

Pantheon Report

Generated at 2017-11-16 11:09:06 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

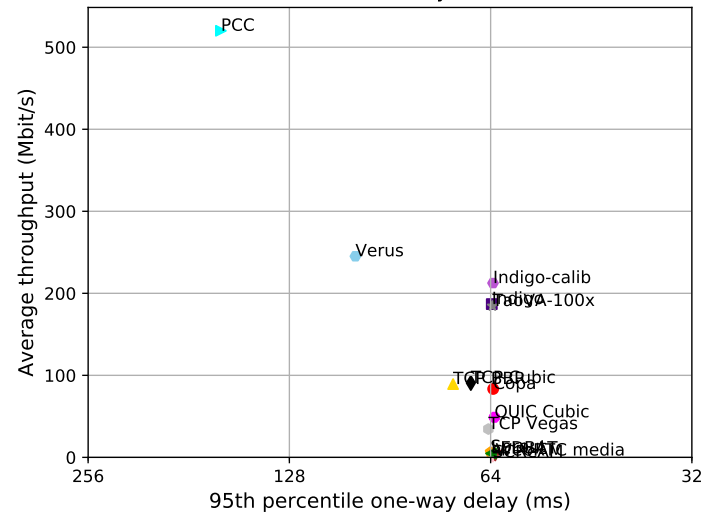
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

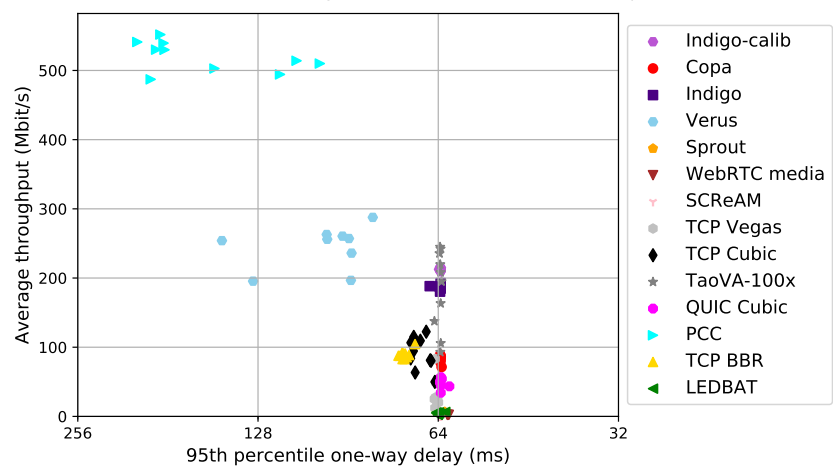
Git summary:

```
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-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	89.37	72.84	0.11
TCP Cubic	10	90.66	68.52	0.08
LEDBAT	10	4.75	63.93	0.35
PCC	10	520.07	162.03	1.39
QUIC Cubic	10	48.85	63.16	0.01
SCReAM	10	0.22	63.57	0.01
WebRTC media	10	2.25	62.99	0.00
Sprout	10	6.47	64.06	0.17
TaoVA-100x	10	184.54	63.61	0.00
TCP Vegas	10	34.51	64.50	0.12
Verus	9	245.16	101.97	0.20
Copa	10	83.41	63.44	0.00
Indigo	10	186.87	63.75	0.00
Indigo-calib	10	212.49	63.48	0.02

Run 1: Statistics of TCP BBR

Start at: 2017-11-16 07:57:12

End at: 2017-11-16 07:57:42

Below is generated by plot.py at 2017-11-16 10:29:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.71 Mbit/s

95th percentile per-packet one-way delay: 74.582 ms

Loss rate: 0.01%

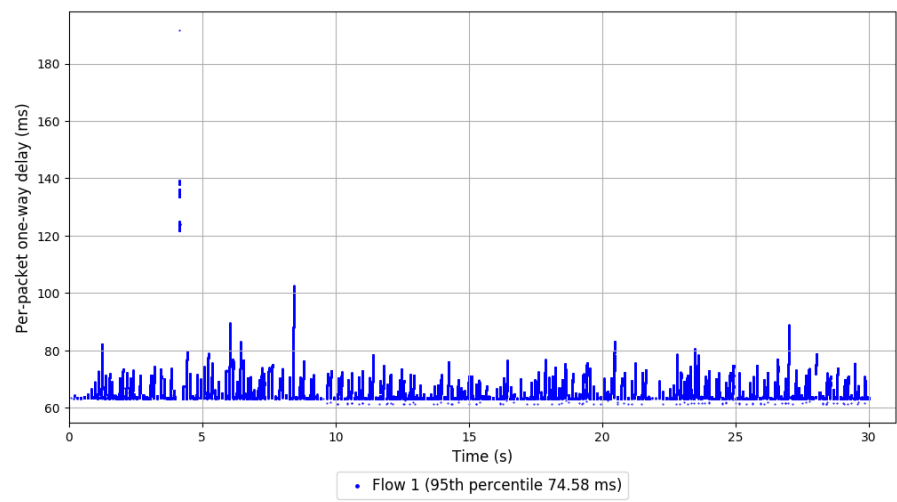
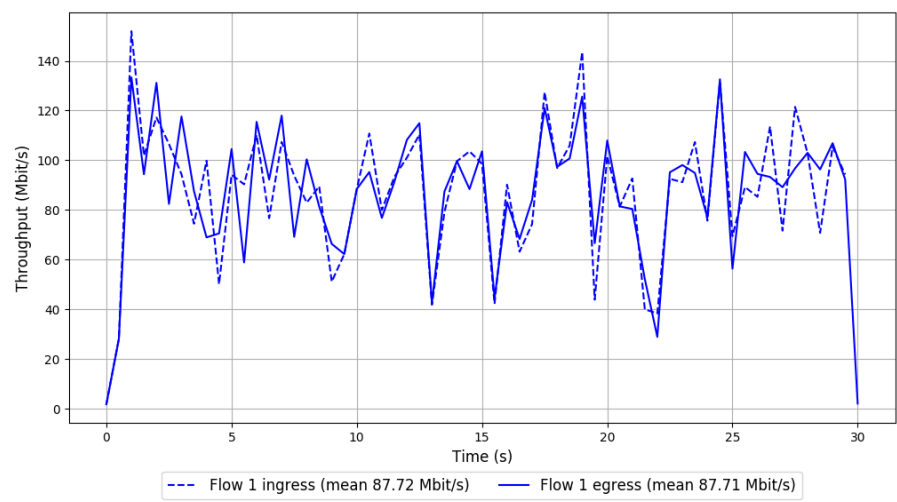
-- Flow 1:

Average throughput: 87.71 Mbit/s

95th percentile per-packet one-way delay: 74.582 ms

Loss rate: 0.01%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-16 08:07:41

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

Below is generated by plot.py at 2017-11-16 10:29:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.96 Mbit/s

95th percentile per-packet one-way delay: 72.703 ms

Loss rate: 0.04%

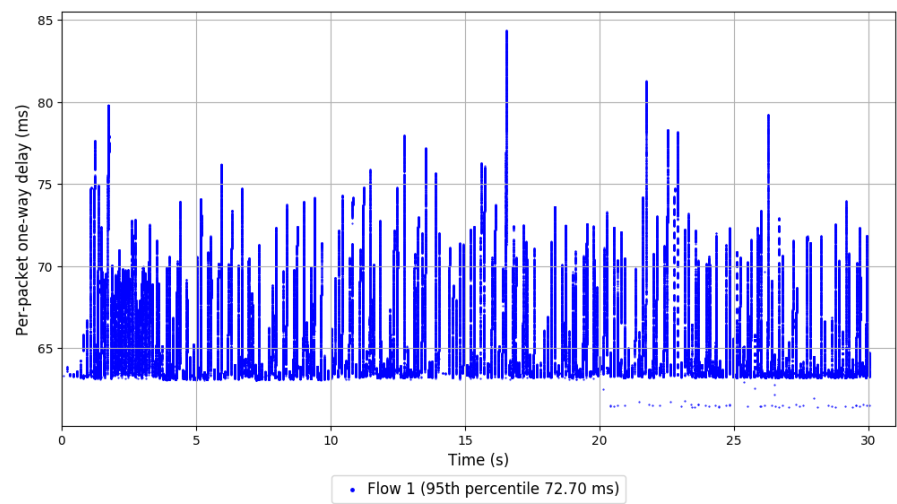
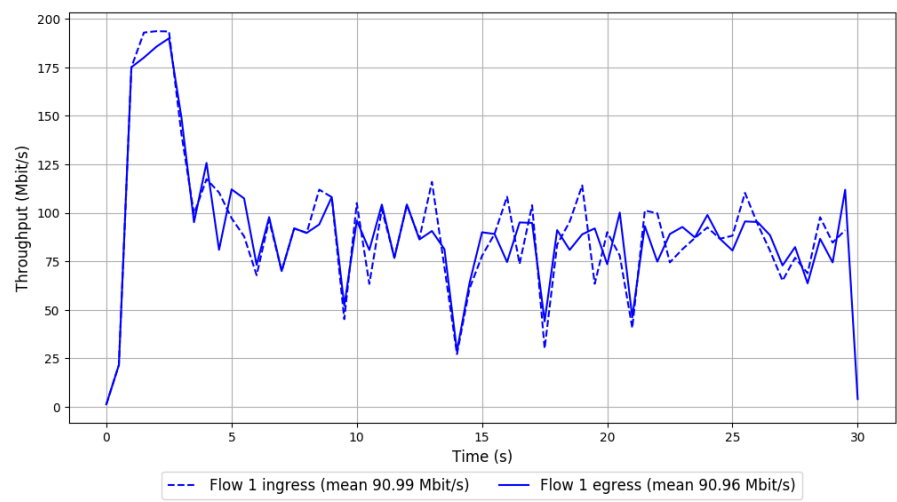
-- Flow 1:

Average throughput: 90.96 Mbit/s

95th percentile per-packet one-way delay: 72.703 ms

Loss rate: 0.04%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-16 08:18:06

End at: 2017-11-16 08:18:36

Below is generated by plot.py at 2017-11-16 10:29:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.52 Mbit/s

95th percentile per-packet one-way delay: 74.263 ms

Loss rate: 0.07%

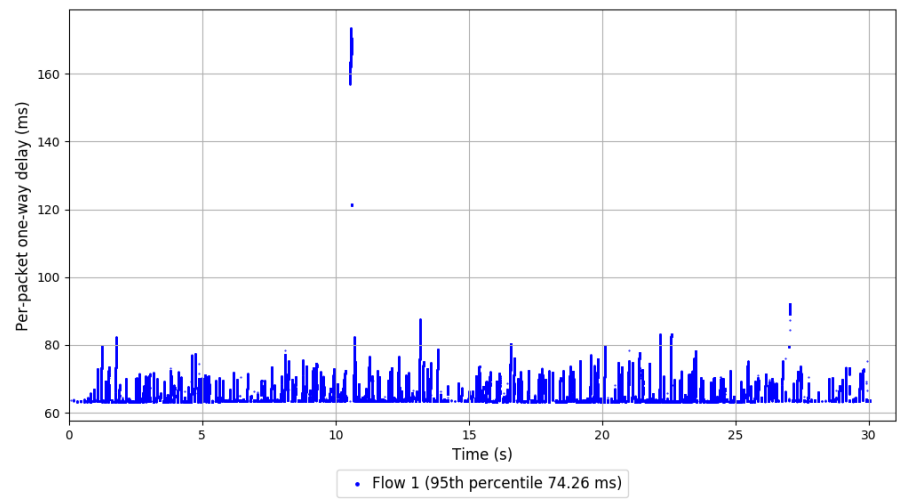
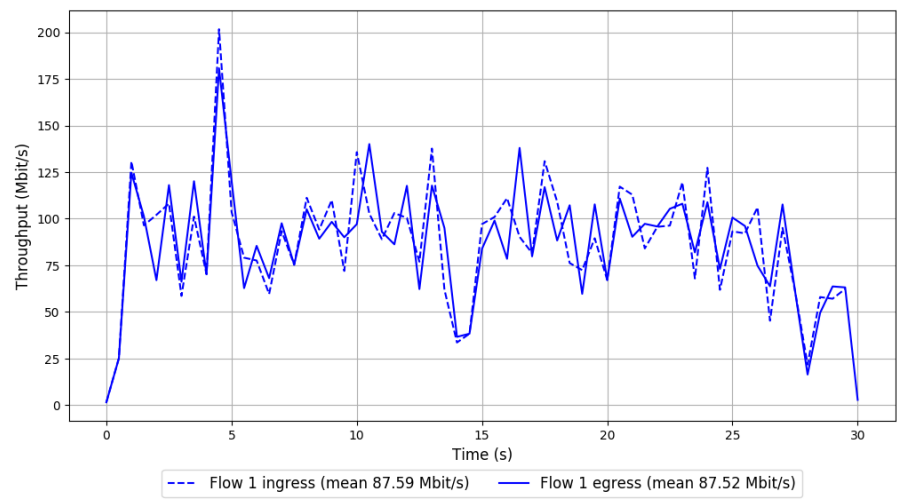
-- Flow 1:

Average throughput: 87.52 Mbit/s

95th percentile per-packet one-way delay: 74.263 ms

Loss rate: 0.07%

Run 3: Report of TCP BBR — Data Link

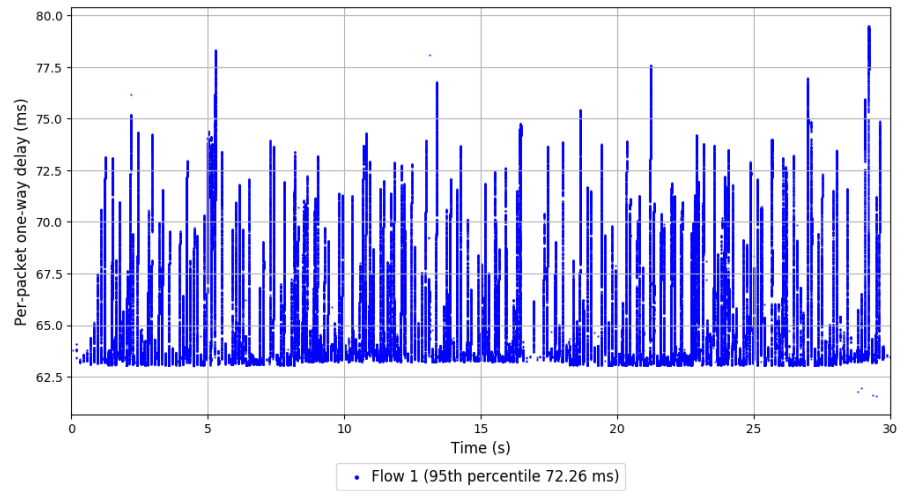
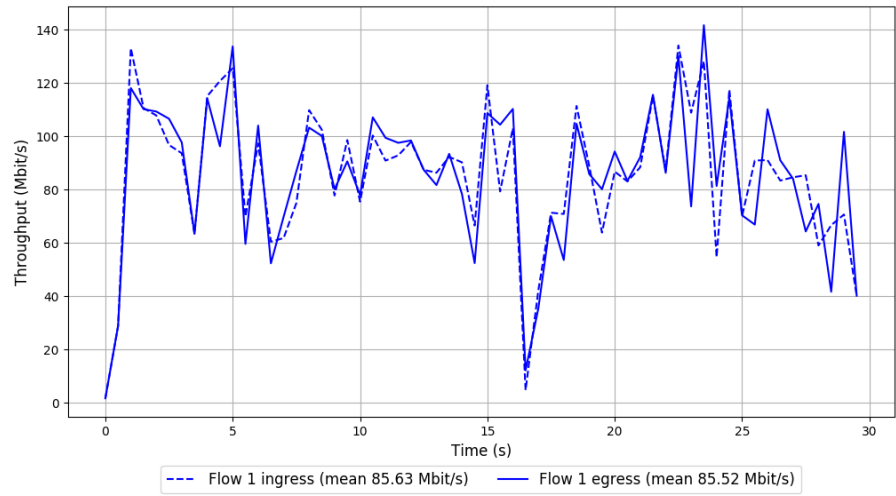


```
Run 4: Statistics of TCP BBR

Start at: 2017-11-16 08:28:33
End at: 2017-11-16 08:29:03

# Below is generated by plot.py at 2017-11-16 10:29:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.52 Mbit/s
95th percentile per-packet one-way delay: 72.258 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 85.52 Mbit/s
95th percentile per-packet one-way delay: 72.258 ms
Loss rate: 0.14%
```

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-16 08:39:00

End at: 2017-11-16 08:39:30

Below is generated by plot.py at 2017-11-16 10:29:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.83 Mbit/s

95th percentile per-packet one-way delay: 73.424 ms

Loss rate: 0.10%

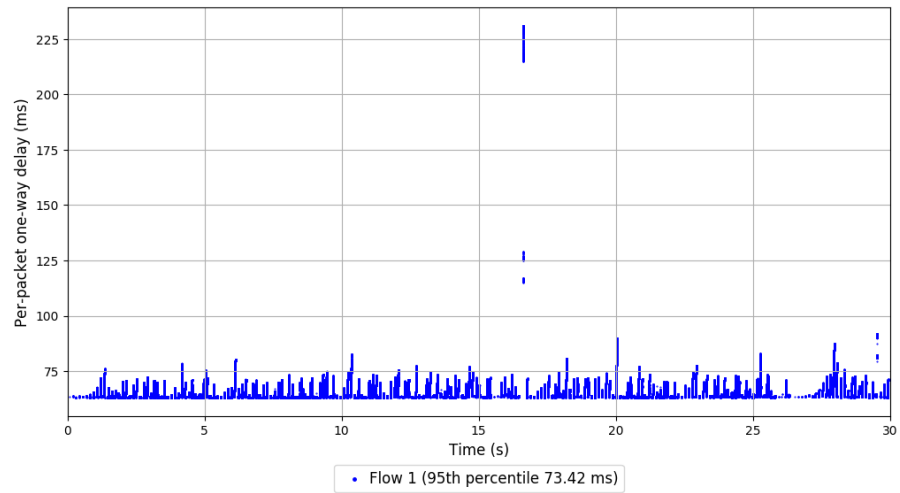
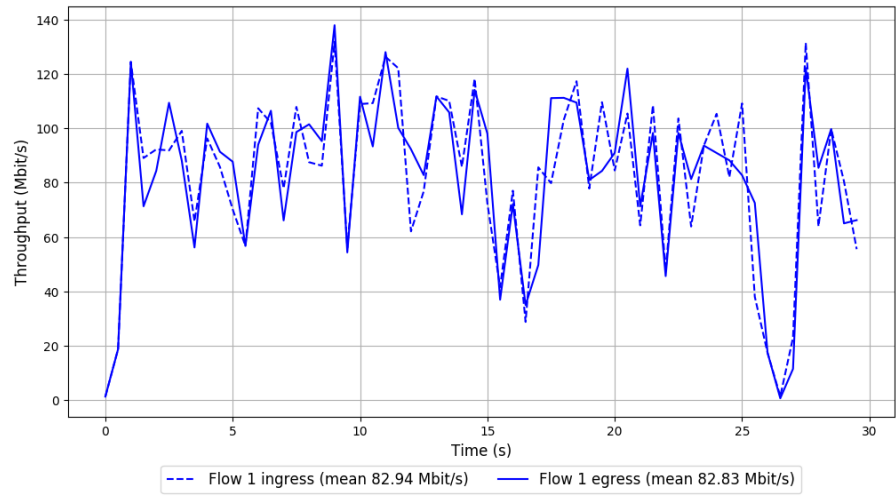
-- Flow 1:

Average throughput: 82.83 Mbit/s

95th percentile per-packet one-way delay: 73.424 ms

Loss rate: 0.10%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-16 08:49:30

End at: 2017-11-16 08:50:00

Below is generated by plot.py at 2017-11-16 10:30:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 104.51 Mbit/s

95th percentile per-packet one-way delay: 69.976 ms

Loss rate: 0.07%

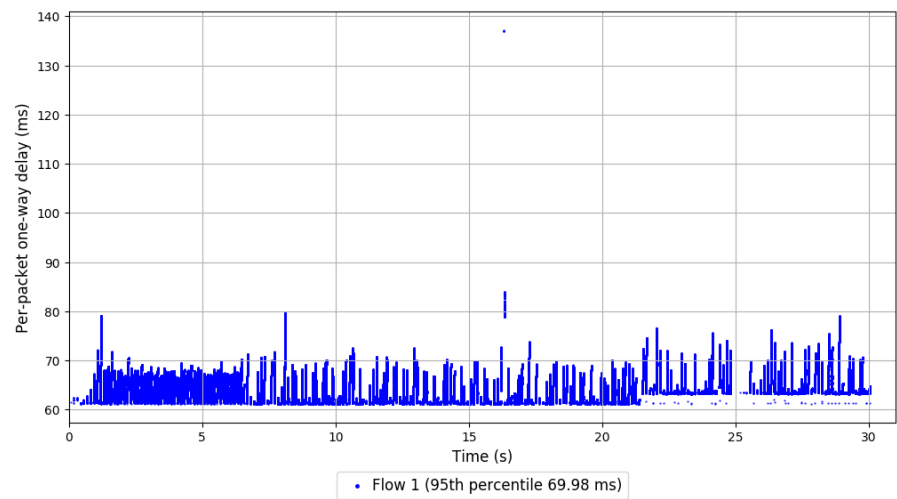
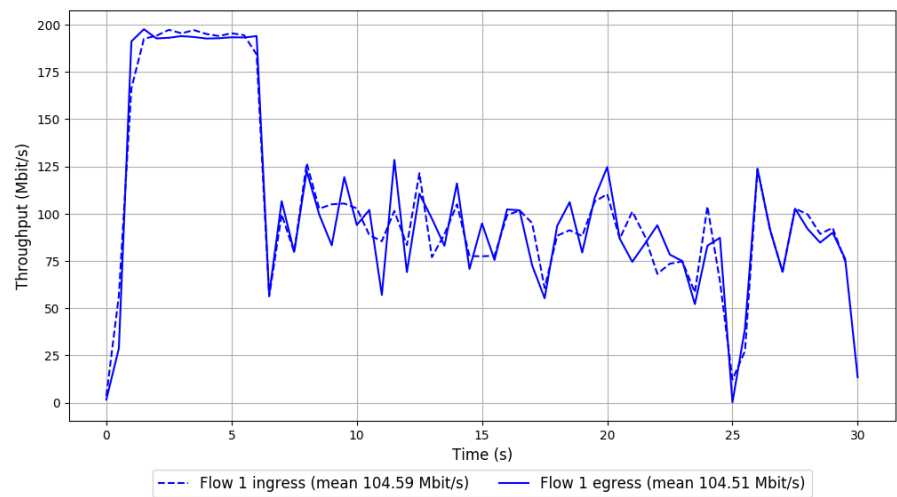
-- Flow 1:

Average throughput: 104.51 Mbit/s

95th percentile per-packet one-way delay: 69.976 ms

Loss rate: 0.07%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-16 08:59:59

End at: 2017-11-16 09:00:29

Below is generated by plot.py at 2017-11-16 10:30:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.87 Mbit/s

95th percentile per-packet one-way delay: 72.890 ms

Loss rate: 0.59%

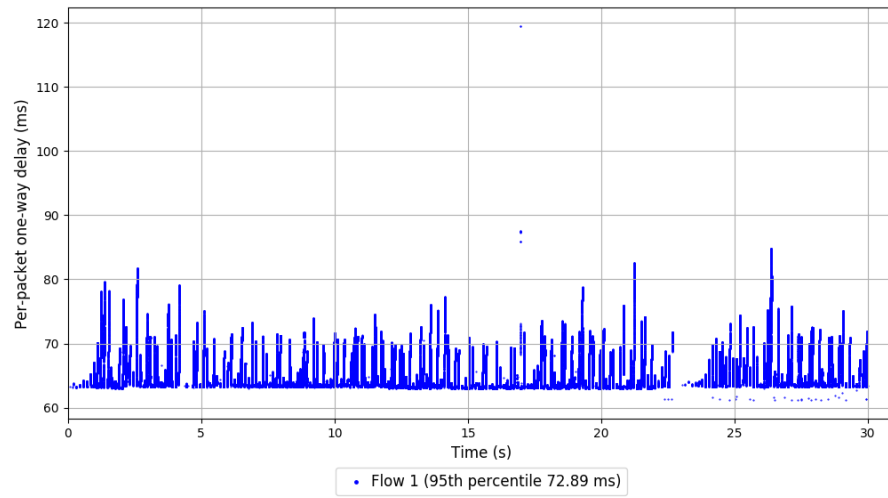
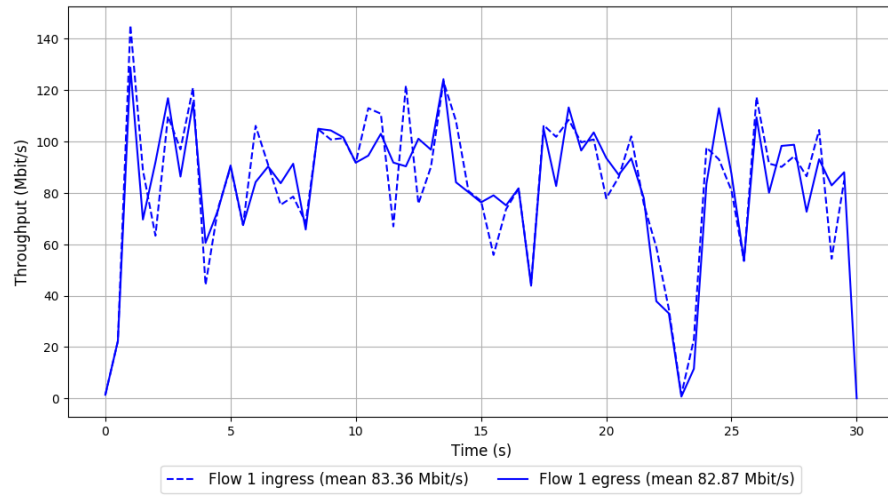
-- Flow 1:

Average throughput: 82.87 Mbit/s

95th percentile per-packet one-way delay: 72.890 ms

Loss rate: 0.59%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-16 09:10:35

End at: 2017-11-16 09:11:05

Below is generated by plot.py at 2017-11-16 10:30:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.03 Mbit/s

95th percentile per-packet one-way delay: 73.169 ms

Loss rate: 0.01%

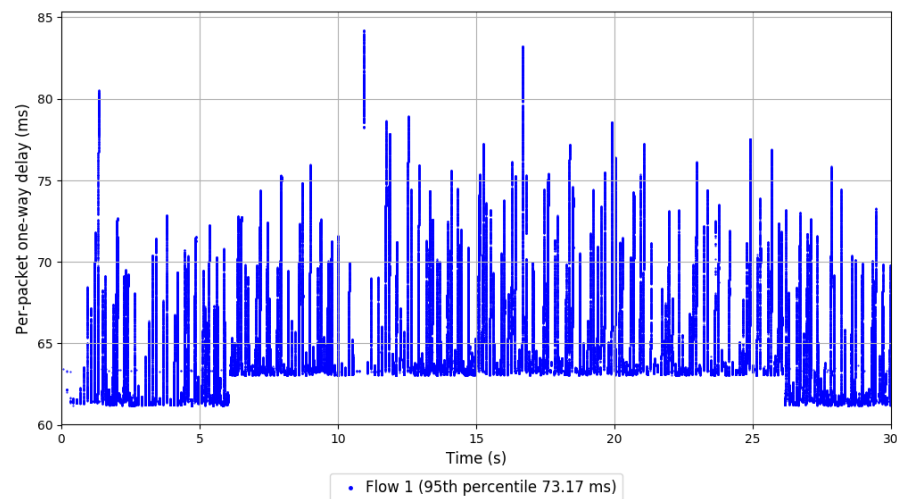
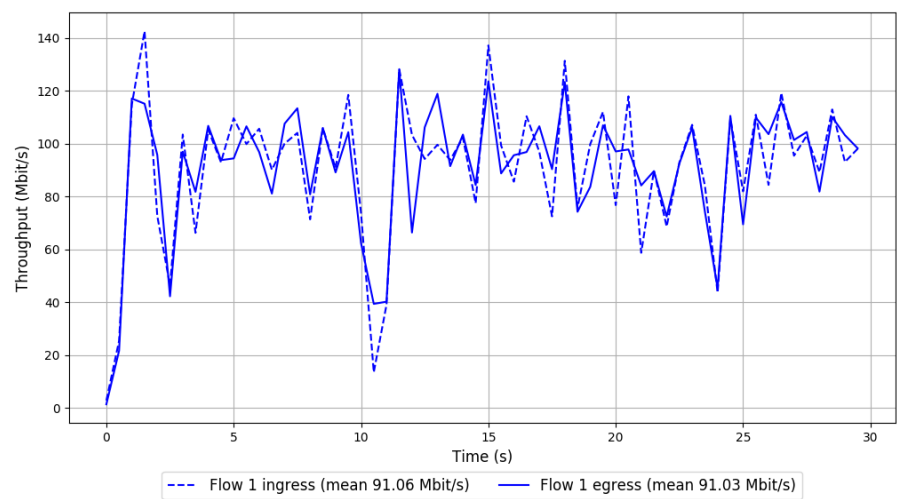
-- Flow 1:

Average throughput: 91.03 Mbit/s

95th percentile per-packet one-way delay: 73.169 ms

Loss rate: 0.01%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-16 09:21:02

End at: 2017-11-16 09:21:32

Below is generated by plot.py at 2017-11-16 10:31:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.09 Mbit/s

95th percentile per-packet one-way delay: 73.501 ms

Loss rate: 0.04%

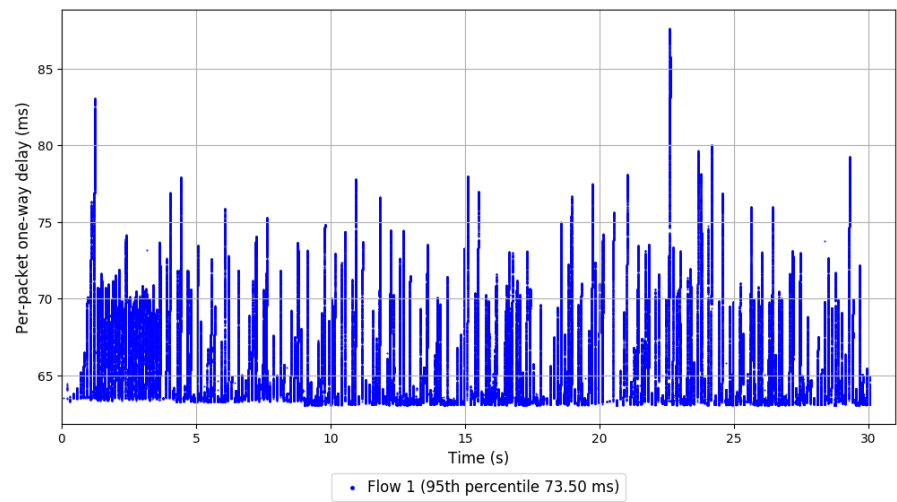
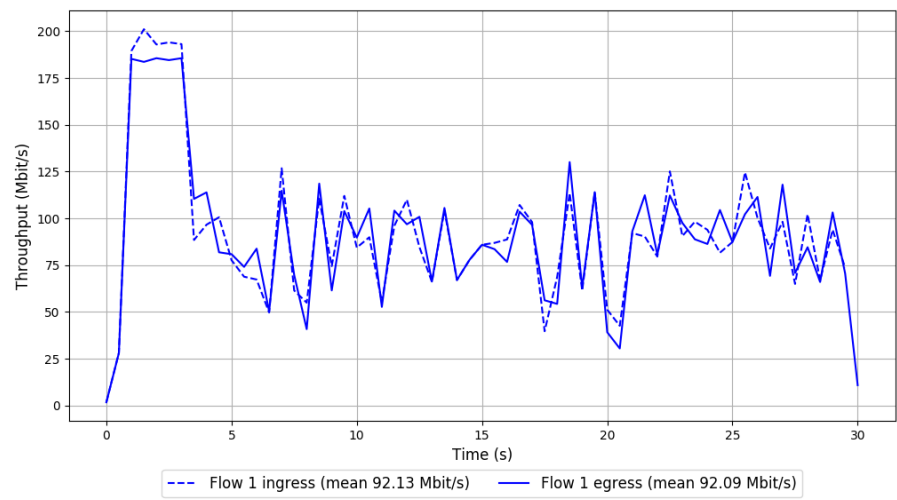
-- Flow 1:

Average throughput: 92.09 Mbit/s

95th percentile per-packet one-way delay: 73.501 ms

Loss rate: 0.04%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-16 09:31:38

End at: 2017-11-16 09:32:08

Below is generated by plot.py at 2017-11-16 10:31:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.65 Mbit/s

95th percentile per-packet one-way delay: 71.586 ms

Loss rate: 0.00%

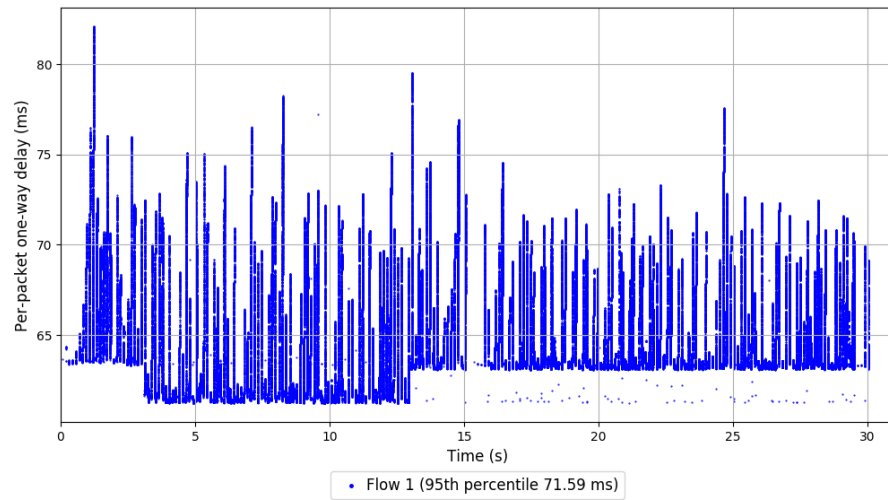
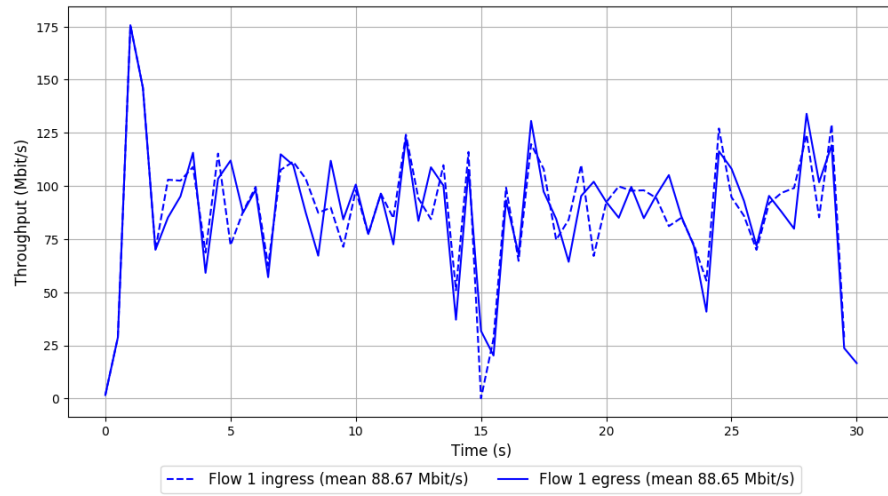
-- Flow 1:

Average throughput: 88.65 Mbit/s

95th percentile per-packet one-way delay: 71.586 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-16 08:06:59

End at: 2017-11-16 08:07:29

Below is generated by plot.py at 2017-11-16 10:31:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.40 Mbit/s

95th percentile per-packet one-way delay: 65.786 ms

Loss rate: 0.07%

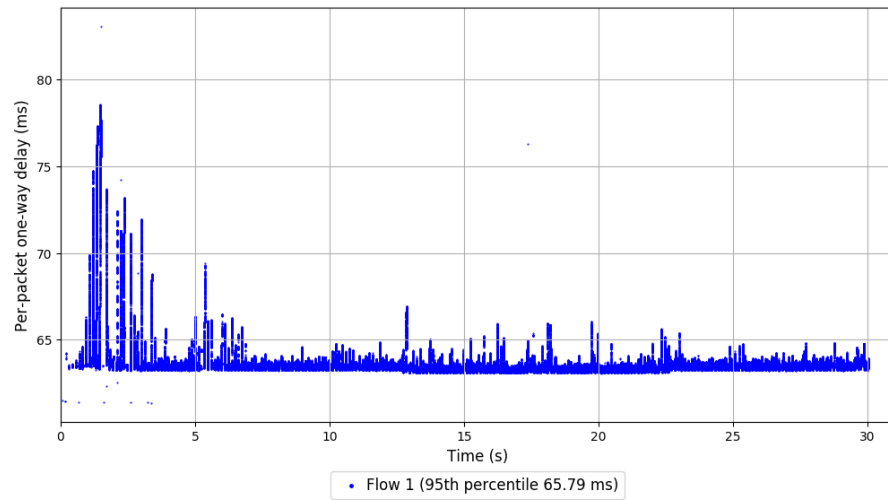
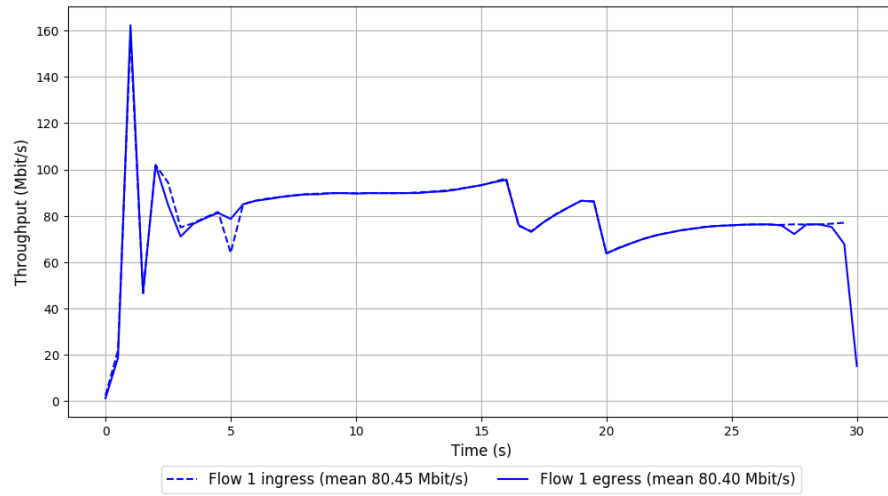
-- Flow 1:

Average throughput: 80.40 Mbit/s

95th percentile per-packet one-way delay: 65.786 ms

Loss rate: 0.07%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-16 08:17:24

End at: 2017-11-16 08:17:54

Below is generated by plot.py at 2017-11-16 10:31:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.46 Mbit/s

95th percentile per-packet one-way delay: 69.938 ms

Loss rate: 0.01%

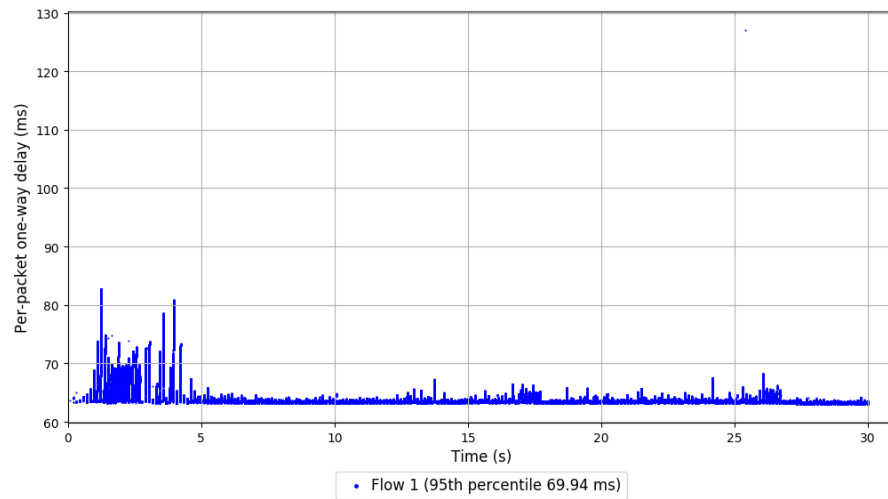
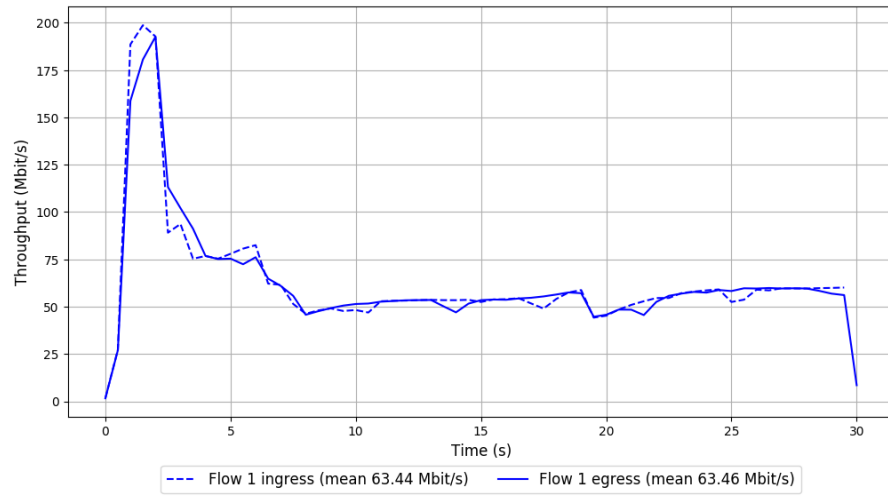
-- Flow 1:

Average throughput: 63.46 Mbit/s

95th percentile per-packet one-way delay: 69.938 ms

Loss rate: 0.01%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-16 08:27:50

End at: 2017-11-16 08:28:20

Below is generated by plot.py at 2017-11-16 10:31:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.15 Mbit/s

95th percentile per-packet one-way delay: 65.998 ms

Loss rate: 0.35%

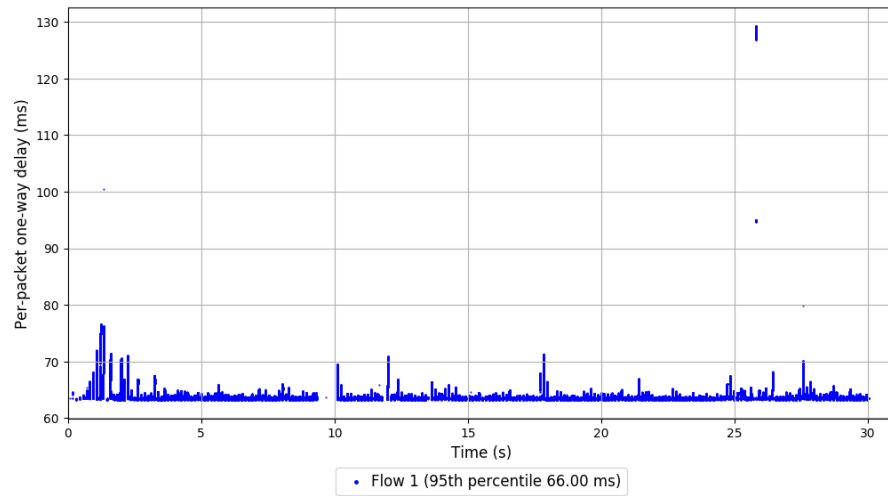
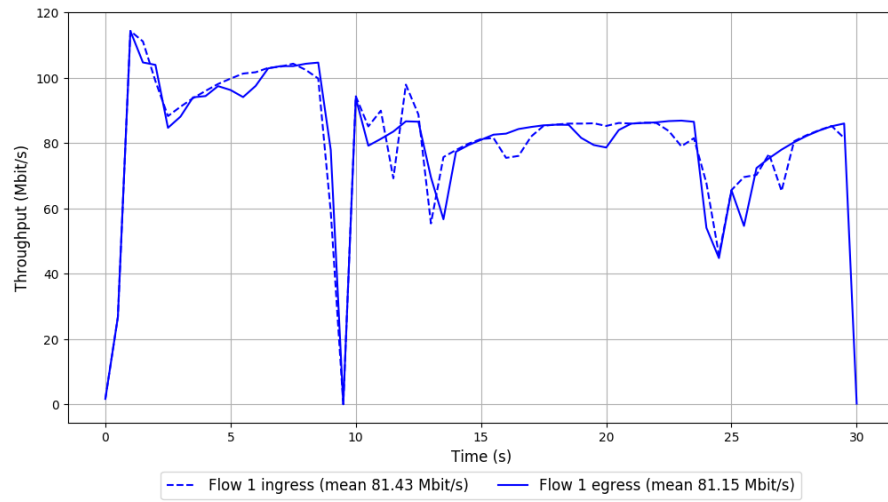
-- Flow 1:

Average throughput: 81.15 Mbit/s

95th percentile per-packet one-way delay: 65.998 ms

Loss rate: 0.35%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-16 08:38:19

End at: 2017-11-16 08:38:49

Below is generated by plot.py at 2017-11-16 10:31:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.88 Mbit/s

95th percentile per-packet one-way delay: 64.846 ms

Loss rate: 0.16%

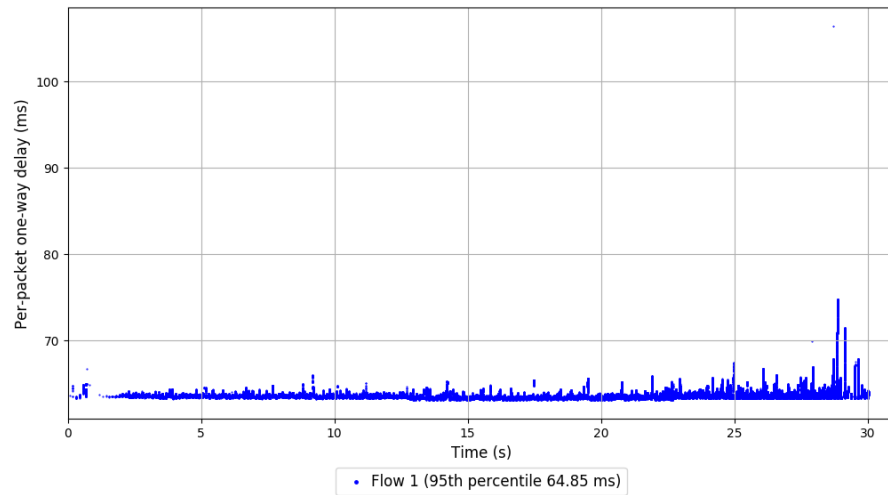
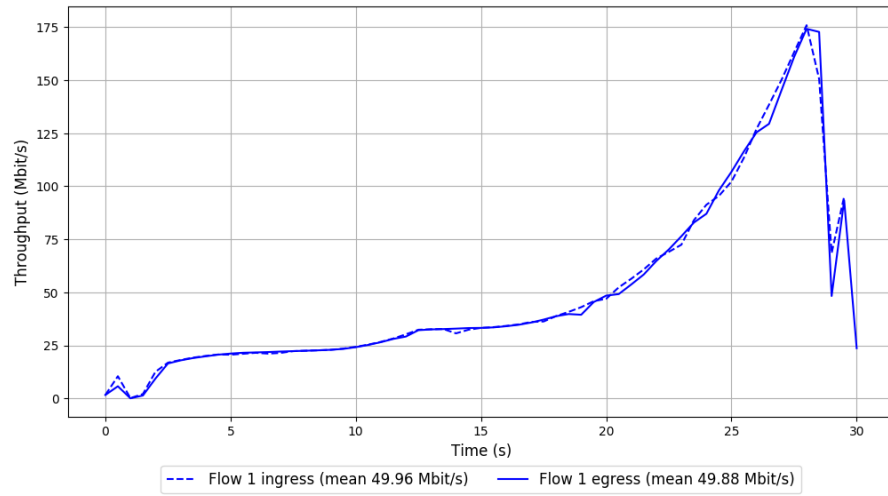
-- Flow 1:

Average throughput: 49.88 Mbit/s

95th percentile per-packet one-way delay: 64.846 ms

Loss rate: 0.16%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-16 08:48:45

End at: 2017-11-16 08:49:15

Below is generated by plot.py at 2017-11-16 10:32:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.42 Mbit/s

95th percentile per-packet one-way delay: 67.027 ms

Loss rate: 0.06%

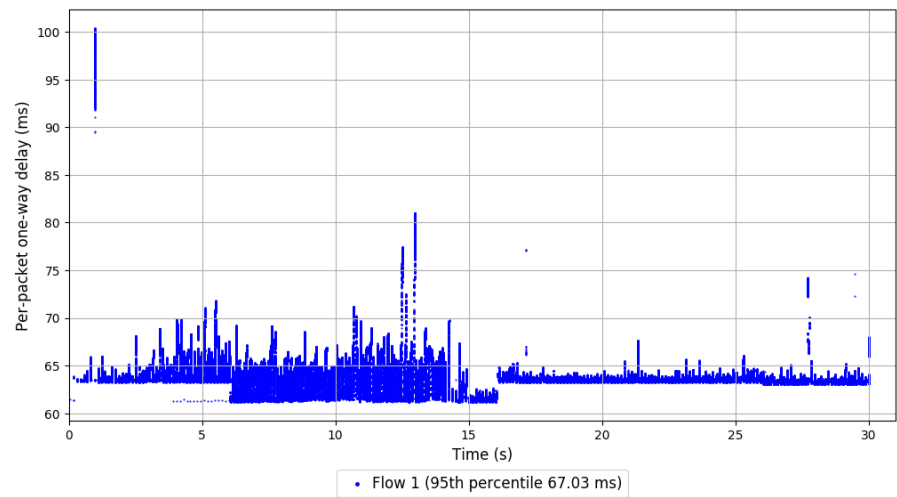
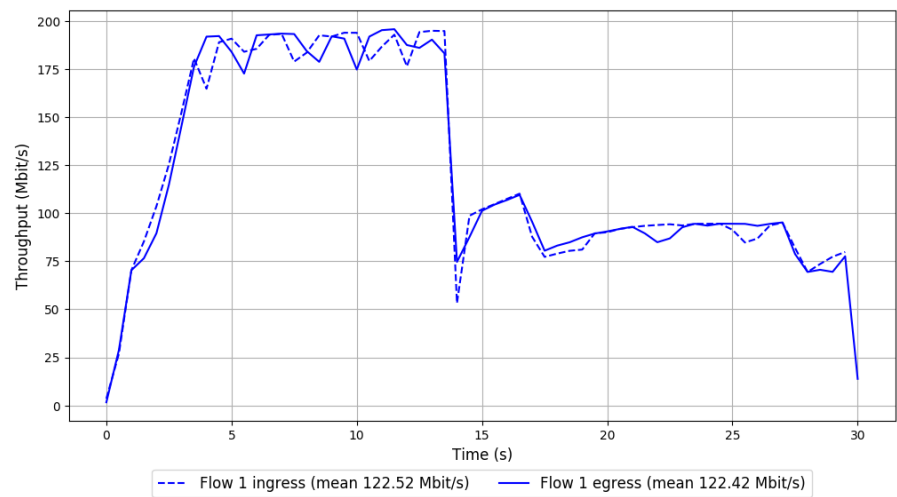
-- Flow 1:

Average throughput: 122.42 Mbit/s

95th percentile per-packet one-way delay: 67.027 ms

Loss rate: 0.06%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-16 08:59:16

End at: 2017-11-16 08:59:46

Below is generated by plot.py at 2017-11-16 10:32:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.79 Mbit/s

95th percentile per-packet one-way delay: 71.161 ms

Loss rate: 0.01%

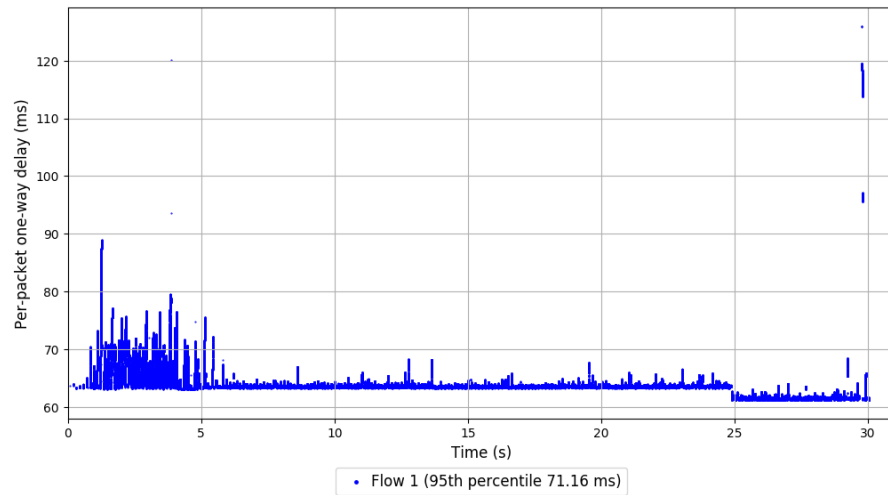
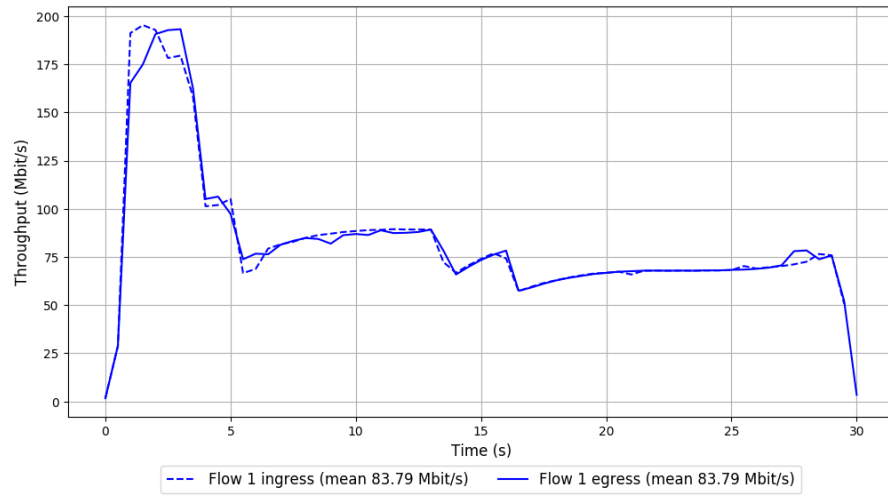
-- Flow 1:

Average throughput: 83.79 Mbit/s

95th percentile per-packet one-way delay: 71.161 ms

Loss rate: 0.01%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-16 09:09:51

End at: 2017-11-16 09:10:21

Below is generated by plot.py at 2017-11-16 10:32:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 106.55 Mbit/s

95th percentile per-packet one-way delay: 71.125 ms

Loss rate: 0.02%

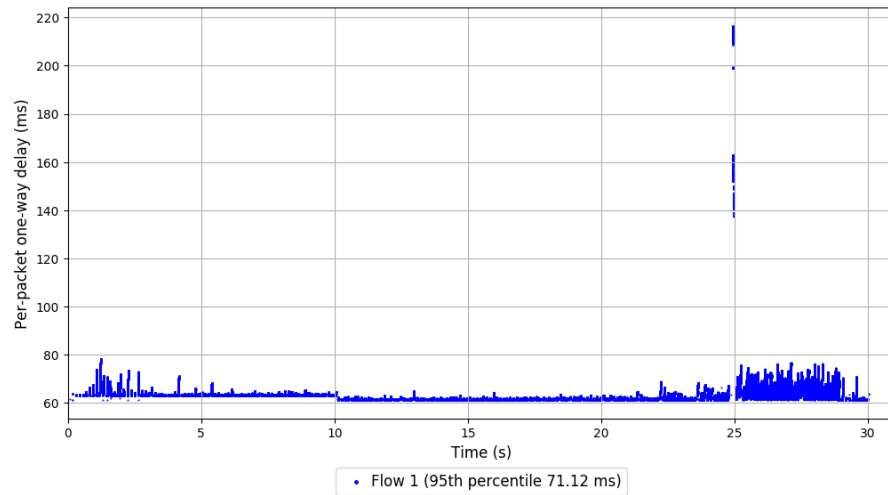
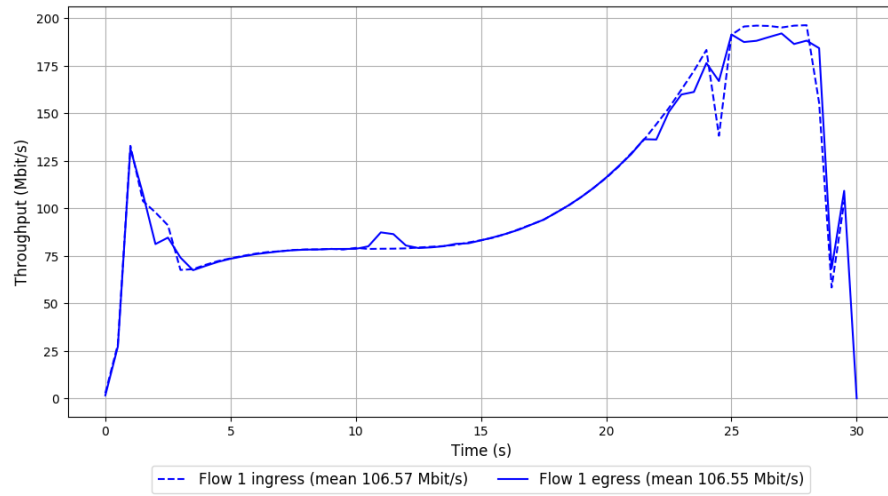
-- Flow 1:

Average throughput: 106.55 Mbit/s

95th percentile per-packet one-way delay: 71.125 ms

Loss rate: 0.02%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-16 09:20:18

End at: 2017-11-16 09:20:48

Below is generated by plot.py at 2017-11-16 10:32:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 114.98 Mbit/s

95th percentile per-packet one-way delay: 70.324 ms

Loss rate: 0.13%

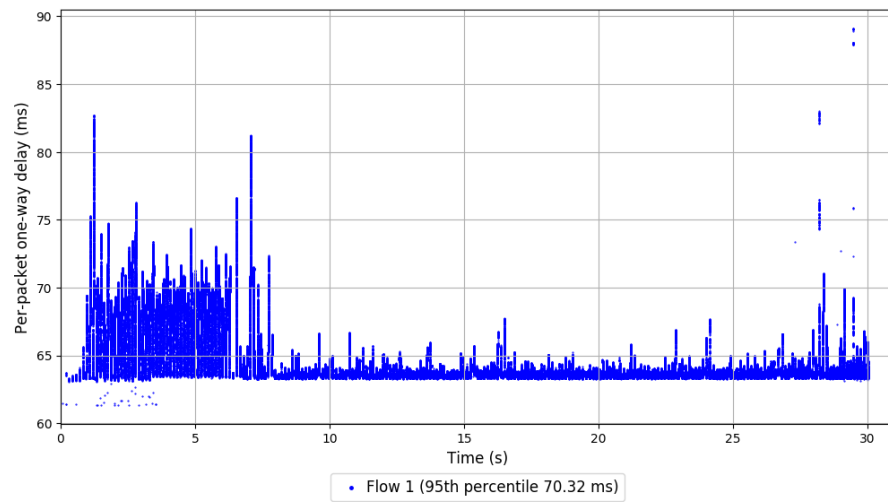
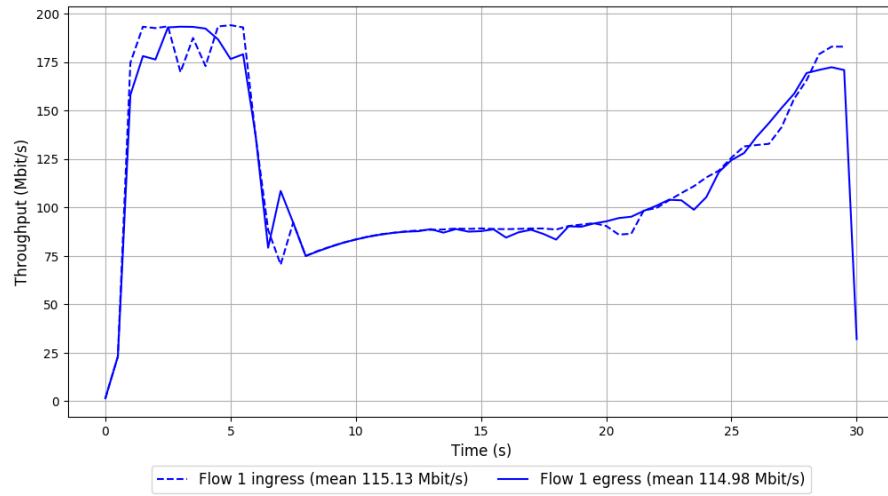
-- Flow 1:

Average throughput: 114.98 Mbit/s

95th percentile per-packet one-way delay: 70.324 ms

Loss rate: 0.13%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-16 09:30:55

End at: 2017-11-16 09:31:25

Below is generated by plot.py at 2017-11-16 10:32:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.53 Mbit/s

95th percentile per-packet one-way delay: 70.406 ms

Loss rate: 0.01%

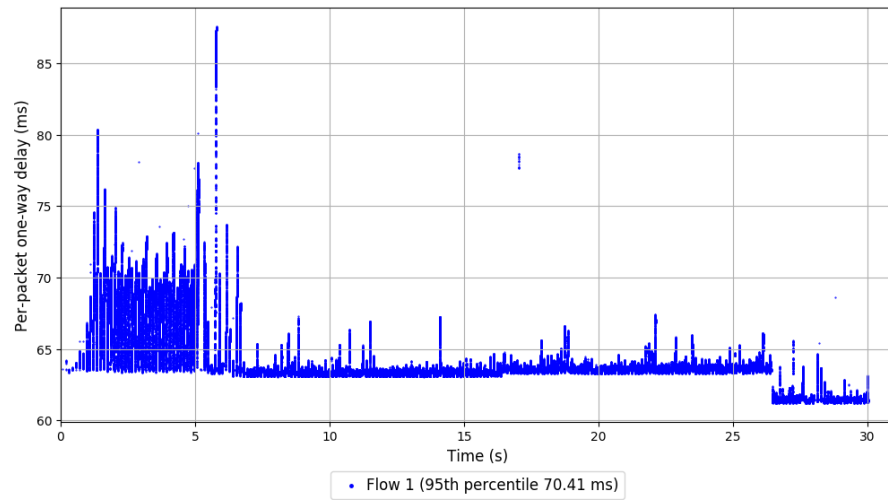
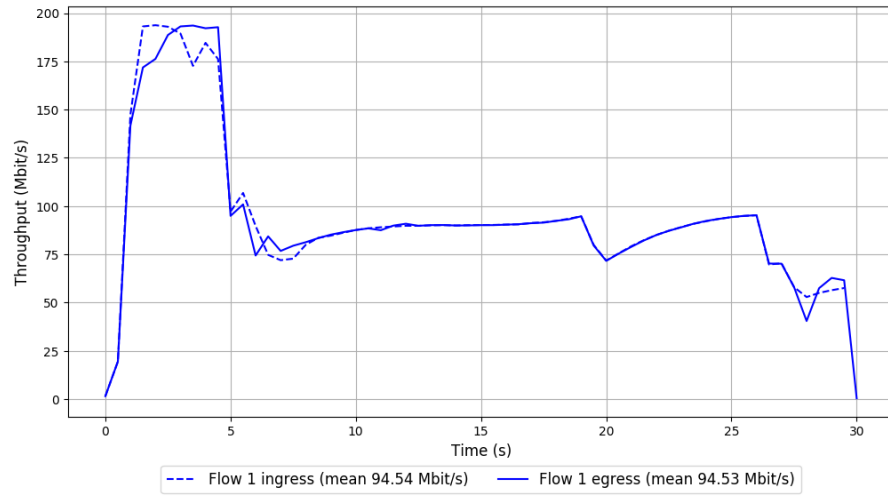
-- Flow 1:

Average throughput: 94.53 Mbit/s

95th percentile per-packet one-way delay: 70.406 ms

Loss rate: 0.01%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-16 09:41:19

End at: 2017-11-16 09:41:49

Below is generated by plot.py at 2017-11-16 10:33:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.39 Mbit/s

95th percentile per-packet one-way delay: 68.551 ms

Loss rate: 0.00%

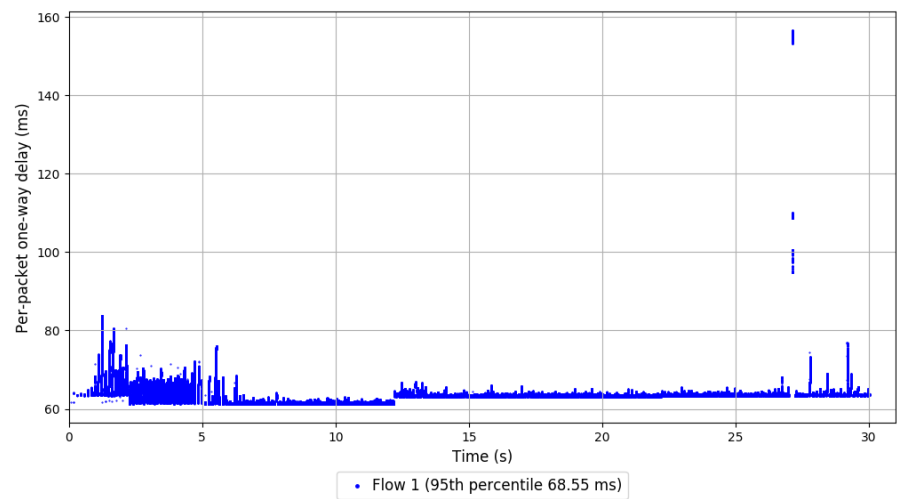
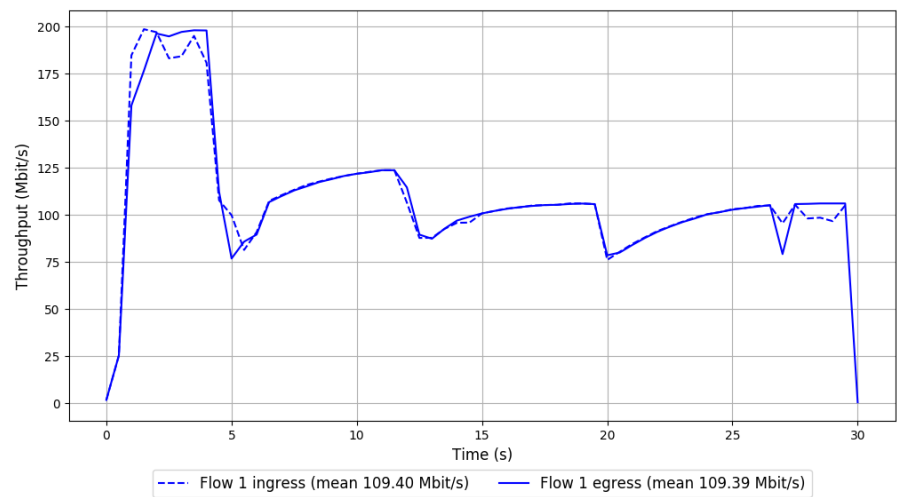
-- Flow 1:

Average throughput: 109.39 Mbit/s

95th percentile per-packet one-way delay: 68.551 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

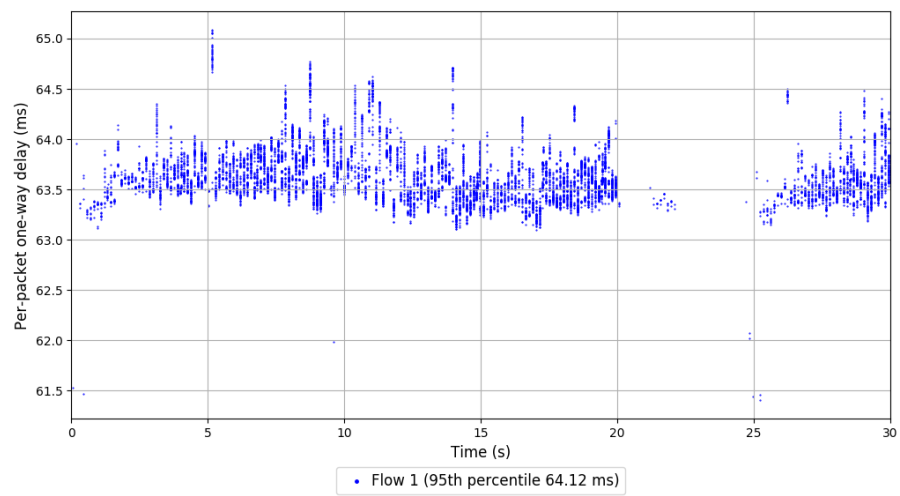
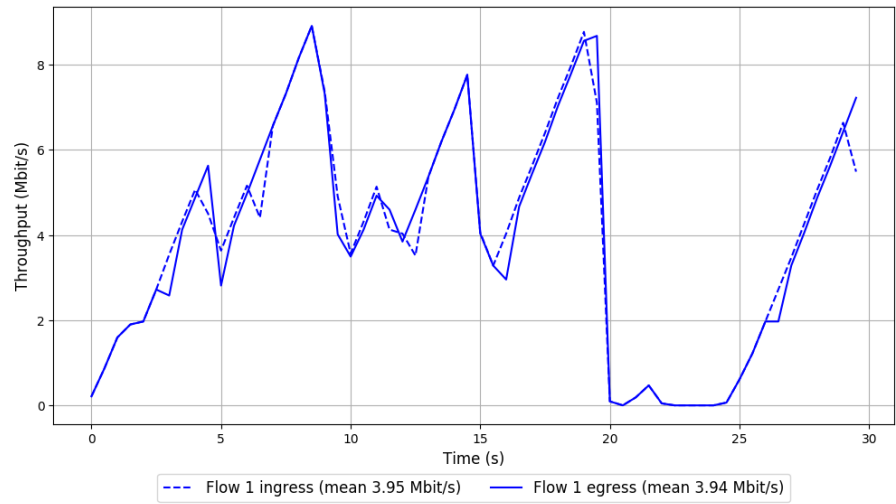


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-16 08:02:50
End at: 2017-11-16 08:03:20

# Below is generated by plot.py at 2017-11-16 10:33:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 64.125 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 64.125 ms
Loss rate: 0.35%
```

Run 1: Report of LEDBAT — Data Link

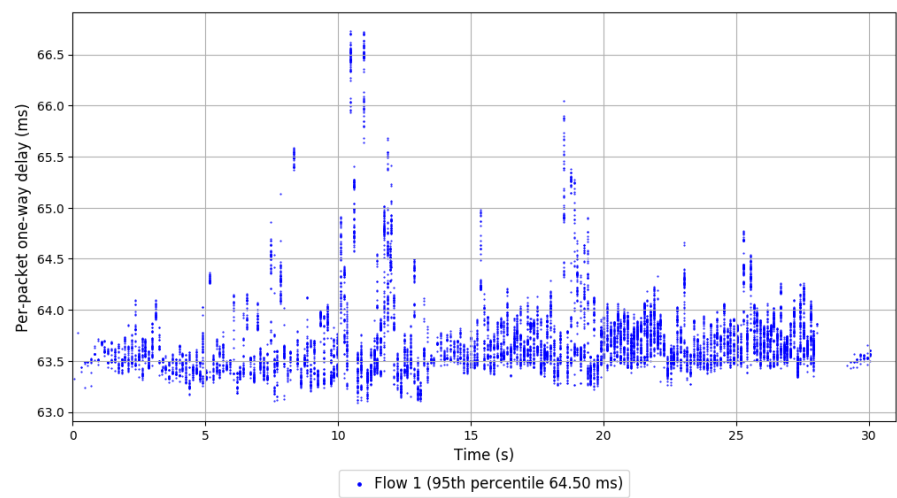
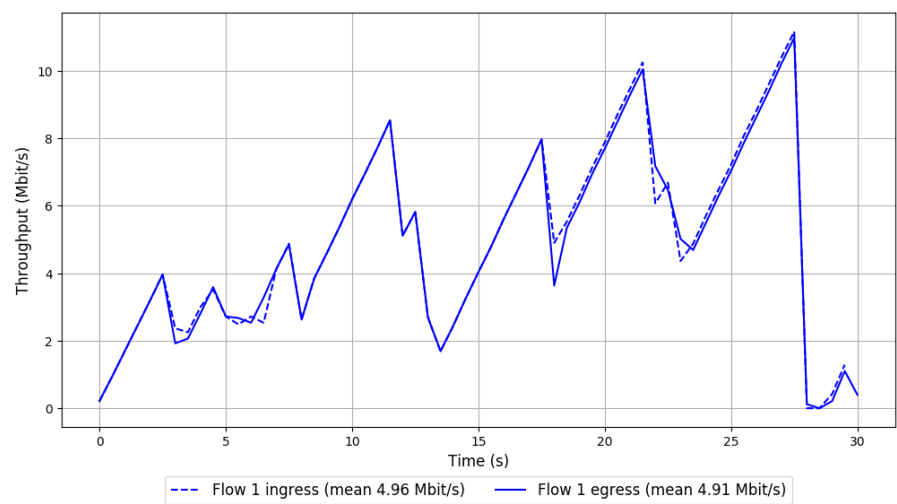


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-16 08:13:08
End at: 2017-11-16 08:13:38

# Below is generated by plot.py at 2017-11-16 10:33:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.91 Mbit/s
95th percentile per-packet one-way delay: 64.505 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 4.91 Mbit/s
95th percentile per-packet one-way delay: 64.505 ms
Loss rate: 0.93%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-16 08:23:41

End at: 2017-11-16 08:24:11

Below is generated by plot.py at 2017-11-16 10:33:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.88 Mbit/s

95th percentile per-packet one-way delay: 64.185 ms

Loss rate: 0.90%

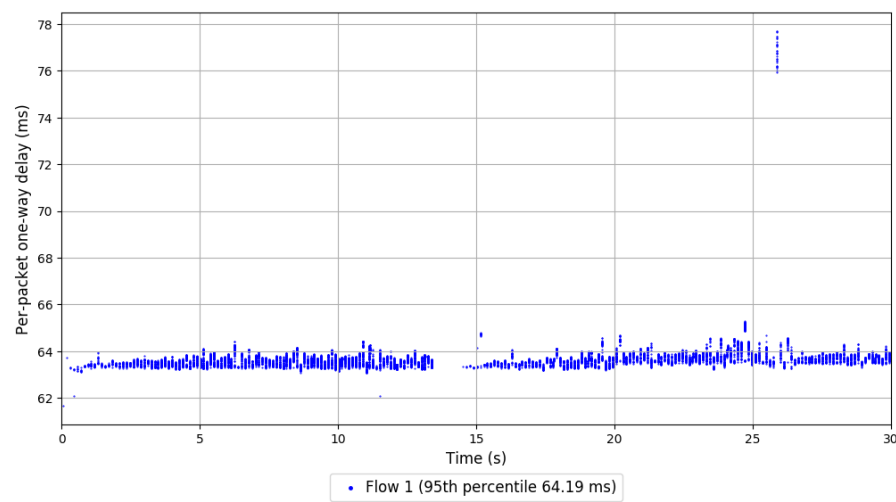
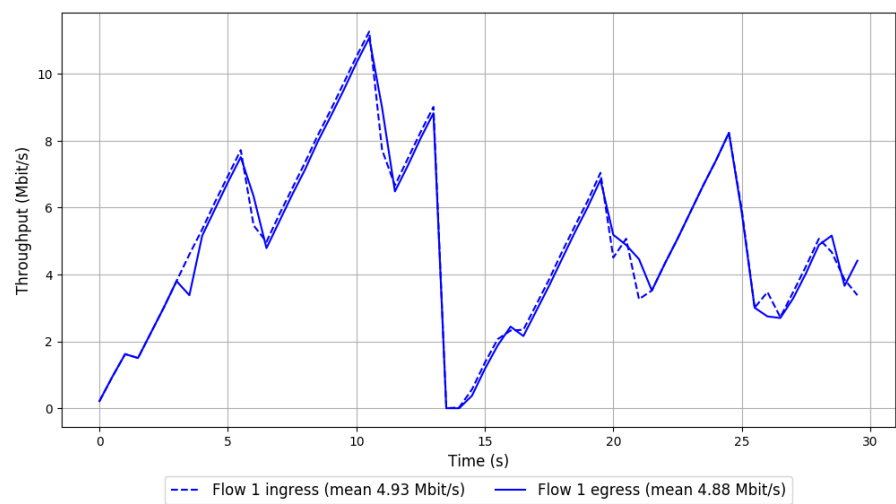
-- Flow 1:

Average throughput: 4.88 Mbit/s

95th percentile per-packet one-way delay: 64.185 ms

Loss rate: 0.90%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-16 08:34:05

End at: 2017-11-16 08:34:35

Below is generated by plot.py at 2017-11-16 10:33:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.82 Mbit/s

95th percentile per-packet one-way delay: 64.018 ms

Loss rate: 0.66%

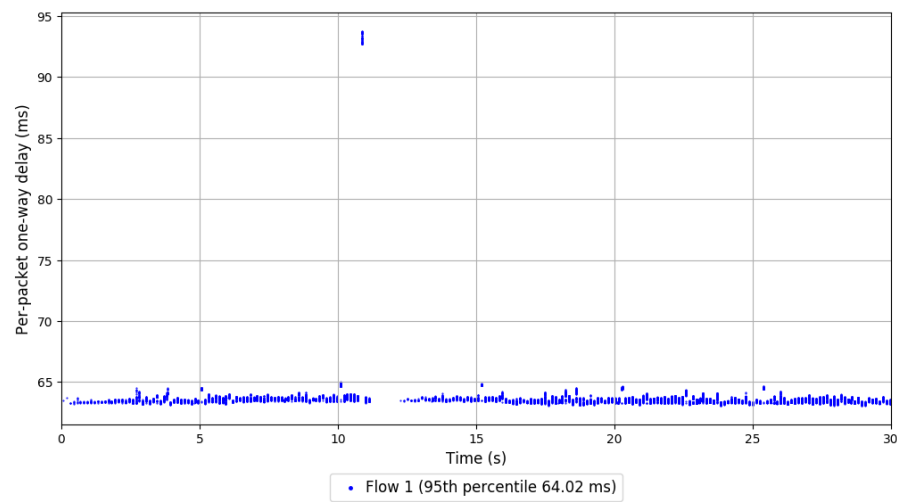
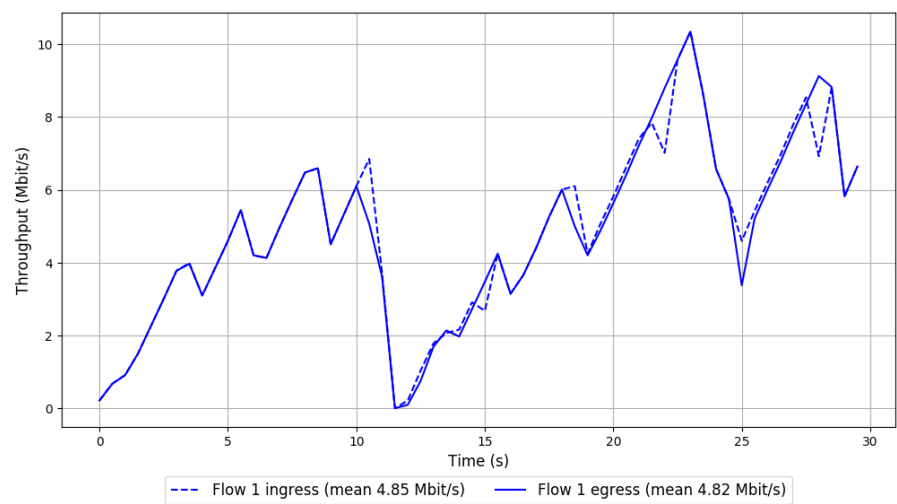
-- Flow 1:

Average throughput: 4.82 Mbit/s

95th percentile per-packet one-way delay: 64.018 ms

Loss rate: 0.66%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-16 08:44:33

End at: 2017-11-16 08:45:03

Below is generated by plot.py at 2017-11-16 10:33:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 63.770 ms

Loss rate: 0.25%

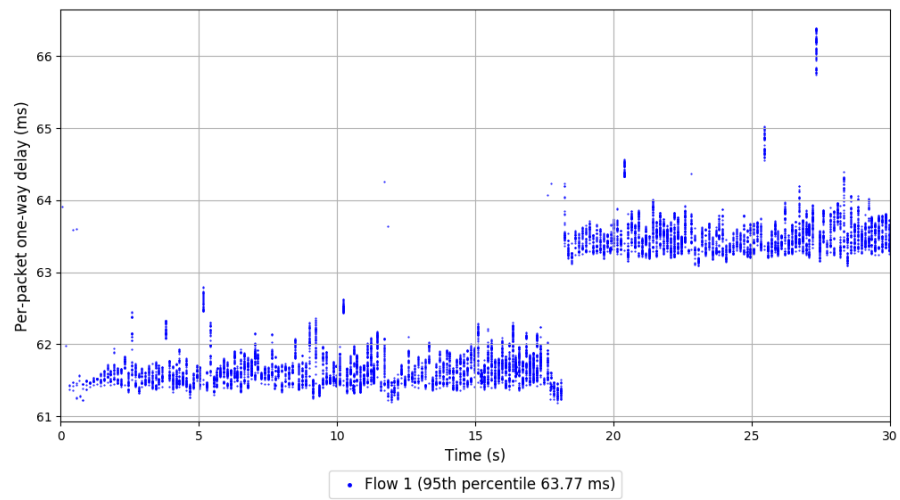
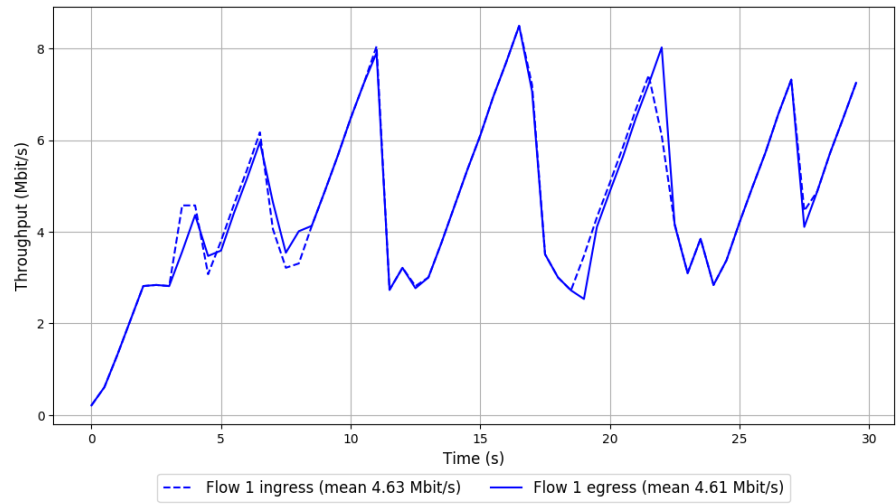
-- Flow 1:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 63.770 ms

Loss rate: 0.25%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-16 08:55:07

End at: 2017-11-16 08:55:37

Below is generated by plot.py at 2017-11-16 10:33:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 64.110 ms

Loss rate: 0.00%

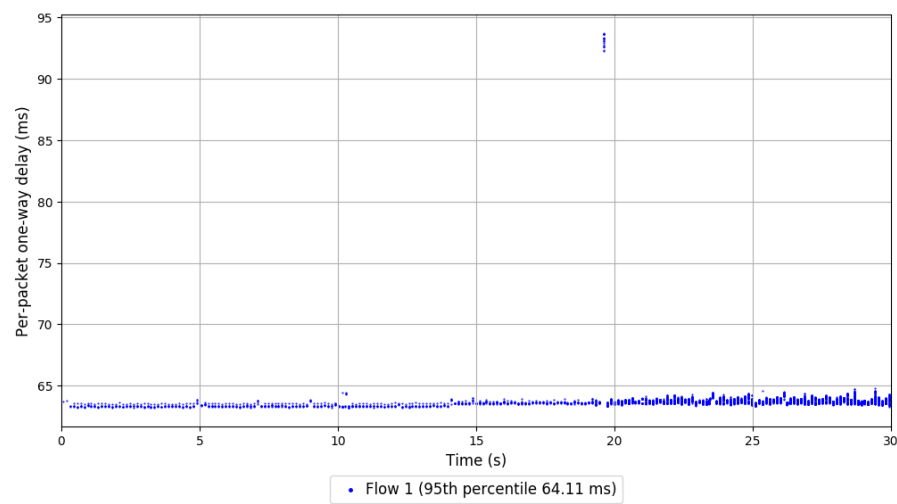
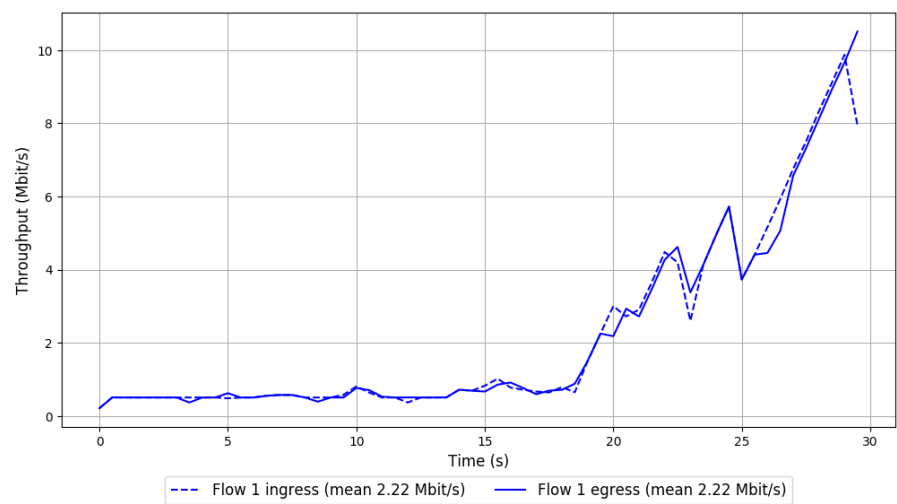
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 64.110 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-16 09:05:38

End at: 2017-11-16 09:06:08

Below is generated by plot.py at 2017-11-16 10:33:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 62.296 ms

Loss rate: 0.17%

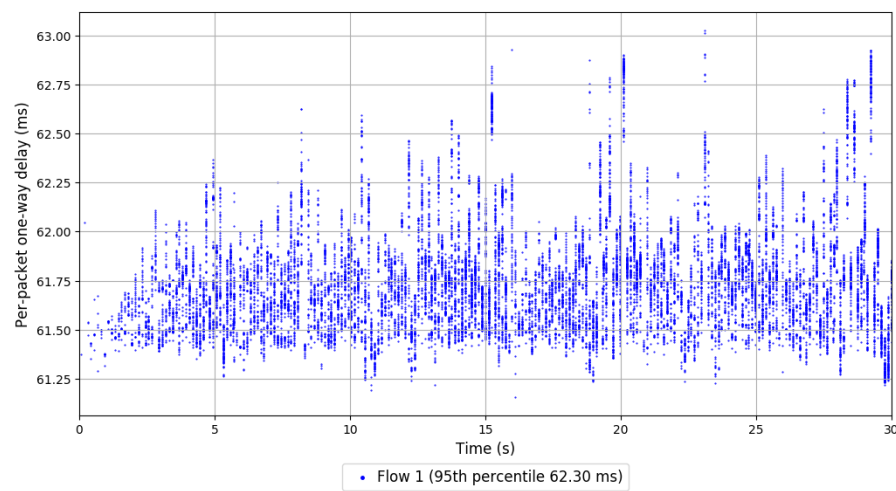
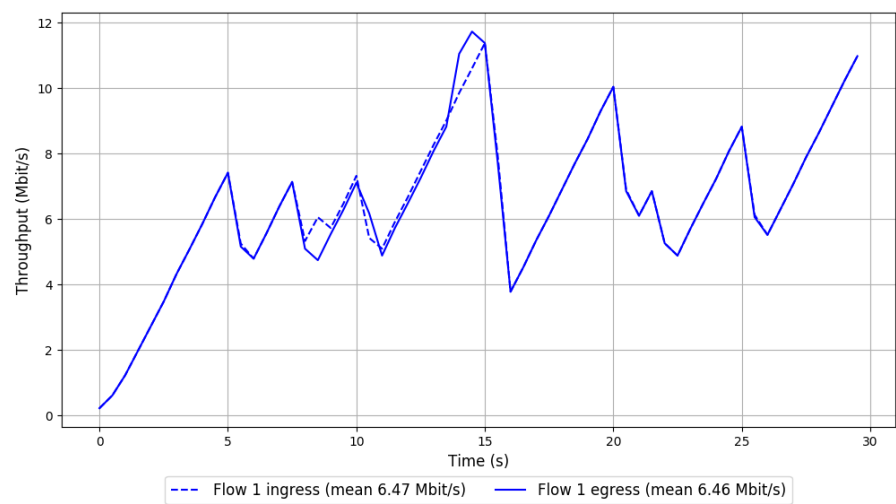
-- Flow 1:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 62.296 ms

Loss rate: 0.17%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-16 09:16:04

End at: 2017-11-16 09:16:34

Below is generated by plot.py at 2017-11-16 10:33:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.81 Mbit/s

95th percentile per-packet one-way delay: 64.431 ms

Loss rate: 0.03%

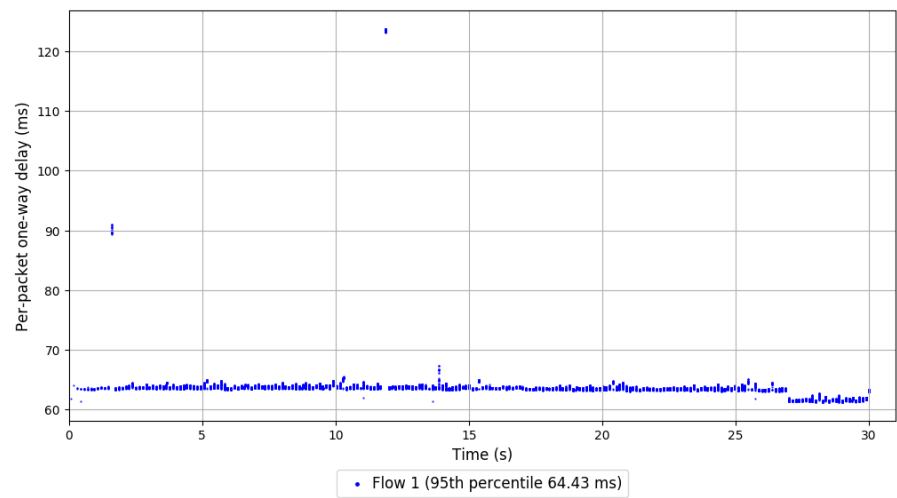
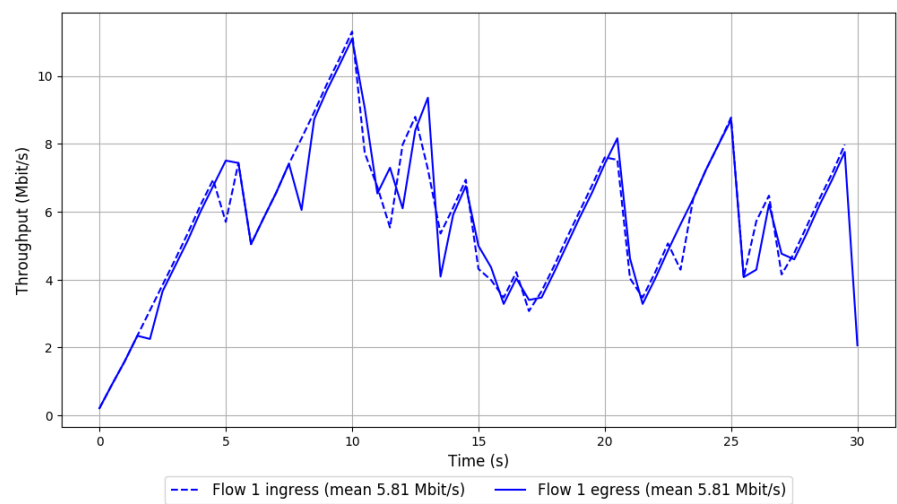
-- Flow 1:

Average throughput: 5.81 Mbit/s

95th percentile per-packet one-way delay: 64.431 ms

Loss rate: 0.03%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-16 09:26:42

End at: 2017-11-16 09:27:12

Below is generated by plot.py at 2017-11-16 10:33:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.70 Mbit/s

95th percentile per-packet one-way delay: 63.835 ms

Loss rate: 0.05%

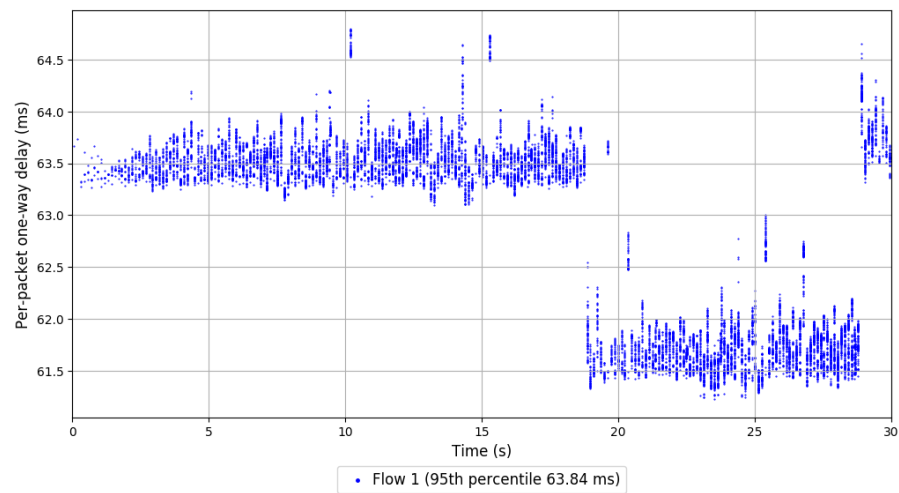
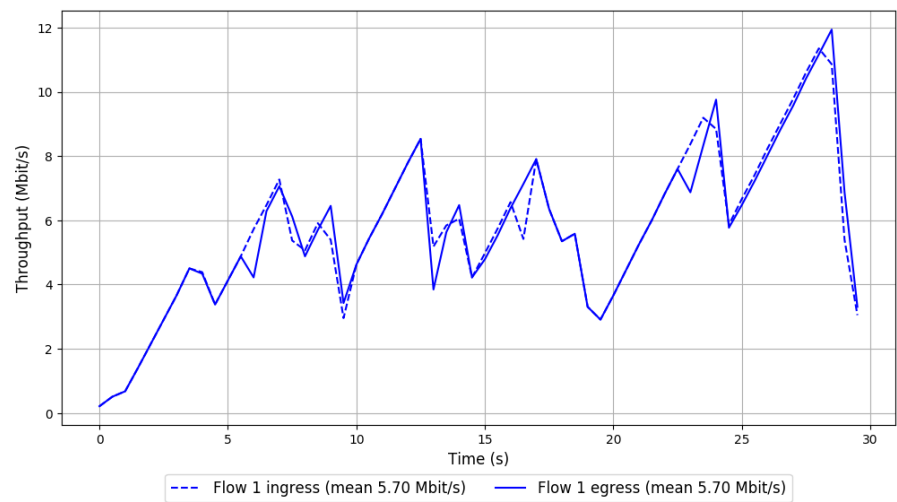
-- Flow 1:

Average throughput: 5.70 Mbit/s

95th percentile per-packet one-way delay: 63.835 ms

Loss rate: 0.05%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-16 09:37:06

End at: 2017-11-16 09:37:36

Below is generated by plot.py at 2017-11-16 10:33:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 63.994 ms

Loss rate: 0.13%

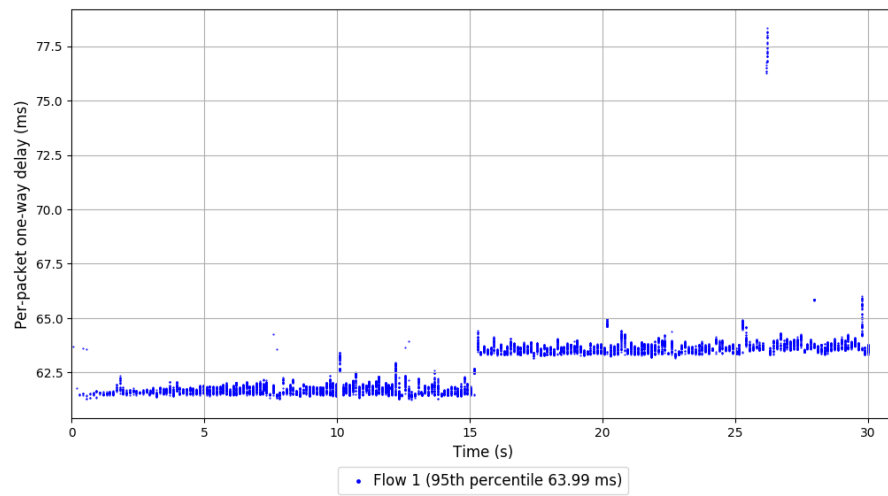
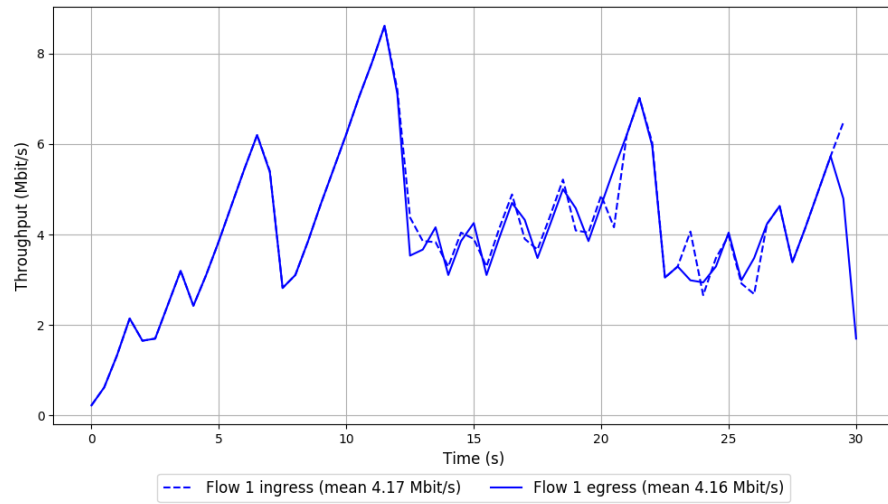
-- Flow 1:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 63.994 ms

Loss rate: 0.13%

Run 10: Report of LEDBAT — Data Link

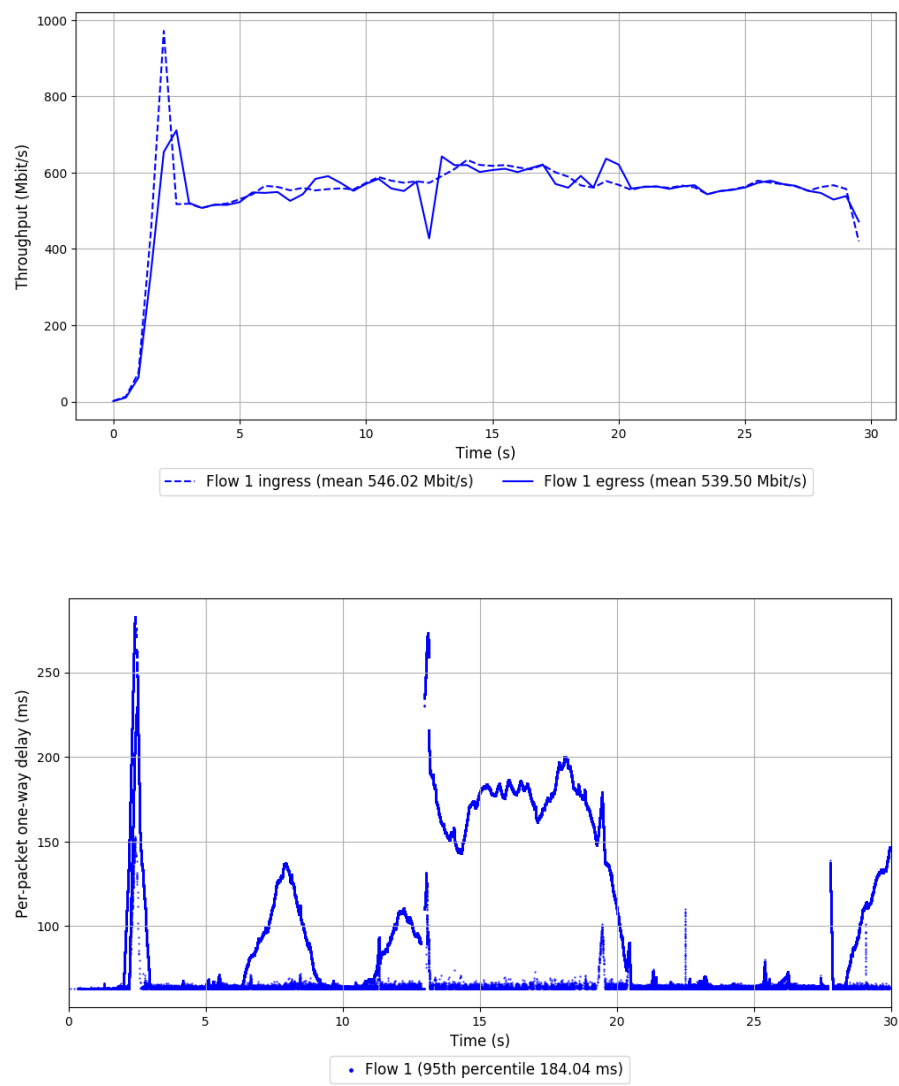


```
Run 1: Statistics of PCC

Start at: 2017-11-16 07:59:33
End at: 2017-11-16 08:00:03

# Below is generated by plot.py at 2017-11-16 10:41:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 539.50 Mbit/s
95th percentile per-packet one-way delay: 184.041 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 539.50 Mbit/s
95th percentile per-packet one-way delay: 184.041 ms
Loss rate: 1.19%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-16 08:09:51

End at: 2017-11-16 08:10:21

Below is generated by plot.py at 2017-11-16 10:41:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 514.04 Mbit/s

95th percentile per-packet one-way delay: 110.359 ms

Loss rate: 0.71%

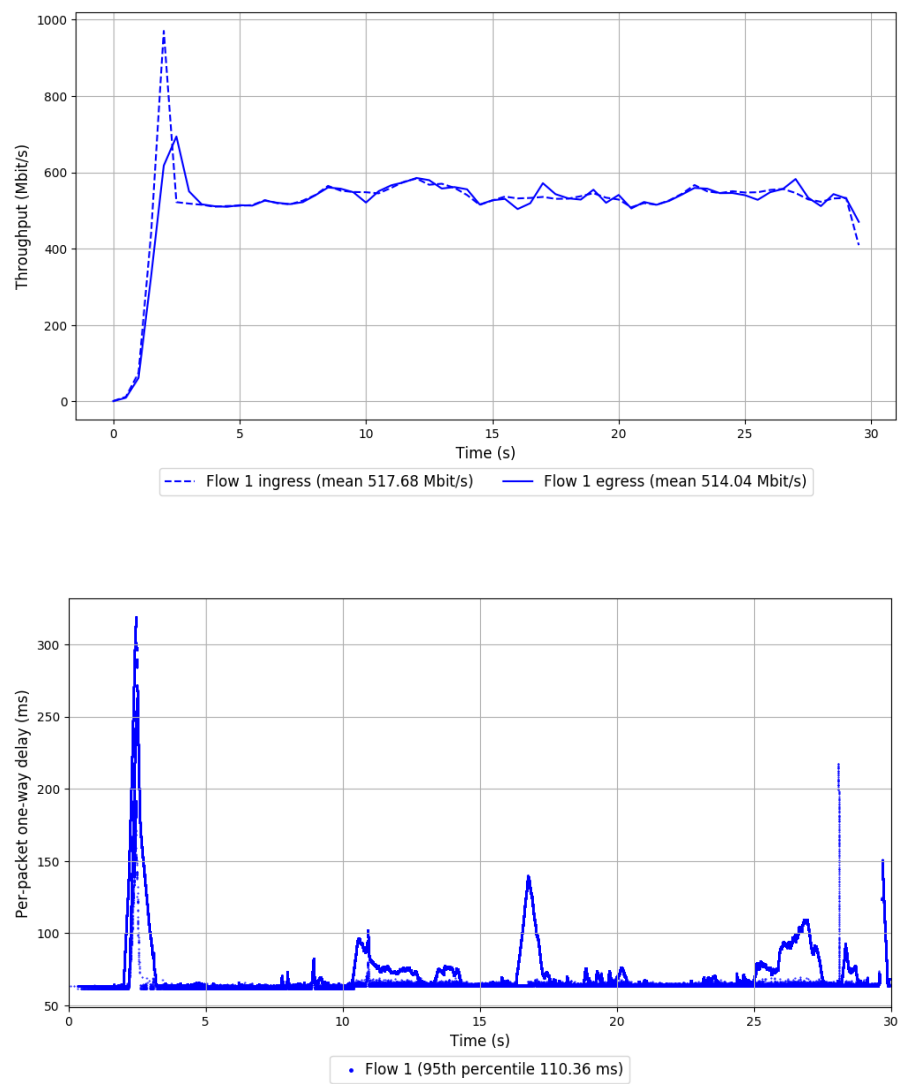
-- Flow 1:

Average throughput: 514.04 Mbit/s

95th percentile per-packet one-way delay: 110.359 ms

Loss rate: 0.71%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-16 08:20:25

End at: 2017-11-16 08:20:55

Below is generated by plot.py at 2017-11-16 10:41:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 509.99 Mbit/s

95th percentile per-packet one-way delay: 100.913 ms

Loss rate: 0.46%

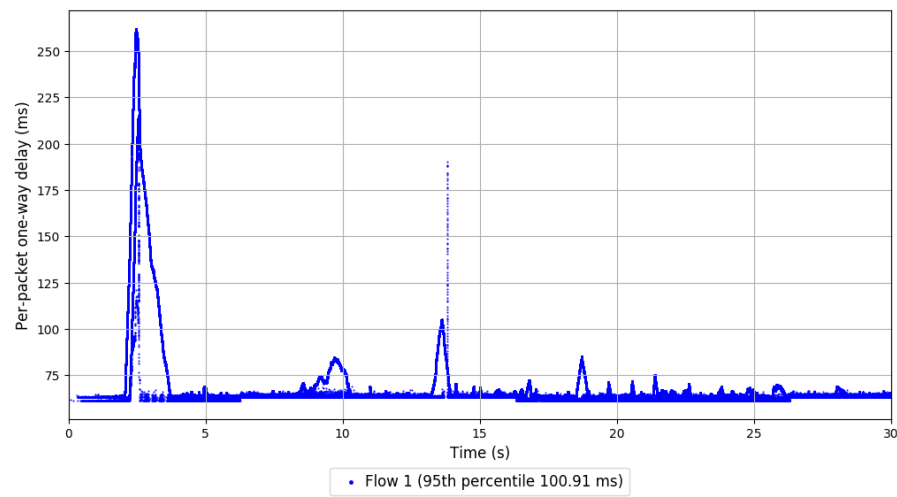
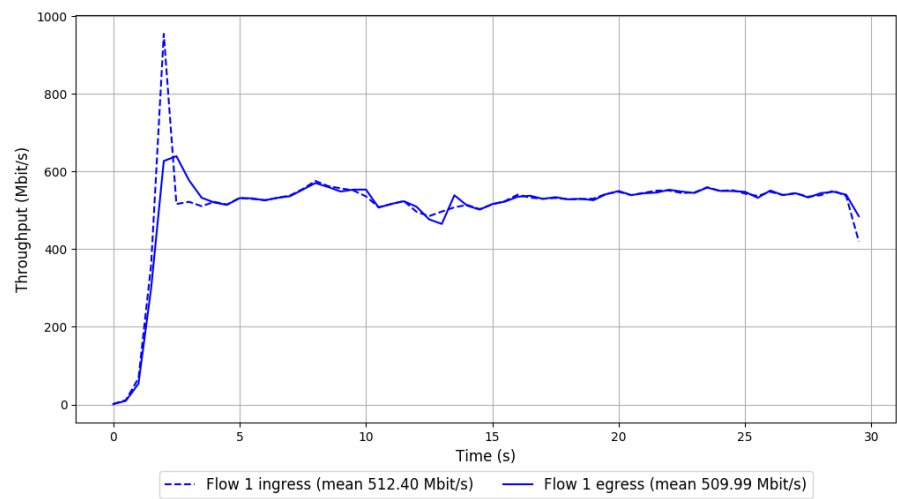
-- Flow 1:

Average throughput: 509.99 Mbit/s

95th percentile per-packet one-way delay: 100.913 ms

Loss rate: 0.46%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-16 08:30:49

End at: 2017-11-16 08:31:19

Below is generated by plot.py at 2017-11-16 10:41:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 494.28 Mbit/s

95th percentile per-packet one-way delay: 117.606 ms

Loss rate: 0.80%

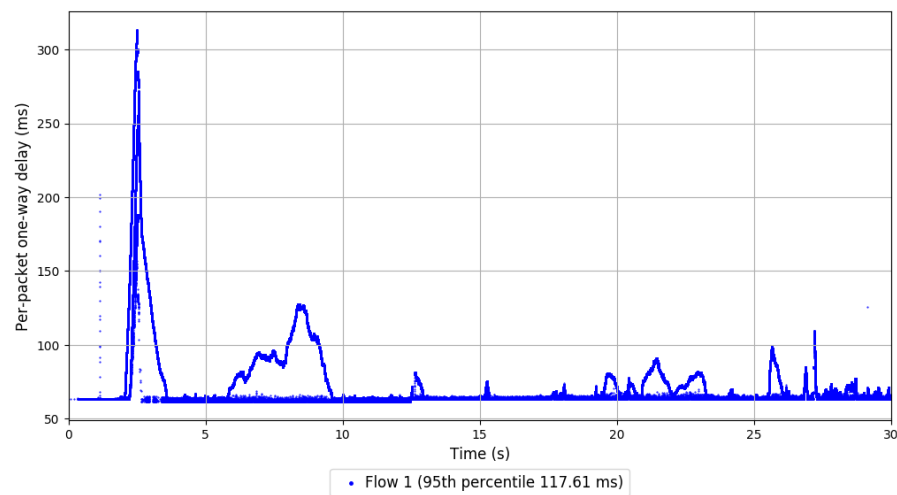
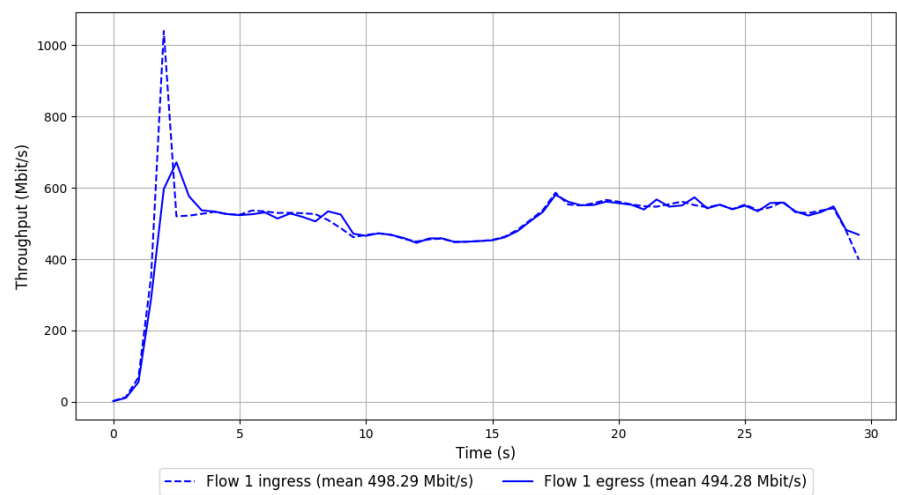
-- Flow 1:

Average throughput: 494.28 Mbit/s

95th percentile per-packet one-way delay: 117.606 ms

Loss rate: 0.80%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-16 08:41:17

End at: 2017-11-16 08:41:47

Below is generated by plot.py at 2017-11-16 10:41:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 502.79 Mbit/s

95th percentile per-packet one-way delay: 151.320 ms

Loss rate: 0.64%

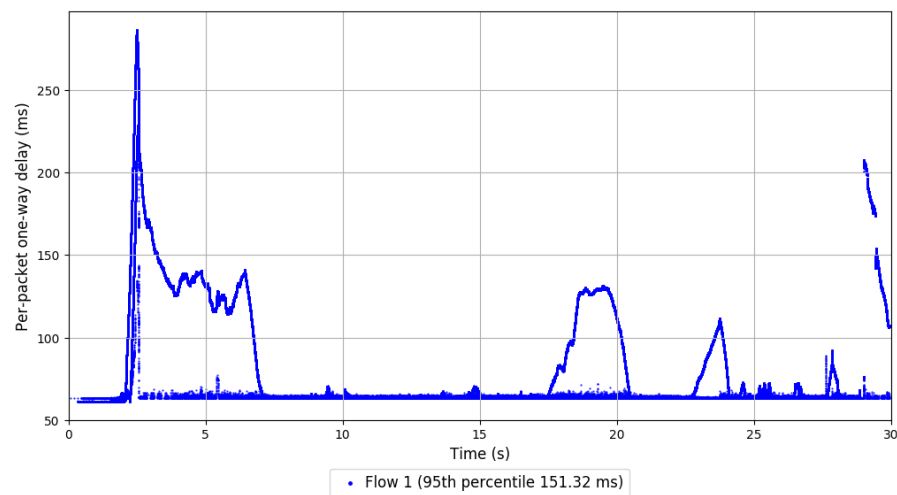
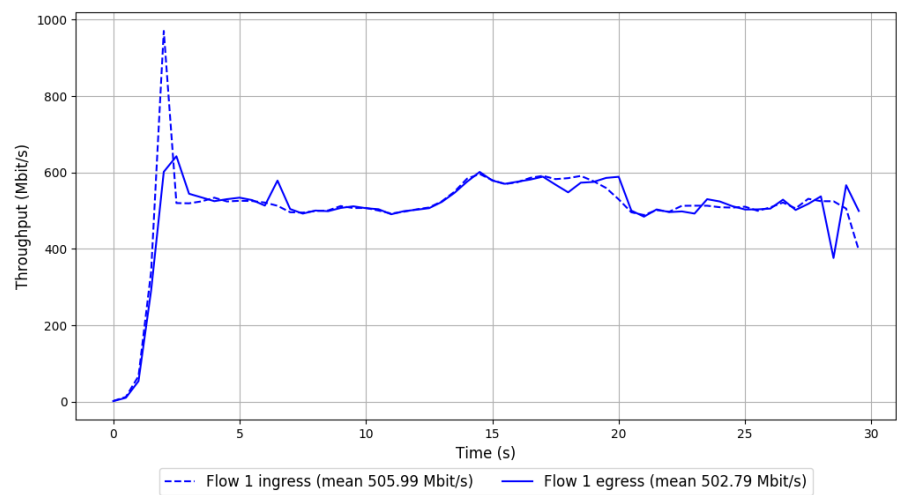
-- Flow 1:

Average throughput: 502.79 Mbit/s

95th percentile per-packet one-way delay: 151.320 ms

Loss rate: 0.64%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-16 08:51:50

End at: 2017-11-16 08:52:20

Below is generated by plot.py at 2017-11-16 10:42:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 541.15 Mbit/s

95th percentile per-packet one-way delay: 203.612 ms

Loss rate: 3.38%

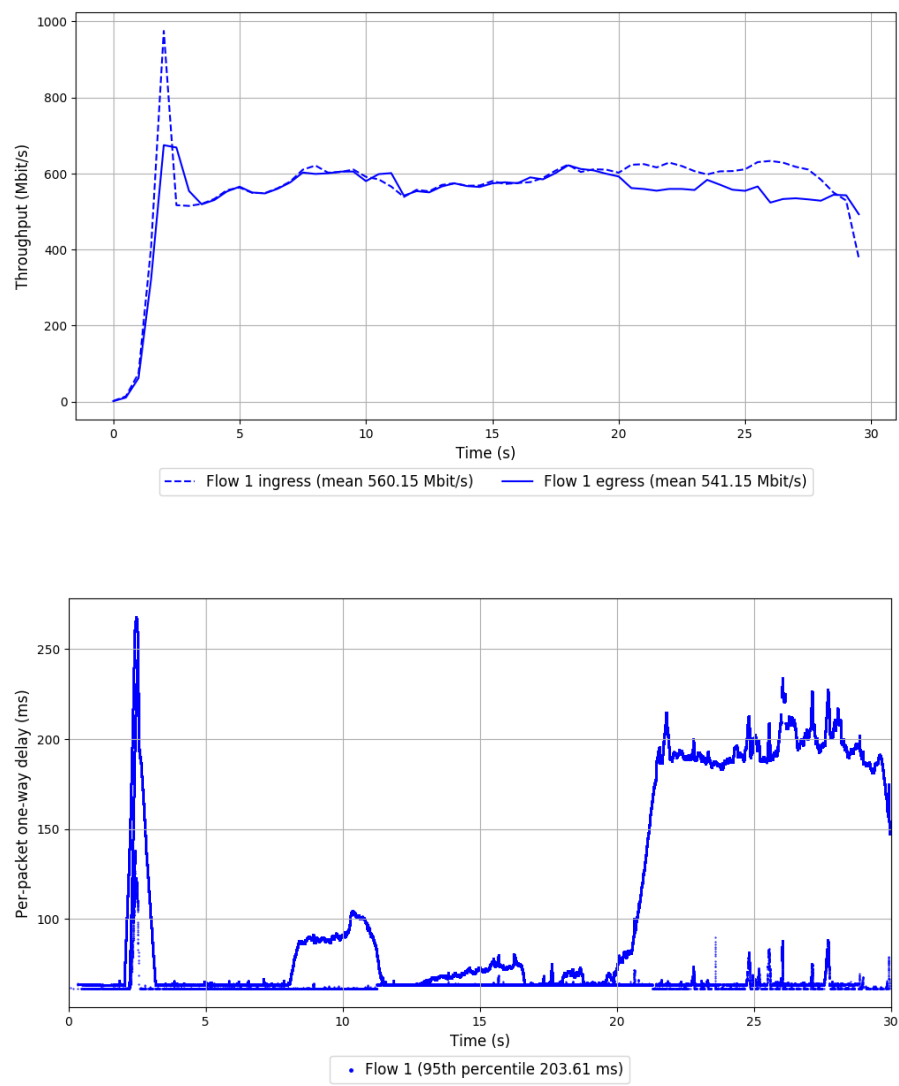
-- Flow 1:

Average throughput: 541.15 Mbit/s

95th percentile per-packet one-way delay: 203.612 ms

Loss rate: 3.38%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-16 09:02:23

End at: 2017-11-16 09:02:53

Below is generated by plot.py at 2017-11-16 10:42:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 487.14 Mbit/s

95th percentile per-packet one-way delay: 193.384 ms

Loss rate: 2.68%

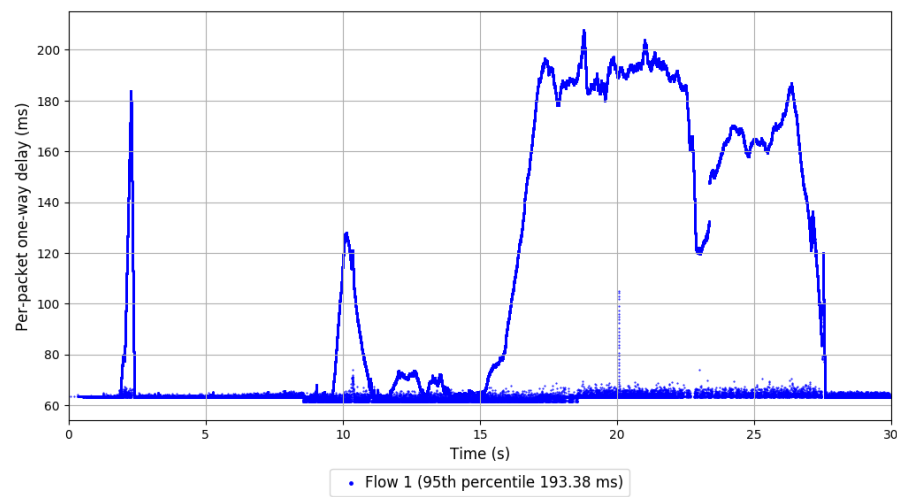
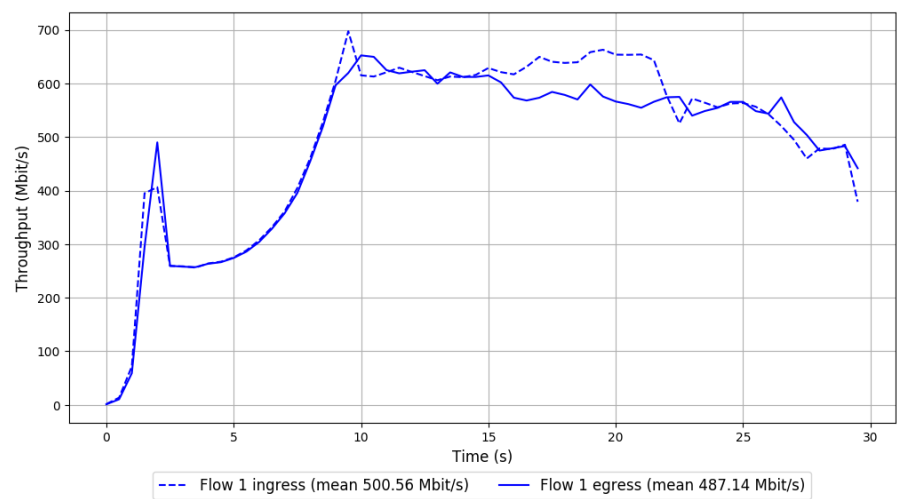
-- Flow 1:

Average throughput: 487.14 Mbit/s

95th percentile per-packet one-way delay: 193.384 ms

Loss rate: 2.68%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-16 09:12:48

End at: 2017-11-16 09:13:18

Below is generated by plot.py at 2017-11-16 10:42:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 529.86 Mbit/s

95th percentile per-packet one-way delay: 183.361 ms

Loss rate: 0.67%

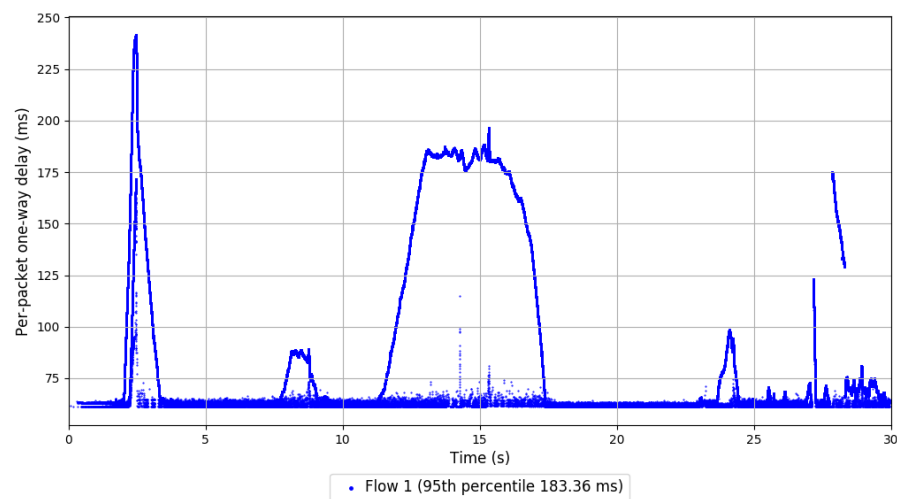
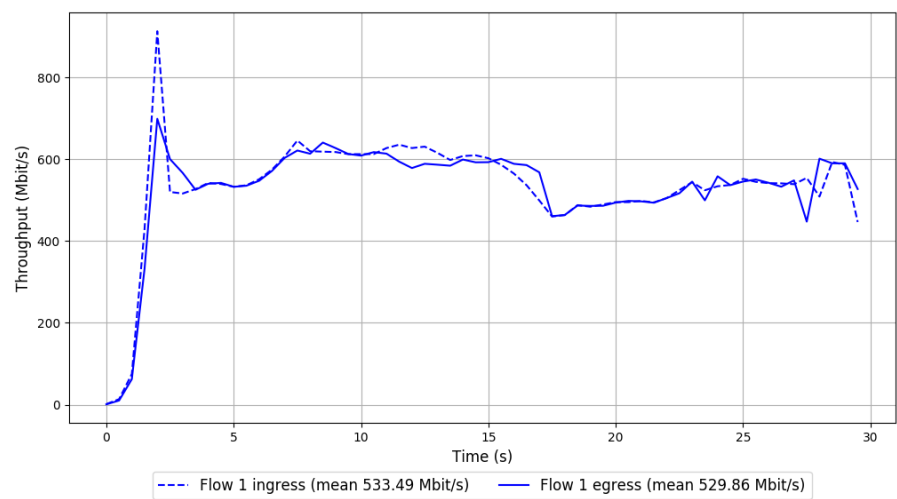
-- Flow 1:

Average throughput: 529.86 Mbit/s

95th percentile per-packet one-way delay: 183.361 ms

Loss rate: 0.67%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-16 09:23:25

End at: 2017-11-16 09:23:55

Below is generated by plot.py at 2017-11-16 10:49:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 530.05 Mbit/s

95th percentile per-packet one-way delay: 189.404 ms

Loss rate: 2.39%

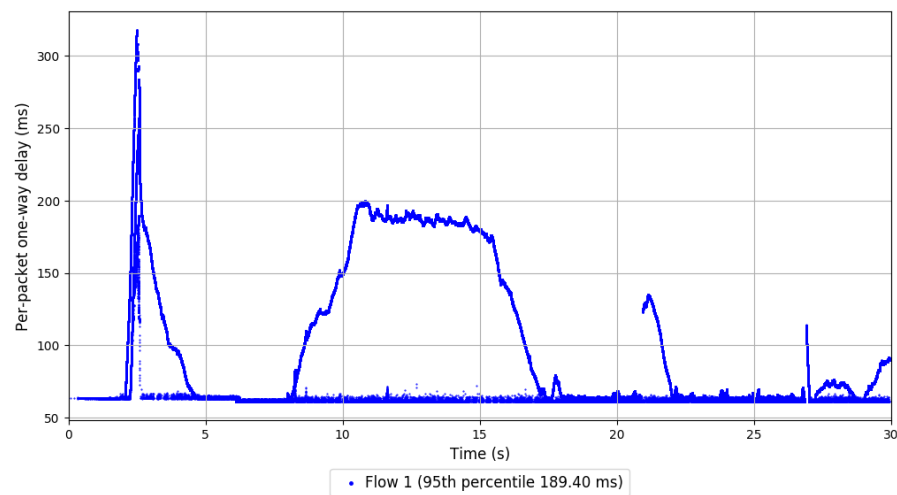
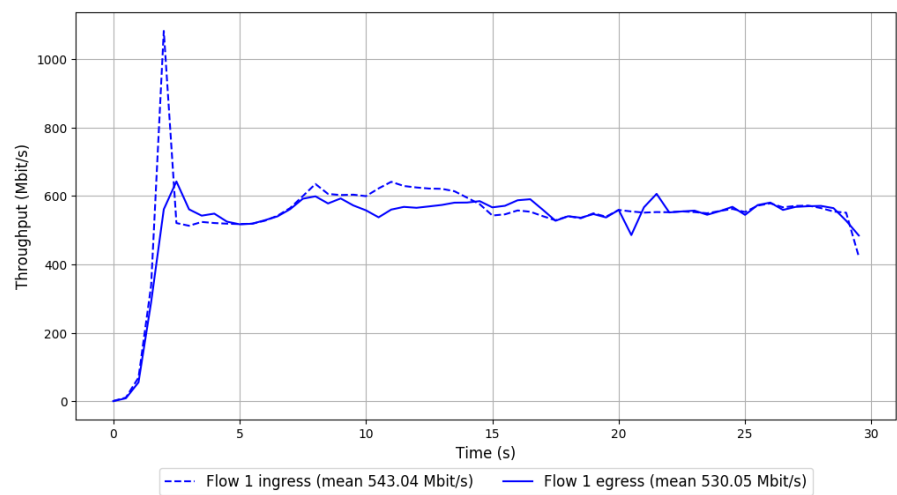
-- Flow 1:

Average throughput: 530.05 Mbit/s

95th percentile per-packet one-way delay: 189.404 ms

Loss rate: 2.39%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-16 09:33:48

End at: 2017-11-16 09:34:18

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 551.87 Mbit/s

95th percentile per-packet one-way delay: 186.331 ms

Loss rate: 0.95%

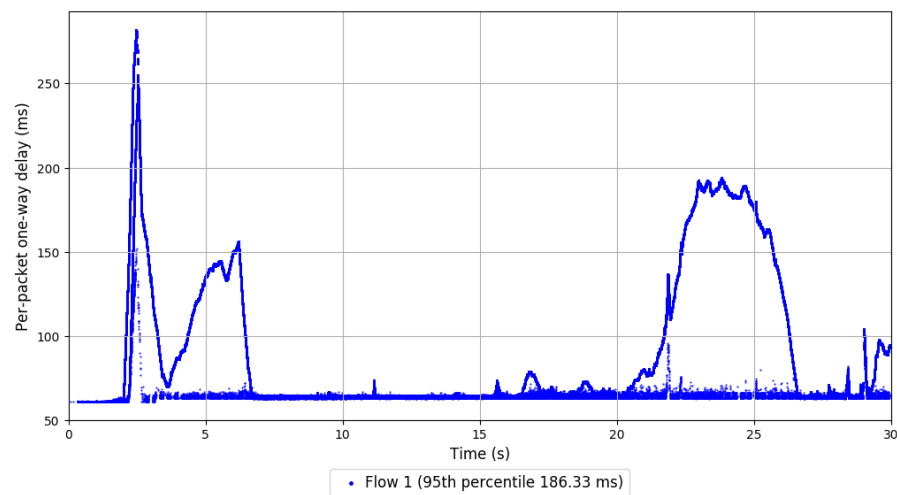
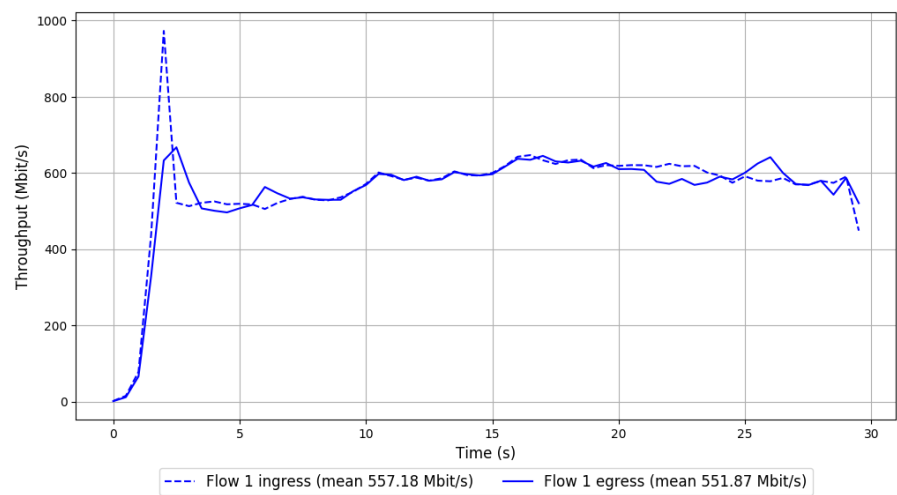
-- Flow 1:

Average throughput: 551.87 Mbit/s

95th percentile per-packet one-way delay: 186.331 ms

Loss rate: 0.95%

Run 10: Report of PCC — Data Link

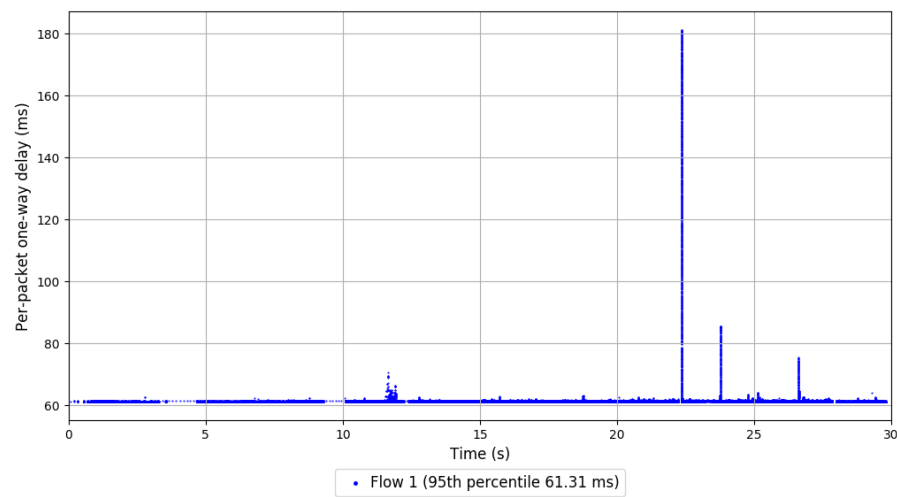
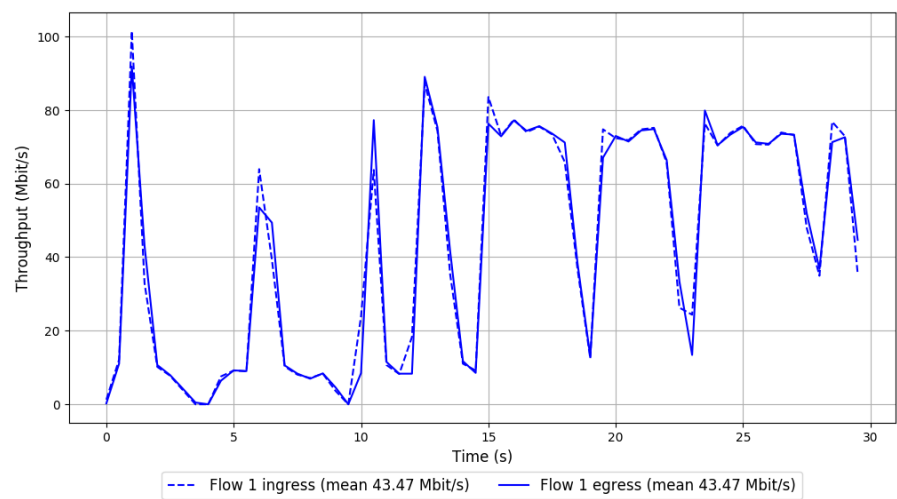


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-16 07:58:53
End at: 2017-11-16 07:59:23

# Below is generated by plot.py at 2017-11-16 10:50:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.47 Mbit/s
95th percentile per-packet one-way delay: 61.314 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.47 Mbit/s
95th percentile per-packet one-way delay: 61.314 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-16 08:09:11

End at: 2017-11-16 08:09:41

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.41 Mbit/s

95th percentile per-packet one-way delay: 63.396 ms

Loss rate: 0.01%

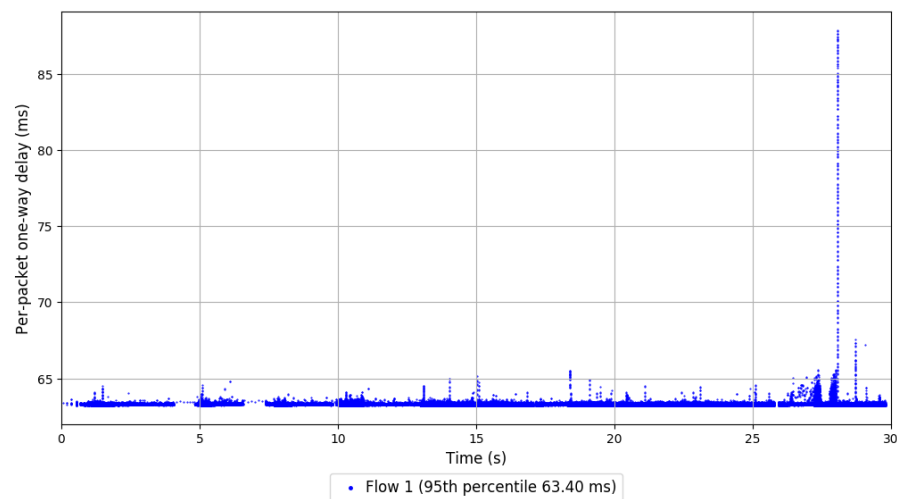
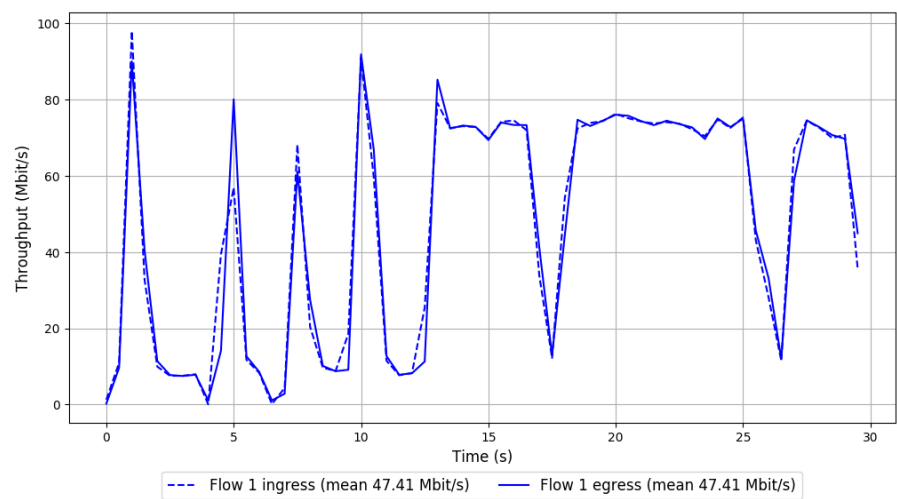
-- Flow 1:

Average throughput: 47.41 Mbit/s

95th percentile per-packet one-way delay: 63.396 ms

Loss rate: 0.01%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-16 08:19:44

End at: 2017-11-16 08:20:15

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.53 Mbit/s

95th percentile per-packet one-way delay: 63.570 ms

Loss rate: 0.01%

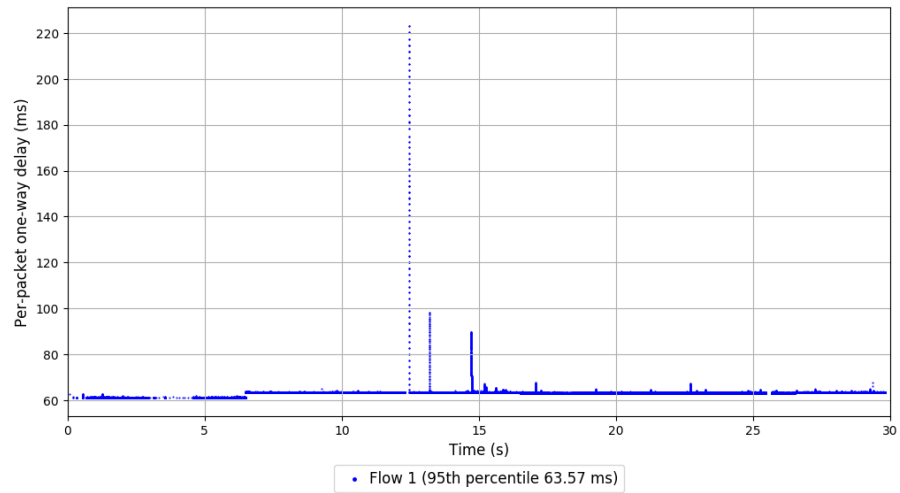
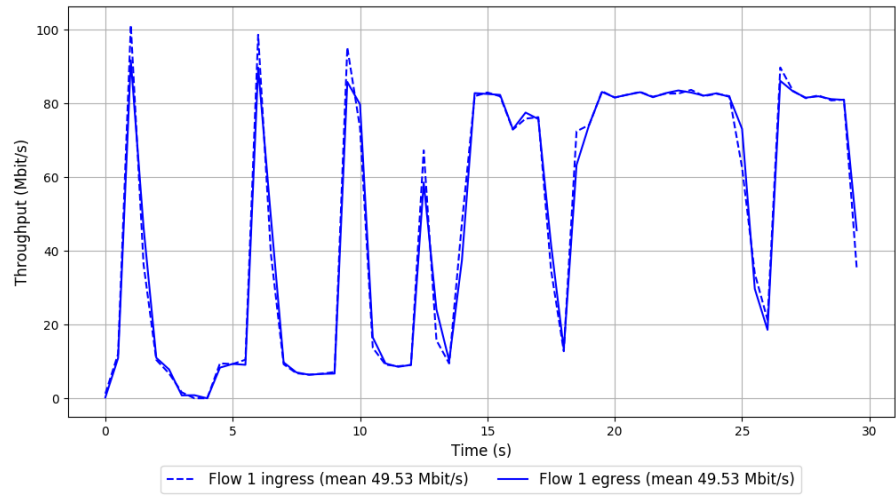
-- Flow 1:

Average throughput: 49.53 Mbit/s

95th percentile per-packet one-way delay: 63.570 ms

Loss rate: 0.01%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

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

End at: 2017-11-16 08:30:38

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.81 Mbit/s

95th percentile per-packet one-way delay: 63.368 ms

Loss rate: 0.00%

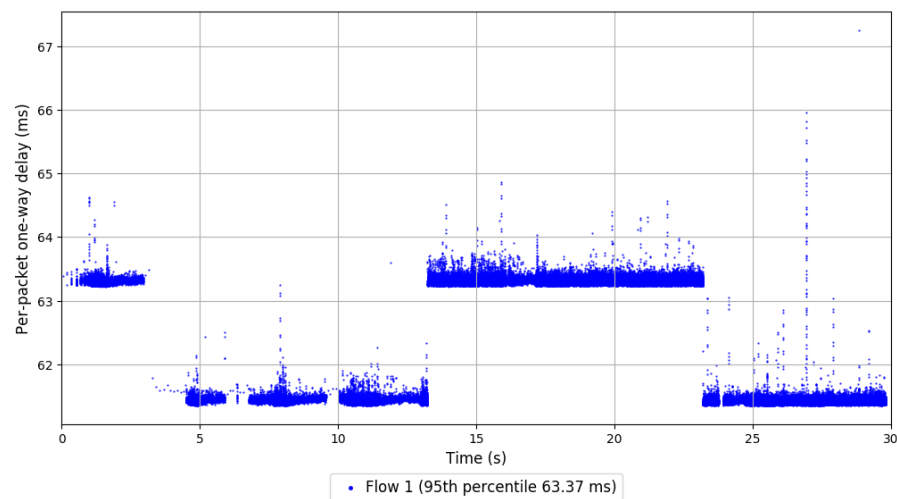
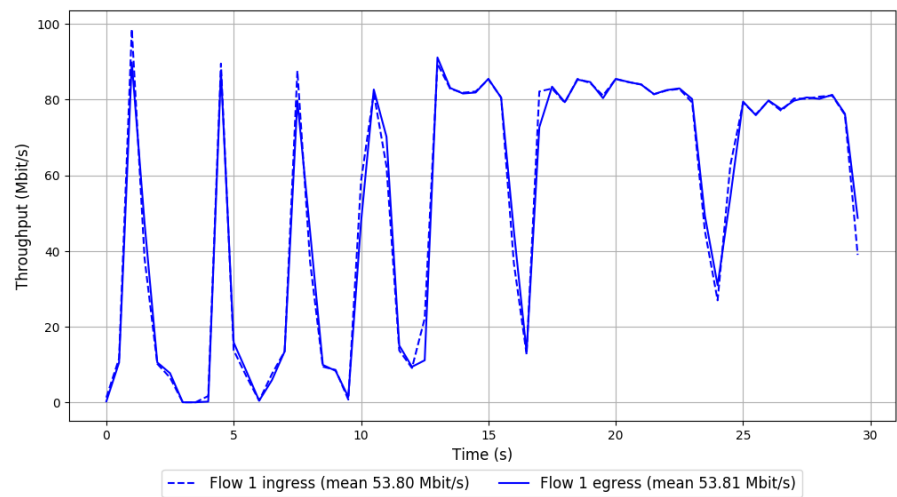
-- Flow 1:

Average throughput: 53.81 Mbit/s

95th percentile per-packet one-way delay: 63.368 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-16 08:40:36

End at: 2017-11-16 08:41:06

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.69 Mbit/s

95th percentile per-packet one-way delay: 63.187 ms

Loss rate: 0.00%

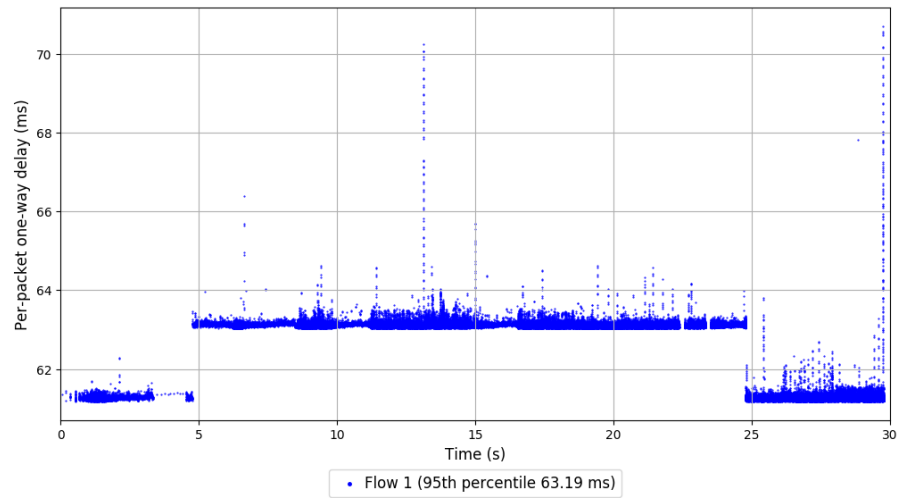
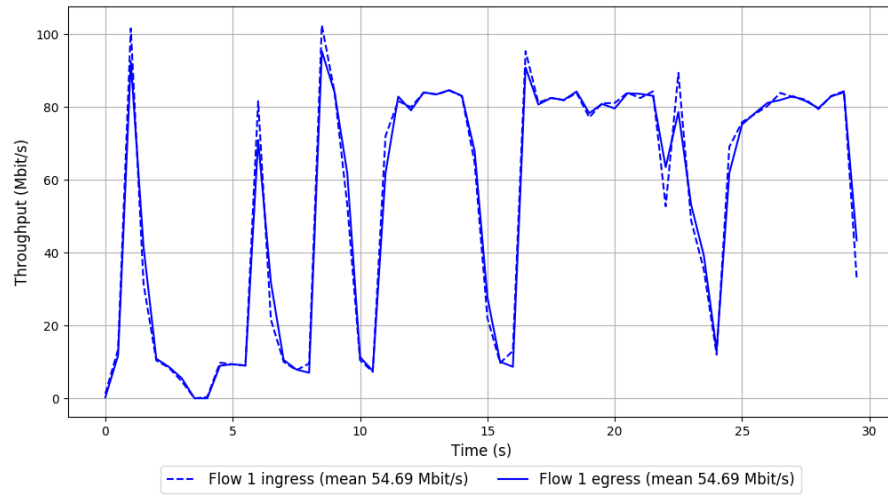
-- Flow 1:

Average throughput: 54.69 Mbit/s

95th percentile per-packet one-way delay: 63.187 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-16 08:51:10

End at: 2017-11-16 08:51:40

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.22 Mbit/s

95th percentile per-packet one-way delay: 63.381 ms

Loss rate: 0.13%

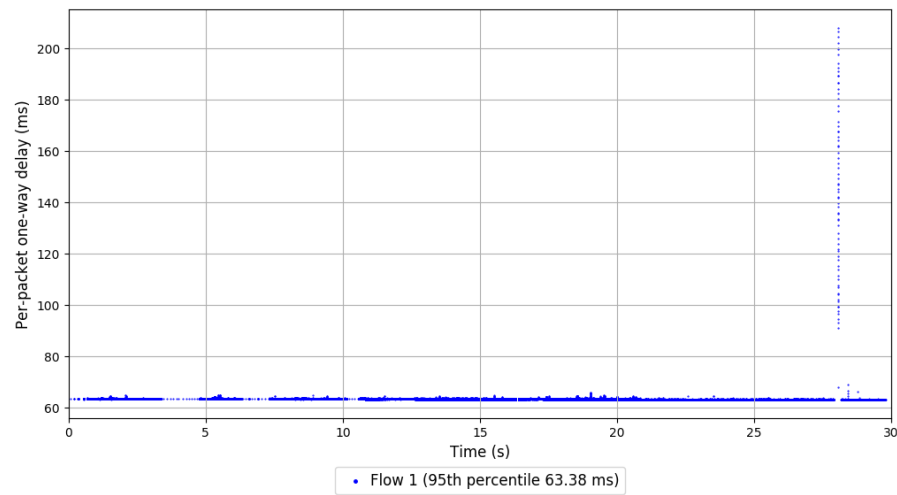
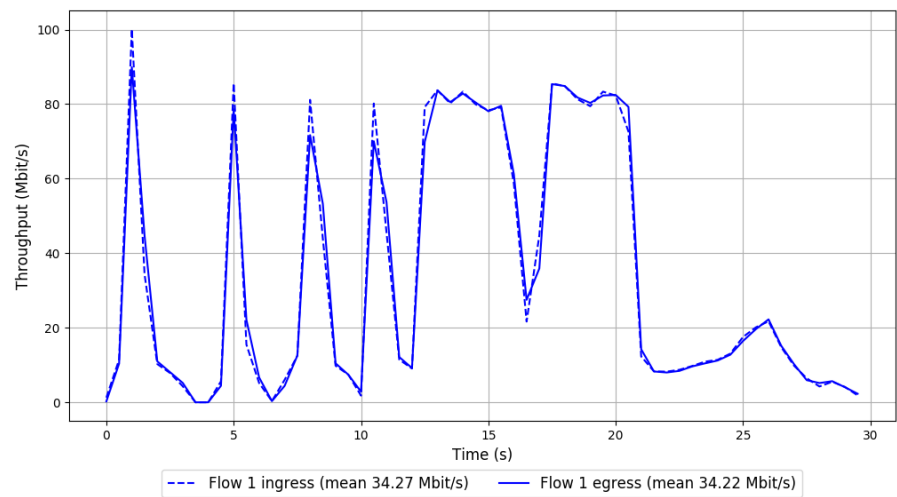
-- Flow 1:

Average throughput: 34.22 Mbit/s

95th percentile per-packet one-way delay: 63.381 ms

Loss rate: 0.13%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-16 09:01:42

End at: 2017-11-16 09:02:12

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.10 Mbit/s

95th percentile per-packet one-way delay: 63.171 ms

Loss rate: 0.00%

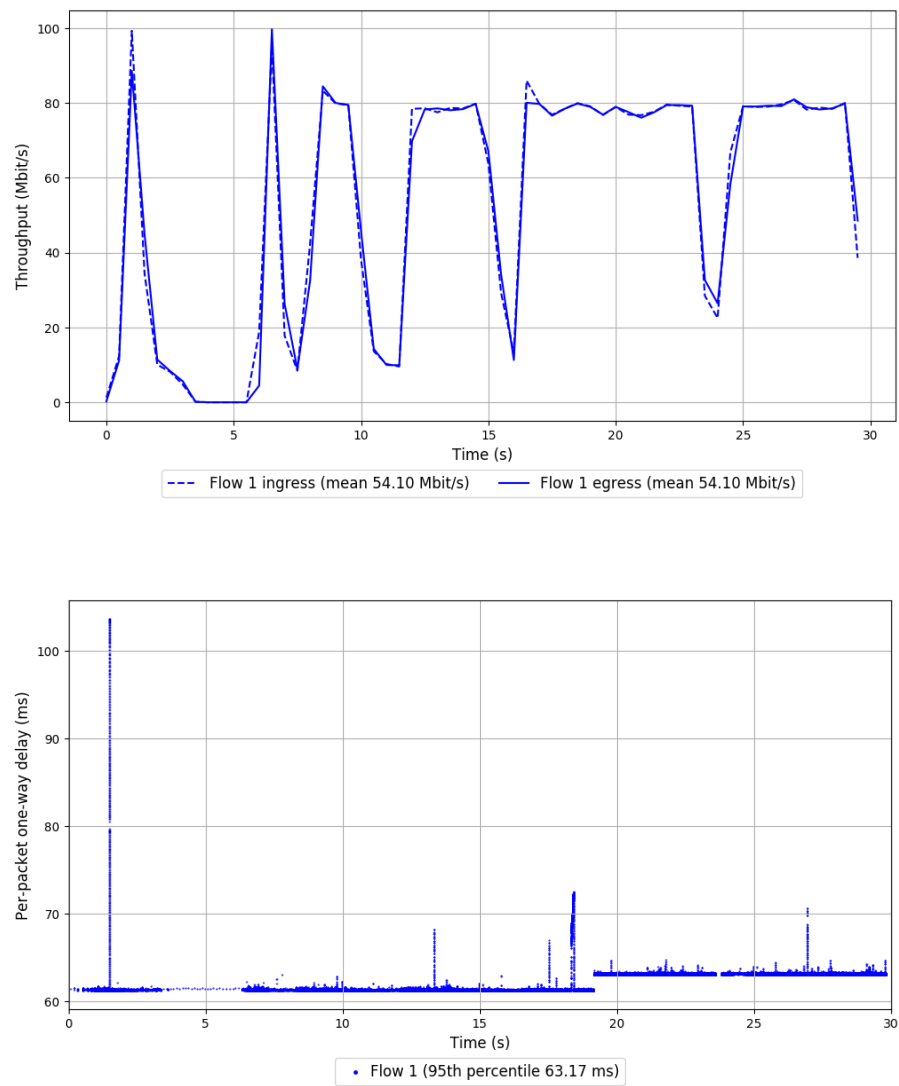
-- Flow 1:

Average throughput: 54.10 Mbit/s

95th percentile per-packet one-way delay: 63.171 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-16 09:12:08

End at: 2017-11-16 09:12:38

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.85 Mbit/s

95th percentile per-packet one-way delay: 63.528 ms

Loss rate: 0.00%

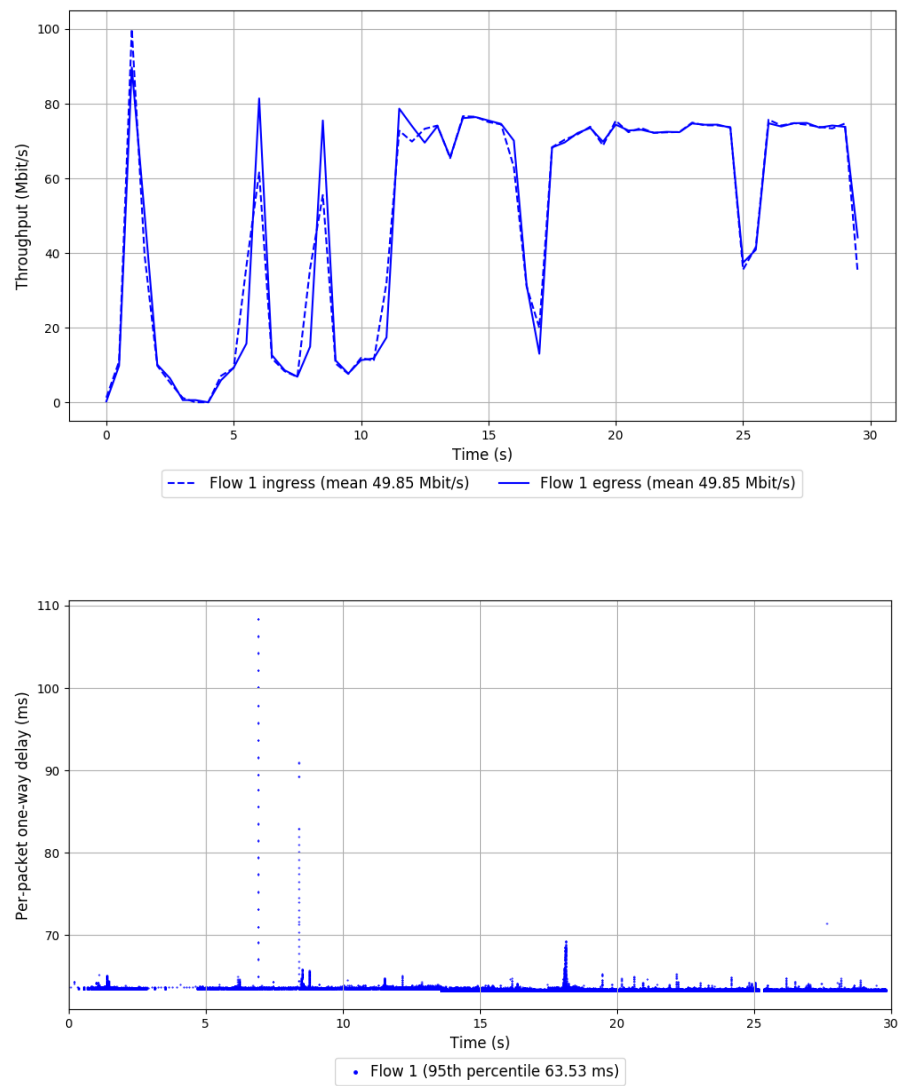
-- Flow 1:

Average throughput: 49.85 Mbit/s

95th percentile per-packet one-way delay: 63.528 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-16 09:22:45

End at: 2017-11-16 09:23:15

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.60 Mbit/s

95th percentile per-packet one-way delay: 63.370 ms

Loss rate: 0.00%

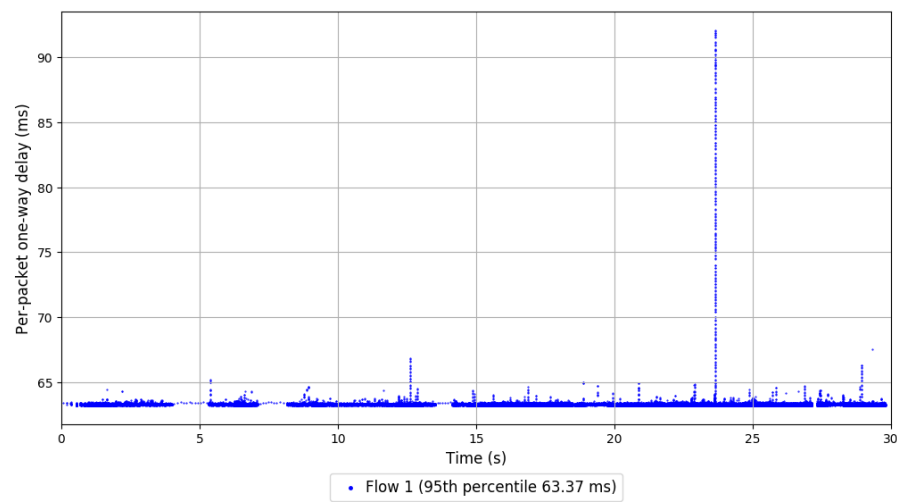
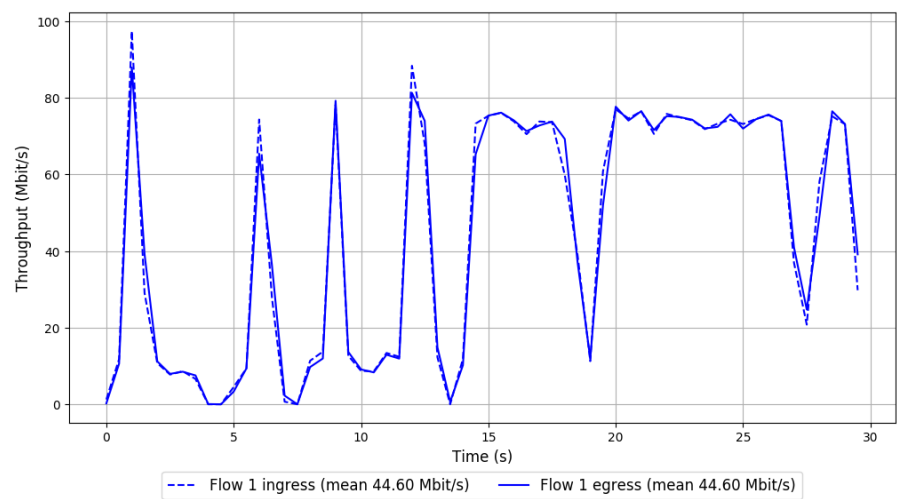
-- Flow 1:

Average throughput: 44.60 Mbit/s

95th percentile per-packet one-way delay: 63.370 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

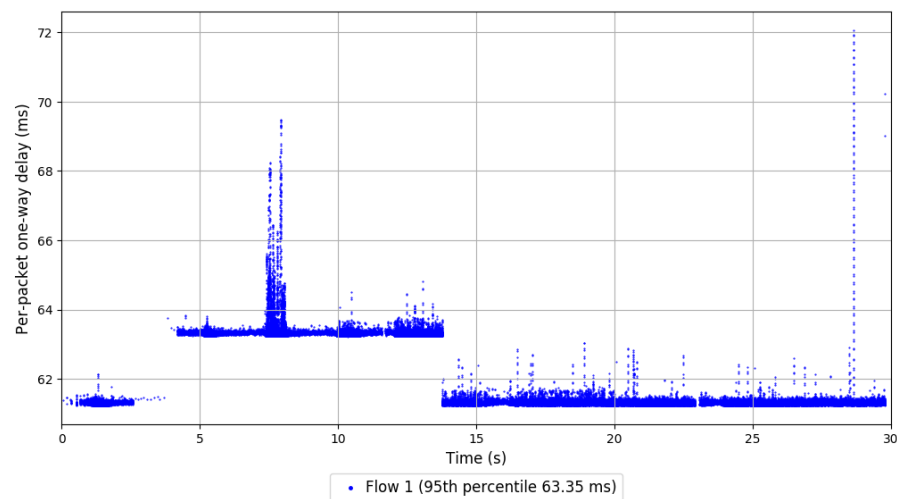
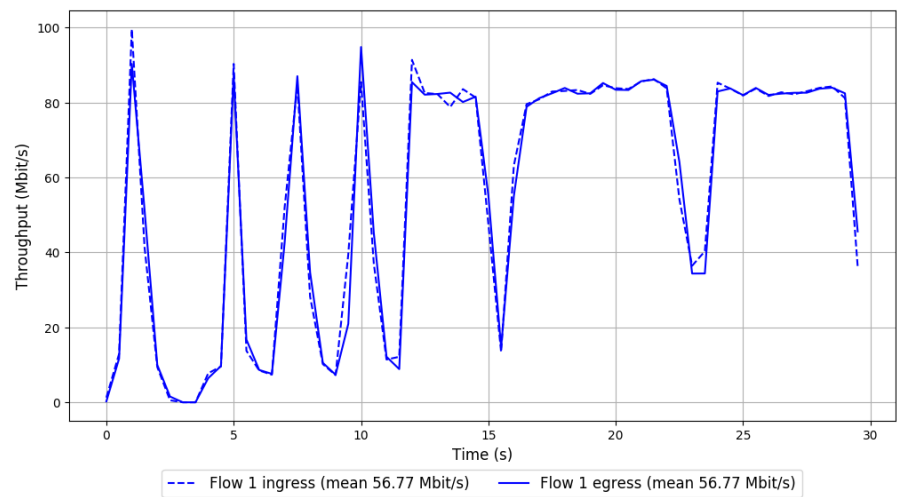


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-11-16 09:33:07
End at: 2017-11-16 09:33:37

# Below is generated by plot.py at 2017-11-16 10:50:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.77 Mbit/s
95th percentile per-packet one-way delay: 63.349 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.77 Mbit/s
95th percentile per-packet one-way delay: 63.349 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

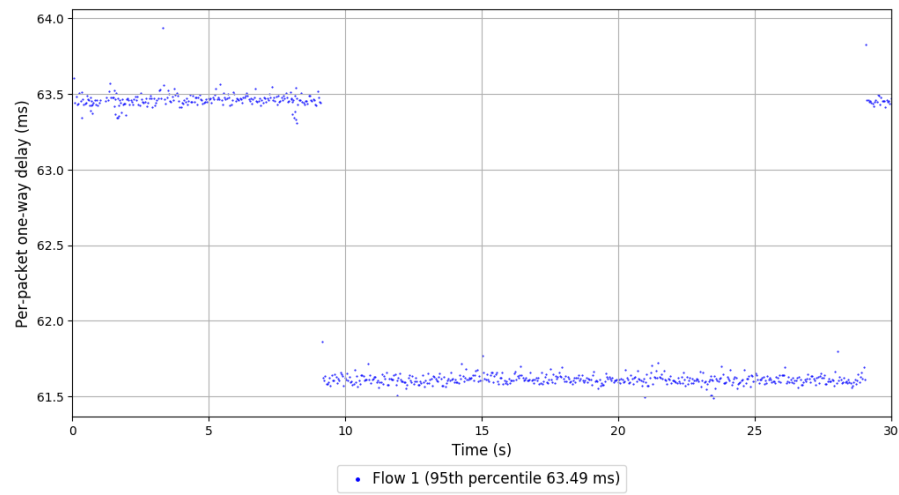
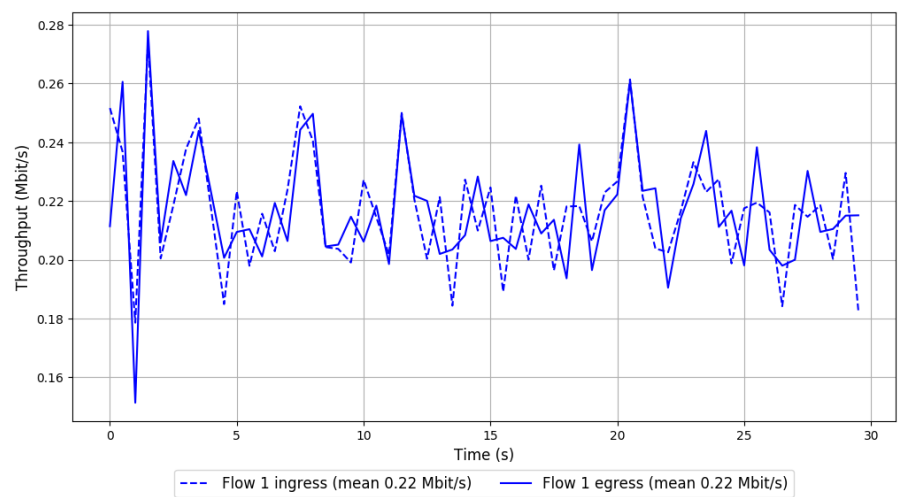


```
Run 1: Statistics of SCReAM

Start at: 2017-11-16 08:02:12
End at: 2017-11-16 08:02:42

# Below is generated by plot.py at 2017-11-16 10:50:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.490 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.490 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

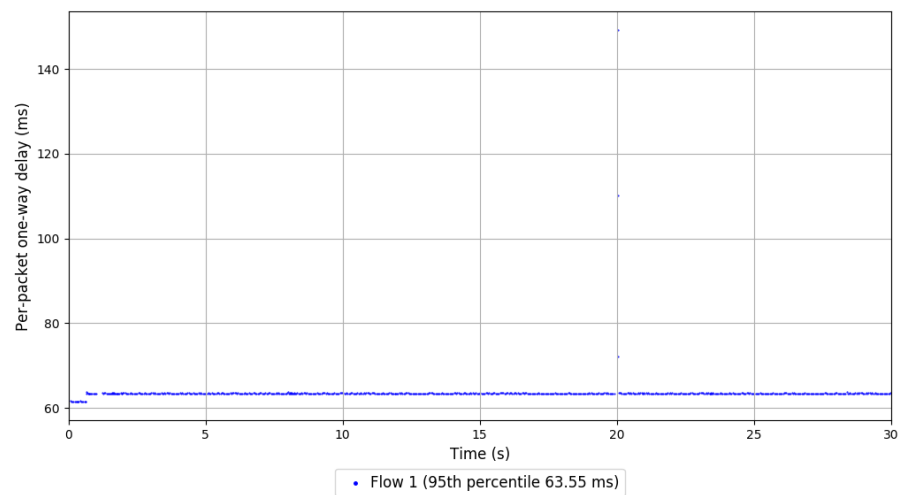
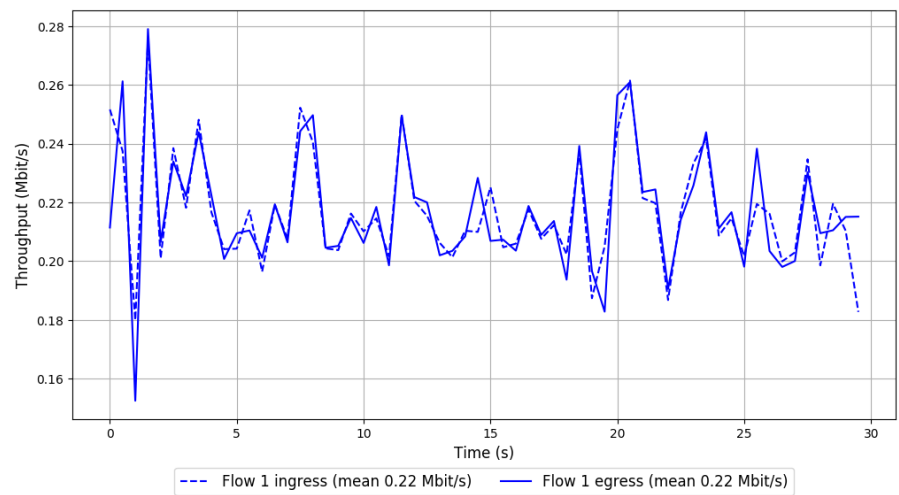


```
Run 2: Statistics of SCReAM

Start at: 2017-11-16 08:12:31
End at: 2017-11-16 08:13:01

# Below is generated by plot.py at 2017-11-16 10:50:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.555 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.555 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-11-16 08:23:04

End at: 2017-11-16 08:23:34

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.611 ms

Loss rate: 0.00%

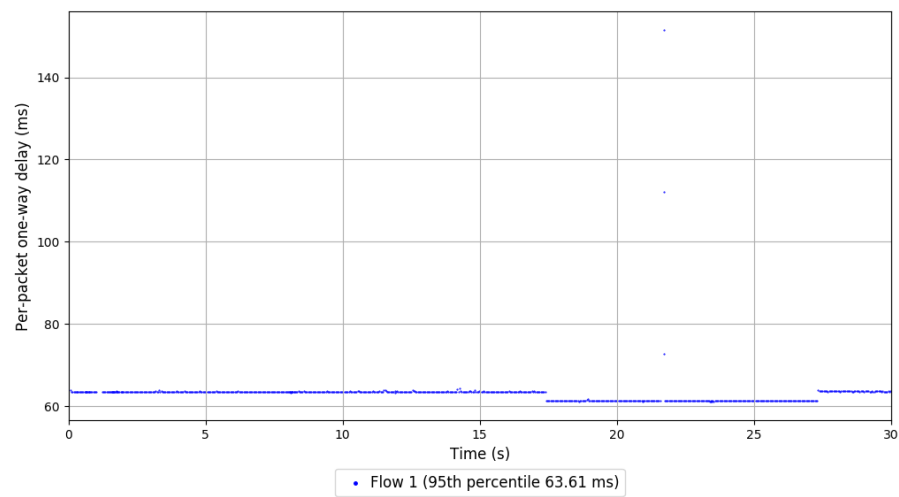
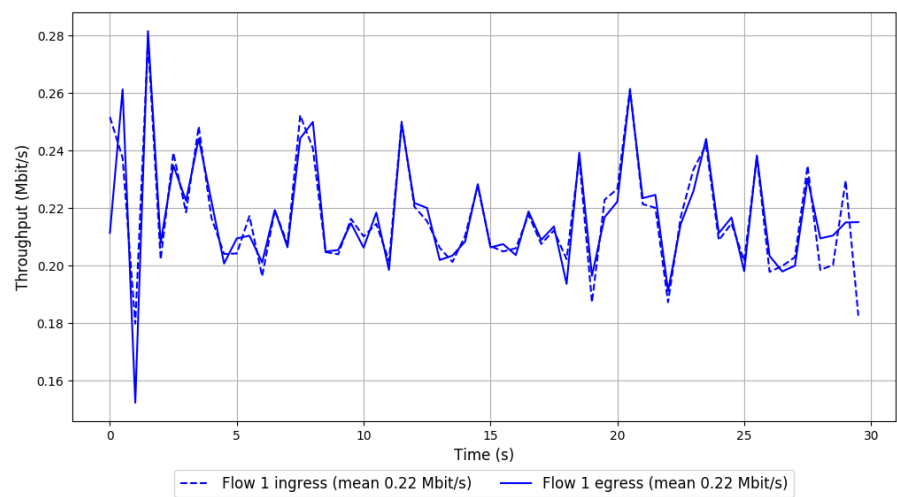
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.611 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-11-16 08:33:28

End at: 2017-11-16 08:33:58

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.294 ms

Loss rate: 0.00%

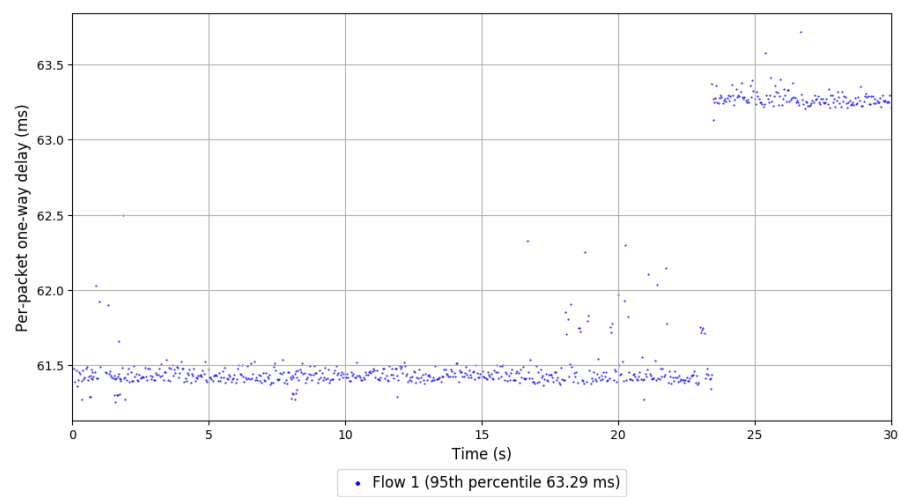
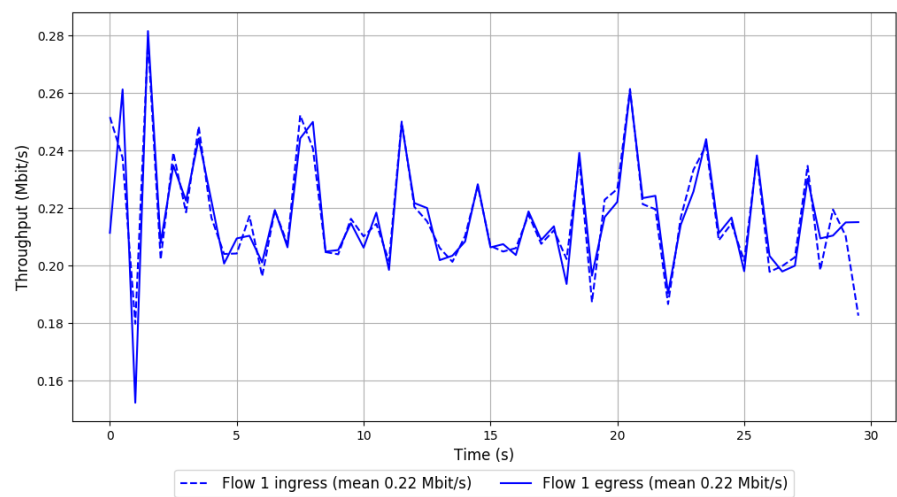
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.294 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-11-16 08:43:56

End at: 2017-11-16 08:44:26

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.683 ms

Loss rate: 0.13%

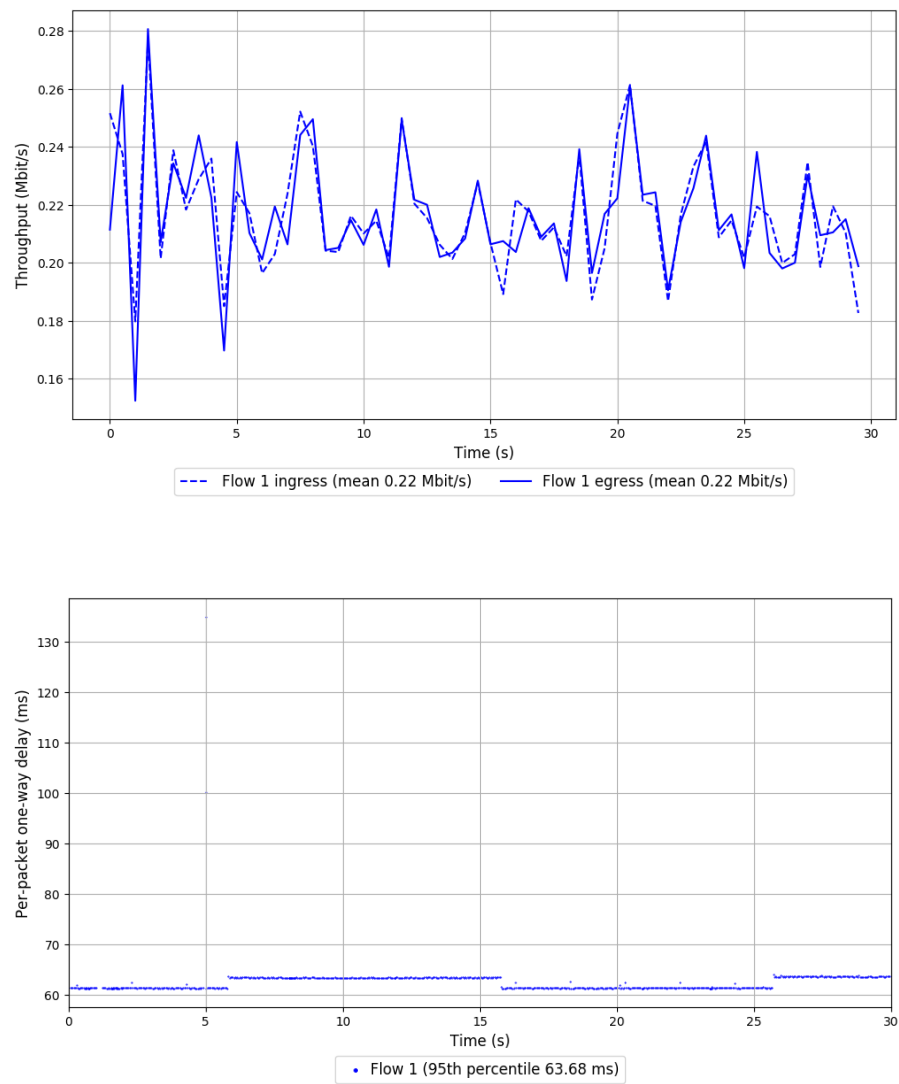
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.683 ms

Loss rate: 0.13%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-16 08:54:30

End at: 2017-11-16 08:55:00

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.524 ms

Loss rate: 0.00%

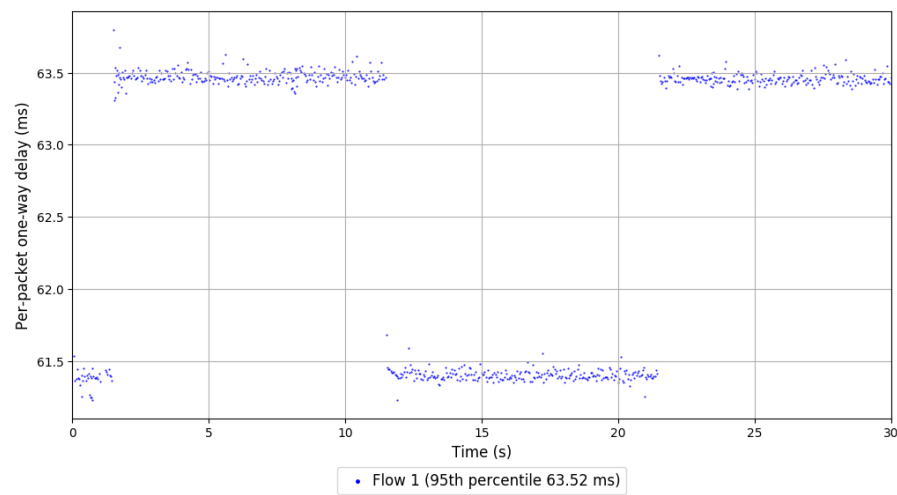
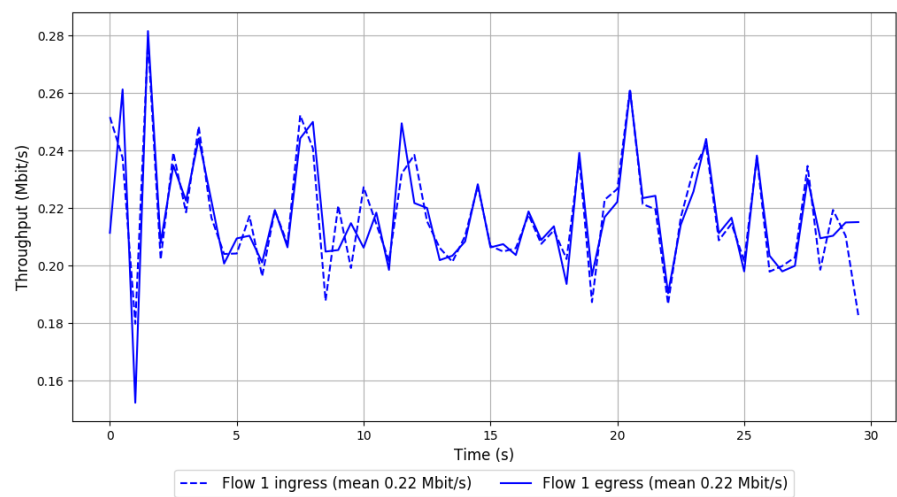
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.524 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

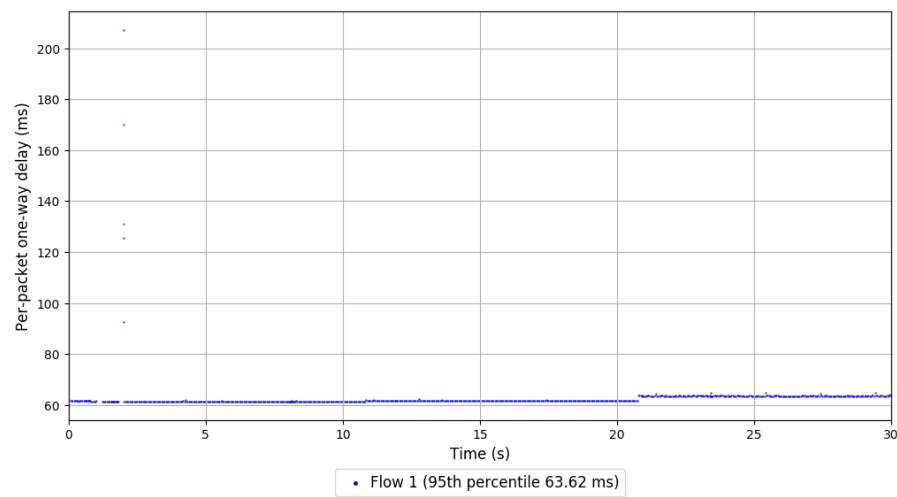
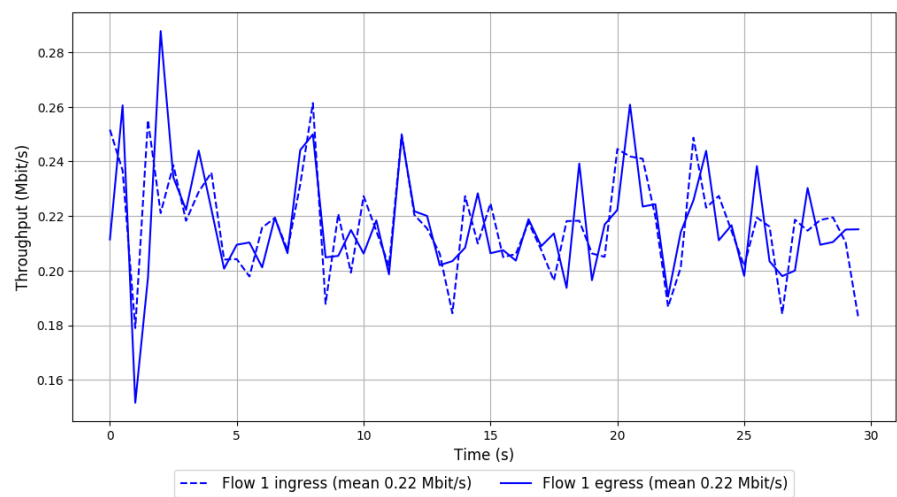


```
Run 7: Statistics of SCReAM

Start at: 2017-11-16 09:05:01
End at: 2017-11-16 09:05:31

# Below is generated by plot.py at 2017-11-16 10:50:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.621 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.621 ms
Loss rate: 0.00%
```

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-11-16 09:15:27

End at: 2017-11-16 09:15:57

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.584 ms

Loss rate: 0.00%

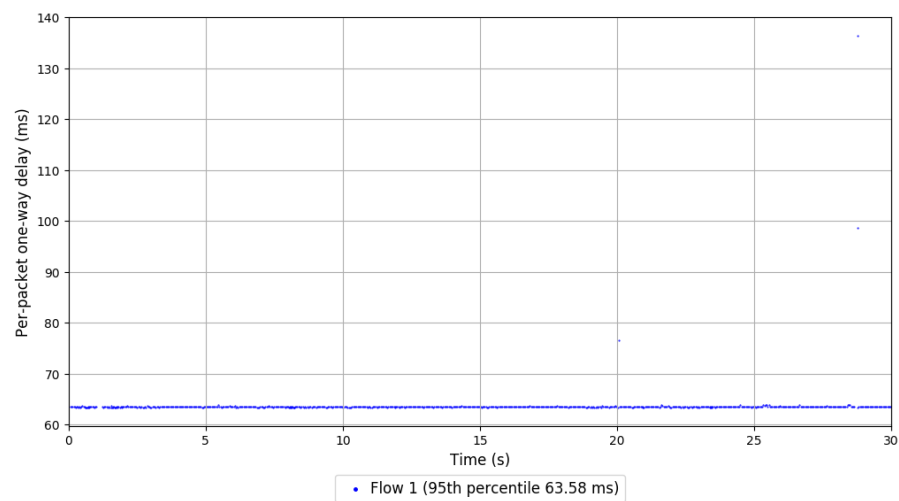
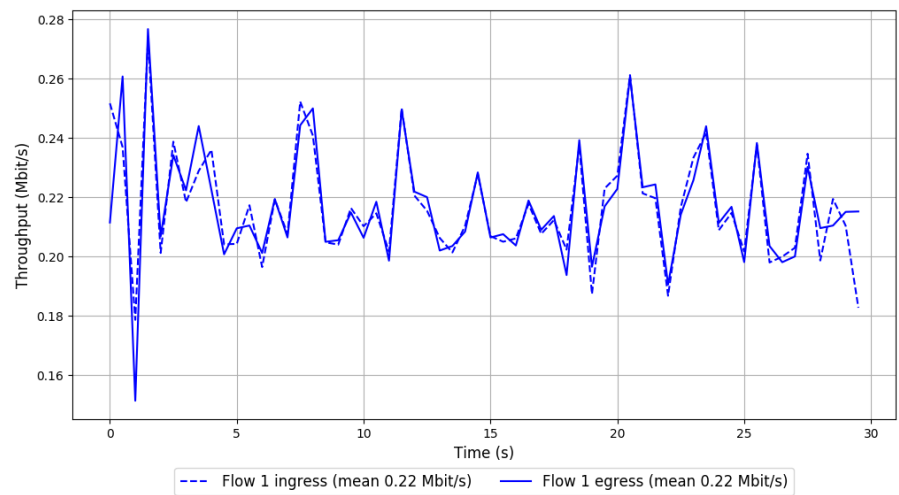
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.584 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-11-16 09:26:05

End at: 2017-11-16 09:26:35

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.585 ms

Loss rate: 0.00%

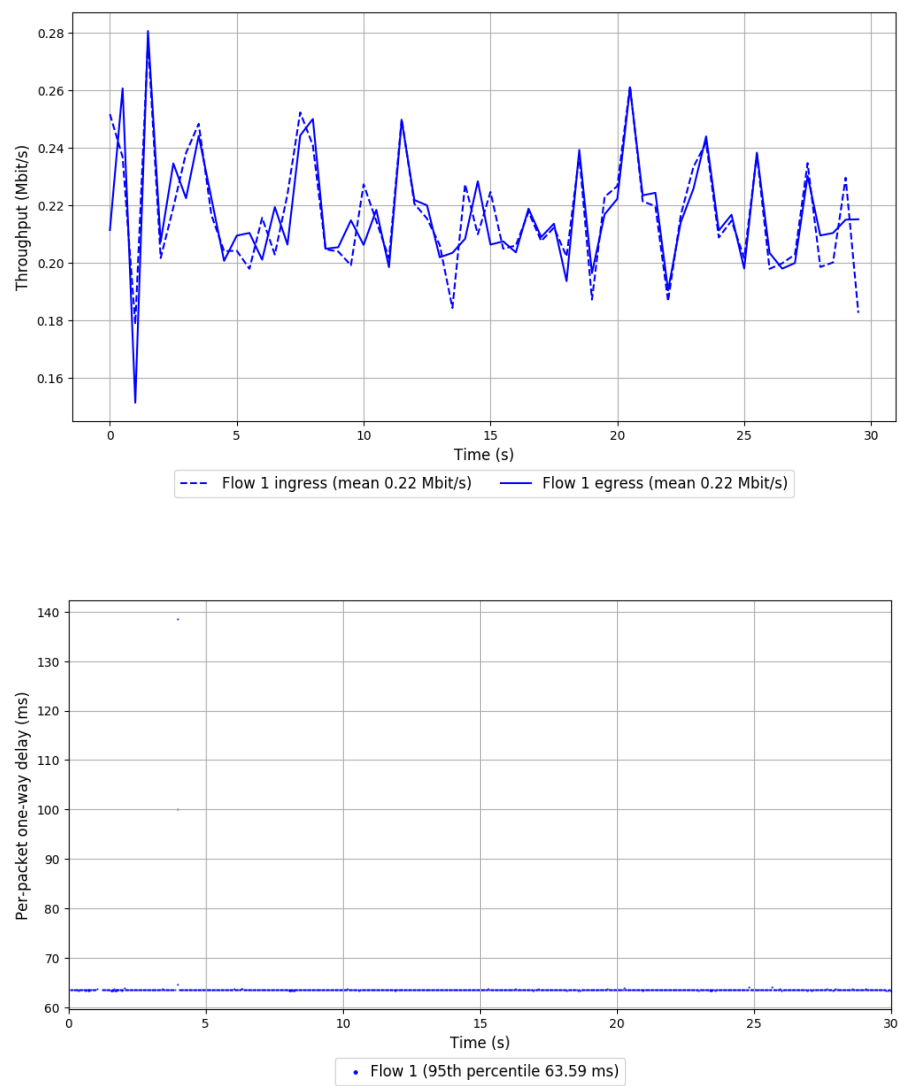
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.585 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-11-16 09:36:28

End at: 2017-11-16 09:36:58

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.719 ms

Loss rate: 0.00%

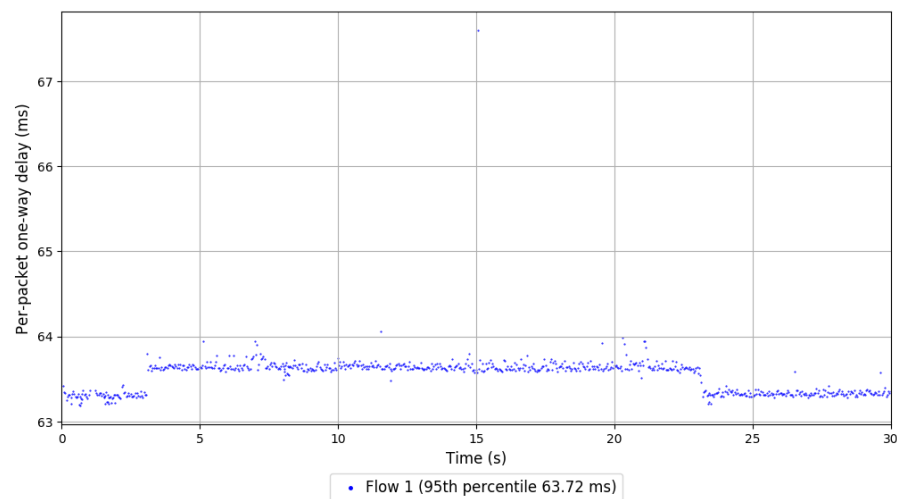
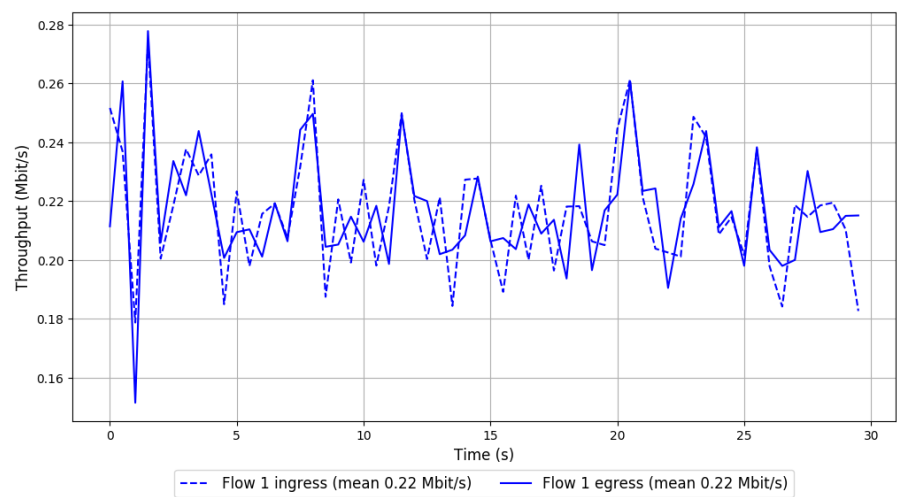
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.719 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

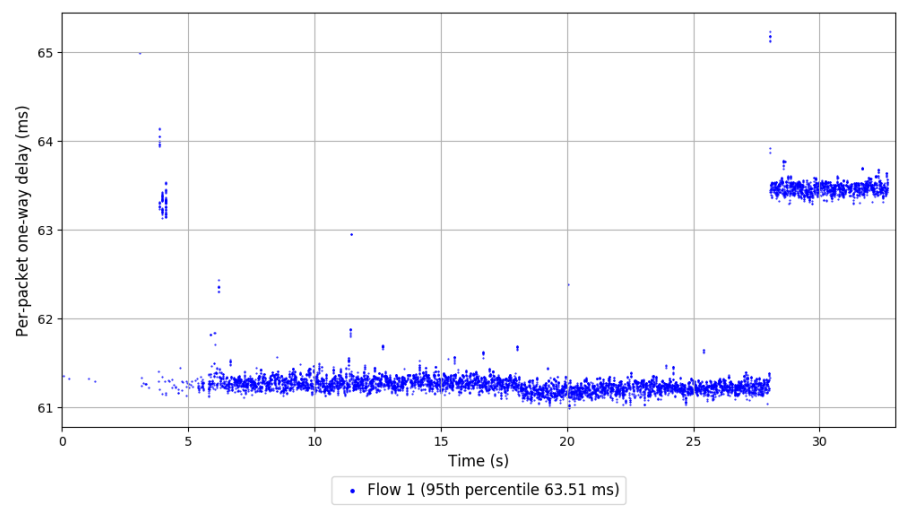
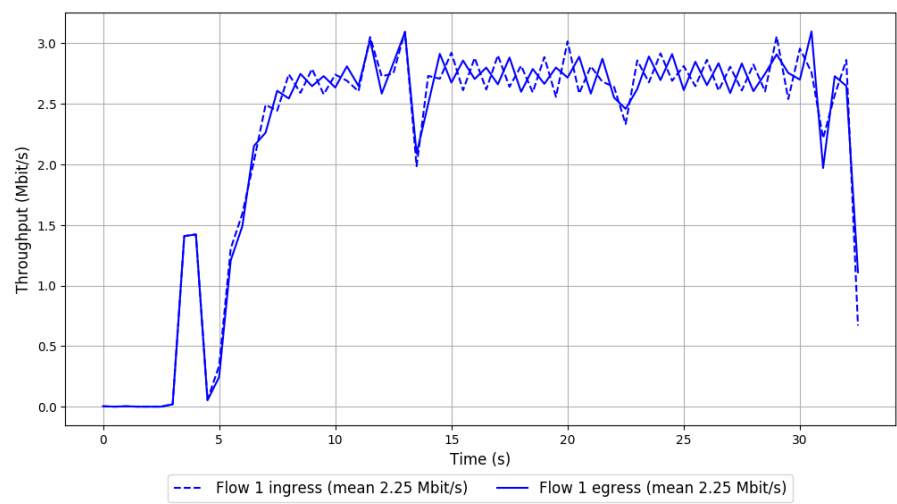


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-16 08:05:36
End at: 2017-11-16 08:06:06

# Below is generated by plot.py at 2017-11-16 10:50:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 63.508 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 63.508 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-16 08:16:01

End at: 2017-11-16 08:16:31

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 61.787 ms

Loss rate: 0.00%

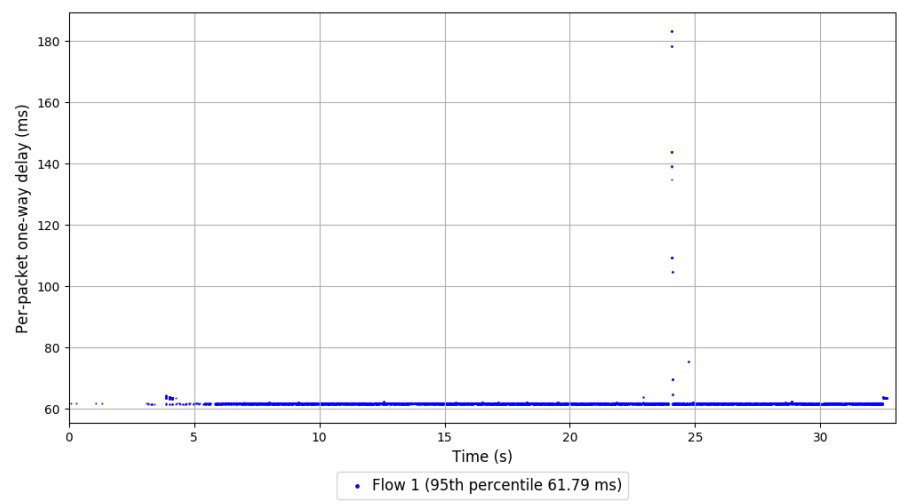
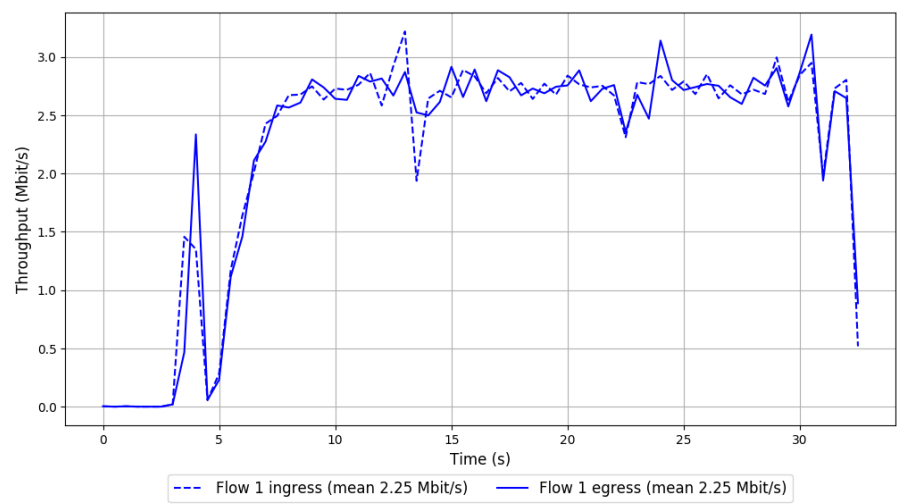
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 61.787 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-16 08:26:27

End at: 2017-11-16 08:26:58

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

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

Loss rate: 0.00%

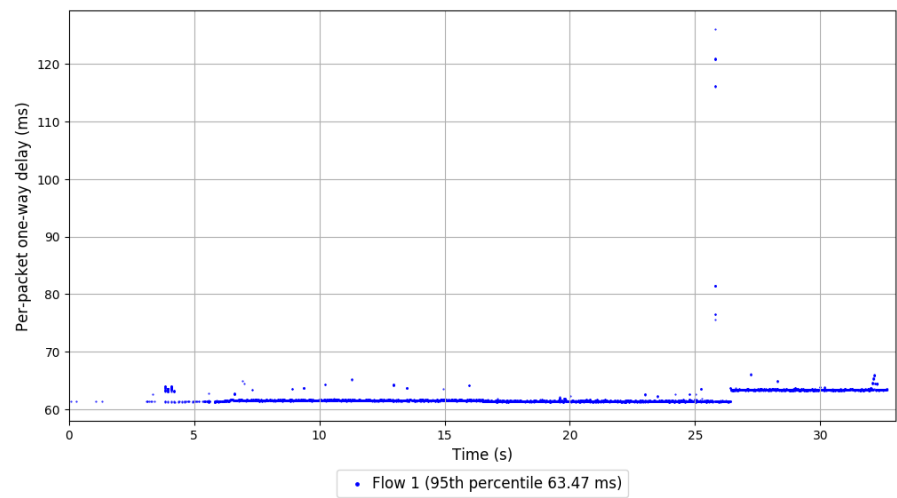
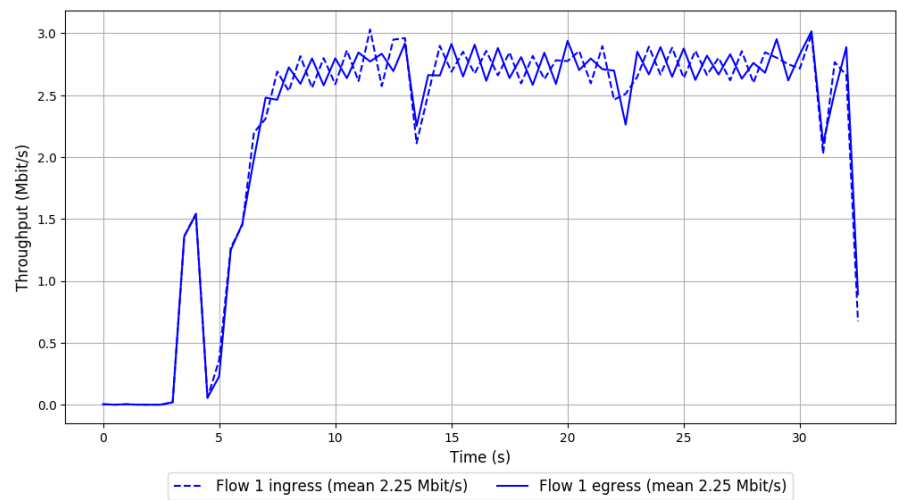
-- Flow 1:

Average throughput: 2.25 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-16 08:36:56

End at: 2017-11-16 08:37:26

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 61.453 ms

Loss rate: 0.00%

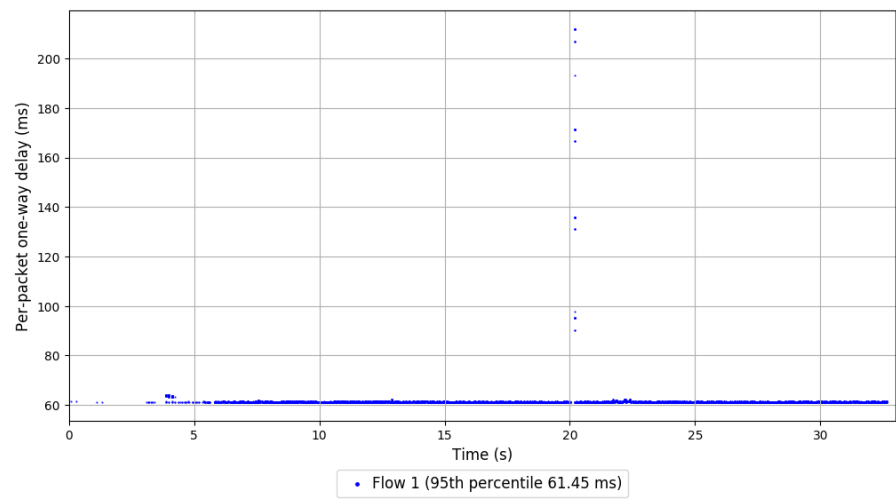
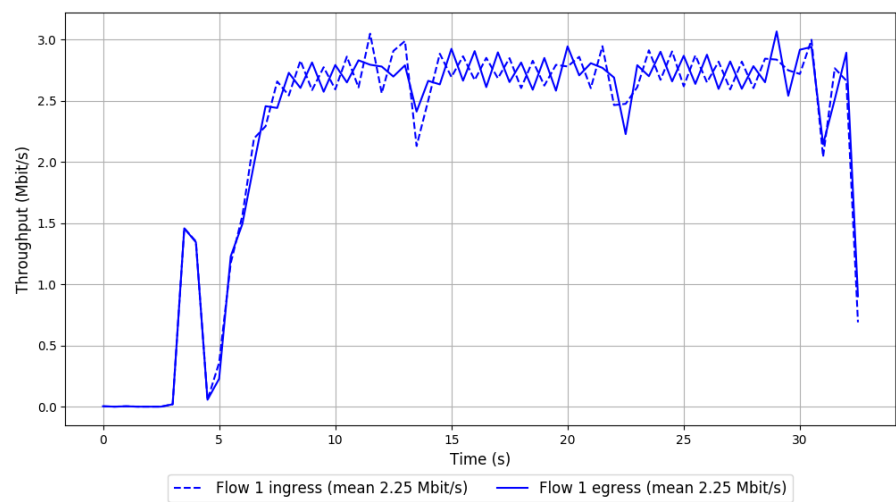
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 61.453 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-16 08:47:23

End at: 2017-11-16 08:47:53

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.621 ms

Loss rate: 0.00%

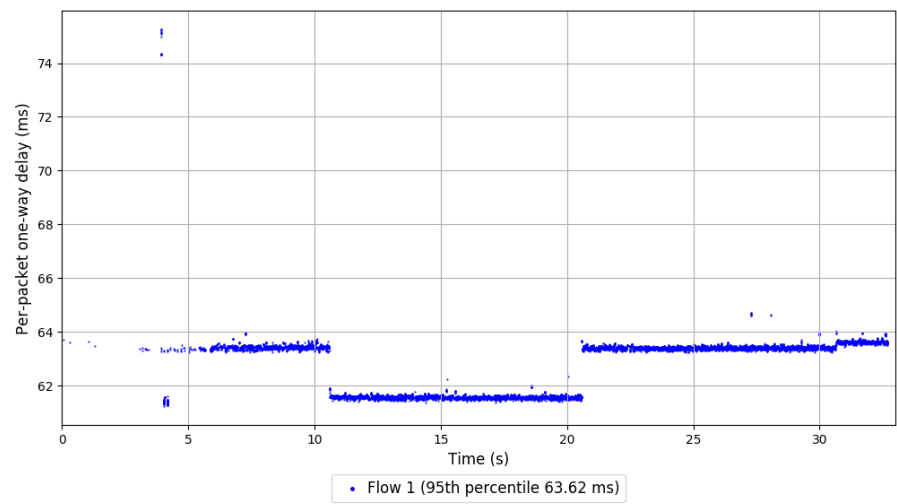
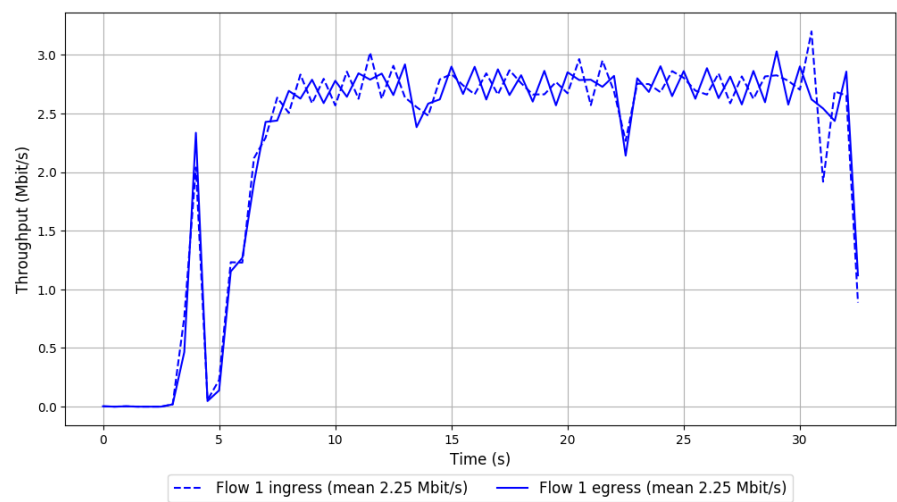
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.621 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-16 08:57:53

End at: 2017-11-16 08:58:23

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.337 ms

Loss rate: 0.00%

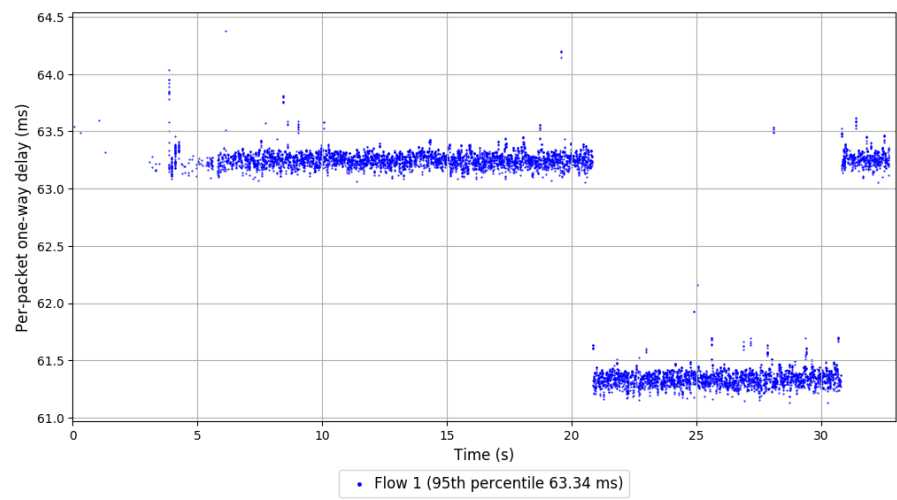
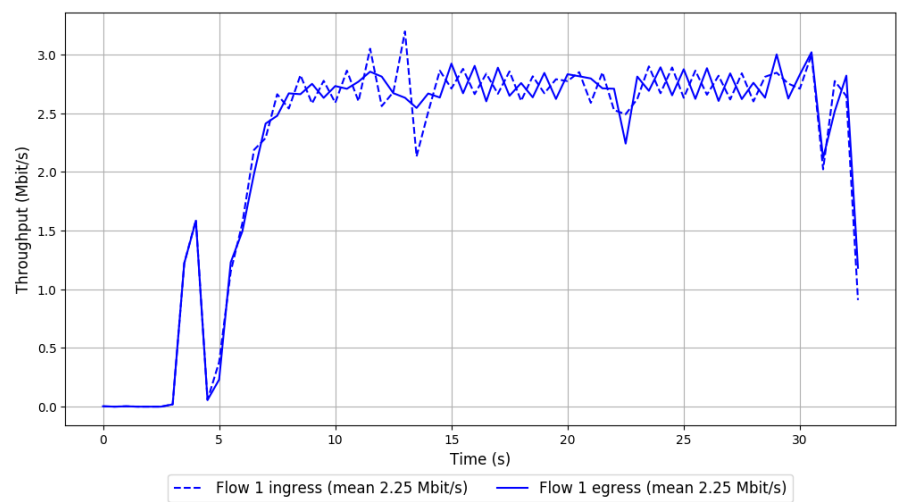
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.337 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-16 09:08:28

End at: 2017-11-16 09:08:58

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.615 ms

Loss rate: 0.00%

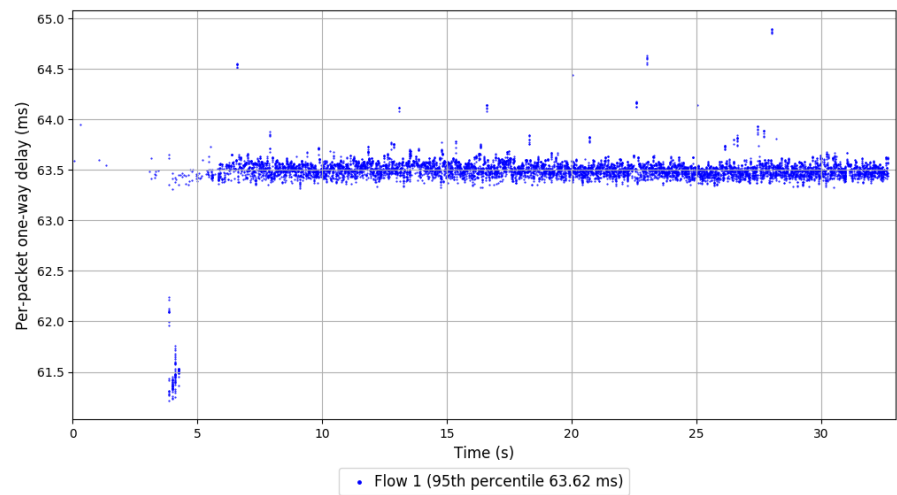
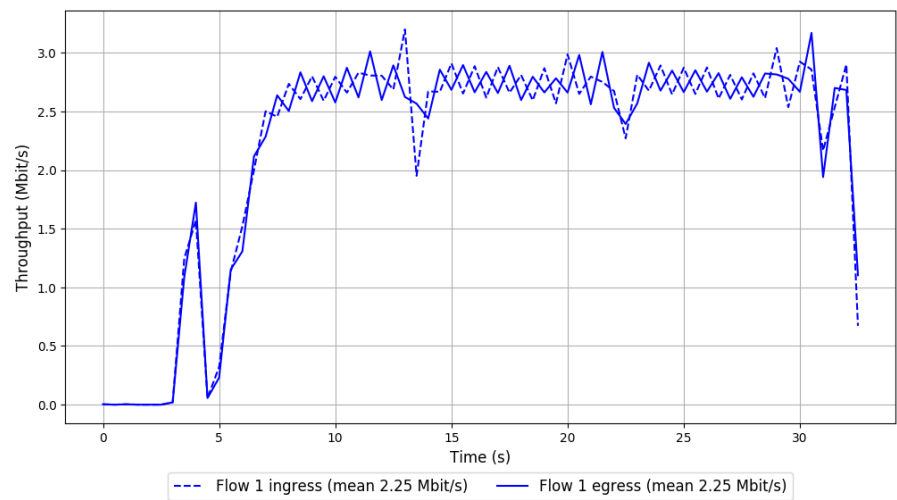
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.615 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-16 09:18:55

End at: 2017-11-16 09:19:25

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 61.735 ms

Loss rate: 0.00%

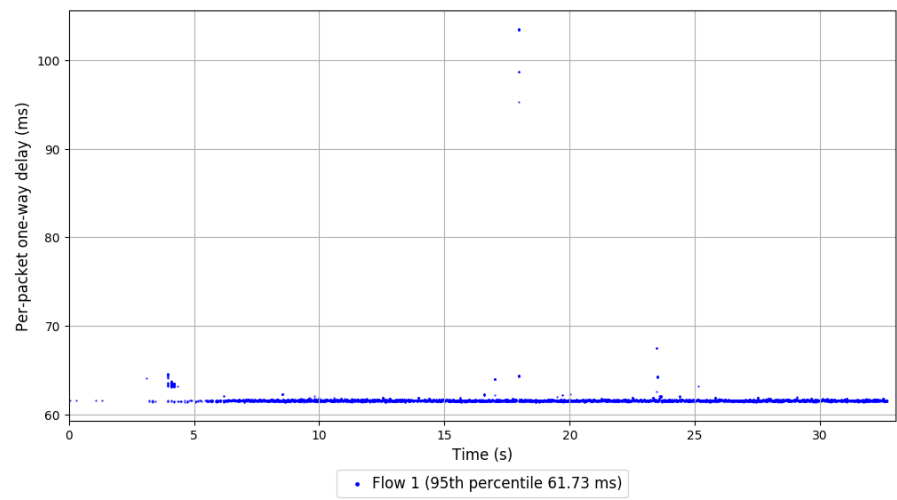
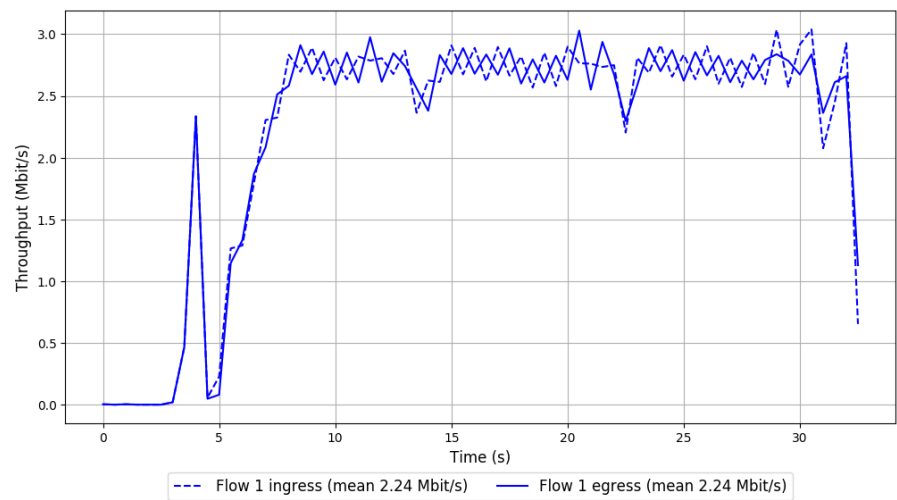
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 61.735 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-16 09:29:32

End at: 2017-11-16 09:30:02

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

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

Loss rate: 0.00%

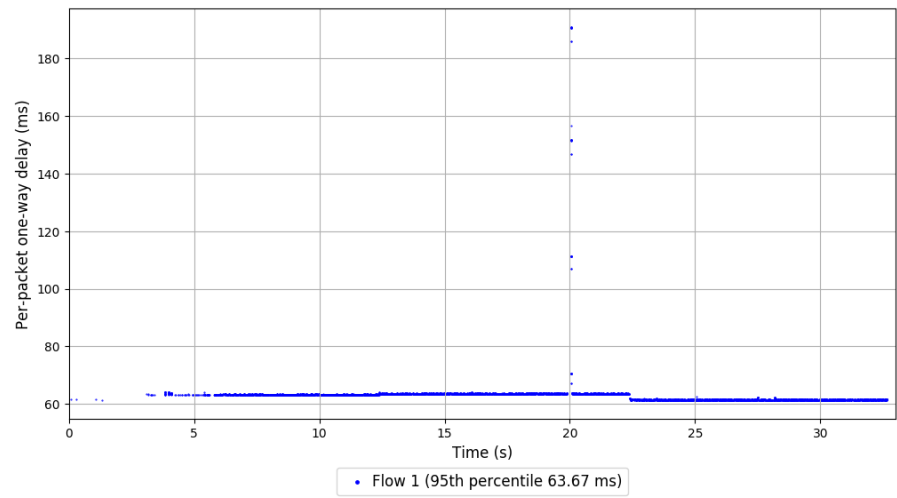
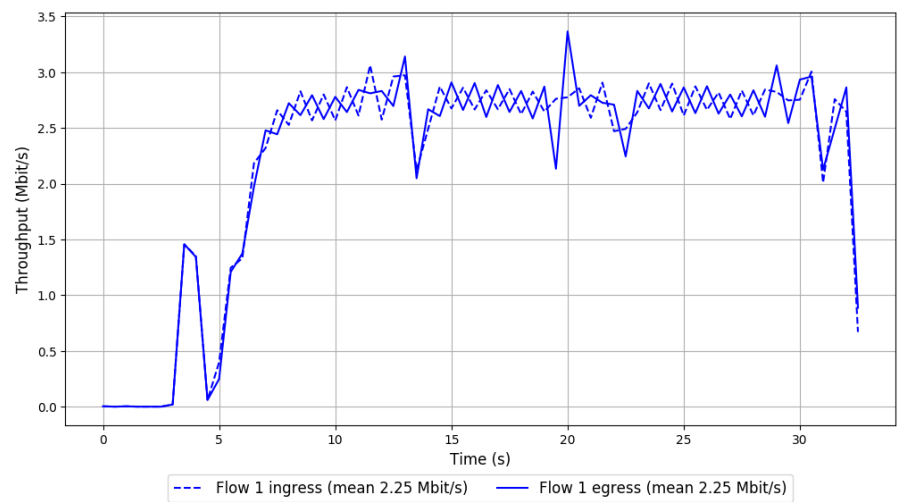
-- Flow 1:

Average throughput: 2.25 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-16 09:39:56

End at: 2017-11-16 09:40:26

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.649 ms

Loss rate: 0.00%

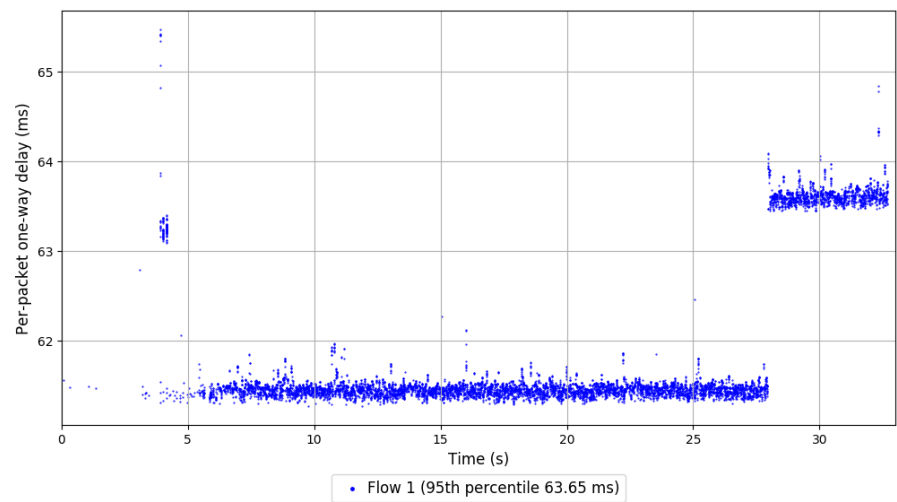
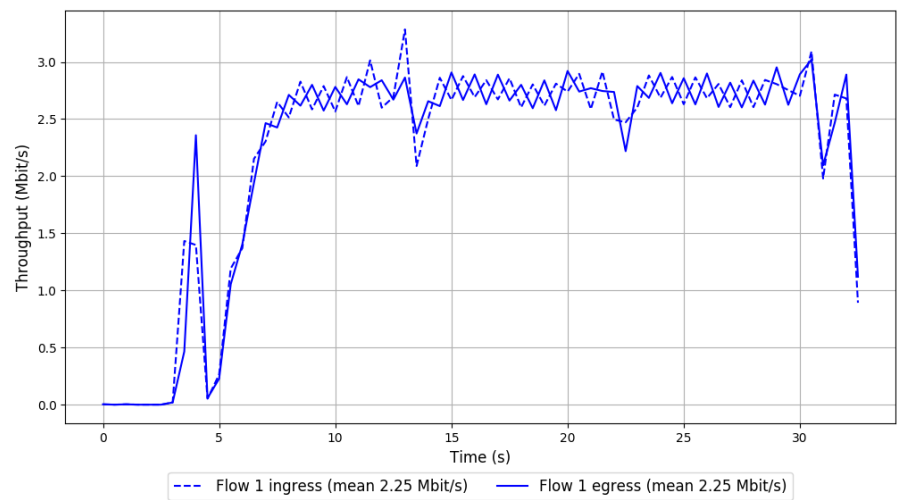
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.649 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-11-16 08:04:58

End at: 2017-11-16 08:05:28

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 64.425 ms

Loss rate: 0.01%

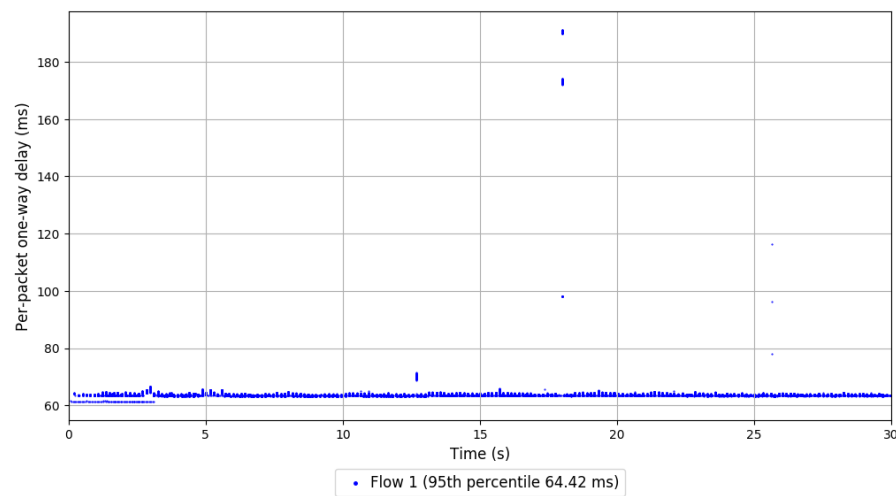
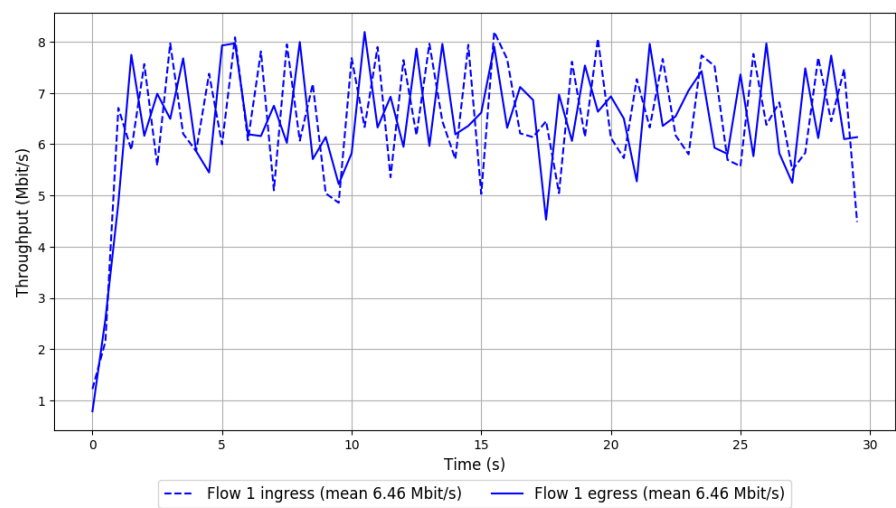
-- Flow 1:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 64.425 ms

Loss rate: 0.01%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

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

End at: 2017-11-16 08:15:54

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.38 Mbit/s

95th percentile per-packet one-way delay: 64.204 ms

Loss rate: 0.00%

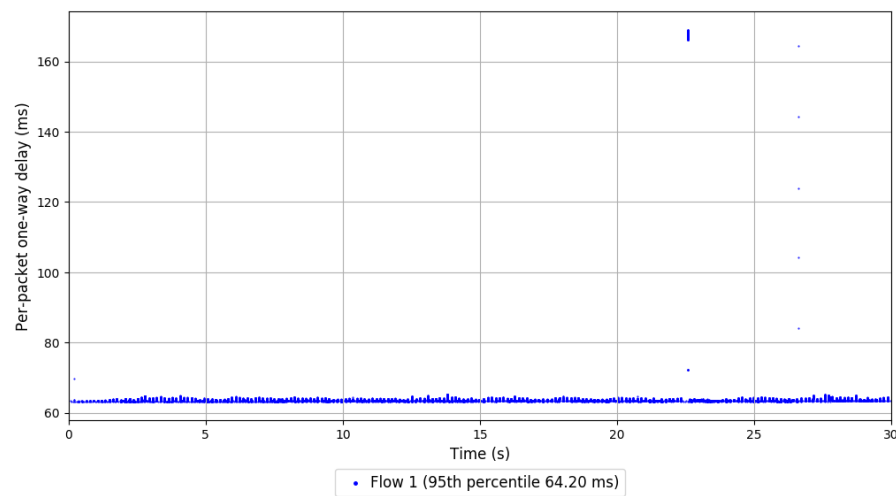
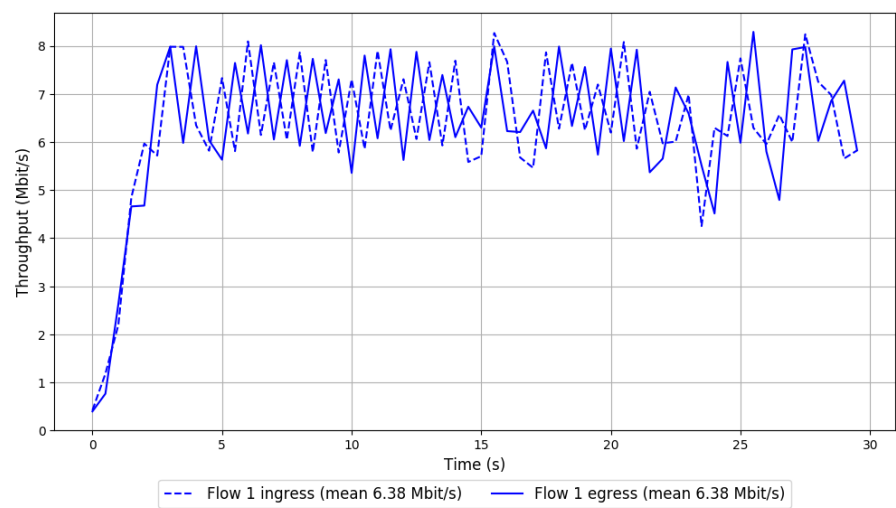
-- Flow 1:

Average throughput: 6.38 Mbit/s

95th percentile per-packet one-way delay: 64.204 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-16 08:25:49

End at: 2017-11-16 08:26:19

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.40 Mbit/s

95th percentile per-packet one-way delay: 64.201 ms

Loss rate: 0.08%

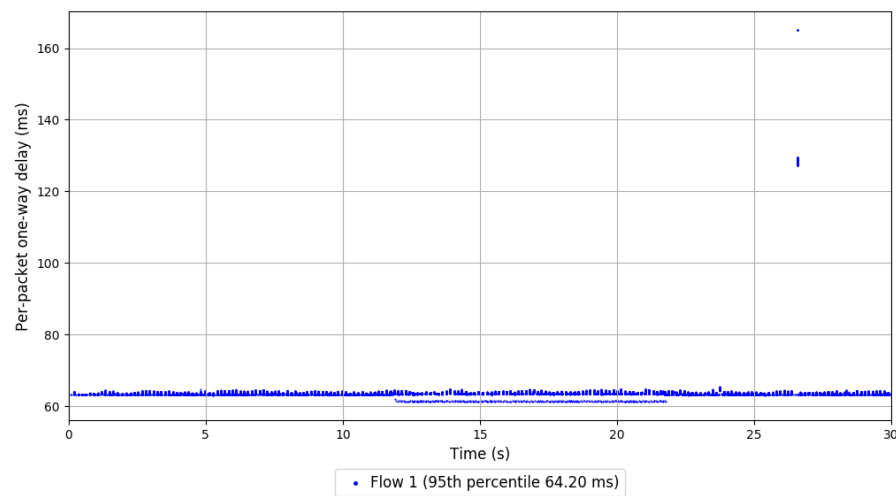
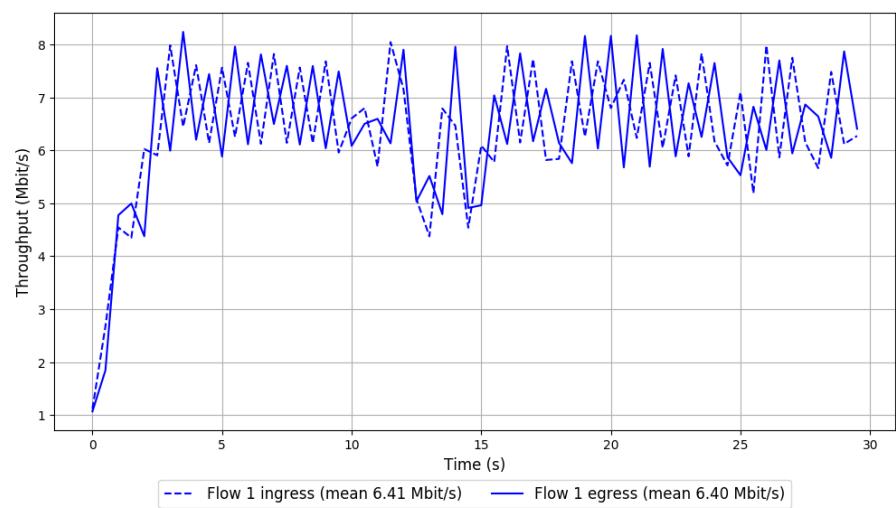
-- Flow 1:

Average throughput: 6.40 Mbit/s

95th percentile per-packet one-way delay: 64.201 ms

Loss rate: 0.08%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-16 08:36:18

End at: 2017-11-16 08:36:48

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 64.256 ms

Loss rate: 0.21%

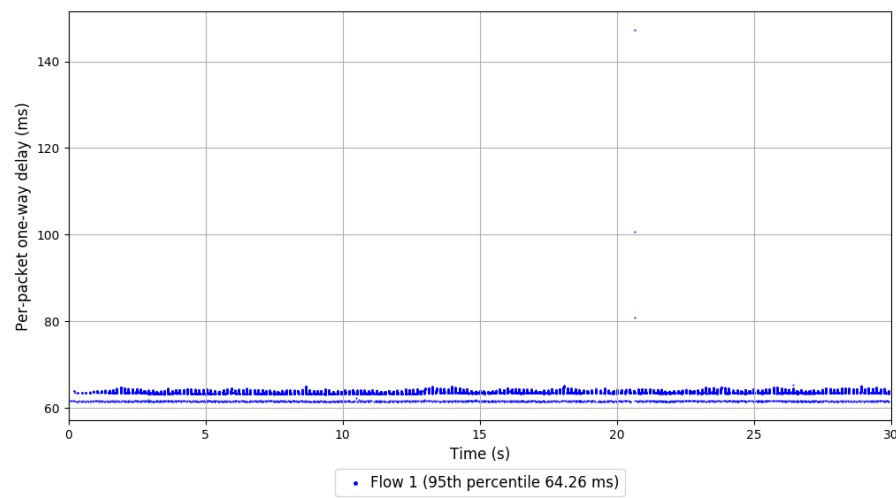
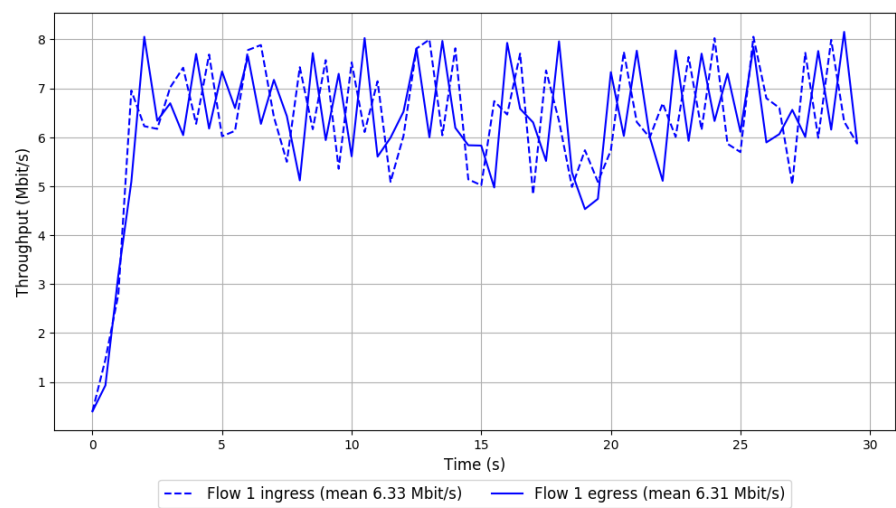
-- Flow 1:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 64.256 ms

Loss rate: 0.21%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-16 08:46:45

End at: 2017-11-16 08:47:15

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.20 Mbit/s

95th percentile per-packet one-way delay: 64.346 ms

Loss rate: 0.84%

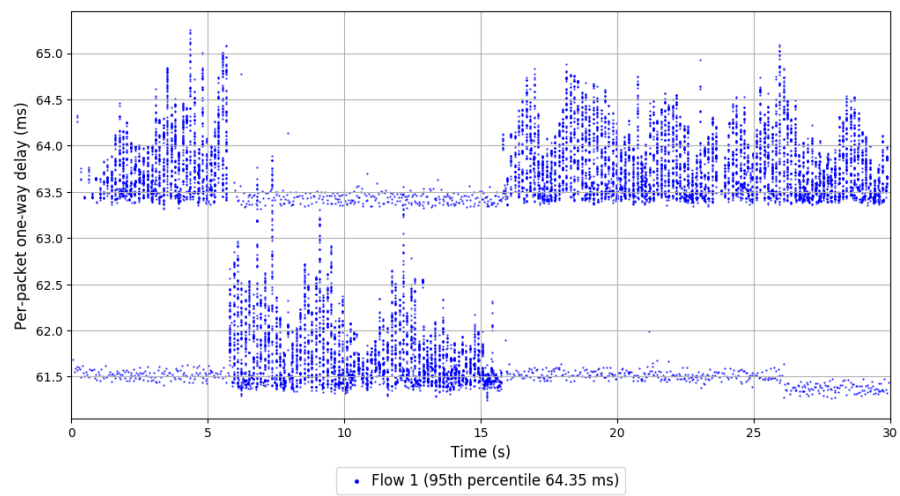
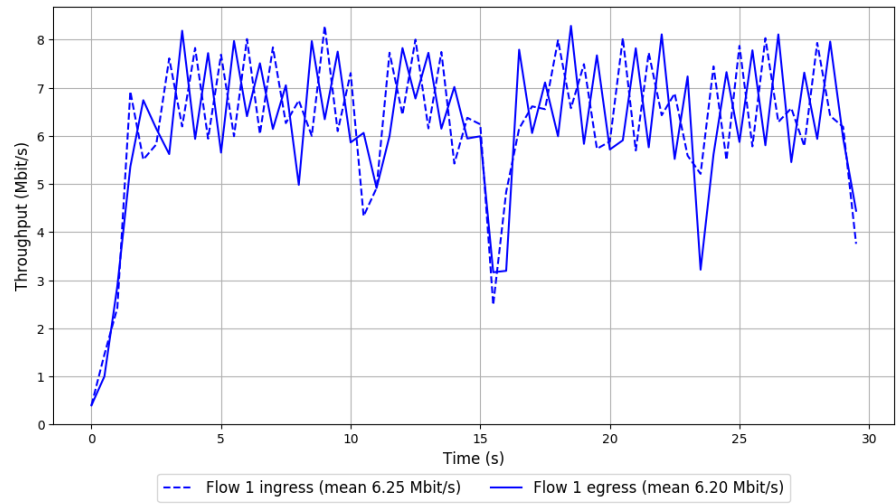
-- Flow 1:

Average throughput: 6.20 Mbit/s

95th percentile per-packet one-way delay: 64.346 ms

Loss rate: 0.84%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-16 08:57:15

End at: 2017-11-16 08:57:45

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.58 Mbit/s

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

Loss rate: 0.24%

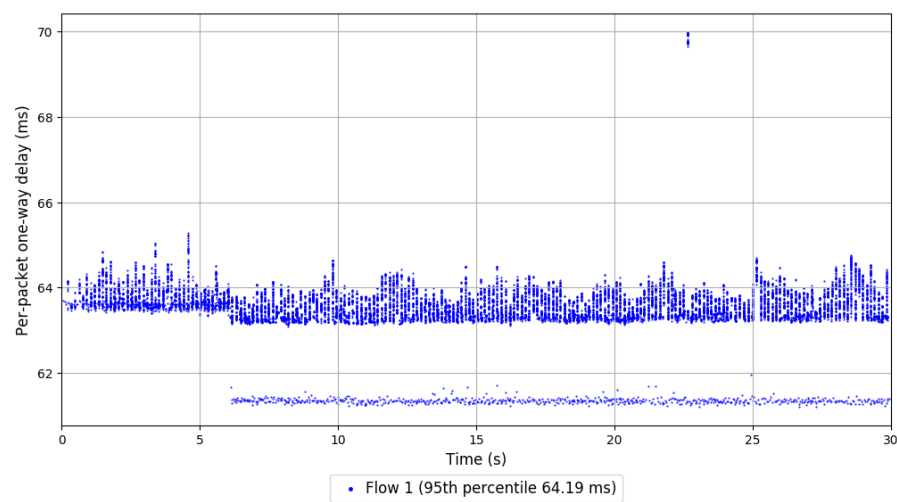
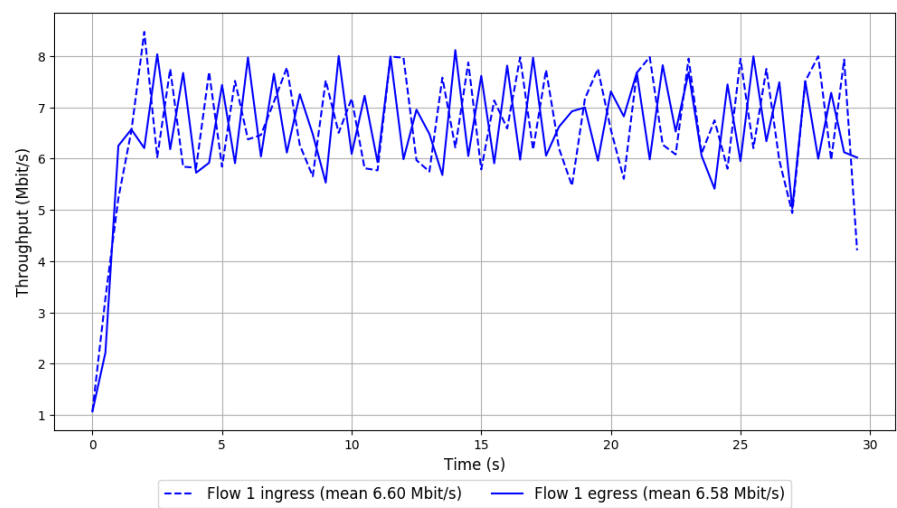
-- Flow 1:

Average throughput: 6.58 Mbit/s

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

Loss rate: 0.24%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-16 09:07:50

End at: 2017-11-16 09:08:20

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 62.430 ms

Loss rate: 0.05%

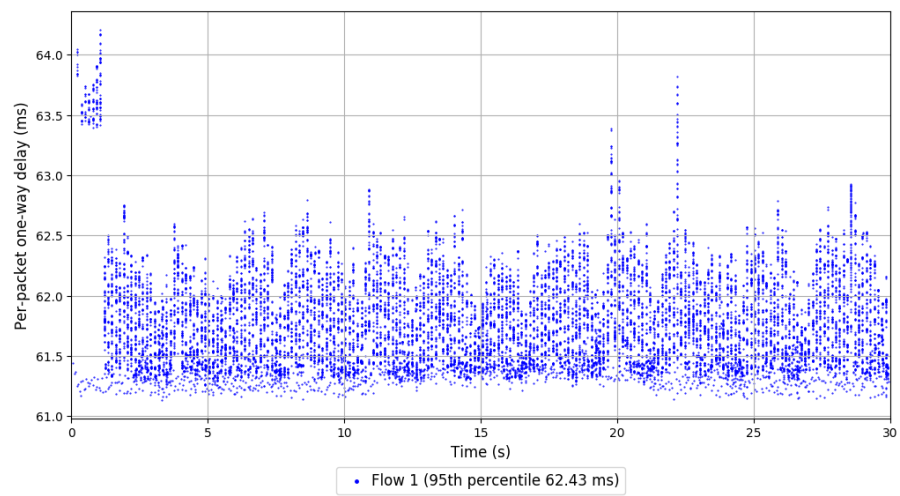
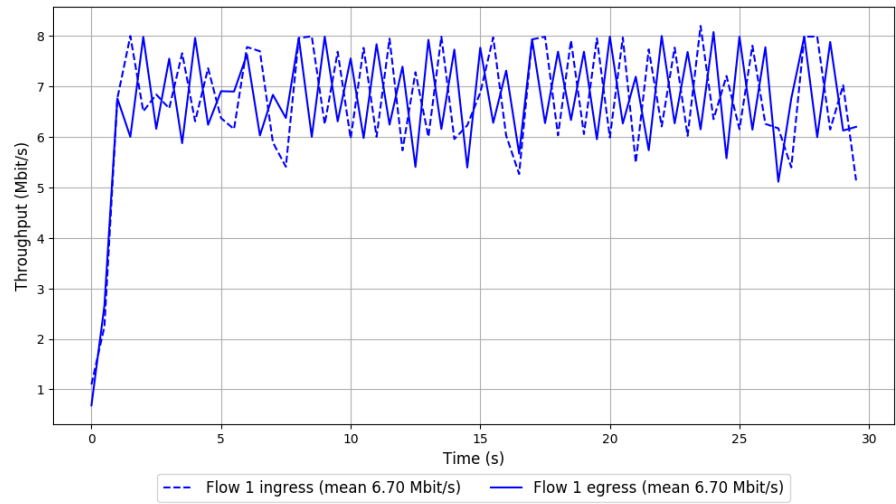
-- Flow 1:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 62.430 ms

Loss rate: 0.05%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-16 09:18:17

End at: 2017-11-16 09:18:47

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.56 Mbit/s

95th percentile per-packet one-way delay: 64.179 ms

Loss rate: 0.15%

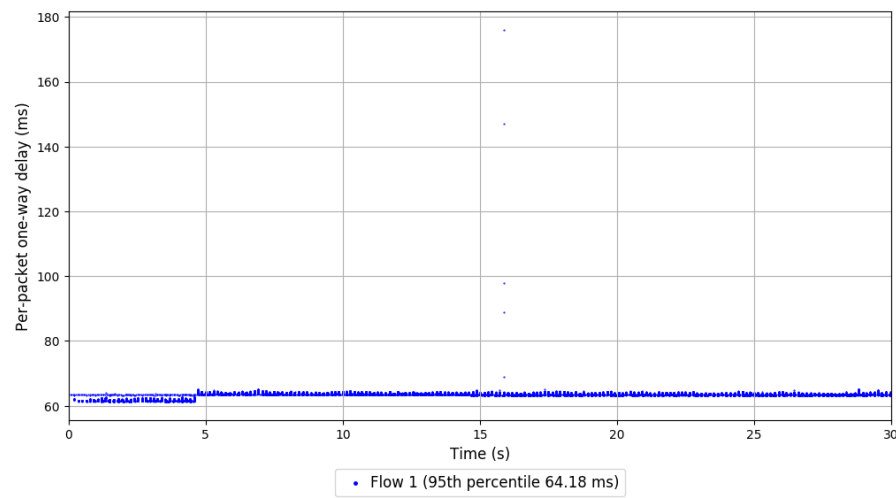
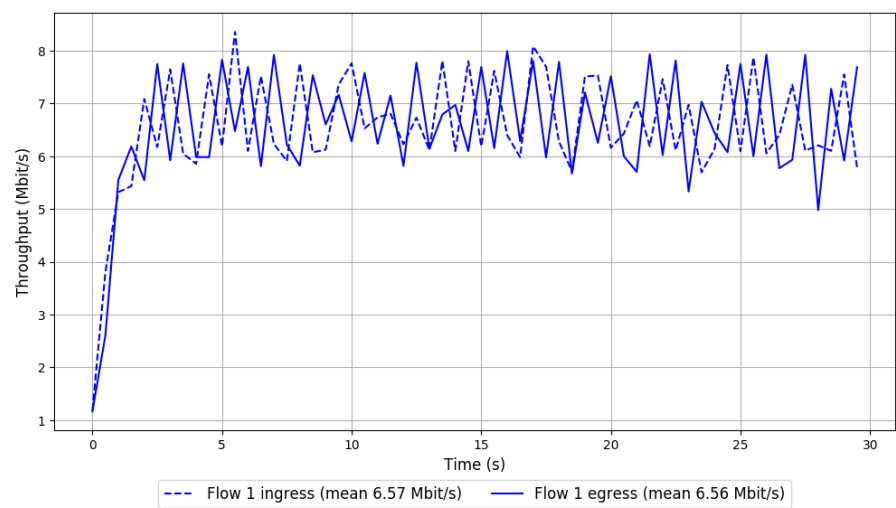
-- Flow 1:

Average throughput: 6.56 Mbit/s

95th percentile per-packet one-way delay: 64.179 ms

Loss rate: 0.15%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-16 09:28:54

End at: 2017-11-16 09:29:24

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.56 Mbit/s

95th percentile per-packet one-way delay: 64.269 ms

Loss rate: 0.06%

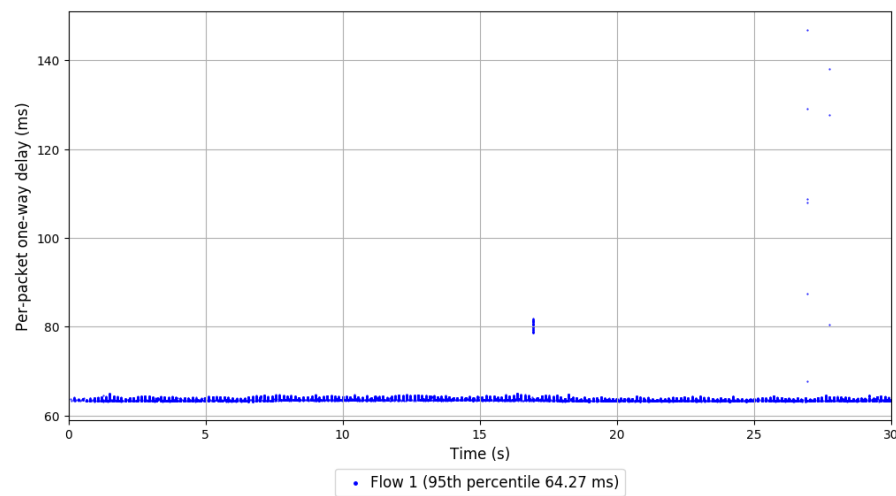
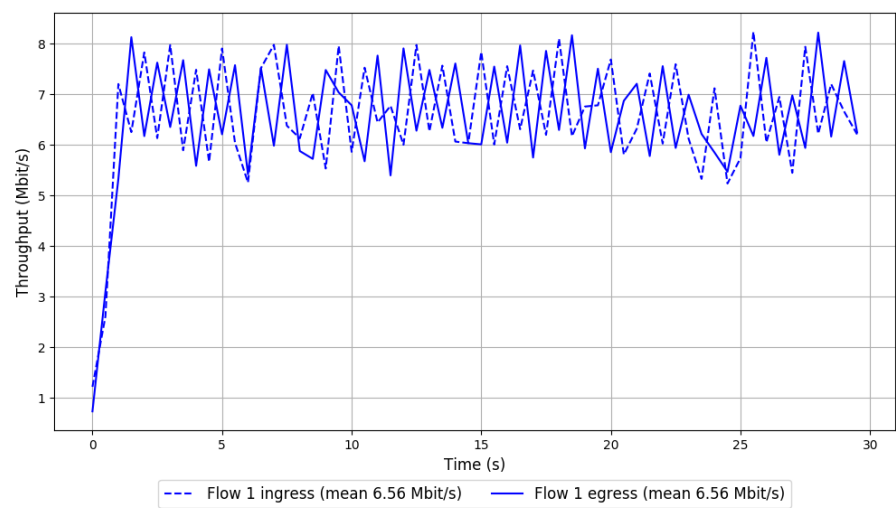
-- Flow 1:

Average throughput: 6.56 Mbit/s

95th percentile per-packet one-way delay: 64.269 ms

Loss rate: 0.06%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-16 09:39:18

End at: 2017-11-16 09:39:48

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 64.091 ms

Loss rate: 0.04%

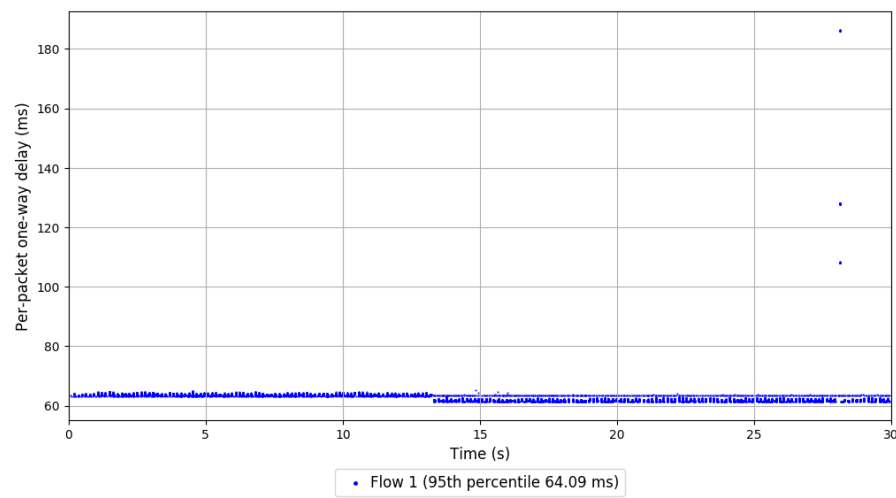
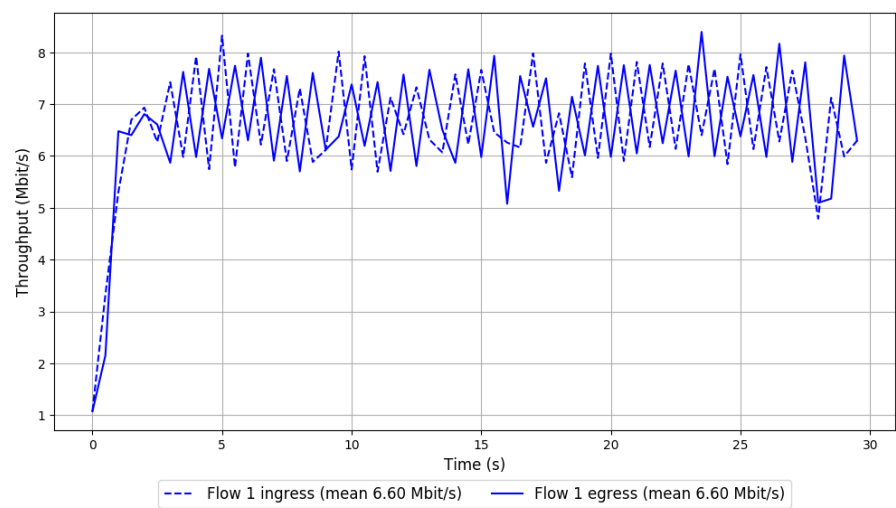
-- Flow 1:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 64.091 ms

Loss rate: 0.04%

Run 10: Report of Sprout — Data Link

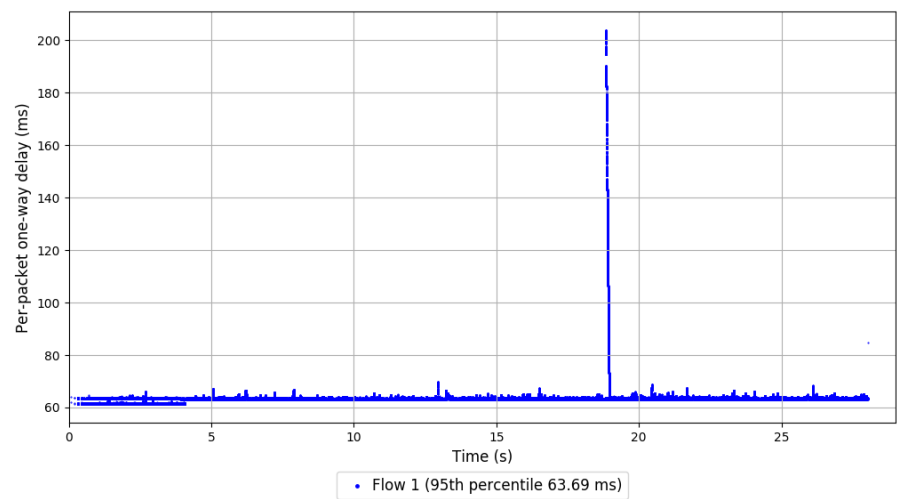
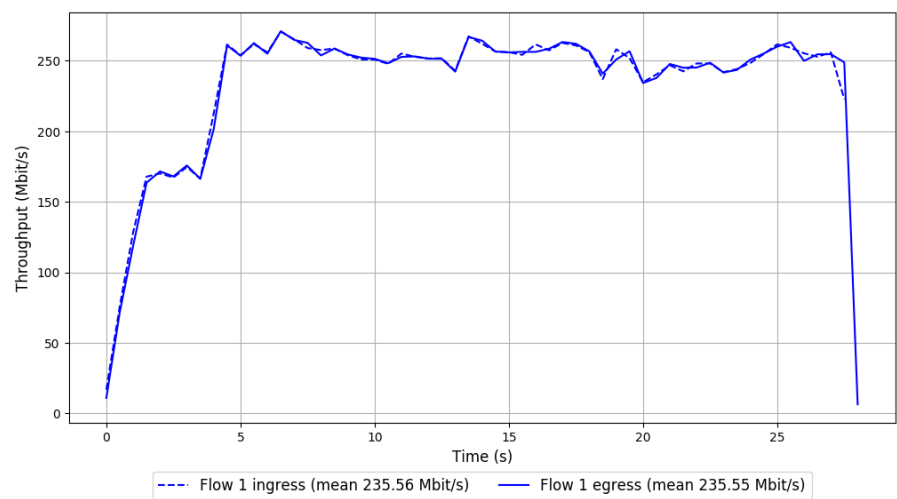


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-16 07:57:55
End at: 2017-11-16 07:58:25

# Below is generated by plot.py at 2017-11-16 10:50:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 235.55 Mbit/s
95th percentile per-packet one-way delay: 63.689 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 235.55 Mbit/s
95th percentile per-packet one-way delay: 63.689 ms
Loss rate: 0.00%
```

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

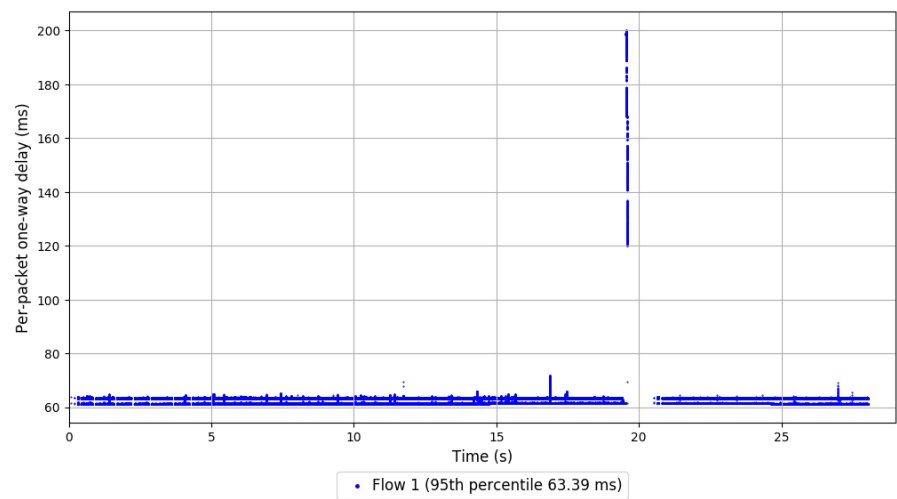
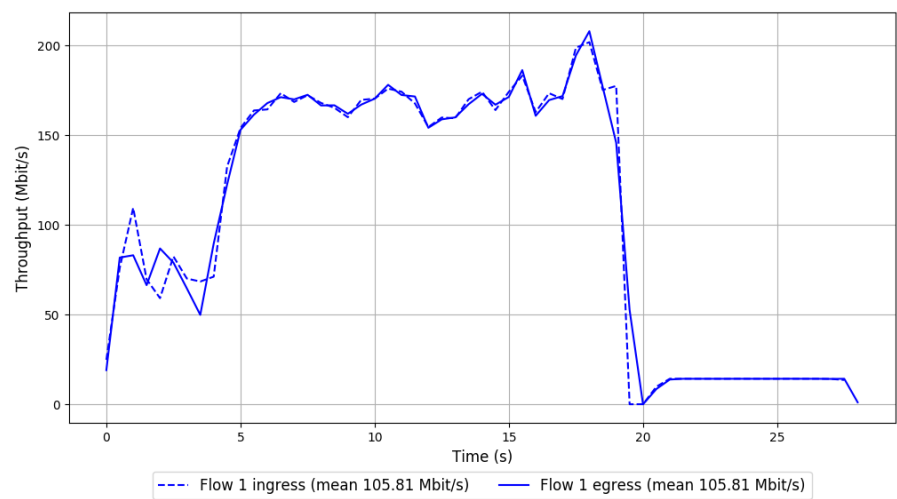


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-16 08:08:25
End at: 2017-11-16 08:08:55

# Below is generated by plot.py at 2017-11-16 10:50:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 105.81 Mbit/s
95th percentile per-packet one-way delay: 63.389 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 105.81 Mbit/s
95th percentile per-packet one-way delay: 63.389 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-16 08:18:49

End at: 2017-11-16 08:19:19

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 208.20 Mbit/s

95th percentile per-packet one-way delay: 63.414 ms

Loss rate: 0.00%

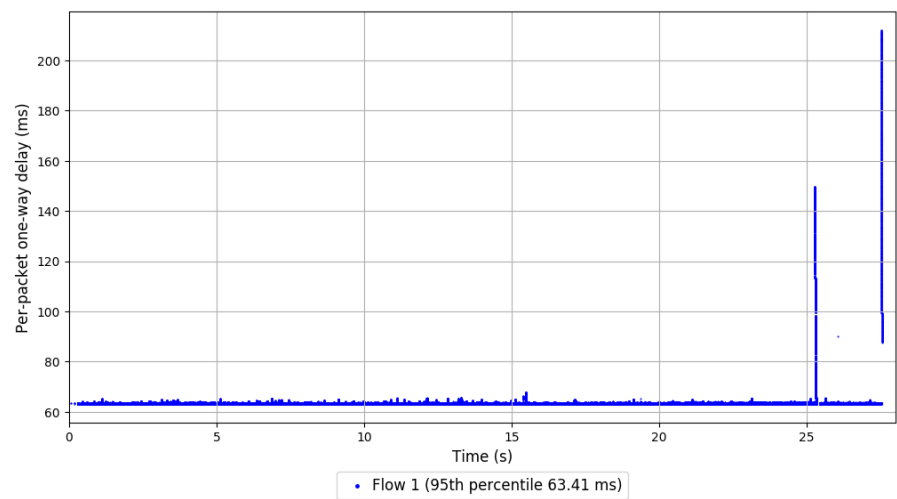
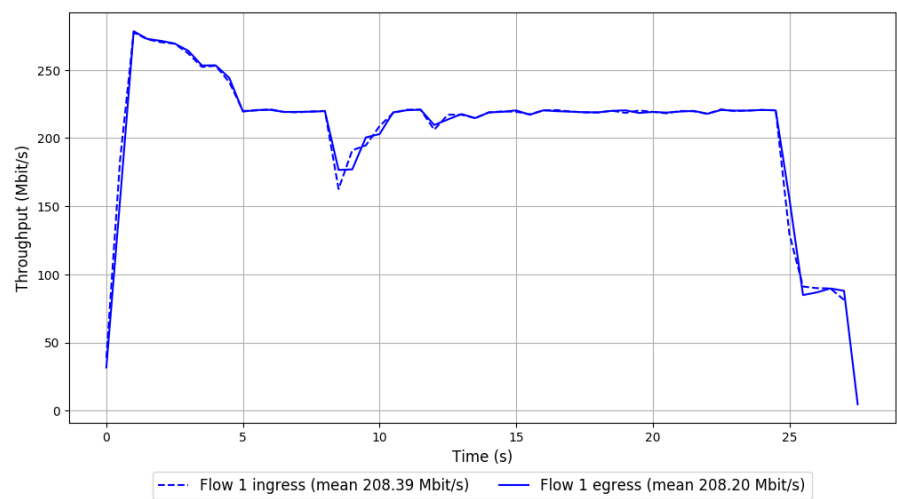
-- Flow 1:

Average throughput: 208.20 Mbit/s

95th percentile per-packet one-way delay: 63.414 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-11-16 08:29:17

End at: 2017-11-16 08:29:47

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 163.39 Mbit/s

95th percentile per-packet one-way delay: 63.413 ms

Loss rate: 0.00%

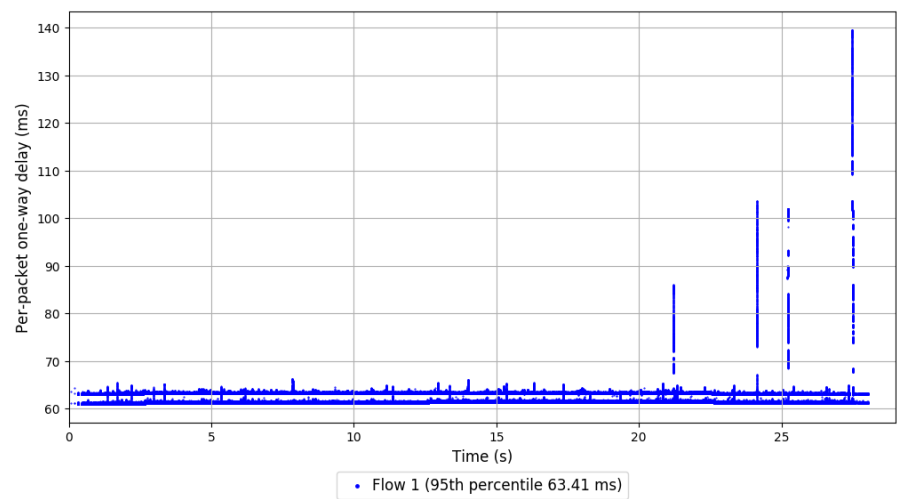
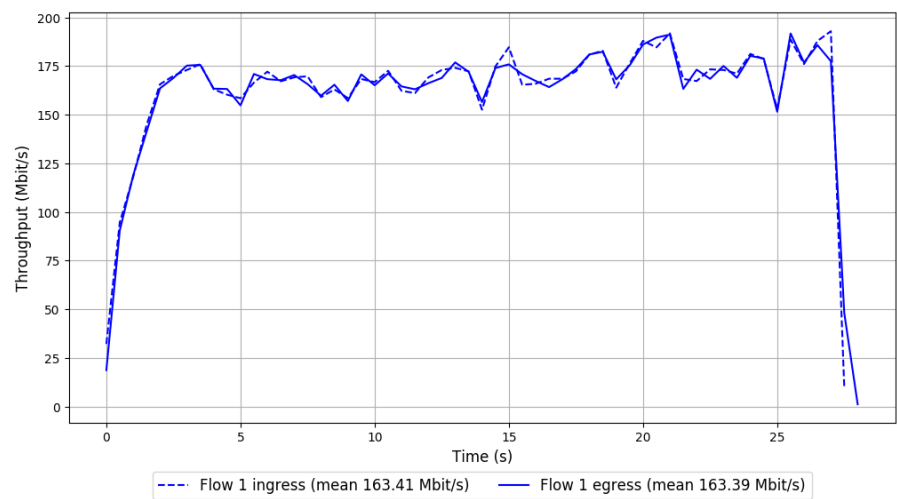
-- Flow 1:

Average throughput: 163.39 Mbit/s

95th percentile per-packet one-way delay: 63.413 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-16 08:39:42

End at: 2017-11-16 08:40:13

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.97 Mbit/s

95th percentile per-packet one-way delay: 63.201 ms

Loss rate: 0.00%

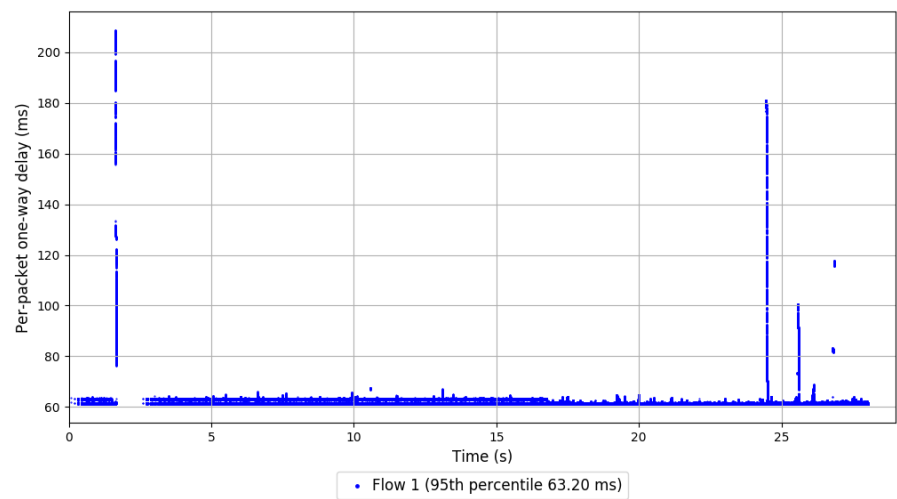
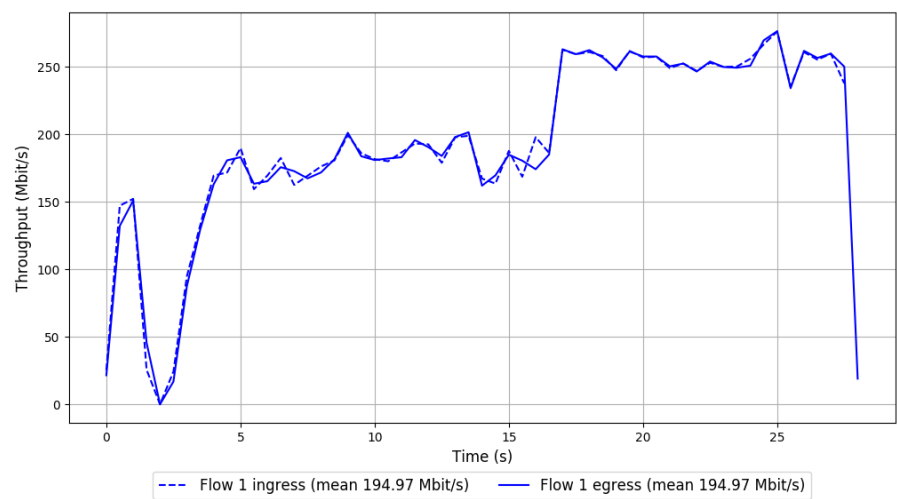
-- Flow 1:

Average throughput: 194.97 Mbit/s

95th percentile per-packet one-way delay: 63.201 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-16 08:50:14

End at: 2017-11-16 08:50:44

Below is generated by plot.py at 2017-11-16 10:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.67 Mbit/s

95th percentile per-packet one-way delay: 63.518 ms

Loss rate: 0.00%

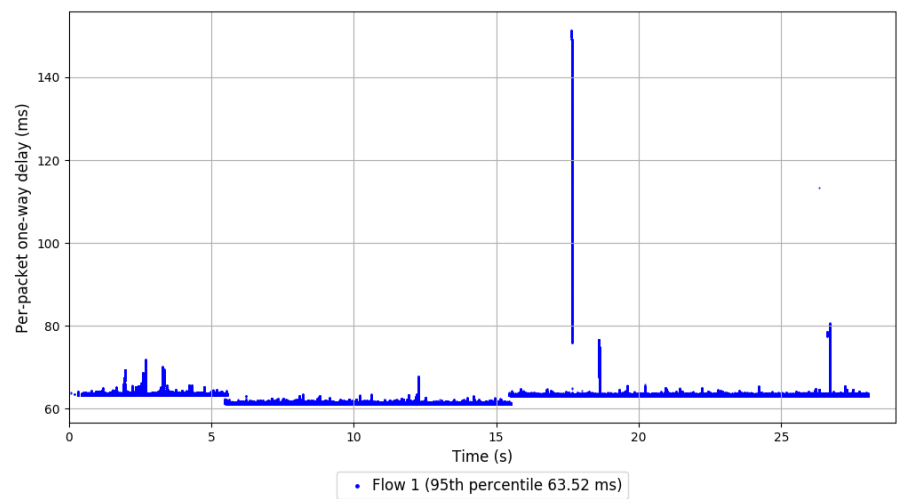
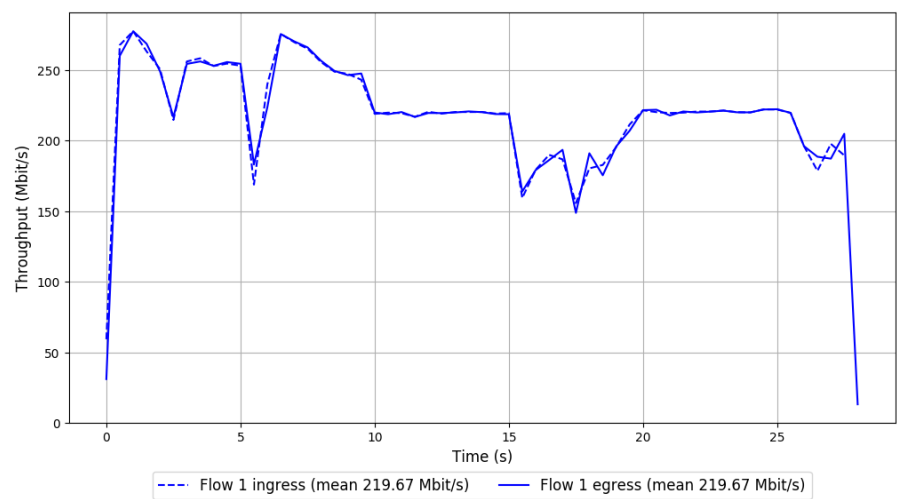
-- Flow 1:

Average throughput: 219.67 Mbit/s

95th percentile per-packet one-way delay: 63.518 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-16 09:00:42

End at: 2017-11-16 09:01:12

Below is generated by plot.py at 2017-11-16 10:54:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 244.90 Mbit/s

95th percentile per-packet one-way delay: 63.552 ms

Loss rate: 0.00%

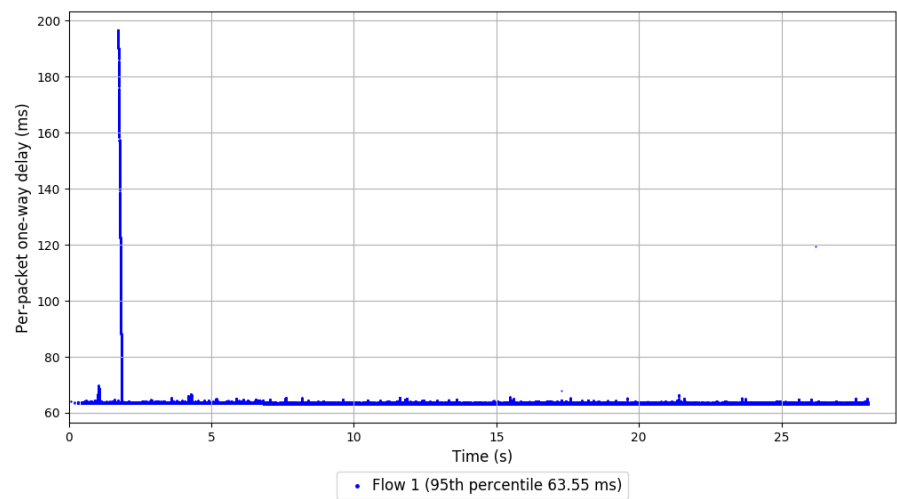
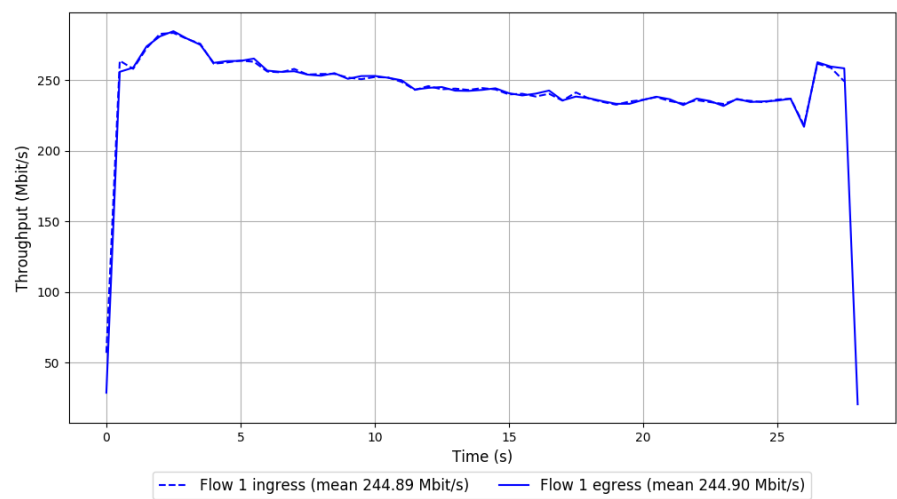
-- Flow 1:

Average throughput: 244.90 Mbit/s

95th percentile per-packet one-way delay: 63.552 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-16 09:11:19

End at: 2017-11-16 09:11:49

Below is generated by plot.py at 2017-11-16 10:54:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 137.63 Mbit/s

95th percentile per-packet one-way delay: 64.947 ms

Loss rate: 0.00%

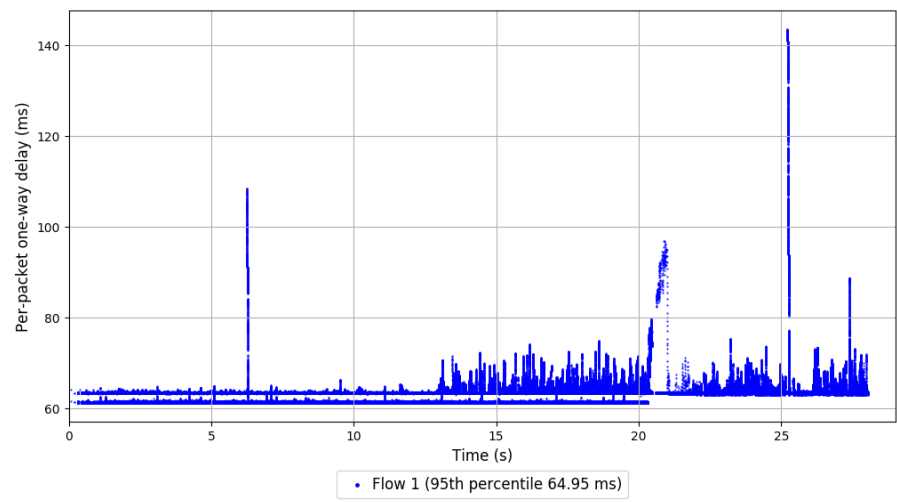
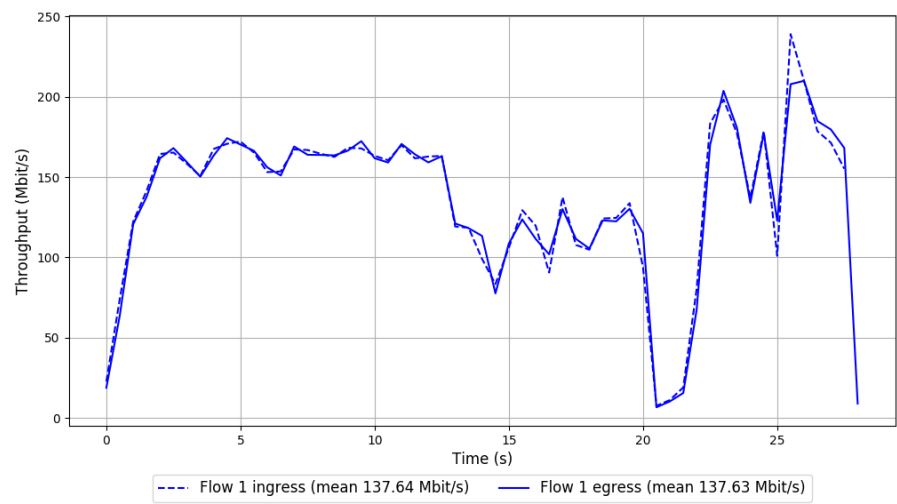
-- Flow 1:

Average throughput: 137.63 Mbit/s

95th percentile per-packet one-way delay: 64.947 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-16 09:21:46

End at: 2017-11-16 09:22:16

Below is generated by plot.py at 2017-11-16 10:56:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 242.22 Mbit/s

95th percentile per-packet one-way delay: 63.434 ms

Loss rate: 0.00%

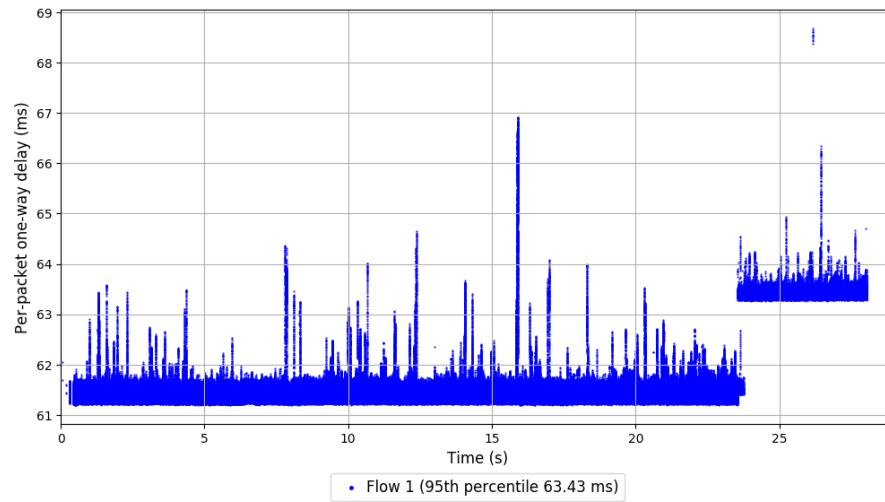
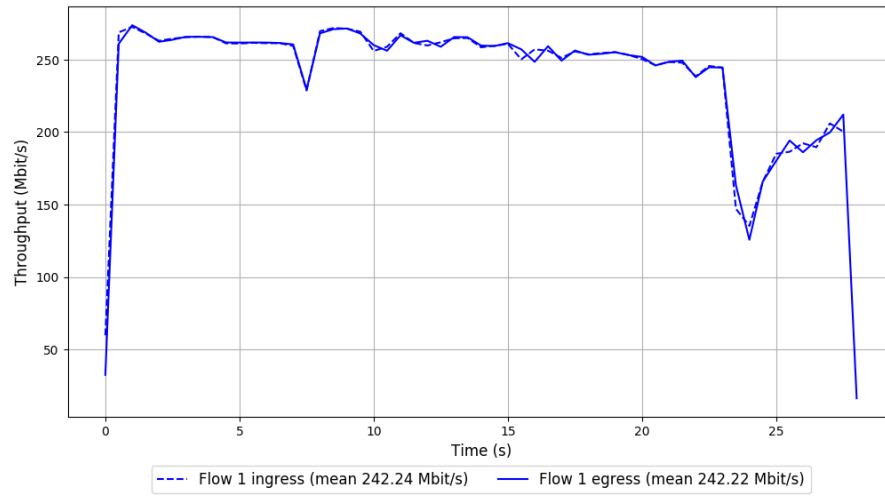
-- Flow 1:

Average throughput: 242.22 Mbit/s

95th percentile per-packet one-way delay: 63.434 ms

Loss rate: 0.00%

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

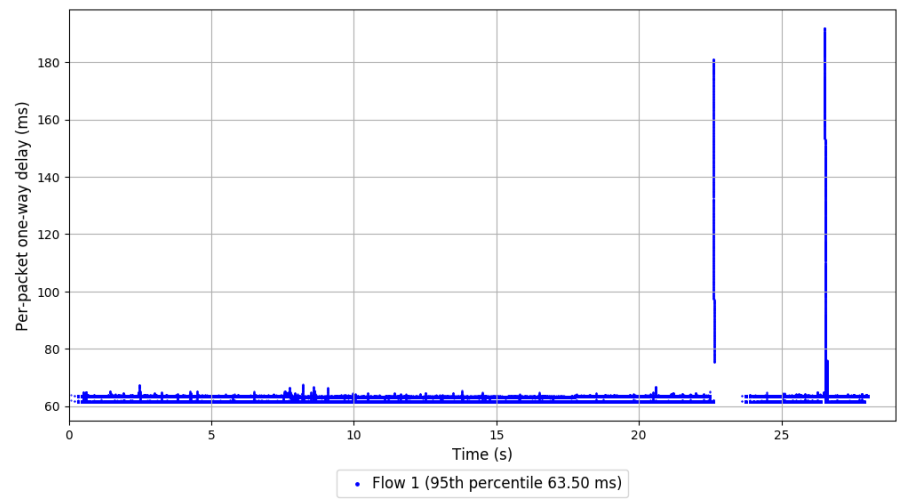
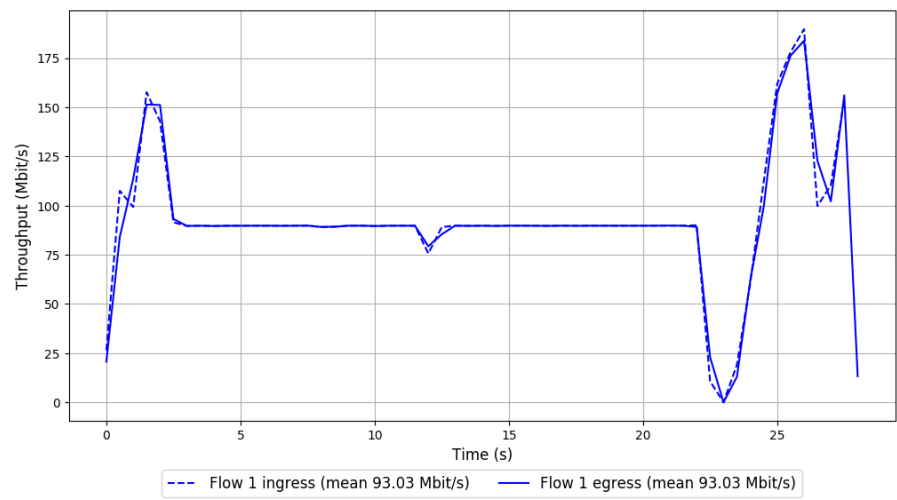


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-16 09:32:21
End at: 2017-11-16 09:32:52

# Below is generated by plot.py at 2017-11-16 10:56:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.03 Mbit/s
95th percentile per-packet one-way delay: 63.500 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 93.03 Mbit/s
95th percentile per-packet one-way delay: 63.500 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-16 08:04:16

End at: 2017-11-16 08:04:46

Below is generated by plot.py at 2017-11-16 10:56:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.21 Mbit/s

95th percentile per-packet one-way delay: 64.782 ms

Loss rate: 0.01%

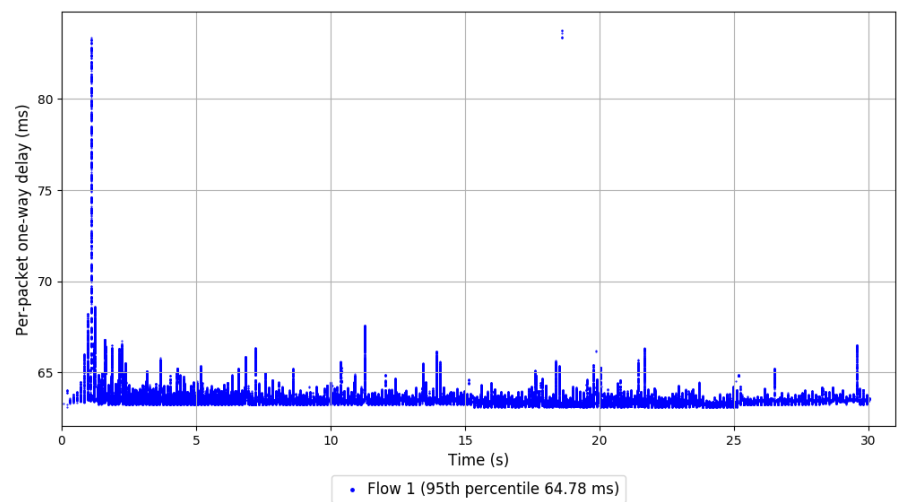
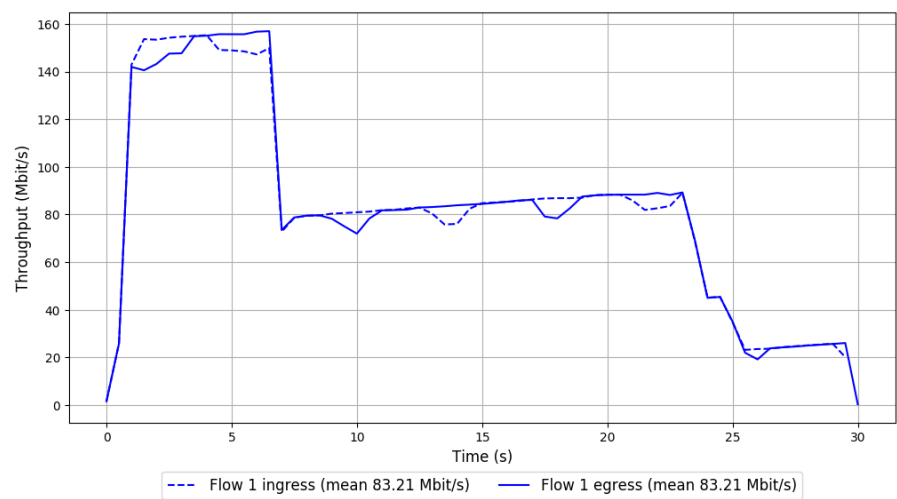
-- Flow 1:

Average throughput: 83.21 Mbit/s

95th percentile per-packet one-way delay: 64.782 ms

Loss rate: 0.01%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-16 08:14:43

End at: 2017-11-16 08:15:13

Below is generated by plot.py at 2017-11-16 10:56:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.77 Mbit/s

95th percentile per-packet one-way delay: 64.578 ms

Loss rate: 0.09%

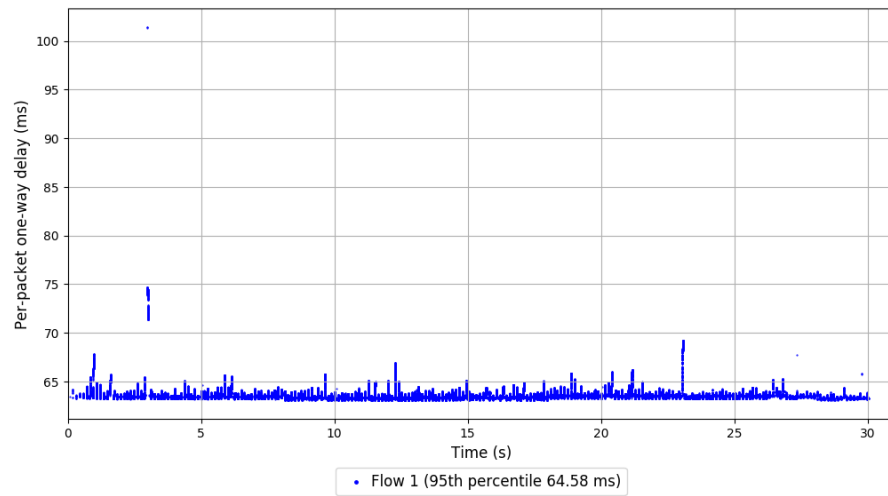
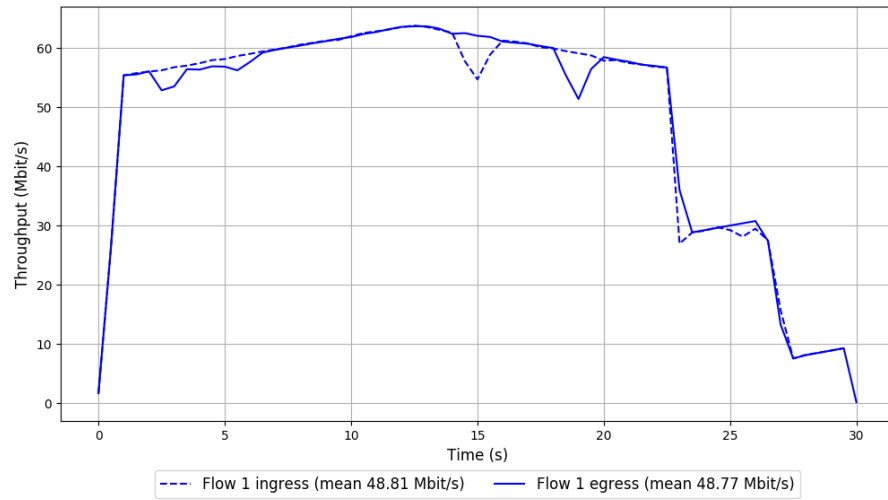
-- Flow 1:

Average throughput: 48.77 Mbit/s

95th percentile per-packet one-way delay: 64.578 ms

Loss rate: 0.09%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-16 08:25:10

End at: 2017-11-16 08:25:40

Below is generated by plot.py at 2017-11-16 10:56:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 24.93 Mbit/s

95th percentile per-packet one-way delay: 64.964 ms

Loss rate: 0.27%

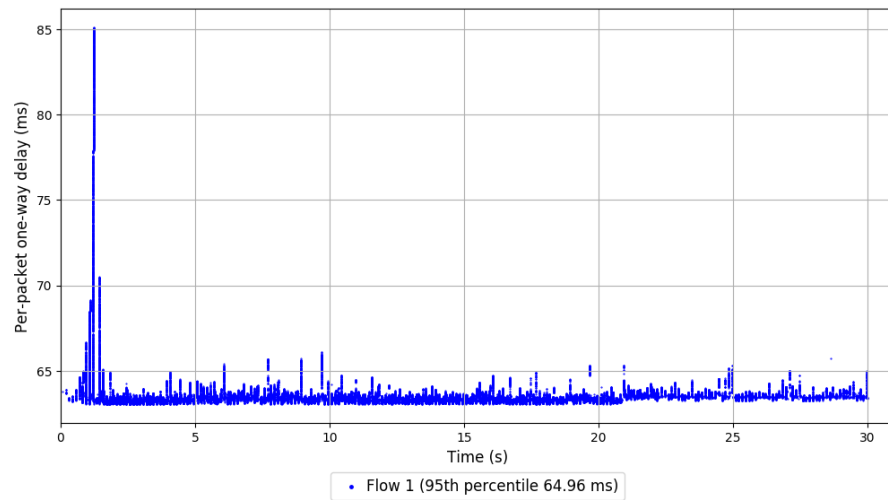
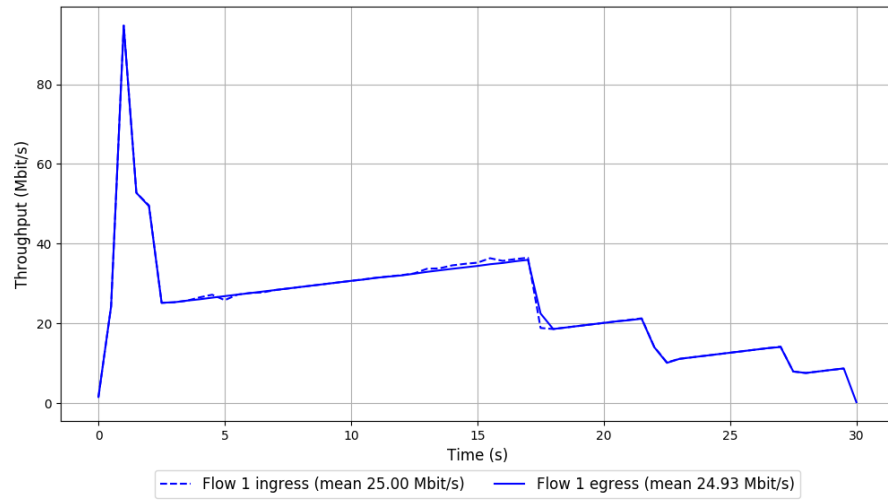
-- Flow 1:

Average throughput: 24.93 Mbit/s

95th percentile per-packet one-way delay: 64.964 ms

Loss rate: 0.27%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-16 08:35:39

End at: 2017-11-16 08:36:09

Below is generated by plot.py at 2017-11-16 10:56:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.55 Mbit/s

95th percentile per-packet one-way delay: 64.147 ms

Loss rate: 0.00%

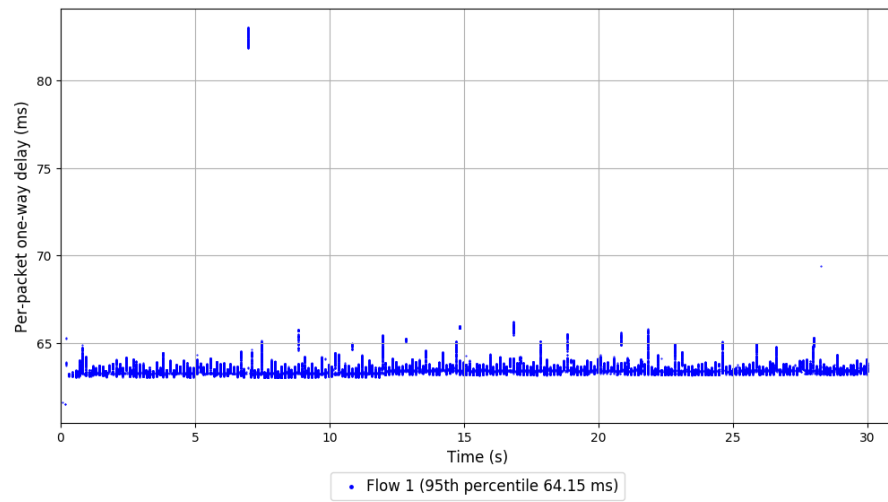
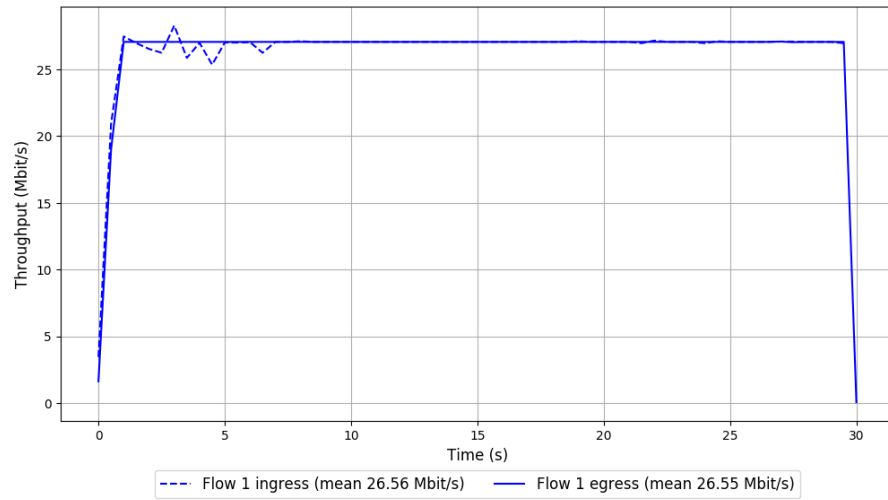
-- Flow 1:

Average throughput: 26.55 Mbit/s

95th percentile per-packet one-way delay: 64.147 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-16 08:46:06

End at: 2017-11-16 08:46:36

Below is generated by plot.py at 2017-11-16 10:56:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.31 Mbit/s

95th percentile per-packet one-way delay: 64.670 ms

Loss rate: 0.01%

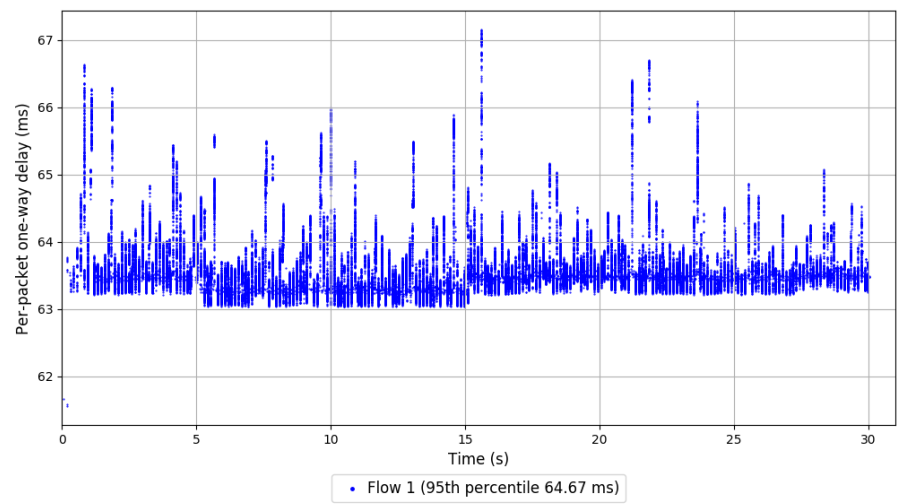
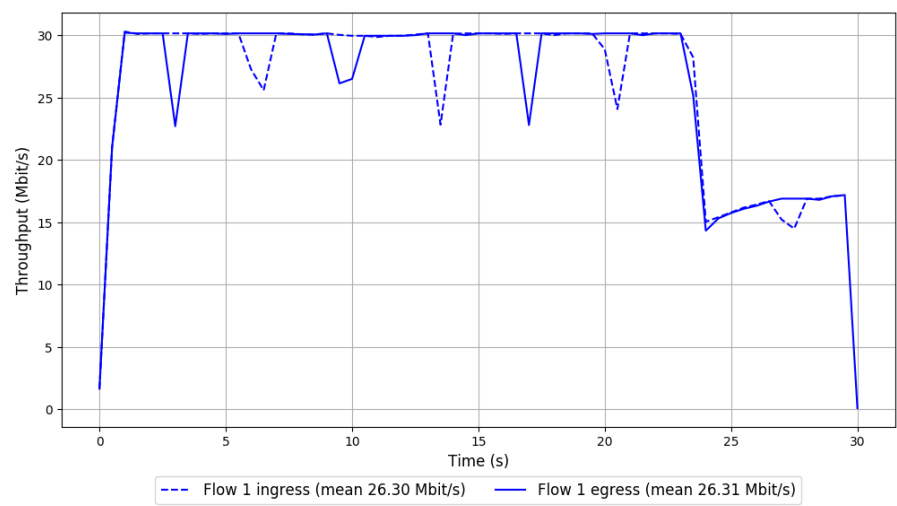
-- Flow 1:

Average throughput: 26.31 Mbit/s

95th percentile per-packet one-way delay: 64.670 ms

Loss rate: 0.01%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-16 08:56:36

End at: 2017-11-16 08:57:06

Below is generated by plot.py at 2017-11-16 10:56:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.42 Mbit/s

95th percentile per-packet one-way delay: 64.689 ms

Loss rate: 0.49%

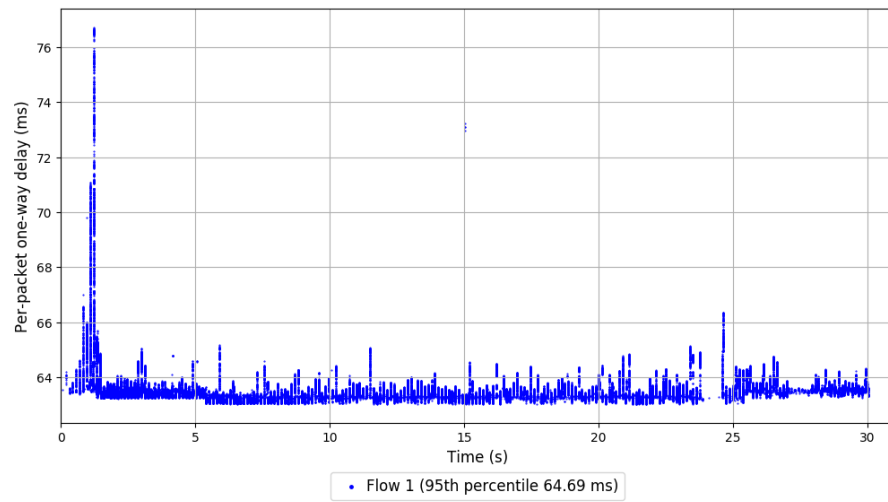
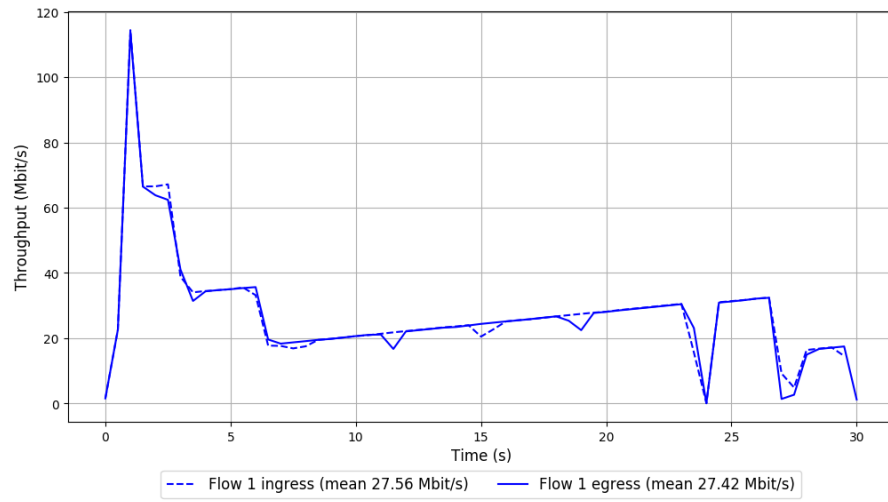
-- Flow 1:

Average throughput: 27.42 Mbit/s

95th percentile per-packet one-way delay: 64.689 ms

Loss rate: 0.49%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-16 09:07:11

End at: 2017-11-16 09:07:41

Below is generated by plot.py at 2017-11-16 10:56:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.08 Mbit/s

95th percentile per-packet one-way delay: 63.948 ms

Loss rate: 0.01%

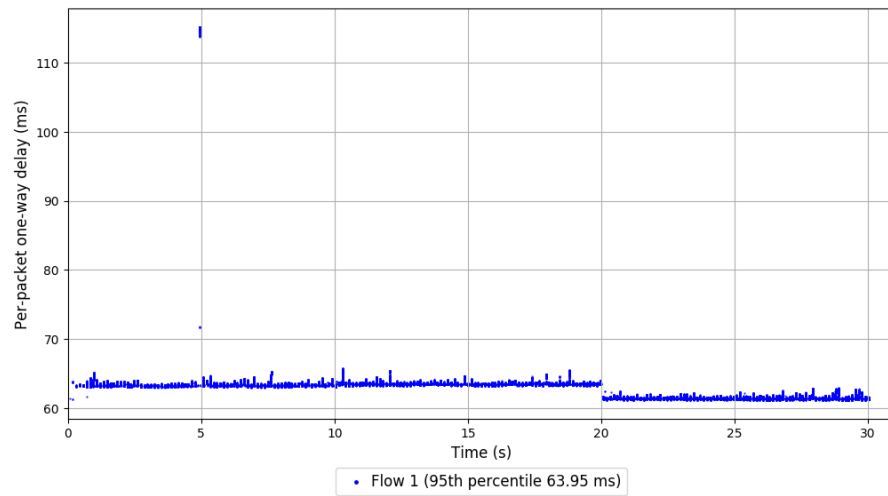
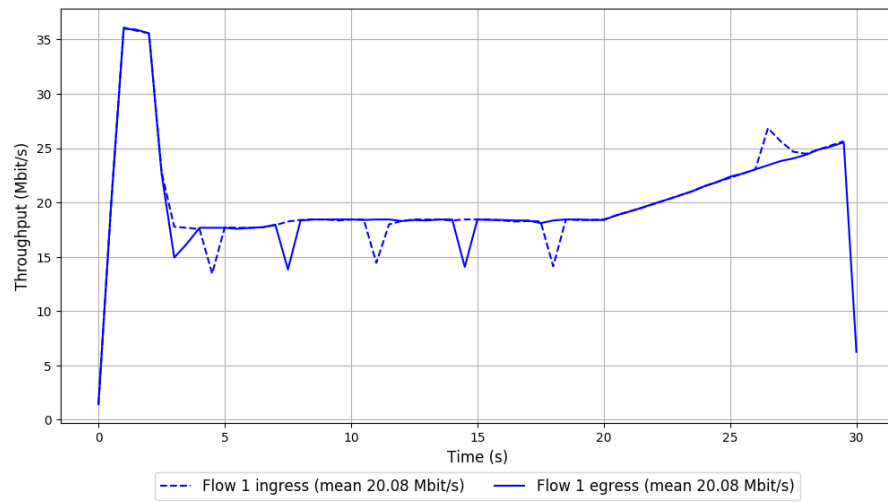
-- Flow 1:

Average throughput: 20.08 Mbit/s

95th percentile per-packet one-way delay: 63.948 ms

Loss rate: 0.01%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-16 09:17:36

End at: 2017-11-16 09:18:06

Below is generated by plot.py at 2017-11-16 10:56:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.09 Mbit/s

95th percentile per-packet one-way delay: 64.088 ms

Loss rate: 0.32%

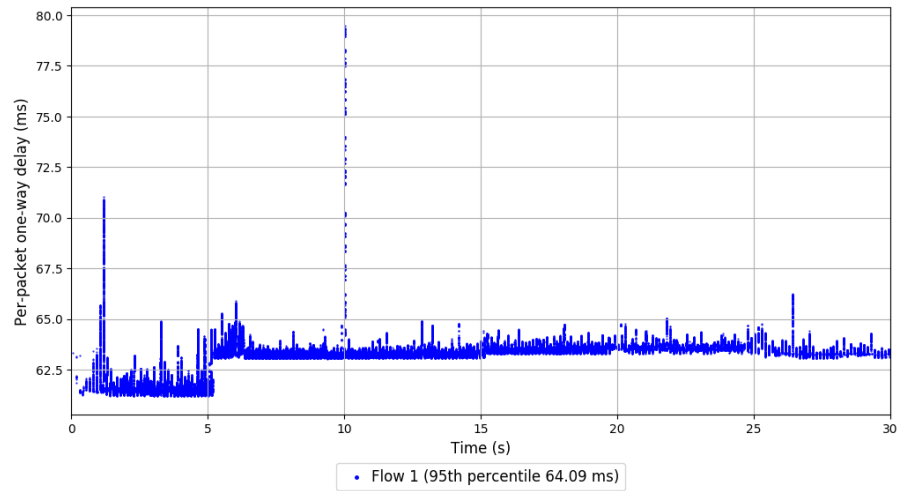
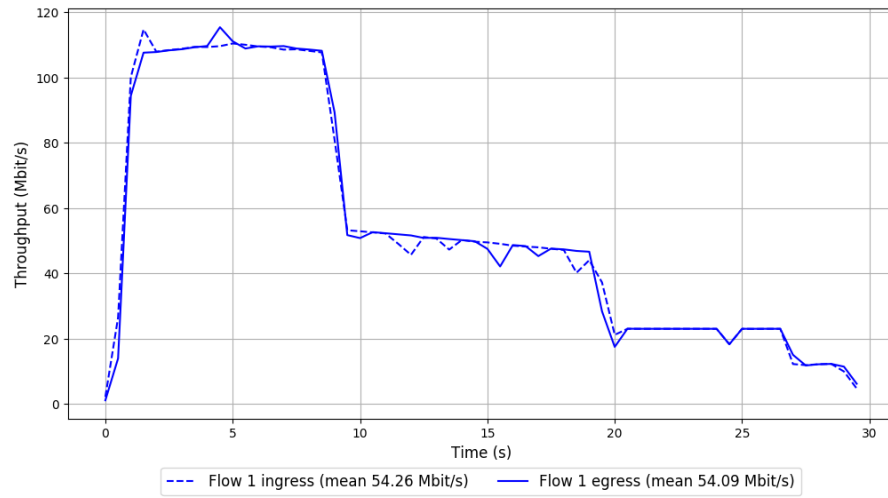
-- Flow 1:

Average throughput: 54.09 Mbit/s

95th percentile per-packet one-way delay: 64.088 ms

Loss rate: 0.32%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-16 09:28:15

End at: 2017-11-16 09:28:45

Below is generated by plot.py at 2017-11-16 10:56:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.17 Mbit/s

95th percentile per-packet one-way delay: 64.831 ms

Loss rate: 0.00%

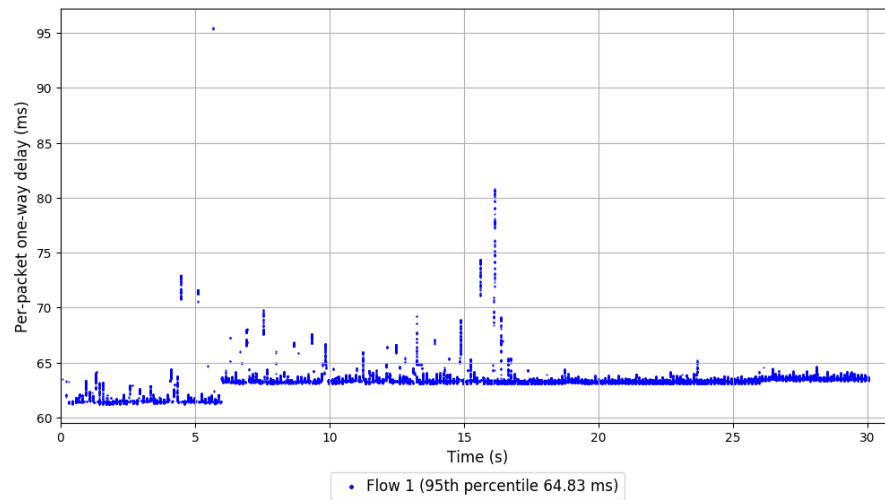
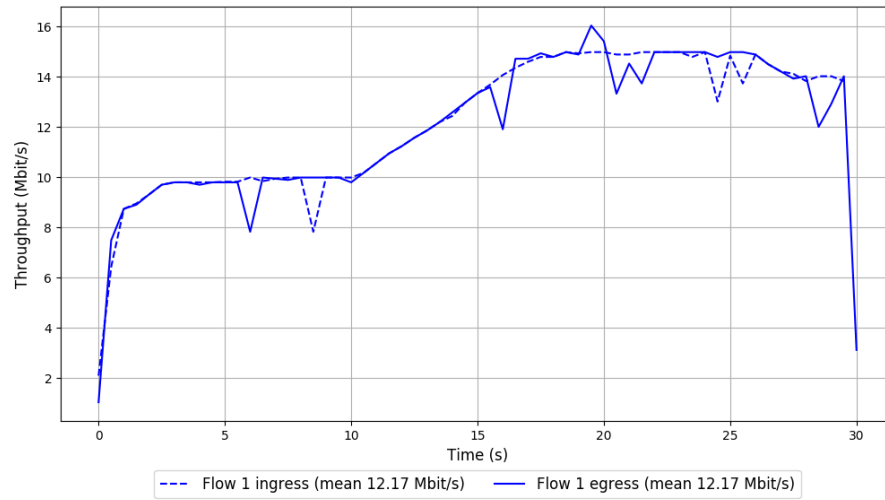
-- Flow 1:

Average throughput: 12.17 Mbit/s

95th percentile per-packet one-way delay: 64.831 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-16 09:38:39

End at: 2017-11-16 09:39:09

Below is generated by plot.py at 2017-11-16 10:56:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.60 Mbit/s

95th percentile per-packet one-way delay: 64.339 ms

Loss rate: 0.02%

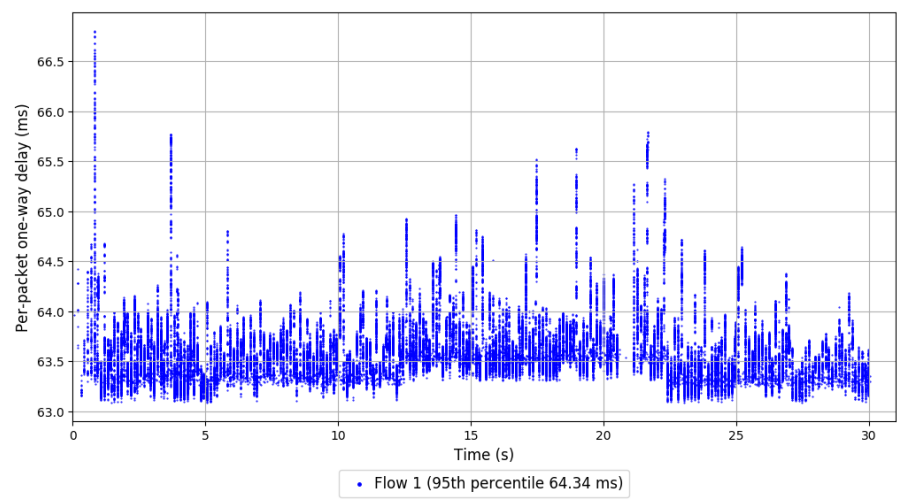
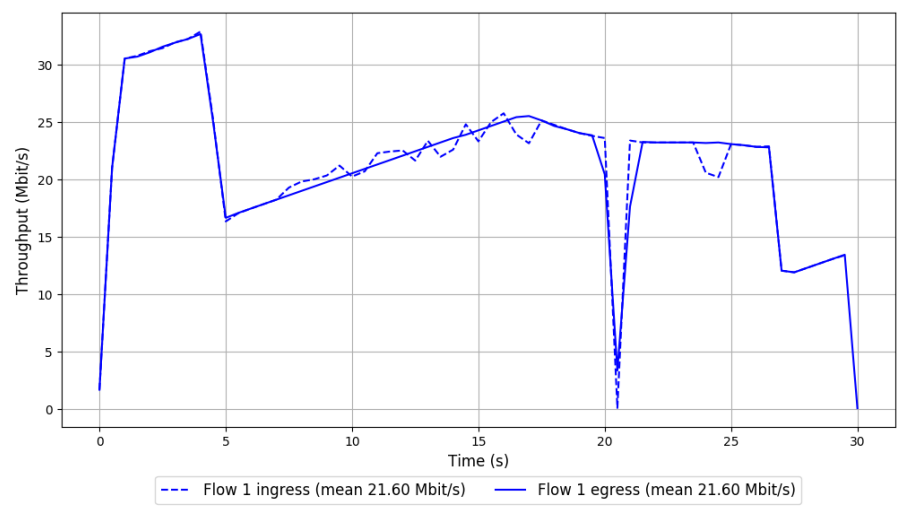
-- Flow 1:

Average throughput: 21.60 Mbit/s

95th percentile per-packet one-way delay: 64.339 ms

Loss rate: 0.02%

Run 10: Report of TCP Vegas — Data Link

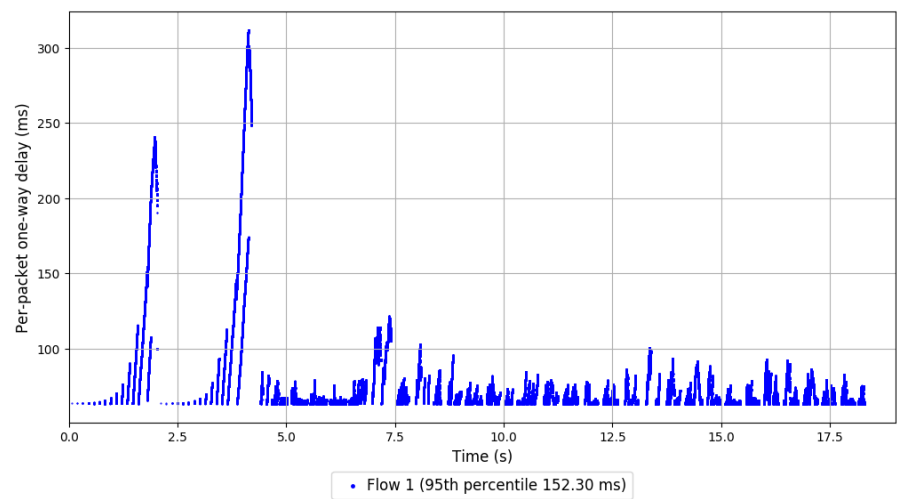
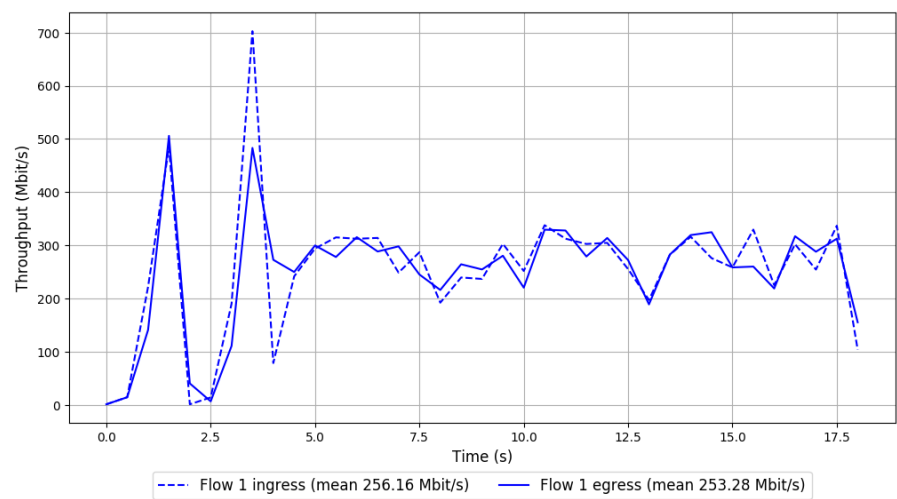


Run 1: Statistics of Verus

Start at: 2017-11-16 08:03:28

End at: 2017-11-16 08:03:58

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-16 08:13:46

End at: 2017-11-16 08:14:16

Below is generated by plot.py at 2017-11-16 10:56:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 287.68 Mbit/s

95th percentile per-packet one-way delay: 82.321 ms

Loss rate: 0.17%

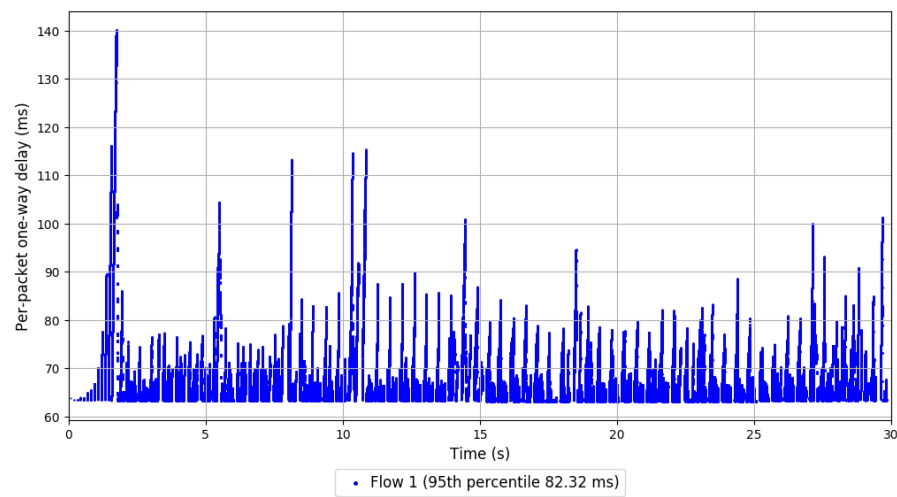
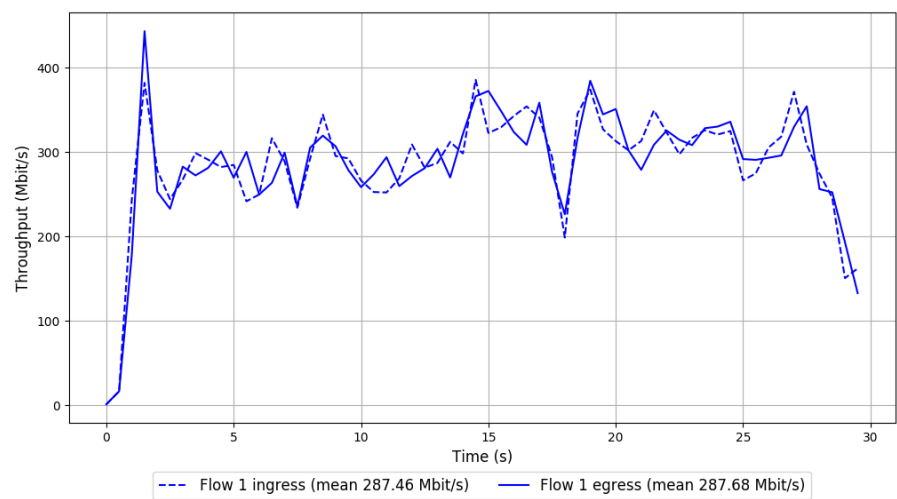
-- Flow 1:

Average throughput: 287.68 Mbit/s

95th percentile per-packet one-way delay: 82.321 ms

Loss rate: 0.17%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-16 08:24:19

End at: 2017-11-16 08:24:49

Below is generated by plot.py at 2017-11-16 10:56:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.64 Mbit/s

95th percentile per-packet one-way delay: 89.542 ms

Loss rate: 0.13%

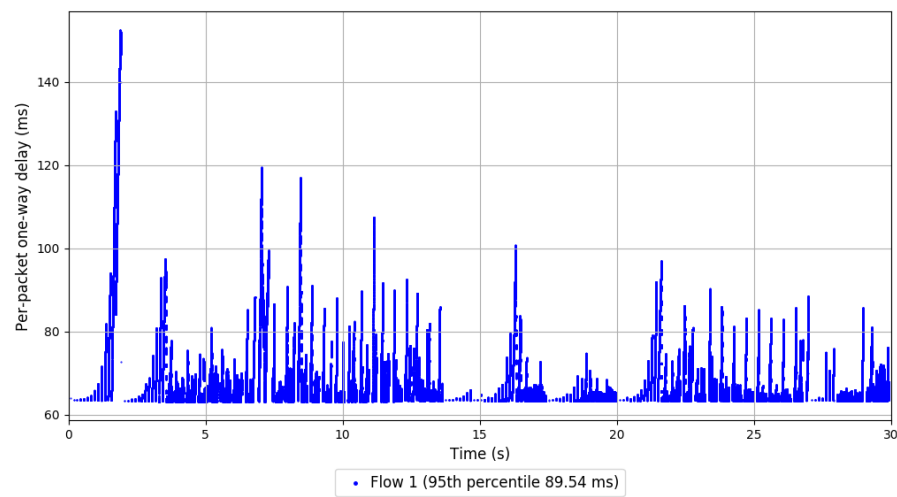
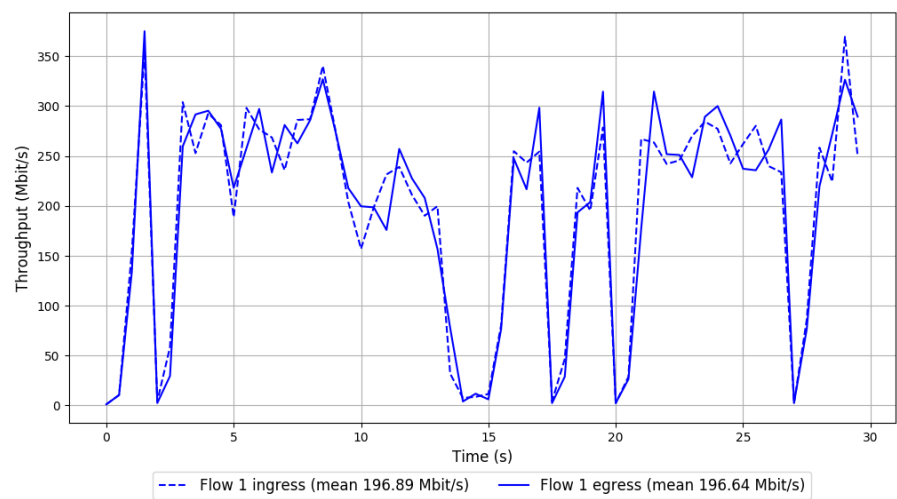
-- Flow 1:

Average throughput: 196.64 Mbit/s

95th percentile per-packet one-way delay: 89.542 ms

Loss rate: 0.13%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-16 08:34:43

End at: 2017-11-16 08:35:13

Below is generated by plot.py at 2017-11-16 10:56:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 260.53 Mbit/s

95th percentile per-packet one-way delay: 92.474 ms

Loss rate: 0.01%

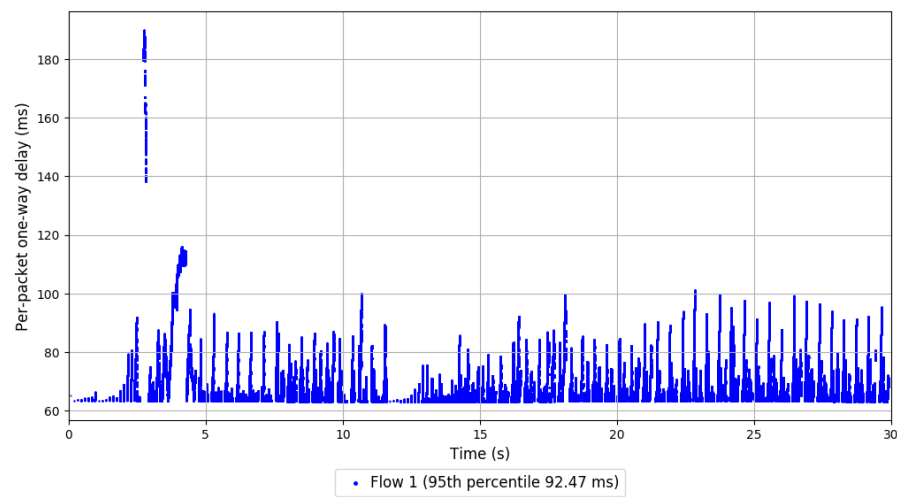
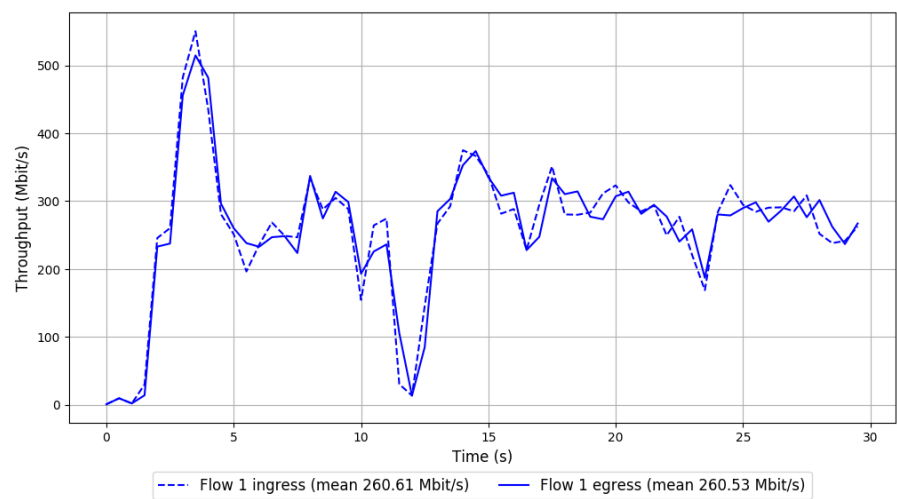
-- Flow 1:

Average throughput: 260.53 Mbit/s

95th percentile per-packet one-way delay: 92.474 ms

Loss rate: 0.01%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-16 08:45:11

End at: 2017-11-16 08:45:41

Below is generated by plot.py at 2017-11-16 10:56:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 257.12 Mbit/s

95th percentile per-packet one-way delay: 90.221 ms

Loss rate: 0.03%

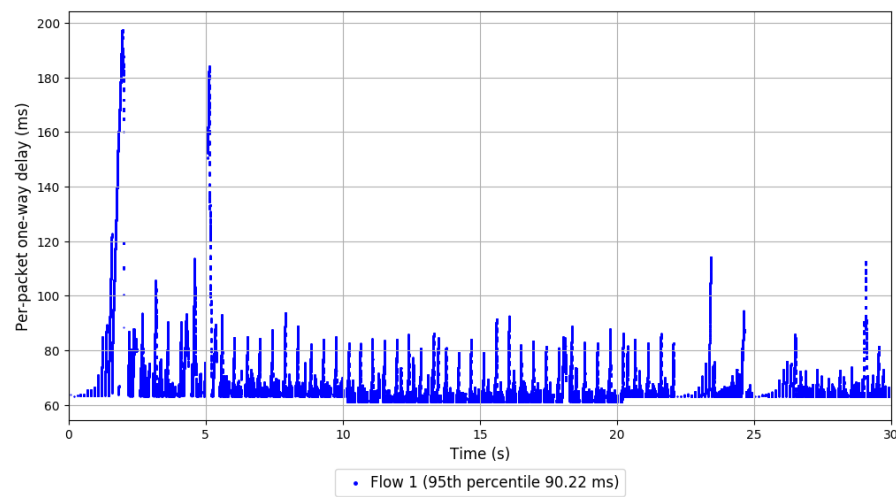
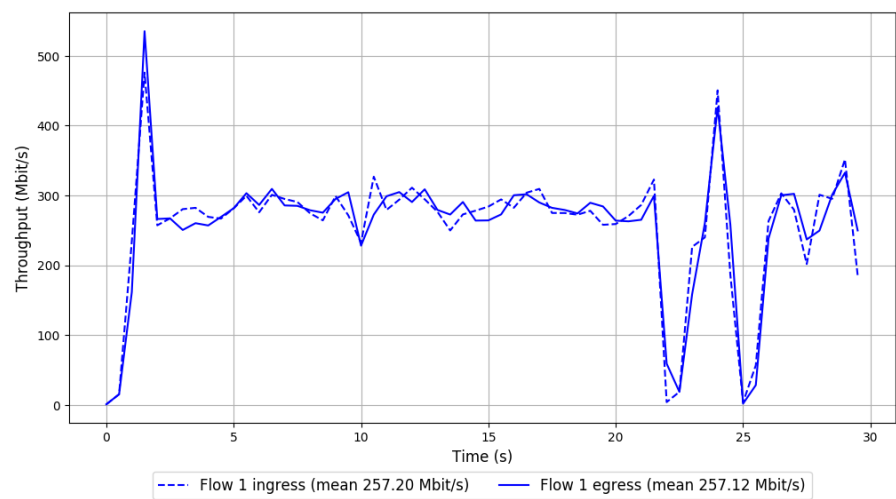
-- Flow 1:

Average throughput: 257.12 Mbit/s

95th percentile per-packet one-way delay: 90.221 ms

Loss rate: 0.03%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-16 08:55:45

End at: 2017-11-16 08:56:15

Below is generated by plot.py at 2017-11-16 10:56:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.48 Mbit/s

95th percentile per-packet one-way delay: 130.454 ms

Loss rate: 1.26%

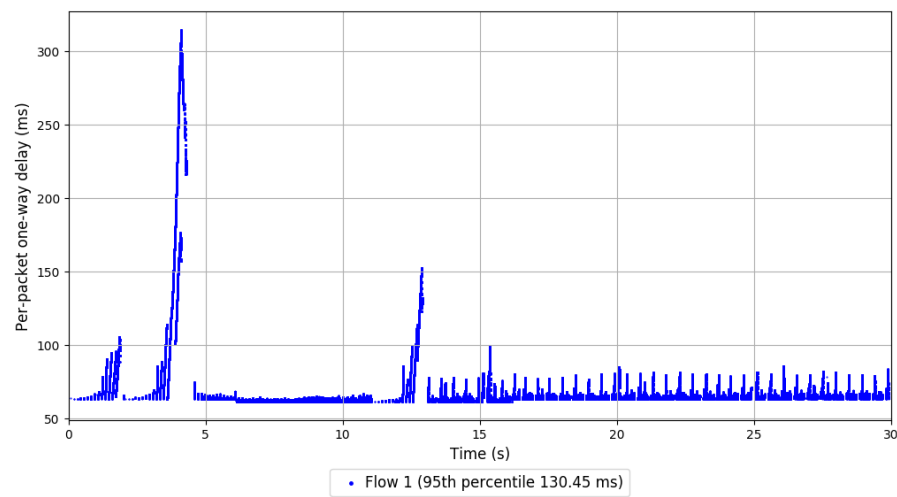
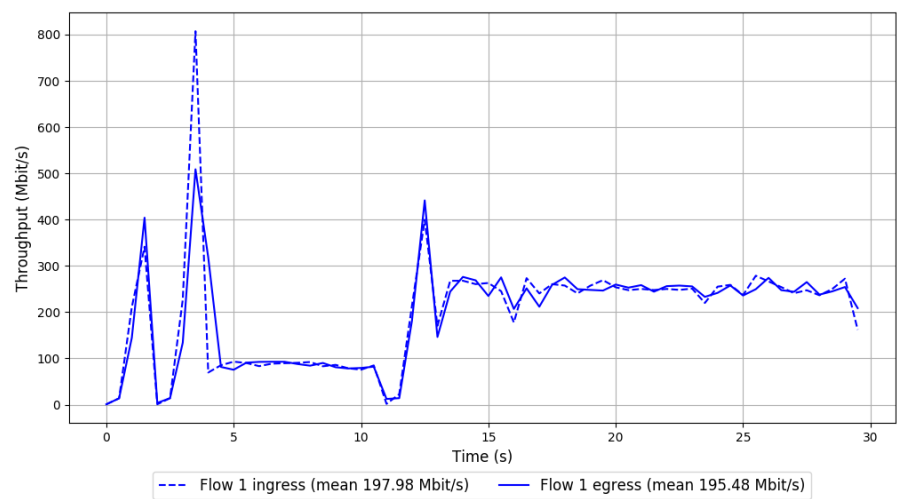
-- Flow 1:

Average throughput: 195.48 Mbit/s

95th percentile per-packet one-way delay: 130.454 ms

Loss rate: 1.26%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-16 09:06:16

End at: 2017-11-16 09:06:46

Below is generated by plot.py at 2017-11-16 10:58:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 262.92 Mbit/s

95th percentile per-packet one-way delay: 98.292 ms

Loss rate: 0.00%

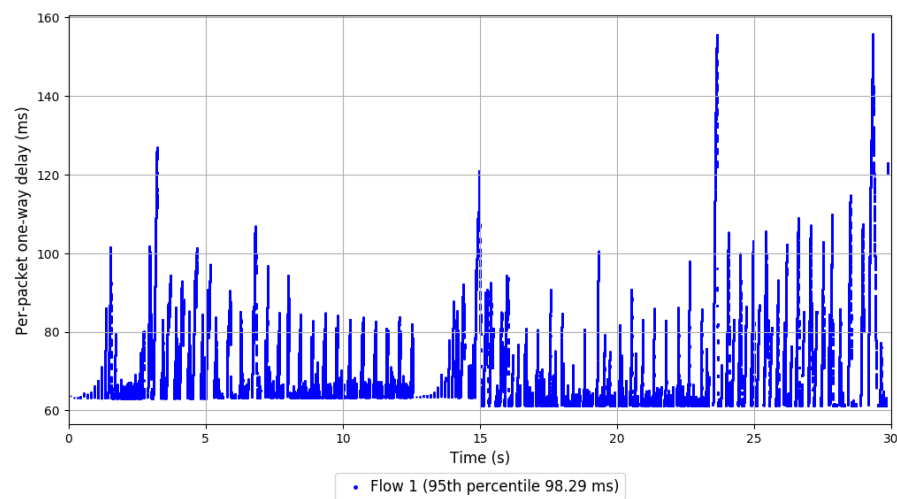
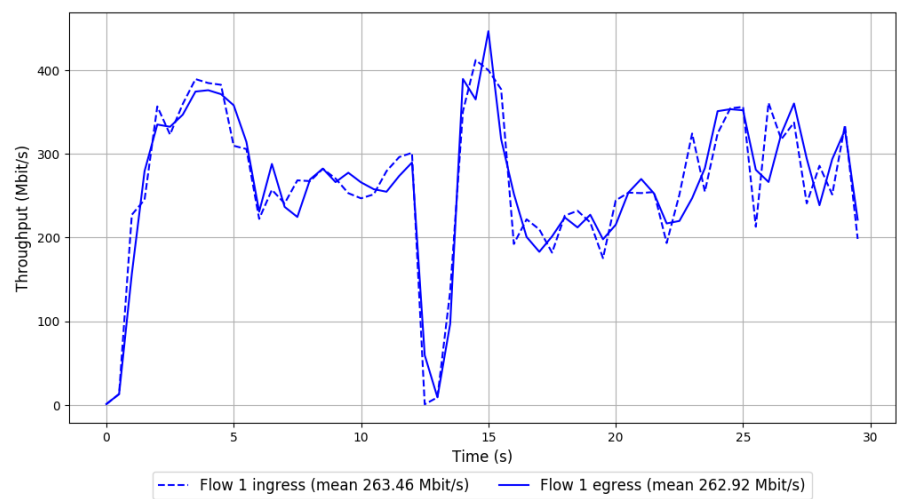
-- Flow 1:

Average throughput: 262.92 Mbit/s

95th percentile per-packet one-way delay: 98.292 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-16 09:16:42

End at: 2017-11-16 09:17:12

Below is generated by plot.py at 2017-11-16 10:58:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 236.00 Mbit/s

95th percentile per-packet one-way delay: 89.317 ms

Loss rate: 0.15%

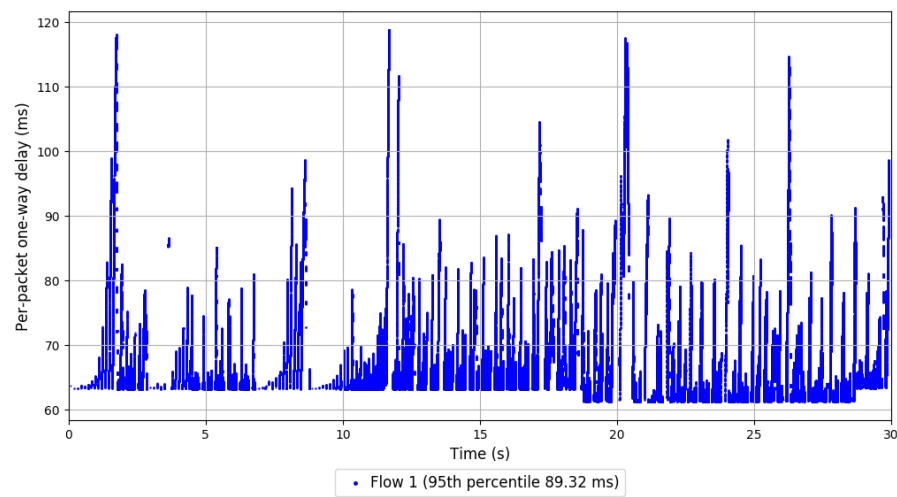
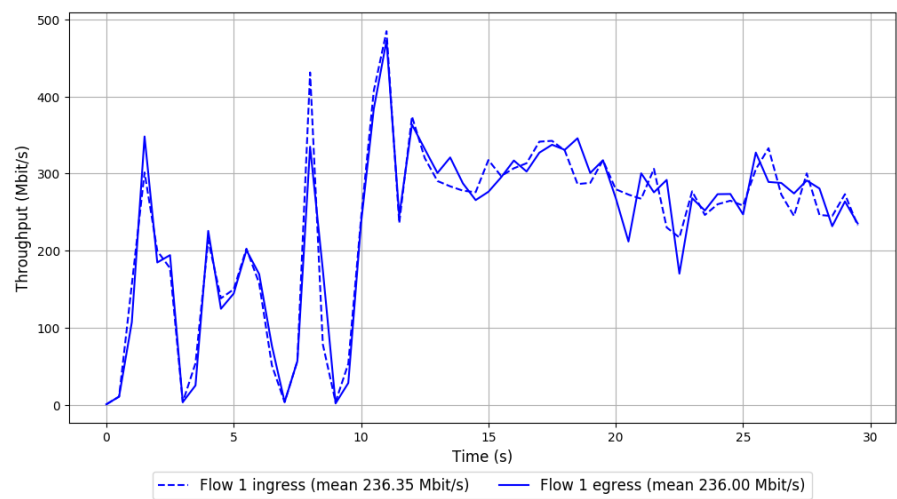
-- Flow 1:

Average throughput: 236.00 Mbit/s

95th percentile per-packet one-way delay: 89.317 ms

Loss rate: 0.15%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-16 09:27:20

End at: 2017-11-16 09:27:50

Below is generated by plot.py at 2017-11-16 10:59:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 254.03 Mbit/s

95th percentile per-packet one-way delay: 147.059 ms

Loss rate: 0.00%

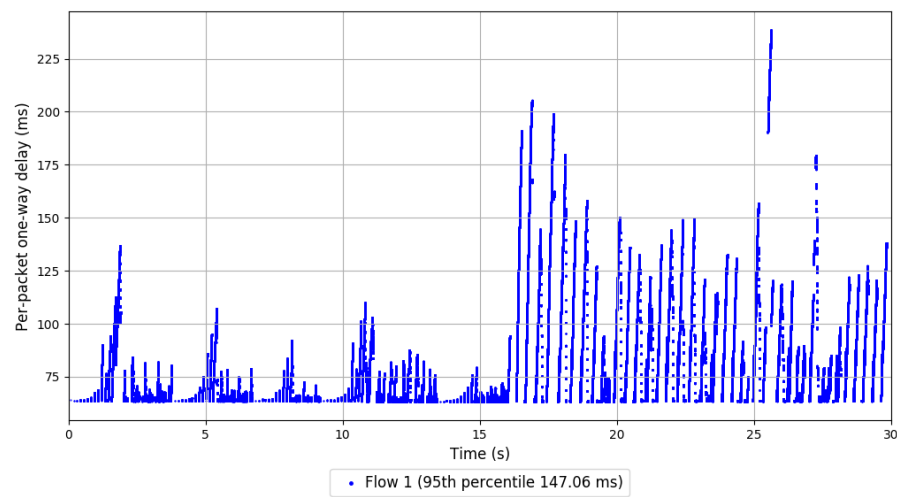
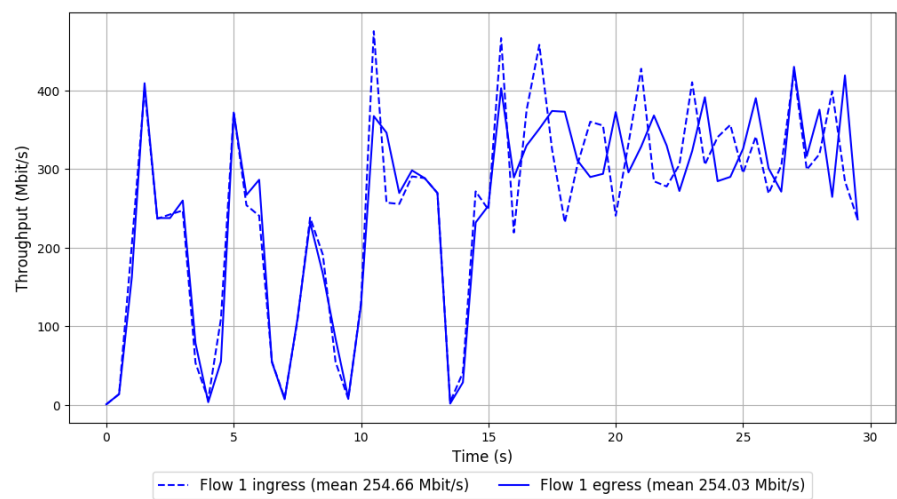
-- Flow 1:

Average throughput: 254.03 Mbit/s

95th percentile per-packet one-way delay: 147.059 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-16 09:37:44

End at: 2017-11-16 09:38:14

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 256.03 Mbit/s

95th percentile per-packet one-way delay: 98.089 ms

Loss rate: 0.01%

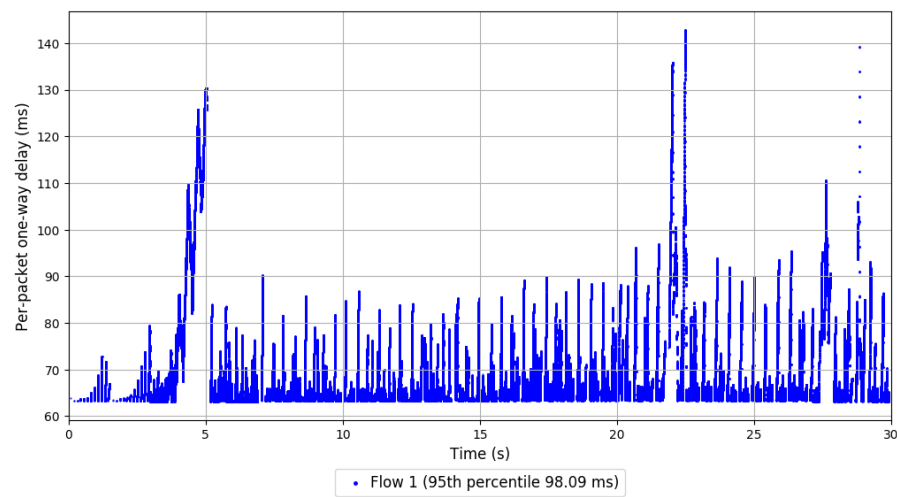
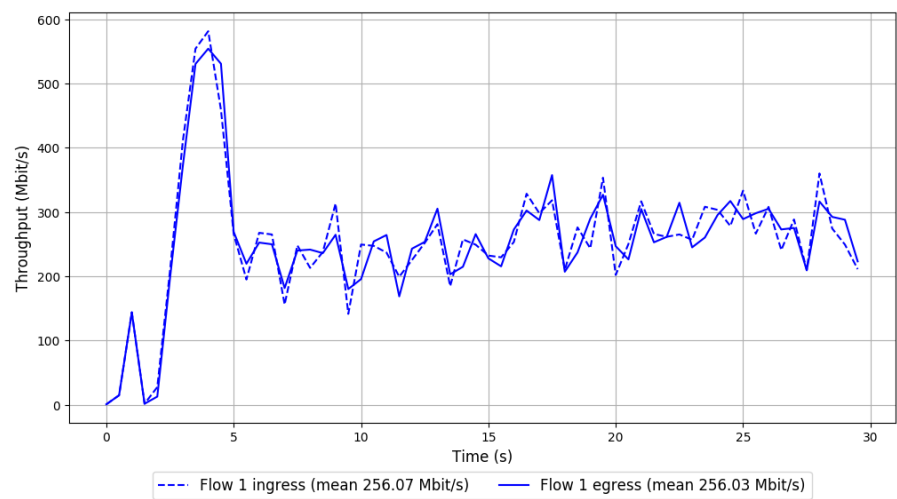
-- Flow 1:

Average throughput: 256.03 Mbit/s

95th percentile per-packet one-way delay: 98.089 ms

Loss rate: 0.01%

Run 10: Report of Verus — Data Link

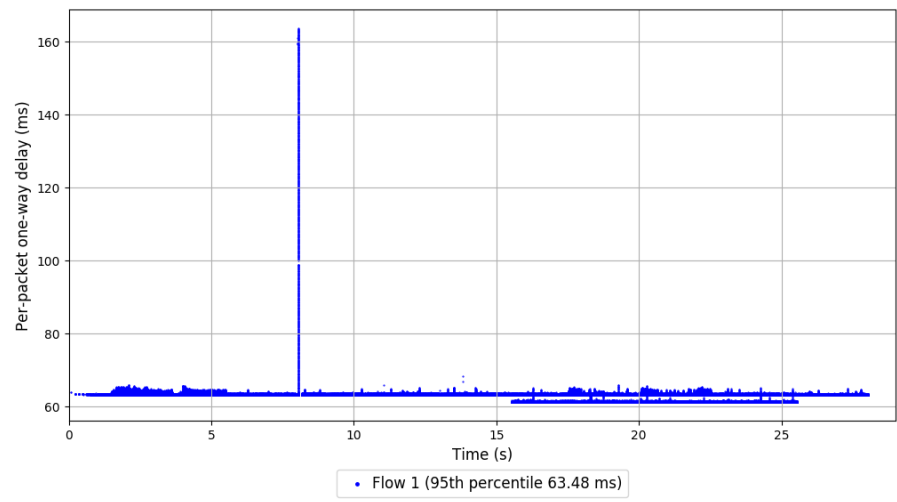
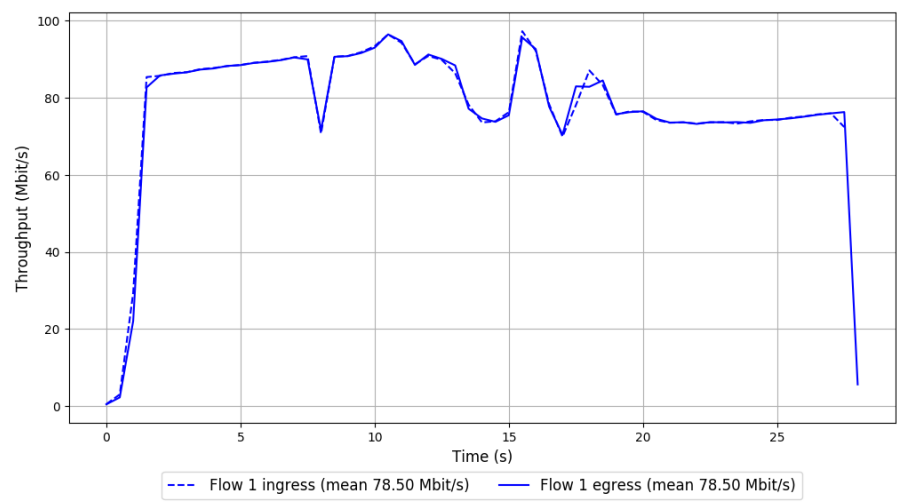


```
Run 1: Statistics of Copa

Start at: 2017-11-16 08:06:14
End at: 2017-11-16 08:06:44

# Below is generated by plot.py at 2017-11-16 11:00:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.50 Mbit/s
95th percentile per-packet one-way delay: 63.483 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 78.50 Mbit/s
95th percentile per-packet one-way delay: 63.483 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-16 08:16:39

End at: 2017-11-16 08:17:09

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.48 Mbit/s

95th percentile per-packet one-way delay: 63.436 ms

Loss rate: 0.00%

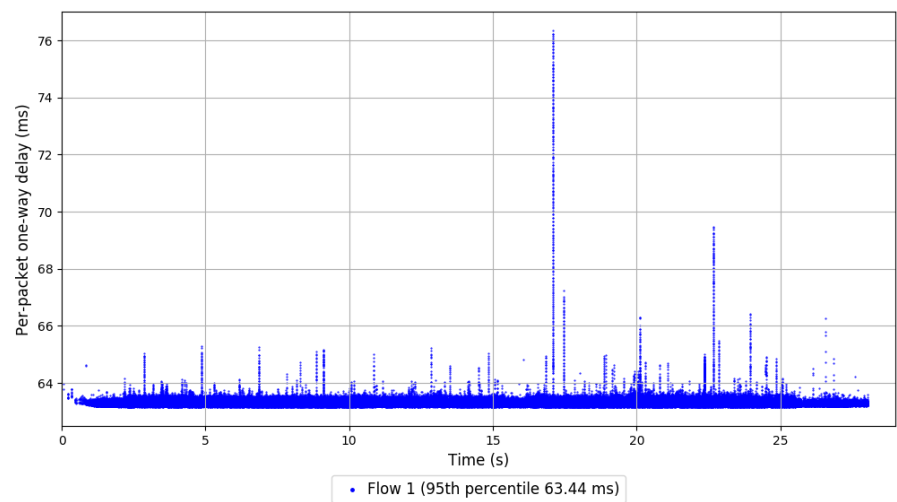
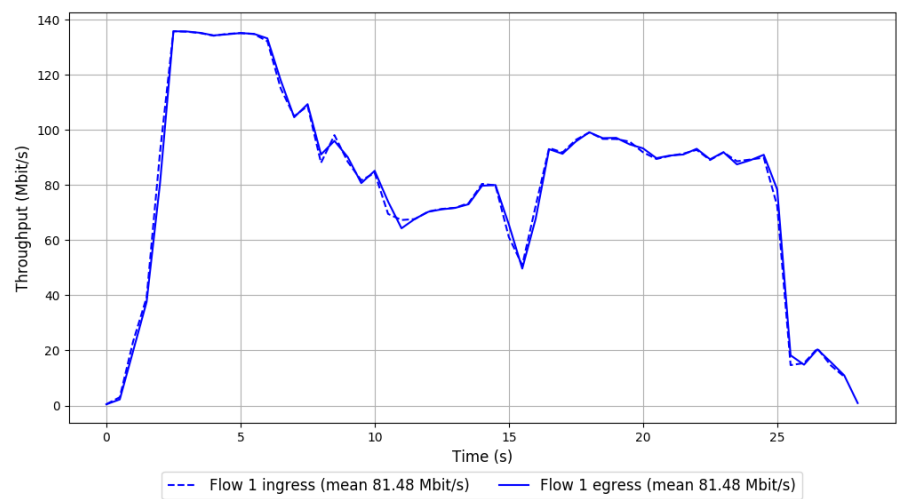
-- Flow 1:

Average throughput: 81.48 Mbit/s

95th percentile per-packet one-way delay: 63.436 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-16 08:27:05

End at: 2017-11-16 08:27:35

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.42 Mbit/s

95th percentile per-packet one-way delay: 63.421 ms

Loss rate: 0.00%

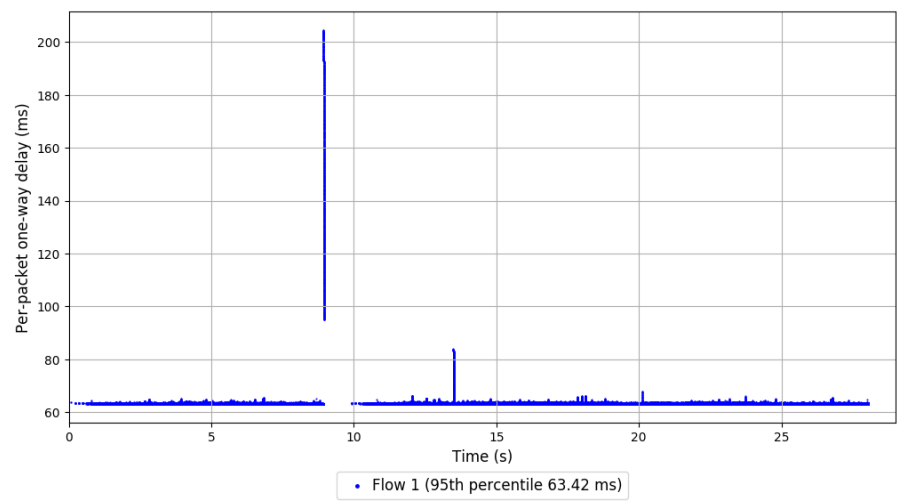
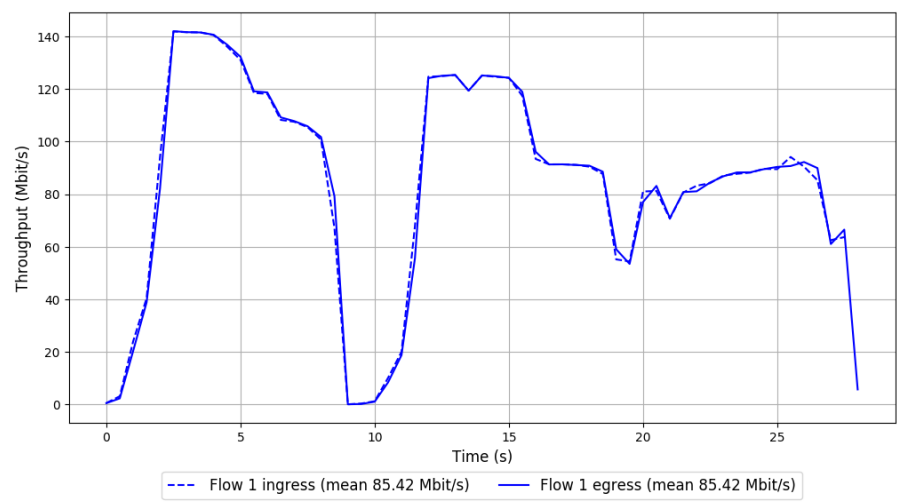
-- Flow 1:

Average throughput: 85.42 Mbit/s

95th percentile per-packet one-way delay: 63.421 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-16 08:37:34

End at: 2017-11-16 08:38:04

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.59 Mbit/s

95th percentile per-packet one-way delay: 63.500 ms

Loss rate: 0.00%

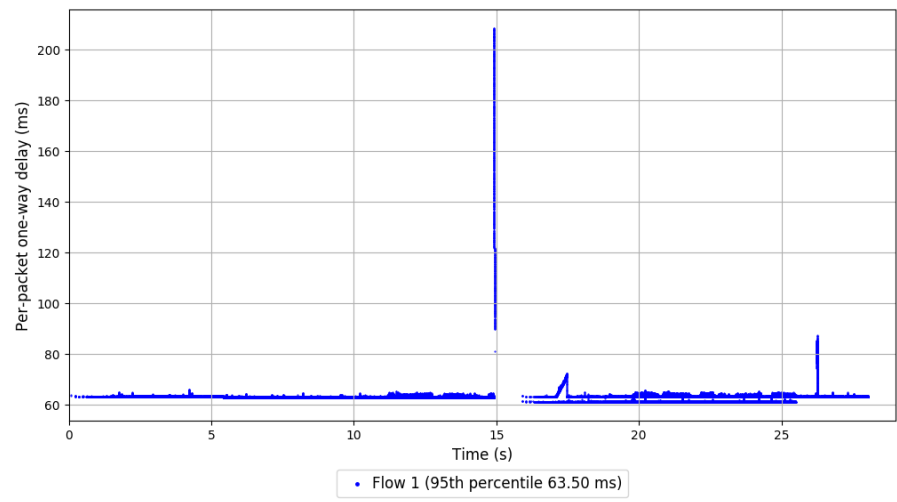
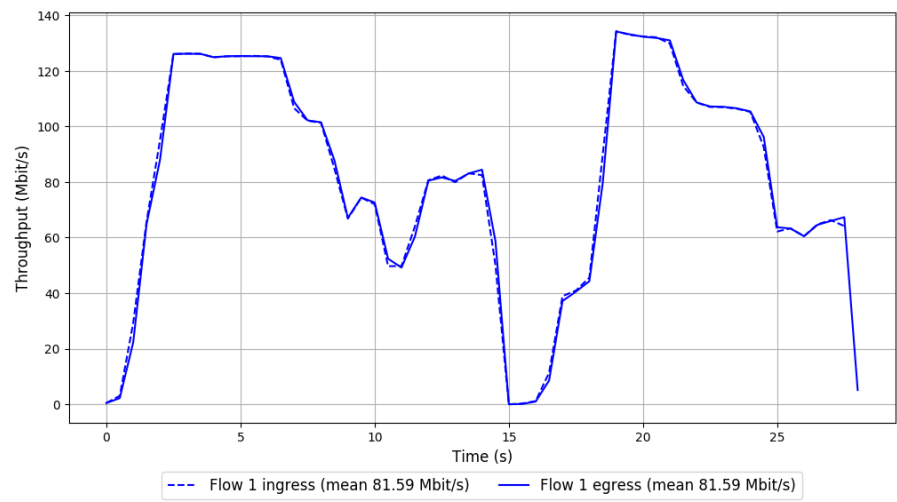
-- Flow 1:

Average throughput: 81.59 Mbit/s

95th percentile per-packet one-way delay: 63.500 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-16 08:48:01

End at: 2017-11-16 08:48:31

Below is generated by plot.py at 2017-11-16 11:00:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.43 Mbit/s

95th percentile per-packet one-way delay: 63.183 ms

Loss rate: 0.00%

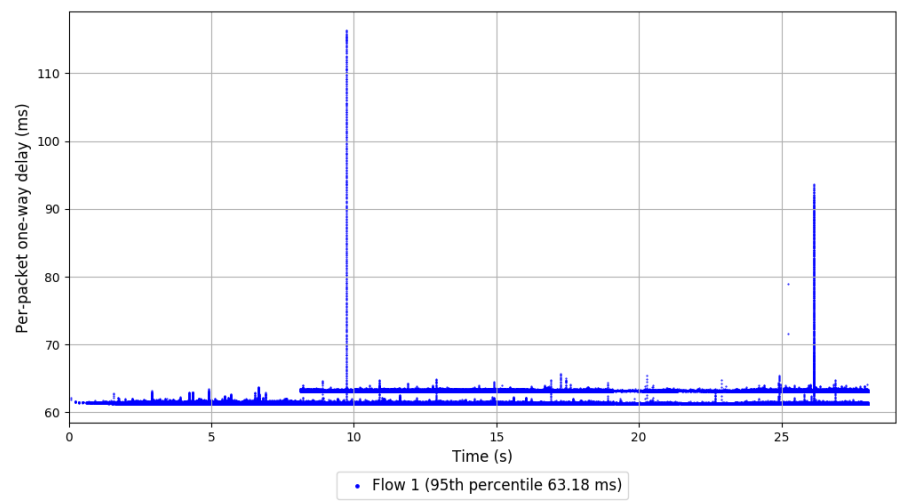
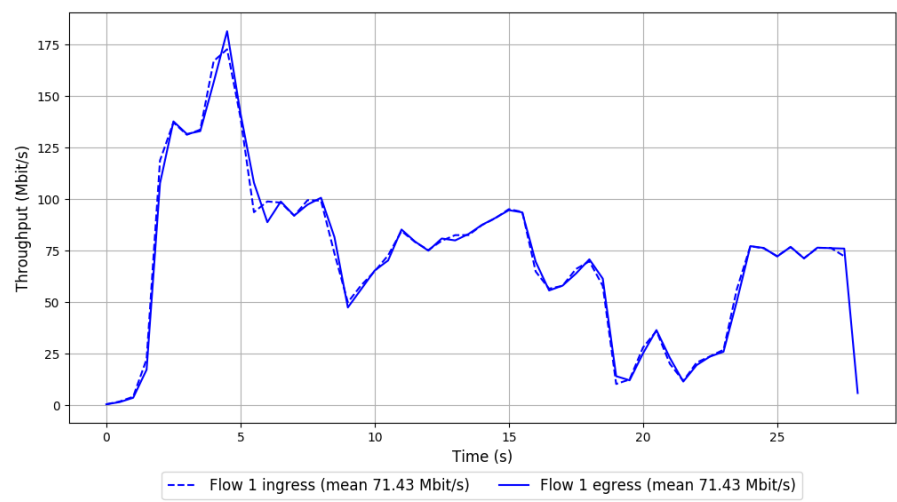
-- Flow 1:

Average throughput: 71.43 Mbit/s

95th percentile per-packet one-way delay: 63.183 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-16 08:58:31

End at: 2017-11-16 08:59:01

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.24 Mbit/s

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

Loss rate: 0.00%

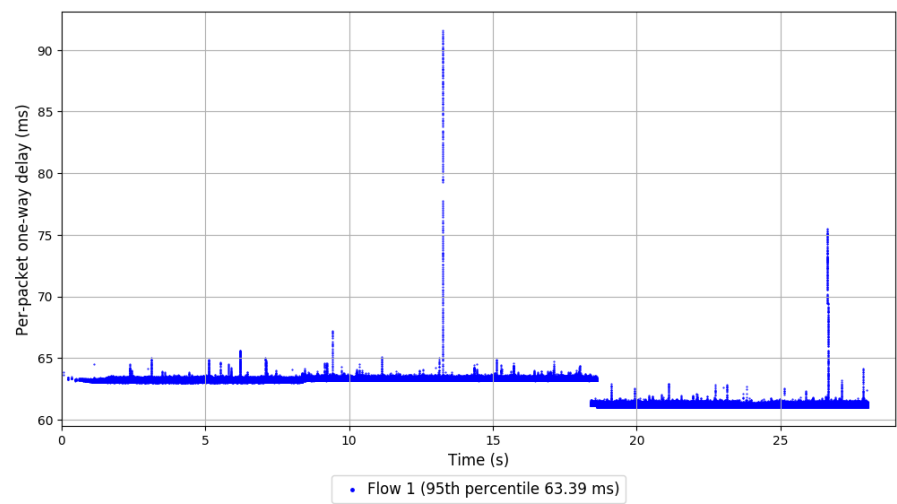
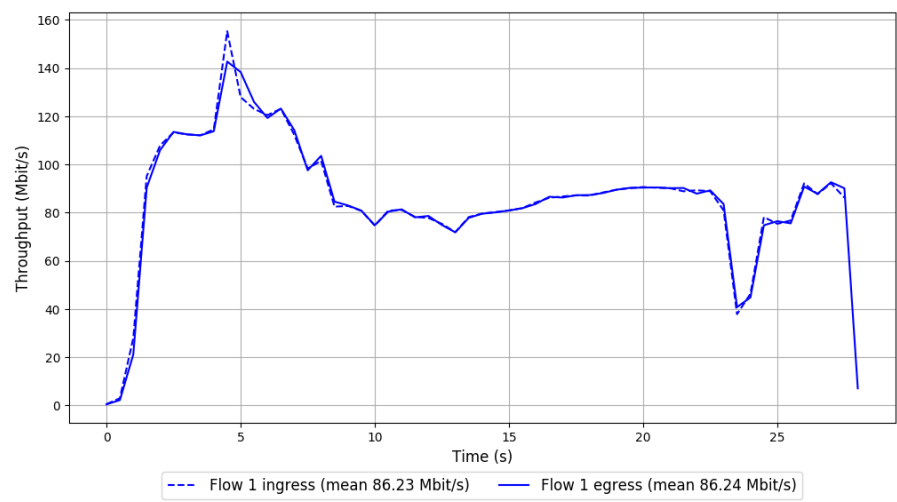
-- Flow 1:

Average throughput: 86.24 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-16 09:09:06

End at: 2017-11-16 09:09:36

Below is generated by plot.py at 2017-11-16 11:01:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.75 Mbit/s

95th percentile per-packet one-way delay: 63.446 ms

Loss rate: 0.00%

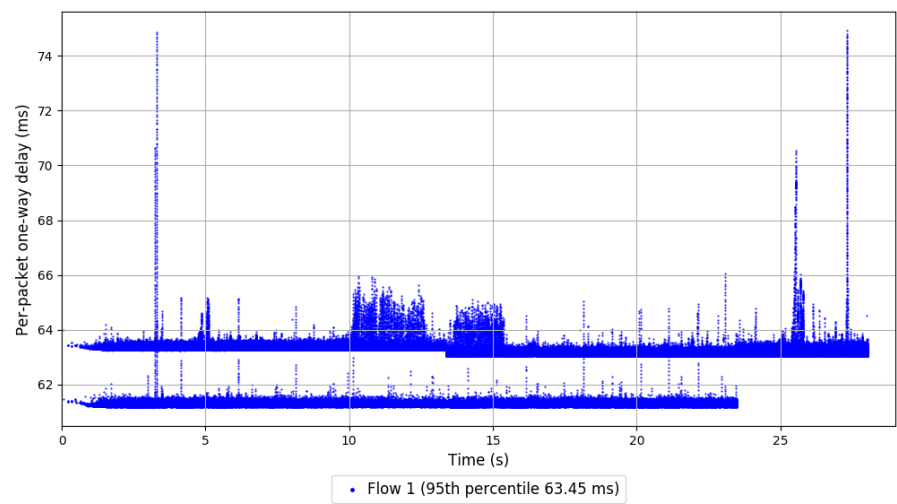
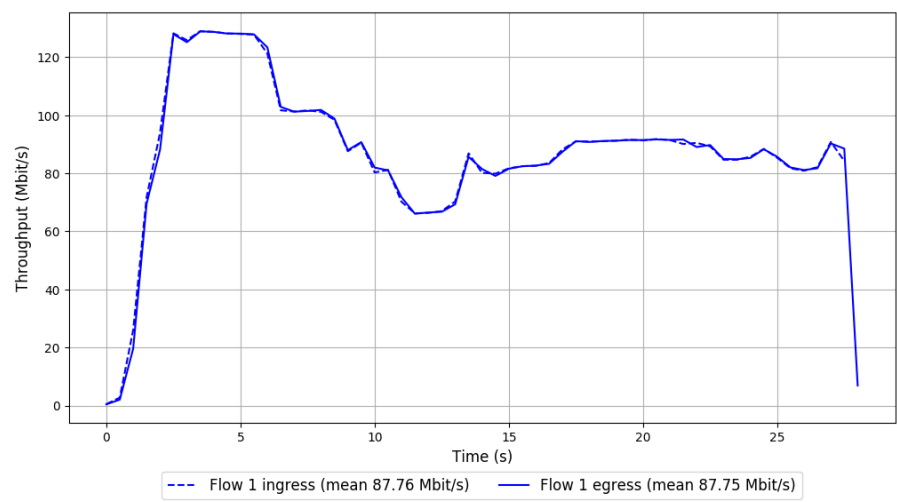
-- Flow 1:

Average throughput: 87.75 Mbit/s

95th percentile per-packet one-way delay: 63.446 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-16 09:19:32

End at: 2017-11-16 09:20:02

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.27 Mbit/s

95th percentile per-packet one-way delay: 63.539 ms

Loss rate: 0.01%

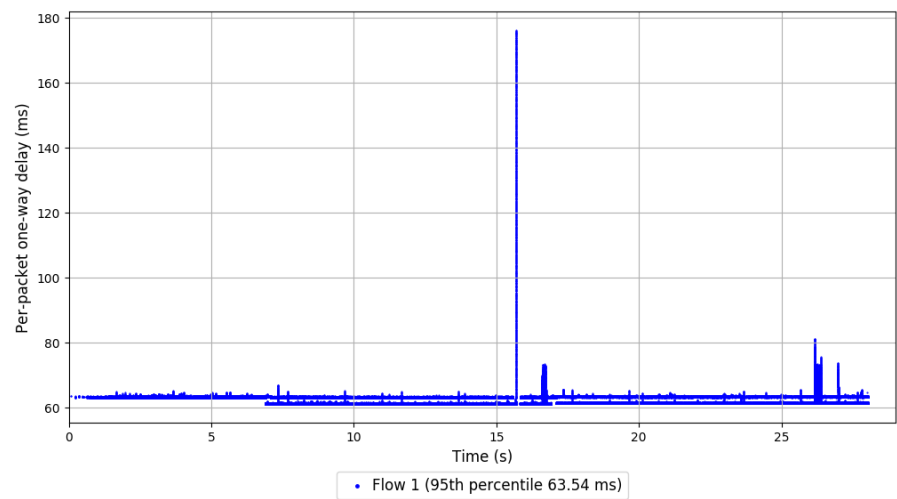
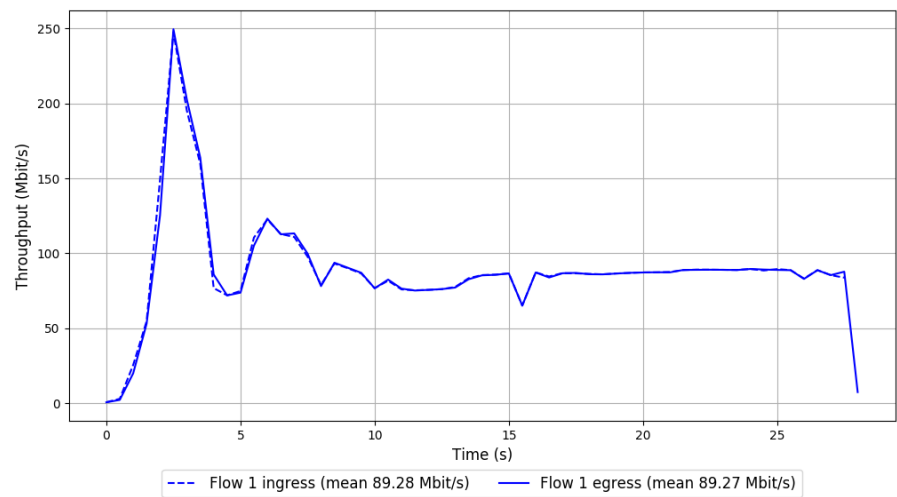
-- Flow 1:

Average throughput: 89.27 Mbit/s

95th percentile per-packet one-way delay: 63.539 ms

Loss rate: 0.01%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

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

End at: 2017-11-16 09:30:39

Below is generated by plot.py at 2017-11-16 11:01:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.85 Mbit/s

95th percentile per-packet one-way delay: 63.482 ms

Loss rate: 0.01%

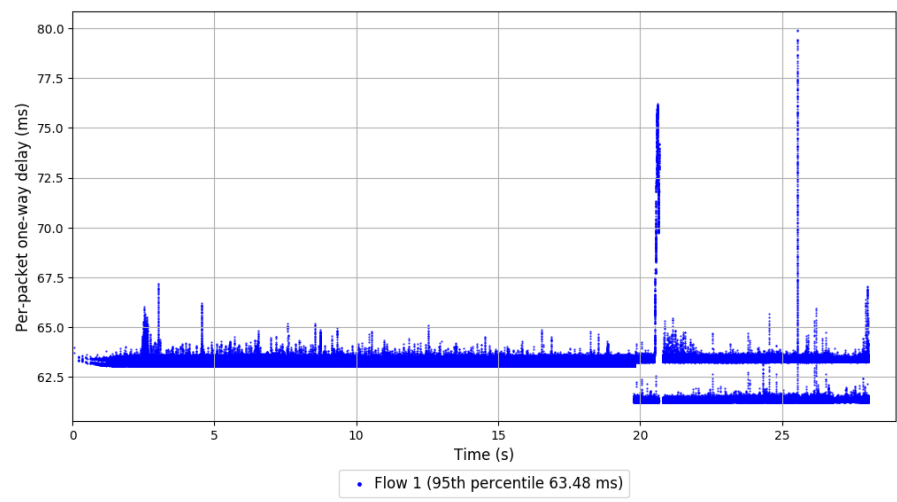
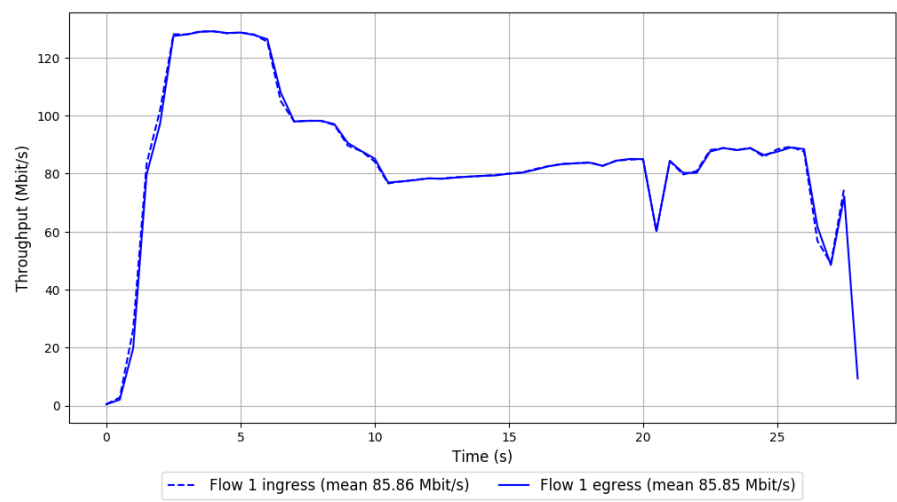
-- Flow 1:

Average throughput: 85.85 Mbit/s

95th percentile per-packet one-way delay: 63.482 ms

Loss rate: 0.01%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-16 09:40:34

End at: 2017-11-16 09:41:04

Below is generated by plot.py at 2017-11-16 11:01:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.55 Mbit/s

95th percentile per-packet one-way delay: 63.546 ms

Loss rate: 0.00%

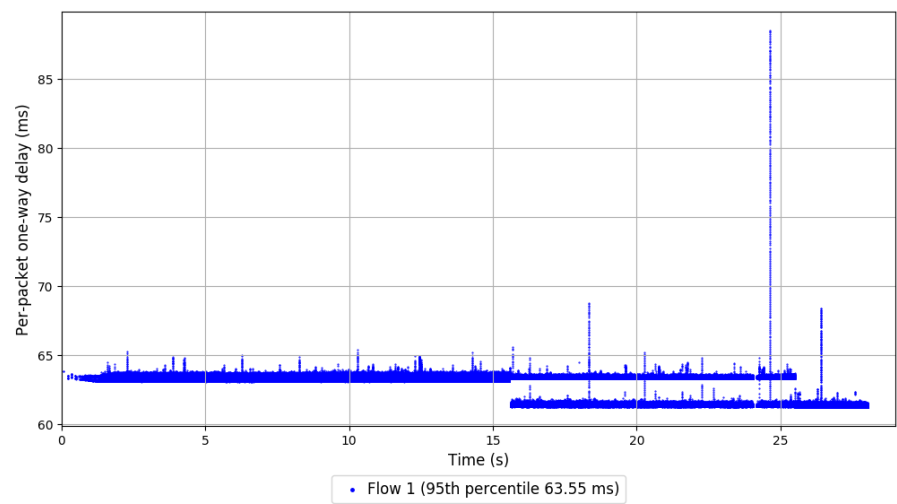
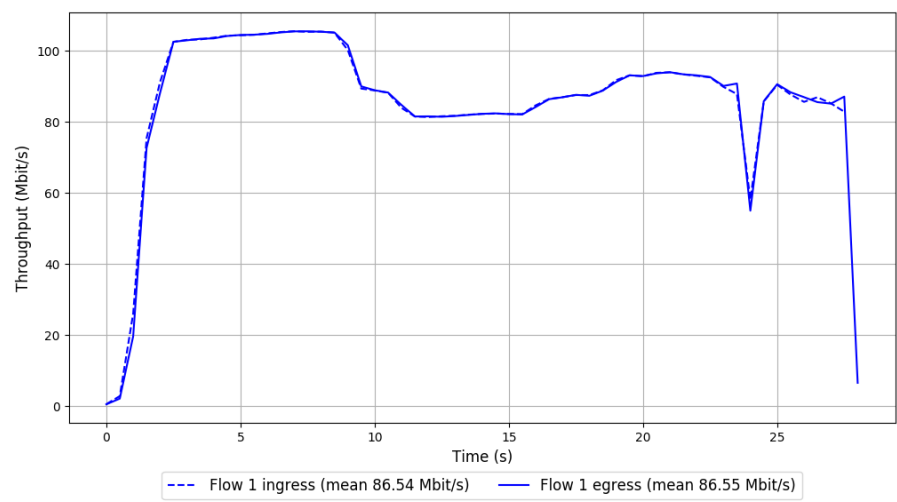
-- Flow 1:

Average throughput: 86.55 Mbit/s

95th percentile per-packet one-way delay: 63.546 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

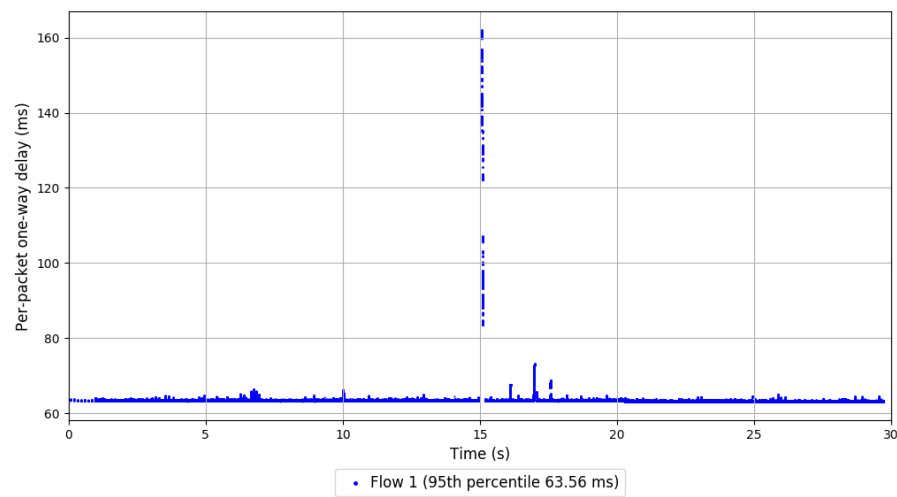
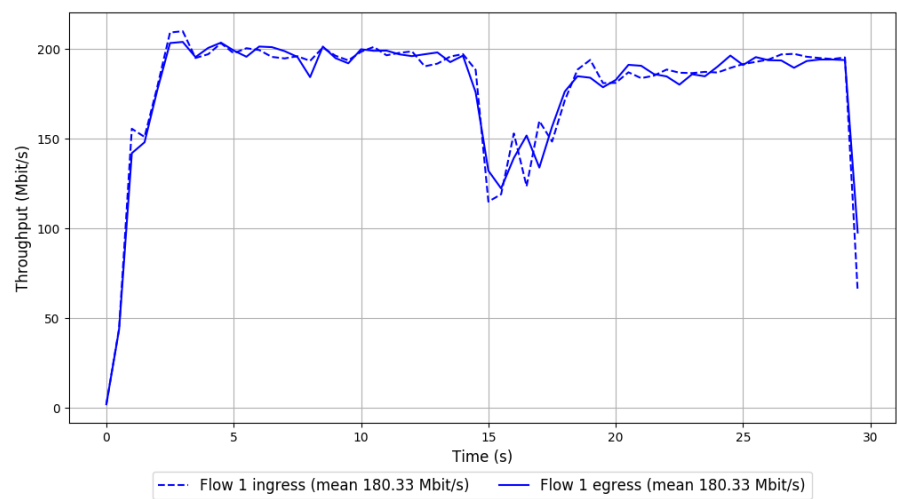


```
Run 1: Statistics of Indigo

Start at: 2017-11-16 08:00:31
End at: 2017-11-16 08:01:01

# Below is generated by plot.py at 2017-11-16 11:02:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 180.33 Mbit/s
95th percentile per-packet one-way delay: 63.556 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 180.33 Mbit/s
95th percentile per-packet one-way delay: 63.556 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-11-16 08:10:48

End at: 2017-11-16 08:11:18

Below is generated by plot.py at 2017-11-16 11:03:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.18 Mbit/s

95th percentile per-packet one-way delay: 63.406 ms

Loss rate: 0.00%

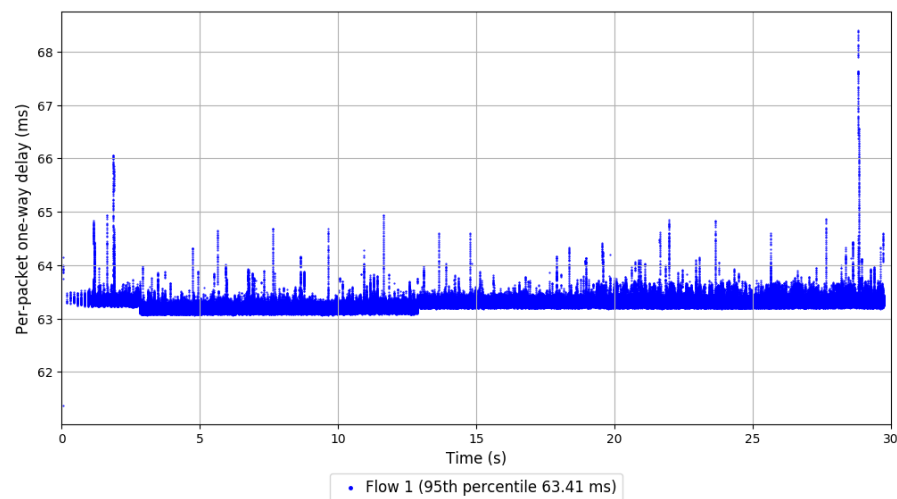
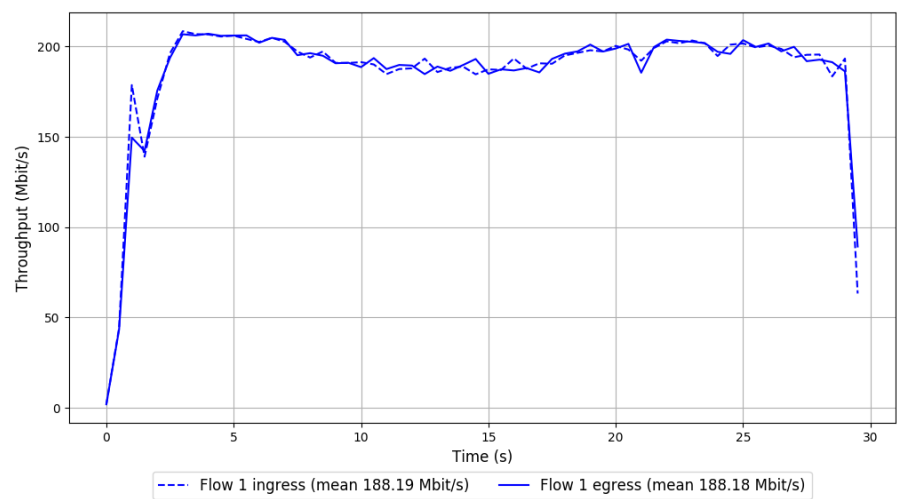
-- Flow 1:

Average throughput: 188.18 Mbit/s

95th percentile per-packet one-way delay: 63.406 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-16 08:21:22

End at: 2017-11-16 08:21:52

Below is generated by plot.py at 2017-11-16 11:04:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.46 Mbit/s

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

Loss rate: 0.00%

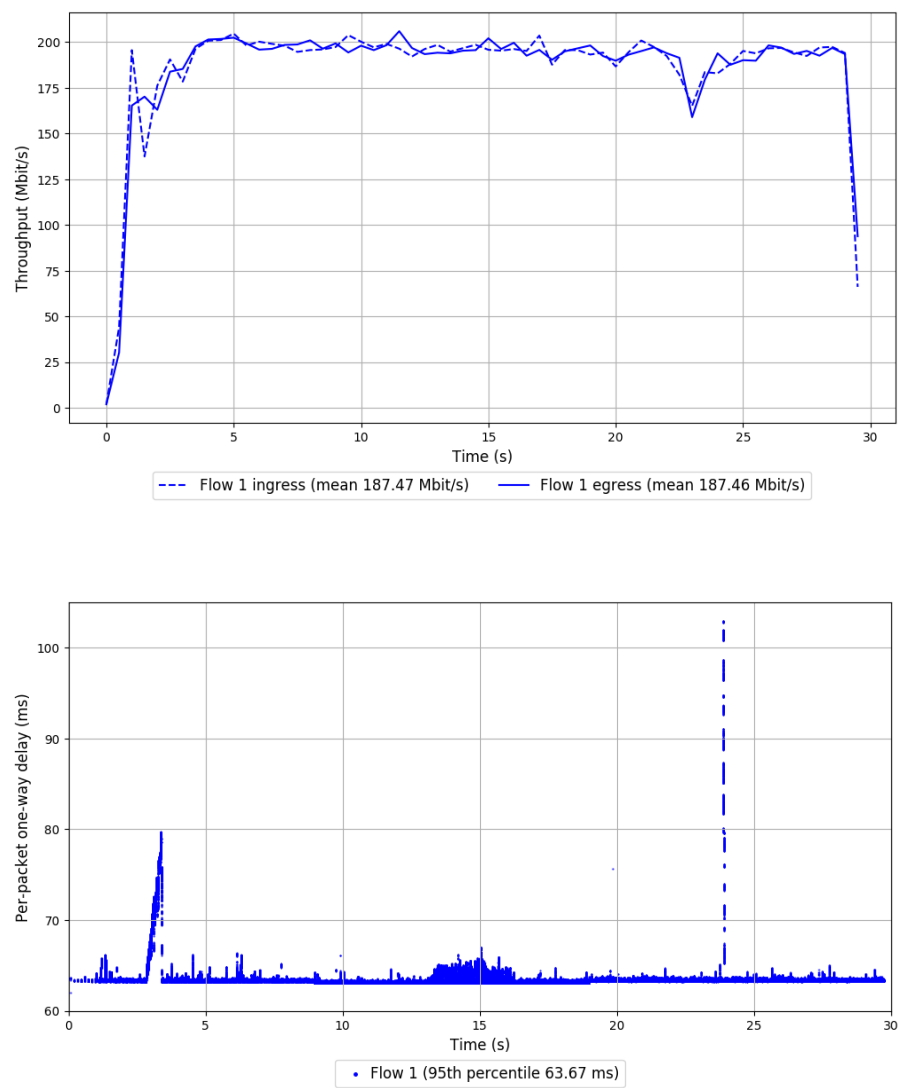
-- Flow 1:

Average throughput: 187.46 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-16 08:31:45

End at: 2017-11-16 08:32:15

Below is generated by plot.py at 2017-11-16 11:04:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.39 Mbit/s

95th percentile per-packet one-way delay: 63.437 ms

Loss rate: 0.03%

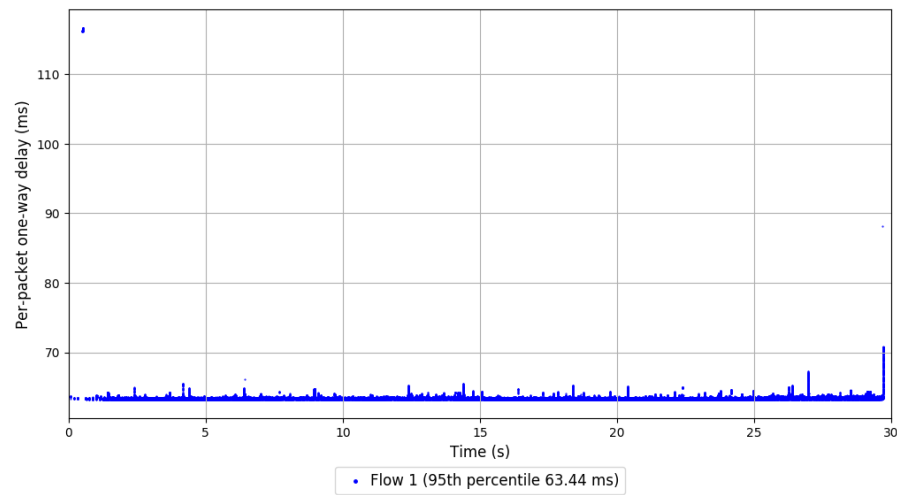
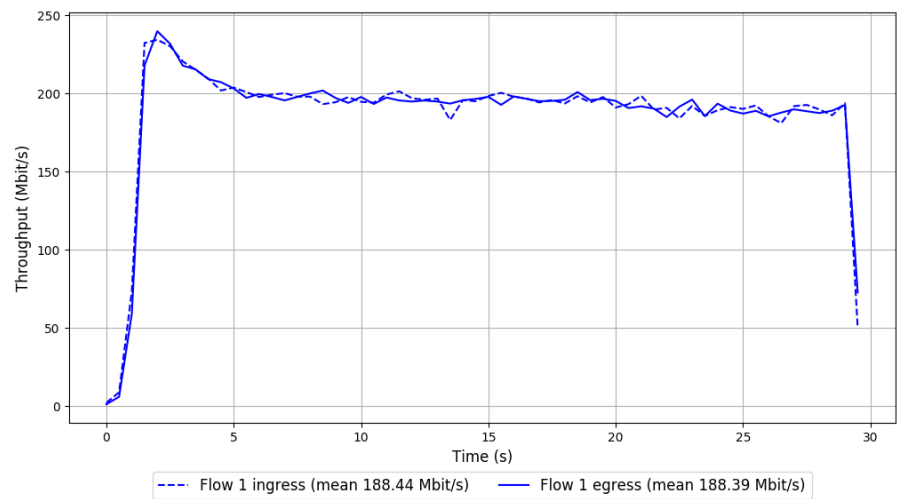
-- Flow 1:

Average throughput: 188.39 Mbit/s

95th percentile per-packet one-way delay: 63.437 ms

Loss rate: 0.03%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-16 08:42:13

End at: 2017-11-16 08:42:43

Below is generated by plot.py at 2017-11-16 11:04:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.68 Mbit/s

95th percentile per-packet one-way delay: 63.418 ms

Loss rate: 0.01%

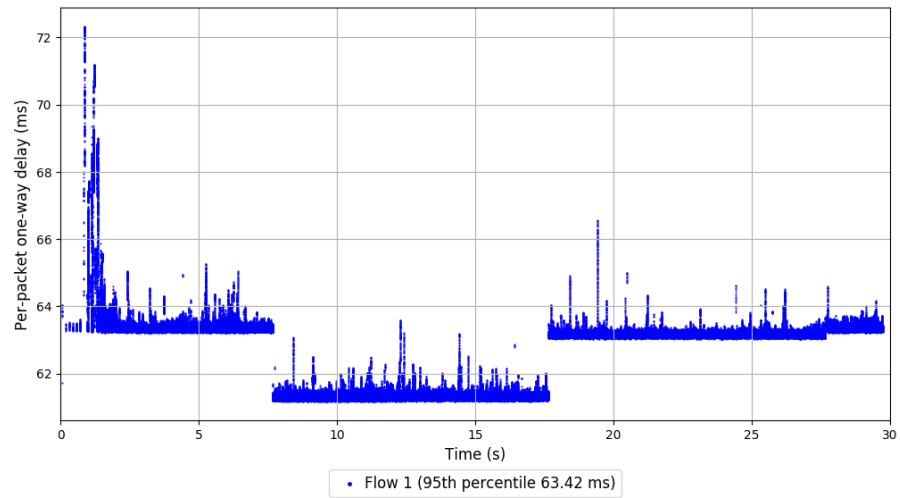
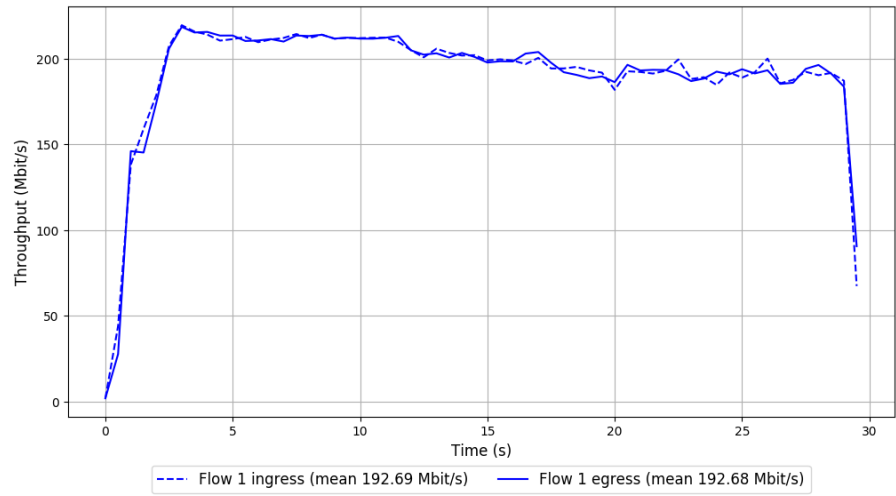
-- Flow 1:

Average throughput: 192.68 Mbit/s

95th percentile per-packet one-way delay: 63.418 ms

Loss rate: 0.01%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-16 08:52:48

End at: 2017-11-16 08:53:18

Below is generated by plot.py at 2017-11-16 11:04:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.07 Mbit/s

95th percentile per-packet one-way delay: 63.419 ms

Loss rate: 0.00%

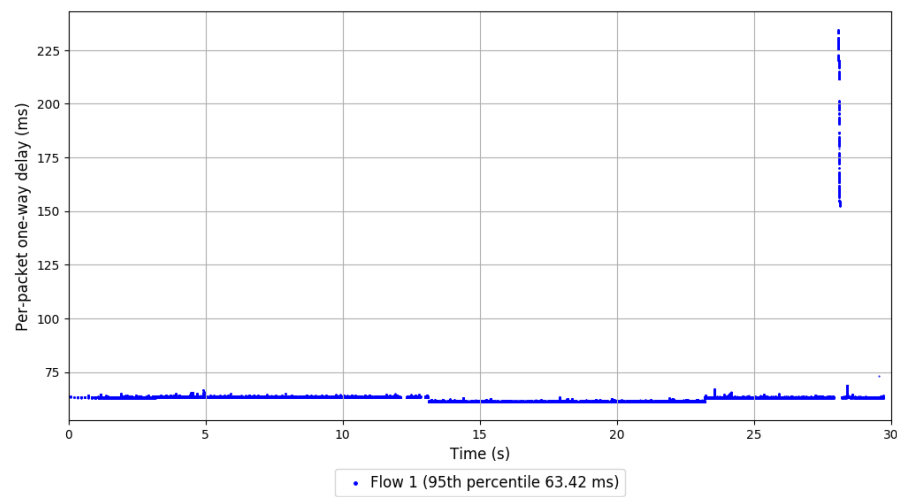
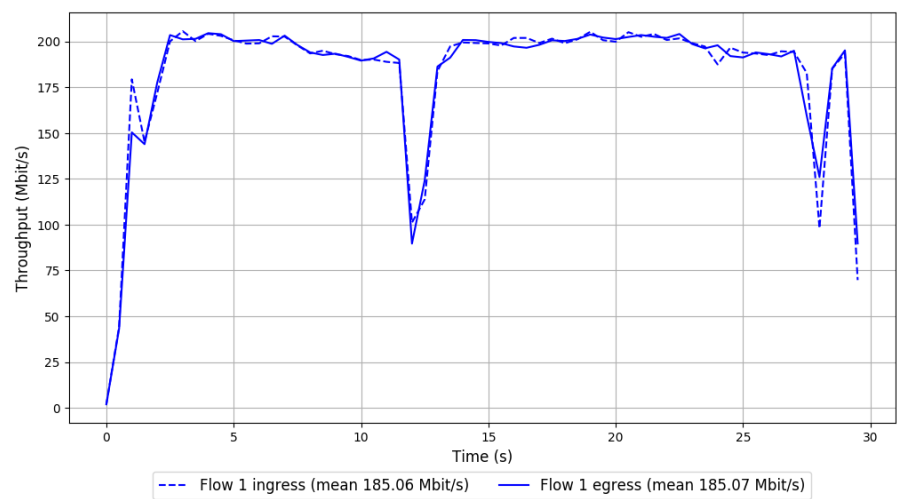
-- Flow 1:

Average throughput: 185.07 Mbit/s

95th percentile per-packet one-way delay: 63.419 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-16 09:03:18

End at: 2017-11-16 09:03:48

Below is generated by plot.py at 2017-11-16 11:04:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.65 Mbit/s

95th percentile per-packet one-way delay: 63.490 ms

Loss rate: 0.00%

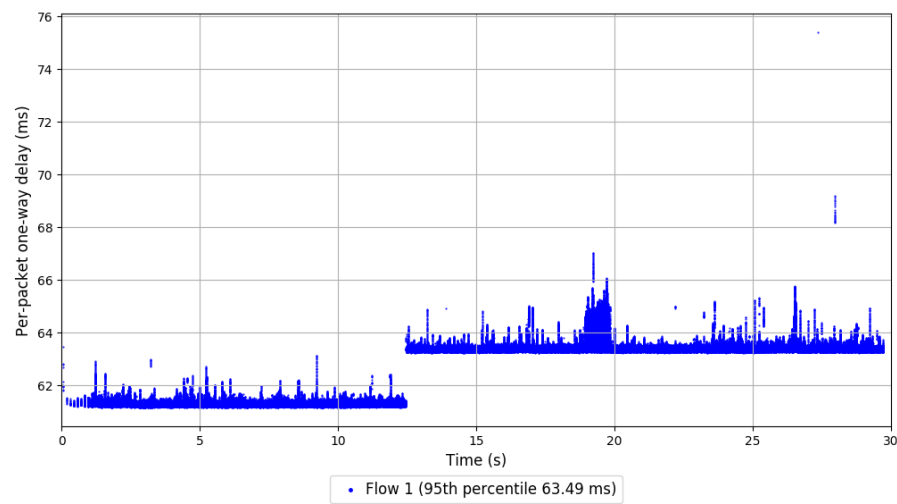
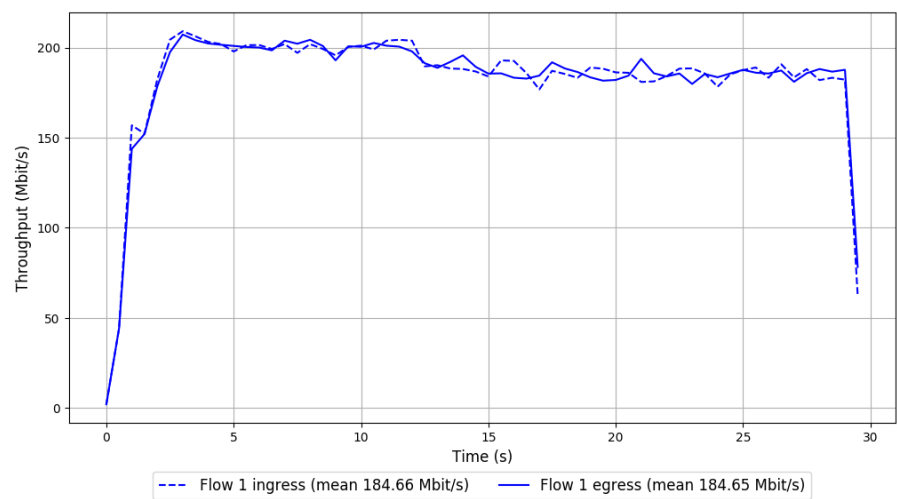
-- Flow 1:

Average throughput: 184.65 Mbit/s

95th percentile per-packet one-way delay: 63.490 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-16 09:13:46

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

Below is generated by plot.py at 2017-11-16 11:04:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.29 Mbit/s

95th percentile per-packet one-way delay: 63.463 ms

Loss rate: 0.00%

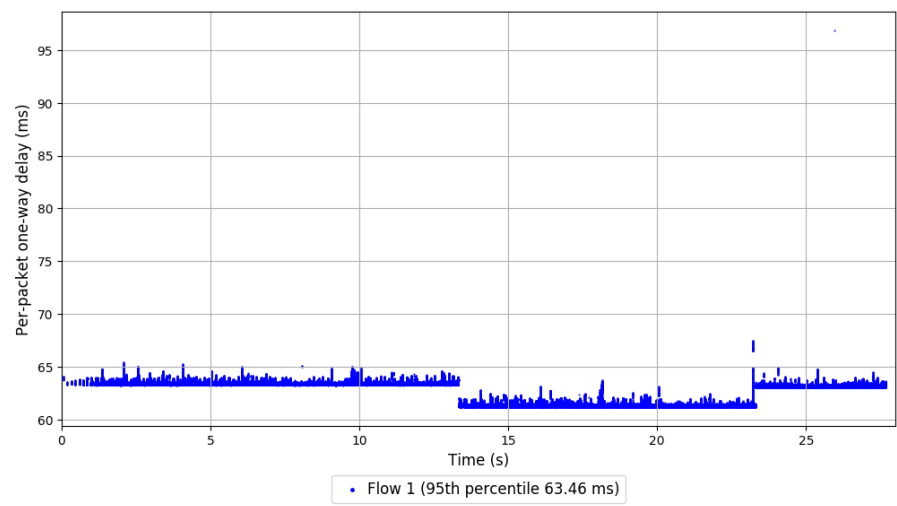
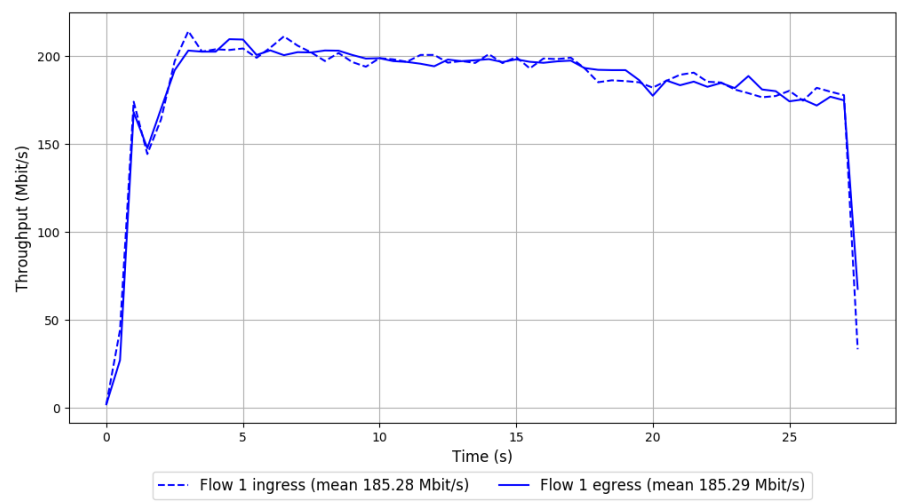
-- Flow 1:

Average throughput: 185.29 Mbit/s

95th percentile per-packet one-way delay: 63.463 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-16 09:24:23

End at: 2017-11-16 09:24:53

Below is generated by plot.py at 2017-11-16 11:05:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.25 Mbit/s

95th percentile per-packet one-way delay: 66.138 ms

Loss rate: 0.00%

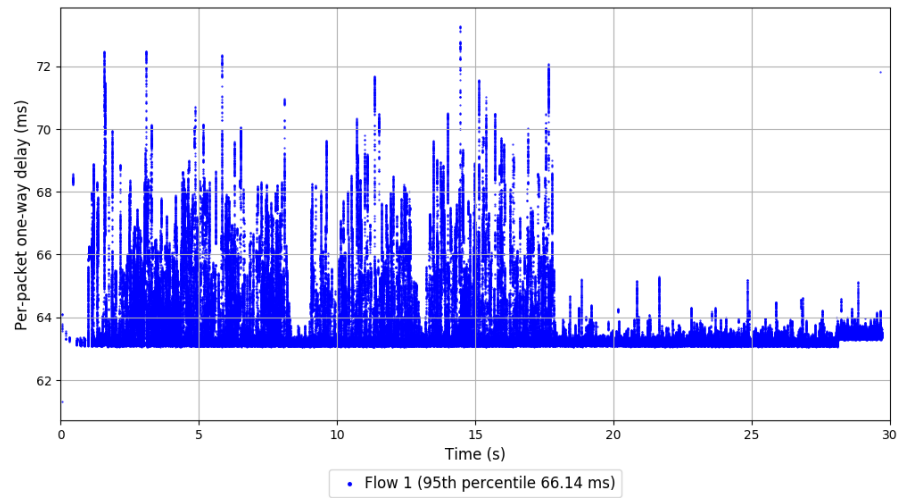
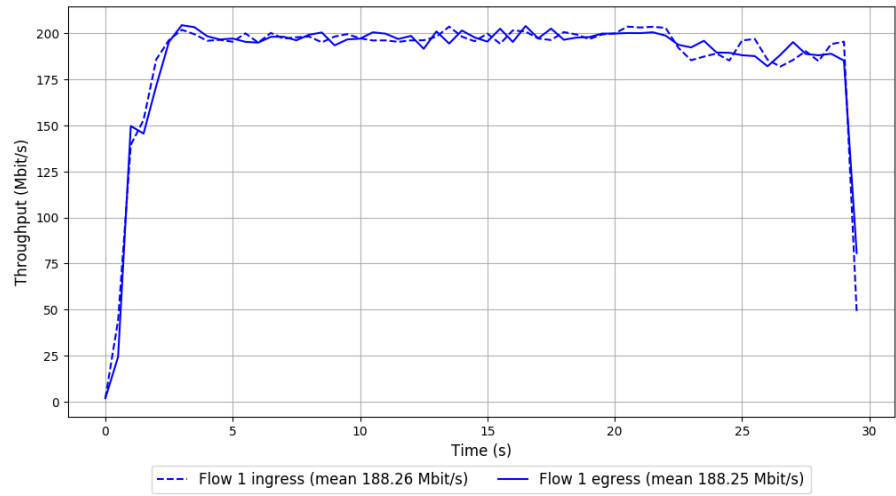
-- Flow 1:

Average throughput: 188.25 Mbit/s

95th percentile per-packet one-way delay: 66.138 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-16 09:34:46

End at: 2017-11-16 09:35:16

Below is generated by plot.py at 2017-11-16 11:06:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.35 Mbit/s

95th percentile per-packet one-way delay: 63.457 ms

Loss rate: 0.00%

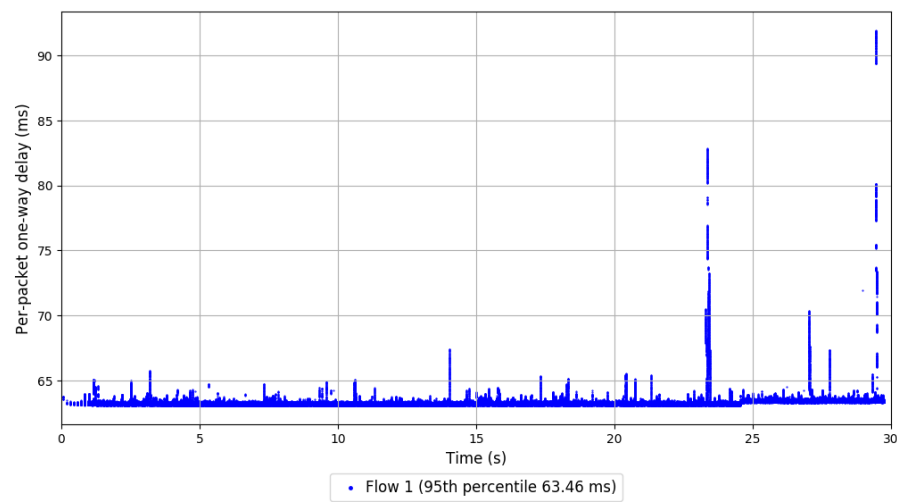
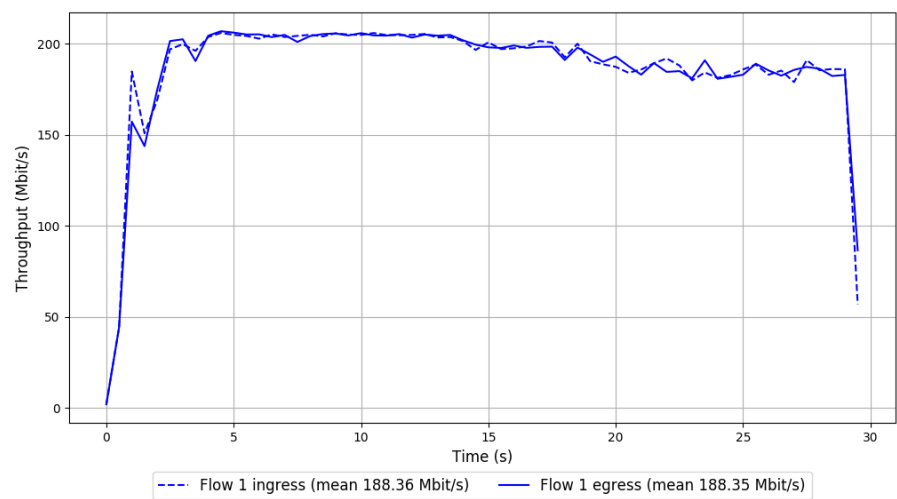
-- Flow 1:

Average throughput: 188.35 Mbit/s

95th percentile per-packet one-way delay: 63.457 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

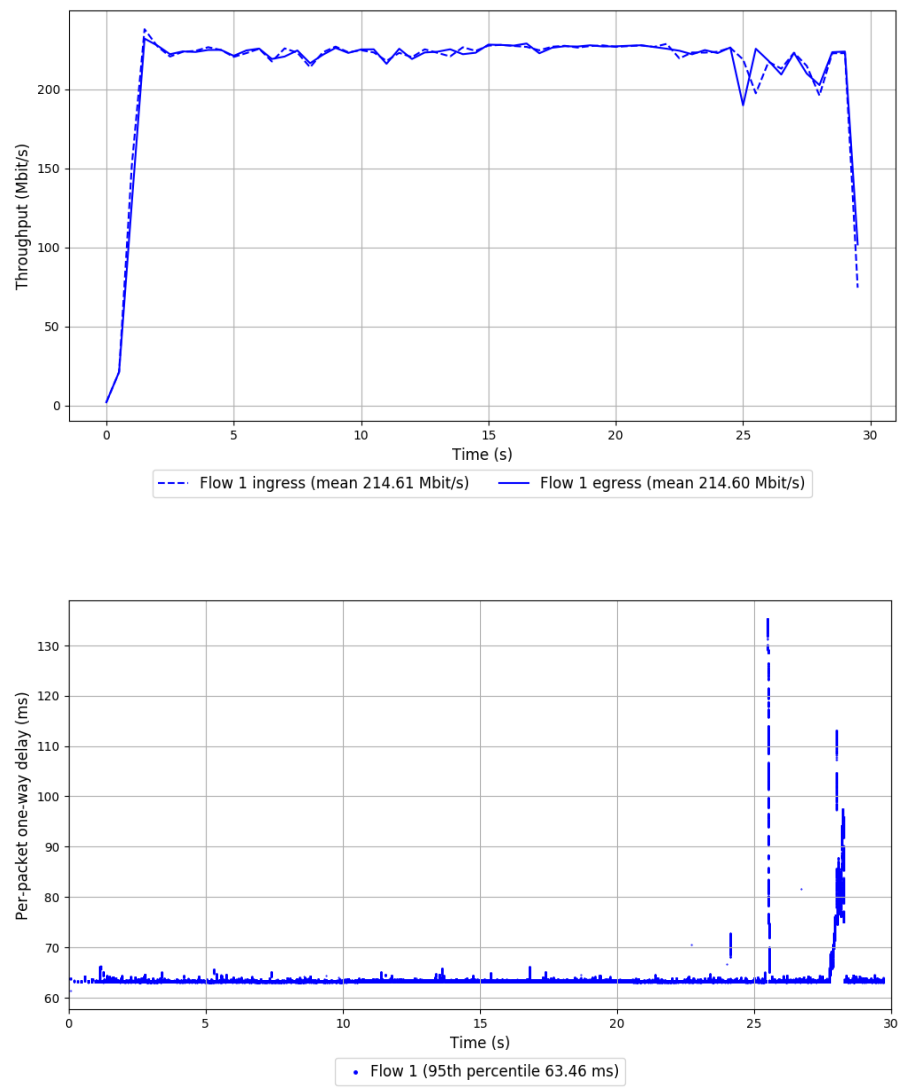


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-16 08:01:20
End at: 2017-11-16 08:01:50

# Below is generated by plot.py at 2017-11-16 11:07:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.60 Mbit/s
95th percentile per-packet one-way delay: 63.457 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 214.60 Mbit/s
95th percentile per-packet one-way delay: 63.457 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-calib — Data Link

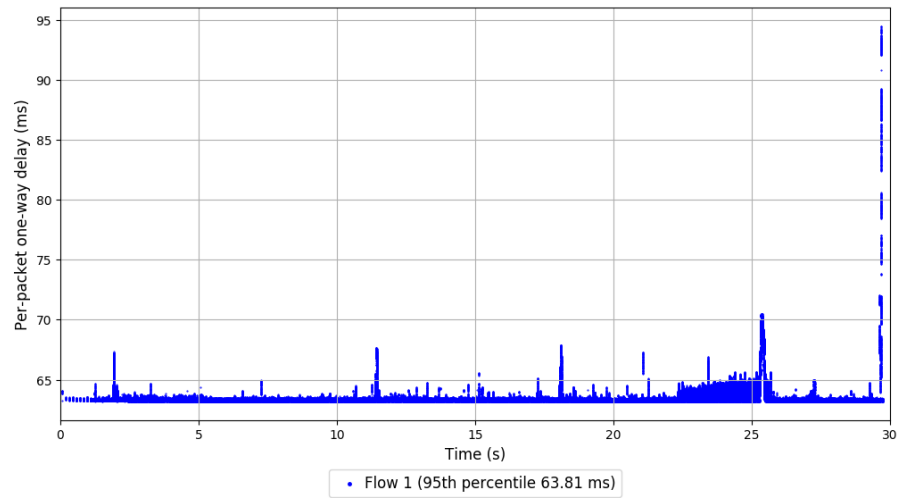
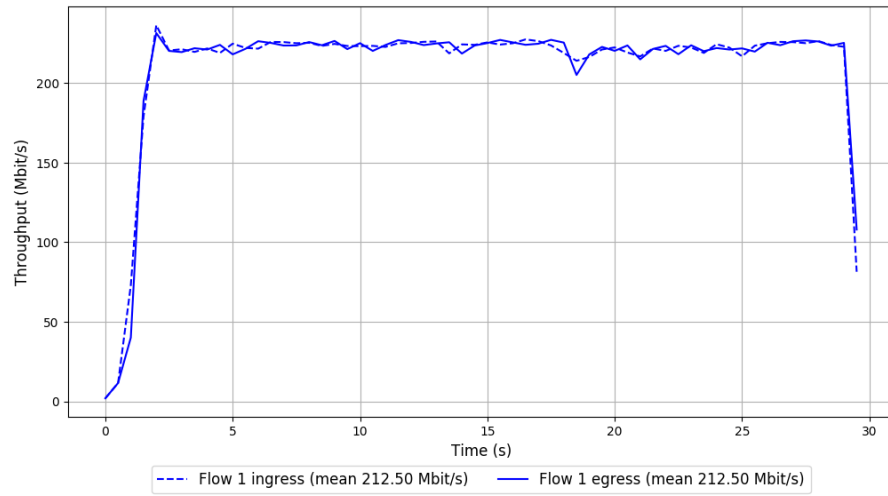


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-16 08:11:38
End at: 2017-11-16 08:12:08

# Below is generated by plot.py at 2017-11-16 11:07:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 212.50 Mbit/s
95th percentile per-packet one-way delay: 63.815 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 212.50 Mbit/s
95th percentile per-packet one-way delay: 63.815 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-11-16 08:22:12

End at: 2017-11-16 08:22:42

Below is generated by plot.py at 2017-11-16 11:07:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.20 Mbit/s

95th percentile per-packet one-way delay: 63.454 ms

Loss rate: 0.00%

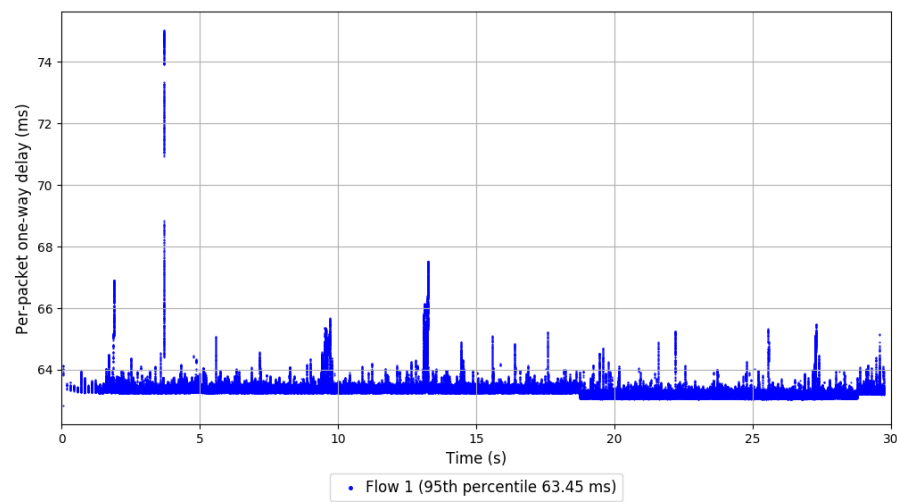
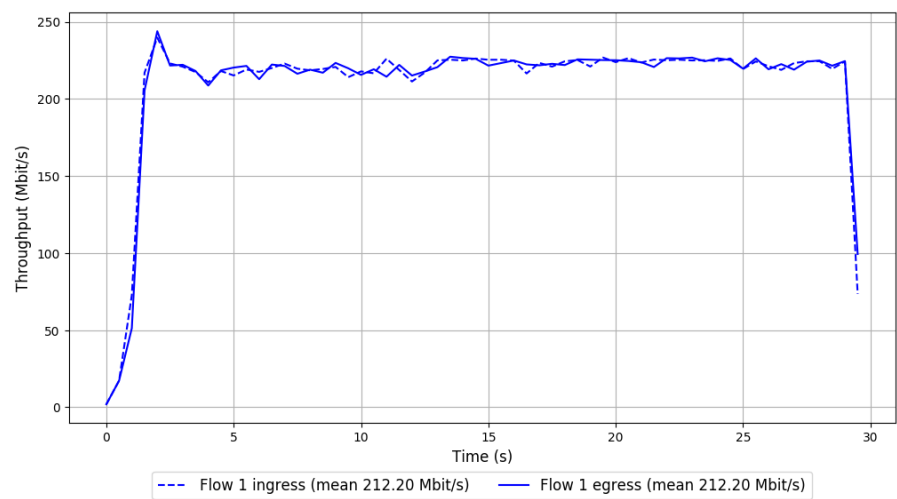
-- Flow 1:

Average throughput: 212.20 Mbit/s

95th percentile per-packet one-way delay: 63.454 ms

Loss rate: 0.00%

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-16 08:32:36

End at: 2017-11-16 08:33:06

Below is generated by plot.py at 2017-11-16 11:07:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.39 Mbit/s

95th percentile per-packet one-way delay: 63.399 ms

Loss rate: 0.06%

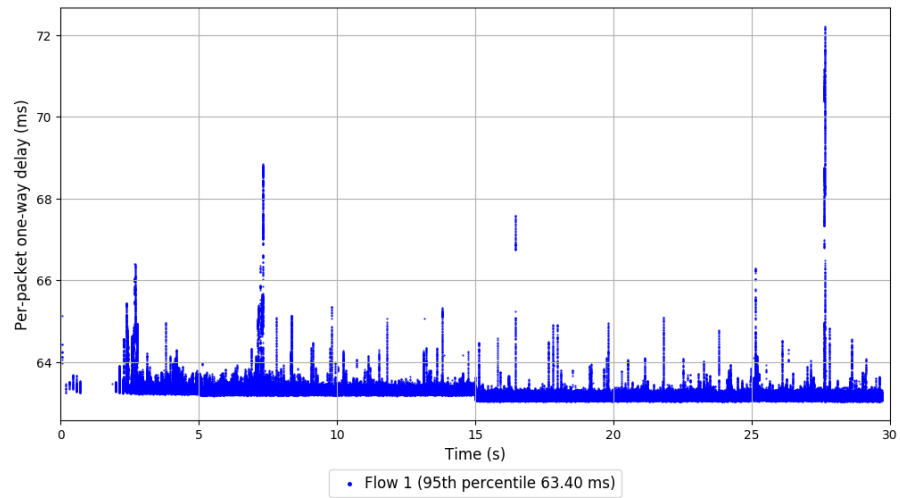
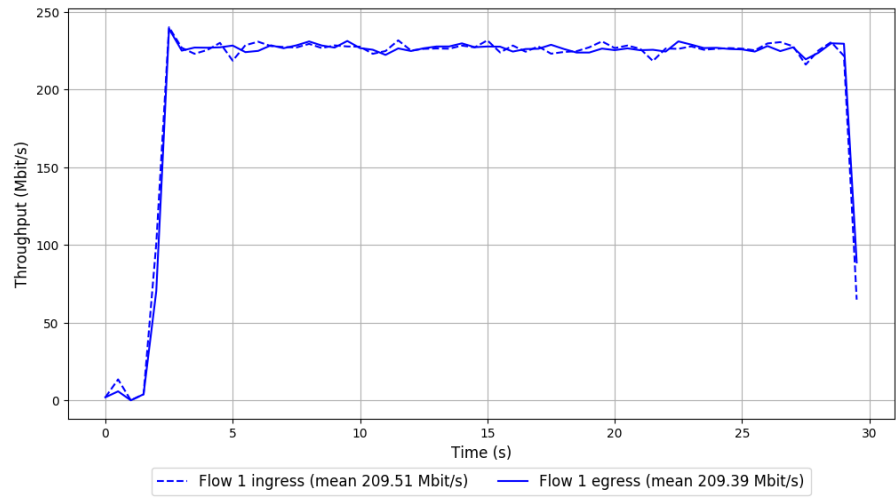
-- Flow 1:

Average throughput: 209.39 Mbit/s

95th percentile per-packet one-way delay: 63.399 ms

Loss rate: 0.06%

Run 4: Report of Indigo-calib — Data Link

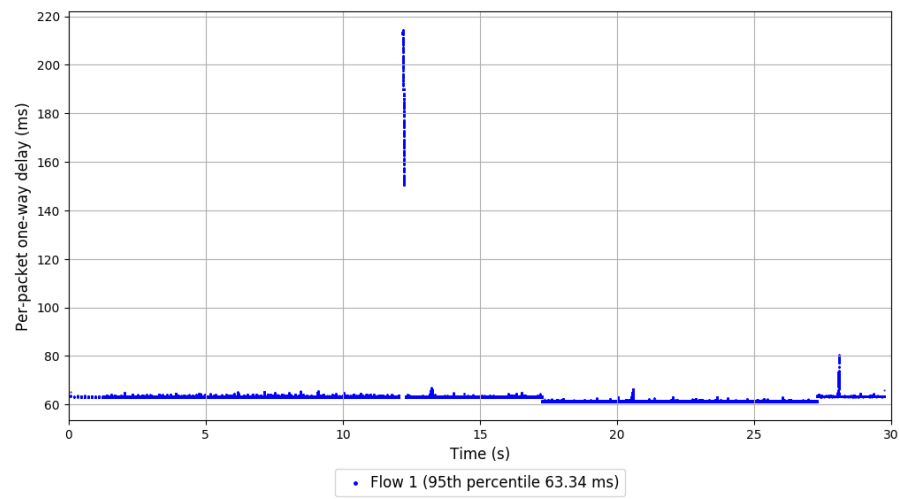
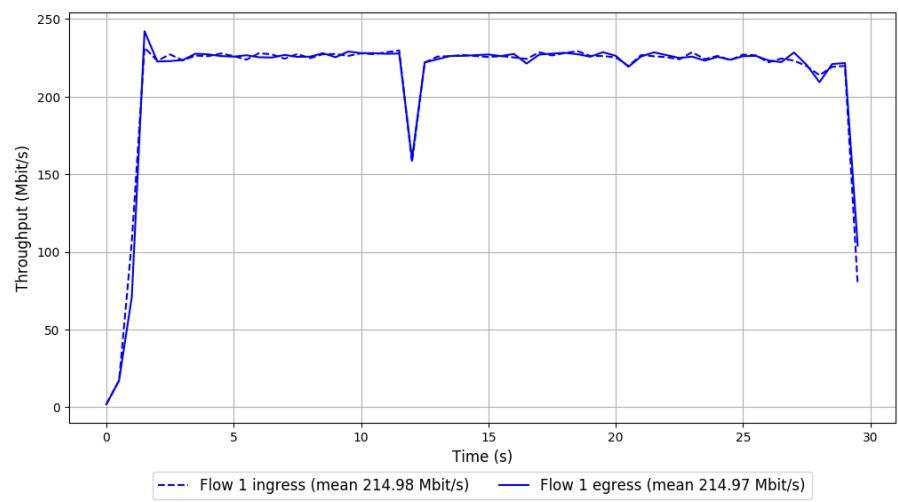


```
Run 5: Statistics of Indigo-calib

Start at: 2017-11-16 08:43:04
End at: 2017-11-16 08:43:34

# Below is generated by plot.py at 2017-11-16 11:08:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.97 Mbit/s
95th percentile per-packet one-way delay: 63.345 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 214.97 Mbit/s
95th percentile per-packet one-way delay: 63.345 ms
Loss rate: 0.01%
```

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-11-16 08:53:38

End at: 2017-11-16 08:54:08

Below is generated by plot.py at 2017-11-16 11:08:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.56 Mbit/s

95th percentile per-packet one-way delay: 63.417 ms

Loss rate: 0.11%

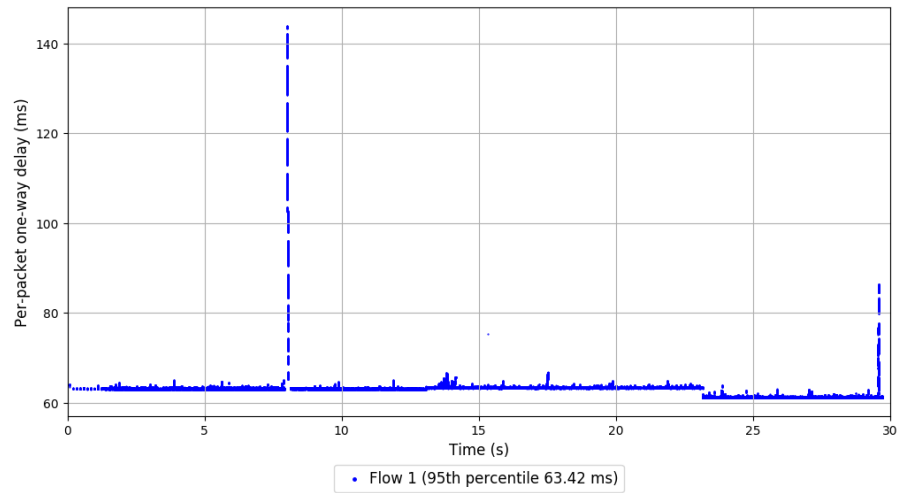
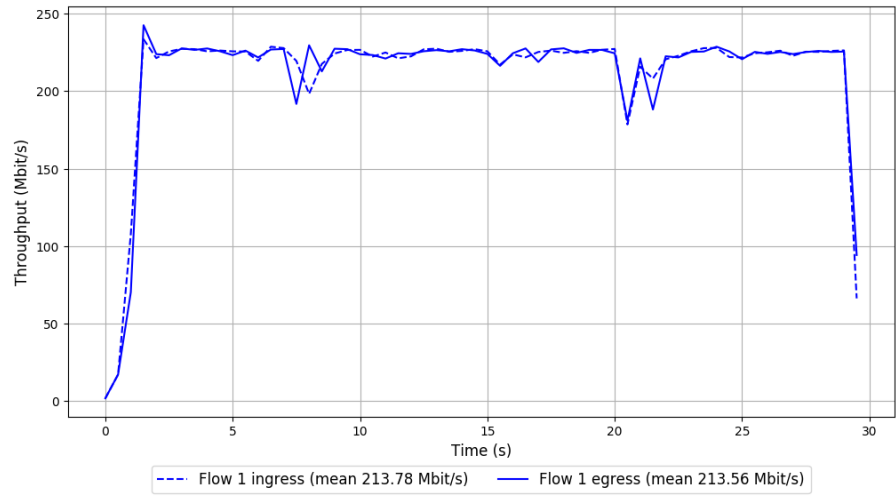
-- Flow 1:

Average throughput: 213.56 Mbit/s

95th percentile per-packet one-way delay: 63.417 ms

Loss rate: 0.11%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-16 09:04:08

End at: 2017-11-16 09:04:38

Below is generated by plot.py at 2017-11-16 11:08:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.62 Mbit/s

95th percentile per-packet one-way delay: 63.569 ms

Loss rate: 0.02%

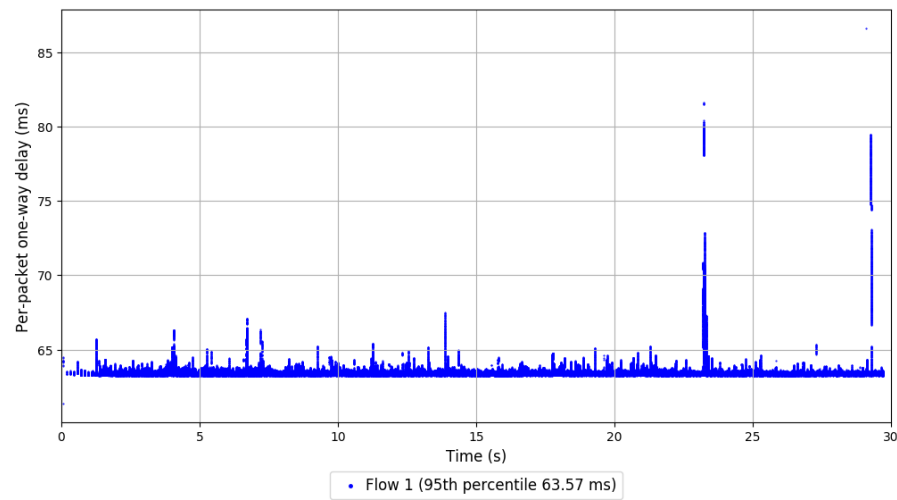
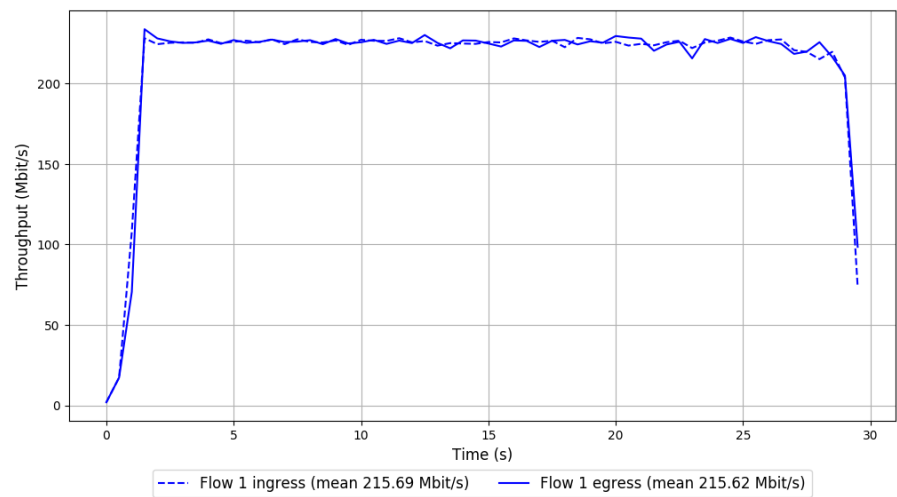
-- Flow 1:

Average throughput: 215.62 Mbit/s

95th percentile per-packet one-way delay: 63.569 ms

Loss rate: 0.02%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-16 09:14:35

End at: 2017-11-16 09:15:05

Below is generated by plot.py at 2017-11-16 11:08:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.11 Mbit/s

95th percentile per-packet one-way delay: 63.384 ms

Loss rate: 0.00%

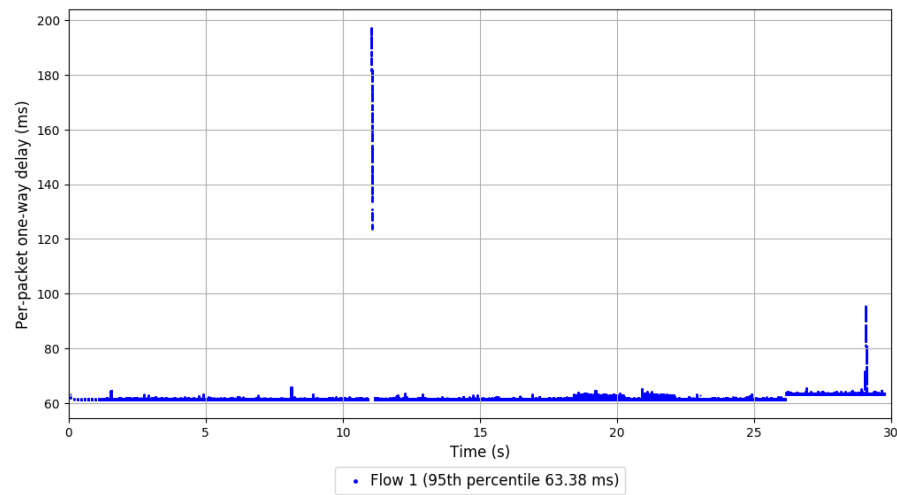
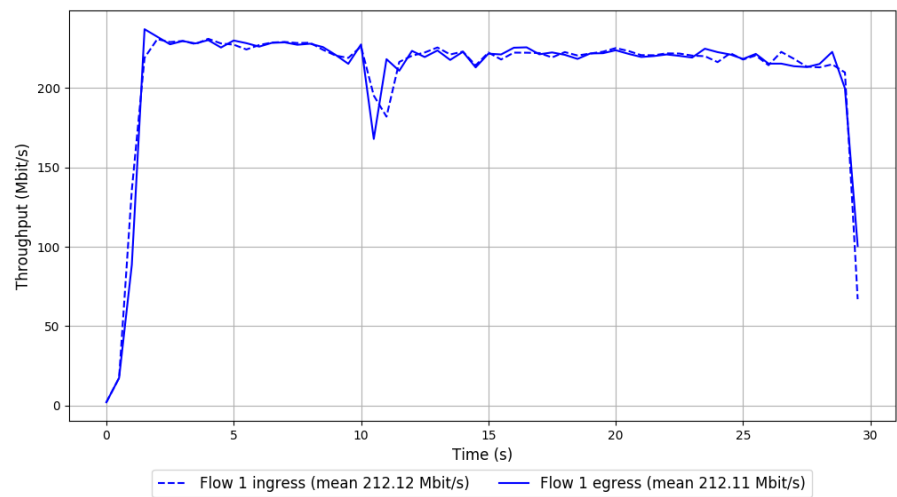
-- Flow 1:

Average throughput: 212.11 Mbit/s

95th percentile per-packet one-way delay: 63.384 ms

Loss rate: 0.00%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-16 09:25:13

End at: 2017-11-16 09:25:43

Below is generated by plot.py at 2017-11-16 11:09:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 210.75 Mbit/s

95th percentile per-packet one-way delay: 63.464 ms

Loss rate: 0.00%

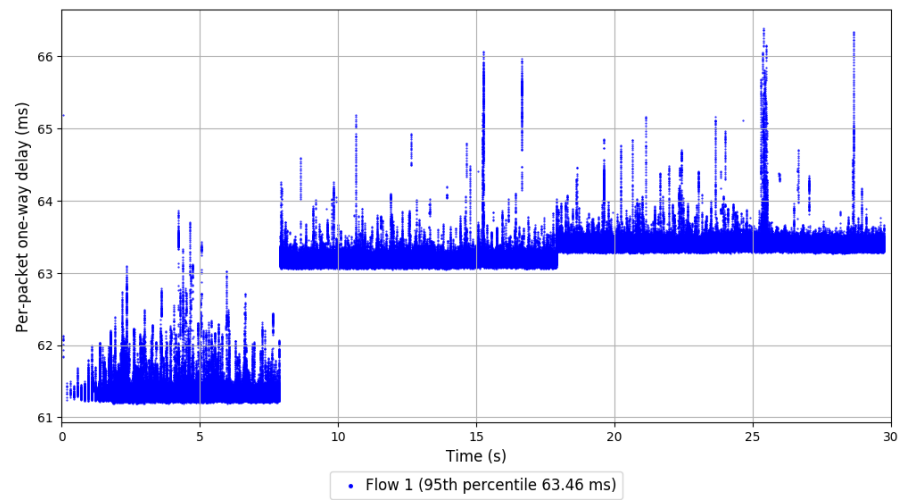
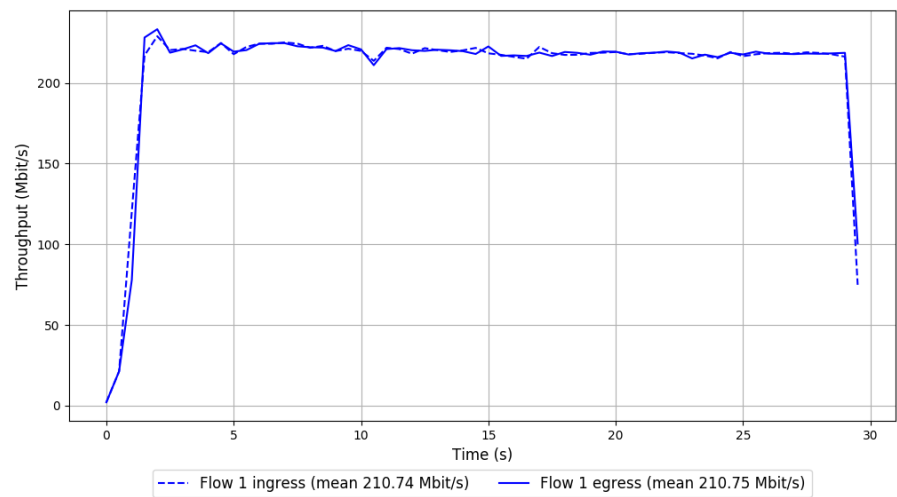
-- Flow 1:

Average throughput: 210.75 Mbit/s

95th percentile per-packet one-way delay: 63.464 ms

Loss rate: 0.00%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-16 09:35:37

End at: 2017-11-16 09:36:07

Below is generated by plot.py at 2017-11-16 11:09:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.20 Mbit/s

95th percentile per-packet one-way delay: 63.469 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 209.20 Mbit/s

95th percentile per-packet one-way delay: 63.469 ms

Loss rate: 0.00%

Run 10: Report of Indigo-calib — Data Link

