

Pantheon Report

Generated at 2017-12-05 11:15:30 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

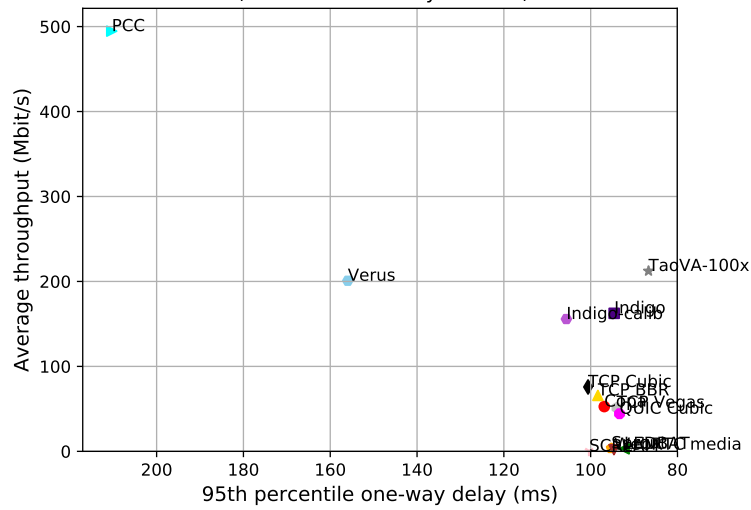
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

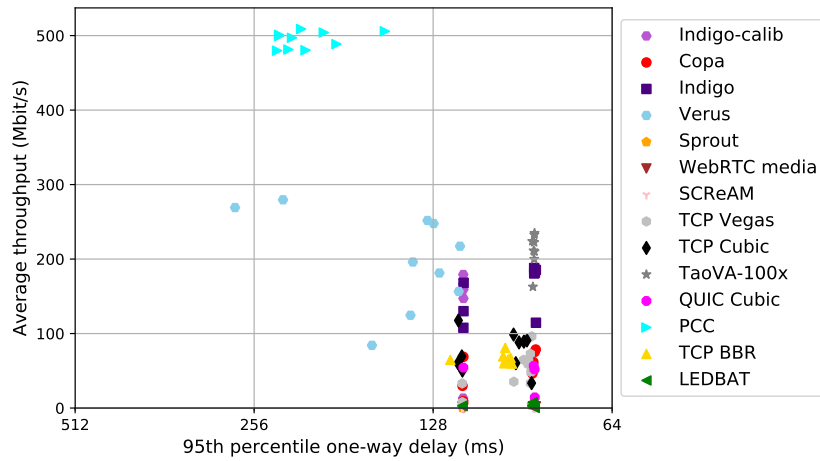
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabbb936fdca204b80db
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 Iowa Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



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



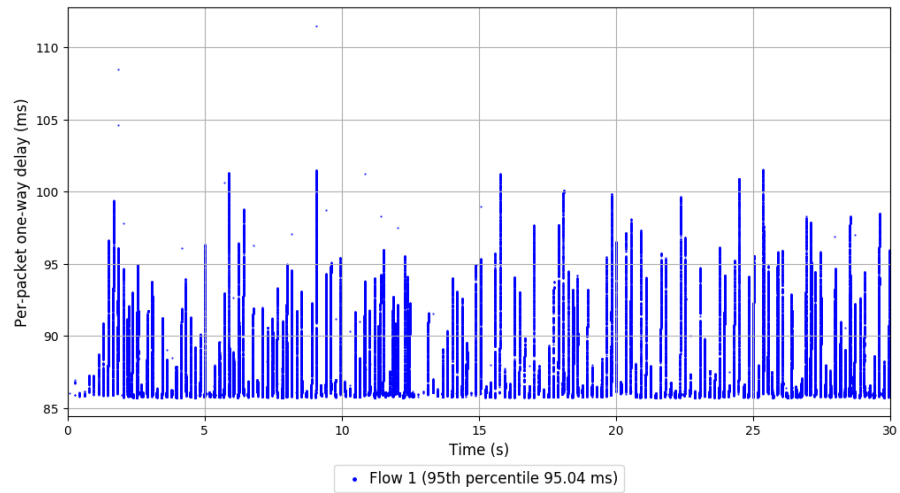
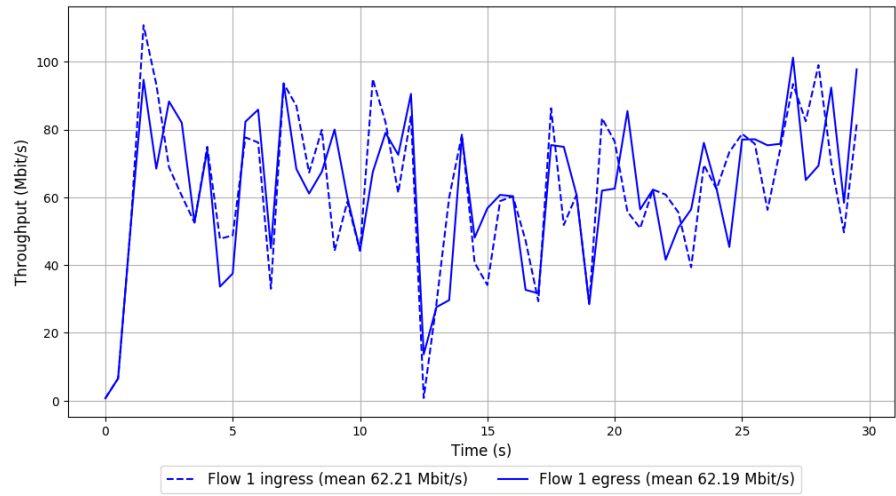
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	65.83	98.34	0.10
TCP Cubic	10	75.77	100.60	0.05
LEDBAT	10	2.95	92.31	0.22
PCC	10	494.62	210.33	1.19
QUIC Cubic	4	44.29	93.35	0.00
SCReAM	10	0.21	100.35	0.01
WebRTC media	10	1.97	94.63	0.01
Sprout	10	3.62	95.24	0.15
TaoVA-100x	8	212.30	86.68	0.01
TCP Vegas	10	51.35	94.01	0.03
Verus	10	200.81	155.96	0.64
Copa	8	52.71	96.87	0.00
Indigo	10	162.46	94.58	0.00
Indigo-calib	10	155.75	105.59	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2017-12-05 08:19:13
End at: 2017-12-05 08:19:43

# Below is generated by plot.py at 2017-12-05 10:41:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.19 Mbit/s
95th percentile per-packet one-way delay: 95.044 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 62.19 Mbit/s
95th percentile per-packet one-way delay: 95.044 ms
Loss rate: 0.00%
```

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-05 08:30:27

End at: 2017-12-05 08:30:57

Below is generated by plot.py at 2017-12-05 10:41:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.69 Mbit/s

95th percentile per-packet one-way delay: 94.330 ms

Loss rate: 0.00%

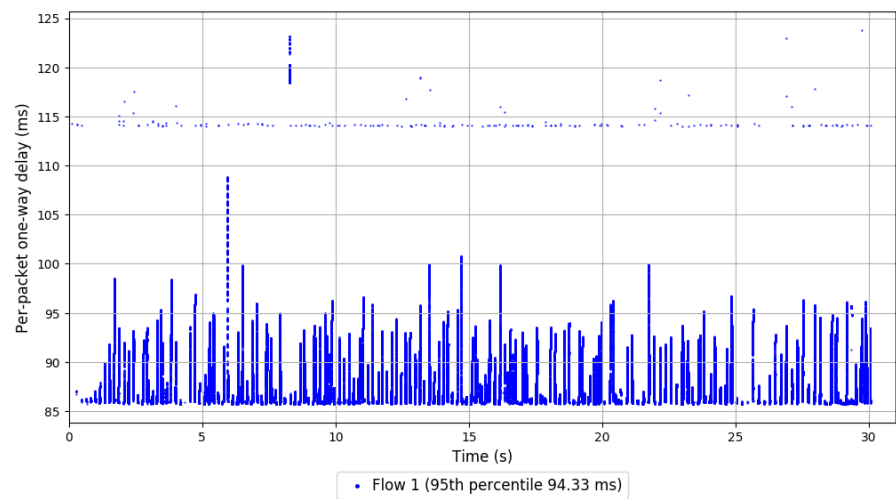
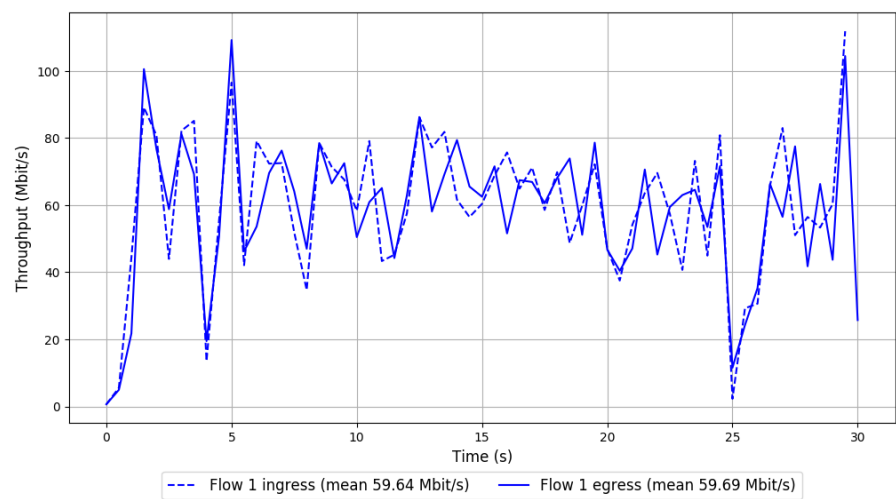
-- Flow 1:

Average throughput: 59.69 Mbit/s

95th percentile per-packet one-way delay: 94.330 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-05 08:41:25

End at: 2017-12-05 08:41:55

Below is generated by plot.py at 2017-12-05 10:41:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.76 Mbit/s

95th percentile per-packet one-way delay: 96.820 ms

Loss rate: 0.00%

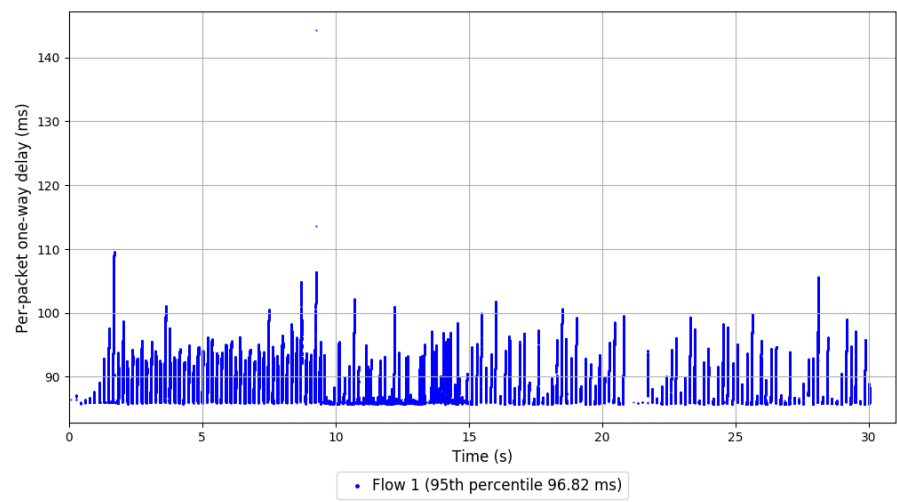
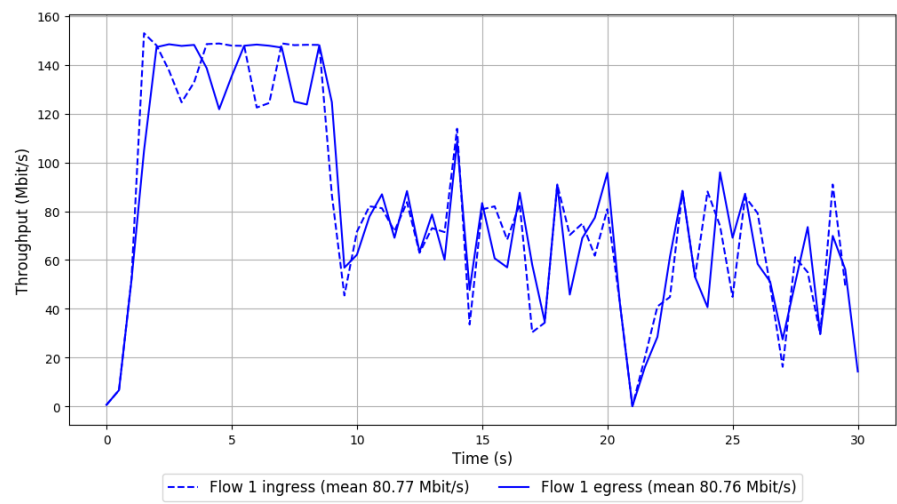
-- Flow 1:

Average throughput: 80.76 Mbit/s

95th percentile per-packet one-way delay: 96.820 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-05 08:52:10

End at: 2017-12-05 08:52:40

Below is generated by plot.py at 2017-12-05 10:41:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.02 Mbit/s

95th percentile per-packet one-way delay: 97.158 ms

Loss rate: 0.42%

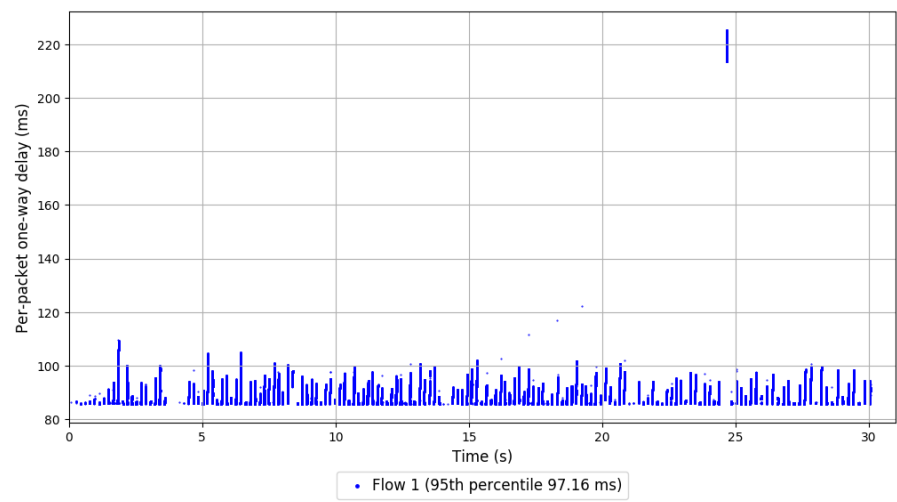
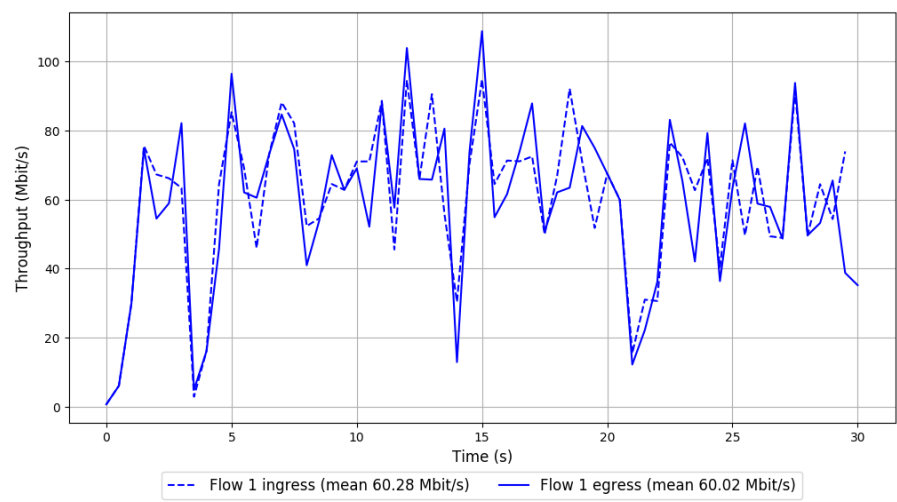
-- Flow 1:

Average throughput: 60.02 Mbit/s

95th percentile per-packet one-way delay: 97.158 ms

Loss rate: 0.42%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-05 09:03:12

End at: 2017-12-05 09:03:42

Below is generated by plot.py at 2017-12-05 10:41:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.64 Mbit/s

95th percentile per-packet one-way delay: 95.412 ms

Loss rate: 0.01%

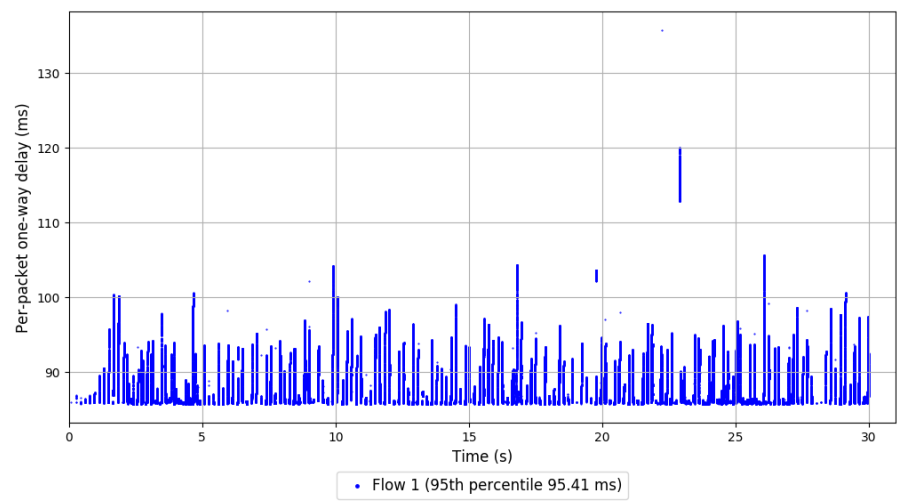
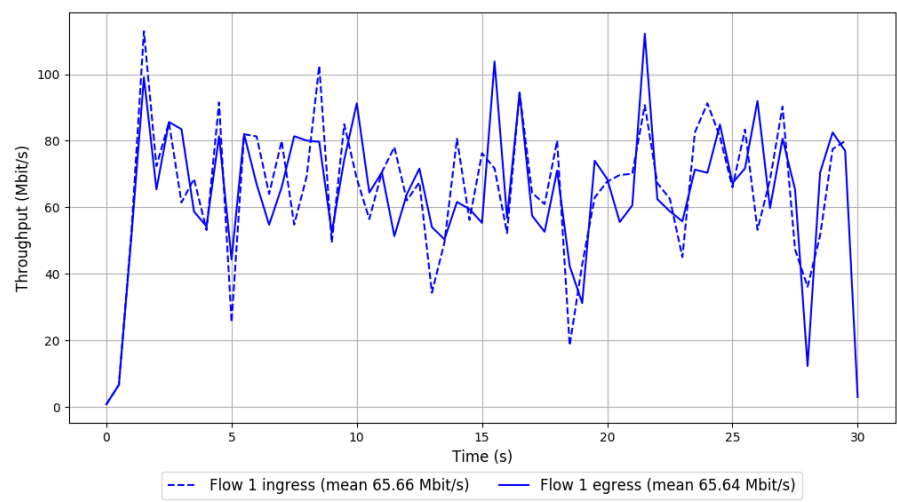
-- Flow 1:

Average throughput: 65.64 Mbit/s

95th percentile per-packet one-way delay: 95.412 ms

Loss rate: 0.01%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-05 09:14:20

End at: 2017-12-05 09:14:50

Below is generated by plot.py at 2017-12-05 10:41:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.70 Mbit/s

95th percentile per-packet one-way delay: 119.756 ms

Loss rate: 0.00%

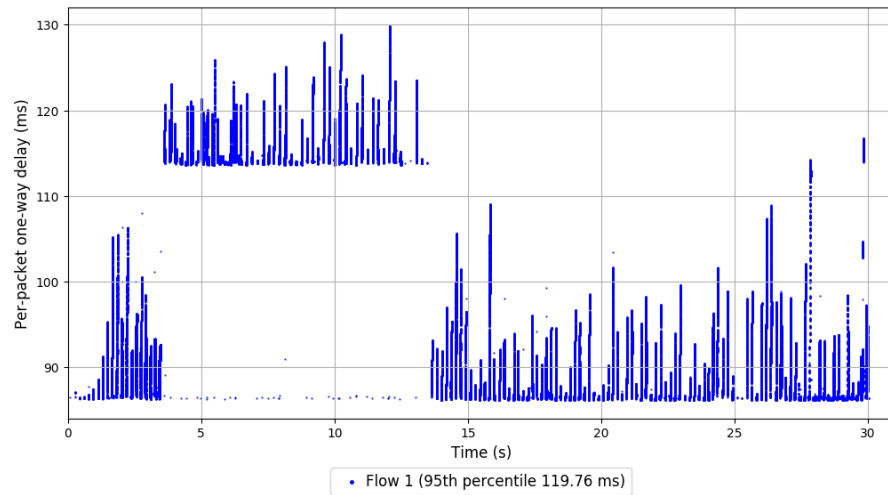
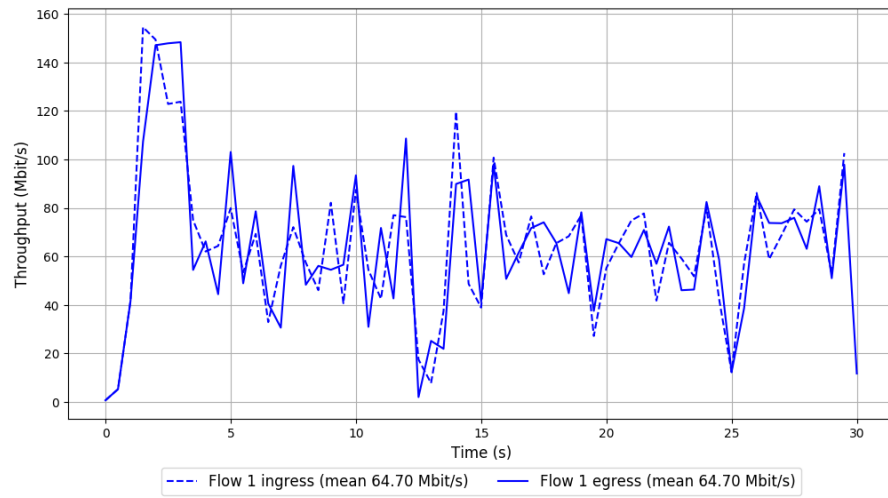
-- Flow 1:

Average throughput: 64.70 Mbit/s

95th percentile per-packet one-way delay: 119.756 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-05 09:25:28

End at: 2017-12-05 09:25:58

Below is generated by plot.py at 2017-12-05 10:41:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.07 Mbit/s

95th percentile per-packet one-way delay: 95.702 ms

Loss rate: 0.54%

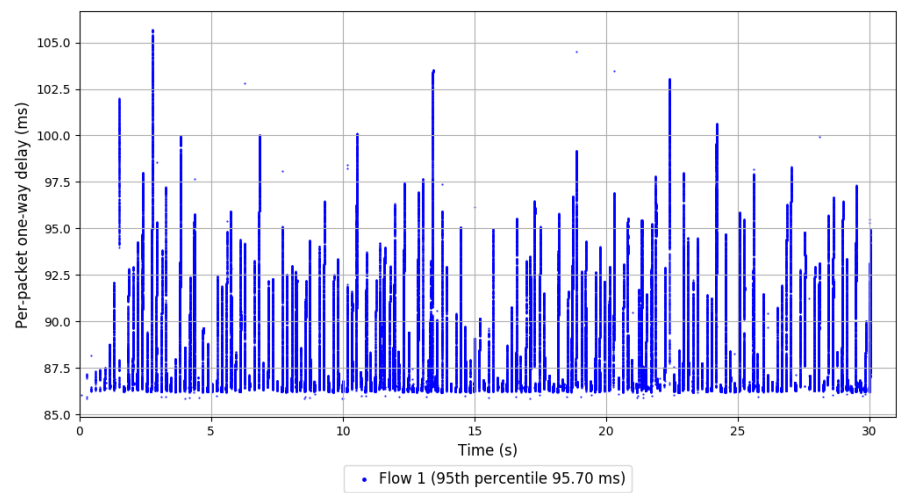
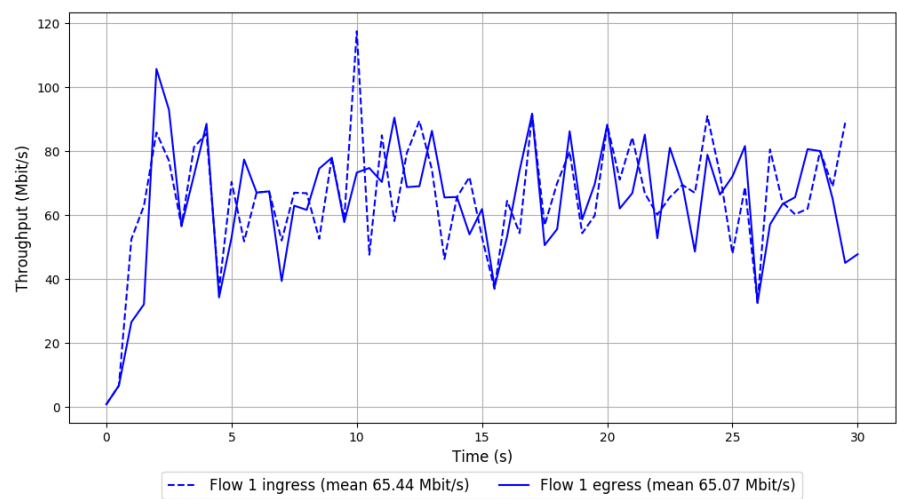
-- Flow 1:

Average throughput: 65.07 Mbit/s

95th percentile per-packet one-way delay: 95.702 ms

Loss rate: 0.54%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-05 09:36:04

End at: 2017-12-05 09:36:34

Below is generated by plot.py at 2017-12-05 10:41:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.19 Mbit/s

95th percentile per-packet one-way delay: 94.819 ms

Loss rate: 0.03%

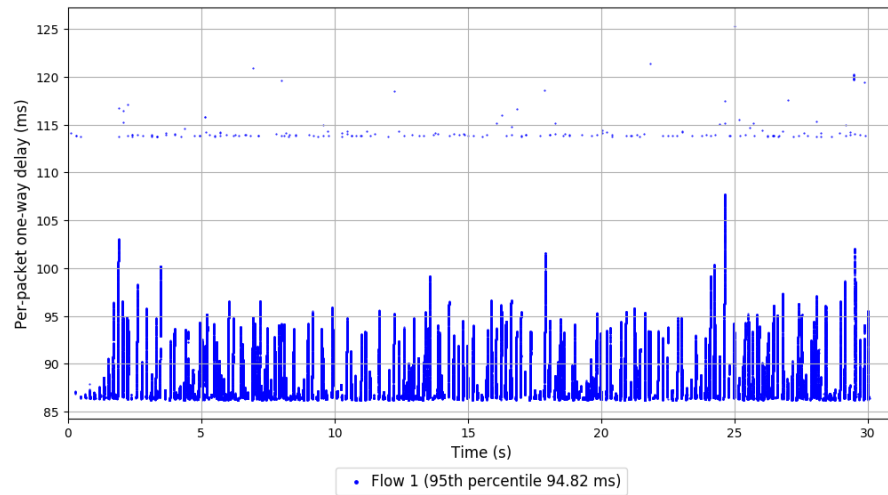
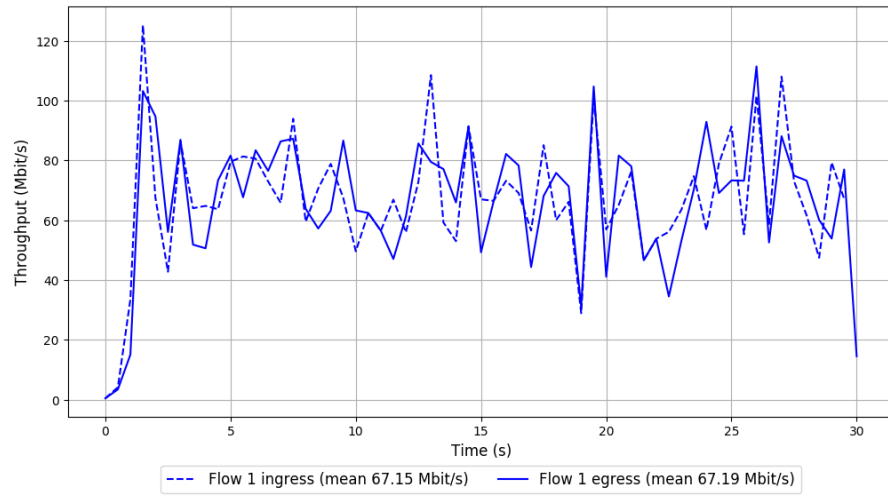
-- Flow 1:

Average throughput: 67.19 Mbit/s

95th percentile per-packet one-way delay: 94.819 ms

Loss rate: 0.03%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-05 09:47:00

End at: 2017-12-05 09:47:30

Below is generated by plot.py at 2017-12-05 10:42:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.74 Mbit/s

95th percentile per-packet one-way delay: 96.796 ms

Loss rate: 0.01%

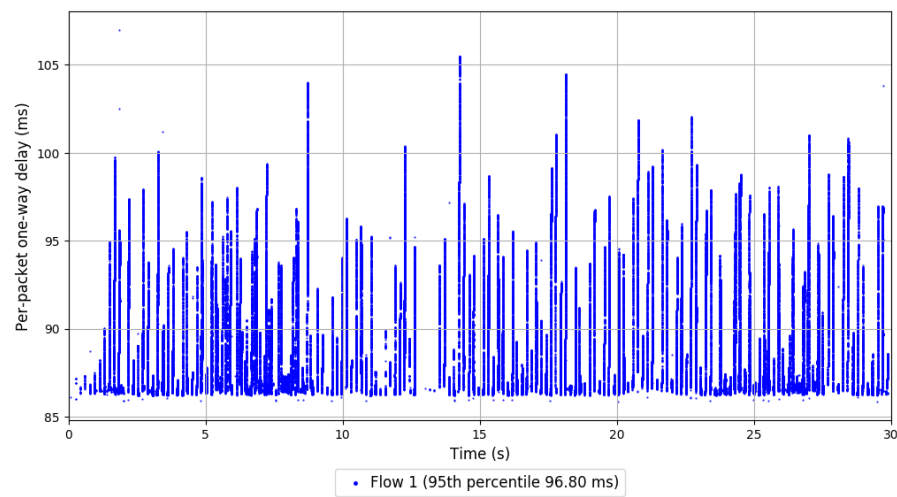
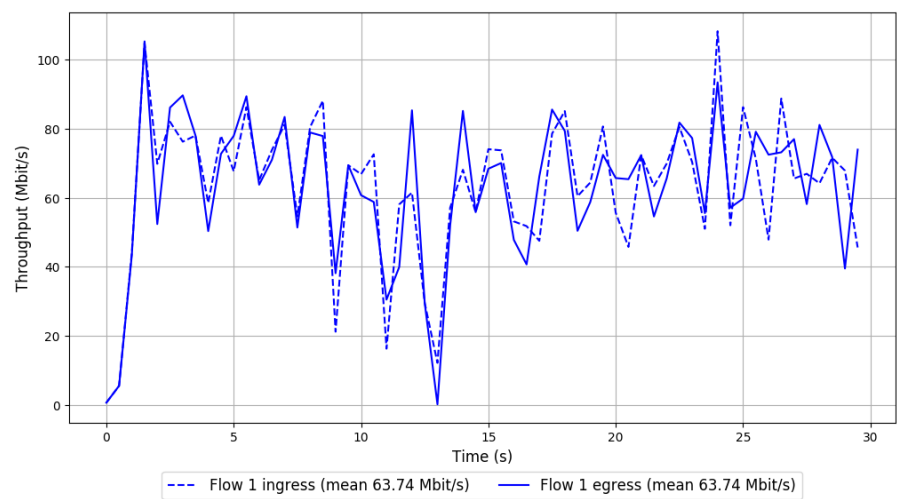
-- Flow 1:

Average throughput: 63.74 Mbit/s

95th percentile per-packet one-way delay: 96.796 ms

Loss rate: 0.01%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-05 09:58:03

End at: 2017-12-05 09:58:33

Below is generated by plot.py at 2017-12-05 10:42:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.33 Mbit/s

95th percentile per-packet one-way delay: 97.599 ms

Loss rate: 0.01%

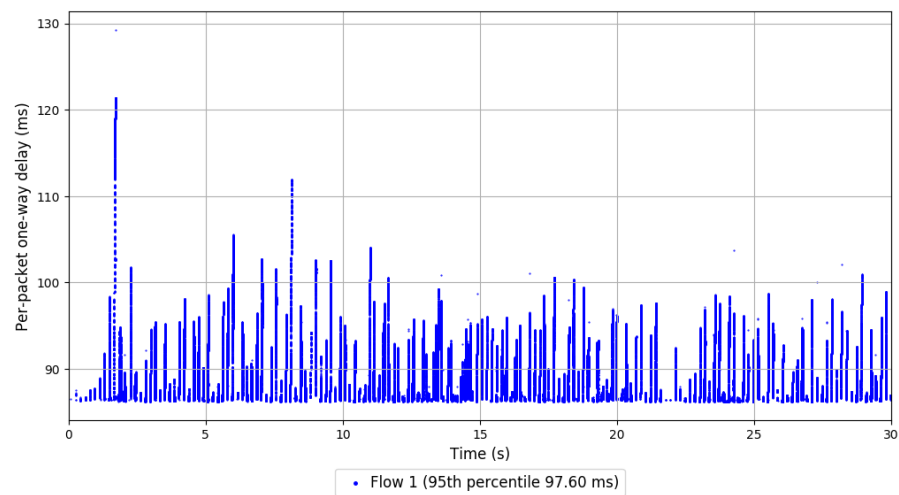
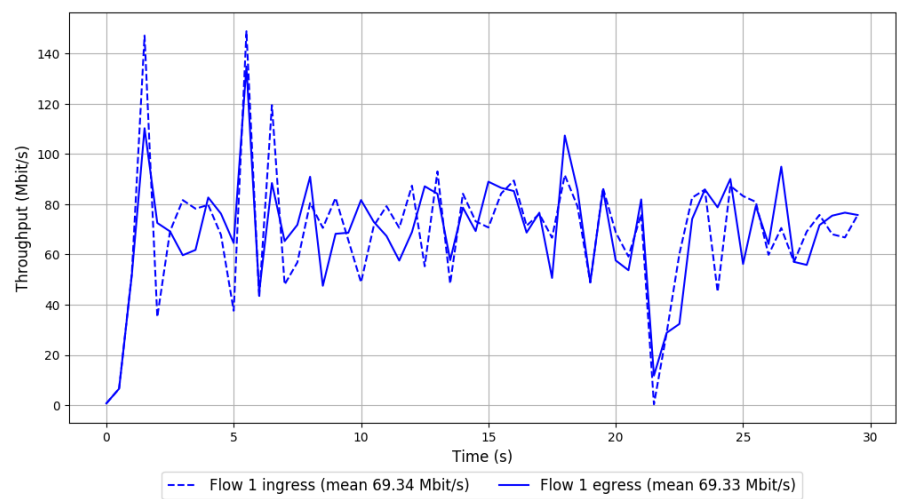
-- Flow 1:

Average throughput: 69.33 Mbit/s

95th percentile per-packet one-way delay: 97.599 ms

Loss rate: 0.01%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-05 08:09:01

End at: 2017-12-05 08:09:31

Below is generated by plot.py at 2017-12-05 10:42:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.20 Mbit/s

95th percentile per-packet one-way delay: 92.926 ms

Loss rate: 0.01%

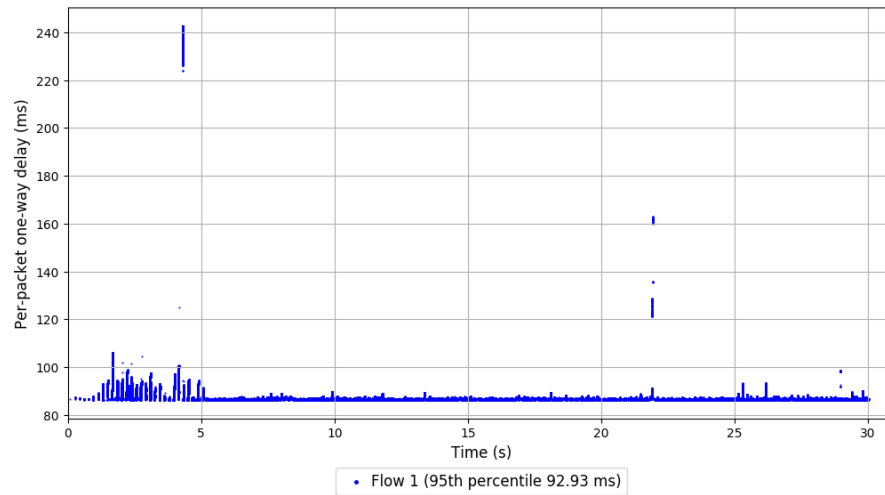
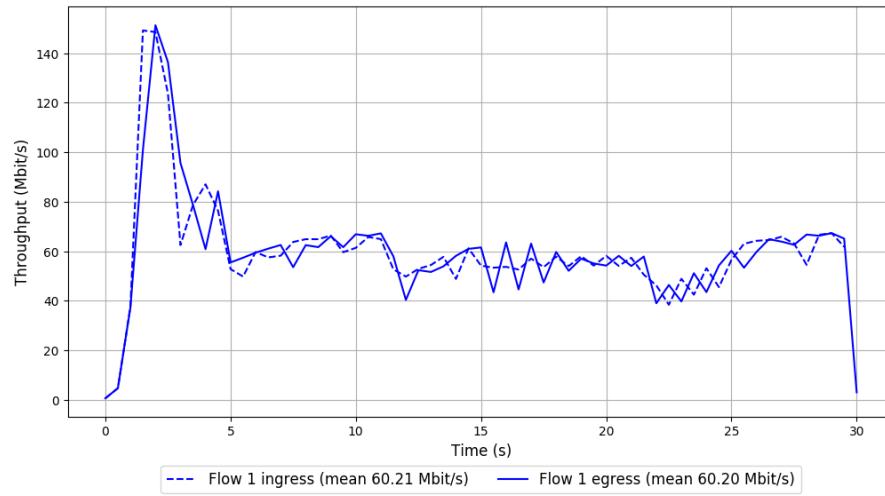
-- Flow 1:

Average throughput: 60.20 Mbit/s

95th percentile per-packet one-way delay: 92.926 ms

Loss rate: 0.01%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-05 08:19:59

End at: 2017-12-05 08:20:29

Below is generated by plot.py at 2017-12-05 10:43:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.55 Mbit/s

95th percentile per-packet one-way delay: 116.064 ms

Loss rate: 0.06%

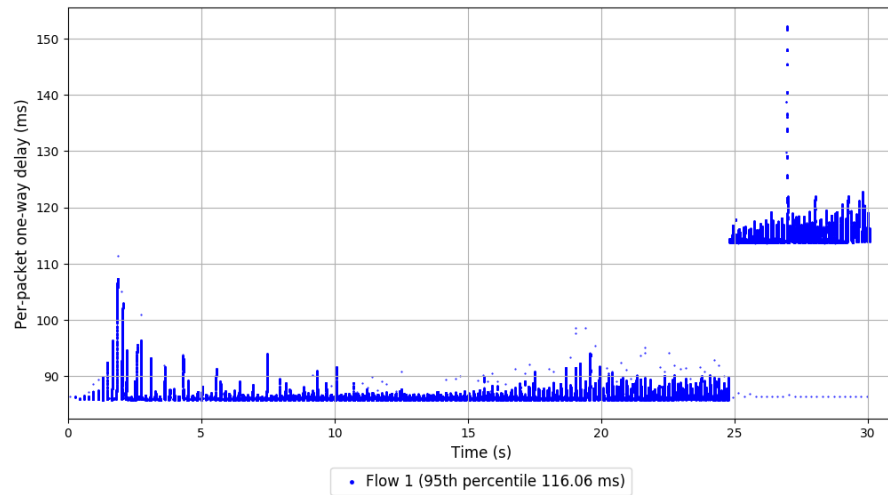
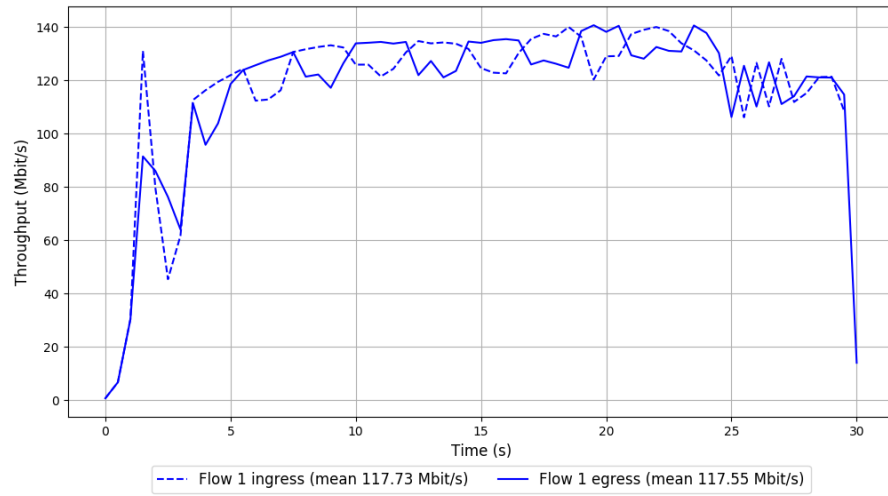
-- Flow 1:

Average throughput: 117.55 Mbit/s

95th percentile per-packet one-way delay: 116.064 ms

Loss rate: 0.06%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

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

End at: 2017-12-05 08:31:42

Below is generated by plot.py at 2017-12-05 10:43:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.47 Mbit/s

95th percentile per-packet one-way delay: 87.414 ms

Loss rate: 0.00%

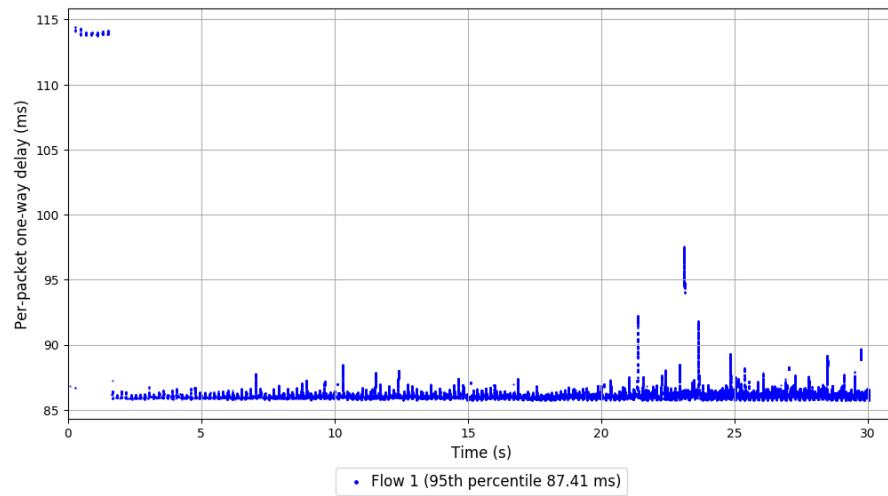
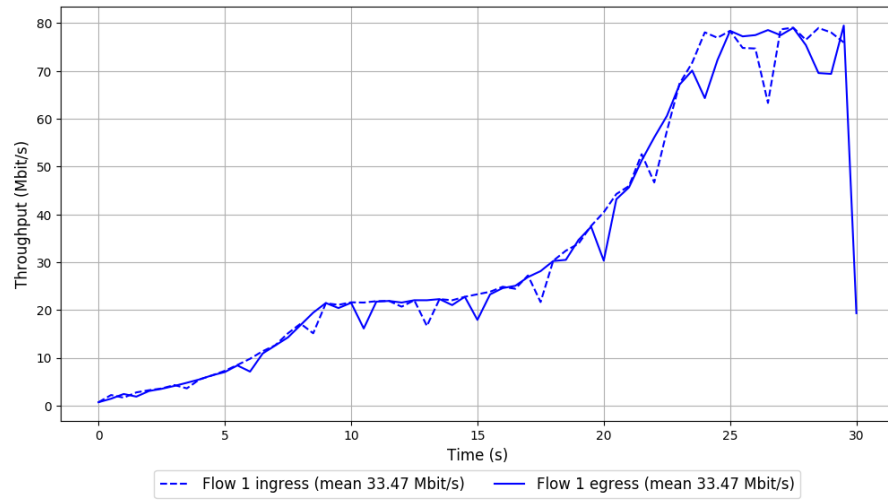
-- Flow 1:

Average throughput: 33.47 Mbit/s

95th percentile per-packet one-way delay: 87.414 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

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

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

Below is generated by plot.py at 2017-12-05 10:43:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.22 Mbit/s

95th percentile per-packet one-way delay: 116.263 ms

Loss rate: 0.03%

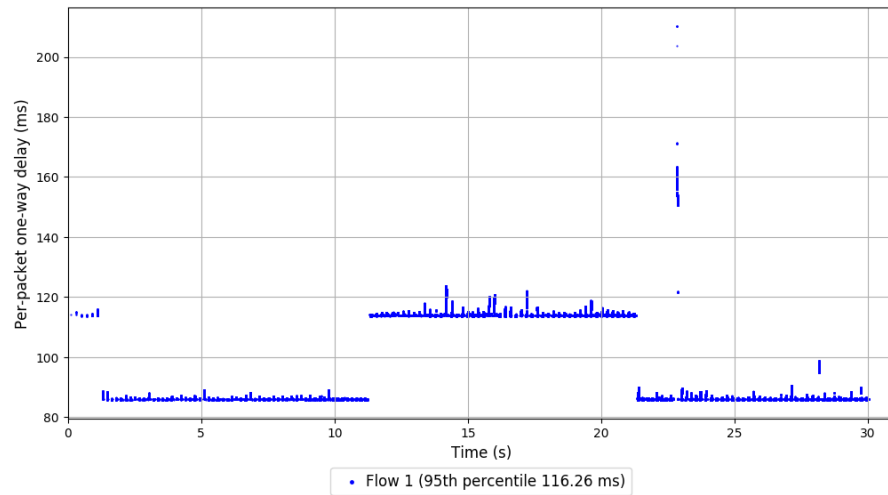
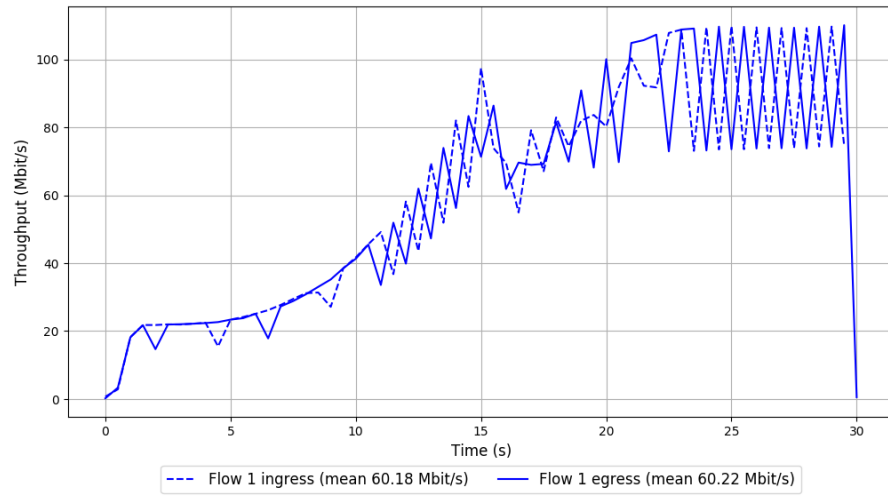
-- Flow 1:

Average throughput: 60.22 Mbit/s

95th percentile per-packet one-way delay: 116.263 ms

Loss rate: 0.03%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-05 08:52:56

End at: 2017-12-05 08:53:26

Below is generated by plot.py at 2017-12-05 10:43:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.26 Mbit/s

95th percentile per-packet one-way delay: 114.266 ms

Loss rate: 0.00%

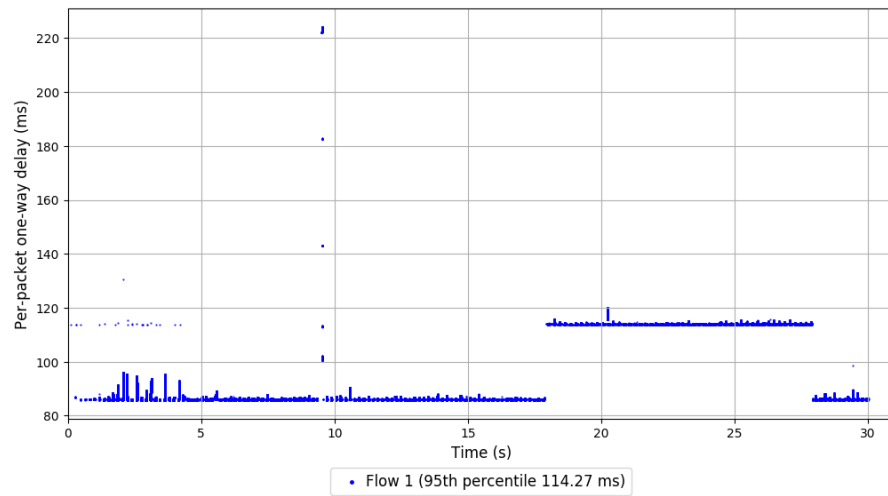
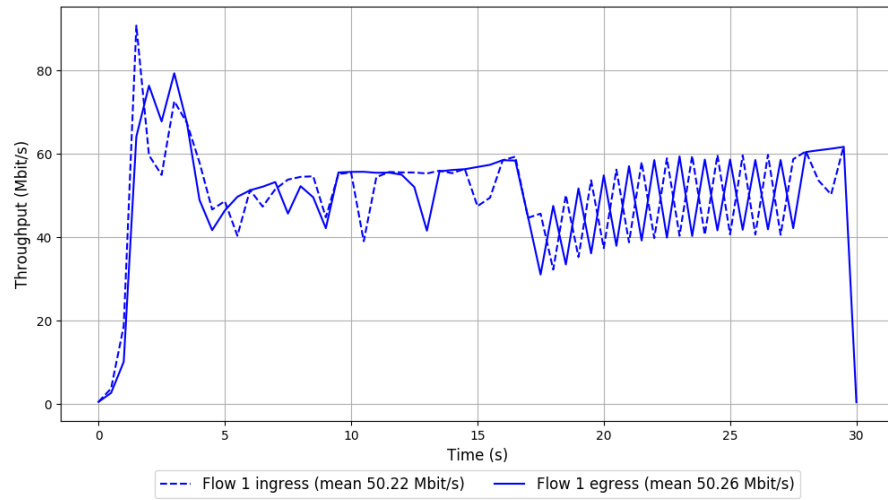
-- Flow 1:

Average throughput: 50.26 Mbit/s

95th percentile per-packet one-way delay: 114.266 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-05 09:03:58

End at: 2017-12-05 09:04:28

Below is generated by plot.py at 2017-12-05 10:43:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.10 Mbit/s

95th percentile per-packet one-way delay: 90.074 ms

Loss rate: 0.01%

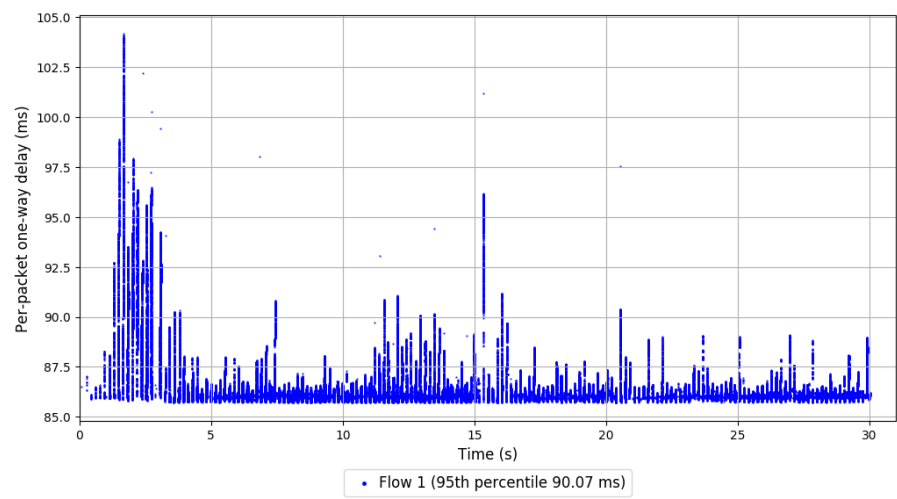
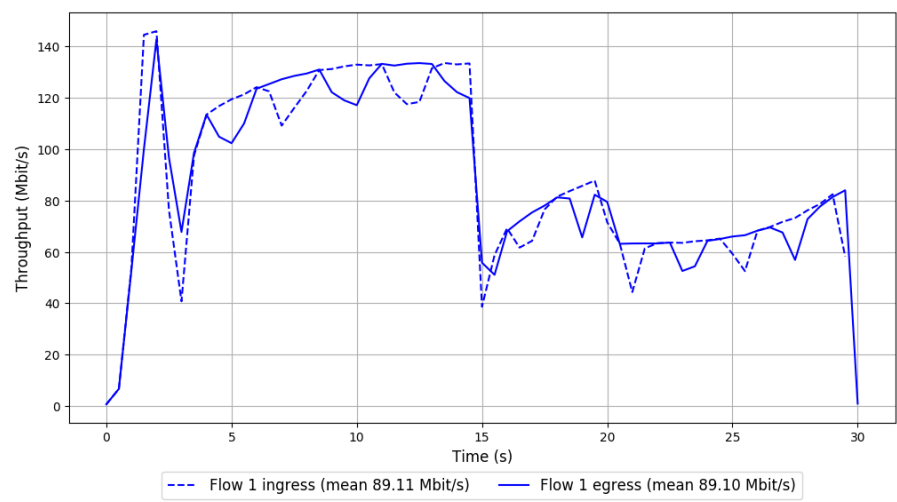
-- Flow 1:

Average throughput: 89.10 Mbit/s

95th percentile per-packet one-way delay: 90.074 ms

Loss rate: 0.01%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-05 09:15:05

End at: 2017-12-05 09:15:35

Below is generated by plot.py at 2017-12-05 10:43:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.08 Mbit/s

95th percentile per-packet one-way delay: 91.774 ms

Loss rate: 0.00%

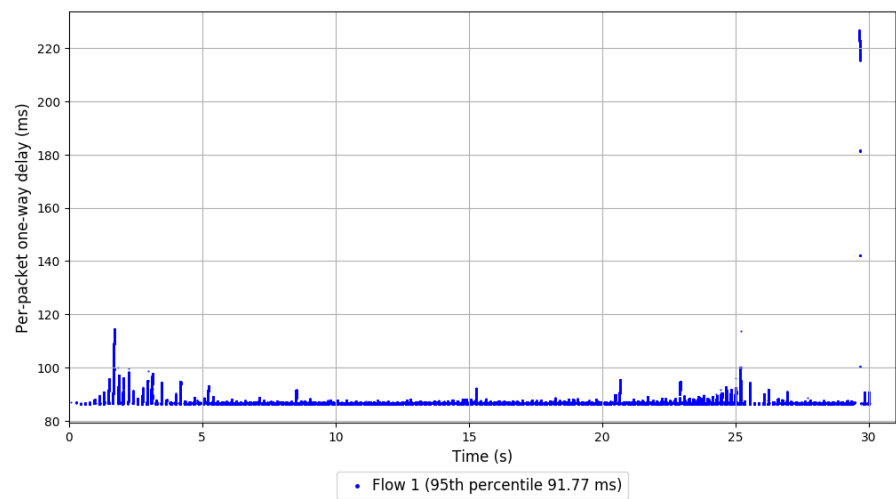
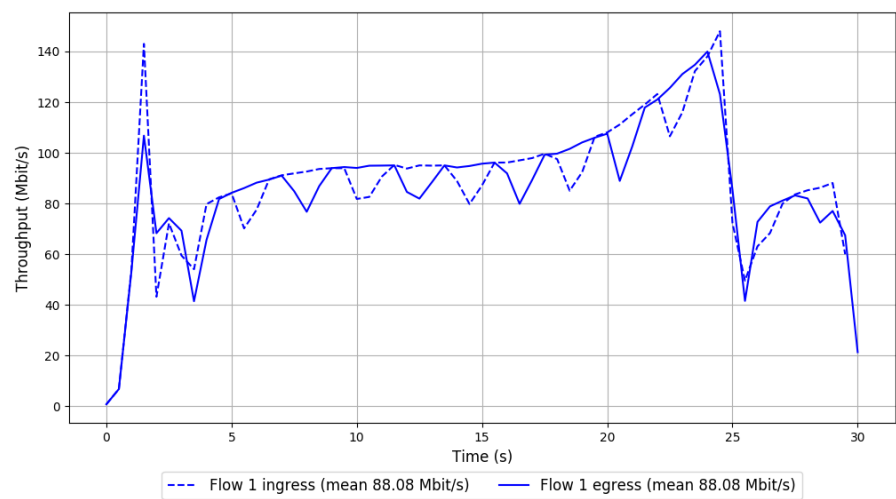
-- Flow 1:

Average throughput: 88.08 Mbit/s

95th percentile per-packet one-way delay: 91.774 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-05 09:26:13

End at: 2017-12-05 09:26:43

Below is generated by plot.py at 2017-12-05 10:43:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.78 Mbit/s

95th percentile per-packet one-way delay: 89.004 ms

Loss rate: 0.00%

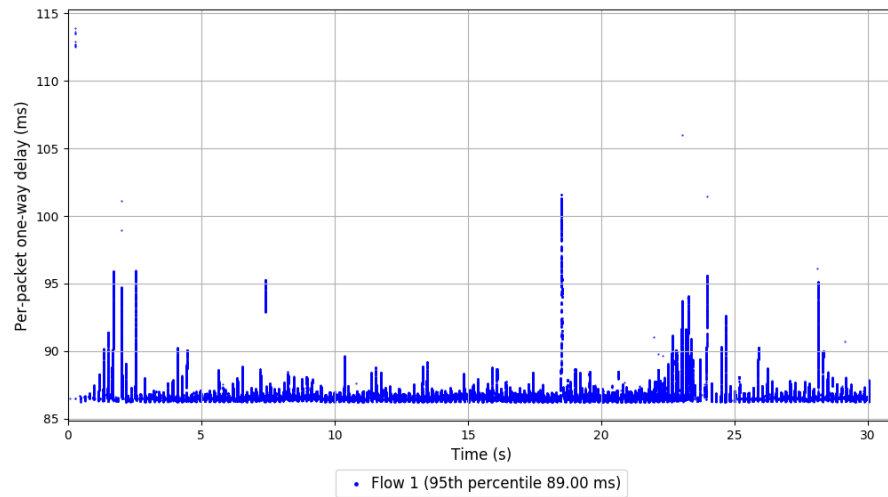
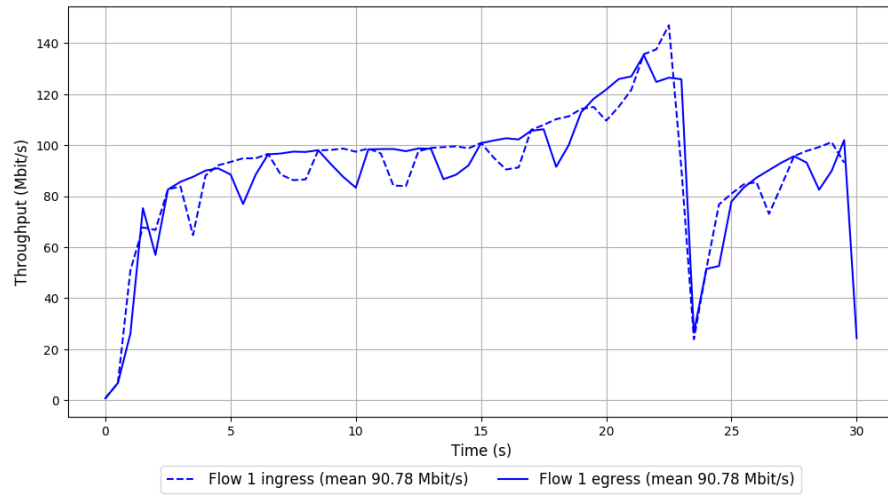
-- Flow 1:

Average throughput: 90.78 Mbit/s

95th percentile per-packet one-way delay: 89.004 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-05 09:36:49

End at: 2017-12-05 09:37:19

Below is generated by plot.py at 2017-12-05 10:44:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.62 Mbit/s

95th percentile per-packet one-way delay: 93.737 ms

Loss rate: 0.41%

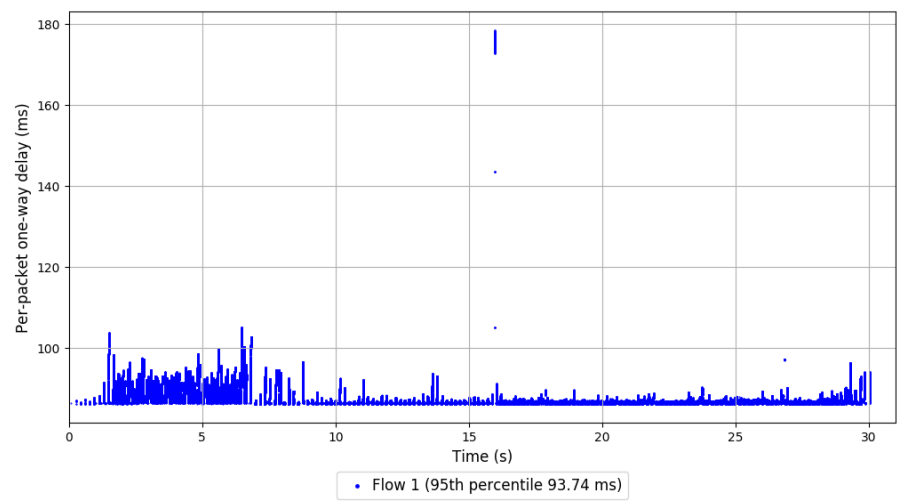
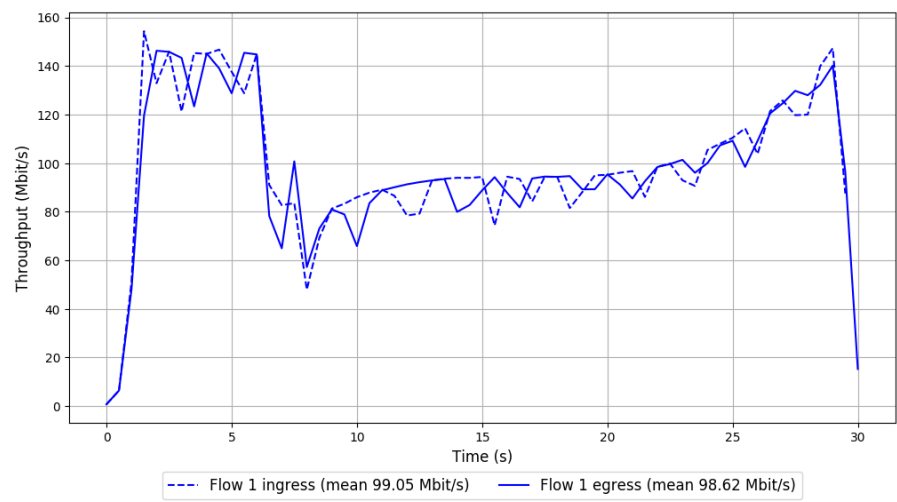
-- Flow 1:

Average throughput: 98.62 Mbit/s

95th percentile per-packet one-way delay: 93.737 ms

Loss rate: 0.41%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-05 09:47:46

End at: 2017-12-05 09:48:16

Below is generated by plot.py at 2017-12-05 10:44:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.39 Mbit/s

95th percentile per-packet one-way delay: 114.527 ms

Loss rate: 0.01%

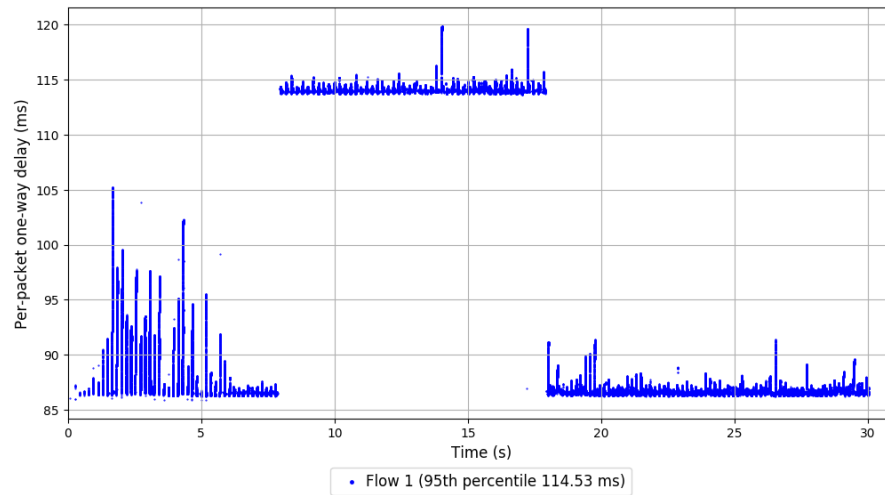
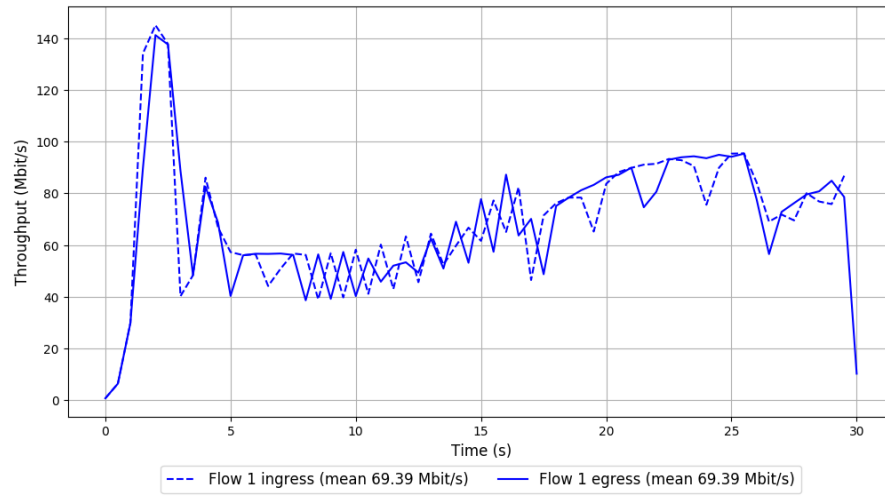
-- Flow 1:

Average throughput: 69.39 Mbit/s

95th percentile per-packet one-way delay: 114.527 ms

Loss rate: 0.01%

Run 10: Report of TCP Cubic — Data Link

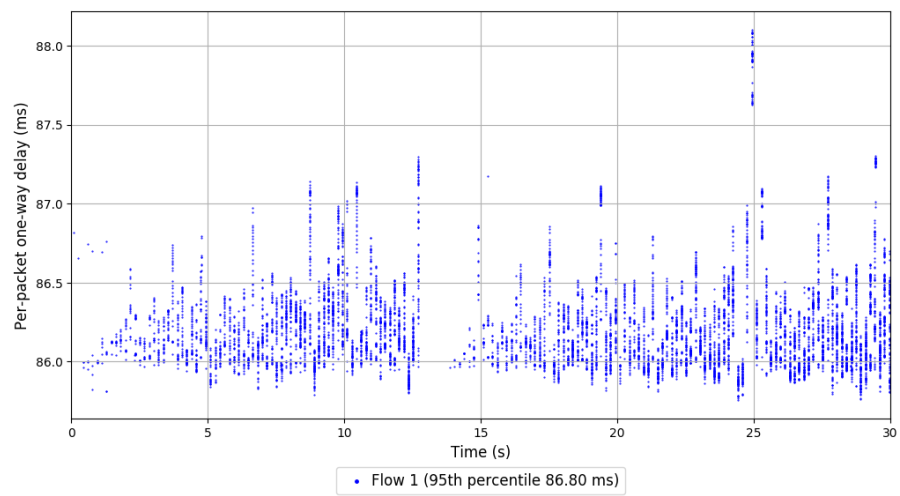
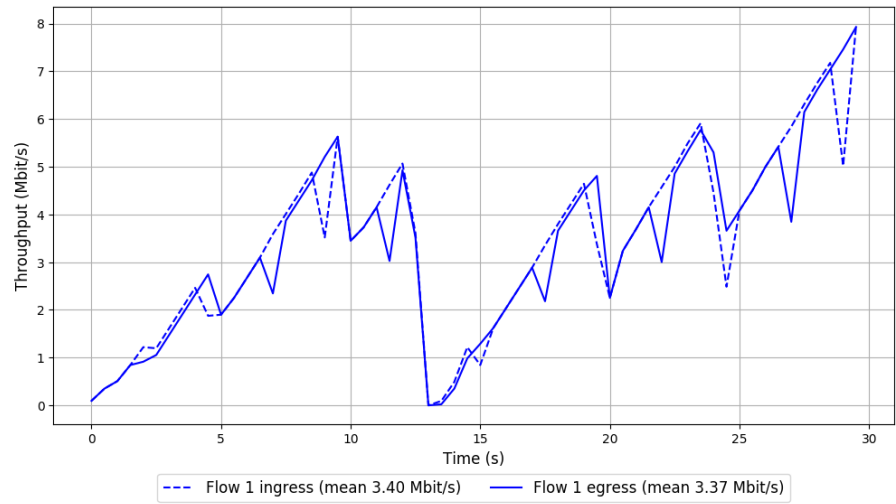


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-05 08:14:19
End at: 2017-12-05 08:14:49

# Below is generated by plot.py at 2017-12-05 10:44:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.37 Mbit/s
95th percentile per-packet one-way delay: 86.796 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 3.37 Mbit/s
95th percentile per-packet one-way delay: 86.796 ms
Loss rate: 0.99%
```

Run 1: Report of LEDBAT — Data Link

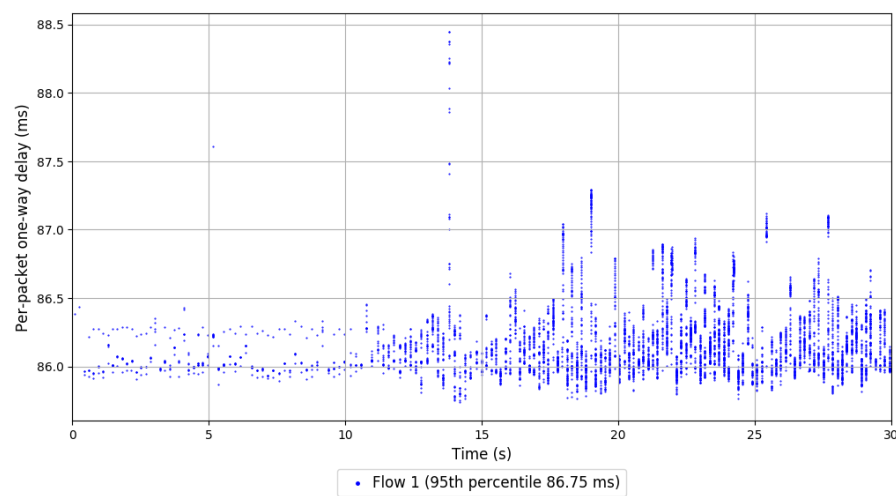
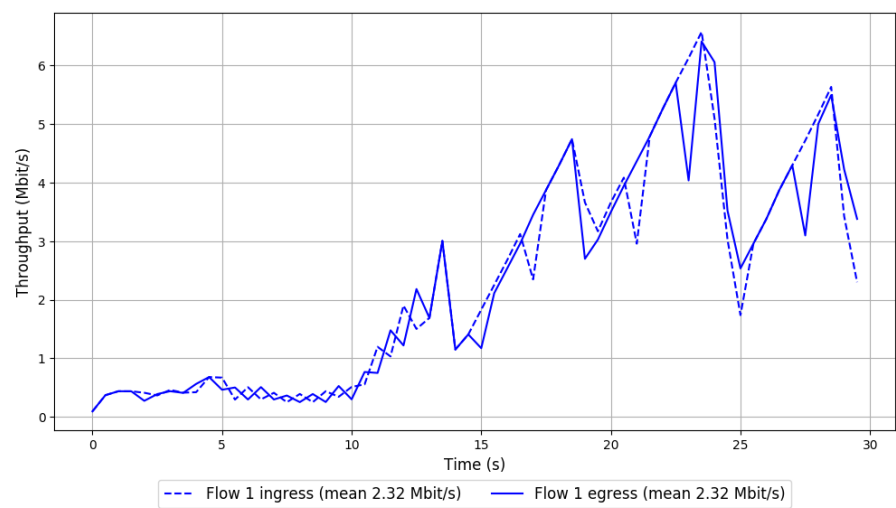


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-05 08:25:31
End at: 2017-12-05 08:26:01

# Below is generated by plot.py at 2017-12-05 10:44:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 86.752 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 86.752 ms
Loss rate: 0.03%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-05 08:36:36

End at: 2017-12-05 08:37:06

Below is generated by plot.py at 2017-12-05 10:44:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.441 ms

Loss rate: 0.00%

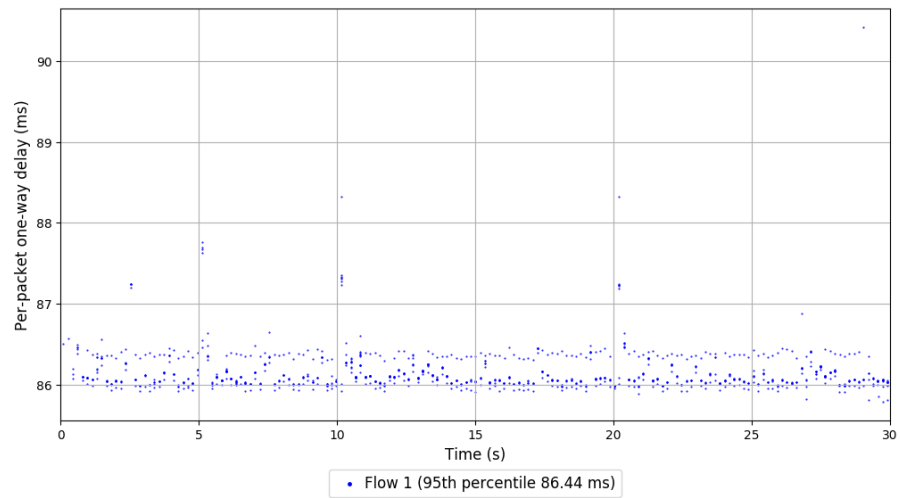
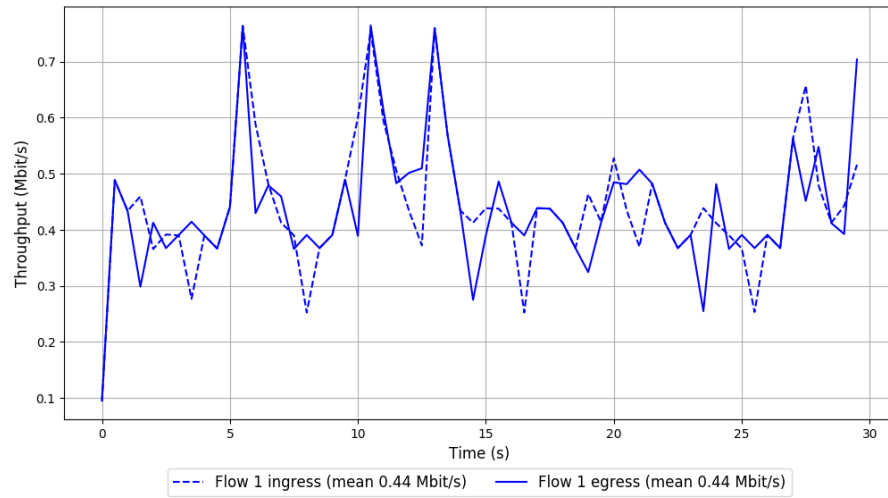
-- Flow 1:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.441 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-05 08:47:40

End at: 2017-12-05 08:48:10

Below is generated by plot.py at 2017-12-05 10:44:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 86.783 ms

Loss rate: 0.89%

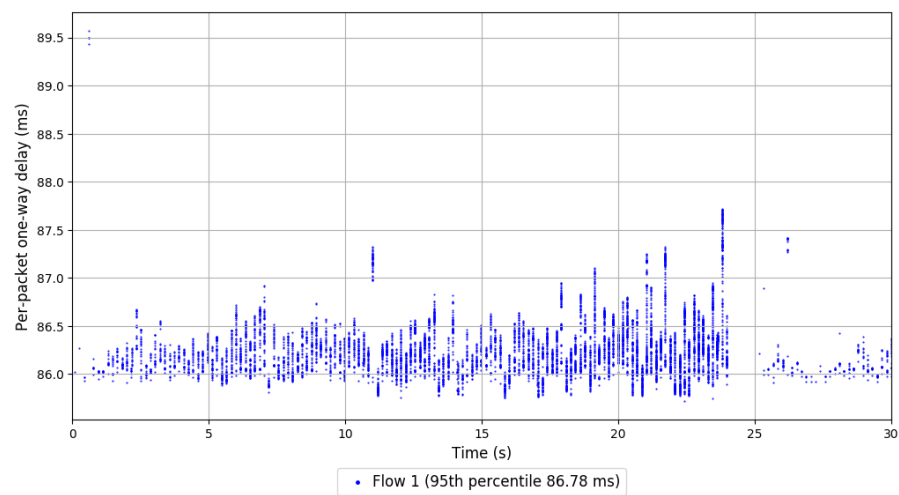
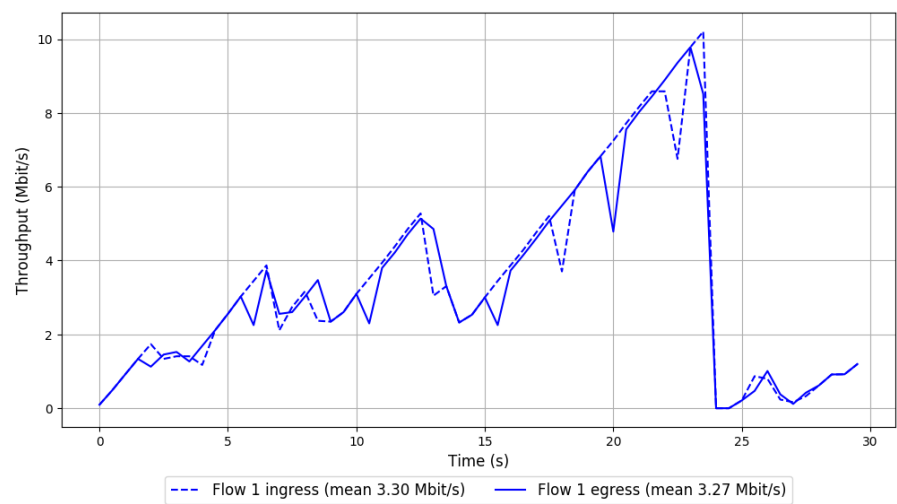
-- Flow 1:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 86.783 ms

Loss rate: 0.89%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-05 08:58:18

End at: 2017-12-05 08:58:48

Below is generated by plot.py at 2017-12-05 10:44:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 86.354 ms

Loss rate: 0.00%

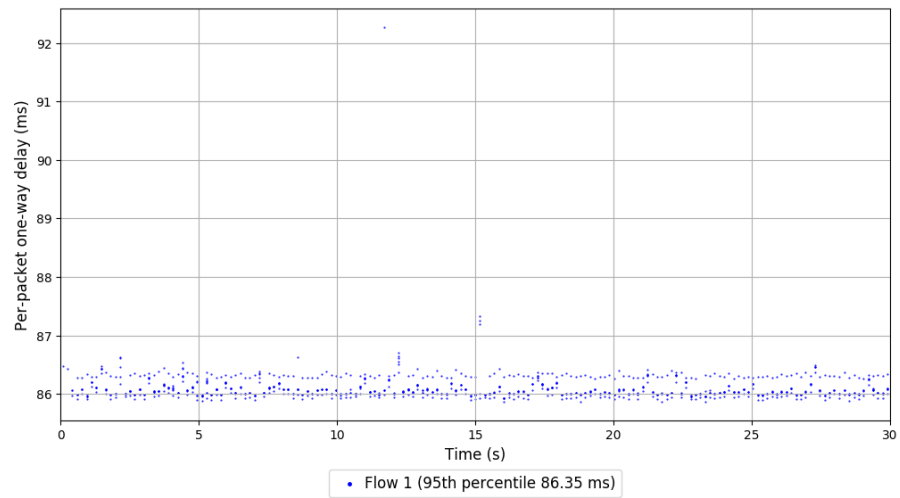
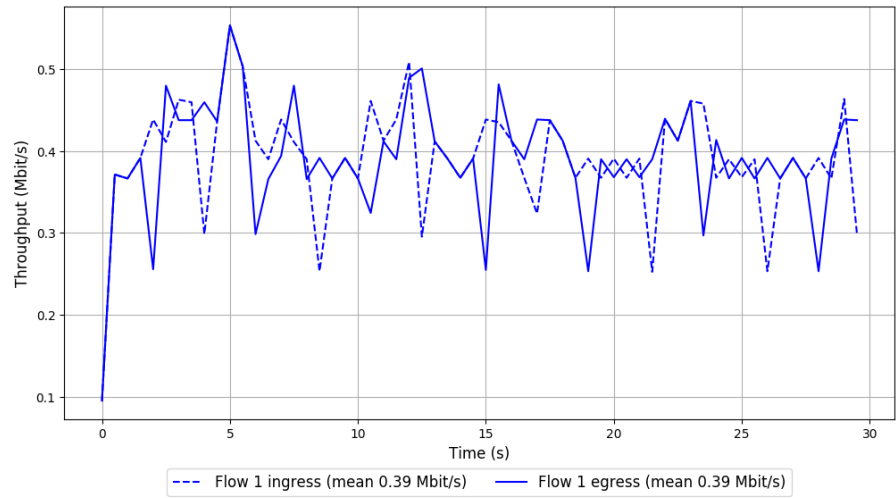
-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 86.354 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-05 09:09:23

End at: 2017-12-05 09:09:53

Below is generated by plot.py at 2017-12-05 10:44:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 87.027 ms

Loss rate: 0.05%

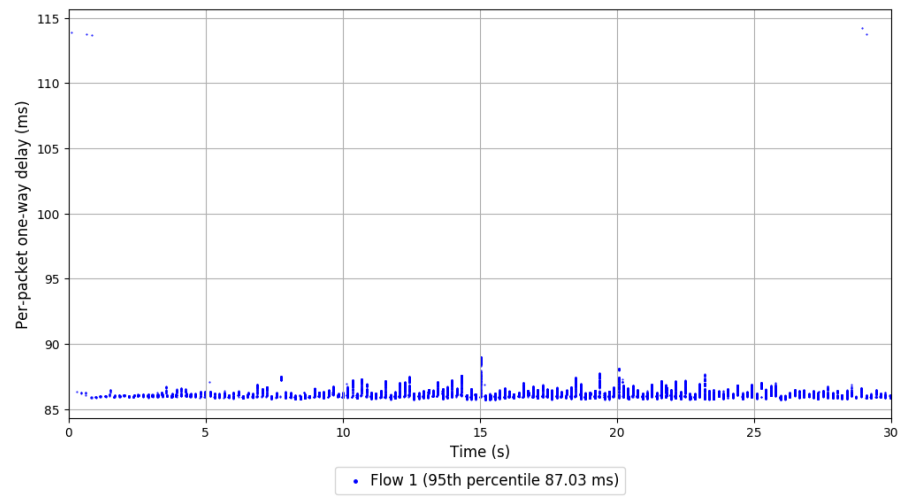
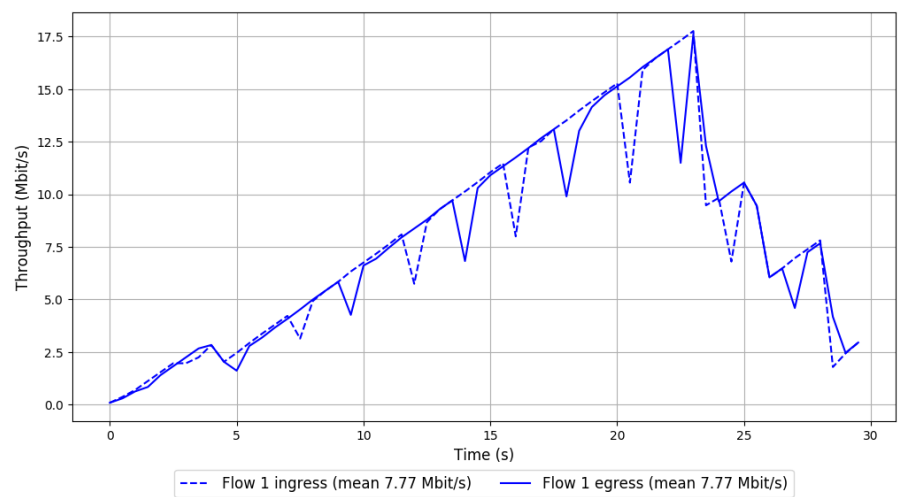
-- Flow 1:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 87.027 ms

Loss rate: 0.05%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-05 09:20:43

End at: 2017-12-05 09:21:13

Below is generated by plot.py at 2017-12-05 10:44:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 114.289 ms

Loss rate: 0.00%

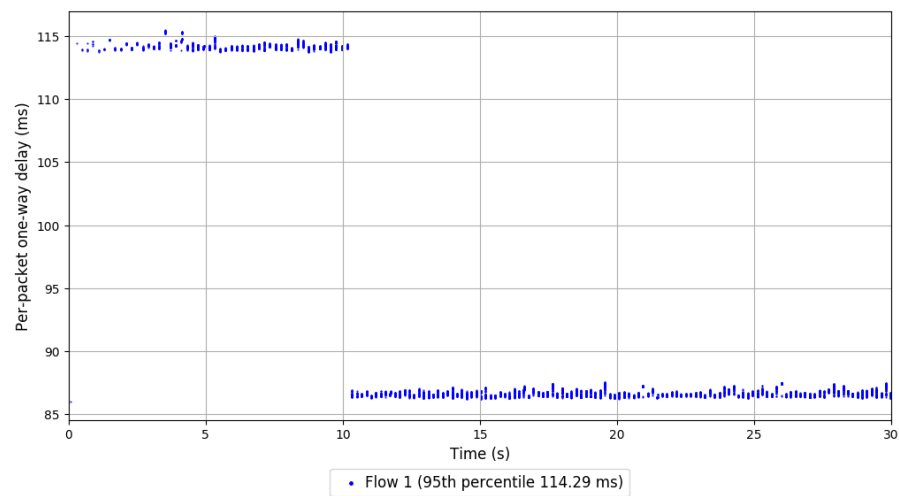
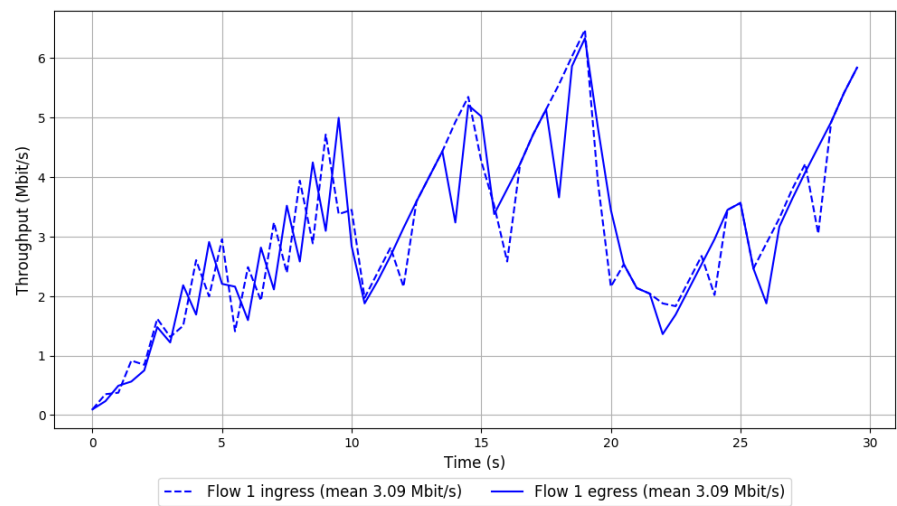
-- Flow 1:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 114.289 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-05 09:31:24

End at: 2017-12-05 09:31:54

Below is generated by plot.py at 2017-12-05 10:44:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 87.227 ms

Loss rate: 0.05%

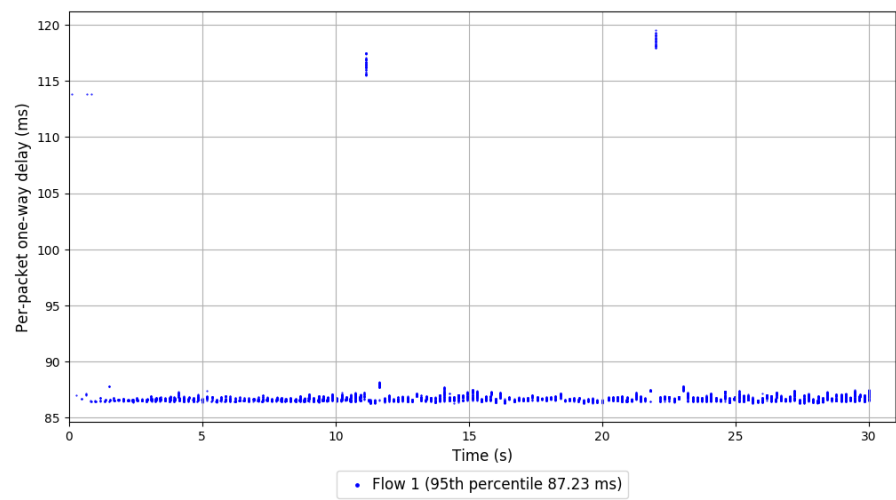
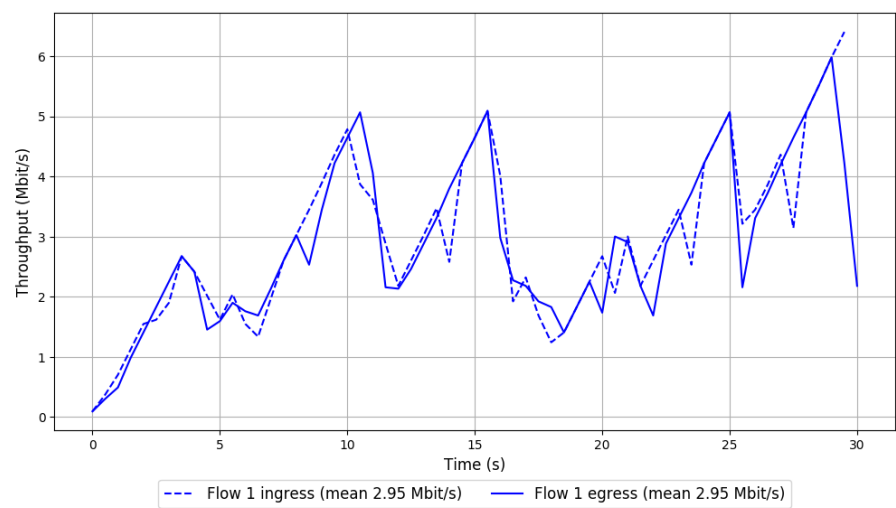
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 87.227 ms

Loss rate: 0.05%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-05 09:42:16

End at: 2017-12-05 09:42:46

Below is generated by plot.py at 2017-12-05 10:44:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 114.198 ms

Loss rate: 0.09%

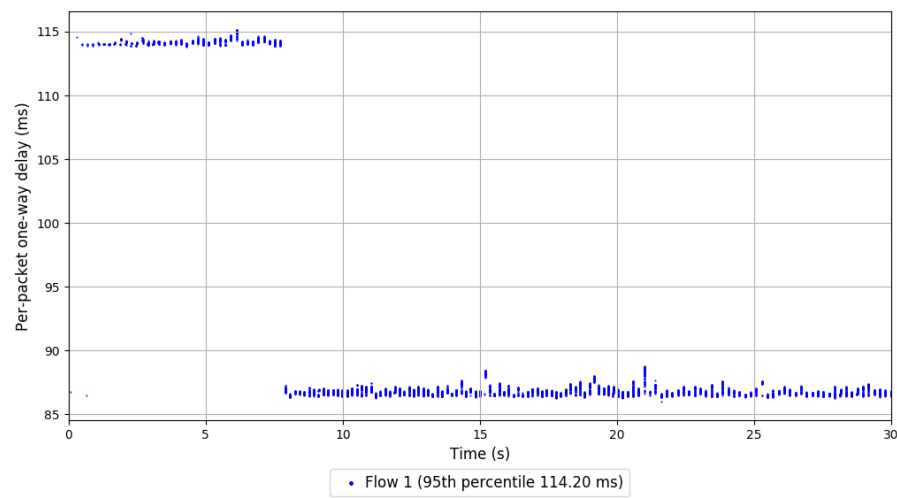
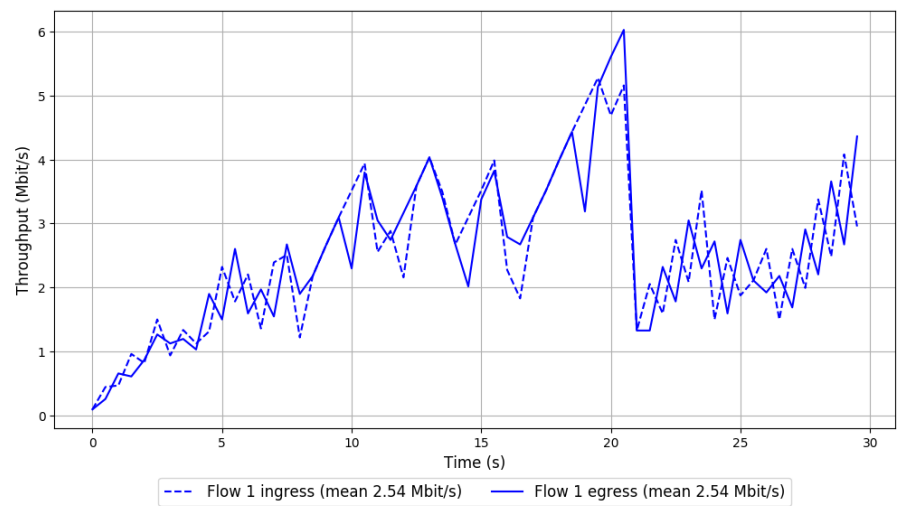
-- Flow 1:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 114.198 ms

Loss rate: 0.09%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-05 09:53:07

End at: 2017-12-05 09:53:37

Below is generated by plot.py at 2017-12-05 10:44:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.34 Mbit/s

95th percentile per-packet one-way delay: 87.191 ms

Loss rate: 0.12%

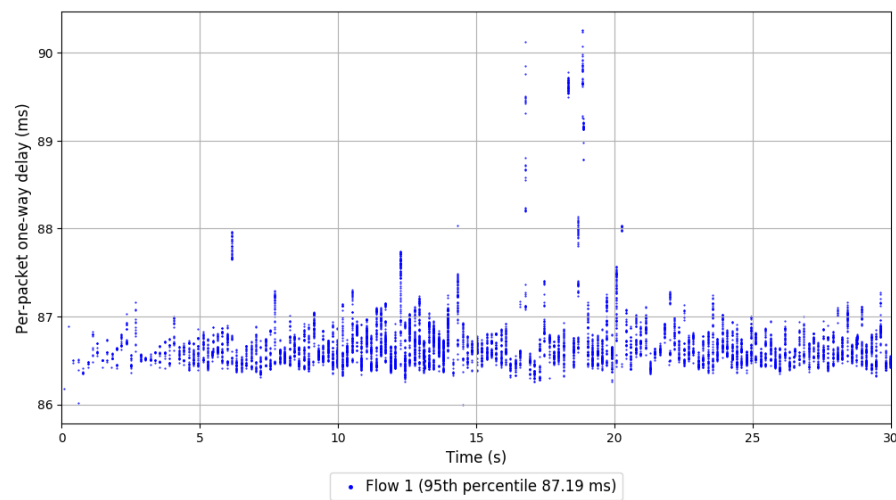
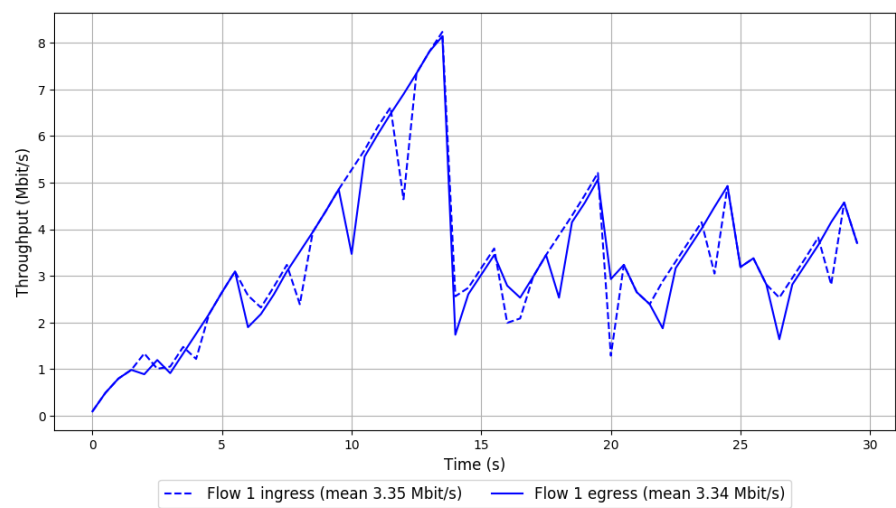
-- Flow 1:

Average throughput: 3.34 Mbit/s

95th percentile per-packet one-way delay: 87.191 ms

Loss rate: 0.12%

Run 10: Report of LEDBAT — Data Link

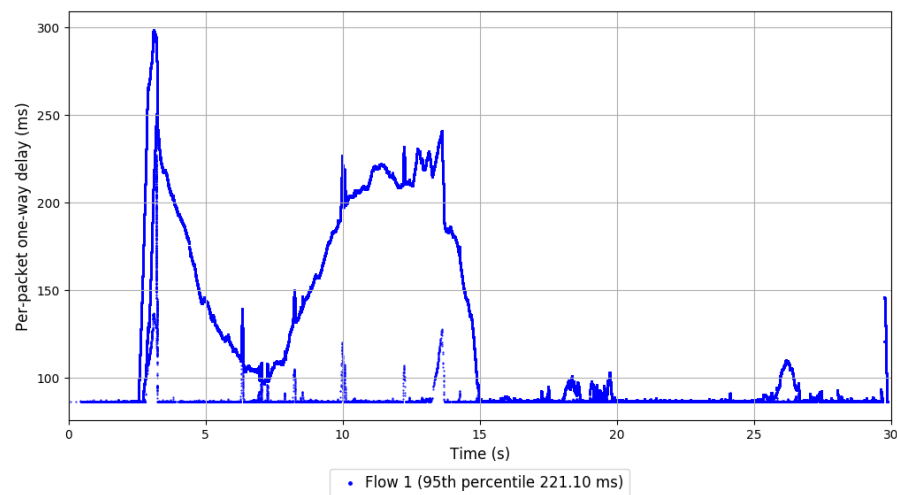
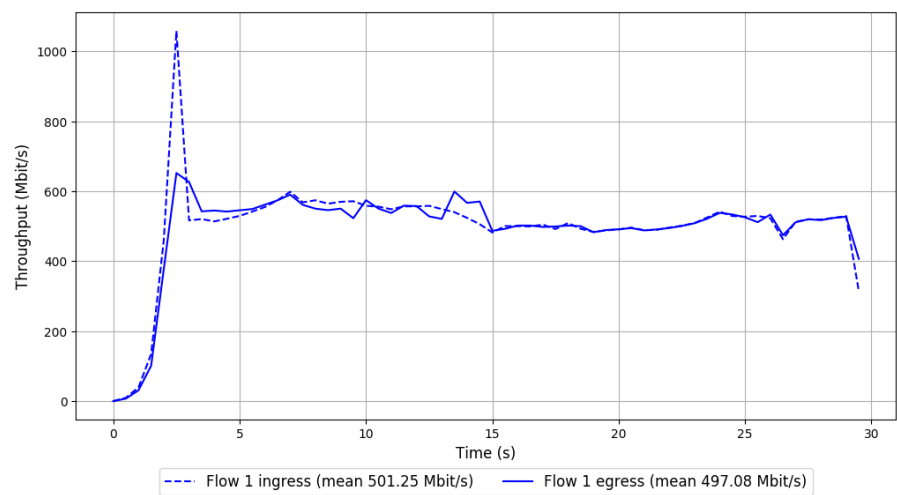


```
Run 1: Statistics of PCC

Start at: 2017-12-05 08:10:27
End at: 2017-12-05 08:10:57

# Below is generated by plot.py at 2017-12-05 10:51:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 497.08 Mbit/s
95th percentile per-packet one-way delay: 221.097 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 497.08 Mbit/s
95th percentile per-packet one-way delay: 221.097 ms
Loss rate: 0.83%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-05 08:21:33

End at: 2017-12-05 08:22:03

Below is generated by plot.py at 2017-12-05 10:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 479.78 Mbit/s

95th percentile per-packet one-way delay: 234.187 ms

Loss rate: 1.38%

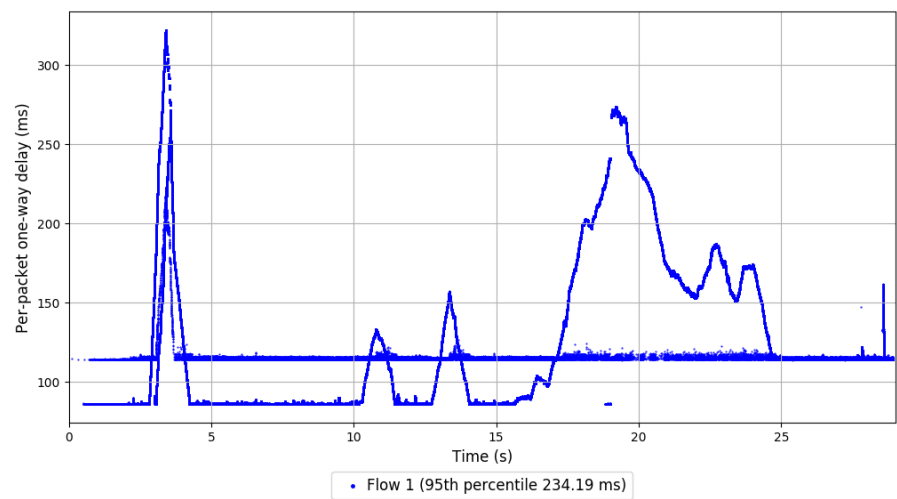
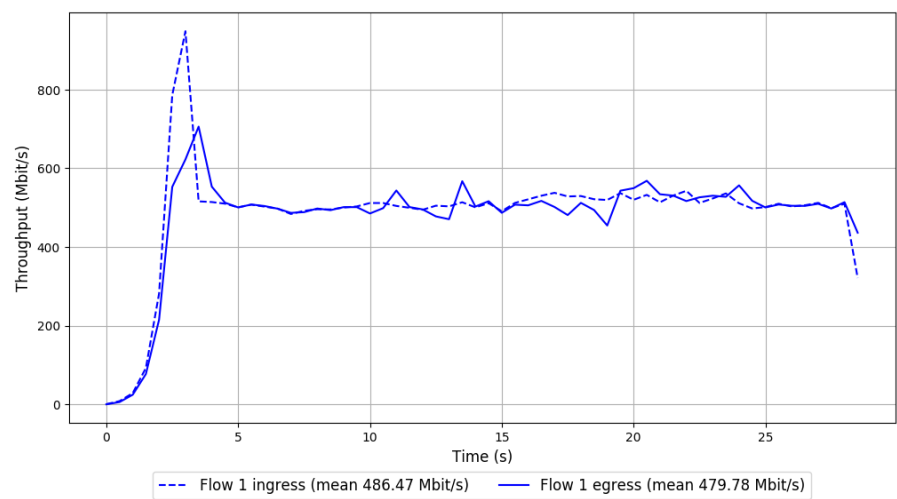
-- Flow 1:

Average throughput: 479.78 Mbit/s

95th percentile per-packet one-way delay: 234.187 ms

Loss rate: 1.38%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-05 08:32:42

End at: 2017-12-05 08:33:13

Below is generated by plot.py at 2017-12-05 10:51:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 488.50 Mbit/s

95th percentile per-packet one-way delay: 186.112 ms

Loss rate: 0.54%

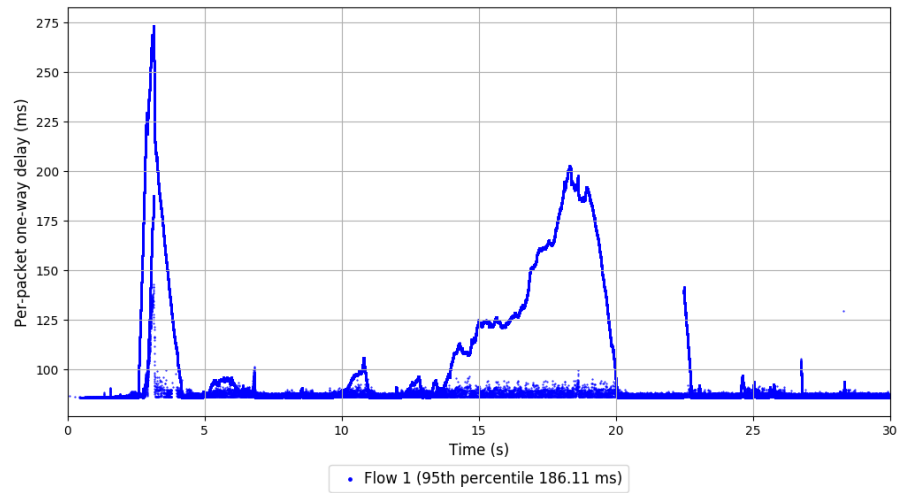
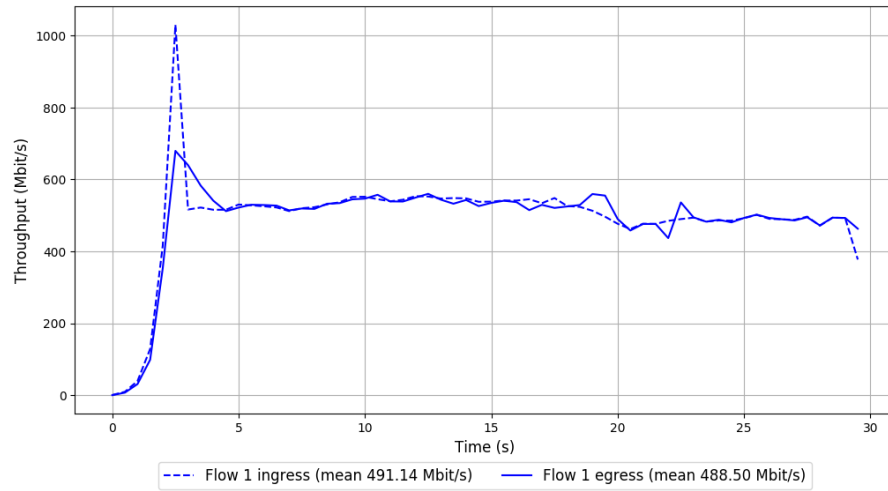
-- Flow 1:

Average throughput: 488.50 Mbit/s

95th percentile per-packet one-way delay: 186.112 ms

Loss rate: 0.54%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-05 08:43:43

End at: 2017-12-05 08:44:13

Below is generated by plot.py at 2017-12-05 10:52:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 499.37 Mbit/s

95th percentile per-packet one-way delay: 232.336 ms

Loss rate: 1.94%

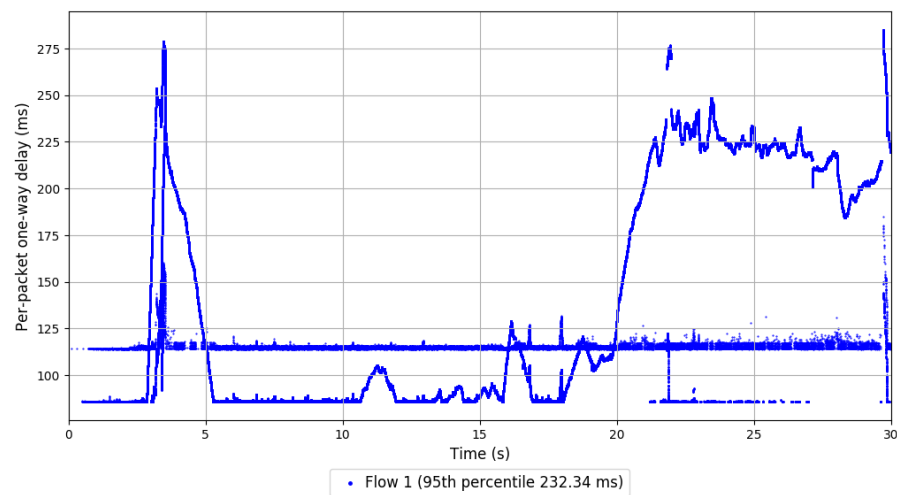
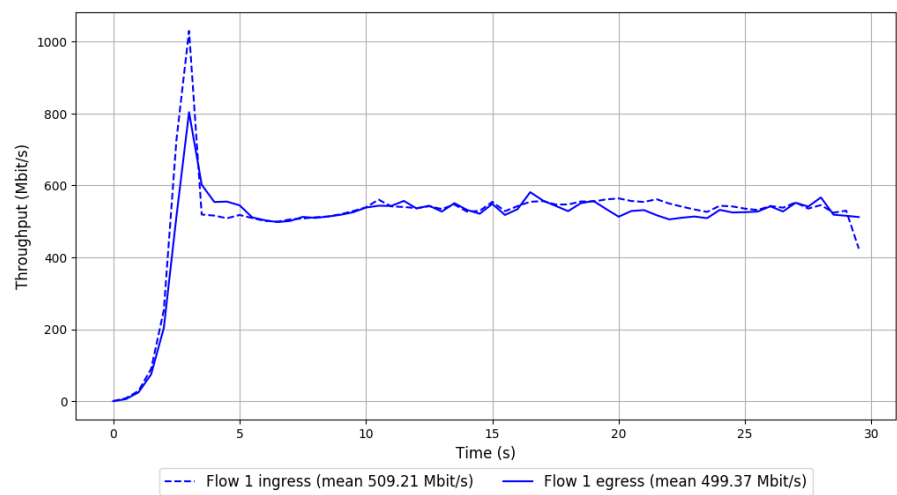
-- Flow 1:

Average throughput: 499.37 Mbit/s

95th percentile per-packet one-way delay: 232.336 ms

Loss rate: 1.94%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-05 08:54:24

End at: 2017-12-05 08:54:54

Below is generated by plot.py at 2017-12-05 10:52:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 480.40 Mbit/s

95th percentile per-packet one-way delay: 209.793 ms

Loss rate: 0.74%

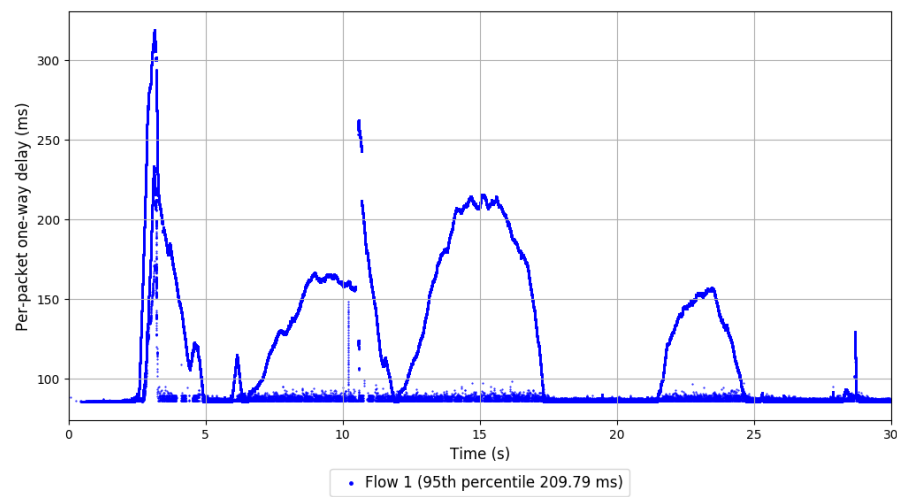
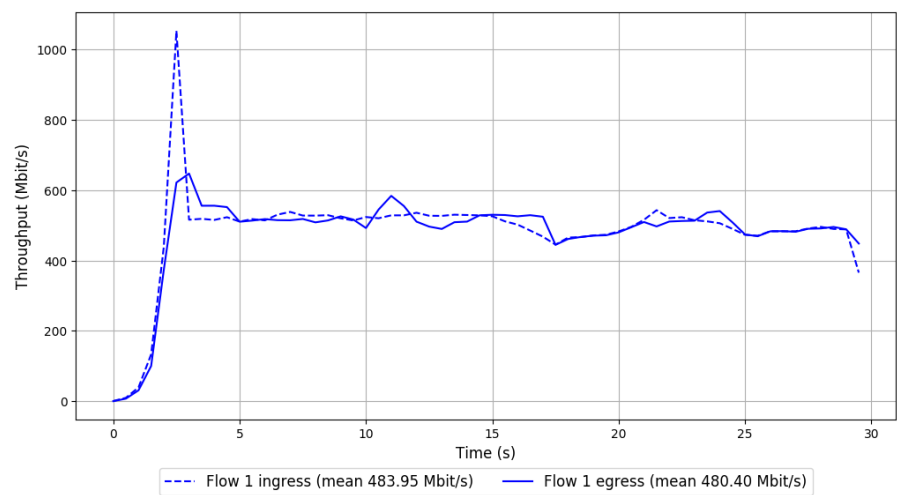
-- Flow 1:

Average throughput: 480.40 Mbit/s

95th percentile per-packet one-way delay: 209.793 ms

Loss rate: 0.74%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-05 09:05:24

End at: 2017-12-05 09:05:54

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 504.06 Mbit/s

95th percentile per-packet one-way delay: 195.486 ms

Loss rate: 0.69%

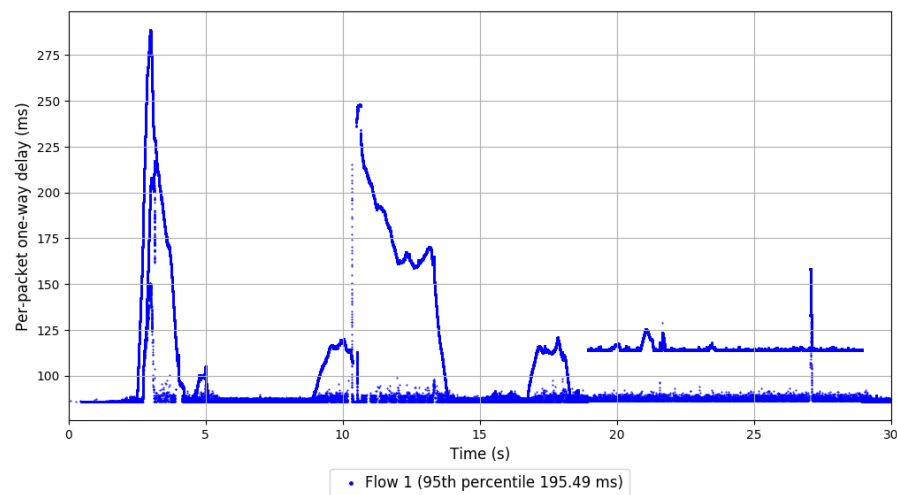
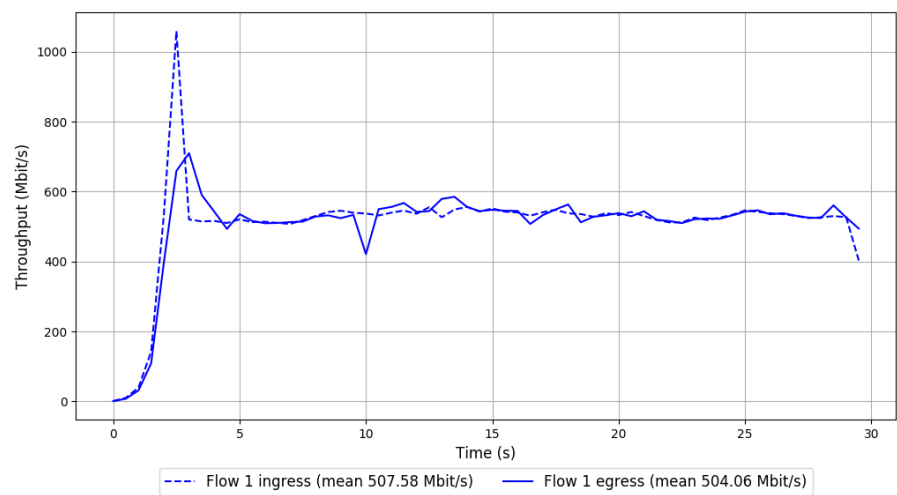
-- Flow 1:

Average throughput: 504.06 Mbit/s

95th percentile per-packet one-way delay: 195.486 ms

Loss rate: 0.69%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-05 09:16:35

End at: 2017-12-05 09:17:05

Below is generated by plot.py at 2017-12-05 10:52:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 501.05 Mbit/s

95th percentile per-packet one-way delay: 232.447 ms

Loss rate: 1.81%

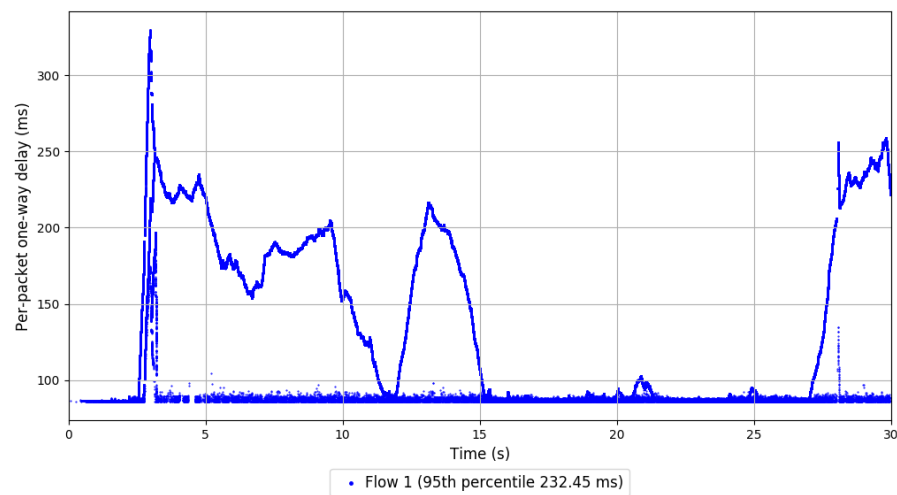
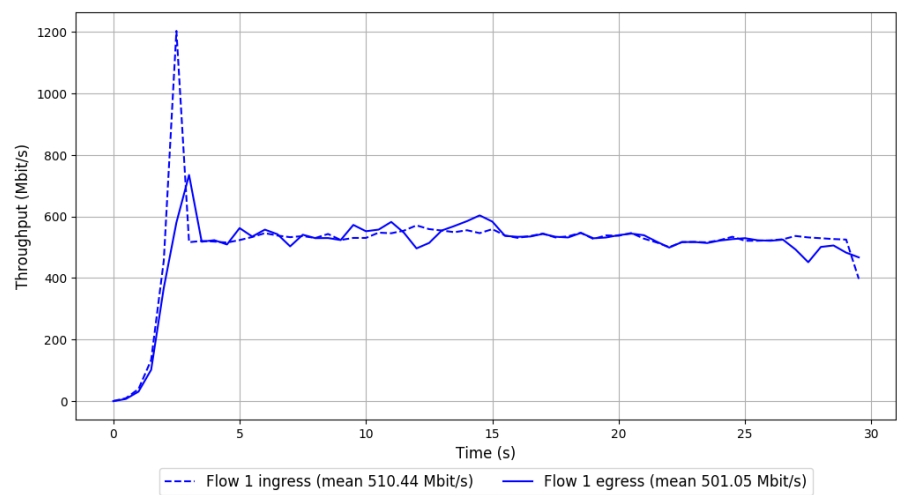
-- Flow 1:

Average throughput: 501.05 Mbit/s

95th percentile per-packet one-way delay: 232.447 ms

Loss rate: 1.81%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-05 09:27:43

End at: 2017-12-05 09:28:13

Below is generated by plot.py at 2017-12-05 10:53:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 508.86 Mbit/s

95th percentile per-packet one-way delay: 213.390 ms

Loss rate: 0.78%

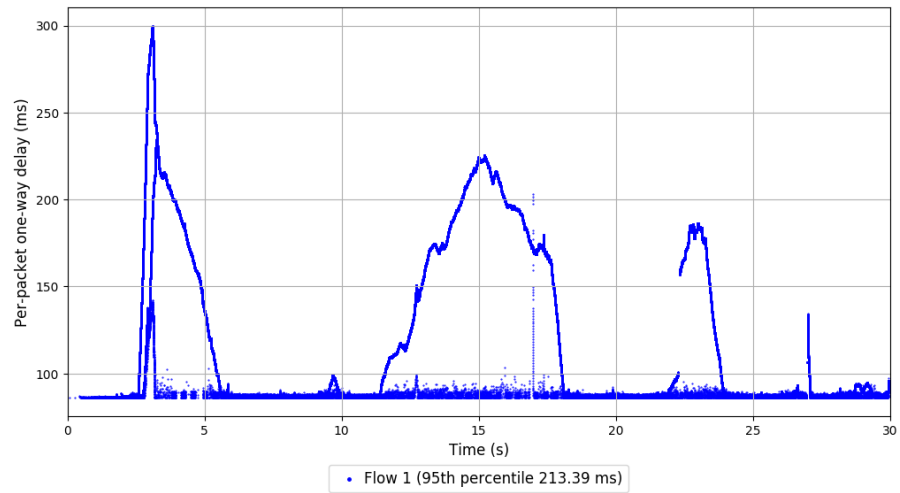
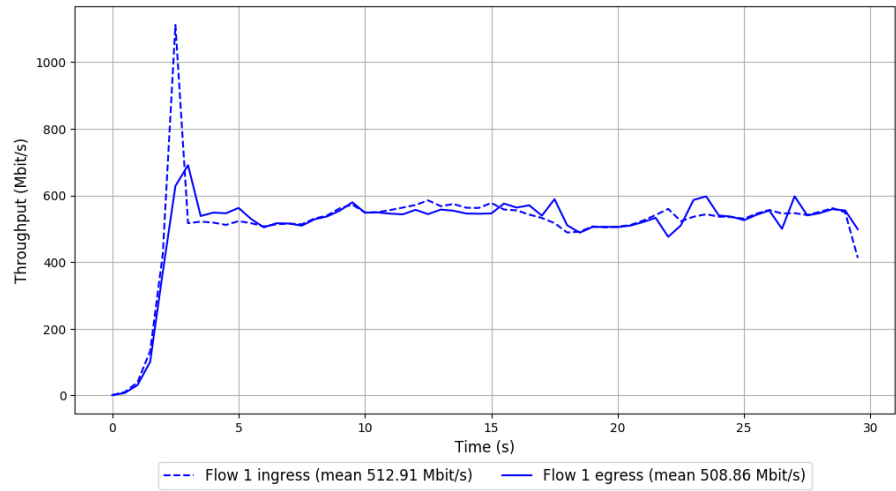
-- Flow 1:

Average throughput: 508.86 Mbit/s

95th percentile per-packet one-way delay: 213.390 ms

Loss rate: 0.78%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-05 09:38:20

End at: 2017-12-05 09:38:50

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 505.78 Mbit/s

95th percentile per-packet one-way delay: 154.304 ms

Loss rate: 1.86%

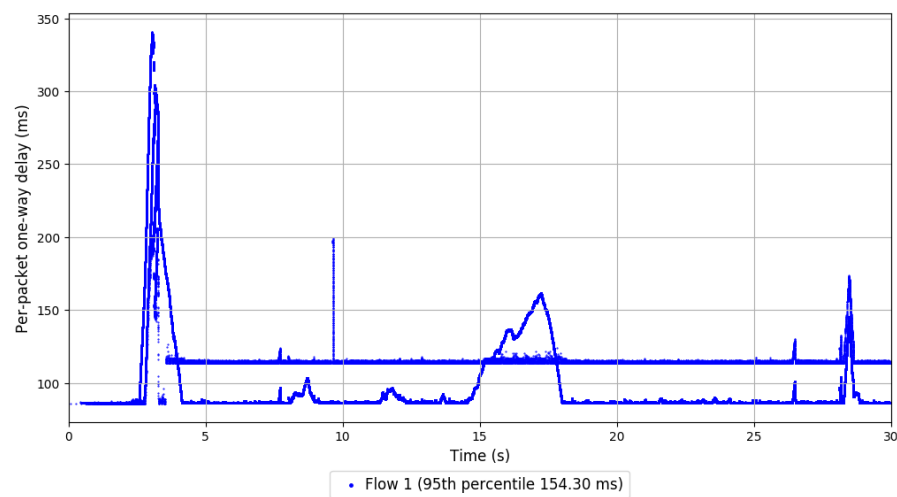
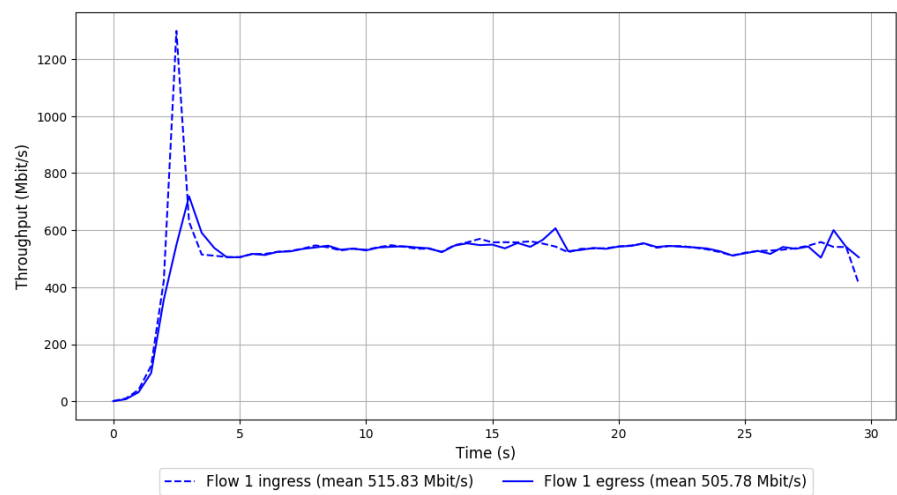
-- Flow 1:

Average throughput: 505.78 Mbit/s

95th percentile per-packet one-way delay: 154.304 ms

Loss rate: 1.86%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-05 09:49:13

End at: 2017-12-05 09:49:43

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 481.30 Mbit/s

95th percentile per-packet one-way delay: 224.180 ms

Loss rate: 1.36%

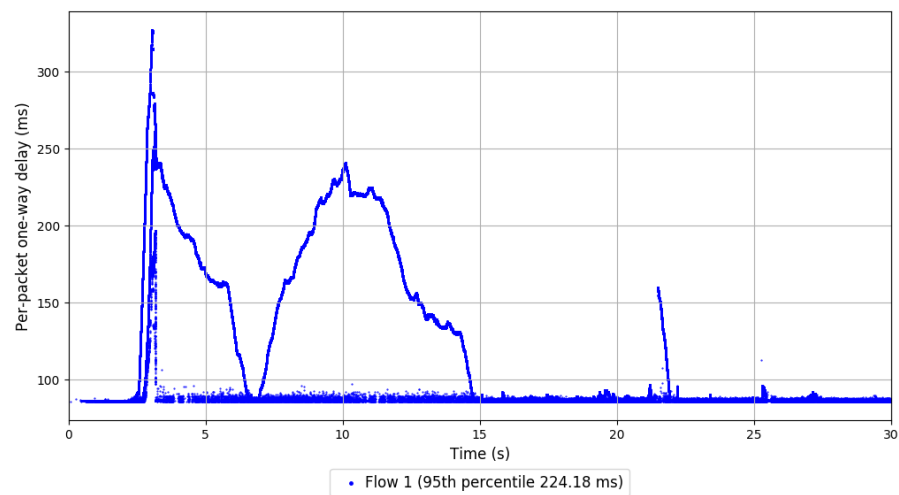
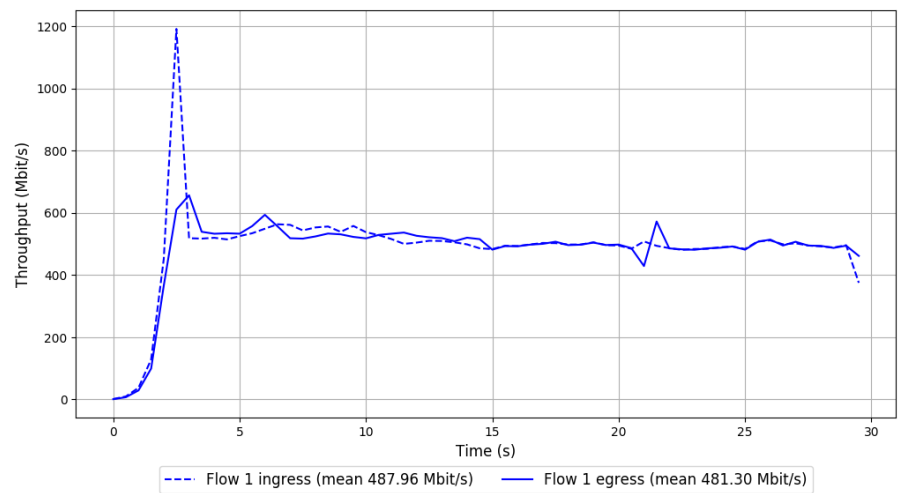
-- Flow 1:

Average throughput: 481.30 Mbit/s

95th percentile per-packet one-way delay: 224.180 ms

Loss rate: 1.36%

Run 10: Report of PCC — Data Link

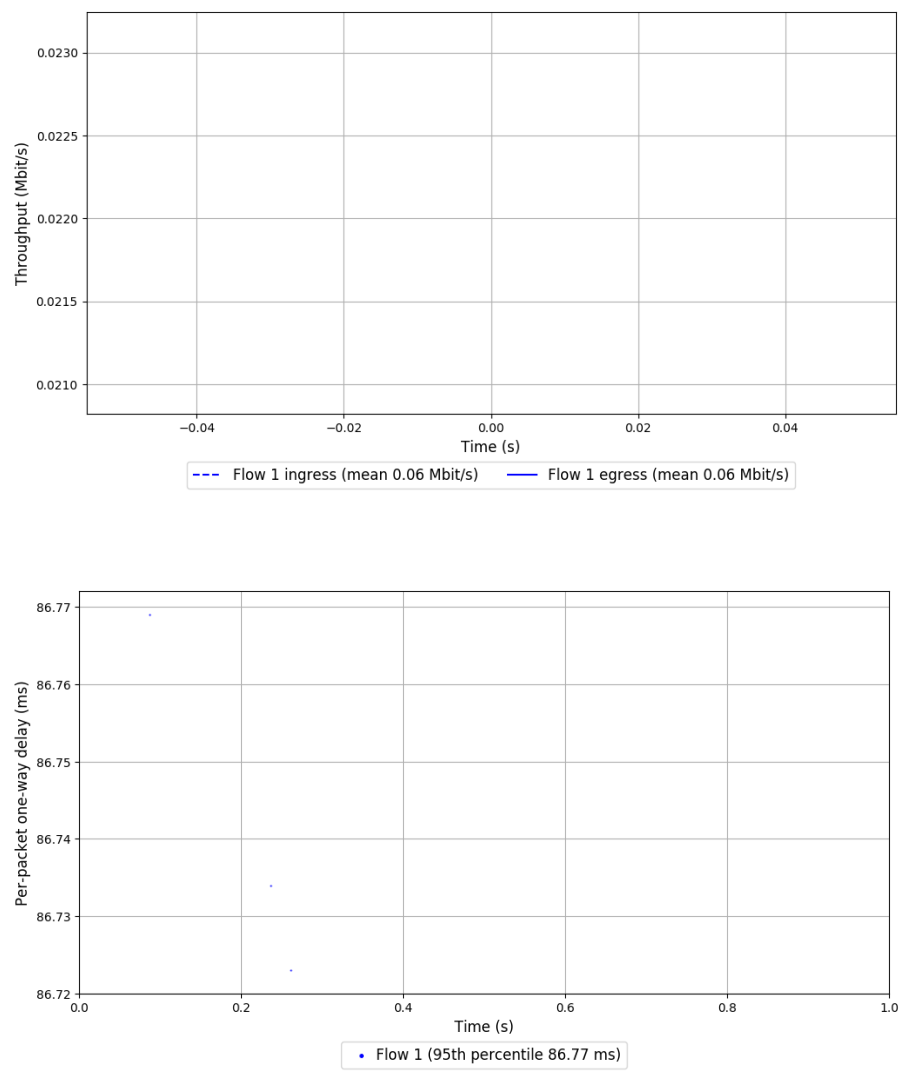


Run 1: Statistics of QUIC Cubic

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

End at: 2017-12-05 08:12:38

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-05 08:23:14

End at: 2017-12-05 08:23:44

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.29 Mbit/s

95th percentile per-packet one-way delay: 113.864 ms

Loss rate: 0.00%

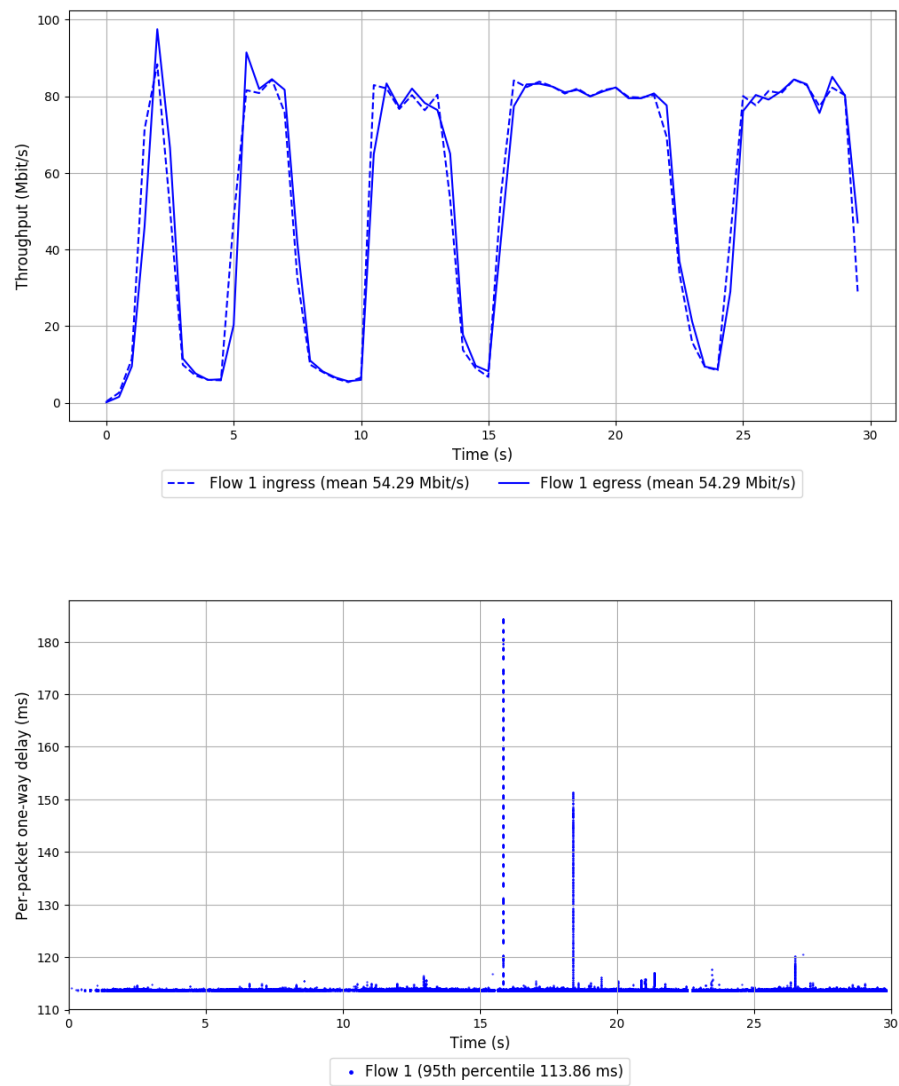
-- Flow 1:

Average throughput: 54.29 Mbit/s

95th percentile per-packet one-way delay: 113.864 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-05 08:34:24

End at: 2017-12-05 08:34:54

Run 3: Report of QUIC Cubic — Data Link

Figure is missing

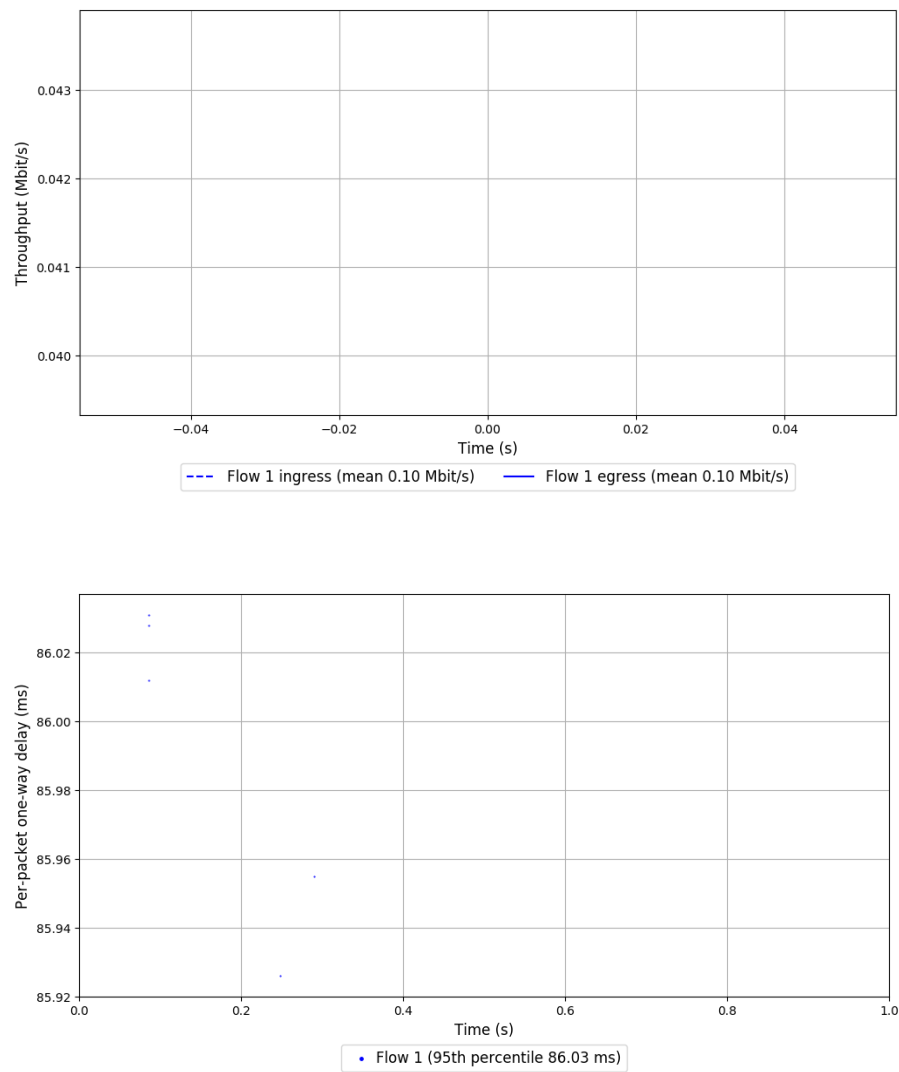
Figure is missing

Run 4: Statistics of QUIC Cubic

Start at: 2017-12-05 08:45:25

End at: 2017-12-05 08:45:55

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-05 08:56:05

End at: 2017-12-05 08:56:35

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.31 Mbit/s

95th percentile per-packet one-way delay: 86.353 ms

Loss rate: 0.00%

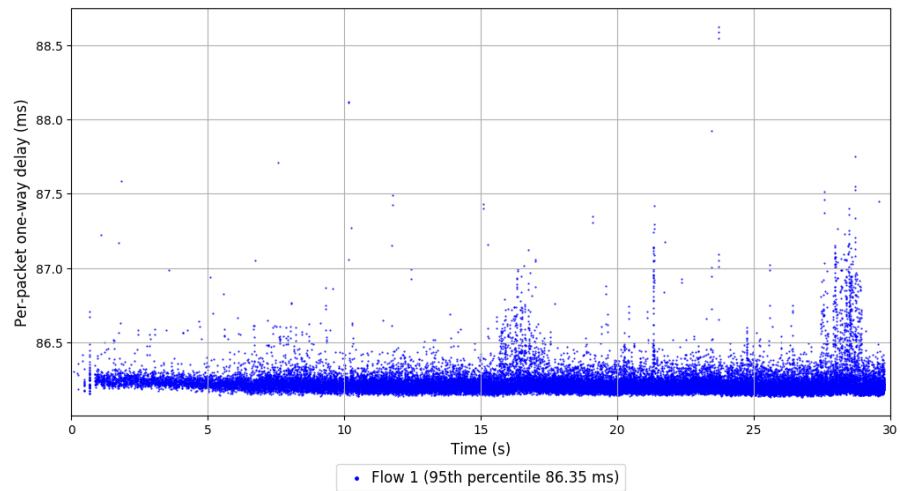
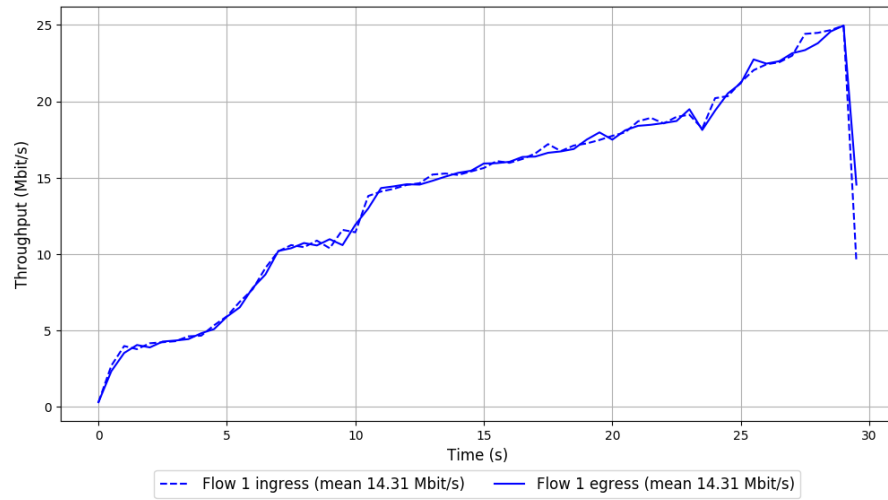
-- Flow 1:

Average throughput: 14.31 Mbit/s

95th percentile per-packet one-way delay: 86.353 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-05 09:07:06

End at: 2017-12-05 09:07:36

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.64 Mbit/s

95th percentile per-packet one-way delay: 86.702 ms

Loss rate: 0.00%

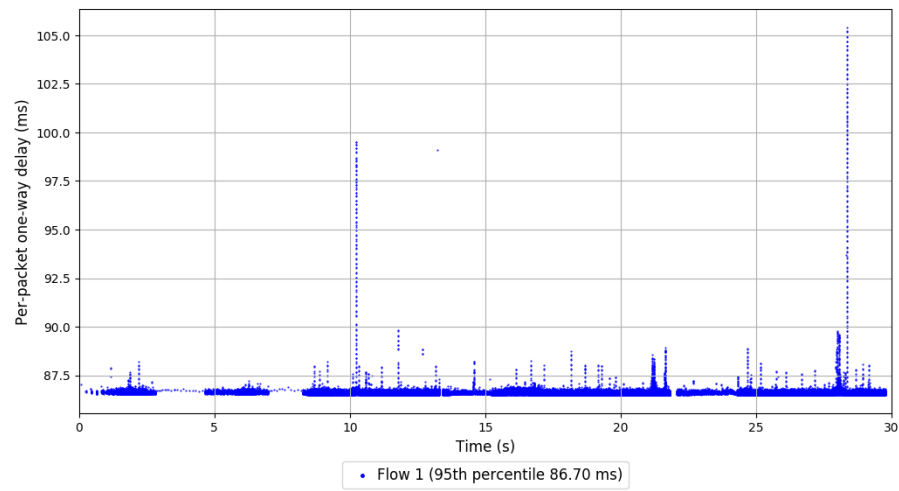
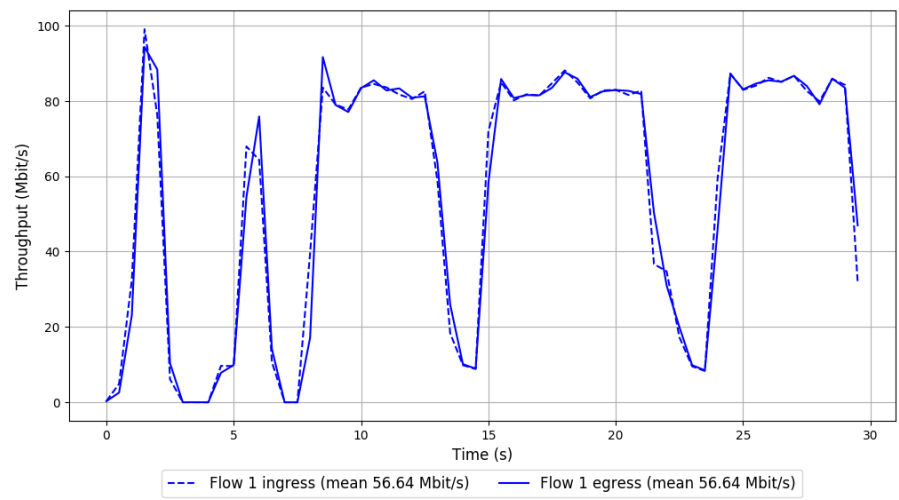
-- Flow 1:

Average throughput: 56.64 Mbit/s

95th percentile per-packet one-way delay: 86.702 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-05 09:18:28

End at: 2017-12-05 09:18:58

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.91 Mbit/s

95th percentile per-packet one-way delay: 86.479 ms

Loss rate: 0.00%

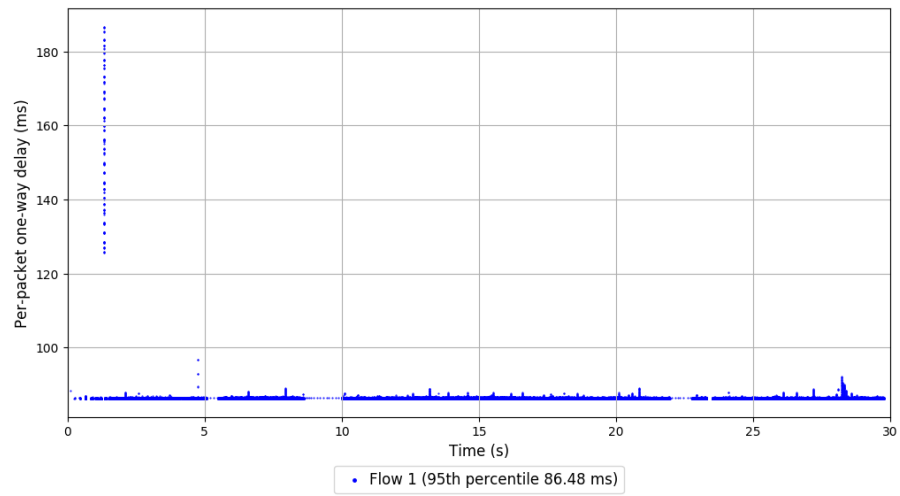
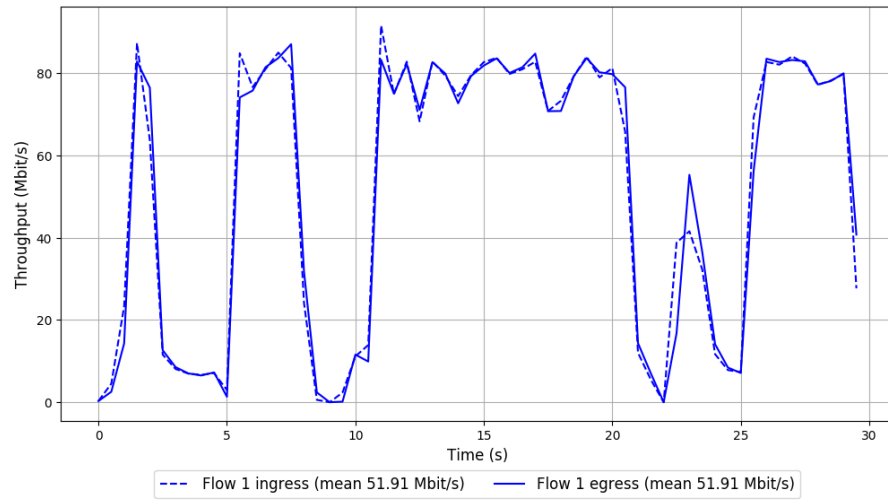
-- Flow 1:

Average throughput: 51.91 Mbit/s

95th percentile per-packet one-way delay: 86.479 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-05 09:29:23

End at: 2017-12-05 09:29:54

Run 8: Report of QUIC Cubic — Data Link

Figure is missing

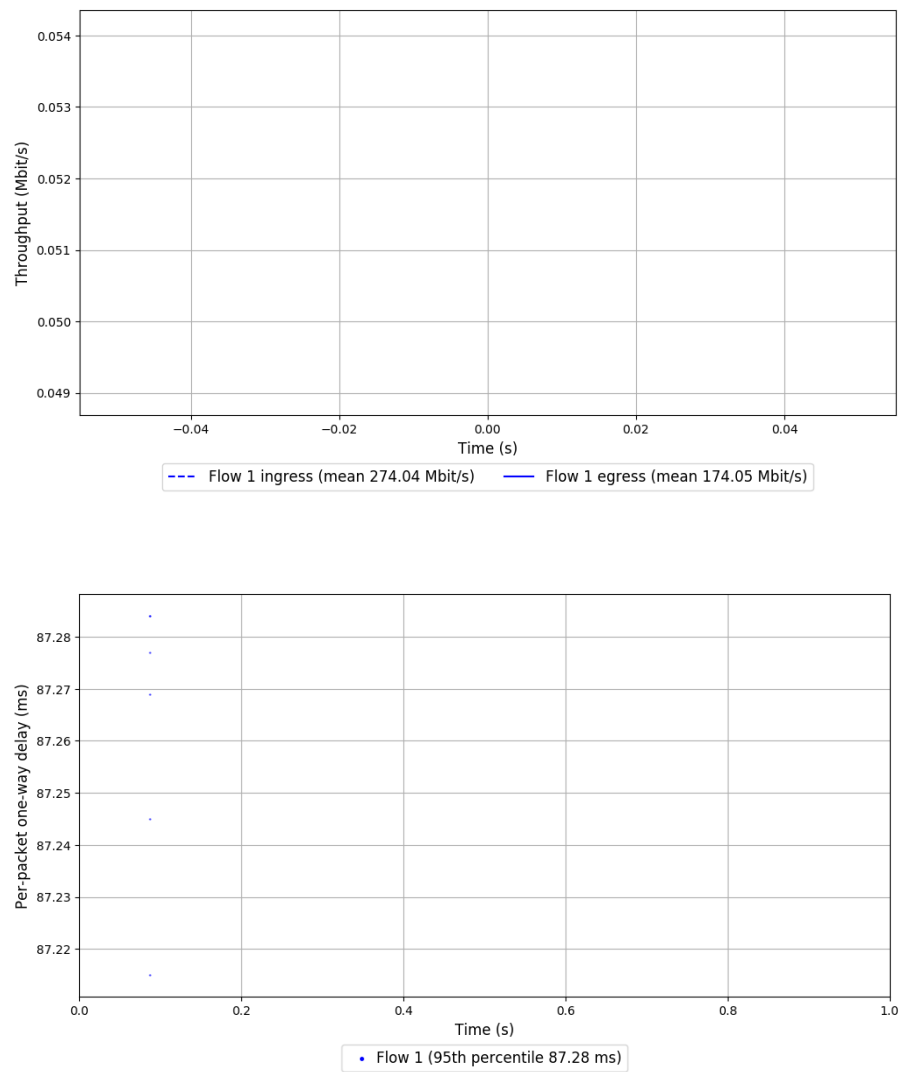
Figure is missing

Run 9: Statistics of QUIC Cubic

Start at: 2017-12-05 09:40:02

End at: 2017-12-05 09:40:32

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-05 09:50:54

End at: 2017-12-05 09:51:24

Run 10: Report of QUIC Cubic — Data Link

Figure is missing

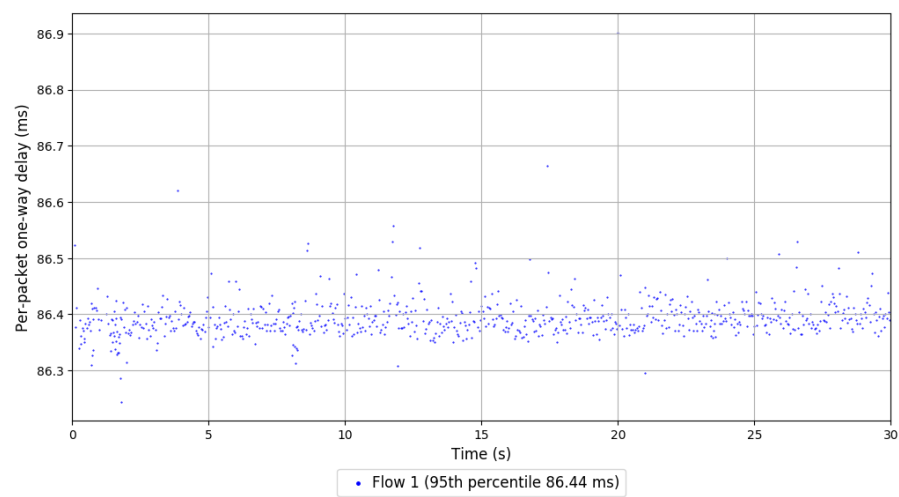
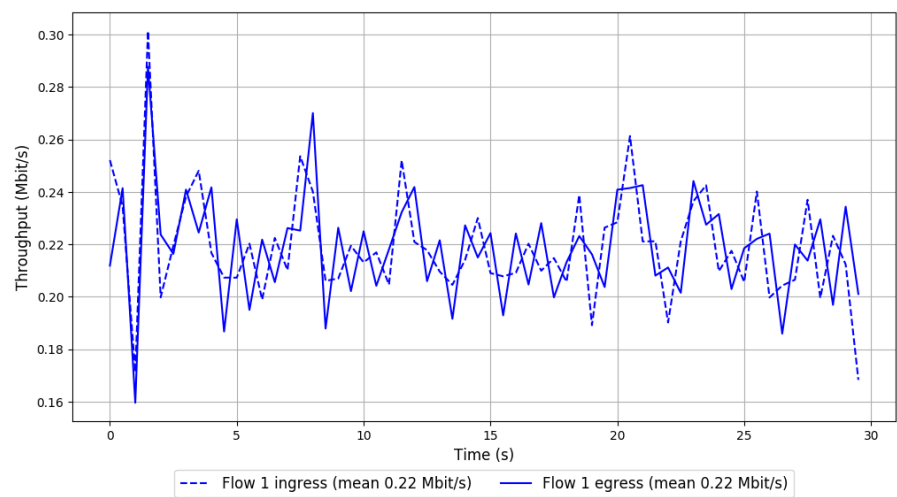
Figure is missing

```
Run 1: Statistics of SCReAM

Start at: 2017-12-05 08:18:33
End at: 2017-12-05 08:19:03

# Below is generated by plot.py at 2017-12-05 11:00:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.444 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.444 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

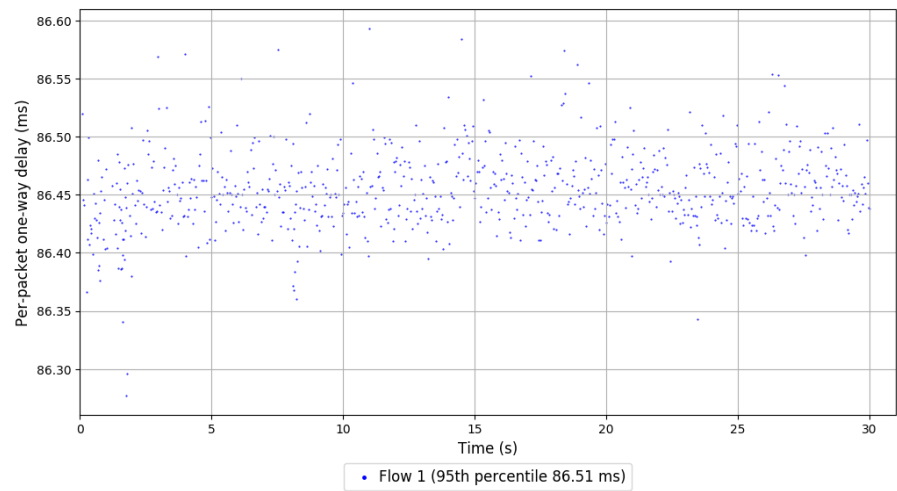
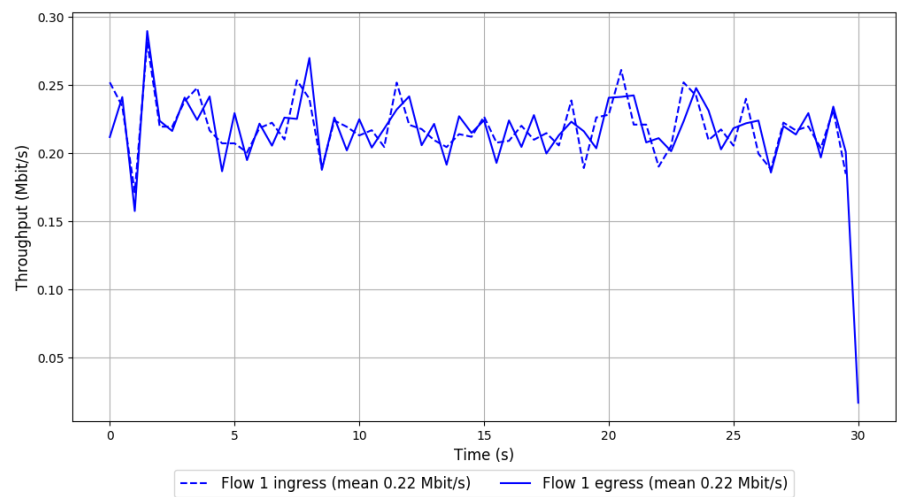


```
Run 2: Statistics of SCReAM

Start at: 2017-12-05 08:29:47
End at: 2017-12-05 08:30:17

# Below is generated by plot.py at 2017-12-05 11:00:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.510 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.510 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-05 08:40:44

End at: 2017-12-05 08:41:14

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.550 ms

Loss rate: 0.00%

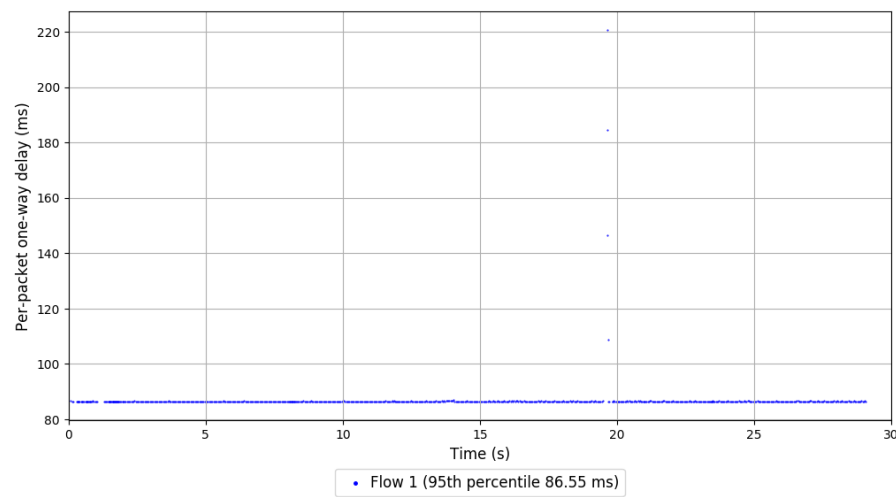
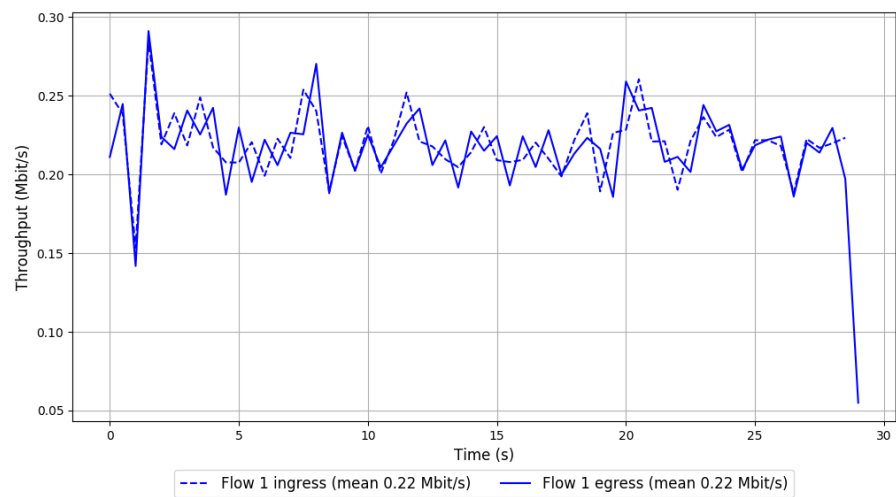
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.550 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-05 08:51:30

End at: 2017-12-05 08:52:00

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.054 ms

Loss rate: 0.00%

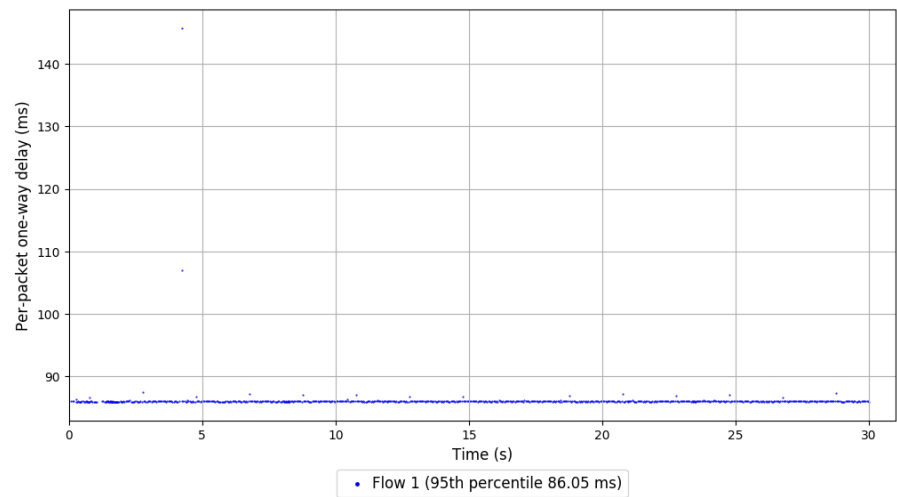
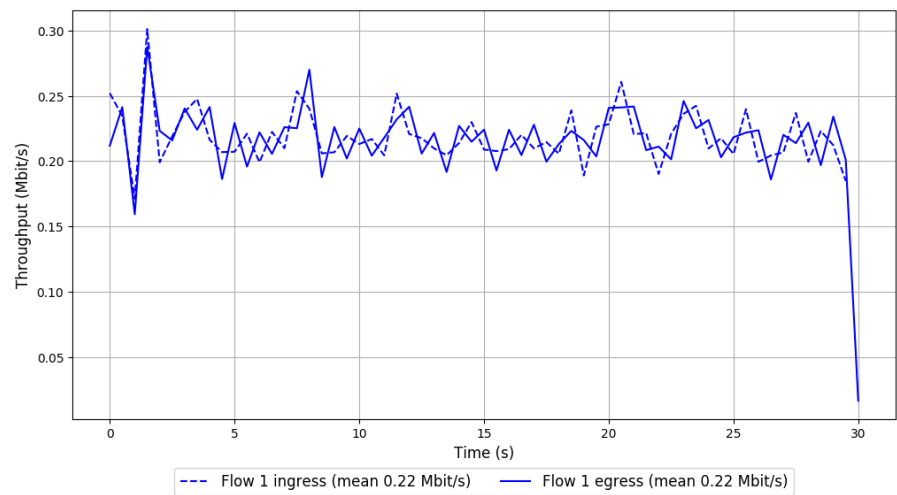
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.054 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-05 09:02:31

End at: 2017-12-05 09:03:01

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 113.903 ms

Loss rate: 0.00%

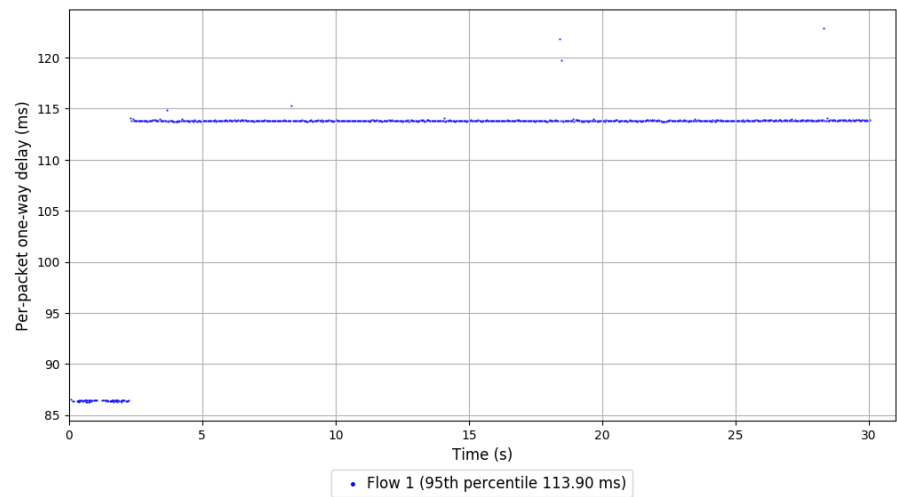
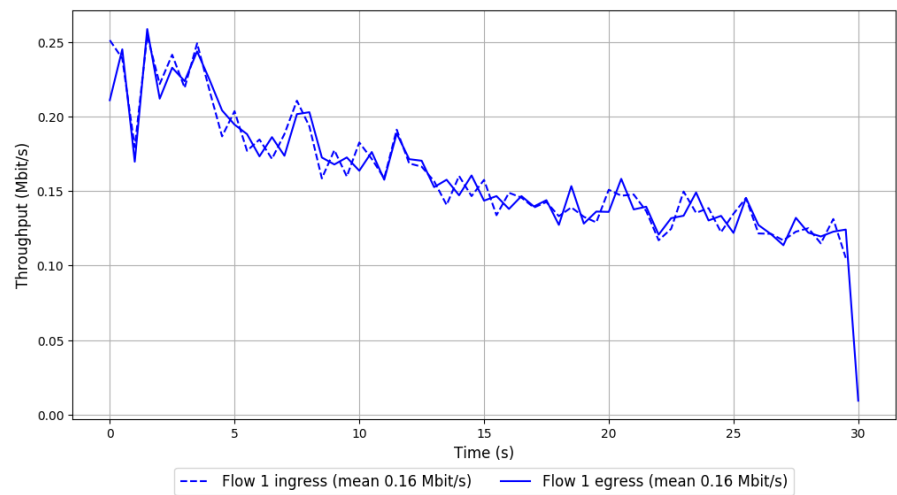
-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 113.903 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-05 09:13:40

End at: 2017-12-05 09:14:10

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.285 ms

Loss rate: 0.00%

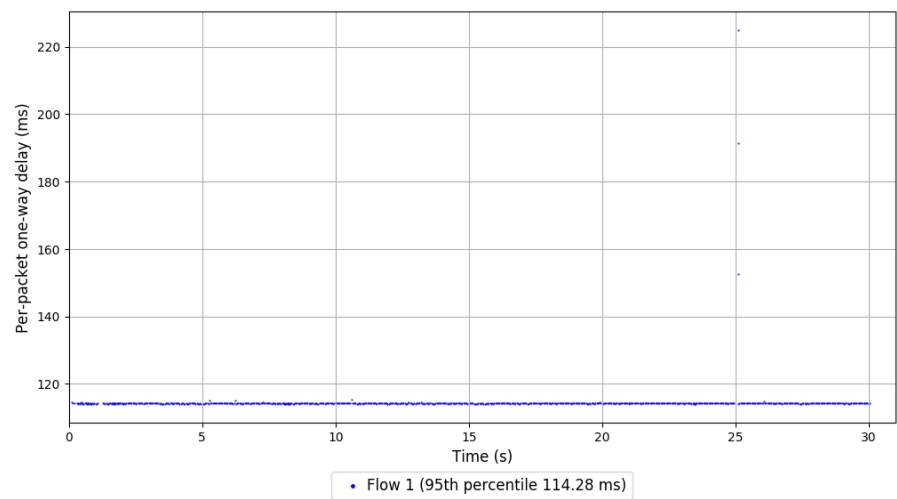
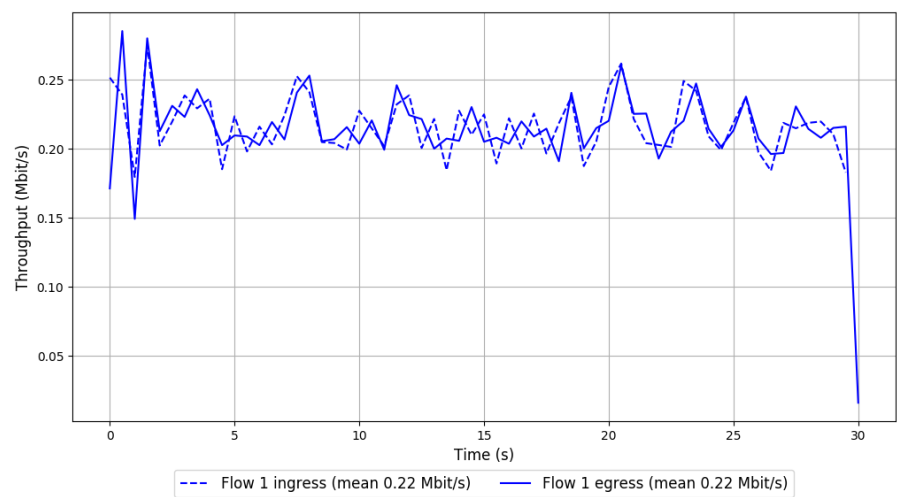
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.285 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-05 09:24:48

End at: 2017-12-05 09:25:18

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.306 ms

Loss rate: 0.00%

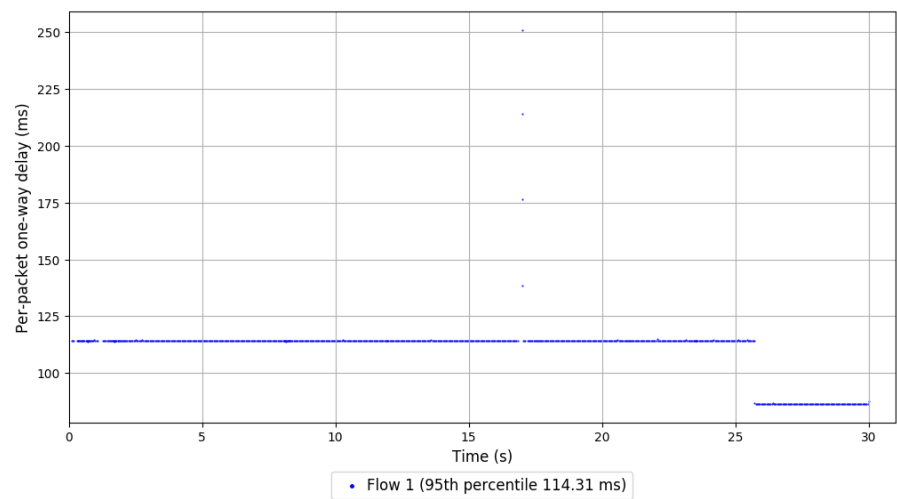
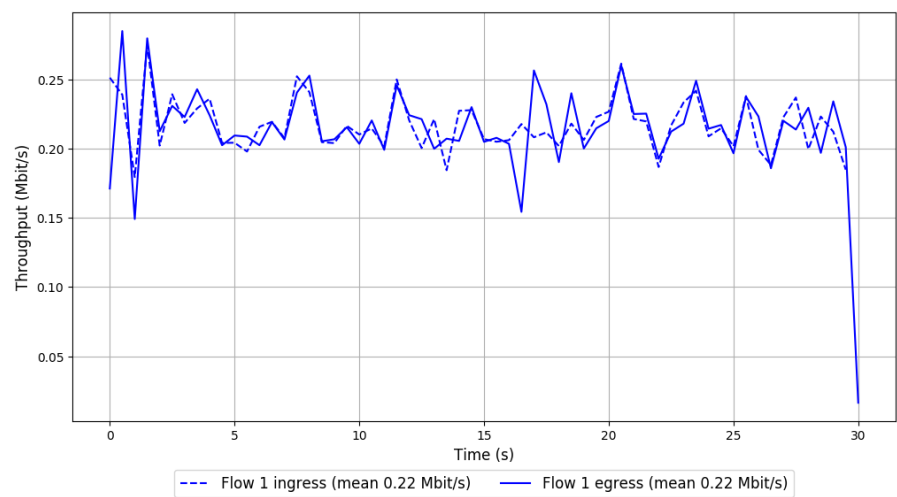
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.306 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-05 09:35:25

End at: 2017-12-05 09:35:55

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 114.280 ms

Loss rate: 0.10%

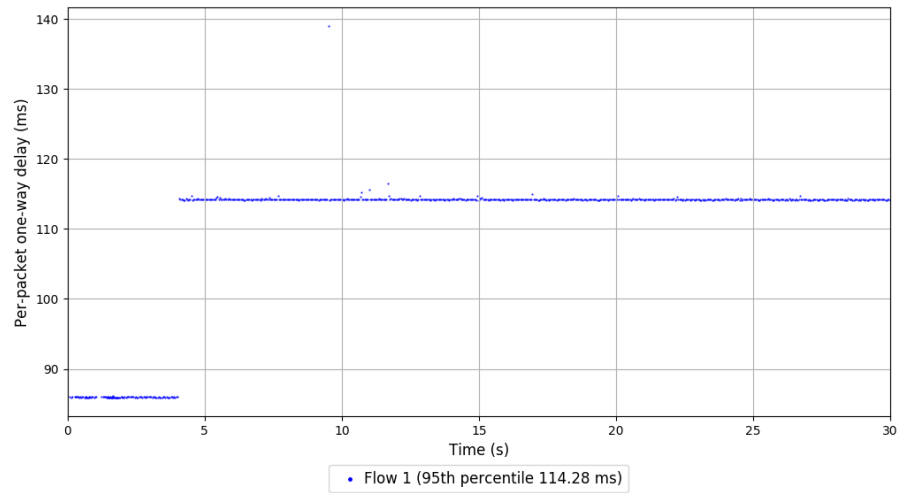
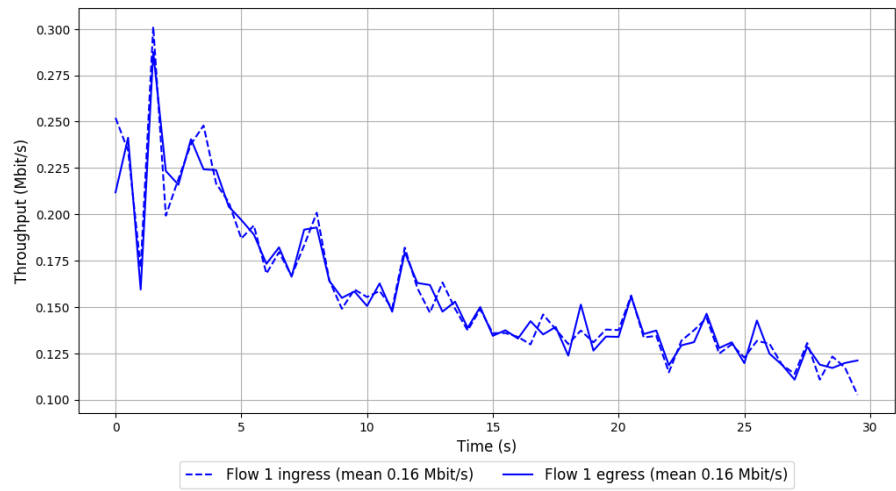
-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 114.280 ms

Loss rate: 0.10%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-05 09:46:20

End at: 2017-12-05 09:46:50

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.917 ms

Loss rate: 0.00%

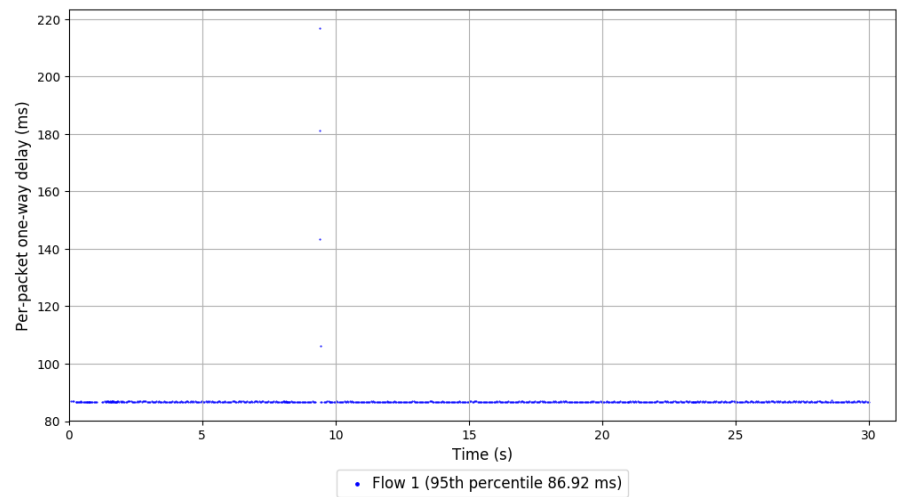
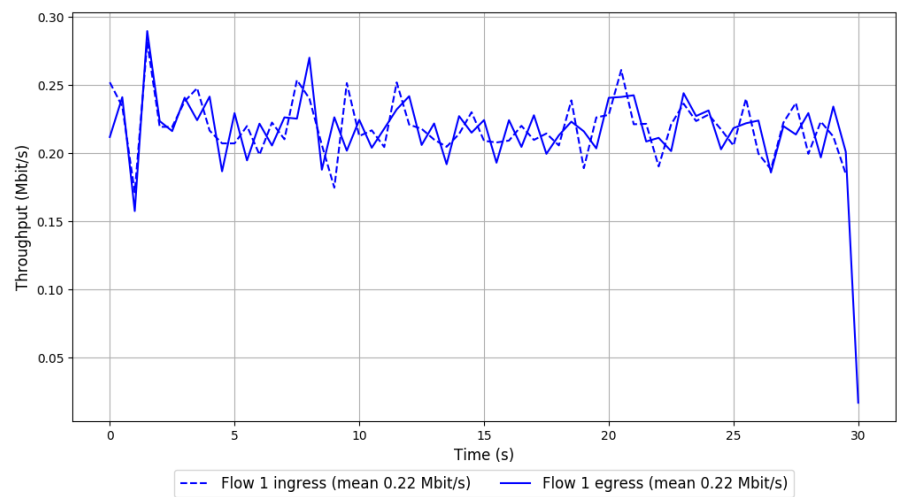
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.917 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-05 09:57:23

End at: 2017-12-05 09:57:53

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.296 ms

Loss rate: 0.00%

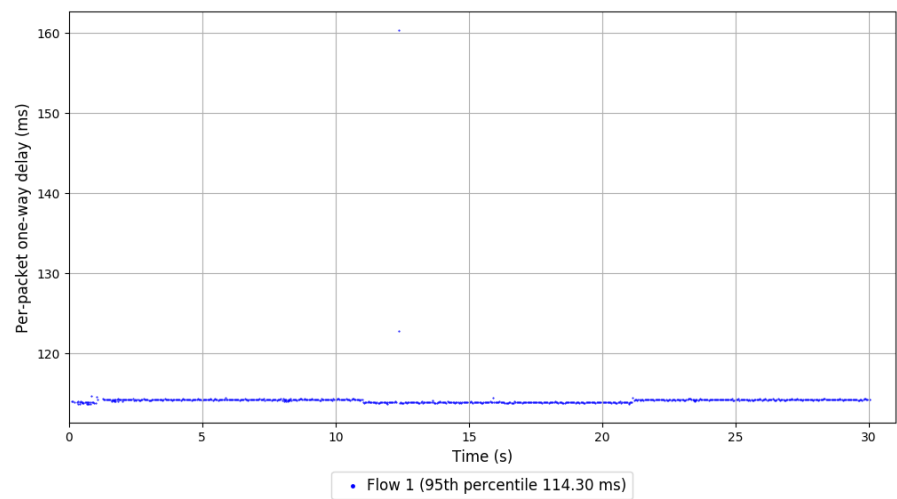
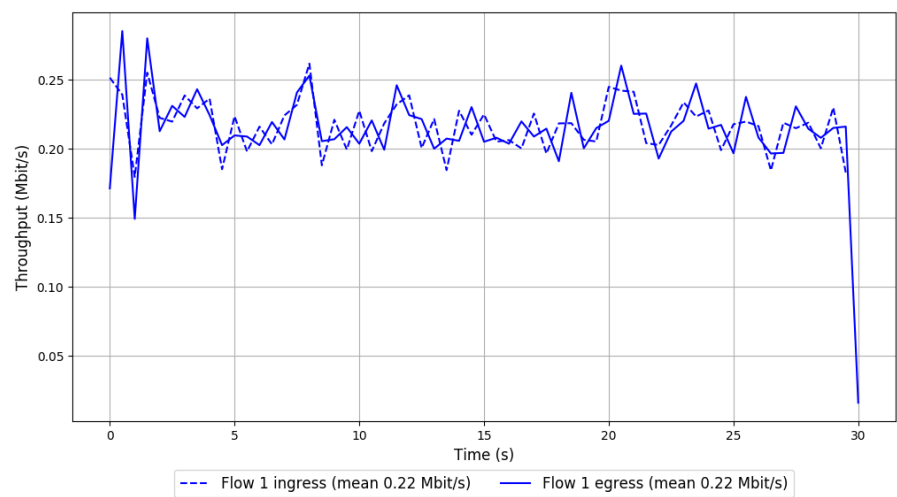
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.296 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

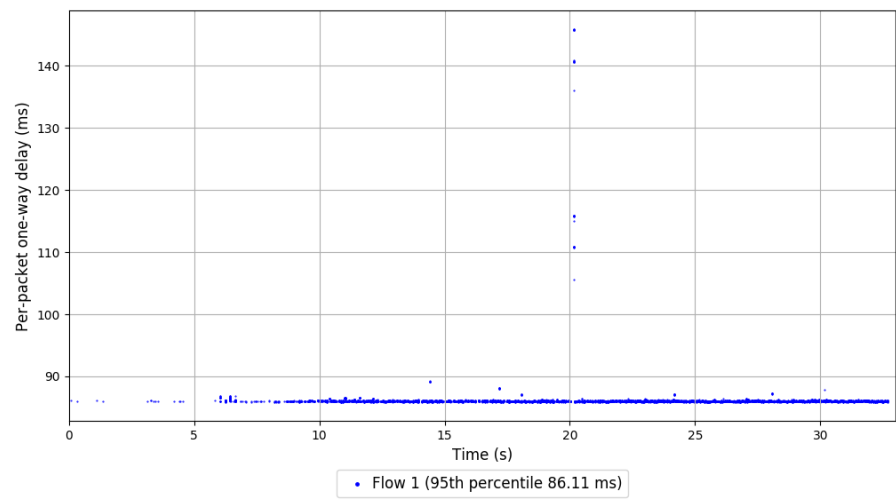
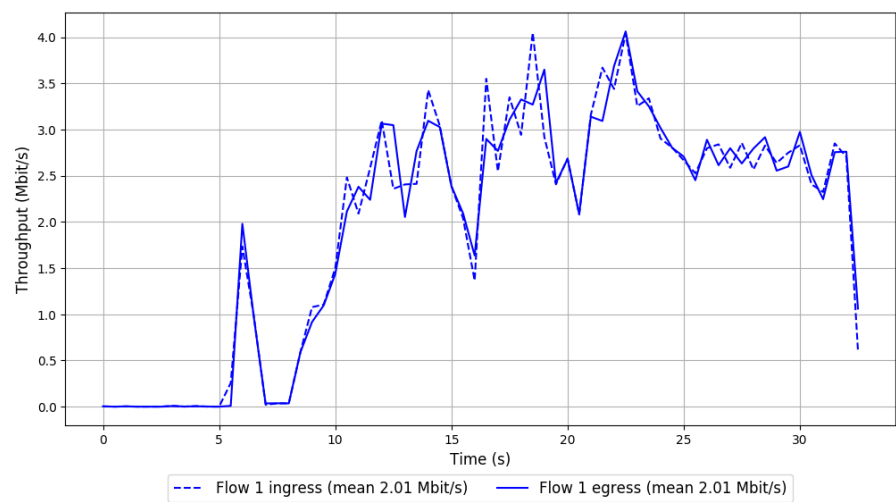


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-05 08:12:47
End at: 2017-12-05 08:13:17

# Below is generated by plot.py at 2017-12-05 11:00:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 86.111 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 86.111 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-05 08:23:57

End at: 2017-12-05 08:24:27

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 114.188 ms

Loss rate: 0.00%

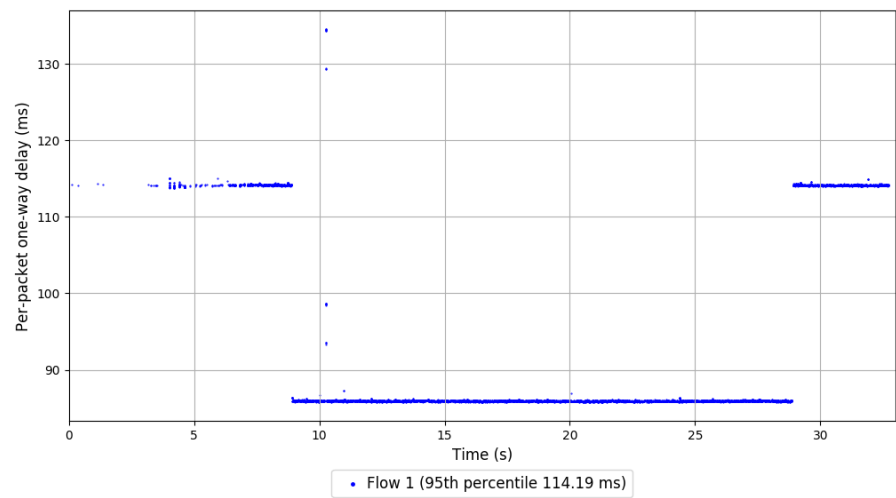
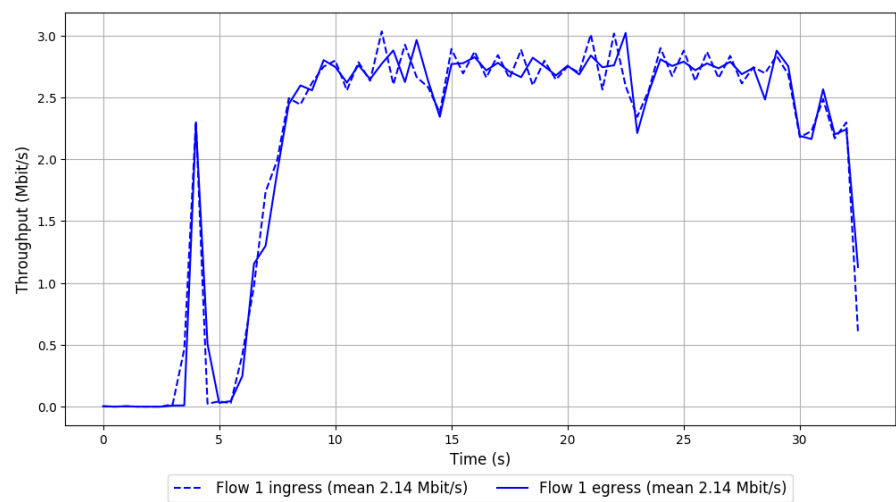
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 114.188 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-05 08:35:03

End at: 2017-12-05 08:35:33

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 86.196 ms

Loss rate: 0.00%

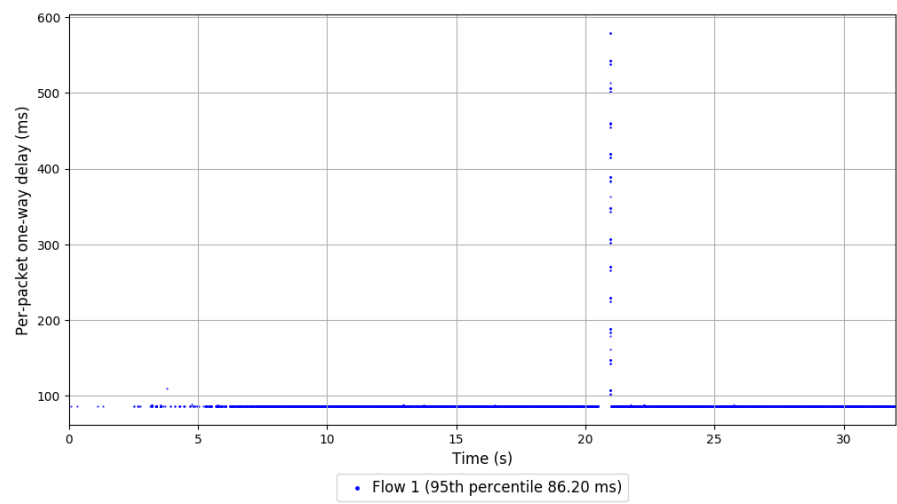
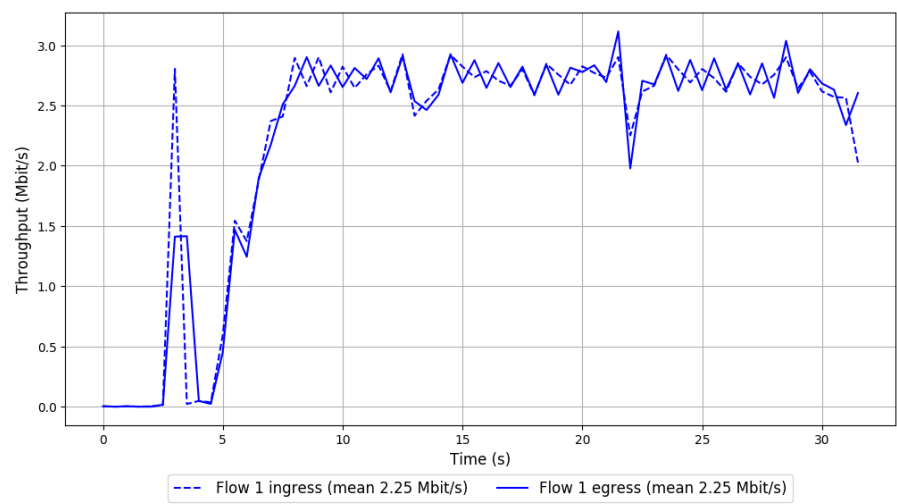
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 86.196 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-05 08:46:05

End at: 2017-12-05 08:46:35

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.087 ms

Loss rate: 0.00%

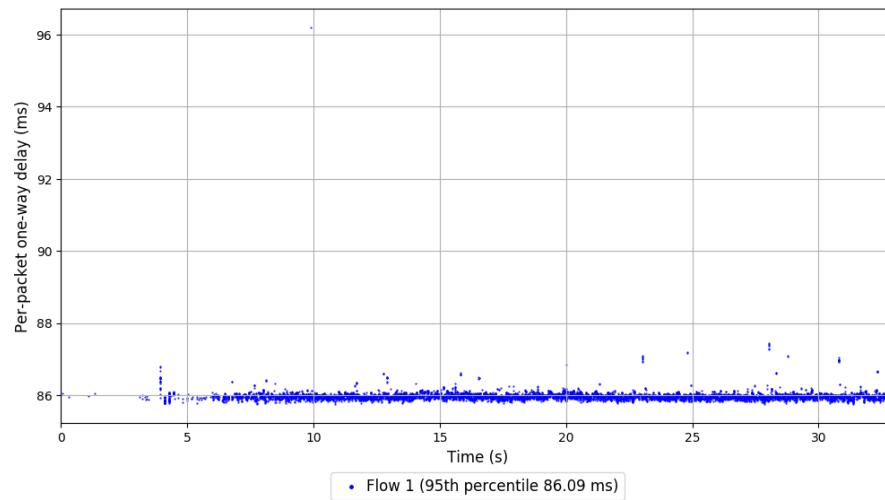
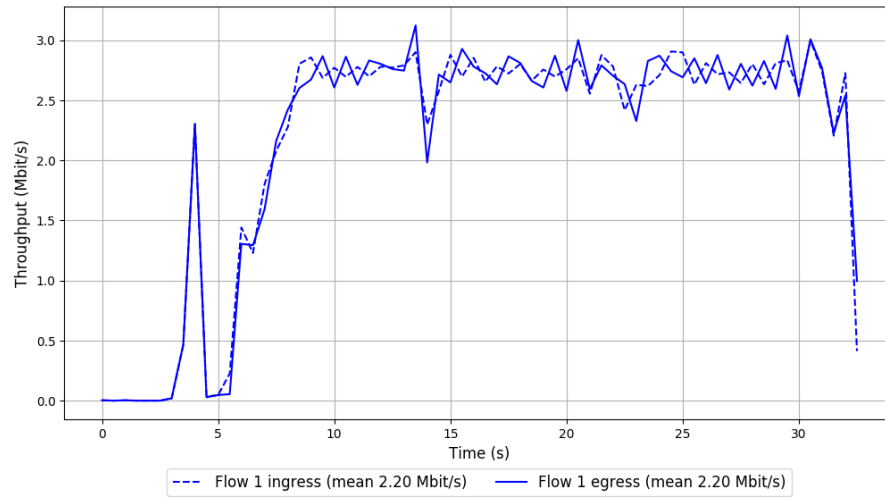
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.087 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-05 08:56:47

End at: 2017-12-05 08:57:17

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 113.862 ms

Loss rate: 0.00%

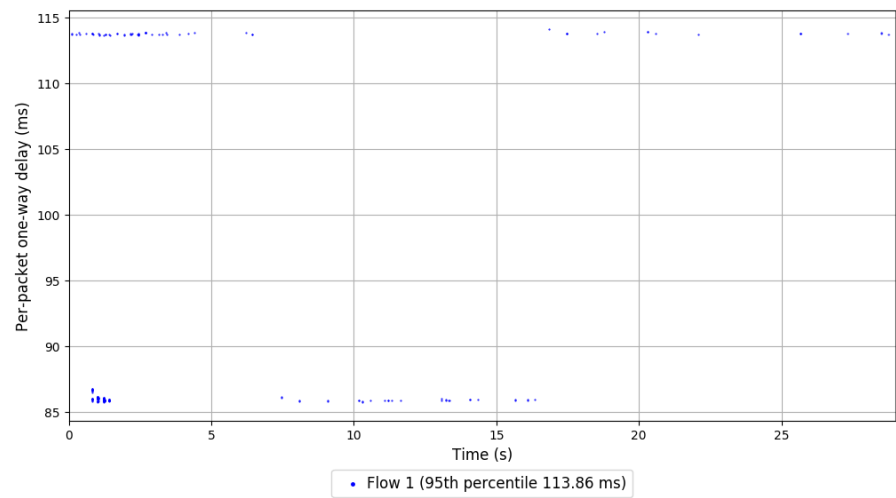
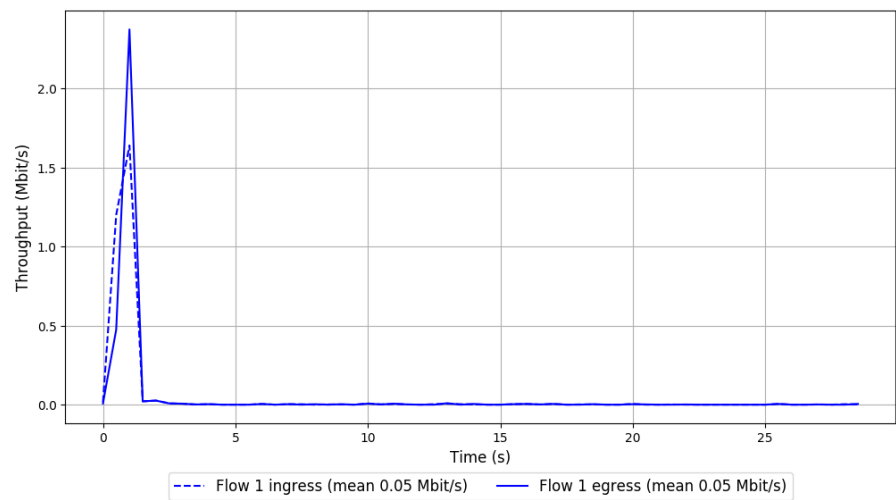
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 113.862 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-05 09:07:49

End at: 2017-12-05 09:08:19

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 86.835 ms

Loss rate: 0.00%

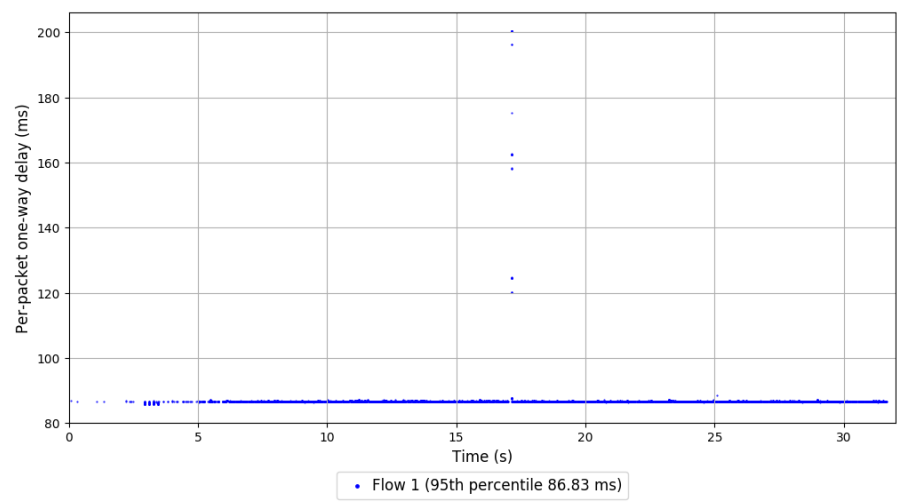
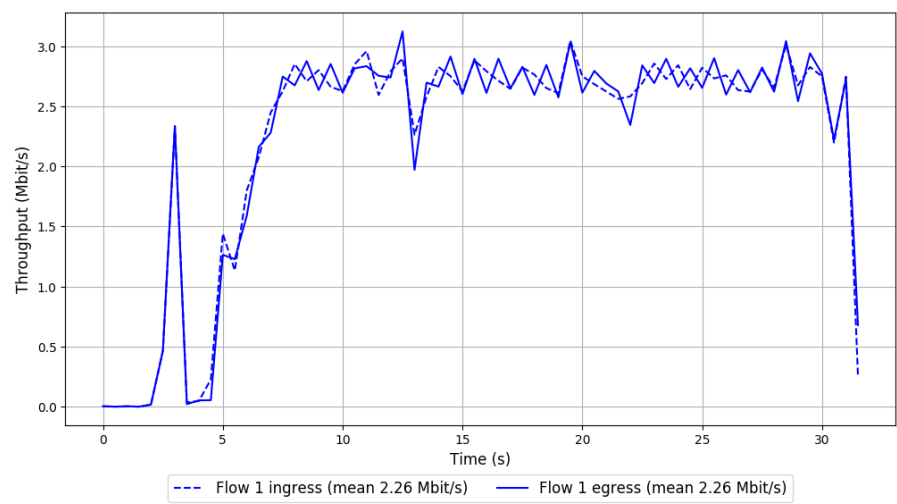
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 86.835 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-05 09:19:12

End at: 2017-12-05 09:19:42

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.543 ms

Loss rate: 0.00%

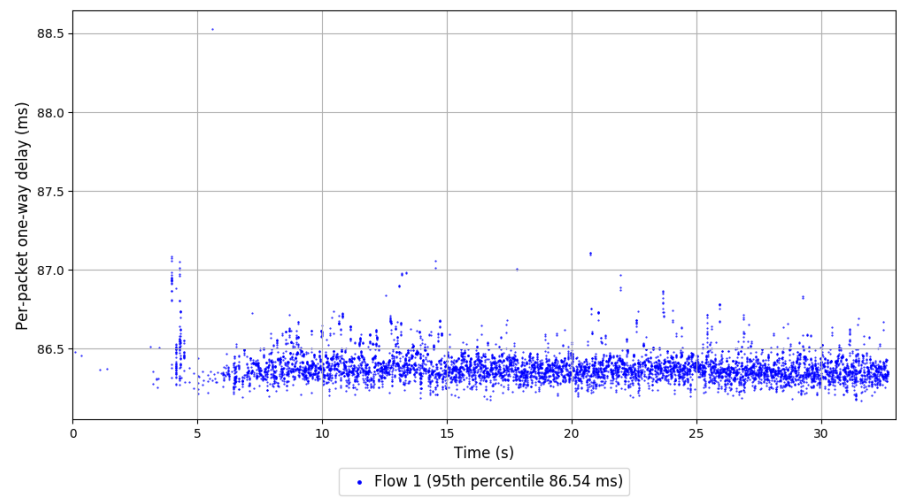
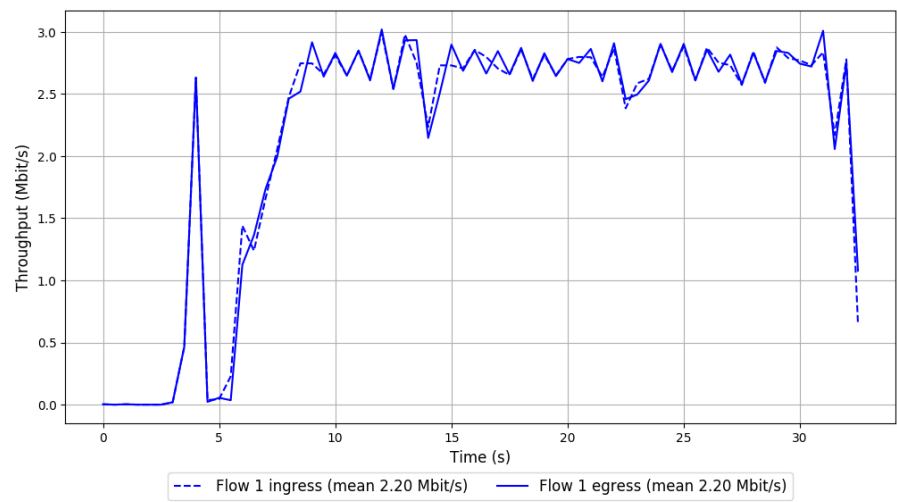
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.543 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-05 09:30:02

End at: 2017-12-05 09:30:32

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 114.173 ms

Loss rate: 0.15%

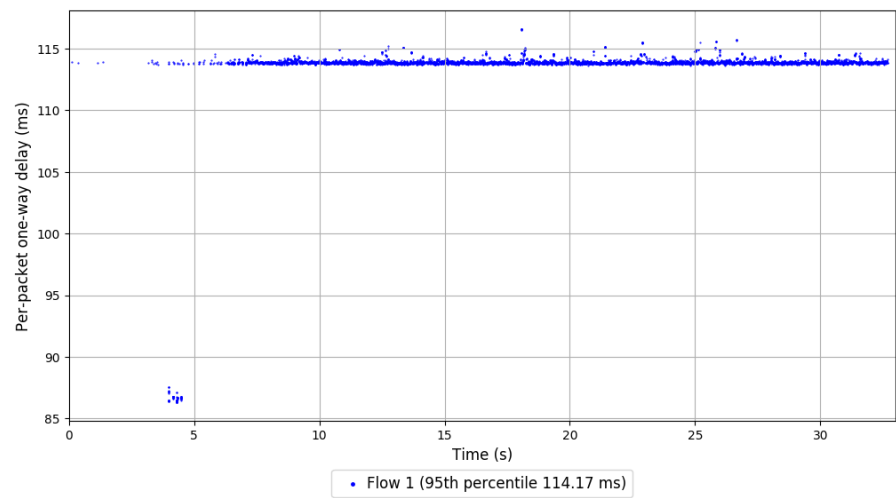
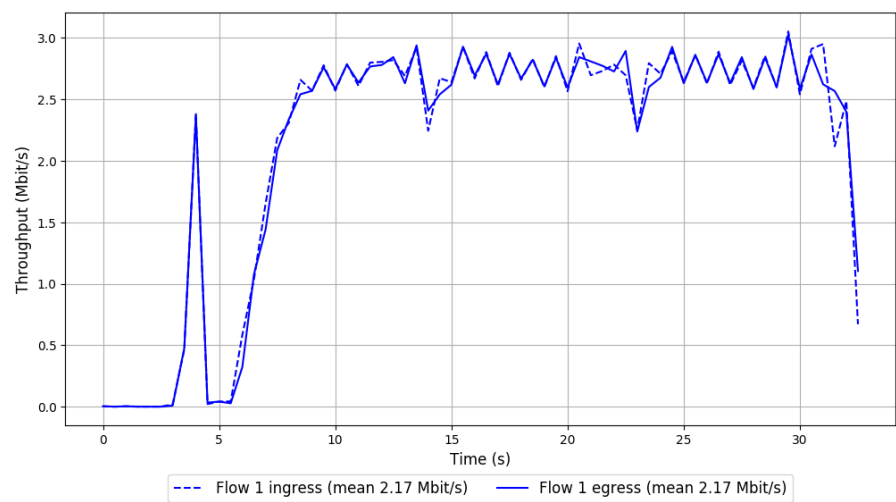
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 114.173 ms

Loss rate: 0.15%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-05 09:40:41

End at: 2017-12-05 09:41:11

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.176 ms

Loss rate: 0.00%

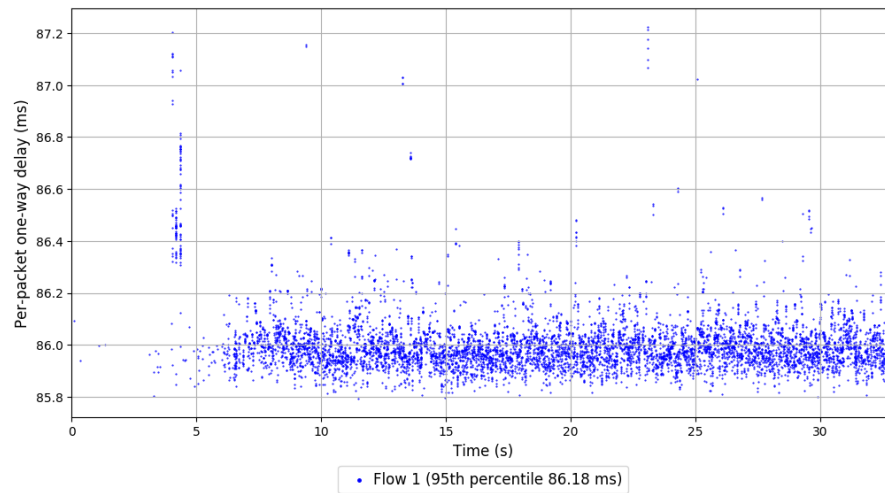
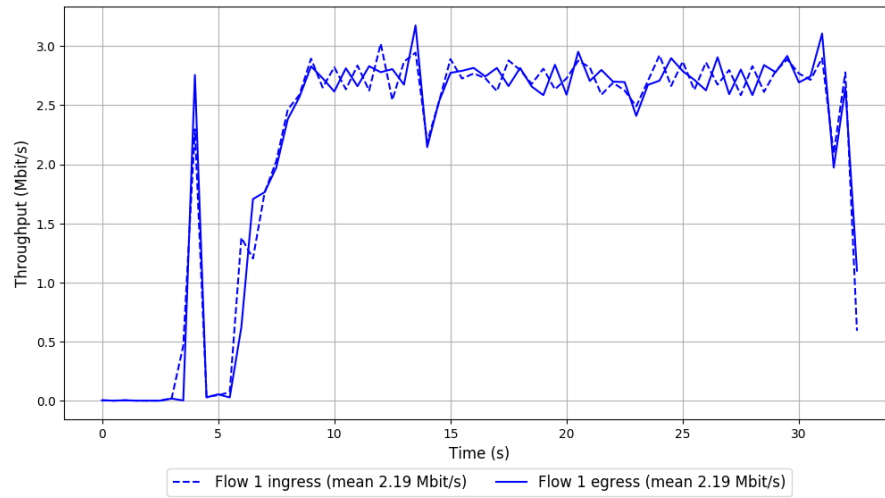
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.176 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-05 09:51:34

End at: 2017-12-05 09:52:04

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.135 ms

Loss rate: 0.00%

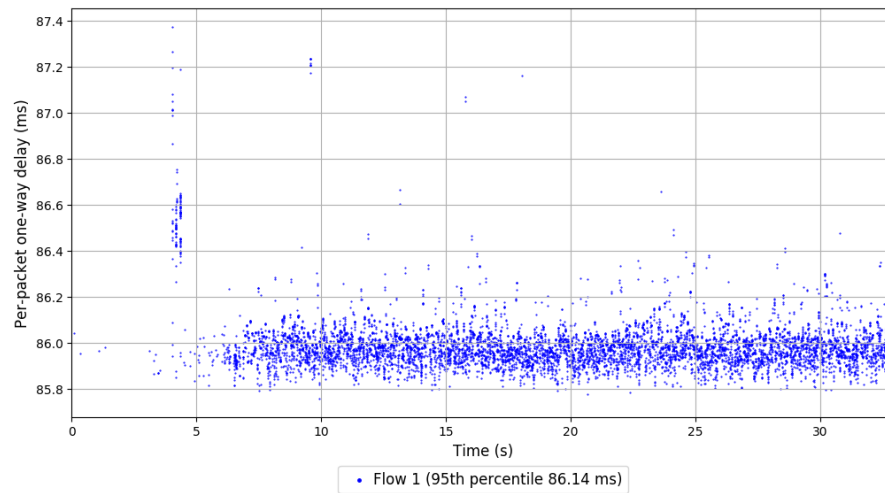
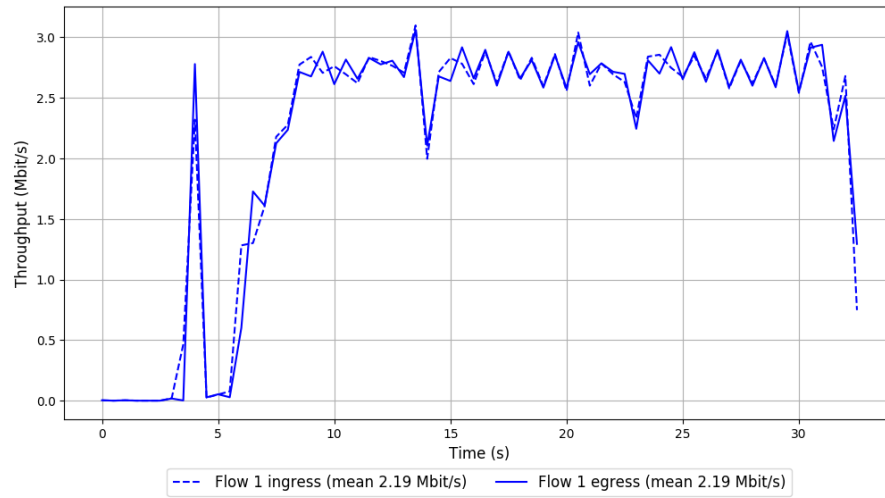
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.135 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-05 08:11:27

End at: 2017-12-05 08:11:57

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 114.244 ms

Loss rate: 0.12%

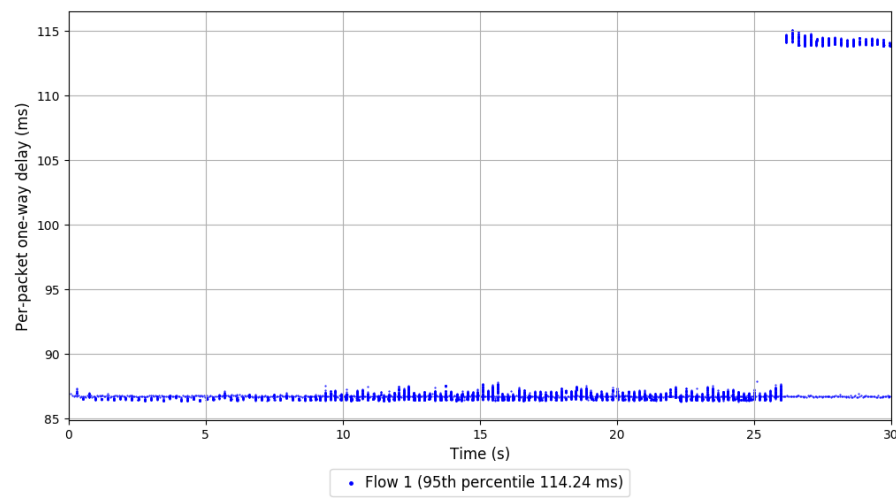
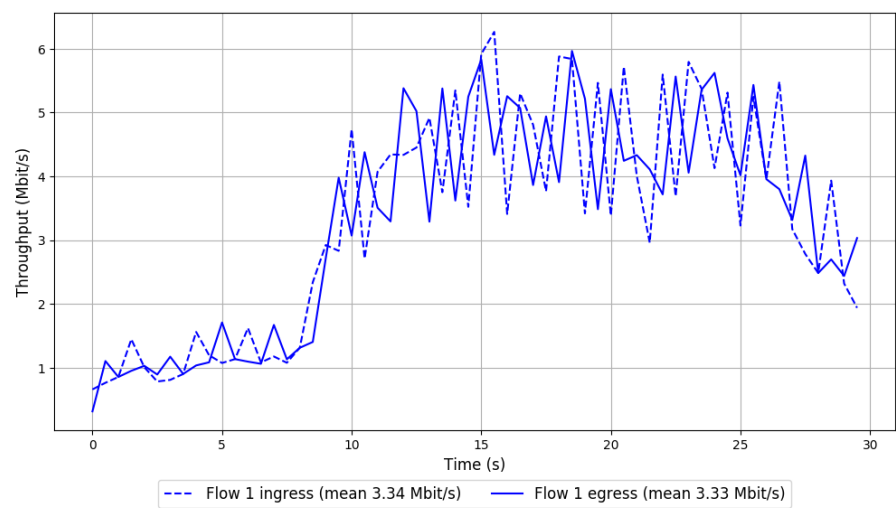
-- Flow 1:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 114.244 ms

Loss rate: 0.12%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-05 08:22:33

End at: 2017-12-05 08:23:03

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.60 Mbit/s

95th percentile per-packet one-way delay: 114.141 ms

Loss rate: 0.19%

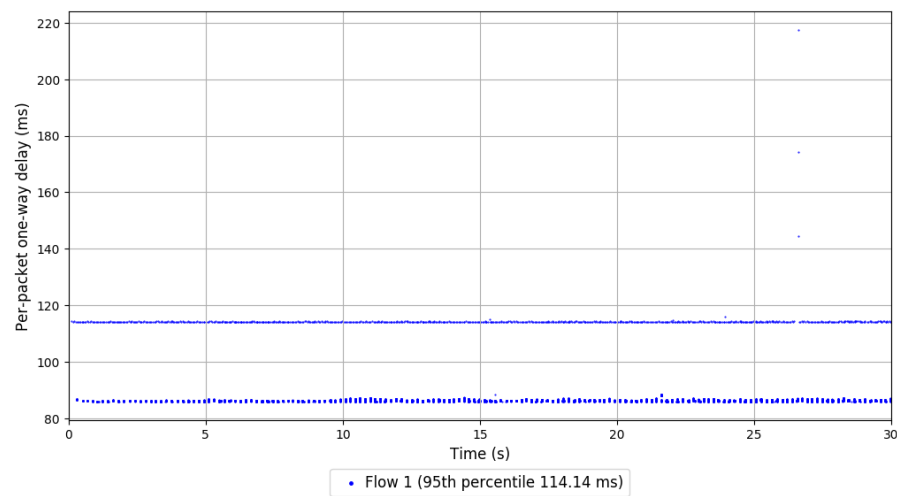
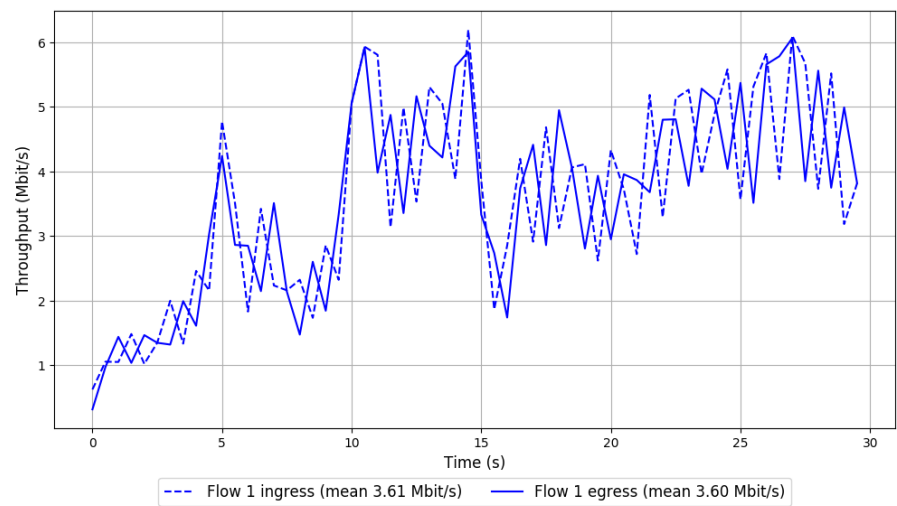
-- Flow 1:

Average throughput: 3.60 Mbit/s

95th percentile per-packet one-way delay: 114.141 ms

Loss rate: 0.19%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-05 08:33:43

End at: 2017-12-05 08:34:13

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 86.946 ms

Loss rate: 0.00%

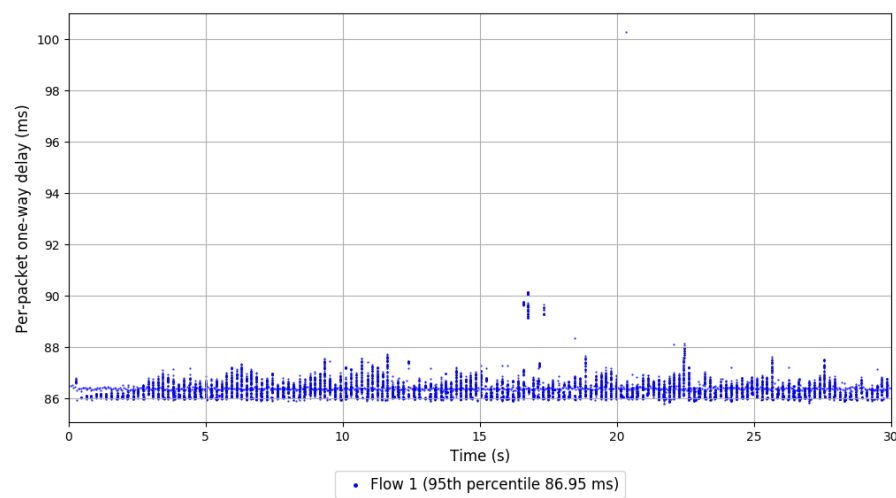
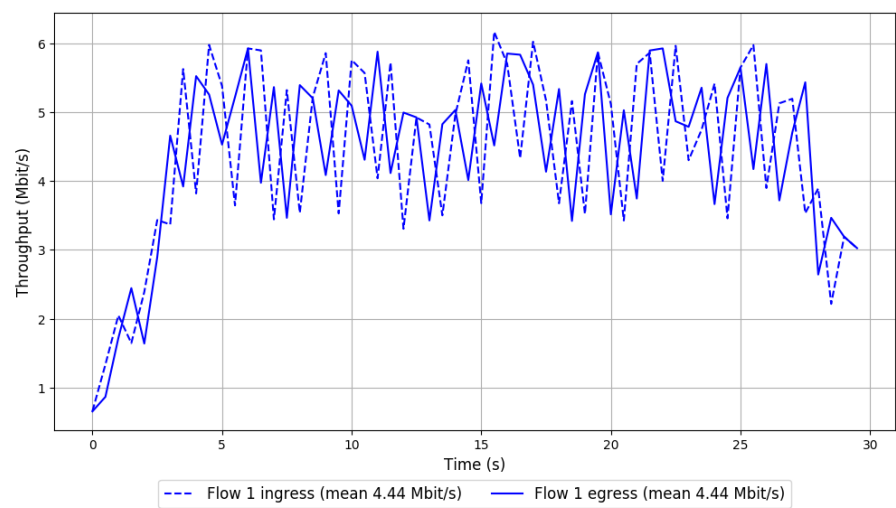
-- Flow 1:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 86.946 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-05 08:44:45

End at: 2017-12-05 08:45:15

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 114.201 ms

Loss rate: 0.00%

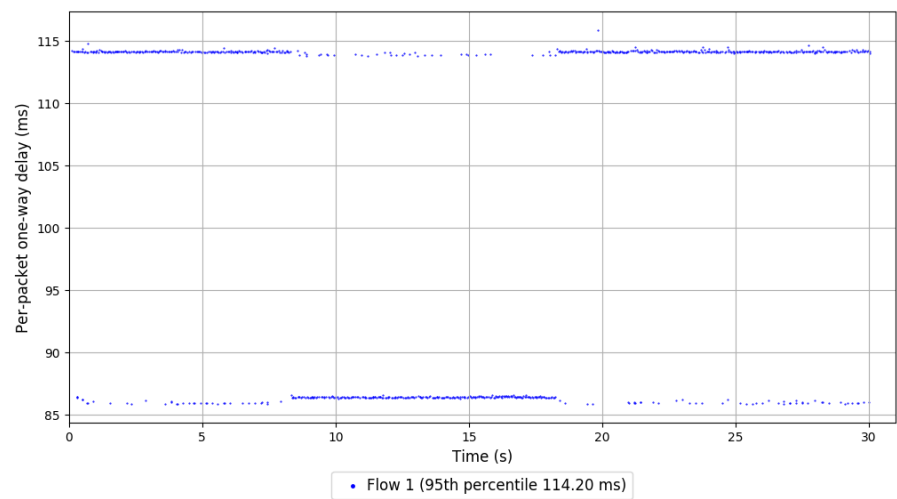
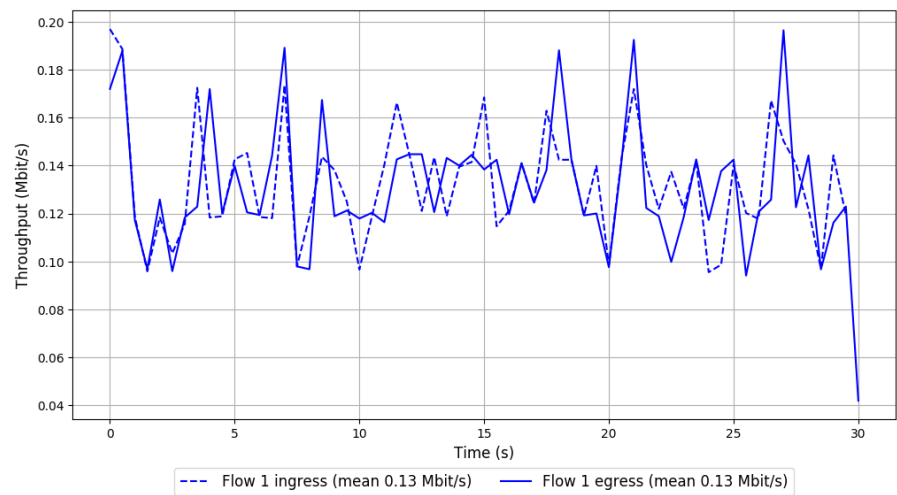
-- Flow 1:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 114.201 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-05 08:55:25

End at: 2017-12-05 08:55:55

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 86.959 ms

Loss rate: 0.05%

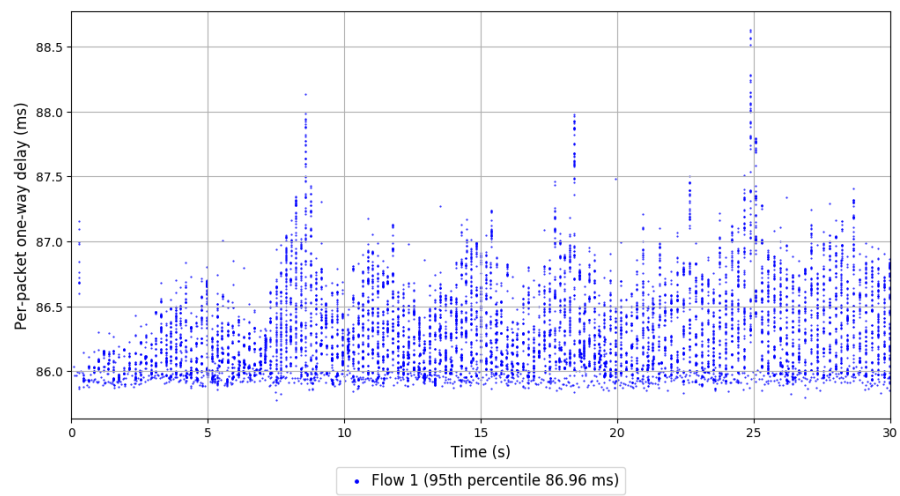
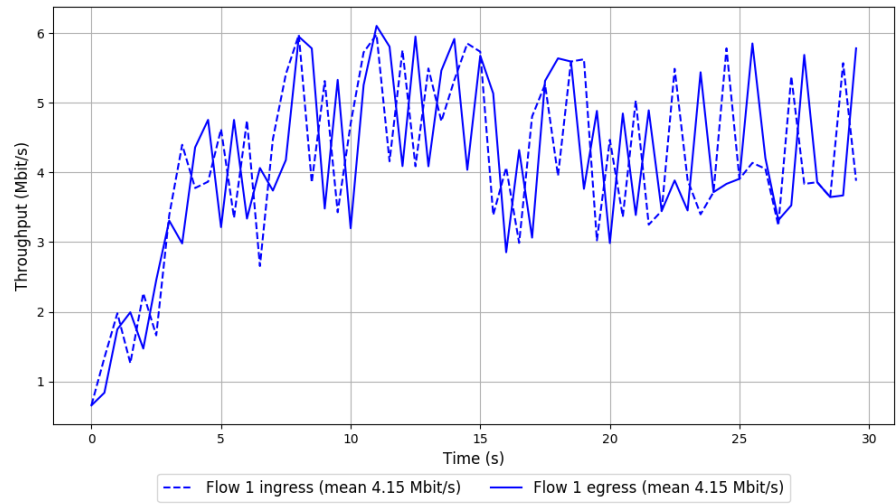
-- Flow 1:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 86.959 ms

Loss rate: 0.05%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-05 09:06:25

End at: 2017-12-05 09:06:55

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.42 Mbit/s

95th percentile per-packet one-way delay: 86.705 ms

Loss rate: 0.17%

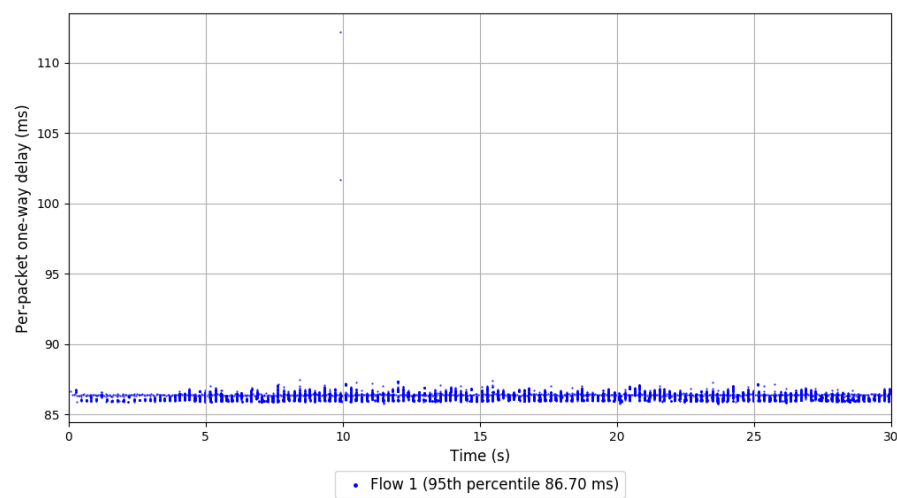
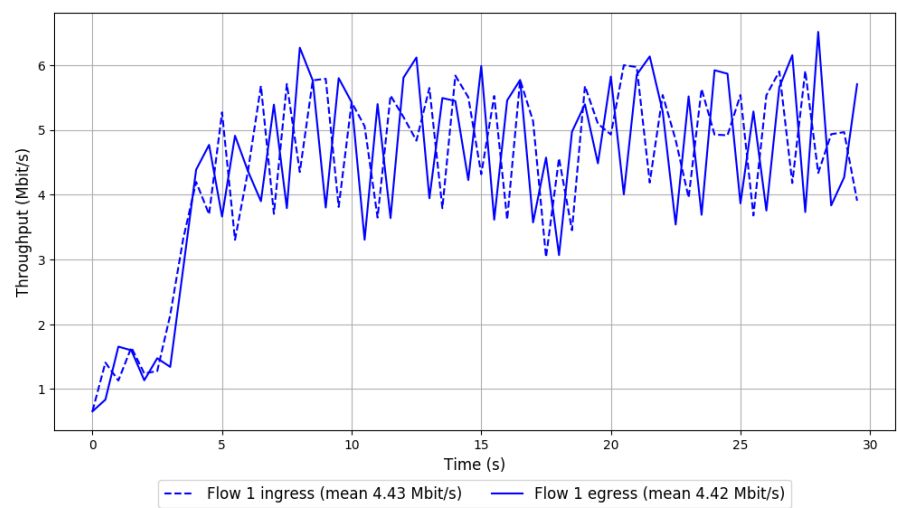
-- Flow 1:

Average throughput: 4.42 Mbit/s

95th percentile per-packet one-way delay: 86.705 ms

Loss rate: 0.17%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-05 09:17:48

End at: 2017-12-05 09:18:18

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 87.376 ms

Loss rate: 0.09%

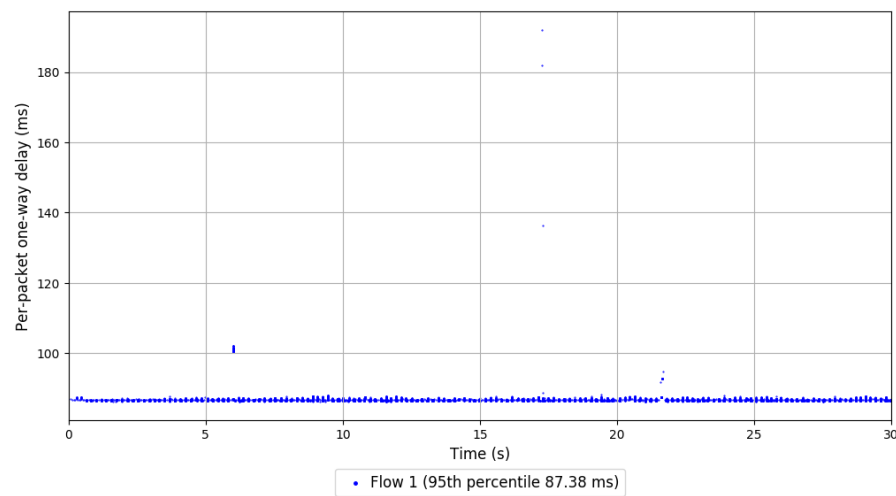
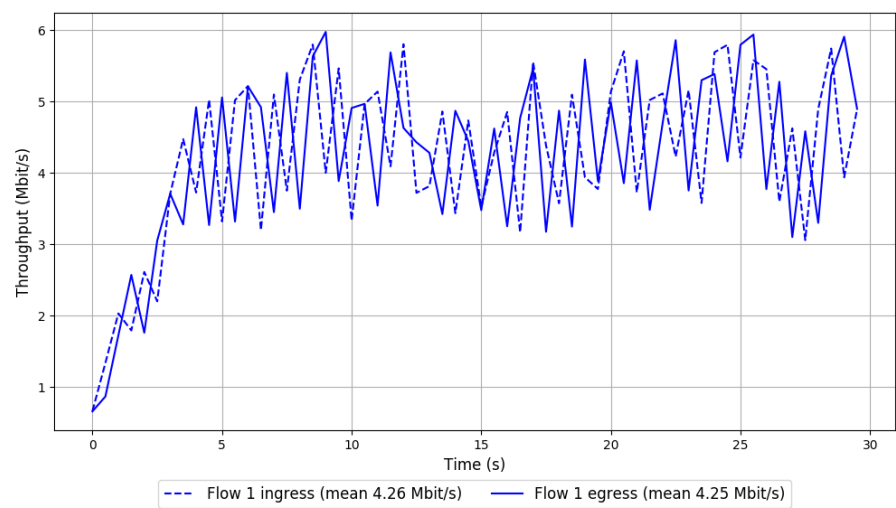
-- Flow 1:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 87.376 ms

Loss rate: 0.09%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-05 09:28:44

End at: 2017-12-05 09:29:14

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 87.202 ms

Loss rate: 0.03%

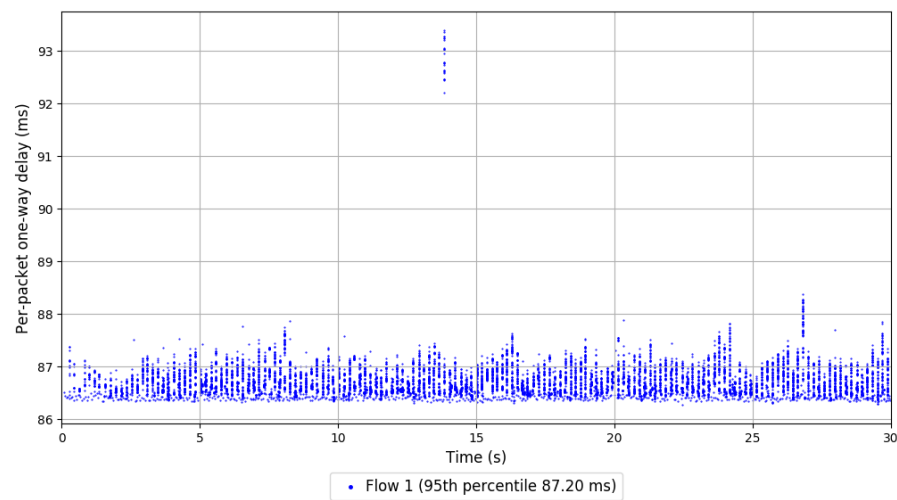
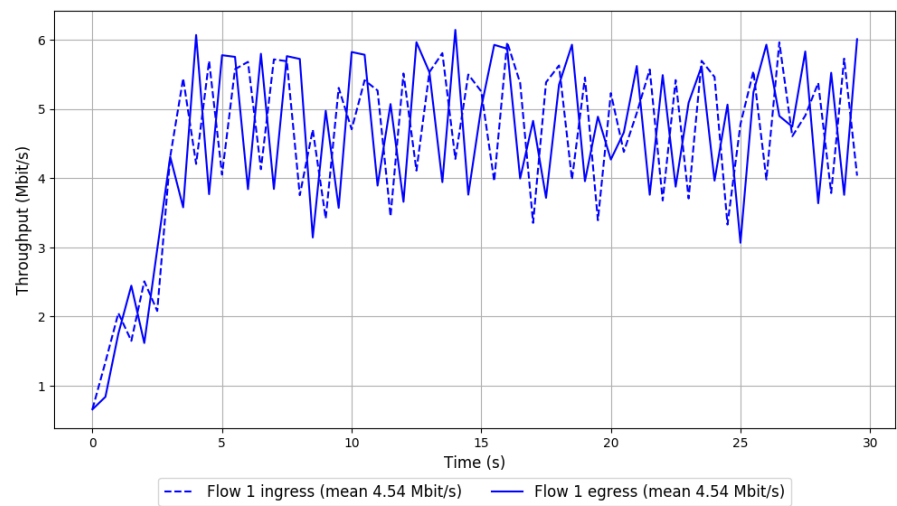
-- Flow 1:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 87.202 ms

Loss rate: 0.03%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-05 09:39:21

End at: 2017-12-05 09:39:51

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 87.275 ms

Loss rate: 0.74%

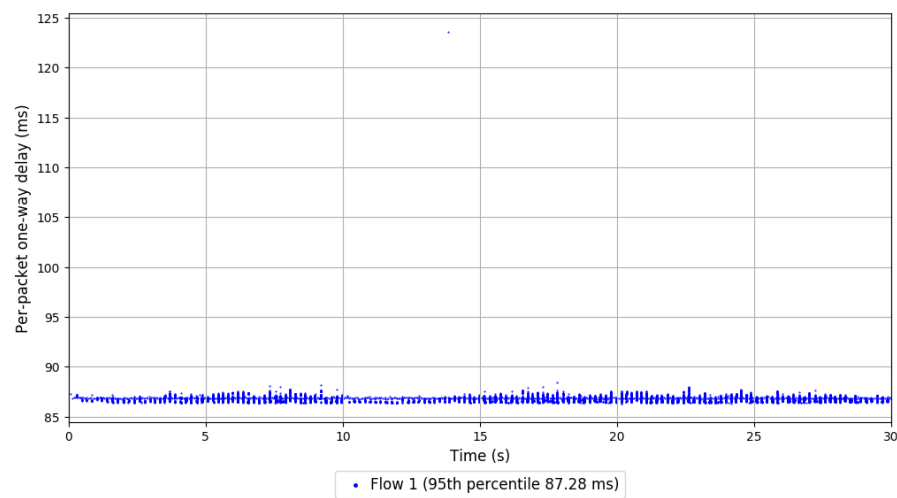
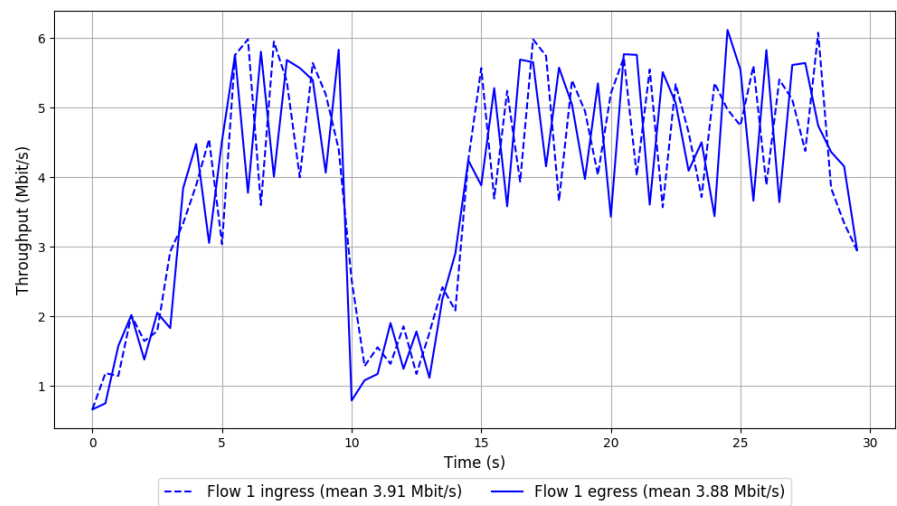
-- Flow 1:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 87.275 ms

Loss rate: 0.74%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-05 09:50:13

End at: 2017-12-05 09:50:44

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 87.314 ms

Loss rate: 0.15%

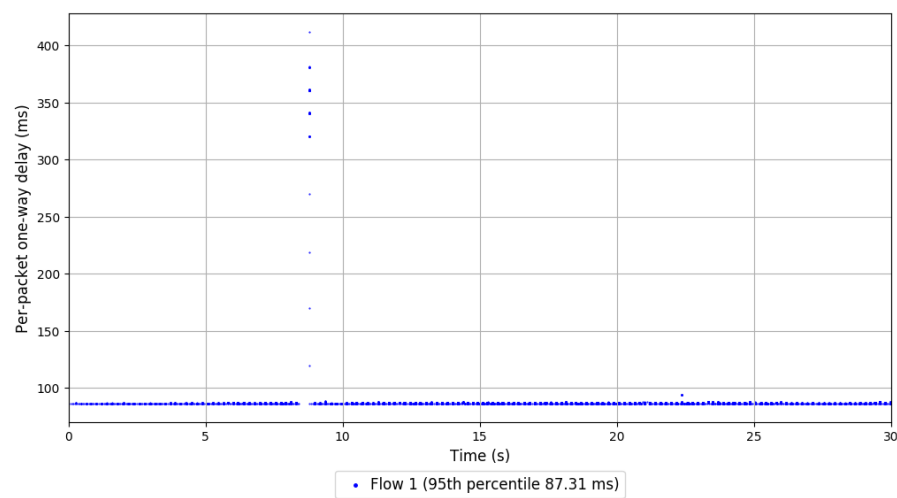
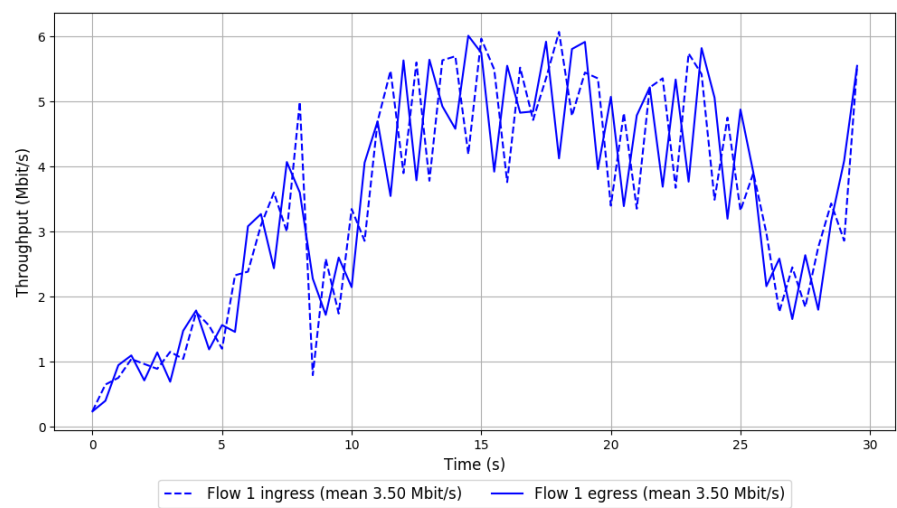
-- Flow 1:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 87.314 ms

Loss rate: 0.15%

Run 10: Report of Sprout — Data Link

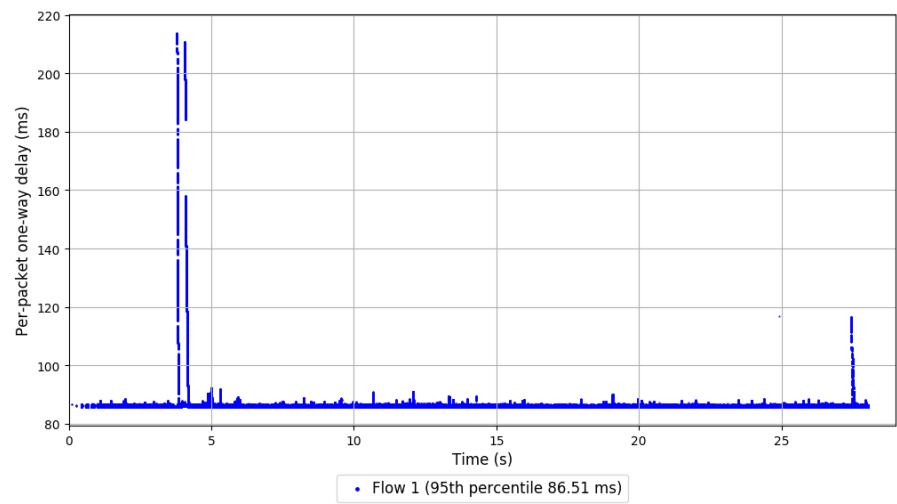
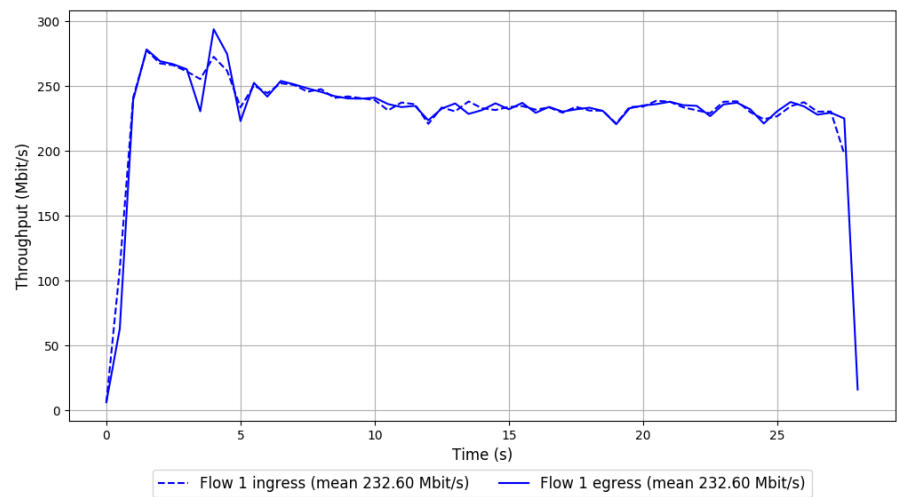


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-05 08:14:59
End at: 2017-12-05 08:15:29

# Below is generated by plot.py at 2017-12-05 11:00:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 232.60 Mbit/s
95th percentile per-packet one-way delay: 86.507 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 232.60 Mbit/s
95th percentile per-packet one-way delay: 86.507 ms
Loss rate: 0.00%
```

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

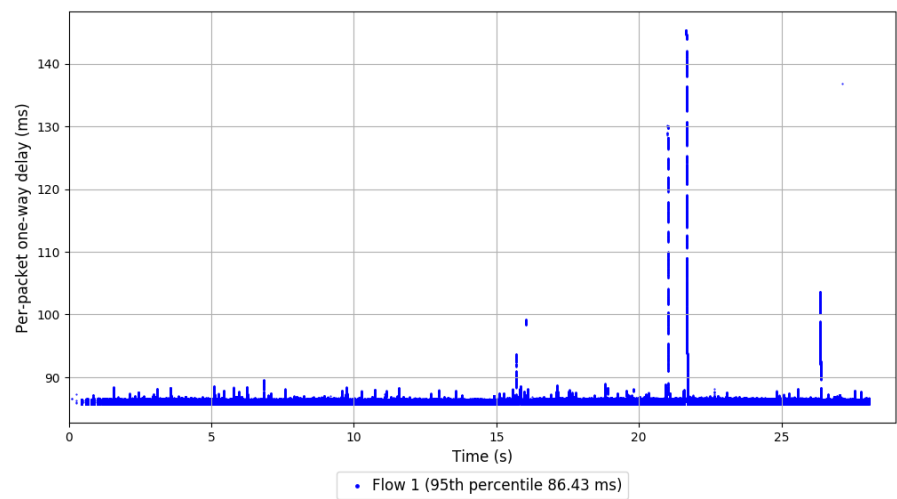
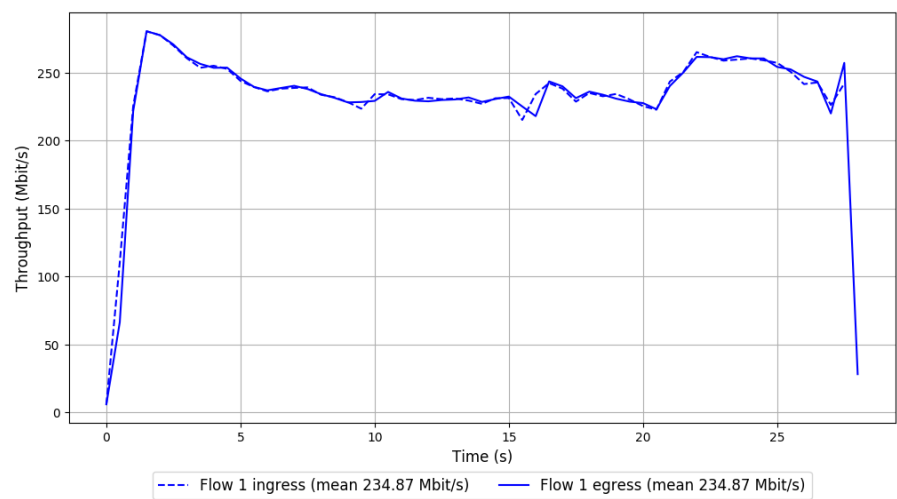


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-05 08:26:11
End at: 2017-12-05 08:26:41

# Below is generated by plot.py at 2017-12-05 11:00:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 234.87 Mbit/s
95th percentile per-packet one-way delay: 86.431 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 234.87 Mbit/s
95th percentile per-packet one-way delay: 86.431 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-05 08:37:16

End at: 2017-12-05 08:37:46

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 210.14 Mbit/s

95th percentile per-packet one-way delay: 86.432 ms

Loss rate: 0.00%

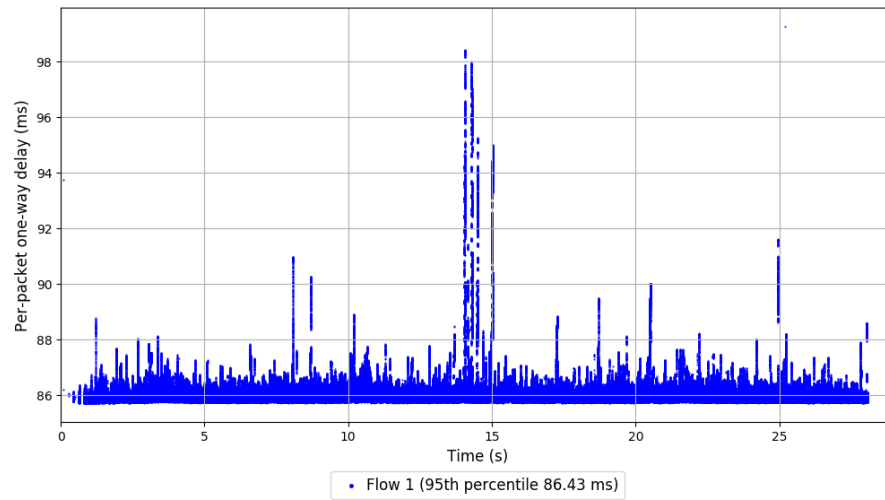
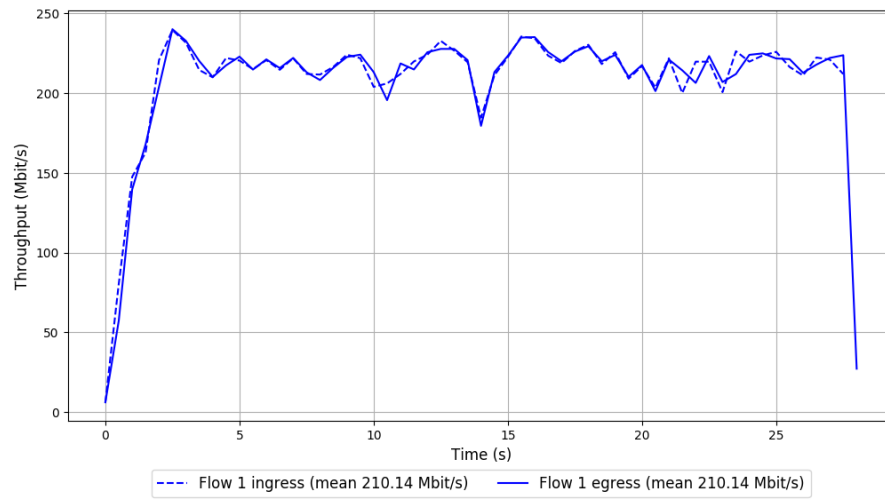
-- Flow 1:

Average throughput: 210.14 Mbit/s

95th percentile per-packet one-way delay: 86.432 ms

Loss rate: 0.00%

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

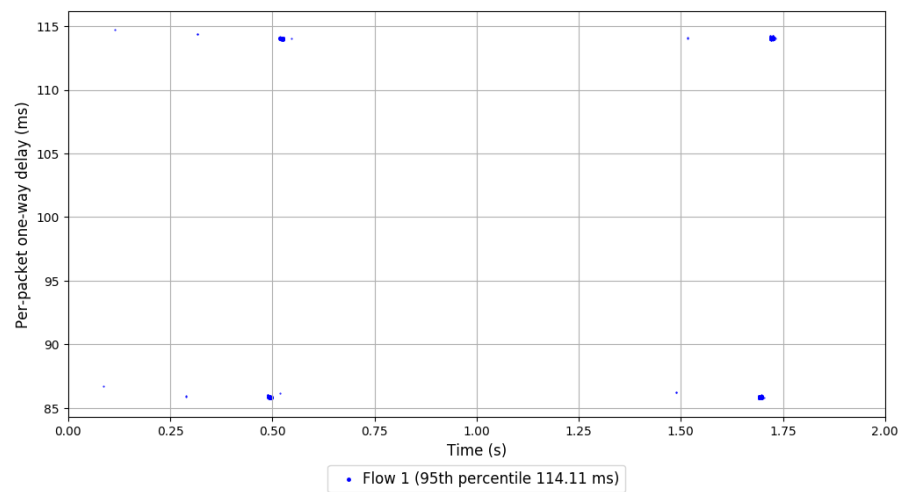
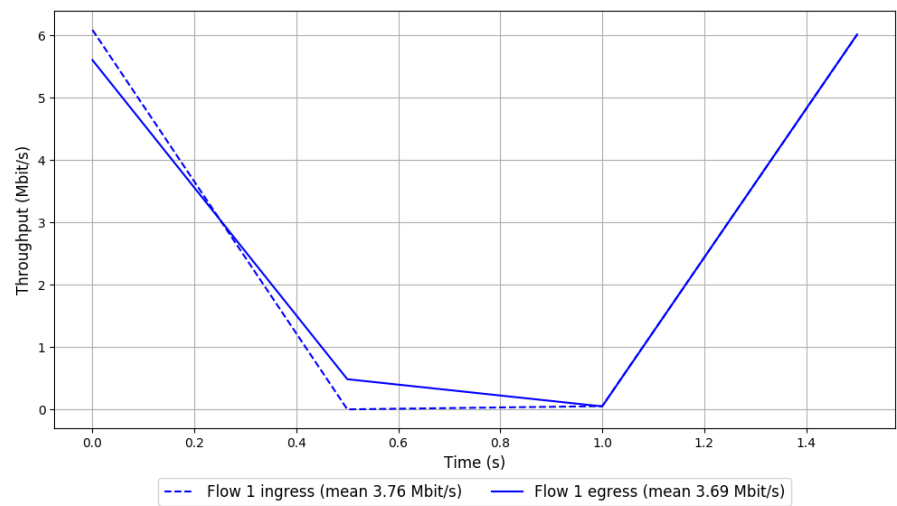


Run 4: Statistics of TaoVA-100x

Start at: 2017-12-05 08:48:21

End at: 2017-12-05 08:48:51

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-05 08:58:58

End at: 2017-12-05 08:59:28

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 211.38 Mbit/s

95th percentile per-packet one-way delay: 86.735 ms

Loss rate: 0.00%

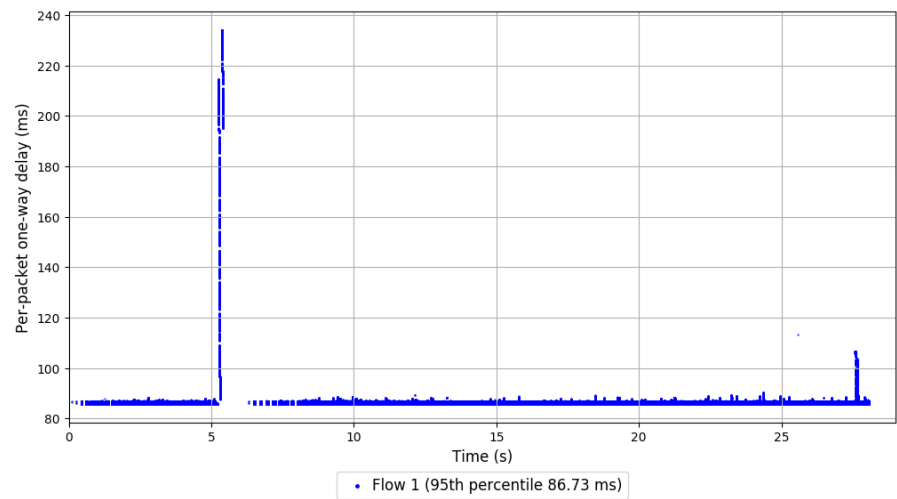
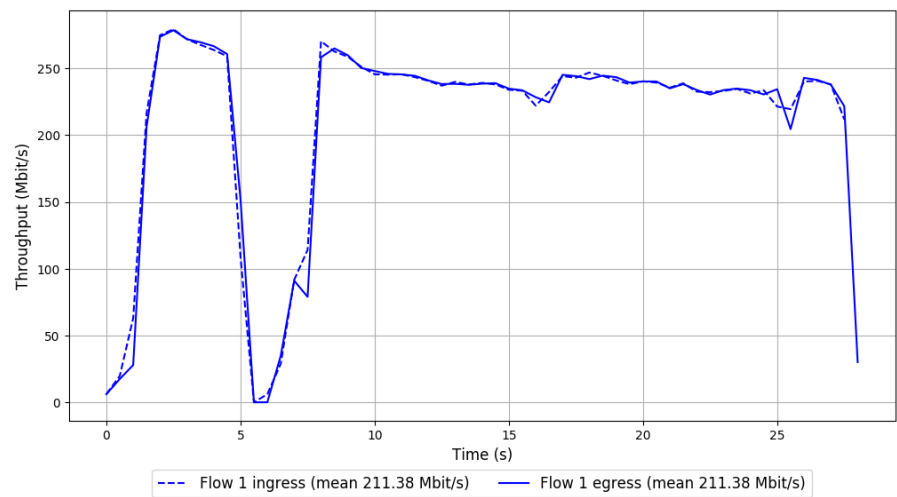
-- Flow 1:

Average throughput: 211.38 Mbit/s

95th percentile per-packet one-way delay: 86.735 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-05 09:10:04

End at: 2017-12-05 09:10:34

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 223.99 Mbit/s

95th percentile per-packet one-way delay: 87.202 ms

Loss rate: 0.00%

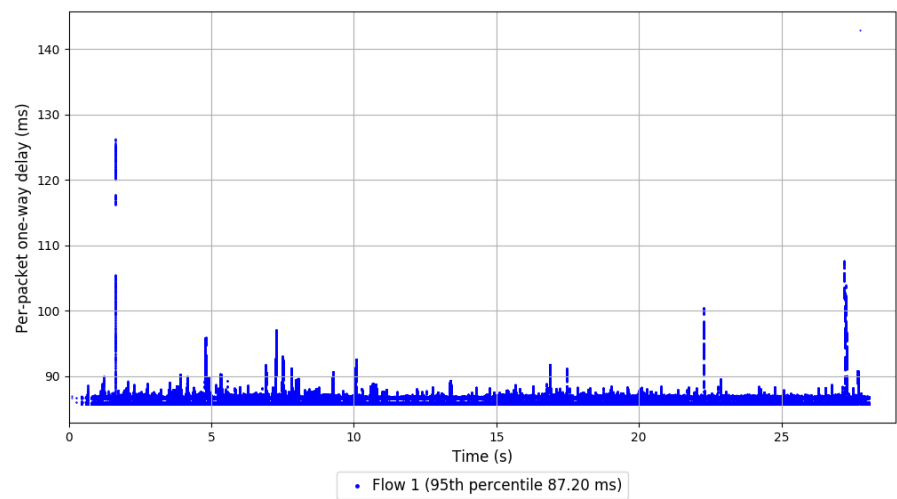
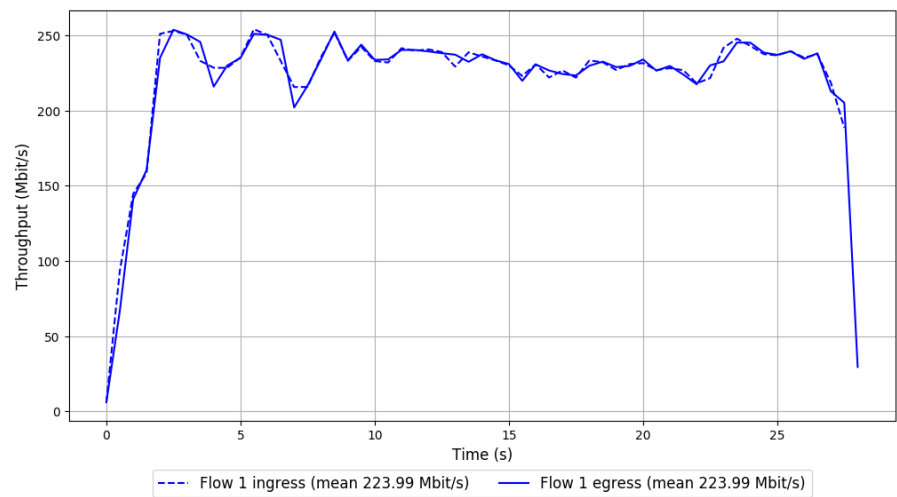
-- Flow 1:

Average throughput: 223.99 Mbit/s

95th percentile per-packet one-way delay: 87.202 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-05 09:21:24

End at: 2017-12-05 09:21:54

Below is generated by plot.py at 2017-12-05 11:00:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 162.82 Mbit/s

95th percentile per-packet one-way delay: 86.981 ms

Loss rate: 0.00%

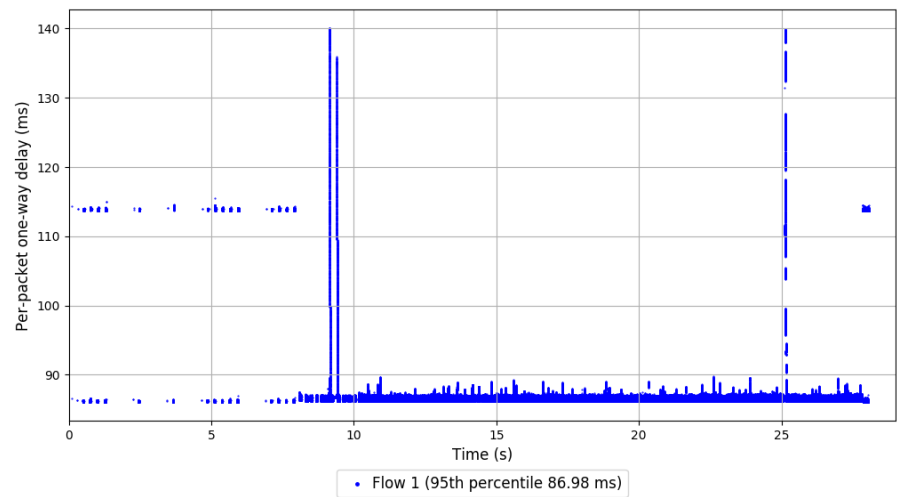
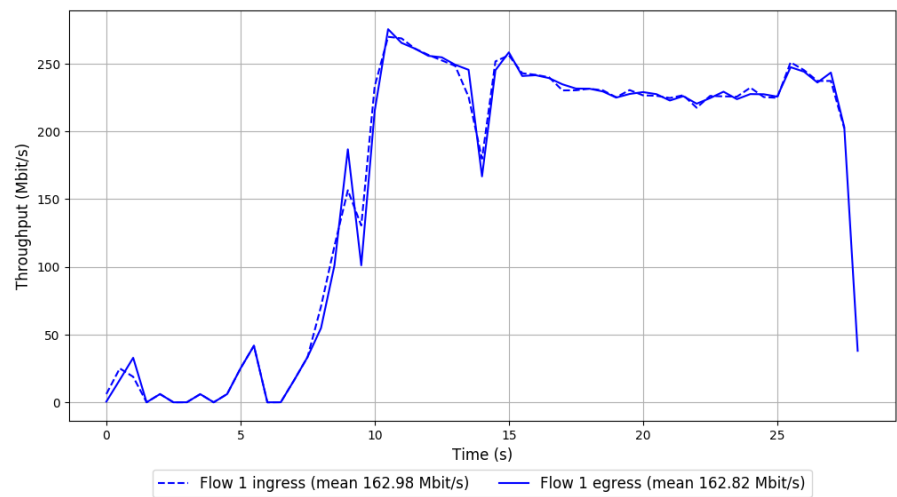
-- Flow 1:

Average throughput: 162.82 Mbit/s

95th percentile per-packet one-way delay: 86.981 ms

Loss rate: 0.00%

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

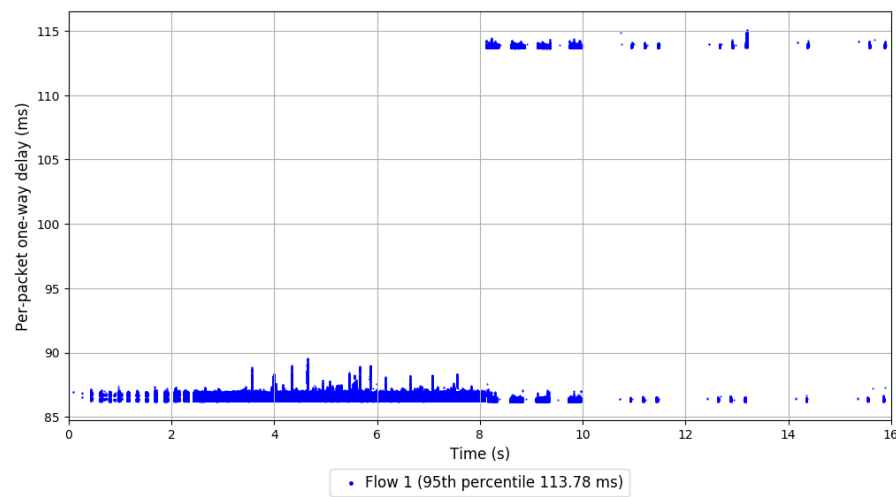
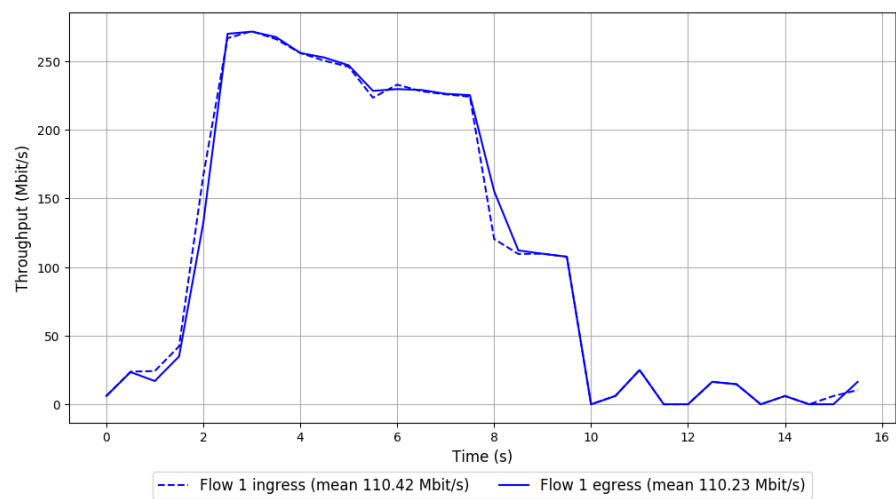


Run 8: Statistics of TaoVA-100x

Start at: 2017-12-05 09:32:03

End at: 2017-12-05 09:32:33

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-05 09:42:56

End at: 2017-12-05 09:43:26

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.58 Mbit/s

95th percentile per-packet one-way delay: 86.563 ms

Loss rate: 0.00%

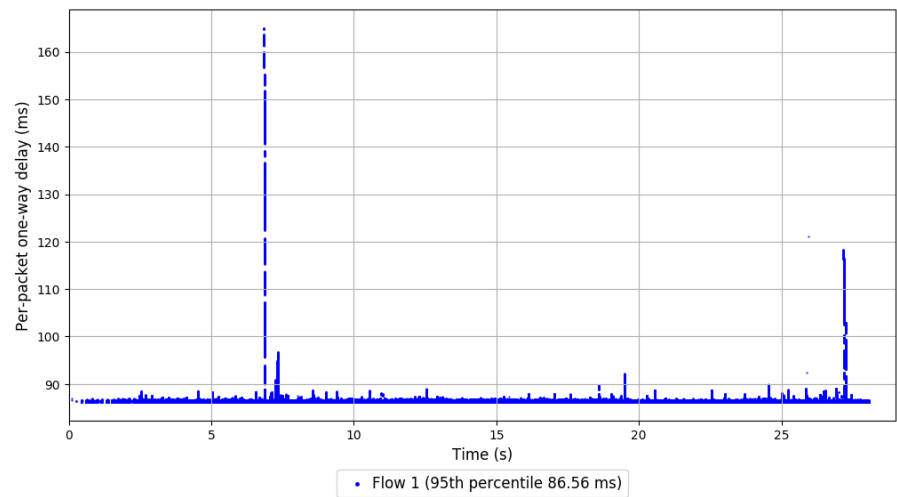
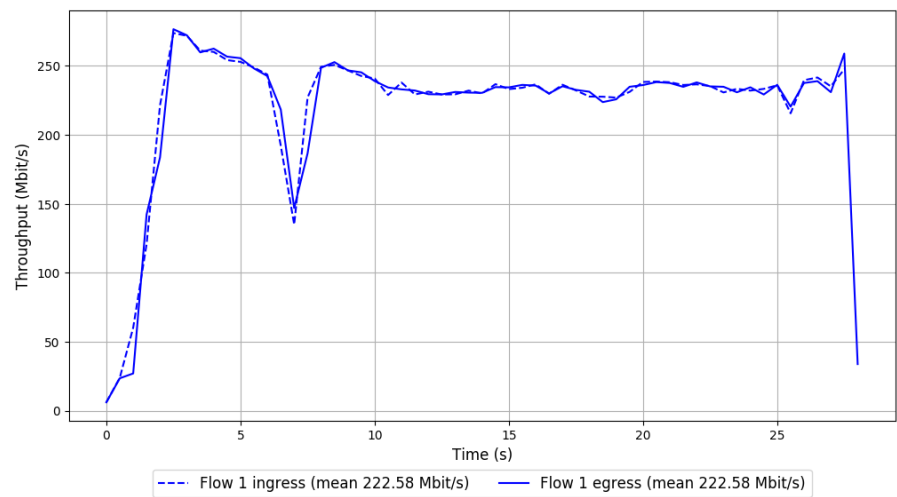
-- Flow 1:

Average throughput: 222.58 Mbit/s

95th percentile per-packet one-way delay: 86.563 ms

Loss rate: 0.00%

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

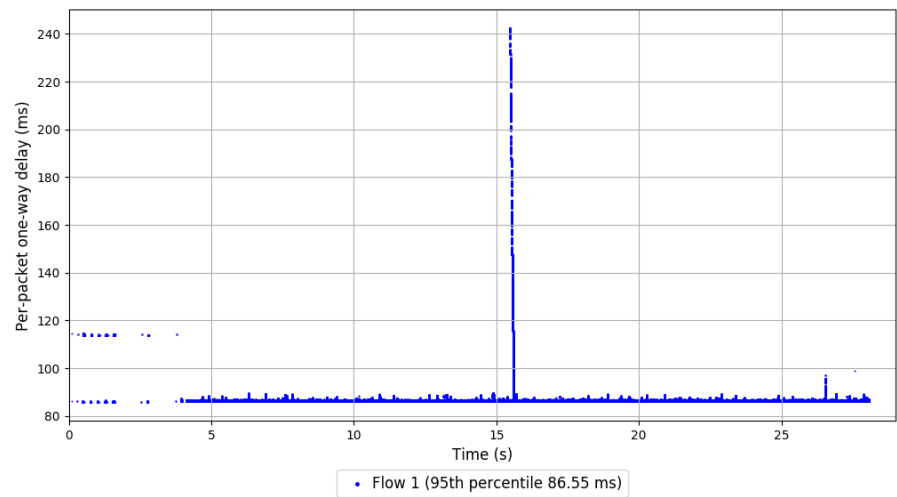
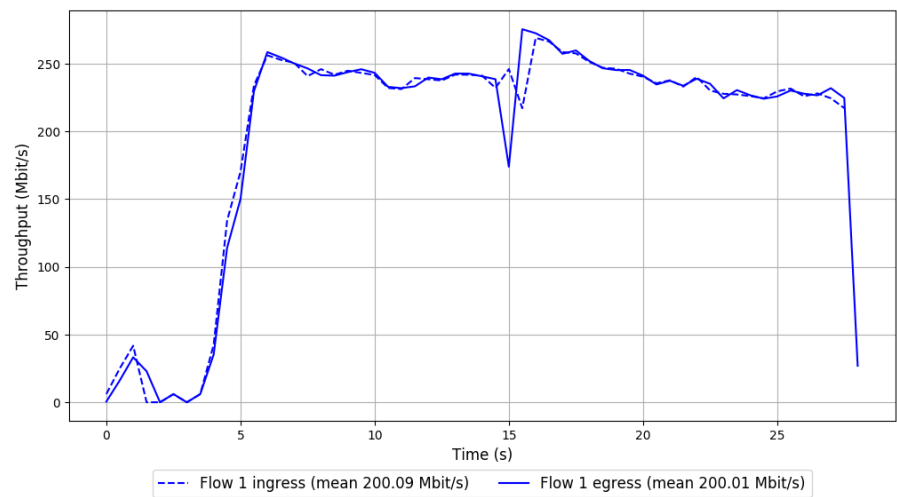


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-05 09:53:48
End at: 2017-12-05 09:54:18

# Below is generated by plot.py at 2017-12-05 11:06:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 200.01 Mbit/s
95th percentile per-packet one-way delay: 86.550 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 200.01 Mbit/s
95th percentile per-packet one-way delay: 86.550 ms
Loss rate: 0.04%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-05 08:16:01

End at: 2017-12-05 08:16:31

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.37 Mbit/s

95th percentile per-packet one-way delay: 93.650 ms

Loss rate: 0.22%

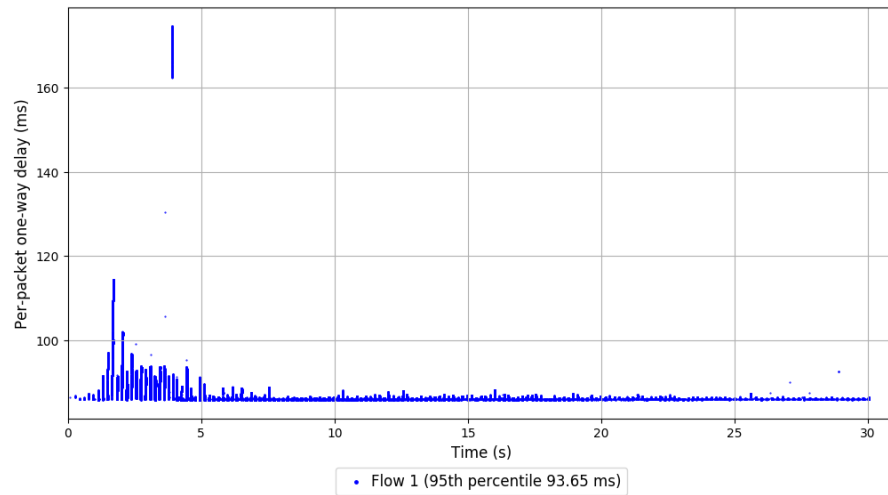
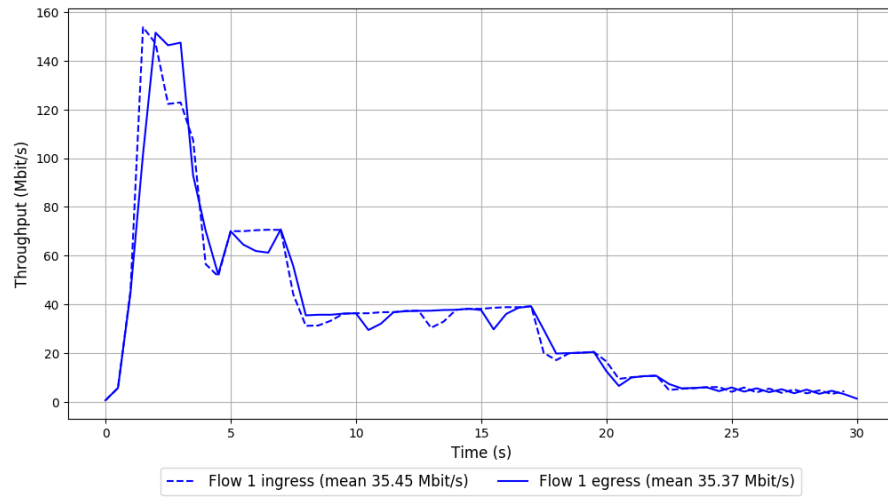
-- Flow 1:

Average throughput: 35.37 Mbit/s

95th percentile per-packet one-way delay: 93.650 ms

Loss rate: 0.22%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-05 08:27:14

End at: 2017-12-05 08:27:44

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.72 Mbit/s

95th percentile per-packet one-way delay: 90.157 ms

Loss rate: 0.00%

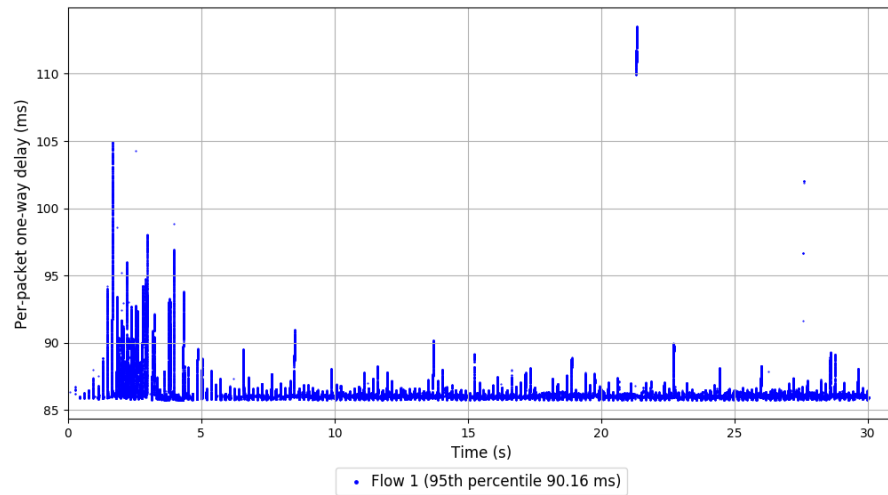
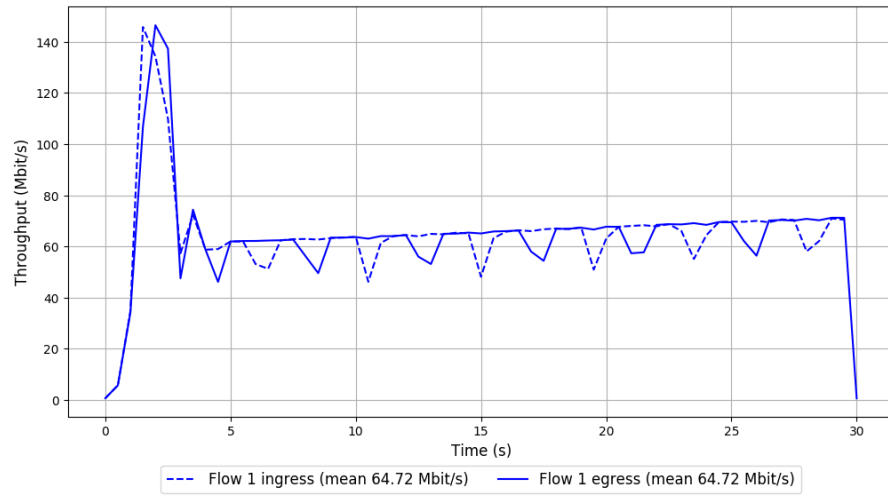
-- Flow 1:

Average throughput: 64.72 Mbit/s

95th percentile per-packet one-way delay: 90.157 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-05 08:38:18

End at: 2017-12-05 08:38:48

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 114.269 ms

Loss rate: 0.05%

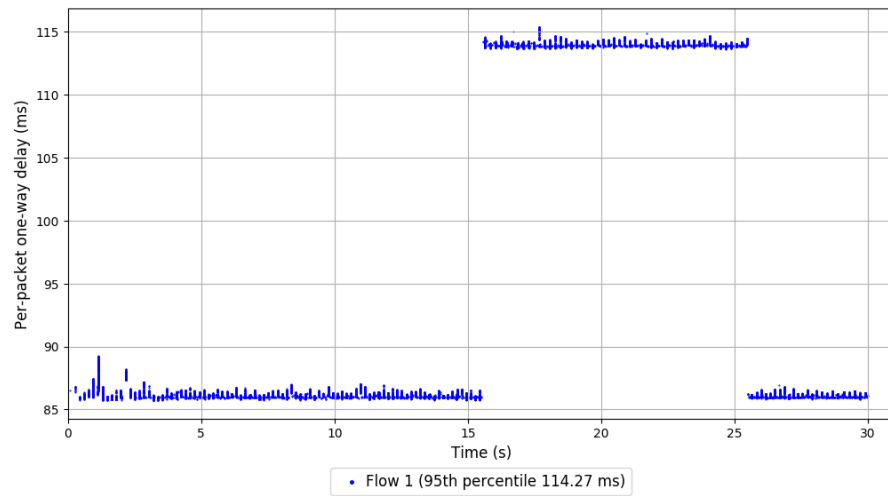
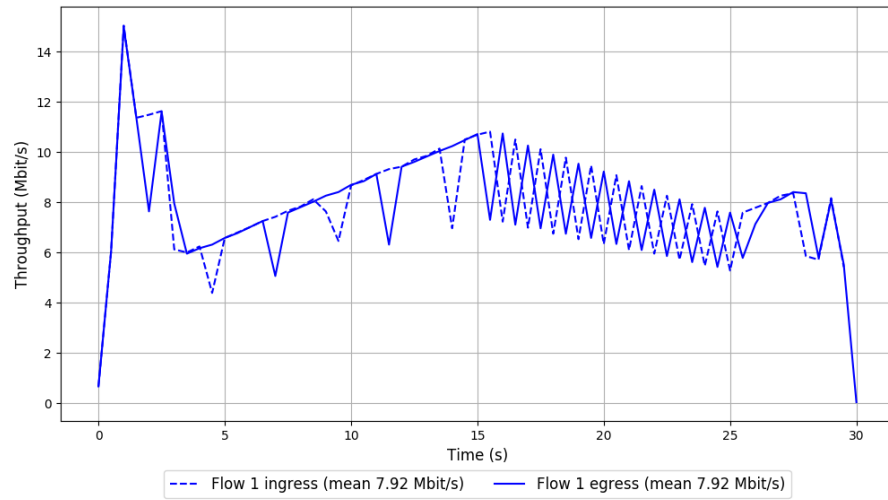
-- Flow 1:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 114.269 ms

Loss rate: 0.05%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-05 08:49:01

End at: 2017-12-05 08:49:31

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.76 Mbit/s

95th percentile per-packet one-way delay: 87.850 ms

Loss rate: 0.00%

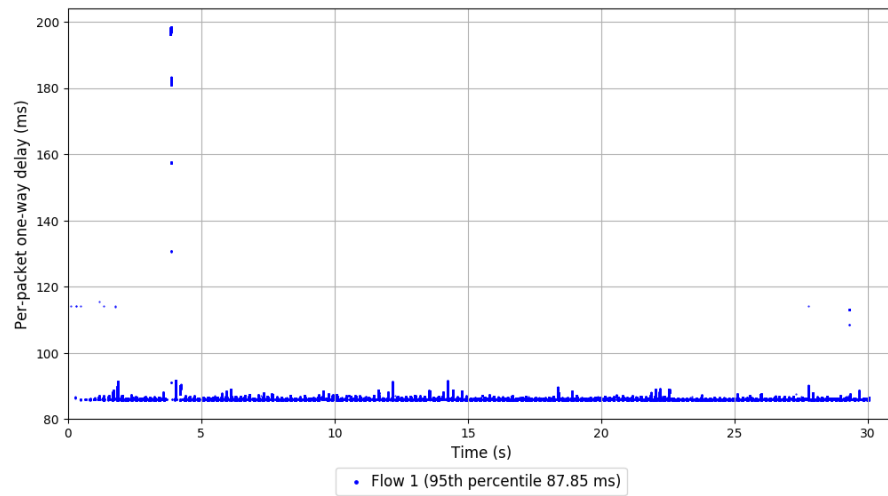
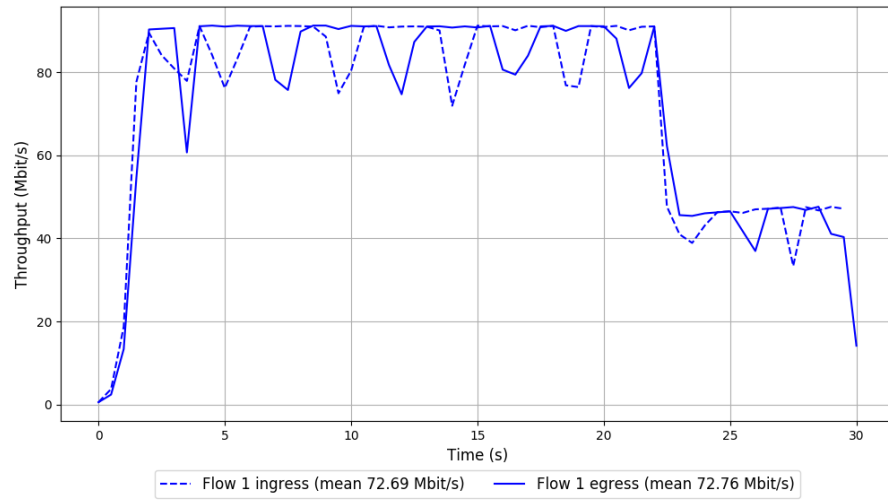
-- Flow 1:

Average throughput: 72.76 Mbit/s

95th percentile per-packet one-way delay: 87.850 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-05 08:59:59

End at: 2017-12-05 09:00:29

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.21 Mbit/s

95th percentile per-packet one-way delay: 87.631 ms

Loss rate: 0.00%

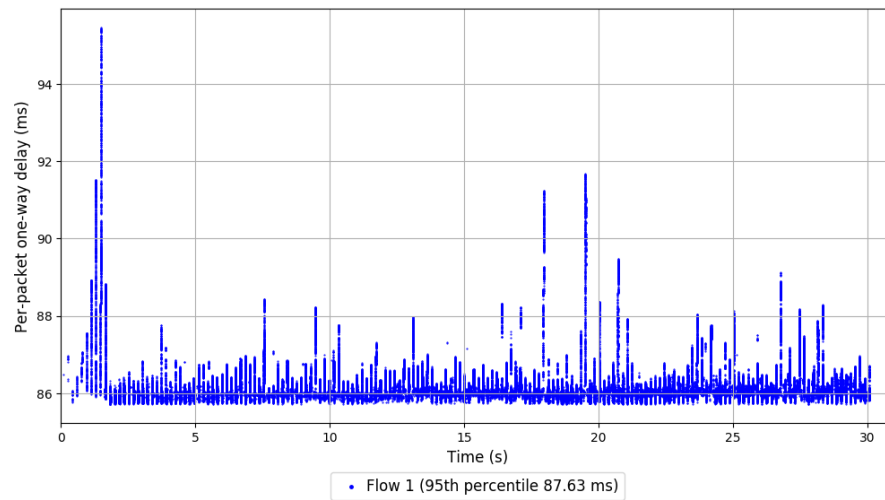
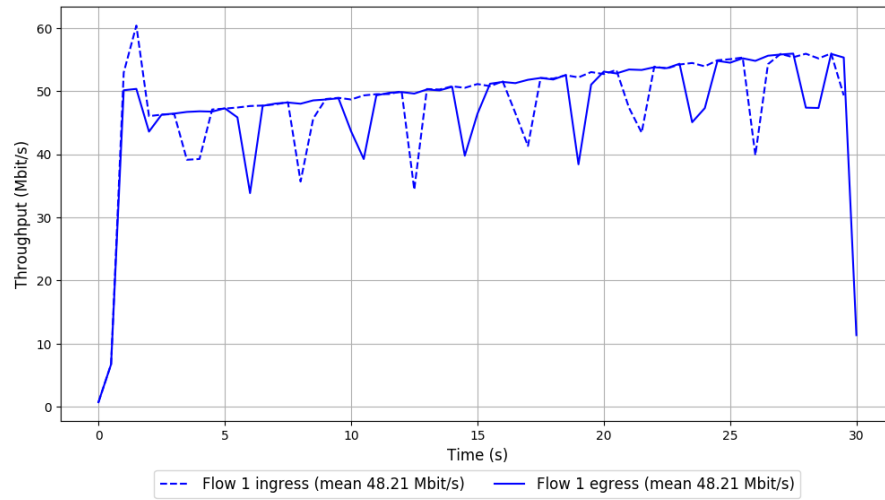
-- Flow 1:

Average throughput: 48.21 Mbit/s

95th percentile per-packet one-way delay: 87.631 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-05 09:11:05

End at: 2017-12-05 09:11:36

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.17 Mbit/s

95th percentile per-packet one-way delay: 87.357 ms

Loss rate: 0.00%

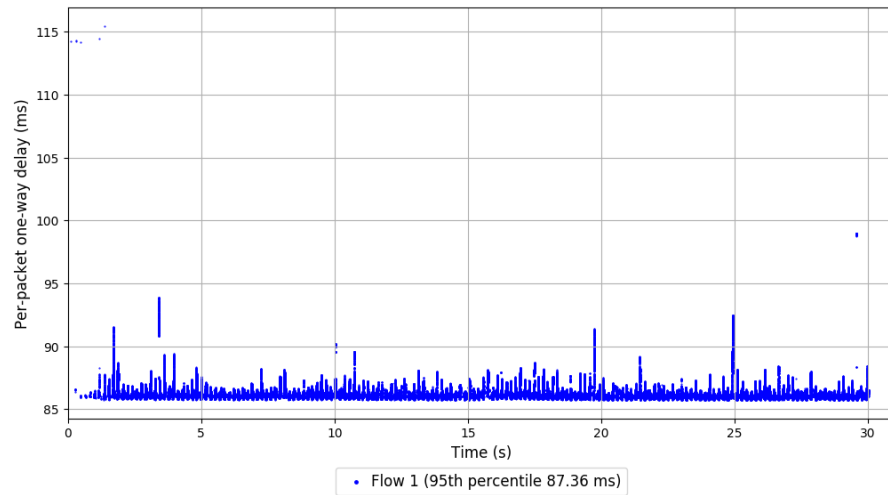
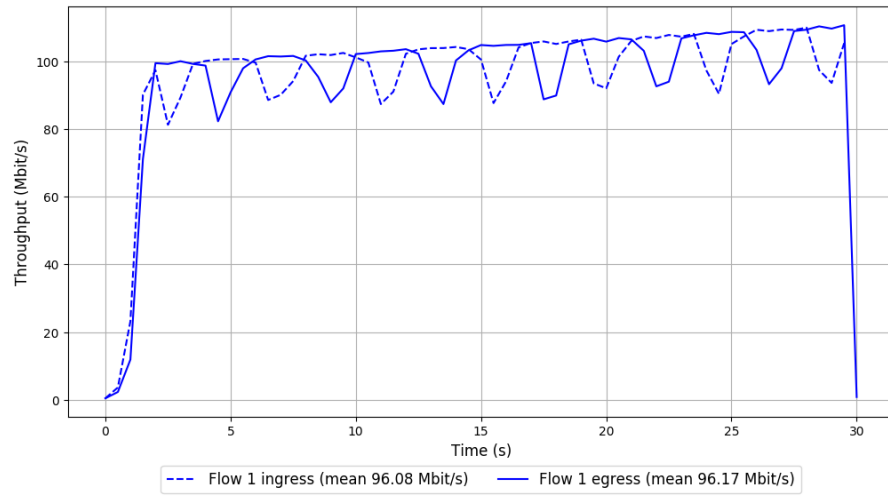
-- Flow 1:

Average throughput: 96.17 Mbit/s

95th percentile per-packet one-way delay: 87.357 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-05 09:22:19

End at: 2017-12-05 09:22:49

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.12 Mbit/s

95th percentile per-packet one-way delay: 88.429 ms

Loss rate: 0.01%

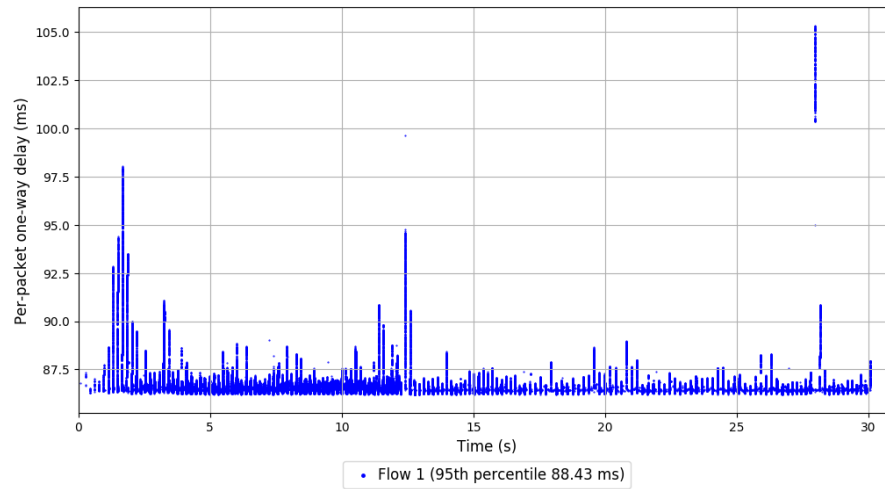
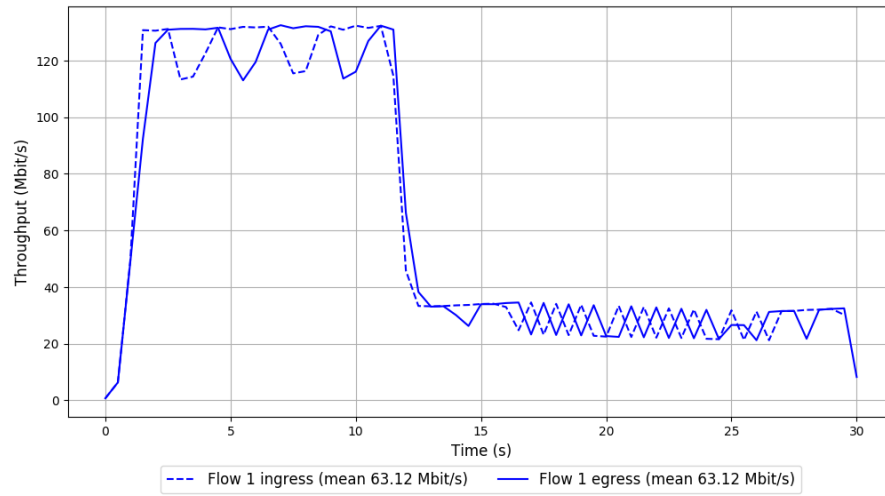
-- Flow 1:

Average throughput: 63.12 Mbit/s

95th percentile per-packet one-way delay: 88.429 ms

Loss rate: 0.01%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-05 09:32:49

End at: 2017-12-05 09:33:19

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.79 Mbit/s

95th percentile per-packet one-way delay: 88.577 ms

Loss rate: 0.00%

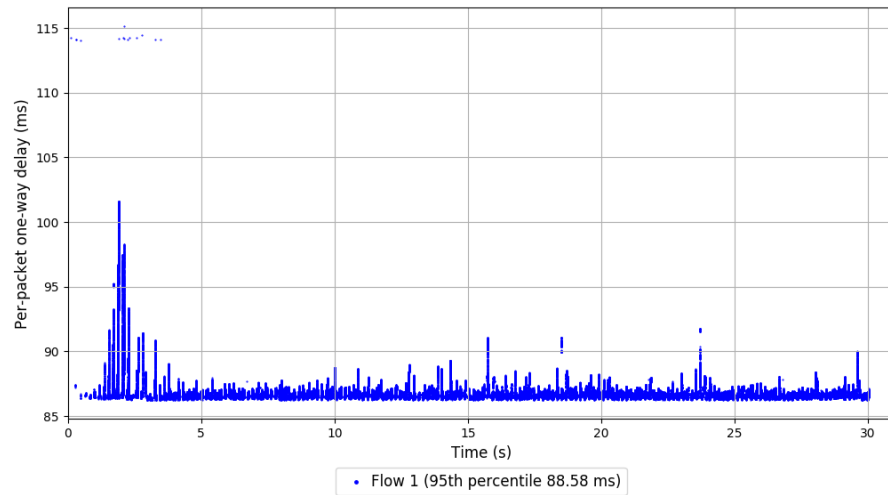
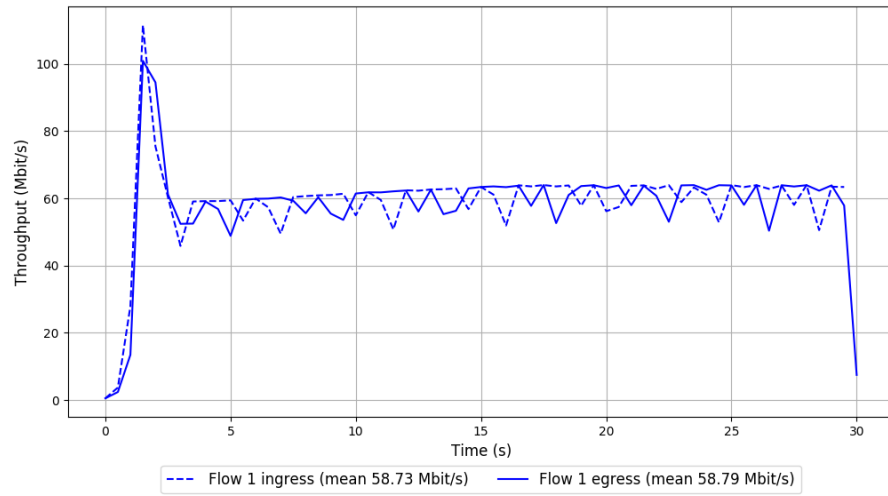
-- Flow 1:

Average throughput: 58.79 Mbit/s

95th percentile per-packet one-way delay: 88.577 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-05 09:43:57

End at: 2017-12-05 09:44:27

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.38 Mbit/s

95th percentile per-packet one-way delay: 87.785 ms

Loss rate: 0.00%

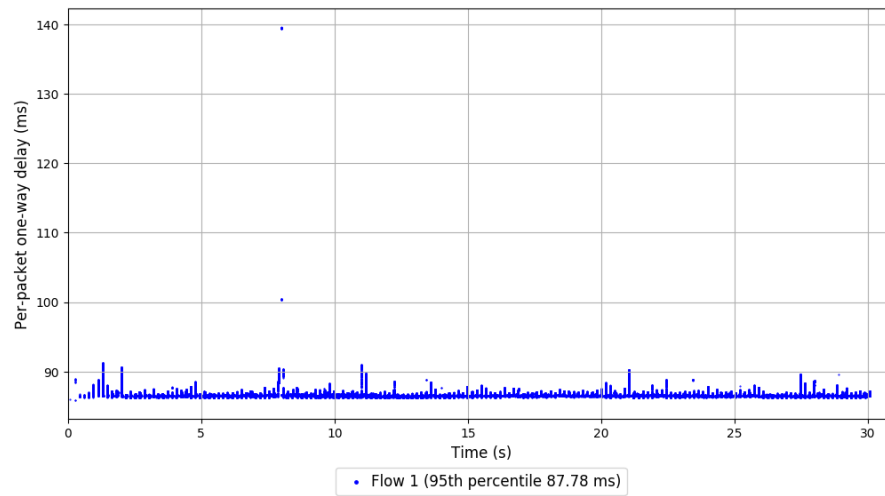
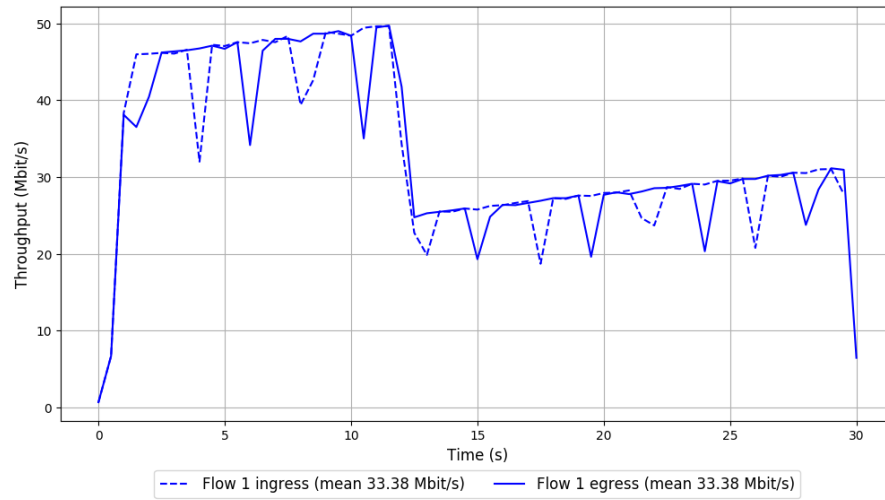
-- Flow 1:

Average throughput: 33.38 Mbit/s

95th percentile per-packet one-way delay: 87.785 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-05 09:54:47

End at: 2017-12-05 09:55:17

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.07 Mbit/s

95th percentile per-packet one-way delay: 114.391 ms

Loss rate: 0.02%

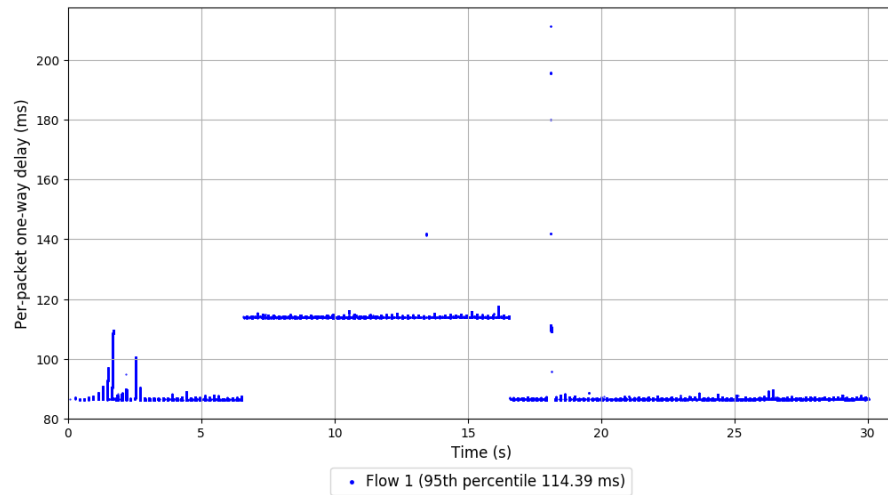
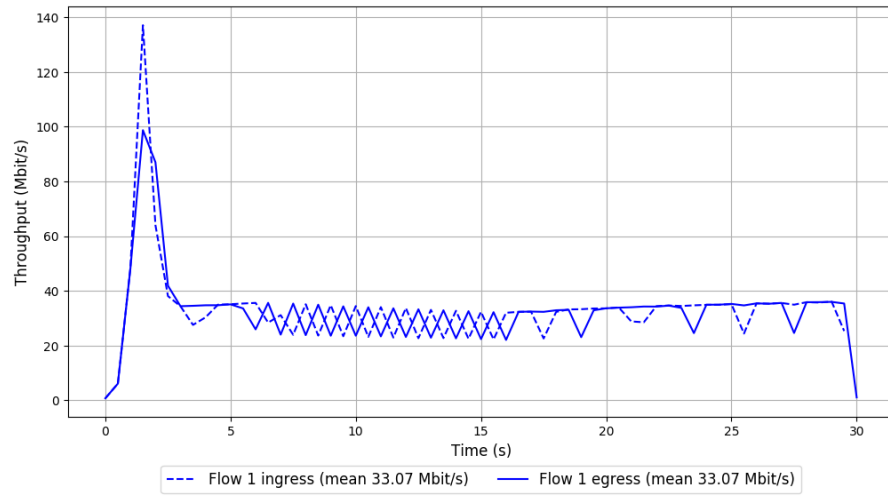
-- Flow 1:

Average throughput: 33.07 Mbit/s

95th percentile per-packet one-way delay: 114.391 ms

Loss rate: 0.02%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-05 08:16:44

End at: 2017-12-05 08:17:14

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.04 Mbit/s

95th percentile per-packet one-way delay: 138.449 ms

Loss rate: 0.17%

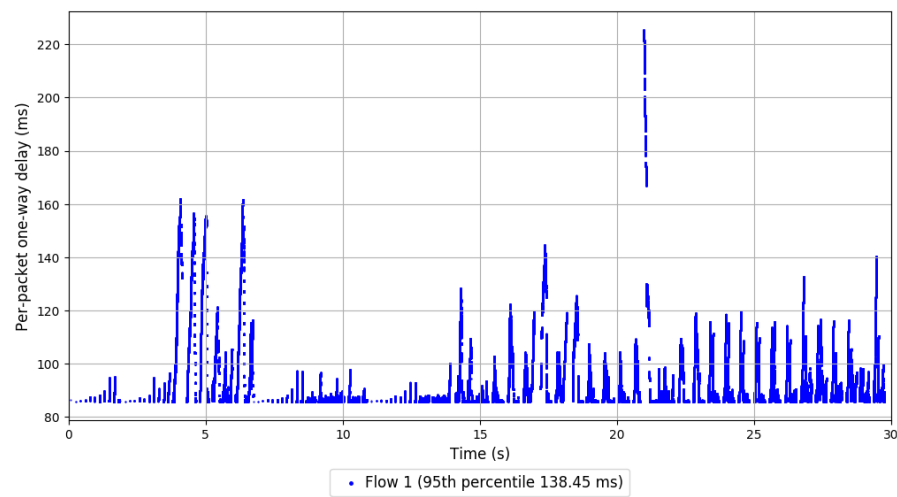
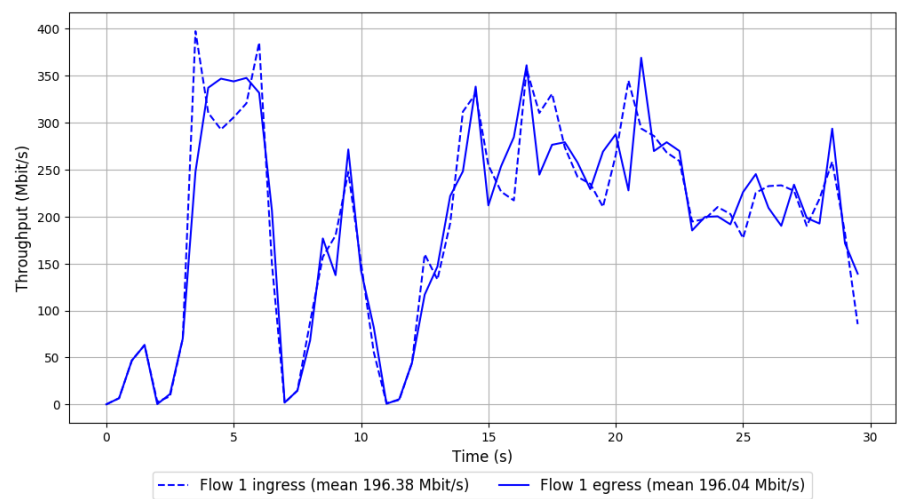
-- Flow 1:

Average throughput: 196.04 Mbit/s

95th percentile per-packet one-way delay: 138.449 ms

Loss rate: 0.17%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-05 08:27:58

End at: 2017-12-05 08:28:28

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 247.68 Mbit/s

95th percentile per-packet one-way delay: 127.734 ms

Loss rate: 0.00%

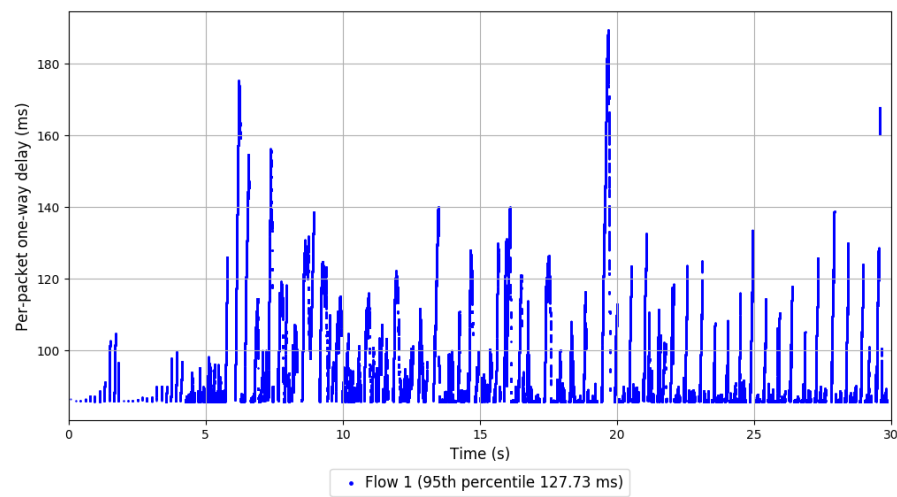
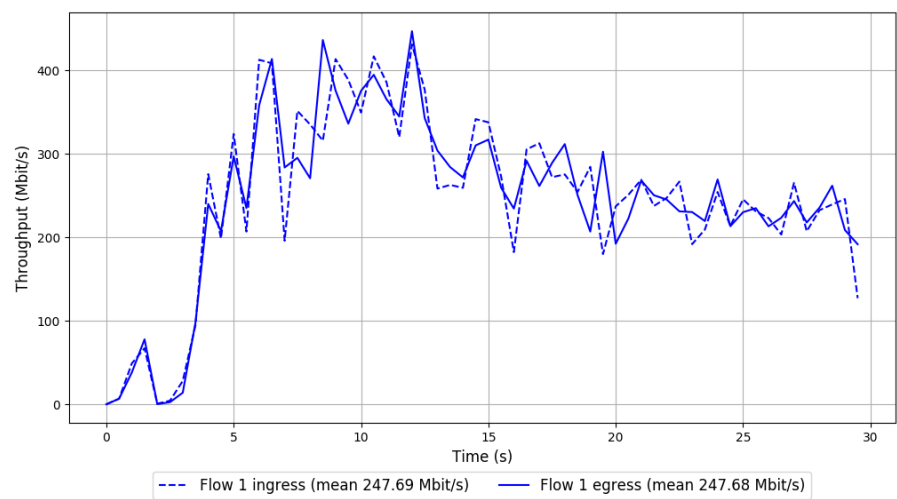
-- Flow 1:

Average throughput: 247.68 Mbit/s

95th percentile per-packet one-way delay: 127.734 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-05 08:39:00

End at: 2017-12-05 08:39:30

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 124.60 Mbit/s

95th percentile per-packet one-way delay: 139.731 ms

Loss rate: 0.01%

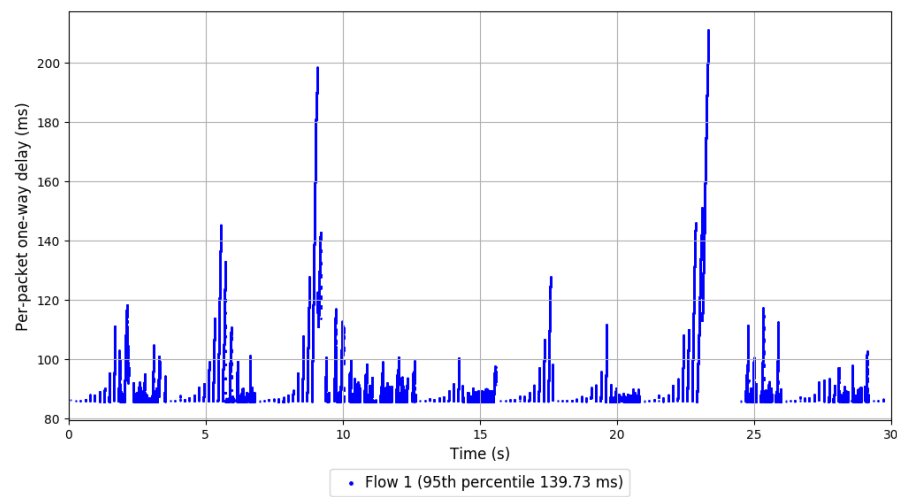
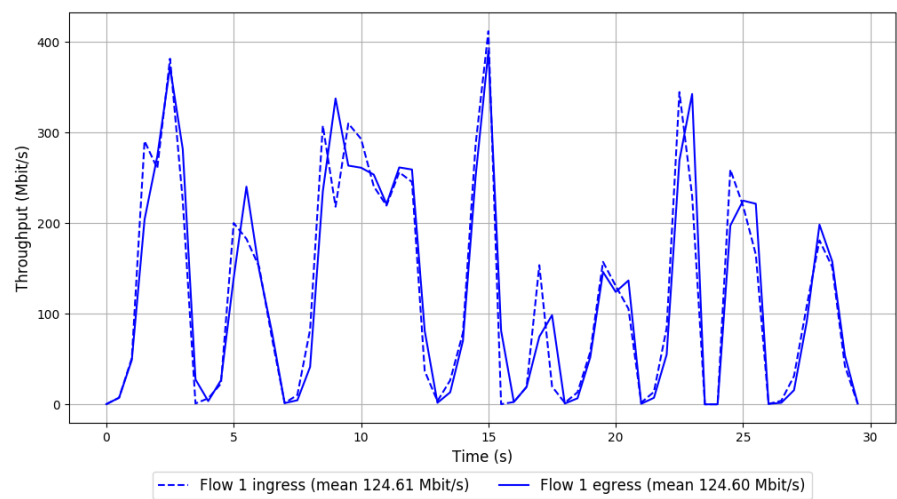
-- Flow 1:

Average throughput: 124.60 Mbit/s

95th percentile per-packet one-way delay: 139.731 ms

Loss rate: 0.01%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-05 08:49:46

End at: 2017-12-05 08:50:16

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.30 Mbit/s

95th percentile per-packet one-way delay: 124.911 ms

Loss rate: 0.00%

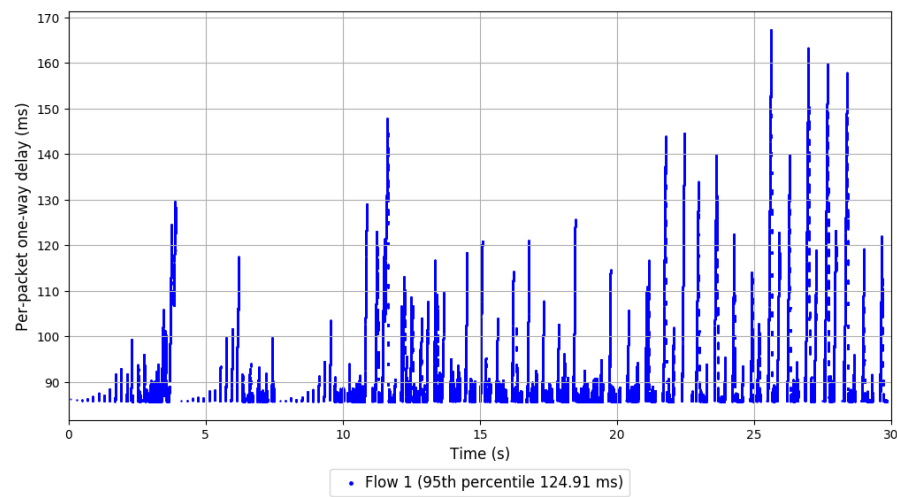
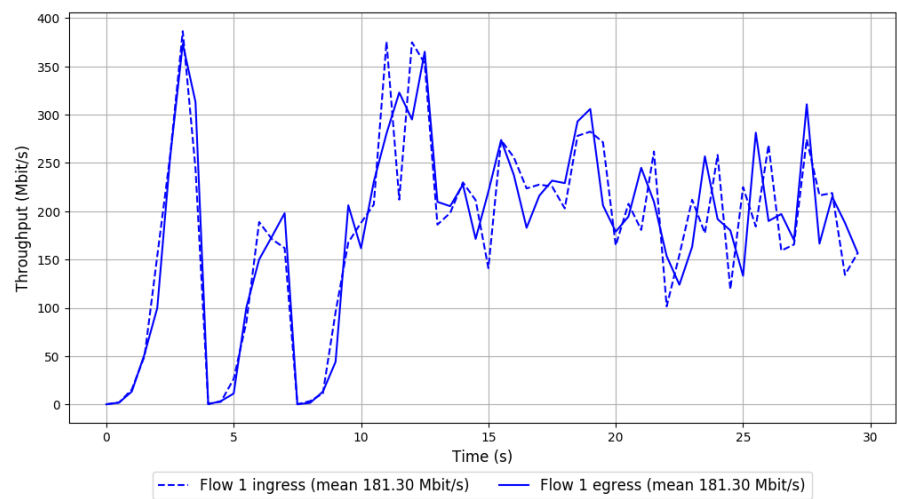
-- Flow 1:

Average throughput: 181.30 Mbit/s

95th percentile per-packet one-way delay: 124.911 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-05 09:00:42

End at: 2017-12-05 09:01:12

Below is generated by plot.py at 2017-12-05 11:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.25 Mbit/s

95th percentile per-packet one-way delay: 115.338 ms

Loss rate: 0.01%

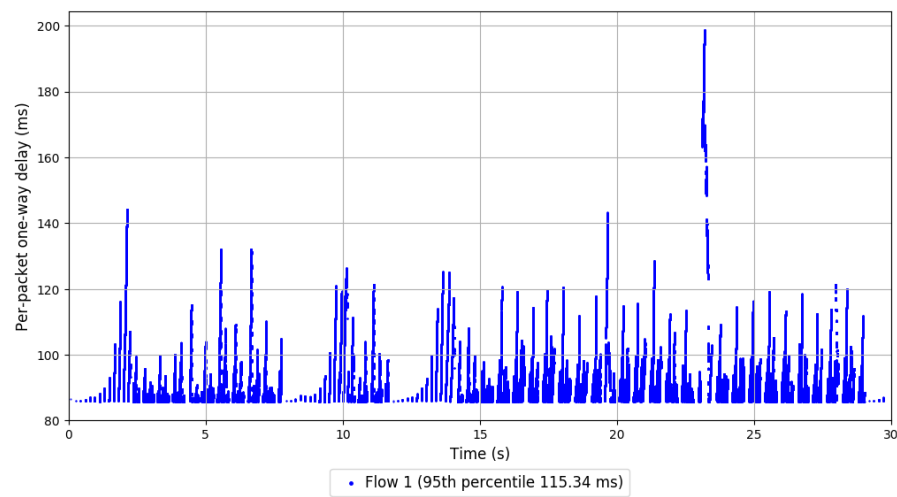
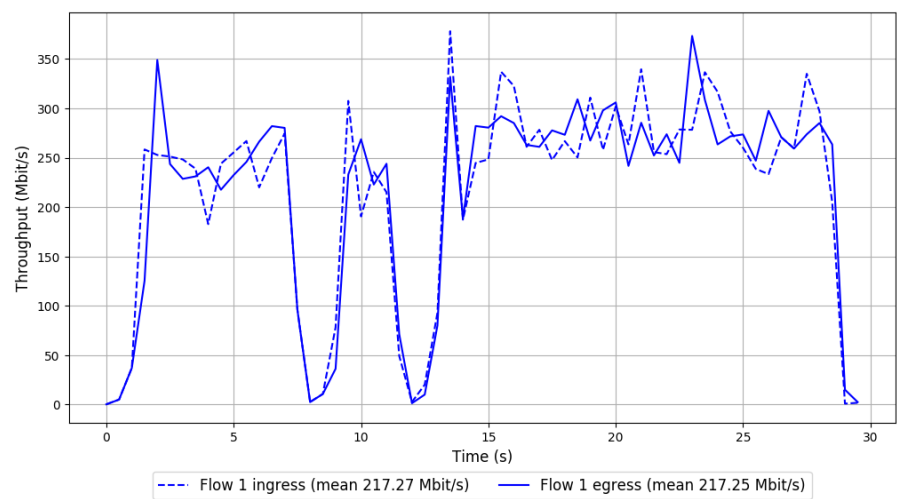
-- Flow 1:

Average throughput: 217.25 Mbit/s

95th percentile per-packet one-way delay: 115.338 ms

Loss rate: 0.01%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-05 09:11:51

End at: 2017-12-05 09:12:21

Below is generated by plot.py at 2017-12-05 11:06:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 269.13 Mbit/s

95th percentile per-packet one-way delay: 275.640 ms

Loss rate: 4.26%

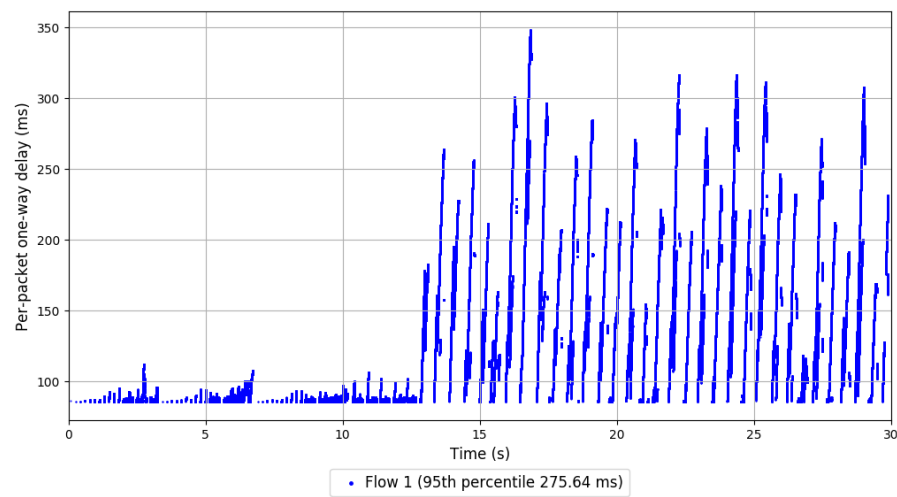
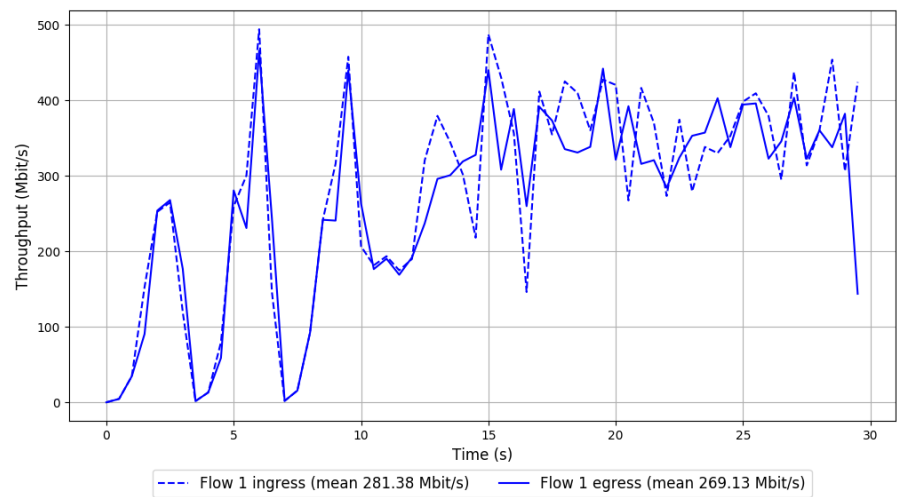
-- Flow 1:

Average throughput: 269.13 Mbit/s

95th percentile per-packet one-way delay: 275.640 ms

Loss rate: 4.26%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-05 09:23:03

End at: 2017-12-05 09:23:33

Below is generated by plot.py at 2017-12-05 11:06:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 156.51 Mbit/s

95th percentile per-packet one-way delay: 115.916 ms

Loss rate: 0.00%

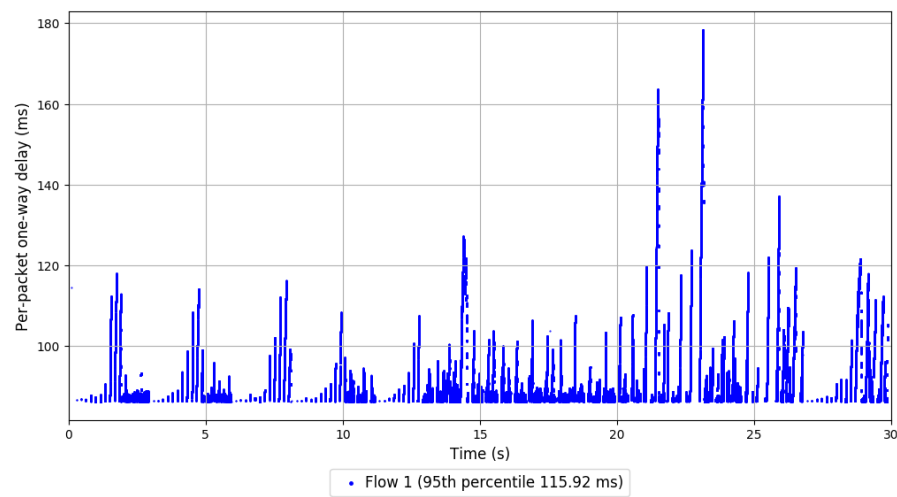
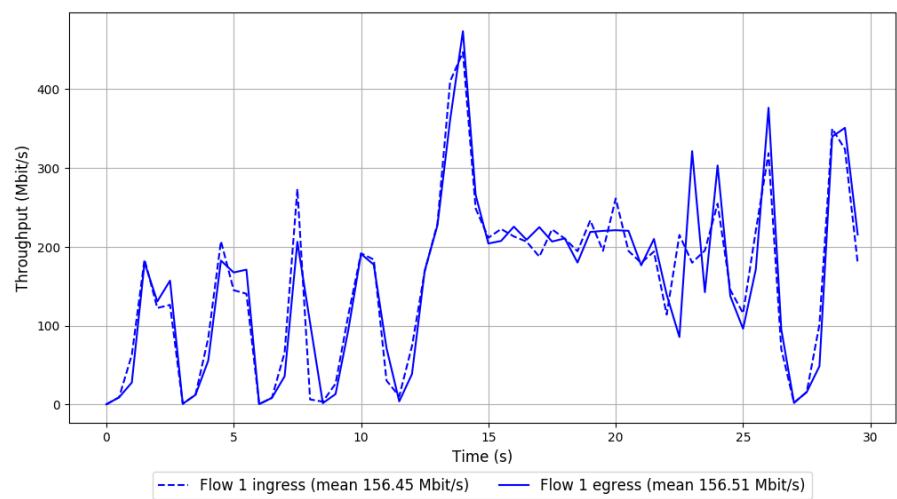
-- Flow 1:

Average throughput: 156.51 Mbit/s

95th percentile per-packet one-way delay: 115.916 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-05 09:33:33

End at: 2017-12-05 09:34:03

Below is generated by plot.py at 2017-12-05 11:09:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 279.56 Mbit/s

95th percentile per-packet one-way delay: 228.901 ms

Loss rate: 1.79%

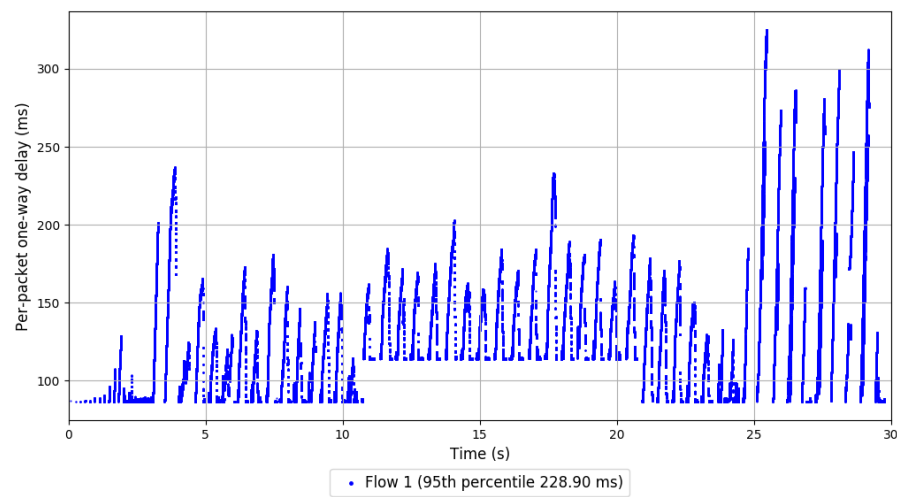
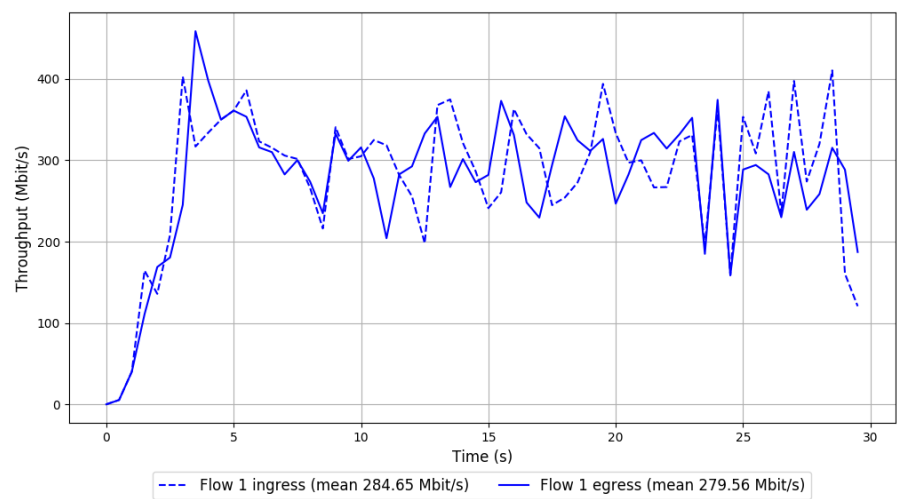
-- Flow 1:

Average throughput: 279.56 Mbit/s

95th percentile per-packet one-way delay: 228.901 ms

Loss rate: 1.79%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-05 09:44:39

End at: 2017-12-05 09:45:09

Below is generated by plot.py at 2017-12-05 11:09:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.19 Mbit/s

95th percentile per-packet one-way delay: 162.212 ms

Loss rate: 0.15%

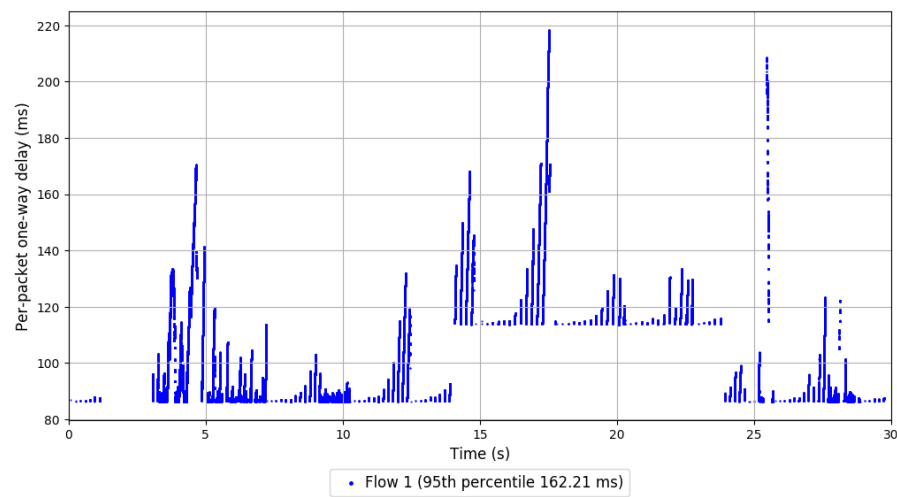
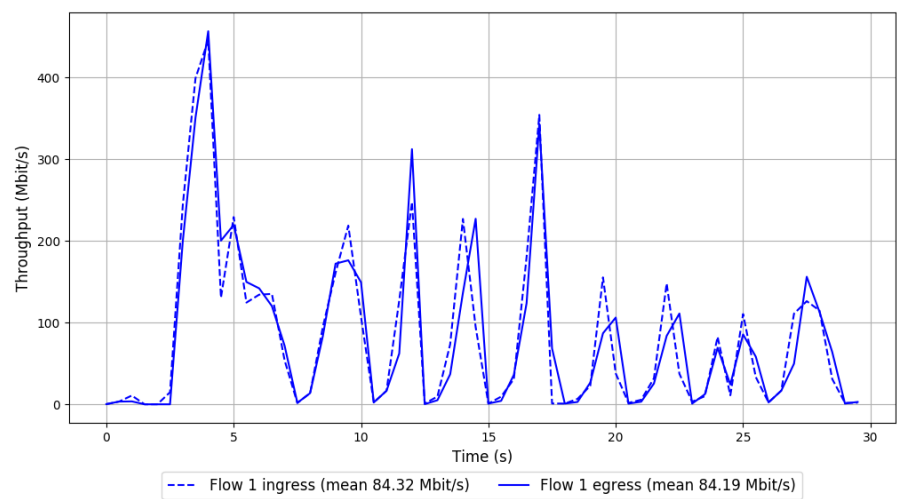
-- Flow 1:

Average throughput: 84.19 Mbit/s

95th percentile per-packet one-way delay: 162.212 ms

Loss rate: 0.15%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-05 09:55:29

End at: 2017-12-05 09:55:59

Below is generated by plot.py at 2017-12-05 11:09:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 251.81 Mbit/s

95th percentile per-packet one-way delay: 130.817 ms

Loss rate: 0.00%

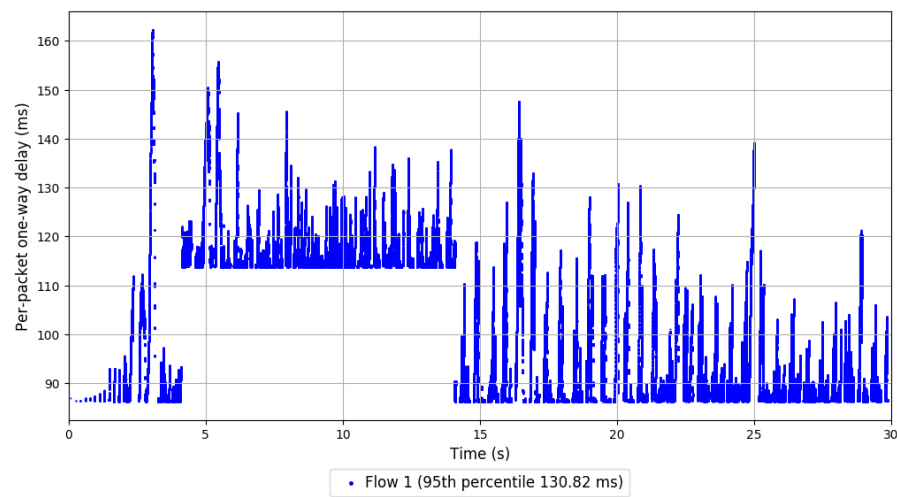
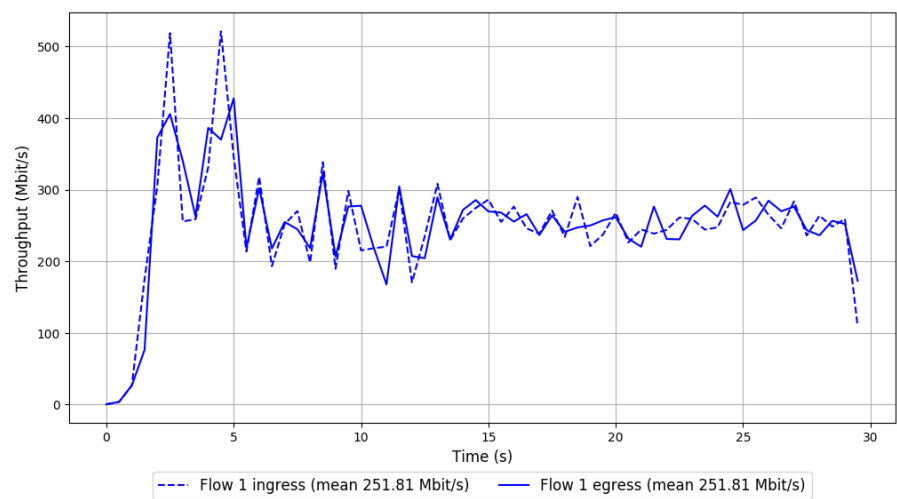
-- Flow 1:

Average throughput: 251.81 Mbit/s

95th percentile per-packet one-way delay: 130.817 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link

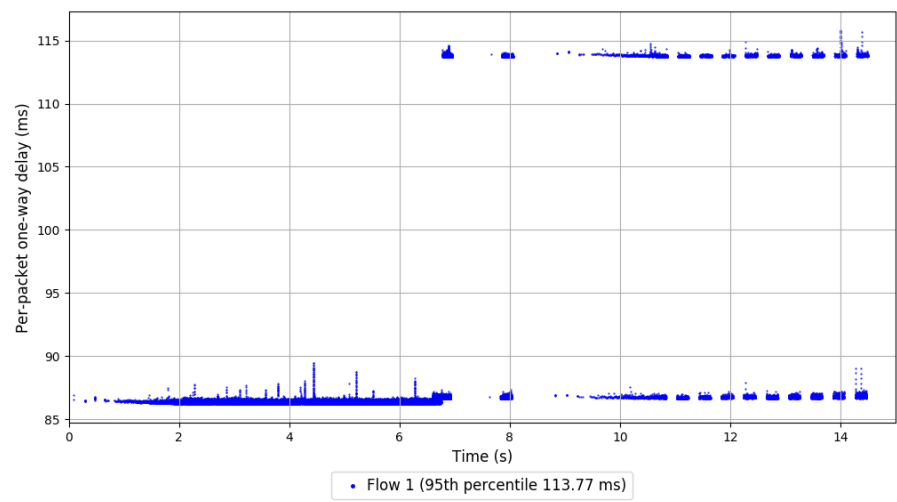
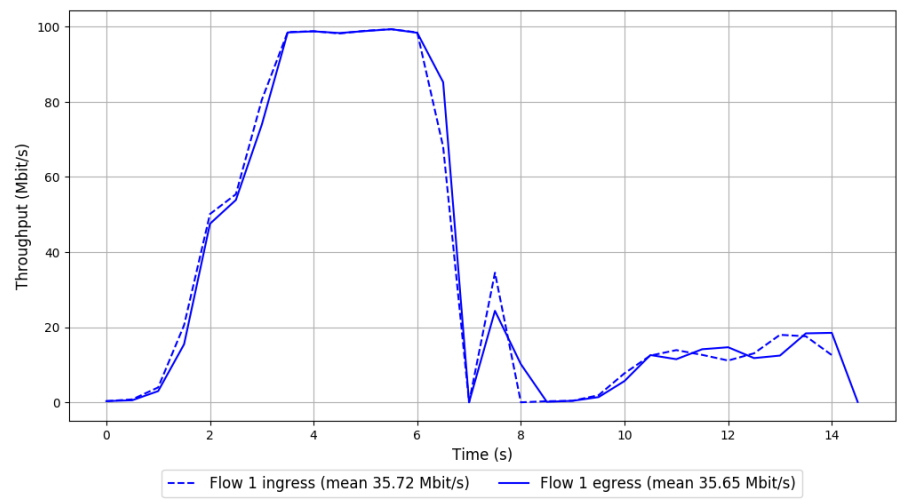


Run 1: Statistics of Copa

Start at: 2017-12-05 08:09:45

End at: 2017-12-05 08:10:15

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-05 08:20:46

End at: 2017-12-05 08:21:16

Below is generated by plot.py at 2017-12-05 11:09:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.31 Mbit/s

95th percentile per-packet one-way delay: 86.376 ms

Loss rate: 0.00%

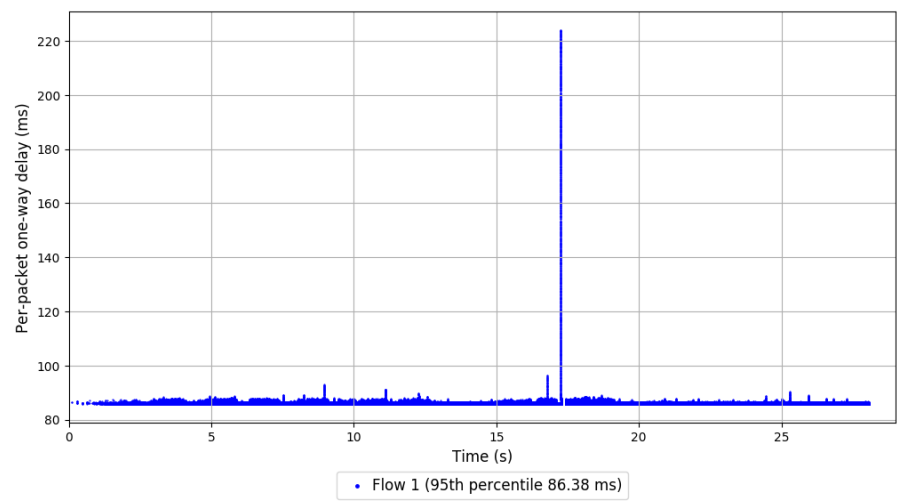
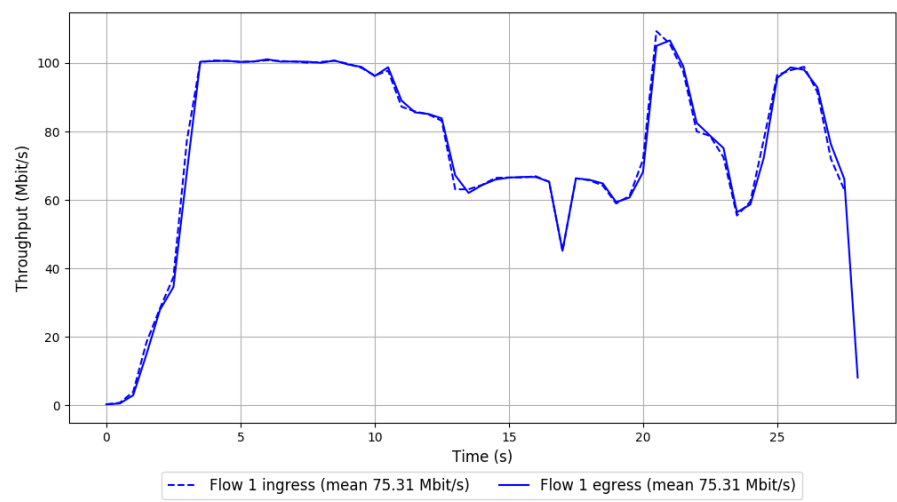
-- Flow 1:

Average throughput: 75.31 Mbit/s

95th percentile per-packet one-way delay: 86.376 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-05 08:31:54

End at: 2017-12-05 08:32:24

Below is generated by plot.py at 2017-12-05 11:09:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.56 Mbit/s

95th percentile per-packet one-way delay: 86.031 ms

Loss rate: 0.00%

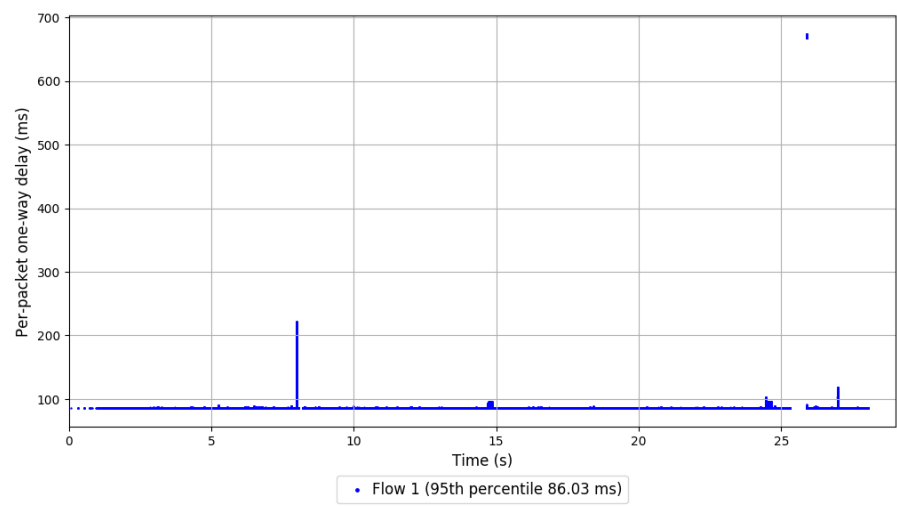
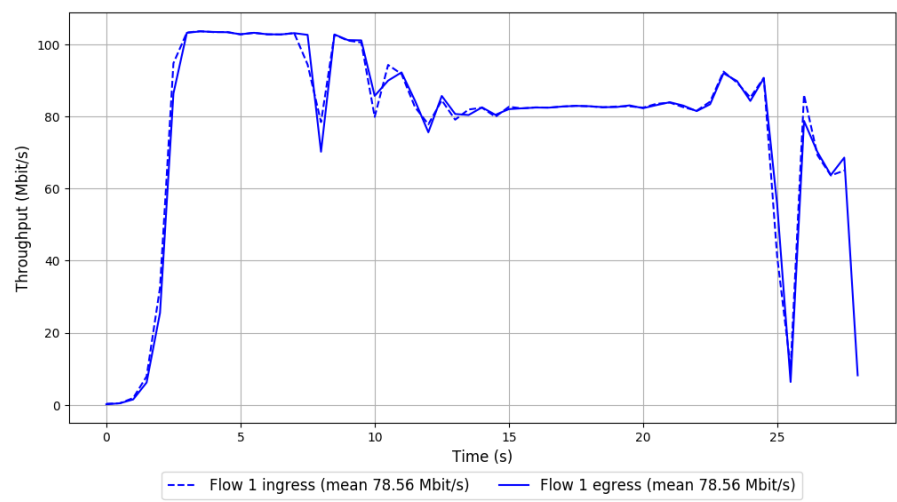
-- Flow 1:

Average throughput: 78.56 Mbit/s

95th percentile per-packet one-way delay: 86.031 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-05 08:42:56

End at: 2017-12-05 08:43:26

Below is generated by plot.py at 2017-12-05 11:09:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.77 Mbit/s

95th percentile per-packet one-way delay: 86.828 ms

Loss rate: 0.00%

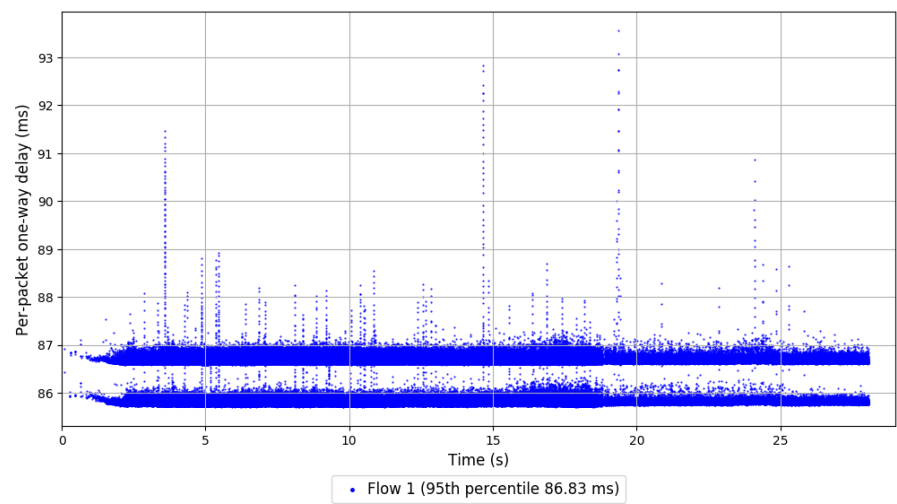
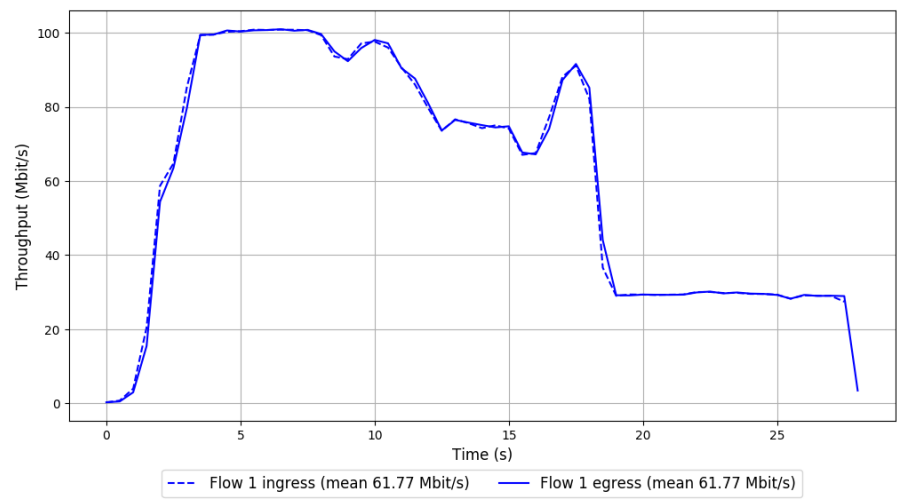
-- Flow 1:

Average throughput: 61.77 Mbit/s

95th percentile per-packet one-way delay: 86.828 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-05 08:53:39

End at: 2017-12-05 08:54:09

Below is generated by plot.py at 2017-12-05 11:09:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.40 Mbit/s

95th percentile per-packet one-way delay: 87.152 ms

Loss rate: 0.00%

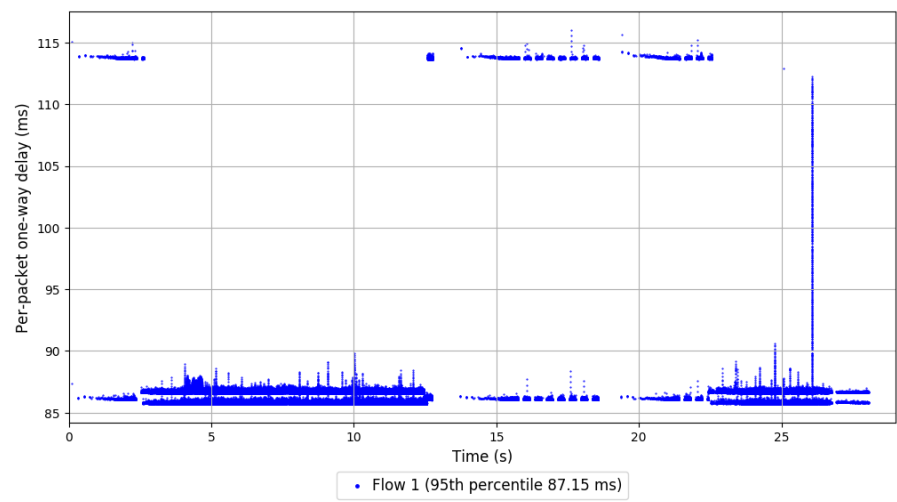
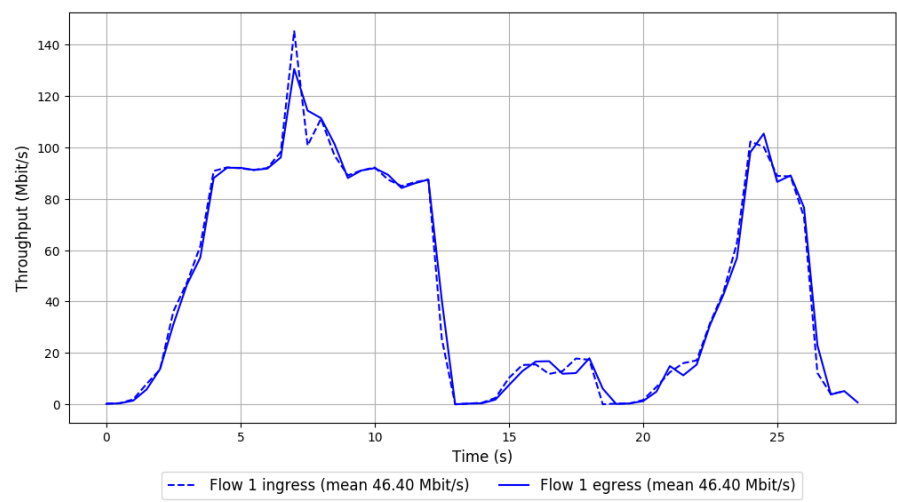
-- Flow 1:

Average throughput: 46.40 Mbit/s

95th percentile per-packet one-way delay: 87.152 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link

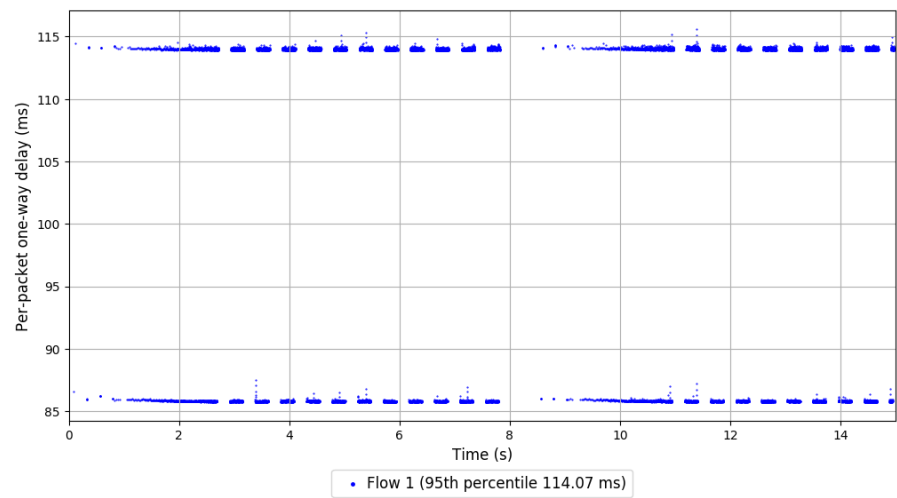
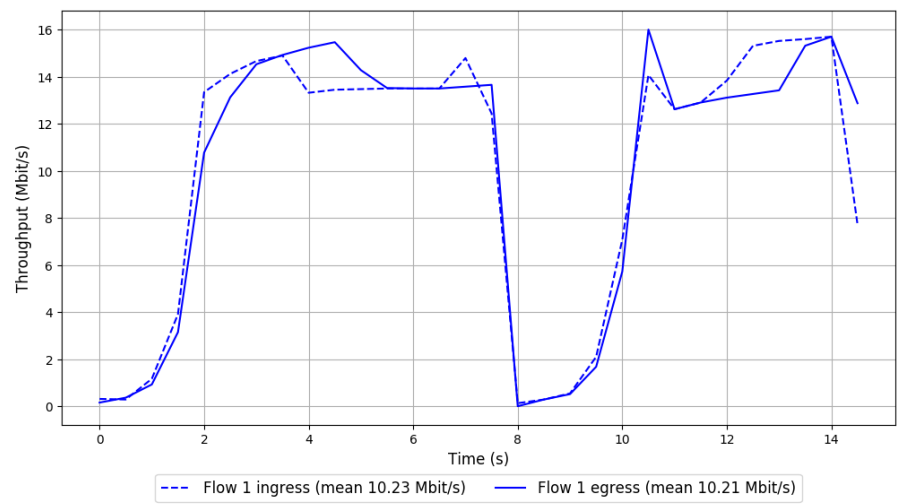


Run 6: Statistics of Copa

Start at: 2017-12-05 09:04:44

End at: 2017-12-05 09:05:14

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-05 09:15:51

End at: 2017-12-05 09:16:21

Below is generated by plot.py at 2017-12-05 11:09:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.14 Mbit/s

95th percentile per-packet one-way delay: 113.915 ms

Loss rate: 0.00%

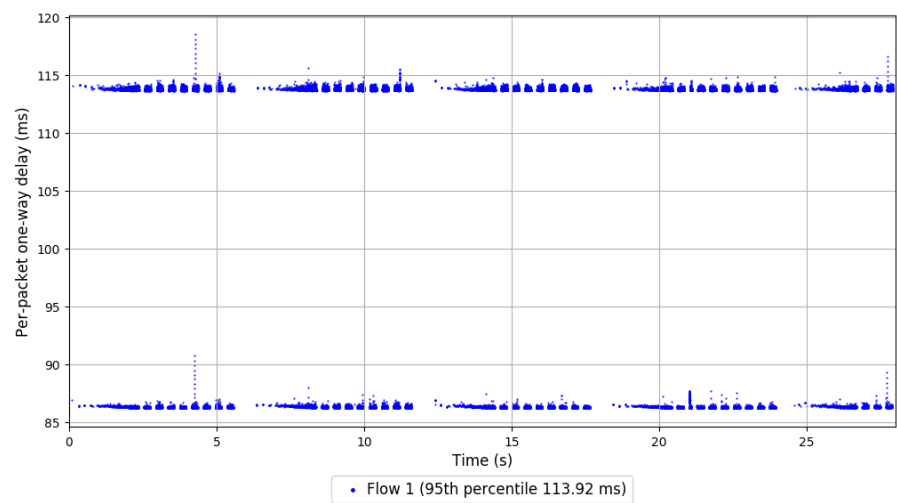
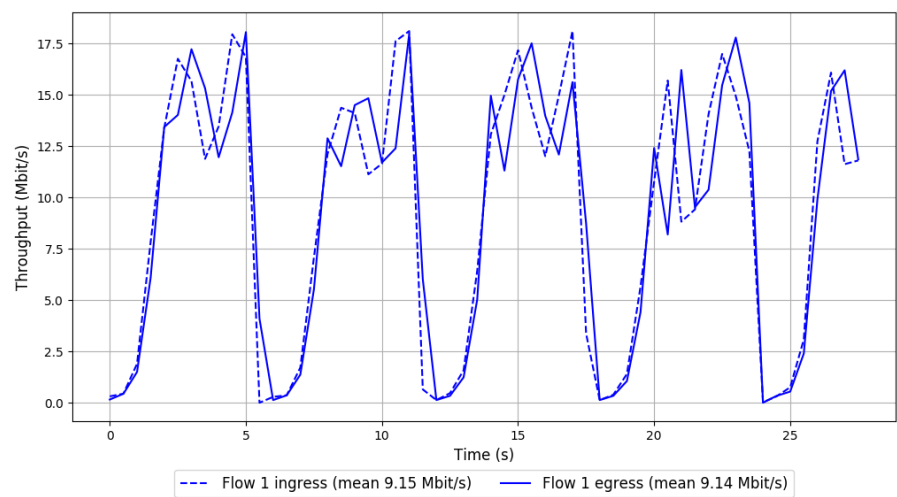
-- Flow 1:

Average throughput: 9.14 Mbit/s

95th percentile per-packet one-way delay: 113.915 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-05 09:26:58

End at: 2017-12-05 09:27:28

Below is generated by plot.py at 2017-12-05 11:09:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.96 Mbit/s

95th percentile per-packet one-way delay: 86.561 ms

Loss rate: 0.00%

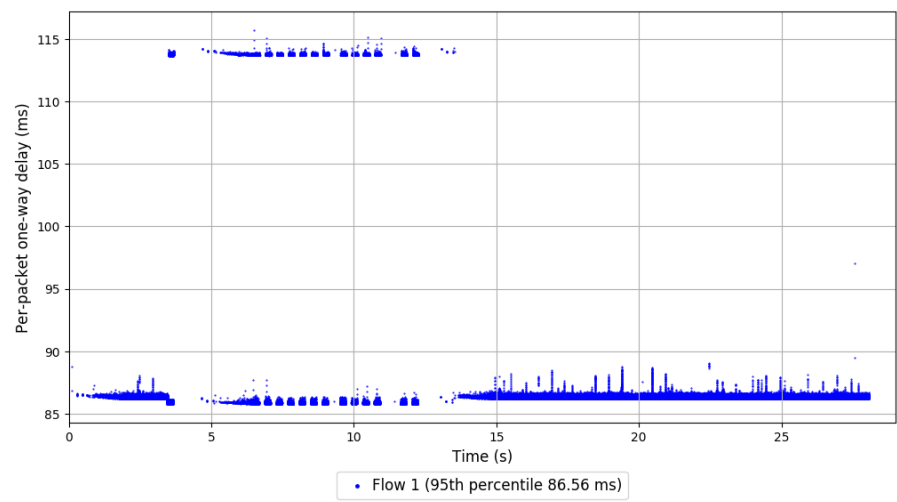
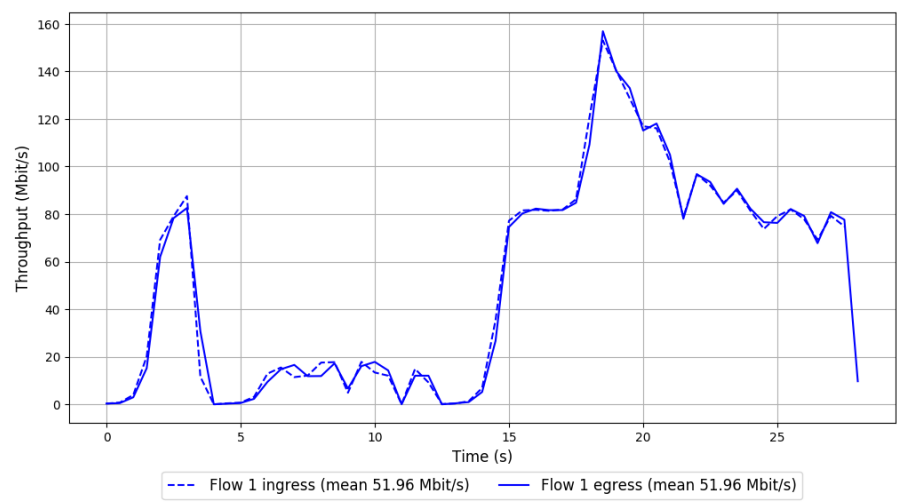
-- Flow 1:

Average throughput: 51.96 Mbit/s

95th percentile per-packet one-way delay: 86.561 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-05 09:37:34

End at: 2017-12-05 09:38:04

Below is generated by plot.py at 2017-12-05 11:09:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.77 Mbit/s

95th percentile per-packet one-way delay: 113.838 ms

Loss rate: 0.00%

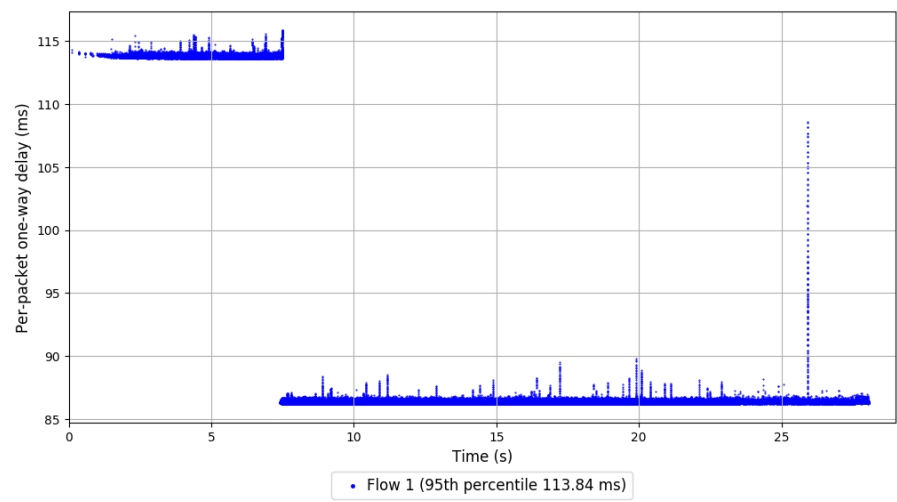
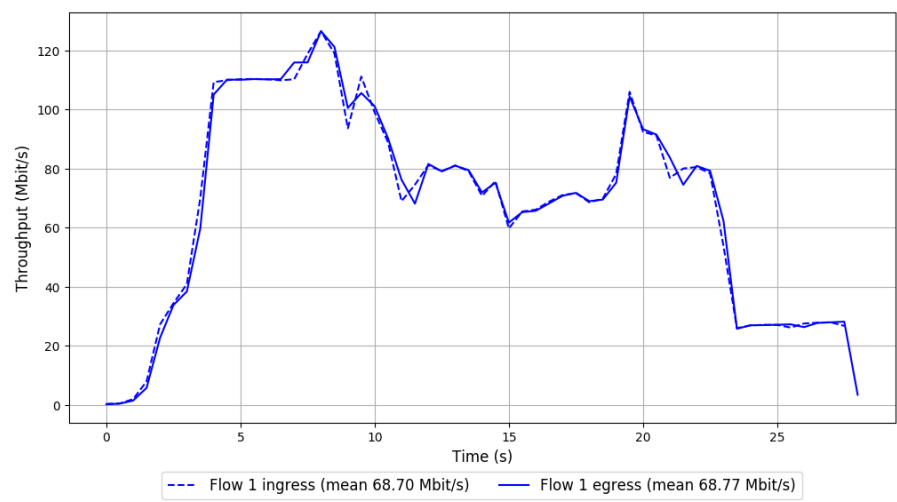
-- Flow 1:

Average throughput: 68.77 Mbit/s

95th percentile per-packet one-way delay: 113.838 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-05 09:48:30

End at: 2017-12-05 09:49:00

Below is generated by plot.py at 2017-12-05 11:09:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.79 Mbit/s

95th percentile per-packet one-way delay: 114.223 ms

Loss rate: 0.00%

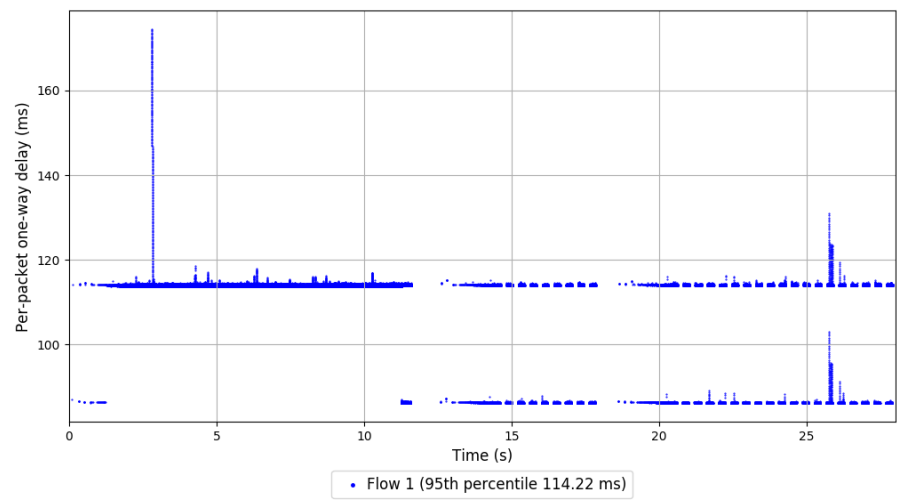
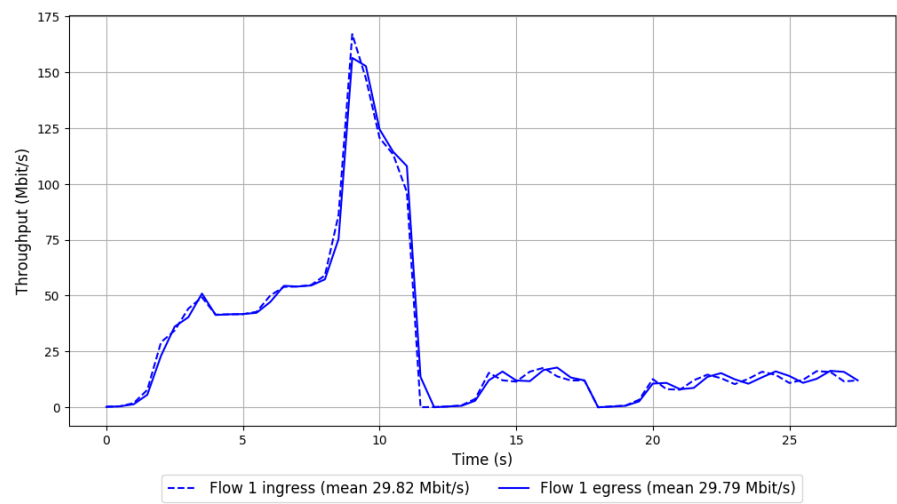
-- Flow 1:

Average throughput: 29.79 Mbit/s

95th percentile per-packet one-way delay: 114.223 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

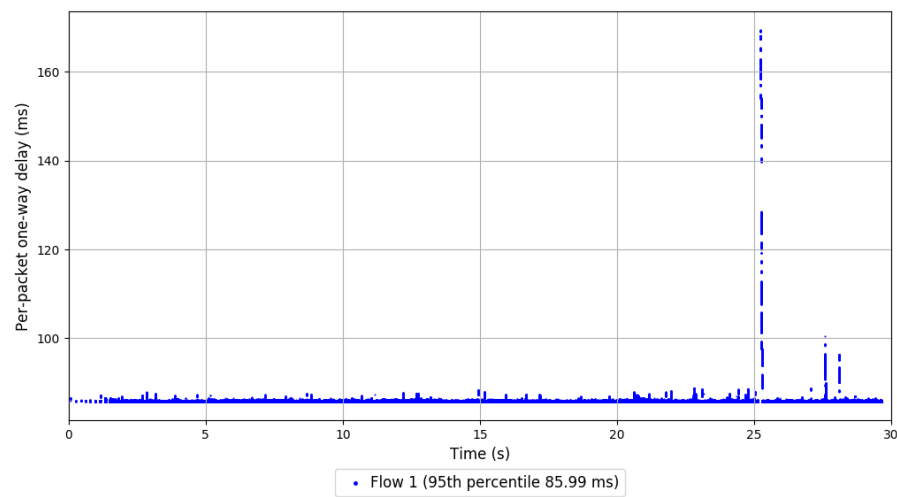
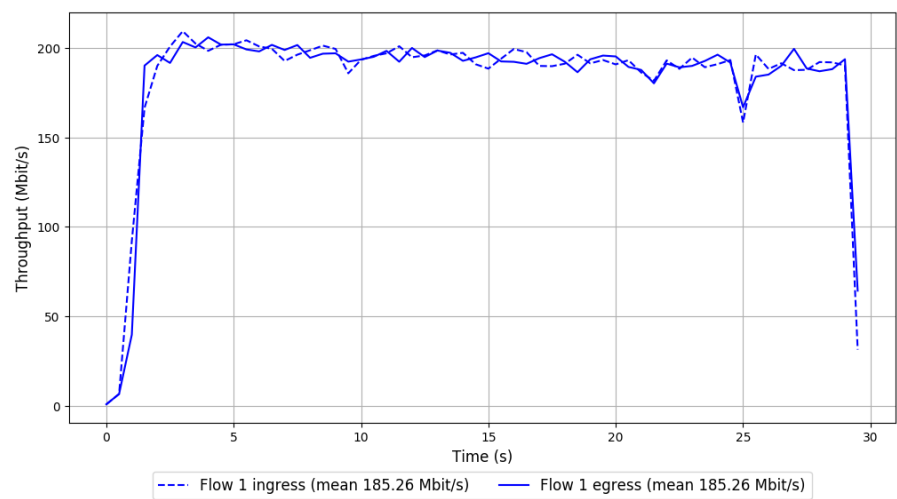


```
Run 1: Statistics of Indigo

Start at: 2017-12-05 08:17:39
End at: 2017-12-05 08:18:09

# Below is generated by plot.py at 2017-12-05 11:11:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 185.26 Mbit/s
95th percentile per-packet one-way delay: 85.991 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.26 Mbit/s
95th percentile per-packet one-way delay: 85.991 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-05 08:28:56

End at: 2017-12-05 08:29:26

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 130.06 Mbit/s

95th percentile per-packet one-way delay: 113.803 ms

Loss rate: 0.00%

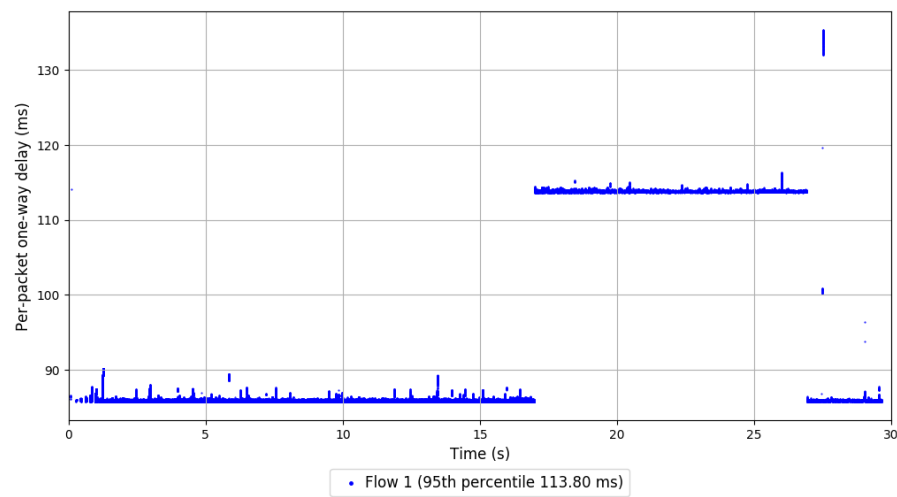
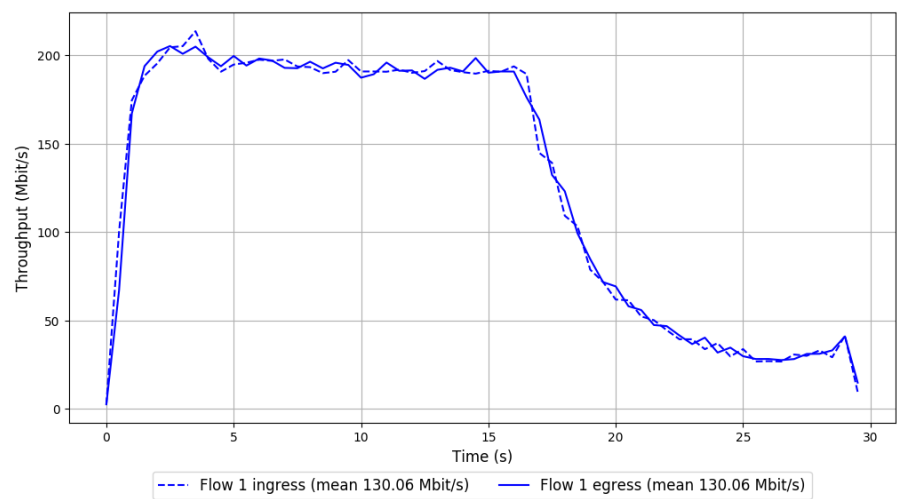
-- Flow 1:

Average throughput: 130.06 Mbit/s

95th percentile per-packet one-way delay: 113.803 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-05 08:39:50

End at: 2017-12-05 08:40:20

Below is generated by plot.py at 2017-12-05 11:11:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.94 Mbit/s

95th percentile per-packet one-way delay: 86.330 ms

Loss rate: 0.00%

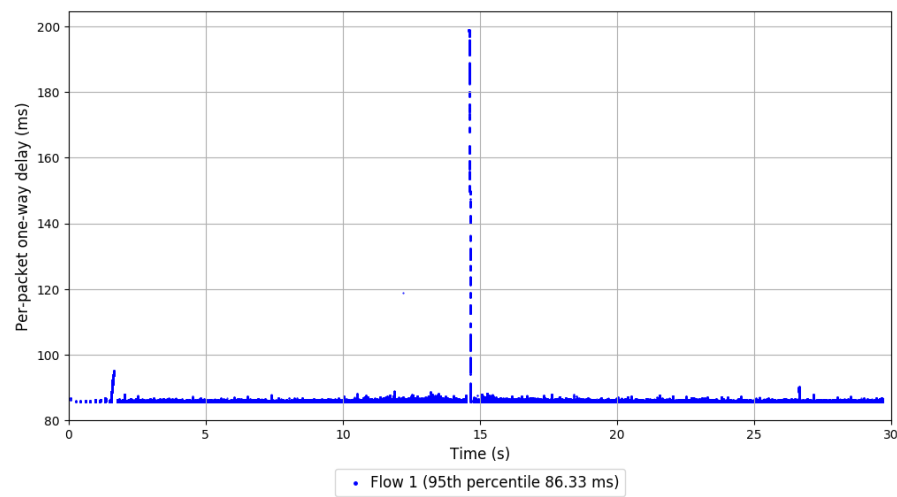
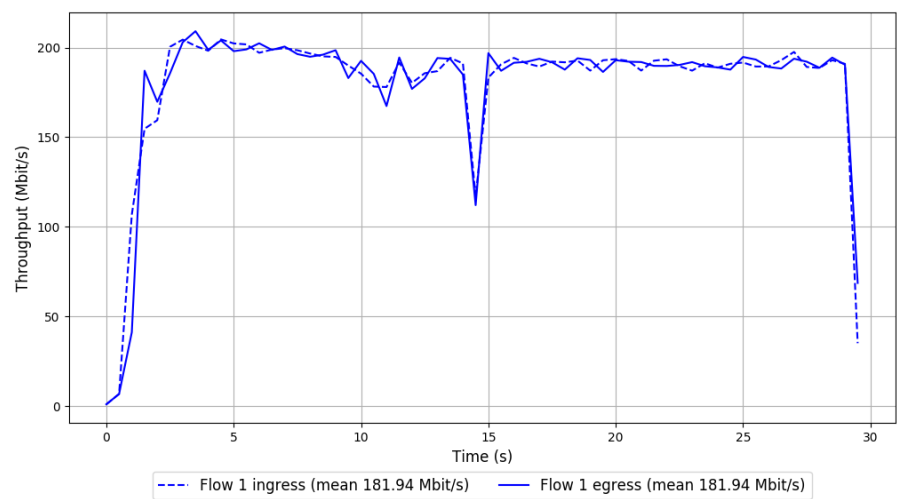
-- Flow 1:

Average throughput: 181.94 Mbit/s

95th percentile per-packet one-way delay: 86.330 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-05 08:50:41

End at: 2017-12-05 08:51:11

Below is generated by plot.py at 2017-12-05 11:11:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 114.52 Mbit/s

95th percentile per-packet one-way delay: 85.962 ms

Loss rate: 0.00%

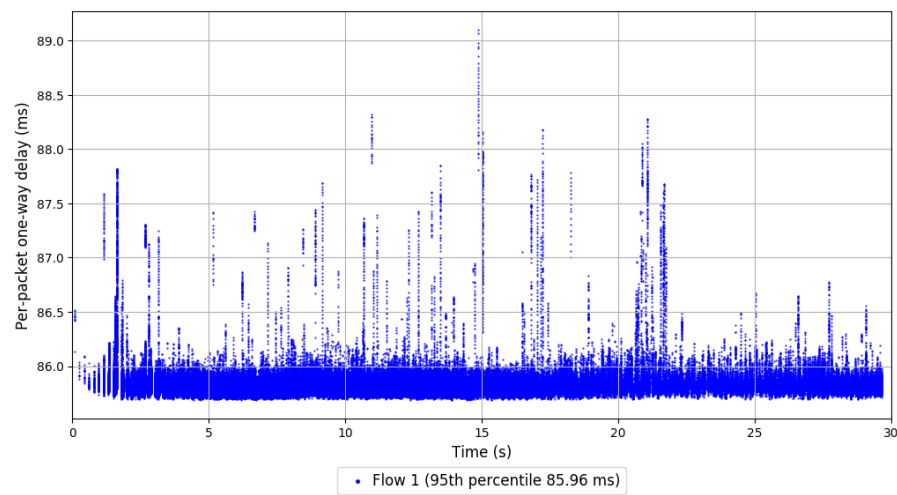
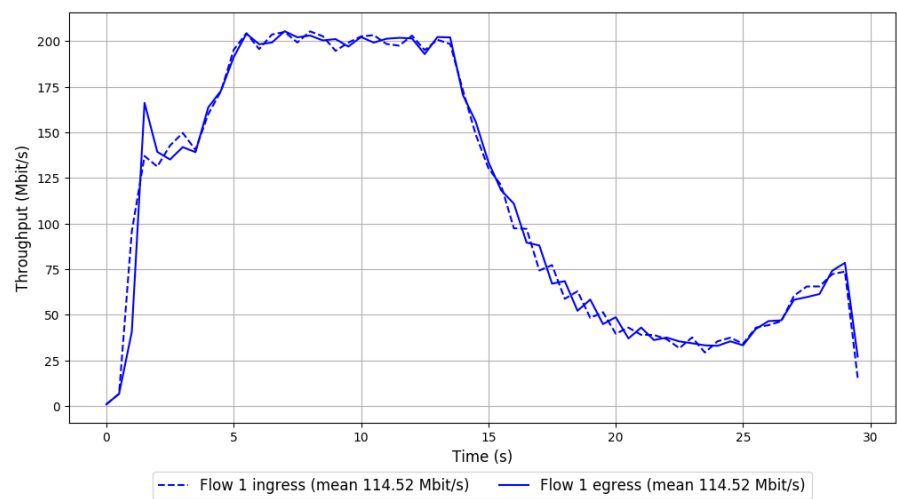
-- Flow 1:

Average throughput: 114.52 Mbit/s

95th percentile per-packet one-way delay: 85.962 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-05 09:01:38

End at: 2017-12-05 09:02:08

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 168.06 Mbit/s

95th percentile per-packet one-way delay: 113.752 ms

Loss rate: 0.00%

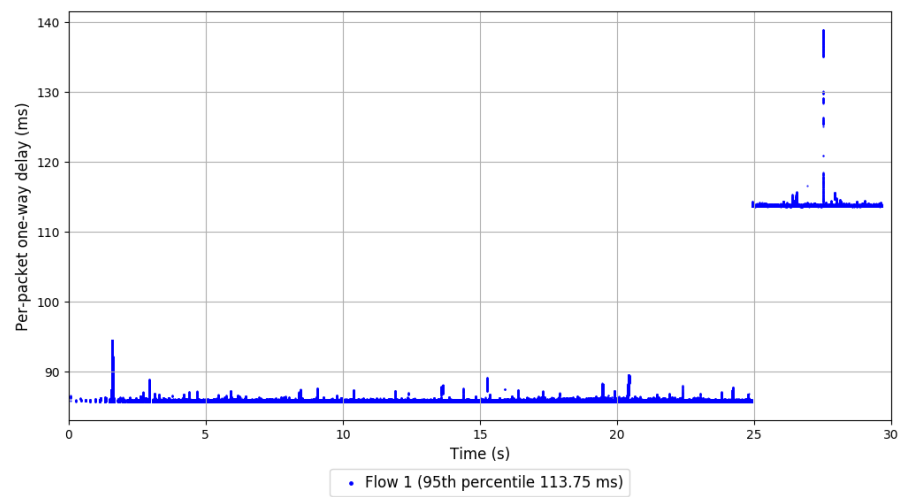
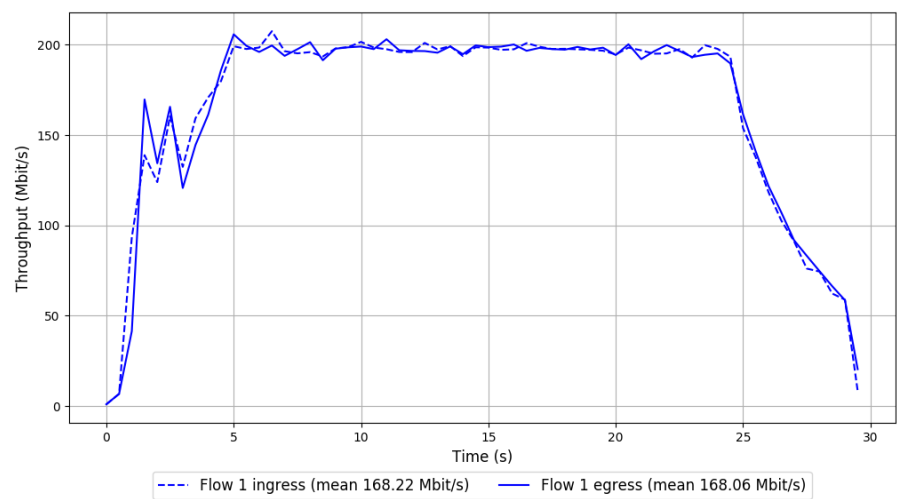
-- Flow 1:

Average throughput: 168.06 Mbit/s

95th percentile per-packet one-way delay: 113.752 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-05 09:12:51

End at: 2017-12-05 09:13:21

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.71 Mbit/s

95th percentile per-packet one-way delay: 113.859 ms

Loss rate: 0.00%

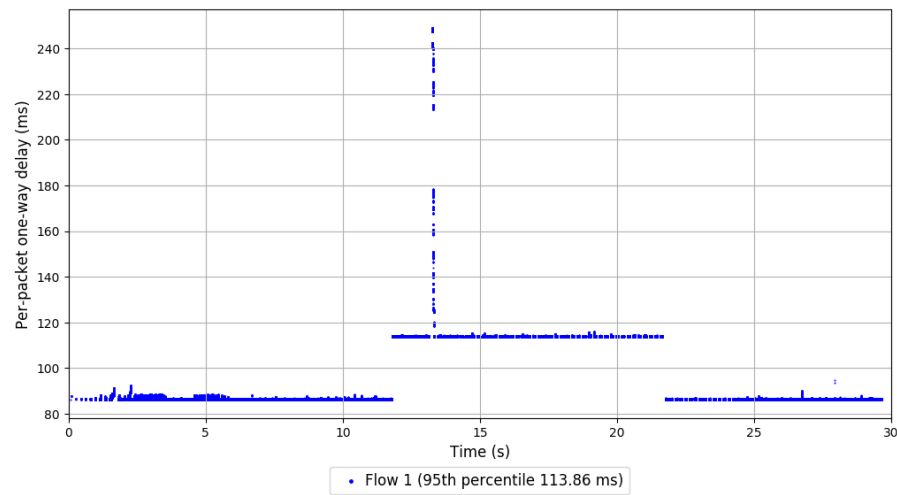
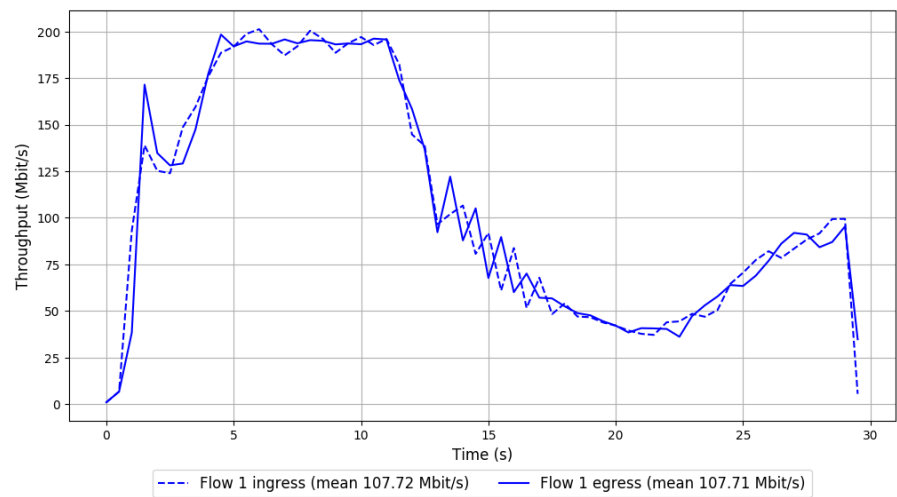
-- Flow 1:

Average throughput: 107.71 Mbit/s

95th percentile per-packet one-way delay: 113.859 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-05 09:23:55

End at: 2017-12-05 09:24:25

Below is generated by plot.py at 2017-12-05 11:12:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.67 Mbit/s

95th percentile per-packet one-way delay: 86.539 ms

Loss rate: 0.00%

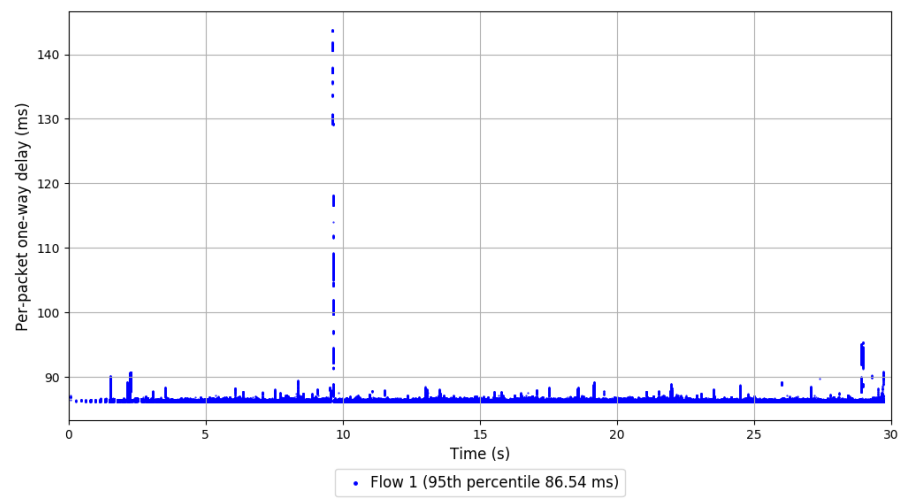
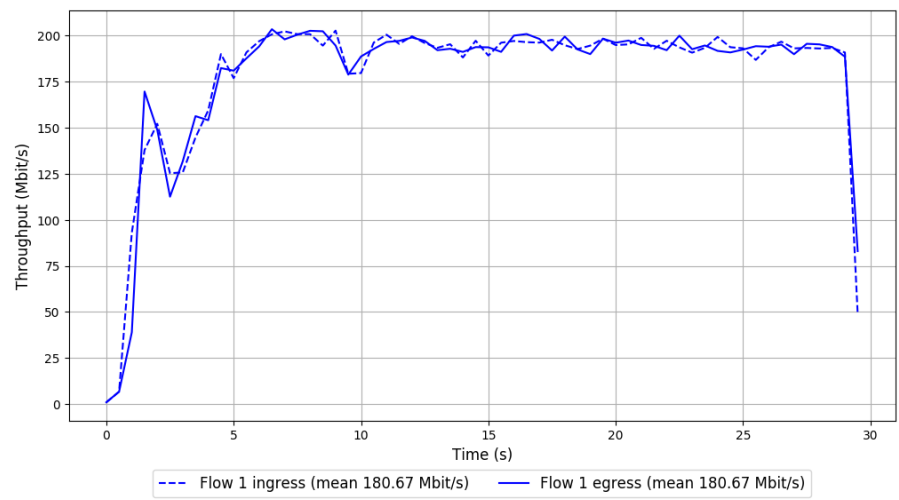
-- Flow 1:

Average throughput: 180.67 Mbit/s

95th percentile per-packet one-way delay: 86.539 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-05 09:34:33

End at: 2017-12-05 09:35:03

Below is generated by plot.py at 2017-12-05 11:13:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.40 Mbit/s

95th percentile per-packet one-way delay: 86.510 ms

Loss rate: 0.00%

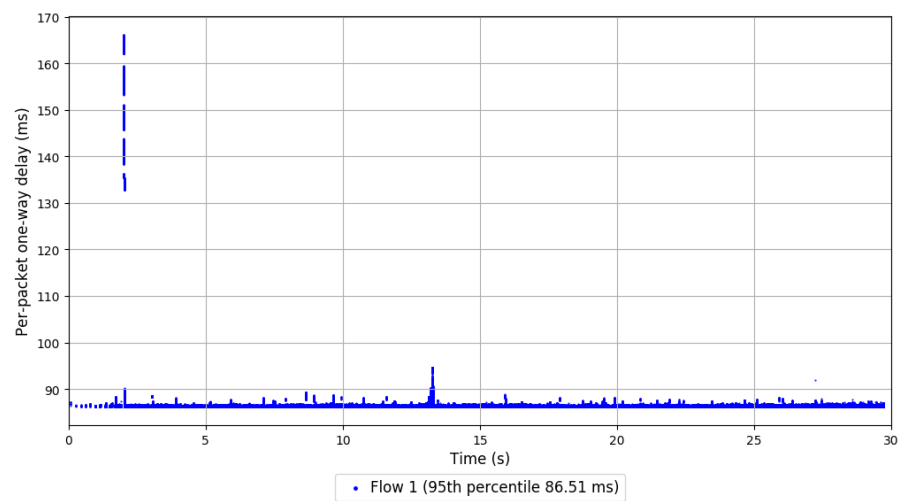
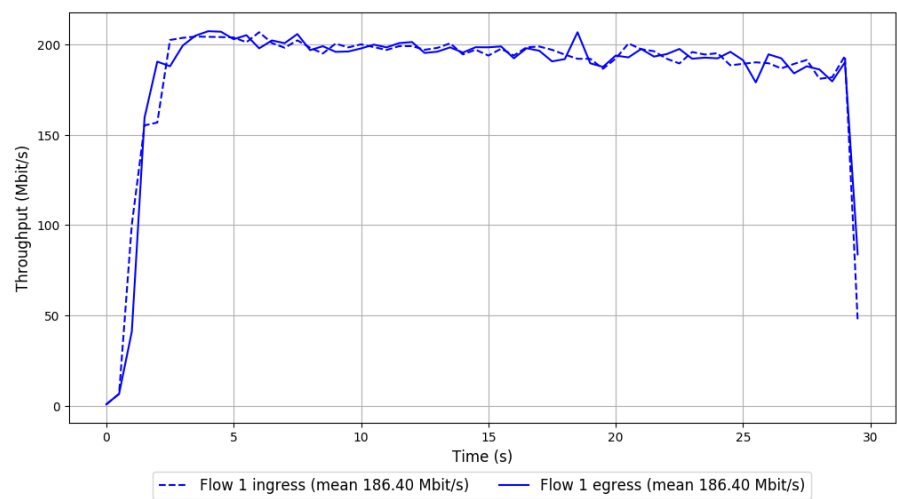
-- Flow 1:

Average throughput: 186.40 Mbit/s

95th percentile per-packet one-way delay: 86.510 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-05 09:45:26

End at: 2017-12-05 09:45:56

Below is generated by plot.py at 2017-12-05 11:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.01 Mbit/s

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

Loss rate: 0.00%

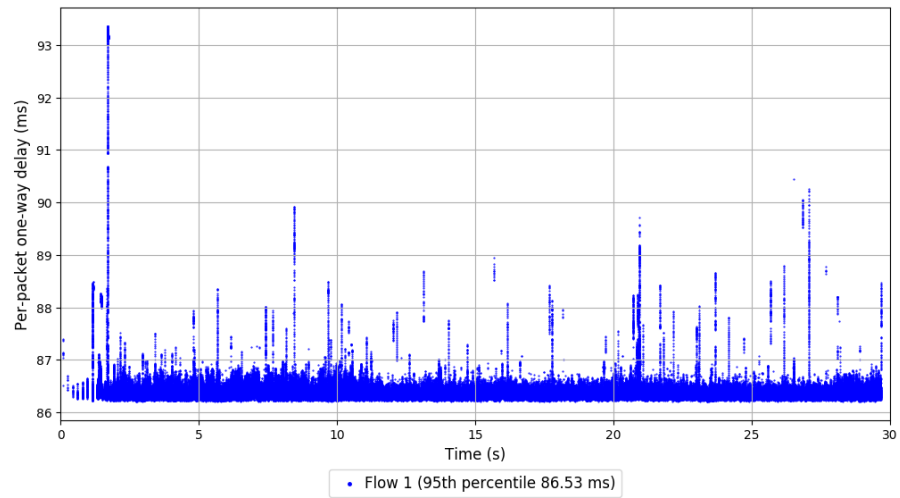
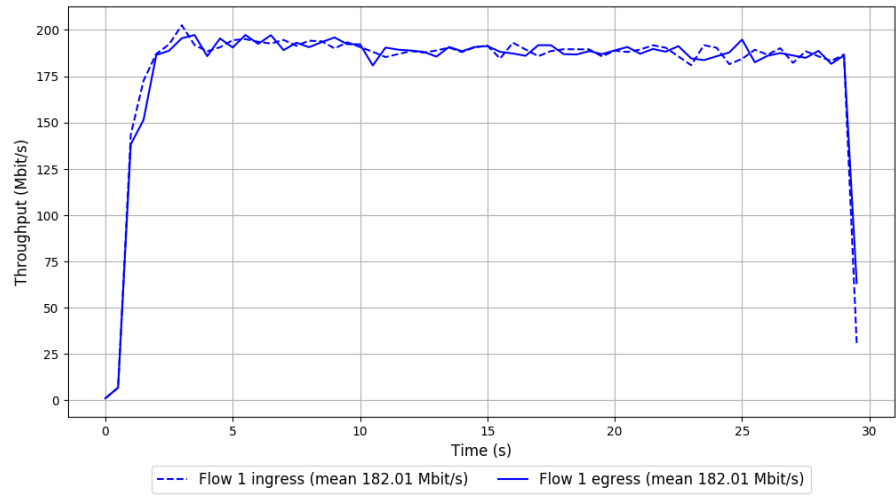
-- Flow 1:

Average throughput: 182.01 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-05 09:56:28

End at: 2017-12-05 09:56:58

Below is generated by plot.py at 2017-12-05 11:13:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.94 Mbit/s

95th percentile per-packet one-way delay: 86.554 ms

Loss rate: 0.00%

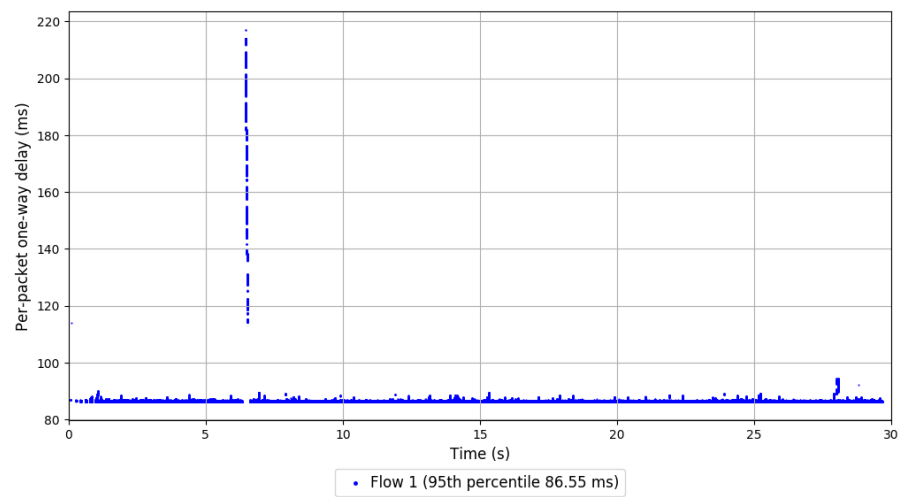
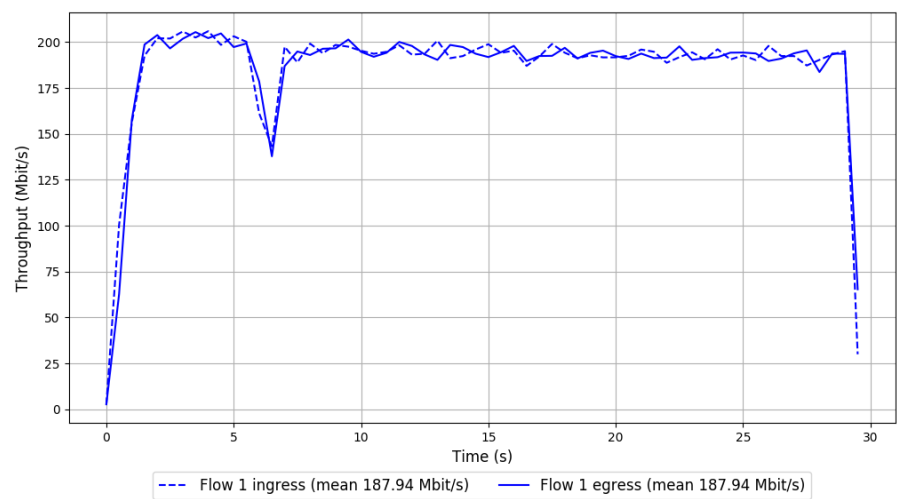
-- Flow 1:

Average throughput: 187.94 Mbit/s

95th percentile per-packet one-way delay: 86.554 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

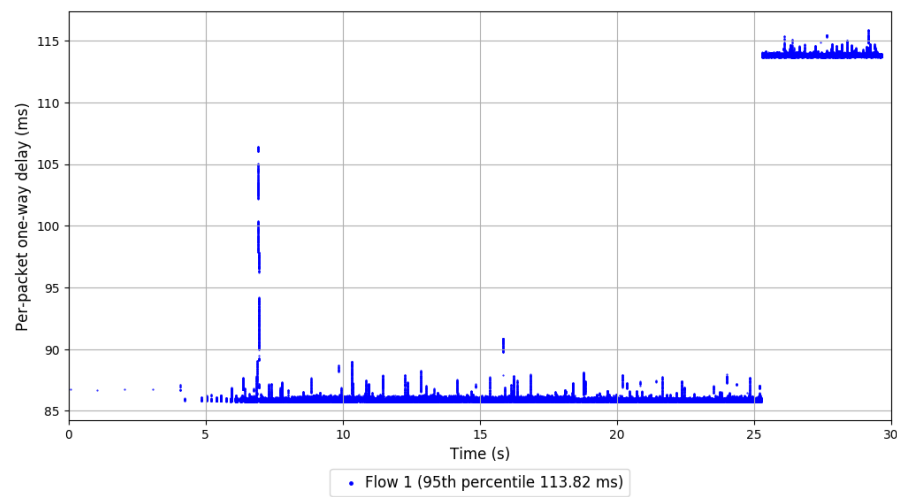
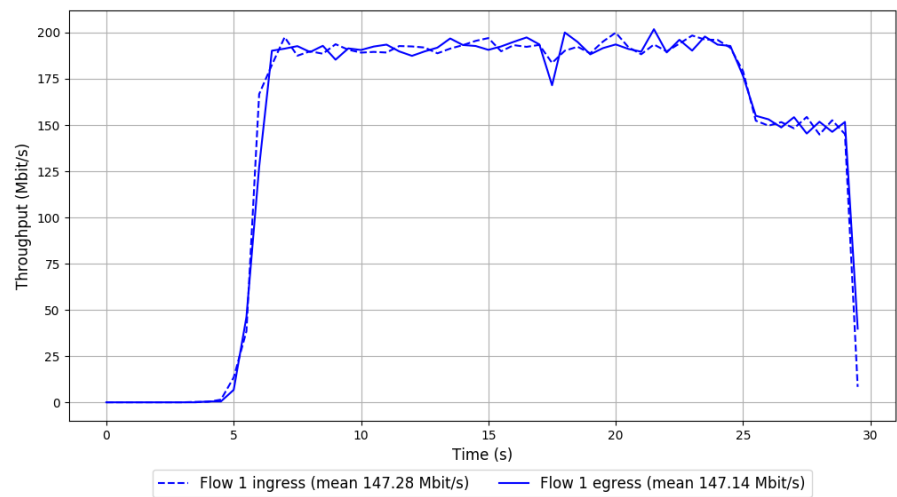


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-05 08:13:28
End at: 2017-12-05 08:13:58

# Below is generated by plot.py at 2017-12-05 11:13:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 147.14 Mbit/s
95th percentile per-packet one-way delay: 113.823 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 147.14 Mbit/s
95th percentile per-packet one-way delay: 113.823 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-calib — Data Link

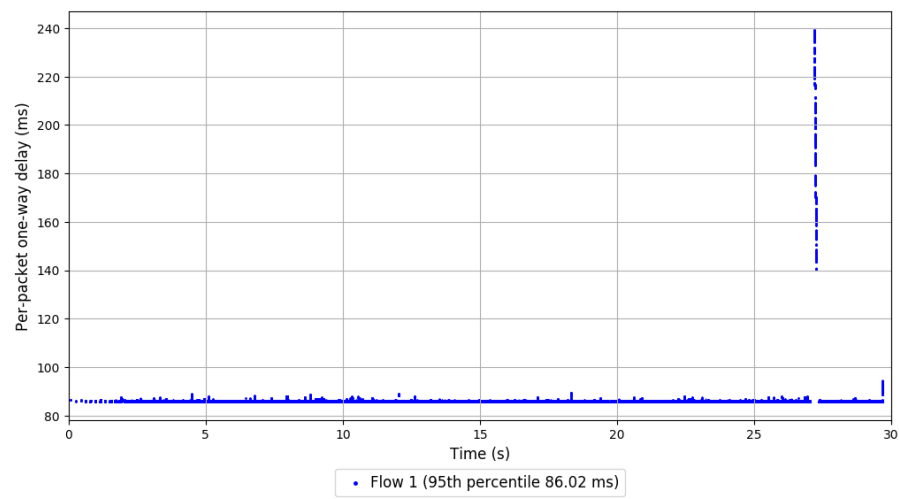
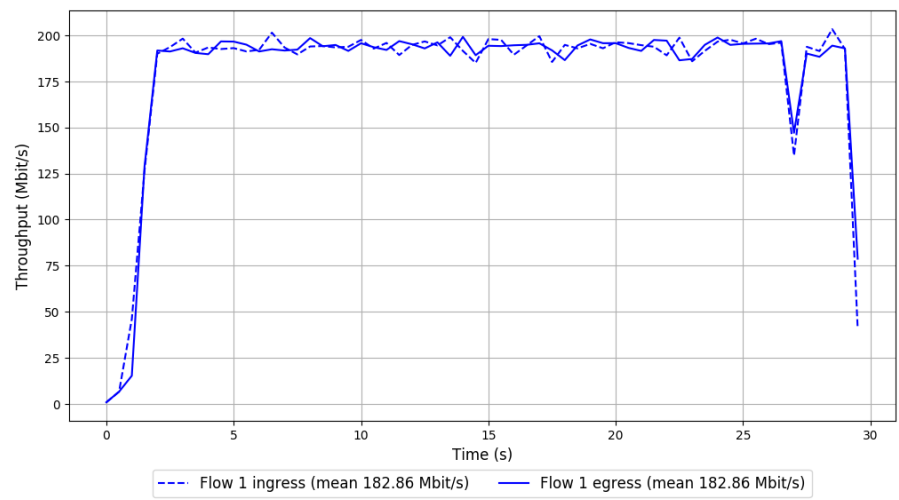


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-05 08:24:38
End at: 2017-12-05 08:25:08

# Below is generated by plot.py at 2017-12-05 11:14:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.86 Mbit/s
95th percentile per-packet one-way delay: 86.015 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 182.86 Mbit/s
95th percentile per-packet one-way delay: 86.015 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-12-05 08:35:44

End at: 2017-12-05 08:36:14

Below is generated by plot.py at 2017-12-05 11:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.44 Mbit/s

95th percentile per-packet one-way delay: 113.927 ms

Loss rate: 0.02%

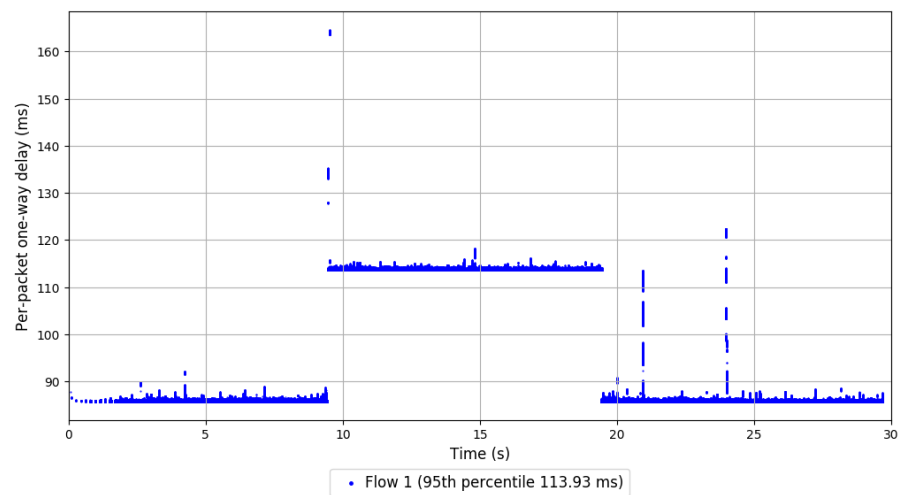
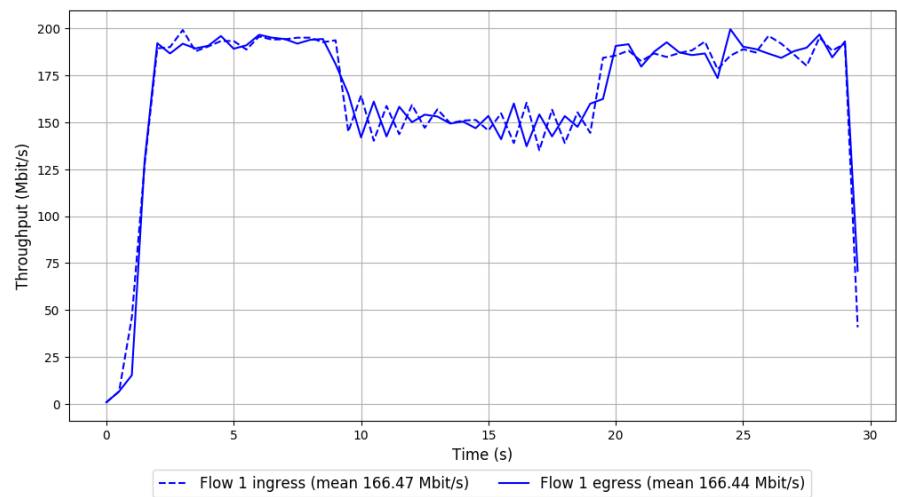
-- Flow 1:

Average throughput: 166.44 Mbit/s

95th percentile per-packet one-way delay: 113.927 ms

Loss rate: 0.02%

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-05 08:46:46

End at: 2017-12-05 08:47:16

Below is generated by plot.py at 2017-12-05 11:14:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.43 Mbit/s

95th percentile per-packet one-way delay: 113.729 ms

Loss rate: 0.00%

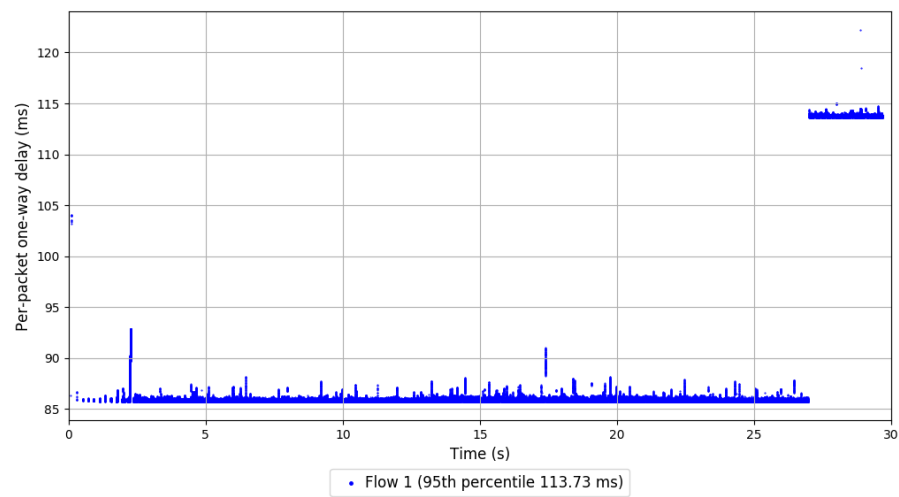
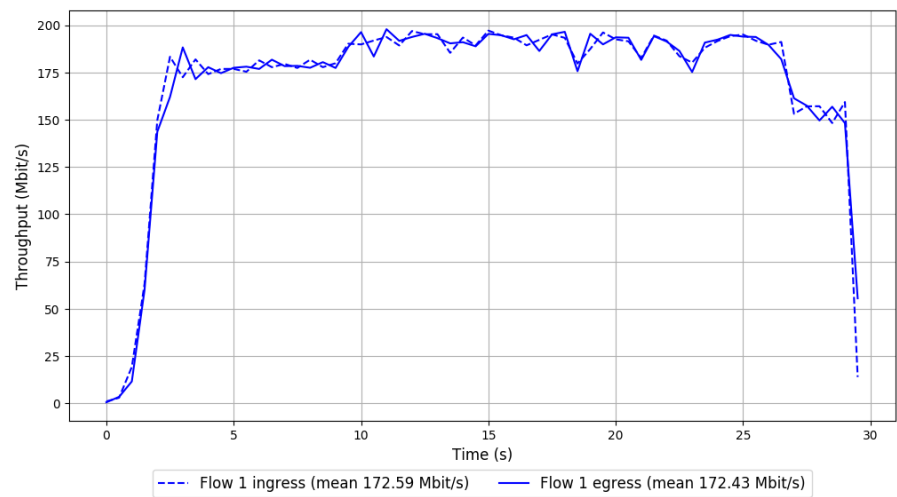
-- Flow 1:

Average throughput: 172.43 Mbit/s

95th percentile per-packet one-way delay: 113.729 ms

Loss rate: 0.00%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-05 08:57:26

End at: 2017-12-05 08:57:56

Below is generated by plot.py at 2017-12-05 11:15:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 159.32 Mbit/s

95th percentile per-packet one-way delay: 113.810 ms

Loss rate: 0.00%

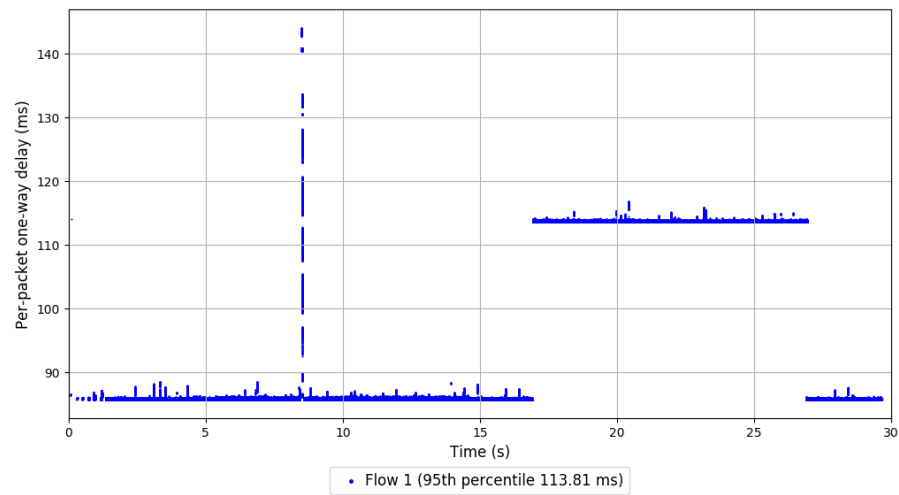
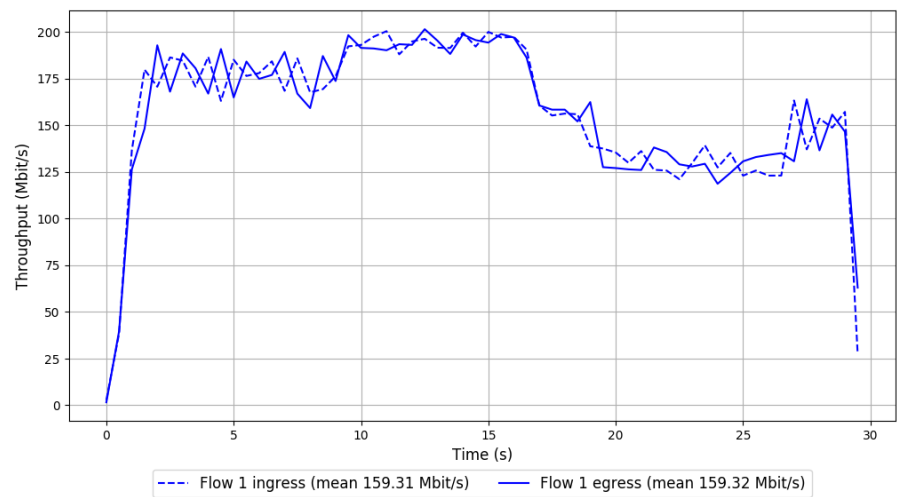
-- Flow 1:

Average throughput: 159.32 Mbit/s

95th percentile per-packet one-way delay: 113.810 ms

Loss rate: 0.00%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-05 09:08:30

End at: 2017-12-05 09:09:00

Below is generated by plot.py at 2017-12-05 11:15:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.90 Mbit/s

95th percentile per-packet one-way delay: 86.368 ms

Loss rate: 0.00%

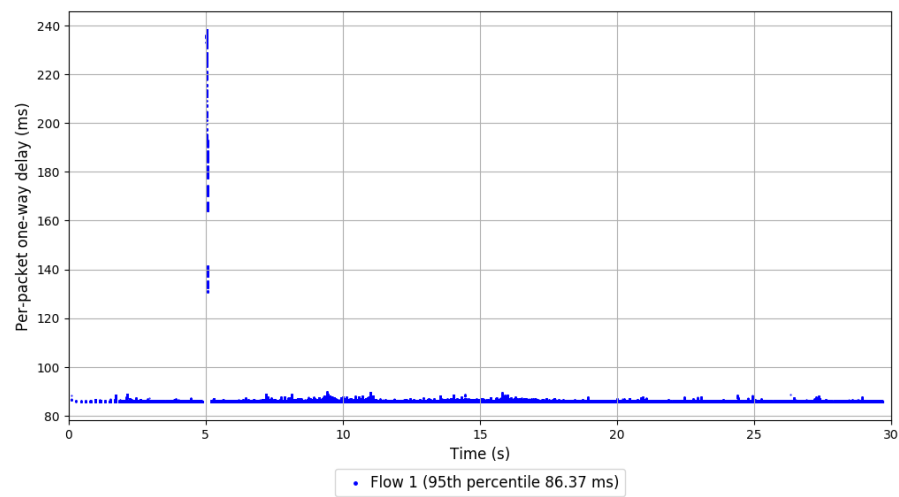
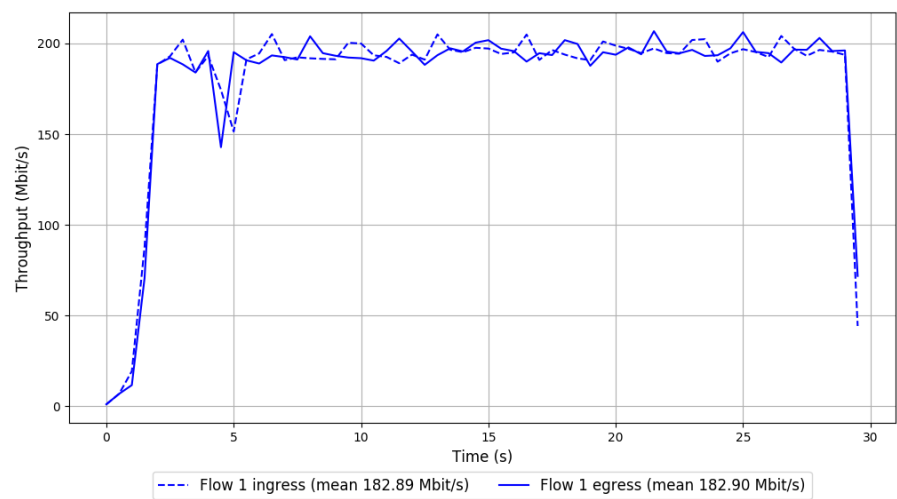
-- Flow 1:

Average throughput: 182.90 Mbit/s

95th percentile per-packet one-way delay: 86.368 ms

Loss rate: 0.00%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-05 09:19:51

End at: 2017-12-05 09:20:21

Below is generated by plot.py at 2017-12-05 11:15:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 167.30 Mbit/s

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

Loss rate: 0.00%

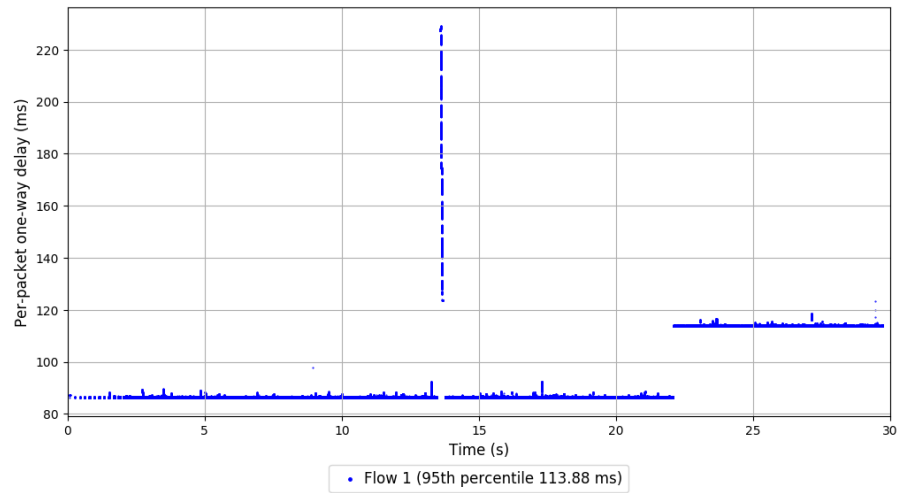
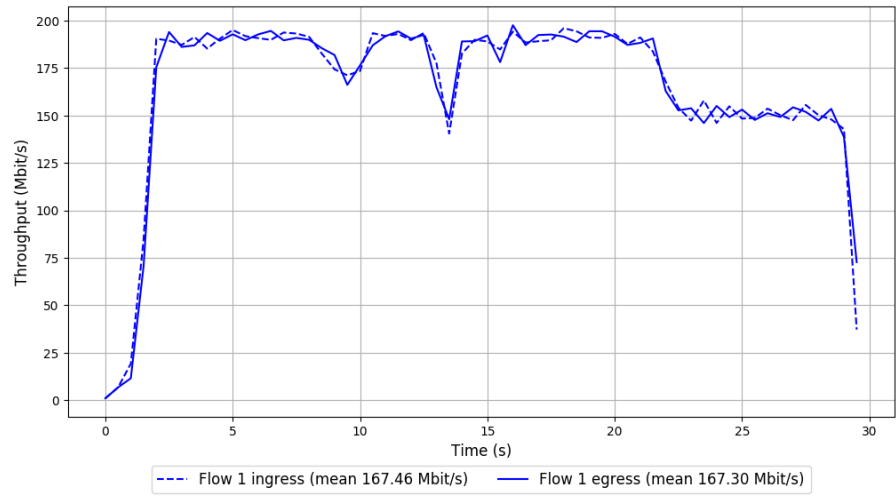
-- Flow 1:

Average throughput: 167.30 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-05 09:30:42

End at: 2017-12-05 09:31:12

Below is generated by plot.py at 2017-12-05 11:15:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.34 Mbit/s

95th percentile per-packet one-way delay: 113.969 ms

Loss rate: 0.00%

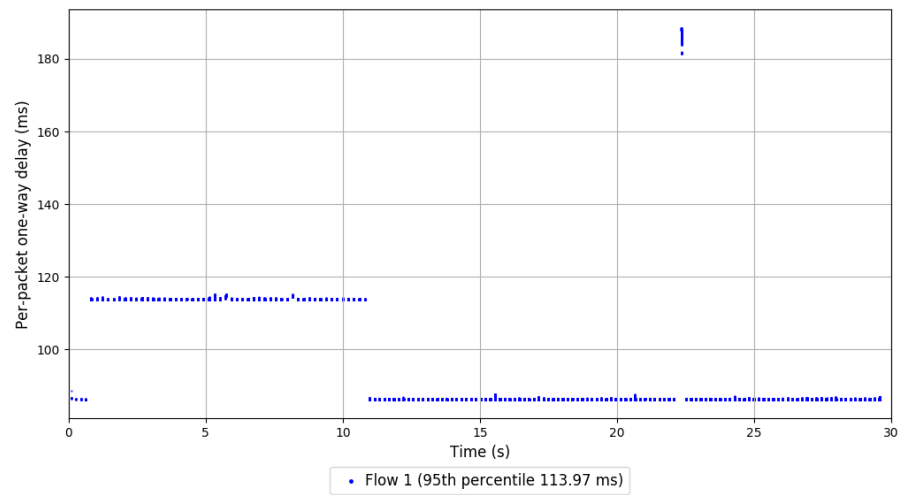
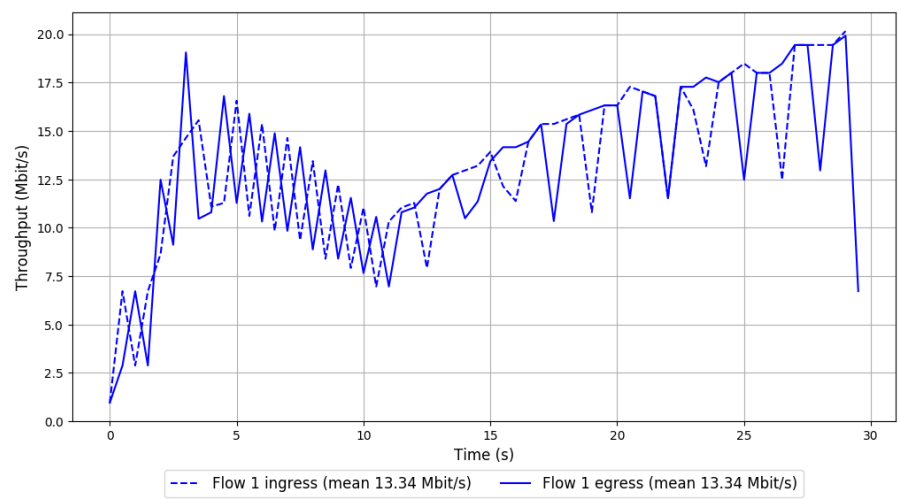
-- Flow 1:

Average throughput: 13.34 Mbit/s

95th percentile per-packet one-way delay: 113.969 ms

Loss rate: 0.00%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-05 09:41:21

End at: 2017-12-05 09:41:51

Below is generated by plot.py at 2017-12-05 11:15:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.49 Mbit/s

95th percentile per-packet one-way delay: 86.530 ms

Loss rate: 0.00%

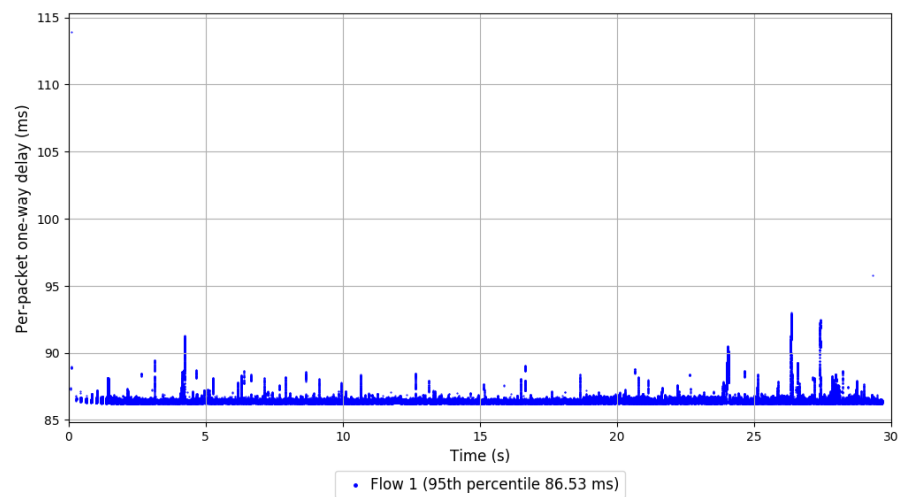
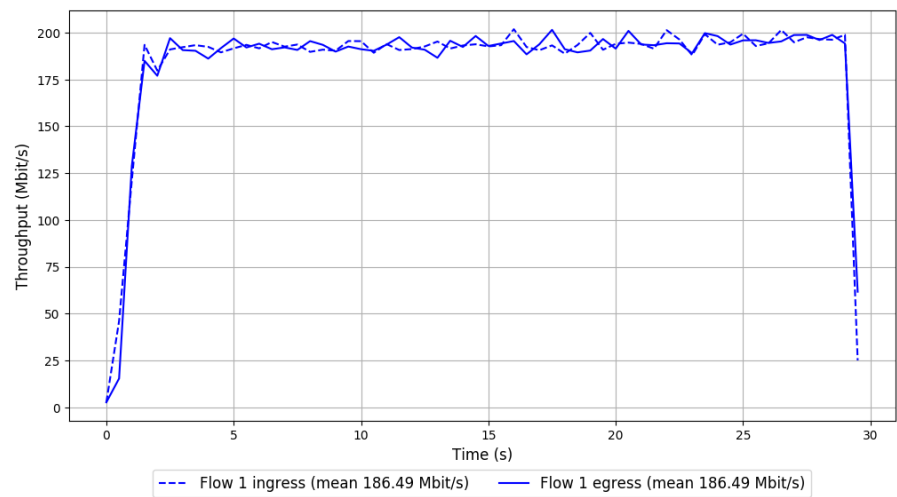
-- Flow 1:

Average throughput: 186.49 Mbit/s

95th percentile per-packet one-way delay: 86.530 ms

Loss rate: 0.00%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-05 09:52:14

End at: 2017-12-05 09:52:44

Below is generated by plot.py at 2017-12-05 11:15:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.27 Mbit/s

95th percentile per-packet one-way delay: 113.901 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 179.27 Mbit/s

95th percentile per-packet one-way delay: 113.901 ms

Loss rate: 0.00%

Run 10: Report of Indigo-calib — Data Link

