

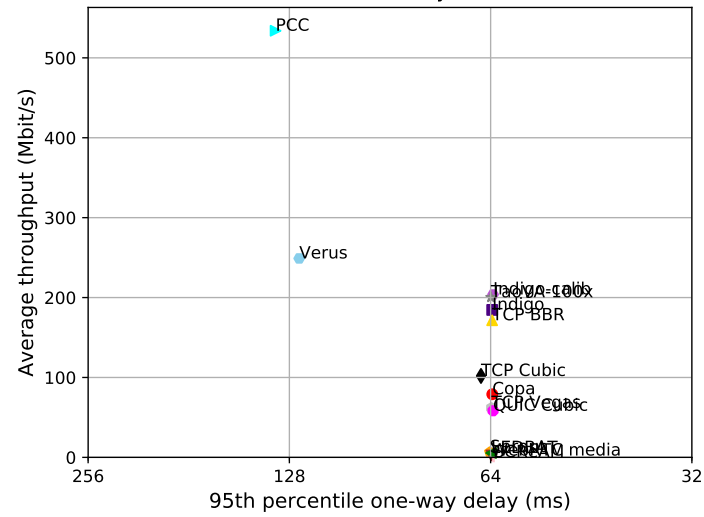
Pantheon Report

Generated at 2017-11-16 10:27:55 (UTC).
Data path: GCE Tokyo Ethernet (*remote*) → GCE Iowa Ethernet (*local*).
Repeated the test of 14 congestion control schemes 10 times.
Each test lasted for 30 seconds running 1 flow.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

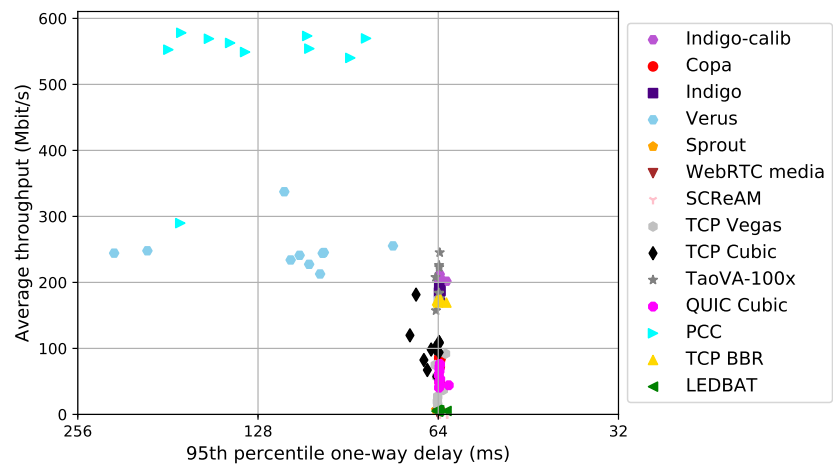
Git summary:

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

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	8	171.60	63.67	0.45
TCP Cubic	10	101.89	66.16	0.45
LEDBAT	10	5.43	63.91	0.57
PCC	10	533.91	134.21	1.11
QUIC Cubic	10	58.31	63.47	0.54
SCReAM	10	0.22	63.37	0.38
WebRTC media	10	2.29	63.84	0.47
Sprout	10	6.54	64.21	0.58
TaoVA-100x	8	200.31	63.95	0.46
TCP Vegas	9	61.84	63.83	0.32
Verus	10	248.97	123.74	1.66
Copa	10	78.98	63.64	0.52
Indigo	10	184.52	63.65	0.45
Indigo-calib	10	203.89	63.46	0.44

Run 1: Statistics of TCP BBR

Start at: 2017-11-16 06:17:38

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

Below is generated by plot.py at 2017-11-16 09:48:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.90 Mbit/s

95th percentile per-packet one-way delay: 64.061 ms

Loss rate: 0.47%

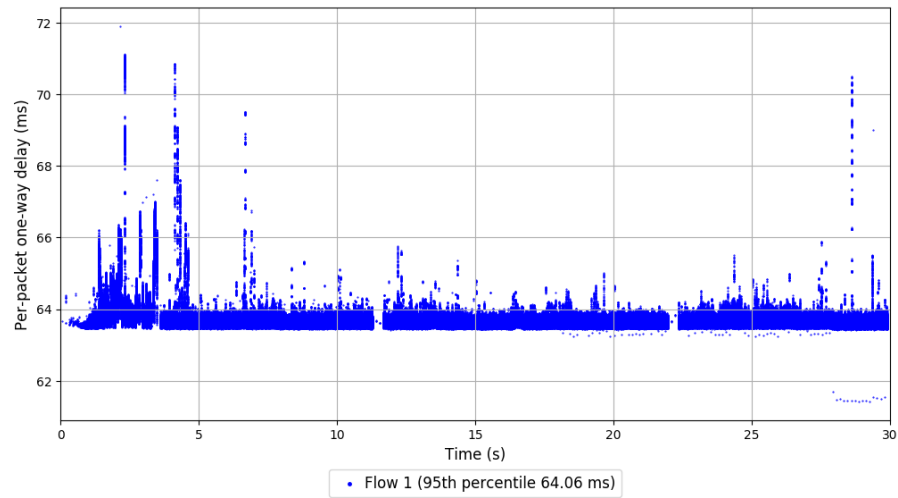
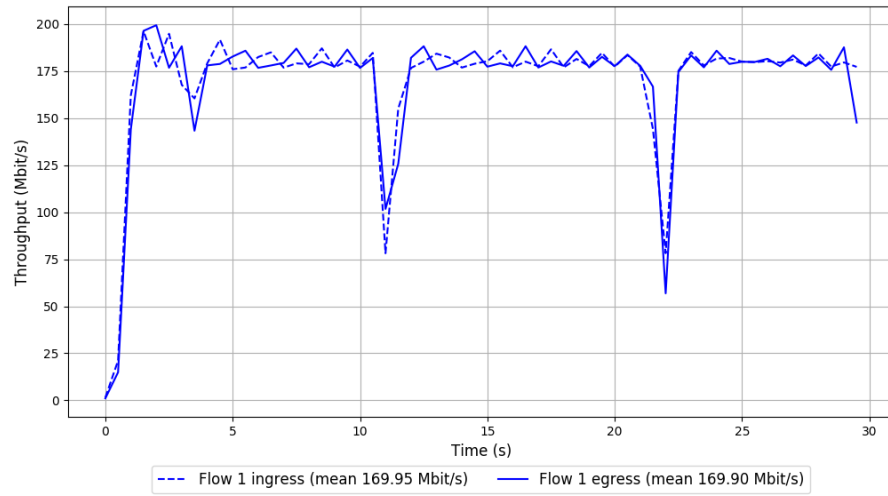
-- Flow 1:

Average throughput: 169.90 Mbit/s

95th percentile per-packet one-way delay: 64.061 ms

Loss rate: 0.47%

Run 1: Report of TCP BBR — Data Link

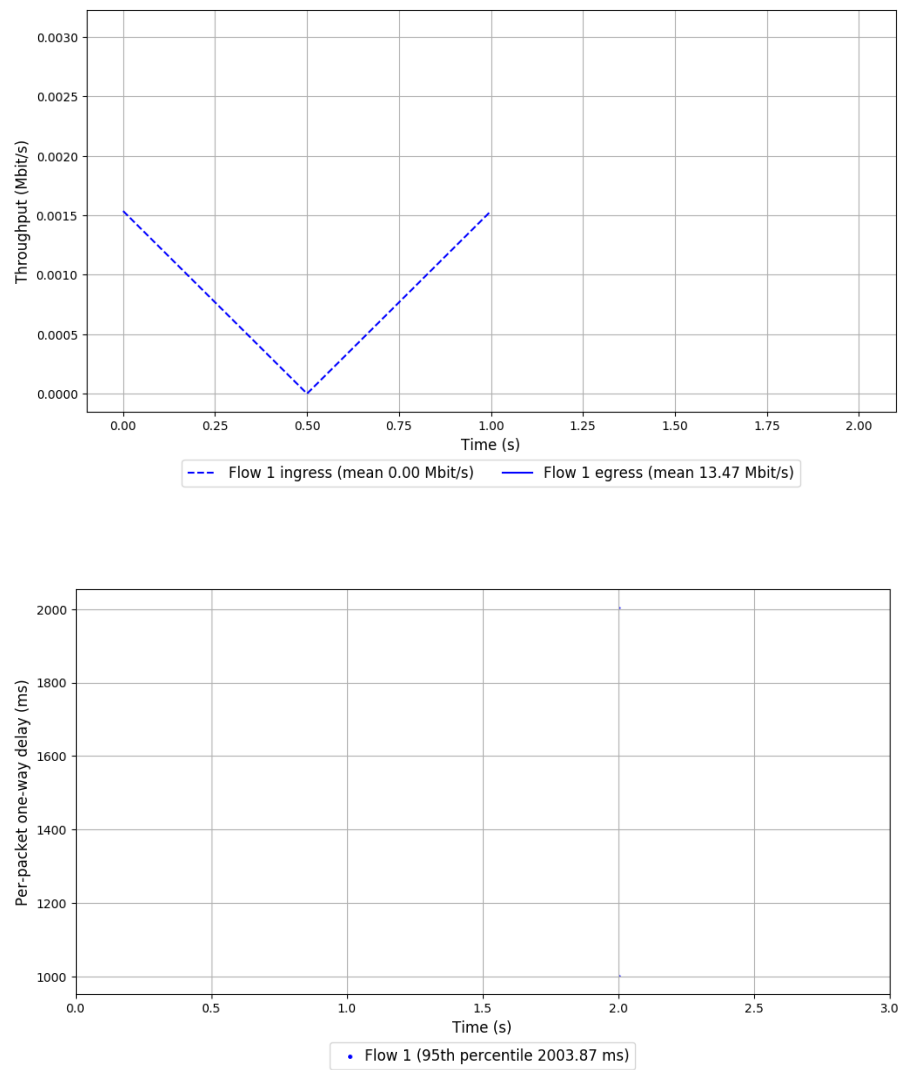


Run 2: Statistics of TCP BBR

Start at: 2017-11-16 06:28:18

End at: 2017-11-16 06:28:48

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-16 06:38:45

End at: 2017-11-16 06:39:15

Below is generated by plot.py at 2017-11-16 09:48:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.18 Mbit/s

95th percentile per-packet one-way delay: 64.003 ms

Loss rate: 0.47%

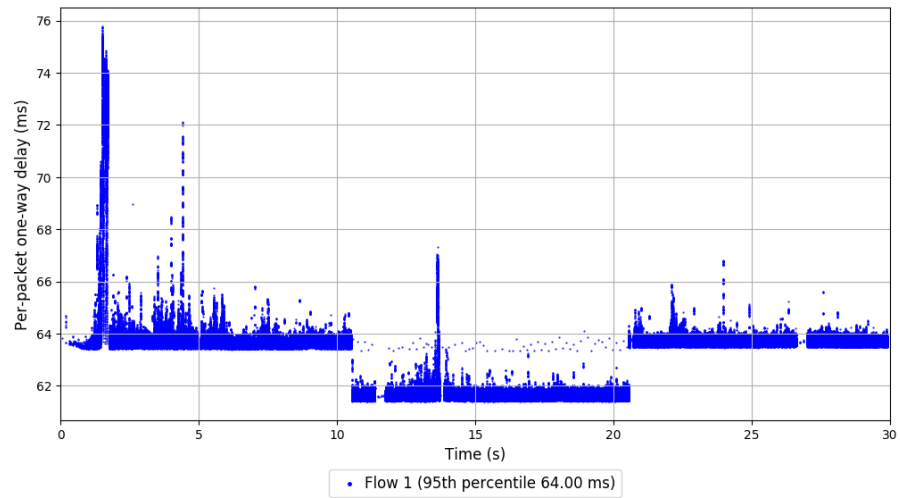
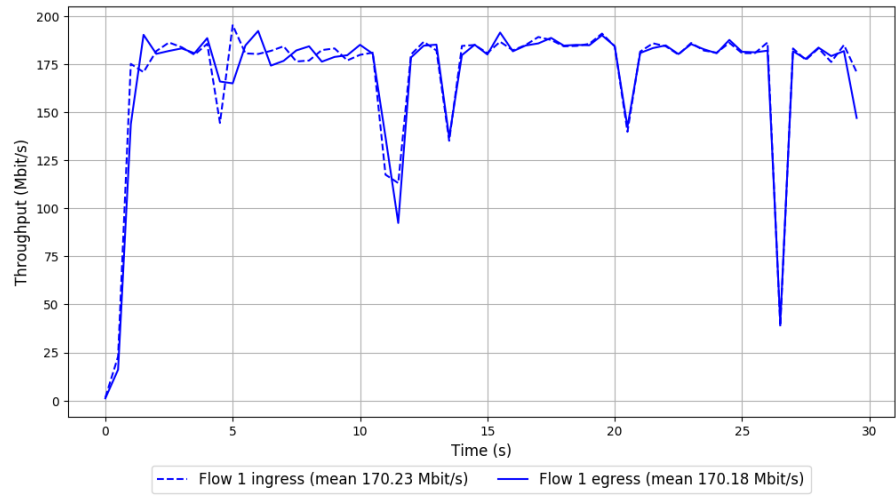
-- Flow 1:

Average throughput: 170.18 Mbit/s

95th percentile per-packet one-way delay: 64.003 ms

Loss rate: 0.47%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-16 06:49:25

End at: 2017-11-16 06:49:55

Below is generated by plot.py at 2017-11-16 09:48:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.83 Mbit/s

95th percentile per-packet one-way delay: 63.856 ms

Loss rate: 0.46%

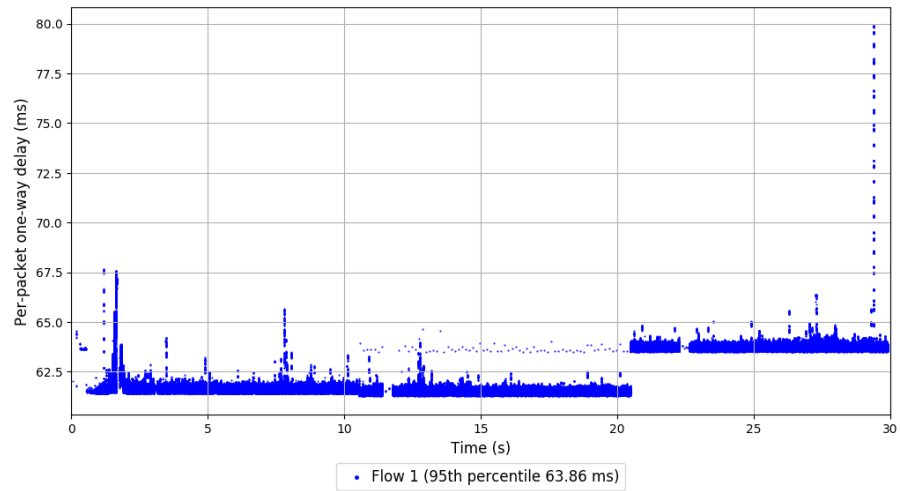
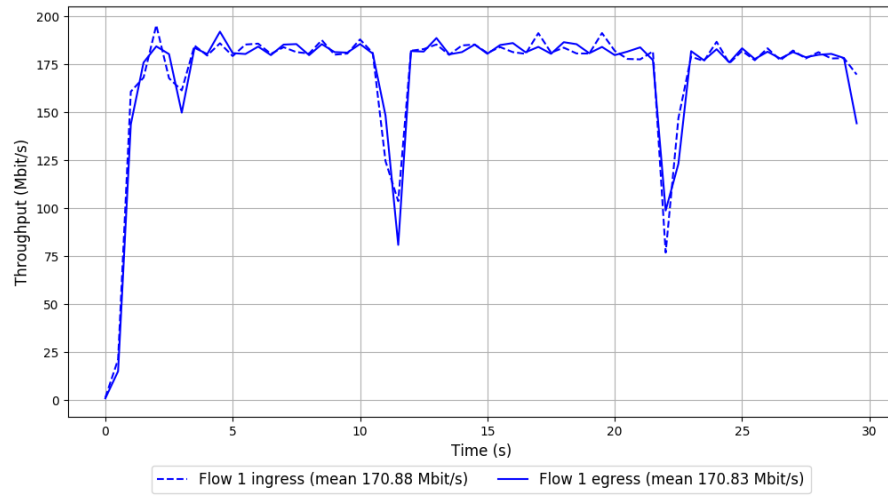
-- Flow 1:

Average throughput: 170.83 Mbit/s

95th percentile per-packet one-way delay: 63.856 ms

Loss rate: 0.46%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

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

End at: 2017-11-16 07:00:29

Below is generated by plot.py at 2017-11-16 09:48:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.50 Mbit/s

95th percentile per-packet one-way delay: 62.024 ms

Loss rate: 0.46%

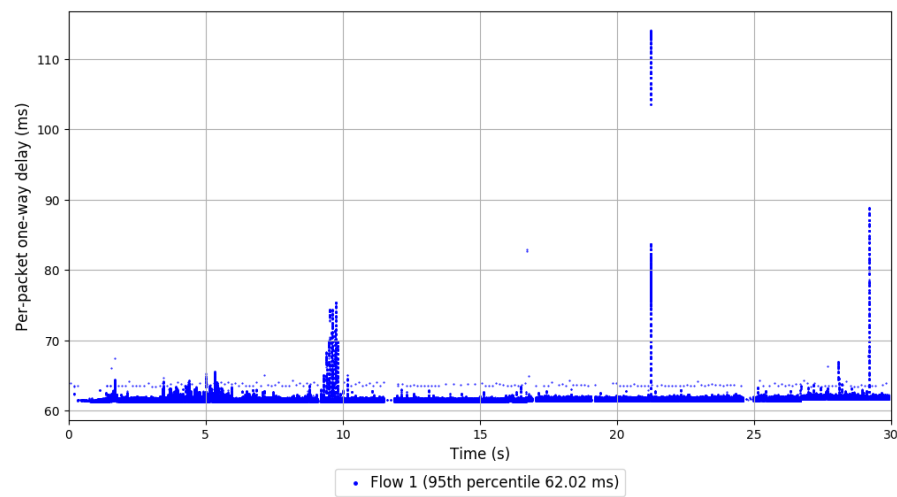
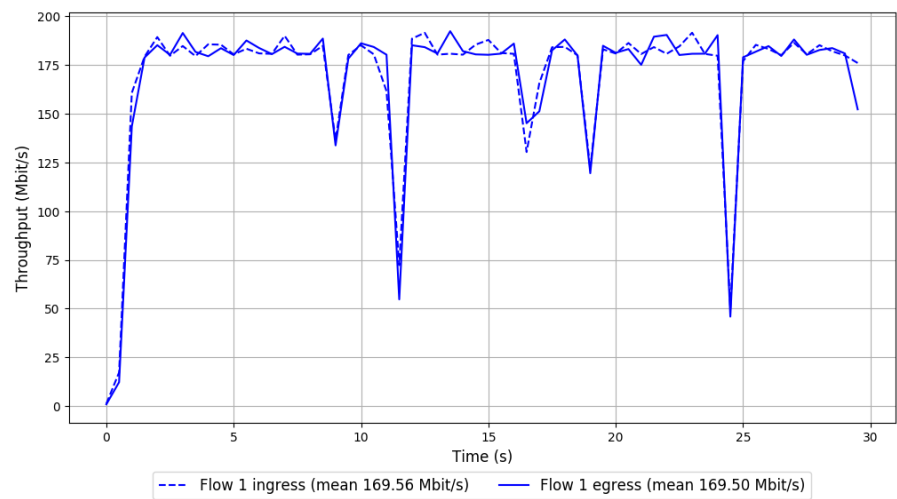
-- Flow 1:

Average throughput: 169.50 Mbit/s

95th percentile per-packet one-way delay: 62.024 ms

Loss rate: 0.46%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-16 07:10:29

End at: 2017-11-16 07:10:59

Below is generated by plot.py at 2017-11-16 09:48:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.84 Mbit/s

95th percentile per-packet one-way delay: 63.426 ms

Loss rate: 0.44%

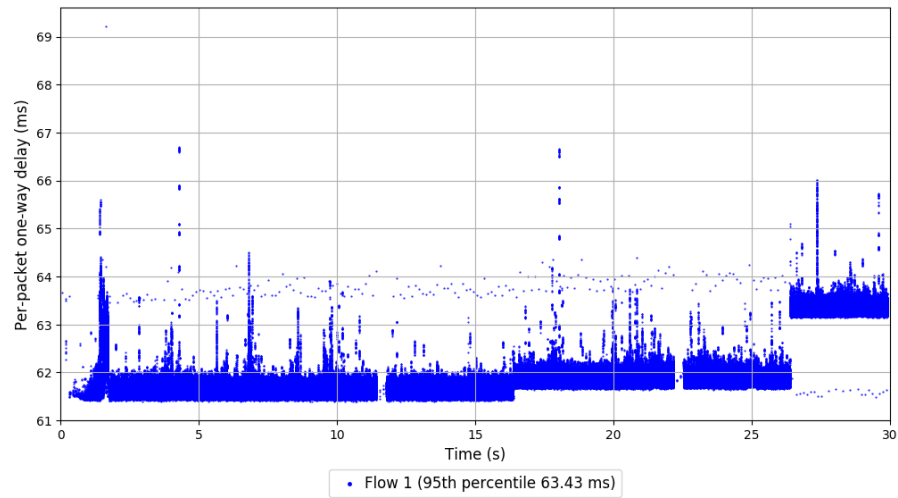
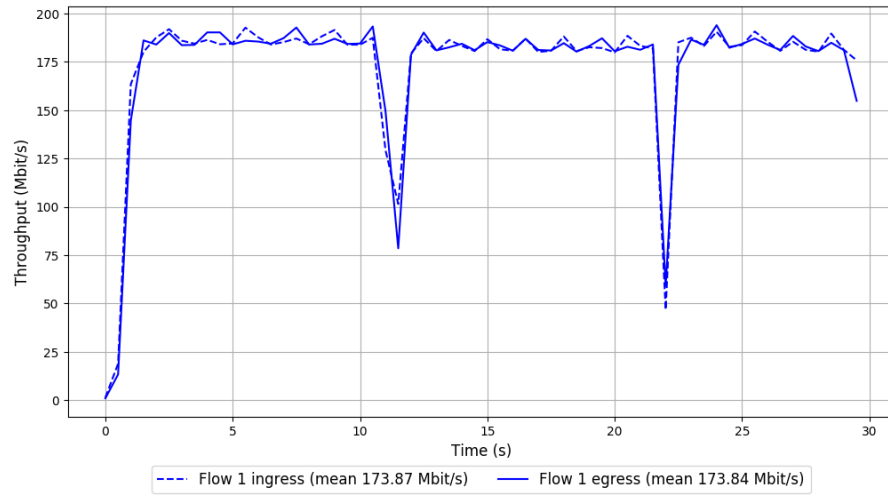
-- Flow 1:

Average throughput: 173.84 Mbit/s

95th percentile per-packet one-way delay: 63.426 ms

Loss rate: 0.44%

Run 6: Report of TCP BBR — Data Link

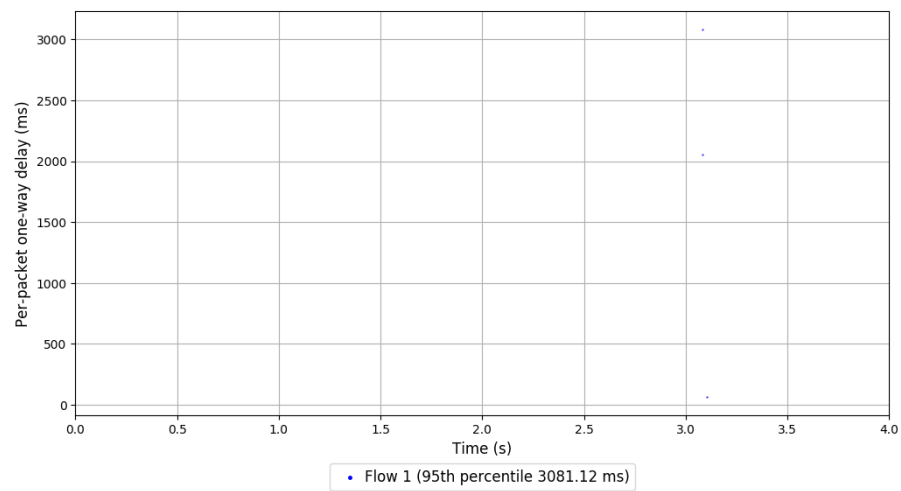
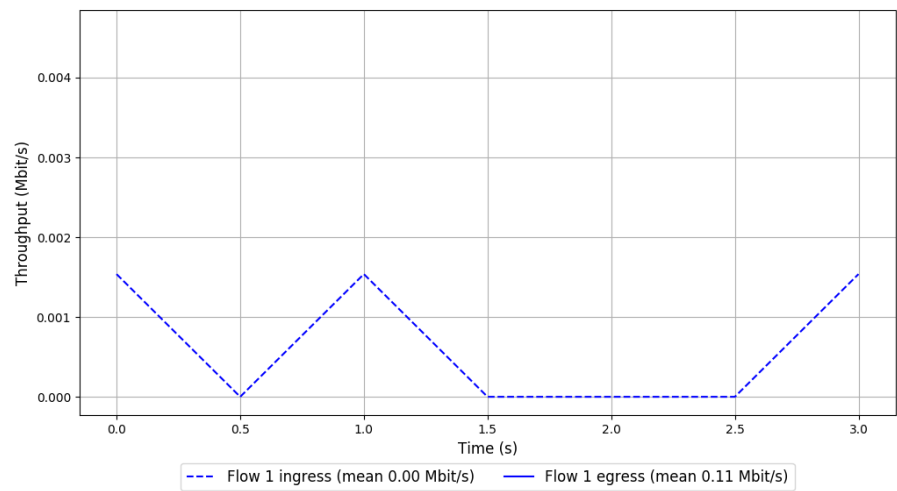


Run 7: Statistics of TCP BBR

Start at: 2017-11-16 07:21:11

End at: 2017-11-16 07:21:41

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-16 07:31:41

End at: 2017-11-16 07:32:11

Below is generated by plot.py at 2017-11-16 09:48:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.19 Mbit/s

95th percentile per-packet one-way delay: 63.888 ms

Loss rate: 0.43%

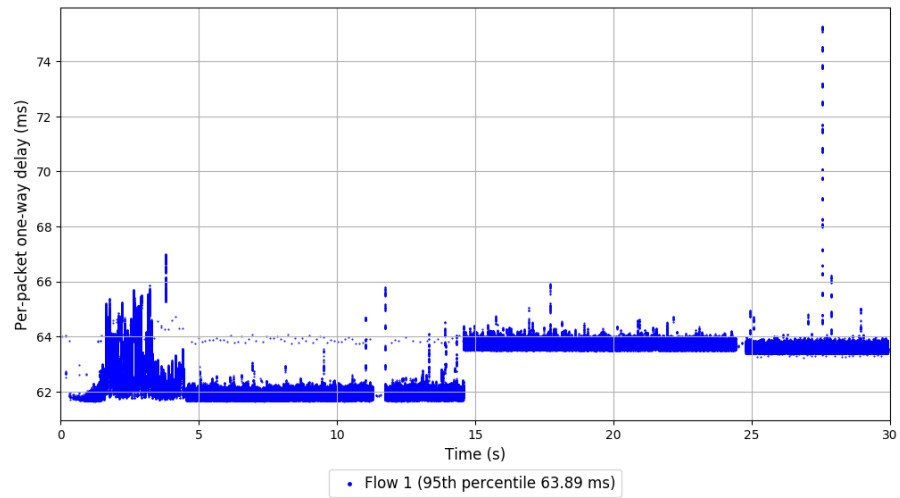
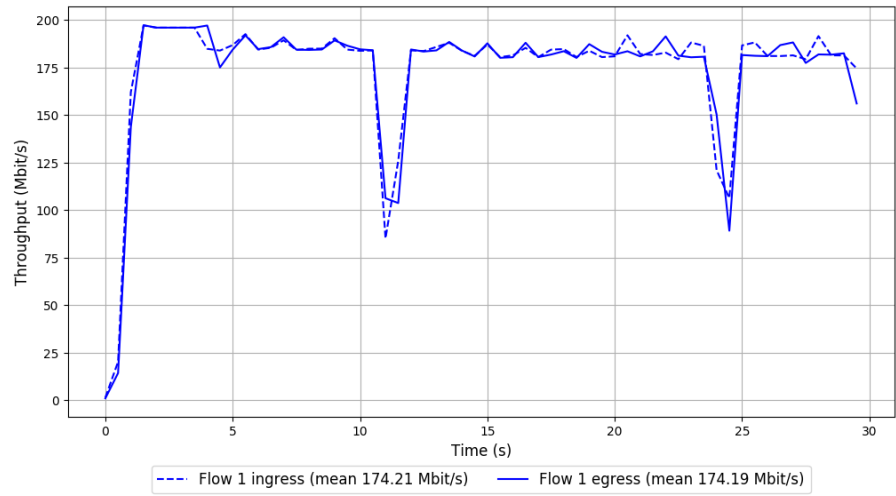
-- Flow 1:

Average throughput: 174.19 Mbit/s

95th percentile per-packet one-way delay: 63.888 ms

Loss rate: 0.43%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-16 07:42:12

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

Below is generated by plot.py at 2017-11-16 09:48:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.90 Mbit/s

95th percentile per-packet one-way delay: 63.855 ms

Loss rate: 0.43%

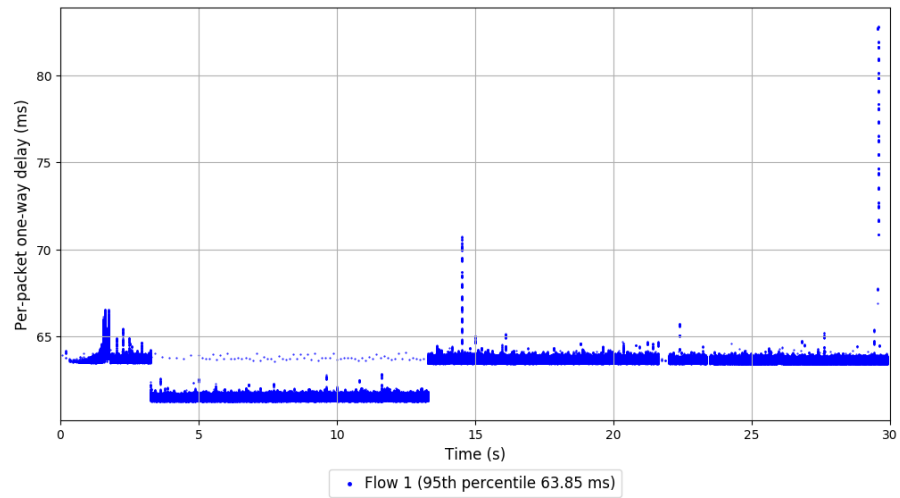
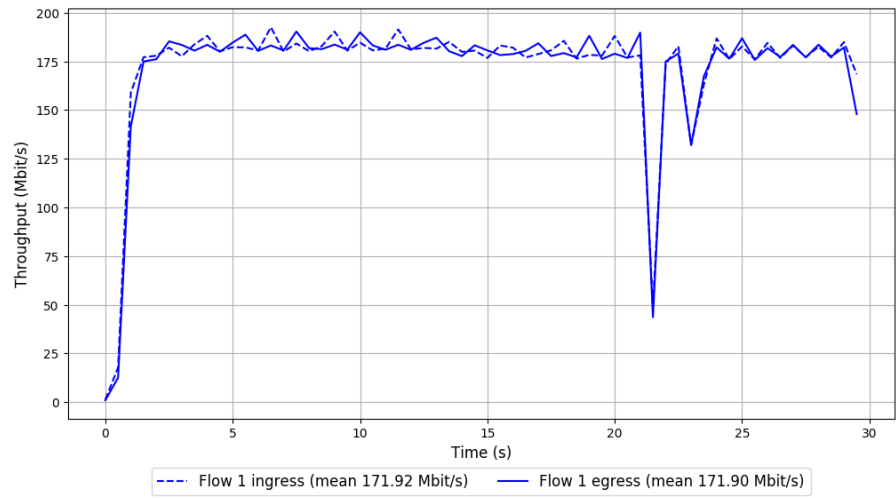
-- Flow 1:

Average throughput: 171.90 Mbit/s

95th percentile per-packet one-way delay: 63.855 ms

Loss rate: 0.43%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-16 07:52:50

End at: 2017-11-16 07:53:20

Below is generated by plot.py at 2017-11-16 09:48:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.44 Mbit/s

95th percentile per-packet one-way delay: 64.286 ms

Loss rate: 0.45%

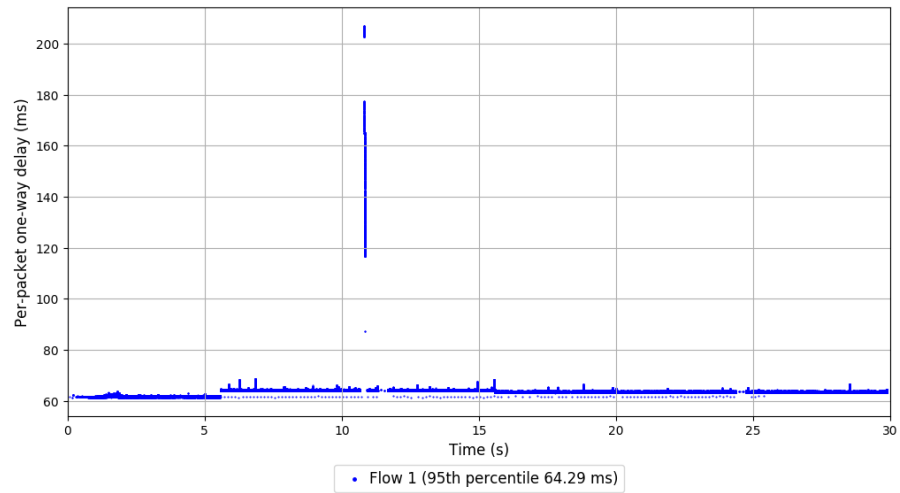
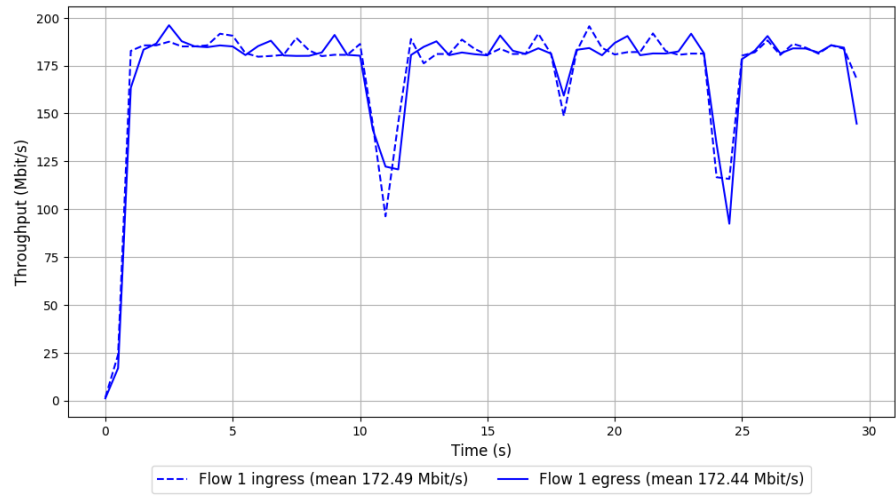
-- Flow 1:

Average throughput: 172.44 Mbit/s

95th percentile per-packet one-way delay: 64.286 ms

Loss rate: 0.45%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-16 06:11:23

End at: 2017-11-16 06:11:53

Below is generated by plot.py at 2017-11-16 09:50:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.00 Mbit/s

95th percentile per-packet one-way delay: 63.789 ms

Loss rate: 0.34%

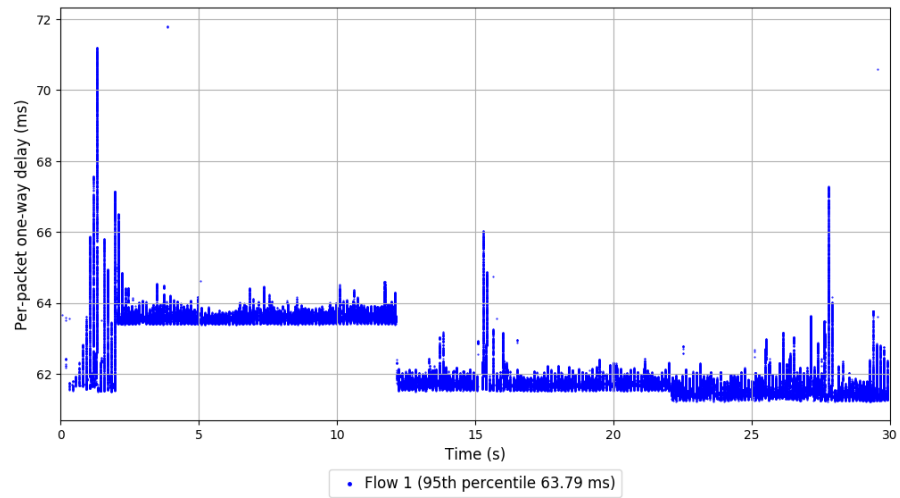
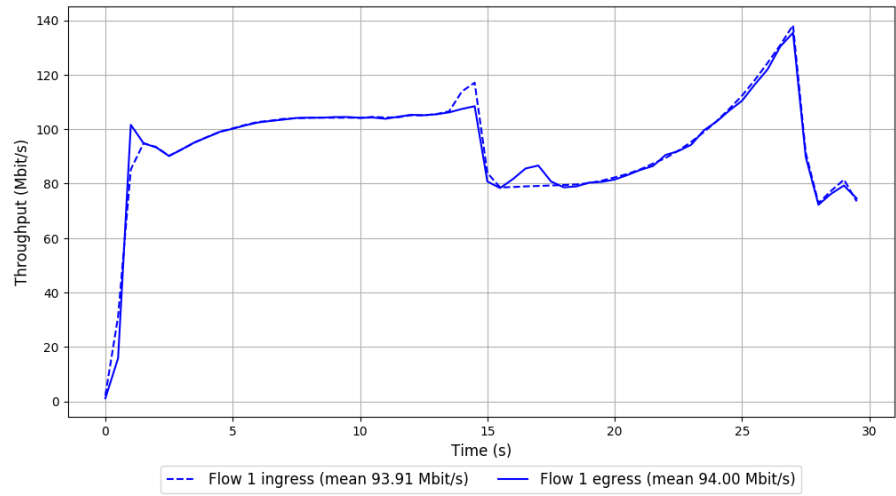
-- Flow 1:

Average throughput: 94.00 Mbit/s

95th percentile per-packet one-way delay: 63.789 ms

Loss rate: 0.34%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-16 06:22:01

End at: 2017-11-16 06:22:31

Below is generated by plot.py at 2017-11-16 09:50:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.33 Mbit/s

95th percentile per-packet one-way delay: 64.359 ms

Loss rate: 0.66%

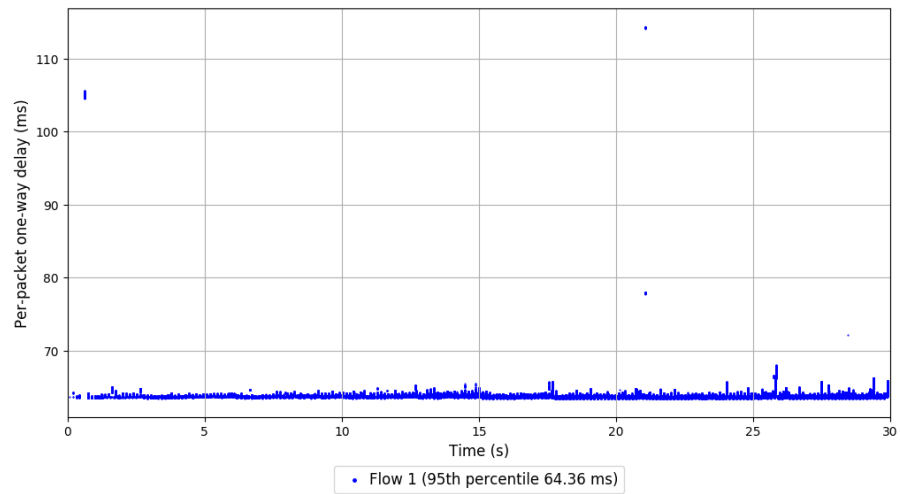
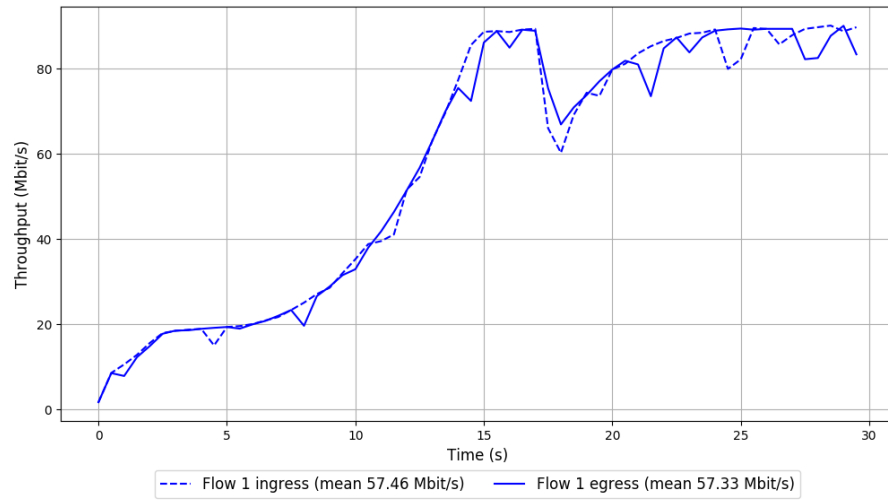
-- Flow 1:

Average throughput: 57.33 Mbit/s

95th percentile per-packet one-way delay: 64.359 ms

Loss rate: 0.66%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-16 06:32:33

End at: 2017-11-16 06:33:03

Below is generated by plot.py at 2017-11-16 09:50:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.26 Mbit/s

95th percentile per-packet one-way delay: 64.754 ms

Loss rate: 0.43%

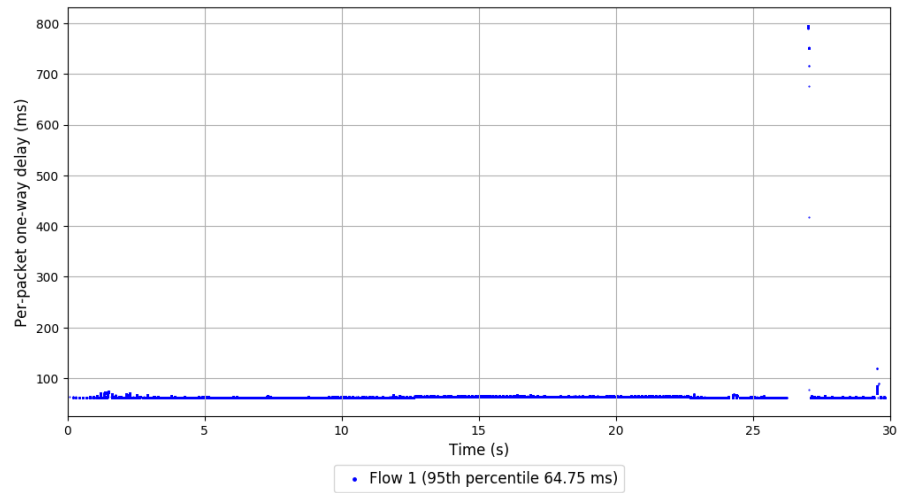
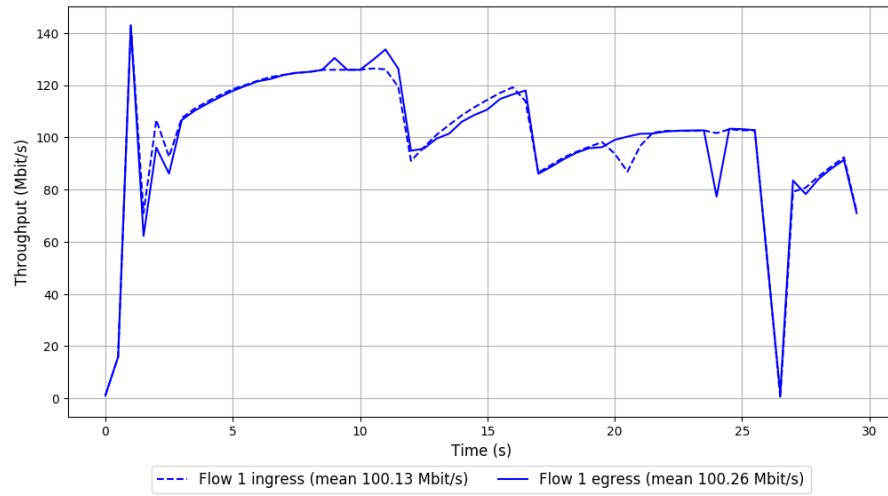
-- Flow 1:

Average throughput: 100.26 Mbit/s

95th percentile per-packet one-way delay: 64.754 ms

Loss rate: 0.43%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-16 06:43:14

End at: 2017-11-16 06:43:45

Below is generated by plot.py at 2017-11-16 09:50:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.32 Mbit/s

95th percentile per-packet one-way delay: 63.722 ms

Loss rate: 0.42%

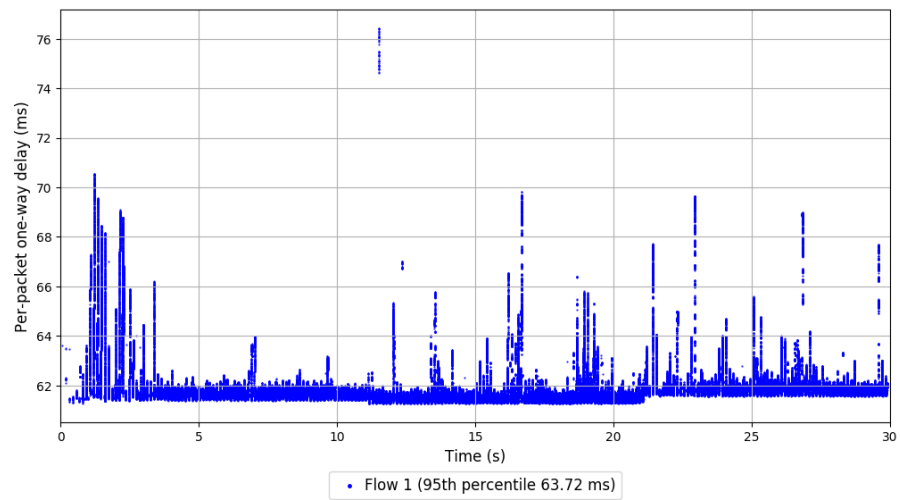
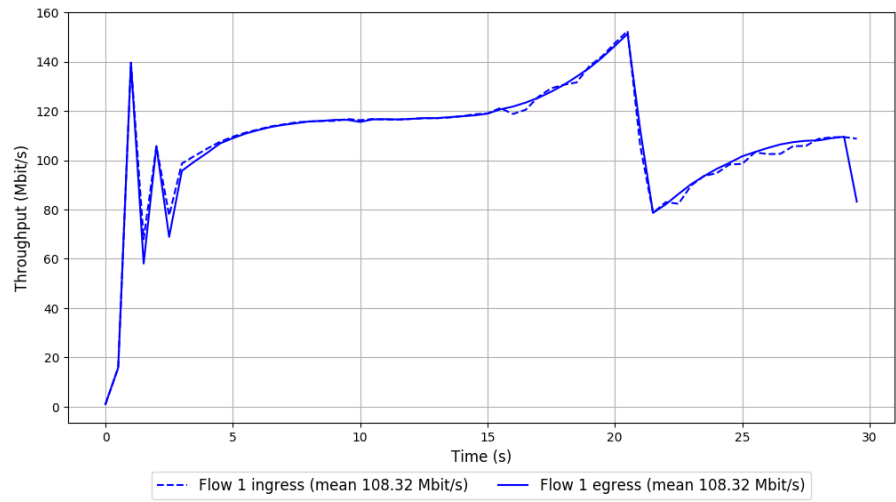
-- Flow 1:

Average throughput: 108.32 Mbit/s

95th percentile per-packet one-way delay: 63.722 ms

Loss rate: 0.42%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-16 06:53:48

End at: 2017-11-16 06:54:18

Below is generated by plot.py at 2017-11-16 09:50:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.24 Mbit/s

95th percentile per-packet one-way delay: 66.743 ms

Loss rate: 0.37%

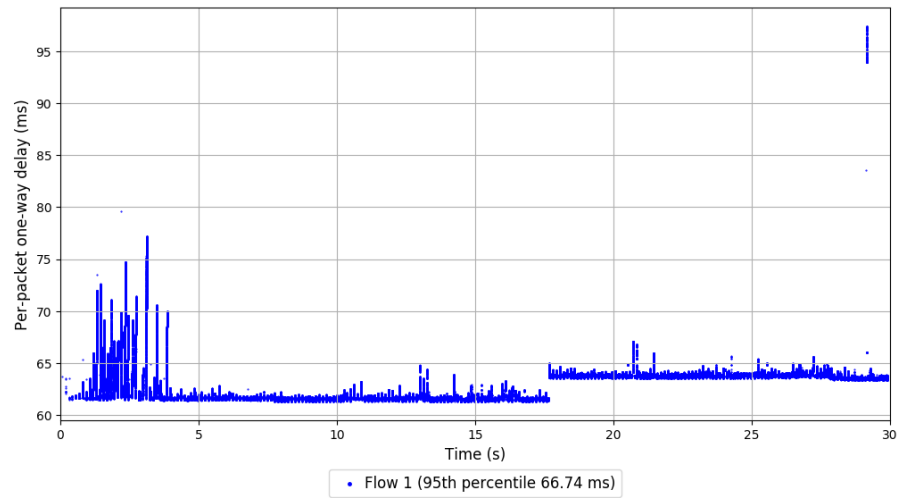
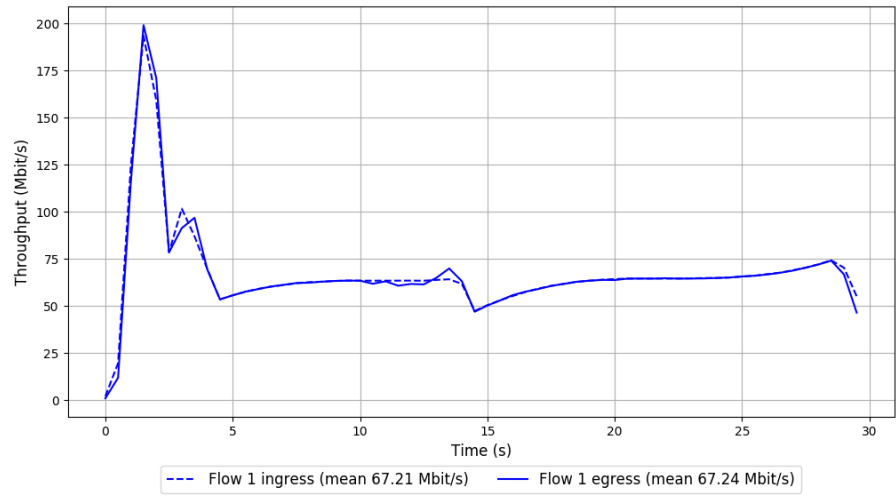
-- Flow 1:

Average throughput: 67.24 Mbit/s

95th percentile per-packet one-way delay: 66.743 ms

Loss rate: 0.37%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-16 07:04:21

End at: 2017-11-16 07:04:51

Below is generated by plot.py at 2017-11-16 09:50:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.81 Mbit/s

95th percentile per-packet one-way delay: 71.364 ms

Loss rate: 0.47%

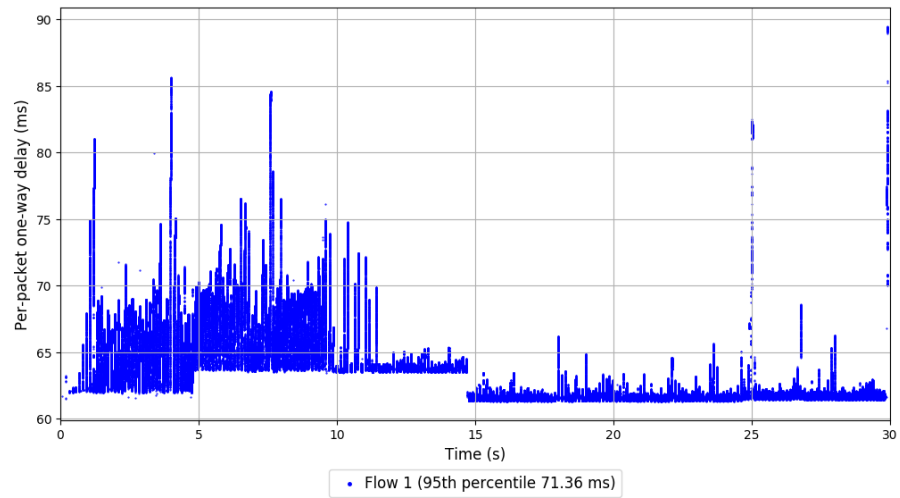
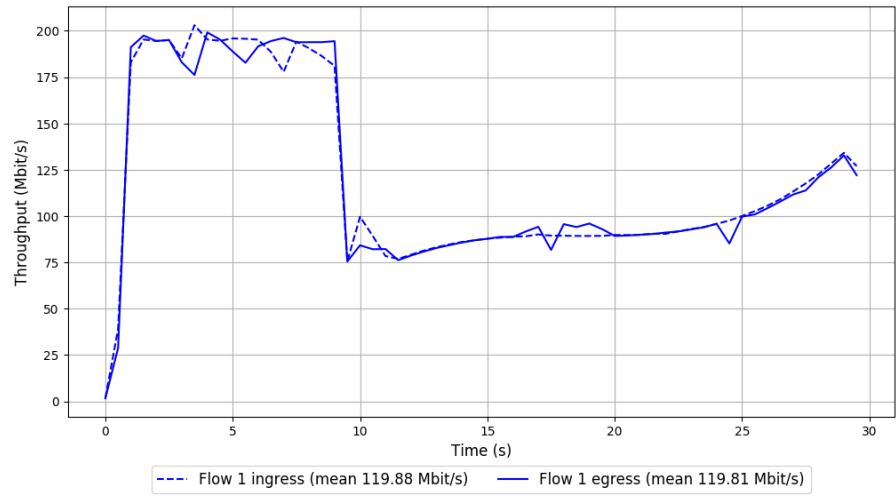
-- Flow 1:

Average throughput: 119.81 Mbit/s

95th percentile per-packet one-way delay: 71.364 ms

Loss rate: 0.47%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-16 07:14:54

End at: 2017-11-16 07:15:24

Below is generated by plot.py at 2017-11-16 09:50:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.40 Mbit/s

95th percentile per-packet one-way delay: 67.632 ms

Loss rate: 0.68%

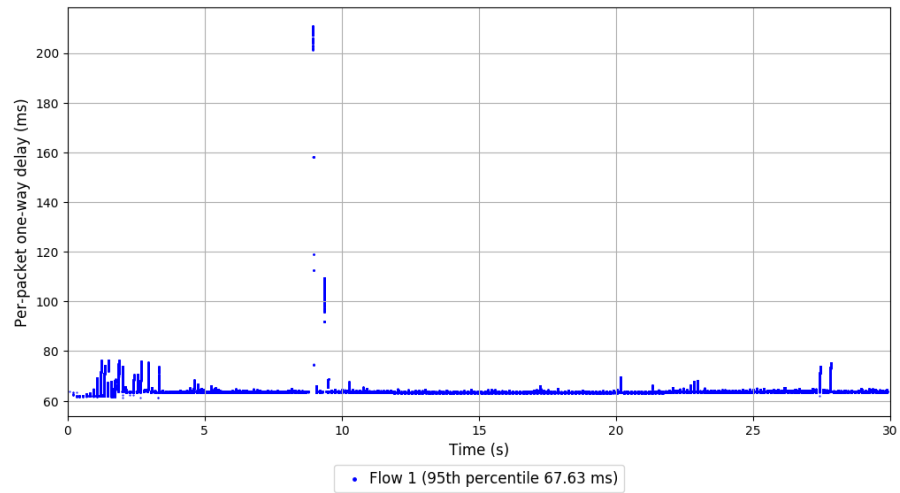
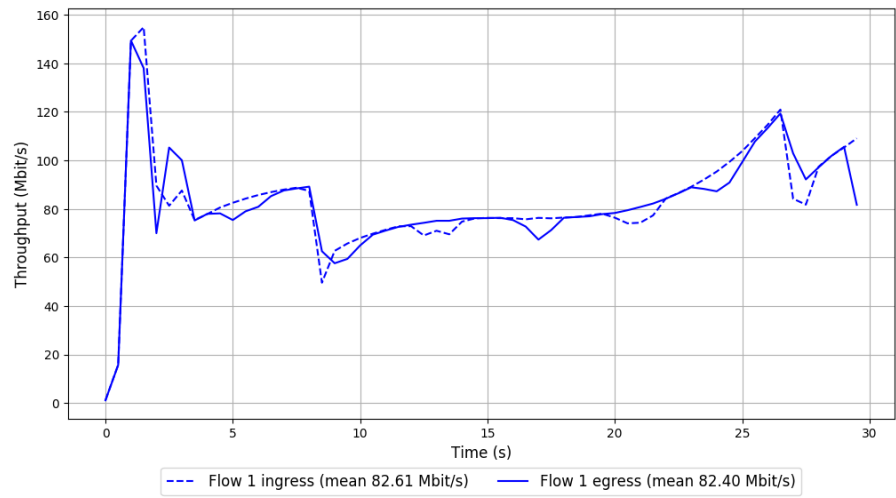
-- Flow 1:

Average throughput: 82.40 Mbit/s

95th percentile per-packet one-way delay: 67.632 ms

Loss rate: 0.68%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-16 07:25:23

End at: 2017-11-16 07:25:53

Below is generated by plot.py at 2017-11-16 09:50:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.73 Mbit/s

95th percentile per-packet one-way delay: 63.800 ms

Loss rate: 0.45%

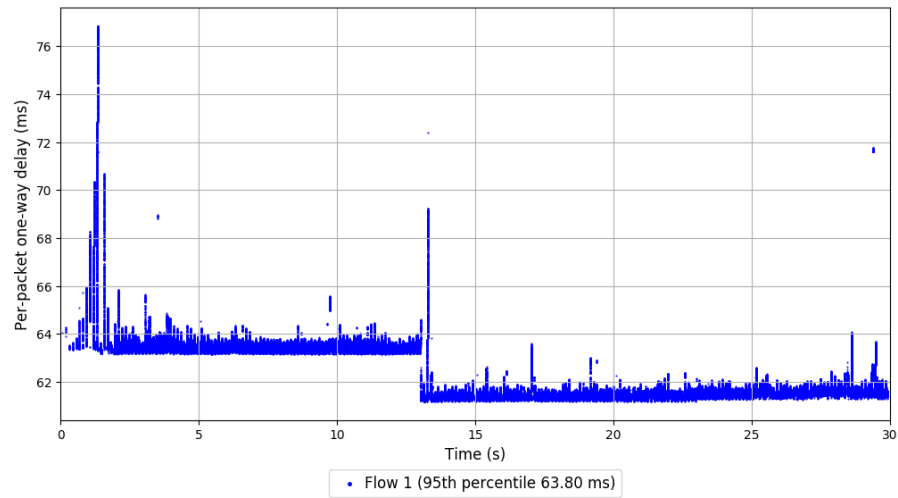
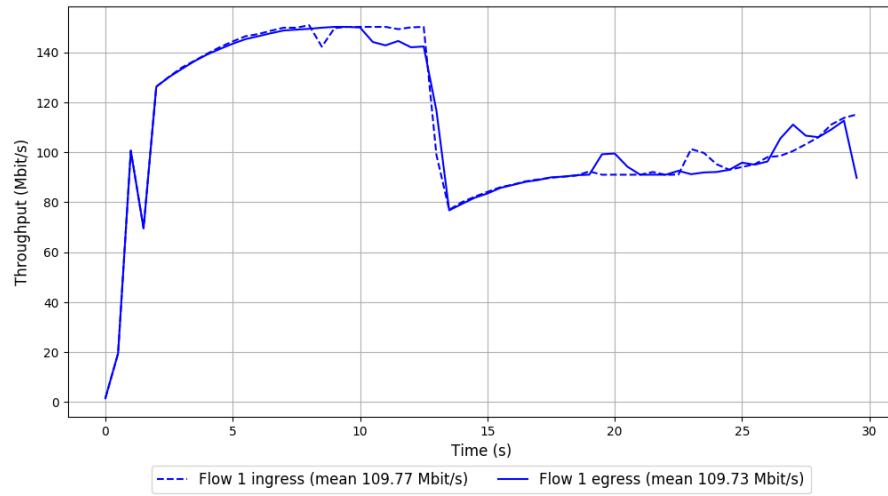
-- Flow 1:

Average throughput: 109.73 Mbit/s

95th percentile per-packet one-way delay: 63.800 ms

Loss rate: 0.45%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-16 07:36:06

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

Below is generated by plot.py at 2017-11-16 09:51:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.30 Mbit/s

95th percentile per-packet one-way delay: 65.768 ms

Loss rate: 0.38%

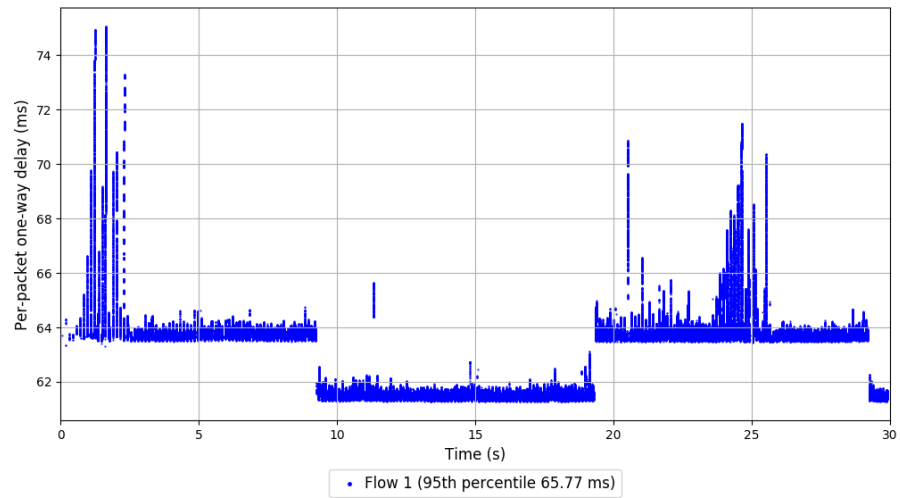
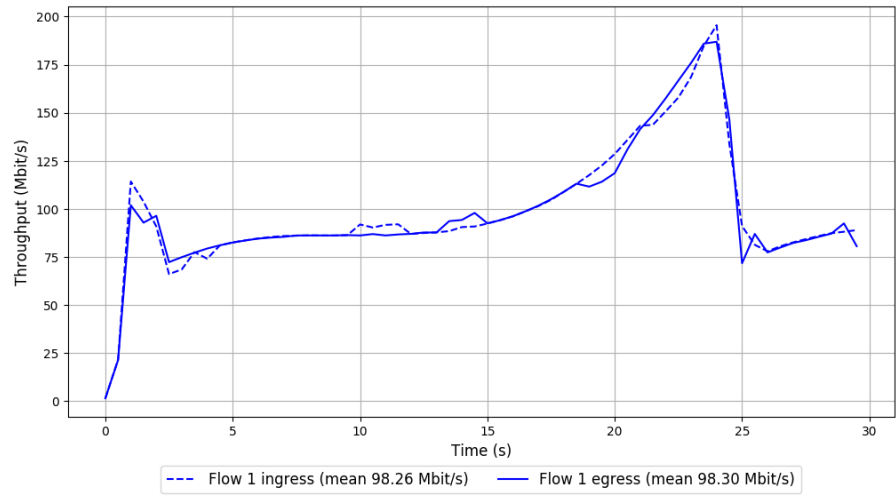
-- Flow 1:

Average throughput: 98.30 Mbit/s

95th percentile per-packet one-way delay: 65.768 ms

Loss rate: 0.38%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-16 07:46:23

End at: 2017-11-16 07:46:53

Below is generated by plot.py at 2017-11-16 09:52:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.48 Mbit/s

95th percentile per-packet one-way delay: 69.699 ms

Loss rate: 0.25%

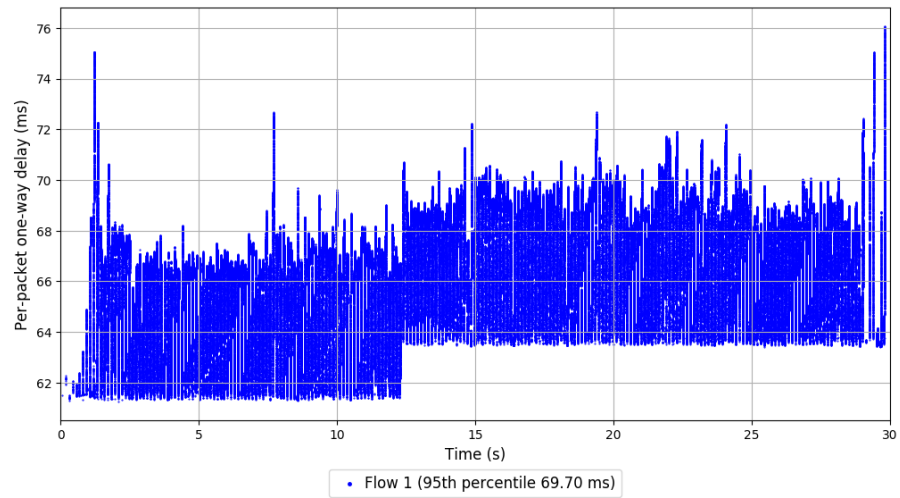
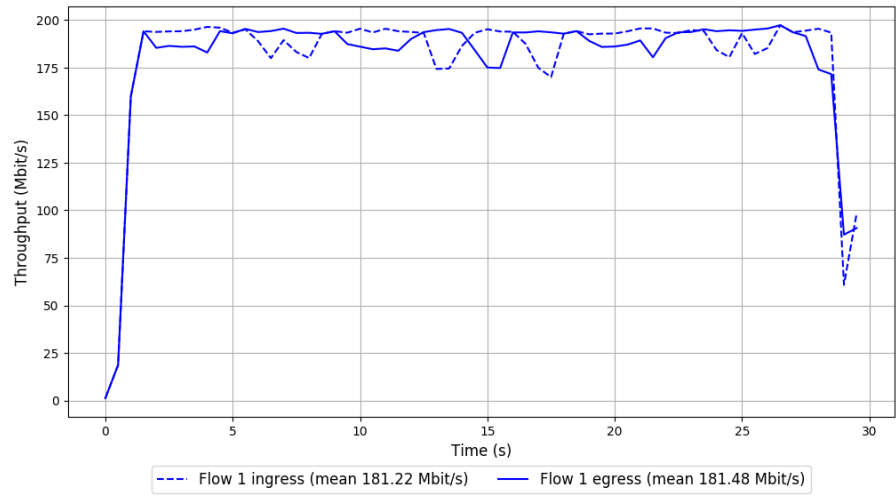
-- Flow 1:

Average throughput: 181.48 Mbit/s

95th percentile per-packet one-way delay: 69.699 ms

Loss rate: 0.25%

Run 10: Report of TCP Cubic — Data Link

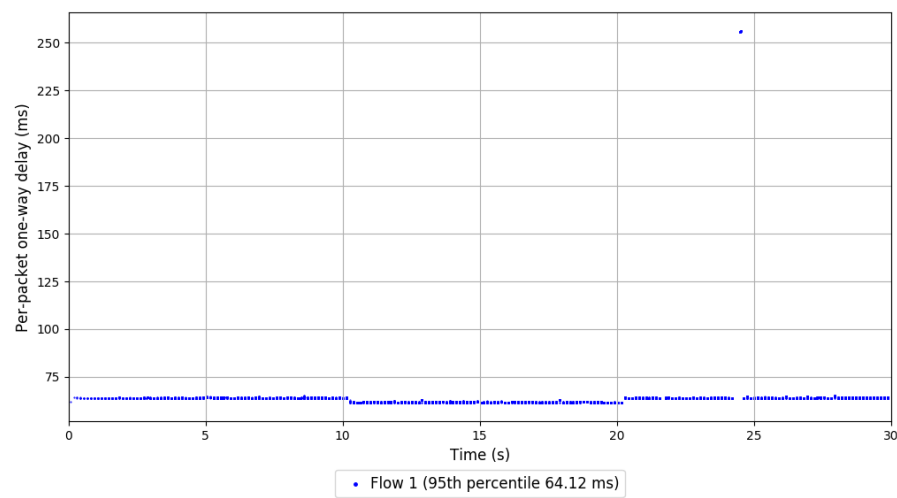
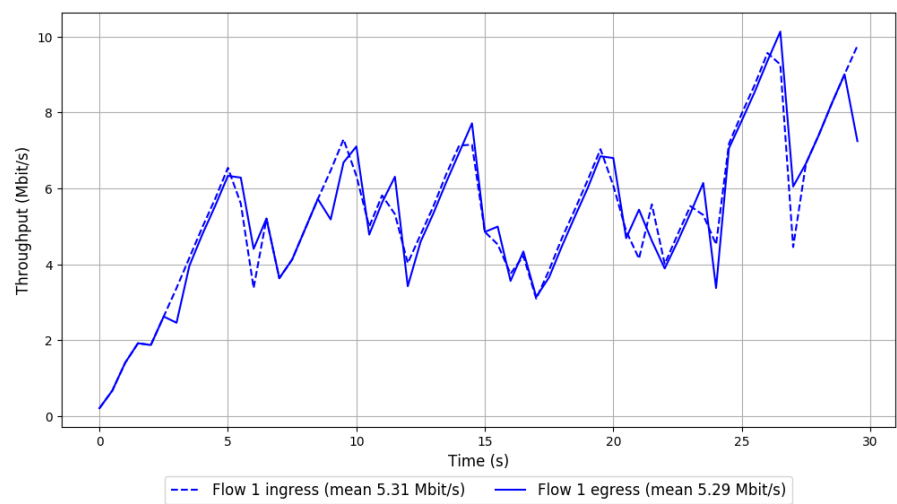


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-16 06:13:35
End at: 2017-11-16 06:14:05

# Below is generated by plot.py at 2017-11-16 09:52:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.29 Mbit/s
95th percentile per-packet one-way delay: 64.116 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 5.29 Mbit/s
95th percentile per-packet one-way delay: 64.116 ms
Loss rate: 0.81%
```

Run 1: Report of LEDBAT — Data Link

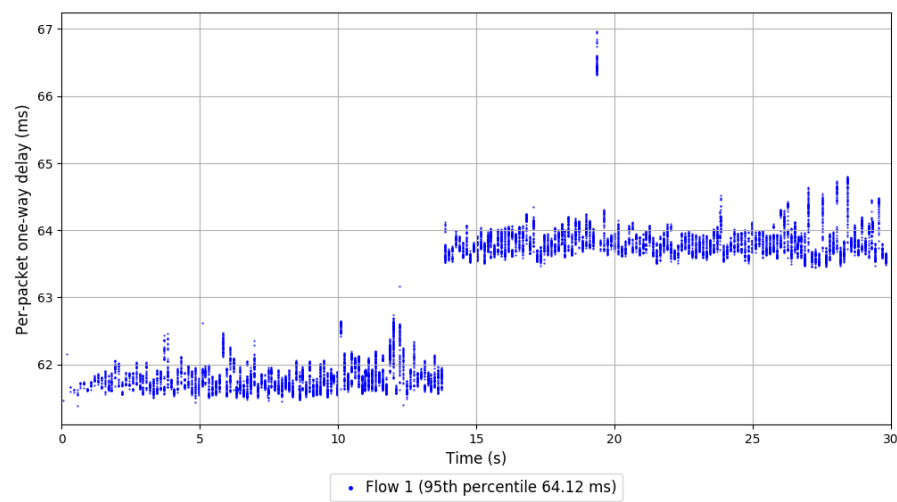
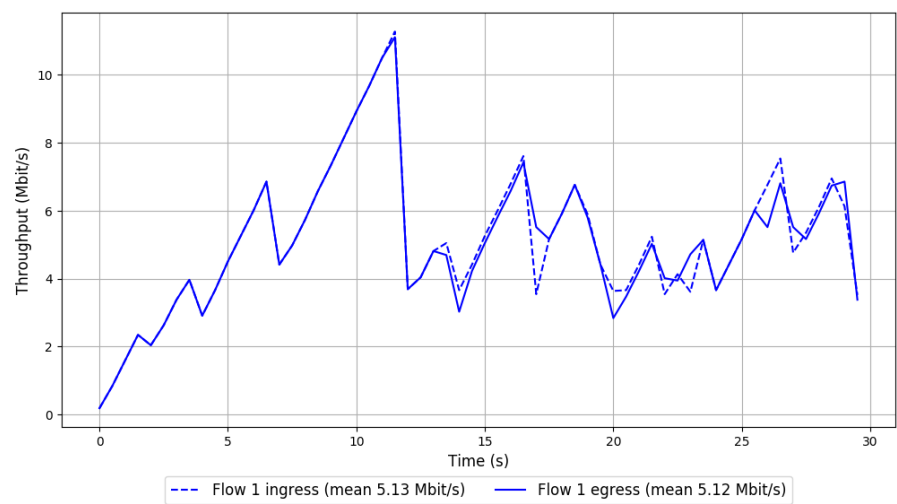


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-16 06:24:12
End at: 2017-11-16 06:24:42

# Below is generated by plot.py at 2017-11-16 09:52:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 64.118 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 64.118 ms
Loss rate: 0.48%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-16 06:34:46

End at: 2017-11-16 06:35:16

Below is generated by plot.py at 2017-11-16 09:52:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 64.031 ms

Loss rate: 0.39%

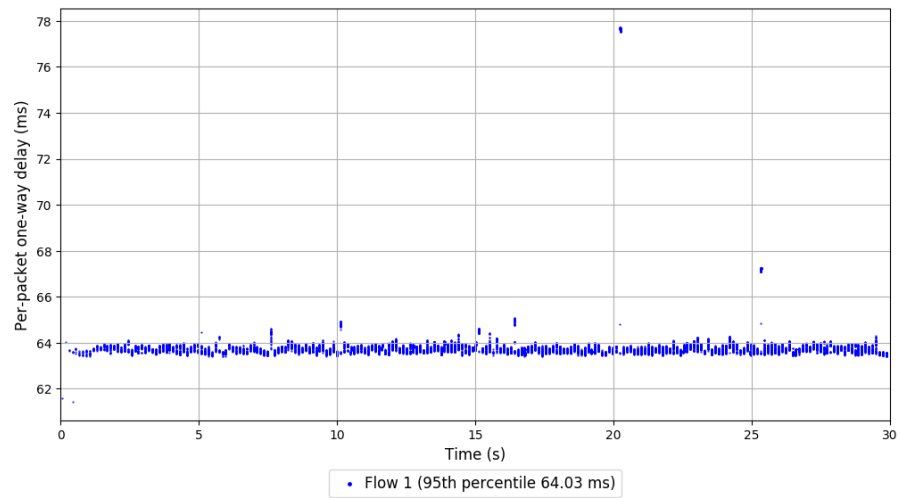
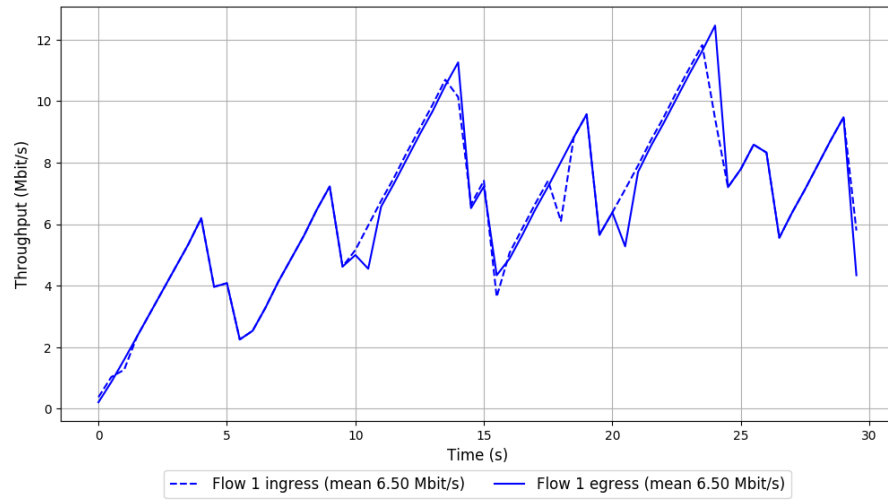
-- Flow 1:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 64.031 ms

Loss rate: 0.39%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-16 06:45:28

End at: 2017-11-16 06:45:58

Below is generated by plot.py at 2017-11-16 09:52:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.25 Mbit/s

95th percentile per-packet one-way delay: 62.003 ms

Loss rate: 0.44%

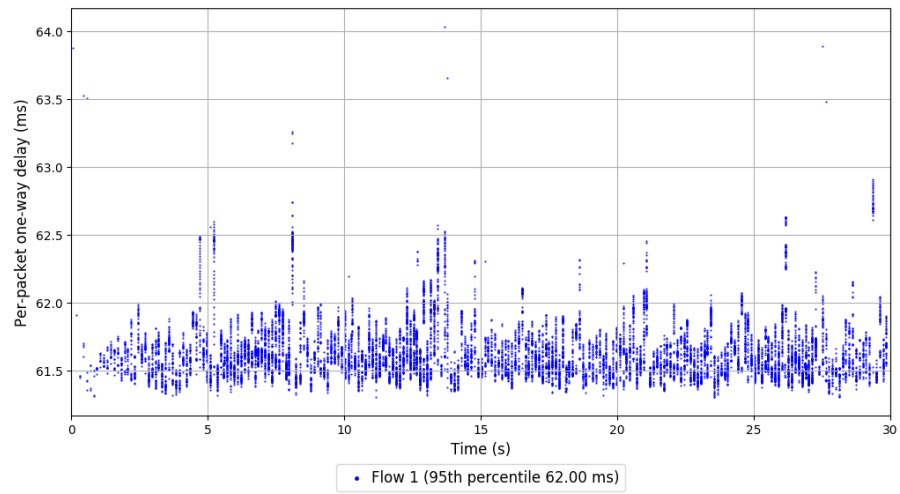
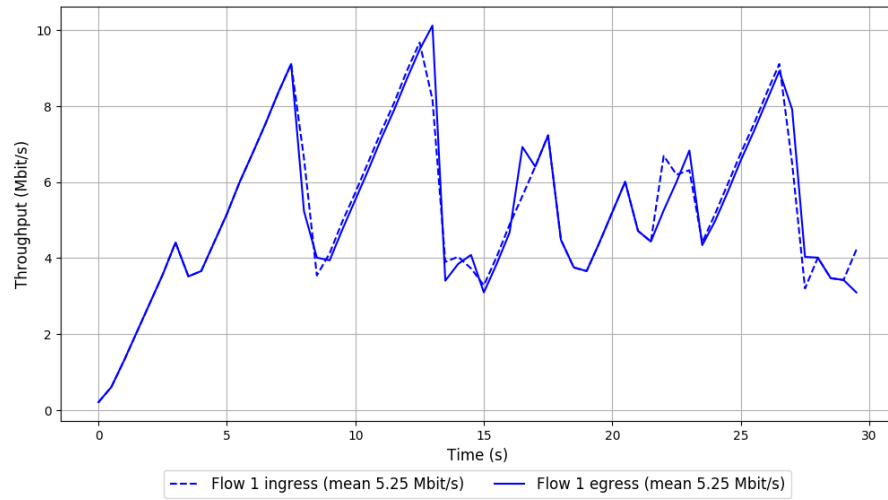
-- Flow 1:

Average throughput: 5.25 Mbit/s

95th percentile per-packet one-way delay: 62.003 ms

Loss rate: 0.44%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-16 06:55:59

End at: 2017-11-16 06:56:29

Below is generated by plot.py at 2017-11-16 09:52:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.12 Mbit/s

95th percentile per-packet one-way delay: 63.774 ms

Loss rate: 0.41%

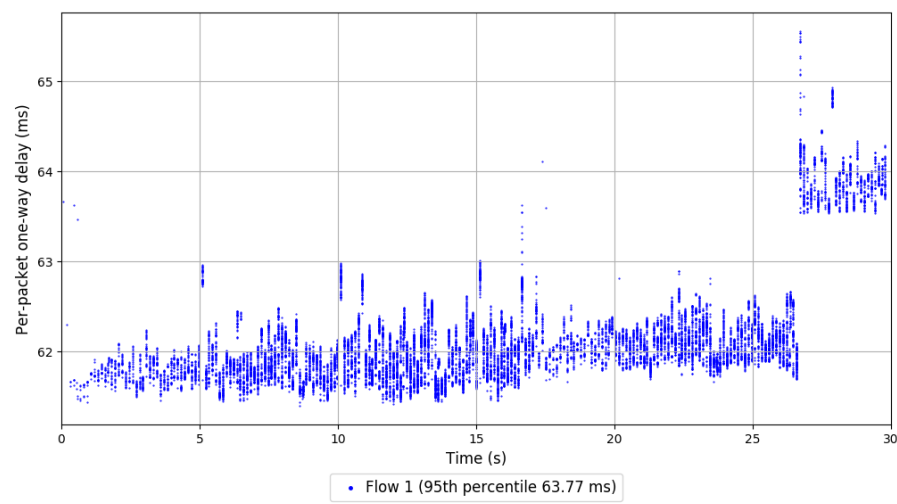
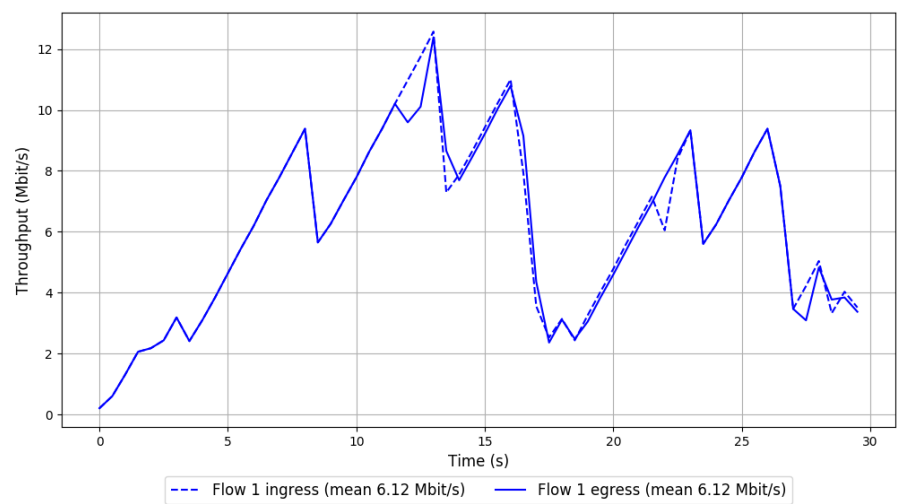
-- Flow 1:

Average throughput: 6.12 Mbit/s

95th percentile per-packet one-way delay: 63.774 ms

Loss rate: 0.41%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-16 07:06:37

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

Below is generated by plot.py at 2017-11-16 09:52:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 64.003 ms

Loss rate: 0.72%

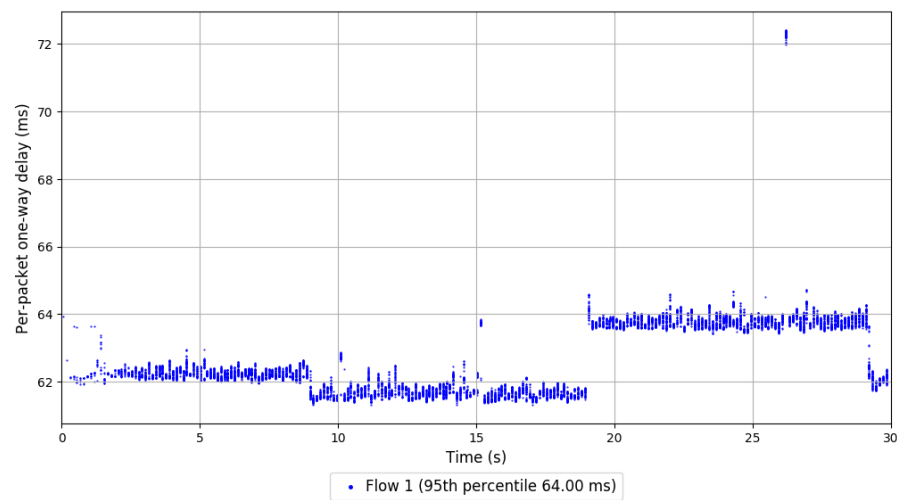
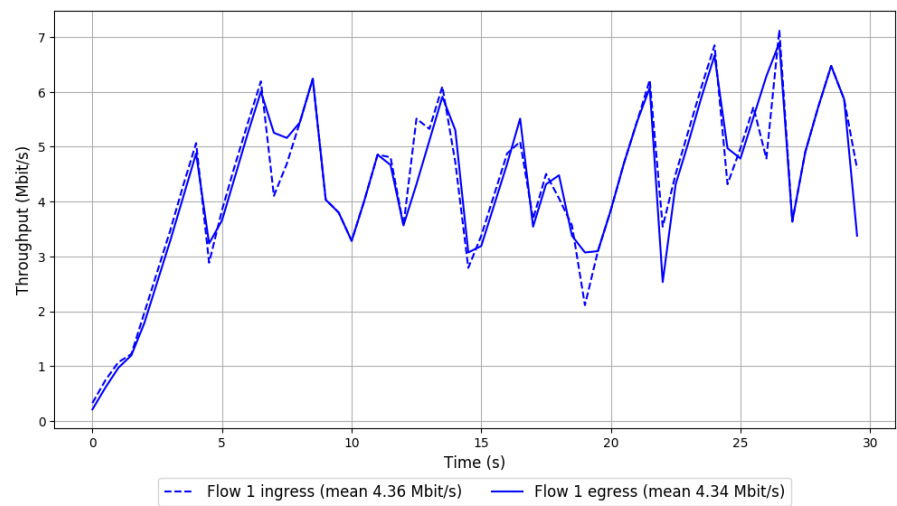
-- Flow 1:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 64.003 ms

Loss rate: 0.72%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-16 07:17:05

End at: 2017-11-16 07:17:35

Below is generated by plot.py at 2017-11-16 09:52:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.90 Mbit/s

95th percentile per-packet one-way delay: 64.451 ms

Loss rate: 0.91%

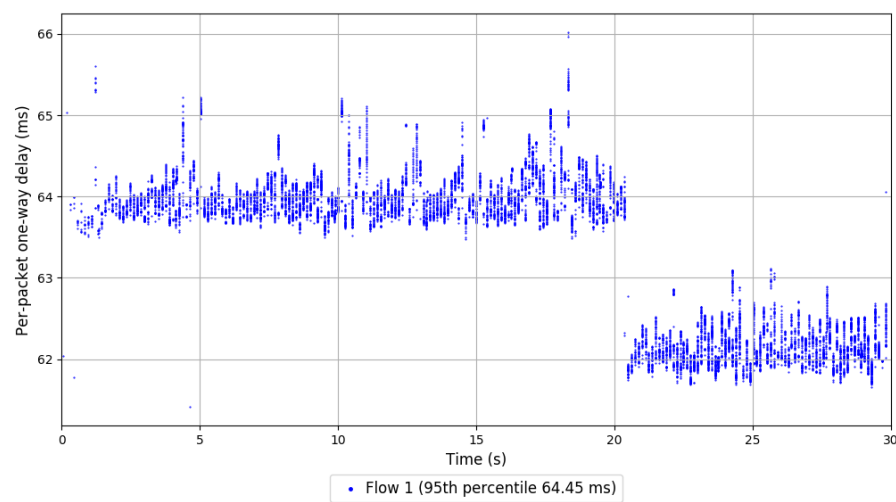
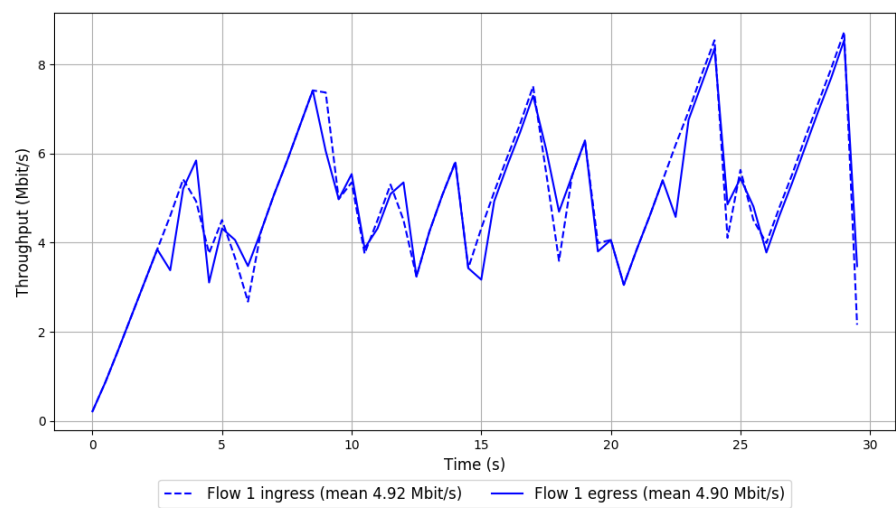
-- Flow 1:

Average throughput: 4.90 Mbit/s

95th percentile per-packet one-way delay: 64.451 ms

Loss rate: 0.91%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-16 07:27:35

End at: 2017-11-16 07:28:05

Below is generated by plot.py at 2017-11-16 09:52:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 64.268 ms

Loss rate: 0.81%

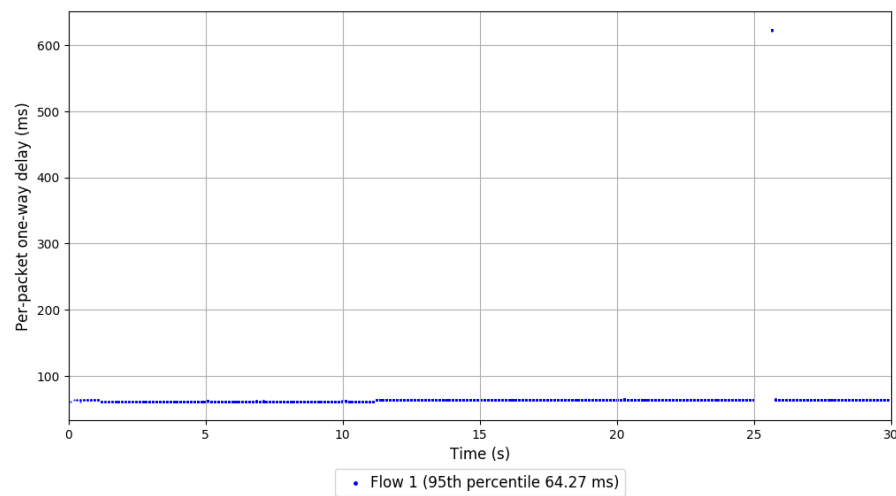
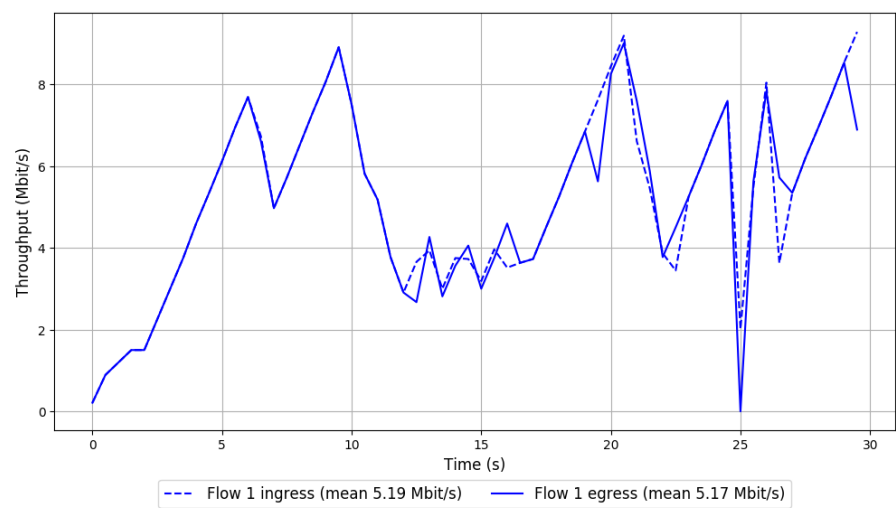
-- Flow 1:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 64.268 ms

Loss rate: 0.81%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-16 07:38:18

End at: 2017-11-16 07:38:48

Below is generated by plot.py at 2017-11-16 09:52:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.80 Mbit/s

95th percentile per-packet one-way delay: 64.106 ms

Loss rate: 0.27%

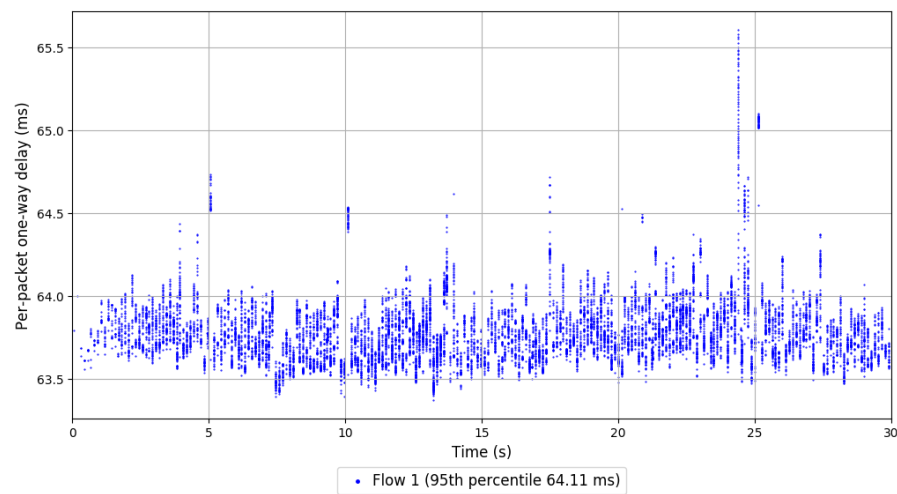
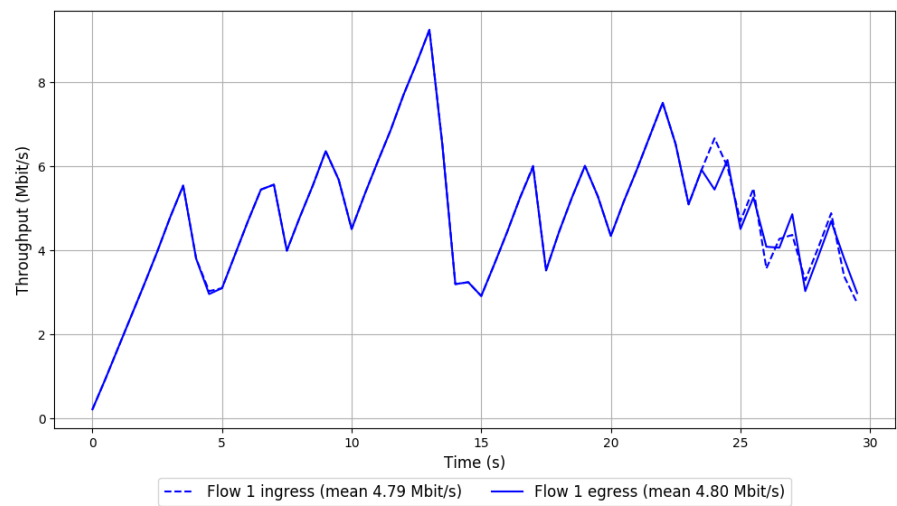
-- Flow 1:

Average throughput: 4.80 Mbit/s

95th percentile per-packet one-way delay: 64.106 ms

Loss rate: 0.27%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-16 07:48:39

End at: 2017-11-16 07:49:09

Below is generated by plot.py at 2017-11-16 09:52:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.83 Mbit/s

95th percentile per-packet one-way delay: 64.264 ms

Loss rate: 0.42%

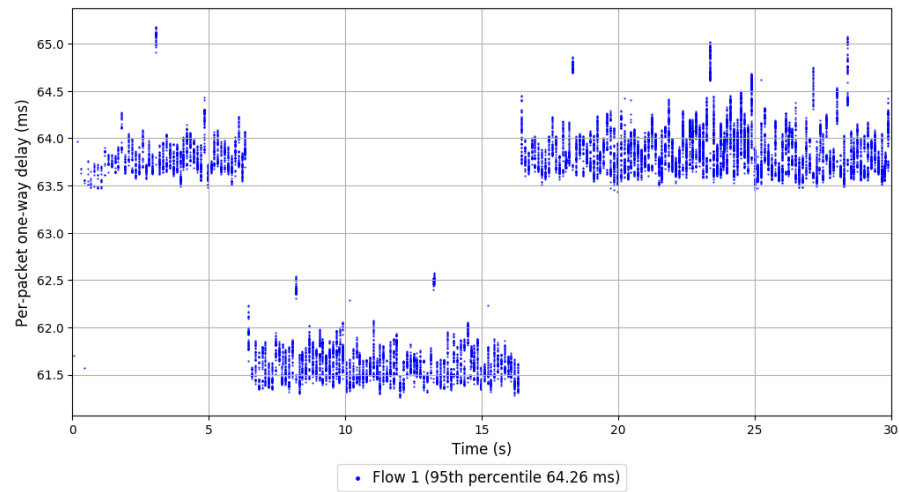
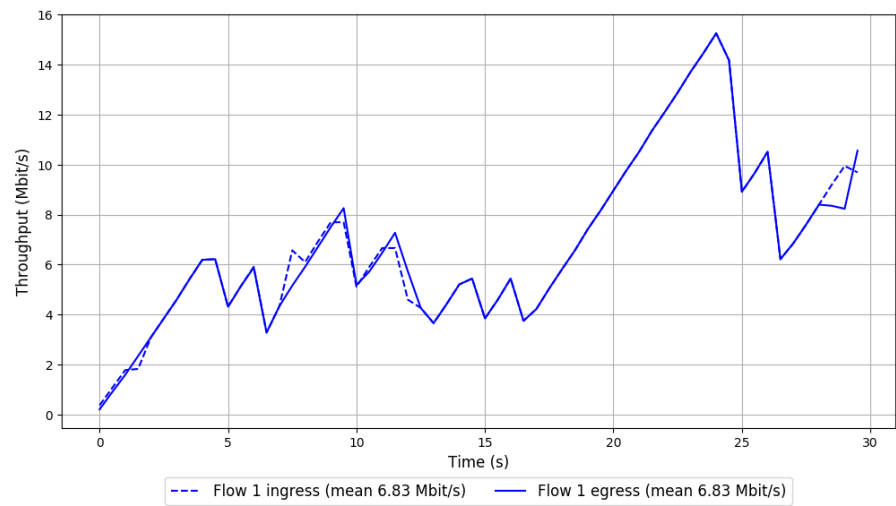
-- Flow 1:

Average throughput: 6.83 Mbit/s

95th percentile per-packet one-way delay: 64.264 ms

Loss rate: 0.42%

Run 10: Report of LEDBAT — Data Link

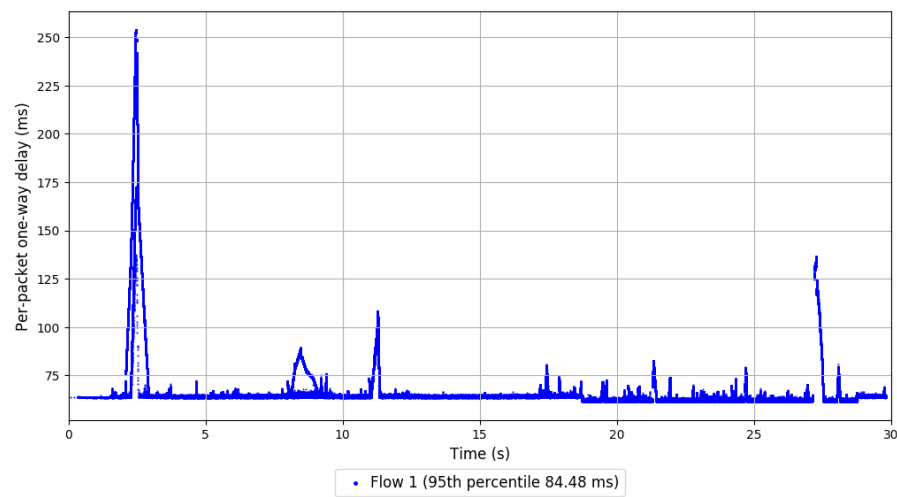
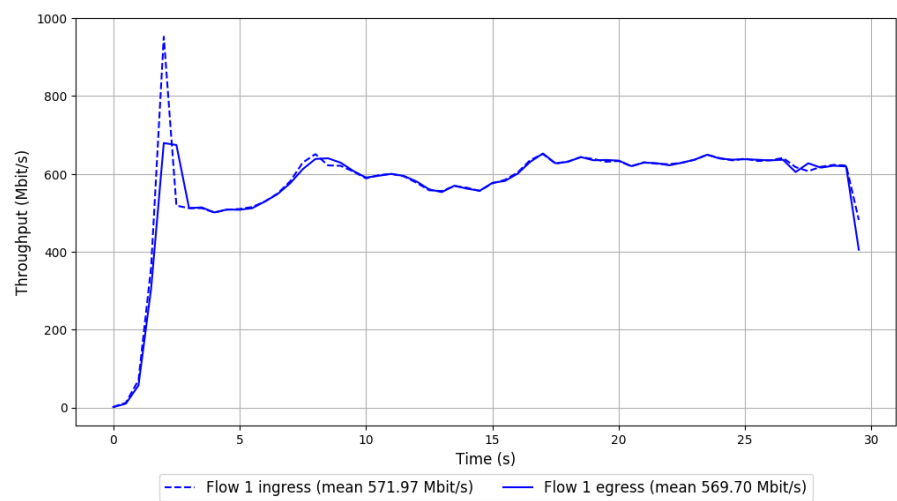


```
Run 1: Statistics of PCC

Start at: 2017-11-16 06:19:07
End at: 2017-11-16 06:19:37

# Below is generated by plot.py at 2017-11-16 10:00:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 569.70 Mbit/s
95th percentile per-packet one-way delay: 84.478 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 569.70 Mbit/s
95th percentile per-packet one-way delay: 84.478 ms
Loss rate: 0.82%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-16 06:29:36

End at: 2017-11-16 06:30:07

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 540.17 Mbit/s

95th percentile per-packet one-way delay: 89.761 ms

Loss rate: 0.93%

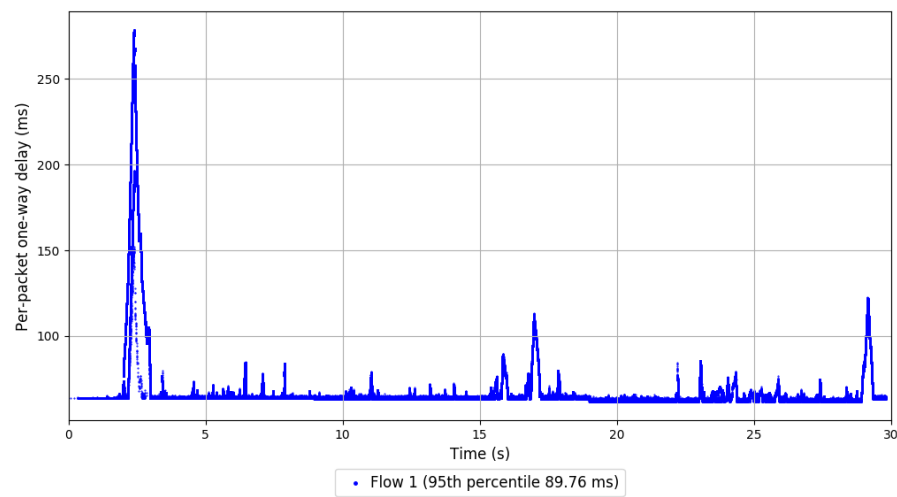
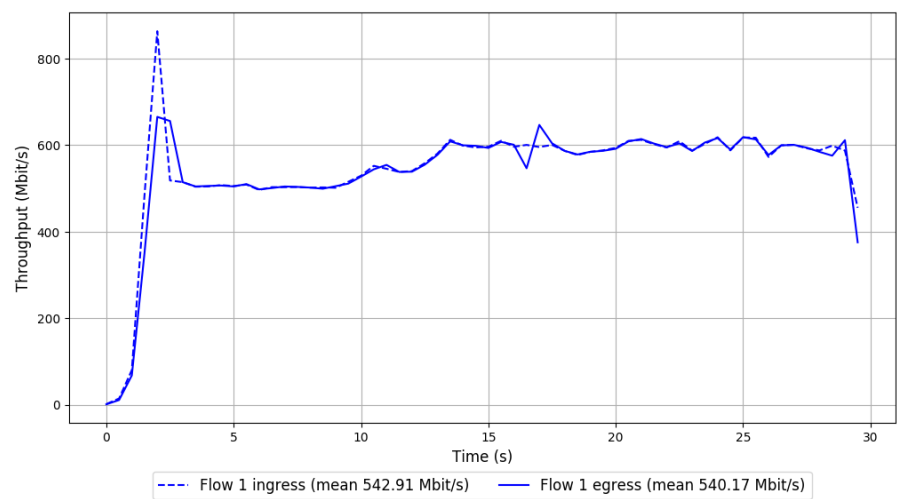
-- Flow 1:

Average throughput: 540.17 Mbit/s

95th percentile per-packet one-way delay: 89.761 ms

Loss rate: 0.93%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-16 06:40:12

End at: 2017-11-16 06:40:42

Below is generated by plot.py at 2017-11-16 10:00:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 573.40 Mbit/s

95th percentile per-packet one-way delay: 105.924 ms

Loss rate: 0.78%

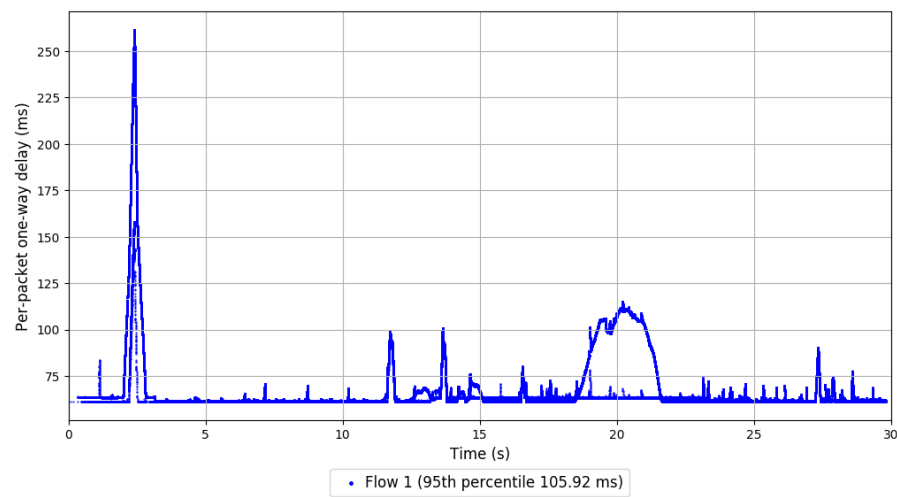
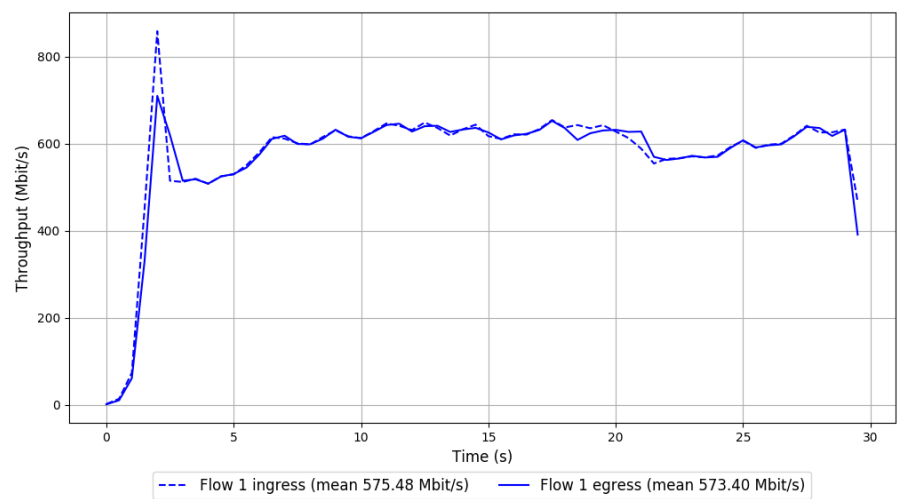
-- Flow 1:

Average throughput: 573.40 Mbit/s

95th percentile per-packet one-way delay: 105.924 ms

Loss rate: 0.78%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-16 06:50:53

End at: 2017-11-16 06:51:23

Below is generated by plot.py at 2017-11-16 10:00:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 562.80 Mbit/s

95th percentile per-packet one-way delay: 142.493 ms

Loss rate: 1.16%

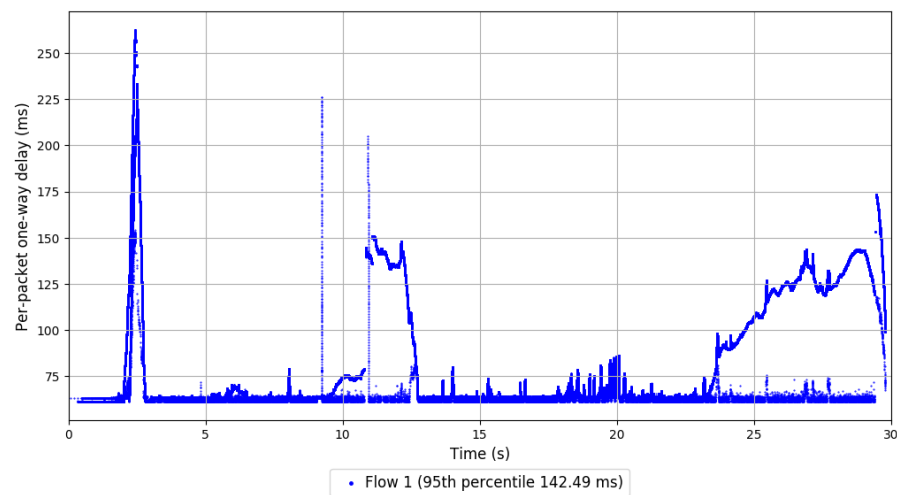
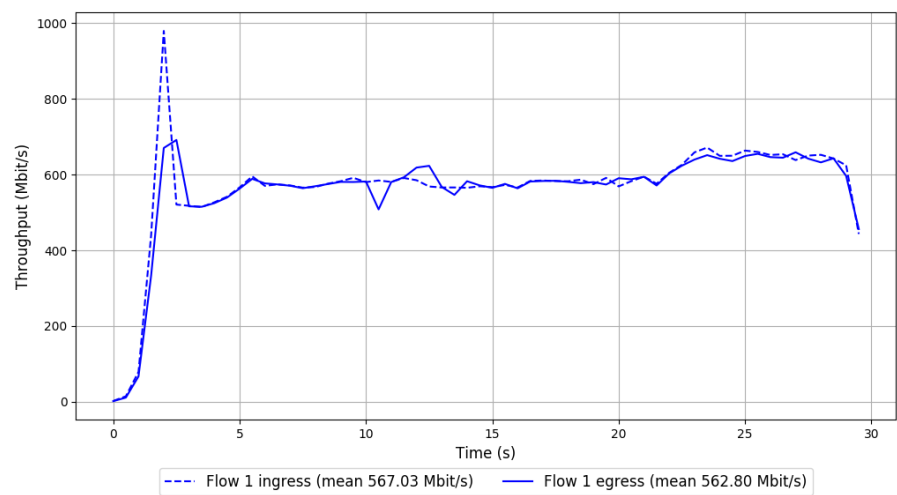
-- Flow 1:

Average throughput: 562.80 Mbit/s

95th percentile per-packet one-way delay: 142.493 ms

Loss rate: 1.16%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-16 07:01:27

End at: 2017-11-16 07:01:57

Below is generated by plot.py at 2017-11-16 10:00:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 554.19 Mbit/s

95th percentile per-packet one-way delay: 105.071 ms

Loss rate: 1.39%

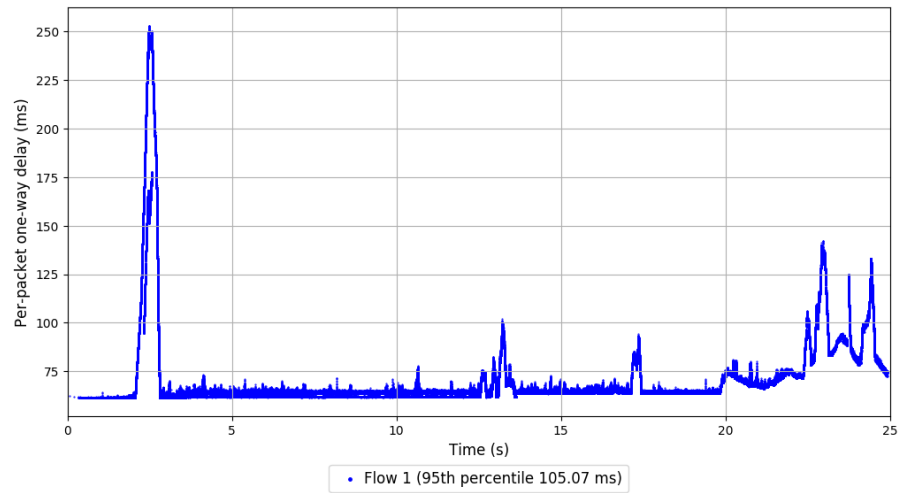
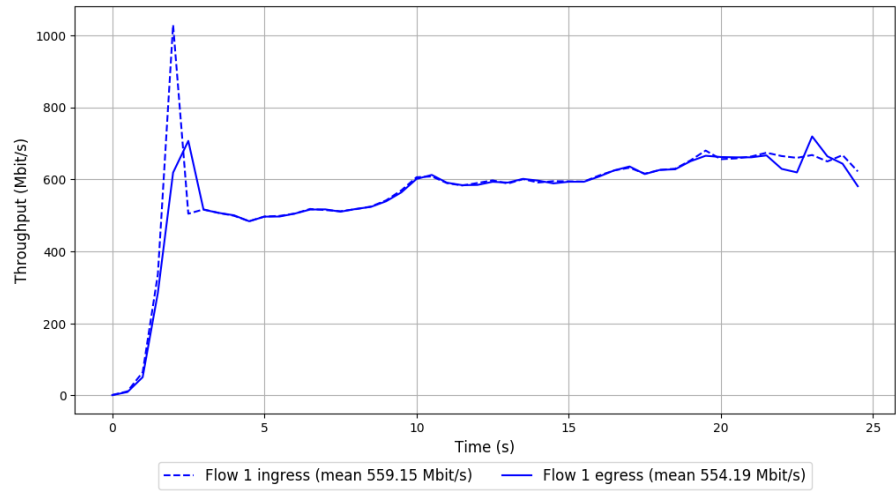
-- Flow 1:

Average throughput: 554.19 Mbit/s

95th percentile per-packet one-way delay: 105.071 ms

Loss rate: 1.39%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

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

End at: 2017-11-16 07:12:27

Below is generated by plot.py at 2017-11-16 10:00:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 569.17 Mbit/s

95th percentile per-packet one-way delay: 154.580 ms

Loss rate: 1.27%

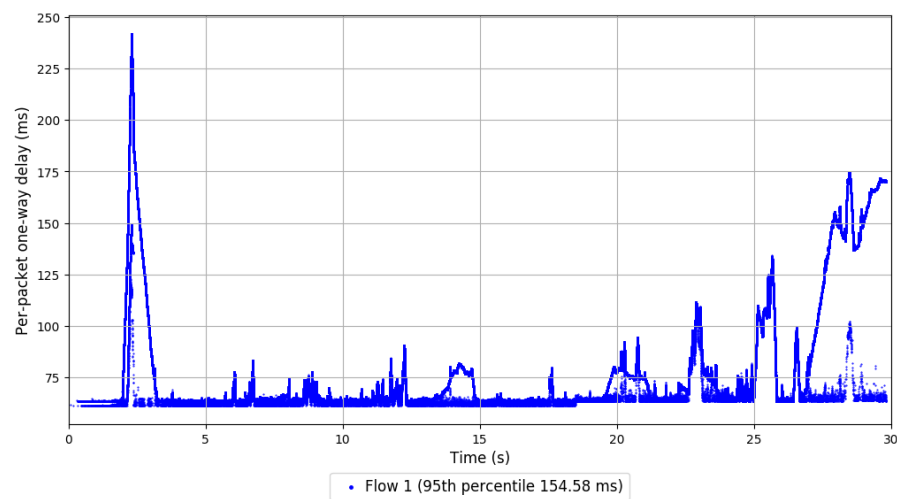
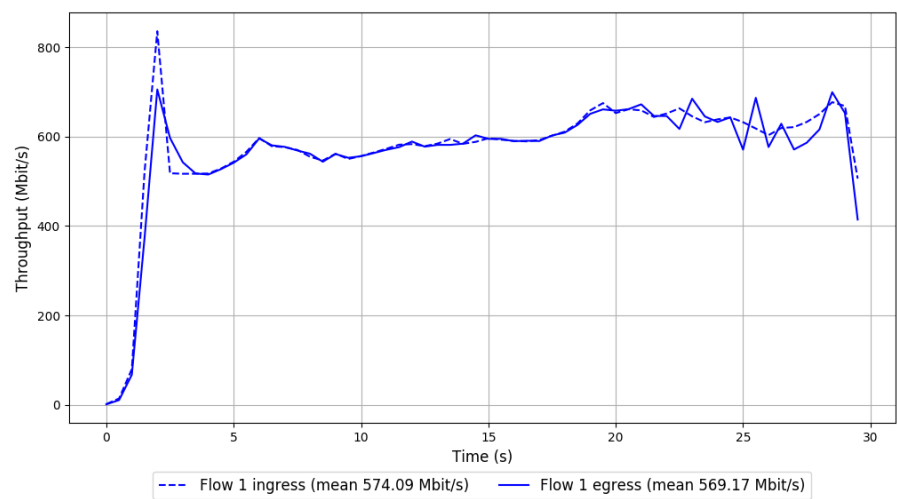
-- Flow 1:

Average throughput: 569.17 Mbit/s

95th percentile per-packet one-way delay: 154.580 ms

Loss rate: 1.27%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-16 07:22:29

End at: 2017-11-16 07:22:59

Below is generated by plot.py at 2017-11-16 10:00:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 549.03 Mbit/s

95th percentile per-packet one-way delay: 134.520 ms

Loss rate: 1.49%

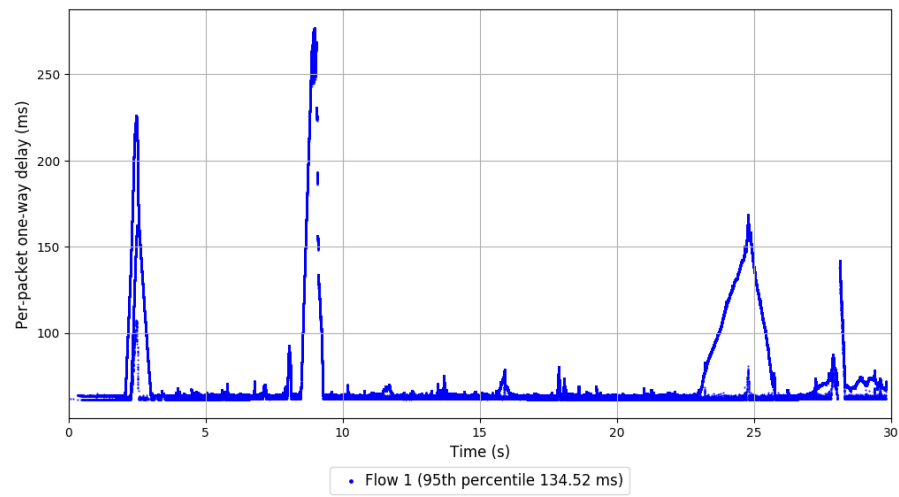
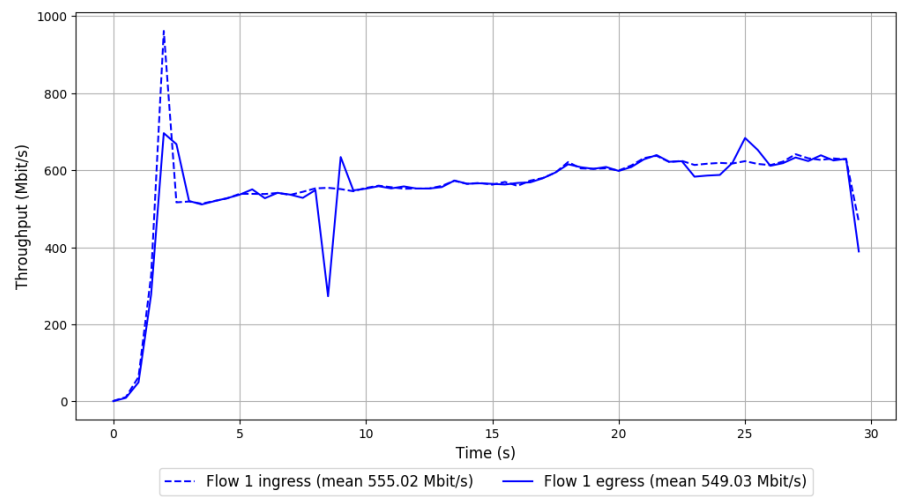
-- Flow 1:

Average throughput: 549.03 Mbit/s

95th percentile per-packet one-way delay: 134.520 ms

Loss rate: 1.49%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

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

End at: 2017-11-16 07:33:39

Below is generated by plot.py at 2017-11-16 10:03:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 578.21 Mbit/s

95th percentile per-packet one-way delay: 171.947 ms

Loss rate: 1.20%

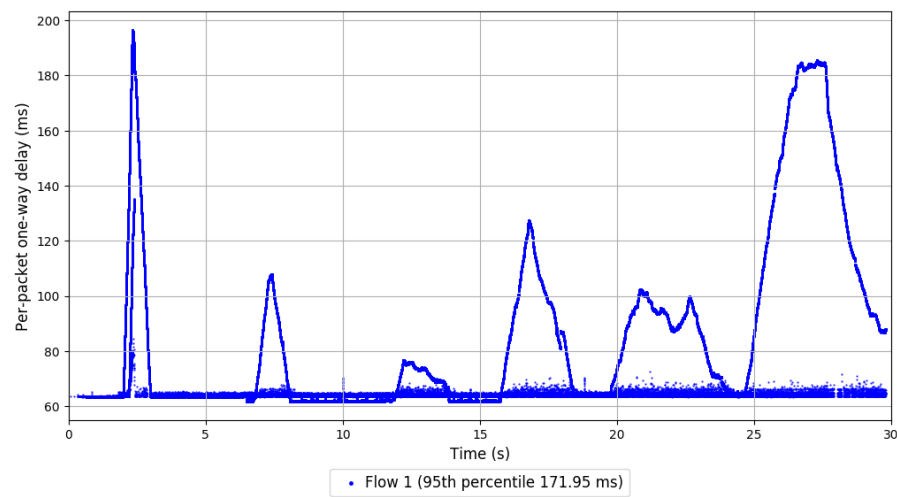
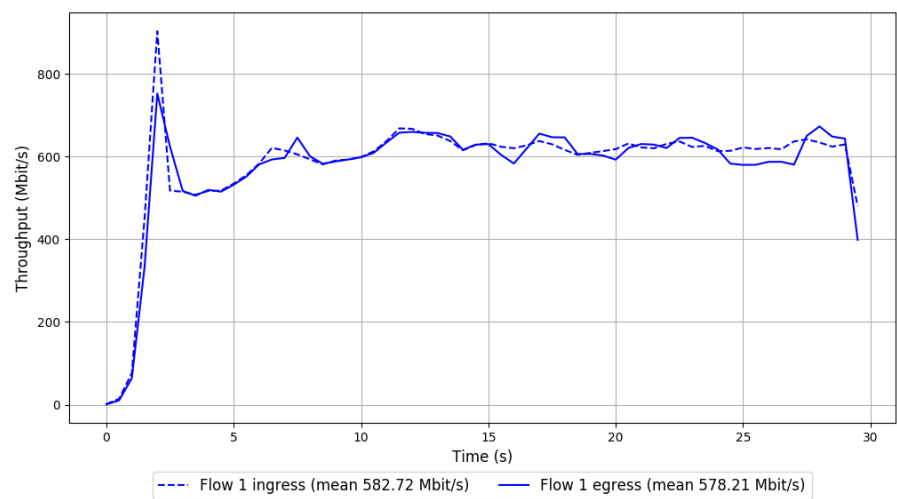
-- Flow 1:

Average throughput: 578.21 Mbit/s

95th percentile per-packet one-way delay: 171.947 ms

Loss rate: 1.20%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-16 07:43:40

End at: 2017-11-16 07:44:10

Below is generated by plot.py at 2017-11-16 10:03:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 289.81 Mbit/s

95th percentile per-packet one-way delay: 172.617 ms

Loss rate: 0.70%

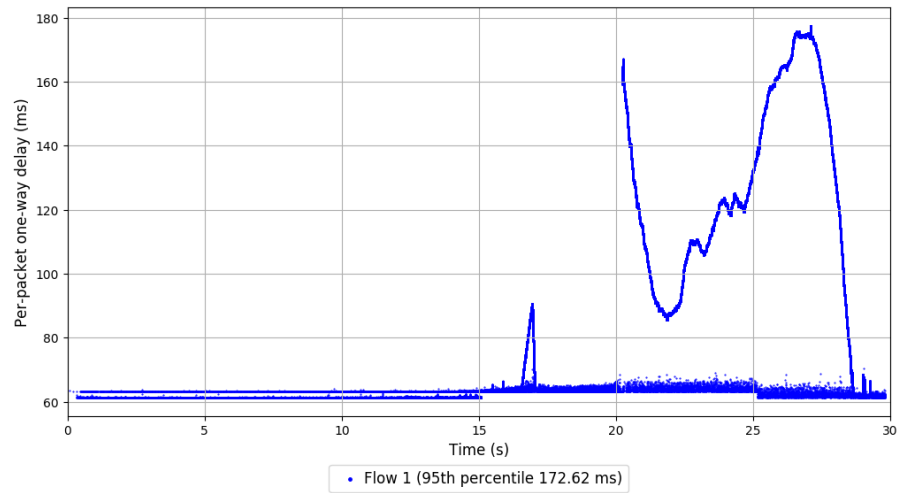
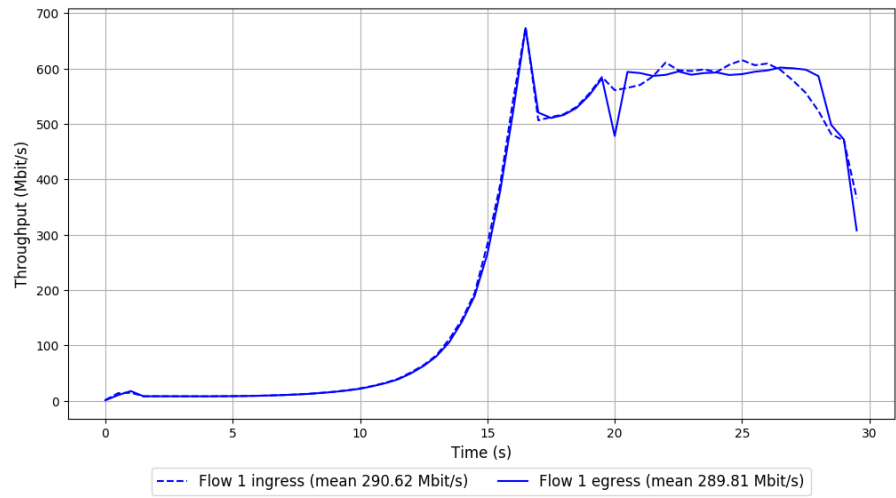
-- Flow 1:

Average throughput: 289.81 Mbit/s

95th percentile per-packet one-way delay: 172.617 ms

Loss rate: 0.70%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-16 07:54:18

End at: 2017-11-16 07:54:48

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 552.61 Mbit/s

95th percentile per-packet one-way delay: 180.712 ms

Loss rate: 1.36%

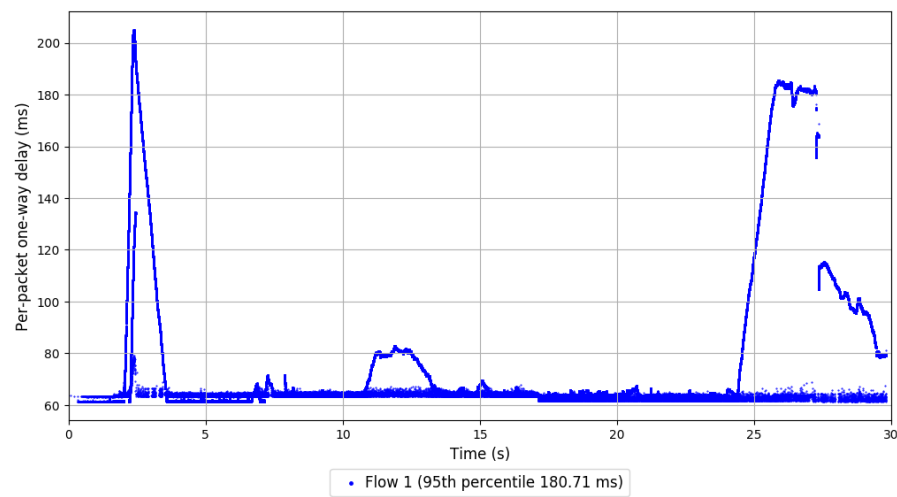
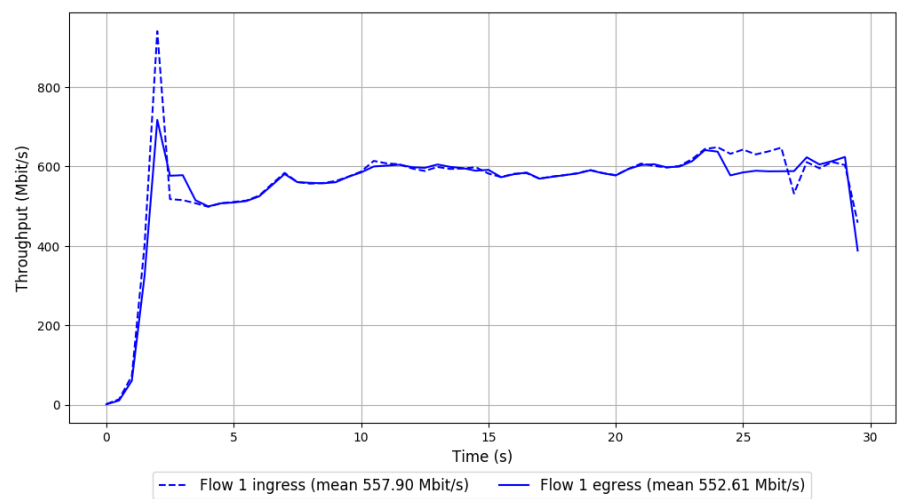
-- Flow 1:

Average throughput: 552.61 Mbit/s

95th percentile per-packet one-way delay: 180.712 ms

Loss rate: 1.36%

Run 10: Report of PCC — Data Link

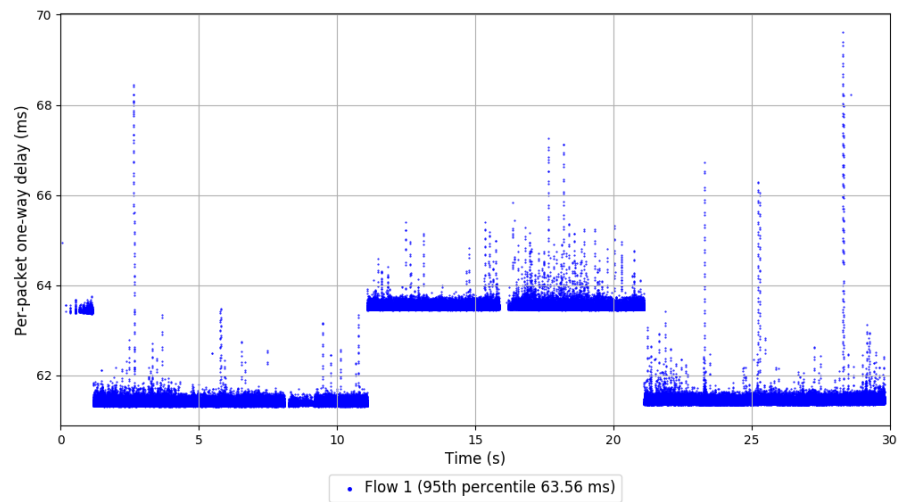
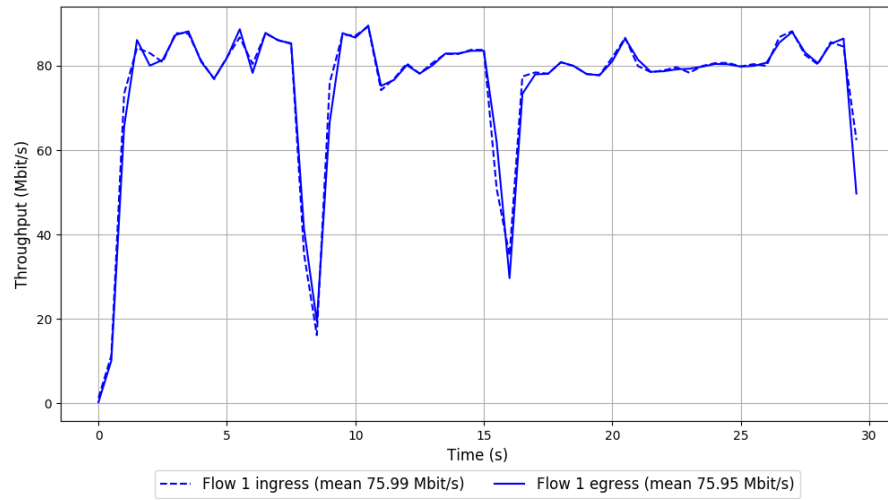


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-16 06:18:24
End at: 2017-11-16 06:18:54

# Below is generated by plot.py at 2017-11-16 10:09:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.95 Mbit/s
95th percentile per-packet one-way delay: 63.559 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 75.95 Mbit/s
95th percentile per-packet one-way delay: 63.559 ms
Loss rate: 0.47%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-16 06:28:55

End at: 2017-11-16 06:29:25

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.24 Mbit/s

95th percentile per-packet one-way delay: 63.867 ms

Loss rate: 0.61%

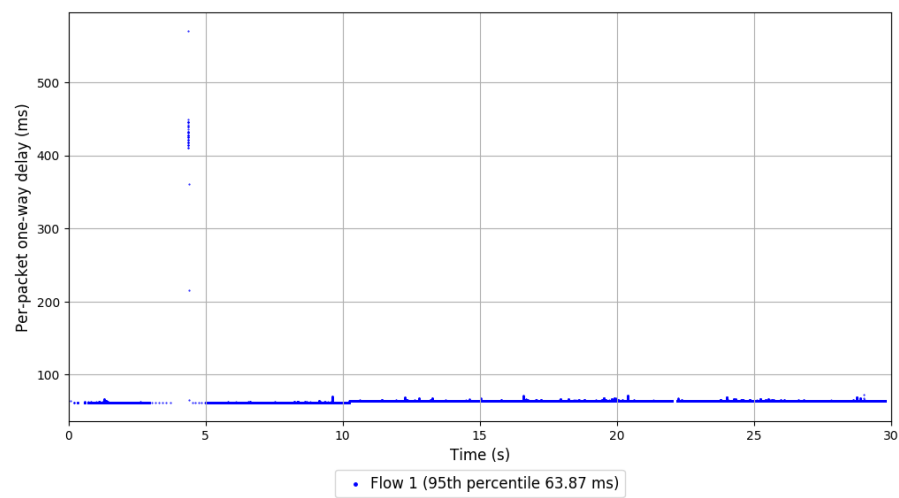
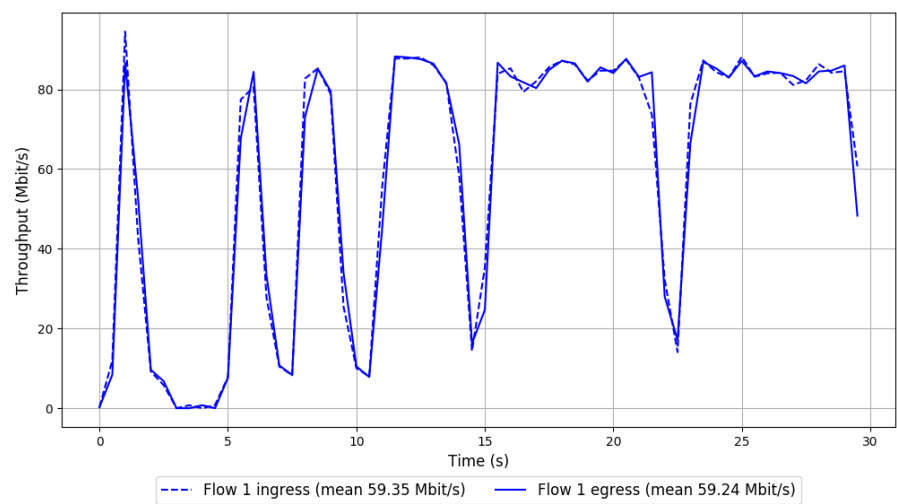
-- Flow 1:

Average throughput: 59.24 Mbit/s

95th percentile per-packet one-way delay: 63.867 ms

Loss rate: 0.61%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-16 06:39:32

End at: 2017-11-16 06:40:02

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.18 Mbit/s

95th percentile per-packet one-way delay: 61.471 ms

Loss rate: 0.72%

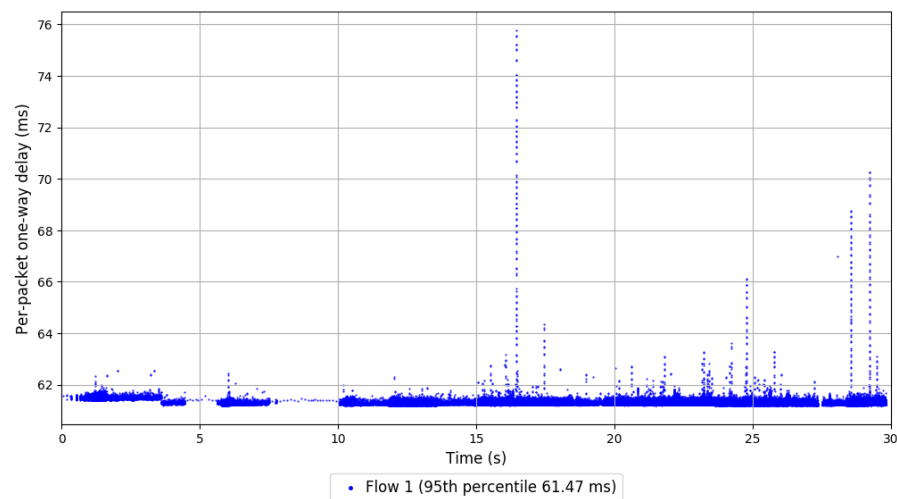
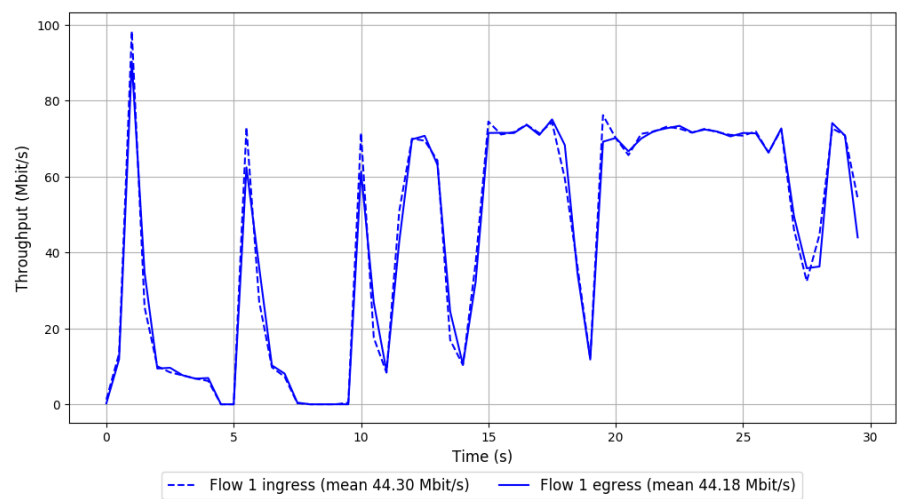
-- Flow 1:

Average throughput: 44.18 Mbit/s

95th percentile per-packet one-way delay: 61.471 ms

Loss rate: 0.72%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-16 06:50:12

End at: 2017-11-16 06:50:42

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.39 Mbit/s

95th percentile per-packet one-way delay: 63.516 ms

Loss rate: 0.62%

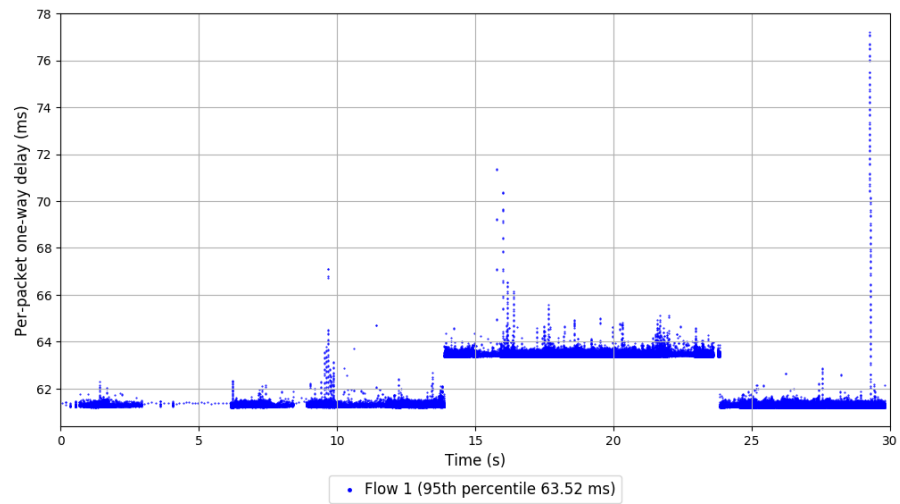
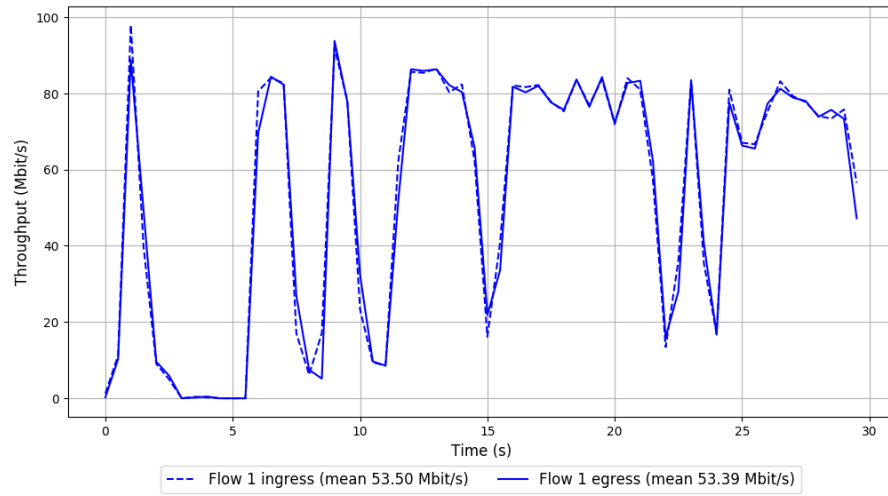
-- Flow 1:

Average throughput: 53.39 Mbit/s

95th percentile per-packet one-way delay: 63.516 ms

Loss rate: 0.62%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-16 07:00:46

End at: 2017-11-16 07:01:16

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.44 Mbit/s

95th percentile per-packet one-way delay: 63.815 ms

Loss rate: 0.12%

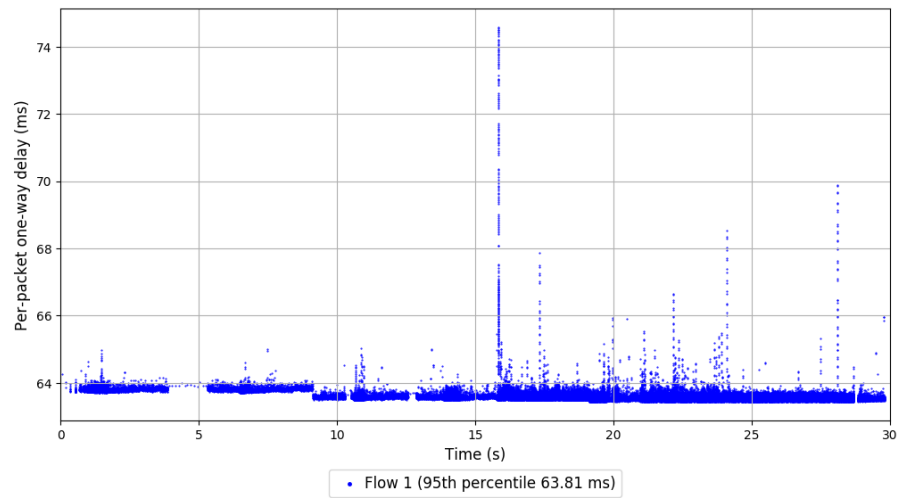
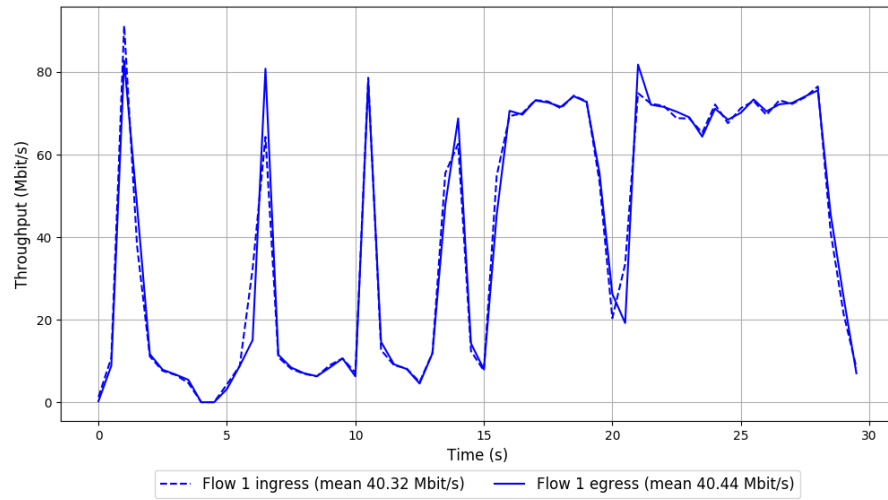
-- Flow 1:

Average throughput: 40.44 Mbit/s

95th percentile per-packet one-way delay: 63.815 ms

Loss rate: 0.12%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

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

End at: 2017-11-16 07:11:46

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.58 Mbit/s

95th percentile per-packet one-way delay: 63.771 ms

Loss rate: 0.65%

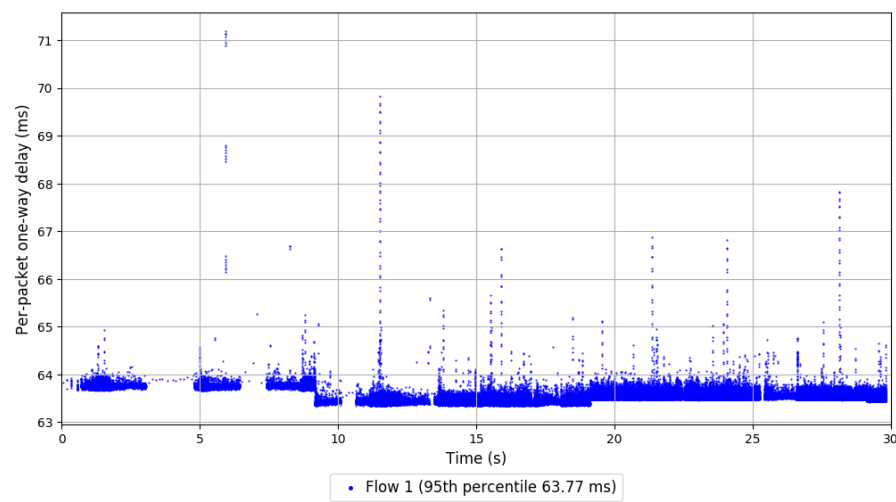
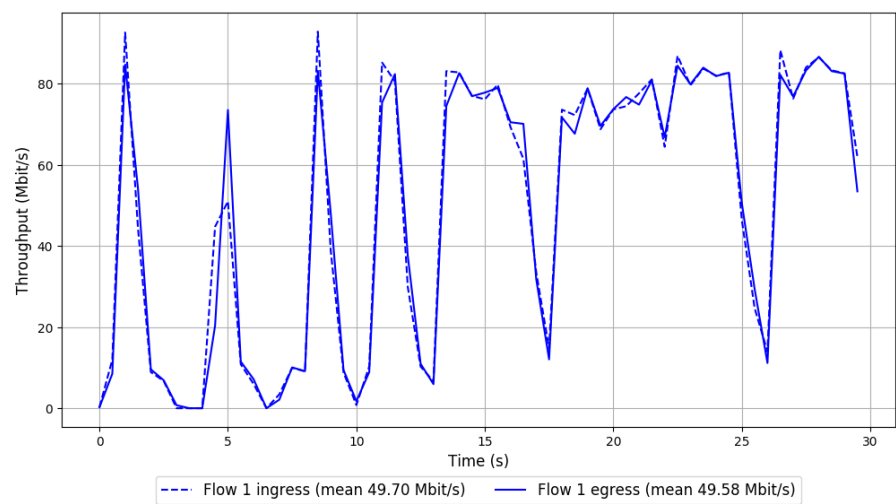
-- Flow 1:

Average throughput: 49.58 Mbit/s

95th percentile per-packet one-way delay: 63.771 ms

Loss rate: 0.65%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-16 07:21:48

End at: 2017-11-16 07:22:18

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.81 Mbit/s

95th percentile per-packet one-way delay: 63.664 ms

Loss rate: 0.67%

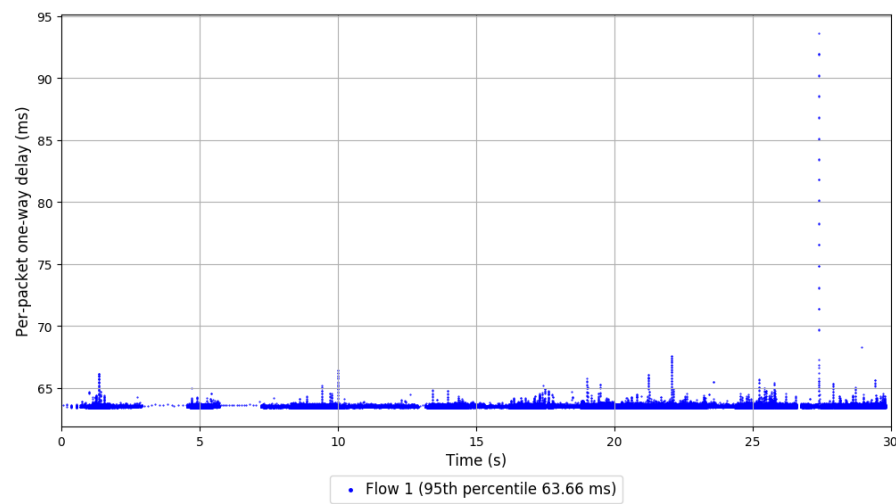
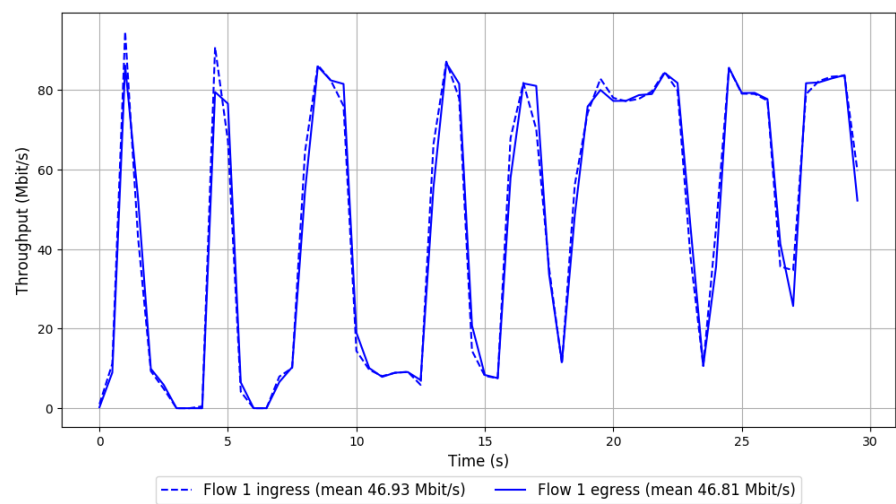
-- Flow 1:

Average throughput: 46.81 Mbit/s

95th percentile per-packet one-way delay: 63.664 ms

Loss rate: 0.67%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-16 07:32:28

End at: 2017-11-16 07:32:58

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.12 Mbit/s

95th percentile per-packet one-way delay: 63.686 ms

Loss rate: 0.55%

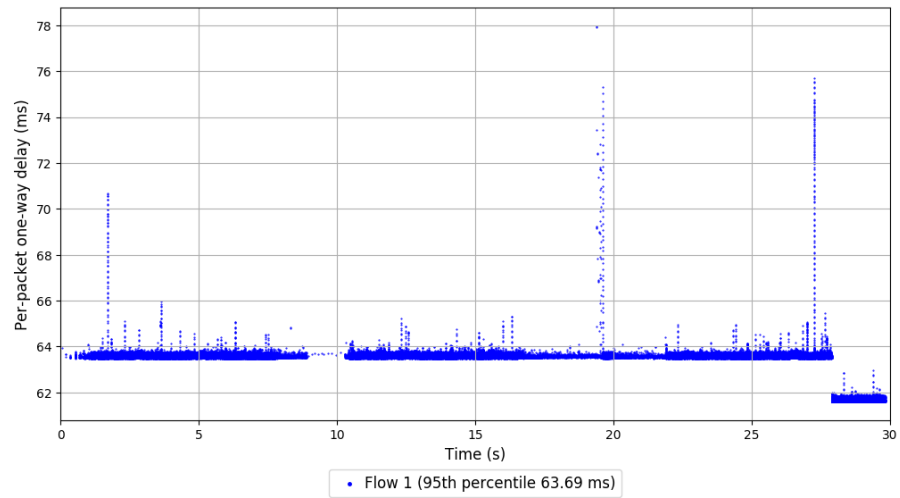
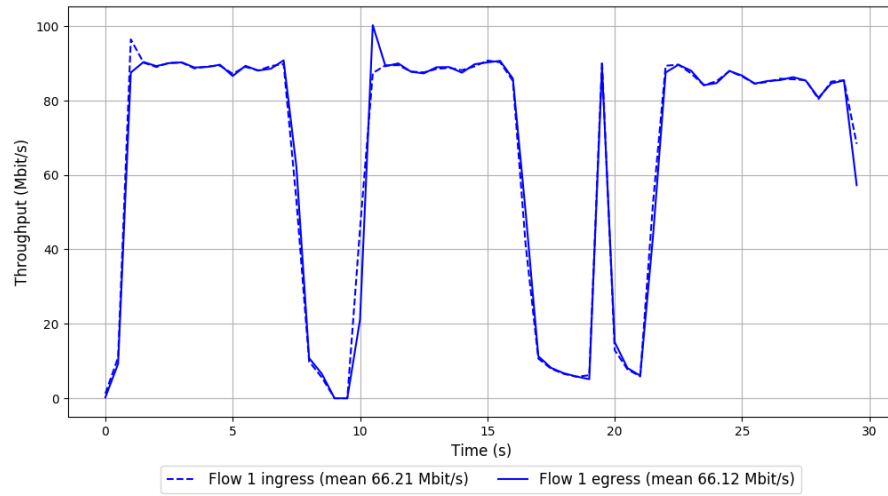
-- Flow 1:

Average throughput: 66.12 Mbit/s

95th percentile per-packet one-way delay: 63.686 ms

Loss rate: 0.55%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-16 07:42:59

End at: 2017-11-16 07:43:29

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.20 Mbit/s

95th percentile per-packet one-way delay: 63.704 ms

Loss rate: 0.51%

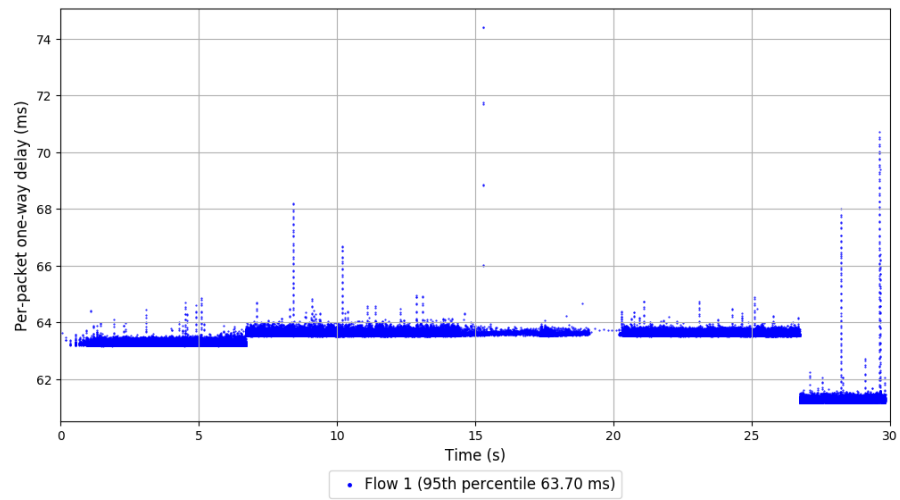
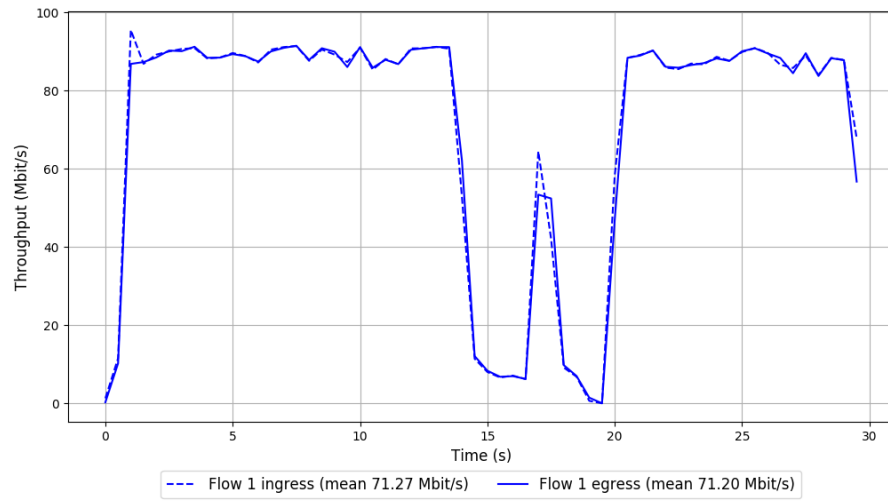
-- Flow 1:

Average throughput: 71.20 Mbit/s

95th percentile per-packet one-way delay: 63.704 ms

Loss rate: 0.51%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-11-16 07:53:37

End at: 2017-11-16 07:54:07

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.21 Mbit/s

95th percentile per-packet one-way delay: 63.627 ms

Loss rate: 0.46%

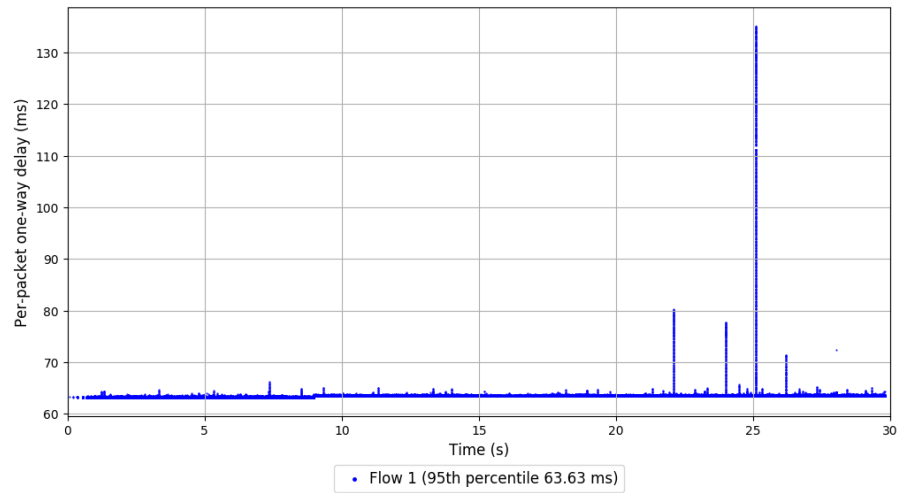
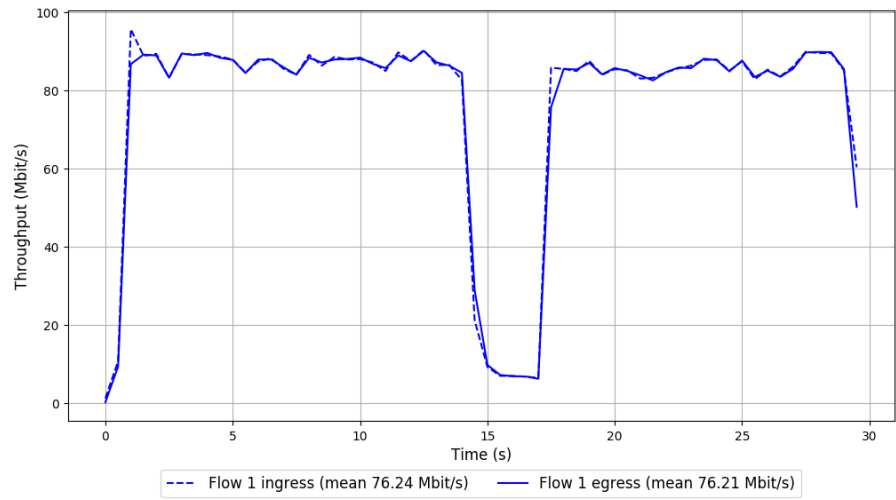
-- Flow 1:

Average throughput: 76.21 Mbit/s

95th percentile per-packet one-way delay: 63.627 ms

Loss rate: 0.46%

Run 10: Report of QUIC Cubic — Data Link

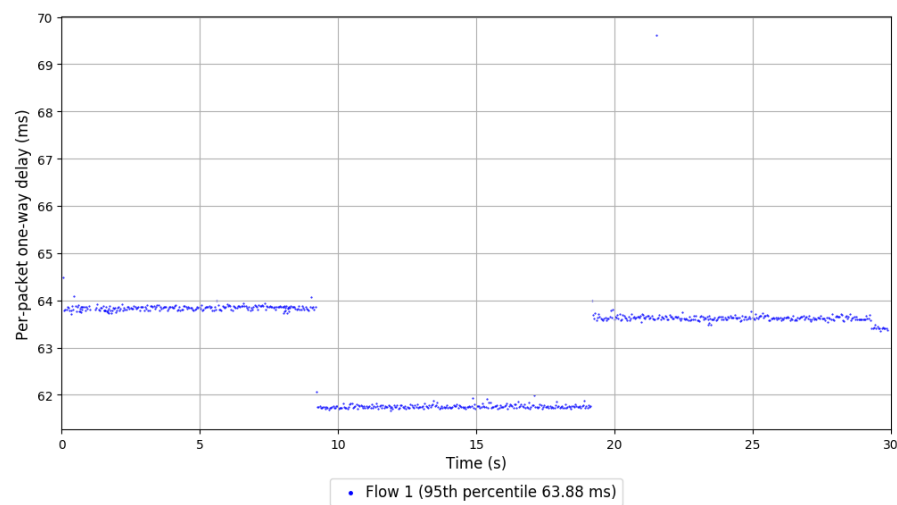
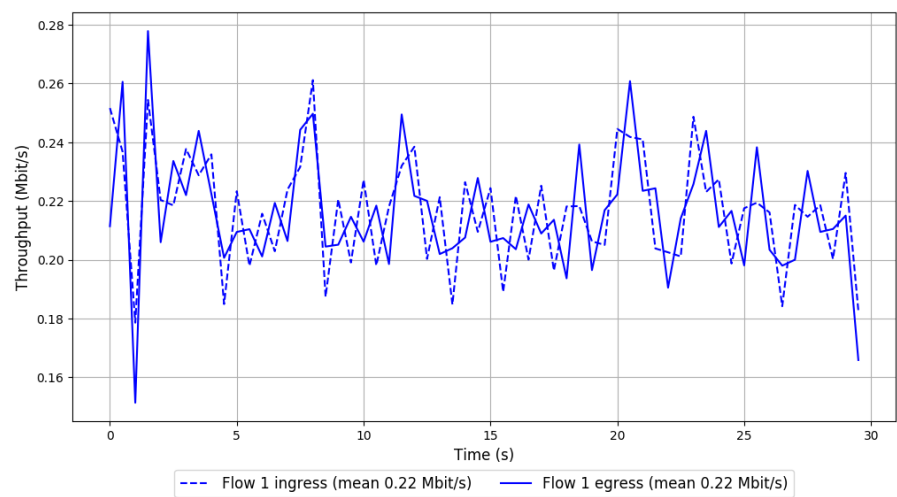


```
Run 1: Statistics of SCReAM

Start at: 2017-11-16 06:20:06
End at: 2017-11-16 06:20:36

# Below is generated by plot.py at 2017-11-16 10:09:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.880 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.880 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2017-11-16 06:30:35

End at: 2017-11-16 06:31:05

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.827 ms

Loss rate: 0.38%

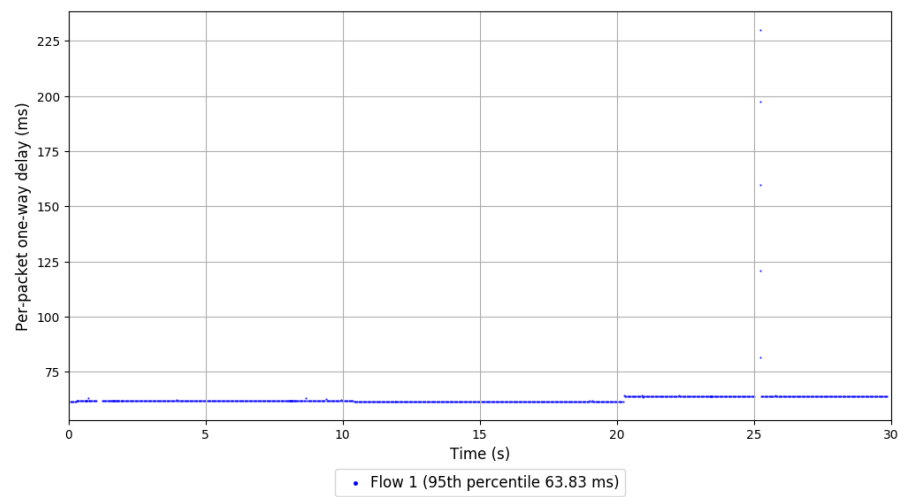
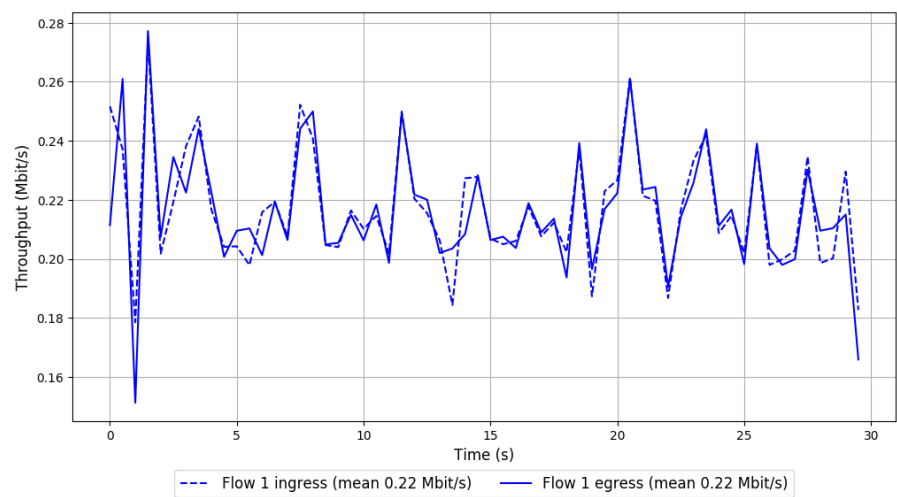
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.827 ms

Loss rate: 0.38%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-11-16 06:41:12

End at: 2017-11-16 06:41:42

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.634 ms

Loss rate: 0.38%

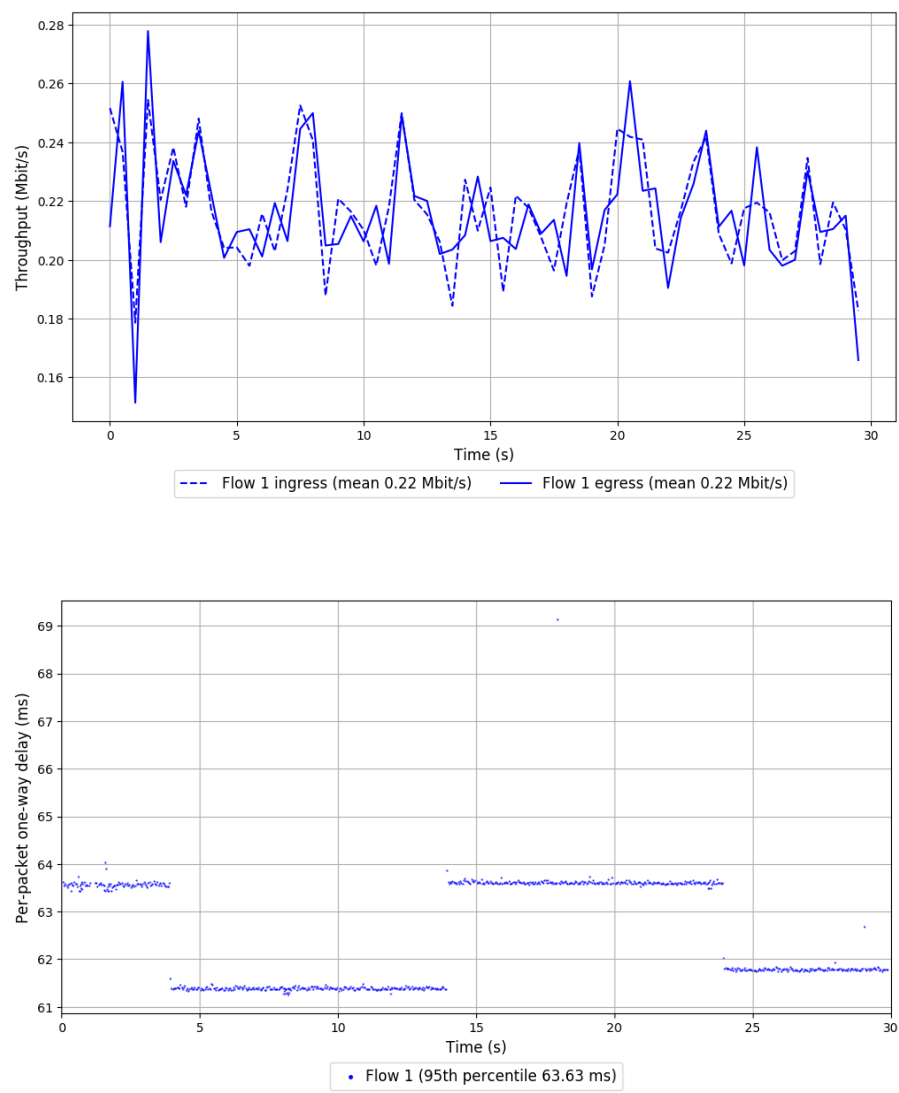
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.634 ms

Loss rate: 0.38%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-11-16 06:51:52

End at: 2017-11-16 06:52:22

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.796 ms

Loss rate: 0.38%

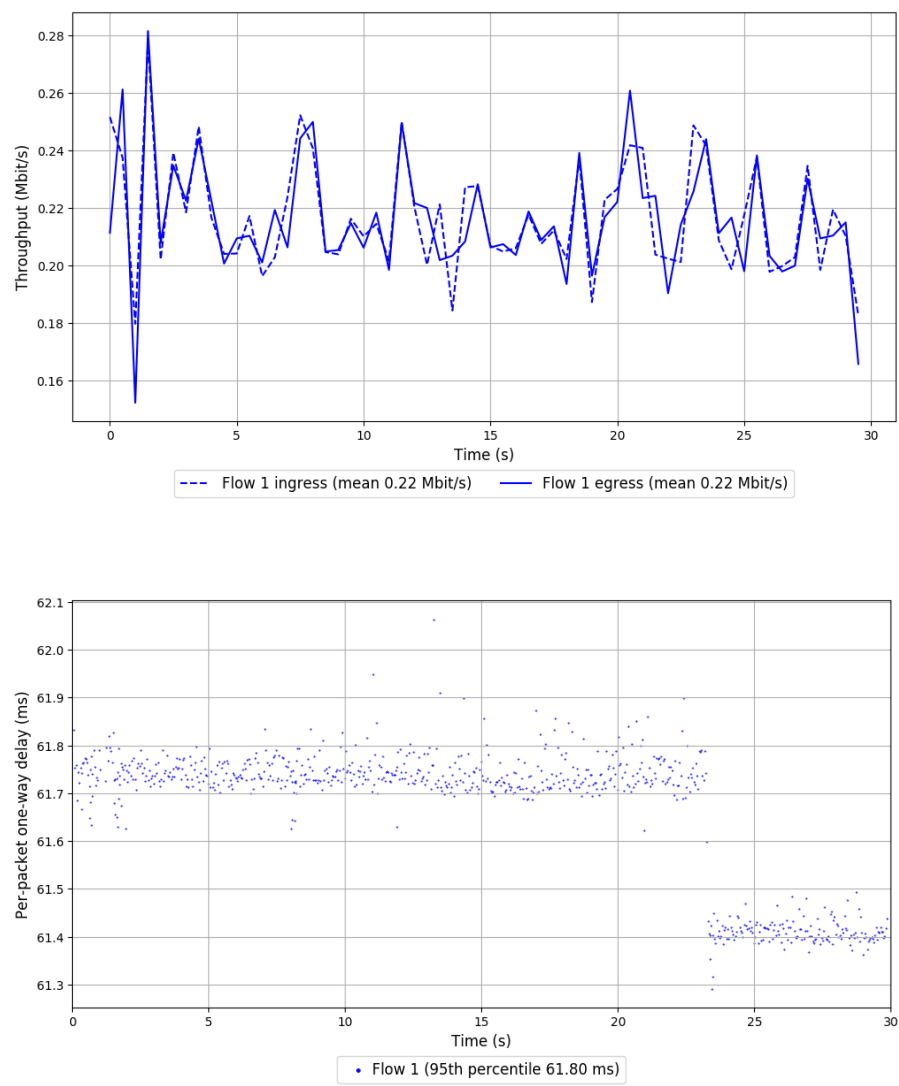
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.796 ms

Loss rate: 0.38%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-11-16 07:02:24

End at: 2017-11-16 07:02:54

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.567 ms

Loss rate: 0.38%

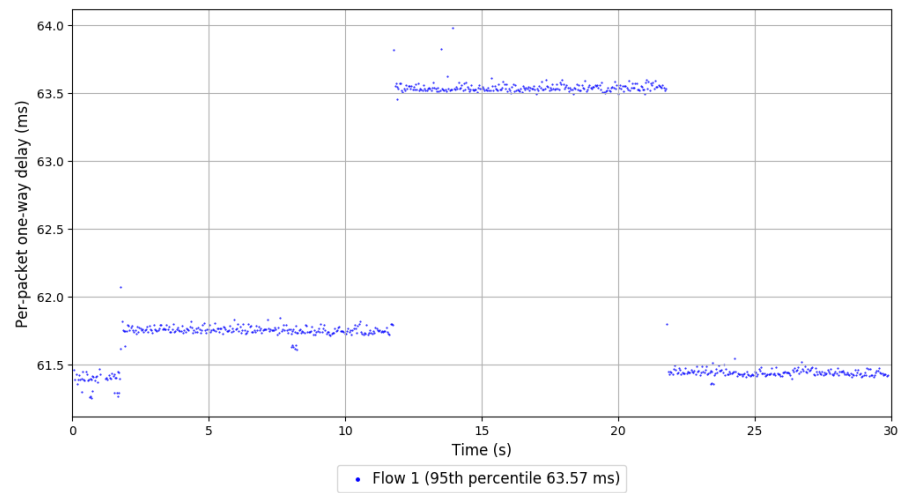
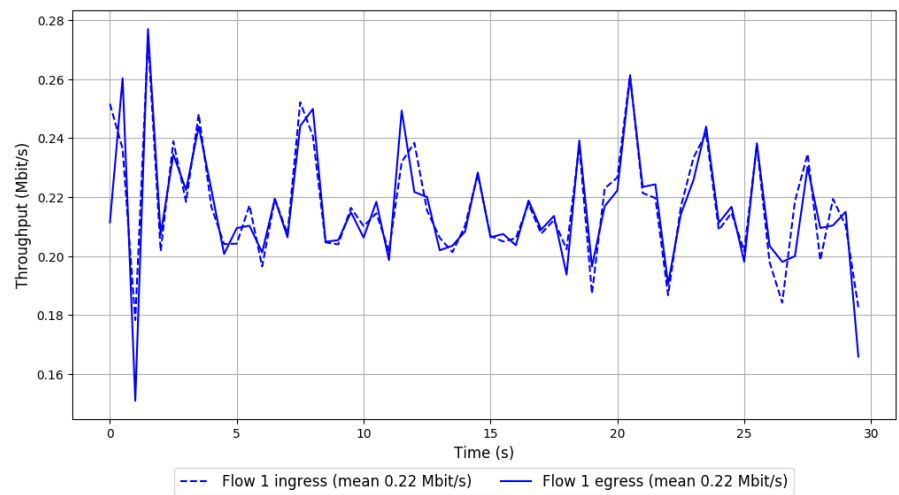
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.567 ms

Loss rate: 0.38%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

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

End at: 2017-11-16 07:13:27

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.889 ms

Loss rate: 0.38%

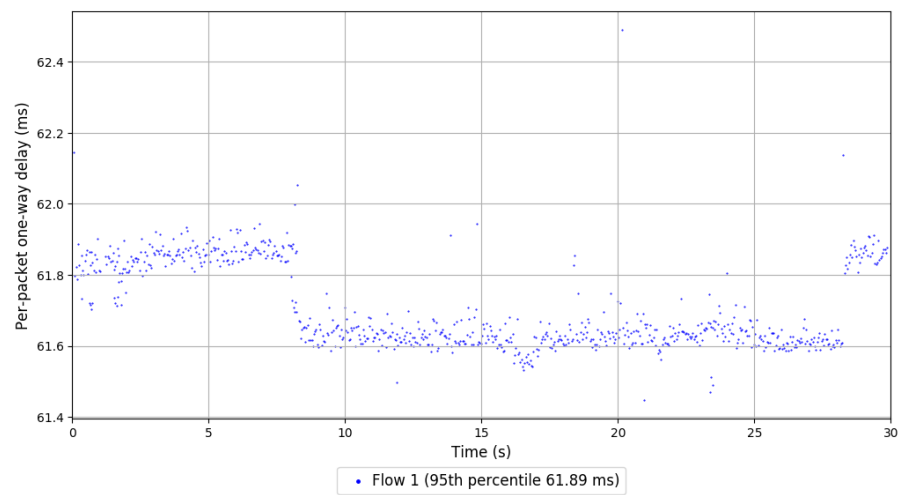
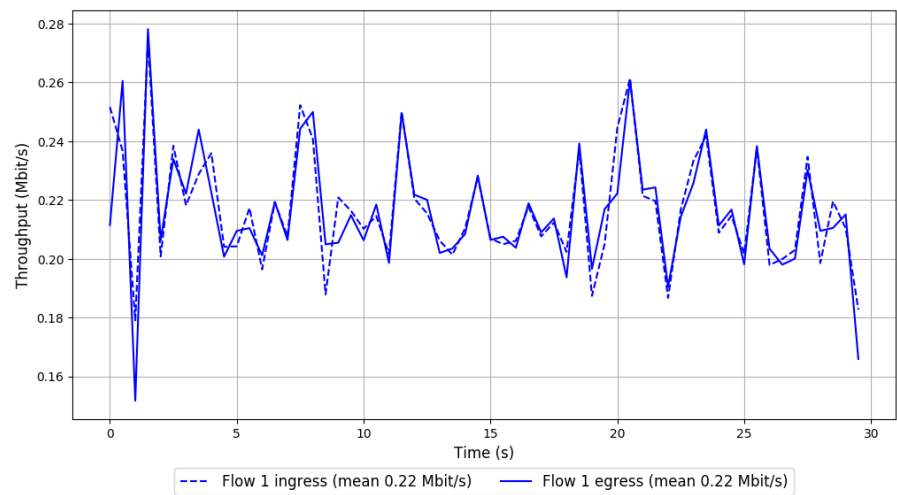
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.889 ms

Loss rate: 0.38%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-11-16 07:23:28

End at: 2017-11-16 07:23:58

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.598 ms

Loss rate: 0.38%

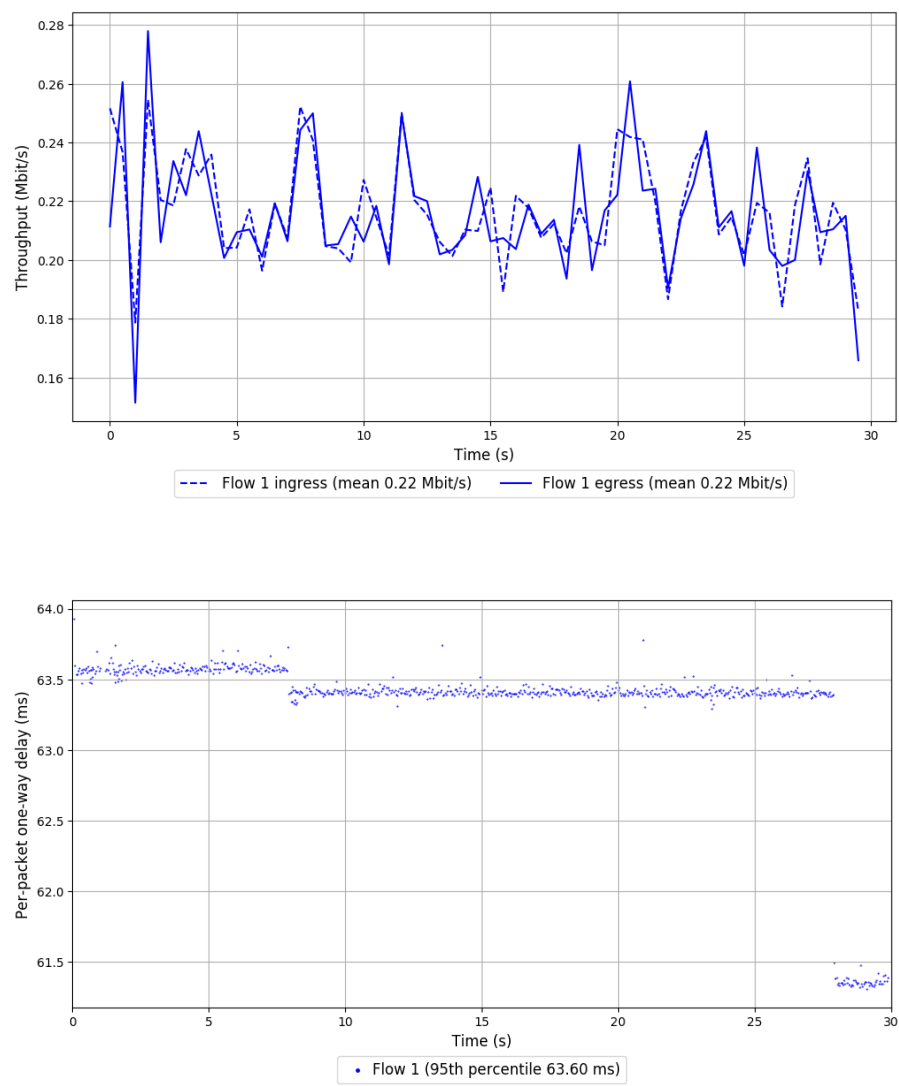
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.598 ms

Loss rate: 0.38%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-11-16 07:34:08

End at: 2017-11-16 07:34:38

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.903 ms

Loss rate: 0.38%

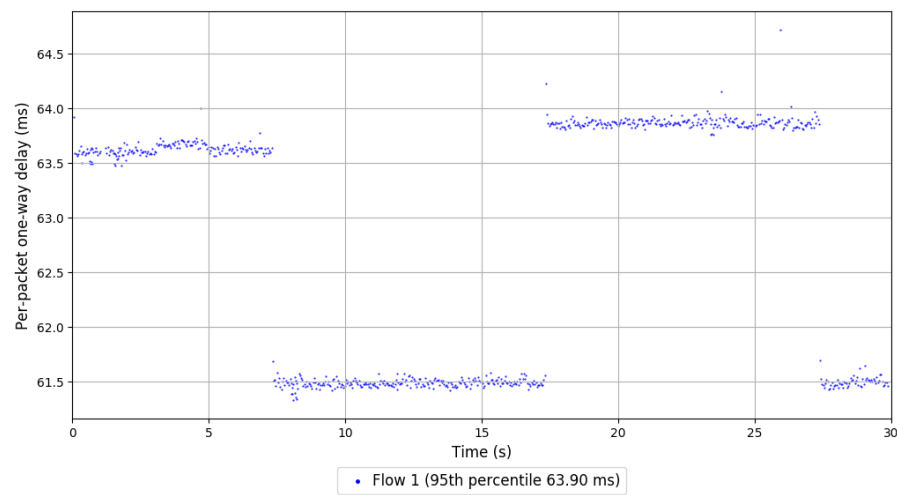
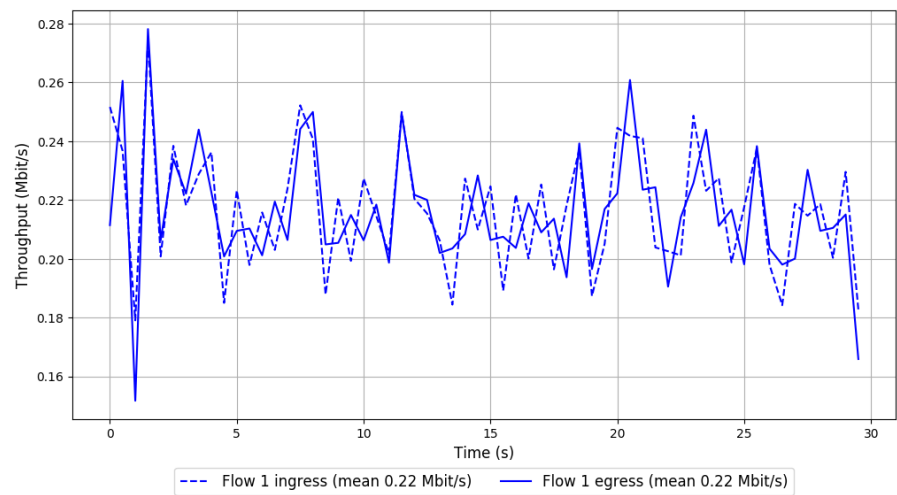
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.903 ms

Loss rate: 0.38%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-11-16 07:44:29

End at: 2017-11-16 07:44:59

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.702 ms

Loss rate: 0.38%

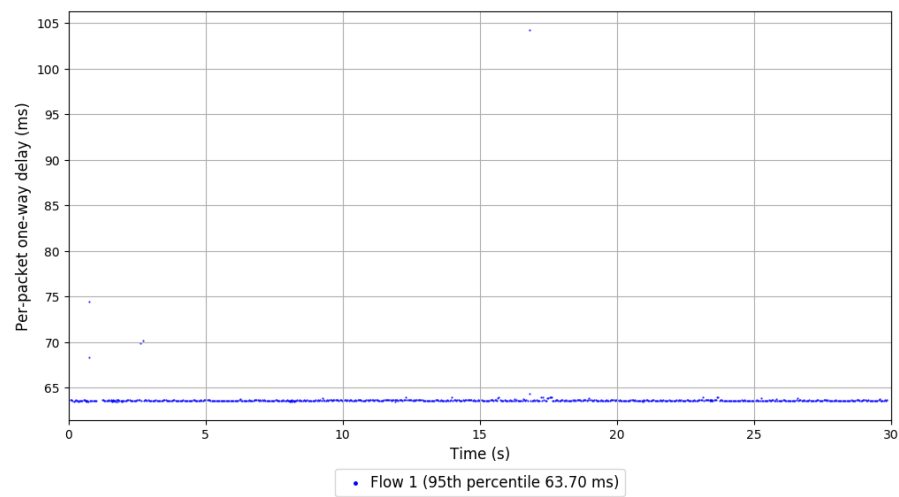
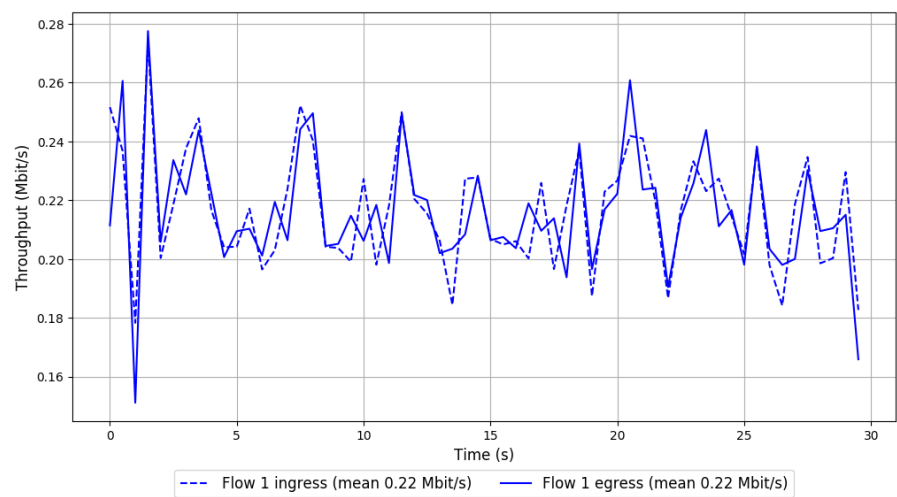
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.702 ms

Loss rate: 0.38%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

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

End at: 2017-11-16 07:55:46

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.855 ms

Loss rate: 0.38%

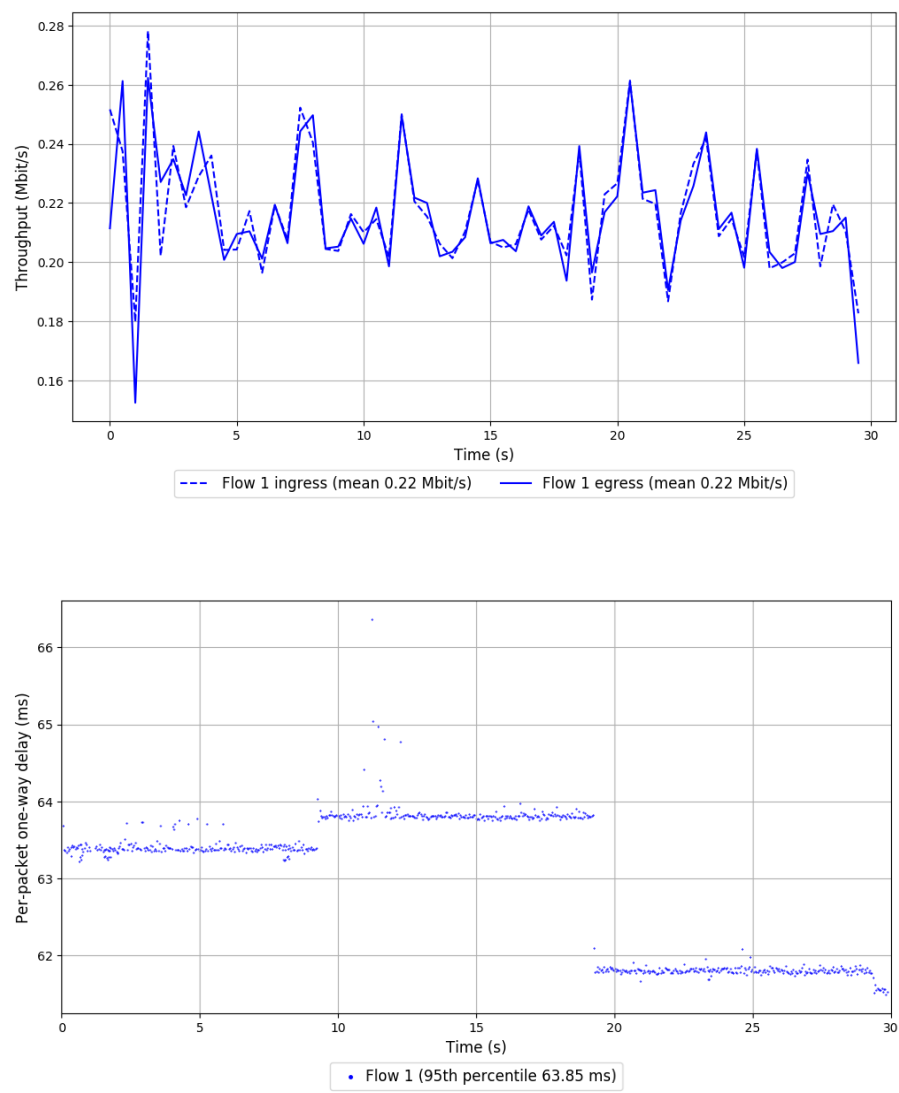
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.855 ms

Loss rate: 0.38%

Run 10: Report of SCRaM — Data Link

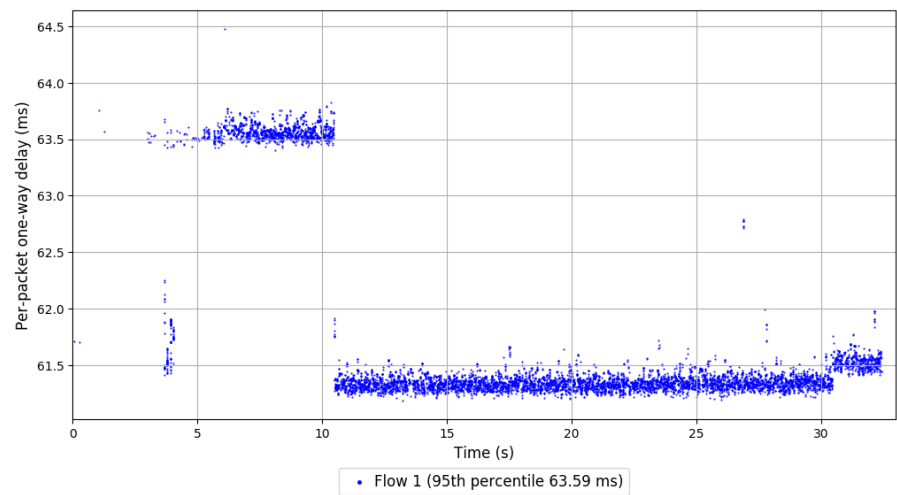
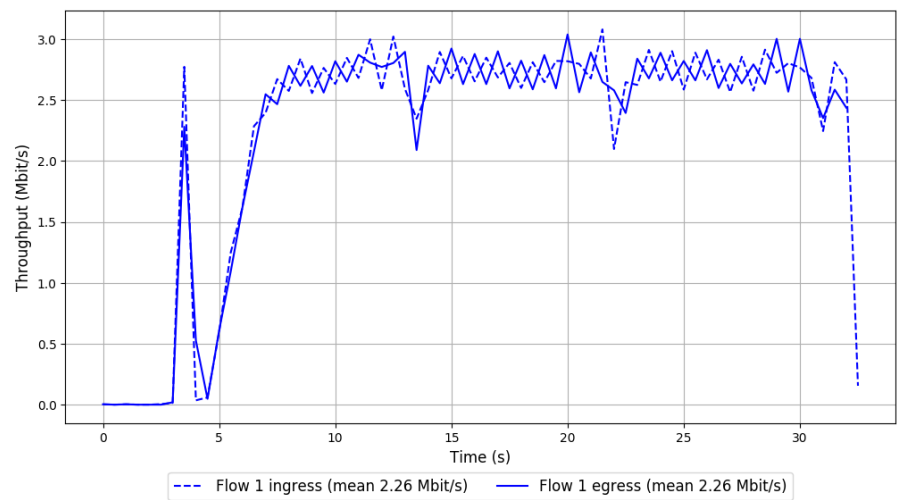


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-16 06:12:58
End at: 2017-11-16 06:13:28

# Below is generated by plot.py at 2017-11-16 10:09:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 63.588 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 63.588 ms
Loss rate: 0.56%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-16 06:23:34

End at: 2017-11-16 06:24:04

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 63.847 ms

Loss rate: 0.39%

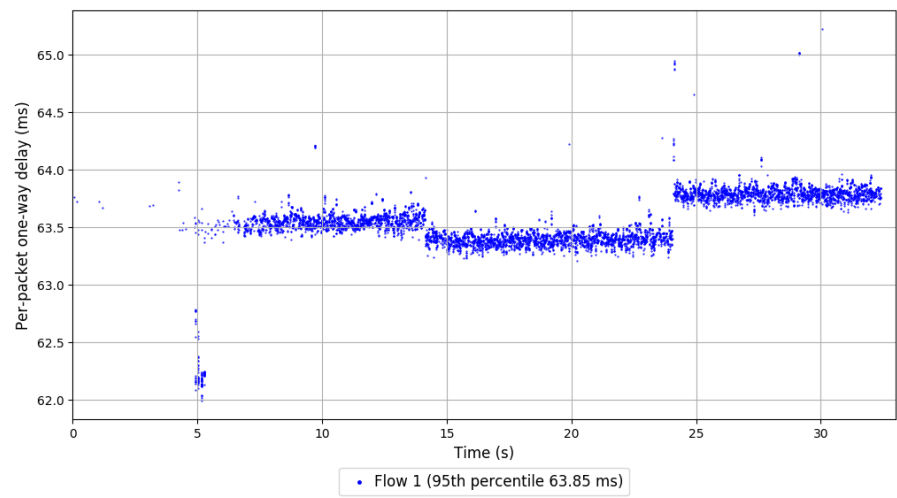
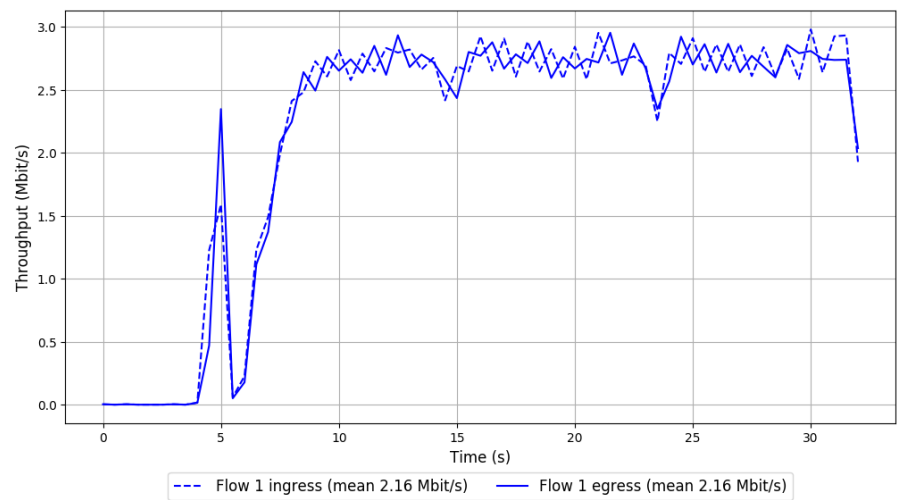
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 63.847 ms

Loss rate: 0.39%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-16 06:34:08

End at: 2017-11-16 06:34:38

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 63.876 ms

Loss rate: 0.46%

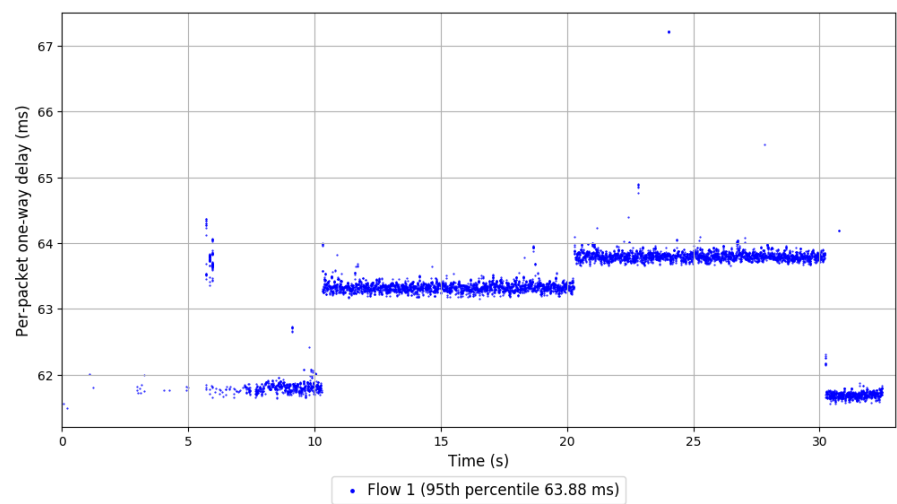
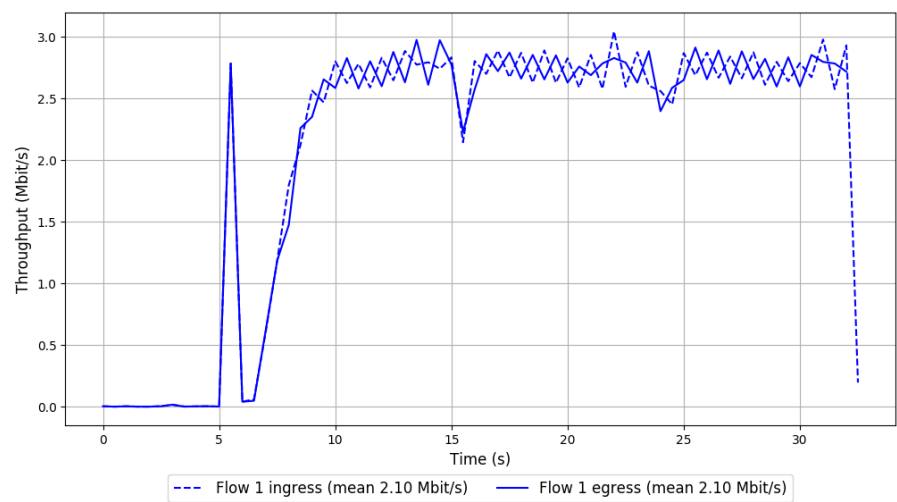
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 63.876 ms

Loss rate: 0.46%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-16 06:44:50

End at: 2017-11-16 06:45:20

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 64.074 ms

Loss rate: 0.45%

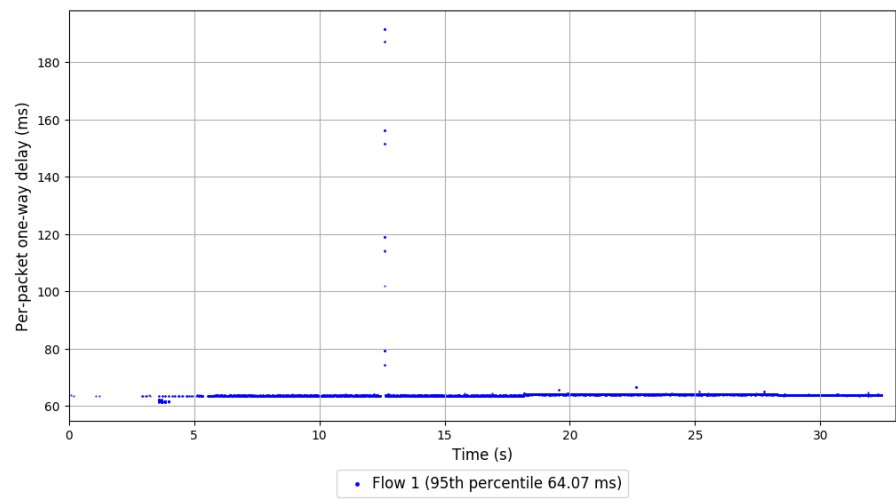
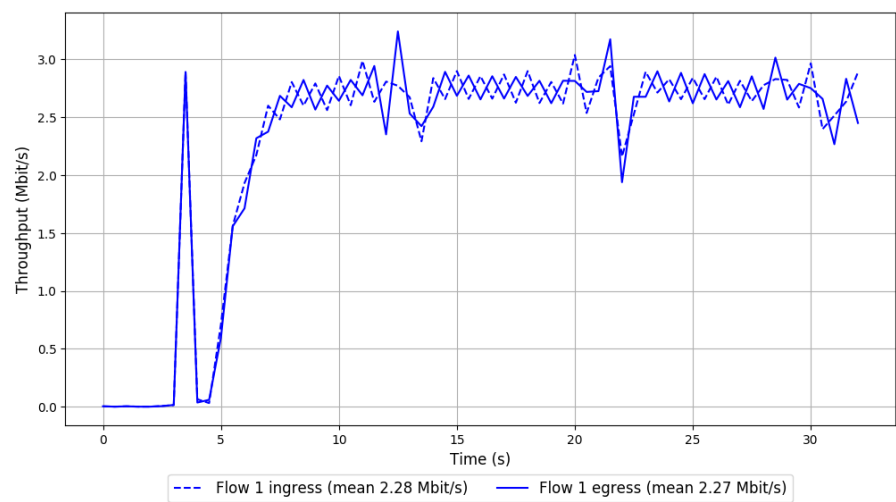
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 64.074 ms

Loss rate: 0.45%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-16 06:55:21

End at: 2017-11-16 06:55:51

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 63.671 ms

Loss rate: 0.44%

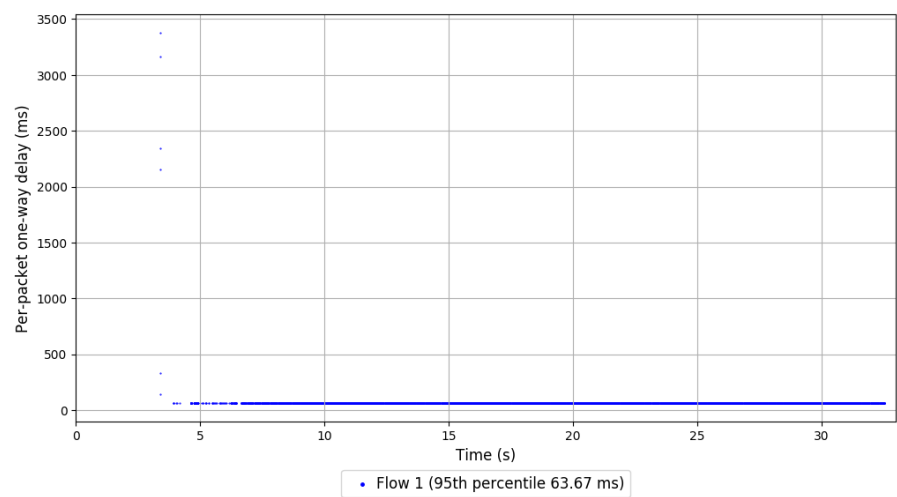
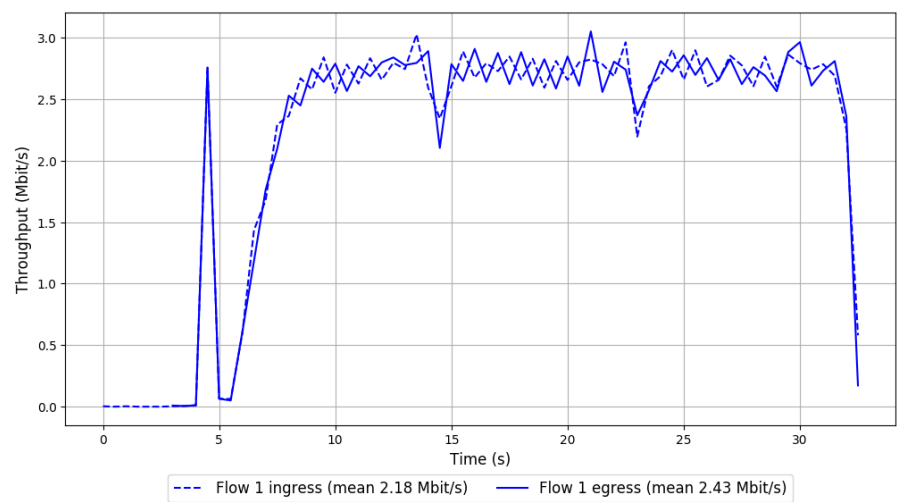
-- Flow 1:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 63.671 ms

Loss rate: 0.44%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-16 07:05:59

End at: 2017-11-16 07:06:29

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.785 ms

Loss rate: 0.46%

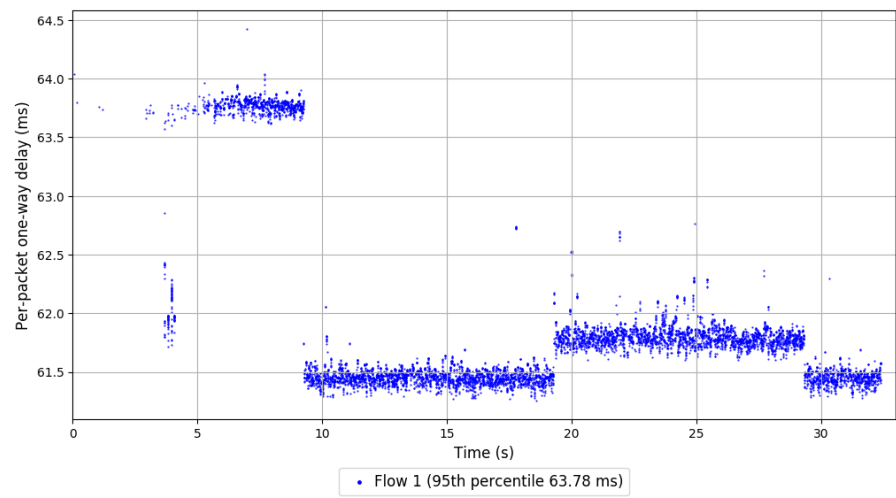
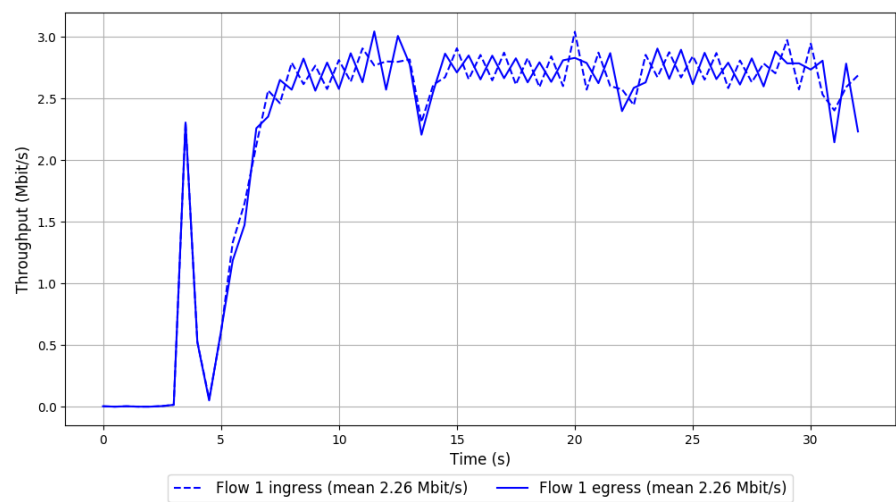
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.785 ms

Loss rate: 0.46%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-16 07:16:28

End at: 2017-11-16 07:16:58

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 63.829 ms

Loss rate: 0.46%

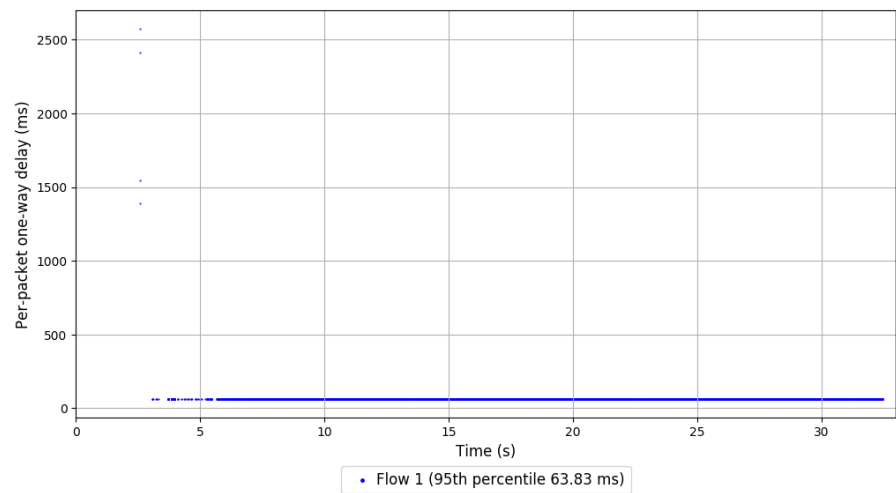
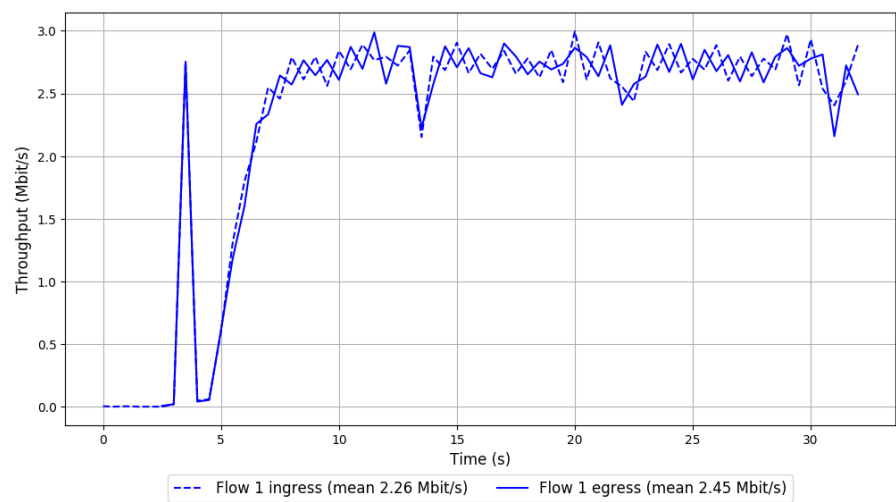
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 63.829 ms

Loss rate: 0.46%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-16 07:26:57

End at: 2017-11-16 07:27:27

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 63.831 ms

Loss rate: 0.45%

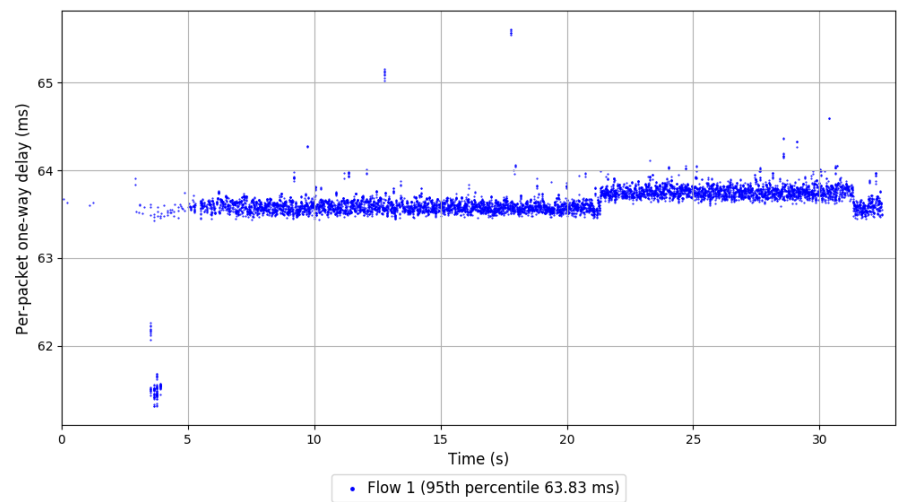
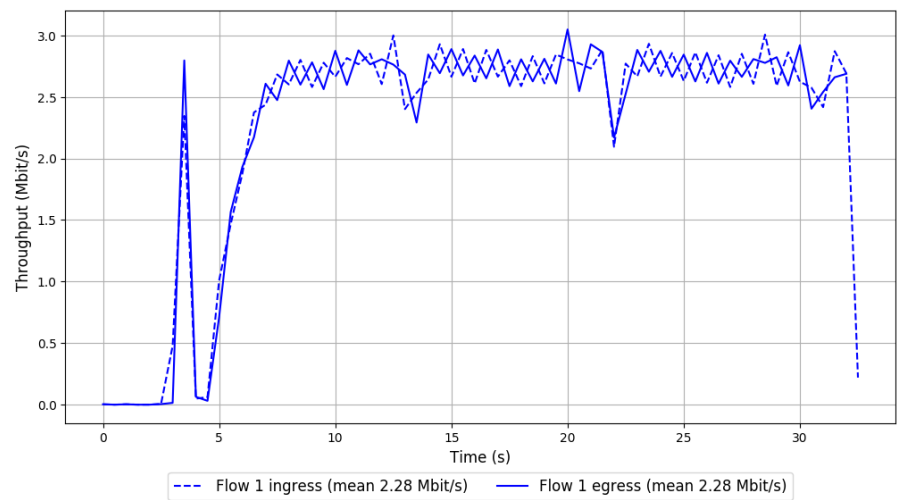
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 63.831 ms

Loss rate: 0.45%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-16 07:37:41

End at: 2017-11-16 07:38:11

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 63.841 ms

Loss rate: 0.56%

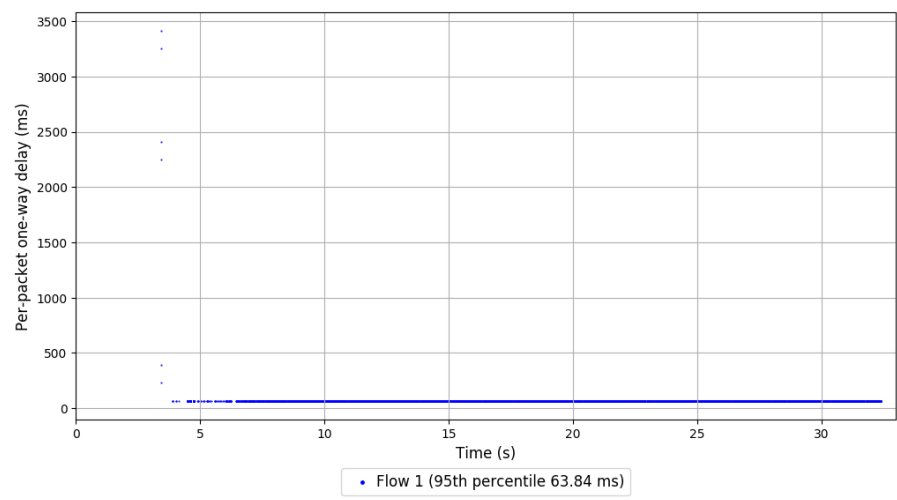
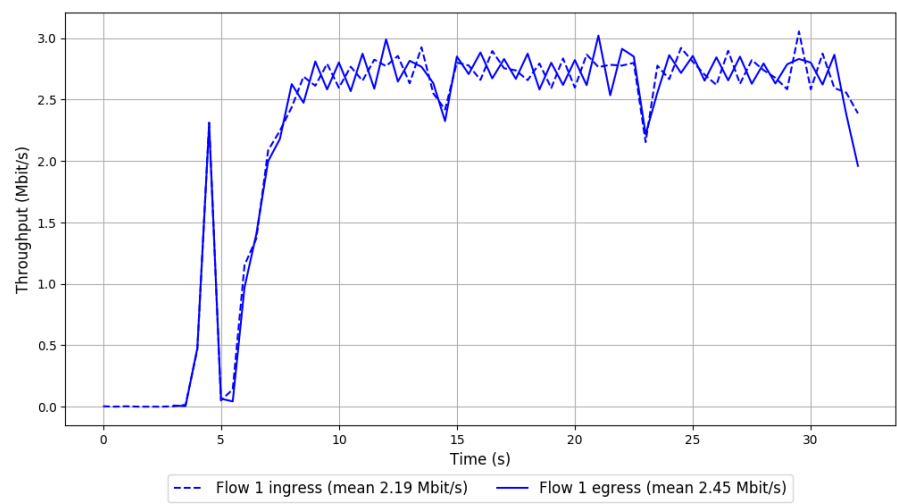
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 63.841 ms

Loss rate: 0.56%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-16 07:48:02

End at: 2017-11-16 07:48:32

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 64.077 ms

Loss rate: 0.45%

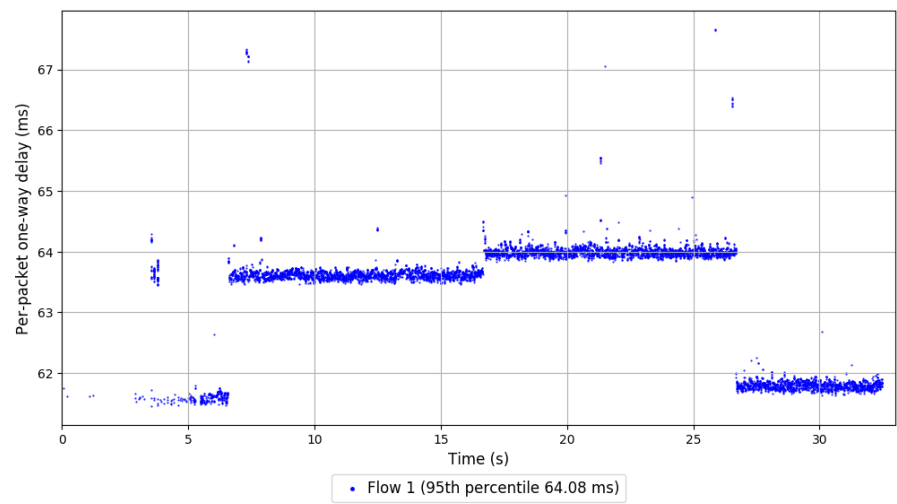
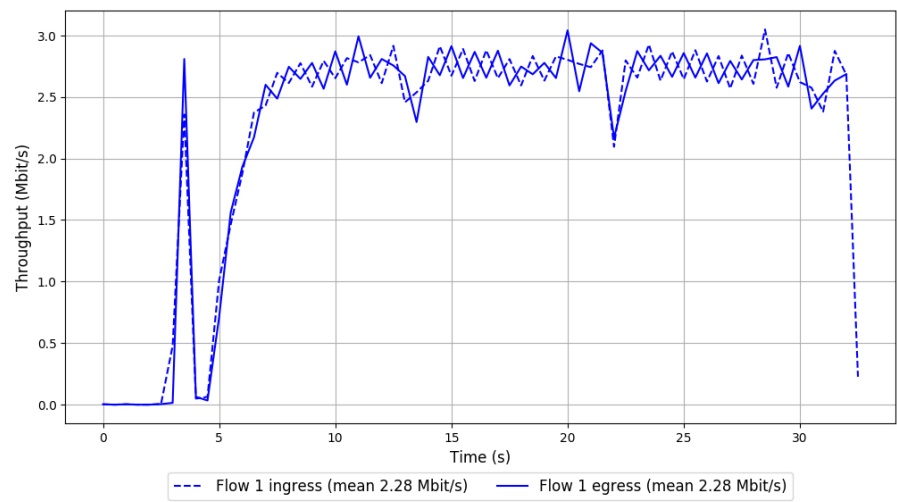
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 64.077 ms

Loss rate: 0.45%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-11-16 06:20:44

End at: 2017-11-16 06:21:14

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.71 Mbit/s

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

Loss rate: 0.45%

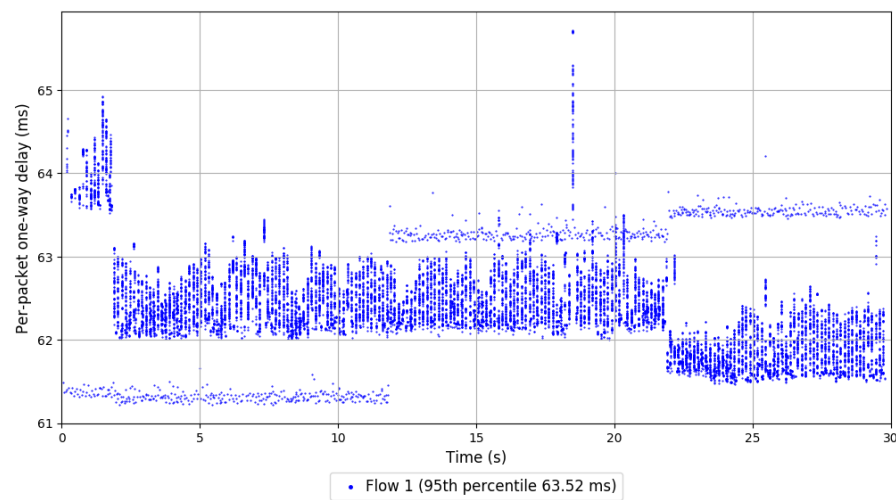
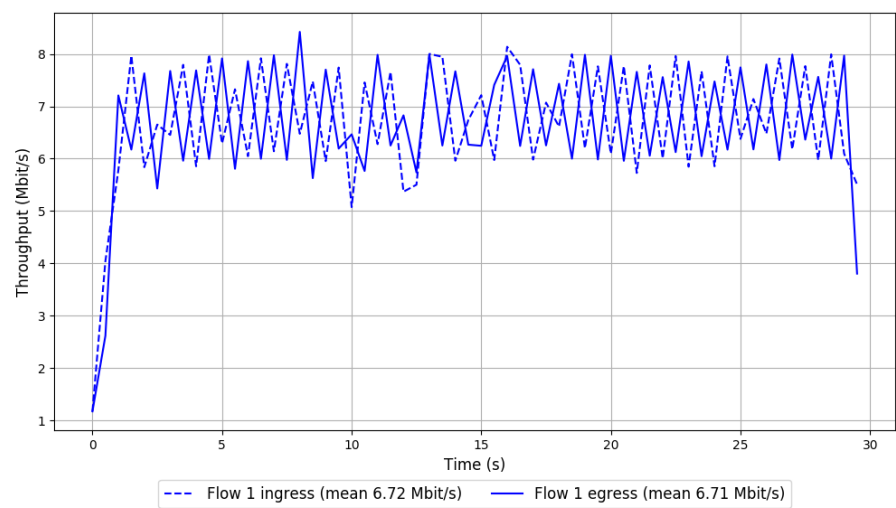
-- Flow 1:

Average throughput: 6.71 Mbit/s

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

Loss rate: 0.45%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-16 06:31:13

End at: 2017-11-16 06:31:43

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 64.191 ms

Loss rate: 0.72%

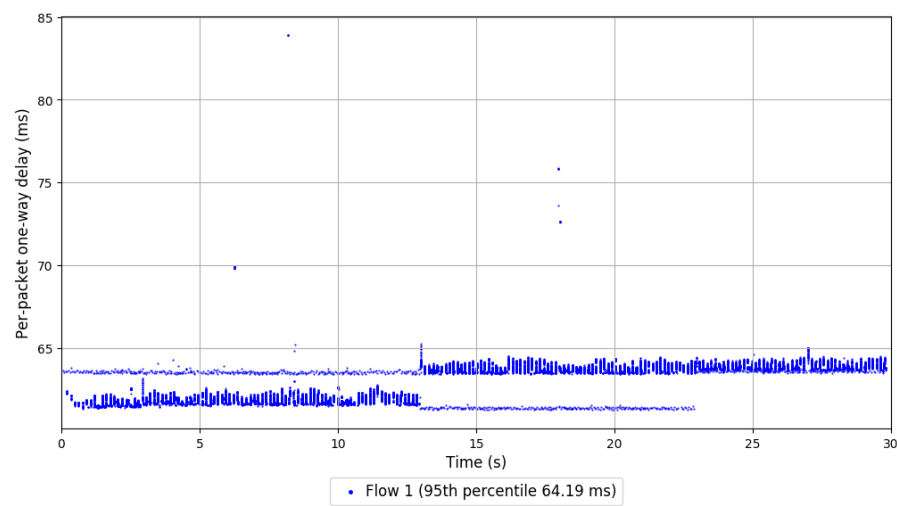
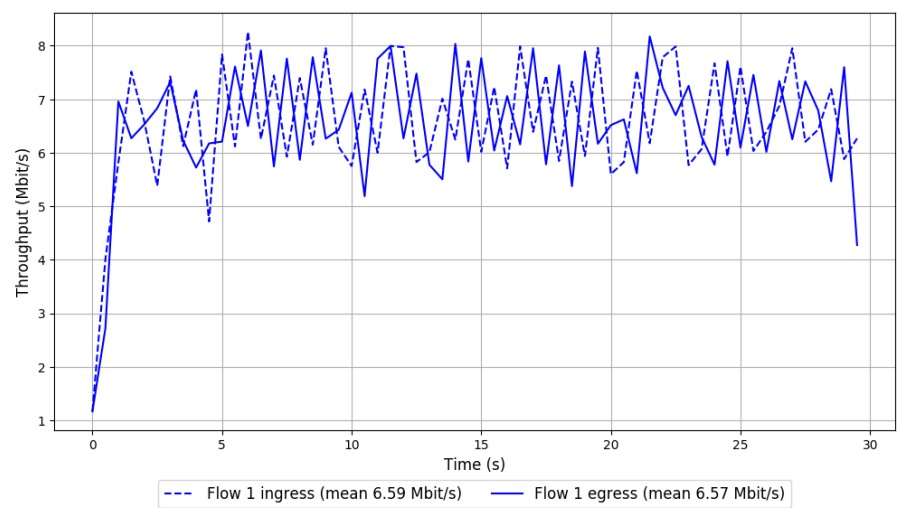
-- Flow 1:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 64.191 ms

Loss rate: 0.72%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-16 06:41:49

End at: 2017-11-16 06:42:19

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.68 Mbit/s

95th percentile per-packet one-way delay: 64.261 ms

Loss rate: 0.50%

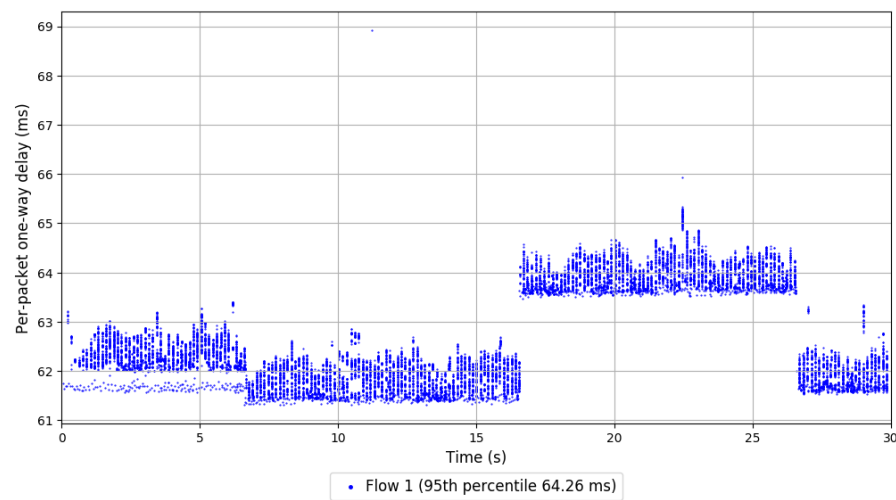
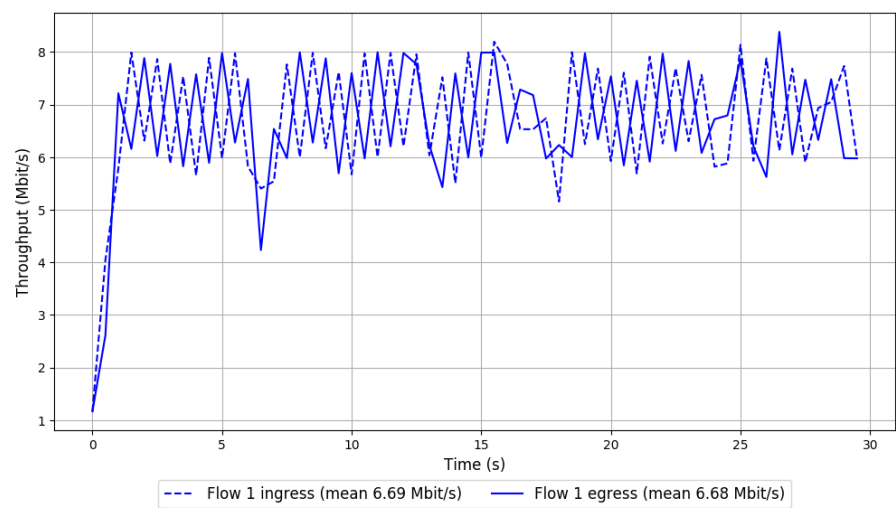
-- Flow 1:

Average throughput: 6.68 Mbit/s

95th percentile per-packet one-way delay: 64.261 ms

Loss rate: 0.50%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-16 06:52:30

End at: 2017-11-16 06:53:00

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 63.935 ms

Loss rate: 0.68%

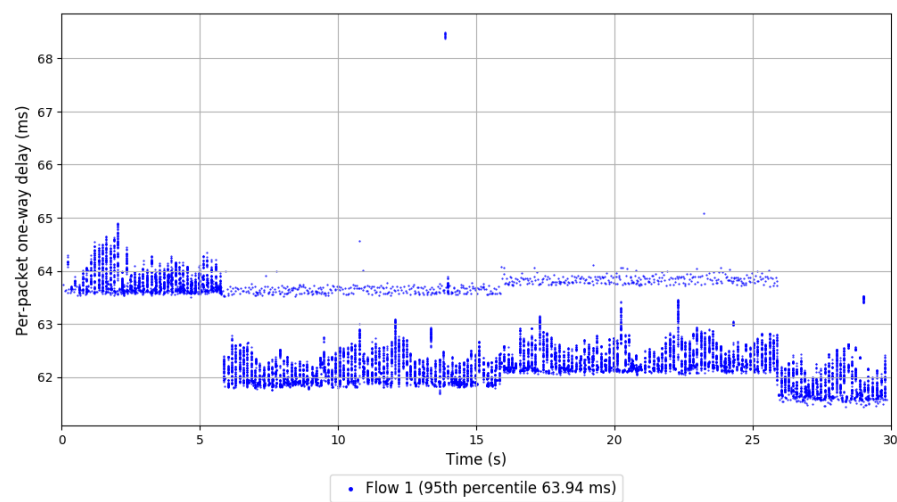
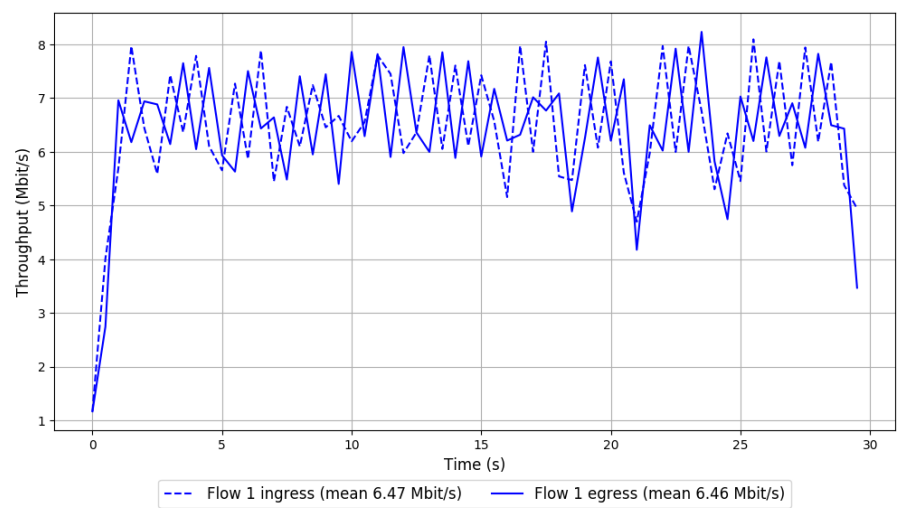
-- Flow 1:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 63.935 ms

Loss rate: 0.68%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-16 07:03:01

End at: 2017-11-16 07:03:31

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 64.485 ms

Loss rate: 0.65%

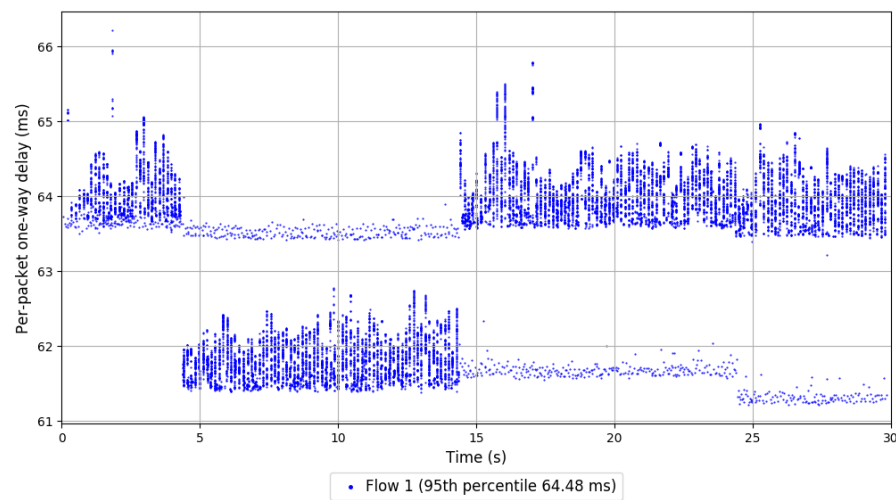
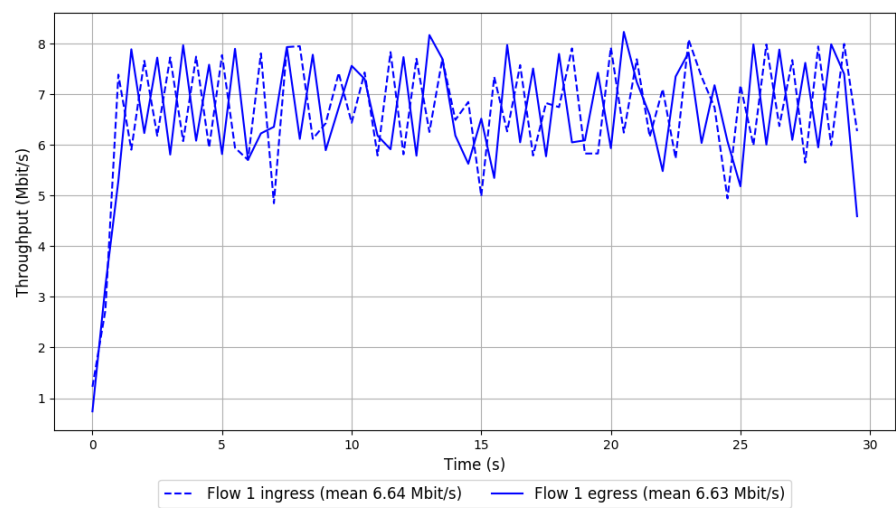
-- Flow 1:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 64.485 ms

Loss rate: 0.65%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-16 07:13:35

End at: 2017-11-16 07:14:05

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 64.145 ms

Loss rate: 0.75%

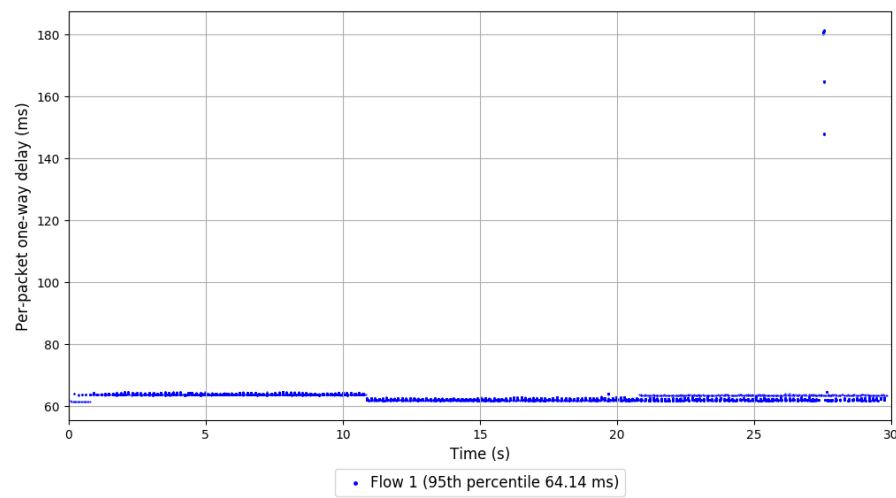
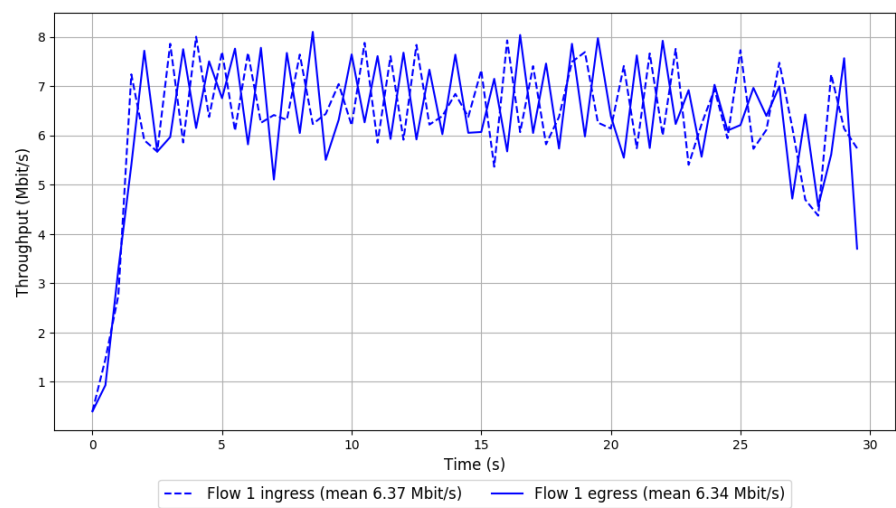
-- Flow 1:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 64.145 ms

Loss rate: 0.75%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-16 07:24:05

End at: 2017-11-16 07:24:35

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 64.303 ms

Loss rate: 0.49%

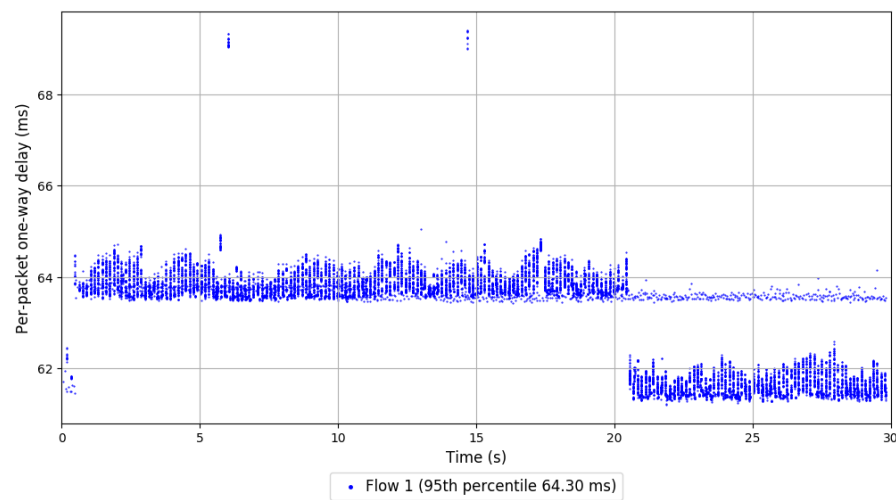
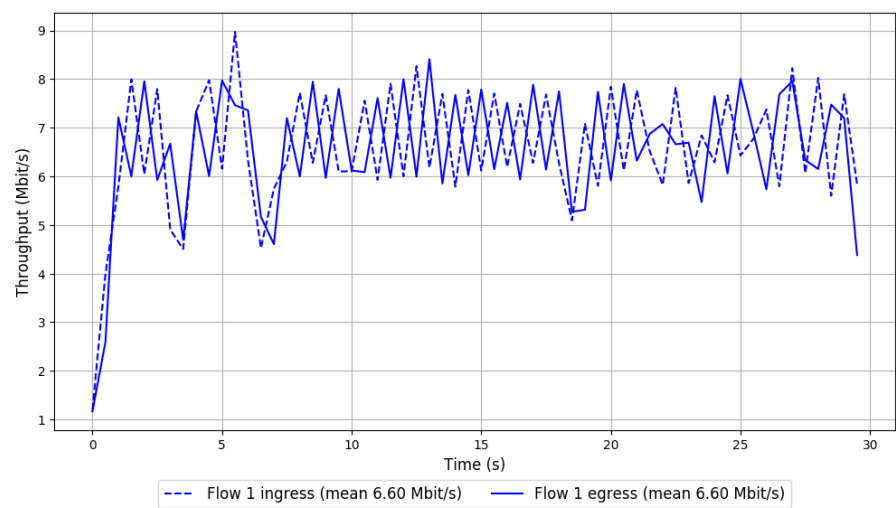
-- Flow 1:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 64.303 ms

Loss rate: 0.49%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-16 07:34:46

End at: 2017-11-16 07:35:16

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 64.328 ms

Loss rate: 0.52%

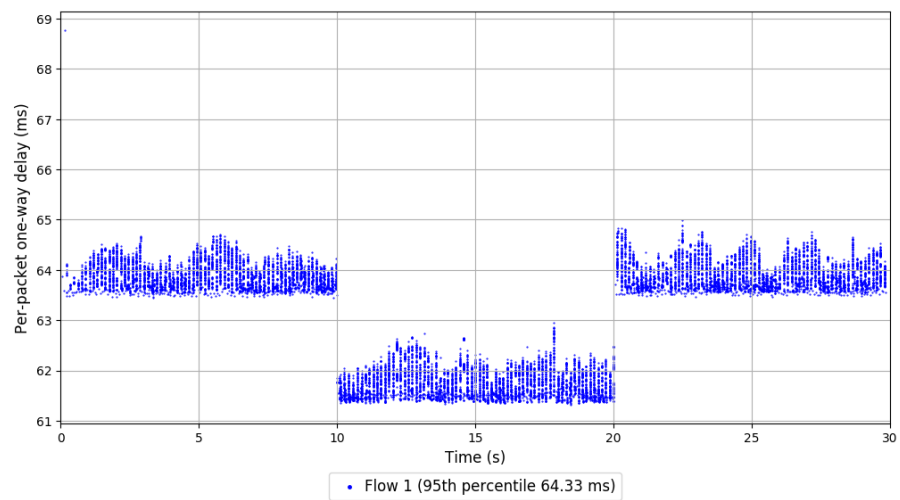
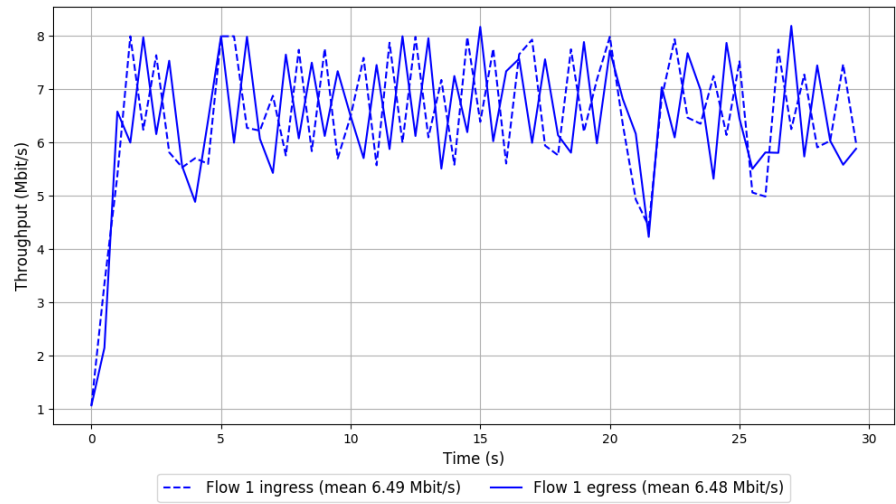
-- Flow 1:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 64.328 ms

Loss rate: 0.52%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-16 07:45:06

End at: 2017-11-16 07:45:36

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 64.461 ms

Loss rate: 0.48%

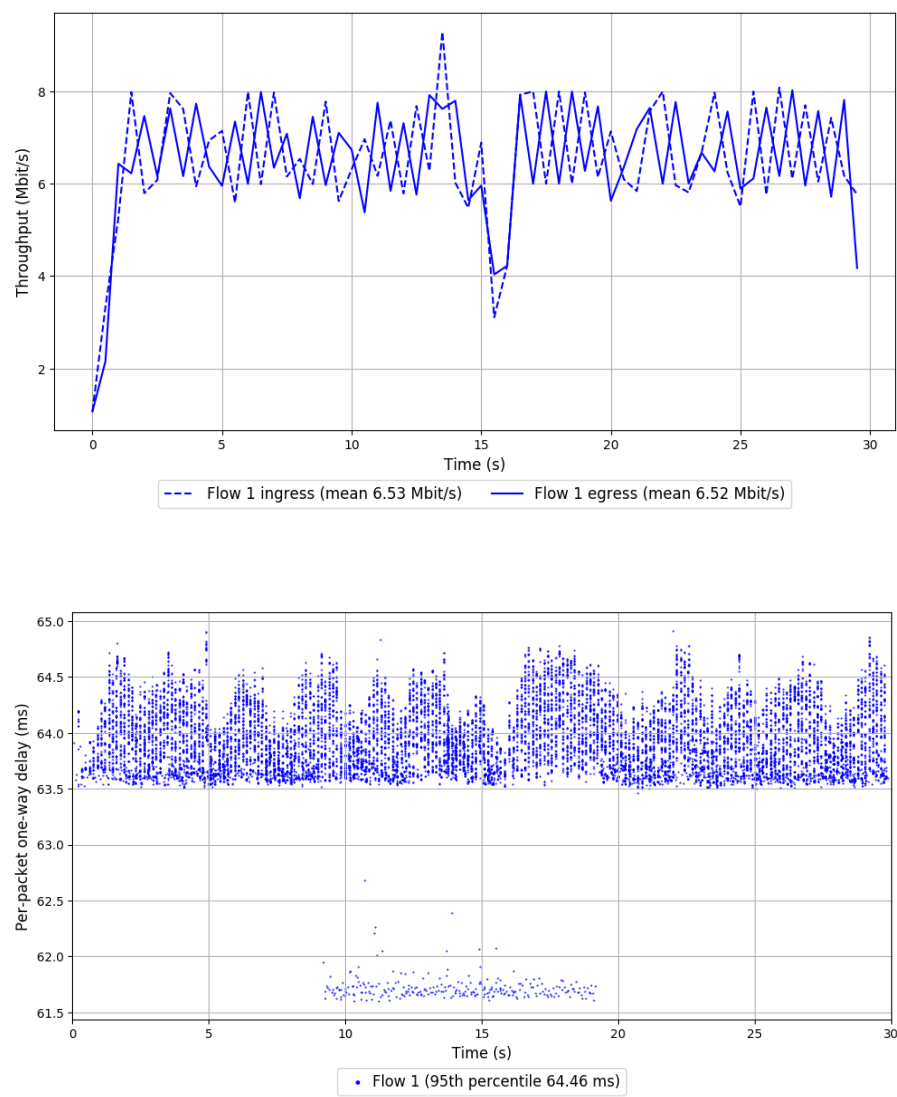
-- Flow 1:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 64.461 ms

Loss rate: 0.48%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-16 07:55:54

End at: 2017-11-16 07:56:24

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.44 Mbit/s

95th percentile per-packet one-way delay: 64.451 ms

Loss rate: 0.52%

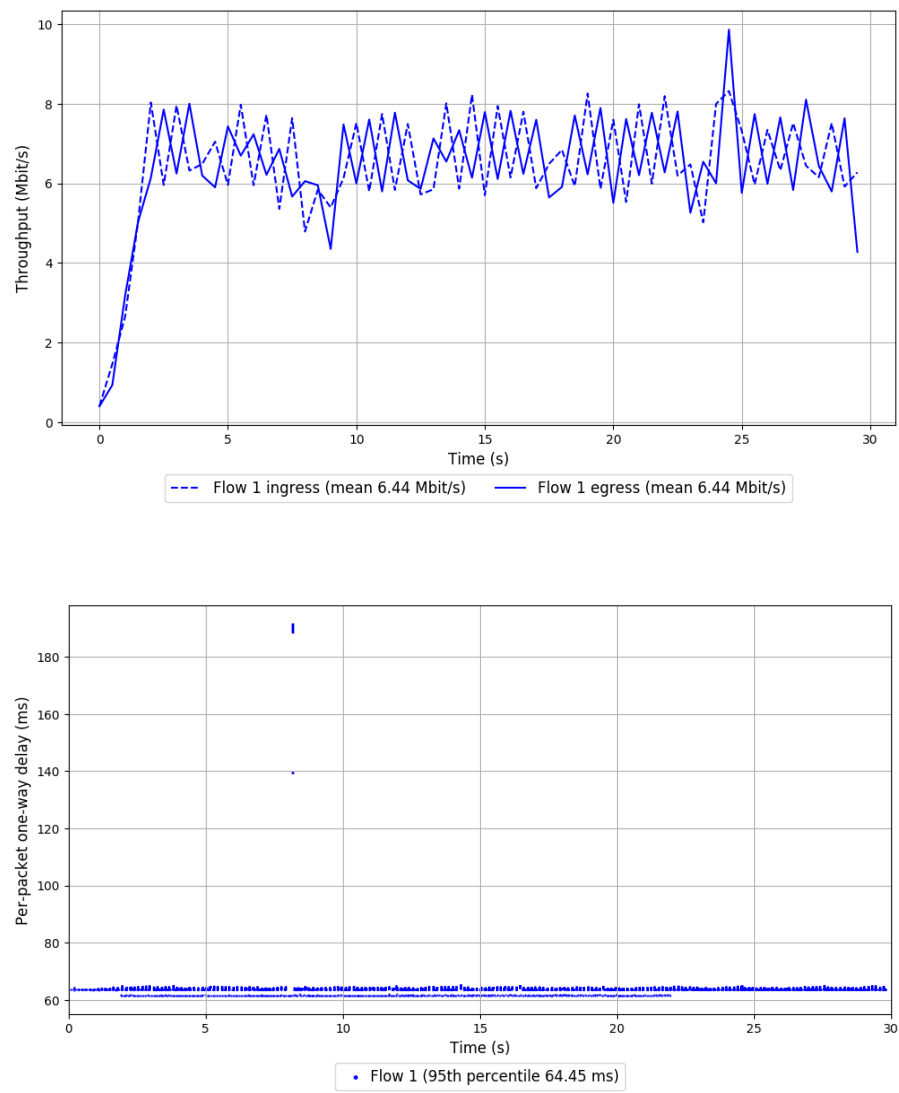
-- Flow 1:

Average throughput: 6.44 Mbit/s

95th percentile per-packet one-way delay: 64.451 ms

Loss rate: 0.52%

Run 10: Report of Sprout — Data Link

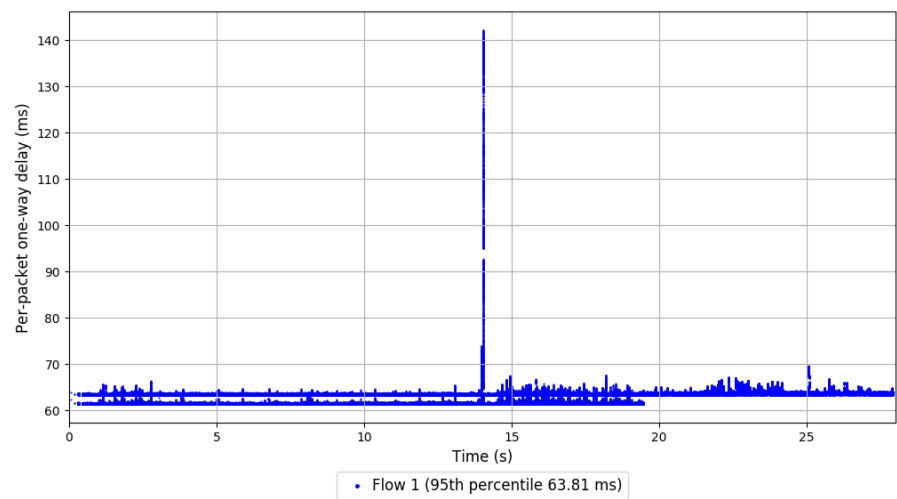
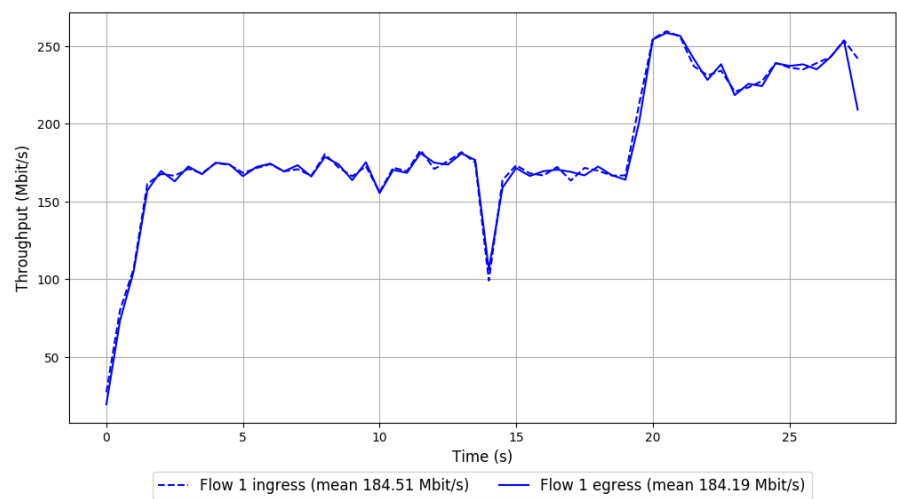


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-16 06:16:44
End at: 2017-11-16 06:17:14

# Below is generated by plot.py at 2017-11-16 10:09:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.19 Mbit/s
95th percentile per-packet one-way delay: 63.810 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 184.19 Mbit/s
95th percentile per-packet one-way delay: 63.810 ms
Loss rate: 0.62%
```

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

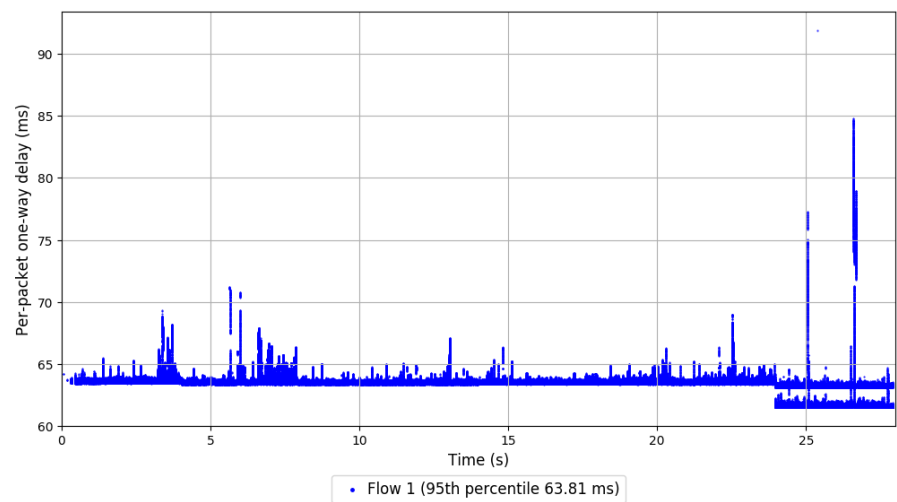
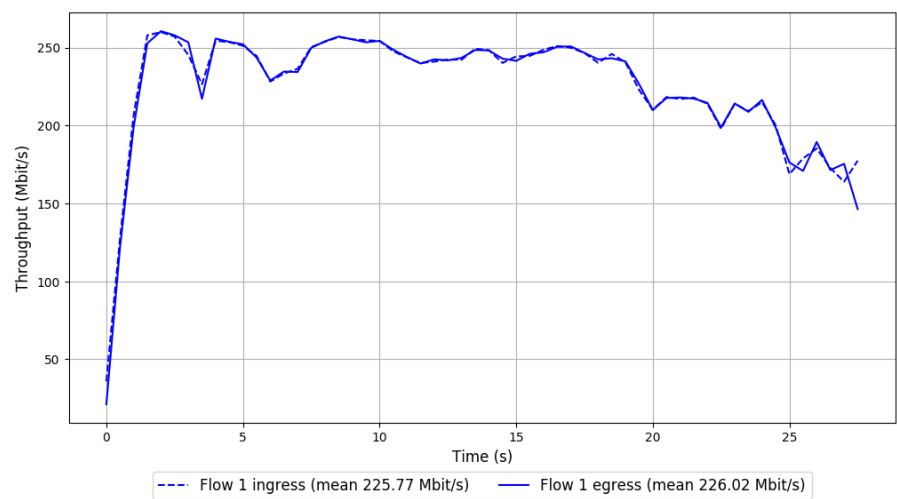


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-16 06:27:20
End at: 2017-11-16 06:27:50

# Below is generated by plot.py at 2017-11-16 10:09:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.02 Mbit/s
95th percentile per-packet one-way delay: 63.809 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 226.02 Mbit/s
95th percentile per-packet one-way delay: 63.809 ms
Loss rate: 0.35%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-16 06:37:52

End at: 2017-11-16 06:38:22

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 175.57 Mbit/s

95th percentile per-packet one-way delay: 63.525 ms

Loss rate: 0.60%

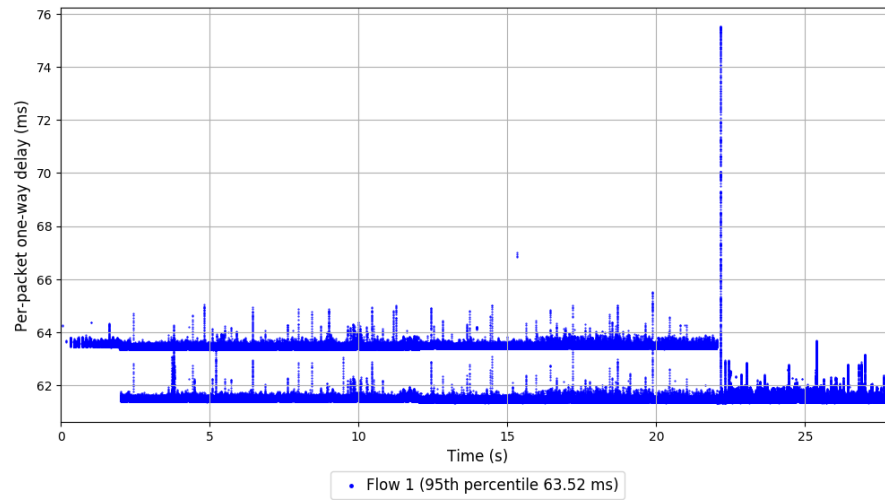
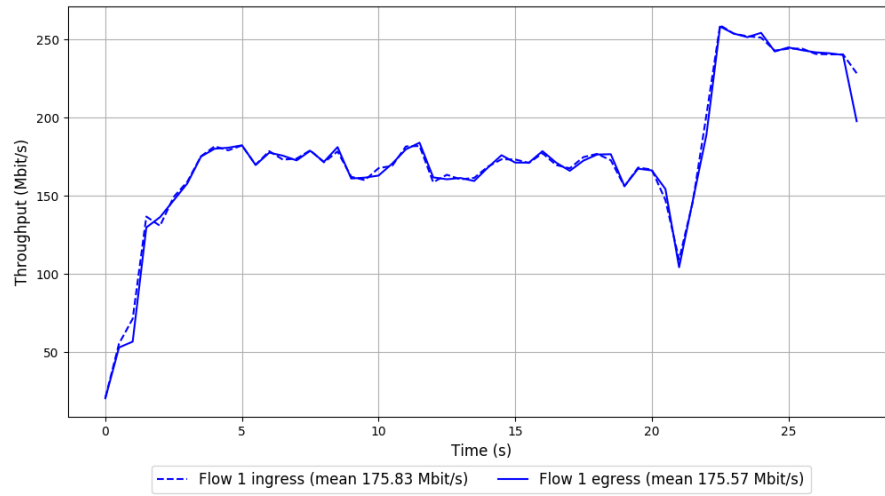
-- Flow 1:

Average throughput: 175.57 Mbit/s

95th percentile per-packet one-way delay: 63.525 ms

Loss rate: 0.60%

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

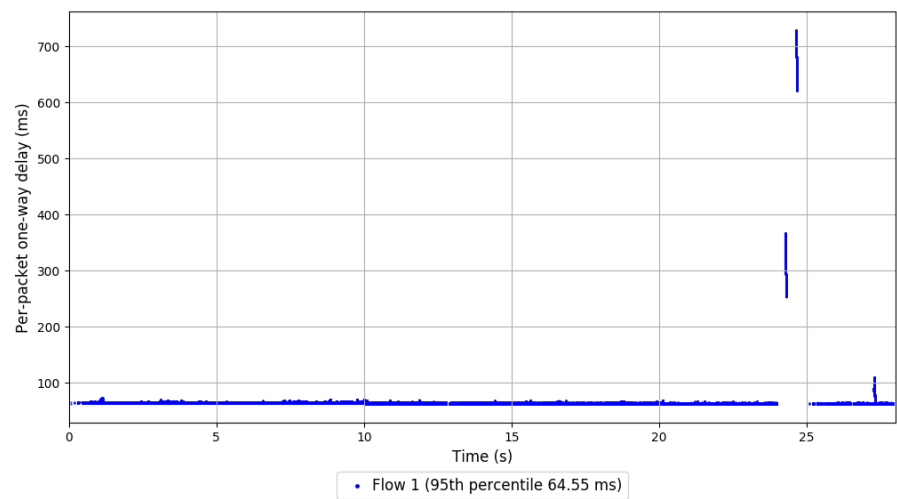
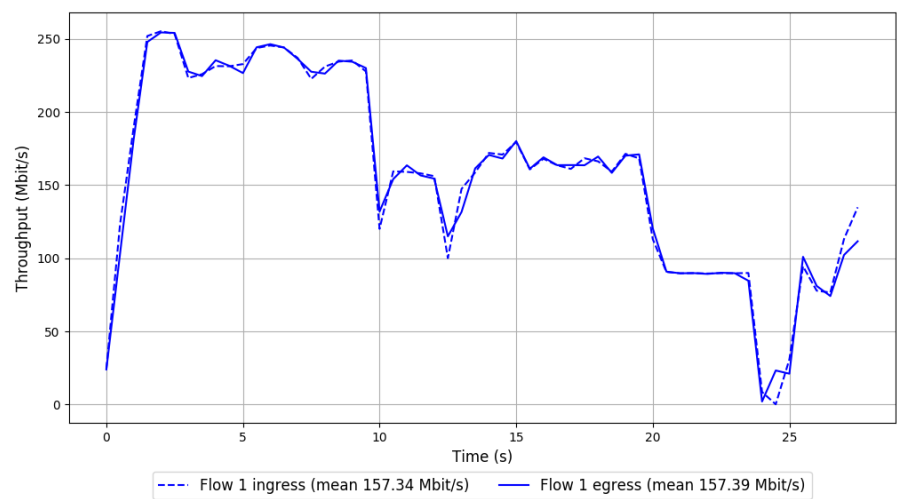


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-11-16 06:48:33
End at: 2017-11-16 06:49:04

# Below is generated by plot.py at 2017-11-16 10:09:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 157.39 Mbit/s
95th percentile per-packet one-way delay: 64.551 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 157.39 Mbit/s
95th percentile per-packet one-way delay: 64.551 ms
Loss rate: 0.42%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-16 06:59:05

End at: 2017-11-16 06:59:35

Below is generated by plot.py at 2017-11-16 10:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.35 Mbit/s

95th percentile per-packet one-way delay: 63.784 ms

Loss rate: 0.33%

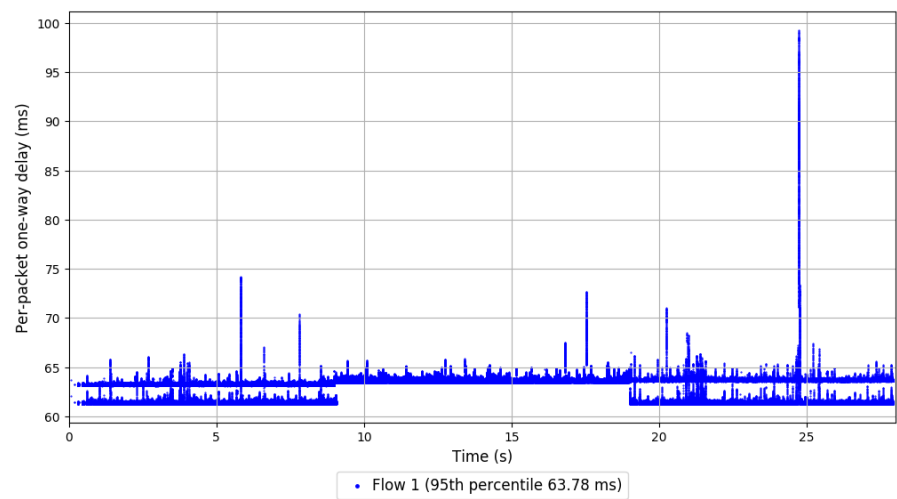
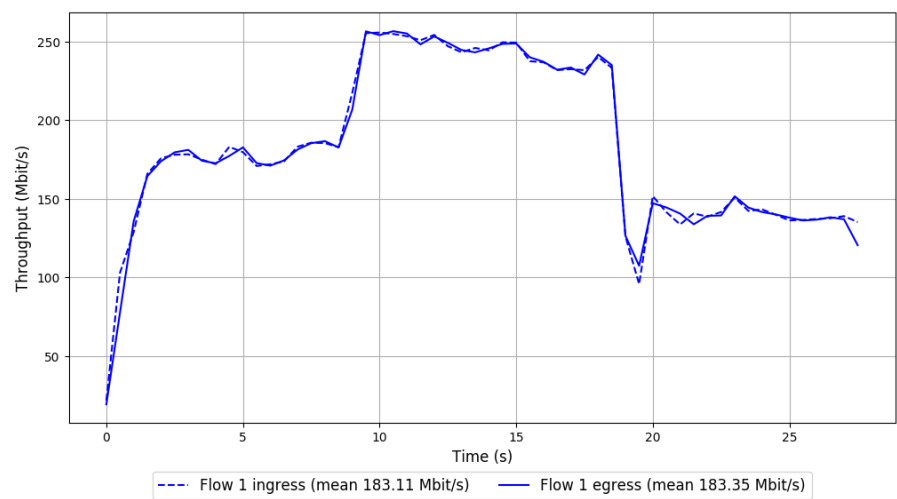
-- Flow 1:

Average throughput: 183.35 Mbit/s

95th percentile per-packet one-way delay: 63.784 ms

Loss rate: 0.33%

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

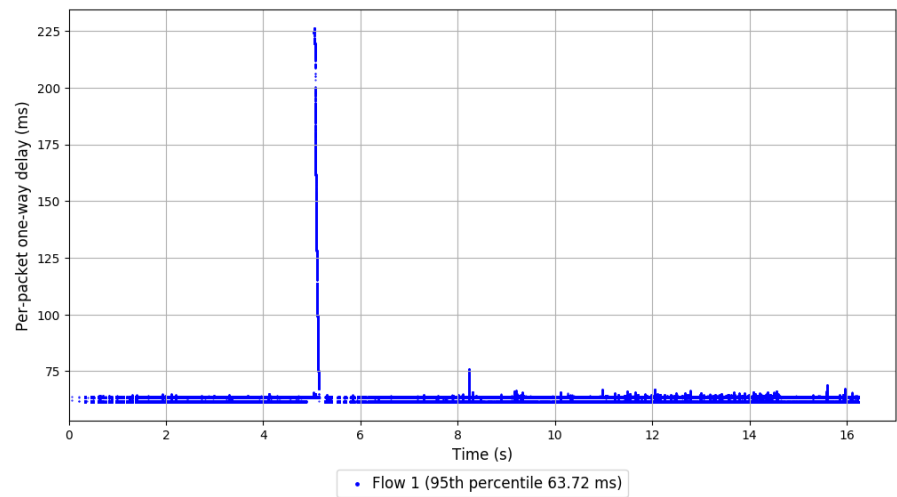
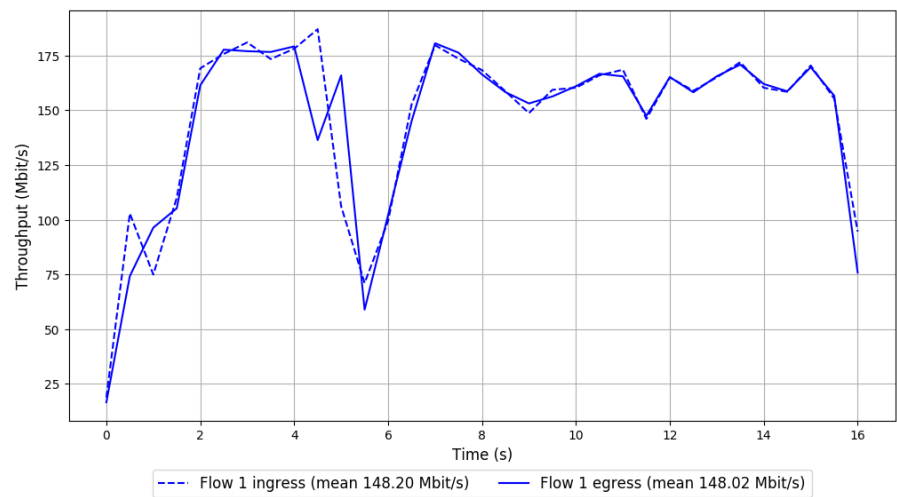


Run 6: Statistics of TaoVA-100x

Start at: 2017-11-16 07:09:44

End at: 2017-11-16 07:10:14

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-16 07:20:15

End at: 2017-11-16 07:20:45

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 207.79 Mbit/s

95th percentile per-packet one-way delay: 64.675 ms

Loss rate: 0.37%

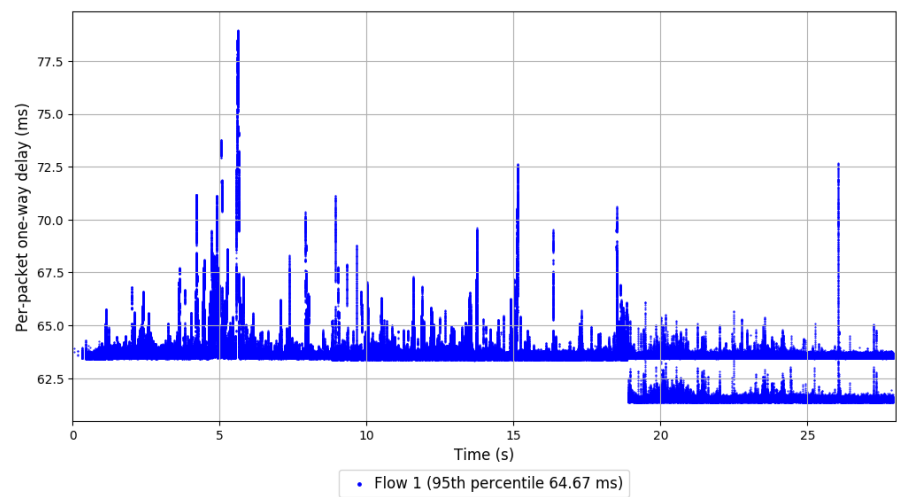
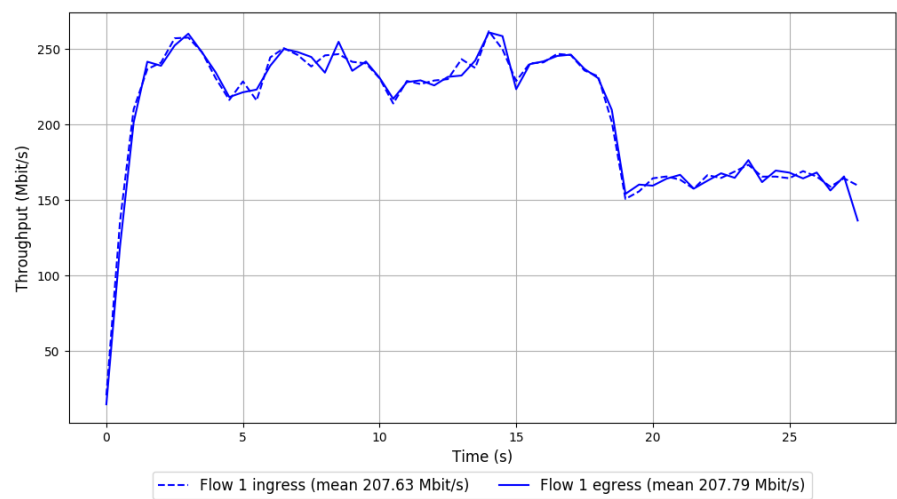
-- Flow 1:

Average throughput: 207.79 Mbit/s

95th percentile per-packet one-way delay: 64.675 ms

Loss rate: 0.37%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-16 07:30:42

End at: 2017-11-16 07:31:12

Below is generated by plot.py at 2017-11-16 10:14:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 245.24 Mbit/s

95th percentile per-packet one-way delay: 63.640 ms

Loss rate: 0.50%

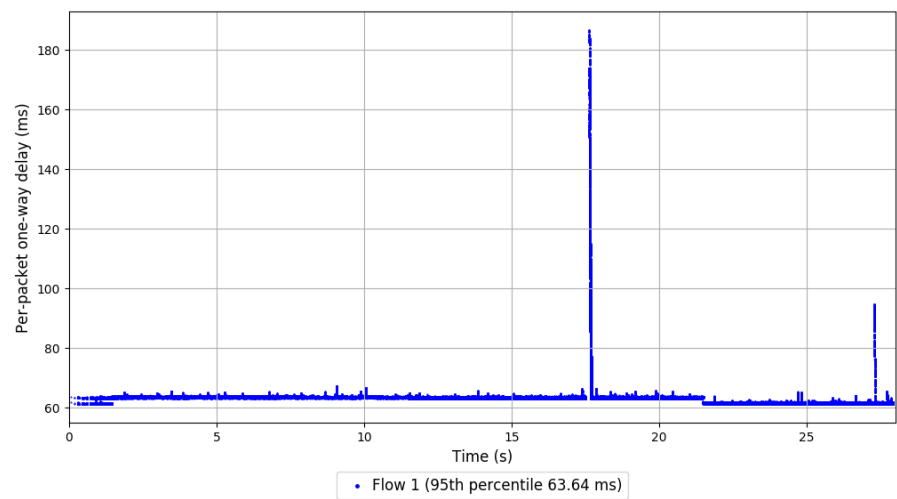
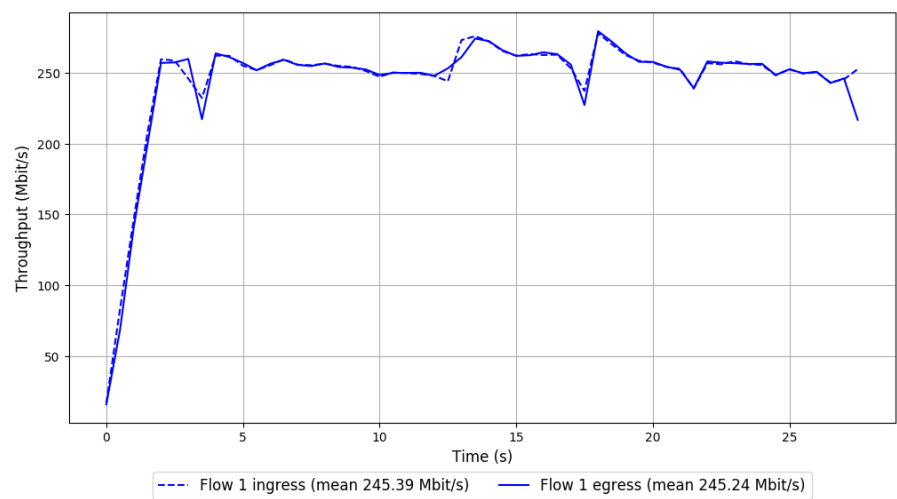
-- Flow 1:

Average throughput: 245.24 Mbit/s

95th percentile per-packet one-way delay: 63.640 ms

Loss rate: 0.50%

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

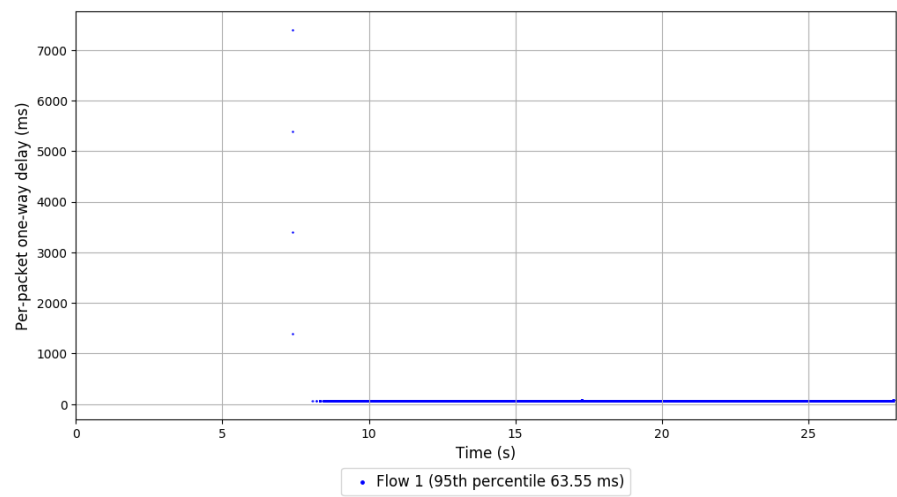
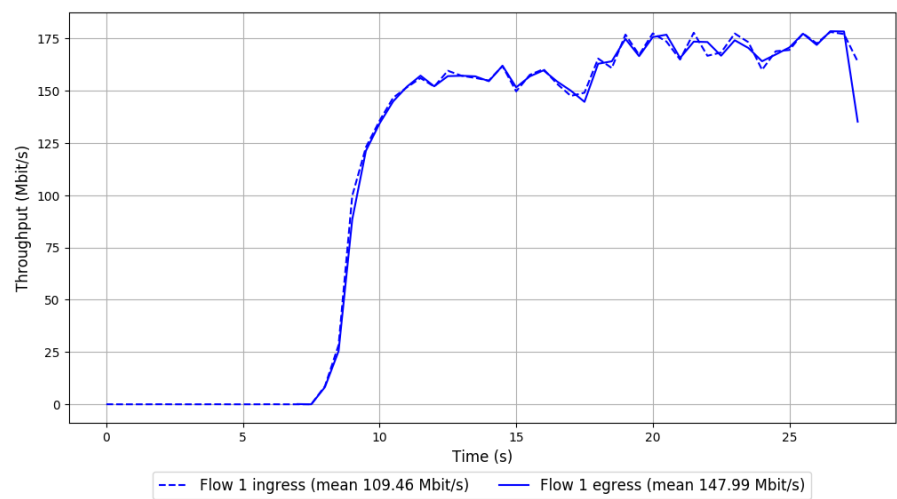


Run 9: Statistics of TaoVA-100x

Start at: 2017-11-16 07:41:26

End at: 2017-11-16 07:41:56

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

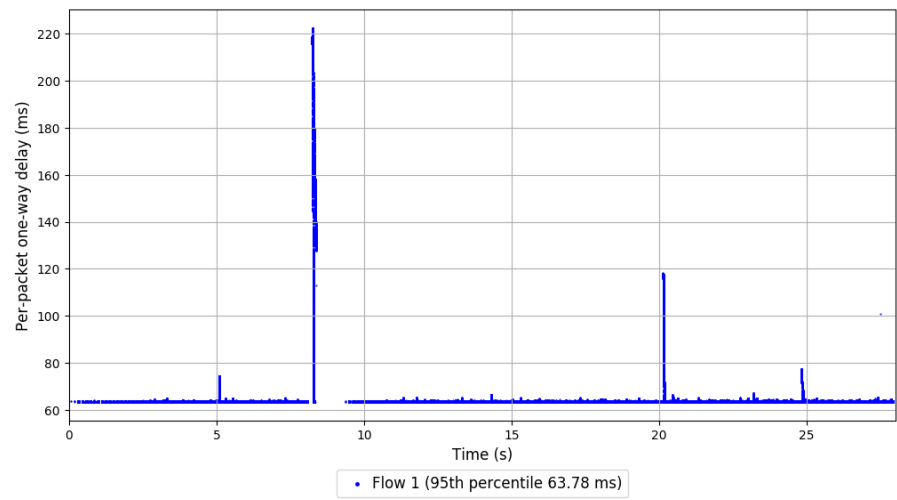
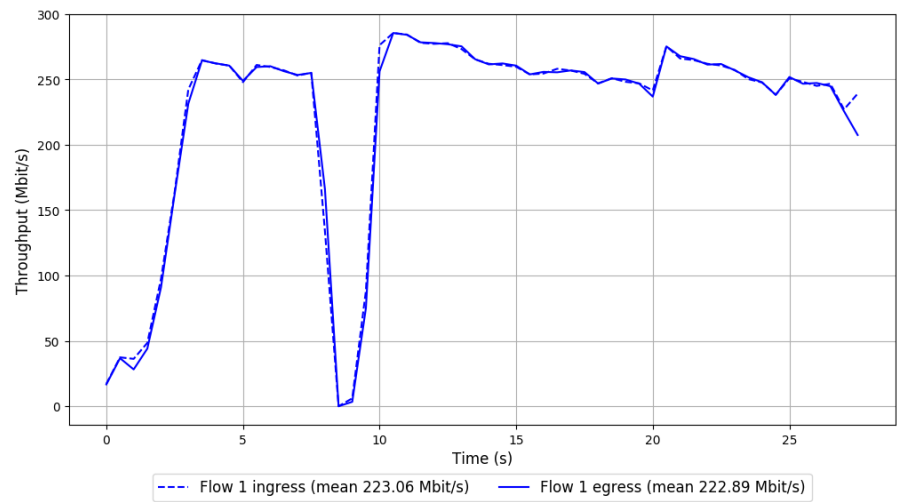


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-16 07:51:53
End at: 2017-11-16 07:52:23

# Below is generated by plot.py at 2017-11-16 10:14:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.89 Mbit/s
95th percentile per-packet one-way delay: 63.783 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 222.89 Mbit/s
95th percentile per-packet one-way delay: 63.783 ms
Loss rate: 0.52%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-16 06:21:22

End at: 2017-11-16 06:21:52

Below is generated by plot.py at 2017-11-16 10:14:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.18 Mbit/s

95th percentile per-packet one-way delay: 64.136 ms

Loss rate: 0.37%

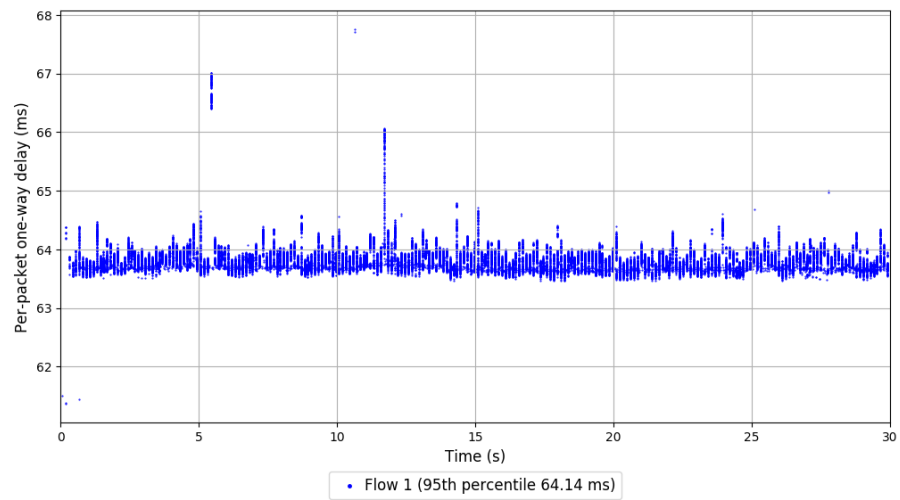
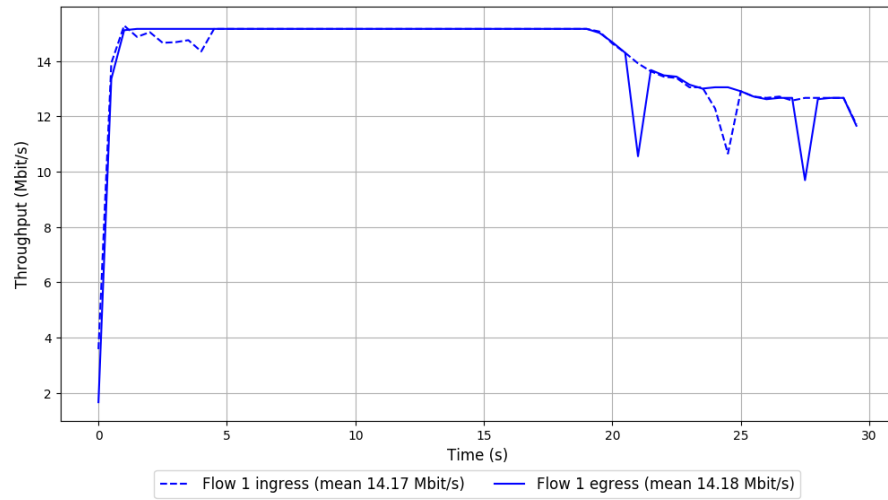
-- Flow 1:

Average throughput: 14.18 Mbit/s

95th percentile per-packet one-way delay: 64.136 ms

Loss rate: 0.37%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-16 06:31:51

End at: 2017-11-16 06:32:21

Below is generated by plot.py at 2017-11-16 10:14:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.93 Mbit/s

95th percentile per-packet one-way delay: 64.745 ms

Loss rate: 0.29%

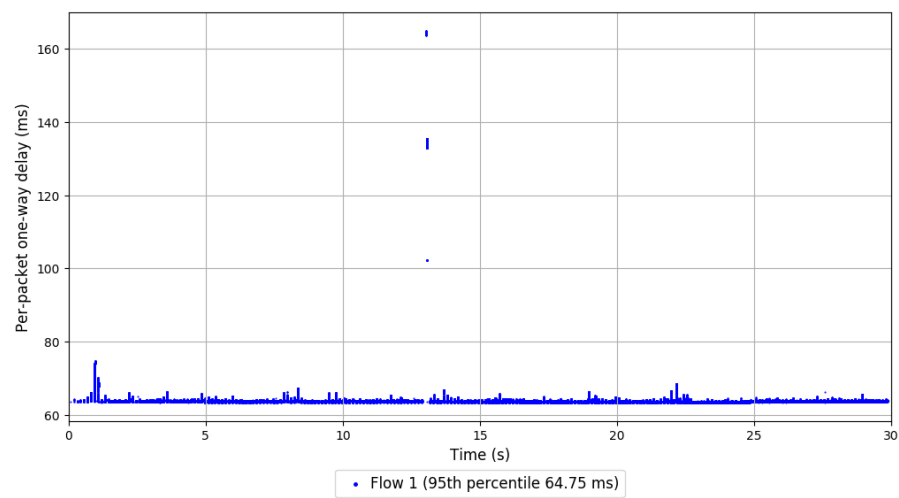
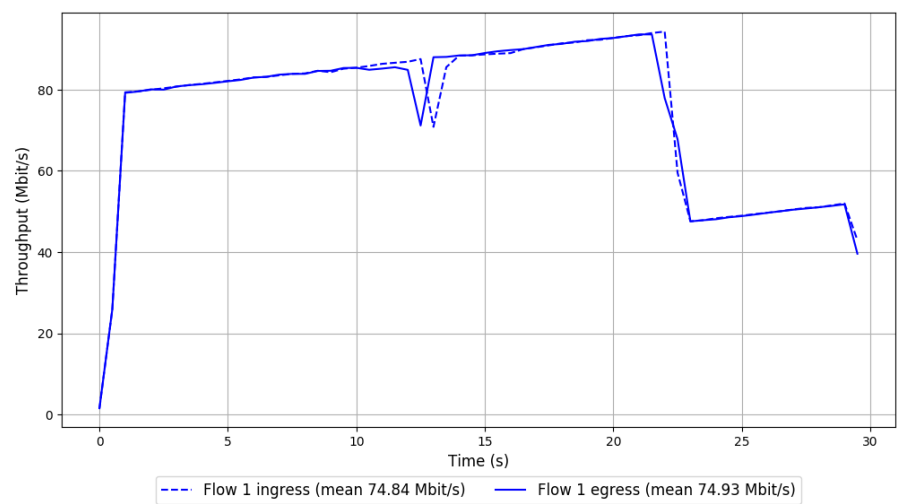
-- Flow 1:

Average throughput: 74.93 Mbit/s

95th percentile per-packet one-way delay: 64.745 ms

Loss rate: 0.29%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-16 06:42:27

End at: 2017-11-16 06:42:57

Below is generated by plot.py at 2017-11-16 10:14:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.14 Mbit/s

95th percentile per-packet one-way delay: 64.017 ms

Loss rate: 0.41%

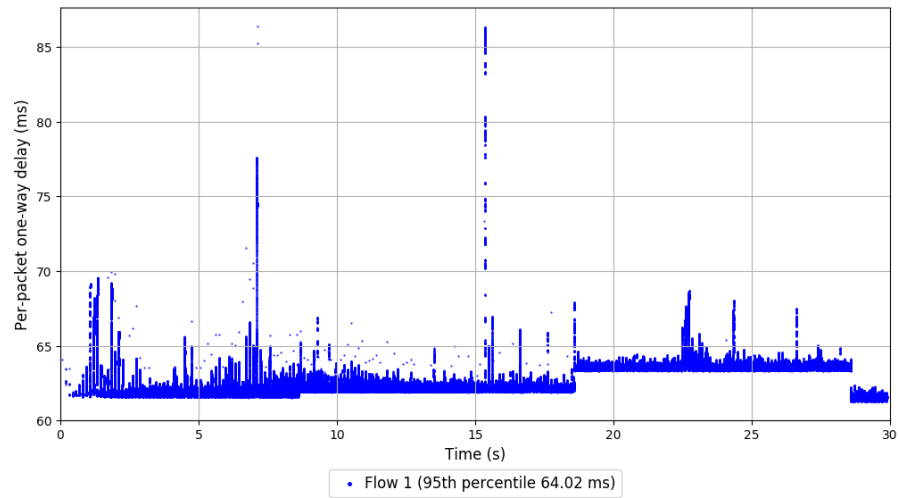
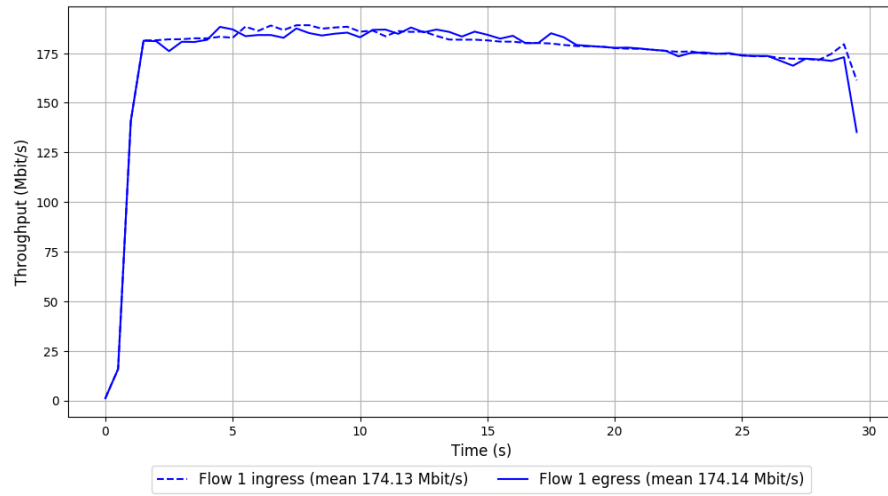
-- Flow 1:

Average throughput: 174.14 Mbit/s

95th percentile per-packet one-way delay: 64.017 ms

Loss rate: 0.41%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-16 06:53:08

End at: 2017-11-16 06:53:38

Below is generated by plot.py at 2017-11-16 10:14:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.11 Mbit/s

95th percentile per-packet one-way delay: 62.770 ms

Loss rate: 0.15%

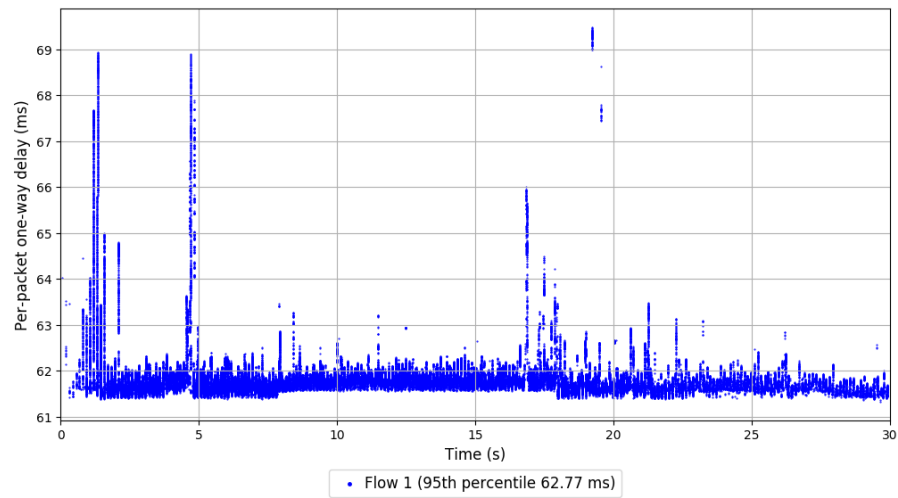
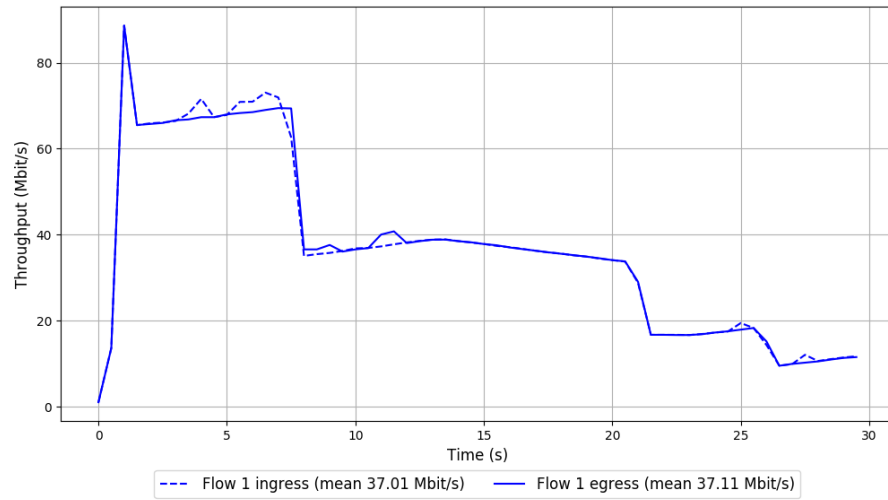
-- Flow 1:

Average throughput: 37.11 Mbit/s

95th percentile per-packet one-way delay: 62.770 ms

Loss rate: 0.15%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-16 07:03:39

End at: 2017-11-16 07:04:09

Below is generated by plot.py at 2017-11-16 10:14:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.27 Mbit/s

95th percentile per-packet one-way delay: 63.812 ms

Loss rate: 0.21%

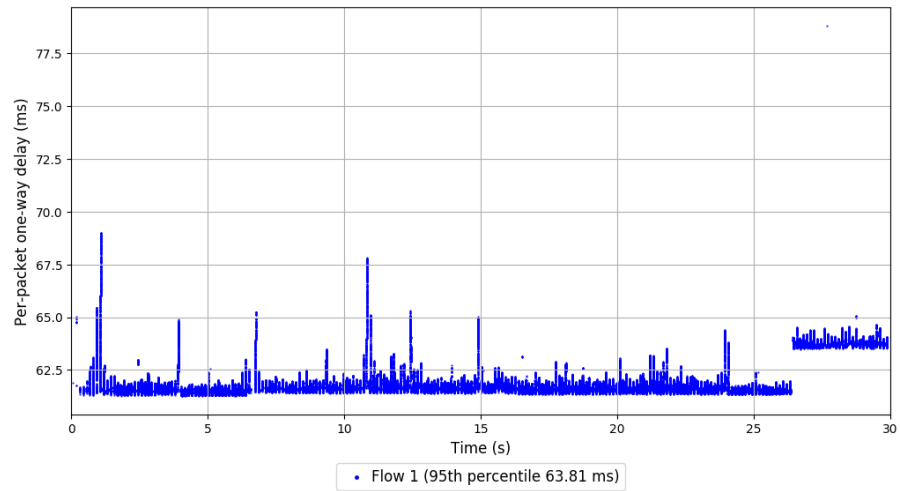
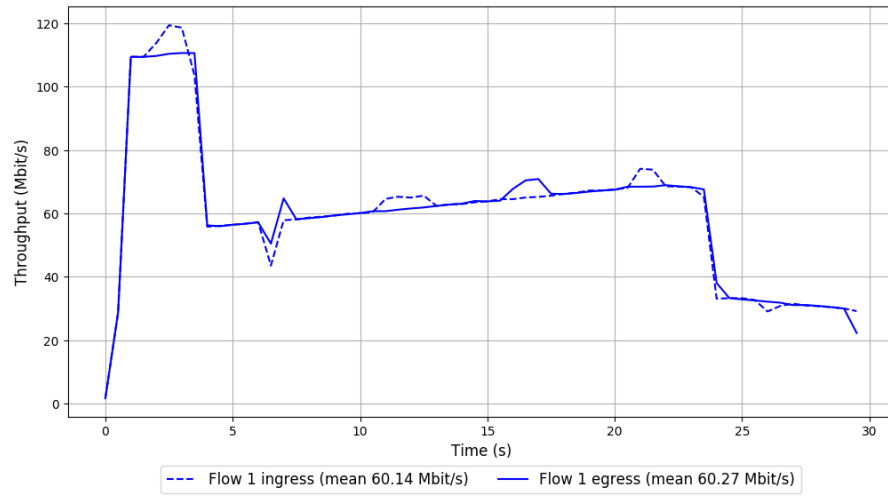
-- Flow 1:

Average throughput: 60.27 Mbit/s

95th percentile per-packet one-way delay: 63.812 ms

Loss rate: 0.21%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-16 07:14:13

End at: 2017-11-16 07:14:43

Below is generated by plot.py at 2017-11-16 10:14:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.14 Mbit/s

95th percentile per-packet one-way delay: 64.399 ms

Loss rate: 0.21%

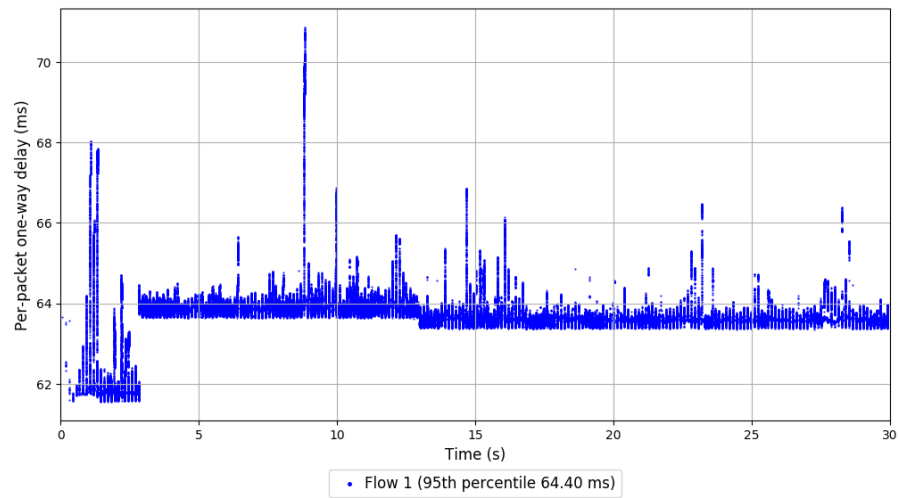
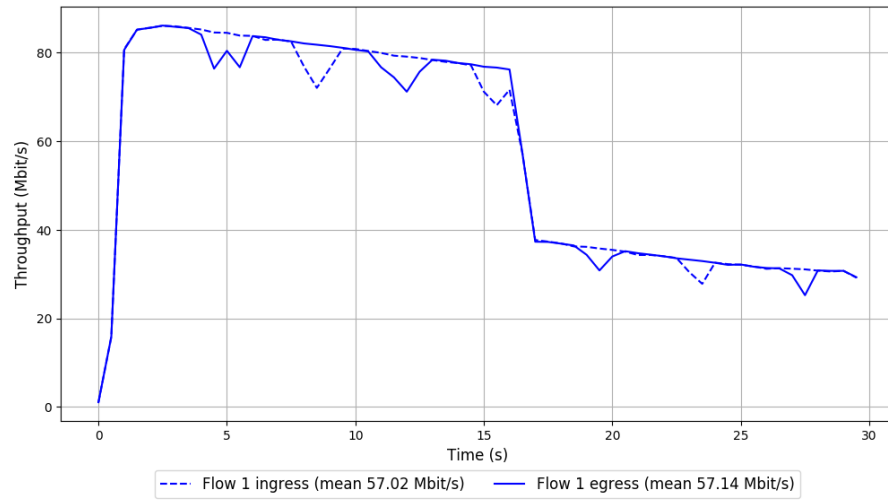
-- Flow 1:

Average throughput: 57.14 Mbit/s

95th percentile per-packet one-way delay: 64.399 ms

Loss rate: 0.21%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-16 07:24:43

End at: 2017-11-16 07:25:13

Below is generated by plot.py at 2017-11-16 10:14:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.44 Mbit/s

95th percentile per-packet one-way delay: 64.138 ms

Loss rate: 0.42%

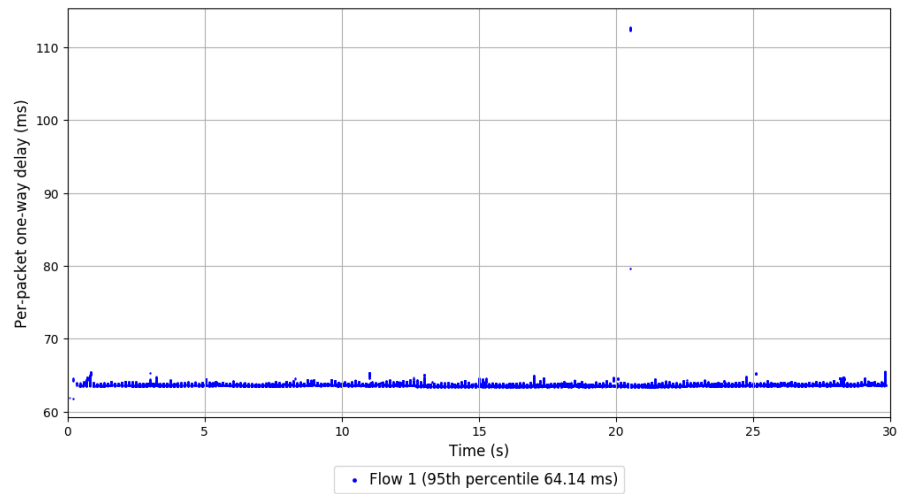
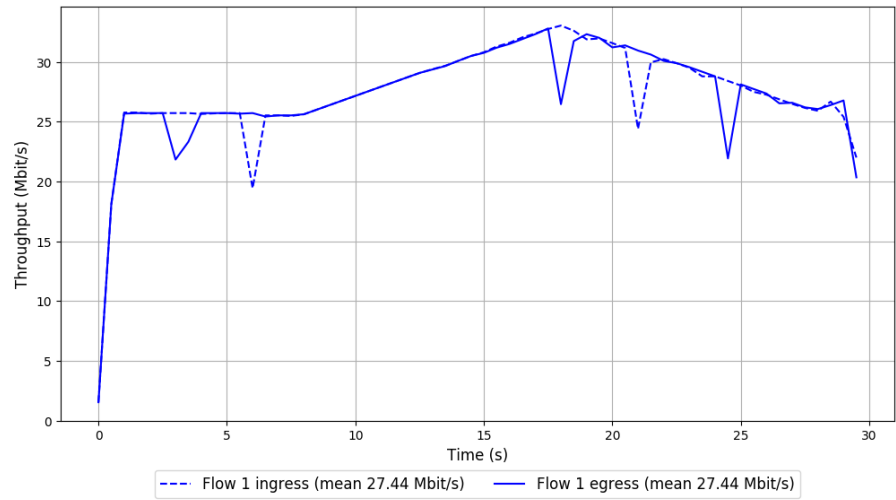
-- Flow 1:

Average throughput: 27.44 Mbit/s

95th percentile per-packet one-way delay: 64.138 ms

Loss rate: 0.42%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-16 07:35:23

End at: 2017-11-16 07:35:53

Below is generated by plot.py at 2017-11-16 10:14:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.99 Mbit/s

95th percentile per-packet one-way delay: 62.242 ms

Loss rate: 0.34%

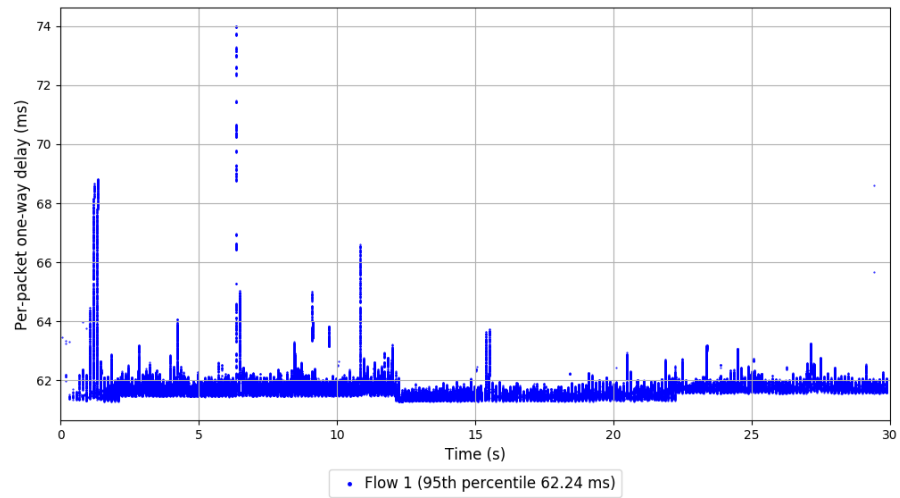
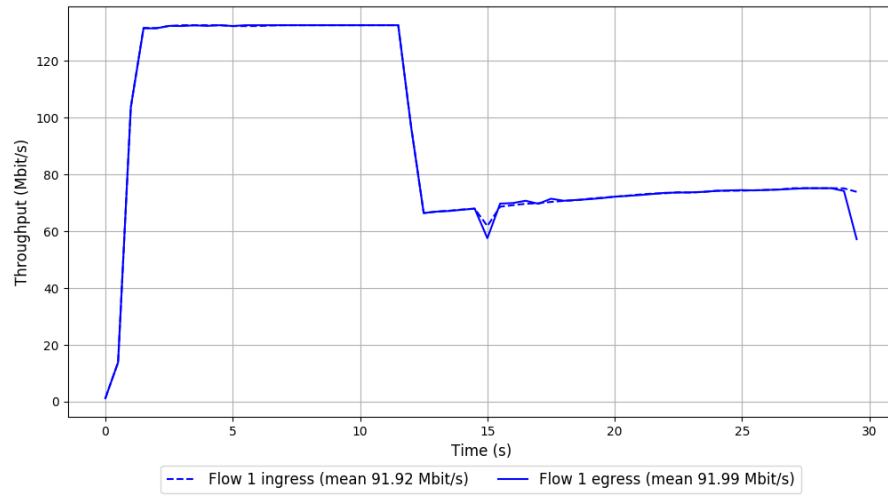
-- Flow 1:

Average throughput: 91.99 Mbit/s

95th percentile per-packet one-way delay: 62.242 ms

Loss rate: 0.34%

Run 8: Report of TCP Vegas — Data Link

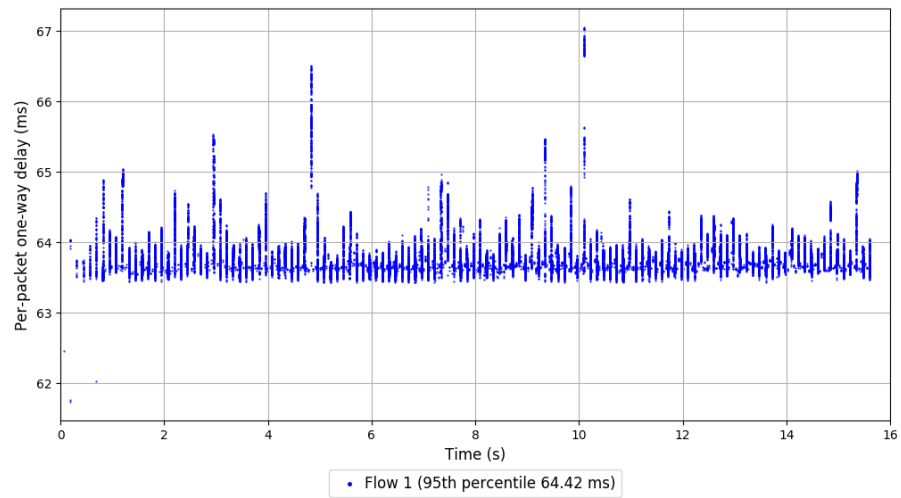
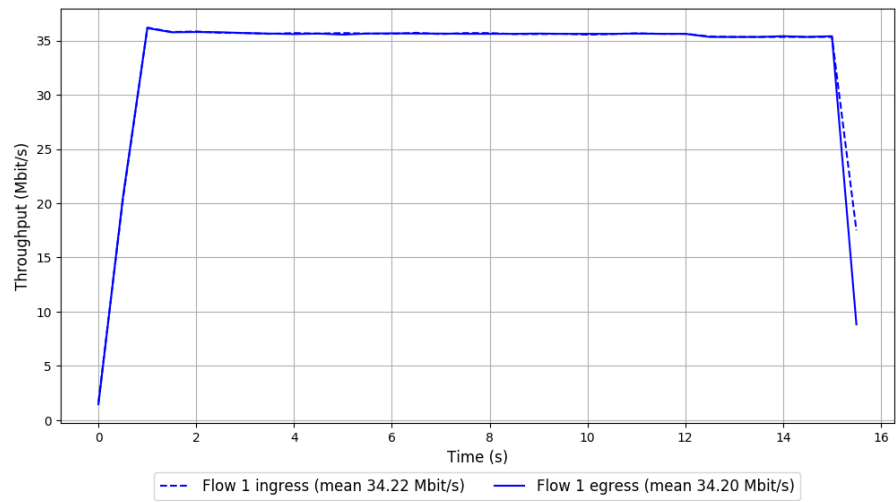


Run 9: Statistics of TCP Vegas

Start at: 2017-11-16 07:45:44

End at: 2017-11-16 07:46:14

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-16 07:56:32

End at: 2017-11-16 07:57:02

Below is generated by plot.py at 2017-11-16 10:14:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.40 Mbit/s

95th percentile per-packet one-way delay: 64.214 ms

Loss rate: 0.44%

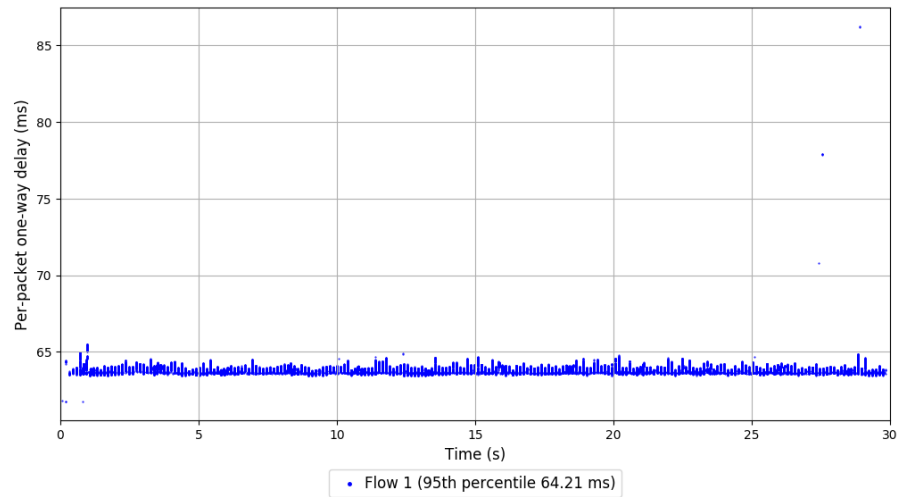
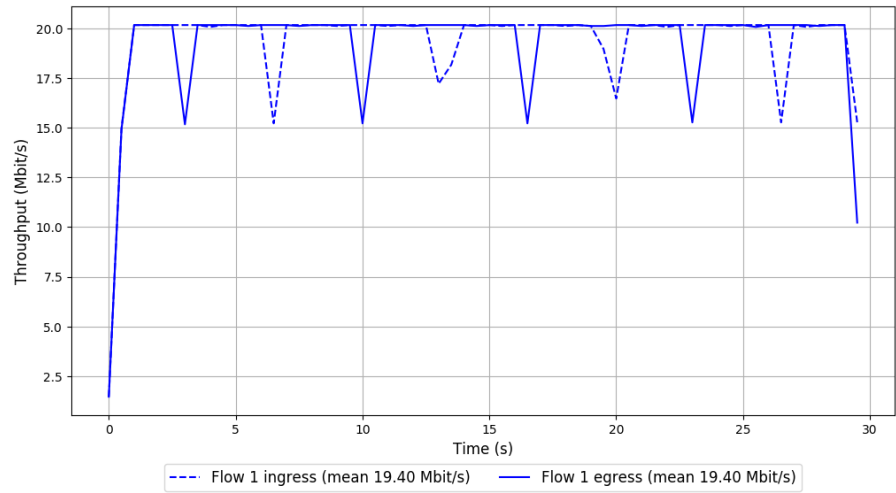
-- Flow 1:

Average throughput: 19.40 Mbit/s

95th percentile per-packet one-way delay: 64.214 ms

Loss rate: 0.44%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-11-16 06:15:49

End at: 2017-11-16 06:16:19

Below is generated by plot.py at 2017-11-16 10:14:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 241.06 Mbit/s

95th percentile per-packet one-way delay: 109.073 ms

Loss rate: 2.01%

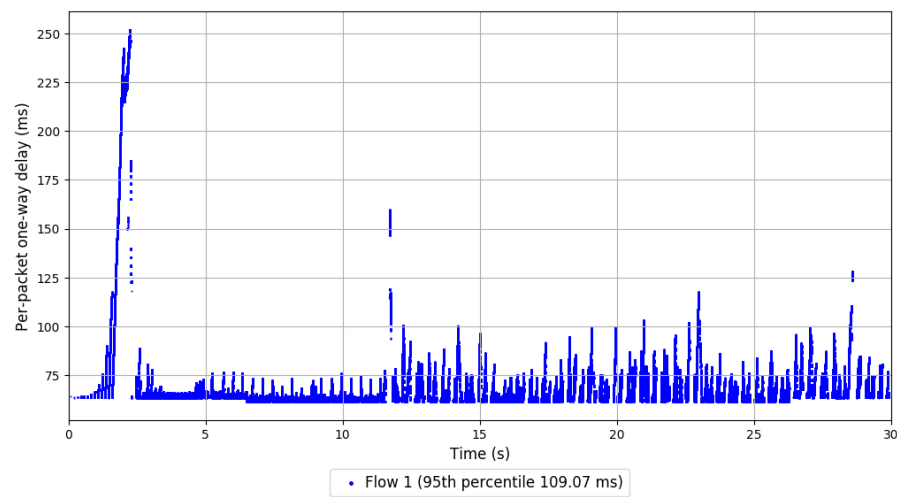
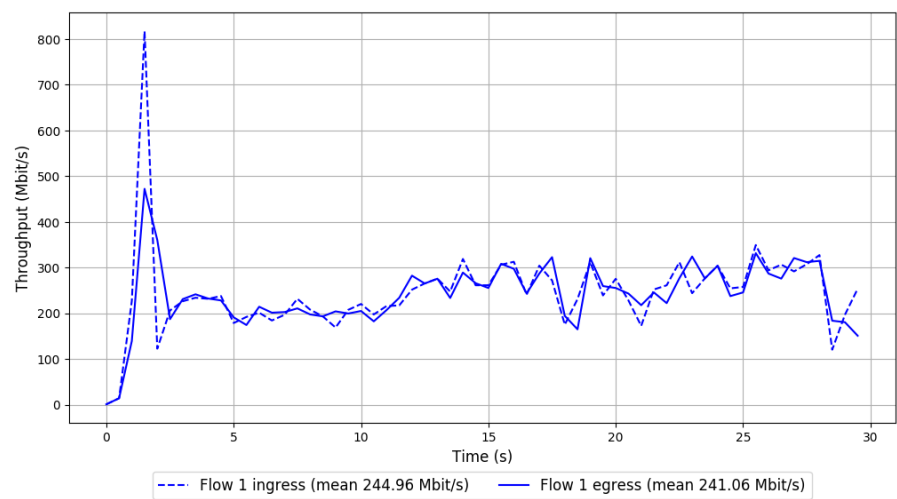
-- Flow 1:

Average throughput: 241.06 Mbit/s

95th percentile per-packet one-way delay: 109.073 ms

Loss rate: 2.01%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-16 06:26:25

End at: 2017-11-16 06:26:55

Below is generated by plot.py at 2017-11-16 10:15:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 245.30 Mbit/s

95th percentile per-packet one-way delay: 99.365 ms

Loss rate: 2.03%

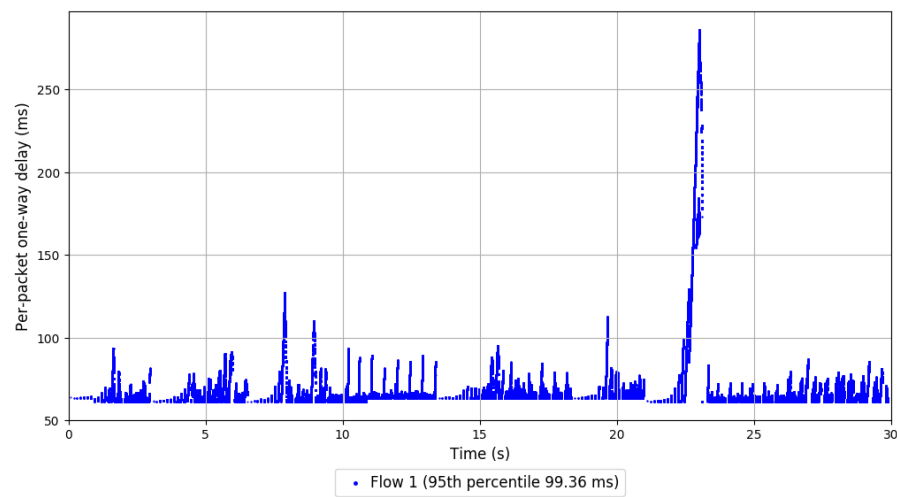
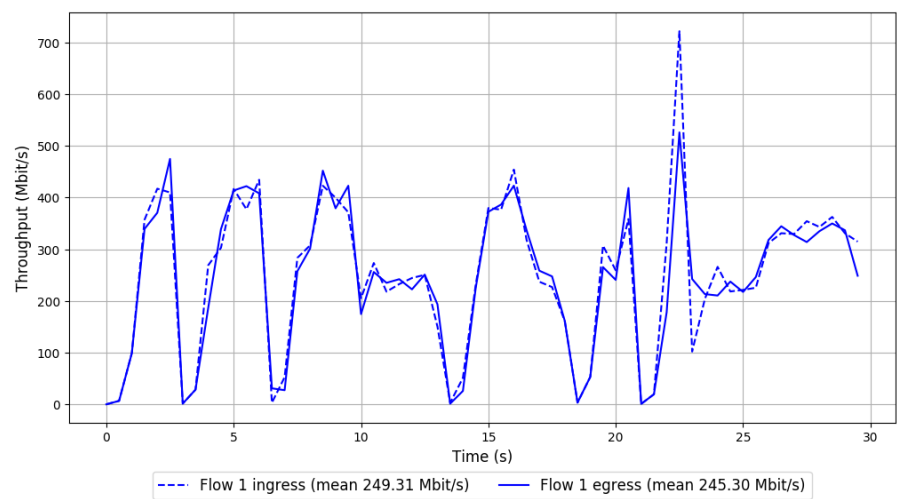
-- Flow 1:

Average throughput: 245.30 Mbit/s

95th percentile per-packet one-way delay: 99.365 ms

Loss rate: 2.03%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-16 06:36:59

End at: 2017-11-16 06:37:29

Below is generated by plot.py at 2017-11-16 10:15:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 227.42 Mbit/s

95th percentile per-packet one-way delay: 105.155 ms

Loss rate: 2.56%

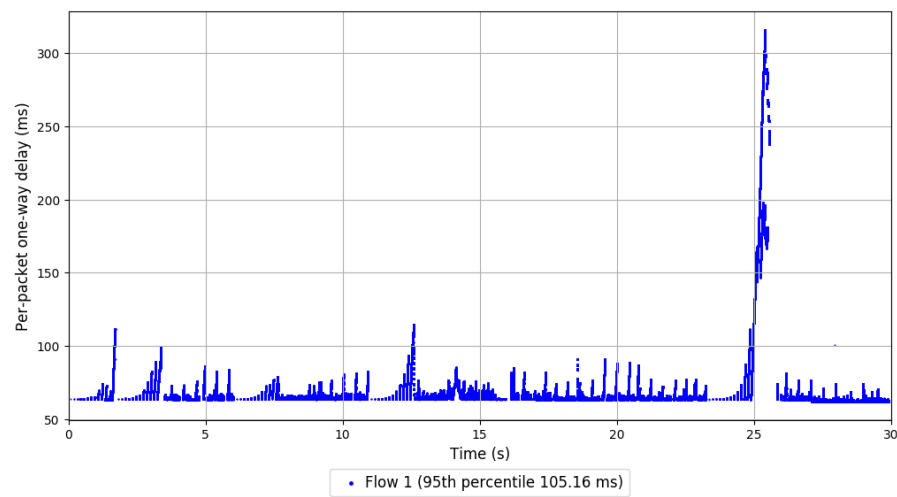
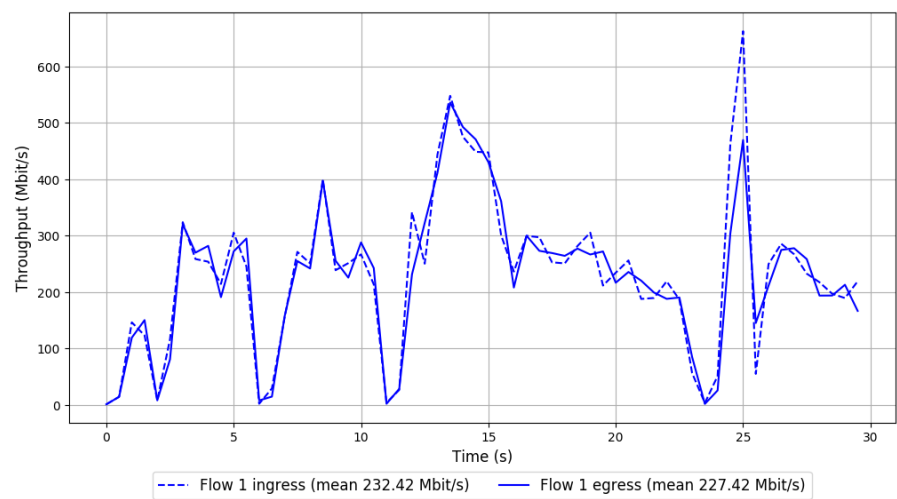
-- Flow 1:

Average throughput: 227.42 Mbit/s

95th percentile per-packet one-way delay: 105.155 ms

Loss rate: 2.56%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-16 06:47:38

End at: 2017-11-16 06:48:08

Below is generated by plot.py at 2017-11-16 10:15:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 244.33 Mbit/s

95th percentile per-packet one-way delay: 222.592 ms

Loss rate: 3.00%

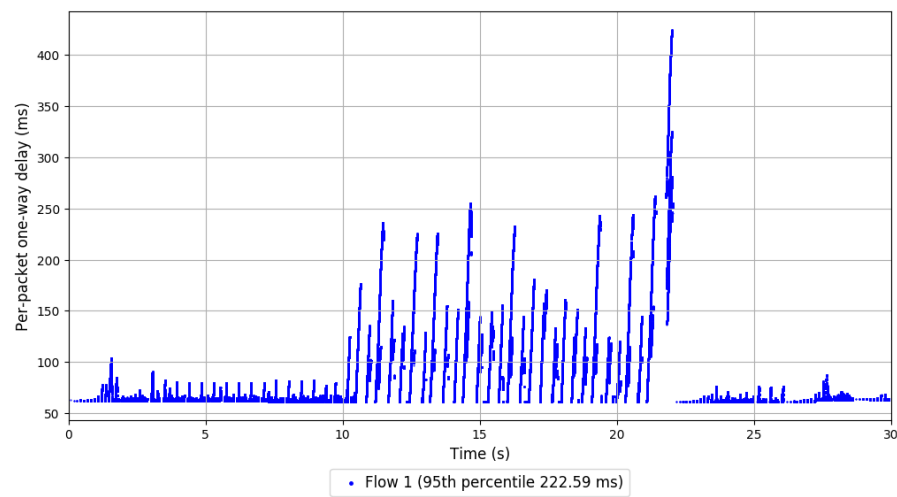
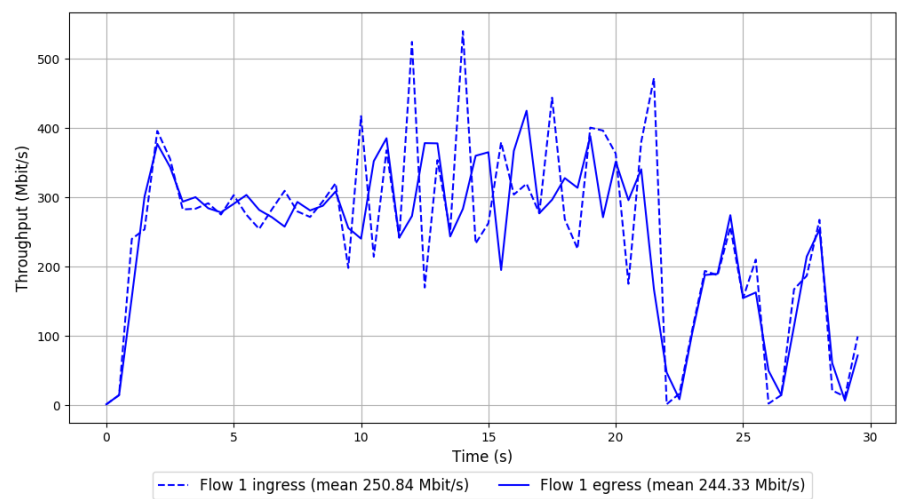
-- Flow 1:

Average throughput: 244.33 Mbit/s

95th percentile per-packet one-way delay: 222.592 ms

Loss rate: 3.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-16 06:58:10

End at: 2017-11-16 06:58:40

Below is generated by plot.py at 2017-11-16 10:15:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 234.00 Mbit/s

95th percentile per-packet one-way delay: 112.901 ms

Loss rate: 2.80%

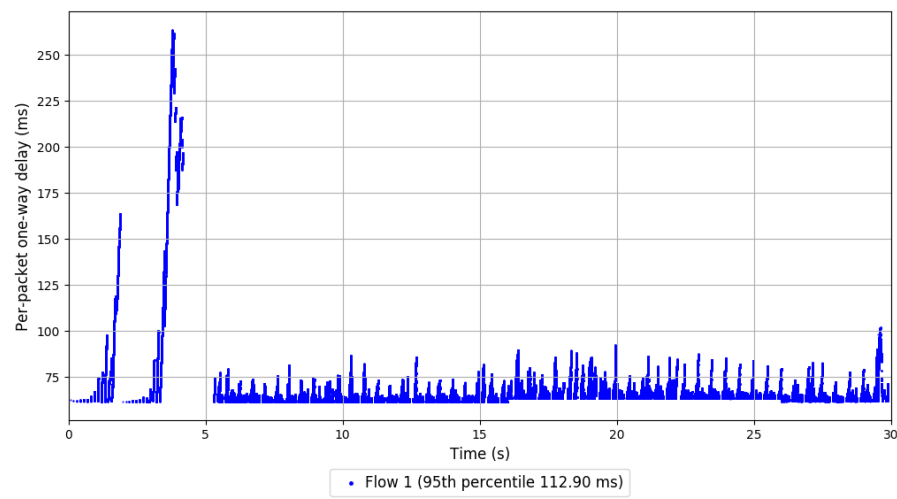
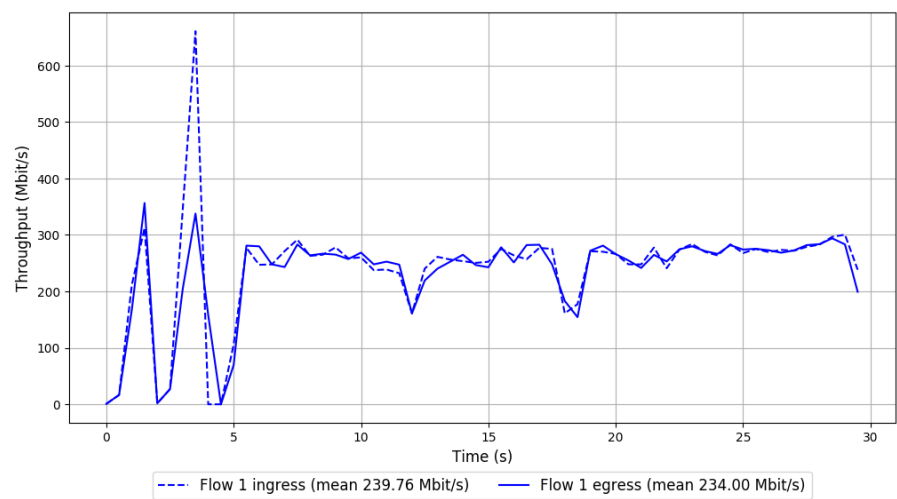
-- Flow 1:

Average throughput: 234.00 Mbit/s

95th percentile per-packet one-way delay: 112.901 ms

Loss rate: 2.80%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-16 07:08:51

End at: 2017-11-16 07:09:21

Below is generated by plot.py at 2017-11-16 10:15:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.77 Mbit/s

95th percentile per-packet one-way delay: 100.815 ms

Loss rate: 0.38%

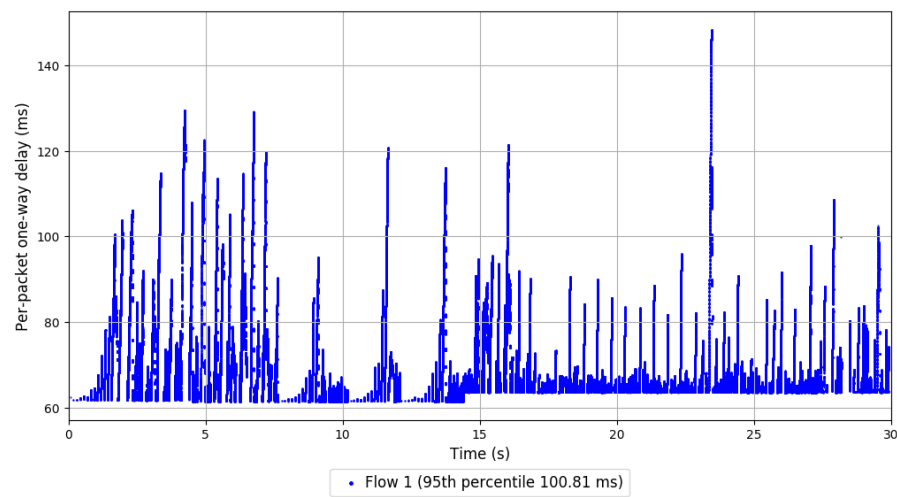
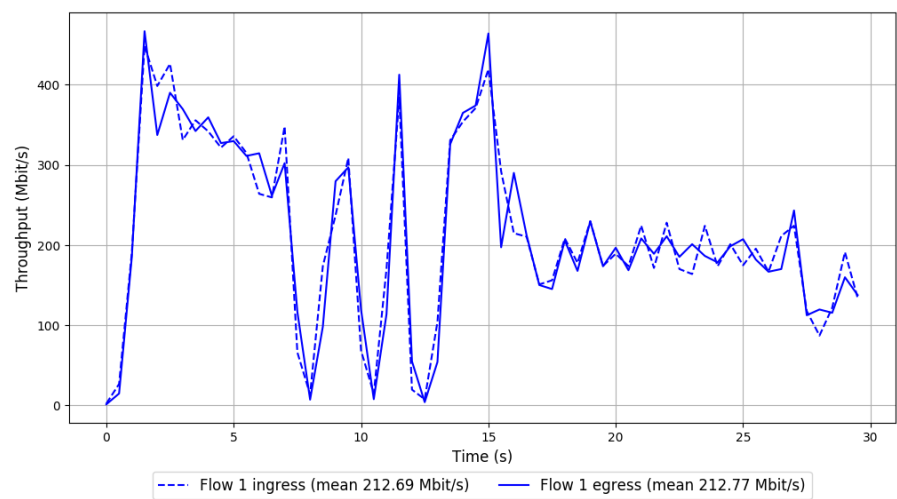
-- Flow 1:

Average throughput: 212.77 Mbit/s

95th percentile per-packet one-way delay: 100.815 ms

Loss rate: 0.38%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-16 07:19:20

End at: 2017-11-16 07:19:50

Below is generated by plot.py at 2017-11-16 10:18:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 247.93 Mbit/s

95th percentile per-packet one-way delay: 195.870 ms

Loss rate: 1.55%

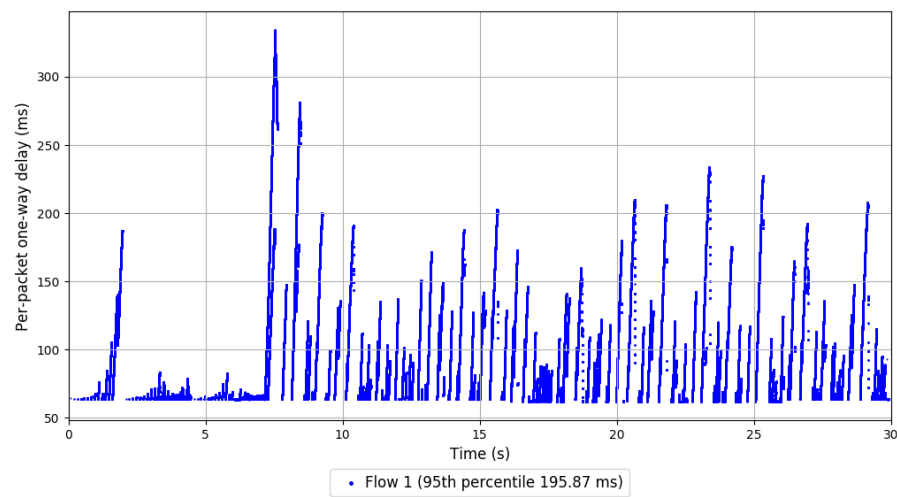
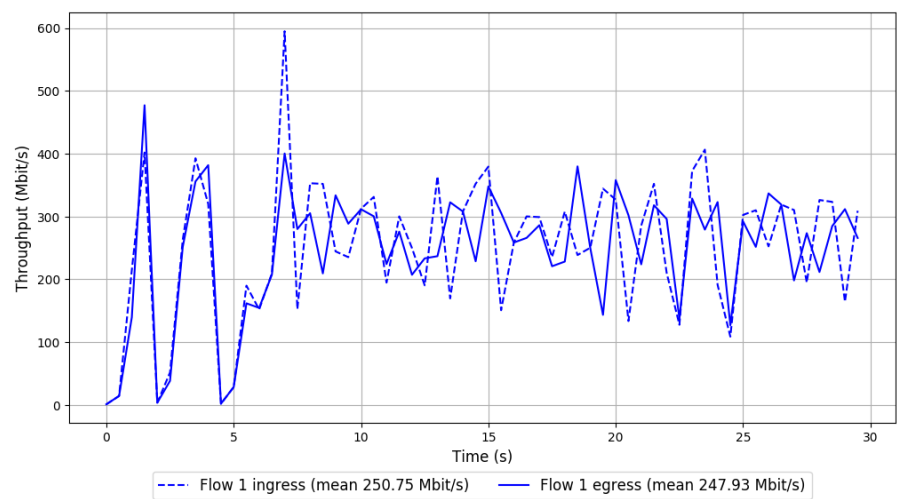
-- Flow 1:

Average throughput: 247.93 Mbit/s

95th percentile per-packet one-way delay: 195.870 ms

Loss rate: 1.55%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-16 07:29:48

End at: 2017-11-16 07:30:18

Below is generated by plot.py at 2017-11-16 10:18:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 255.32 Mbit/s

95th percentile per-packet one-way delay: 76.167 ms

Loss rate: 1.21%

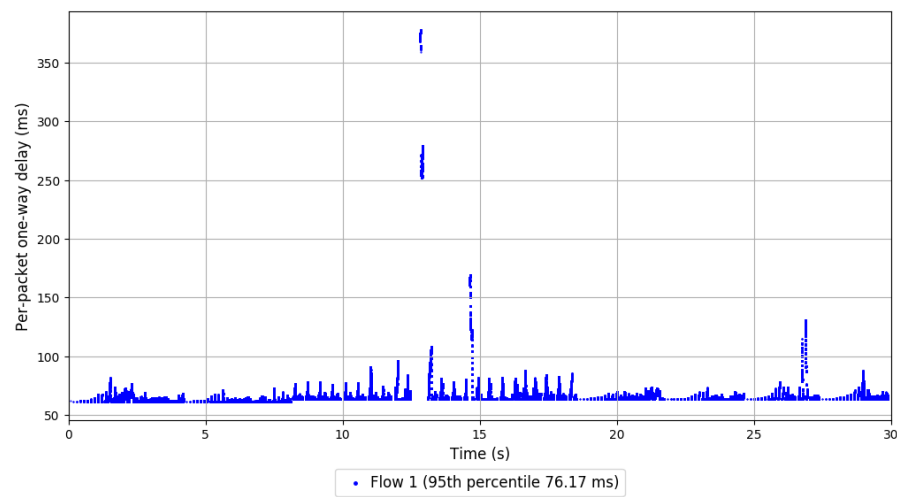
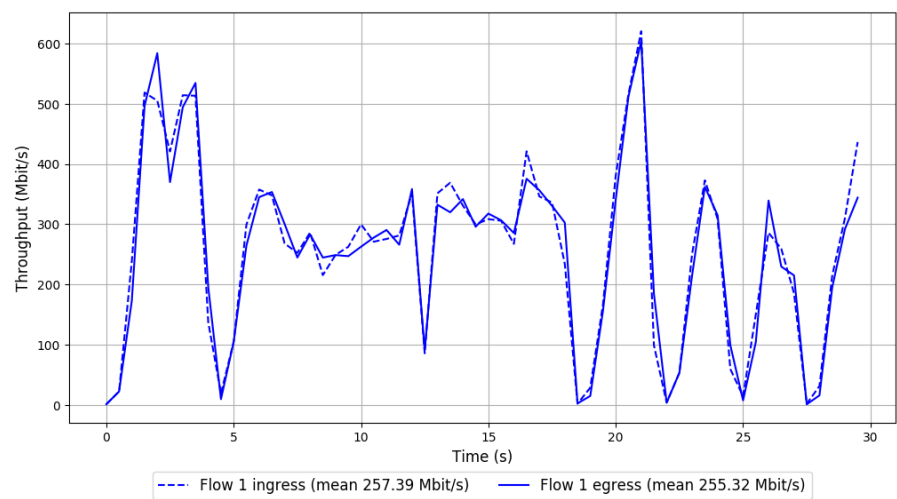
-- Flow 1:

Average throughput: 255.32 Mbit/s

95th percentile per-packet one-way delay: 76.167 ms

Loss rate: 1.21%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-16 07:40:32

End at: 2017-11-16 07:41:02

Below is generated by plot.py at 2017-11-16 10:18:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 244.14 Mbit/s

95th percentile per-packet one-way delay: 99.813 ms

Loss rate: 0.12%

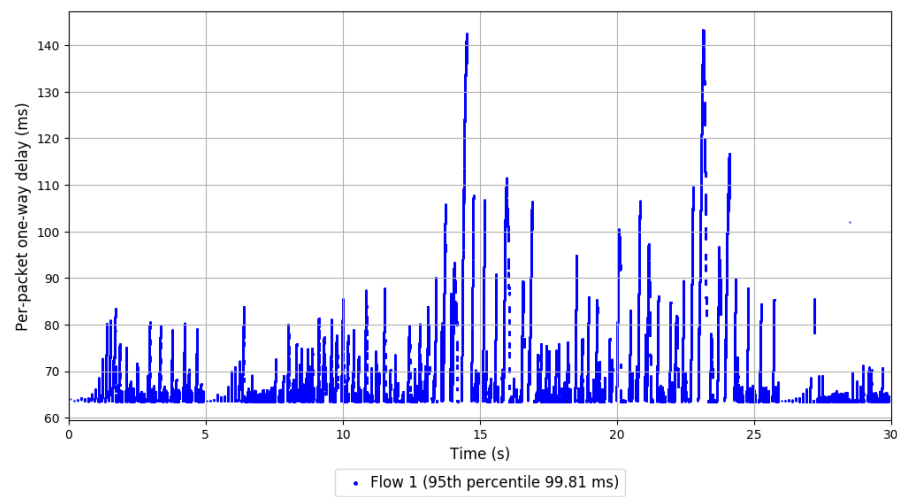
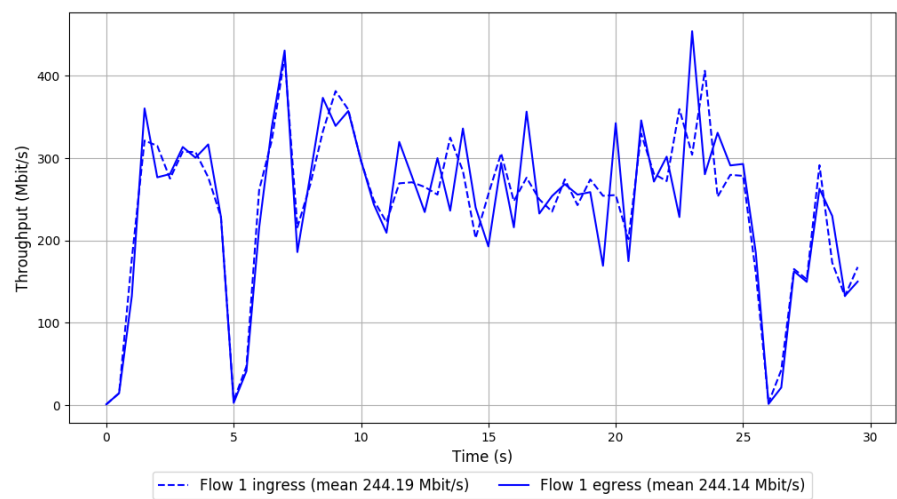
-- Flow 1:

Average throughput: 244.14 Mbit/s

95th percentile per-packet one-way delay: 99.813 ms

Loss rate: 0.12%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-16 07:50:52

End at: 2017-11-16 07:51:22

Below is generated by plot.py at 2017-11-16 10:20:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 337.38 Mbit/s

95th percentile per-packet one-way delay: 115.692 ms

Loss rate: 0.93%

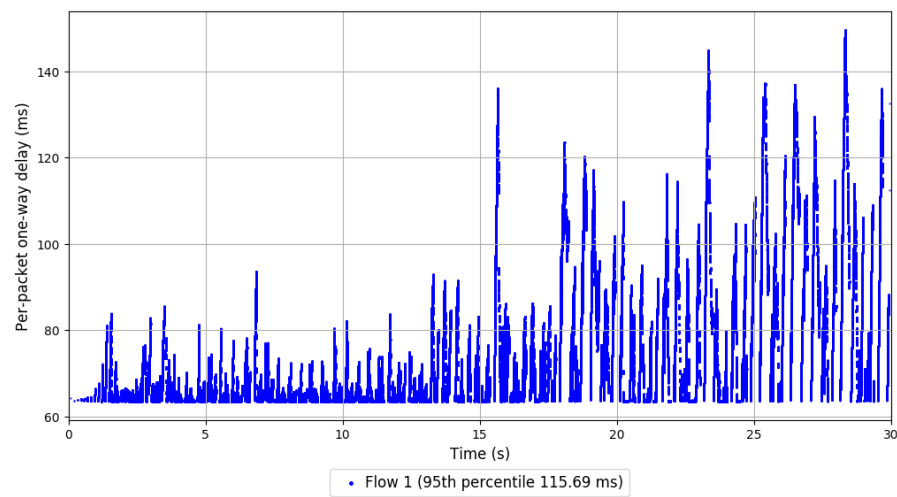
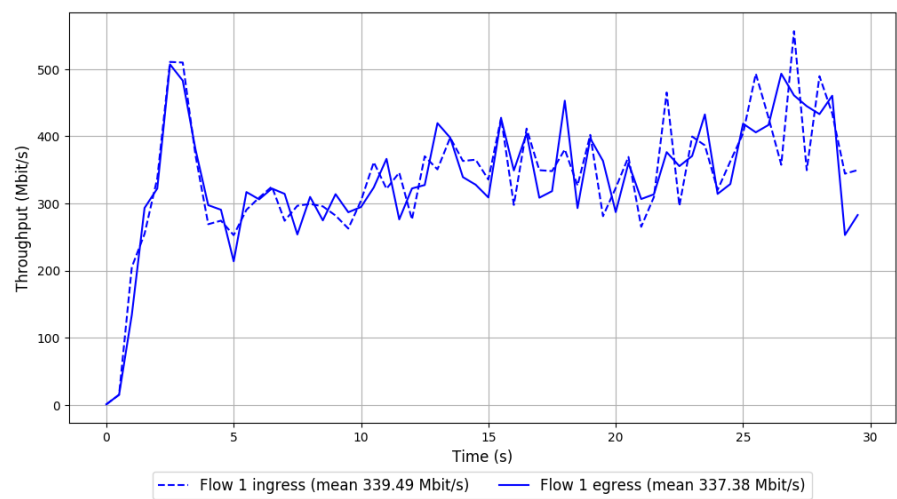
-- Flow 1:

Average throughput: 337.38 Mbit/s

95th percentile per-packet one-way delay: 115.692 ms

Loss rate: 0.93%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-11-16 06:14:14

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

Below is generated by plot.py at 2017-11-16 10:20:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.45 Mbit/s

95th percentile per-packet one-way delay: 63.385 ms

Loss rate: 0.46%

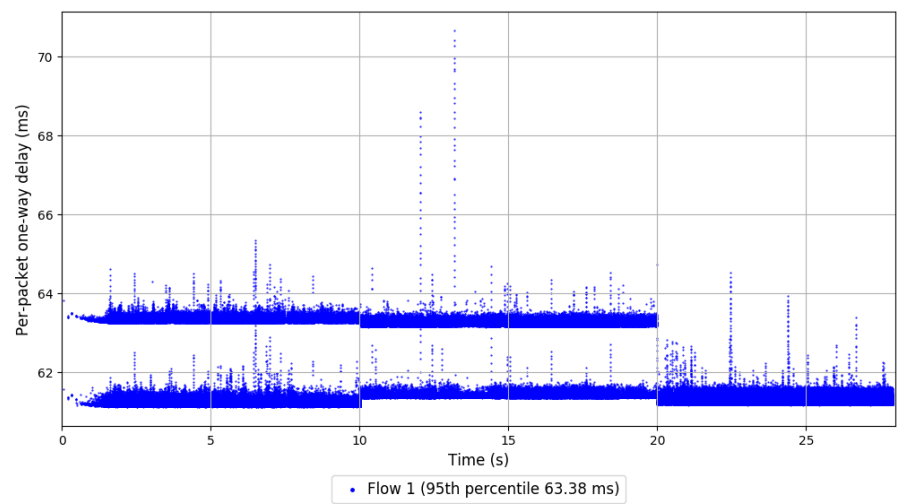
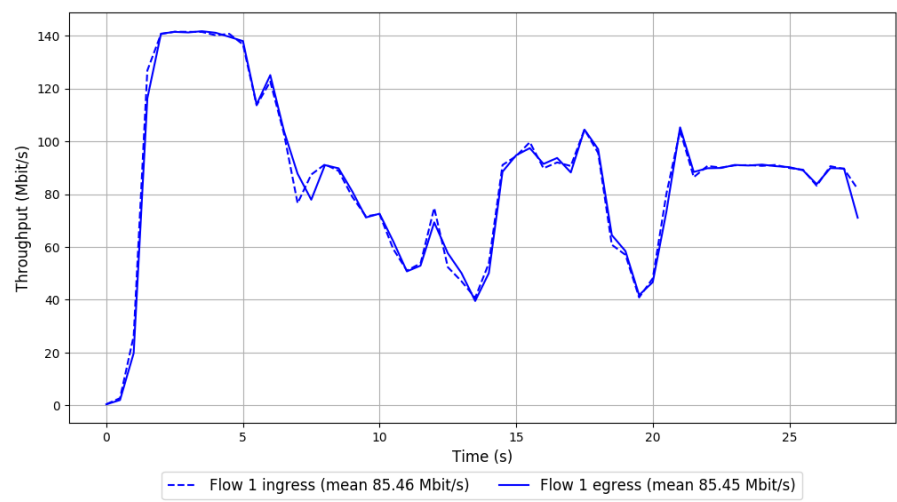
-- Flow 1:

Average throughput: 85.45 Mbit/s

95th percentile per-packet one-way delay: 63.385 ms

Loss rate: 0.46%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-16 06:24:50

End at: 2017-11-16 06:25:20

Below is generated by plot.py at 2017-11-16 10:20:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.72 Mbit/s

95th percentile per-packet one-way delay: 63.767 ms

Loss rate: 0.48%

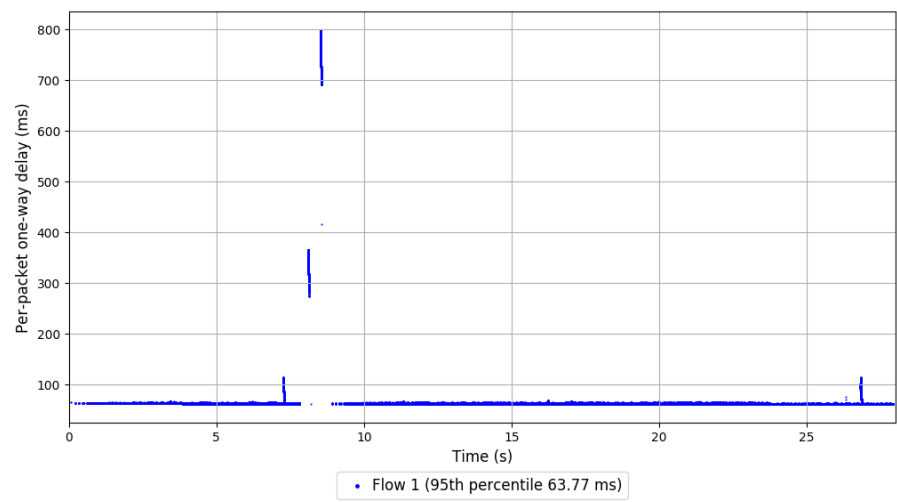
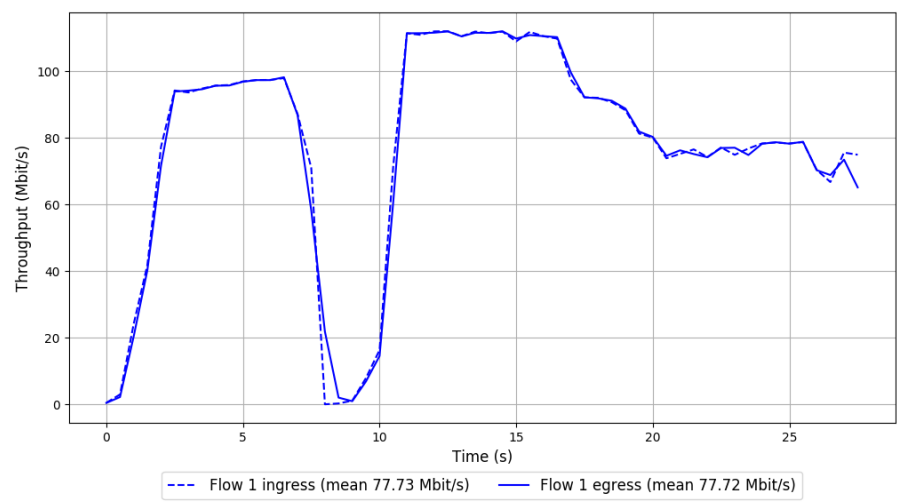
-- Flow 1:

Average throughput: 77.72 Mbit/s

95th percentile per-packet one-way delay: 63.767 ms

Loss rate: 0.48%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-16 06:35:24

End at: 2017-11-16 06:35:54

Below is generated by plot.py at 2017-11-16 10:20:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.23 Mbit/s

95th percentile per-packet one-way delay: 63.735 ms

Loss rate: 0.33%

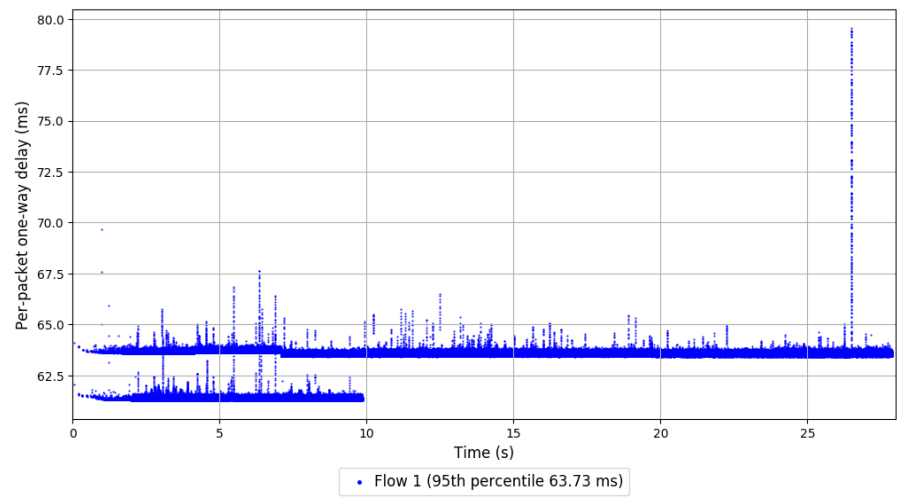
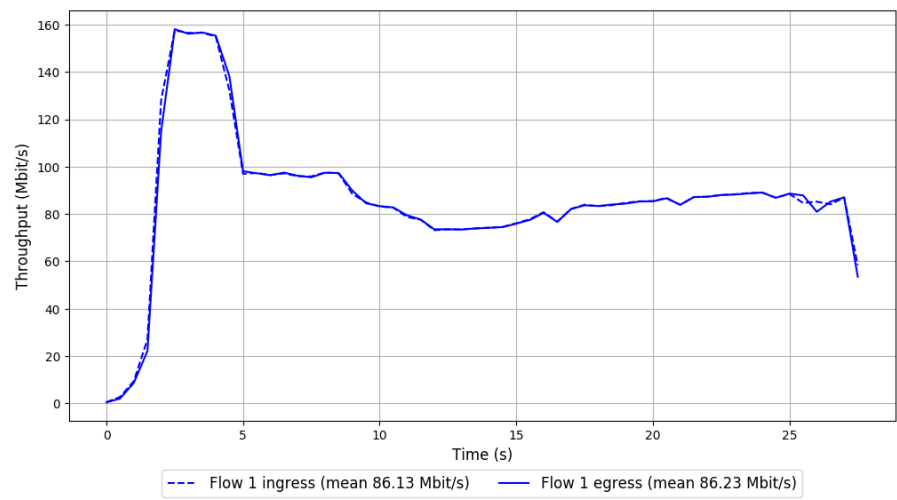
-- Flow 1:

Average throughput: 86.23 Mbit/s

95th percentile per-packet one-way delay: 63.735 ms

Loss rate: 0.33%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

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

End at: 2017-11-16 06:46:36

Below is generated by plot.py at 2017-11-16 10:20:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.05 Mbit/s

95th percentile per-packet one-way delay: 63.624 ms

Loss rate: 0.64%

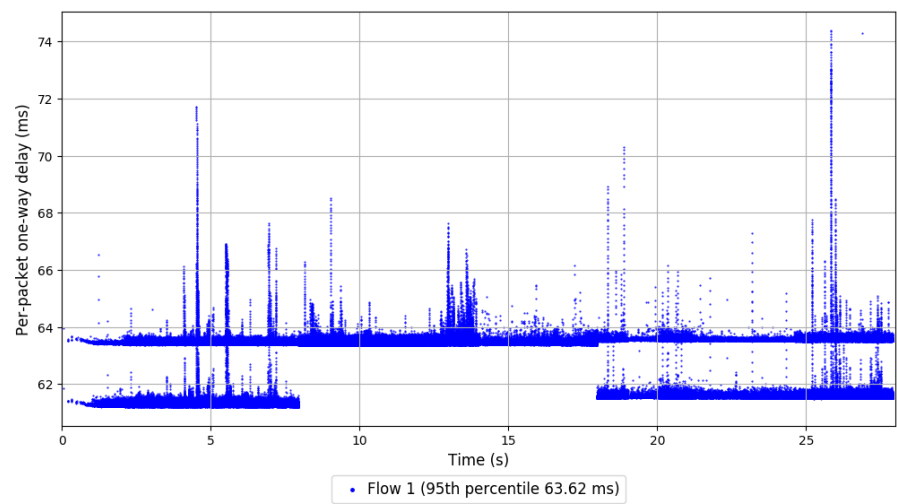
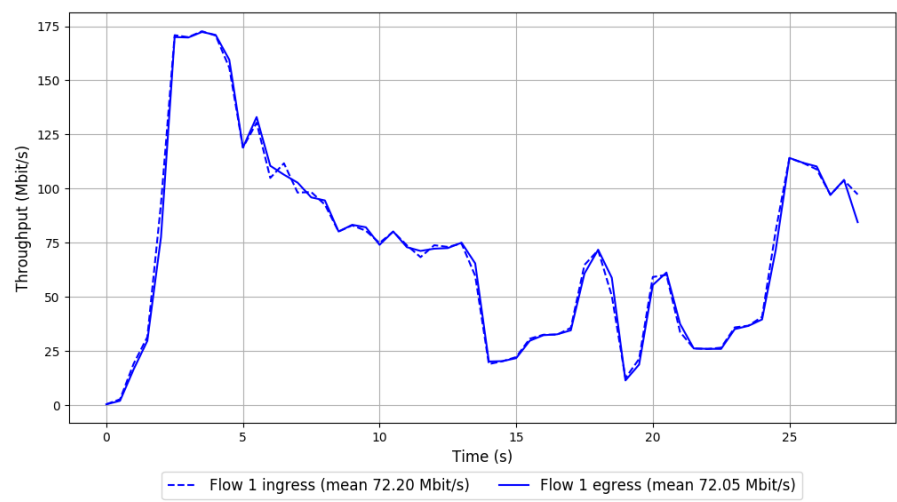
-- Flow 1:

Average throughput: 72.05 Mbit/s

95th percentile per-packet one-way delay: 63.624 ms

Loss rate: 0.64%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-16 06:56:37

End at: 2017-11-16 06:57:07

Below is generated by plot.py at 2017-11-16 10:20:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.37 Mbit/s

95th percentile per-packet one-way delay: 63.631 ms

Loss rate: 0.96%

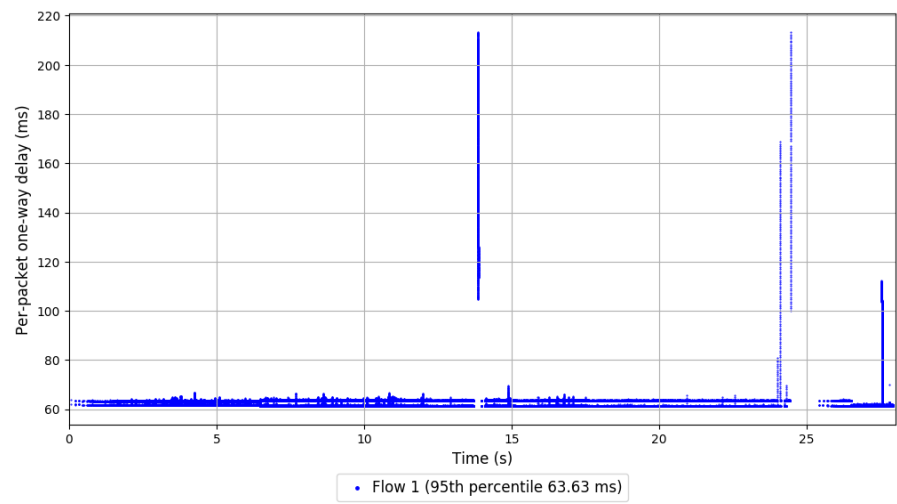
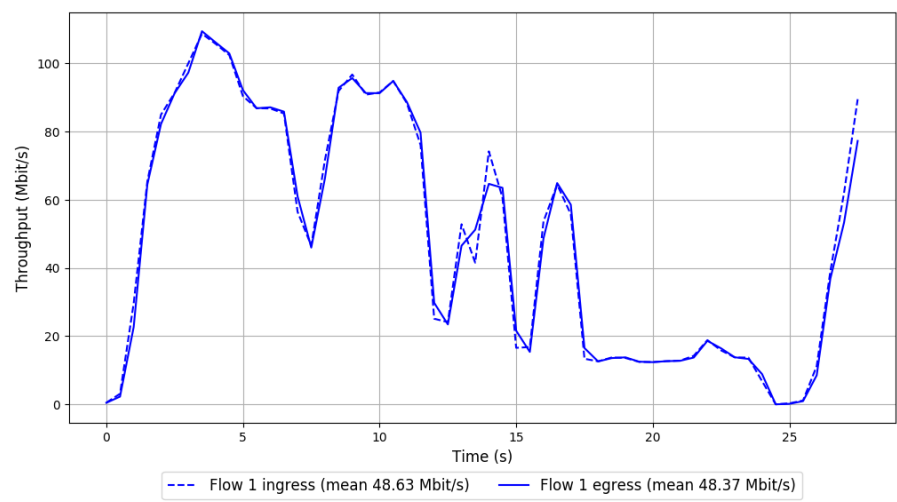
-- Flow 1:

Average throughput: 48.37 Mbit/s

95th percentile per-packet one-way delay: 63.631 ms

Loss rate: 0.96%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-16 07:07:15

End at: 2017-11-16 07:07:45

Below is generated by plot.py at 2017-11-16 10:20:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.21 Mbit/s

95th percentile per-packet one-way delay: 63.644 ms

Loss rate: 0.45%

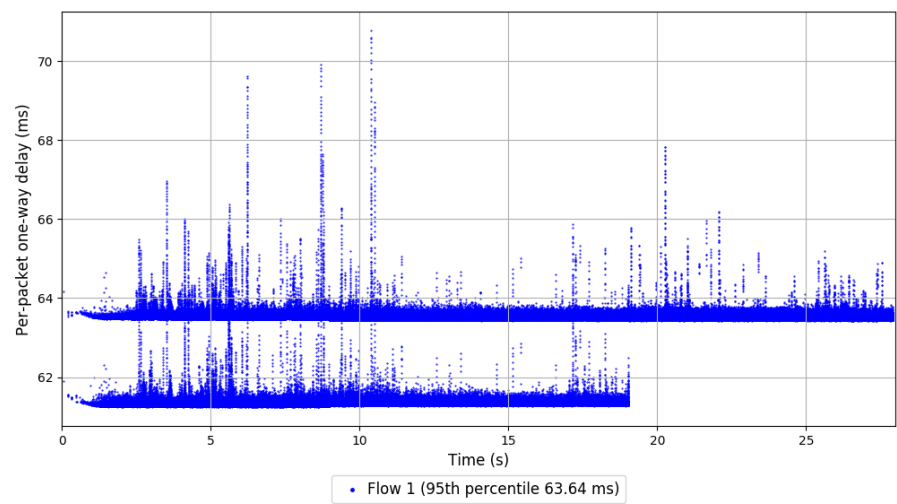
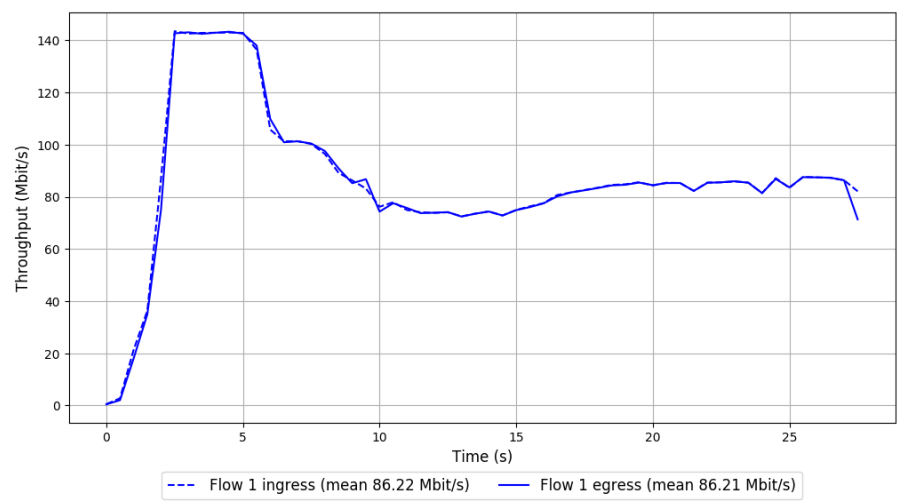
-- Flow 1:

Average throughput: 86.21 Mbit/s

95th percentile per-packet one-way delay: 63.644 ms

Loss rate: 0.45%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-16 07:17:43

End at: 2017-11-16 07:18:13

Below is generated by plot.py at 2017-11-16 10:20:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.66 Mbit/s

95th percentile per-packet one-way delay: 63.641 ms

Loss rate: 0.54%

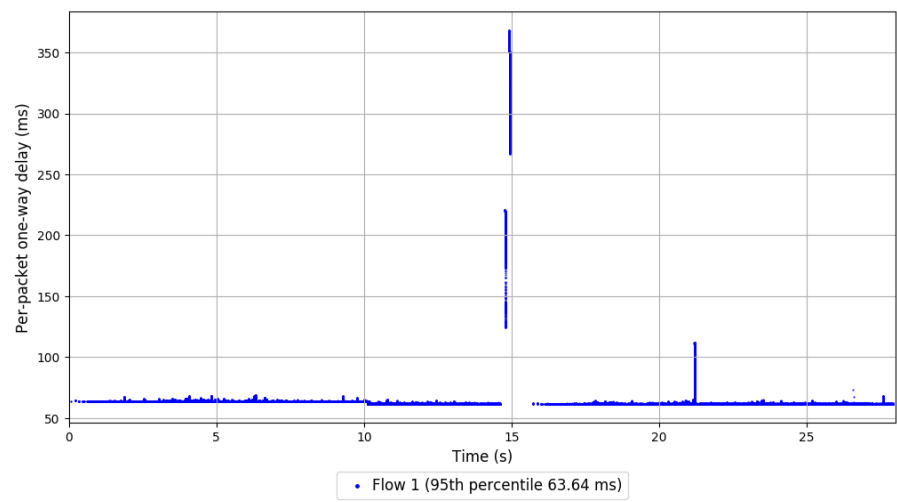
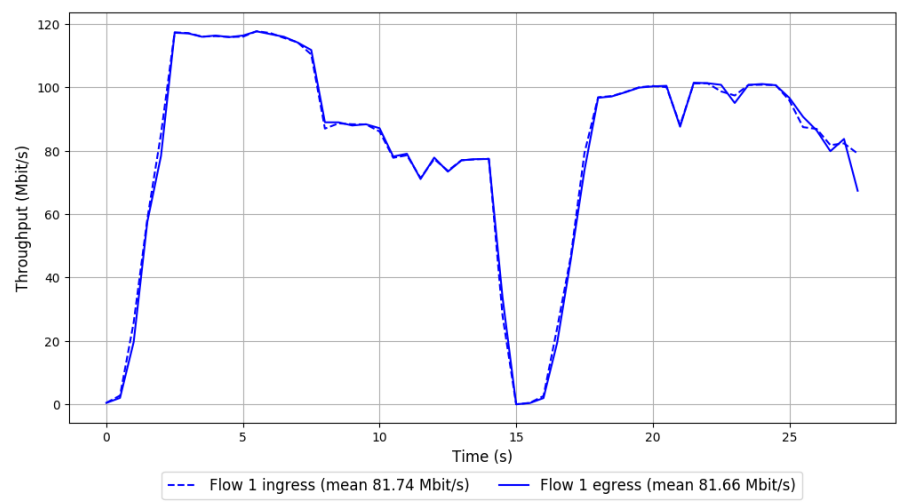
-- Flow 1:

Average throughput: 81.66 Mbit/s

95th percentile per-packet one-way delay: 63.641 ms

Loss rate: 0.54%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-16 07:28:13

End at: 2017-11-16 07:28:43

Below is generated by plot.py at 2017-11-16 10:20:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.58 Mbit/s

95th percentile per-packet one-way delay: 63.768 ms

Loss rate: 0.50%

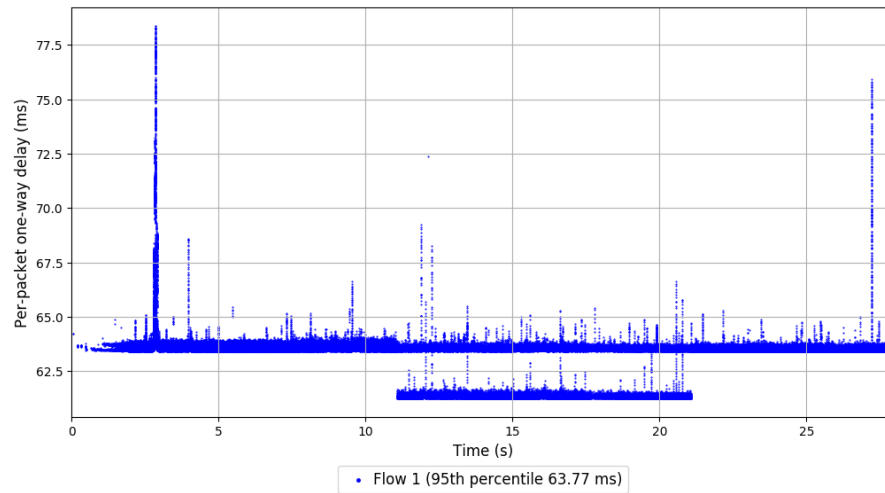
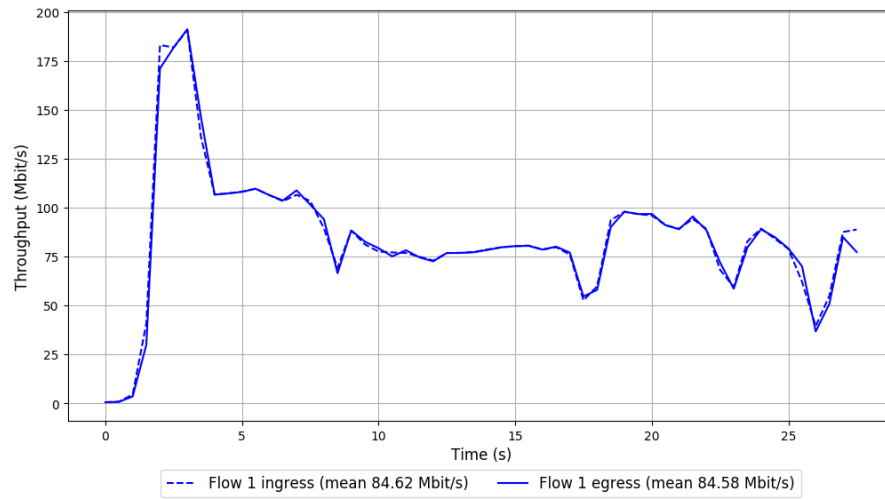
-- Flow 1:

Average throughput: 84.58 Mbit/s

95th percentile per-packet one-way delay: 63.768 ms

Loss rate: 0.50%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-16 07:38:56

End at: 2017-11-16 07:39:26

Below is generated by plot.py at 2017-11-16 10:20:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.96 Mbit/s

95th percentile per-packet one-way delay: 63.633 ms

Loss rate: 0.35%

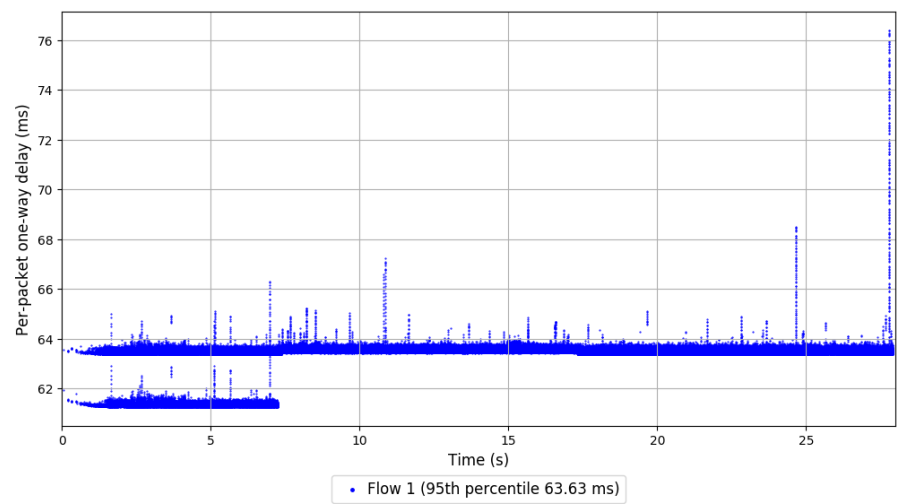
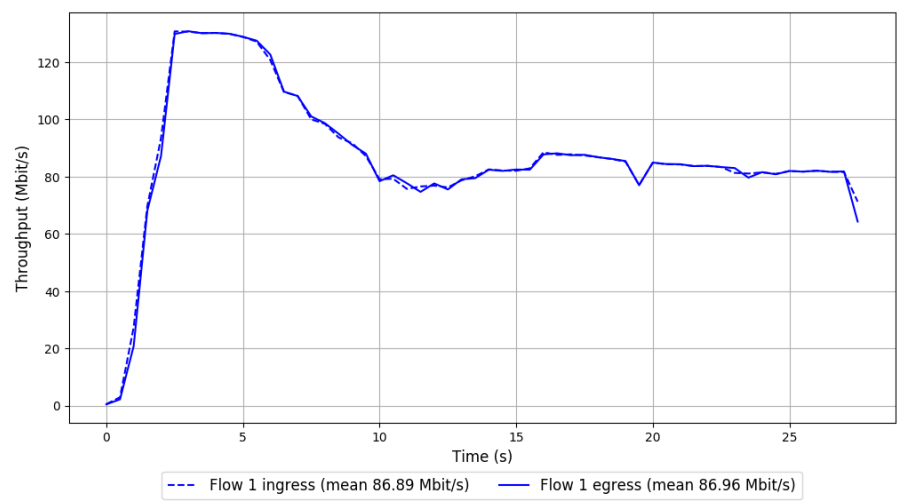
-- Flow 1:

Average throughput: 86.96 Mbit/s

95th percentile per-packet one-way delay: 63.633 ms

Loss rate: 0.35%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-16 07:49:17

End at: 2017-11-16 07:49:47

Below is generated by plot.py at 2017-11-16 10:21:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.54 Mbit/s

95th percentile per-packet one-way delay: 63.591 ms

Loss rate: 0.48%

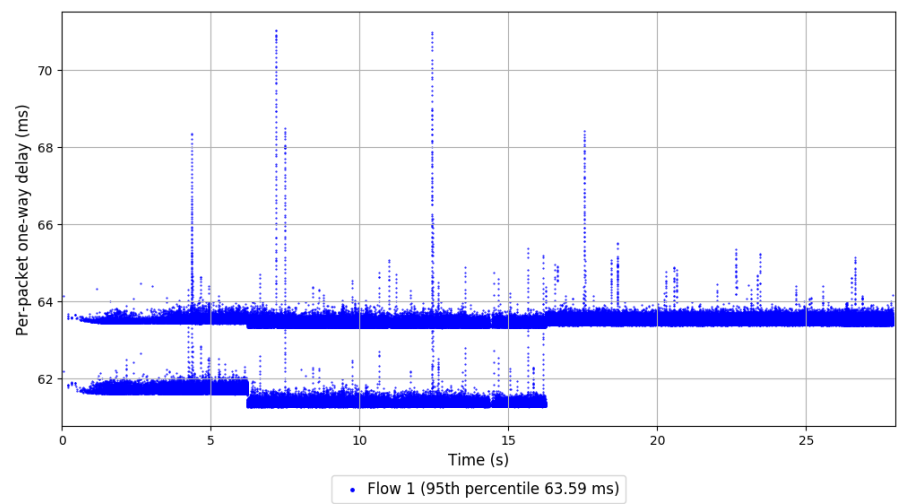
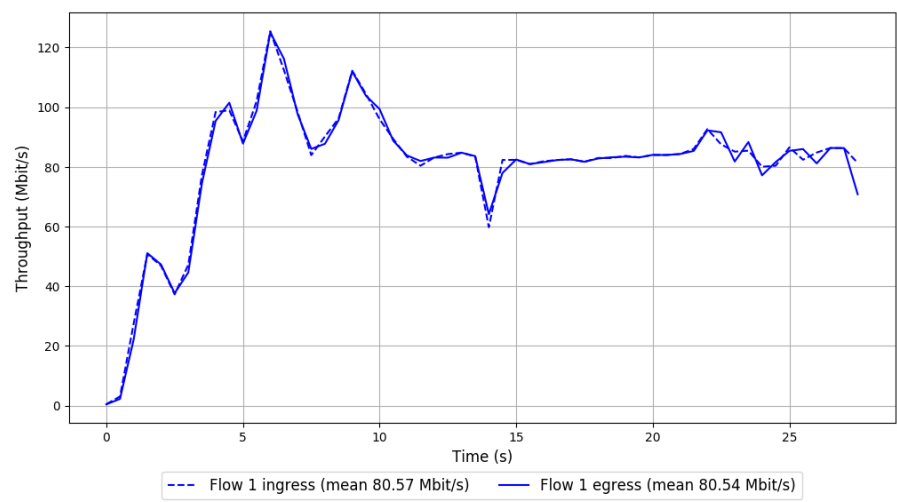
-- Flow 1:

Average throughput: 80.54 Mbit/s

95th percentile per-packet one-way delay: 63.591 ms

Loss rate: 0.48%

Run 10: Report of Copa — Data Link

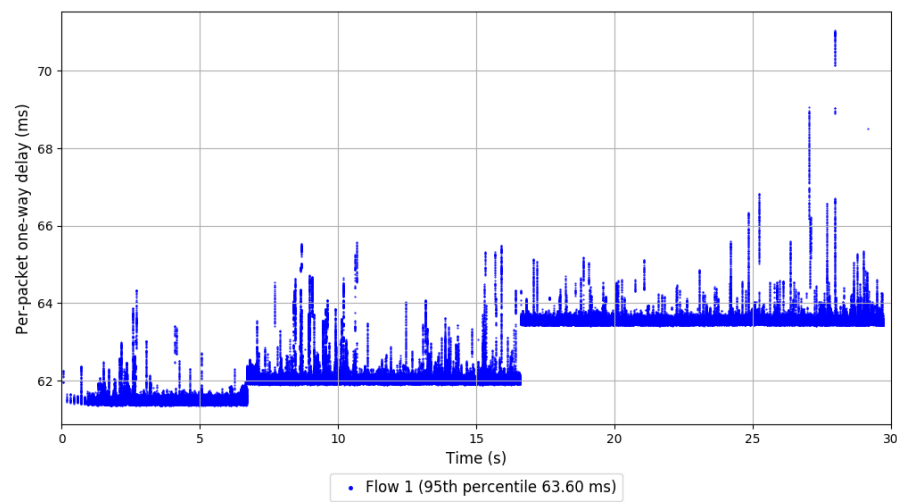
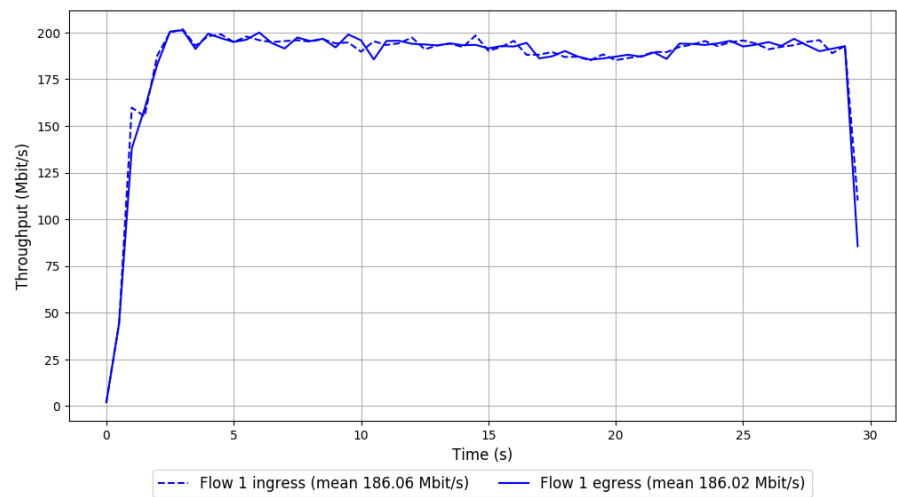


```
Run 1: Statistics of Indigo

Start at: 2017-11-16 06:14:59
End at: 2017-11-16 06:15:29

# Below is generated by plot.py at 2017-11-16 10:21:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.02 Mbit/s
95th percentile per-packet one-way delay: 63.602 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 186.02 Mbit/s
95th percentile per-packet one-way delay: 63.602 ms
Loss rate: 0.45%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-11-16 06:25:34

End at: 2017-11-16 06:26:05

Below is generated by plot.py at 2017-11-16 10:22:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.09 Mbit/s

95th percentile per-packet one-way delay: 63.661 ms

Loss rate: 0.42%

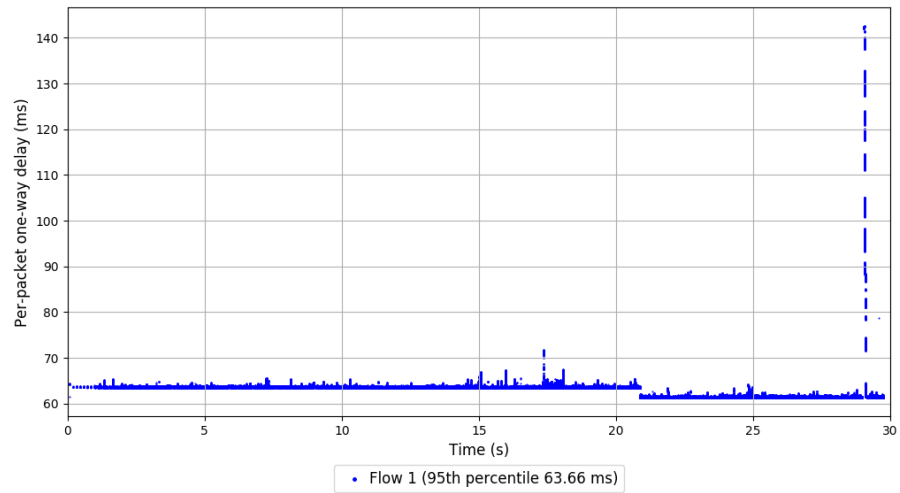
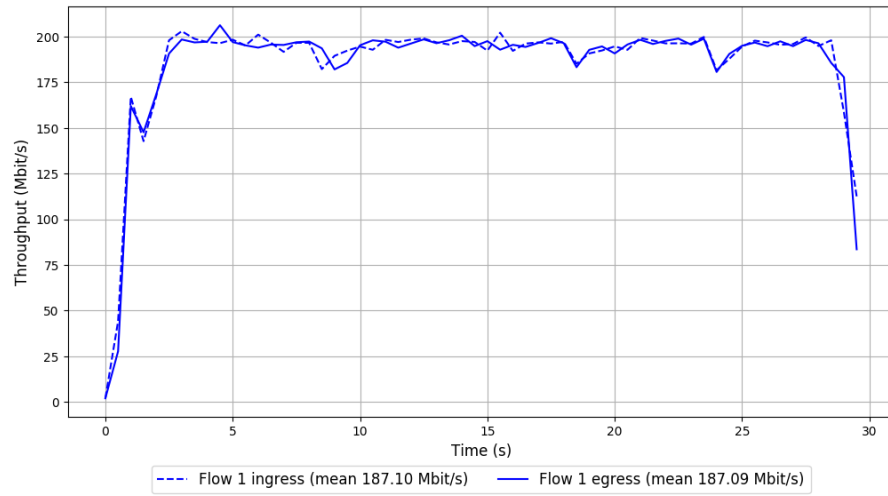
-- Flow 1:

Average throughput: 187.09 Mbit/s

95th percentile per-packet one-way delay: 63.661 ms

Loss rate: 0.42%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-16 06:36:09

End at: 2017-11-16 06:36:39

Below is generated by plot.py at 2017-11-16 10:22:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.47 Mbit/s

95th percentile per-packet one-way delay: 63.646 ms

Loss rate: 0.45%

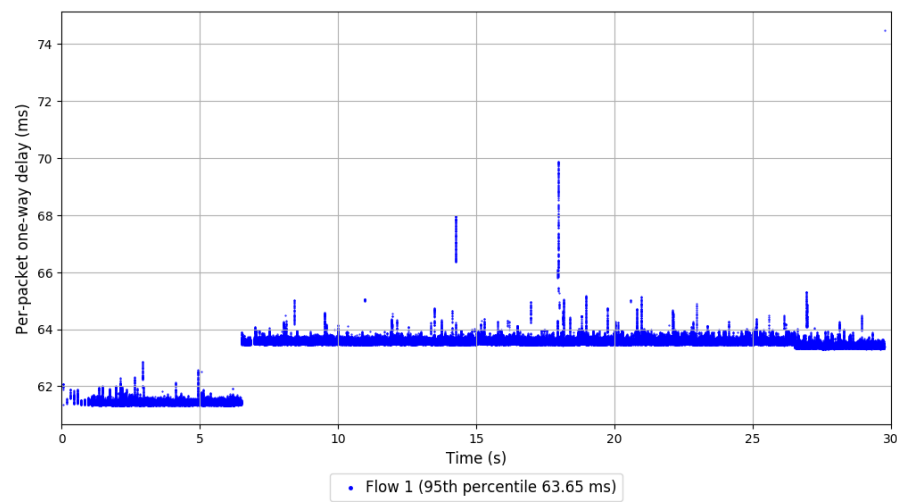
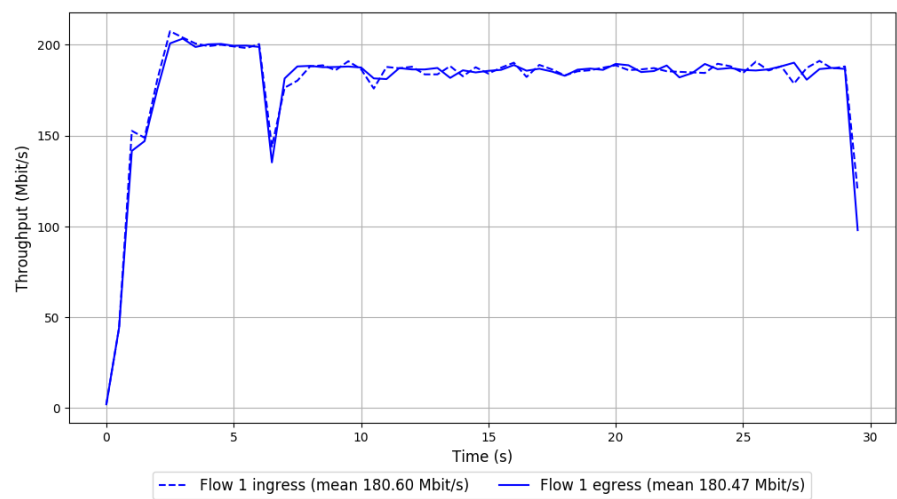
-- Flow 1:

Average throughput: 180.47 Mbit/s

95th percentile per-packet one-way delay: 63.646 ms

Loss rate: 0.45%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-16 06:46:50

End at: 2017-11-16 06:47:20

Below is generated by plot.py at 2017-11-16 10:22:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.22 Mbit/s

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

Loss rate: 0.57%

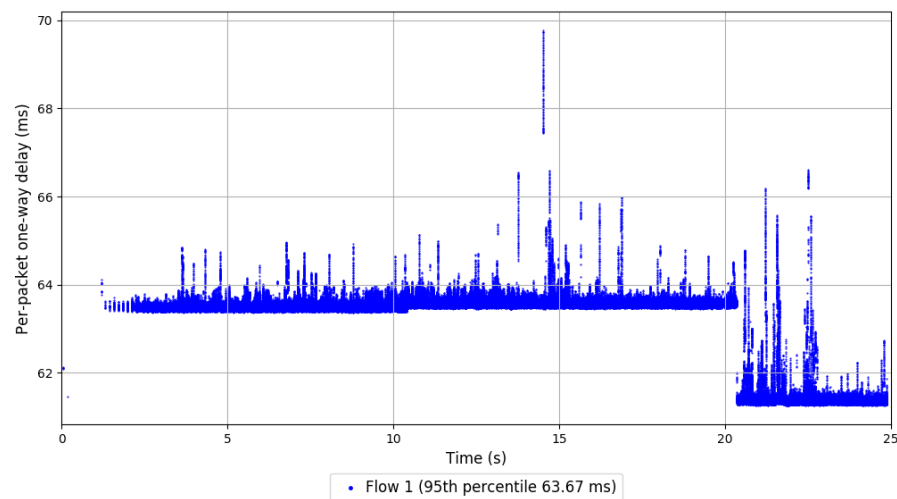
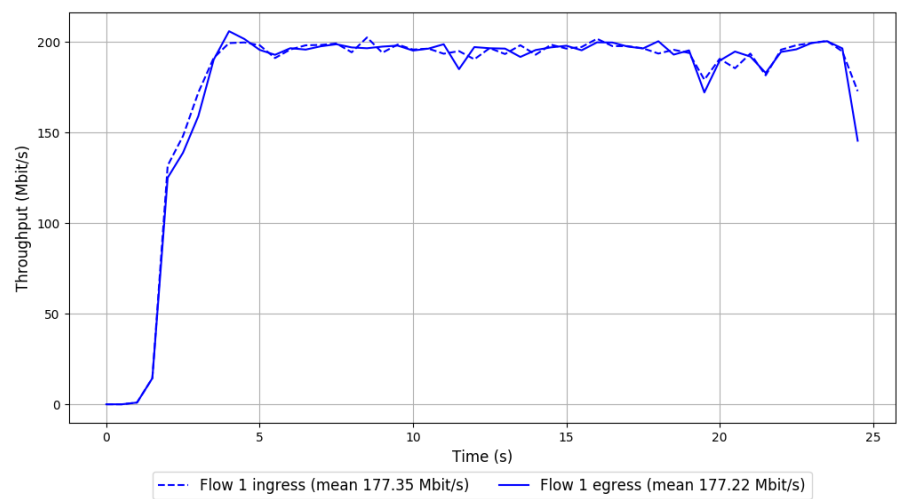
-- Flow 1:

Average throughput: 177.22 Mbit/s

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

Loss rate: 0.57%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-16 06:57:19

End at: 2017-11-16 06:57:49

Below is generated by plot.py at 2017-11-16 10:23:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.47 Mbit/s

95th percentile per-packet one-way delay: 63.751 ms

Loss rate: 0.50%

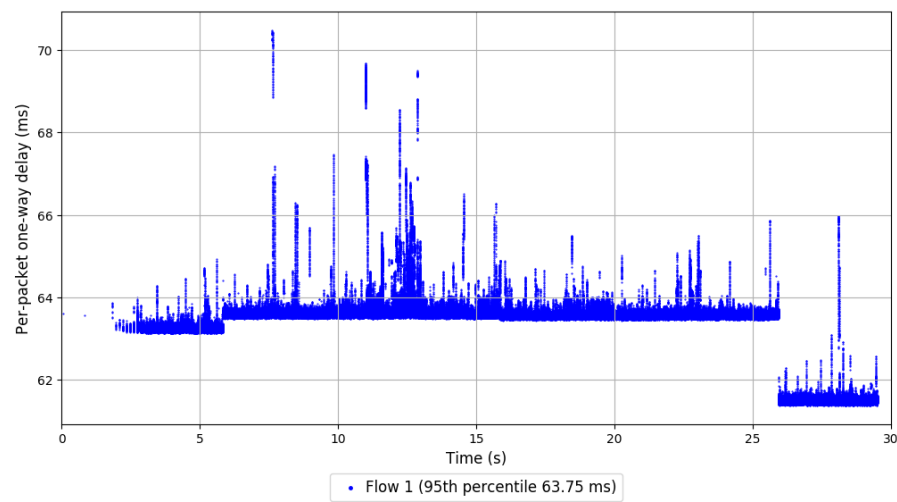
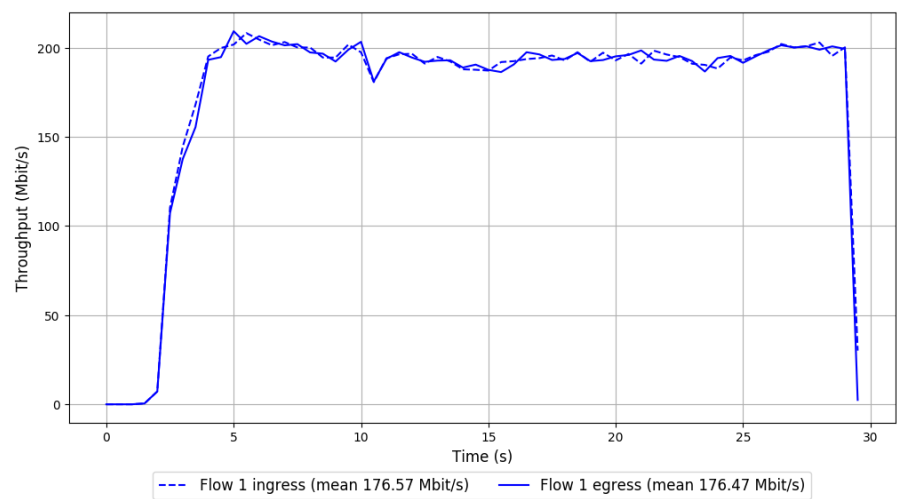
-- Flow 1:

Average throughput: 176.47 Mbit/s

95th percentile per-packet one-way delay: 63.751 ms

Loss rate: 0.50%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-16 07:08:00

End at: 2017-11-16 07:08:30

Below is generated by plot.py at 2017-11-16 10:23:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.76 Mbit/s

95th percentile per-packet one-way delay: 63.799 ms

Loss rate: 0.51%

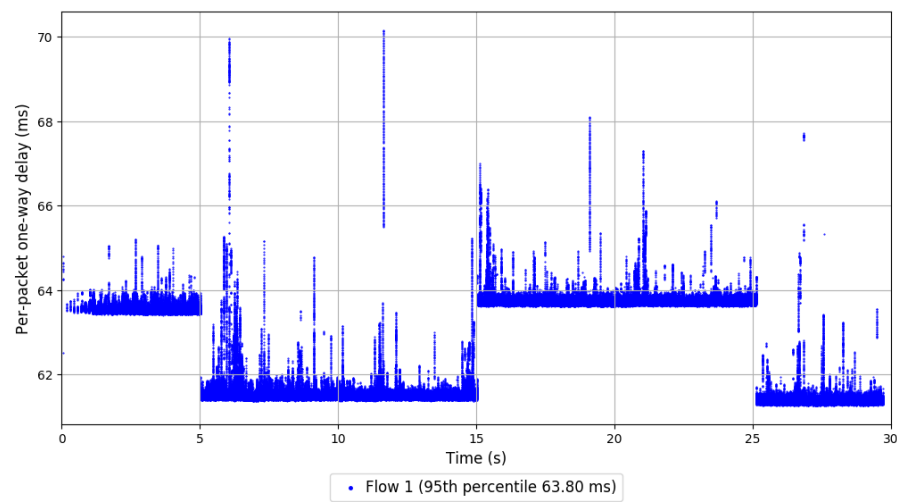
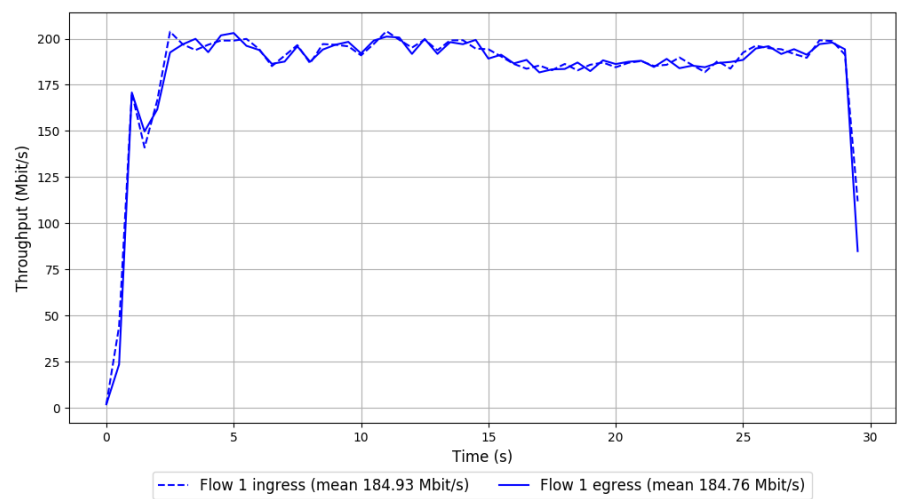
-- Flow 1:

Average throughput: 184.76 Mbit/s

95th percentile per-packet one-way delay: 63.799 ms

Loss rate: 0.51%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-16 07:18:29

End at: 2017-11-16 07:18:59

Below is generated by plot.py at 2017-11-16 10:23:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.60 Mbit/s

95th percentile per-packet one-way delay: 63.764 ms

Loss rate: 0.44%

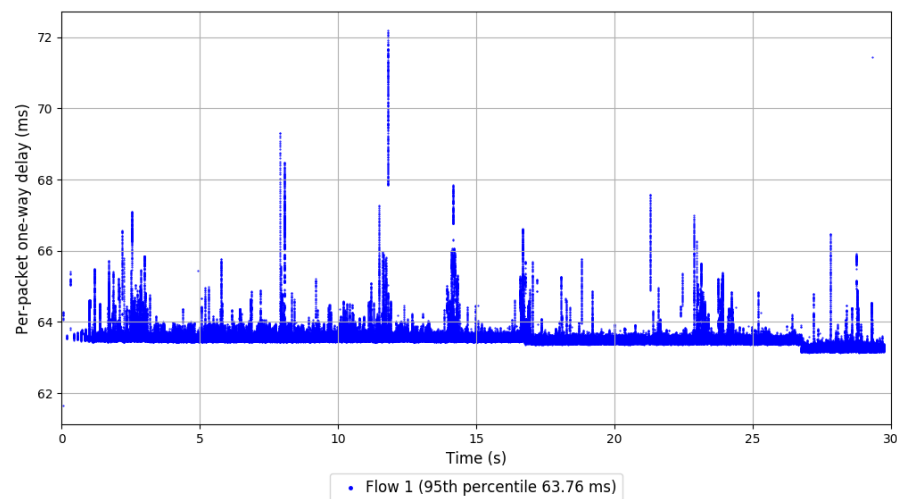
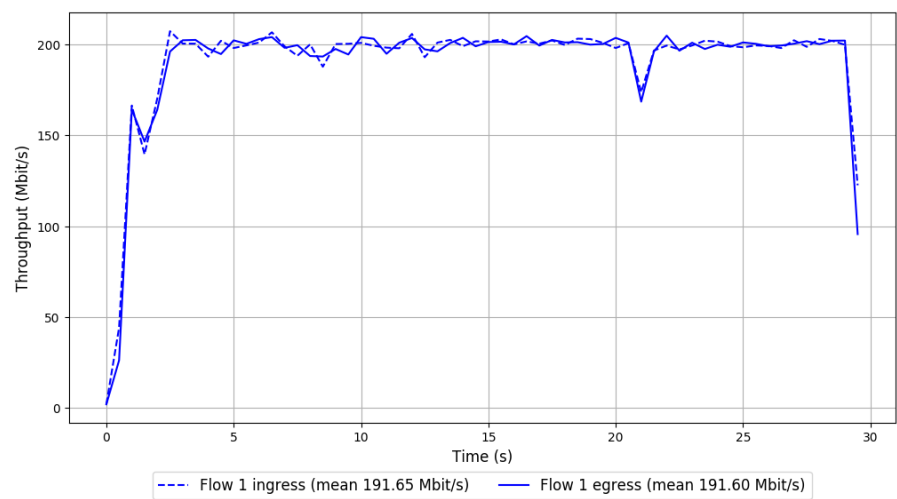
-- Flow 1:

Average throughput: 191.60 Mbit/s

95th percentile per-packet one-way delay: 63.764 ms

Loss rate: 0.44%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-16 07:28:58

End at: 2017-11-16 07:29:28

Below is generated by plot.py at 2017-11-16 10:24:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.97 Mbit/s

95th percentile per-packet one-way delay: 63.492 ms

Loss rate: 0.43%

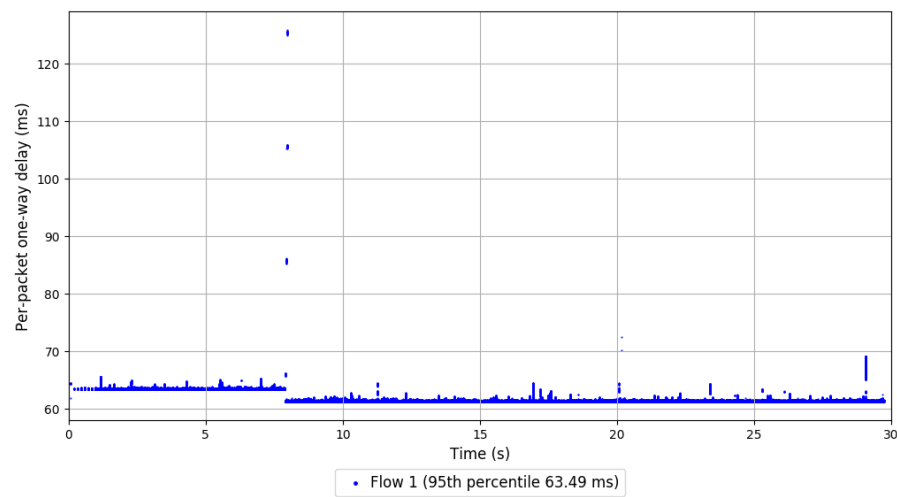
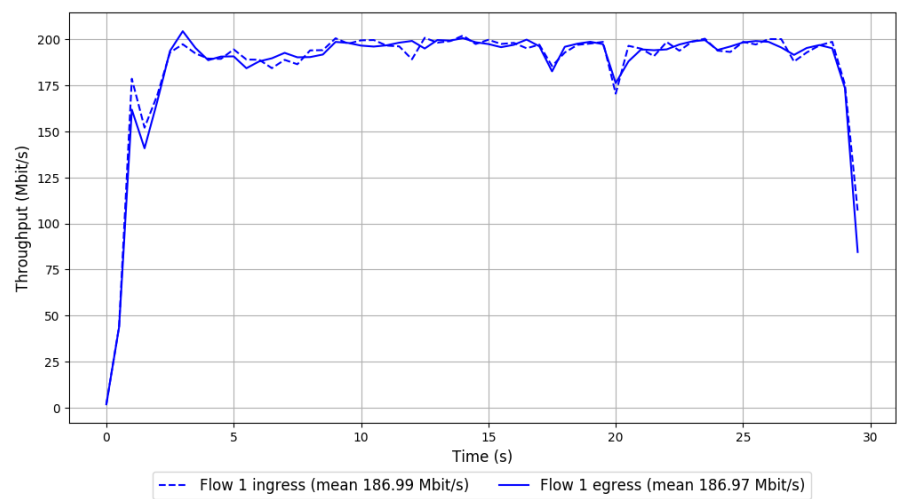
-- Flow 1:

Average throughput: 186.97 Mbit/s

95th percentile per-packet one-way delay: 63.492 ms

Loss rate: 0.43%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-16 07:39:41

End at: 2017-11-16 07:40:12

Below is generated by plot.py at 2017-11-16 10:24:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.74 Mbit/s

95th percentile per-packet one-way delay: 63.618 ms

Loss rate: 0.44%

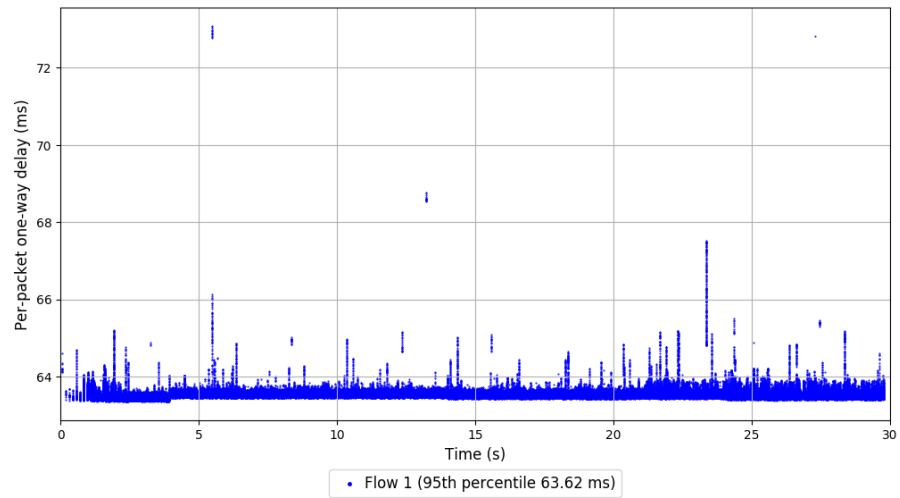
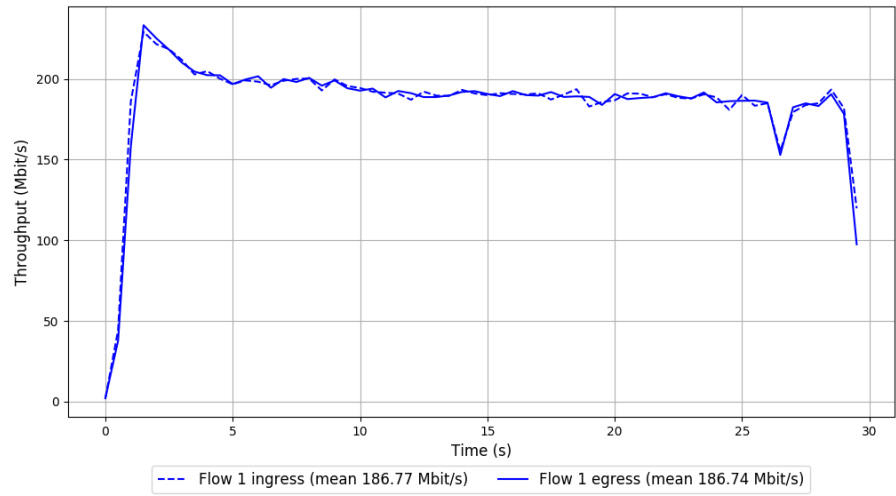
-- Flow 1:

Average throughput: 186.74 Mbit/s

95th percentile per-packet one-way delay: 63.618 ms

Loss rate: 0.44%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-16 07:50:02

End at: 2017-11-16 07:50:32

Below is generated by plot.py at 2017-11-16 10:25:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.90 Mbit/s

95th percentile per-packet one-way delay: 63.541 ms

Loss rate: 0.33%

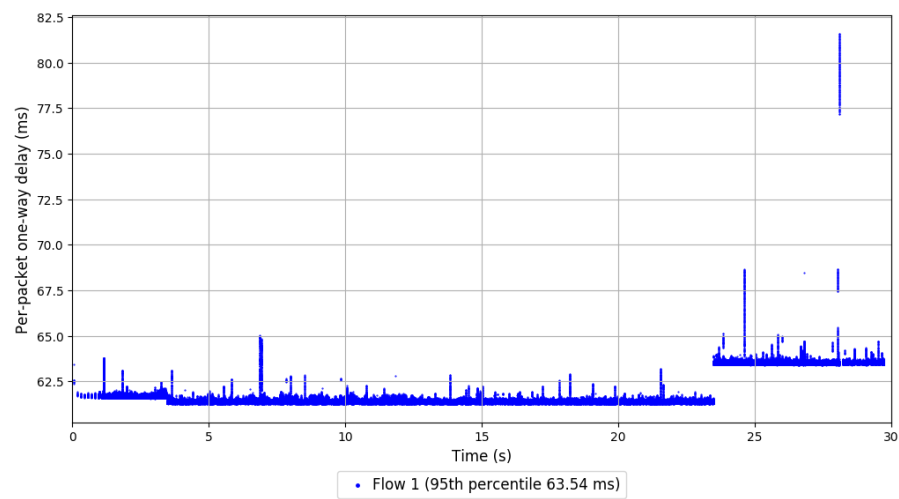
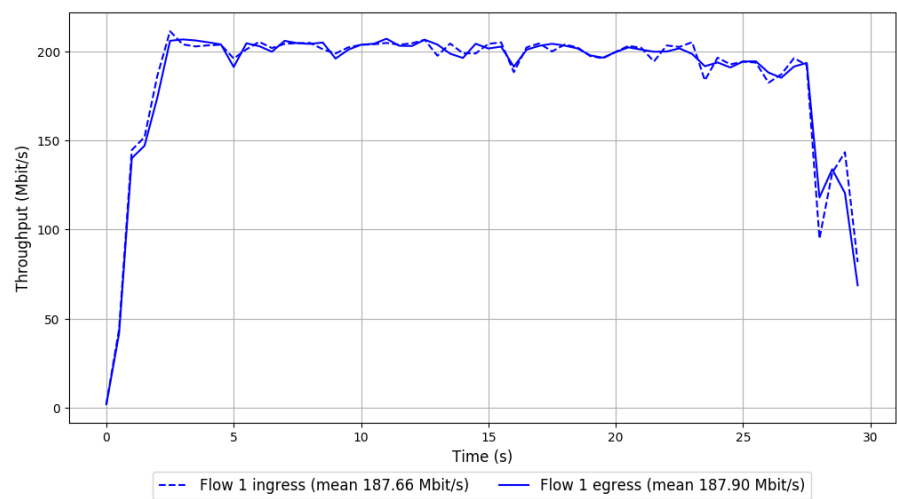
-- Flow 1:

Average throughput: 187.90 Mbit/s

95th percentile per-packet one-way delay: 63.541 ms

Loss rate: 0.33%

Run 10: Report of Indigo — Data Link

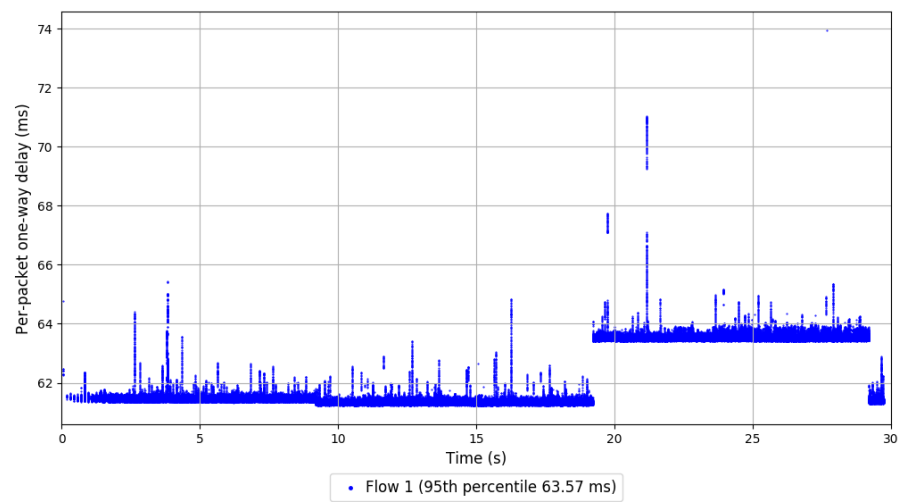
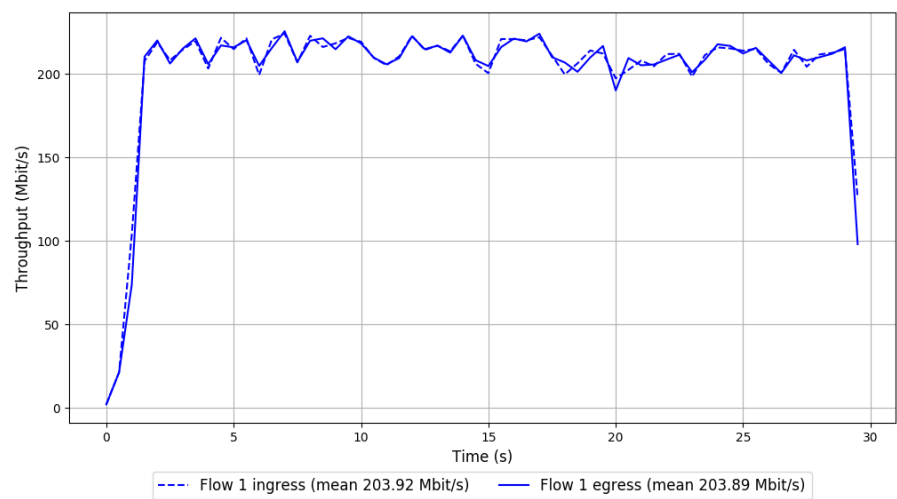


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-16 06:12:06
End at: 2017-11-16 06:12:36

# Below is generated by plot.py at 2017-11-16 10:25:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.89 Mbit/s
95th percentile per-packet one-way delay: 63.569 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 203.89 Mbit/s
95th percentile per-packet one-way delay: 63.569 ms
Loss rate: 0.44%
```

Run 1: Report of Indigo-calib — Data Link

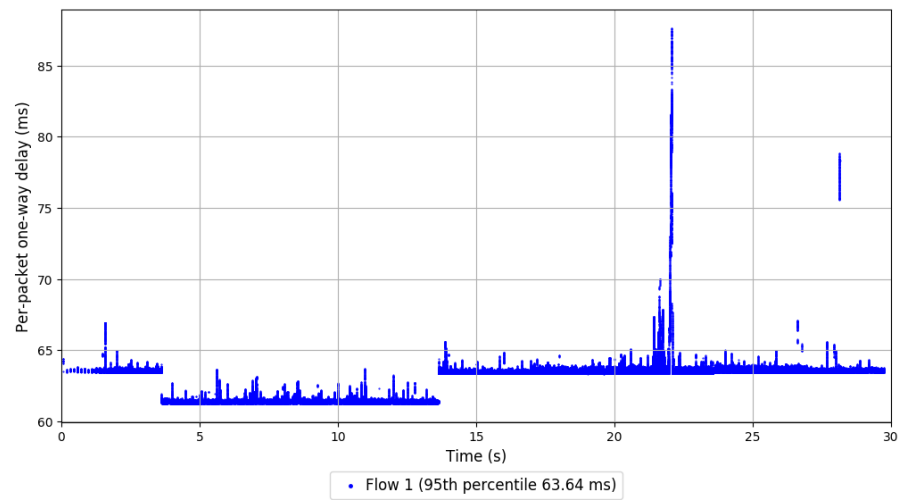
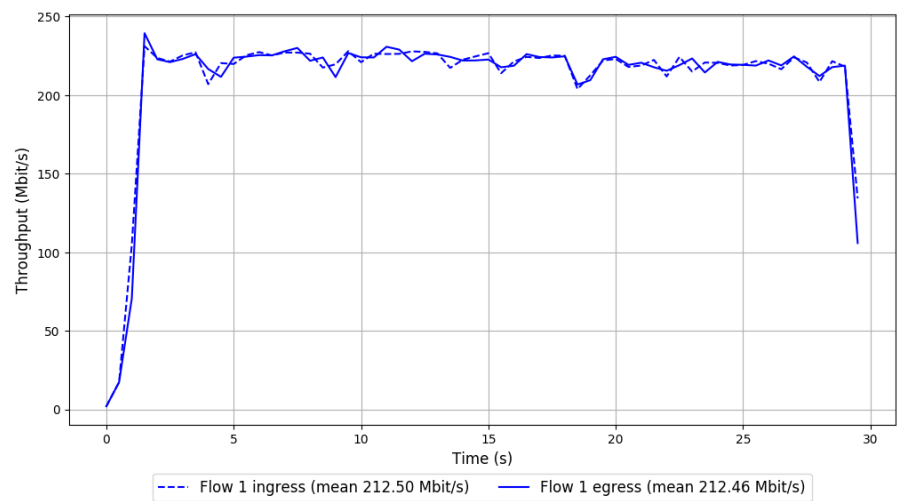


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-16 06:22:42
End at: 2017-11-16 06:23:12

# Below is generated by plot.py at 2017-11-16 10:26:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 212.46 Mbit/s
95th percentile per-packet one-way delay: 63.642 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 212.46 Mbit/s
95th percentile per-packet one-way delay: 63.642 ms
Loss rate: 0.45%
```

Run 2: Report of Indigo-calib — Data Link

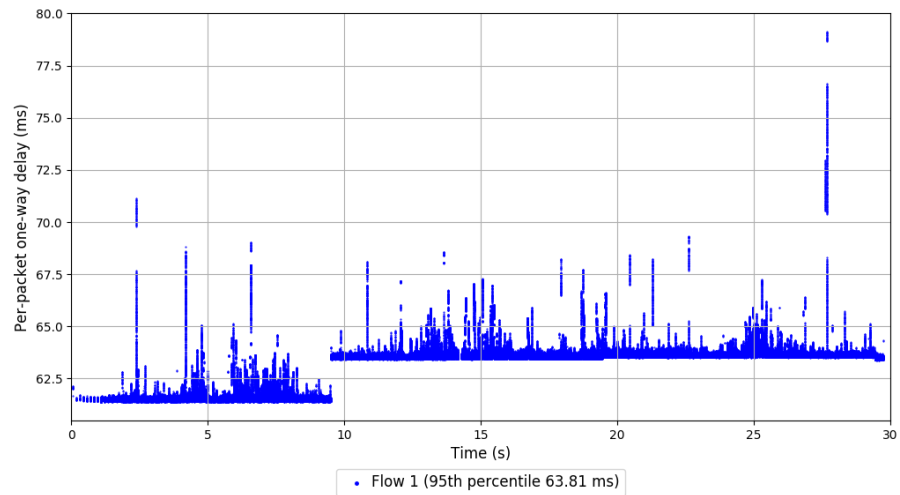
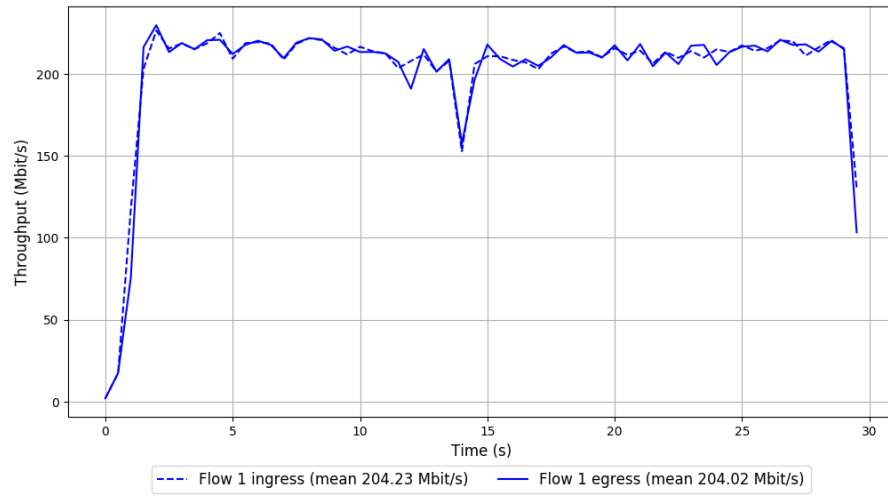


```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-16 06:33:16
End at: 2017-11-16 06:33:46

# Below is generated by plot.py at 2017-11-16 10:26:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 204.02 Mbit/s
95th percentile per-packet one-way delay: 63.806 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 204.02 Mbit/s
95th percentile per-packet one-way delay: 63.806 ms
Loss rate: 0.52%
```

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-16 06:43:58

End at: 2017-11-16 06:44:28

Below is generated by plot.py at 2017-11-16 10:26:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.81 Mbit/s

95th percentile per-packet one-way delay: 62.009 ms

Loss rate: 0.42%

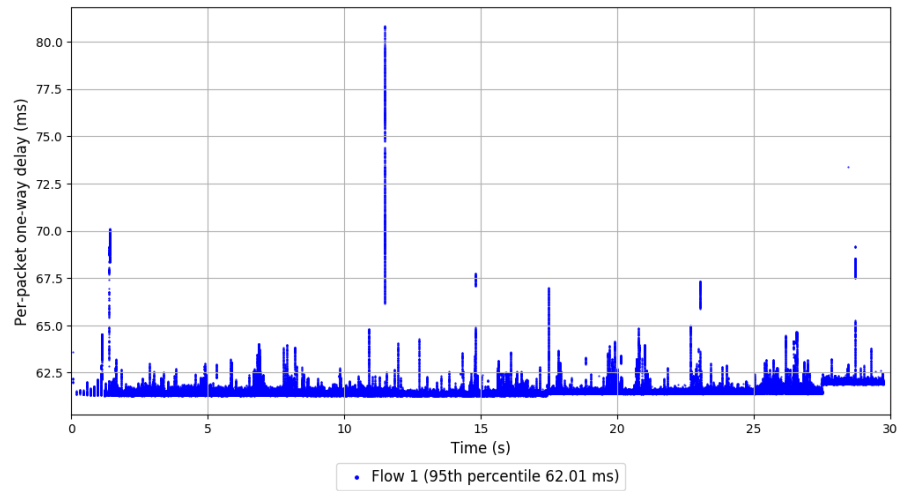
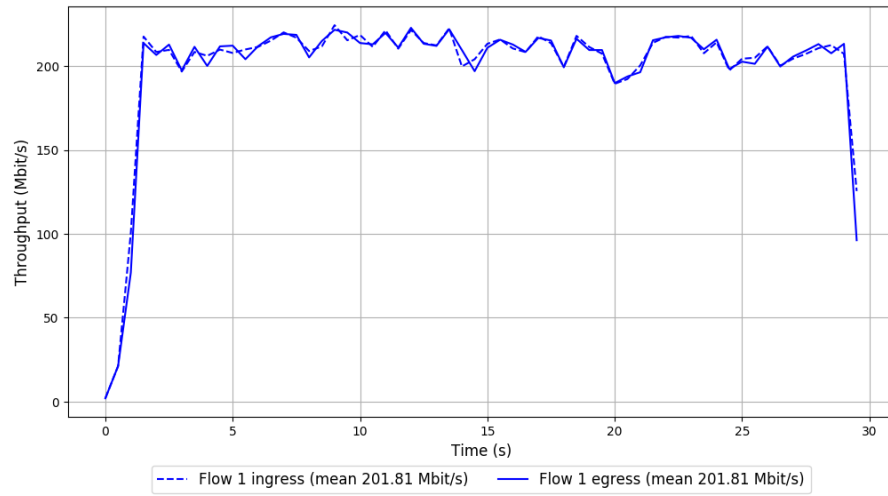
-- Flow 1:

Average throughput: 201.81 Mbit/s

95th percentile per-packet one-way delay: 62.009 ms

Loss rate: 0.42%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-16 06:54:29

End at: 2017-11-16 06:54:59

Below is generated by plot.py at 2017-11-16 10:26:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.99 Mbit/s

95th percentile per-packet one-way delay: 63.593 ms

Loss rate: 0.45%

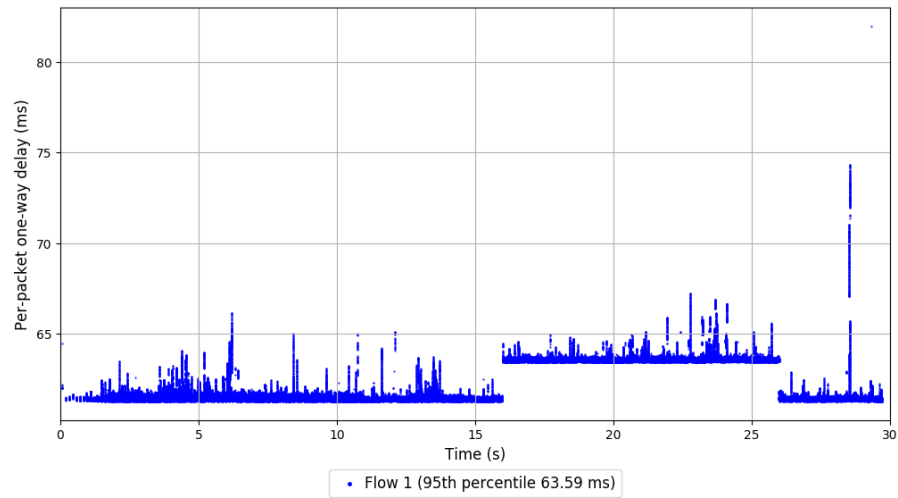
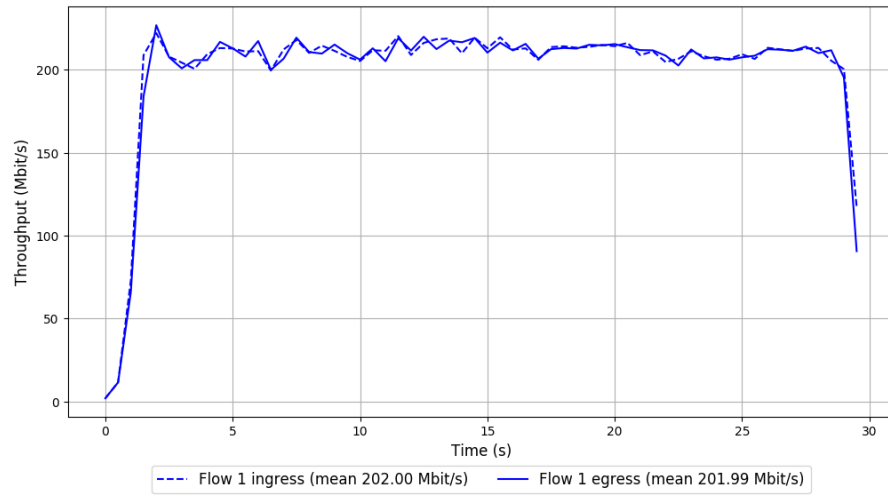
-- Flow 1:

Average throughput: 201.99 Mbit/s

95th percentile per-packet one-way delay: 63.593 ms

Loss rate: 0.45%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-11-16 07:05:06

End at: 2017-11-16 07:05:36

Below is generated by plot.py at 2017-11-16 10:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.00 Mbit/s

95th percentile per-packet one-way delay: 63.777 ms

Loss rate: 0.45%

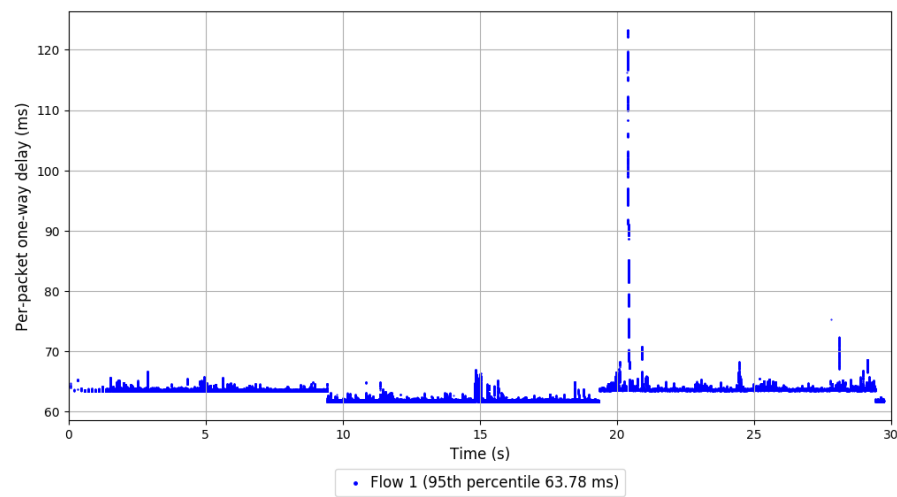
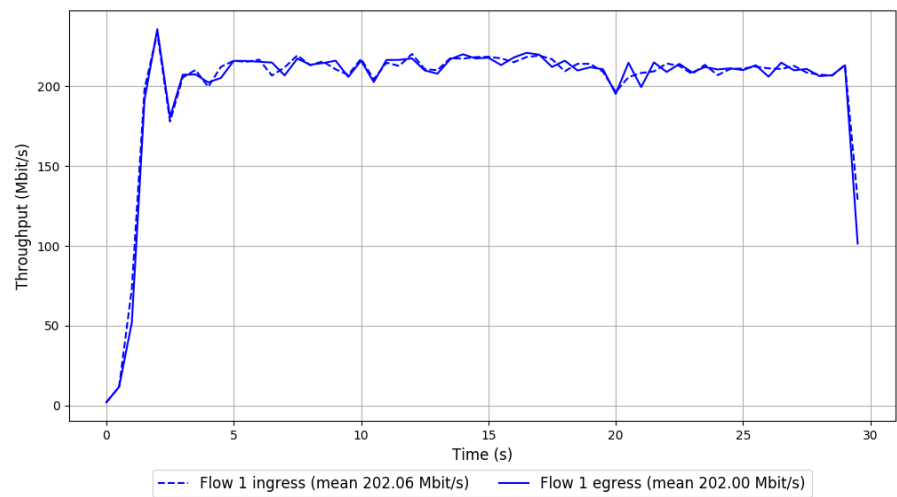
-- Flow 1:

Average throughput: 202.00 Mbit/s

95th percentile per-packet one-way delay: 63.777 ms

Loss rate: 0.45%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-16 07:15:36

End at: 2017-11-16 07:16:06

Below is generated by plot.py at 2017-11-16 10:27:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.44 Mbit/s

95th percentile per-packet one-way delay: 63.504 ms

Loss rate: 0.45%

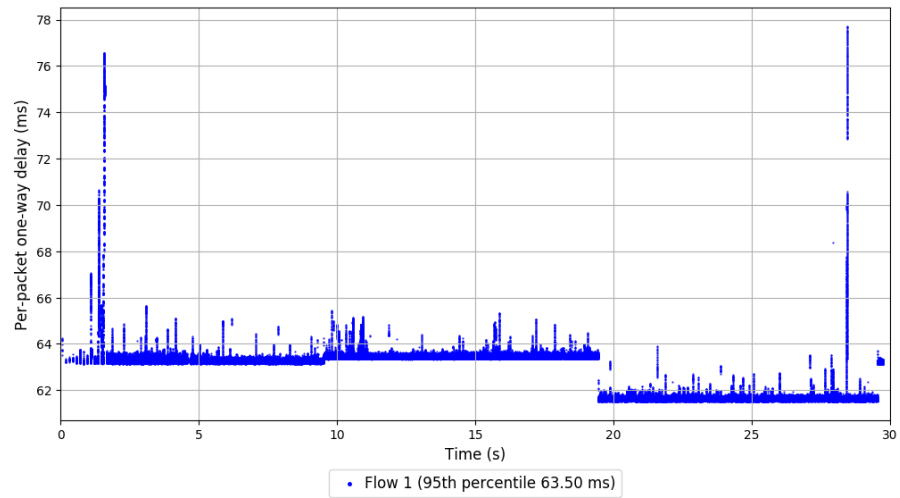
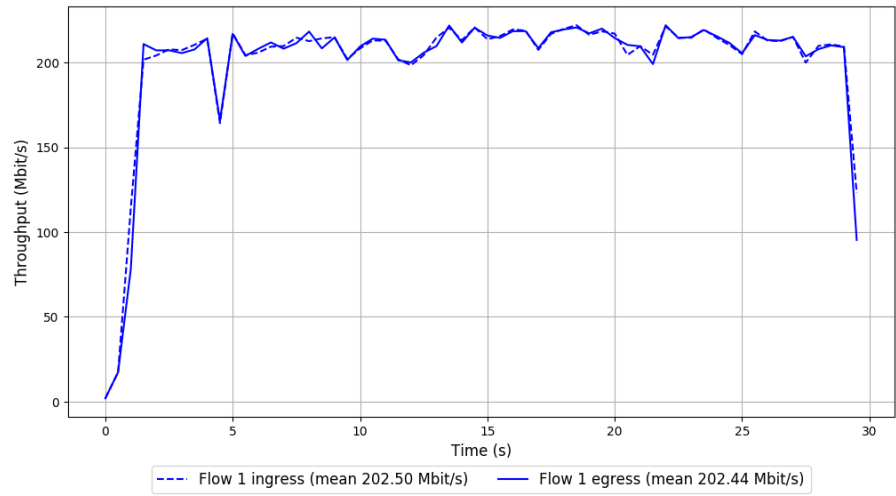
-- Flow 1:

Average throughput: 202.44 Mbit/s

95th percentile per-packet one-way delay: 63.504 ms

Loss rate: 0.45%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-16 07:26:06

End at: 2017-11-16 07:26:36

Below is generated by plot.py at 2017-11-16 10:27:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.38 Mbit/s

95th percentile per-packet one-way delay: 63.588 ms

Loss rate: 0.44%

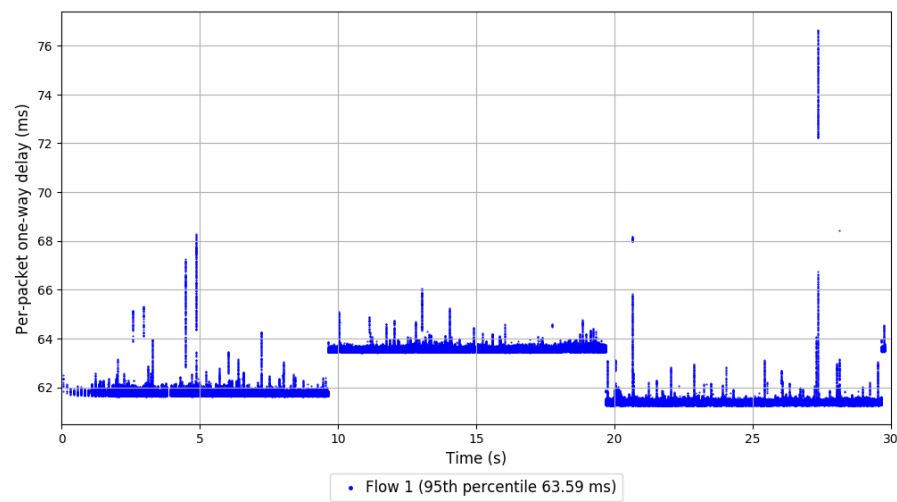
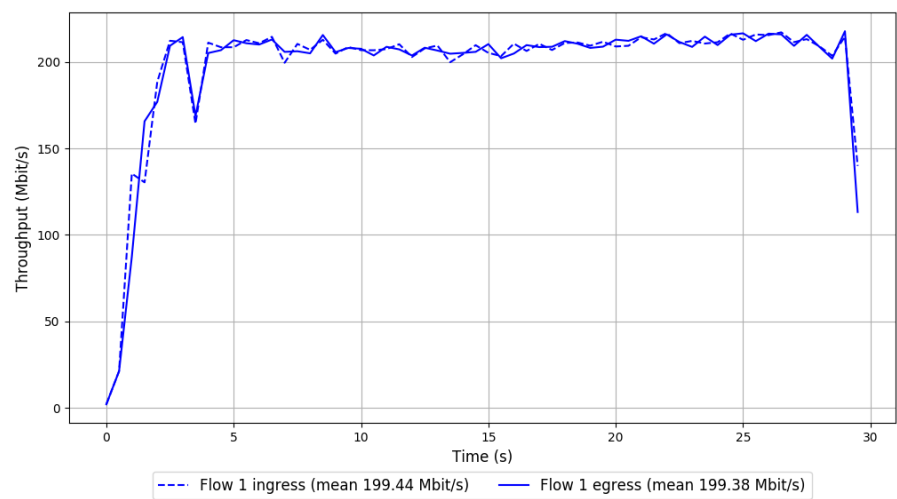
-- Flow 1:

Average throughput: 199.38 Mbit/s

95th percentile per-packet one-way delay: 63.588 ms

Loss rate: 0.44%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-16 07:36:49

End at: 2017-11-16 07:37:19

Below is generated by plot.py at 2017-11-16 10:27:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 207.62 Mbit/s

95th percentile per-packet one-way delay: 63.604 ms

Loss rate: 0.37%

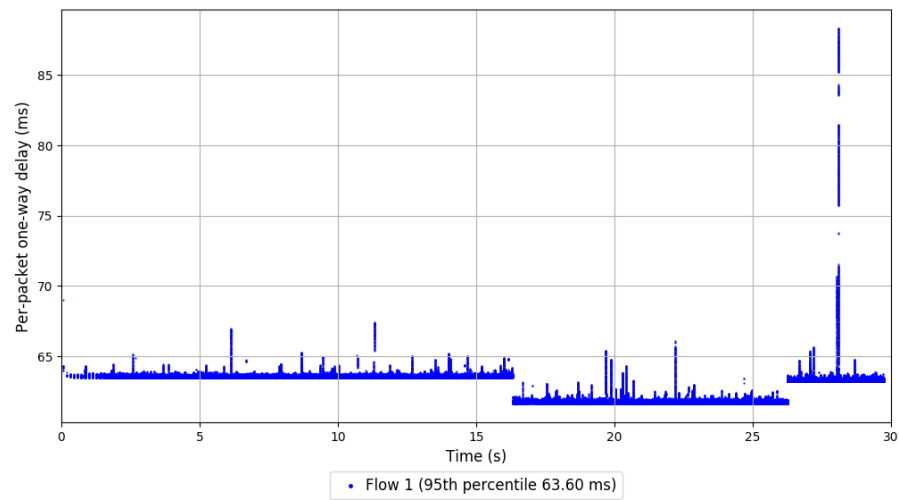
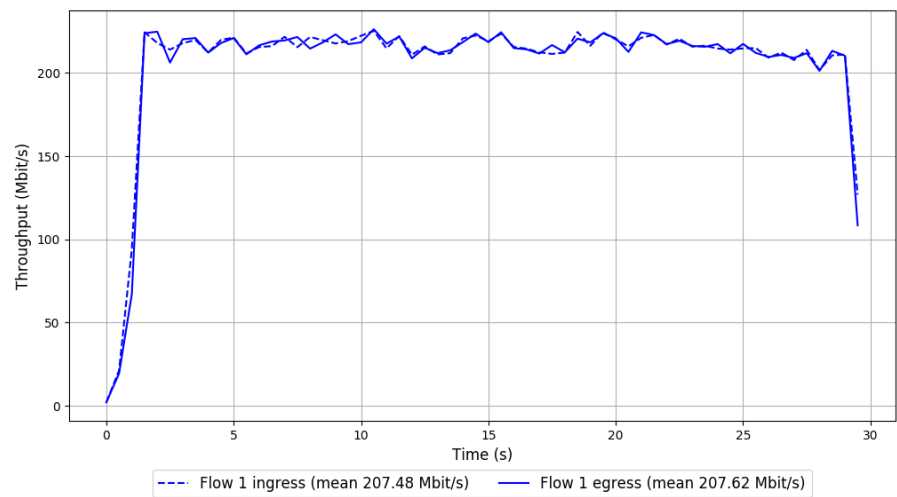
-- Flow 1:

Average throughput: 207.62 Mbit/s

95th percentile per-packet one-way delay: 63.604 ms

Loss rate: 0.37%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-16 07:47:10

End at: 2017-11-16 07:47:40

Below is generated by plot.py at 2017-11-16 10:27:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 203.27 Mbit/s

95th percentile per-packet one-way delay: 63.547 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 203.27 Mbit/s

95th percentile per-packet one-way delay: 63.547 ms

Loss rate: 0.42%

Run 10: Report of Indigo-calib — Data Link

