

Pantheon Report

Generated at 2017-11-16 00:33:45 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

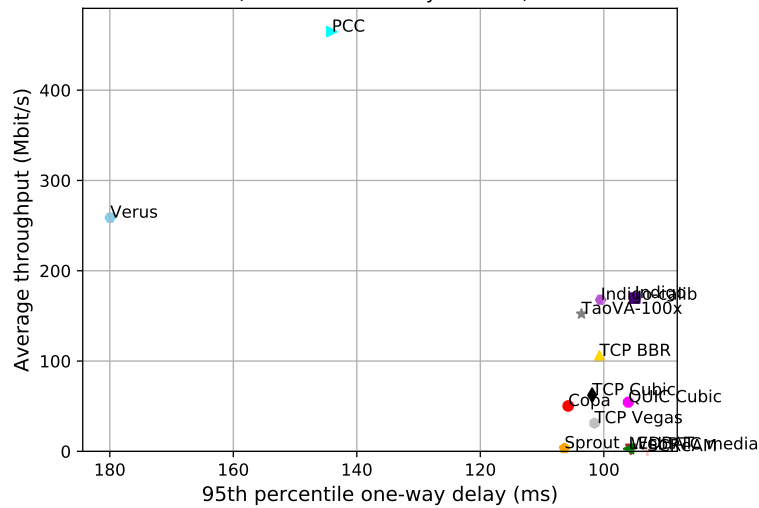
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

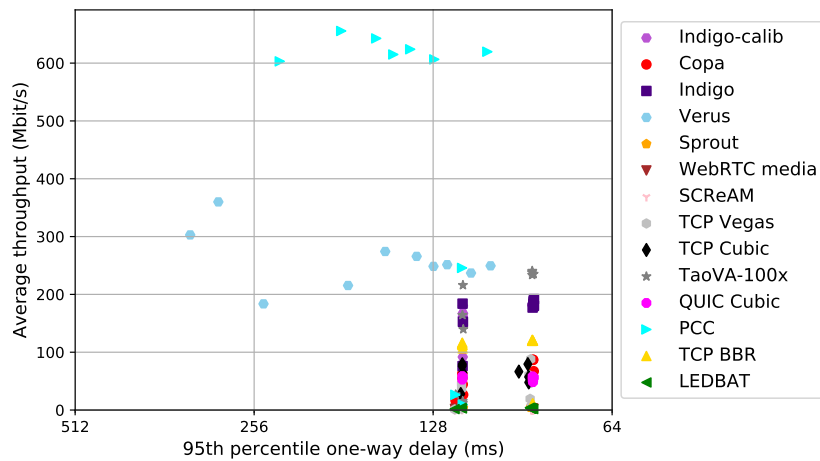
Git summary:

```
branch: indigos @ f54f2953f2a9765c9ffa988d13de5a9471790eb0
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
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 @ f1a14bffe749737437f61b1eaeeb30b267cde681
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 Sydney Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	105.75	100.70	0.78
TCP Cubic	8	62.22	101.89	0.69
LEDBAT	10	2.84	96.00	0.85
PCC	10	464.80	144.04	2.05
QUIC Cubic	9	54.45	96.04	0.92
SCReAM	10	0.22	92.94	0.58
WebRTC media	10	2.19	95.63	0.71
Sprout	10	3.44	106.38	0.60
TaoVA-100x	10	152.25	103.62	0.38
TCP Vegas	10	31.20	101.50	0.71
Verus	10	258.81	179.94	4.68
Copa	9	50.27	105.77	0.42
Indigo	10	169.71	94.99	0.55
Indigo-calib	10	167.93	100.50	0.60

Run 1: Statistics of TCP BBR

Start at: 2017-11-15 20:18:42

End at: 2017-11-15 20:19:12

Below is generated by plot.py at 2017-11-15 23:59:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.58 Mbit/s

95th percentile per-packet one-way delay: 87.183 ms

Loss rate: 0.69%

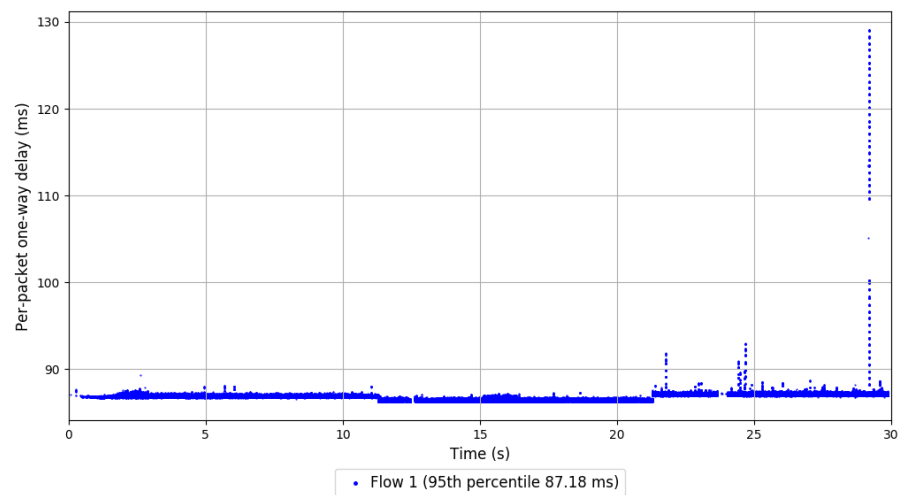
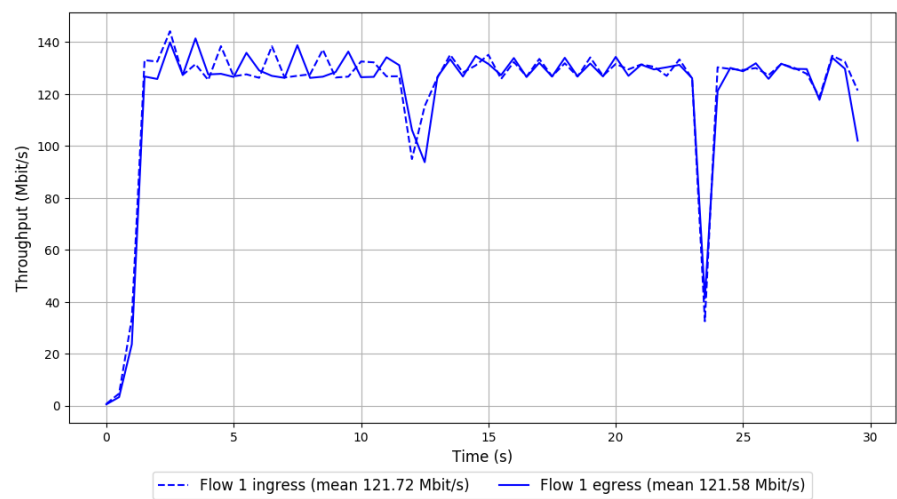
-- Flow 1:

Average throughput: 121.58 Mbit/s

95th percentile per-packet one-way delay: 87.183 ms

Loss rate: 0.69%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-15 20:29:43

End at: 2017-11-15 20:30:13

Below is generated by plot.py at 2017-11-15 23:59:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.77 Mbit/s

95th percentile per-packet one-way delay: 86.932 ms

Loss rate: 0.62%

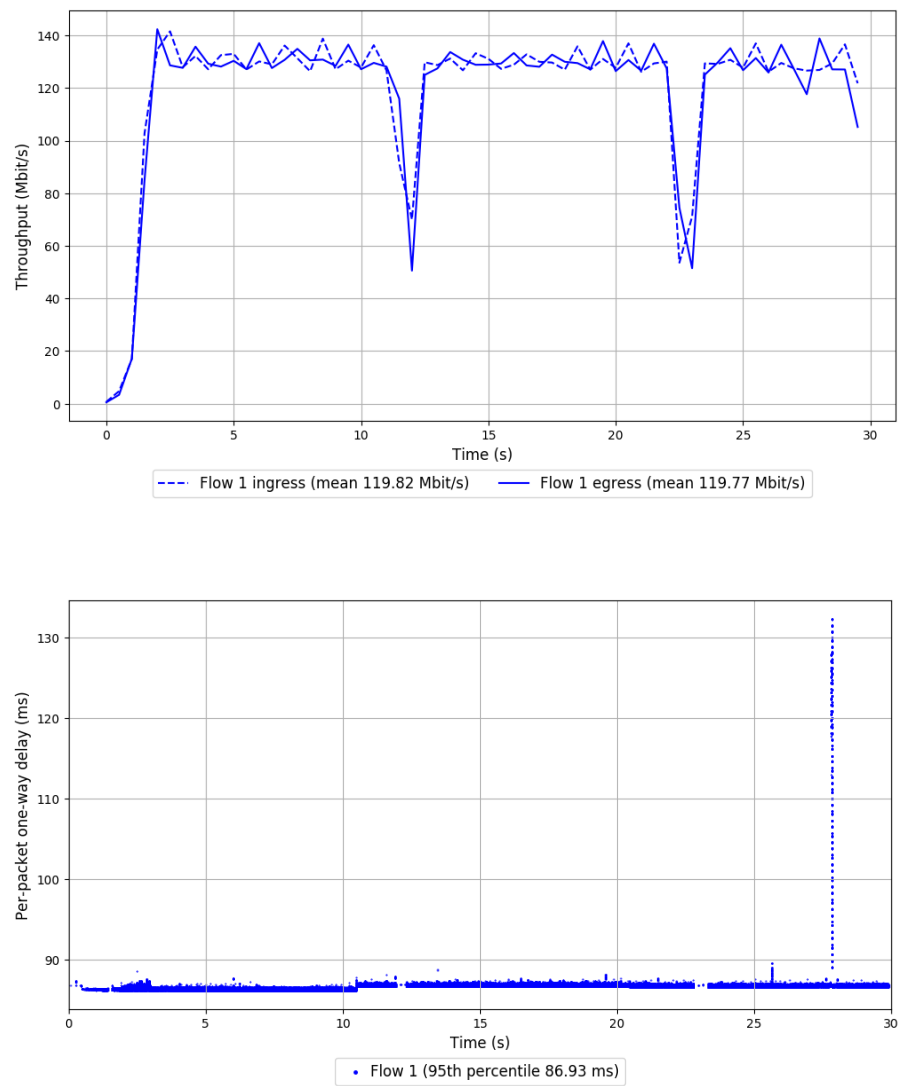
-- Flow 1:

Average throughput: 119.77 Mbit/s

95th percentile per-packet one-way delay: 86.932 ms

Loss rate: 0.62%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-15 20:40:49

End at: 2017-11-15 20:41:19

Below is generated by plot.py at 2017-11-15 23:59:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.65 Mbit/s

95th percentile per-packet one-way delay: 87.250 ms

Loss rate: 0.71%

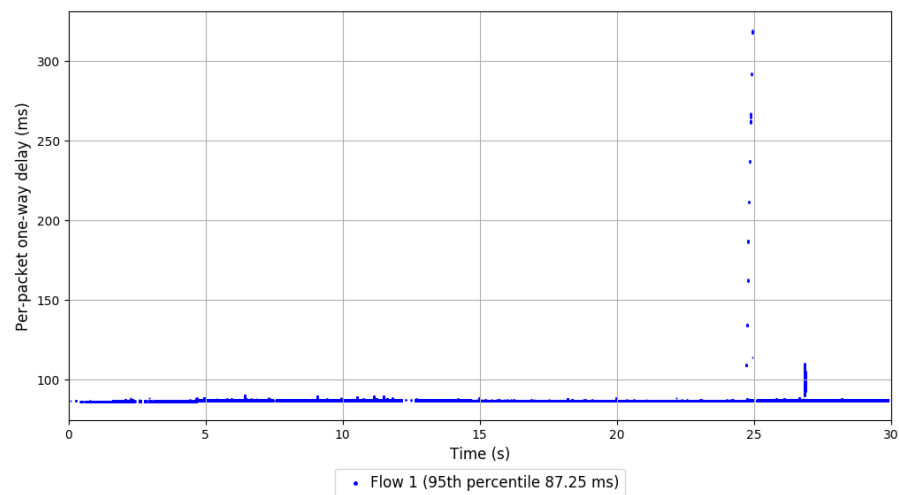
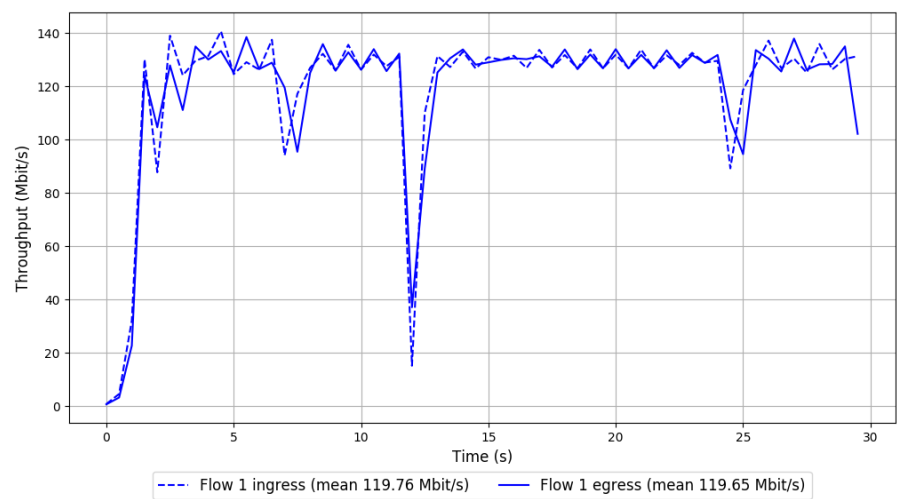
-- Flow 1:

Average throughput: 119.65 Mbit/s

95th percentile per-packet one-way delay: 87.250 ms

Loss rate: 0.71%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-15 20:51:54

End at: 2017-11-15 20:52:24

Below is generated by plot.py at 2017-11-15 23:59:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.08 Mbit/s

95th percentile per-packet one-way delay: 114.412 ms

Loss rate: 0.64%

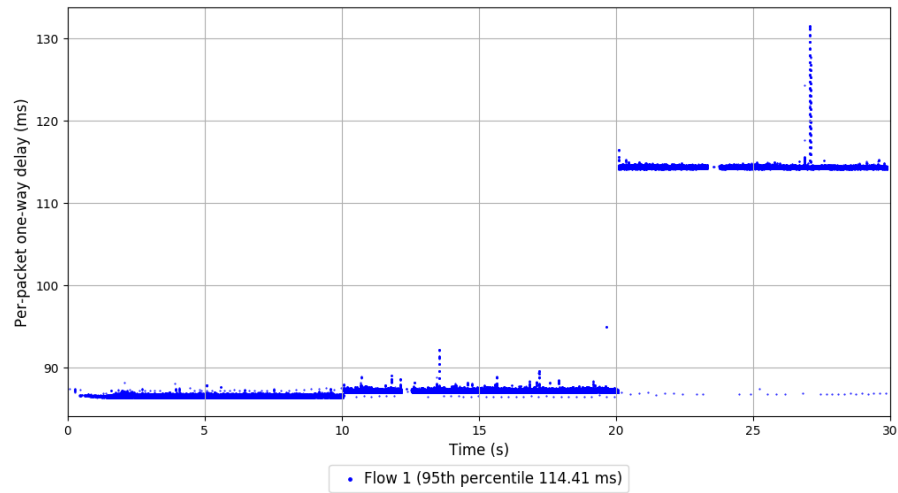
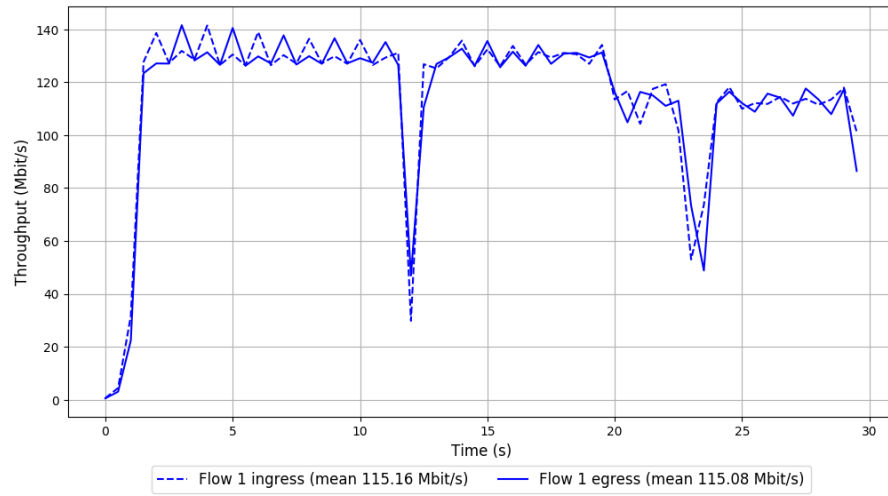
-- Flow 1:

Average throughput: 115.08 Mbit/s

95th percentile per-packet one-way delay: 114.412 ms

Loss rate: 0.64%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-15 21:02:41

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

Below is generated by plot.py at 2017-11-15 23:59:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 113.50 Mbit/s

95th percentile per-packet one-way delay: 114.425 ms

Loss rate: 0.70%

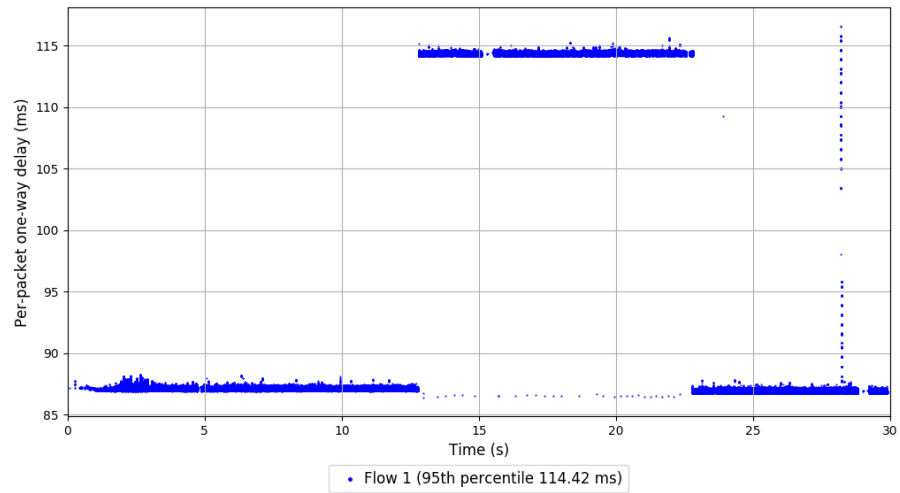
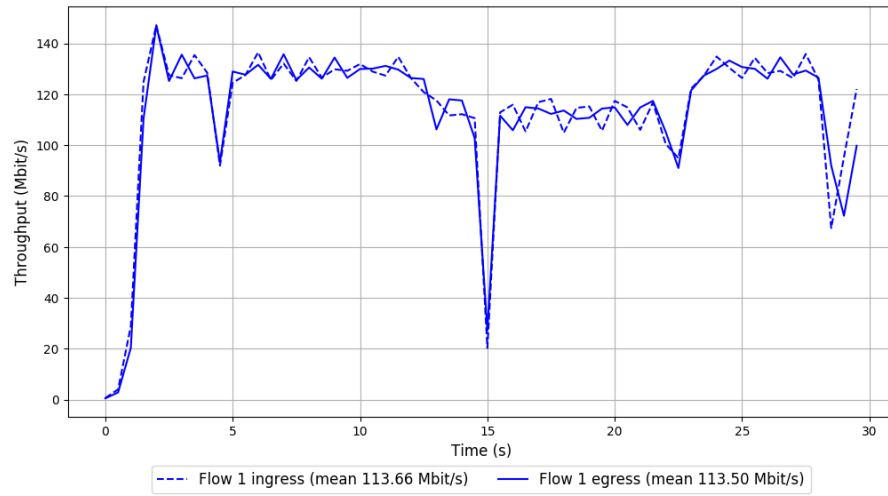
-- Flow 1:

Average throughput: 113.50 Mbit/s

95th percentile per-packet one-way delay: 114.425 ms

Loss rate: 0.70%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-15 21:13:36

End at: 2017-11-15 21:14:06

Below is generated by plot.py at 2017-11-15 23:59:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.52 Mbit/s

95th percentile per-packet one-way delay: 114.320 ms

Loss rate: 0.64%

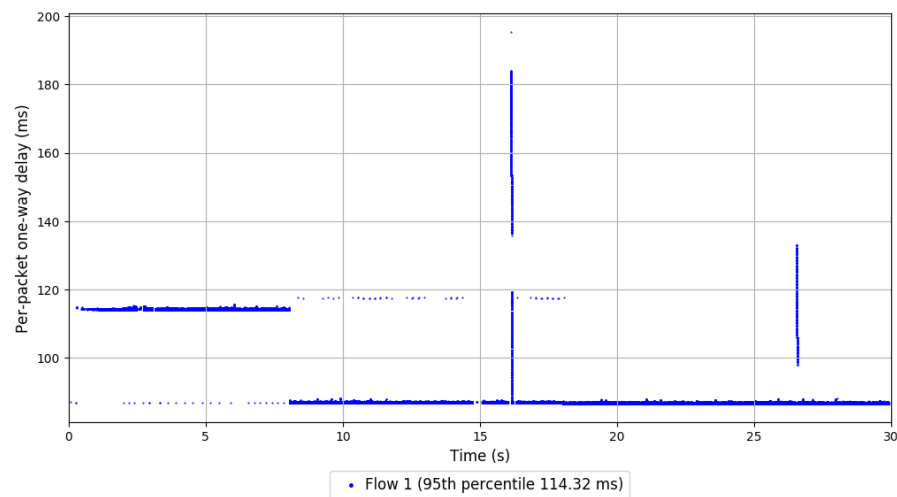
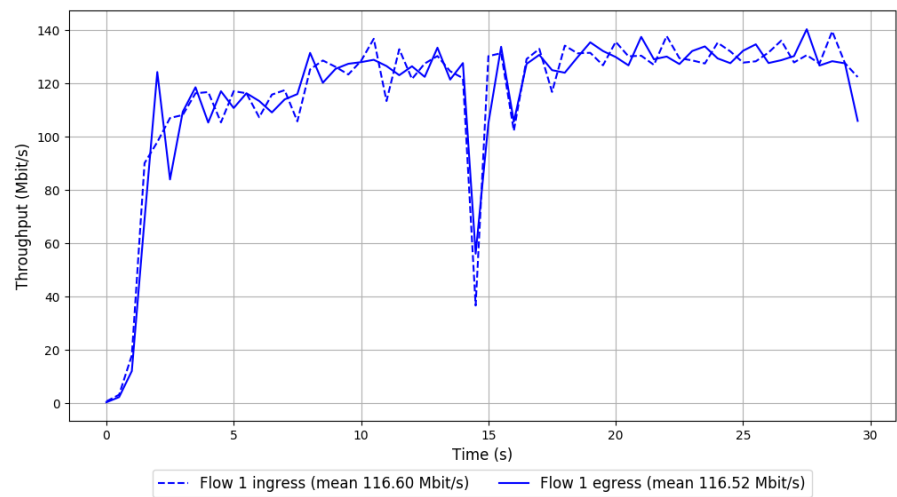
-- Flow 1:

Average throughput: 116.52 Mbit/s

95th percentile per-packet one-way delay: 114.320 ms

Loss rate: 0.64%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-15 21:24:47

End at: 2017-11-15 21:25:17

Below is generated by plot.py at 2017-11-15 23:59:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.75 Mbit/s

95th percentile per-packet one-way delay: 87.052 ms

Loss rate: 1.77%

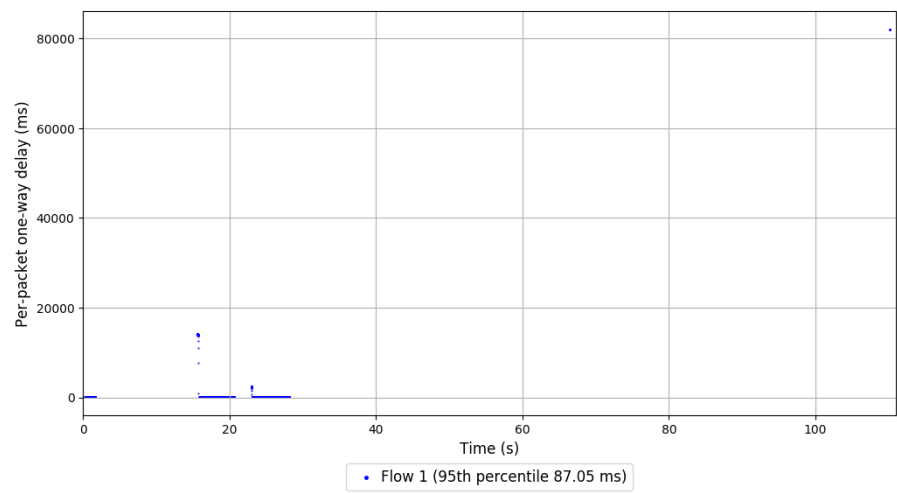
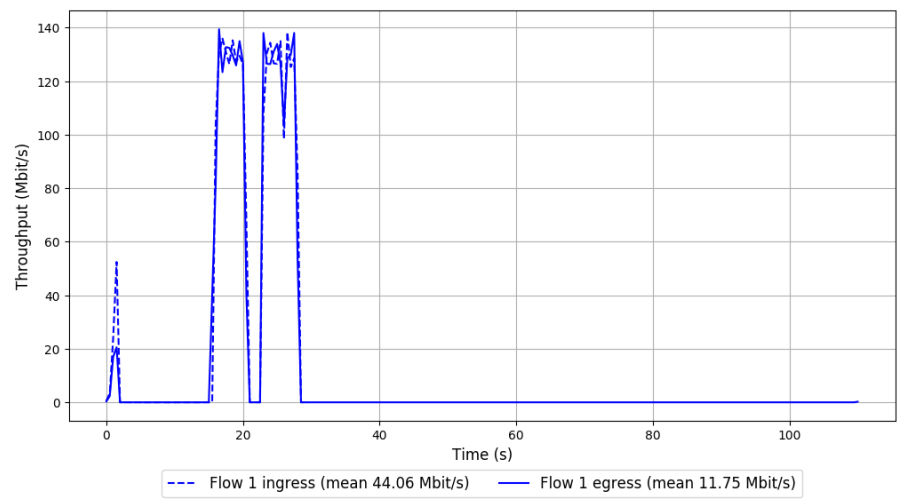
-- Flow 1:

Average throughput: 11.75 Mbit/s

95th percentile per-packet one-way delay: 87.052 ms

Loss rate: 1.77%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-15 21:37:56

End at: 2017-11-15 21:38:26

Below is generated by plot.py at 2017-11-15 23:59:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 106.71 Mbit/s

95th percentile per-packet one-way delay: 114.184 ms

Loss rate: 0.73%

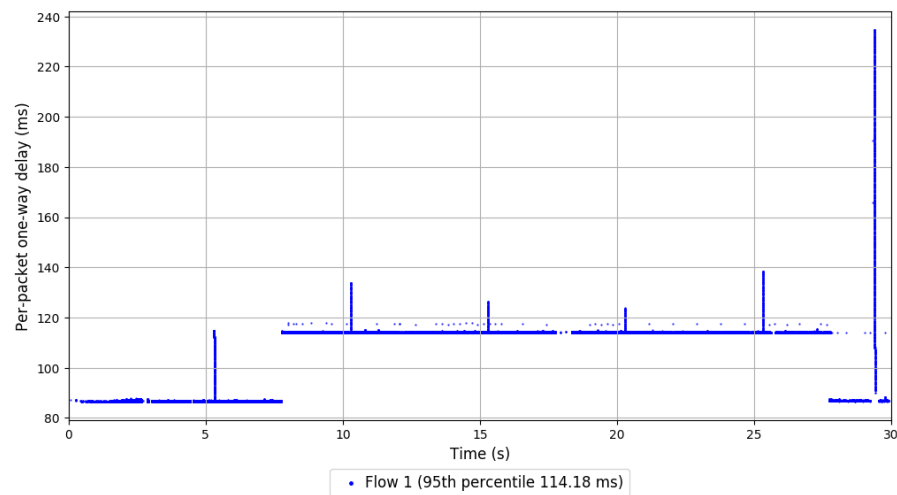
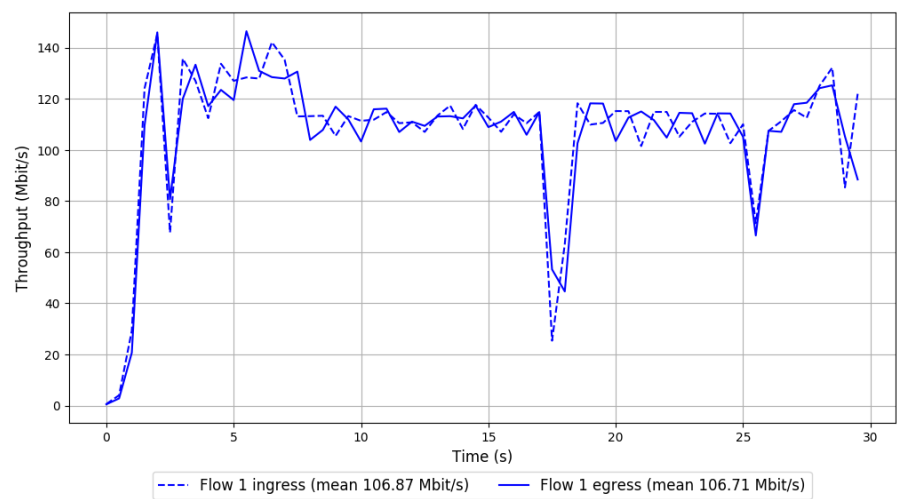
-- Flow 1:

Average throughput: 106.71 Mbit/s

95th percentile per-packet one-way delay: 114.184 ms

Loss rate: 0.73%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-15 21:48:50

End at: 2017-11-15 21:49:20

Below is generated by plot.py at 2017-11-16 00:00:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 112.19 Mbit/s

95th percentile per-packet one-way delay: 114.234 ms

Loss rate: 0.64%

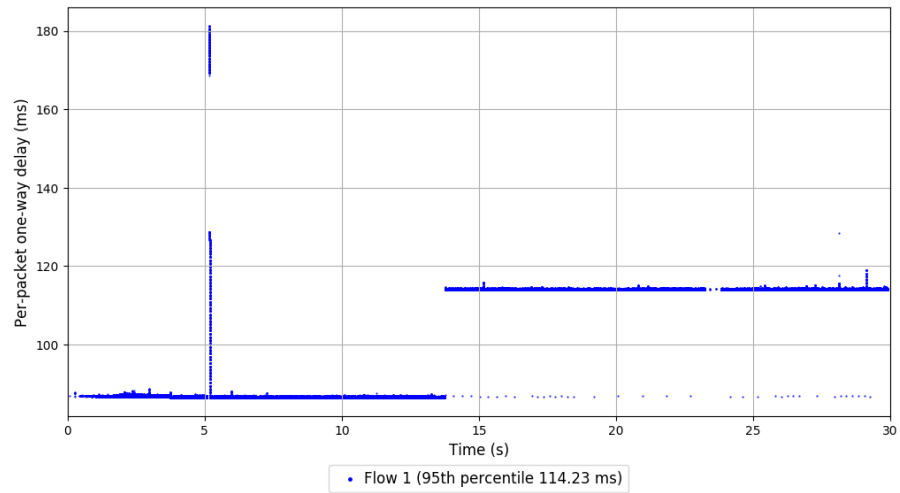
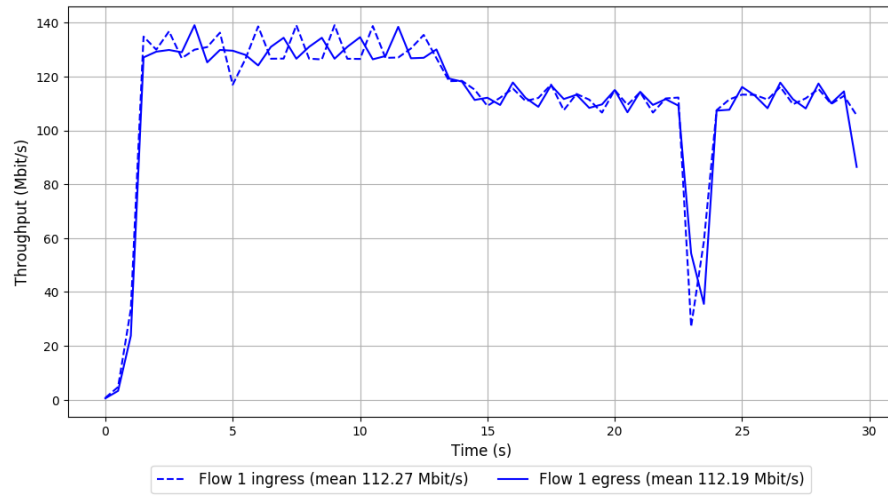
-- Flow 1:

Average throughput: 112.19 Mbit/s

95th percentile per-packet one-way delay: 114.234 ms

Loss rate: 0.64%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-15 21:59:04

End at: 2017-11-15 21:59:34

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.70 Mbit/s

95th percentile per-packet one-way delay: 87.049 ms

Loss rate: 0.62%

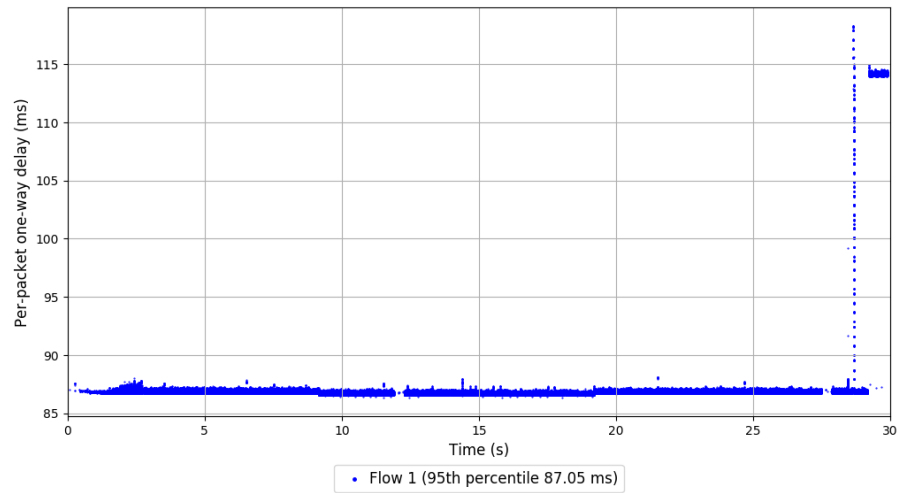
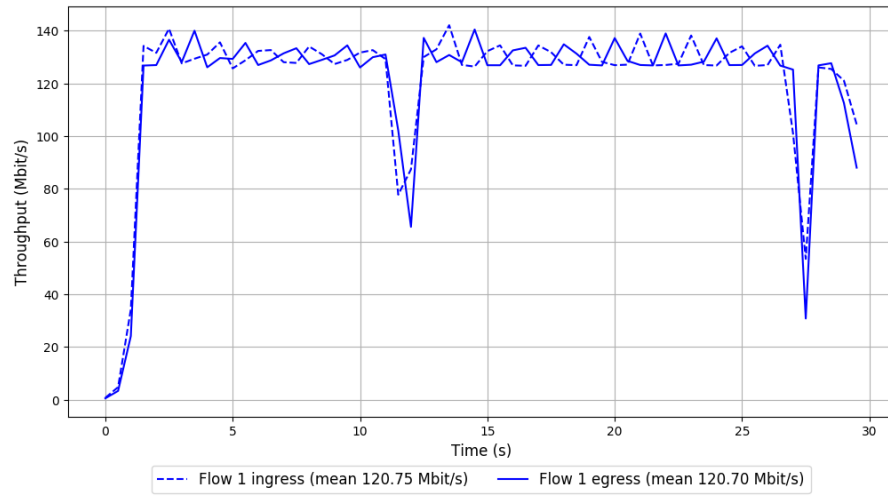
-- Flow 1:

Average throughput: 120.70 Mbit/s

95th percentile per-packet one-way delay: 87.049 ms

Loss rate: 0.62%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

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

End at: 2017-11-15 20:22:12

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.39 Mbit/s

95th percentile per-packet one-way delay: 88.693 ms

Loss rate: 0.69%

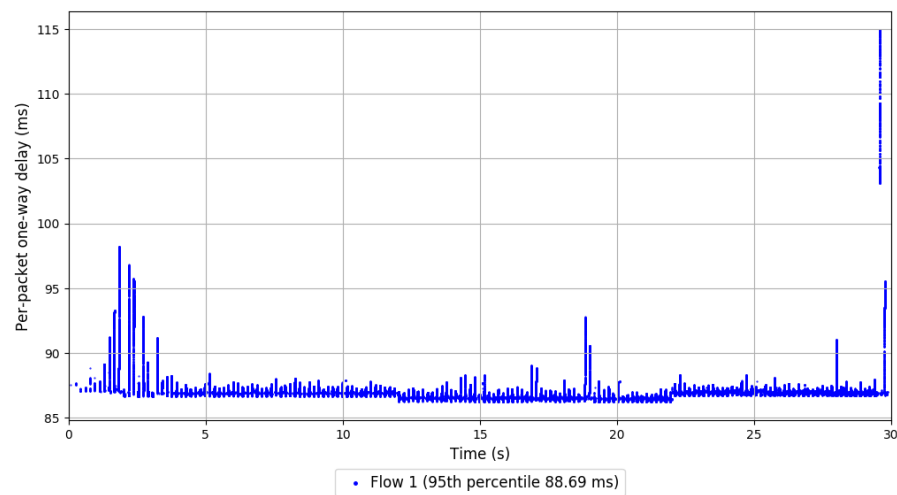
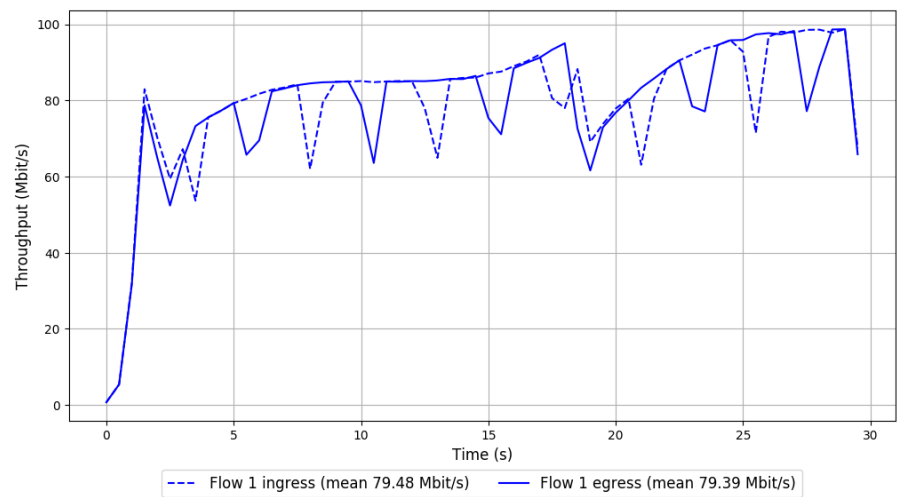
-- Flow 1:

Average throughput: 79.39 Mbit/s

95th percentile per-packet one-way delay: 88.693 ms

Loss rate: 0.69%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-15 20:32:44

End at: 2017-11-15 20:33:14

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.82 Mbit/s

95th percentile per-packet one-way delay: 88.399 ms

Loss rate: 0.75%

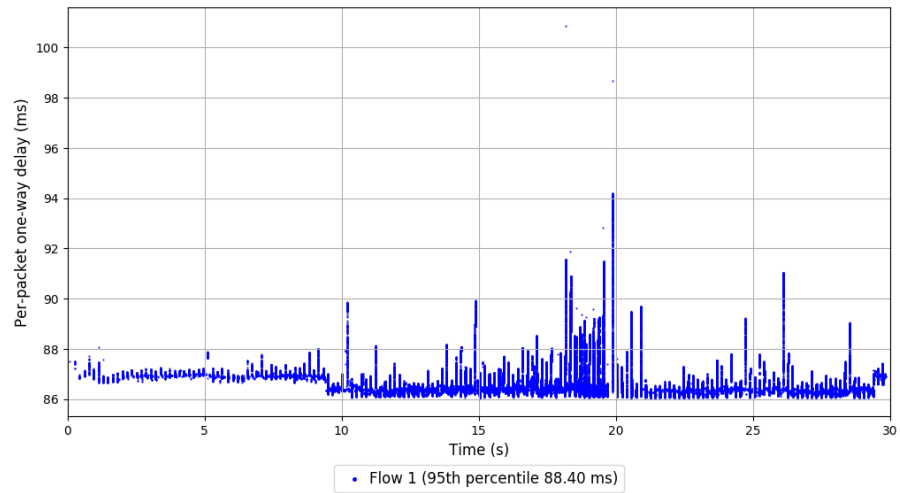
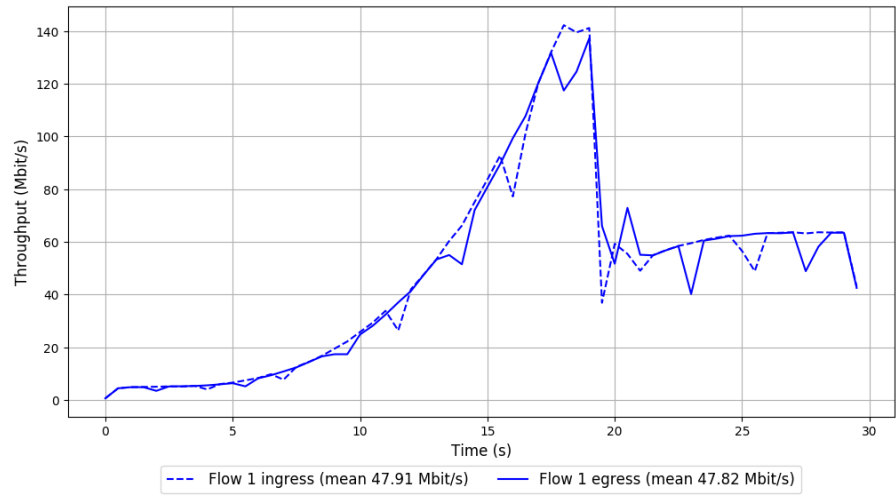
-- Flow 1:

Average throughput: 47.82 Mbit/s

95th percentile per-packet one-way delay: 88.399 ms

Loss rate: 0.75%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-15 20:43:47

End at: 2017-11-15 20:44:17

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.17 Mbit/s

95th percentile per-packet one-way delay: 88.415 ms

Loss rate: 0.70%

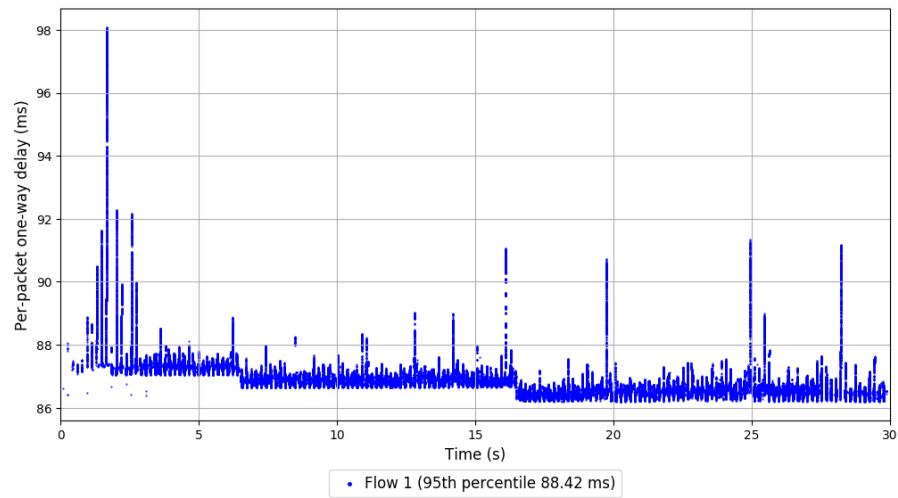
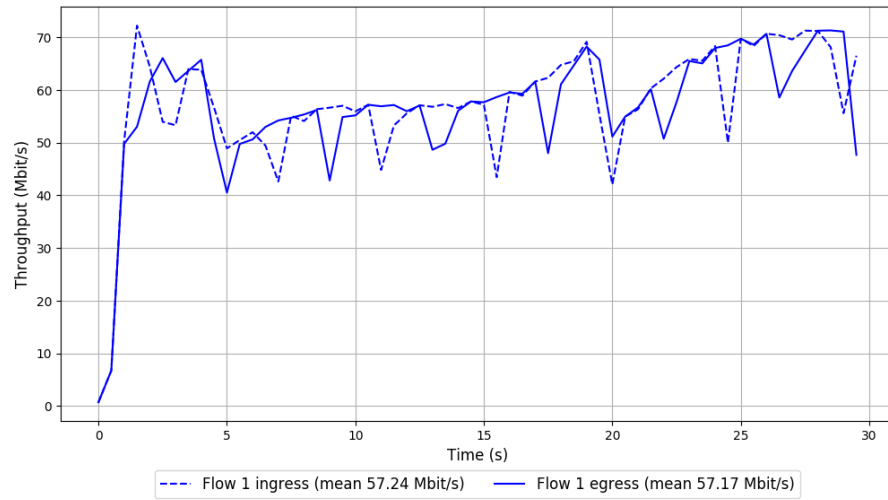
-- Flow 1:

Average throughput: 57.17 Mbit/s

95th percentile per-packet one-way delay: 88.415 ms

Loss rate: 0.70%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

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

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

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.46 Mbit/s

95th percentile per-packet one-way delay: 91.842 ms

Loss rate: 0.38%

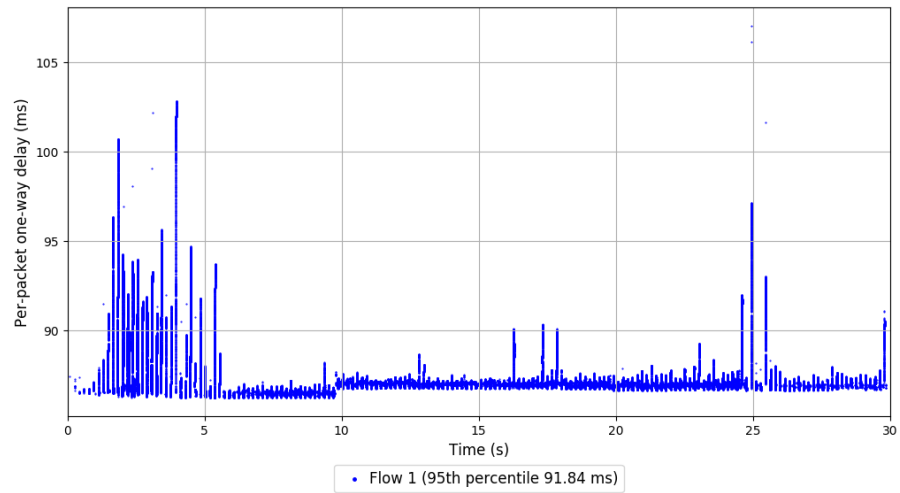
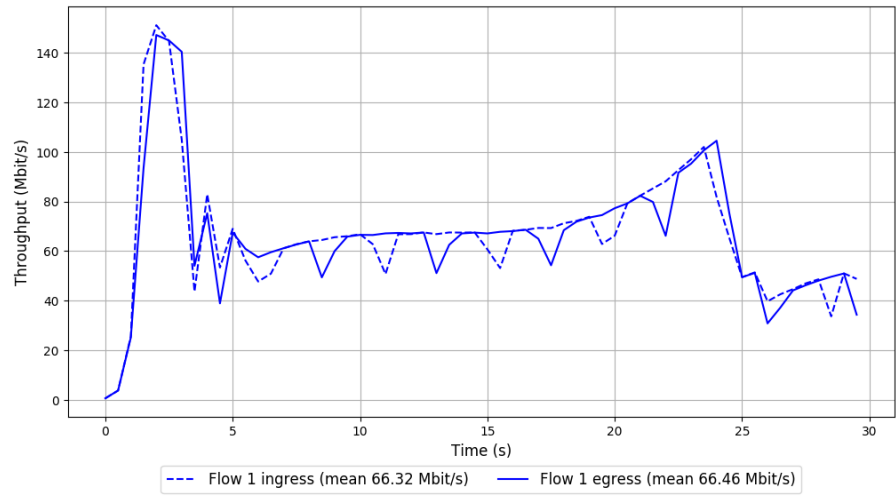
-- Flow 1:

Average throughput: 66.46 Mbit/s

95th percentile per-packet one-way delay: 91.842 ms

Loss rate: 0.38%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-15 21:05:38

End at: 2017-11-15 21:06:08

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.06 Mbit/s

95th percentile per-packet one-way delay: 114.370 ms

Loss rate: 0.53%

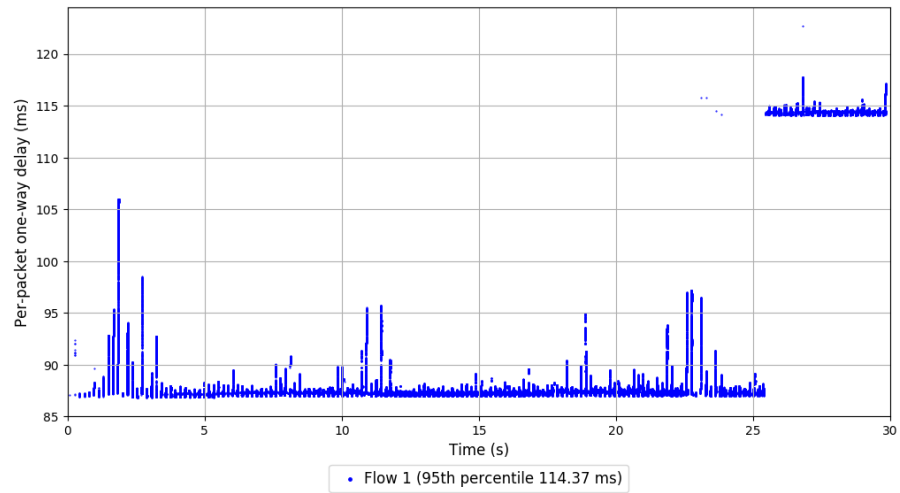
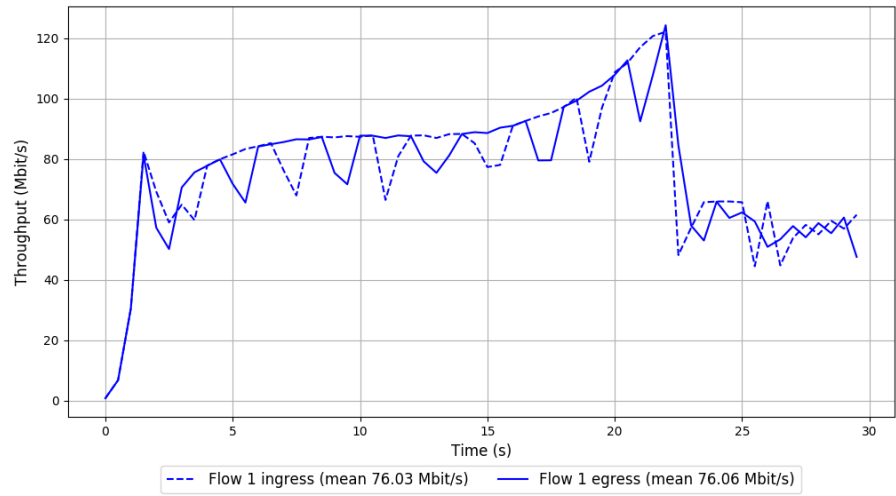
-- Flow 1:

Average throughput: 76.06 Mbit/s

95th percentile per-packet one-way delay: 114.370 ms

Loss rate: 0.53%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-15 21:16:37

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

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.73 Mbit/s

95th percentile per-packet one-way delay: 115.006 ms

Loss rate: 1.00%

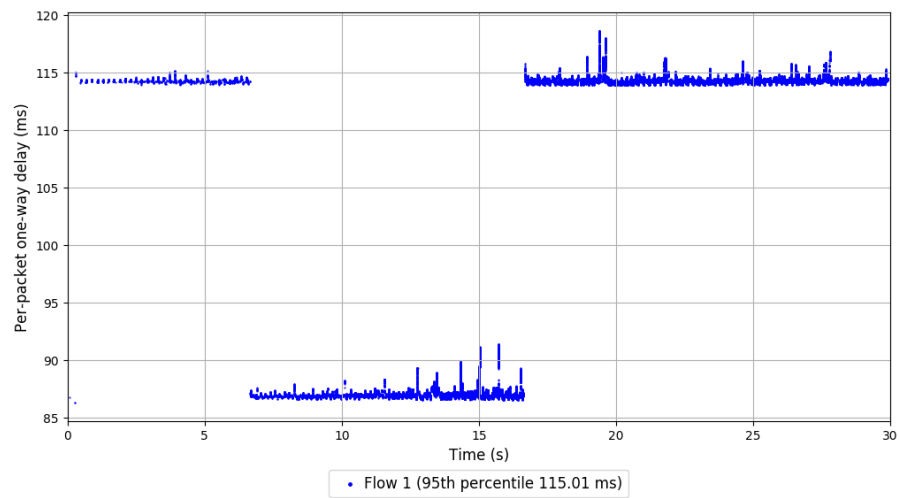
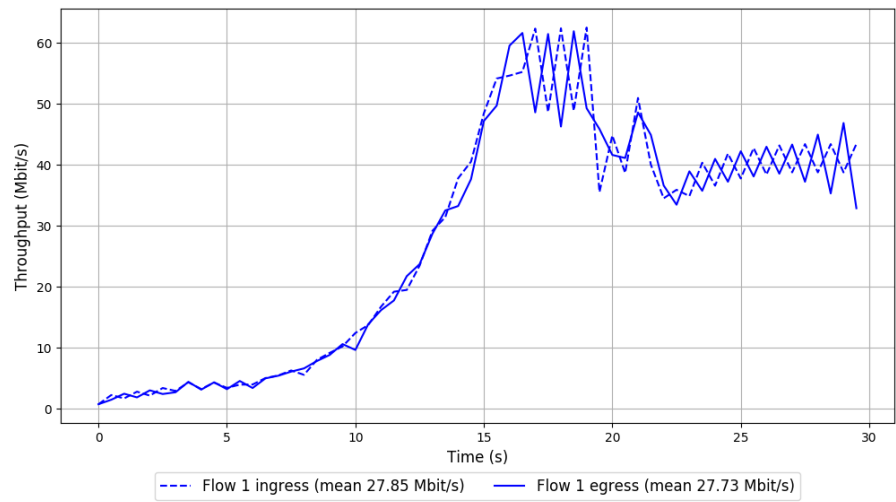
-- Flow 1:

Average throughput: 27.73 Mbit/s

95th percentile per-packet one-way delay: 115.006 ms

Loss rate: 1.00%

Run 6: Report of TCP Cubic — Data Link

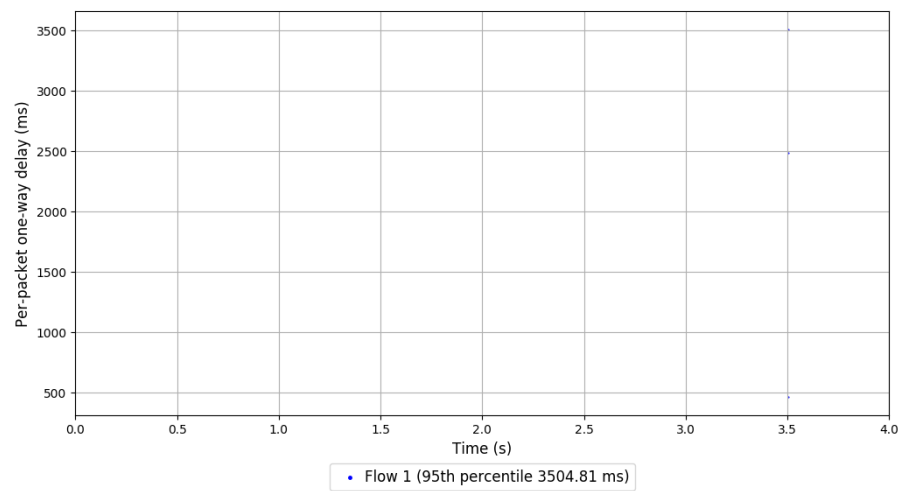
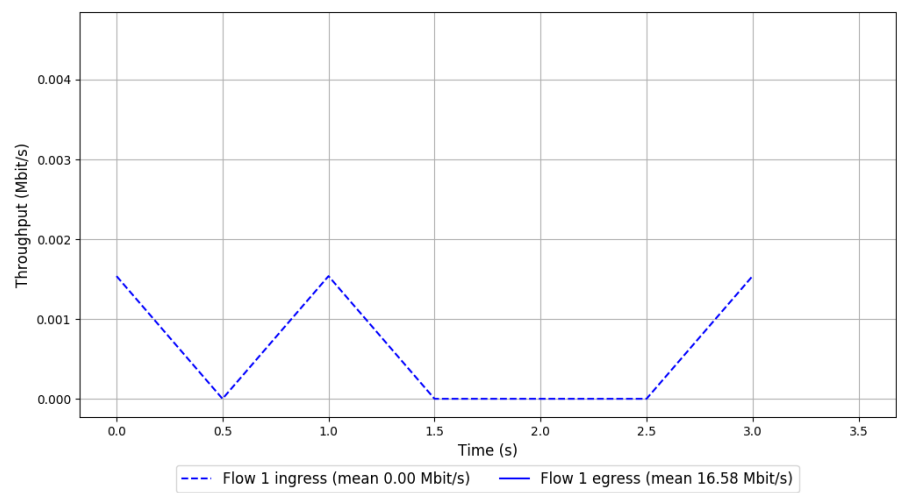


Run 7: Statistics of TCP Cubic

Start at: 2017-11-15 21:29:00

End at: 2017-11-15 21:29:30

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-15 21:40:54

End at: 2017-11-15 21:41:24

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.15 Mbit/s

95th percentile per-packet one-way delay: 114.317 ms

Loss rate: 1.05%

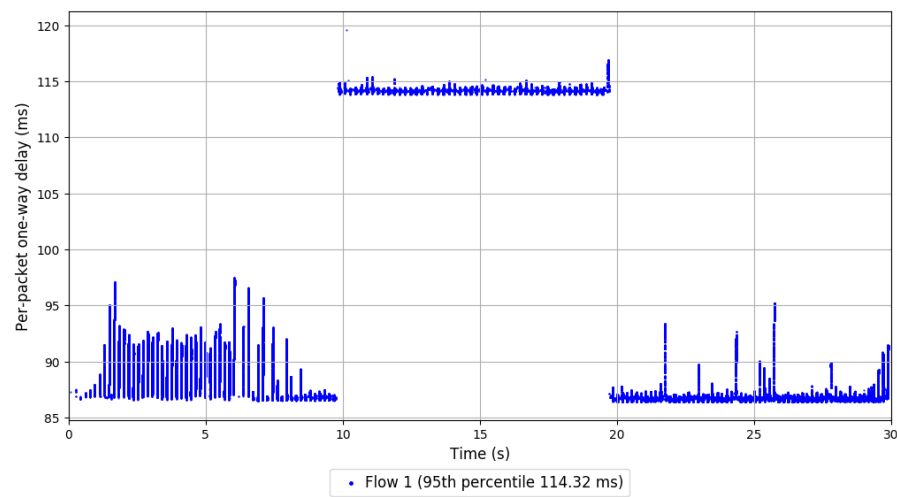
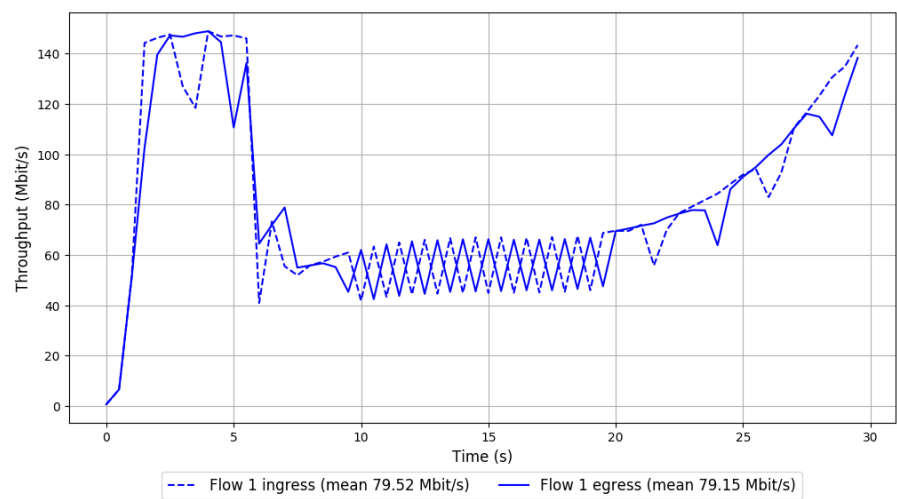
-- Flow 1:

Average throughput: 79.15 Mbit/s

95th percentile per-packet one-way delay: 114.317 ms

Loss rate: 1.05%

Run 8: Report of TCP Cubic — Data Link

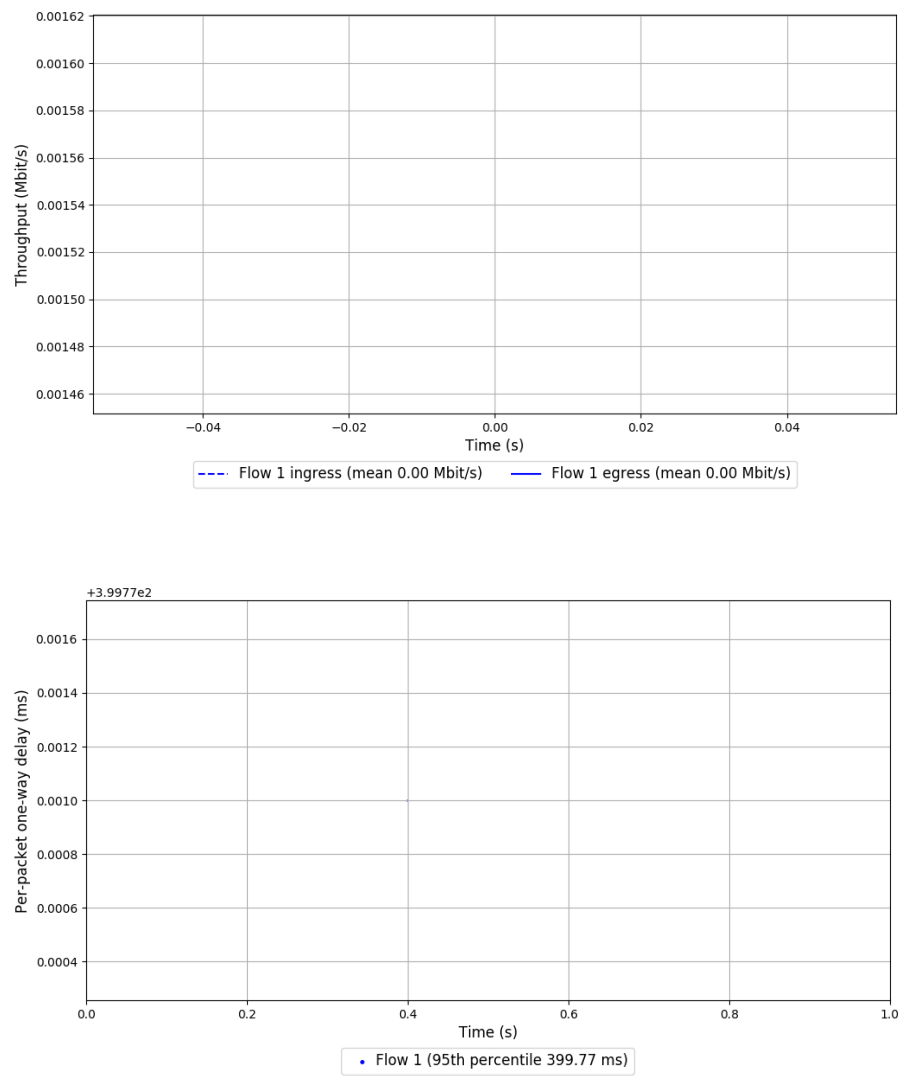


Run 9: Statistics of TCP Cubic

Start at: 2017-11-15 21:51:49

End at: 2017-11-15 21:52:19

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-15 22:01:56

End at: 2017-11-15 22:02:26

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.99 Mbit/s

95th percentile per-packet one-way delay: 114.049 ms

Loss rate: 0.41%

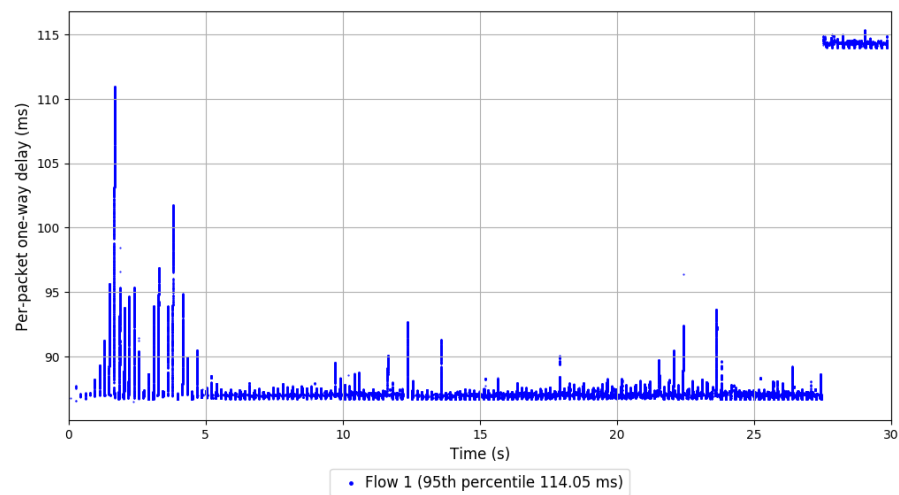
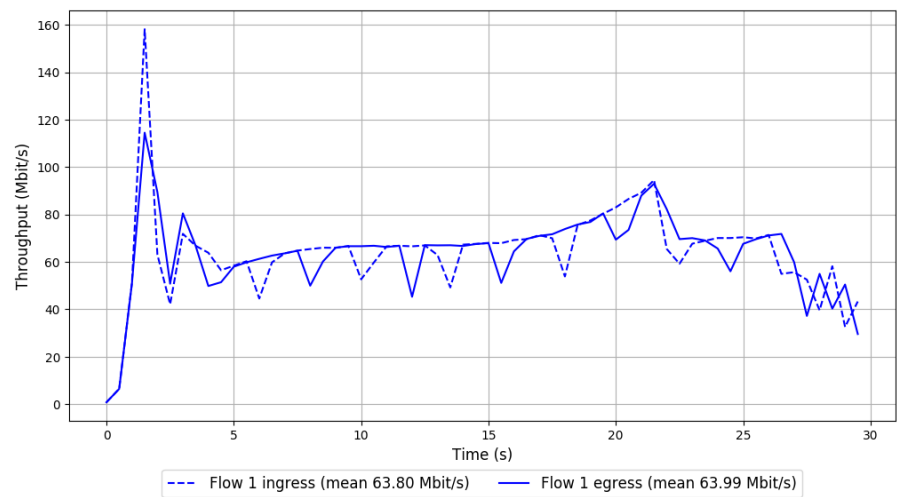
-- Flow 1:

Average throughput: 63.99 Mbit/s

95th percentile per-packet one-way delay: 114.049 ms

Loss rate: 0.41%

Run 10: Report of TCP Cubic — Data Link

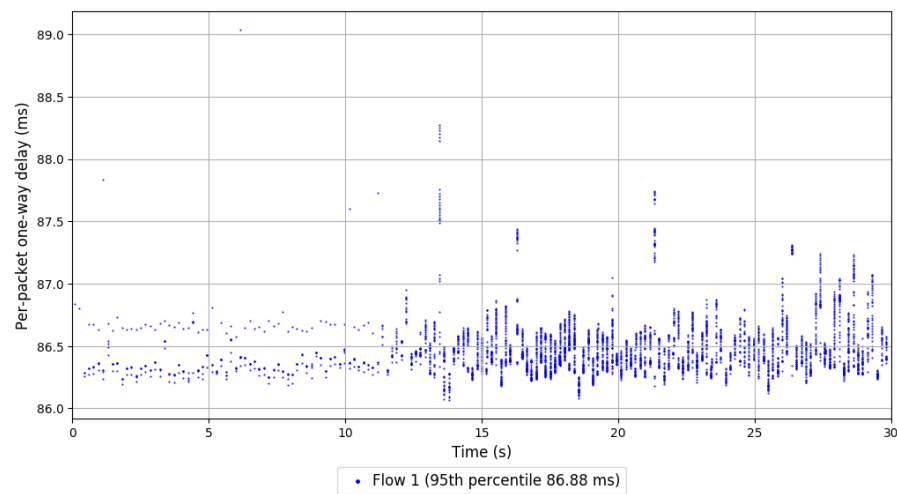
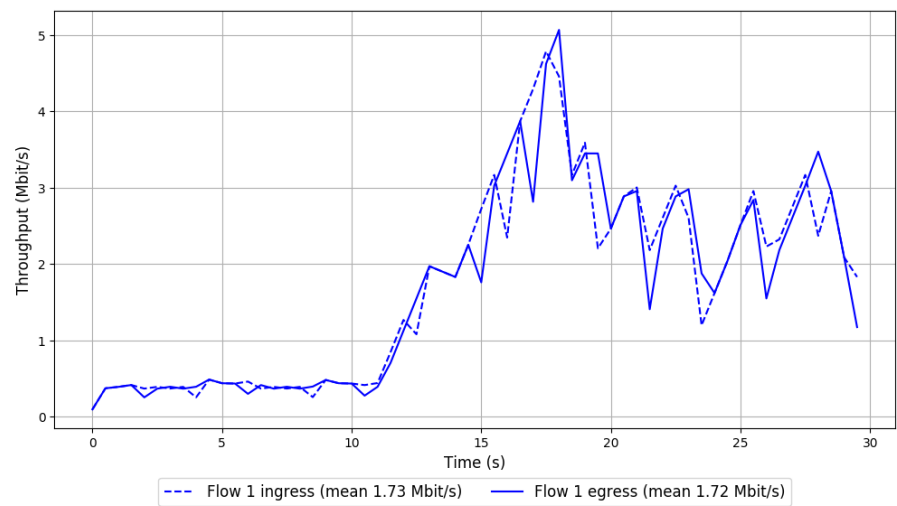


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-15 20:16:59
End at: 2017-11-15 20:17:29

# Below is generated by plot.py at 2017-11-16 00:01:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 86.875 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 86.875 ms
Loss rate: 0.79%
```


Run 1: Report of LEDBAT — Data Link

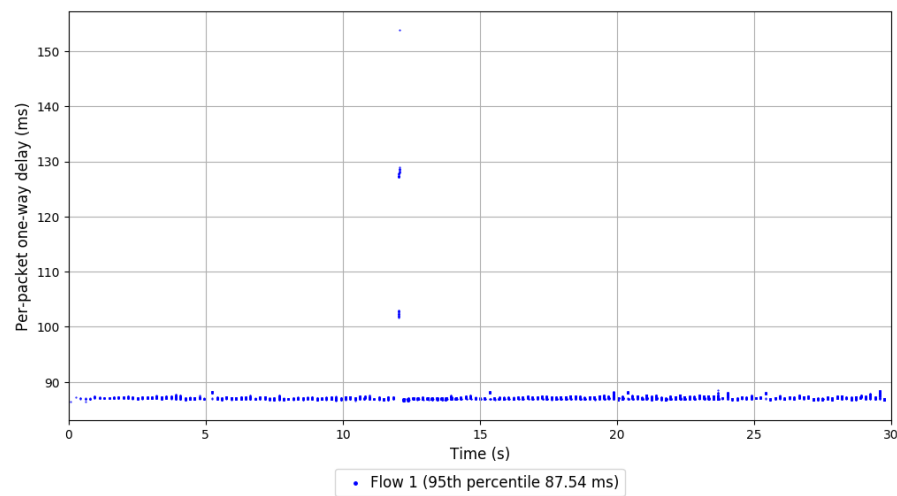
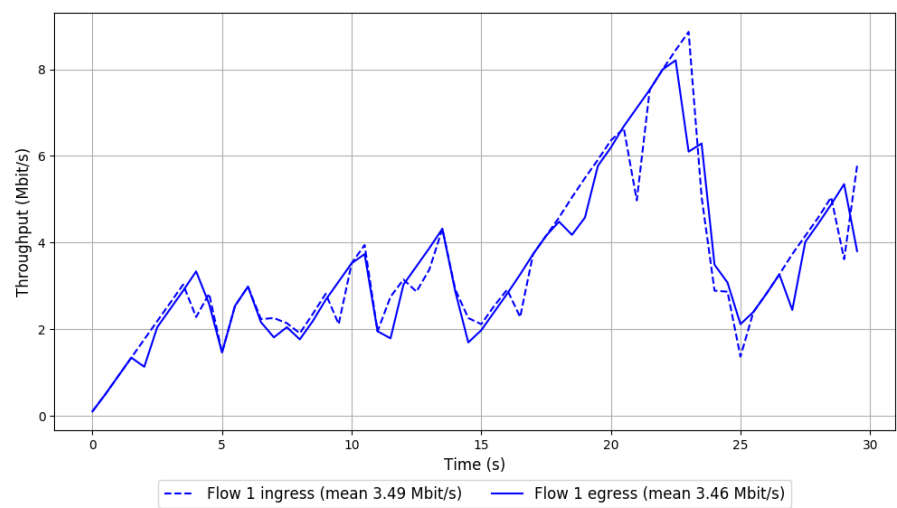


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-15 20:28:00
End at: 2017-11-15 20:28:30

# Below is generated by plot.py at 2017-11-16 00:01:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 87.544 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 87.544 ms
Loss rate: 1.29%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-15 20:39:04

End at: 2017-11-15 20:39:34

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 87.765 ms

Loss rate: 0.84%

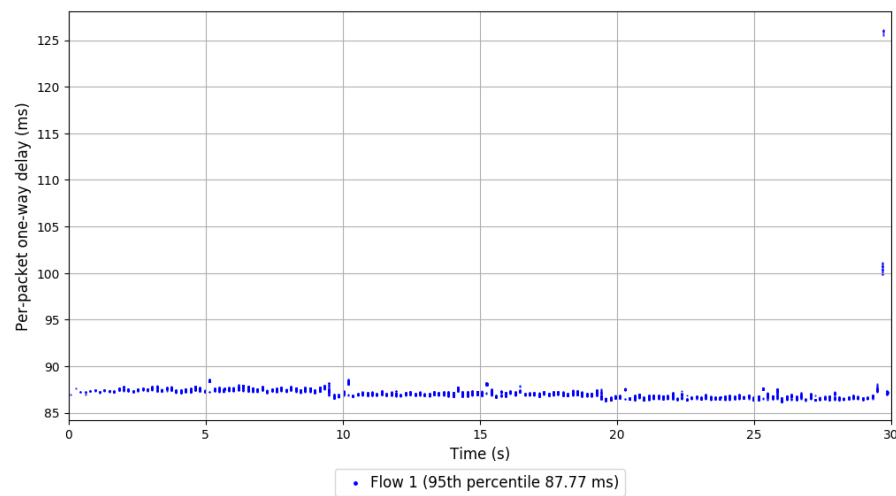
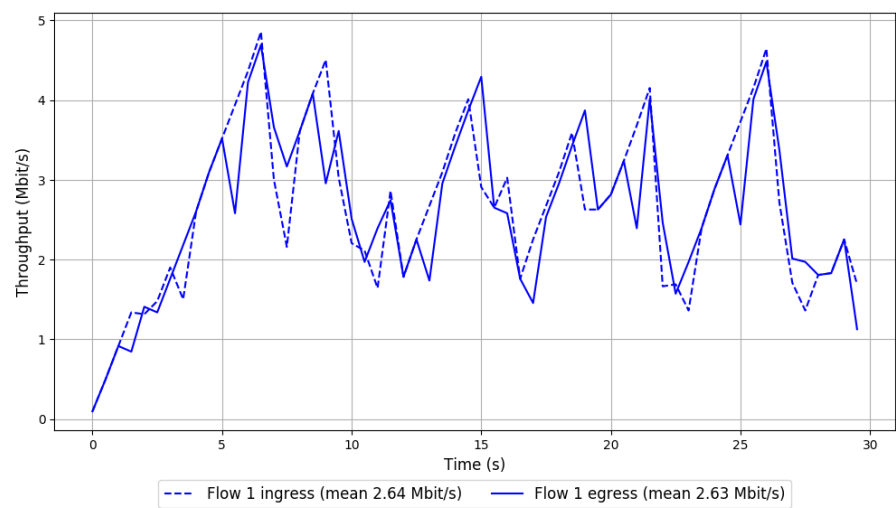
-- Flow 1:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 87.765 ms

Loss rate: 0.84%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-15 20:50:10

End at: 2017-11-15 20:50:40

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 87.527 ms

Loss rate: 0.90%

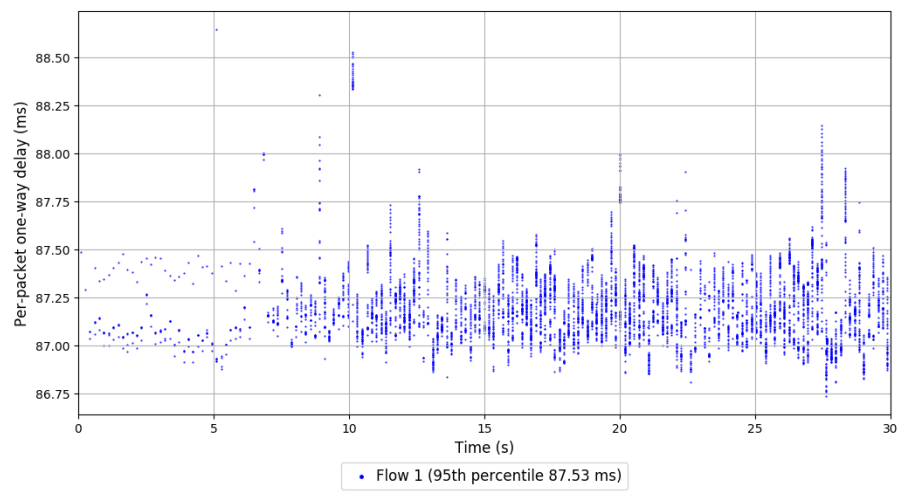
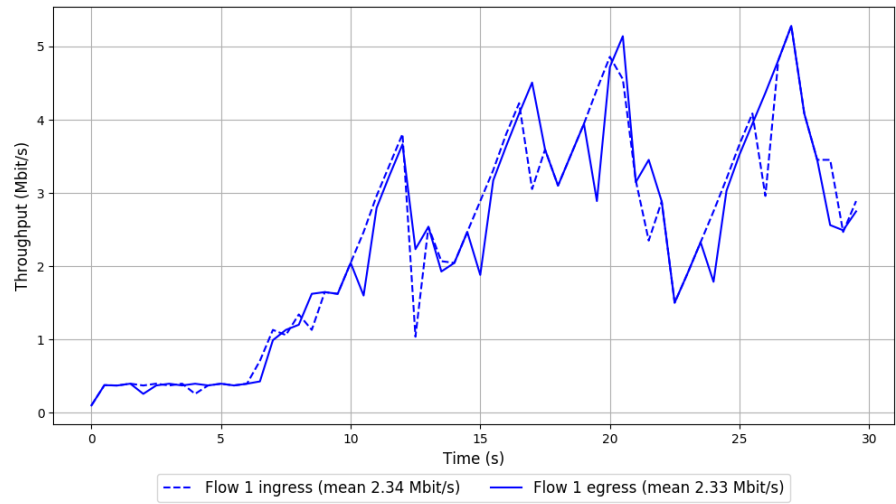
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 87.527 ms

Loss rate: 0.90%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-15 21:01:12

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

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.29 Mbit/s

95th percentile per-packet one-way delay: 87.749 ms

Loss rate: 0.56%

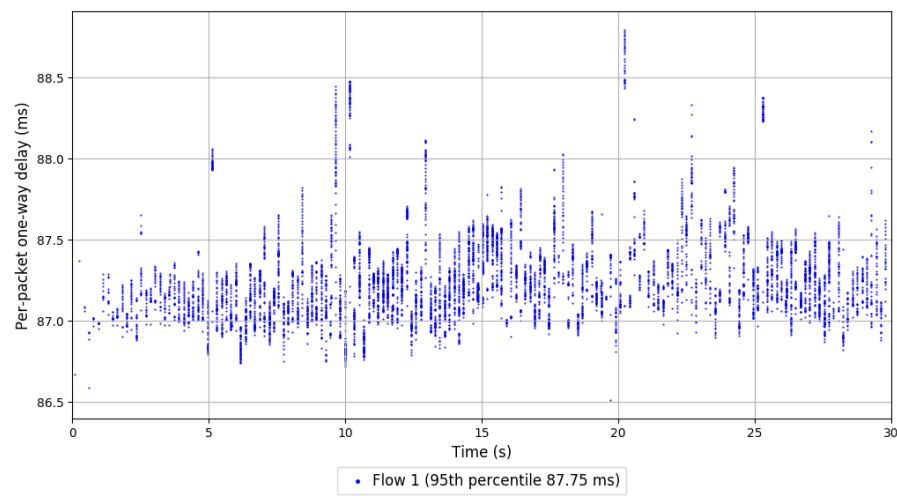
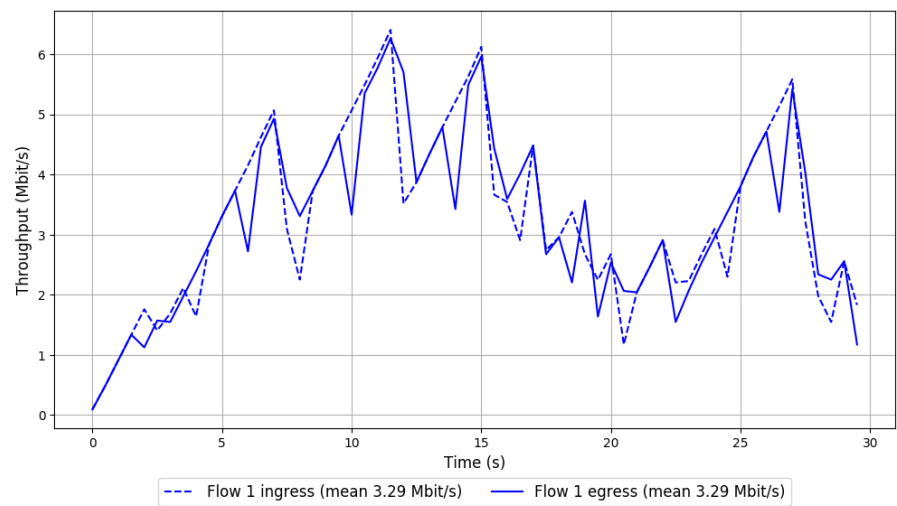
-- Flow 1:

Average throughput: 3.29 Mbit/s

95th percentile per-packet one-way delay: 87.749 ms

Loss rate: 0.56%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

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

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

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 88.016 ms

Loss rate: 0.88%

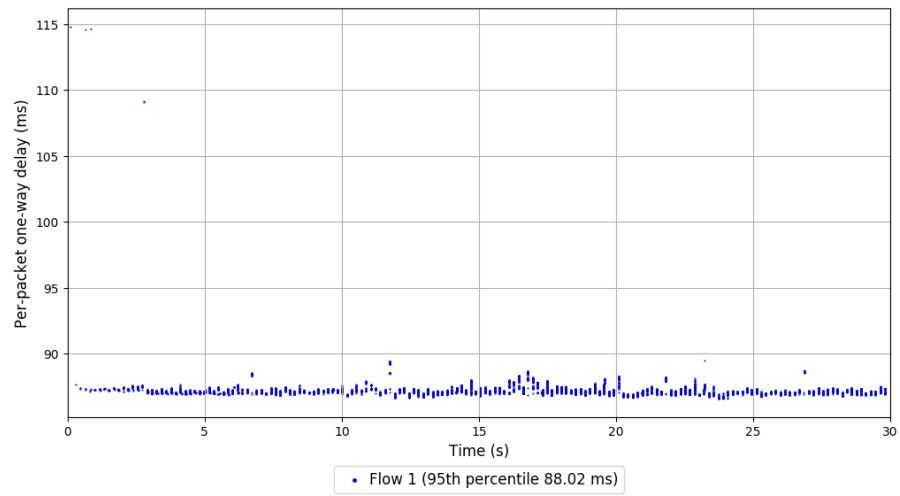
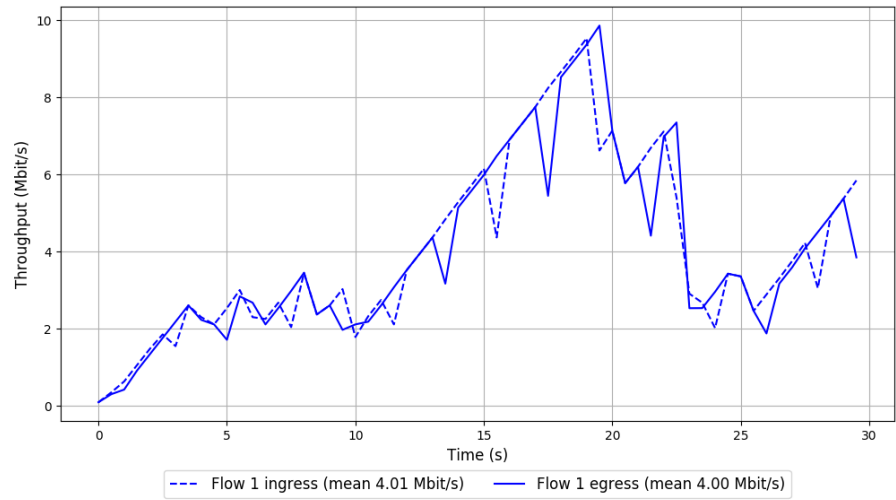
-- Flow 1:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 88.016 ms

Loss rate: 0.88%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-15 21:23:02

End at: 2017-11-15 21:23:32

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 87.469 ms

Loss rate: 1.03%

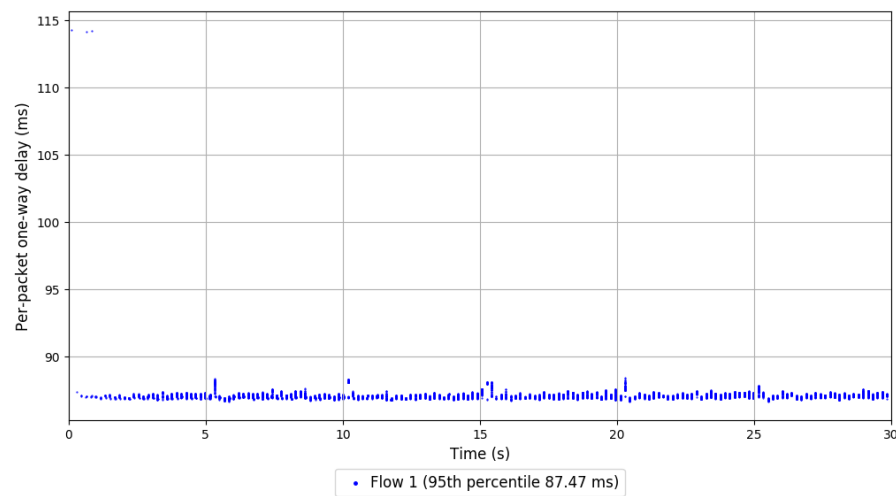
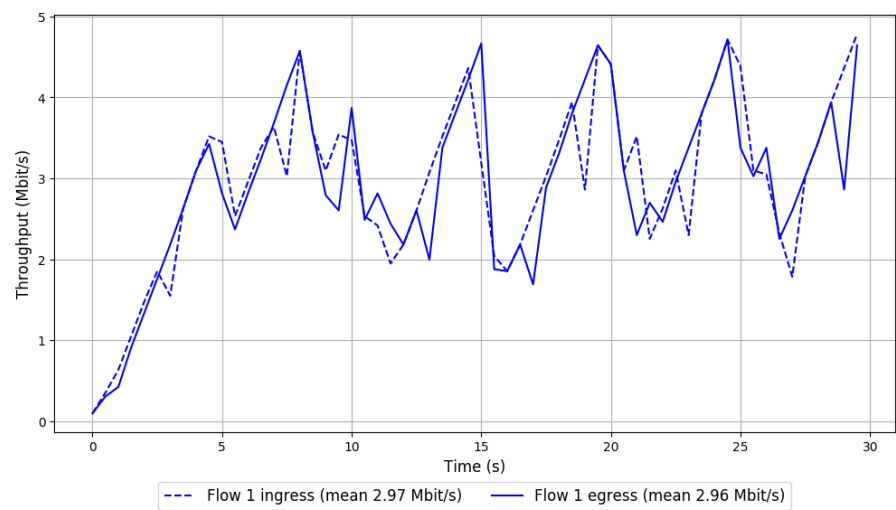
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 87.469 ms

Loss rate: 1.03%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-15 21:36:34

End at: 2017-11-15 21:37:04

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 117.822 ms

Loss rate: 1.01%

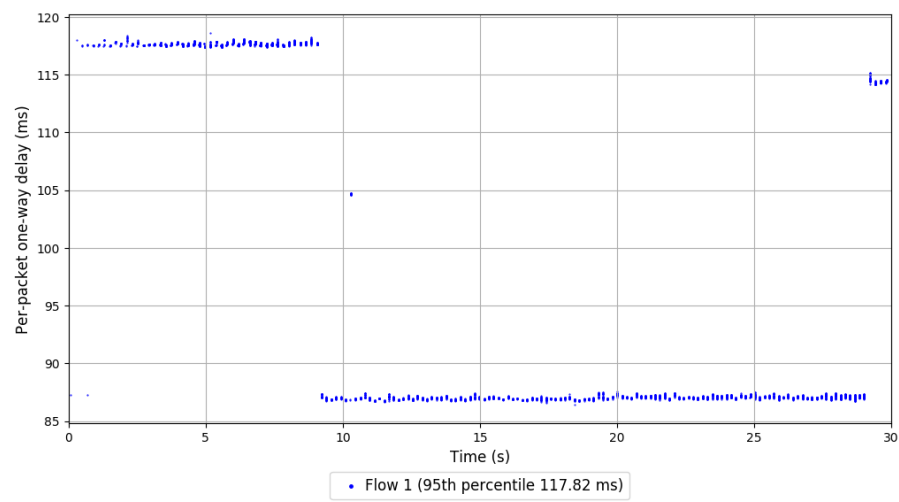
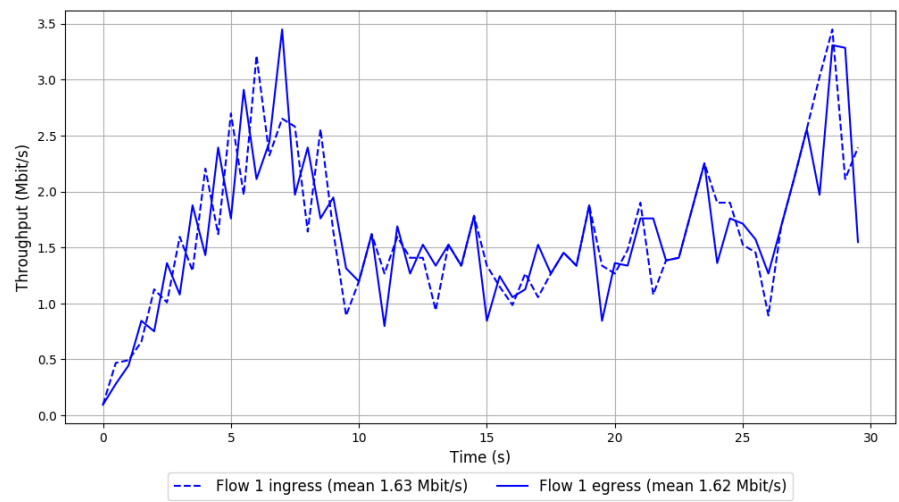
-- Flow 1:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 117.822 ms

Loss rate: 1.01%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-15 21:47:03

End at: 2017-11-15 21:47:33

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 114.737 ms

Loss rate: 0.56%

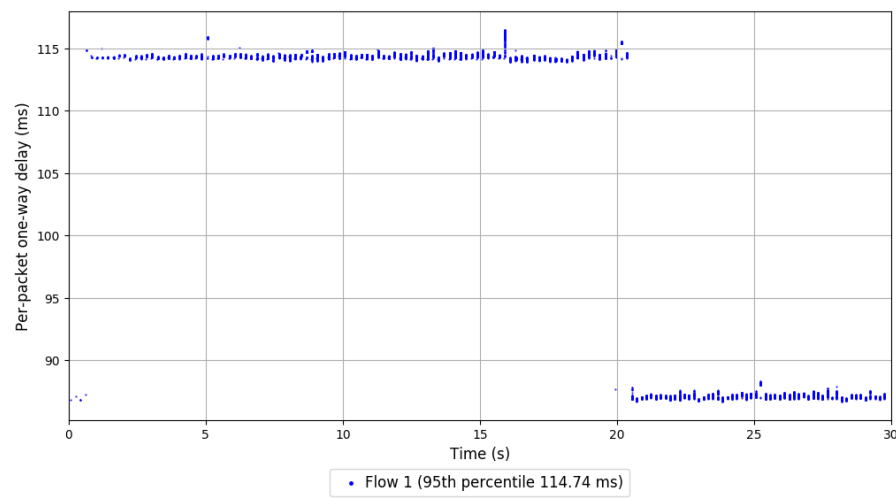
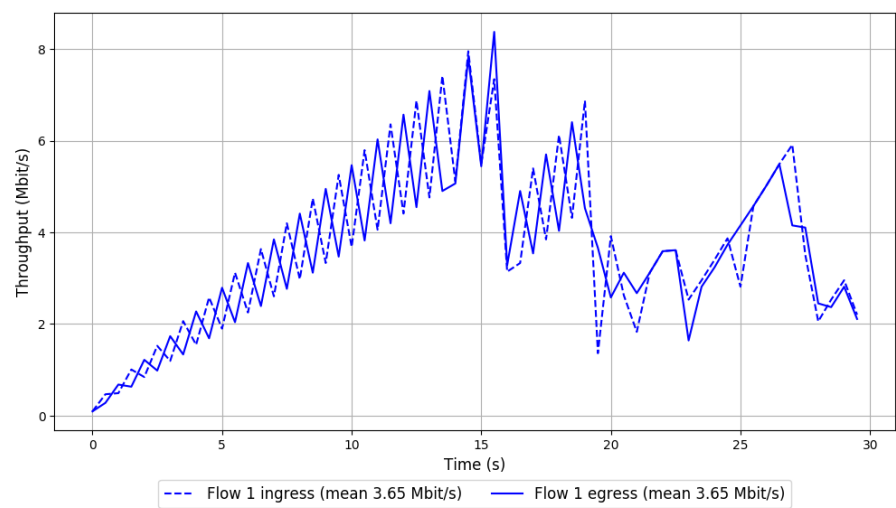
-- Flow 1:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 114.737 ms

Loss rate: 0.56%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-15 21:57:44

End at: 2017-11-15 21:58:14

Below is generated by plot.py at 2017-11-16 00:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 114.478 ms

Loss rate: 0.65%

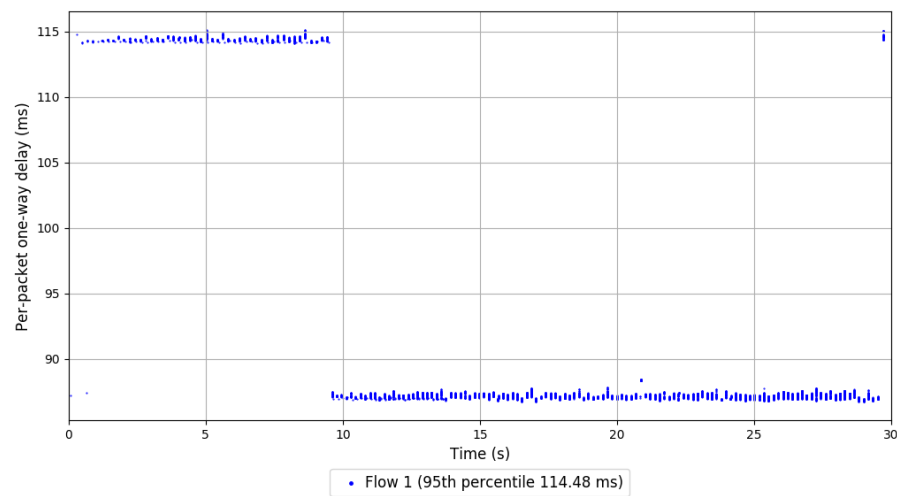
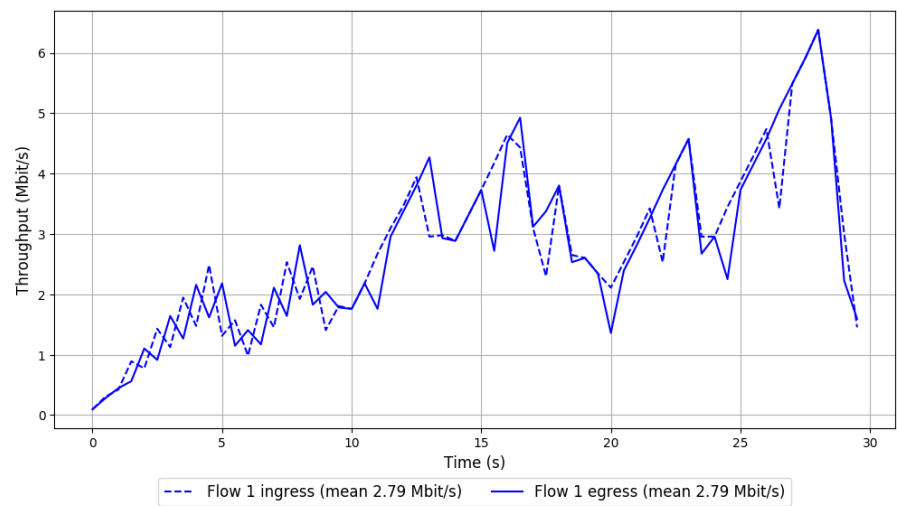
-- Flow 1:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 114.478 ms

Loss rate: 0.65%

Run 10: Report of LEDBAT — Data Link

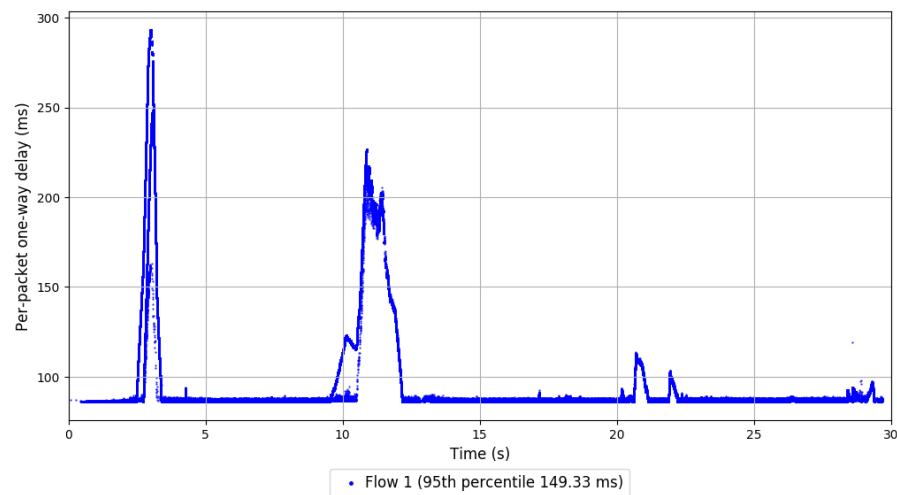
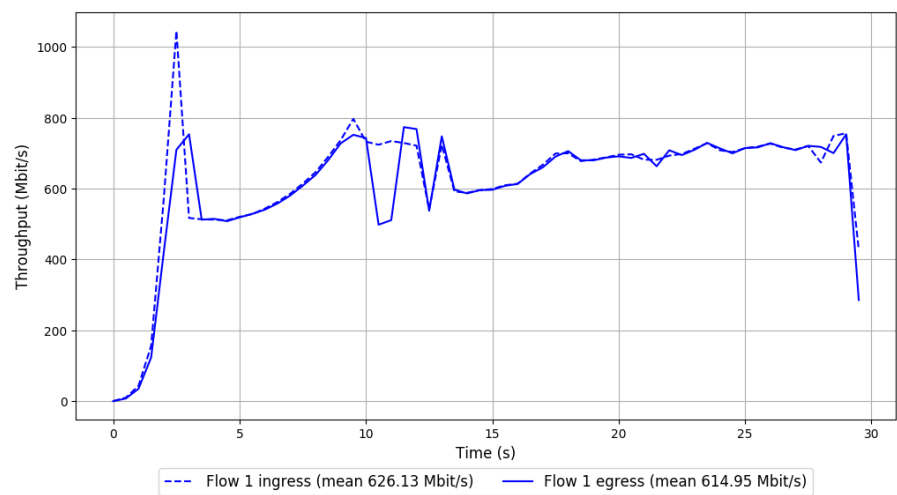


```
Run 1: Statistics of PCC

Start at: 2017-11-15 20:17:39
End at: 2017-11-15 20:18:09

# Below is generated by plot.py at 2017-11-16 00:11:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 614.95 Mbit/s
95th percentile per-packet one-way delay: 149.332 ms
Loss rate: 2.36%
-- Flow 1:
Average throughput: 614.95 Mbit/s
95th percentile per-packet one-way delay: 149.332 ms
Loss rate: 2.36%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-15 20:28:39

End at: 2017-11-15 20:29:09

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 619.70 Mbit/s

95th percentile per-packet one-way delay: 103.750 ms

Loss rate: 1.05%

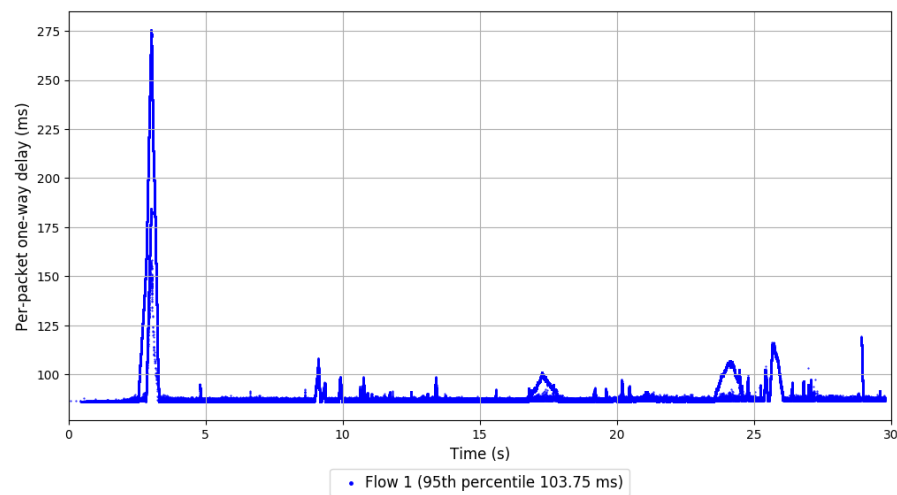
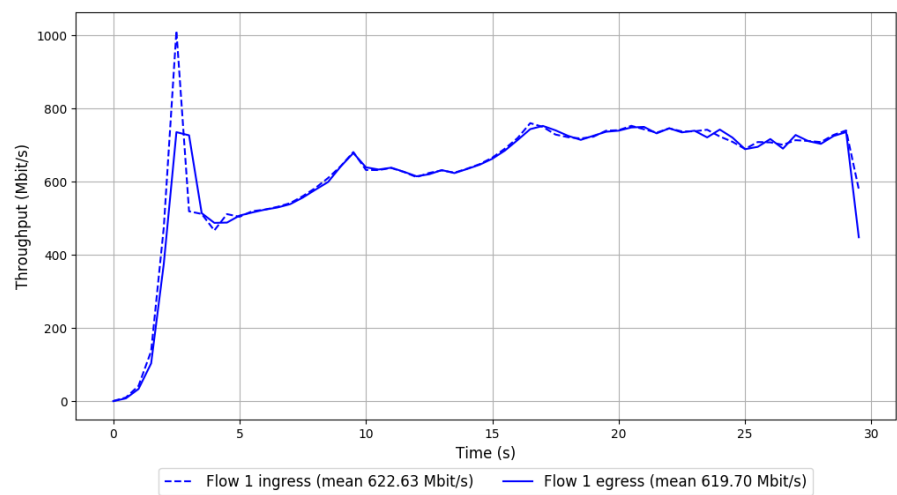
-- Flow 1:

Average throughput: 619.70 Mbit/s

95th percentile per-packet one-way delay: 103.750 ms

Loss rate: 1.05%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-15 20:39:44

End at: 2017-11-15 20:40:14

Below is generated by plot.py at 2017-11-16 00:12:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 642.73 Mbit/s

95th percentile per-packet one-way delay: 159.555 ms

Loss rate: 1.50%

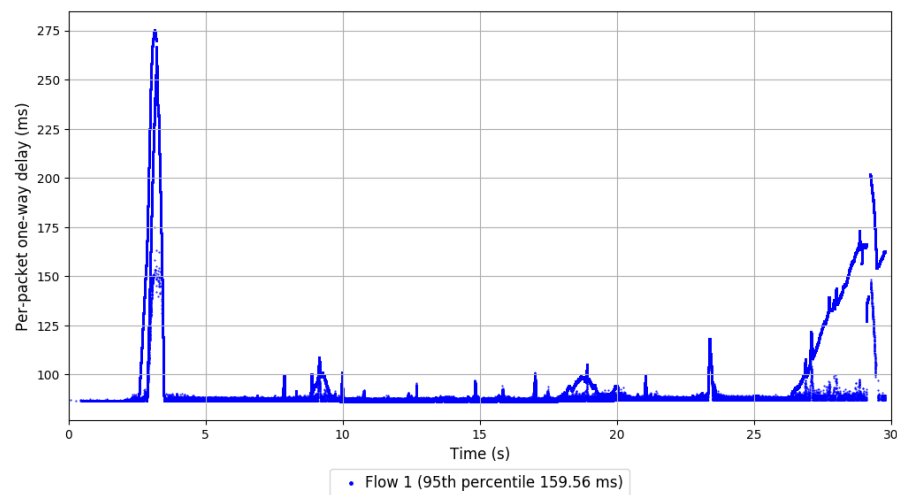
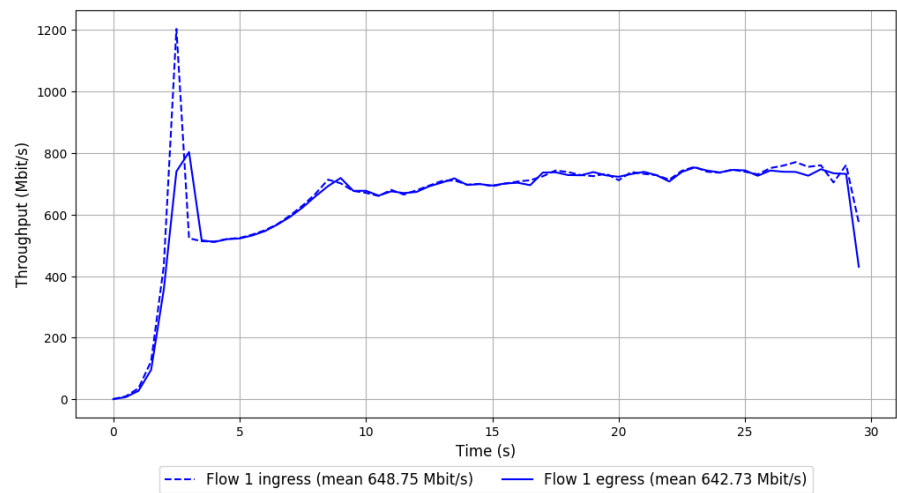
-- Flow 1:

Average throughput: 642.73 Mbit/s

95th percentile per-packet one-way delay: 159.555 ms

Loss rate: 1.50%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-15 20:50:49

End at: 2017-11-15 20:51:19

Below is generated by plot.py at 2017-11-16 00:12:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 623.92 Mbit/s

95th percentile per-packet one-way delay: 139.876 ms

Loss rate: 1.26%

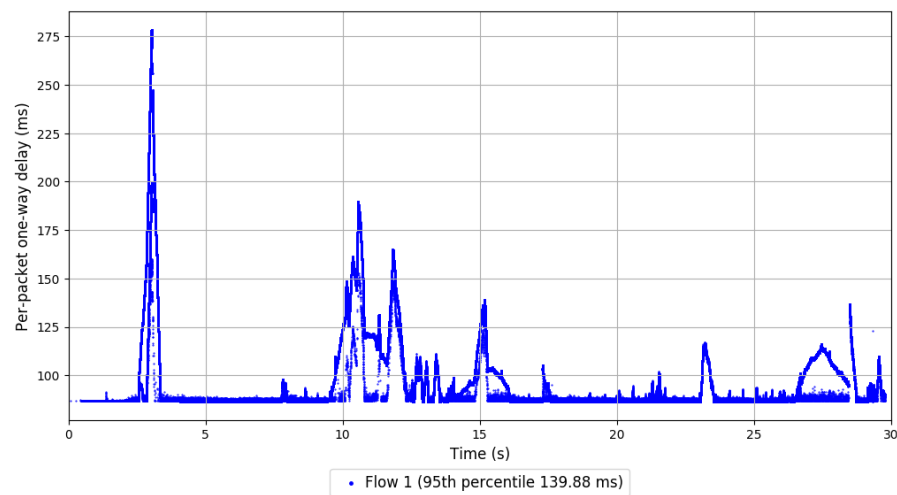
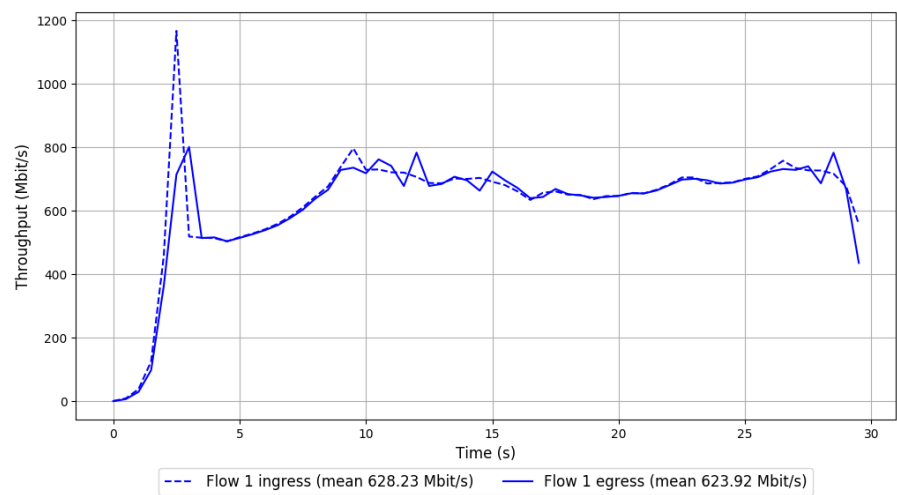
-- Flow 1:

Average throughput: 623.92 Mbit/s

95th percentile per-packet one-way delay: 139.876 ms

Loss rate: 1.26%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-15 21:01:51

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

Below is generated by plot.py at 2017-11-16 00:12:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 245.78 Mbit/s

95th percentile per-packet one-way delay: 114.424 ms

Loss rate: 0.67%

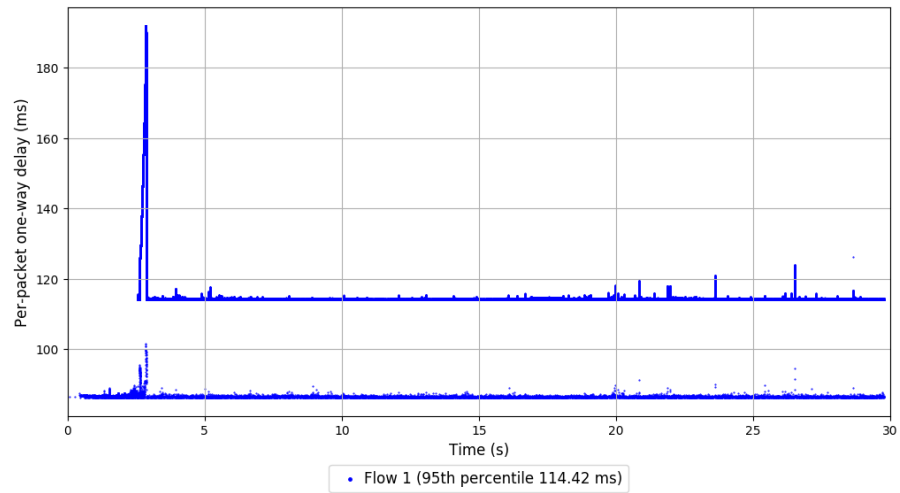
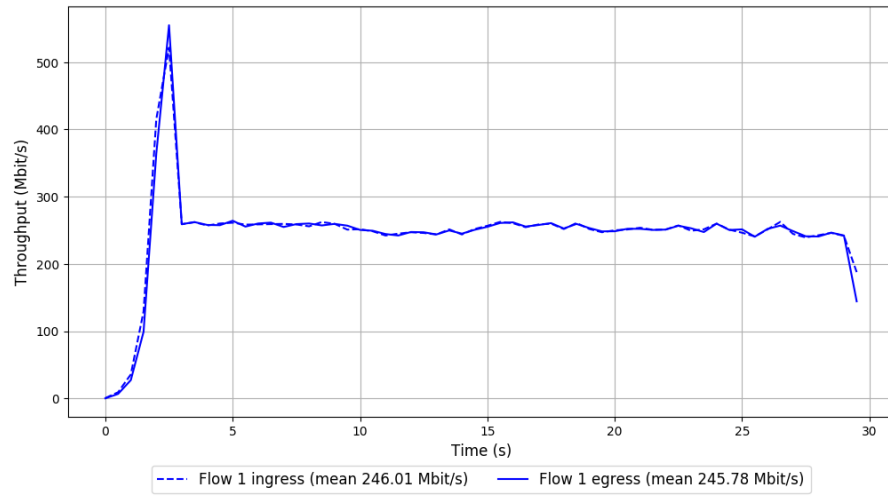
-- Flow 1:

Average throughput: 245.78 Mbit/s

95th percentile per-packet one-way delay: 114.424 ms

Loss rate: 0.67%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-15 21:12:31

End at: 2017-11-15 21:13:01

Below is generated by plot.py at 2017-11-16 00:12:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 603.03 Mbit/s

95th percentile per-packet one-way delay: 231.802 ms

Loss rate: 2.66%

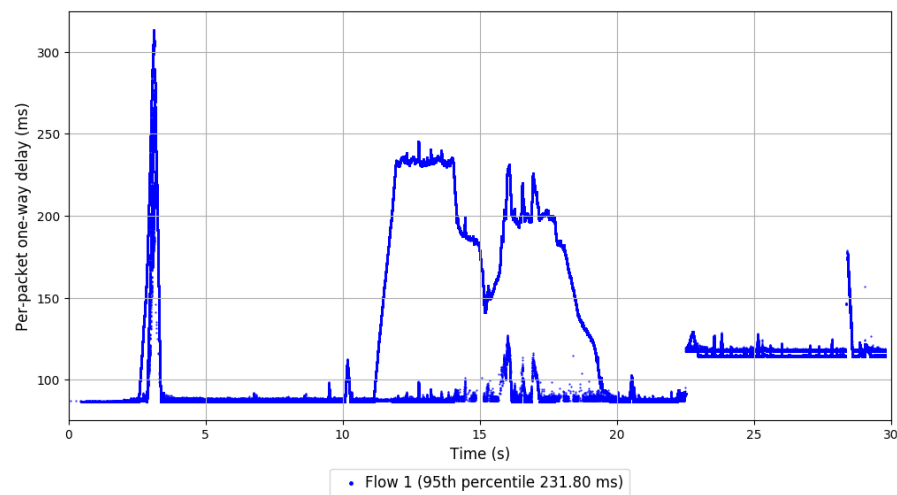
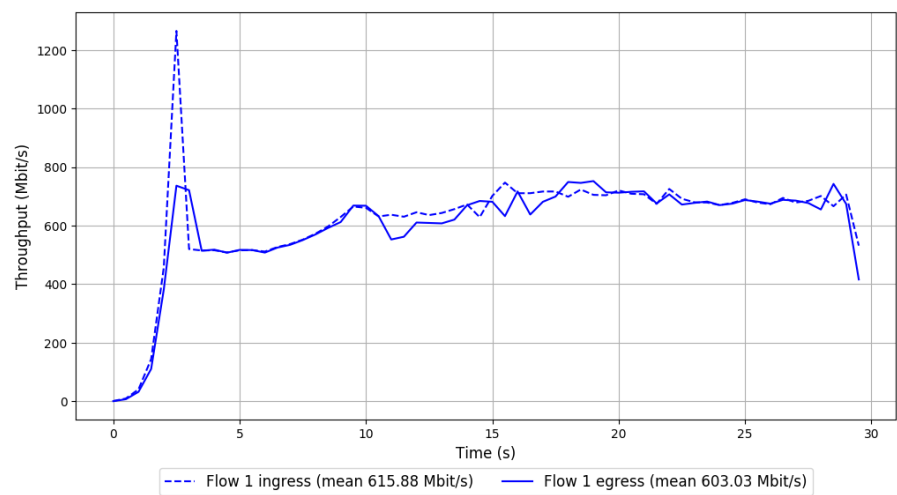
-- Flow 1:

Average throughput: 603.03 Mbit/s

95th percentile per-packet one-way delay: 231.802 ms

Loss rate: 2.66%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-15 21:23:42

End at: 2017-11-15 21:24:12

Below is generated by plot.py at 2017-11-16 00:12:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 606.45 Mbit/s

95th percentile per-packet one-way delay: 127.422 ms

Loss rate: 2.59%

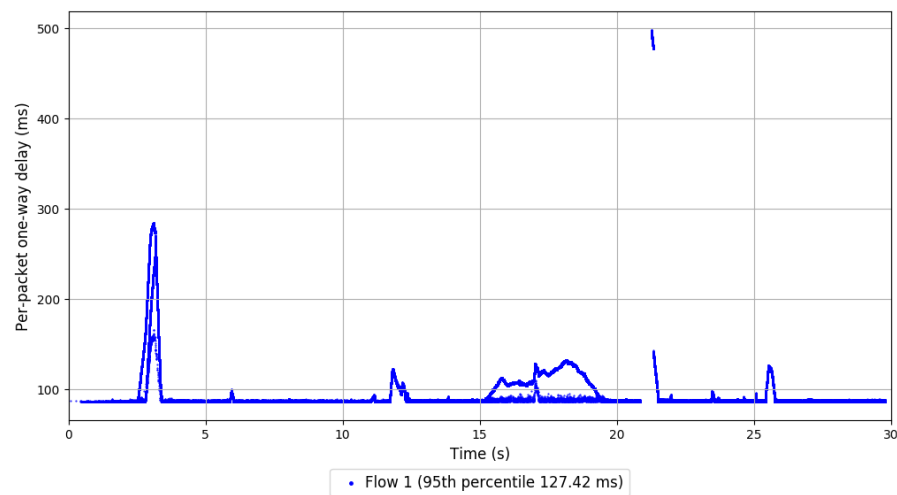
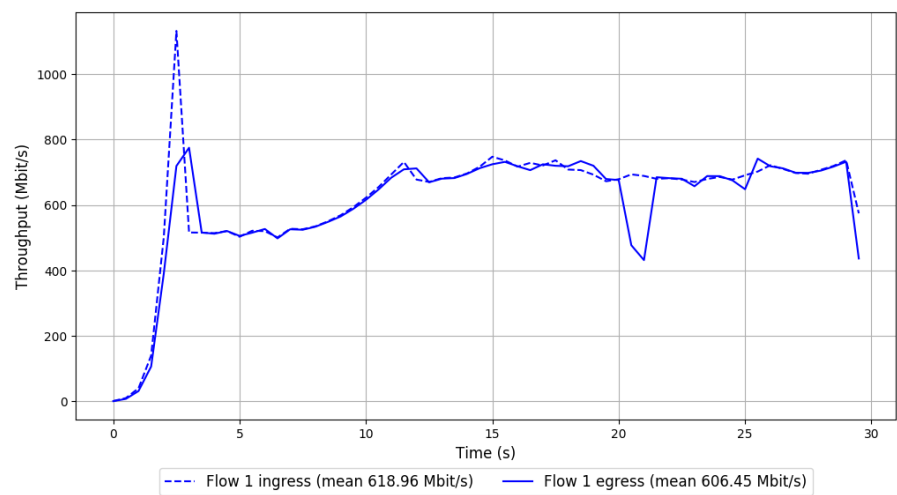
-- Flow 1:

Average throughput: 606.45 Mbit/s

95th percentile per-packet one-way delay: 127.422 ms

Loss rate: 2.59%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

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

End at: 2017-11-15 21:37:45

Below is generated by plot.py at 2017-11-16 00:12:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.42 Mbit/s

95th percentile per-packet one-way delay: 114.120 ms

Loss rate: 2.47%

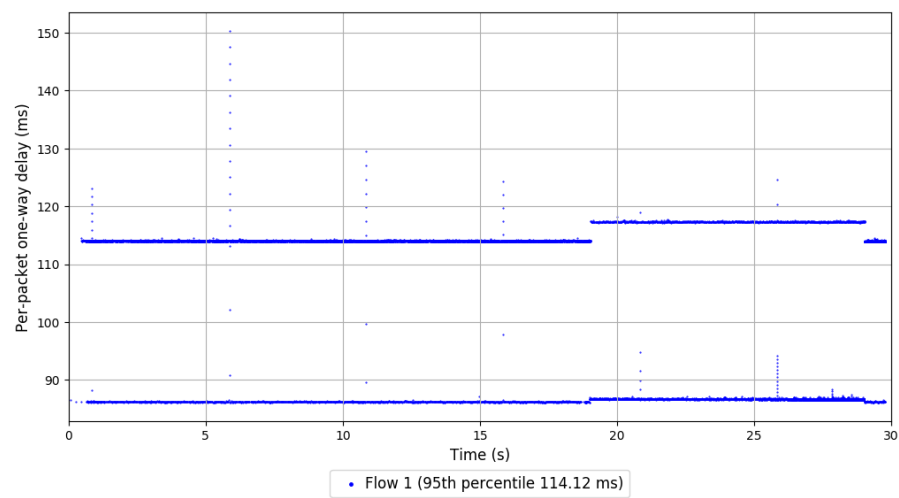
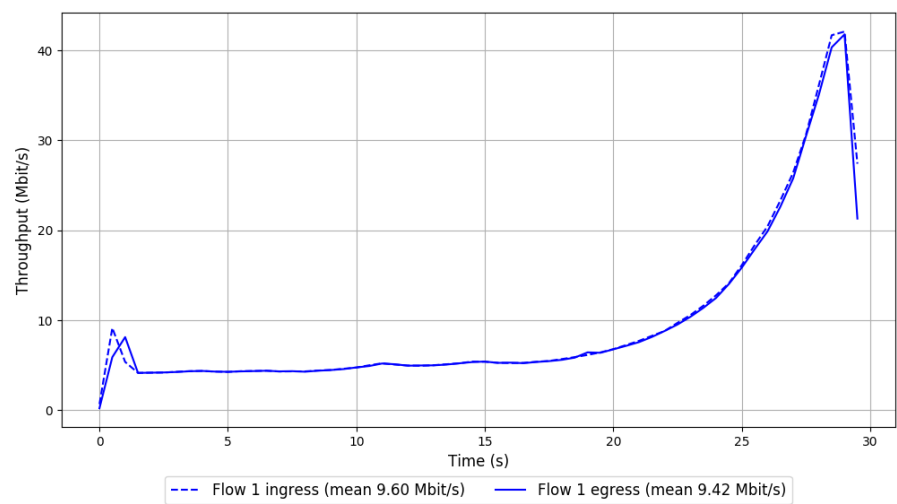
-- Flow 1:

Average throughput: 9.42 Mbit/s

95th percentile per-packet one-way delay: 114.120 ms

Loss rate: 2.47%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-15 21:47:43

End at: 2017-11-15 21:48:13

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 655.61 Mbit/s

95th percentile per-packet one-way delay: 182.722 ms

Loss rate: 1.44%

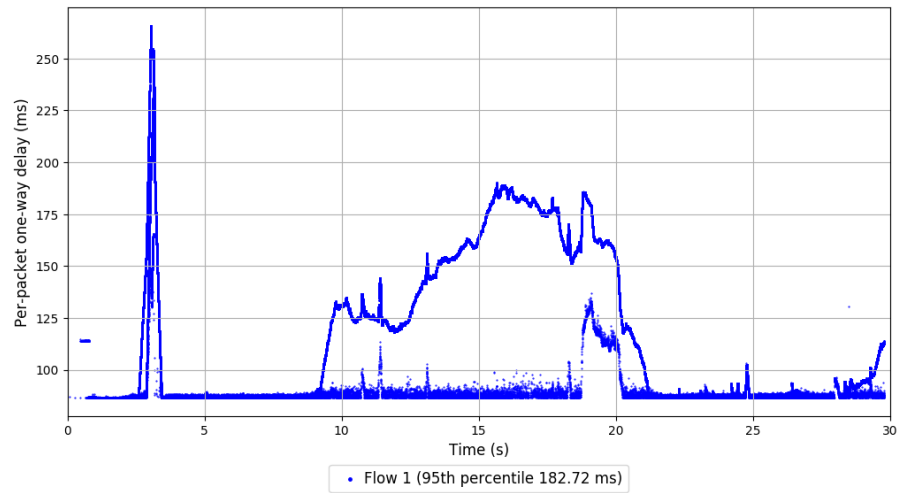
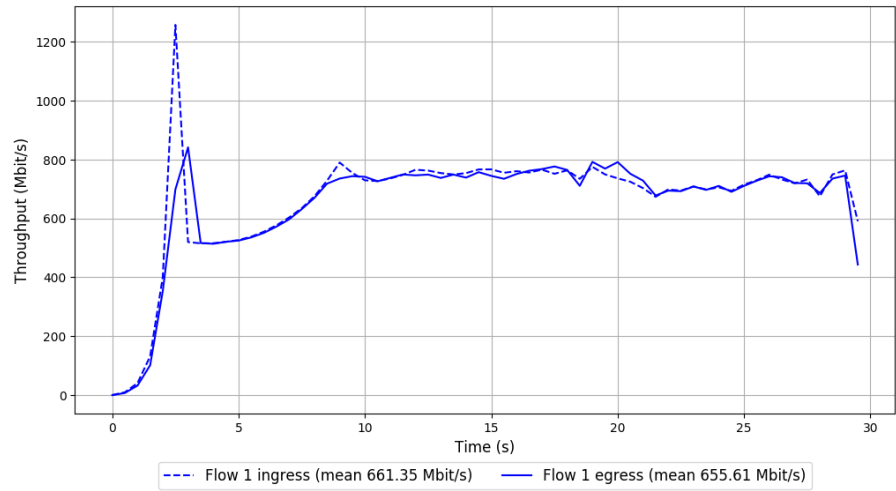
-- Flow 1:

Average throughput: 655.61 Mbit/s

95th percentile per-packet one-way delay: 182.722 ms

Loss rate: 1.44%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-15 21:58:23

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

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.39 Mbit/s

95th percentile per-packet one-way delay: 117.432 ms

Loss rate: 4.49%

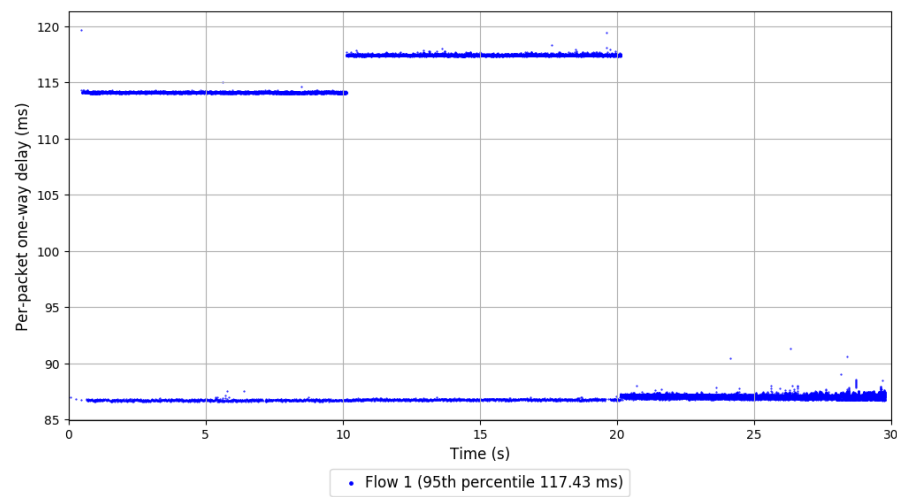
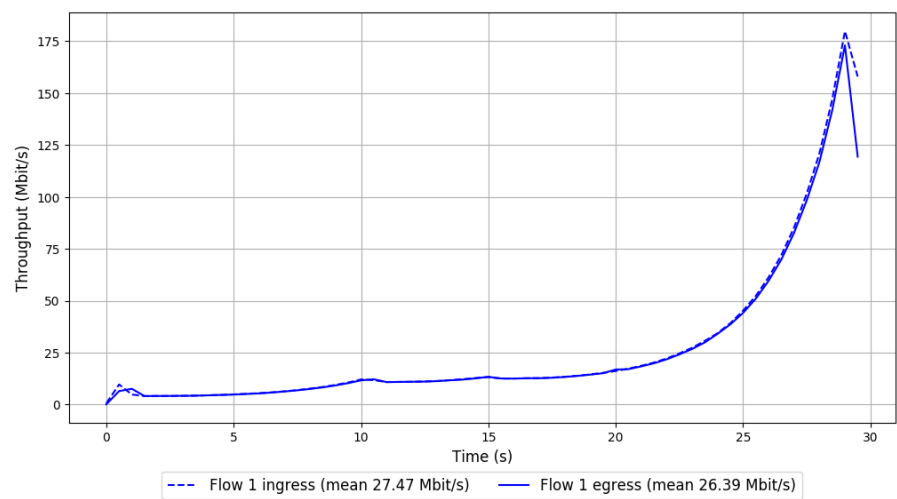
-- Flow 1:

Average throughput: 26.39 Mbit/s

95th percentile per-packet one-way delay: 117.432 ms

Loss rate: 4.49%

Run 10: Report of PCC — Data Link

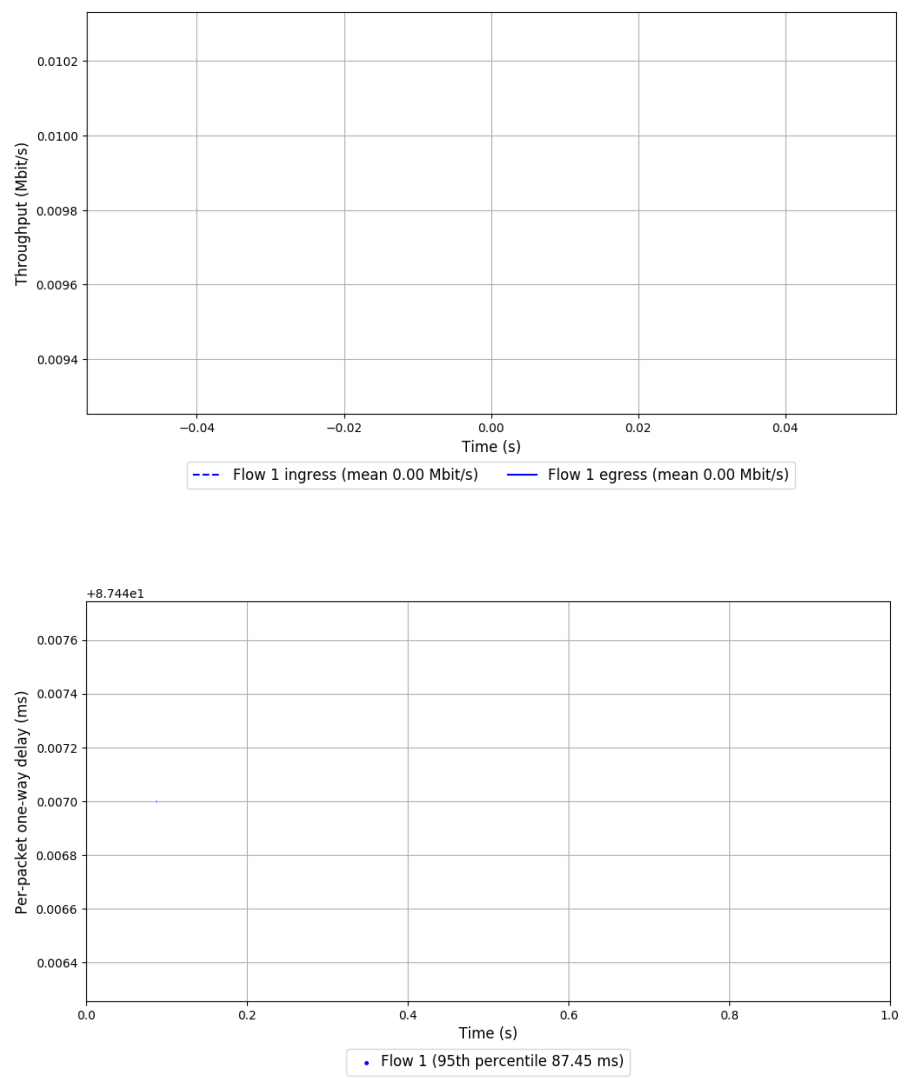


Run 1: Statistics of QUIC Cubic

Start at: 2017-11-15 20:26:28

End at: 2017-11-15 20:26:58

Run 1: Report of QUIC Cubic — Data Link

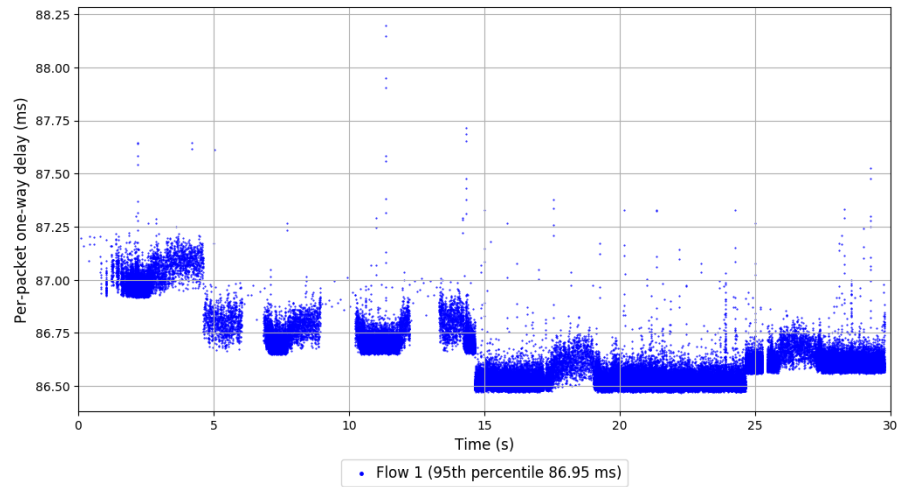
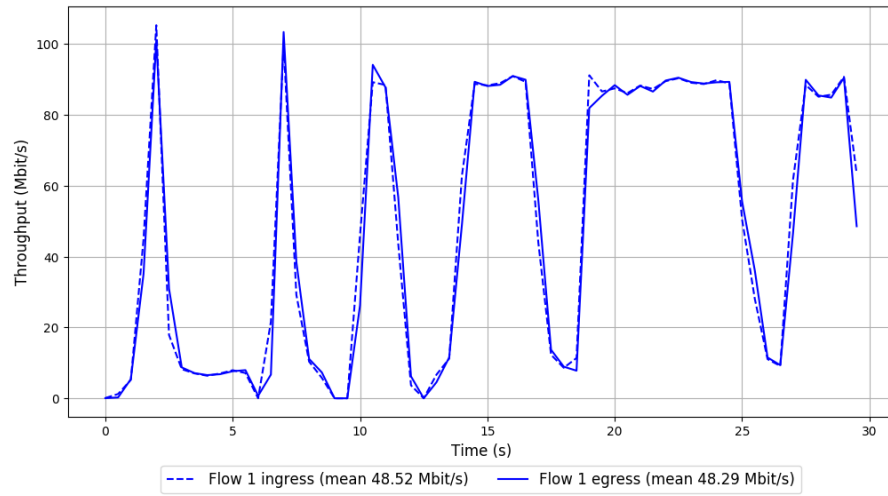


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-11-15 20:37:29
End at: 2017-11-15 20:37:59

# Below is generated by plot.py at 2017-11-16 00:13:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.29 Mbit/s
95th percentile per-packet one-way delay: 86.952 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 48.29 Mbit/s
95th percentile per-packet one-way delay: 86.952 ms
Loss rate: 1.06%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-15 20:48:34

End at: 2017-11-15 20:49:04

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.71 Mbit/s

95th percentile per-packet one-way delay: 86.878 ms

Loss rate: 0.87%

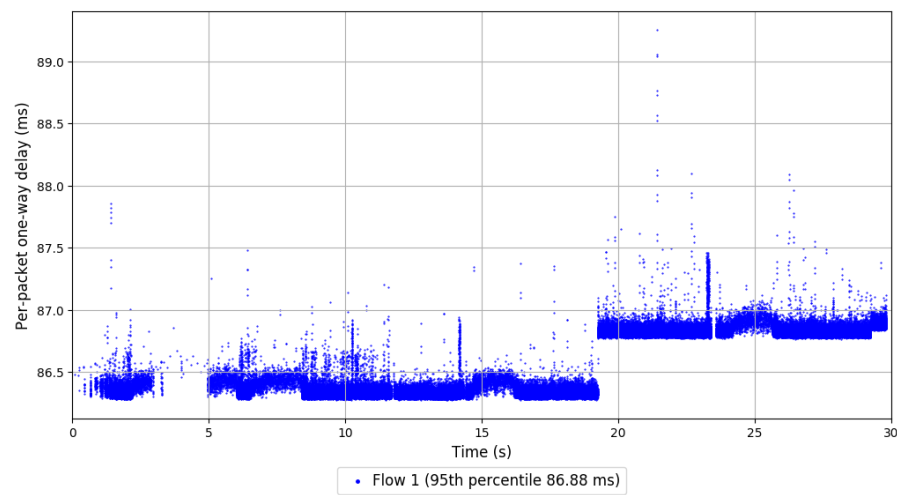
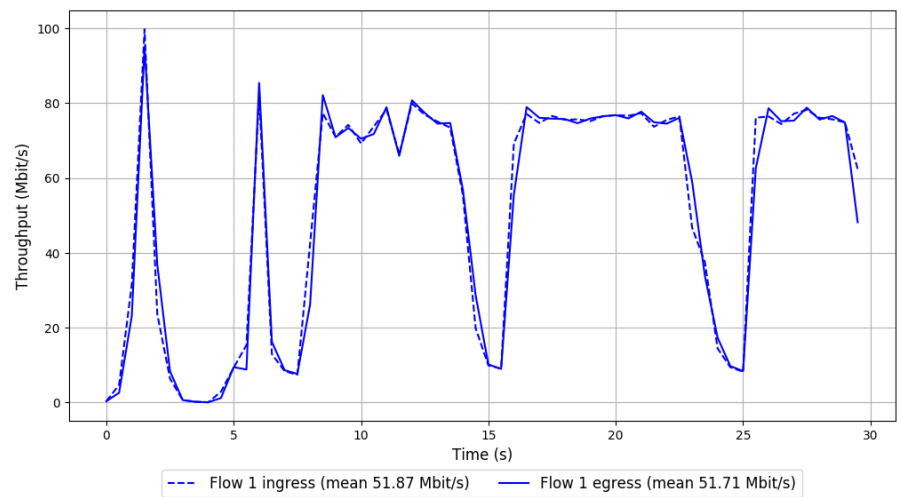
-- Flow 1:

Average throughput: 51.71 Mbit/s

95th percentile per-packet one-way delay: 86.878 ms

Loss rate: 0.87%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-15 20:59:35

End at: 2017-11-15 21:00:06

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.82 Mbit/s

95th percentile per-packet one-way delay: 87.050 ms

Loss rate: 0.93%

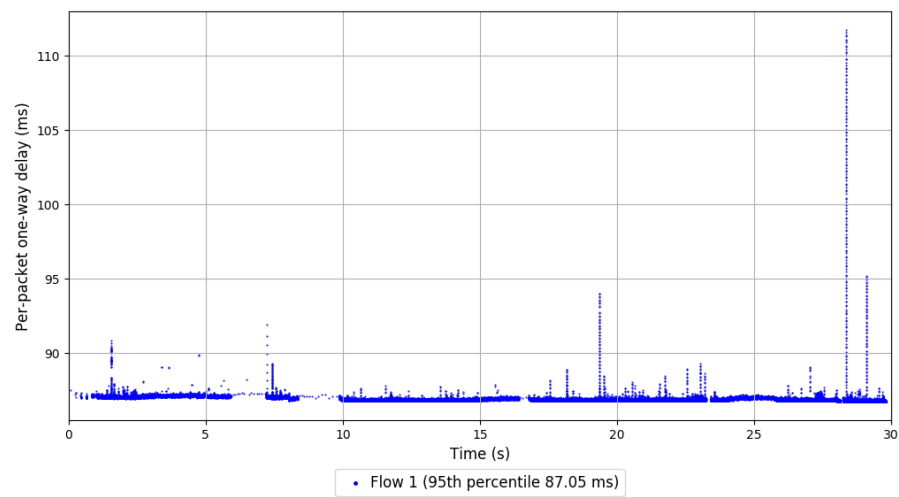
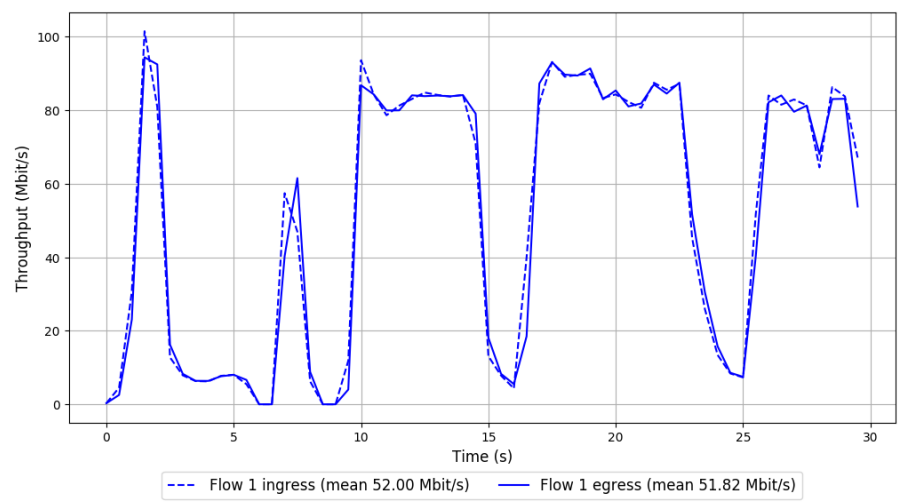
-- Flow 1:

Average throughput: 51.82 Mbit/s

95th percentile per-packet one-way delay: 87.050 ms

Loss rate: 0.93%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

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

End at: 2017-11-15 21:10:51

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.30 Mbit/s

95th percentile per-packet one-way delay: 87.082 ms

Loss rate: 0.88%

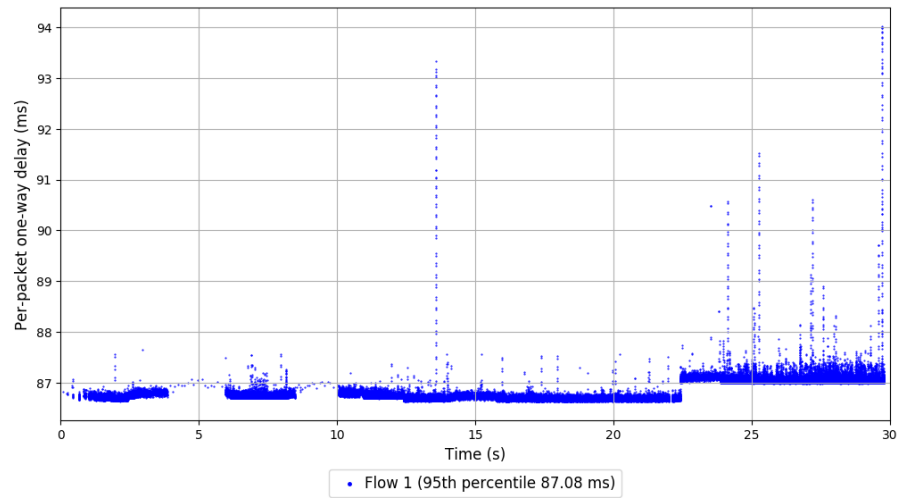
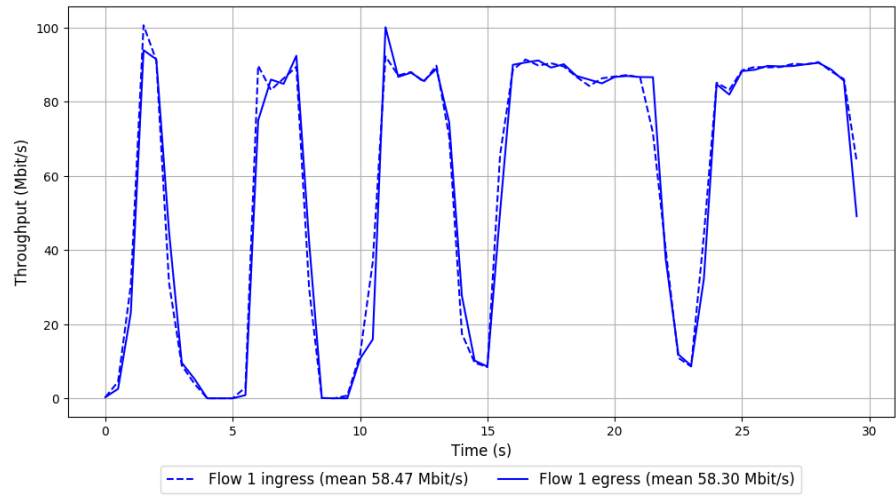
-- Flow 1:

Average throughput: 58.30 Mbit/s

95th percentile per-packet one-way delay: 87.082 ms

Loss rate: 0.88%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

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

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

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.74 Mbit/s

95th percentile per-packet one-way delay: 114.331 ms

Loss rate: 0.79%

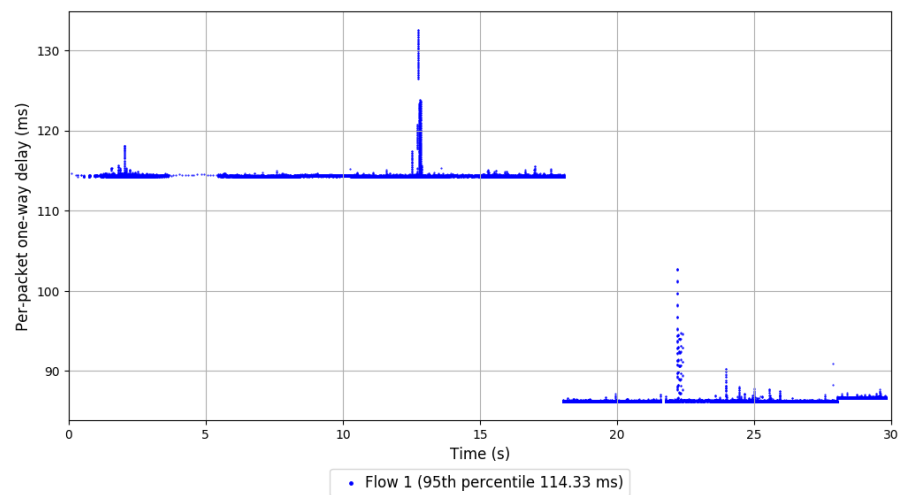
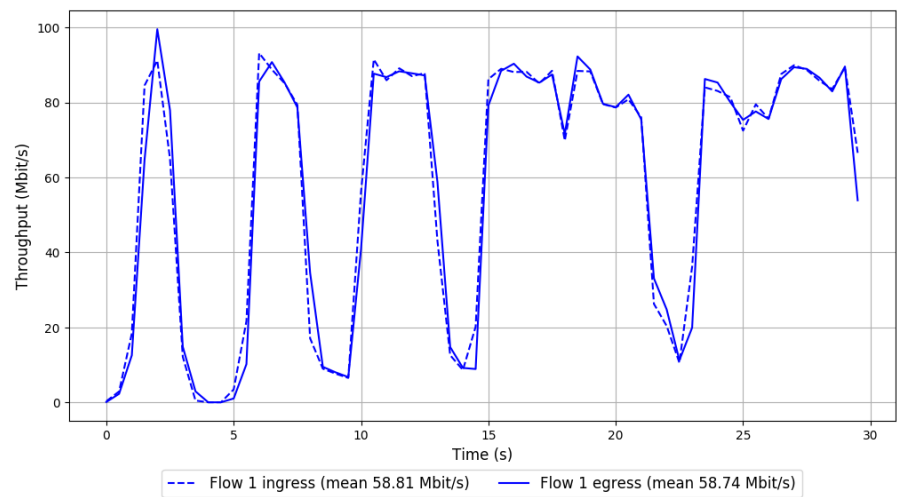
-- Flow 1:

Average throughput: 58.74 Mbit/s

95th percentile per-packet one-way delay: 114.331 ms

Loss rate: 0.79%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-15 21:33:20

End at: 2017-11-15 21:33:50

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.84 Mbit/s

95th percentile per-packet one-way delay: 87.015 ms

Loss rate: 0.83%

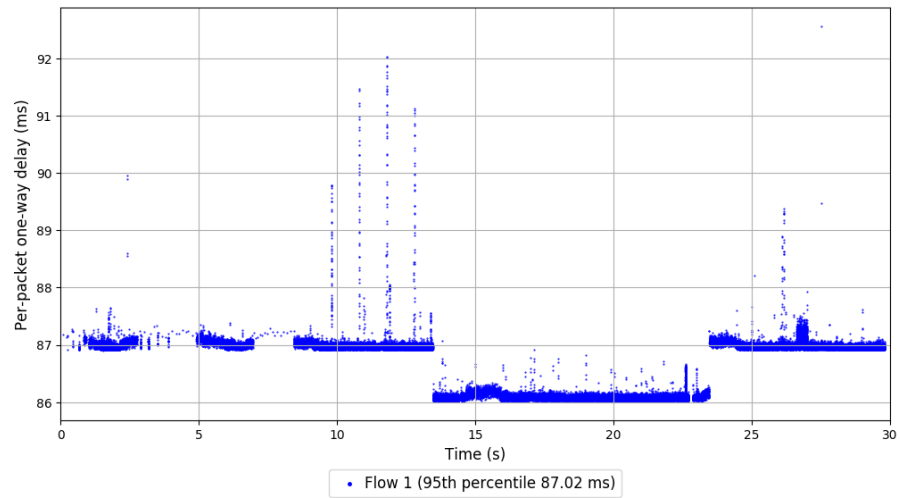
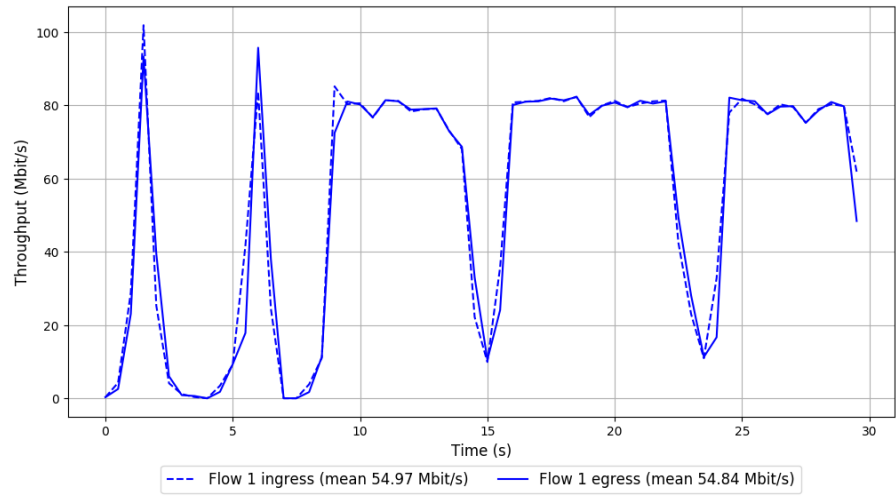
-- Flow 1:

Average throughput: 54.84 Mbit/s

95th percentile per-packet one-way delay: 87.015 ms

Loss rate: 0.83%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-15 21:45:27

End at: 2017-11-15 21:45:57

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.48 Mbit/s

95th percentile per-packet one-way delay: 86.647 ms

Loss rate: 0.95%

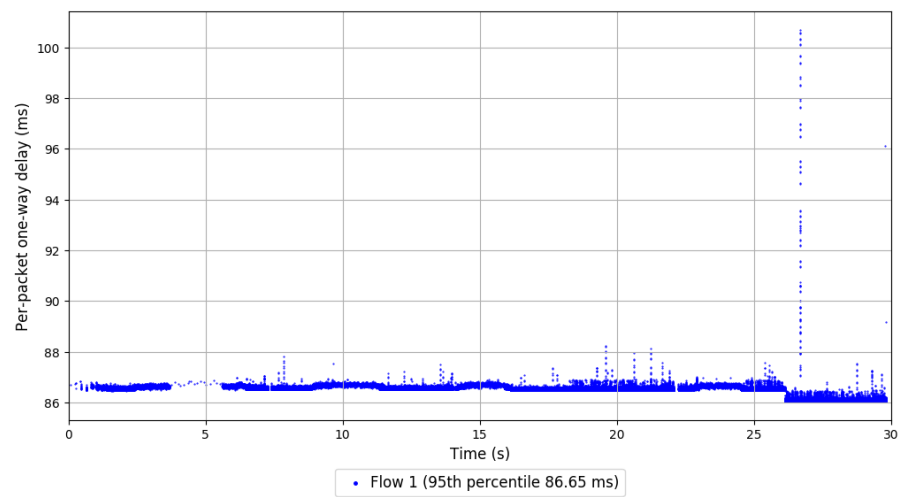
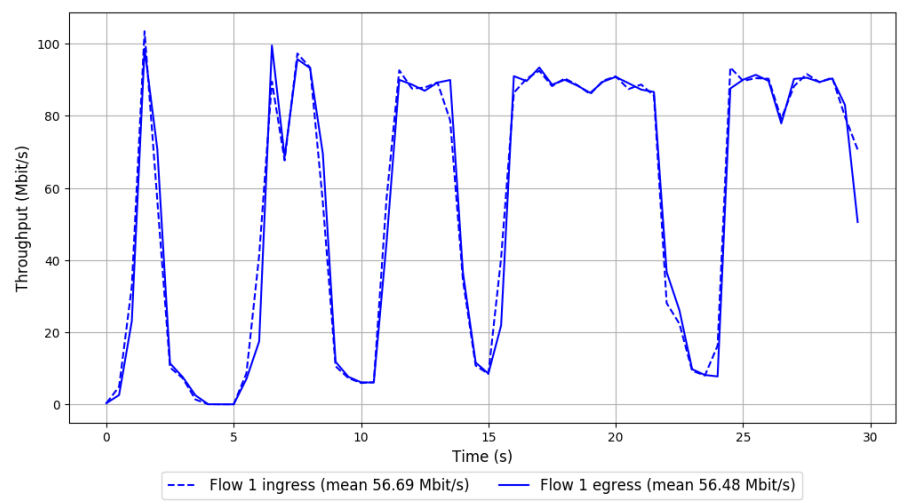
-- Flow 1:

Average throughput: 56.48 Mbit/s

95th percentile per-packet one-way delay: 86.647 ms

Loss rate: 0.95%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

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

End at: 2017-11-15 21:56:41

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.57 Mbit/s

95th percentile per-packet one-way delay: 114.332 ms

Loss rate: 1.07%

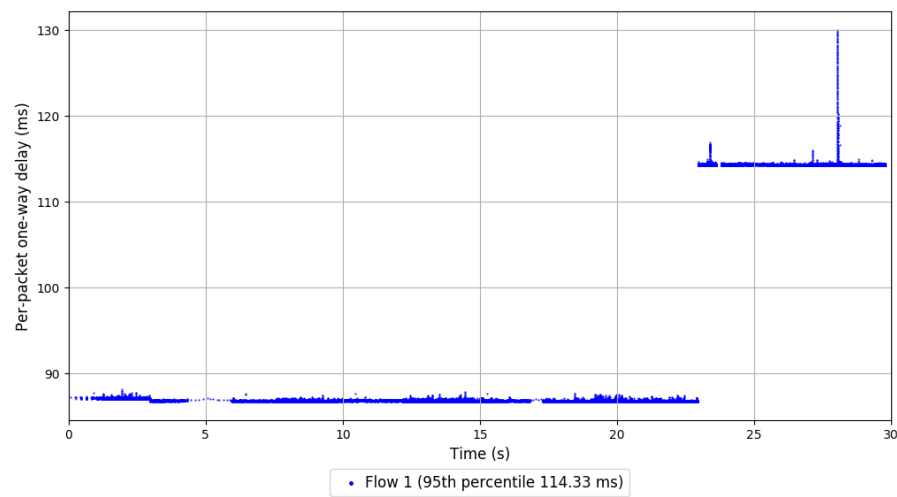
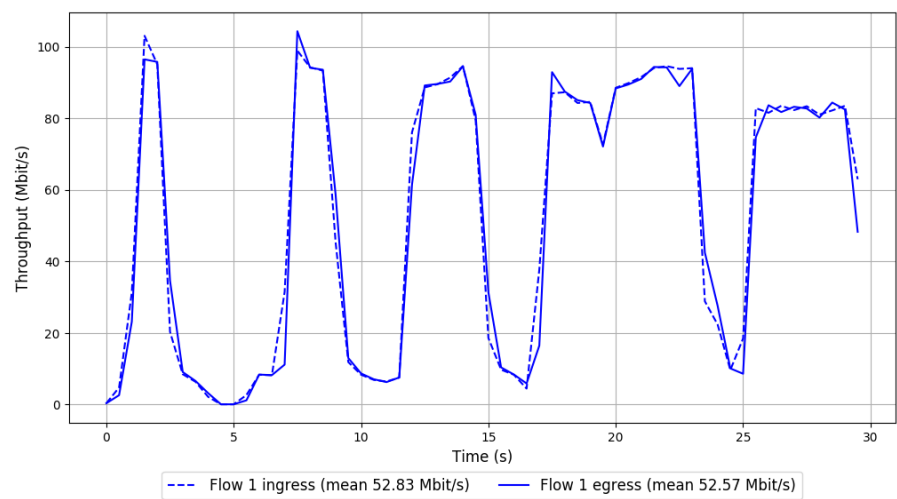
-- Flow 1:

Average throughput: 52.57 Mbit/s

95th percentile per-packet one-way delay: 114.332 ms

Loss rate: 1.07%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-11-15 22:06:18

End at: 2017-11-15 22:06:48

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.26 Mbit/s

95th percentile per-packet one-way delay: 114.079 ms

Loss rate: 0.89%

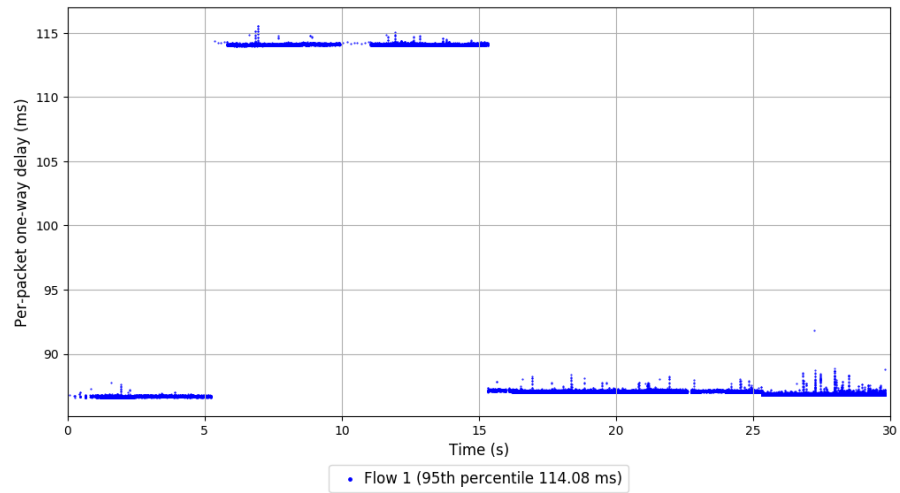
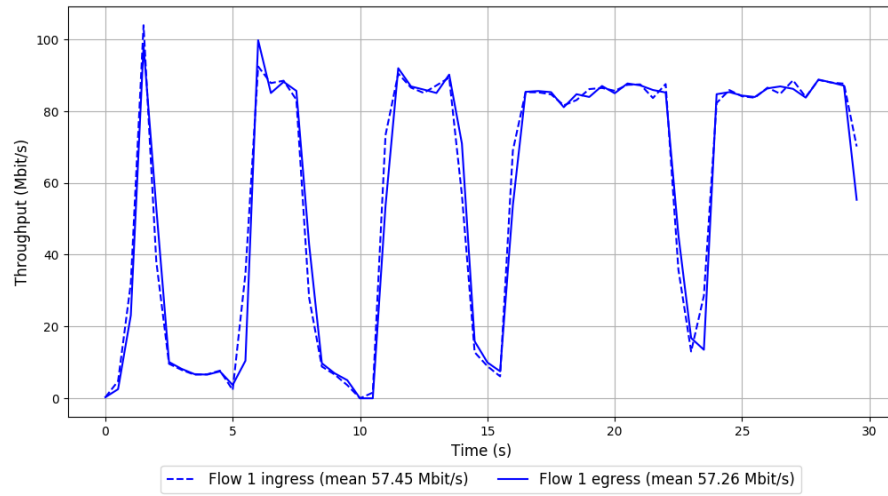
-- Flow 1:

Average throughput: 57.26 Mbit/s

95th percentile per-packet one-way delay: 114.079 ms

Loss rate: 0.89%

Run 10: Report of QUIC Cubic — Data Link

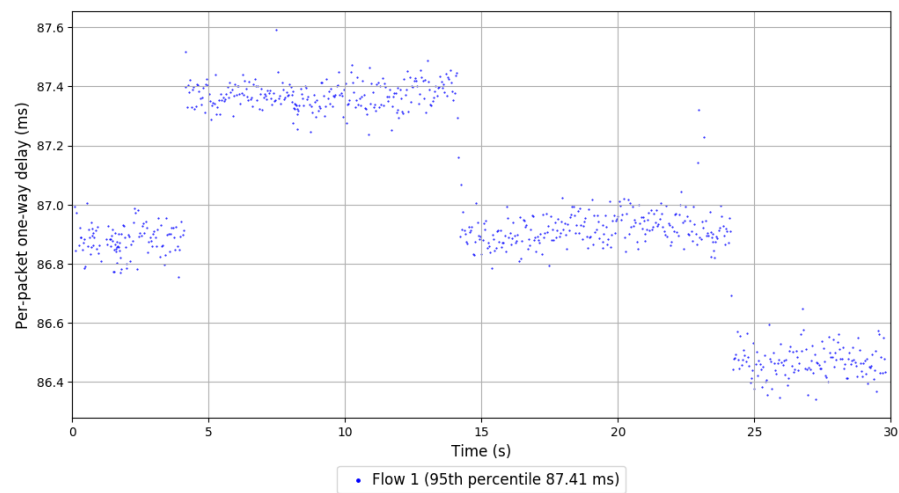
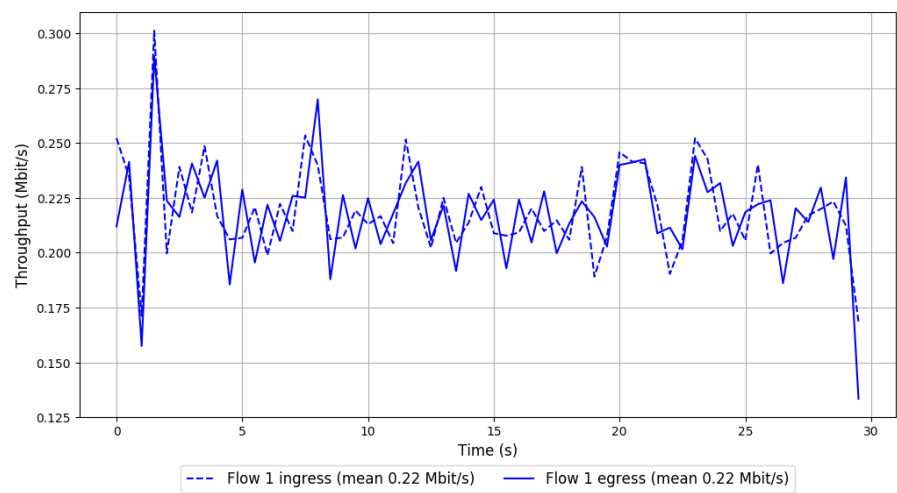


```
Run 1: Statistics of SCReAM

Start at: 2017-11-15 20:25:49
End at: 2017-11-15 20:26:19

# Below is generated by plot.py at 2017-11-16 00:13:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.414 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.414 ms
Loss rate: 0.52%
```

Run 1: Report of SReAM — Data Link

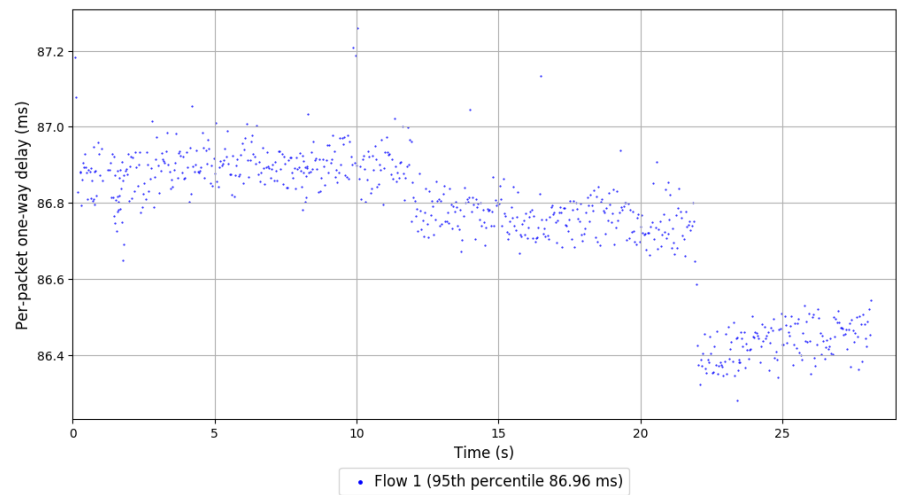
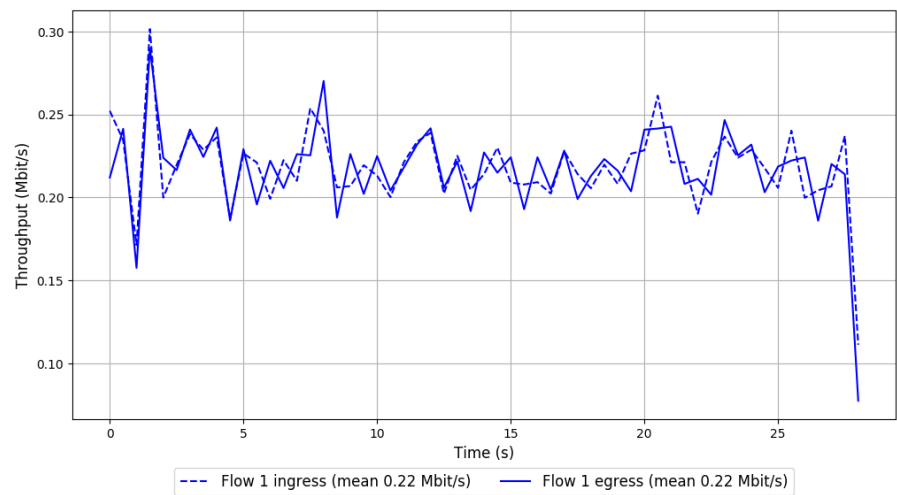


```
Run 2: Statistics of SCReAM

Start at: 2017-11-15 20:36:50
End at: 2017-11-15 20:37:20

# Below is generated by plot.py at 2017-11-16 00:13:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.959 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.959 ms
Loss rate: 0.74%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-11-15 20:47:55

End at: 2017-11-15 20:48:25

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.568 ms

Loss rate: 0.51%

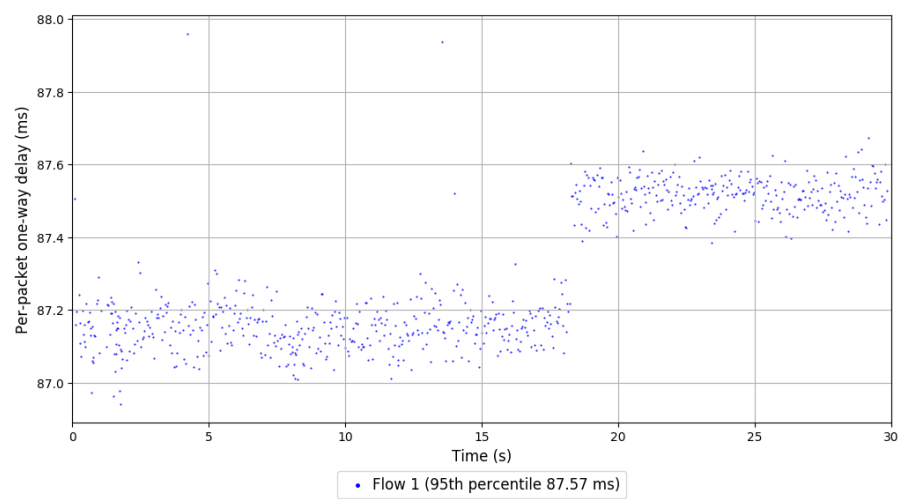
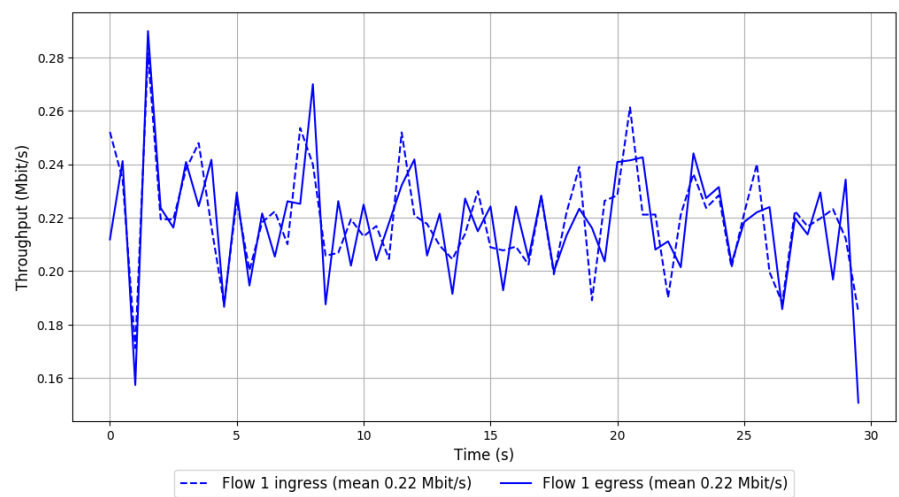
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.568 ms

Loss rate: 0.51%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-11-15 20:58:57

End at: 2017-11-15 20:59:27

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.173 ms

Loss rate: 0.81%

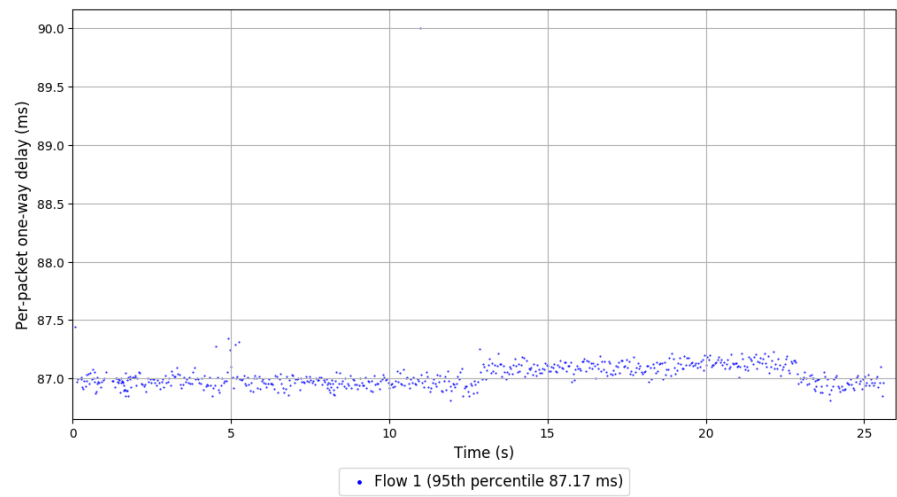
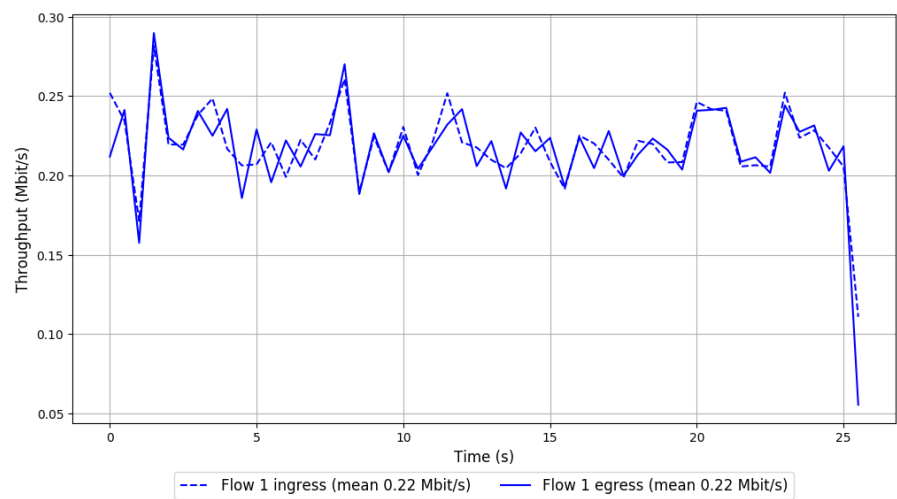
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.173 ms

Loss rate: 0.81%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

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

End at: 2017-11-15 21:10:12

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.931 ms

Loss rate: 0.64%

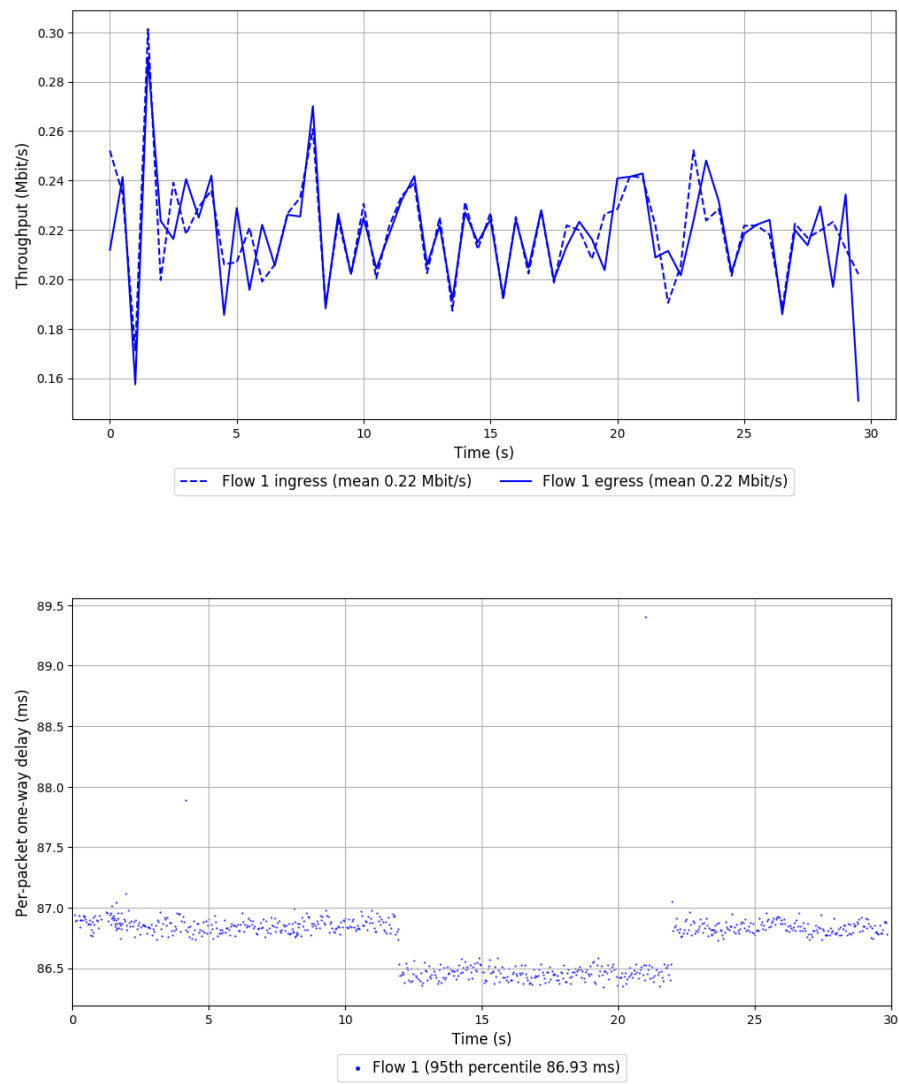
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.931 ms

Loss rate: 0.64%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-15 21:20:47

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

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.586 ms

Loss rate: 0.51%

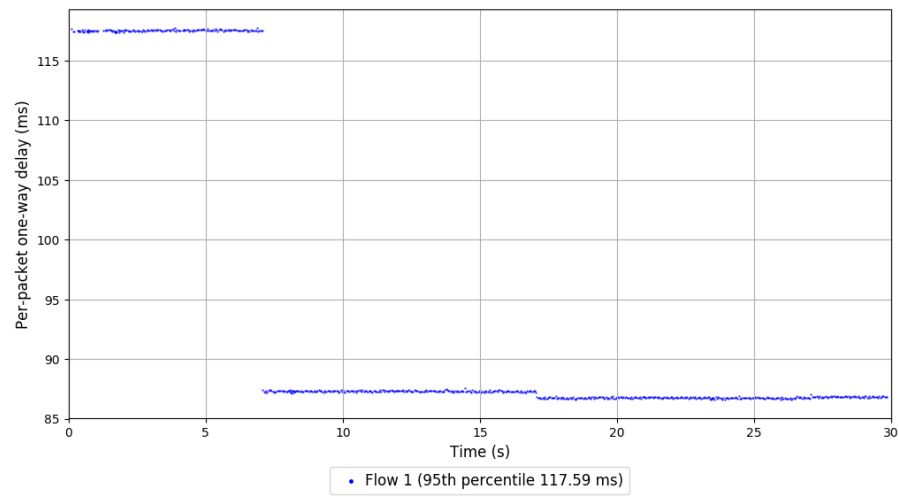
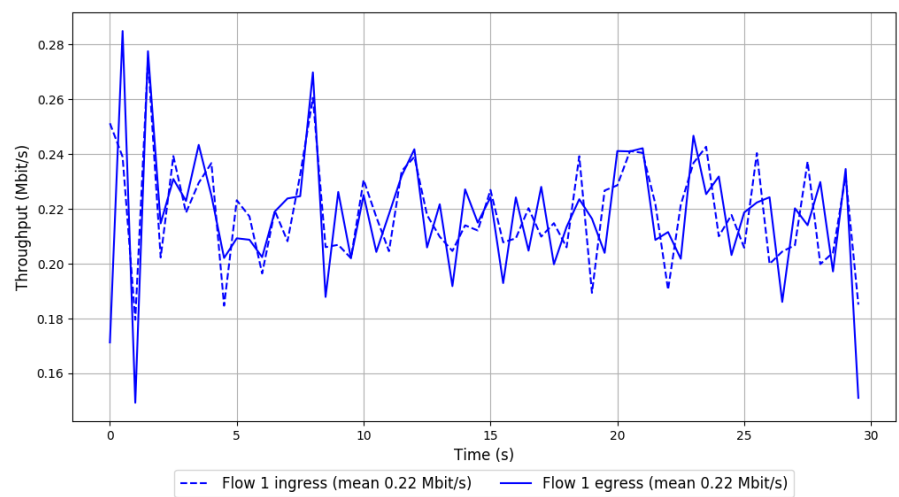
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.586 ms

Loss rate: 0.51%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-11-15 21:32:41

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

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.834 ms

Loss rate: 0.51%

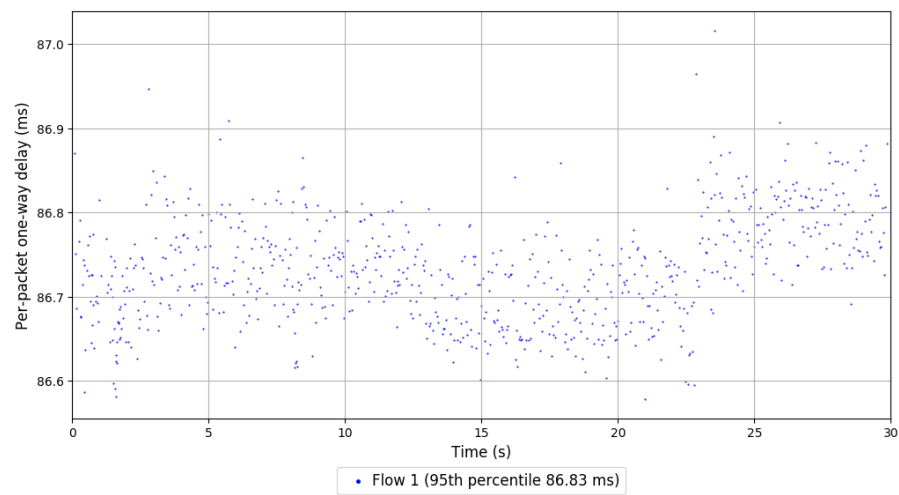
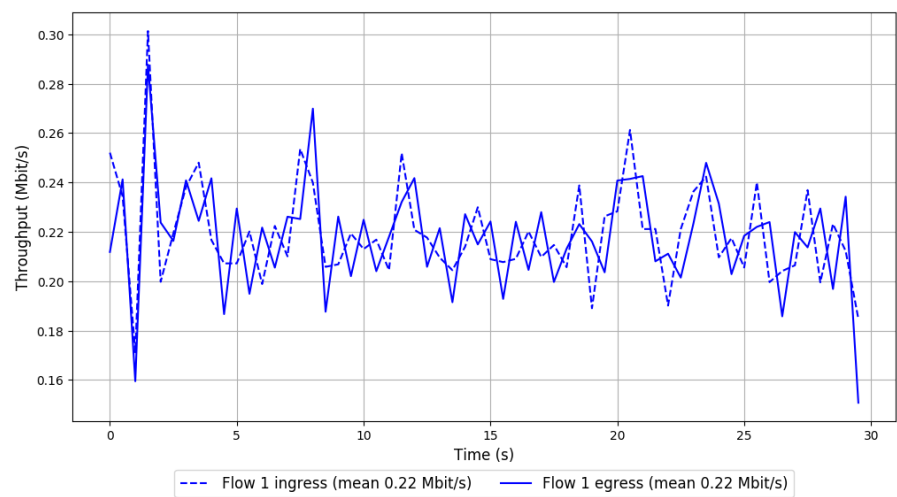
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.834 ms

Loss rate: 0.51%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-11-15 21:44:48

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

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.234 ms

Loss rate: 0.57%

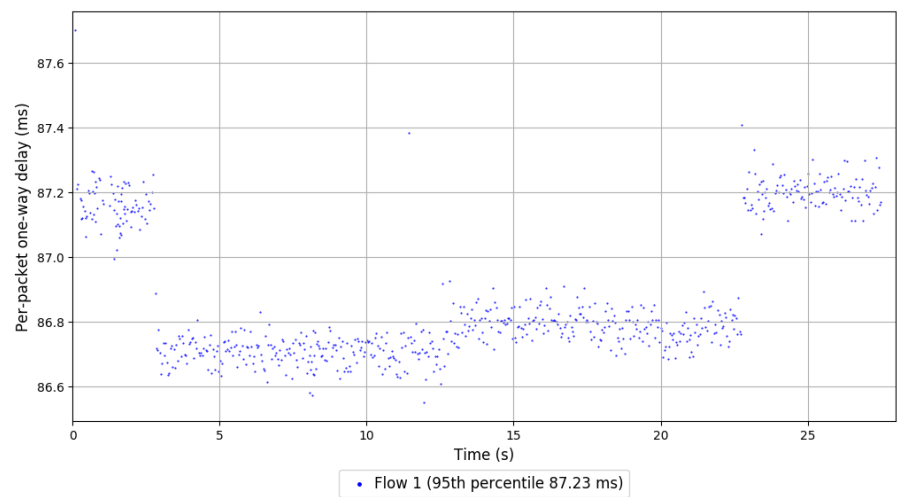
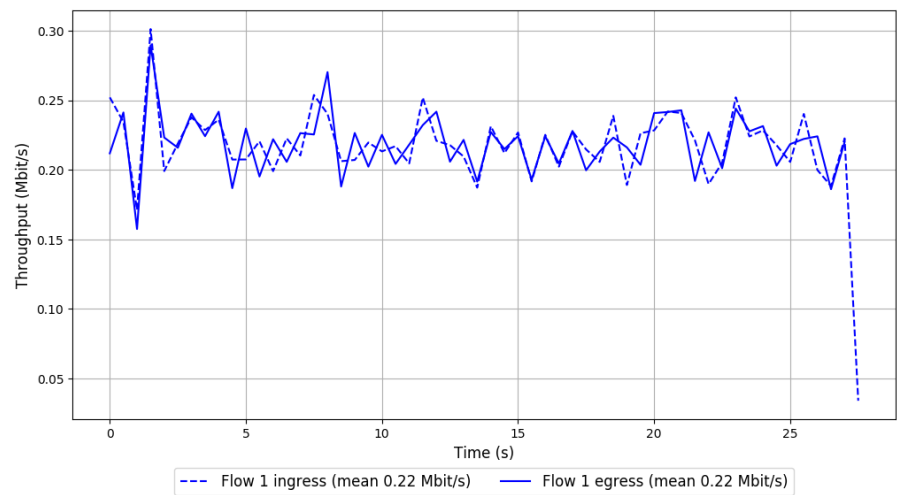
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.234 ms

Loss rate: 0.57%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-11-15 21:55:32

End at: 2017-11-15 21:56:02

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.307 ms

Loss rate: 0.51%

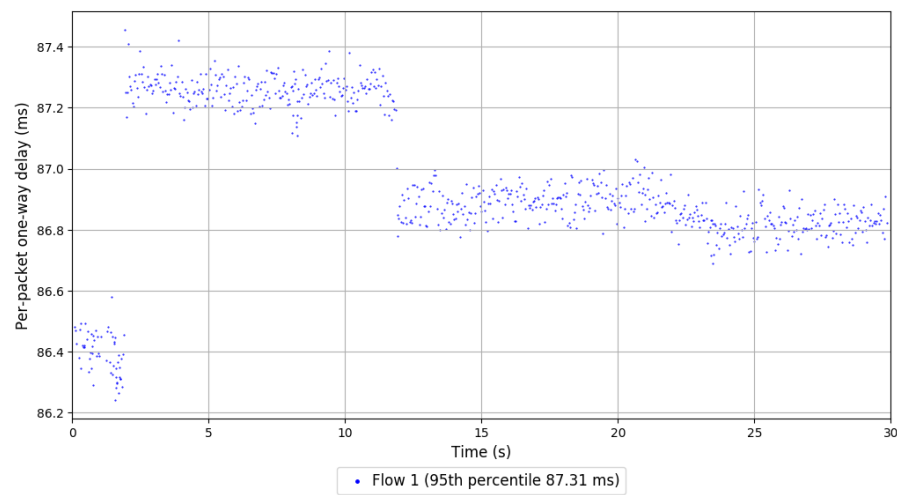
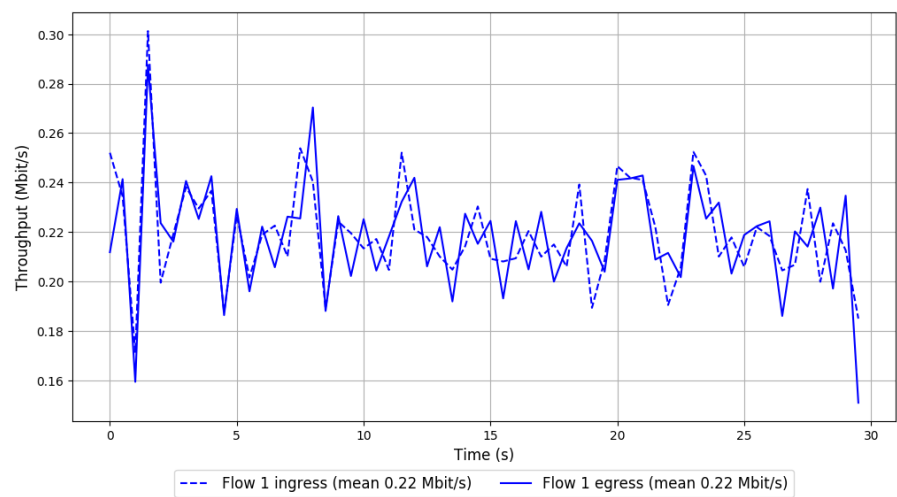
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.307 ms

Loss rate: 0.51%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

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

End at: 2017-11-15 22:06:09

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.356 ms

Loss rate: 0.51%

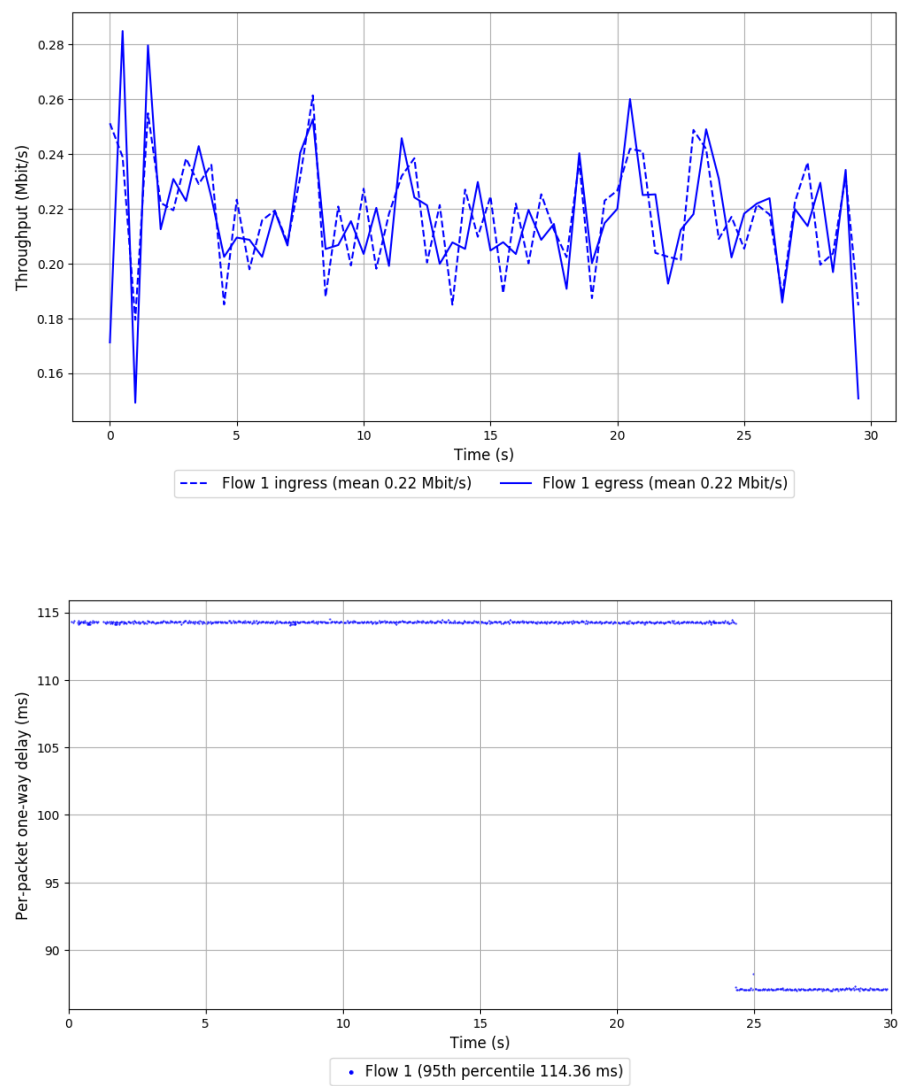
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.356 ms

Loss rate: 0.51%

Run 10: Report of SReAM — Data Link

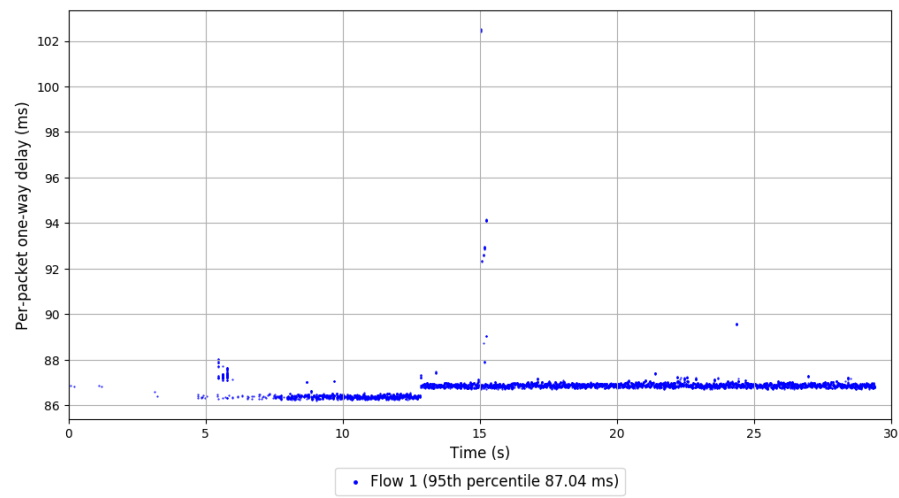
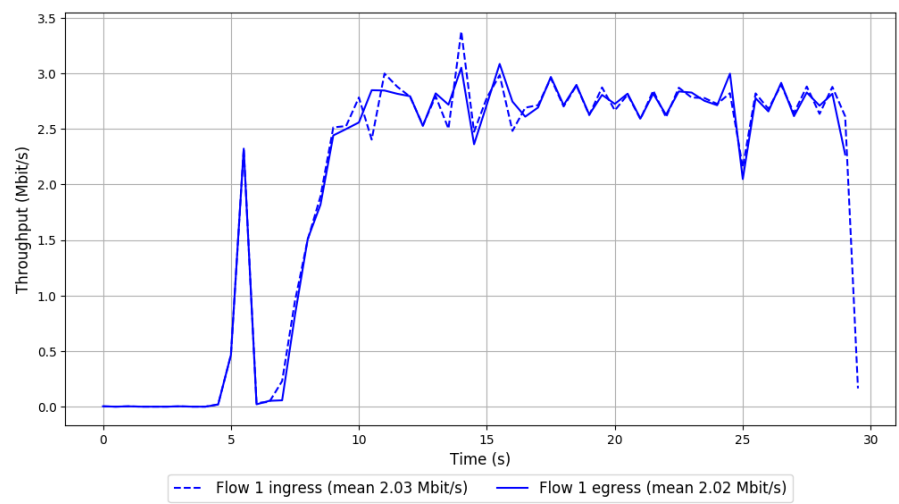


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-15 20:20:10
End at: 2017-11-15 20:20:40

# Below is generated by plot.py at 2017-11-16 00:13:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 87.039 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 87.039 ms
Loss rate: 0.85%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-15 20:31:13

End at: 2017-11-15 20:31:43

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 86.966 ms

Loss rate: 0.66%

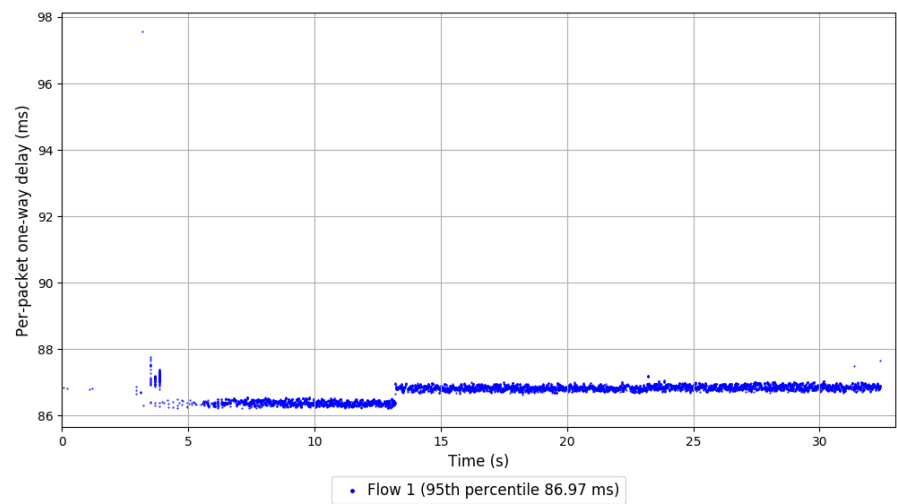
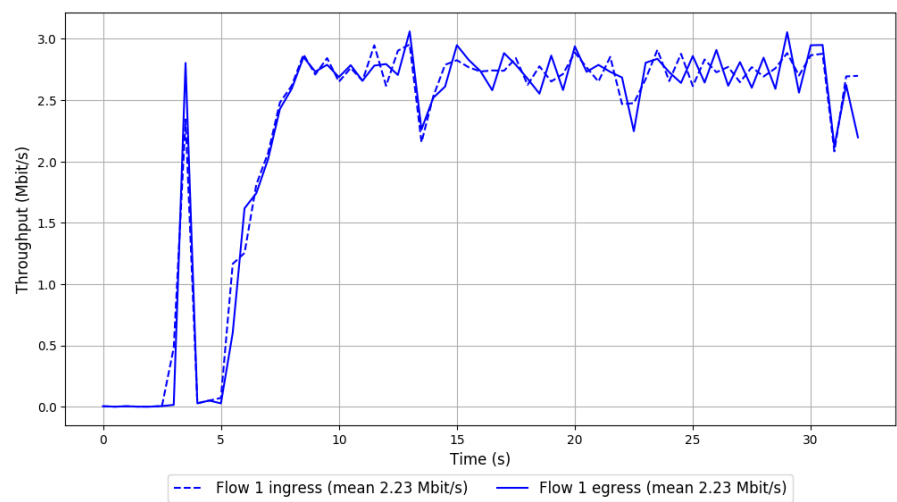
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 86.966 ms

Loss rate: 0.66%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-15 20:42:16

End at: 2017-11-15 20:42:46

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.065 ms

Loss rate: 0.78%

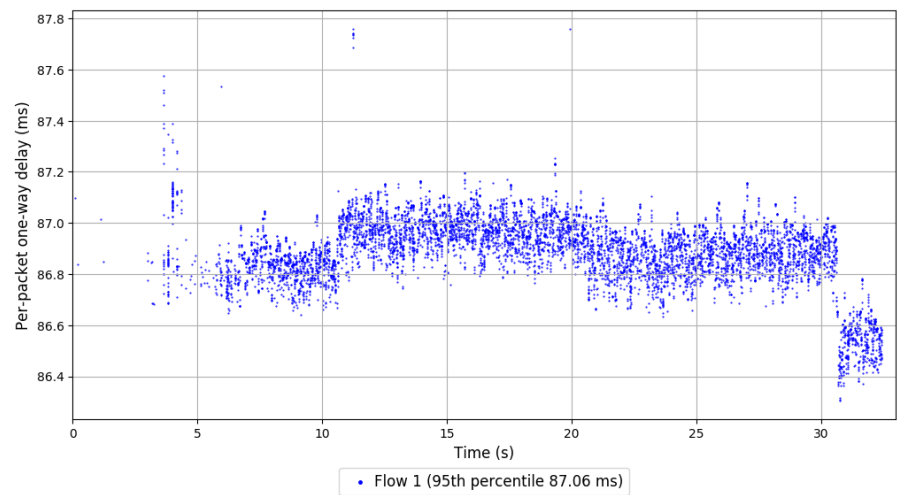
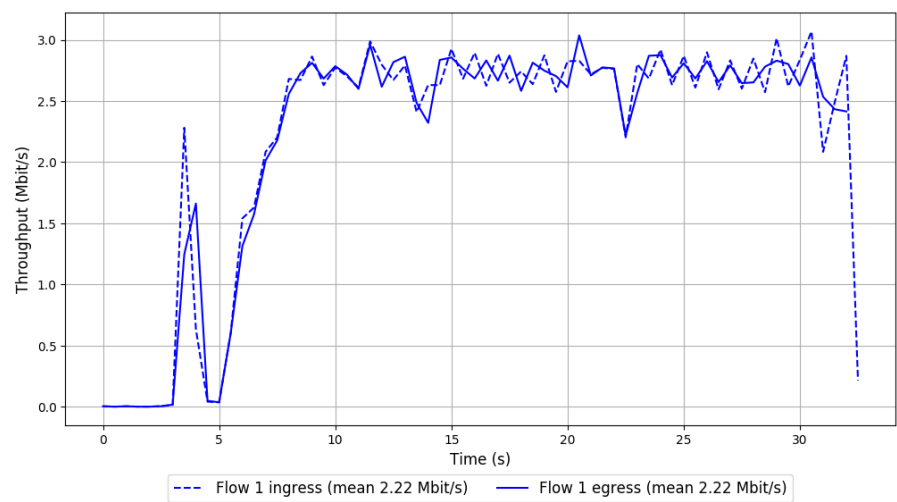
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.065 ms

Loss rate: 0.78%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-15 20:53:21

End at: 2017-11-15 20:53:51

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.156 ms

Loss rate: 0.61%

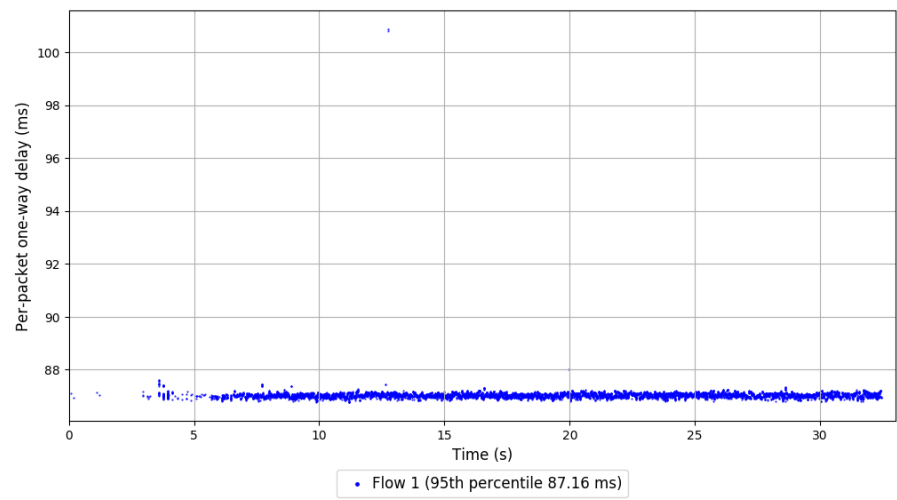
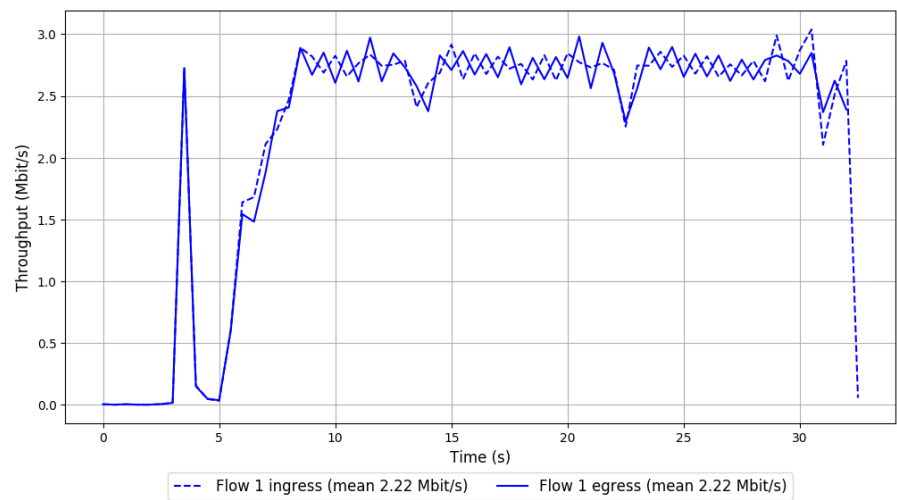
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.156 ms

Loss rate: 0.61%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-15 21:04:06

End at: 2017-11-15 21:04:36

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.425 ms

Loss rate: 0.72%

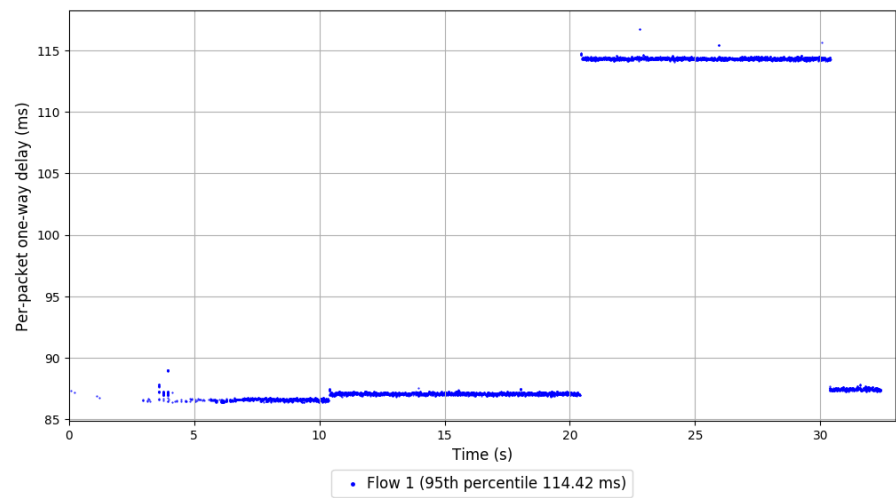
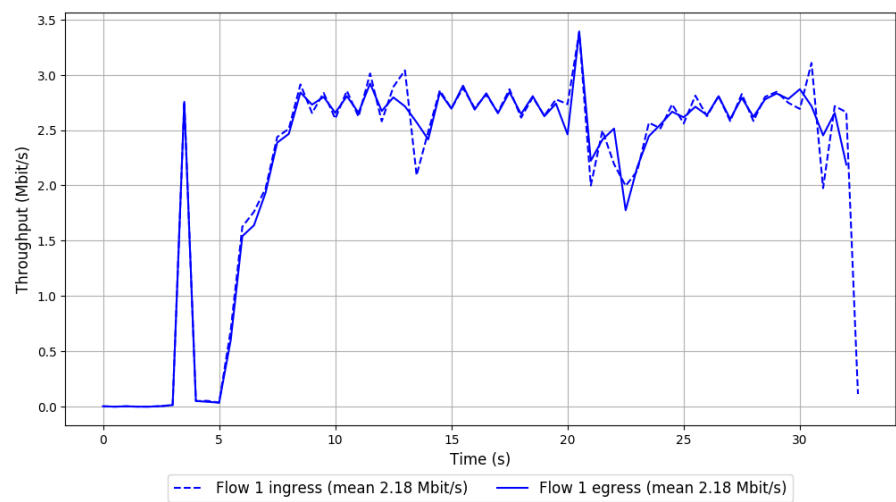
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.425 ms

Loss rate: 0.72%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

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

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

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 114.661 ms

Loss rate: 0.75%

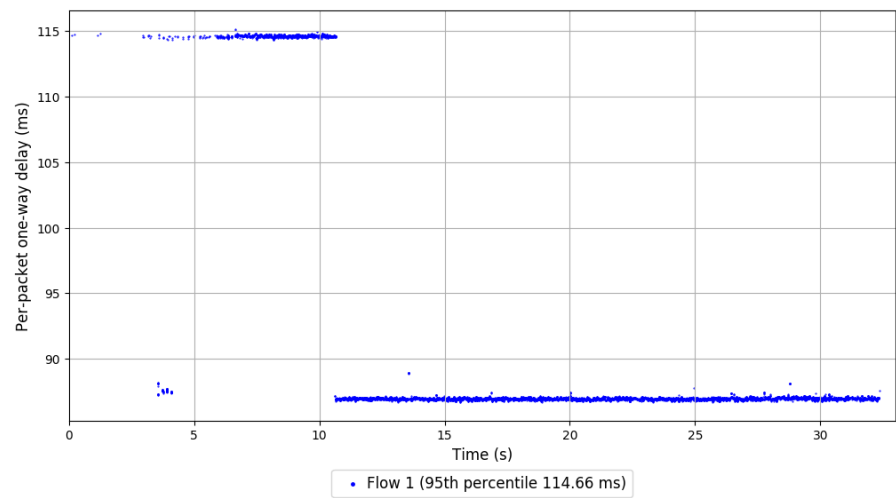
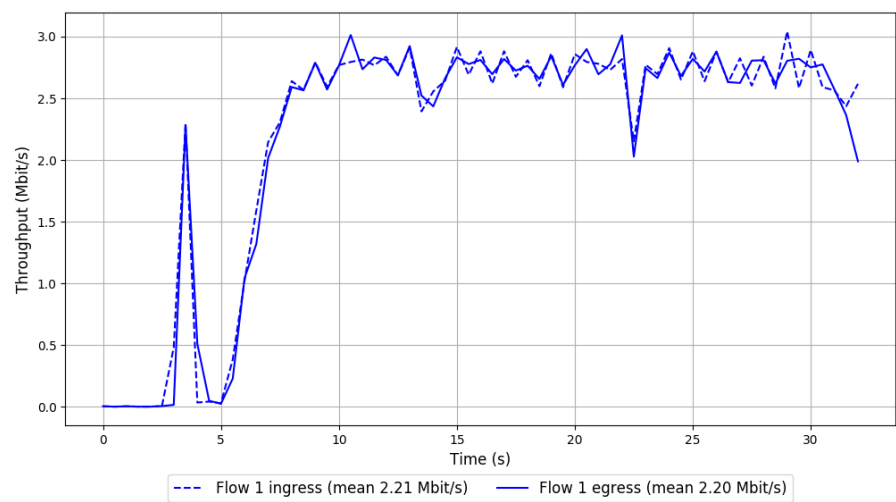
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 114.661 ms

Loss rate: 0.75%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-15 21:27:30

End at: 2017-11-15 21:28:00

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.204 ms

Loss rate: 0.62%

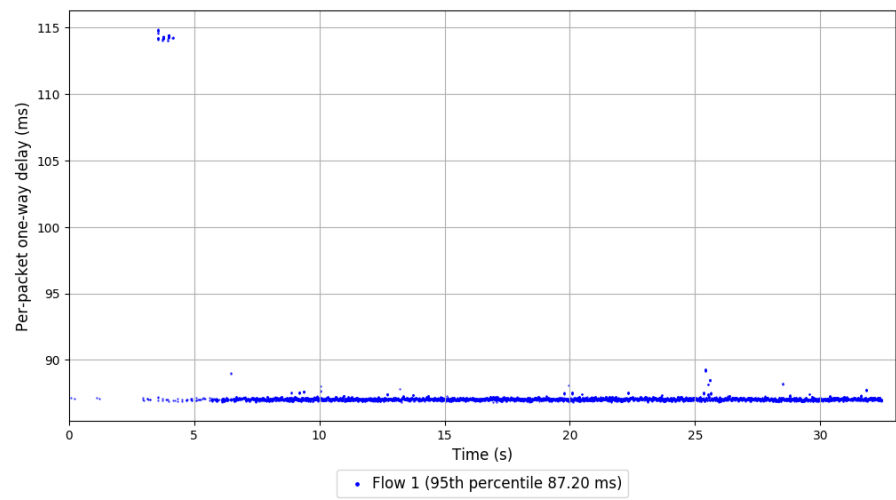
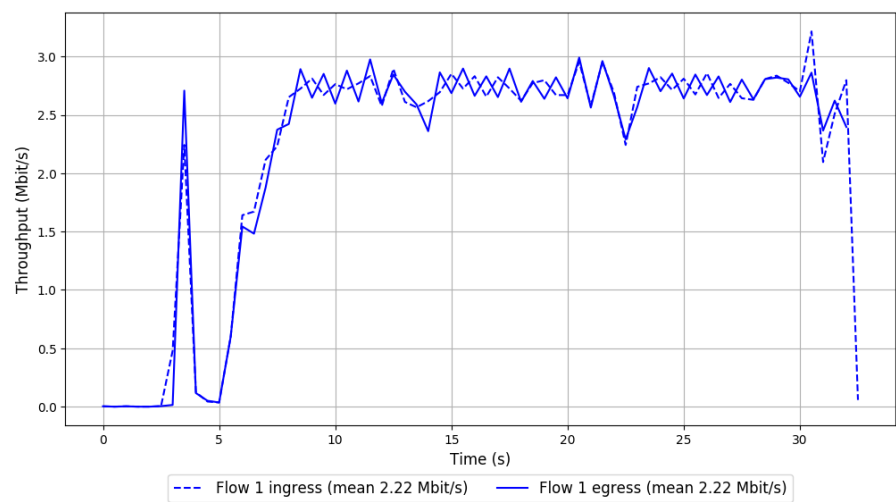
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.204 ms

Loss rate: 0.62%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-15 21:39:23

End at: 2017-11-15 21:39:53

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.802 ms

Loss rate: 0.79%

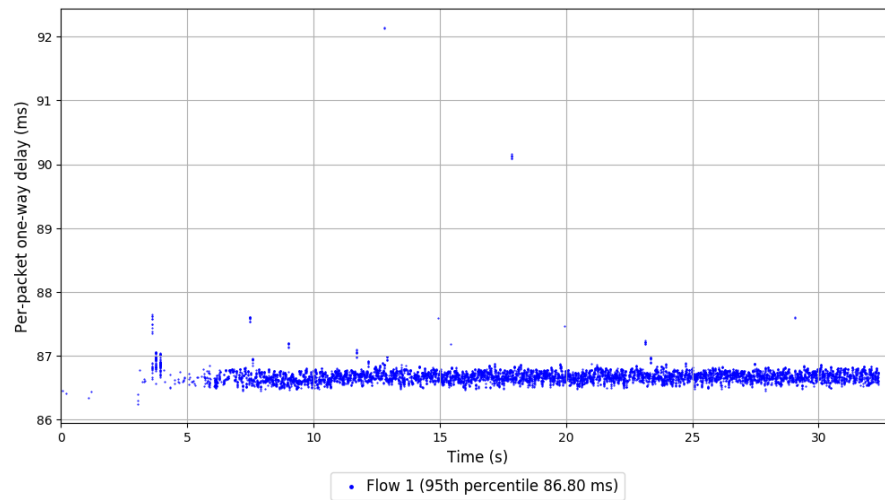
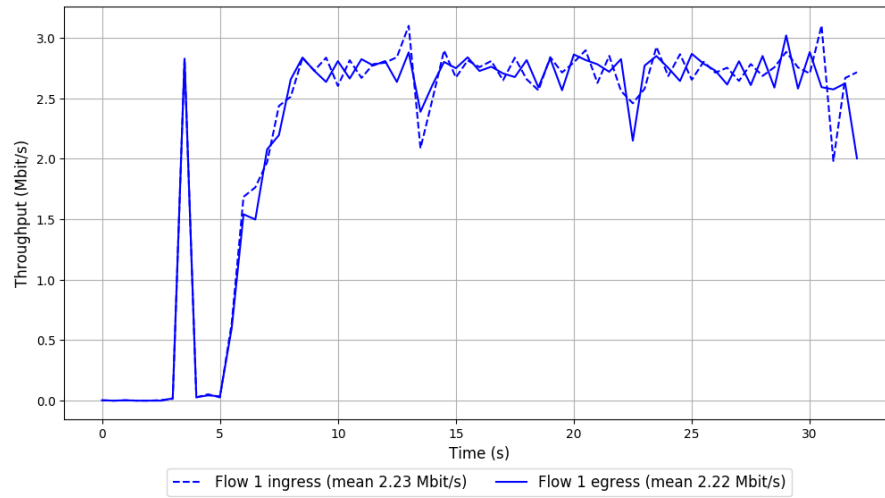
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.802 ms

Loss rate: 0.79%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-15 21:50:18

End at: 2017-11-15 21:50:48

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 117.619 ms

Loss rate: 0.73%

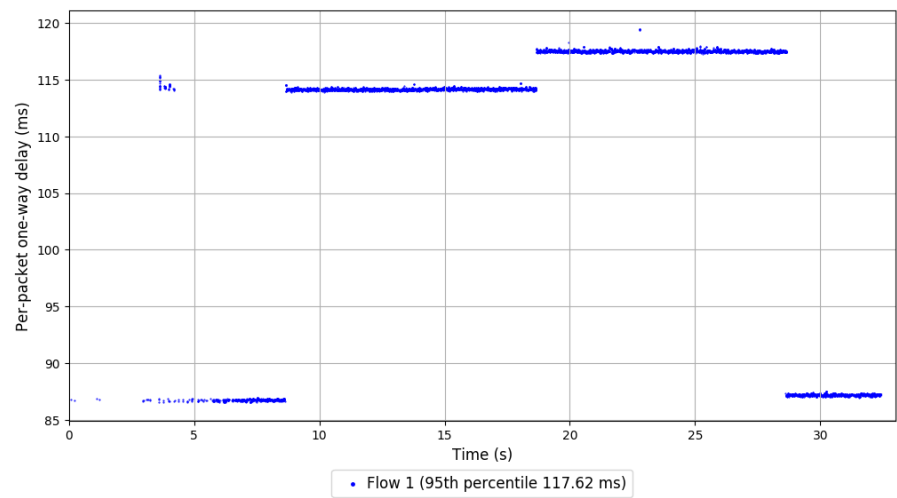
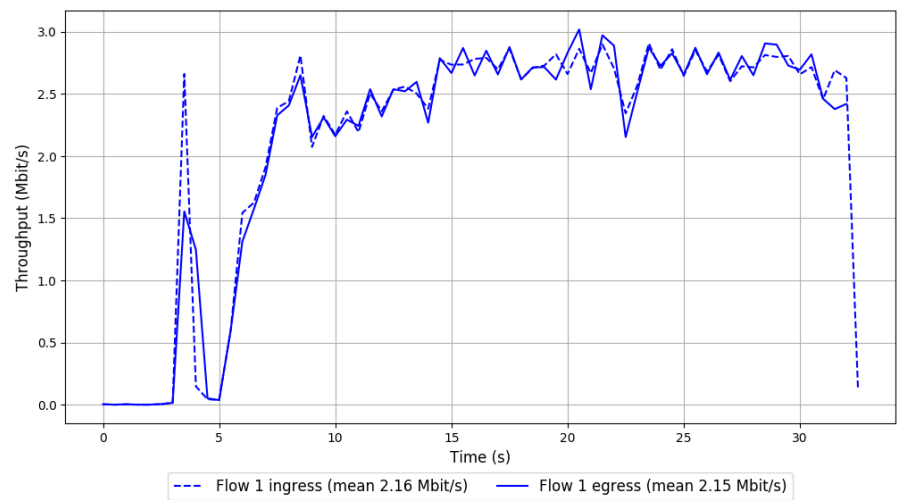
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 117.619 ms

Loss rate: 0.73%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-15 22:00:30

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

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.330 ms

Loss rate: 0.63%

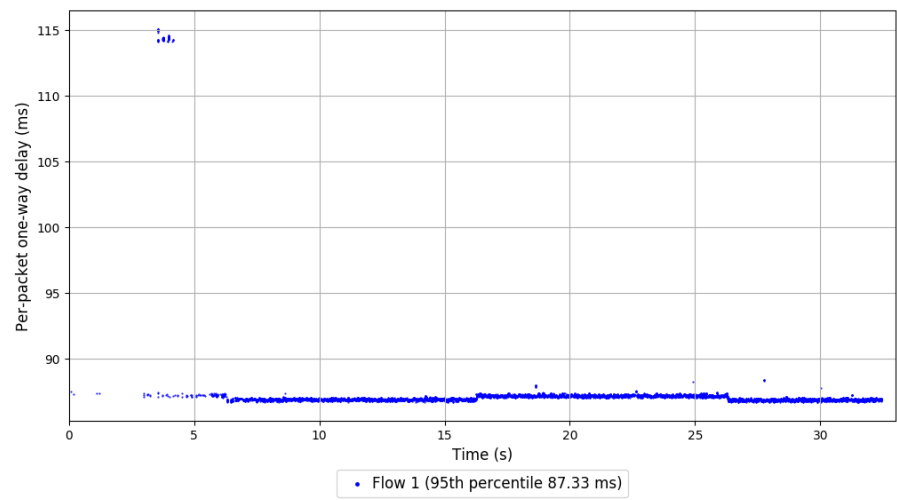
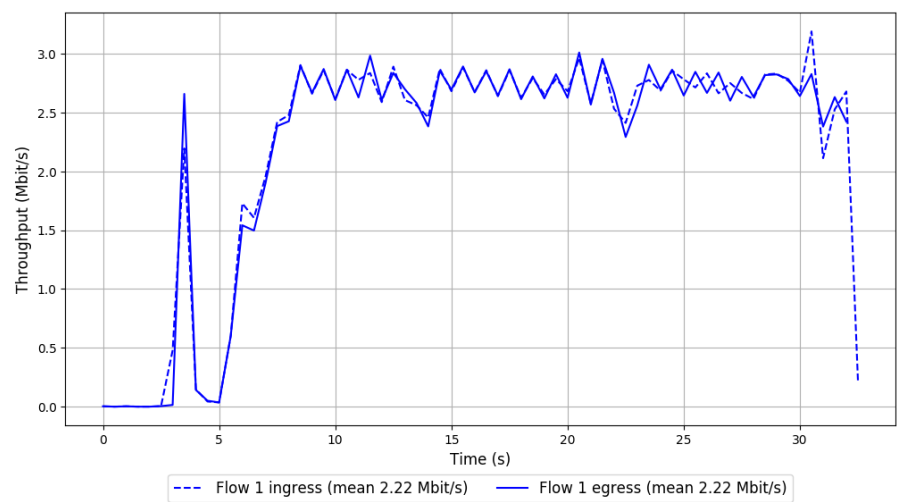
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.330 ms

Loss rate: 0.63%

Run 10: Report of WebRTC media — Data Link

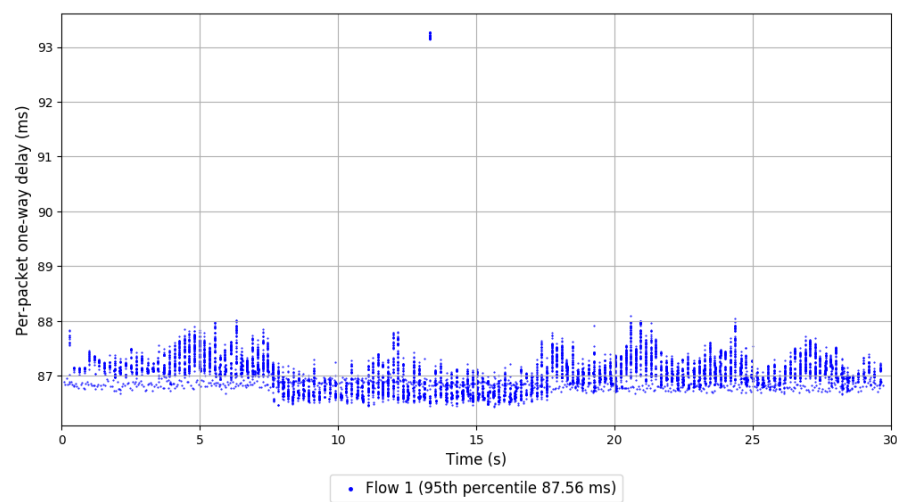
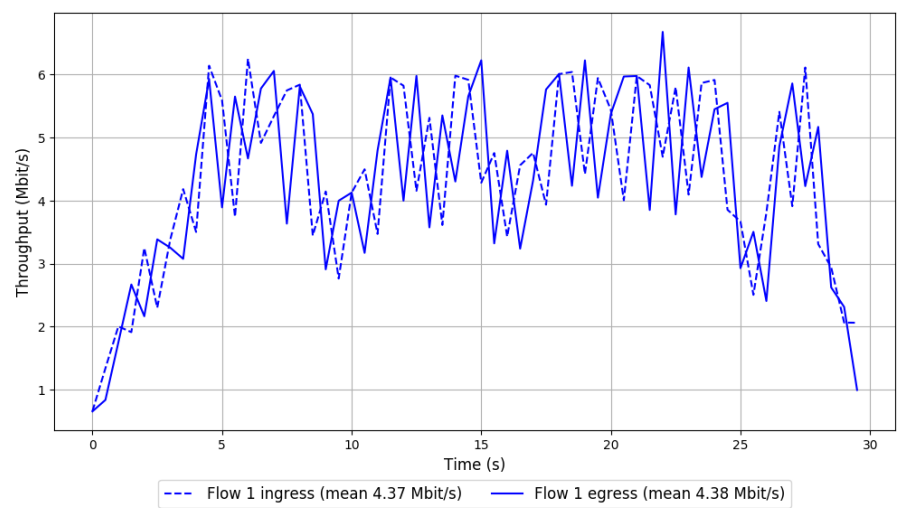


```
Run 1: Statistics of Sprout

Start at: 2017-11-15 20:23:26
End at: 2017-11-15 20:23:56

# Below is generated by plot.py at 2017-11-16 00:13:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.38 Mbit/s
95th percentile per-packet one-way delay: 87.556 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 4.38 Mbit/s
95th percentile per-packet one-way delay: 87.556 ms
Loss rate: 0.53%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-15 20:34:27

End at: 2017-11-15 20:34:57

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.29 Mbit/s

95th percentile per-packet one-way delay: 87.421 ms

Loss rate: 0.79%

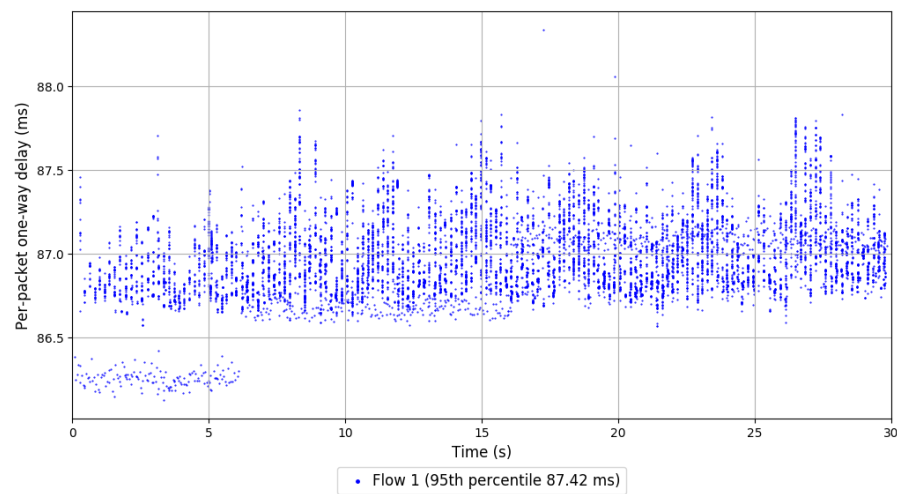
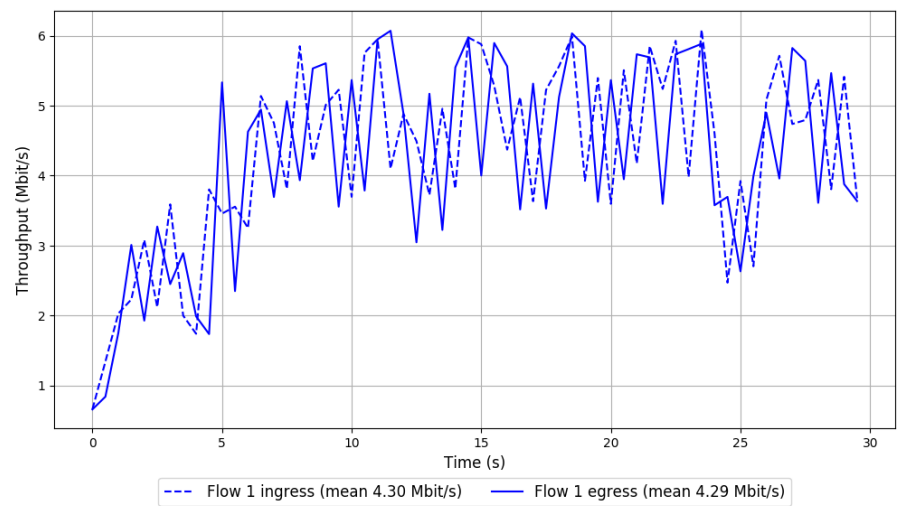
-- Flow 1:

Average throughput: 4.29 Mbit/s

95th percentile per-packet one-way delay: 87.421 ms

Loss rate: 0.79%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-15 20:45:31

End at: 2017-11-15 20:46:01

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 87.685 ms

Loss rate: 0.52%

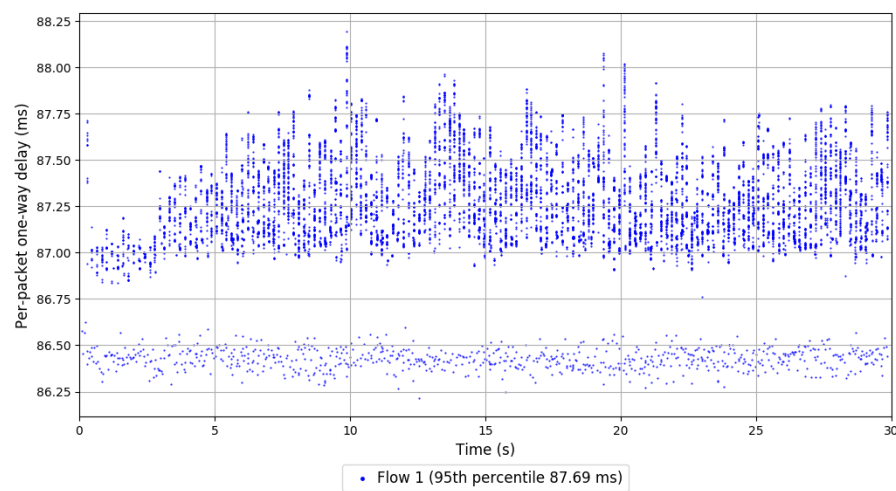
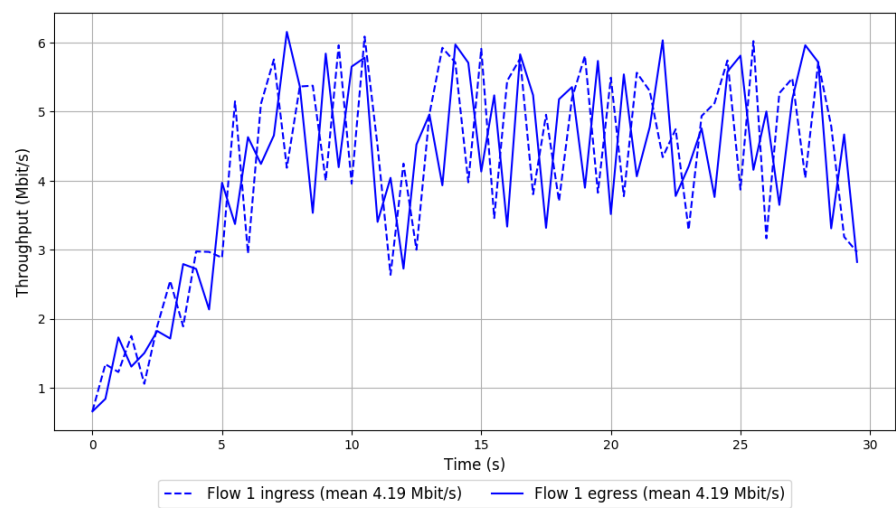
-- Flow 1:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 87.685 ms

Loss rate: 0.52%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-15 20:56:38

End at: 2017-11-15 20:57:08

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.86 Mbit/s

95th percentile per-packet one-way delay: 114.566 ms

Loss rate: 0.67%

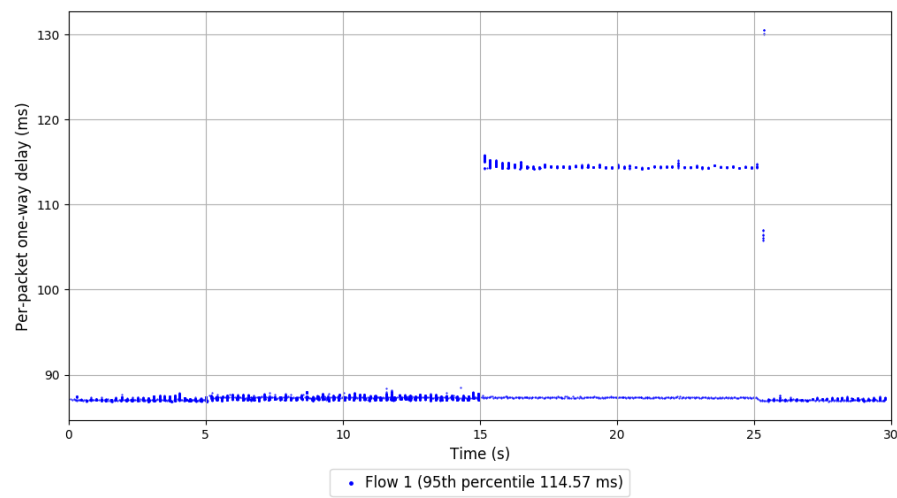
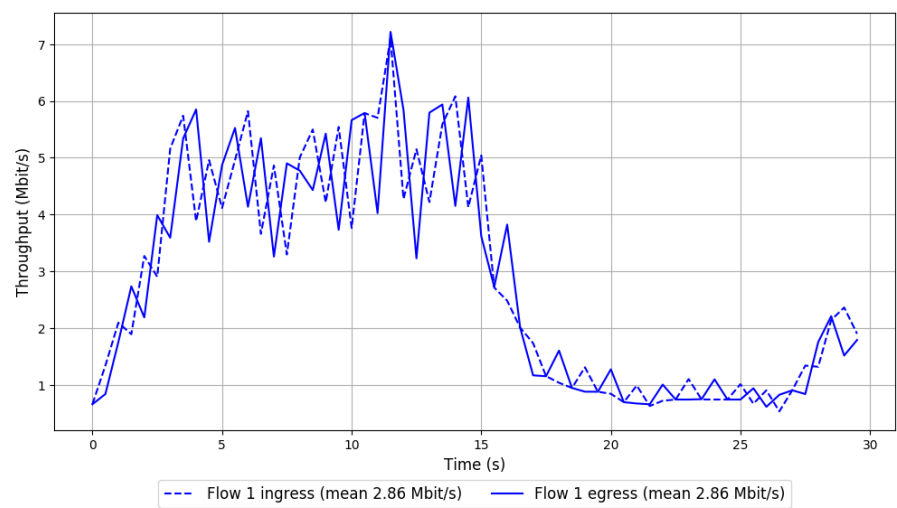
-- Flow 1:

Average throughput: 2.86 Mbit/s

95th percentile per-packet one-way delay: 114.566 ms

Loss rate: 0.67%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

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

End at: 2017-11-15 21:07:47

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 114.632 ms

Loss rate: 0.65%

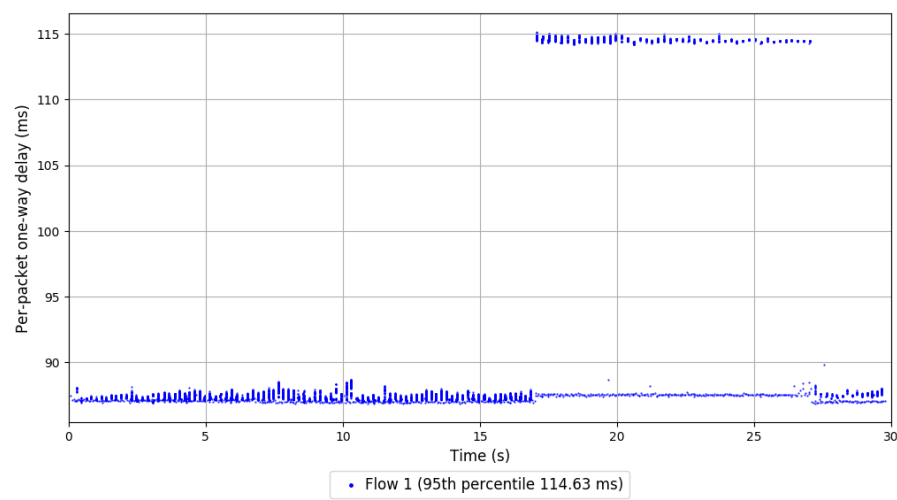
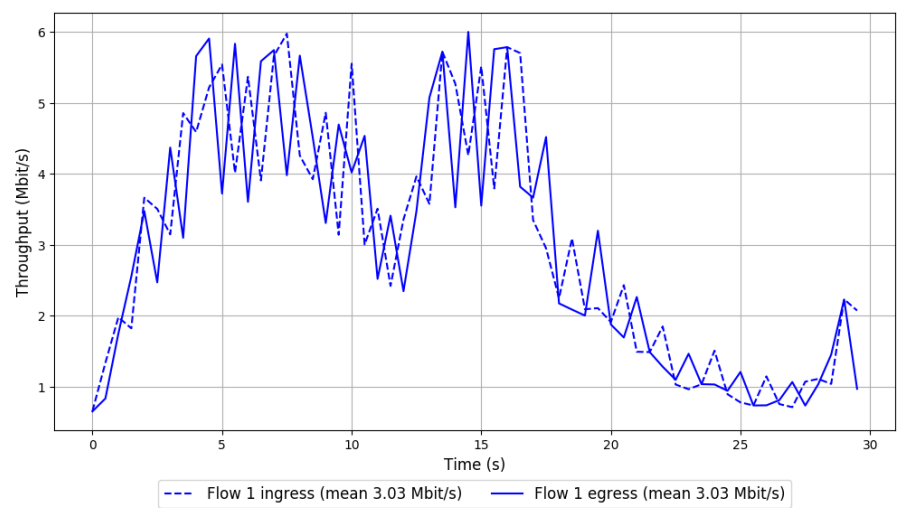
-- Flow 1:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 114.632 ms

Loss rate: 0.65%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

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

End at: 2017-11-15 21:18:48

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 114.126 ms

Loss rate: 0.77%

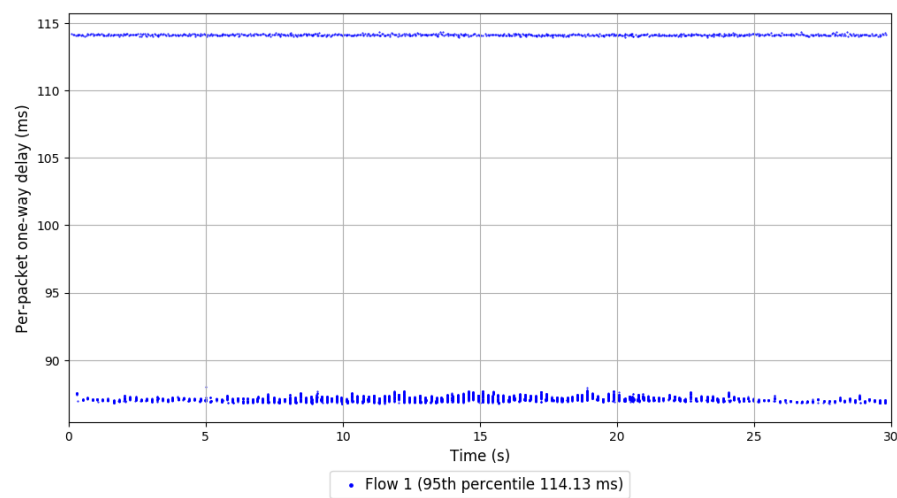
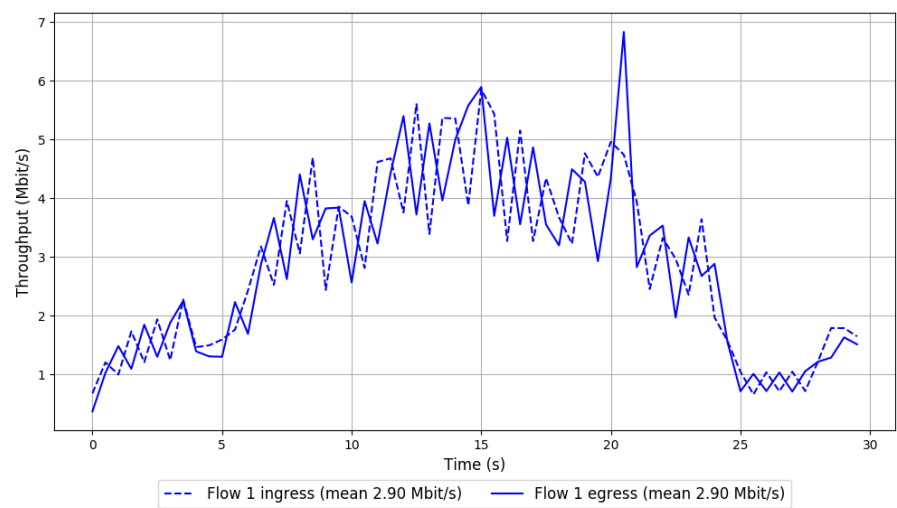
-- Flow 1:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 114.126 ms

Loss rate: 0.77%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-15 21:30:22

End at: 2017-11-15 21:30:52

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 114.315 ms

Loss rate: 0.83%

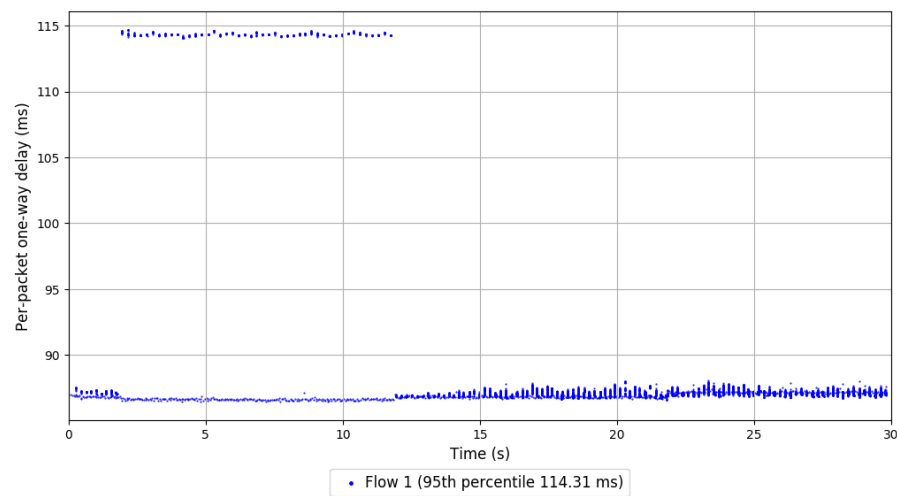
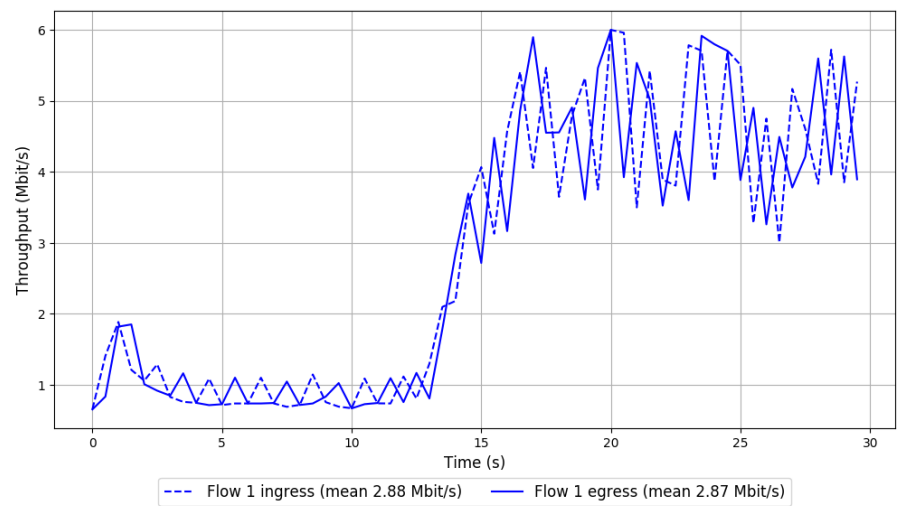
-- Flow 1:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 114.315 ms

Loss rate: 0.83%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

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

End at: 2017-11-15 21:43:00

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 113.938 ms

Loss rate: 0.74%

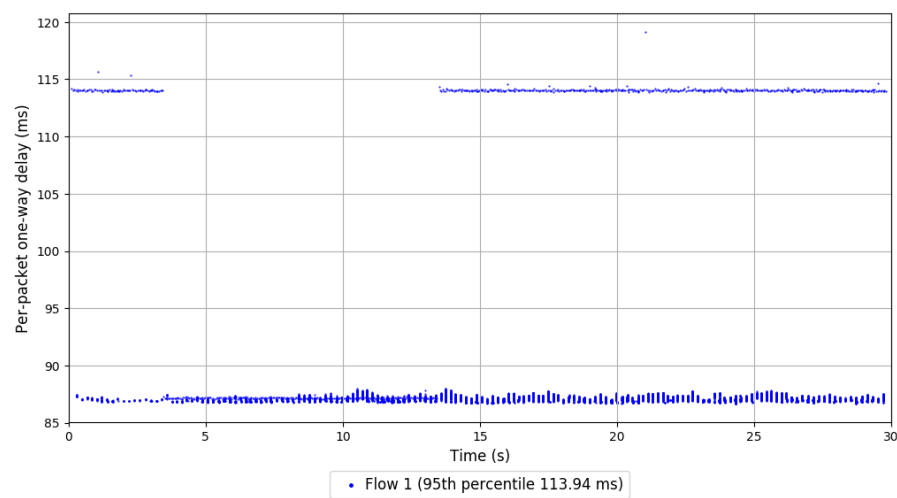
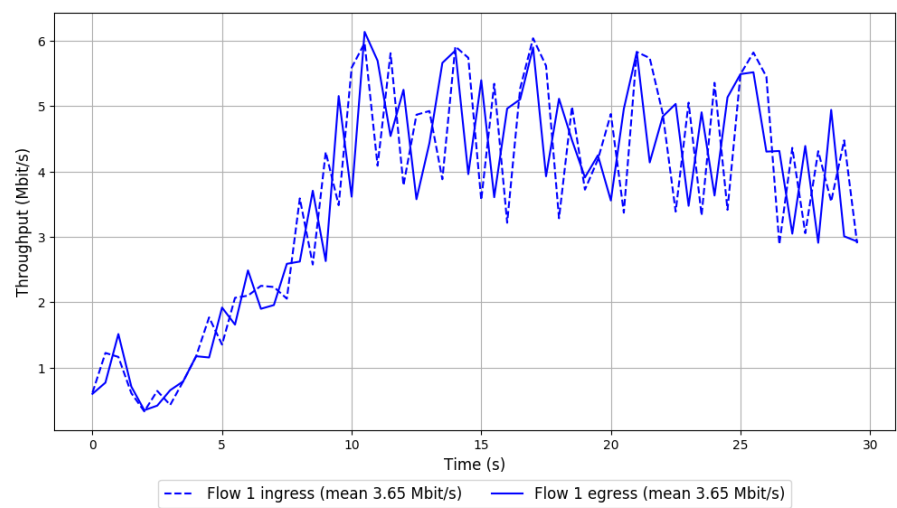
-- Flow 1:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 113.938 ms

Loss rate: 0.74%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-15 21:53:09

End at: 2017-11-15 21:53:39

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.66 Mbit/s

95th percentile per-packet one-way delay: 114.538 ms

Loss rate: 0.04%

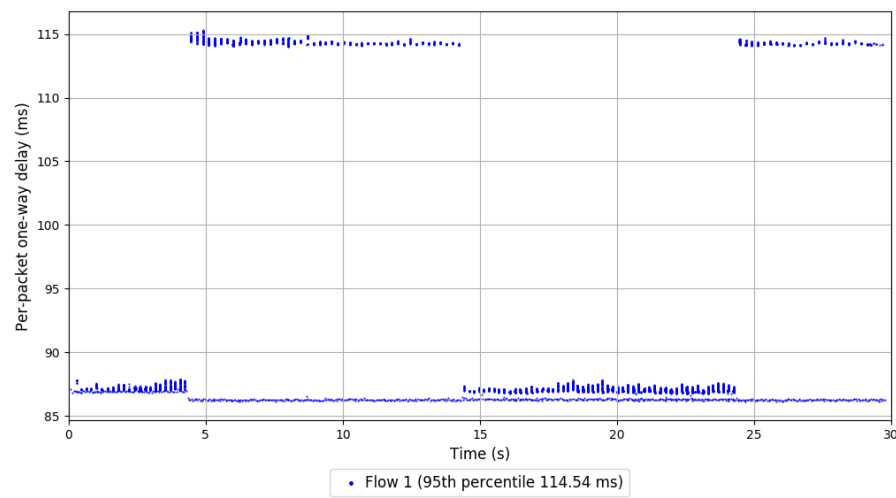
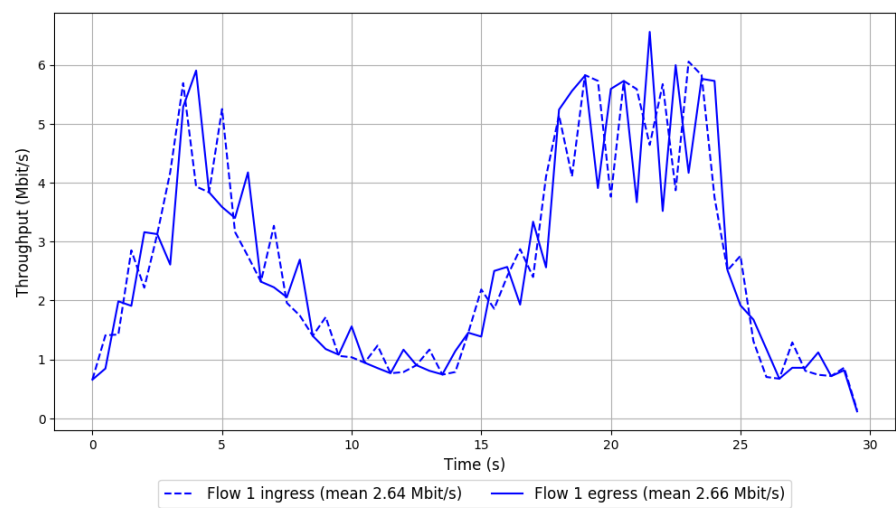
-- Flow 1:

Average throughput: 2.66 Mbit/s

95th percentile per-packet one-way delay: 114.538 ms

Loss rate: 0.04%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-15 22:03:21

End at: 2017-11-15 22:03:51

Below is generated by plot.py at 2017-11-16 00:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 115.004 ms

Loss rate: 0.48%

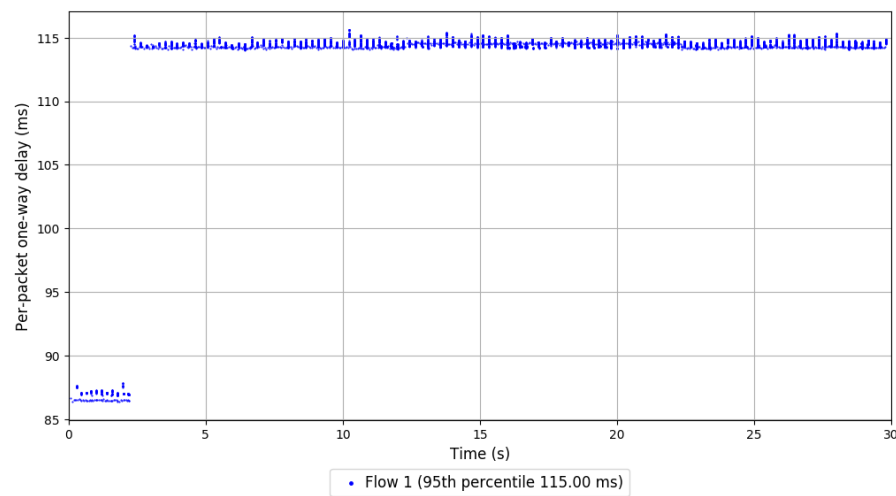
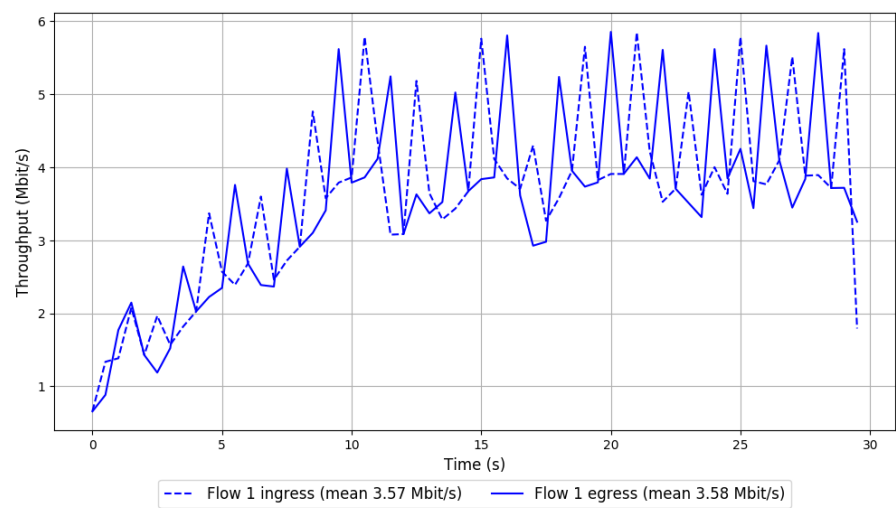
-- Flow 1:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 115.004 ms

Loss rate: 0.48%

Run 10: Report of Sprout — Data Link

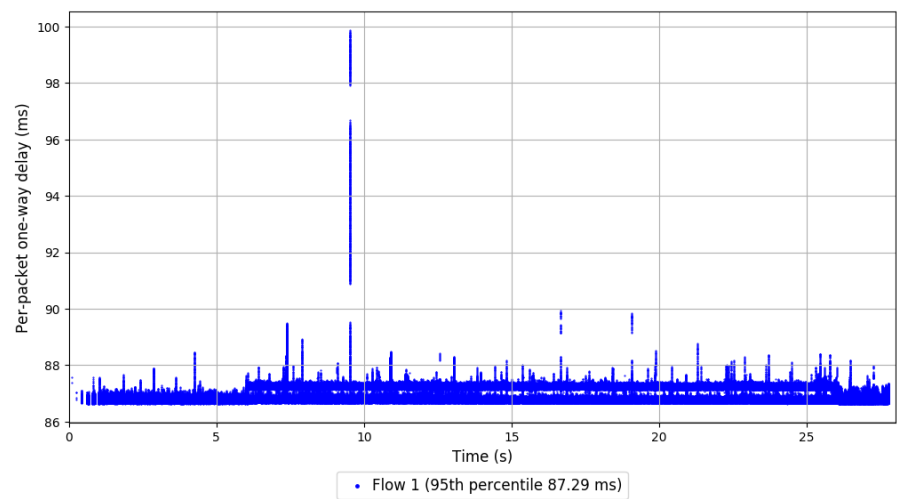
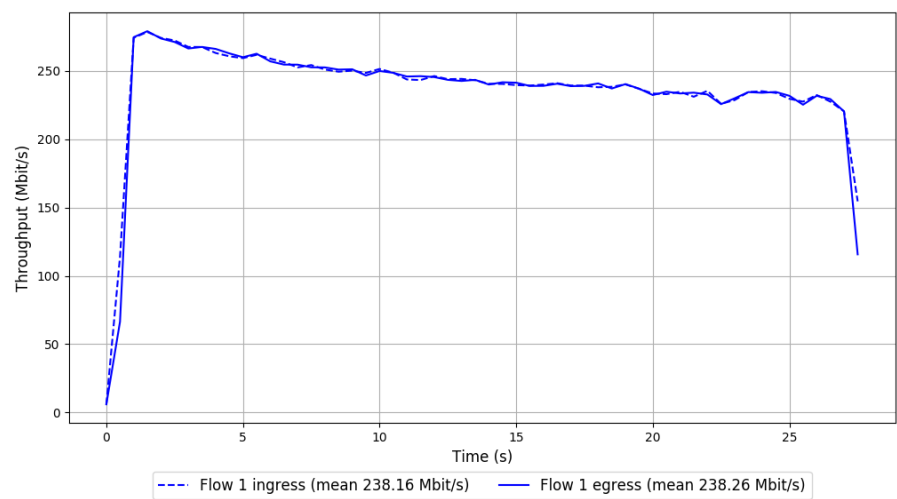


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-15 20:22:25
End at: 2017-11-15 20:22:55

# Below is generated by plot.py at 2017-11-16 00:19:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 238.26 Mbit/s
95th percentile per-packet one-way delay: 87.287 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 238.26 Mbit/s
95th percentile per-packet one-way delay: 87.287 ms
Loss rate: 0.59%
```


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

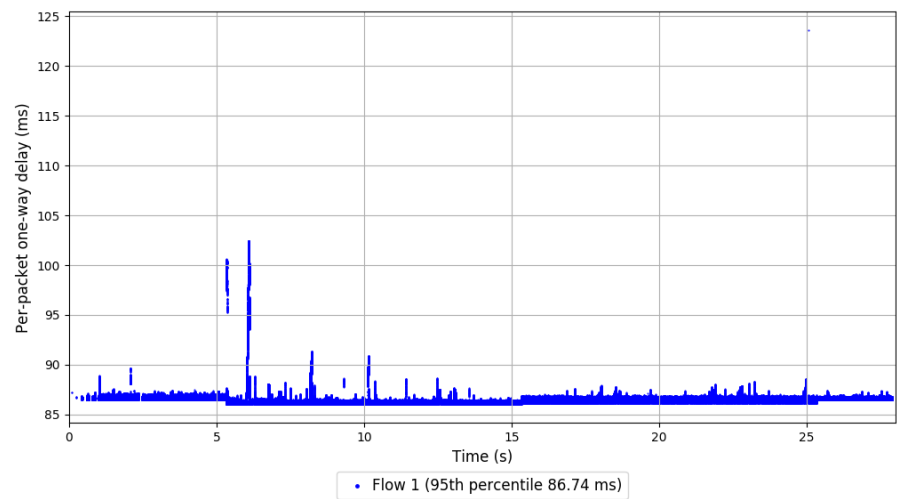
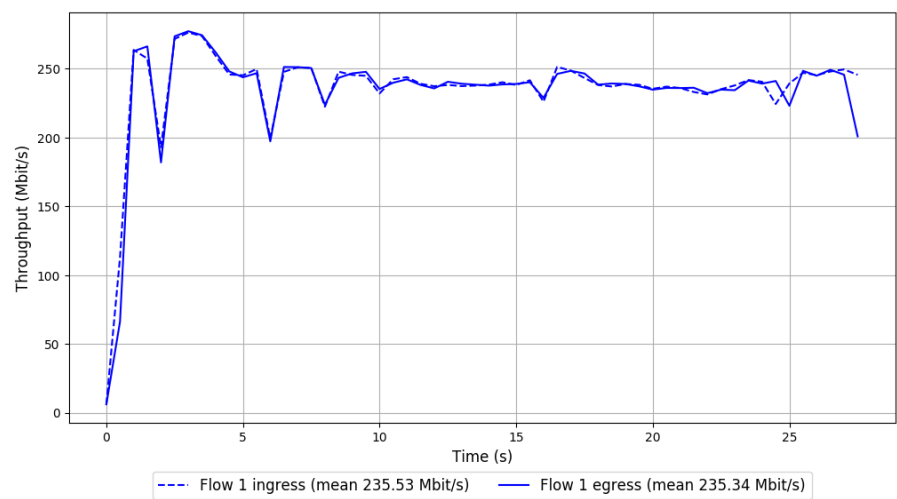


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-15 20:33:26
End at: 2017-11-15 20:33:56

# Below is generated by plot.py at 2017-11-16 00:19:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 235.34 Mbit/s
95th percentile per-packet one-way delay: 86.741 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 235.34 Mbit/s
95th percentile per-packet one-way delay: 86.741 ms
Loss rate: 0.70%
```

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

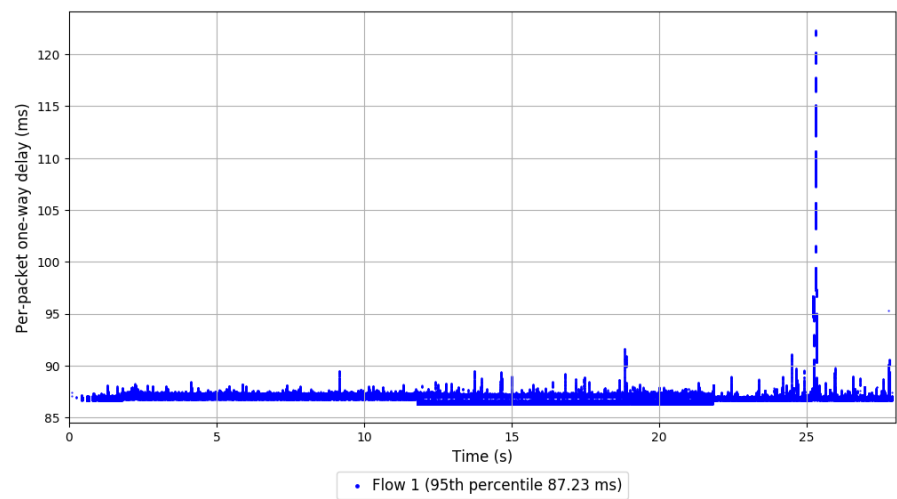
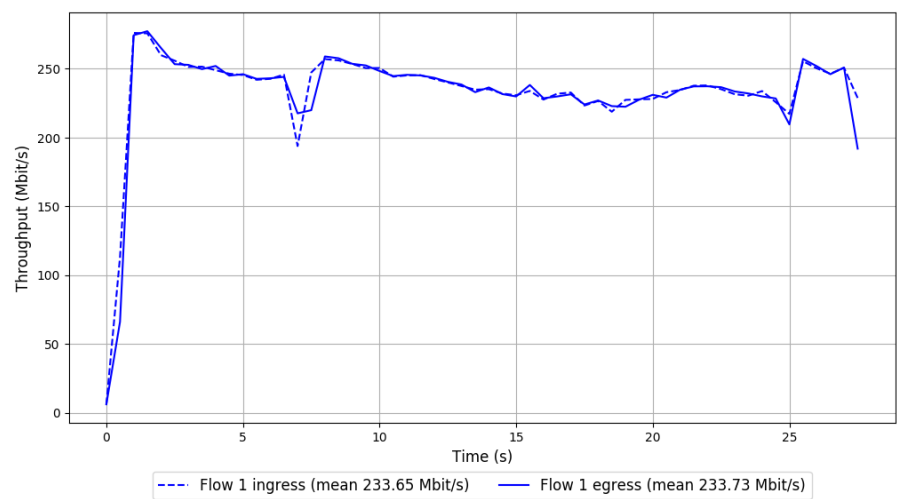


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-11-15 20:44:30
End at: 2017-11-15 20:45:00

# Below is generated by plot.py at 2017-11-16 00:19:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 233.73 Mbit/s
95th percentile per-packet one-way delay: 87.230 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 233.73 Mbit/s
95th percentile per-packet one-way delay: 87.230 ms
Loss rate: 0.61%
```

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



Run 4: Statistics of TaoVA-100x

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

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

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 240.59 Mbit/s

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

Loss rate: 0.69%

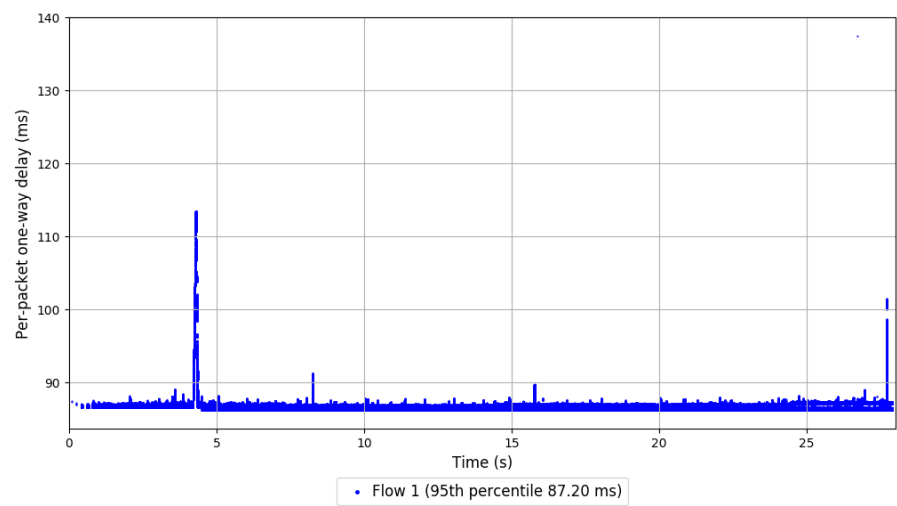
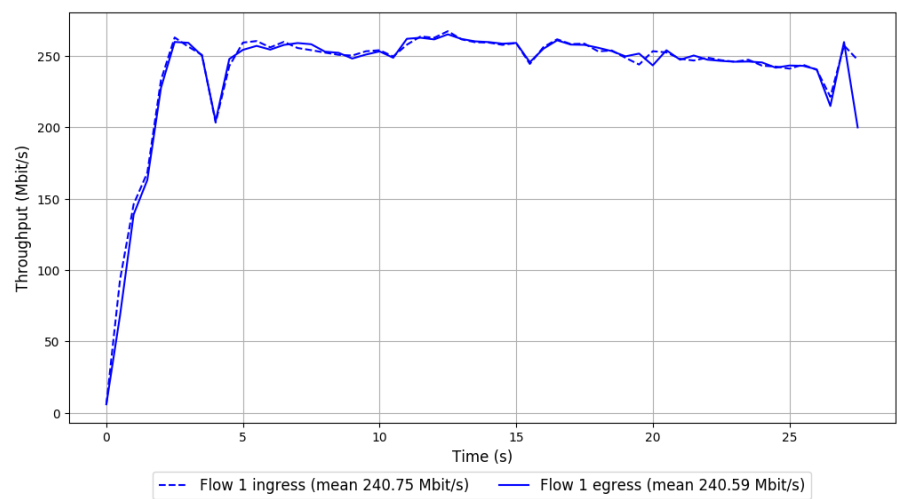
-- Flow 1:

Average throughput: 240.59 Mbit/s

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

Loss rate: 0.69%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-15 21:06:22

End at: 2017-11-15 21:06:52

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 164.33 Mbit/s

95th percentile per-packet one-way delay: 114.264 ms

Loss rate: 0.00%

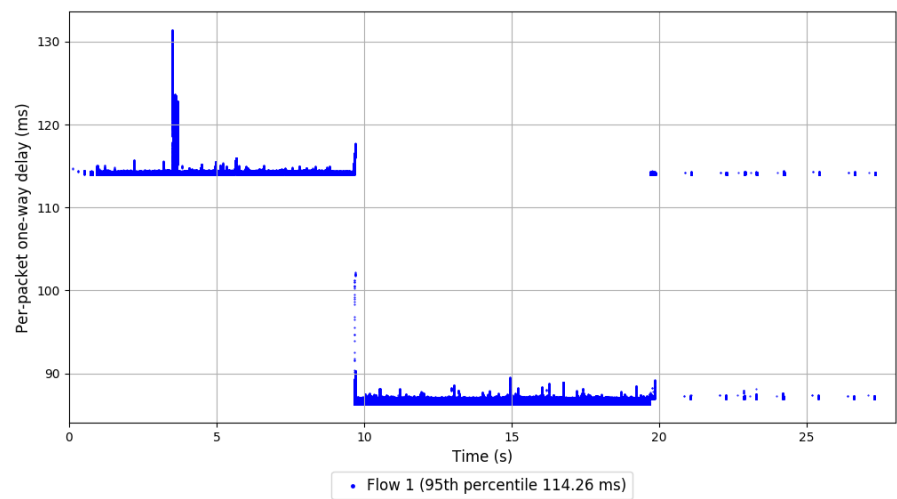
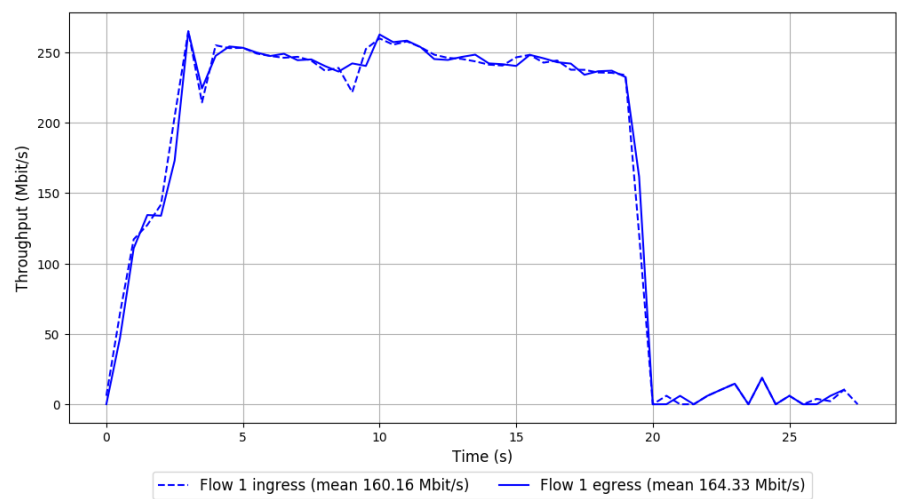
-- Flow 1:

Average throughput: 164.33 Mbit/s

95th percentile per-packet one-way delay: 114.264 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-15 21:17:18

End at: 2017-11-15 21:17:48

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 216.07 Mbit/s

95th percentile per-packet one-way delay: 114.045 ms

Loss rate: 0.39%

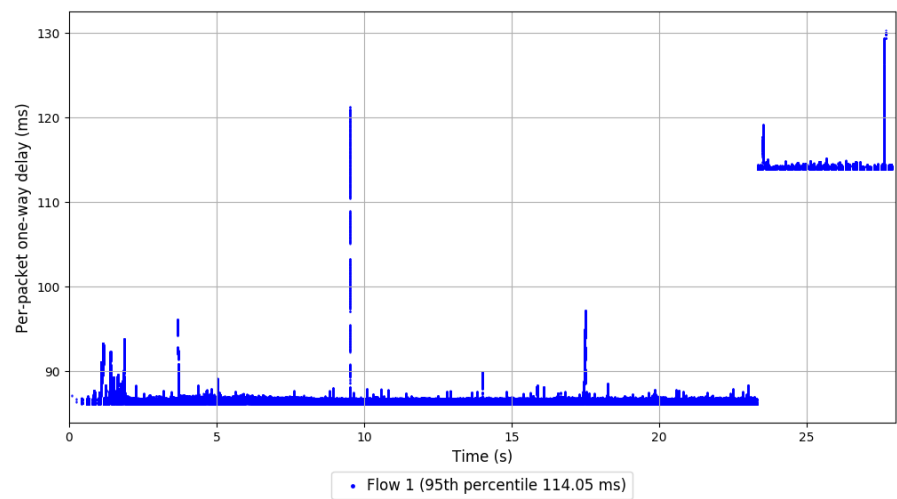
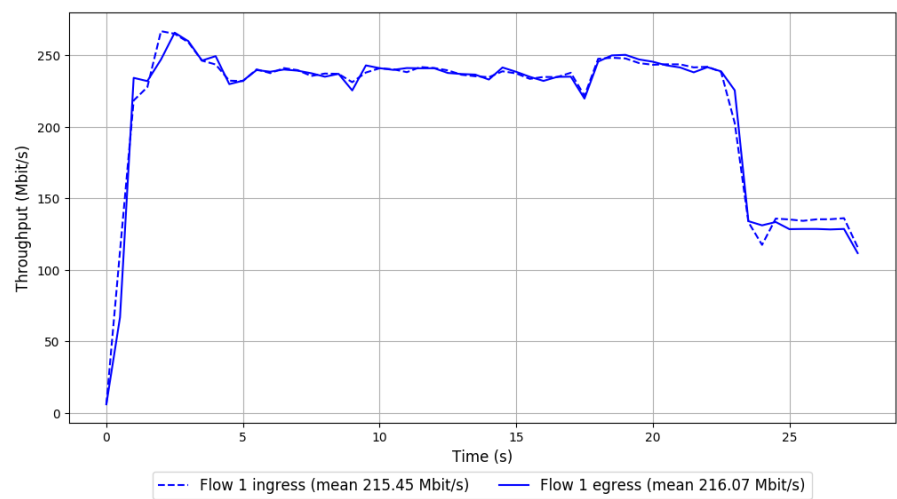
-- Flow 1:

Average throughput: 216.07 Mbit/s

95th percentile per-packet one-way delay: 114.045 ms

Loss rate: 0.39%

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

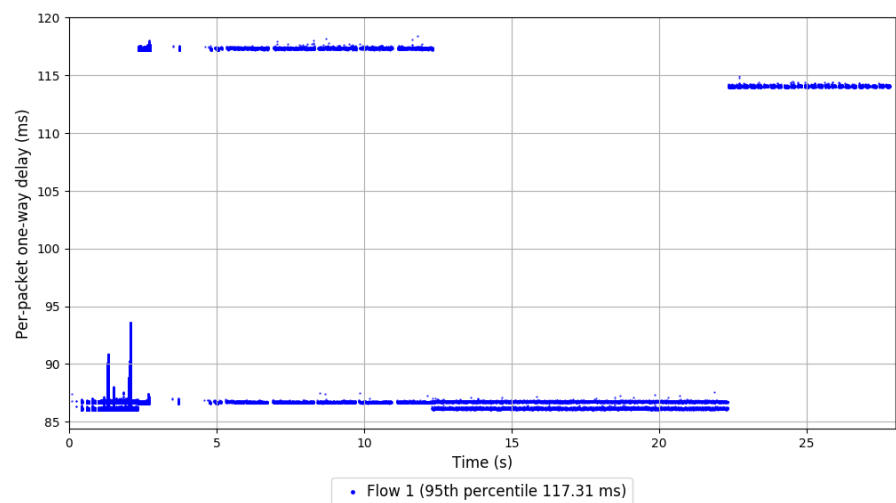
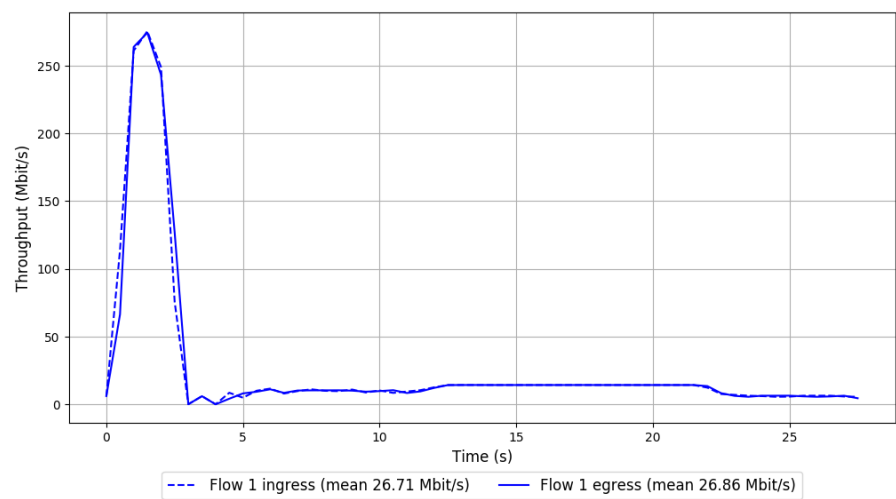


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-11-15 21:29:39
End at: 2017-11-15 21:30:09

# Below is generated by plot.py at 2017-11-16 00:20:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.86 Mbit/s
95th percentile per-packet one-way delay: 117.305 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 26.86 Mbit/s
95th percentile per-packet one-way delay: 117.305 ms
Loss rate: 0.19%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-15 21:41:38

End at: 2017-11-15 21:42:08

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 139.80 Mbit/s

95th percentile per-packet one-way delay: 113.894 ms

Loss rate: 0.07%

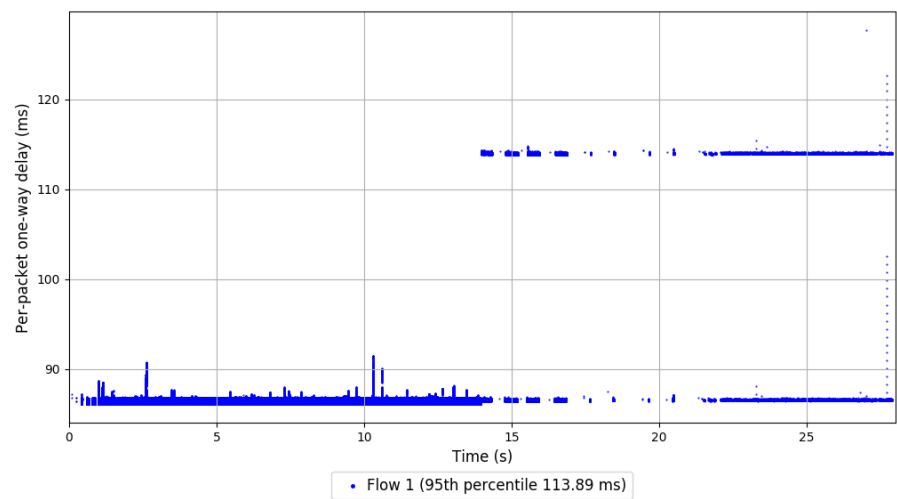
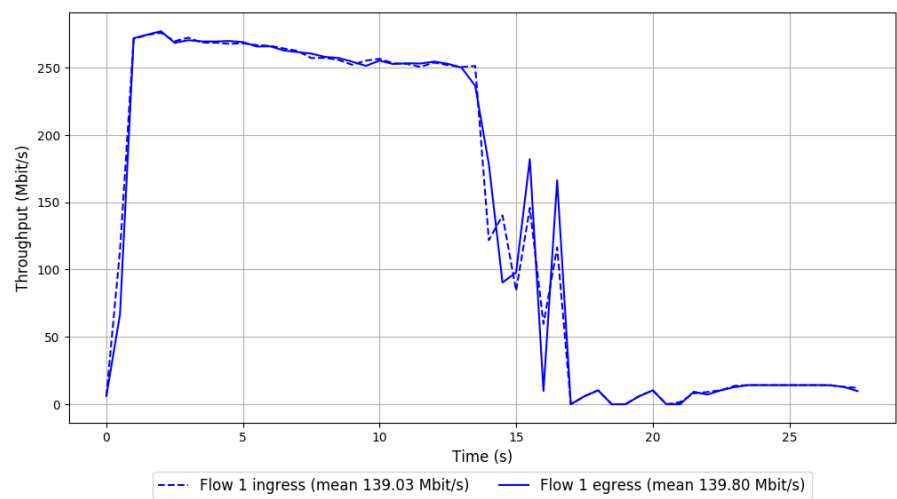
-- Flow 1:

Average throughput: 139.80 Mbit/s

95th percentile per-packet one-way delay: 113.894 ms

Loss rate: 0.07%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-15 21:52:29

End at: 2017-11-15 21:52:59

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.97 Mbit/s

95th percentile per-packet one-way delay: 114.077 ms

Loss rate: 0.35%

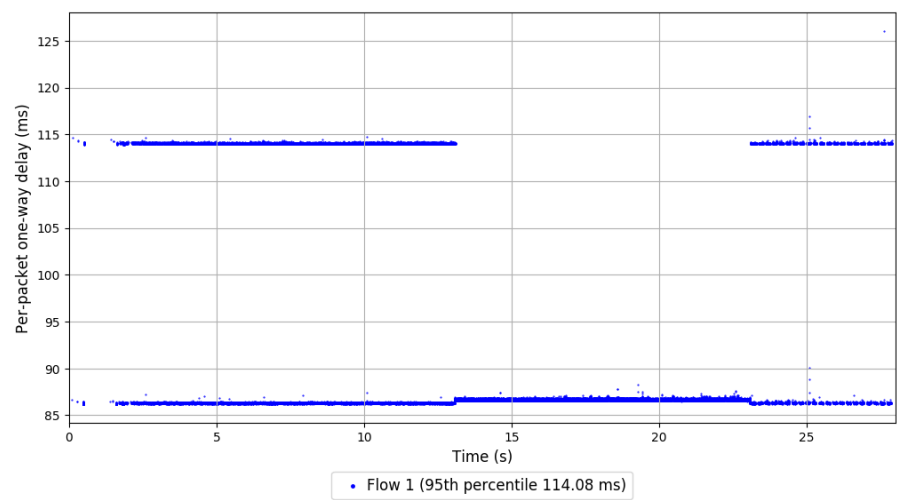
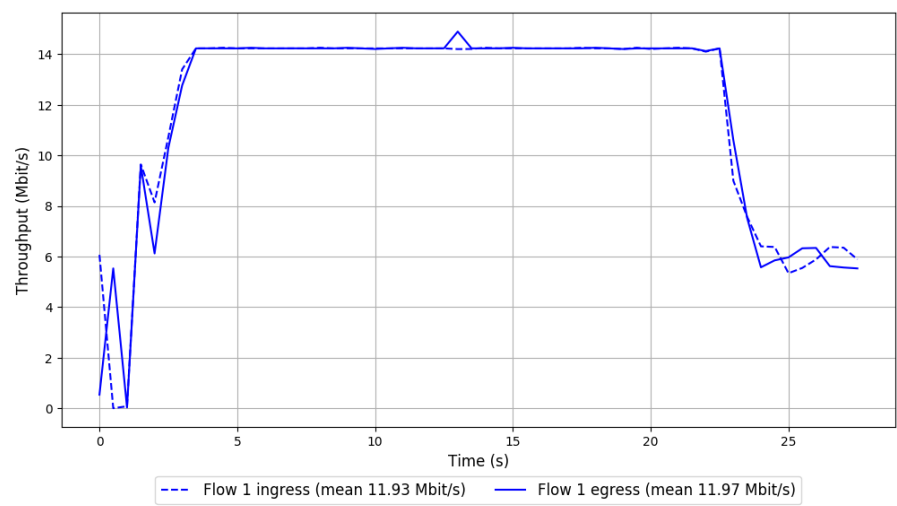
-- Flow 1:

Average throughput: 11.97 Mbit/s

95th percentile per-packet one-way delay: 114.077 ms

Loss rate: 0.35%

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

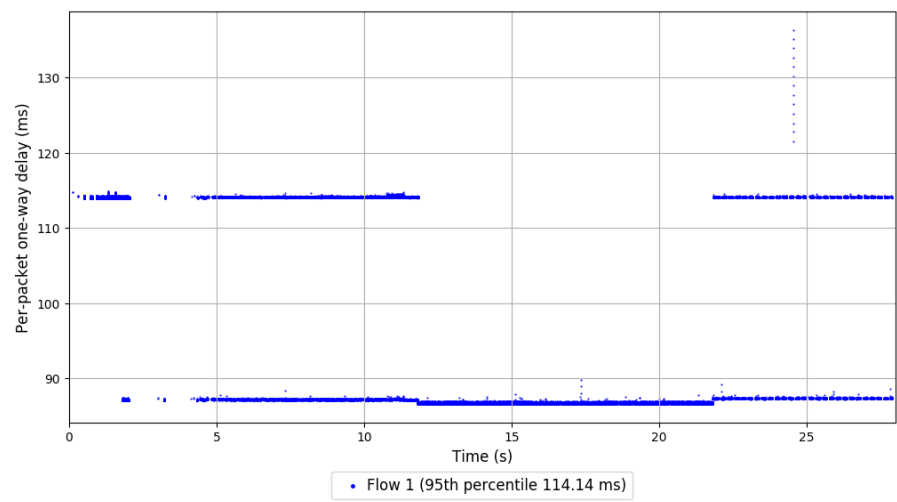
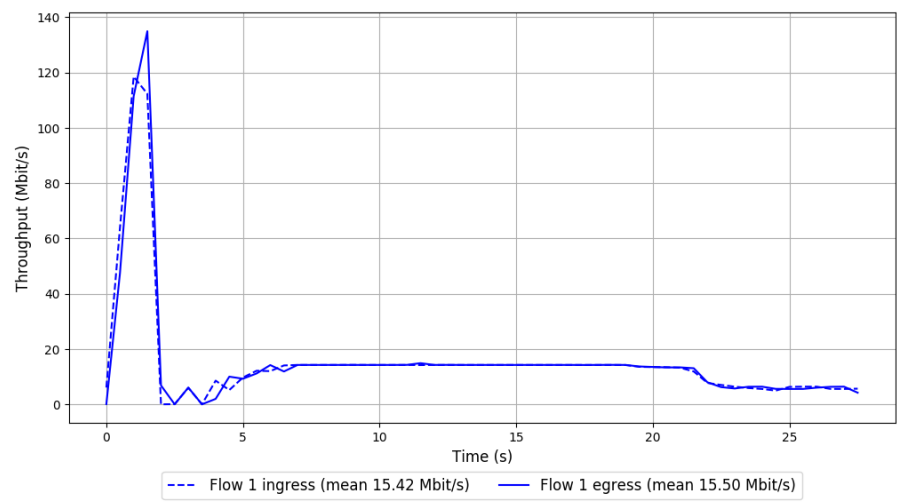


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-15 22:02:40
End at: 2017-11-15 22:03:10

# Below is generated by plot.py at 2017-11-16 00:20:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 15.50 Mbit/s
95th percentile per-packet one-way delay: 114.138 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 15.50 Mbit/s
95th percentile per-packet one-way delay: 114.138 ms
Loss rate: 0.25%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-15 20:19:28

End at: 2017-11-15 20:19:58

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.74 Mbit/s

95th percentile per-packet one-way delay: 87.676 ms

Loss rate: 0.54%

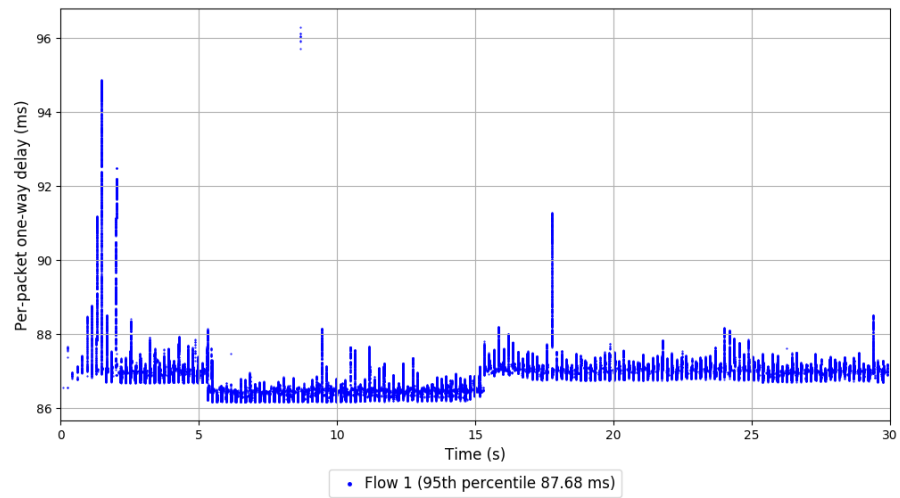
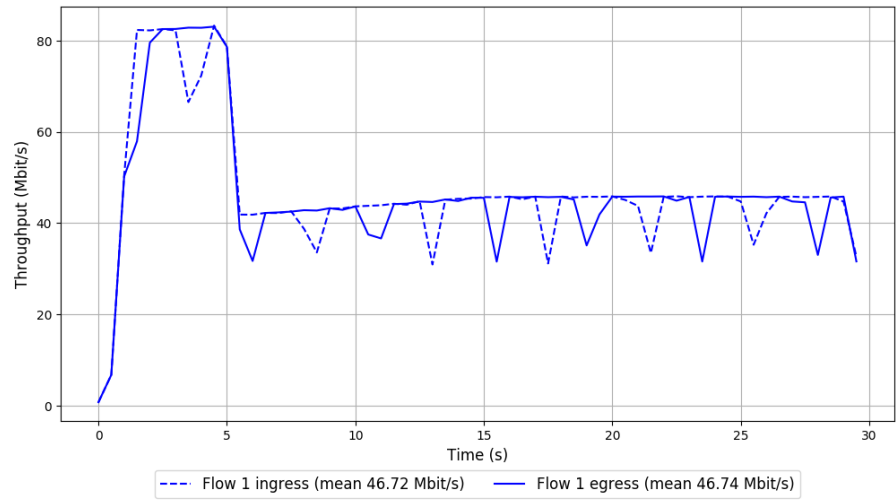
-- Flow 1:

Average throughput: 46.74 Mbit/s

95th percentile per-packet one-way delay: 87.676 ms

Loss rate: 0.54%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-15 20:30:29

End at: 2017-11-15 20:30:59

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.90 Mbit/s

95th percentile per-packet one-way delay: 87.727 ms

Loss rate: 0.64%

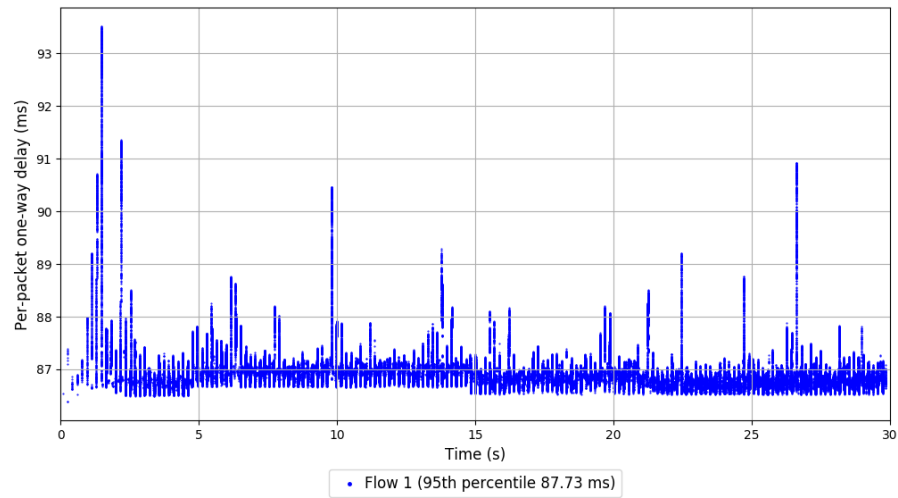
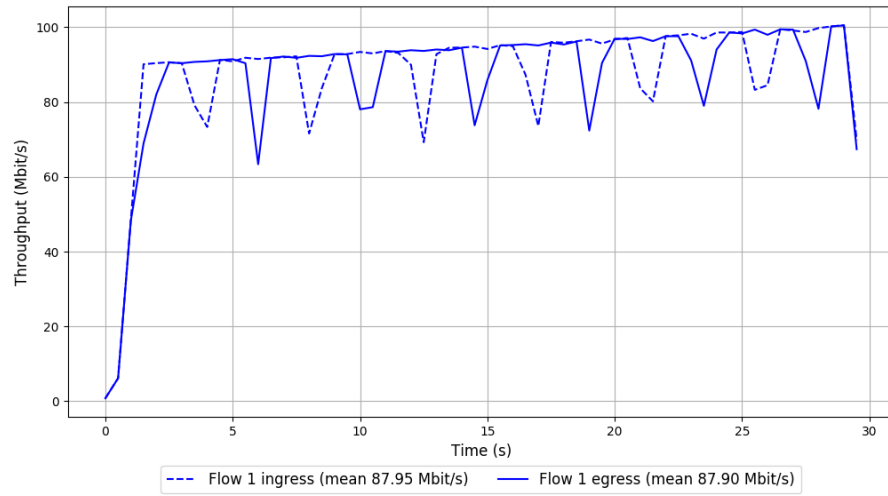
-- Flow 1:

Average throughput: 87.90 Mbit/s

95th percentile per-packet one-way delay: 87.727 ms

Loss rate: 0.64%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-15 20:41:35

End at: 2017-11-15 20:42:05

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.30 Mbit/s

95th percentile per-packet one-way delay: 87.918 ms

Loss rate: 0.51%

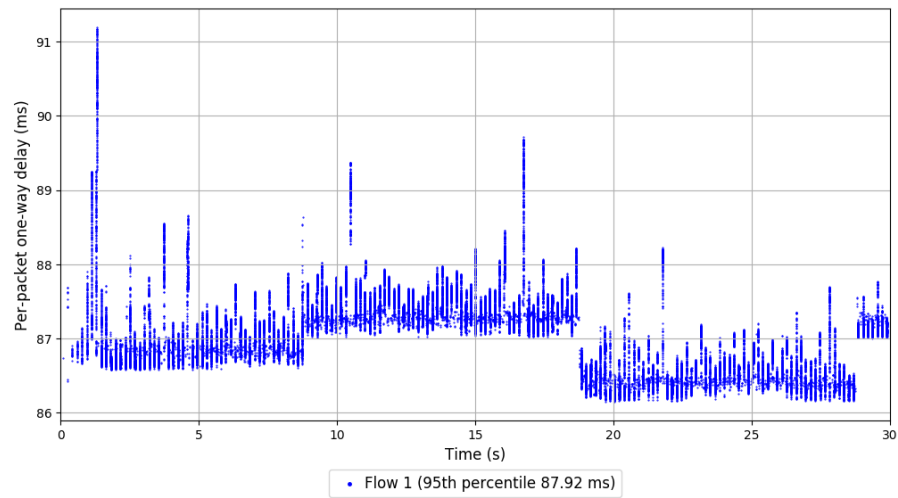
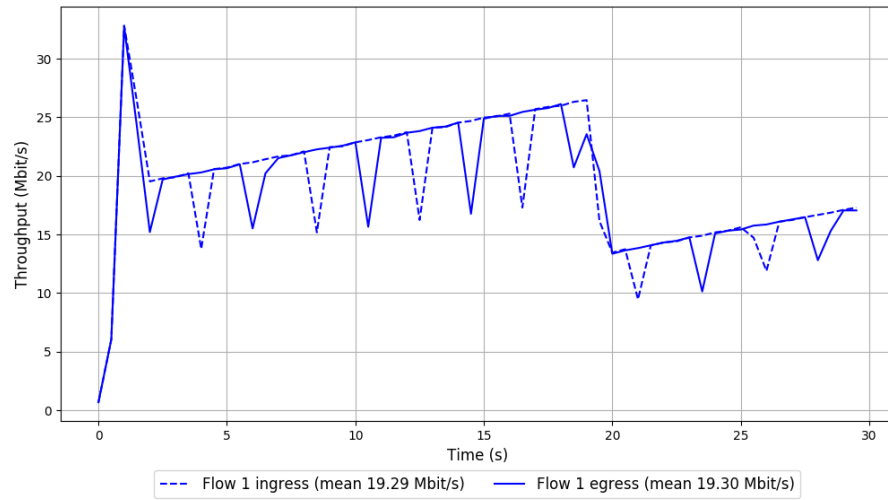
-- Flow 1:

Average throughput: 19.30 Mbit/s

95th percentile per-packet one-way delay: 87.918 ms

Loss rate: 0.51%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-15 20:52:39

End at: 2017-11-15 20:53:09

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.79 Mbit/s

95th percentile per-packet one-way delay: 114.637 ms

Loss rate: 0.61%

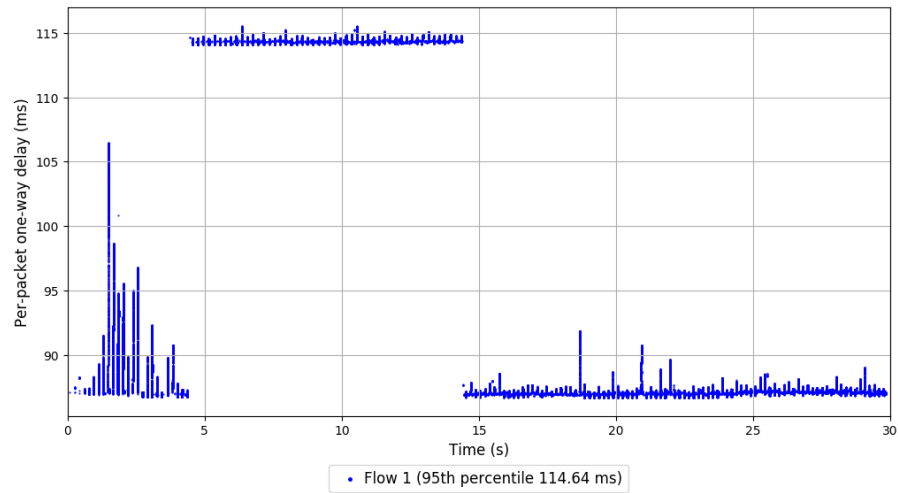
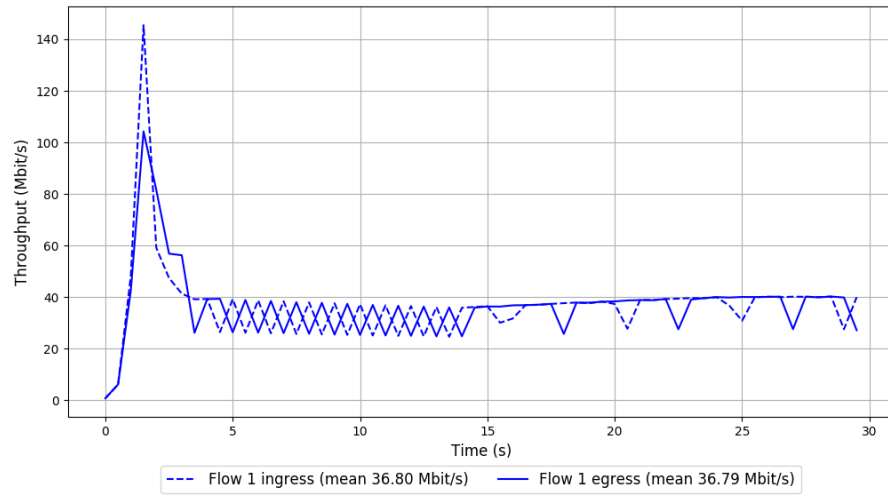
-- Flow 1:

Average throughput: 36.79 Mbit/s

95th percentile per-packet one-way delay: 114.637 ms

Loss rate: 0.61%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-15 21:03:26

End at: 2017-11-15 21:03:56

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 114.574 ms

Loss rate: 1.60%

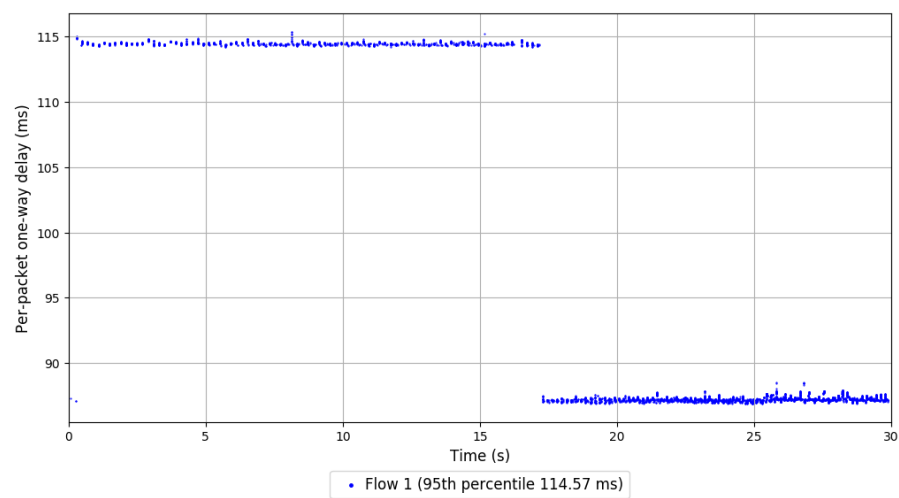
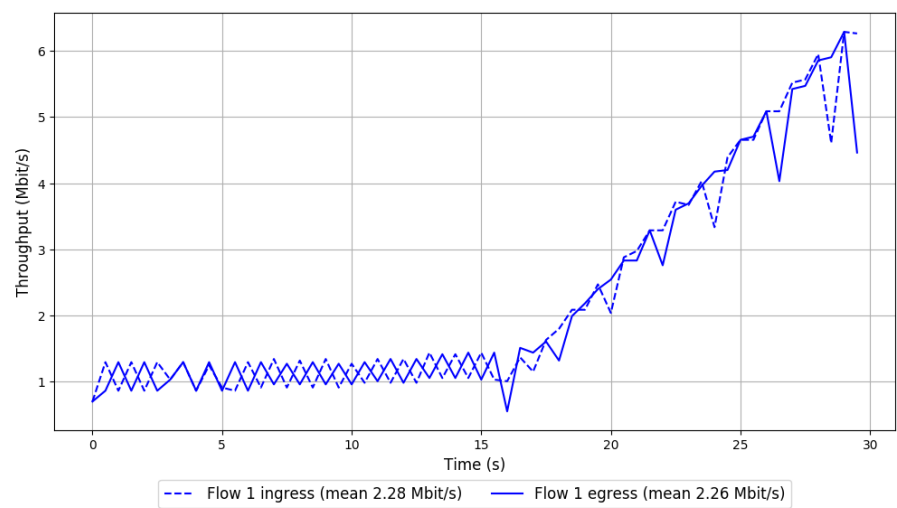
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 114.574 ms

Loss rate: 1.60%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-15 21:14:23

End at: 2017-11-15 21:14:53

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.54 Mbit/s

95th percentile per-packet one-way delay: 88.342 ms

Loss rate: 0.30%

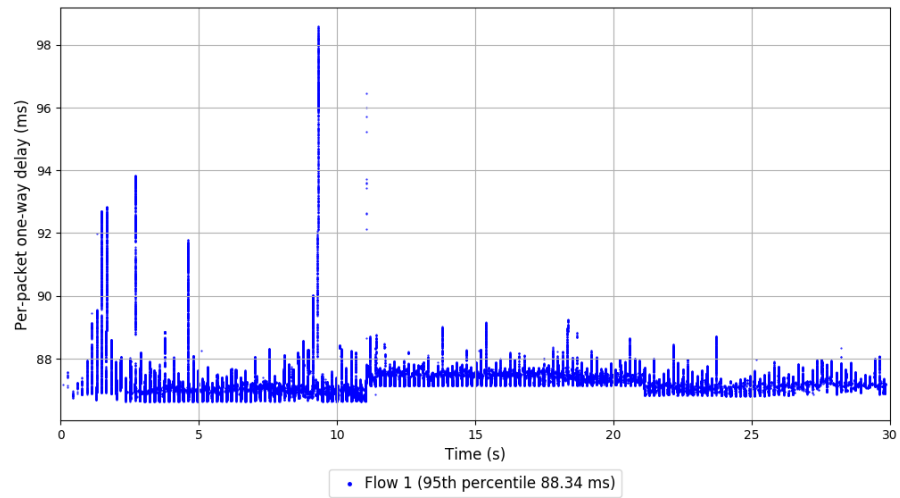
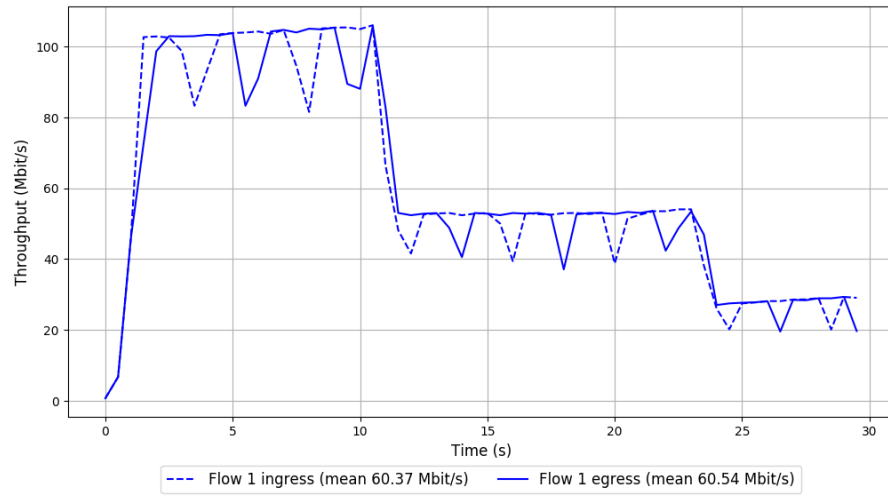
-- Flow 1:

Average throughput: 60.54 Mbit/s

95th percentile per-packet one-way delay: 88.342 ms

Loss rate: 0.30%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-15 21:26:50

End at: 2017-11-15 21:27:20

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.86 Mbit/s

95th percentile per-packet one-way delay: 114.325 ms

Loss rate: 0.84%

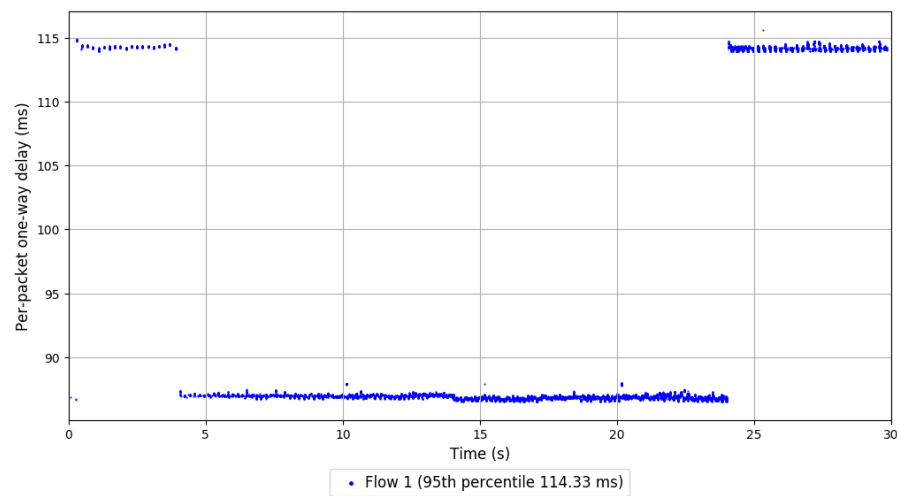
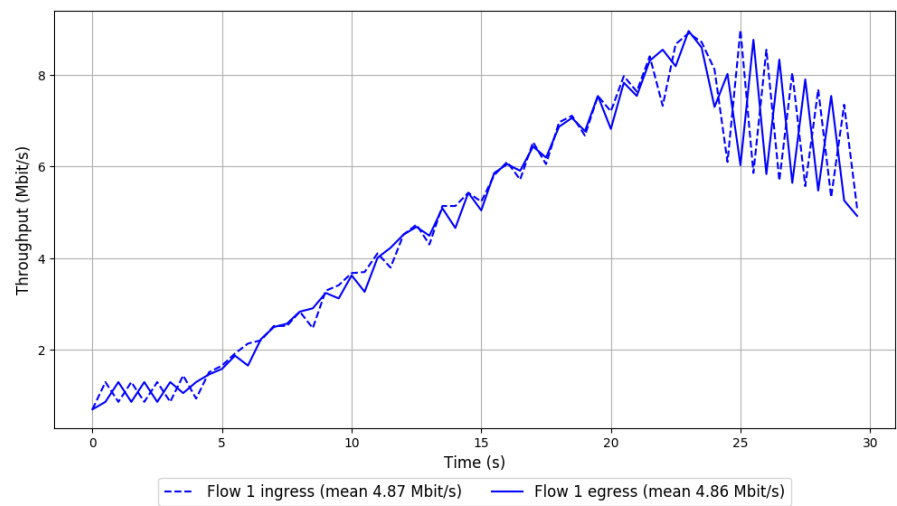
-- Flow 1:

Average throughput: 4.86 Mbit/s

95th percentile per-packet one-way delay: 114.325 ms

Loss rate: 0.84%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-15 21:38:42

End at: 2017-11-15 21:39:12

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.34 Mbit/s

95th percentile per-packet one-way delay: 87.444 ms

Loss rate: 0.78%

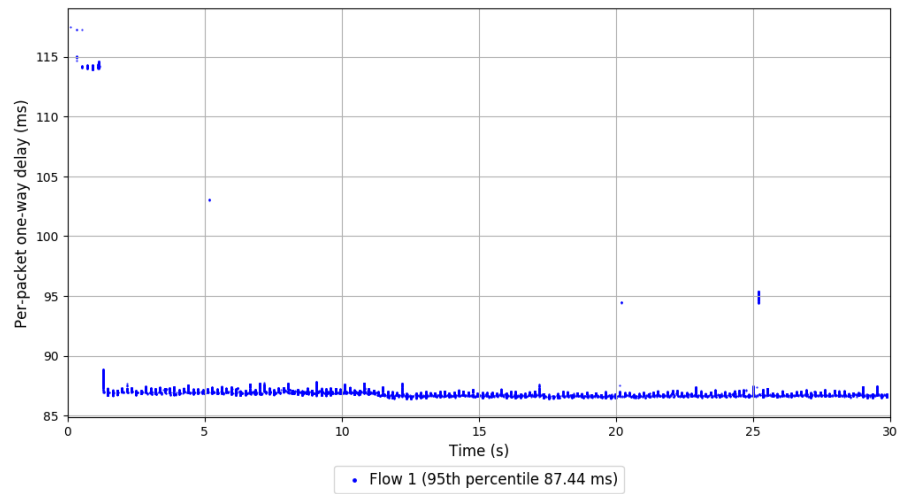
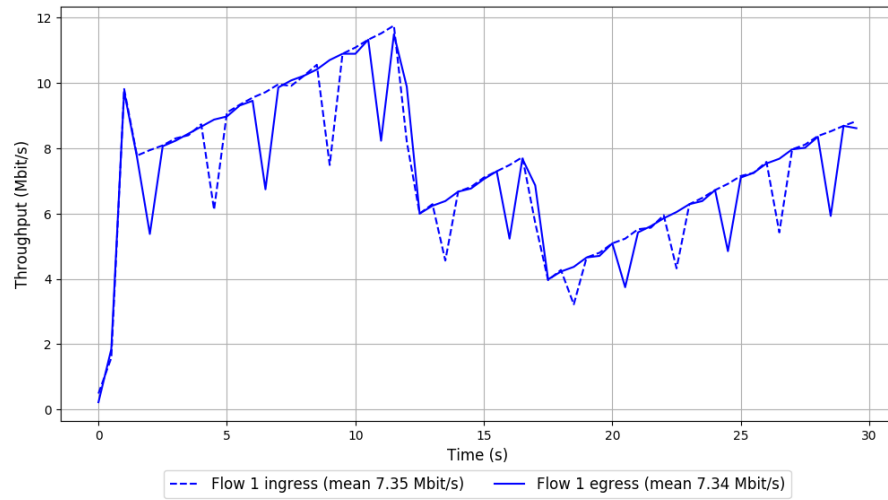
-- Flow 1:

Average throughput: 7.34 Mbit/s

95th percentile per-packet one-way delay: 87.444 ms

Loss rate: 0.78%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-15 21:49:35

End at: 2017-11-15 21:50:06

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.15 Mbit/s

95th percentile per-packet one-way delay: 114.668 ms

Loss rate: 0.59%

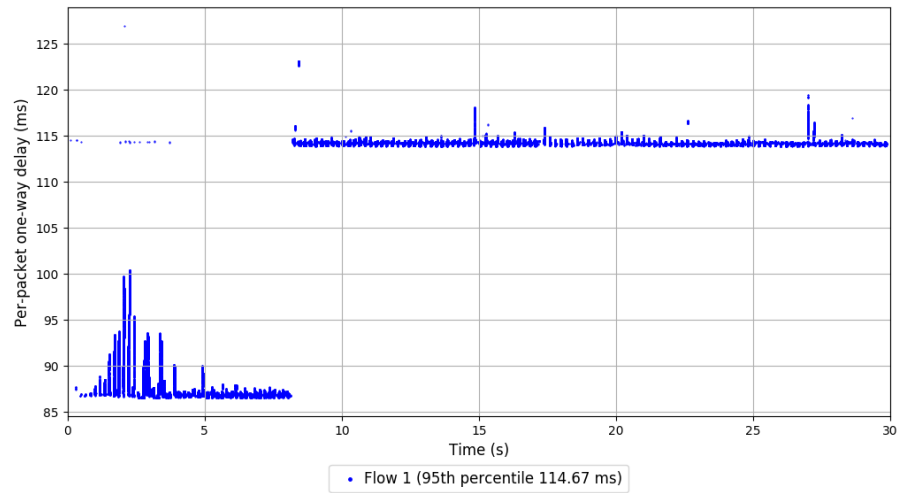
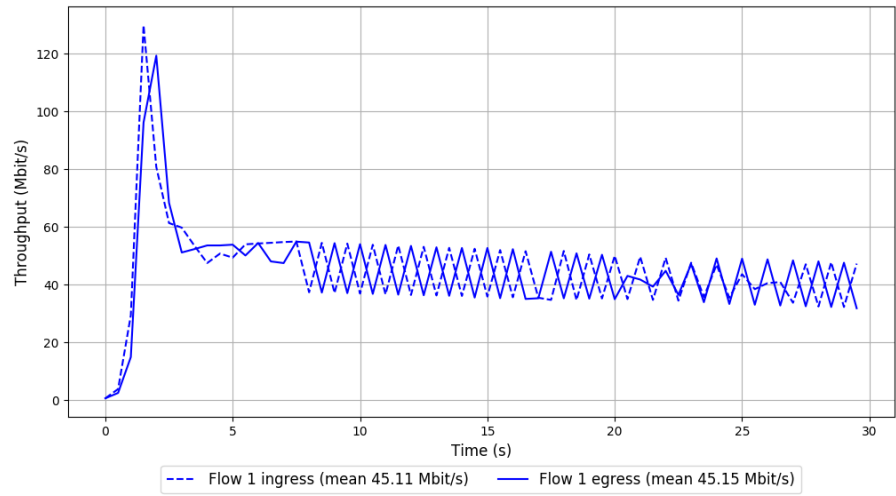
-- Flow 1:

Average throughput: 45.15 Mbit/s

95th percentile per-packet one-way delay: 114.668 ms

Loss rate: 0.59%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-15 21:59:50

End at: 2017-11-15 22:00:20

Below is generated by plot.py at 2017-11-16 00:20:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.15 Mbit/s

95th percentile per-packet one-way delay: 117.732 ms

Loss rate: 0.73%

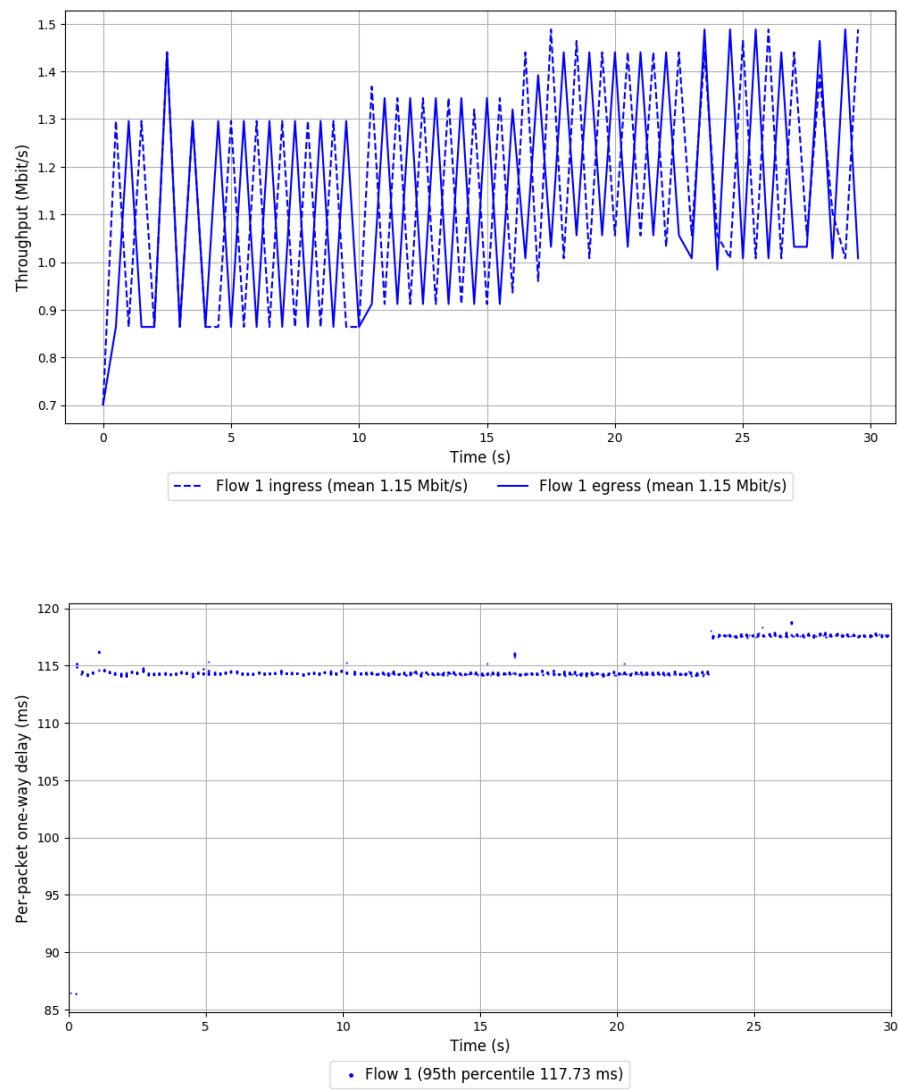
-- Flow 1:

Average throughput: 1.15 Mbit/s

95th percentile per-packet one-way delay: 117.732 ms

Loss rate: 0.73%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-11-15 20:24:05

End at: 2017-11-15 20:24:35

Below is generated by plot.py at 2017-11-16 00:22:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 236.94 Mbit/s

95th percentile per-packet one-way delay: 110.529 ms

Loss rate: 1.45%

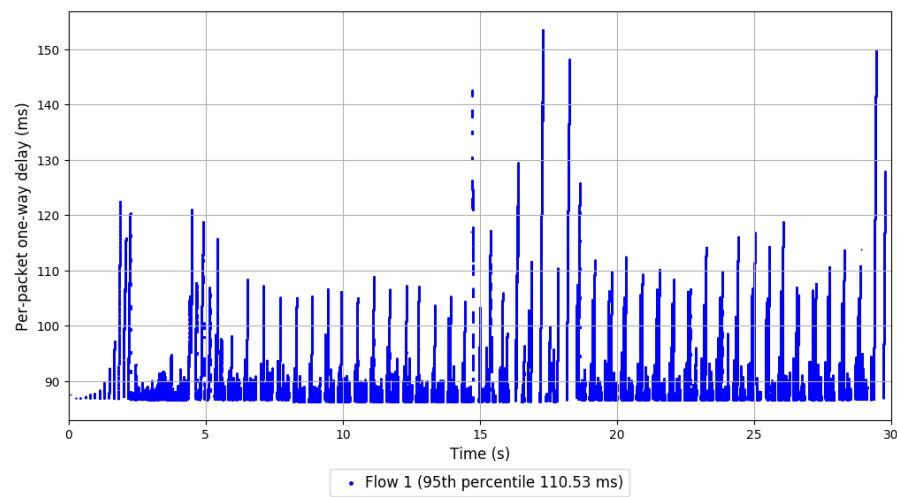
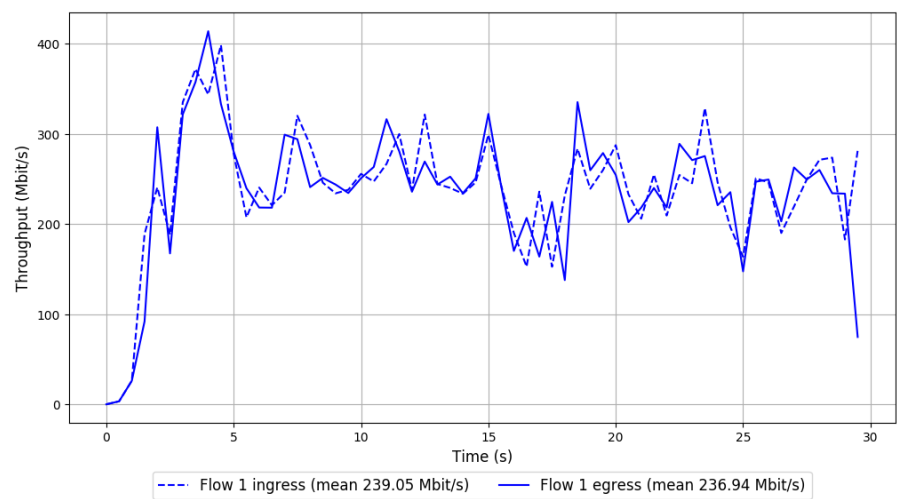
-- Flow 1:

Average throughput: 236.94 Mbit/s

95th percentile per-packet one-way delay: 110.529 ms

Loss rate: 1.45%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-15 20:35:07

End at: 2017-11-15 20:35:37

Below is generated by plot.py at 2017-11-16 00:23:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 249.43 Mbit/s

95th percentile per-packet one-way delay: 102.464 ms

Loss rate: 0.81%

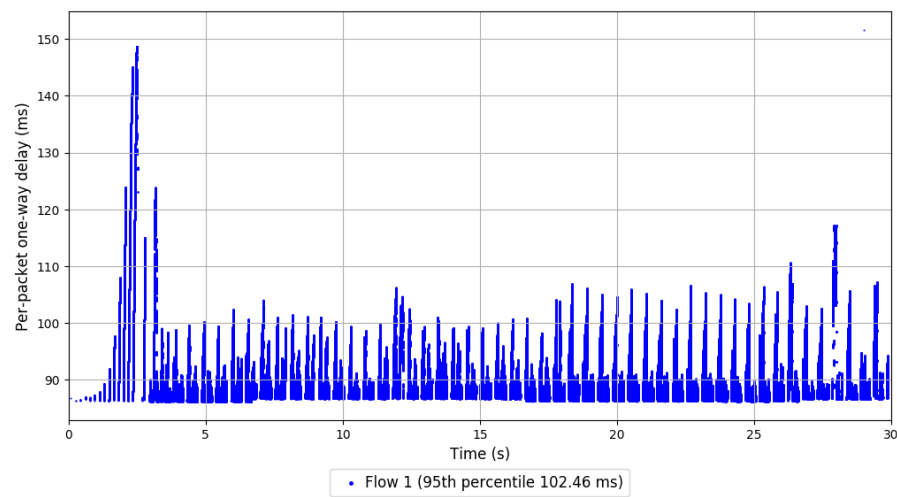
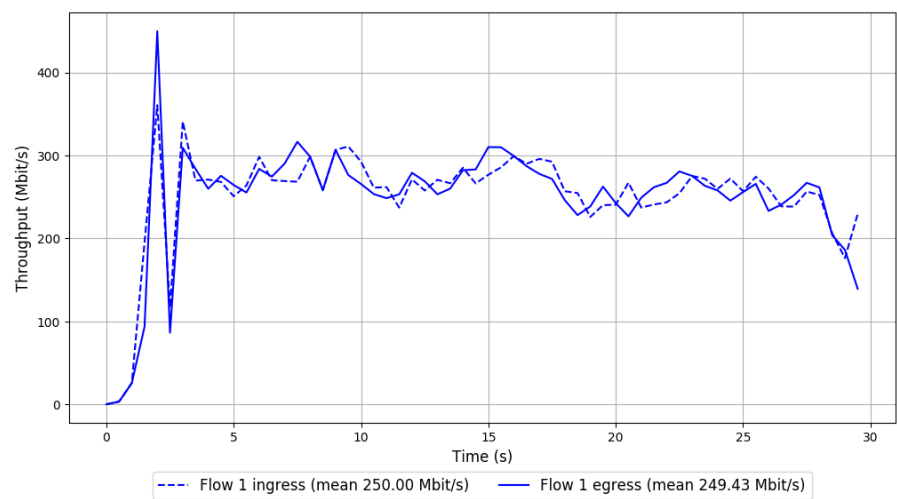
-- Flow 1:

Average throughput: 249.43 Mbit/s

95th percentile per-packet one-way delay: 102.464 ms

Loss rate: 0.81%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-15 20:46:10

End at: 2017-11-15 20:46:40

Below is generated by plot.py at 2017-11-16 00:23:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 251.37 Mbit/s

95th percentile per-packet one-way delay: 121.211 ms

Loss rate: 0.75%

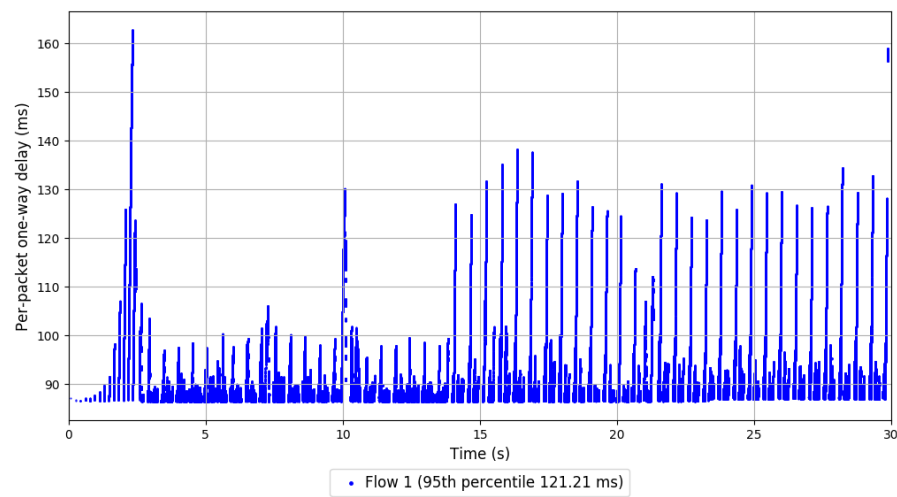
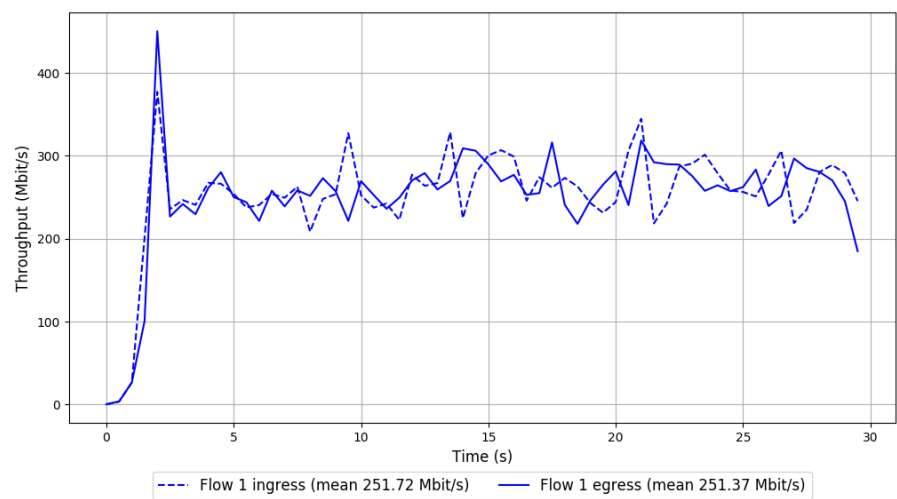
-- Flow 1:

Average throughput: 251.37 Mbit/s

95th percentile per-packet one-way delay: 121.211 ms

Loss rate: 0.75%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-15 20:57:18

End at: 2017-11-15 20:57:48

Below is generated by plot.py at 2017-11-16 00:23:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.39 Mbit/s

95th percentile per-packet one-way delay: 177.946 ms

Loss rate: 1.04%

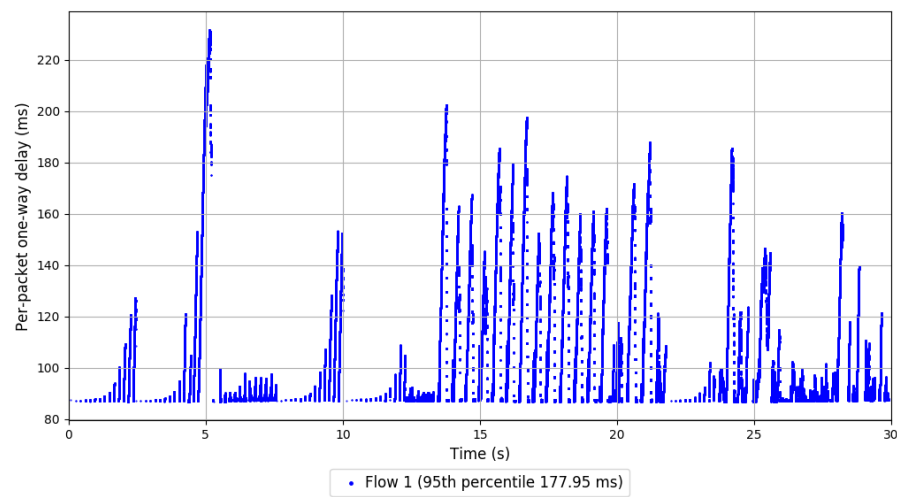
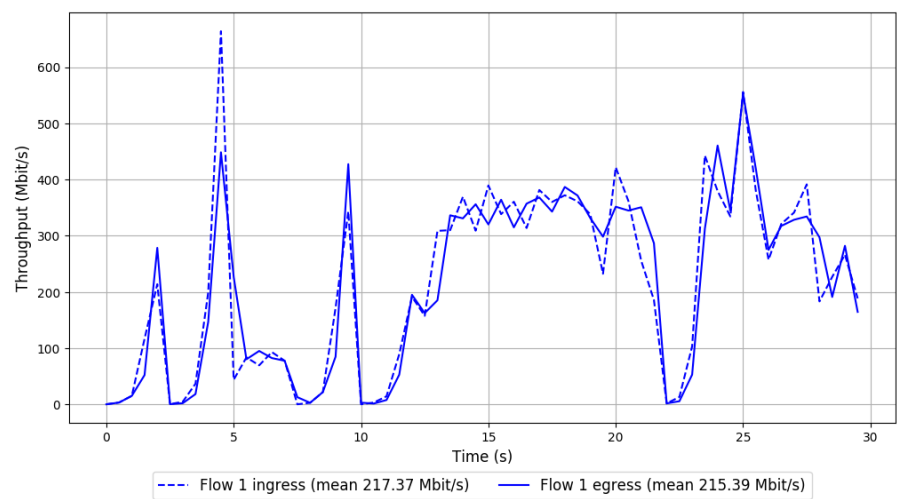
-- Flow 1:

Average throughput: 215.39 Mbit/s

95th percentile per-packet one-way delay: 177.946 ms

Loss rate: 1.04%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-15 21:07:57

End at: 2017-11-15 21:08:27

Below is generated by plot.py at 2017-11-16 00:24:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 265.76 Mbit/s

95th percentile per-packet one-way delay: 136.429 ms

Loss rate: 0.30%

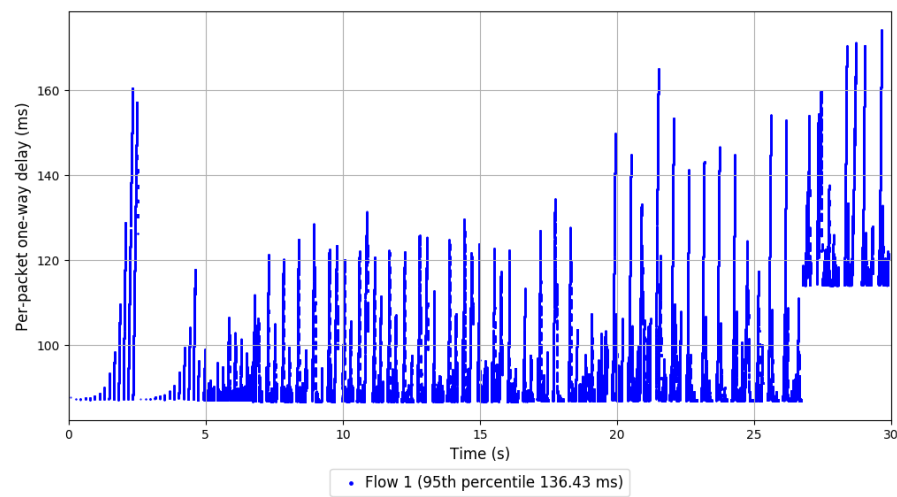
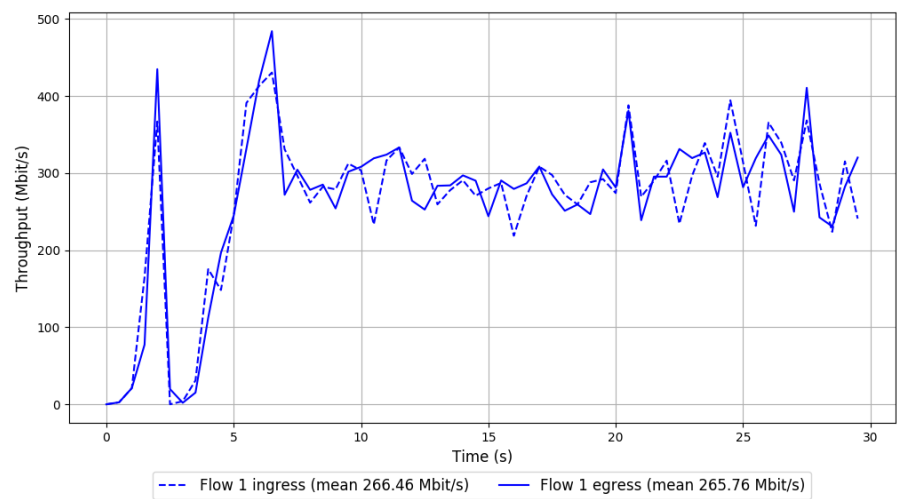
-- Flow 1:

Average throughput: 265.76 Mbit/s

95th percentile per-packet one-way delay: 136.429 ms

Loss rate: 0.30%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-15 21:18:57

End at: 2017-11-15 21:19:27

Below is generated by plot.py at 2017-11-16 00:26:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 359.98 Mbit/s

95th percentile per-packet one-way delay: 294.072 ms

Loss rate: 8.17%

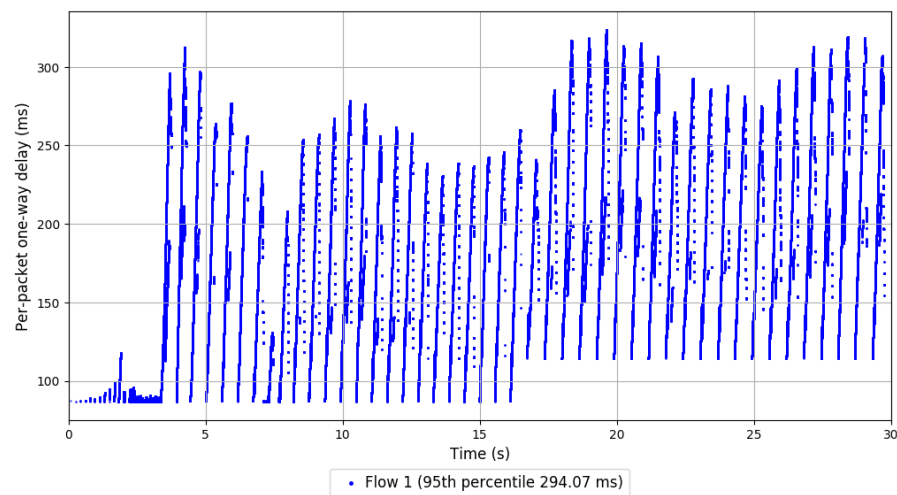
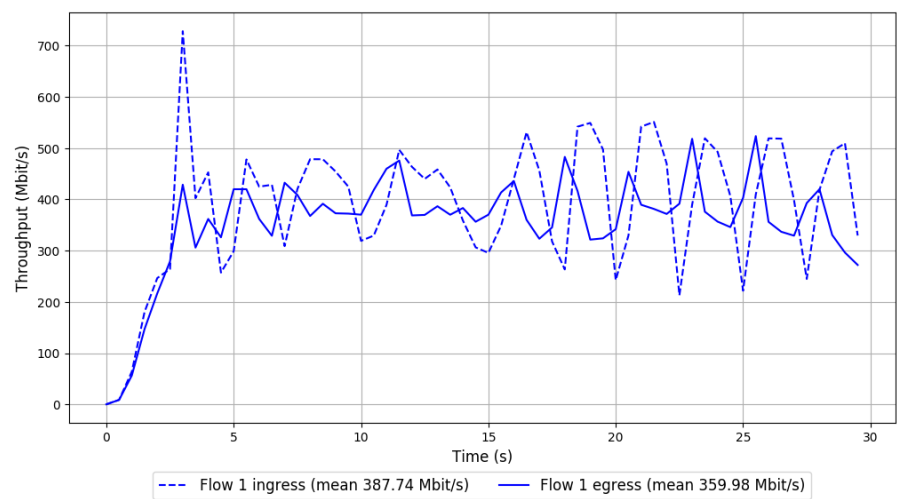
-- Flow 1:

Average throughput: 359.98 Mbit/s

95th percentile per-packet one-way delay: 294.072 ms

Loss rate: 8.17%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

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

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

Below is generated by plot.py at 2017-11-16 00:26:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 274.22 Mbit/s

95th percentile per-packet one-way delay: 154.094 ms

Loss rate: 0.53%

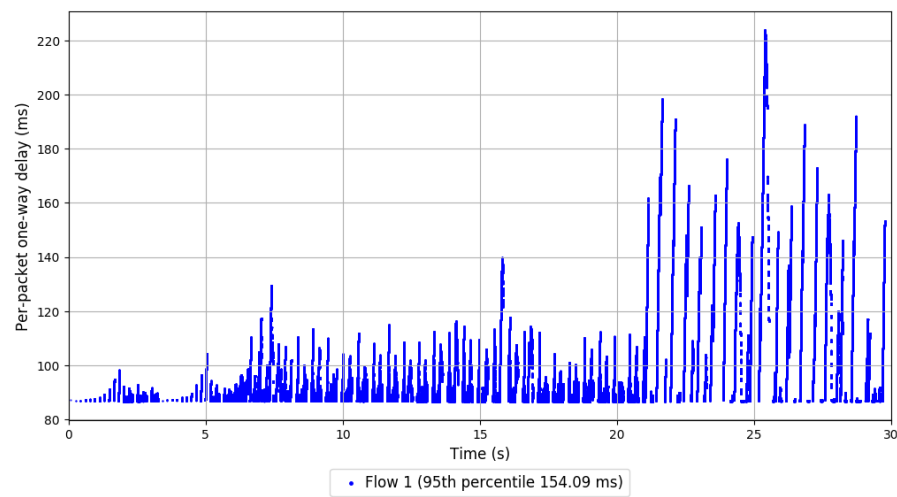
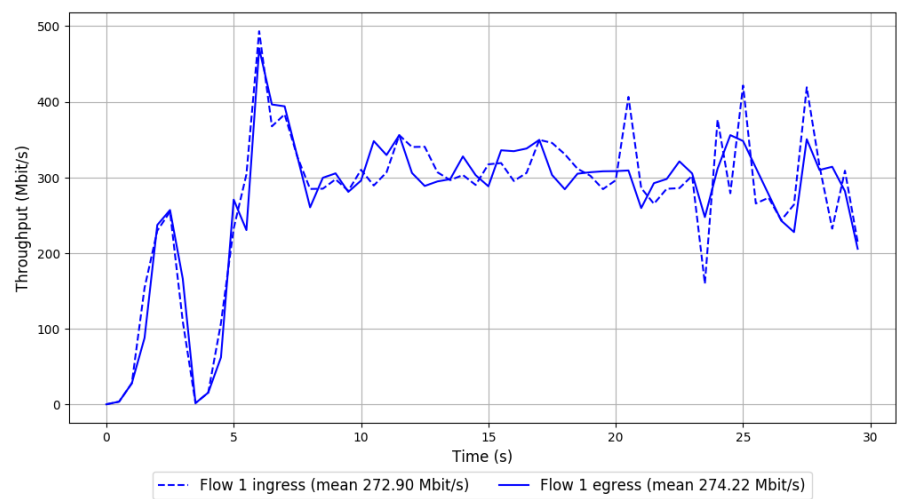
-- Flow 1:

Average throughput: 274.22 Mbit/s

95th percentile per-packet one-way delay: 154.094 ms

Loss rate: 0.53%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-15 21:43:10

End at: 2017-11-15 21:43:40

Below is generated by plot.py at 2017-11-16 00:26:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 248.47 Mbit/s

95th percentile per-packet one-way delay: 127.814 ms

Loss rate: 0.22%

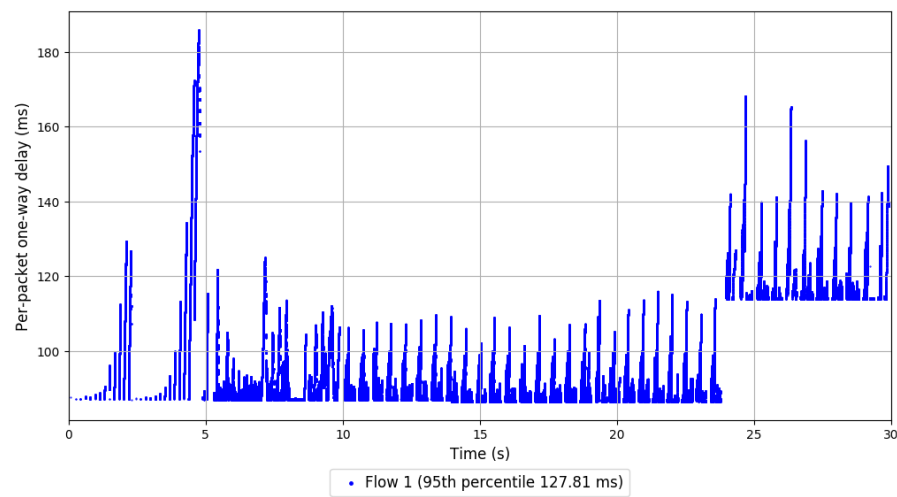
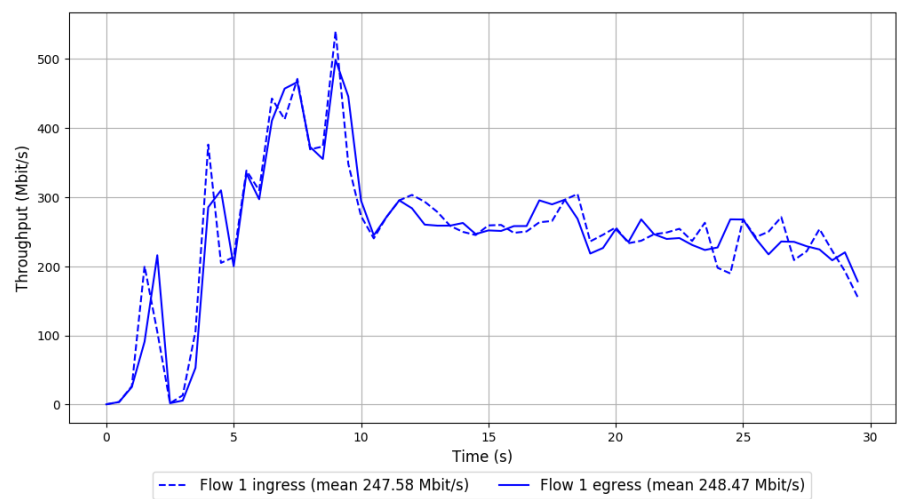
-- Flow 1:

Average throughput: 248.47 Mbit/s

95th percentile per-packet one-way delay: 127.814 ms

Loss rate: 0.22%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-15 21:53:49

End at: 2017-11-15 21:54:19

Below is generated by plot.py at 2017-11-16 00:28:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 302.89 Mbit/s

95th percentile per-packet one-way delay: 327.927 ms

Loss rate: 27.35%

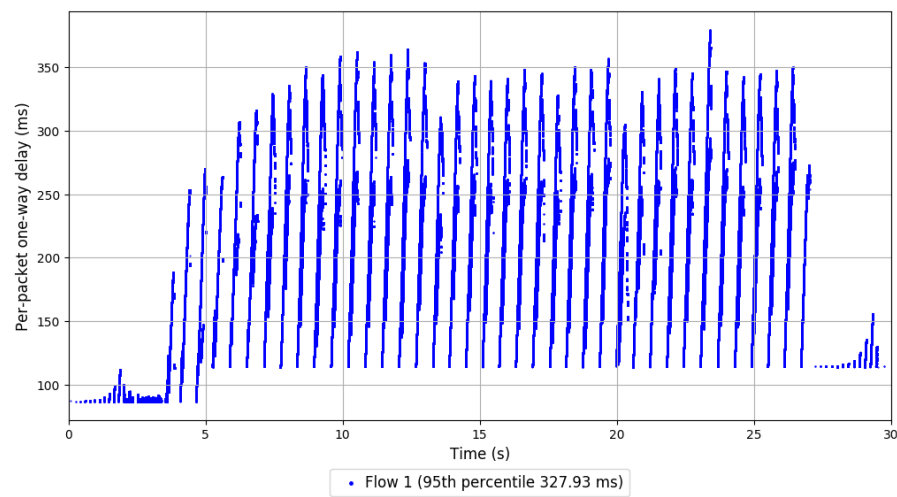
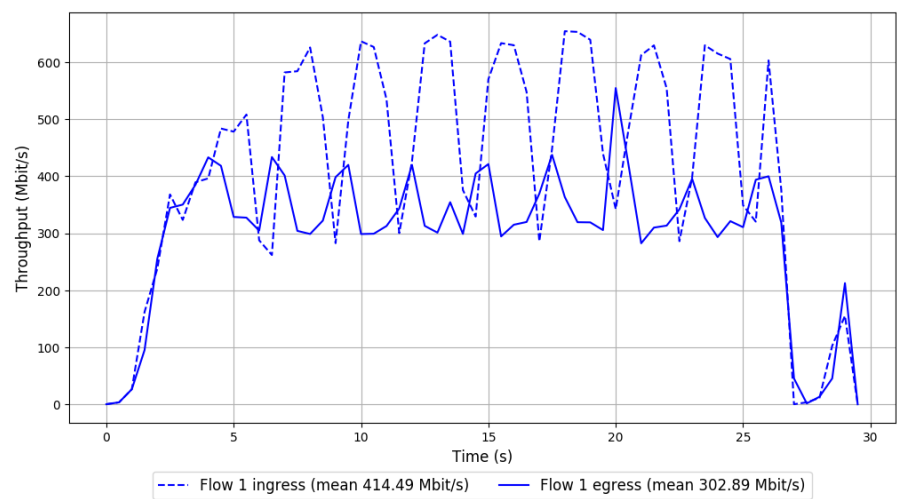
-- Flow 1:

Average throughput: 302.89 Mbit/s

95th percentile per-packet one-way delay: 327.927 ms

Loss rate: 27.35%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

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

End at: 2017-11-15 22:04:31

Below is generated by plot.py at 2017-11-16 00:28:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.63 Mbit/s

95th percentile per-packet one-way delay: 246.876 ms

Loss rate: 6.21%

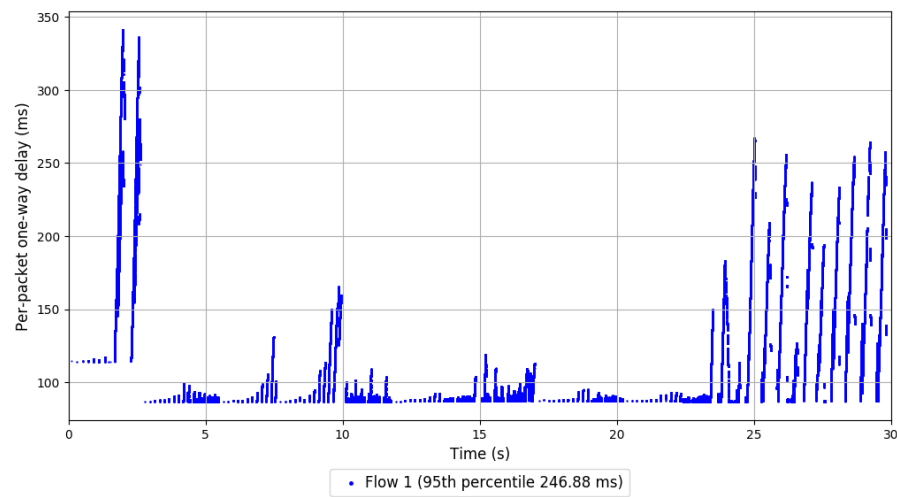
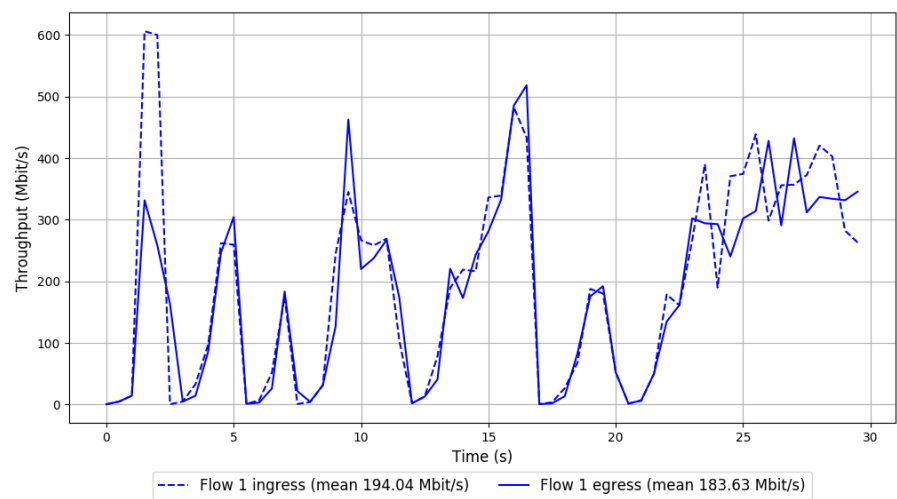
-- Flow 1:

Average throughput: 183.63 Mbit/s

95th percentile per-packet one-way delay: 246.876 ms

Loss rate: 6.21%

Run 10: Report of Verus — Data Link

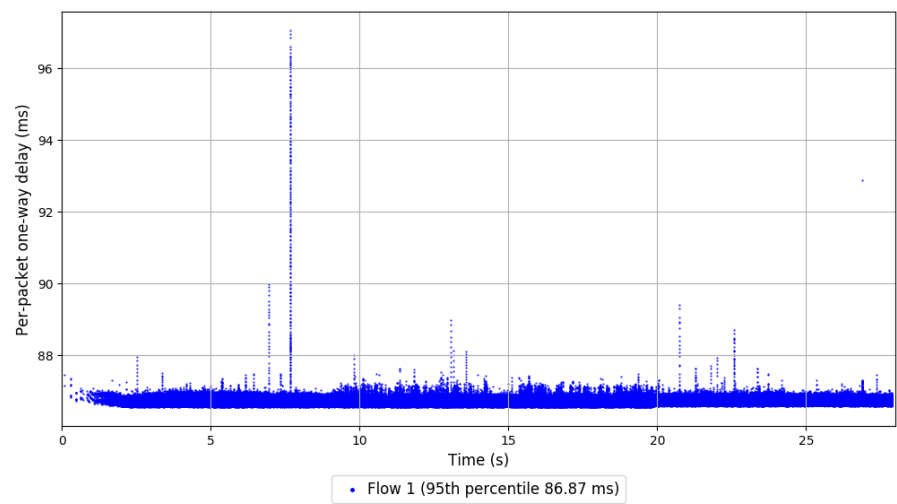
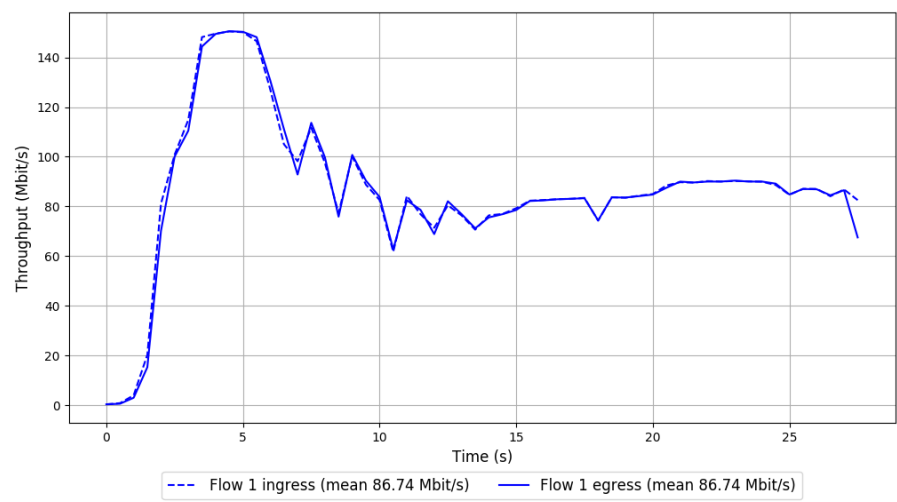


```
Run 1: Statistics of Copa

Start at: 2017-11-15 20:25:02
End at: 2017-11-15 20:25:32

# Below is generated by plot.py at 2017-11-16 00:28:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: 86.867 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: 86.867 ms
Loss rate: 0.62%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-15 20:36:04

End at: 2017-11-15 20:36:34

Below is generated by plot.py at 2017-11-16 00:28:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.13 Mbit/s

95th percentile per-packet one-way delay: 86.694 ms

Loss rate: 0.55%

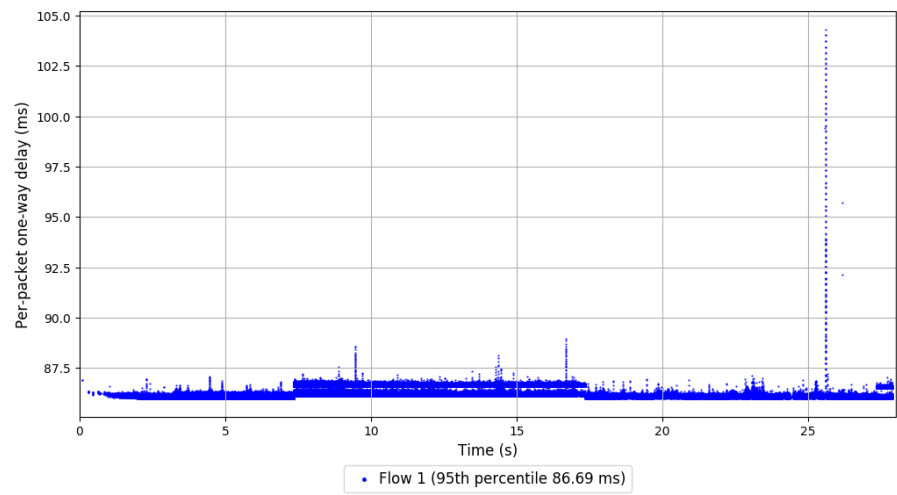
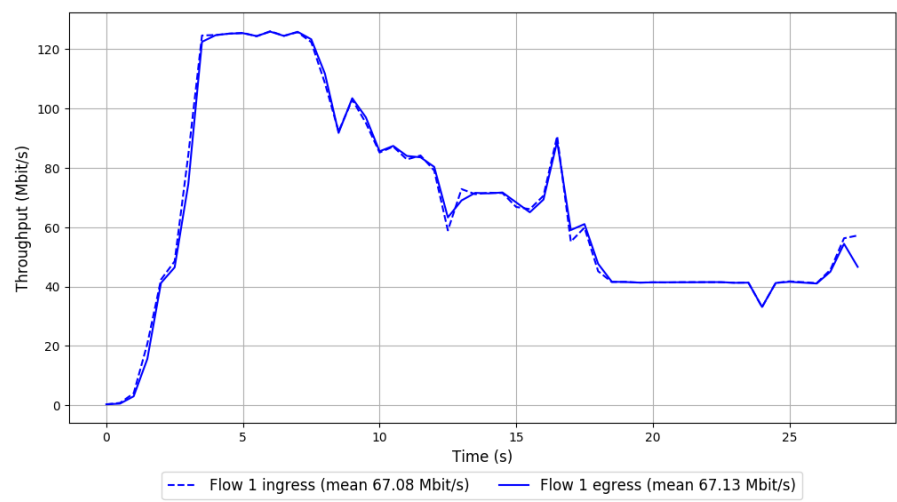
-- Flow 1:

Average throughput: 67.13 Mbit/s

95th percentile per-packet one-way delay: 86.694 ms

Loss rate: 0.55%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-15 20:47:08

End at: 2017-11-15 20:47:38

Below is generated by plot.py at 2017-11-16 00:28:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.00 Mbit/s

95th percentile per-packet one-way delay: 86.952 ms

Loss rate: 0.62%

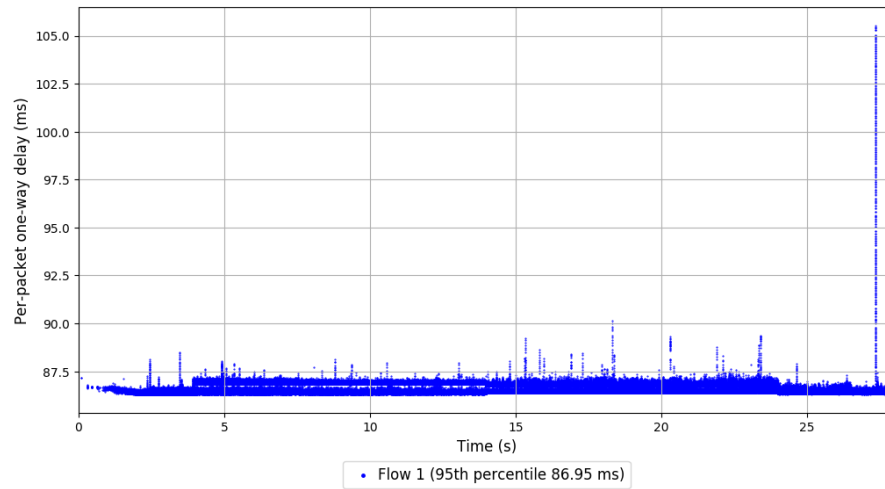
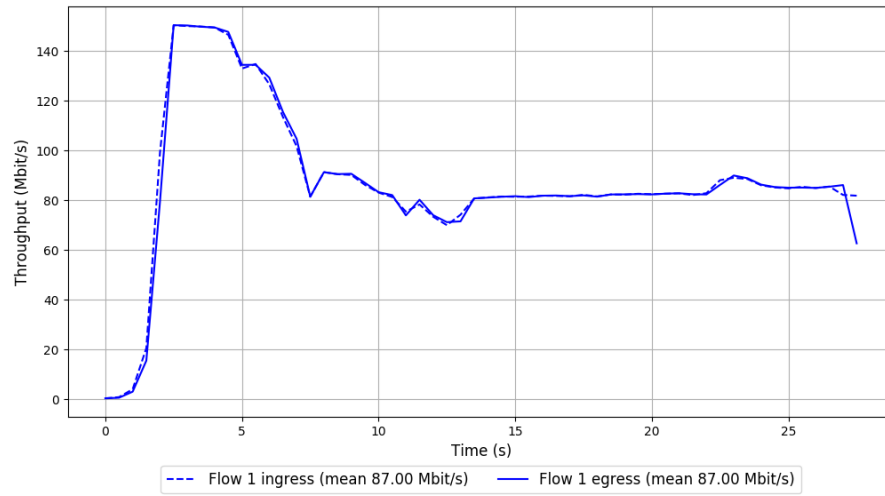
-- Flow 1:

Average throughput: 87.00 Mbit/s

95th percentile per-packet one-way delay: 86.952 ms

Loss rate: 0.62%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-15 20:58:13

End at: 2017-11-15 20:58:43

Below is generated by plot.py at 2017-11-16 00:28:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.45 Mbit/s

95th percentile per-packet one-way delay: 114.135 ms

Loss rate: 0.16%

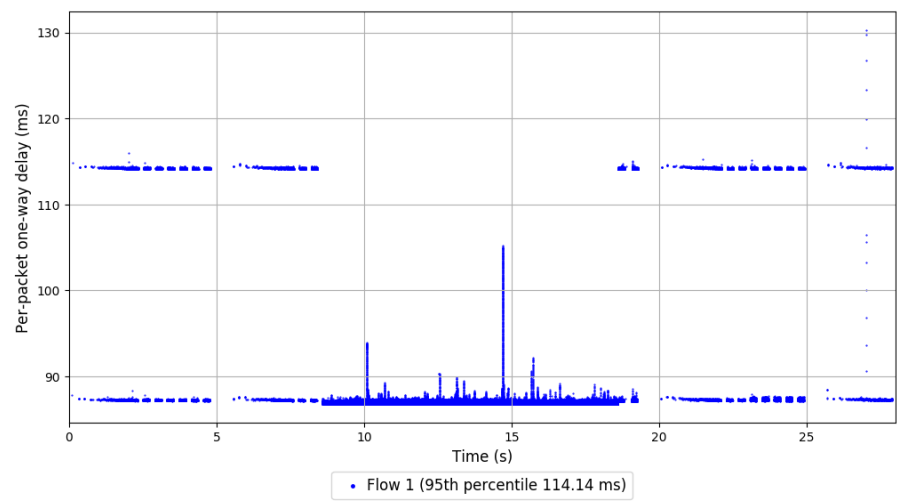
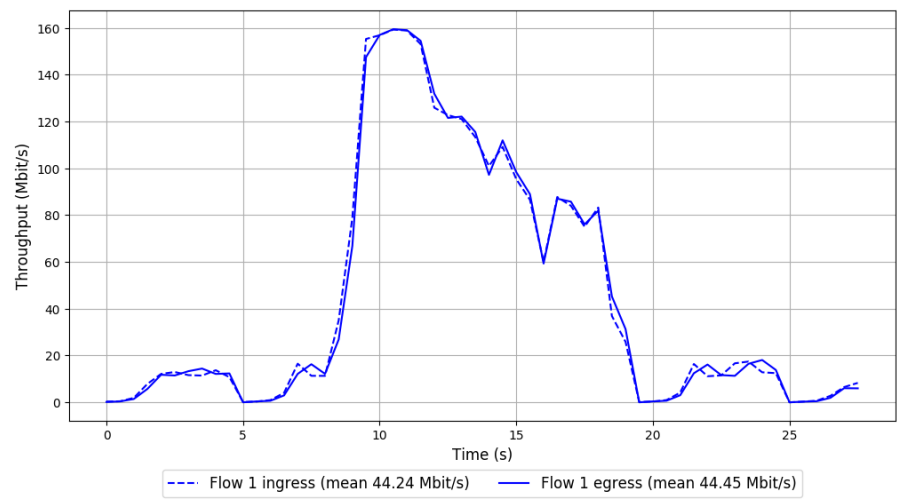
-- Flow 1:

Average throughput: 44.45 Mbit/s

95th percentile per-packet one-way delay: 114.135 ms

Loss rate: 0.16%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-15 21:08:56

End at: 2017-11-15 21:09:26

Below is generated by plot.py at 2017-11-16 00:28:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.04 Mbit/s

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

Loss rate: 0.96%

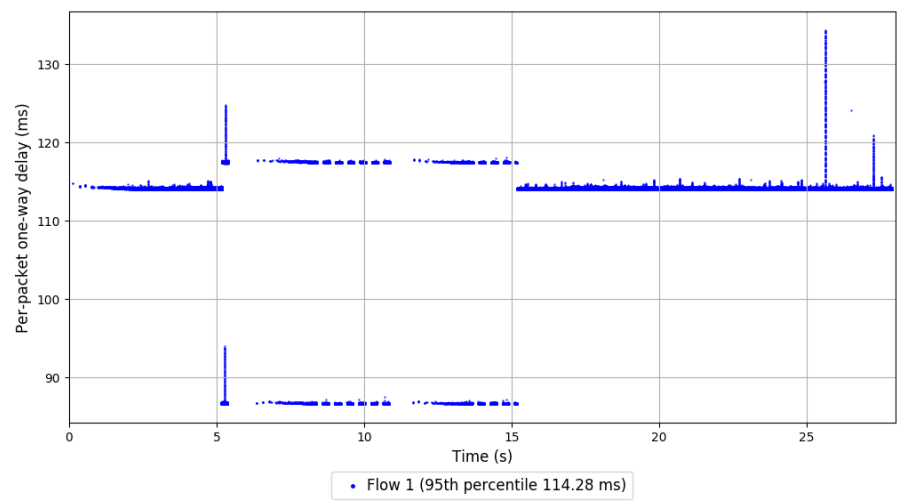
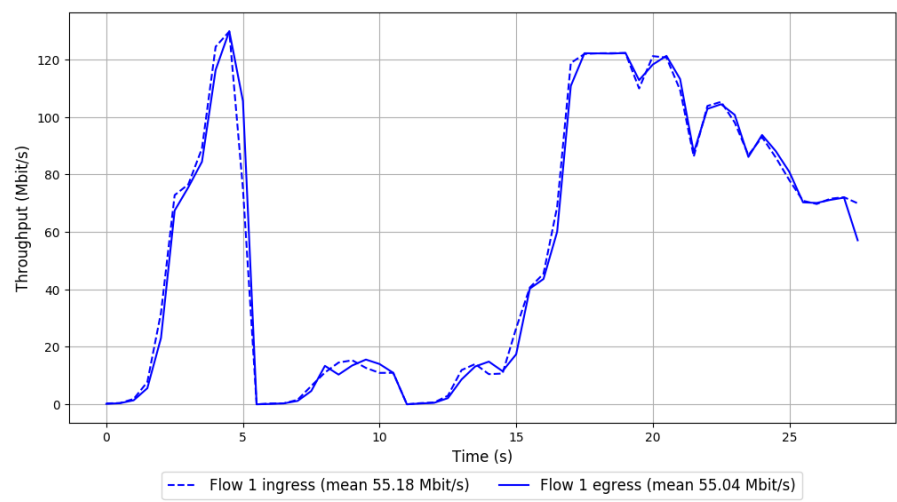
-- Flow 1:

Average throughput: 55.04 Mbit/s

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

Loss rate: 0.96%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-15 21:20:05

End at: 2017-11-15 21:20:35

Below is generated by plot.py at 2017-11-16 00:28:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.45 Mbit/s

95th percentile per-packet one-way delay: 113.952 ms

Loss rate: 0.45%

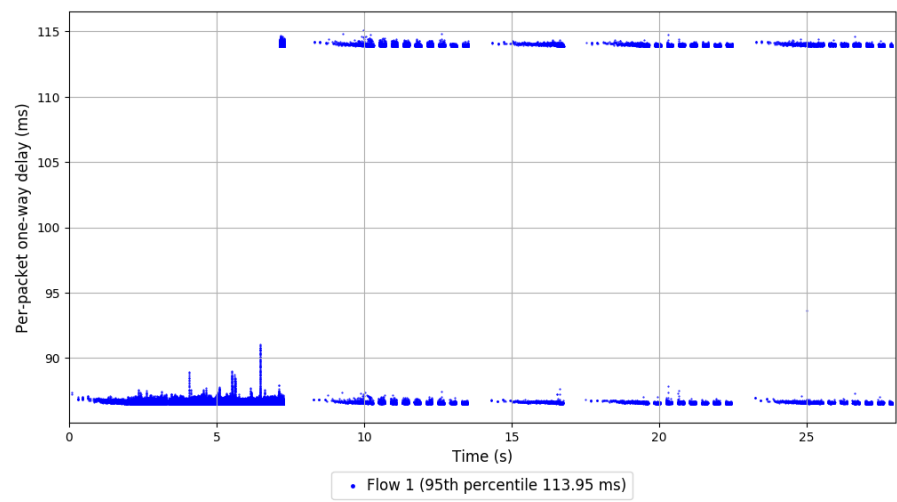
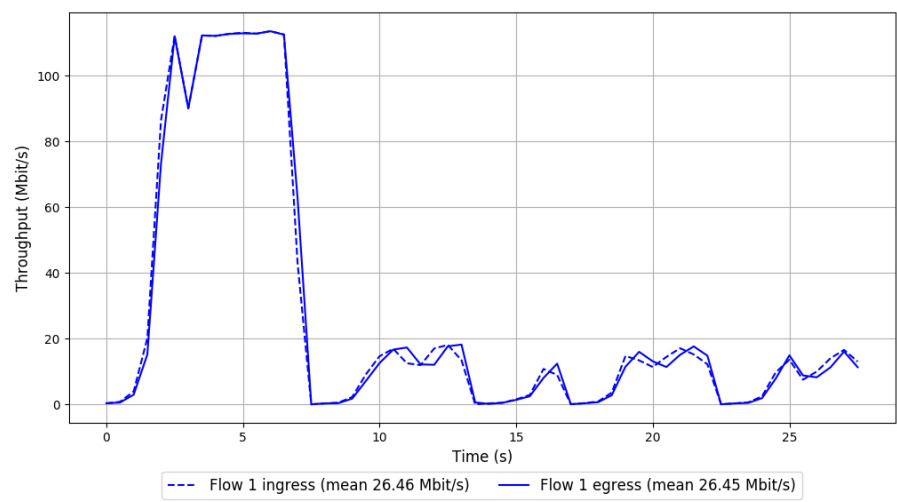
-- Flow 1:

Average throughput: 26.45 Mbit/s

95th percentile per-packet one-way delay: 113.952 ms

Loss rate: 0.45%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-15 21:32:00

End at: 2017-11-15 21:32:30

Below is generated by plot.py at 2017-11-16 00:28:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.04 Mbit/s

95th percentile per-packet one-way delay: 117.362 ms

Loss rate: 0.16%

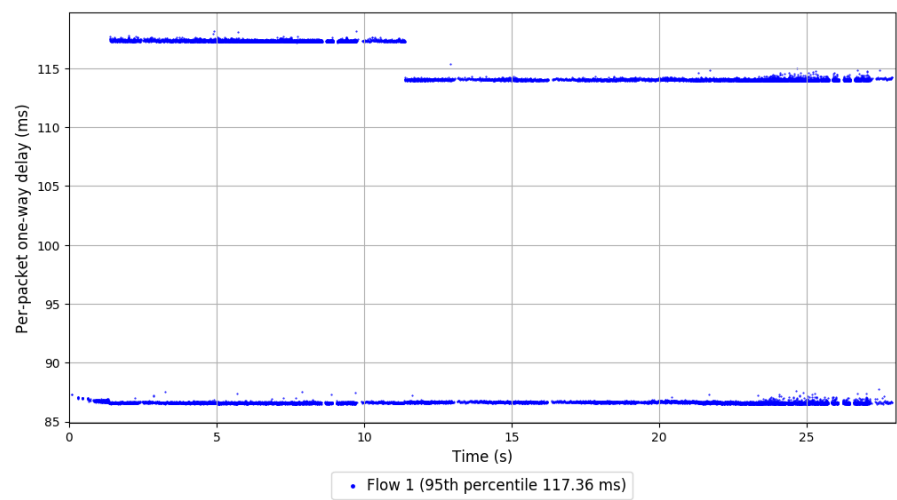
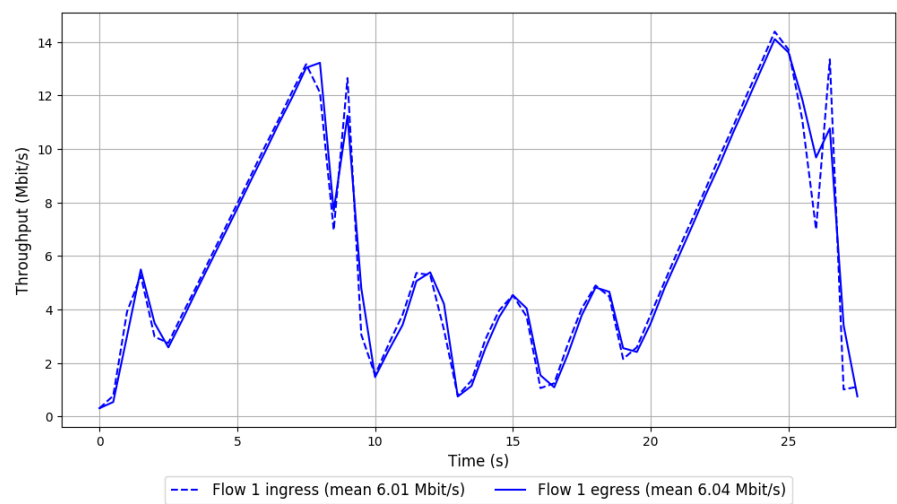
-- Flow 1:

Average throughput: 6.04 Mbit/s

95th percentile per-packet one-way delay: 117.362 ms

Loss rate: 0.16%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-15 21:44:07

End at: 2017-11-15 21:44:37

Below is generated by plot.py at 2017-11-16 00:28:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.45 Mbit/s

95th percentile per-packet one-way delay: 117.351 ms

Loss rate: 0.01%

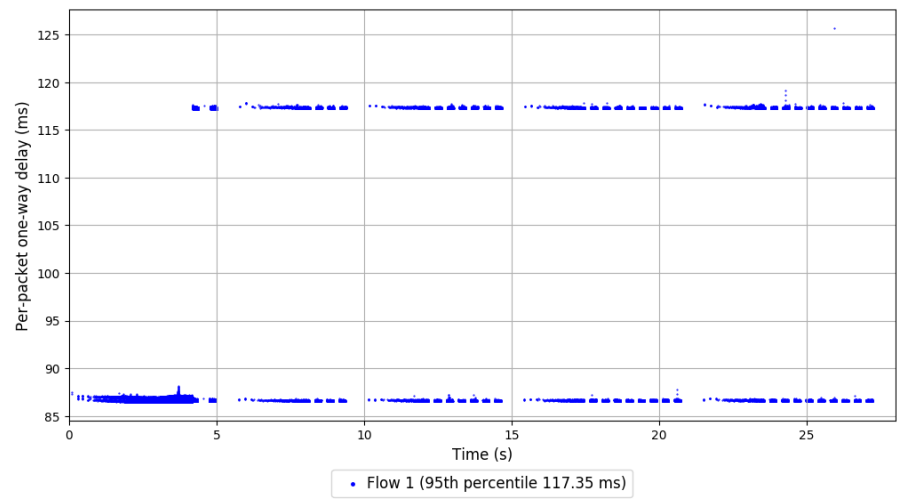
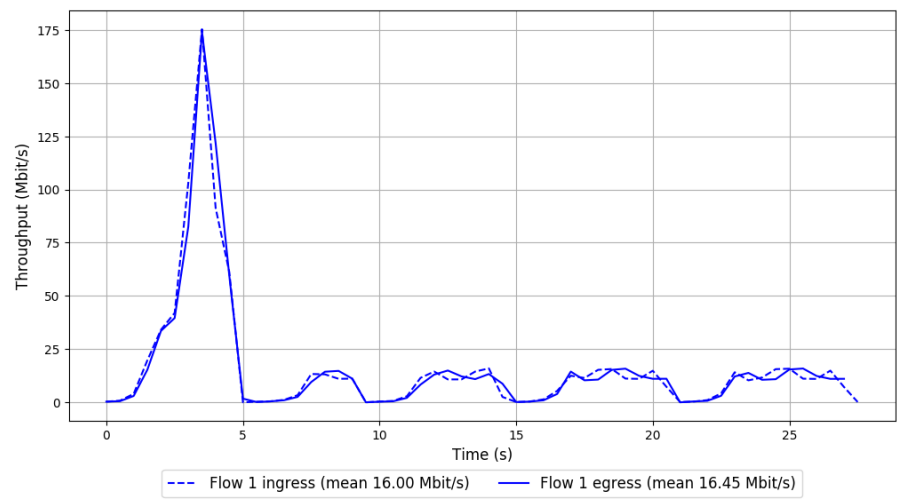
-- Flow 1:

Average throughput: 16.45 Mbit/s

95th percentile per-packet one-way delay: 117.351 ms

Loss rate: 0.01%

Run 8: Report of Copa — Data Link

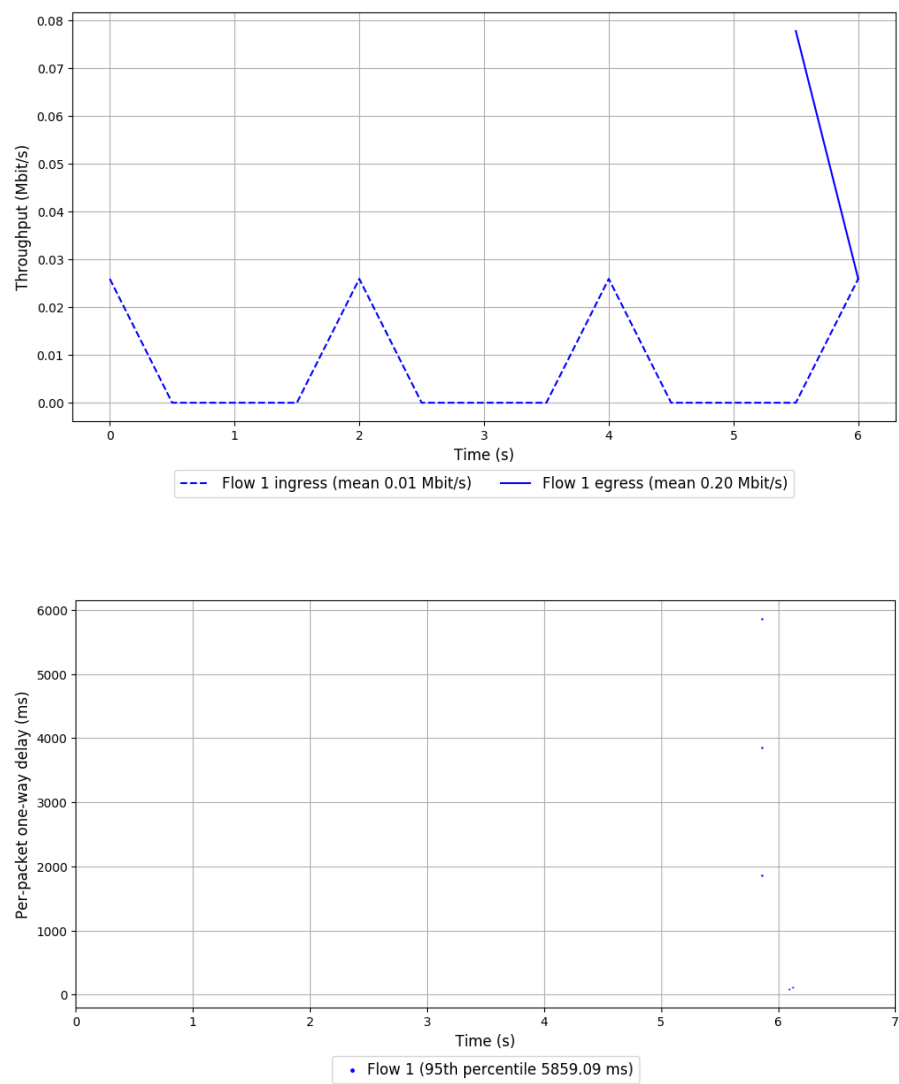


Run 9: Statistics of Copa

Start at: 2017-11-15 21:54:52

End at: 2017-11-15 21:55:22

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

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

End at: 2017-11-15 22:05:24

Below is generated by plot.py at 2017-11-16 00:28:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.13 Mbit/s

95th percentile per-packet one-way delay: 114.331 ms

Loss rate: 0.25%

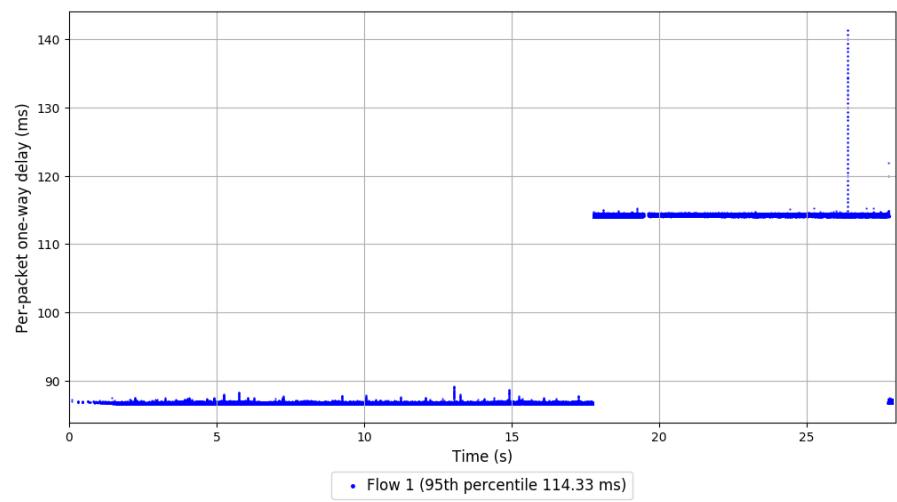
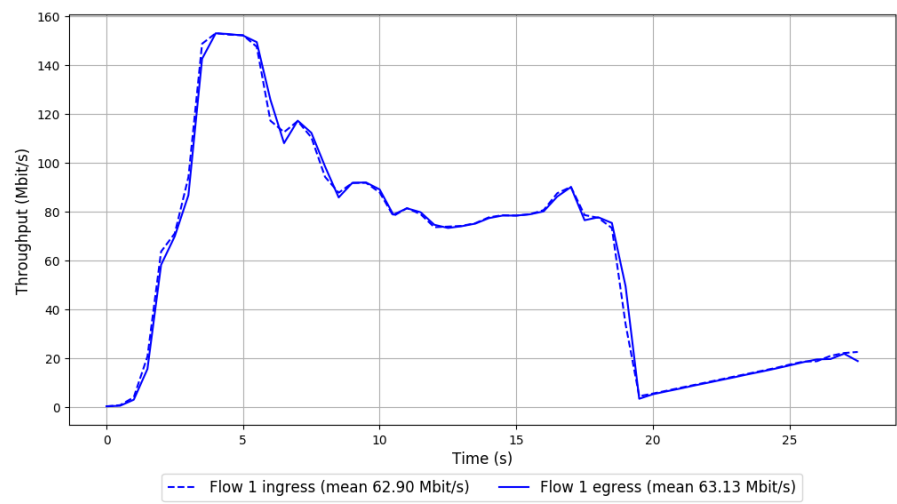
-- Flow 1:

Average throughput: 63.13 Mbit/s

95th percentile per-packet one-way delay: 114.331 ms

Loss rate: 0.25%

Run 10: Report of Copa — Data Link

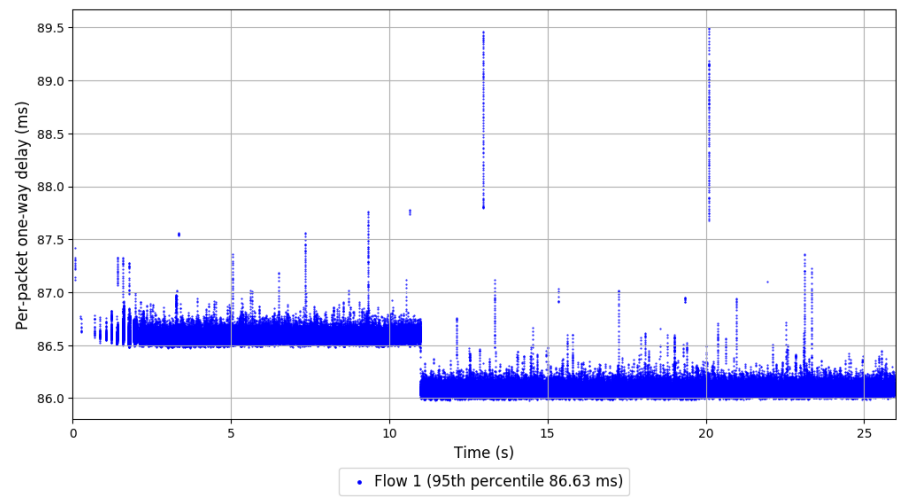
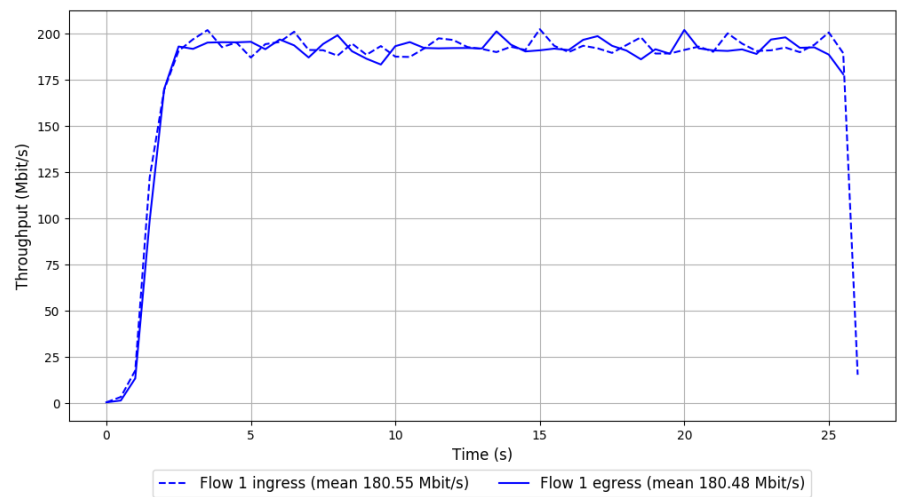


```
Run 1: Statistics of Indigo

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

# Below is generated by plot.py at 2017-11-16 00:28:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 180.48 Mbit/s
95th percentile per-packet one-way delay: 86.629 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 180.48 Mbit/s
95th percentile per-packet one-way delay: 86.629 ms
Loss rate: 0.72%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-11-15 20:27:08

End at: 2017-11-15 20:27:38

Below is generated by plot.py at 2017-11-16 00:29:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.61 Mbit/s

95th percentile per-packet one-way delay: 86.813 ms

Loss rate: 0.61%

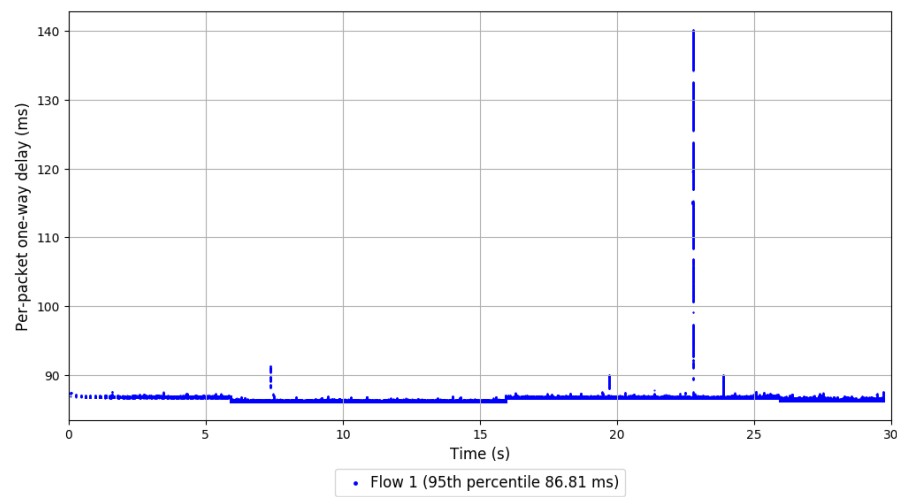
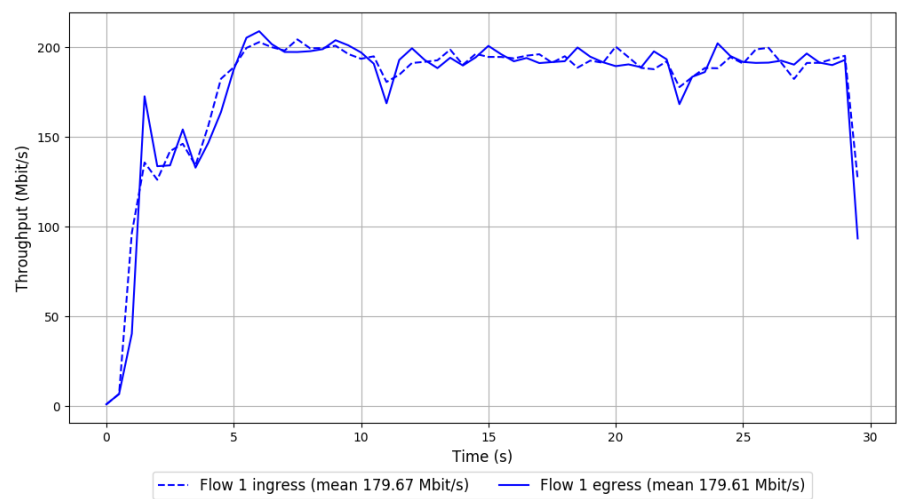
-- Flow 1:

Average throughput: 179.61 Mbit/s

95th percentile per-packet one-way delay: 86.813 ms

Loss rate: 0.61%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-15 20:38:12

End at: 2017-11-15 20:38:42

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.17 Mbit/s

95th percentile per-packet one-way delay: 86.781 ms

Loss rate: 0.59%

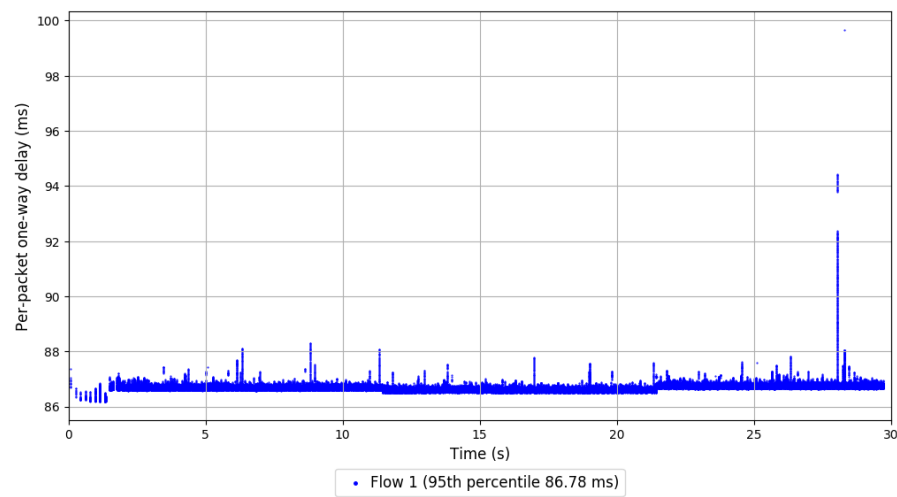
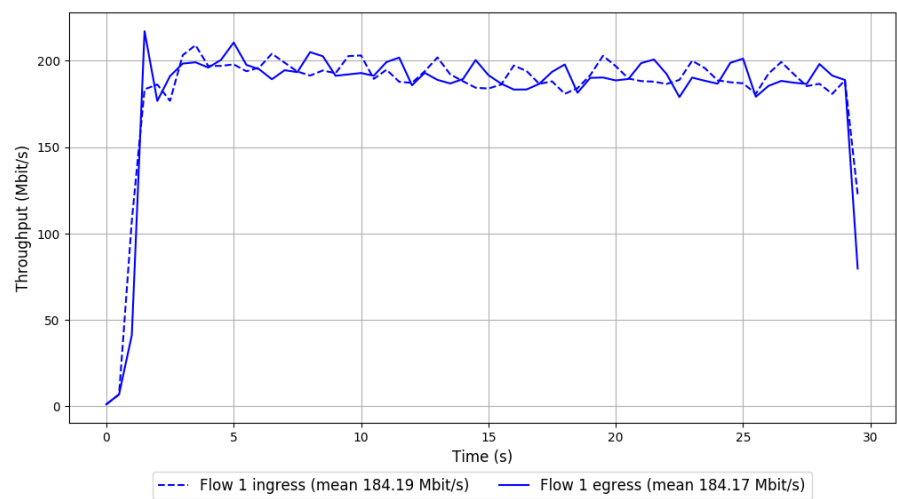
-- Flow 1:

Average throughput: 184.17 Mbit/s

95th percentile per-packet one-way delay: 86.781 ms

Loss rate: 0.59%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-15 20:49:17

End at: 2017-11-15 20:49:47

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.21 Mbit/s

95th percentile per-packet one-way delay: 87.073 ms

Loss rate: 0.63%

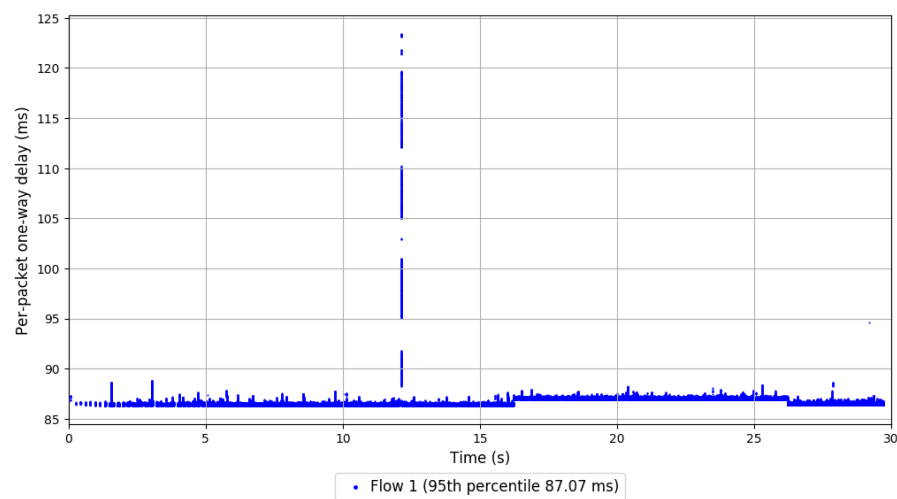
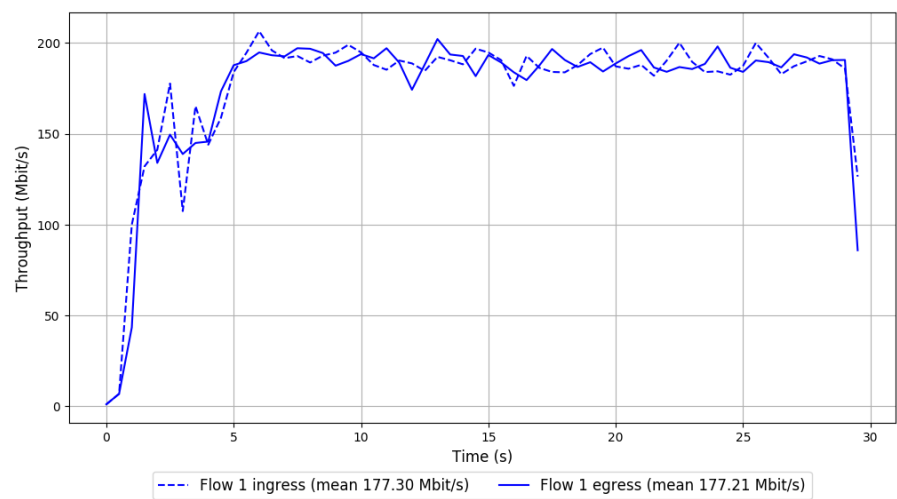
-- Flow 1:

Average throughput: 177.21 Mbit/s

95th percentile per-packet one-way delay: 87.073 ms

Loss rate: 0.63%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-15 21:00:19

End at: 2017-11-15 21:00:49

Below is generated by plot.py at 2017-11-16 00:29:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.99 Mbit/s

95th percentile per-packet one-way delay: 114.213 ms

Loss rate: 0.60%

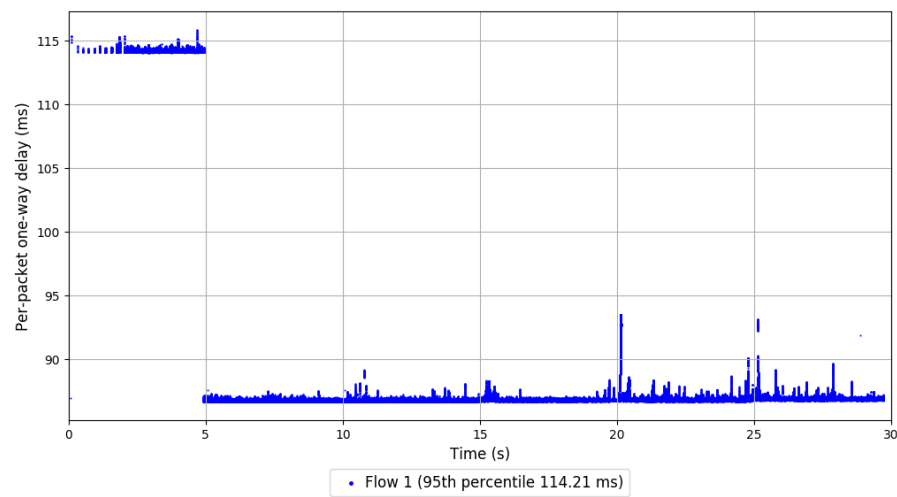
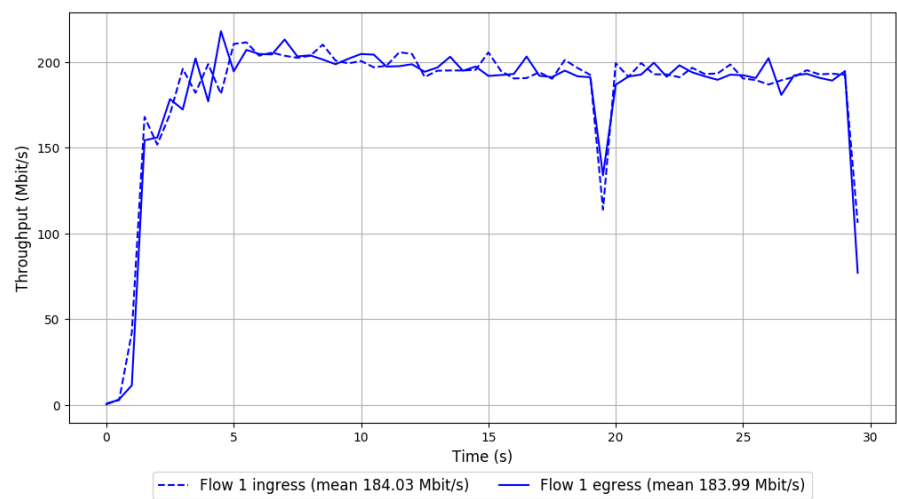
-- Flow 1:

Average throughput: 183.99 Mbit/s

95th percentile per-packet one-way delay: 114.213 ms

Loss rate: 0.60%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

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

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

Below is generated by plot.py at 2017-11-16 00:29:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.00 Mbit/s

95th percentile per-packet one-way delay: 114.205 ms

Loss rate: 0.21%

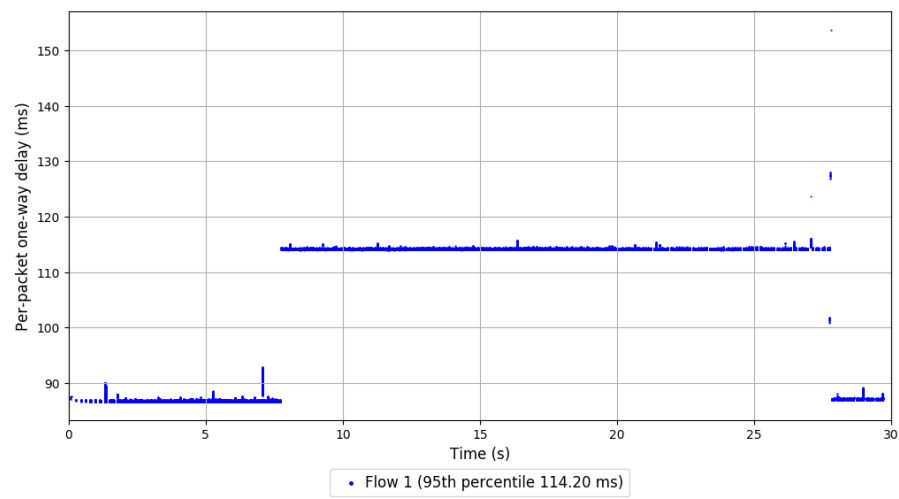
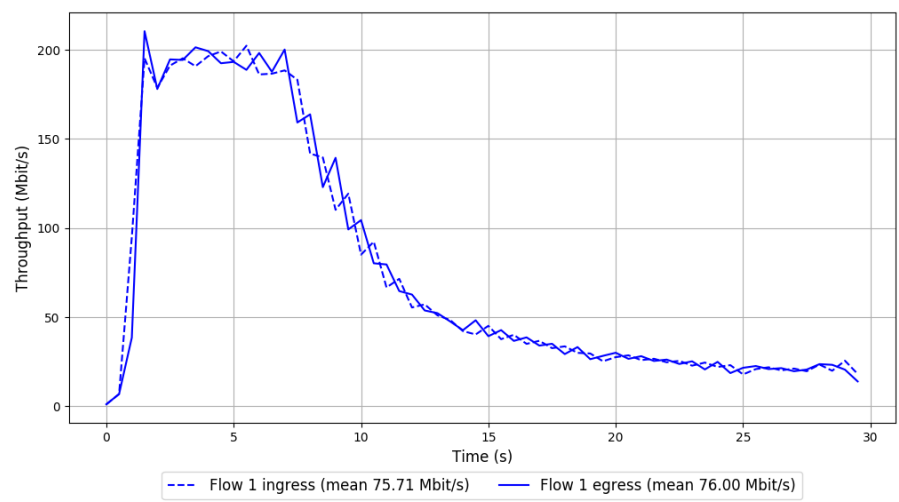
-- Flow 1:

Average throughput: 76.00 Mbit/s

95th percentile per-packet one-way delay: 114.205 ms

Loss rate: 0.21%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-15 21:22:09

End at: 2017-11-15 21:22:39

Below is generated by plot.py at 2017-11-16 00:30:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.97 Mbit/s

95th percentile per-packet one-way delay: 86.769 ms

Loss rate: 0.61%

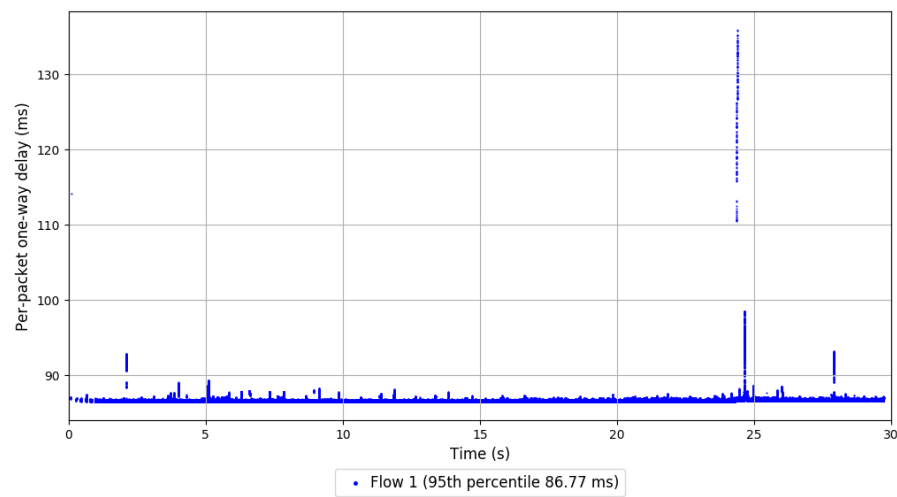
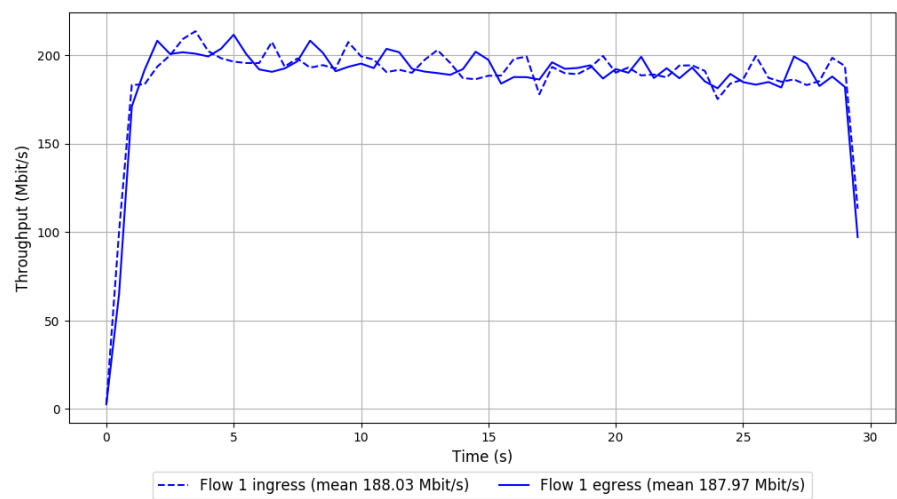
-- Flow 1:

Average throughput: 187.97 Mbit/s

95th percentile per-packet one-way delay: 86.769 ms

Loss rate: 0.61%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-15 21:35:42

End at: 2017-11-15 21:36:12

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.93 Mbit/s

95th percentile per-packet one-way delay: 86.621 ms

Loss rate: 0.75%

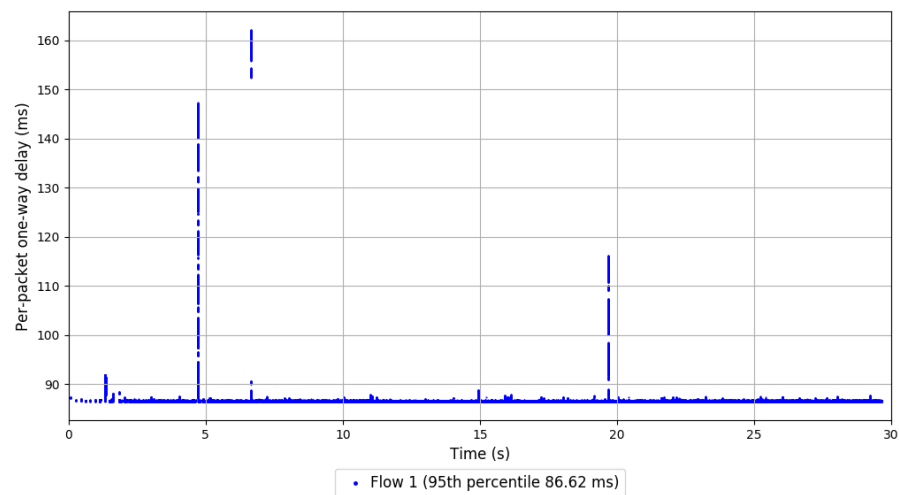
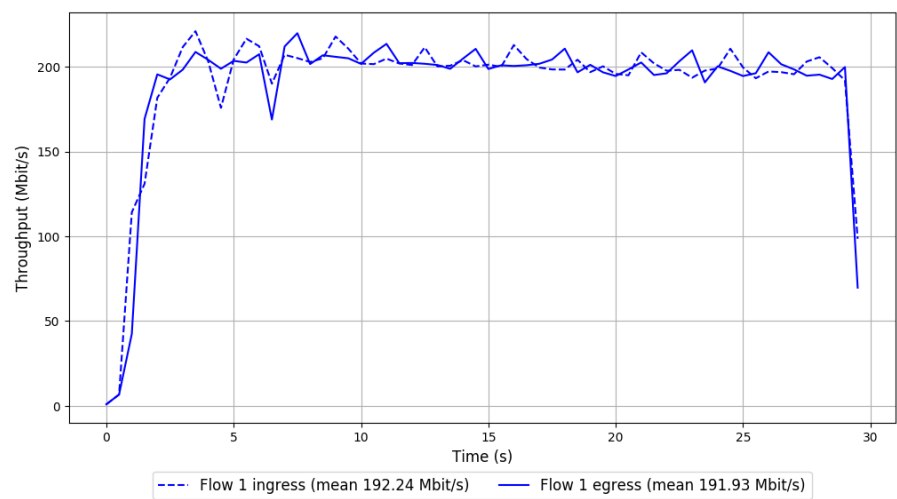
-- Flow 1:

Average throughput: 191.93 Mbit/s

95th percentile per-packet one-way delay: 86.621 ms

Loss rate: 0.75%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

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

End at: 2017-11-15 21:46:41

Below is generated by plot.py at 2017-11-16 00:31:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.19 Mbit/s

95th percentile per-packet one-way delay: 86.691 ms

Loss rate: 0.59%

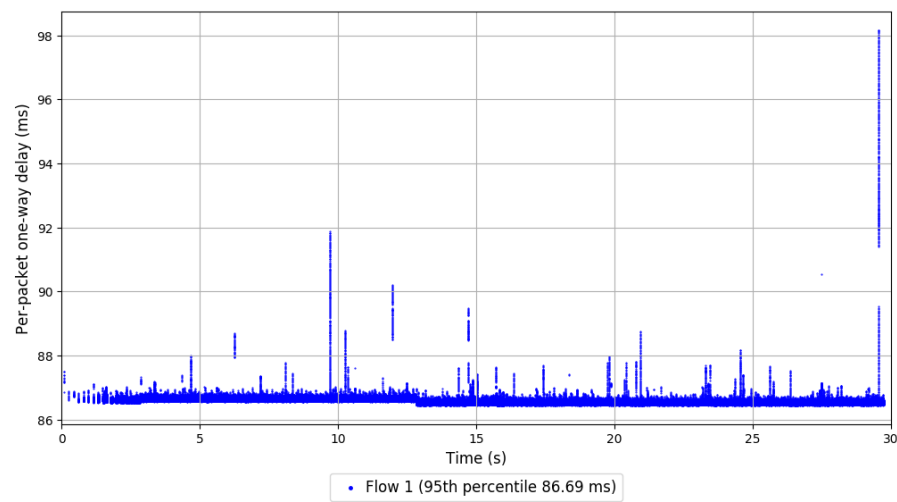
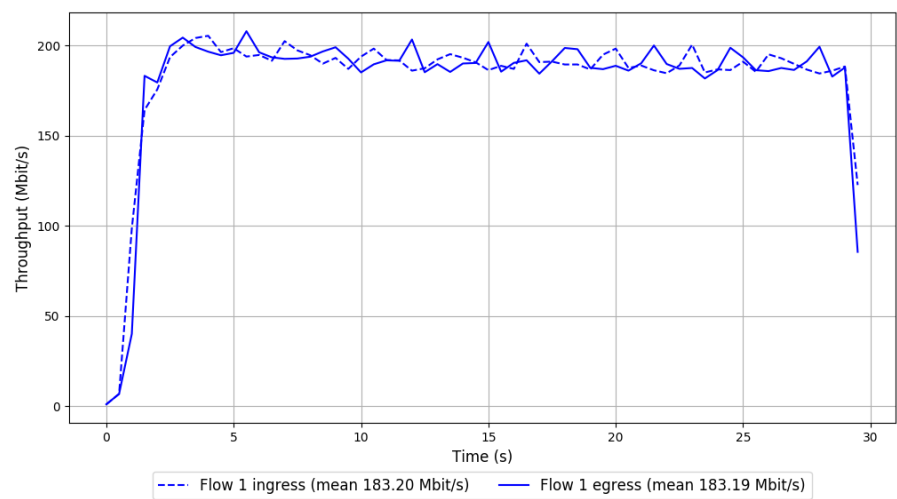
-- Flow 1:

Average throughput: 183.19 Mbit/s

95th percentile per-packet one-way delay: 86.691 ms

Loss rate: 0.59%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-15 21:56:53

End at: 2017-11-15 21:57:24

Below is generated by plot.py at 2017-11-16 00:31:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.59 Mbit/s

95th percentile per-packet one-way delay: 114.056 ms

Loss rate: 0.19%

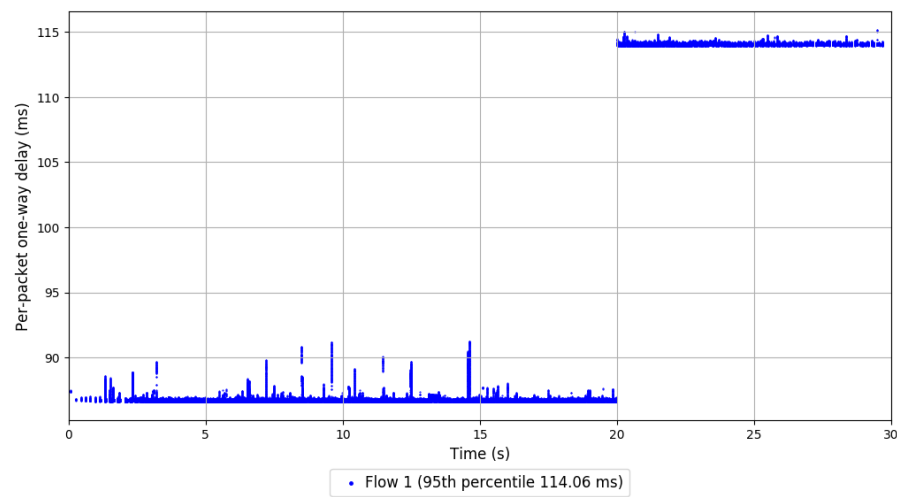
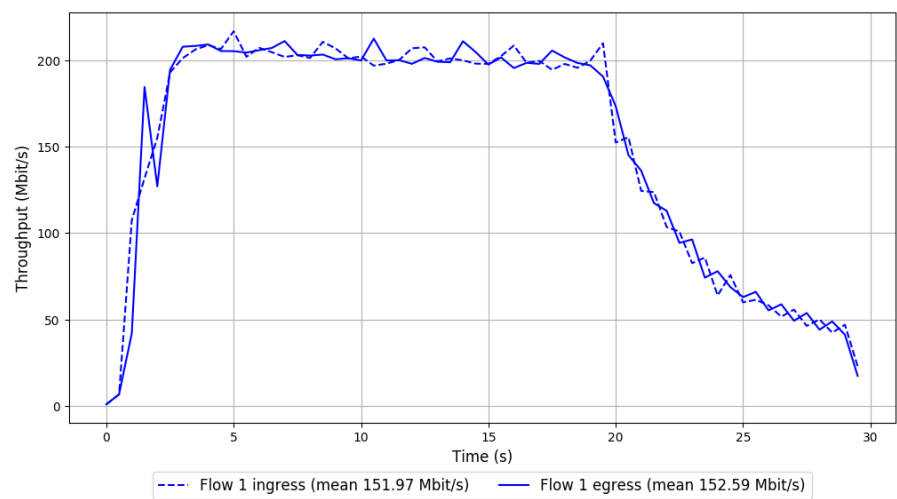
-- Flow 1:

Average throughput: 152.59 Mbit/s

95th percentile per-packet one-way delay: 114.056 ms

Loss rate: 0.19%

Run 10: Report of Indigo — Data Link

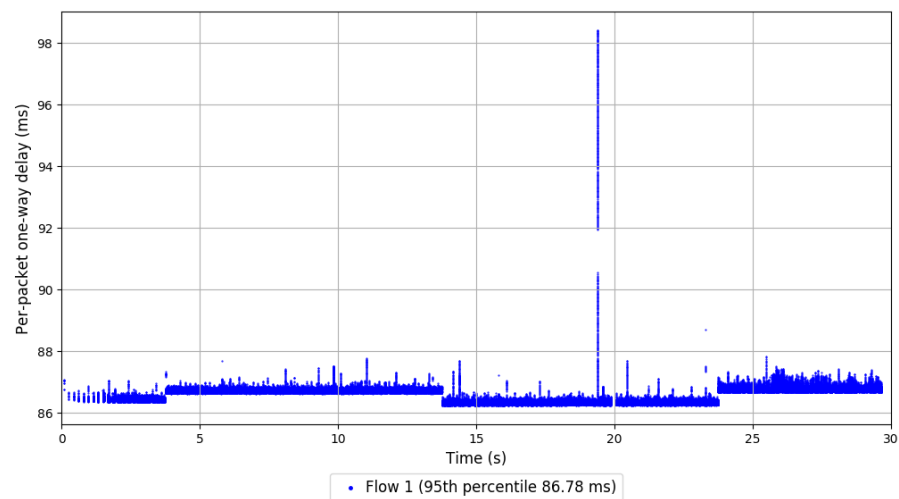
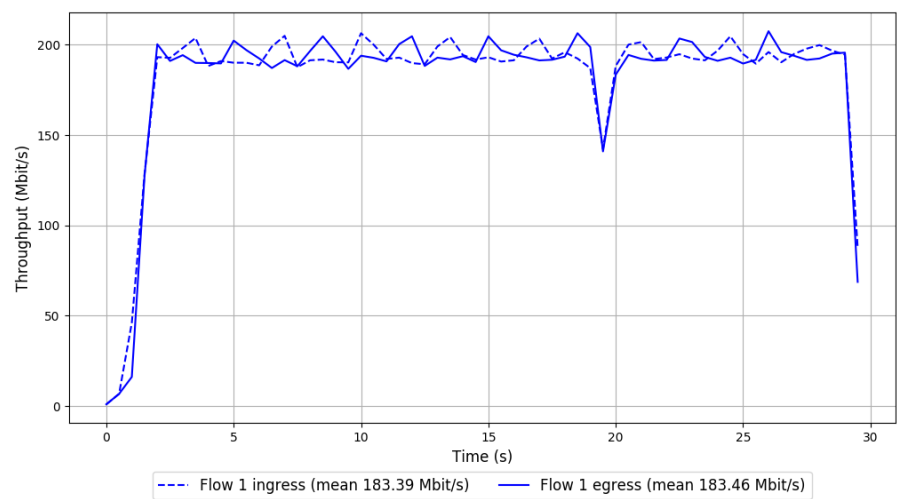


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-15 20:20:50
End at: 2017-11-15 20:21:20

# Below is generated by plot.py at 2017-11-16 00:32:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.46 Mbit/s
95th percentile per-packet one-way delay: 86.780 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 183.46 Mbit/s
95th percentile per-packet one-way delay: 86.780 ms
Loss rate: 0.55%
```

Run 1: Report of Indigo-calib — Data Link

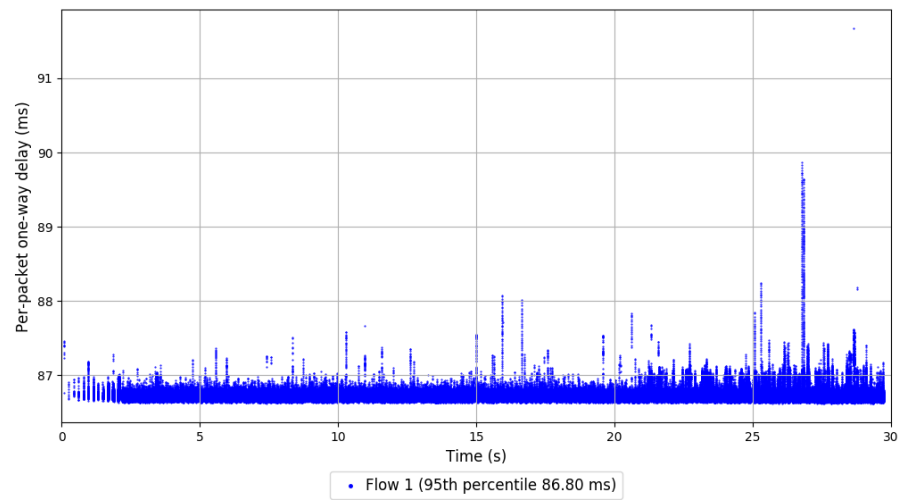
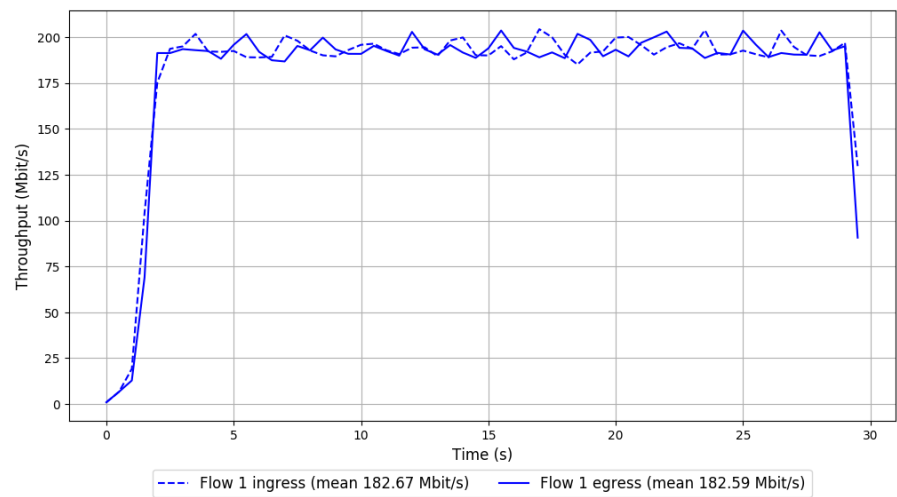


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-15 20:31:52
End at: 2017-11-15 20:32:22

# Below is generated by plot.py at 2017-11-16 00:32:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.59 Mbit/s
95th percentile per-packet one-way delay: 86.804 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 182.59 Mbit/s
95th percentile per-packet one-way delay: 86.804 ms
Loss rate: 0.63%
```

Run 2: Report of Indigo-calib — Data Link

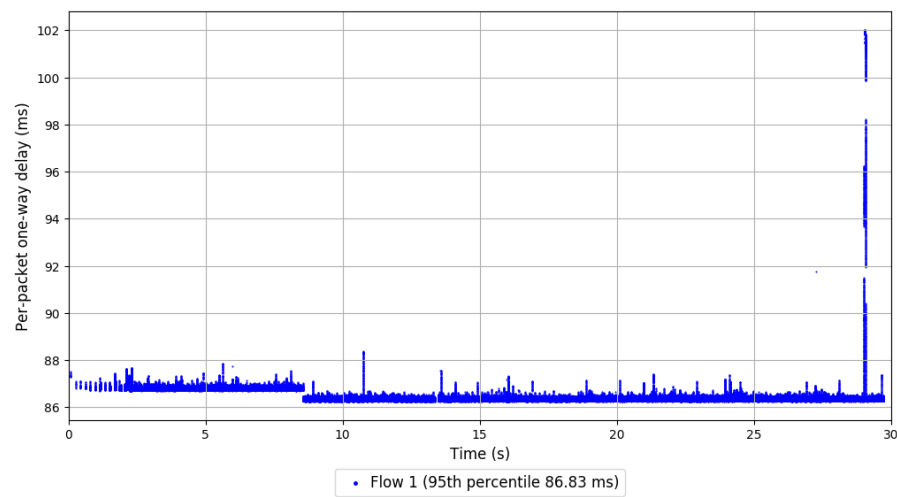
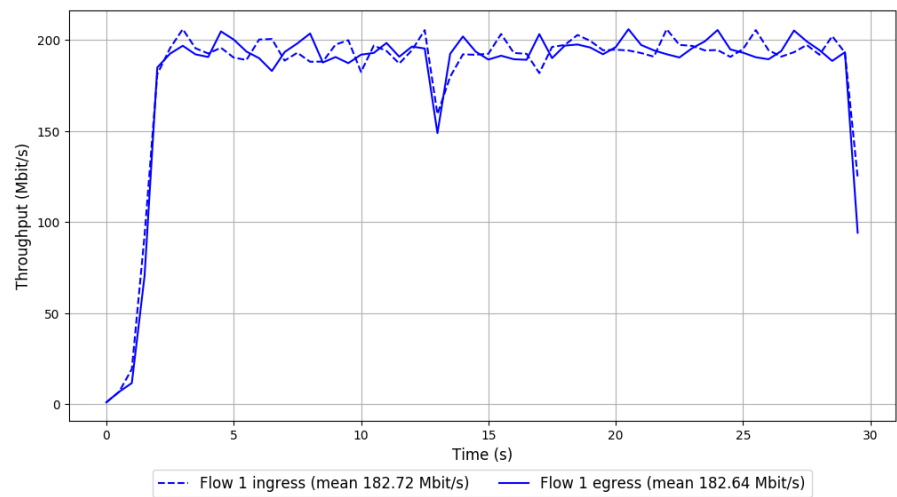


```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-15 20:42:55
End at: 2017-11-15 20:43:25

# Below is generated by plot.py at 2017-11-16 00:32:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.64 Mbit/s
95th percentile per-packet one-way delay: 86.834 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 182.64 Mbit/s
95th percentile per-packet one-way delay: 86.834 ms
Loss rate: 0.63%
```


Run 3: Report of Indigo-calib — Data Link

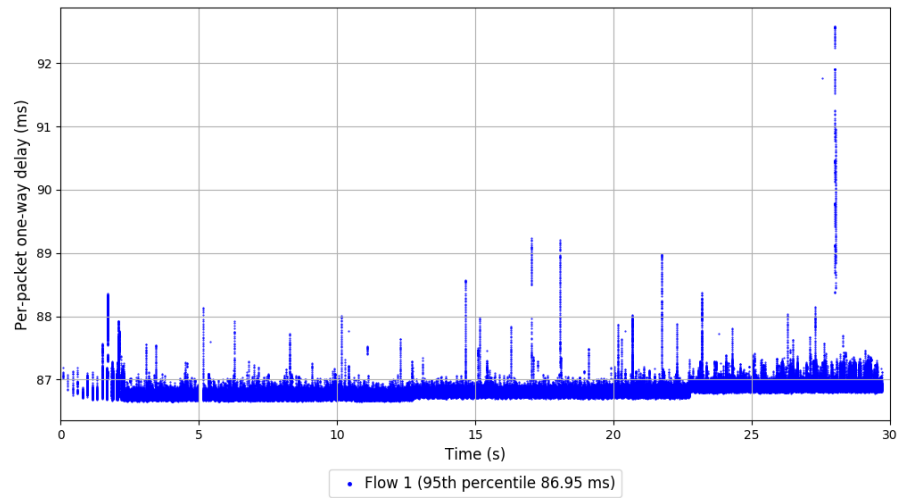
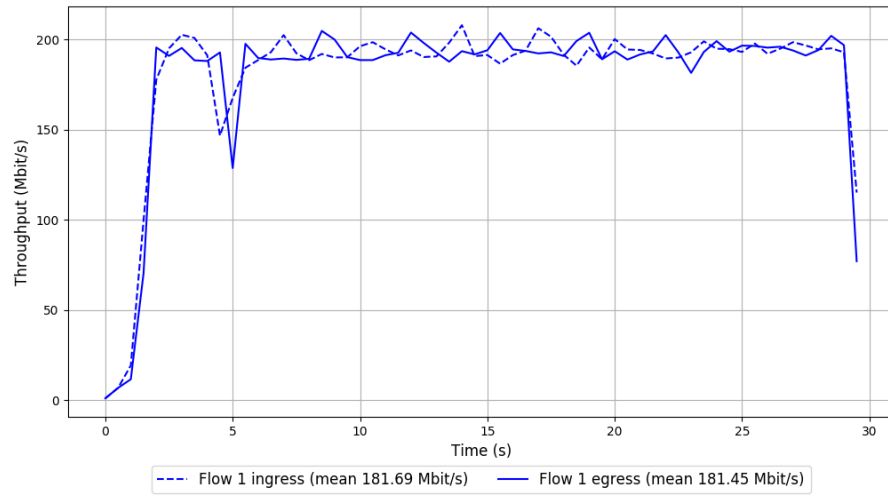


```
Run 4: Statistics of Indigo-calib

Start at: 2017-11-15 20:54:01
End at: 2017-11-15 20:54:31

# Below is generated by plot.py at 2017-11-16 00:32:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.45 Mbit/s
95th percentile per-packet one-way delay: 86.953 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 181.45 Mbit/s
95th percentile per-packet one-way delay: 86.953 ms
Loss rate: 0.62%
```

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-15 21:04:46

End at: 2017-11-15 21:05:16

Below is generated by plot.py at 2017-11-16 00:33:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.31 Mbit/s

95th percentile per-packet one-way delay: 87.220 ms

Loss rate: 0.63%

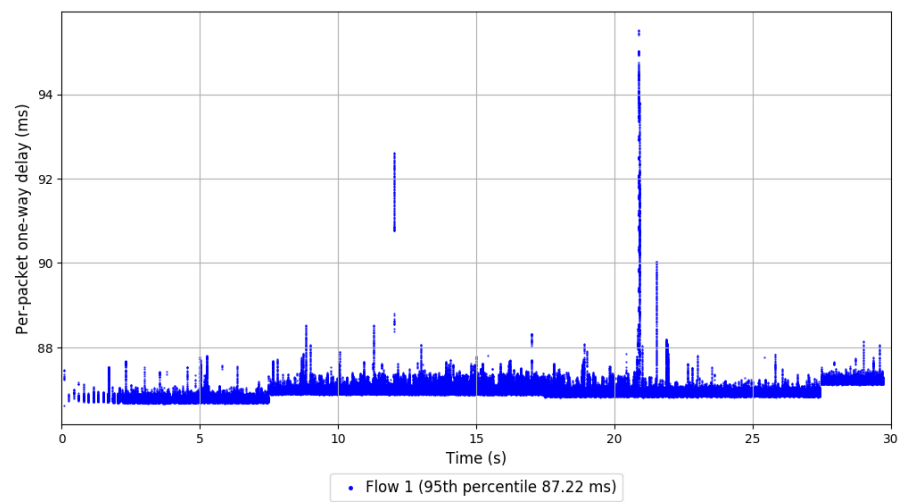
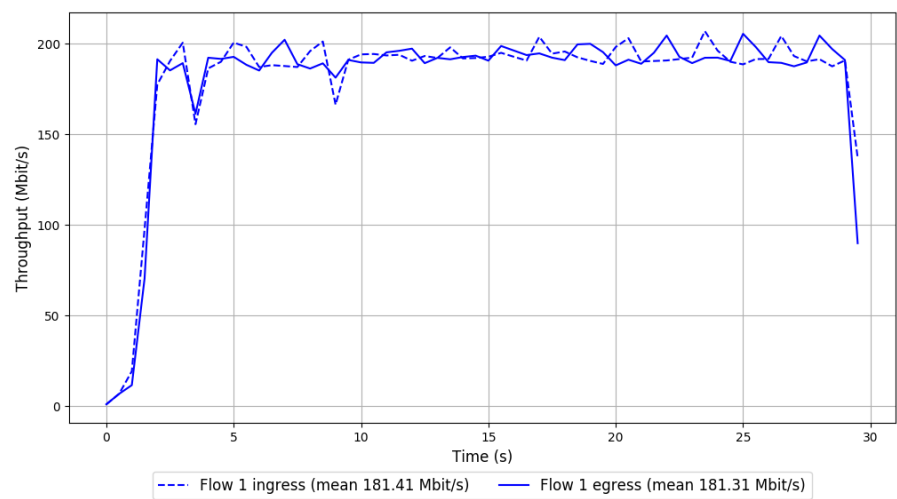
-- Flow 1:

Average throughput: 181.31 Mbit/s

95th percentile per-packet one-way delay: 87.220 ms

Loss rate: 0.63%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

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

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

Below is generated by plot.py at 2017-11-16 00:33:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.92 Mbit/s

95th percentile per-packet one-way delay: 114.143 ms

Loss rate: 0.59%

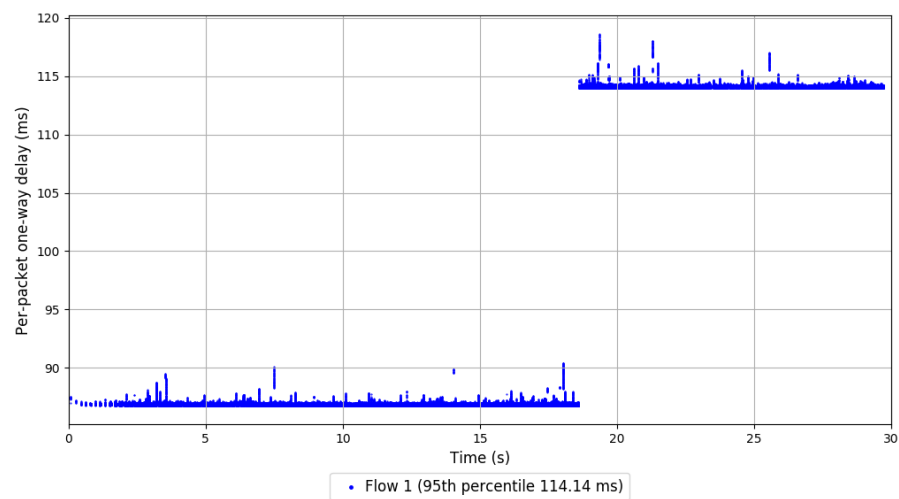
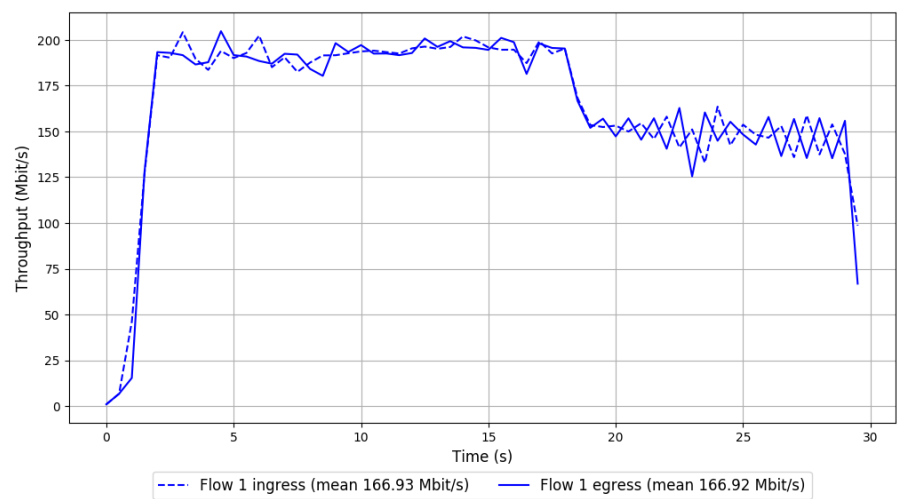
-- Flow 1:

Average throughput: 166.92 Mbit/s

95th percentile per-packet one-way delay: 114.143 ms

Loss rate: 0.59%

Run 6: Report of Indigo-calib — Data Link

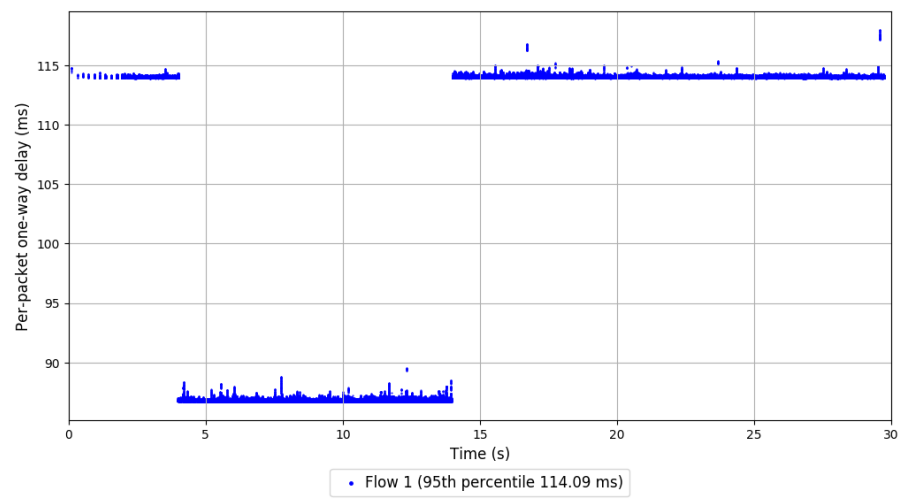
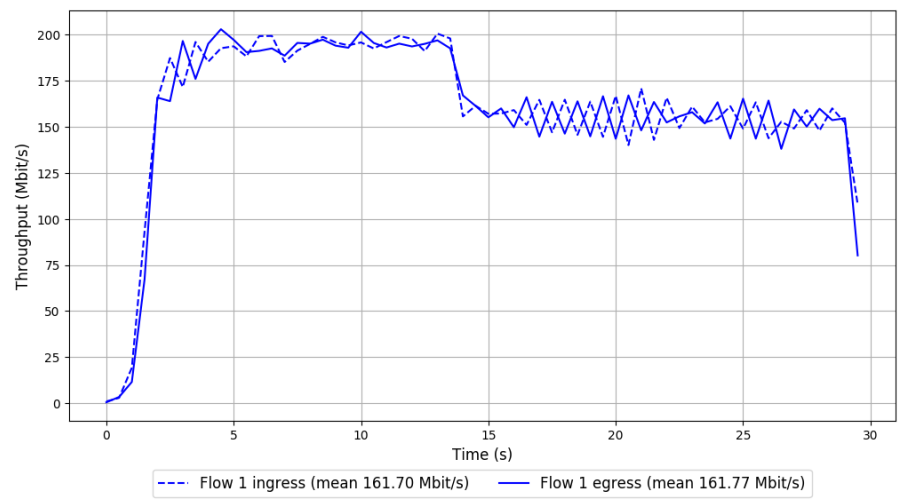


```
Run 7: Statistics of Indigo-calib

Start at: 2017-11-15 21:28:09
End at: 2017-11-15 21:28:40

# Below is generated by plot.py at 2017-11-16 00:33:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 161.77 Mbit/s
95th percentile per-packet one-way delay: 114.095 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 161.77 Mbit/s
95th percentile per-packet one-way delay: 114.095 ms
Loss rate: 0.63%
```


Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-15 21:40:02

End at: 2017-11-15 21:40:32

Below is generated by plot.py at 2017-11-16 00:33:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 167.03 Mbit/s

95th percentile per-packet one-way delay: 113.993 ms

Loss rate: 0.67%

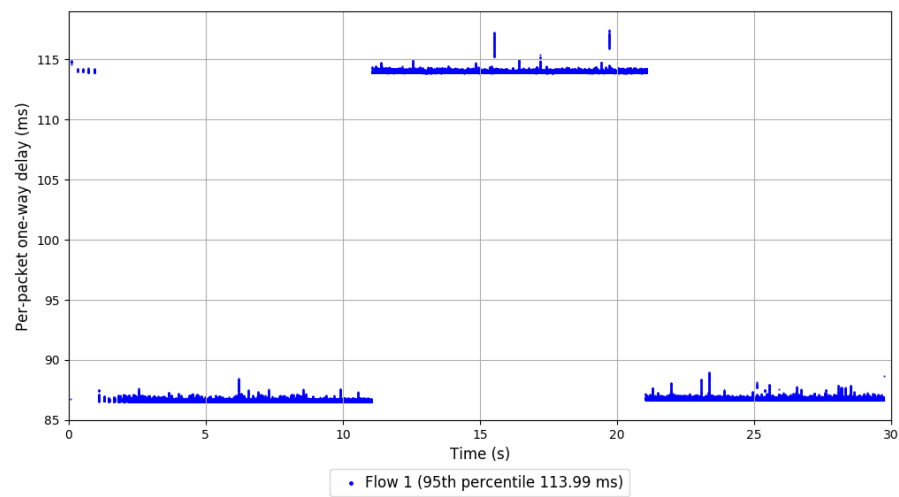
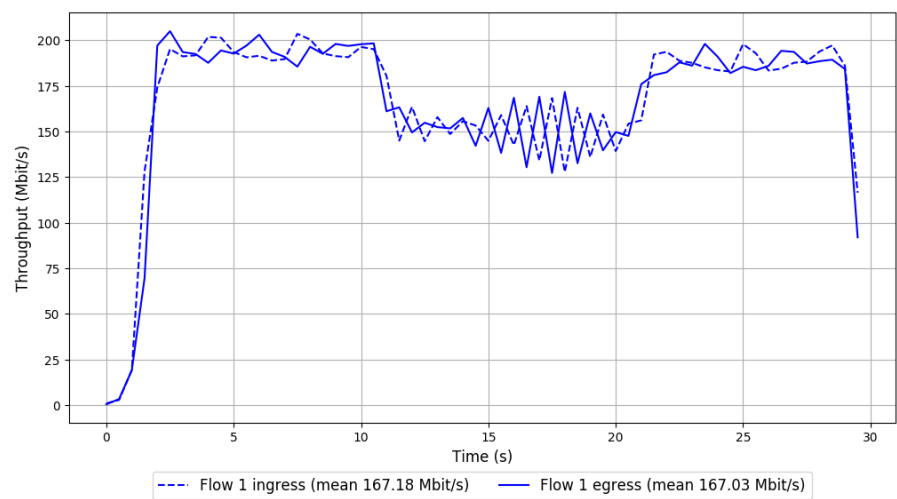
-- Flow 1:

Average throughput: 167.03 Mbit/s

95th percentile per-packet one-way delay: 113.993 ms

Loss rate: 0.67%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-15 21:50:57

End at: 2017-11-15 21:51:27

Below is generated by plot.py at 2017-11-16 00:33:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.35 Mbit/s

95th percentile per-packet one-way delay: 114.037 ms

Loss rate: 0.63%

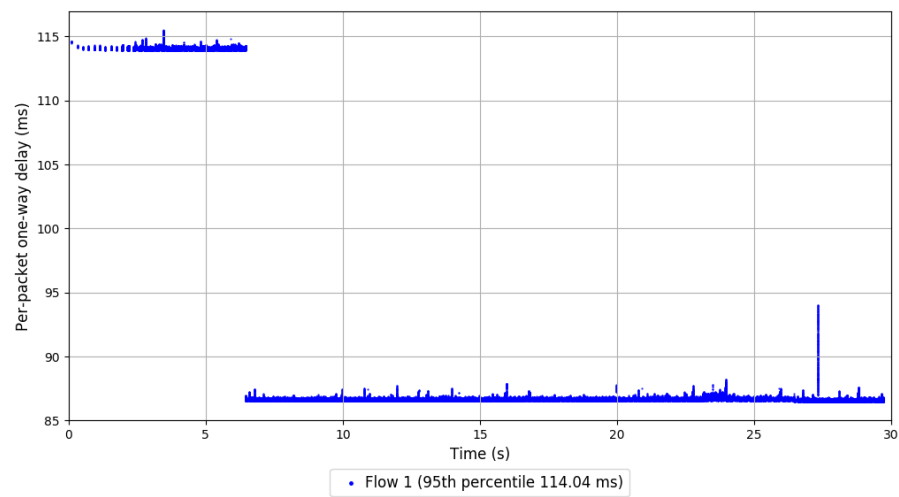
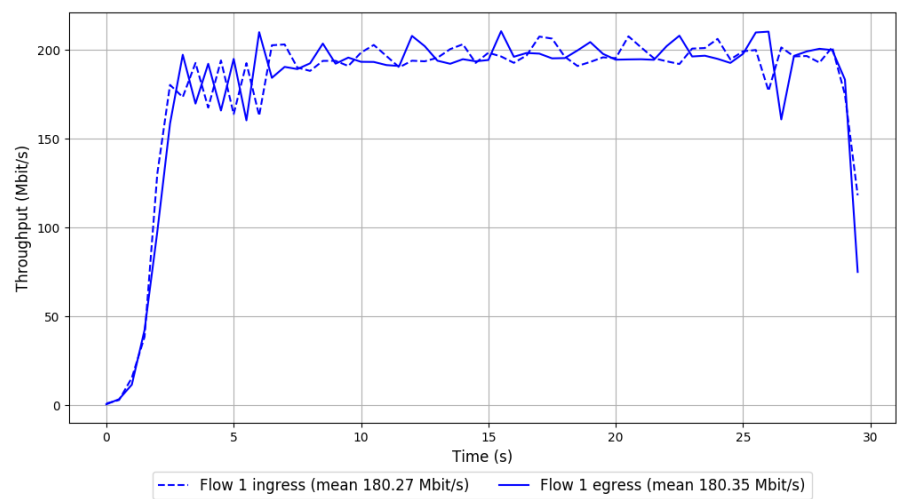
-- Flow 1:

Average throughput: 180.35 Mbit/s

95th percentile per-packet one-way delay: 114.037 ms

Loss rate: 0.63%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-15 22:01:10

End at: 2017-11-15 22:01:40

Below is generated by plot.py at 2017-11-16 00:33:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.79 Mbit/s

95th percentile per-packet one-way delay: 114.121 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 91.79 Mbit/s

95th percentile per-packet one-way delay: 114.121 ms

Loss rate: 0.45%

Run 10: Report of Indigo-calib — Data Link

