

Pantheon Report

Generated at 2017-11-30 19:27:05 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

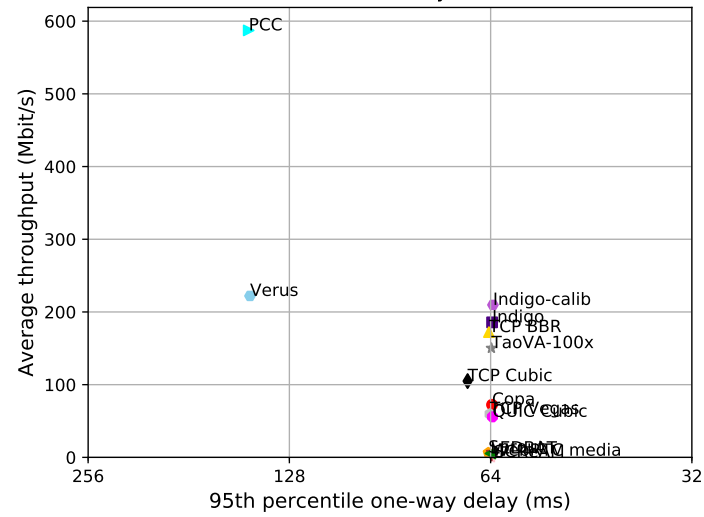
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

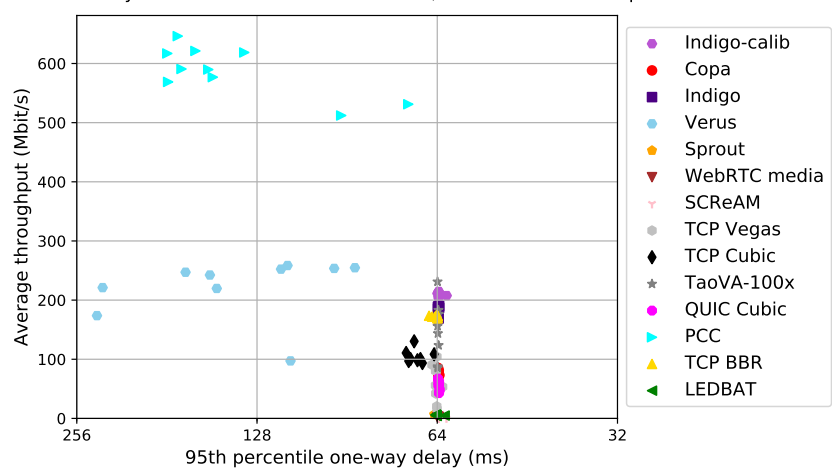
Git summary:

```
branch: 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 Iowa Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	172.31	64.38	0.44
TCP Cubic	8	104.90	69.29	0.40
LEDBAT	10	5.30	64.07	0.59
PCC	10	587.26	147.24	1.59
QUIC Cubic	10	55.78	63.60	0.67
SCReAM	5	0.22	63.29	0.41
WebRTC media	10	2.26	63.75	0.46
Sprout	10	6.50	64.52	0.46
TaoVA-100x	9	150.26	63.83	0.45
TCP Vegas	10	59.65	64.18	0.32
Verus	10	222.06	146.60	1.32
Copa	9	72.33	63.69	0.29
Indigo	8	185.69	63.68	0.44
Indigo-calib	10	209.71	63.49	0.44

Run 1: Statistics of TCP BBR

Start at: 2017-11-30 15:18:00

End at: 2017-11-30 15:18:30

Below is generated by plot.py at 2017-11-30 18:47:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.00 Mbit/s

95th percentile per-packet one-way delay: 65.271 ms

Loss rate: 0.44%

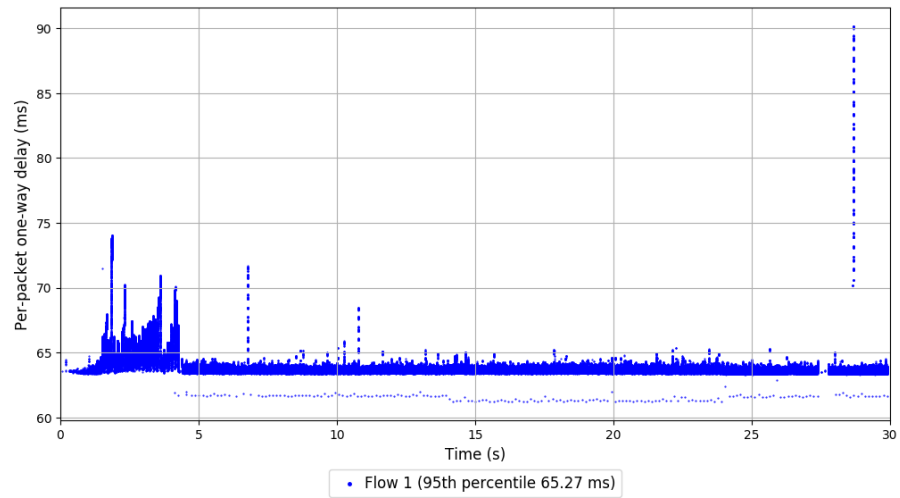
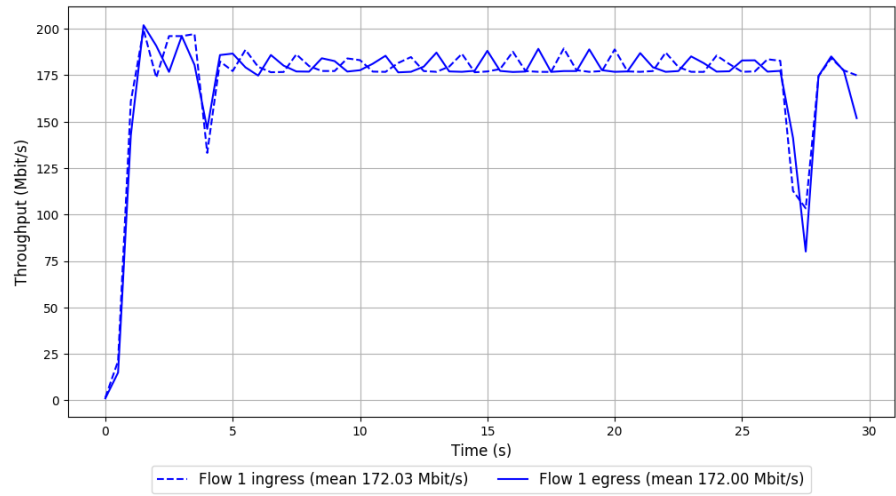
-- Flow 1:

Average throughput: 172.00 Mbit/s

95th percentile per-packet one-way delay: 65.271 ms

Loss rate: 0.44%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-30 15:28:28

End at: 2017-11-30 15:28:58

Below is generated by plot.py at 2017-11-30 18:48:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.65 Mbit/s

95th percentile per-packet one-way delay: 63.974 ms

Loss rate: 0.46%

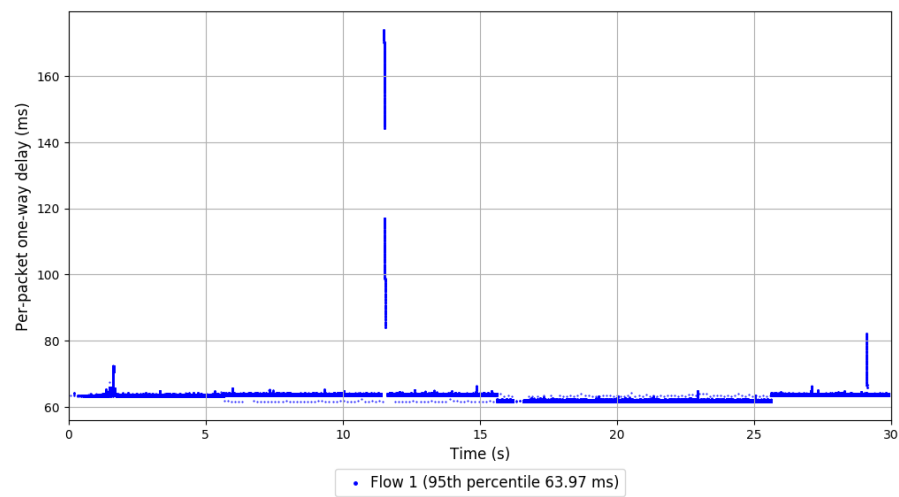
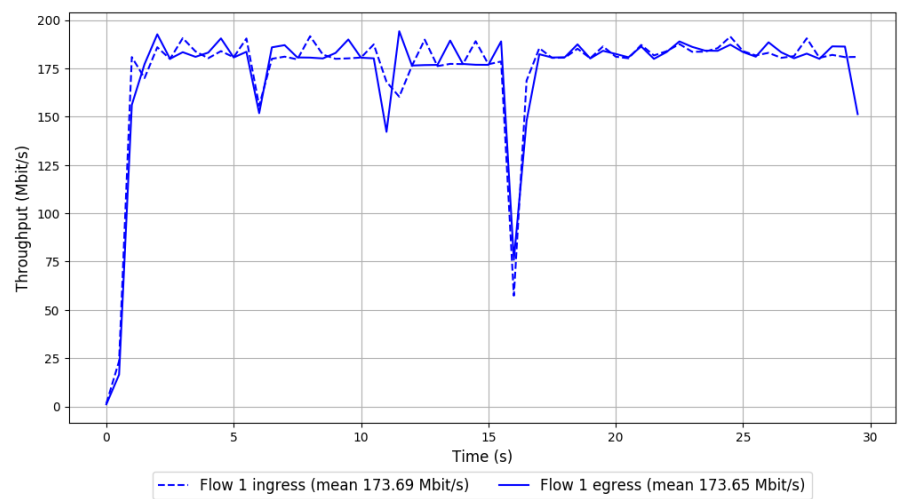
-- Flow 1:

Average throughput: 173.65 Mbit/s

95th percentile per-packet one-way delay: 63.974 ms

Loss rate: 0.46%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-30 15:38:49

End at: 2017-11-30 15:39:19

Below is generated by plot.py at 2017-11-30 18:48:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.69 Mbit/s

95th percentile per-packet one-way delay: 64.190 ms

Loss rate: 0.46%

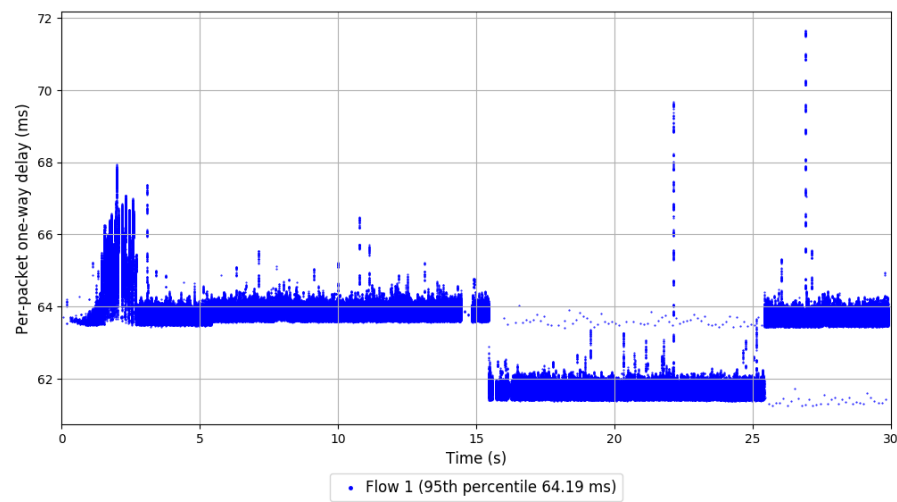
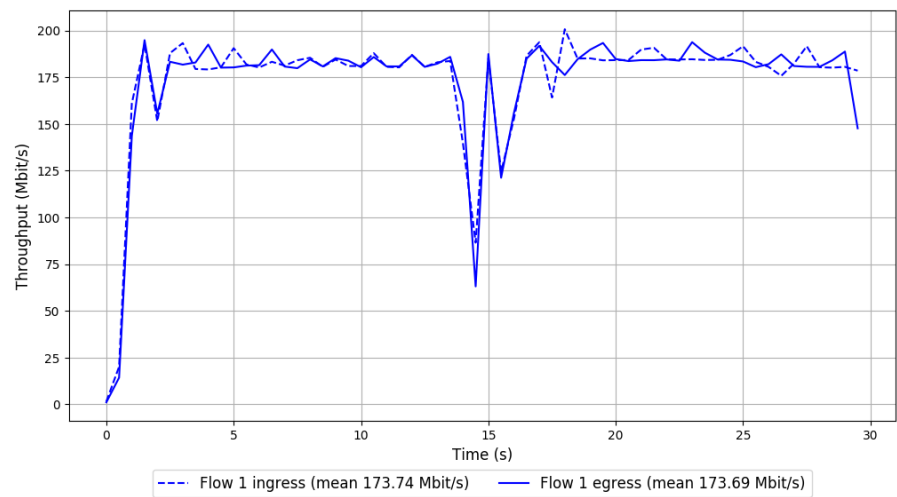
-- Flow 1:

Average throughput: 173.69 Mbit/s

95th percentile per-packet one-way delay: 64.190 ms

Loss rate: 0.46%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-30 15:49:04

End at: 2017-11-30 15:49:34

Below is generated by plot.py at 2017-11-30 18:48:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.60 Mbit/s

95th percentile per-packet one-way delay: 63.989 ms

Loss rate: 0.35%

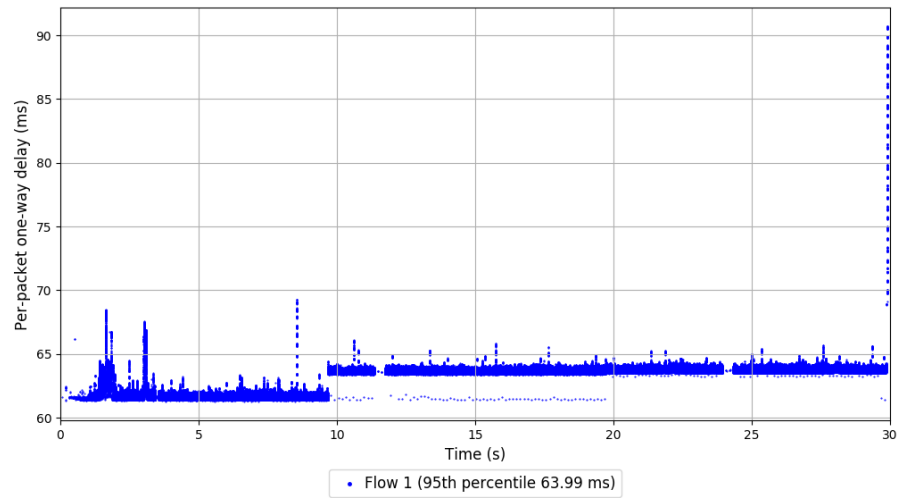
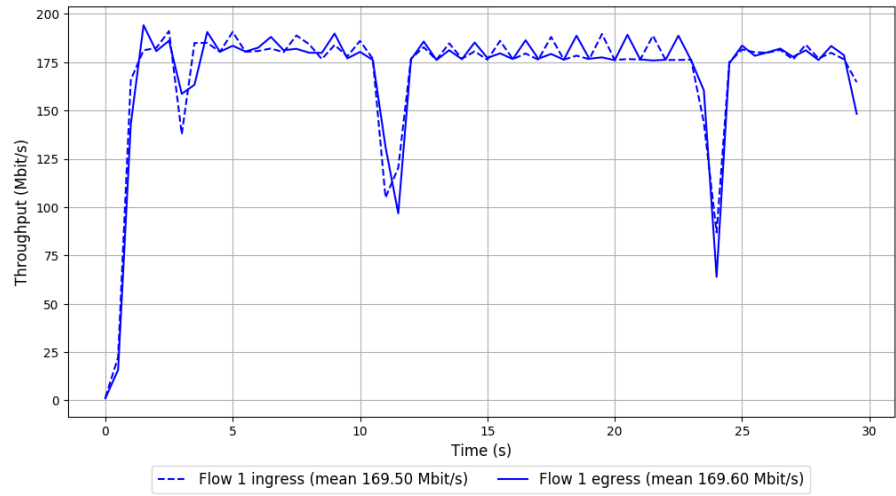
-- Flow 1:

Average throughput: 169.60 Mbit/s

95th percentile per-packet one-way delay: 63.989 ms

Loss rate: 0.35%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-30 15:59:46

End at: 2017-11-30 16:00:16

Below is generated by plot.py at 2017-11-30 18:48:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.90 Mbit/s

95th percentile per-packet one-way delay: 64.061 ms

Loss rate: 0.44%

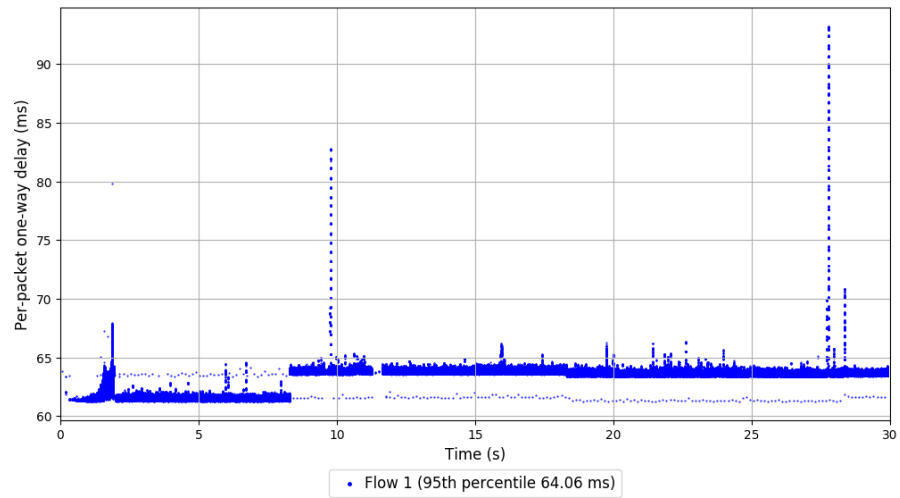
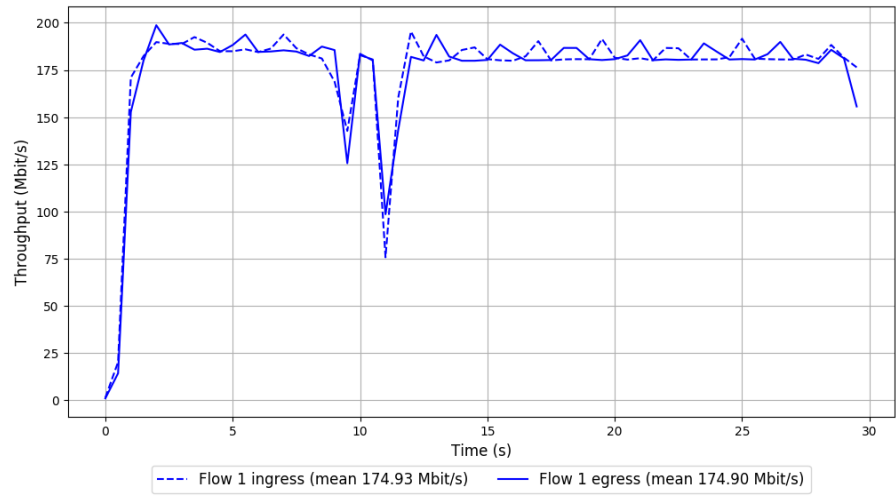
-- Flow 1:

Average throughput: 174.90 Mbit/s

95th percentile per-packet one-way delay: 64.061 ms

Loss rate: 0.44%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-30 16:10:12

End at: 2017-11-30 16:10:42

Below is generated by plot.py at 2017-11-30 18:48:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.95 Mbit/s

95th percentile per-packet one-way delay: 63.972 ms

Loss rate: 0.52%

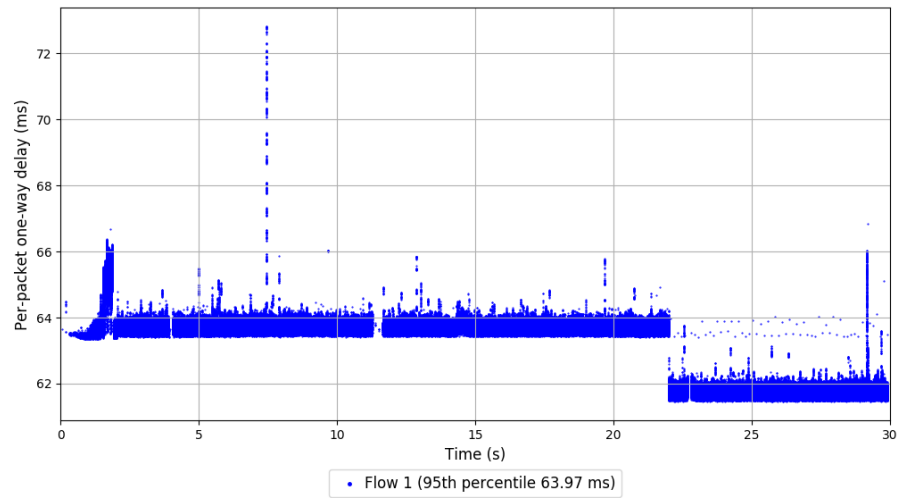
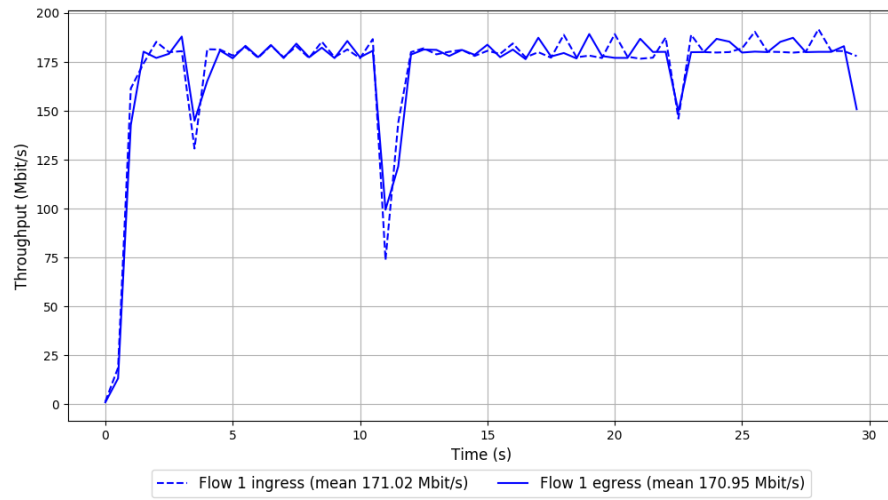
-- Flow 1:

Average throughput: 170.95 Mbit/s

95th percentile per-packet one-way delay: 63.972 ms

Loss rate: 0.52%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-30 16:20:46

End at: 2017-11-30 16:21:16

Below is generated by plot.py at 2017-11-30 18:48:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.53 Mbit/s

95th percentile per-packet one-way delay: 66.044 ms

Loss rate: 0.43%

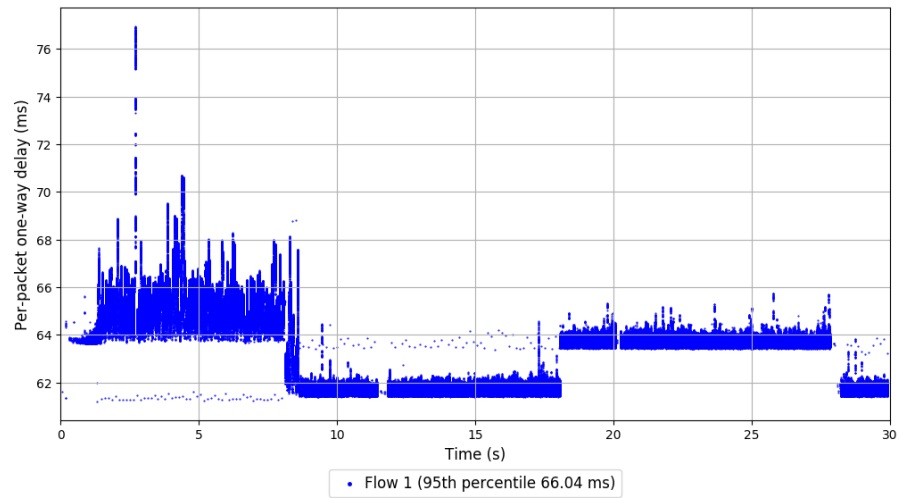
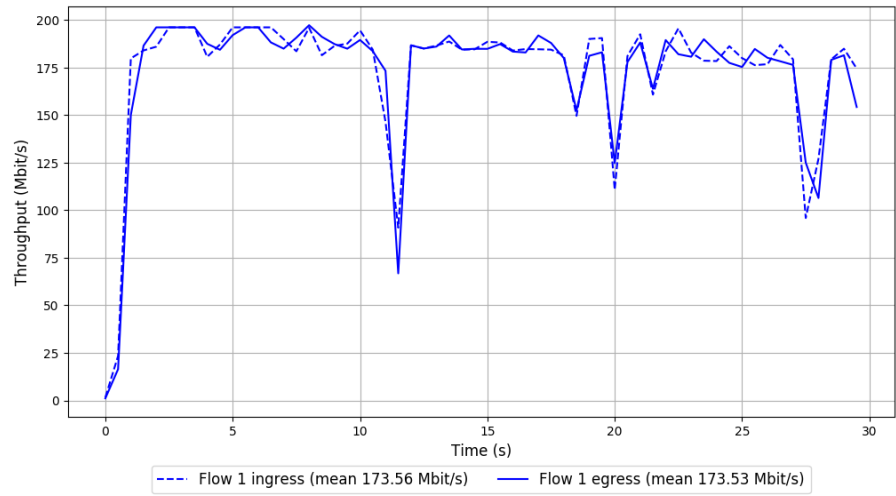
-- Flow 1:

Average throughput: 173.53 Mbit/s

95th percentile per-packet one-way delay: 66.044 ms

Loss rate: 0.43%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-30 16:31:16

End at: 2017-11-30 16:31:47

Below is generated by plot.py at 2017-11-30 18:48:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.23 Mbit/s

95th percentile per-packet one-way delay: 64.490 ms

Loss rate: 0.43%

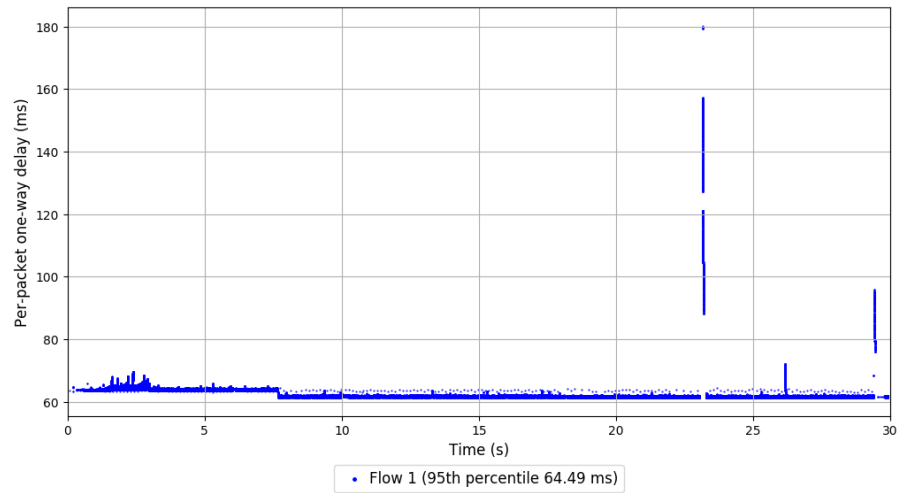
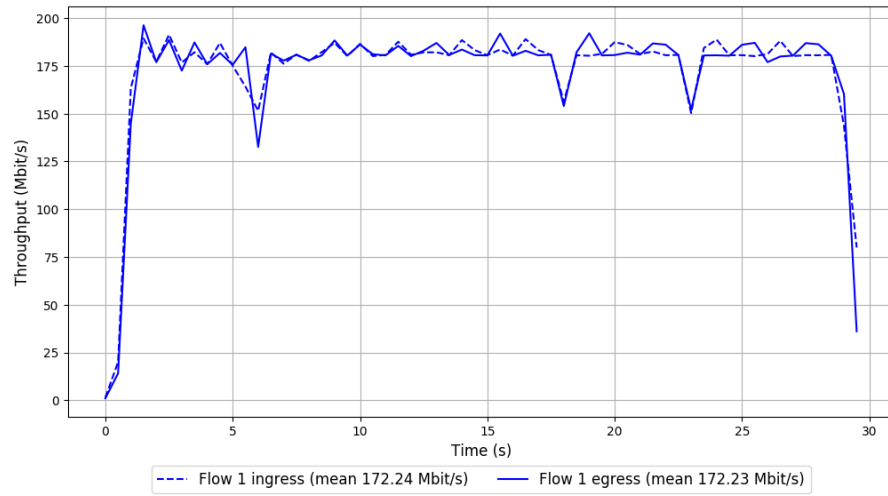
-- Flow 1:

Average throughput: 172.23 Mbit/s

95th percentile per-packet one-way delay: 64.490 ms

Loss rate: 0.43%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-30 16:41:52

End at: 2017-11-30 16:42:22

Below is generated by plot.py at 2017-11-30 18:50:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.40 Mbit/s

95th percentile per-packet one-way delay: 63.924 ms

Loss rate: 0.45%

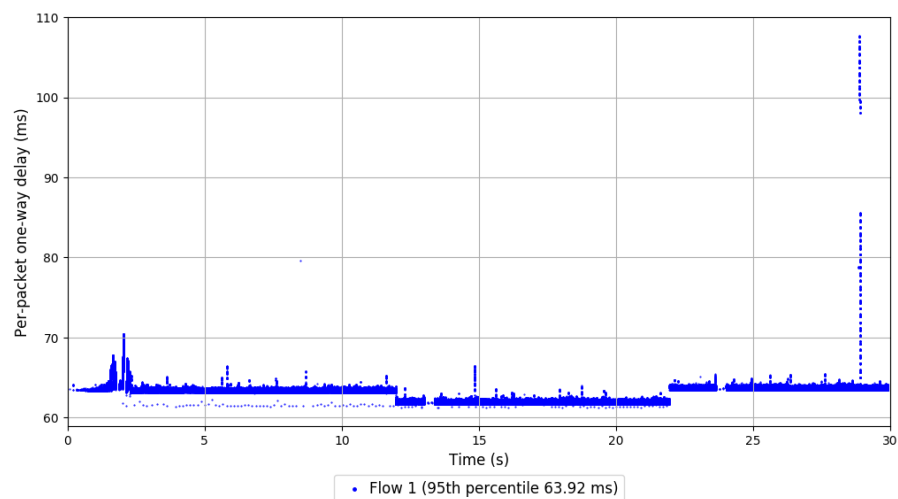
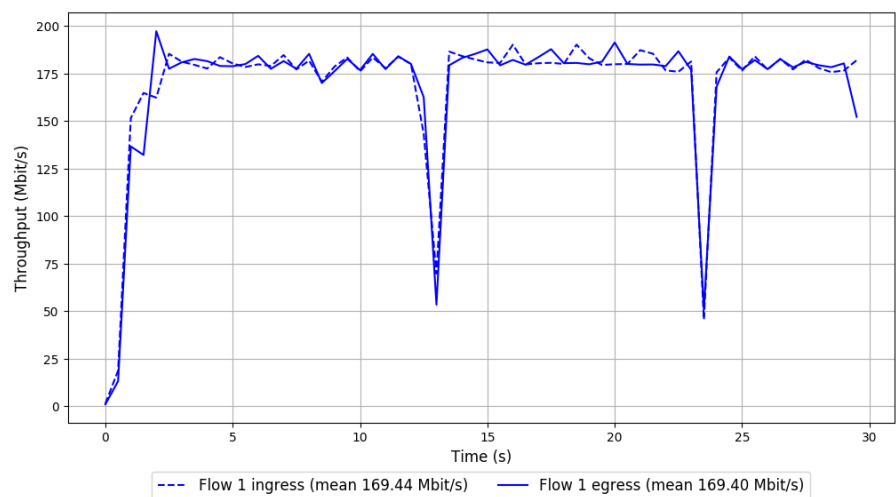
-- Flow 1:

Average throughput: 169.40 Mbit/s

95th percentile per-packet one-way delay: 63.924 ms

Loss rate: 0.45%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-30 16:52:31

End at: 2017-11-30 16:53:01

Below is generated by plot.py at 2017-11-30 18:51:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.13 Mbit/s

95th percentile per-packet one-way delay: 63.861 ms

Loss rate: 0.46%

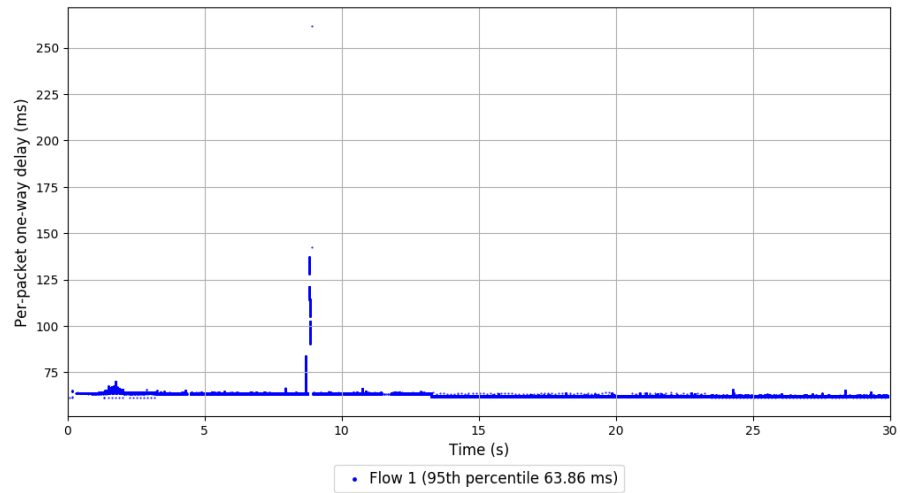
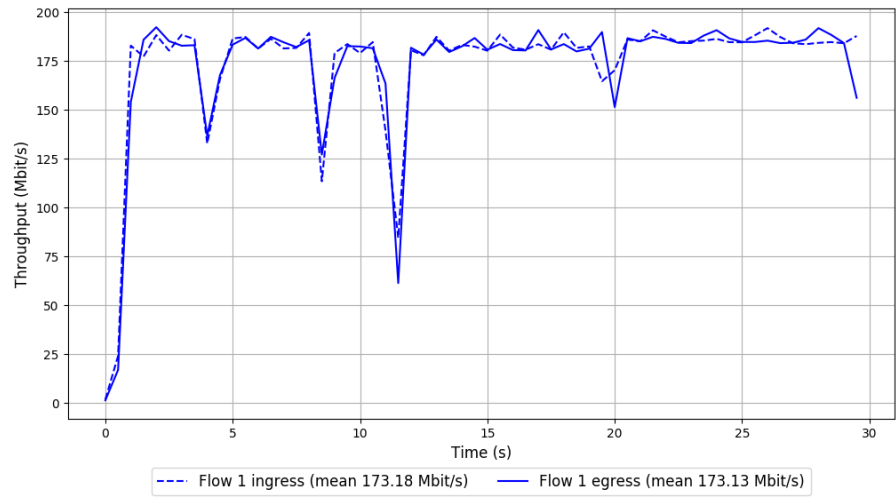
-- Flow 1:

Average throughput: 173.13 Mbit/s

95th percentile per-packet one-way delay: 63.861 ms

Loss rate: 0.46%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-30 15:13:46

End at: 2017-11-30 15:14:16

Below is generated by plot.py at 2017-11-30 18:51:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.38 Mbit/s

95th percentile per-packet one-way delay: 68.274 ms

Loss rate: 0.47%

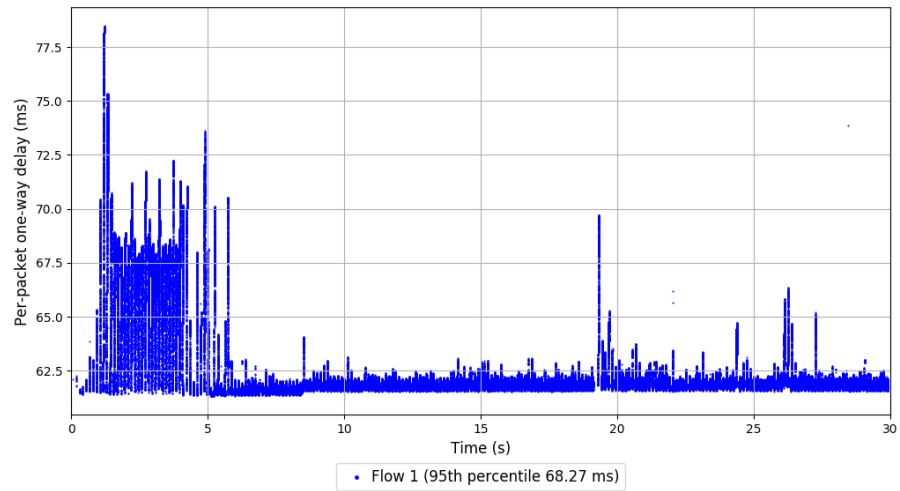
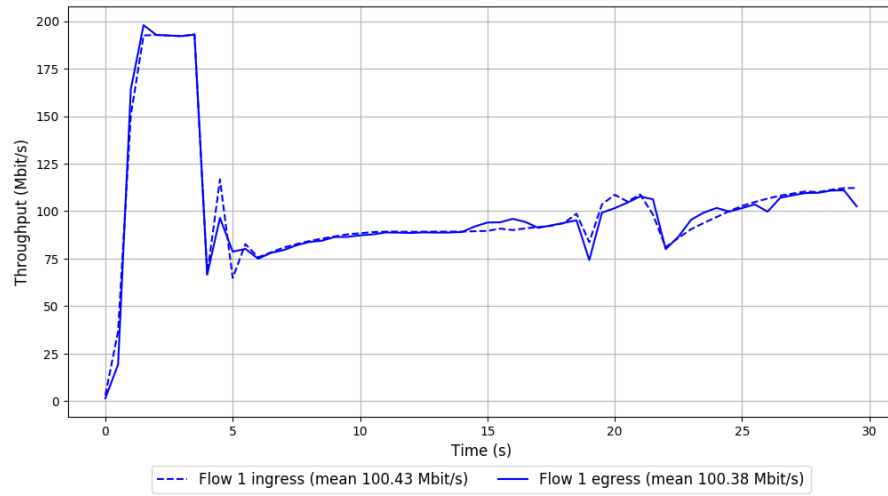
-- Flow 1:

Average throughput: 100.38 Mbit/s

95th percentile per-packet one-way delay: 68.274 ms

Loss rate: 0.47%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-30 15:24:19

End at: 2017-11-30 15:24:49

Below is generated by plot.py at 2017-11-30 18:51:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.38 Mbit/s

95th percentile per-packet one-way delay: 69.065 ms

Loss rate: 0.44%

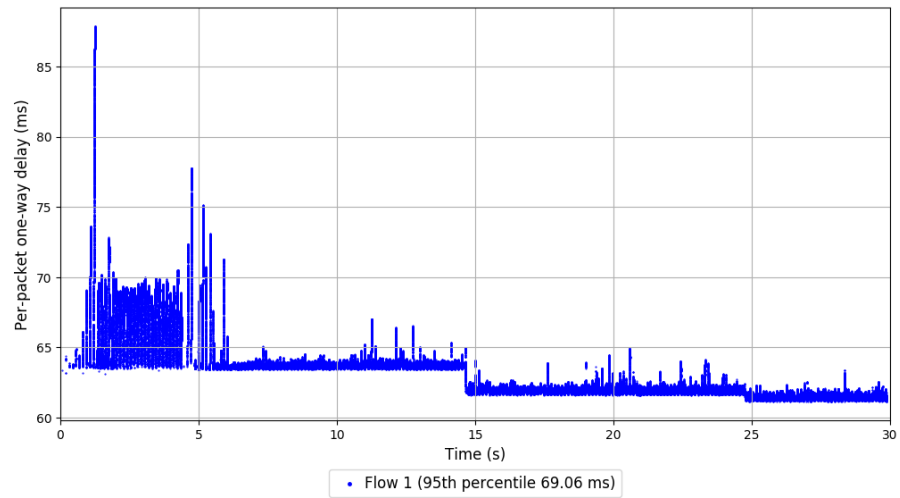
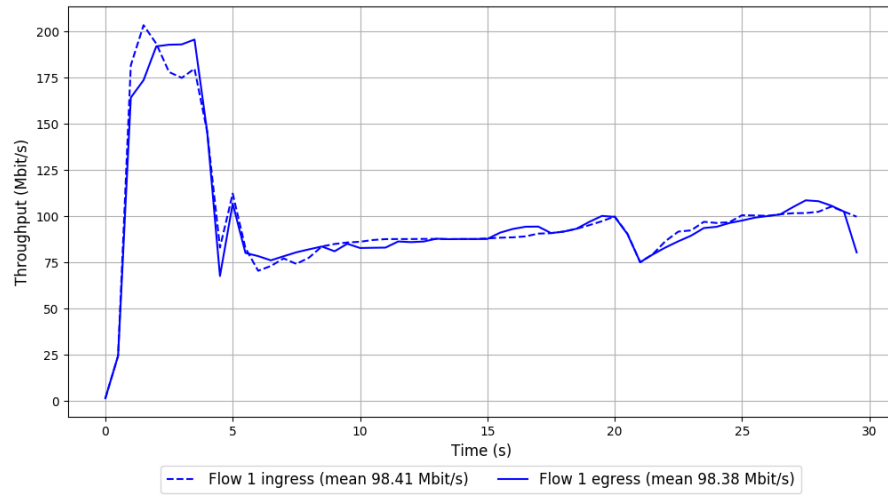
-- Flow 1:

Average throughput: 98.38 Mbit/s

95th percentile per-packet one-way delay: 69.065 ms

Loss rate: 0.44%

Run 2: Report of TCP Cubic — Data Link

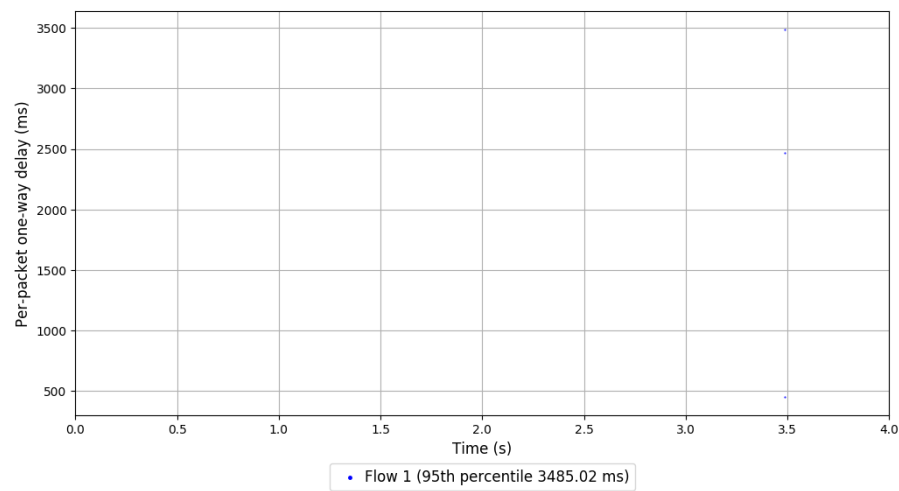
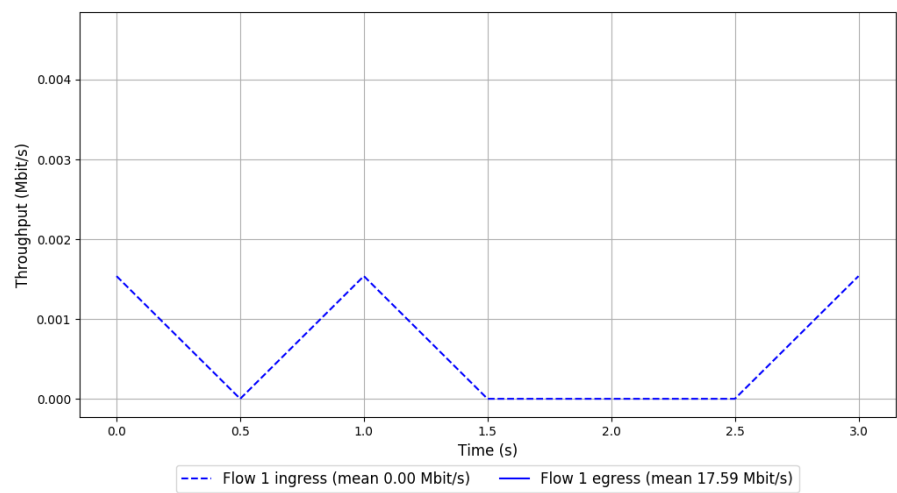


Run 3: Statistics of TCP Cubic

Start at: 2017-11-30 15:34:42

End at: 2017-11-30 15:35:12

Run 3: Report of TCP Cubic — Data Link

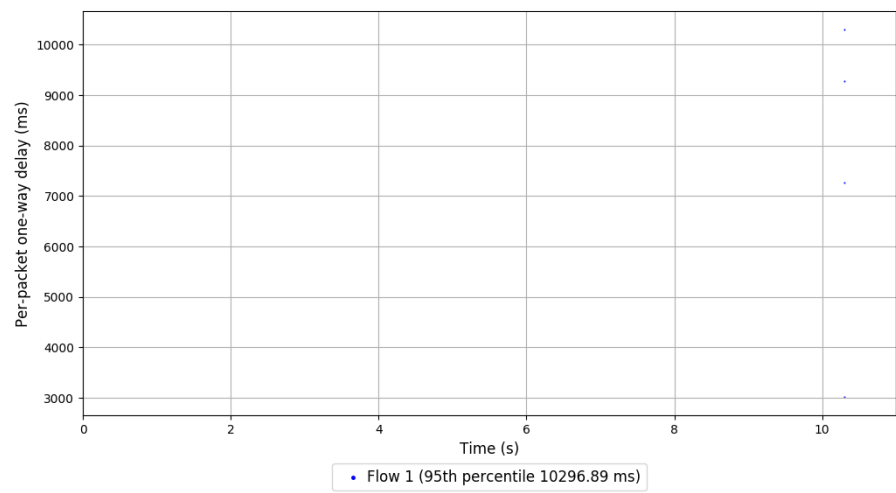
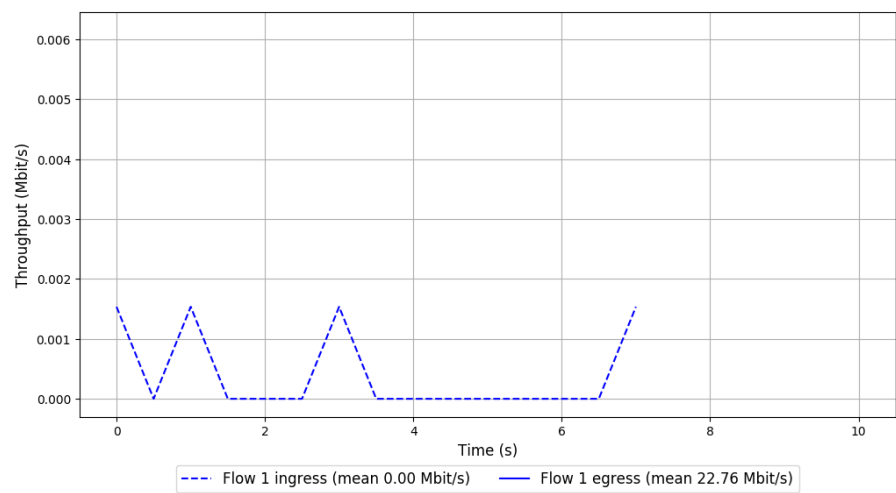


Run 4: Statistics of TCP Cubic

Start at: 2017-11-30 15:44:57

End at: 2017-11-30 15:45:27

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-30 15:55:30

End at: 2017-11-30 15:56:00

Below is generated by plot.py at 2017-11-30 18:51:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 130.33 Mbit/s

95th percentile per-packet one-way delay: 69.940 ms

Loss rate: 0.27%

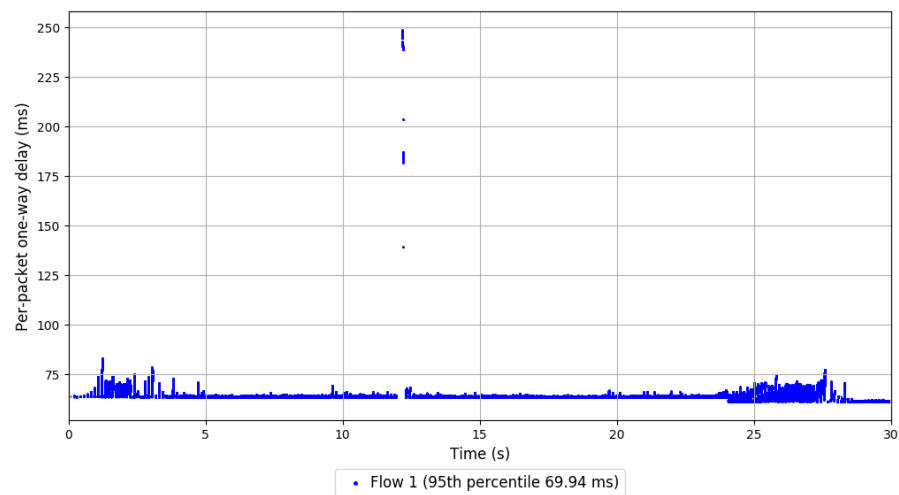
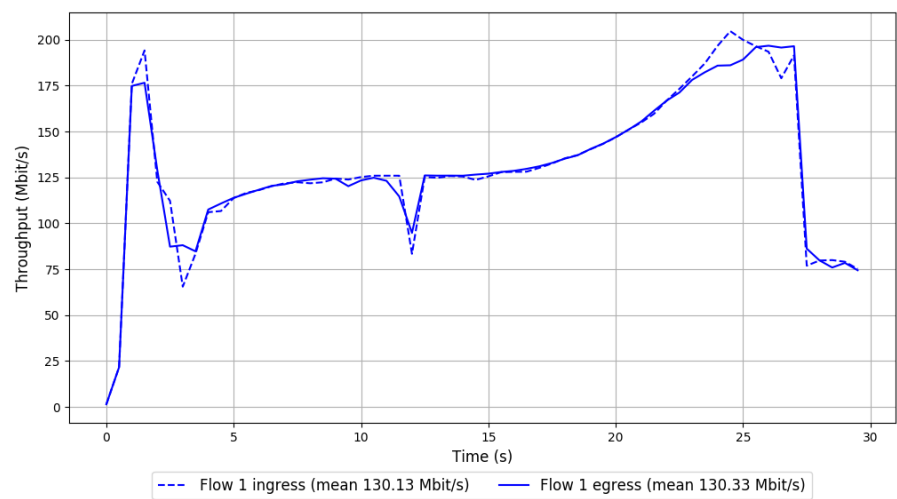
-- Flow 1:

Average throughput: 130.33 Mbit/s

95th percentile per-packet one-way delay: 69.940 ms

Loss rate: 0.27%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-30 16:06:03

End at: 2017-11-30 16:06:33

Below is generated by plot.py at 2017-11-30 18:51:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.00 Mbit/s

95th percentile per-packet one-way delay: 71.434 ms

Loss rate: 0.51%

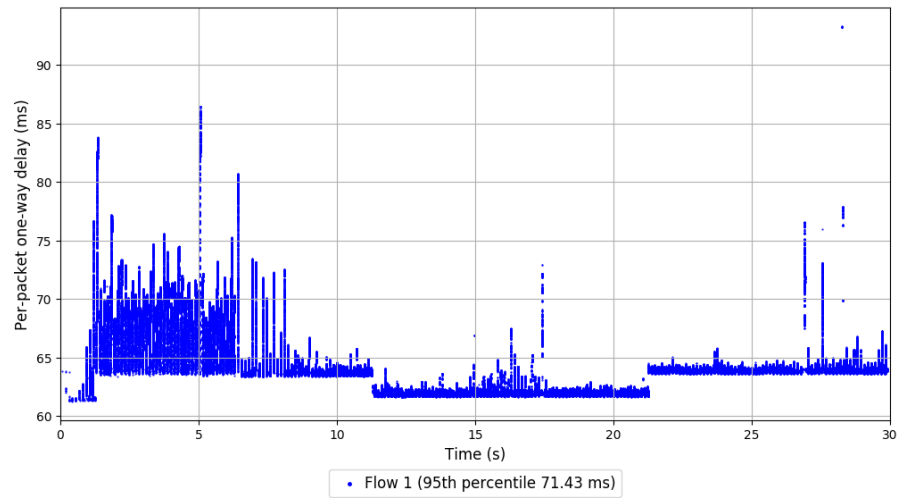
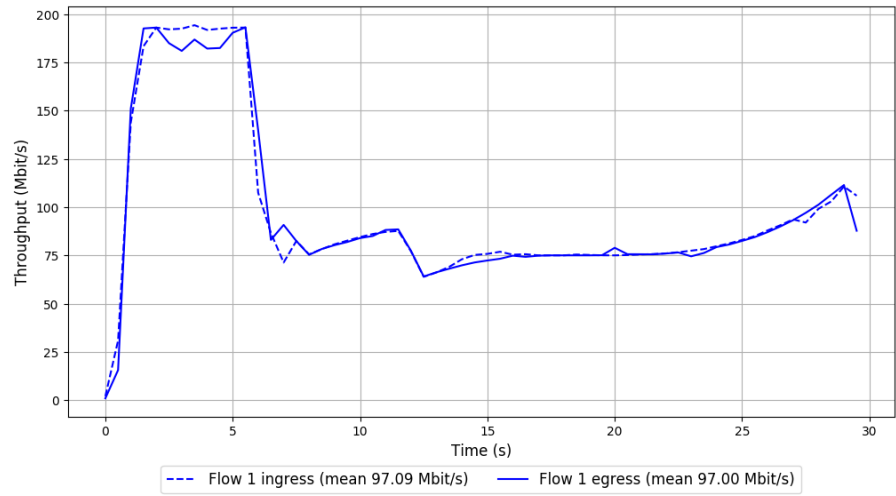
-- Flow 1:

Average throughput: 97.00 Mbit/s

95th percentile per-packet one-way delay: 71.434 ms

Loss rate: 0.51%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-30 16:16:37

End at: 2017-11-30 16:17:07

Below is generated by plot.py at 2017-11-30 18:51:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.64 Mbit/s

95th percentile per-packet one-way delay: 72.135 ms

Loss rate: 0.30%

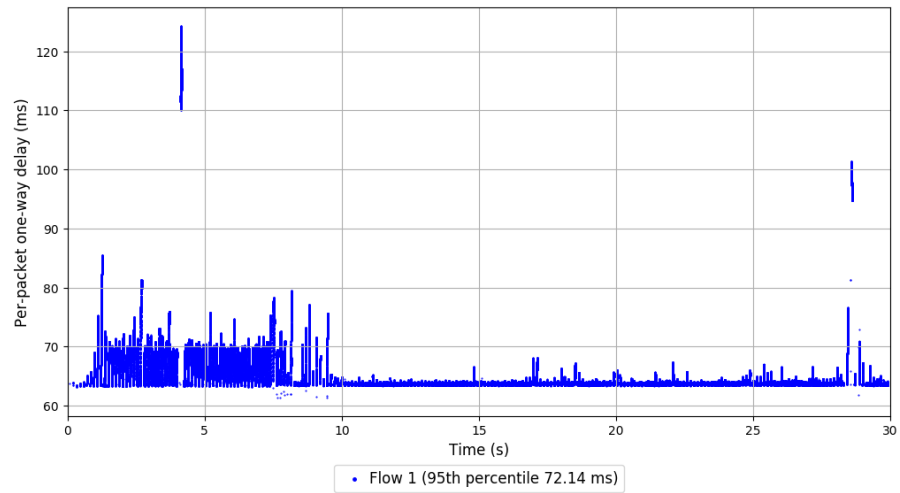
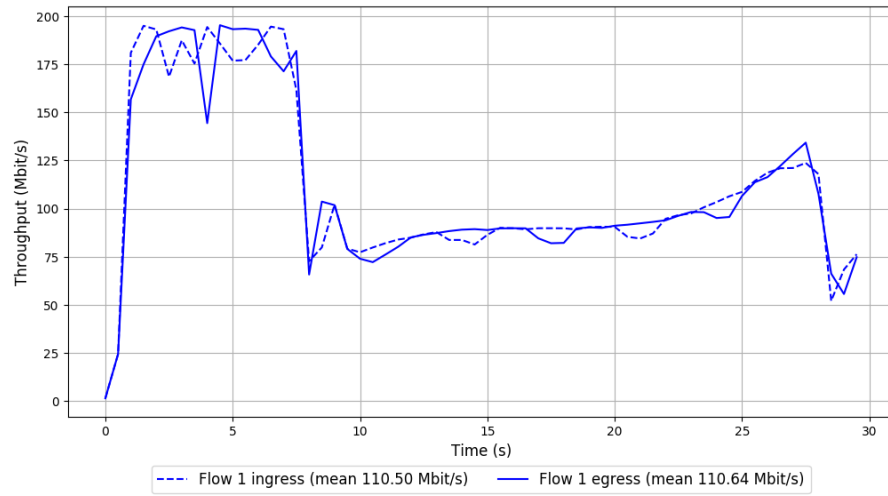
-- Flow 1:

Average throughput: 110.64 Mbit/s

95th percentile per-packet one-way delay: 72.135 ms

Loss rate: 0.30%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-30 16:27:14

End at: 2017-11-30 16:27:44

Below is generated by plot.py at 2017-11-30 18:51:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.42 Mbit/s

95th percentile per-packet one-way delay: 64.766 ms

Loss rate: 0.37%

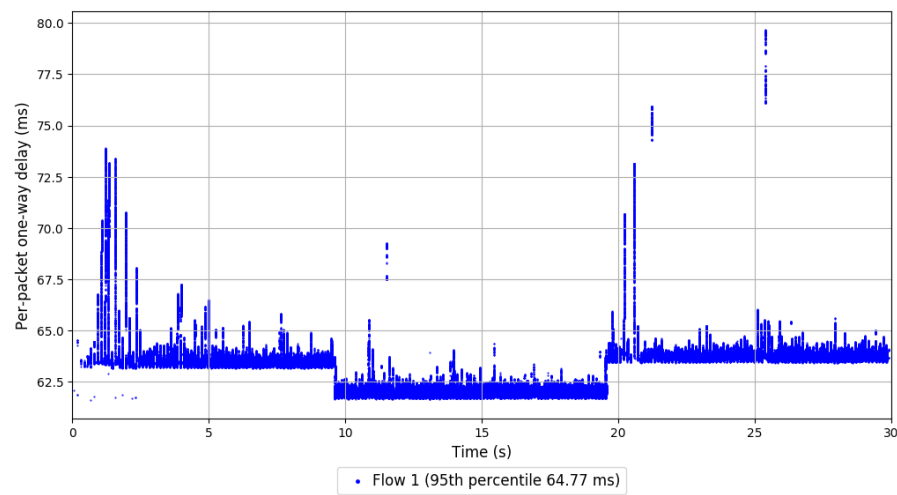
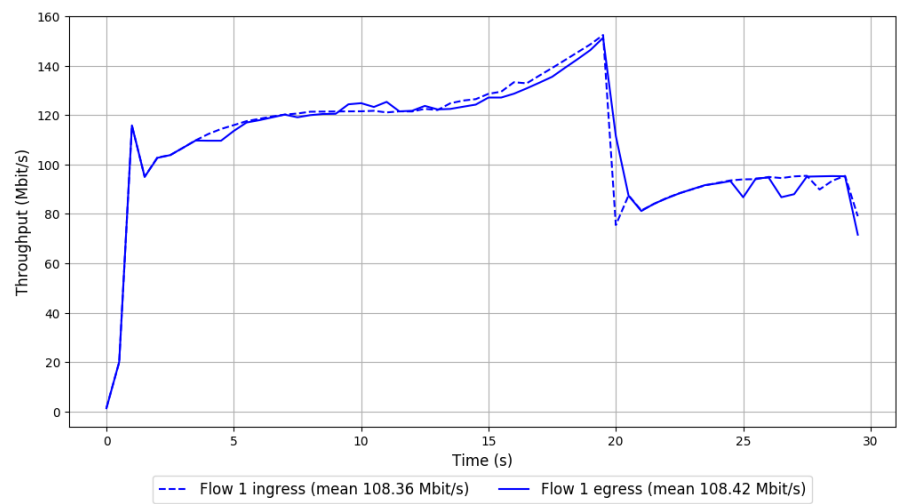
-- Flow 1:

Average throughput: 108.42 Mbit/s

95th percentile per-packet one-way delay: 64.766 ms

Loss rate: 0.37%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-30 16:37:41

End at: 2017-11-30 16:38:11

Below is generated by plot.py at 2017-11-30 18:51:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.63 Mbit/s

95th percentile per-packet one-way delay: 67.757 ms

Loss rate: 0.41%

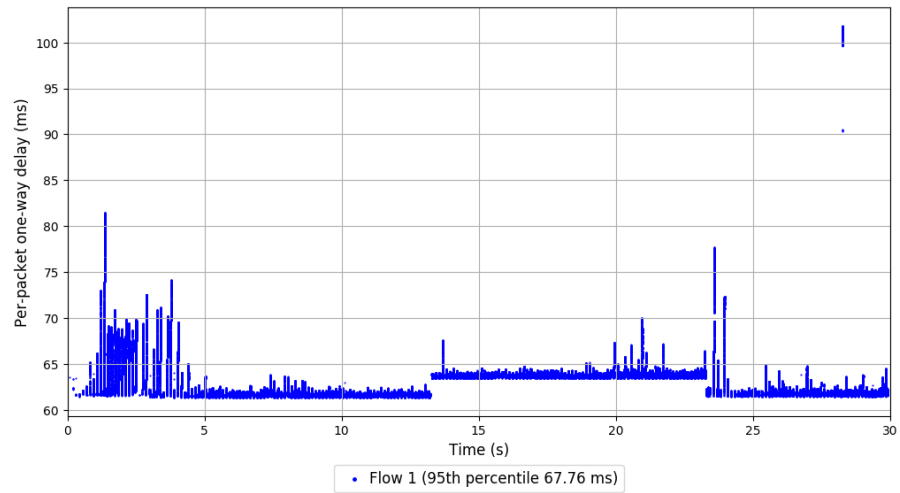
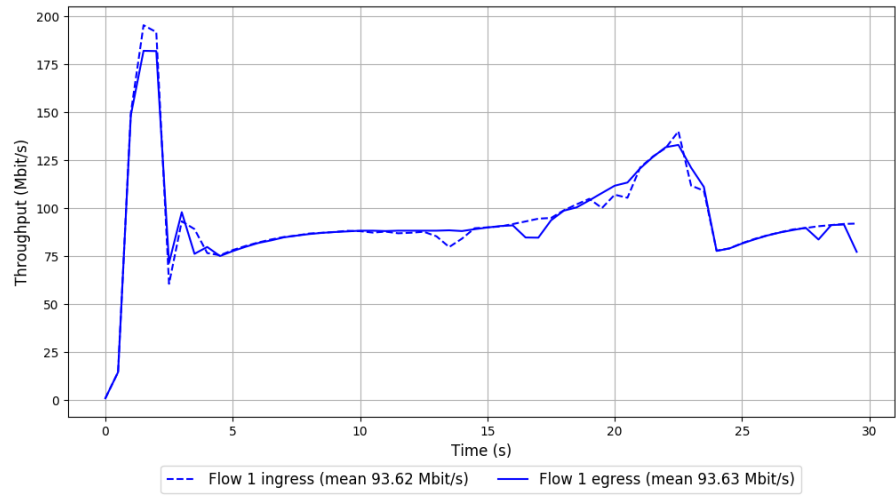
-- Flow 1:

Average throughput: 93.63 Mbit/s

95th percentile per-packet one-way delay: 67.757 ms

Loss rate: 0.41%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-30 16:48:16

End at: 2017-11-30 16:48:46

Below is generated by plot.py at 2017-11-30 18:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.40 Mbit/s

95th percentile per-packet one-way delay: 70.930 ms

Loss rate: 0.42%

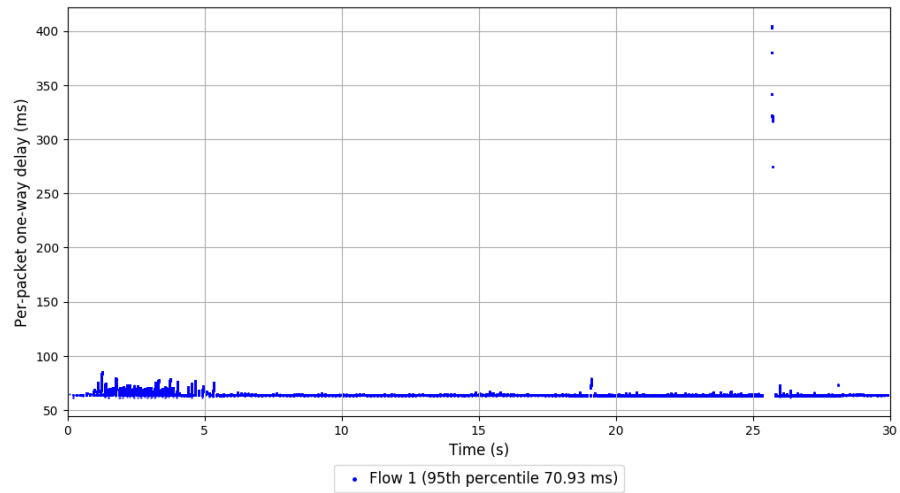
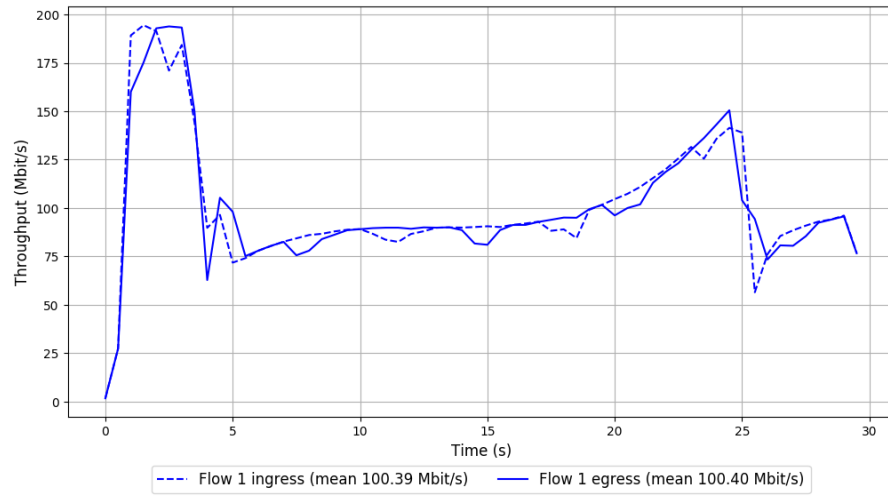
-- Flow 1:

Average throughput: 100.40 Mbit/s

95th percentile per-packet one-way delay: 70.930 ms

Loss rate: 0.42%

Run 10: Report of TCP Cubic — Data Link

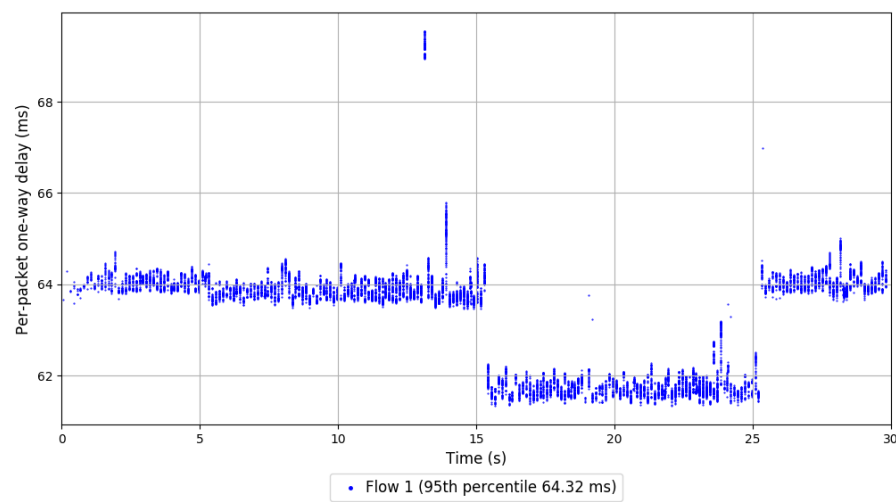
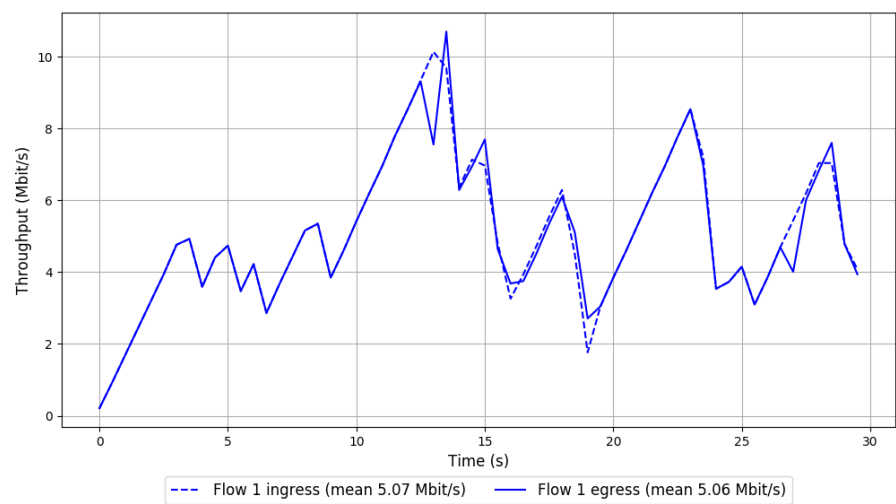


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-30 15:14:29
End at: 2017-11-30 15:14:59

# Below is generated by plot.py at 2017-11-30 18:51:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.06 Mbit/s
95th percentile per-packet one-way delay: 64.324 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 5.06 Mbit/s
95th percentile per-packet one-way delay: 64.324 ms
Loss rate: 0.57%
```


Run 1: Report of LEDBAT — Data Link

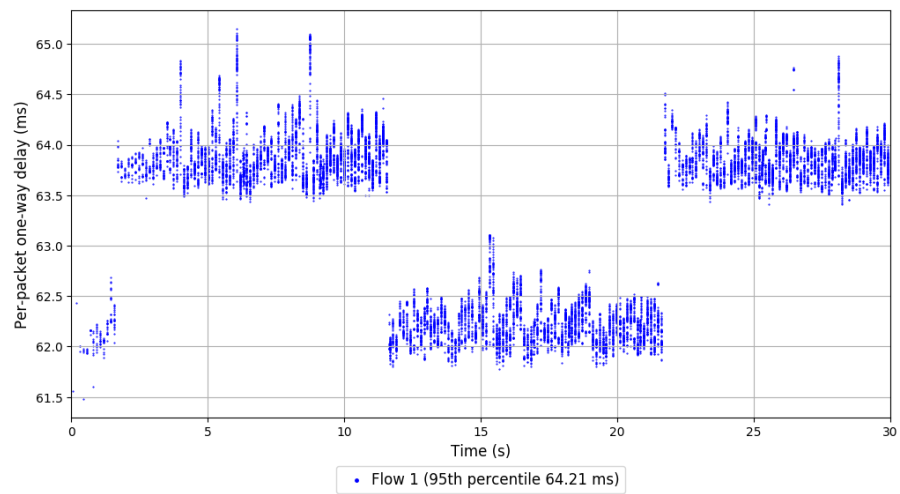
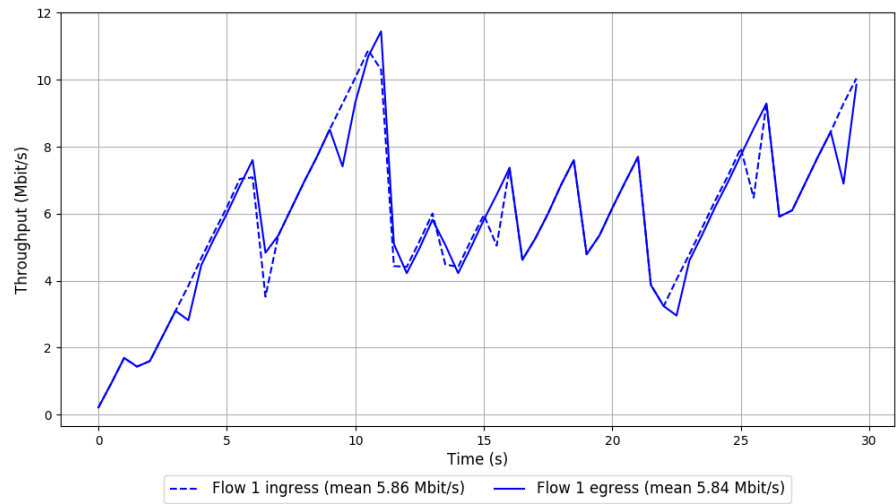


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-30 15:25:02
End at: 2017-11-30 15:25:32

# Below is generated by plot.py at 2017-11-30 18:51:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.84 Mbit/s
95th percentile per-packet one-way delay: 64.211 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 5.84 Mbit/s
95th percentile per-packet one-way delay: 64.211 ms
Loss rate: 0.73%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-30 15:35:19

End at: 2017-11-30 15:35:49

Below is generated by plot.py at 2017-11-30 18:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.17 Mbit/s

95th percentile per-packet one-way delay: 64.384 ms

Loss rate: 0.65%

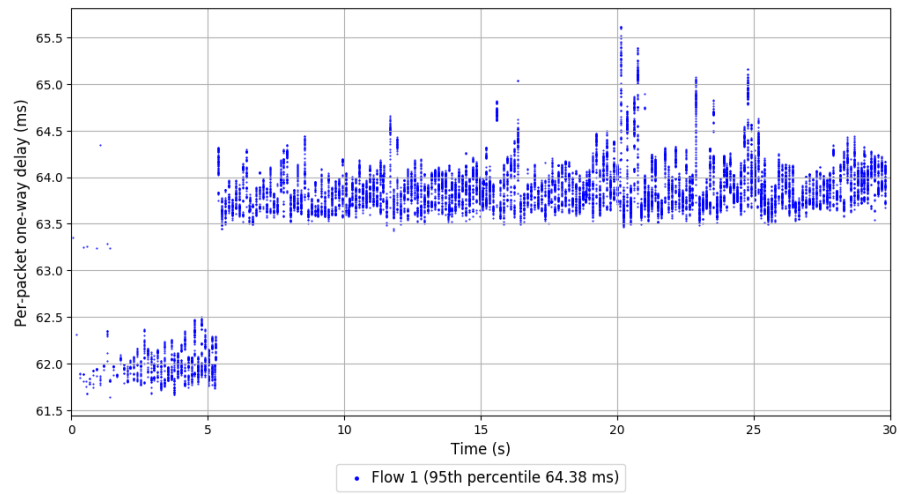
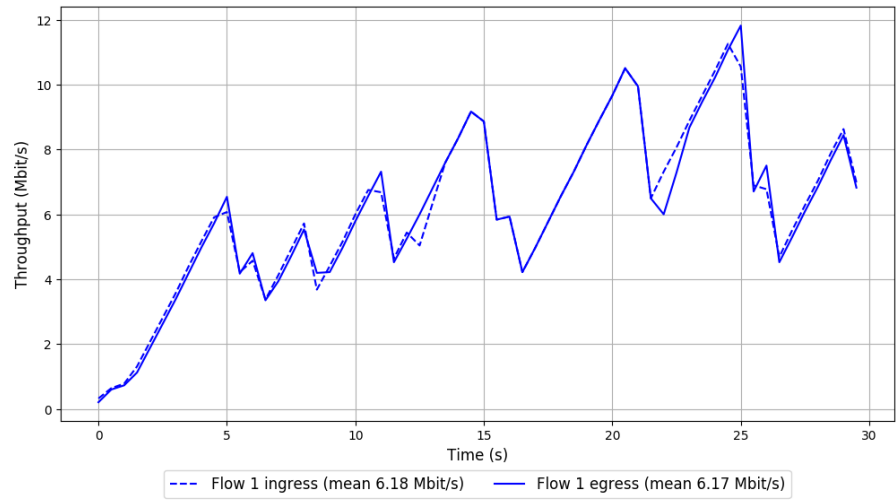
-- Flow 1:

Average throughput: 6.17 Mbit/s

95th percentile per-packet one-way delay: 64.384 ms

Loss rate: 0.65%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-30 15:45:35

End at: 2017-11-30 15:46:05

Below is generated by plot.py at 2017-11-30 18:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.92 Mbit/s

95th percentile per-packet one-way delay: 64.178 ms

Loss rate: 0.37%

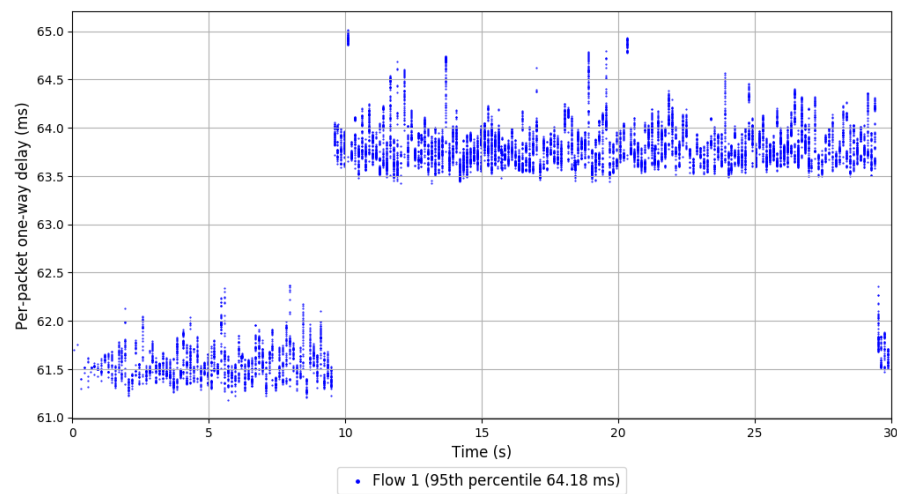
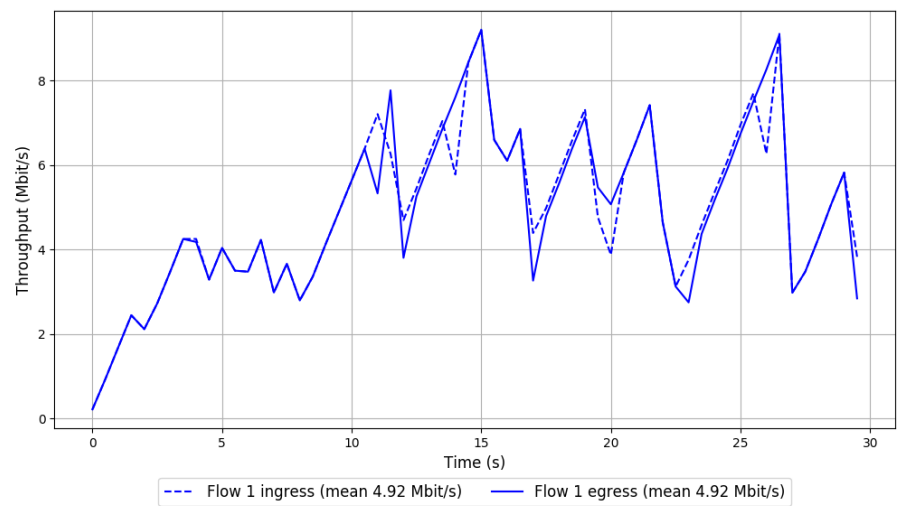
-- Flow 1:

Average throughput: 4.92 Mbit/s

95th percentile per-packet one-way delay: 64.178 ms

Loss rate: 0.37%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-30 15:56:15

End at: 2017-11-30 15:56:45

Below is generated by plot.py at 2017-11-30 18:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.69 Mbit/s

95th percentile per-packet one-way delay: 64.173 ms

Loss rate: 0.48%

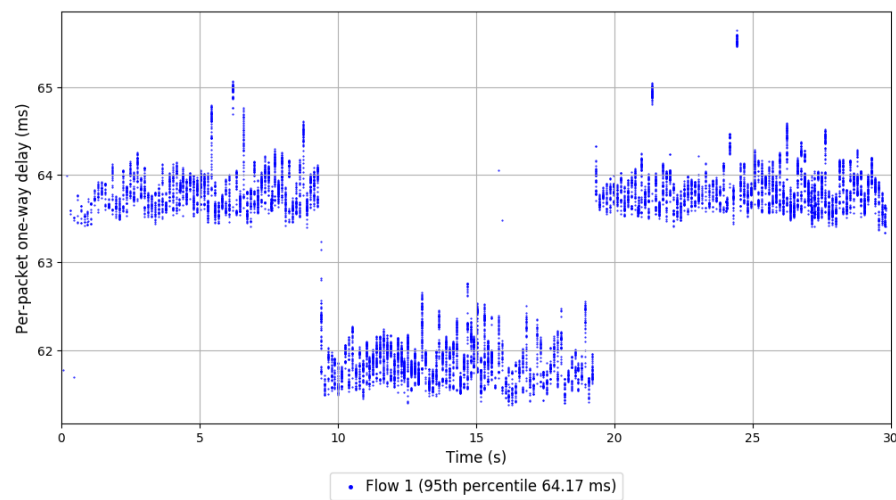
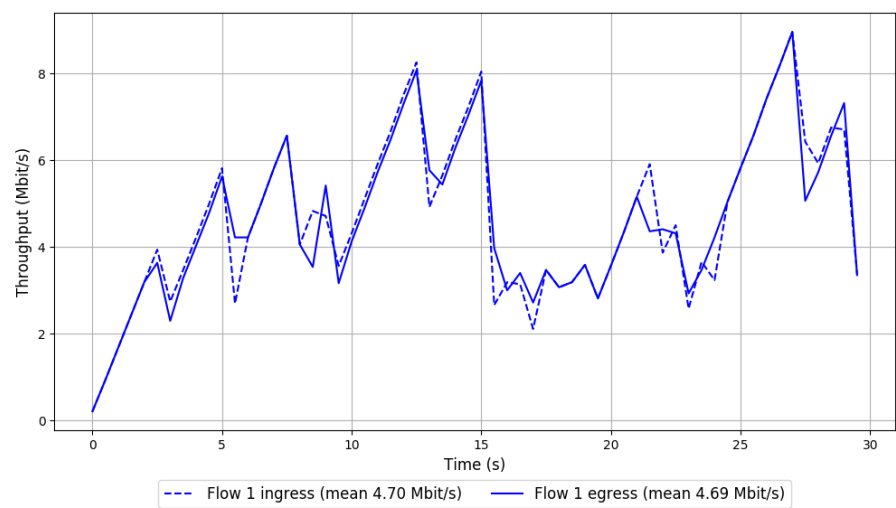
-- Flow 1:

Average throughput: 4.69 Mbit/s

95th percentile per-packet one-way delay: 64.173 ms

Loss rate: 0.48%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-30 16:06:46

End at: 2017-11-30 16:07:16

Below is generated by plot.py at 2017-11-30 18:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.23 Mbit/s

95th percentile per-packet one-way delay: 64.356 ms

Loss rate: 1.12%

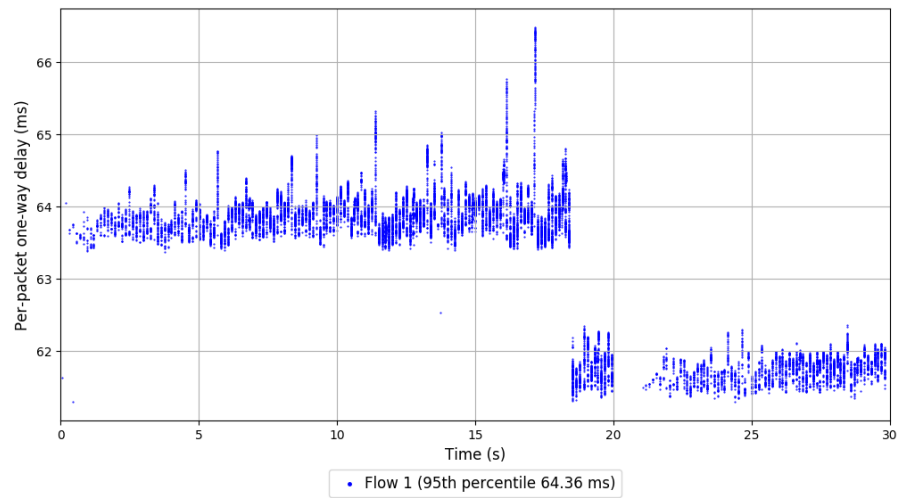
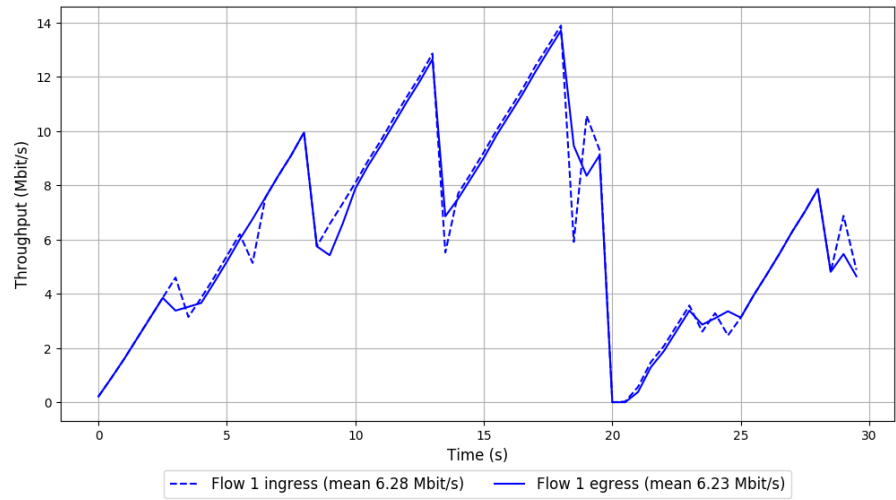
-- Flow 1:

Average throughput: 6.23 Mbit/s

95th percentile per-packet one-way delay: 64.356 ms

Loss rate: 1.12%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-30 16:17:20

End at: 2017-11-30 16:17:50

Below is generated by plot.py at 2017-11-30 18:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.55 Mbit/s

95th percentile per-packet one-way delay: 64.296 ms

Loss rate: 0.08%

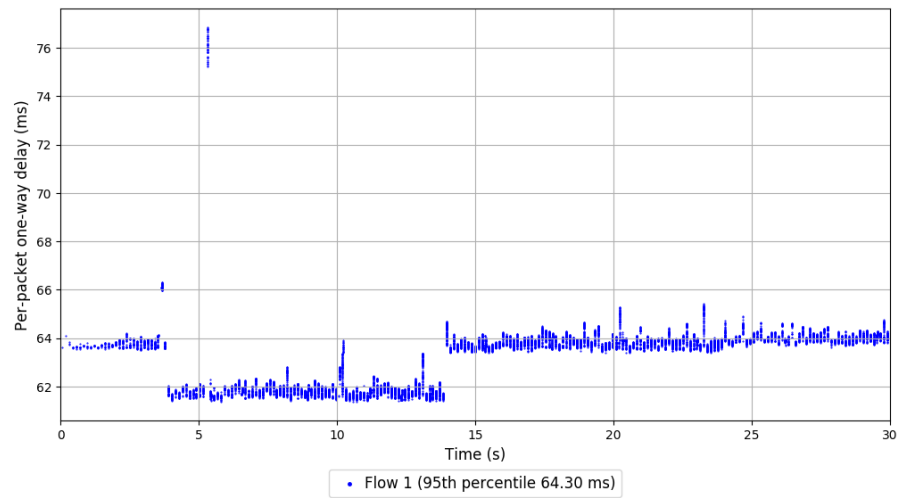
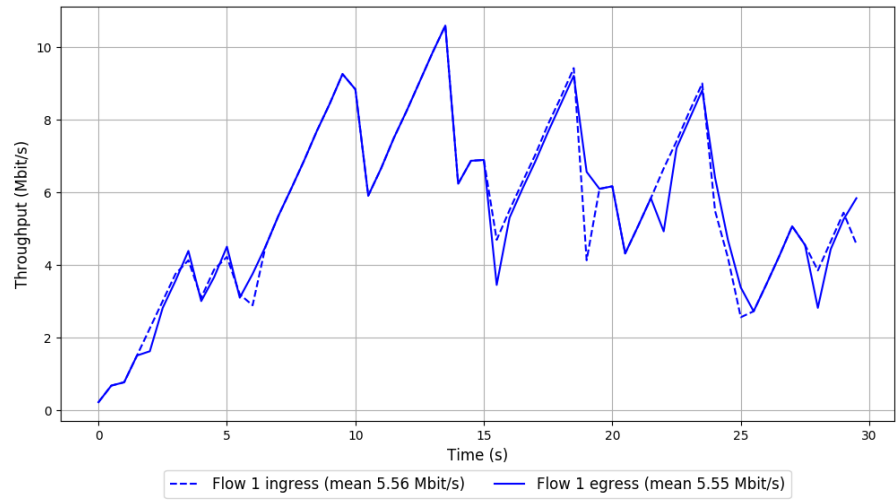
-- Flow 1:

Average throughput: 5.55 Mbit/s

95th percentile per-packet one-way delay: 64.296 ms

Loss rate: 0.08%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-30 16:27:58

End at: 2017-11-30 16:28:28

Below is generated by plot.py at 2017-11-30 18:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.64 Mbit/s

95th percentile per-packet one-way delay: 64.406 ms

Loss rate: 0.69%

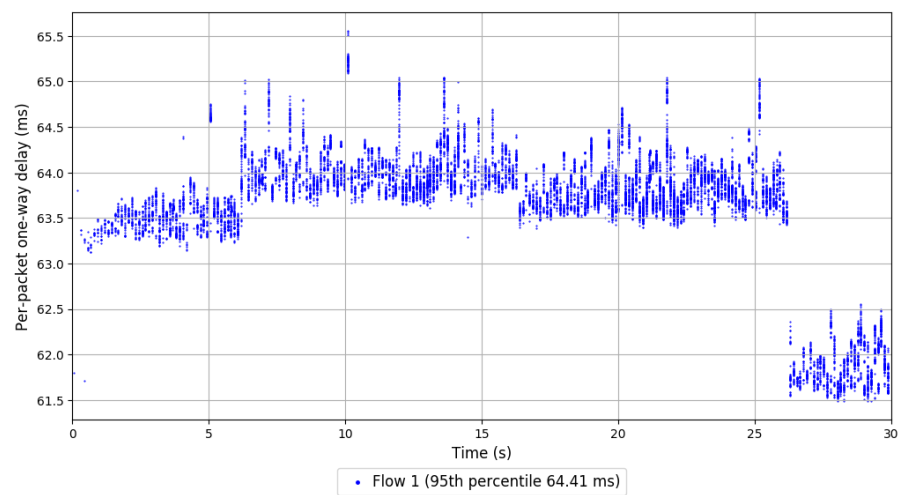
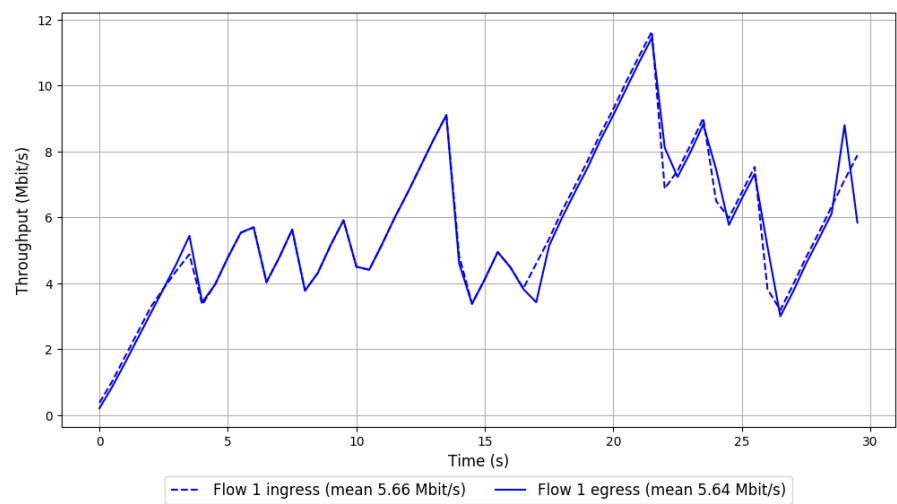
-- Flow 1:

Average throughput: 5.64 Mbit/s

95th percentile per-packet one-way delay: 64.406 ms

Loss rate: 0.69%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-30 16:38:24

End at: 2017-11-30 16:38:54

Below is generated by plot.py at 2017-11-30 18:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 64.115 ms

Loss rate: 0.46%

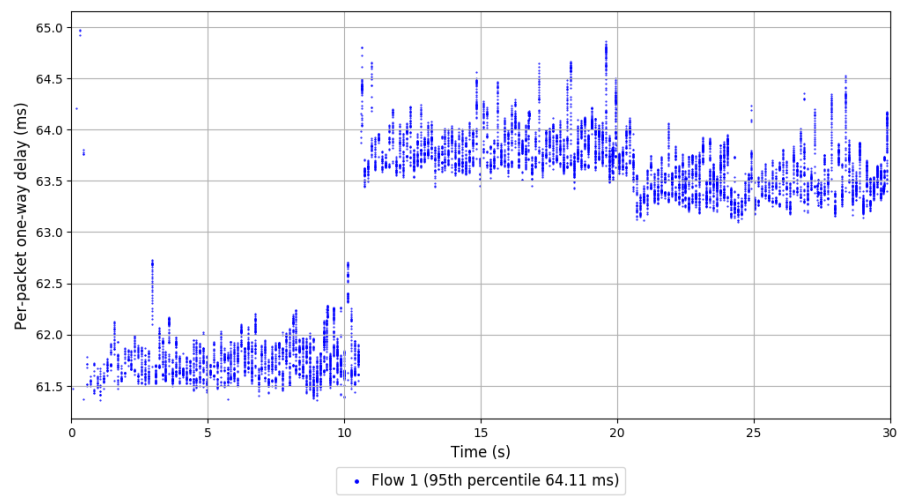
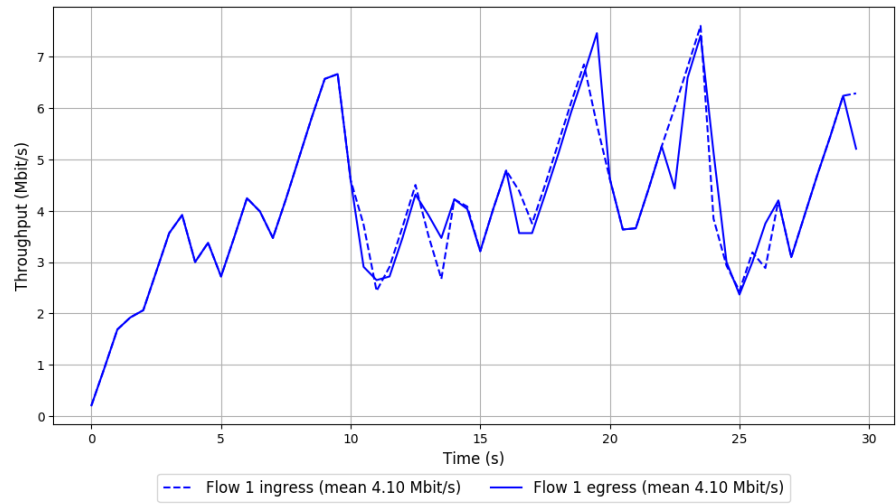
-- Flow 1:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 64.115 ms

Loss rate: 0.46%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-30 16:48:59

End at: 2017-11-30 16:49:29

Below is generated by plot.py at 2017-11-30 18:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.80 Mbit/s

95th percentile per-packet one-way delay: 62.212 ms

Loss rate: 0.78%

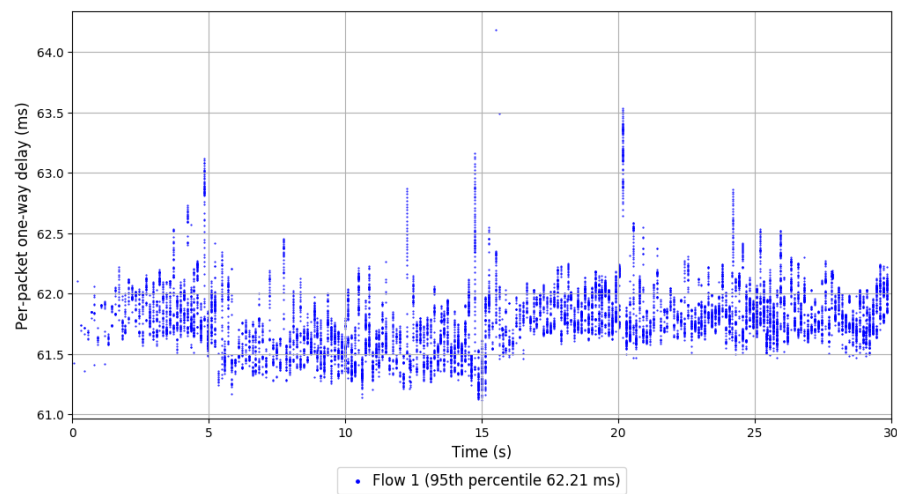
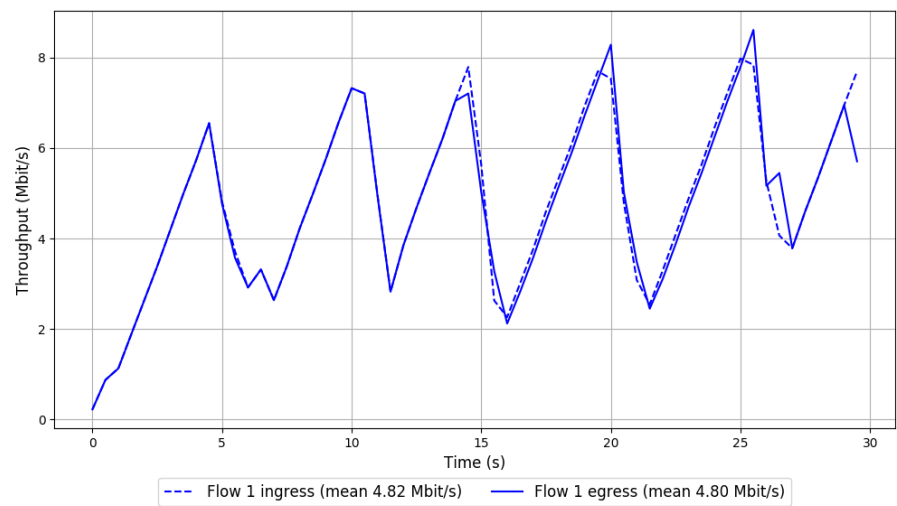
-- Flow 1:

Average throughput: 4.80 Mbit/s

95th percentile per-packet one-way delay: 62.212 ms

Loss rate: 0.78%

Run 10: Report of LEDBAT — Data Link

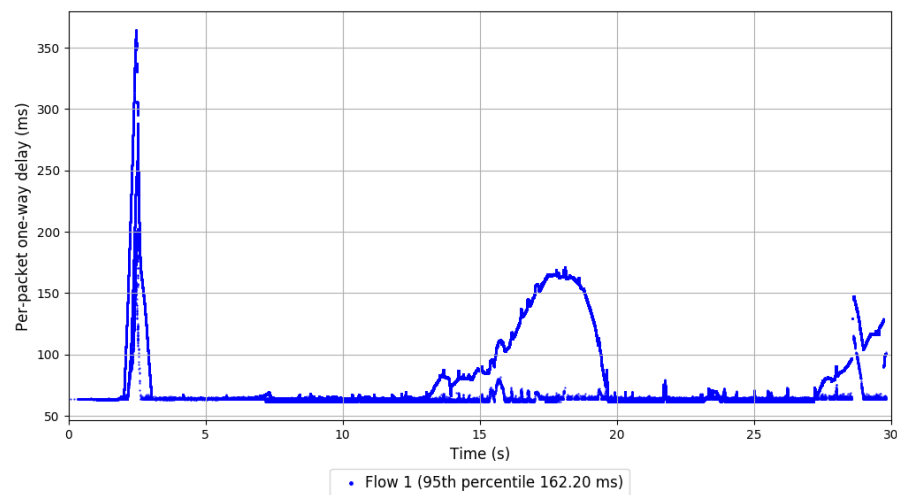
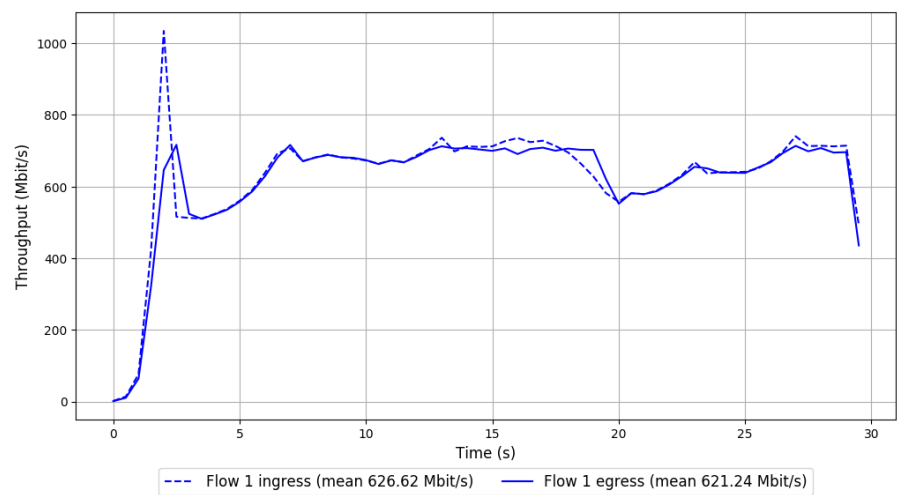


```
Run 1: Statistics of PCC

Start at: 2017-11-30 15:18:47
End at: 2017-11-30 15:19:17

# Below is generated by plot.py at 2017-11-30 19:00:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 621.24 Mbit/s
95th percentile per-packet one-way delay: 162.204 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 621.24 Mbit/s
95th percentile per-packet one-way delay: 162.204 ms
Loss rate: 1.28%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-30 15:29:15

End at: 2017-11-30 15:29:45

Below is generated by plot.py at 2017-11-30 19:00:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 589.79 Mbit/s

95th percentile per-packet one-way delay: 154.380 ms

Loss rate: 1.20%

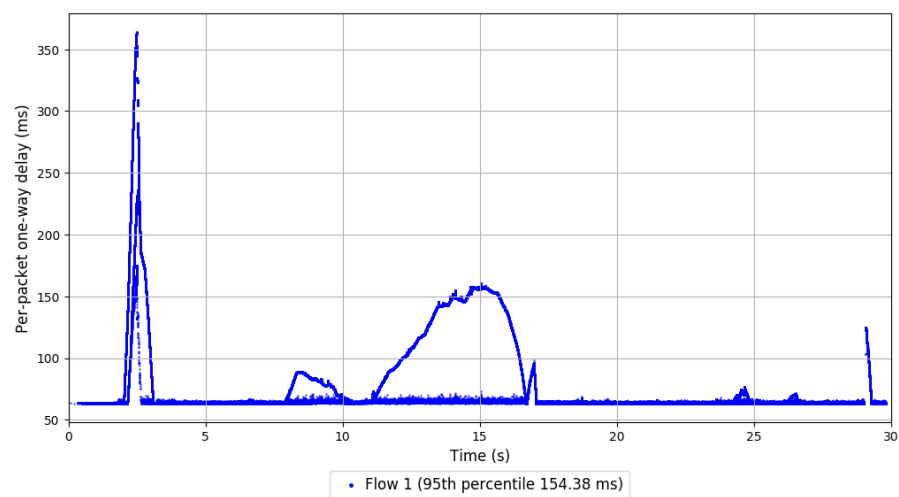
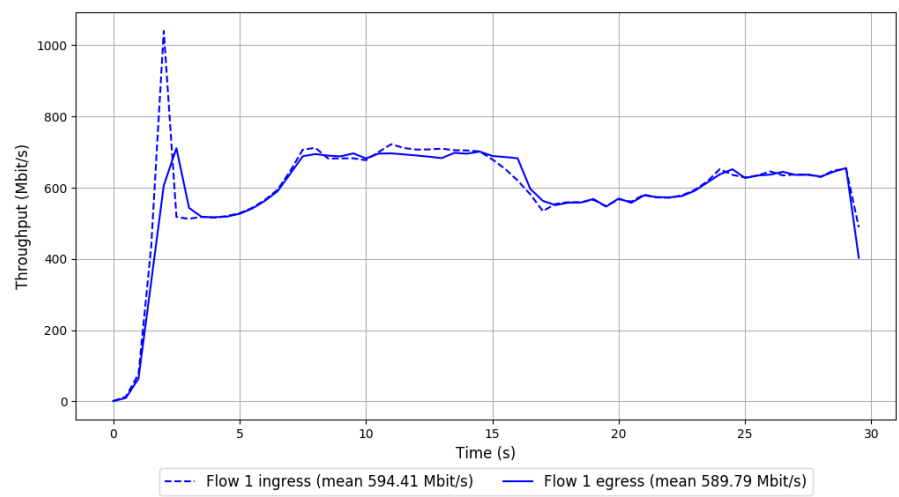
-- Flow 1:

Average throughput: 589.79 Mbit/s

95th percentile per-packet one-way delay: 154.380 ms

Loss rate: 1.20%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-30 15:39:35

End at: 2017-11-30 15:40:05

Below is generated by plot.py at 2017-11-30 19:00:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 531.11 Mbit/s

95th percentile per-packet one-way delay: 71.539 ms

Loss rate: 1.01%

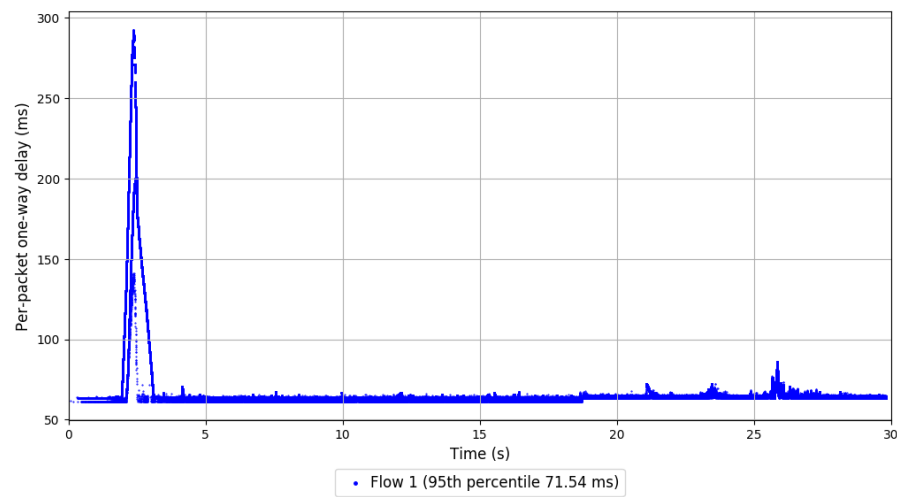
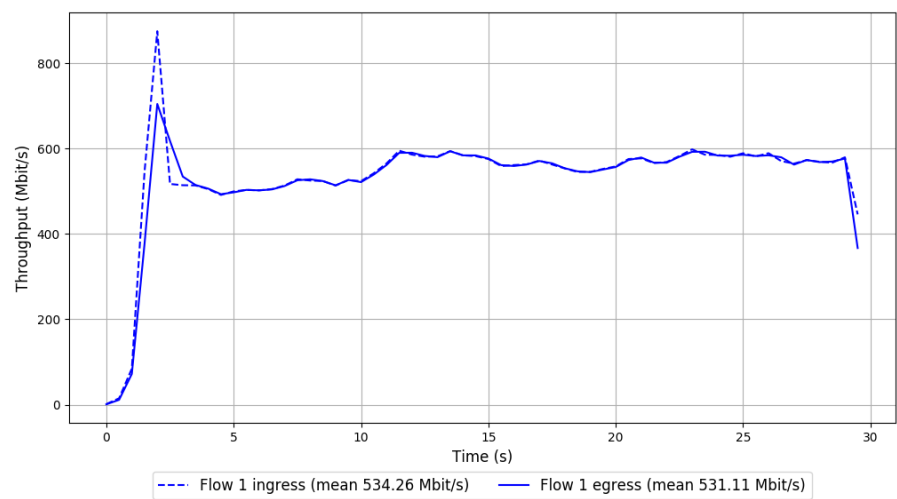
-- Flow 1:

Average throughput: 531.11 Mbit/s

95th percentile per-packet one-way delay: 71.539 ms

Loss rate: 1.01%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-30 15:49:51

End at: 2017-11-30 15:50:21

Below is generated by plot.py at 2017-11-30 19:00:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 616.97 Mbit/s

95th percentile per-packet one-way delay: 180.728 ms

Loss rate: 1.55%

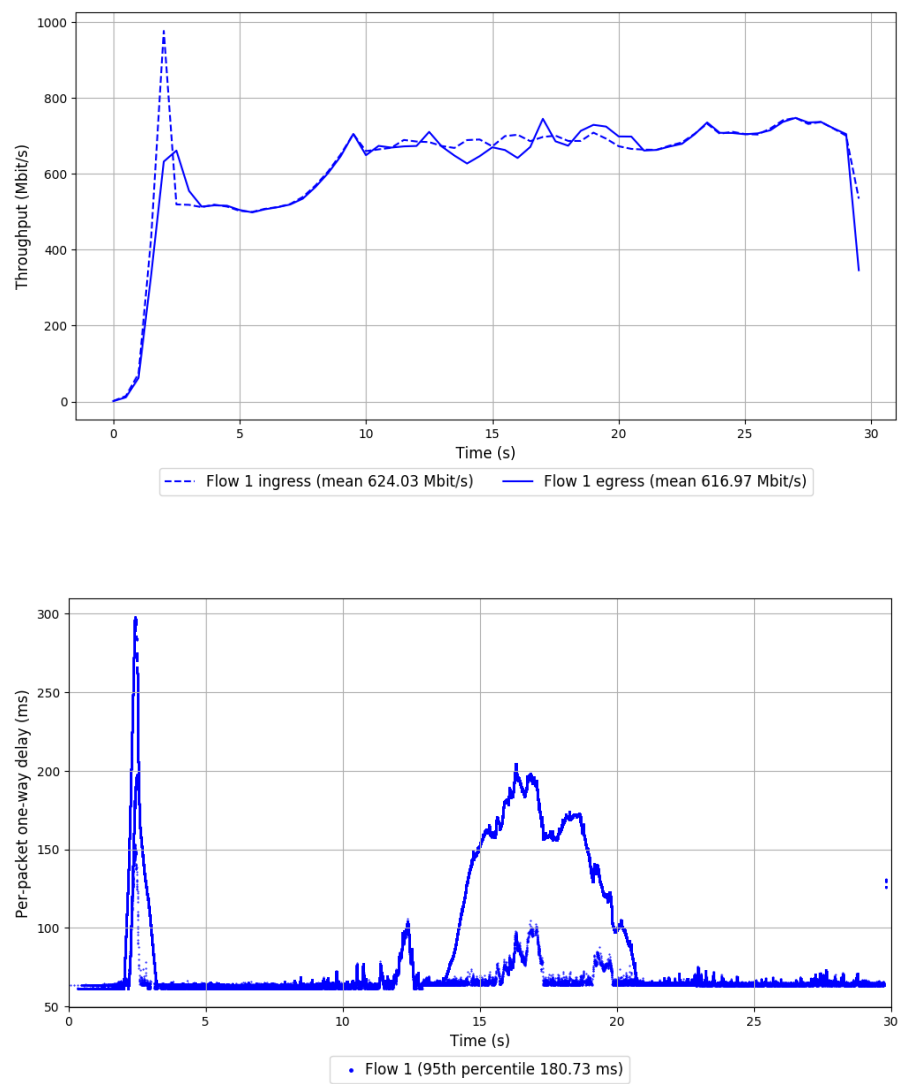
-- Flow 1:

Average throughput: 616.97 Mbit/s

95th percentile per-packet one-way delay: 180.728 ms

Loss rate: 1.55%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-30 16:00:32

End at: 2017-11-30 16:01:02

Below is generated by plot.py at 2017-11-30 19:00:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 512.08 Mbit/s

95th percentile per-packet one-way delay: 92.587 ms

Loss rate: 1.48%

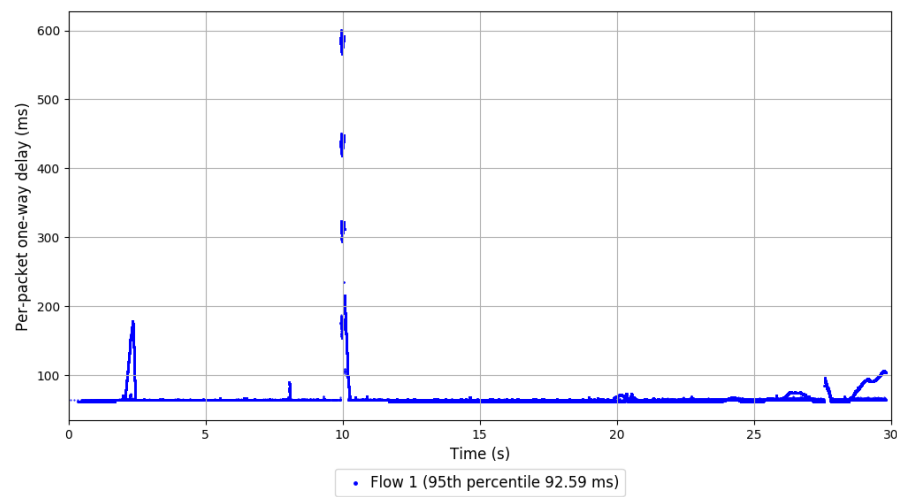
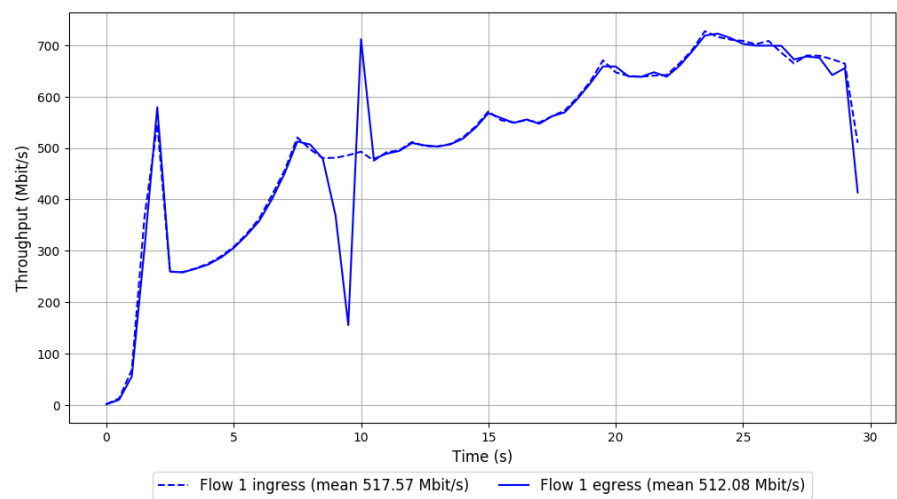
-- Flow 1:

Average throughput: 512.08 Mbit/s

95th percentile per-packet one-way delay: 92.587 ms

Loss rate: 1.48%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-30 16:10:59

End at: 2017-11-30 16:11:29

Below is generated by plot.py at 2017-11-30 19:00:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 568.88 Mbit/s

95th percentile per-packet one-way delay: 180.165 ms

Loss rate: 1.69%

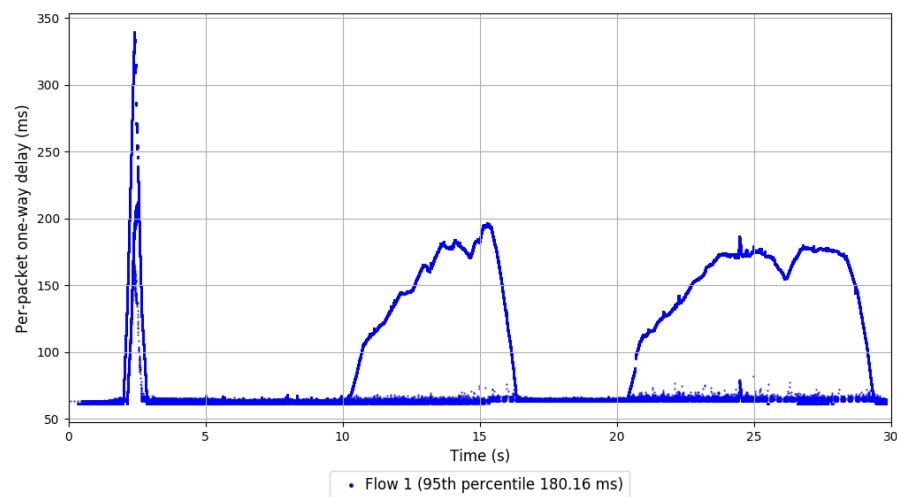
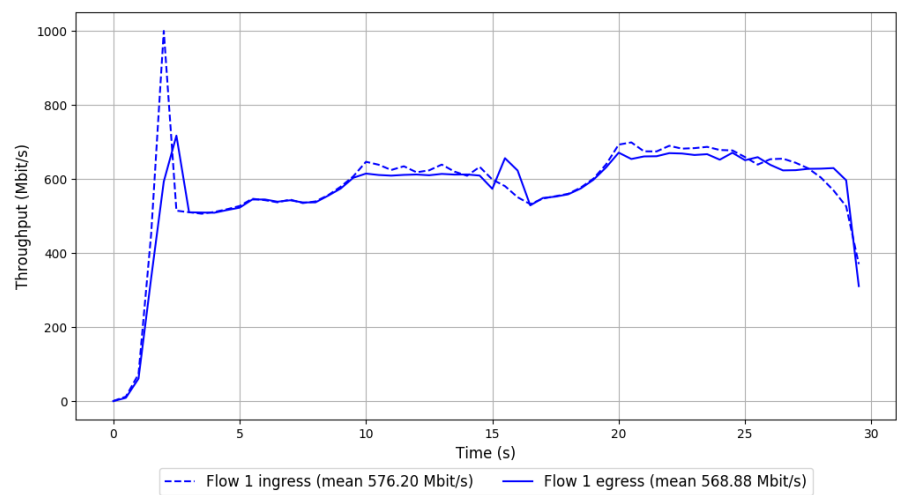
-- Flow 1:

Average throughput: 568.88 Mbit/s

95th percentile per-packet one-way delay: 180.165 ms

Loss rate: 1.69%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-30 16:21:33

End at: 2017-11-30 16:22:03

Below is generated by plot.py at 2017-11-30 19:02:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 646.29 Mbit/s

95th percentile per-packet one-way delay: 173.596 ms

Loss rate: 2.10%

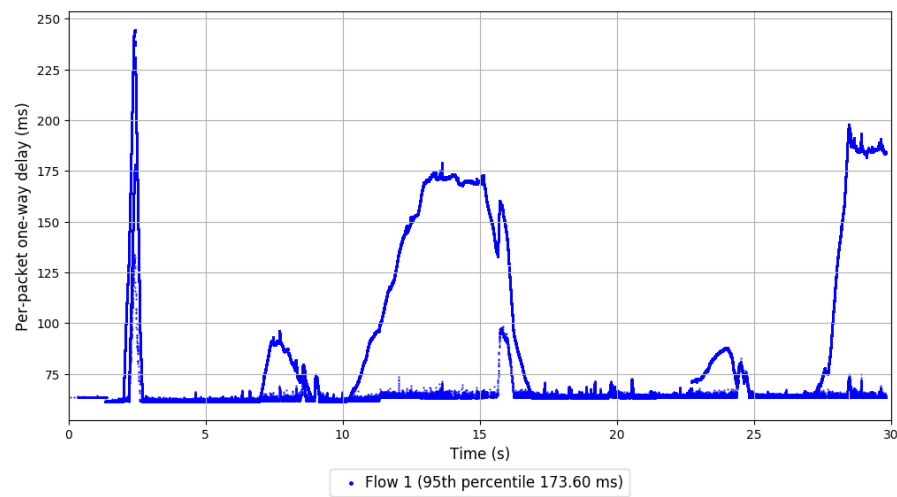
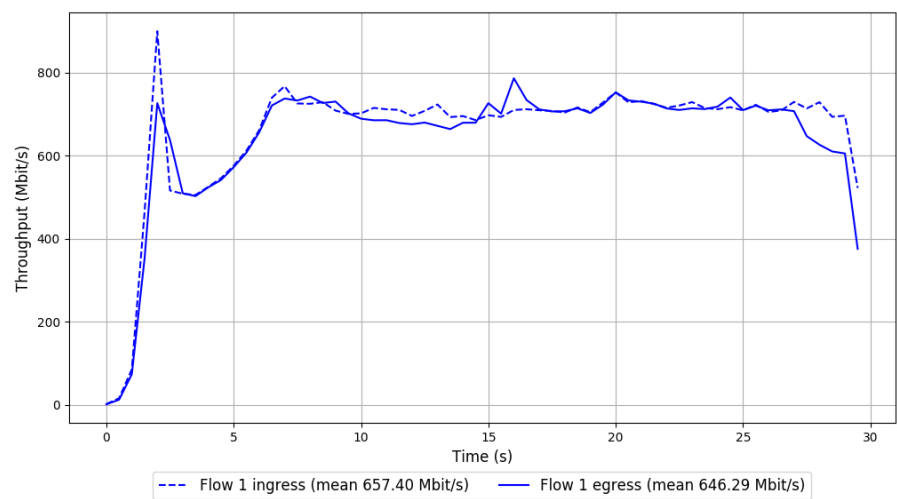
-- Flow 1:

Average throughput: 646.29 Mbit/s

95th percentile per-packet one-way delay: 173.596 ms

Loss rate: 2.10%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-30 16:32:03

End at: 2017-11-30 16:32:33

Below is generated by plot.py at 2017-11-30 19:02:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 590.75 Mbit/s

95th percentile per-packet one-way delay: 171.114 ms

Loss rate: 1.94%

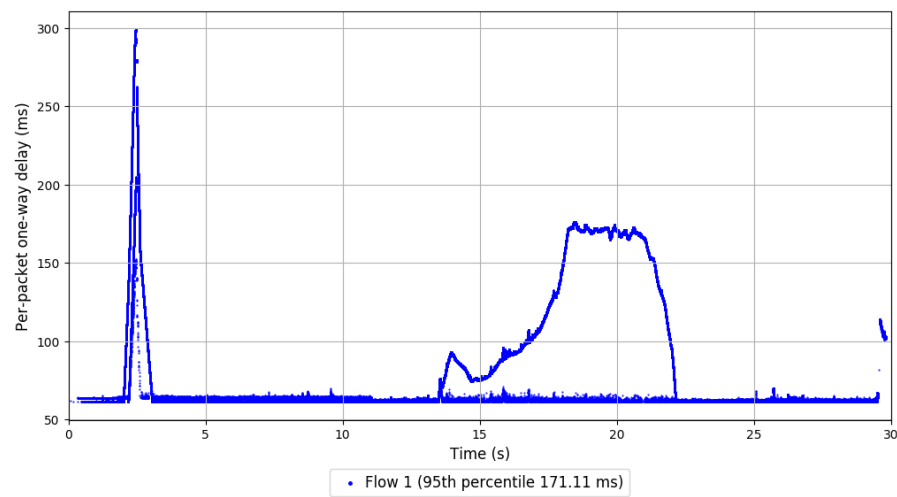
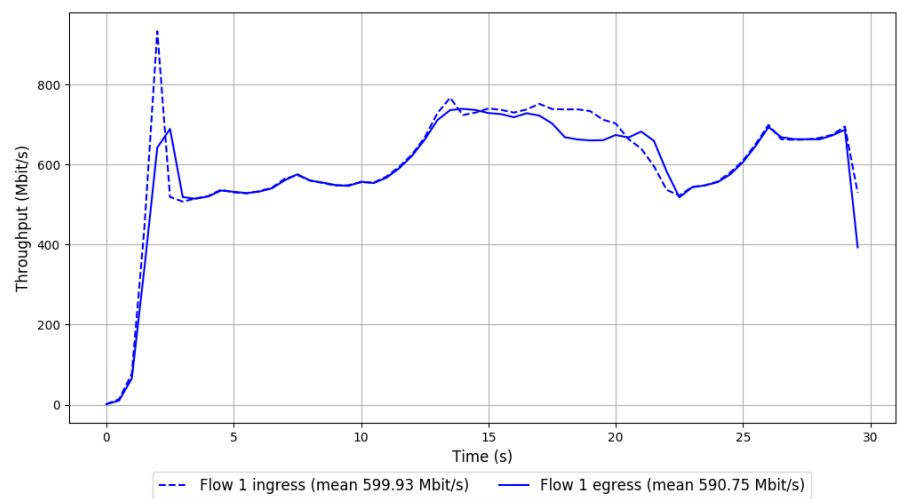
-- Flow 1:

Average throughput: 590.75 Mbit/s

95th percentile per-packet one-way delay: 171.114 ms

Loss rate: 1.94%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-30 16:42:39

End at: 2017-11-30 16:43:09

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 618.65 Mbit/s

95th percentile per-packet one-way delay: 134.425 ms

Loss rate: 0.81%

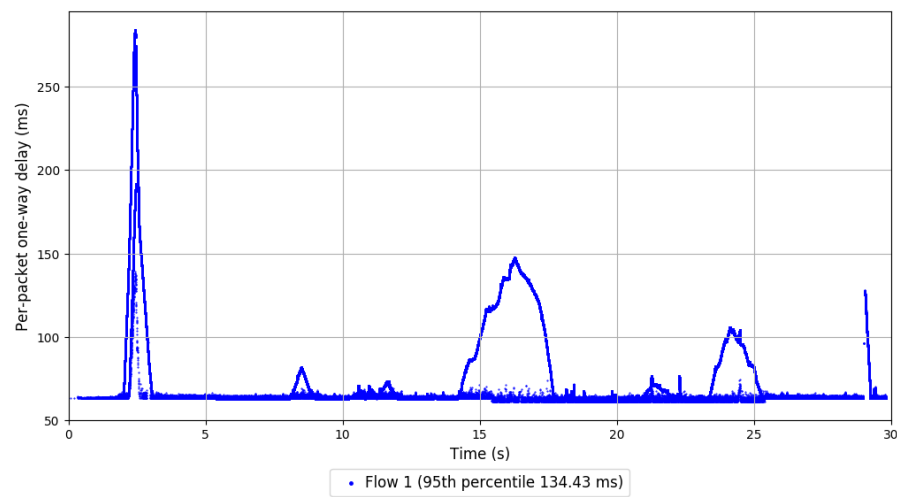
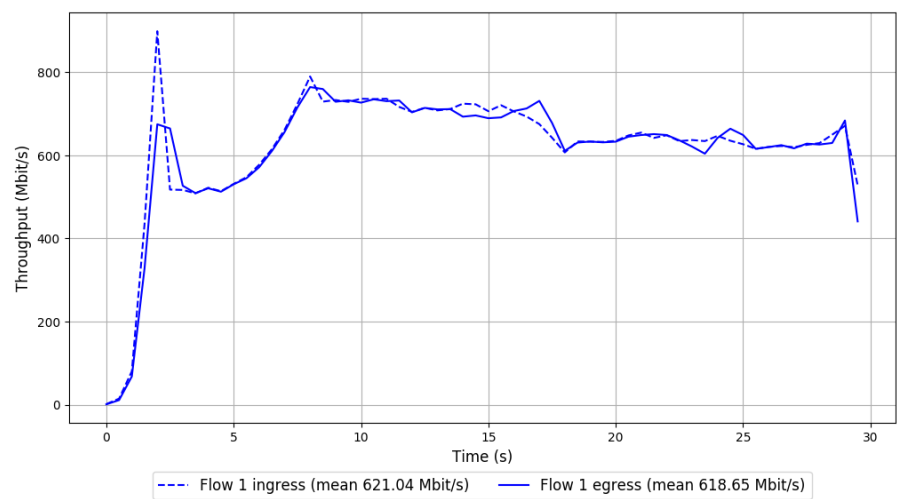
-- Flow 1:

Average throughput: 618.65 Mbit/s

95th percentile per-packet one-way delay: 134.425 ms

Loss rate: 0.81%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-30 16:53:17

End at: 2017-11-30 16:53:47

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 576.89 Mbit/s

95th percentile per-packet one-way delay: 151.708 ms

Loss rate: 2.79%

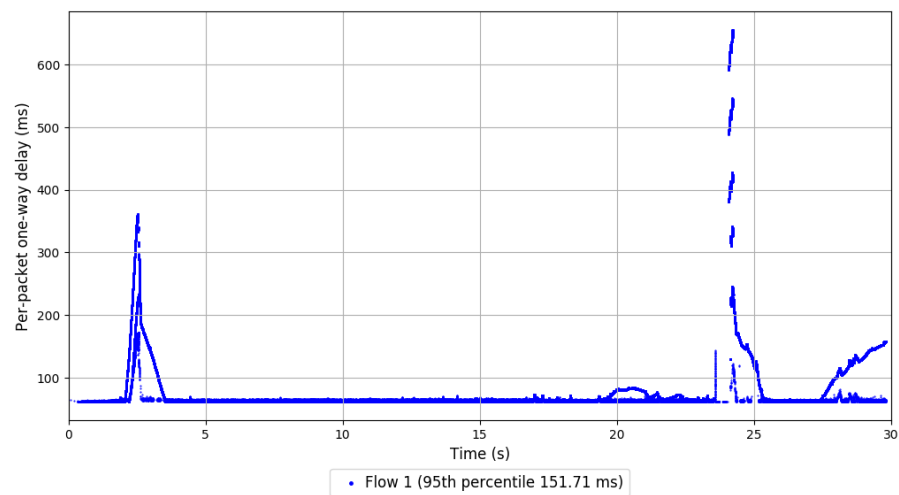
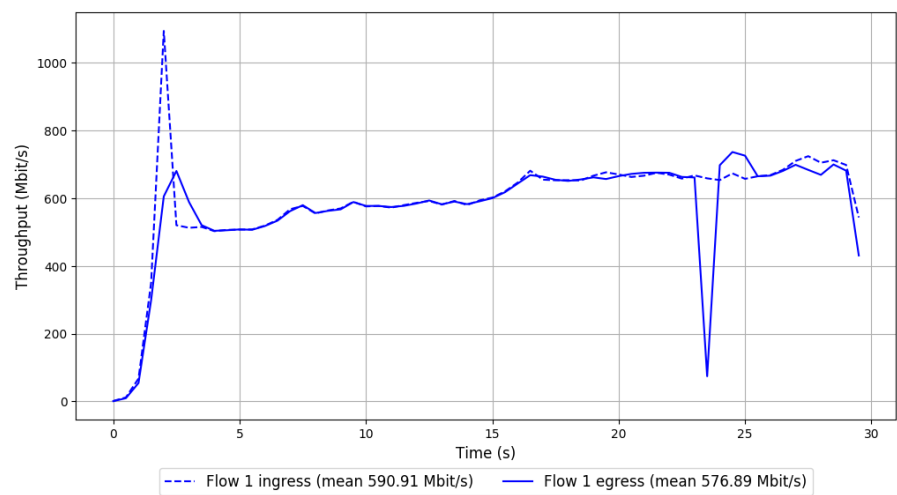
-- Flow 1:

Average throughput: 576.89 Mbit/s

95th percentile per-packet one-way delay: 151.708 ms

Loss rate: 2.79%

Run 10: Report of PCC — Data Link

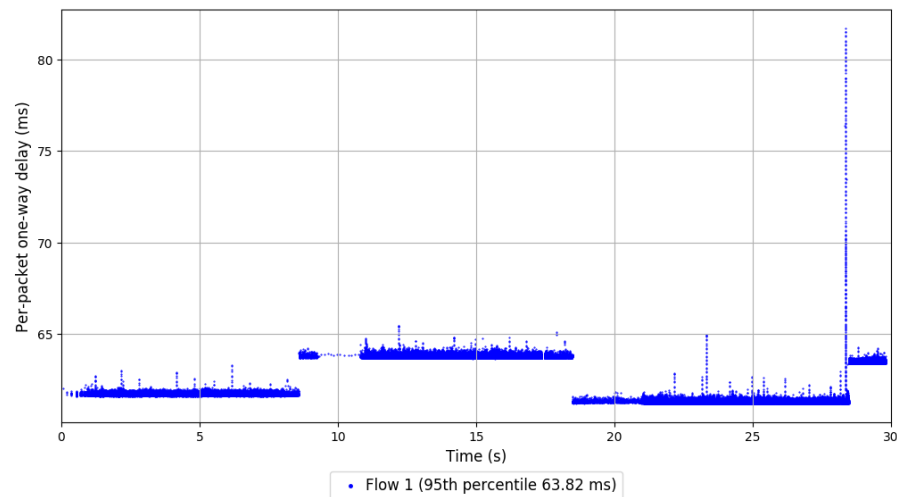
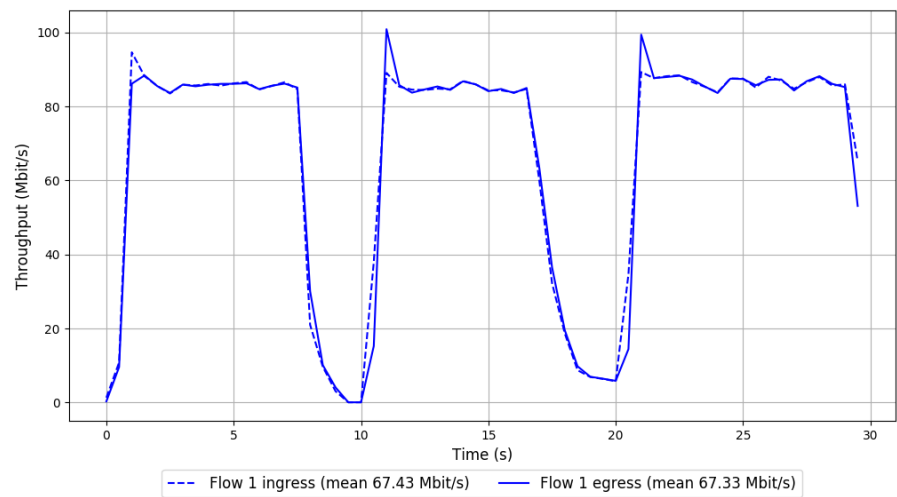


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-30 15:20:25
End at: 2017-11-30 15:20:56

# Below is generated by plot.py at 2017-11-30 19:10:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.33 Mbit/s
95th percentile per-packet one-way delay: 63.822 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 67.33 Mbit/s
95th percentile per-packet one-way delay: 63.822 ms
Loss rate: 0.57%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-30 15:30:53

End at: 2017-11-30 15:31:23

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.95 Mbit/s

95th percentile per-packet one-way delay: 63.566 ms

Loss rate: 0.72%

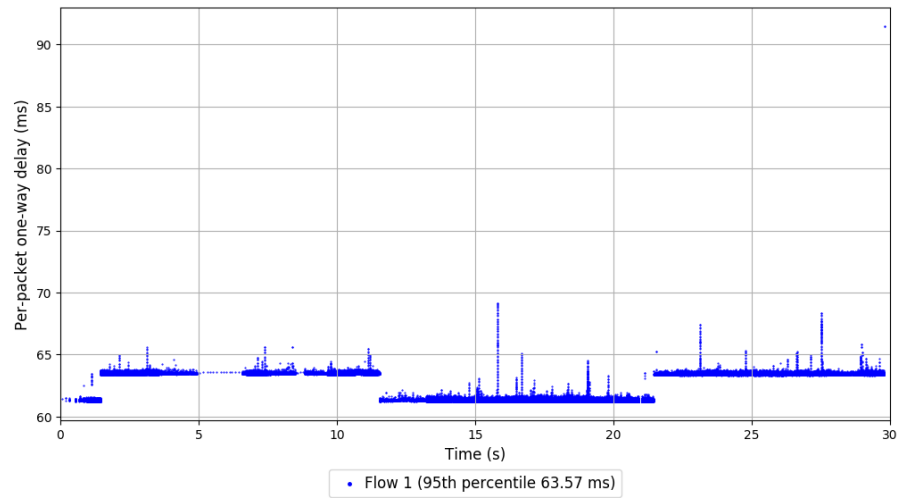
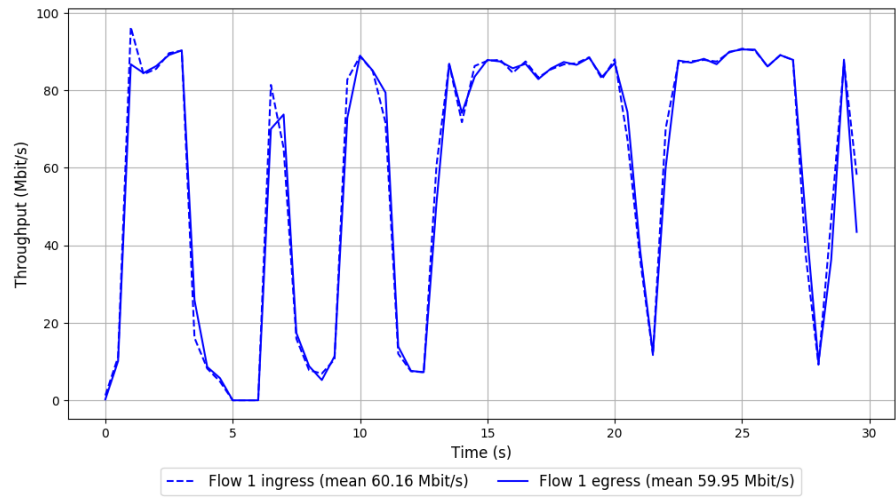
-- Flow 1:

Average throughput: 59.95 Mbit/s

95th percentile per-packet one-way delay: 63.566 ms

Loss rate: 0.72%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-30 15:41:10

End at: 2017-11-30 15:41:41

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.05 Mbit/s

95th percentile per-packet one-way delay: 63.742 ms

Loss rate: 0.67%

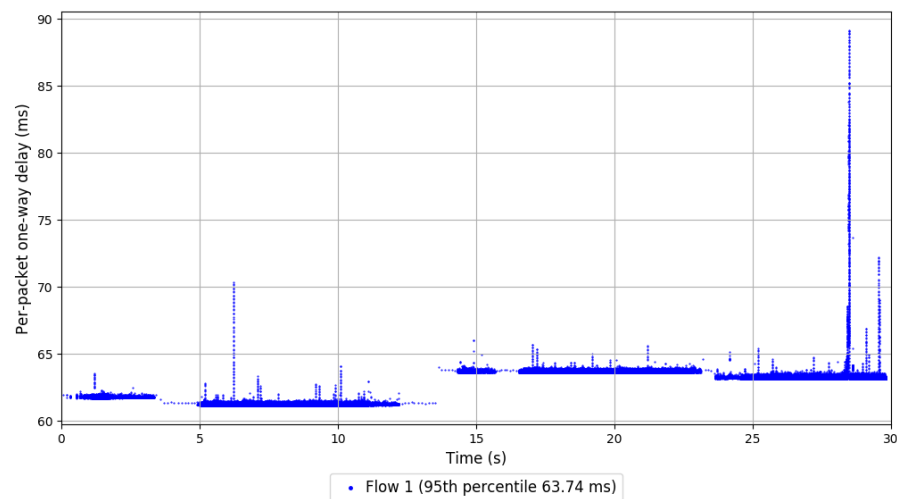
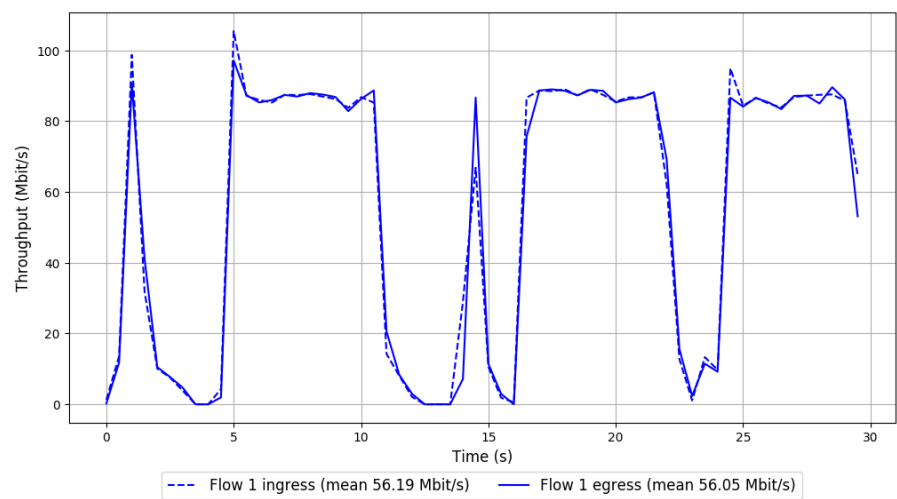
-- Flow 1:

Average throughput: 56.05 Mbit/s

95th percentile per-packet one-way delay: 63.742 ms

Loss rate: 0.67%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-30 15:51:30

End at: 2017-11-30 15:52:00

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.67 Mbit/s

95th percentile per-packet one-way delay: 63.739 ms

Loss rate: 0.57%

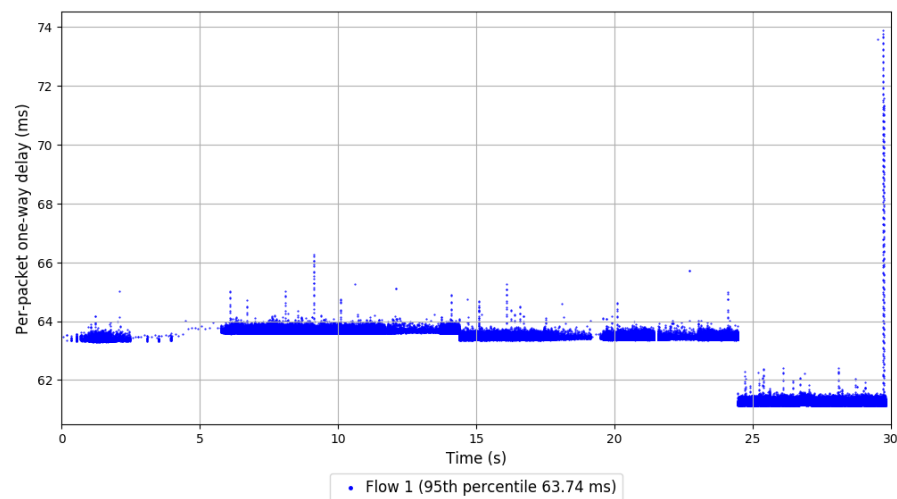
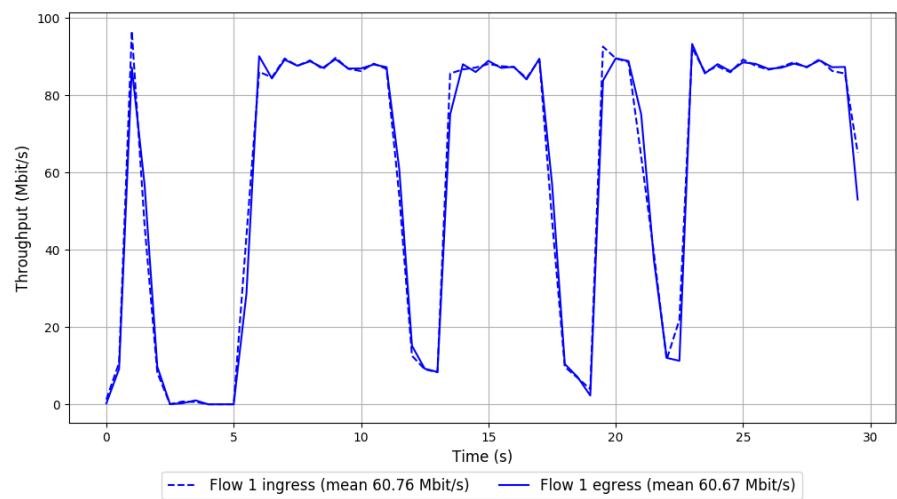
-- Flow 1:

Average throughput: 60.67 Mbit/s

95th percentile per-packet one-way delay: 63.739 ms

Loss rate: 0.57%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-30 16:02:07

End at: 2017-11-30 16:02:37

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.45 Mbit/s

95th percentile per-packet one-way delay: 63.388 ms

Loss rate: 0.69%

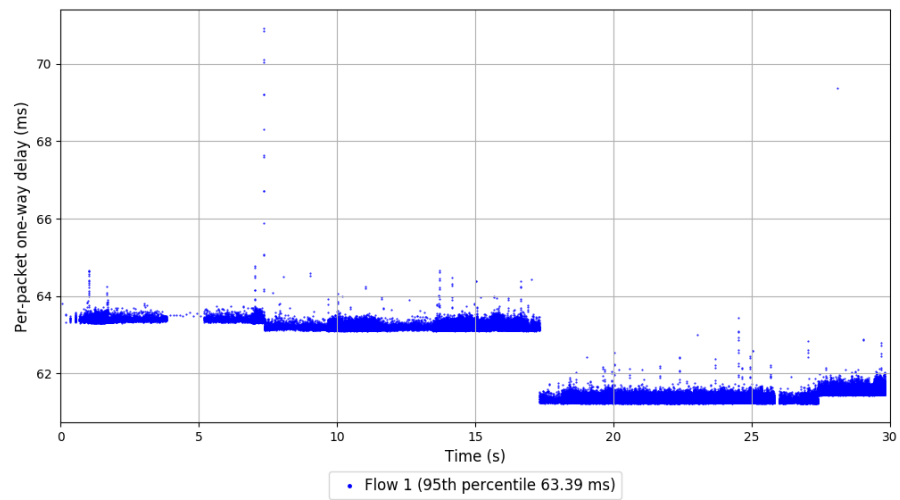
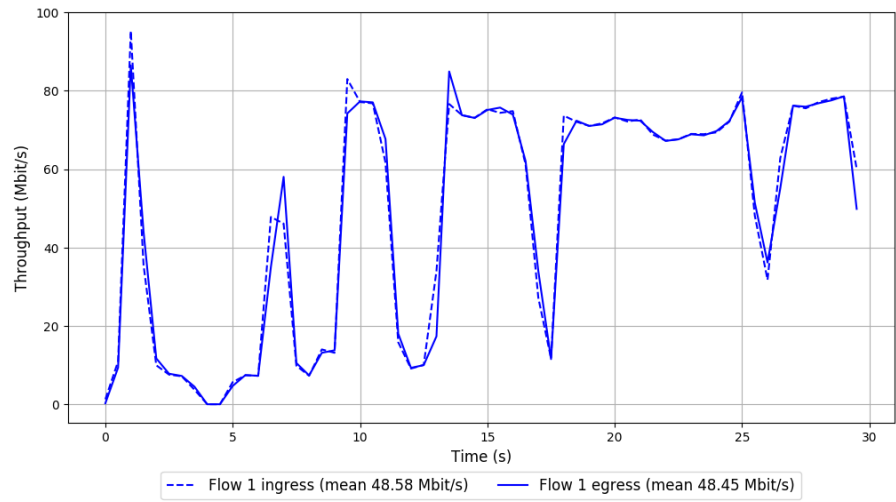
-- Flow 1:

Average throughput: 48.45 Mbit/s

95th percentile per-packet one-way delay: 63.388 ms

Loss rate: 0.69%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-30 16:12:35

End at: 2017-11-30 16:13:05

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.32 Mbit/s

95th percentile per-packet one-way delay: 63.545 ms

Loss rate: 0.57%

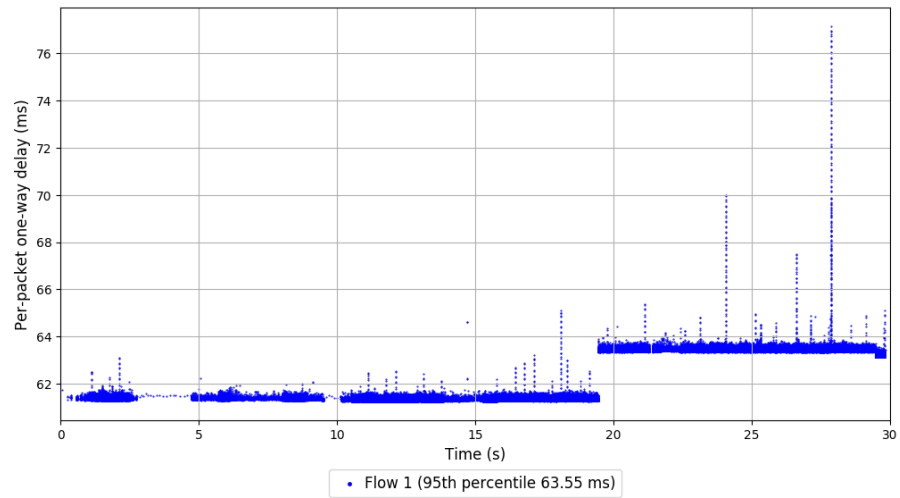
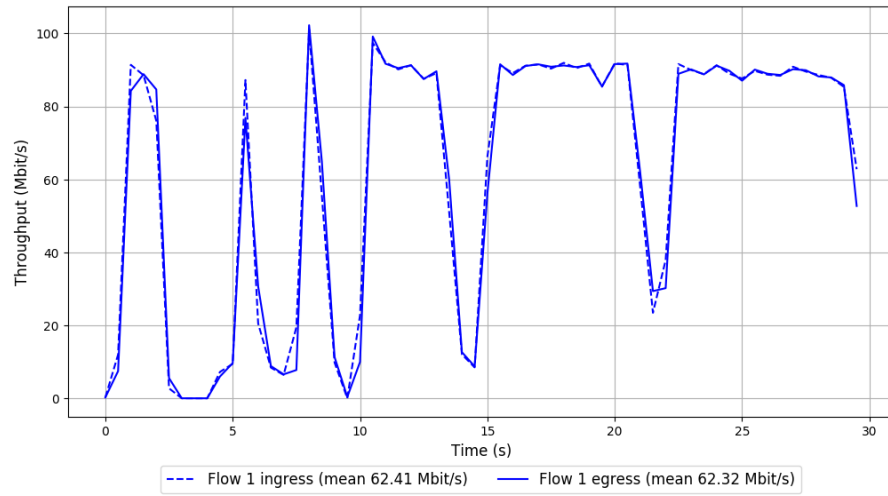
-- Flow 1:

Average throughput: 62.32 Mbit/s

95th percentile per-packet one-way delay: 63.545 ms

Loss rate: 0.57%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-30 16:23:12

End at: 2017-11-30 16:23:42

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.45 Mbit/s

95th percentile per-packet one-way delay: 63.520 ms

Loss rate: 0.75%

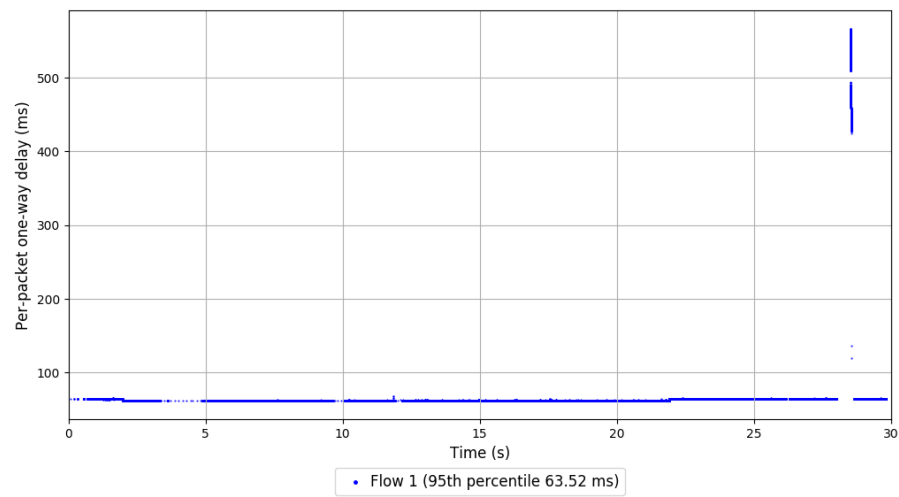
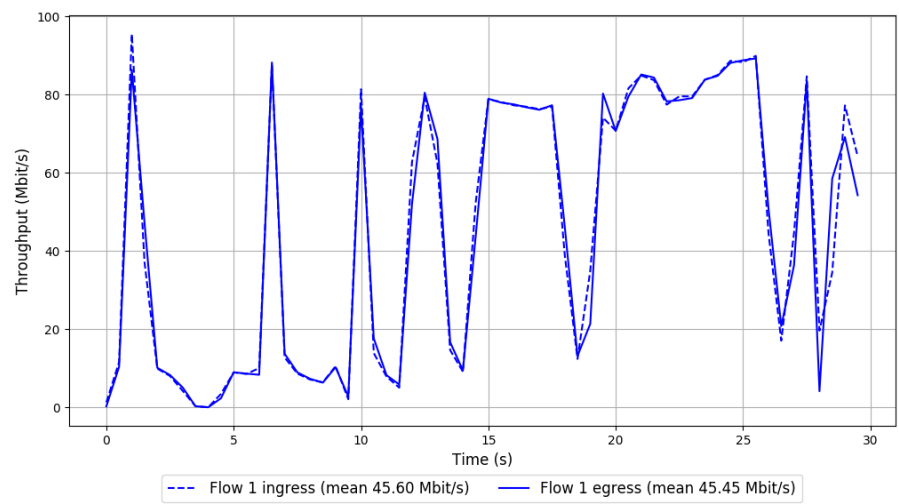
-- Flow 1:

Average throughput: 45.45 Mbit/s

95th percentile per-packet one-way delay: 63.520 ms

Loss rate: 0.75%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-30 16:33:40

End at: 2017-11-30 16:34:10

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.71 Mbit/s

95th percentile per-packet one-way delay: 63.558 ms

Loss rate: 0.83%

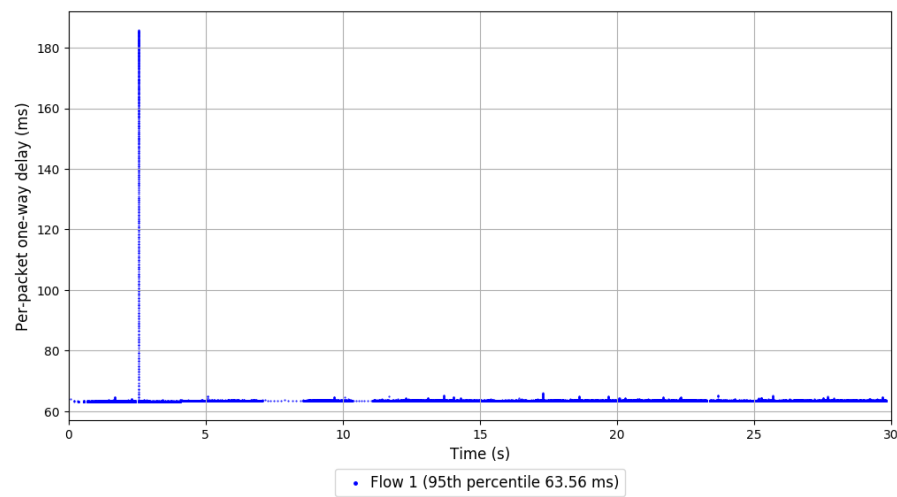
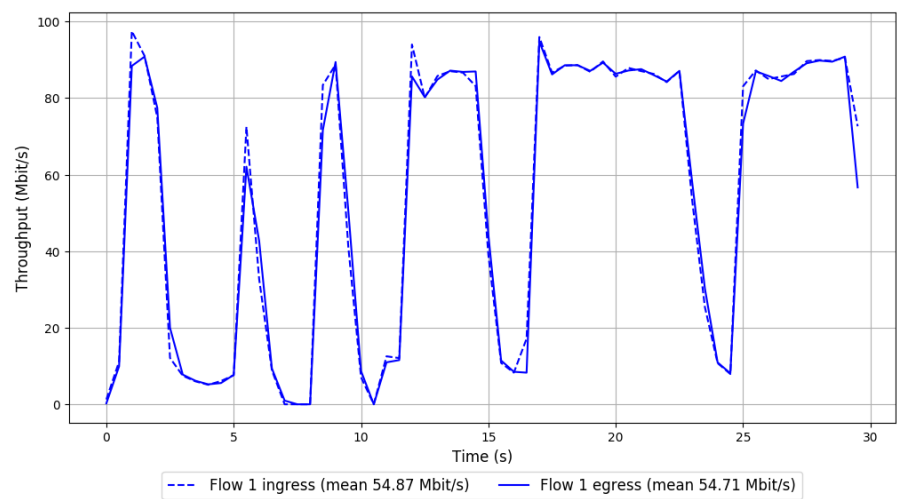
-- Flow 1:

Average throughput: 54.71 Mbit/s

95th percentile per-packet one-way delay: 63.558 ms

Loss rate: 0.83%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-30 16:44:17

End at: 2017-11-30 16:44:47

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.05 Mbit/s

95th percentile per-packet one-way delay: 63.551 ms

Loss rate: 0.63%

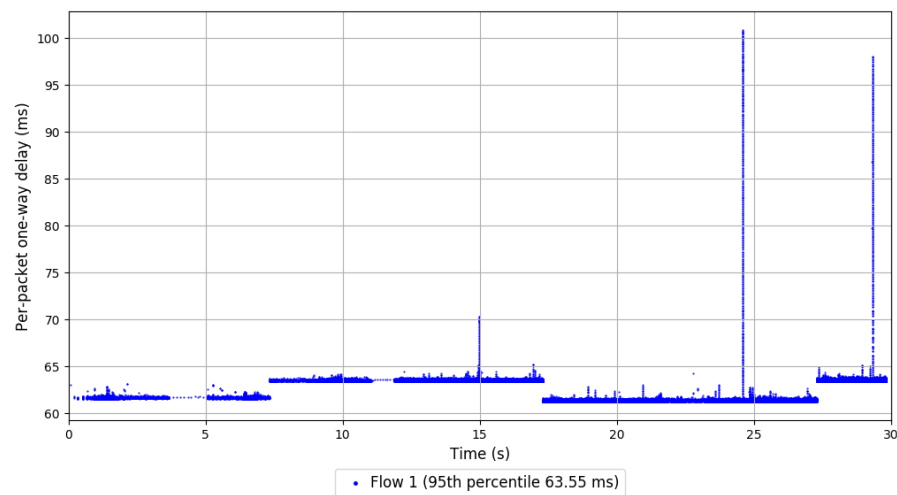
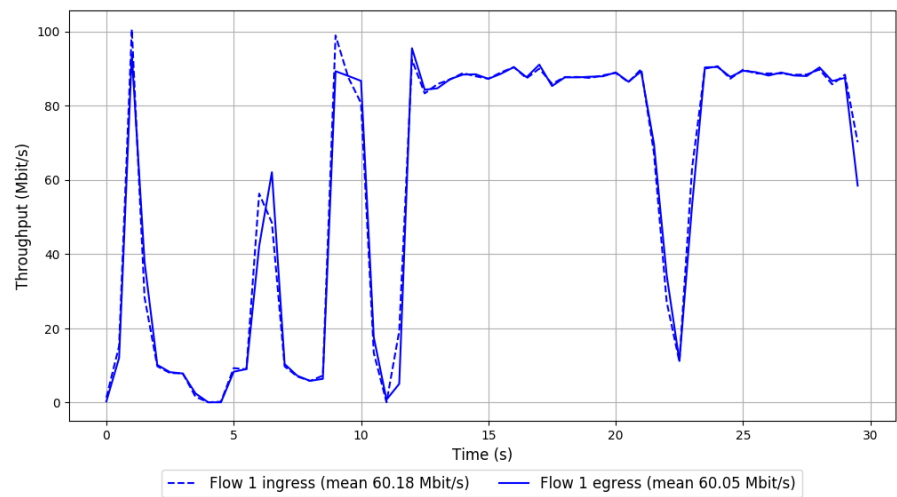
-- Flow 1:

Average throughput: 60.05 Mbit/s

95th percentile per-packet one-way delay: 63.551 ms

Loss rate: 0.63%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-11-30 16:54:54

End at: 2017-11-30 16:55:24

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.78 Mbit/s

95th percentile per-packet one-way delay: 63.582 ms

Loss rate: 0.72%

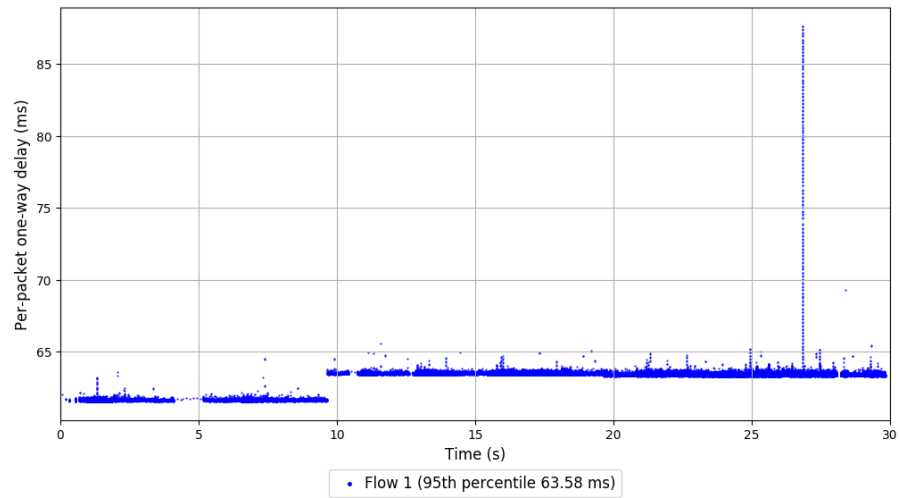
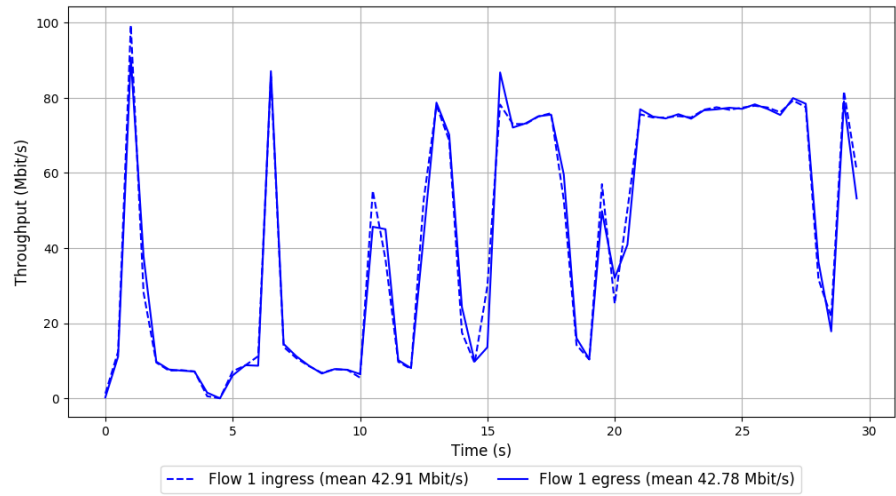
-- Flow 1:

Average throughput: 42.78 Mbit/s

95th percentile per-packet one-way delay: 63.582 ms

Loss rate: 0.72%

Run 10: Report of QUIC Cubic — Data Link

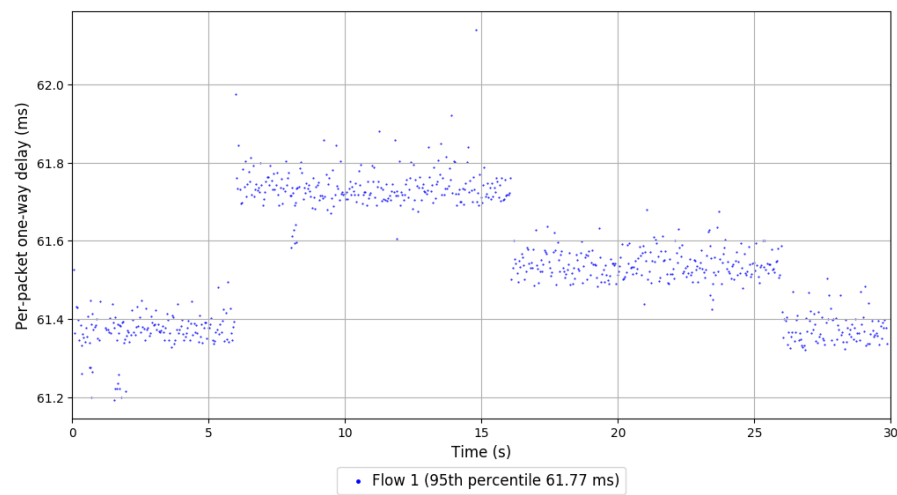
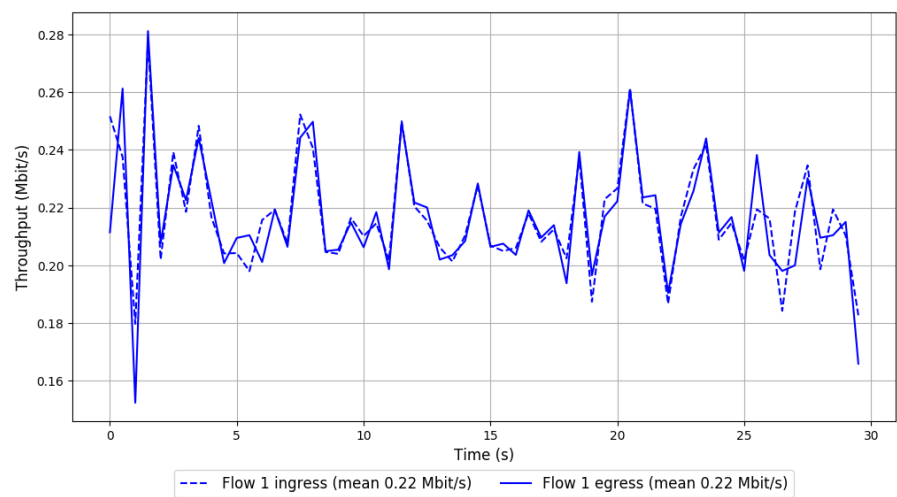


```
Run 1: Statistics of SCReAM

Start at: 2017-11-30 15:19:48
End at: 2017-11-30 15:20:18

# Below is generated by plot.py at 2017-11-30 19:10:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.775 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.775 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link

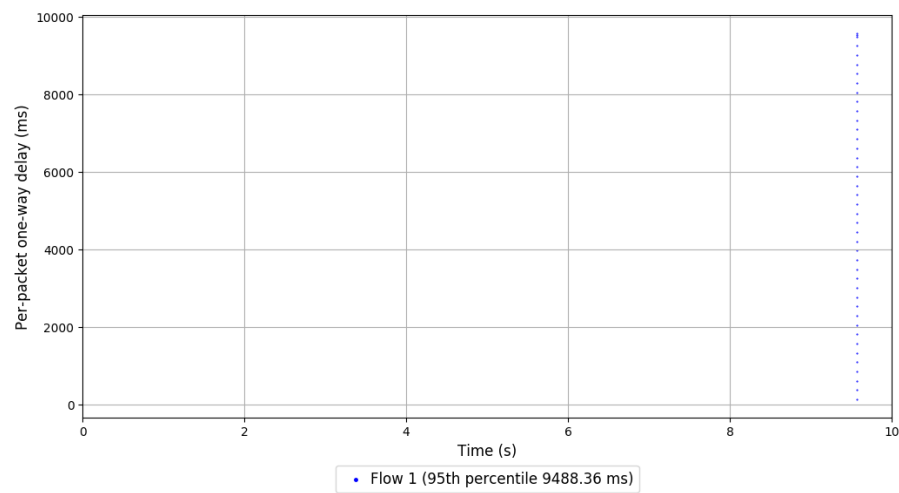
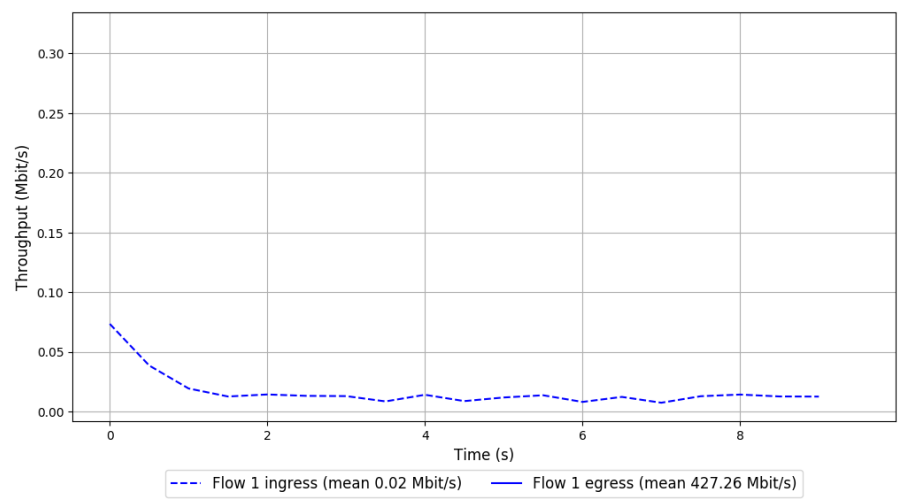


Run 2: Statistics of SReAM

Start at: 2017-11-30 15:30:15

End at: 2017-11-30 15:30:45

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-11-30 15:40:33

End at: 2017-11-30 15:41:03

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.663 ms

Loss rate: 0.38%

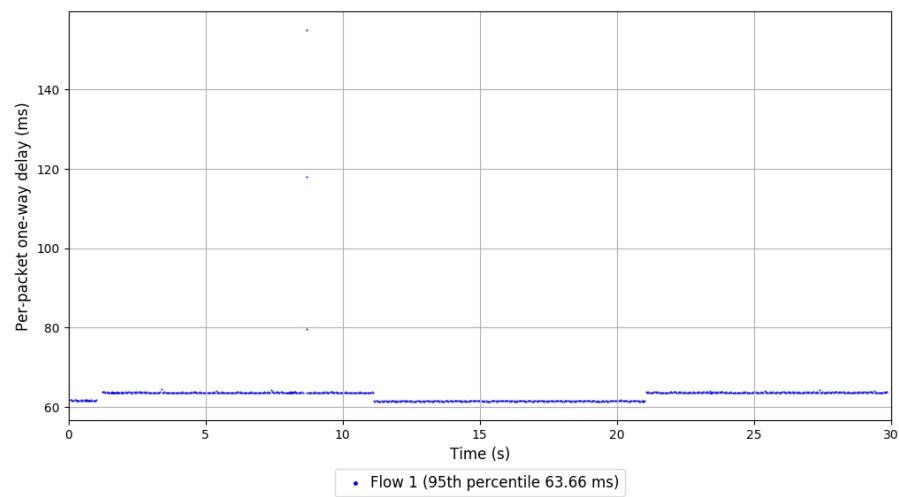
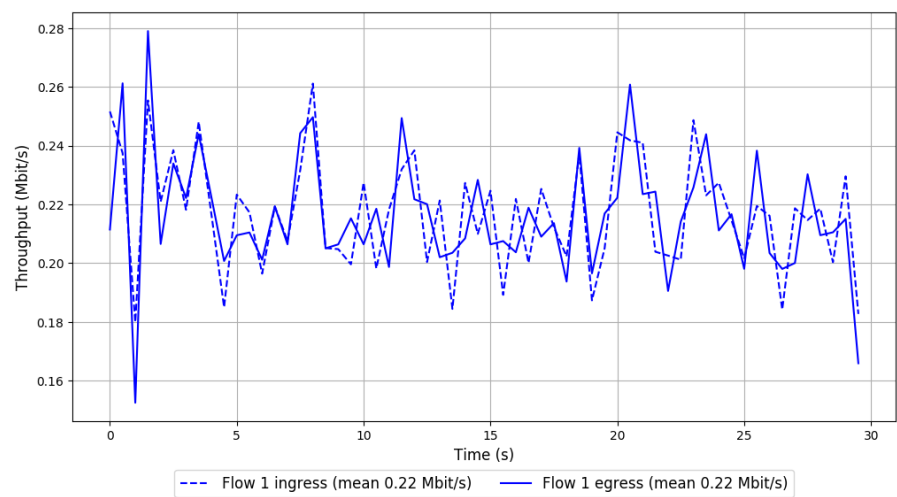
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.663 ms

Loss rate: 0.38%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-11-30 15:50:52

End at: 2017-11-30 15:51:22

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.675 ms

Loss rate: 0.38%

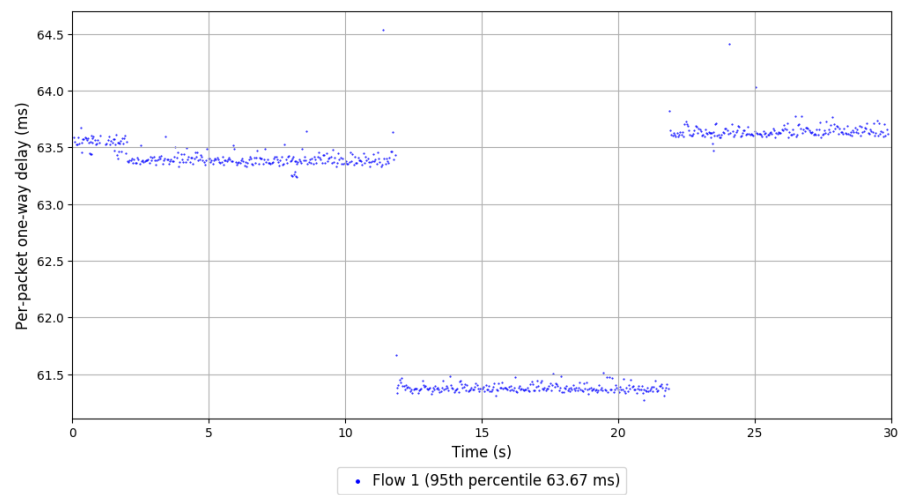
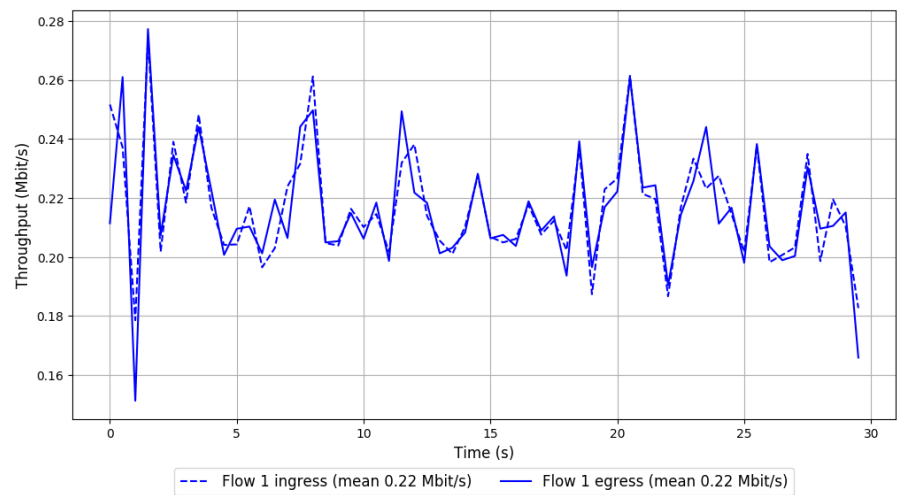
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.675 ms

Loss rate: 0.38%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-11-30 16:01:29

End at: 2017-11-30 16:01:59

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.665 ms

Loss rate: 0.51%

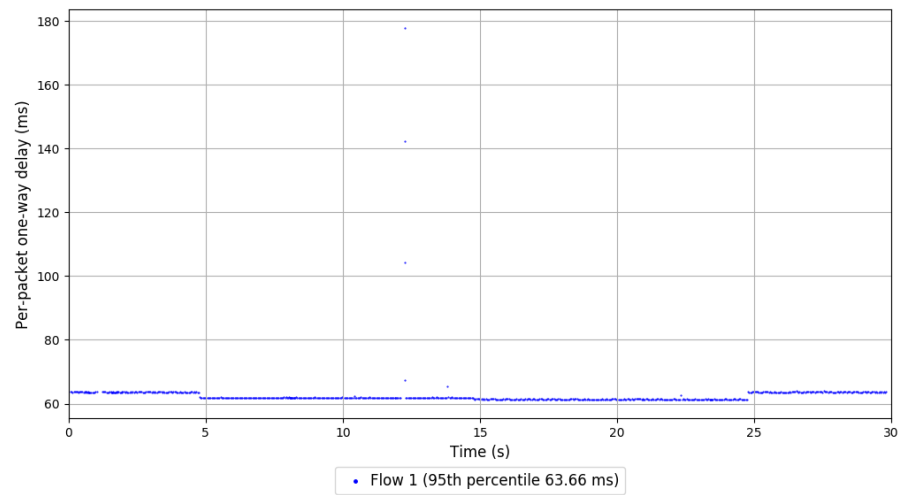
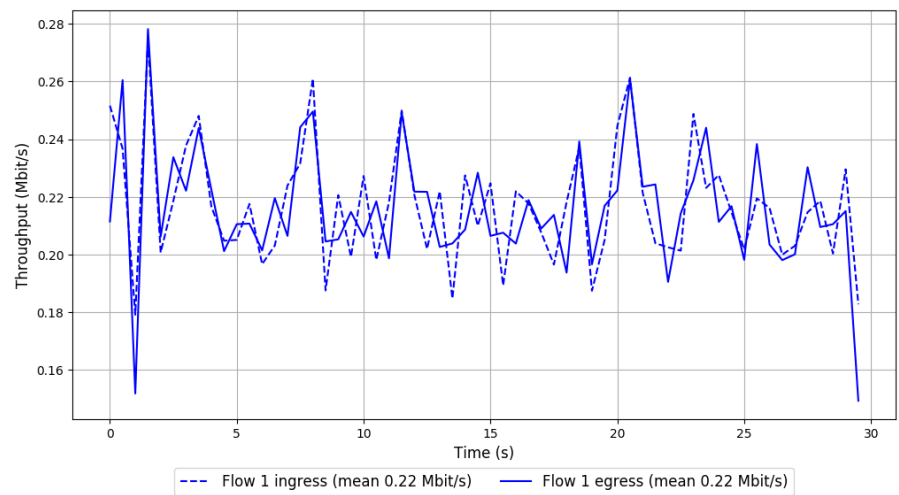
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.665 ms

Loss rate: 0.51%

Run 5: Report of SReAM — Data Link

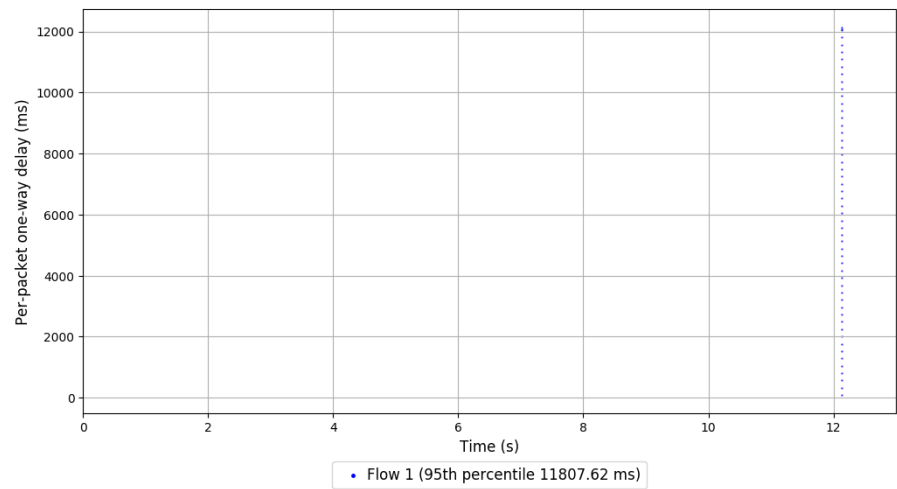
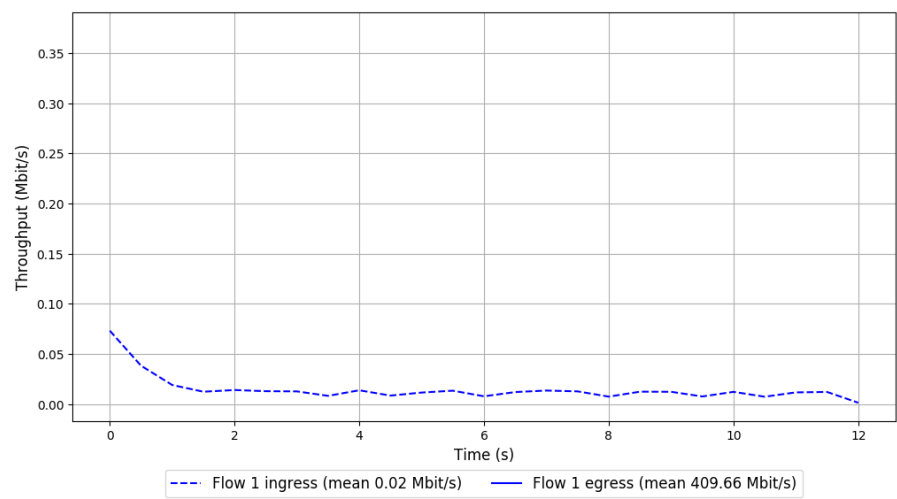


Run 6: Statistics of SReAM

Start at: 2017-11-30 16:11:57

End at: 2017-11-30 16:12:27

Run 6: Report of SReAM — Data Link

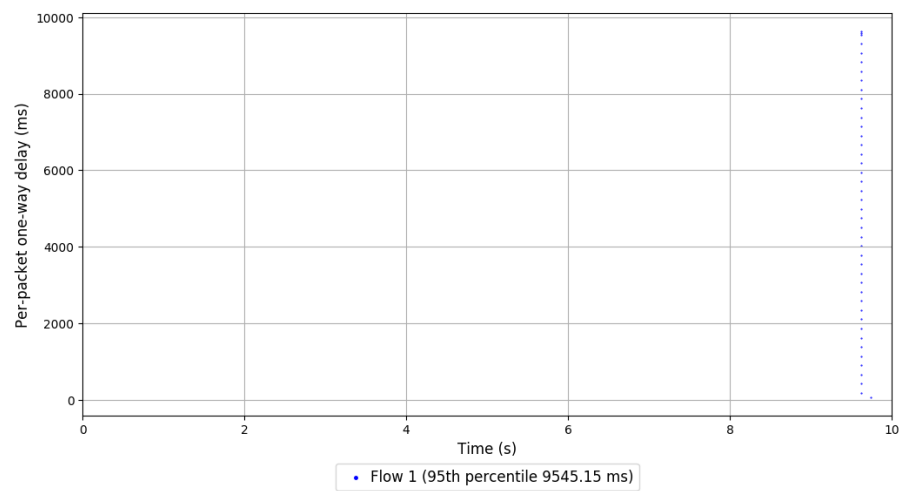
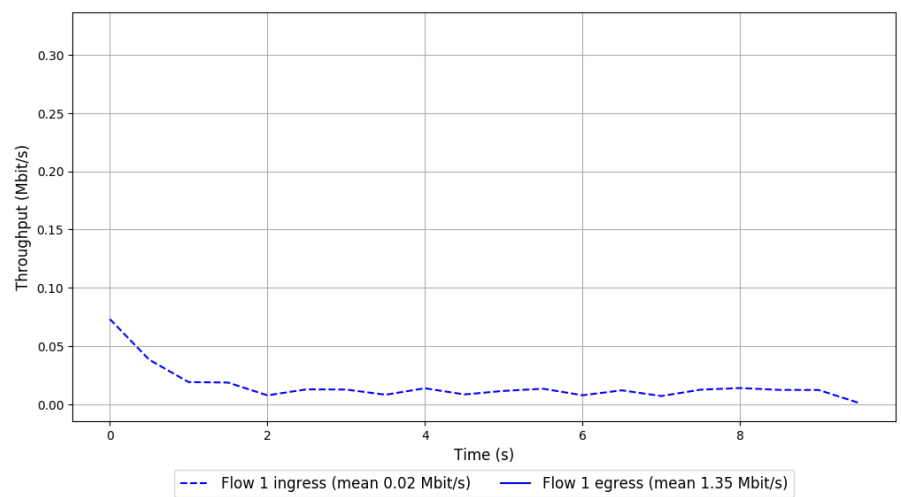


Run 7: Statistics of SReAM

Start at: 2017-11-30 16:22:35

End at: 2017-11-30 16:23:05

Run 7: Report of SReAM — Data Link

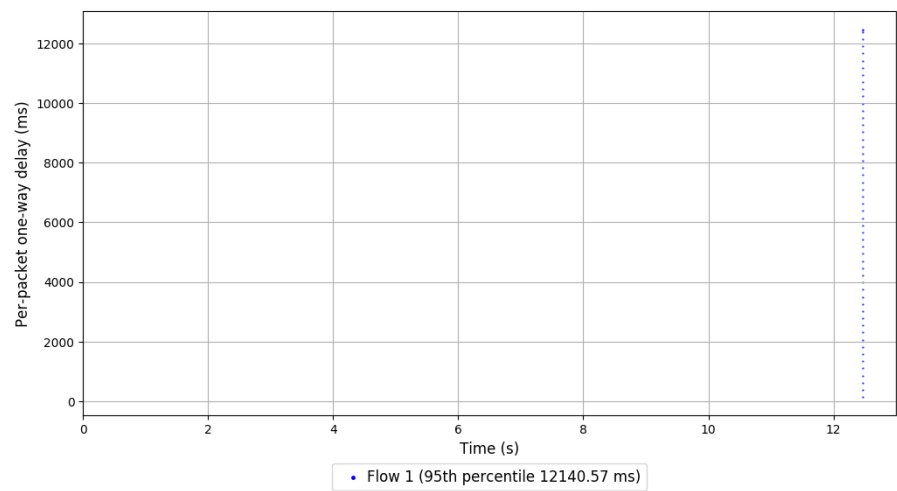
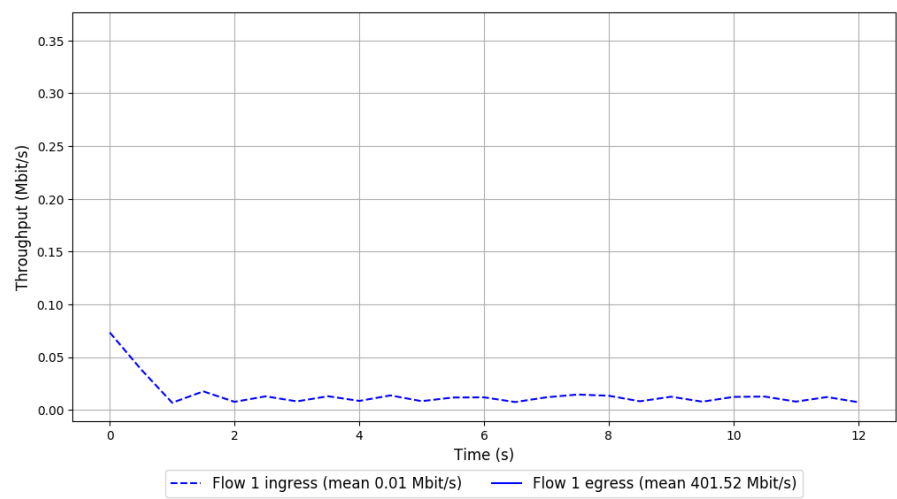


Run 8: Statistics of SReAM

Start at: 2017-11-30 16:33:03

End at: 2017-11-30 16:33:33

Run 8: Report of SReAM — Data Link

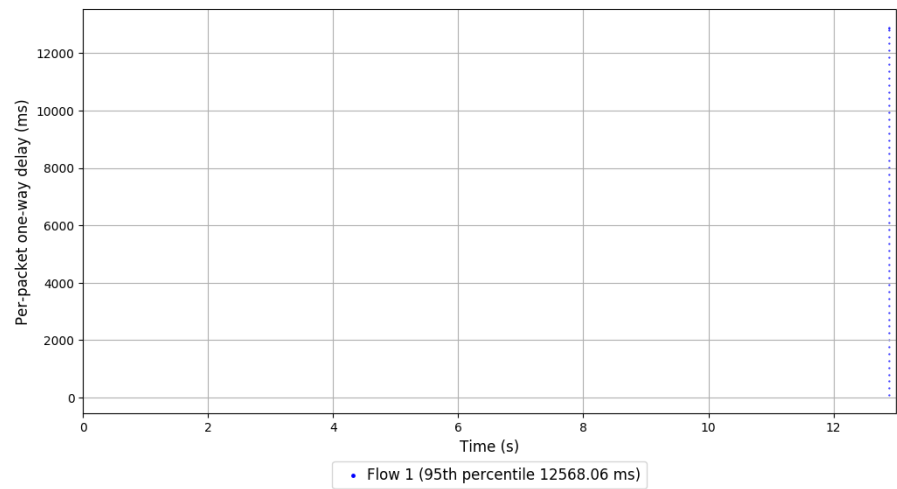
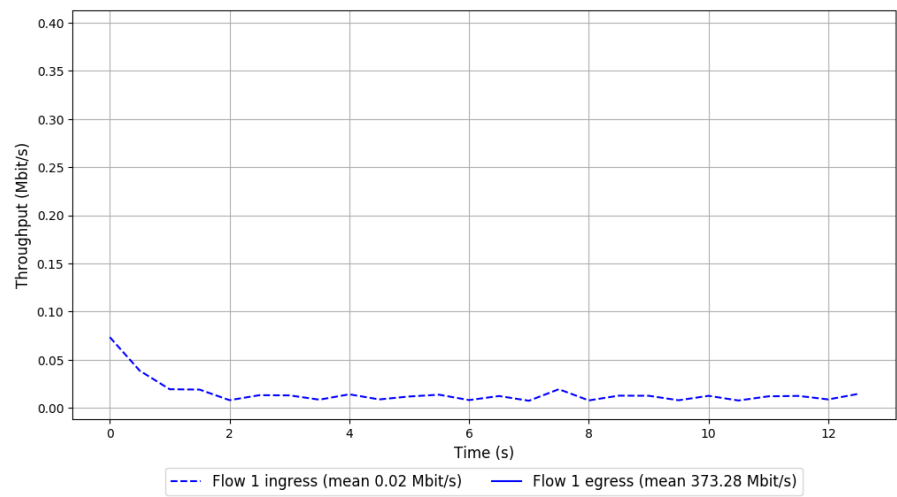


Run 9: Statistics of SReAM

Start at: 2017-11-30 16:43:39

End at: 2017-11-30 16:44:09

Run 9: Report of SReAM — Data Link

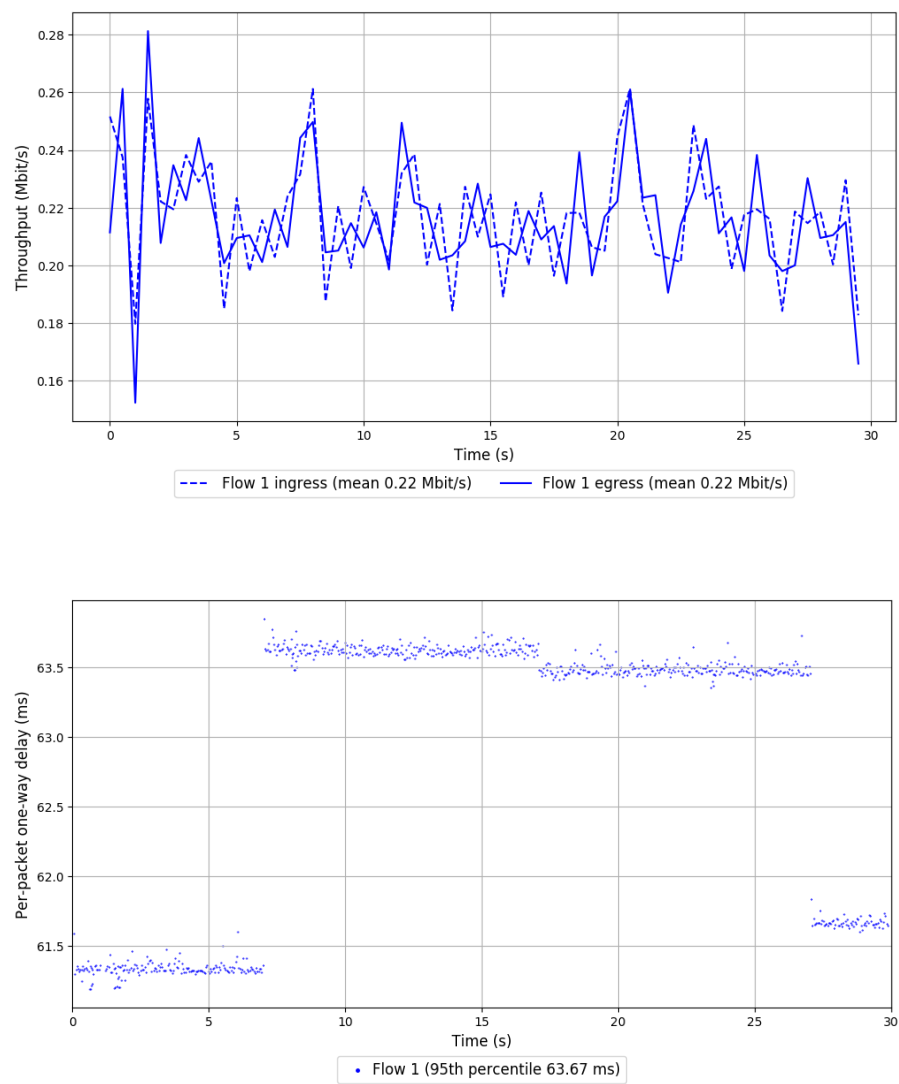


```
Run 10: Statistics of SReAM

Start at: 2017-11-30 16:54:17
End at: 2017-11-30 16:54:47

# Below is generated by plot.py at 2017-11-30 19:10:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.667 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.667 ms
Loss rate: 0.38%
```

Run 10: Report of SReAM — Data Link

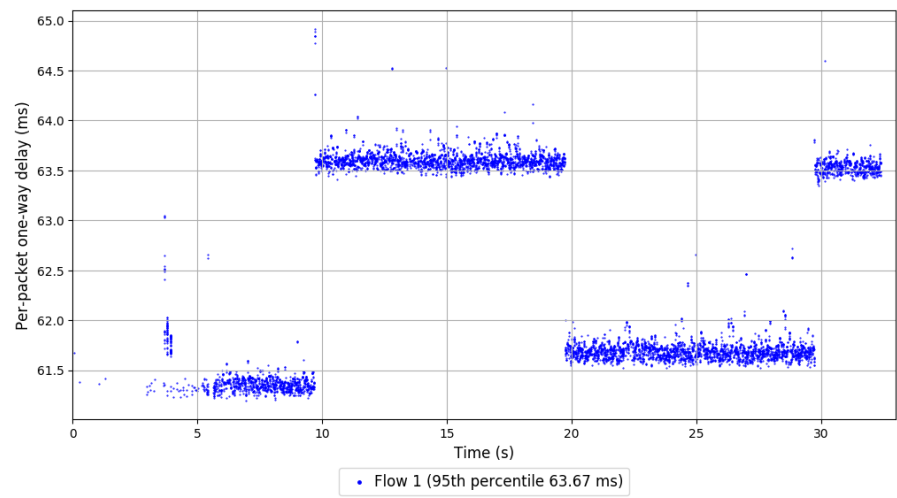
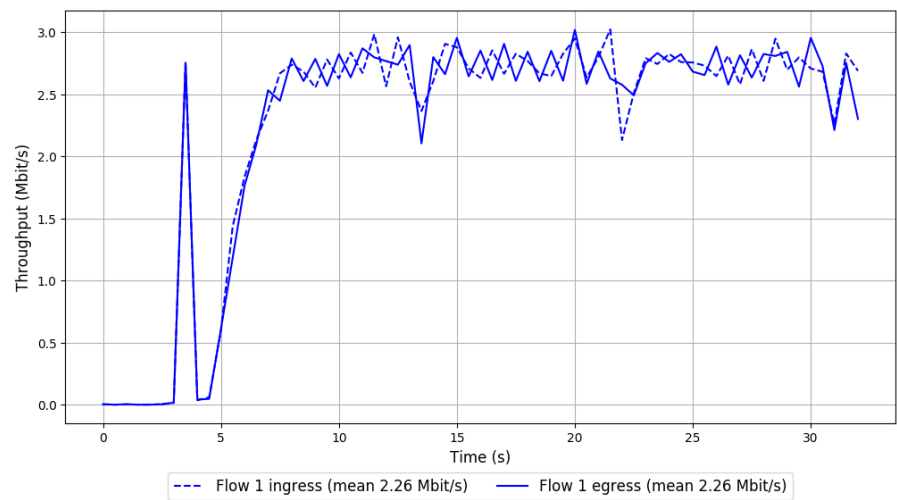


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-30 15:15:07
End at: 2017-11-30 15:15:37

# Below is generated by plot.py at 2017-11-30 19:10:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 63.675 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 63.675 ms
Loss rate: 0.46%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-30 15:25:41

End at: 2017-11-30 15:26:11

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.722 ms

Loss rate: 0.47%

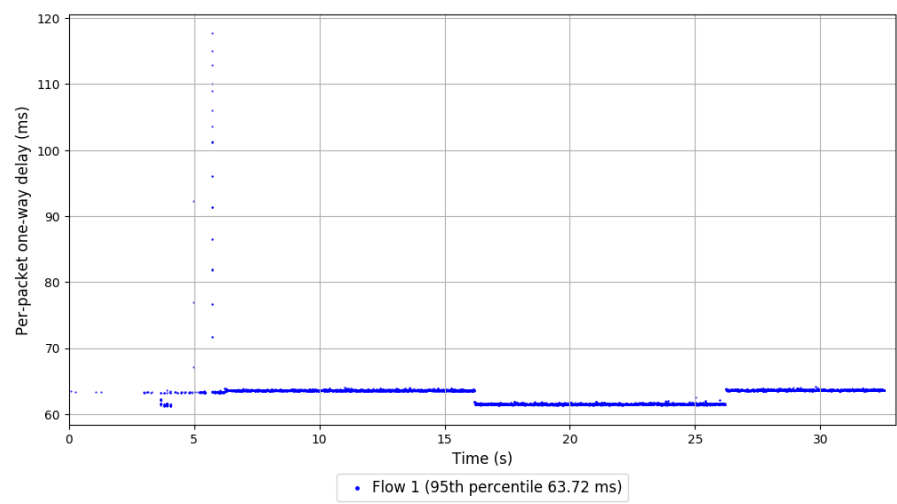
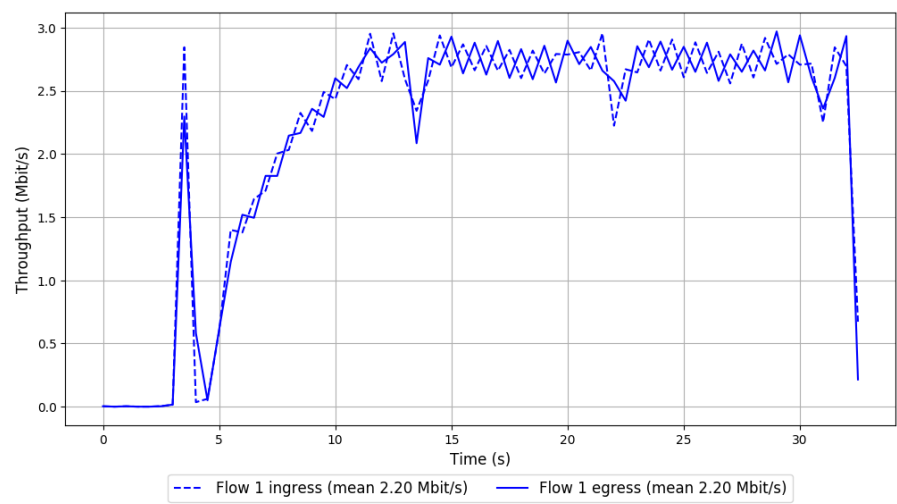
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.722 ms

Loss rate: 0.47%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-30 15:35:57

End at: 2017-11-30 15:36:27

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.764 ms

Loss rate: 0.45%

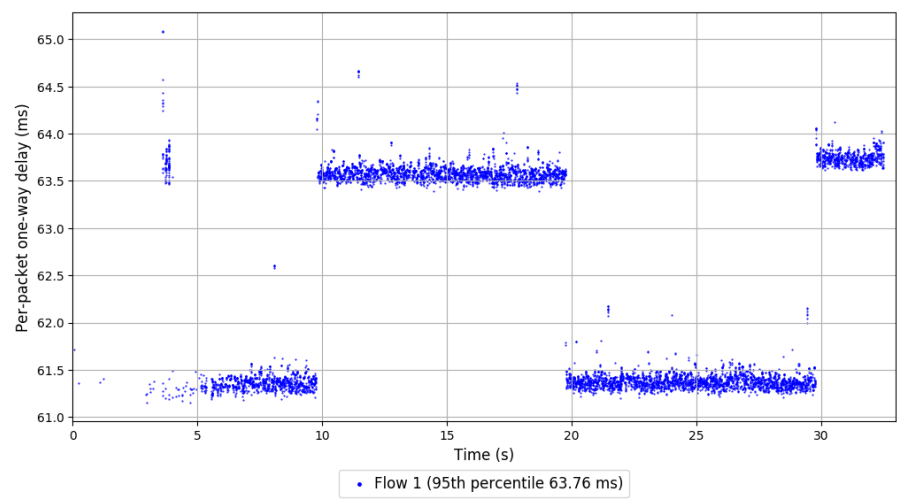
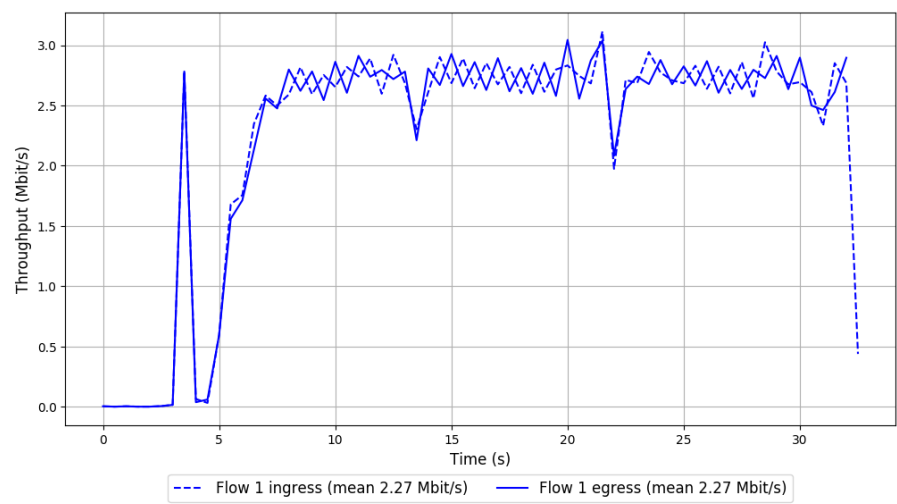
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.764 ms

Loss rate: 0.45%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-30 15:46:13

End at: 2017-11-30 15:46:43

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.934 ms

Loss rate: 0.45%

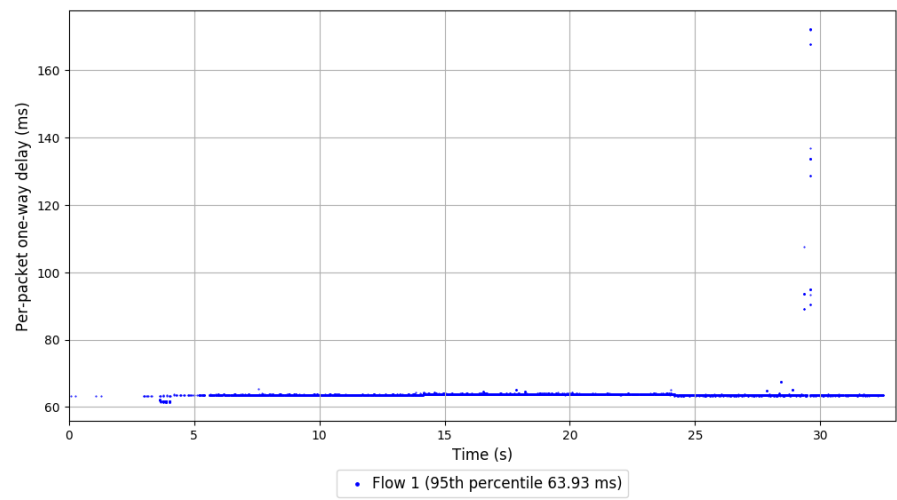
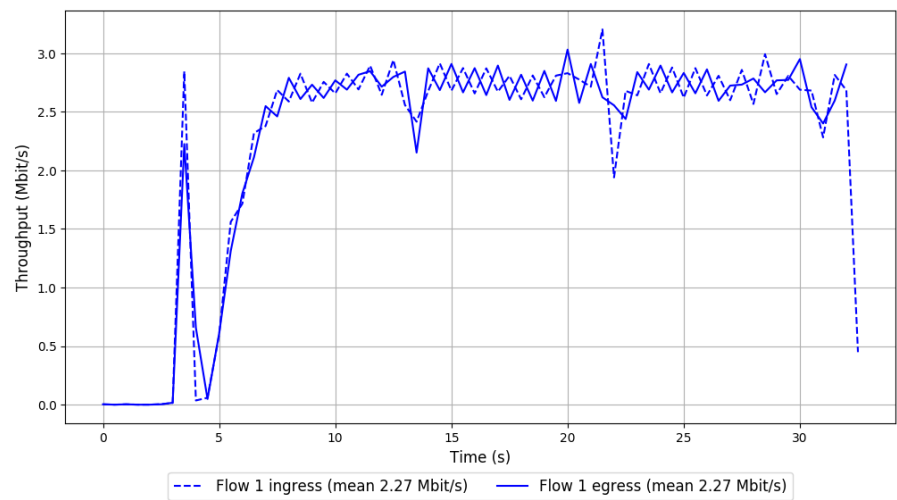
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.934 ms

Loss rate: 0.45%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-30 15:56:53

End at: 2017-11-30 15:57:23

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.873 ms

Loss rate: 0.46%

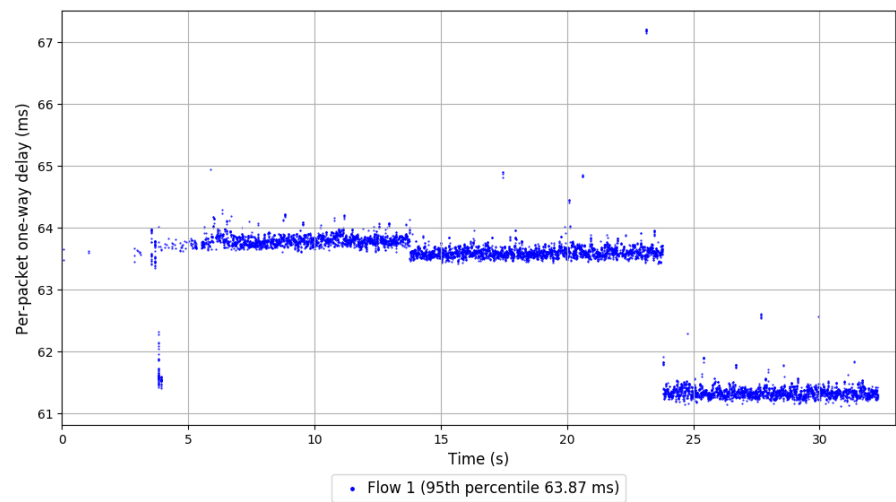
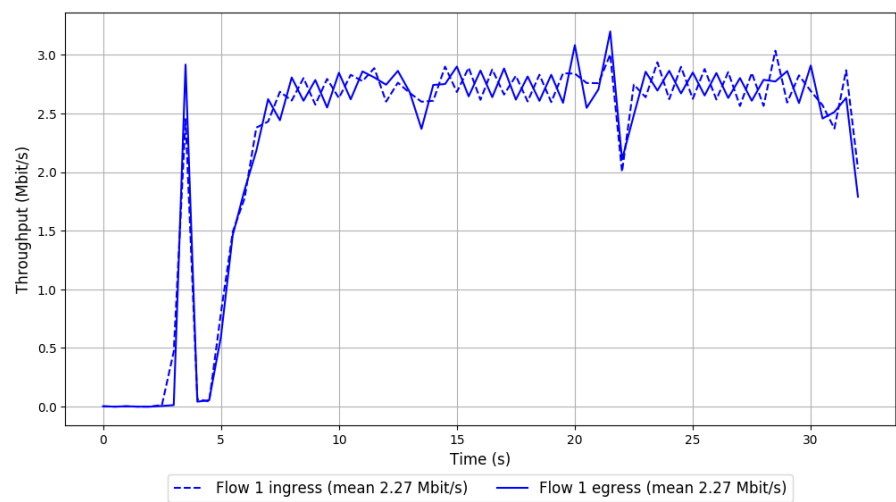
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.873 ms

Loss rate: 0.46%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-30 16:07:24

End at: 2017-11-30 16:07:54

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.655 ms

Loss rate: 0.45%

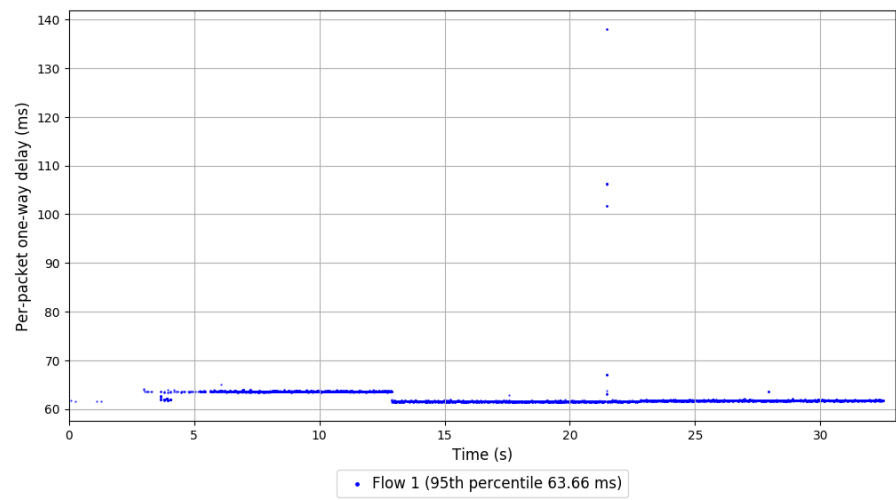
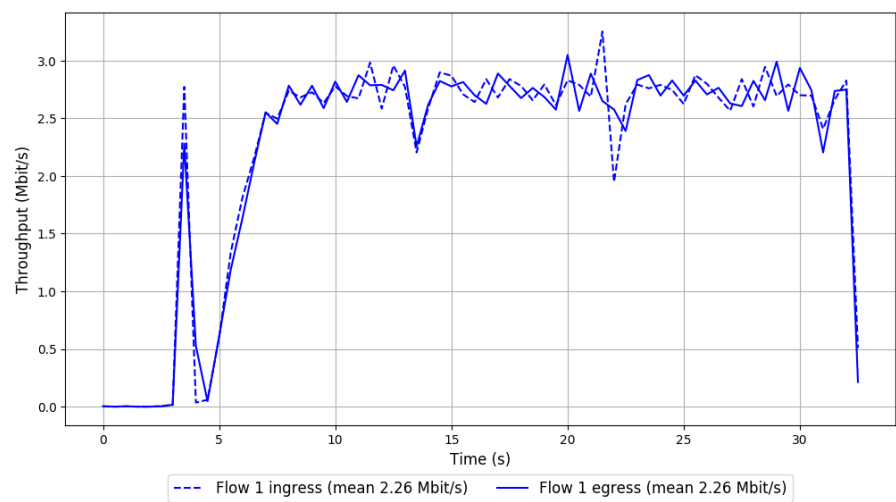
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.655 ms

Loss rate: 0.45%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-30 16:17:58

End at: 2017-11-30 16:18:28

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.696 ms

Loss rate: 0.49%

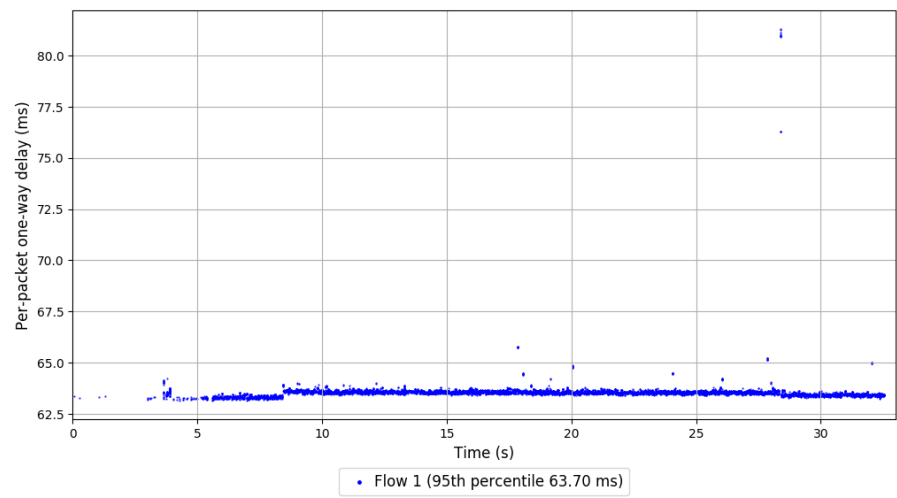
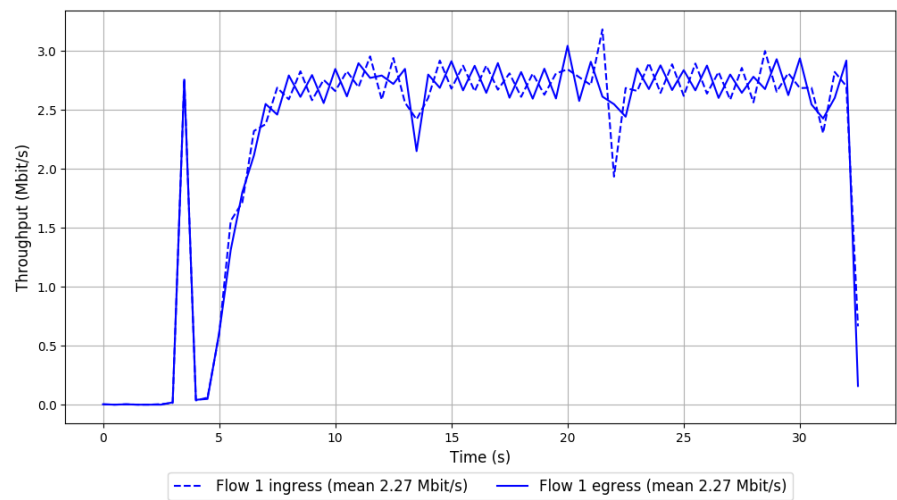
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.696 ms

Loss rate: 0.49%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-30 16:28:36

End at: 2017-11-30 16:29:06

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.821 ms

Loss rate: 0.44%

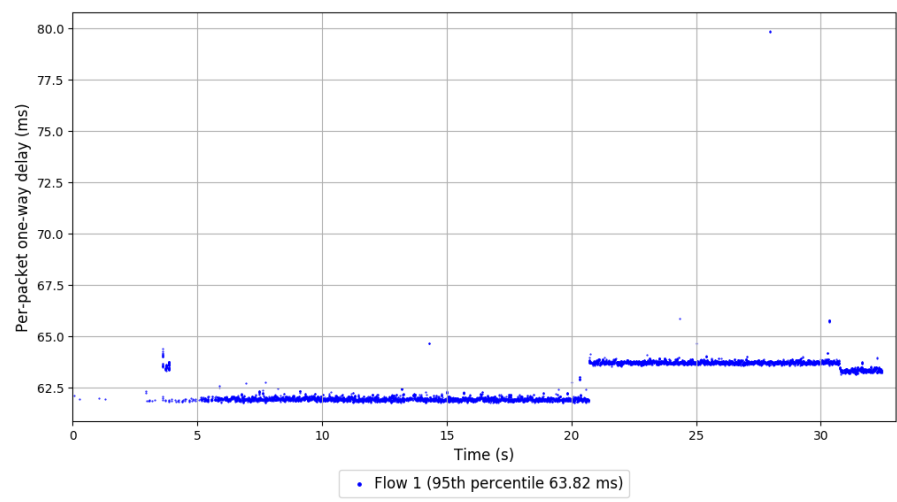
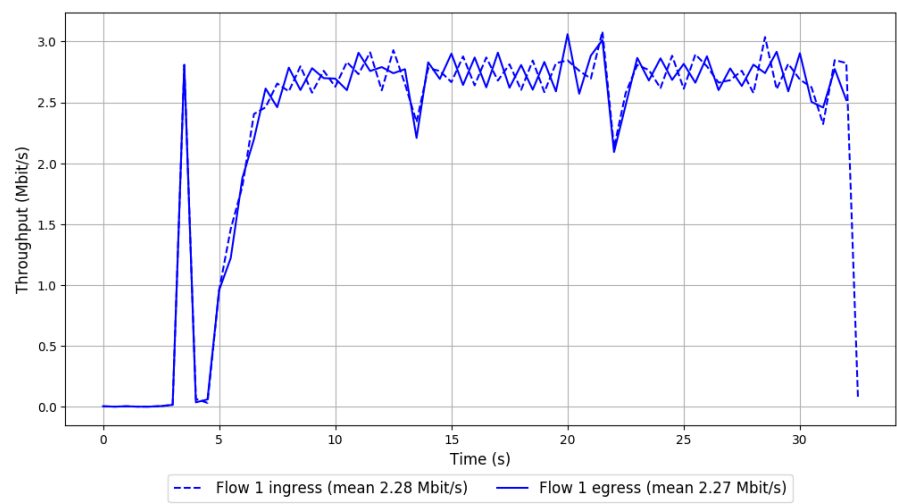
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.821 ms

Loss rate: 0.44%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-30 16:39:02

End at: 2017-11-30 16:39:32

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.686 ms

Loss rate: 0.45%

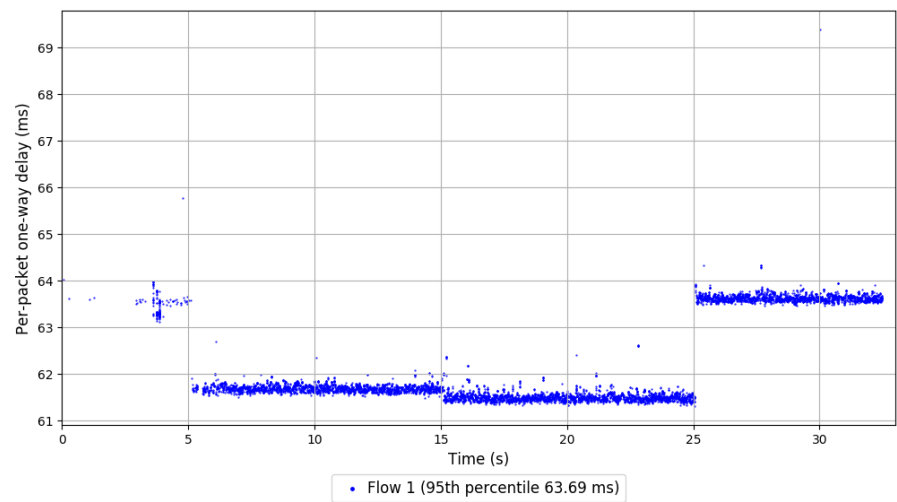
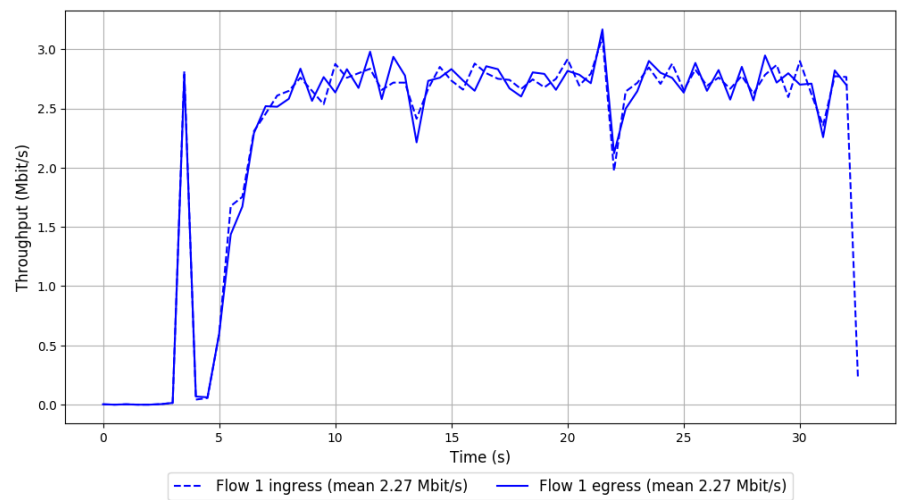
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.686 ms

Loss rate: 0.45%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-30 16:49:37

End at: 2017-11-30 16:50:07

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.712 ms

Loss rate: 0.45%

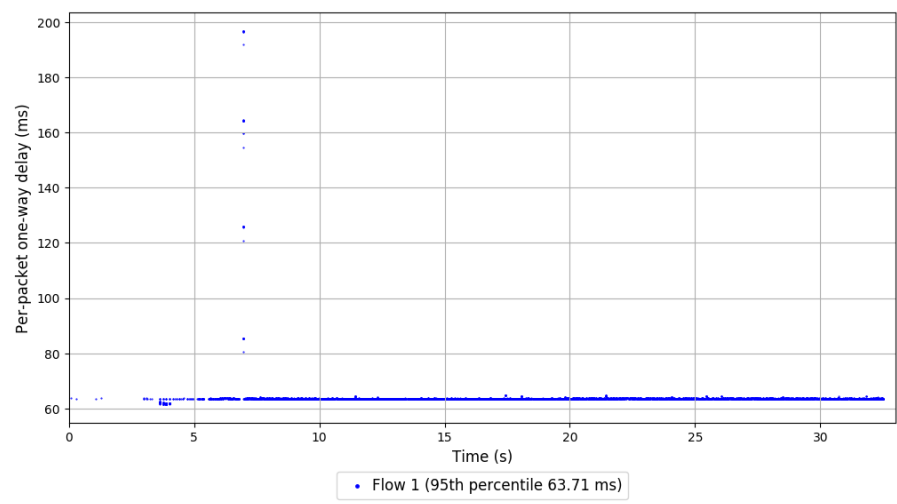
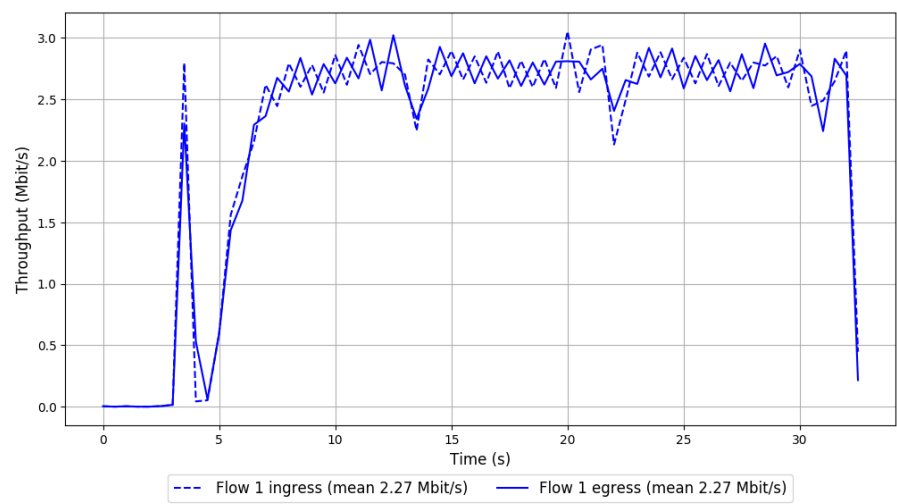
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.712 ms

Loss rate: 0.45%

Run 10: Report of WebRTC media — Data Link

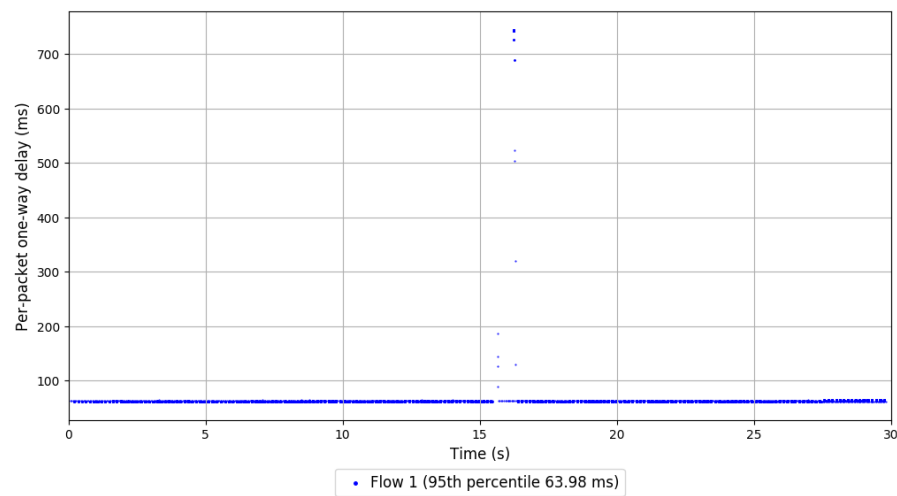
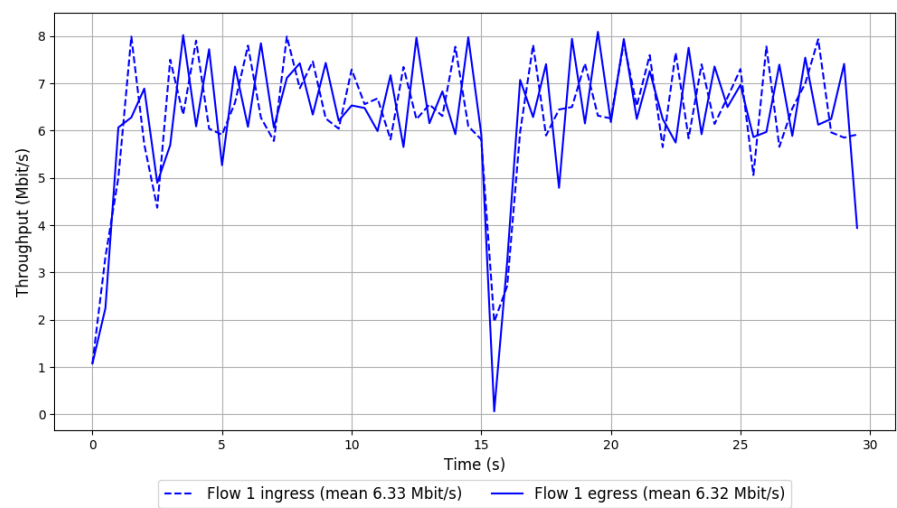


```
Run 1: Statistics of Sprout

Start at: 2017-11-30 15:16:27
End at: 2017-11-30 15:16:57

# Below is generated by plot.py at 2017-11-30 19:10:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.32 Mbit/s
95th percentile per-packet one-way delay: 63.985 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 6.32 Mbit/s
95th percentile per-packet one-way delay: 63.985 ms
Loss rate: 0.55%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-30 15:26:57

End at: 2017-11-30 15:27:27

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 64.595 ms

Loss rate: 0.51%

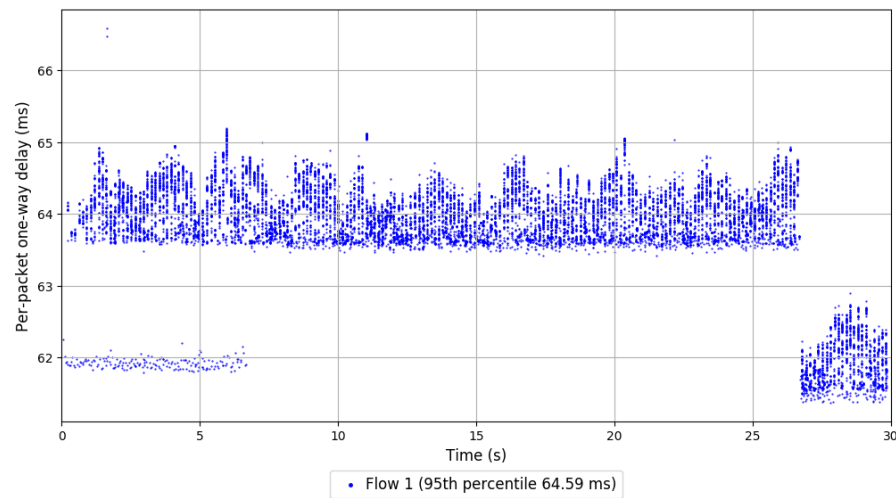
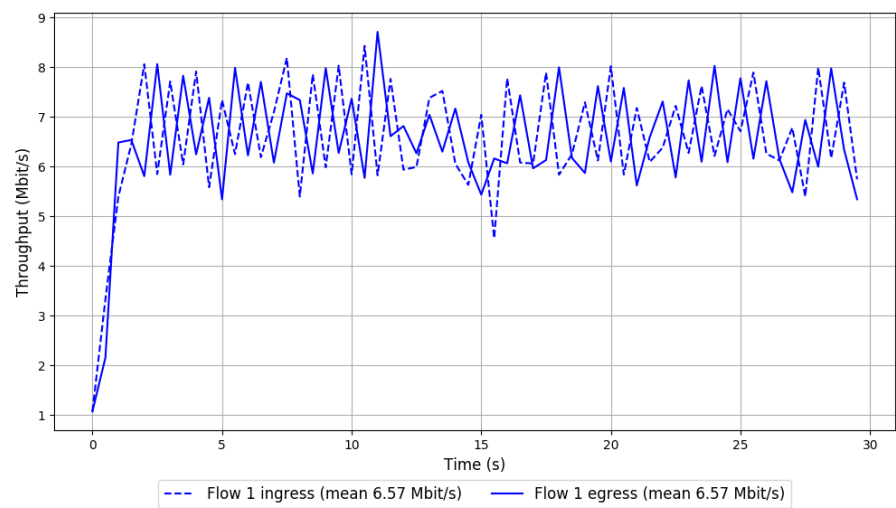
-- Flow 1:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 64.595 ms

Loss rate: 0.51%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-30 15:37:15

End at: 2017-11-30 15:37:45

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.54 Mbit/s

95th percentile per-packet one-way delay: 64.574 ms

Loss rate: 0.00%

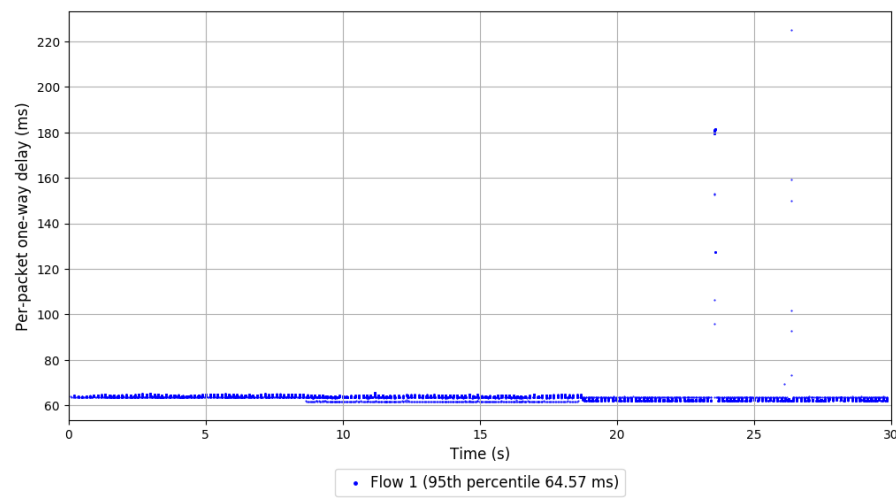
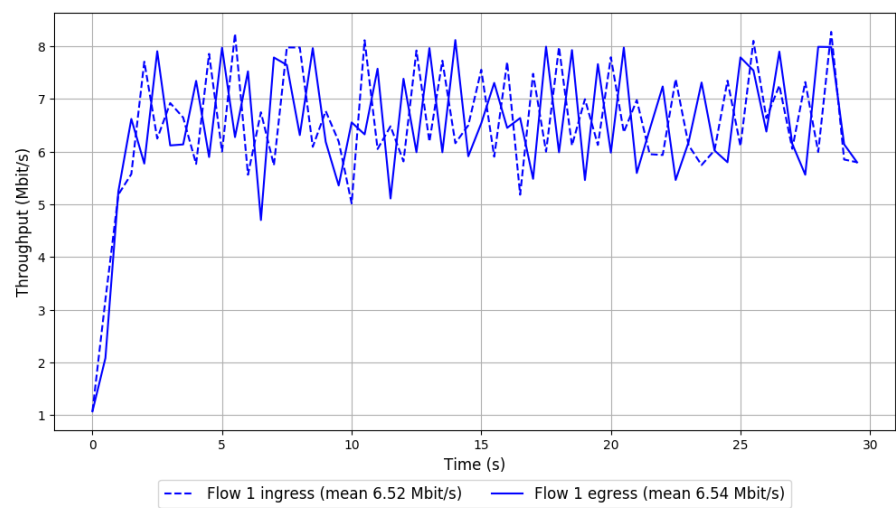
-- Flow 1:

Average throughput: 6.54 Mbit/s

95th percentile per-packet one-way delay: 64.574 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-30 15:47:31

End at: 2017-11-30 15:48:01

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.712 ms

Loss rate: 0.56%

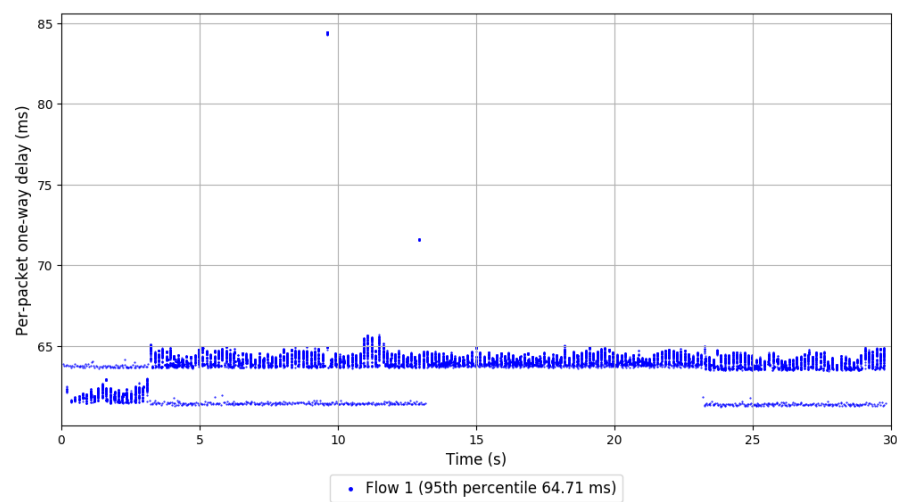
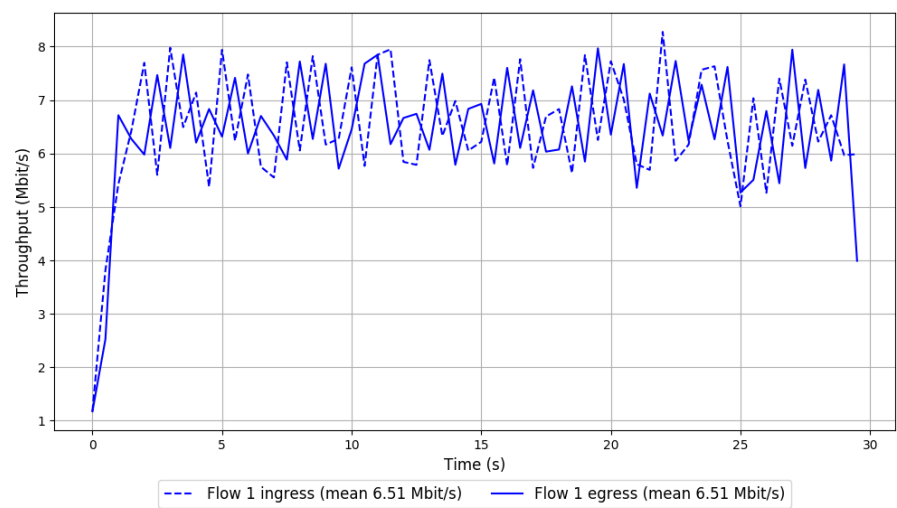
-- Flow 1:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.712 ms

Loss rate: 0.56%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-30 15:58:13

End at: 2017-11-30 15:58:43

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.460 ms

Loss rate: 0.46%

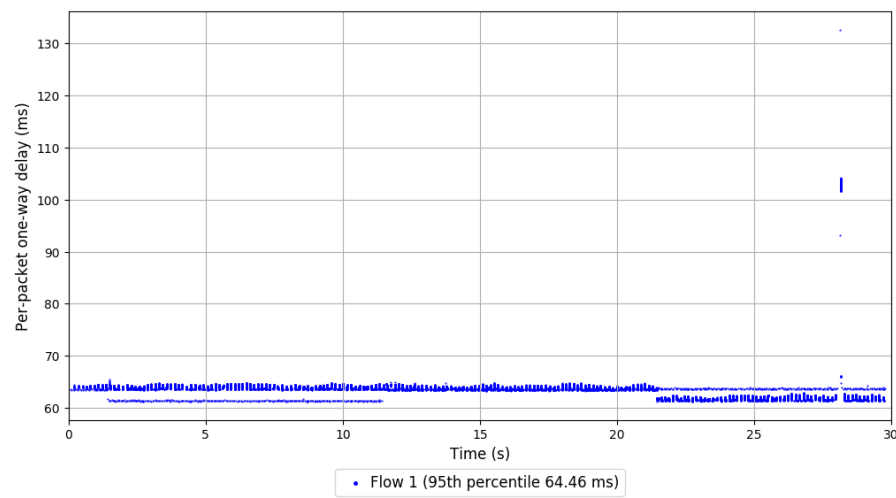
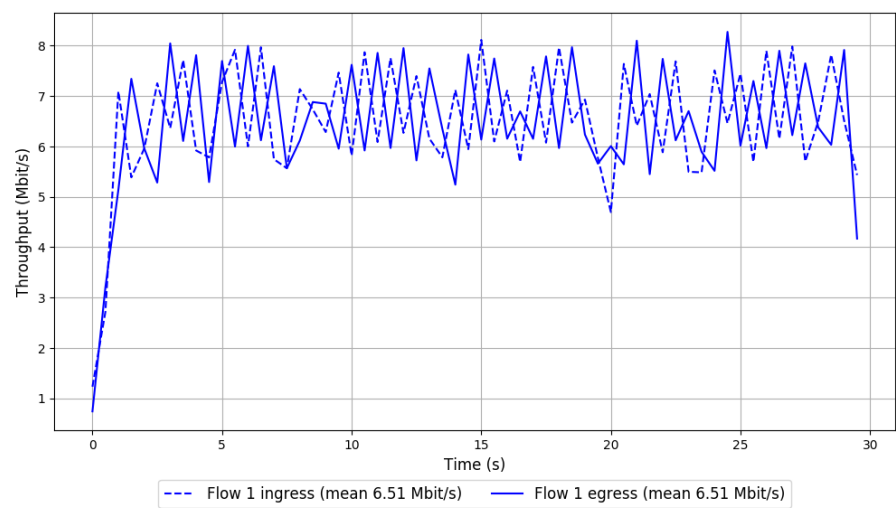
-- Flow 1:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.460 ms

Loss rate: 0.46%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-30 16:08:44

End at: 2017-11-30 16:09:14

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 64.595 ms

Loss rate: 0.39%

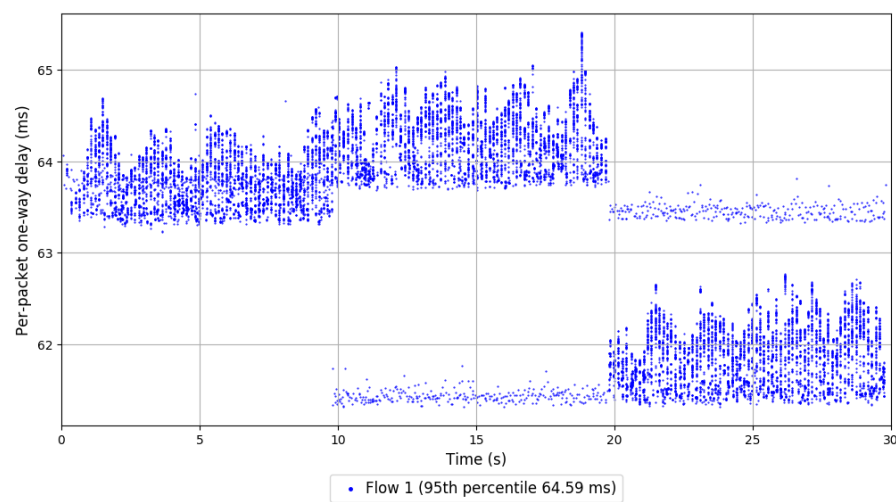
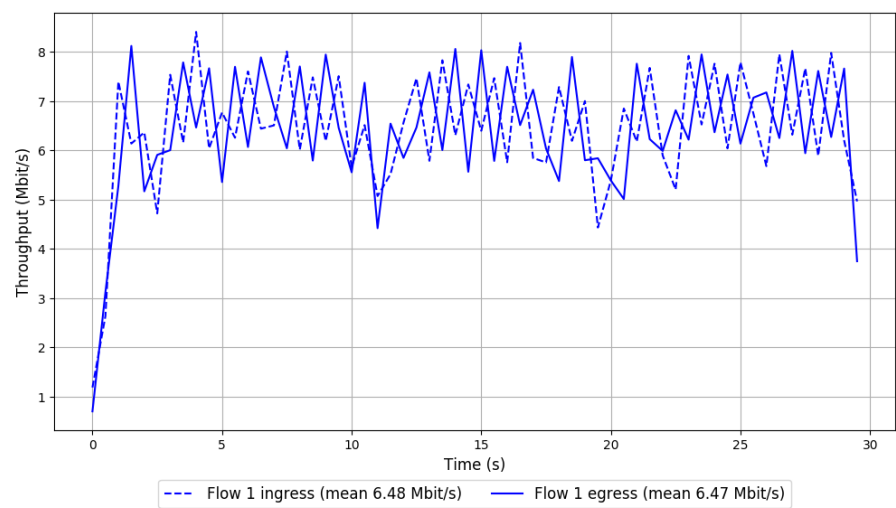
-- Flow 1:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 64.595 ms

Loss rate: 0.39%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-30 16:19:15

End at: 2017-11-30 16:19:45

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 64.726 ms

Loss rate: 0.49%

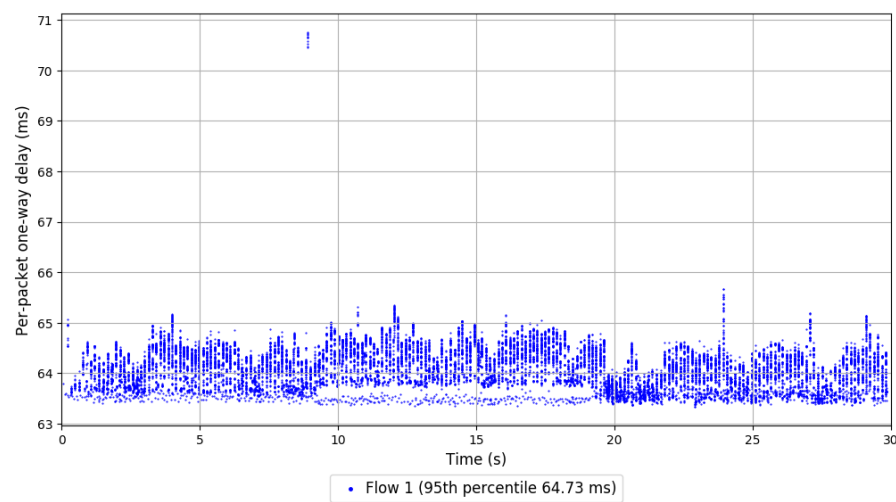
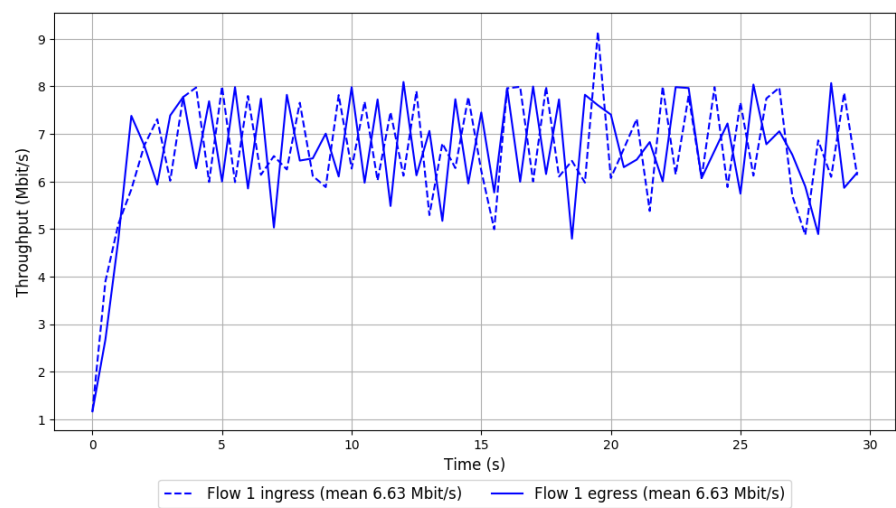
-- Flow 1:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 64.726 ms

Loss rate: 0.49%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-30 16:29:54

End at: 2017-11-30 16:30:24

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 64.548 ms

Loss rate: 0.56%

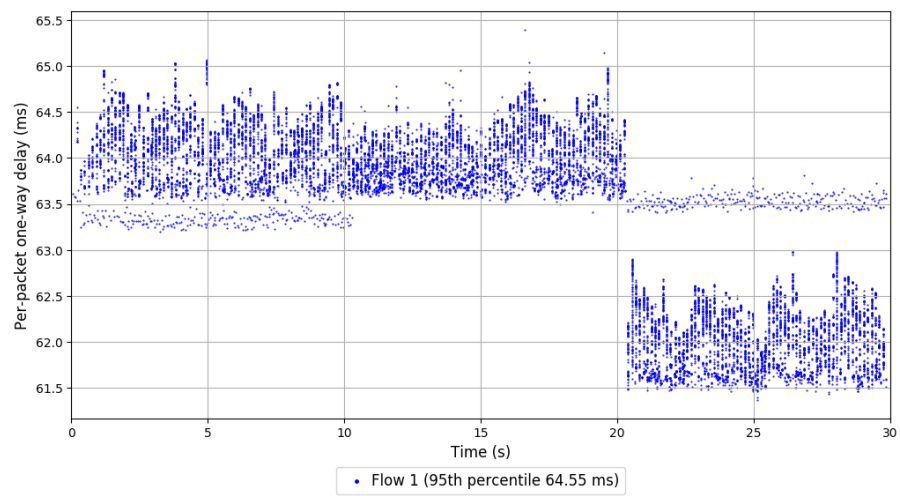
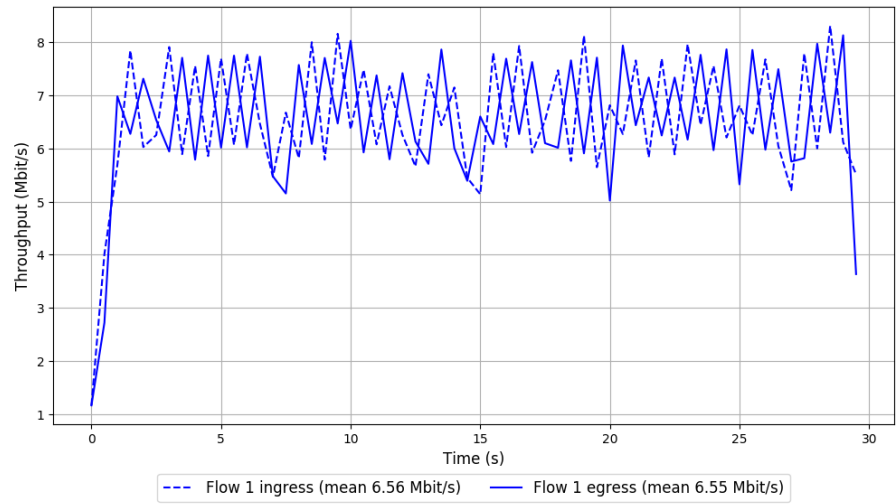
-- Flow 1:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 64.548 ms

Loss rate: 0.56%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-30 16:40:20

End at: 2017-11-30 16:40:50

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 64.532 ms

Loss rate: 0.56%

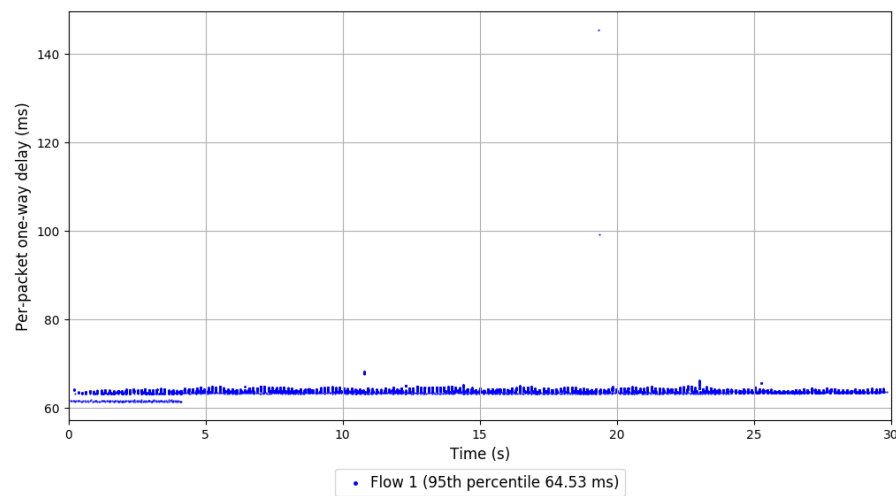
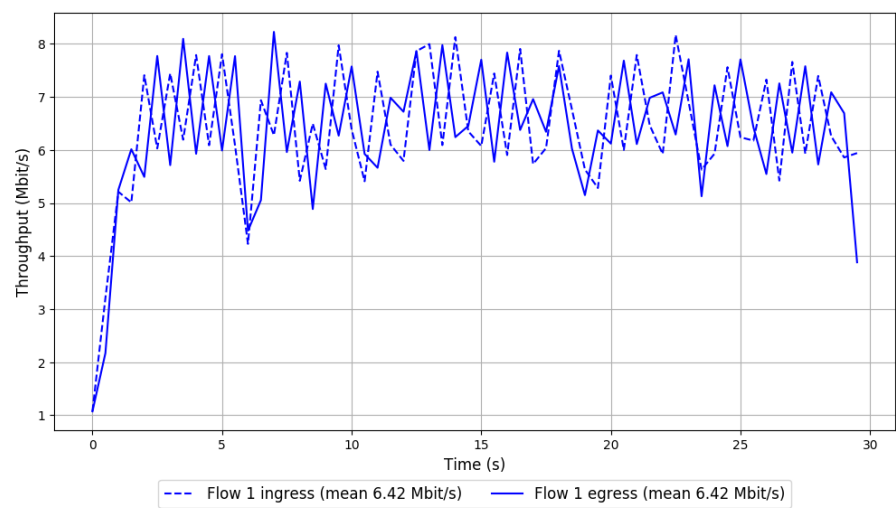
-- Flow 1:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 64.532 ms

Loss rate: 0.56%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-30 16:50:58

End at: 2017-11-30 16:51:28

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 64.451 ms

Loss rate: 0.51%

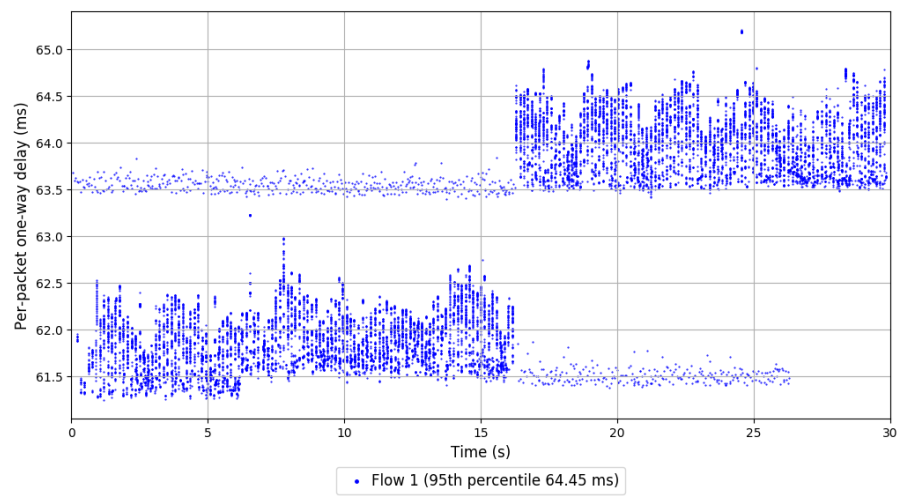
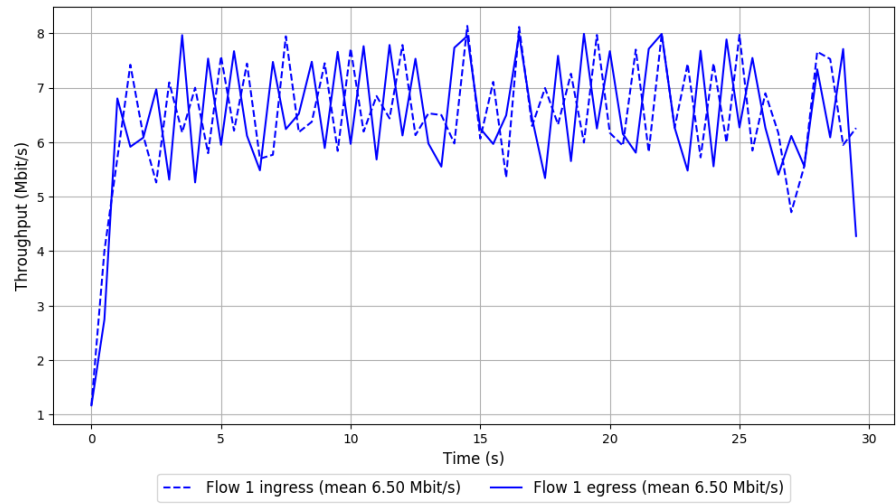
-- Flow 1:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 64.451 ms

Loss rate: 0.51%

Run 10: Report of Sprout — Data Link

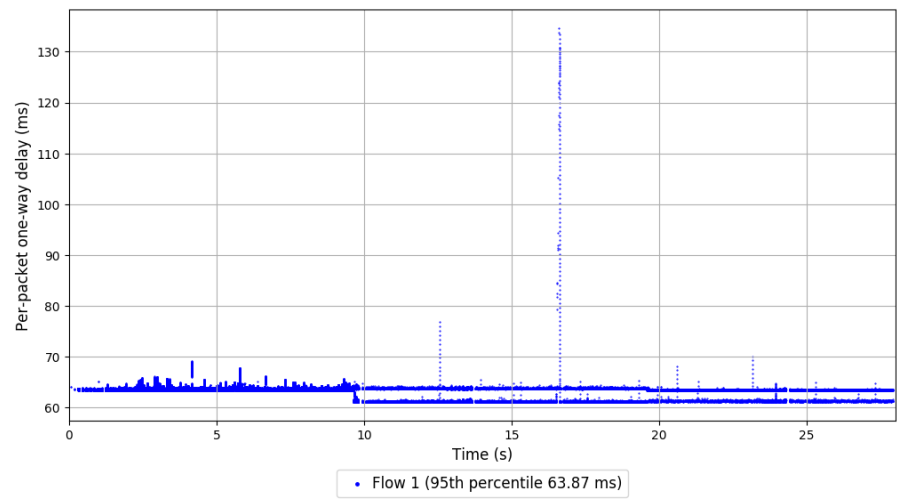
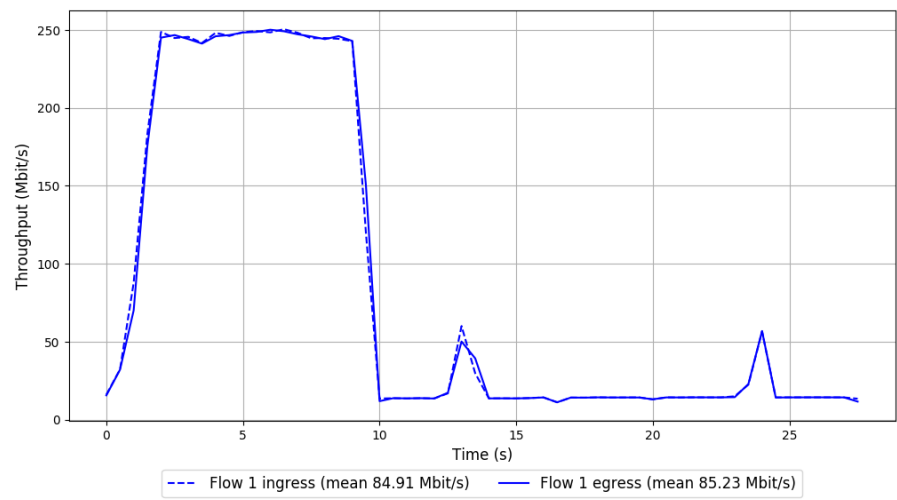


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-30 15:22:42
End at: 2017-11-30 15:23:12

# Below is generated by plot.py at 2017-11-30 19:10:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.23 Mbit/s
95th percentile per-packet one-way delay: 63.865 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 85.23 Mbit/s
95th percentile per-packet one-way delay: 63.865 ms
Loss rate: 0.08%
```


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

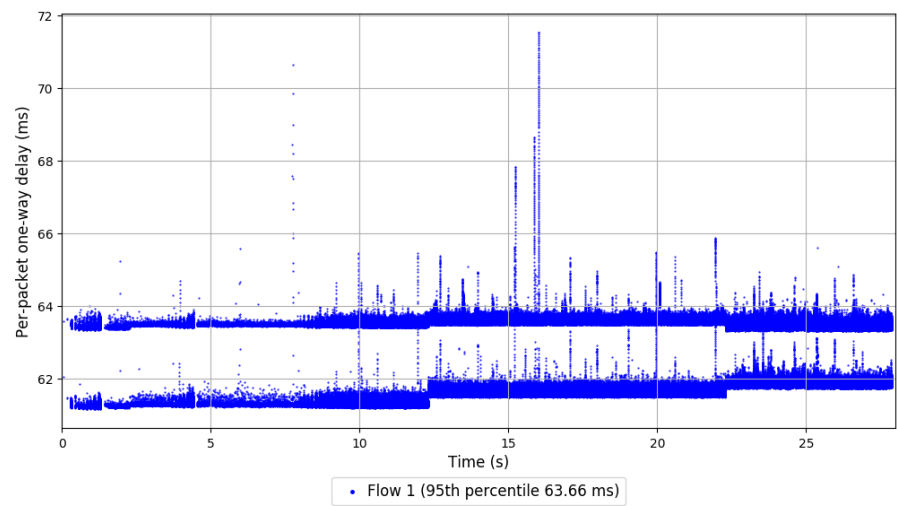
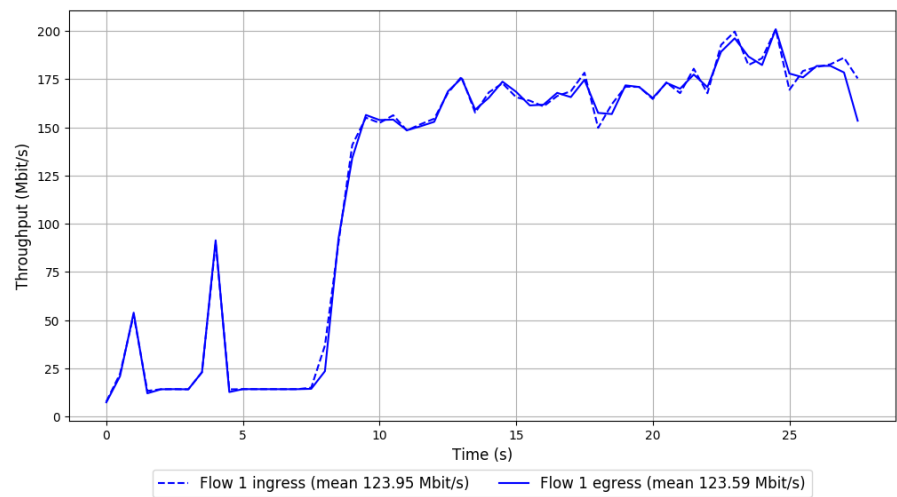


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-30 15:33:00
End at: 2017-11-30 15:33:30

# Below is generated by plot.py at 2017-11-30 19:10:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 123.59 Mbit/s
95th percentile per-packet one-way delay: 63.662 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 123.59 Mbit/s
95th percentile per-packet one-way delay: 63.662 ms
Loss rate: 0.74%
```

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

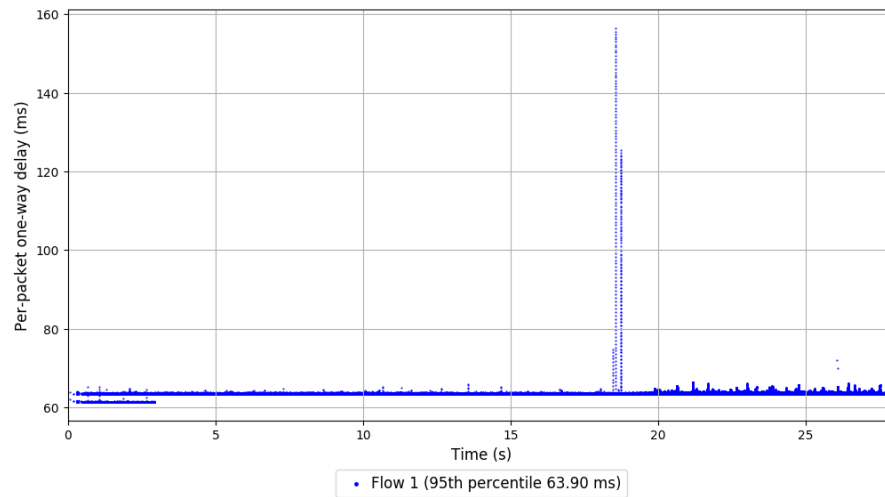
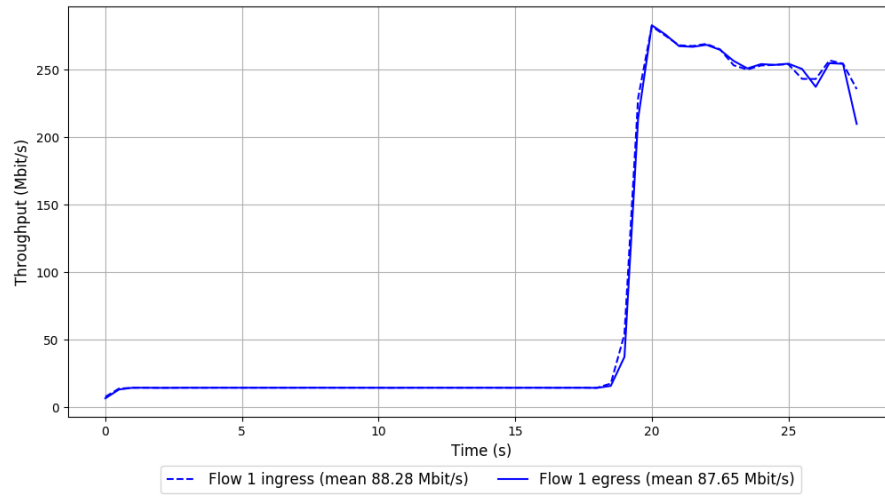


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-11-30 15:43:19
End at: 2017-11-30 15:43:49

# Below is generated by plot.py at 2017-11-30 19:10:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.65 Mbit/s
95th percentile per-packet one-way delay: 63.899 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 87.65 Mbit/s
95th percentile per-packet one-way delay: 63.899 ms
Loss rate: 1.16%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-11-30 15:53:45

End at: 2017-11-30 15:54:15

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 165.36 Mbit/s

95th percentile per-packet one-way delay: 64.009 ms

Loss rate: 0.25%

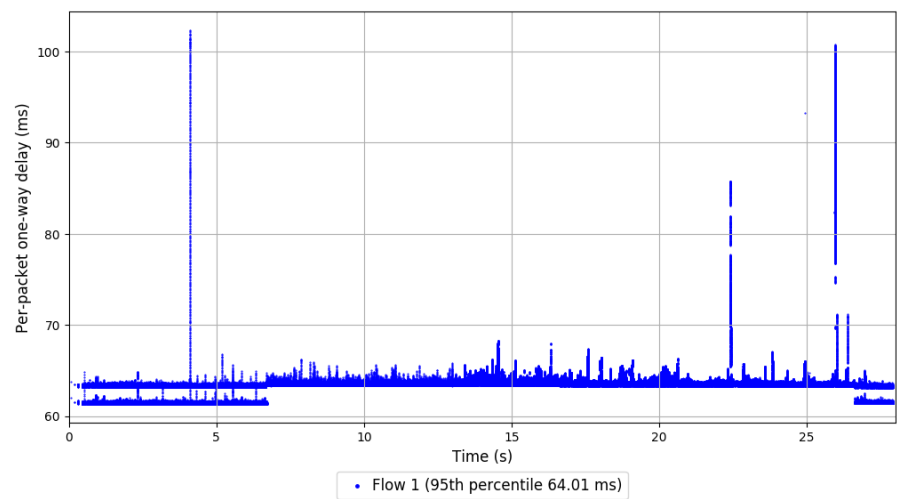
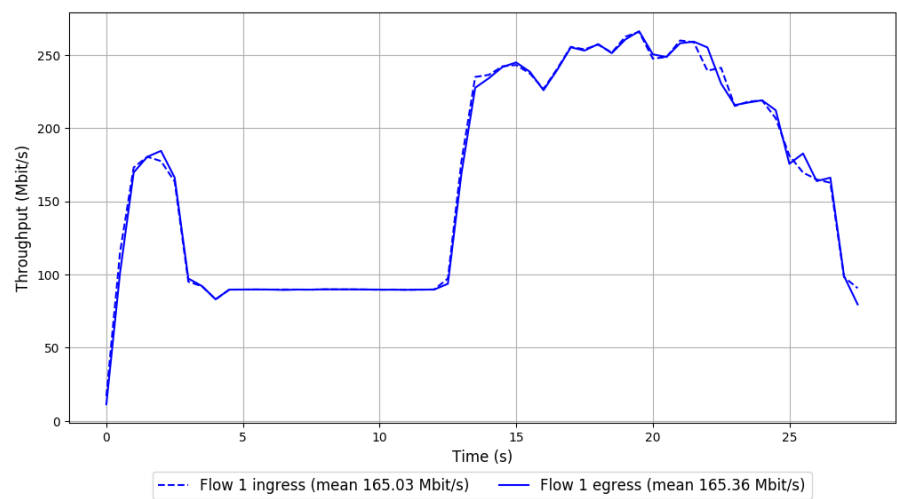
-- Flow 1:

Average throughput: 165.36 Mbit/s

95th percentile per-packet one-way delay: 64.009 ms

Loss rate: 0.25%

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

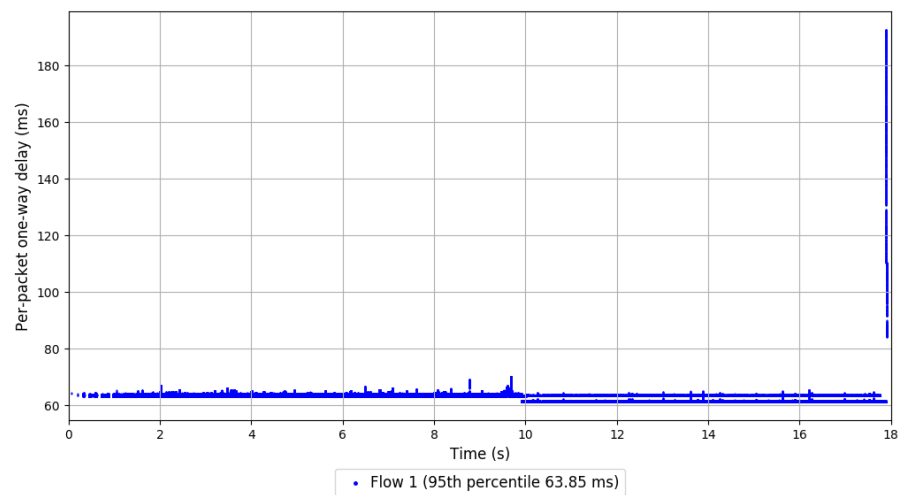
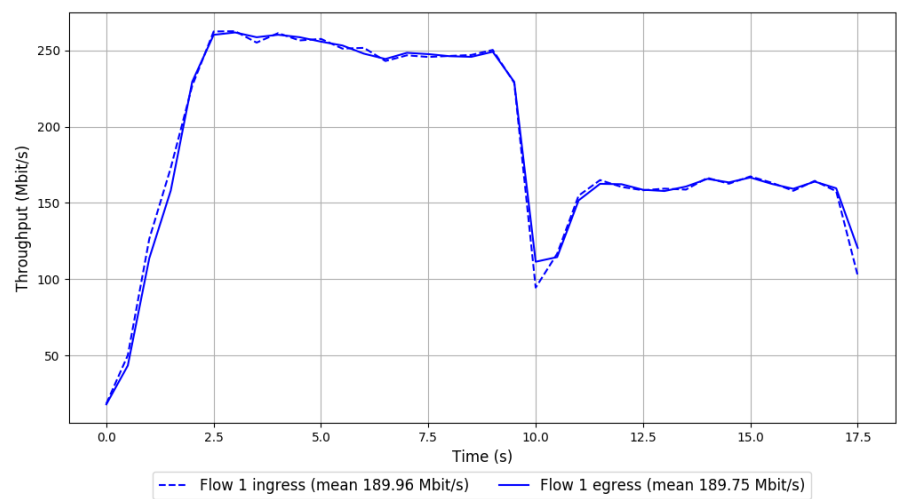


Run 5: Statistics of TaoVA-100x

Start at: 2017-11-30 16:04:22

End at: 2017-11-30 16:04:52

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-30 16:14:51

End at: 2017-11-30 16:15:21

Below is generated by plot.py at 2017-11-30 19:10:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.15 Mbit/s

95th percentile per-packet one-way delay: 63.705 ms

Loss rate: 0.39%

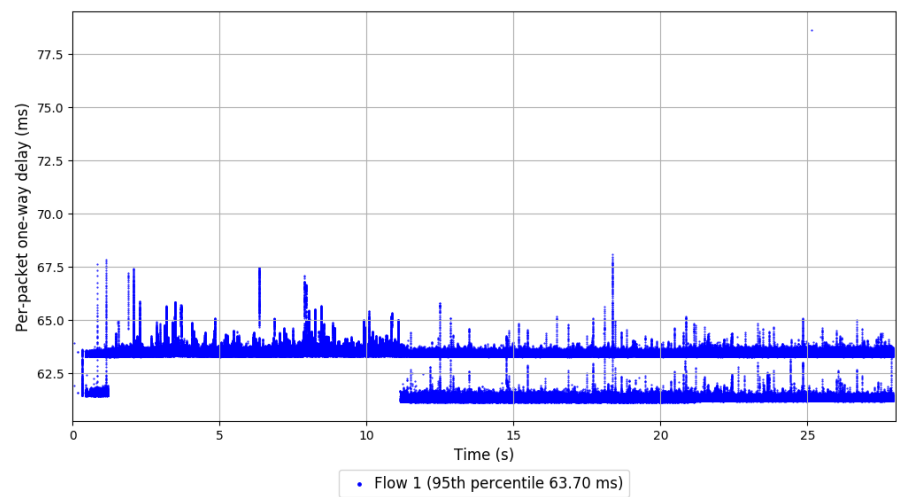
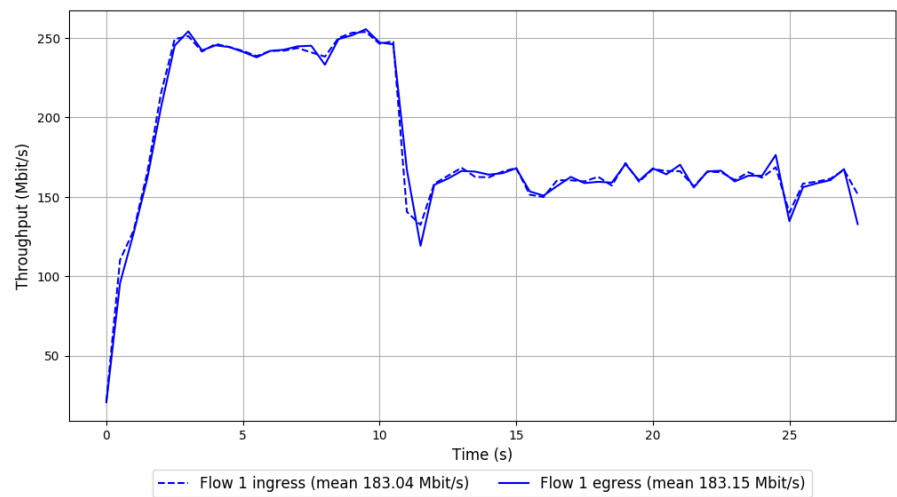
-- Flow 1:

Average throughput: 183.15 Mbit/s

95th percentile per-packet one-way delay: 63.705 ms

Loss rate: 0.39%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-30 16:25:24

End at: 2017-11-30 16:25:54

Below is generated by plot.py at 2017-11-30 19:12:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 231.10 Mbit/s

95th percentile per-packet one-way delay: 63.929 ms

Loss rate: 0.35%

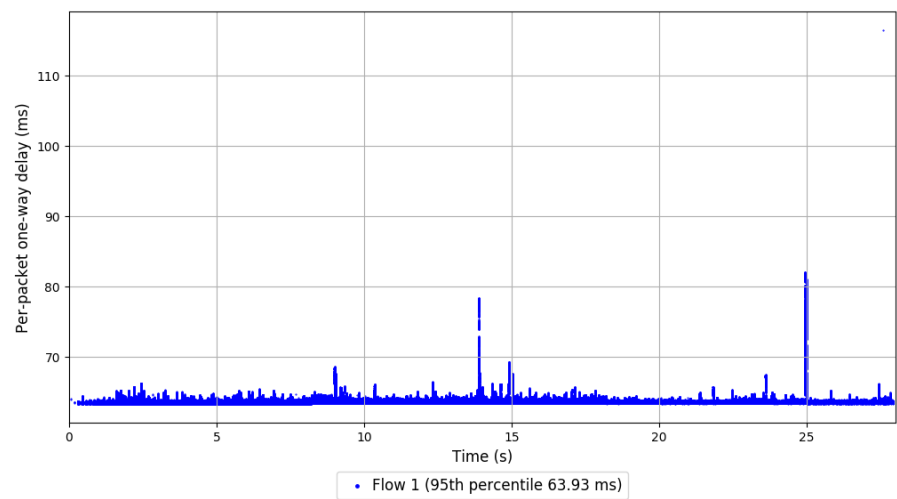
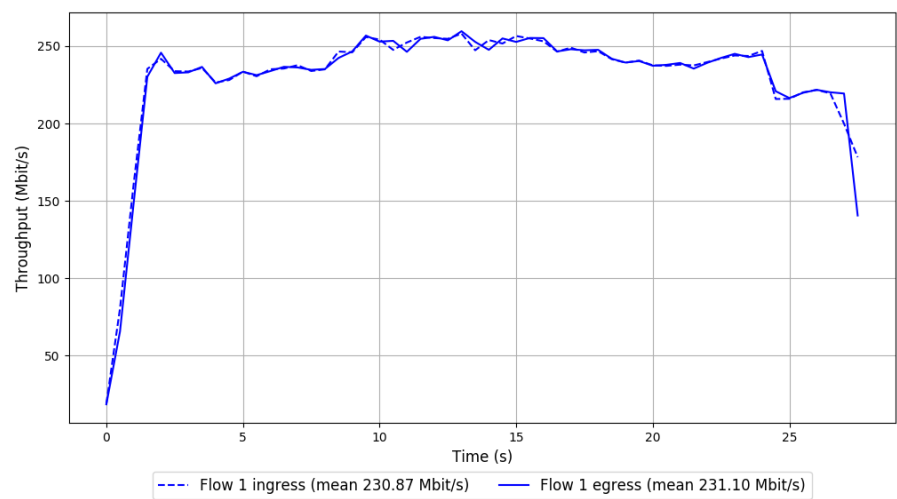
-- Flow 1:

Average throughput: 231.10 Mbit/s

95th percentile per-packet one-way delay: 63.929 ms

Loss rate: 0.35%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-30 16:35:56

End at: 2017-11-30 16:36:26

Below is generated by plot.py at 2017-11-30 19:12:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.59 Mbit/s

95th percentile per-packet one-way delay: 63.657 ms

Loss rate: 0.55%

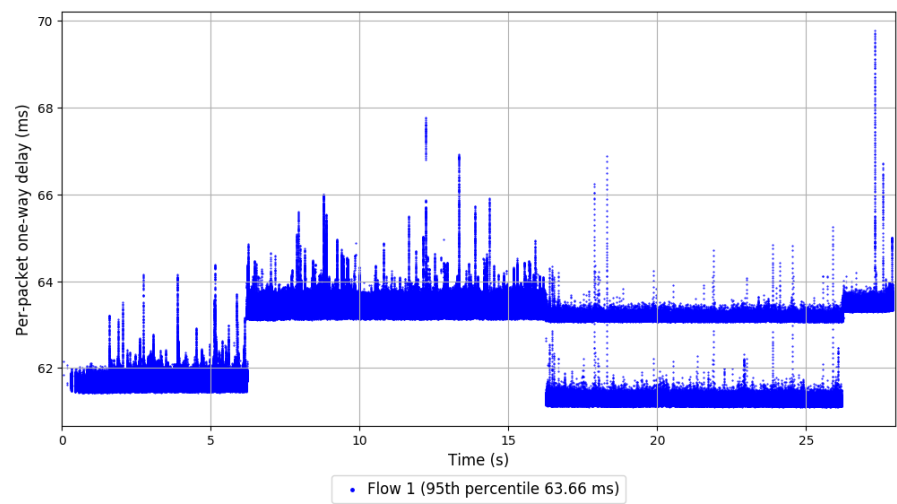
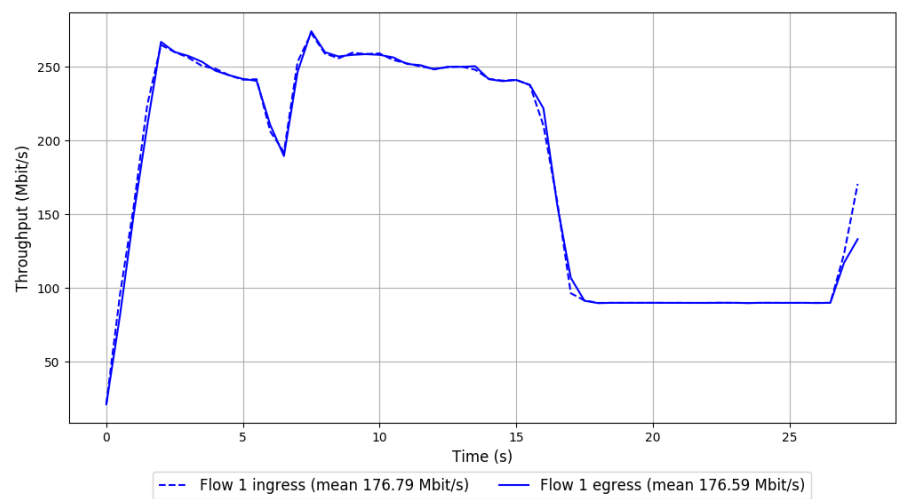
-- Flow 1:

Average throughput: 176.59 Mbit/s

95th percentile per-packet one-way delay: 63.657 ms

Loss rate: 0.55%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-30 16:46:32

End at: 2017-11-30 16:47:02

Below is generated by plot.py at 2017-11-30 19:12:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 156.04 Mbit/s

95th percentile per-packet one-way delay: 63.912 ms

Loss rate: 0.26%

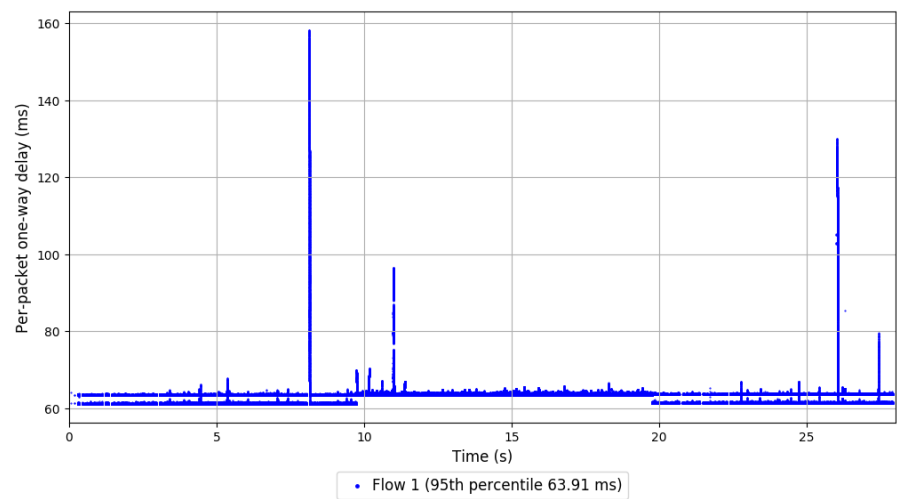
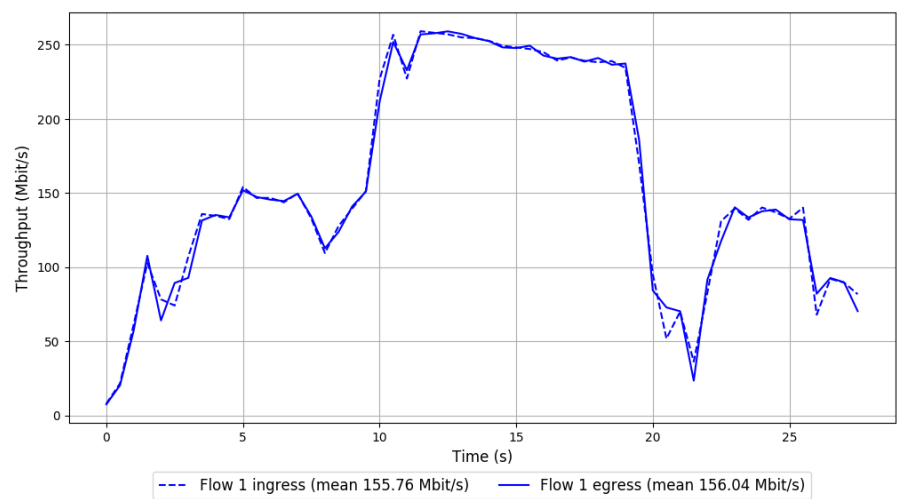
-- Flow 1:

Average throughput: 156.04 Mbit/s

95th percentile per-packet one-way delay: 63.912 ms

Loss rate: 0.26%

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

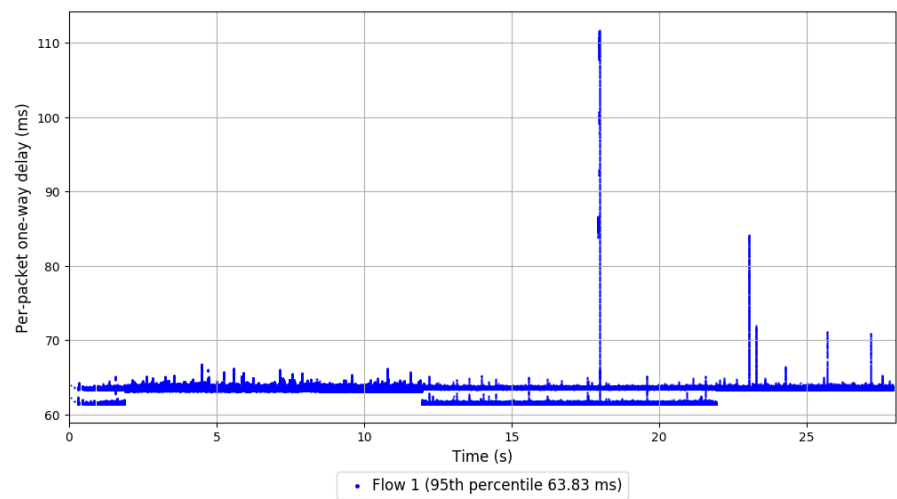
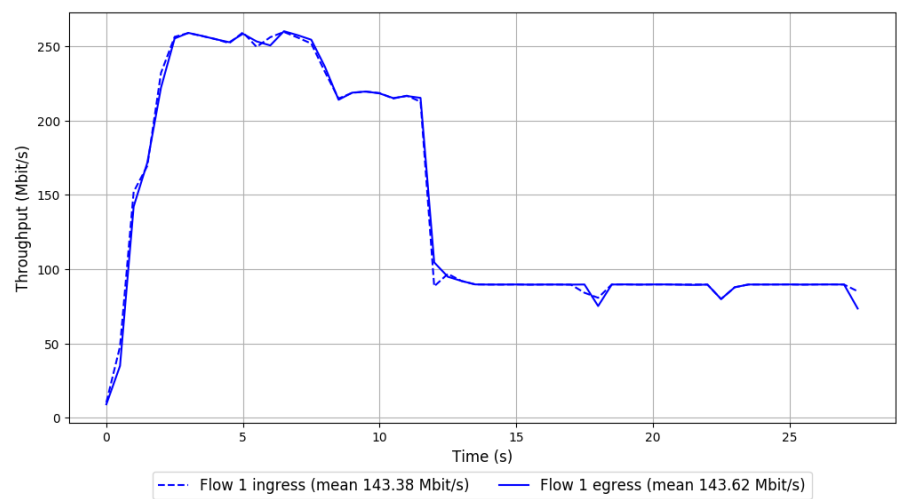


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-30 16:57:10
End at: 2017-11-30 16:57:40

# Below is generated by plot.py at 2017-11-30 19:12:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 143.62 Mbit/s
95th percentile per-packet one-way delay: 63.831 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 143.62 Mbit/s
95th percentile per-packet one-way delay: 63.831 ms
Loss rate: 0.29%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-30 15:15:45

End at: 2017-11-30 15:16:15

Below is generated by plot.py at 2017-11-30 19:12:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.64 Mbit/s

95th percentile per-packet one-way delay: 64.228 ms

Loss rate: 0.41%

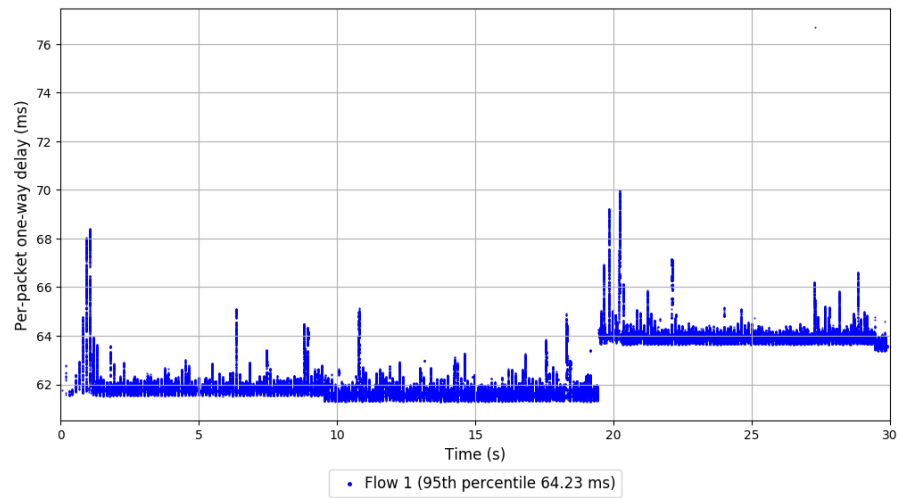
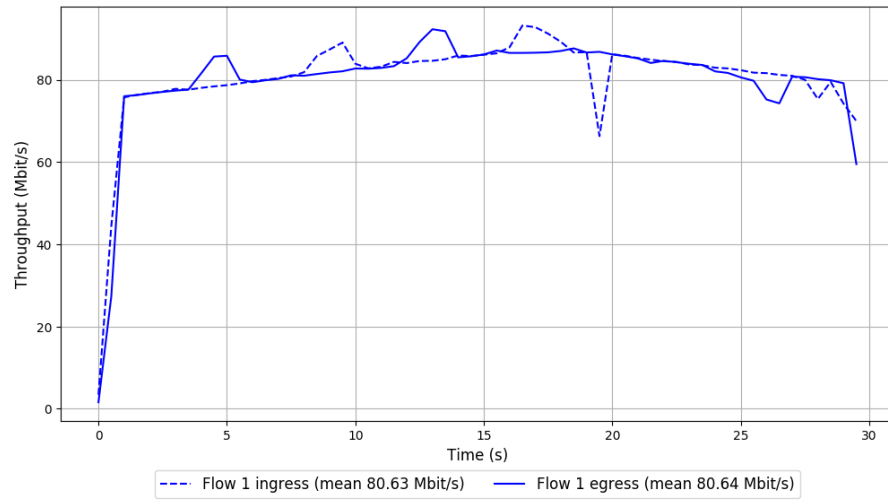
-- Flow 1:

Average throughput: 80.64 Mbit/s

95th percentile per-packet one-way delay: 64.228 ms

Loss rate: 0.41%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-30 15:26:18

End at: 2017-11-30 15:26:48

Below is generated by plot.py at 2017-11-30 19:12:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.41 Mbit/s

95th percentile per-packet one-way delay: 64.120 ms

Loss rate: 0.54%

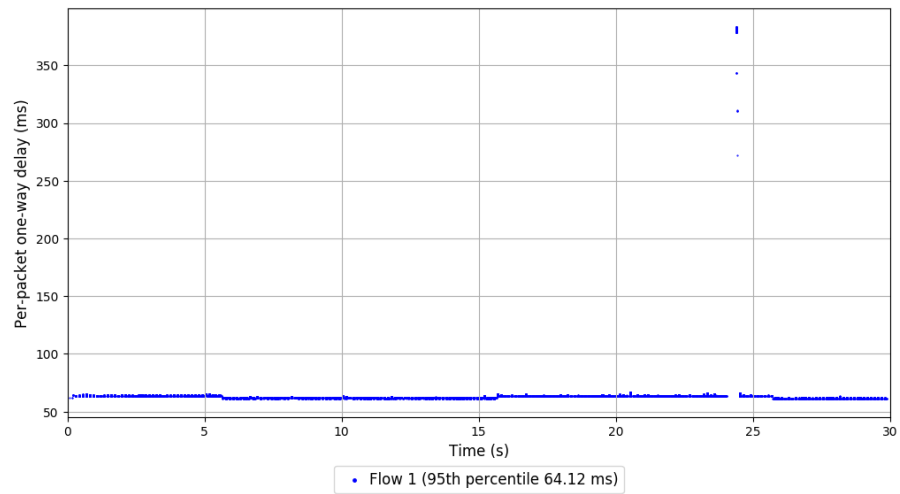
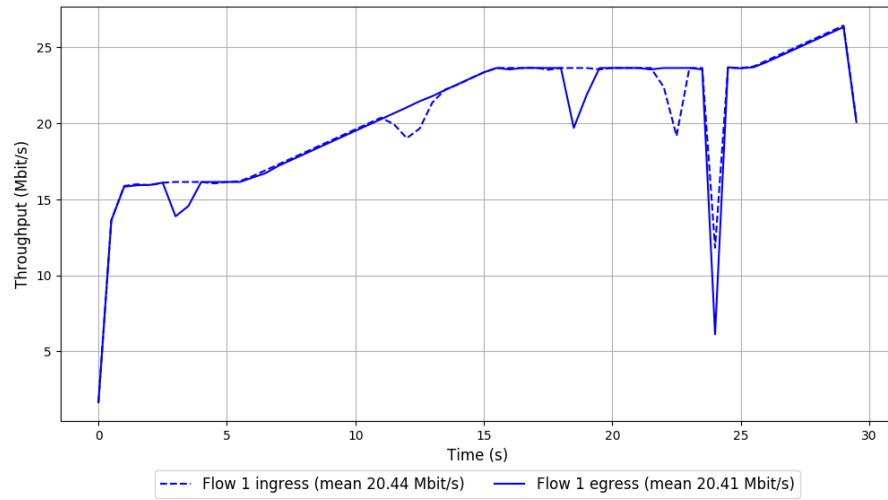
-- Flow 1:

Average throughput: 20.41 Mbit/s

95th percentile per-packet one-way delay: 64.120 ms

Loss rate: 0.54%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-30 15:36:35

End at: 2017-11-30 15:37:05

Below is generated by plot.py at 2017-11-30 19:12:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.20 Mbit/s

95th percentile per-packet one-way delay: 64.042 ms

Loss rate: 0.39%

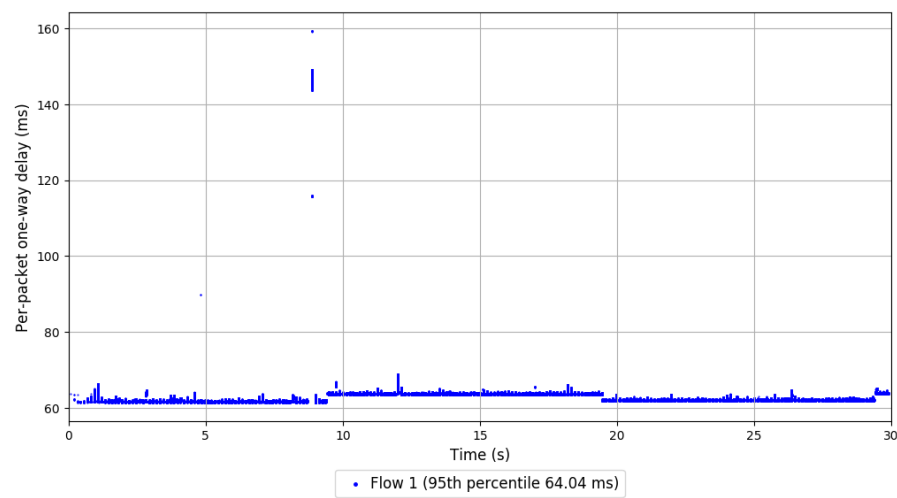
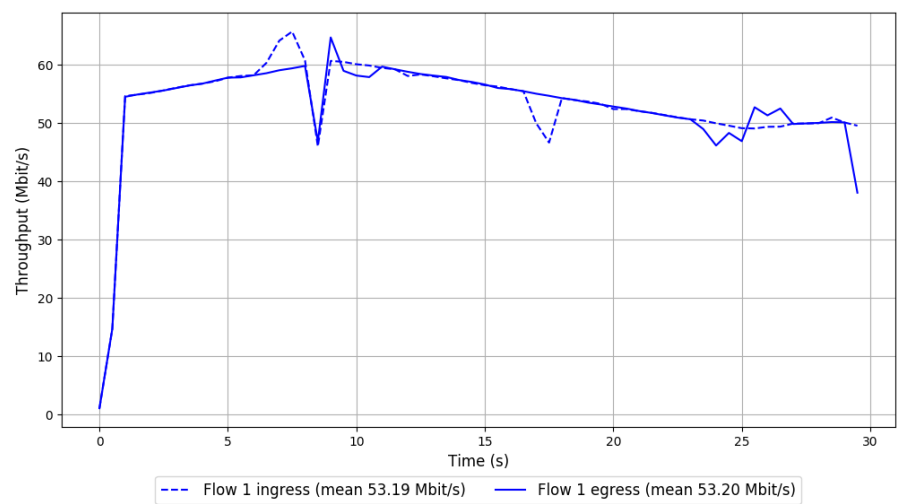
-- Flow 1:

Average throughput: 53.20 Mbit/s

95th percentile per-packet one-way delay: 64.042 ms

Loss rate: 0.39%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-30 15:46:50

End at: 2017-11-30 15:47:20

Below is generated by plot.py at 2017-11-30 19:12:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.78 Mbit/s

95th percentile per-packet one-way delay: 64.436 ms

Loss rate: 0.34%

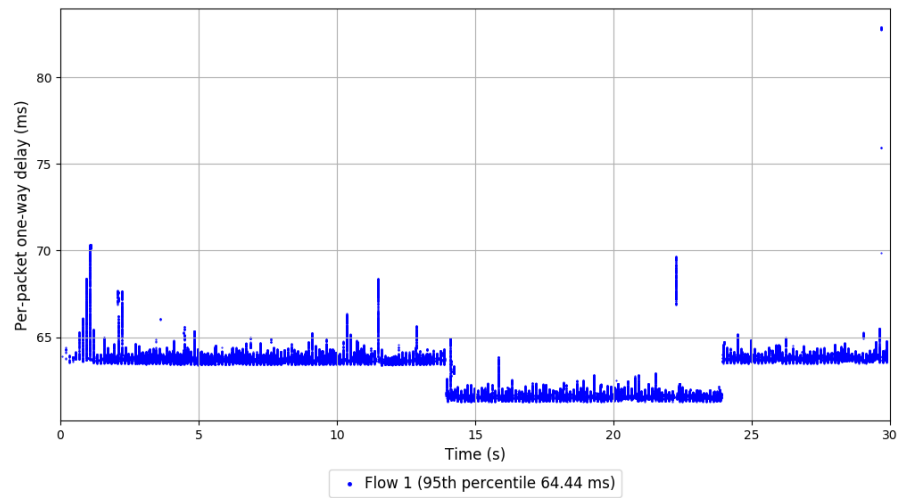
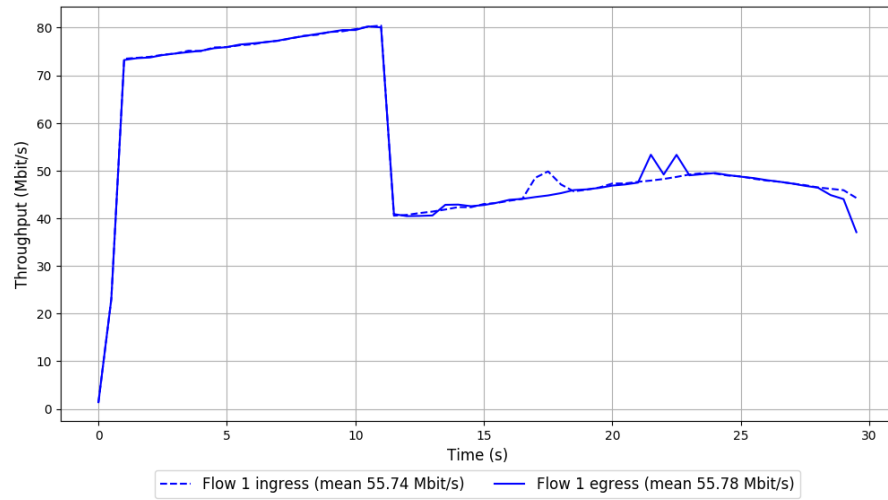
-- Flow 1:

Average throughput: 55.78 Mbit/s

95th percentile per-packet one-way delay: 64.436 ms

Loss rate: 0.34%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-30 15:57:30

End at: 2017-11-30 15:58:01

Below is generated by plot.py at 2017-11-30 19:12:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.22 Mbit/s

95th percentile per-packet one-way delay: 64.415 ms

Loss rate: 0.38%

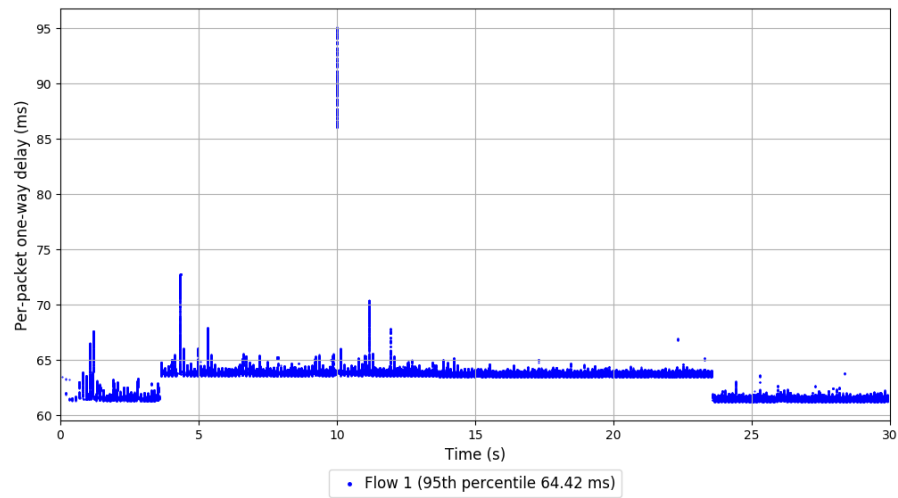
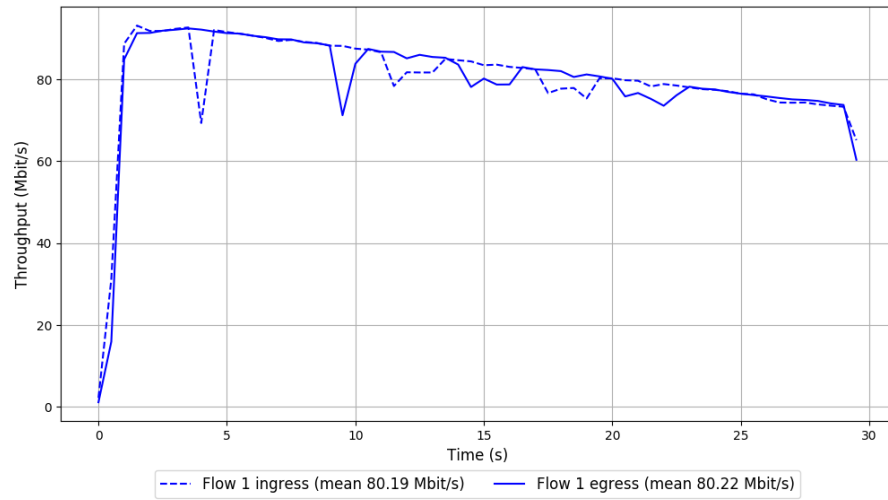
-- Flow 1:

Average throughput: 80.22 Mbit/s

95th percentile per-packet one-way delay: 64.415 ms

Loss rate: 0.38%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-30 16:08:02

End at: 2017-11-30 16:08:32

Below is generated by plot.py at 2017-11-30 19:12:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.71 Mbit/s

95th percentile per-packet one-way delay: 65.312 ms

Loss rate: 0.32%

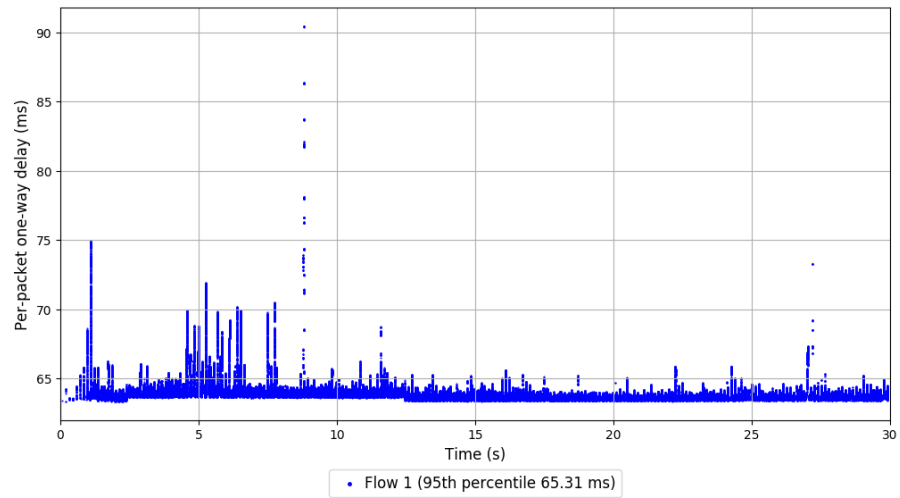
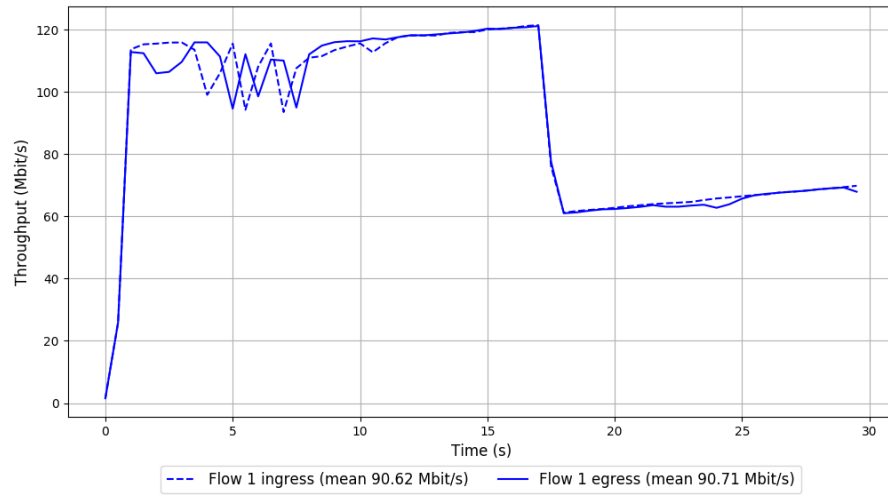
-- Flow 1:

Average throughput: 90.71 Mbit/s

95th percentile per-packet one-way delay: 65.312 ms

Loss rate: 0.32%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-30 16:18:36

End at: 2017-11-30 16:19:06

Below is generated by plot.py at 2017-11-30 19:12:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.70 Mbit/s

95th percentile per-packet one-way delay: 64.057 ms

Loss rate: 0.30%

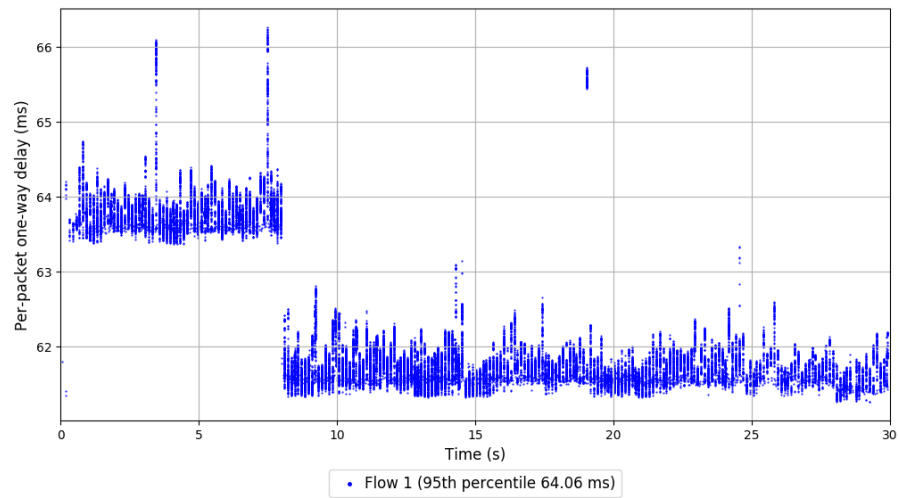
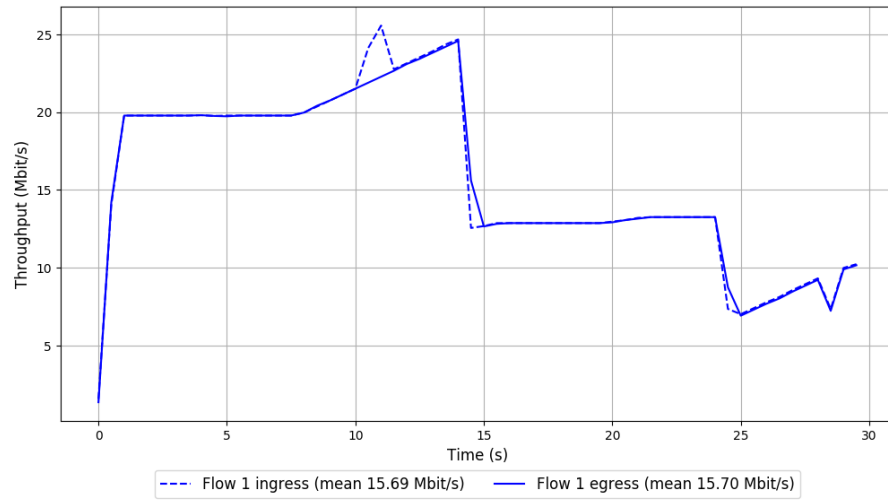
-- Flow 1:

Average throughput: 15.70 Mbit/s

95th percentile per-packet one-way delay: 64.057 ms

Loss rate: 0.30%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-30 16:29:14

End at: 2017-11-30 16:29:44

Below is generated by plot.py at 2017-11-30 19:12:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.02 Mbit/s

95th percentile per-packet one-way delay: 64.377 ms

Loss rate: 0.25%

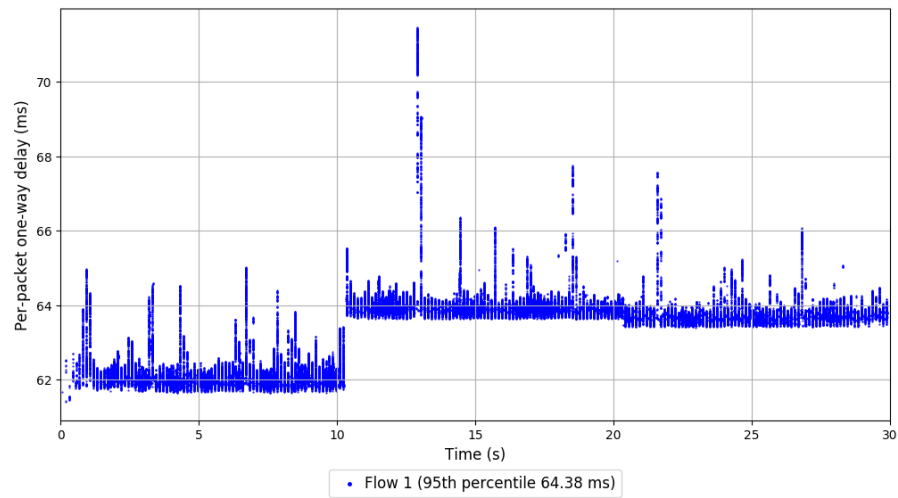
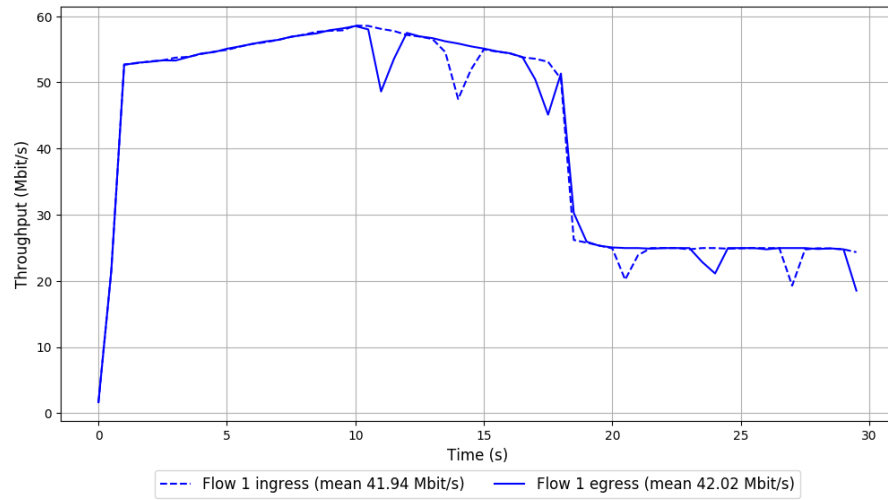
-- Flow 1:

Average throughput: 42.02 Mbit/s

95th percentile per-packet one-way delay: 64.377 ms

Loss rate: 0.25%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-30 16:39:39

End at: 2017-11-30 16:40:09

Below is generated by plot.py at 2017-11-30 19:12:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.45 Mbit/s

95th percentile per-packet one-way delay: 62.694 ms

Loss rate: 0.05%

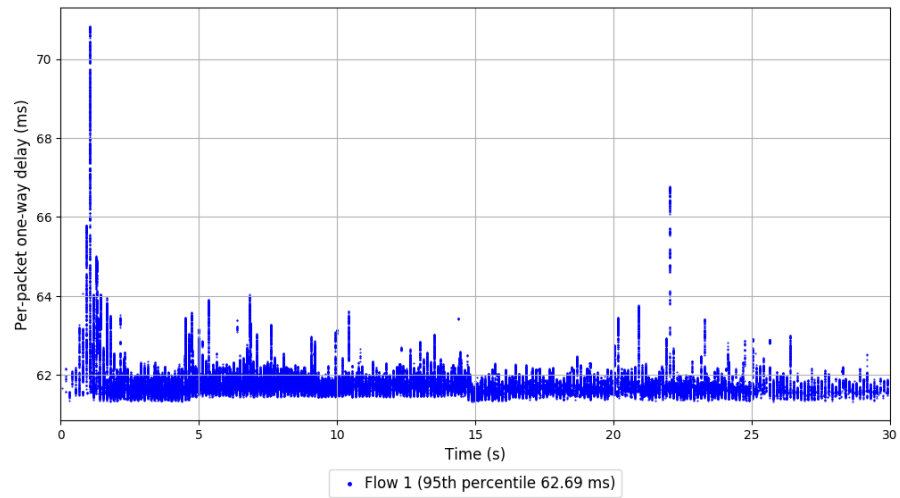
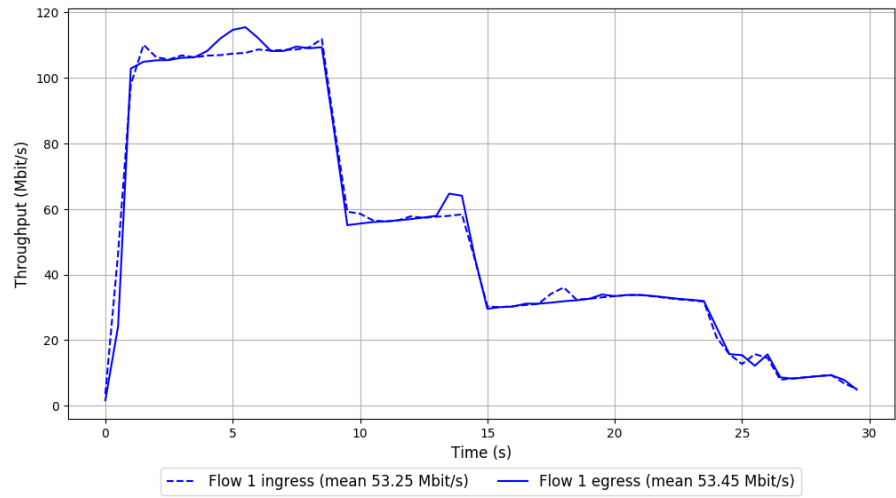
-- Flow 1:

Average throughput: 53.45 Mbit/s

95th percentile per-packet one-way delay: 62.694 ms

Loss rate: 0.05%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-30 16:50:15

End at: 2017-11-30 16:50:45

Below is generated by plot.py at 2017-11-30 19:12:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 104.35 Mbit/s

95th percentile per-packet one-way delay: 64.084 ms

Loss rate: 0.24%

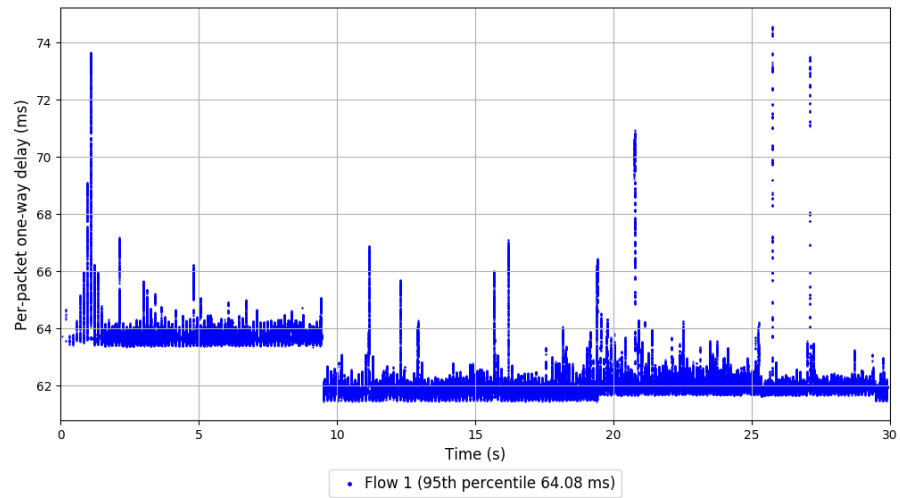
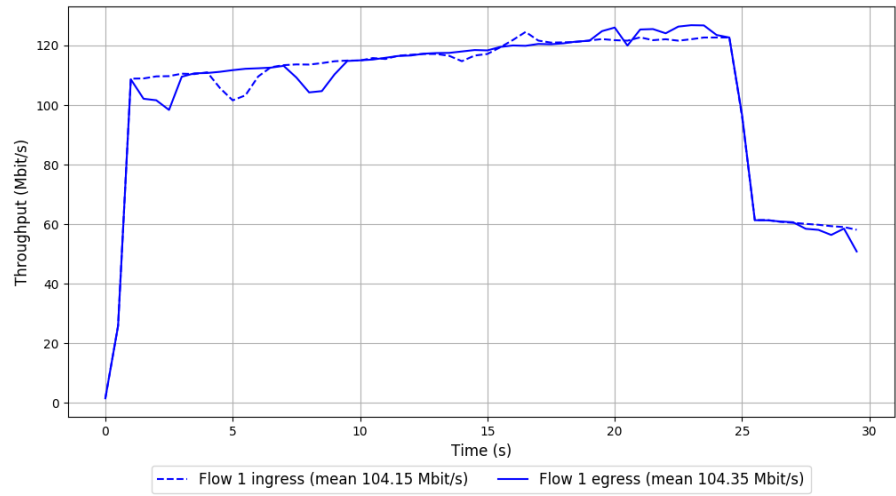
-- Flow 1:

Average throughput: 104.35 Mbit/s

95th percentile per-packet one-way delay: 64.084 ms

Loss rate: 0.24%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-11-30 15:17:05

End at: 2017-11-30 15:17:35

Below is generated by plot.py at 2017-11-30 19:15:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 258.49 Mbit/s

95th percentile per-packet one-way delay: 113.813 ms

Loss rate: 0.91%

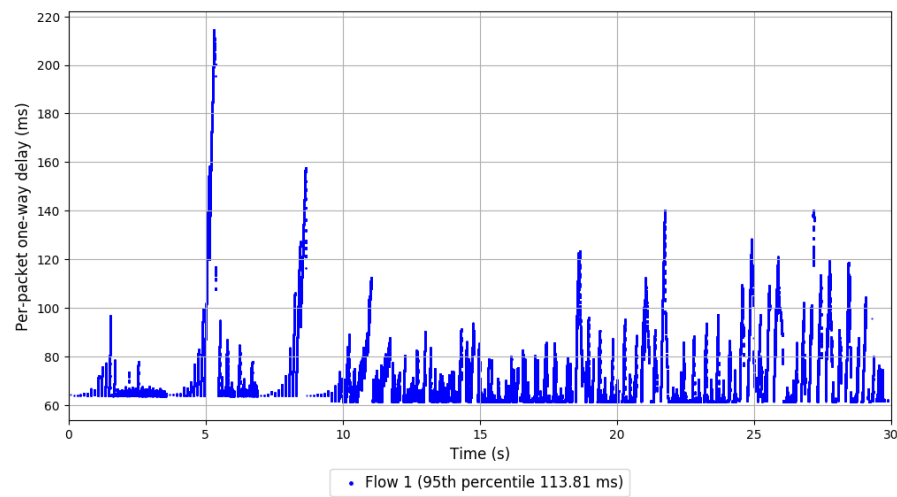
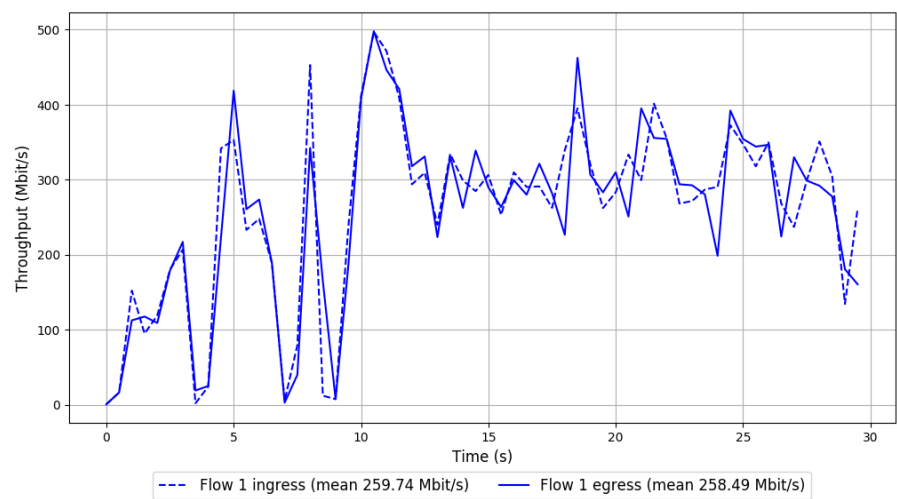
-- Flow 1:

Average throughput: 258.49 Mbit/s

95th percentile per-packet one-way delay: 113.813 ms

Loss rate: 0.91%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-30 15:27:35

End at: 2017-11-30 15:28:05

Below is generated by plot.py at 2017-11-30 19:15:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.71 Mbit/s

95th percentile per-packet one-way delay: 149.426 ms

Loss rate: 1.04%

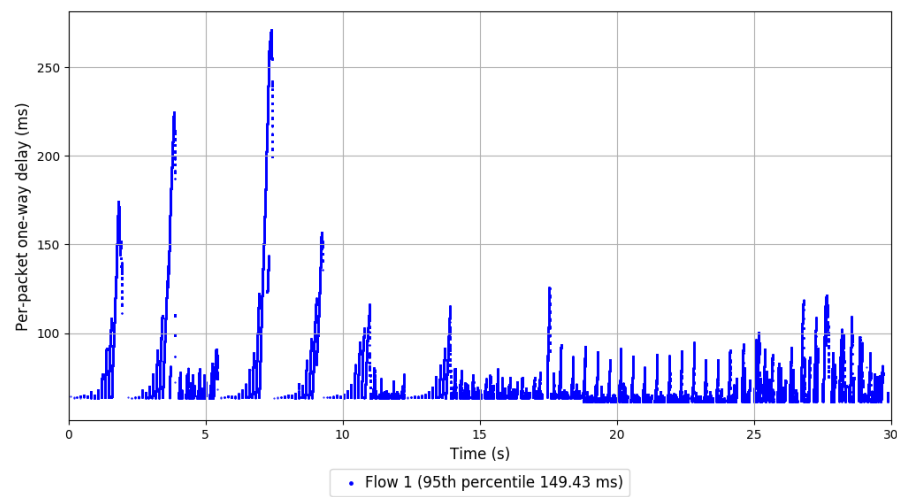
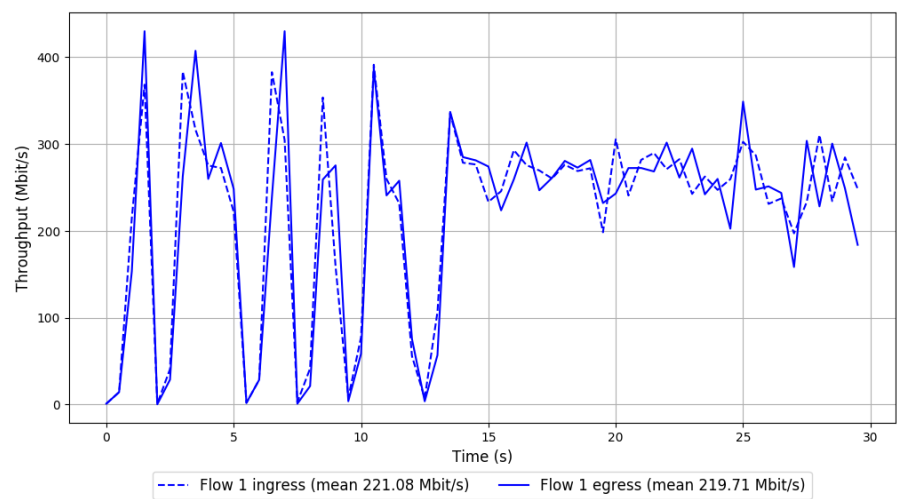
-- Flow 1:

Average throughput: 219.71 Mbit/s

95th percentile per-packet one-way delay: 149.426 ms

Loss rate: 1.04%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-30 15:37:53

End at: 2017-11-30 15:38:23

Below is generated by plot.py at 2017-11-30 19:15:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 253.60 Mbit/s

95th percentile per-packet one-way delay: 95.132 ms

Loss rate: 0.95%

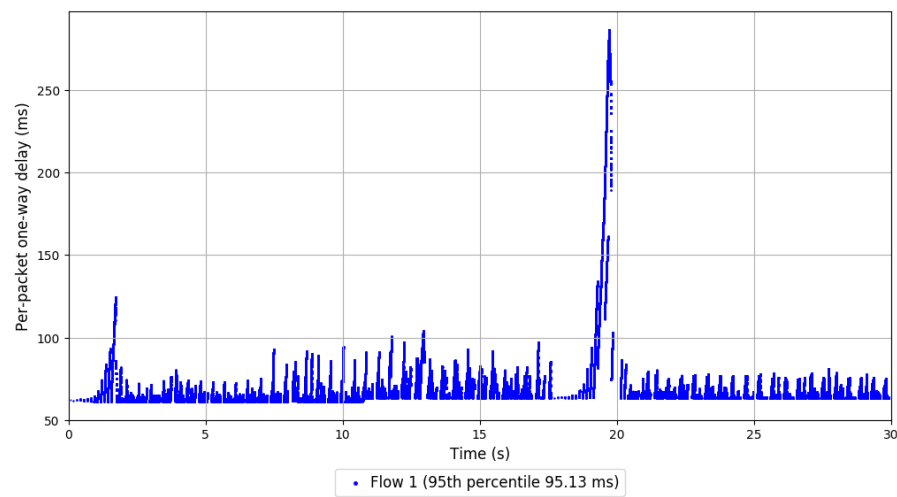
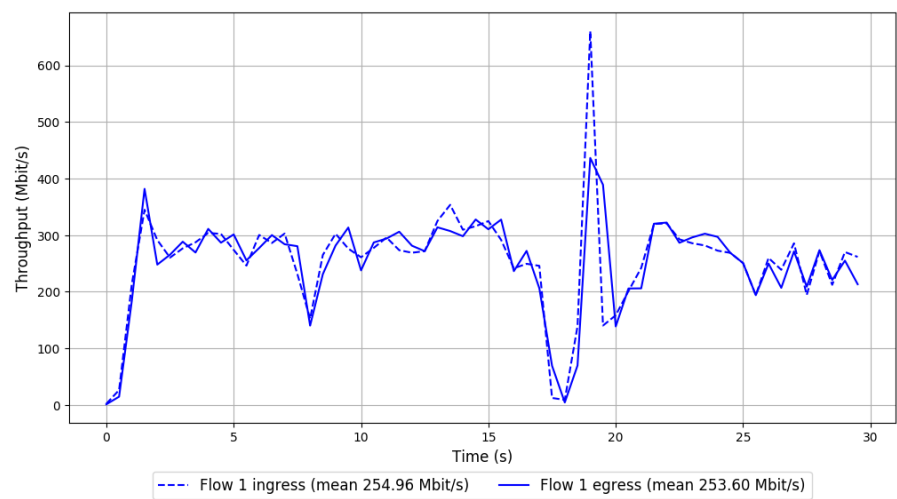
-- Flow 1:

Average throughput: 253.60 Mbit/s

95th percentile per-packet one-way delay: 95.132 ms

Loss rate: 0.95%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-30 15:48:09

End at: 2017-11-30 15:48:39

Below is generated by plot.py at 2017-11-30 19:16:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 254.76 Mbit/s

95th percentile per-packet one-way delay: 87.846 ms

Loss rate: 0.47%

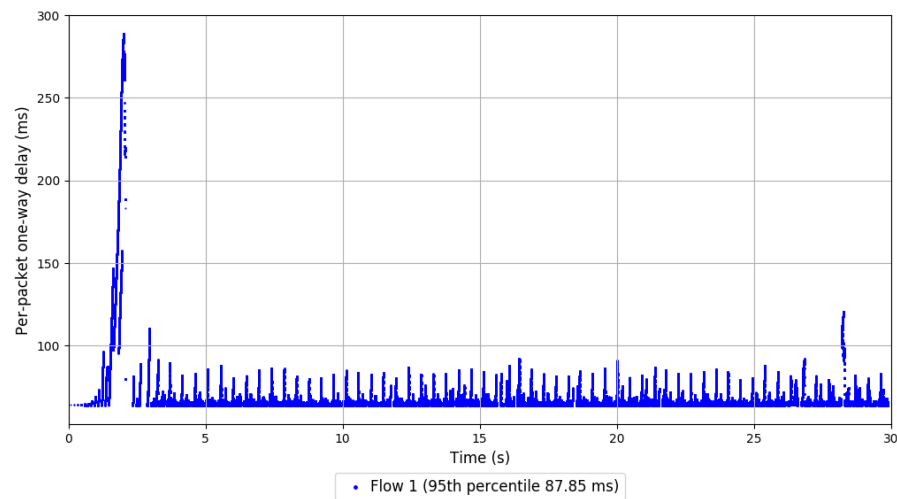
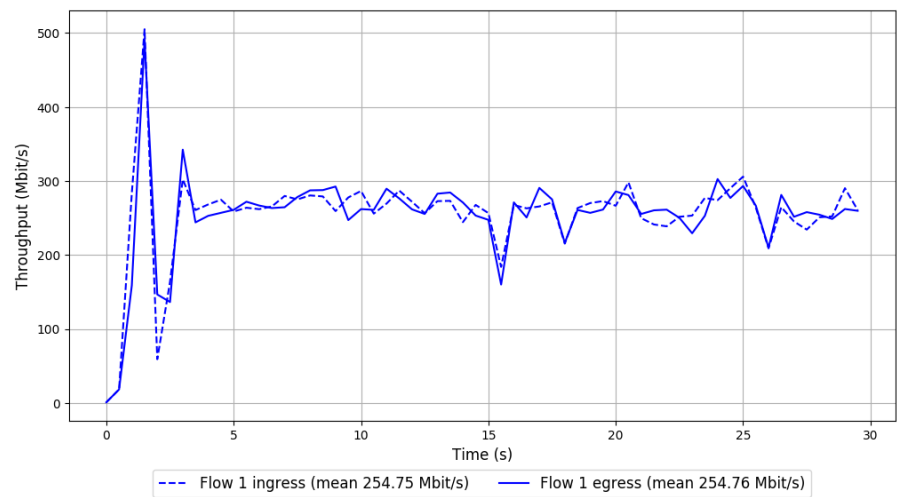
-- Flow 1:

Average throughput: 254.76 Mbit/s

95th percentile per-packet one-way delay: 87.846 ms

Loss rate: 0.47%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-30 15:58:51

End at: 2017-11-30 15:59:21

Below is generated by plot.py at 2017-11-30 19:16:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 247.12 Mbit/s

95th percentile per-packet one-way delay: 168.485 ms

Loss rate: 2.88%

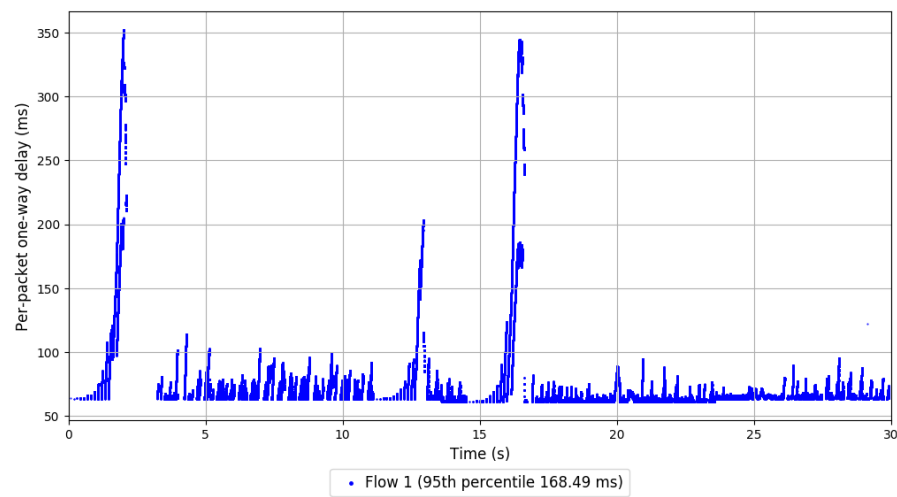
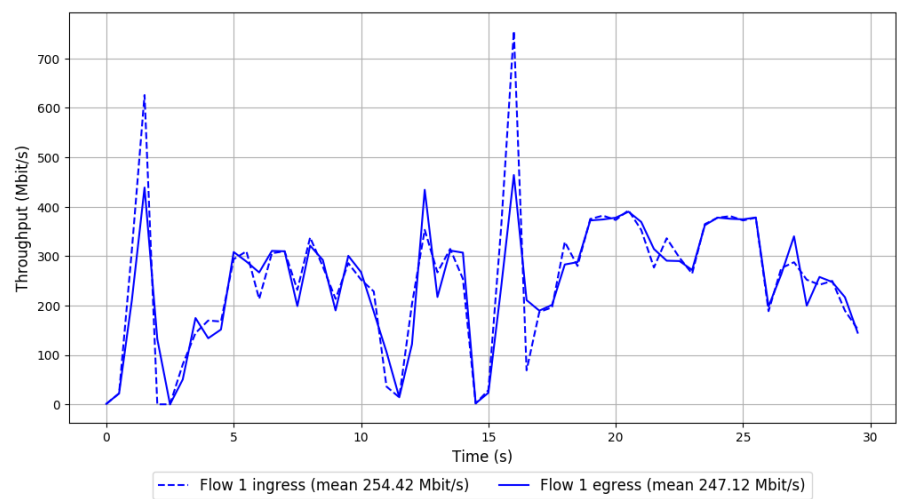
-- Flow 1:

Average throughput: 247.12 Mbit/s

95th percentile per-packet one-way delay: 168.485 ms

Loss rate: 2.88%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-30 16:09:22

End at: 2017-11-30 16:09:52

Below is generated by plot.py at 2017-11-30 19:16:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.74 Mbit/s

95th percentile per-packet one-way delay: 236.867 ms

Loss rate: 2.31%

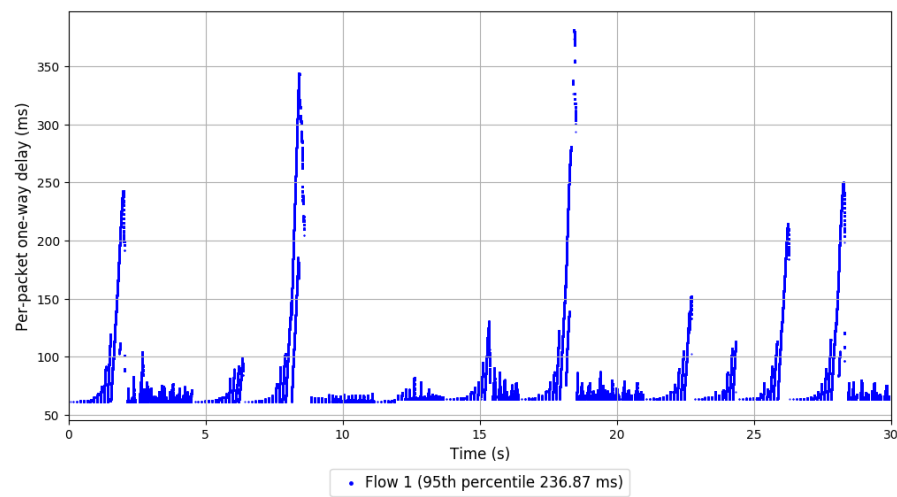
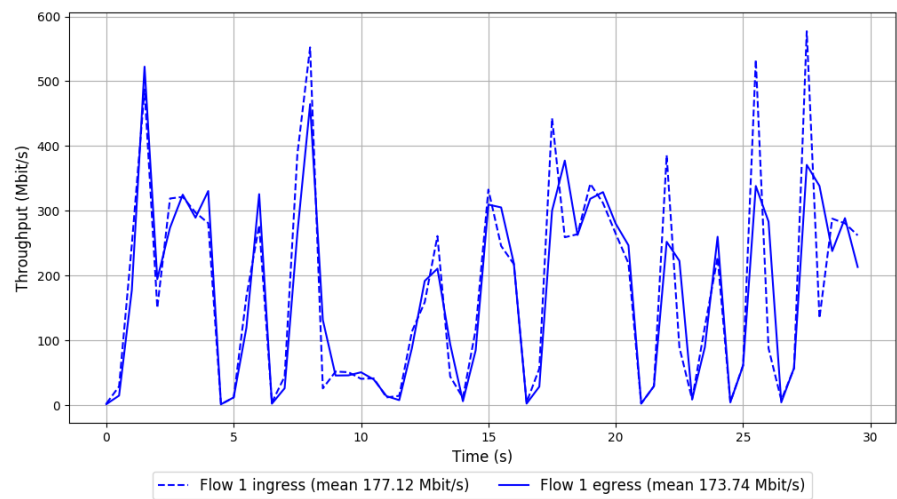
-- Flow 1:

Average throughput: 173.74 Mbit/s

95th percentile per-packet one-way delay: 236.867 ms

Loss rate: 2.31%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-30 16:19:53

End at: 2017-11-30 16:20:23

Below is generated by plot.py at 2017-11-30 19:16:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.12 Mbit/s

95th percentile per-packet one-way delay: 231.768 ms

Loss rate: 2.70%

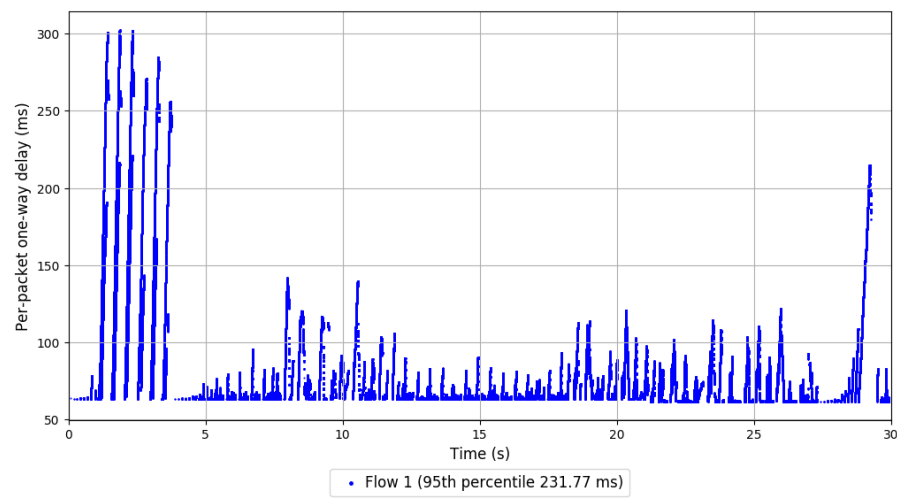
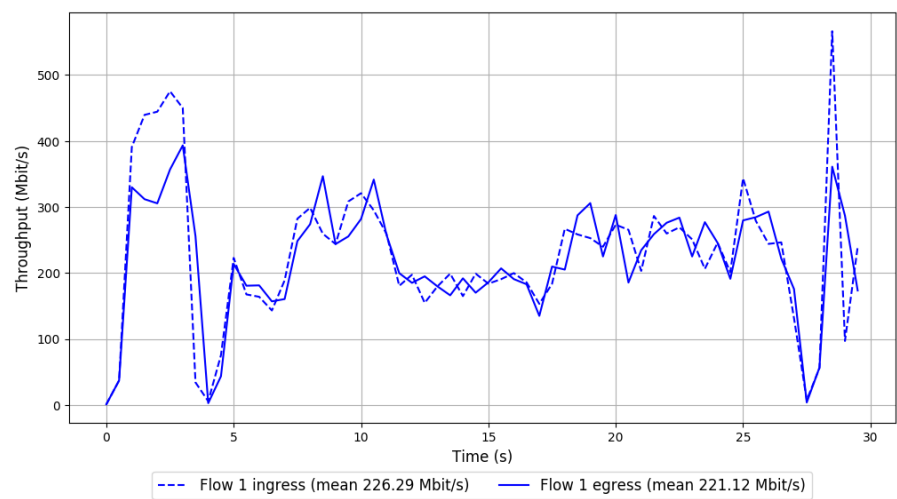
-- Flow 1:

Average throughput: 221.12 Mbit/s

95th percentile per-packet one-way delay: 231.768 ms

Loss rate: 2.70%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-30 16:30:32

End at: 2017-11-30 16:31:02

Below is generated by plot.py at 2017-11-30 19:16:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.23 Mbit/s

95th percentile per-packet one-way delay: 112.528 ms

Loss rate: 0.61%

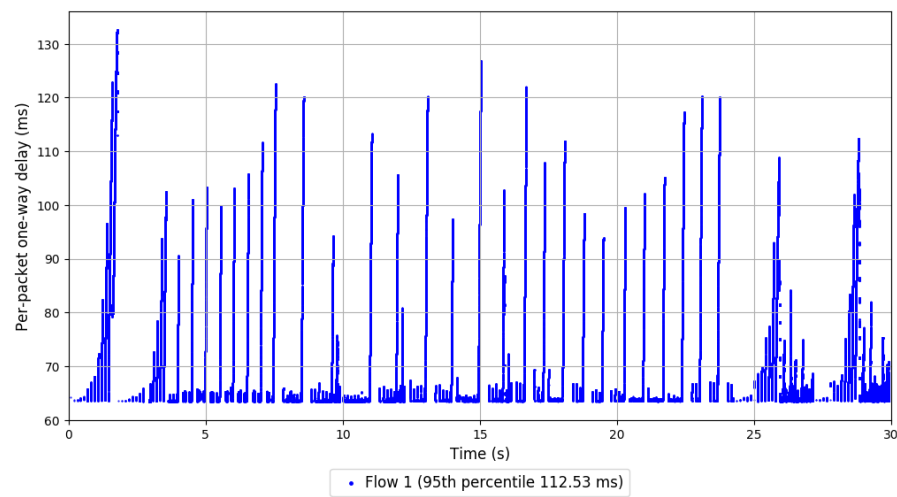
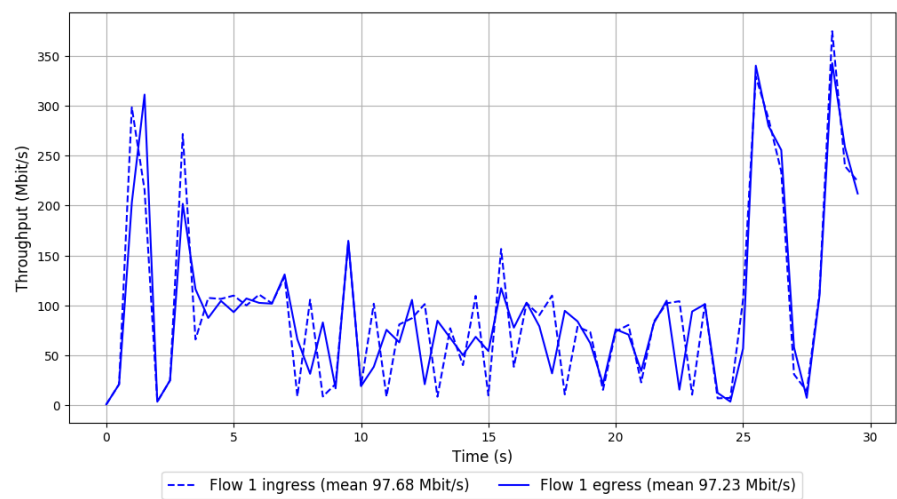
-- Flow 1:

Average throughput: 97.23 Mbit/s

95th percentile per-packet one-way delay: 112.528 ms

Loss rate: 0.61%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-30 16:40:58

End at: 2017-11-30 16:41:28

Below is generated by plot.py at 2017-11-30 19:18:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 242.41 Mbit/s

95th percentile per-packet one-way delay: 153.421 ms

Loss rate: 0.50%

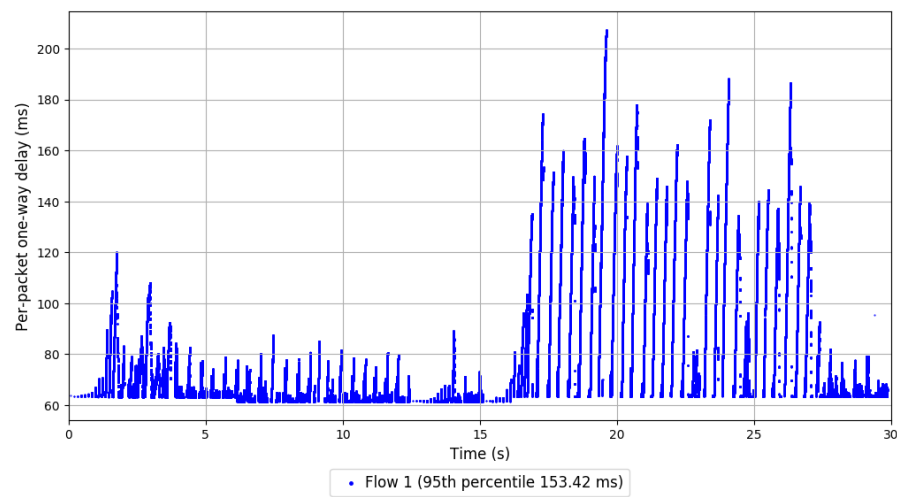
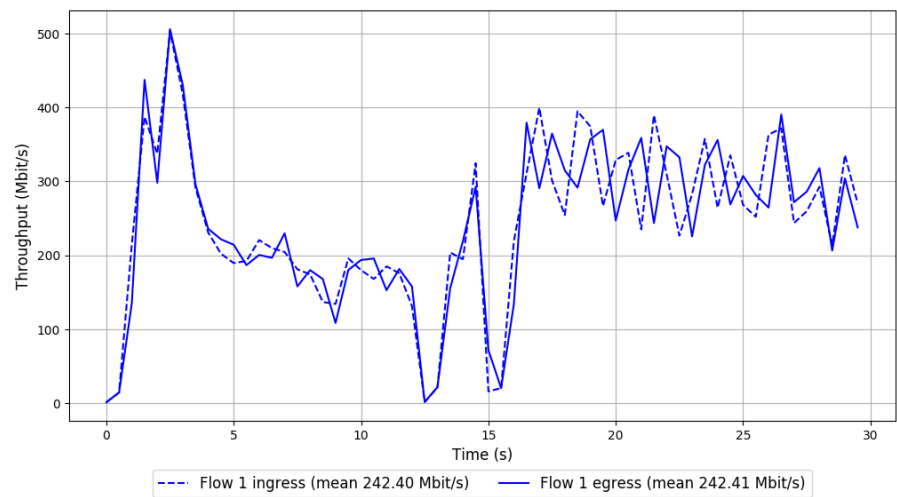
-- Flow 1:

Average throughput: 242.41 Mbit/s

95th percentile per-packet one-way delay: 153.421 ms

Loss rate: 0.50%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-30 16:51:36

End at: 2017-11-30 16:52:06

Below is generated by plot.py at 2017-11-30 19:19:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 252.37 Mbit/s

95th percentile per-packet one-way delay: 116.716 ms

Loss rate: 0.83%

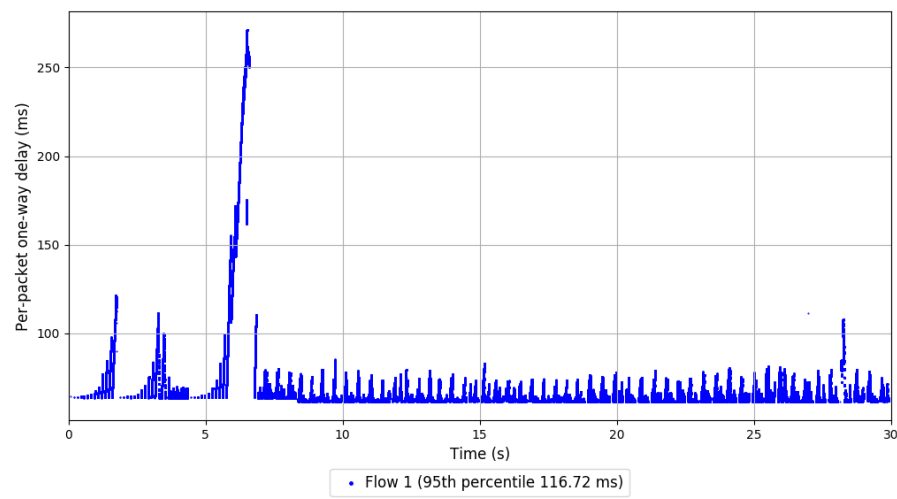
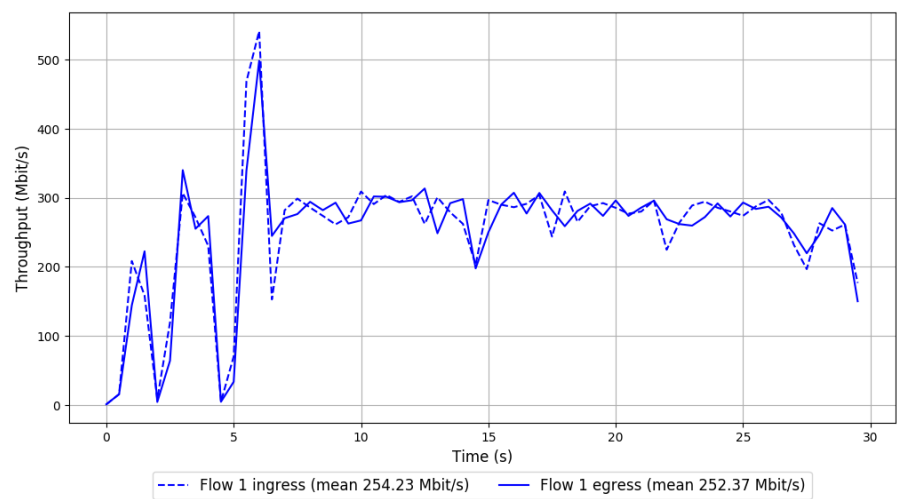
-- Flow 1:

Average throughput: 252.37 Mbit/s

95th percentile per-packet one-way delay: 116.716 ms

Loss rate: 0.83%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-11-30 15:21:58

End at: 2017-11-30 15:22:28

Below is generated by plot.py at 2017-11-30 19:19:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.13 Mbit/s

95th percentile per-packet one-way delay: 63.474 ms

Loss rate: 0.43%

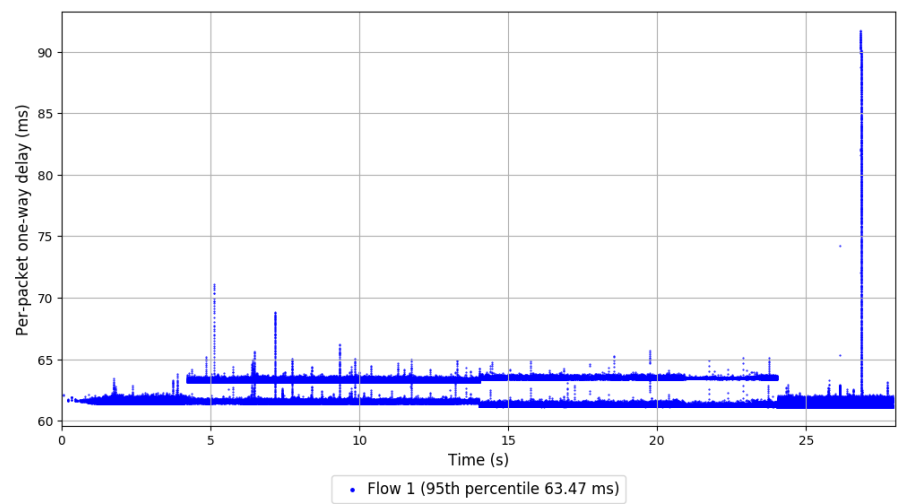
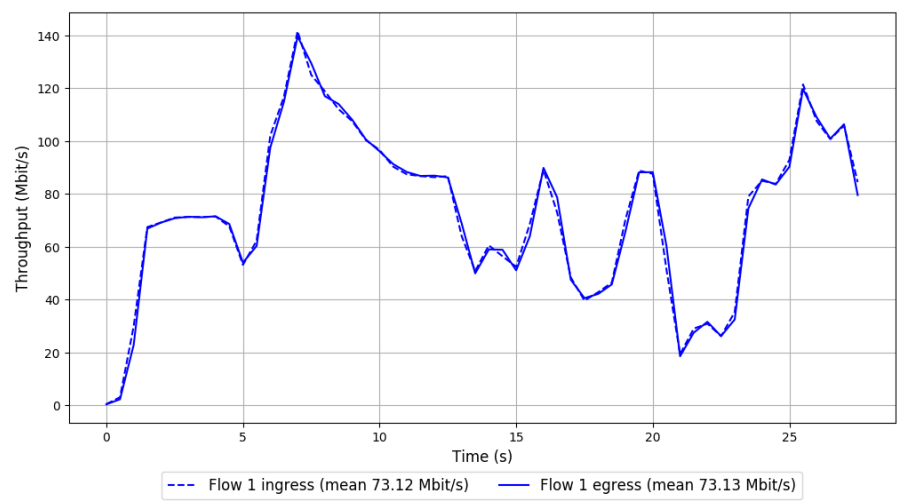
-- Flow 1:

Average throughput: 73.13 Mbit/s

95th percentile per-packet one-way delay: 63.474 ms

Loss rate: 0.43%

Run 1: Report of Copa — Data Link

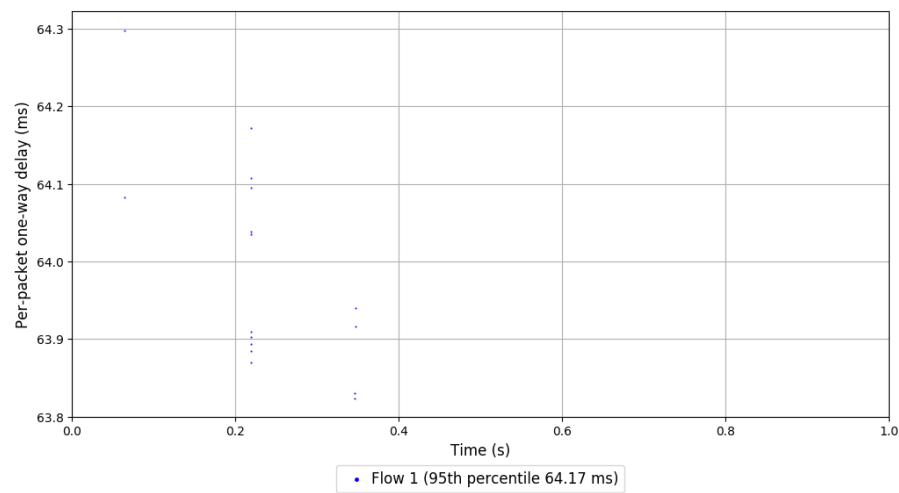
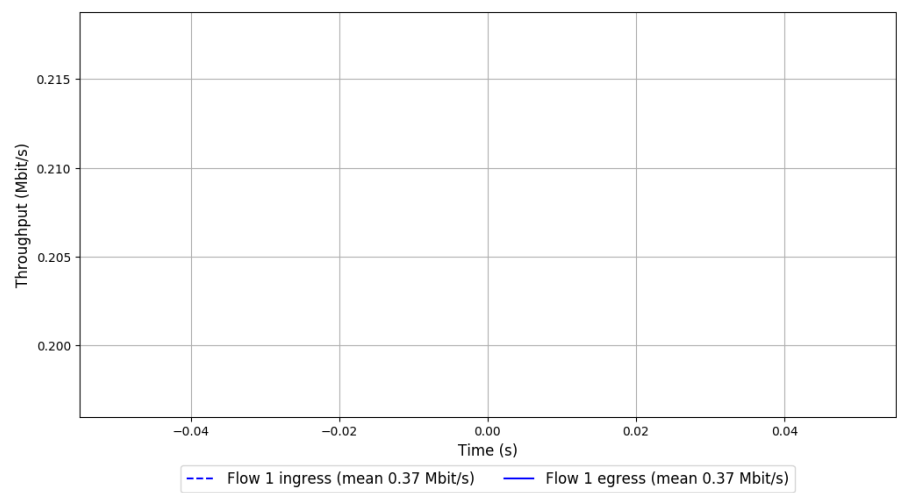


Run 2: Statistics of Copa

Start at: 2017-11-30 15:32:23

End at: 2017-11-30 15:32:53

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-30 15:42:37

End at: 2017-11-30 15:43:07

Below is generated by plot.py at 2017-11-30 19:19:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.63 Mbit/s

95th percentile per-packet one-way delay: 63.768 ms

Loss rate: 0.33%

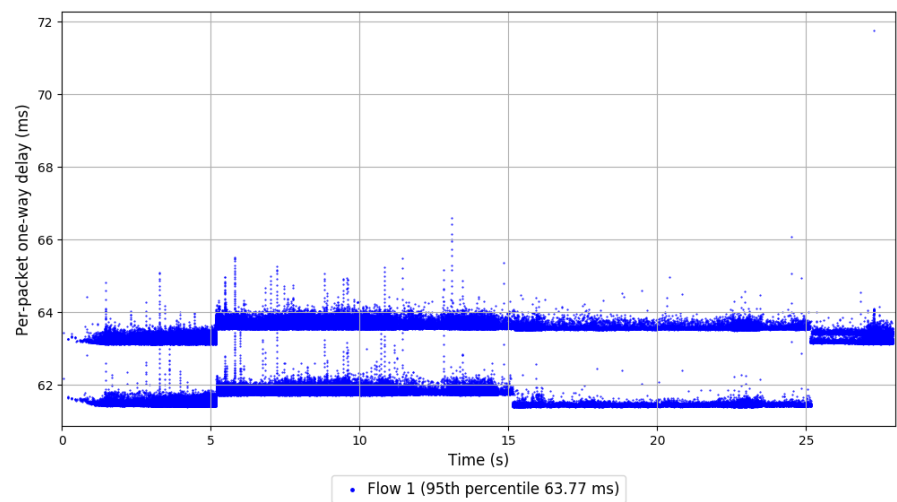
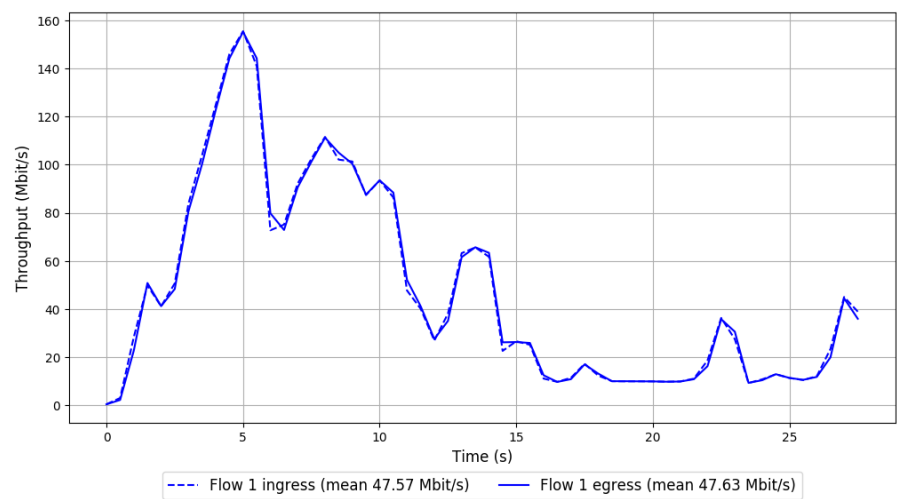
-- Flow 1:

Average throughput: 47.63 Mbit/s

95th percentile per-packet one-way delay: 63.768 ms

Loss rate: 0.33%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-30 15:53:02

End at: 2017-11-30 15:53:32

Below is generated by plot.py at 2017-11-30 19:19:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.00 Mbit/s

95th percentile per-packet one-way delay: 63.708 ms

Loss rate: 0.08%

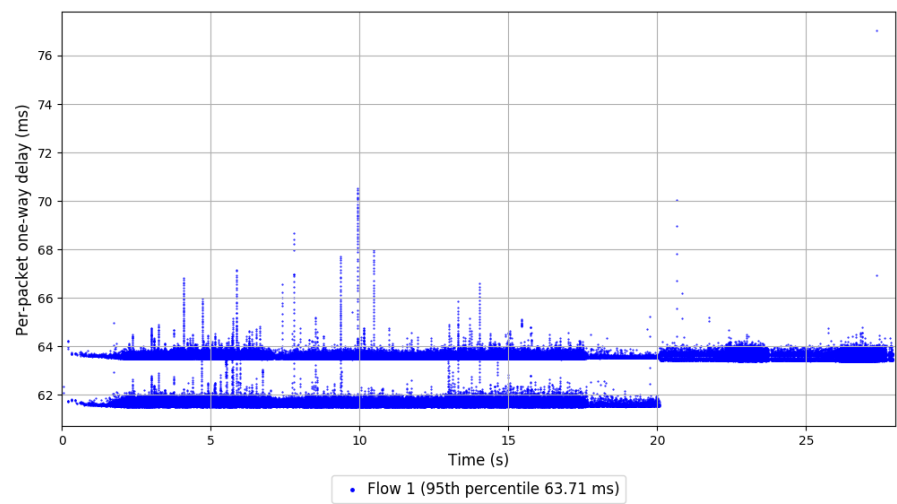
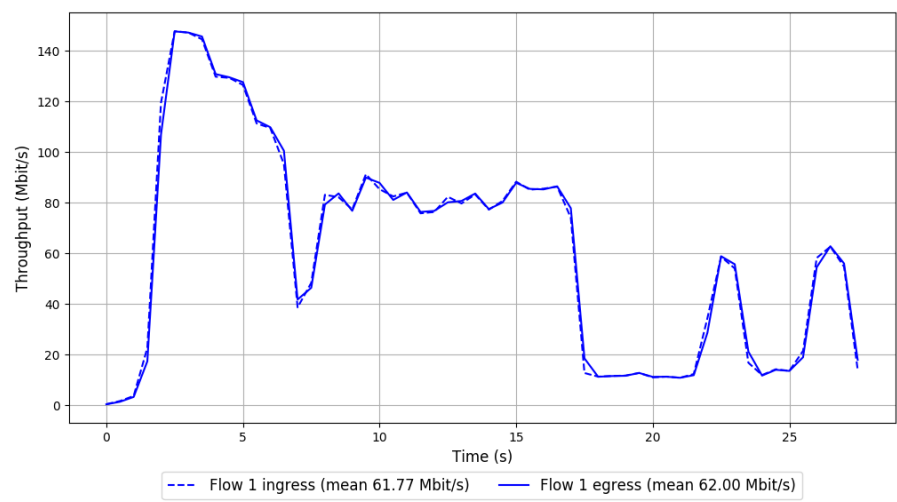
-- Flow 1:

Average throughput: 62.00 Mbit/s

95th percentile per-packet one-way delay: 63.708 ms

Loss rate: 0.08%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-30 16:03:37

End at: 2017-11-30 16:04:07

Below is generated by plot.py at 2017-11-30 19:19:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.77 Mbit/s

95th percentile per-packet one-way delay: 63.667 ms

Loss rate: 0.29%

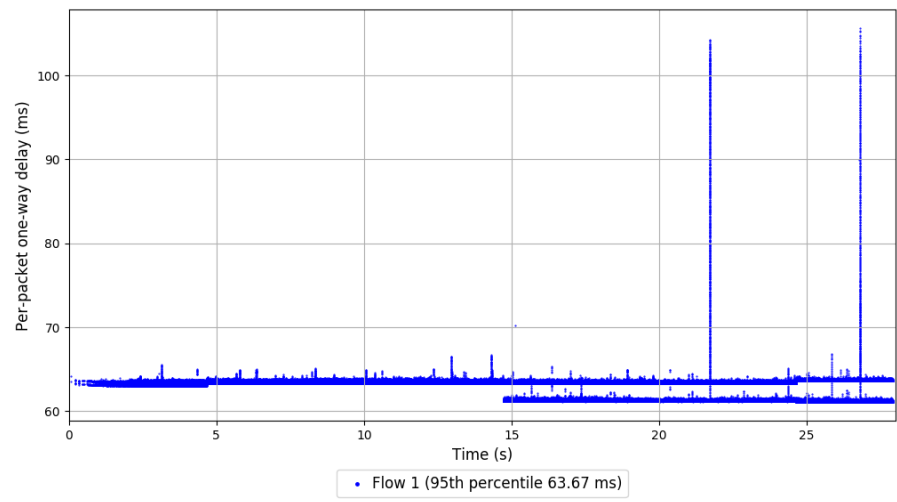
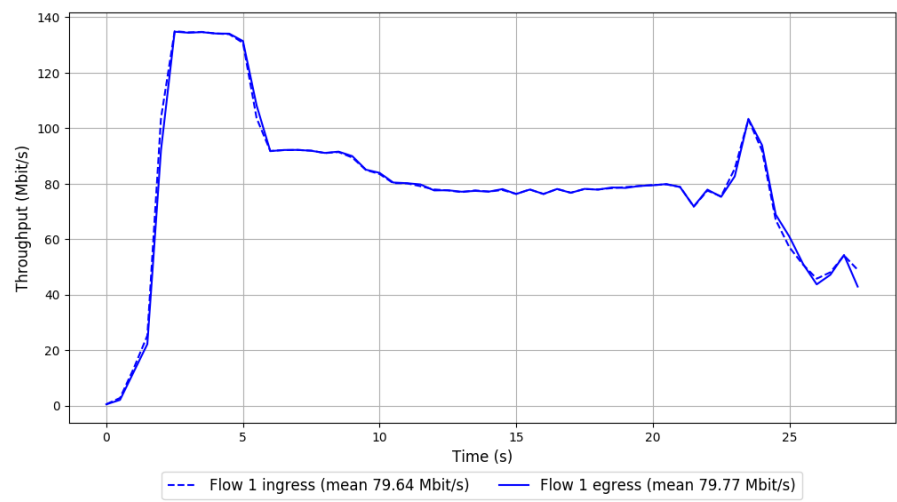
-- Flow 1:

Average throughput: 79.77 Mbit/s

95th percentile per-packet one-way delay: 63.667 ms

Loss rate: 0.29%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-30 16:14:06

End at: 2017-11-30 16:14:37

Below is generated by plot.py at 2017-11-30 19:19:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.37 Mbit/s

95th percentile per-packet one-way delay: 63.801 ms

Loss rate: 0.28%

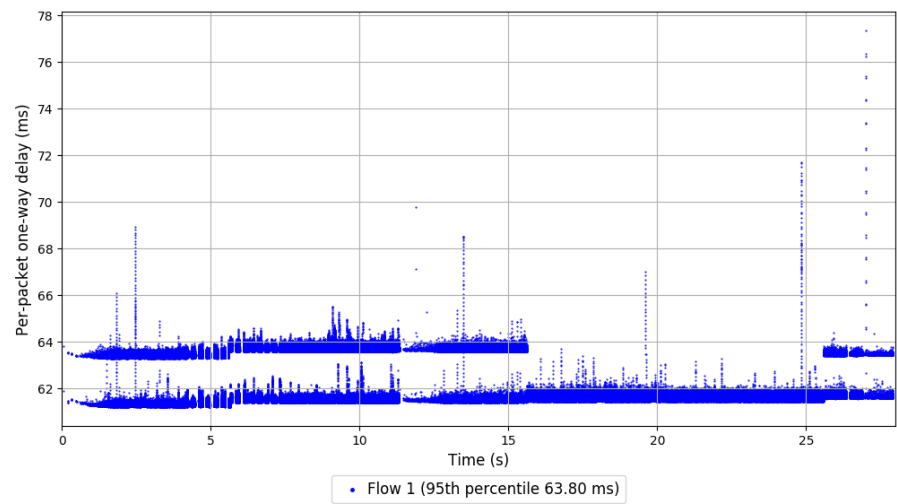
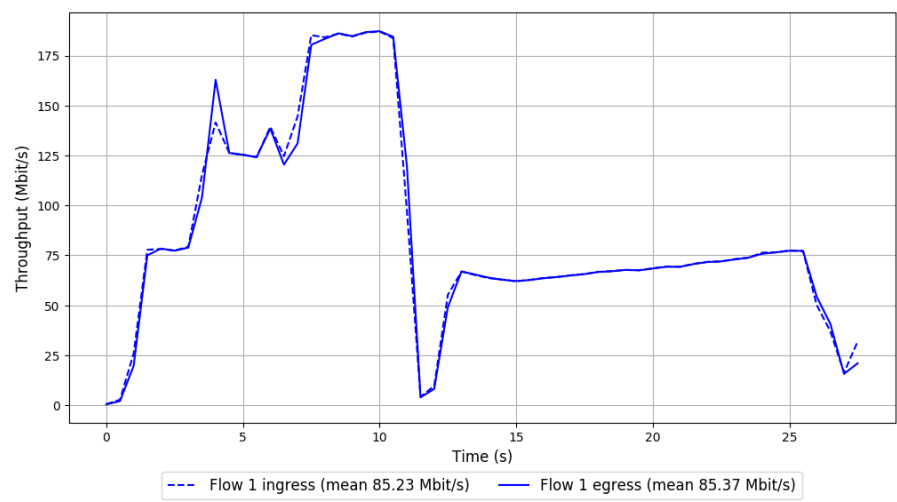
-- Flow 1:

Average throughput: 85.37 Mbit/s

95th percentile per-packet one-way delay: 63.801 ms

Loss rate: 0.28%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-30 16:24:39

End at: 2017-11-30 16:25:09

Below is generated by plot.py at 2017-11-30 19:19:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.52 Mbit/s

95th percentile per-packet one-way delay: 63.664 ms

Loss rate: 0.46%

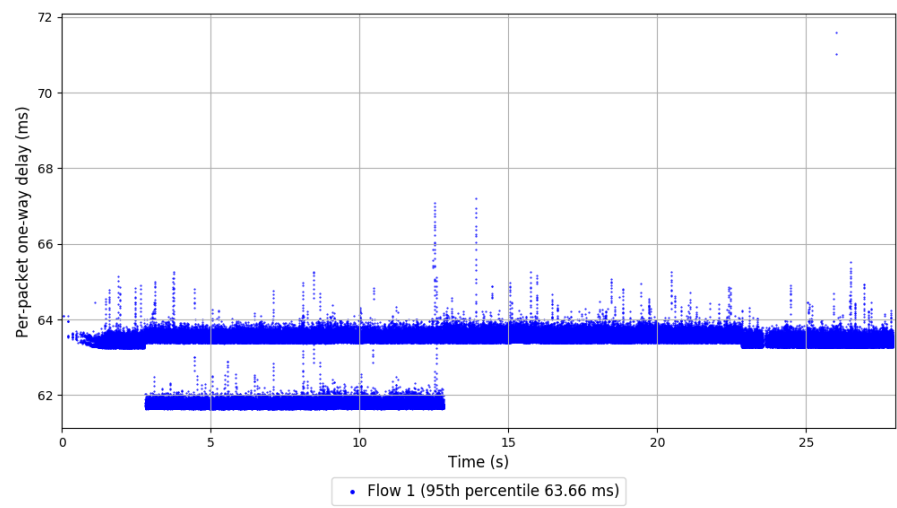
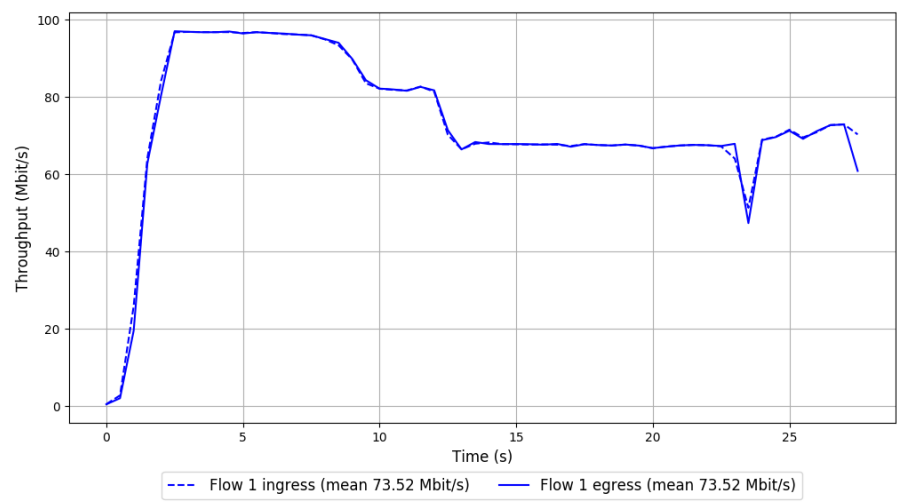
-- Flow 1:

Average throughput: 73.52 Mbit/s

95th percentile per-packet one-way delay: 63.664 ms

Loss rate: 0.46%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-30 16:35:11

End at: 2017-11-30 16:35:41

Below is generated by plot.py at 2017-11-30 19:19:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.25 Mbit/s

95th percentile per-packet one-way delay: 63.805 ms

Loss rate: 0.19%

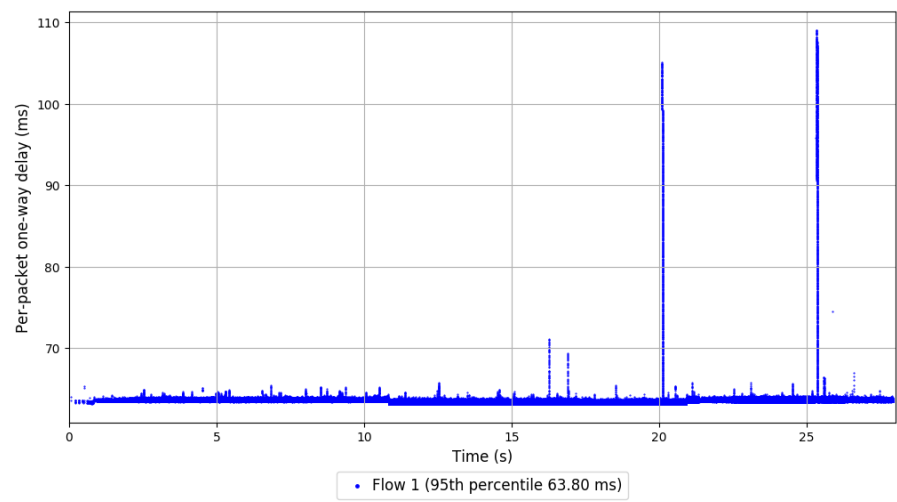
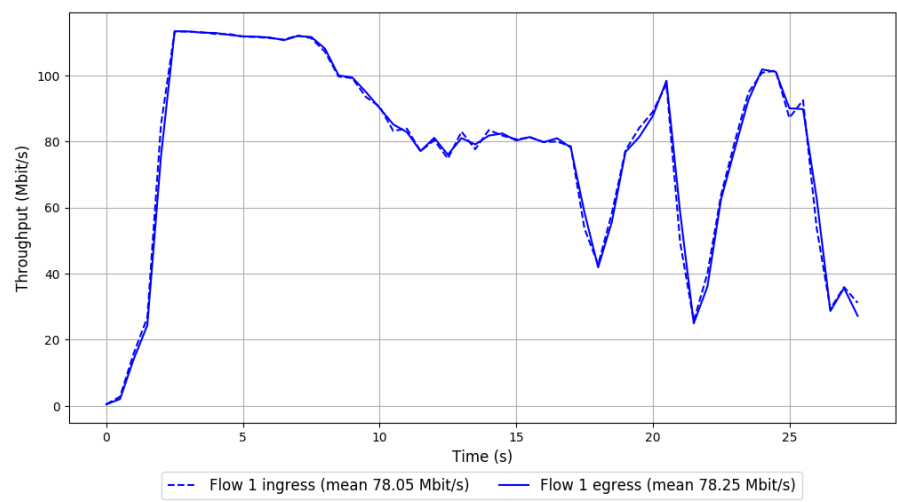
-- Flow 1:

Average throughput: 78.25 Mbit/s

95th percentile per-packet one-way delay: 63.805 ms

Loss rate: 0.19%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-30 16:45:48

End at: 2017-11-30 16:46:18

Below is generated by plot.py at 2017-11-30 19:19:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.14 Mbit/s

95th percentile per-packet one-way delay: 63.726 ms

Loss rate: 0.14%

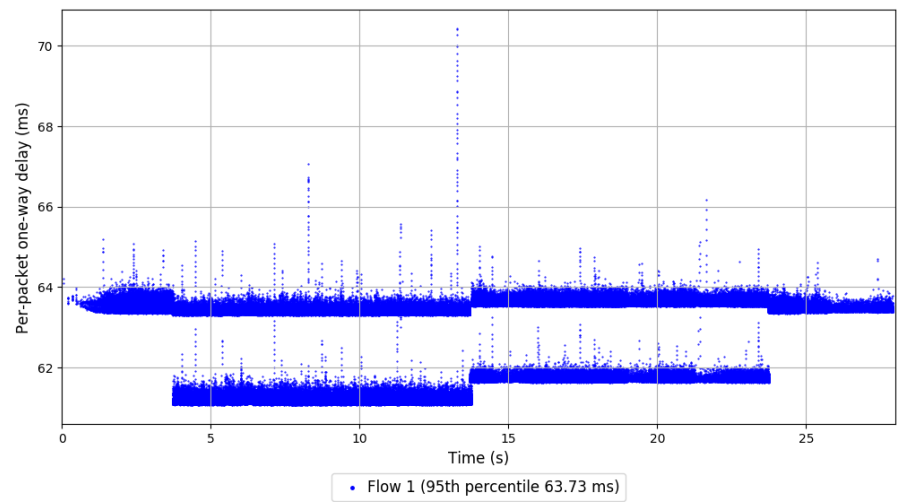
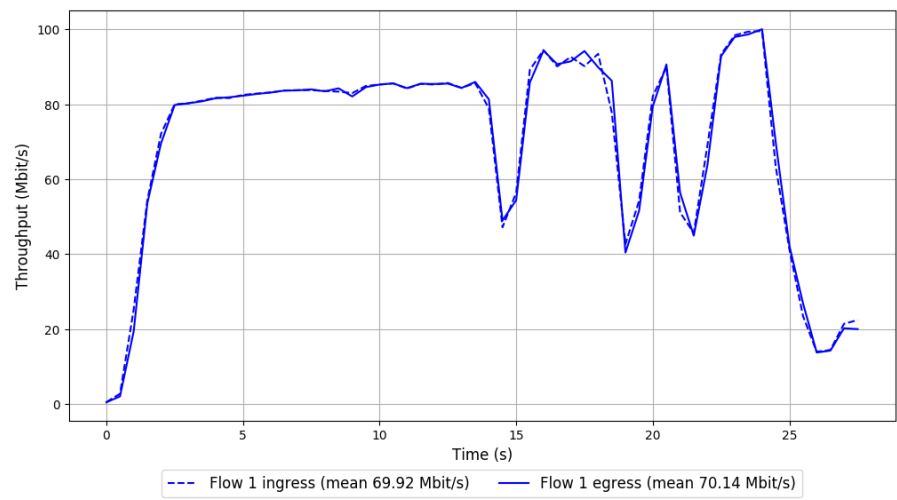
-- Flow 1:

Average throughput: 70.14 Mbit/s

95th percentile per-packet one-way delay: 63.726 ms

Loss rate: 0.14%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-30 16:56:25

End at: 2017-11-30 16:56:55

Below is generated by plot.py at 2017-11-30 19:20:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.16 Mbit/s

95th percentile per-packet one-way delay: 63.630 ms

Loss rate: 0.42%

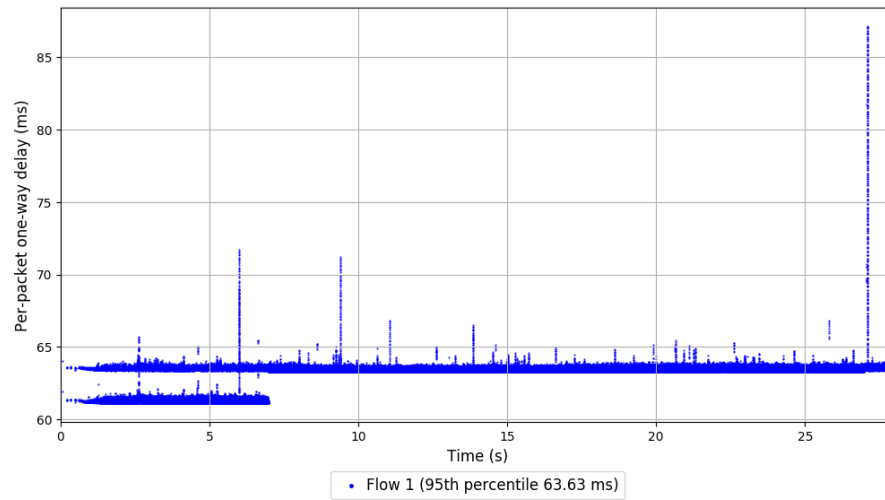
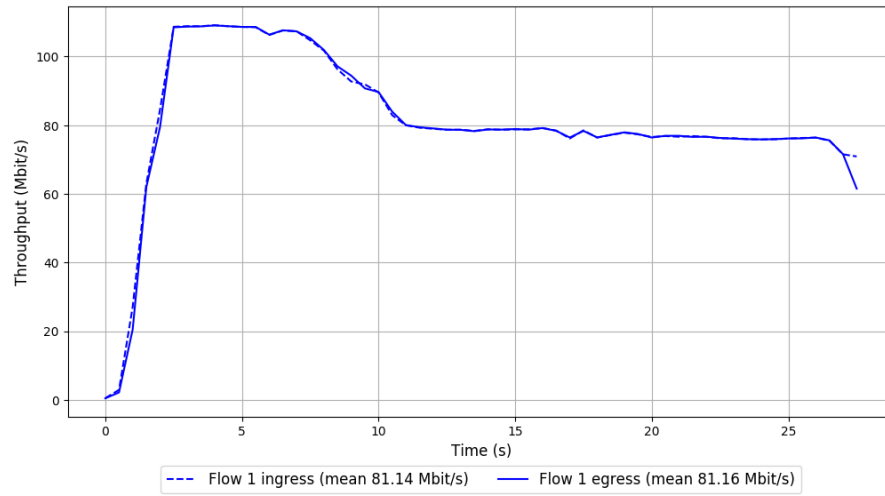
-- Flow 1:

Average throughput: 81.16 Mbit/s

95th percentile per-packet one-way delay: 63.630 ms

Loss rate: 0.42%

Run 10: Report of Copa — Data Link

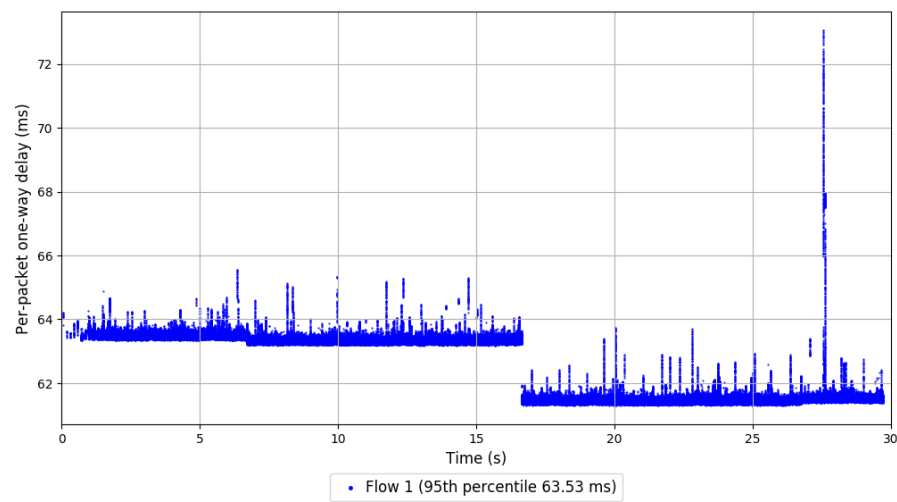
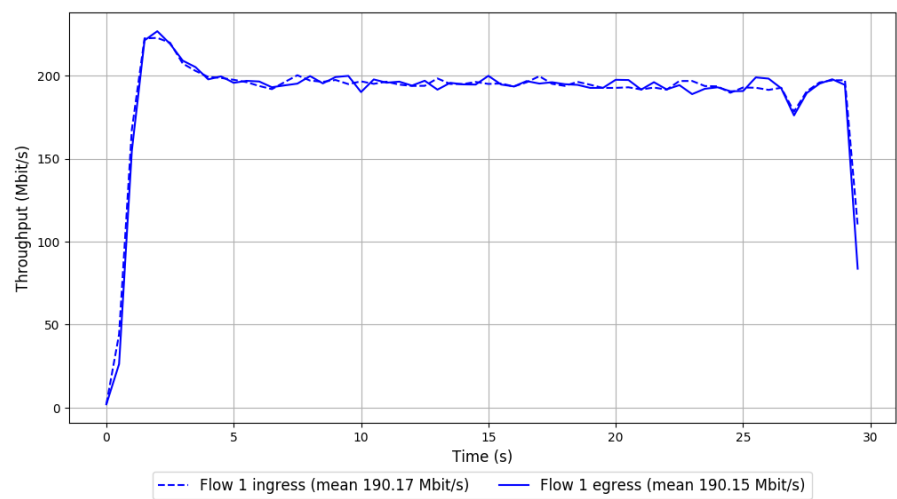


```
Run 1: Statistics of Indigo

Start at: 2017-11-30 15:21:07
End at: 2017-11-30 15:21:37

# Below is generated by plot.py at 2017-11-30 19:21:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.15 Mbit/s
95th percentile per-packet one-way delay: 63.535 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 190.15 Mbit/s
95th percentile per-packet one-way delay: 63.535 ms
Loss rate: 0.44%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-11-30 15:31:34

End at: 2017-11-30 15:32:04

Below is generated by plot.py at 2017-11-30 19:21:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 168.93 Mbit/s

95th percentile per-packet one-way delay: 63.658 ms

Loss rate: 0.53%

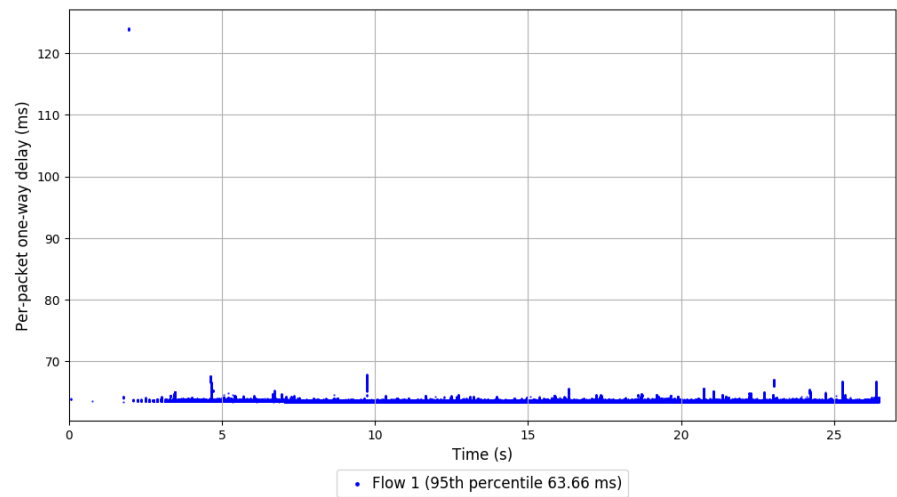
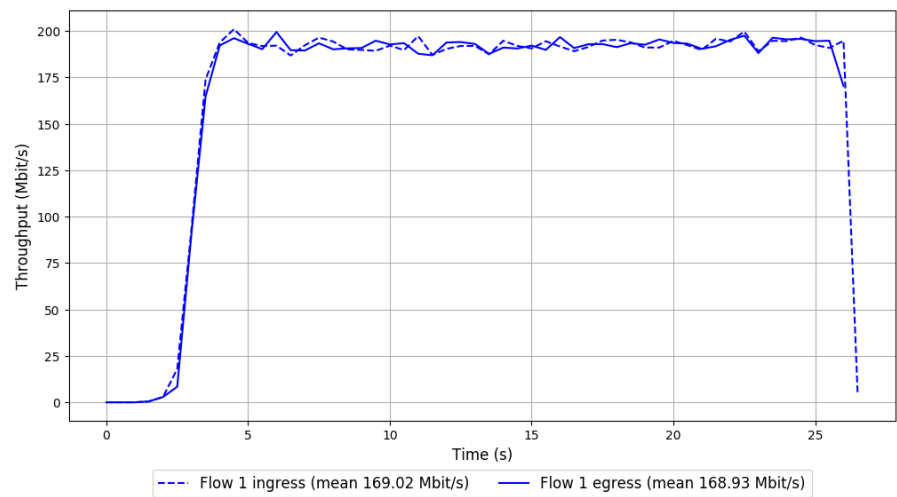
-- Flow 1:

Average throughput: 168.93 Mbit/s

95th percentile per-packet one-way delay: 63.658 ms

Loss rate: 0.53%

Run 2: Report of Indigo — Data Link

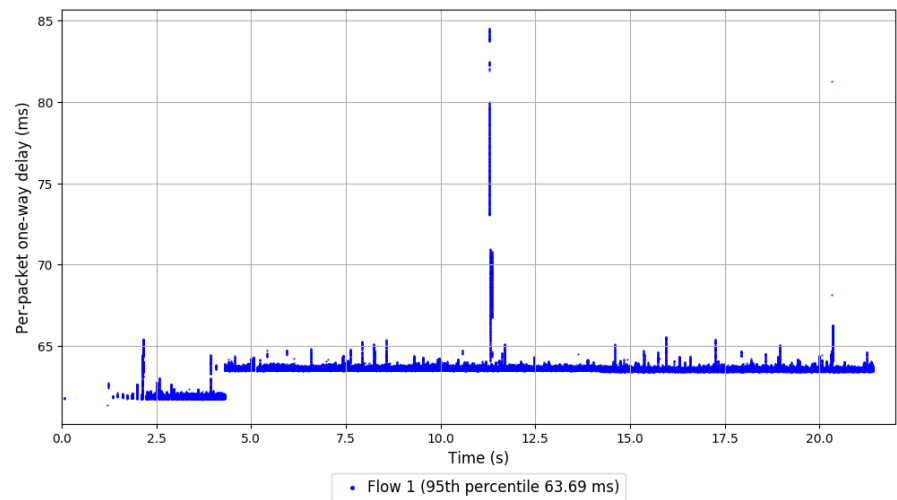
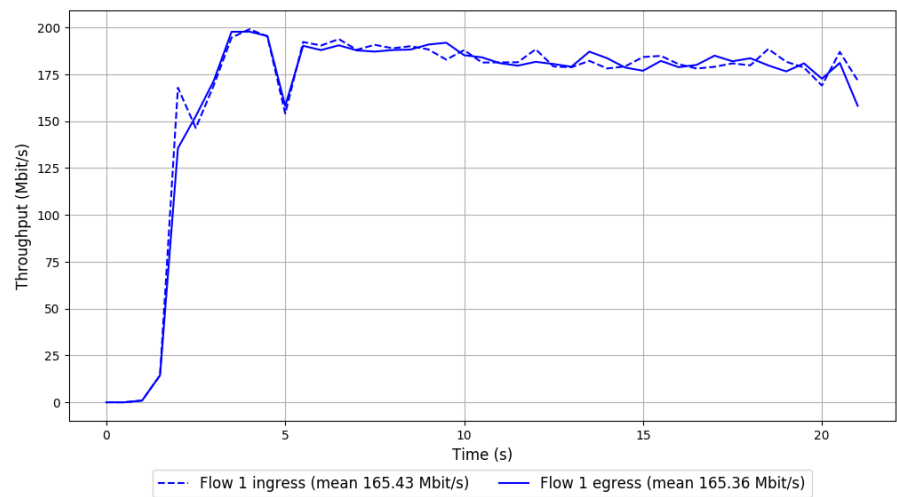


Run 3: Statistics of Indigo

Start at: 2017-11-30 15:41:51

End at: 2017-11-30 15:42:21

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-30 15:52:11

End at: 2017-11-30 15:52:41

Below is generated by plot.py at 2017-11-30 19:22:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.50 Mbit/s

95th percentile per-packet one-way delay: 63.772 ms

Loss rate: 0.44%

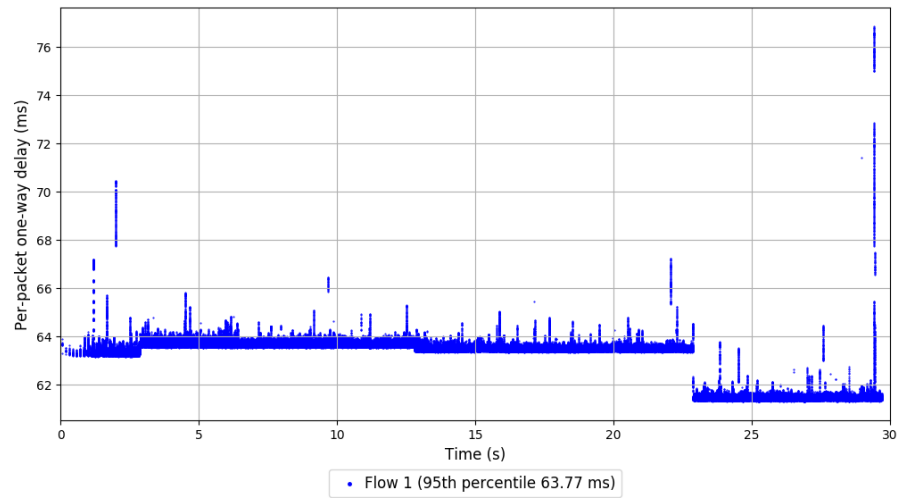
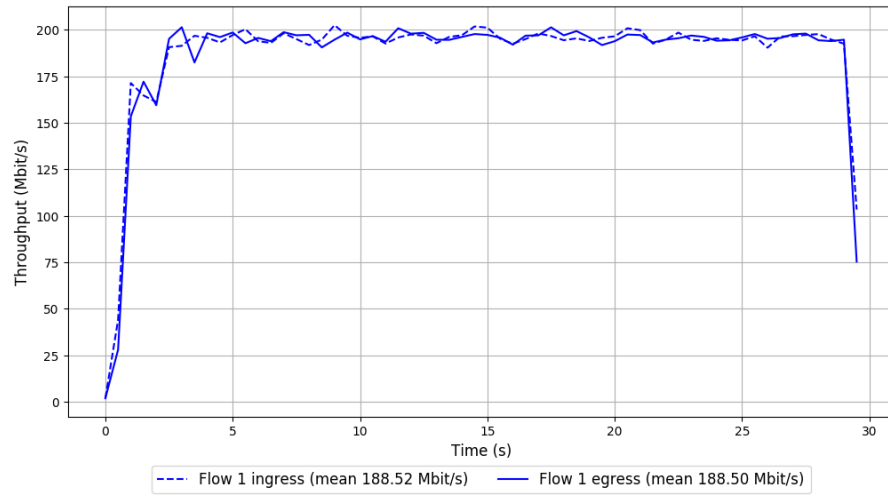
-- Flow 1:

Average throughput: 188.50 Mbit/s

95th percentile per-packet one-way delay: 63.772 ms

Loss rate: 0.44%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-30 16:02:47

End at: 2017-11-30 16:03:17

Below is generated by plot.py at 2017-11-30 19:22:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.71 Mbit/s

95th percentile per-packet one-way delay: 63.812 ms

Loss rate: 0.47%

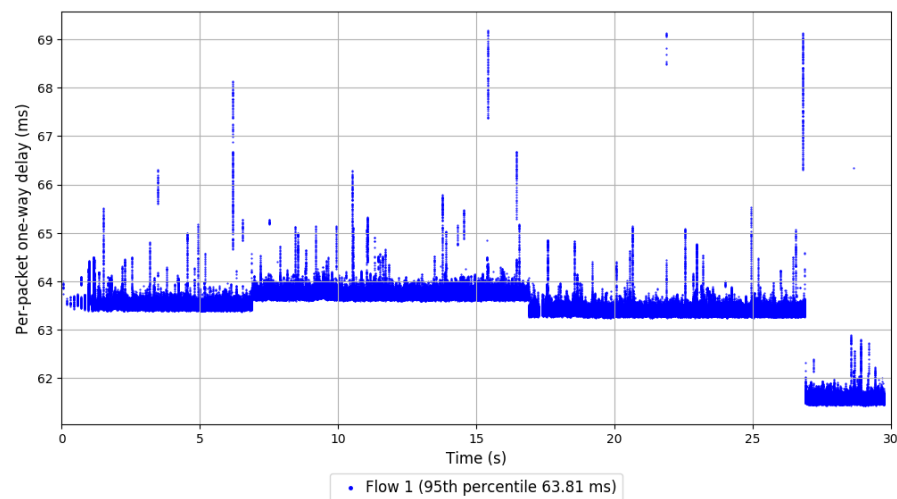
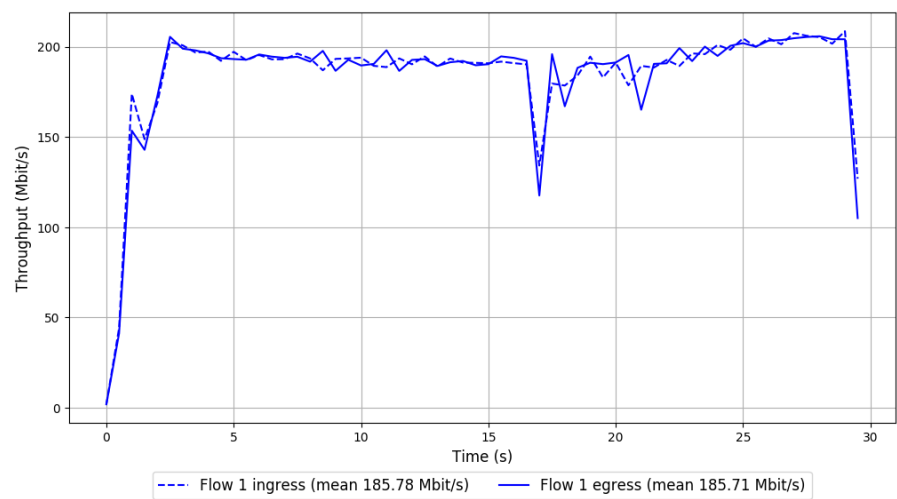
-- Flow 1:

Average throughput: 185.71 Mbit/s

95th percentile per-packet one-way delay: 63.812 ms

Loss rate: 0.47%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-30 16:13:16

End at: 2017-11-30 16:13:46

Below is generated by plot.py at 2017-11-30 19:22:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.31 Mbit/s

95th percentile per-packet one-way delay: 63.672 ms

Loss rate: 0.41%

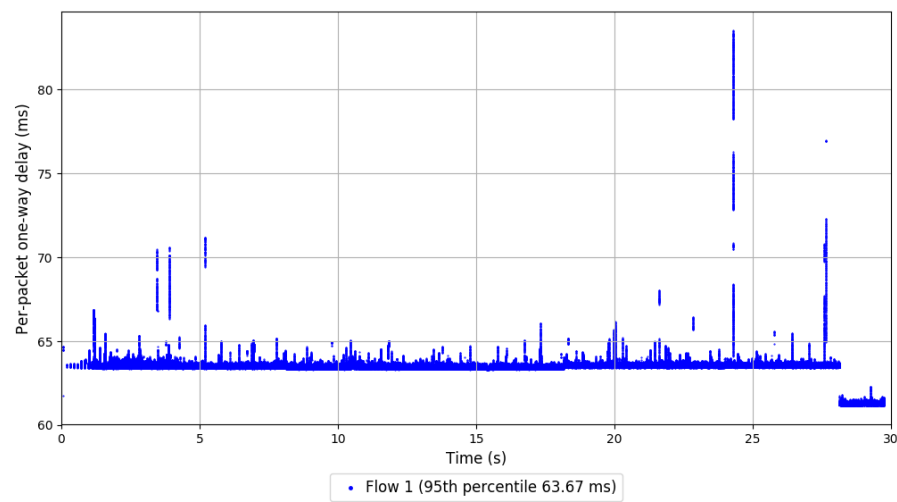
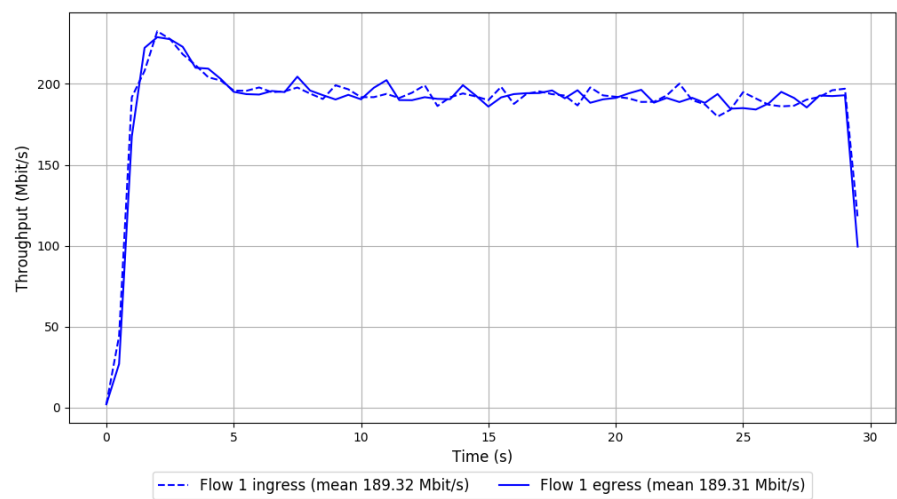
-- Flow 1:

Average throughput: 189.31 Mbit/s

95th percentile per-packet one-way delay: 63.672 ms

Loss rate: 0.41%

Run 6: Report of Indigo — Data Link

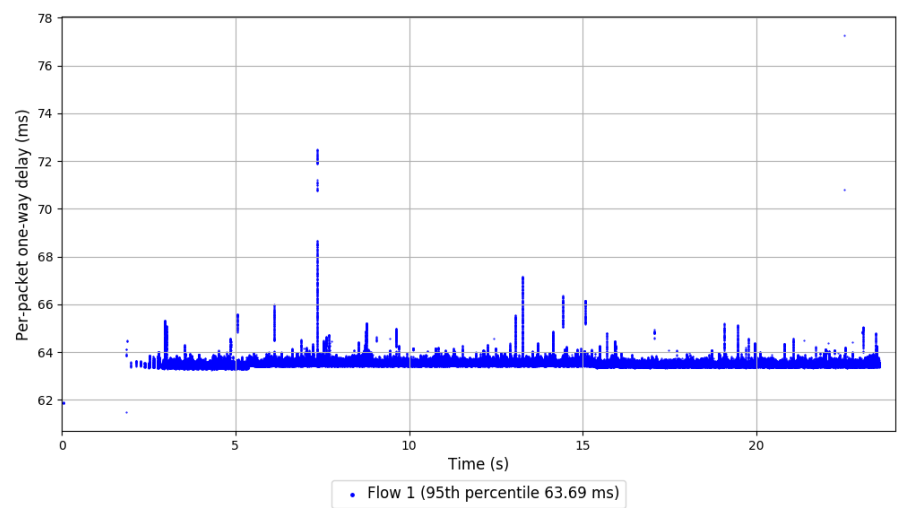
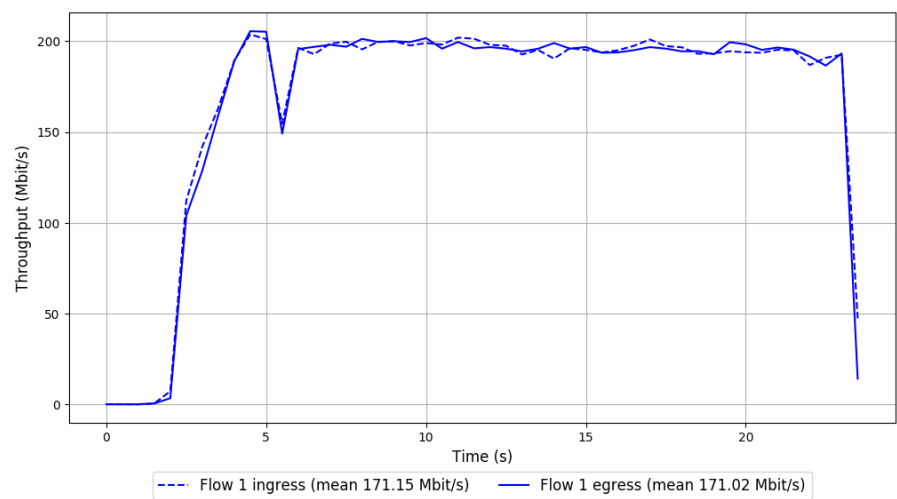


Run 7: Statistics of Indigo

Start at: 2017-11-30 16:23:52

End at: 2017-11-30 16:24:22

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-30 16:34:21

End at: 2017-11-30 16:34:51

Below is generated by plot.py at 2017-11-30 19:23:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.94 Mbit/s

95th percentile per-packet one-way delay: 63.810 ms

Loss rate: 0.42%

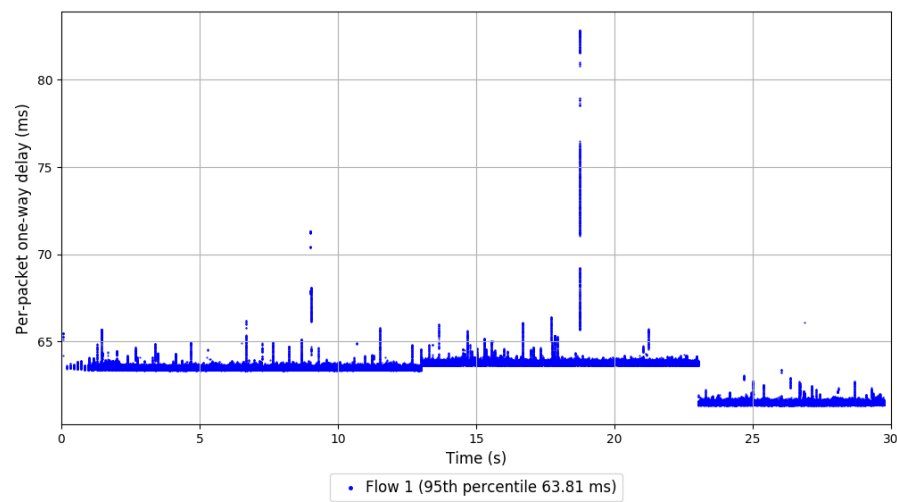
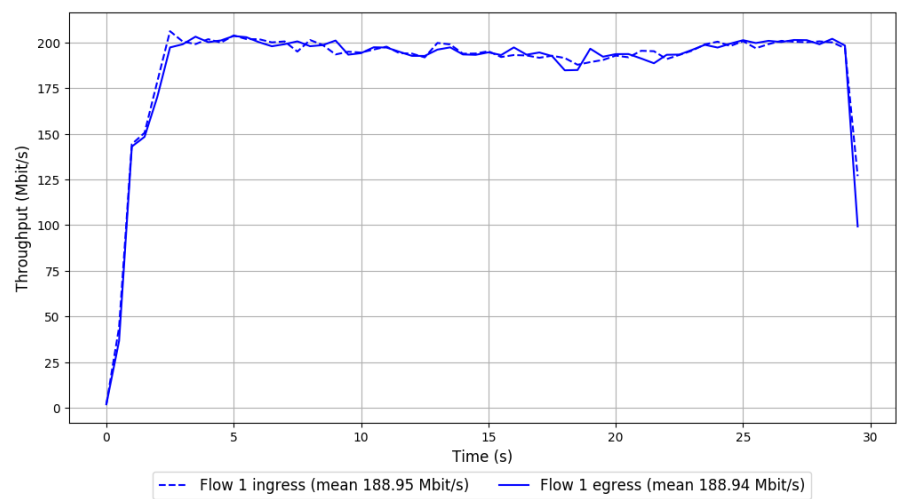
-- Flow 1:

Average throughput: 188.94 Mbit/s

95th percentile per-packet one-way delay: 63.810 ms

Loss rate: 0.42%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-30 16:44:58

End at: 2017-11-30 16:45:28

Below is generated by plot.py at 2017-11-30 19:24:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.18 Mbit/s

95th percentile per-packet one-way delay: 63.561 ms

Loss rate: 0.41%

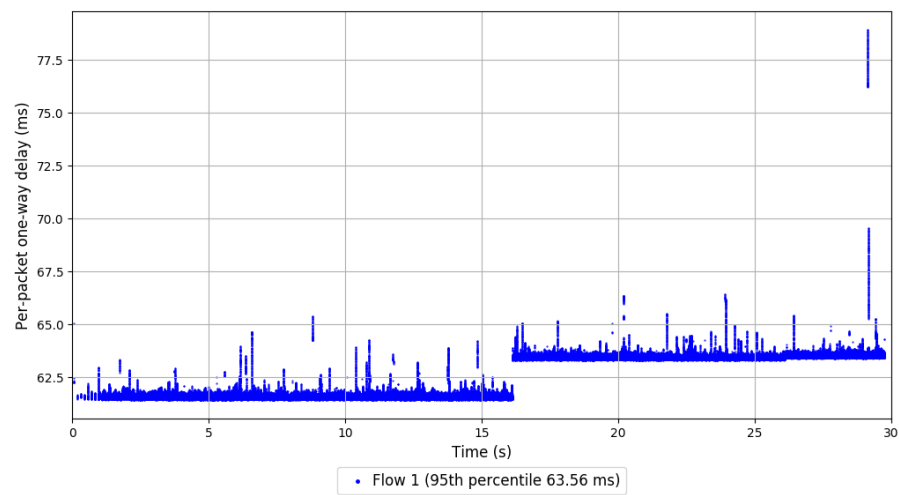
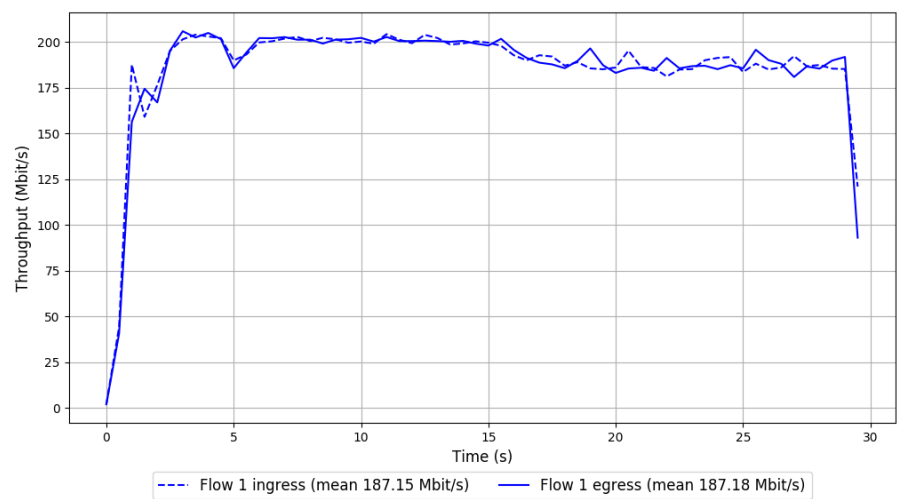
-- Flow 1:

Average throughput: 187.18 Mbit/s

95th percentile per-packet one-way delay: 63.561 ms

Loss rate: 0.41%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-30 16:55:35

End at: 2017-11-30 16:56:05

Below is generated by plot.py at 2017-11-30 19:24:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.82 Mbit/s

95th percentile per-packet one-way delay: 63.608 ms

Loss rate: 0.42%

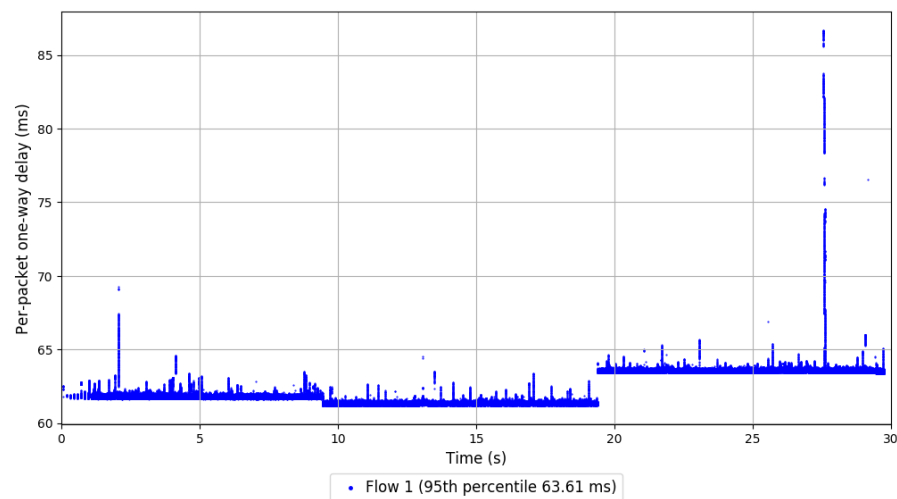
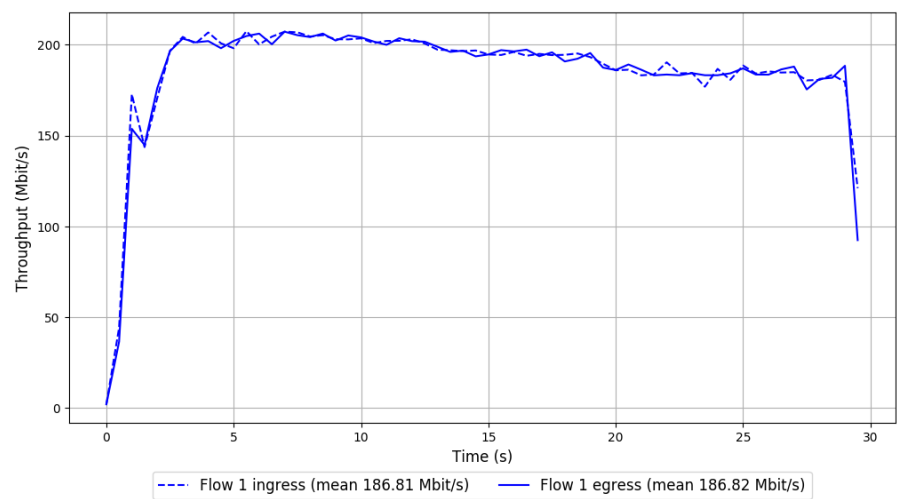
-- Flow 1:

Average throughput: 186.82 Mbit/s

95th percentile per-packet one-way delay: 63.608 ms

Loss rate: 0.42%

Run 10: Report of Indigo — Data Link

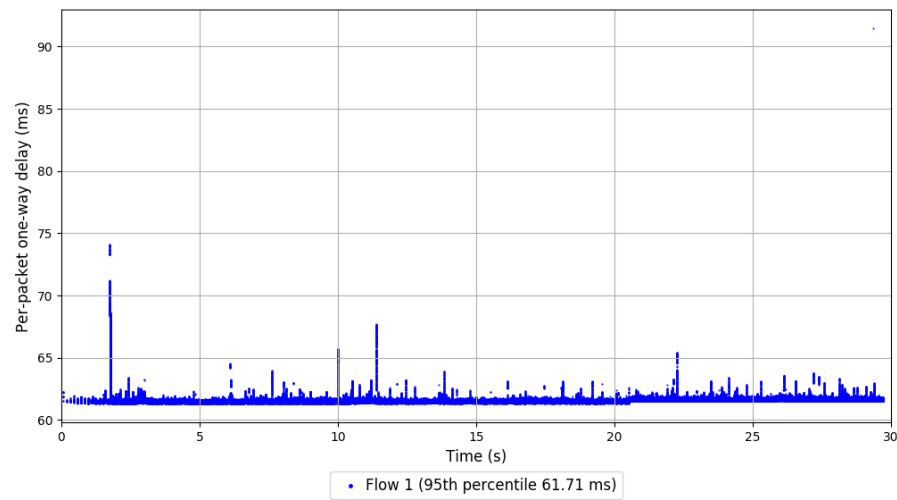
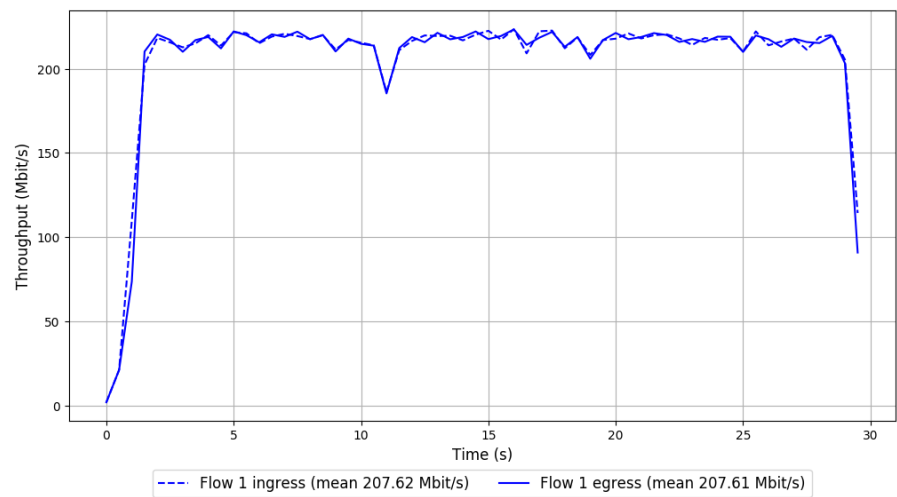


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-30 15:12:53
End at: 2017-11-30 15:13:23

# Below is generated by plot.py at 2017-11-30 19:25:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 207.61 Mbit/s
95th percentile per-packet one-way delay: 61.711 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 207.61 Mbit/s
95th percentile per-packet one-way delay: 61.711 ms
Loss rate: 0.43%
```

Run 1: Report of Indigo-calib — Data Link

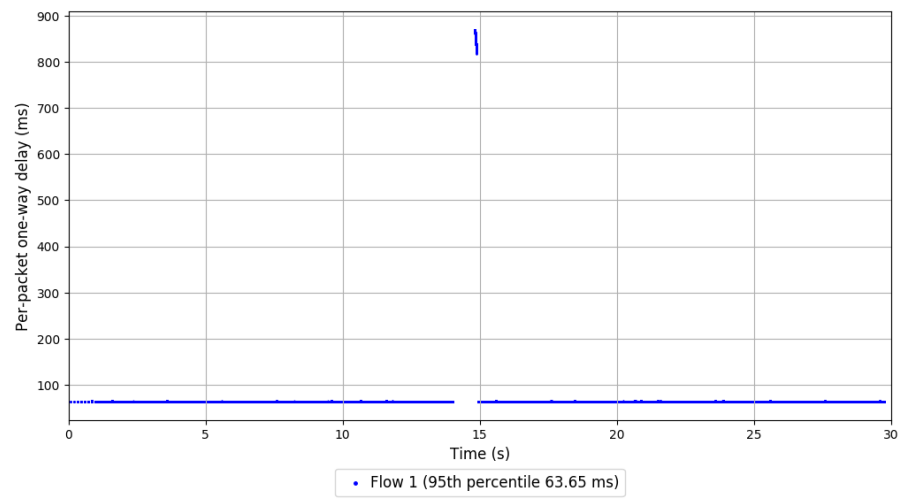
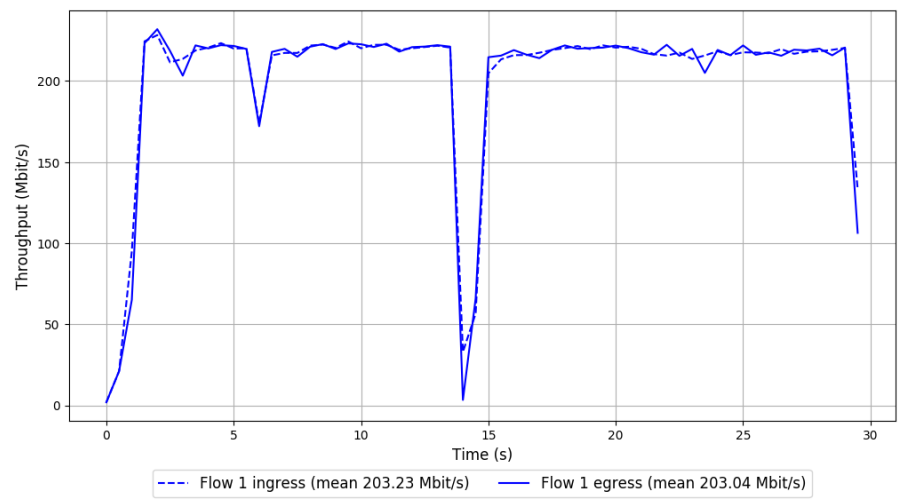


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-30 15:23:28
End at: 2017-11-30 15:23:58

# Below is generated by plot.py at 2017-11-30 19:25:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.04 Mbit/s
95th percentile per-packet one-way delay: 63.654 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 203.04 Mbit/s
95th percentile per-packet one-way delay: 63.654 ms
Loss rate: 0.52%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-11-30 15:33:49

End at: 2017-11-30 15:34:19

Below is generated by plot.py at 2017-11-30 19:25:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.33 Mbit/s

95th percentile per-packet one-way delay: 63.554 ms

Loss rate: 0.44%

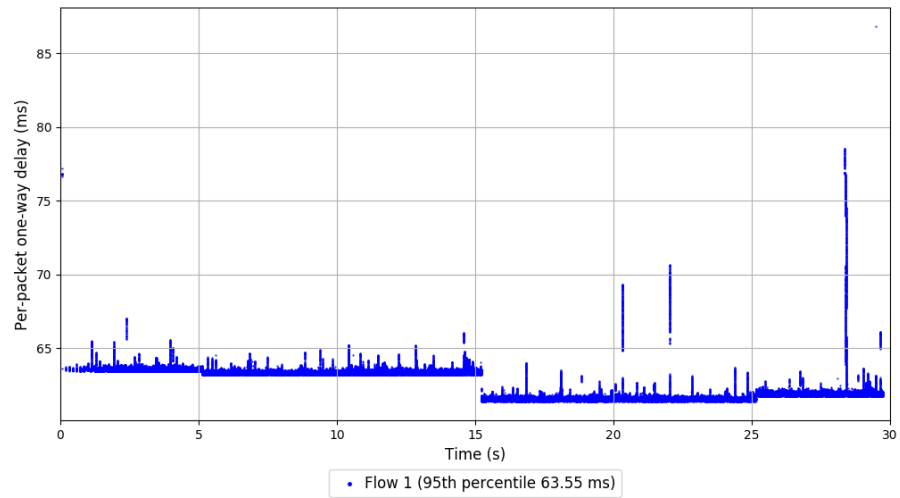
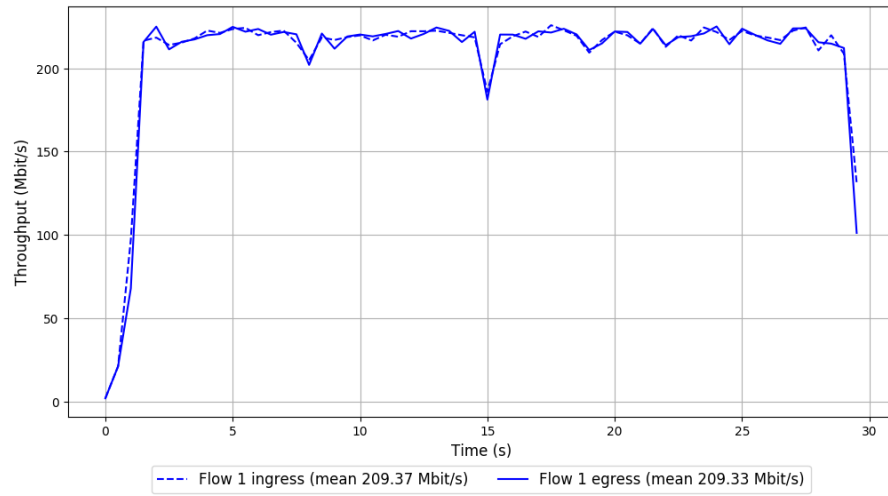
-- Flow 1:

Average throughput: 209.33 Mbit/s

95th percentile per-packet one-way delay: 63.554 ms

Loss rate: 0.44%

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-30 15:44:05

End at: 2017-11-30 15:44:35

Below is generated by plot.py at 2017-11-30 19:25:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.69 Mbit/s

95th percentile per-packet one-way delay: 63.619 ms

Loss rate: 0.43%

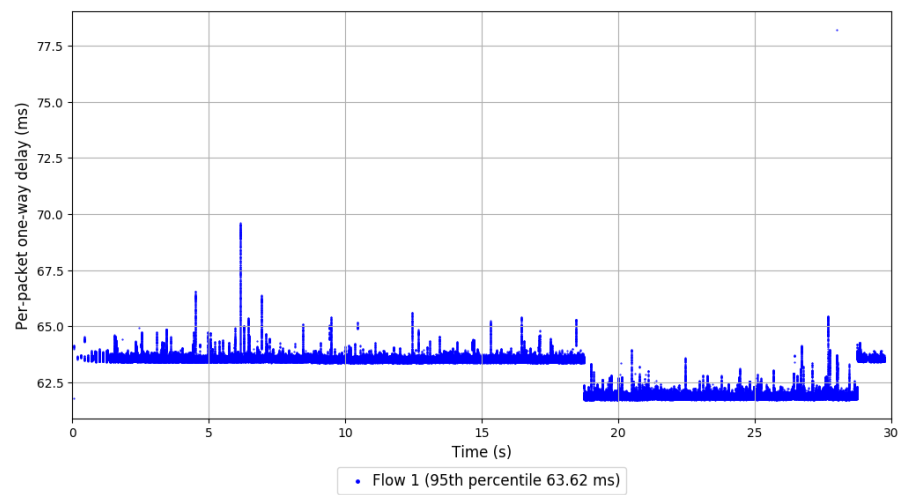
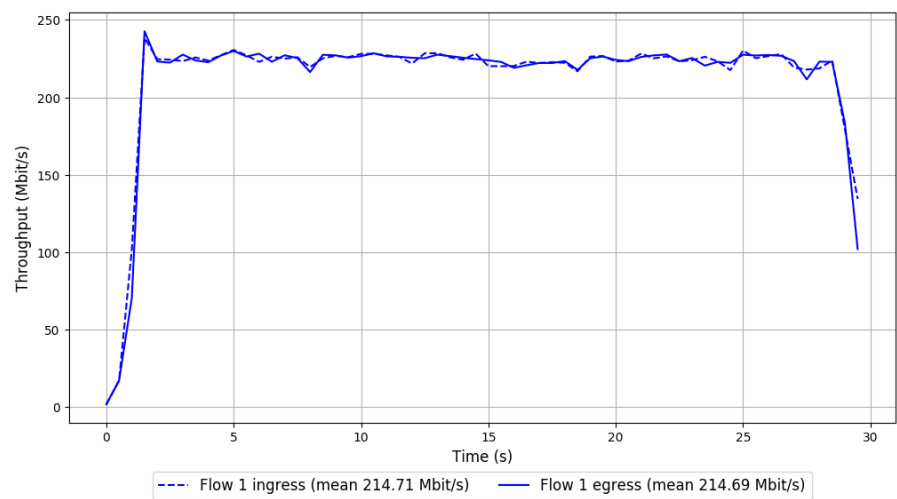
-- Flow 1:

Average throughput: 214.69 Mbit/s

95th percentile per-packet one-way delay: 63.619 ms

Loss rate: 0.43%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-30 15:54:38

End at: 2017-11-30 15:55:08

Below is generated by plot.py at 2017-11-30 19:26:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 211.08 Mbit/s

95th percentile per-packet one-way delay: 63.953 ms

Loss rate: 0.43%

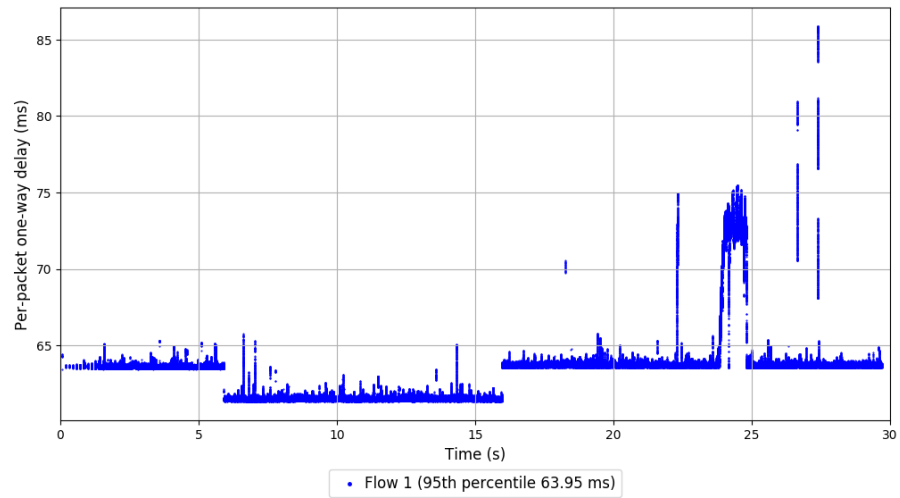
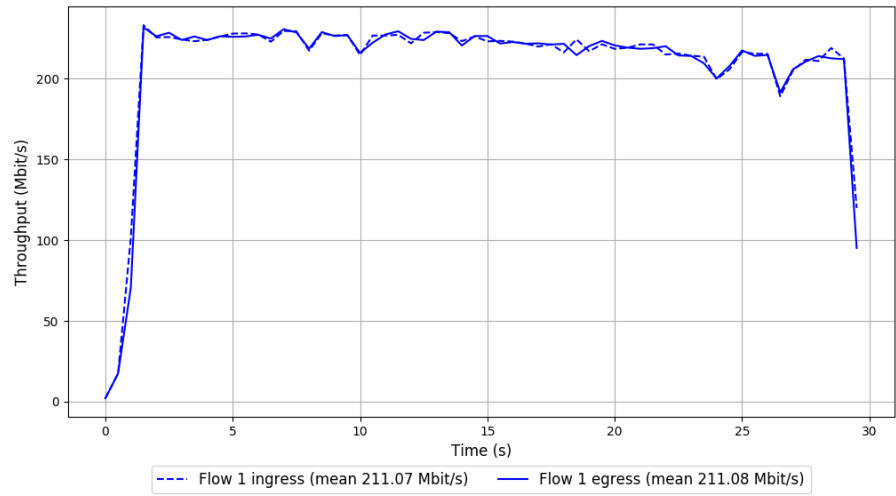
-- Flow 1:

Average throughput: 211.08 Mbit/s

95th percentile per-packet one-way delay: 63.953 ms

Loss rate: 0.43%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-11-30 16:05:11

End at: 2017-11-30 16:05:41

Below is generated by plot.py at 2017-11-30 19:26:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.90 Mbit/s

95th percentile per-packet one-way delay: 63.730 ms

Loss rate: 0.43%

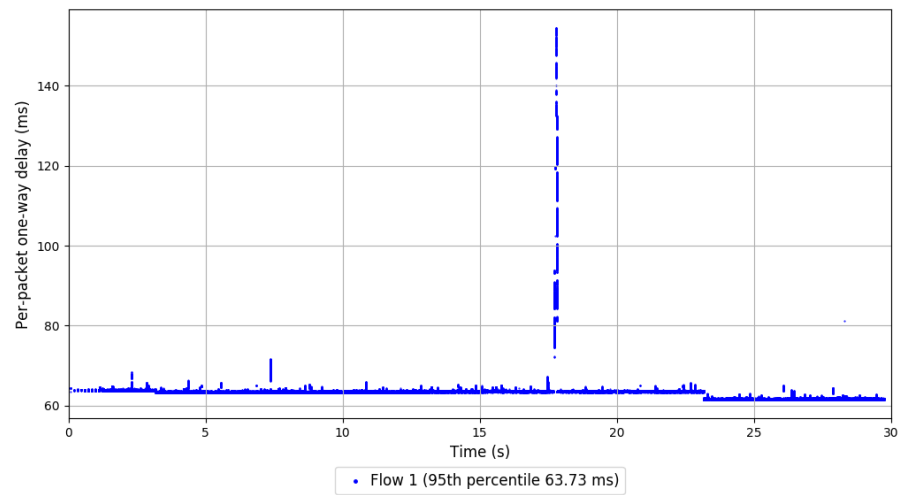
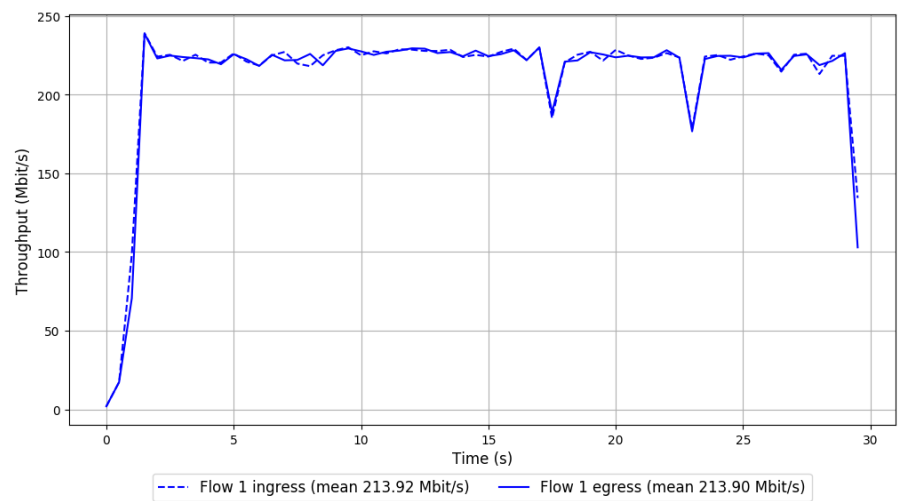
-- Flow 1:

Average throughput: 213.90 Mbit/s

95th percentile per-packet one-way delay: 63.730 ms

Loss rate: 0.43%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-30 16:15:45

End at: 2017-11-30 16:16:15

Below is generated by plot.py at 2017-11-30 19:26:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.37 Mbit/s

95th percentile per-packet one-way delay: 63.829 ms

Loss rate: 0.44%

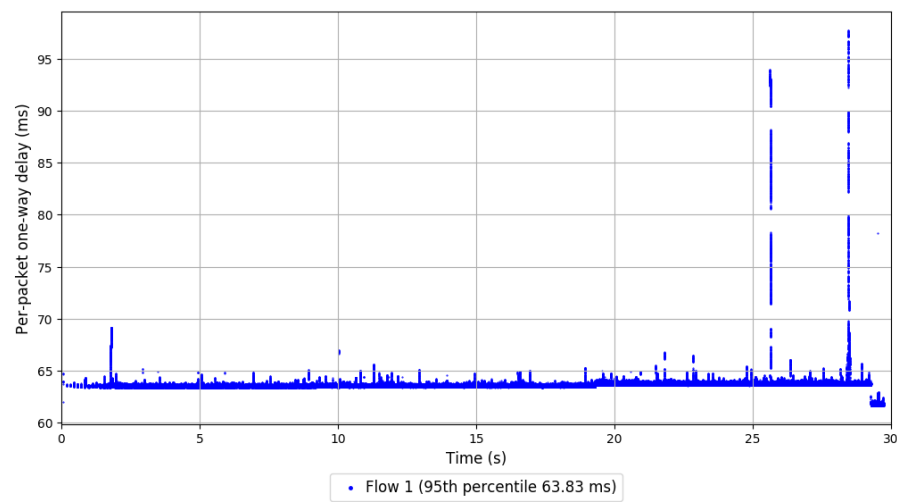
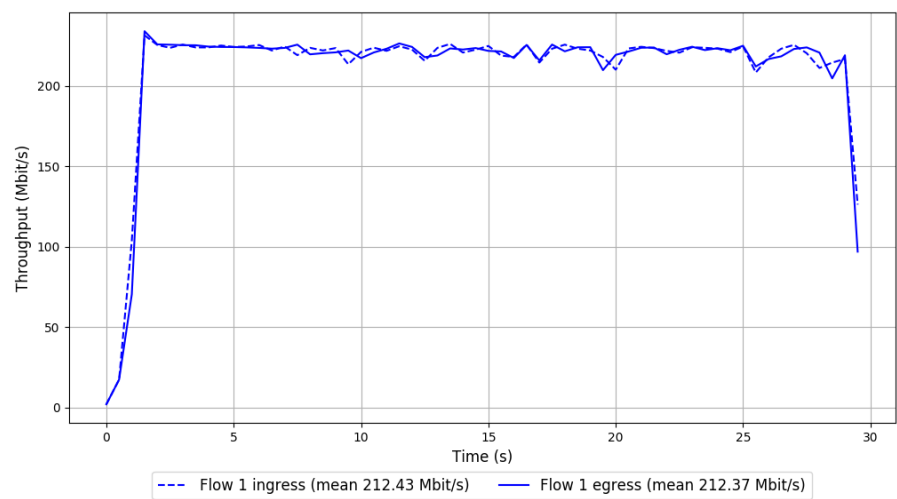
-- Flow 1:

Average throughput: 212.37 Mbit/s

95th percentile per-packet one-way delay: 63.829 ms

Loss rate: 0.44%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-30 16:26:23

End at: 2017-11-30 16:26:53

Below is generated by plot.py at 2017-11-30 19:26:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 205.87 Mbit/s

95th percentile per-packet one-way delay: 63.701 ms

Loss rate: 0.43%

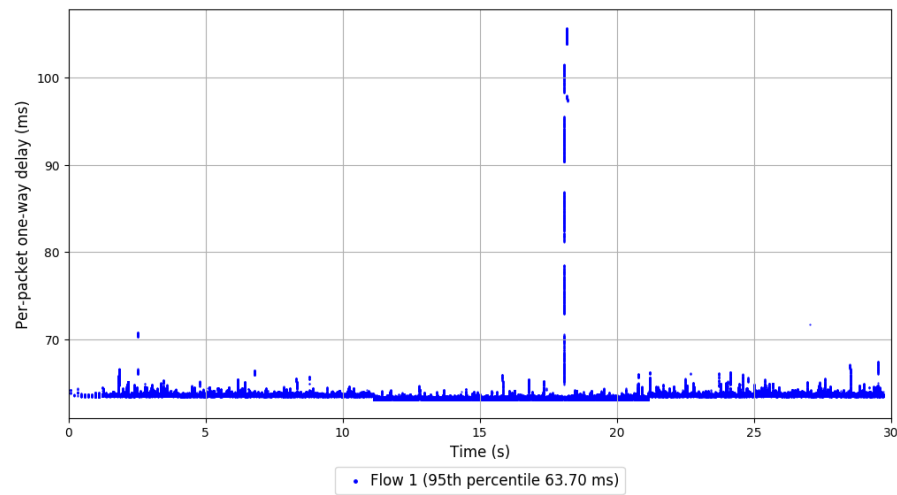
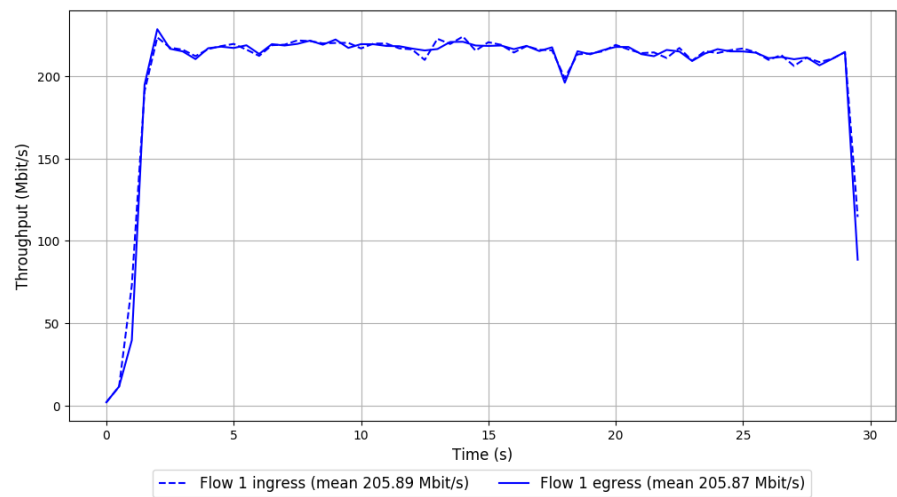
-- Flow 1:

Average throughput: 205.87 Mbit/s

95th percentile per-packet one-way delay: 63.701 ms

Loss rate: 0.43%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-30 16:36:49

End at: 2017-11-30 16:37:19

Below is generated by plot.py at 2017-11-30 19:27:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 205.47 Mbit/s

95th percentile per-packet one-way delay: 63.580 ms

Loss rate: 0.44%

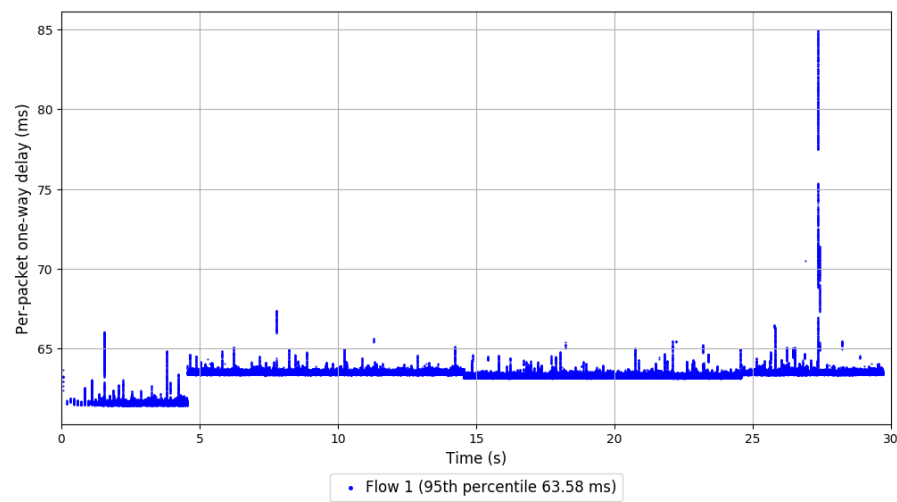
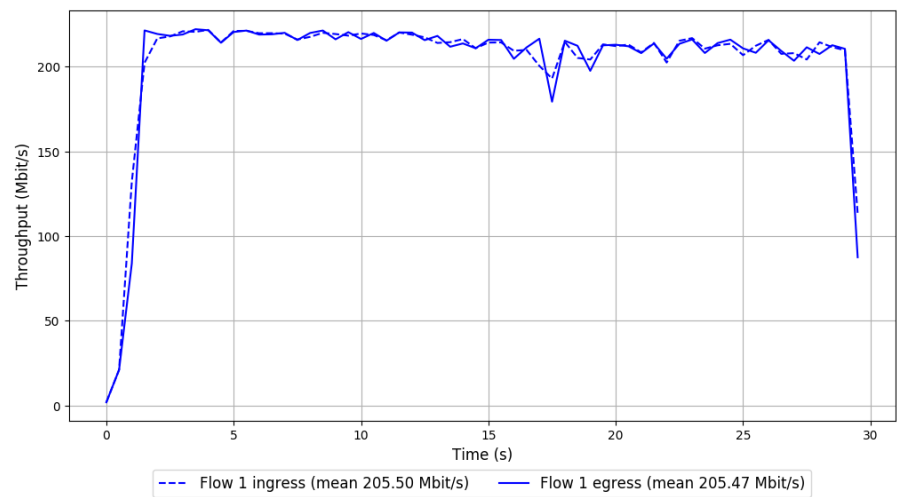
-- Flow 1:

Average throughput: 205.47 Mbit/s

95th percentile per-packet one-way delay: 63.580 ms

Loss rate: 0.44%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-30 16:47:24

End at: 2017-11-30 16:47:54

Below is generated by plot.py at 2017-11-30 19:27:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.70 Mbit/s

95th percentile per-packet one-way delay: 63.587 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 213.70 Mbit/s

95th percentile per-packet one-way delay: 63.587 ms

Loss rate: 0.44%

Run 10: Report of Indigo-calib — Data Link

