

Pantheon Report

Generated at 2017-11-16 01:07:18 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

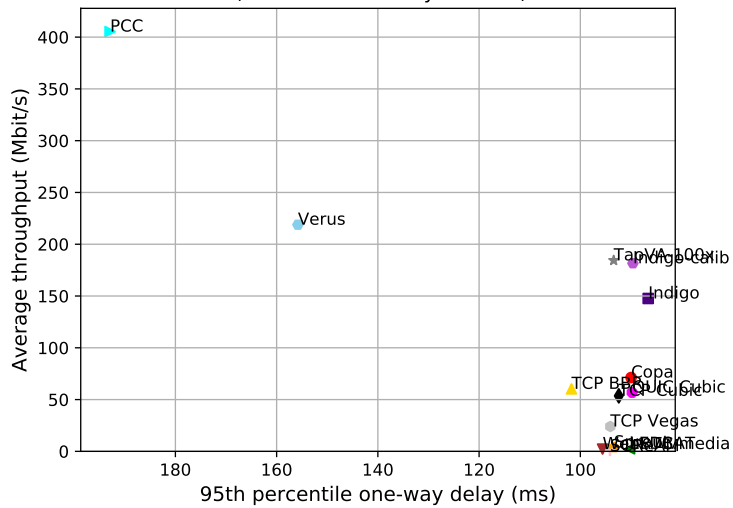
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

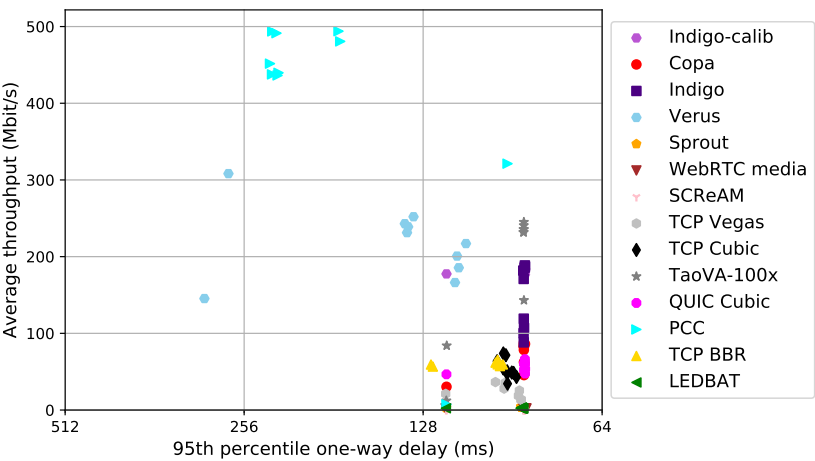
Git summary:

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

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	9	60.34	101.75	0.01
TCP Cubic	10	53.60	92.40	0.10
LEDBAT	10	2.42	90.28	0.16
PCC	10	405.35	192.90	1.11
QUIC Cubic	9	56.82	89.78	0.00
SCReAM	8	0.21	94.16	0.00
WebRTC media	10	2.19	95.61	0.00
Sprout	10	3.76	93.37	0.09
TaoVA-100x	9	184.41	93.41	0.04
TCP Vegas	8	24.00	94.08	0.07
Verus	10	218.83	155.80	1.04
Copa	9	71.28	89.97	0.00
Indigo	9	147.62	86.59	0.01
Indigo-calib	10	181.61	89.61	0.02

Run 1: Statistics of TCP BBR

Start at: 2017-11-15 22:09:12

End at: 2017-11-15 22:09:42

Below is generated by plot.py at 2017-11-16 00:35:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.36 Mbit/s

95th percentile per-packet one-way delay: 95.925 ms

Loss rate: 0.00%

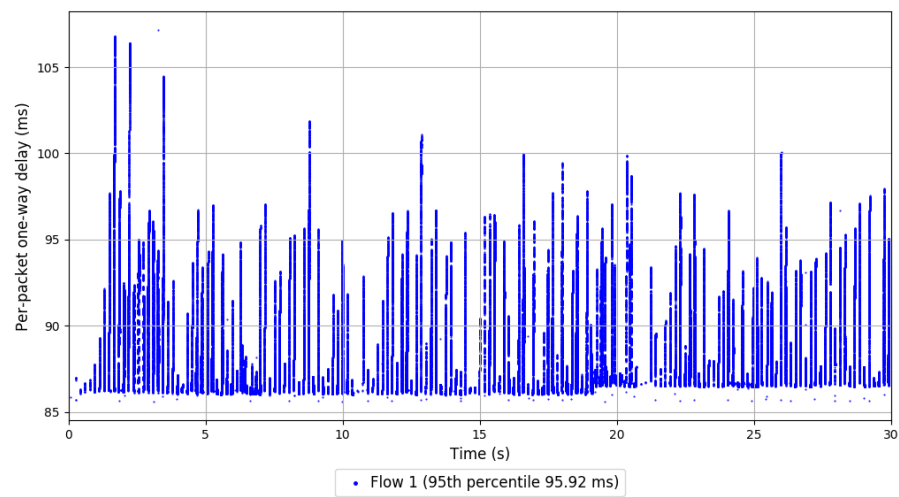
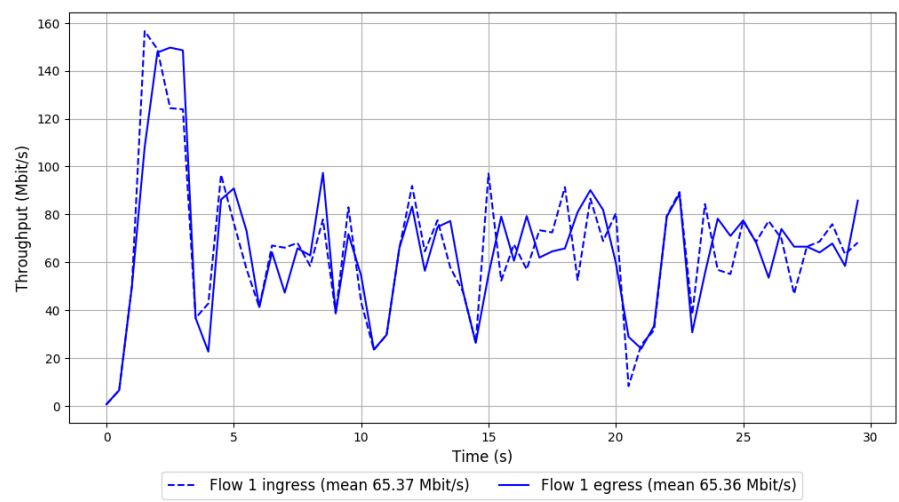
-- Flow 1:

Average throughput: 65.36 Mbit/s

95th percentile per-packet one-way delay: 95.925 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-15 22:19:53

End at: 2017-11-15 22:20:23

Below is generated by plot.py at 2017-11-16 00:35:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.33 Mbit/s

95th percentile per-packet one-way delay: 95.075 ms

Loss rate: 0.01%

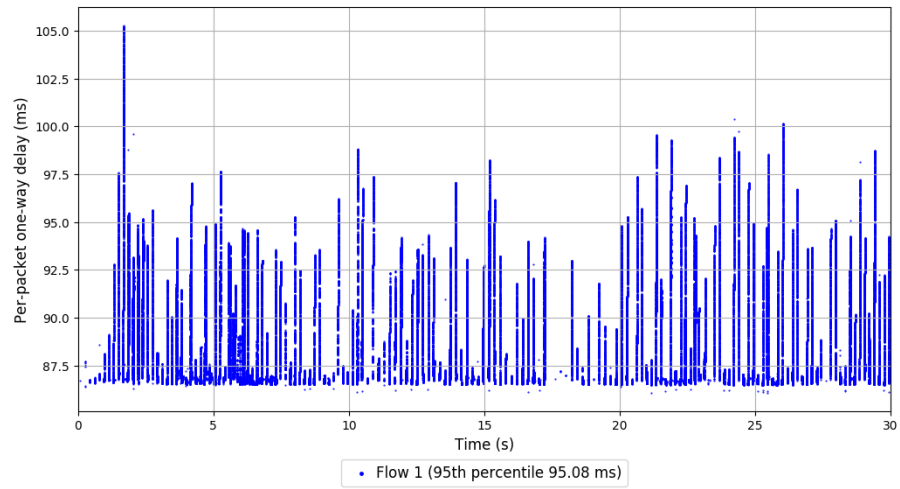
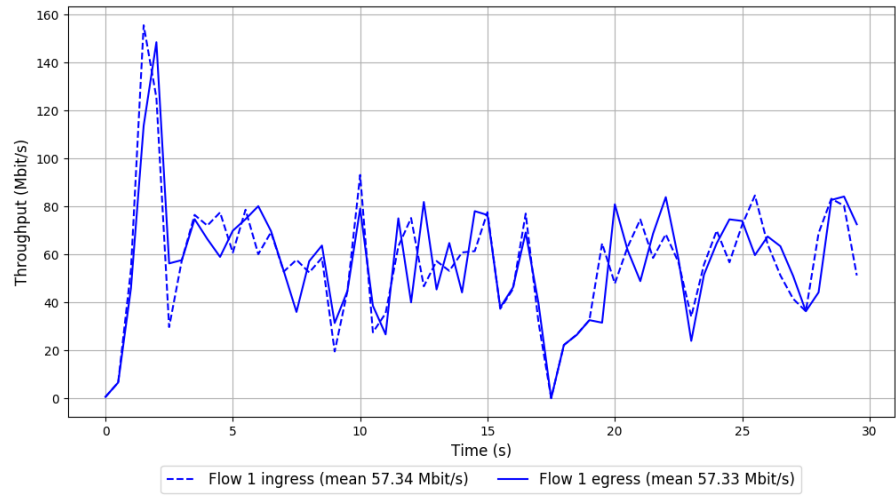
-- Flow 1:

Average throughput: 57.33 Mbit/s

95th percentile per-packet one-way delay: 95.075 ms

Loss rate: 0.01%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-15 22:30:43

End at: 2017-11-15 22:31:13

Below is generated by plot.py at 2017-11-16 00:35:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.59 Mbit/s

95th percentile per-packet one-way delay: 95.912 ms

Loss rate: 0.00%

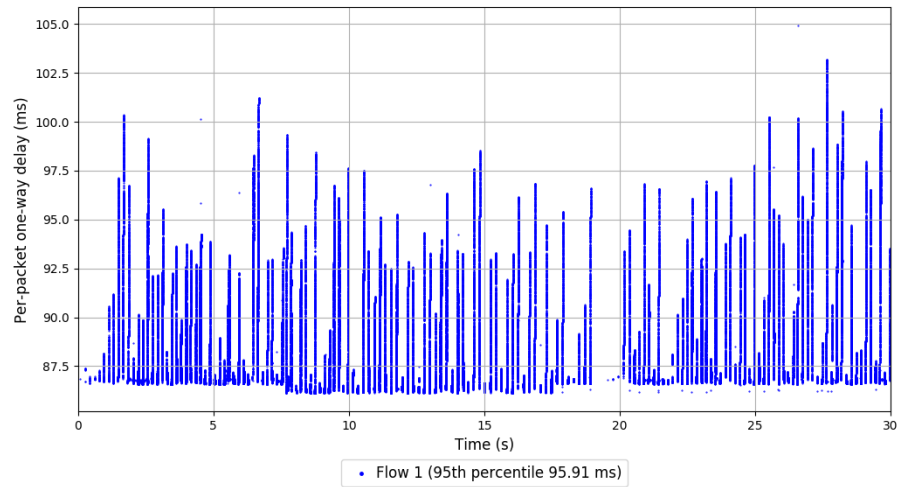
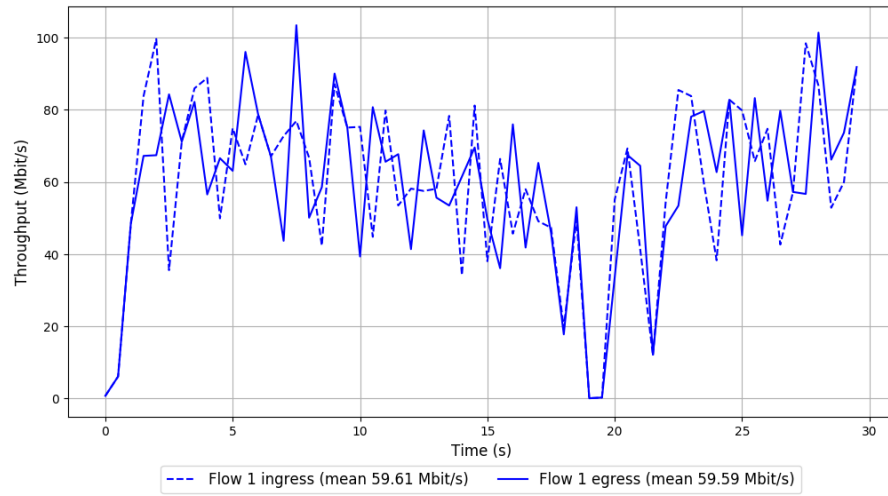
-- Flow 1:

Average throughput: 59.59 Mbit/s

95th percentile per-packet one-way delay: 95.912 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-15 22:41:35

End at: 2017-11-15 22:42:05

Below is generated by plot.py at 2017-11-16 00:35:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.85 Mbit/s

95th percentile per-packet one-way delay: 94.942 ms

Loss rate: 0.01%

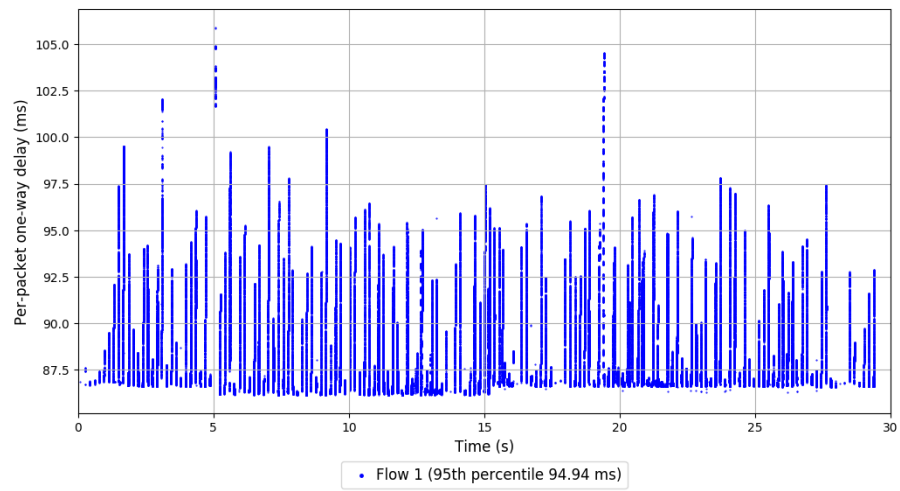
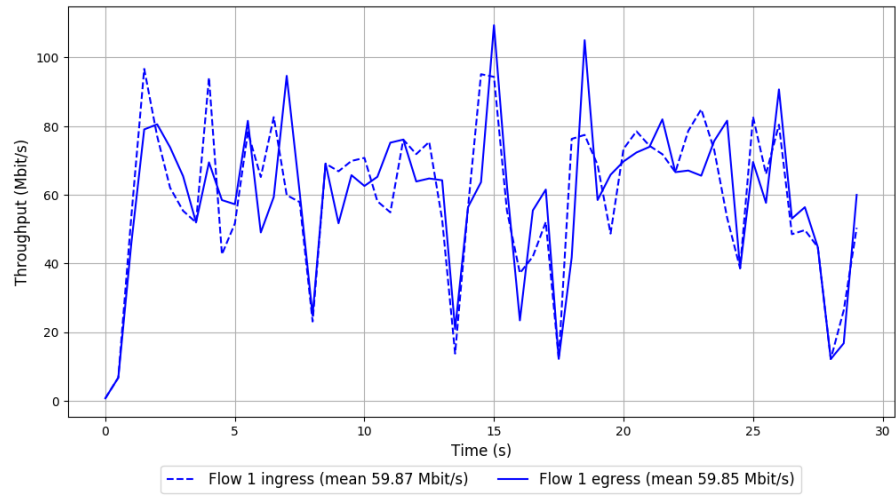
-- Flow 1:

Average throughput: 59.85 Mbit/s

95th percentile per-packet one-way delay: 94.942 ms

Loss rate: 0.01%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-15 22:52:35

End at: 2017-11-15 22:53:05

Below is generated by plot.py at 2017-11-16 00:35:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.87 Mbit/s

95th percentile per-packet one-way delay: 96.690 ms

Loss rate: 0.02%

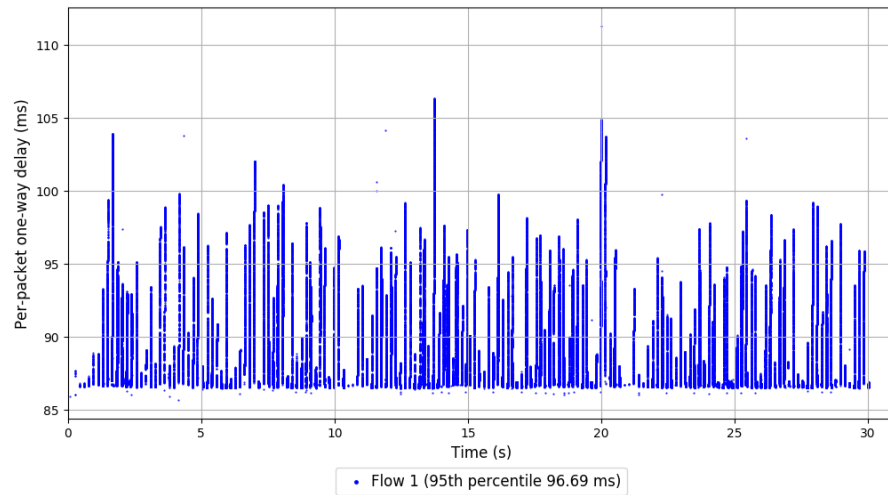
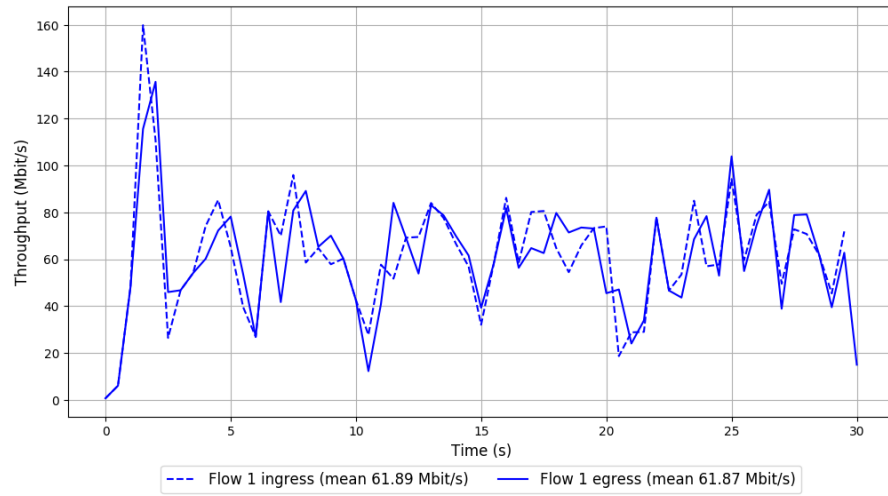
-- Flow 1:

Average throughput: 61.87 Mbit/s

95th percentile per-packet one-way delay: 96.690 ms

Loss rate: 0.02%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-15 23:03:24

End at: 2017-11-15 23:03:54

Below is generated by plot.py at 2017-11-16 00:35:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.49 Mbit/s

95th percentile per-packet one-way delay: 94.001 ms

Loss rate: 0.01%

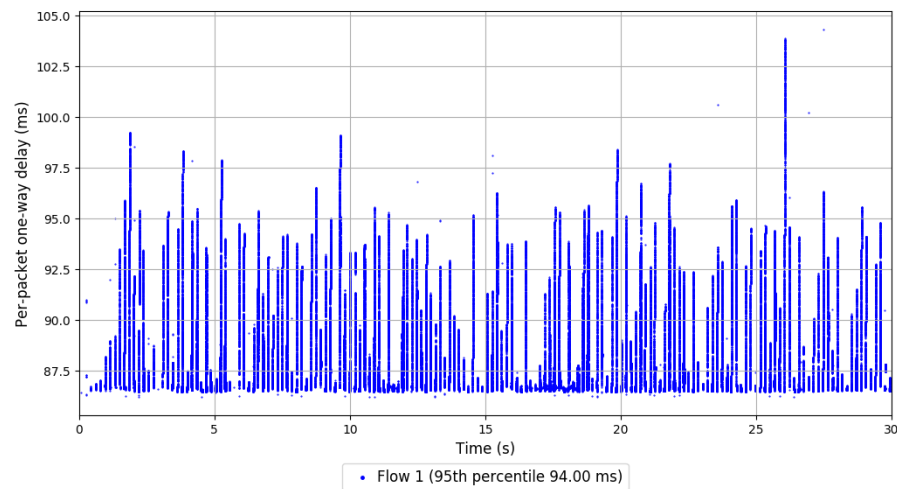
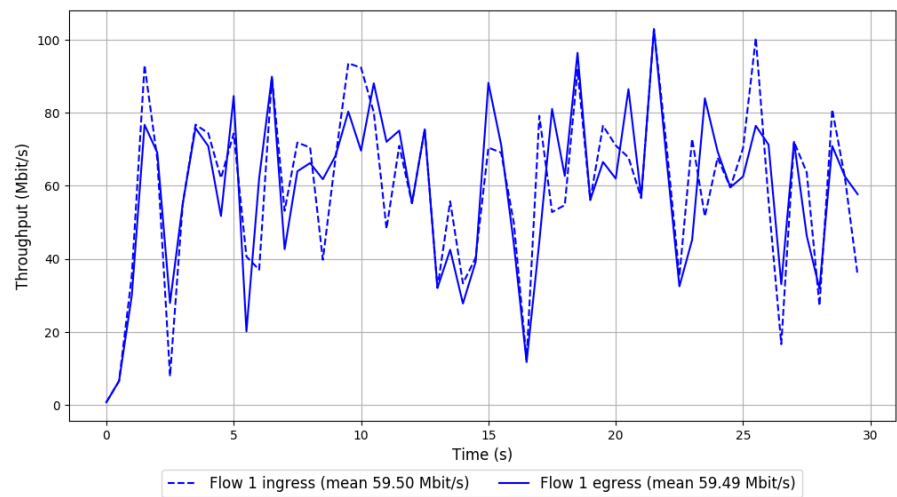
-- Flow 1:

Average throughput: 59.49 Mbit/s

95th percentile per-packet one-way delay: 94.001 ms

Loss rate: 0.01%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-15 23:14:02

End at: 2017-11-15 23:14:32

Below is generated by plot.py at 2017-11-16 00:35:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.50 Mbit/s

95th percentile per-packet one-way delay: 95.750 ms

Loss rate: 0.01%

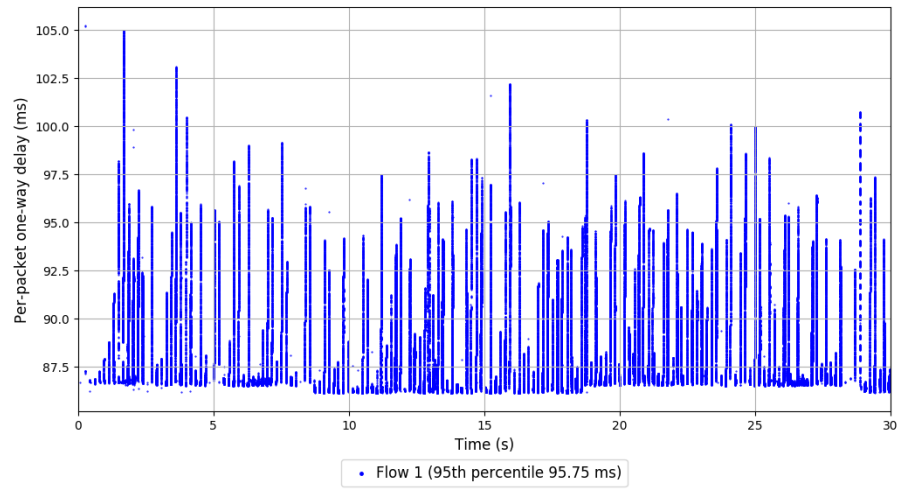
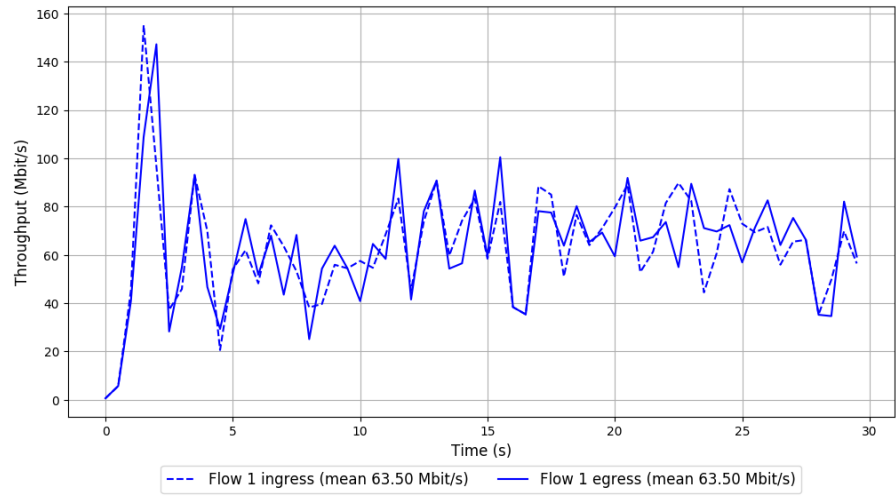
-- Flow 1:

Average throughput: 63.50 Mbit/s

95th percentile per-packet one-way delay: 95.750 ms

Loss rate: 0.01%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-15 23:24:57

End at: 2017-11-15 23:25:27

Below is generated by plot.py at 2017-11-16 00:35:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.70 Mbit/s

95th percentile per-packet one-way delay: 123.267 ms

Loss rate: 0.01%

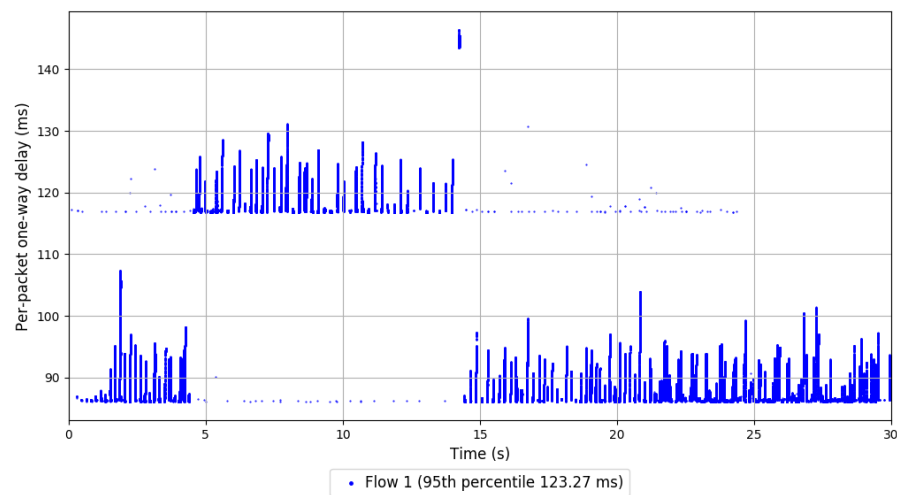
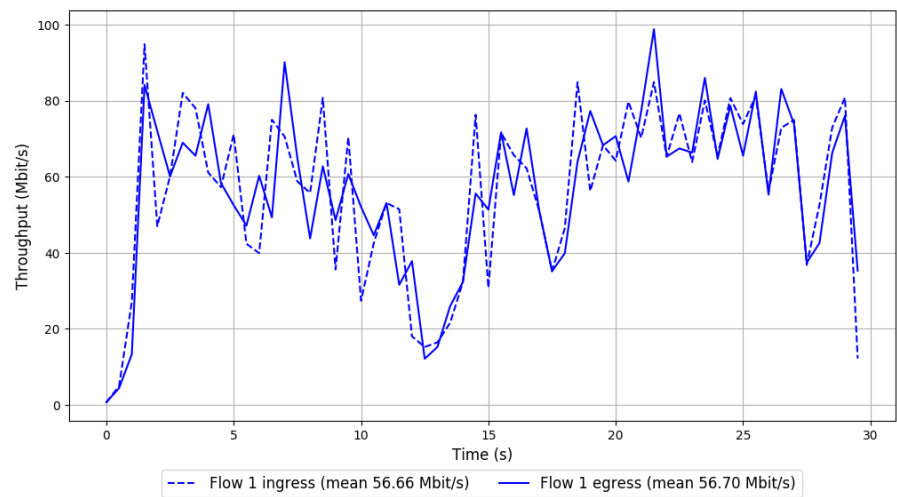
-- Flow 1:

Average throughput: 56.70 Mbit/s

95th percentile per-packet one-way delay: 123.267 ms

Loss rate: 0.01%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-15 23:35:19

End at: 2017-11-15 23:35:49

Below is generated by plot.py at 2017-11-16 00:36:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.36 Mbit/s

95th percentile per-packet one-way delay: 124.166 ms

Loss rate: 0.00%

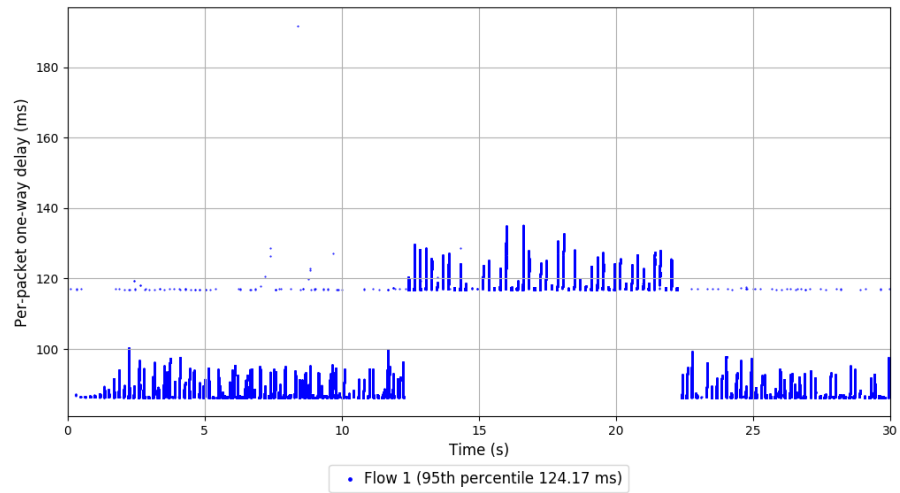
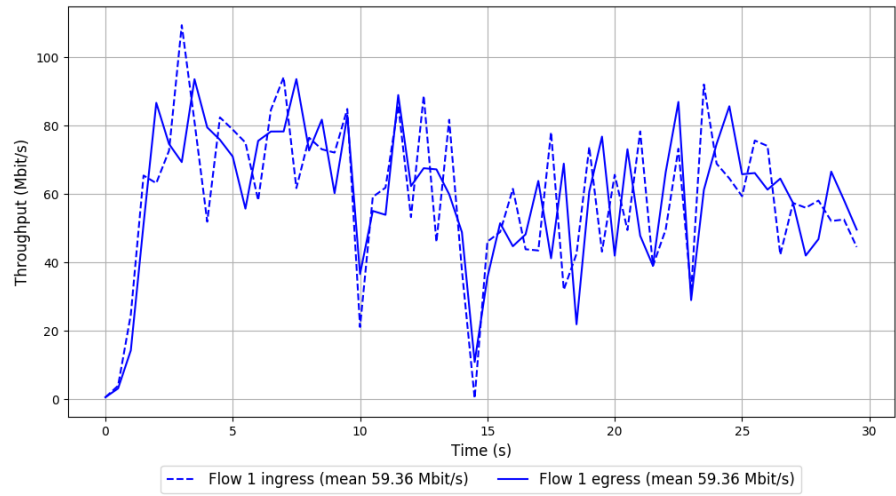
-- Flow 1:

Average throughput: 59.36 Mbit/s

95th percentile per-packet one-way delay: 124.166 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link

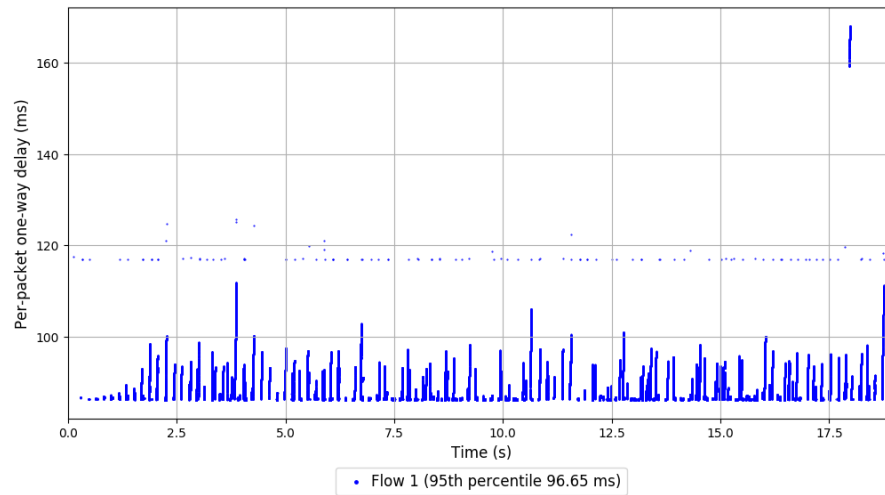
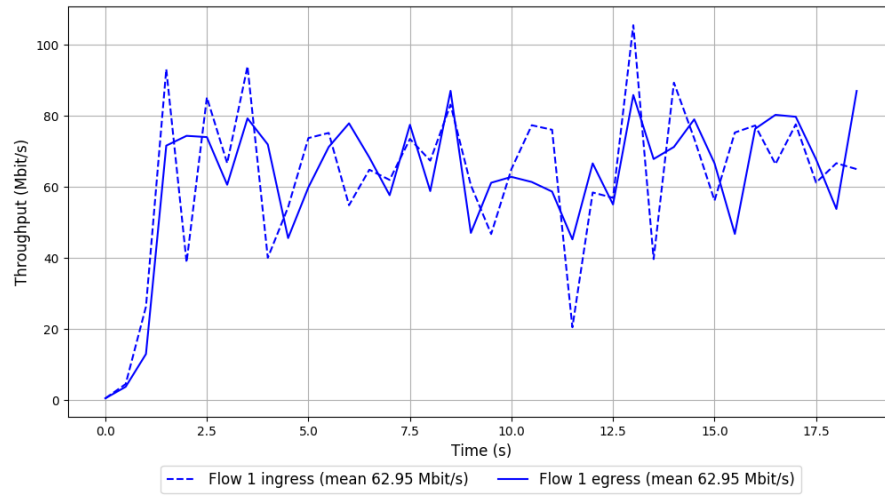


Run 10: Statistics of TCP BBR

Start at: 2017-11-15 23:46:12

End at: 2017-11-15 23:46:42

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-15 22:16:05

End at: 2017-11-15 22:16:35

Below is generated by plot.py at 2017-11-16 00:36:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.08 Mbit/s

95th percentile per-packet one-way delay: 89.165 ms

Loss rate: 0.00%

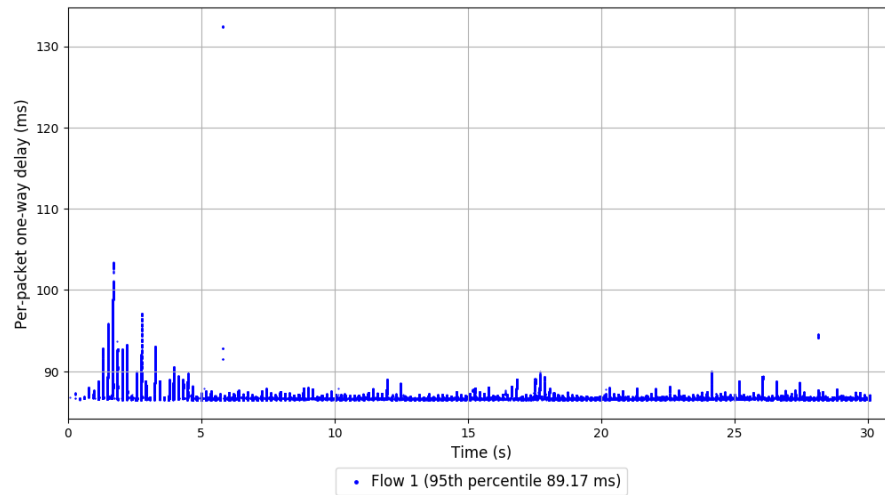
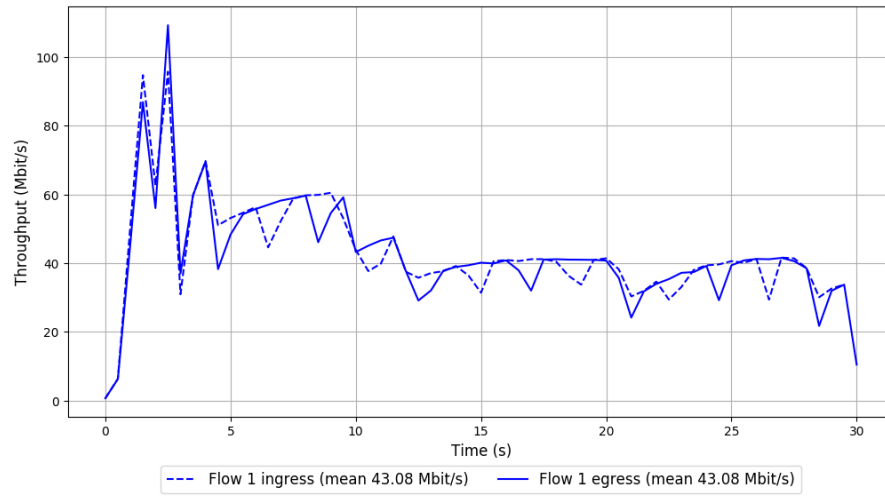
-- Flow 1:

Average throughput: 43.08 Mbit/s

95th percentile per-packet one-way delay: 89.165 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-15 22:26:56

End at: 2017-11-15 22:27:26

Below is generated by plot.py at 2017-11-16 00:36:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.46 Mbit/s

95th percentile per-packet one-way delay: 92.900 ms

Loss rate: 0.00%

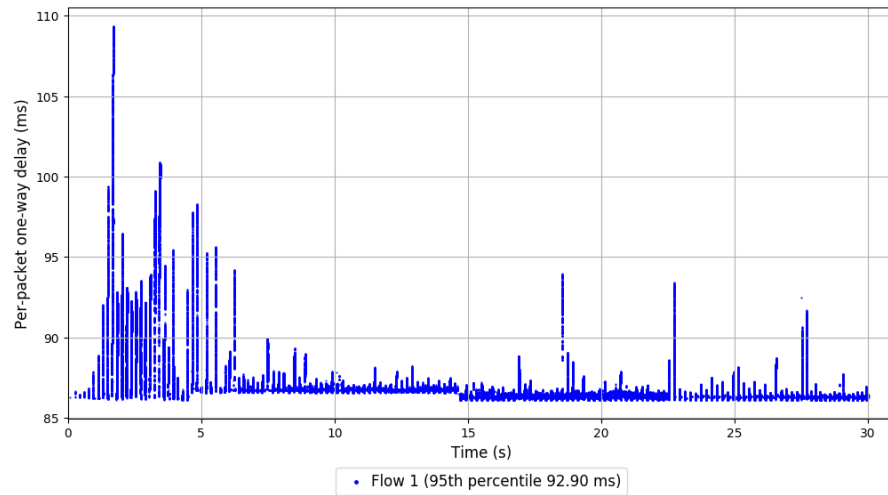
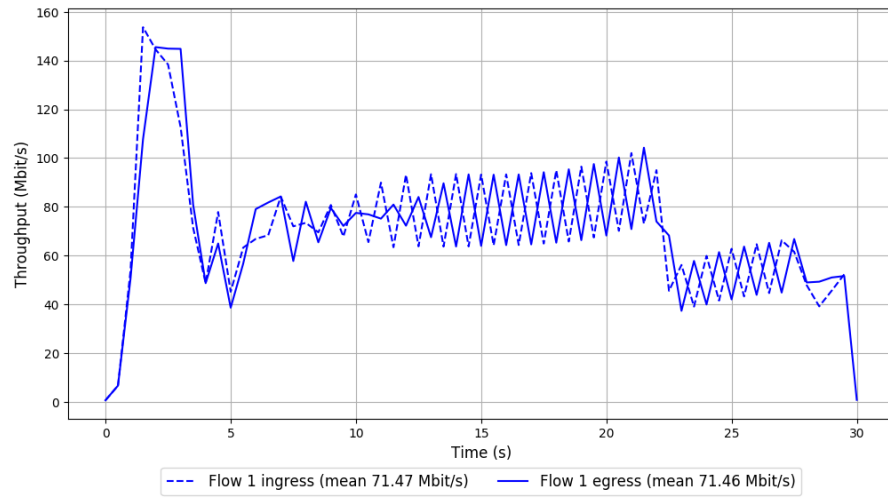
-- Flow 1:

Average throughput: 71.46 Mbit/s

95th percentile per-packet one-way delay: 92.900 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-15 22:37:40

End at: 2017-11-15 22:38:10

Below is generated by plot.py at 2017-11-16 00:36:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.18 Mbit/s

95th percentile per-packet one-way delay: 93.850 ms

Loss rate: 0.00%

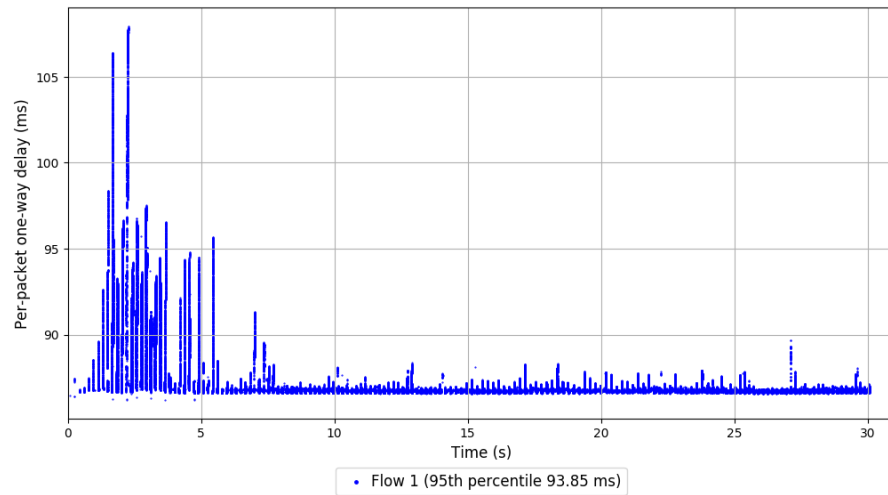
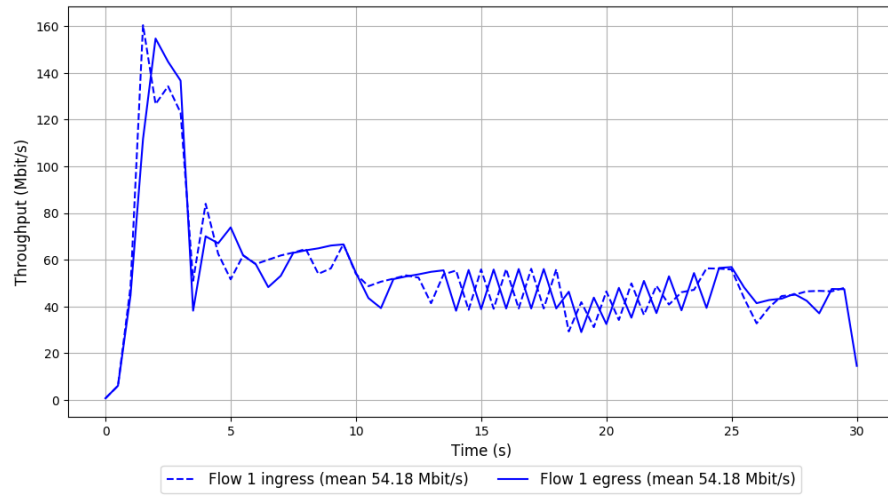
-- Flow 1:

Average throughput: 54.18 Mbit/s

95th percentile per-packet one-way delay: 93.850 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-15 22:48:43

End at: 2017-11-15 22:49:13

Below is generated by plot.py at 2017-11-16 00:36:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.38 Mbit/s

95th percentile per-packet one-way delay: 90.161 ms

Loss rate: 0.00%

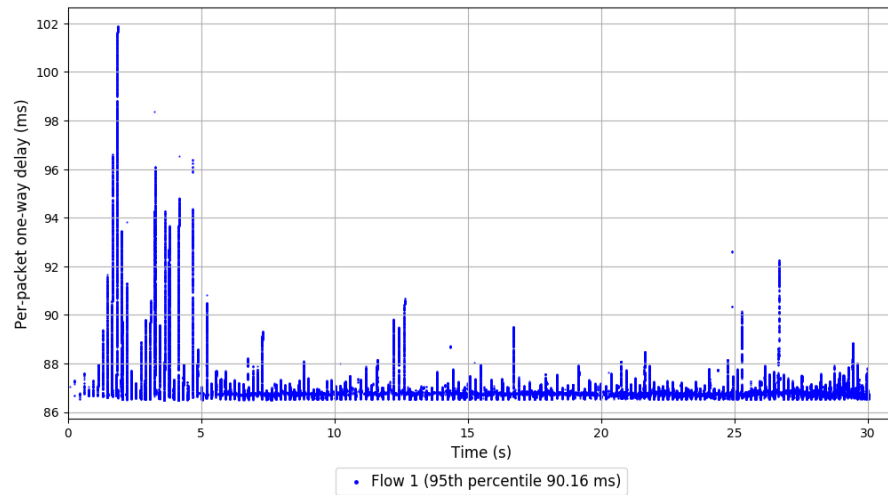
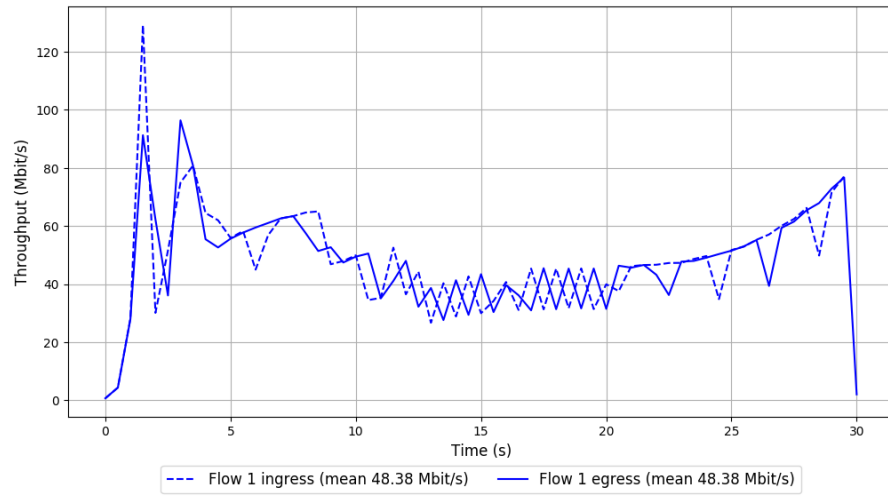
-- Flow 1:

Average throughput: 48.38 Mbit/s

95th percentile per-packet one-way delay: 90.161 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-15 22:59:34

End at: 2017-11-15 23:00:04

Below is generated by plot.py at 2017-11-16 00:36:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.80 Mbit/s

95th percentile per-packet one-way delay: 93.819 ms

Loss rate: 0.00%

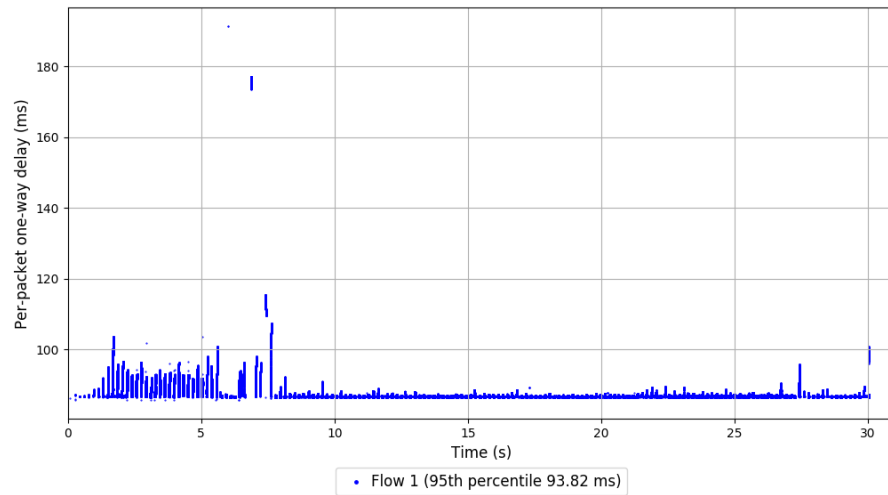
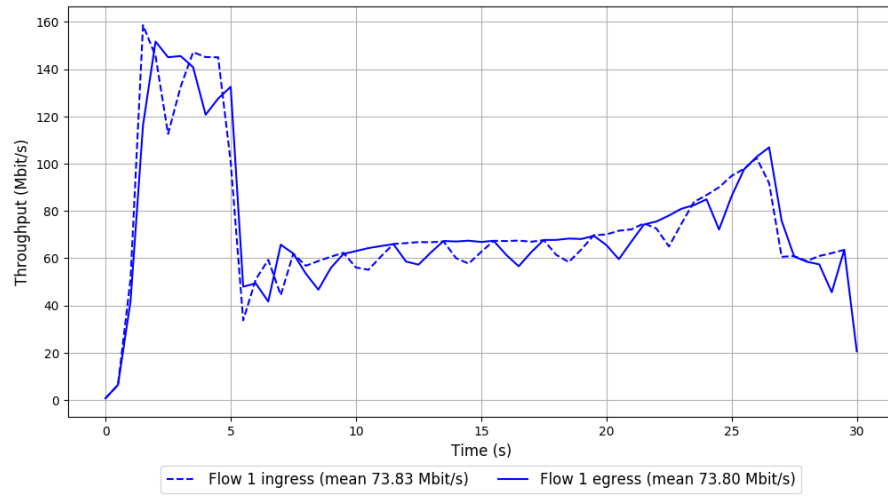
-- Flow 1:

Average throughput: 73.80 Mbit/s

95th percentile per-packet one-way delay: 93.819 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-15 23:10:13

End at: 2017-11-15 23:10:43

Below is generated by plot.py at 2017-11-16 00:36:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.67 Mbit/s

95th percentile per-packet one-way delay: 96.115 ms

Loss rate: 0.14%

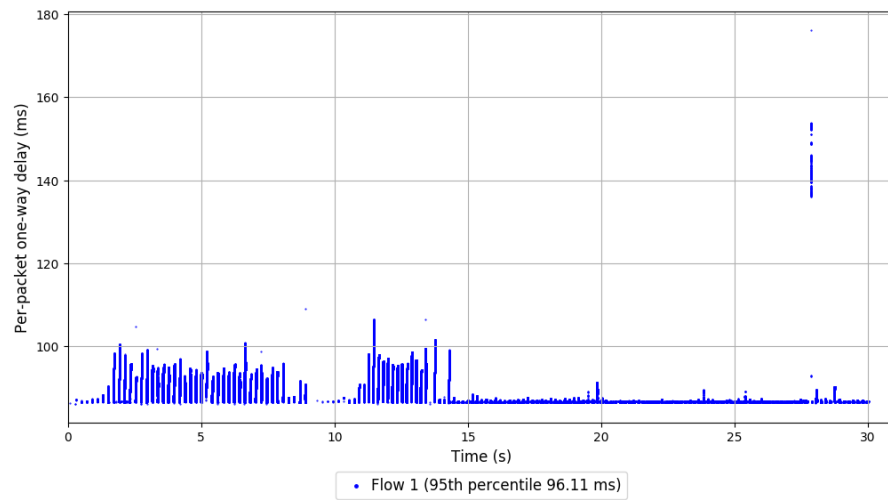
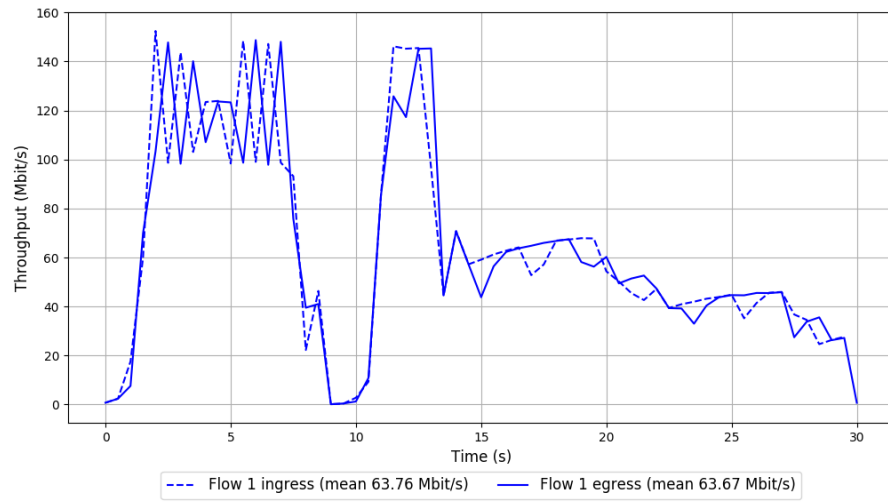
-- Flow 1:

Average throughput: 63.67 Mbit/s

95th percentile per-packet one-way delay: 96.115 ms

Loss rate: 0.14%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-15 23:21:03

End at: 2017-11-15 23:21:33

Below is generated by plot.py at 2017-11-16 00:36:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.54 Mbit/s

95th percentile per-packet one-way delay: 92.446 ms

Loss rate: 0.00%

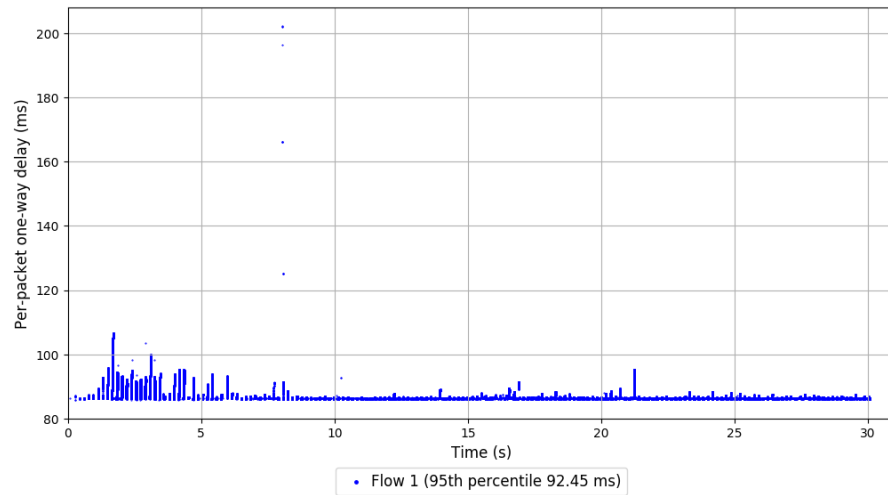
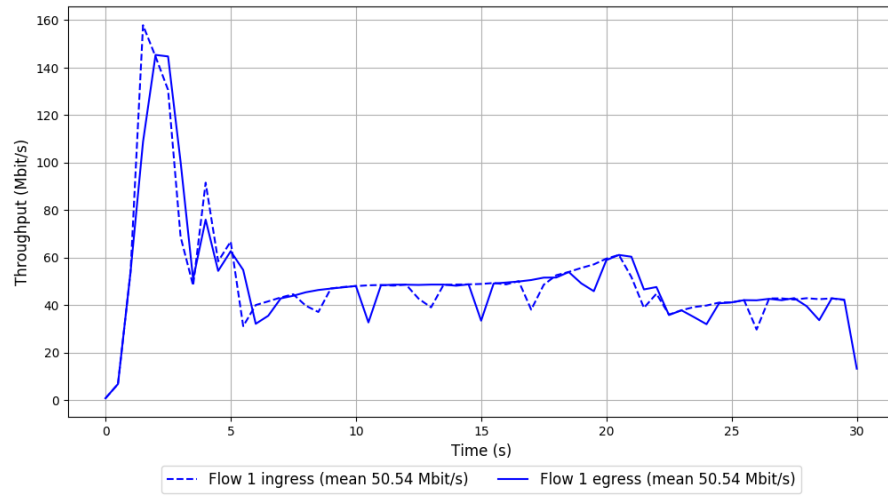
-- Flow 1:

Average throughput: 50.54 Mbit/s

95th percentile per-packet one-way delay: 92.446 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-15 23:31:25

End at: 2017-11-15 23:31:55

Below is generated by plot.py at 2017-11-16 00:37:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.91 Mbit/s

95th percentile per-packet one-way delay: 90.812 ms

Loss rate: 0.00%

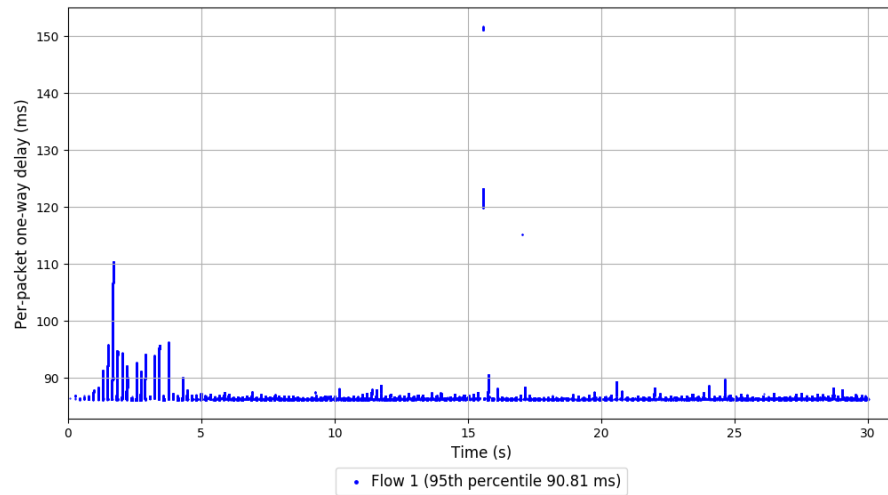
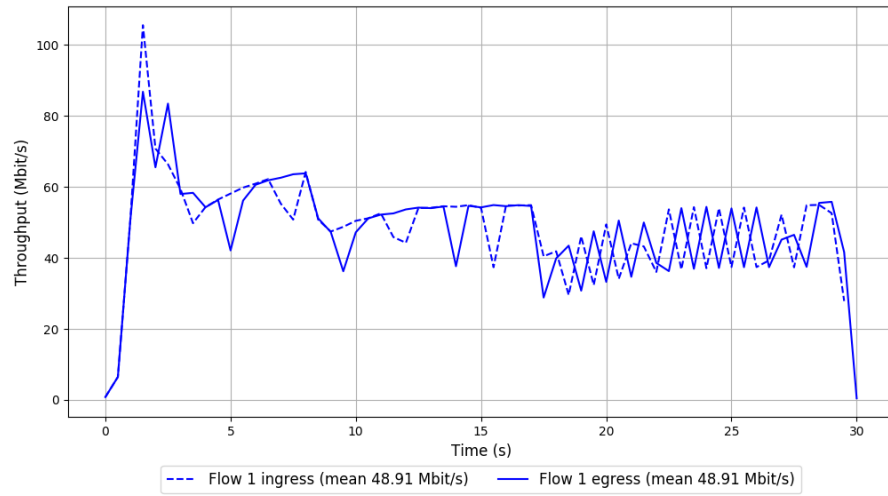
-- Flow 1:

Average throughput: 48.91 Mbit/s

95th percentile per-packet one-way delay: 90.812 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-15 23:42:08

End at: 2017-11-15 23:42:38

Below is generated by plot.py at 2017-11-16 00:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.59 Mbit/s

95th percentile per-packet one-way delay: 92.450 ms

Loss rate: 0.01%

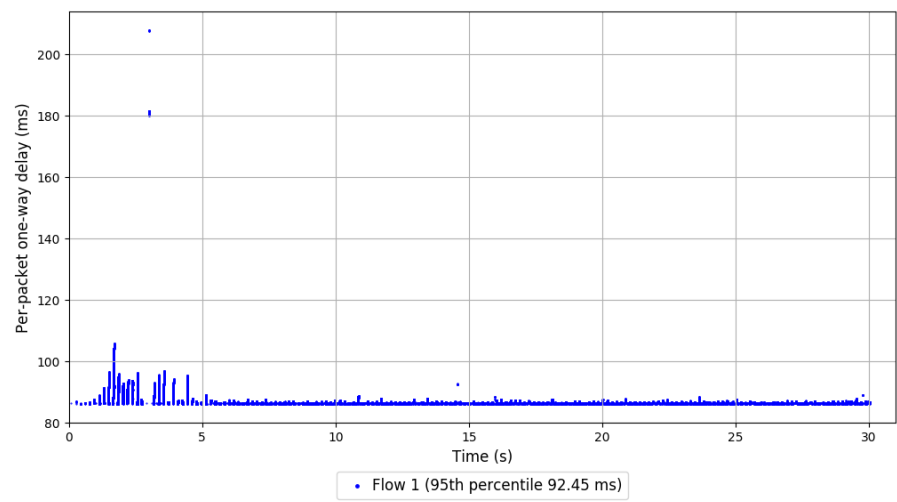
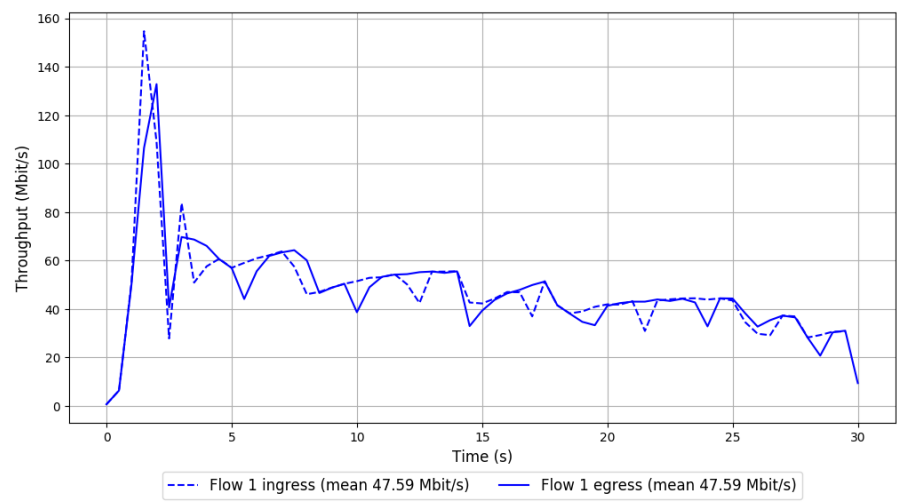
-- Flow 1:

Average throughput: 47.59 Mbit/s

95th percentile per-packet one-way delay: 92.450 ms

Loss rate: 0.01%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-15 23:52:55

End at: 2017-11-15 23:53:25

Below is generated by plot.py at 2017-11-16 00:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.37 Mbit/s

95th percentile per-packet one-way delay: 92.310 ms

Loss rate: 0.80%

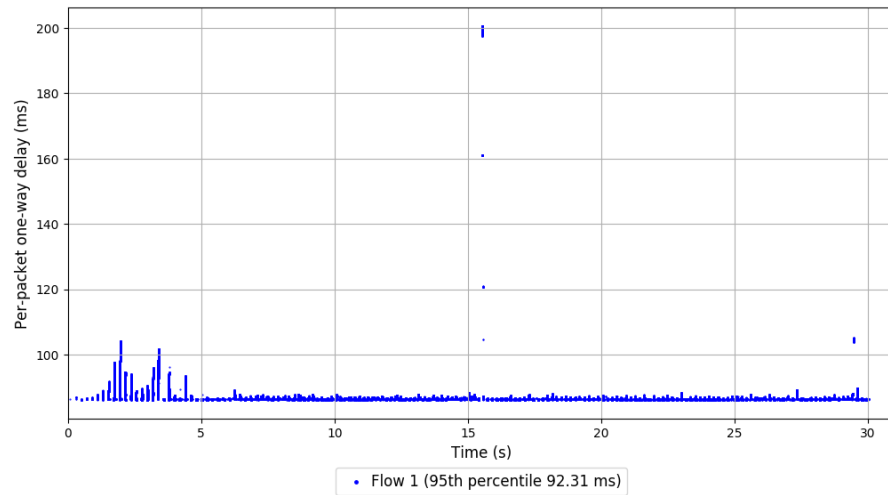
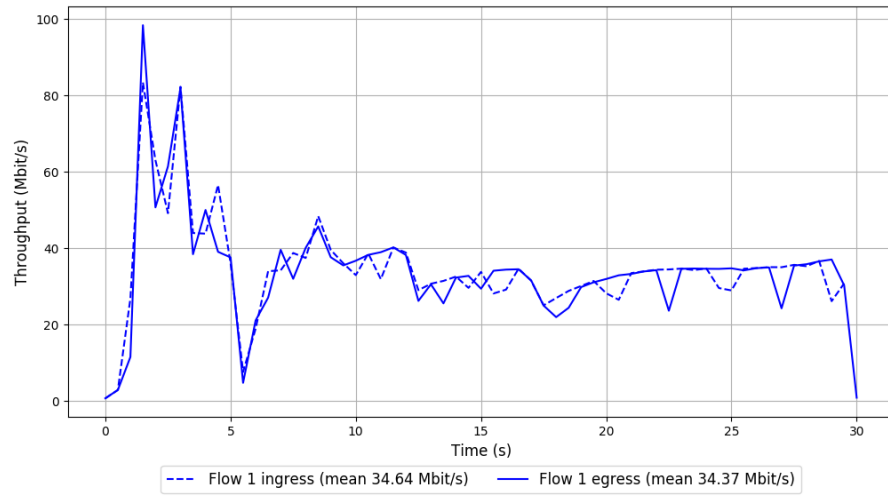
-- Flow 1:

Average throughput: 34.37 Mbit/s

95th percentile per-packet one-way delay: 92.310 ms

Loss rate: 0.80%

Run 10: Report of TCP Cubic — Data Link

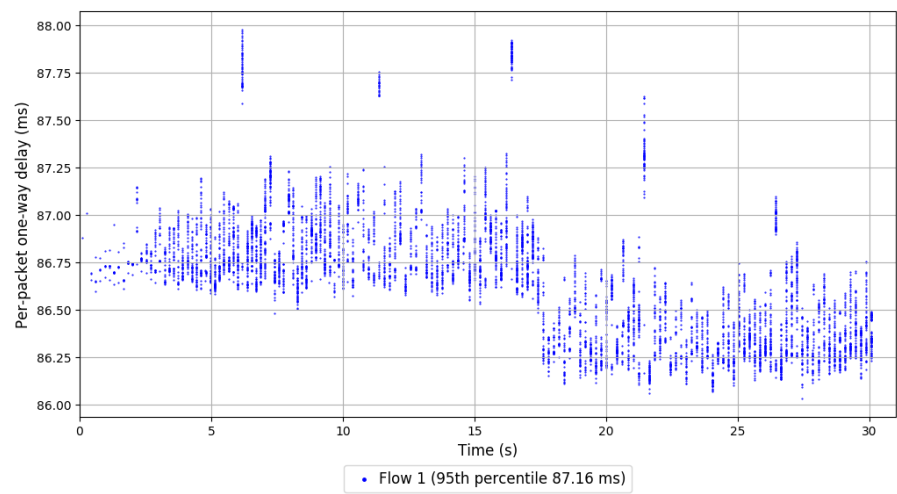
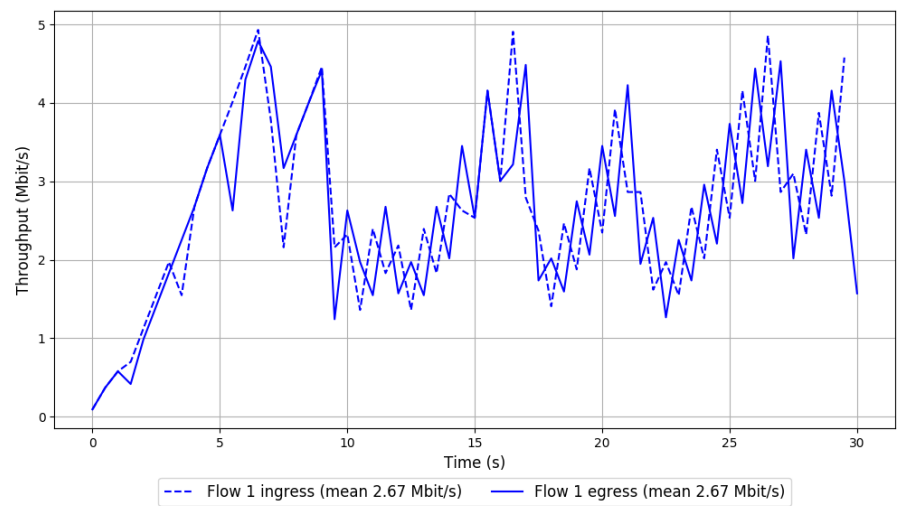


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-15 22:11:33
End at: 2017-11-15 22:12:03

# Below is generated by plot.py at 2017-11-16 00:37:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.67 Mbit/s
95th percentile per-packet one-way delay: 87.159 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 2.67 Mbit/s
95th percentile per-packet one-way delay: 87.159 ms
Loss rate: 0.04%
```

Run 1: Report of LEDBAT — Data Link

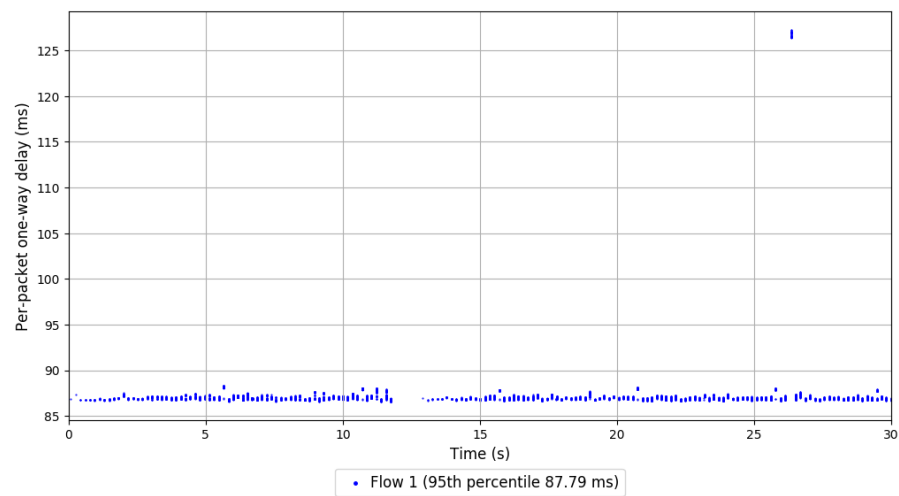
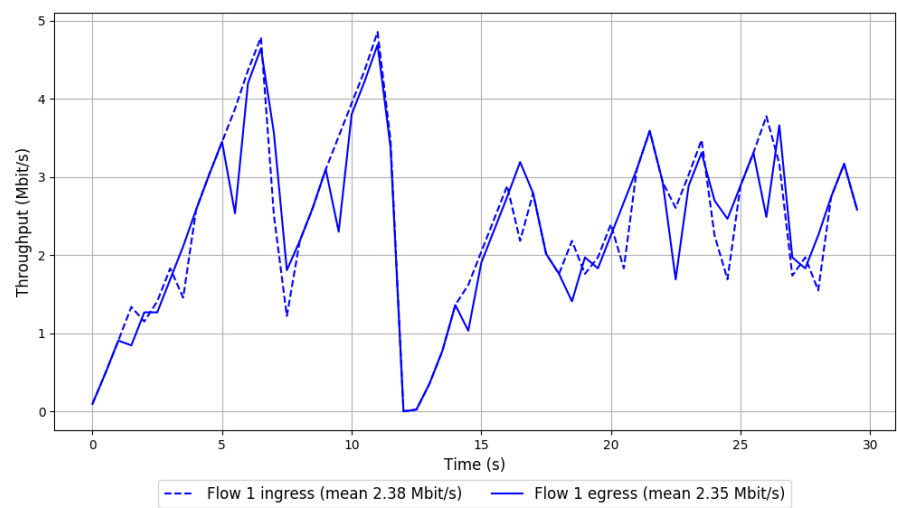


```
Run 2: Statistics of LEDBAT

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

# Below is generated by plot.py at 2017-11-16 00:37:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 87.794 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 87.794 ms
Loss rate: 1.24%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-15 22:32:59

End at: 2017-11-15 22:33:29

Below is generated by plot.py at 2017-11-16 00:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 87.445 ms

Loss rate: 0.04%

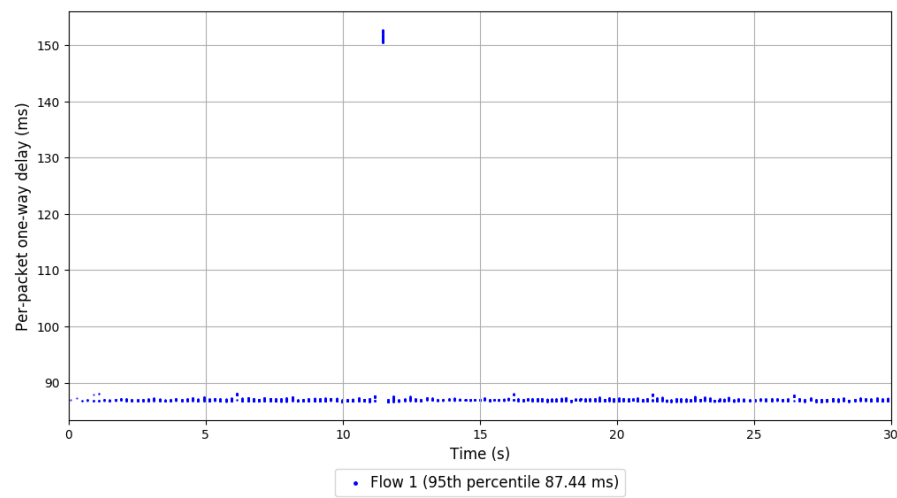
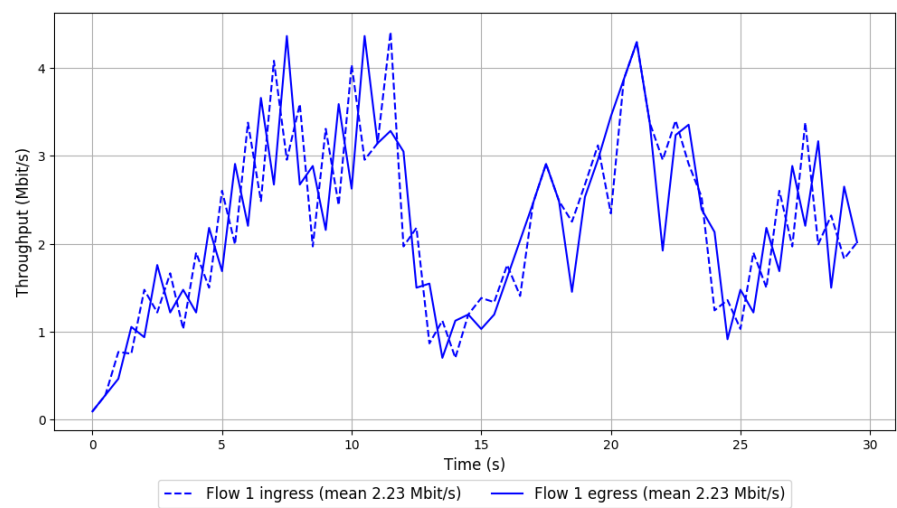
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 87.445 ms

Loss rate: 0.04%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-15 22:43:57

End at: 2017-11-15 22:44:27

Below is generated by plot.py at 2017-11-16 00:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 87.478 ms

Loss rate: 0.00%

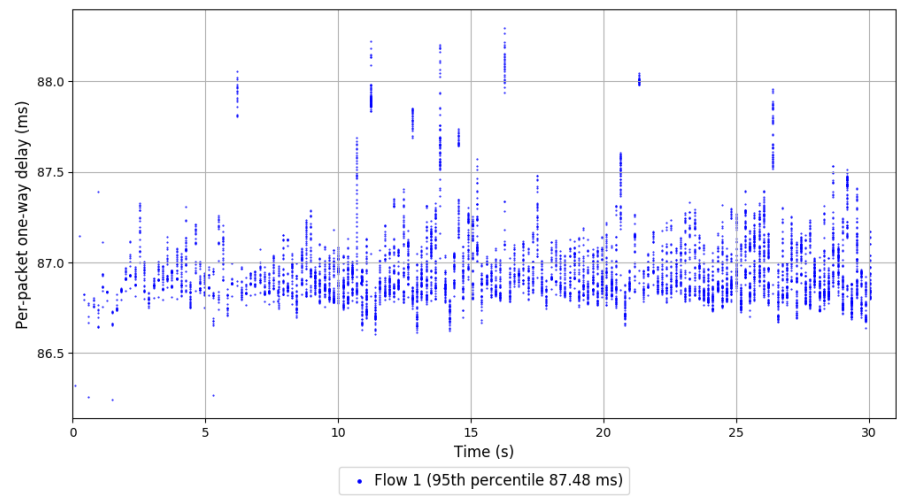
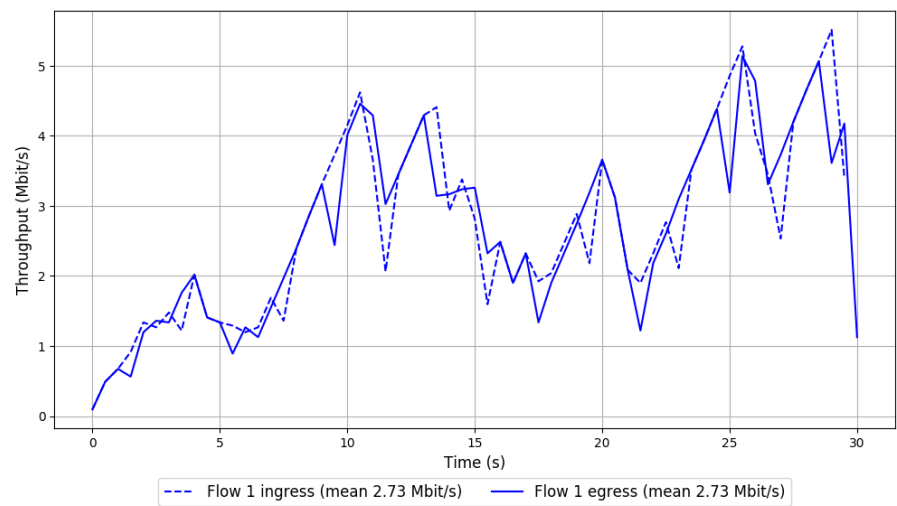
-- Flow 1:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 87.478 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-15 22:54:56

End at: 2017-11-15 22:55:26

Below is generated by plot.py at 2017-11-16 00:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 87.385 ms

Loss rate: 0.00%

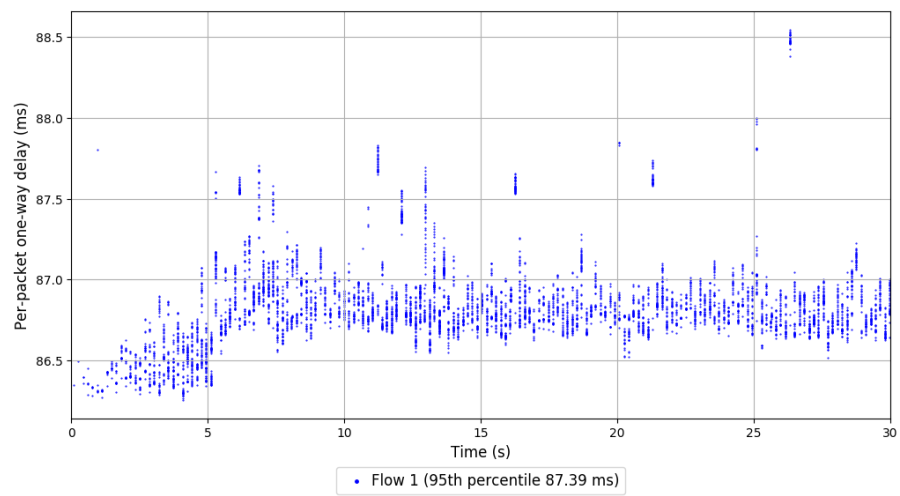
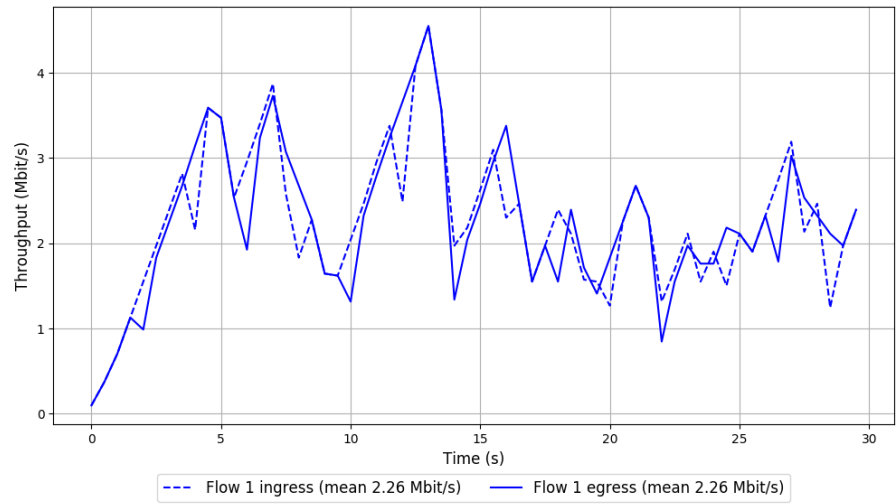
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 87.385 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-15 23:05:45

End at: 2017-11-15 23:06:15

Below is generated by plot.py at 2017-11-16 00:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 87.186 ms

Loss rate: 0.02%

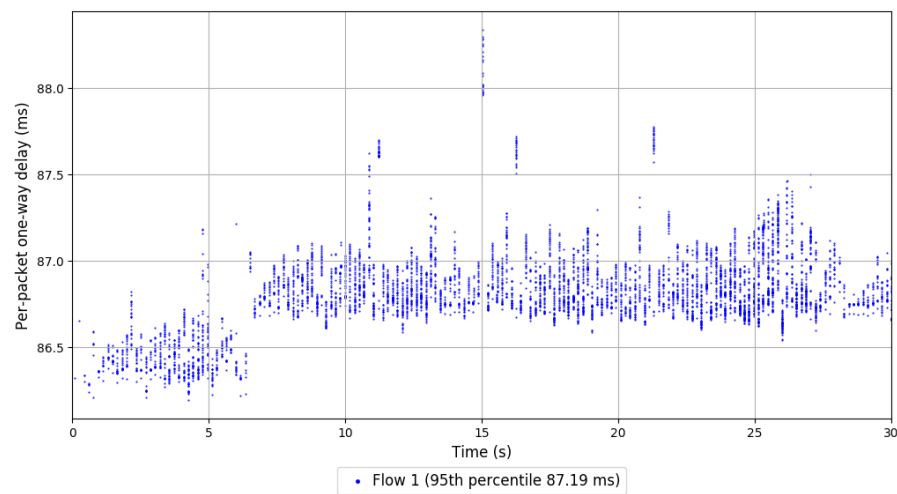
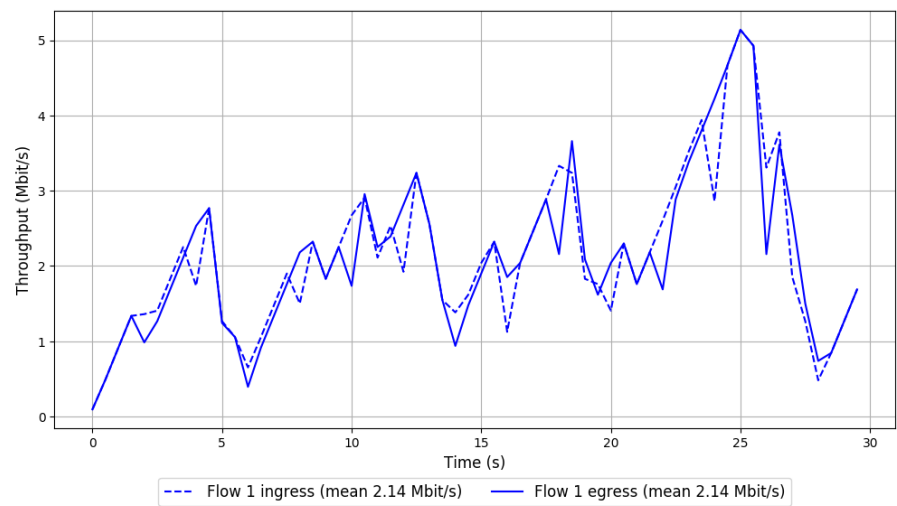
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 87.186 ms

Loss rate: 0.02%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-15 23:16:24

End at: 2017-11-15 23:16:54

Below is generated by plot.py at 2017-11-16 00:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 87.315 ms

Loss rate: 0.01%

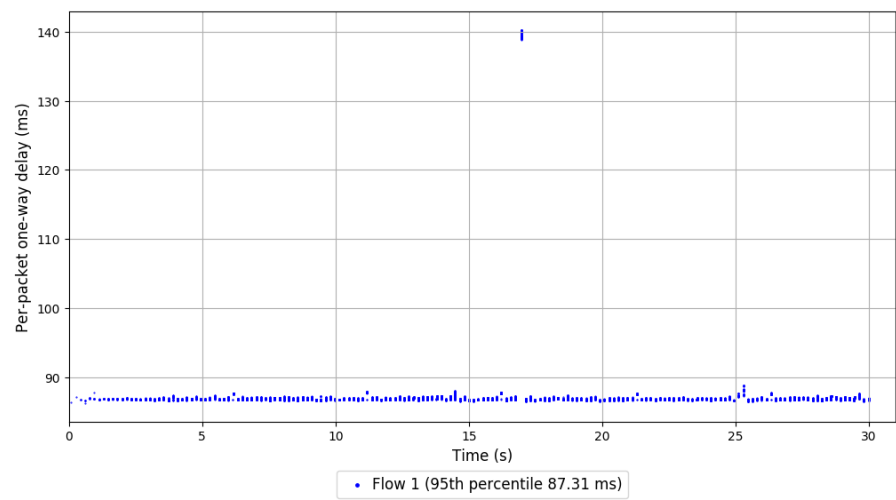
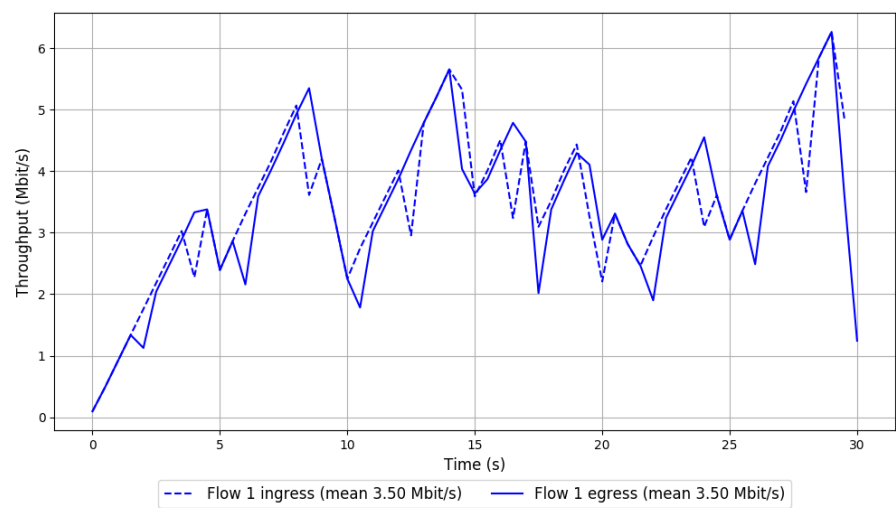
-- Flow 1:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 87.315 ms

Loss rate: 0.01%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-15 23:27:00

End at: 2017-11-15 23:27:30

Below is generated by plot.py at 2017-11-16 00:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 117.214 ms

Loss rate: 0.21%

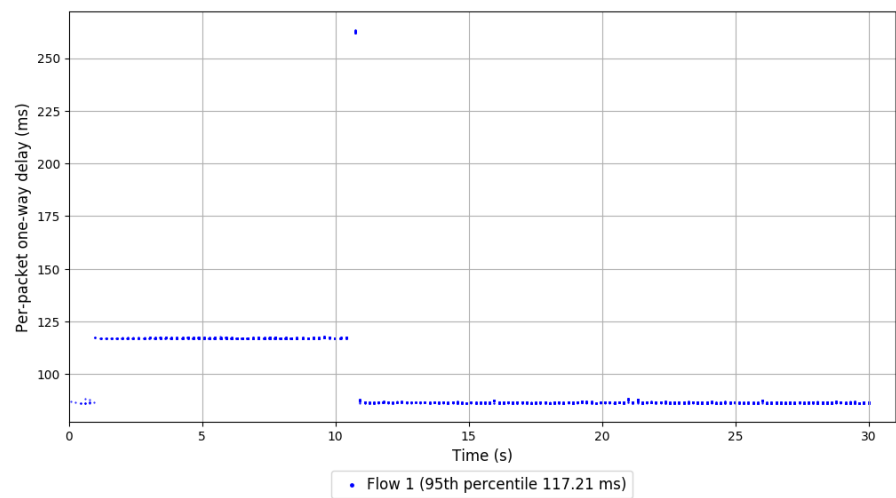
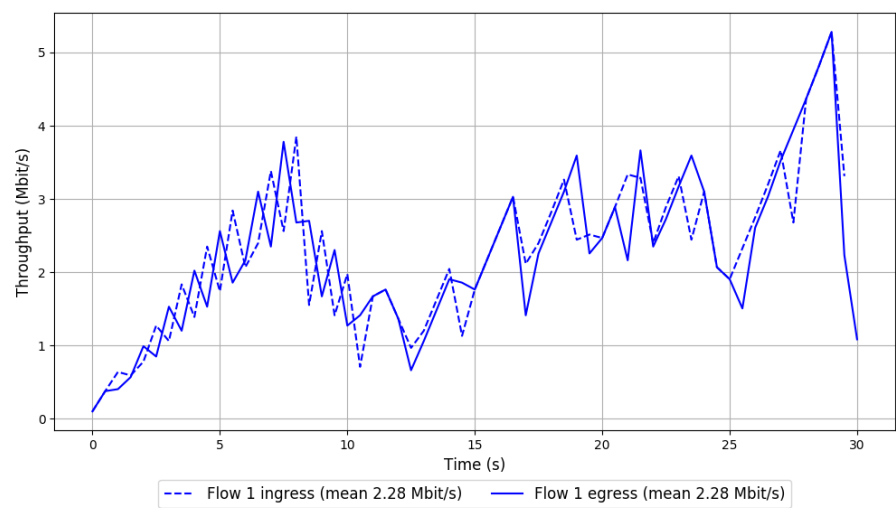
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 117.214 ms

Loss rate: 0.21%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-15 23:37:39

End at: 2017-11-15 23:38:09

Below is generated by plot.py at 2017-11-16 00:37:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 86.818 ms

Loss rate: 0.02%

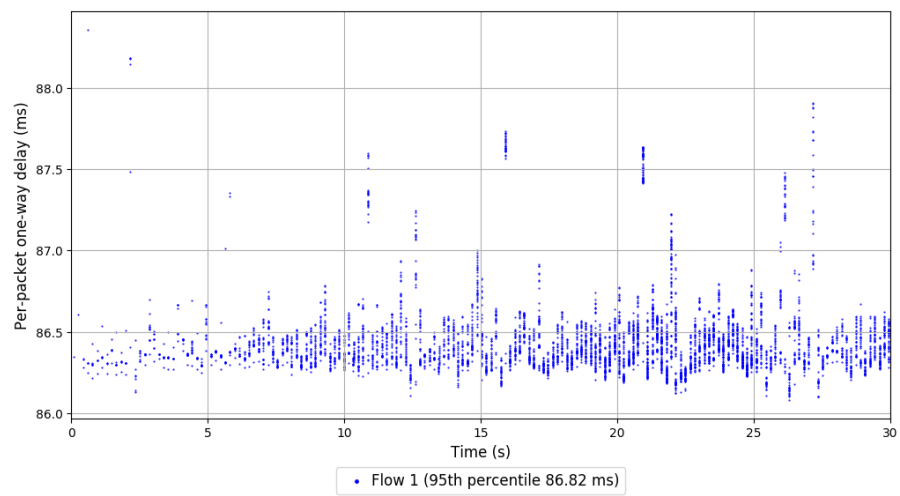
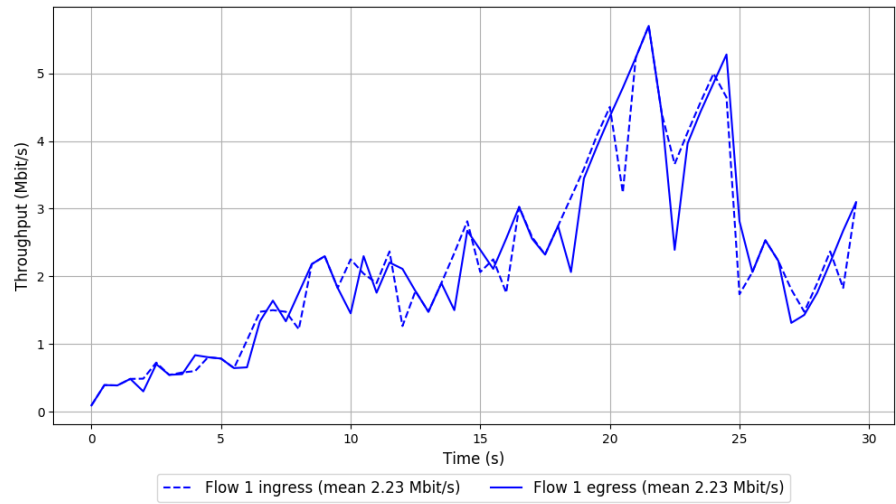
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 86.818 ms

Loss rate: 0.02%

Run 9: Report of LEDBAT — Data Link

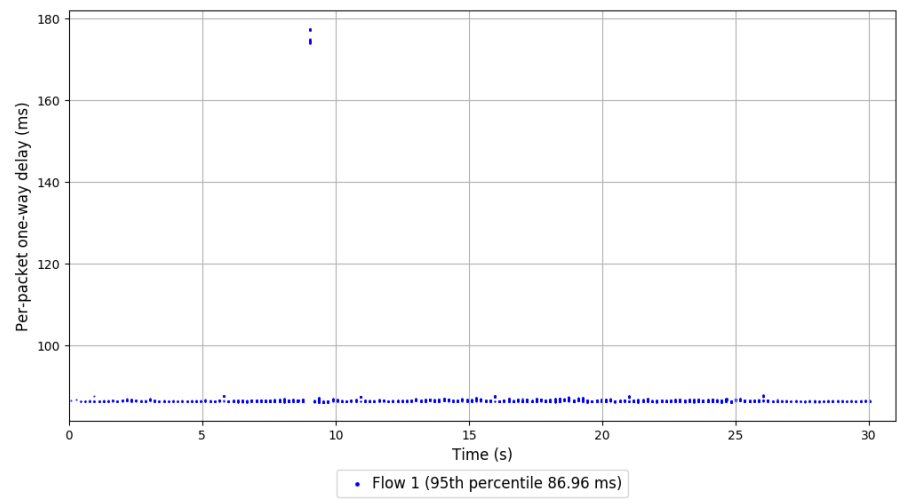
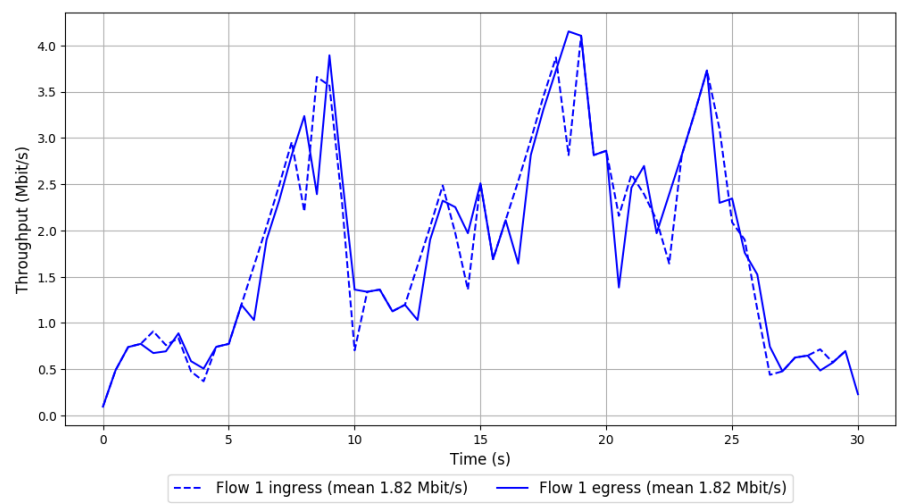


```
Run 10: Statistics of LEDBAT

Start at: 2017-11-15 23:48:32
End at: 2017-11-15 23:49:02

# Below is generated by plot.py at 2017-11-16 00:37:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 86.960 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 86.960 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

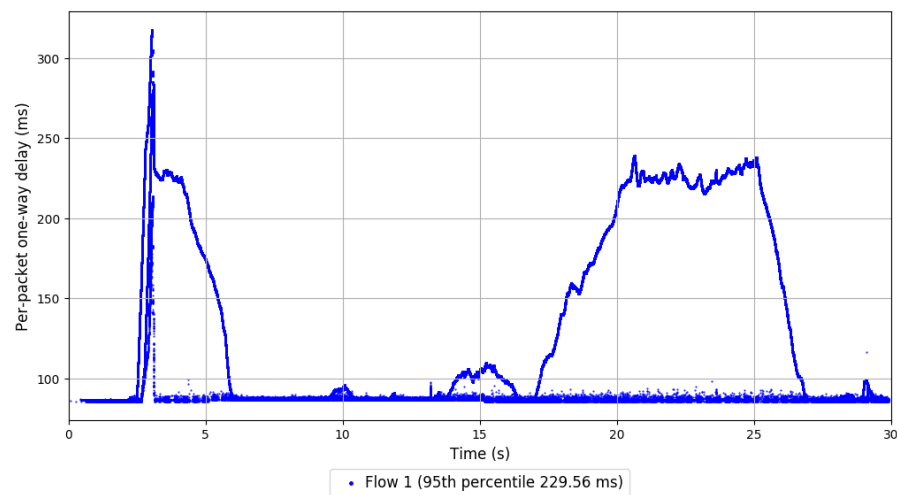
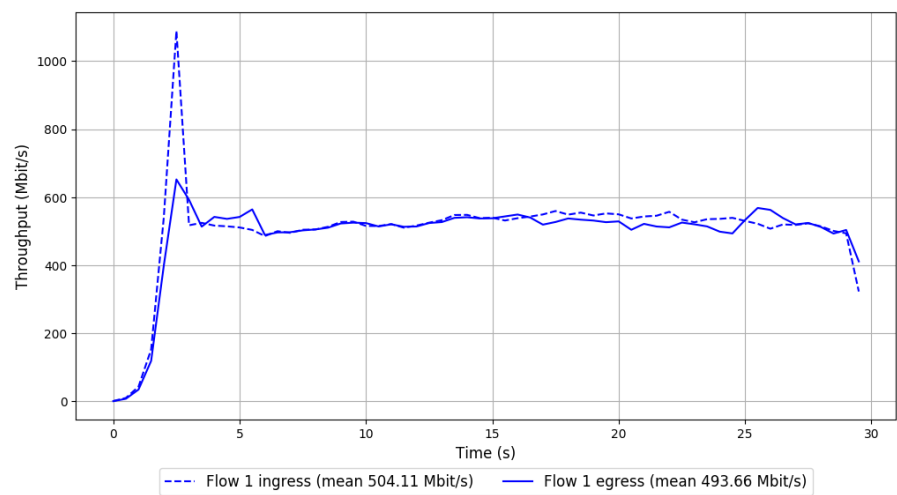


```
Run 1: Statistics of PCC

Start at: 2017-11-15 22:09:56
End at: 2017-11-15 22:10:26

# Below is generated by plot.py at 2017-11-16 00:44:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 493.66 Mbit/s
95th percentile per-packet one-way delay: 229.557 ms
Loss rate: 2.07%
-- Flow 1:
Average throughput: 493.66 Mbit/s
95th percentile per-packet one-way delay: 229.557 ms
Loss rate: 2.07%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-15 22:20:37

End at: 2017-11-15 22:21:07

Below is generated by plot.py at 2017-11-16 00:44:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 436.25 Mbit/s

95th percentile per-packet one-way delay: 224.887 ms

Loss rate: 1.32%

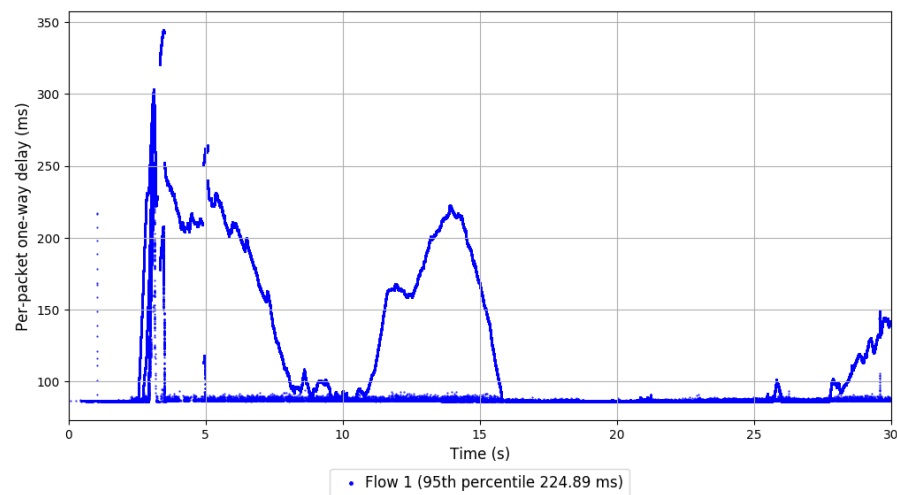
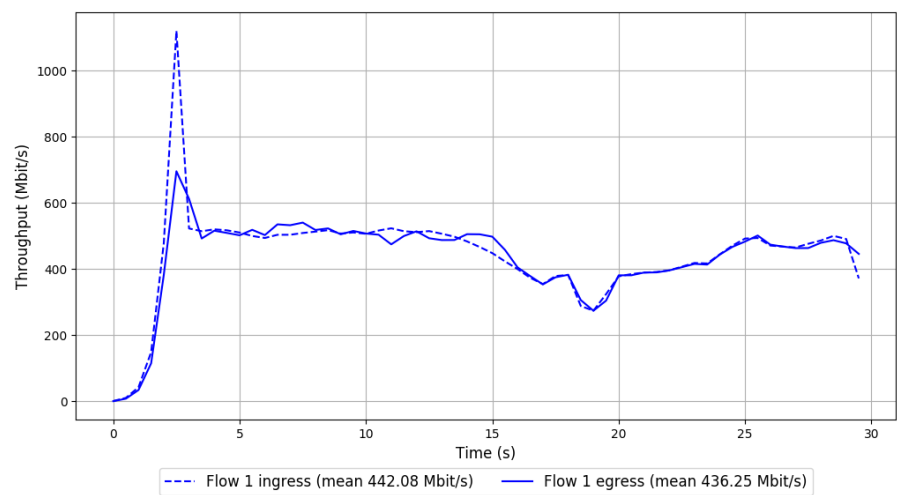
-- Flow 1:

Average throughput: 436.25 Mbit/s

95th percentile per-packet one-way delay: 224.887 ms

Loss rate: 1.32%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-15 22:31:27

End at: 2017-11-15 22:31:57

Below is generated by plot.py at 2017-11-16 00:44:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 321.24 Mbit/s

95th percentile per-packet one-way delay: 92.303 ms

Loss rate: 0.18%

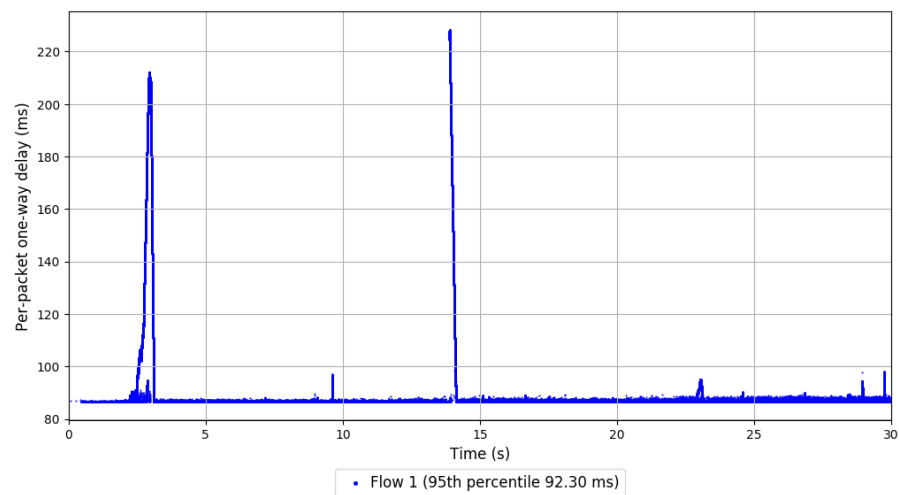
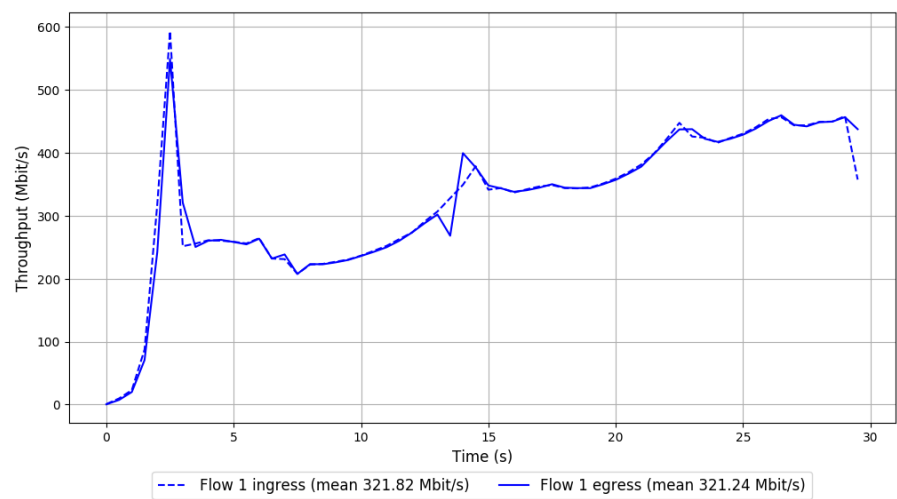
-- Flow 1:

Average throughput: 321.24 Mbit/s

95th percentile per-packet one-way delay: 92.303 ms

Loss rate: 0.18%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-15 22:42:19

End at: 2017-11-15 22:42:49

Below is generated by plot.py at 2017-11-16 00:44:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 493.95 Mbit/s

95th percentile per-packet one-way delay: 177.622 ms

Loss rate: 0.74%

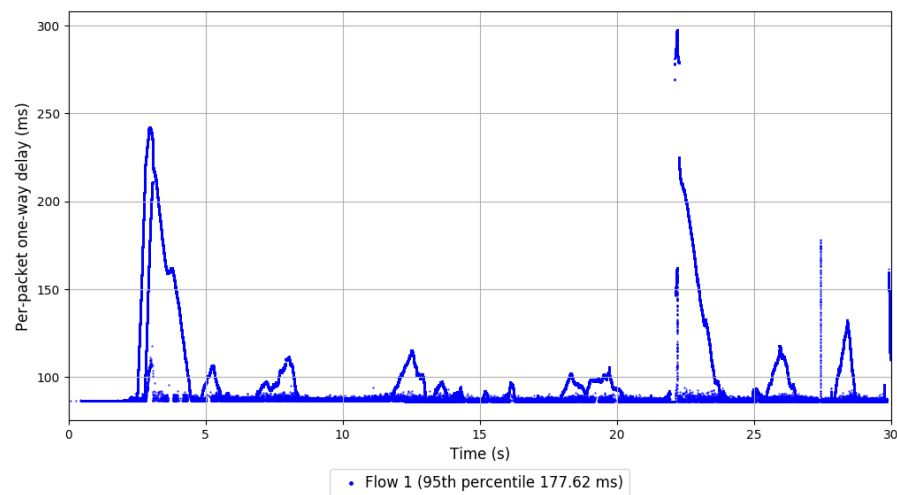
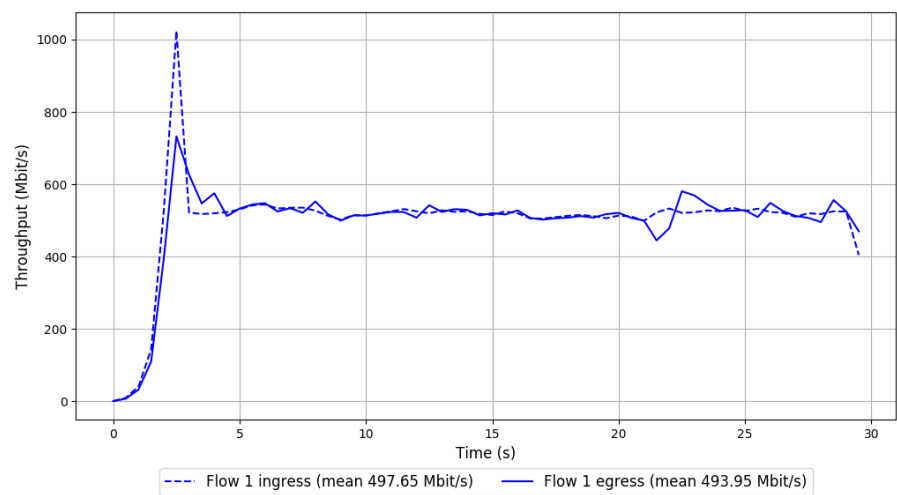
-- Flow 1:

Average throughput: 493.95 Mbit/s

95th percentile per-packet one-way delay: 177.622 ms

Loss rate: 0.74%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-15 22:53:19

End at: 2017-11-15 22:53:49

Below is generated by plot.py at 2017-11-16 00:44:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 451.66 Mbit/s

95th percentile per-packet one-way delay: 231.595 ms

Loss rate: 1.42%

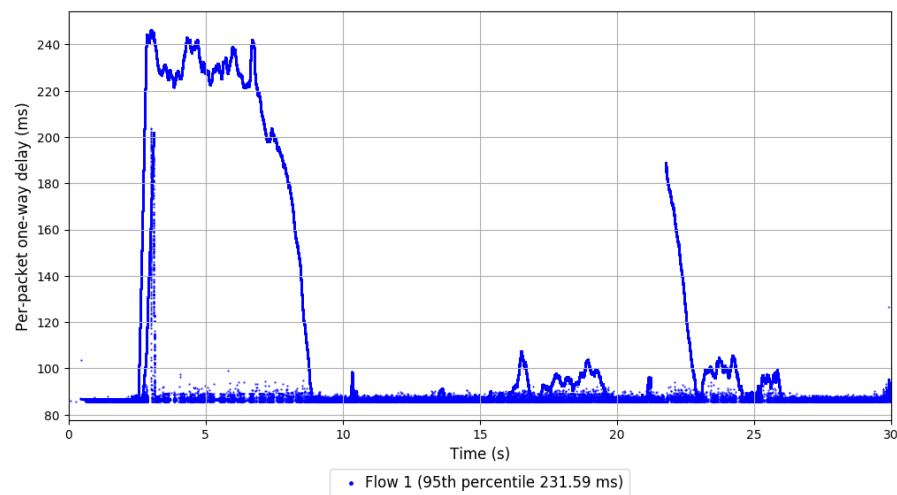
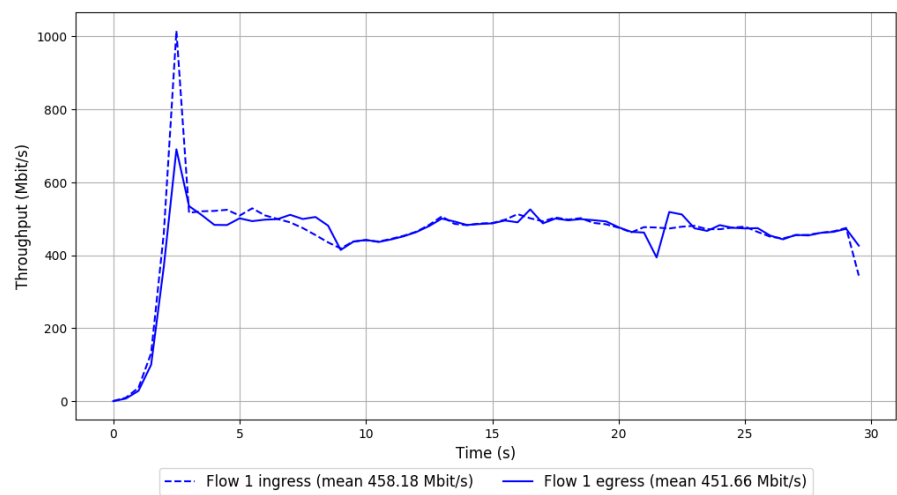
-- Flow 1:

Average throughput: 451.66 Mbit/s

95th percentile per-packet one-way delay: 231.595 ms

Loss rate: 1.42%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-15 23:04:07

End at: 2017-11-15 23:04:37

Below is generated by plot.py at 2017-11-16 00:45:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 491.34 Mbit/s

95th percentile per-packet one-way delay: 225.830 ms

Loss rate: 1.32%

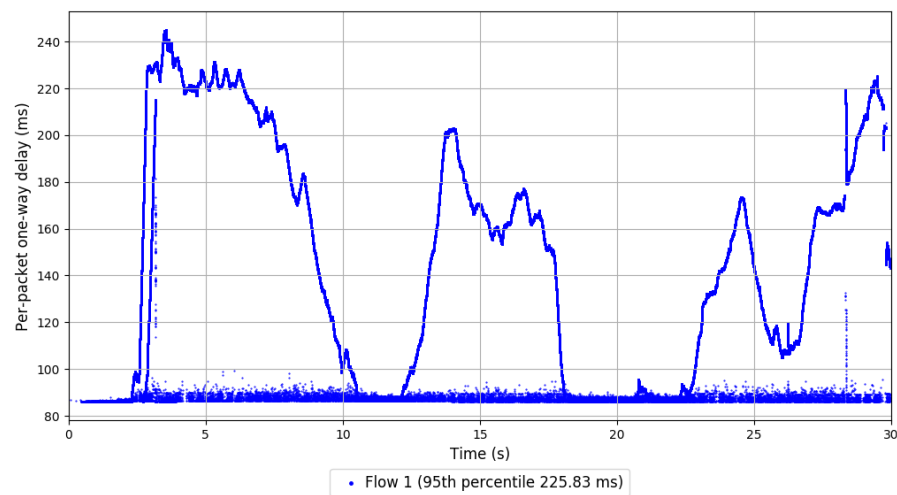
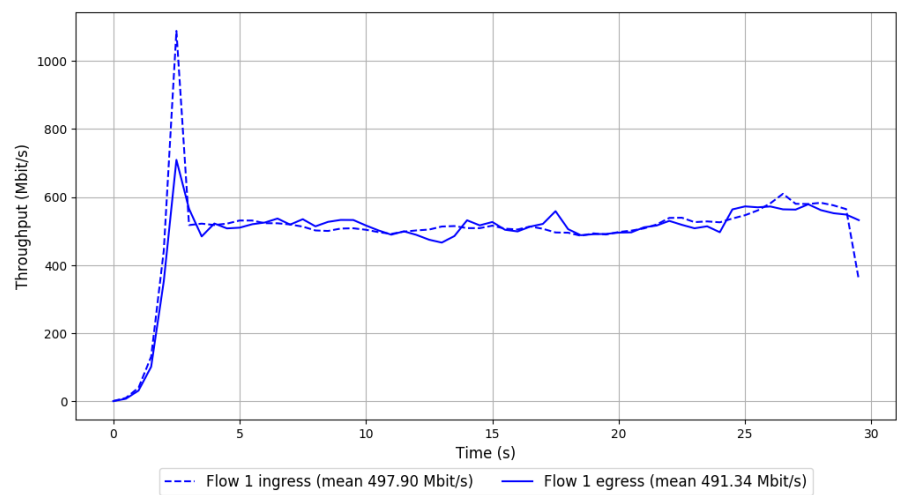
-- Flow 1:

Average throughput: 491.34 Mbit/s

95th percentile per-packet one-way delay: 225.830 ms

Loss rate: 1.32%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-15 23:14:46

End at: 2017-11-15 23:15:16

Below is generated by plot.py at 2017-11-16 00:45:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 480.64 Mbit/s

95th percentile per-packet one-way delay: 176.452 ms

Loss rate: 0.73%

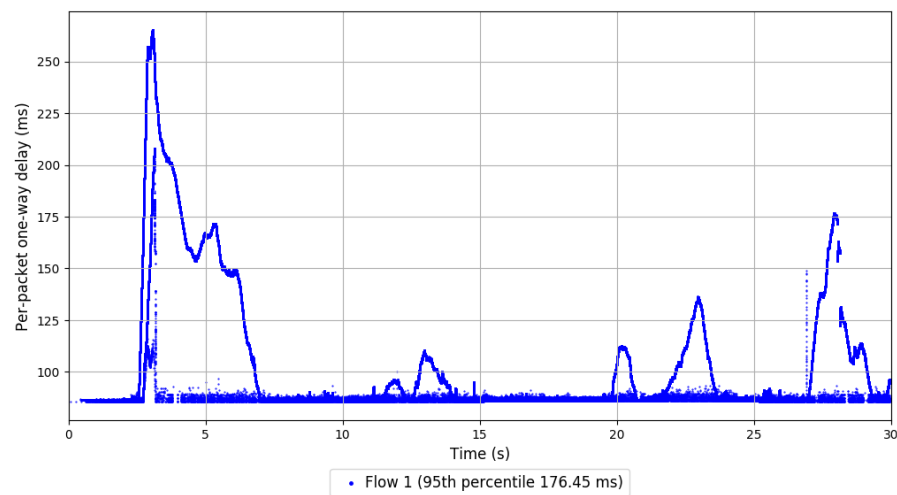
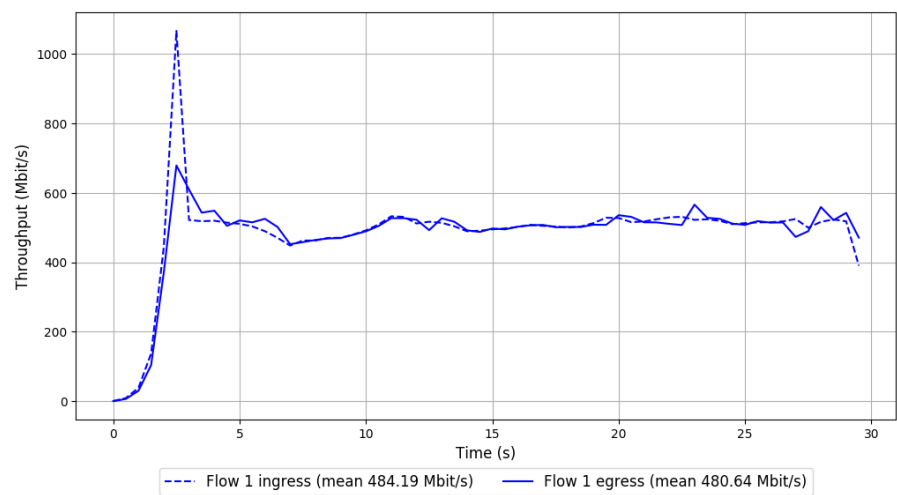
-- Flow 1:

Average throughput: 480.64 Mbit/s

95th percentile per-packet one-way delay: 176.452 ms

Loss rate: 0.73%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-15 23:25:40

End at: 2017-11-15 23:26:10

Below is generated by plot.py at 2017-11-16 00:45:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.42 Mbit/s

95th percentile per-packet one-way delay: 116.937 ms

Loss rate: 0.00%

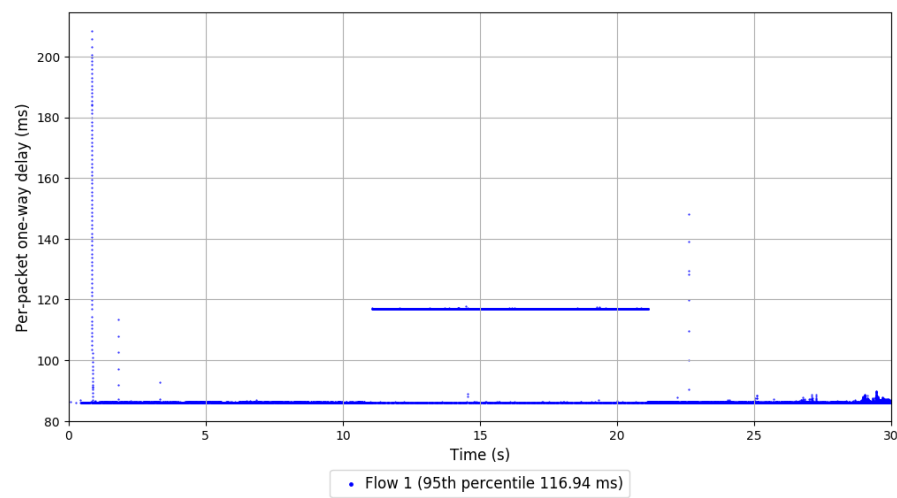
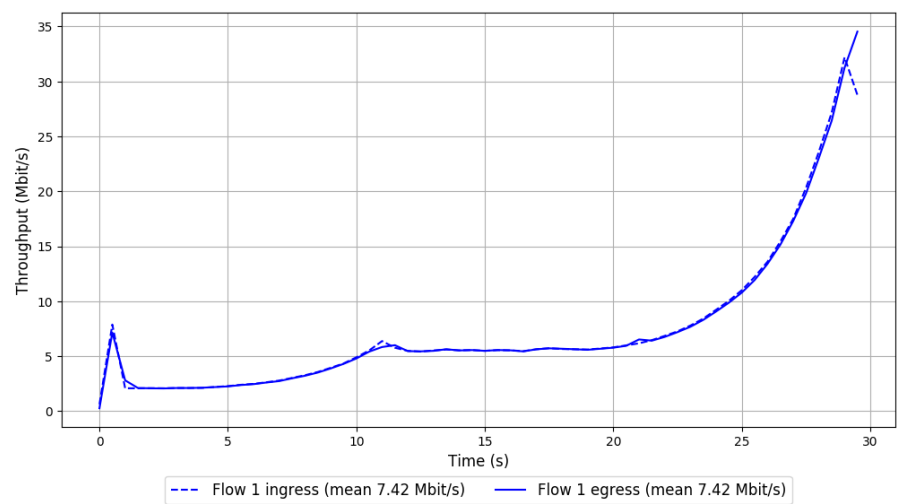
-- Flow 1:

Average throughput: 7.42 Mbit/s

95th percentile per-packet one-way delay: 116.937 ms

Loss rate: 0.00%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-15 23:36:02

End at: 2017-11-15 23:36:32

Below is generated by plot.py at 2017-11-16 00:45:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 439.71 Mbit/s

95th percentile per-packet one-way delay: 224.061 ms

Loss rate: 1.07%

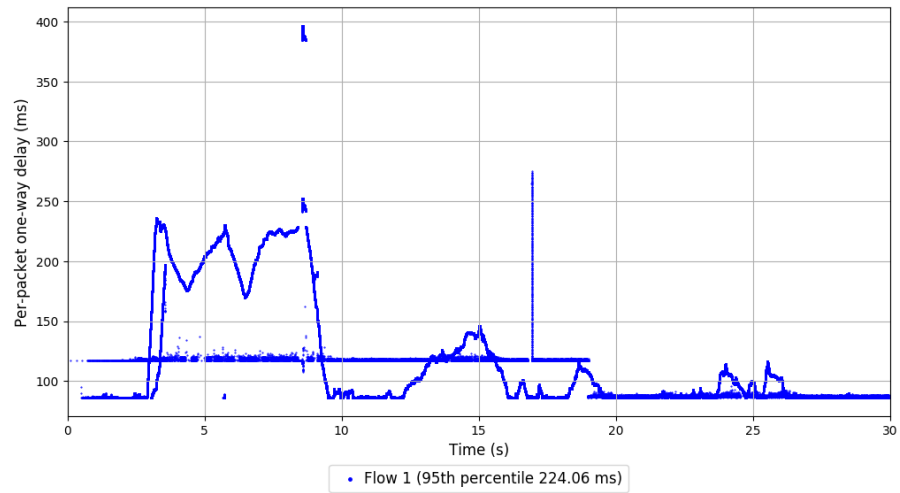
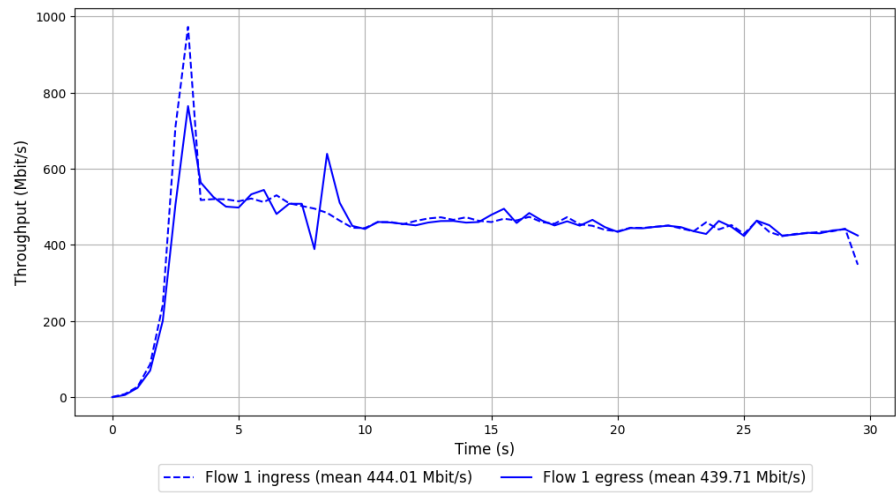
-- Flow 1:

Average throughput: 439.71 Mbit/s

95th percentile per-packet one-way delay: 224.061 ms

Loss rate: 1.07%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-15 23:46:55

End at: 2017-11-15 23:47:25

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 437.62 Mbit/s

95th percentile per-packet one-way delay: 229.781 ms

Loss rate: 2.22%

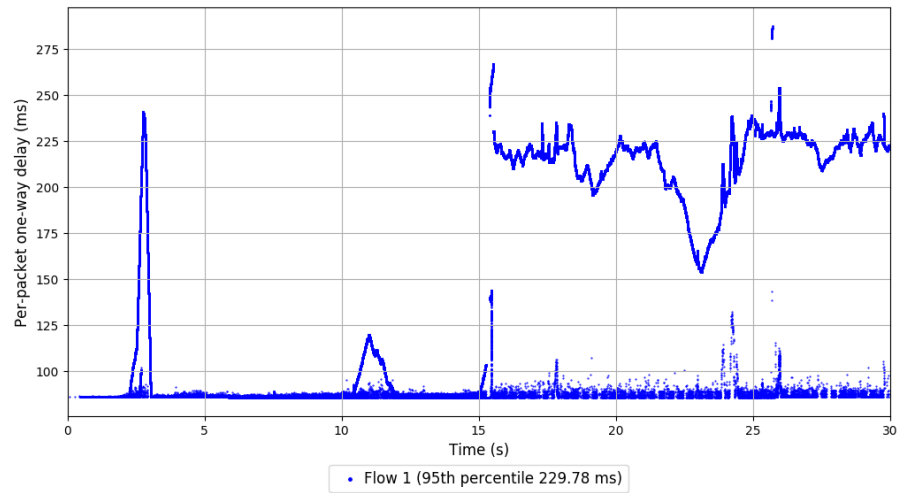
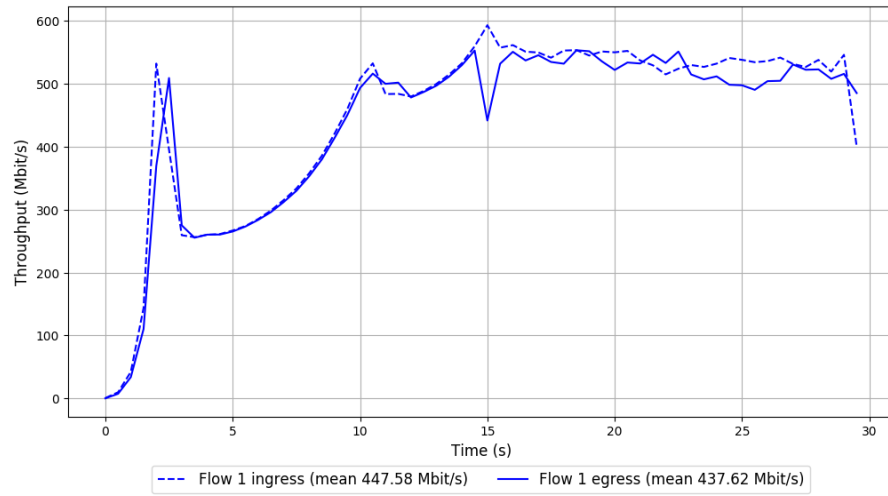
-- Flow 1:

Average throughput: 437.62 Mbit/s

95th percentile per-packet one-way delay: 229.781 ms

Loss rate: 2.22%

Run 10: Report of PCC — Data Link

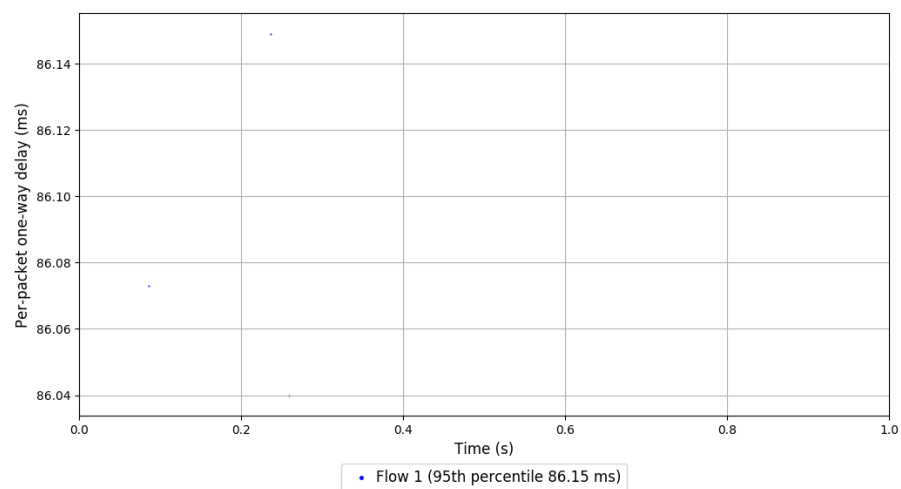
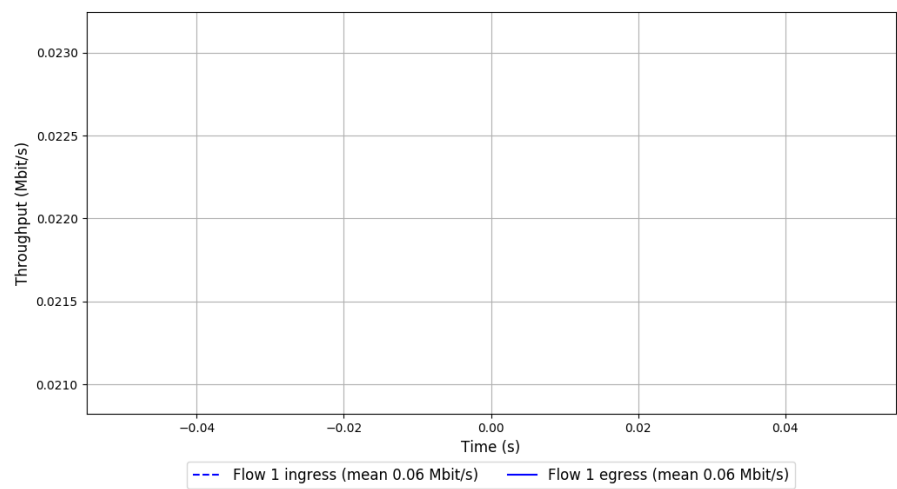


Run 1: Statistics of QUIC Cubic

Start at: 2017-11-15 22:12:53

End at: 2017-11-15 22:13:23

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-15 22:23:34

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

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.37 Mbit/s

95th percentile per-packet one-way delay: 86.311 ms

Loss rate: 0.00%

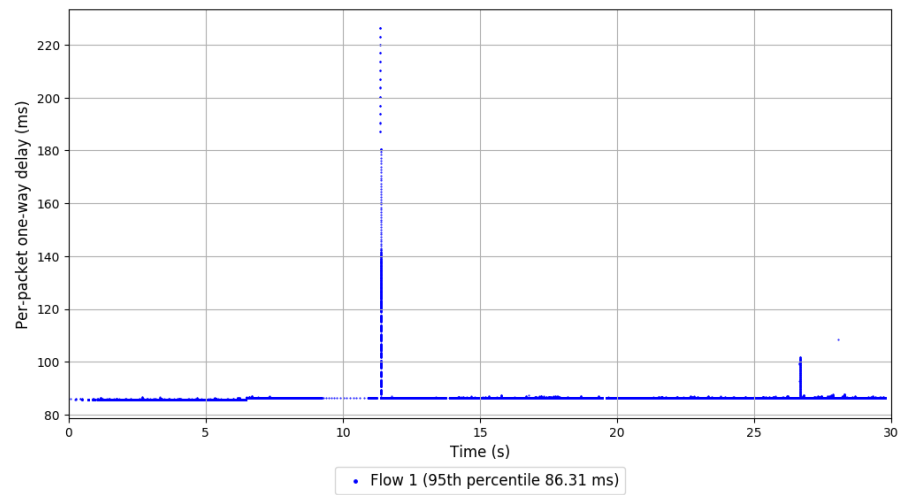
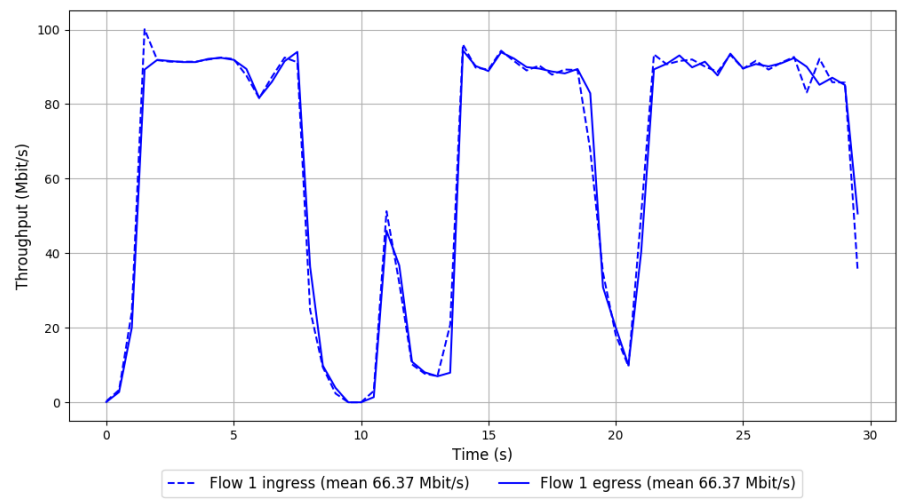
-- Flow 1:

Average throughput: 66.37 Mbit/s

95th percentile per-packet one-way delay: 86.311 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-15 22:34:19

End at: 2017-11-15 22:34:49

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.72 Mbit/s

95th percentile per-packet one-way delay: 86.364 ms

Loss rate: 0.00%

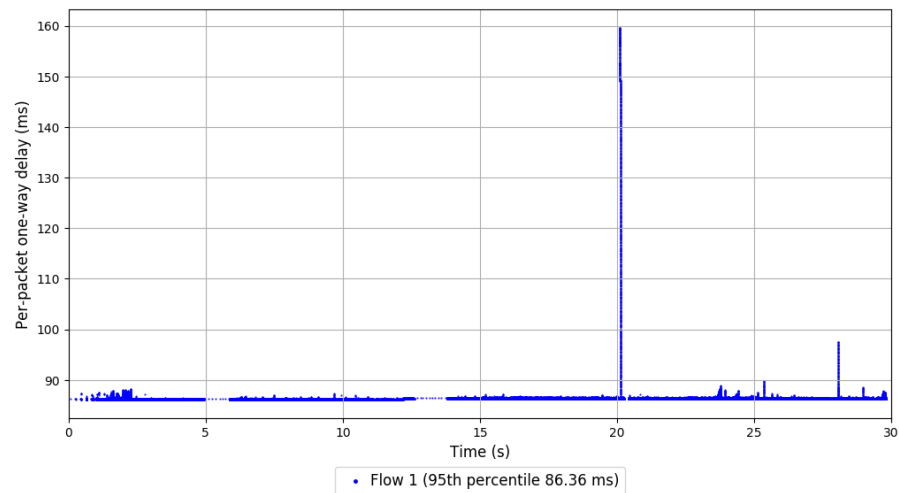
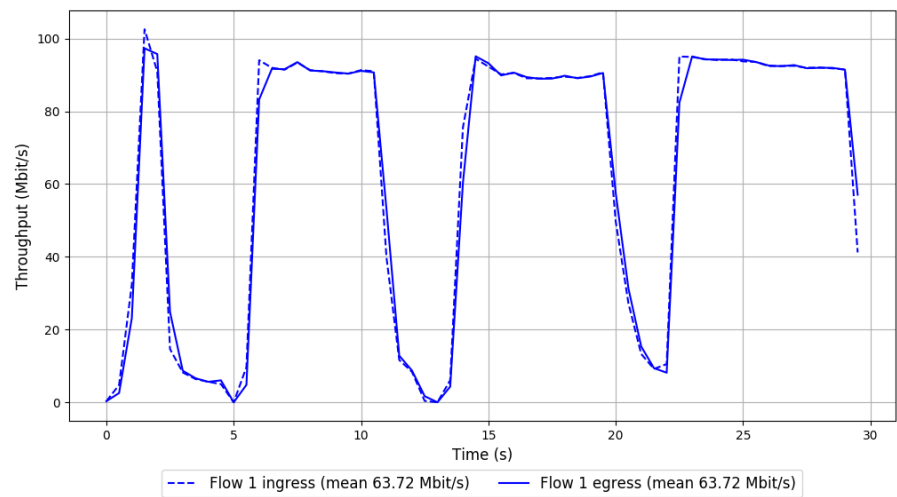
-- Flow 1:

Average throughput: 63.72 Mbit/s

95th percentile per-packet one-way delay: 86.364 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-15 22:45:17

End at: 2017-11-15 22:45:47

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.38 Mbit/s

95th percentile per-packet one-way delay: 86.337 ms

Loss rate: 0.00%

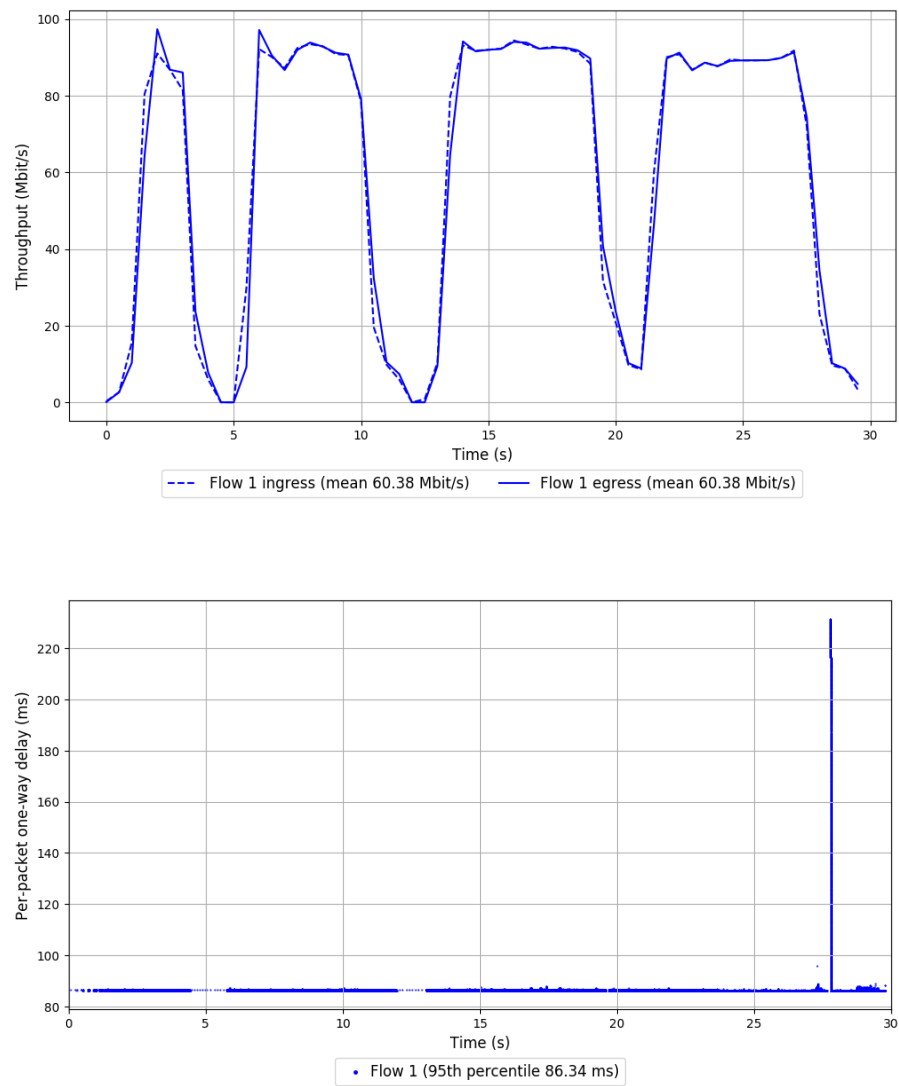
-- Flow 1:

Average throughput: 60.38 Mbit/s

95th percentile per-packet one-way delay: 86.337 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

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

End at: 2017-11-15 22:56:45

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.76 Mbit/s

95th percentile per-packet one-way delay: 86.211 ms

Loss rate: 0.00%

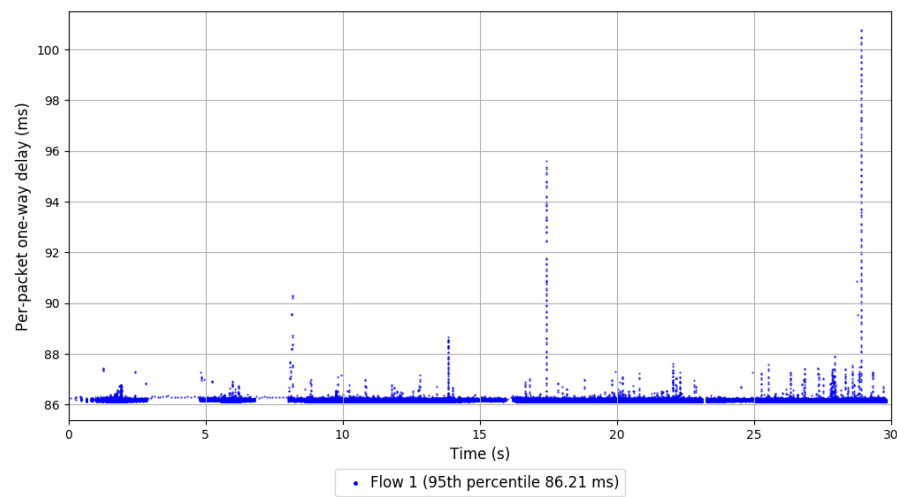
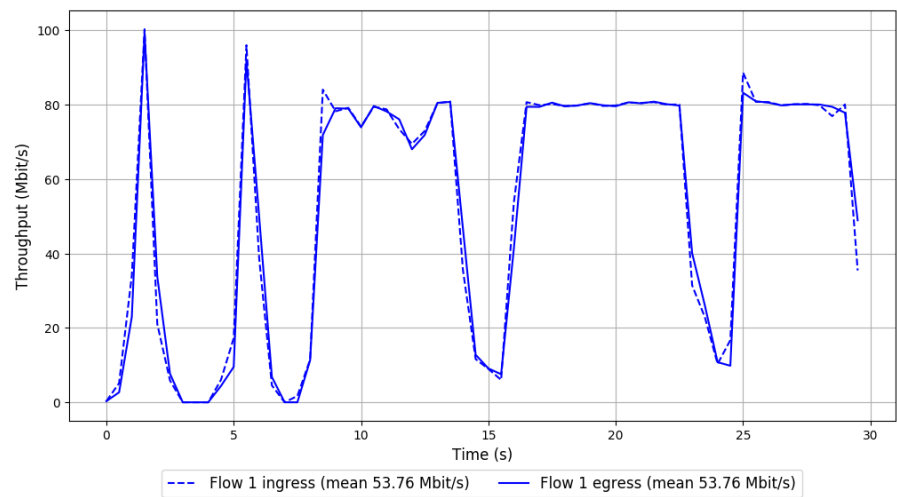
-- Flow 1:

Average throughput: 53.76 Mbit/s

95th percentile per-packet one-way delay: 86.211 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-15 23:07:04

End at: 2017-11-15 23:07:34

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.27 Mbit/s

95th percentile per-packet one-way delay: 86.284 ms

Loss rate: 0.00%

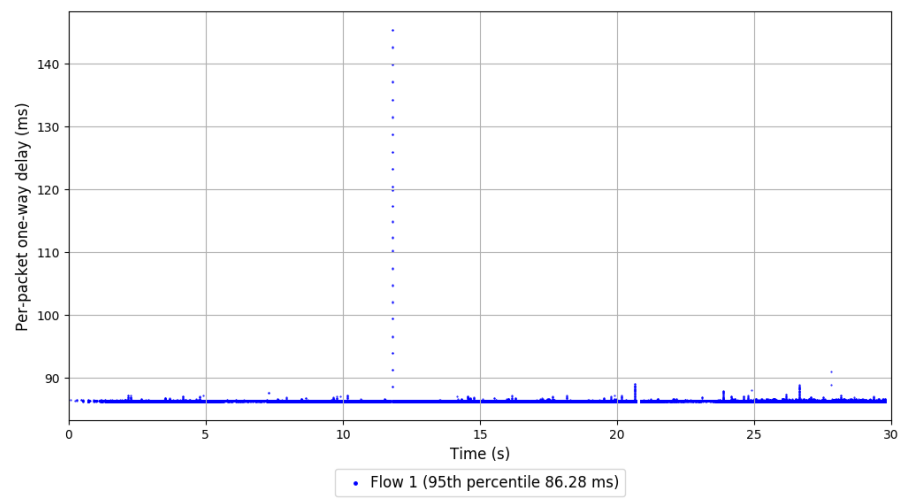
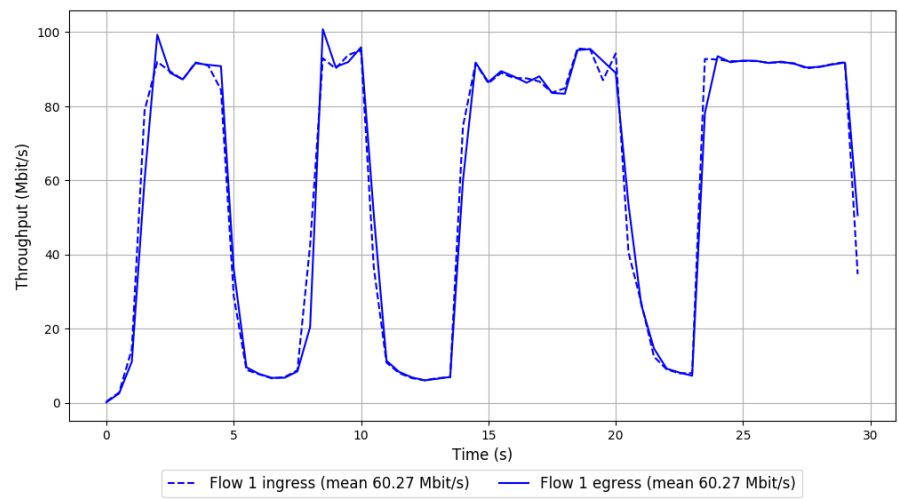
-- Flow 1:

Average throughput: 60.27 Mbit/s

95th percentile per-packet one-way delay: 86.284 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-15 23:17:43

End at: 2017-11-15 23:18:13

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.60 Mbit/s

95th percentile per-packet one-way delay: 86.254 ms

Loss rate: 0.00%

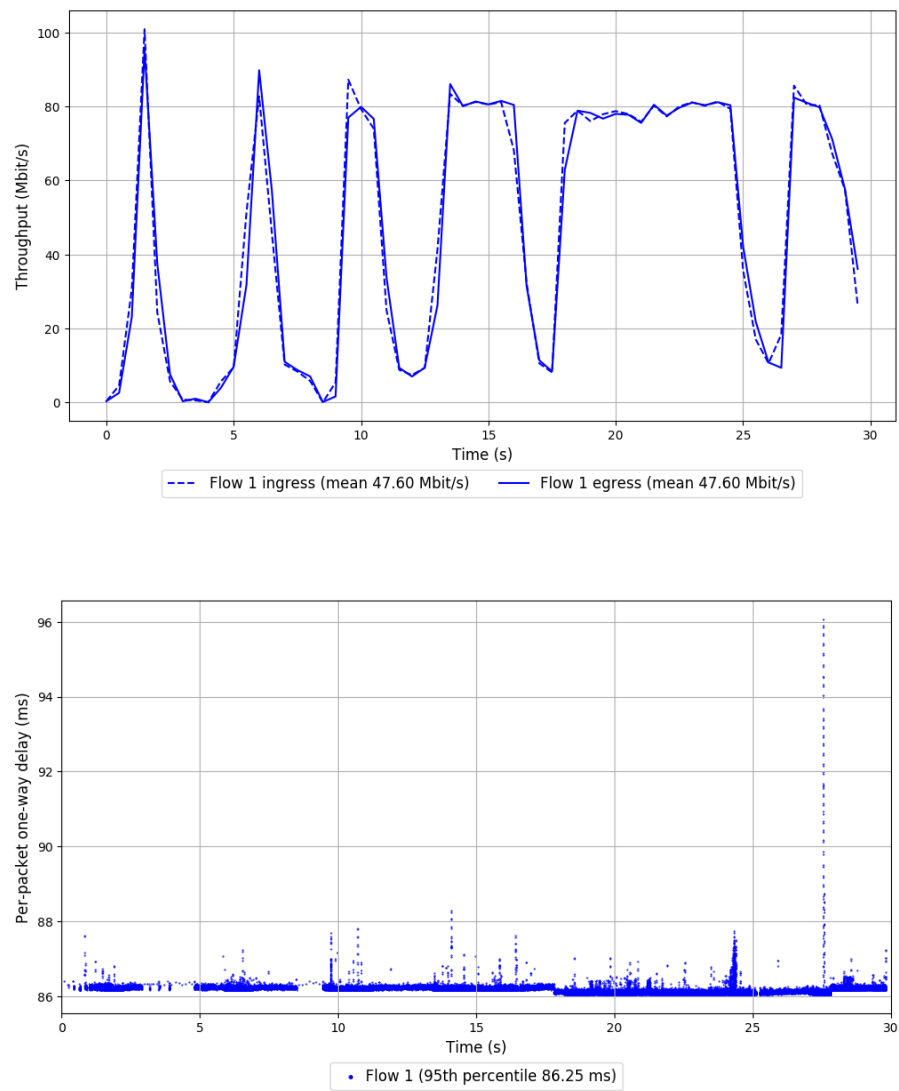
-- Flow 1:

Average throughput: 47.60 Mbit/s

95th percentile per-packet one-way delay: 86.254 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-15 23:28:20

End at: 2017-11-15 23:28:50

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.49 Mbit/s

95th percentile per-packet one-way delay: 86.626 ms

Loss rate: 0.00%

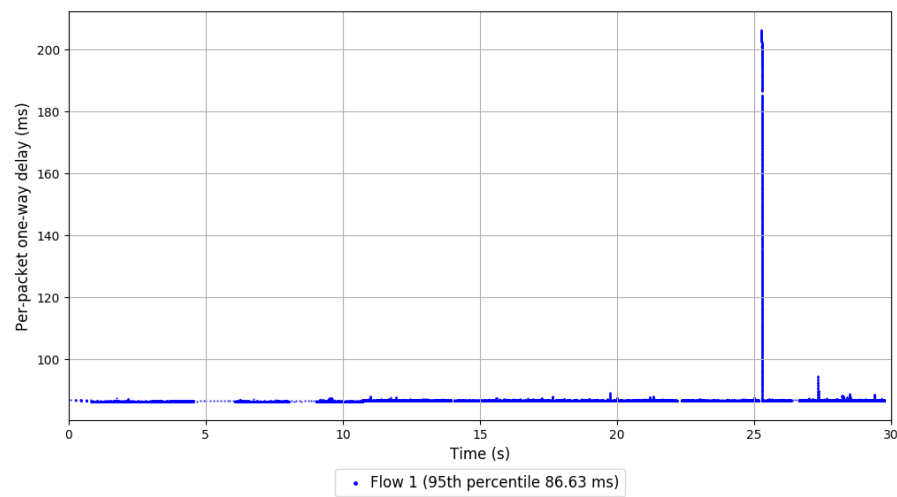
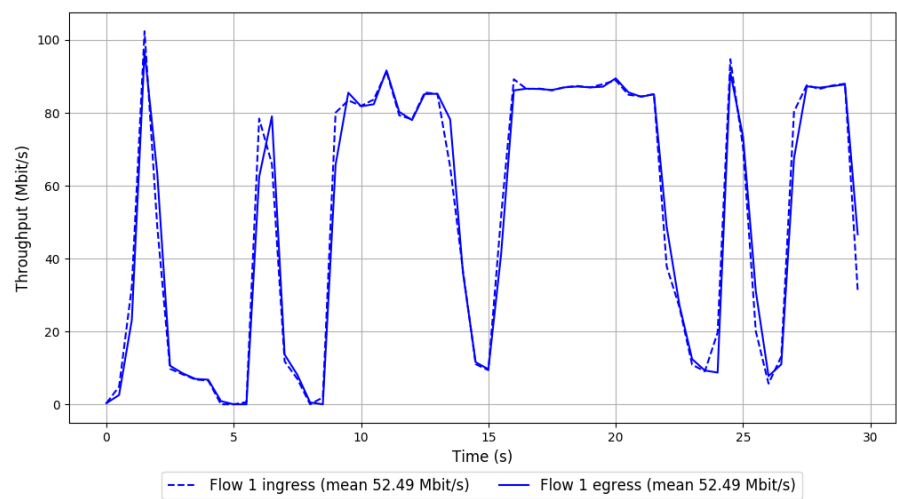
-- Flow 1:

Average throughput: 52.49 Mbit/s

95th percentile per-packet one-way delay: 86.626 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-15 23:38:59

End at: 2017-11-15 23:39:29

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.26 Mbit/s

95th percentile per-packet one-way delay: 86.649 ms

Loss rate: 0.00%

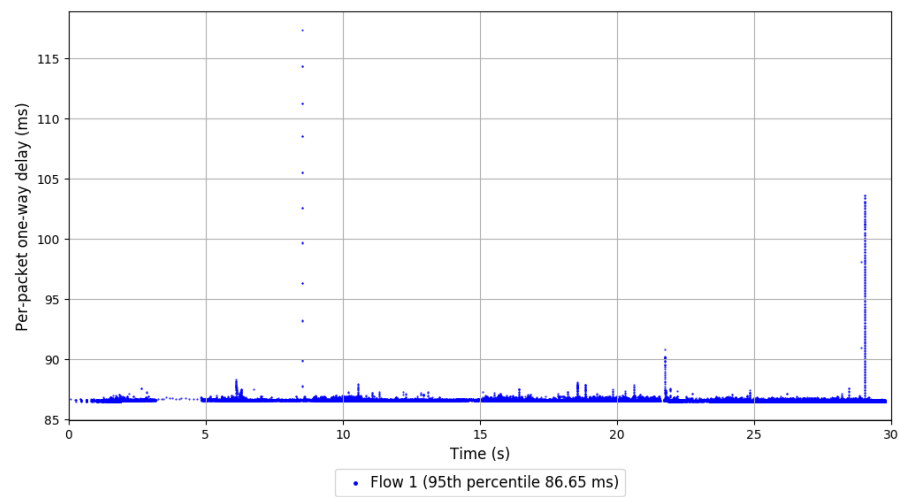
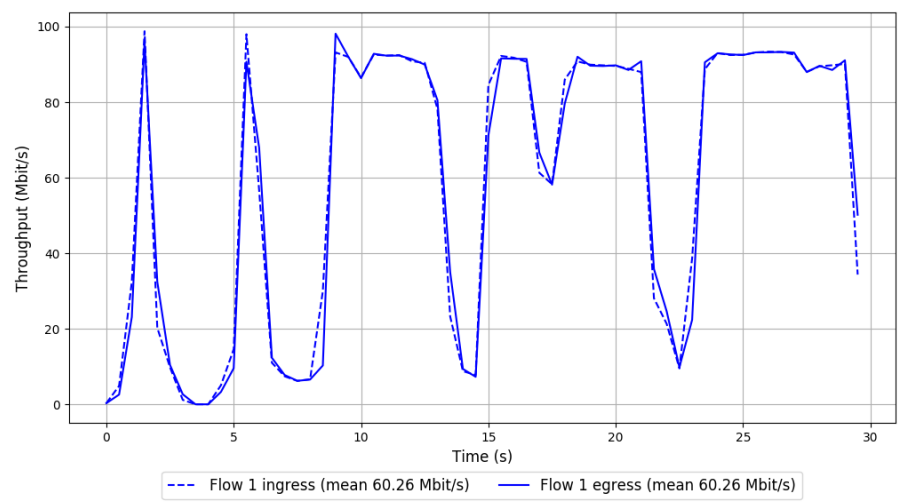
-- Flow 1:

Average throughput: 60.26 Mbit/s

95th percentile per-packet one-way delay: 86.649 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

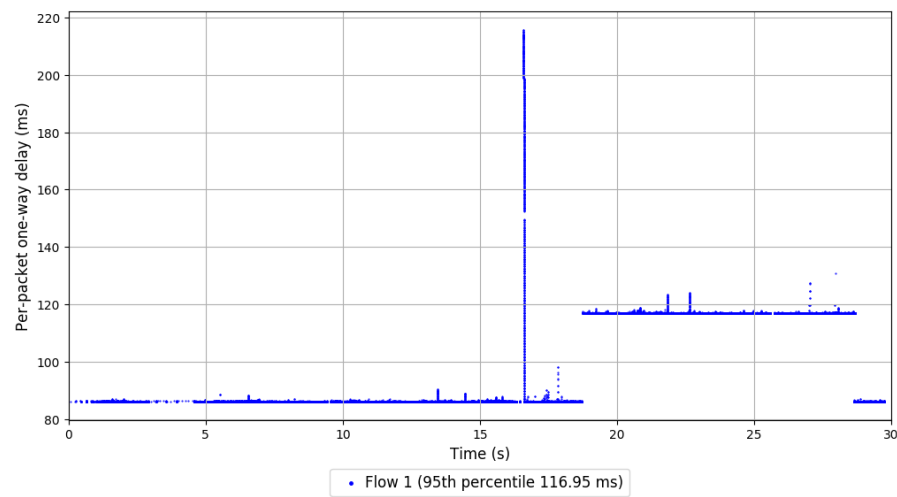
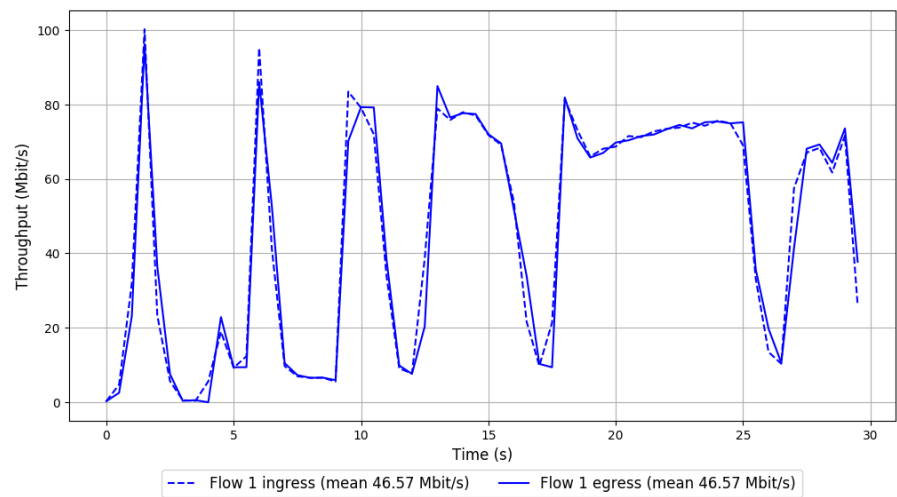


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-11-15 23:49:52
End at: 2017-11-15 23:50:22

# Below is generated by plot.py at 2017-11-16 00:51:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.57 Mbit/s
95th percentile per-packet one-way delay: 116.947 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.57 Mbit/s
95th percentile per-packet one-way delay: 116.947 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

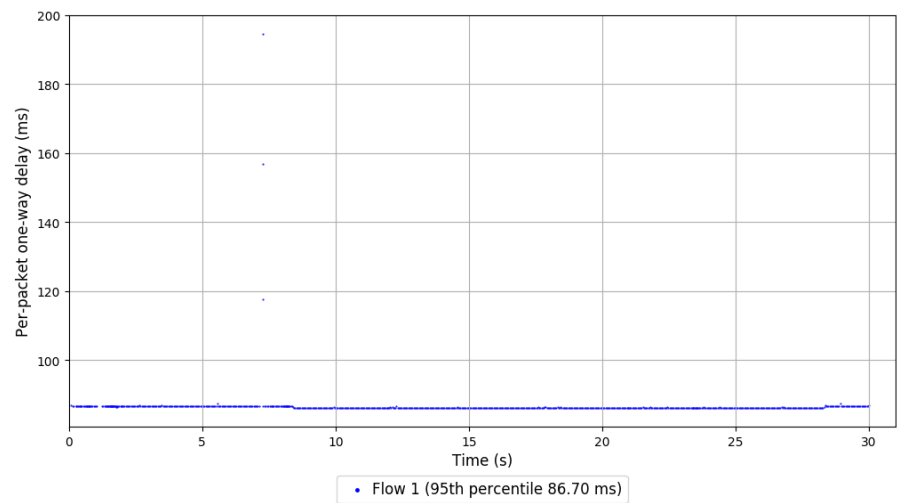
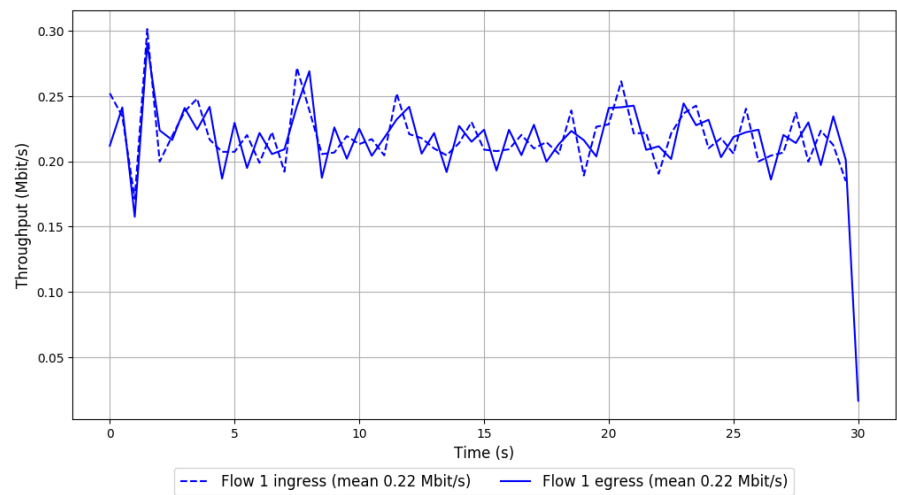


```
Run 1: Statistics of SCReAM

Start at: 2017-11-15 22:08:33
End at: 2017-11-15 22:09:03

# Below is generated by plot.py at 2017-11-16 00:51:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.705 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.705 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

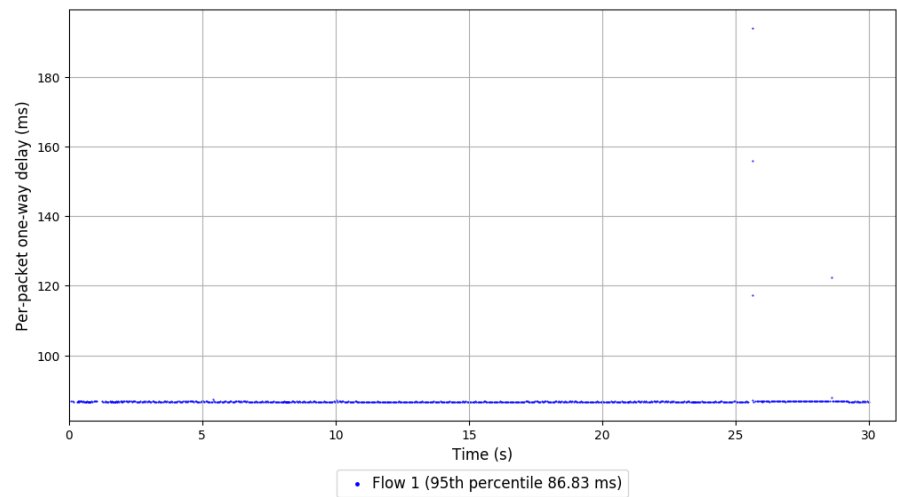
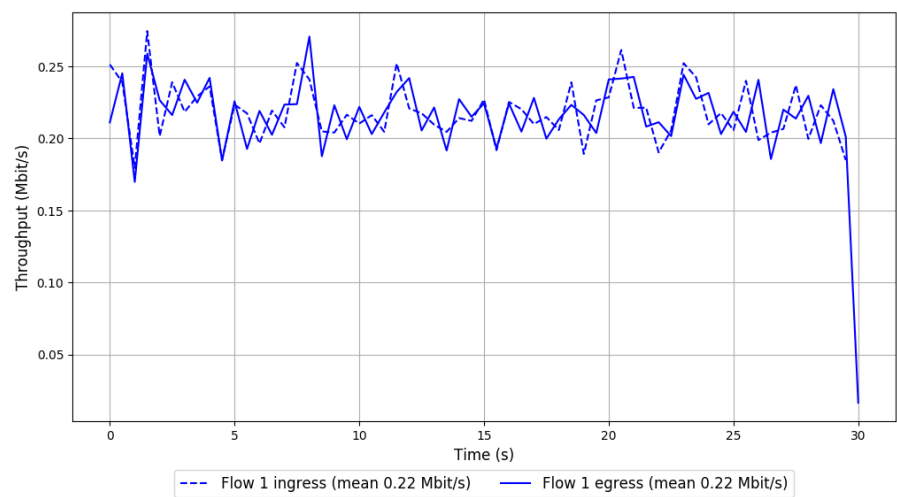


```
Run 2: Statistics of SCReAM

Start at: 2017-11-15 22:19:13
End at: 2017-11-15 22:19:43

# Below is generated by plot.py at 2017-11-16 00:51:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.830 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.830 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-11-15 22:30:04

End at: 2017-11-15 22:30:34

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

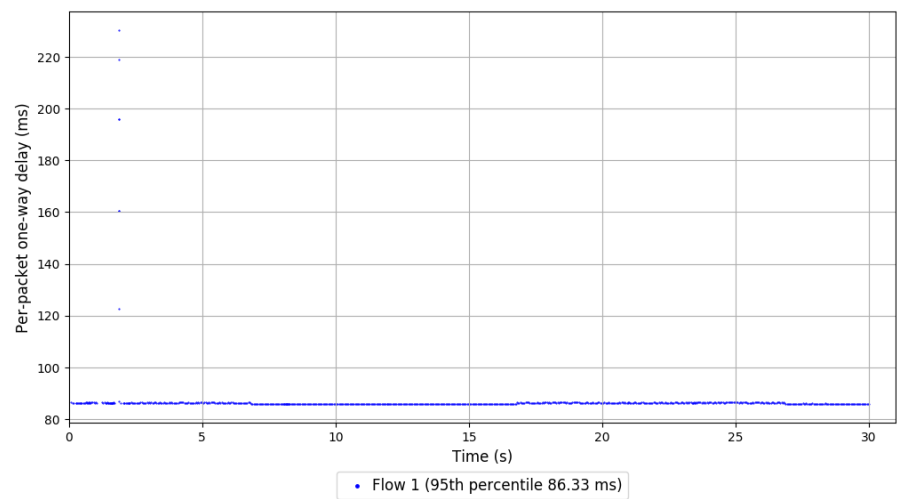
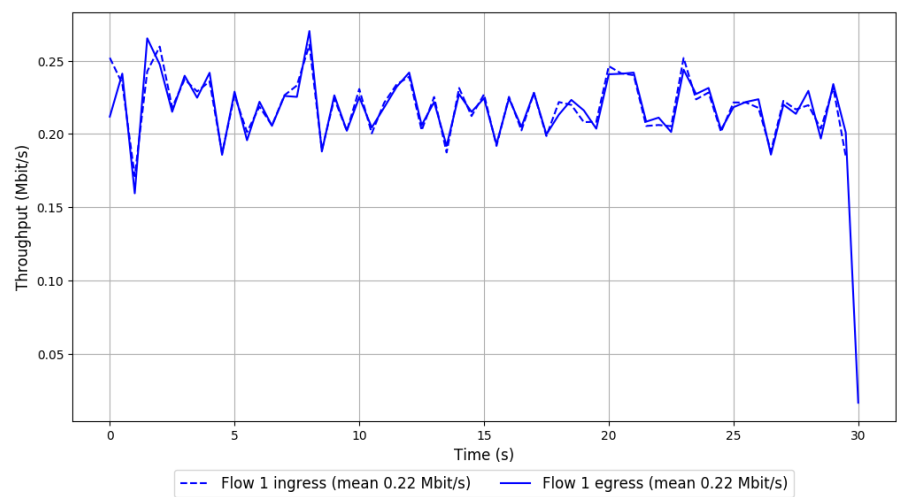
-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

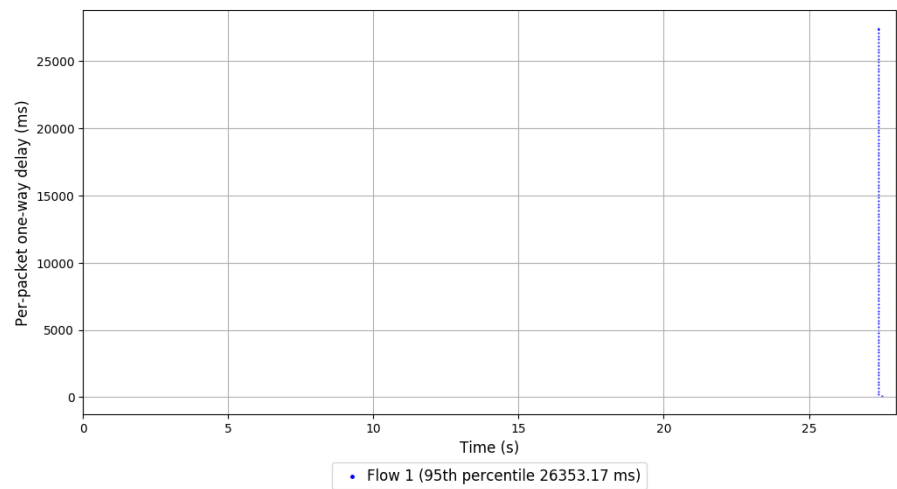
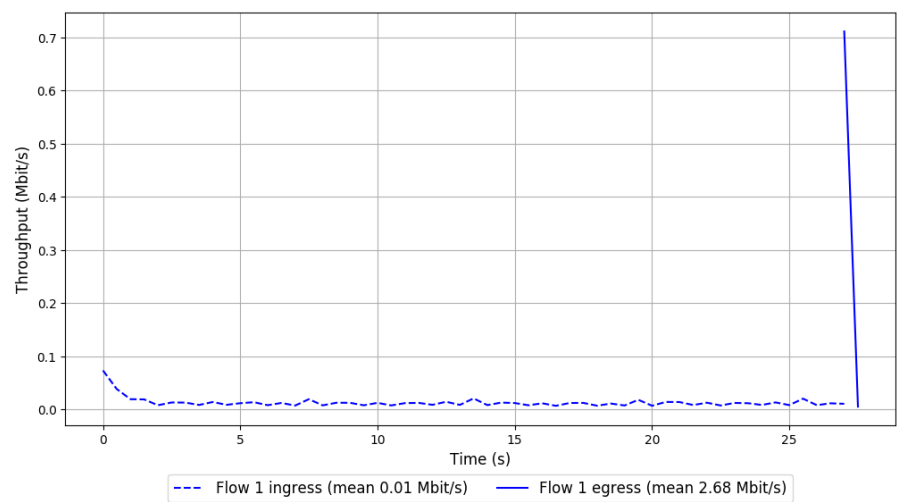


Run 4: Statistics of SReAM

Start at: 2017-11-15 22:40:55

End at: 2017-11-15 22:41:25

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-11-15 22:51:56

End at: 2017-11-15 22:52:26

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.846 ms

Loss rate: 0.00%

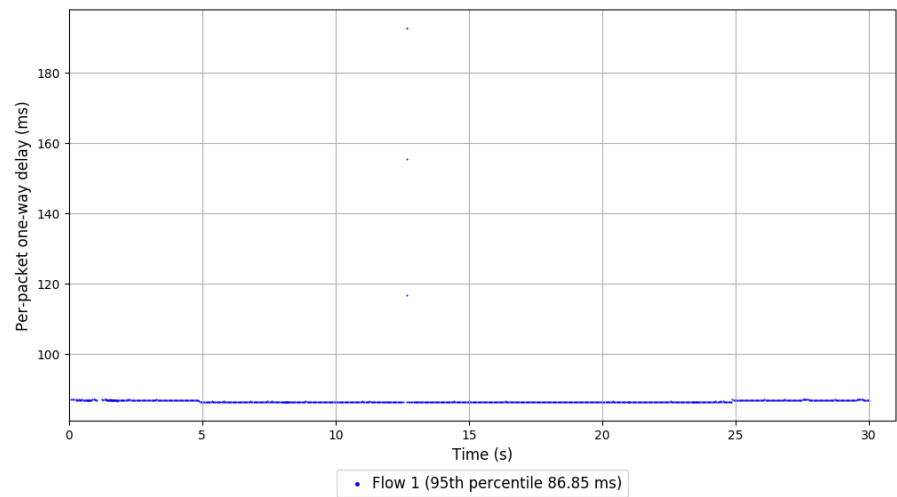
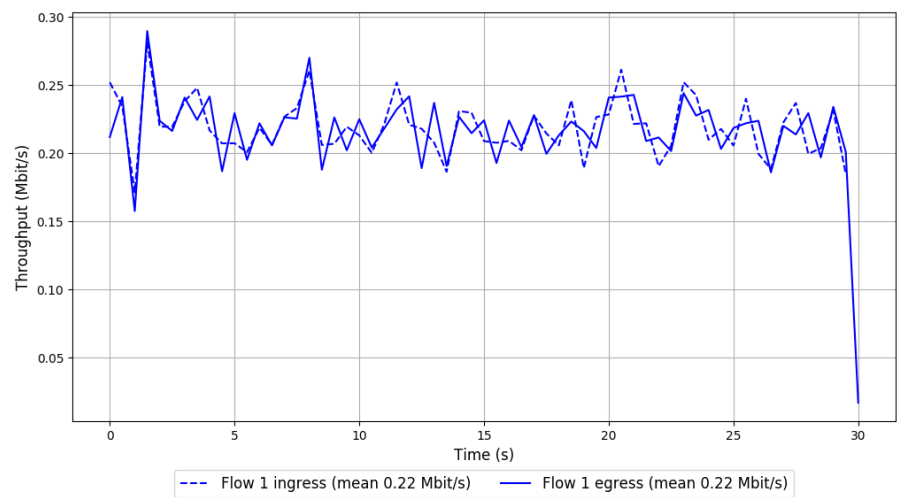
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.846 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-15 23:02:44

End at: 2017-11-15 23:03:14

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.277 ms

Loss rate: 0.00%

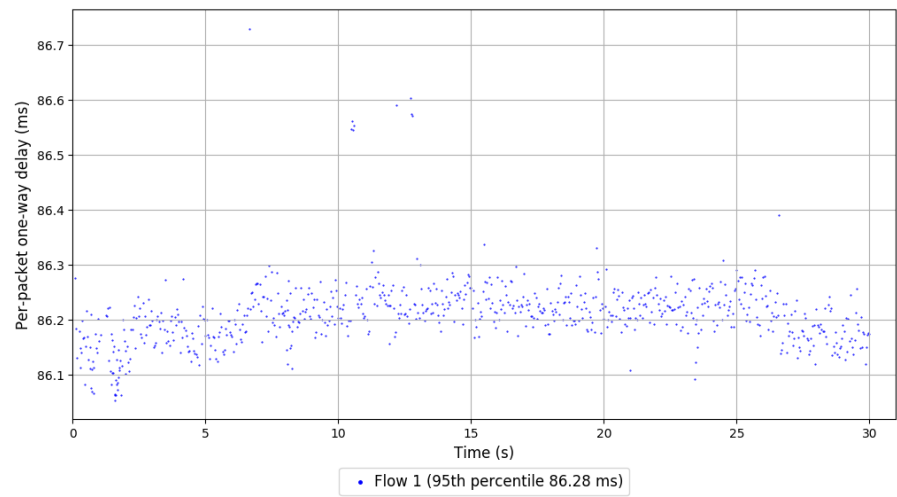
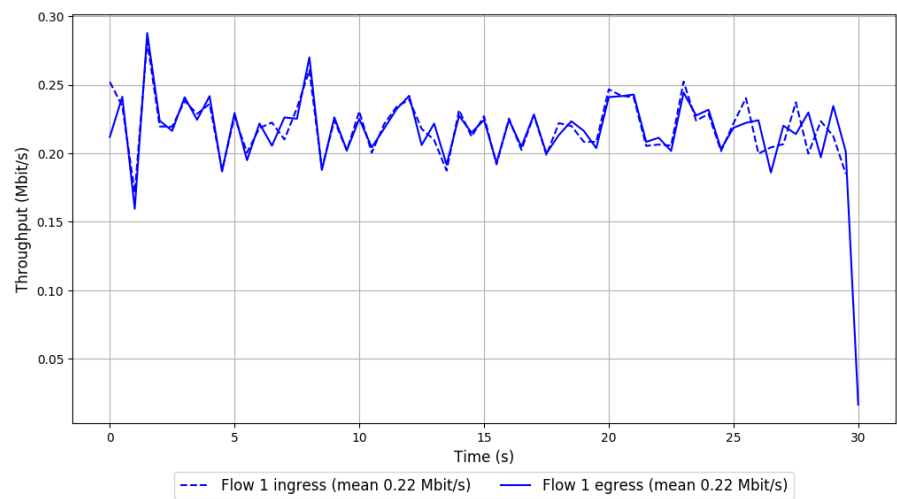
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.277 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

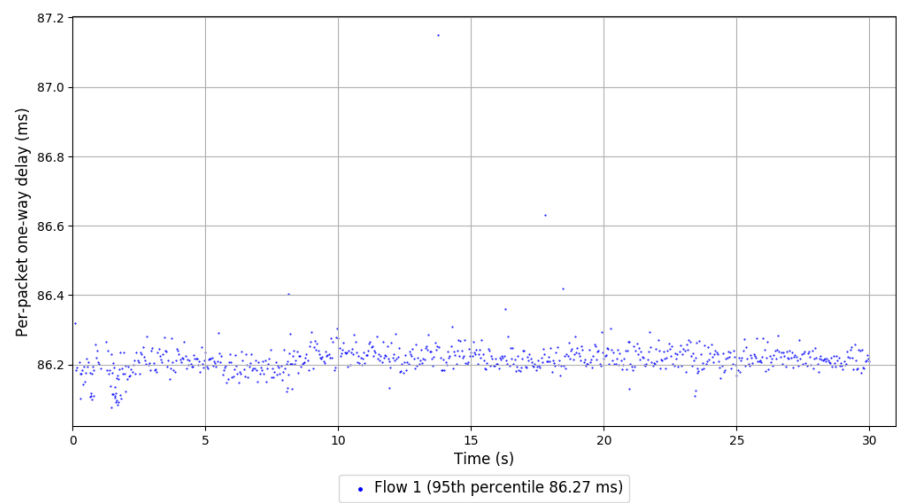
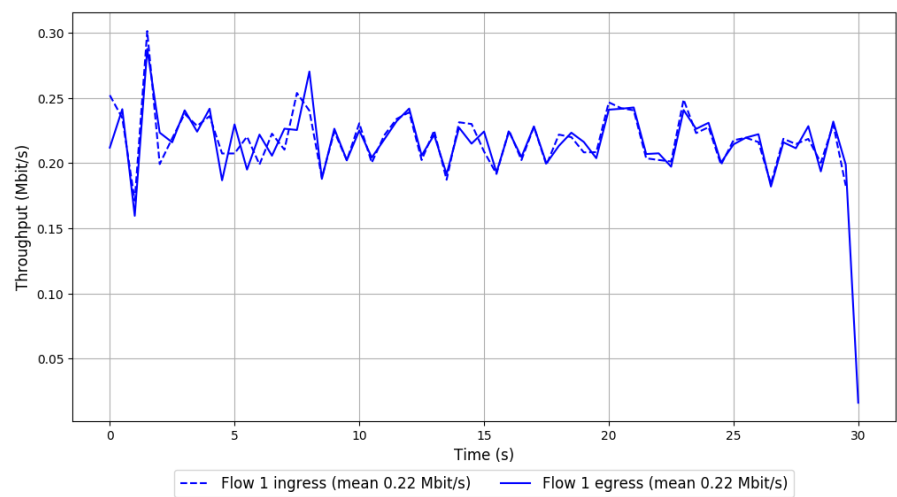


```
Run 7: Statistics of SCReAM

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

# Below is generated by plot.py at 2017-11-16 00:51:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.267 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.267 ms
Loss rate: 0.00%
```

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-11-15 23:24:17

End at: 2017-11-15 23:24:47

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 116.965 ms

Loss rate: 0.00%

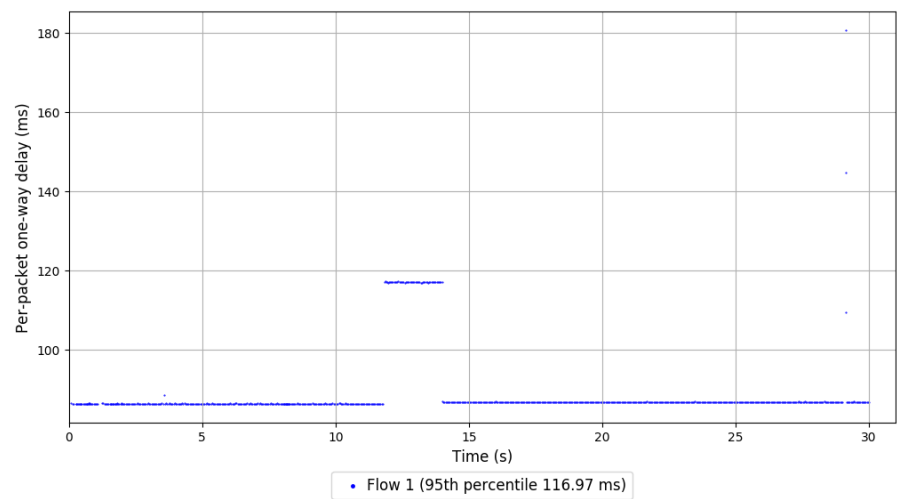
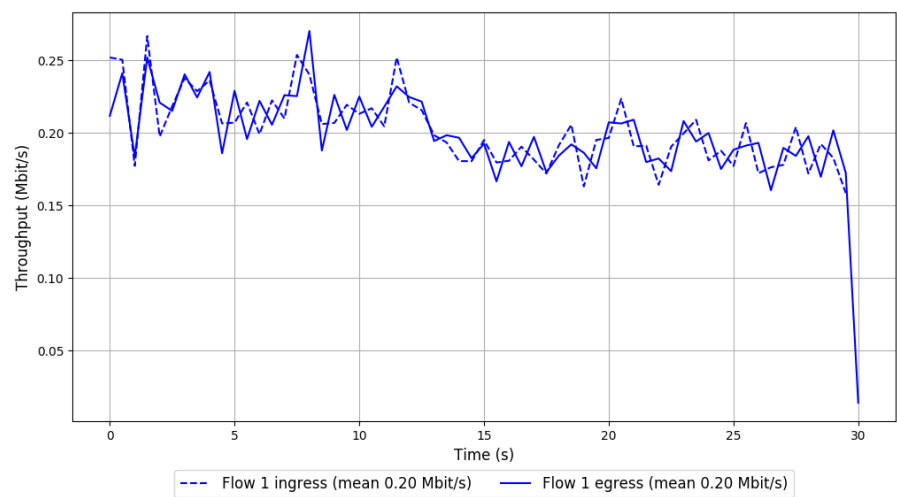
-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 116.965 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-11-15 23:34:39

End at: 2017-11-15 23:35:09

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 117.026 ms

Loss rate: 0.00%

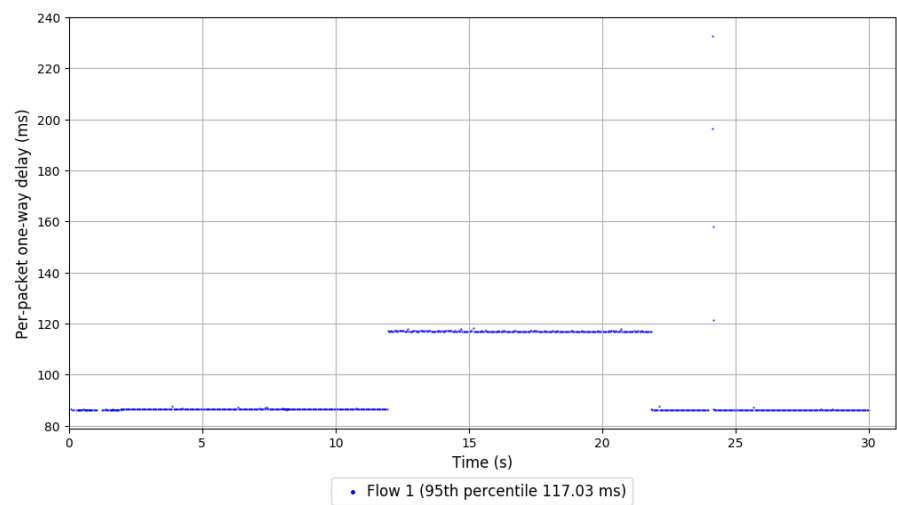
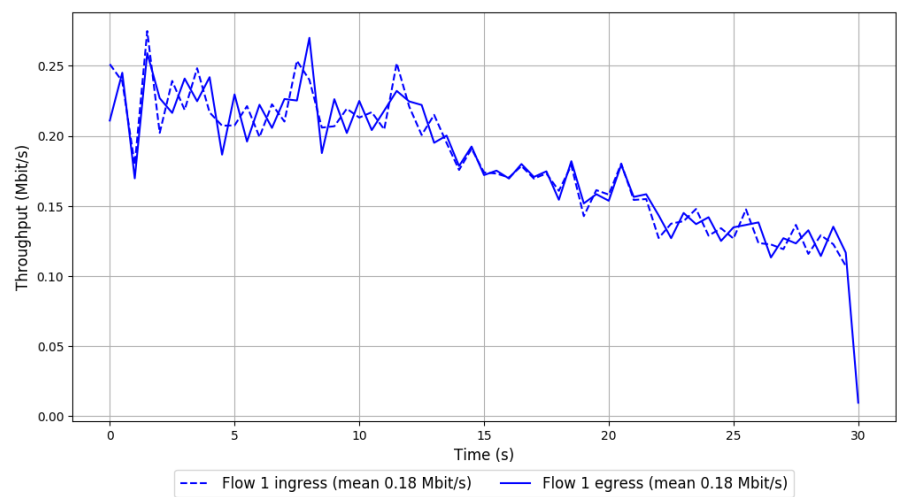
-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 117.026 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

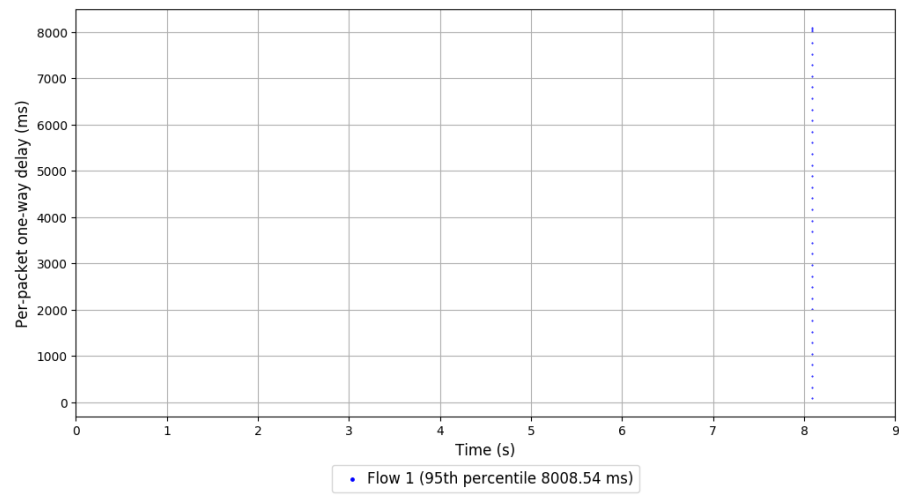
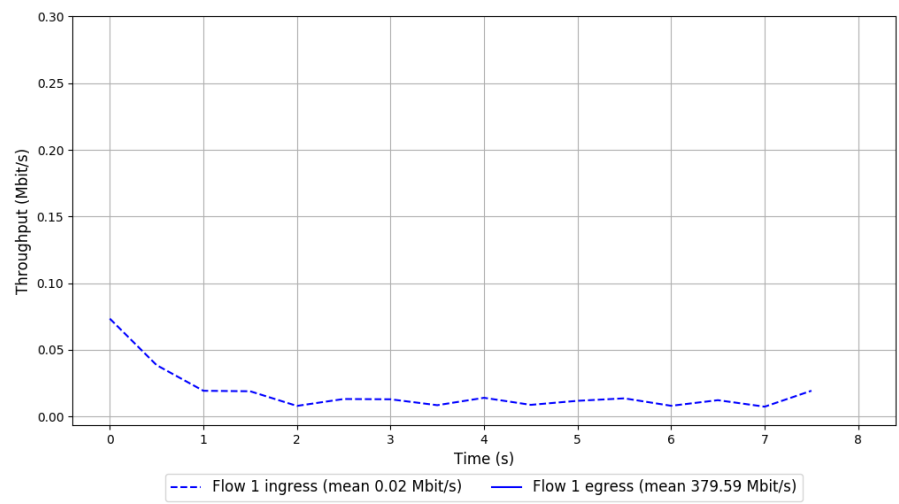


Run 10: Statistics of SCReAM

Start at: 2017-11-15 23:45:31

End at: 2017-11-15 23:46:01

Run 10: Report of SCReAM — Data Link

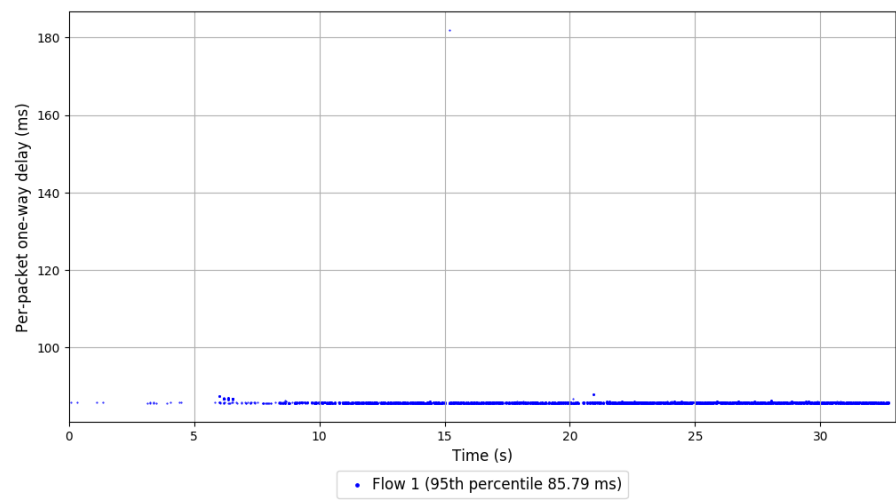
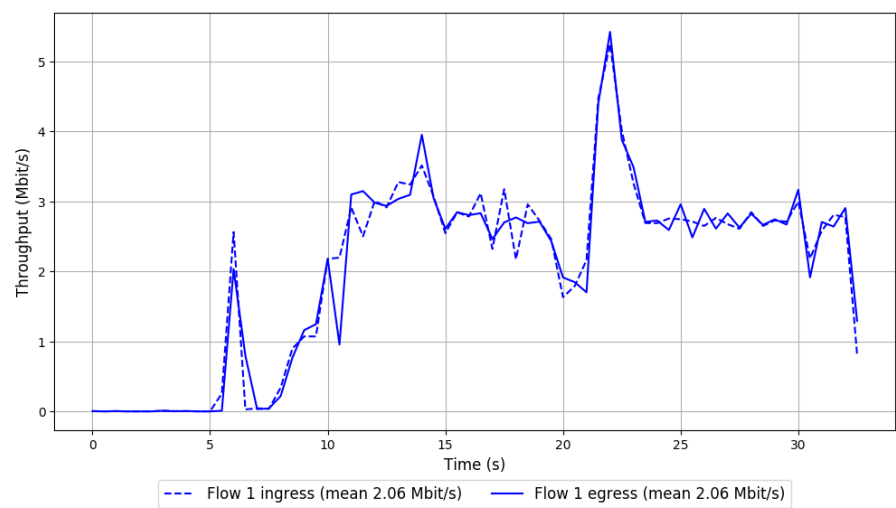


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-15 22:10:54
End at: 2017-11-15 22:11:24

# Below is generated by plot.py at 2017-11-16 00:51:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 85.793 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 85.793 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-15 22:21:34

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

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.796 ms

Loss rate: 0.00%

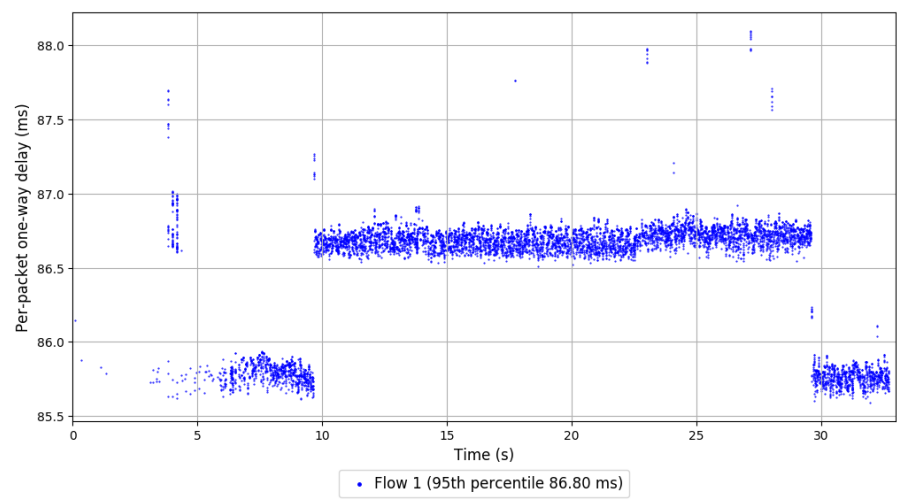
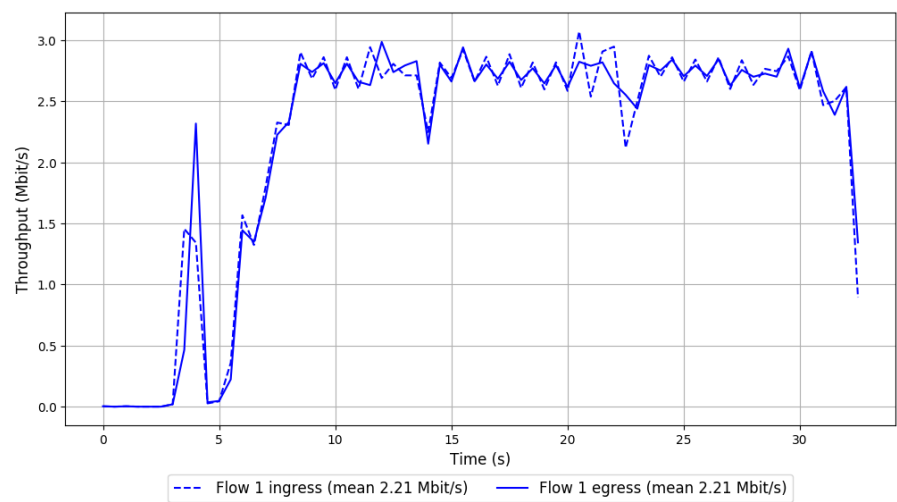
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.796 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-15 22:32:20

End at: 2017-11-15 22:32:50

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 85.929 ms

Loss rate: 0.00%

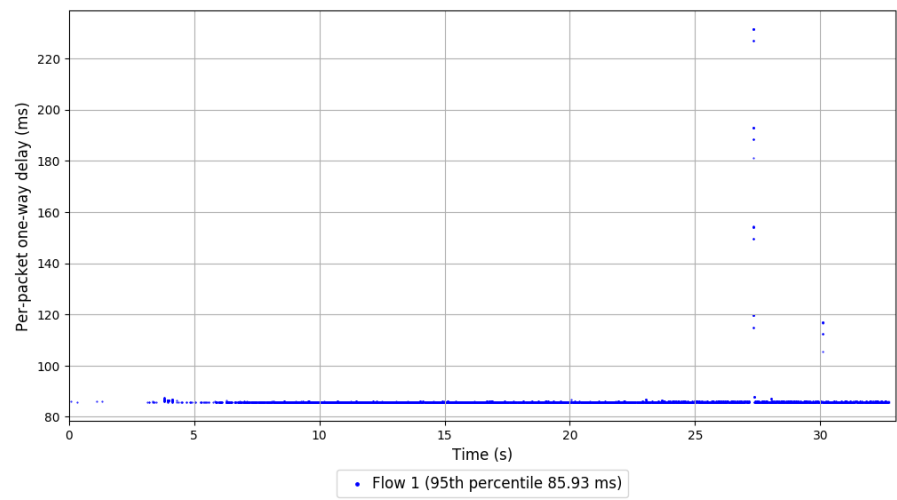
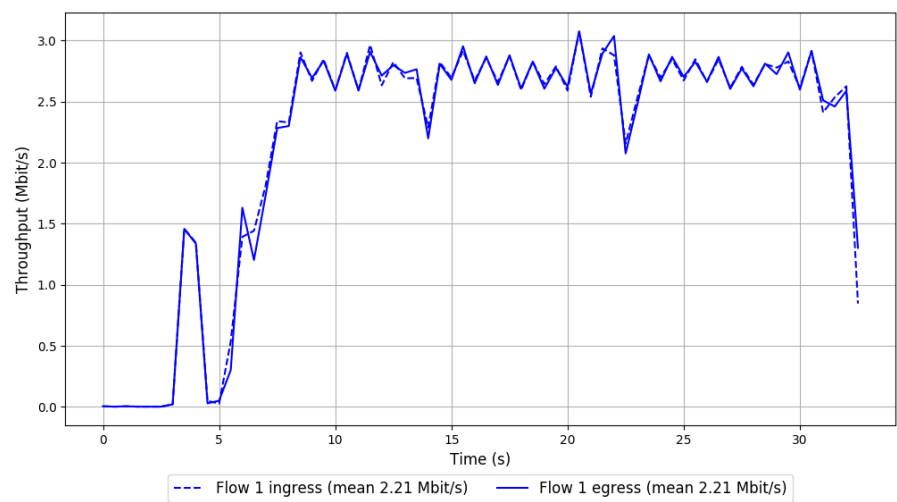
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 85.929 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-15 22:43:18

End at: 2017-11-15 22:43:48

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.545 ms

Loss rate: 0.00%

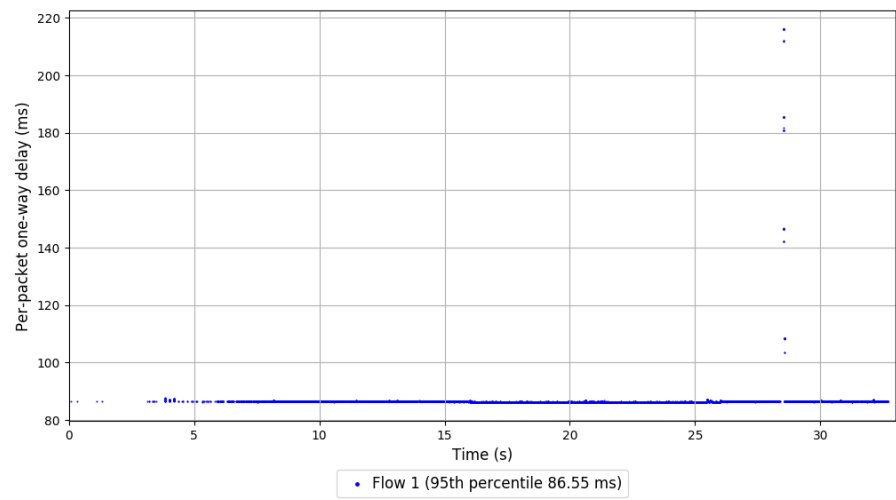
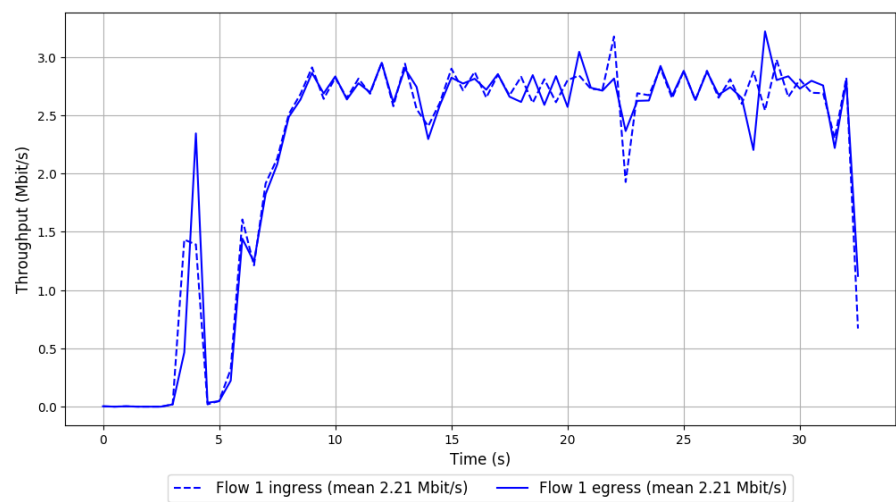
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.545 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-15 22:54:17

End at: 2017-11-15 22:54:47

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.389 ms

Loss rate: 0.00%

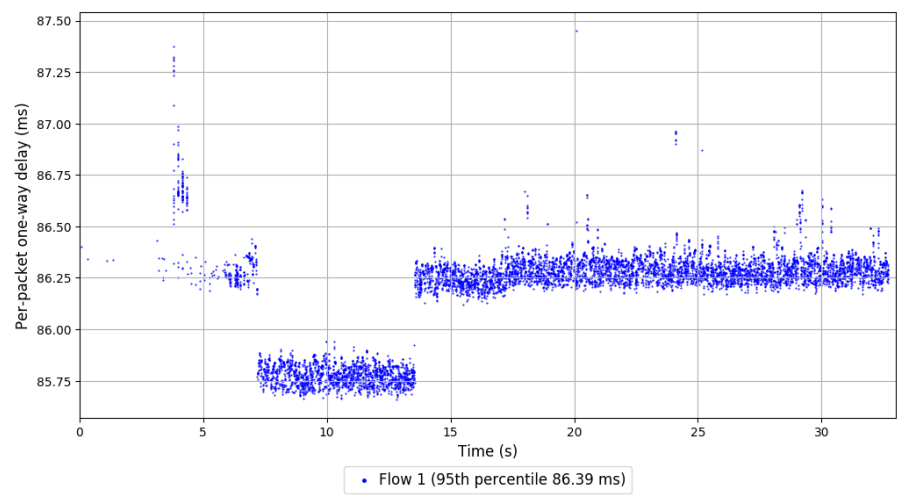
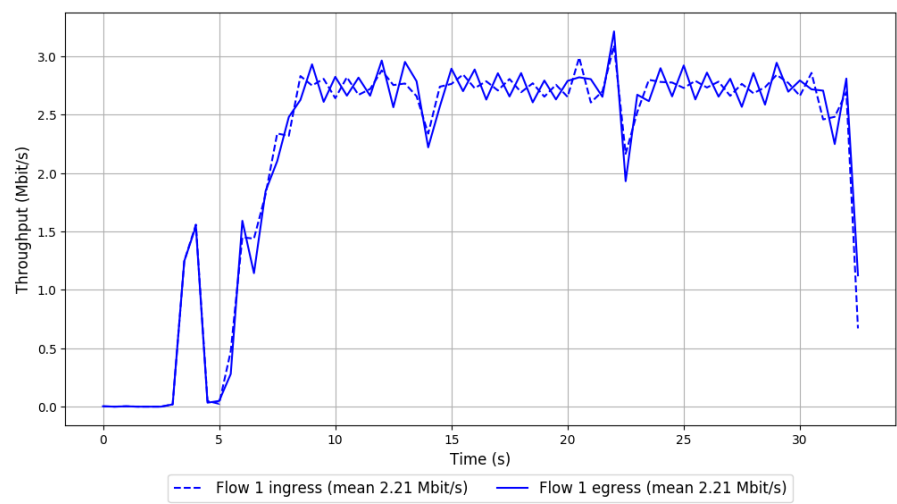
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.389 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-15 23:05:05

End at: 2017-11-15 23:05:35

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.440 ms

Loss rate: 0.00%

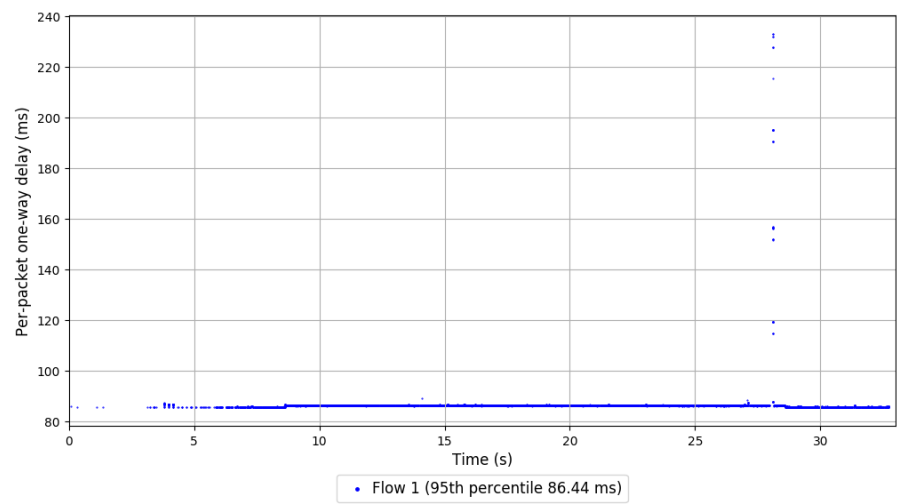
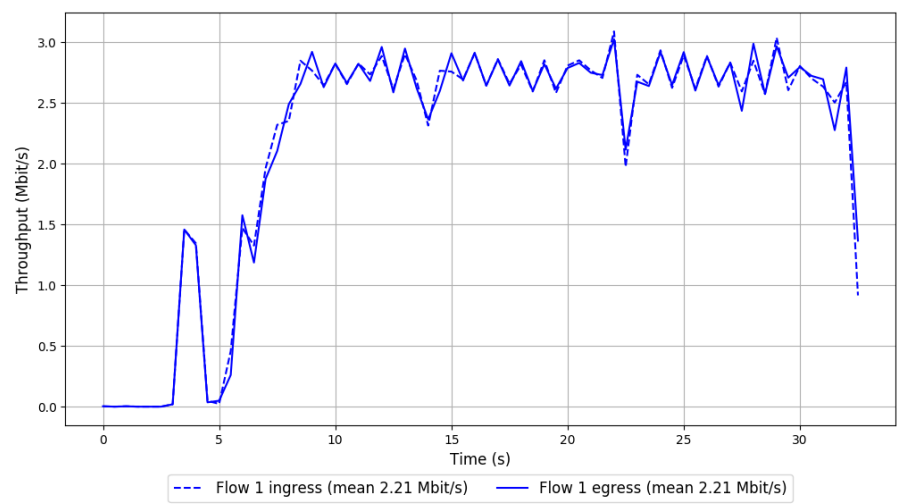
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.440 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-15 23:15:45

End at: 2017-11-15 23:16:15

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.699 ms

Loss rate: 0.00%

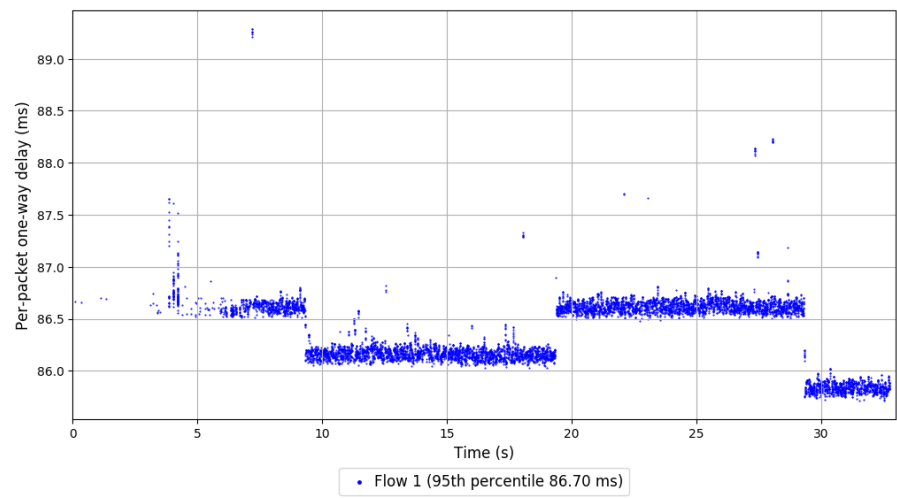
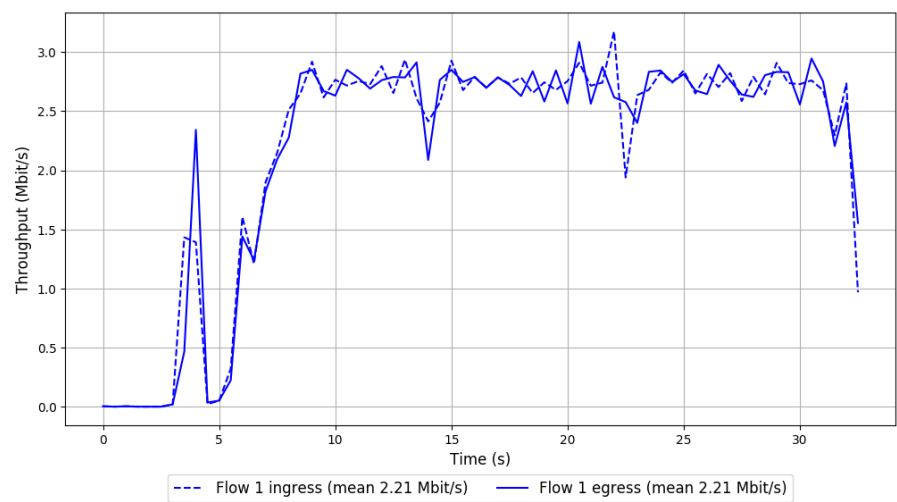
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.699 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

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

End at: 2017-11-15 23:26:50

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 117.296 ms

Loss rate: 0.00%

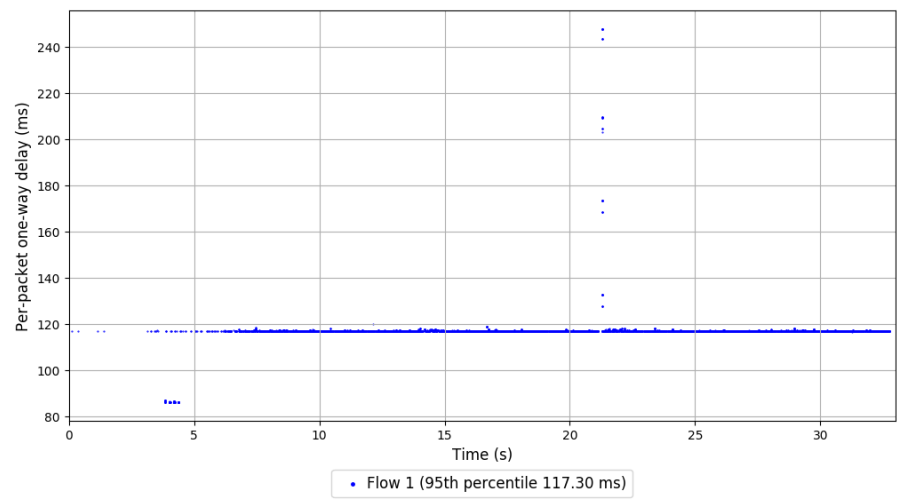
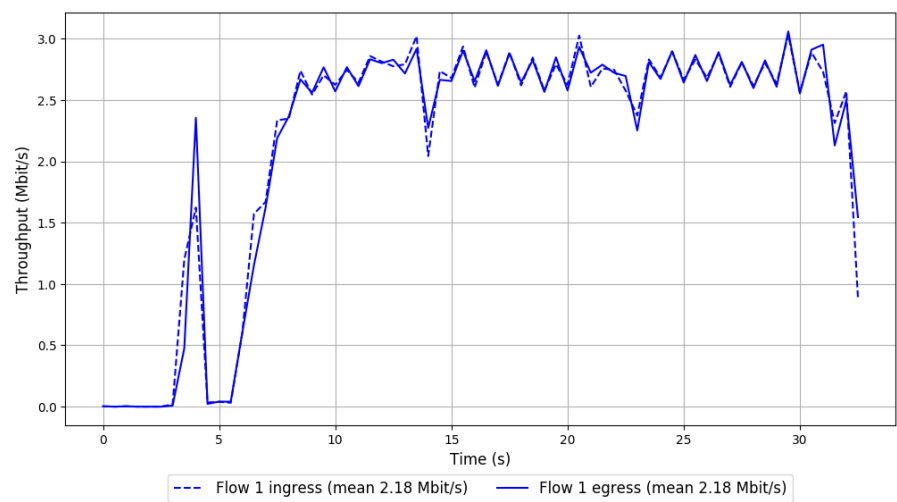
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 117.296 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-15 23:36:59

End at: 2017-11-15 23:37:29

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 117.086 ms

Loss rate: 0.00%

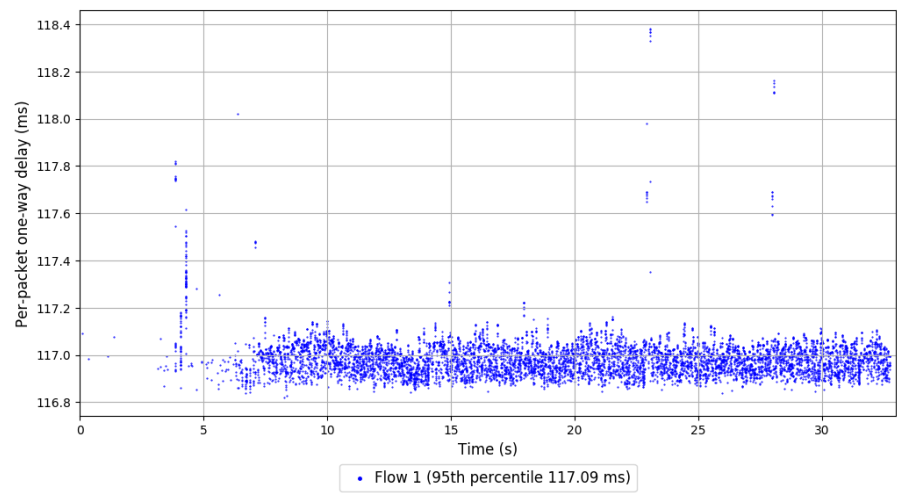
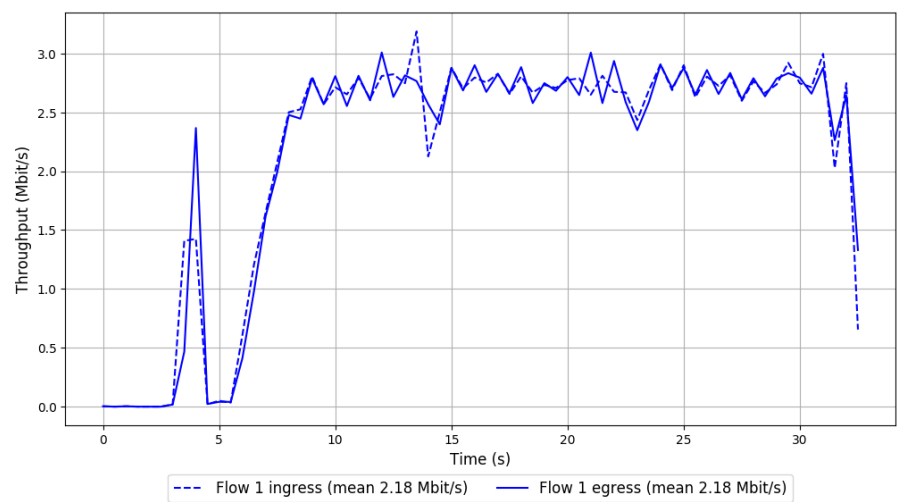
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 117.086 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-15 23:47:52

End at: 2017-11-15 23:48:22

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 117.138 ms

Loss rate: 0.03%

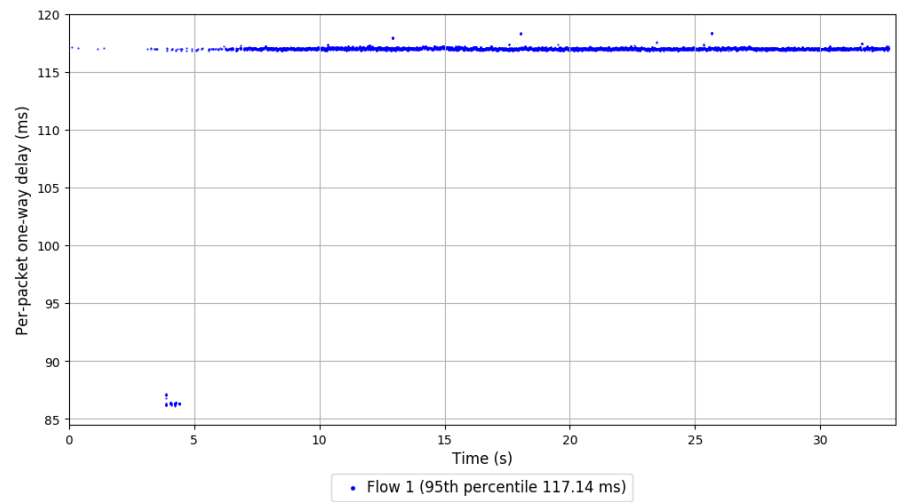
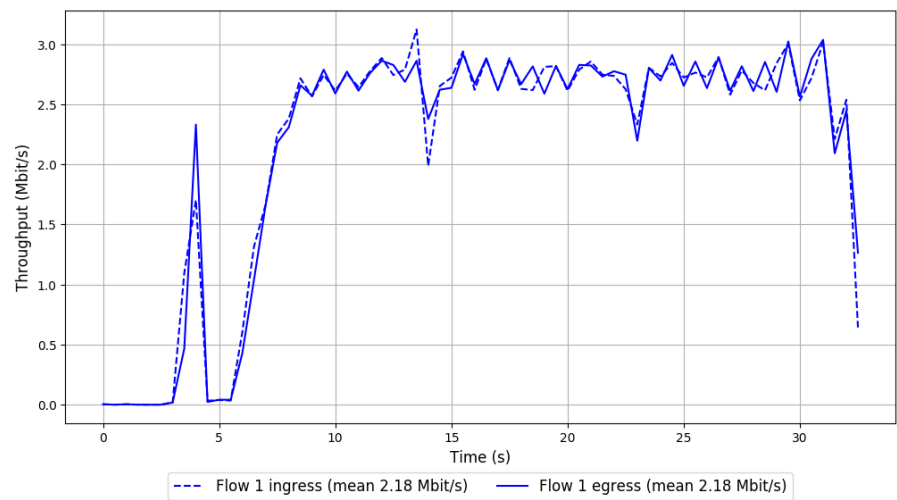
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 117.138 ms

Loss rate: 0.03%

Run 10: Report of WebRTC media — Data Link

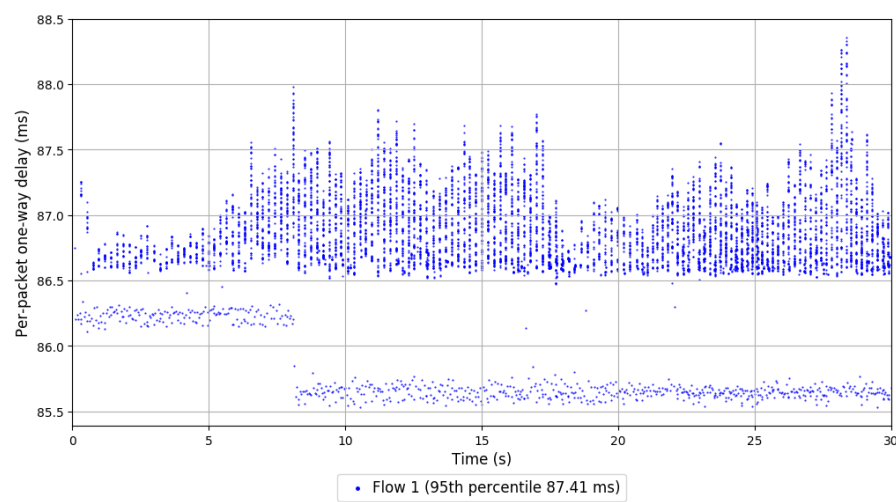
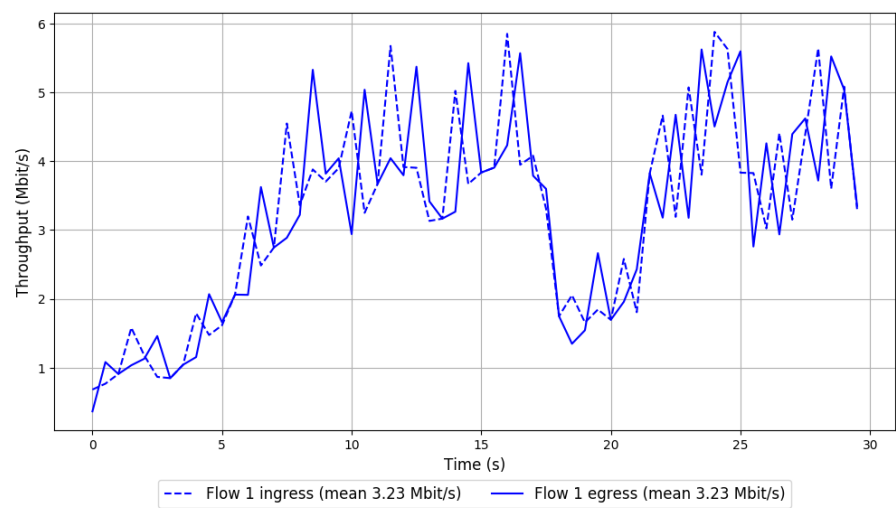


```
Run 1: Statistics of Sprout

Start at: 2017-11-15 22:12:13
End at: 2017-11-15 22:12:43

# Below is generated by plot.py at 2017-11-16 00:51:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 87.409 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 87.409 ms
Loss rate: 0.05%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

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

End at: 2017-11-15 22:23:24

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 87.582 ms

Loss rate: 0.02%

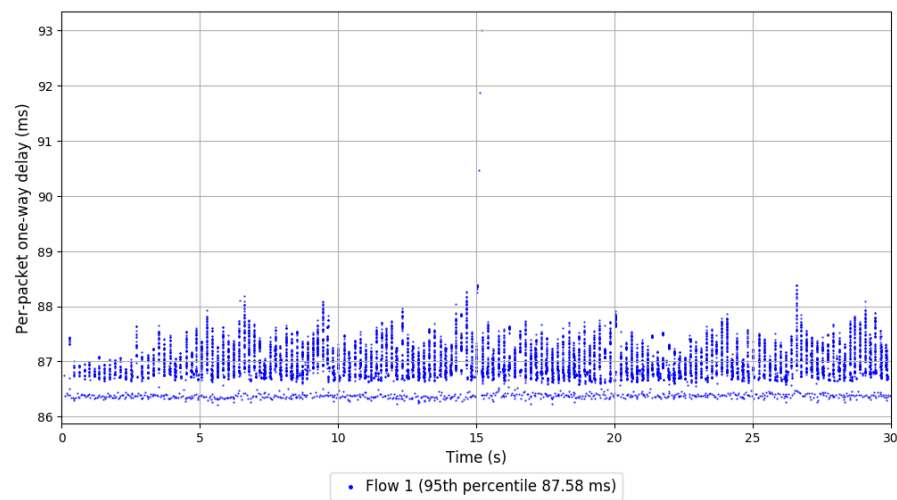
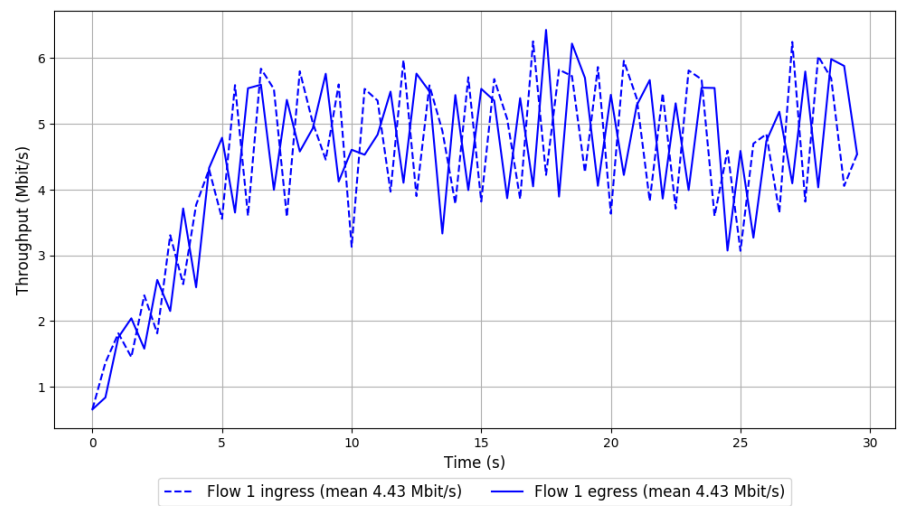
-- Flow 1:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 87.582 ms

Loss rate: 0.02%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-15 22:33:39

End at: 2017-11-15 22:34:09

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 87.645 ms

Loss rate: 0.00%

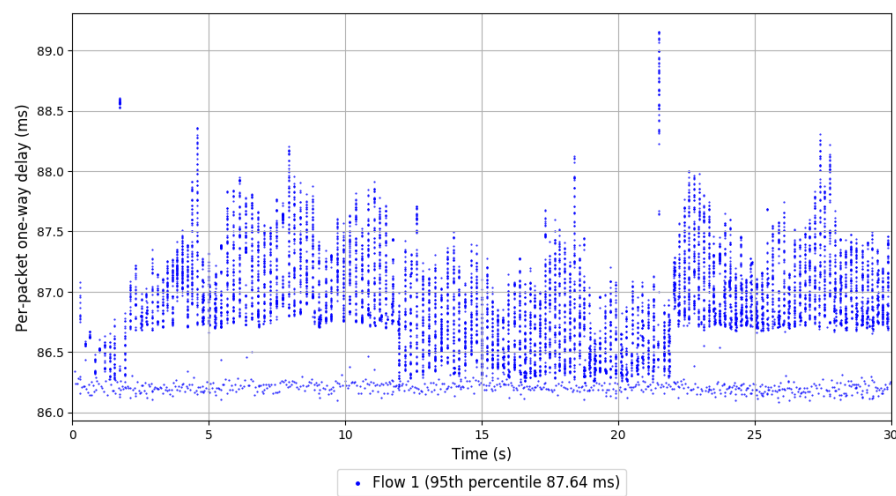
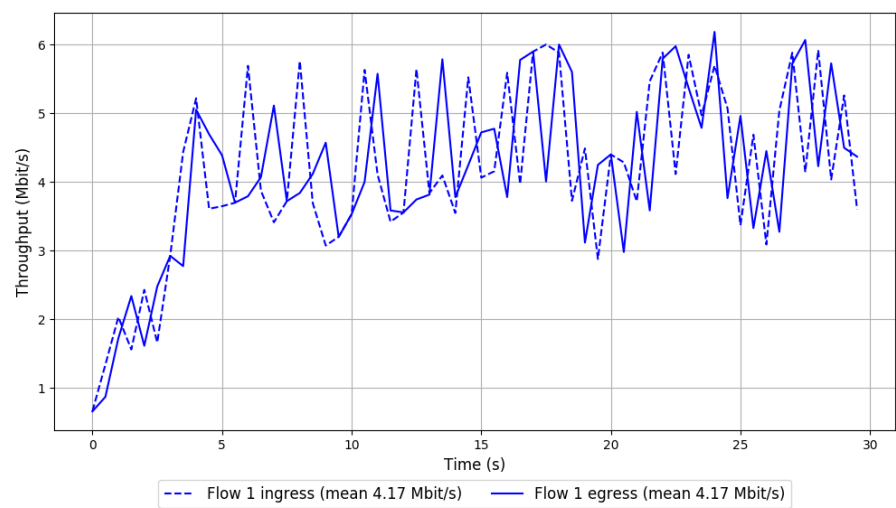
-- Flow 1:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 87.645 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-15 22:44:37

End at: 2017-11-15 22:45:07

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 87.501 ms

Loss rate: 0.02%

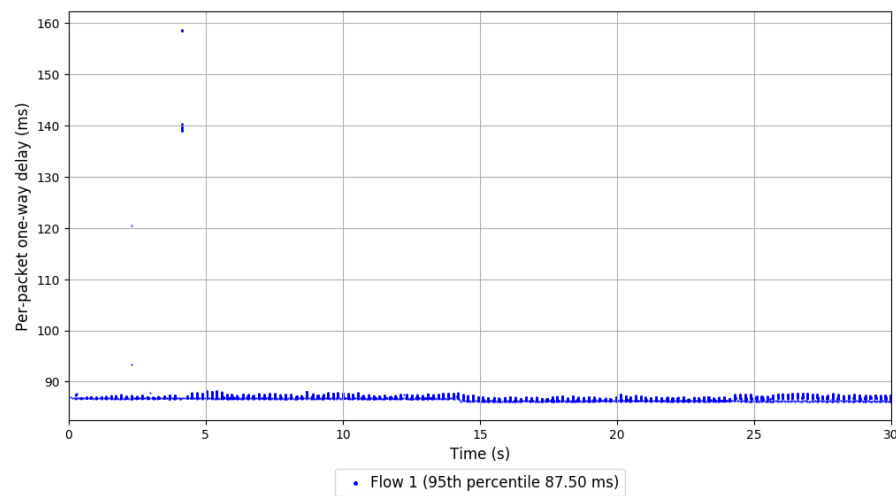
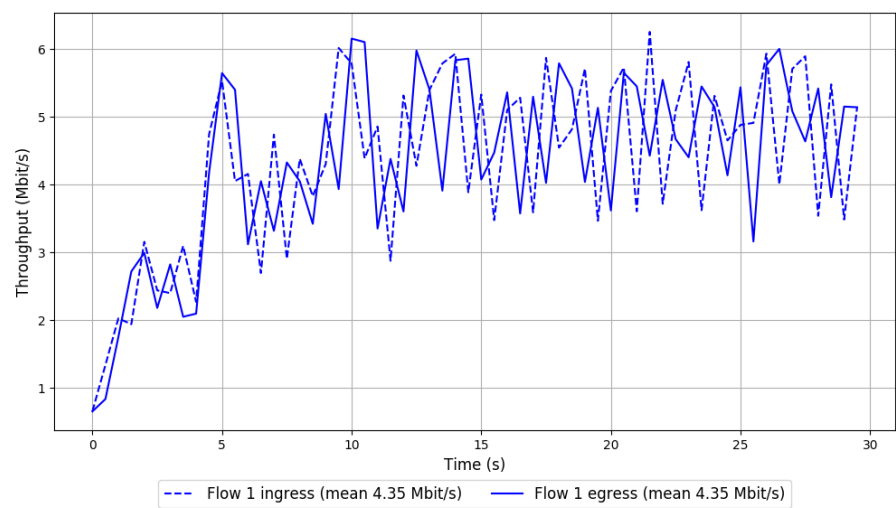
-- Flow 1:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 87.501 ms

Loss rate: 0.02%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-15 22:55:35

End at: 2017-11-15 22:56:05

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 87.466 ms

Loss rate: 0.01%

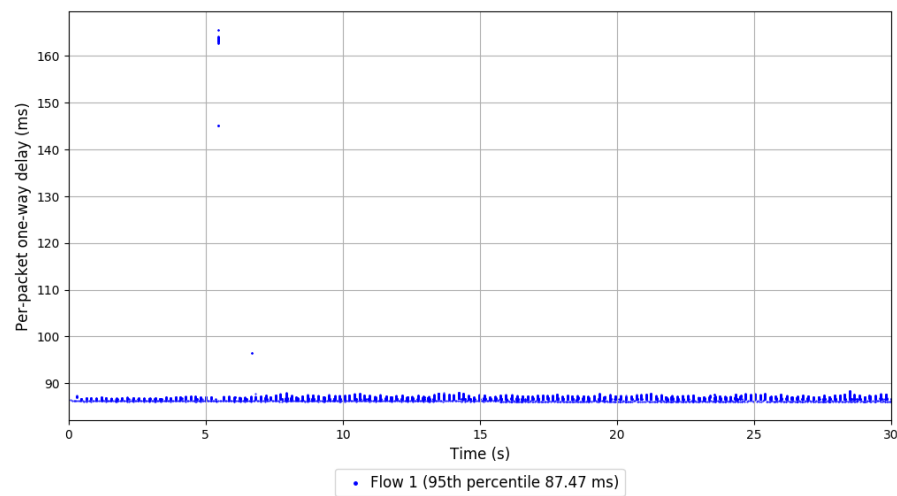
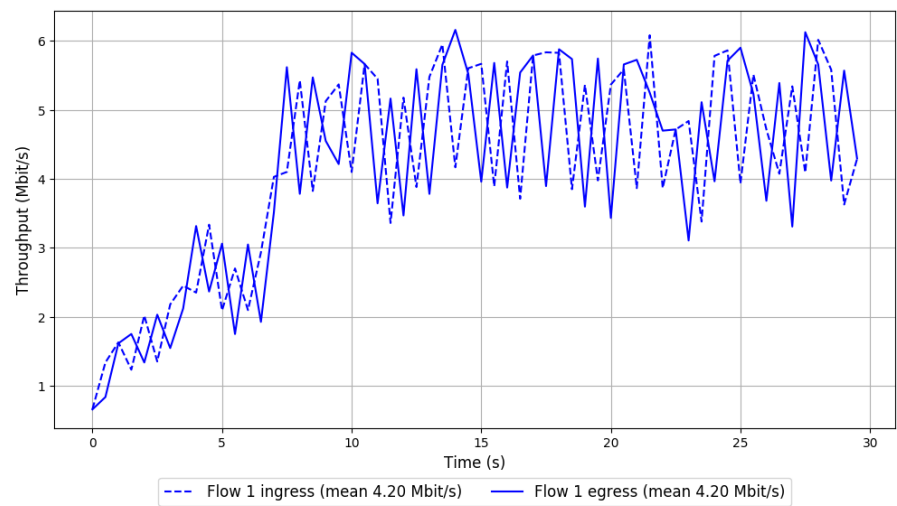
-- Flow 1:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 87.466 ms

Loss rate: 0.01%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-15 23:06:24

End at: 2017-11-15 23:06:54

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.92 Mbit/s

95th percentile per-packet one-way delay: 87.271 ms

Loss rate: 0.01%

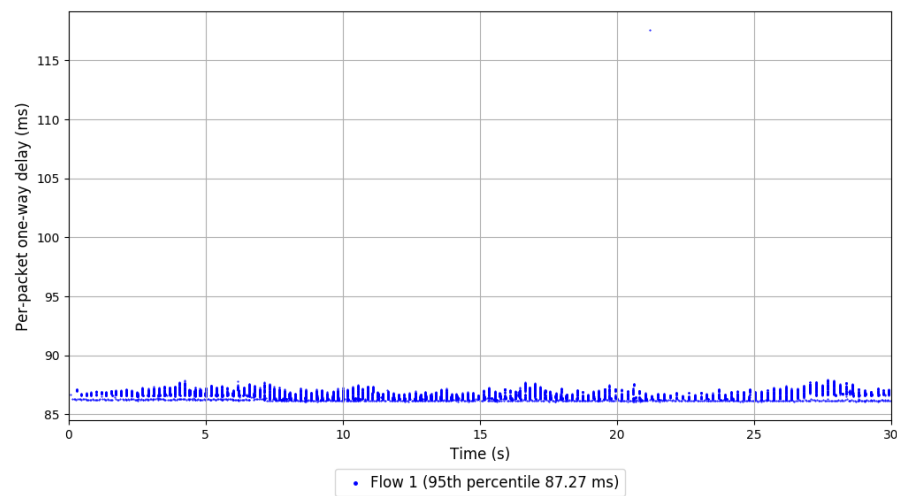
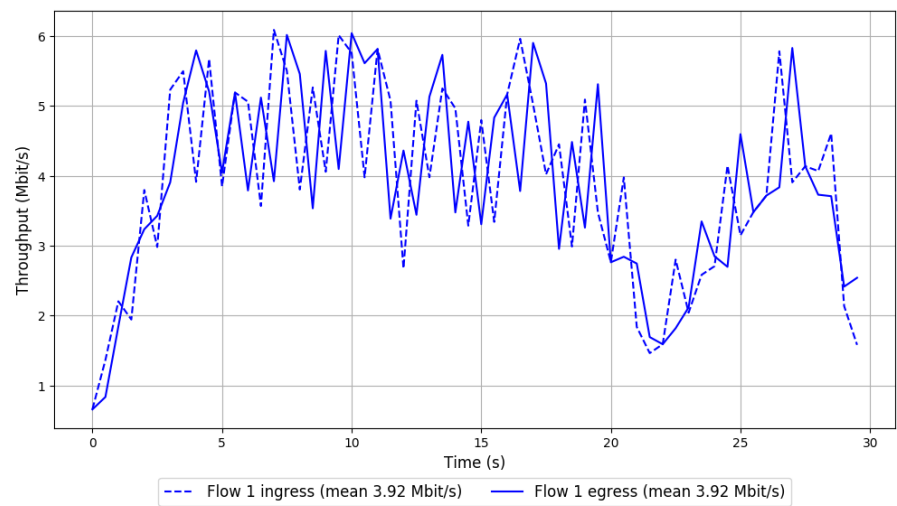
-- Flow 1:

Average throughput: 3.92 Mbit/s

95th percentile per-packet one-way delay: 87.271 ms

Loss rate: 0.01%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-15 23:17:04

End at: 2017-11-15 23:17:34

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.51 Mbit/s

95th percentile per-packet one-way delay: 87.462 ms

Loss rate: 0.00%

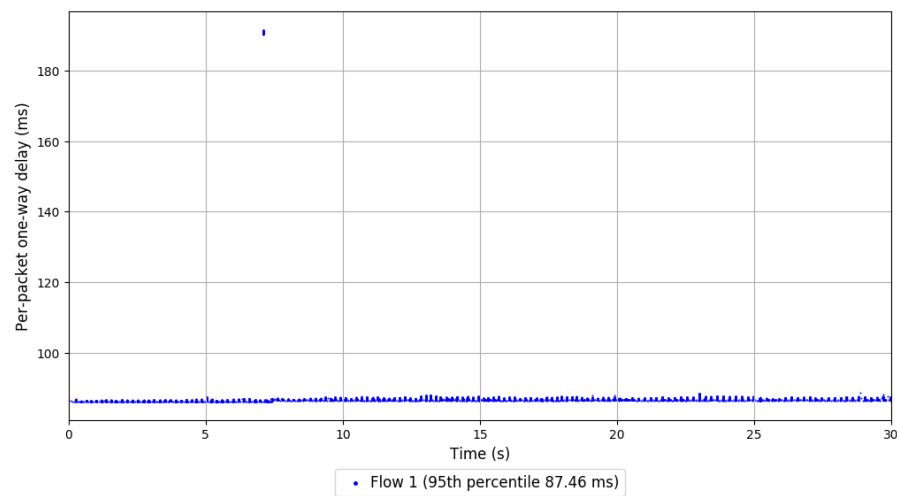
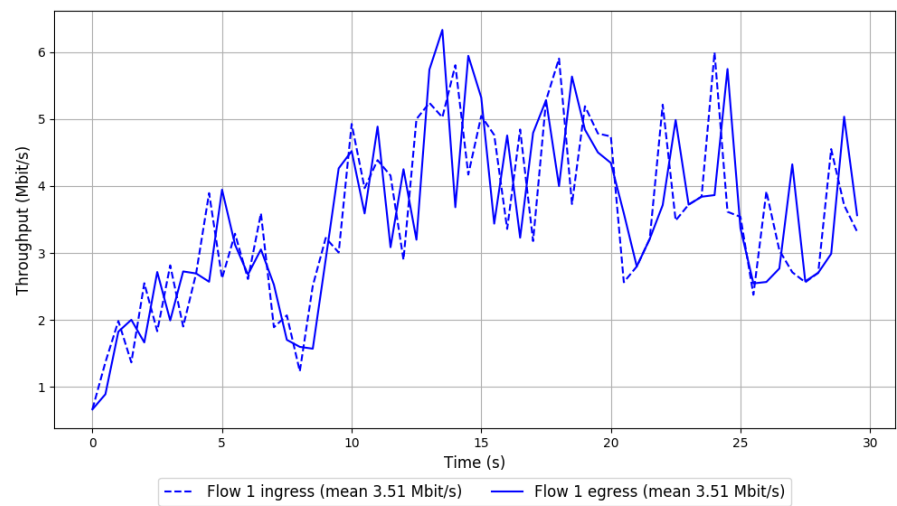
-- Flow 1:

Average throughput: 3.51 Mbit/s

95th percentile per-packet one-way delay: 87.462 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-15 23:27:40

End at: 2017-11-15 23:28:10

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 117.041 ms

Loss rate: 0.00%

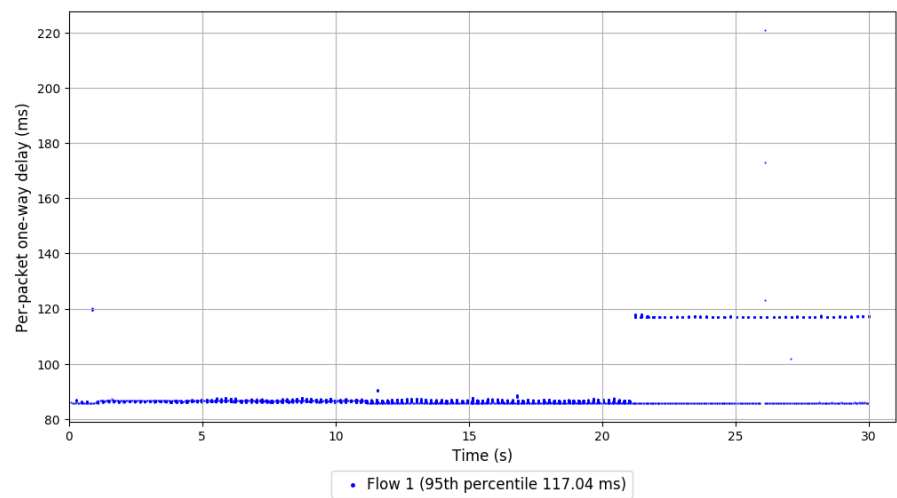
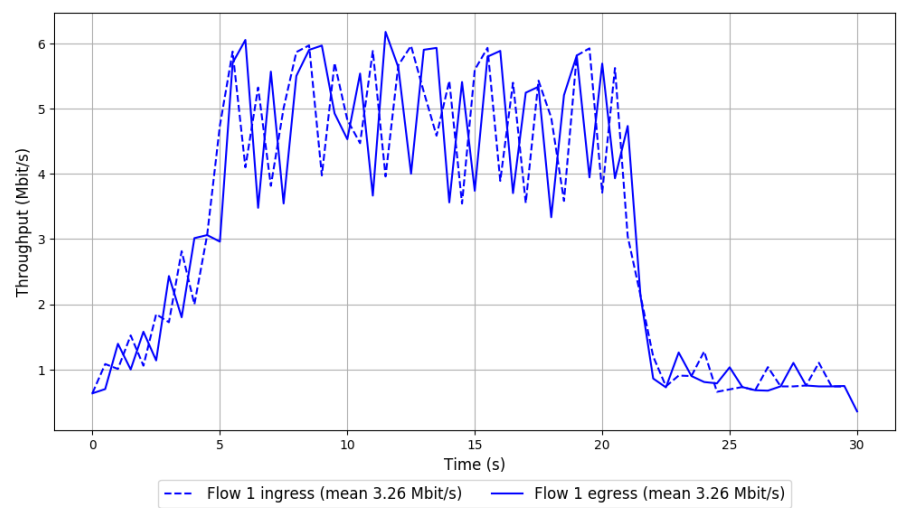
-- Flow 1:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 117.041 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-15 23:38:18

End at: 2017-11-15 23:38:48

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 117.069 ms

Loss rate: 0.00%

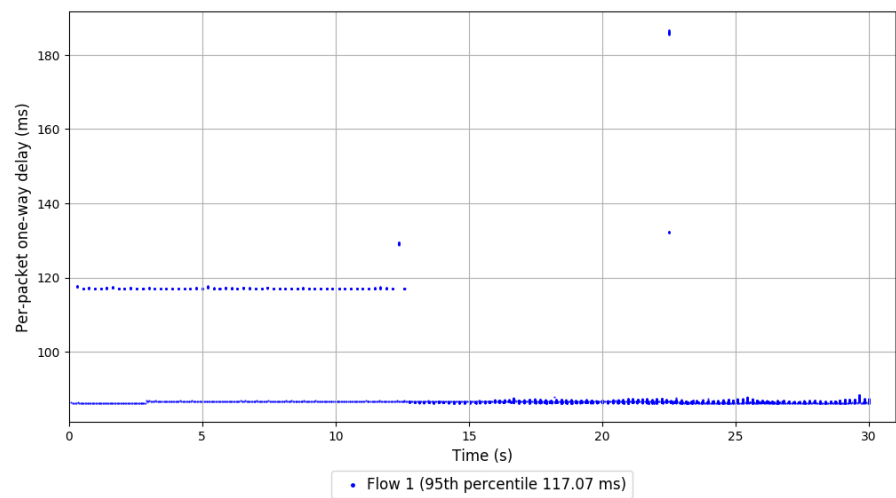
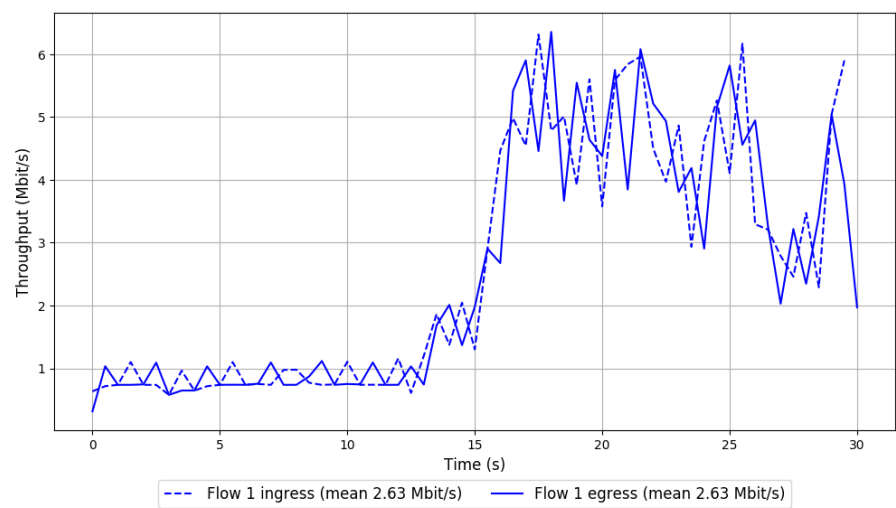
-- Flow 1:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 117.069 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-15 23:49:11

End at: 2017-11-15 23:49:41

Below is generated by plot.py at 2017-11-16 00:51:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.92 Mbit/s

95th percentile per-packet one-way delay: 87.215 ms

Loss rate: 0.78%

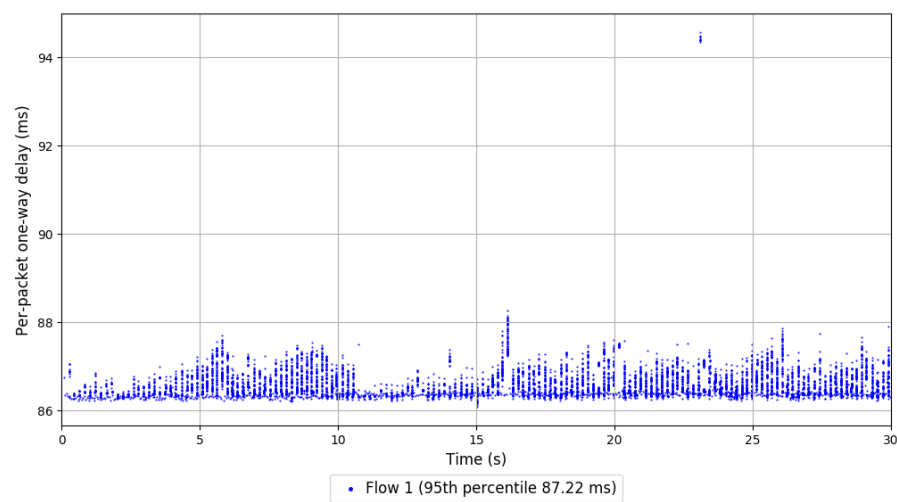
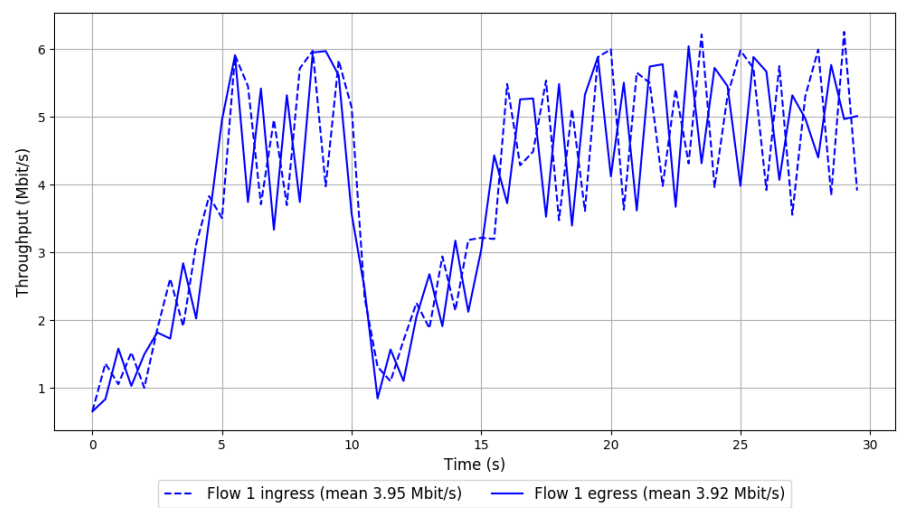
-- Flow 1:

Average throughput: 3.92 Mbit/s

95th percentile per-packet one-way delay: 87.215 ms

Loss rate: 0.78%

Run 10: Report of Sprout — Data Link

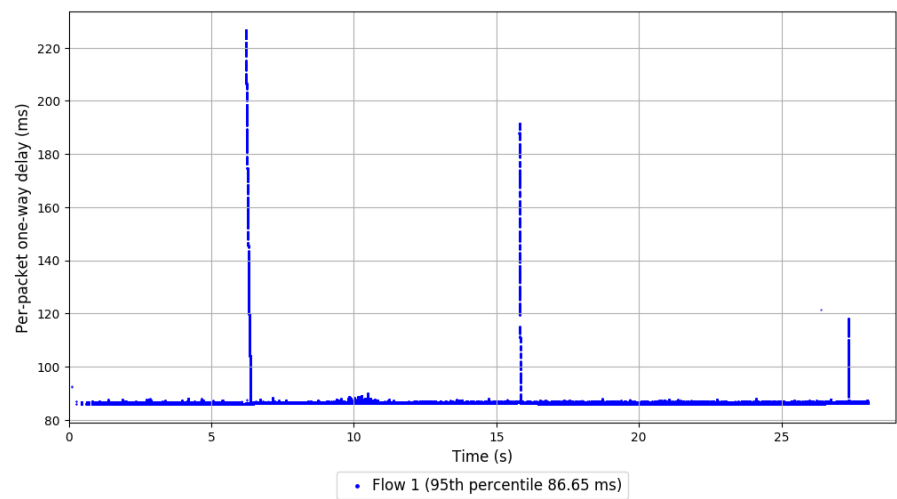
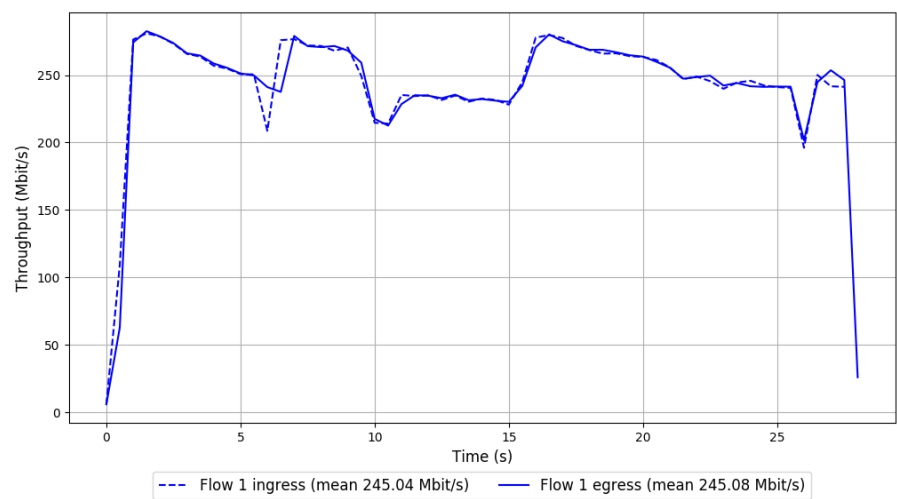


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-15 22:13:33
End at: 2017-11-15 22:14:03

# Below is generated by plot.py at 2017-11-16 00:53:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 245.08 Mbit/s
95th percentile per-packet one-way delay: 86.650 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 245.08 Mbit/s
95th percentile per-packet one-way delay: 86.650 ms
Loss rate: 0.00%
```

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

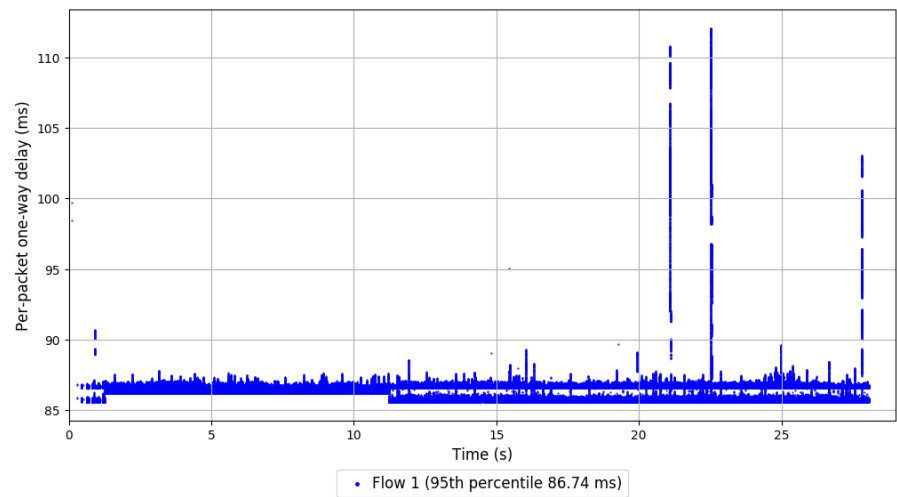
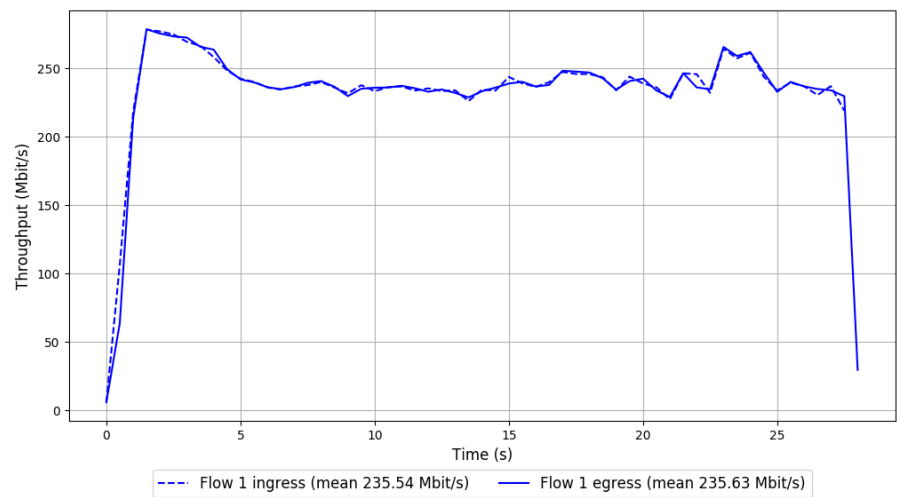


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-15 22:24:18
End at: 2017-11-15 22:24:48

# Below is generated by plot.py at 2017-11-16 00:53:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 235.63 Mbit/s
95th percentile per-packet one-way delay: 86.744 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 235.63 Mbit/s
95th percentile per-packet one-way delay: 86.744 ms
Loss rate: 0.01%
```

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

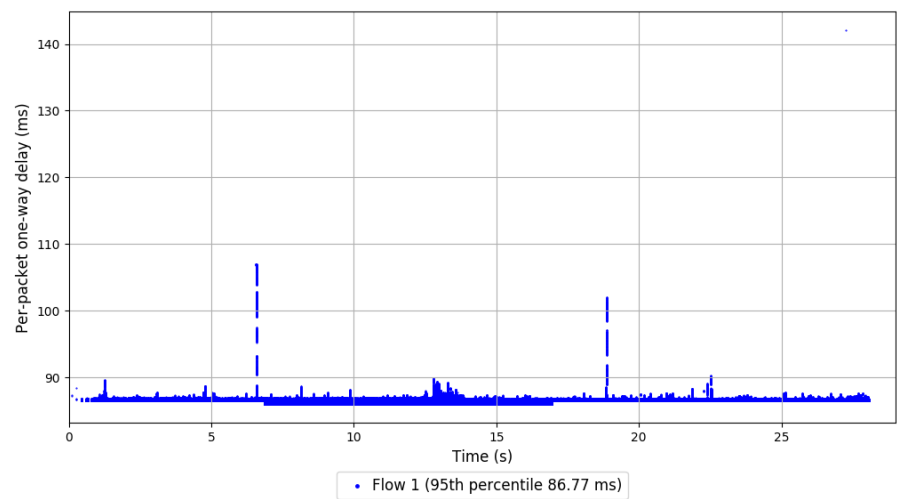
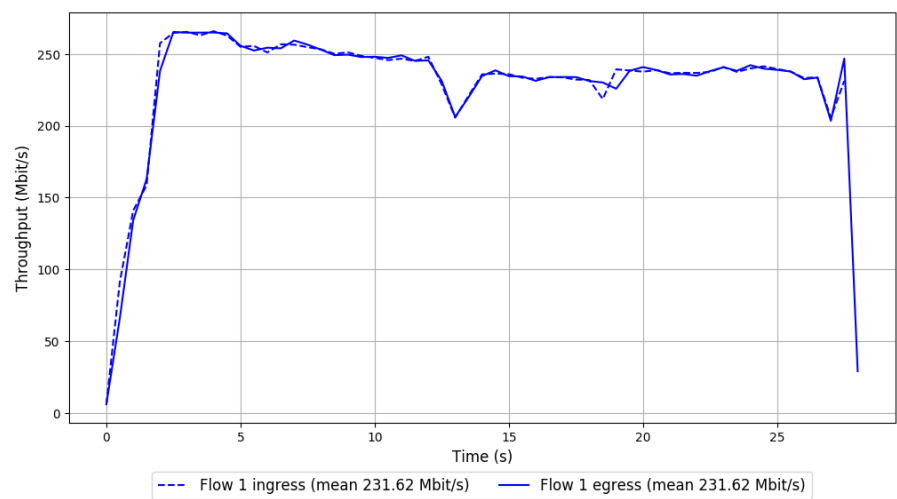


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-11-15 22:35:02
End at: 2017-11-15 22:35:32

# Below is generated by plot.py at 2017-11-16 00:53:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 231.62 Mbit/s
95th percentile per-packet one-way delay: 86.765 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 231.62 Mbit/s
95th percentile per-packet one-way delay: 86.765 ms
Loss rate: 0.00%
```

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

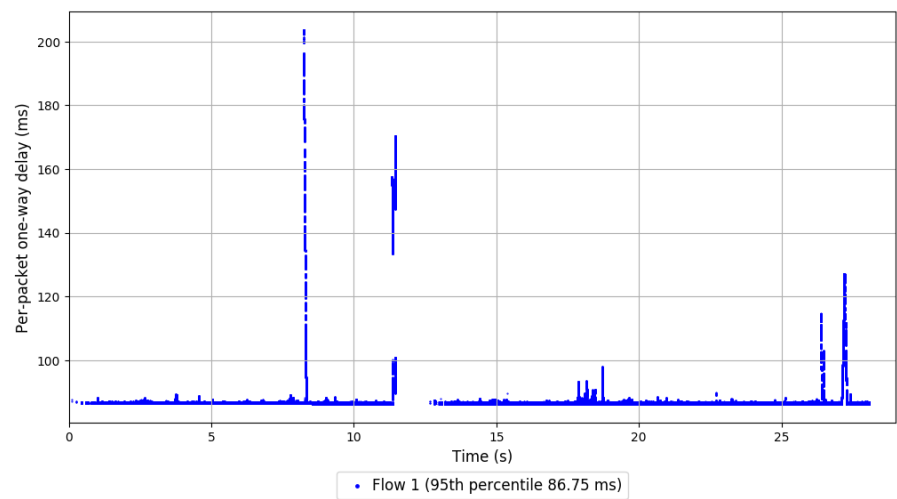
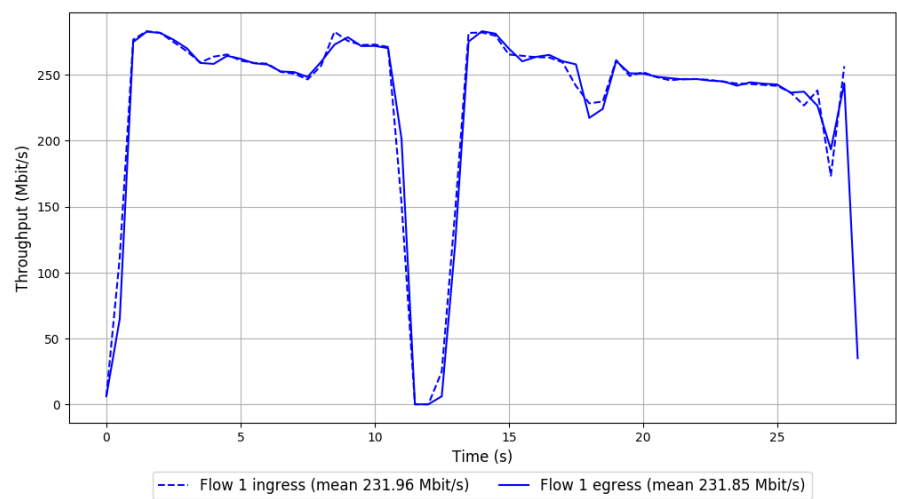


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-11-15 22:46:01
End at: 2017-11-15 22:46:31

# Below is generated by plot.py at 2017-11-16 00:53:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 231.85 Mbit/s
95th percentile per-packet one-way delay: 86.752 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 231.85 Mbit/s
95th percentile per-packet one-way delay: 86.752 ms
Loss rate: 0.05%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-15 22:56:57

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

Below is generated by plot.py at 2017-11-16 00:53:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 235.55 Mbit/s

95th percentile per-packet one-way delay: 86.658 ms

Loss rate: 0.01%

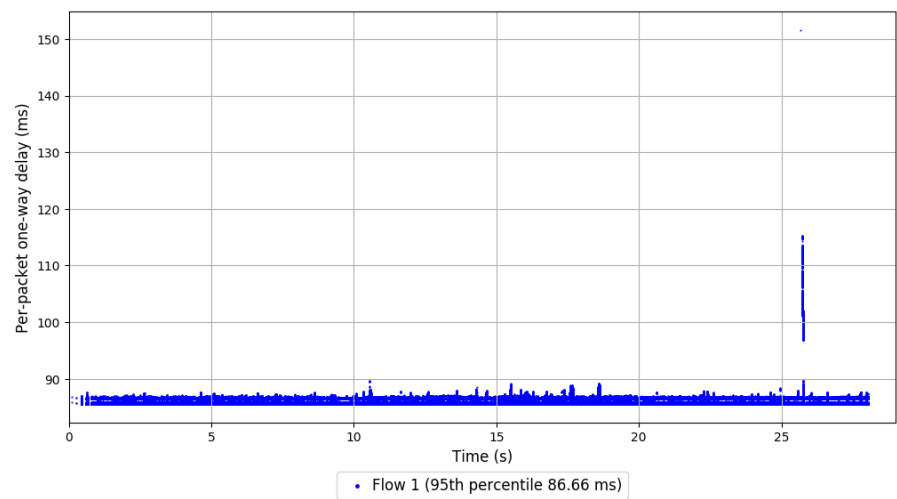
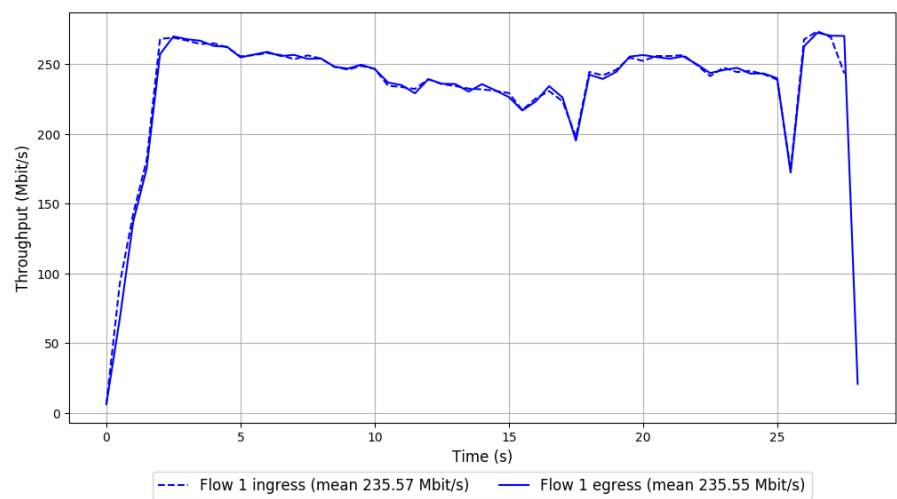
-- Flow 1:

Average throughput: 235.55 Mbit/s

95th percentile per-packet one-way delay: 86.658 ms

Loss rate: 0.01%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-15 23:07:46

End at: 2017-11-15 23:08:16

Below is generated by plot.py at 2017-11-16 00:53:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 143.16 Mbit/s

95th percentile per-packet one-way delay: 86.631 ms

Loss rate: 0.01%

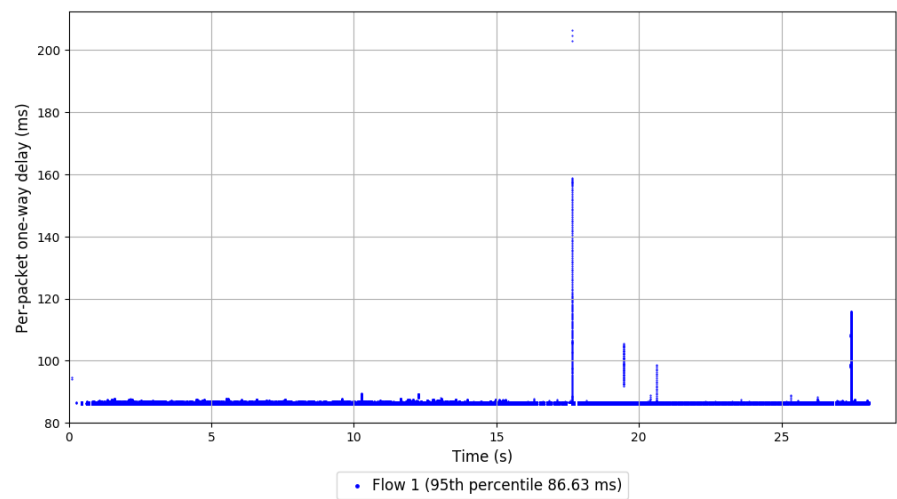
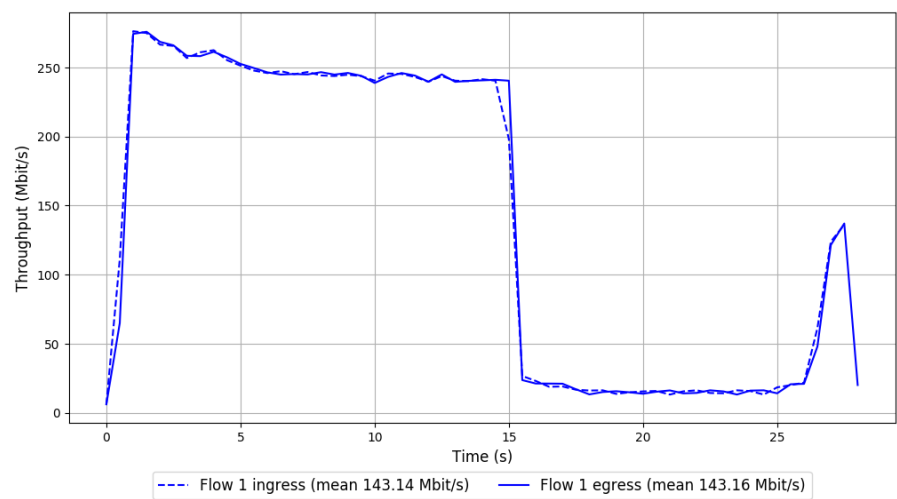
-- Flow 1:

Average throughput: 143.16 Mbit/s

95th percentile per-packet one-way delay: 86.631 ms

Loss rate: 0.01%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-15 23:18:25

End at: 2017-11-15 23:18:55

Below is generated by plot.py at 2017-11-16 00:53:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 240.68 Mbit/s

95th percentile per-packet one-way delay: 86.672 ms

Loss rate: 0.00%

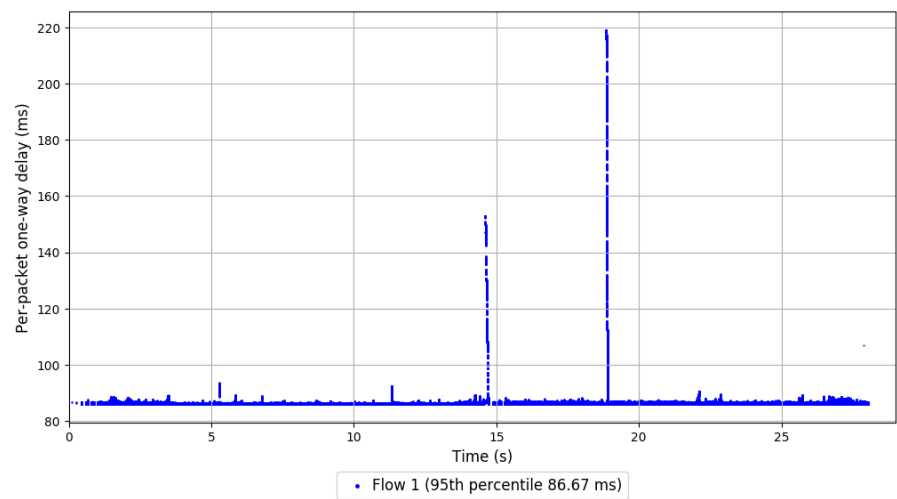
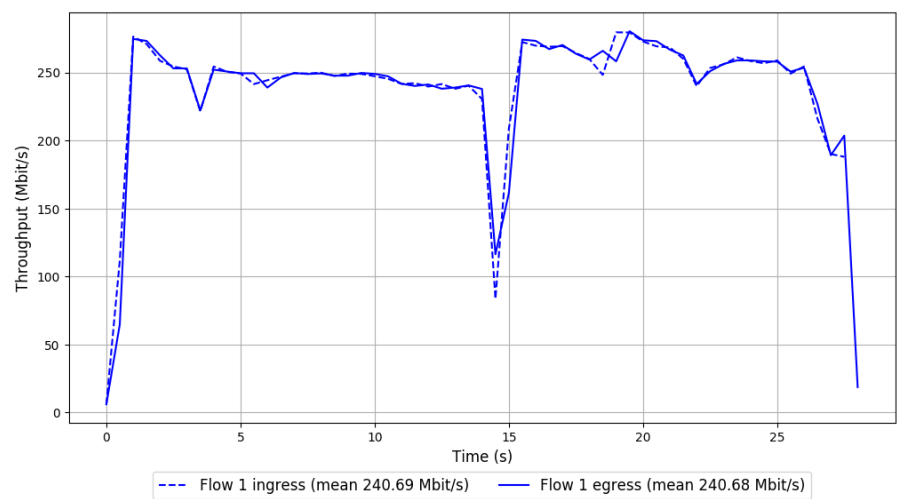
-- Flow 1:

Average throughput: 240.68 Mbit/s

95th percentile per-packet one-way delay: 86.672 ms

Loss rate: 0.00%

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

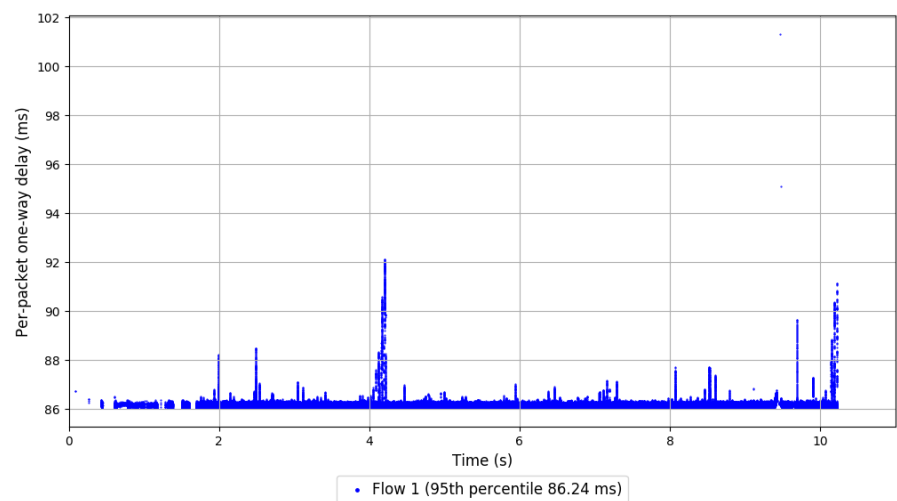
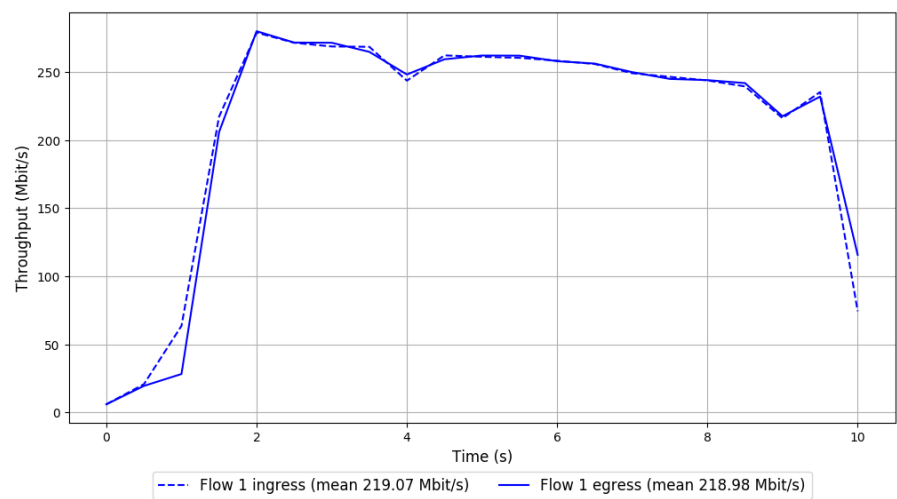


Run 8: Statistics of TaoVA-100x

Start at: 2017-11-15 23:29:03

End at: 2017-11-15 23:29:33

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-15 23:39:42

End at: 2017-11-15 23:40:12

Below is generated by plot.py at 2017-11-16 00:53:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.95 Mbit/s

95th percentile per-packet one-way delay: 116.838 ms

Loss rate: 0.16%

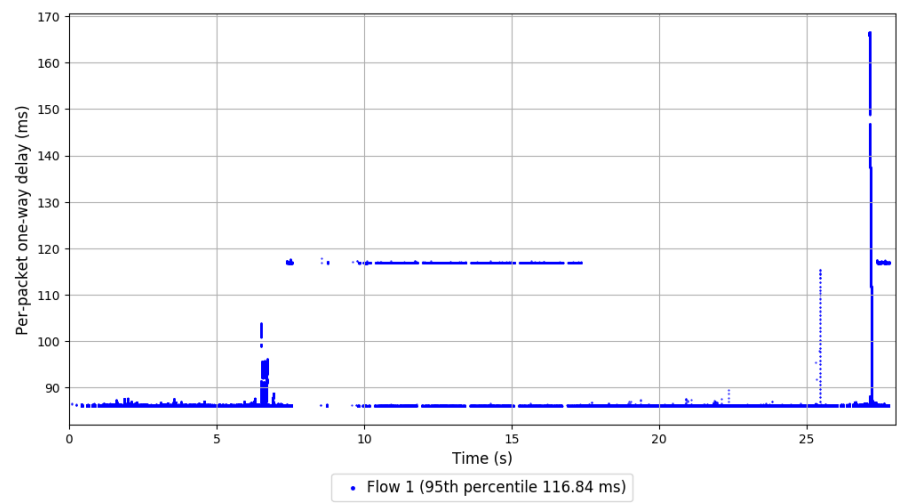
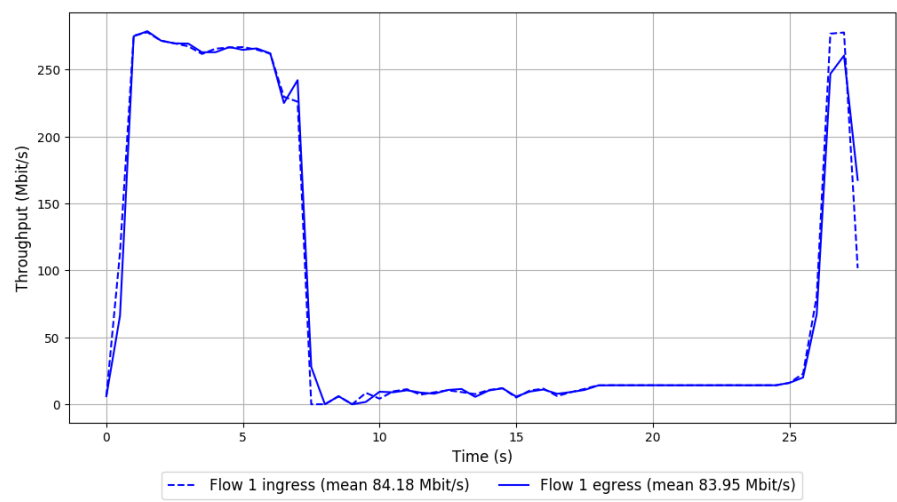
-- Flow 1:

Average throughput: 83.95 Mbit/s

95th percentile per-packet one-way delay: 116.838 ms

Loss rate: 0.16%

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

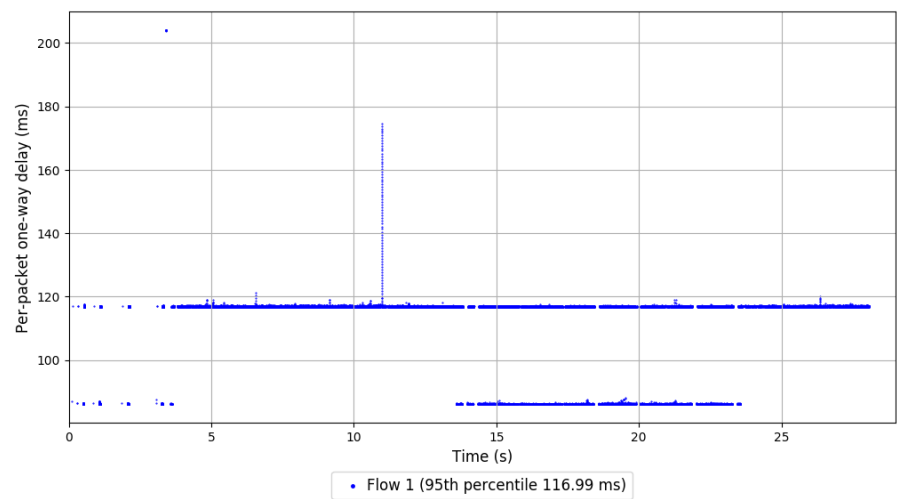
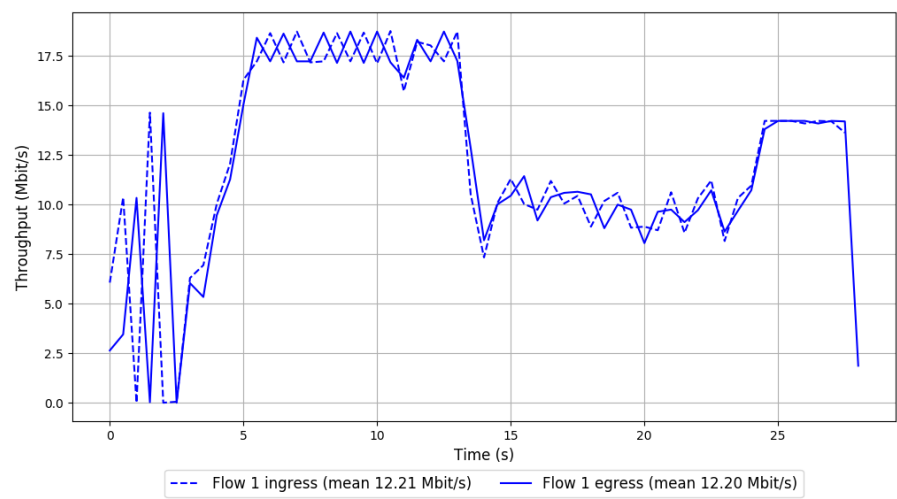


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-15 23:50:35
End at: 2017-11-15 23:51:05

# Below is generated by plot.py at 2017-11-16 00:53:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.20 Mbit/s
95th percentile per-packet one-way delay: 116.994 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 12.20 Mbit/s
95th percentile per-packet one-way delay: 116.994 ms
Loss rate: 0.13%
```

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

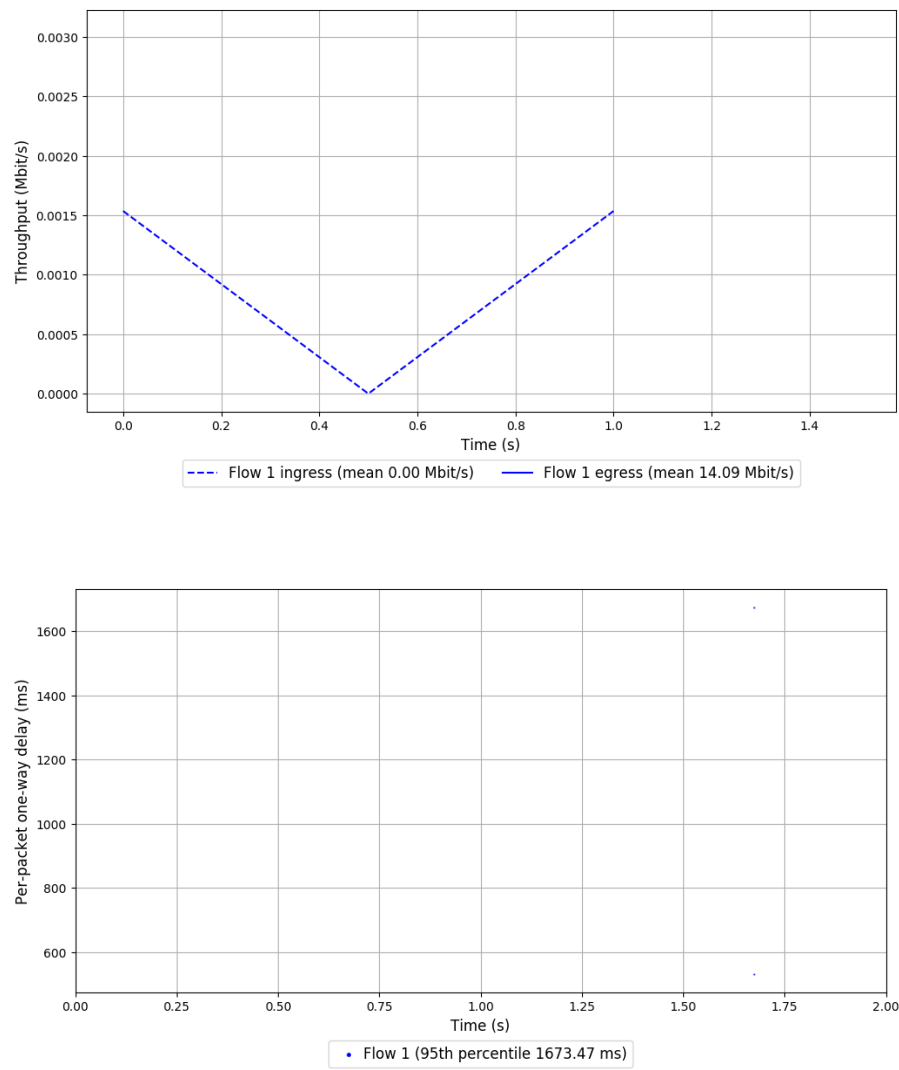


Run 1: Statistics of TCP Vegas

Start at: 2017-11-15 22:14:35

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

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-15 22:25:18

End at: 2017-11-15 22:25:48

Below is generated by plot.py at 2017-11-16 00:53:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.49 Mbit/s

95th percentile per-packet one-way delay: 88.494 ms

Loss rate: 0.18%

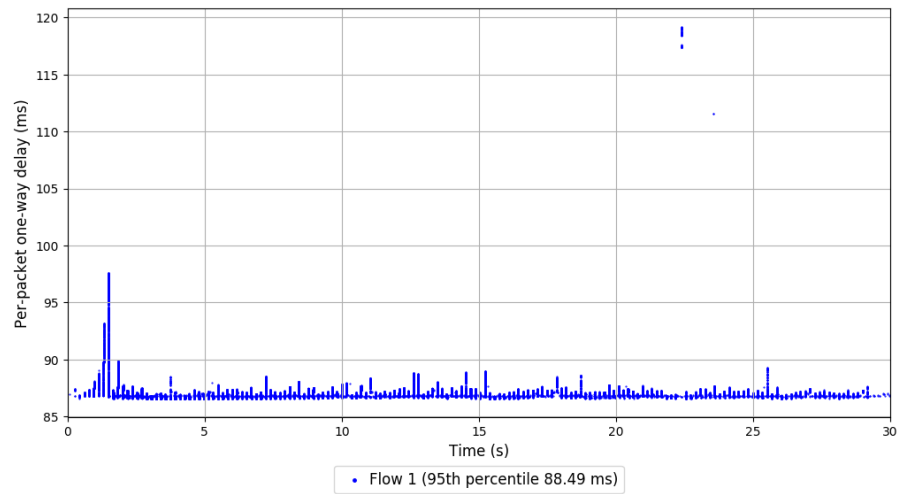
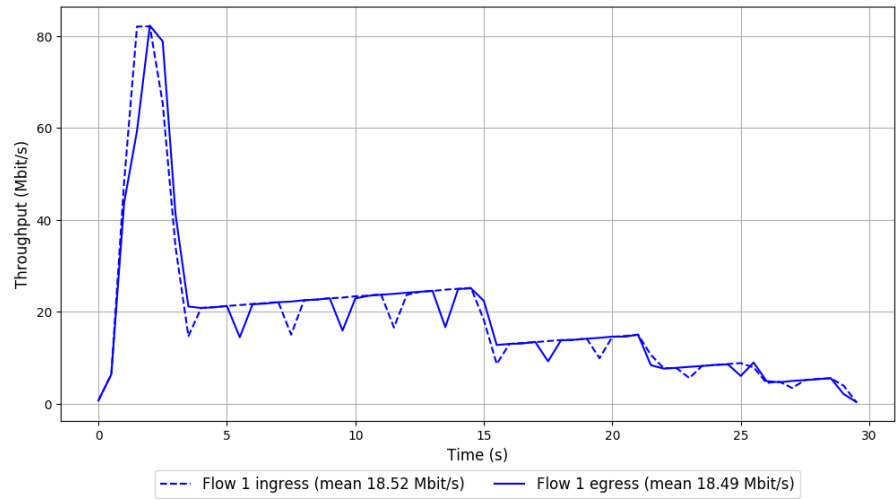
-- Flow 1:

Average throughput: 18.49 Mbit/s

95th percentile per-packet one-way delay: 88.494 ms

Loss rate: 0.18%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-15 22:36:03

End at: 2017-11-15 22:36:33

Below is generated by plot.py at 2017-11-16 00:53:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.70 Mbit/s

95th percentile per-packet one-way delay: 87.538 ms

Loss rate: 0.01%

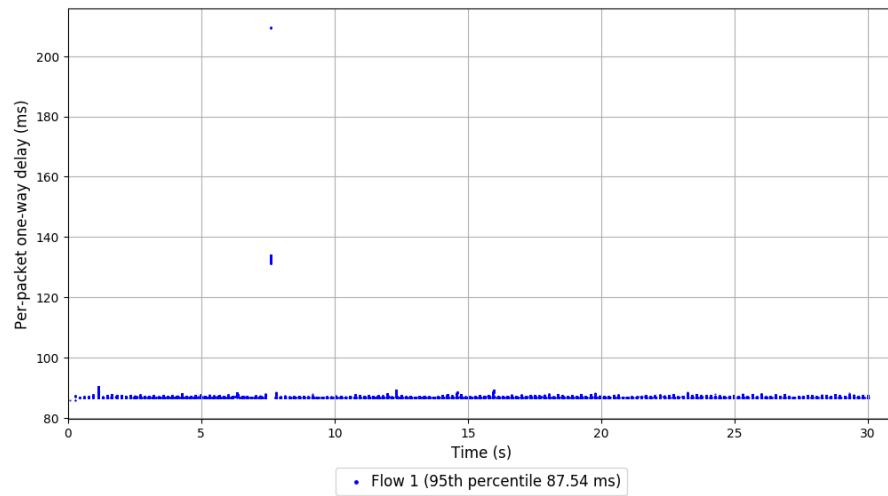
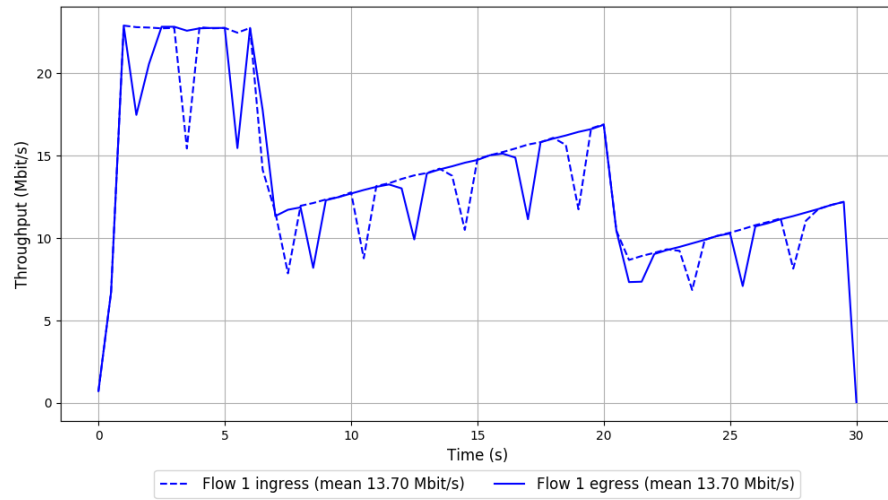
-- Flow 1:

Average throughput: 13.70 Mbit/s

95th percentile per-packet one-way delay: 87.538 ms

Loss rate: 0.01%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-15 22:47:01

End at: 2017-11-15 22:47:31

Below is generated by plot.py at 2017-11-16 00:53:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.43 Mbit/s

95th percentile per-packet one-way delay: 88.175 ms

Loss rate: 0.00%

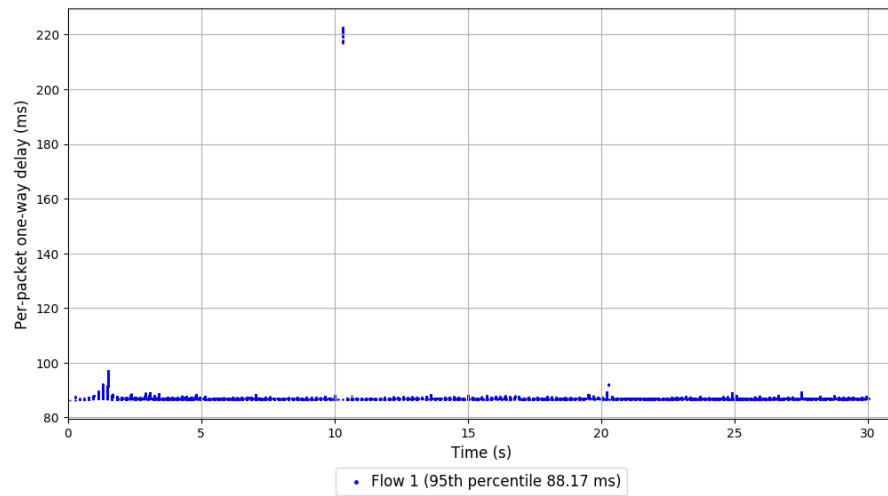
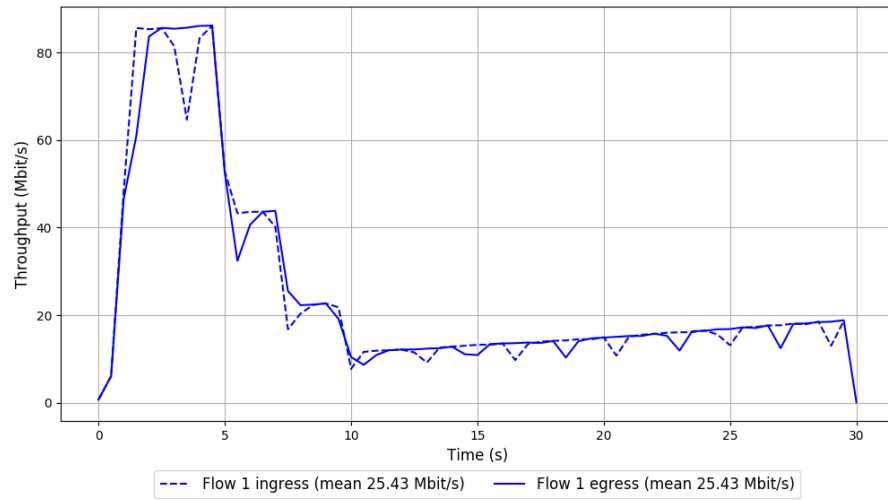
-- Flow 1:

Average throughput: 25.43 Mbit/s

95th percentile per-packet one-way delay: 88.175 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-15 22:57:59

End at: 2017-11-15 22:58:29

Below is generated by plot.py at 2017-11-16 00:53:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.41 Mbit/s

95th percentile per-packet one-way delay: 87.657 ms

Loss rate: 0.04%

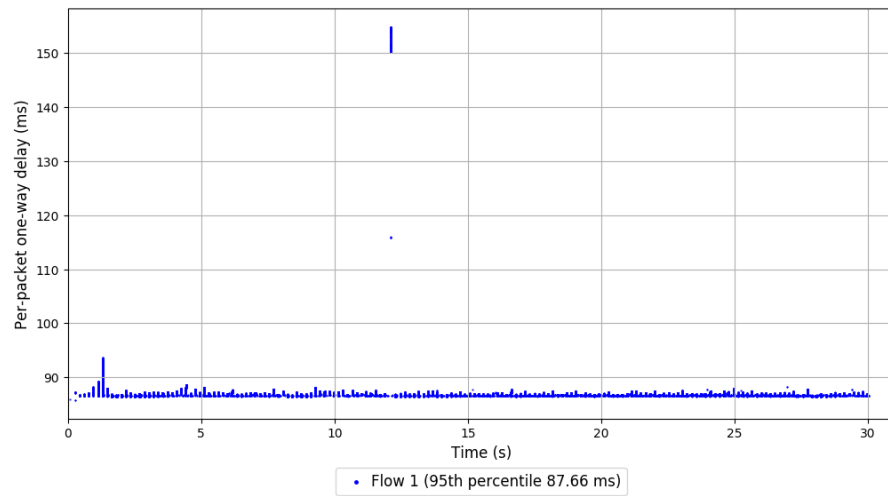
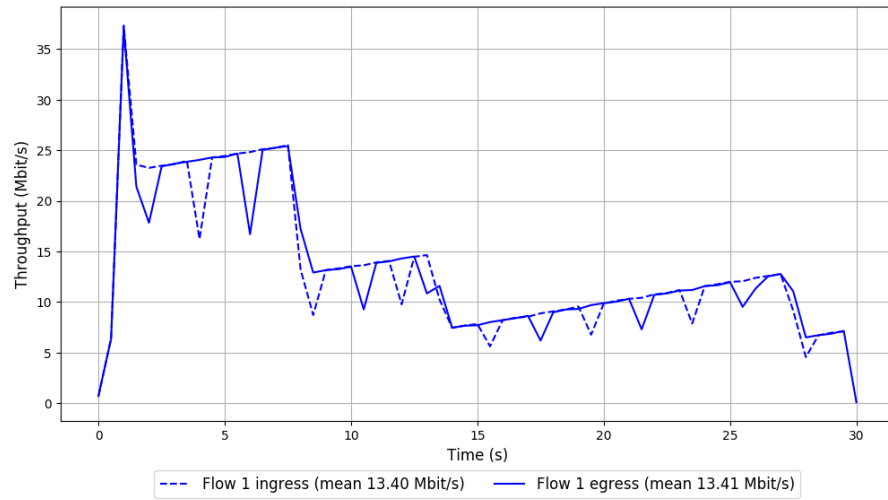
-- Flow 1:

Average throughput: 13.41 Mbit/s

95th percentile per-packet one-way delay: 87.657 ms

Loss rate: 0.04%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-15 23:08:39

End at: 2017-11-15 23:09:09

Below is generated by plot.py at 2017-11-16 00:53:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.43 Mbit/s

95th percentile per-packet one-way delay: 96.740 ms

Loss rate: 0.00%

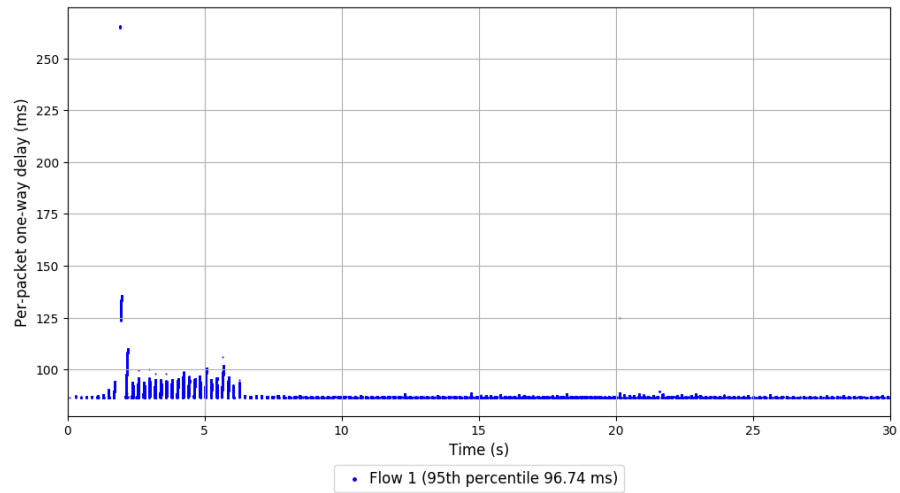
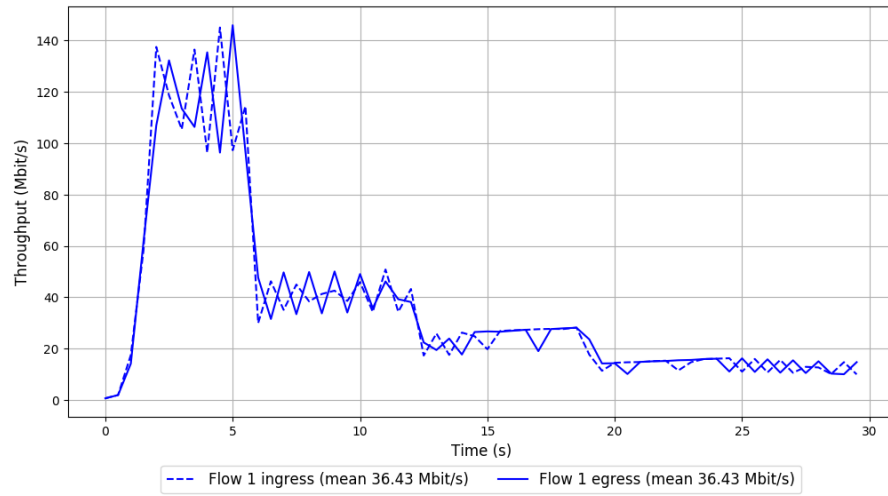
-- Flow 1:

Average throughput: 36.43 Mbit/s

95th percentile per-packet one-way delay: 96.740 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-15 23:19:27

End at: 2017-11-15 23:19:57

Below is generated by plot.py at 2017-11-16 00:53:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.92 Mbit/s

95th percentile per-packet one-way delay: 93.546 ms

Loss rate: 0.00%

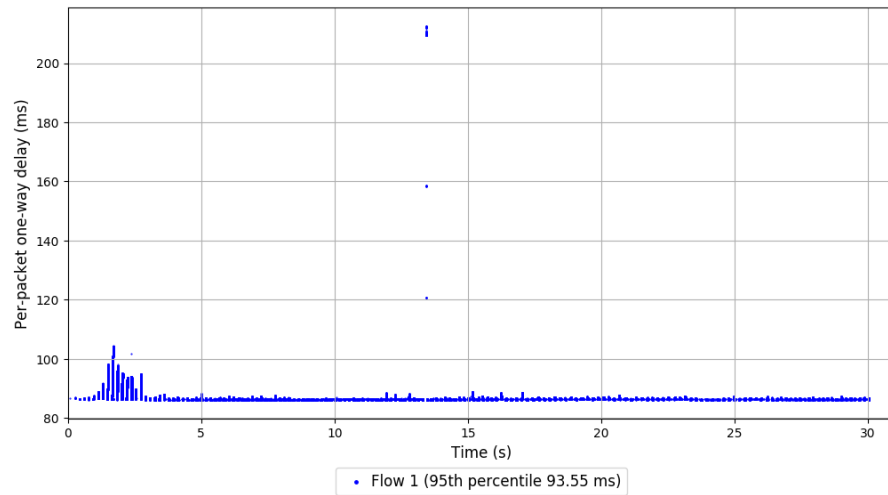
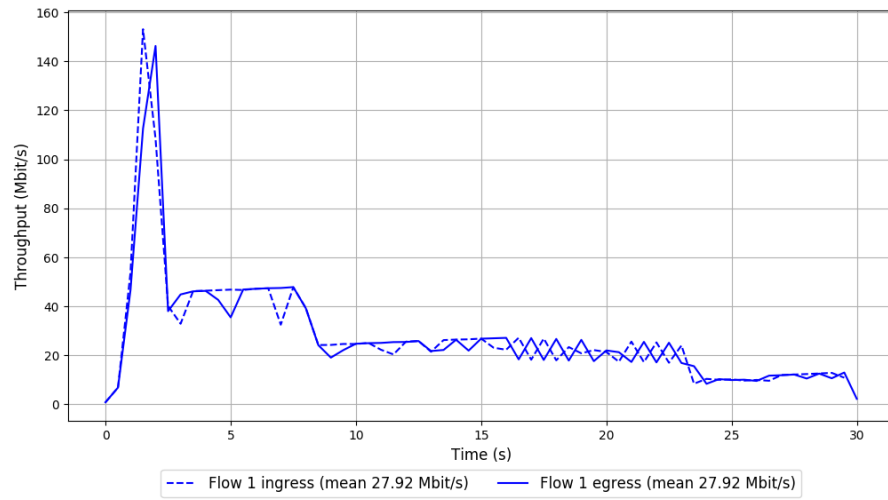
-- Flow 1:

Average throughput: 27.92 Mbit/s

95th percentile per-packet one-way delay: 93.546 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link

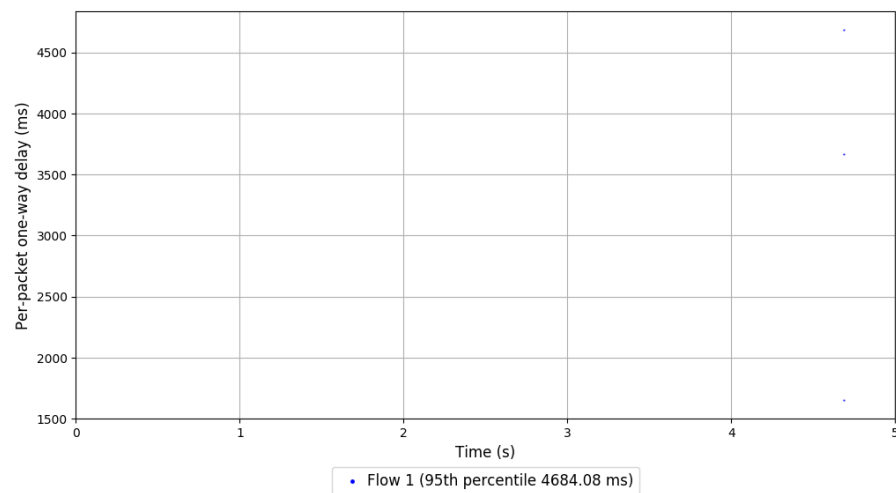
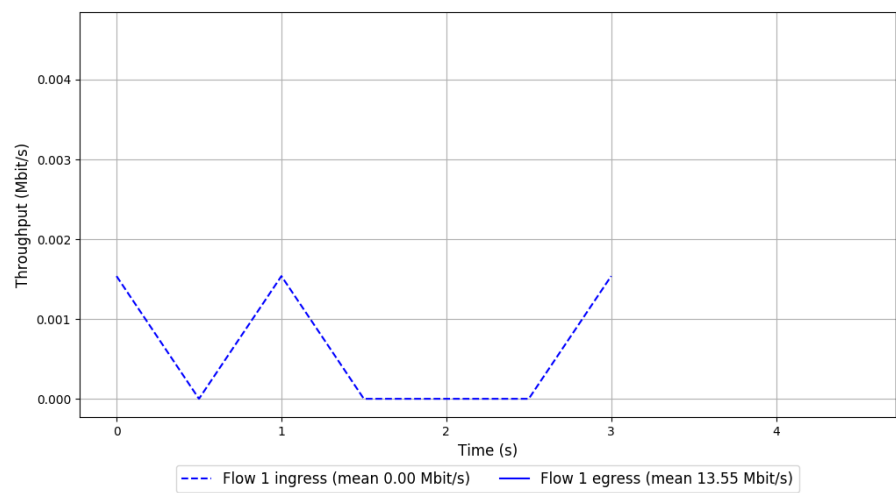


Run 8: Statistics of TCP Vegas

Start at: 2017-11-15 23:29:50

End at: 2017-11-15 23:30:20

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-15 23:40:29

End at: 2017-11-15 23:40:59

Below is generated by plot.py at 2017-11-16 00:54:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.55 Mbit/s

95th percentile per-packet one-way delay: 93.176 ms

Loss rate: 0.21%

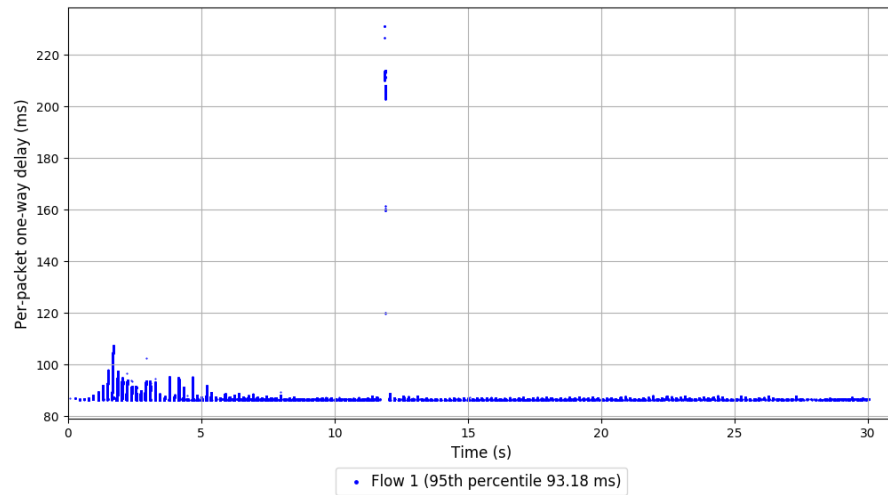
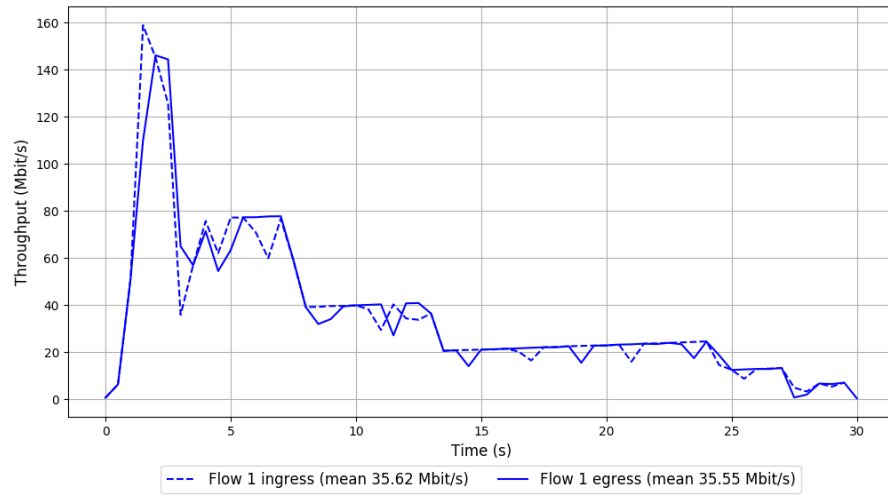
-- Flow 1:

Average throughput: 35.55 Mbit/s

95th percentile per-packet one-way delay: 93.176 ms

Loss rate: 0.21%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-15 23:51:16

End at: 2017-11-15 23:51:46

Below is generated by plot.py at 2017-11-16 00:54:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.10 Mbit/s

95th percentile per-packet one-way delay: 117.295 ms

Loss rate: 0.15%

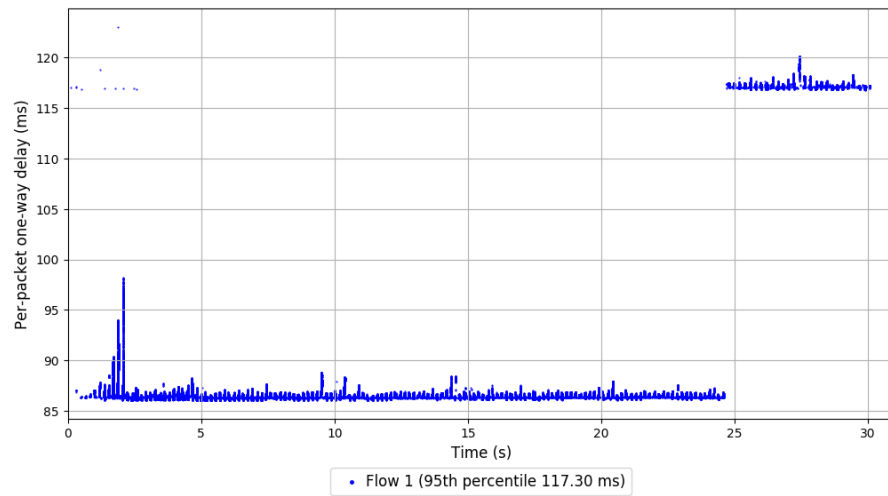
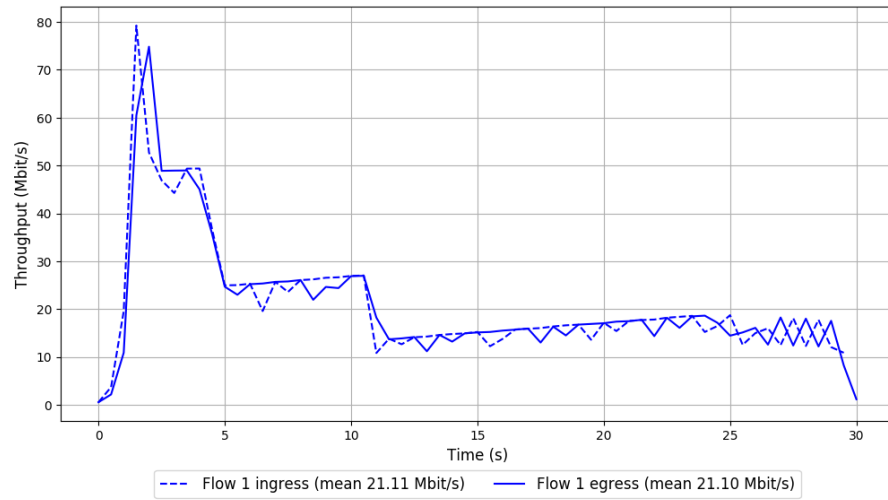
-- Flow 1:

Average throughput: 21.10 Mbit/s

95th percentile per-packet one-way delay: 117.295 ms

Loss rate: 0.15%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-11-15 22:15:14

End at: 2017-11-15 22:15:44

Below is generated by plot.py at 2017-11-16 00:56:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.23 Mbit/s

95th percentile per-packet one-way delay: 113.136 ms

Loss rate: 0.01%

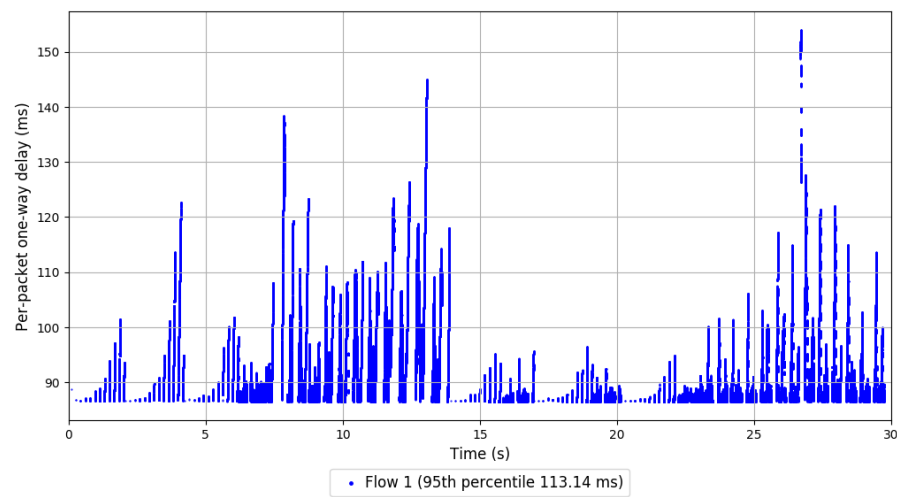
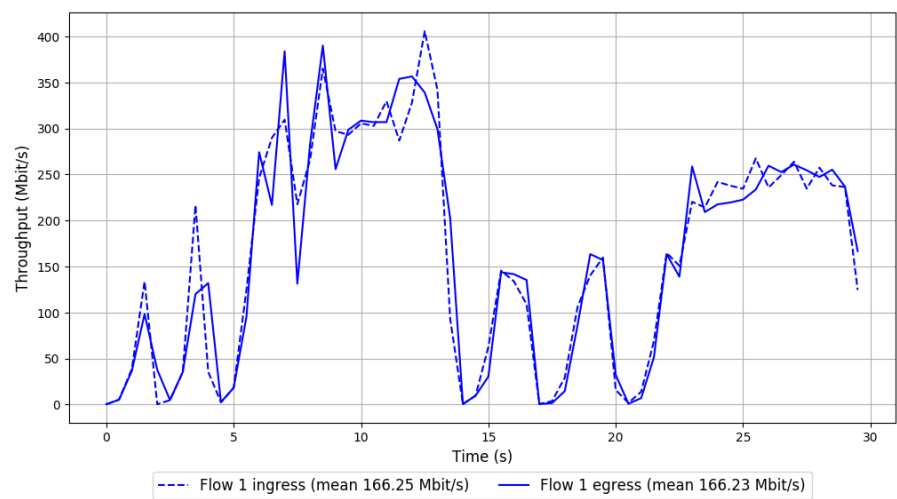
-- Flow 1:

Average throughput: 166.23 Mbit/s

95th percentile per-packet one-way delay: 113.136 ms

Loss rate: 0.01%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-15 22:25:59

End at: 2017-11-15 22:26:29

Below is generated by plot.py at 2017-11-16 00:57:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 242.96 Mbit/s

95th percentile per-packet one-way delay: 137.415 ms

Loss rate: 0.01%

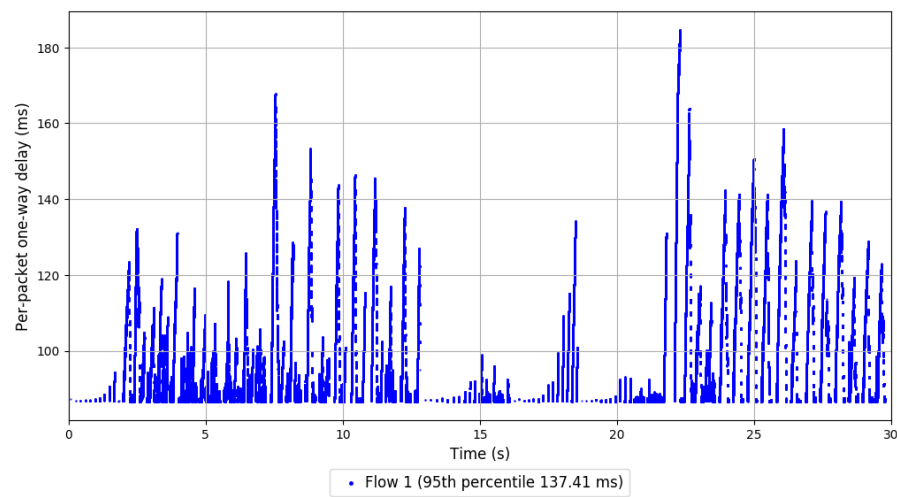
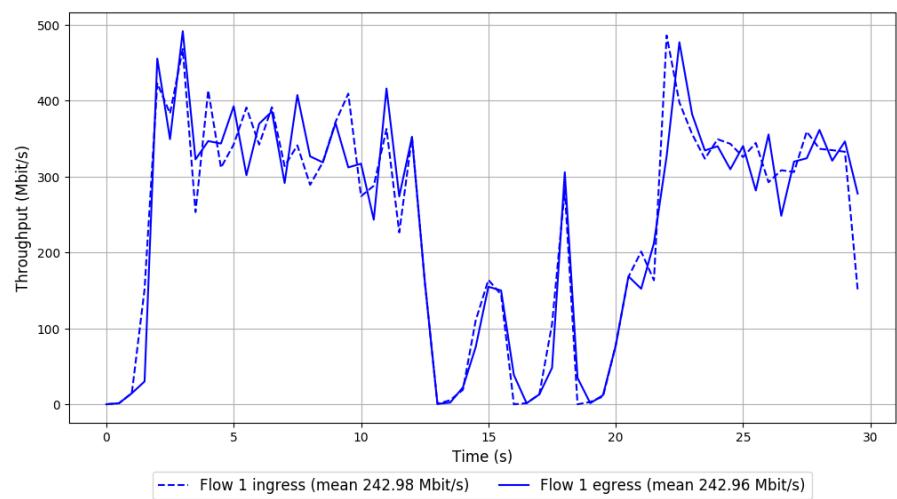
-- Flow 1:

Average throughput: 242.96 Mbit/s

95th percentile per-packet one-way delay: 137.415 ms

Loss rate: 0.01%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-15 22:36:43

End at: 2017-11-15 22:37:13

Below is generated by plot.py at 2017-11-16 00:57:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 238.88 Mbit/s

95th percentile per-packet one-way delay: 135.645 ms

Loss rate: 0.47%

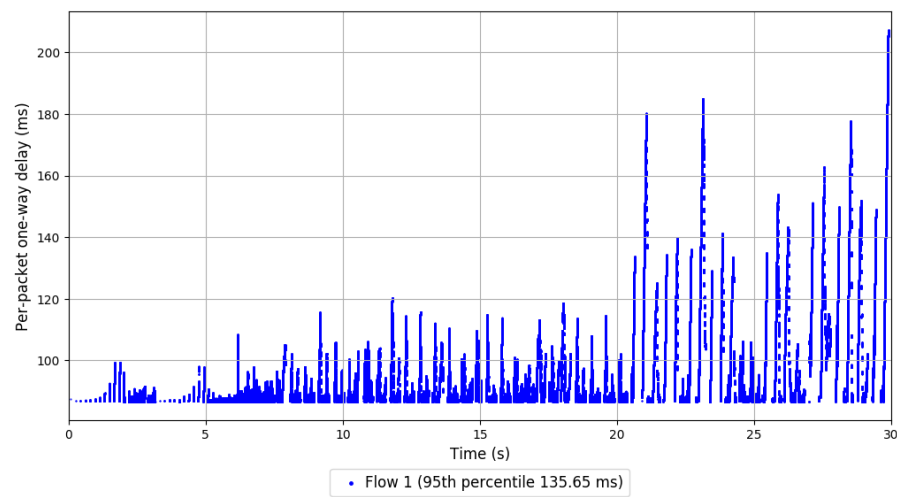
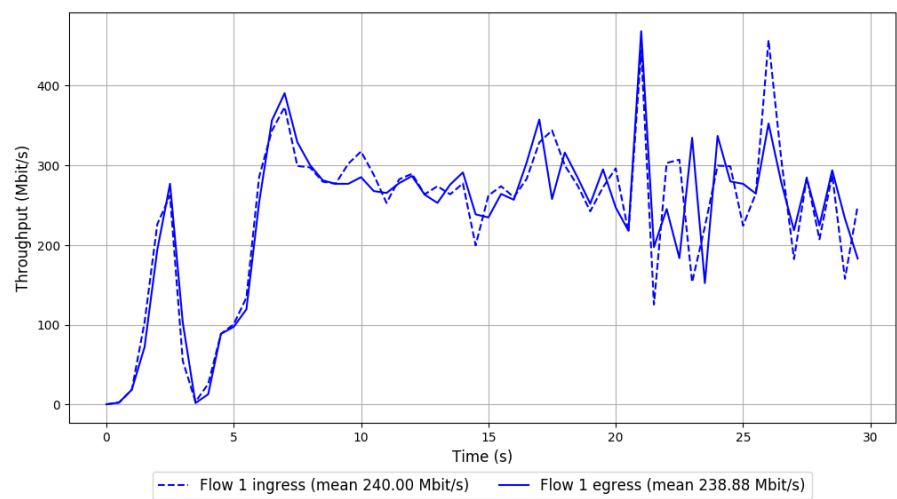
-- Flow 1:

Average throughput: 238.88 Mbit/s

95th percentile per-packet one-way delay: 135.645 ms

Loss rate: 0.47%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-15 22:47:42

End at: 2017-11-15 22:48:12

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 308.25 Mbit/s

95th percentile per-packet one-way delay: 272.026 ms

Loss rate: 3.08%

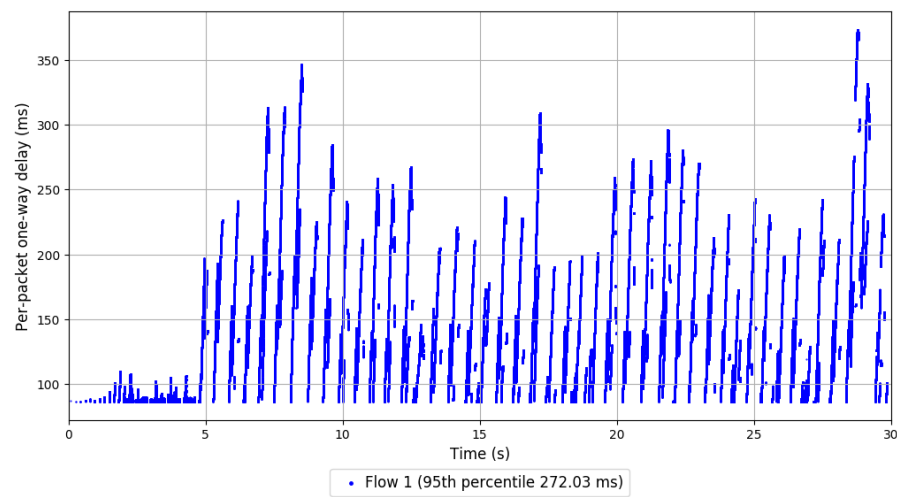
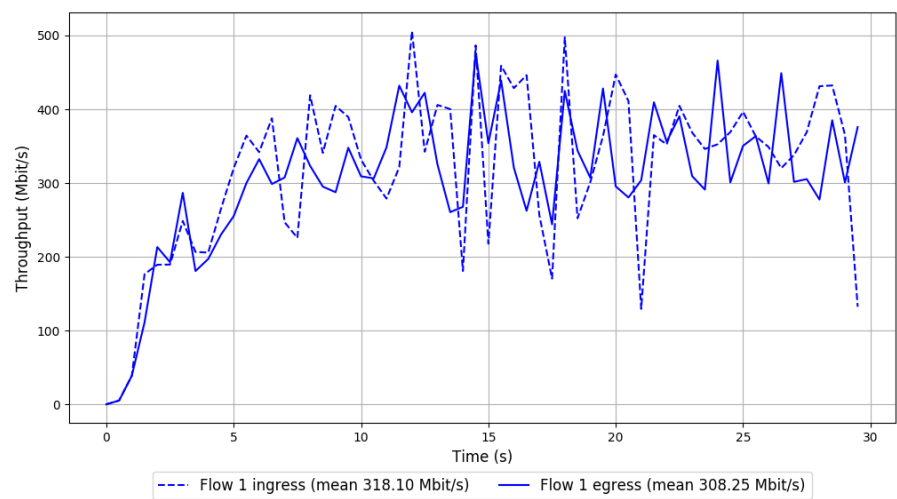
-- Flow 1:

Average throughput: 308.25 Mbit/s

95th percentile per-packet one-way delay: 272.026 ms

Loss rate: 3.08%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-15 22:58:39

End at: 2017-11-15 22:59:09

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.05 Mbit/s

95th percentile per-packet one-way delay: 108.428 ms

Loss rate: 0.00%

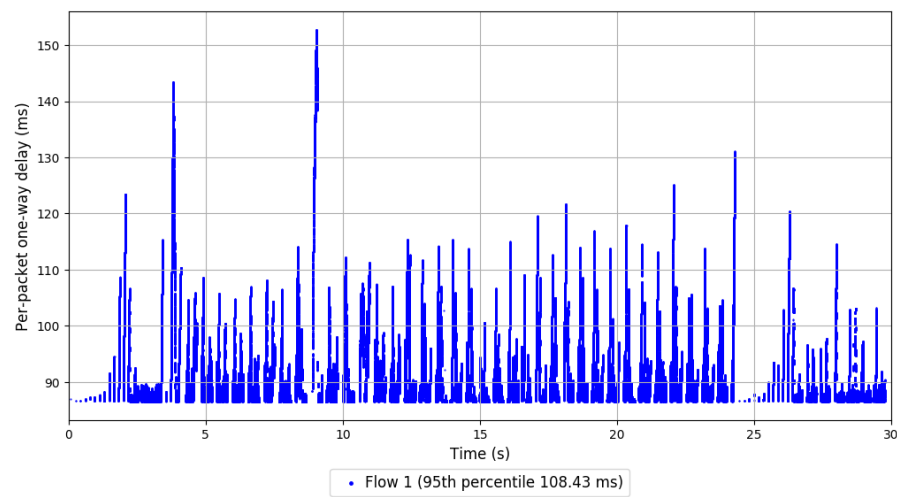
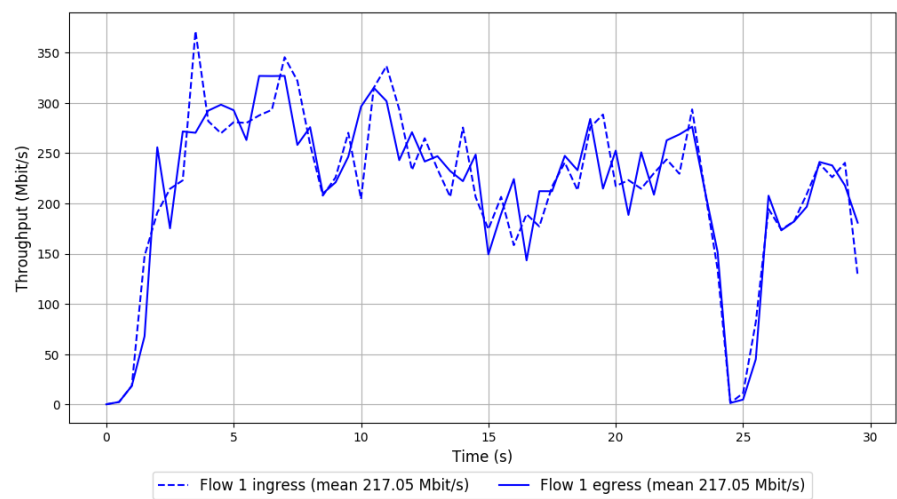
-- Flow 1:

Average throughput: 217.05 Mbit/s

95th percentile per-packet one-way delay: 108.428 ms

Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-15 23:09:21

End at: 2017-11-15 23:09:51

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.54 Mbit/s

95th percentile per-packet one-way delay: 111.486 ms

Loss rate: 0.00%

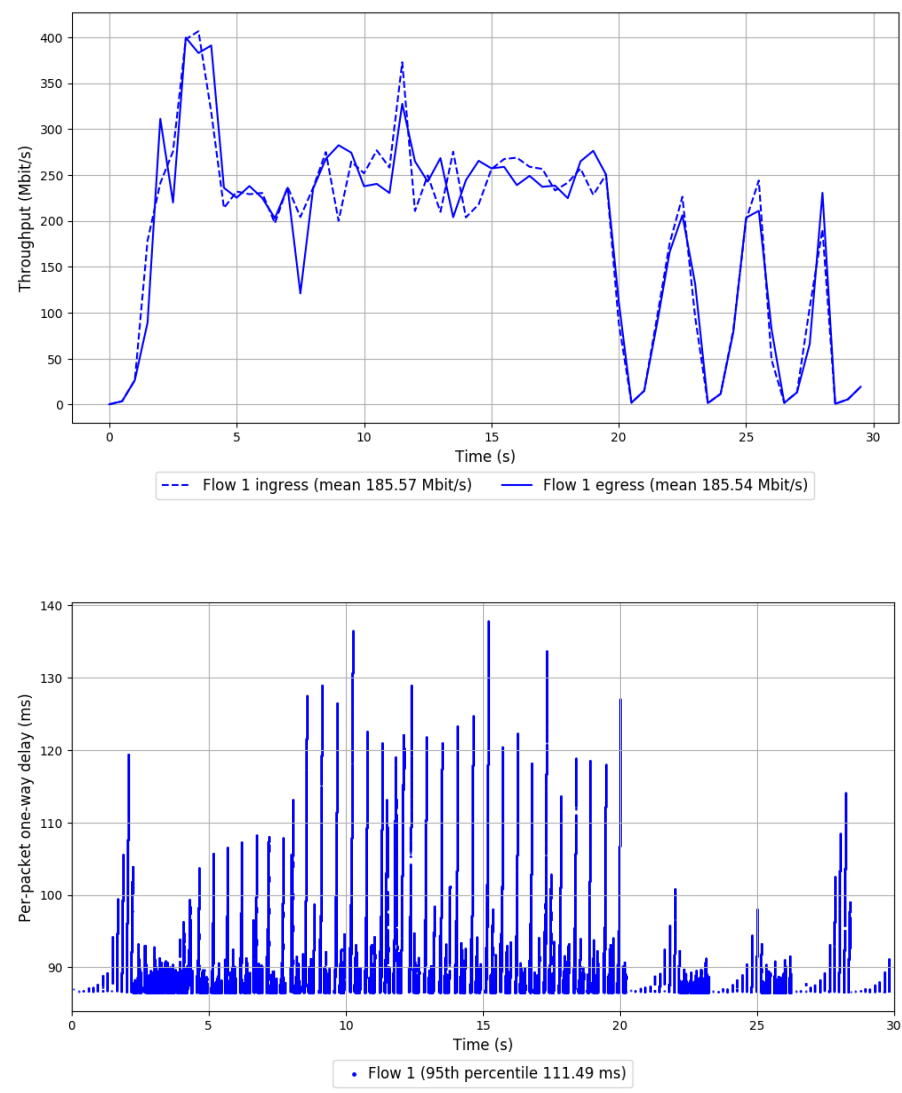
-- Flow 1:

Average throughput: 185.54 Mbit/s

95th percentile per-packet one-way delay: 111.486 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-15 23:20:09

End at: 2017-11-15 23:20:39

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.72 Mbit/s

95th percentile per-packet one-way delay: 112.243 ms

Loss rate: 0.22%

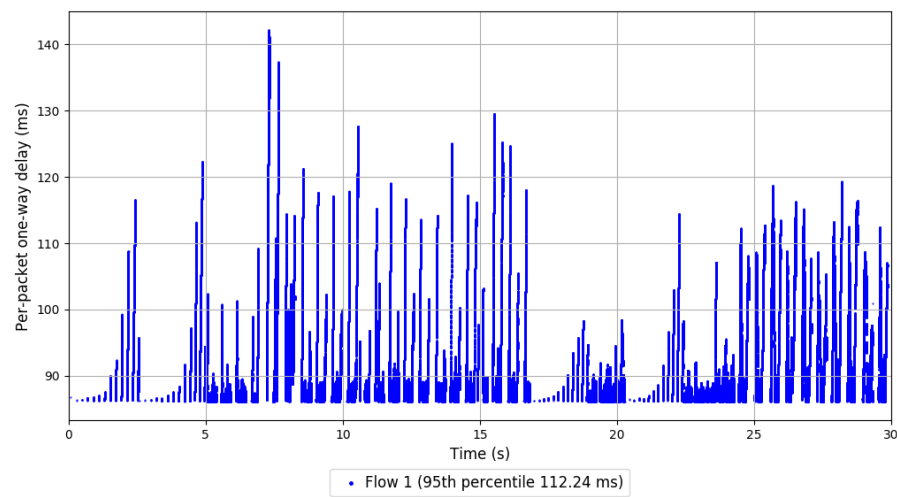
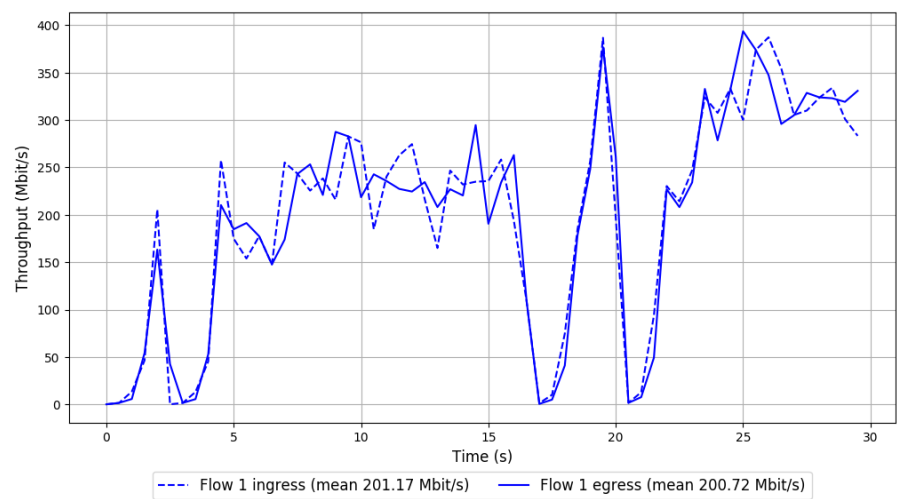
-- Flow 1:

Average throughput: 200.72 Mbit/s

95th percentile per-packet one-way delay: 112.243 ms

Loss rate: 0.22%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

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

End at: 2017-11-15 23:31:00

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 231.30 Mbit/s

95th percentile per-packet one-way delay: 136.241 ms

Loss rate: 0.03%

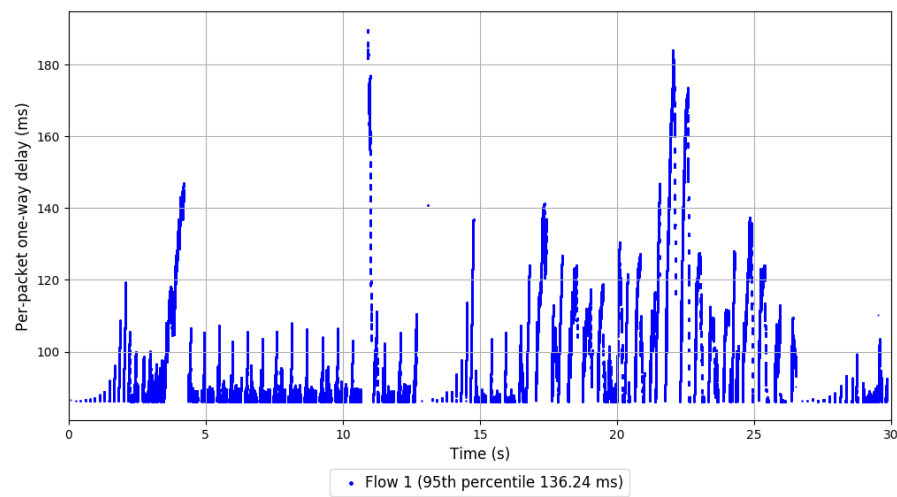
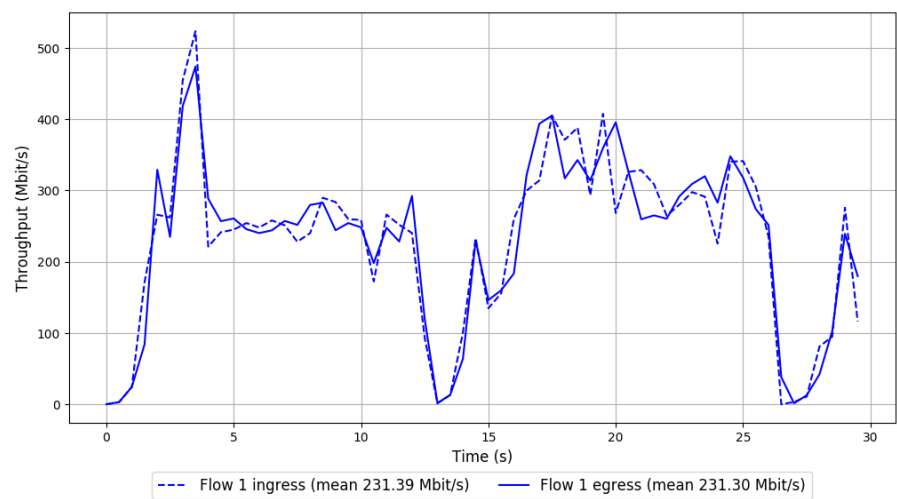
-- Flow 1:

Average throughput: 231.30 Mbit/s

95th percentile per-packet one-way delay: 136.241 ms

Loss rate: 0.03%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-15 23:41:11

End at: 2017-11-15 23:41:41

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 145.37 Mbit/s

95th percentile per-packet one-way delay: 298.568 ms

Loss rate: 6.45%

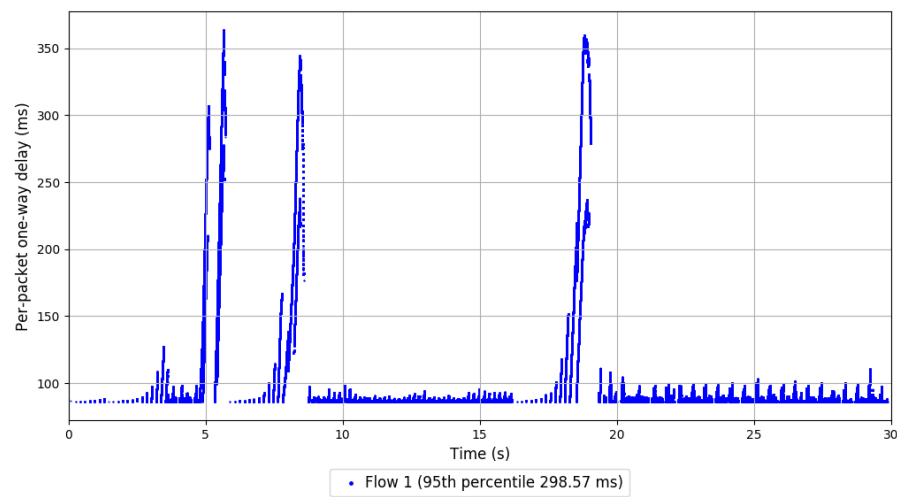
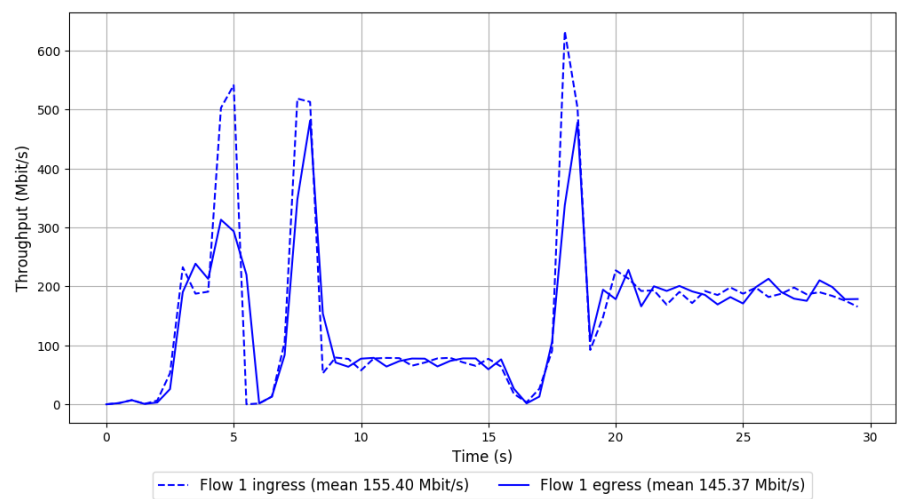
-- Flow 1:

Average throughput: 145.37 Mbit/s

95th percentile per-packet one-way delay: 298.568 ms

Loss rate: 6.45%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-15 23:51:57

End at: 2017-11-15 23:52:27

Below is generated by plot.py at 2017-11-16 01:01:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 252.03 Mbit/s

95th percentile per-packet one-way delay: 132.845 ms

Loss rate: 0.09%

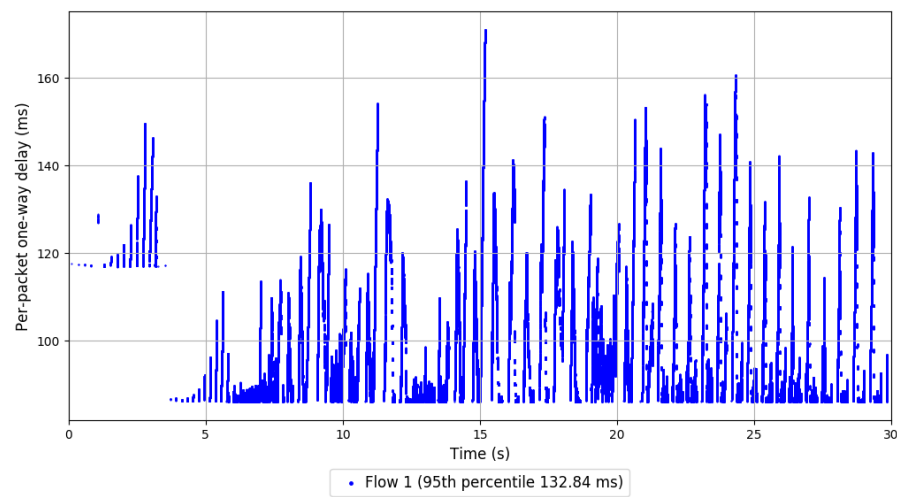
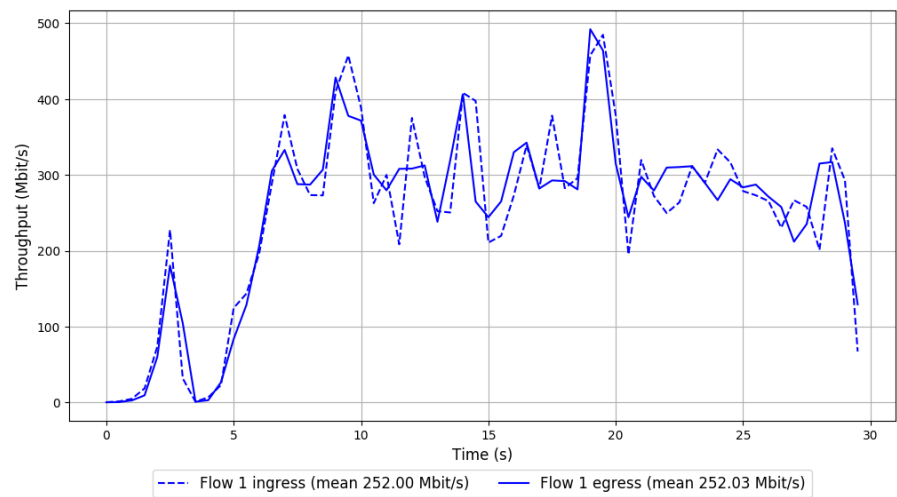
-- Flow 1:

Average throughput: 252.03 Mbit/s

95th percentile per-packet one-way delay: 132.845 ms

Loss rate: 0.09%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-11-15 22:07:49

End at: 2017-11-15 22:08:19

Below is generated by plot.py at 2017-11-16 01:01:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.52 Mbit/s

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

Loss rate: 0.00%

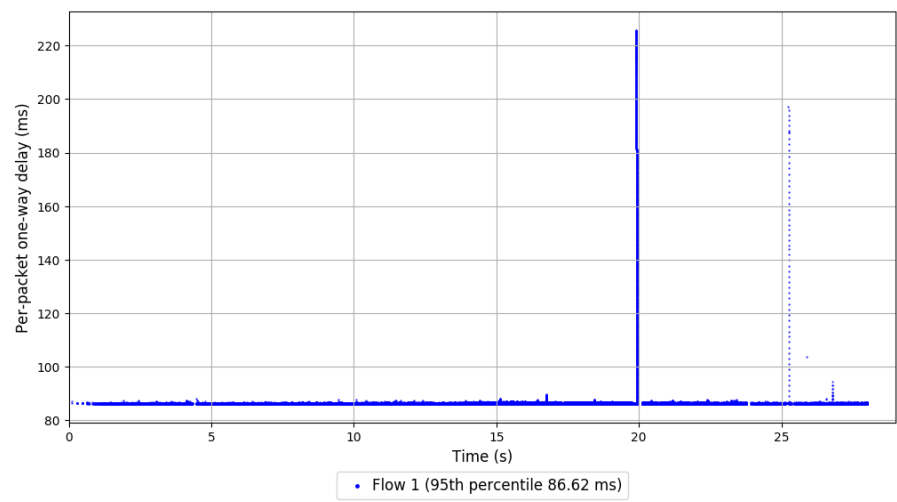
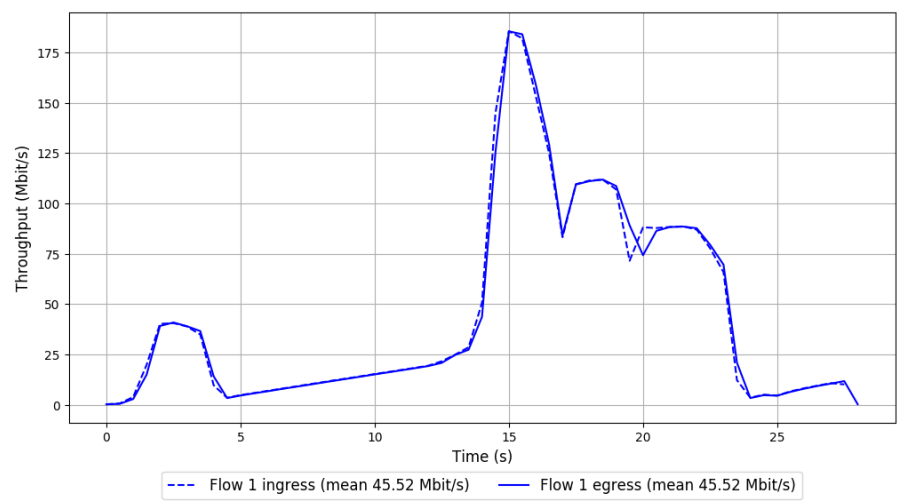
-- Flow 1:

Average throughput: 45.52 Mbit/s

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

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-15 22:18:26

End at: 2017-11-15 22:18:56

Below is generated by plot.py at 2017-11-16 01:01:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.37 Mbit/s

95th percentile per-packet one-way delay: 86.652 ms

Loss rate: 0.00%

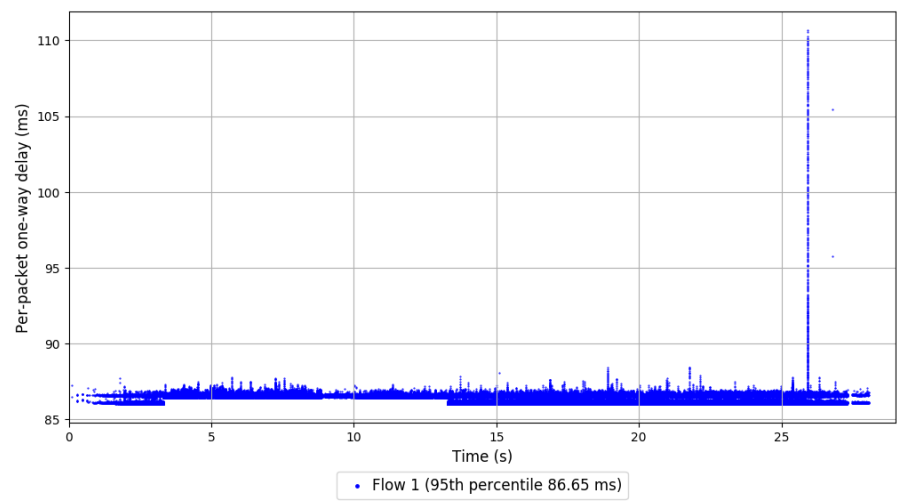
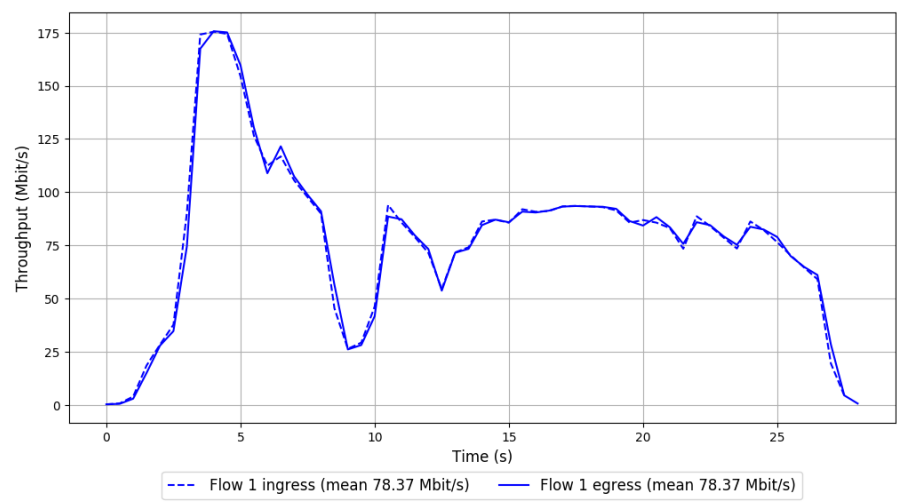
-- Flow 1:

Average throughput: 78.37 Mbit/s

95th percentile per-packet one-way delay: 86.652 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link

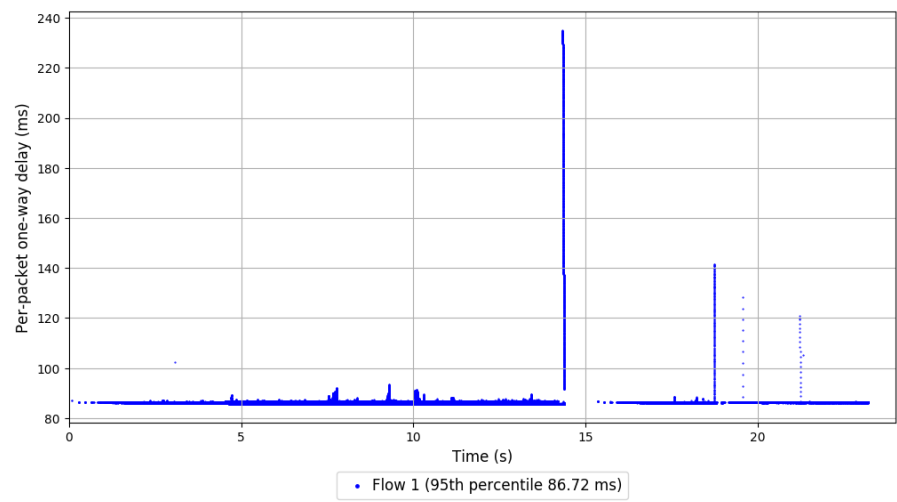
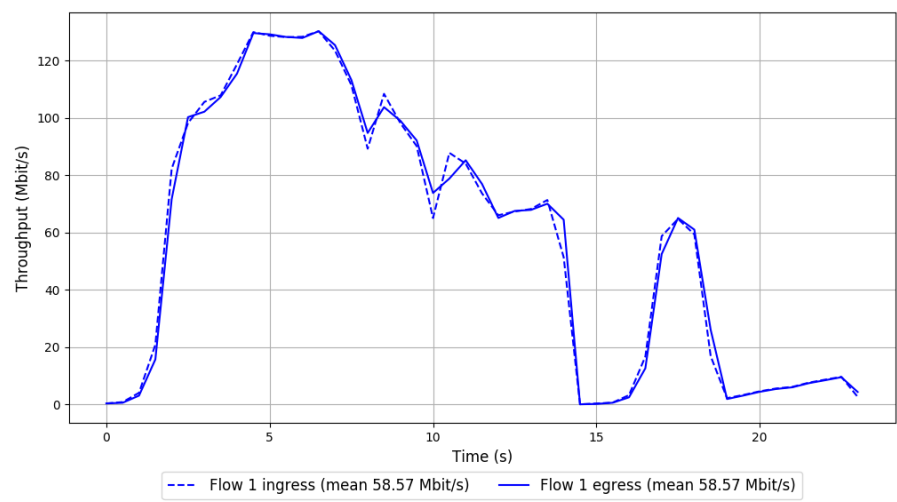


Run 3: Statistics of Copa

Start at: 2017-11-15 22:29:20

End at: 2017-11-15 22:29:50

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-15 22:40:08

End at: 2017-11-15 22:40:38

Below is generated by plot.py at 2017-11-16 01:01:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.30 Mbit/s

95th percentile per-packet one-way delay: 86.736 ms

Loss rate: 0.00%

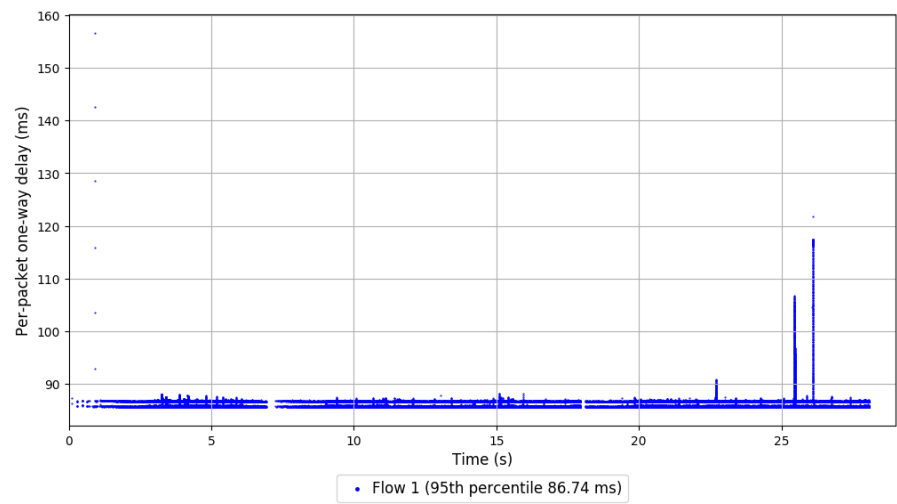
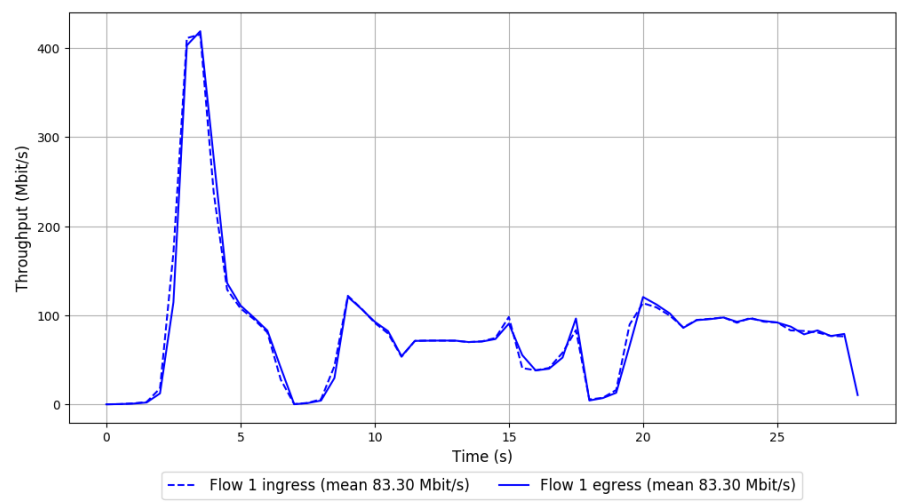
-- Flow 1:

Average throughput: 83.30 Mbit/s

95th percentile per-packet one-way delay: 86.736 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-15 22:51:10

End at: 2017-11-15 22:51:40

Below is generated by plot.py at 2017-11-16 01:01:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.63 Mbit/s

95th percentile per-packet one-way delay: 86.659 ms

Loss rate: 0.00%

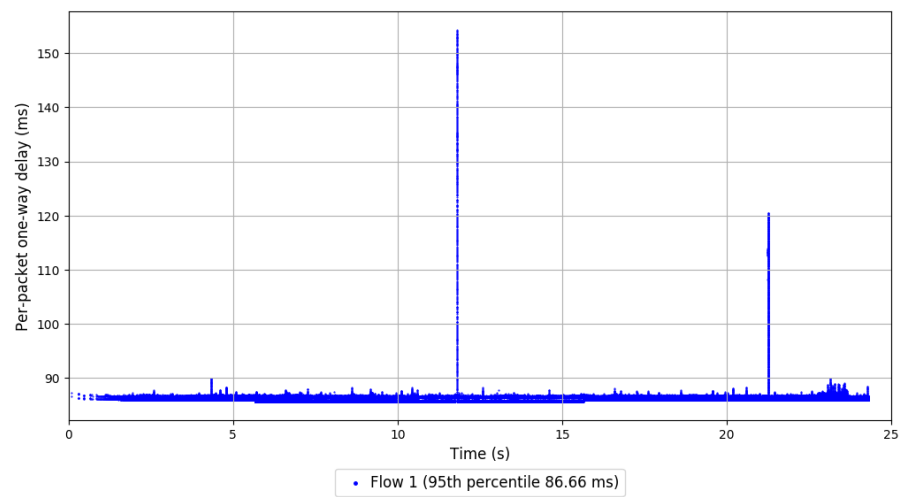
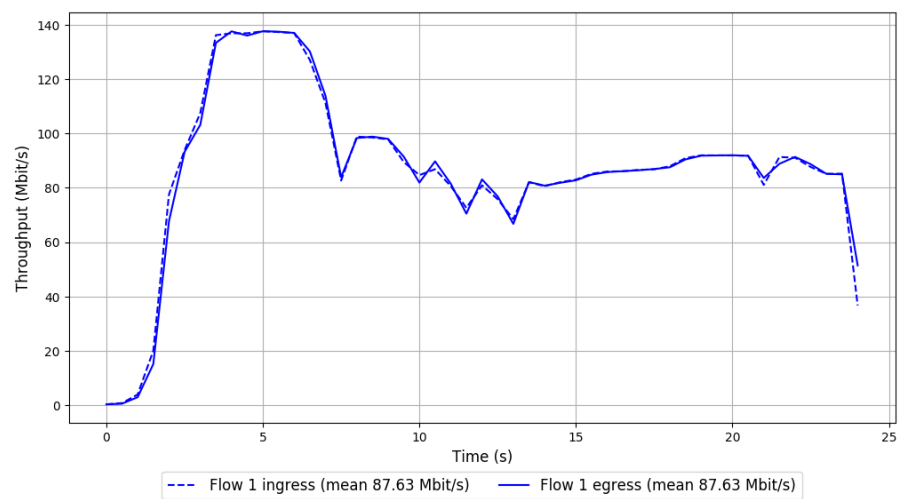
-- Flow 1:

Average throughput: 87.63 Mbit/s

95th percentile per-packet one-way delay: 86.659 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-15 23:01:57

End at: 2017-11-15 23:02:27

Below is generated by plot.py at 2017-11-16 01:01:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.79 Mbit/s

95th percentile per-packet one-way delay: 86.609 ms

Loss rate: 0.01%

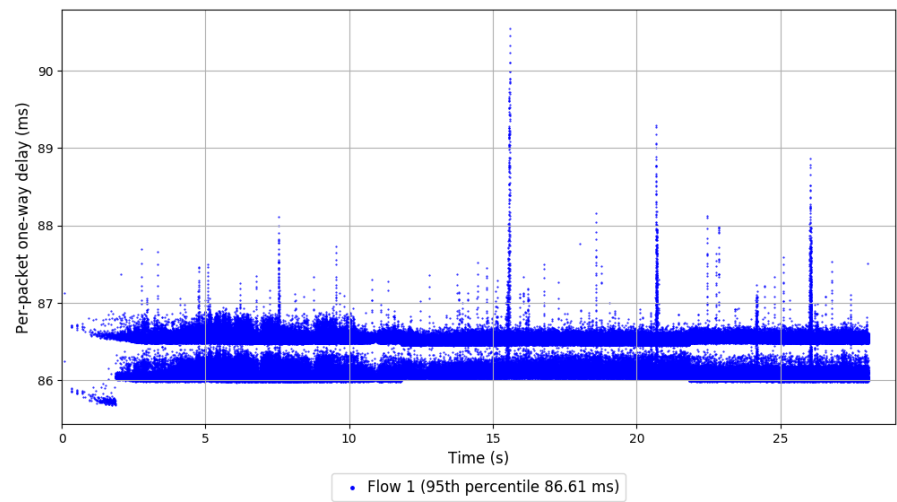
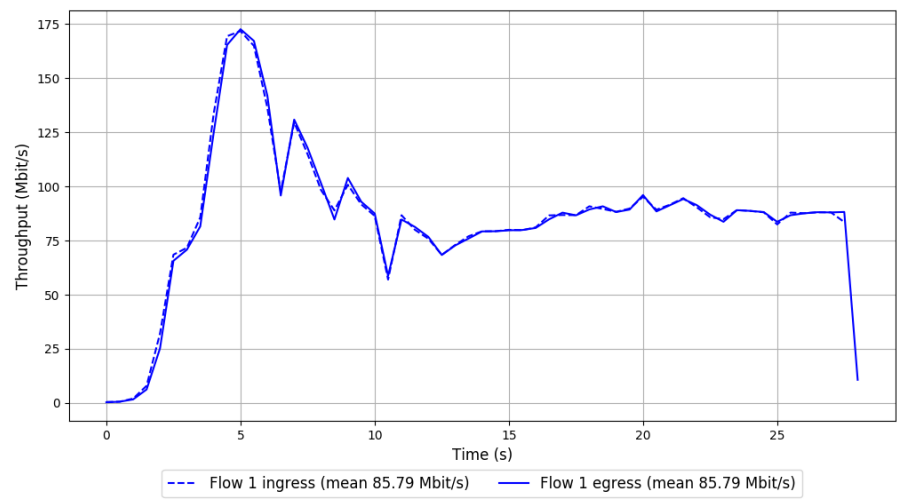
-- Flow 1:

Average throughput: 85.79 Mbit/s

95th percentile per-packet one-way delay: 86.609 ms

Loss rate: 0.01%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-15 23:12:36

End at: 2017-11-15 23:13:06

Below is generated by plot.py at 2017-11-16 01:01:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.96 Mbit/s

95th percentile per-packet one-way delay: 86.620 ms

Loss rate: 0.00%

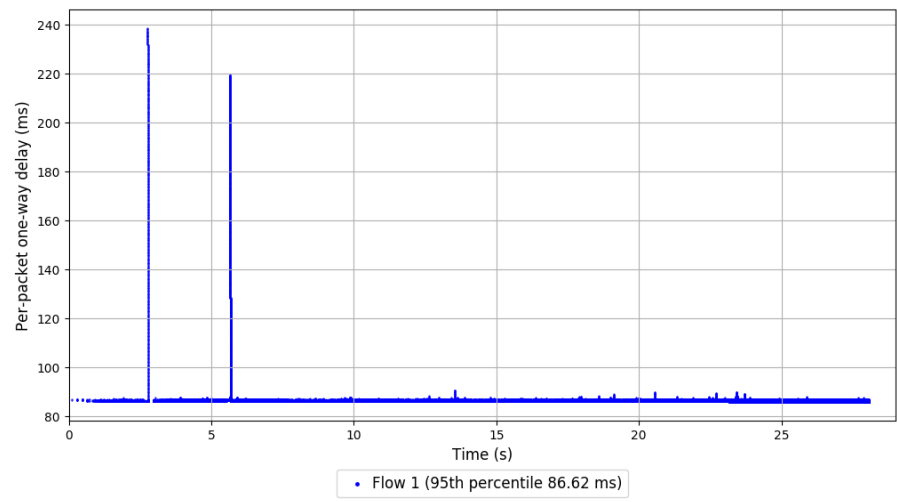
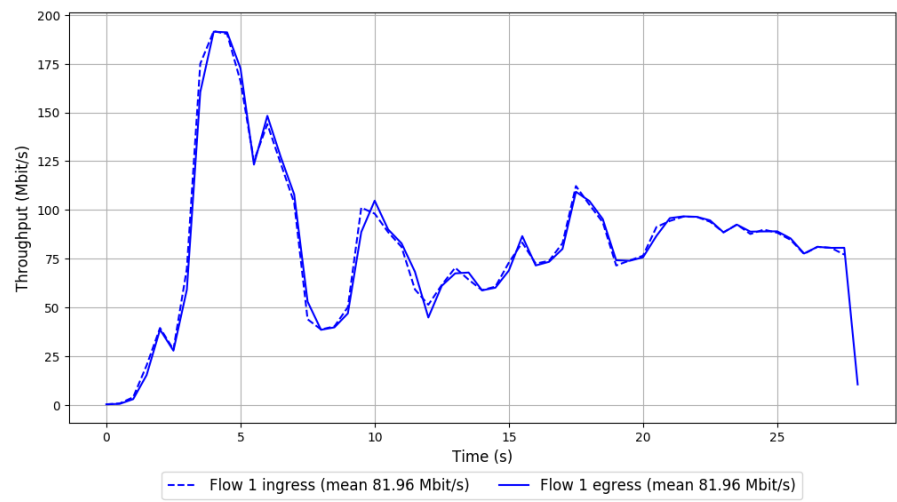
-- Flow 1:

Average throughput: 81.96 Mbit/s

95th percentile per-packet one-way delay: 86.620 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

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

End at: 2017-11-15 23:24:00

Below is generated by plot.py at 2017-11-16 01:01:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.14 Mbit/s

95th percentile per-packet one-way delay: 86.271 ms

Loss rate: 0.00%

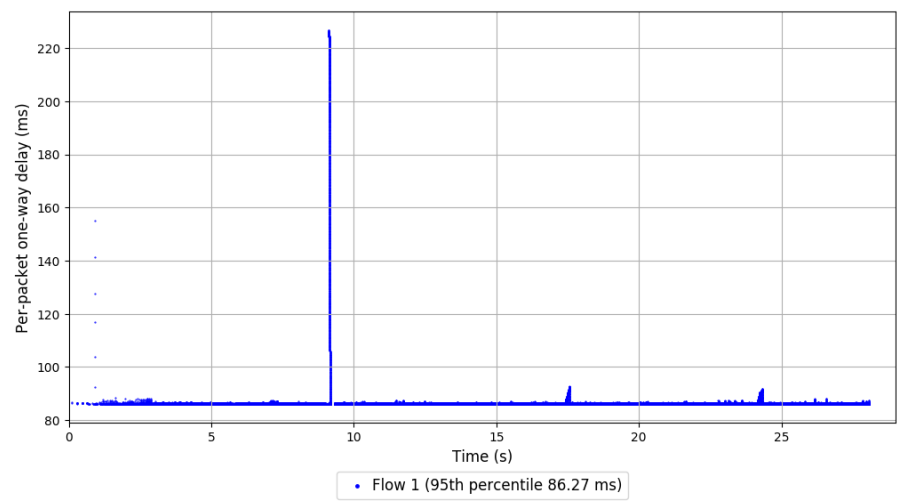
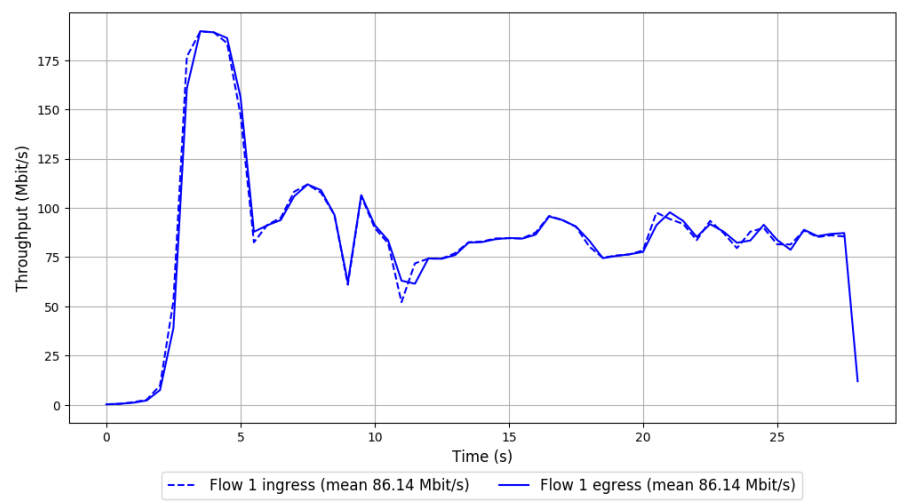
-- Flow 1:

Average throughput: 86.14 Mbit/s

95th percentile per-packet one-way delay: 86.271 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-15 23:33:53

End at: 2017-11-15 23:34:23

Below is generated by plot.py at 2017-11-16 01:01:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.45 Mbit/s

95th percentile per-packet one-way delay: 86.633 ms

Loss rate: 0.00%

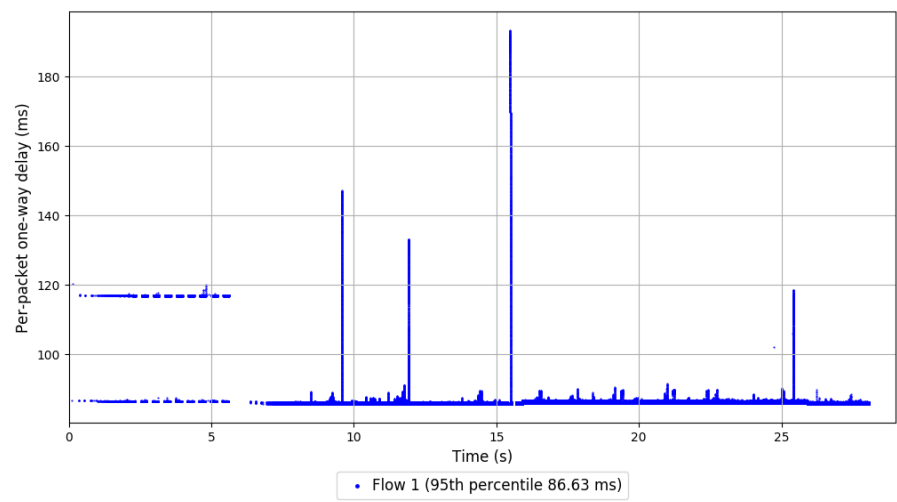
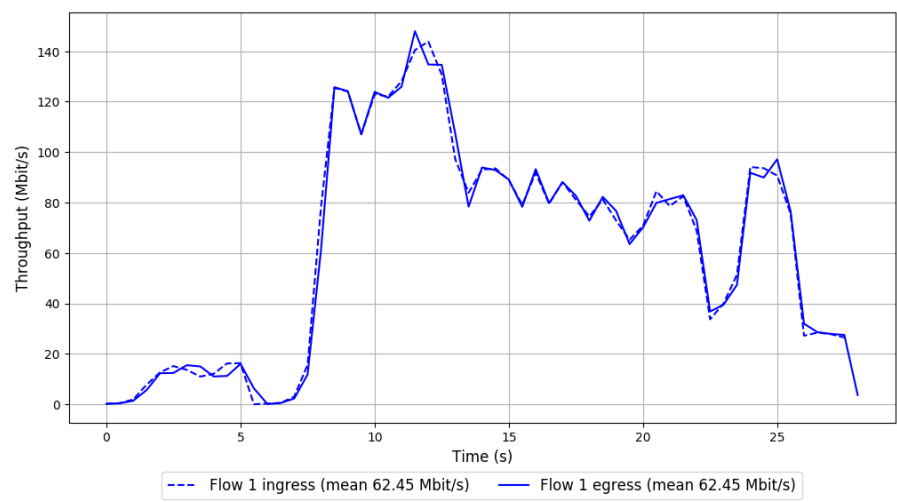
-- Flow 1:

Average throughput: 62.45 Mbit/s

95th percentile per-packet one-way delay: 86.633 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-15 23:44:48

End at: 2017-11-15 23:45:18

Below is generated by plot.py at 2017-11-16 01:01:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.34 Mbit/s

95th percentile per-packet one-way delay: 116.929 ms

Loss rate: 0.01%

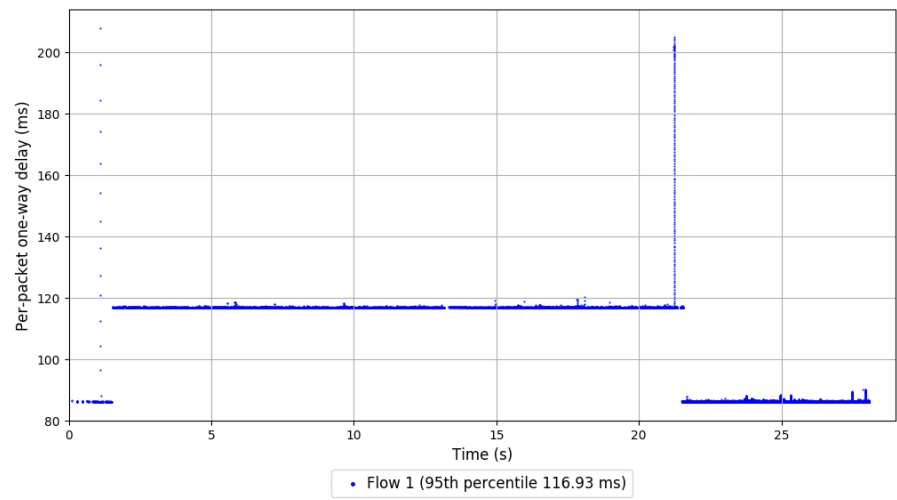
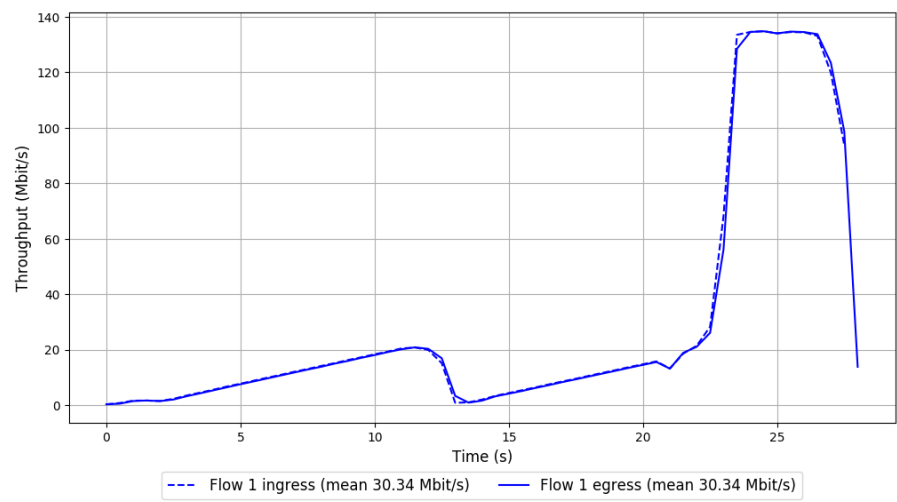
-- Flow 1:

Average throughput: 30.34 Mbit/s

95th percentile per-packet one-way delay: 116.929 ms

Loss rate: 0.01%

Run 10: Report of Copa — Data Link

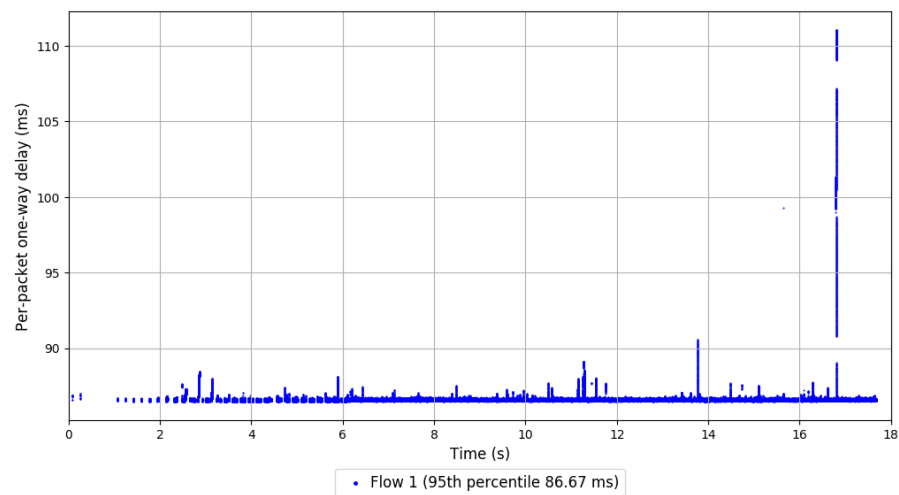
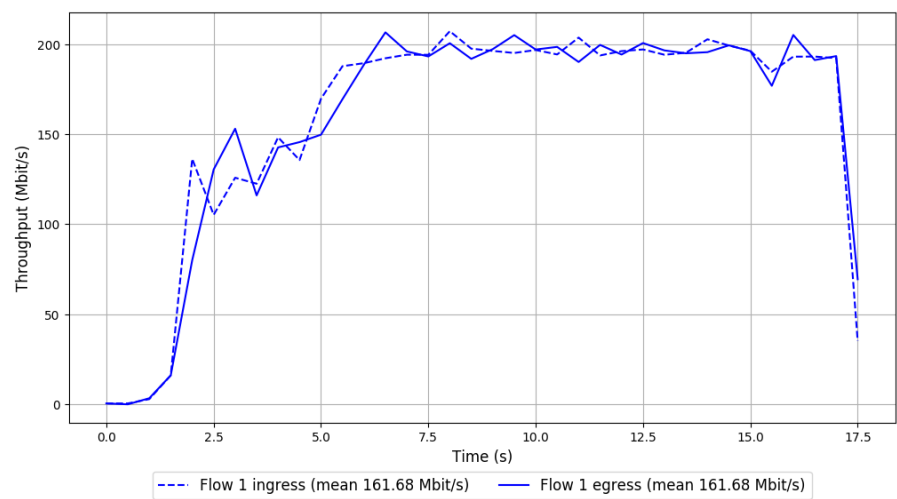


Run 1: Statistics of Indigo

Start at: 2017-11-15 22:07:02

End at: 2017-11-15 22:07:32

Run 1: Report of Indigo — Data Link

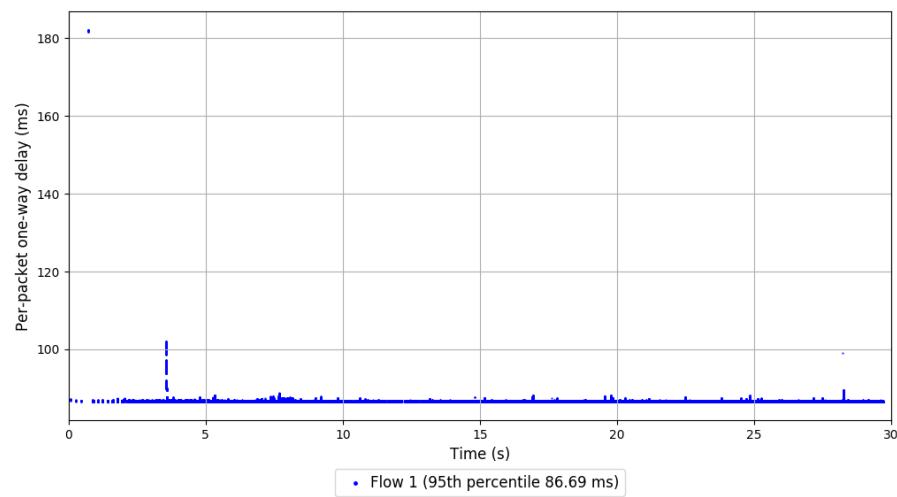
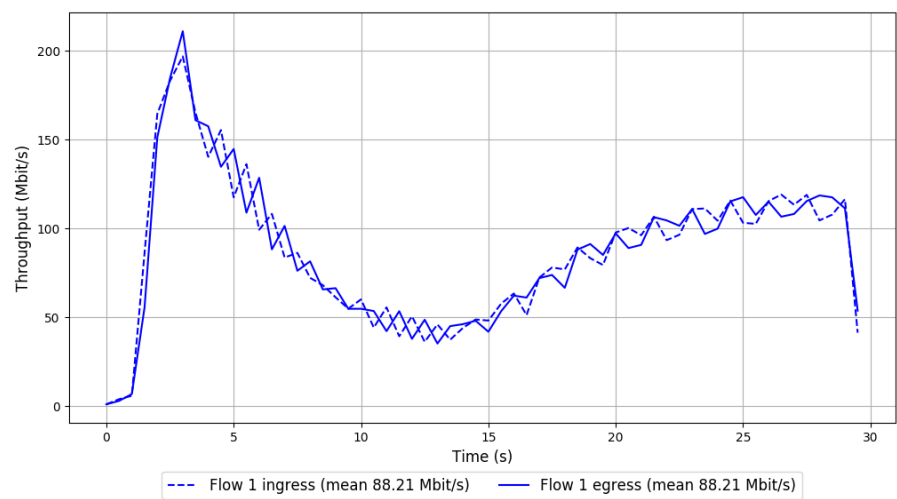


```
Run 2: Statistics of Indigo

Start at: 2017-11-15 22:17:40
End at: 2017-11-15 22:18:10

# Below is generated by plot.py at 2017-11-16 01:01:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.21 Mbit/s
95th percentile per-packet one-way delay: 86.692 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 88.21 Mbit/s
95th percentile per-packet one-way delay: 86.692 ms
Loss rate: 0.01%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-15 22:28:33

End at: 2017-11-15 22:29:03

Below is generated by plot.py at 2017-11-16 01:02:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.18 Mbit/s

95th percentile per-packet one-way delay: 86.756 ms

Loss rate: 0.01%

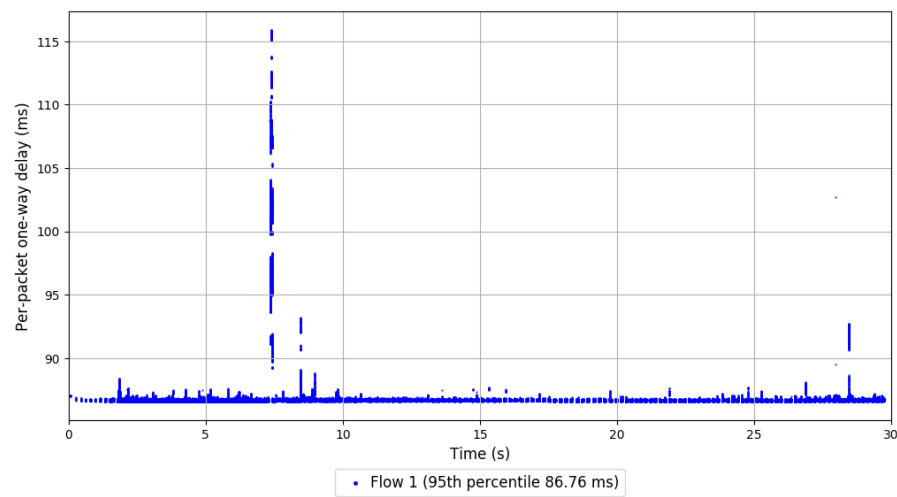
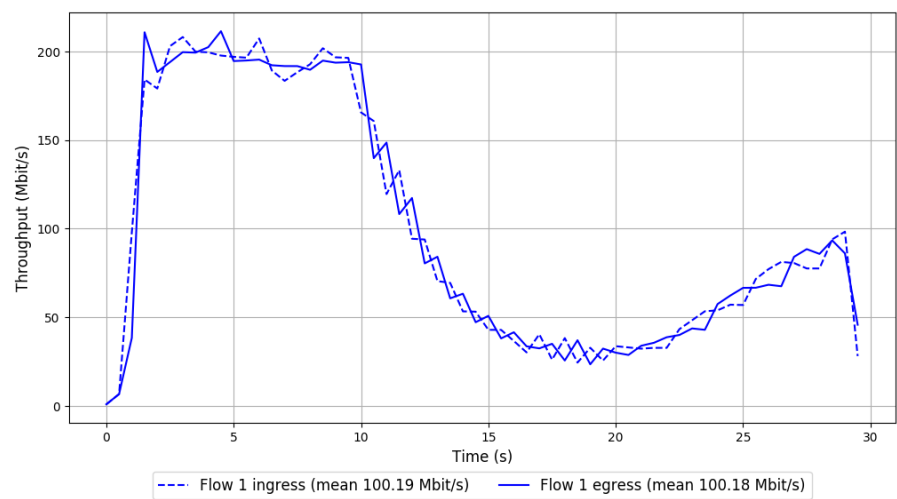
-- Flow 1:

Average throughput: 100.18 Mbit/s

95th percentile per-packet one-way delay: 86.756 ms

Loss rate: 0.01%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-15 22:39:16

End at: 2017-11-15 22:39:46

Below is generated by plot.py at 2017-11-16 01:03:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.89 Mbit/s

95th percentile per-packet one-way delay: 86.852 ms

Loss rate: 0.00%

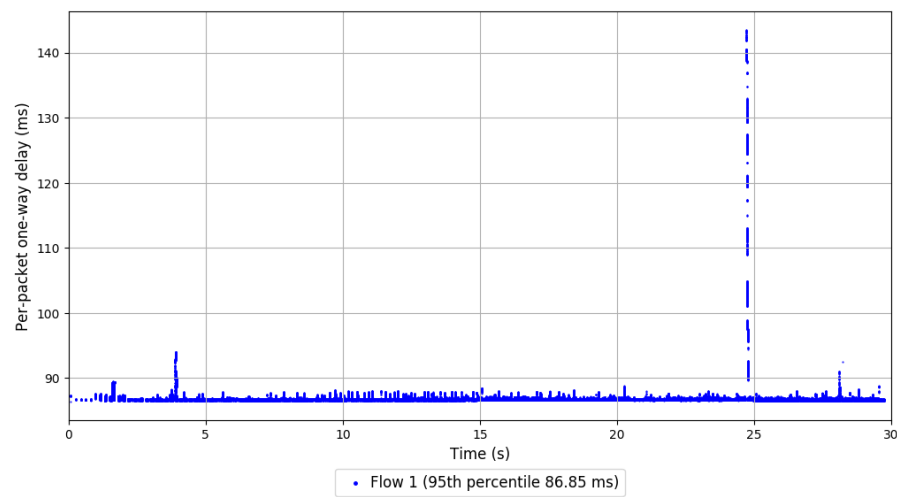
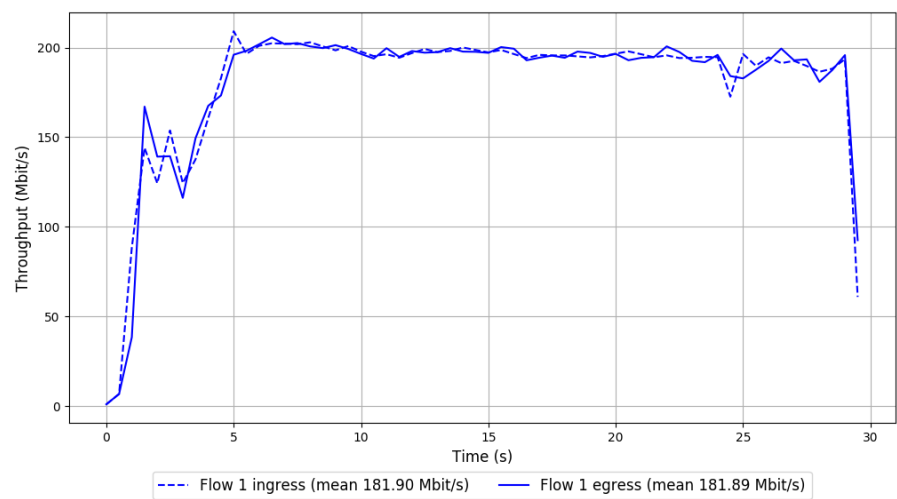
-- Flow 1:

Average throughput: 181.89 Mbit/s

95th percentile per-packet one-way delay: 86.852 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-15 22:50:18

End at: 2017-11-15 22:50:48

Below is generated by plot.py at 2017-11-16 01:03:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.91 Mbit/s

95th percentile per-packet one-way delay: 86.716 ms

Loss rate: 0.01%

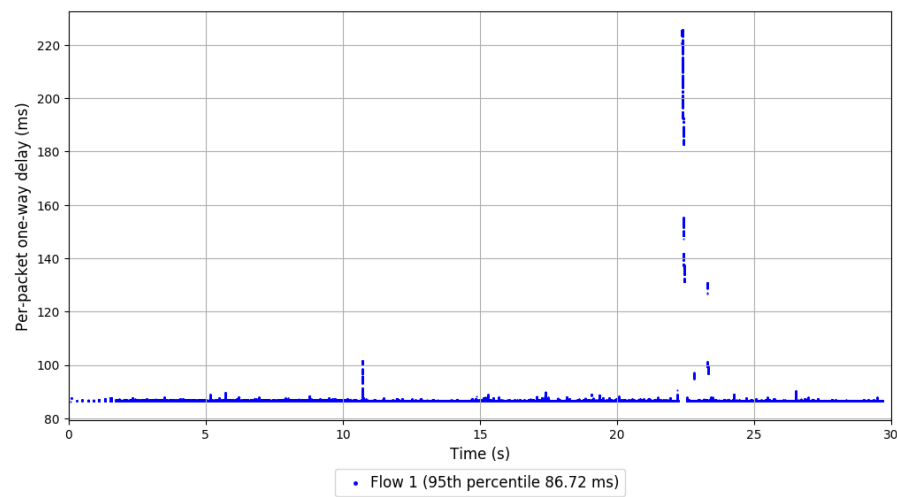
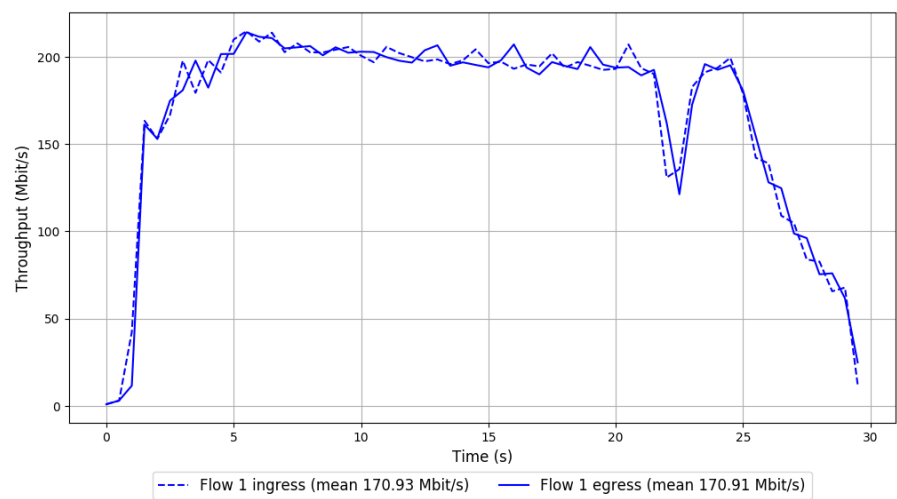
-- Flow 1:

Average throughput: 170.91 Mbit/s

95th percentile per-packet one-way delay: 86.716 ms

Loss rate: 0.01%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-15 23:01:10

End at: 2017-11-15 23:01:40

Below is generated by plot.py at 2017-11-16 01:03:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.09 Mbit/s

95th percentile per-packet one-way delay: 86.596 ms

Loss rate: 0.01%

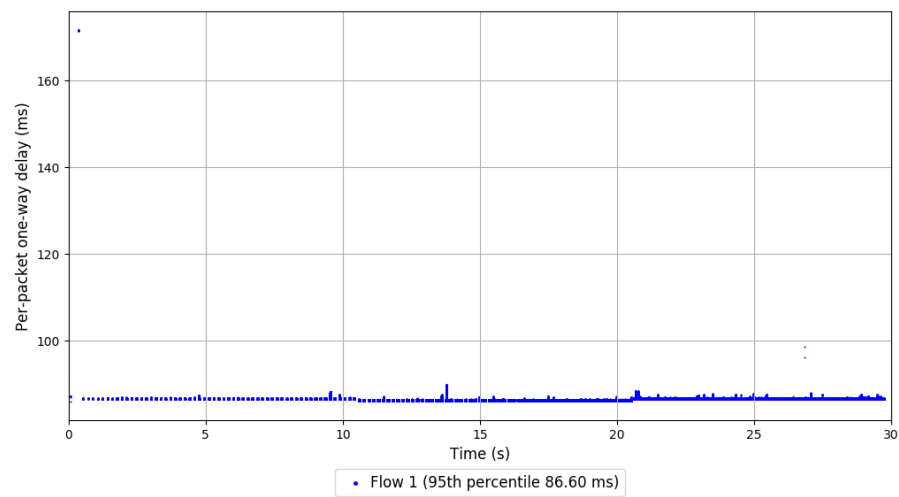
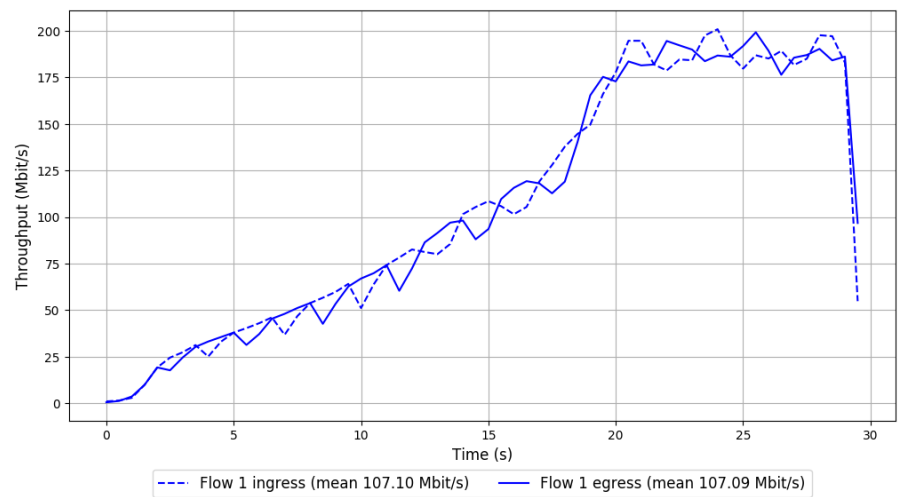
-- Flow 1:

Average throughput: 107.09 Mbit/s

95th percentile per-packet one-way delay: 86.596 ms

Loss rate: 0.01%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

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

End at: 2017-11-15 23:12:18

Below is generated by plot.py at 2017-11-16 01:03:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.14 Mbit/s

95th percentile per-packet one-way delay: 86.692 ms

Loss rate: 0.01%

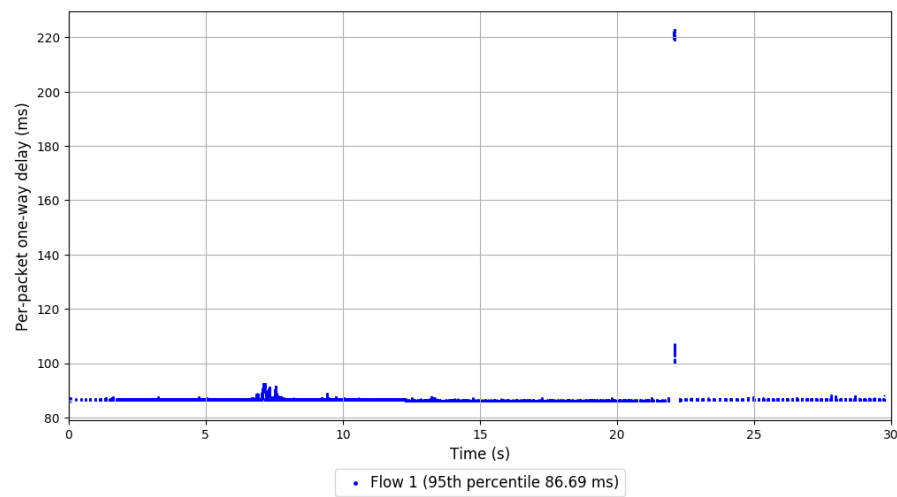
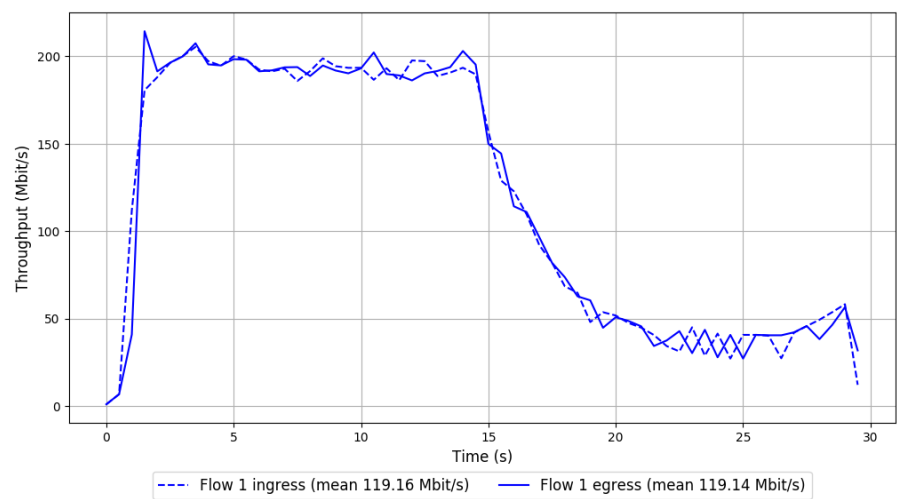
-- Flow 1:

Average throughput: 119.14 Mbit/s

95th percentile per-packet one-way delay: 86.692 ms

Loss rate: 0.01%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-15 23:22:38

End at: 2017-11-15 23:23:08

Below is generated by plot.py at 2017-11-16 01:04:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.58 Mbit/s

95th percentile per-packet one-way delay: 86.404 ms

Loss rate: 0.00%

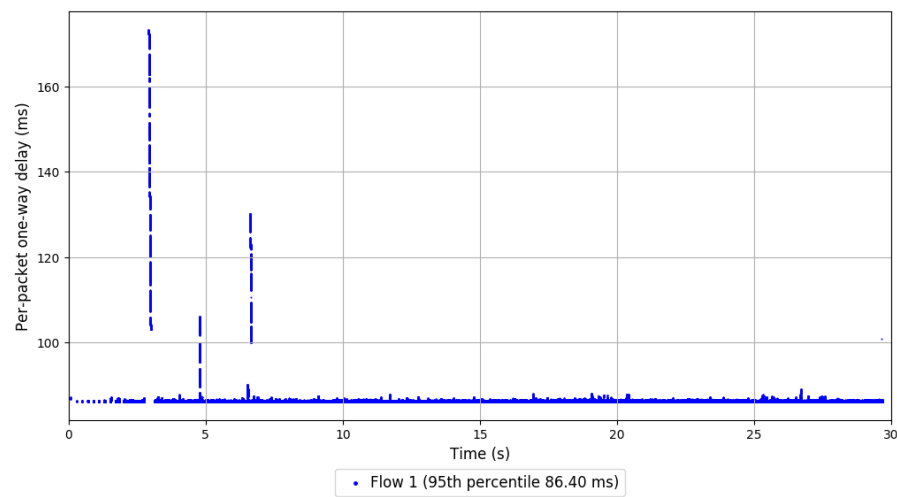
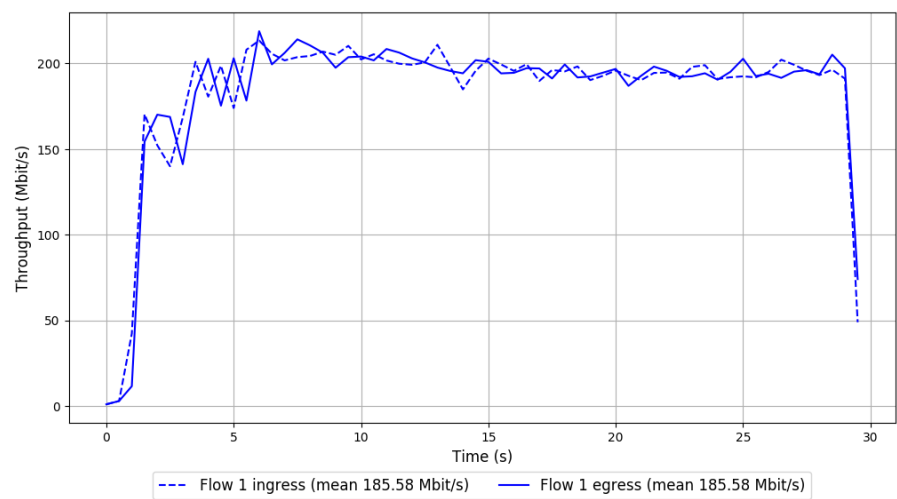
-- Flow 1:

Average throughput: 185.58 Mbit/s

95th percentile per-packet one-way delay: 86.404 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-15 23:33:01

End at: 2017-11-15 23:33:31

Below is generated by plot.py at 2017-11-16 01:04:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.01 Mbit/s

95th percentile per-packet one-way delay: 86.278 ms

Loss rate: 0.00%

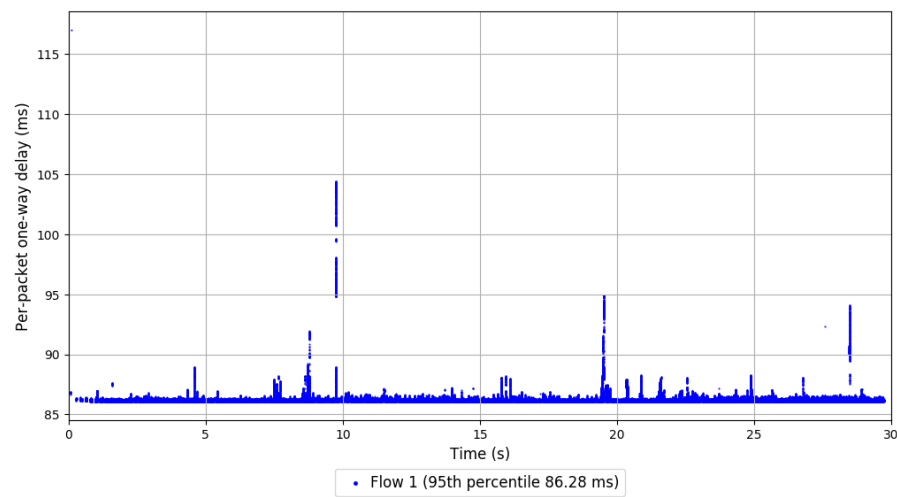
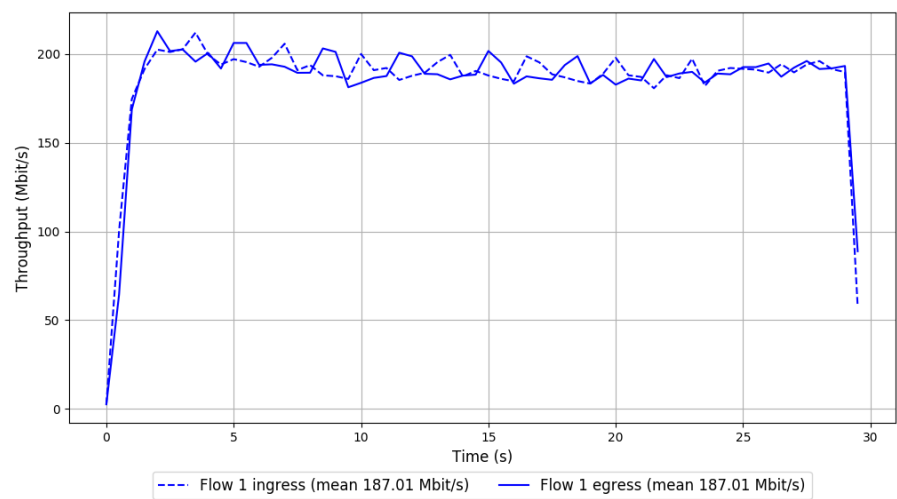
-- Flow 1:

Average throughput: 187.01 Mbit/s

95th percentile per-packet one-way delay: 86.278 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-15 23:43:54

End at: 2017-11-15 23:44:24

Below is generated by plot.py at 2017-11-16 01:04:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.58 Mbit/s

95th percentile per-packet one-way delay: 86.309 ms

Loss rate: 0.00%

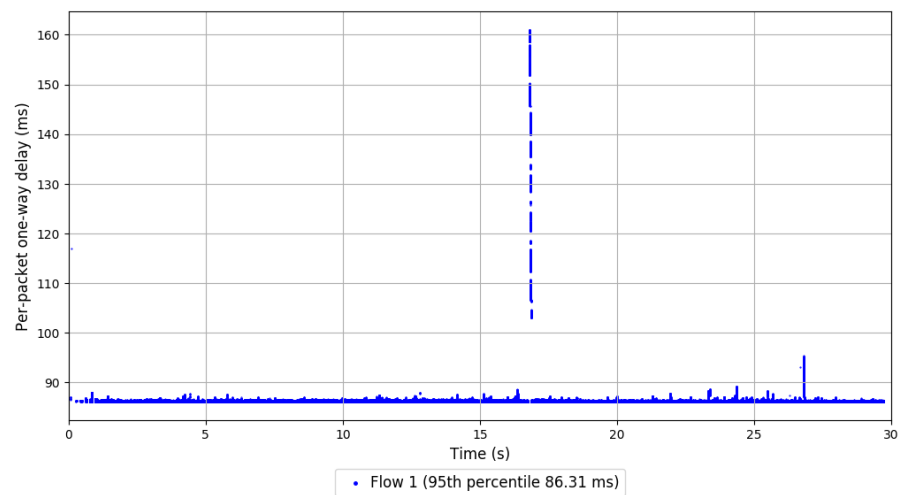
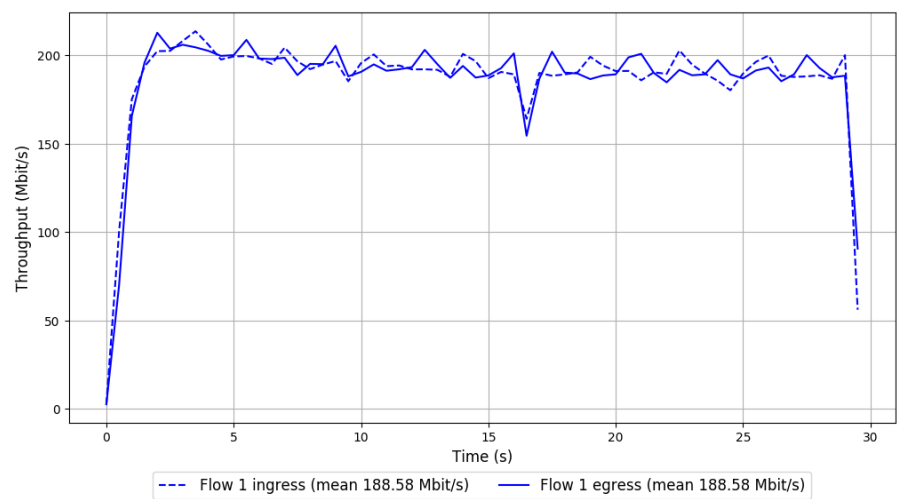
-- Flow 1:

Average throughput: 188.58 Mbit/s

95th percentile per-packet one-way delay: 86.309 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

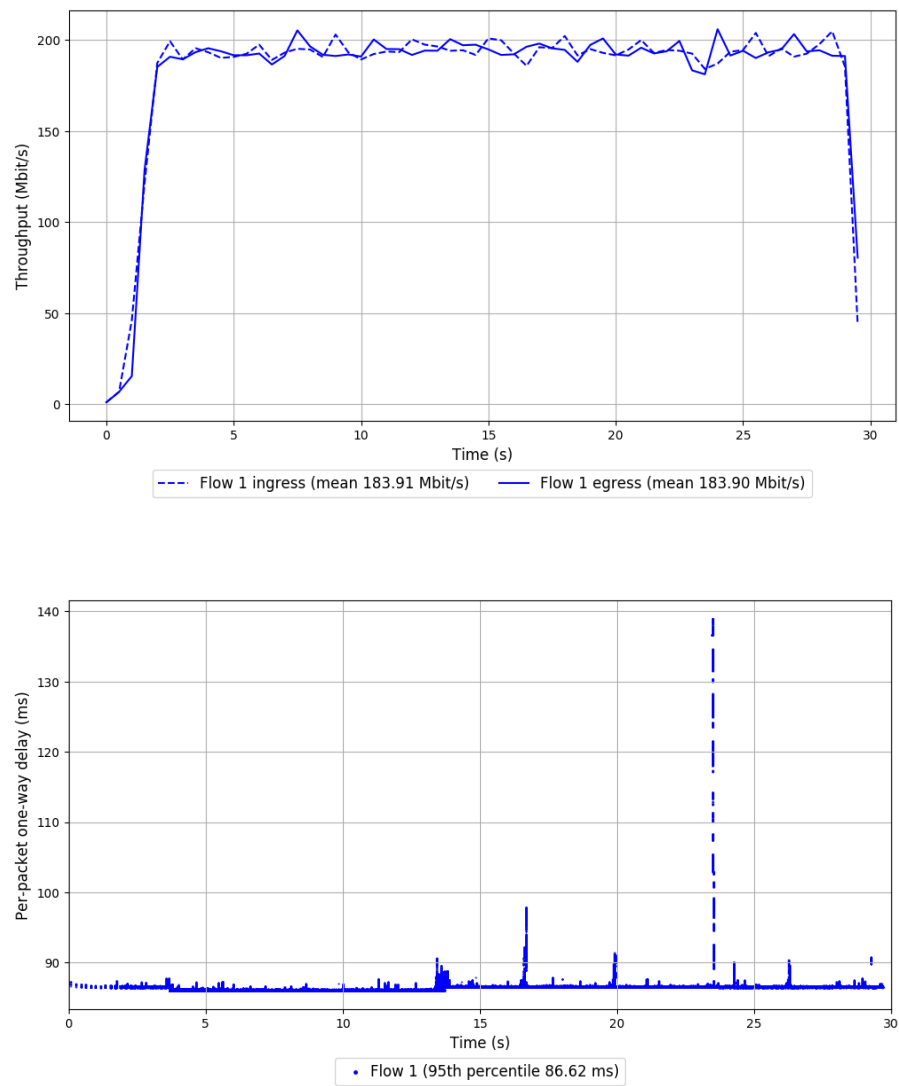


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-15 22:16:47
End at: 2017-11-15 22:17:17

# Below is generated by plot.py at 2017-11-16 01:05:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.90 Mbit/s
95th percentile per-packet one-way delay: 86.616 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 183.90 Mbit/s
95th percentile per-packet one-way delay: 86.616 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-calib — Data Link

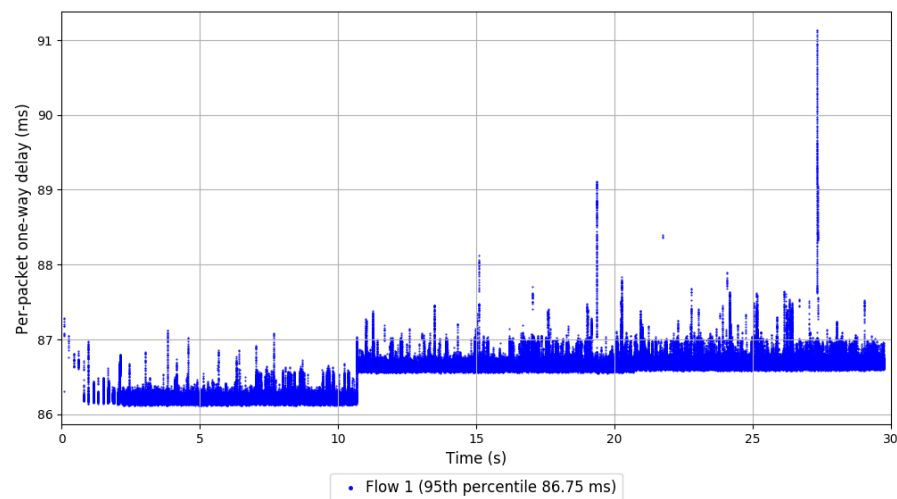
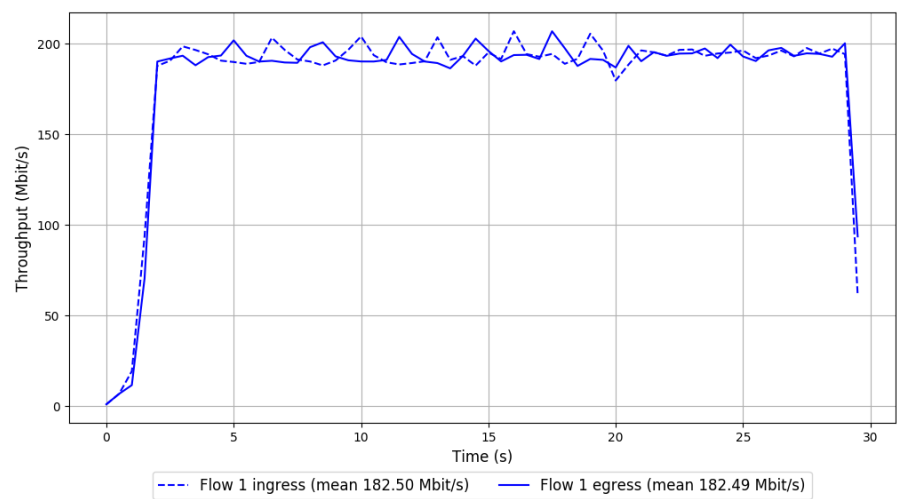


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-15 22:27:40
End at: 2017-11-15 22:28:10

# Below is generated by plot.py at 2017-11-16 01:05:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.49 Mbit/s
95th percentile per-packet one-way delay: 86.753 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 182.49 Mbit/s
95th percentile per-packet one-way delay: 86.753 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link

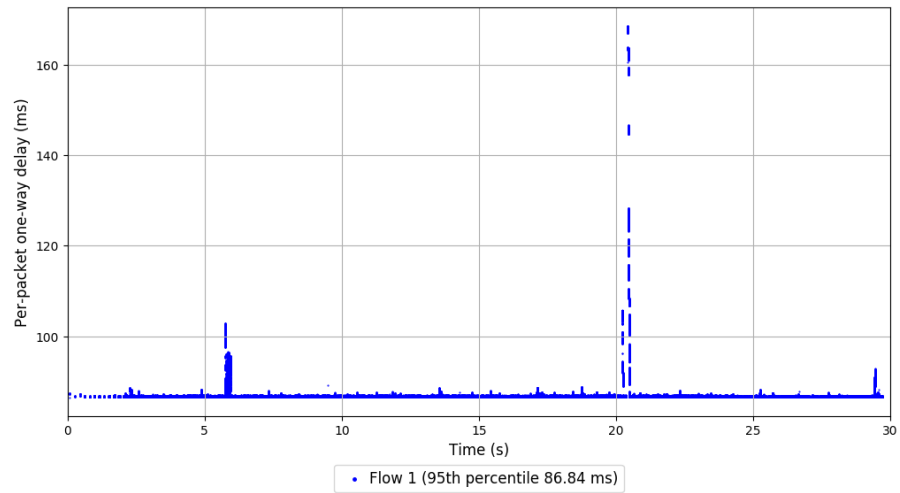
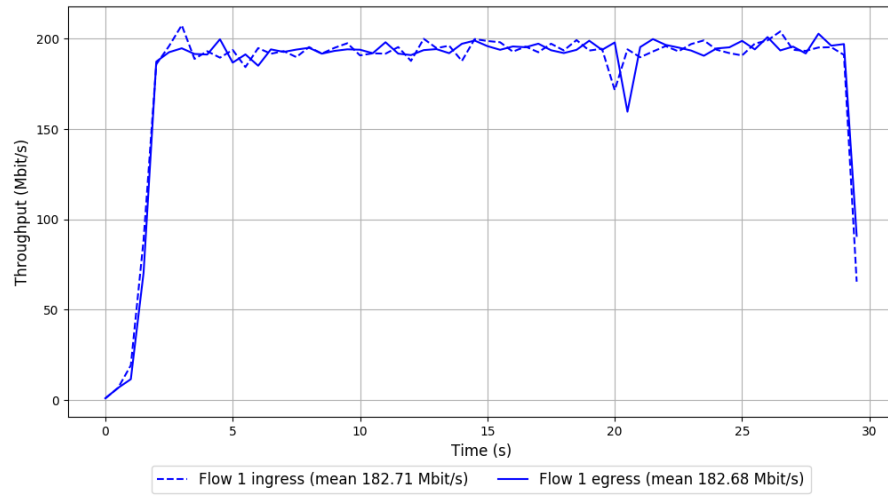


```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-15 22:38:23
End at: 2017-11-15 22:38:53

# Below is generated by plot.py at 2017-11-16 01:06:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.68 Mbit/s
95th percentile per-packet one-way delay: 86.837 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 182.68 Mbit/s
95th percentile per-packet one-way delay: 86.837 ms
Loss rate: 0.02%
```

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-15 22:49:25

End at: 2017-11-15 22:49:55

Below is generated by plot.py at 2017-11-16 01:06:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.41 Mbit/s

95th percentile per-packet one-way delay: 86.679 ms

Loss rate: 0.00%

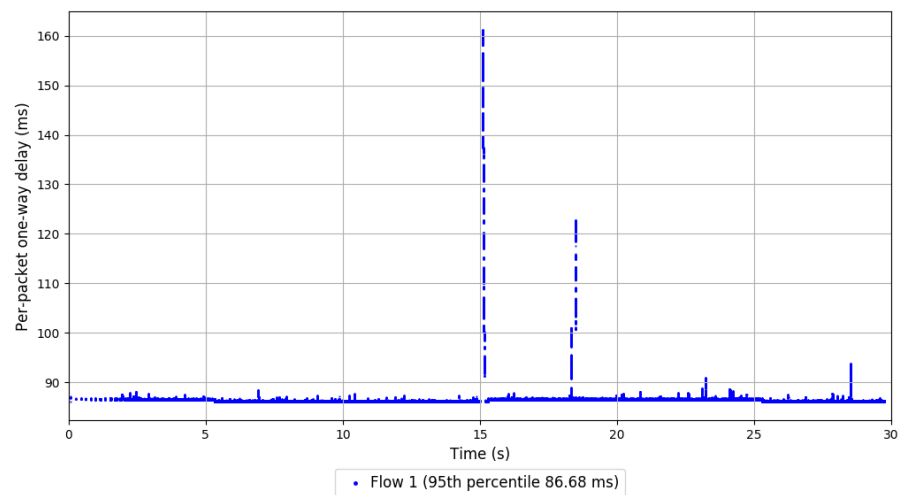
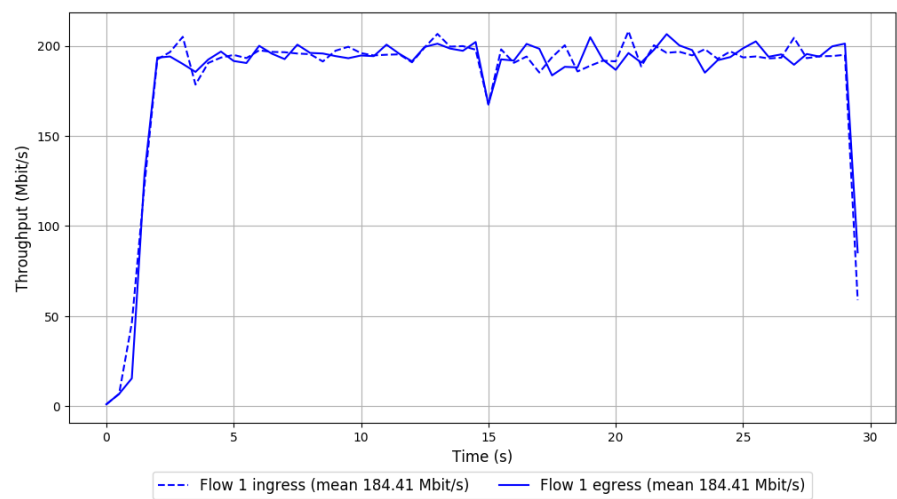
-- Flow 1:

Average throughput: 184.41 Mbit/s

95th percentile per-packet one-way delay: 86.679 ms

Loss rate: 0.00%

Run 4: Report of Indigo-calib — Data Link

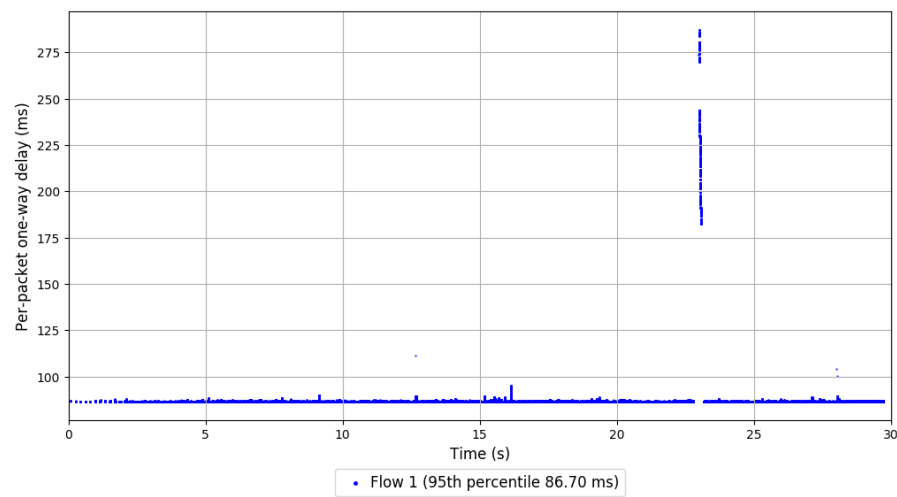
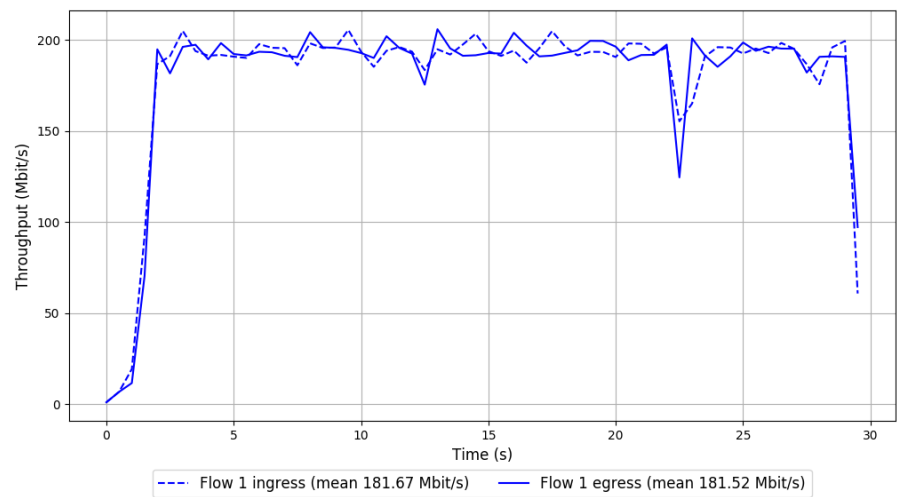


```
Run 5: Statistics of Indigo-calib

Start at: 2017-11-15 23:00:18
End at: 2017-11-15 23:00:48

# Below is generated by plot.py at 2017-11-16 01:06:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.52 Mbit/s
95th percentile per-packet one-way delay: 86.705 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 181.52 Mbit/s
95th percentile per-packet one-way delay: 86.705 ms
Loss rate: 0.08%
```

Run 5: Report of Indigo-calib — Data Link

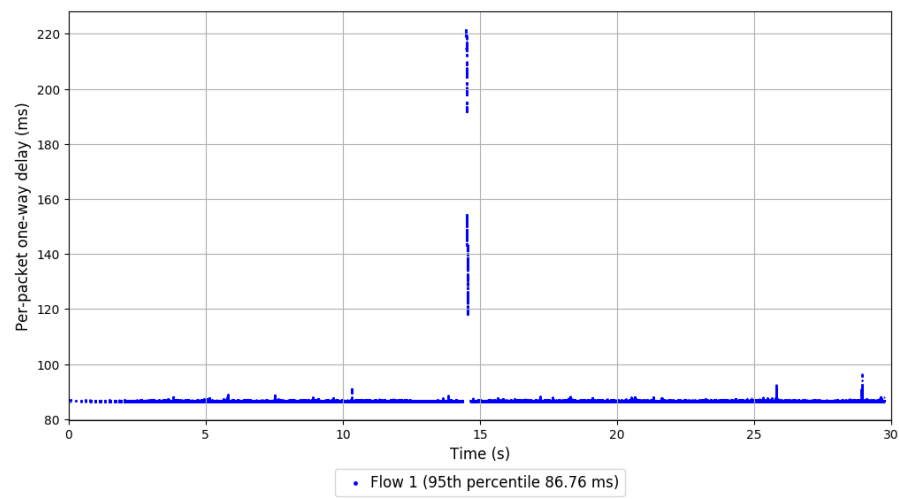
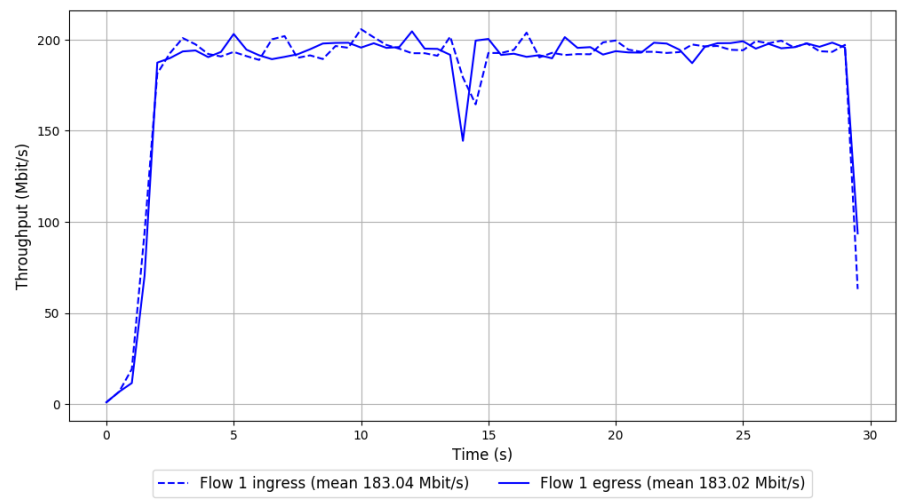


```
Run 6: Statistics of Indigo-calib

Start at: 2017-11-15 23:10:56
End at: 2017-11-15 23:11:26

# Below is generated by plot.py at 2017-11-16 01:07:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.02 Mbit/s
95th percentile per-packet one-way delay: 86.760 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 183.02 Mbit/s
95th percentile per-packet one-way delay: 86.760 ms
Loss rate: 0.01%
```

Run 6: Report of Indigo-calib — Data Link

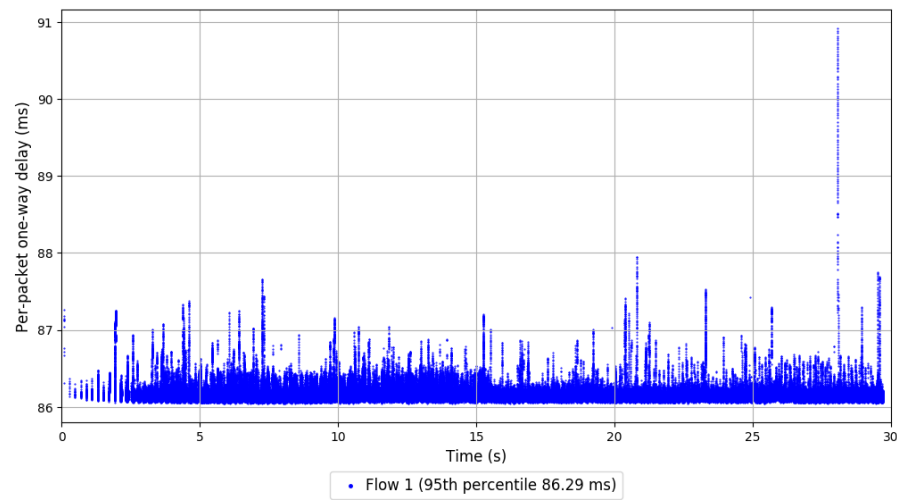
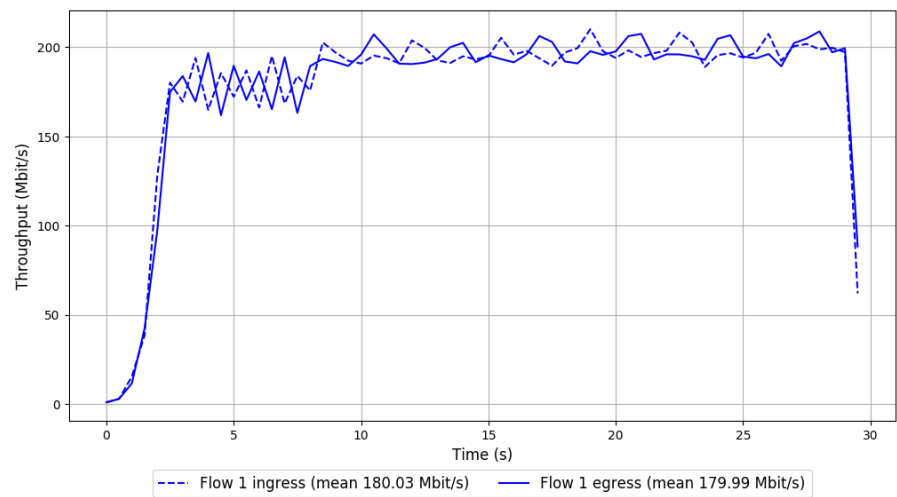


```
Run 7: Statistics of Indigo-calib

Start at: 2017-11-15 23:21:45
End at: 2017-11-15 23:22:15

# Below is generated by plot.py at 2017-11-16 01:07:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 179.99 Mbit/s
95th percentile per-packet one-way delay: 86.294 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 179.99 Mbit/s
95th percentile per-packet one-way delay: 86.294 ms
Loss rate: 0.02%
```

Run 7: Report of Indigo-calib — Data Link

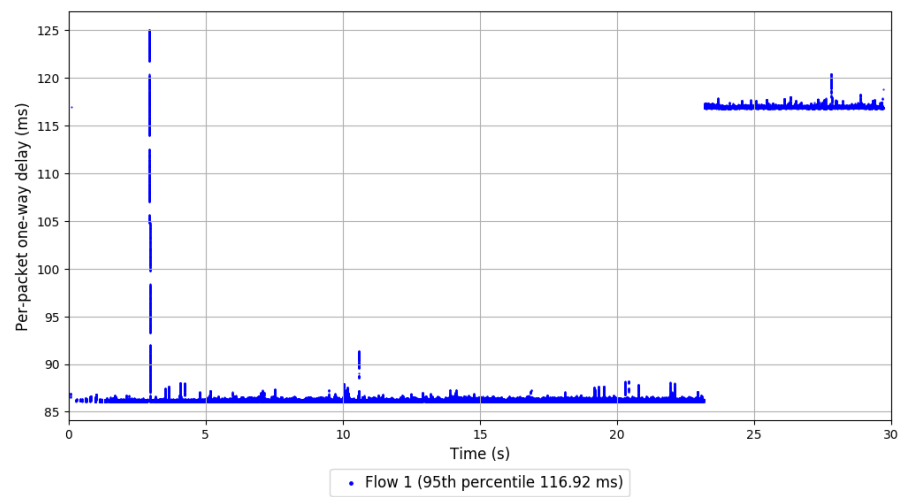
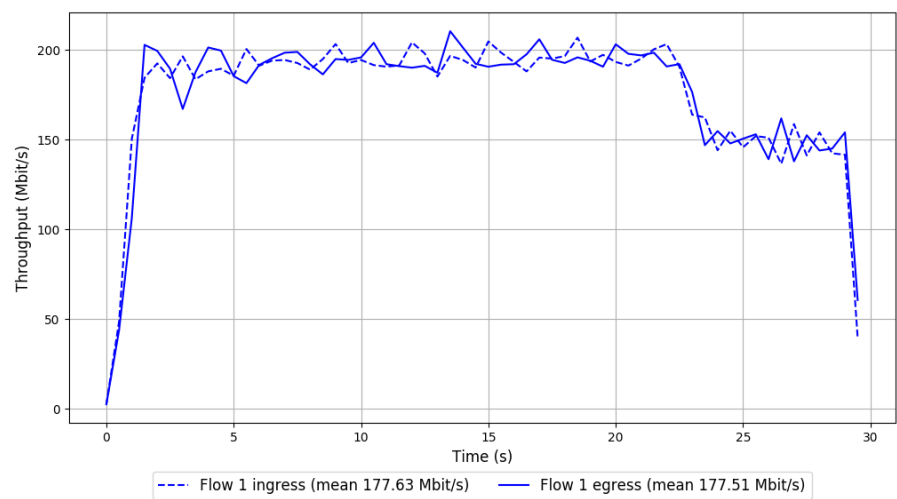


```
Run 8: Statistics of Indigo-calib

Start at: 2017-11-15 23:32:07
End at: 2017-11-15 23:32:38

# Below is generated by plot.py at 2017-11-16 01:07:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.51 Mbit/s
95th percentile per-packet one-way delay: 116.921 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 177.51 Mbit/s
95th percentile per-packet one-way delay: 116.921 ms
Loss rate: 0.03%
```

Run 8: Report of Indigo-calib — Data Link

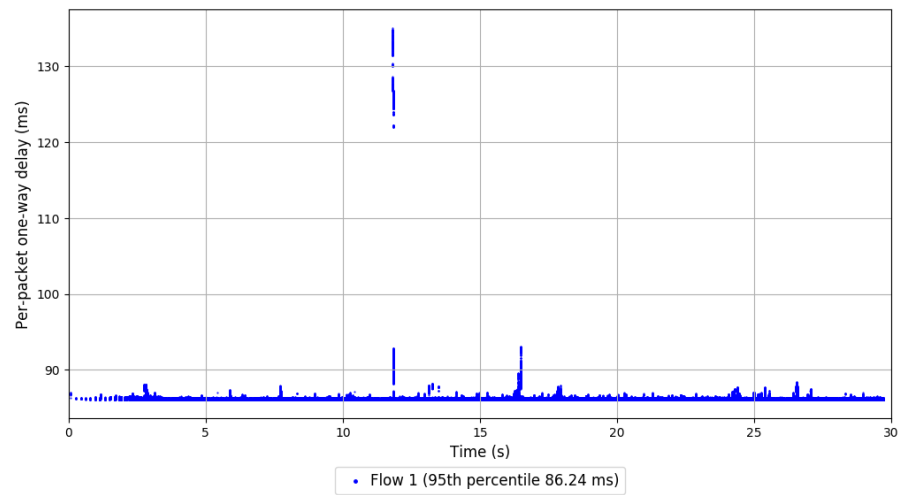
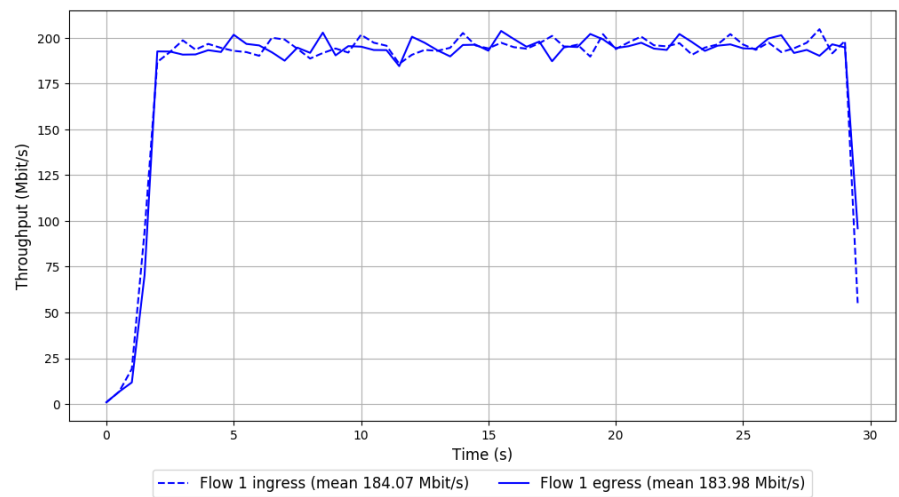


```
Run 9: Statistics of Indigo-calib

Start at: 2017-11-15 23:42:59
End at: 2017-11-15 23:43:29

# Below is generated by plot.py at 2017-11-16 01:07:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.98 Mbit/s
95th percentile per-packet one-way delay: 86.238 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 183.98 Mbit/s
95th percentile per-packet one-way delay: 86.238 ms
Loss rate: 0.05%
```

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-15 23:53:37

End at: 2017-11-15 23:54:07

Below is generated by plot.py at 2017-11-16 01:07:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.64 Mbit/s

95th percentile per-packet one-way delay: 86.288 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 176.64 Mbit/s

95th percentile per-packet one-way delay: 86.288 ms

Loss rate: 0.00%

Run 10: Report of Indigo-calib — Data Link

