

Pantheon Report

Generated at 2017-11-16 00:34:13 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

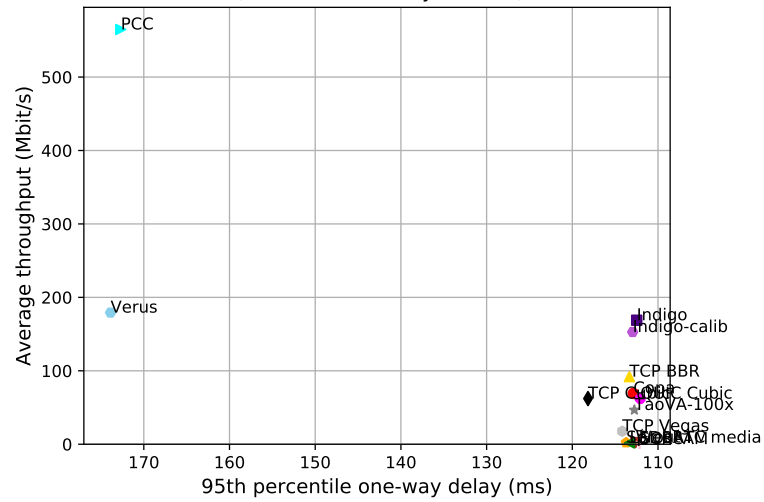
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

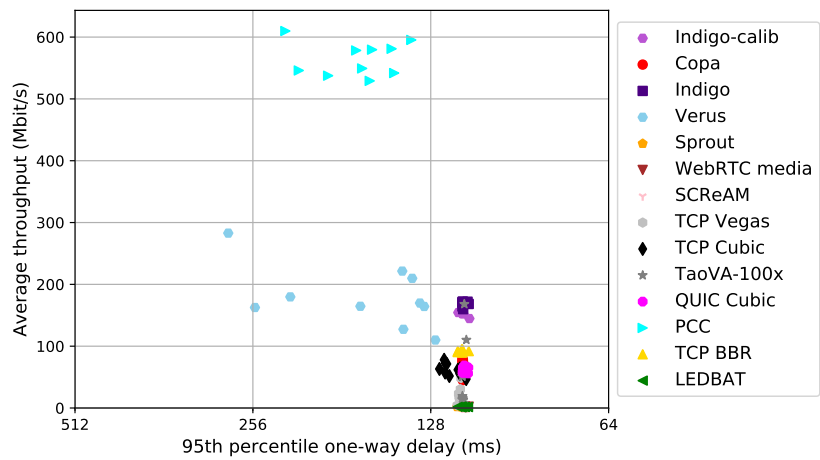
Git summary:

```
branch: indigos @ f54f2953f2a9765c9ffa988d13de5a9471790eb0
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



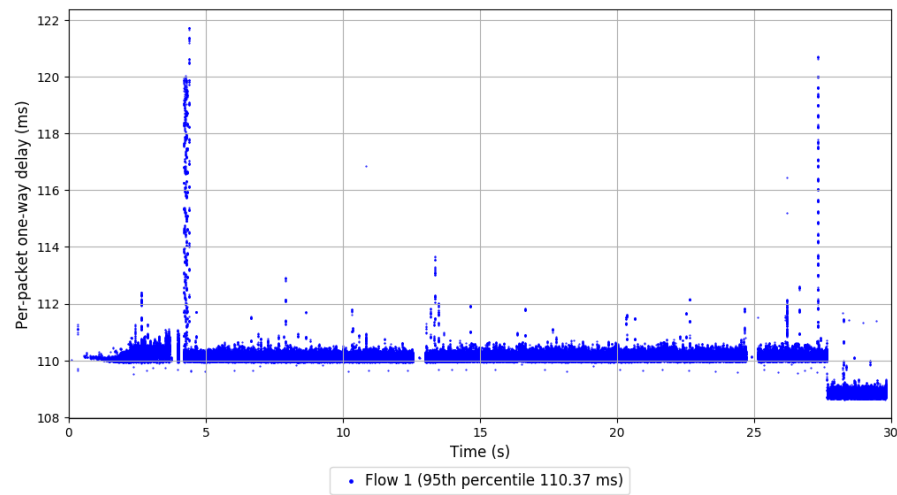
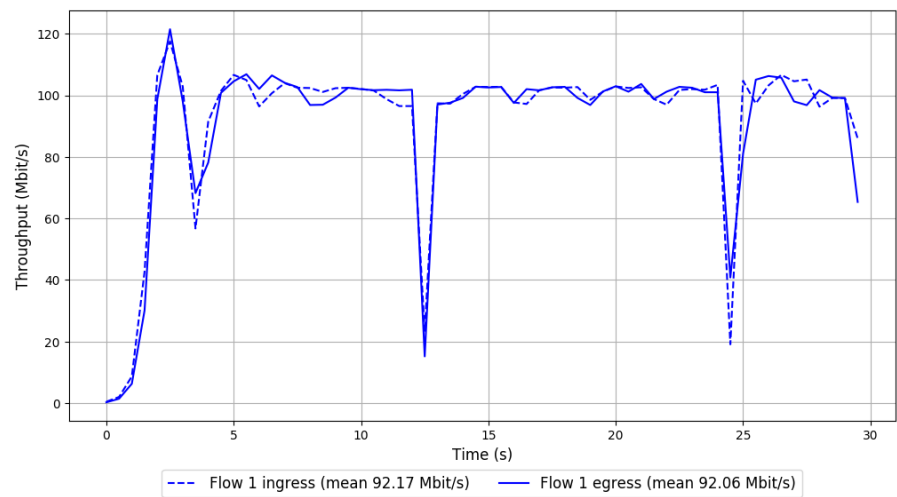
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	92.06	113.34	0.85
TCP Cubic	10	62.22	118.17	0.85
LEDBAT	10	1.67	113.33	1.12
PCC	10	564.82	172.68	2.20
QUIC Cubic	9	62.13	112.07	1.00
SCReAM	10	0.22	112.17	0.75
WebRTC media	10	2.15	112.62	0.87
Sprout	10	2.24	113.72	1.03
TaoVA-100x	10	46.68	112.76	1.36
TCP Vegas	10	17.68	114.17	0.57
Verus	10	179.23	173.88	2.52
Copa	10	69.19	112.88	0.49
Indigo	9	168.83	112.48	0.80
Indigo-calib	10	152.81	112.96	0.82

```
Run 1: Statistics of TCP BBR

Start at: 2017-11-15 20:18:38
End at: 2017-11-15 20:19:08

# Below is generated by plot.py at 2017-11-16 00:01:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.06 Mbit/s
95th percentile per-packet one-way delay: 110.372 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 92.06 Mbit/s
95th percentile per-packet one-way delay: 110.372 ms
Loss rate: 0.80%
```

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-15 20:29:32

End at: 2017-11-15 20:30:02

Below is generated by plot.py at 2017-11-16 00:01:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.12 Mbit/s

95th percentile per-packet one-way delay: 113.444 ms

Loss rate: 0.79%

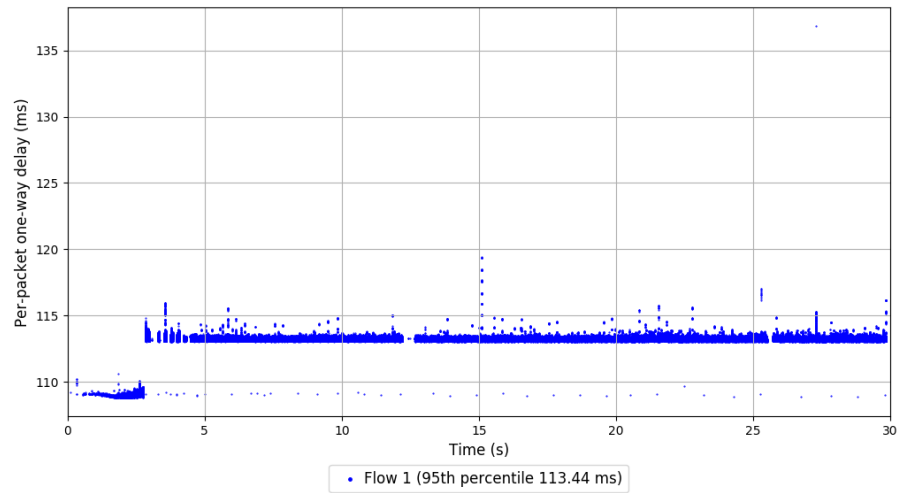
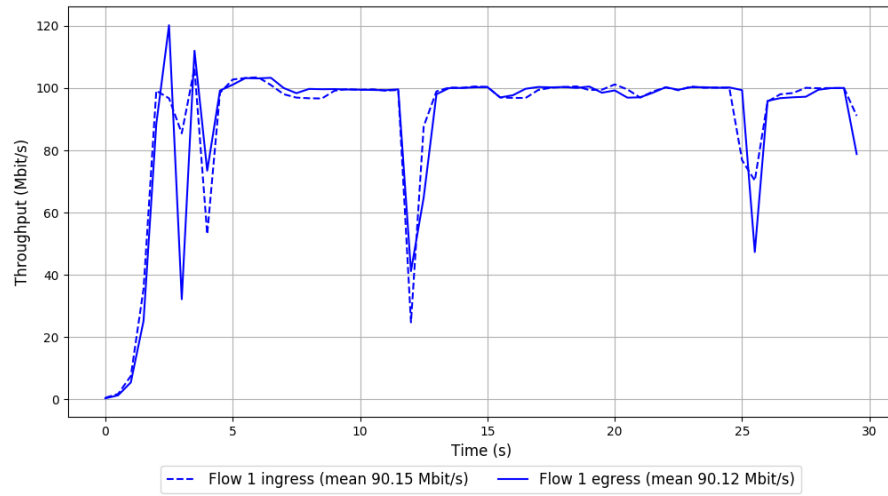
-- Flow 1:

Average throughput: 90.12 Mbit/s

95th percentile per-packet one-way delay: 113.444 ms

Loss rate: 0.79%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-15 20:40:30

End at: 2017-11-15 20:41:00

Below is generated by plot.py at 2017-11-16 00:01:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.98 Mbit/s

95th percentile per-packet one-way delay: 113.346 ms

Loss rate: 0.81%

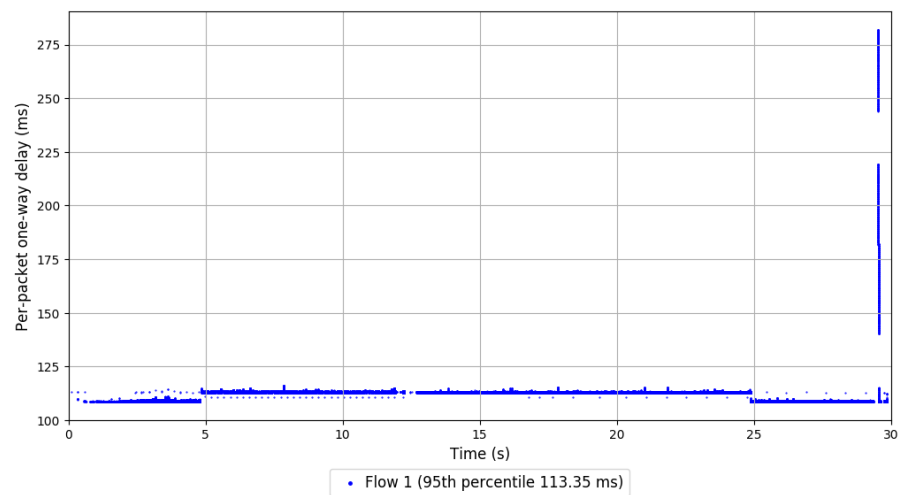
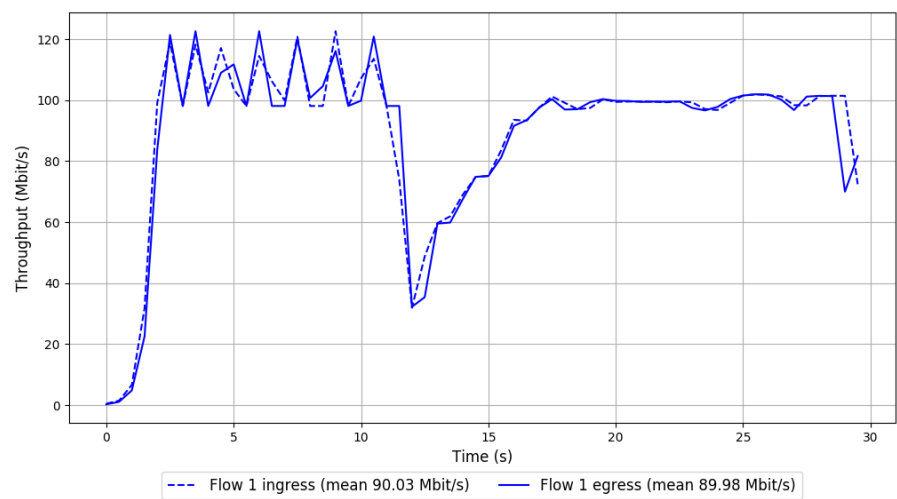
-- Flow 1:

Average throughput: 89.98 Mbit/s

95th percentile per-packet one-way delay: 113.346 ms

Loss rate: 0.81%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-15 20:51:37

End at: 2017-11-15 20:52:07

Below is generated by plot.py at 2017-11-16 00:01:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.50 Mbit/s

95th percentile per-packet one-way delay: 115.258 ms

Loss rate: 0.85%

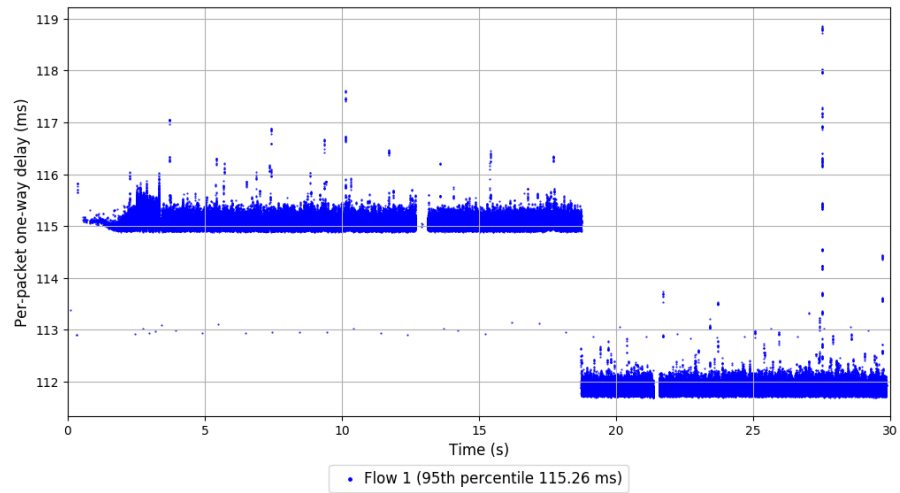
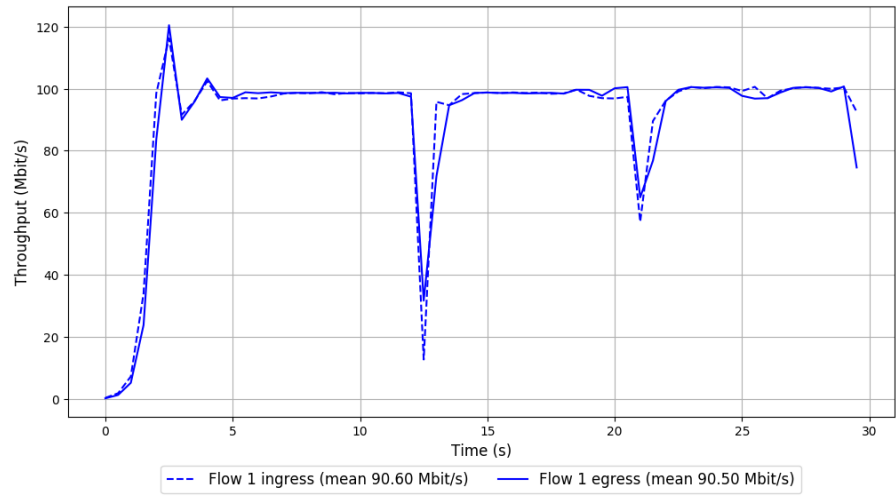
-- Flow 1:

Average throughput: 90.50 Mbit/s

95th percentile per-packet one-way delay: 115.258 ms

Loss rate: 0.85%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-15 21:02:46

End at: 2017-11-15 21:03:16

Below is generated by plot.py at 2017-11-16 00:01:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.44 Mbit/s

95th percentile per-packet one-way delay: 113.157 ms

Loss rate: 0.79%

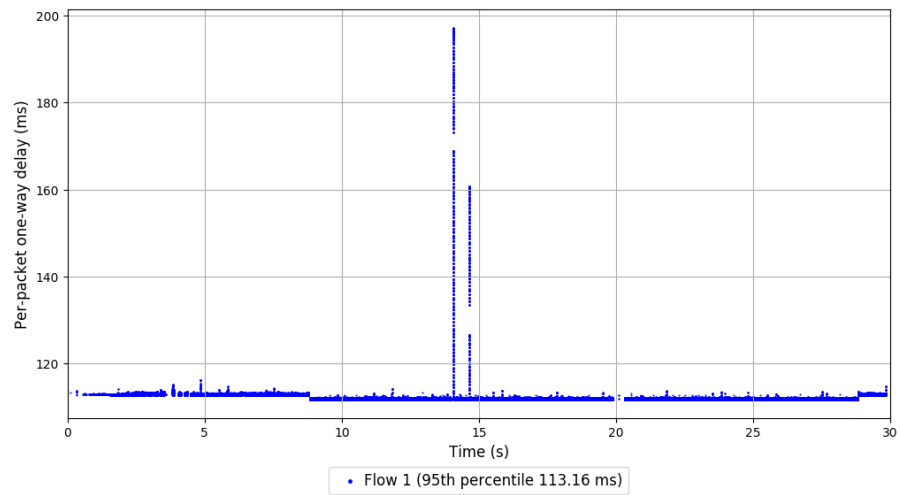
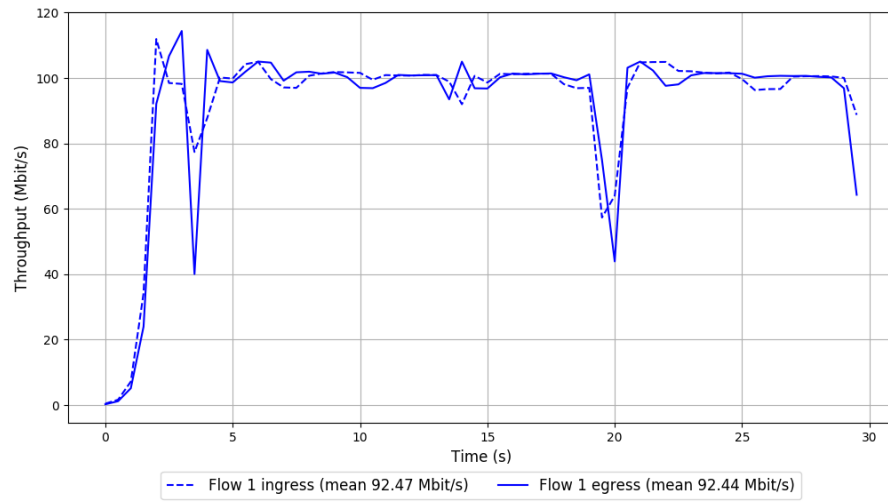
-- Flow 1:

Average throughput: 92.44 Mbit/s

95th percentile per-packet one-way delay: 113.157 ms

Loss rate: 0.79%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-15 21:13:49

End at: 2017-11-15 21:14:19

Below is generated by plot.py at 2017-11-16 00:01:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.24 Mbit/s

95th percentile per-packet one-way delay: 113.127 ms

Loss rate: 0.90%

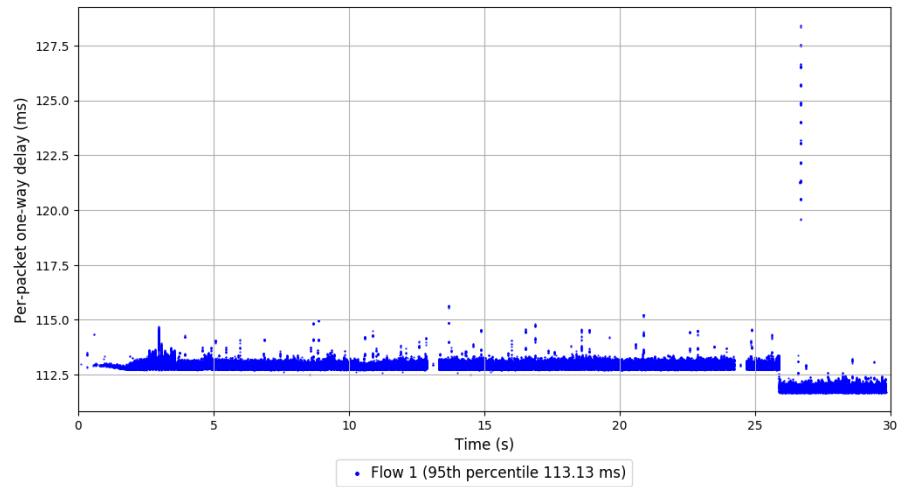
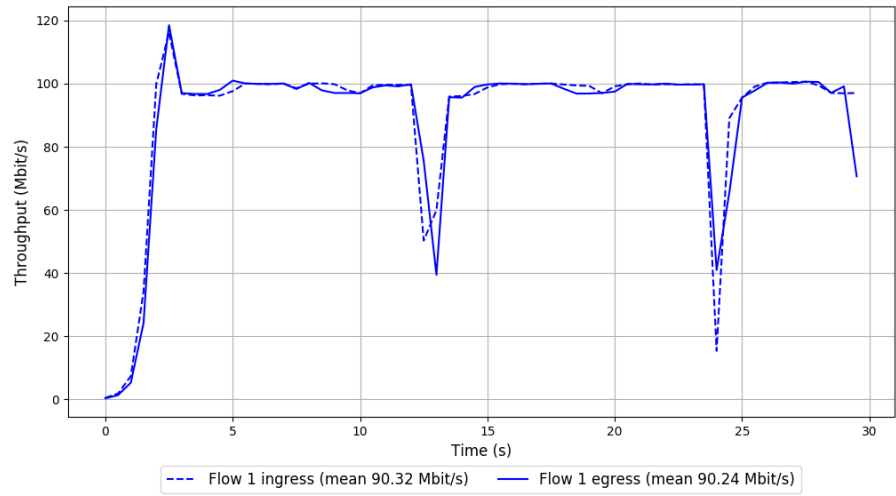
-- Flow 1:

Average throughput: 90.24 Mbit/s

95th percentile per-packet one-way delay: 113.127 ms

Loss rate: 0.90%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-15 21:24:55

End at: 2017-11-15 21:25:25

Below is generated by plot.py at 2017-11-16 00:01:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.93 Mbit/s

95th percentile per-packet one-way delay: 113.415 ms

Loss rate: 0.78%

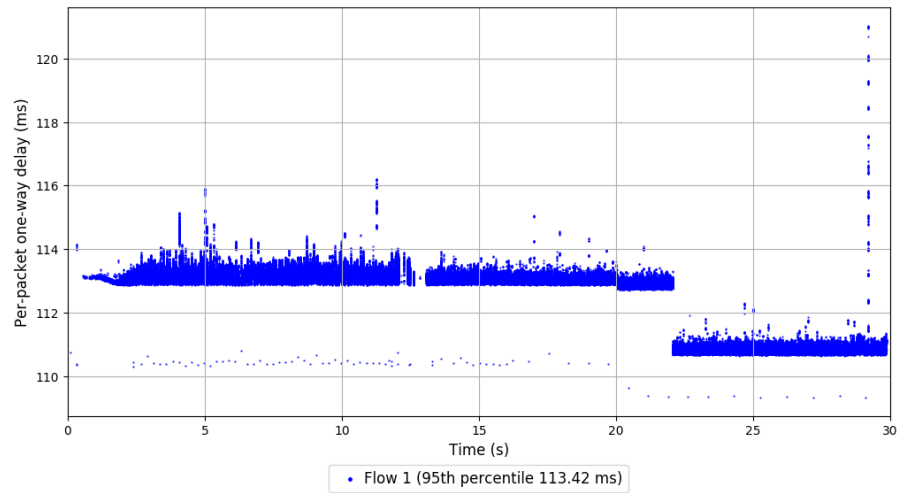
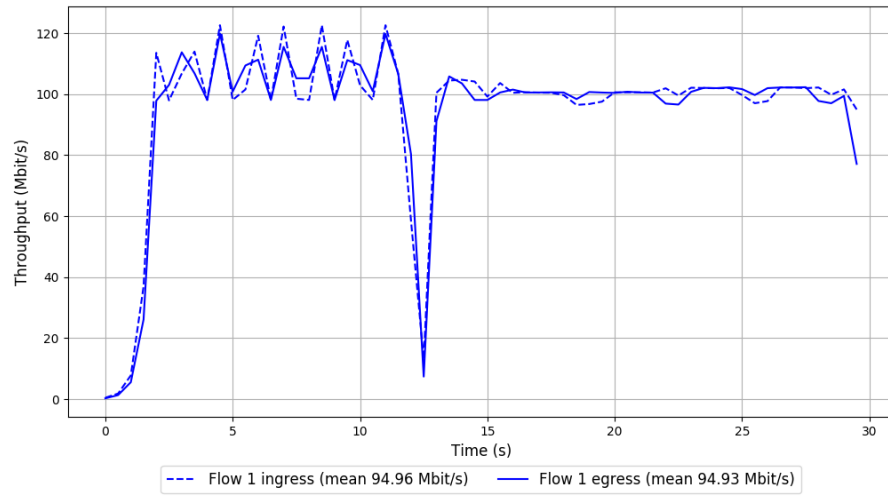
-- Flow 1:

Average throughput: 94.93 Mbit/s

95th percentile per-packet one-way delay: 113.415 ms

Loss rate: 0.78%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-15 21:35:50

End at: 2017-11-15 21:36:20

Below is generated by plot.py at 2017-11-16 00:01:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.93 Mbit/s

95th percentile per-packet one-way delay: 113.218 ms

Loss rate: 1.14%

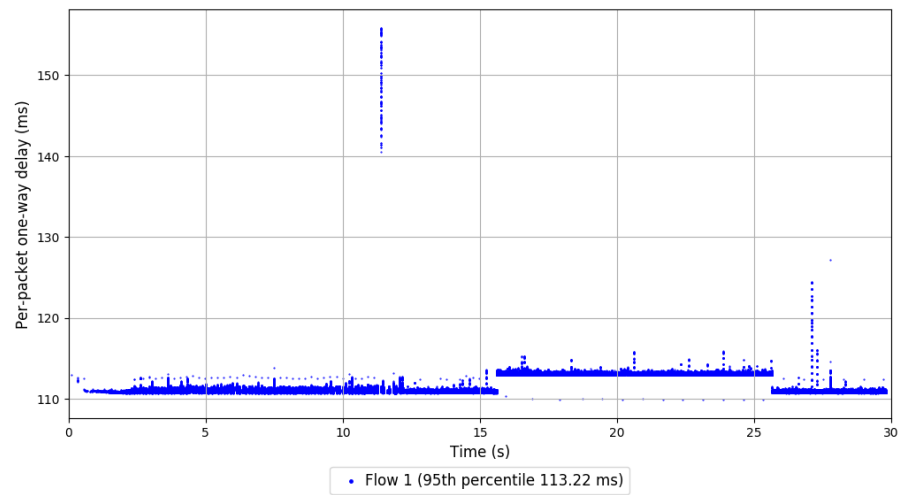
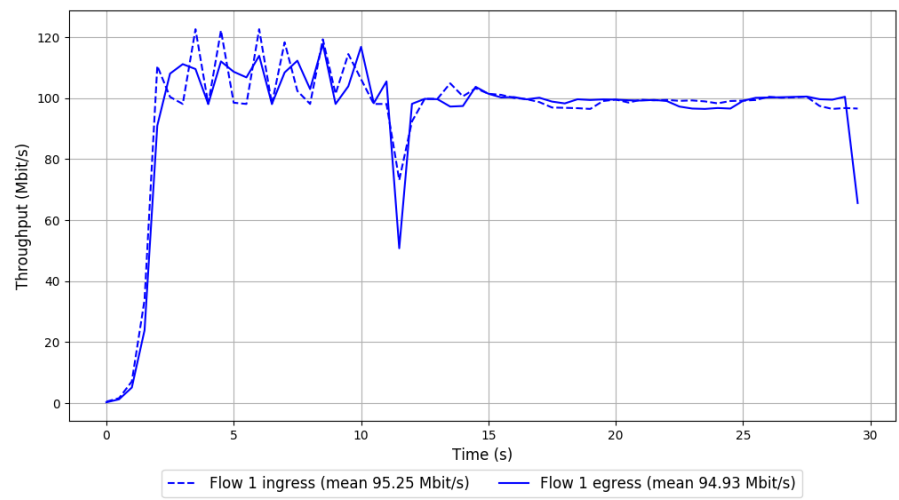
-- Flow 1:

Average throughput: 94.93 Mbit/s

95th percentile per-packet one-way delay: 113.218 ms

Loss rate: 1.14%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-15 21:46:57

End at: 2017-11-15 21:47:27

Below is generated by plot.py at 2017-11-16 00:03:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.15 Mbit/s

95th percentile per-packet one-way delay: 115.184 ms

Loss rate: 0.80%

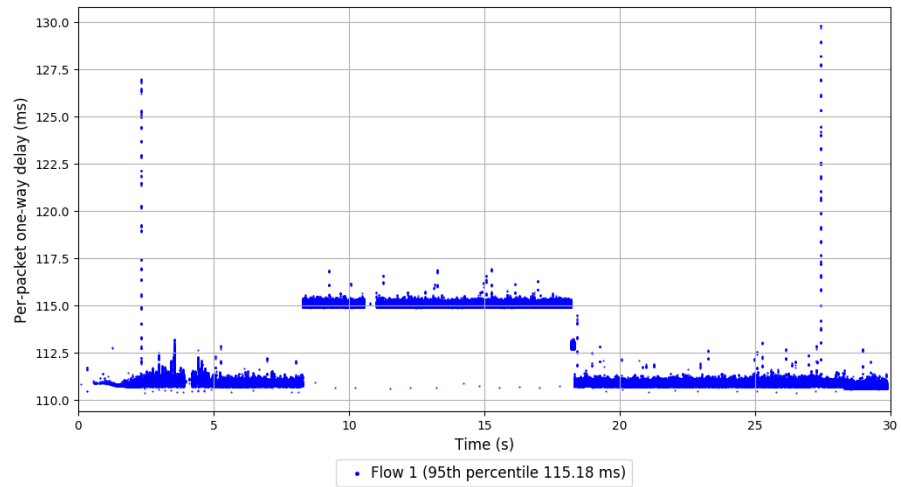
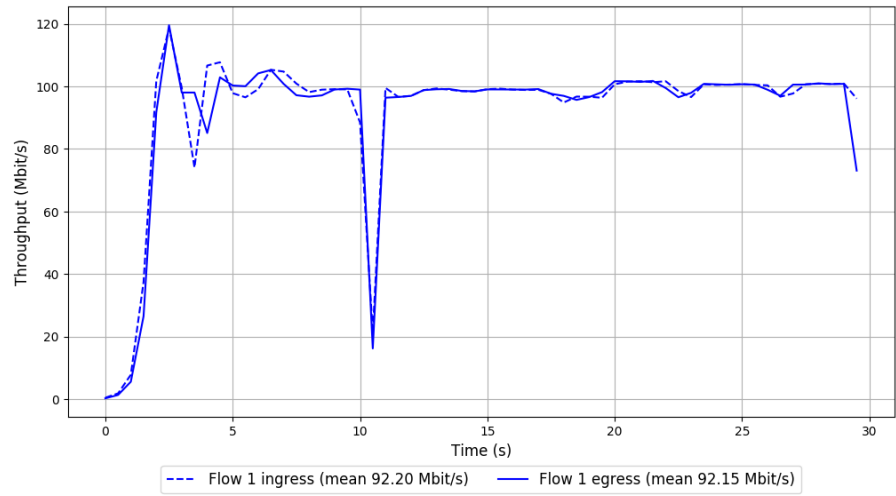
-- Flow 1:

Average throughput: 92.15 Mbit/s

95th percentile per-packet one-way delay: 115.184 ms

Loss rate: 0.80%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-15 21:58:09

End at: 2017-11-15 21:58:39

Below is generated by plot.py at 2017-11-16 00:03:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.23 Mbit/s

95th percentile per-packet one-way delay: 112.908 ms

Loss rate: 0.86%

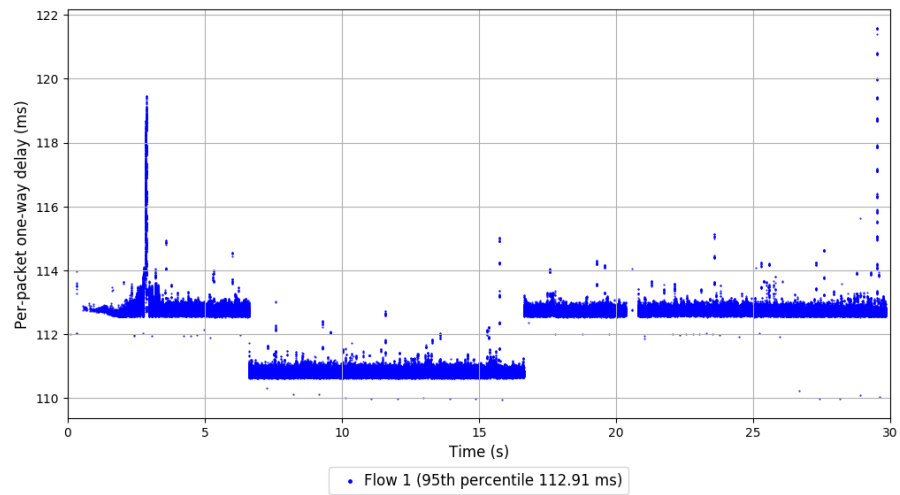
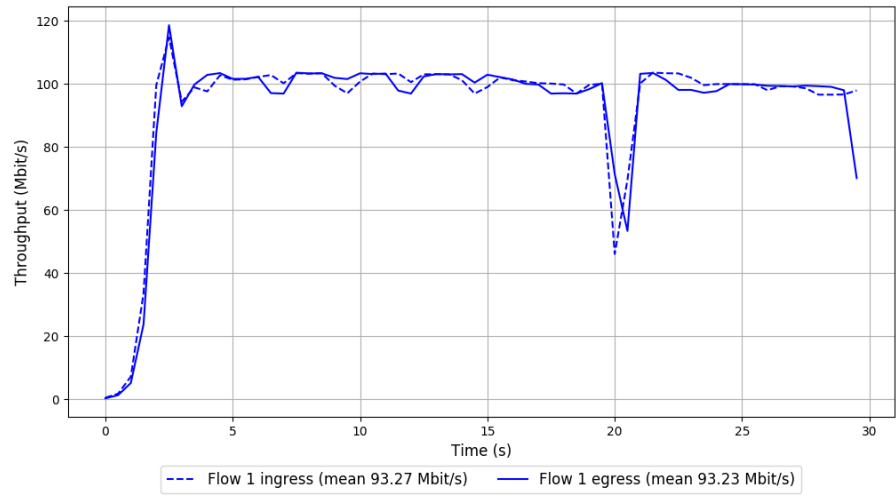
-- Flow 1:

Average throughput: 93.23 Mbit/s

95th percentile per-packet one-way delay: 112.908 ms

Loss rate: 0.86%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-15 20:21:12

End at: 2017-11-15 20:21:42

Below is generated by plot.py at 2017-11-16 00:03:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.80 Mbit/s

95th percentile per-packet one-way delay: 111.481 ms

Loss rate: 0.86%

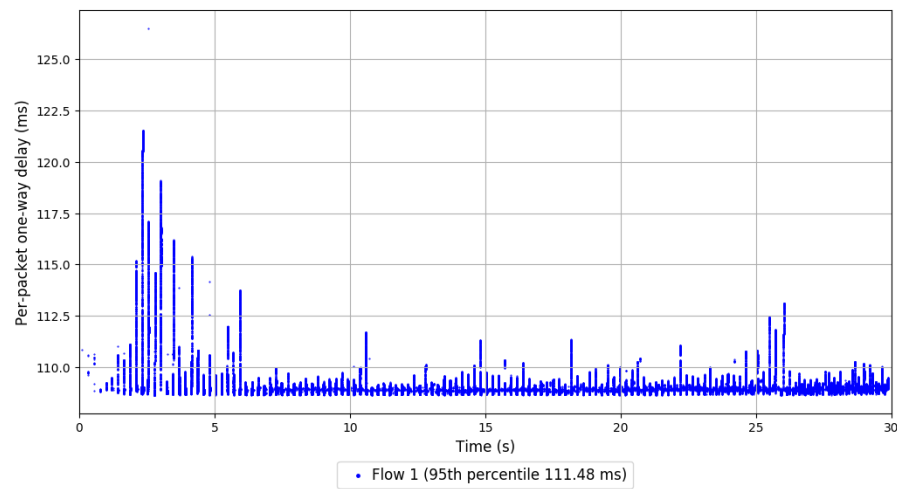
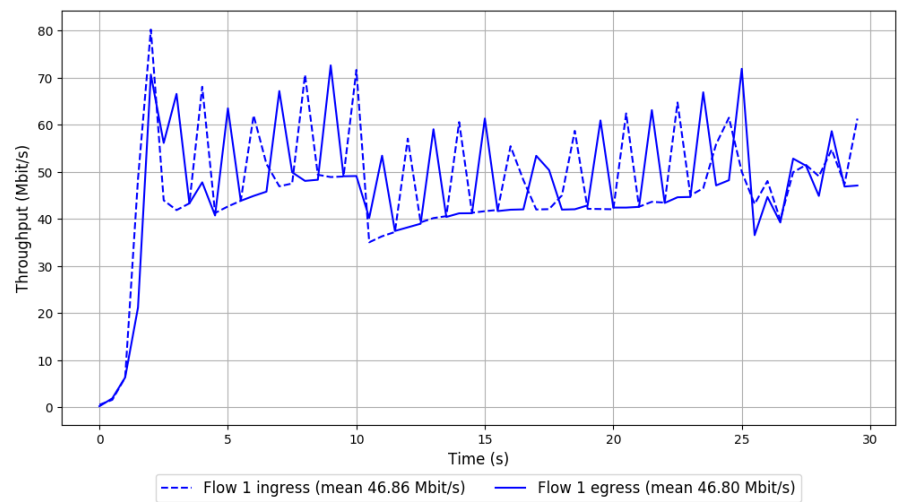
-- Flow 1:

Average throughput: 46.80 Mbit/s

95th percentile per-packet one-way delay: 111.481 ms

Loss rate: 0.86%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-15 20:32:05

End at: 2017-11-15 20:32:35

Below is generated by plot.py at 2017-11-16 00:03:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.85 Mbit/s

95th percentile per-packet one-way delay: 115.138 ms

Loss rate: 0.96%

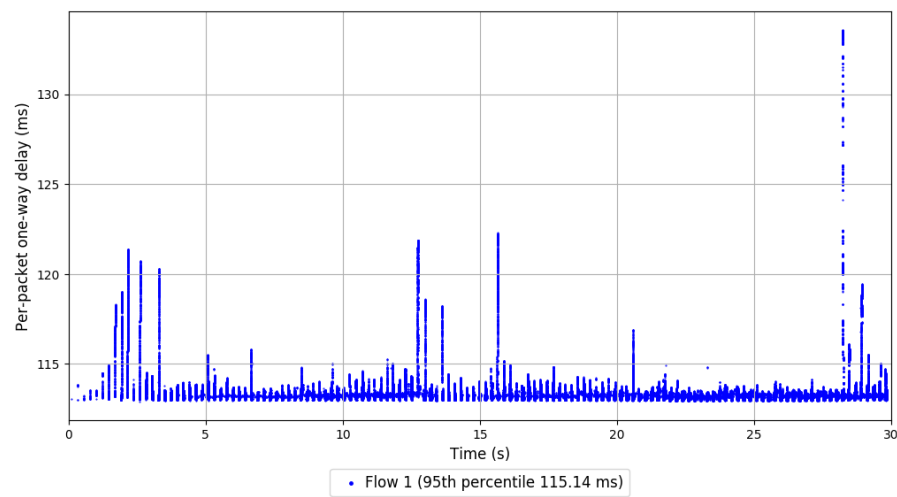
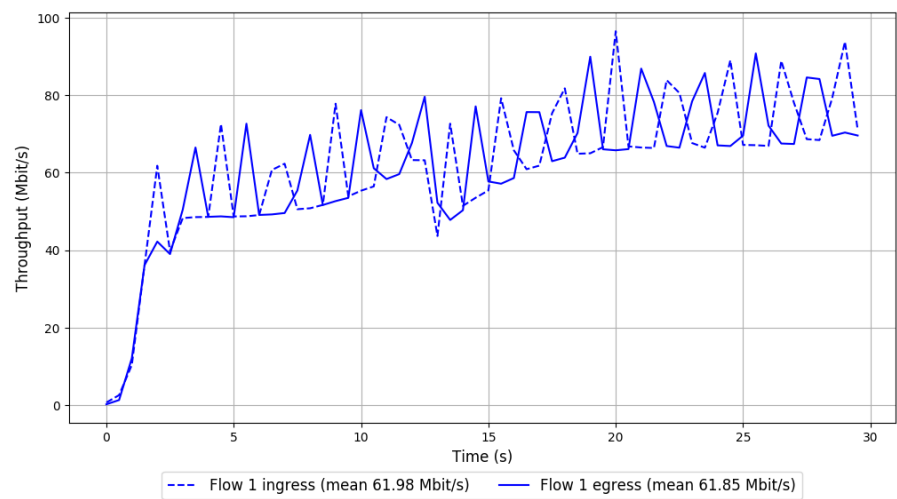
-- Flow 1:

Average throughput: 61.85 Mbit/s

95th percentile per-packet one-way delay: 115.138 ms

Loss rate: 0.96%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-15 20:43:04

End at: 2017-11-15 20:43:34

Below is generated by plot.py at 2017-11-16 00:03:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.30 Mbit/s

95th percentile per-packet one-way delay: 120.223 ms

Loss rate: 1.11%

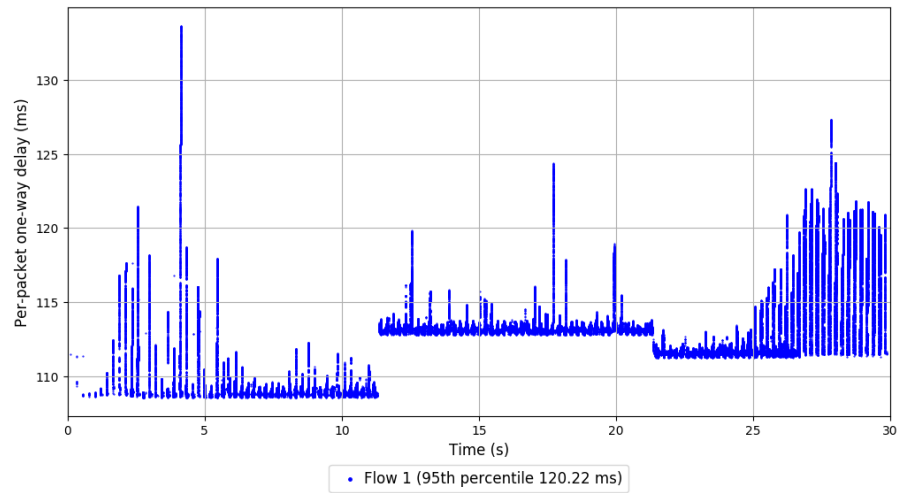
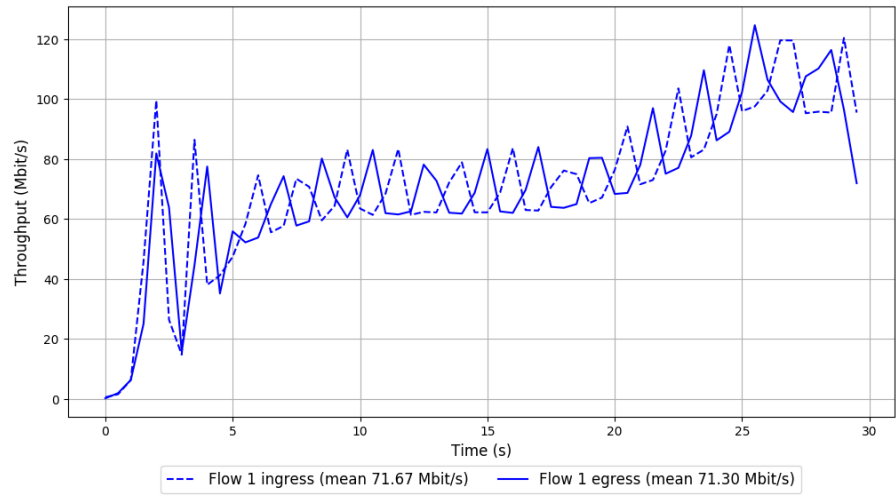
-- Flow 1:

Average throughput: 71.30 Mbit/s

95th percentile per-packet one-way delay: 120.223 ms

Loss rate: 1.11%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-15 20:54:08

End at: 2017-11-15 20:54:38

Below is generated by plot.py at 2017-11-16 00:03:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.97 Mbit/s

95th percentile per-packet one-way delay: 121.483 ms

Loss rate: 0.73%

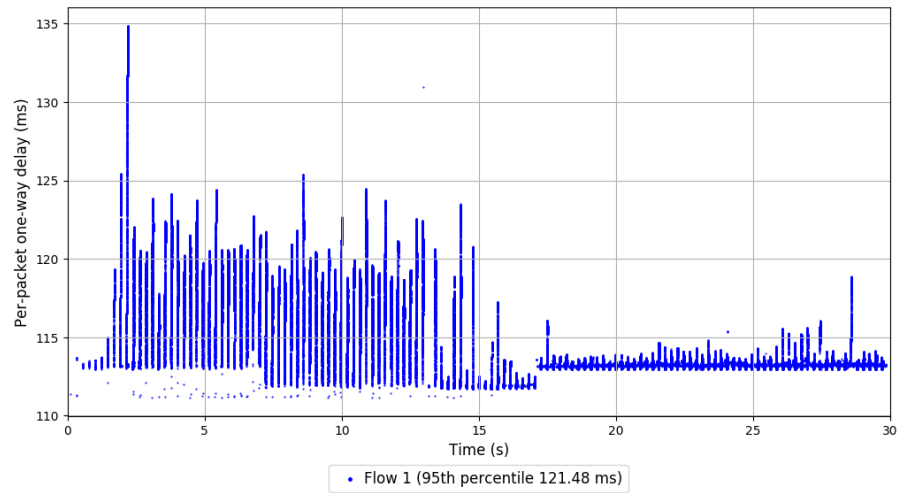
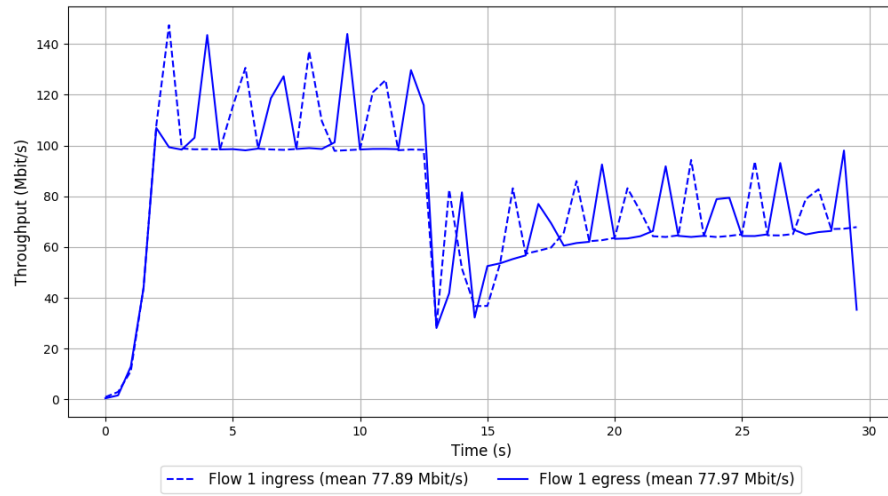
-- Flow 1:

Average throughput: 77.97 Mbit/s

95th percentile per-packet one-way delay: 121.483 ms

Loss rate: 0.73%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-15 21:05:21

End at: 2017-11-15 21:05:51

Below is generated by plot.py at 2017-11-16 00:03:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.49 Mbit/s

95th percentile per-packet one-way delay: 120.959 ms

Loss rate: 0.53%

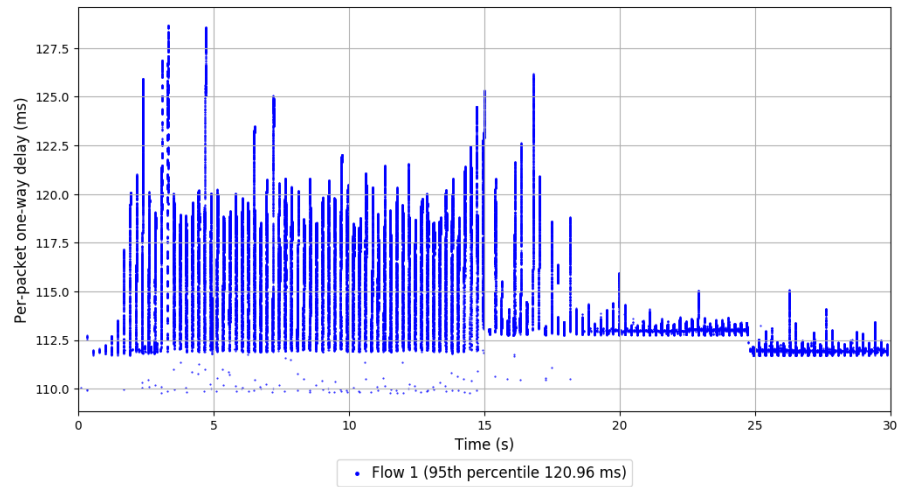
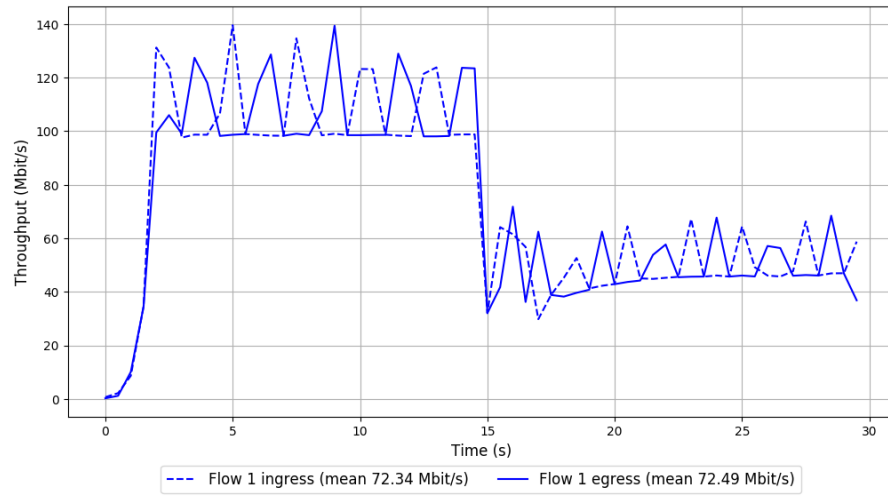
-- Flow 1:

Average throughput: 72.49 Mbit/s

95th percentile per-packet one-way delay: 120.959 ms

Loss rate: 0.53%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-15 21:16:22

End at: 2017-11-15 21:16:52

Below is generated by plot.py at 2017-11-16 00:03:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.17 Mbit/s

95th percentile per-packet one-way delay: 123.724 ms

Loss rate: 0.60%

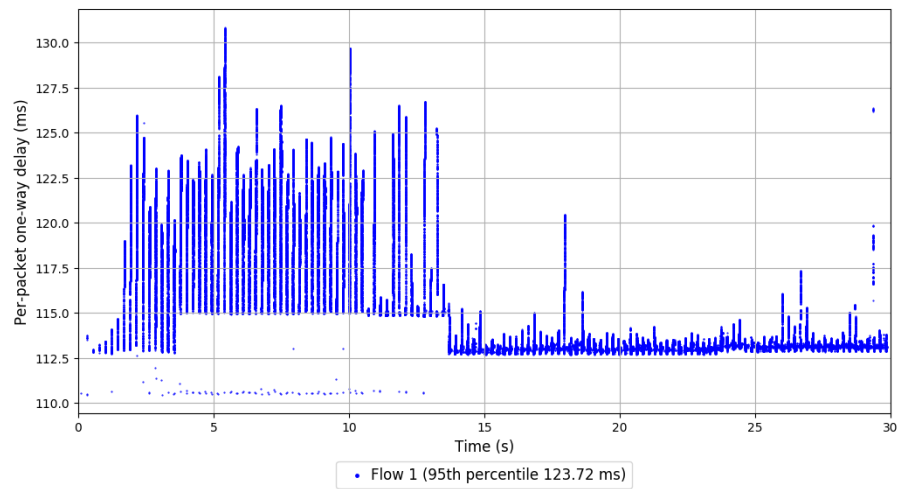
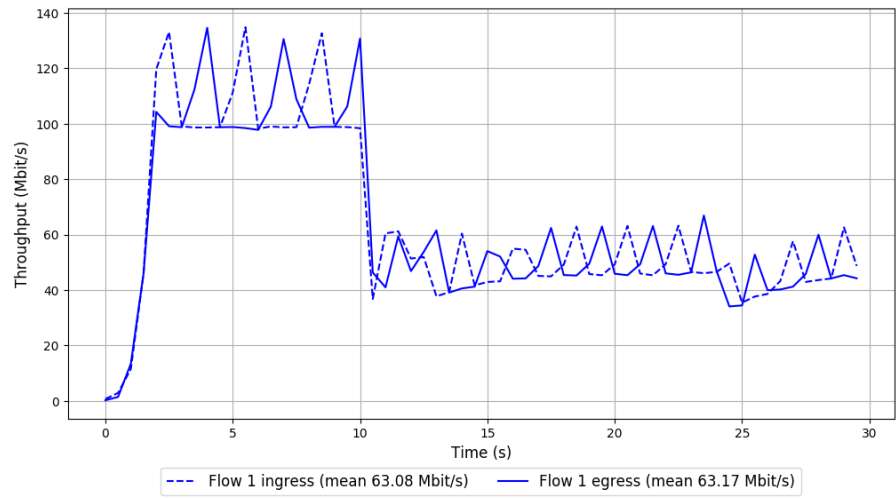
-- Flow 1:

Average throughput: 63.17 Mbit/s

95th percentile per-packet one-way delay: 123.724 ms

Loss rate: 0.60%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-15 21:27:28

End at: 2017-11-15 21:27:58

Below is generated by plot.py at 2017-11-16 00:03:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.73 Mbit/s

95th percentile per-packet one-way delay: 119.042 ms

Loss rate: 0.62%

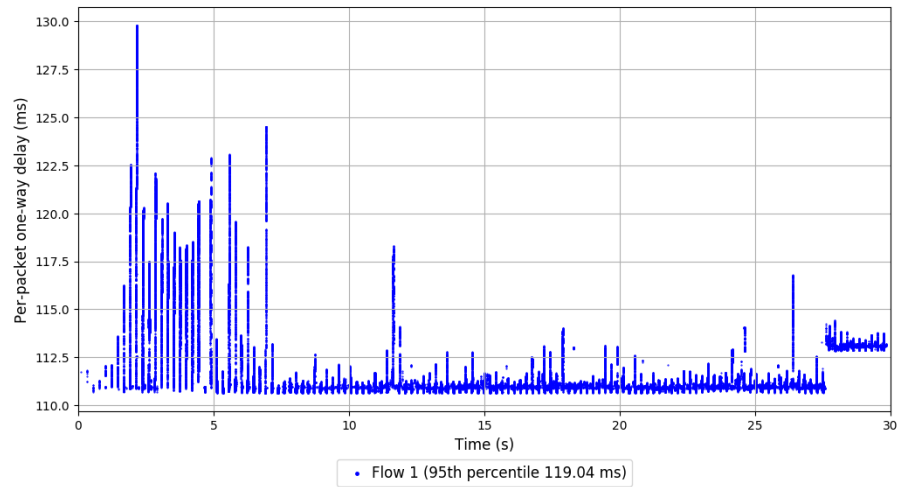
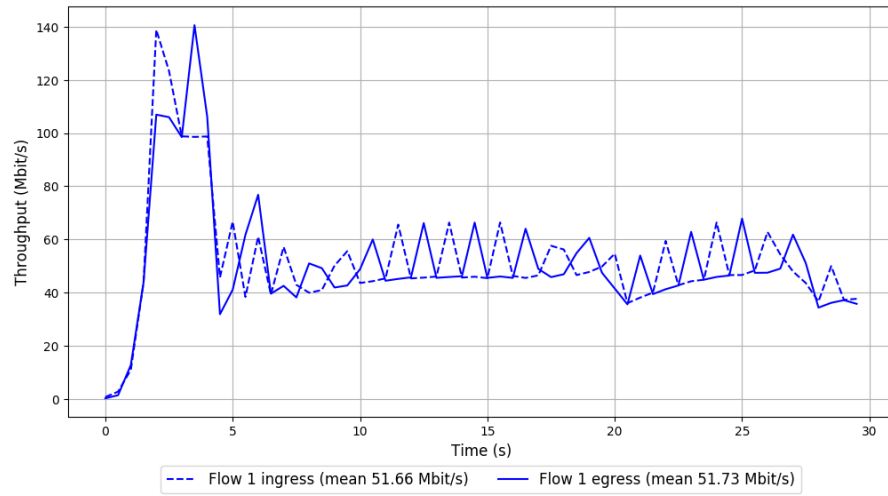
-- Flow 1:

Average throughput: 51.73 Mbit/s

95th percentile per-packet one-way delay: 119.042 ms

Loss rate: 0.62%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-15 21:38:23

End at: 2017-11-15 21:38:53

Below is generated by plot.py at 2017-11-16 00:04:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.61 Mbit/s

95th percentile per-packet one-way delay: 114.358 ms

Loss rate: 0.90%

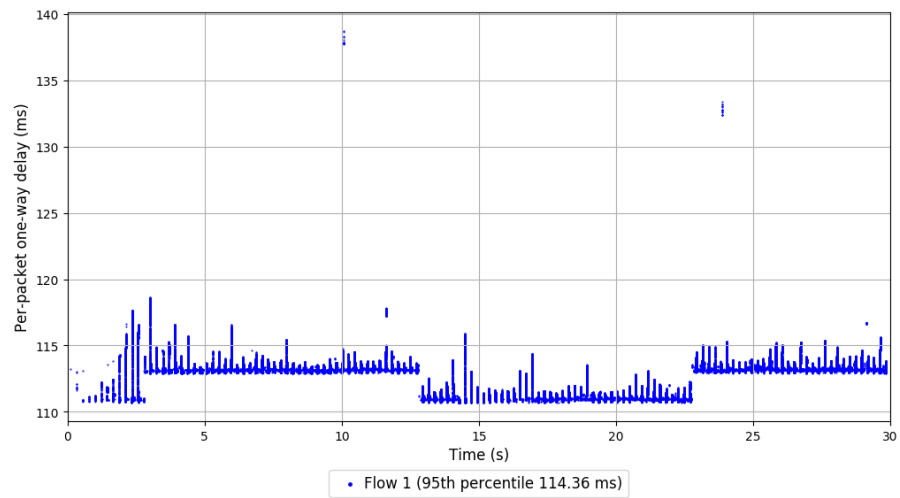
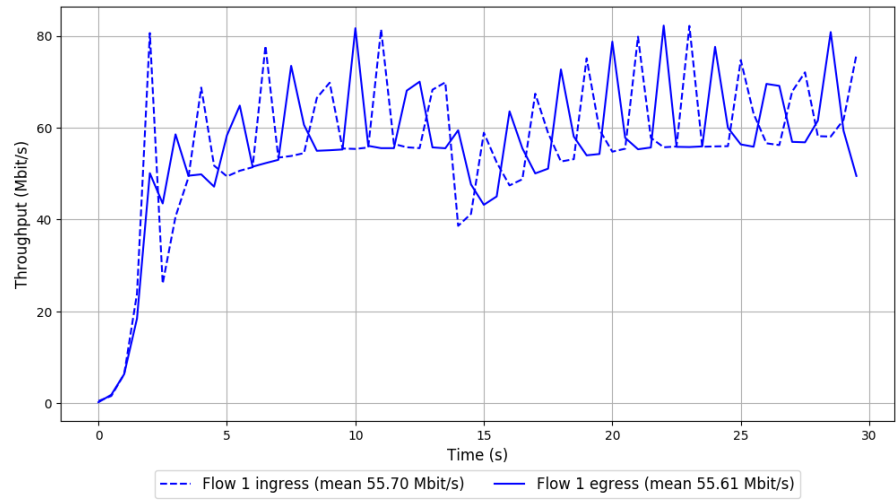
-- Flow 1:

Average throughput: 55.61 Mbit/s

95th percentile per-packet one-way delay: 114.358 ms

Loss rate: 0.90%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-15 21:49:31

End at: 2017-11-15 21:50:01

Below is generated by plot.py at 2017-11-16 00:04:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.37 Mbit/s

95th percentile per-packet one-way delay: 121.026 ms

Loss rate: 1.38%

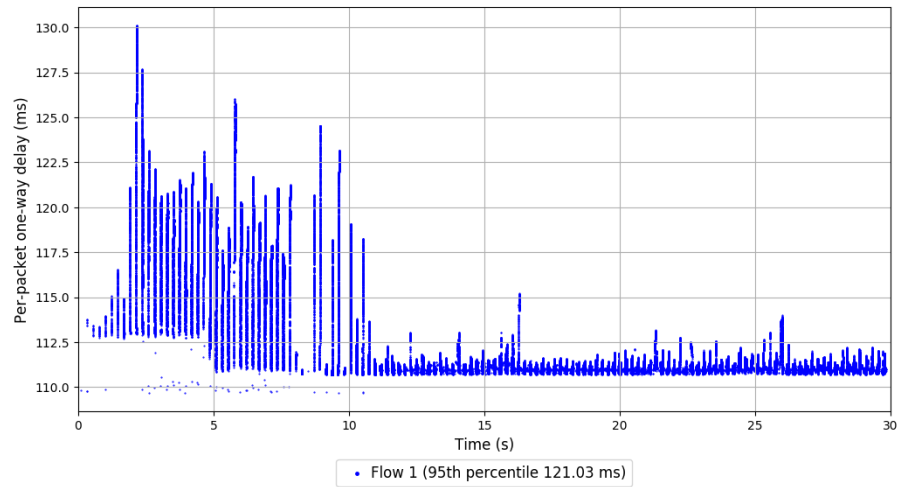
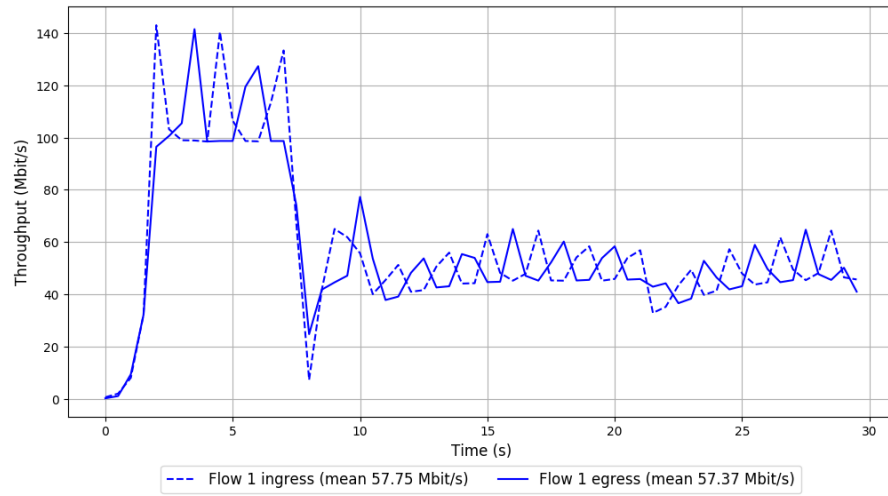
-- Flow 1:

Average throughput: 57.37 Mbit/s

95th percentile per-packet one-way delay: 121.026 ms

Loss rate: 1.38%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-15 22:00:42

End at: 2017-11-15 22:01:12

Below is generated by plot.py at 2017-11-16 00:04:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.89 Mbit/s

95th percentile per-packet one-way delay: 114.267 ms

Loss rate: 0.82%

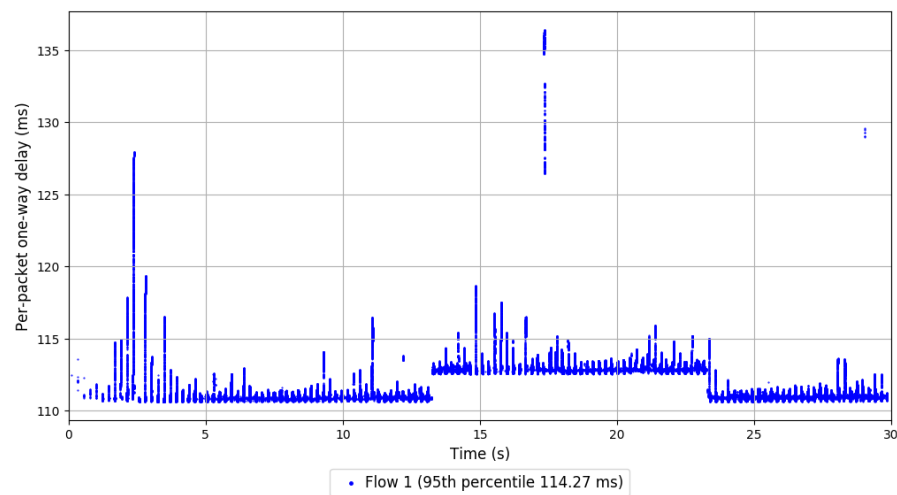
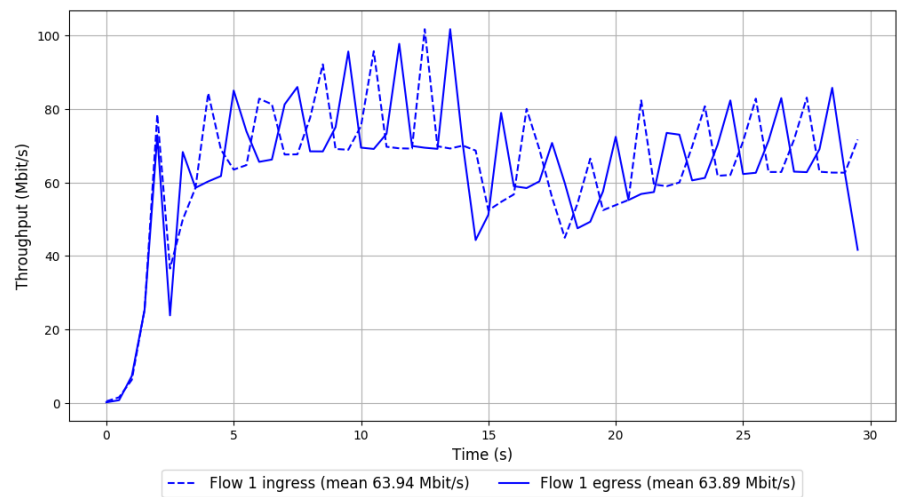
-- Flow 1:

Average throughput: 63.89 Mbit/s

95th percentile per-packet one-way delay: 114.267 ms

Loss rate: 0.82%

Run 10: Report of TCP Cubic — Data Link

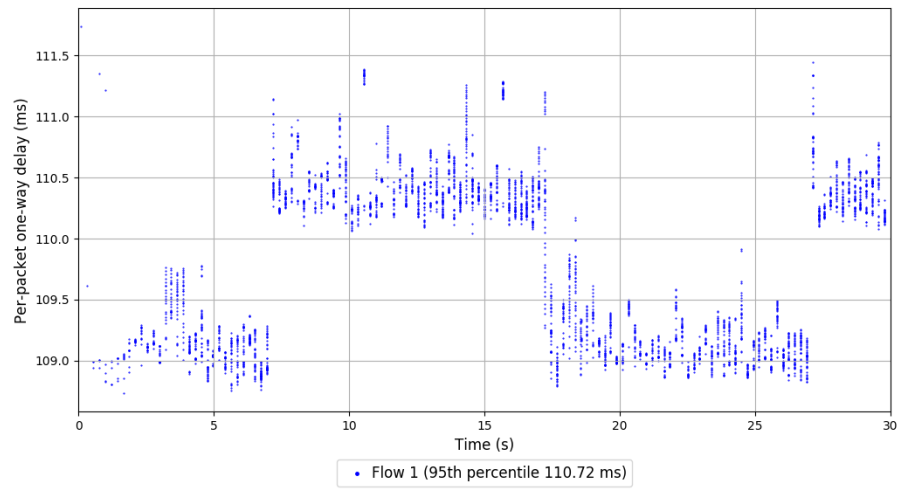
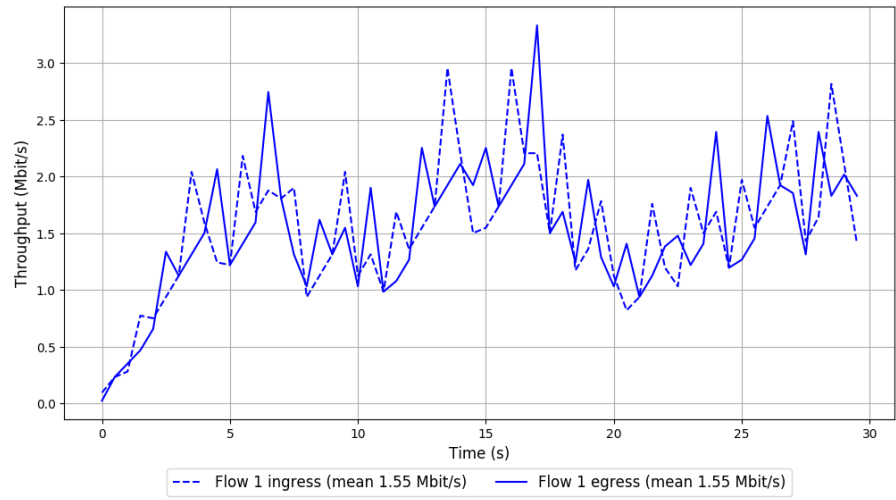


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-15 20:23:18
End at: 2017-11-15 20:23:48

# Below is generated by plot.py at 2017-11-16 00:04:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 110.716 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 110.716 ms
Loss rate: 0.78%
```

Run 1: Report of LEDBAT — Data Link

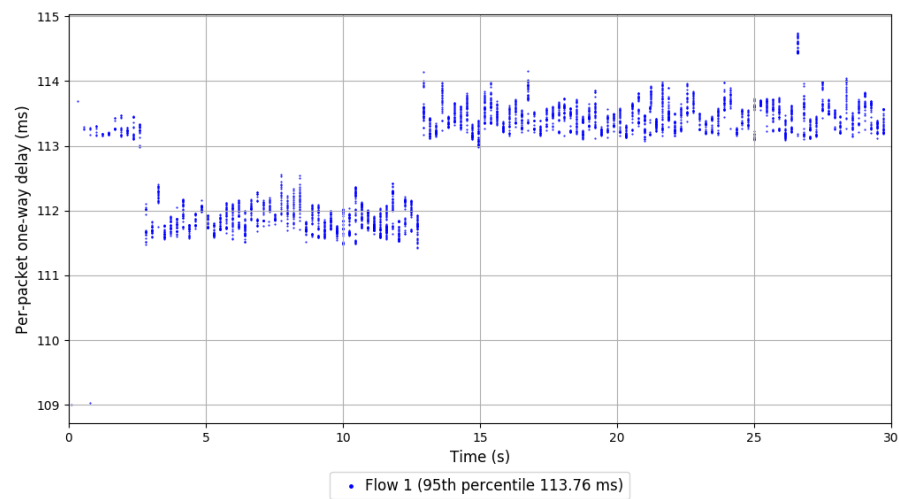
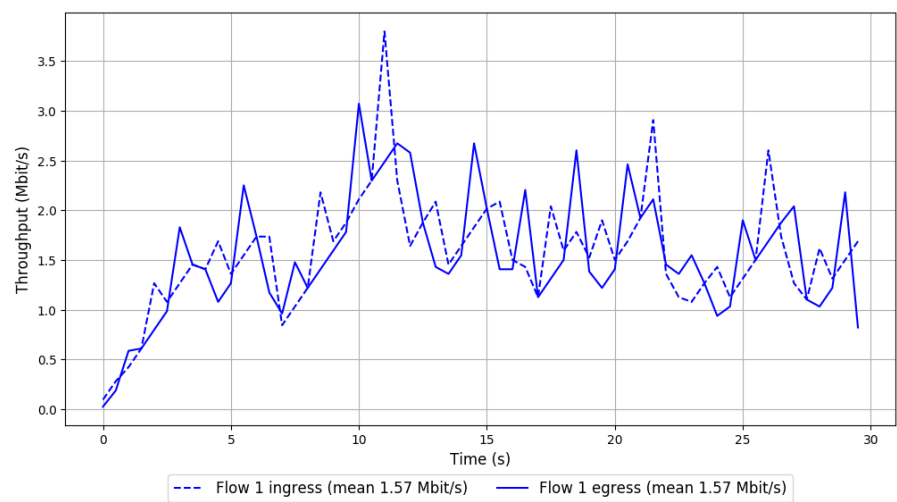


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-15 20:34:13
End at: 2017-11-15 20:34:43

# Below is generated by plot.py at 2017-11-16 00:04:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 113.760 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 113.760 ms
Loss rate: 1.07%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-15 20:45:22

End at: 2017-11-15 20:45:52

Below is generated by plot.py at 2017-11-16 00:04:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 113.805 ms

Loss rate: 0.79%

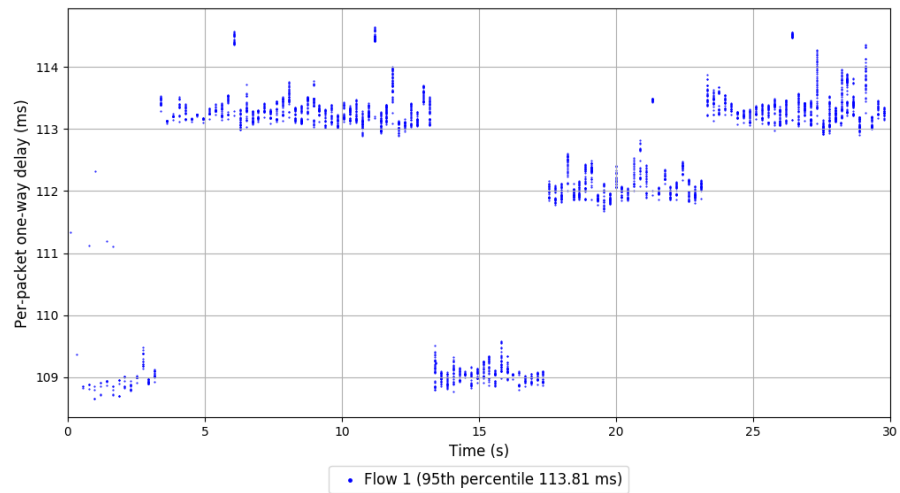
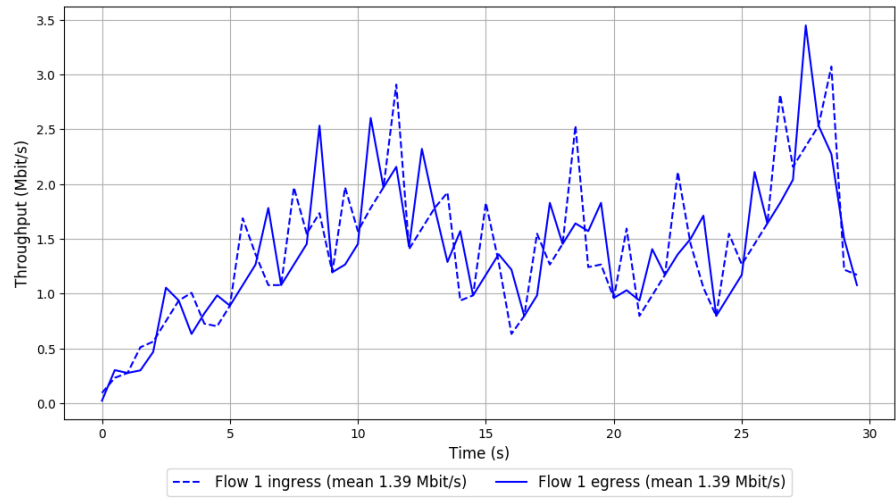
-- Flow 1:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 113.805 ms

Loss rate: 0.79%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-15 20:56:17

End at: 2017-11-15 20:56:47

Below is generated by plot.py at 2017-11-16 00:04:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 113.303 ms

Loss rate: 1.16%

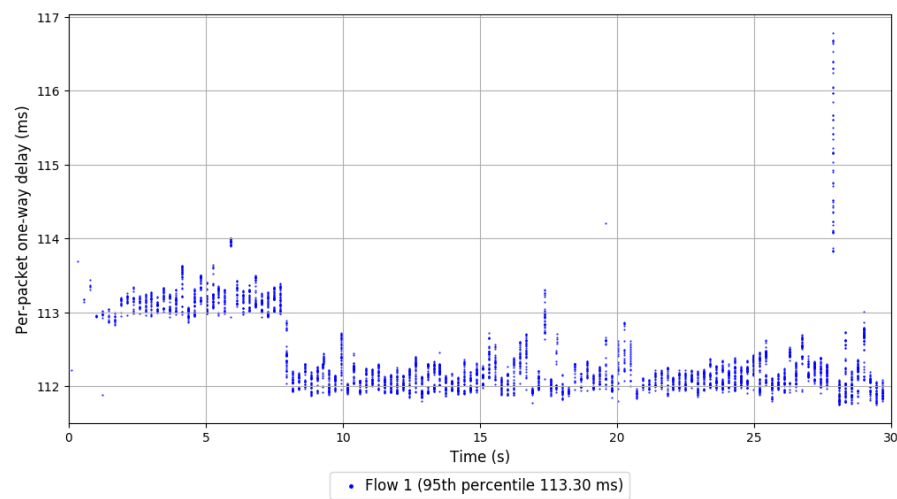
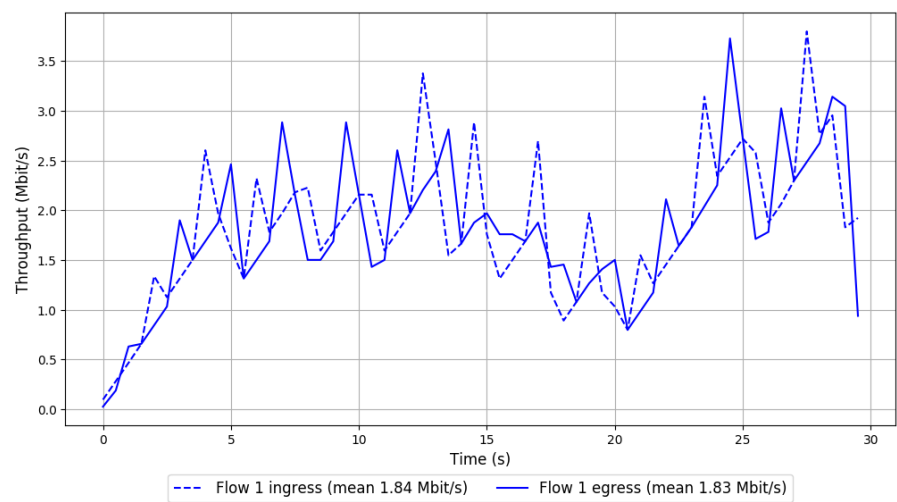
-- Flow 1:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 113.303 ms

Loss rate: 1.16%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-15 21:07:29

End at: 2017-11-15 21:07:59

Below is generated by plot.py at 2017-11-16 00:04:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 115.255 ms

Loss rate: 0.96%

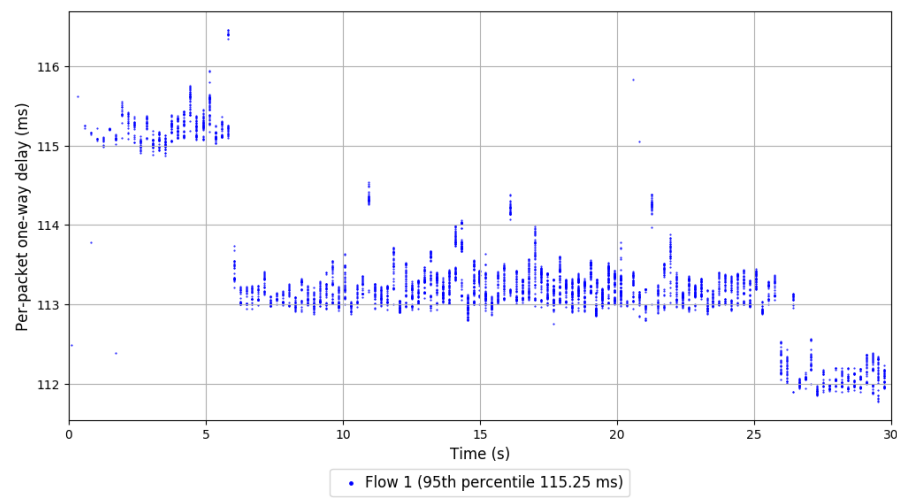
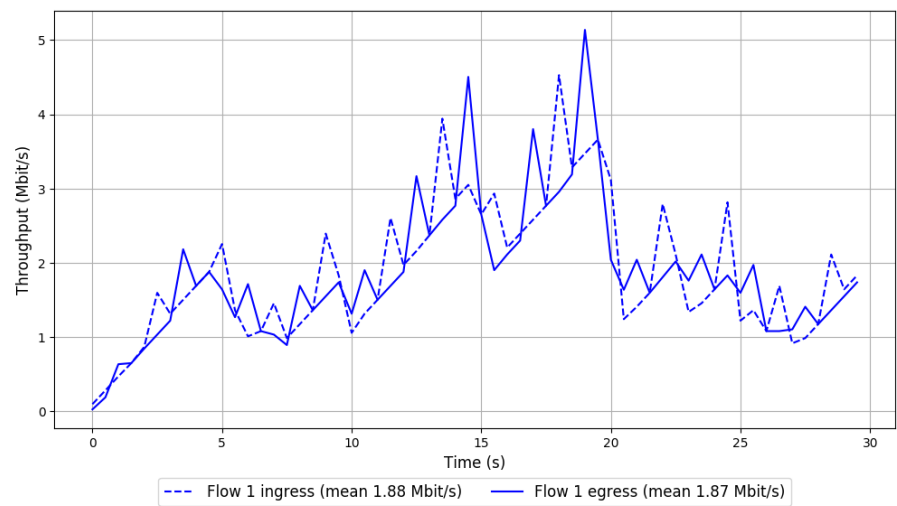
-- Flow 1:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 115.255 ms

Loss rate: 0.96%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-15 21:18:34

End at: 2017-11-15 21:19:04

Below is generated by plot.py at 2017-11-16 00:04:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 113.877 ms

Loss rate: 1.40%

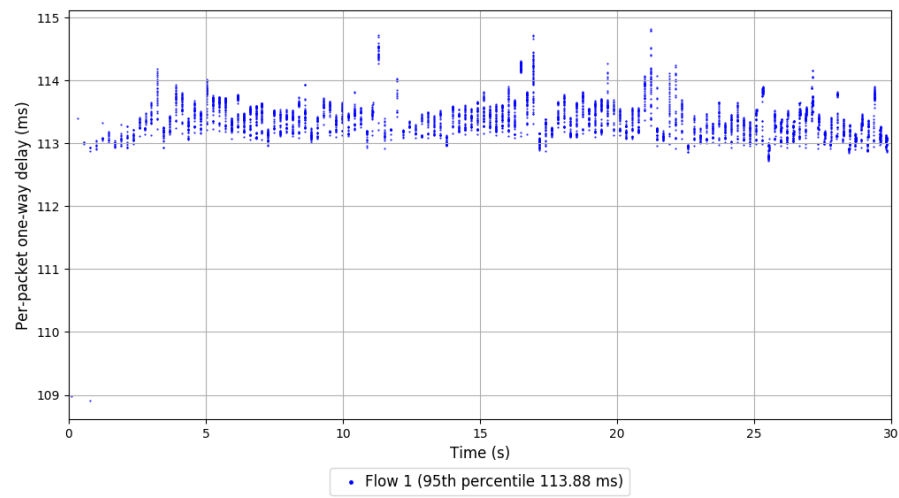
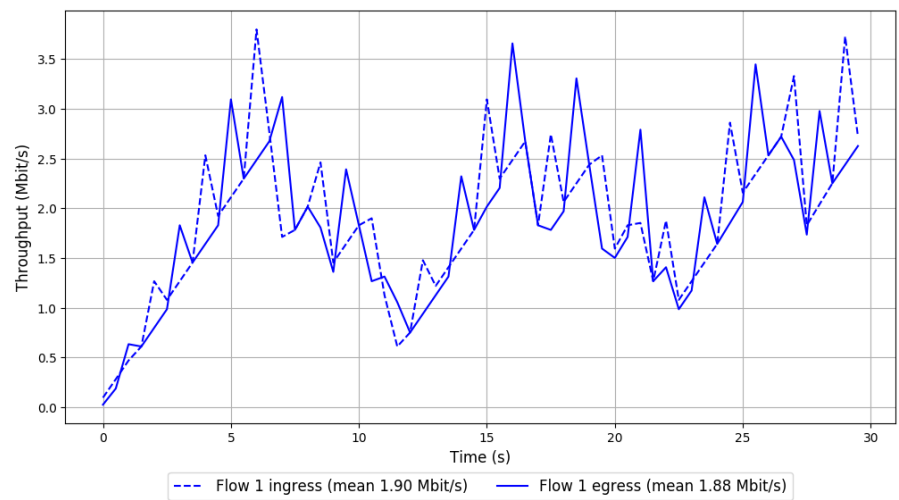
-- Flow 1:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 113.877 ms

Loss rate: 1.40%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-15 21:29:36

End at: 2017-11-15 21:30:06

Below is generated by plot.py at 2017-11-16 00:04:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 113.521 ms

Loss rate: 0.99%

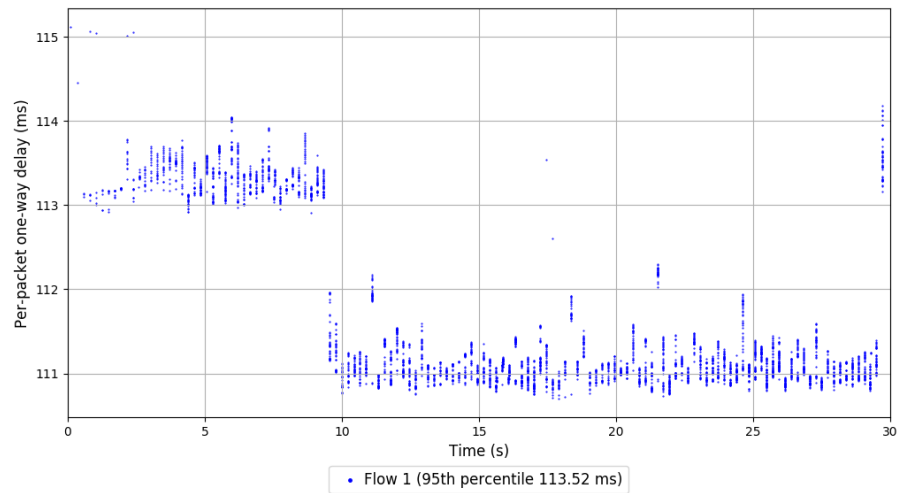
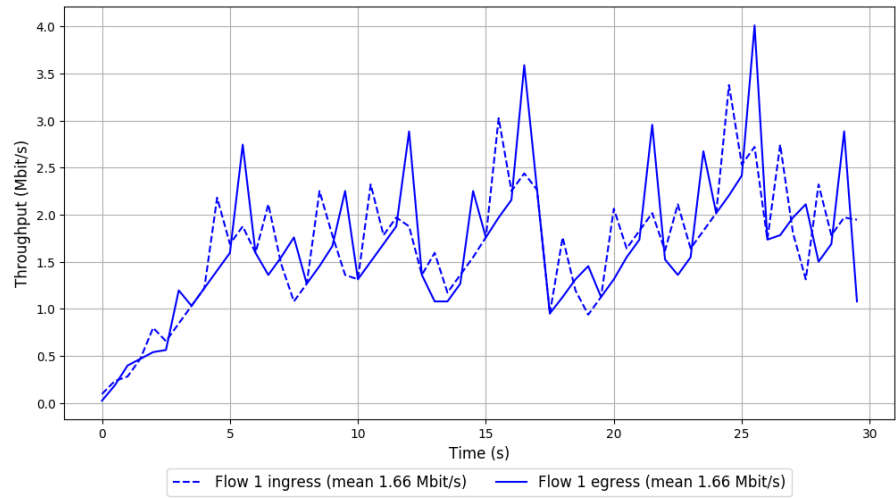
-- Flow 1:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 113.521 ms

Loss rate: 0.99%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-15 21:40:34

End at: 2017-11-15 21:41:04

Below is generated by plot.py at 2017-11-16 00:04:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 113.750 ms

Loss rate: 1.27%

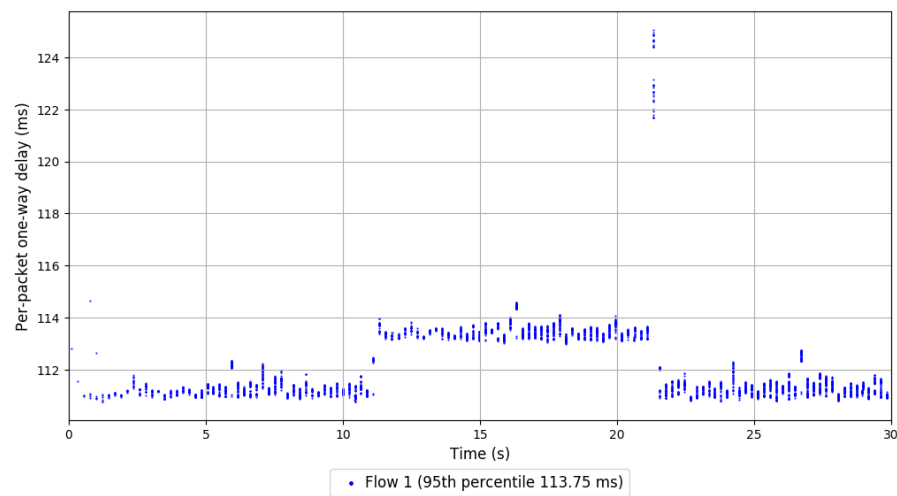
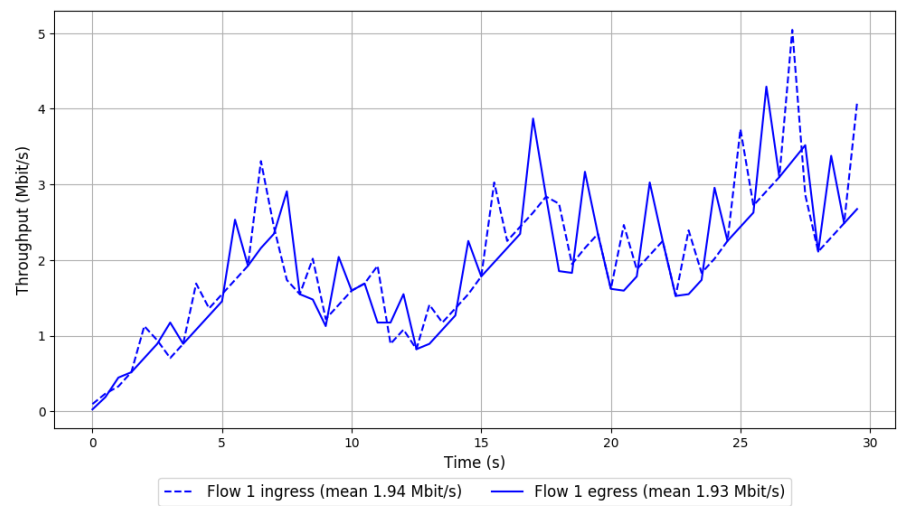
-- Flow 1:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 113.750 ms

Loss rate: 1.27%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-15 21:51:53

End at: 2017-11-15 21:52:23

Below is generated by plot.py at 2017-11-16 00:04:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 112.075 ms

Loss rate: 1.61%

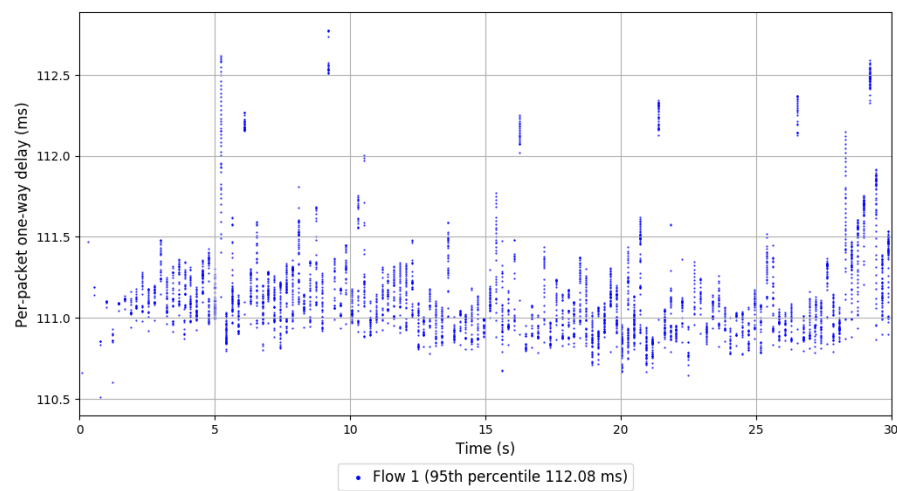
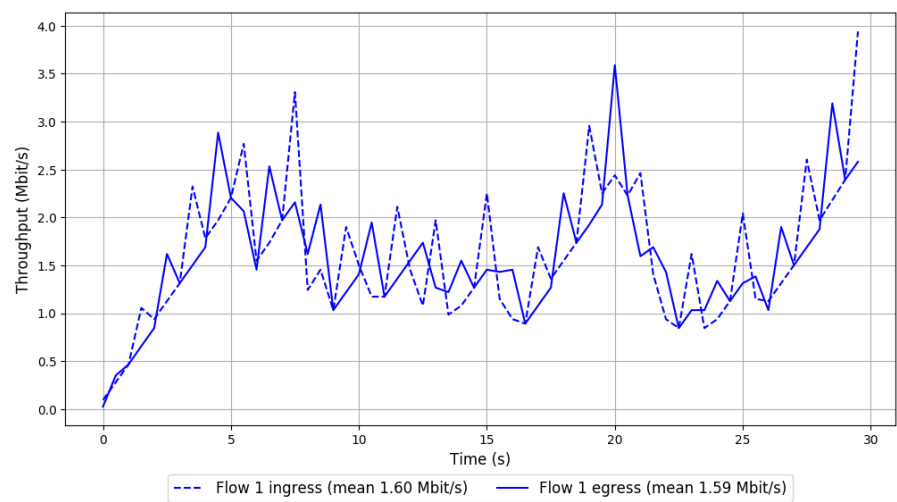
-- Flow 1:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 112.075 ms

Loss rate: 1.61%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-15 22:02:50

End at: 2017-11-15 22:03:20

Below is generated by plot.py at 2017-11-16 00:04:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 113.196 ms

Loss rate: 1.15%

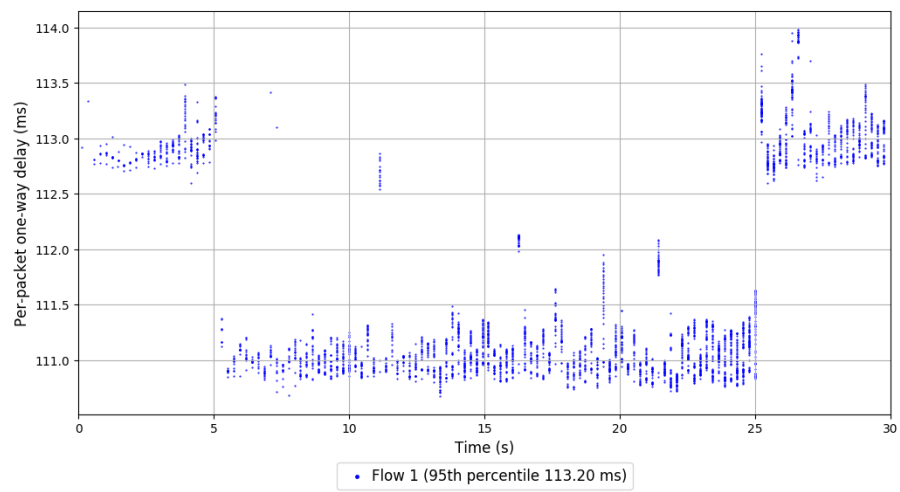
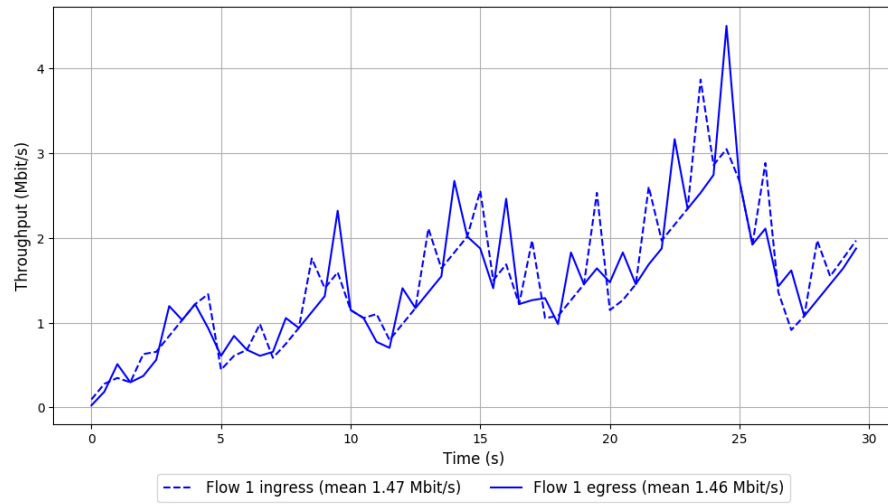
-- Flow 1:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 113.196 ms

Loss rate: 1.15%

Run 10: Report of LEDBAT — Data Link

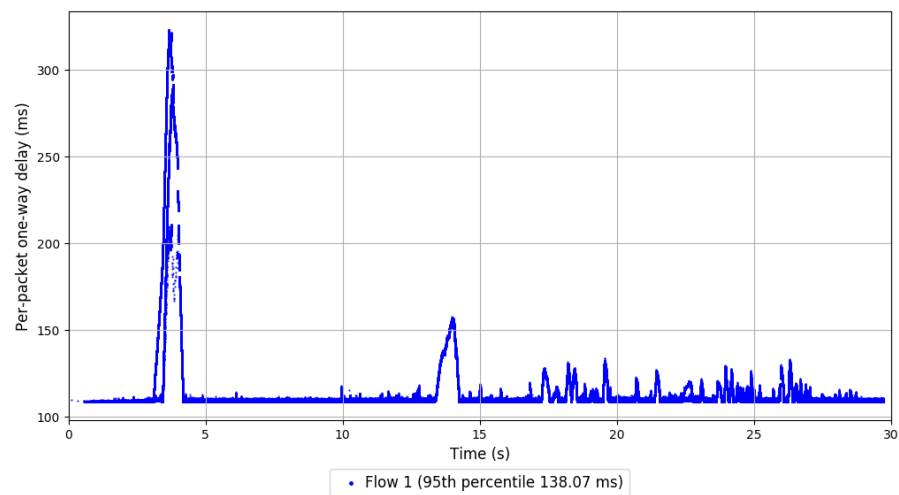
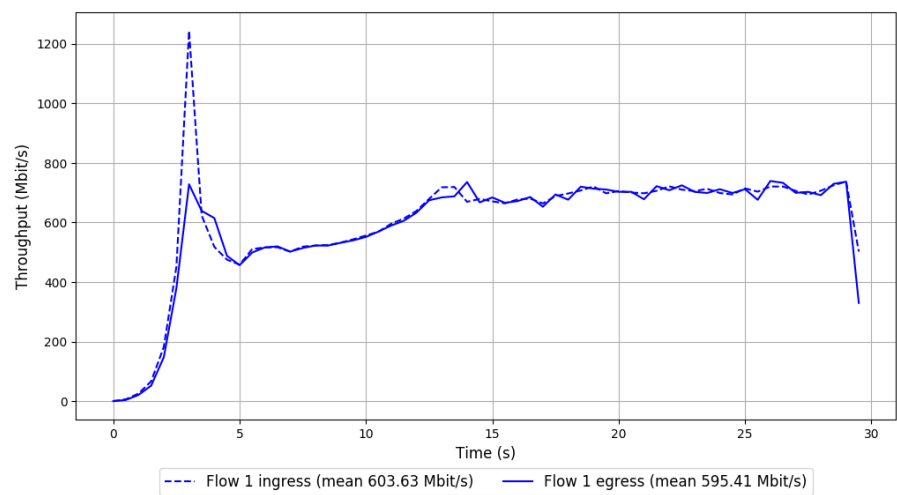


```
Run 1: Statistics of PCC

Start at: 2017-11-15 20:19:24
End at: 2017-11-15 20:19:54

# Below is generated by plot.py at 2017-11-16 00:14:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 595.41 Mbit/s
95th percentile per-packet one-way delay: 138.069 ms
Loss rate: 2.09%
-- Flow 1:
Average throughput: 595.41 Mbit/s
95th percentile per-packet one-way delay: 138.069 ms
Loss rate: 2.09%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-15 20:30:19

End at: 2017-11-15 20:30:49

Below is generated by plot.py at 2017-11-16 00:14:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 549.28 Mbit/s

95th percentile per-packet one-way delay: 167.211 ms

Loss rate: 3.35%

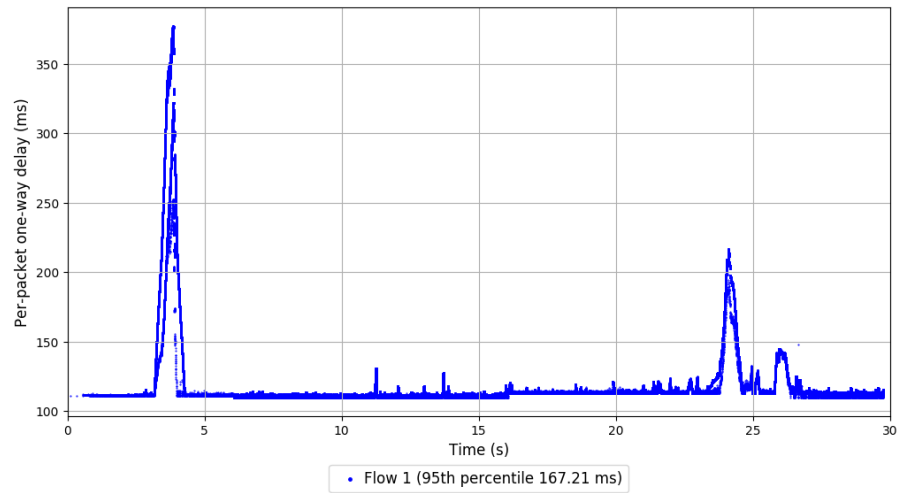
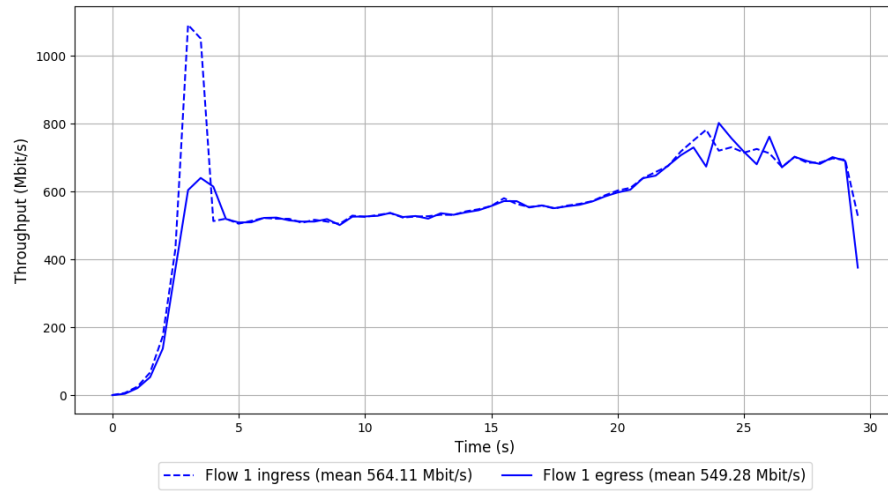
-- Flow 1:

Average throughput: 549.28 Mbit/s

95th percentile per-packet one-way delay: 167.211 ms

Loss rate: 3.35%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-15 20:41:17

End at: 2017-11-15 20:41:47

Below is generated by plot.py at 2017-11-16 00:14:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 579.63 Mbit/s

95th percentile per-packet one-way delay: 160.872 ms

Loss rate: 1.53%

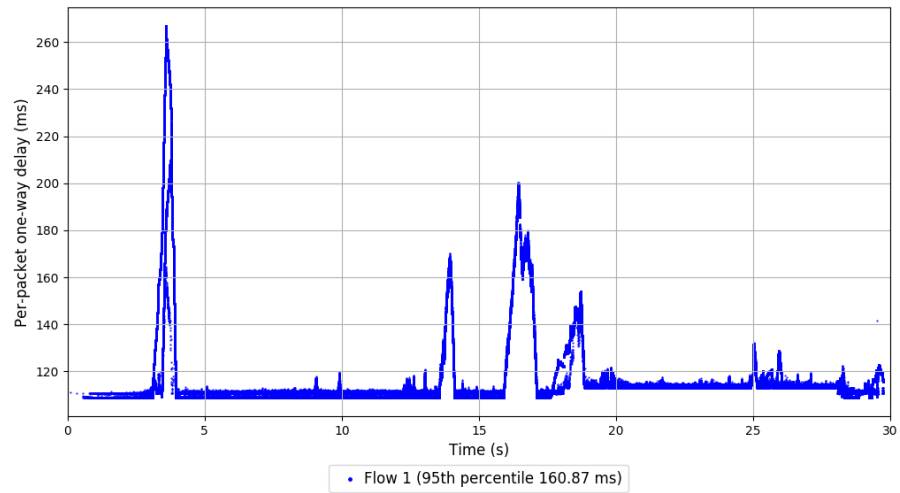
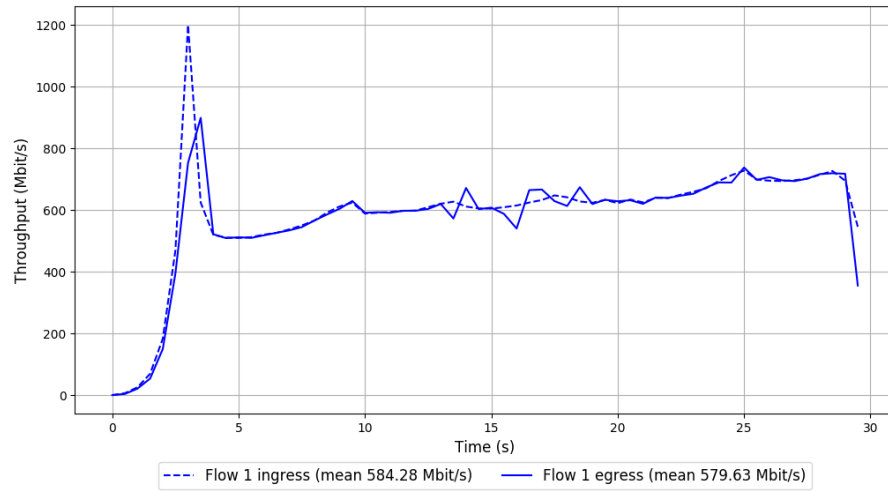
-- Flow 1:

Average throughput: 579.63 Mbit/s

95th percentile per-packet one-way delay: 160.872 ms

Loss rate: 1.53%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-15 20:52:23

End at: 2017-11-15 20:52:53

Below is generated by plot.py at 2017-11-16 00:14:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 529.15 Mbit/s

95th percentile per-packet one-way delay: 162.353 ms

Loss rate: 2.72%

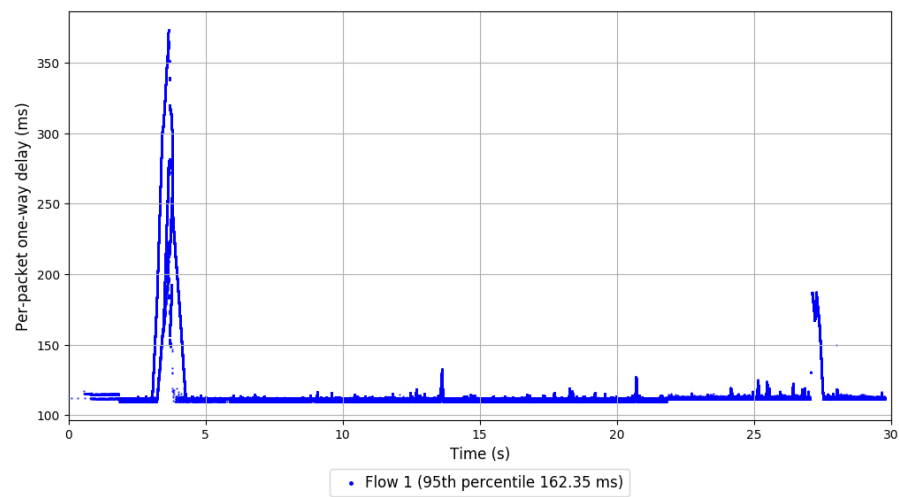
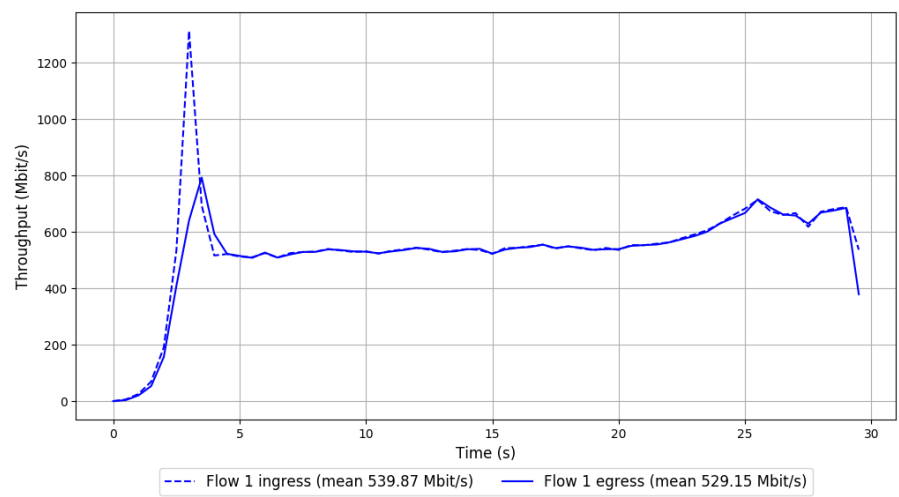
-- Flow 1:

Average throughput: 529.15 Mbit/s

95th percentile per-packet one-way delay: 162.353 ms

Loss rate: 2.72%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-15 21:03:33

End at: 2017-11-15 21:04:03

Below is generated by plot.py at 2017-11-16 00:14:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 609.82 Mbit/s

95th percentile per-packet one-way delay: 225.539 ms

Loss rate: 2.07%

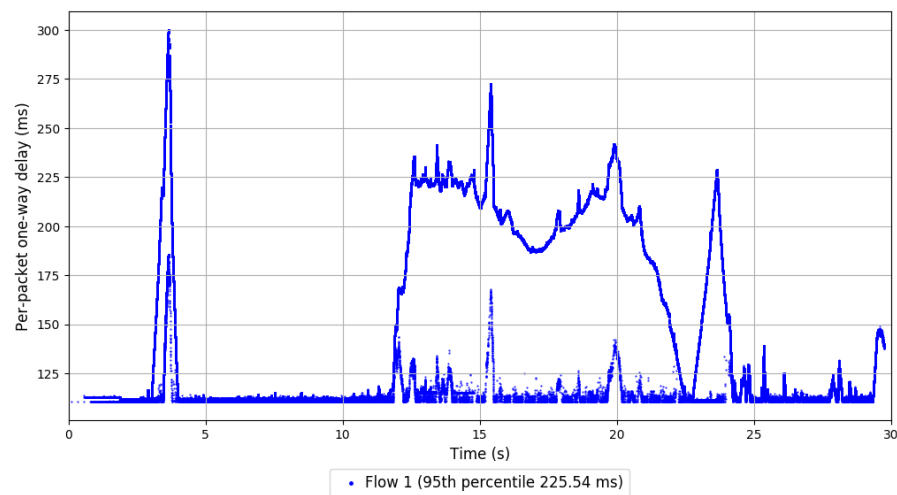
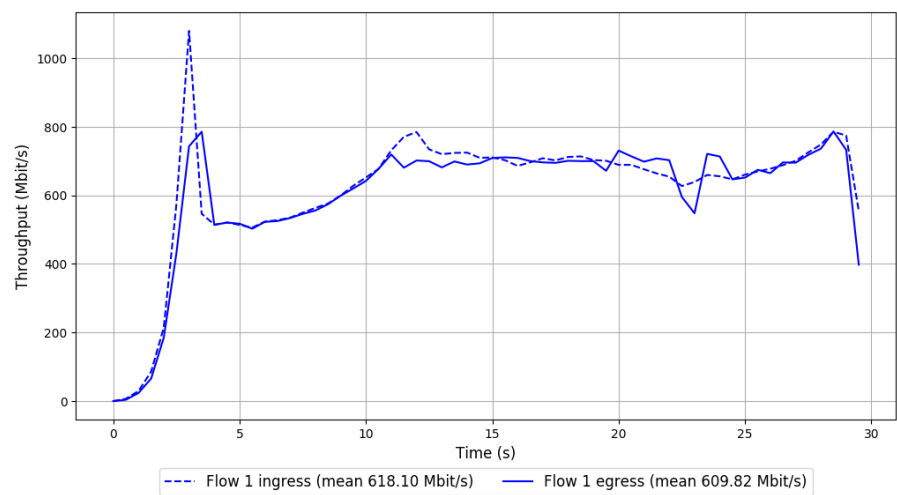
-- Flow 1:

Average throughput: 609.82 Mbit/s

95th percentile per-packet one-way delay: 225.539 ms

Loss rate: 2.07%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-15 21:14:36

End at: 2017-11-15 21:15:06

Below is generated by plot.py at 2017-11-16 00:14:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 541.83 Mbit/s

95th percentile per-packet one-way delay: 147.602 ms

Loss rate: 2.31%

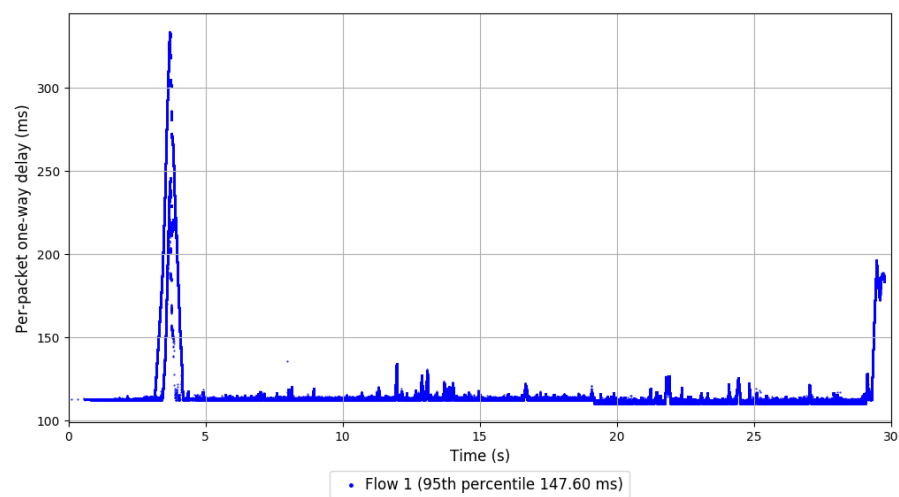
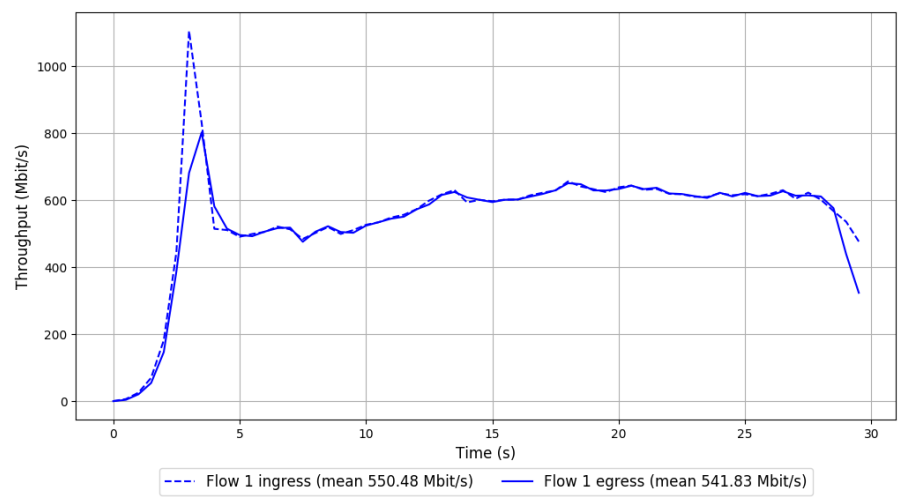
-- Flow 1:

Average throughput: 541.83 Mbit/s

95th percentile per-packet one-way delay: 147.602 ms

Loss rate: 2.31%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-15 21:25:42

End at: 2017-11-15 21:26:12

Below is generated by plot.py at 2017-11-16 00:14:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 545.98 Mbit/s

95th percentile per-packet one-way delay: 214.044 ms

Loss rate: 2.72%

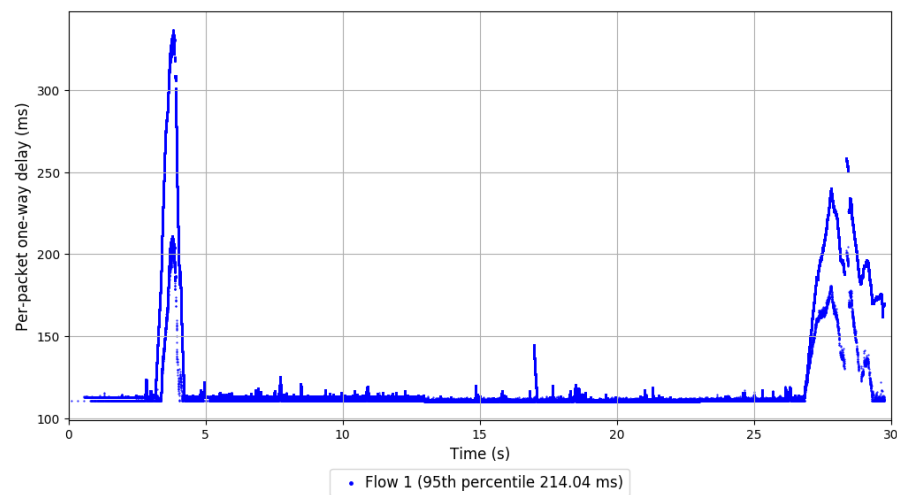
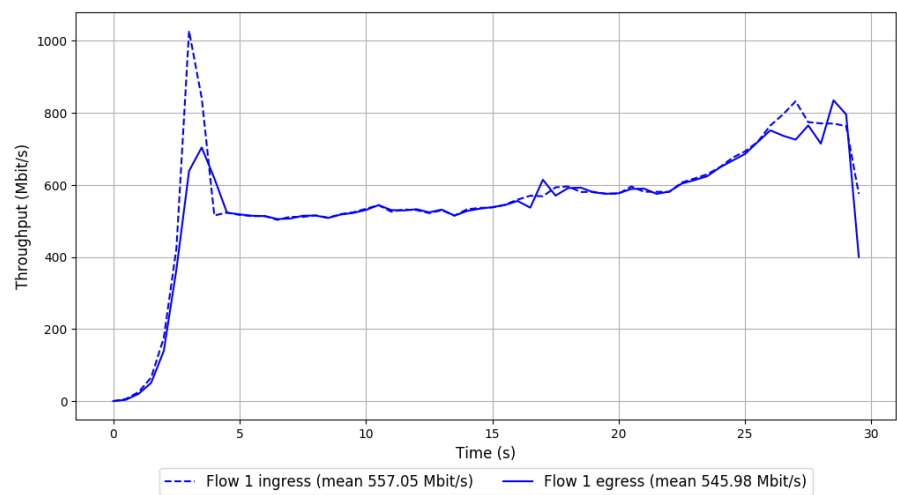
-- Flow 1:

Average throughput: 545.98 Mbit/s

95th percentile per-packet one-way delay: 214.044 ms

Loss rate: 2.72%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-15 21:36:37

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

Below is generated by plot.py at 2017-11-16 00:14:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 537.56 Mbit/s

95th percentile per-packet one-way delay: 190.914 ms

Loss rate: 2.21%

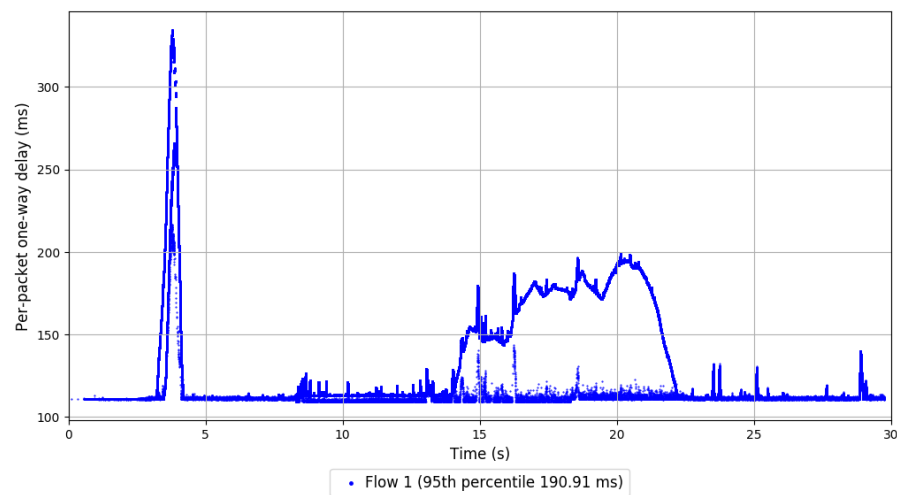
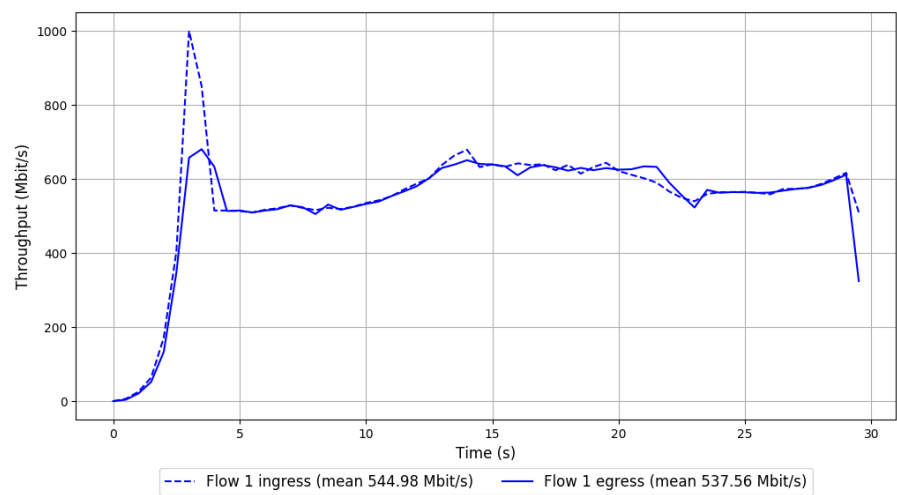
-- Flow 1:

Average throughput: 537.56 Mbit/s

95th percentile per-packet one-way delay: 190.914 ms

Loss rate: 2.21%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-15 21:47:44

End at: 2017-11-15 21:48:14

Below is generated by plot.py at 2017-11-16 00:24:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 581.10 Mbit/s

95th percentile per-packet one-way delay: 149.072 ms

Loss rate: 1.61%

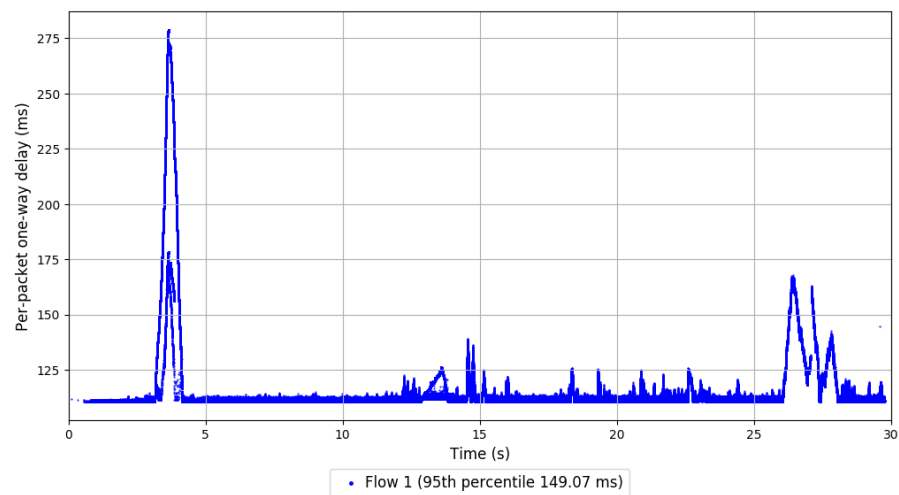
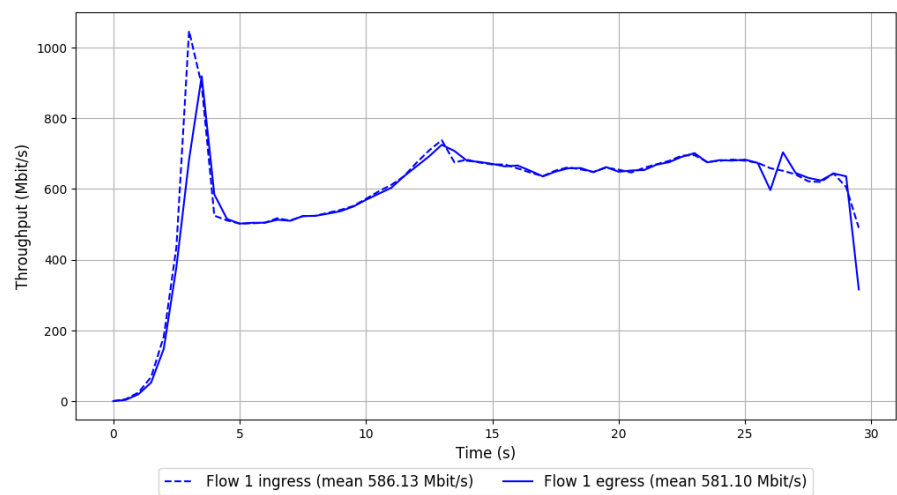
-- Flow 1:

Average throughput: 581.10 Mbit/s

95th percentile per-packet one-way delay: 149.072 ms

Loss rate: 1.61%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-15 21:58:56

End at: 2017-11-15 21:59:26

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 578.39 Mbit/s

95th percentile per-packet one-way delay: 171.166 ms

Loss rate: 1.39%

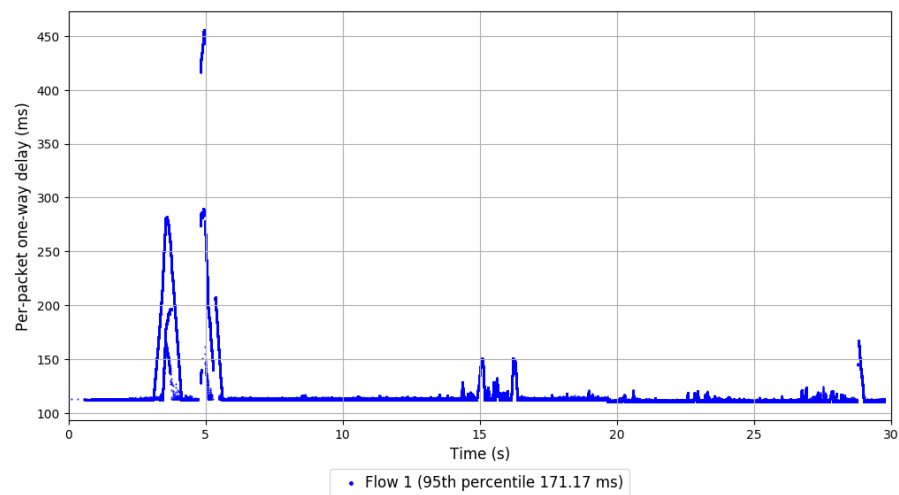
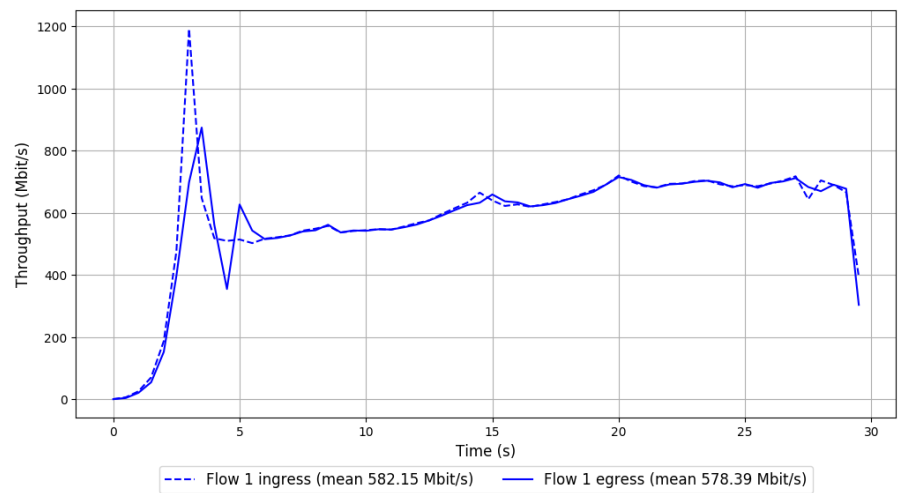
-- Flow 1:

Average throughput: 578.39 Mbit/s

95th percentile per-packet one-way delay: 171.166 ms

Loss rate: 1.39%

Run 10: Report of PCC — Data Link

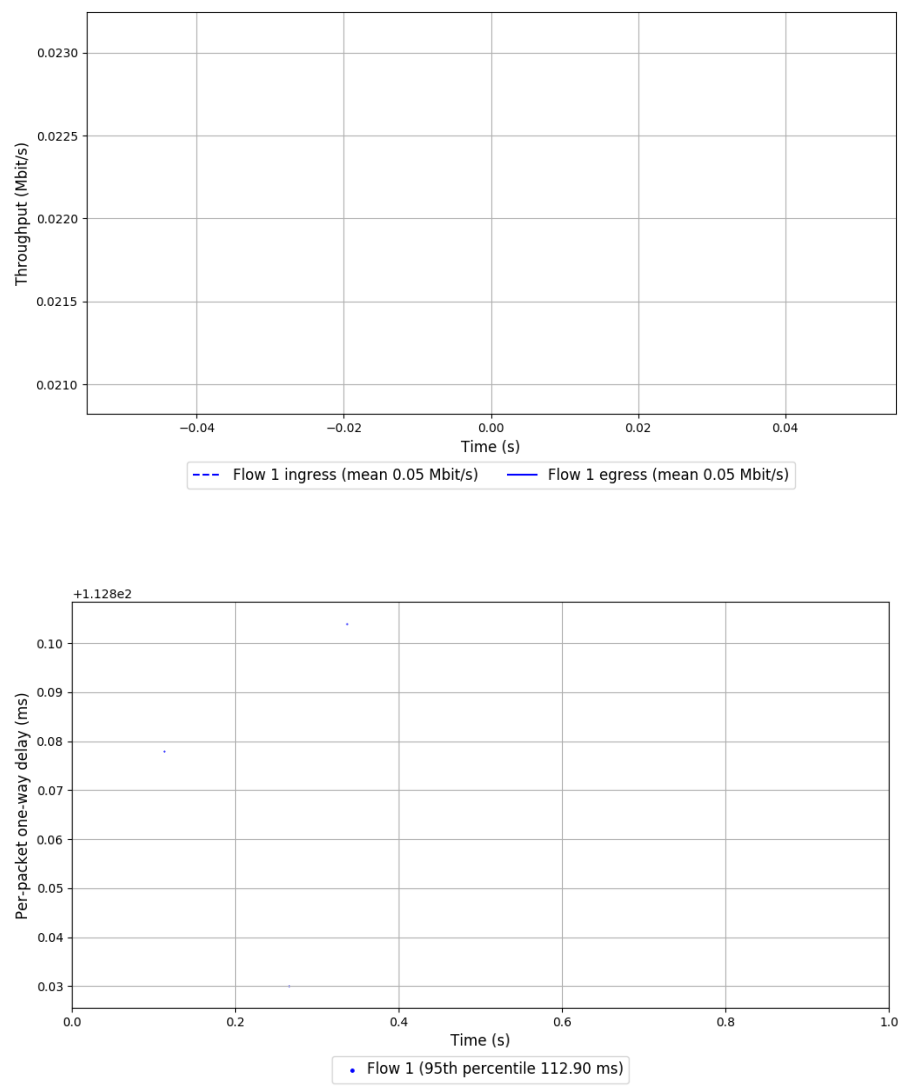


Run 1: Statistics of QUIC Cubic

Start at: 2017-11-15 20:24:53

End at: 2017-11-15 20:25:23

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-15 20:35:47

End at: 2017-11-15 20:36:17

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.72 Mbit/s

95th percentile per-packet one-way delay: 112.887 ms

Loss rate: 1.06%

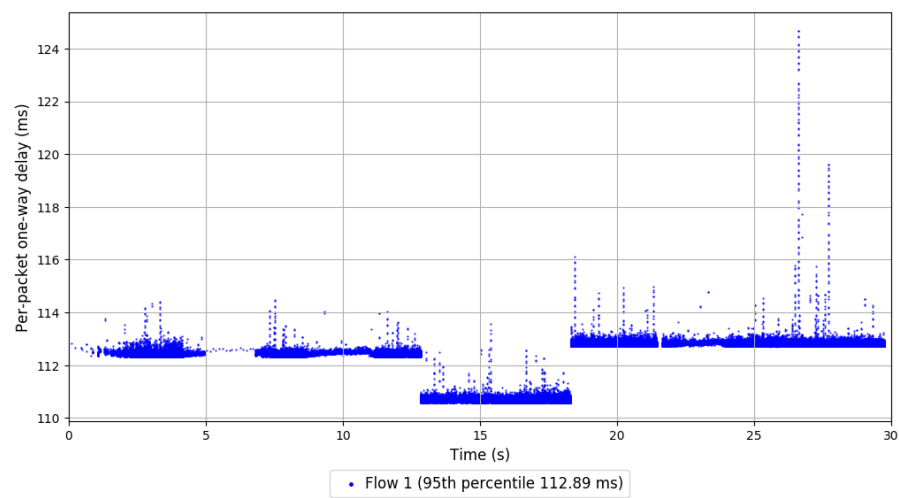
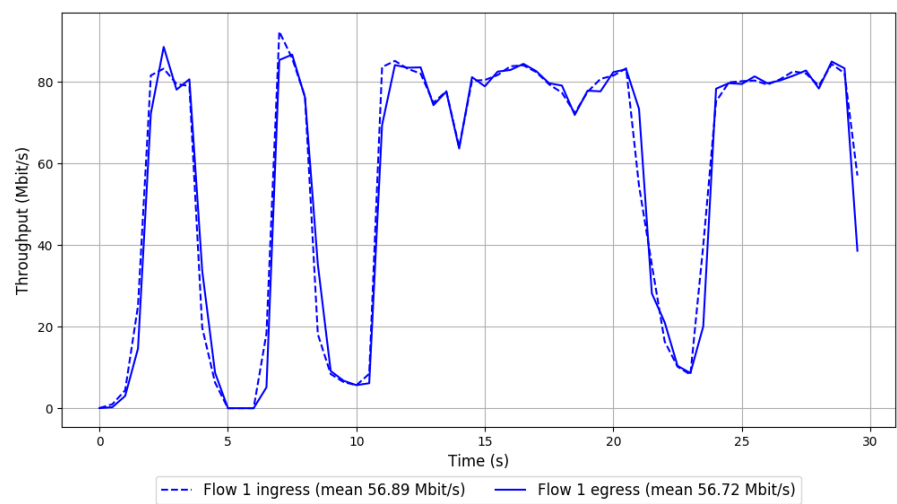
-- Flow 1:

Average throughput: 56.72 Mbit/s

95th percentile per-packet one-way delay: 112.887 ms

Loss rate: 1.06%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-15 20:46:49

End at: 2017-11-15 20:47:19

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.25 Mbit/s

95th percentile per-packet one-way delay: 112.957 ms

Loss rate: 1.02%

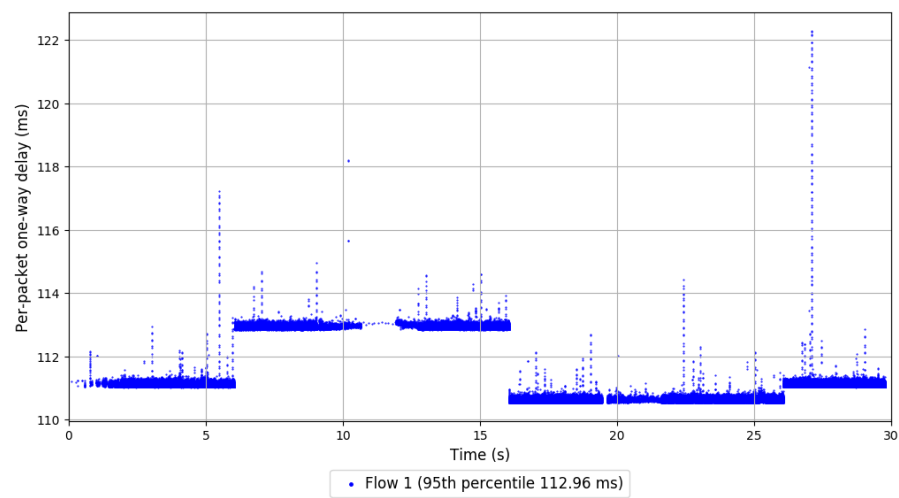
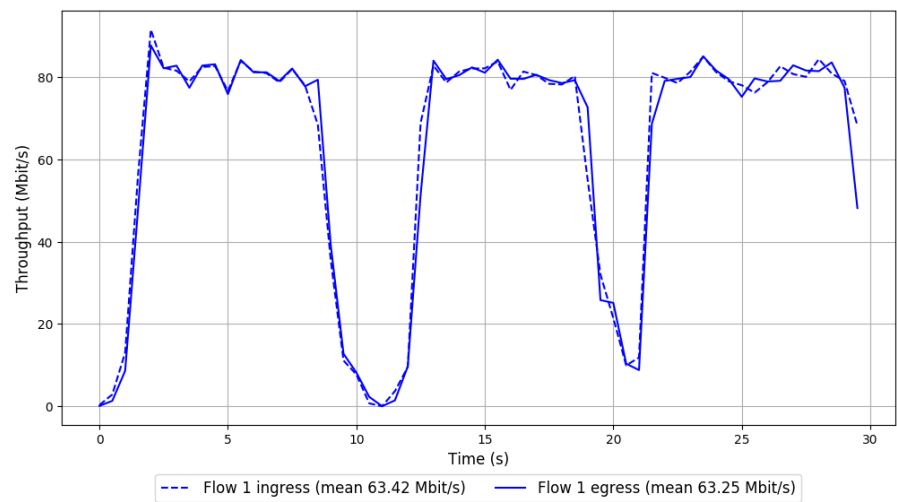
-- Flow 1:

Average throughput: 63.25 Mbit/s

95th percentile per-packet one-way delay: 112.957 ms

Loss rate: 1.02%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-15 20:57:53

End at: 2017-11-15 20:58:23

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.05 Mbit/s

95th percentile per-packet one-way delay: 111.893 ms

Loss rate: 1.01%

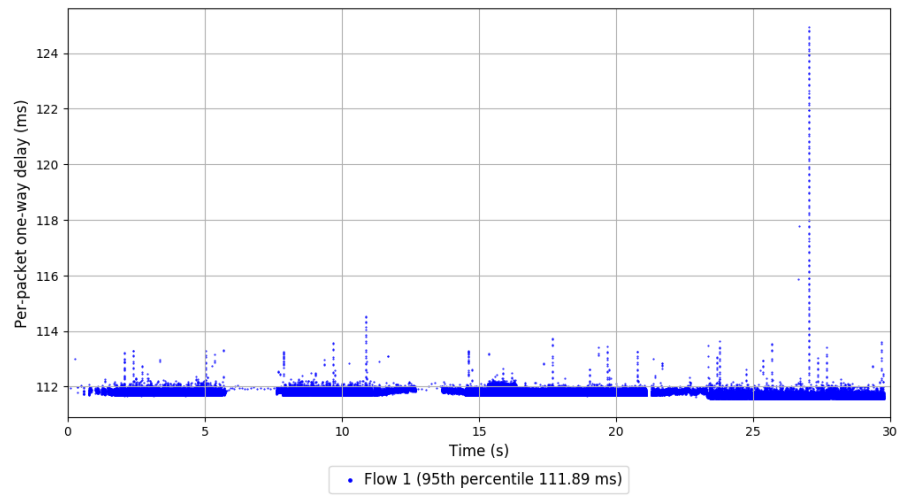
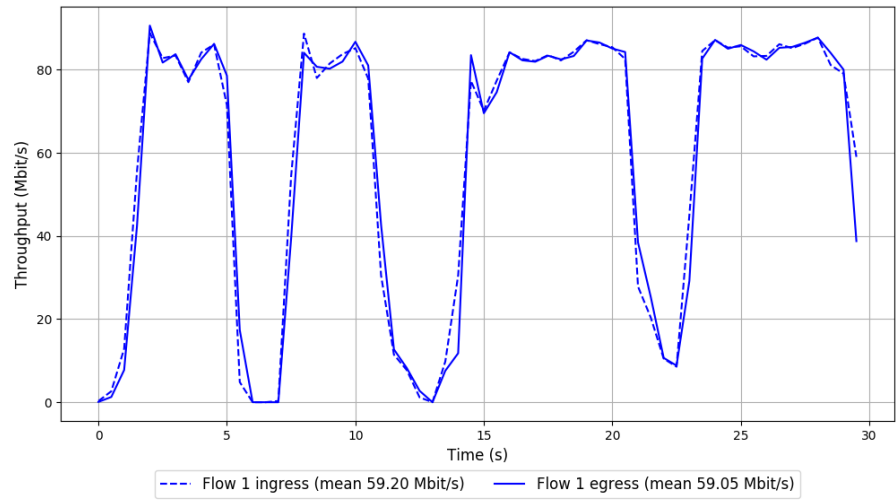
-- Flow 1:

Average throughput: 59.05 Mbit/s

95th percentile per-packet one-way delay: 111.893 ms

Loss rate: 1.01%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-15 21:09:05

End at: 2017-11-15 21:09:35

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.89 Mbit/s

95th percentile per-packet one-way delay: 110.682 ms

Loss rate: 1.15%

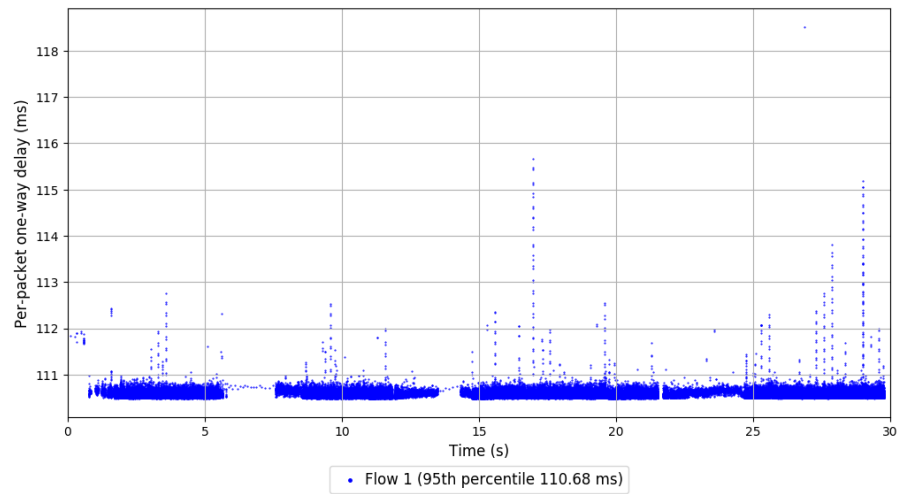
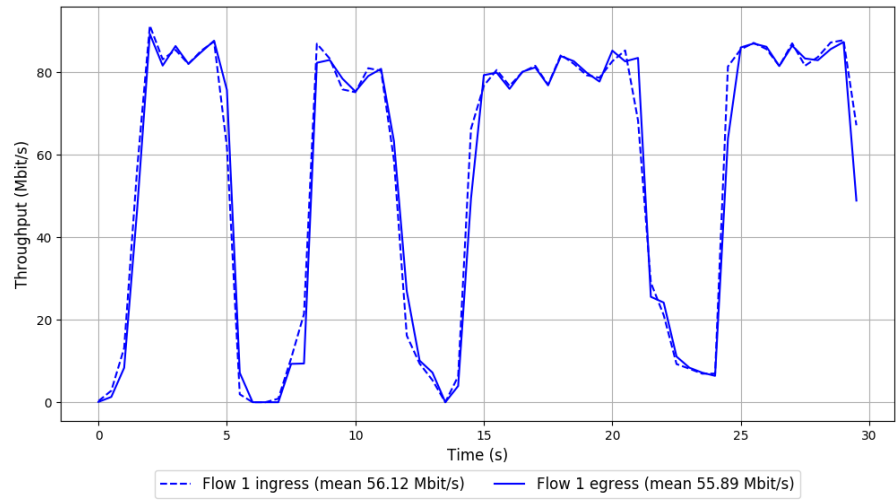
-- Flow 1:

Average throughput: 55.89 Mbit/s

95th percentile per-packet one-way delay: 110.682 ms

Loss rate: 1.15%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-15 21:20:10

End at: 2017-11-15 21:20:40

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.92 Mbit/s

95th percentile per-packet one-way delay: 111.325 ms

Loss rate: 0.98%

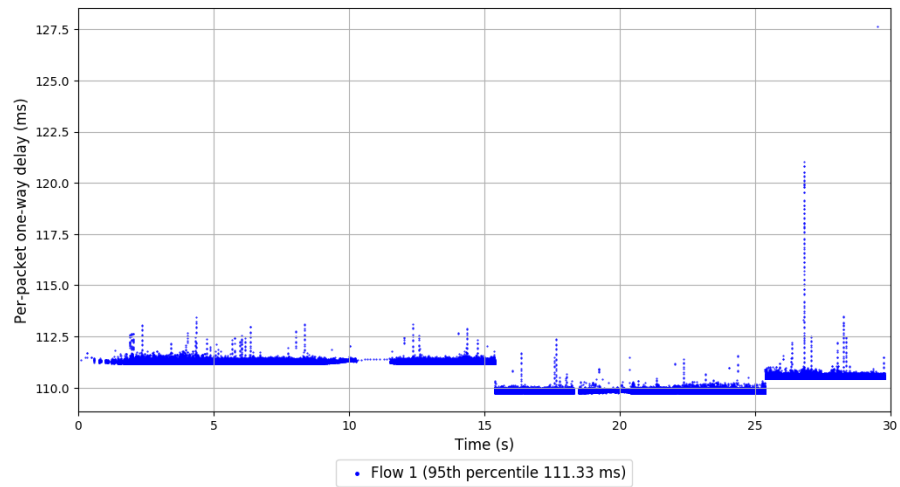
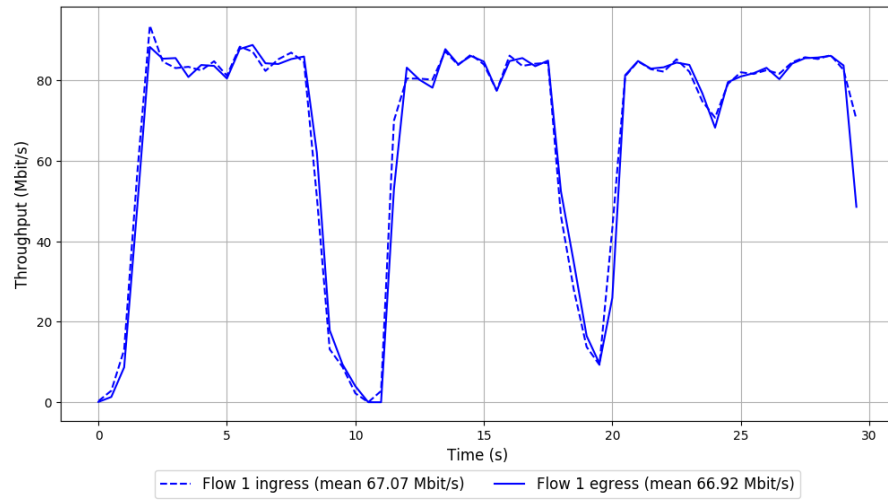
-- Flow 1:

Average throughput: 66.92 Mbit/s

95th percentile per-packet one-way delay: 111.325 ms

Loss rate: 0.98%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-15 21:31:11

End at: 2017-11-15 21:31:41

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.32 Mbit/s

95th percentile per-packet one-way delay: 112.938 ms

Loss rate: 0.92%

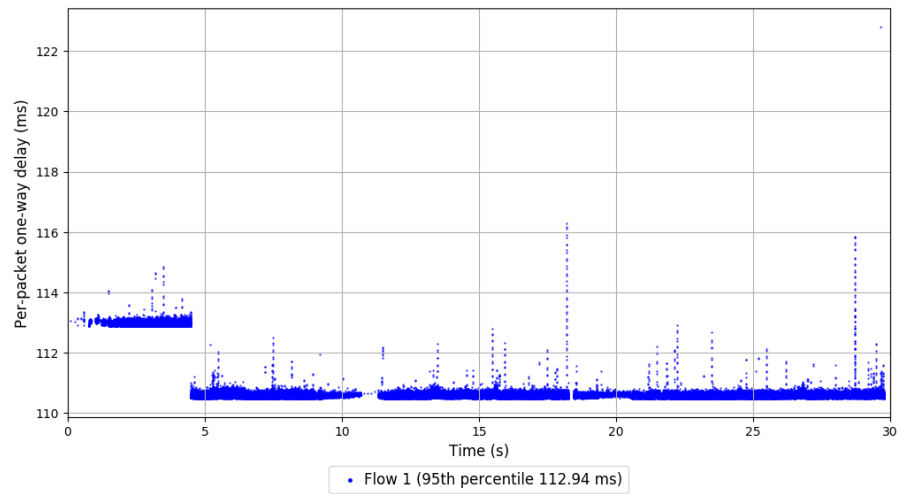
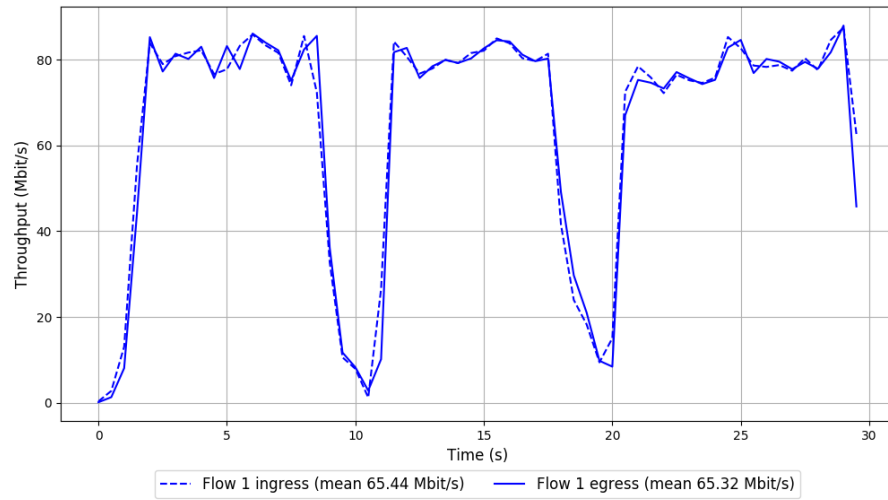
-- Flow 1:

Average throughput: 65.32 Mbit/s

95th percentile per-packet one-way delay: 112.938 ms

Loss rate: 0.92%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-15 21:42:09

End at: 2017-11-15 21:42:39

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.95 Mbit/s

95th percentile per-packet one-way delay: 113.085 ms

Loss rate: 1.07%

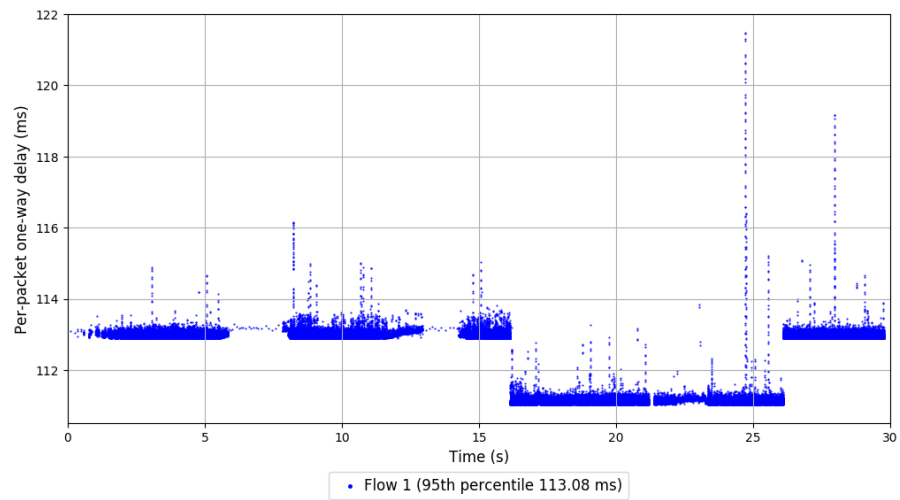
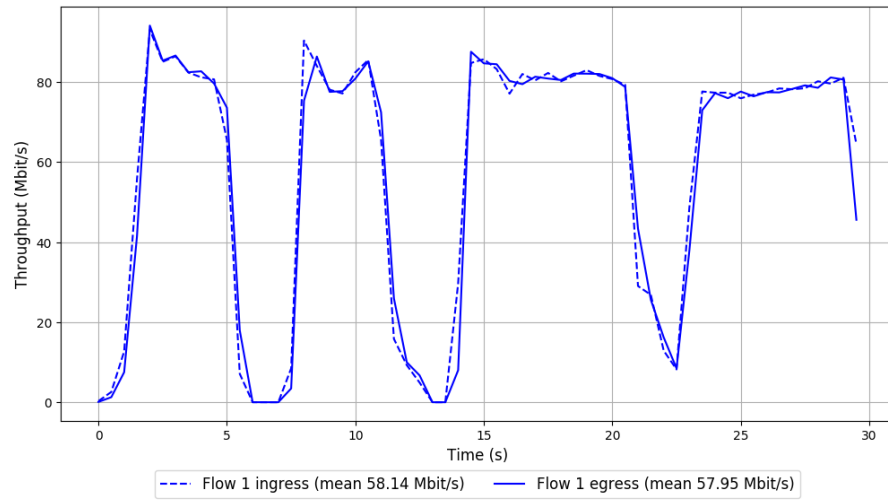
-- Flow 1:

Average throughput: 57.95 Mbit/s

95th percentile per-packet one-way delay: 113.085 ms

Loss rate: 1.07%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-15 21:53:28

End at: 2017-11-15 21:53:58

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.74 Mbit/s

95th percentile per-packet one-way delay: 112.357 ms

Loss rate: 0.84%

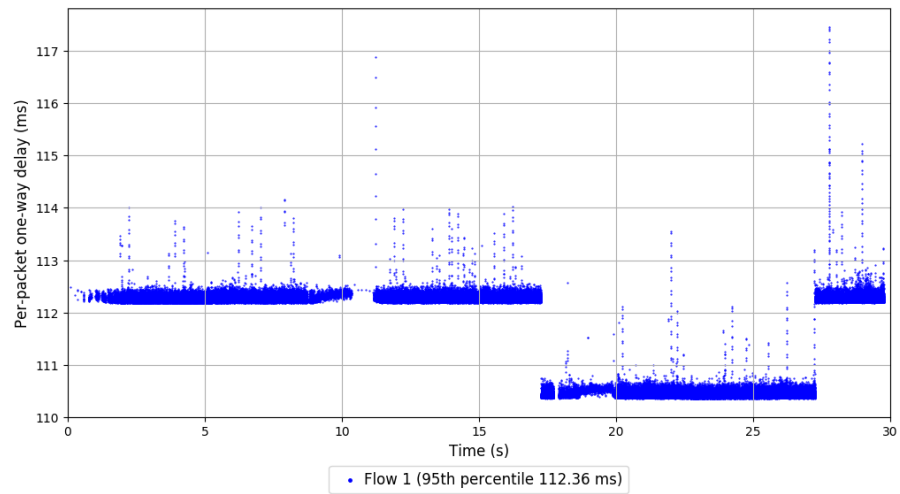
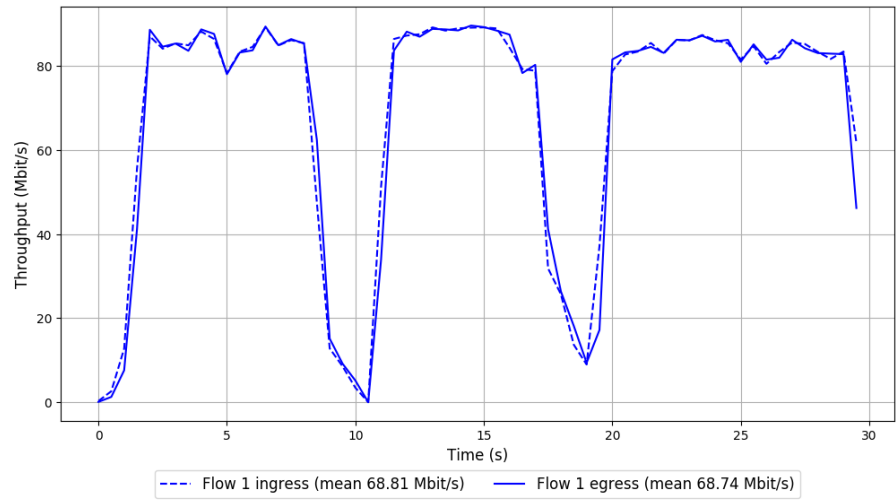
-- Flow 1:

Average throughput: 68.74 Mbit/s

95th percentile per-packet one-way delay: 112.357 ms

Loss rate: 0.84%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-11-15 22:04:24

End at: 2017-11-15 22:04:54

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.36 Mbit/s

95th percentile per-packet one-way delay: 110.546 ms

Loss rate: 0.96%

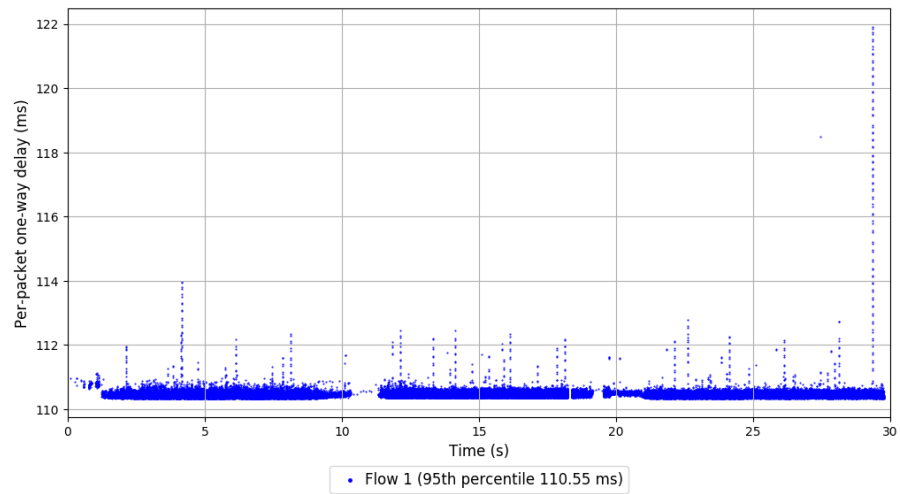
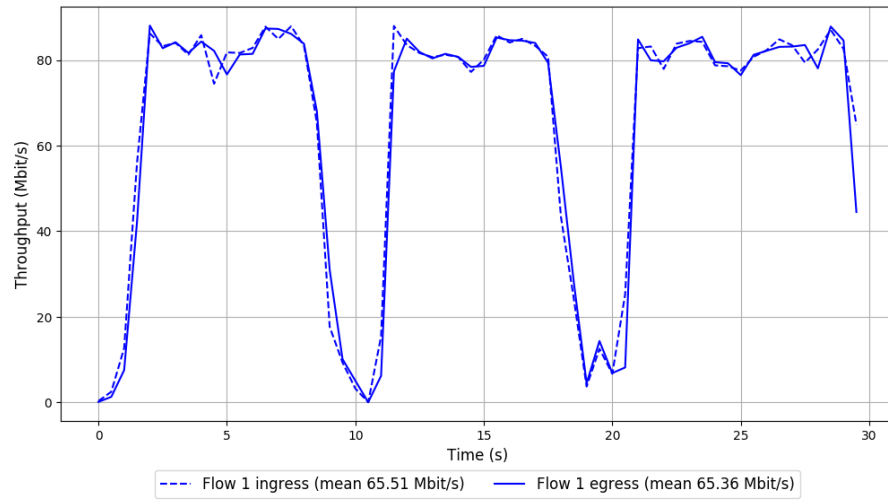
-- Flow 1:

Average throughput: 65.36 Mbit/s

95th percentile per-packet one-way delay: 110.546 ms

Loss rate: 0.96%

Run 10: Report of QUIC Cubic — Data Link

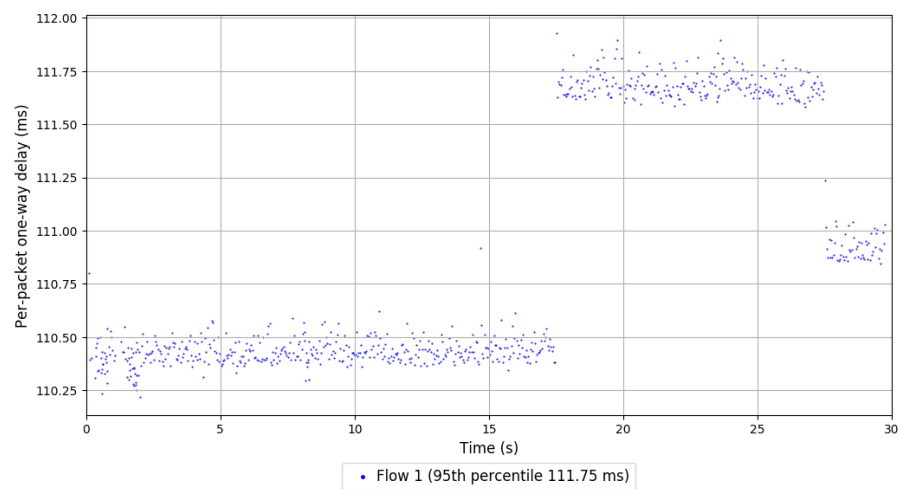
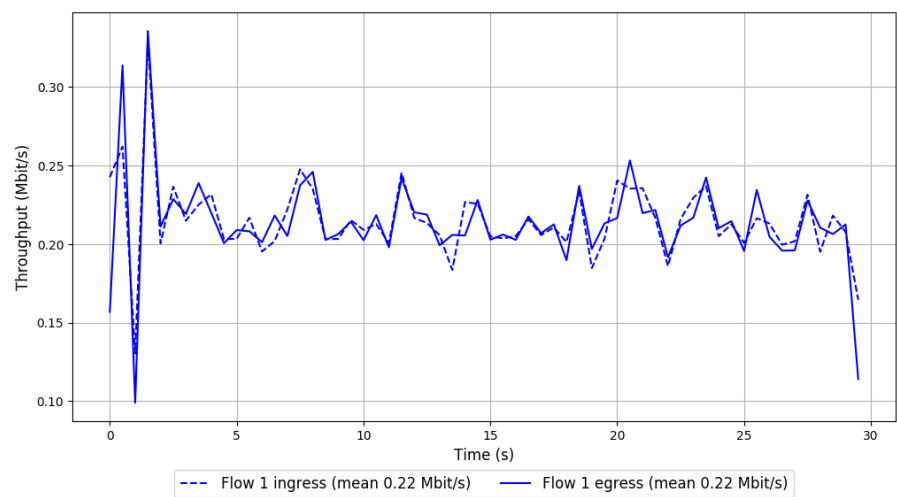


```
Run 1: Statistics of SCReAM

Start at: 2017-11-15 20:22:38
End at: 2017-11-15 20:23:08

# Below is generated by plot.py at 2017-11-16 00:24:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.749 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.749 ms
Loss rate: 0.77%
```

Run 1: Report of SReAM — Data Link

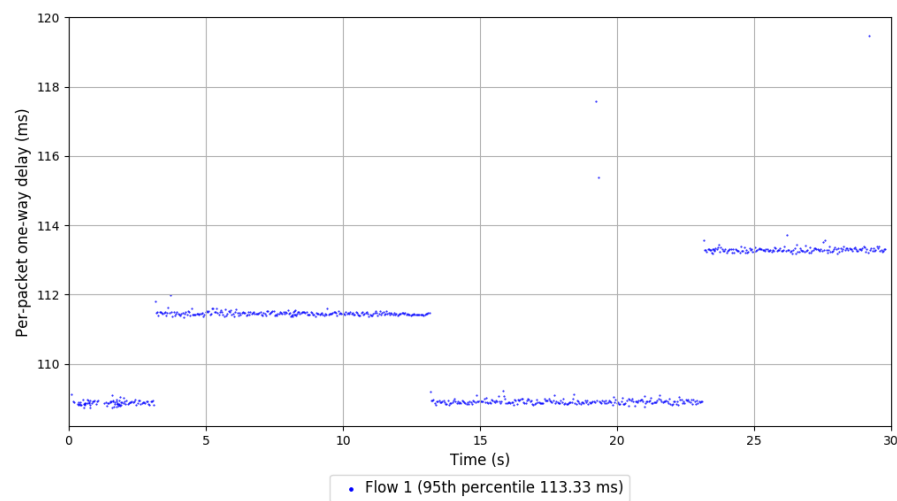
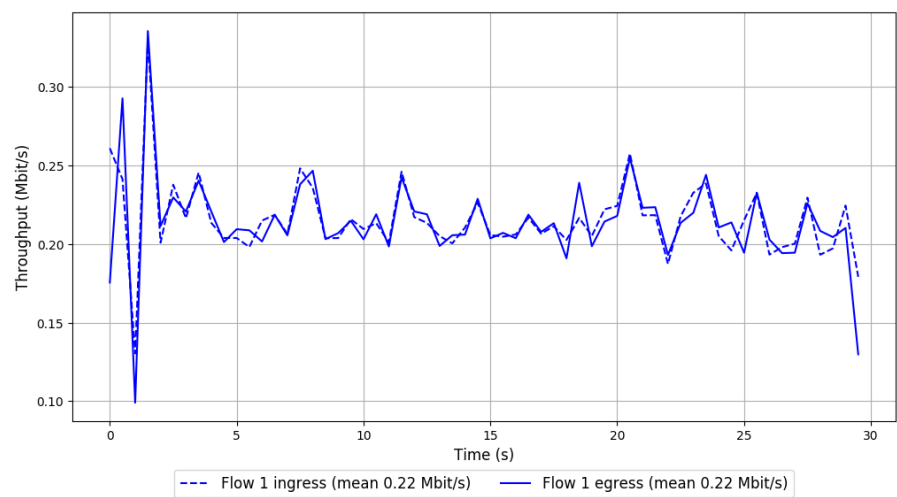


```
Run 2: Statistics of SCReAM

Start at: 2017-11-15 20:33:32
End at: 2017-11-15 20:34:02

# Below is generated by plot.py at 2017-11-16 00:24:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.335 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.335 ms
Loss rate: 0.76%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-11-15 20:44:42

End at: 2017-11-15 20:45:12

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.226 ms

Loss rate: 0.75%

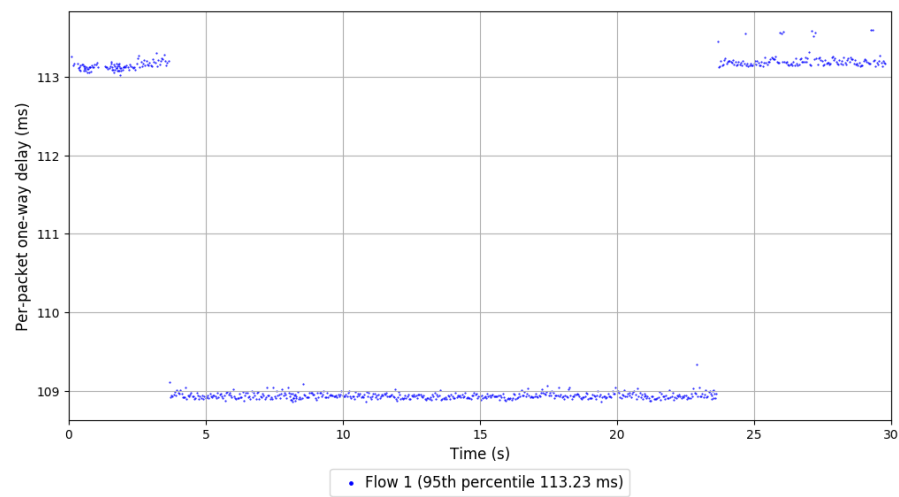
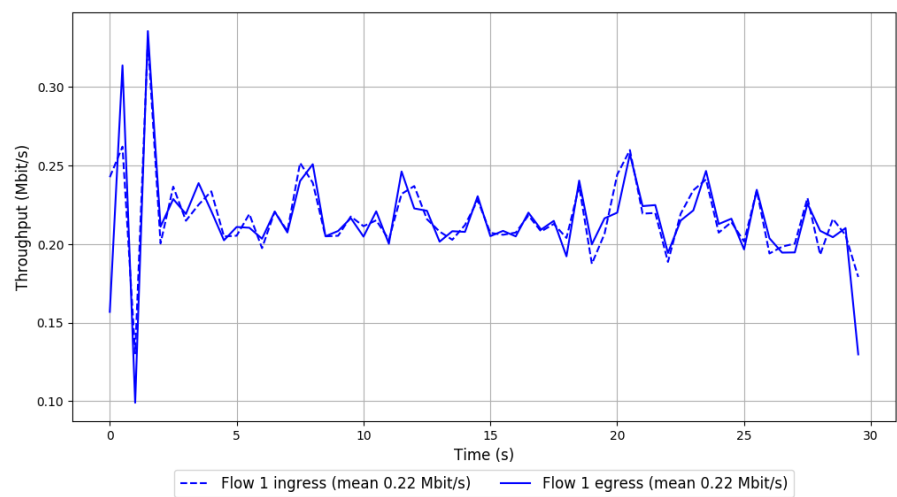
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.226 ms

Loss rate: 0.75%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-11-15 20:55:37

End at: 2017-11-15 20:56:07

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.888 ms

Loss rate: 0.76%

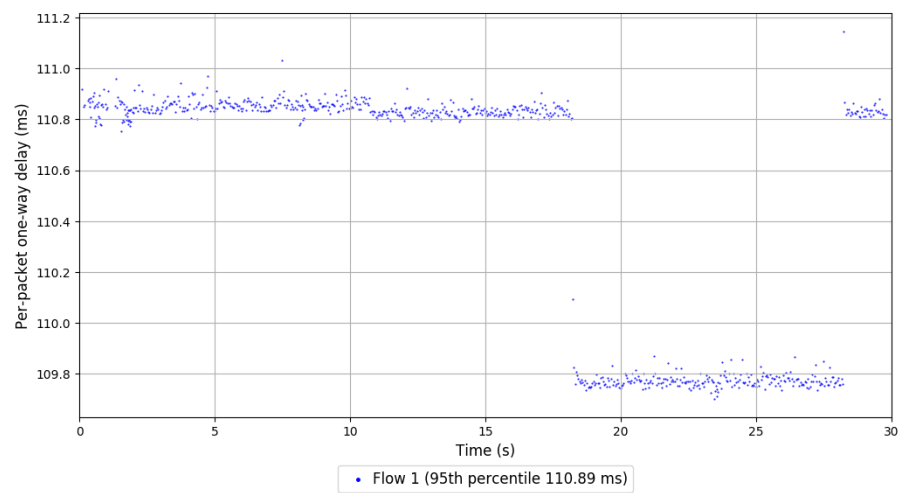
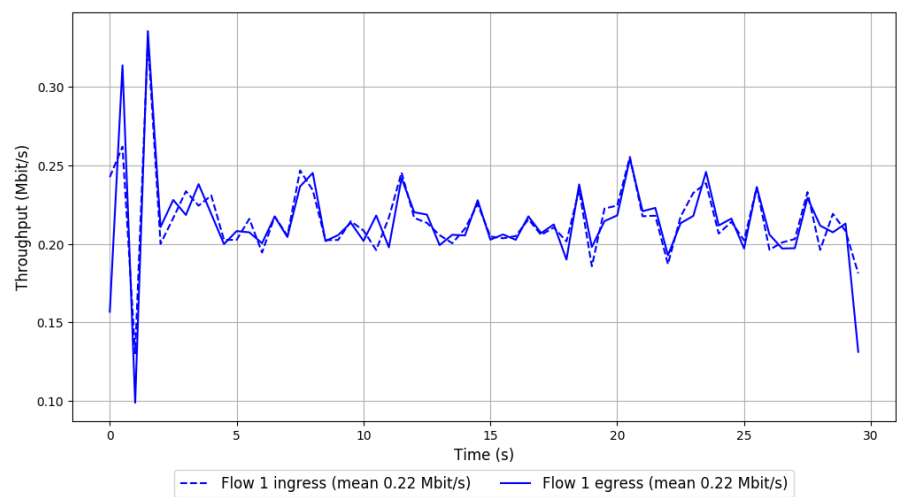
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.888 ms

Loss rate: 0.76%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-11-15 21:06:49

End at: 2017-11-15 21:07:19

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.060 ms

Loss rate: 0.76%

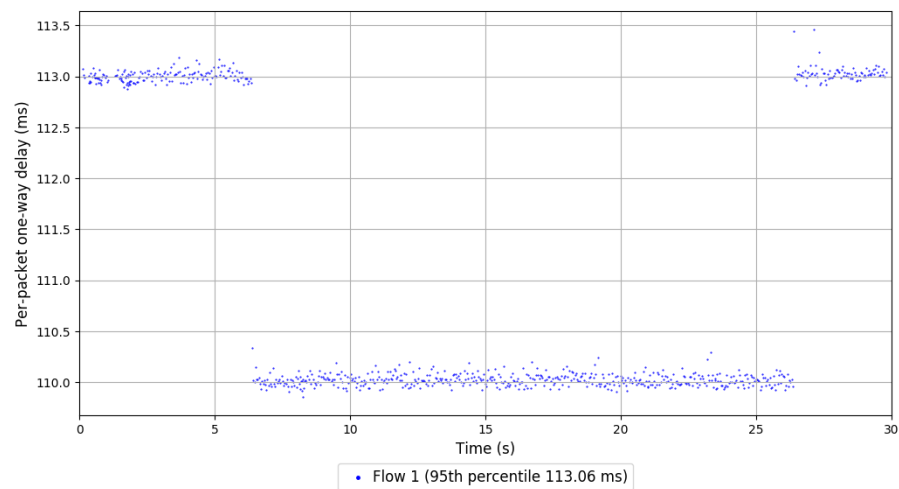
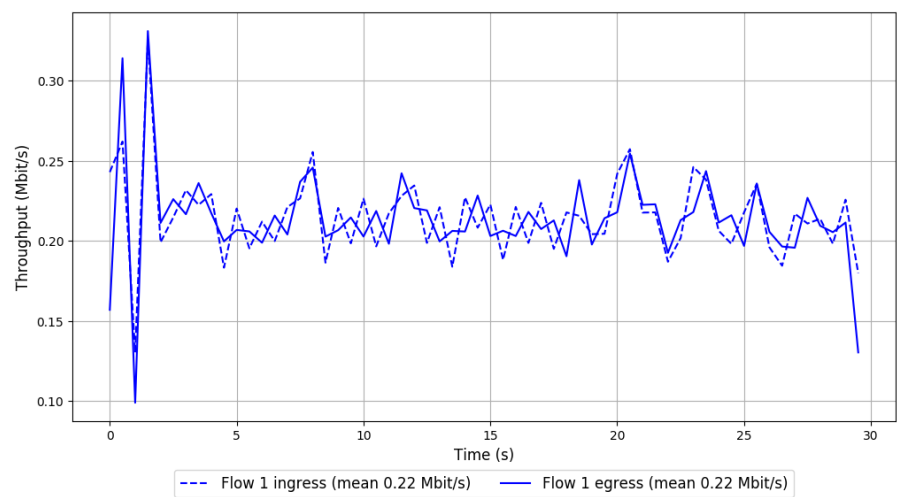
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.060 ms

Loss rate: 0.76%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-15 21:17:54

End at: 2017-11-15 21:18:24

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.976 ms

Loss rate: 0.76%

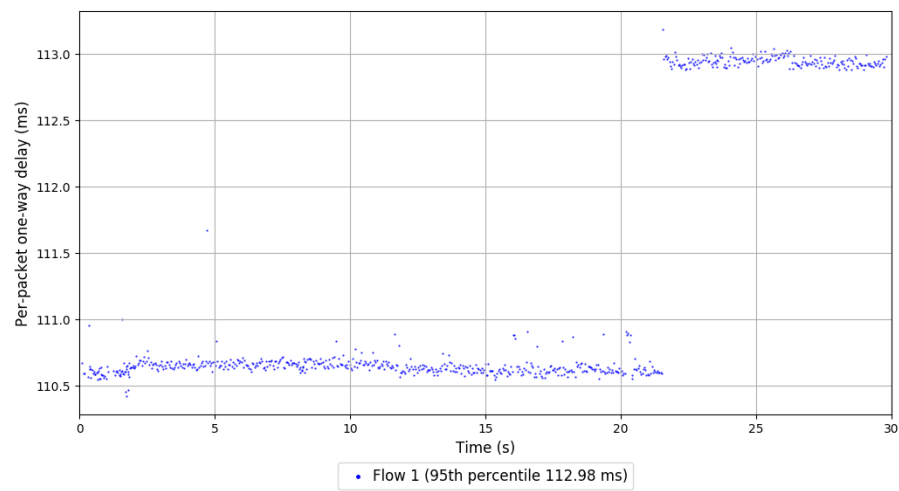
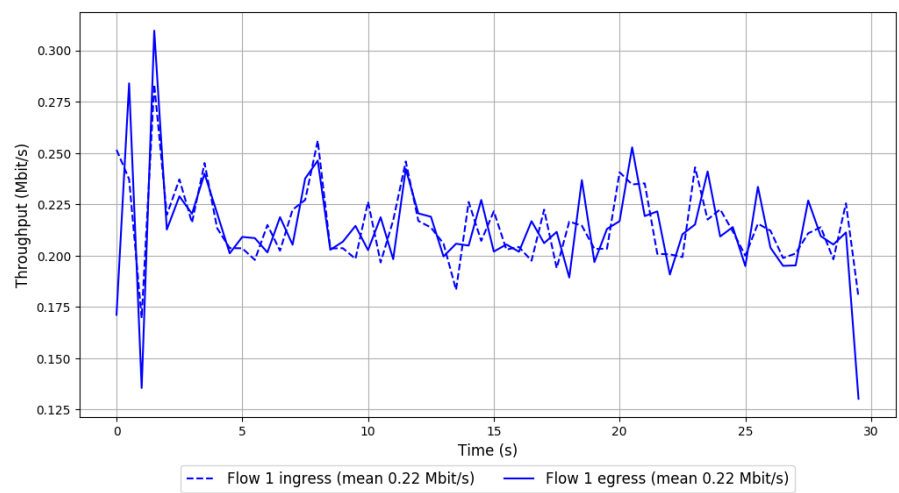
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.976 ms

Loss rate: 0.76%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-11-15 21:28:55

End at: 2017-11-15 21:29:25

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.004 ms

Loss rate: 0.76%

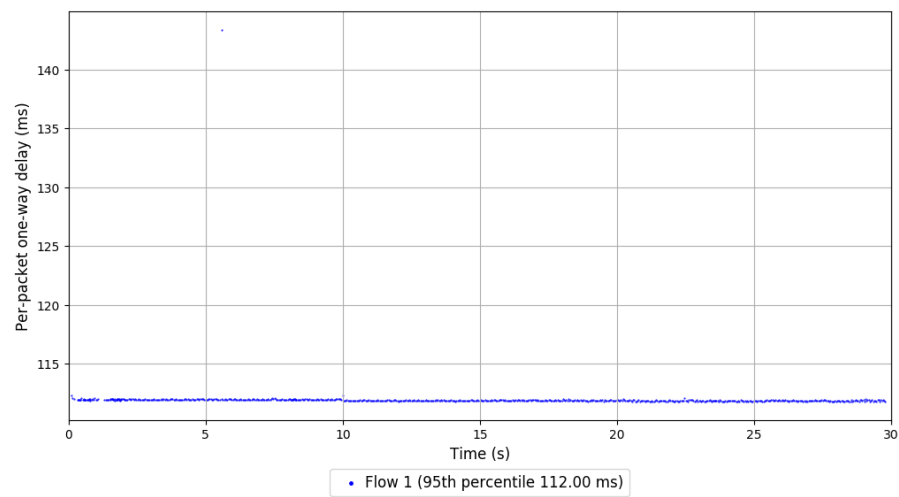
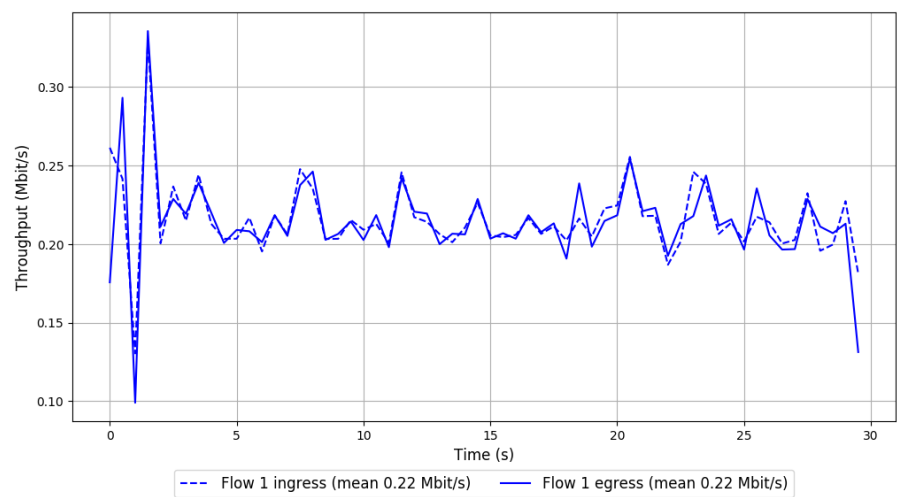
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.004 ms

Loss rate: 0.76%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-11-15 21:39:54

End at: 2017-11-15 21:40:24

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 110.815 ms

Loss rate: 0.76%

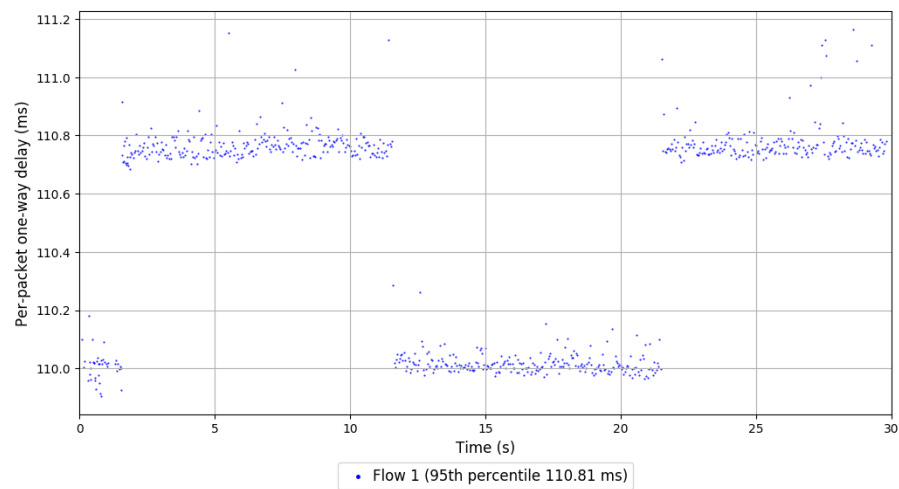
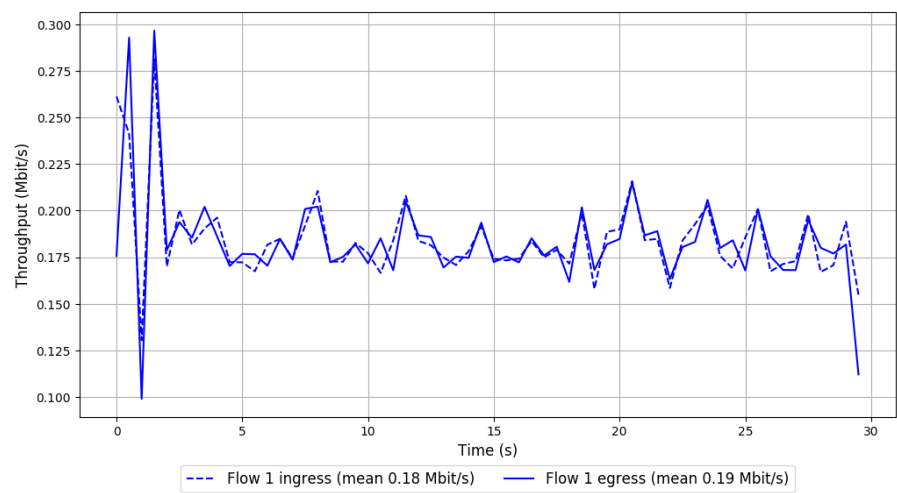
-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 110.815 ms

Loss rate: 0.76%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-11-15 21:51:13

End at: 2017-11-15 21:51:43

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.635 ms

Loss rate: 0.64%

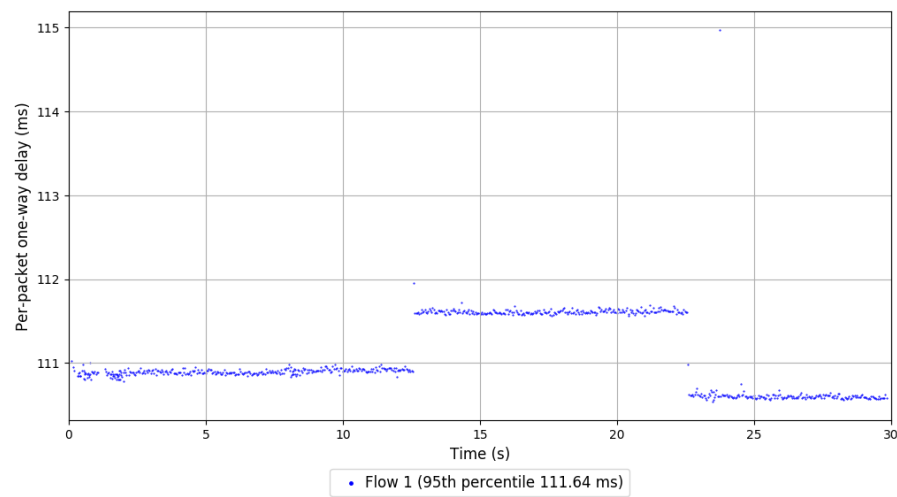
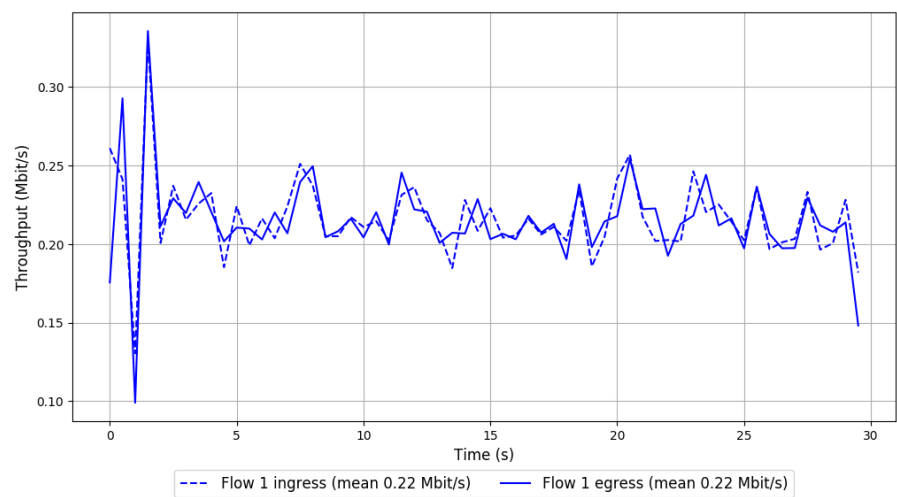
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.635 ms

Loss rate: 0.64%

Run 9: Report of SReAM — Data Link

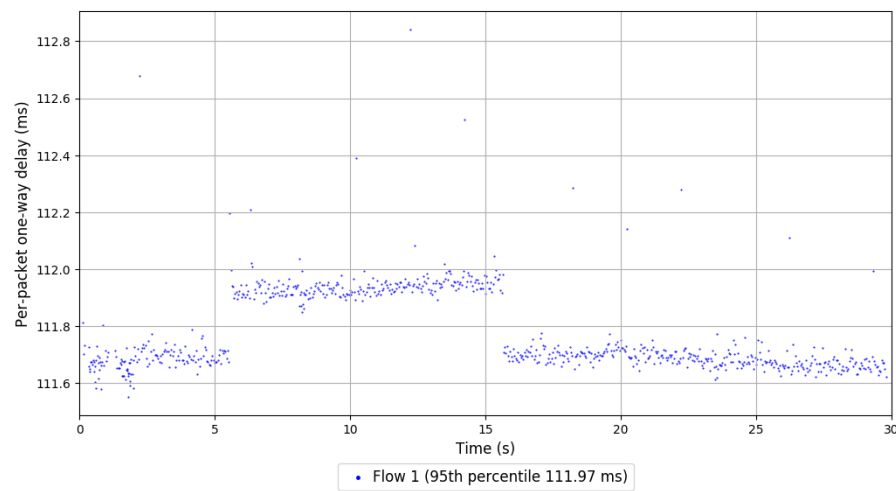
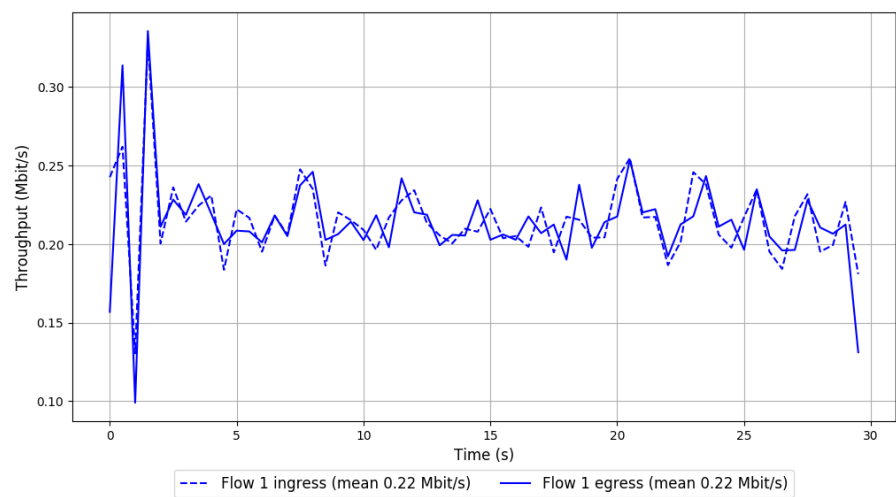


```
Run 10: Statistics of SReAM

Start at: 2017-11-15 22:02:10
End at: 2017-11-15 22:02:40

# Below is generated by plot.py at 2017-11-16 00:24:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.970 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.970 ms
Loss rate: 0.76%
```

Run 10: Report of SReAM — Data Link

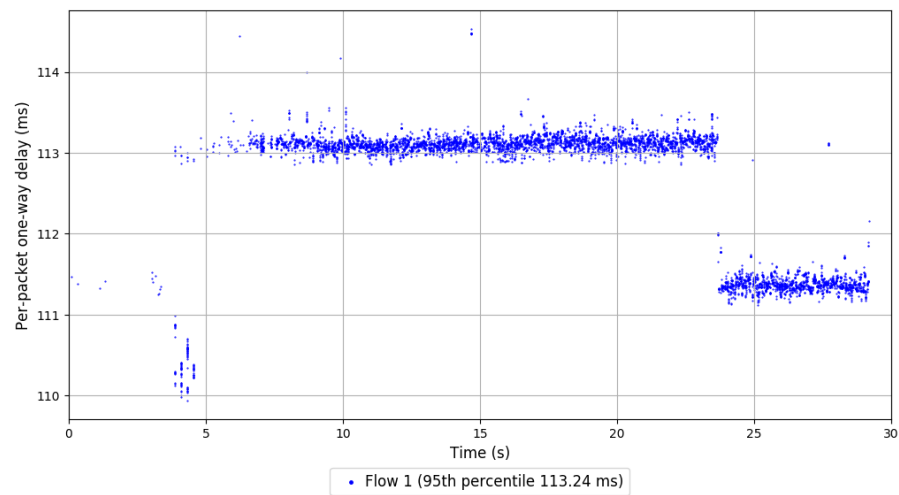
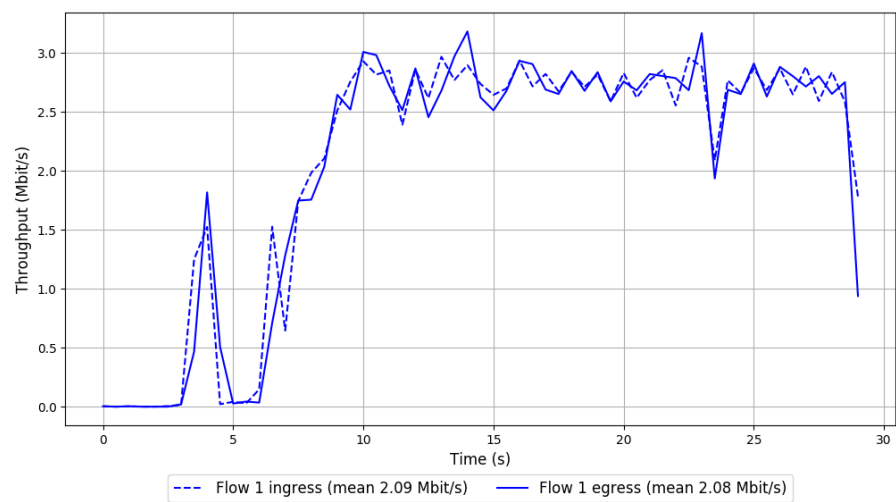


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-15 20:17:01
End at: 2017-11-15 20:17:31

# Below is generated by plot.py at 2017-11-16 00:24:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 113.240 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 113.240 ms
Loss rate: 1.08%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-15 20:27:57

End at: 2017-11-15 20:28:27

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 112.121 ms

Loss rate: 0.79%

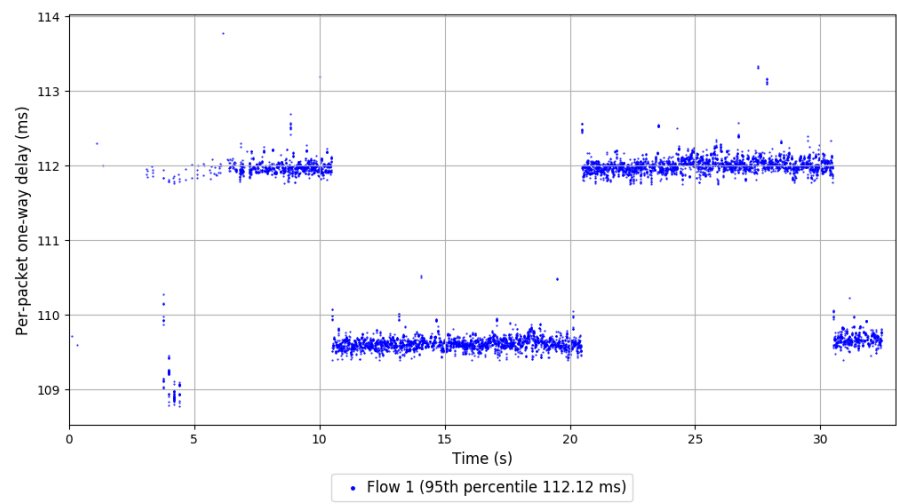
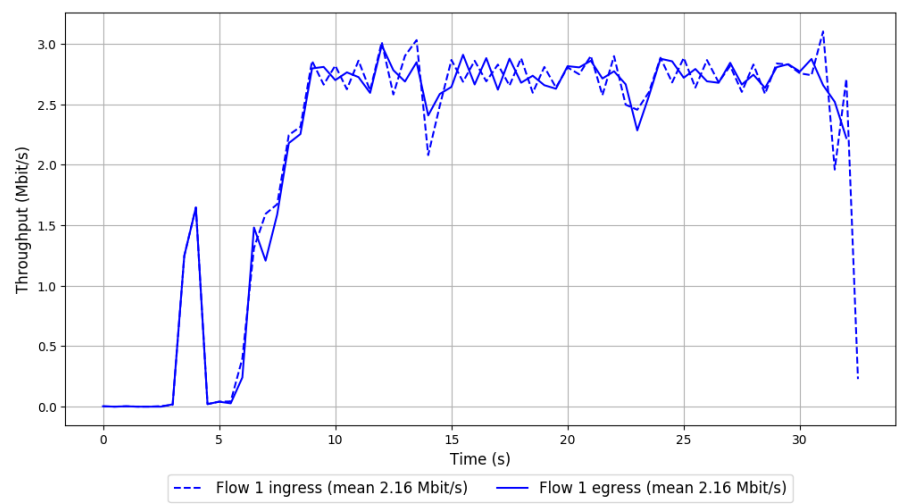
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 112.121 ms

Loss rate: 0.79%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-15 20:38:55

End at: 2017-11-15 20:39:25

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 113.008 ms

Loss rate: 0.93%

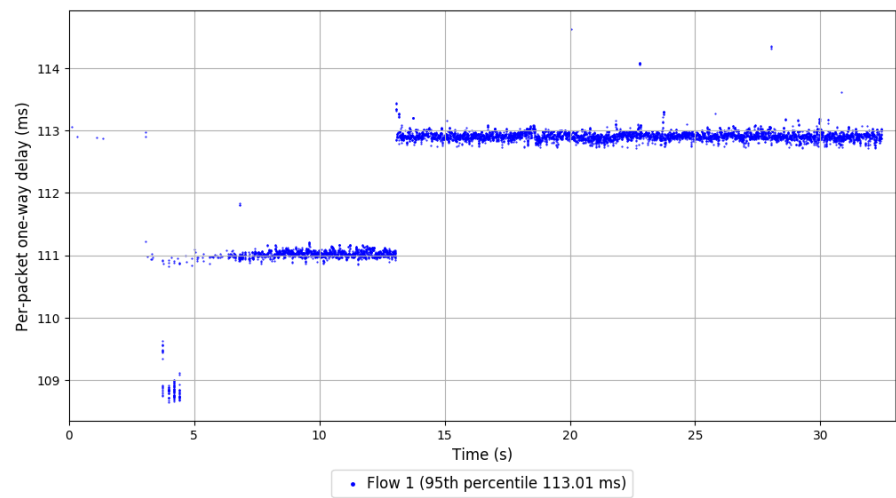
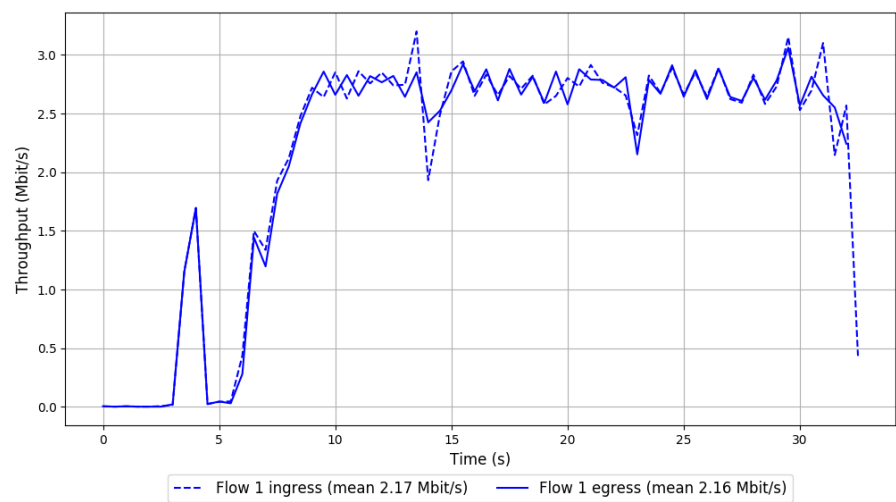
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 113.008 ms

Loss rate: 0.93%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-15 20:49:58

End at: 2017-11-15 20:50:28

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 112.914 ms

Loss rate: 0.93%

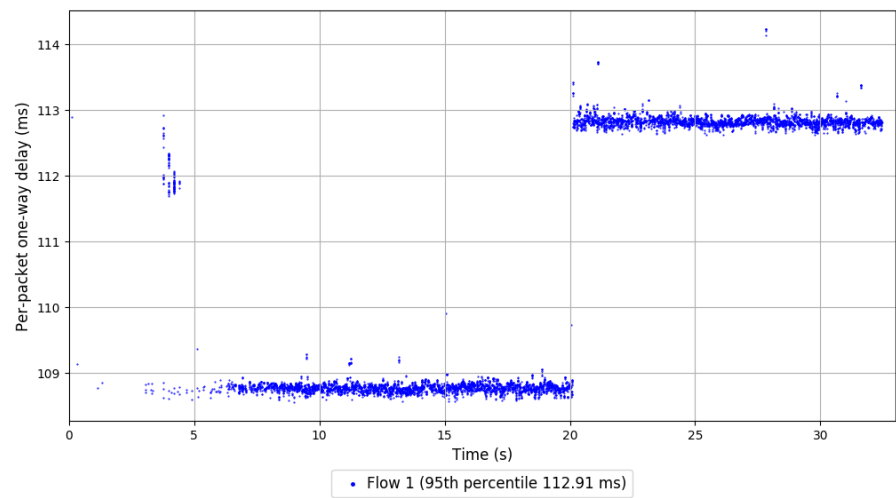
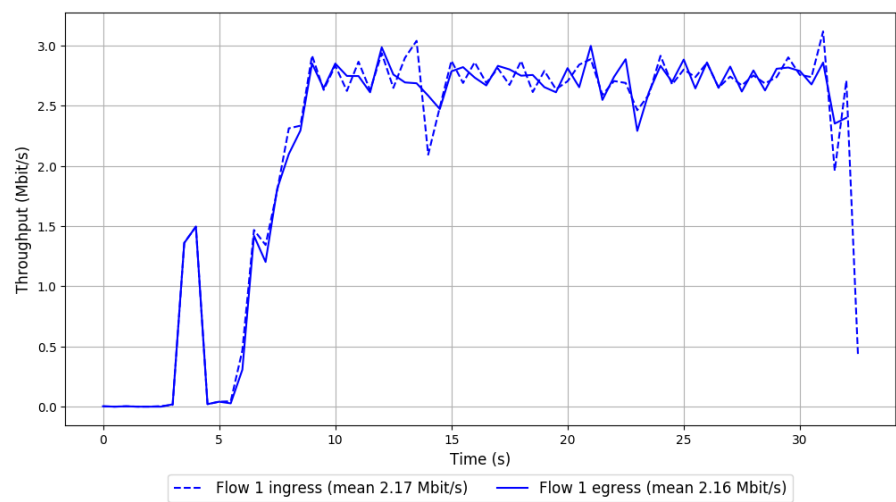
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 112.914 ms

Loss rate: 0.93%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-15 21:01:01

End at: 2017-11-15 21:01:31

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 113.048 ms

Loss rate: 0.77%

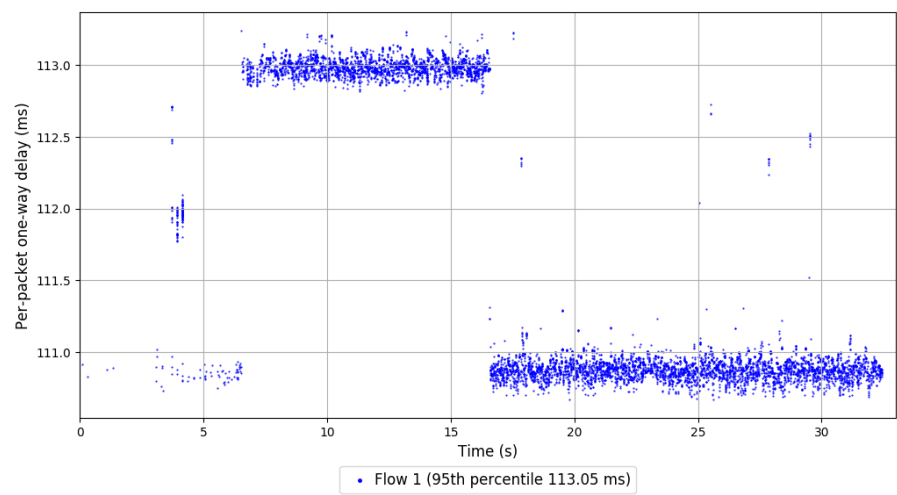
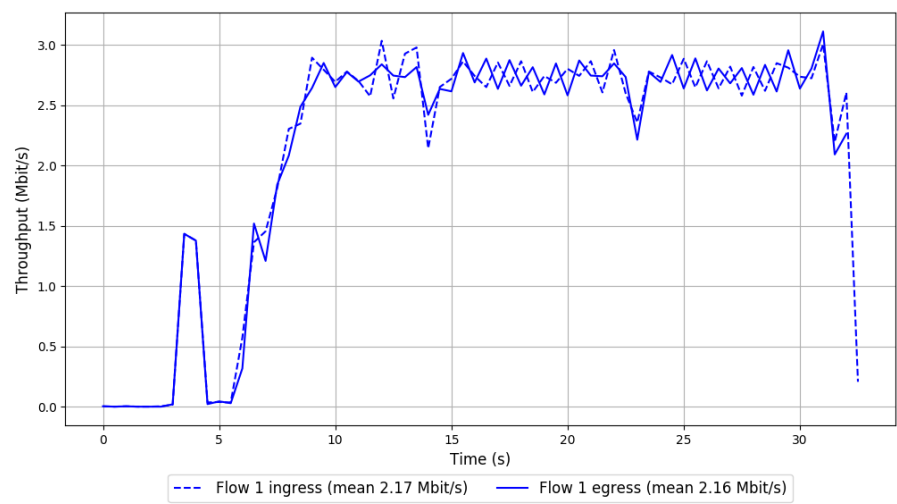
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 113.048 ms

Loss rate: 0.77%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-15 21:12:14

End at: 2017-11-15 21:12:44

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 110.405 ms

Loss rate: 0.88%

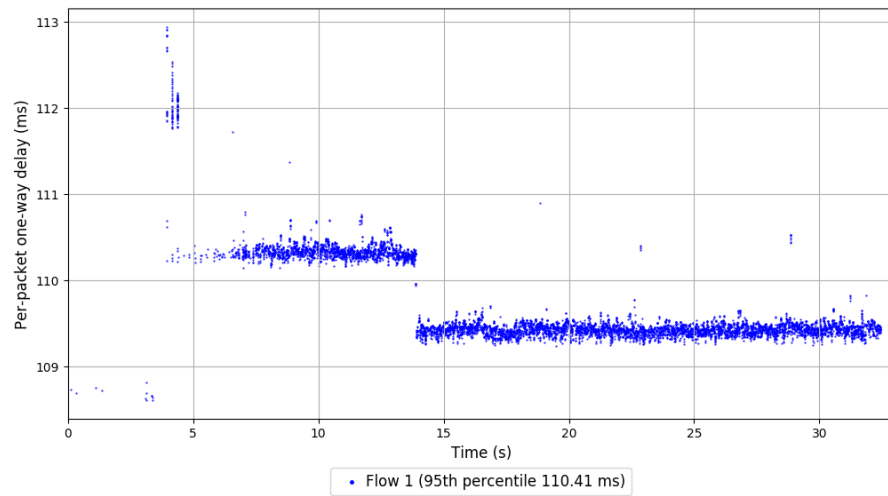
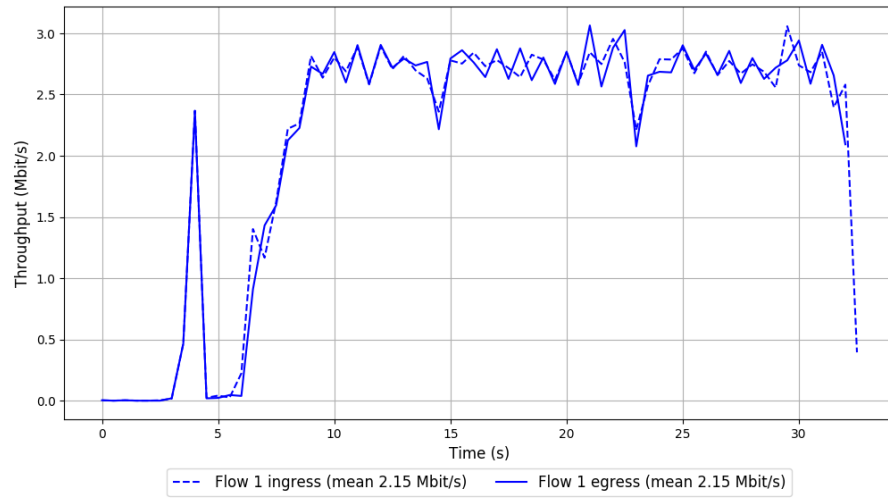
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 110.405 ms

Loss rate: 0.88%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-15 21:23:20

End at: 2017-11-15 21:23:50

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 113.088 ms

Loss rate: 0.77%

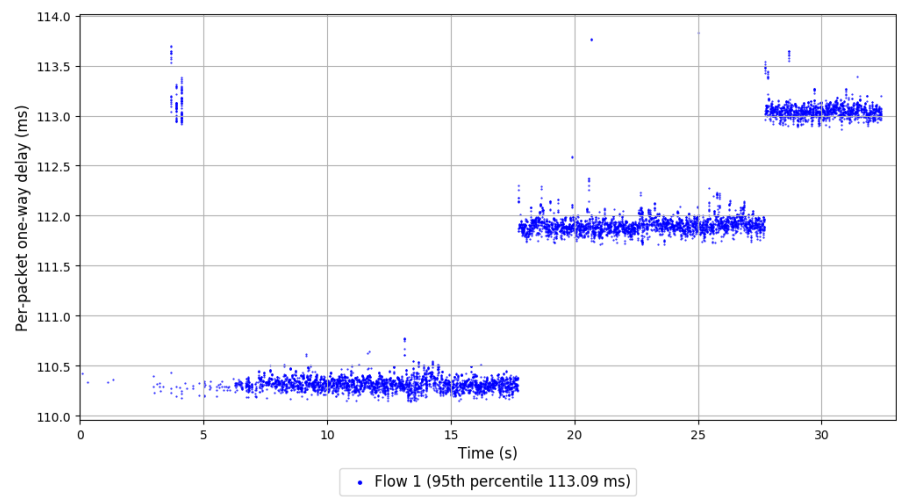
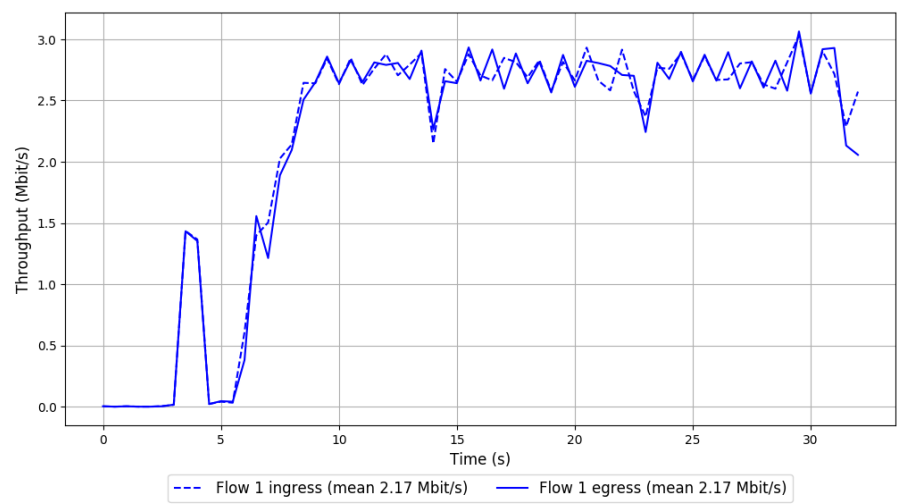
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 113.088 ms

Loss rate: 0.77%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-15 21:34:17

End at: 2017-11-15 21:34:47

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 112.077 ms

Loss rate: 0.79%

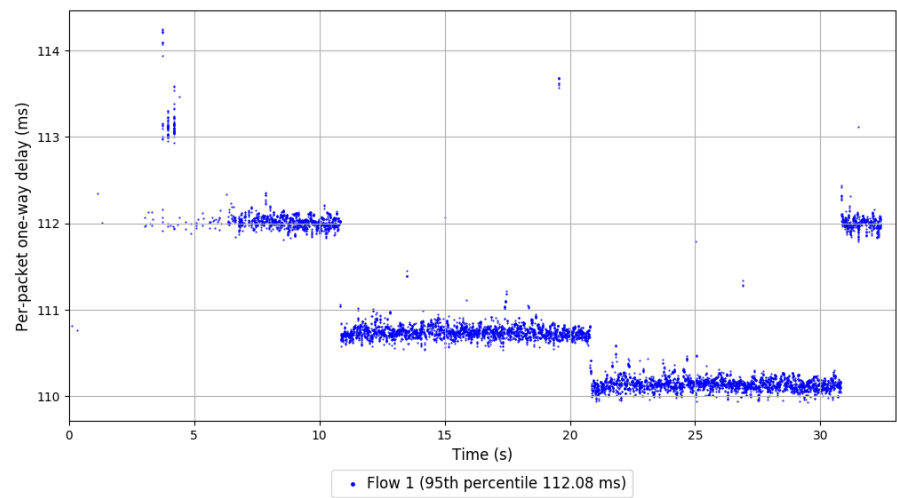
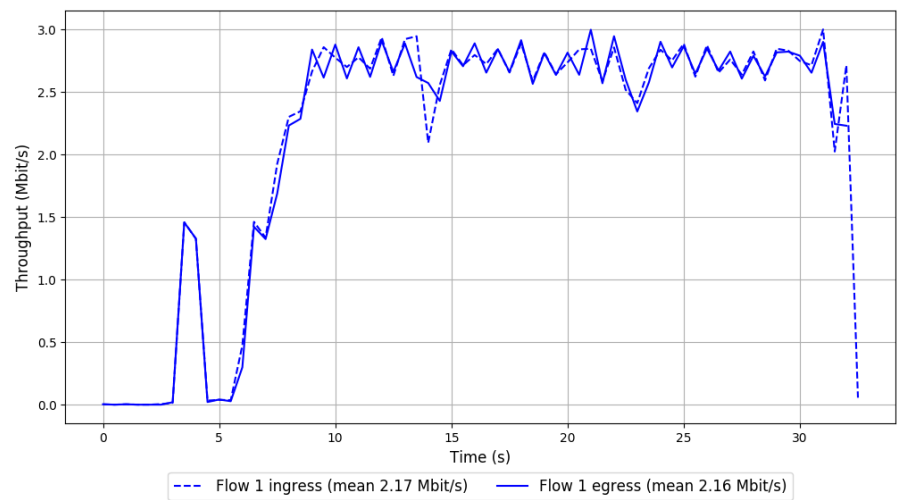
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 112.077 ms

Loss rate: 0.79%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-15 21:45:17

End at: 2017-11-15 21:45:47

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 113.045 ms

Loss rate: 0.82%

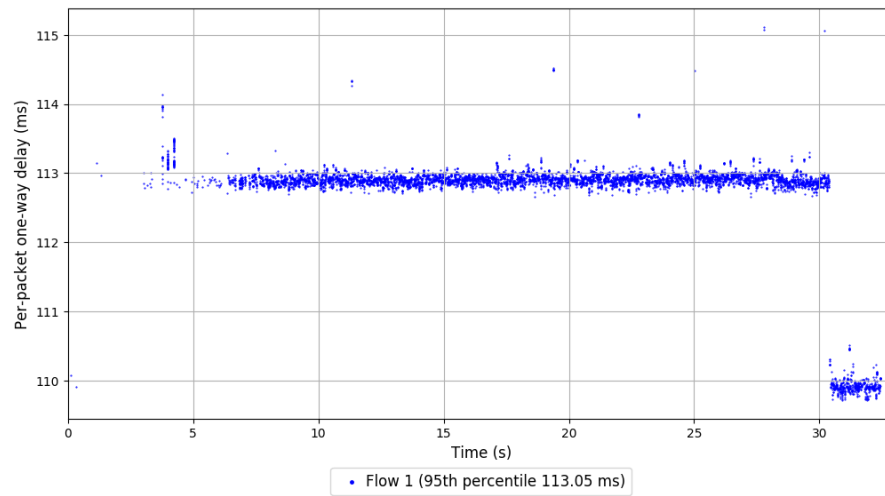
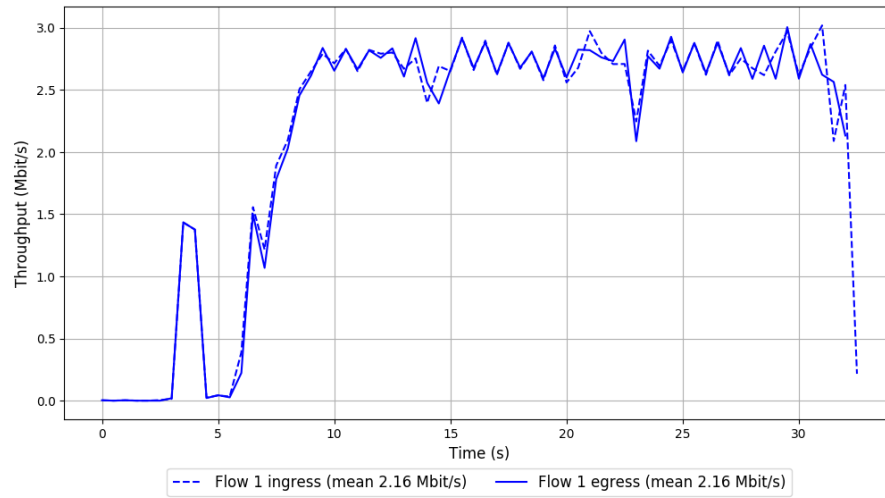
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 113.045 ms

Loss rate: 0.82%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-15 21:56:38

End at: 2017-11-15 21:57:08

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 113.215 ms

Loss rate: 0.93%

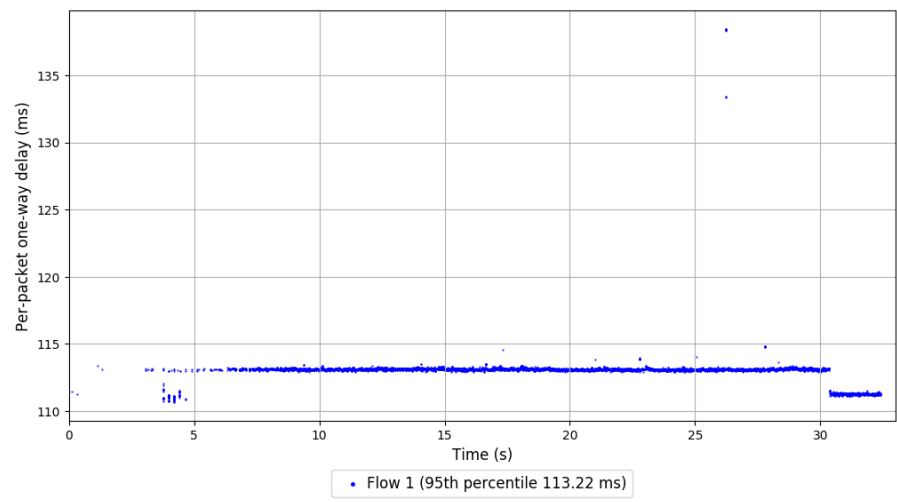
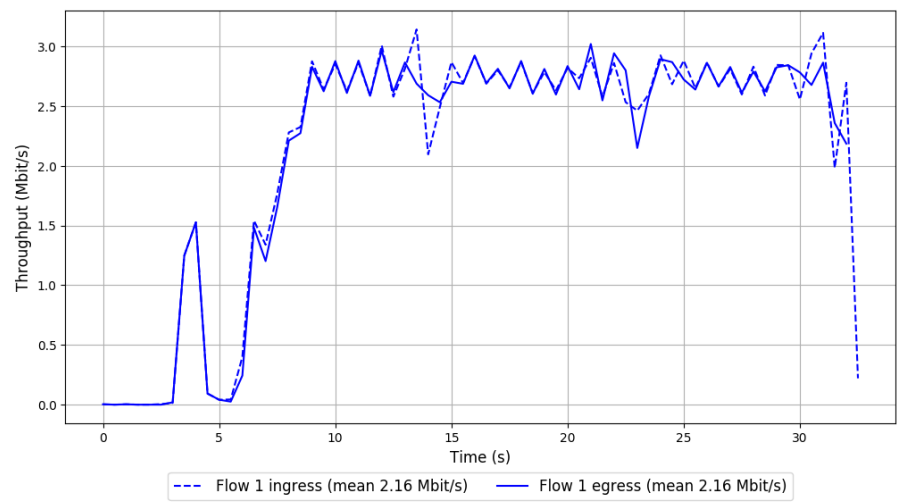
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 113.215 ms

Loss rate: 0.93%

Run 10: Report of WebRTC media — Data Link

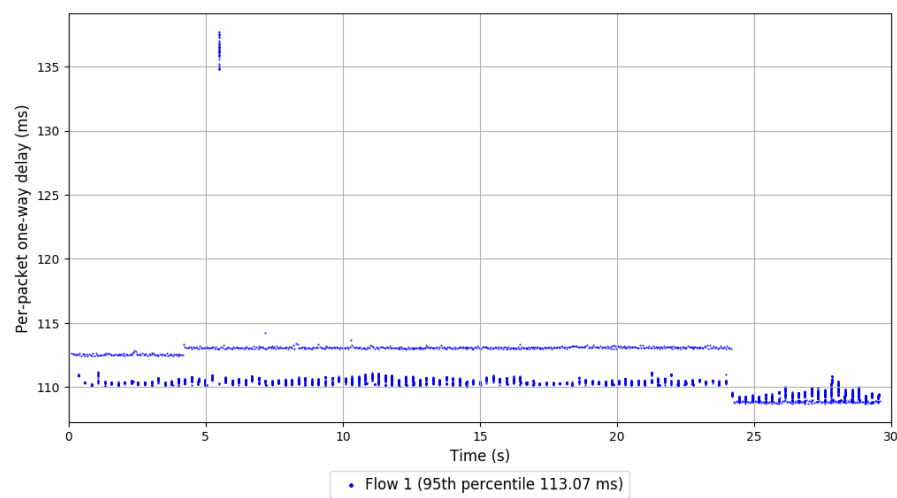
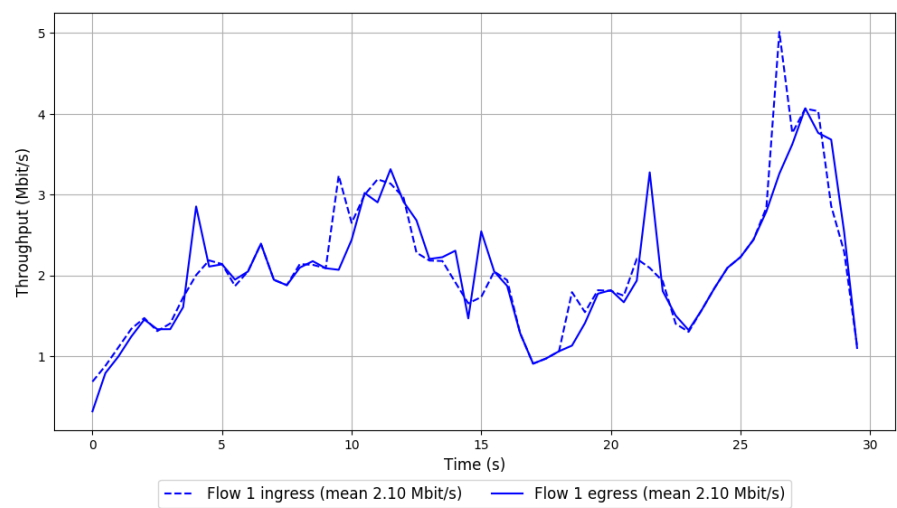


```
Run 1: Statistics of Sprout

Start at: 2017-11-15 20:20:31
End at: 2017-11-15 20:21:01

# Below is generated by plot.py at 2017-11-16 00:24:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 113.074 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 113.074 ms
Loss rate: 1.01%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-15 20:31:24

End at: 2017-11-15 20:31:54

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 113.766 ms

Loss rate: 1.33%

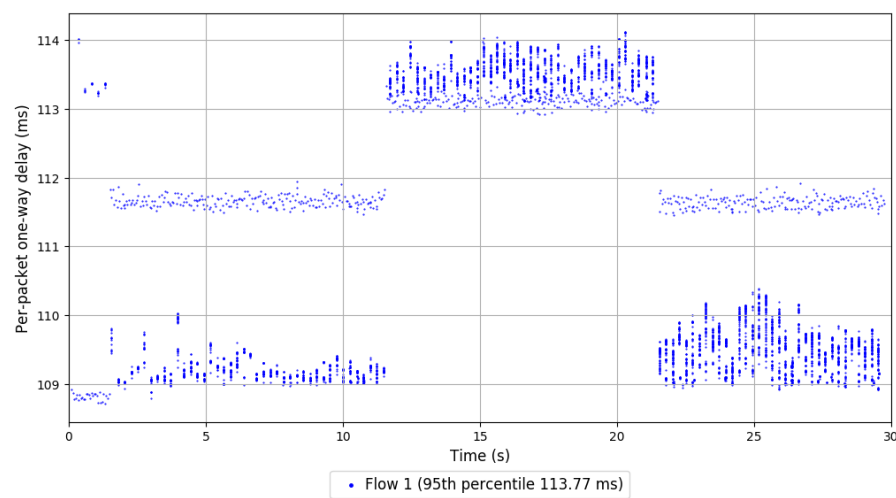
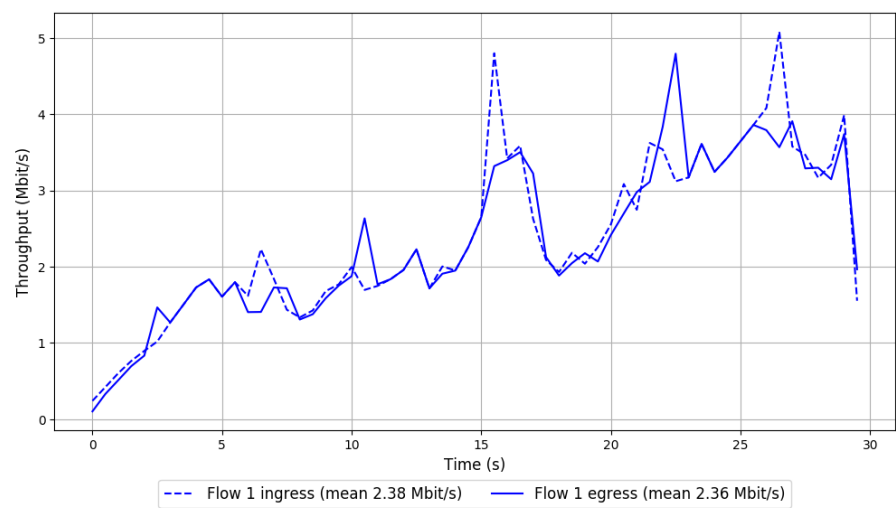
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 113.766 ms

Loss rate: 1.33%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-15 20:42:23

End at: 2017-11-15 20:42:53

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 113.595 ms

Loss rate: 1.30%

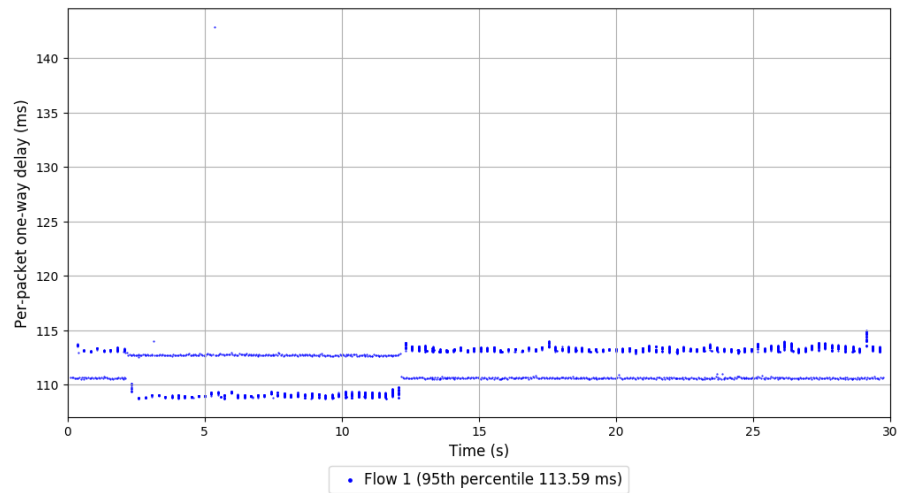
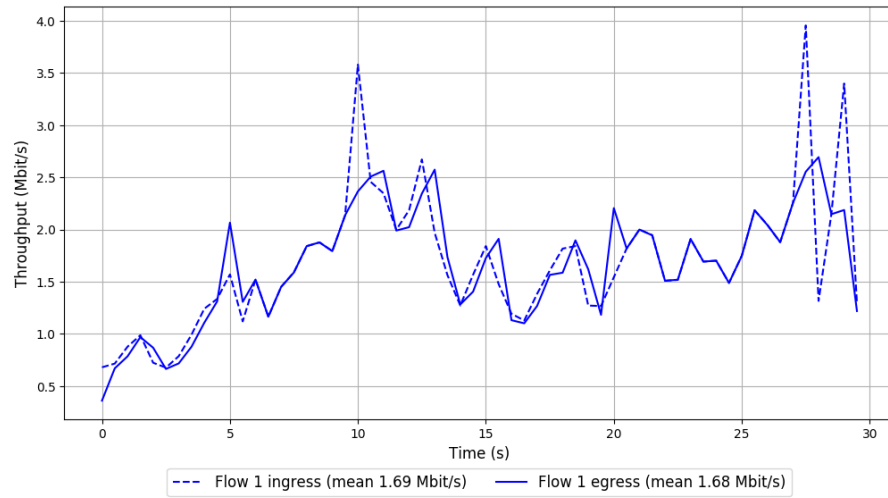
-- Flow 1:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 113.595 ms

Loss rate: 1.30%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-15 20:53:27

End at: 2017-11-15 20:53:57

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.74 Mbit/s

95th percentile per-packet one-way delay: 113.940 ms

Loss rate: 1.01%

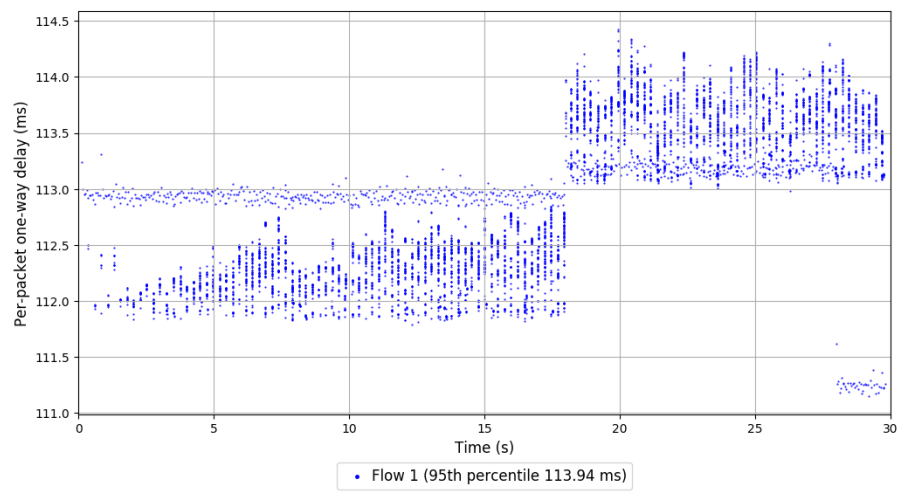
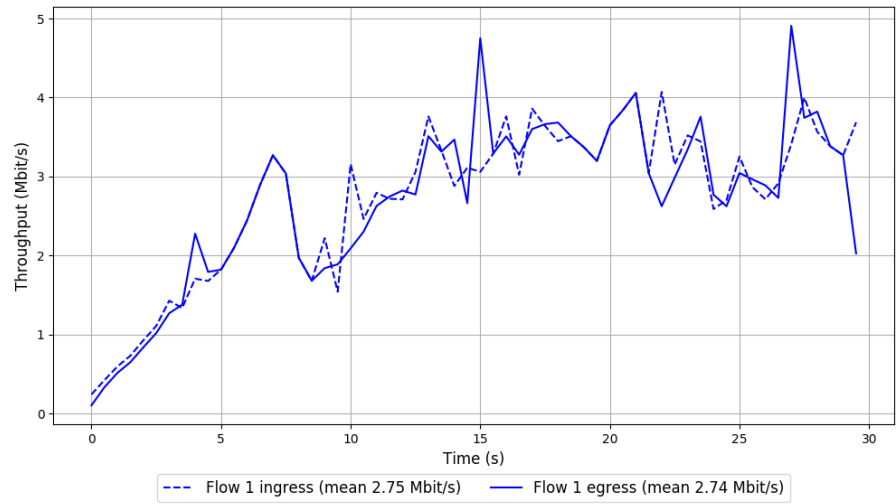
-- Flow 1:

Average throughput: 2.74 Mbit/s

95th percentile per-packet one-way delay: 113.940 ms

Loss rate: 1.01%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-15 21:04:40

End at: 2017-11-15 21:05:10

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 113.618 ms

Loss rate: 0.45%

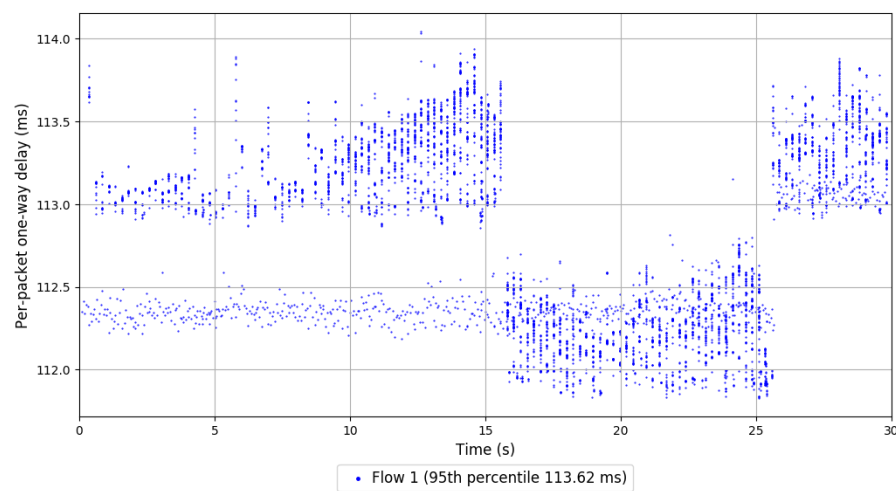
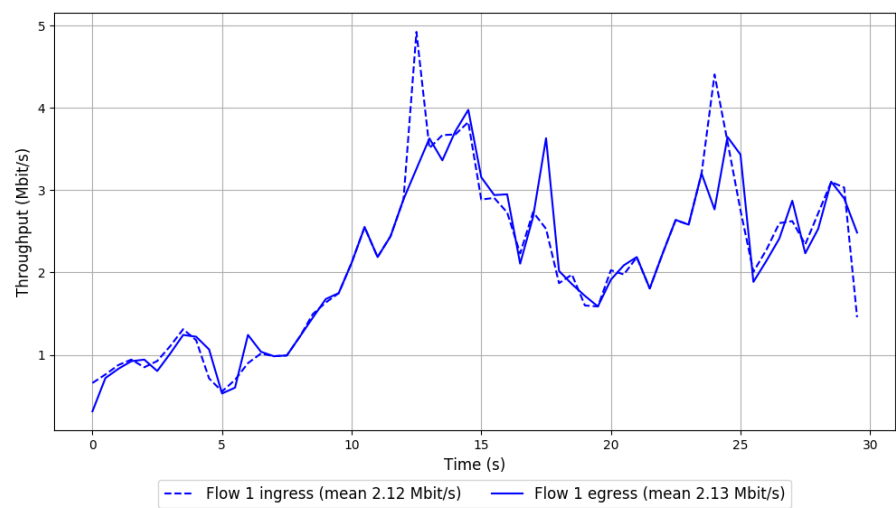
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 113.618 ms

Loss rate: 0.45%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-15 21:15:41

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

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 115.453 ms

Loss rate: 1.75%

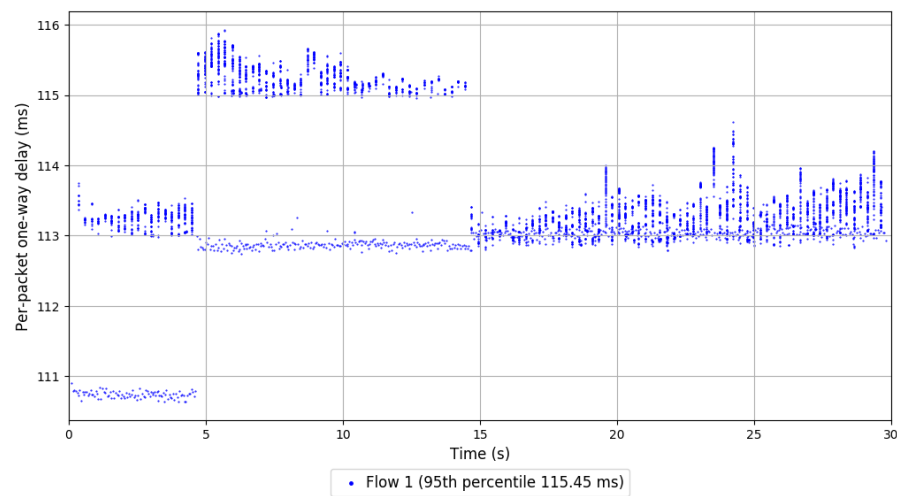
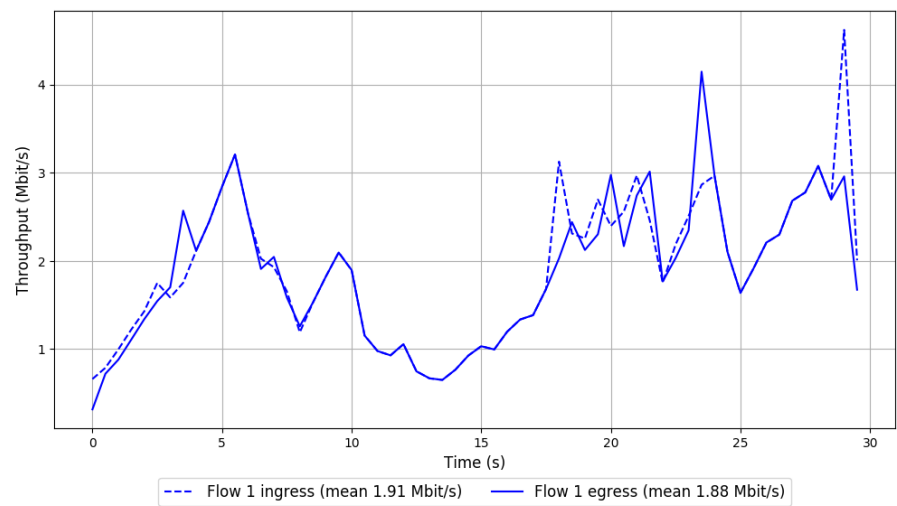
-- Flow 1:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 115.453 ms

Loss rate: 1.75%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-15 21:26:47

End at: 2017-11-15 21:27:17

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 113.989 ms

Loss rate: 0.88%

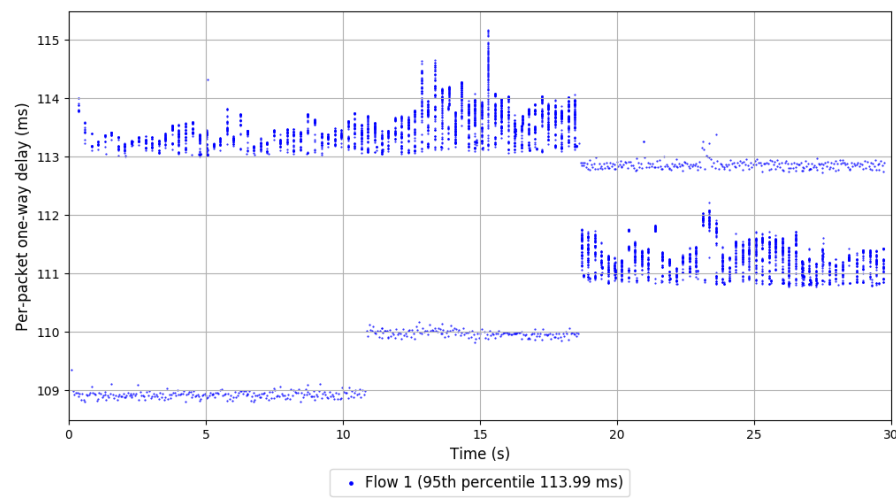
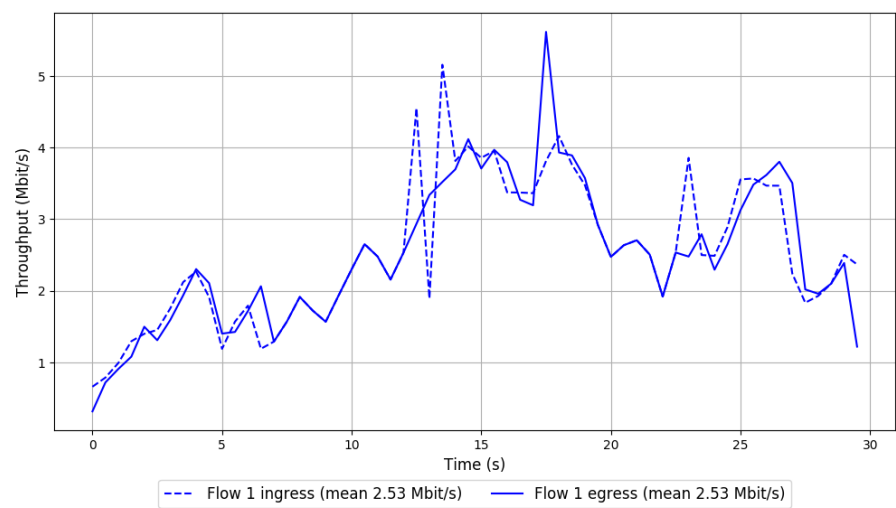
-- Flow 1:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 113.989 ms

Loss rate: 0.88%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-15 21:37:42

End at: 2017-11-15 21:38:12

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 112.835 ms

Loss rate: 1.06%

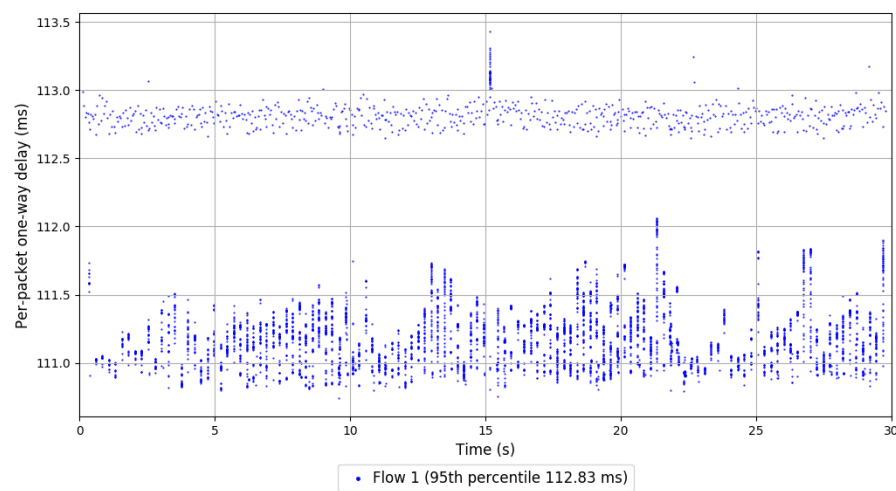
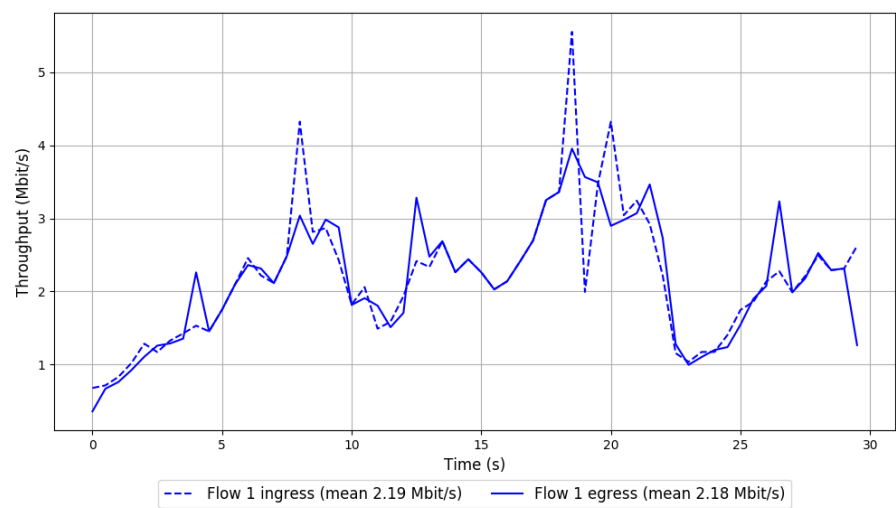
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 112.835 ms

Loss rate: 1.06%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-15 21:48:49

End at: 2017-11-15 21:49:19

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.05 Mbit/s

95th percentile per-packet one-way delay: 113.647 ms

Loss rate: 0.74%

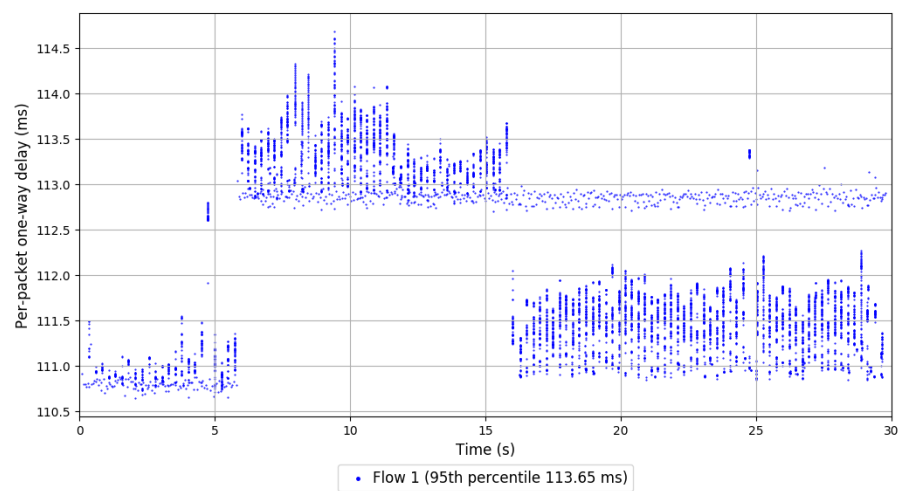
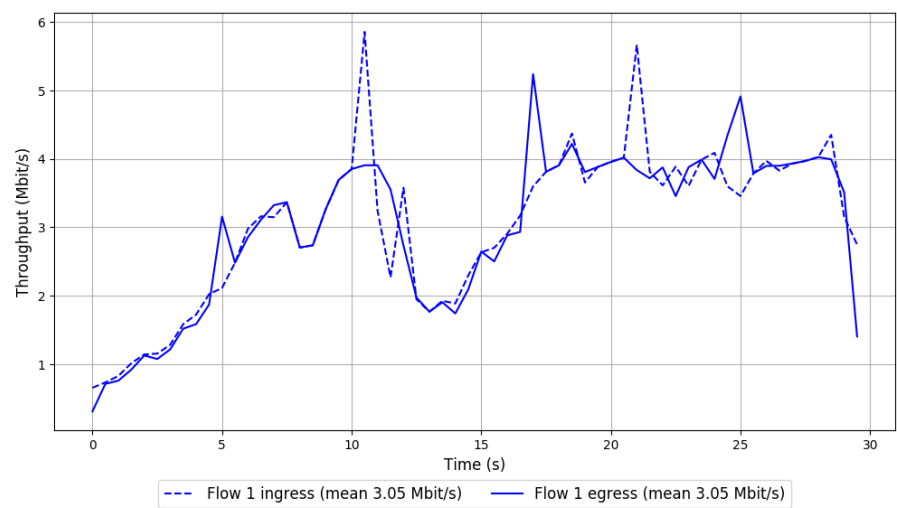
-- Flow 1:

Average throughput: 3.05 Mbit/s

95th percentile per-packet one-way delay: 113.647 ms

Loss rate: 0.74%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-15 22:00:01

End at: 2017-11-15 22:00:31

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 113.248 ms

Loss rate: 0.79%

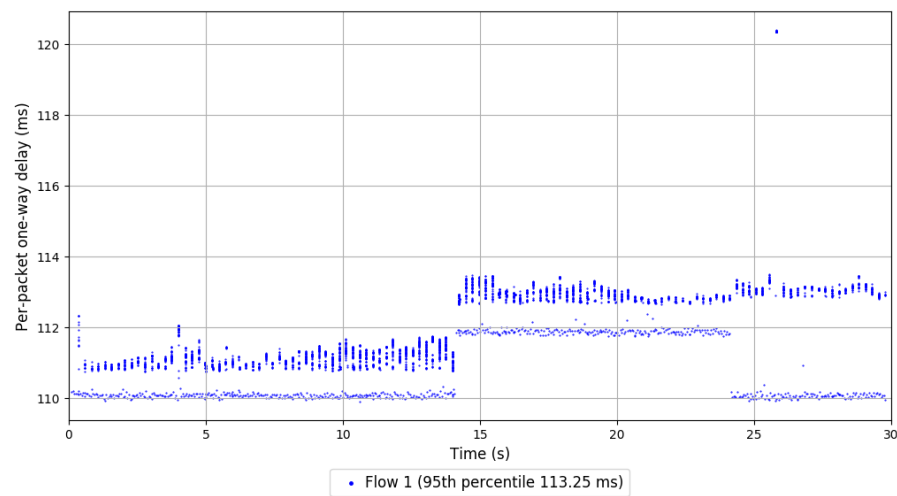
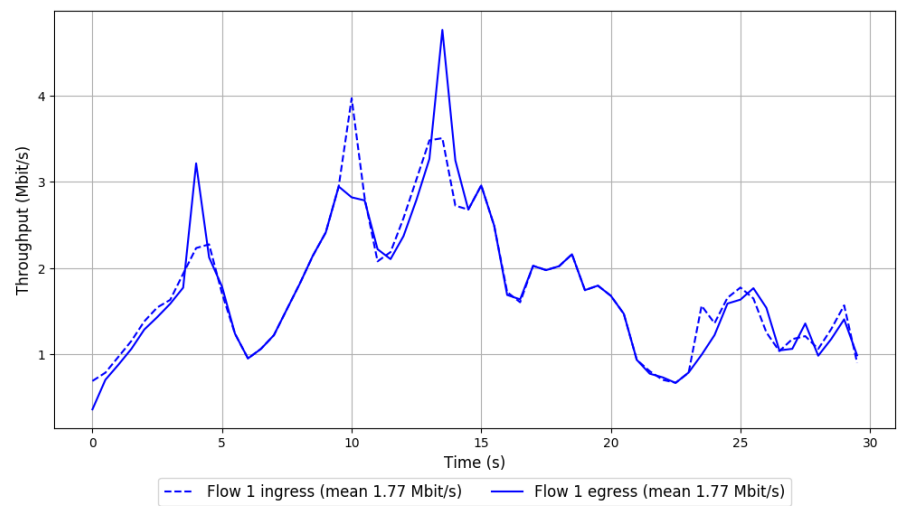
-- Flow 1:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 113.248 ms

Loss rate: 0.79%

Run 10: Report of Sprout — Data Link

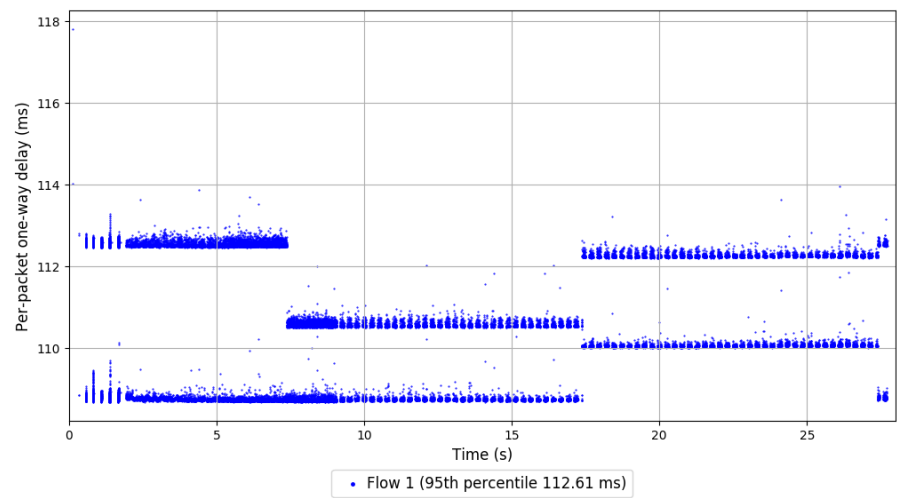
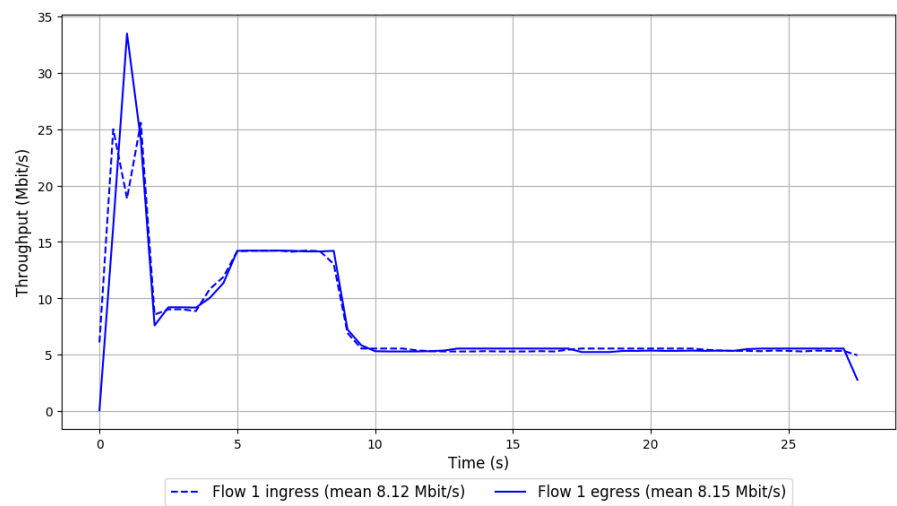


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-15 20:21:56
End at: 2017-11-15 20:22:26

# Below is generated by plot.py at 2017-11-16 00:24:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.15 Mbit/s
95th percentile per-packet one-way delay: 112.605 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 8.15 Mbit/s
95th percentile per-packet one-way delay: 112.605 ms
Loss rate: 0.61%
```

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

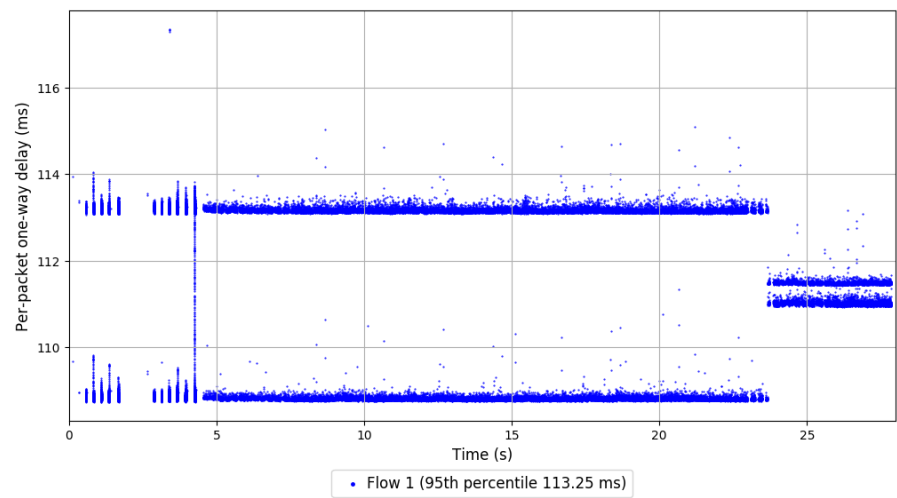
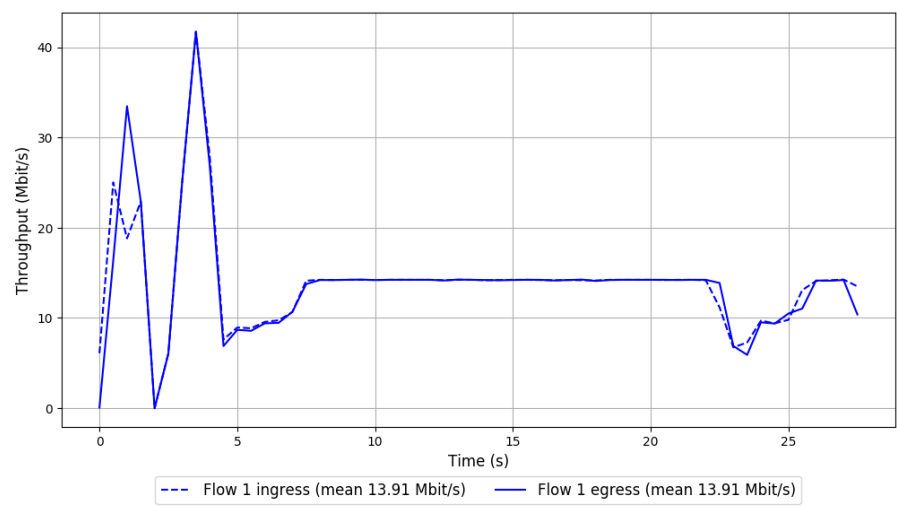


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-15 20:32:50
End at: 2017-11-15 20:33:20

# Below is generated by plot.py at 2017-11-16 00:24:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.91 Mbit/s
95th percentile per-packet one-way delay: 113.247 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 13.91 Mbit/s
95th percentile per-packet one-way delay: 113.247 ms
Loss rate: 0.81%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-15 20:43:49

End at: 2017-11-15 20:44:19

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.21 Mbit/s

95th percentile per-packet one-way delay: 111.412 ms

Loss rate: 0.76%

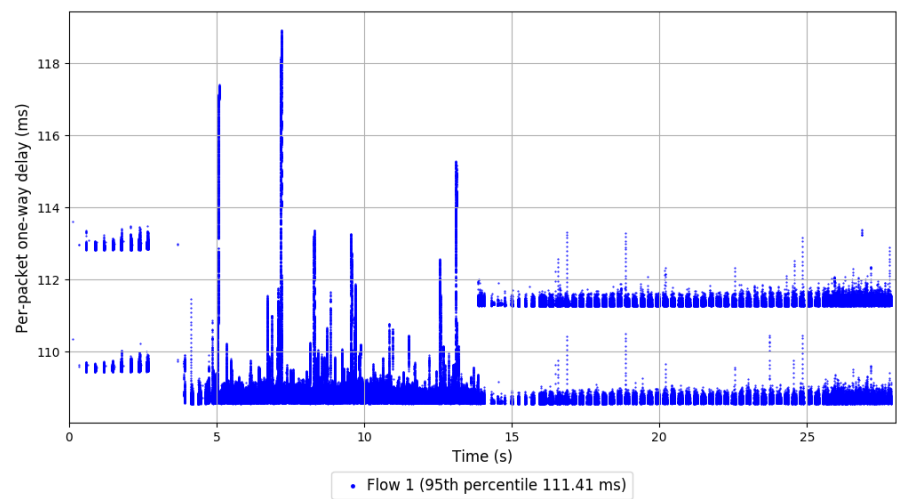
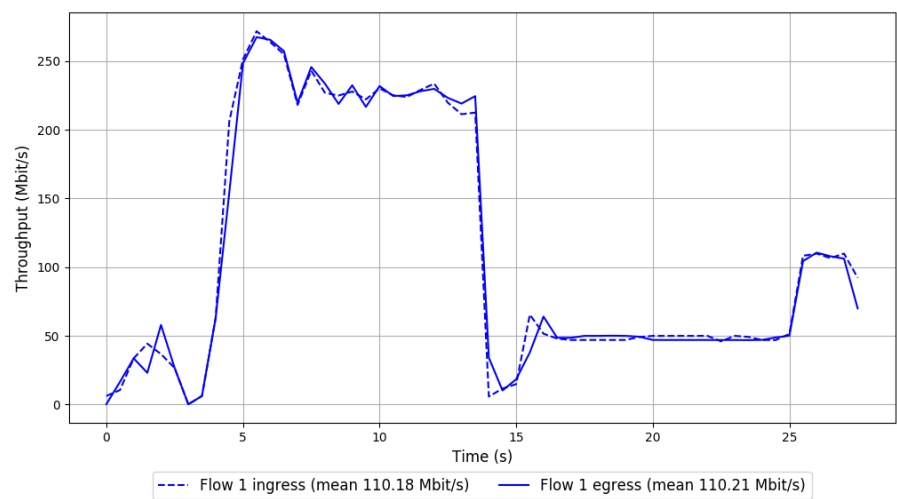
-- Flow 1:

Average throughput: 110.21 Mbit/s

95th percentile per-packet one-way delay: 111.412 ms

Loss rate: 0.76%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-11-15 20:54:54

End at: 2017-11-15 20:55:24

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.98 Mbit/s

95th percentile per-packet one-way delay: 113.014 ms

Loss rate: 0.81%

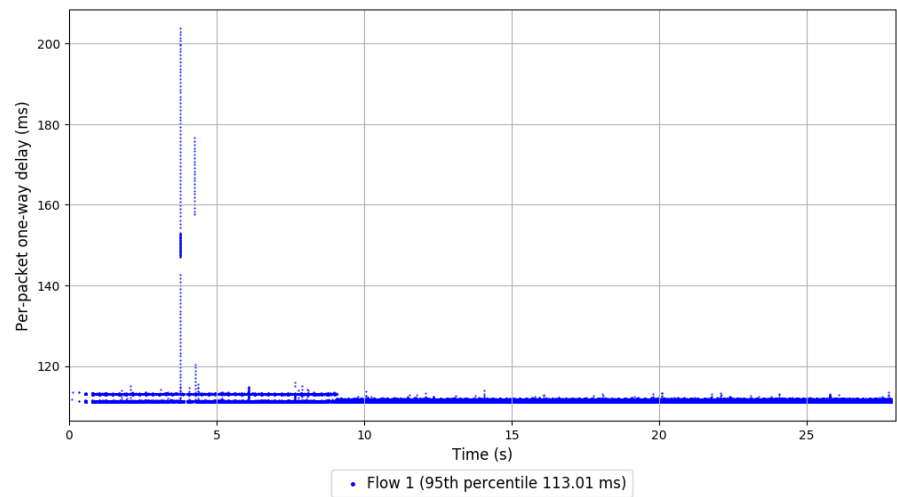
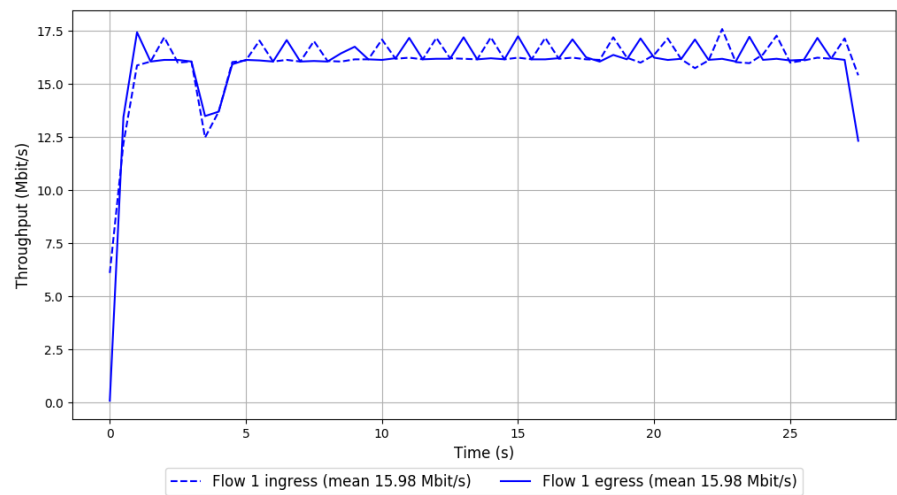
-- Flow 1:

Average throughput: 15.98 Mbit/s

95th percentile per-packet one-way delay: 113.014 ms

Loss rate: 0.81%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-15 21:06:06

End at: 2017-11-15 21:06:36

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.75 Mbit/s

95th percentile per-packet one-way delay: 112.852 ms

Loss rate: 0.82%

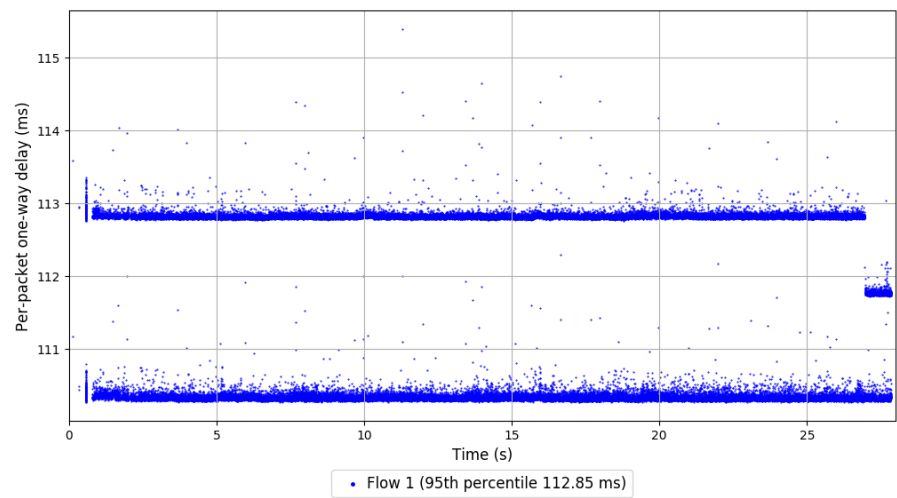
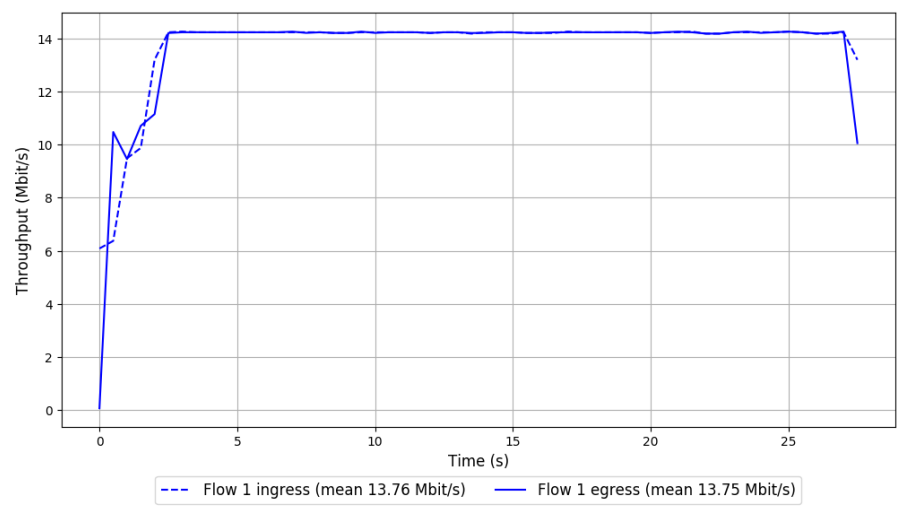
-- Flow 1:

Average throughput: 13.75 Mbit/s

95th percentile per-packet one-way delay: 112.852 ms

Loss rate: 0.82%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-15 21:17:07

End at: 2017-11-15 21:17:37

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.93 Mbit/s

95th percentile per-packet one-way delay: 113.059 ms

Loss rate: 0.09%

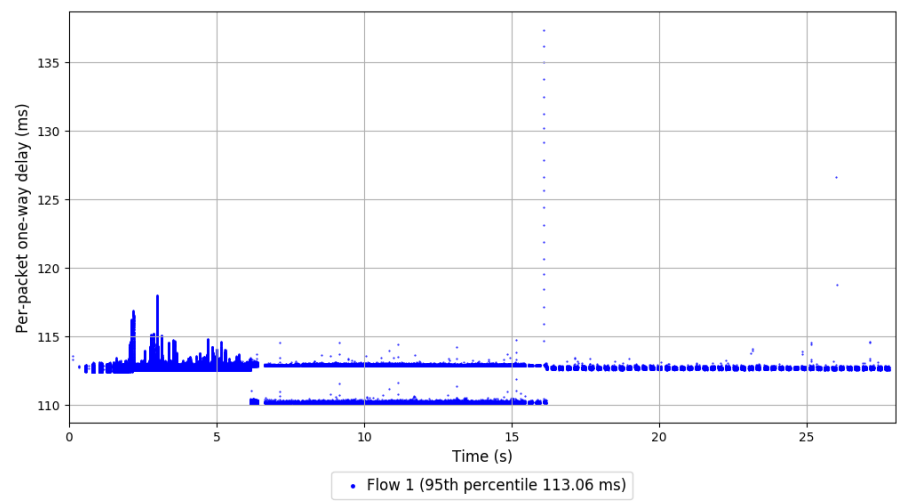
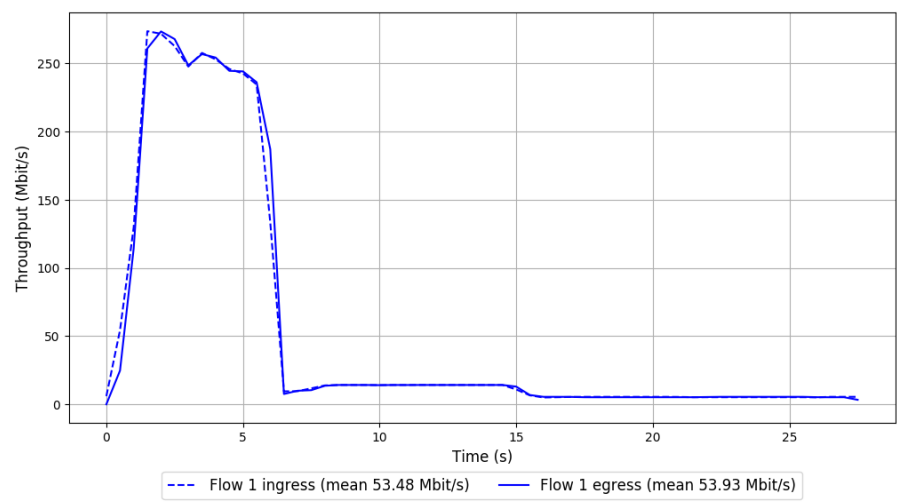
-- Flow 1:

Average throughput: 53.93 Mbit/s

95th percentile per-packet one-way delay: 113.059 ms

Loss rate: 0.09%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-15 21:28:12

End at: 2017-11-15 21:28:42

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.22 Mbit/s

95th percentile per-packet one-way delay: 113.131 ms

Loss rate: 0.59%

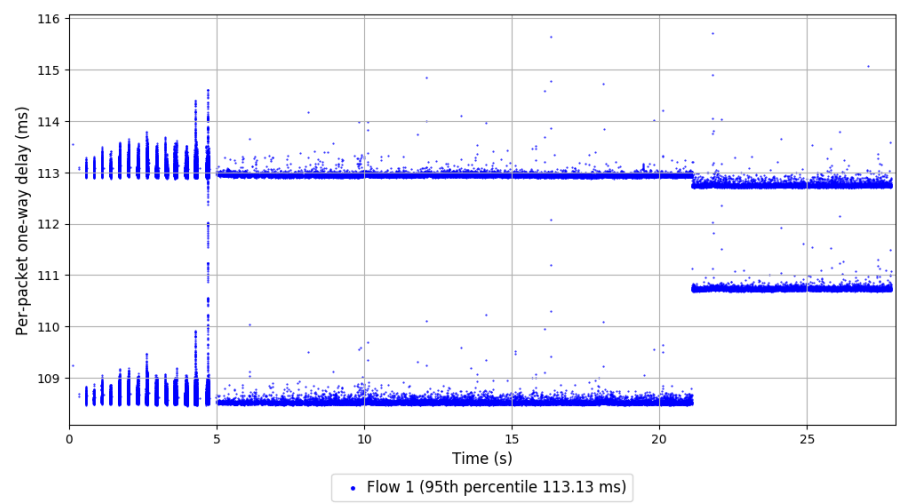
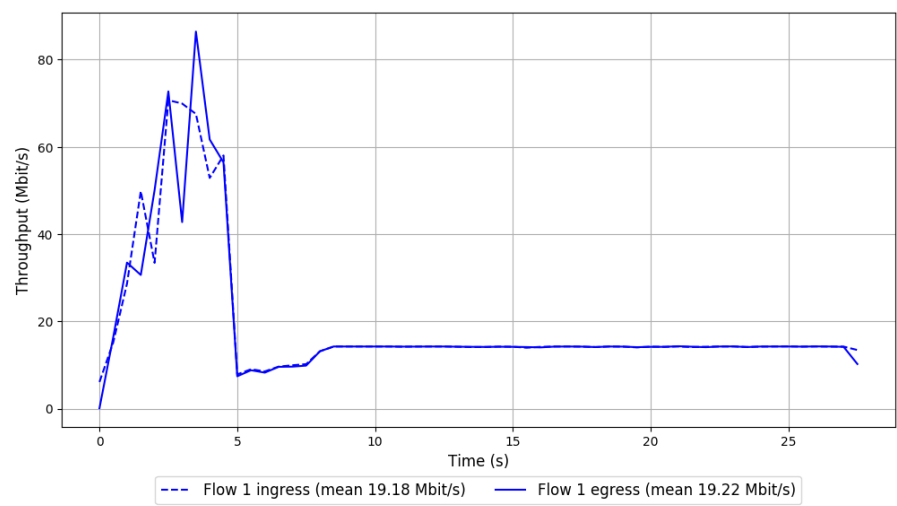
-- Flow 1:

Average throughput: 19.22 Mbit/s

95th percentile per-packet one-way delay: 113.131 ms

Loss rate: 0.59%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-15 21:39:07

End at: 2017-11-15 21:39:37

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.77 Mbit/s

95th percentile per-packet one-way delay: 113.137 ms

Loss rate: 3.85%

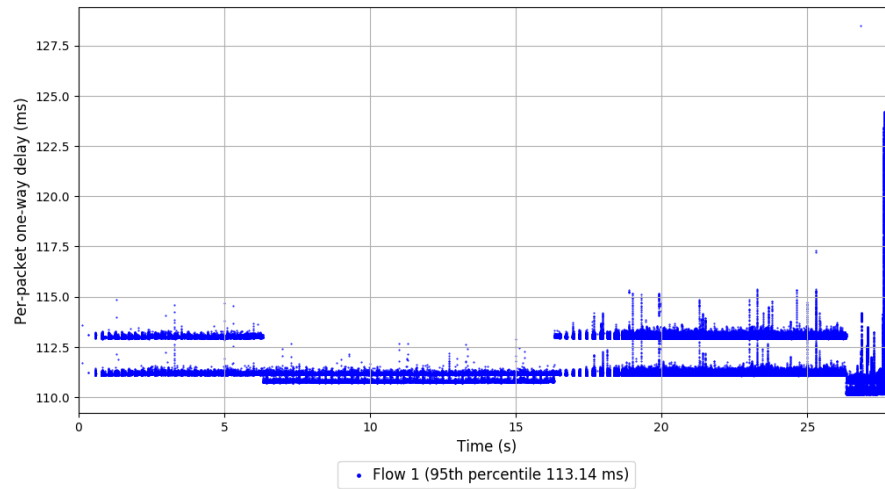
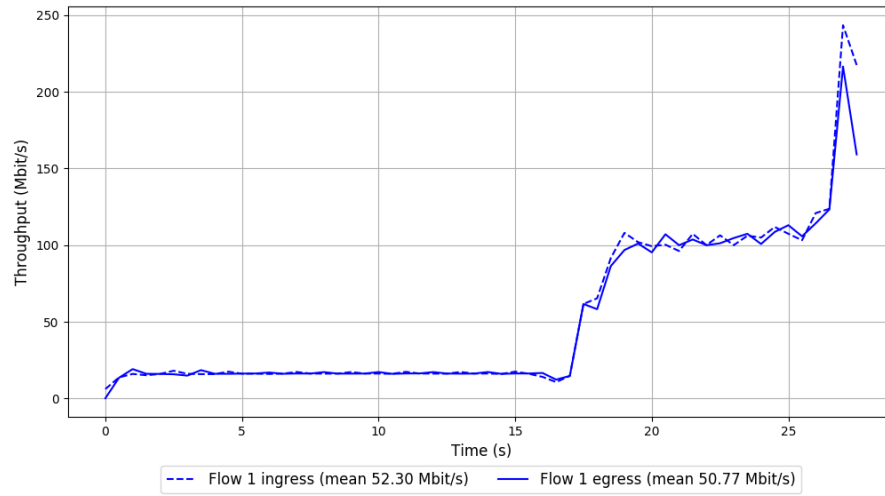
-- Flow 1:

Average throughput: 50.77 Mbit/s

95th percentile per-packet one-way delay: 113.137 ms

Loss rate: 3.85%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-15 21:50:15

End at: 2017-11-15 21:50:45

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 168.13 Mbit/s

95th percentile per-packet one-way delay: 112.302 ms

Loss rate: 0.66%

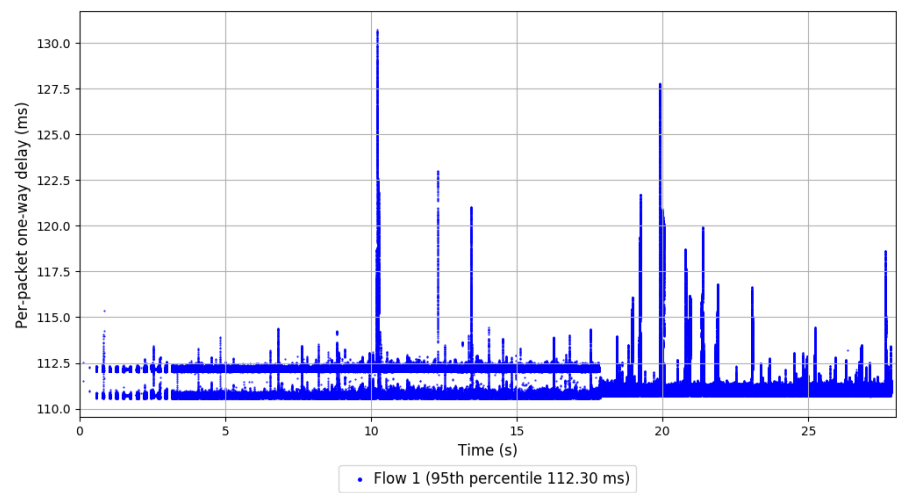
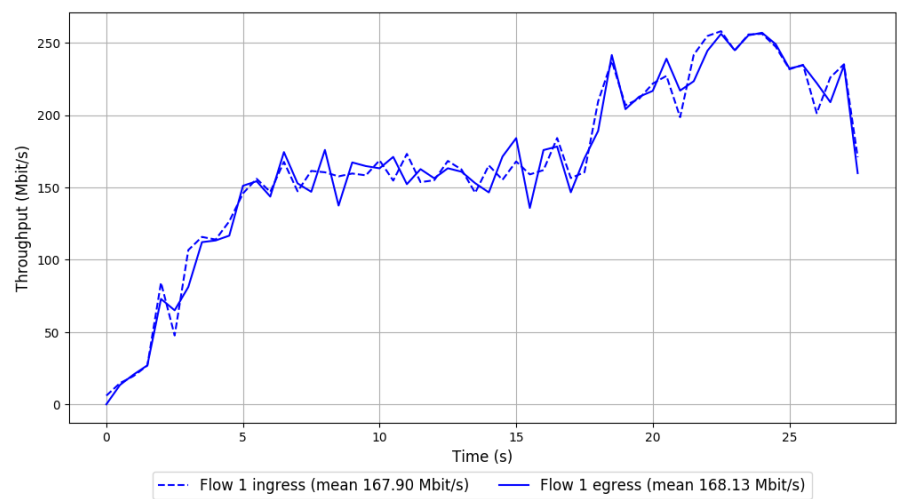
-- Flow 1:

Average throughput: 168.13 Mbit/s

95th percentile per-packet one-way delay: 112.302 ms

Loss rate: 0.66%

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

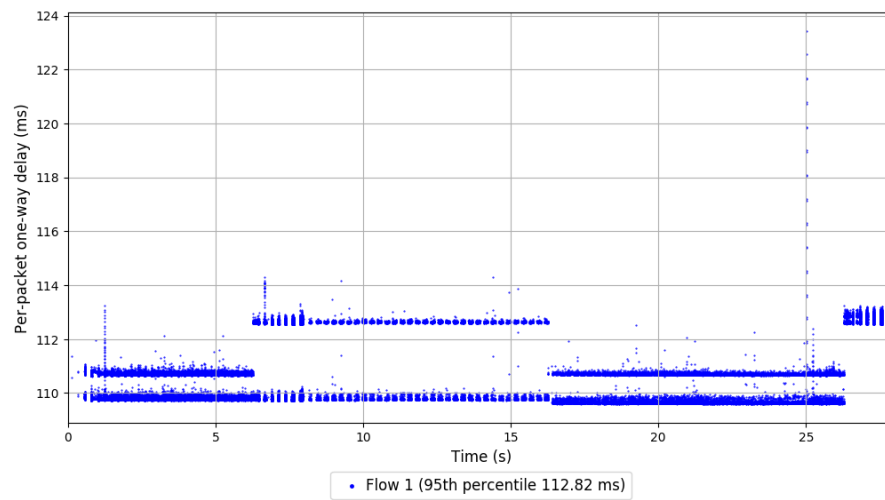
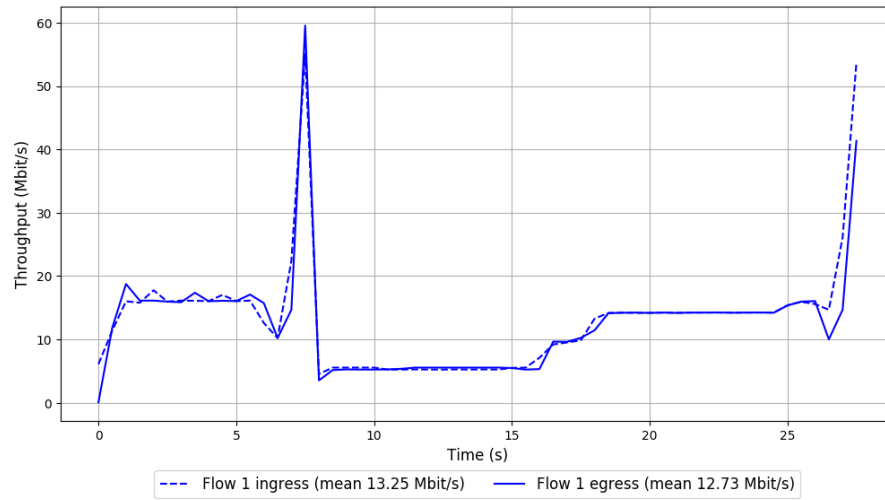


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-15 22:01:27
End at: 2017-11-15 22:01:57

# Below is generated by plot.py at 2017-11-16 00:24:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 112.824 ms
Loss rate: 4.63%
-- Flow 1:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 112.824 ms
Loss rate: 4.63%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-15 20:26:22

End at: 2017-11-15 20:26:52

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.47 Mbit/s

95th percentile per-packet one-way delay: 114.642 ms

Loss rate: 0.31%

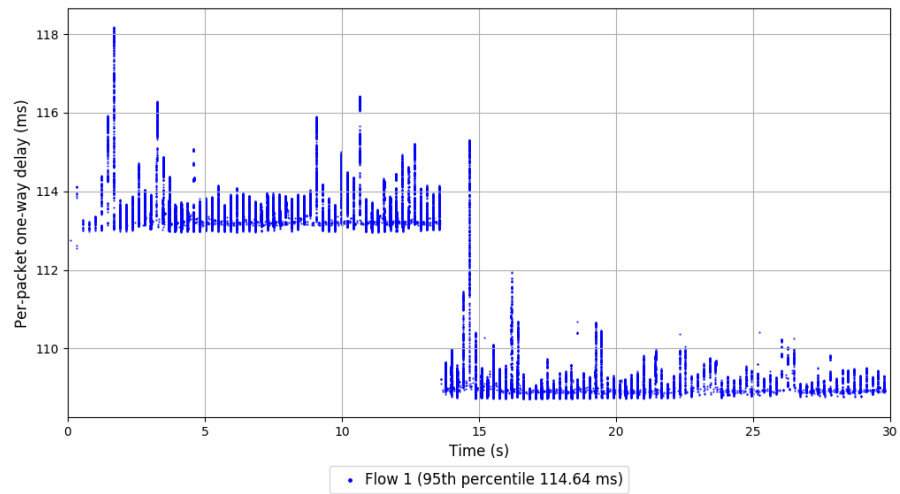
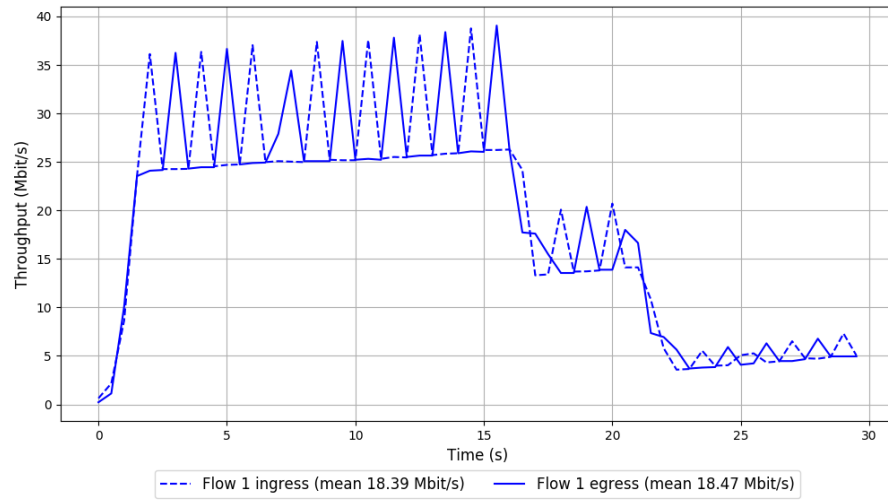
-- Flow 1:

Average throughput: 18.47 Mbit/s

95th percentile per-packet one-way delay: 114.642 ms

Loss rate: 0.31%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-15 20:37:17

End at: 2017-11-15 20:37:47

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.41 Mbit/s

95th percentile per-packet one-way delay: 113.809 ms

Loss rate: 0.31%

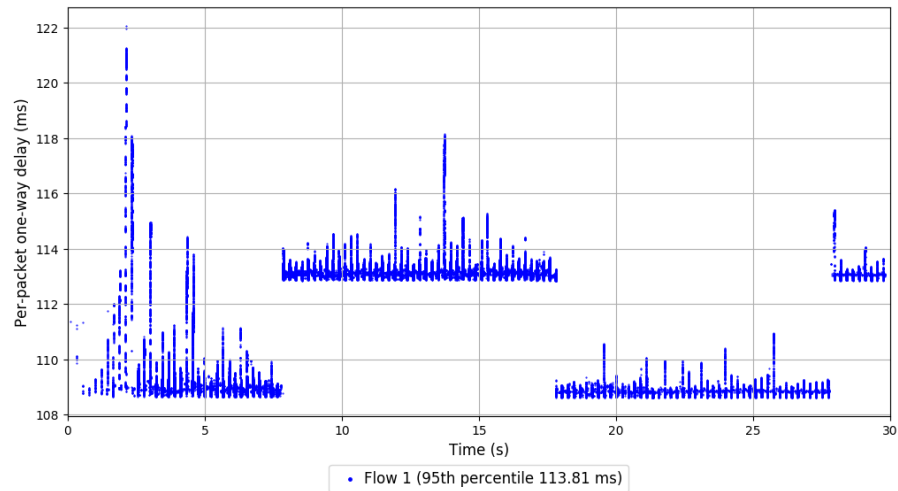
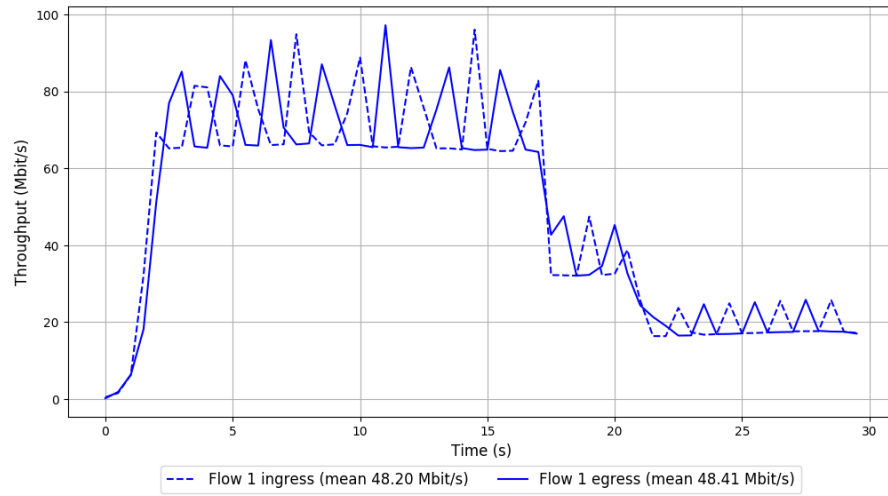
-- Flow 1:

Average throughput: 48.41 Mbit/s

95th percentile per-packet one-way delay: 113.809 ms

Loss rate: 0.31%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-15 20:48:23

End at: 2017-11-15 20:48:53

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.14 Mbit/s

95th percentile per-packet one-way delay: 113.494 ms

Loss rate: 0.55%

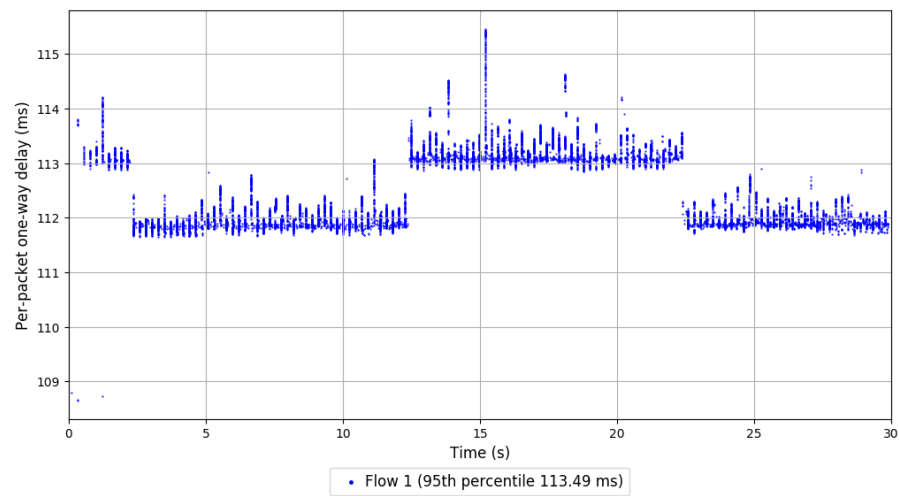
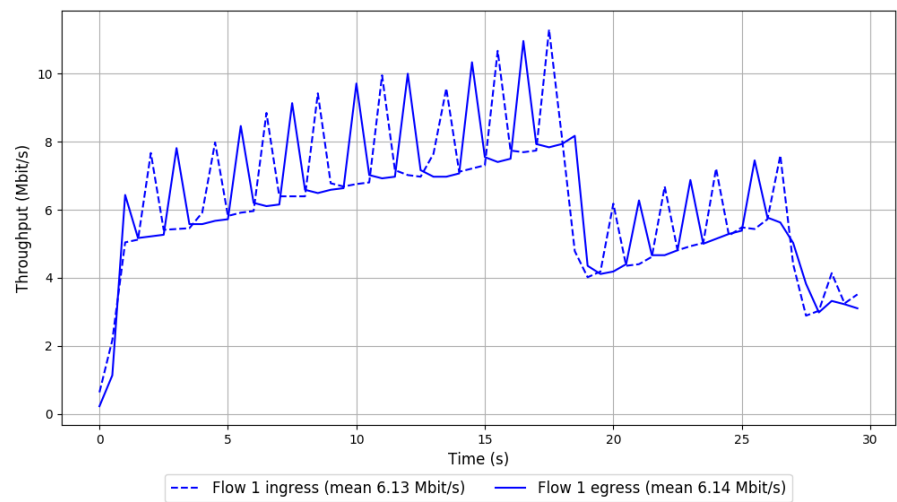
-- Flow 1:

Average throughput: 6.14 Mbit/s

95th percentile per-packet one-way delay: 113.494 ms

Loss rate: 0.55%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-15 20:59:26

End at: 2017-11-15 20:59:56

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.06 Mbit/s

95th percentile per-packet one-way delay: 113.630 ms

Loss rate: 0.71%

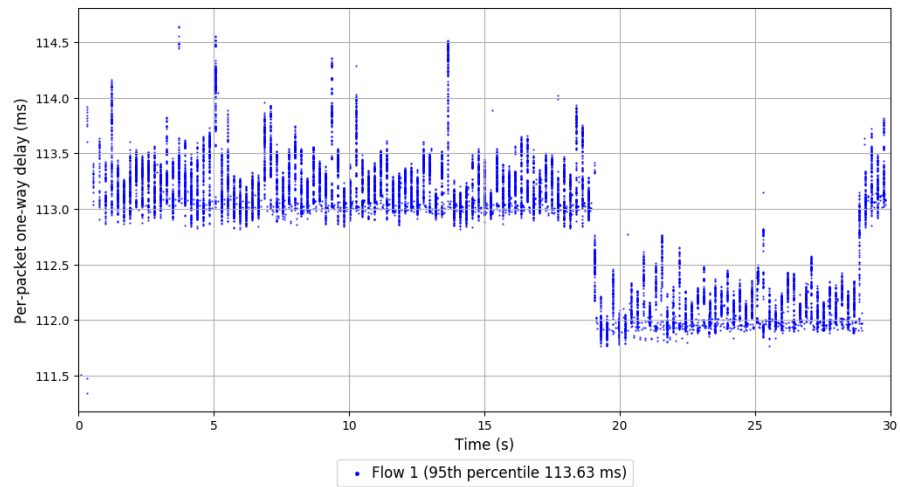
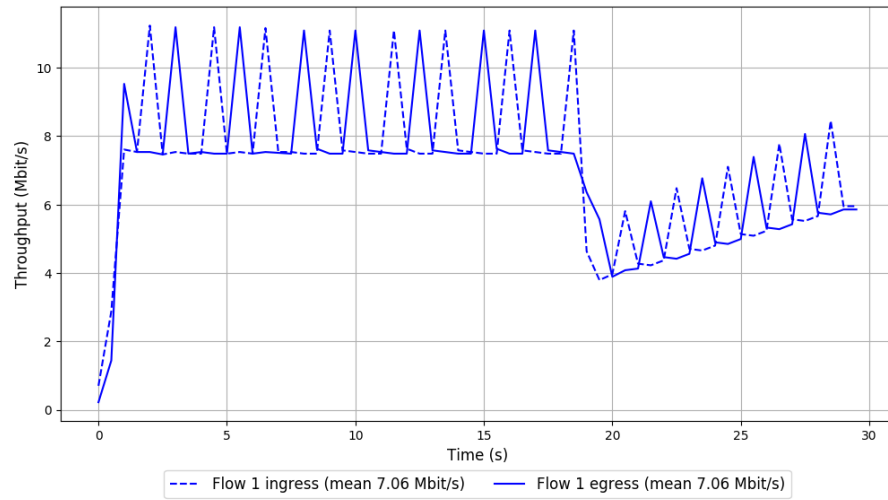
-- Flow 1:

Average throughput: 7.06 Mbit/s

95th percentile per-packet one-way delay: 113.630 ms

Loss rate: 0.71%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-15 21:10:38

End at: 2017-11-15 21:11:08

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.69 Mbit/s

95th percentile per-packet one-way delay: 113.984 ms

Loss rate: 0.85%

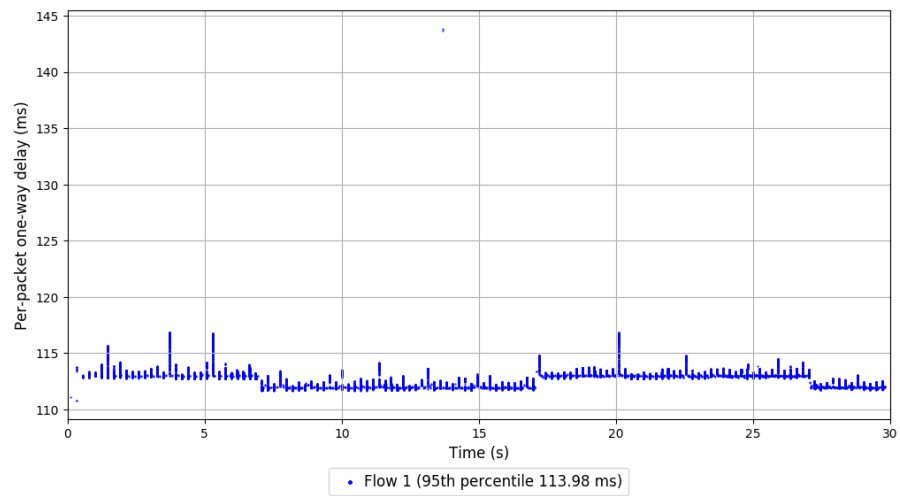
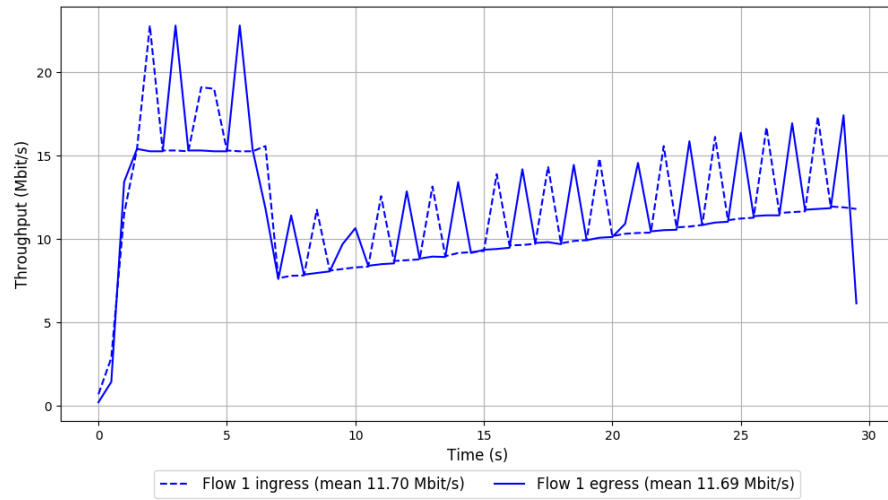
-- Flow 1:

Average throughput: 11.69 Mbit/s

95th percentile per-packet one-way delay: 113.984 ms

Loss rate: 0.85%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-15 21:21:44

End at: 2017-11-15 21:22:14

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.07 Mbit/s

95th percentile per-packet one-way delay: 114.463 ms

Loss rate: 0.36%

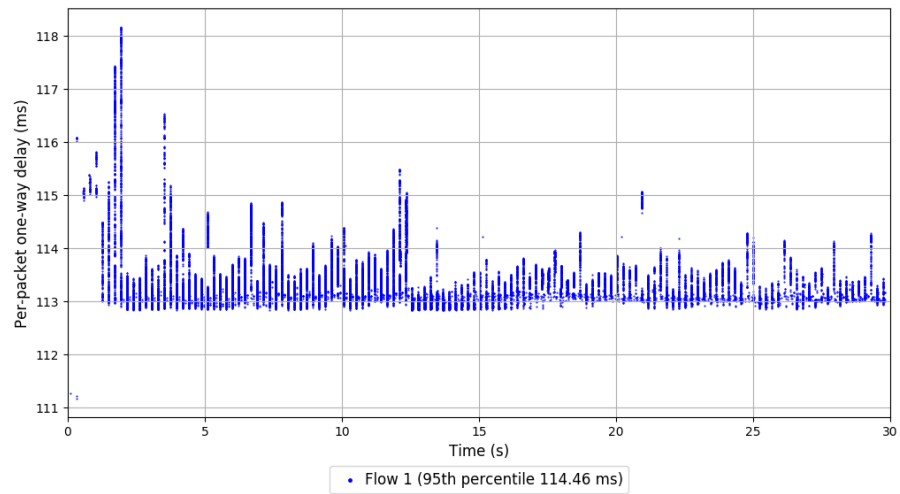
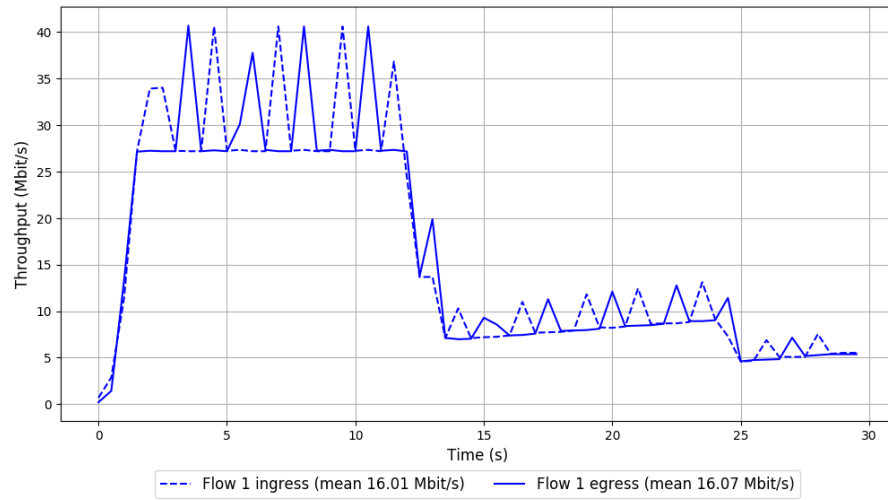
-- Flow 1:

Average throughput: 16.07 Mbit/s

95th percentile per-packet one-way delay: 114.463 ms

Loss rate: 0.36%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-15 21:32:42

End at: 2017-11-15 21:33:12

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 115.478 ms

Loss rate: 0.68%

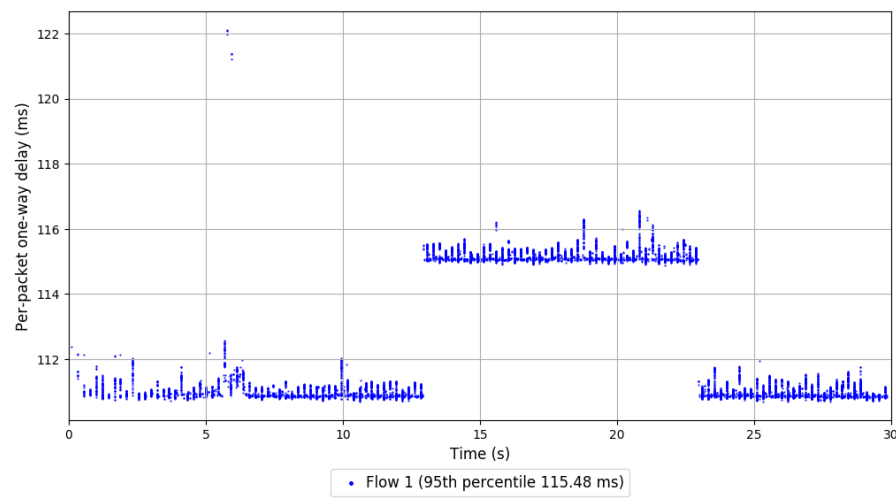
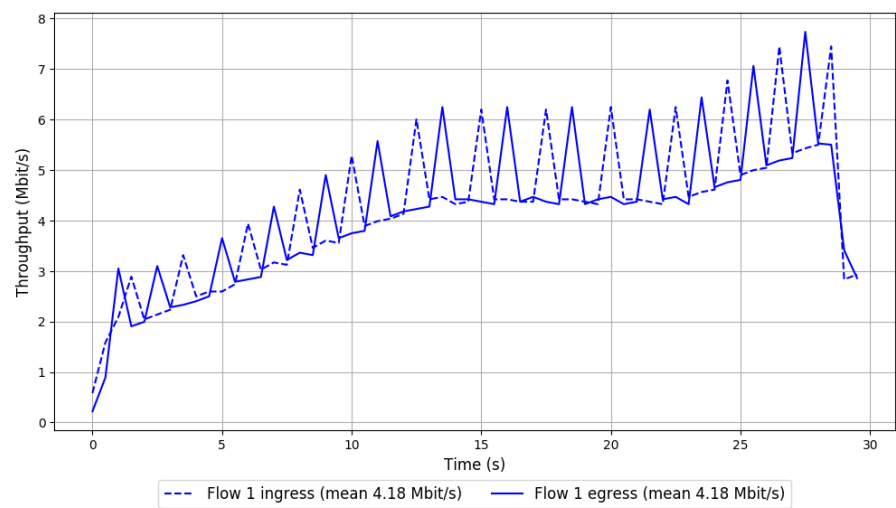
-- Flow 1:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 115.478 ms

Loss rate: 0.68%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-15 21:43:42

End at: 2017-11-15 21:44:12

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.17 Mbit/s

95th percentile per-packet one-way delay: 114.855 ms

Loss rate: 0.37%

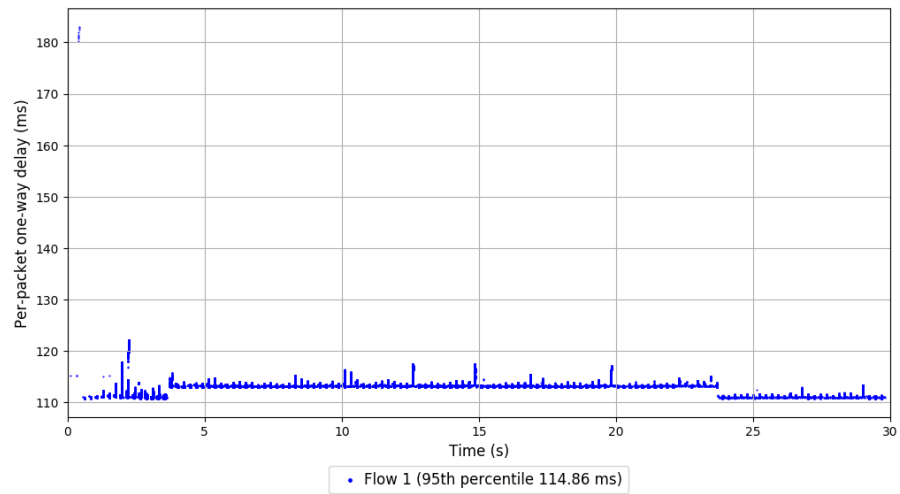
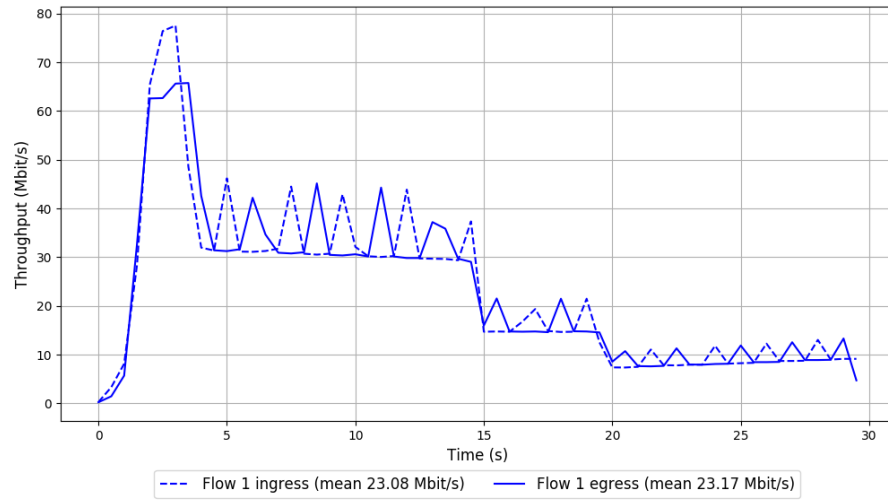
-- Flow 1:

Average throughput: 23.17 Mbit/s

95th percentile per-packet one-way delay: 114.855 ms

Loss rate: 0.37%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-15 21:55:03

End at: 2017-11-15 21:55:33

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.09 Mbit/s

95th percentile per-packet one-way delay: 113.311 ms

Loss rate: 0.89%

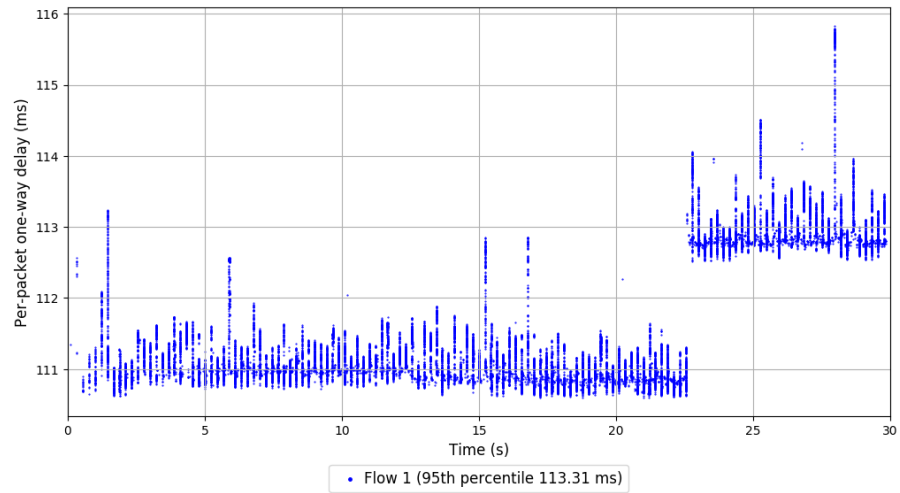
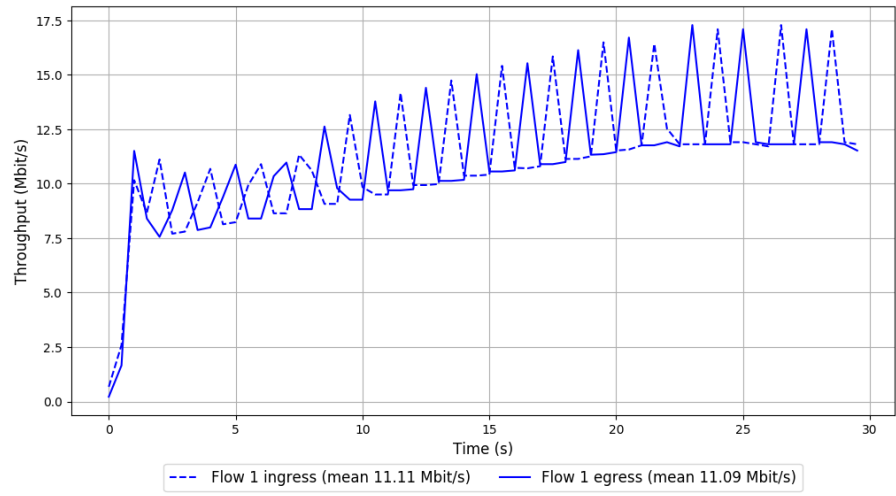
-- Flow 1:

Average throughput: 11.09 Mbit/s

95th percentile per-packet one-way delay: 113.311 ms

Loss rate: 0.89%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-15 22:05:57

End at: 2017-11-15 22:06:27

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.50 Mbit/s

95th percentile per-packet one-way delay: 114.062 ms

Loss rate: 0.71%

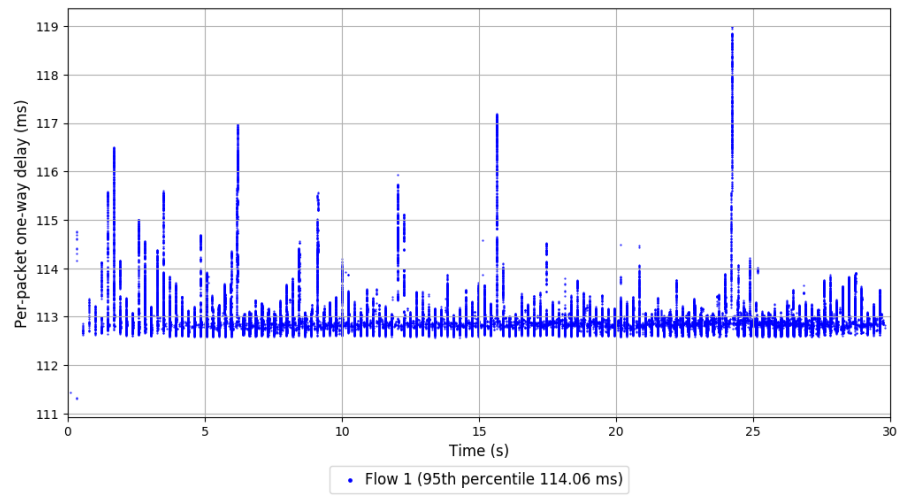
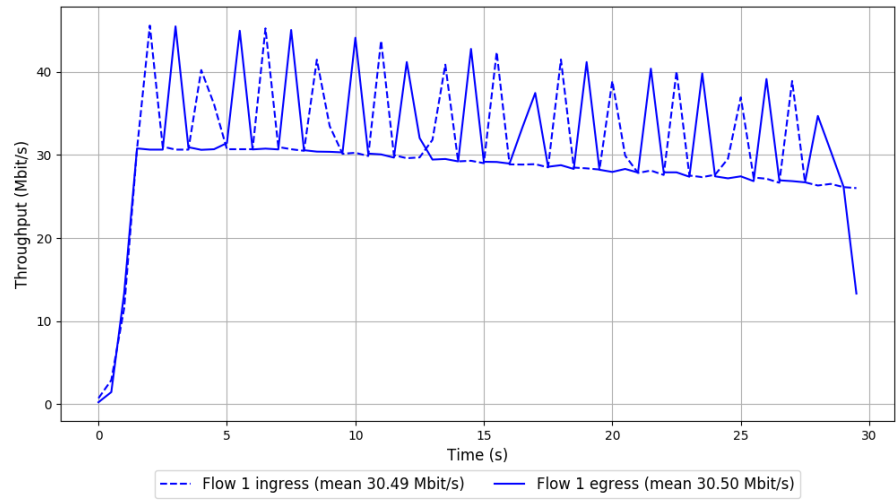
-- Flow 1:

Average throughput: 30.50 Mbit/s

95th percentile per-packet one-way delay: 114.062 ms

Loss rate: 0.71%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-11-15 20:17:42

End at: 2017-11-15 20:18:12

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.76 Mbit/s

95th percentile per-packet one-way delay: 221.240 ms

Loss rate: 3.02%

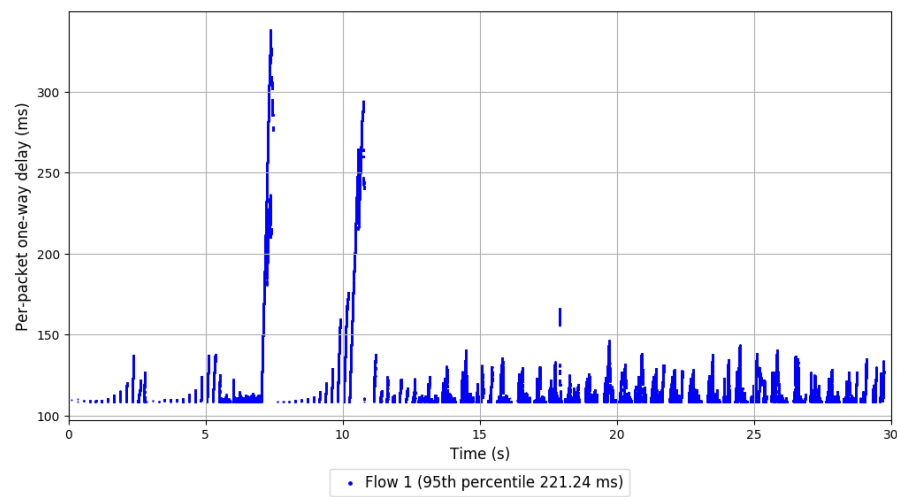
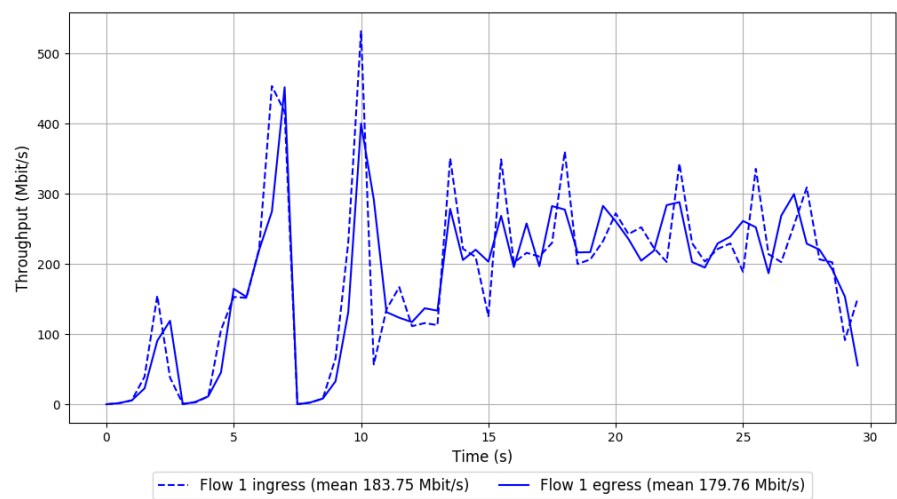
-- Flow 1:

Average throughput: 179.76 Mbit/s

95th percentile per-packet one-way delay: 221.240 ms

Loss rate: 3.02%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-15 20:28:38

End at: 2017-11-15 20:29:08

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 164.56 Mbit/s

95th percentile per-packet one-way delay: 168.377 ms

Loss rate: 0.52%

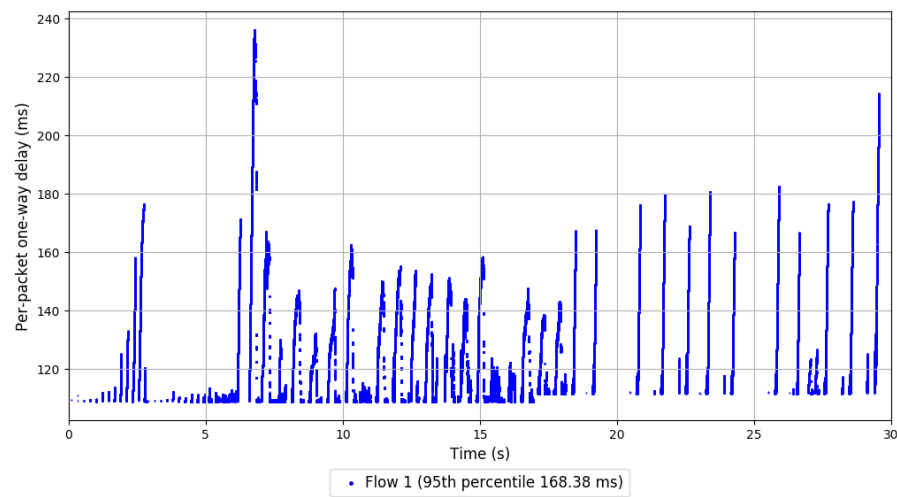
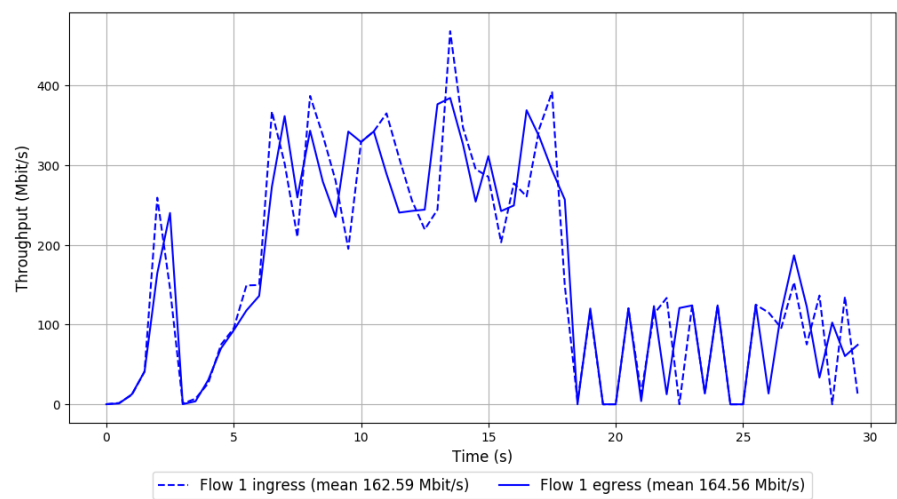
-- Flow 1:

Average throughput: 164.56 Mbit/s

95th percentile per-packet one-way delay: 168.377 ms

Loss rate: 0.52%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-15 20:39:36

End at: 2017-11-15 20:40:06

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.78 Mbit/s

95th percentile per-packet one-way delay: 133.498 ms

Loss rate: 2.48%

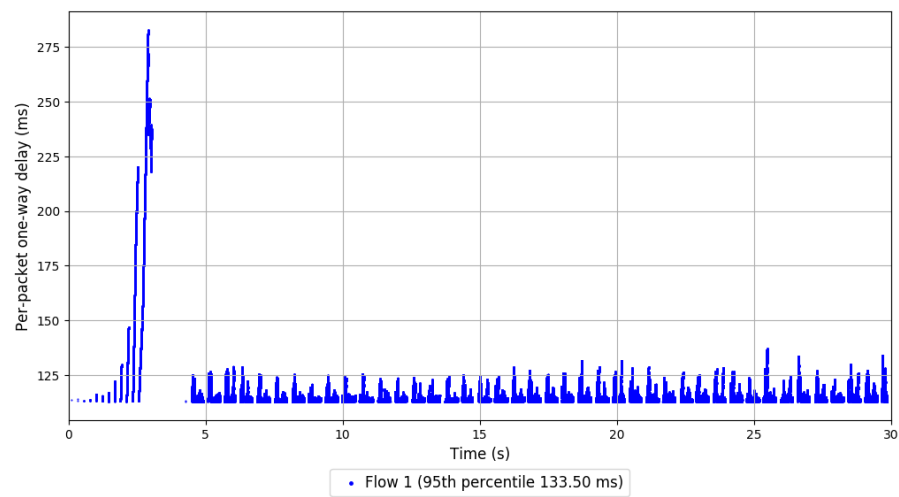
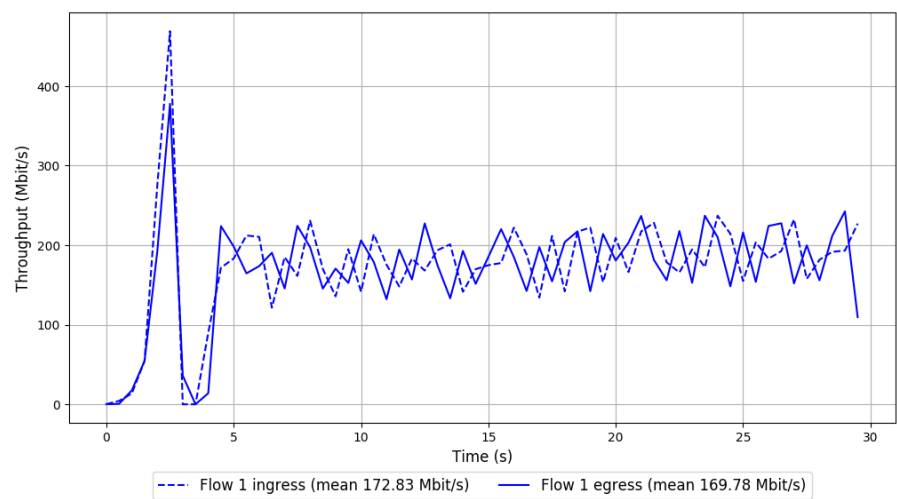
-- Flow 1:

Average throughput: 169.78 Mbit/s

95th percentile per-packet one-way delay: 133.498 ms

Loss rate: 2.48%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-15 20:50:39

End at: 2017-11-15 20:51:09

Below is generated by plot.py at 2017-11-16 00:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.78 Mbit/s

95th percentile per-packet one-way delay: 137.579 ms

Loss rate: 0.05%

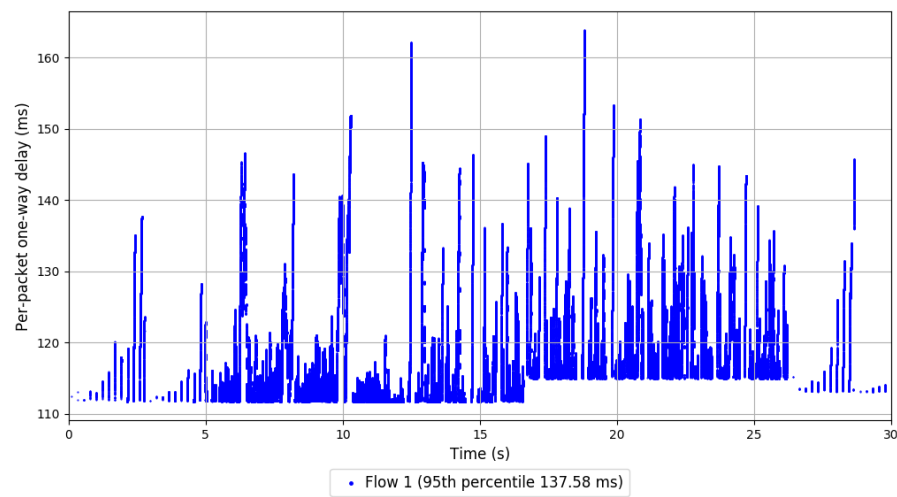
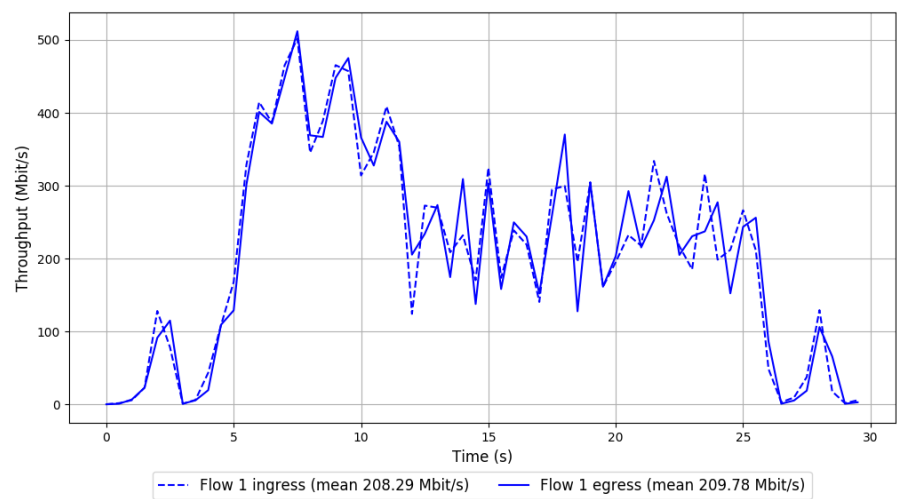
-- Flow 1:

Average throughput: 209.78 Mbit/s

95th percentile per-packet one-way delay: 137.579 ms

Loss rate: 0.05%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-15 21:01:42

End at: 2017-11-15 21:02:12

Below is generated by plot.py at 2017-11-16 00:25:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 282.89 Mbit/s

95th percentile per-packet one-way delay: 281.784 ms

Loss rate: 13.97%

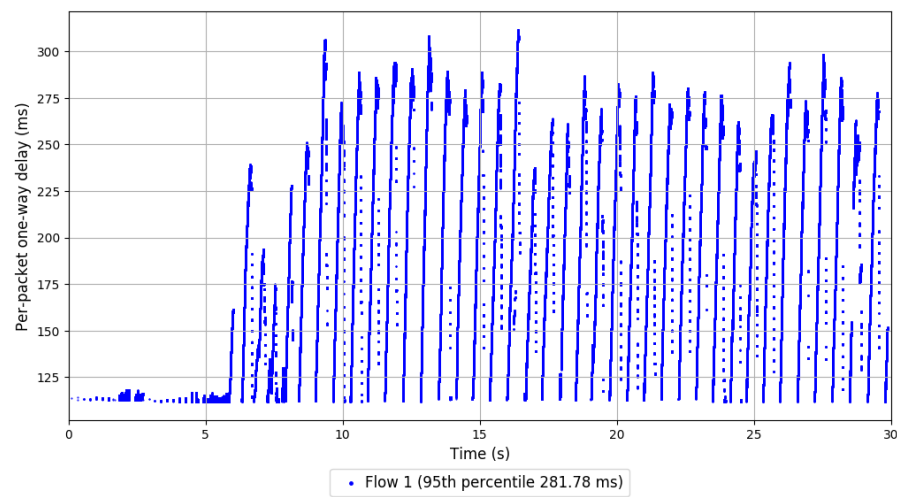
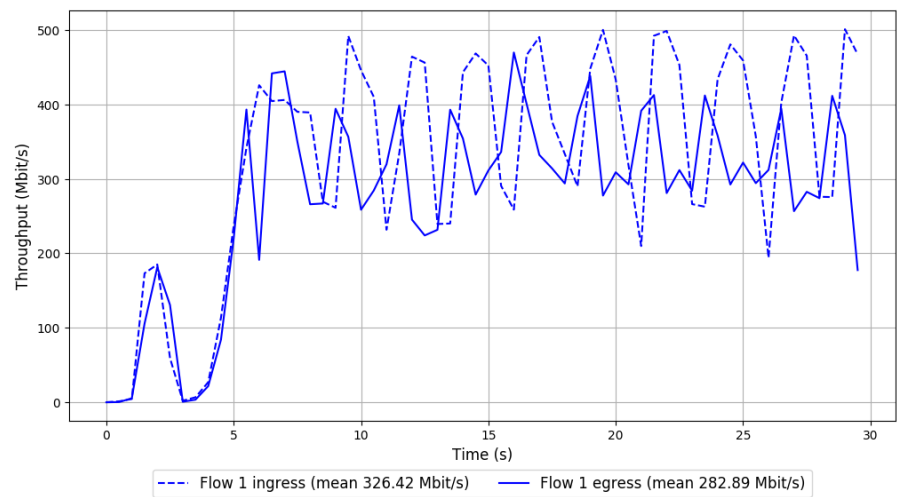
-- Flow 1:

Average throughput: 282.89 Mbit/s

95th percentile per-packet one-way delay: 281.784 ms

Loss rate: 13.97%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-15 21:12:55

End at: 2017-11-15 21:13:25

Below is generated by plot.py at 2017-11-16 00:25:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 164.24 Mbit/s

95th percentile per-packet one-way delay: 131.295 ms

Loss rate: 1.17%

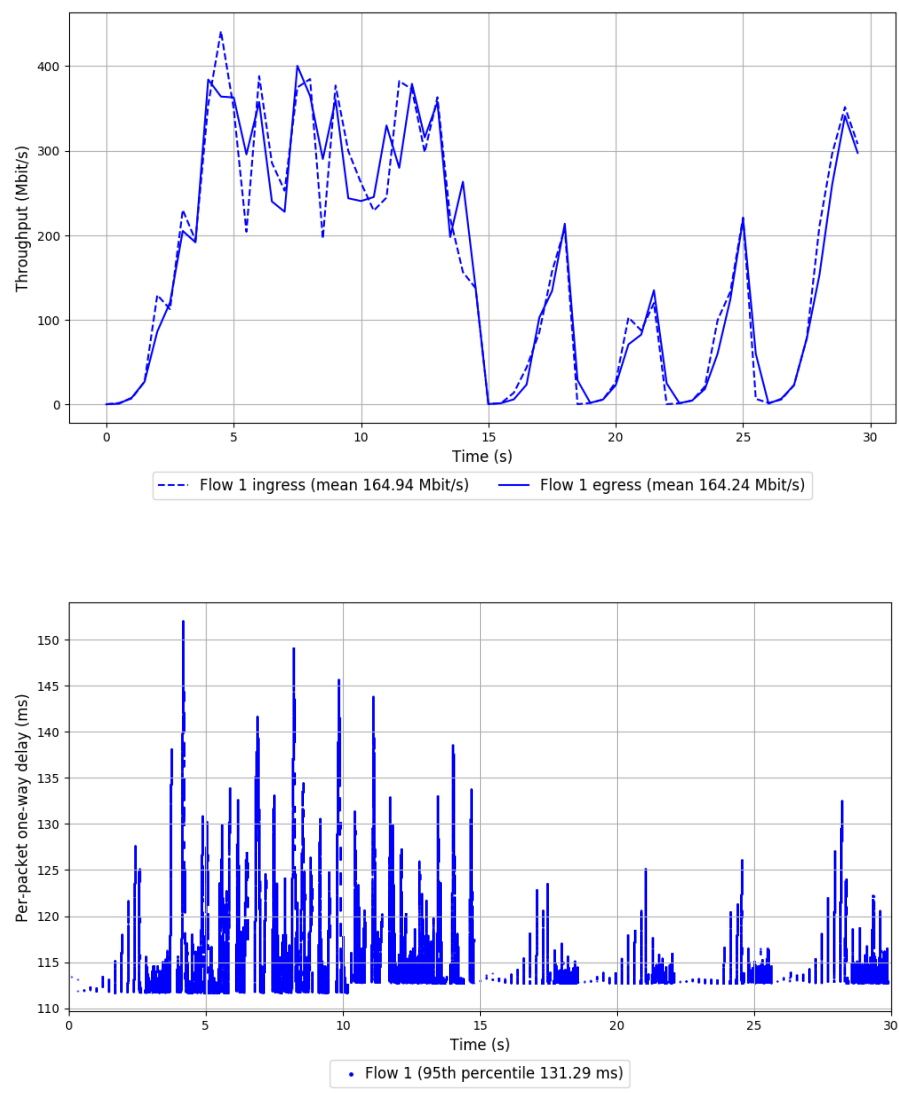
-- Flow 1:

Average throughput: 164.24 Mbit/s

95th percentile per-packet one-way delay: 131.295 ms

Loss rate: 1.17%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-15 21:24:01

End at: 2017-11-15 21:24:31

Below is generated by plot.py at 2017-11-16 00:25:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 162.58 Mbit/s

95th percentile per-packet one-way delay: 253.939 ms

Loss rate: 3.12%

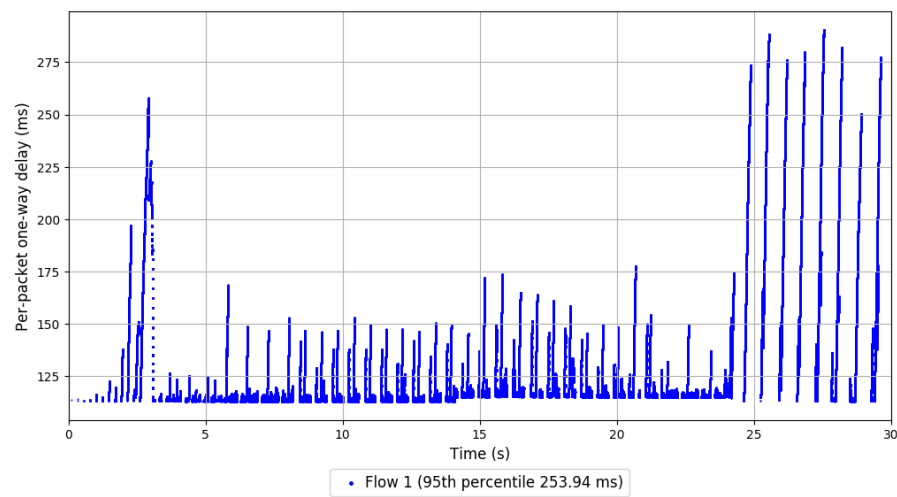
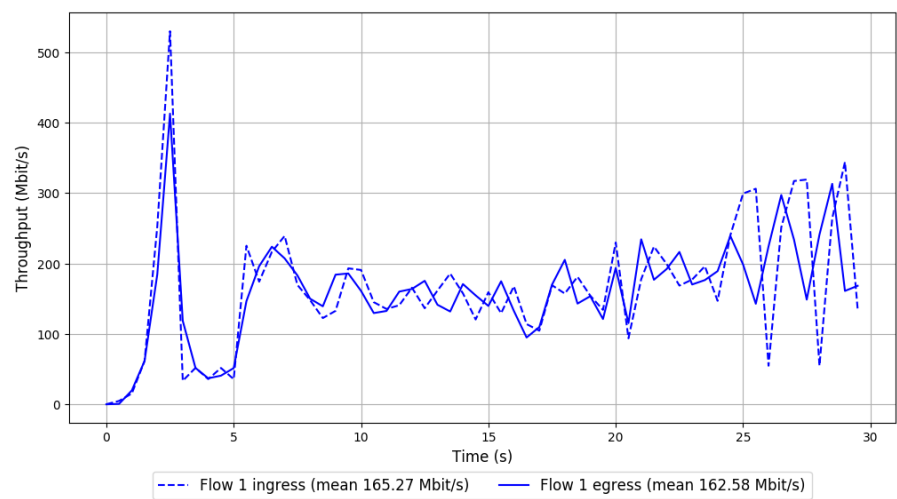
-- Flow 1:

Average throughput: 162.58 Mbit/s

95th percentile per-packet one-way delay: 253.939 ms

Loss rate: 3.12%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-15 21:34:58

End at: 2017-11-15 21:35:28

Below is generated by plot.py at 2017-11-16 00:25:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 127.31 Mbit/s

95th percentile per-packet one-way delay: 142.384 ms

Loss rate: 0.01%

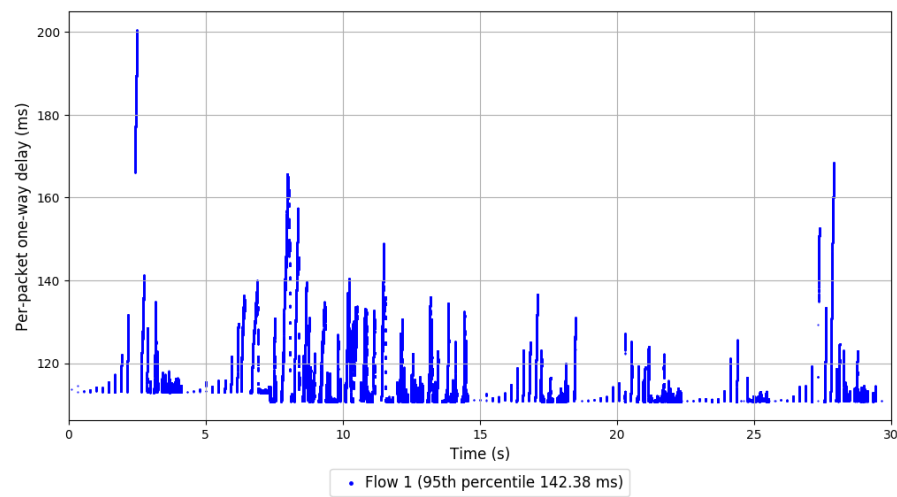
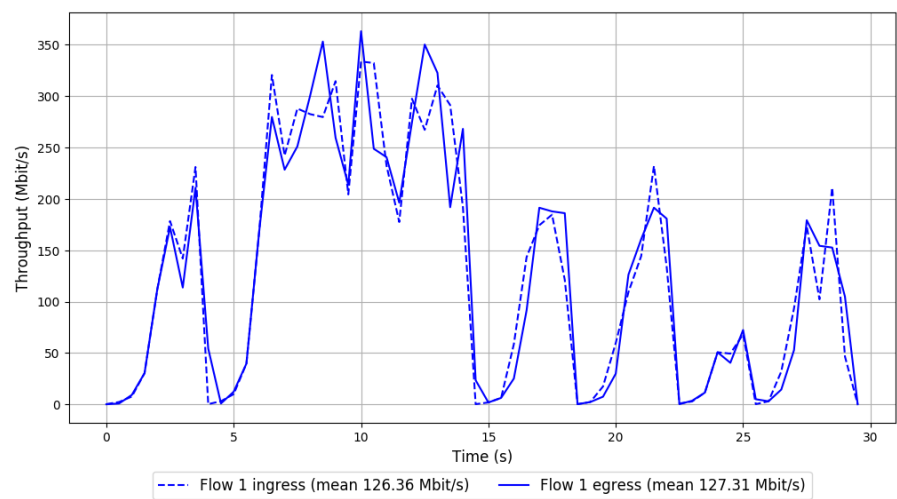
-- Flow 1:

Average throughput: 127.31 Mbit/s

95th percentile per-packet one-way delay: 142.384 ms

Loss rate: 0.01%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-15 21:45:58

End at: 2017-11-15 21:46:28

Below is generated by plot.py at 2017-11-16 00:26:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.46 Mbit/s

95th percentile per-packet one-way delay: 143.017 ms

Loss rate: 0.85%

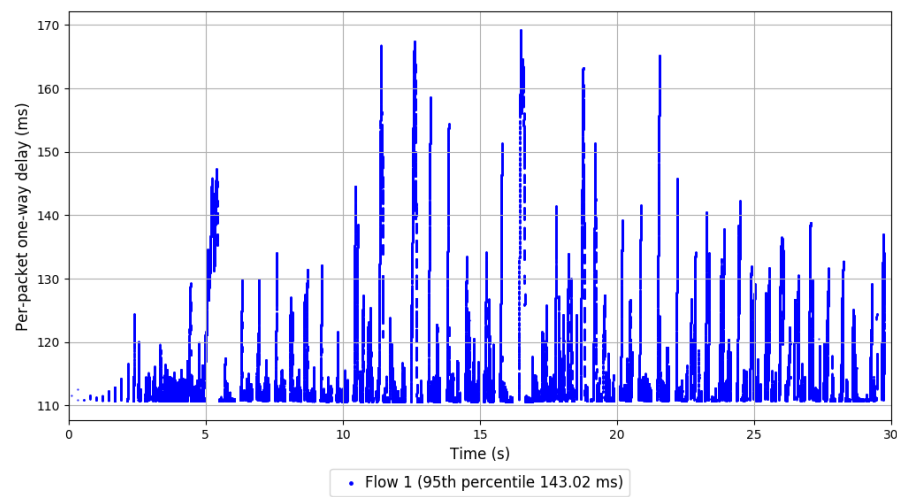
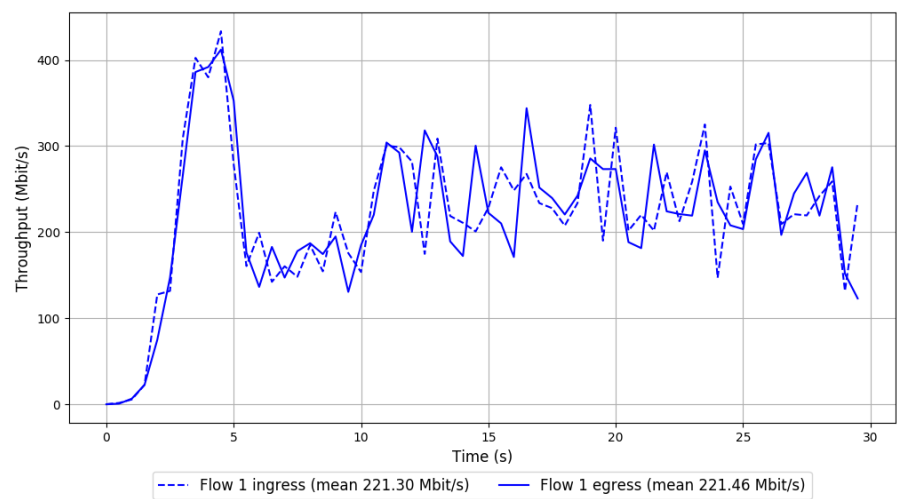
-- Flow 1:

Average throughput: 221.46 Mbit/s

95th percentile per-packet one-way delay: 143.017 ms

Loss rate: 0.85%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-15 21:57:19

End at: 2017-11-15 21:57:49

Below is generated by plot.py at 2017-11-16 00:26:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.95 Mbit/s

95th percentile per-packet one-way delay: 125.717 ms

Loss rate: 0.05%

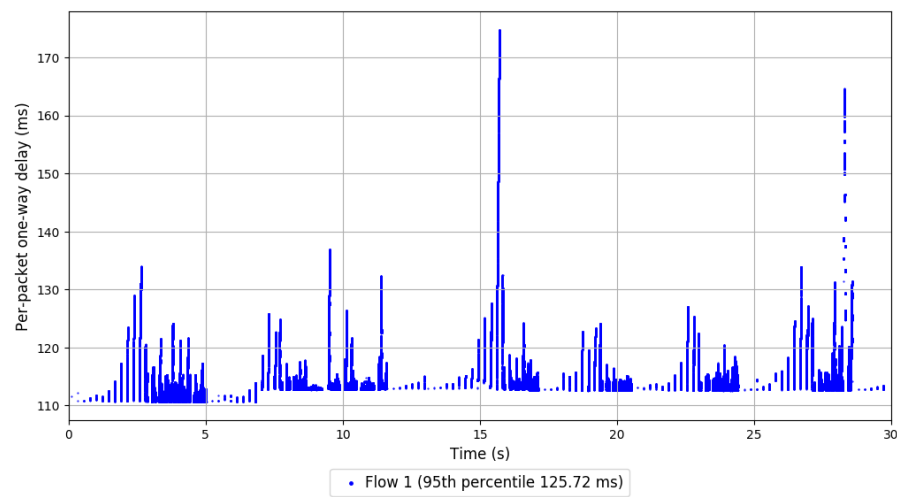
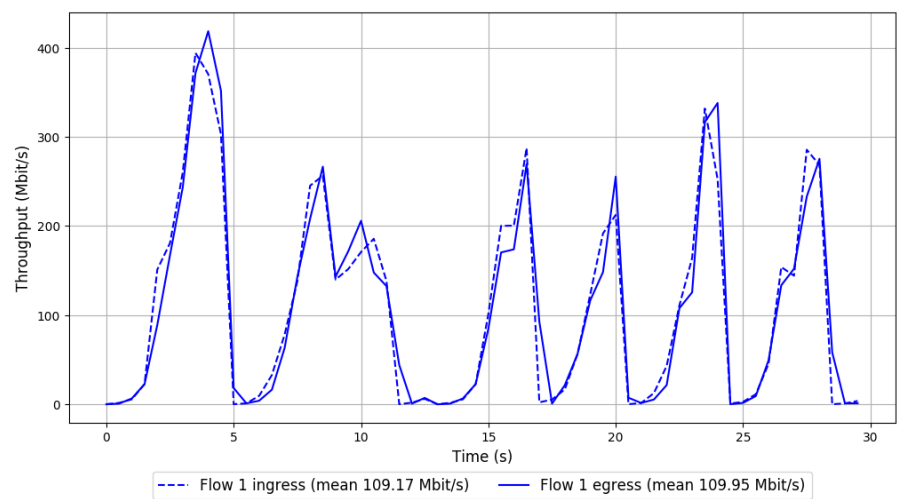
-- Flow 1:

Average throughput: 109.95 Mbit/s

95th percentile per-packet one-way delay: 125.717 ms

Loss rate: 0.05%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-11-15 20:25:33

End at: 2017-11-15 20:26:03

Below is generated by plot.py at 2017-11-16 00:26:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.38 Mbit/s

95th percentile per-packet one-way delay: 113.157 ms

Loss rate: 0.80%

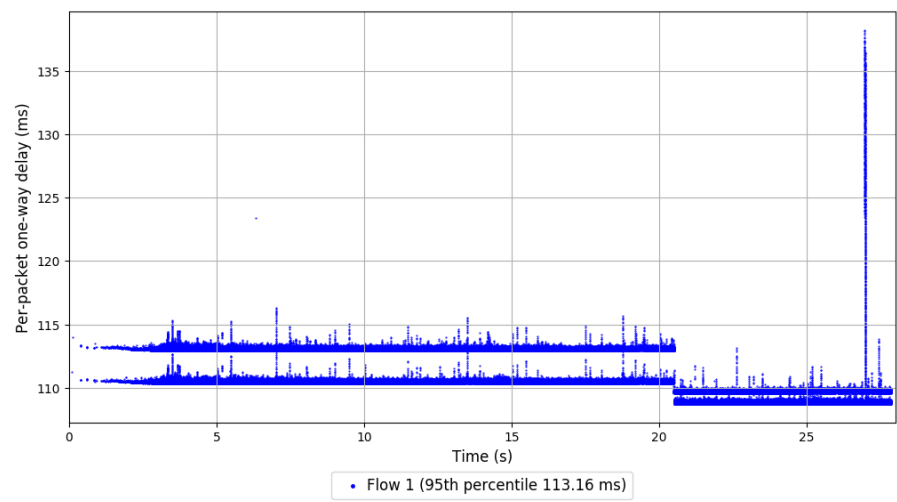
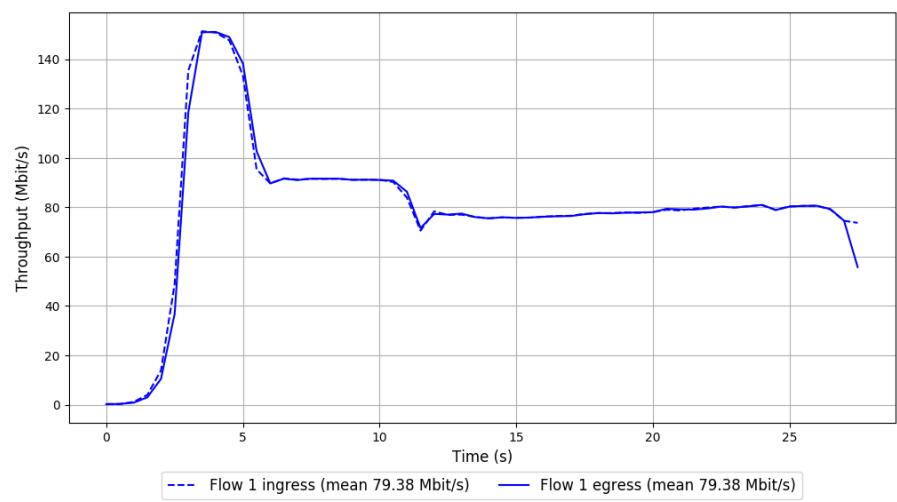
-- Flow 1:

Average throughput: 79.38 Mbit/s

95th percentile per-packet one-way delay: 113.157 ms

Loss rate: 0.80%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-15 20:36:32

End at: 2017-11-15 20:37:02

Below is generated by plot.py at 2017-11-16 00:26:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.94 Mbit/s

95th percentile per-packet one-way delay: 112.994 ms

Loss rate: 0.12%

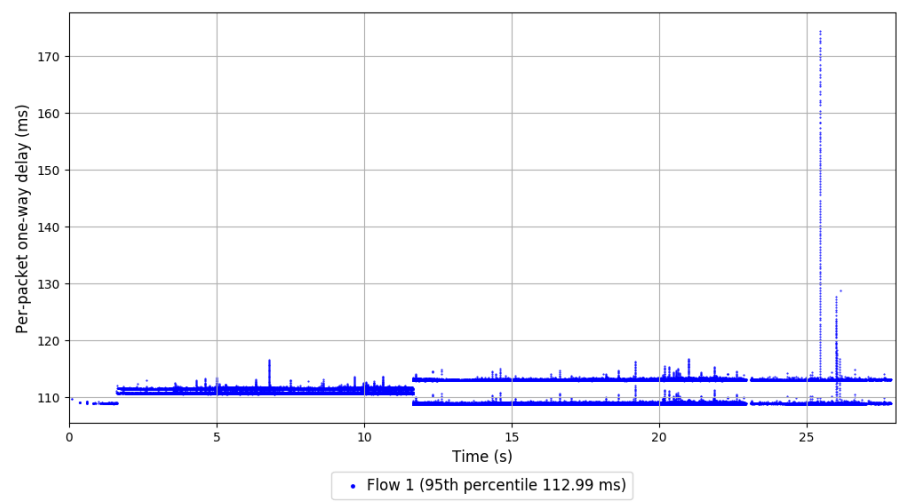
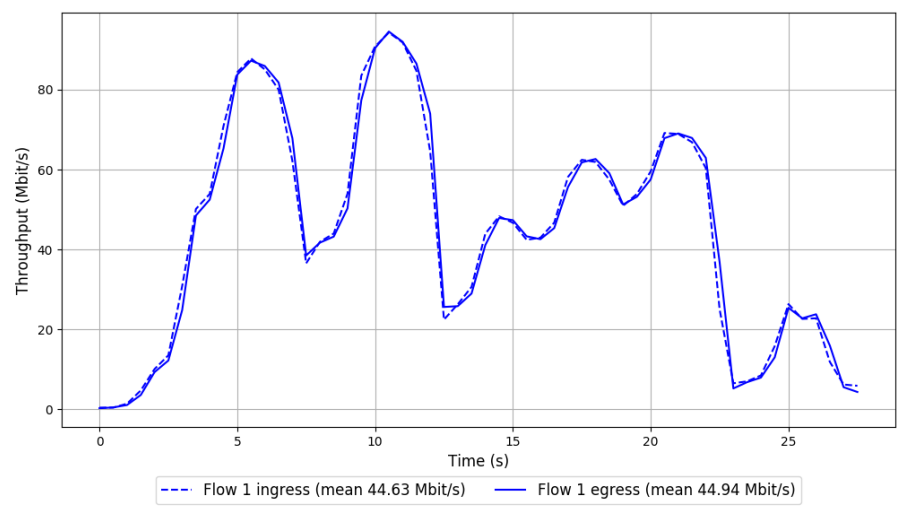
-- Flow 1:

Average throughput: 44.94 Mbit/s

95th percentile per-packet one-way delay: 112.994 ms

Loss rate: 0.12%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-15 20:47:34

End at: 2017-11-15 20:48:04

Below is generated by plot.py at 2017-11-16 00:26:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.15 Mbit/s

95th percentile per-packet one-way delay: 112.986 ms

Loss rate: 0.54%

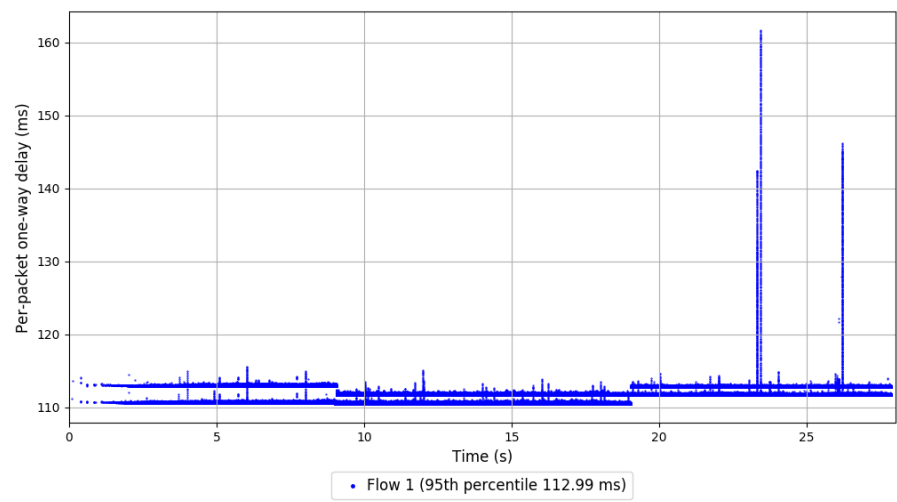
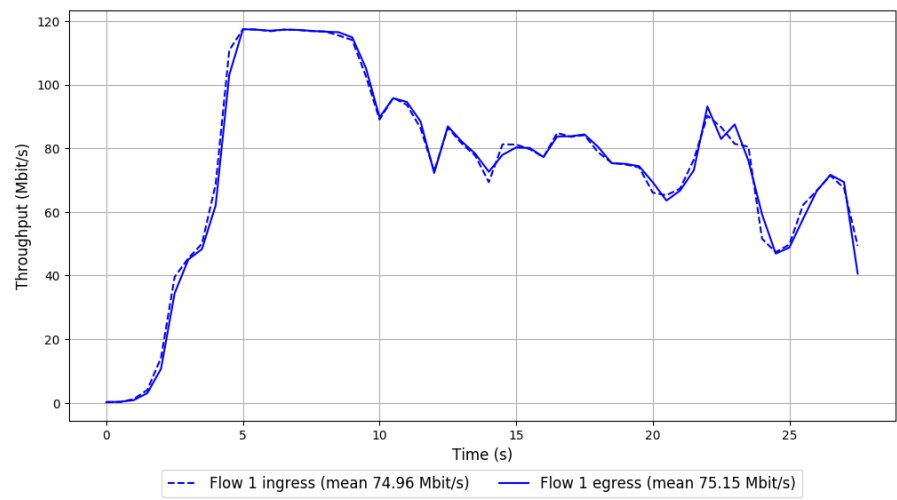
-- Flow 1:

Average throughput: 75.15 Mbit/s

95th percentile per-packet one-way delay: 112.986 ms

Loss rate: 0.54%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-15 20:58:37

End at: 2017-11-15 20:59:07

Below is generated by plot.py at 2017-11-16 00:26:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.87 Mbit/s

95th percentile per-packet one-way delay: 112.962 ms

Loss rate: 0.82%

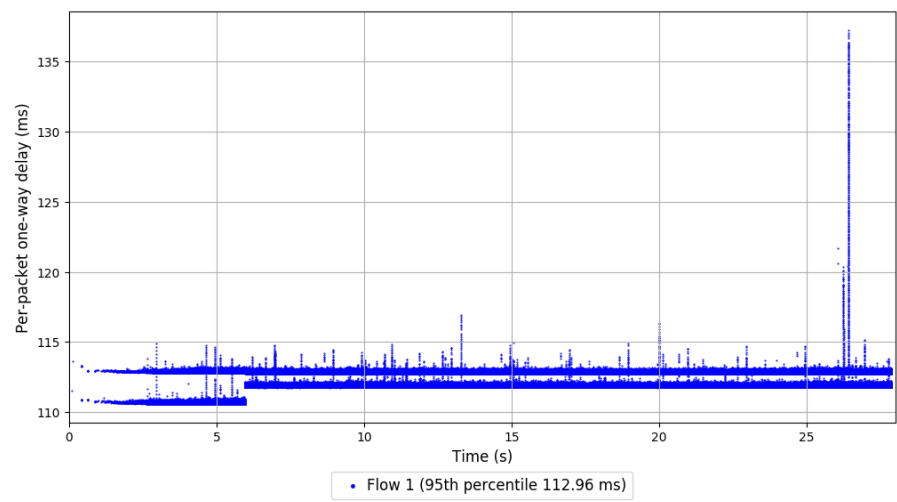
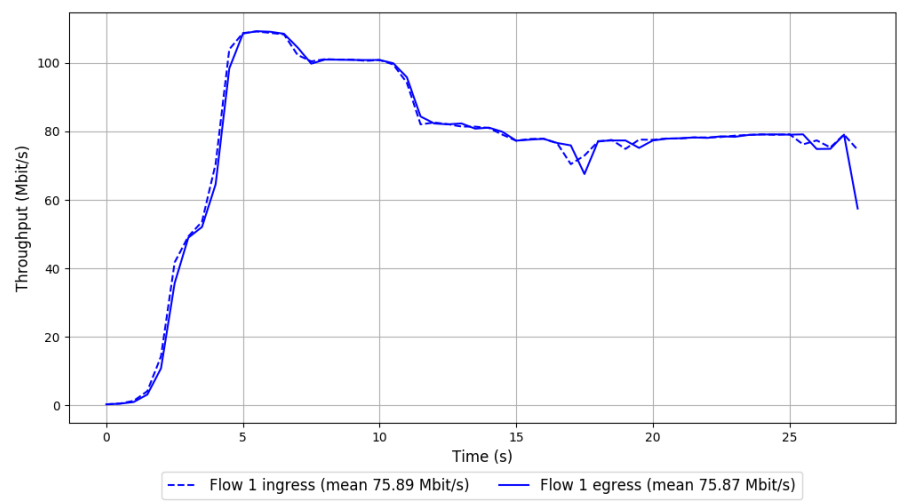
-- Flow 1:

Average throughput: 75.87 Mbit/s

95th percentile per-packet one-way delay: 112.962 ms

Loss rate: 0.82%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-15 21:09:49

End at: 2017-11-15 21:10:19

Below is generated by plot.py at 2017-11-16 00:26:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.17 Mbit/s

95th percentile per-packet one-way delay: 112.915 ms

Loss rate: 0.82%

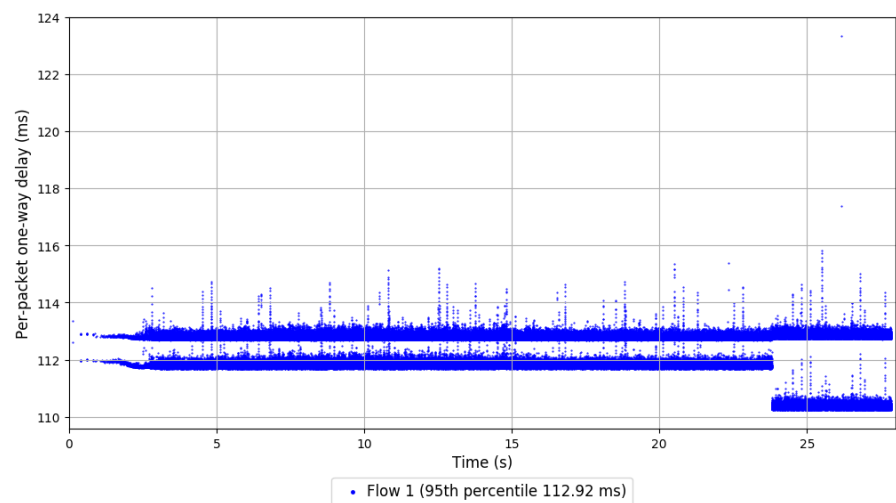
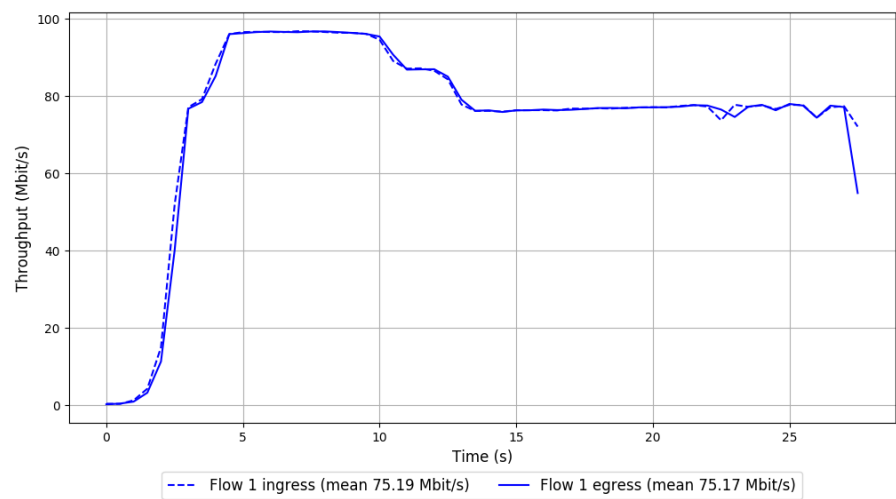
-- Flow 1:

Average throughput: 75.17 Mbit/s

95th percentile per-packet one-way delay: 112.915 ms

Loss rate: 0.82%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-15 21:20:55

End at: 2017-11-15 21:21:25

Below is generated by plot.py at 2017-11-16 00:26:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.20 Mbit/s

95th percentile per-packet one-way delay: 113.045 ms

Loss rate: 0.84%

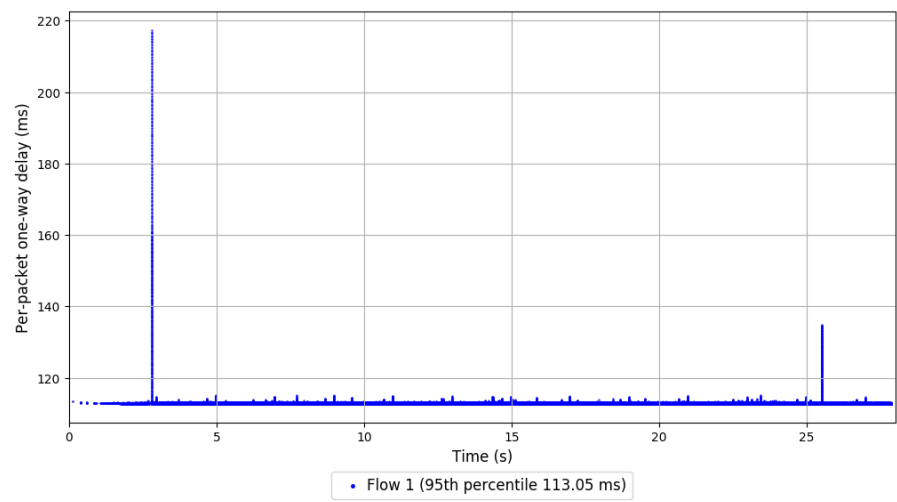
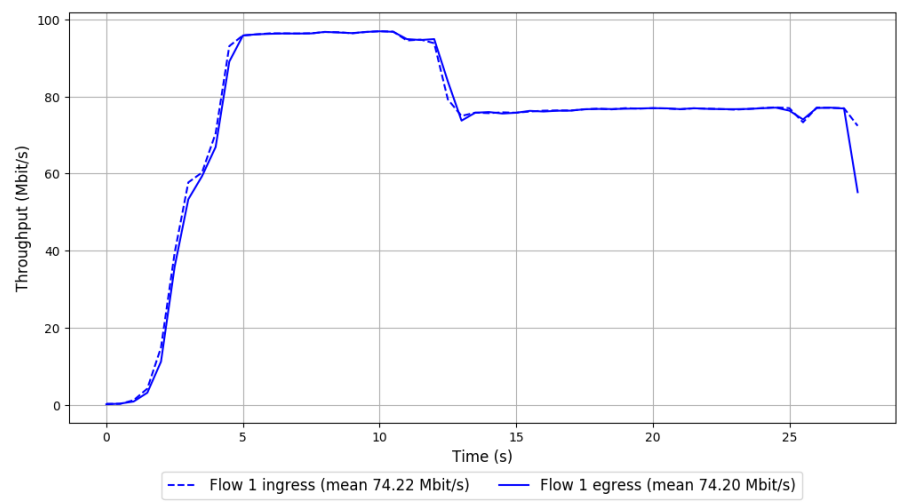
-- Flow 1:

Average throughput: 74.20 Mbit/s

95th percentile per-packet one-way delay: 113.045 ms

Loss rate: 0.84%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-15 21:31:56

End at: 2017-11-15 21:32:26

Below is generated by plot.py at 2017-11-16 00:27:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.77 Mbit/s

95th percentile per-packet one-way delay: 113.063 ms

Loss rate: 0.15%

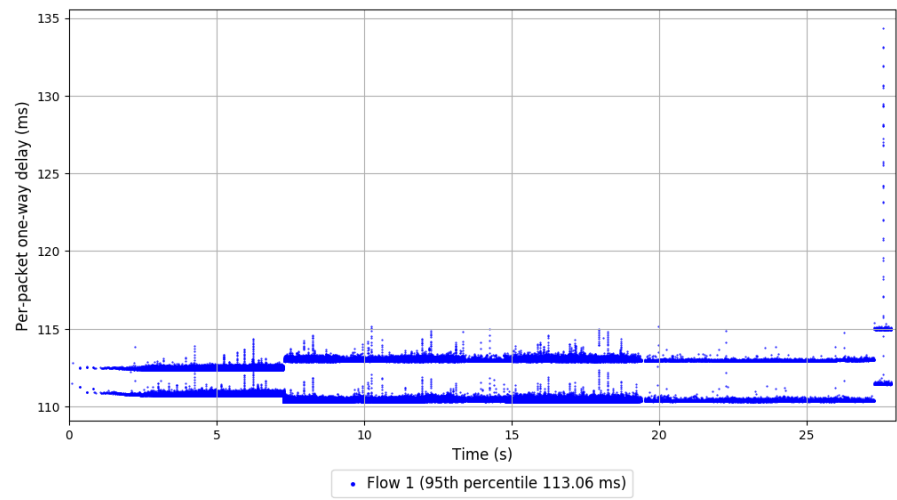
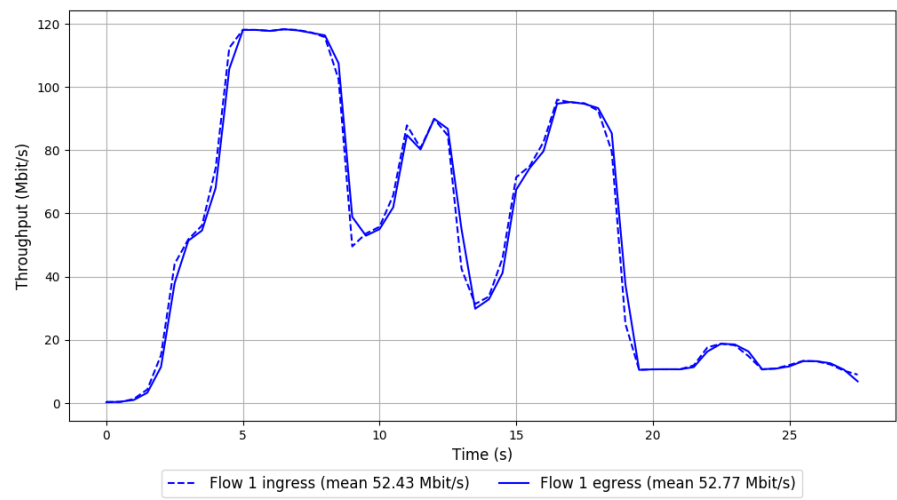
-- Flow 1:

Average throughput: 52.77 Mbit/s

95th percentile per-packet one-way delay: 113.063 ms

Loss rate: 0.15%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-15 21:42:54

End at: 2017-11-15 21:43:24

Below is generated by plot.py at 2017-11-16 00:27:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.85 Mbit/s

95th percentile per-packet one-way delay: 111.812 ms

Loss rate: 0.17%

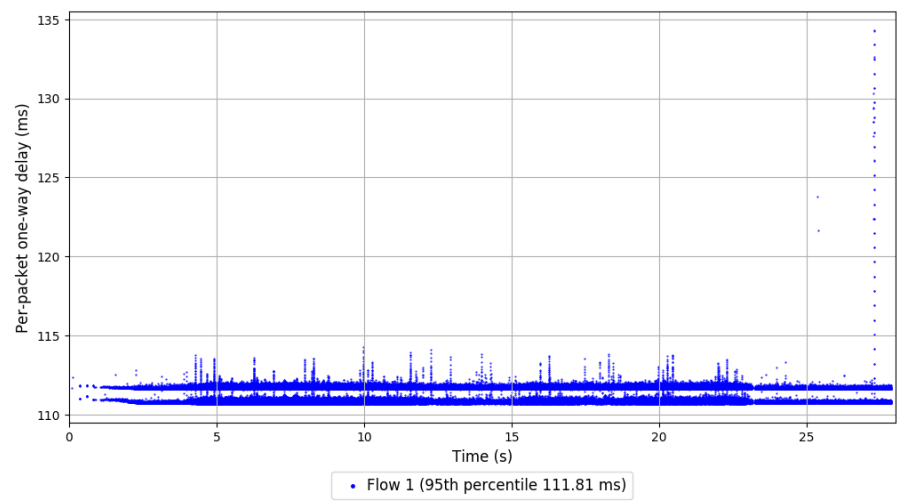
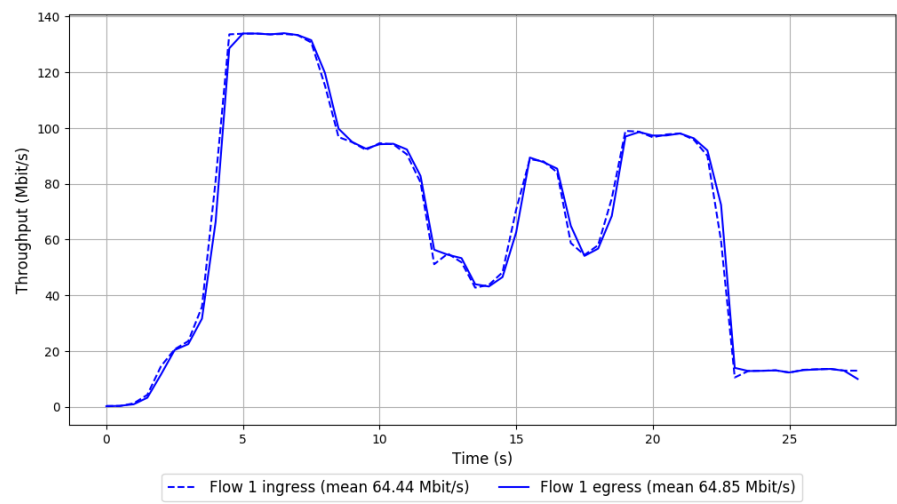
-- Flow 1:

Average throughput: 64.85 Mbit/s

95th percentile per-packet one-way delay: 111.812 ms

Loss rate: 0.17%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-15 21:54:14

End at: 2017-11-15 21:54:44

Below is generated by plot.py at 2017-11-16 00:28:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.25 Mbit/s

95th percentile per-packet one-way delay: 112.949 ms

Loss rate: 0.53%

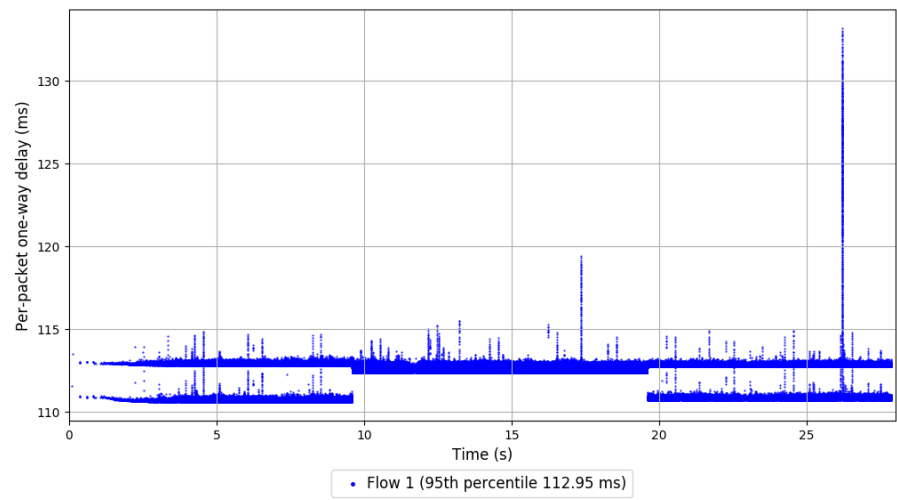
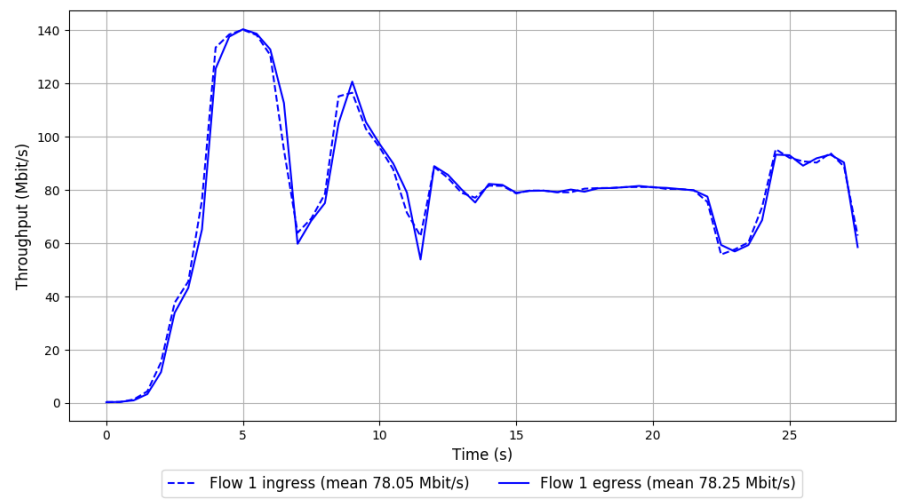
-- Flow 1:

Average throughput: 78.25 Mbit/s

95th percentile per-packet one-way delay: 112.949 ms

Loss rate: 0.53%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-15 22:05:09

End at: 2017-11-15 22:05:39

Below is generated by plot.py at 2017-11-16 00:28:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.35 Mbit/s

95th percentile per-packet one-way delay: 112.893 ms

Loss rate: 0.09%

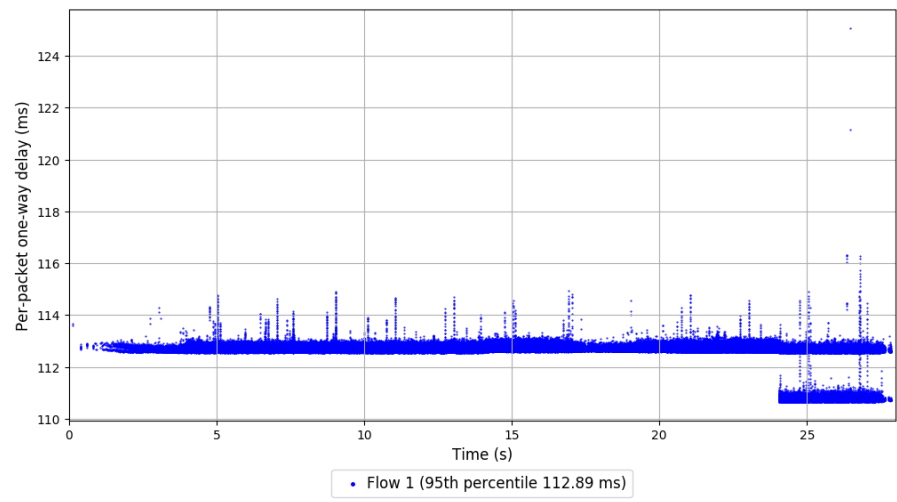
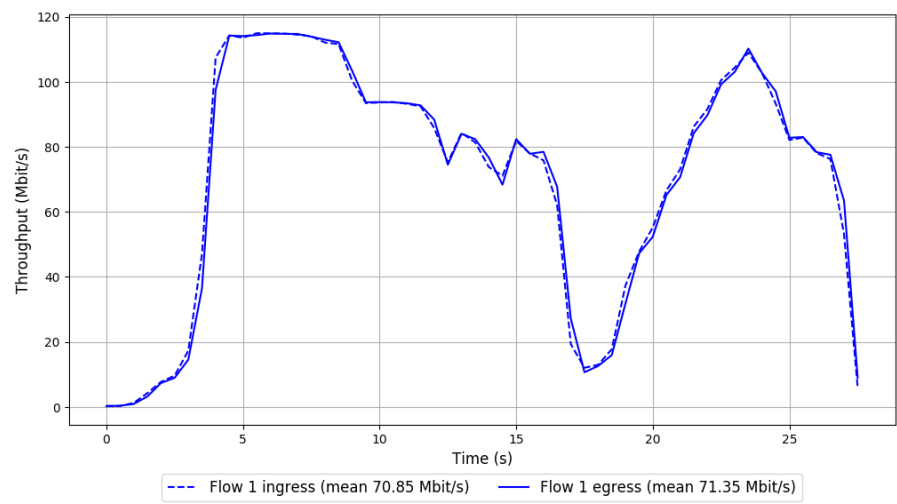
-- Flow 1:

Average throughput: 71.35 Mbit/s

95th percentile per-packet one-way delay: 112.893 ms

Loss rate: 0.09%

Run 10: Report of Copa — Data Link

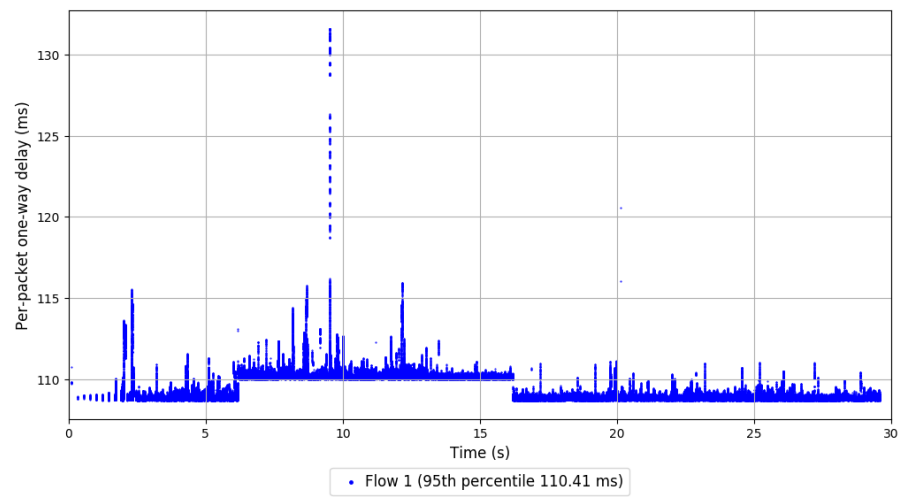
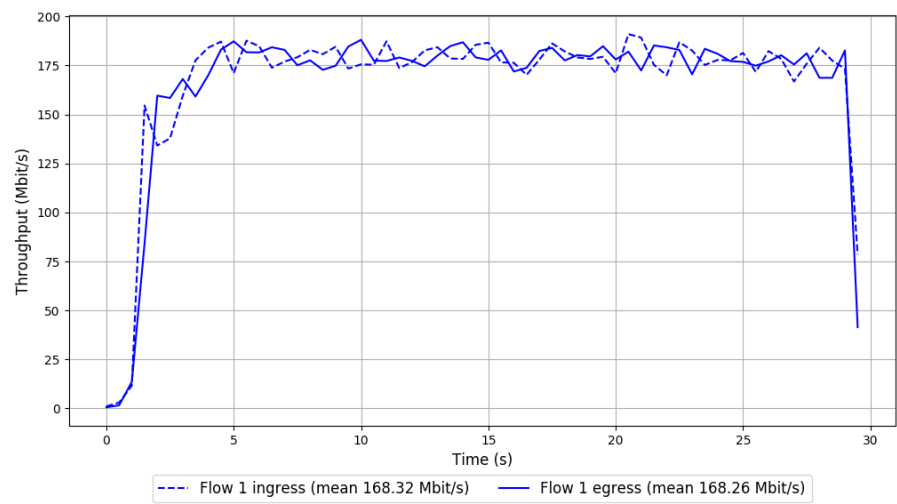


```
Run 1: Statistics of Indigo

Start at: 2017-11-15 20:23:59
End at: 2017-11-15 20:24:29

# Below is generated by plot.py at 2017-11-16 00:29:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 168.26 Mbit/s
95th percentile per-packet one-way delay: 110.407 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 168.26 Mbit/s
95th percentile per-packet one-way delay: 110.407 ms
Loss rate: 0.78%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-11-15 20:34:53

End at: 2017-11-15 20:35:23

Below is generated by plot.py at 2017-11-16 00:29:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 164.21 Mbit/s

95th percentile per-packet one-way delay: 113.134 ms

Loss rate: 0.75%

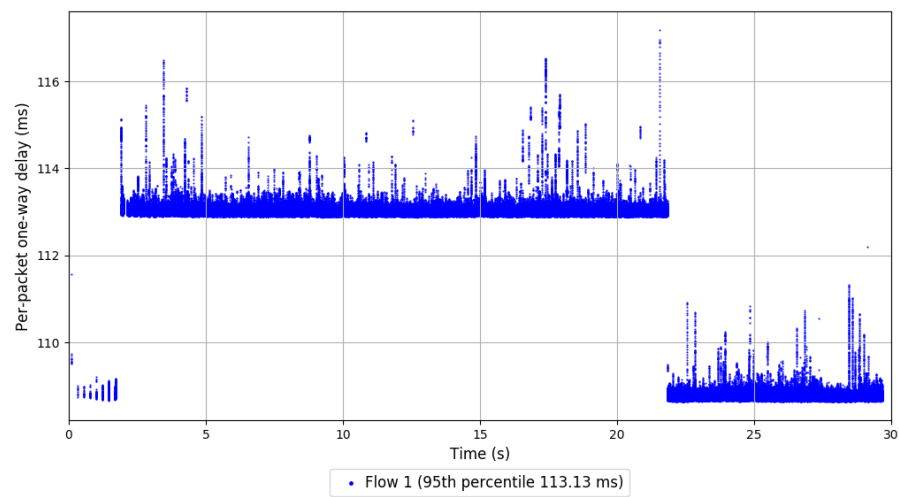
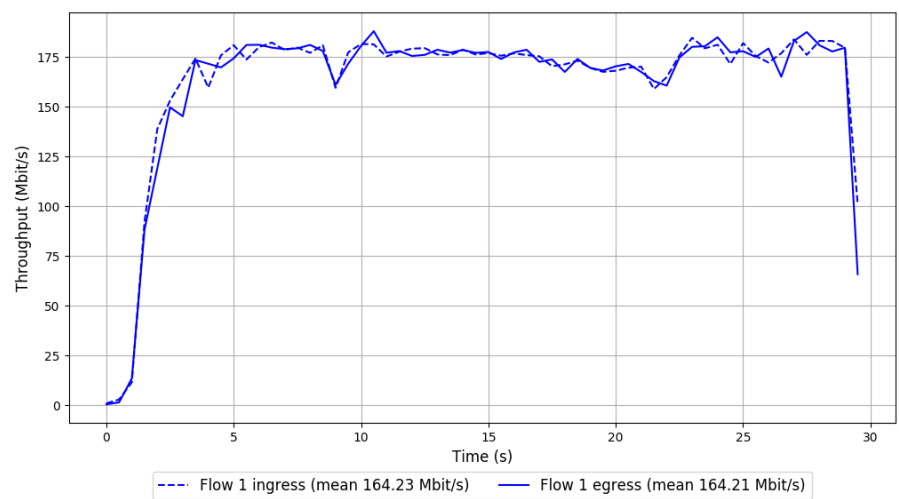
-- Flow 1:

Average throughput: 164.21 Mbit/s

95th percentile per-packet one-way delay: 113.134 ms

Loss rate: 0.75%

Run 2: Report of Indigo — Data Link

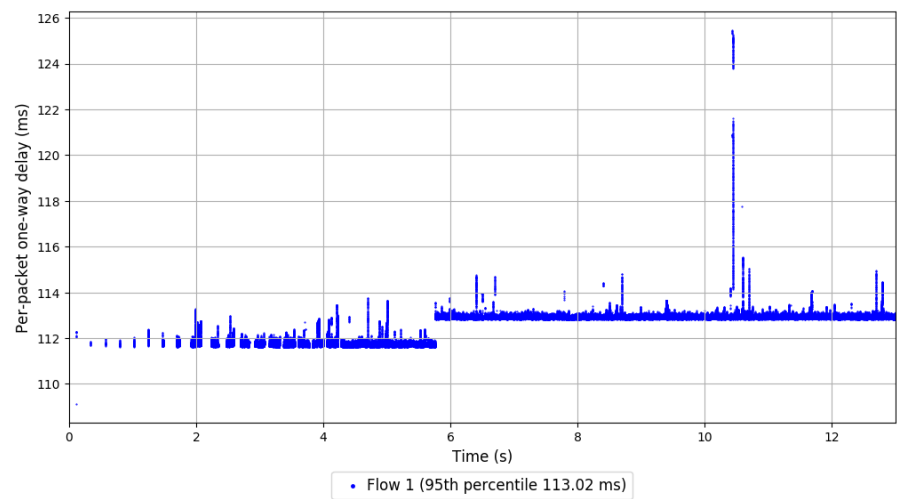
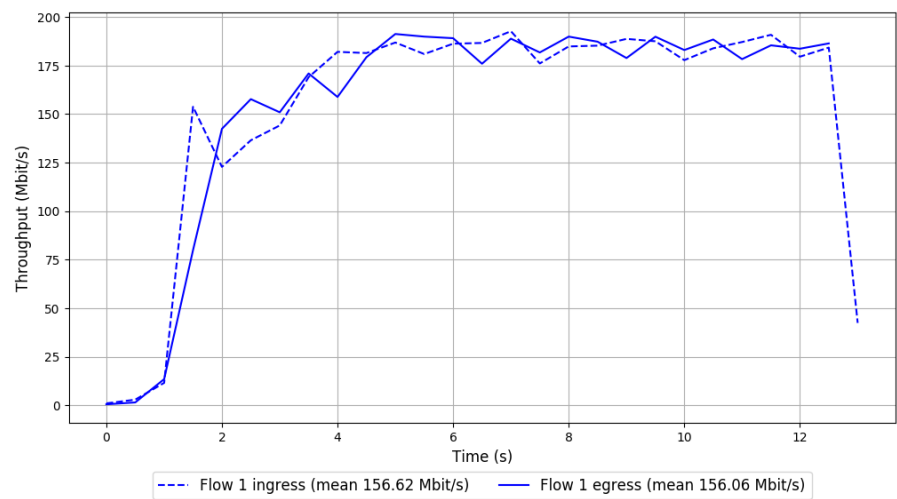


Run 3: Statistics of Indigo

Start at: 2017-11-15 20:46:03

End at: 2017-11-15 20:46:33

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-15 20:56:58

End at: 2017-11-15 20:57:28

Below is generated by plot.py at 2017-11-16 00:29:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.07 Mbit/s

95th percentile per-packet one-way delay: 112.997 ms

Loss rate: 0.81%

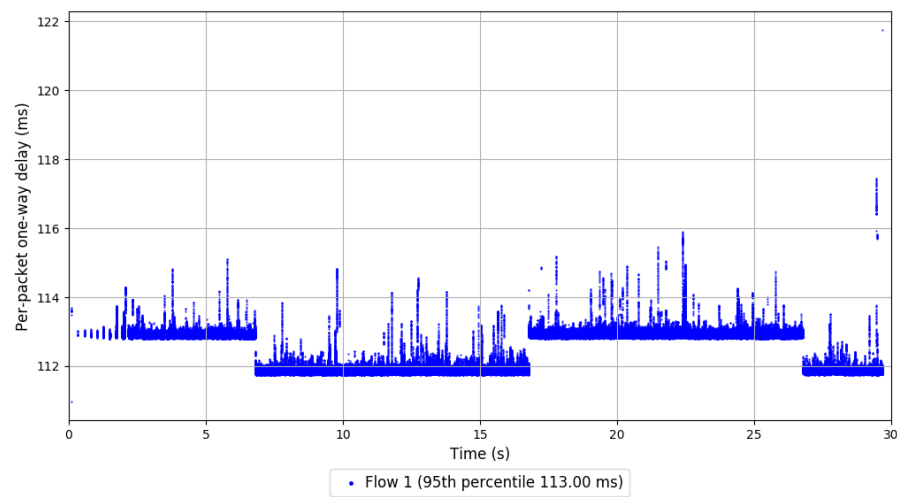
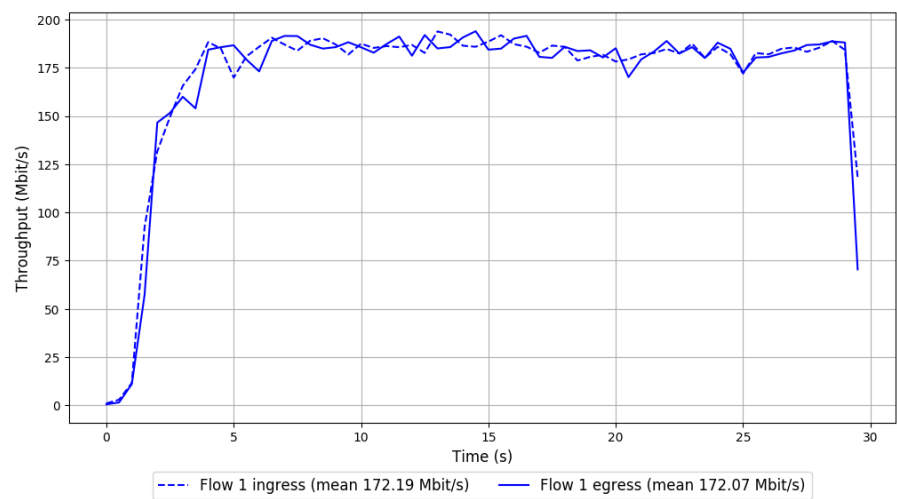
-- Flow 1:

Average throughput: 172.07 Mbit/s

95th percentile per-packet one-way delay: 112.997 ms

Loss rate: 0.81%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-15 21:08:10

End at: 2017-11-15 21:08:40

Below is generated by plot.py at 2017-11-16 00:30:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.57 Mbit/s

95th percentile per-packet one-way delay: 112.992 ms

Loss rate: 0.82%

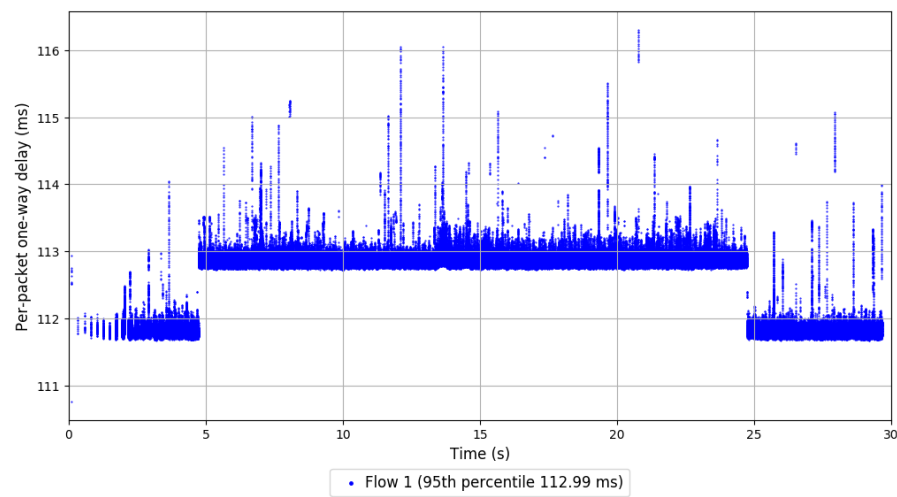
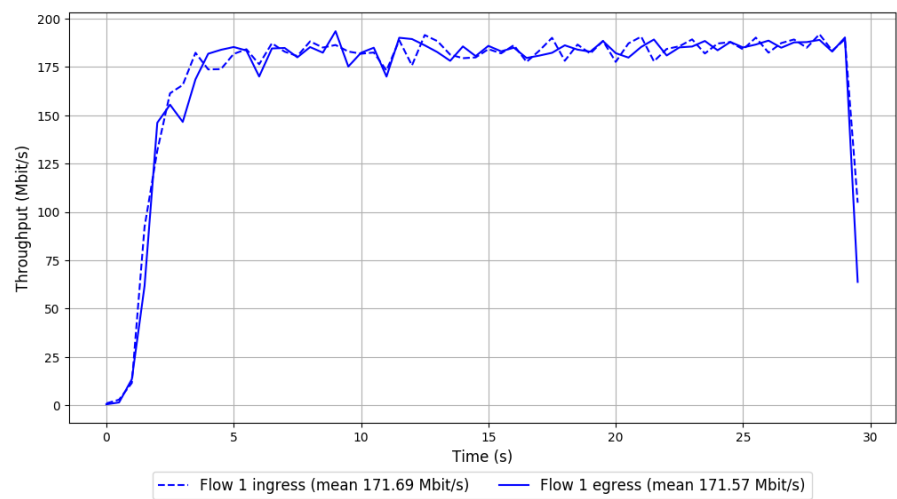
-- Flow 1:

Average throughput: 171.57 Mbit/s

95th percentile per-packet one-way delay: 112.992 ms

Loss rate: 0.82%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-15 21:19:15

End at: 2017-11-15 21:19:45

Below is generated by plot.py at 2017-11-16 00:30:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.35 Mbit/s

95th percentile per-packet one-way delay: 112.937 ms

Loss rate: 0.81%

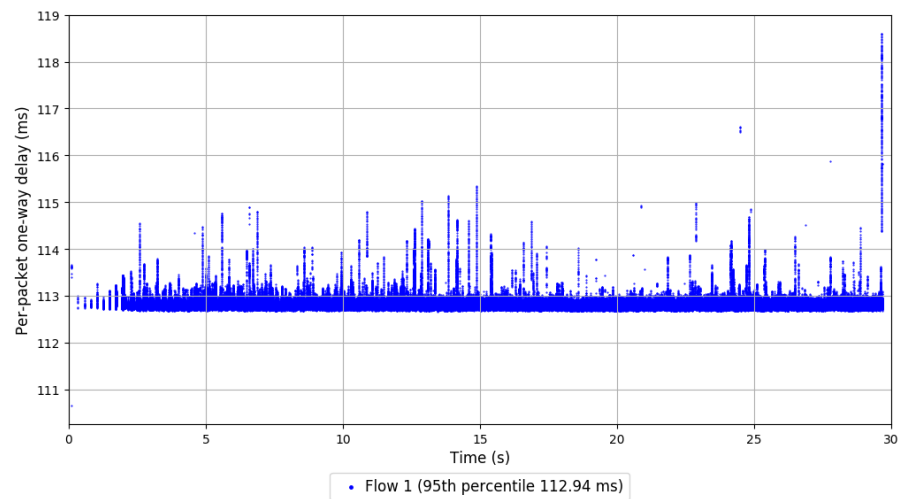
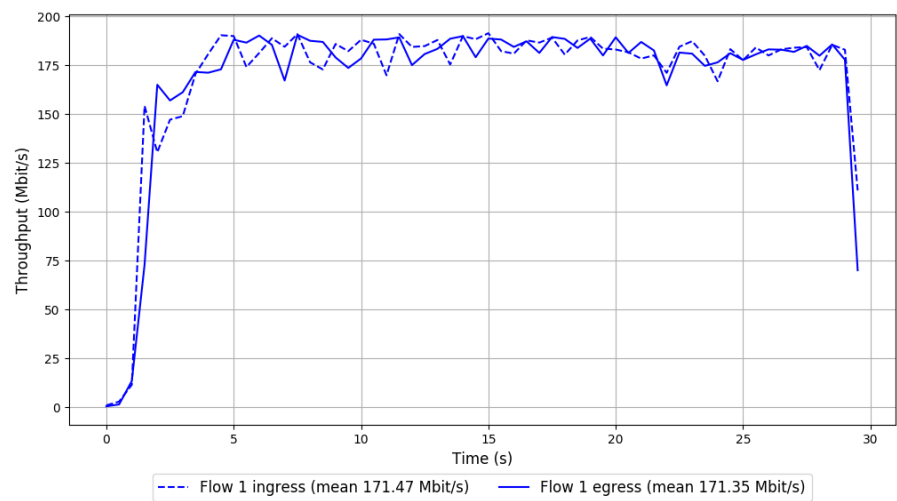
-- Flow 1:

Average throughput: 171.35 Mbit/s

95th percentile per-packet one-way delay: 112.937 ms

Loss rate: 0.81%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-15 21:30:17

End at: 2017-11-15 21:30:47

Below is generated by plot.py at 2017-11-16 00:31:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.50 Mbit/s

95th percentile per-packet one-way delay: 113.097 ms

Loss rate: 0.79%

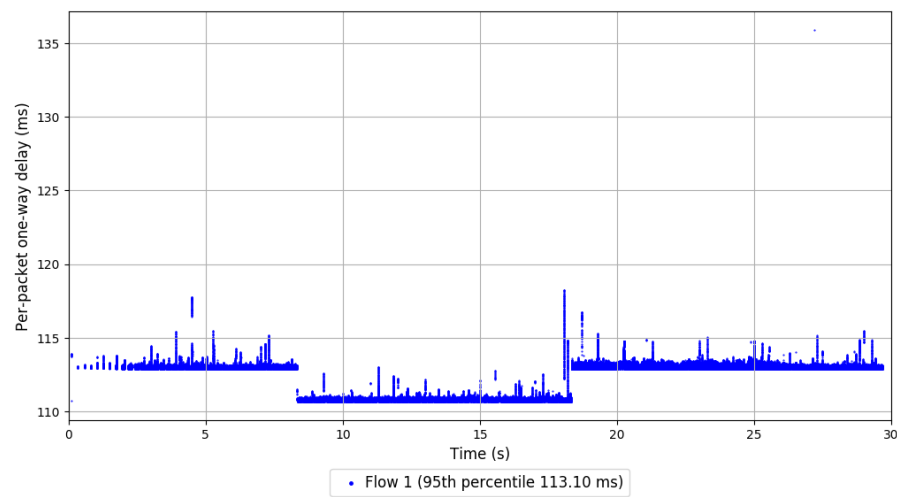
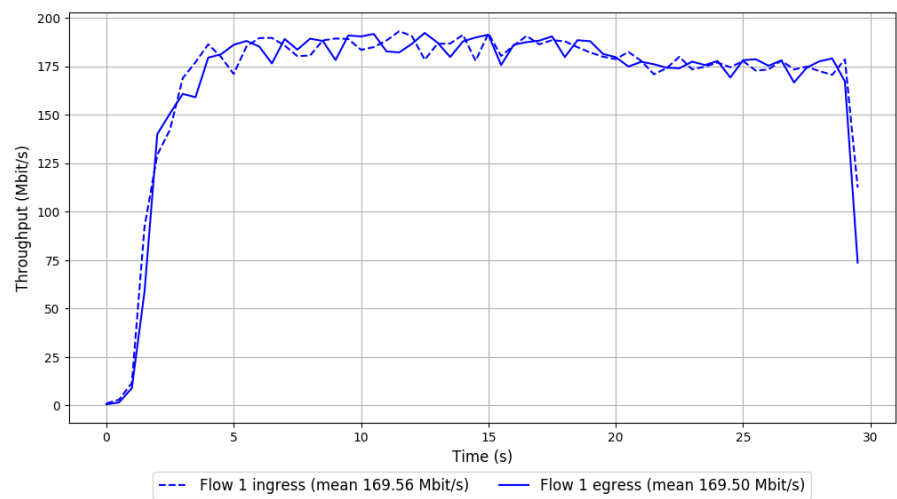
-- Flow 1:

Average throughput: 169.50 Mbit/s

95th percentile per-packet one-way delay: 113.097 ms

Loss rate: 0.79%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-15 21:41:15

End at: 2017-11-15 21:41:45

Below is generated by plot.py at 2017-11-16 00:31:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.67 Mbit/s

95th percentile per-packet one-way delay: 113.090 ms

Loss rate: 0.80%

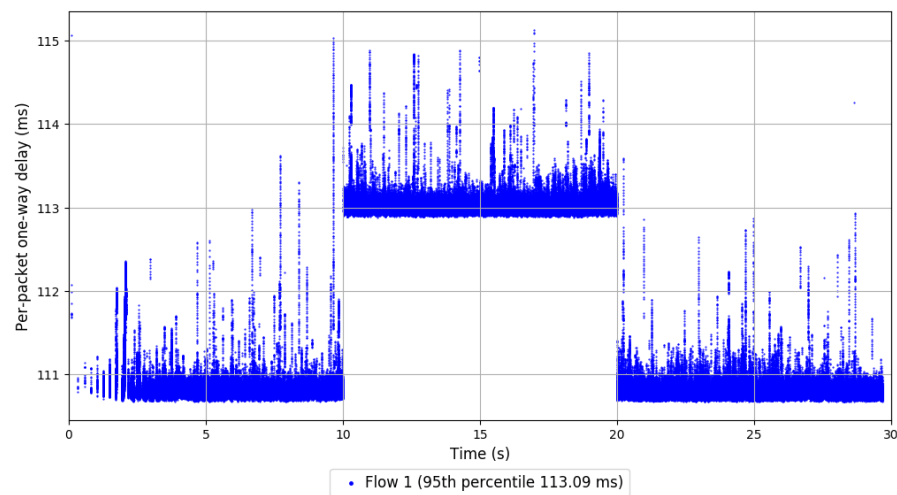
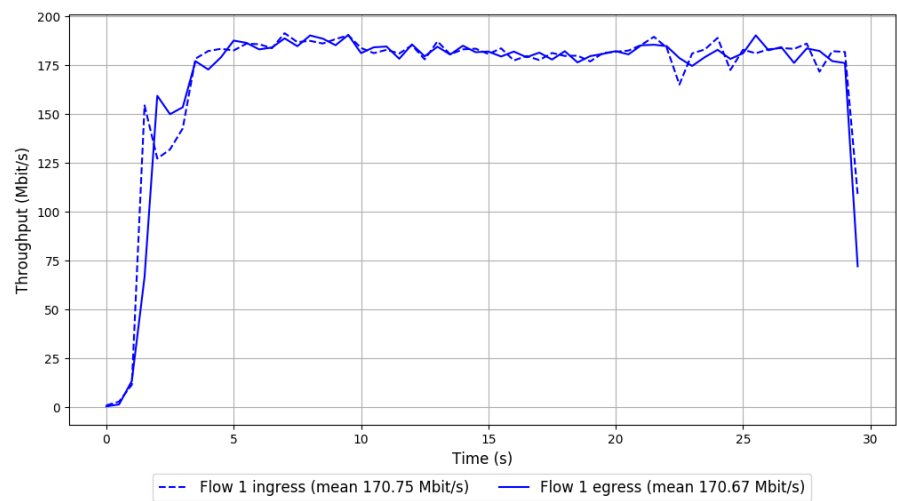
-- Flow 1:

Average throughput: 170.67 Mbit/s

95th percentile per-packet one-way delay: 113.090 ms

Loss rate: 0.80%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-15 21:52:34

End at: 2017-11-15 21:53:04

Below is generated by plot.py at 2017-11-16 00:31:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.92 Mbit/s

95th percentile per-packet one-way delay: 110.893 ms

Loss rate: 0.80%

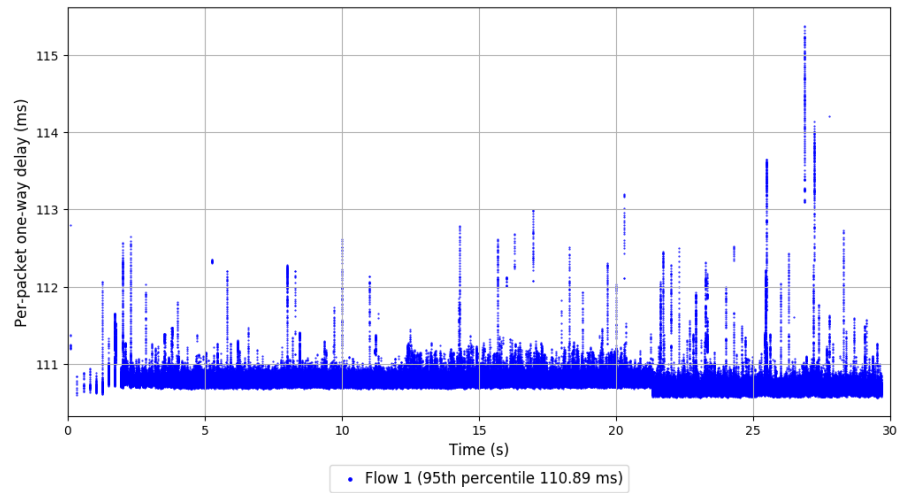
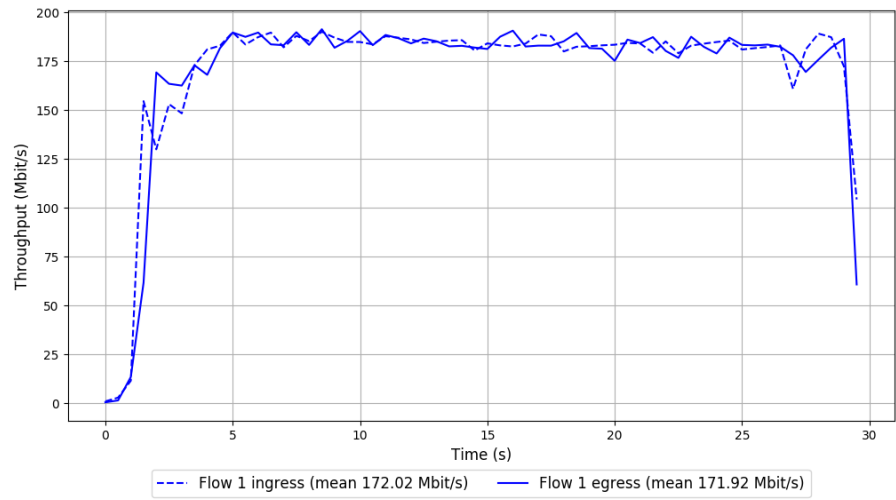
-- Flow 1:

Average throughput: 171.92 Mbit/s

95th percentile per-packet one-way delay: 110.893 ms

Loss rate: 0.80%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-15 22:03:31

End at: 2017-11-15 22:04:01

Below is generated by plot.py at 2017-11-16 00:32:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 159.91 Mbit/s

95th percentile per-packet one-way delay: 112.808 ms

Loss rate: 0.88%

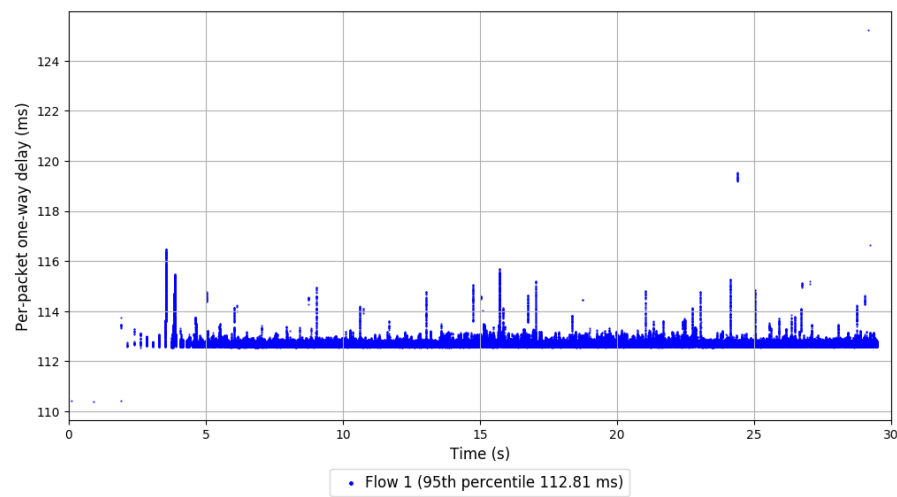
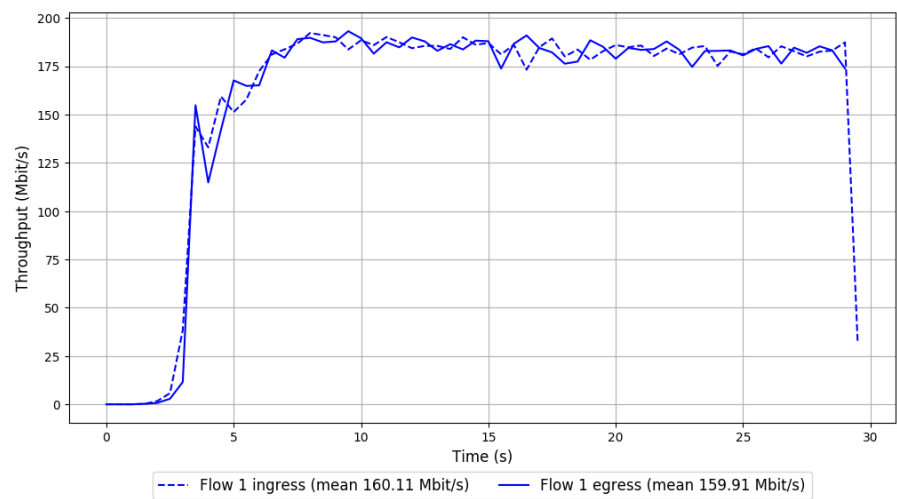
-- Flow 1:

Average throughput: 159.91 Mbit/s

95th percentile per-packet one-way delay: 112.808 ms

Loss rate: 0.88%

Run 10: Report of Indigo — Data Link

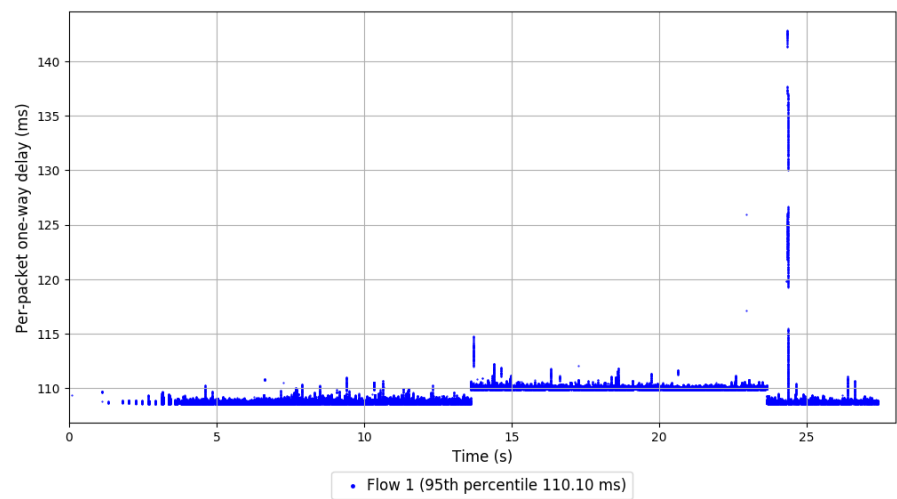
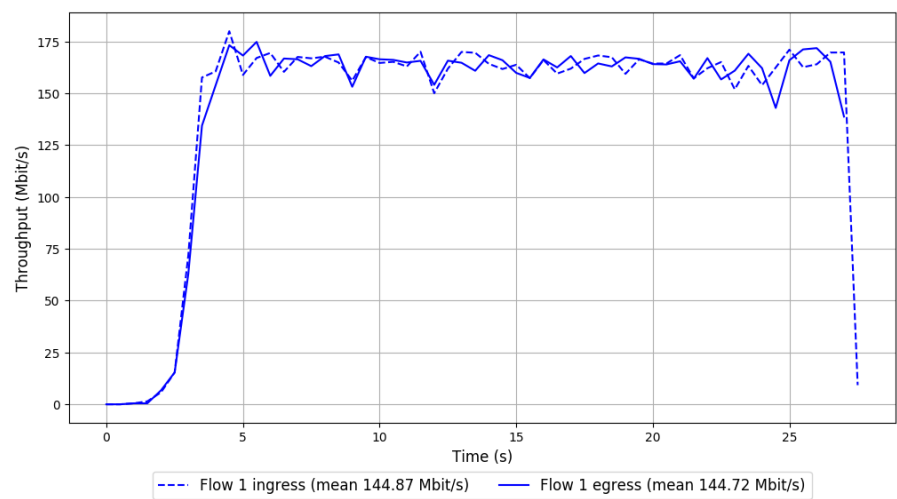


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-15 20:16:09
End at: 2017-11-15 20:16:39

# Below is generated by plot.py at 2017-11-16 00:32:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 144.72 Mbit/s
95th percentile per-packet one-way delay: 110.097 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 144.72 Mbit/s
95th percentile per-packet one-way delay: 110.097 ms
Loss rate: 0.91%
```

Run 1: Report of Indigo-calib — Data Link

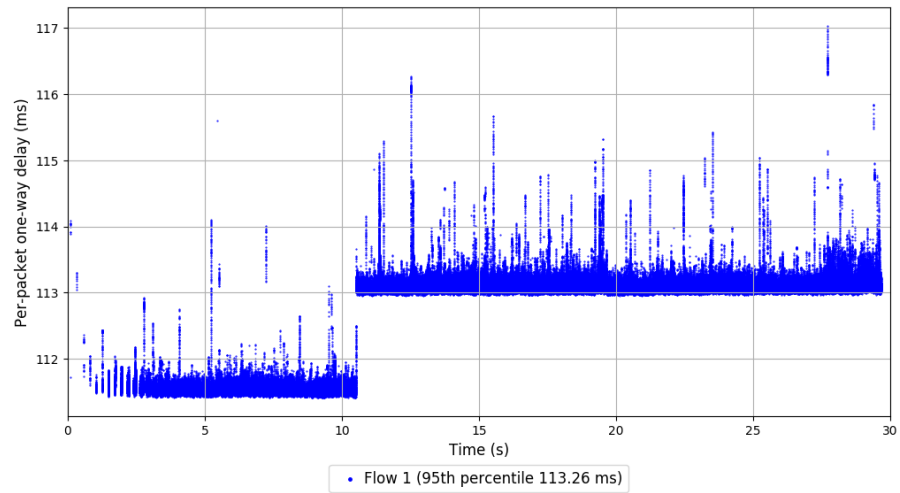
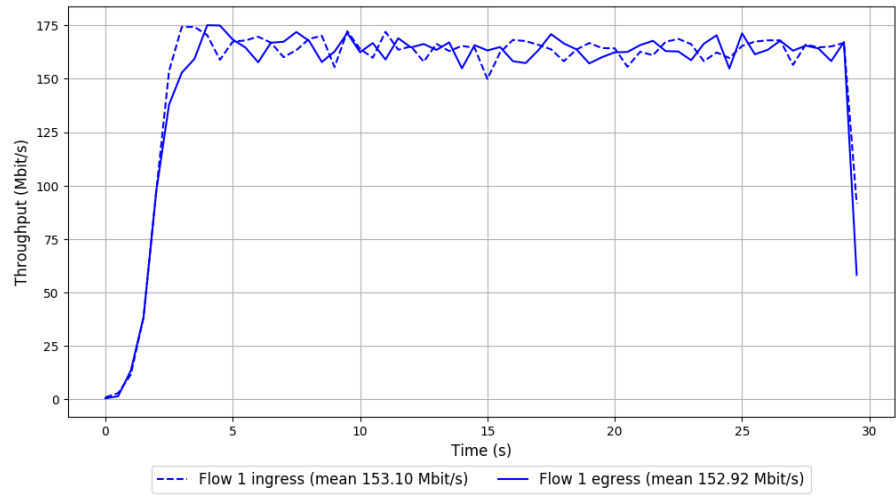


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-15 20:27:05
End at: 2017-11-15 20:27:35

# Below is generated by plot.py at 2017-11-16 00:32:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 152.92 Mbit/s
95th percentile per-packet one-way delay: 113.258 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 152.92 Mbit/s
95th percentile per-packet one-way delay: 113.258 ms
Loss rate: 0.82%
```

Run 2: Report of Indigo-calib — Data Link

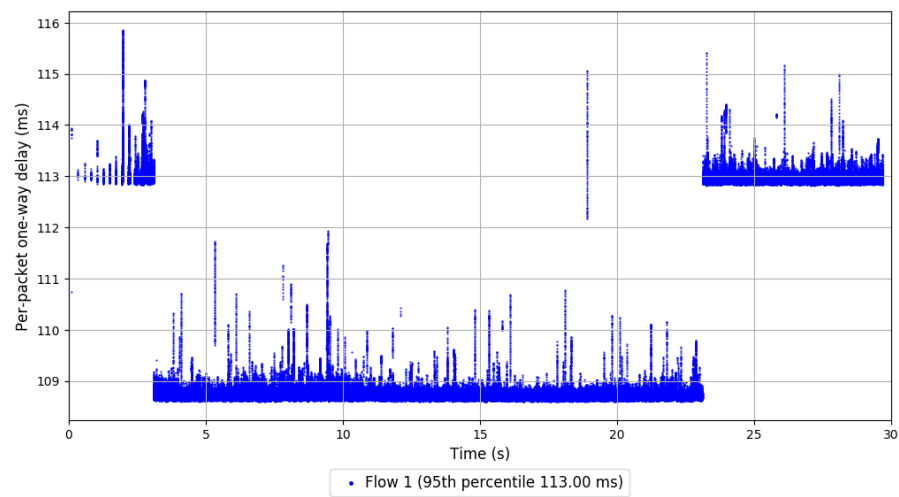
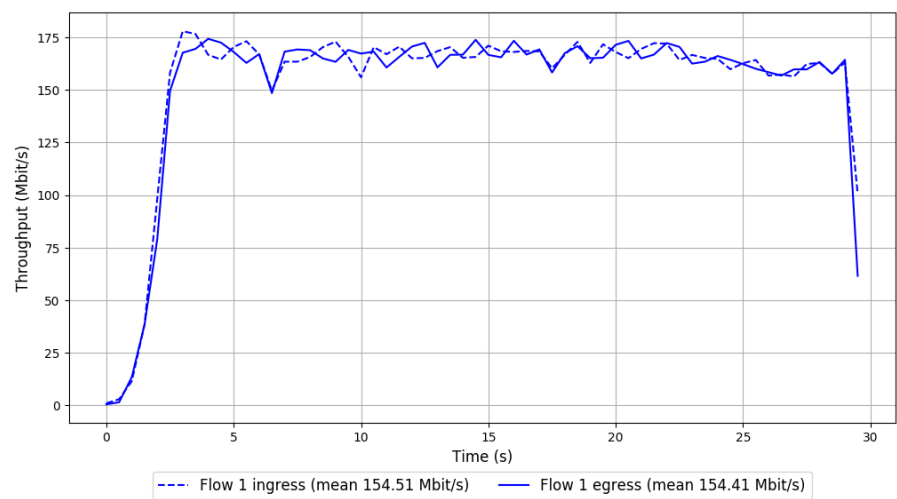


```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-15 20:38:02
End at: 2017-11-15 20:38:32

# Below is generated by plot.py at 2017-11-16 00:32:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 154.41 Mbit/s
95th percentile per-packet one-way delay: 113.000 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 154.41 Mbit/s
95th percentile per-packet one-way delay: 113.000 ms
Loss rate: 0.80%
```

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-15 20:49:05

End at: 2017-11-15 20:49:35

Below is generated by plot.py at 2017-11-16 00:33:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 154.55 Mbit/s

95th percentile per-packet one-way delay: 113.056 ms

Loss rate: 0.83%

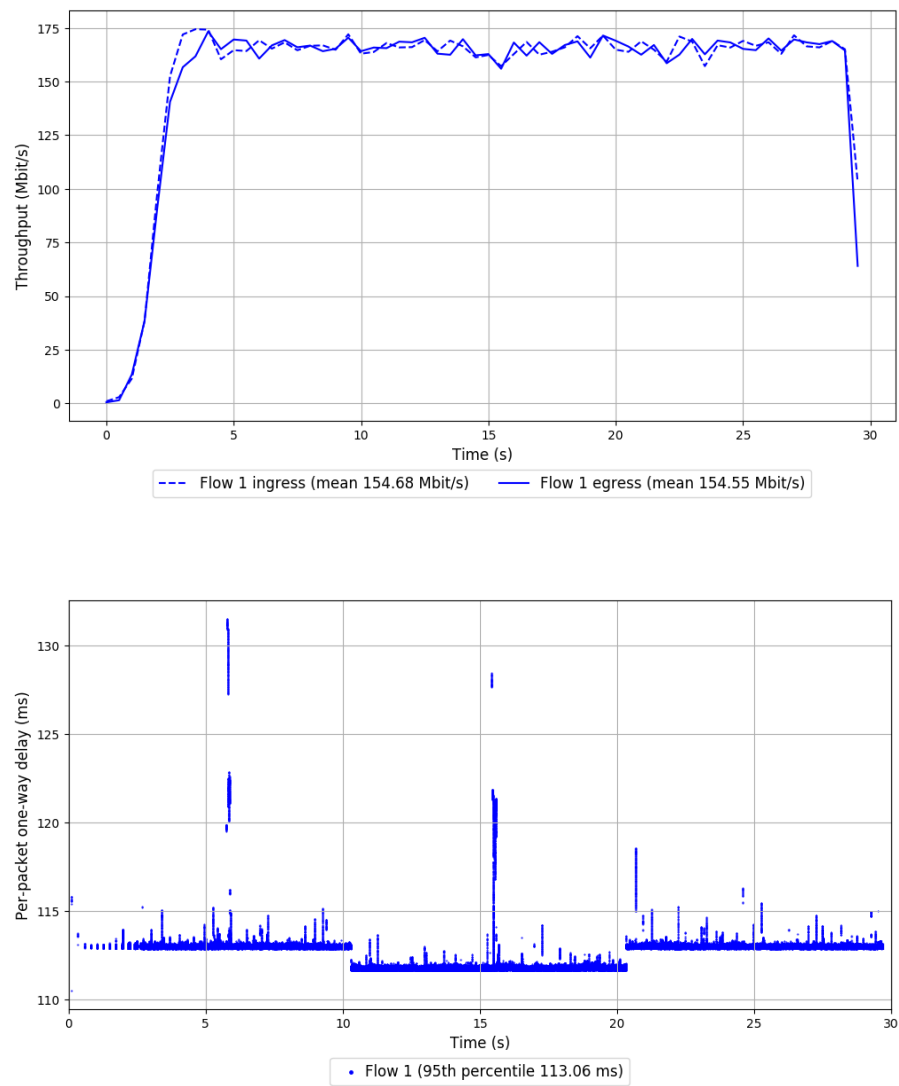
-- Flow 1:

Average throughput: 154.55 Mbit/s

95th percentile per-packet one-way delay: 113.056 ms

Loss rate: 0.83%

Run 4: Report of Indigo-calib — Data Link

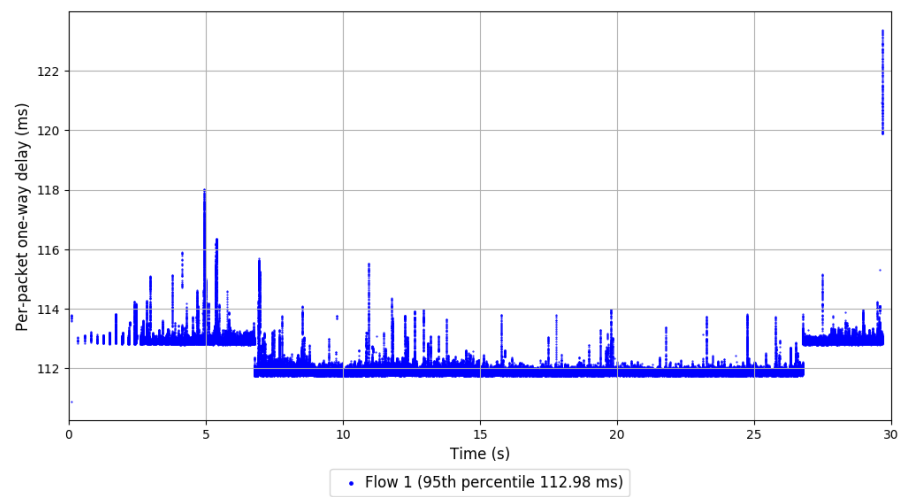
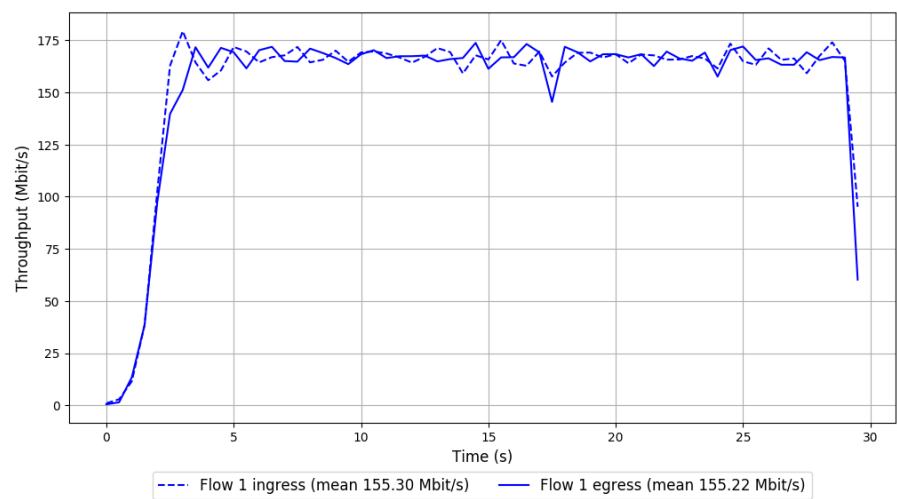


```
Run 5: Statistics of Indigo-calib

Start at: 2017-11-15 21:00:08
End at: 2017-11-15 21:00:38

# Below is generated by plot.py at 2017-11-16 00:33:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 155.22 Mbit/s
95th percentile per-packet one-way delay: 112.983 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 155.22 Mbit/s
95th percentile per-packet one-way delay: 112.983 ms
Loss rate: 0.81%
```

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

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

End at: 2017-11-15 21:11:51

Below is generated by plot.py at 2017-11-16 00:33:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 154.39 Mbit/s

95th percentile per-packet one-way delay: 114.985 ms

Loss rate: 0.79%

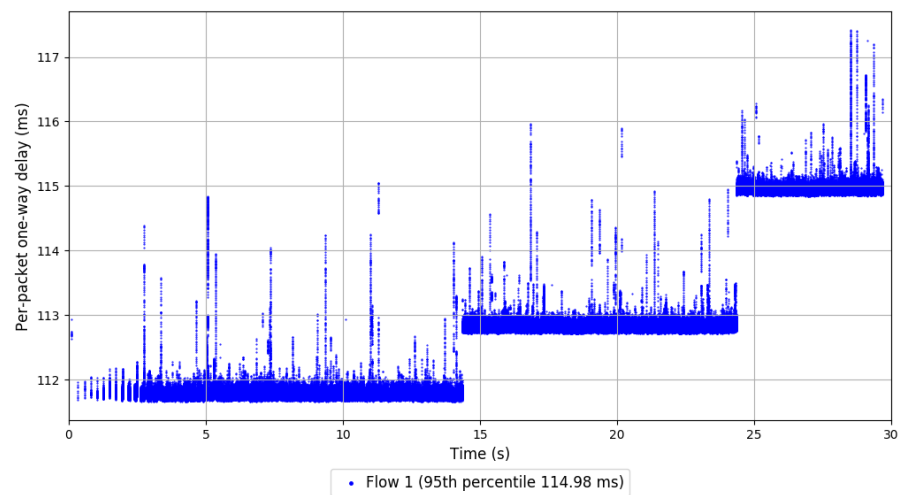
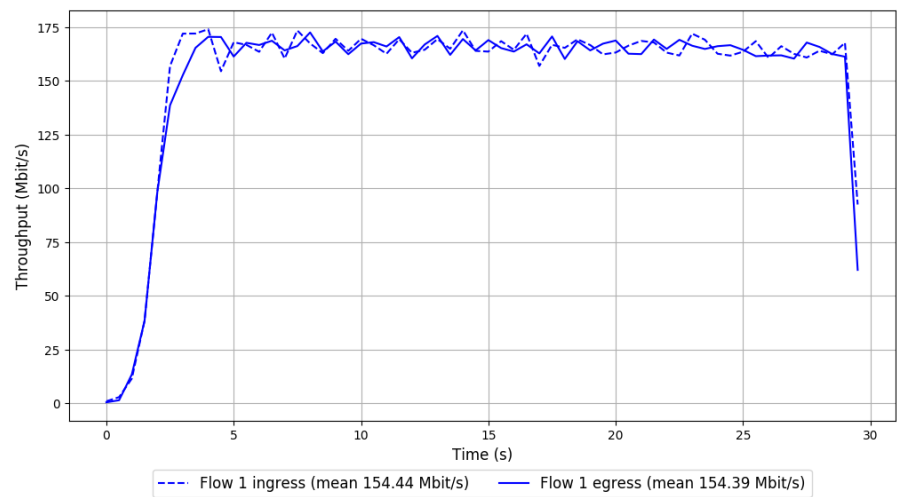
-- Flow 1:

Average throughput: 154.39 Mbit/s

95th percentile per-packet one-way delay: 114.985 ms

Loss rate: 0.79%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-15 21:22:27

End at: 2017-11-15 21:22:57

Below is generated by plot.py at 2017-11-16 00:33:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.41 Mbit/s

95th percentile per-packet one-way delay: 113.182 ms

Loss rate: 0.77%

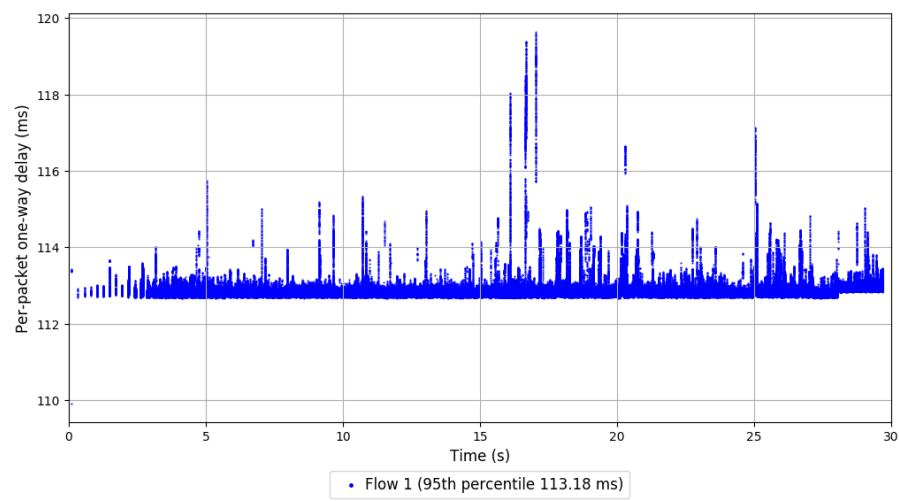
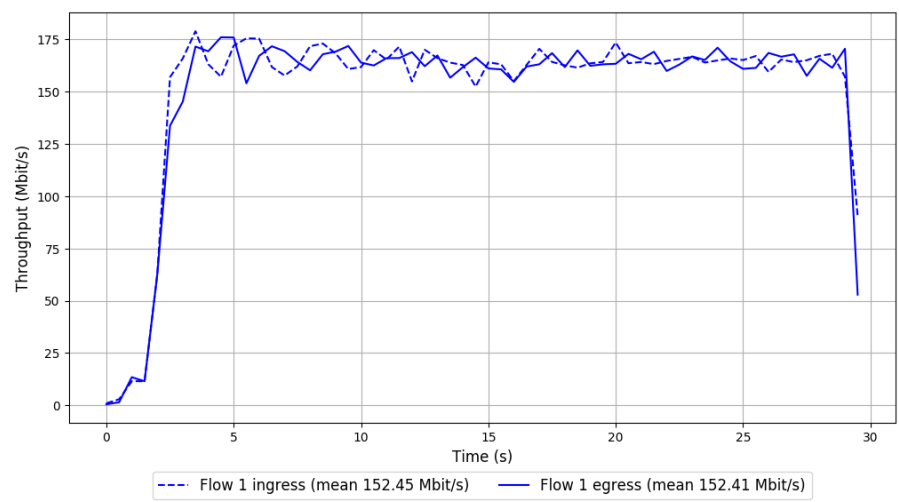
-- Flow 1:

Average throughput: 152.41 Mbit/s

95th percentile per-packet one-way delay: 113.182 ms

Loss rate: 0.77%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-15 21:33:24

End at: 2017-11-15 21:33:54

Below is generated by plot.py at 2017-11-16 00:34:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 153.50 Mbit/s

95th percentile per-packet one-way delay: 113.061 ms

Loss rate: 0.80%

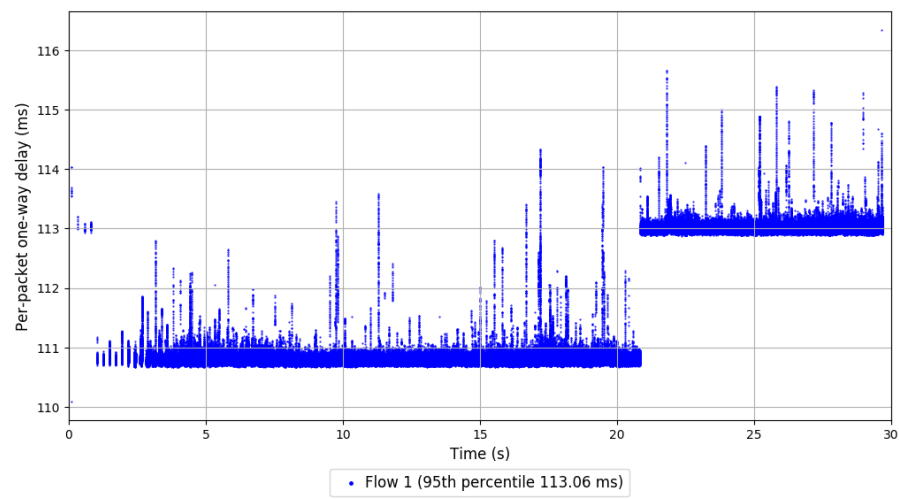
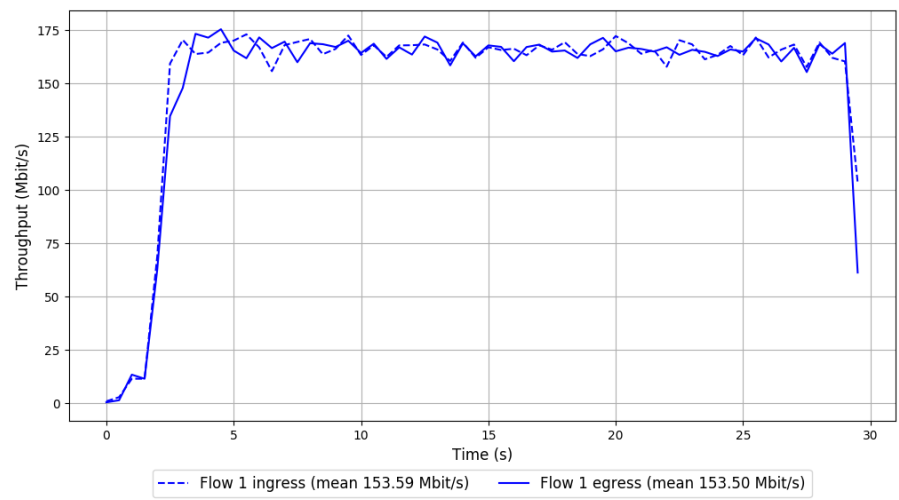
-- Flow 1:

Average throughput: 153.50 Mbit/s

95th percentile per-packet one-way delay: 113.061 ms

Loss rate: 0.80%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-15 21:44:25

End at: 2017-11-15 21:44:55

Below is generated by plot.py at 2017-11-16 00:34:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 153.36 Mbit/s

95th percentile per-packet one-way delay: 113.226 ms

Loss rate: 0.82%

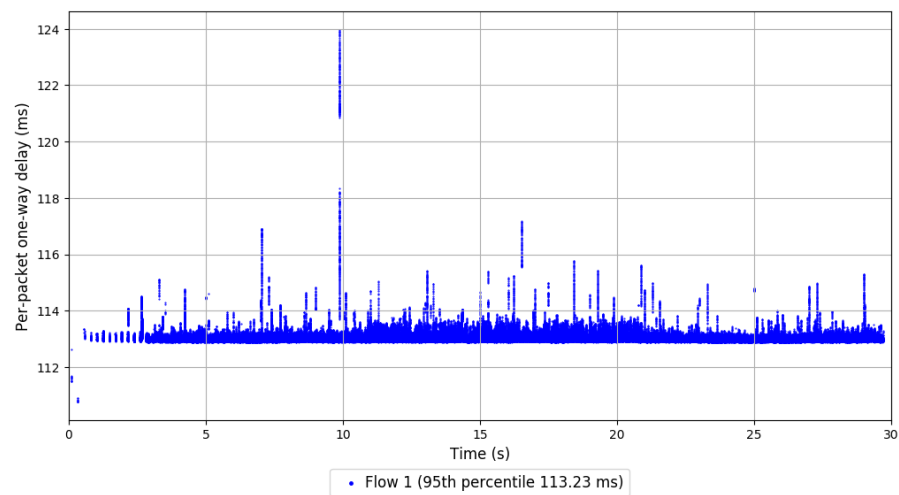
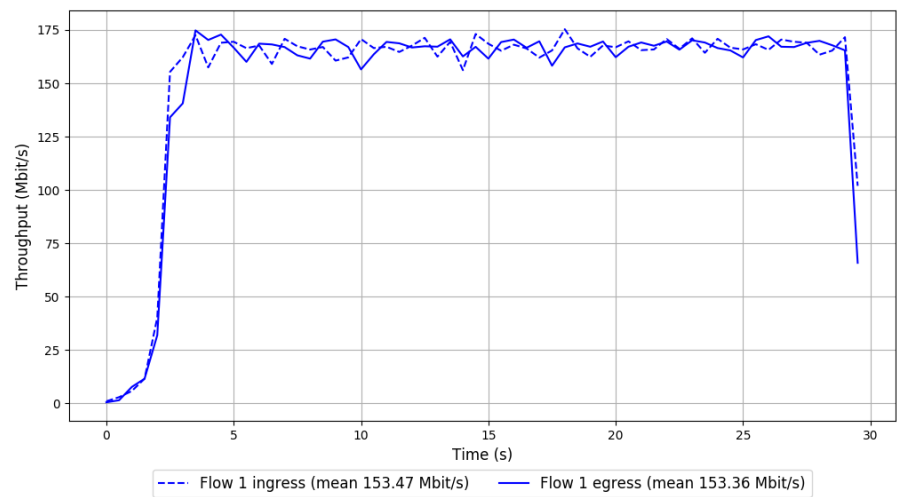
-- Flow 1:

Average throughput: 153.36 Mbit/s

95th percentile per-packet one-way delay: 113.226 ms

Loss rate: 0.82%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-15 21:55:45

End at: 2017-11-15 21:56:15

Below is generated by plot.py at 2017-11-16 00:34:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.60 Mbit/s

95th percentile per-packet one-way delay: 112.717 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 152.60 Mbit/s

95th percentile per-packet one-way delay: 112.717 ms

Loss rate: 0.81%

Run 10: Report of Indigo-calib — Data Link

