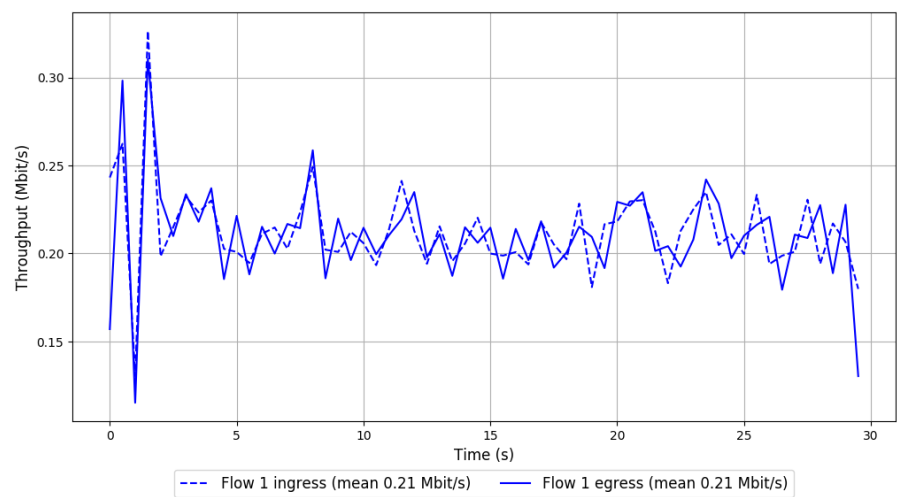
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 137.615 ms

Loss rate: 0.77%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-05 06:58:44

End at: 2017-12-05 06:59:14

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 130.685 ms

Loss rate: 0.77%

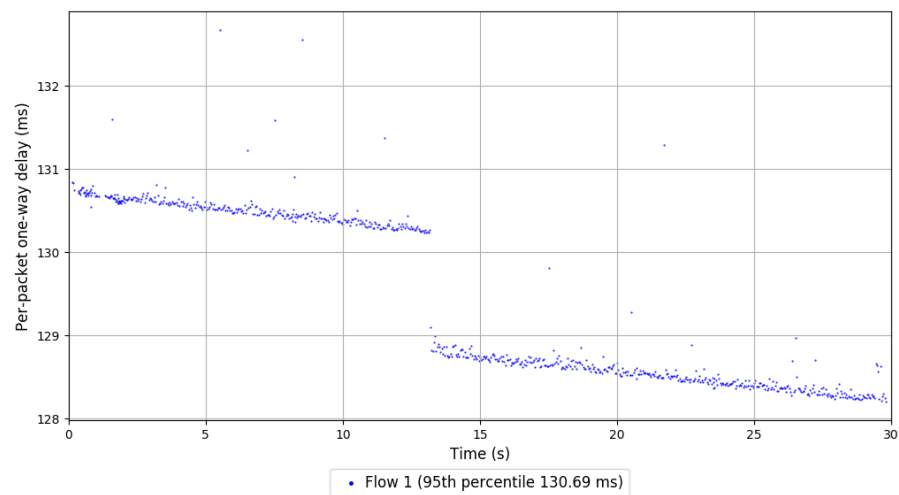
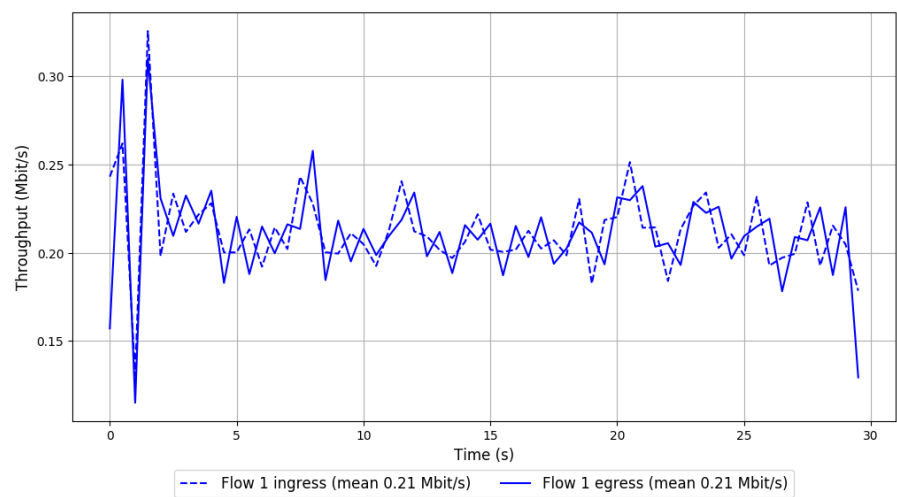
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 130.685 ms

Loss rate: 0.77%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-05 07:09:38

End at: 2017-12-05 07:10:08

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 124.490 ms

Loss rate: 0.76%

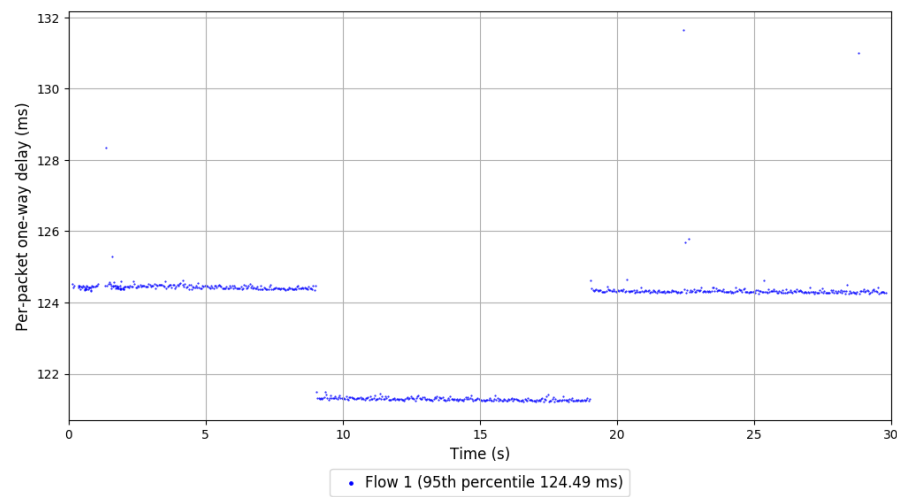
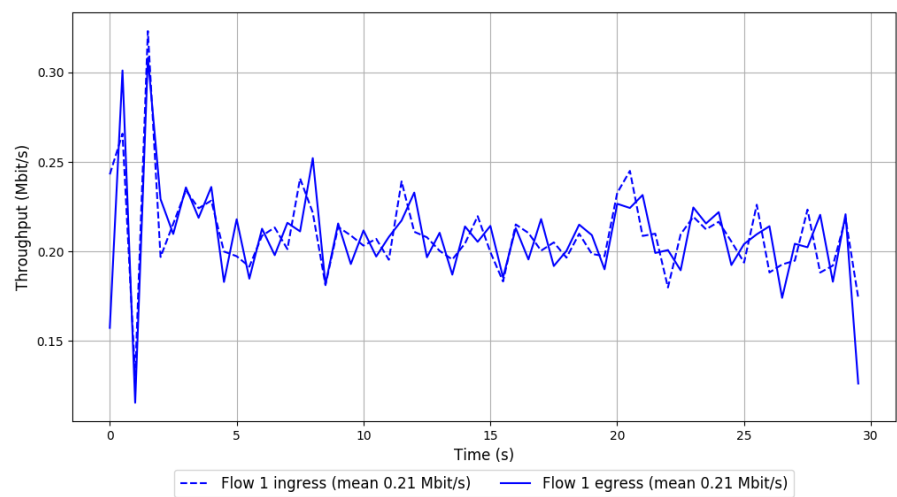
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 124.490 ms

Loss rate: 0.76%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-05 07:20:34

End at: 2017-12-05 07:21:04

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 121.001 ms

Loss rate: 0.77%

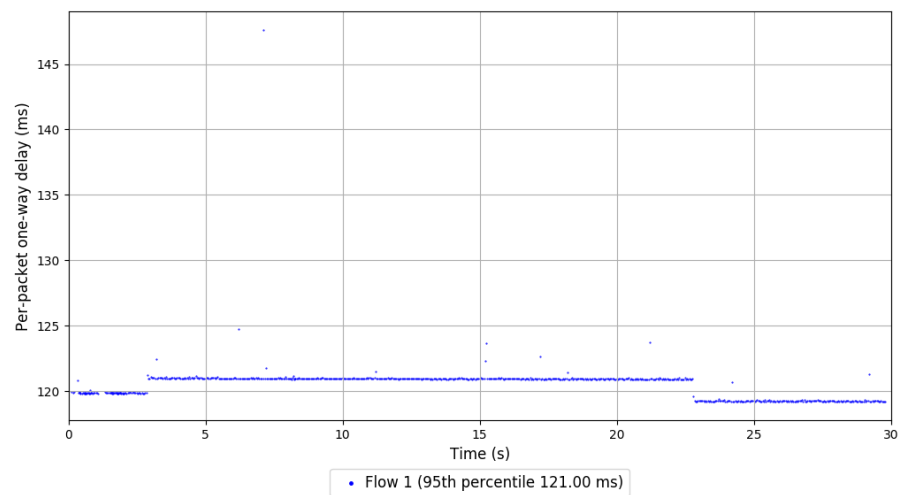
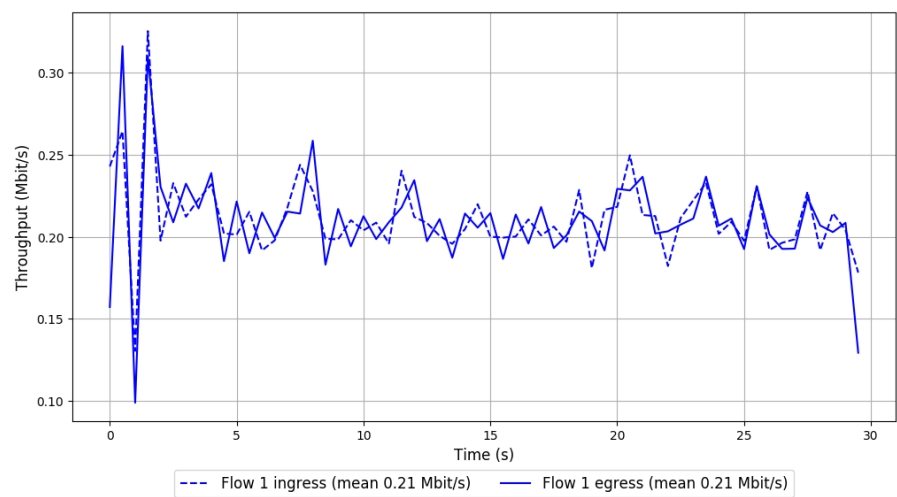
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 121.001 ms

Loss rate: 0.77%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-05 07:31:53

End at: 2017-12-05 07:32:23

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 121.933 ms

Loss rate: 0.76%

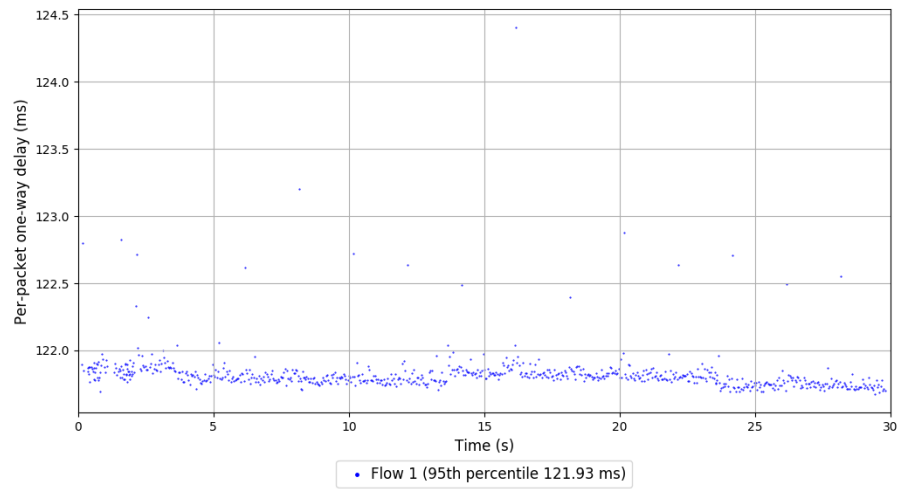
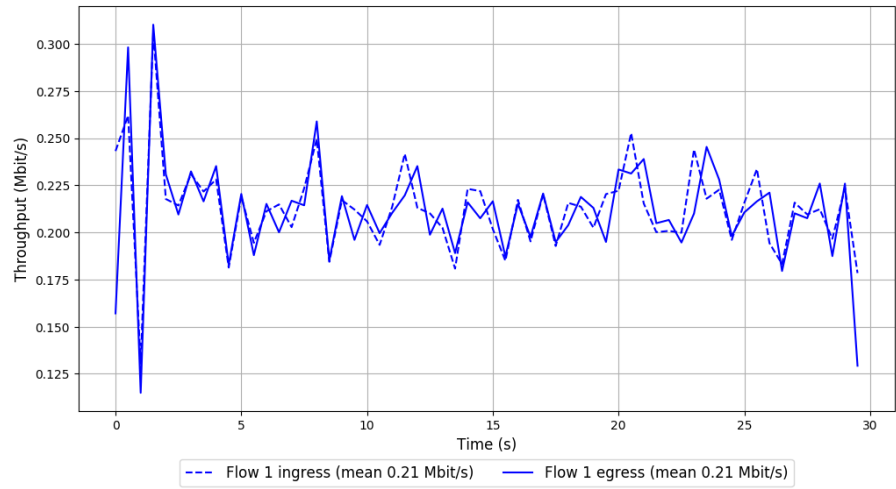
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 121.933 ms

Loss rate: 0.76%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-05 07:42:45

End at: 2017-12-05 07:43:15

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 121.119 ms

Loss rate: 0.77%

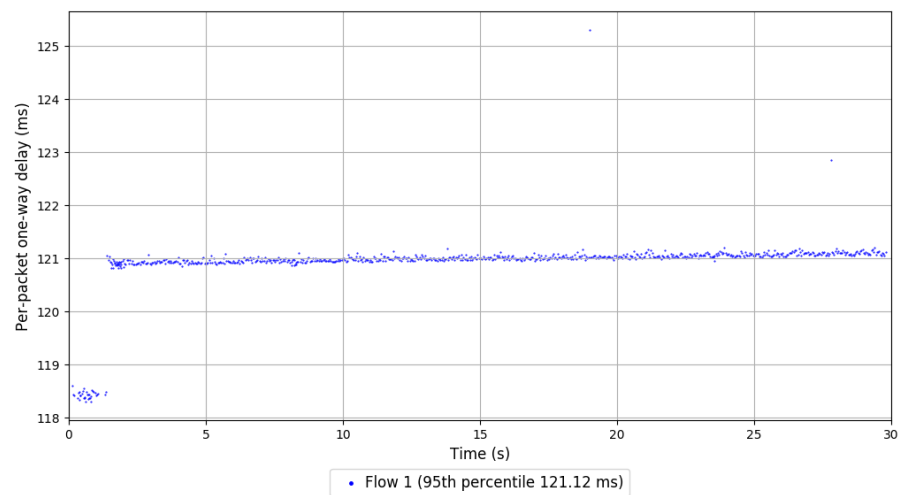
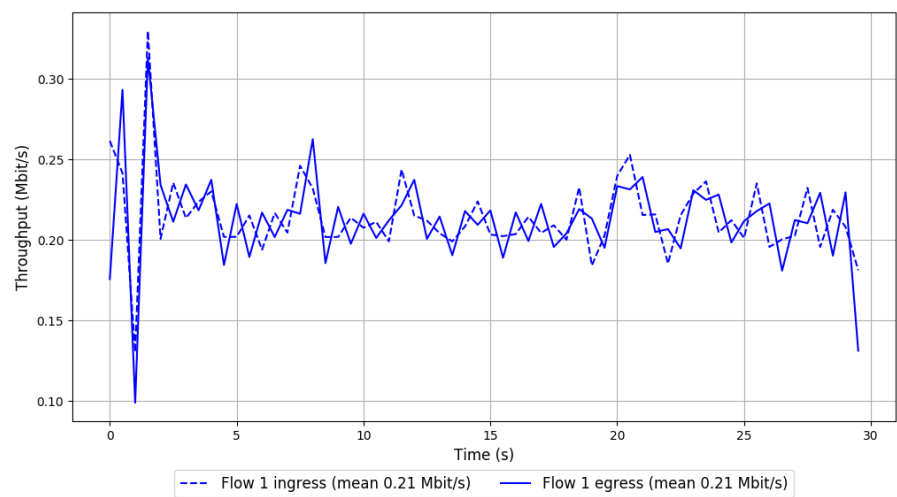
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 121.119 ms

Loss rate: 0.77%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-05 07:53:47

End at: 2017-12-05 07:54:17

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 120.147 ms

Loss rate: 0.63%

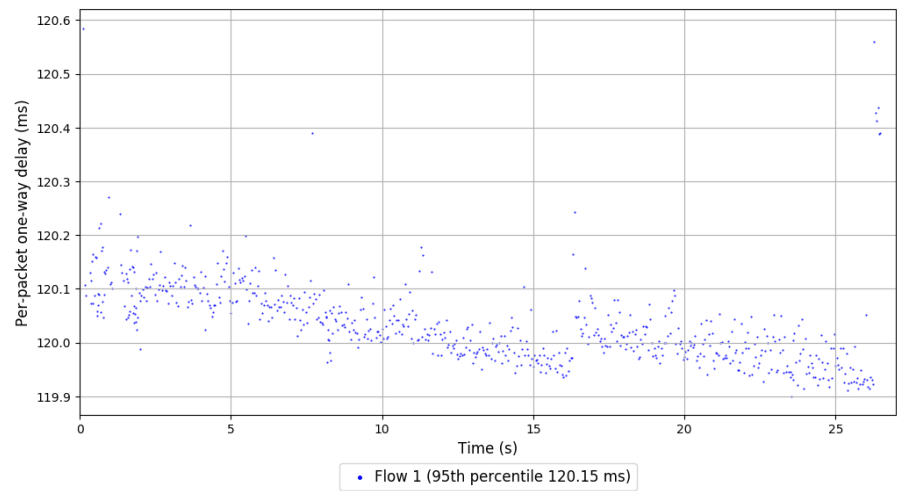
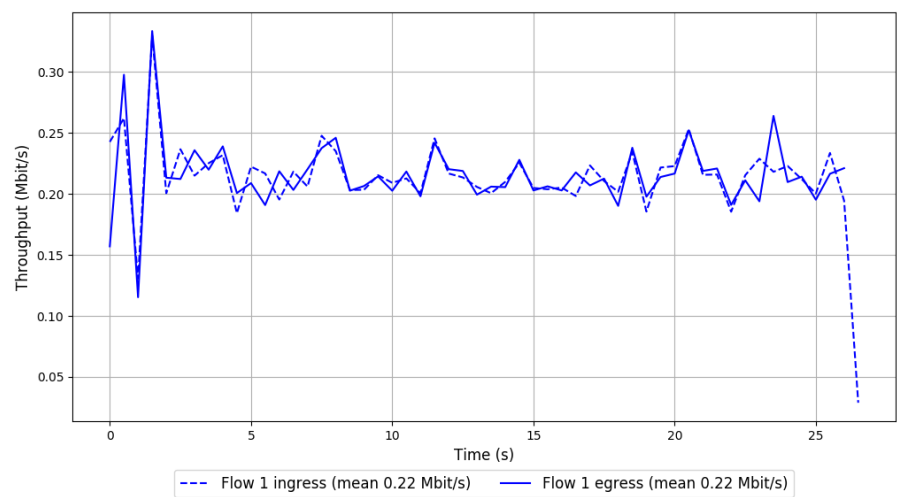
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 120.147 ms

Loss rate: 0.63%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-05 08:04:42

End at: 2017-12-05 08:05:12

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 121.274 ms

Loss rate: 0.76%

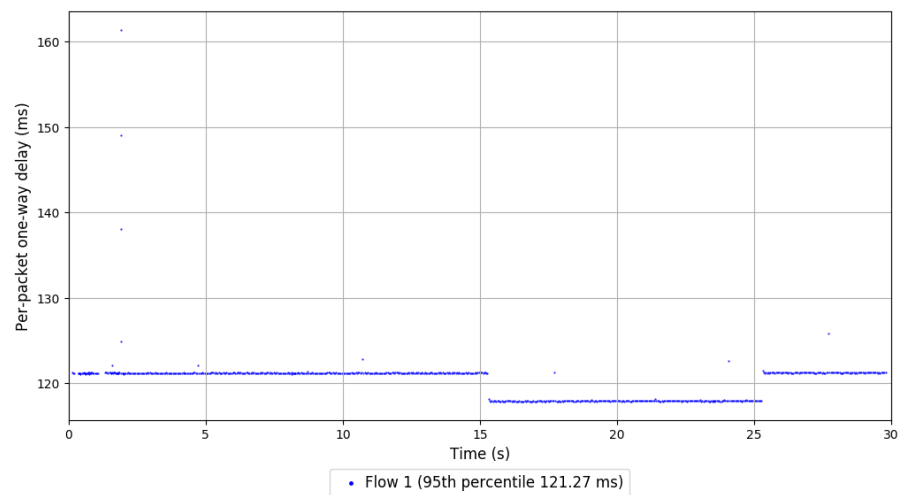
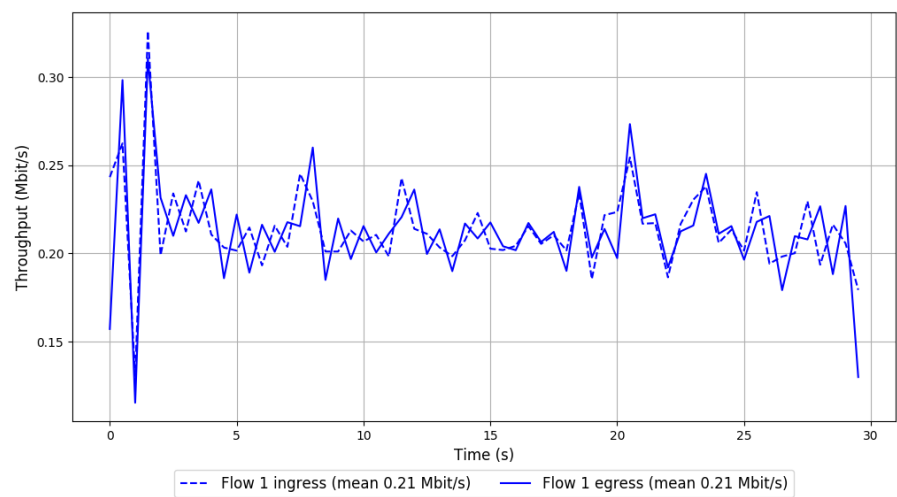
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 121.274 ms

Loss rate: 0.76%

Run 10: Report of SReAM — Data Link

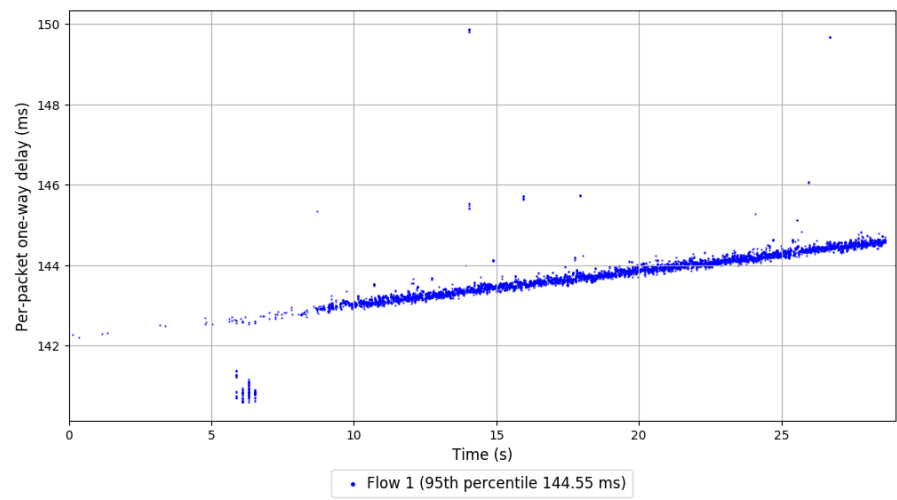
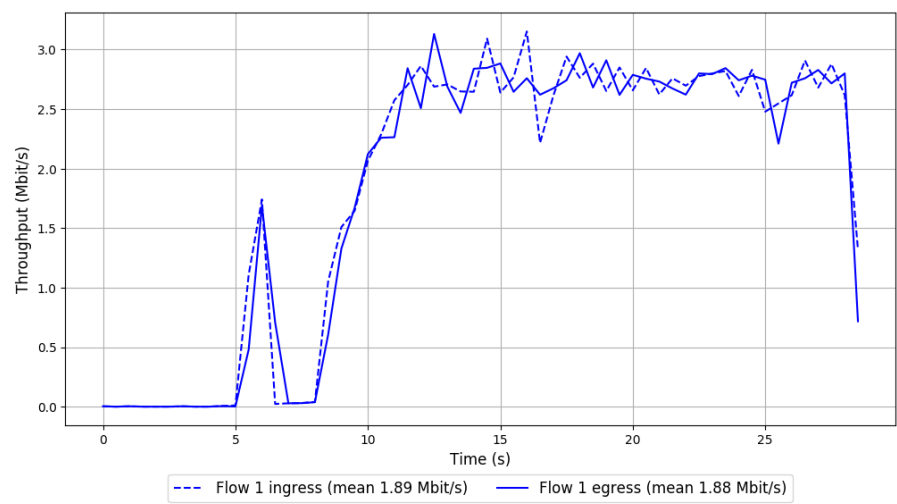


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-05 06:21:50
End at: 2017-12-05 06:22:20

# Below is generated by plot.py at 2017-12-05 10:22:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 144.548 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 144.548 ms
Loss rate: 1.22%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-05 06:32:53

End at: 2017-12-05 06:33:23

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 148.824 ms

Loss rate: 0.76%

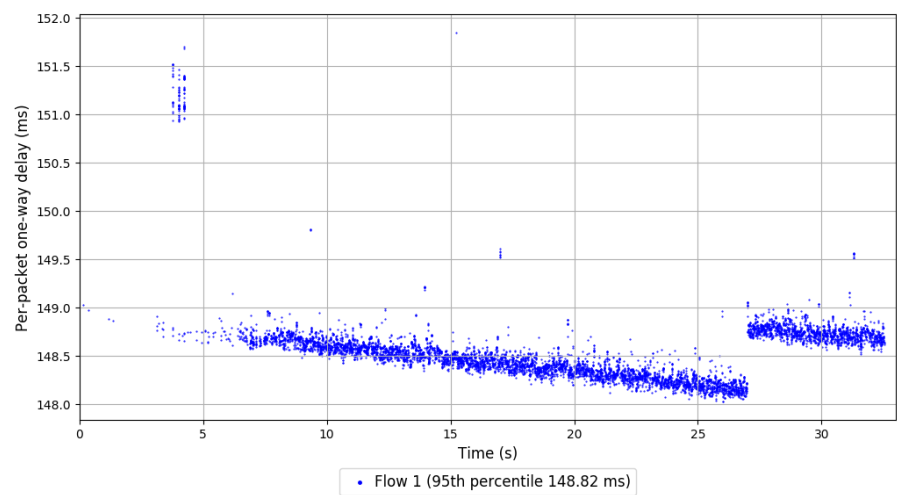
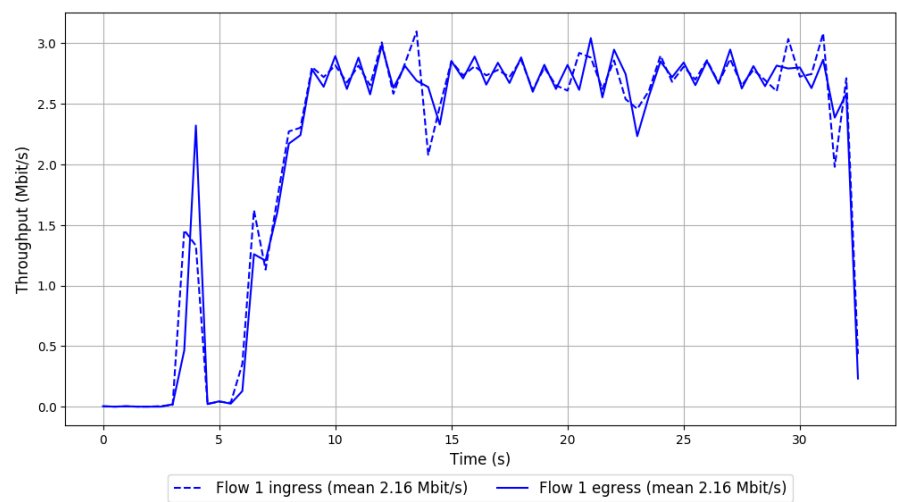
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 148.824 ms

Loss rate: 0.76%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-05 06:44:05

End at: 2017-12-05 06:44:35

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 146.224 ms

Loss rate: 0.79%

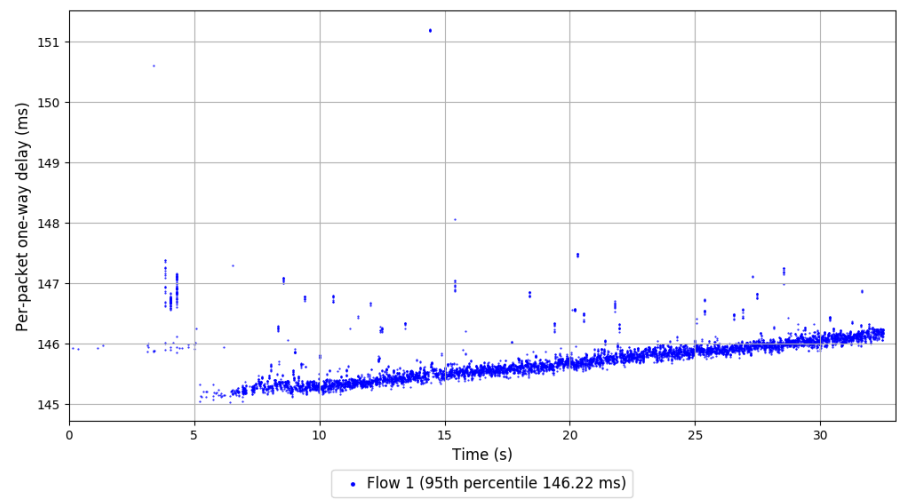
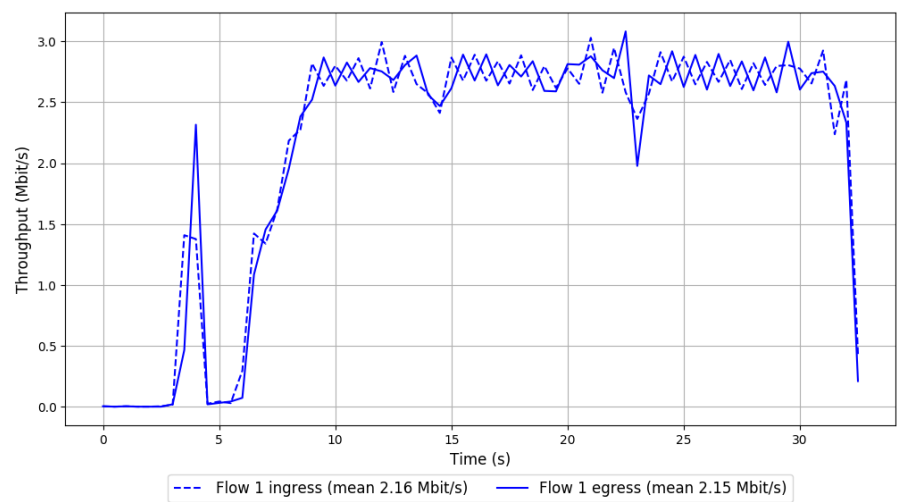
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 146.224 ms

Loss rate: 0.79%

Run 3: Report of WebRTC media — Data Link

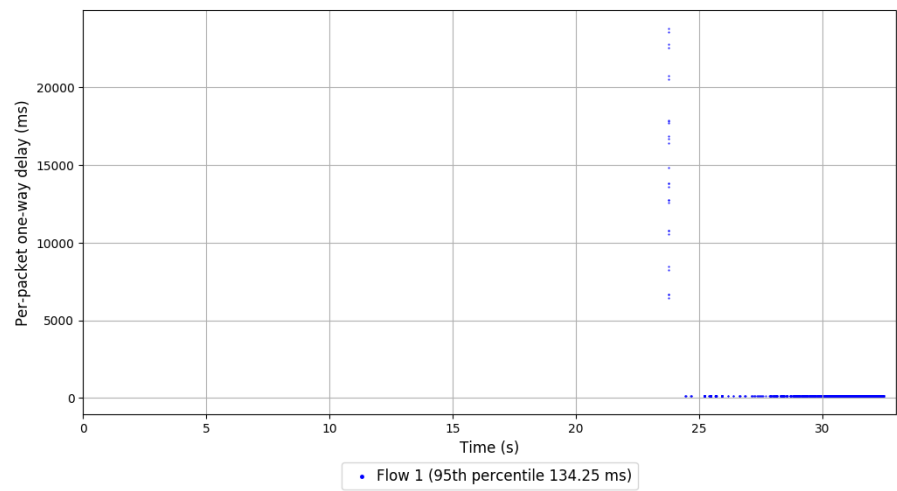
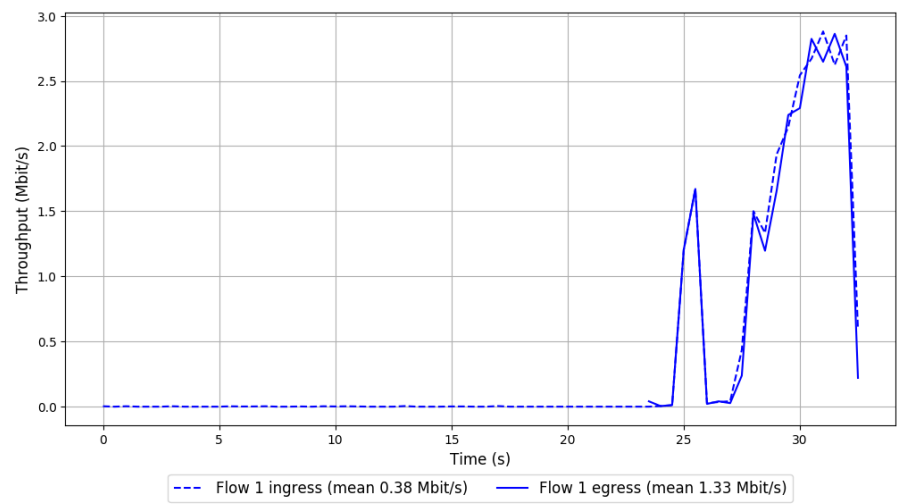


Run 4: Statistics of WebRTC media

Start at: 2017-12-05 06:55:02

End at: 2017-12-05 06:55:32

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-05 07:06:02

End at: 2017-12-05 07:06:32

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 125.964 ms

Loss rate: 0.90%

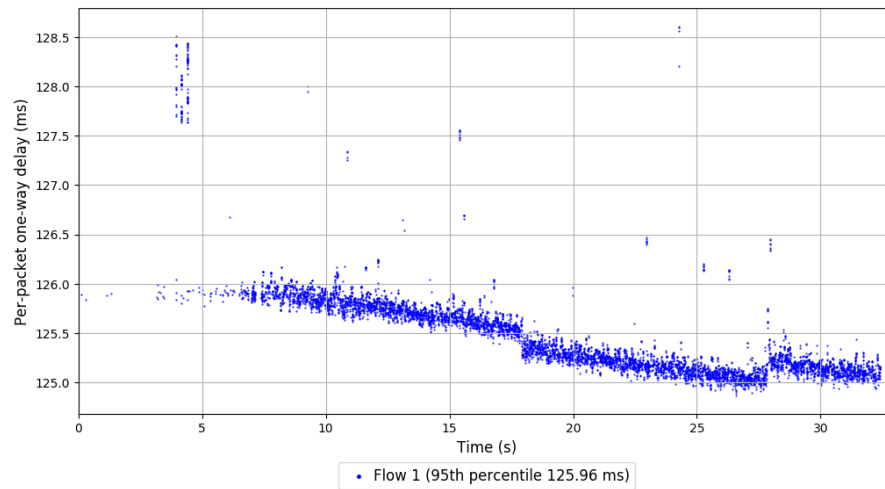
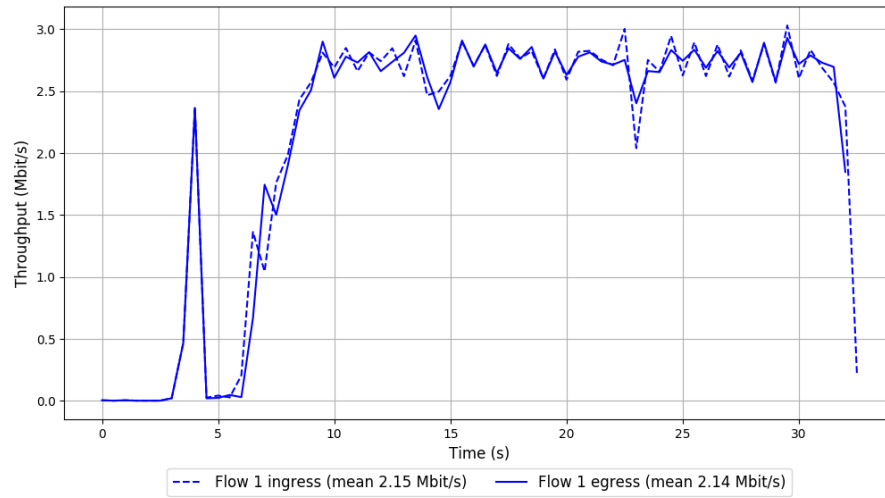
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 125.964 ms

Loss rate: 0.90%

Run 5: Report of WebRTC media — Data Link

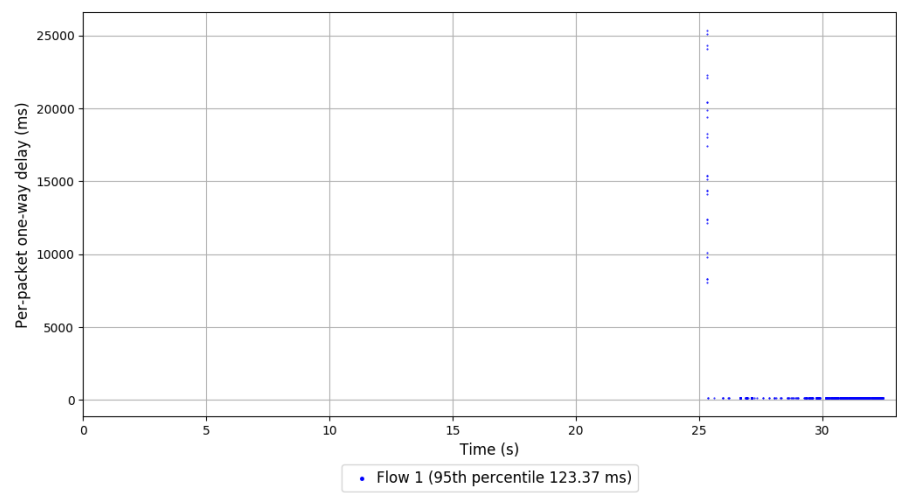
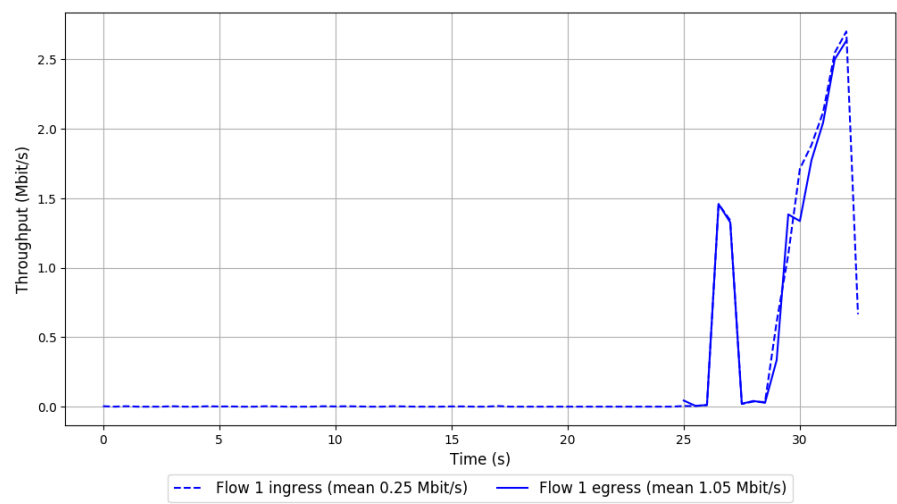


Run 6: Statistics of WebRTC media

Start at: 2017-12-05 07:16:53

End at: 2017-12-05 07:17:23

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-05 07:28:12

End at: 2017-12-05 07:28:42

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 122.216 ms

Loss rate: 0.93%

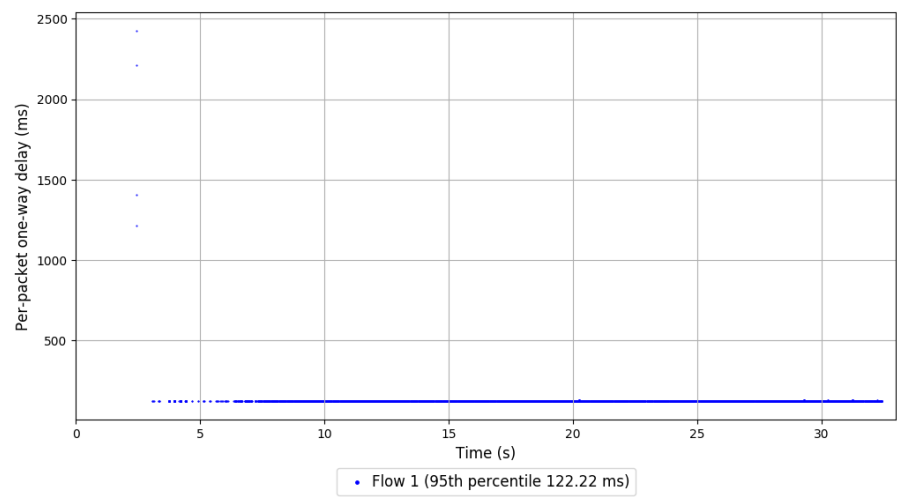
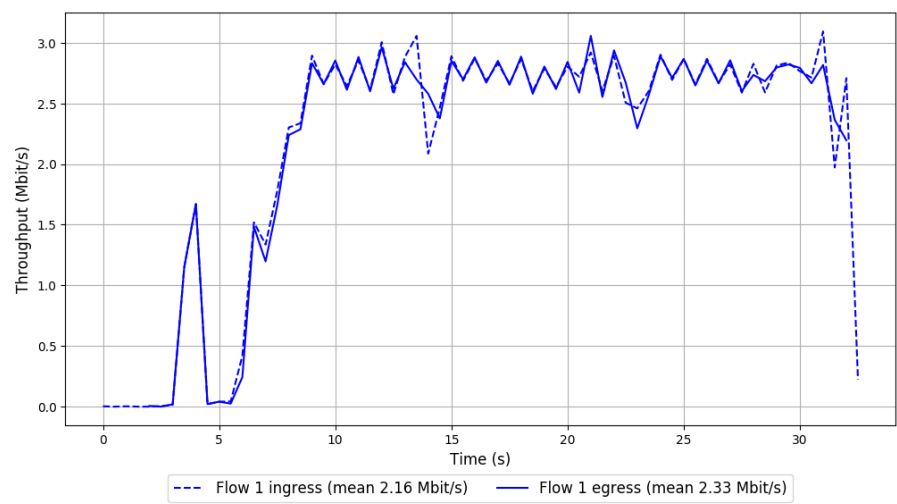
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 122.216 ms

Loss rate: 0.93%

Run 7: Report of WebRTC media — Data Link

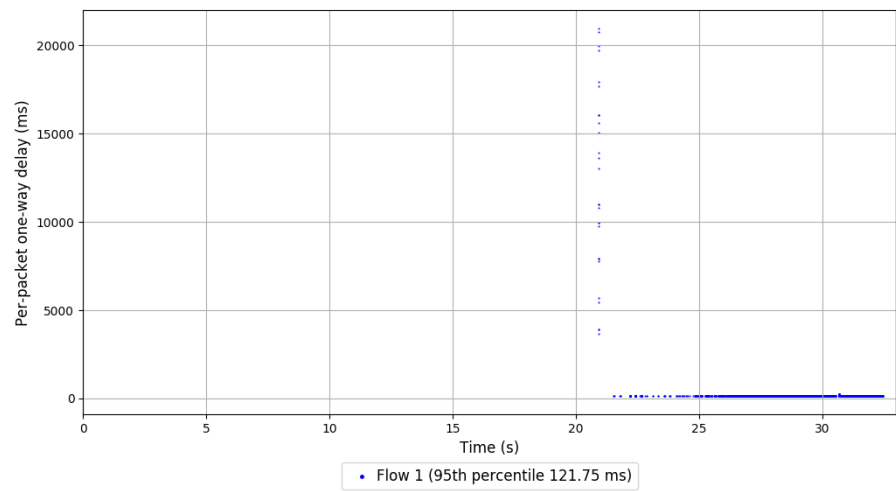
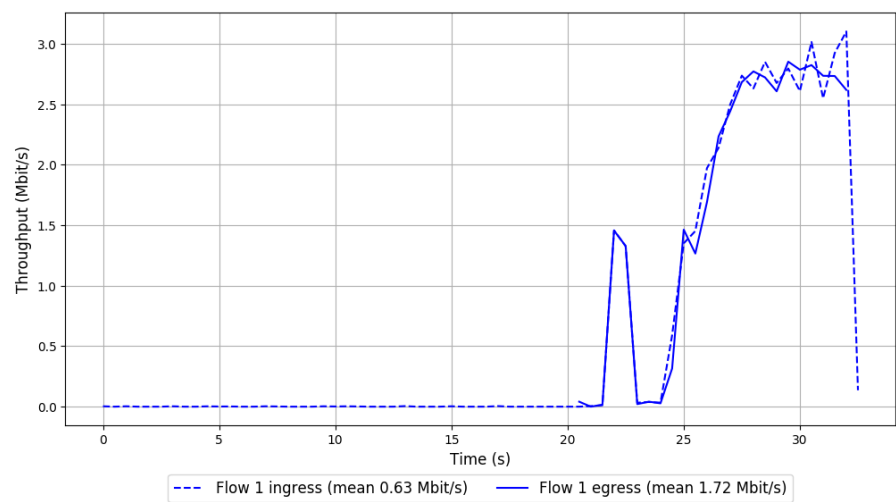


Run 8: Statistics of WebRTC media

Start at: 2017-12-05 07:39:11

End at: 2017-12-05 07:39:41

Run 8: Report of WebRTC media — Data Link

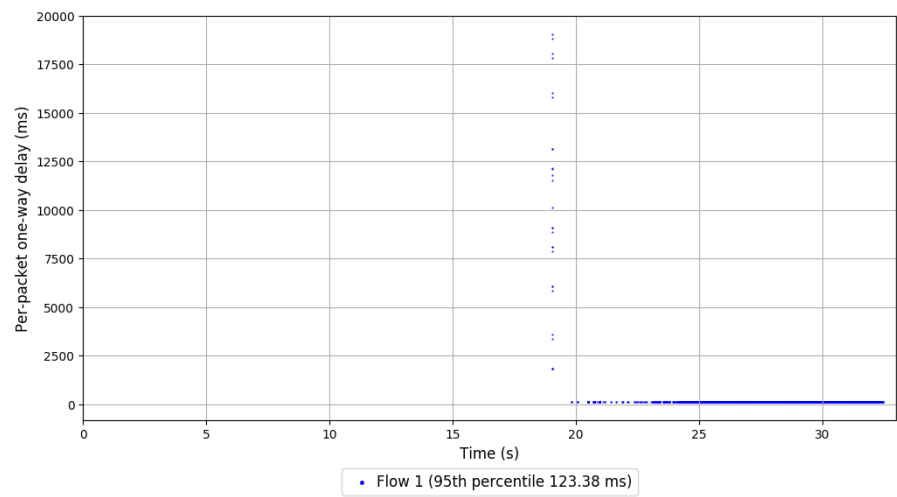
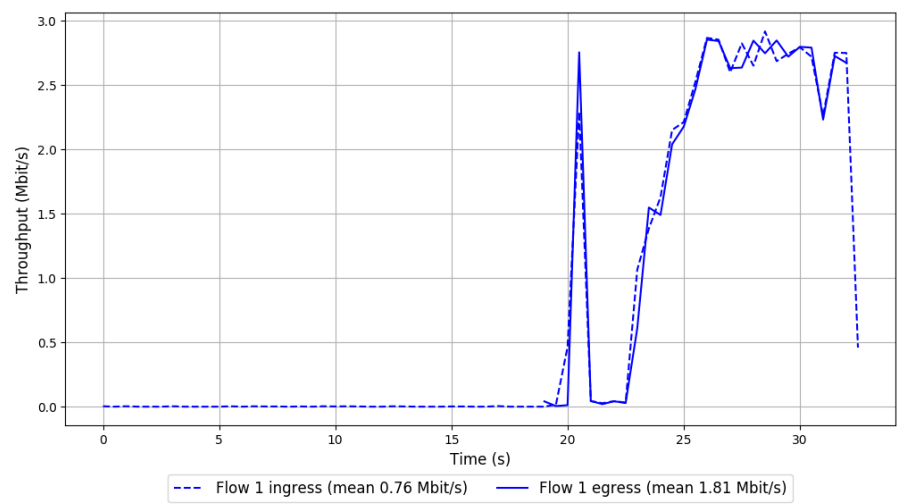


Run 9: Statistics of WebRTC media

Start at: 2017-12-05 07:50:06

End at: 2017-12-05 07:50:36

Run 9: Report of WebRTC media — Data Link

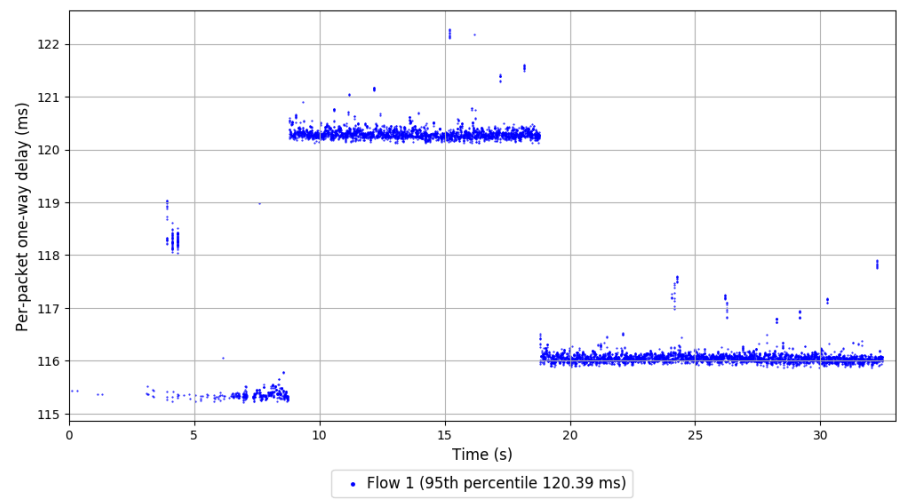
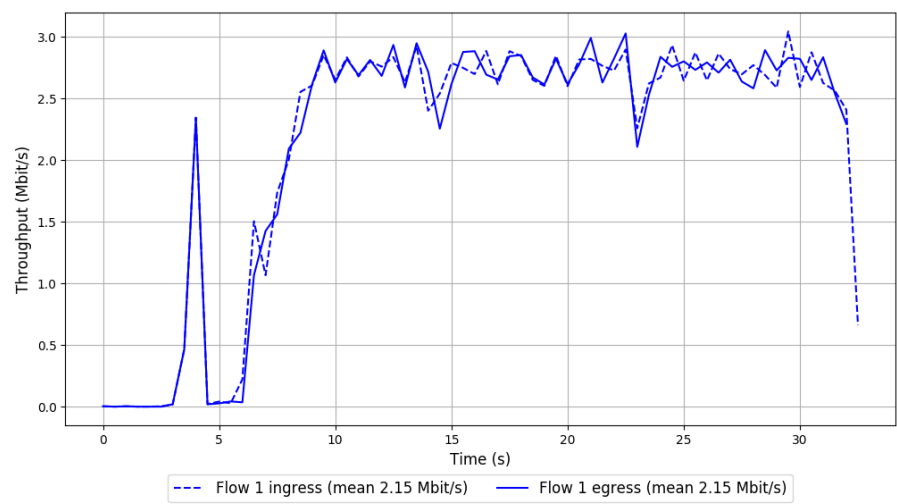


```
Run 10: Statistics of WebRTC media

Start at: 2017-12-05 08:01:01
End at: 2017-12-05 08:01:31

# Below is generated by plot.py at 2017-12-05 10:22:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 120.394 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 120.394 ms
Loss rate: 0.92%
```

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-05 06:22:31

End at: 2017-12-05 06:23:01

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.97 Mbit/s

95th percentile per-packet one-way delay: 150.525 ms

Loss rate: 0.67%

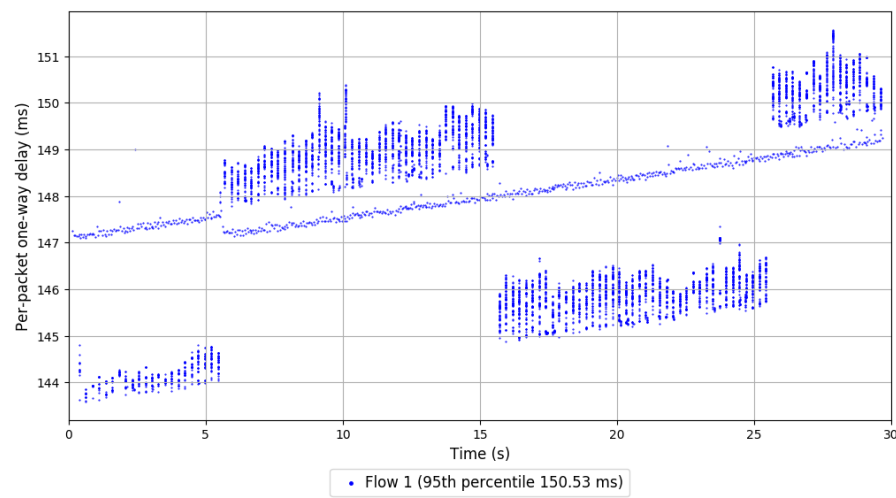
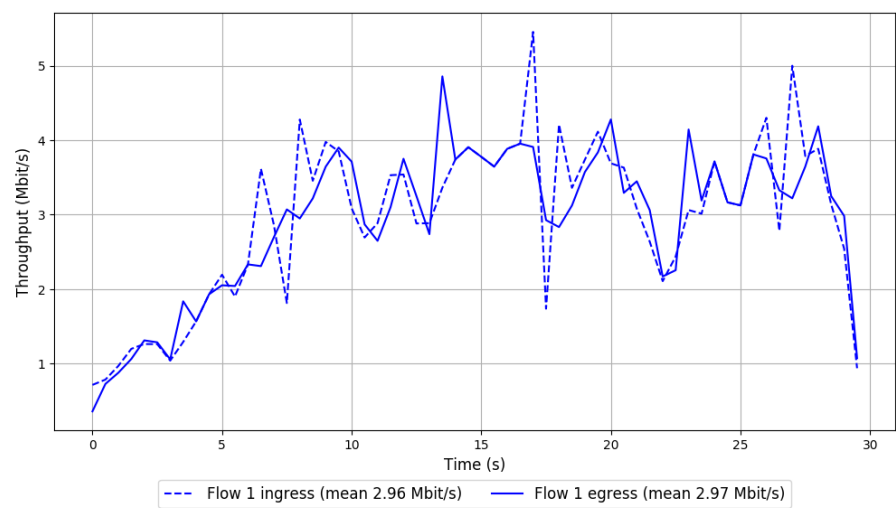
-- Flow 1:

Average throughput: 2.97 Mbit/s

95th percentile per-packet one-way delay: 150.525 ms

Loss rate: 0.67%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-05 06:33:34

End at: 2017-12-05 06:34:04

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 150.367 ms

Loss rate: 0.83%

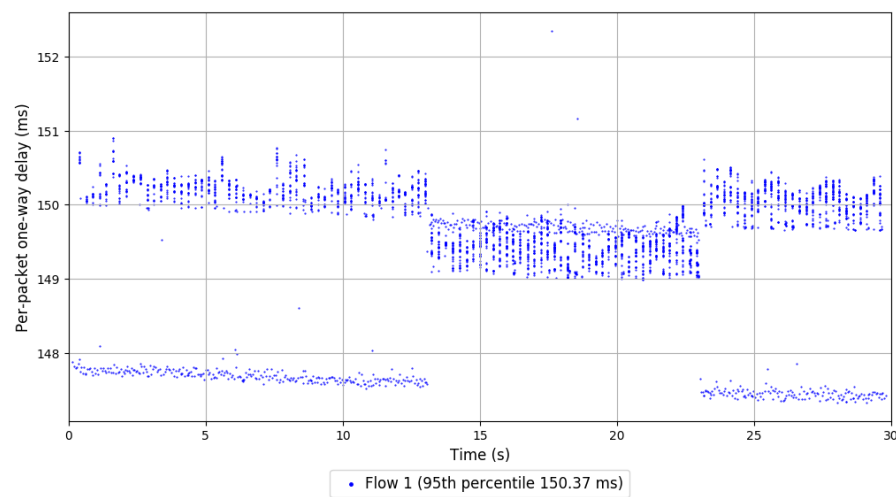
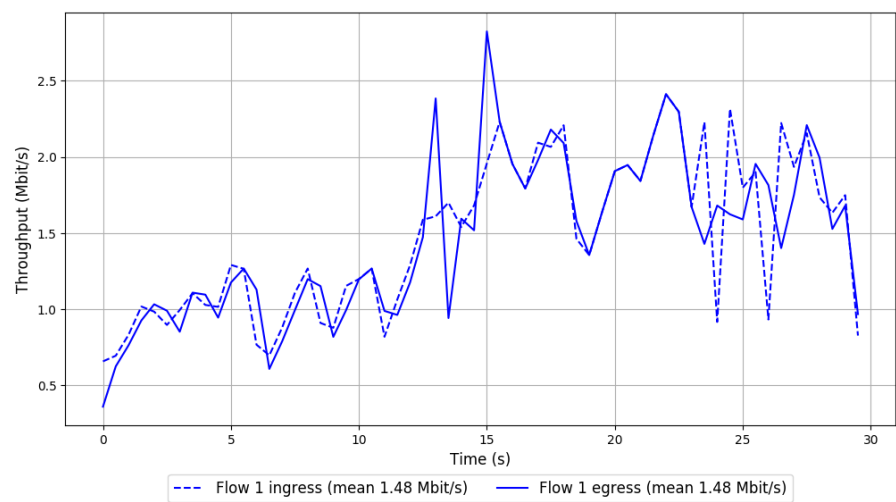
-- Flow 1:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 150.367 ms

Loss rate: 0.83%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-05 06:44:46

End at: 2017-12-05 06:45:16

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 148.242 ms

Loss rate: 0.94%

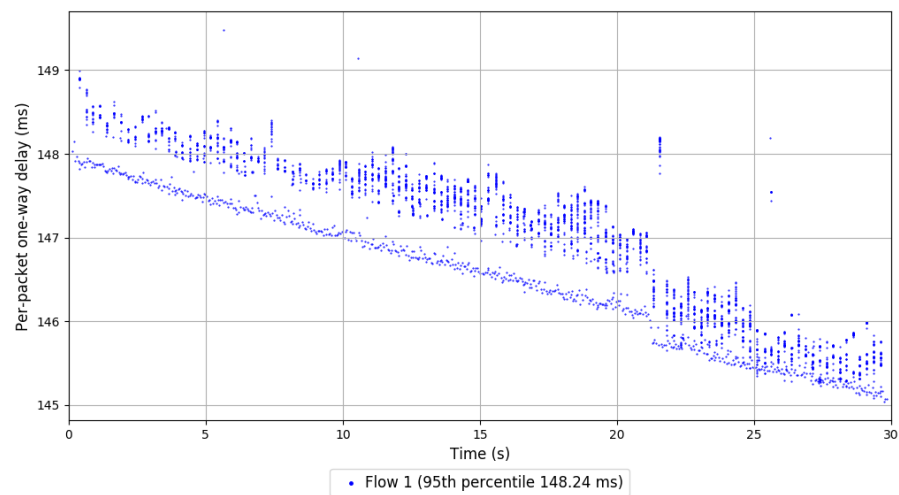
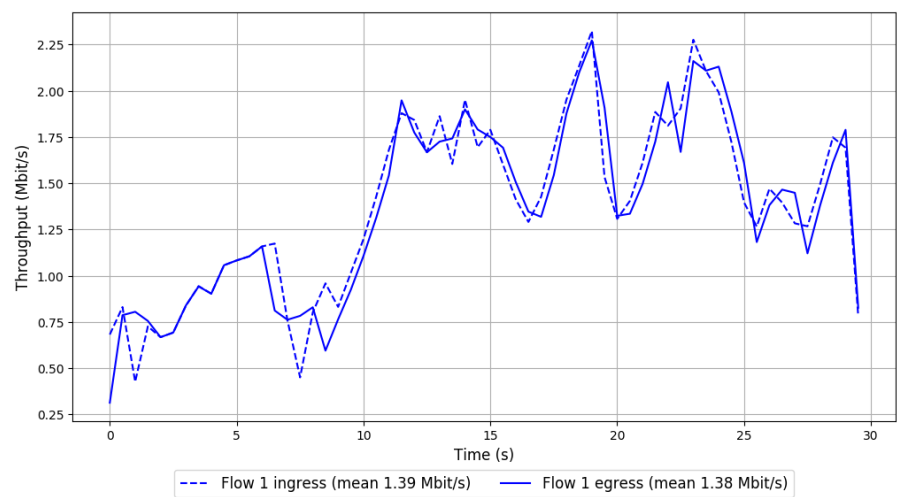
-- Flow 1:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 148.242 ms

Loss rate: 0.94%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-05 06:55:43

End at: 2017-12-05 06:56:13

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.13 Mbit/s

95th percentile per-packet one-way delay: 135.192 ms

Loss rate: 0.85%

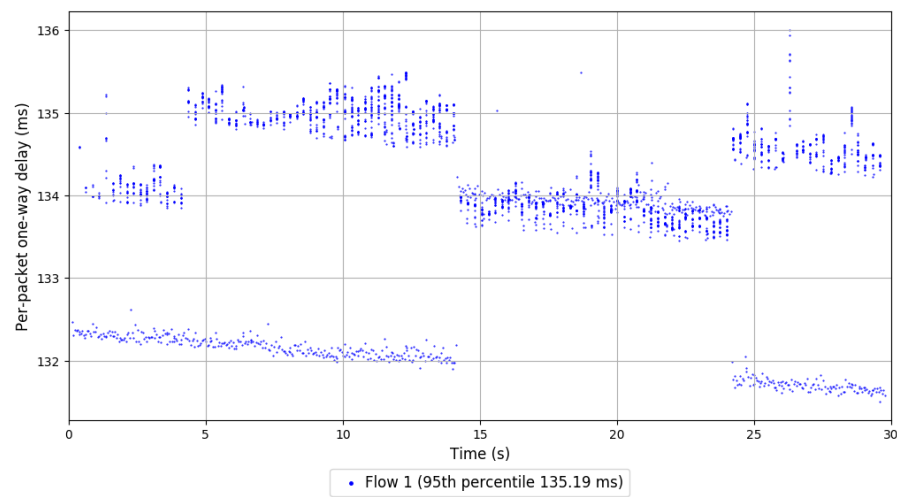
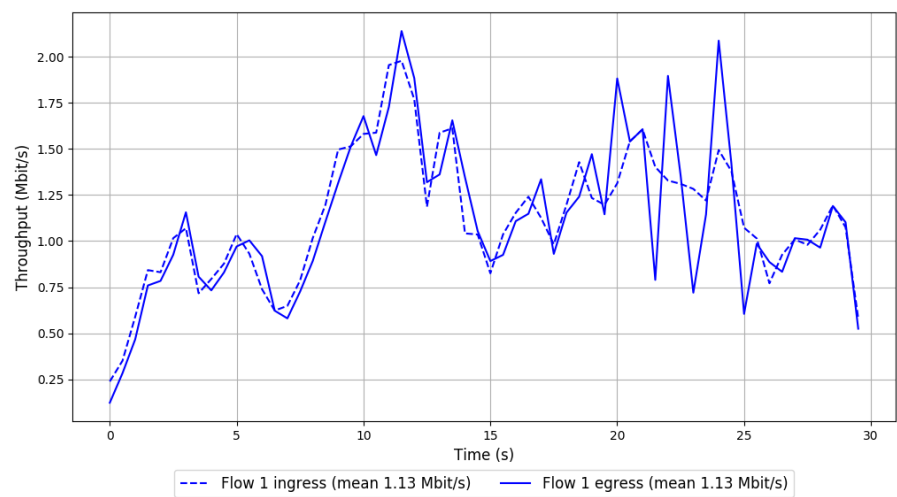
-- Flow 1:

Average throughput: 1.13 Mbit/s

95th percentile per-packet one-way delay: 135.192 ms

Loss rate: 0.85%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-05 07:06:43

End at: 2017-12-05 07:07:13

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 127.509 ms

Loss rate: 0.70%

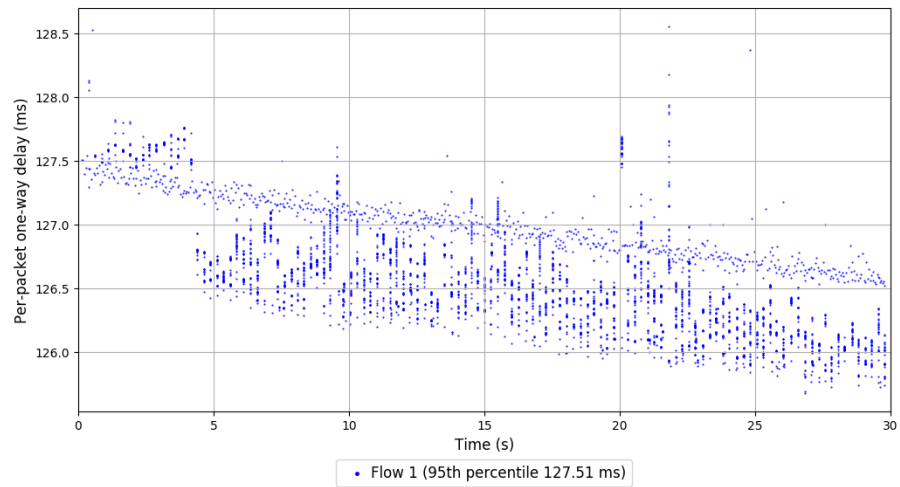
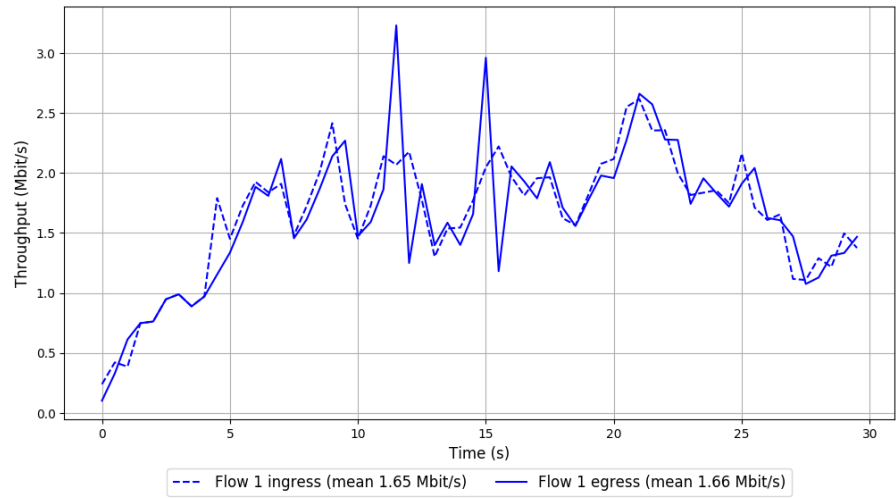
-- Flow 1:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 127.509 ms

Loss rate: 0.70%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-05 07:17:34

End at: 2017-12-05 07:18:04

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 123.666 ms

Loss rate: 0.52%

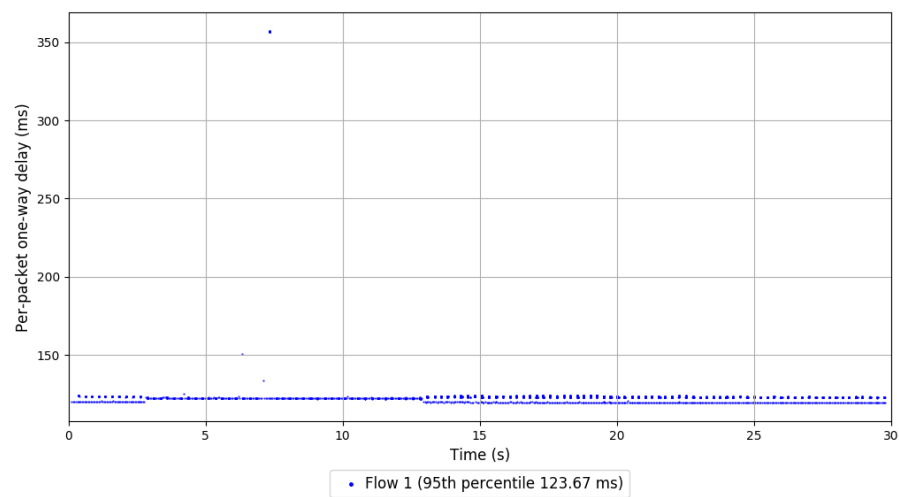
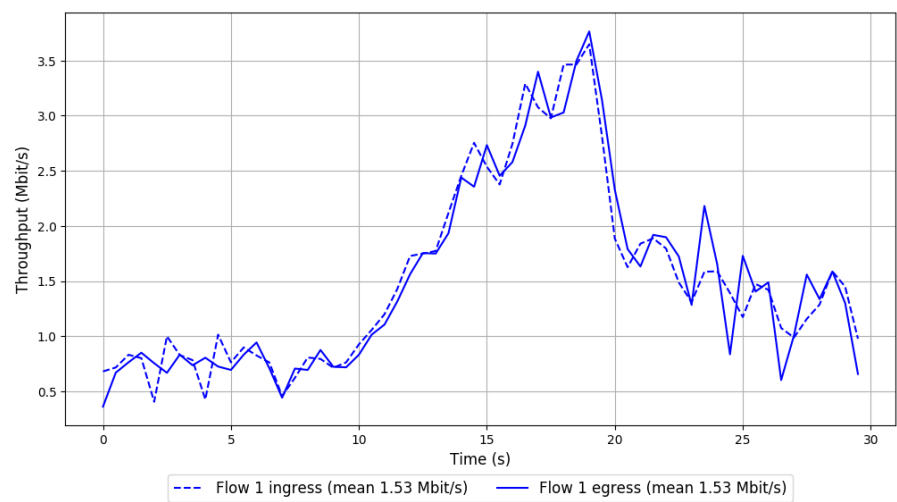
-- Flow 1:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 123.666 ms

Loss rate: 0.52%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-05 07:28:53

End at: 2017-12-05 07:29:23

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 122.786 ms

Loss rate: 0.54%

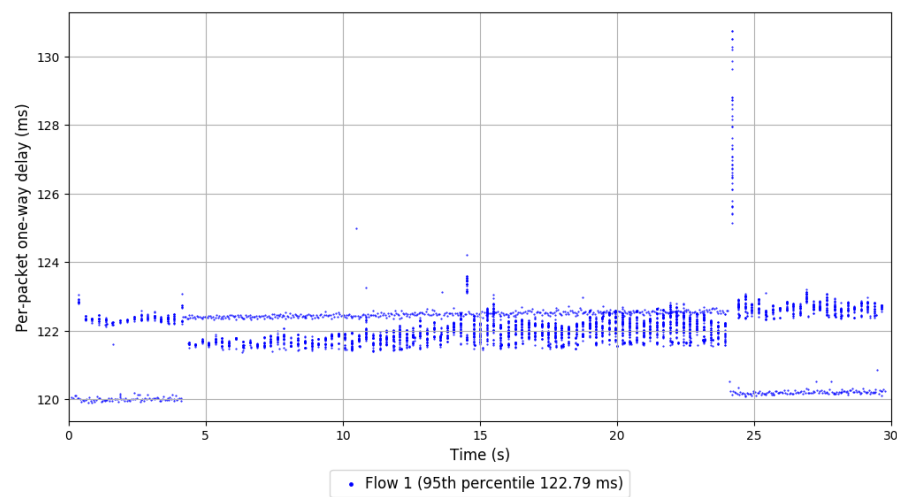
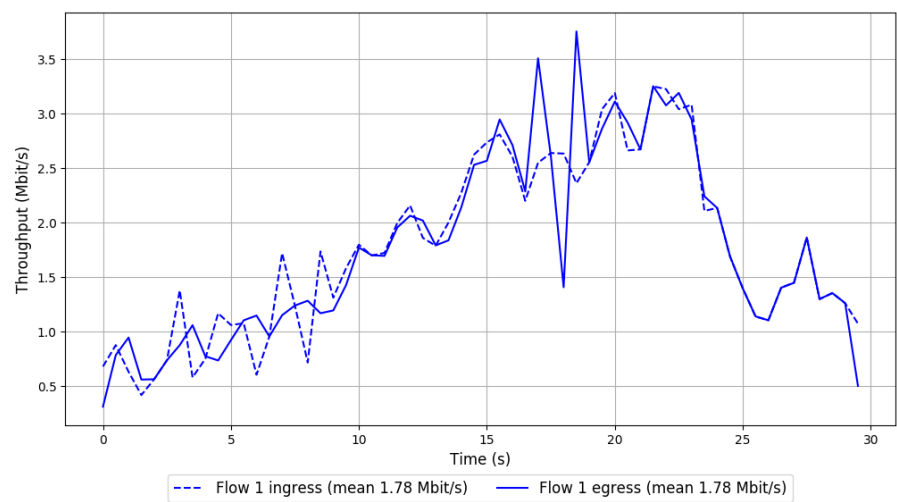
-- Flow 1:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 122.786 ms

Loss rate: 0.54%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-05 07:39:52

End at: 2017-12-05 07:40:22

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 123.353 ms

Loss rate: 1.66%

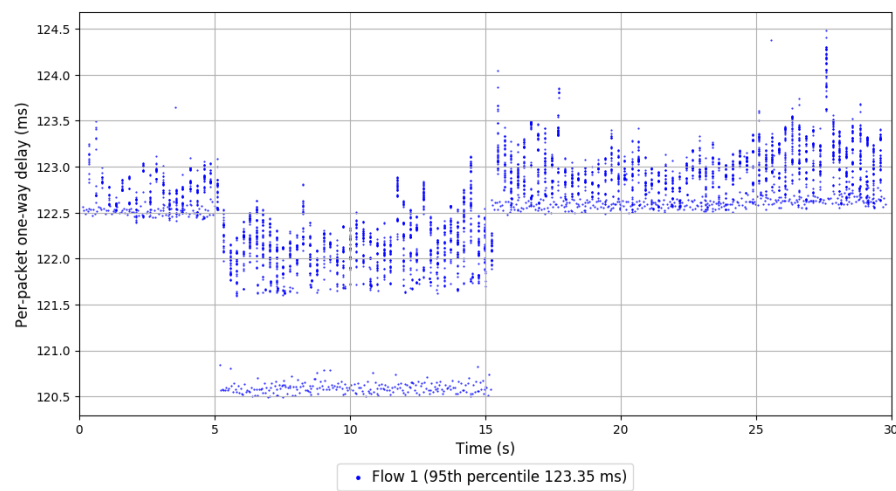
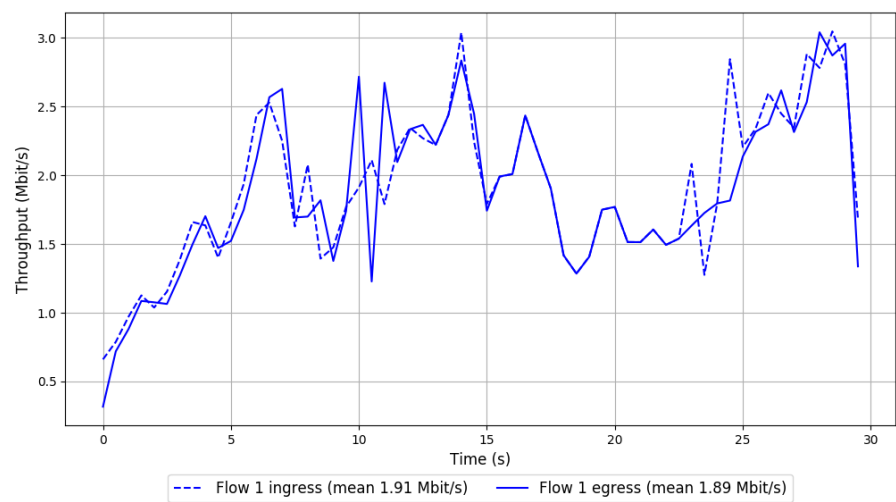
-- Flow 1:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 123.353 ms

Loss rate: 1.66%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-05 07:50:47

End at: 2017-12-05 07:51:17

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 124.001 ms

Loss rate: 0.52%

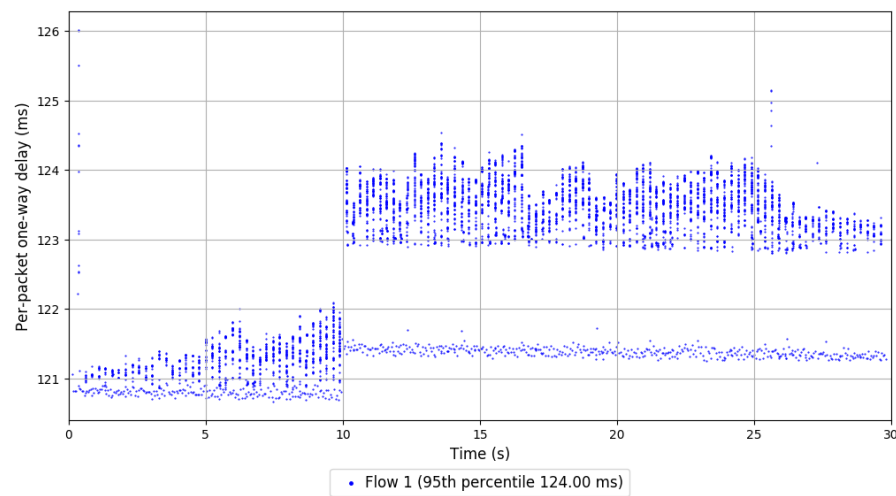
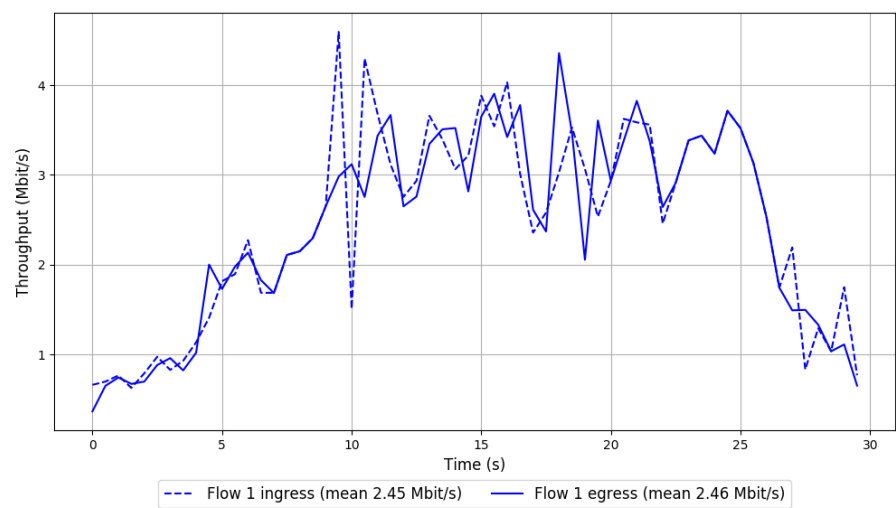
-- Flow 1:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 124.001 ms

Loss rate: 0.52%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-05 08:01:42

End at: 2017-12-05 08:02:12

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 120.528 ms

Loss rate: 1.40%

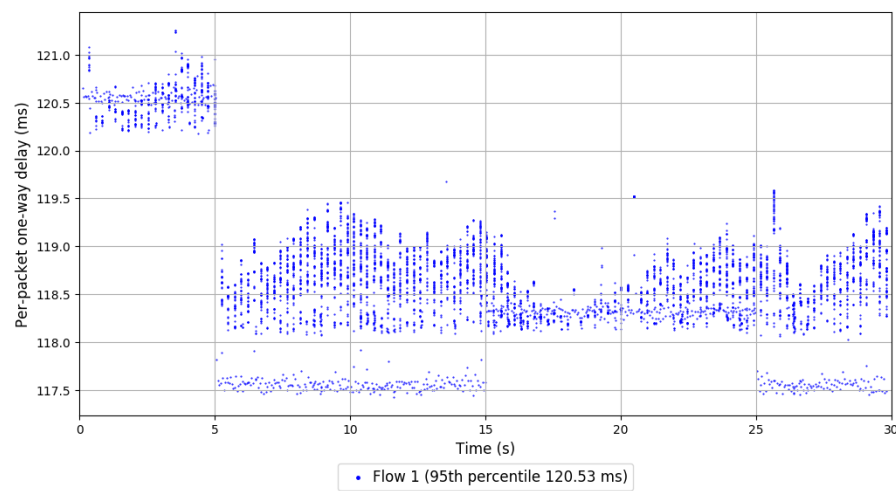
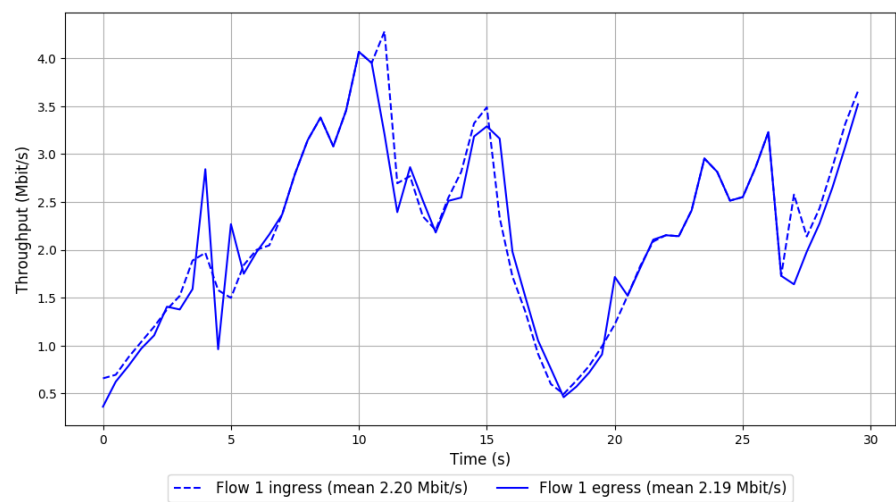
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 120.528 ms

Loss rate: 1.40%

Run 10: Report of Sprout — Data Link

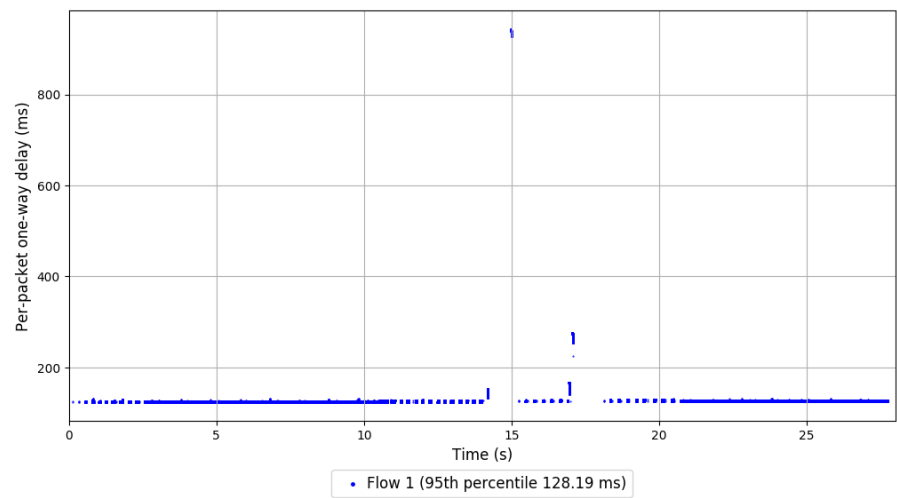
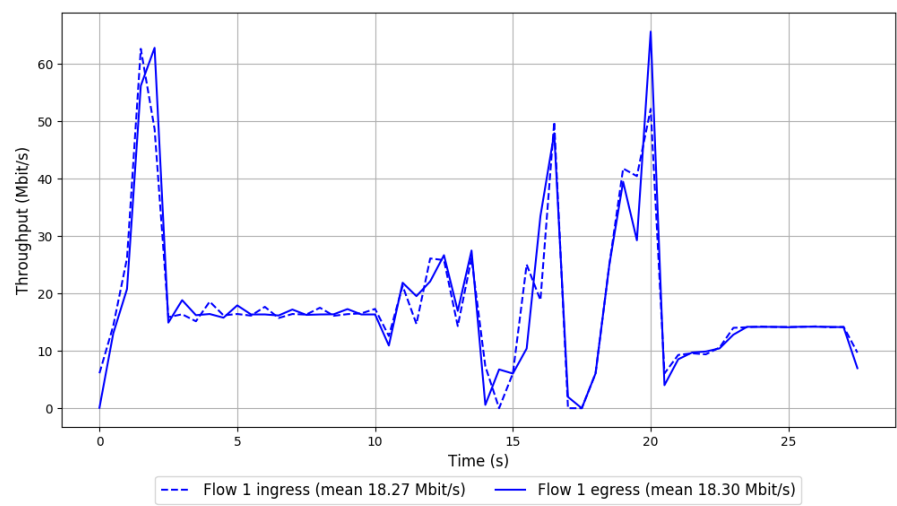


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-05 06:18:24
End at: 2017-12-05 06:18:54

# Below is generated by plot.py at 2017-12-05 10:22:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.30 Mbit/s
95th percentile per-packet one-way delay: 128.191 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 18.30 Mbit/s
95th percentile per-packet one-way delay: 128.191 ms
Loss rate: 0.62%
```

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

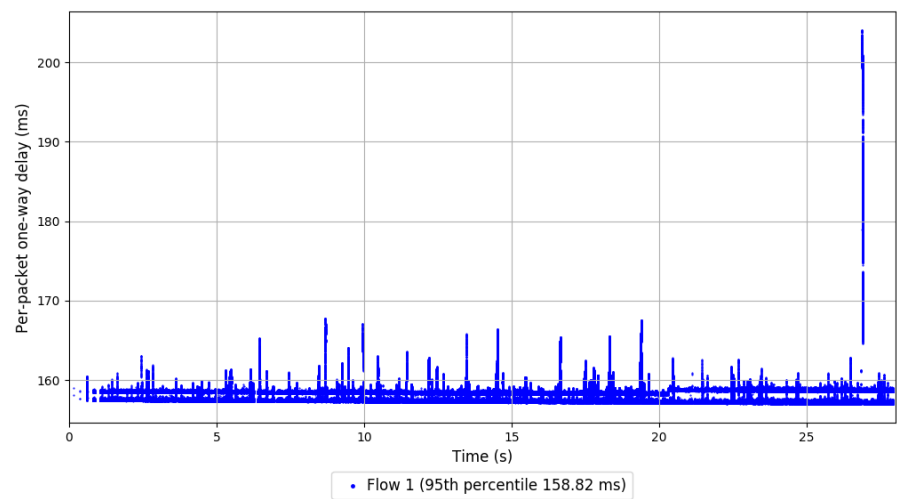
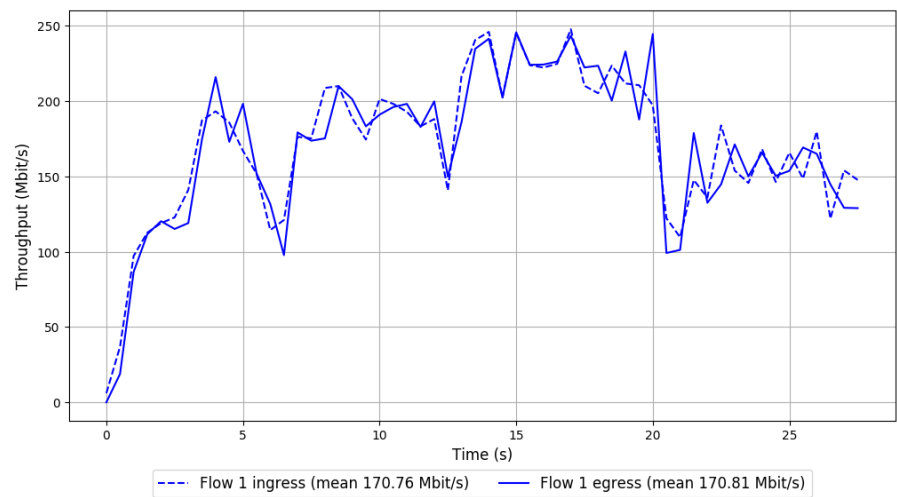


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-05 06:29:15
End at: 2017-12-05 06:29:45

# Below is generated by plot.py at 2017-12-05 10:22:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 170.81 Mbit/s
95th percentile per-packet one-way delay: 158.819 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 170.81 Mbit/s
95th percentile per-packet one-way delay: 158.819 ms
Loss rate: 0.77%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-05 06:40:26

End at: 2017-12-05 06:40:56

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 137.73 Mbit/s

95th percentile per-packet one-way delay: 143.679 ms

Loss rate: 2.39%

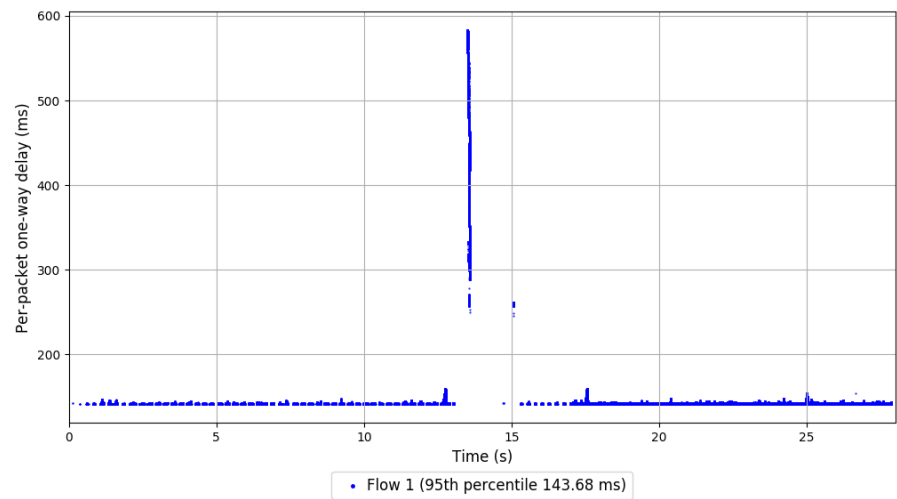
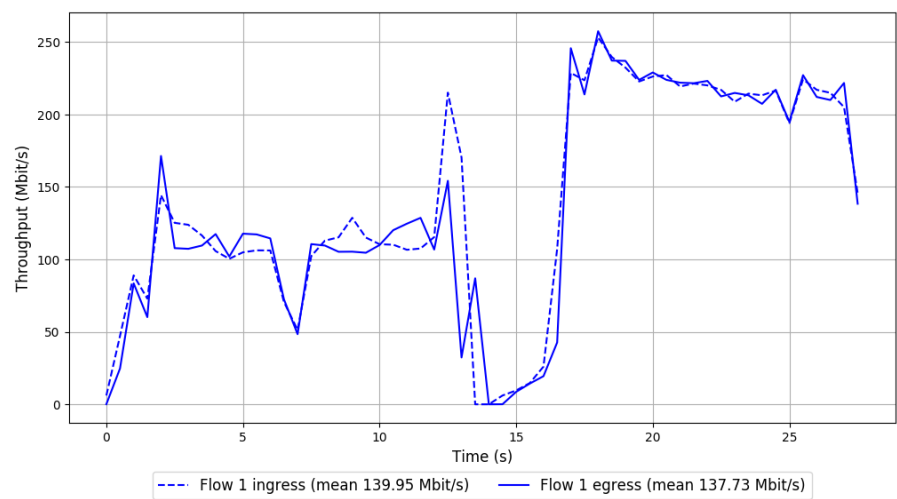
-- Flow 1:

Average throughput: 137.73 Mbit/s

95th percentile per-packet one-way delay: 143.679 ms

Loss rate: 2.39%

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

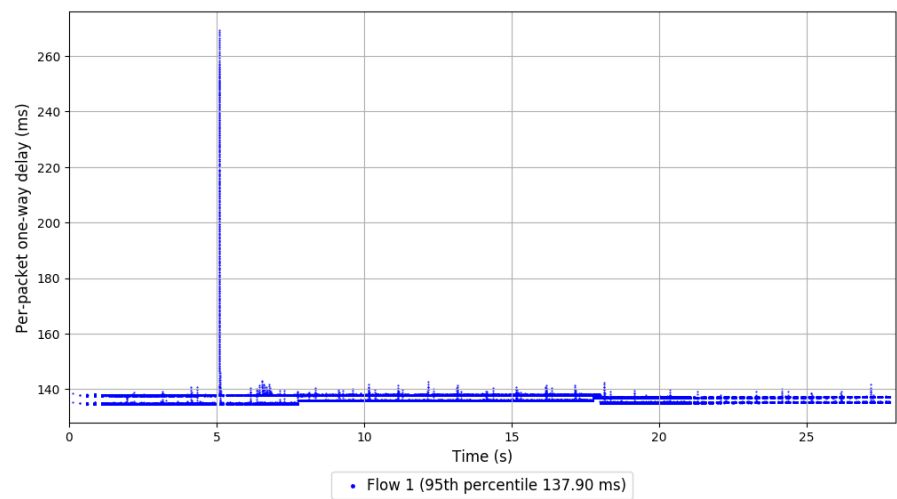
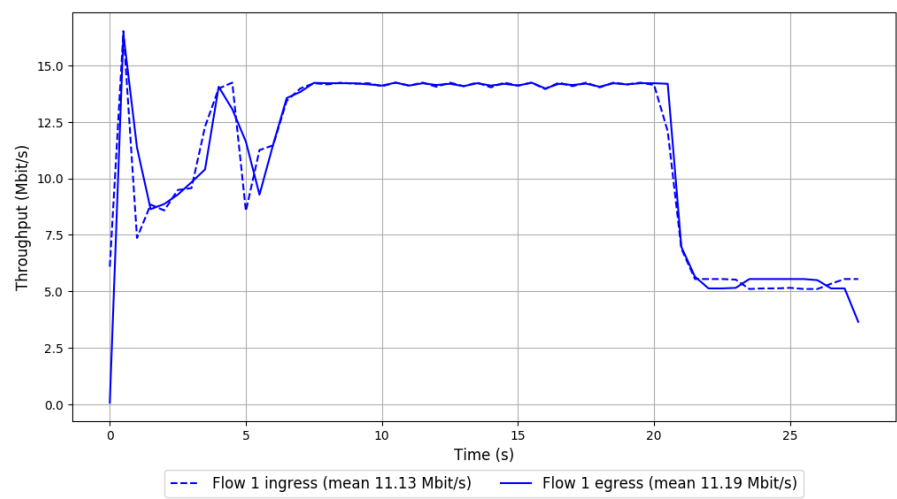


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-12-05 06:51:37
End at: 2017-12-05 06:52:07

# Below is generated by plot.py at 2017-12-05 10:22:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.19 Mbit/s
95th percentile per-packet one-way delay: 137.899 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 11.19 Mbit/s
95th percentile per-packet one-way delay: 137.899 ms
Loss rate: 0.45%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-05 07:02:35

End at: 2017-12-05 07:03:05

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.79 Mbit/s

95th percentile per-packet one-way delay: 127.386 ms

Loss rate: 0.83%

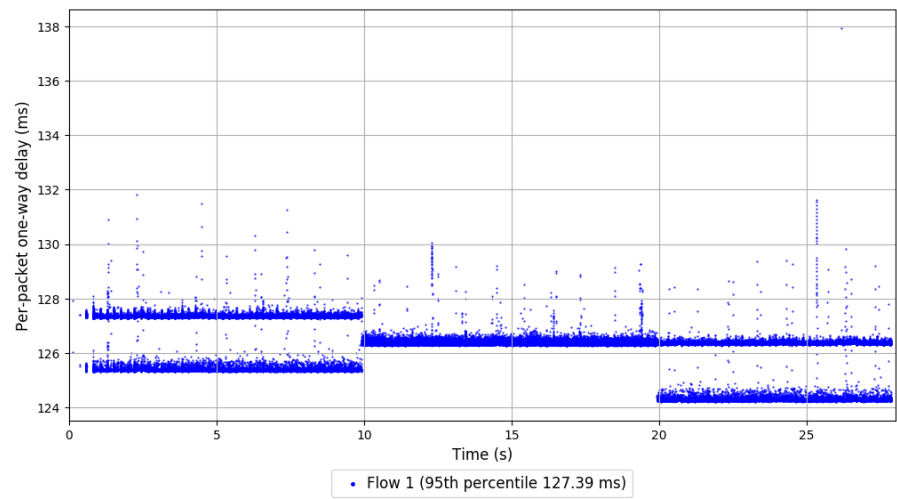
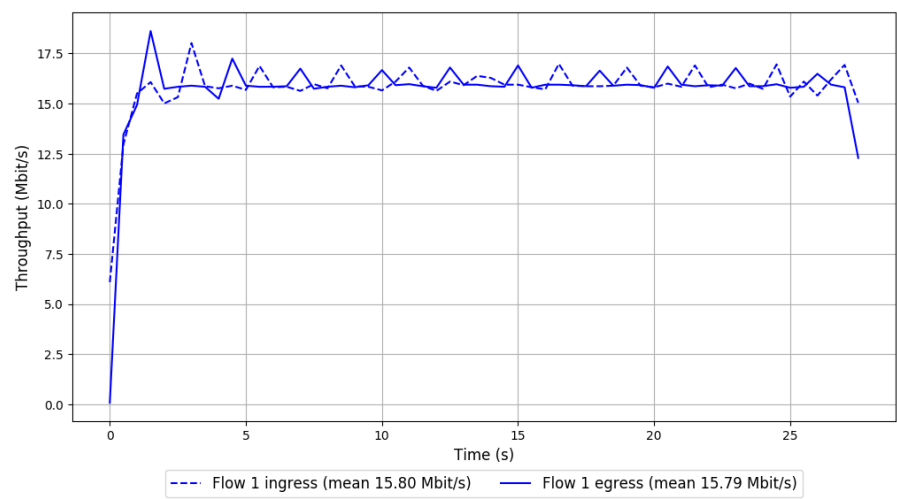
-- Flow 1:

Average throughput: 15.79 Mbit/s

95th percentile per-packet one-way delay: 127.386 ms

Loss rate: 0.83%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-05 07:13:30

End at: 2017-12-05 07:14:00

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.48 Mbit/s

95th percentile per-packet one-way delay: 125.046 ms

Loss rate: 0.43%

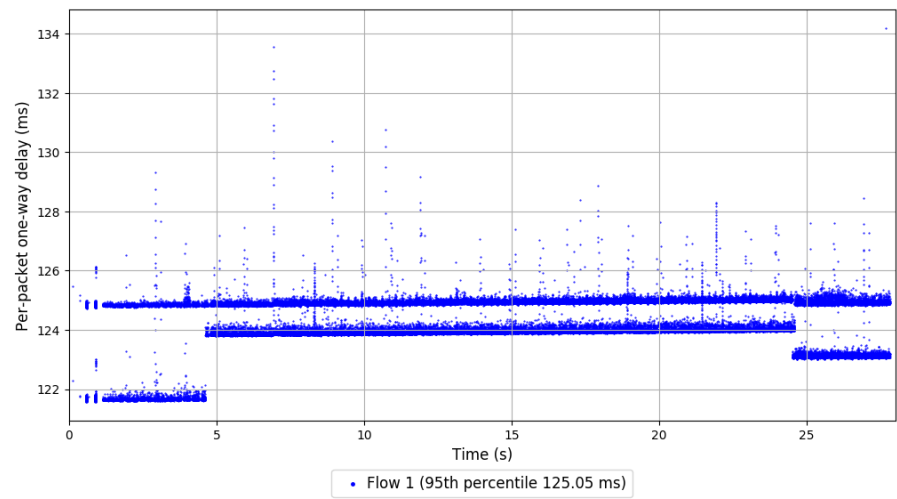
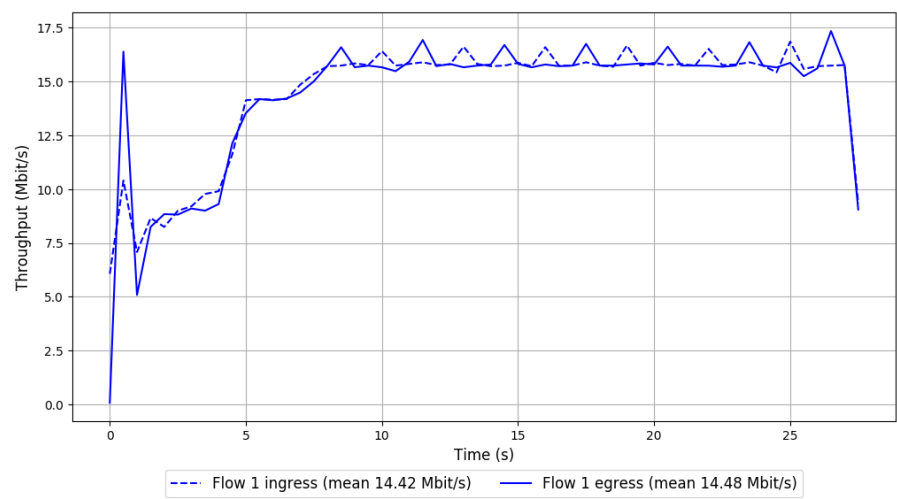
-- Flow 1:

Average throughput: 14.48 Mbit/s

95th percentile per-packet one-way delay: 125.046 ms

Loss rate: 0.43%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-05 07:24:28

End at: 2017-12-05 07:24:58

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 158.68 Mbit/s

95th percentile per-packet one-way delay: 121.217 ms

Loss rate: 0.61%

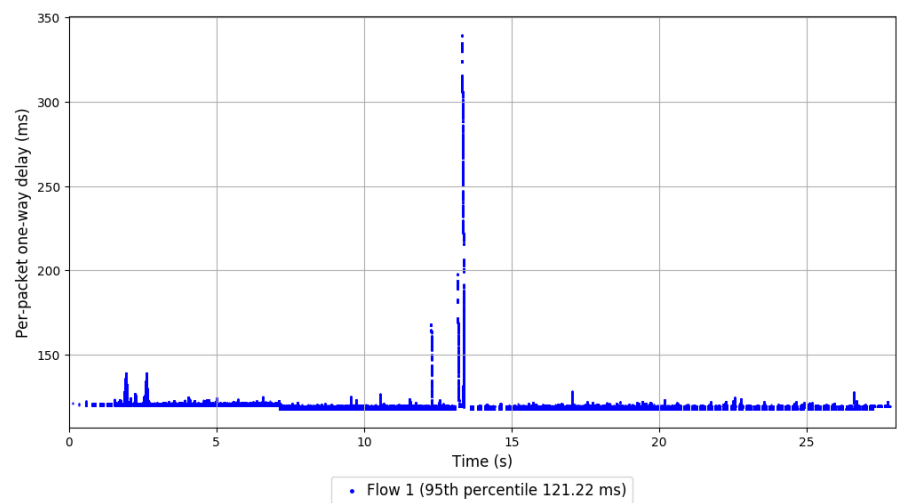
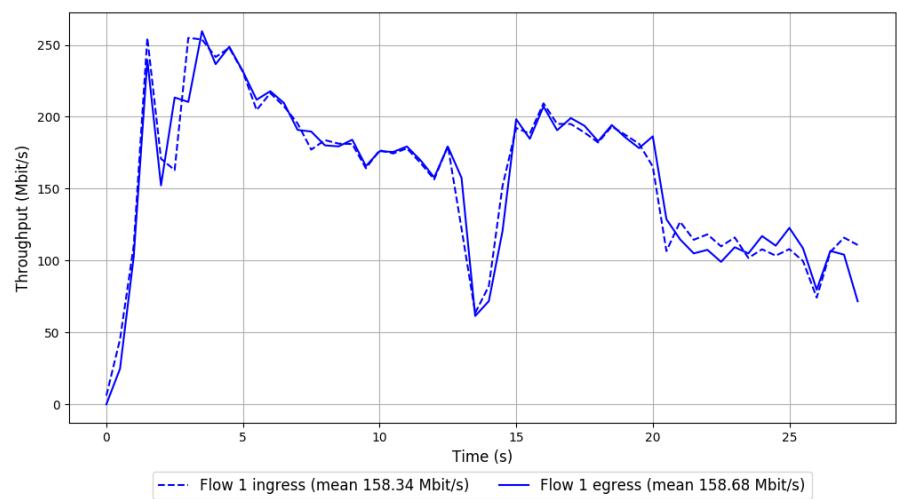
-- Flow 1:

Average throughput: 158.68 Mbit/s

95th percentile per-packet one-way delay: 121.217 ms

Loss rate: 0.61%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-05 07:35:42

End at: 2017-12-05 07:36:12

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 28.05 Mbit/s

95th percentile per-packet one-way delay: 121.741 ms

Loss rate: 1.16%

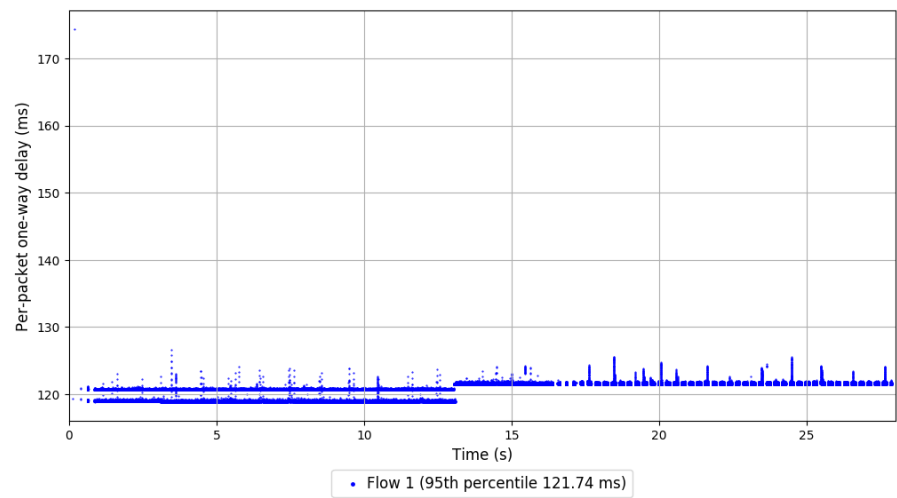
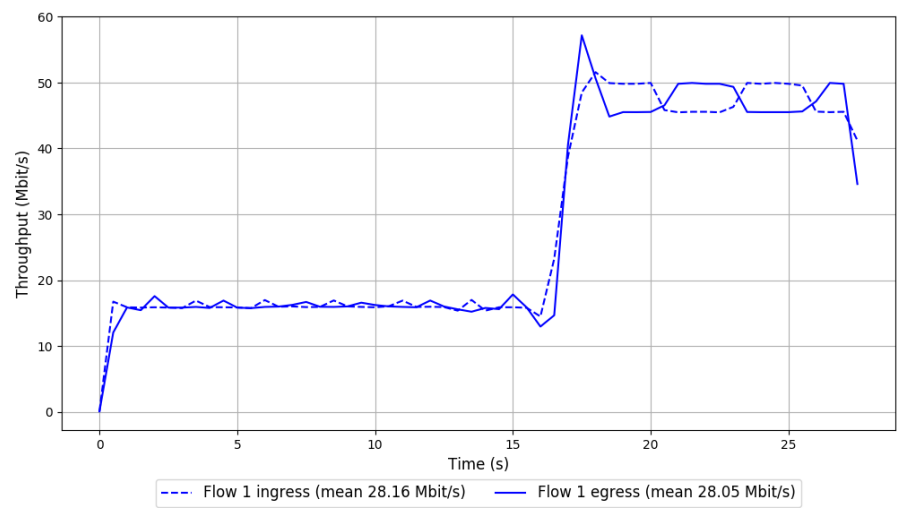
-- Flow 1:

Average throughput: 28.05 Mbit/s

95th percentile per-packet one-way delay: 121.741 ms

Loss rate: 1.16%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-05 07:46:37

End at: 2017-12-05 07:47:07

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.22 Mbit/s

95th percentile per-packet one-way delay: 125.192 ms

Loss rate: 0.85%

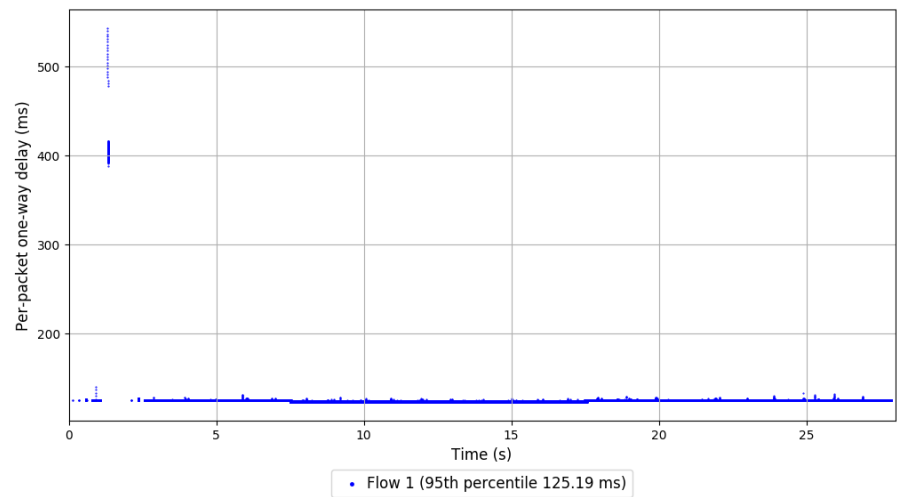
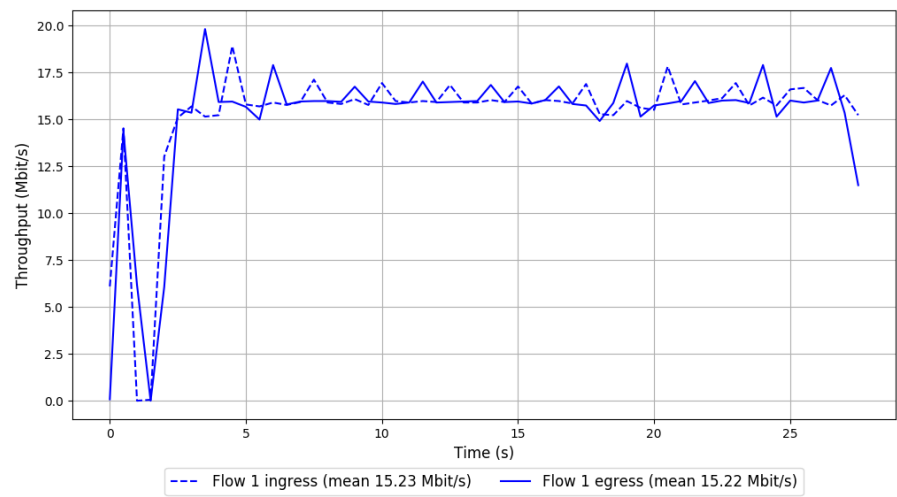
-- Flow 1:

Average throughput: 15.22 Mbit/s

95th percentile per-packet one-way delay: 125.192 ms

Loss rate: 0.85%

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

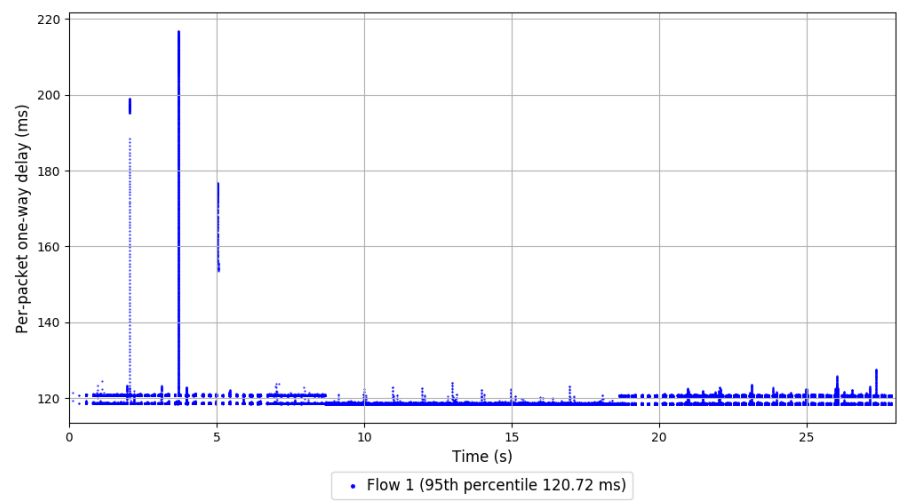
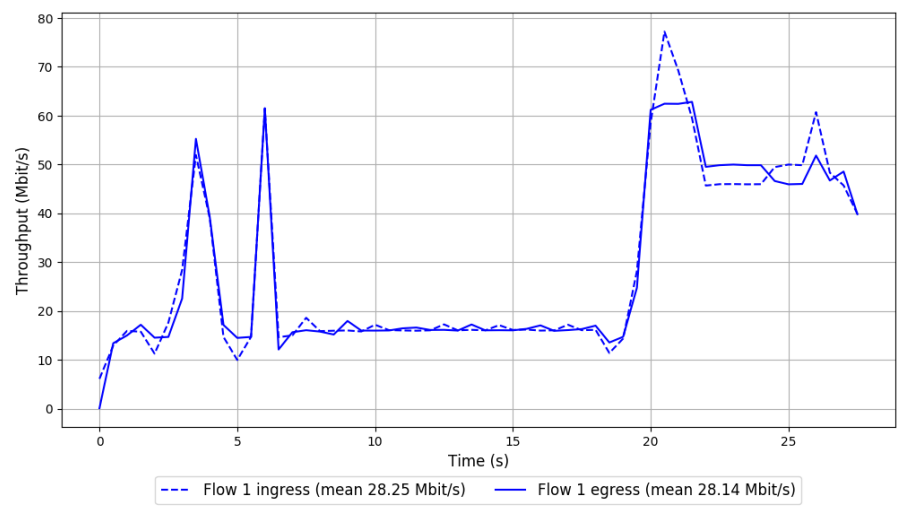


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-05 07:57:36
End at: 2017-12-05 07:58:06

# Below is generated by plot.py at 2017-12-05 10:22:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.14 Mbit/s
95th percentile per-packet one-way delay: 120.721 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 28.14 Mbit/s
95th percentile per-packet one-way delay: 120.721 ms
Loss rate: 1.19%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-05 06:28:31

End at: 2017-12-05 06:29:01

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.12 Mbit/s

95th percentile per-packet one-way delay: 162.997 ms

Loss rate: 0.85%

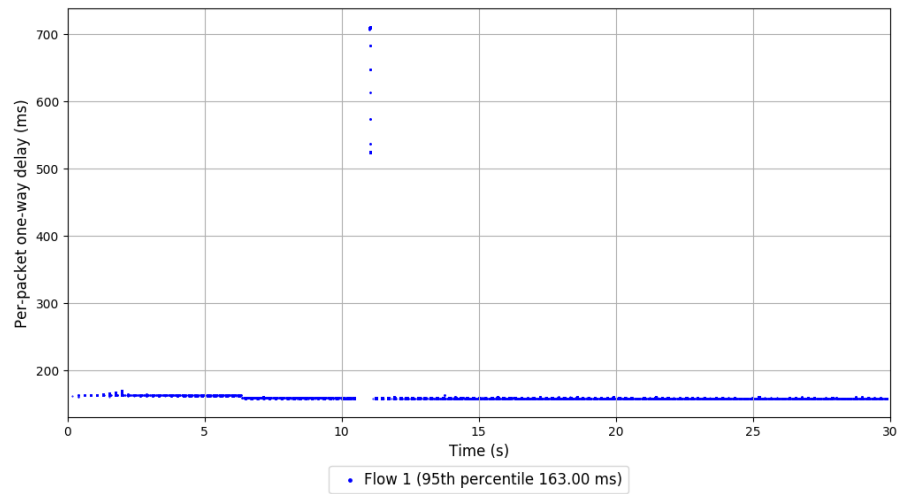
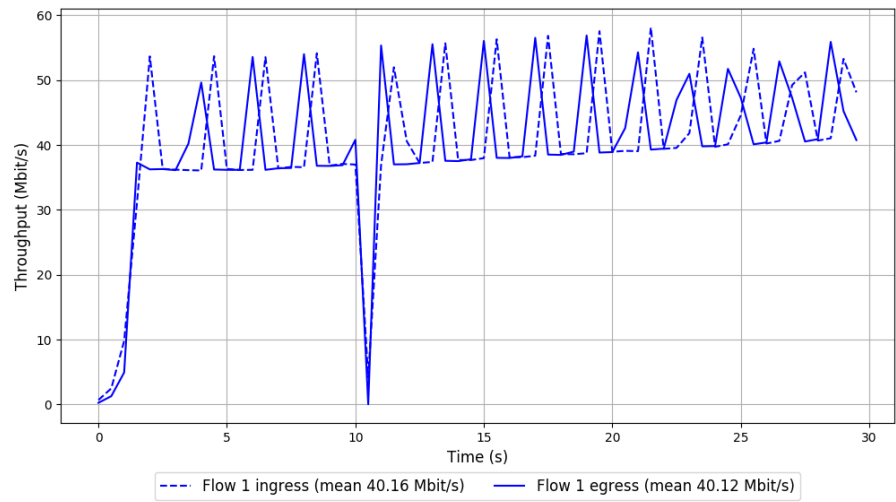
-- Flow 1:

Average throughput: 40.12 Mbit/s

95th percentile per-packet one-way delay: 162.997 ms

Loss rate: 0.85%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-05 06:39:41

End at: 2017-12-05 06:40:11

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.55 Mbit/s

95th percentile per-packet one-way delay: 143.039 ms

Loss rate: 0.45%

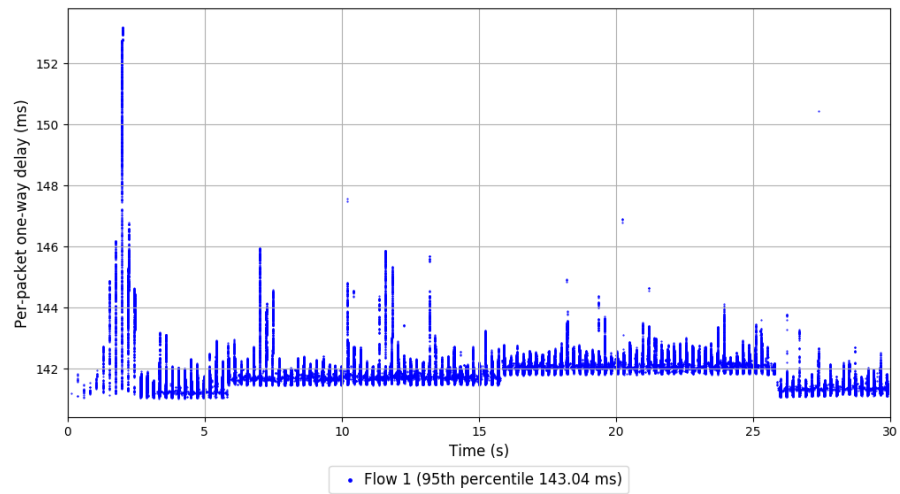
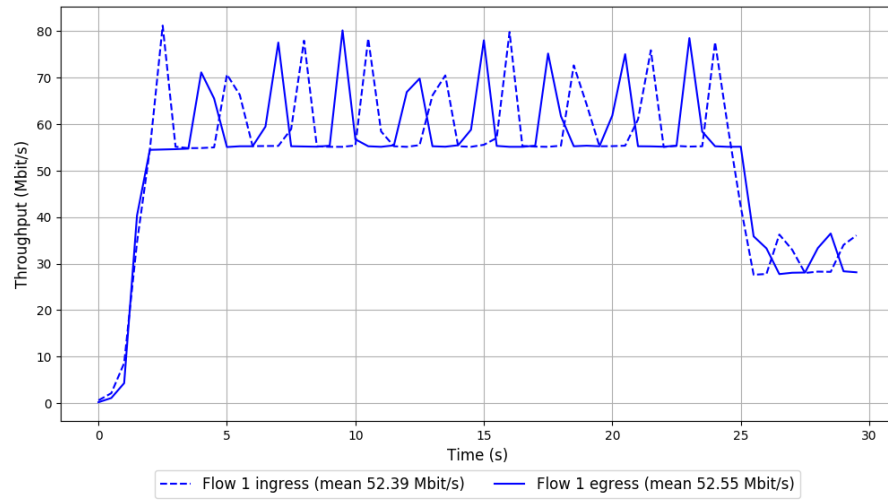
-- Flow 1:

Average throughput: 52.55 Mbit/s

95th percentile per-packet one-way delay: 143.039 ms

Loss rate: 0.45%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-05 06:50:53

End at: 2017-12-05 06:51:23

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.38 Mbit/s

95th percentile per-packet one-way delay: 138.803 ms

Loss rate: 0.69%

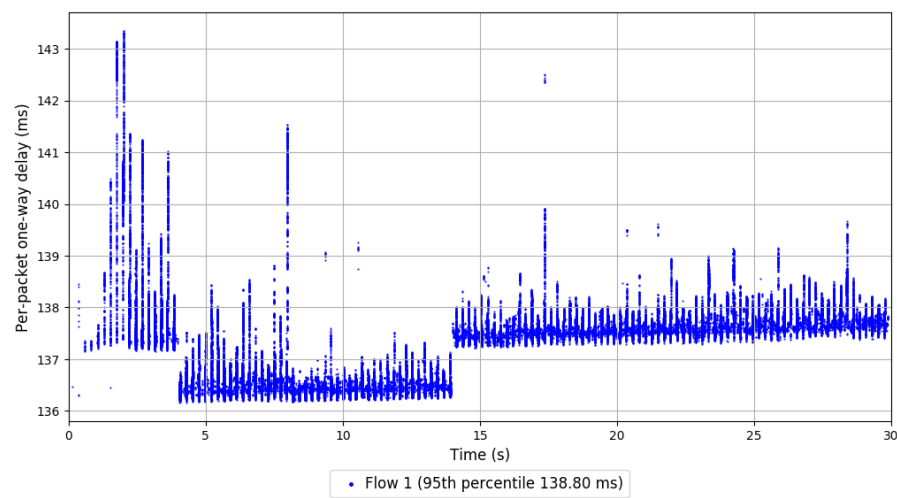
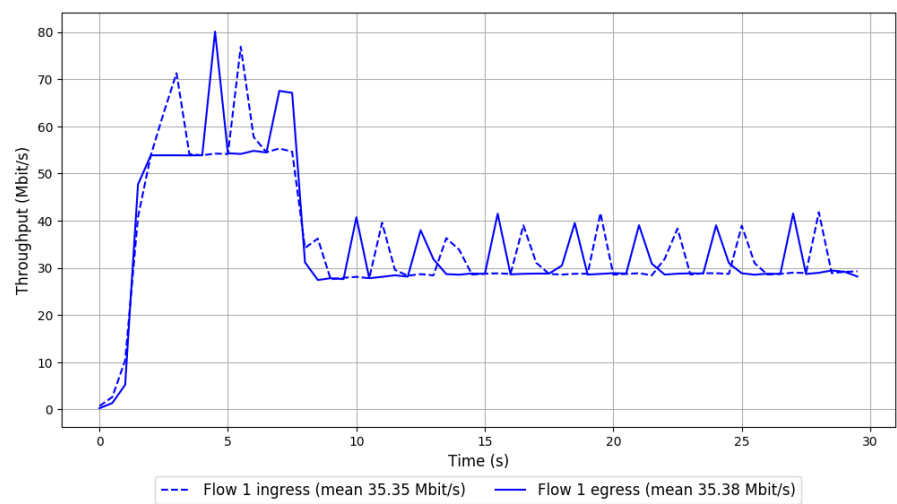
-- Flow 1:

Average throughput: 35.38 Mbit/s

95th percentile per-packet one-way delay: 138.803 ms

Loss rate: 0.69%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-05 07:01:51

End at: 2017-12-05 07:02:21

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.48 Mbit/s

95th percentile per-packet one-way delay: 128.887 ms

Loss rate: 0.44%

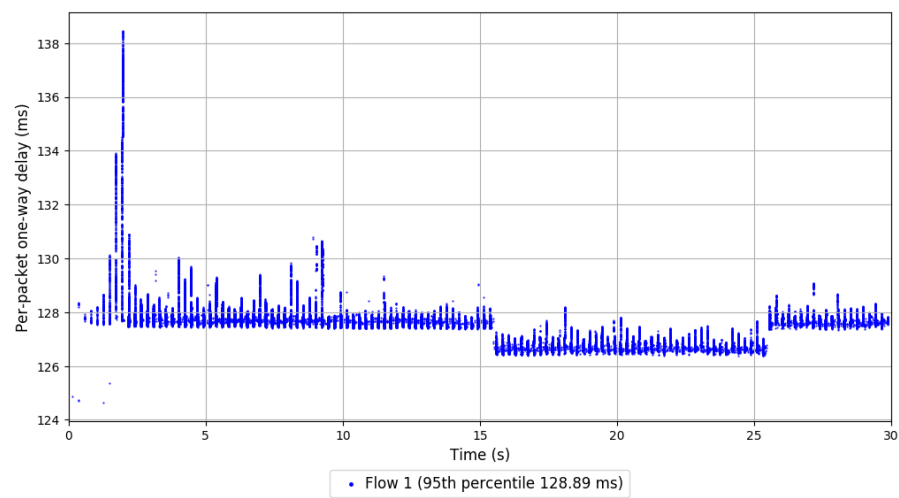
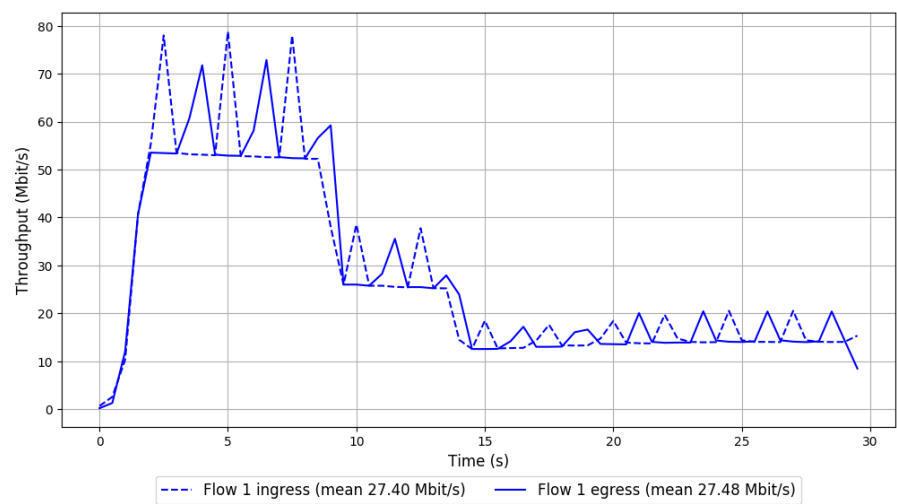
-- Flow 1:

Average throughput: 27.48 Mbit/s

95th percentile per-packet one-way delay: 128.887 ms

Loss rate: 0.44%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-05 07:12:48

End at: 2017-12-05 07:13:18

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.94 Mbit/s

95th percentile per-packet one-way delay: 125.061 ms

Loss rate: 0.78%

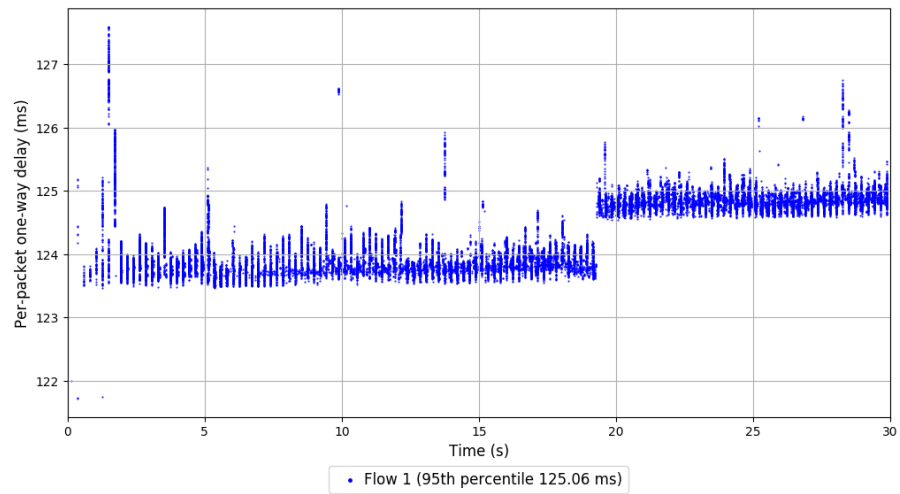
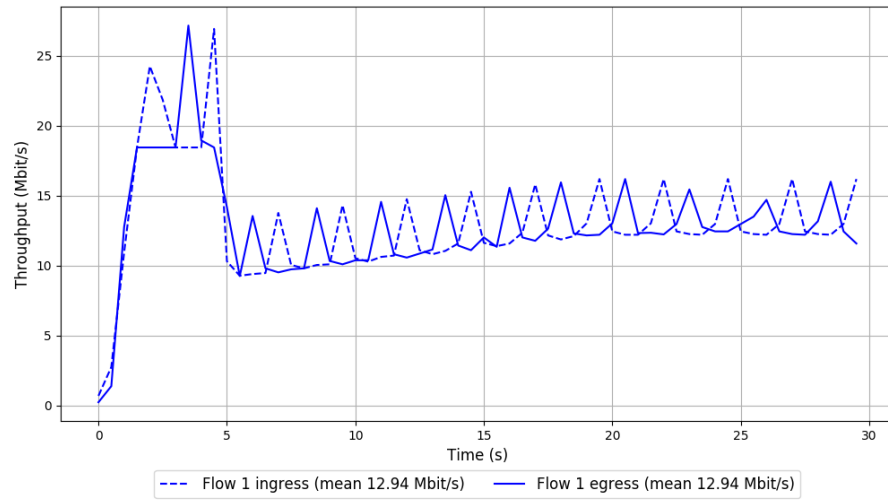
-- Flow 1:

Average throughput: 12.94 Mbit/s

95th percentile per-packet one-way delay: 125.061 ms

Loss rate: 0.78%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-05 07:23:41

End at: 2017-12-05 07:24:11

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.87 Mbit/s

95th percentile per-packet one-way delay: 130.643 ms

Loss rate: 0.35%

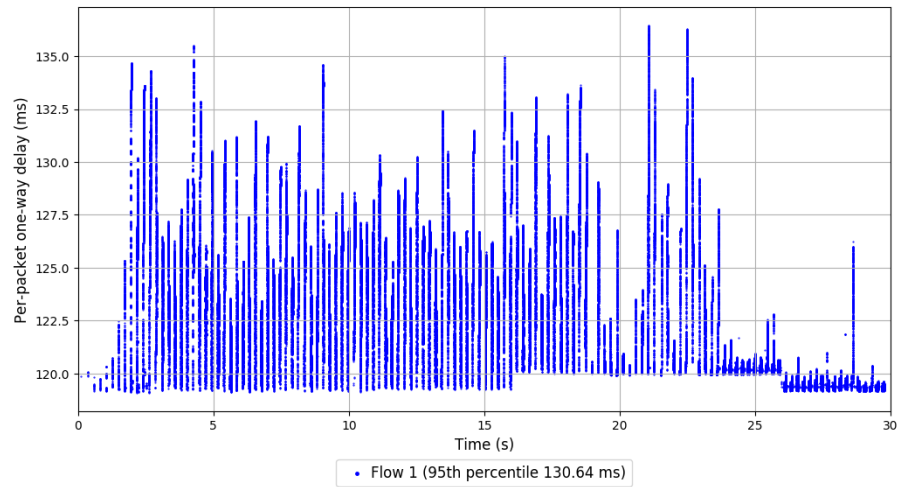
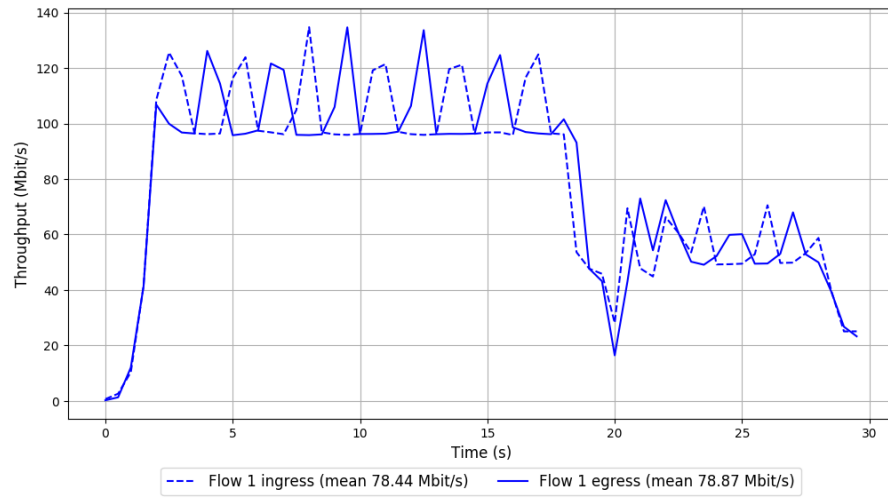
-- Flow 1:

Average throughput: 78.87 Mbit/s

95th percentile per-packet one-way delay: 130.643 ms

Loss rate: 0.35%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-05 07:34:59

End at: 2017-12-05 07:35:29

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.40 Mbit/s

95th percentile per-packet one-way delay: 122.331 ms

Loss rate: 0.76%

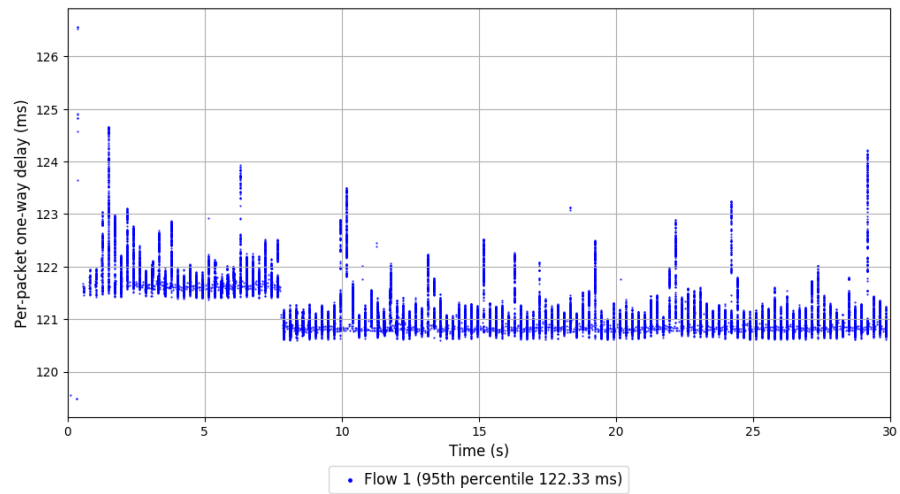
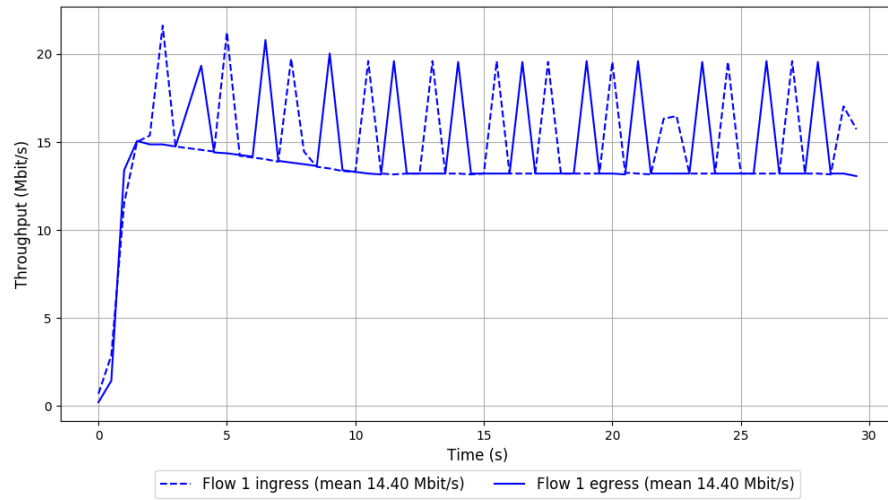
-- Flow 1:

Average throughput: 14.40 Mbit/s

95th percentile per-packet one-way delay: 122.331 ms

Loss rate: 0.76%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-05 07:45:54

End at: 2017-12-05 07:46:24

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.50 Mbit/s

95th percentile per-packet one-way delay: 125.457 ms

Loss rate: 0.69%

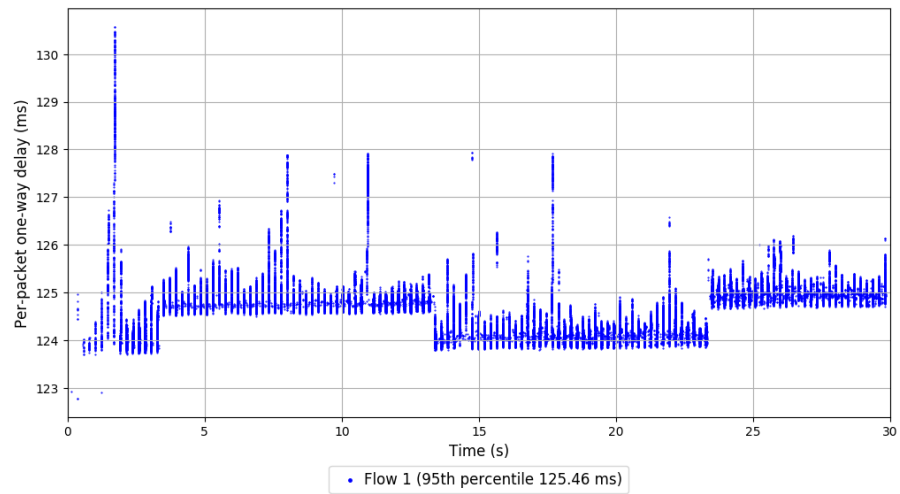
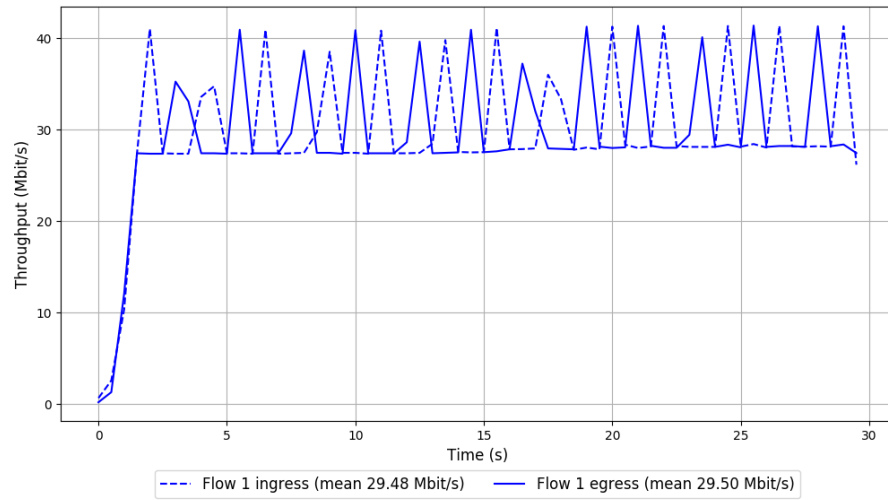
-- Flow 1:

Average throughput: 29.50 Mbit/s

95th percentile per-packet one-way delay: 125.457 ms

Loss rate: 0.69%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-05 07:56:53

End at: 2017-12-05 07:57:23

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.69 Mbit/s

95th percentile per-packet one-way delay: 121.693 ms

Loss rate: 0.82%

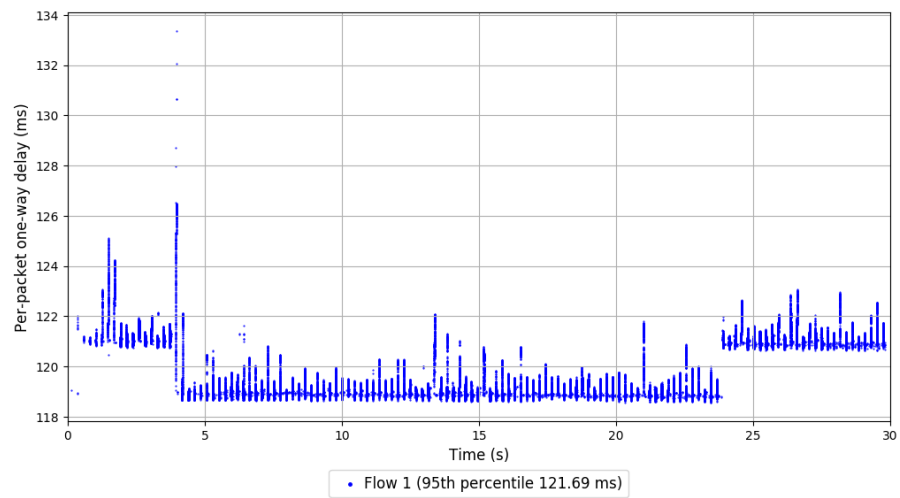
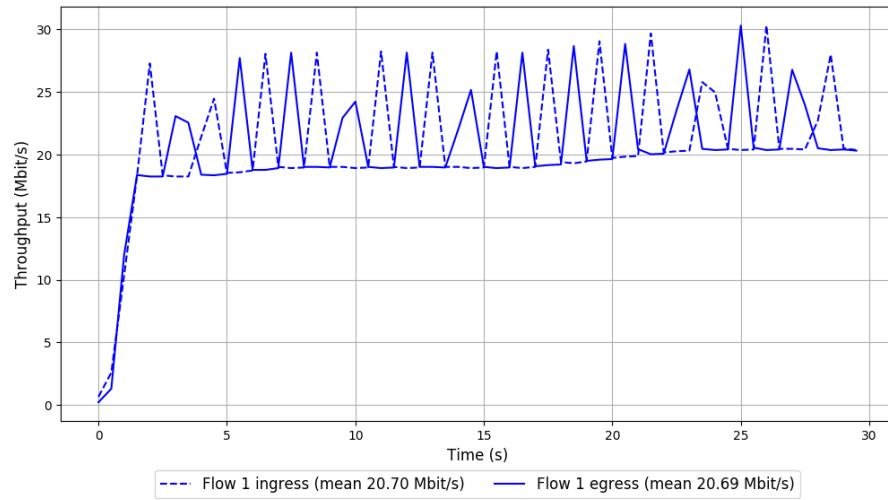
-- Flow 1:

Average throughput: 20.69 Mbit/s

95th percentile per-packet one-way delay: 121.693 ms

Loss rate: 0.82%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-05 08:07:48

End at: 2017-12-05 08:08:18

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.87 Mbit/s

95th percentile per-packet one-way delay: 120.602 ms

Loss rate: 0.75%

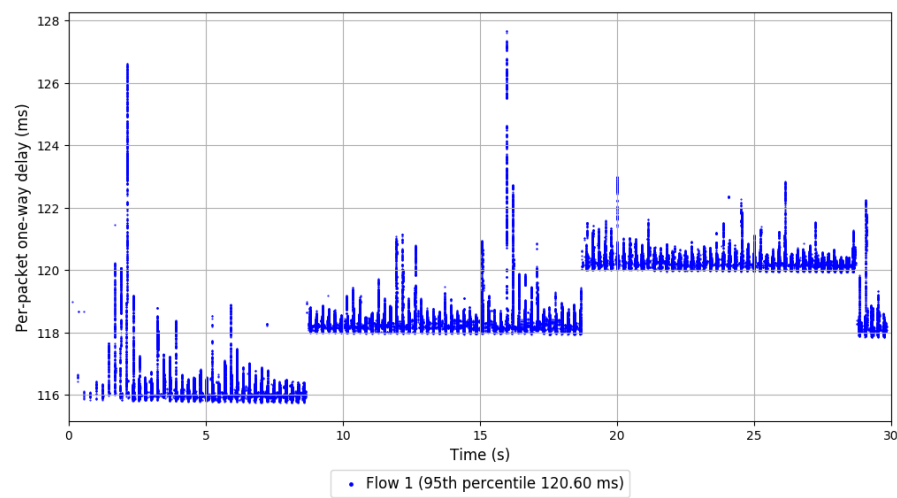
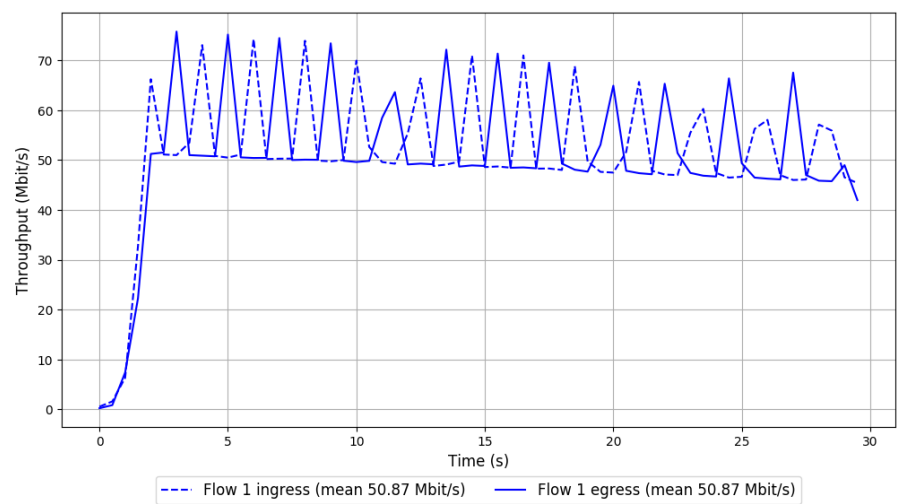
-- Flow 1:

Average throughput: 50.87 Mbit/s

95th percentile per-packet one-way delay: 120.602 ms

Loss rate: 0.75%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-05 06:19:07

End at: 2017-12-05 06:19:37

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 150.42 Mbit/s

95th percentile per-packet one-way delay: 194.329 ms

Loss rate: 0.58%

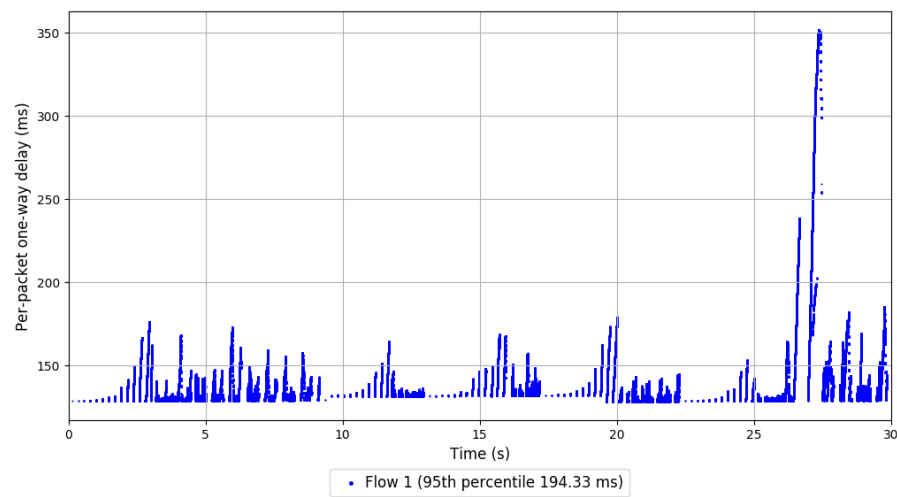
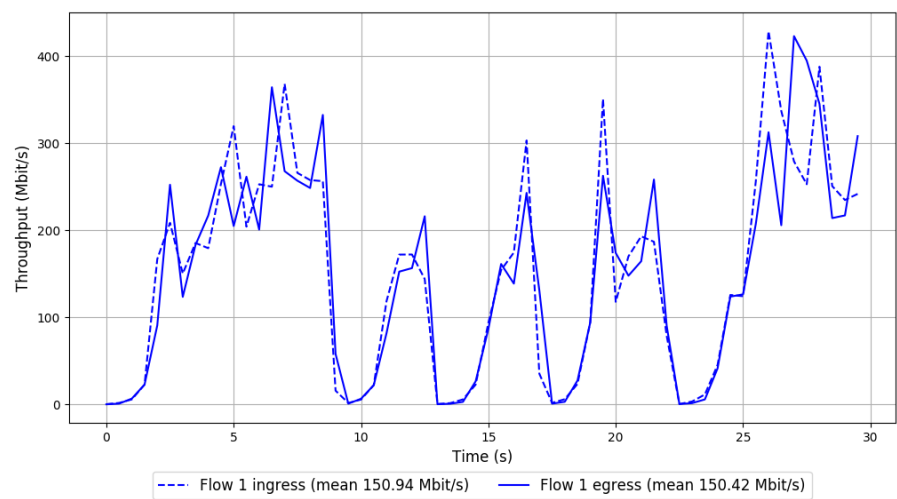
-- Flow 1:

Average throughput: 150.42 Mbit/s

95th percentile per-packet one-way delay: 194.329 ms

Loss rate: 0.58%

Run 1: Report of Verus — Data Link

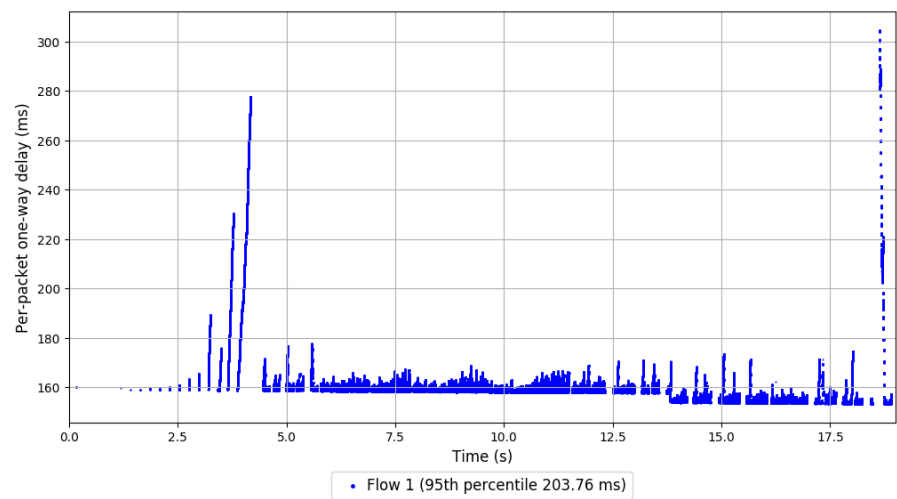
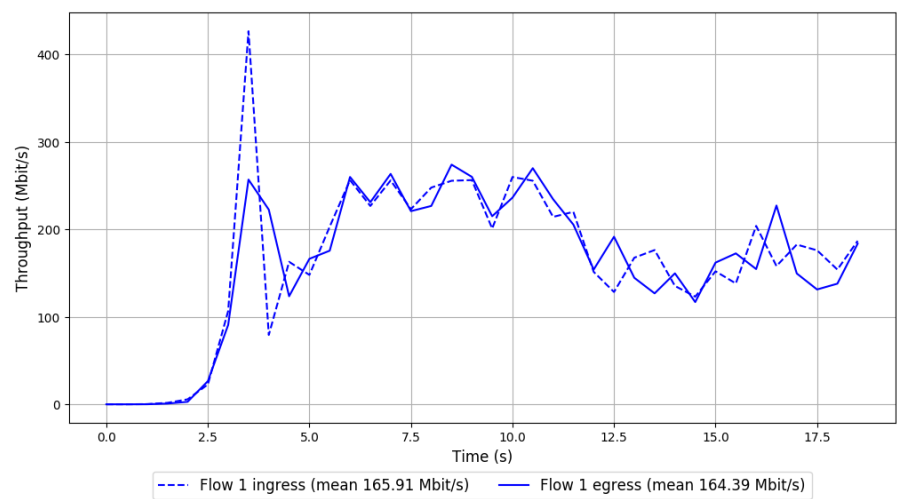


Run 2: Statistics of Verus

Start at: 2017-12-05 06:30:12

End at: 2017-12-05 06:30:42

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-05 06:41:21

End at: 2017-12-05 06:41:51

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 131.16 Mbit/s

95th percentile per-packet one-way delay: 282.709 ms

Loss rate: 3.24%

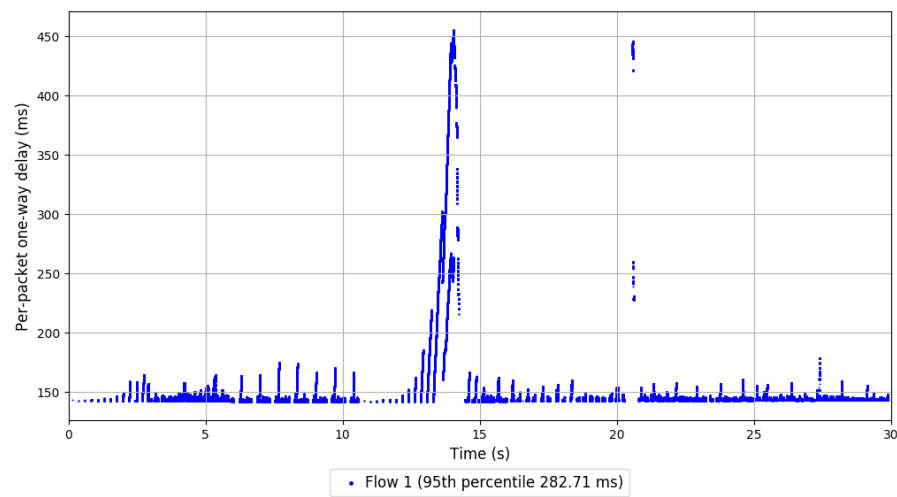
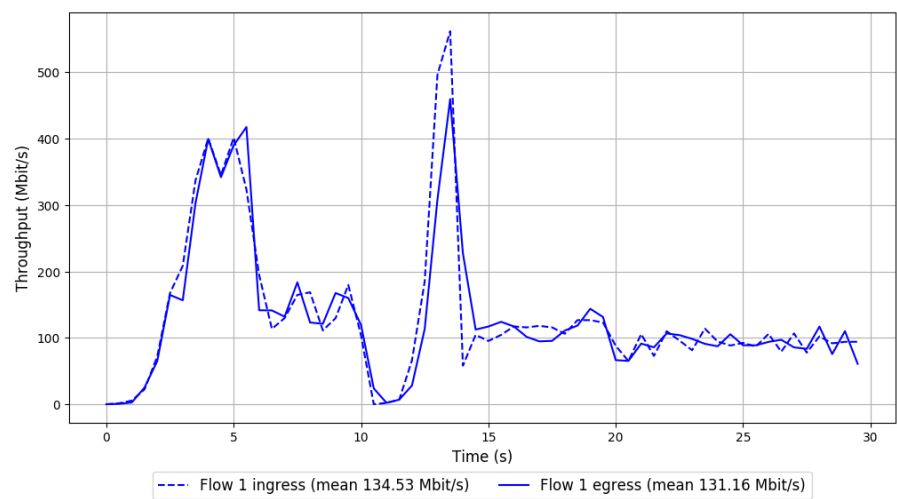
-- Flow 1:

Average throughput: 131.16 Mbit/s

95th percentile per-packet one-way delay: 282.709 ms

Loss rate: 3.24%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-05 06:52:20

End at: 2017-12-05 06:52:50

Below is generated by plot.py at 2017-12-05 10:22:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.64 Mbit/s

95th percentile per-packet one-way delay: 186.215 ms

Loss rate: 0.55%

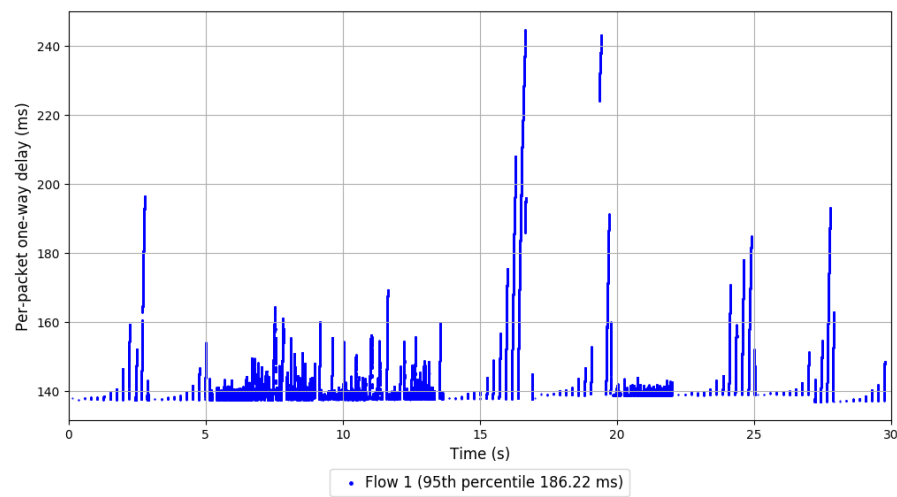
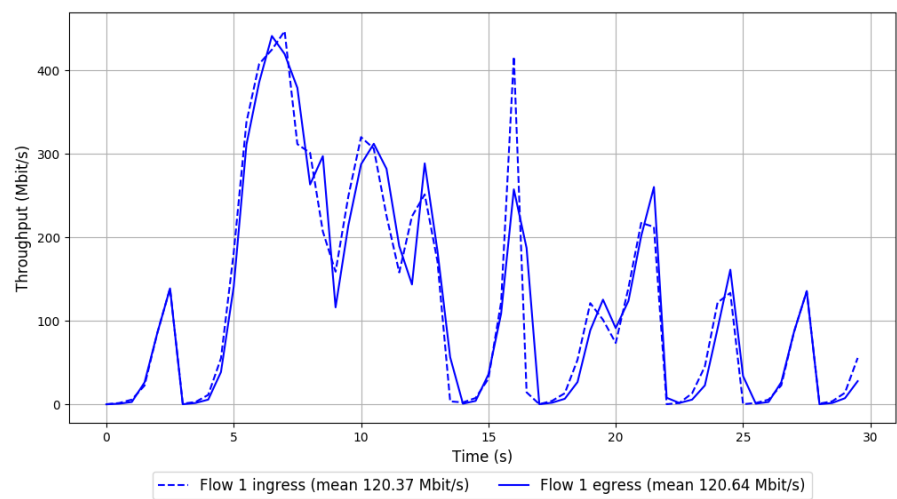
-- Flow 1:

Average throughput: 120.64 Mbit/s

95th percentile per-packet one-way delay: 186.215 ms

Loss rate: 0.55%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-05 07:03:18

End at: 2017-12-05 07:03:48

Below is generated by plot.py at 2017-12-05 10:23:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 139.25 Mbit/s

95th percentile per-packet one-way delay: 168.494 ms

Loss rate: 2.09%

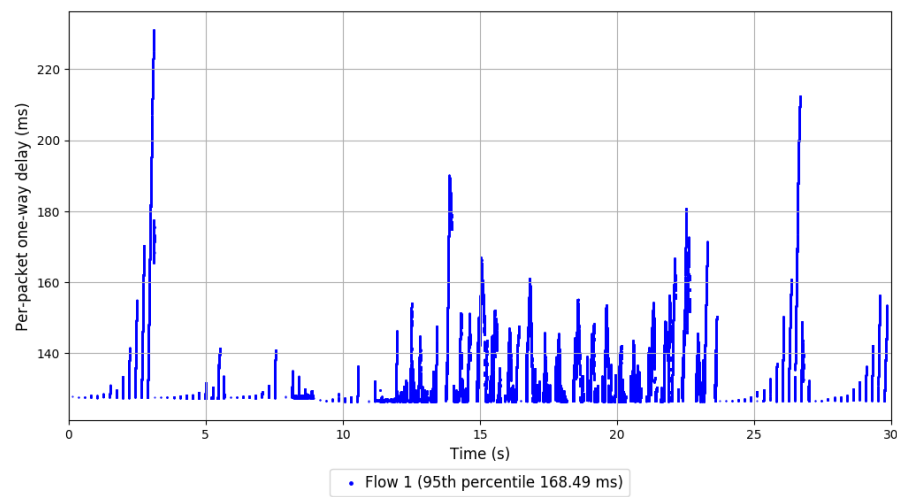
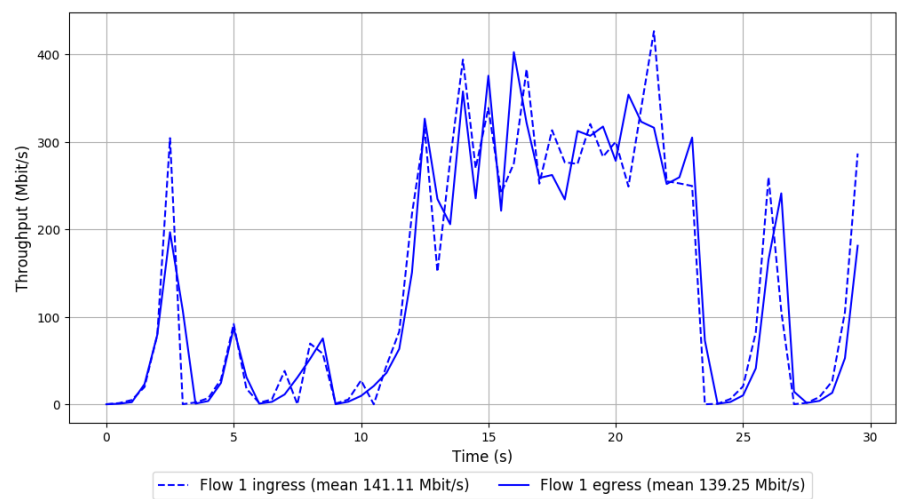
-- Flow 1:

Average throughput: 139.25 Mbit/s

95th percentile per-packet one-way delay: 168.494 ms

Loss rate: 2.09%

Run 5: Report of Verus — Data Link

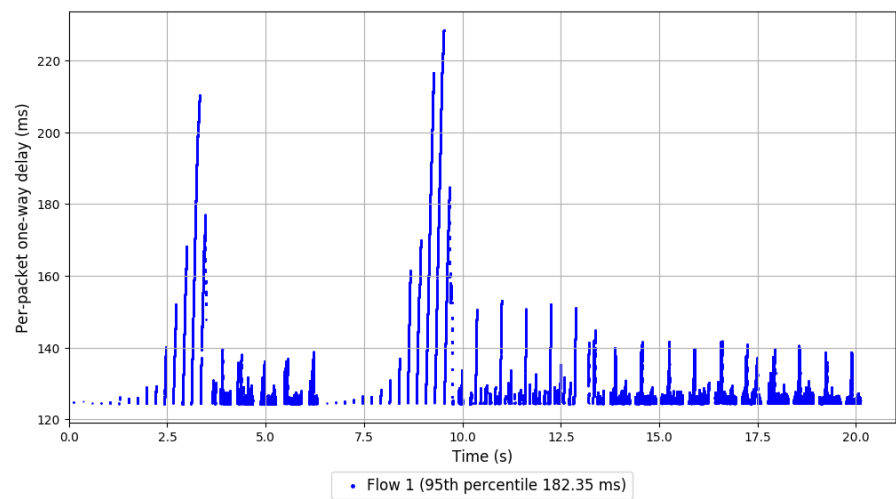
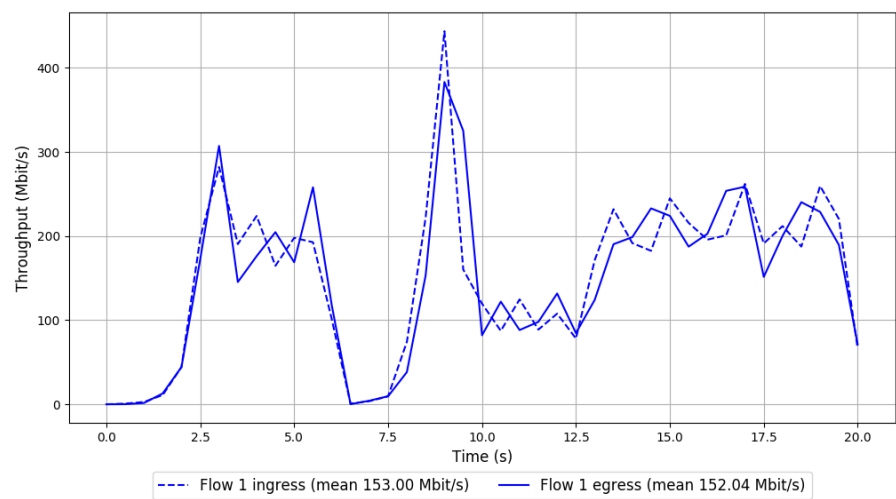


Run 6: Statistics of Verus

Start at: 2017-12-05 07:14:13

End at: 2017-12-05 07:14:43

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-05 07:25:25

End at: 2017-12-05 07:25:55

Below is generated by plot.py at 2017-12-05 10:24:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.02 Mbit/s

95th percentile per-packet one-way delay: 178.789 ms

Loss rate: 1.19%

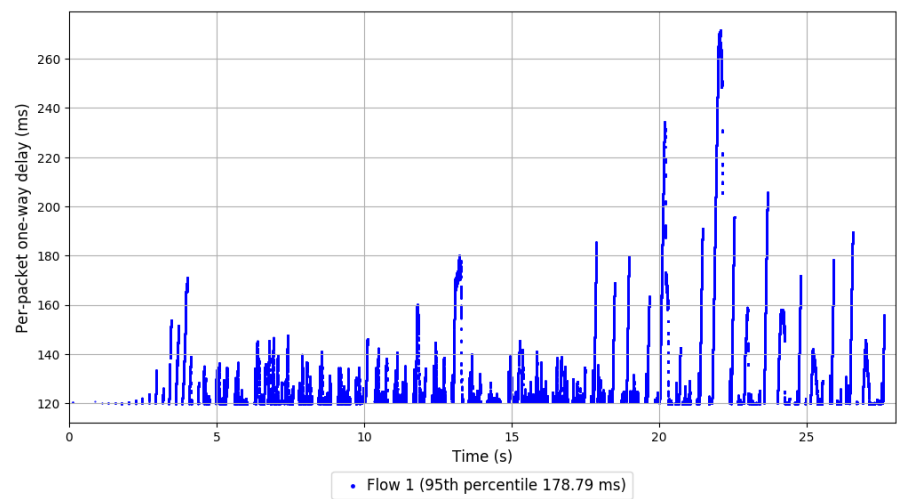
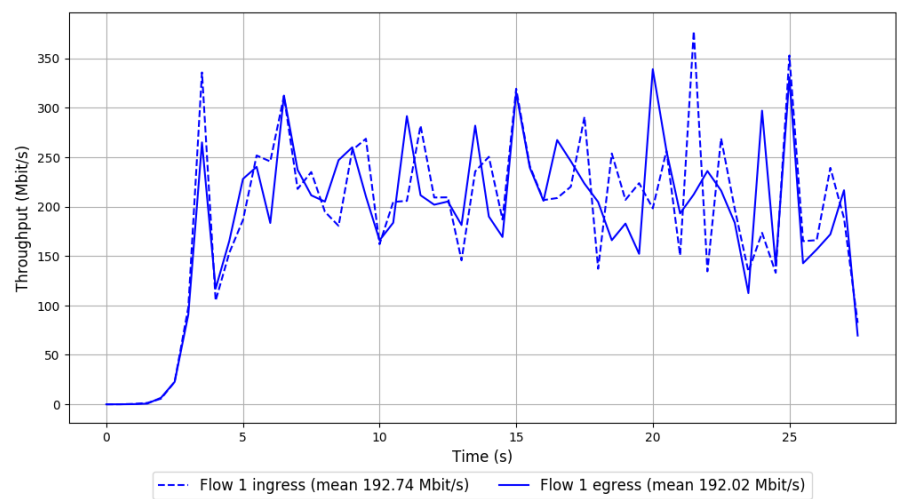
-- Flow 1:

Average throughput: 192.02 Mbit/s

95th percentile per-packet one-way delay: 178.789 ms

Loss rate: 1.19%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-05 07:36:26

End at: 2017-12-05 07:36:56

Below is generated by plot.py at 2017-12-05 10:24:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 134.94 Mbit/s

95th percentile per-packet one-way delay: 187.865 ms

Loss rate: 1.15%

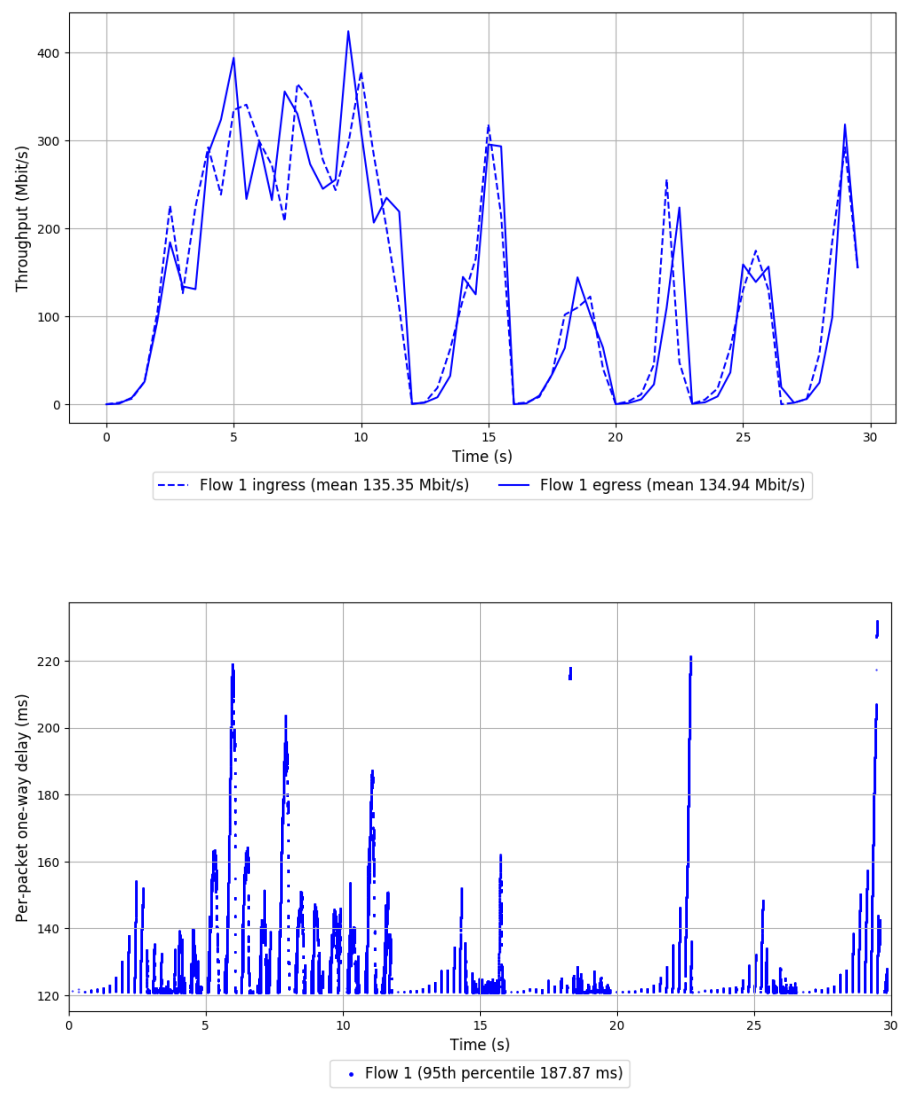
-- Flow 1:

Average throughput: 134.94 Mbit/s

95th percentile per-packet one-way delay: 187.865 ms

Loss rate: 1.15%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-05 07:47:20

End at: 2017-12-05 07:47:50

Below is generated by plot.py at 2017-12-05 10:25:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 208.48 Mbit/s

95th percentile per-packet one-way delay: 153.496 ms

Loss rate: 0.99%

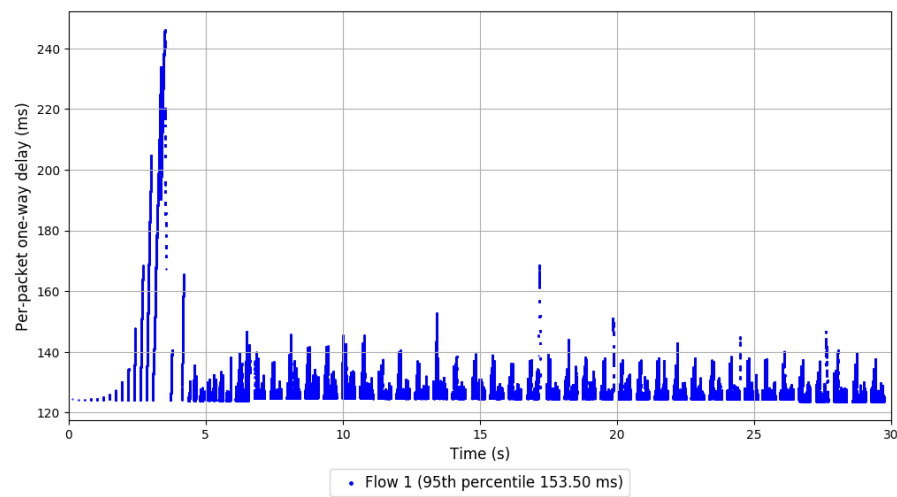
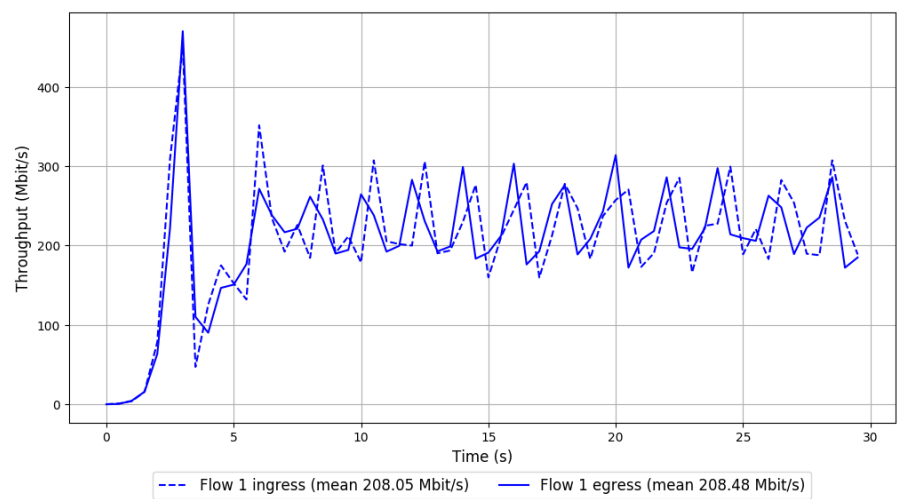
-- Flow 1:

Average throughput: 208.48 Mbit/s

95th percentile per-packet one-way delay: 153.496 ms

Loss rate: 0.99%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-05 07:58:20

End at: 2017-12-05 07:58:50

Below is generated by plot.py at 2017-12-05 10:25:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.08 Mbit/s

95th percentile per-packet one-way delay: 154.126 ms

Loss rate: 0.57%

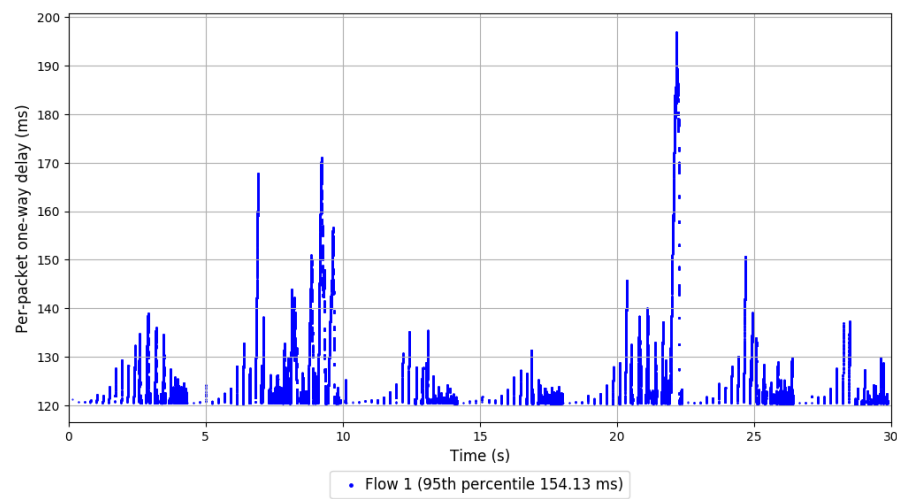
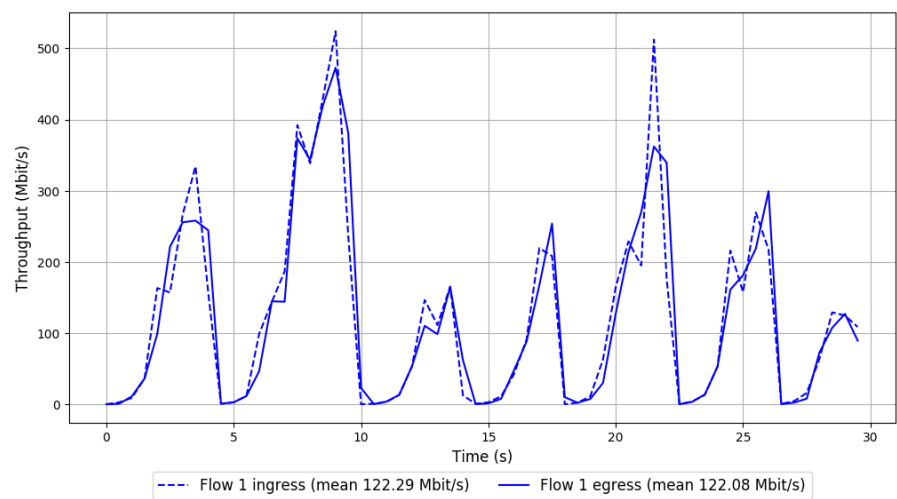
-- Flow 1:

Average throughput: 122.08 Mbit/s

95th percentile per-packet one-way delay: 154.126 ms

Loss rate: 0.57%

Run 10: Report of Verus — Data Link

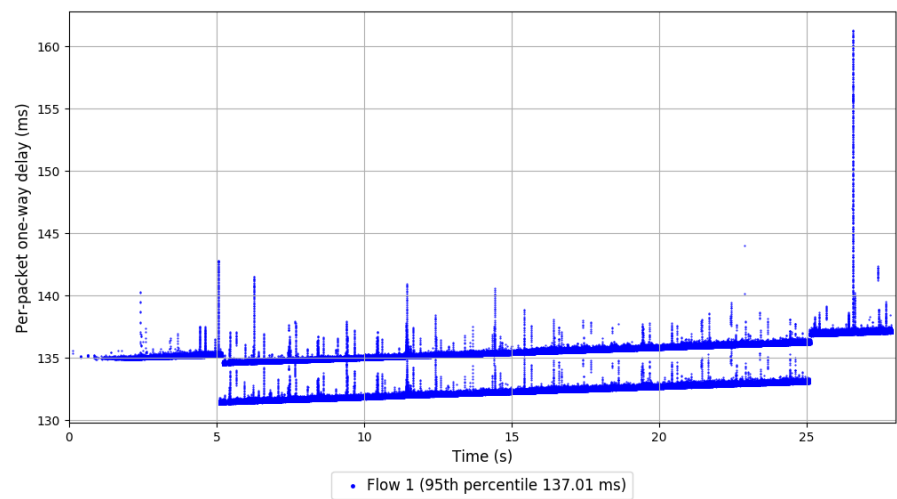
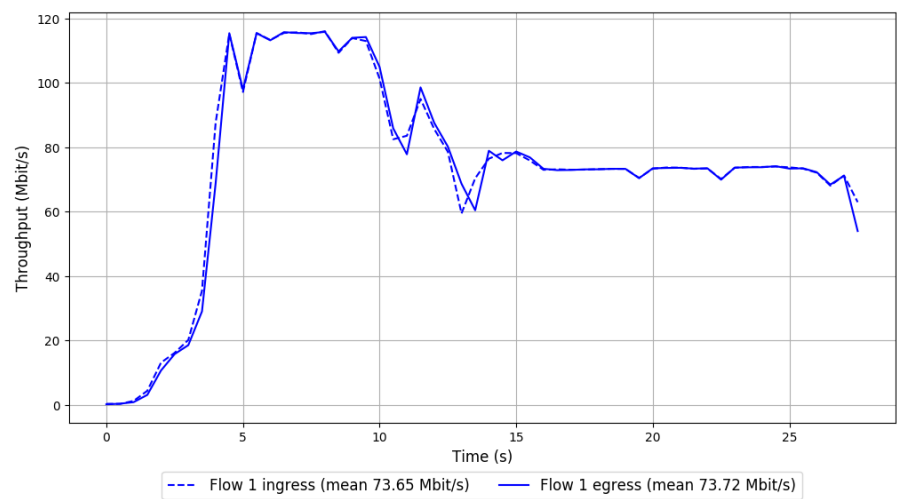


```
Run 1: Statistics of Copa

Start at: 2017-12-05 06:20:00
End at: 2017-12-05 06:20:30

# Below is generated by plot.py at 2017-12-05 10:25:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.72 Mbit/s
95th percentile per-packet one-way delay: 137.015 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 73.72 Mbit/s
95th percentile per-packet one-way delay: 137.015 ms
Loss rate: 0.69%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-05 06:31:02

End at: 2017-12-05 06:31:32

Below is generated by plot.py at 2017-12-05 10:25:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.22 Mbit/s

95th percentile per-packet one-way delay: 156.742 ms

Loss rate: 0.88%

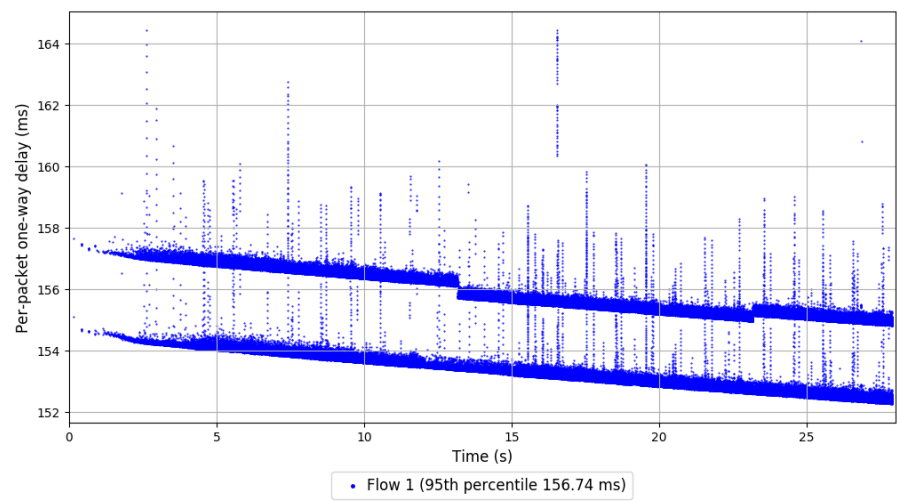
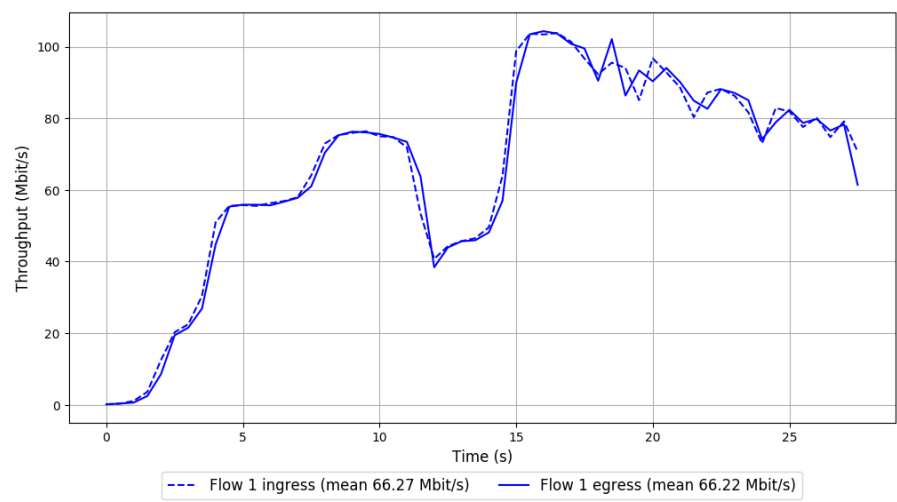
-- Flow 1:

Average throughput: 66.22 Mbit/s

95th percentile per-packet one-way delay: 156.742 ms

Loss rate: 0.88%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-05 06:42:12

End at: 2017-12-05 06:42:42

Below is generated by plot.py at 2017-12-05 10:25:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.81 Mbit/s

95th percentile per-packet one-way delay: 144.600 ms

Loss rate: 0.33%

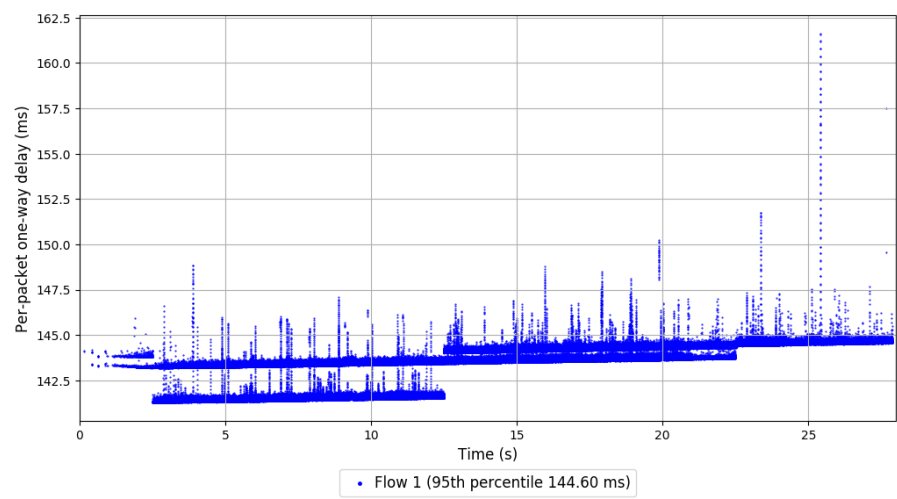
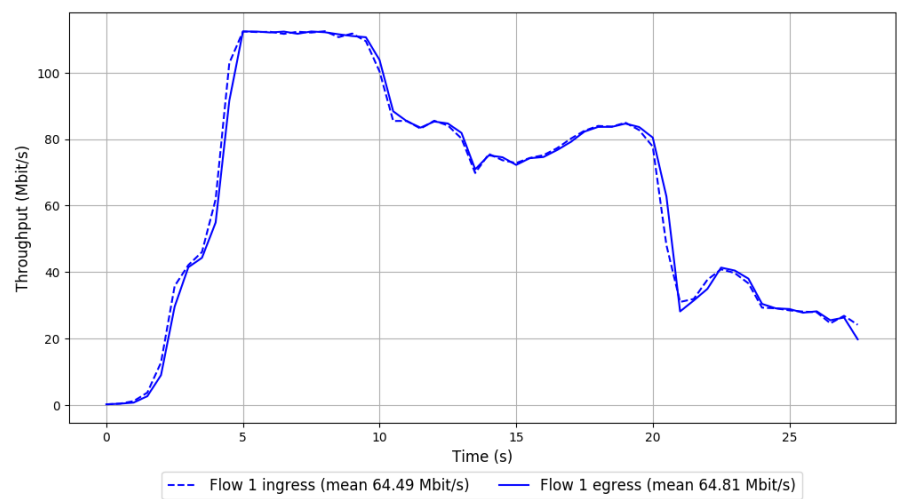
-- Flow 1:

Average throughput: 64.81 Mbit/s

95th percentile per-packet one-way delay: 144.600 ms

Loss rate: 0.33%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-05 06:53:11

End at: 2017-12-05 06:53:41

Below is generated by plot.py at 2017-12-05 10:25:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.69 Mbit/s

95th percentile per-packet one-way delay: 139.850 ms

Loss rate: 0.25%

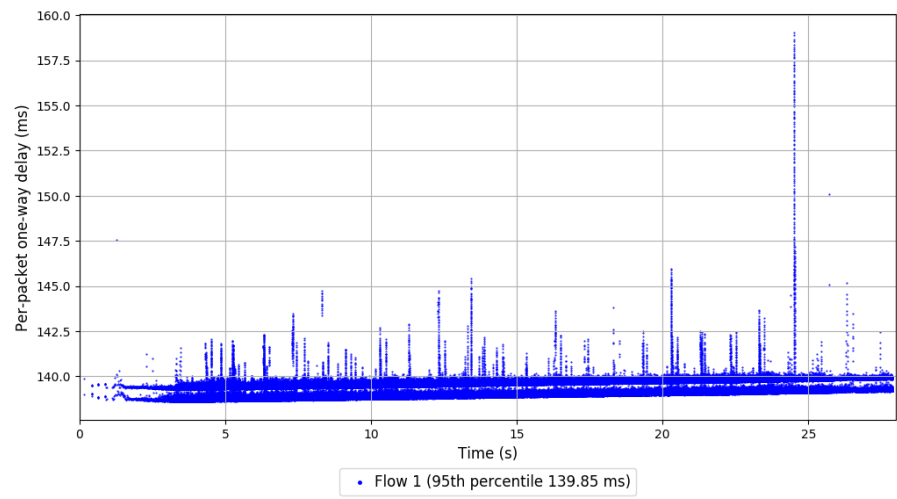
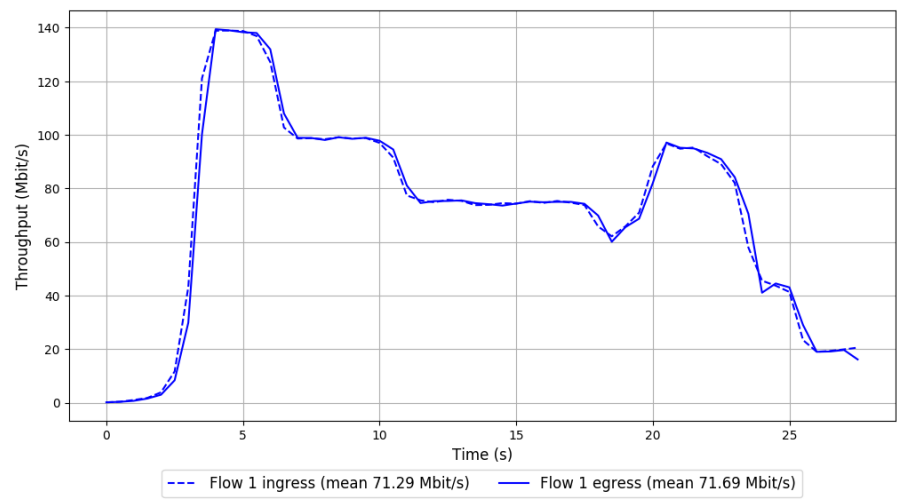
-- Flow 1:

Average throughput: 71.69 Mbit/s

95th percentile per-packet one-way delay: 139.850 ms

Loss rate: 0.25%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-05 07:04:10

End at: 2017-12-05 07:04:40

Below is generated by plot.py at 2017-12-05 10:25:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.42 Mbit/s

95th percentile per-packet one-way delay: 127.748 ms

Loss rate: 0.78%

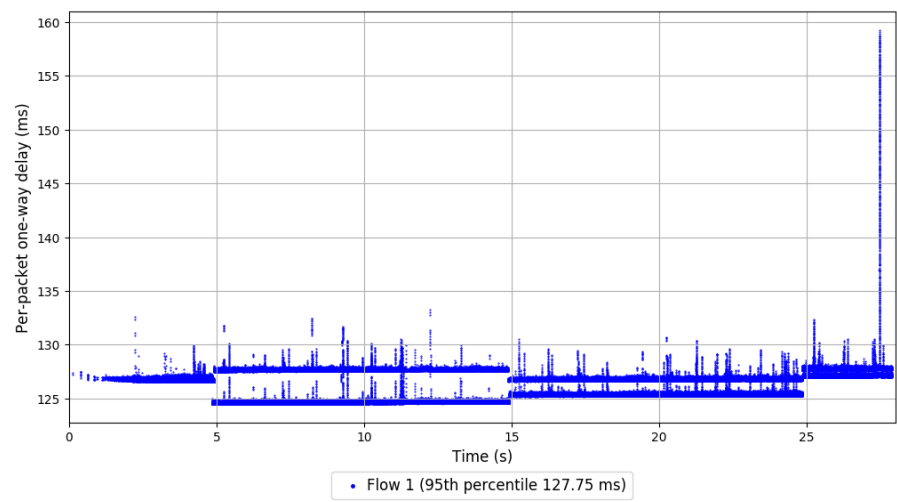
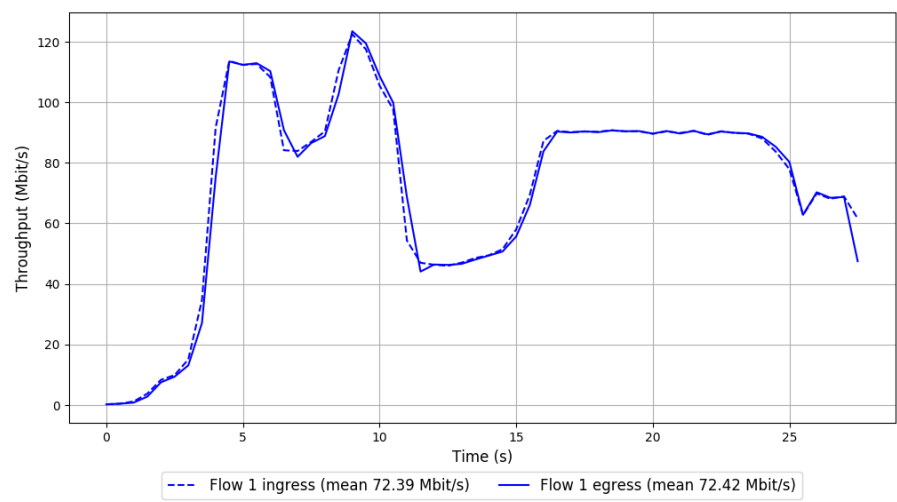
-- Flow 1:

Average throughput: 72.42 Mbit/s

95th percentile per-packet one-way delay: 127.748 ms

Loss rate: 0.78%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-05 07:15:03

End at: 2017-12-05 07:15:33

Below is generated by plot.py at 2017-12-05 10:25:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.91 Mbit/s

95th percentile per-packet one-way delay: 125.557 ms

Loss rate: 0.12%

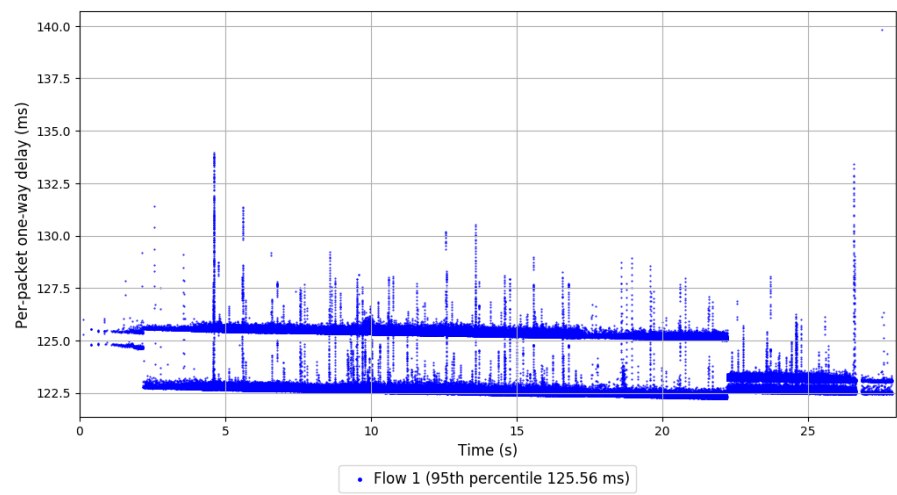
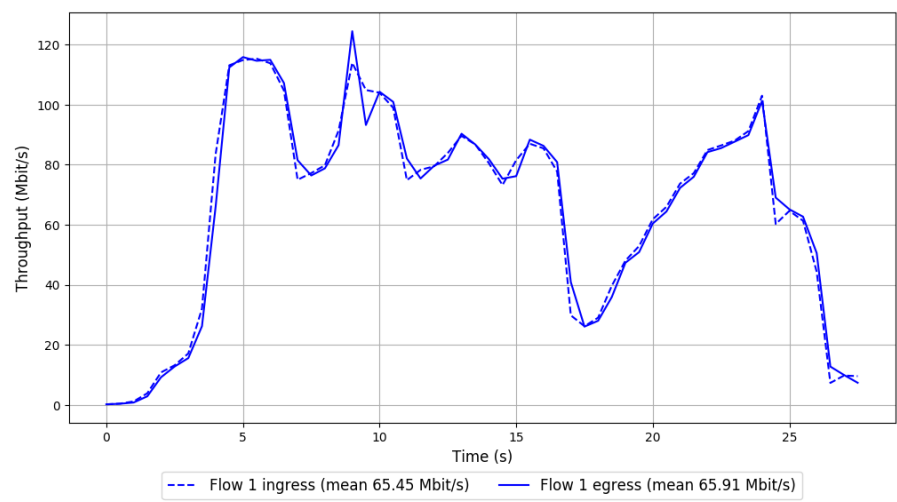
-- Flow 1:

Average throughput: 65.91 Mbit/s

95th percentile per-packet one-way delay: 125.557 ms

Loss rate: 0.12%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-05 07:26:20

End at: 2017-12-05 07:26:50

Below is generated by plot.py at 2017-12-05 10:26:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.51 Mbit/s

95th percentile per-packet one-way delay: 121.070 ms

Loss rate: 0.27%

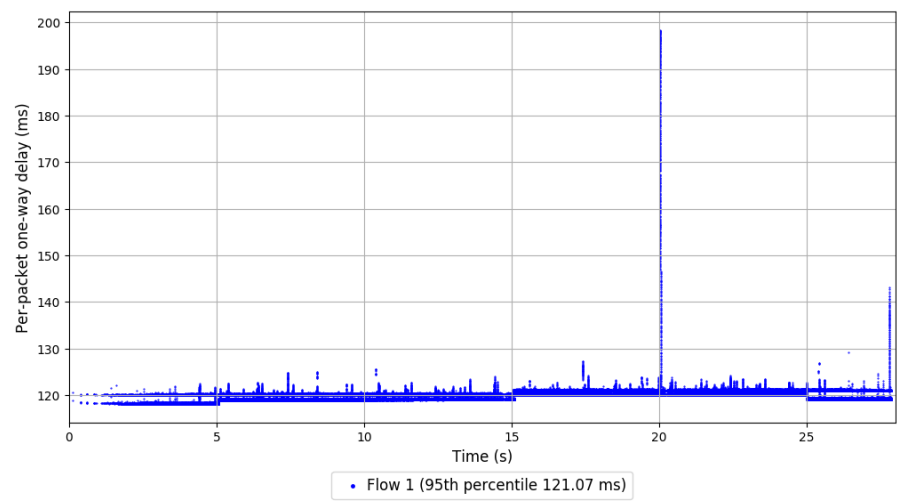
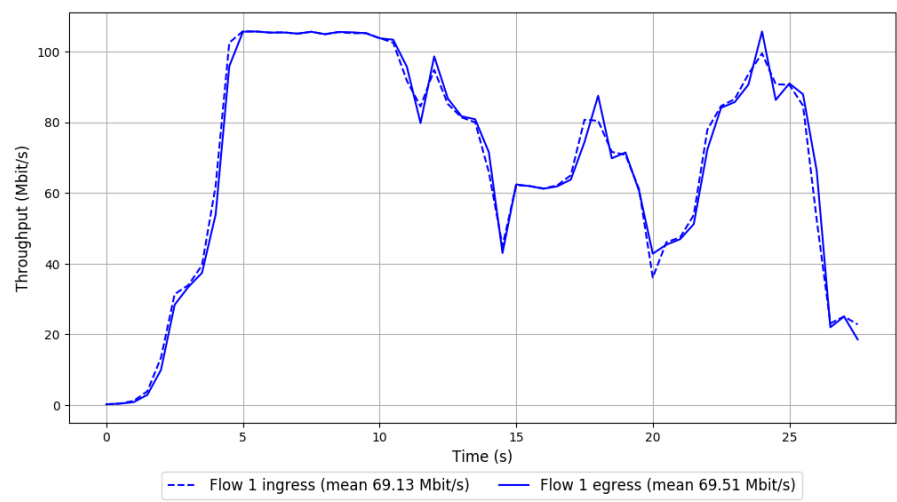
-- Flow 1:

Average throughput: 69.51 Mbit/s

95th percentile per-packet one-way delay: 121.070 ms

Loss rate: 0.27%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-05 07:37:18

End at: 2017-12-05 07:37:48

Below is generated by plot.py at 2017-12-05 10:26:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.45 Mbit/s

95th percentile per-packet one-way delay: 122.570 ms

Loss rate: 1.72%

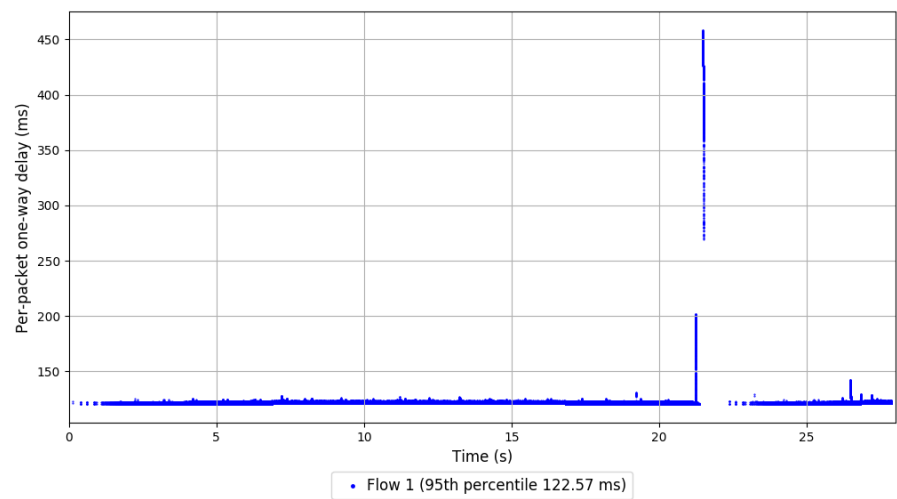
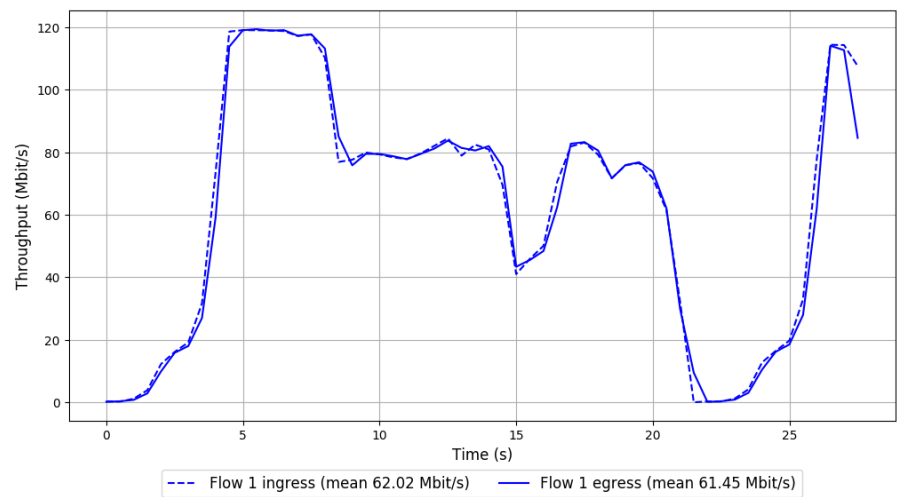
-- Flow 1:

Average throughput: 61.45 Mbit/s

95th percentile per-packet one-way delay: 122.570 ms

Loss rate: 1.72%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-05 07:48:18

End at: 2017-12-05 07:48:48

Below is generated by plot.py at 2017-12-05 10:26:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.07 Mbit/s

95th percentile per-packet one-way delay: 124.590 ms

Loss rate: 1.42%

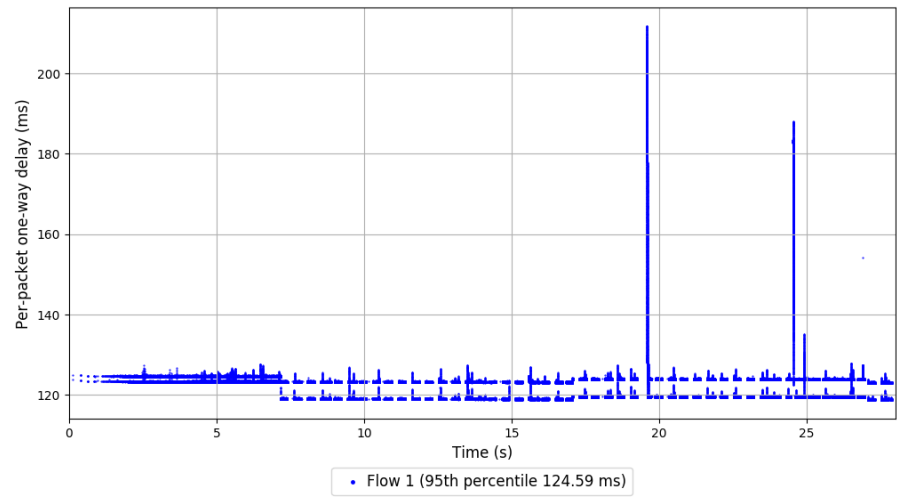
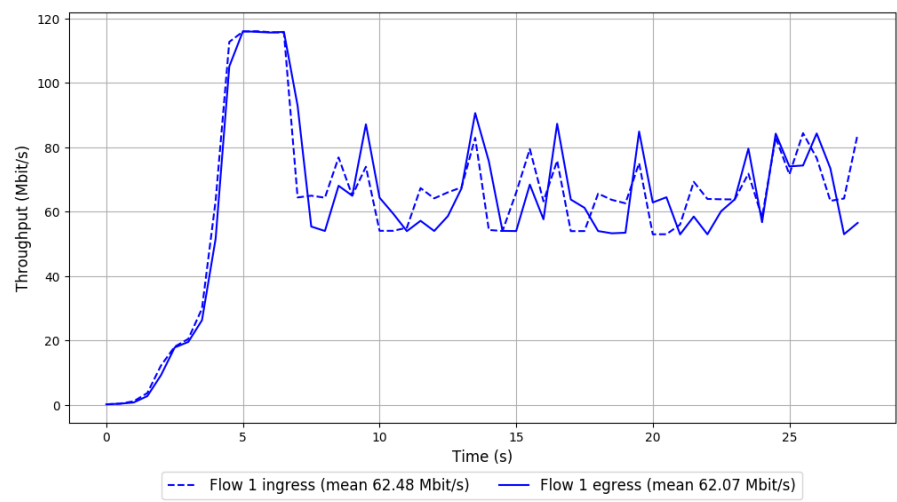
-- Flow 1:

Average throughput: 62.07 Mbit/s

95th percentile per-packet one-way delay: 124.590 ms

Loss rate: 1.42%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-05 07:59:11

End at: 2017-12-05 07:59:41

Below is generated by plot.py at 2017-12-05 10:26:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.89 Mbit/s

95th percentile per-packet one-way delay: 118.470 ms

Loss rate: 0.84%

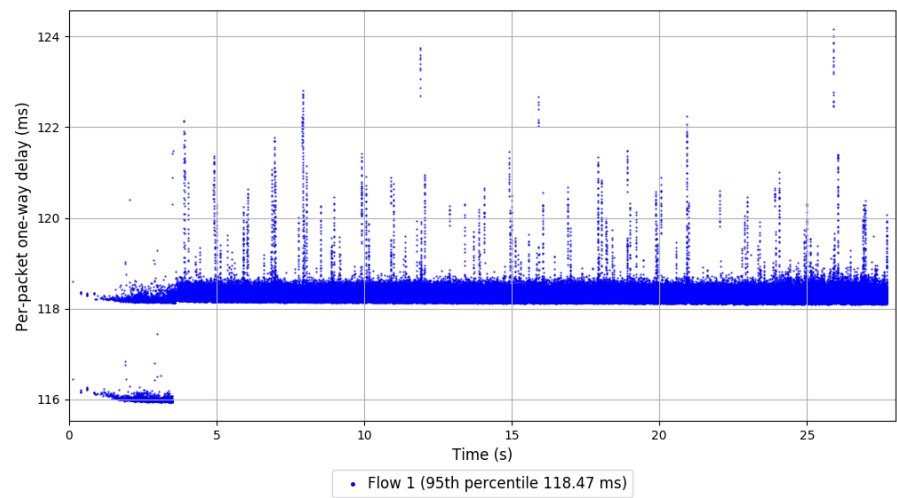
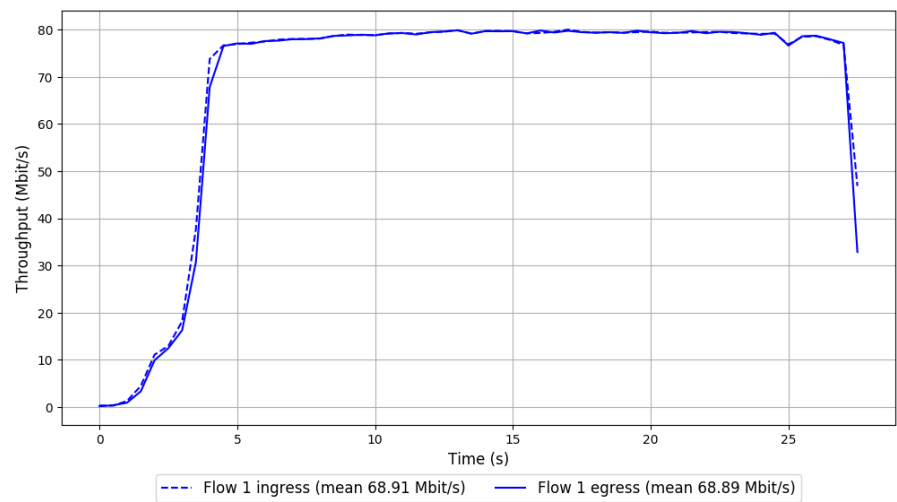
-- Flow 1:

Average throughput: 68.89 Mbit/s

95th percentile per-packet one-way delay: 118.470 ms

Loss rate: 0.84%

Run 10: Report of Copa — Data Link

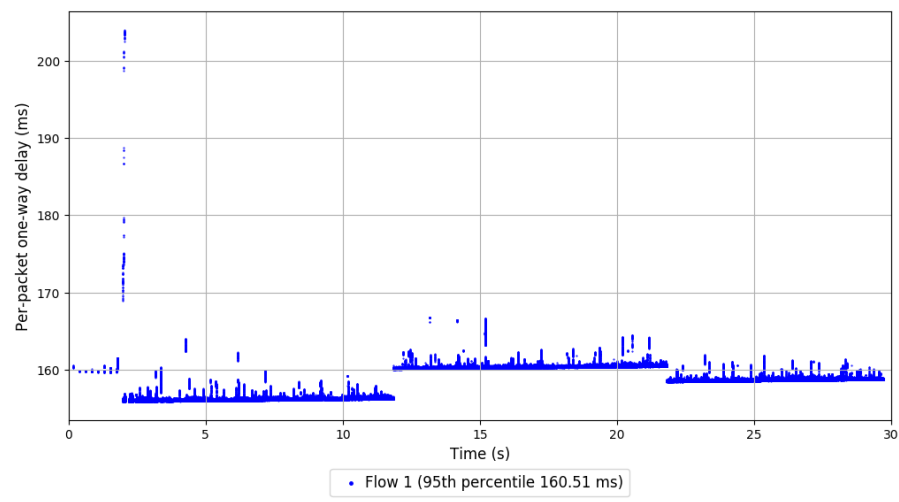
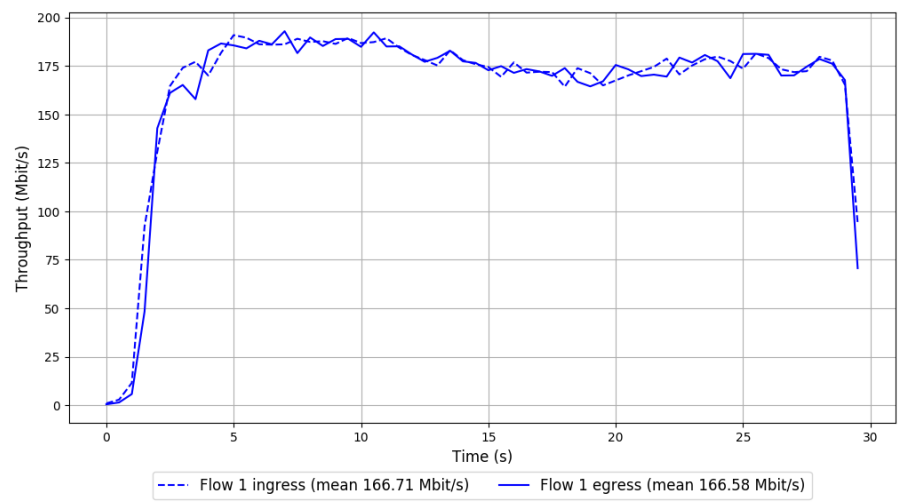


```
Run 1: Statistics of Indigo

Start at: 2017-12-05 06:26:05
End at: 2017-12-05 06:26:35

# Below is generated by plot.py at 2017-12-05 10:28:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 166.58 Mbit/s
95th percentile per-packet one-way delay: 160.510 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 166.58 Mbit/s
95th percentile per-packet one-way delay: 160.510 ms
Loss rate: 0.83%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-05 06:37:14

End at: 2017-12-05 06:37:44

Below is generated by plot.py at 2017-12-05 10:28:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.41 Mbit/s

95th percentile per-packet one-way delay: 144.674 ms

Loss rate: 0.87%

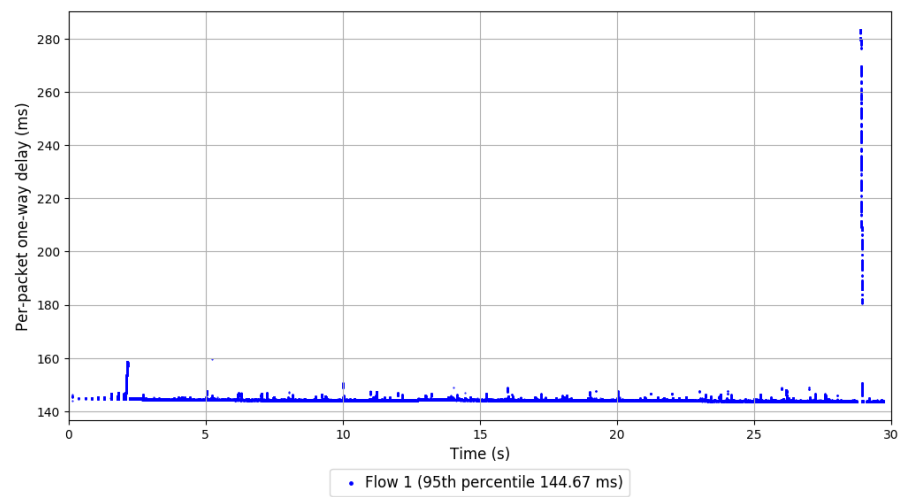
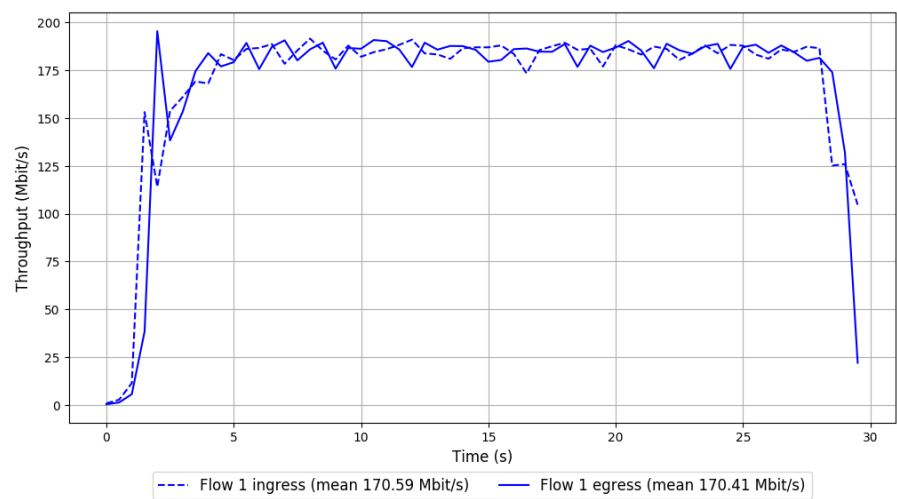
-- Flow 1:

Average throughput: 170.41 Mbit/s

95th percentile per-packet one-way delay: 144.674 ms

Loss rate: 0.87%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-05 06:48:26

End at: 2017-12-05 06:48:56

Below is generated by plot.py at 2017-12-05 10:28:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.93 Mbit/s

95th percentile per-packet one-way delay: 137.464 ms

Loss rate: 0.81%

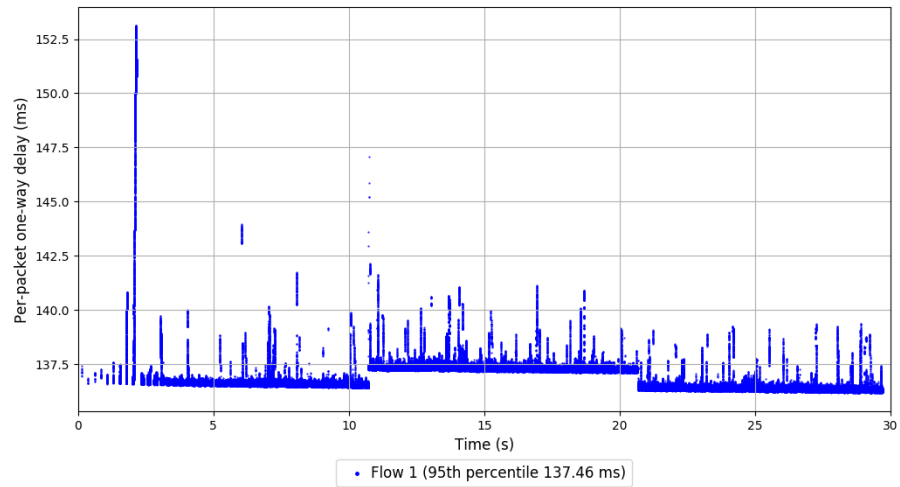
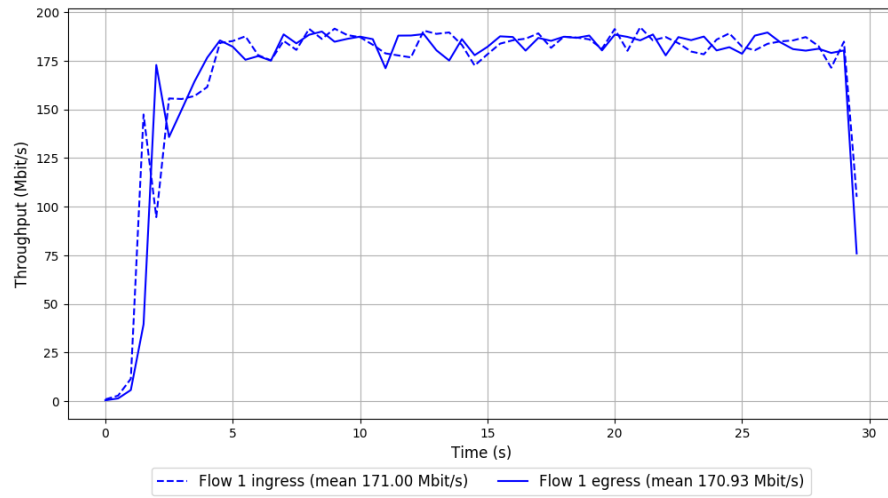
-- Flow 1:

Average throughput: 170.93 Mbit/s

95th percentile per-packet one-way delay: 137.464 ms

Loss rate: 0.81%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-05 06:59:24

End at: 2017-12-05 06:59:54

Below is generated by plot.py at 2017-12-05 10:28:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 165.50 Mbit/s

95th percentile per-packet one-way delay: 130.872 ms

Loss rate: 0.83%

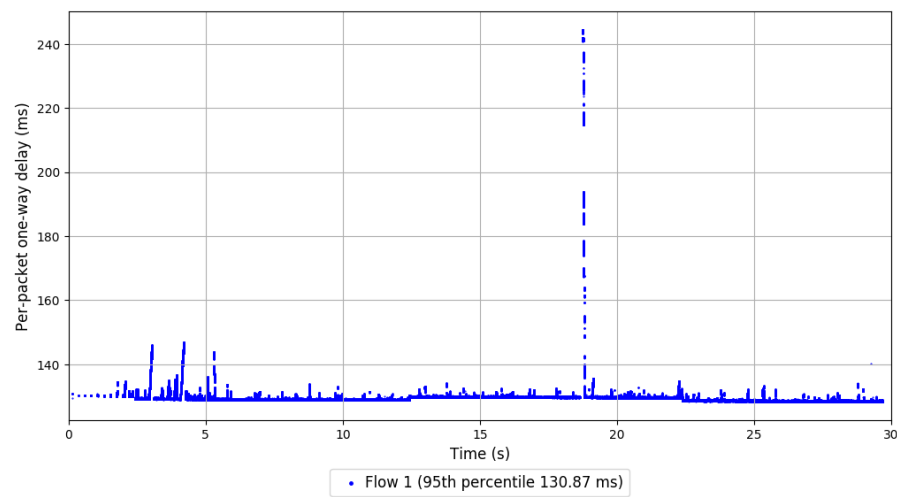
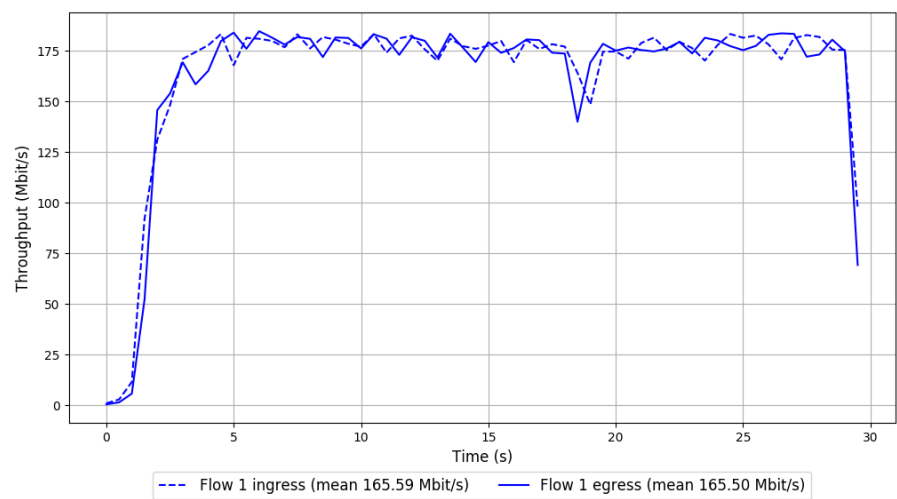
-- Flow 1:

Average throughput: 165.50 Mbit/s

95th percentile per-packet one-way delay: 130.872 ms

Loss rate: 0.83%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-05 07:10:18

End at: 2017-12-05 07:10:48

Below is generated by plot.py at 2017-12-05 10:28:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.01 Mbit/s

95th percentile per-packet one-way delay: 124.332 ms

Loss rate: 0.80%

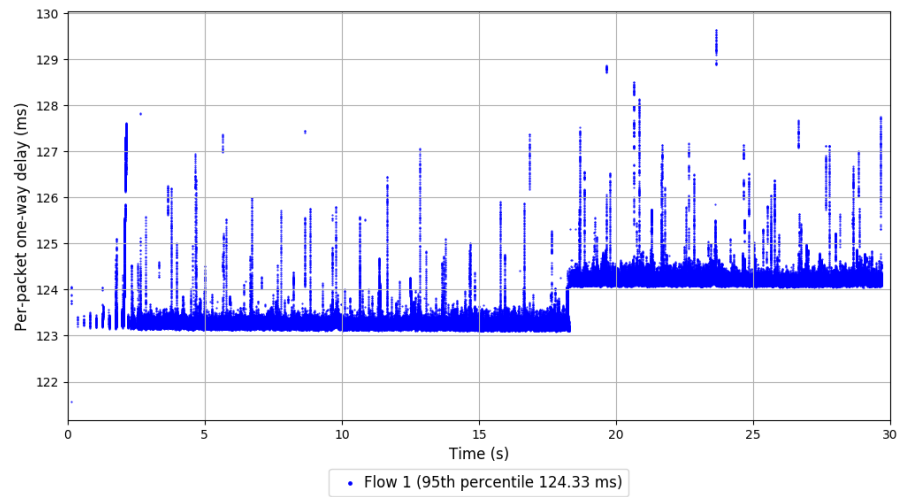
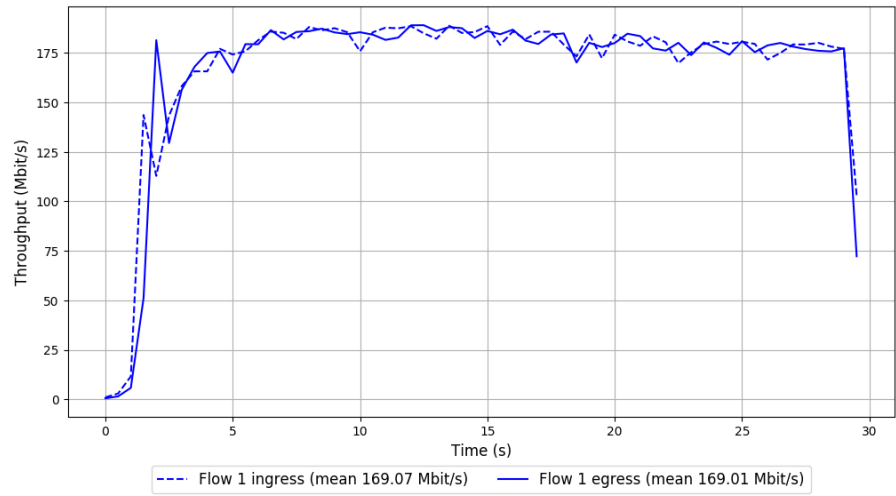
-- Flow 1:

Average throughput: 169.01 Mbit/s

95th percentile per-packet one-way delay: 124.332 ms

Loss rate: 0.80%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-05 07:21:15

End at: 2017-12-05 07:21:45

Below is generated by plot.py at 2017-12-05 10:28:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.82 Mbit/s

95th percentile per-packet one-way delay: 120.555 ms

Loss rate: 0.83%

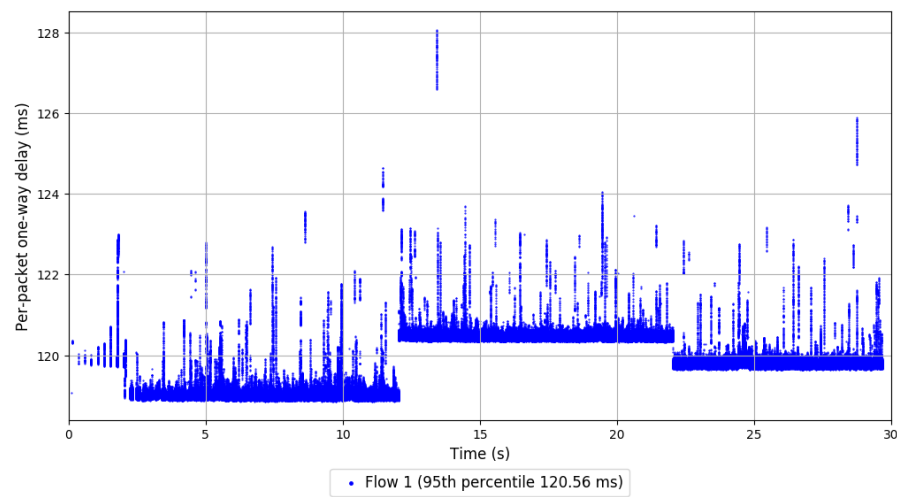
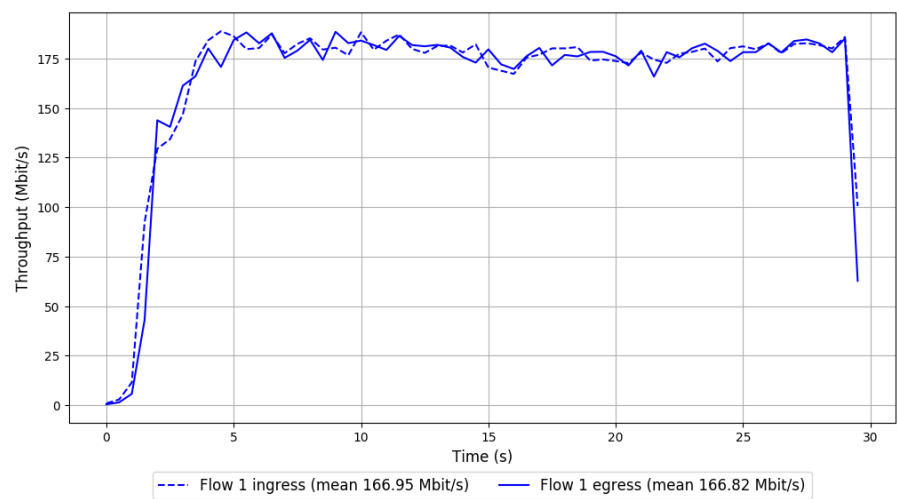
-- Flow 1:

Average throughput: 166.82 Mbit/s

95th percentile per-packet one-way delay: 120.555 ms

Loss rate: 0.83%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-05 07:32:34

End at: 2017-12-05 07:33:04

Below is generated by plot.py at 2017-12-05 10:29:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.80 Mbit/s

95th percentile per-packet one-way delay: 121.917 ms

Loss rate: 0.86%

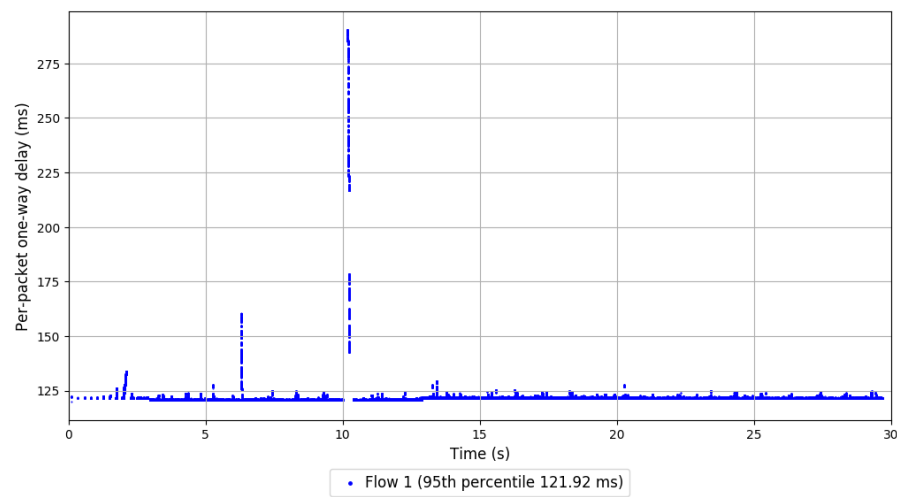
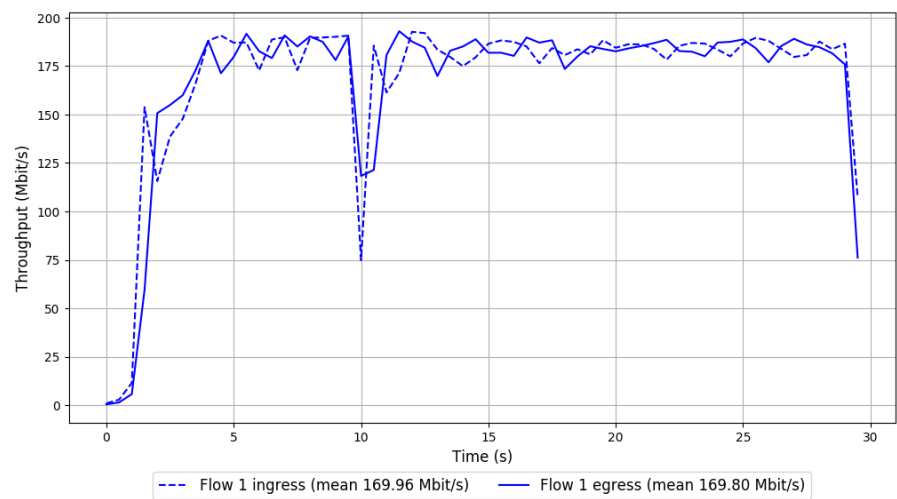
-- Flow 1:

Average throughput: 169.80 Mbit/s

95th percentile per-packet one-way delay: 121.917 ms

Loss rate: 0.86%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-05 07:43:26

End at: 2017-12-05 07:43:56

Below is generated by plot.py at 2017-12-05 10:30:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.18 Mbit/s

95th percentile per-packet one-way delay: 123.778 ms

Loss rate: 0.80%

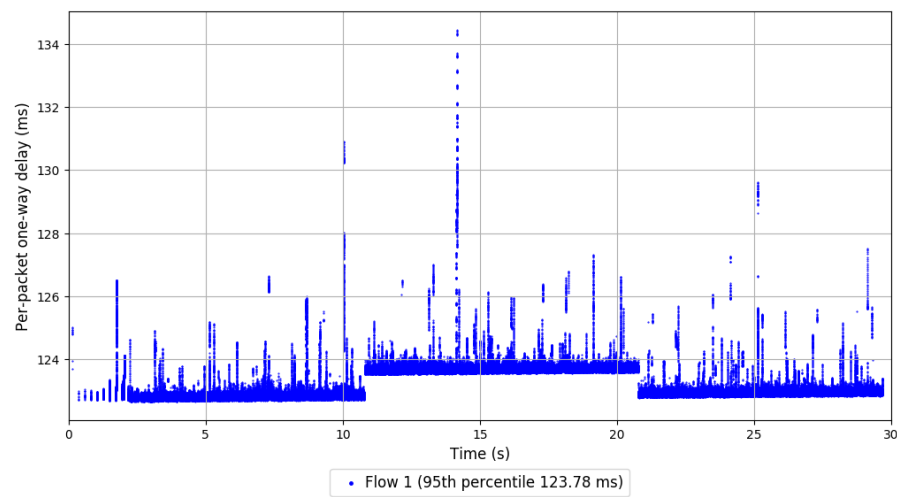
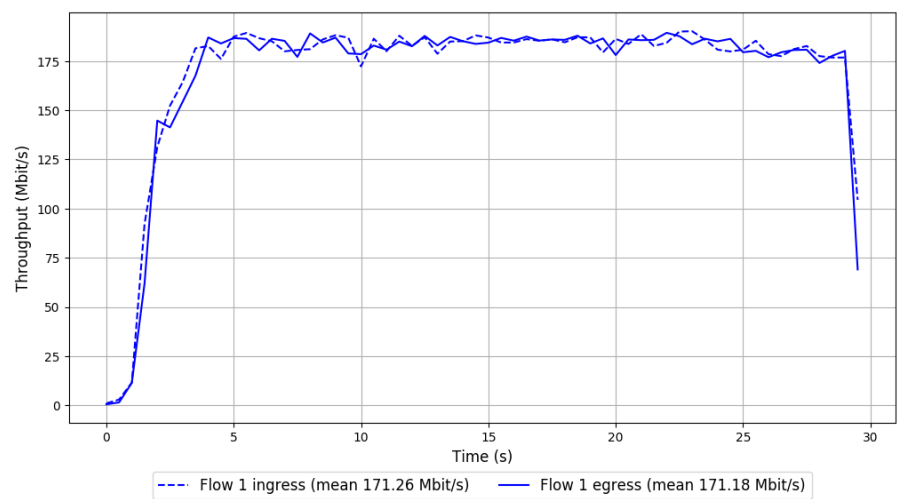
-- Flow 1:

Average throughput: 171.18 Mbit/s

95th percentile per-packet one-way delay: 123.778 ms

Loss rate: 0.80%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-05 07:54:28

End at: 2017-12-05 07:54:58

Below is generated by plot.py at 2017-12-05 10:31:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 163.23 Mbit/s

95th percentile per-packet one-way delay: 119.790 ms

Loss rate: 0.78%

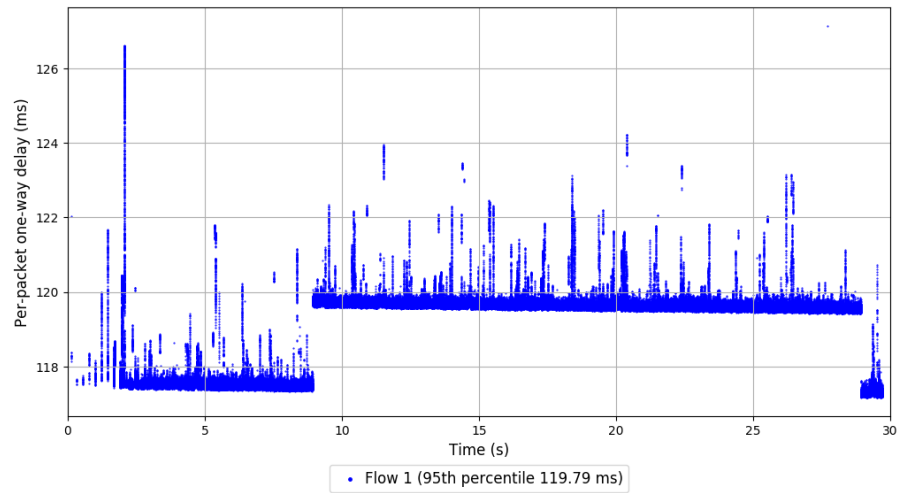
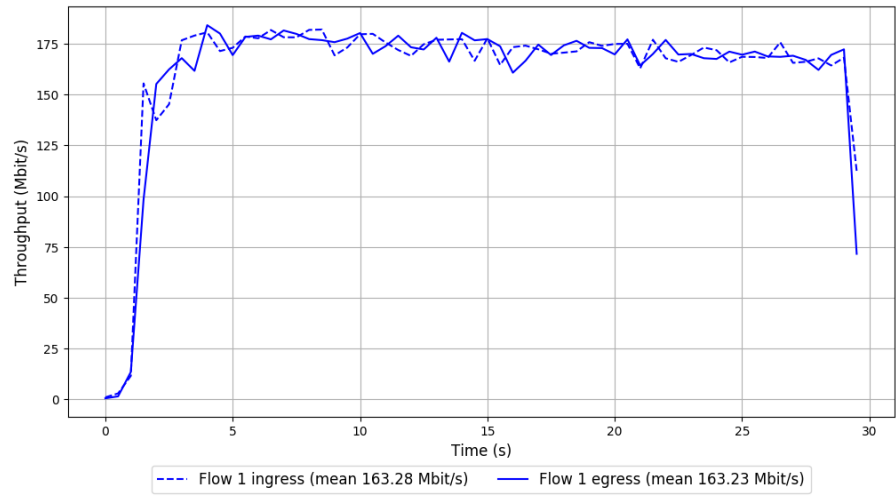
-- Flow 1:

Average throughput: 163.23 Mbit/s

95th percentile per-packet one-way delay: 119.790 ms

Loss rate: 0.78%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-05 08:05:22

End at: 2017-12-05 08:05:52

Below is generated by plot.py at 2017-12-05 10:31:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 162.87 Mbit/s

95th percentile per-packet one-way delay: 120.746 ms

Loss rate: 1.19%

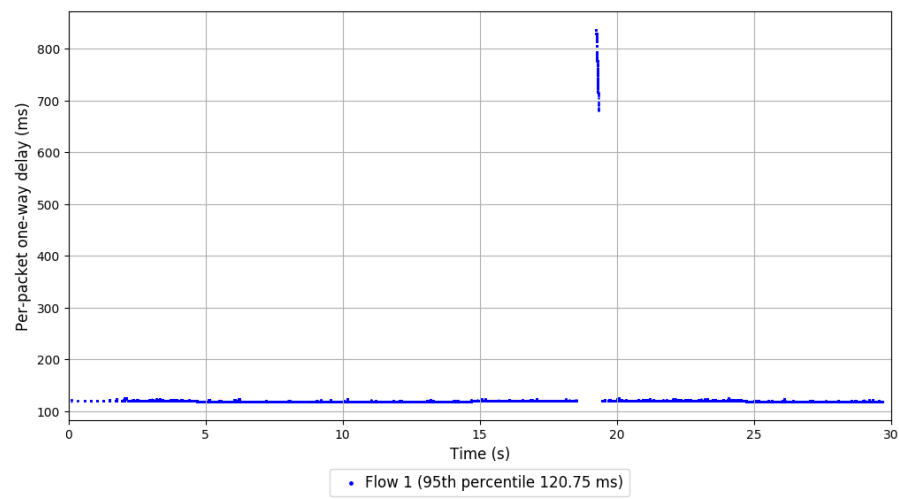
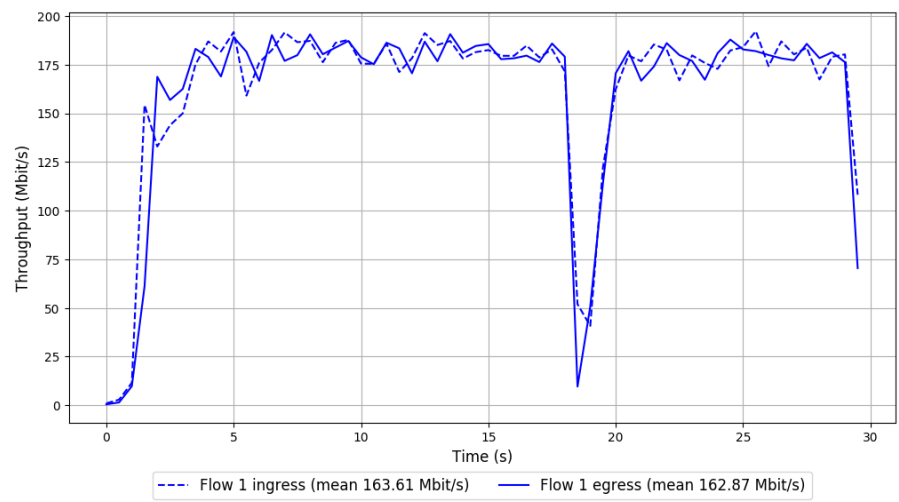
-- Flow 1:

Average throughput: 162.87 Mbit/s

95th percentile per-packet one-way delay: 120.746 ms

Loss rate: 1.19%

Run 10: Report of Indigo — Data Link

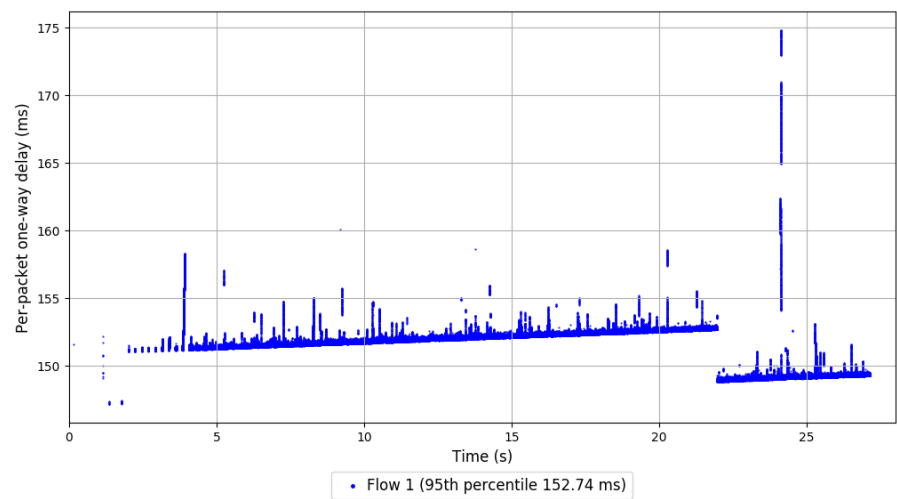
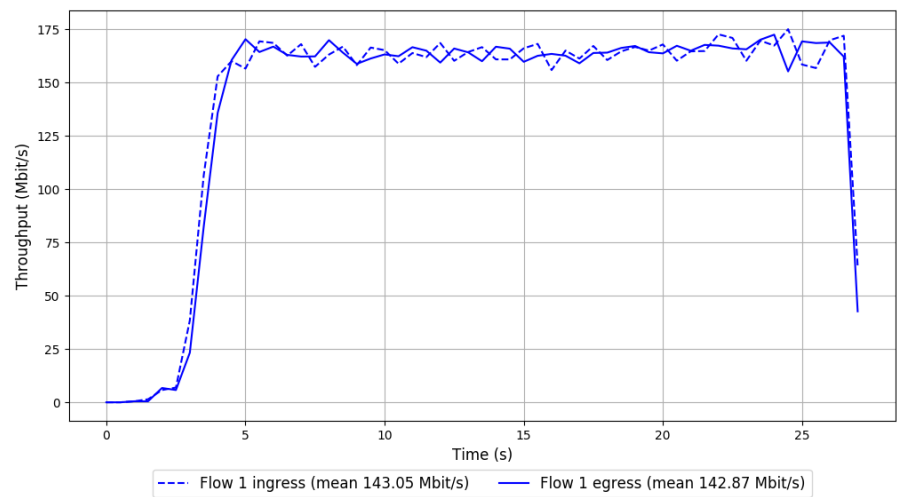


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-05 06:23:12
End at: 2017-12-05 06:23:42

# Below is generated by plot.py at 2017-12-05 10:31:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 142.87 Mbit/s
95th percentile per-packet one-way delay: 152.737 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 142.87 Mbit/s
95th percentile per-packet one-way delay: 152.737 ms
Loss rate: 0.94%
```

Run 1: Report of Indigo-calib — Data Link

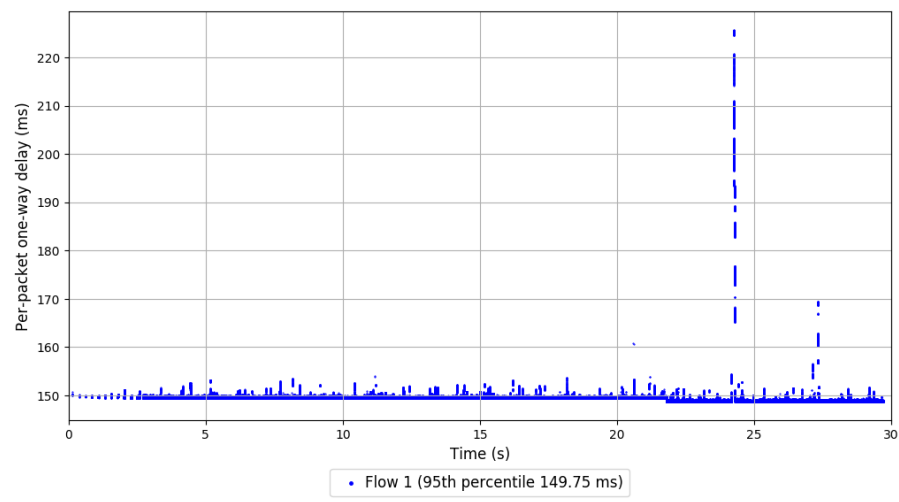
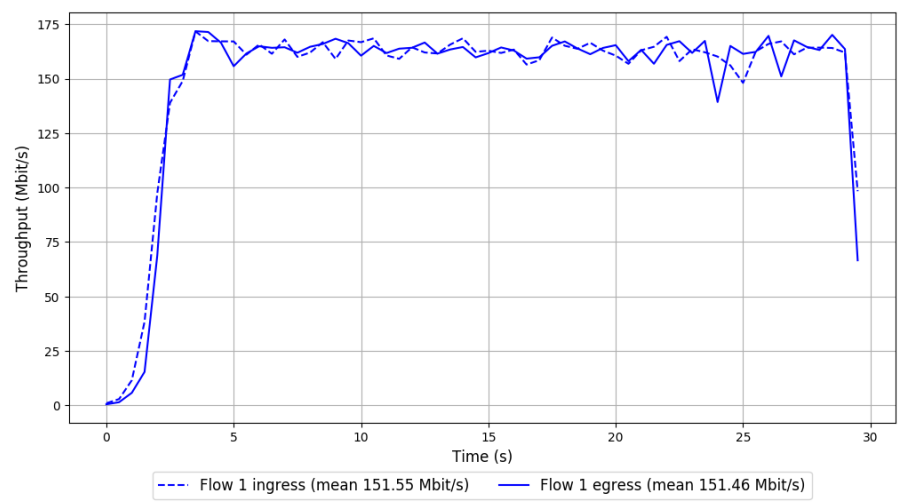


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-05 06:34:15
End at: 2017-12-05 06:34:45

# Below is generated by plot.py at 2017-12-05 10:31:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 151.46 Mbit/s
95th percentile per-packet one-way delay: 149.751 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 151.46 Mbit/s
95th percentile per-packet one-way delay: 149.751 ms
Loss rate: 0.82%
```

Run 2: Report of Indigo-calib — Data Link

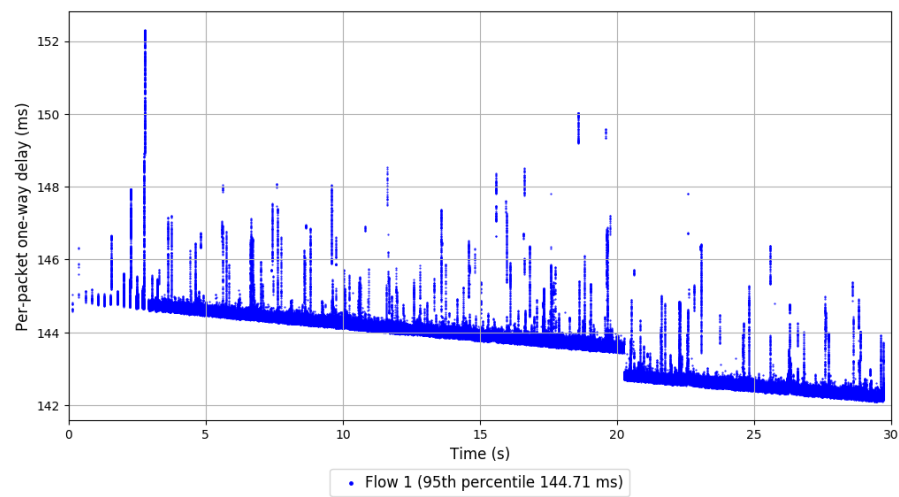
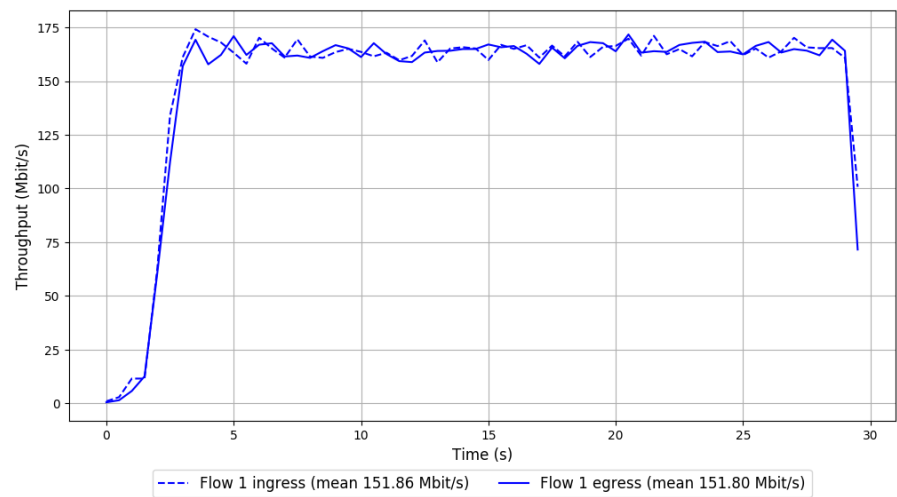


```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-05 06:45:27
End at: 2017-12-05 06:45:57

# Below is generated by plot.py at 2017-12-05 10:31:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 151.80 Mbit/s
95th percentile per-packet one-way delay: 144.707 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 151.80 Mbit/s
95th percentile per-packet one-way delay: 144.707 ms
Loss rate: 0.81%
```

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-05 06:56:24

End at: 2017-12-05 06:56:54

Below is generated by plot.py at 2017-12-05 10:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.00 Mbit/s

95th percentile per-packet one-way delay: 134.052 ms

Loss rate: 1.13%

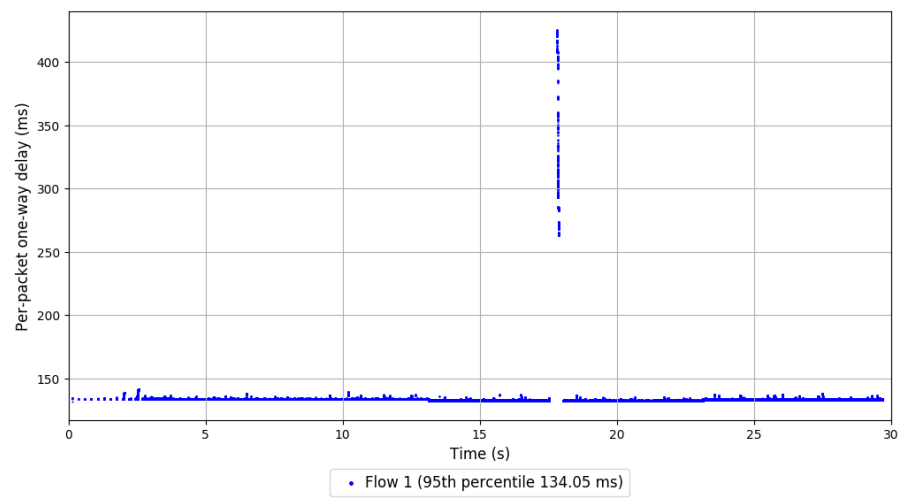
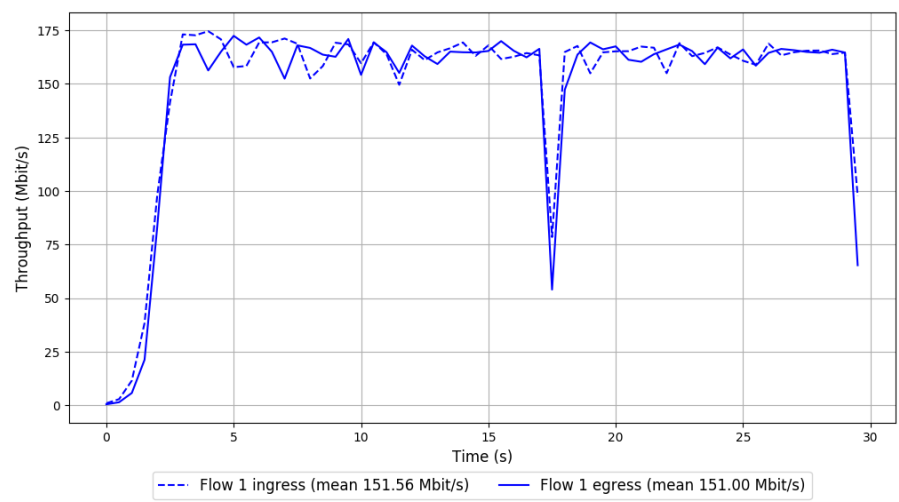
-- Flow 1:

Average throughput: 151.00 Mbit/s

95th percentile per-packet one-way delay: 134.052 ms

Loss rate: 1.13%

Run 4: Report of Indigo-calib — Data Link

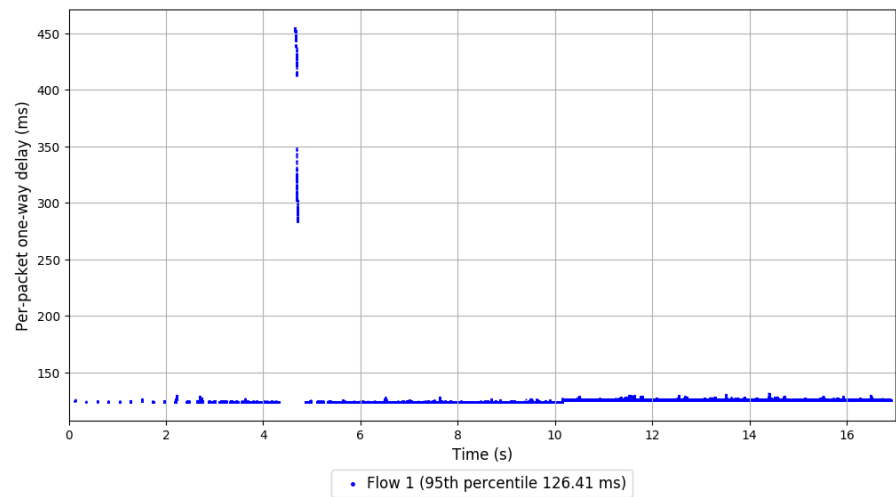
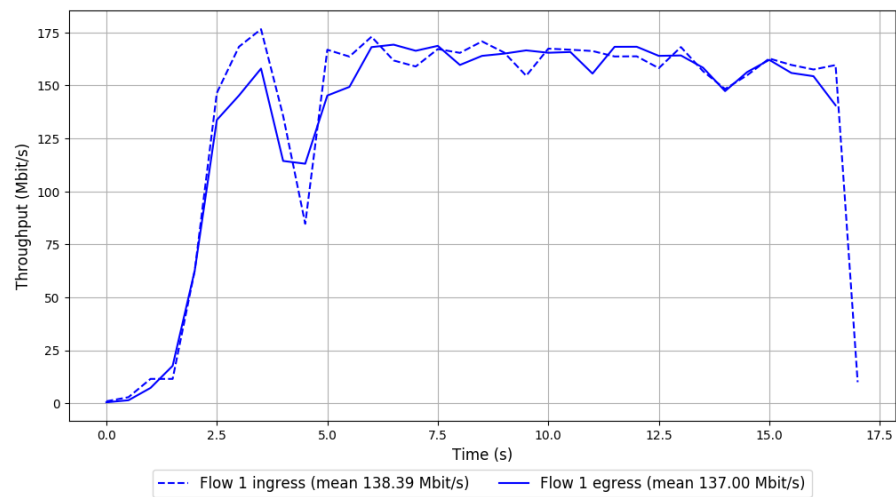


Run 5: Statistics of Indigo-calib

Start at: 2017-12-05 07:07:24

End at: 2017-12-05 07:07:54

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-05 07:18:15

End at: 2017-12-05 07:18:45

Below is generated by plot.py at 2017-12-05 10:32:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.88 Mbit/s

95th percentile per-packet one-way delay: 121.755 ms

Loss rate: 0.79%

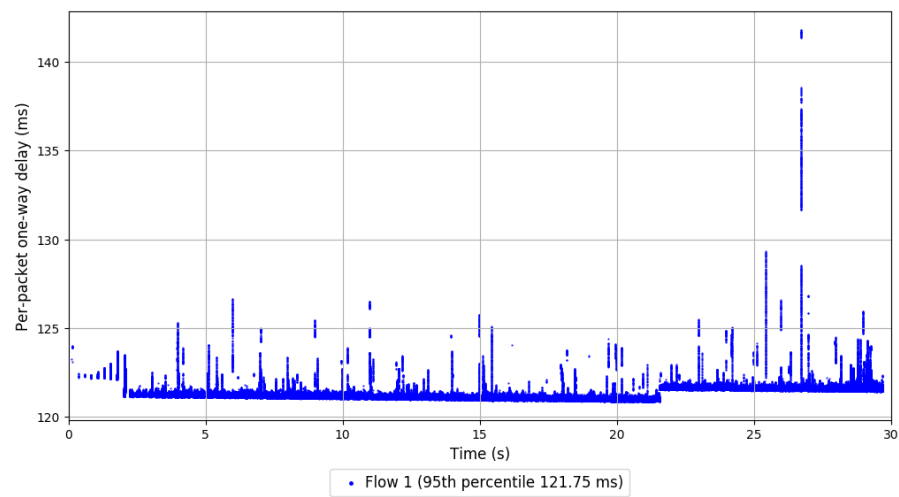
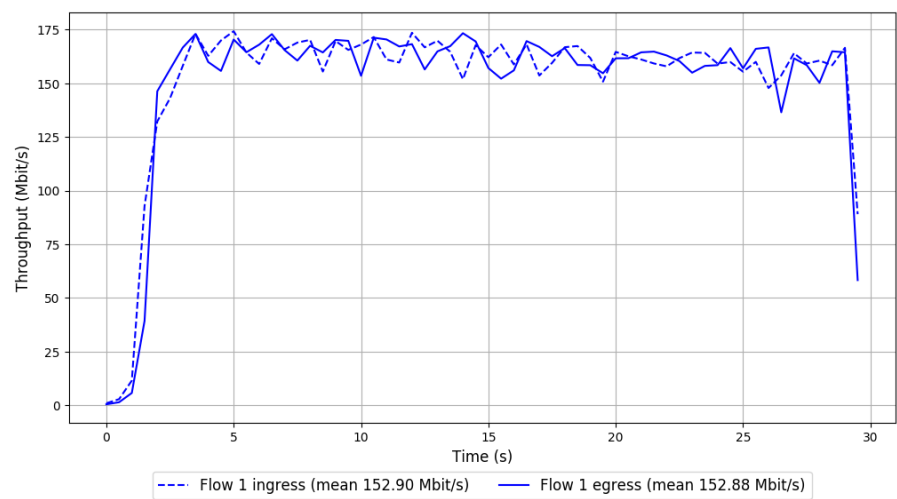
-- Flow 1:

Average throughput: 152.88 Mbit/s

95th percentile per-packet one-way delay: 121.755 ms

Loss rate: 0.79%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-05 07:29:34

End at: 2017-12-05 07:30:04

Below is generated by plot.py at 2017-12-05 10:32:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.78 Mbit/s

95th percentile per-packet one-way delay: 122.464 ms

Loss rate: 1.03%

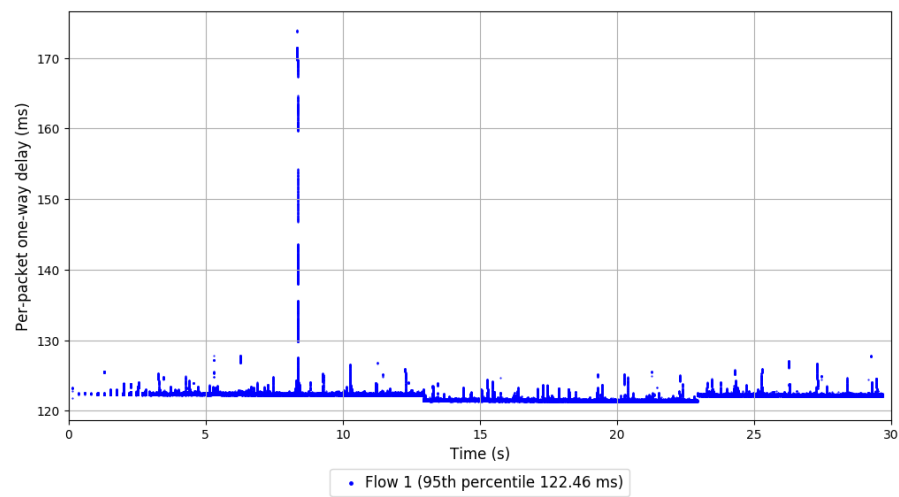
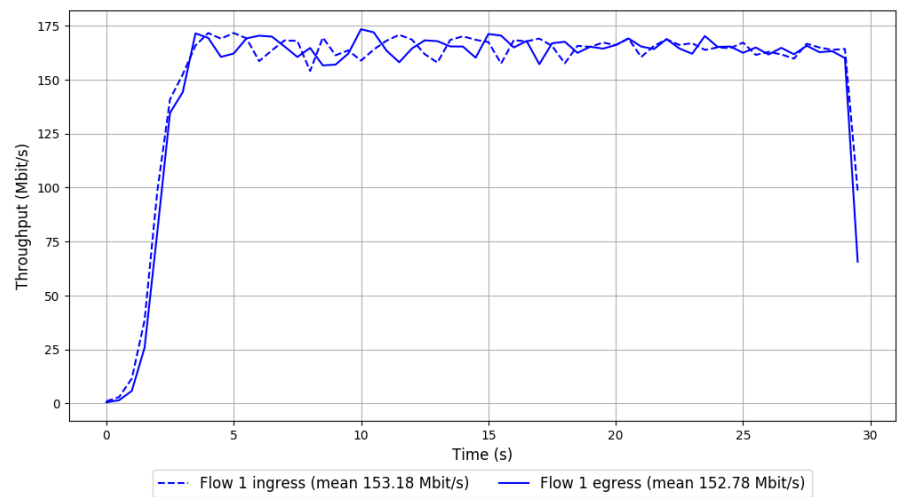
-- Flow 1:

Average throughput: 152.78 Mbit/s

95th percentile per-packet one-way delay: 122.464 ms

Loss rate: 1.03%

Run 7: Report of Indigo-calib — Data Link

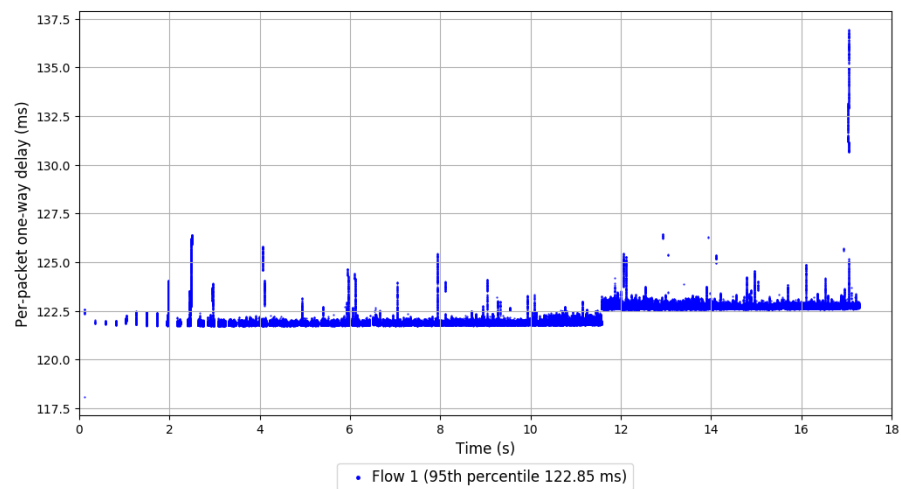
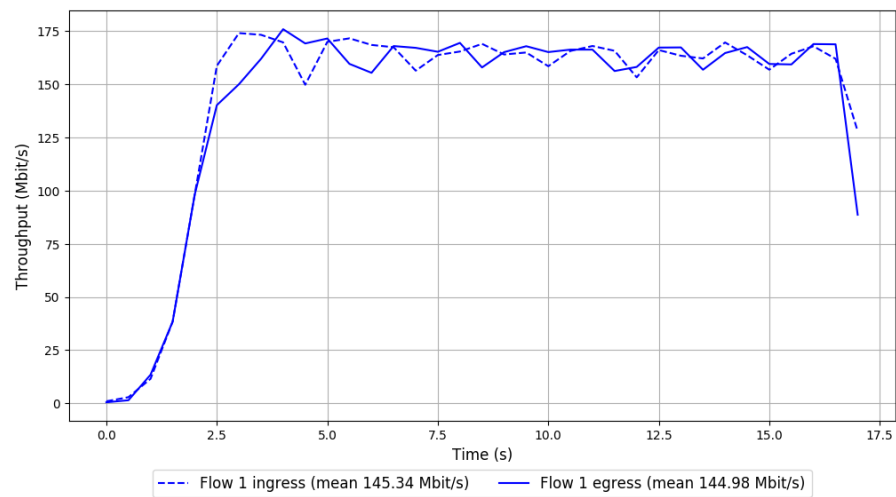


Run 8: Statistics of Indigo-calib

Start at: 2017-12-05 07:40:33

End at: 2017-12-05 07:41:03

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-05 07:51:28

End at: 2017-12-05 07:51:58

Below is generated by plot.py at 2017-12-05 10:32:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 154.82 Mbit/s

95th percentile per-packet one-way delay: 120.983 ms

Loss rate: 0.81%

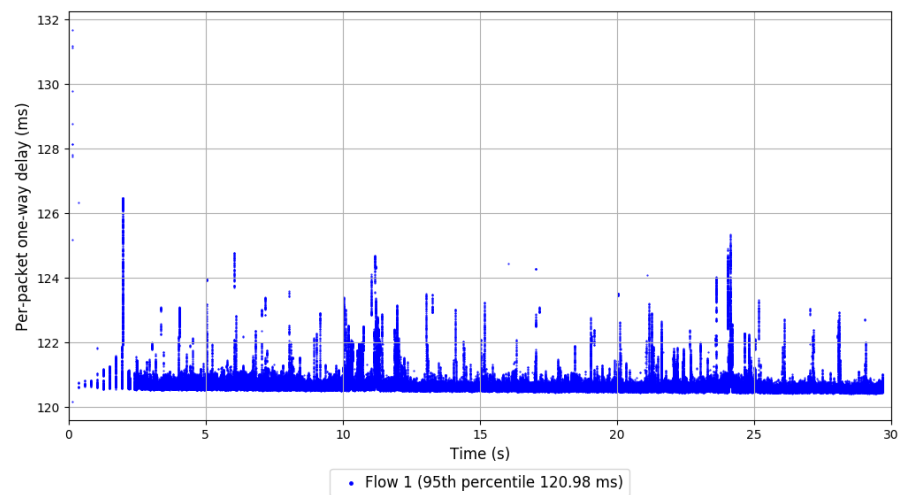
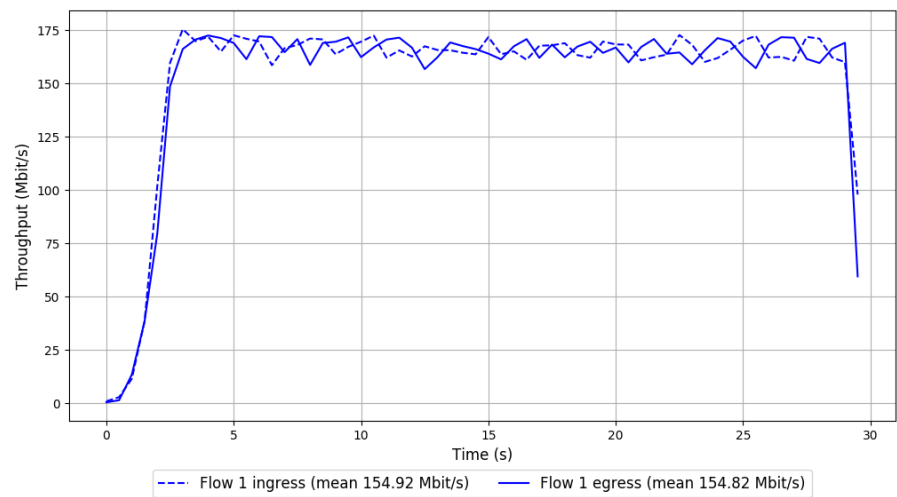
-- Flow 1:

Average throughput: 154.82 Mbit/s

95th percentile per-packet one-way delay: 120.983 ms

Loss rate: 0.81%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-05 08:02:23

End at: 2017-12-05 08:02:53

Below is generated by plot.py at 2017-12-05 10:32:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 154.52 Mbit/s

95th percentile per-packet one-way delay: 120.318 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 154.52 Mbit/s

95th percentile per-packet one-way delay: 120.318 ms

Loss rate: 0.81%

Run 10: Report of Indigo-calib — Data Link

