

Pantheon Report

Generated at 2017-12-05 15:36:24 (UTC).

Data path: GCE London 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.

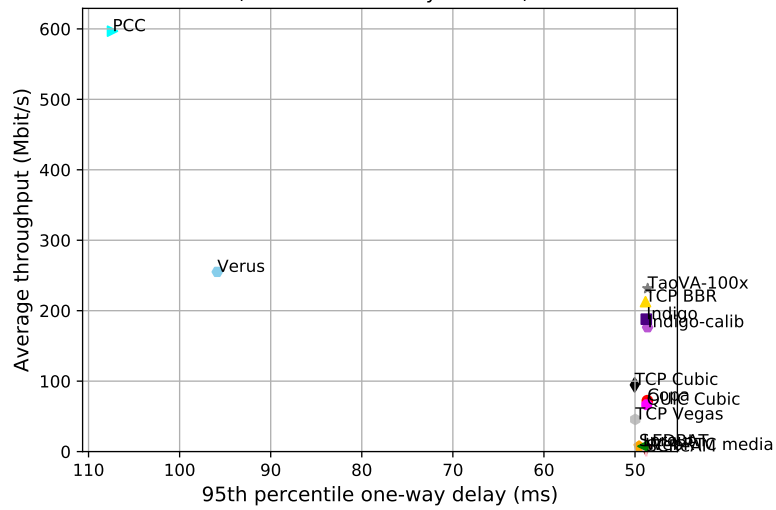
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

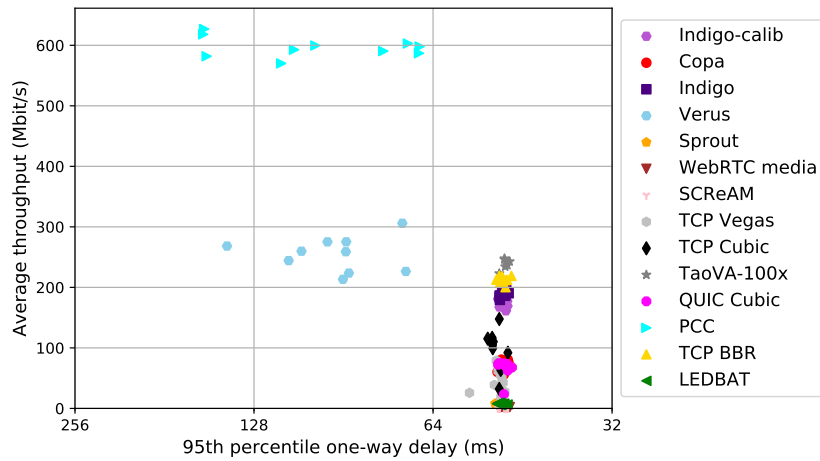
Git summary:

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	212.82	48.85	0.46
TCP Cubic	10	94.66	50.04	0.40
LEDBAT	10	7.56	49.14	0.63
PCC	10	596.76	107.37	1.01
QUIC Cubic	10	66.57	48.71	0.44
SCReAM	10	0.22	48.77	0.38
WebRTC media	10	2.29	48.81	0.40
Sprout	10	7.84	49.56	0.78
TaoVA-100x	8	231.42	48.62	0.37
TCP Vegas	10	45.64	49.98	0.41
Verus	10	255.10	95.87	0.59
Copa	10	72.29	48.65	0.36
Indigo	10	187.94	48.76	0.45
Indigo-calib	10	176.54	48.62	0.29

Run 1: Statistics of TCP BBR

Start at: 2017-12-05 11:19:02

End at: 2017-12-05 11:19:33

Below is generated by plot.py at 2017-12-05 14:53:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.95 Mbit/s

95th percentile per-packet one-way delay: 47.251 ms

Loss rate: 0.36%

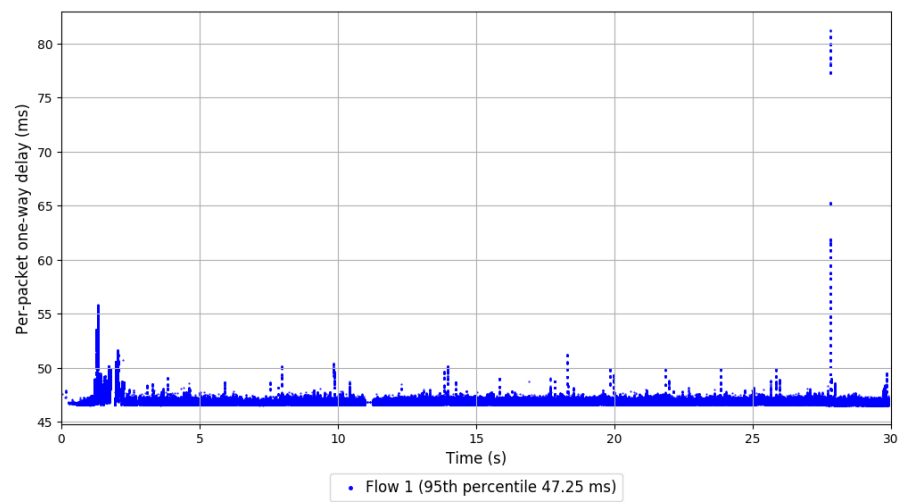
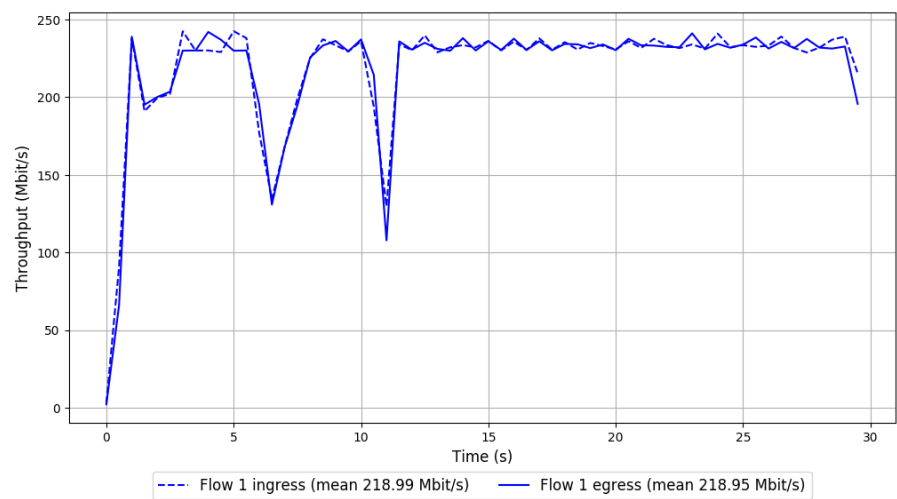
-- Flow 1:

Average throughput: 218.95 Mbit/s

95th percentile per-packet one-way delay: 47.251 ms

Loss rate: 0.36%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-05 11:29:36

End at: 2017-12-05 11:30:06

Below is generated by plot.py at 2017-12-05 14:53:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.58 Mbit/s

95th percentile per-packet one-way delay: 48.050 ms

Loss rate: 0.37%

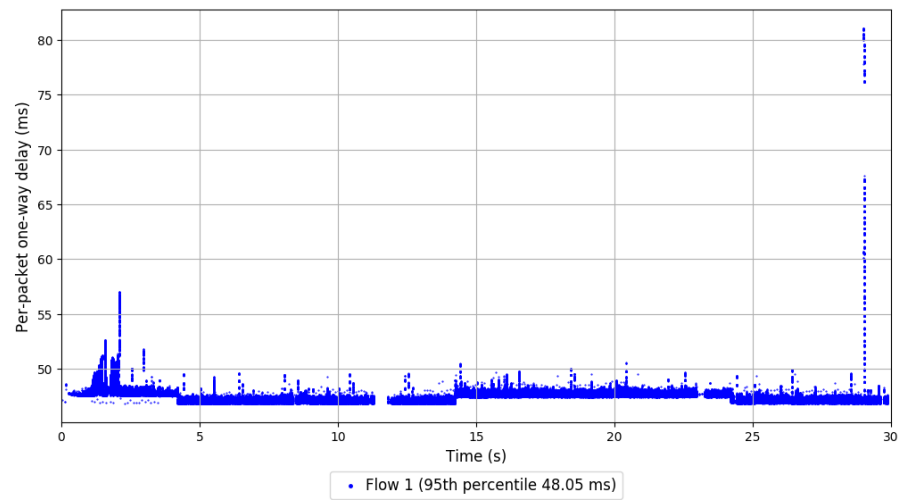
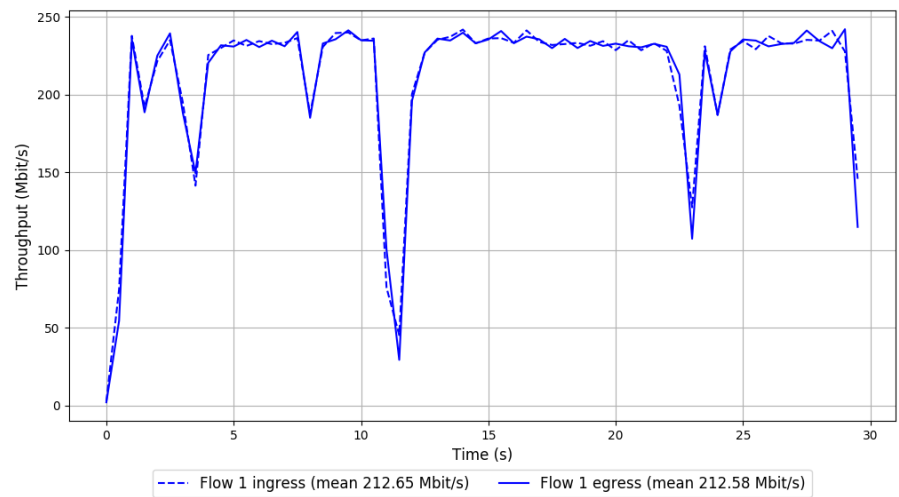
-- Flow 1:

Average throughput: 212.58 Mbit/s

95th percentile per-packet one-way delay: 48.050 ms

Loss rate: 0.37%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-05 11:40:03

End at: 2017-12-05 11:40:33

Below is generated by plot.py at 2017-12-05 14:53:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.15 Mbit/s

95th percentile per-packet one-way delay: 48.781 ms

Loss rate: 0.54%

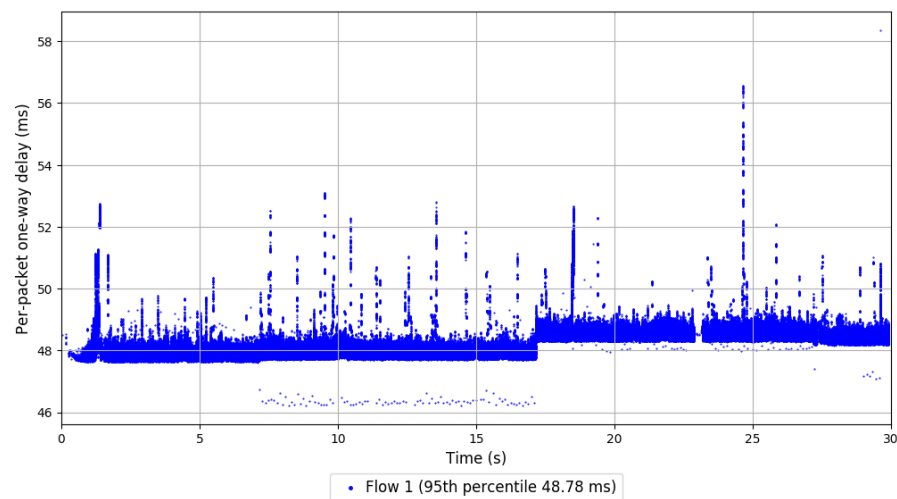
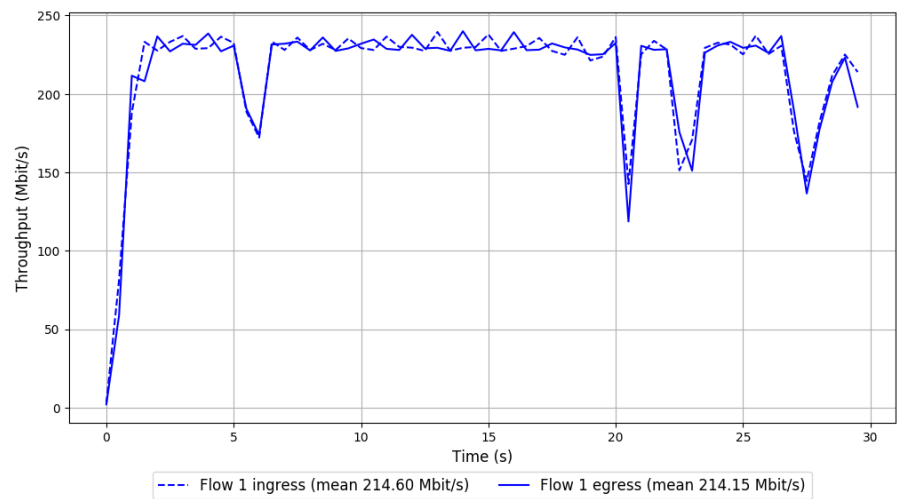
-- Flow 1:

Average throughput: 214.15 Mbit/s

95th percentile per-packet one-way delay: 48.781 ms

Loss rate: 0.54%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-05 11:50:37

End at: 2017-12-05 11:51:07

Below is generated by plot.py at 2017-12-05 14:53:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.29 Mbit/s

95th percentile per-packet one-way delay: 48.346 ms

Loss rate: 0.41%

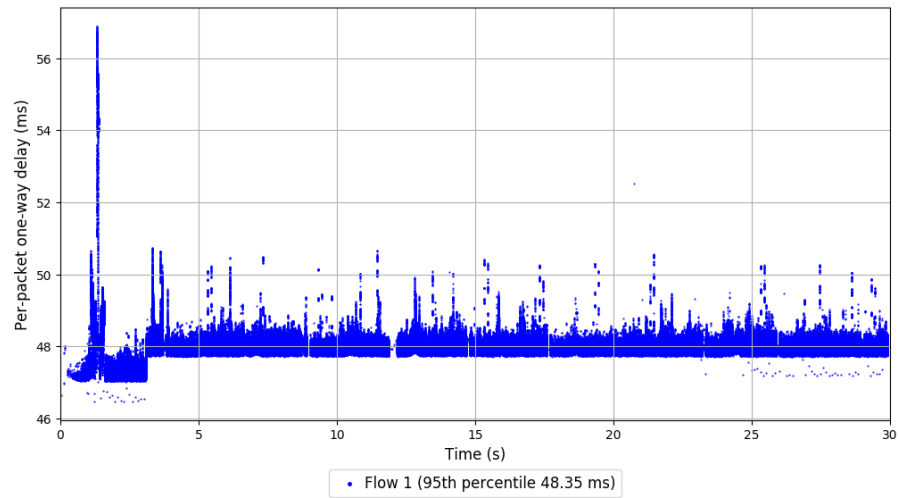
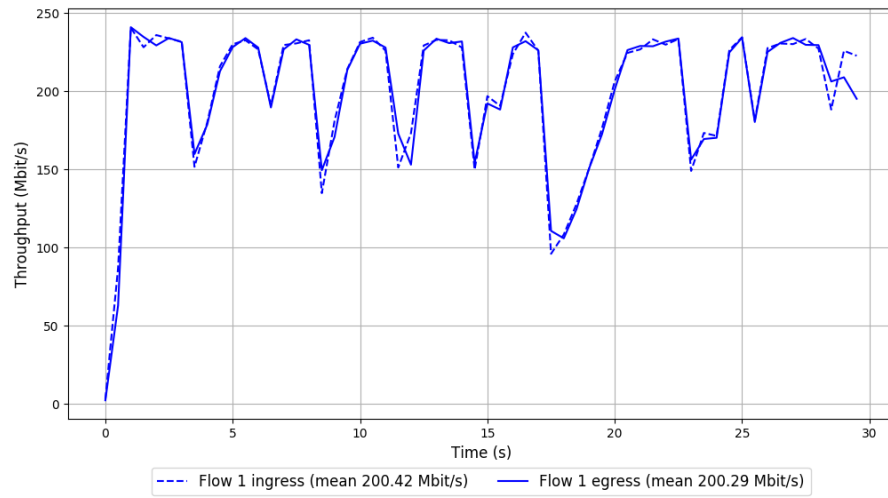
-- Flow 1:

Average throughput: 200.29 Mbit/s

95th percentile per-packet one-way delay: 48.346 ms

Loss rate: 0.41%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

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

End at: 2017-12-05 12:01:35

Below is generated by plot.py at 2017-12-05 14:53:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 211.86 Mbit/s

95th percentile per-packet one-way delay: 48.459 ms

Loss rate: 0.77%

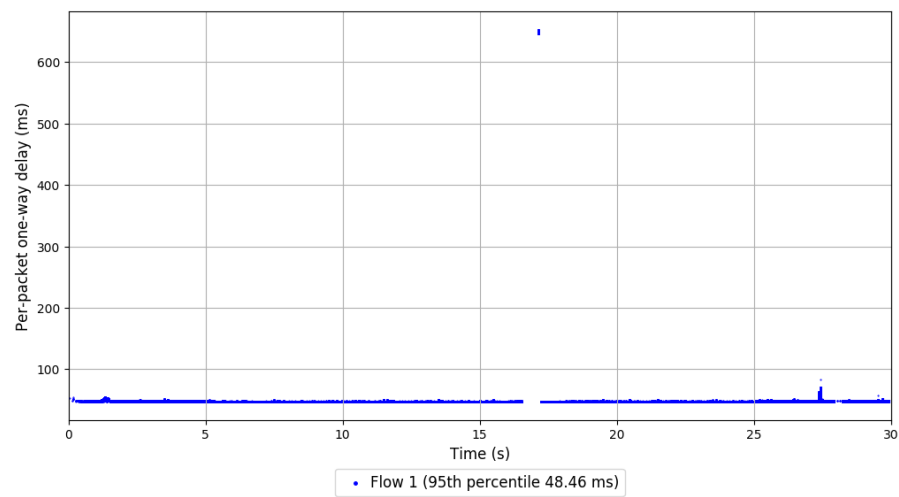
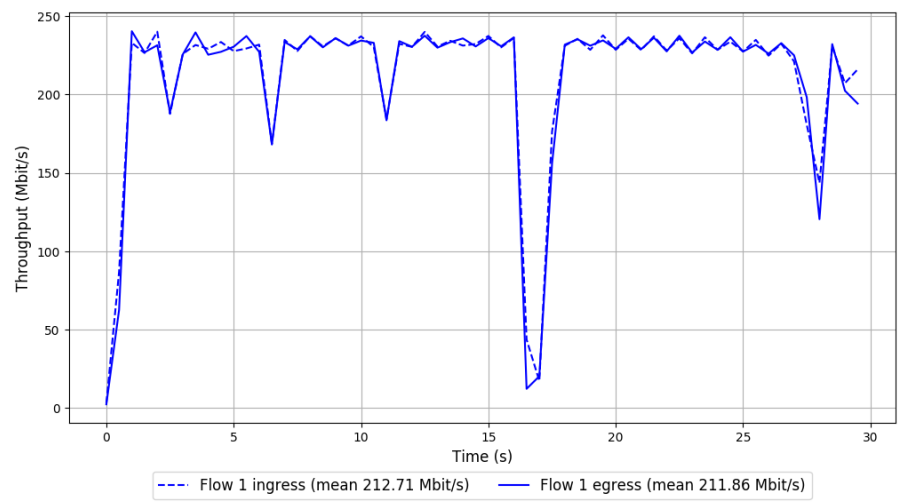
-- Flow 1:

Average throughput: 211.86 Mbit/s

95th percentile per-packet one-way delay: 48.459 ms

Loss rate: 0.77%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-05 12:11:35

End at: 2017-12-05 12:12:05

Below is generated by plot.py at 2017-12-05 14:53:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 207.53 Mbit/s

95th percentile per-packet one-way delay: 49.396 ms

Loss rate: 0.59%

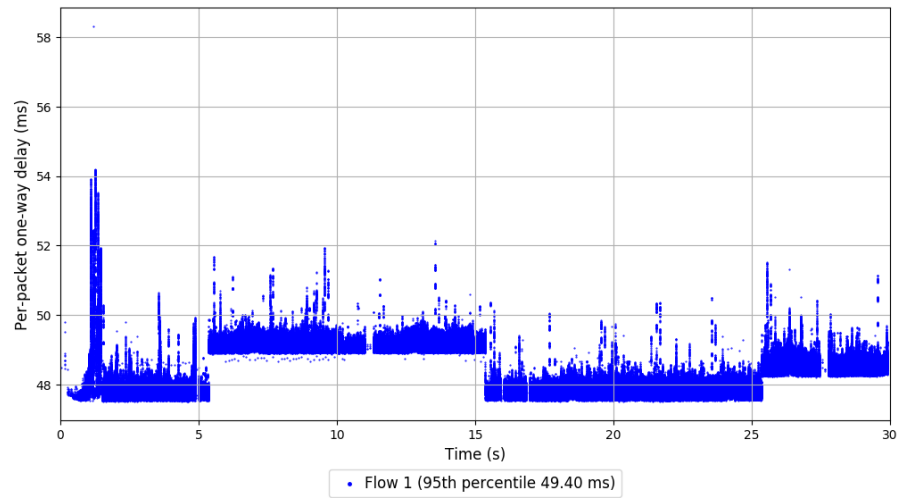
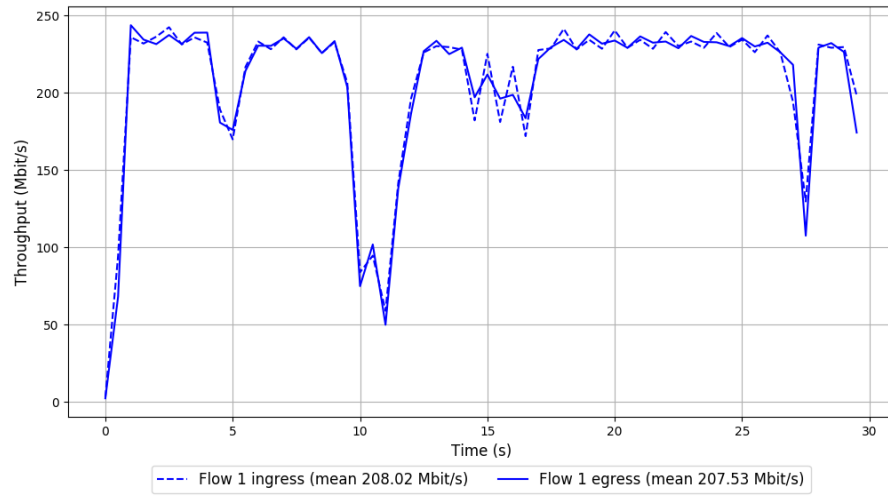
-- Flow 1:

Average throughput: 207.53 Mbit/s

95th percentile per-packet one-way delay: 49.396 ms

Loss rate: 0.59%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-05 12:22:02

End at: 2017-12-05 12:22:32

Below is generated by plot.py at 2017-12-05 14:53:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.14 Mbit/s

95th percentile per-packet one-way delay: 49.509 ms

Loss rate: 0.38%

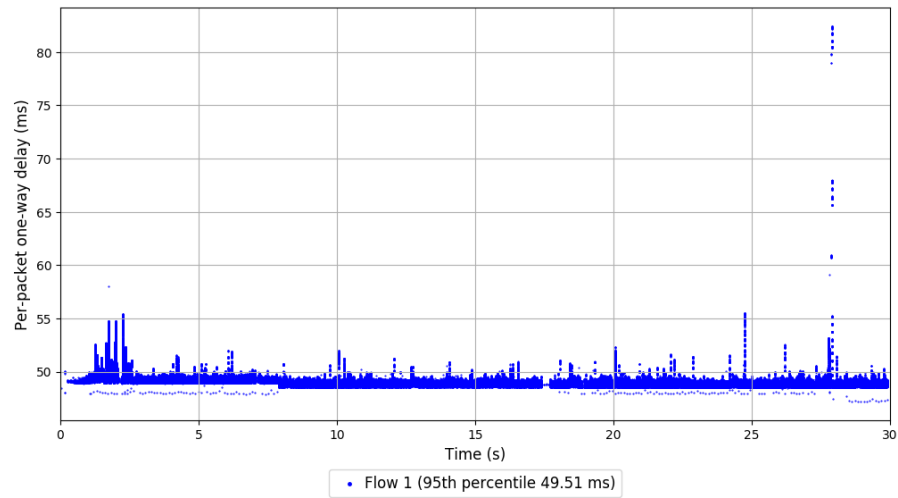
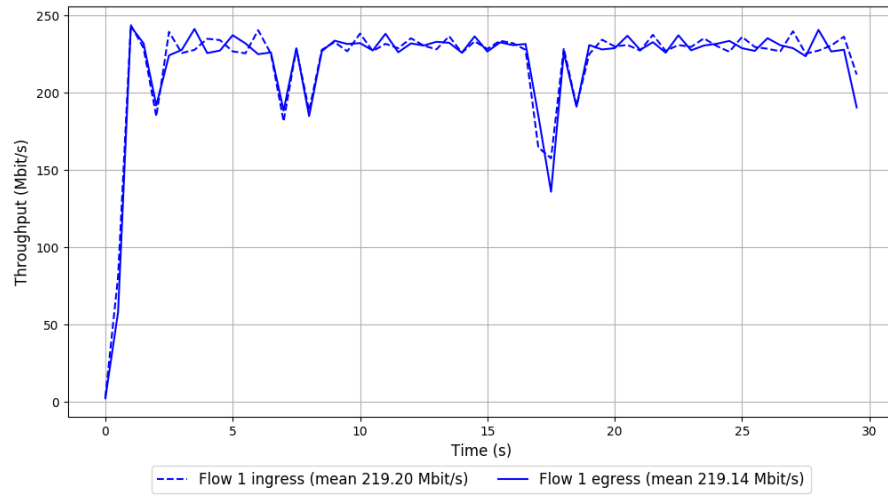
-- Flow 1:

Average throughput: 219.14 Mbit/s

95th percentile per-packet one-way delay: 49.509 ms

Loss rate: 0.38%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-05 12:32:36

End at: 2017-12-05 12:33:06

Below is generated by plot.py at 2017-12-05 14:53:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.09 Mbit/s

95th percentile per-packet one-way delay: 48.991 ms

Loss rate: 0.38%

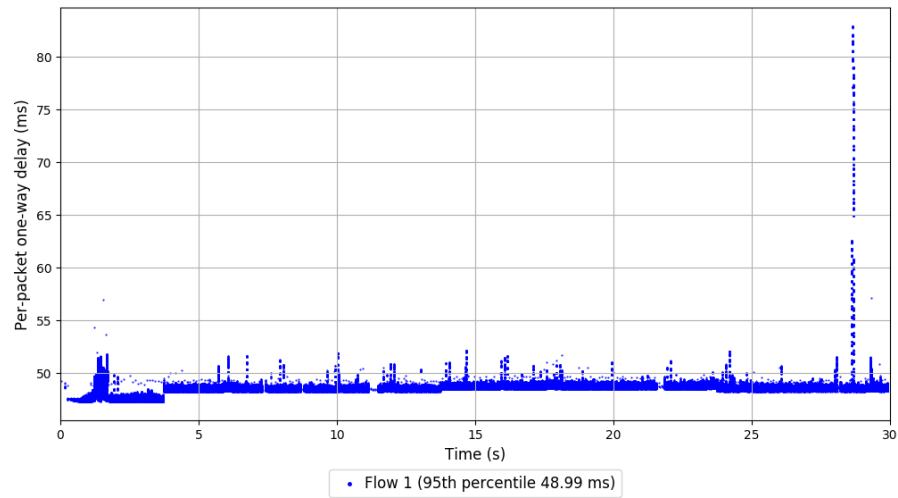
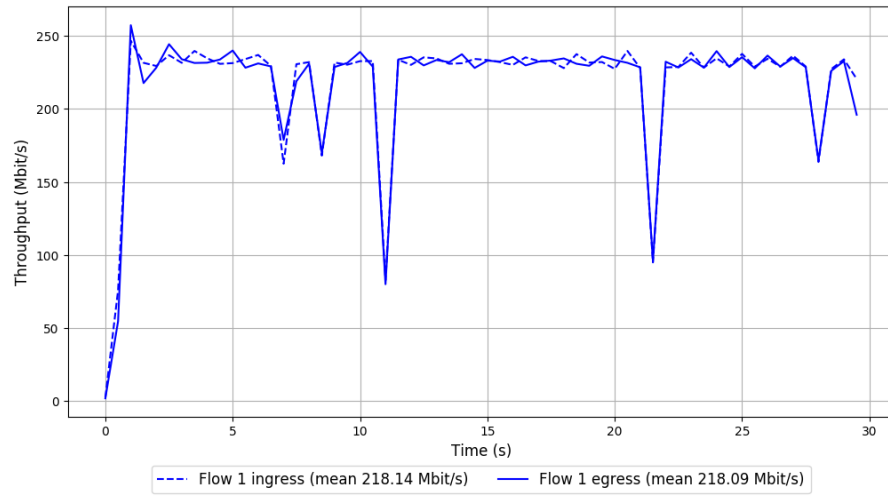
-- Flow 1:

Average throughput: 218.09 Mbit/s

95th percentile per-packet one-way delay: 48.991 ms

Loss rate: 0.38%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-05 12:43:06

End at: 2017-12-05 12:43:36

Below is generated by plot.py at 2017-12-05 14:56:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.83 Mbit/s

95th percentile per-packet one-way delay: 49.604 ms

Loss rate: 0.34%

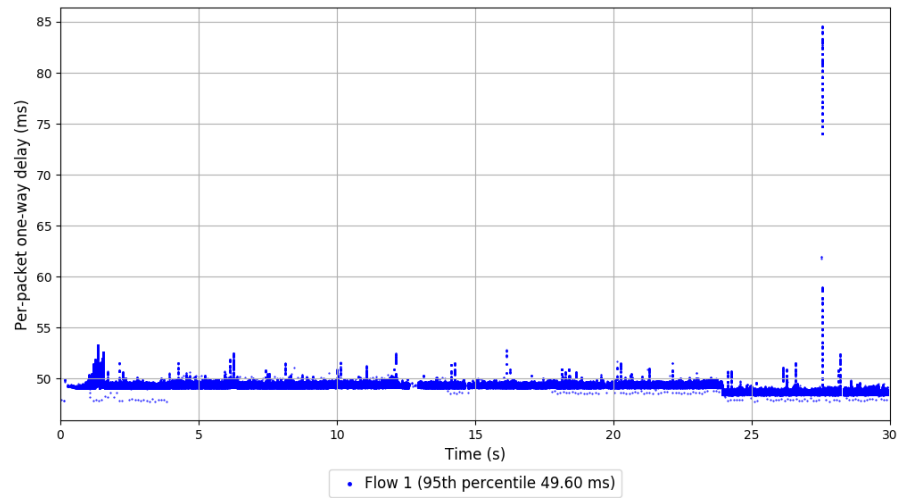
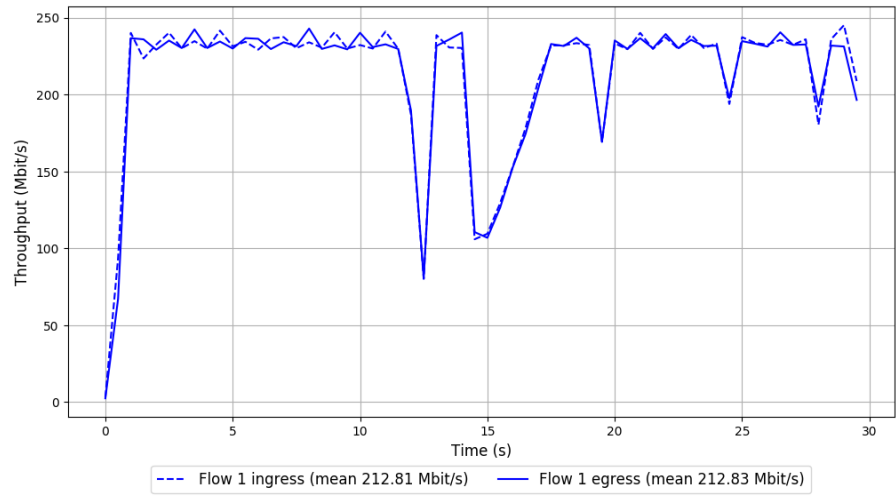
-- Flow 1:

Average throughput: 212.83 Mbit/s

95th percentile per-packet one-way delay: 49.604 ms

Loss rate: 0.34%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-05 12:53:32

End at: 2017-12-05 12:54:02

Below is generated by plot.py at 2017-12-05 14:56:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.82 Mbit/s

95th percentile per-packet one-way delay: 50.086 ms

Loss rate: 0.42%

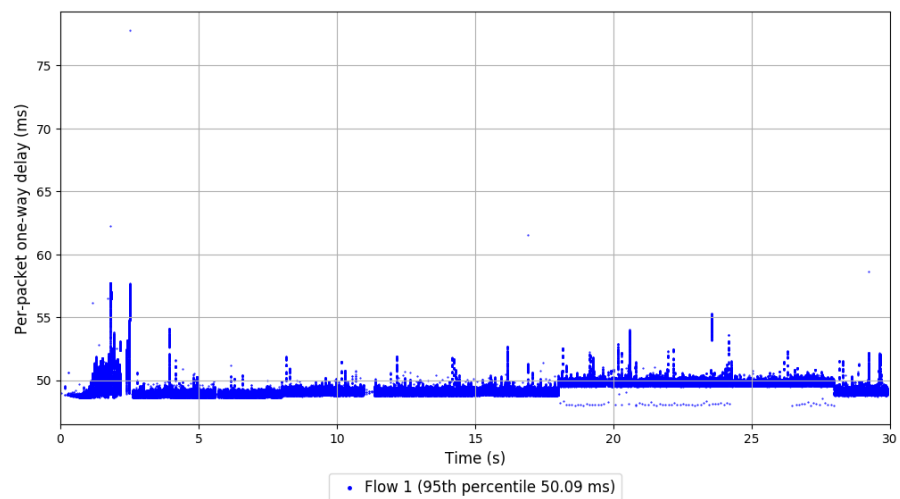
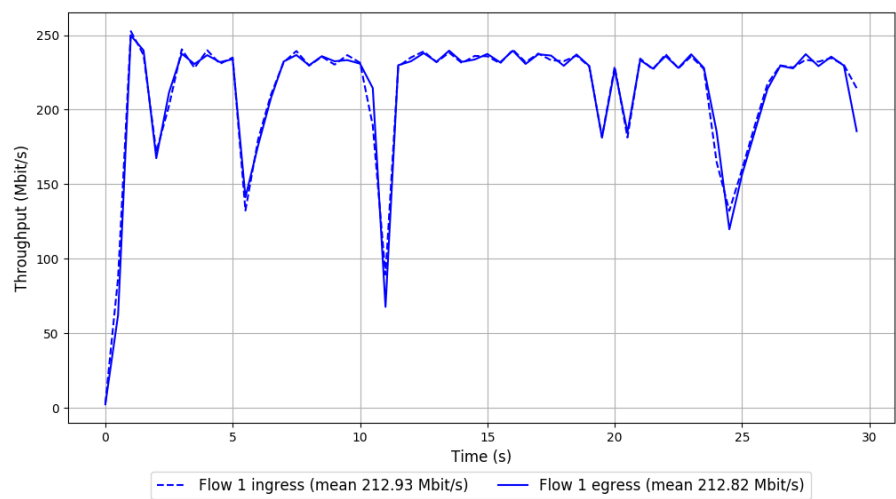
-- Flow 1:

Average throughput: 212.82 Mbit/s

95th percentile per-packet one-way delay: 50.086 ms

Loss rate: 0.42%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-05 11:20:34

End at: 2017-12-05 11:21:04

Below is generated by plot.py at 2017-12-05 14:56:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.98 Mbit/s

95th percentile per-packet one-way delay: 47.905 ms

Loss rate: 0.29%

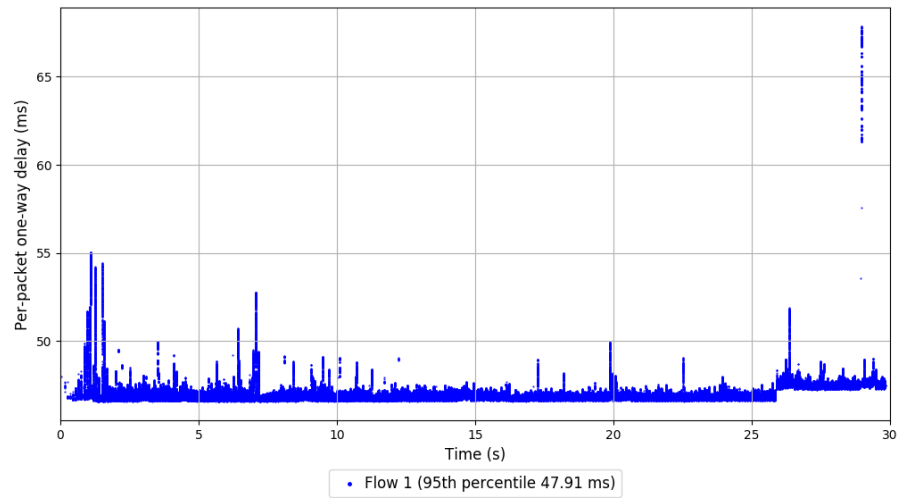
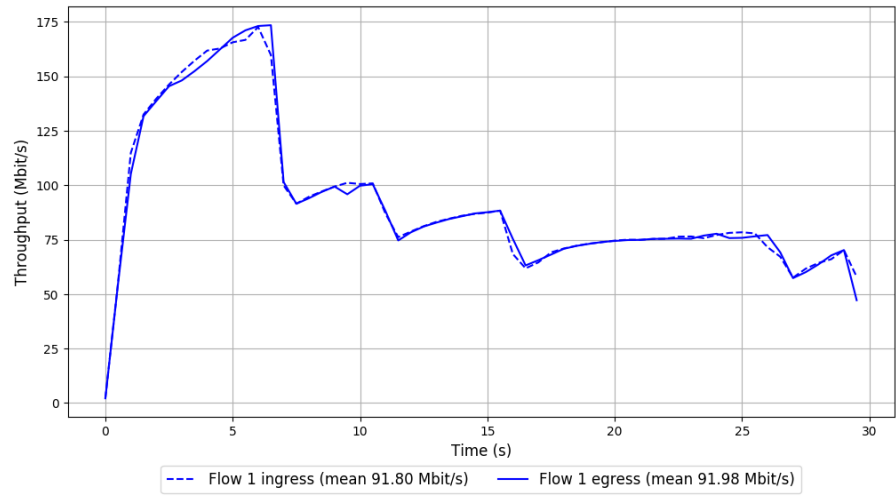
-- Flow 1:

Average throughput: 91.98 Mbit/s

95th percentile per-packet one-way delay: 47.905 ms

Loss rate: 0.29%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-05 11:31:06

End at: 2017-12-05 11:31:36

Below is generated by plot.py at 2017-12-05 14:56:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.72 Mbit/s

95th percentile per-packet one-way delay: 49.257 ms

Loss rate: 0.17%

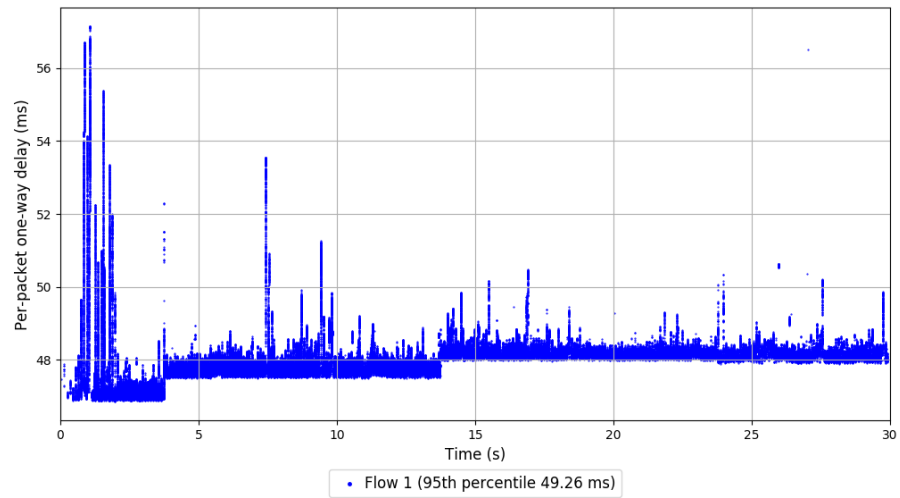
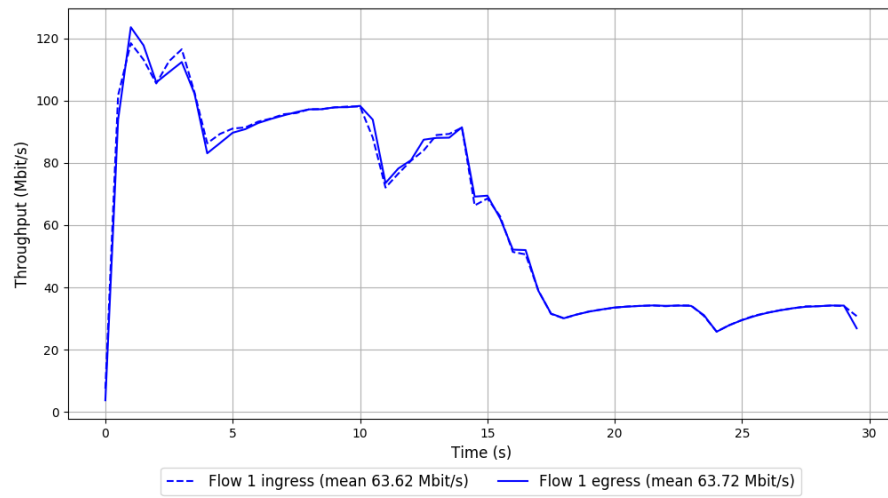
-- Flow 1:

Average throughput: 63.72 Mbit/s

95th percentile per-packet one-way delay: 49.257 ms

Loss rate: 0.17%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-05 11:41:35

End at: 2017-12-05 11:42:05

Below is generated by plot.py at 2017-12-05 14:56:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 104.86 Mbit/s

95th percentile per-packet one-way delay: 50.834 ms

Loss rate: 0.35%

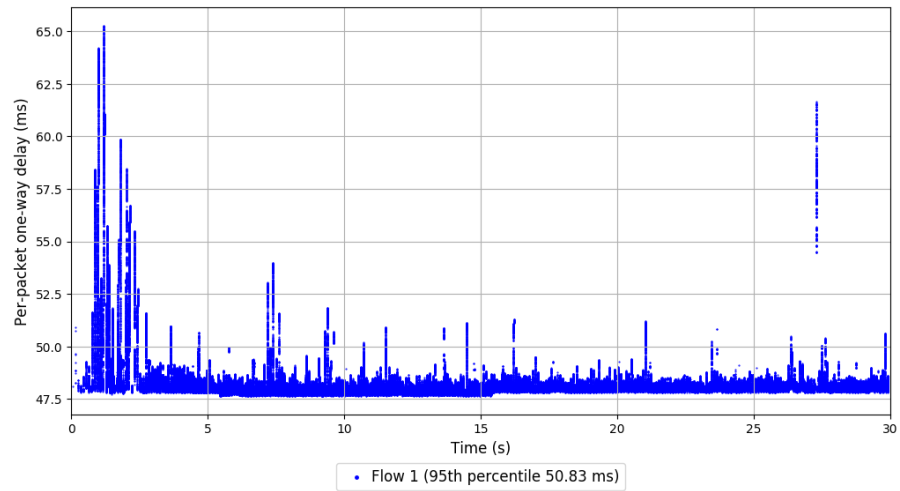
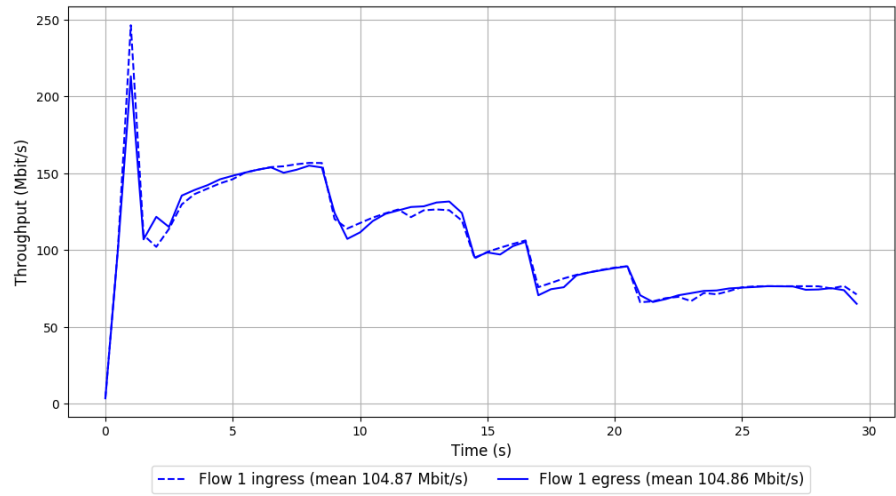
-- Flow 1:

Average throughput: 104.86 Mbit/s

95th percentile per-packet one-way delay: 50.834 ms

Loss rate: 0.35%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-05 11:52:07

End at: 2017-12-05 11:52:37

Below is generated by plot.py at 2017-12-05 14:56:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.84 Mbit/s

95th percentile per-packet one-way delay: 49.174 ms

Loss rate: 0.53%

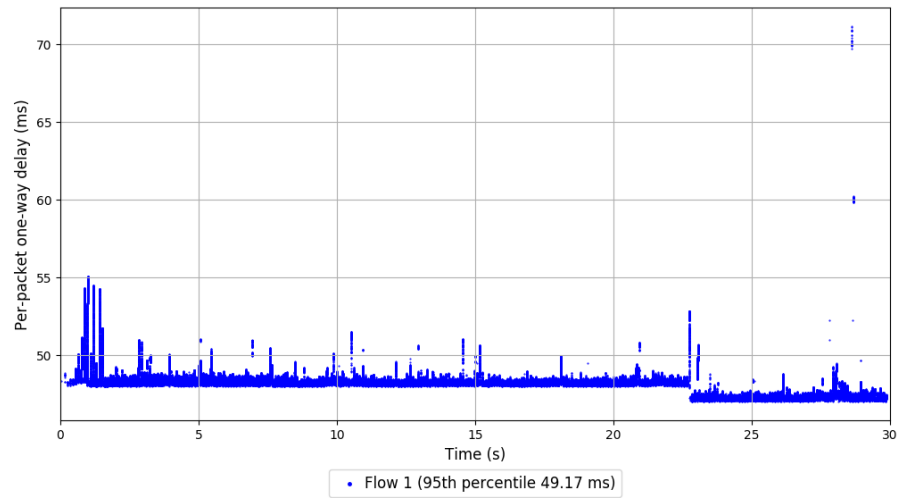
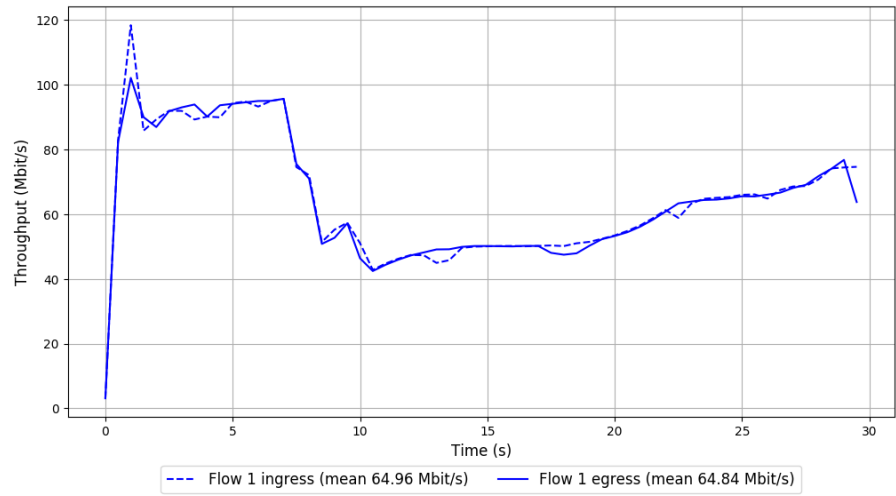
-- Flow 1:

Average throughput: 64.84 Mbit/s

95th percentile per-packet one-way delay: 49.174 ms

Loss rate: 0.53%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-05 12:02:37

End at: 2017-12-05 12:03:07

Below is generated by plot.py at 2017-12-05 14:56:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 147.70 Mbit/s

95th percentile per-packet one-way delay: 49.521 ms

Loss rate: 0.41%

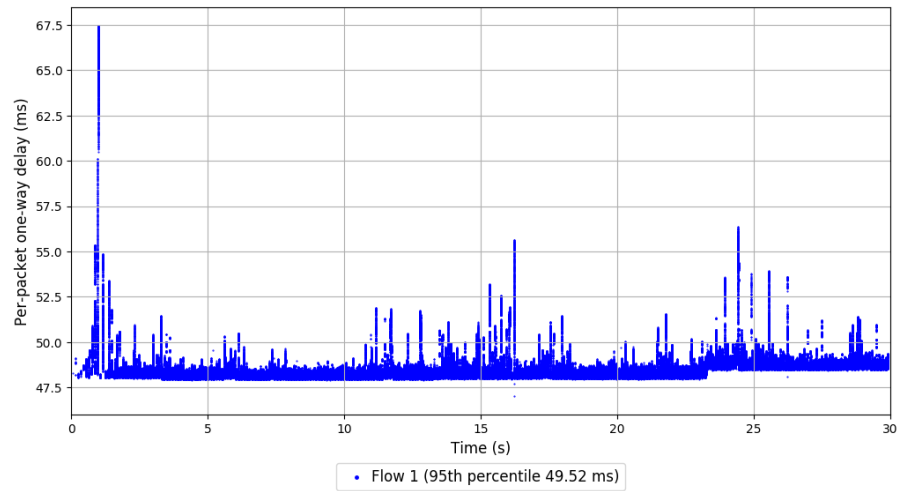
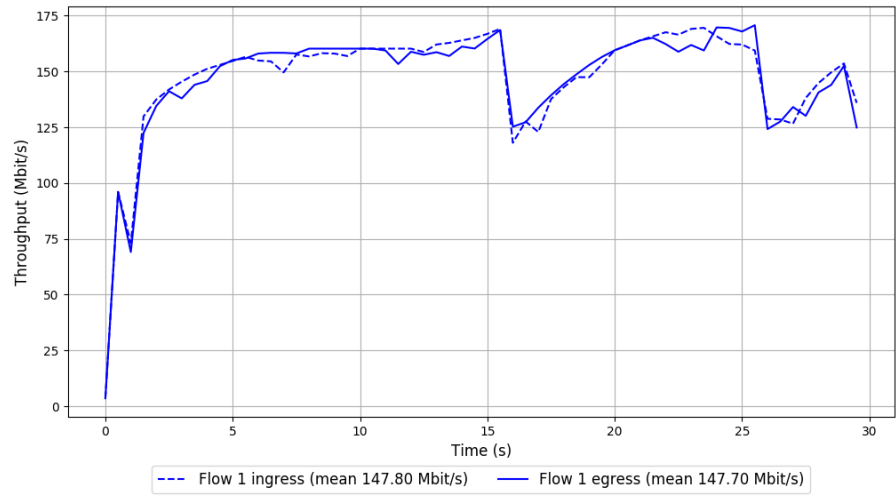
-- Flow 1:

Average throughput: 147.70 Mbit/s

95th percentile per-packet one-way delay: 49.521 ms

Loss rate: 0.41%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

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

End at: 2017-12-05 12:13:35

Below is generated by plot.py at 2017-12-05 14:56:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.17 Mbit/s

95th percentile per-packet one-way delay: 51.789 ms

Loss rate: 0.61%

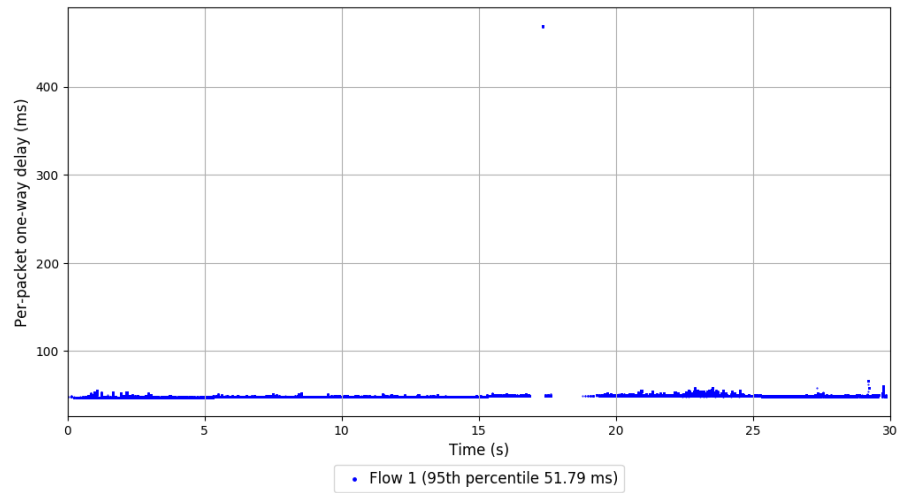
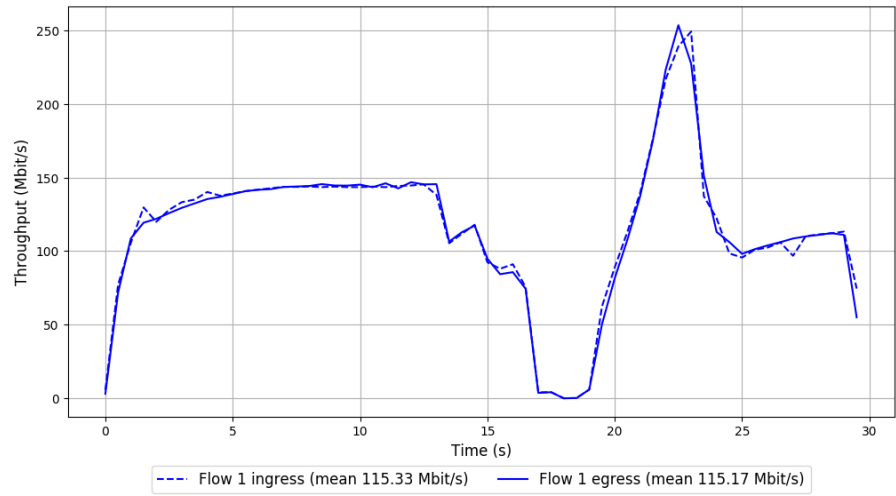
-- Flow 1:

Average throughput: 115.17 Mbit/s

95th percentile per-packet one-way delay: 51.789 ms

Loss rate: 0.61%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-05 12:23:35

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

Below is generated by plot.py at 2017-12-05 14:56:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 99.46 Mbit/s

95th percentile per-packet one-way delay: 50.790 ms

Loss rate: 0.23%

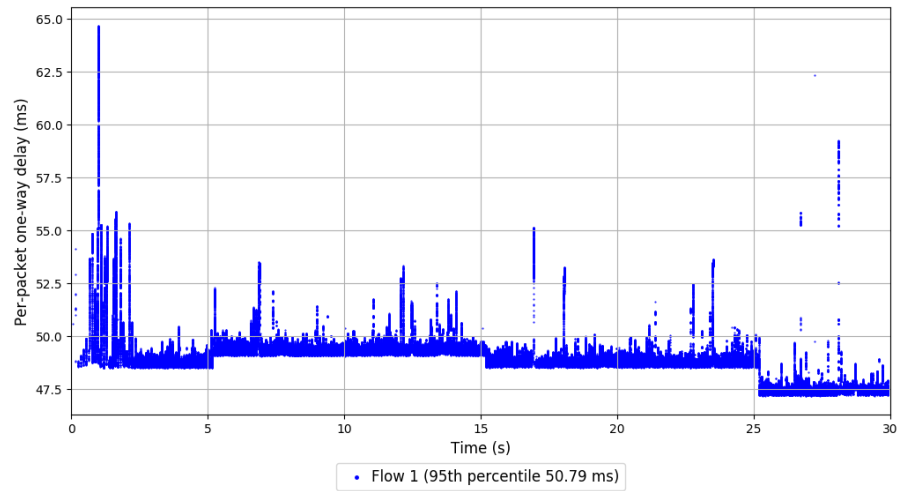
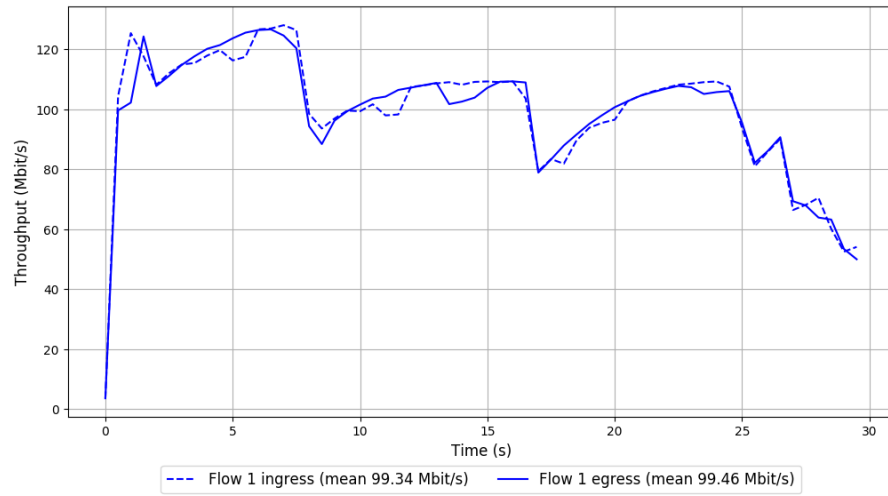
-- Flow 1:

Average throughput: 99.46 Mbit/s

95th percentile per-packet one-way delay: 50.790 ms

Loss rate: 0.23%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

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

End at: 2017-12-05 12:34:39

Below is generated by plot.py at 2017-12-05 14:56:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.13 Mbit/s

95th percentile per-packet one-way delay: 49.522 ms

Loss rate: 0.79%

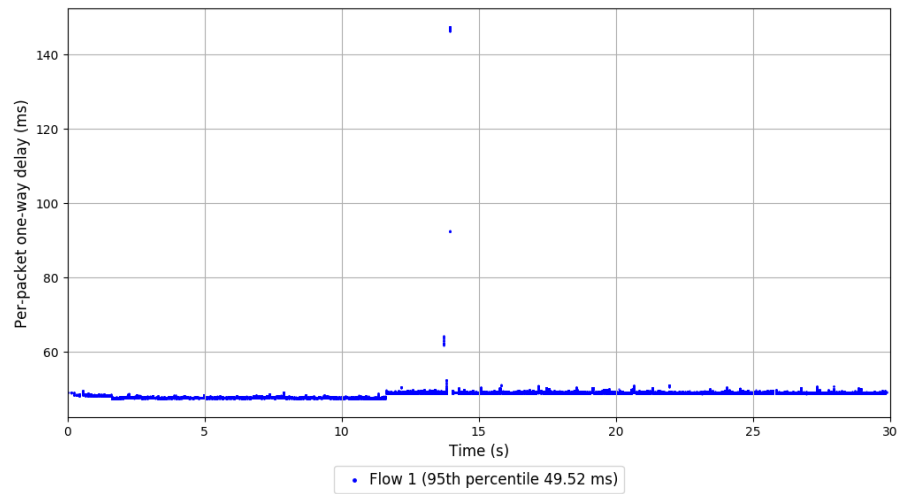
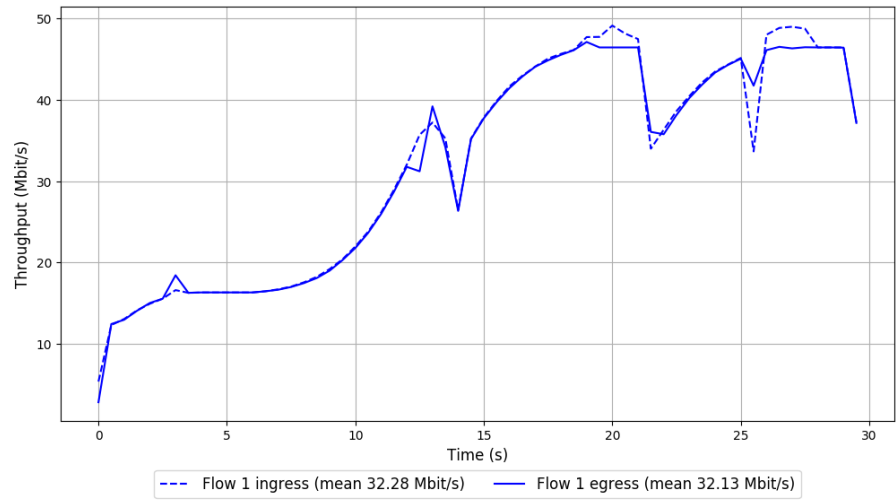
-- Flow 1:

Average throughput: 32.13 Mbit/s

95th percentile per-packet one-way delay: 49.522 ms

Loss rate: 0.79%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-05 12:44:36

End at: 2017-12-05 12:45:06

Below is generated by plot.py at 2017-12-05 14:56:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.24 Mbit/s

95th percentile per-packet one-way delay: 50.676 ms

Loss rate: 0.27%

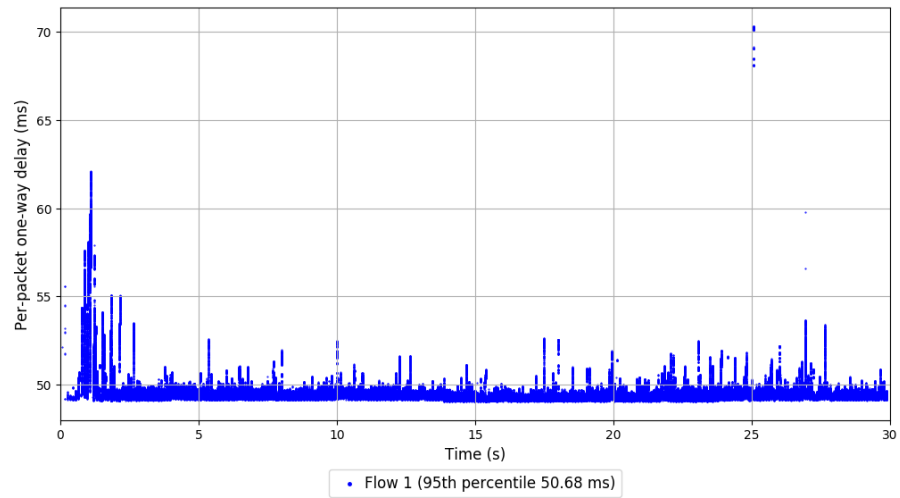
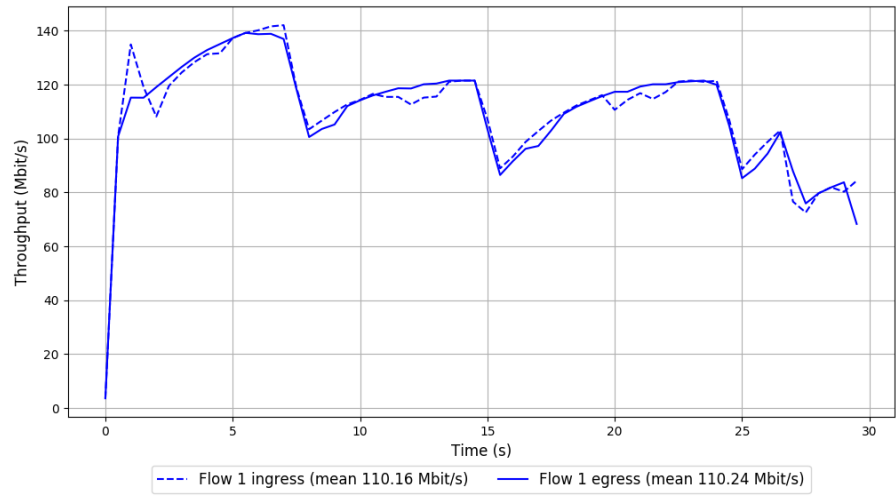
-- Flow 1:

Average throughput: 110.24 Mbit/s

95th percentile per-packet one-way delay: 50.676 ms

Loss rate: 0.27%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-05 12:55:04

End at: 2017-12-05 12:55:34

Below is generated by plot.py at 2017-12-05 14:57:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.52 Mbit/s

95th percentile per-packet one-way delay: 50.903 ms

Loss rate: 0.37%

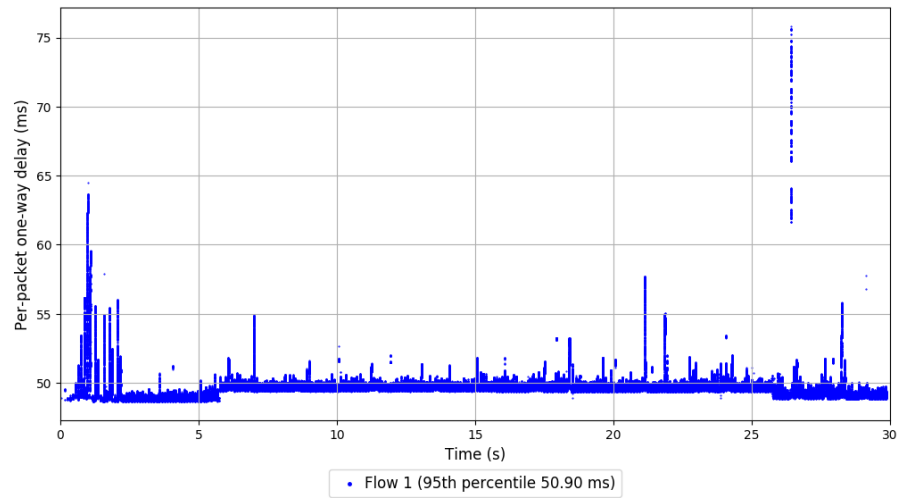
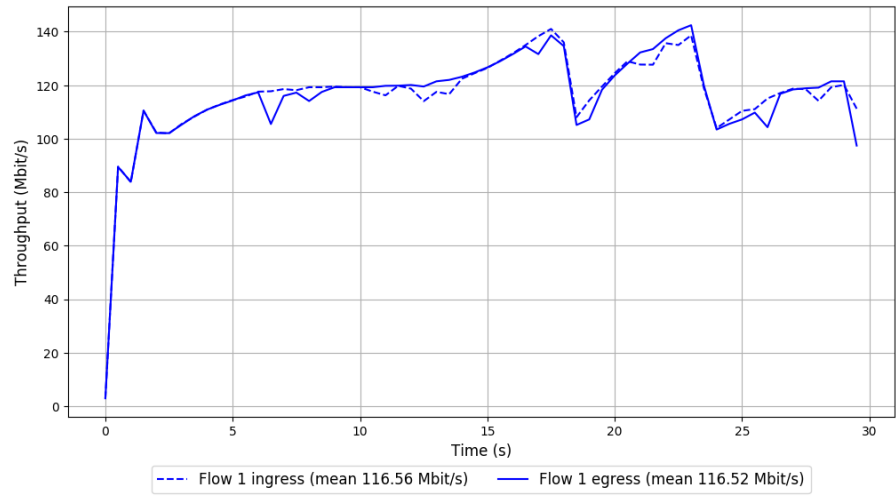
-- Flow 1:

Average throughput: 116.52 Mbit/s

95th percentile per-packet one-way delay: 50.903 ms

Loss rate: 0.37%

Run 10: Report of TCP Cubic — Data Link

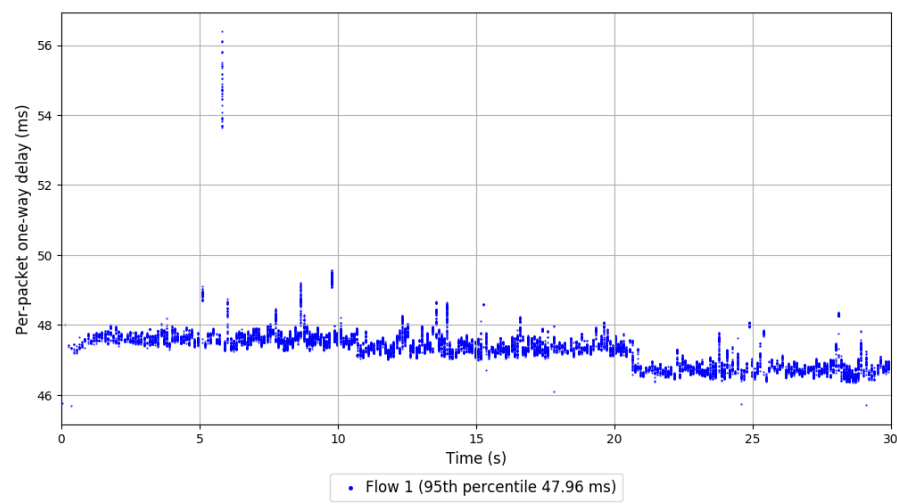
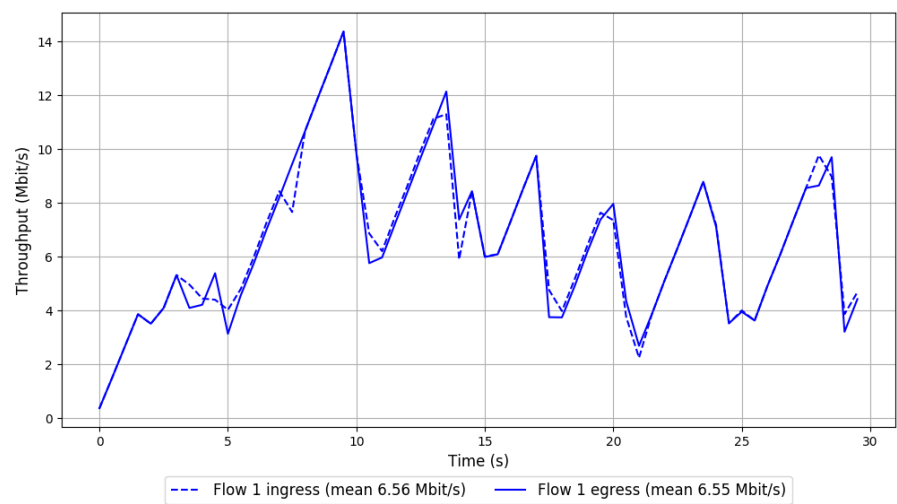


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-05 11:16:29
End at: 2017-12-05 11:16:59

# Below is generated by plot.py at 2017-12-05 14:57:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 47.962 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 47.962 ms
Loss rate: 0.51%
```

Run 1: Report of LEDBAT — Data Link

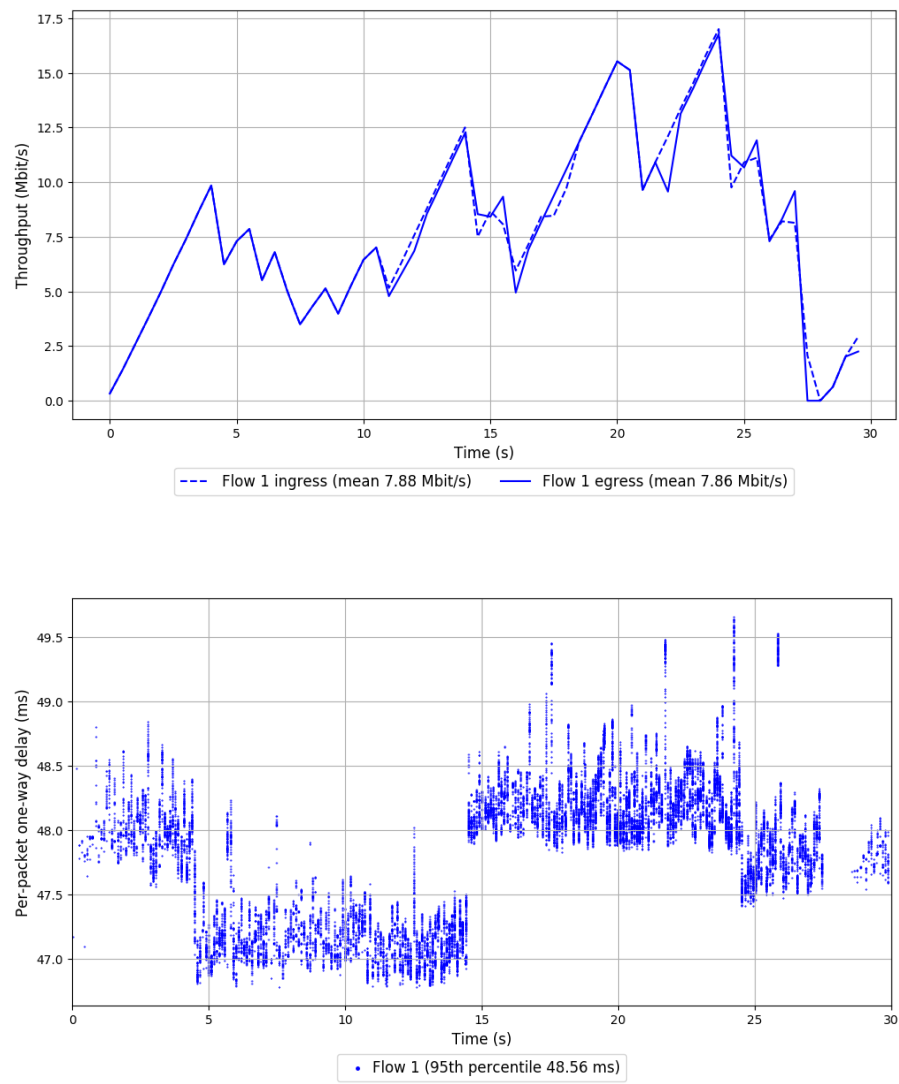


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-05 11:27:06
End at: 2017-12-05 11:27:36

# Below is generated by plot.py at 2017-12-05 14:57:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.86 Mbit/s
95th percentile per-packet one-way delay: 48.565 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 7.86 Mbit/s
95th percentile per-packet one-way delay: 48.565 ms
Loss rate: 0.65%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-05 11:37:35

End at: 2017-12-05 11:38:05

Below is generated by plot.py at 2017-12-05 14:57:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 48.692 ms

Loss rate: 1.04%

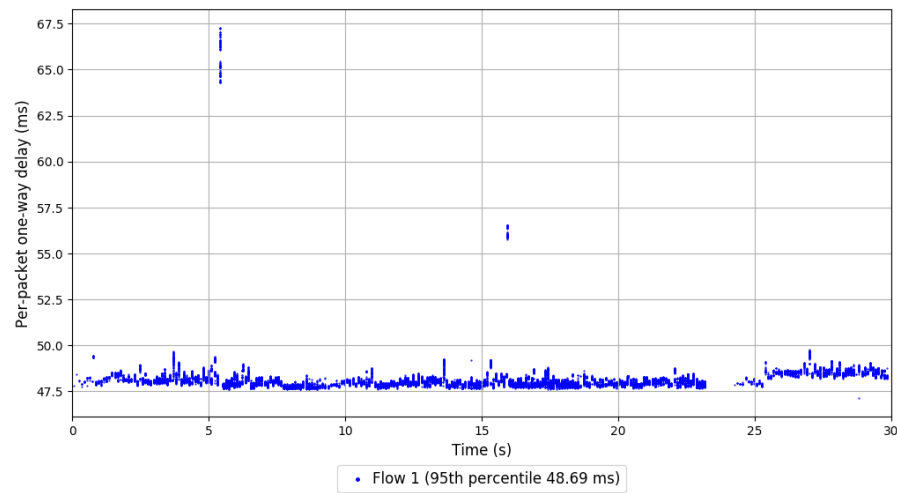
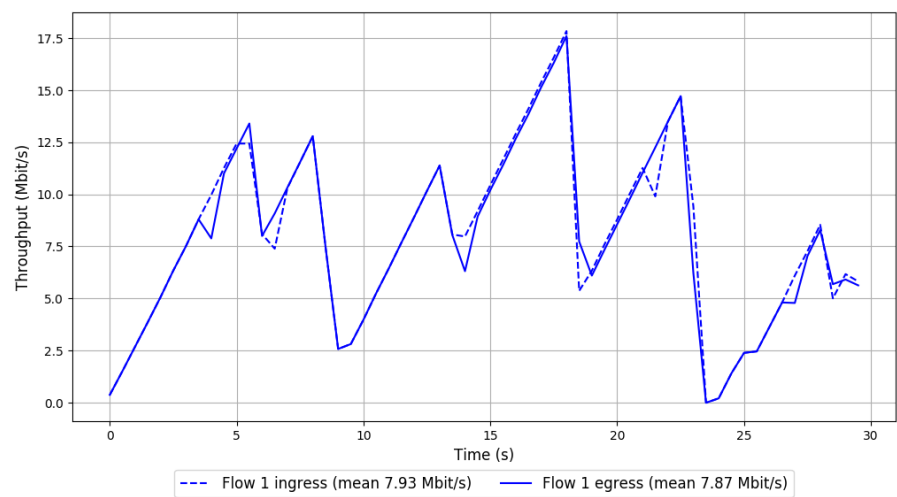
-- Flow 1:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 48.692 ms

Loss rate: 1.04%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-05 11:48:08

End at: 2017-12-05 11:48:38

Below is generated by plot.py at 2017-12-05 14:57:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 49.185 ms

Loss rate: 0.30%

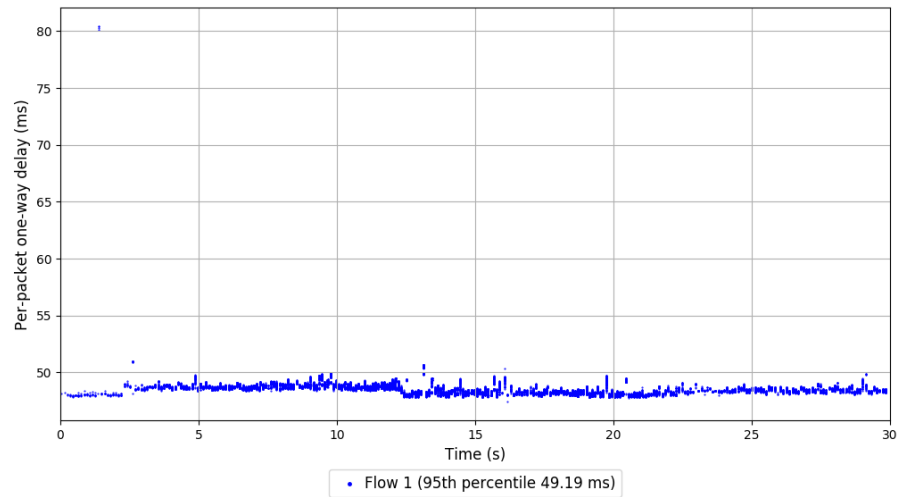
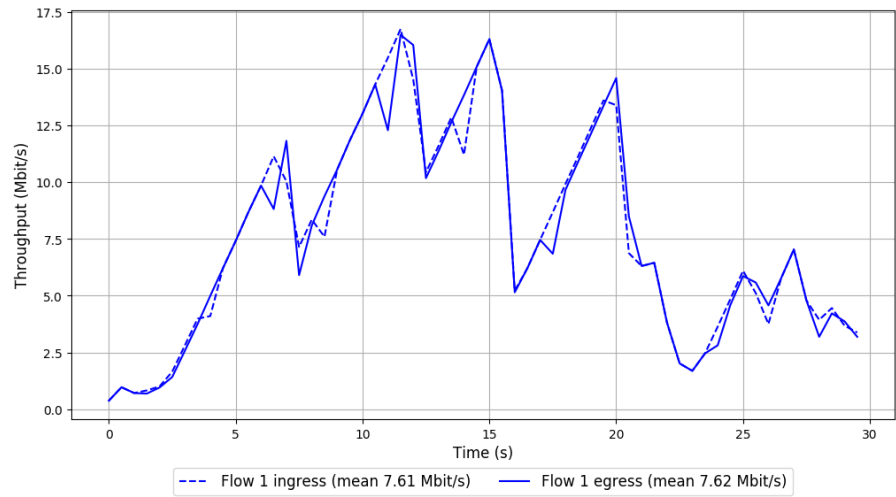
-- Flow 1:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 49.185 ms

Loss rate: 0.30%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-05 11:58:37

End at: 2017-12-05 11:59:07

Below is generated by plot.py at 2017-12-05 14:57:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.11 Mbit/s

95th percentile per-packet one-way delay: 49.073 ms

Loss rate: 0.44%

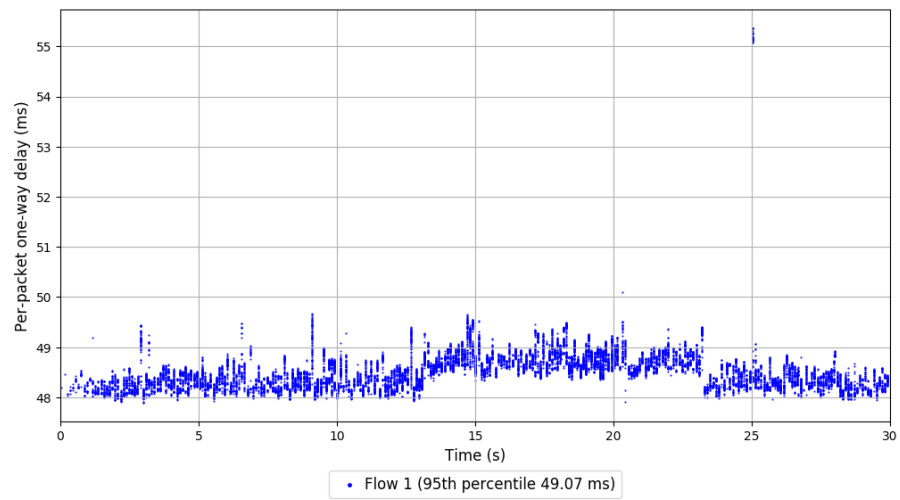
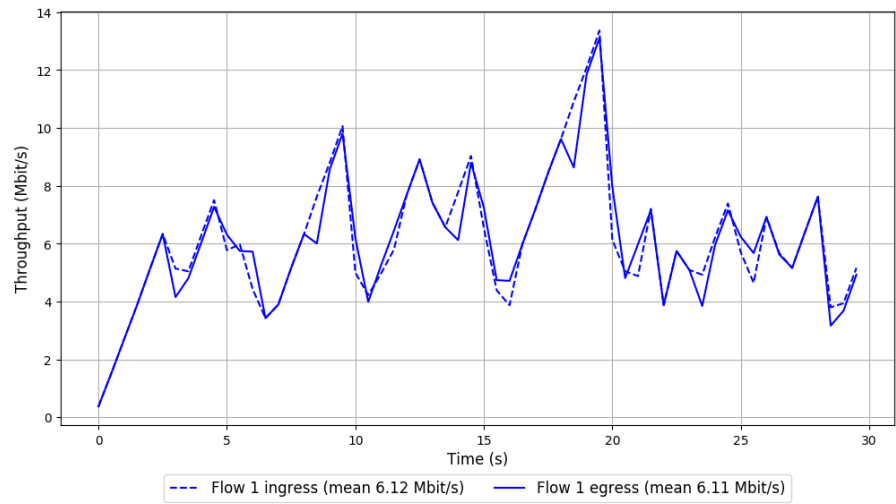
-- Flow 1:

Average throughput: 6.11 Mbit/s

95th percentile per-packet one-way delay: 49.073 ms

Loss rate: 0.44%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

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

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

Below is generated by plot.py at 2017-12-05 14:57:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.94 Mbit/s

95th percentile per-packet one-way delay: 49.573 ms

Loss rate: 0.42%

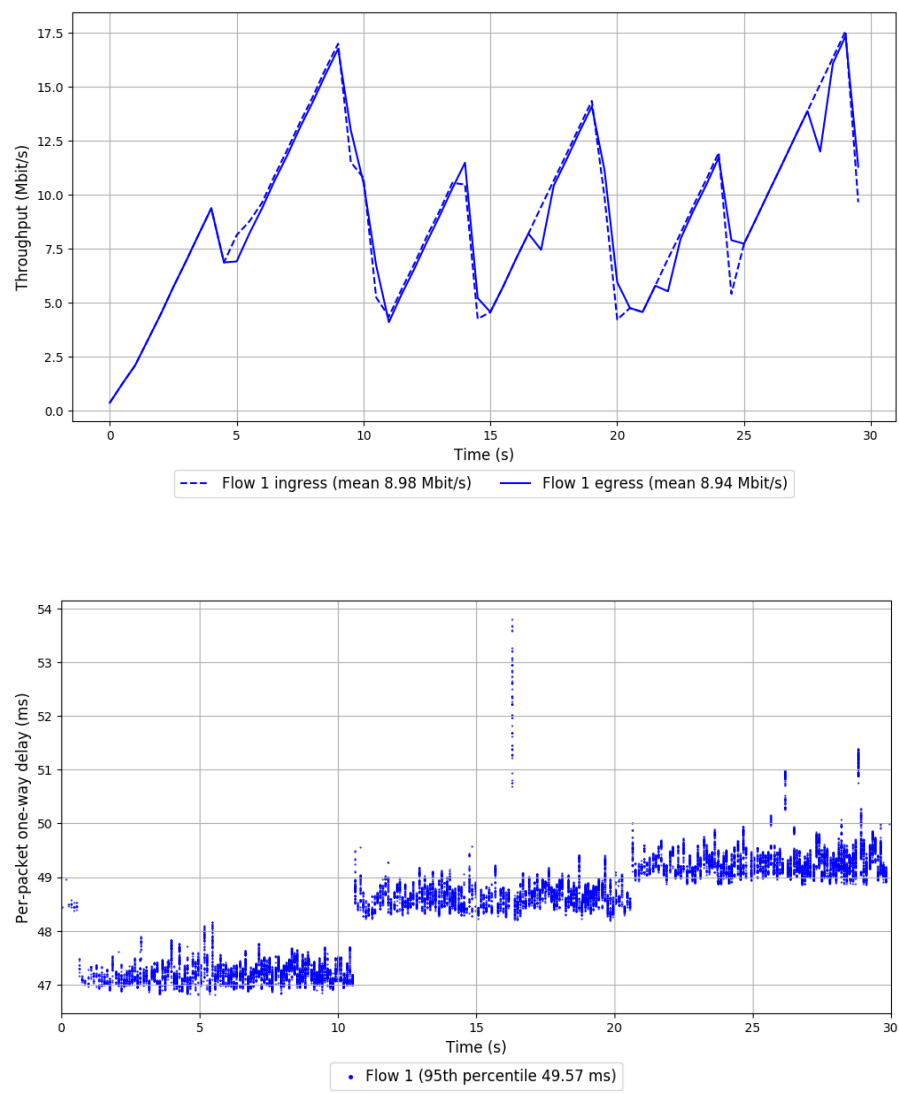
-- Flow 1:

Average throughput: 8.94 Mbit/s

95th percentile per-packet one-way delay: 49.573 ms

Loss rate: 0.42%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-05 12:19:36

End at: 2017-12-05 12:20:06

Below is generated by plot.py at 2017-12-05 14:57:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.51 Mbit/s

95th percentile per-packet one-way delay: 49.305 ms

Loss rate: 0.68%

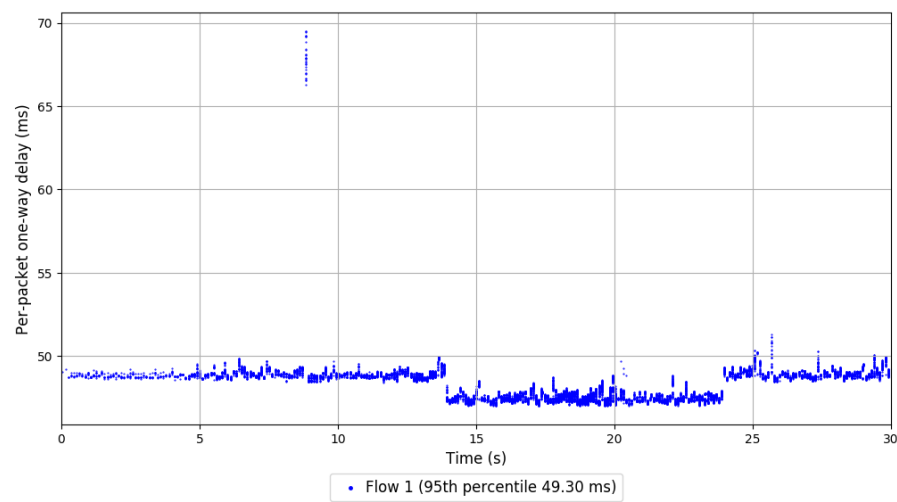
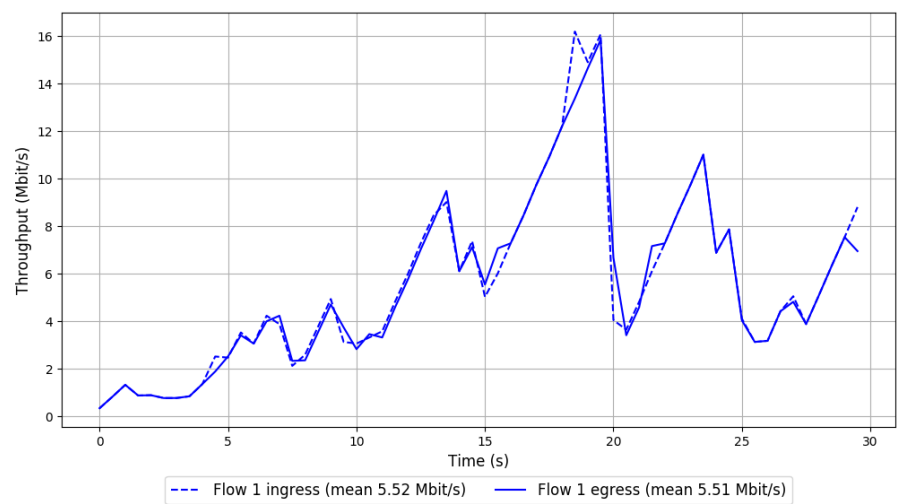
-- Flow 1:

Average throughput: 5.51 Mbit/s

95th percentile per-packet one-way delay: 49.305 ms

Loss rate: 0.68%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

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

End at: 2017-12-05 12:30:38

Below is generated by plot.py at 2017-12-05 14:57:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 49.659 ms

Loss rate: 0.75%

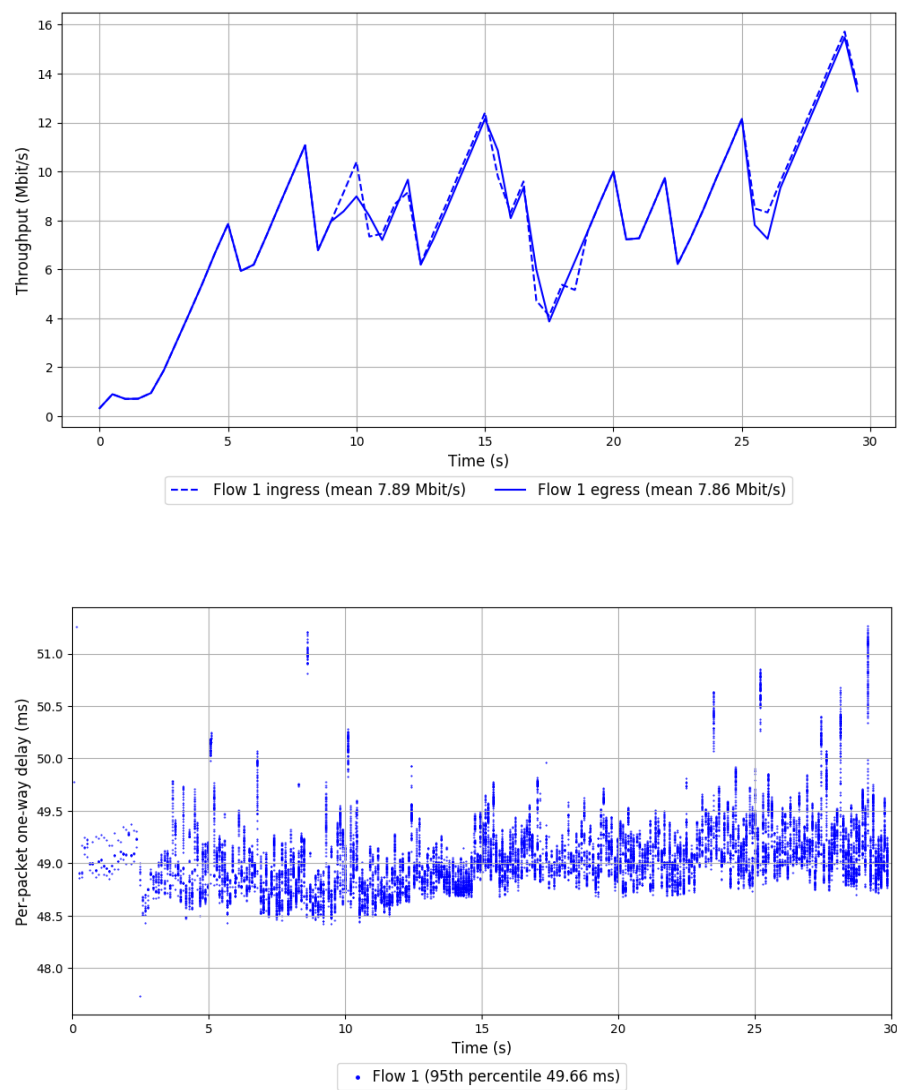
-- Flow 1:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 49.659 ms

Loss rate: 0.75%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-05 12:40:37

End at: 2017-12-05 12:41:07

Below is generated by plot.py at 2017-12-05 14:57:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 49.951 ms

Loss rate: 0.52%

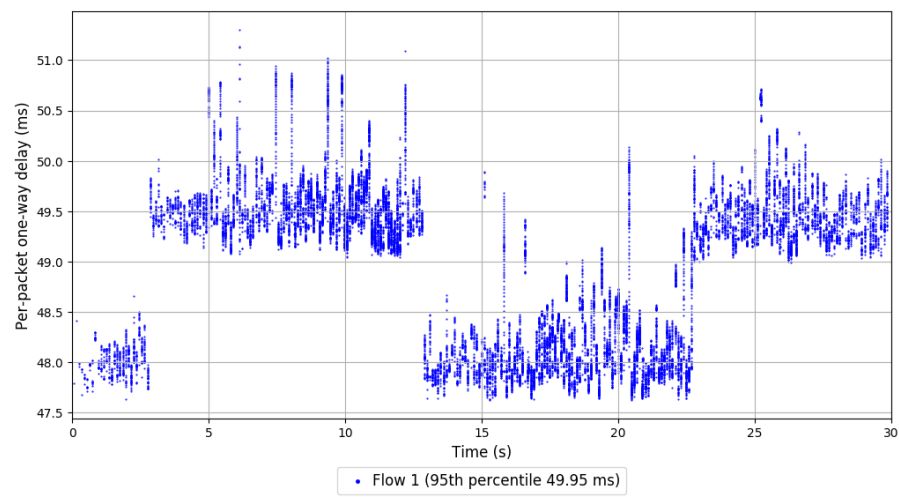
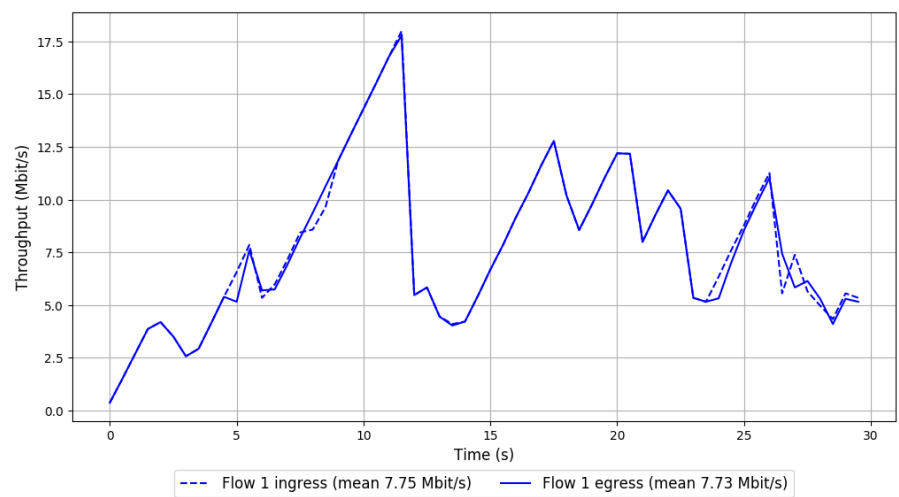
-- Flow 1:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 49.951 ms

Loss rate: 0.52%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-05 12:51:10

End at: 2017-12-05 12:51:40

Below is generated by plot.py at 2017-12-05 14:57:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.58 Mbit/s

95th percentile per-packet one-way delay: 49.416 ms

Loss rate: 1.00%

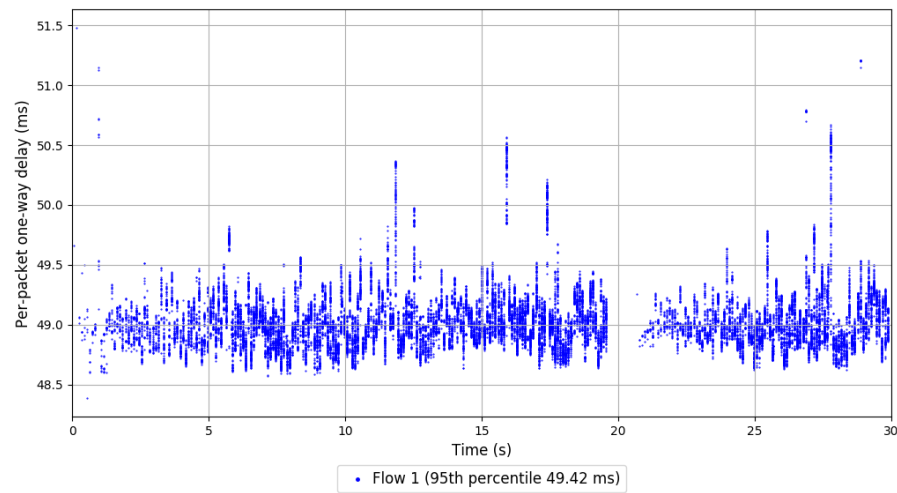
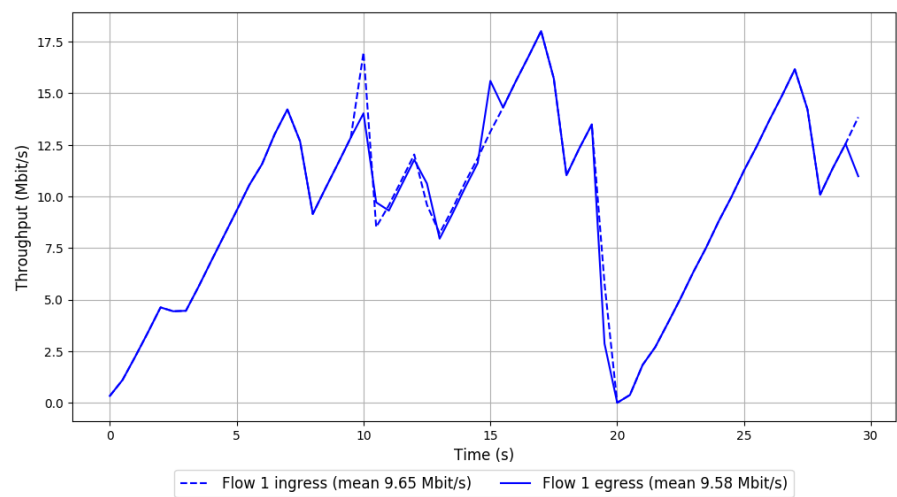
-- Flow 1:

Average throughput: 9.58 Mbit/s

95th percentile per-packet one-way delay: 49.416 ms

Loss rate: 1.00%

Run 10: Report of LEDBAT — Data Link

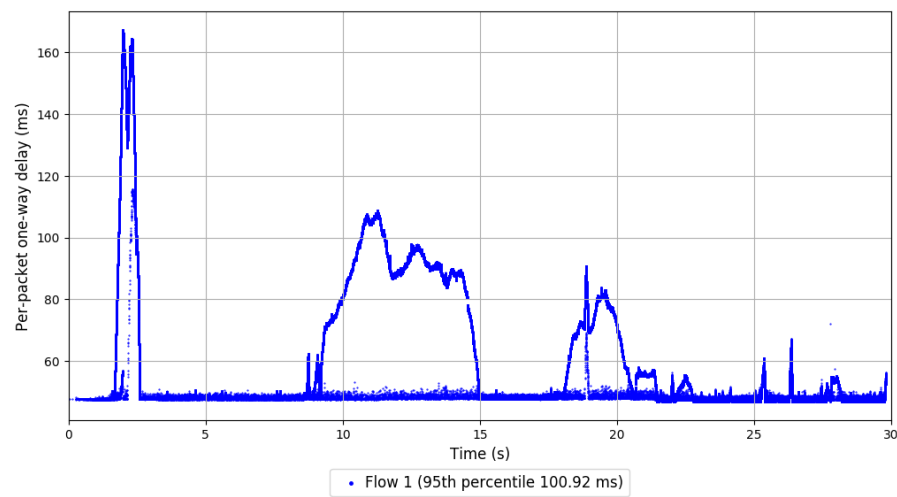
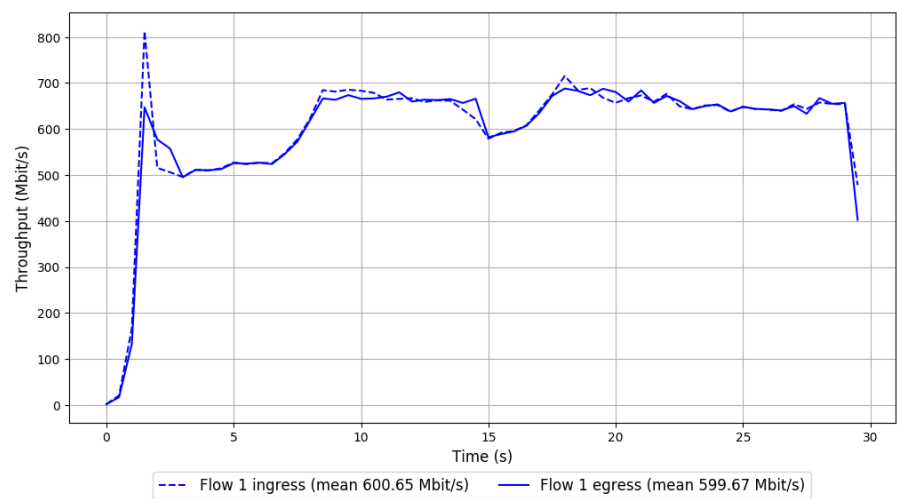


```
Run 1: Statistics of PCC

Start at: 2017-12-05 11:23:59
End at: 2017-12-05 11:24:29

# Below is generated by plot.py at 2017-12-05 15:06:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 599.67 Mbit/s
95th percentile per-packet one-way delay: 100.918 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 599.67 Mbit/s
95th percentile per-packet one-way delay: 100.918 ms
Loss rate: 0.50%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-05 11:34:29

End at: 2017-12-05 11:34:59

Below is generated by plot.py at 2017-12-05 15:06:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 581.90 Mbit/s

95th percentile per-packet one-way delay: 153.764 ms

Loss rate: 1.45%

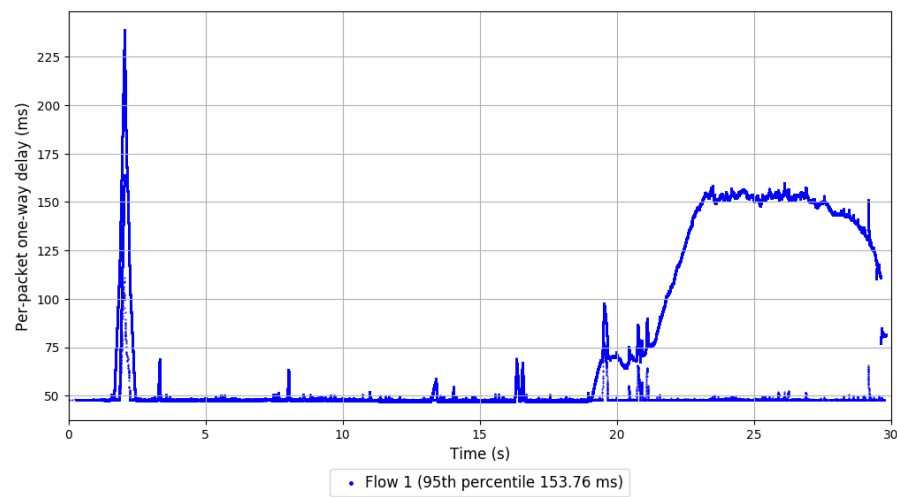
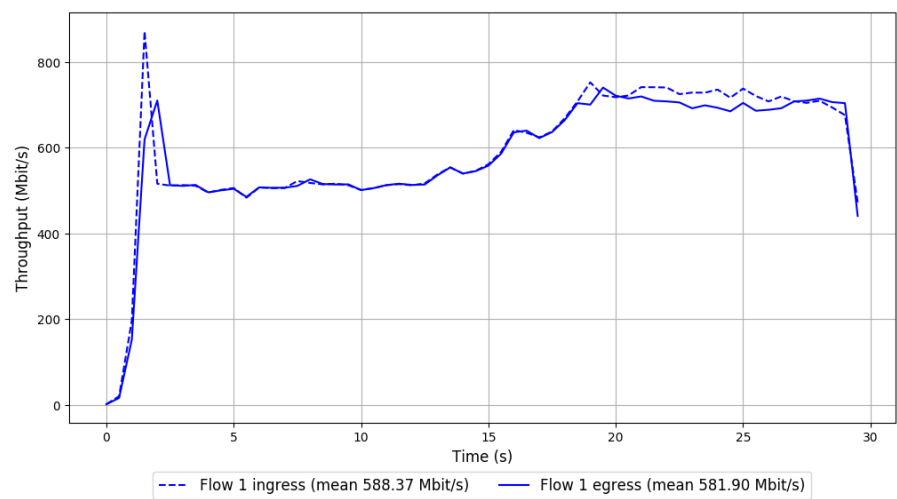
-- Flow 1:

Average throughput: 581.90 Mbit/s

95th percentile per-packet one-way delay: 153.764 ms

Loss rate: 1.45%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-05 11:45:00

End at: 2017-12-05 11:45:30

Below is generated by plot.py at 2017-12-05 15:06:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 602.92 Mbit/s

95th percentile per-packet one-way delay: 70.545 ms

Loss rate: 0.76%

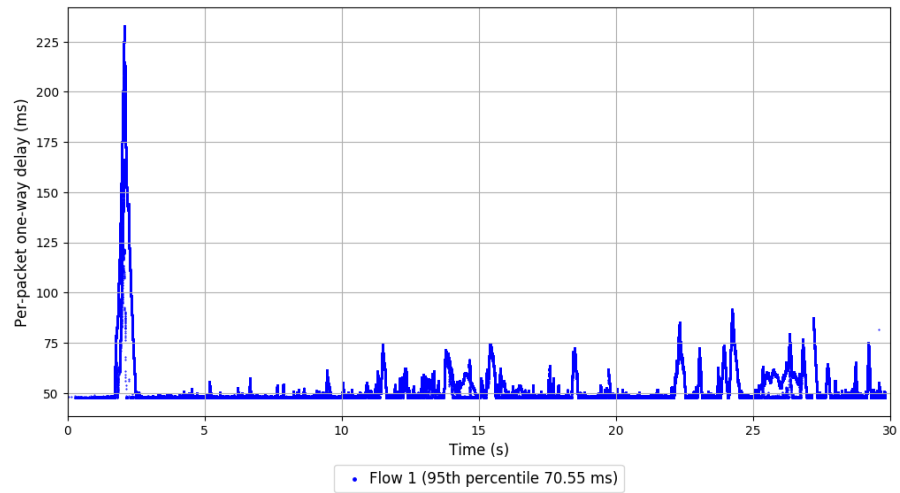
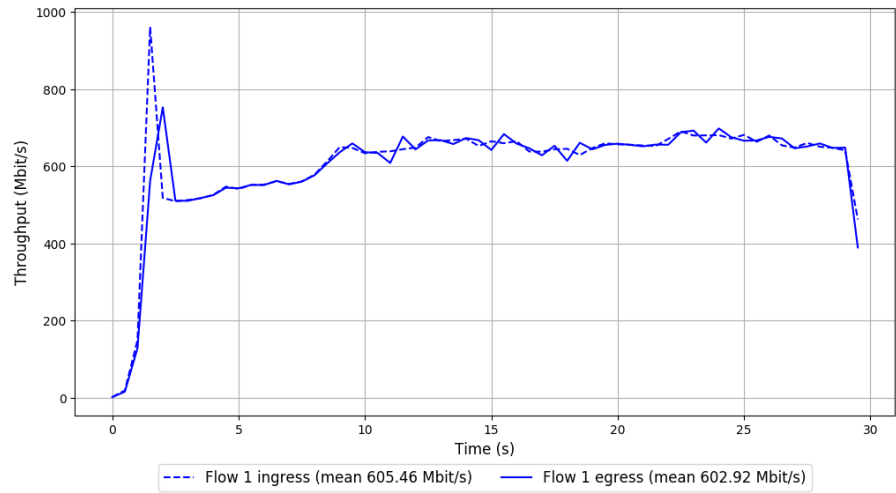
-- Flow 1:

Average throughput: 602.92 Mbit/s

95th percentile per-packet one-way delay: 70.545 ms

Loss rate: 0.76%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-05 11:55:29

End at: 2017-12-05 11:55:59

Below is generated by plot.py at 2017-12-05 15:06:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 618.12 Mbit/s

95th percentile per-packet one-way delay: 155.817 ms

Loss rate: 1.38%

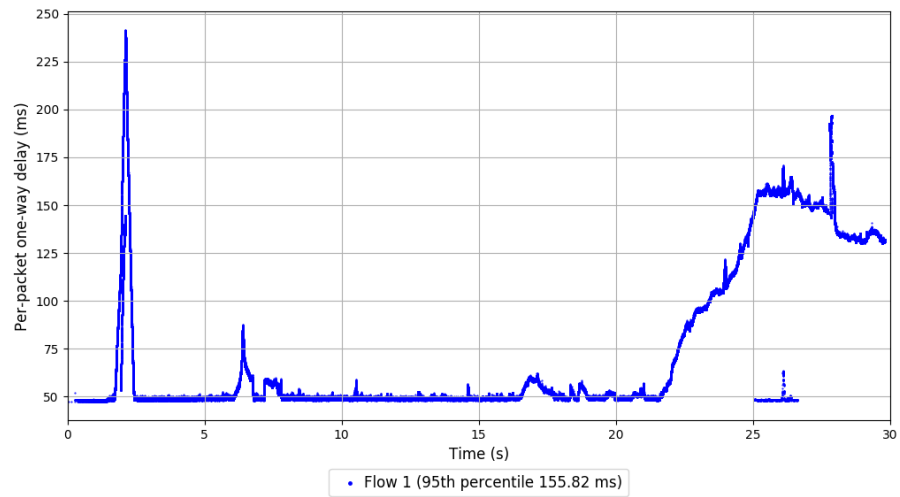
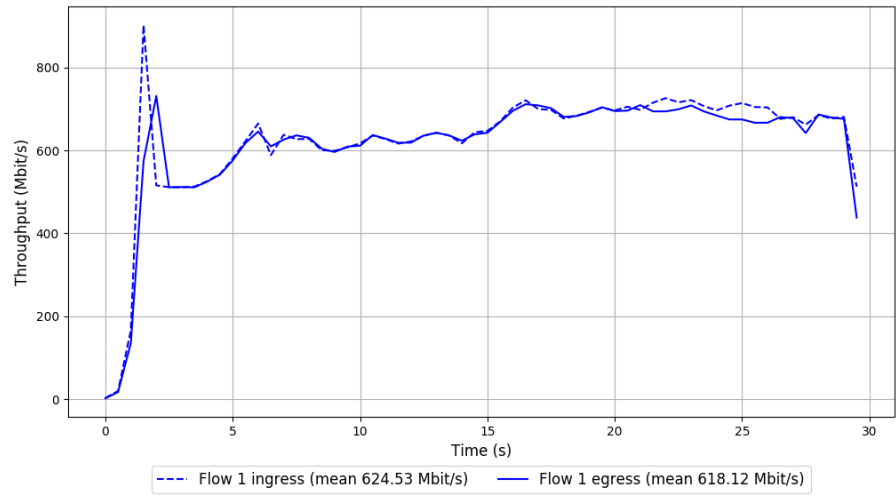
-- Flow 1:

Average throughput: 618.12 Mbit/s

95th percentile per-packet one-way delay: 155.817 ms

Loss rate: 1.38%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-05 12:06:04

End at: 2017-12-05 12:06:34

Below is generated by plot.py at 2017-12-05 15:06:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 590.38 Mbit/s

95th percentile per-packet one-way delay: 77.590 ms

Loss rate: 0.59%

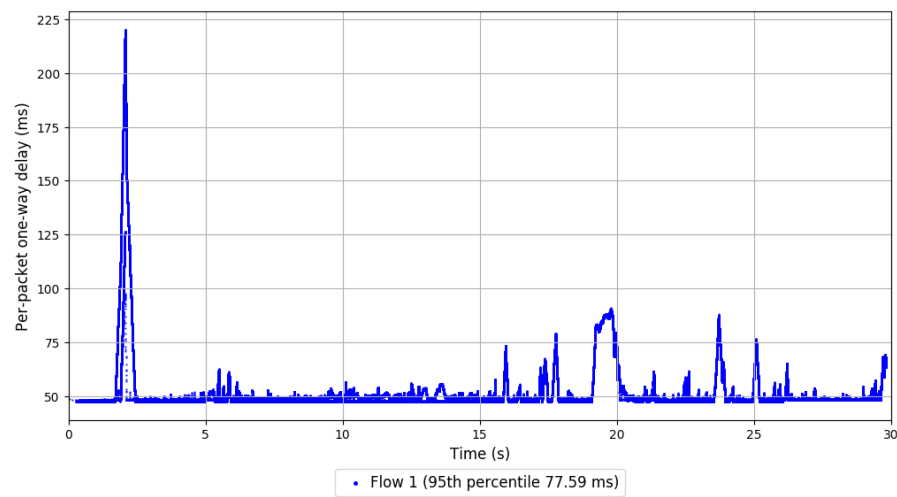
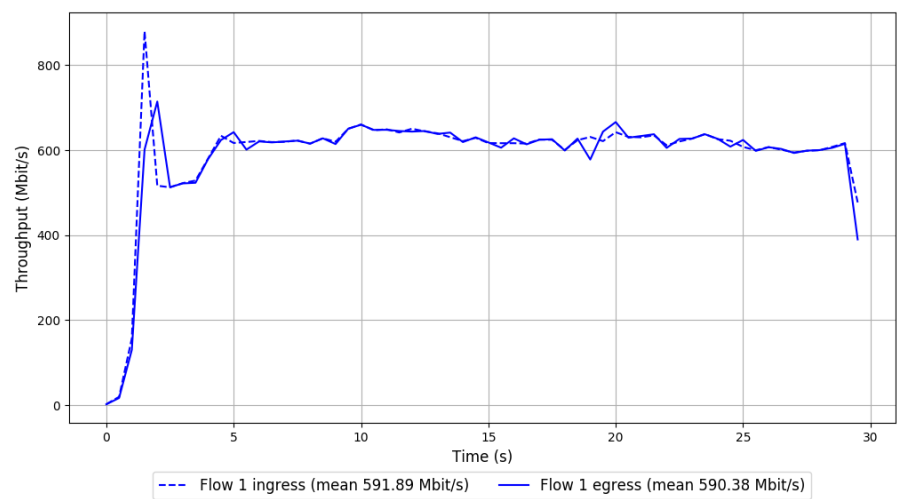
-- Flow 1:

Average throughput: 590.38 Mbit/s

95th percentile per-packet one-way delay: 77.590 ms

Loss rate: 0.59%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-05 12:16:30

End at: 2017-12-05 12:17:00

Below is generated by plot.py at 2017-12-05 15:07:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 597.98 Mbit/s

95th percentile per-packet one-way delay: 67.380 ms

Loss rate: 0.46%

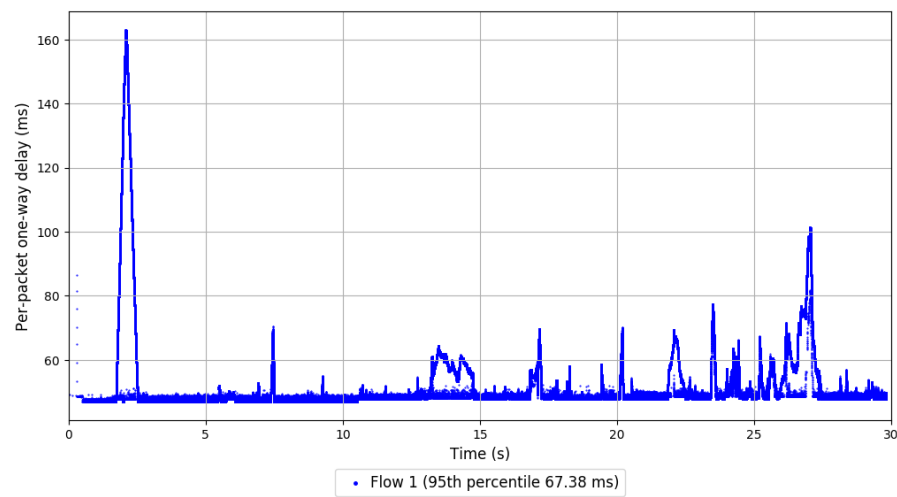
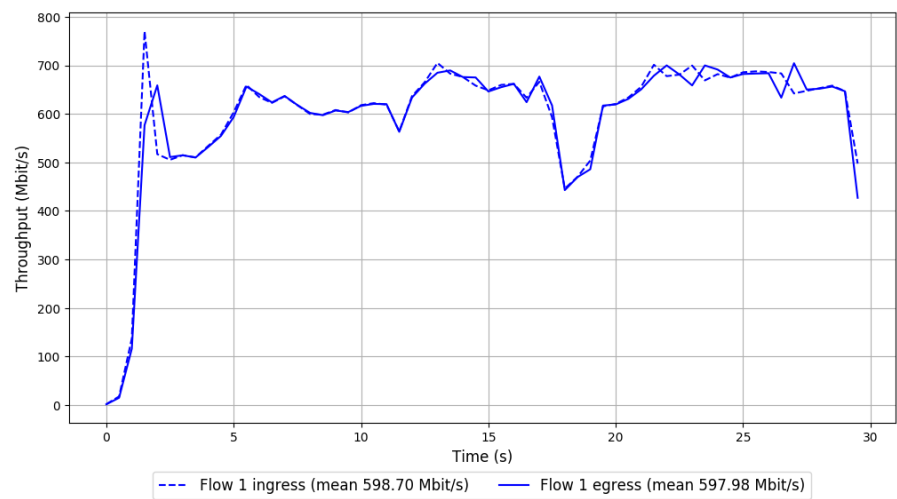
-- Flow 1:

Average throughput: 597.98 Mbit/s

95th percentile per-packet one-way delay: 67.380 ms

Loss rate: 0.46%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-05 12:27:00

End at: 2017-12-05 12:27:30

Below is generated by plot.py at 2017-12-05 15:07:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 592.77 Mbit/s

95th percentile per-packet one-way delay: 109.607 ms

Loss rate: 0.85%

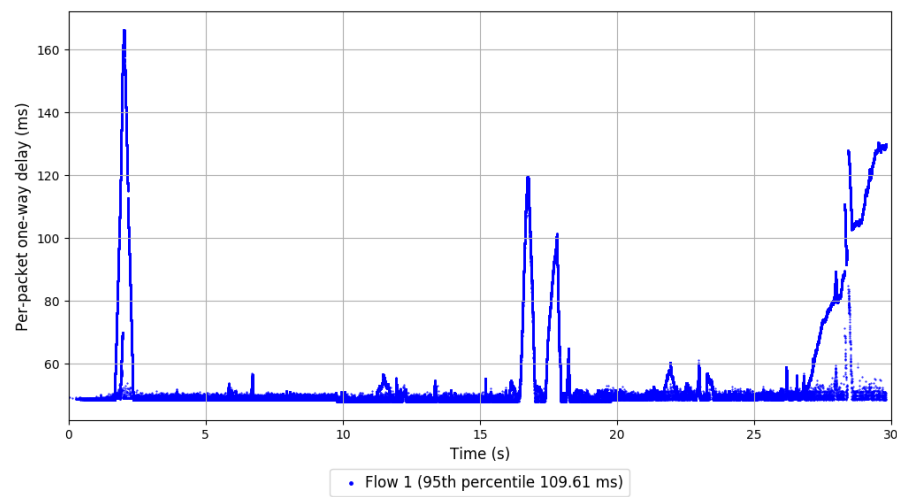
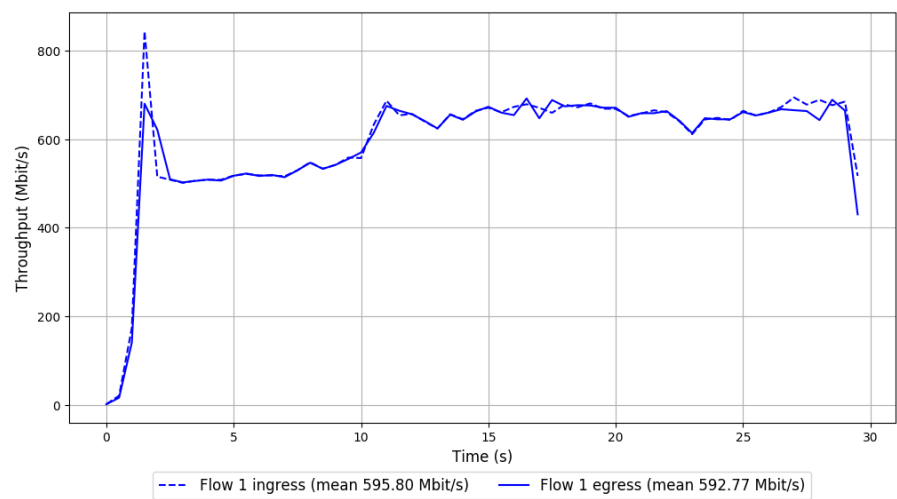
-- Flow 1:

Average throughput: 592.77 Mbit/s

95th percentile per-packet one-way delay: 109.607 ms

Loss rate: 0.85%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-05 12:37:31

End at: 2017-12-05 12:38:01

Below is generated by plot.py at 2017-12-05 15:07:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 570.08 Mbit/s

95th percentile per-packet one-way delay: 115.208 ms

Loss rate: 0.96%

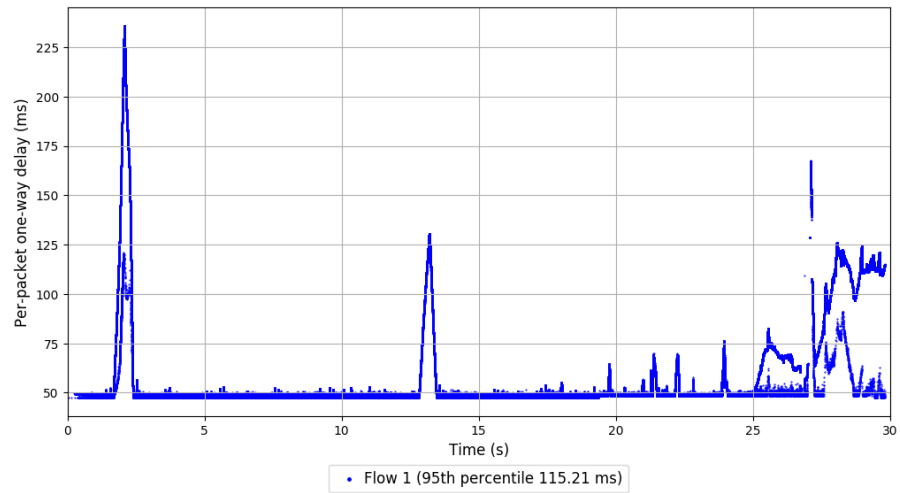
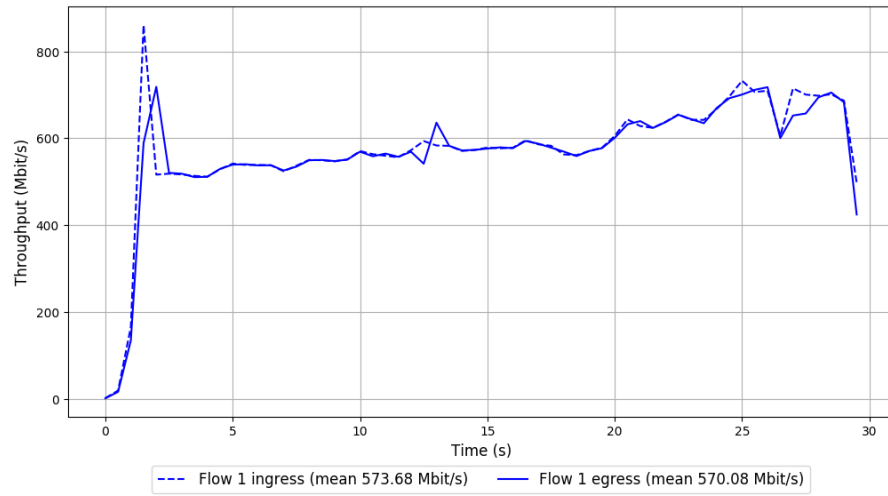
-- Flow 1:

Average throughput: 570.08 Mbit/s

95th percentile per-packet one-way delay: 115.208 ms

Loss rate: 0.96%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-05 12:48:03

End at: 2017-12-05 12:48:33

Below is generated by plot.py at 2017-12-05 15:16:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 586.84 Mbit/s

95th percentile per-packet one-way delay: 67.585 ms

Loss rate: 2.20%

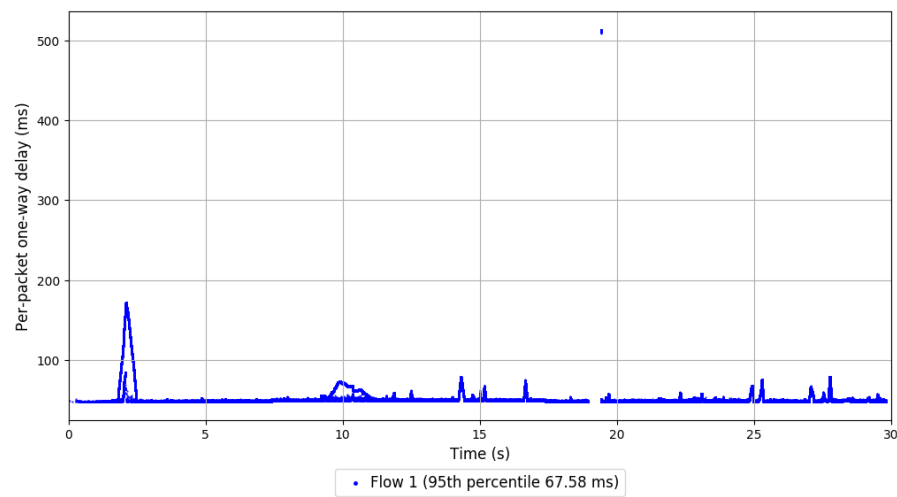
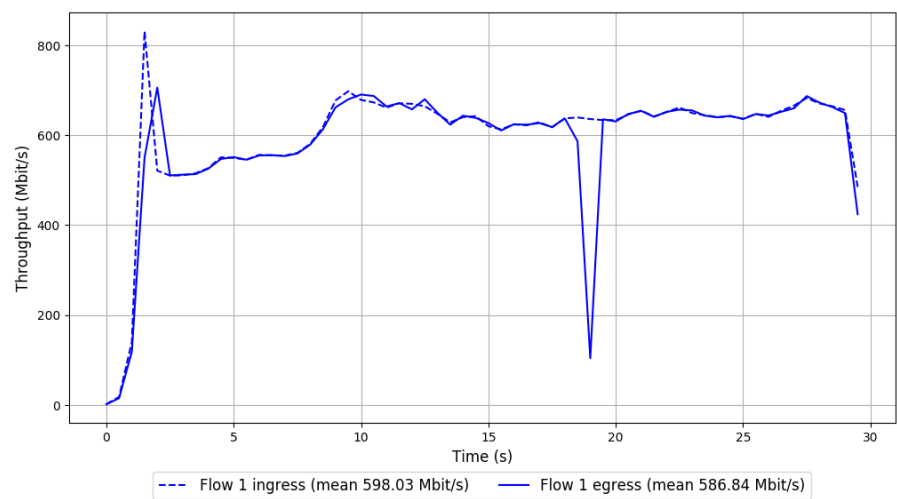
-- Flow 1:

Average throughput: 586.84 Mbit/s

95th percentile per-packet one-way delay: 67.585 ms

Loss rate: 2.20%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-05 12:58:30

End at: 2017-12-05 12:59:00

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 626.94 Mbit/s

95th percentile per-packet one-way delay: 155.268 ms

Loss rate: 0.94%

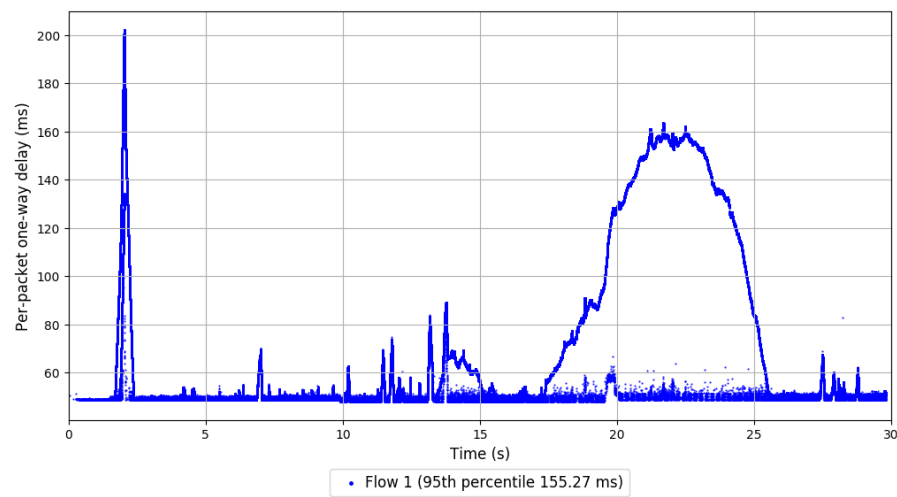
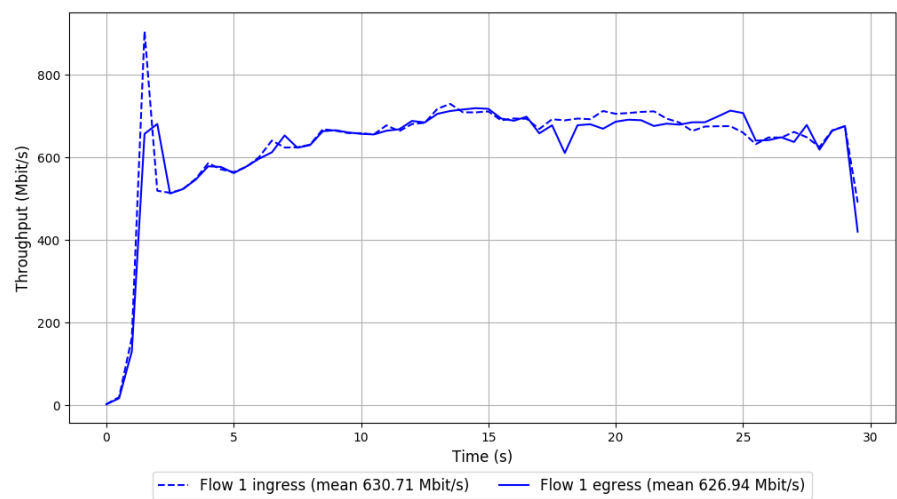
-- Flow 1:

Average throughput: 626.94 Mbit/s

95th percentile per-packet one-way delay: 155.268 ms

Loss rate: 0.94%

Run 10: Report of PCC — Data Link

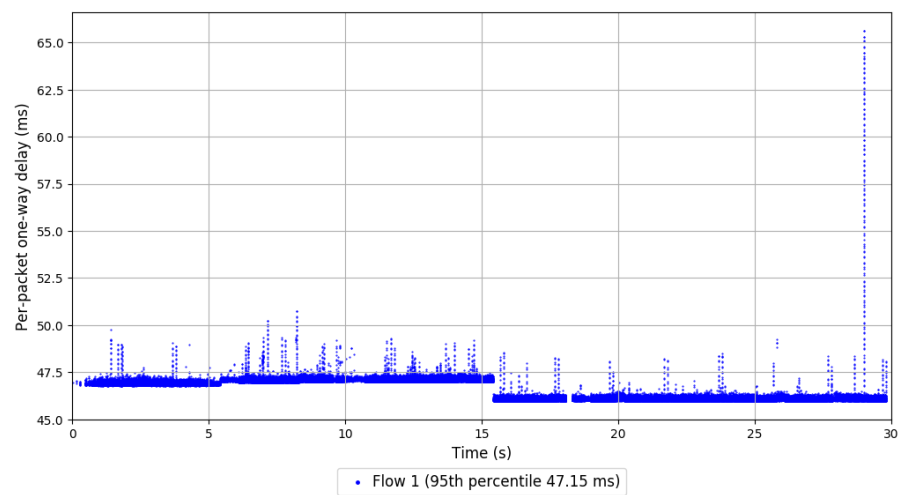
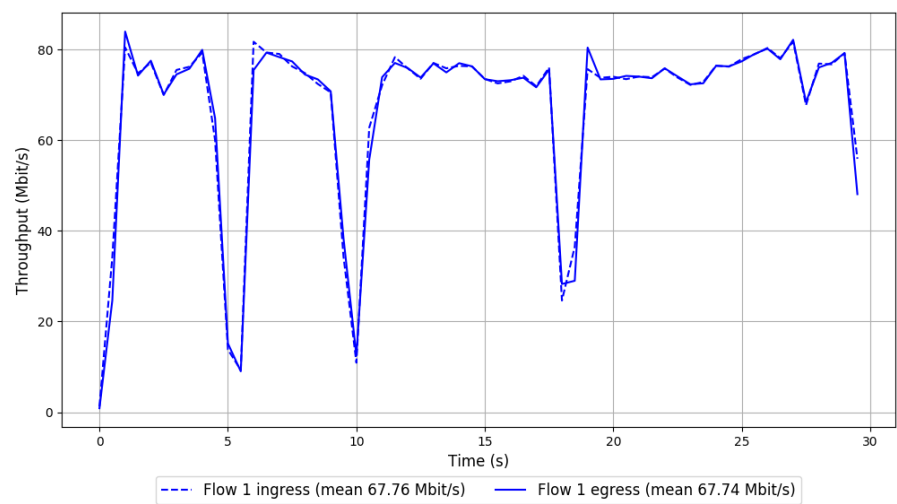


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-05 11:26:25
End at: 2017-12-05 11:26:55

# Below is generated by plot.py at 2017-12-05 15:17:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.74 Mbit/s
95th percentile per-packet one-way delay: 47.147 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 67.74 Mbit/s
95th percentile per-packet one-way delay: 47.147 ms
Loss rate: 0.37%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-05 11:36:54

End at: 2017-12-05 11:37:24

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.65 Mbit/s

95th percentile per-packet one-way delay: 47.936 ms

Loss rate: 0.40%

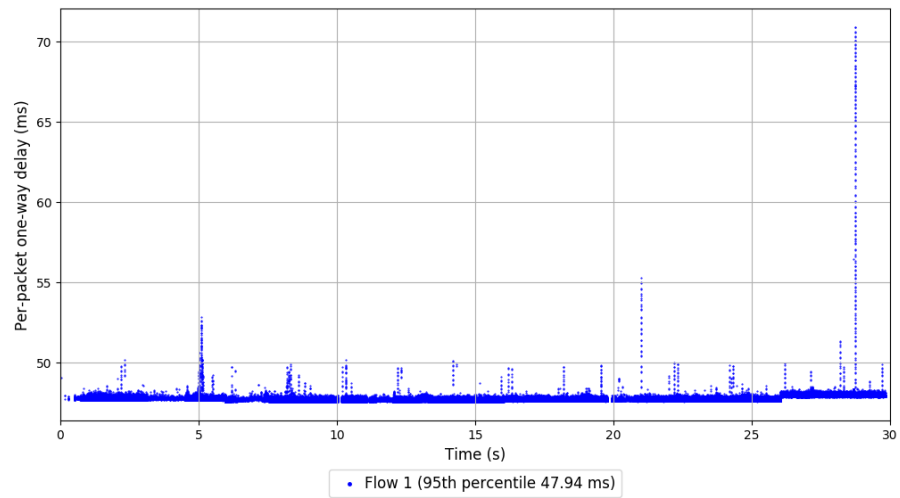
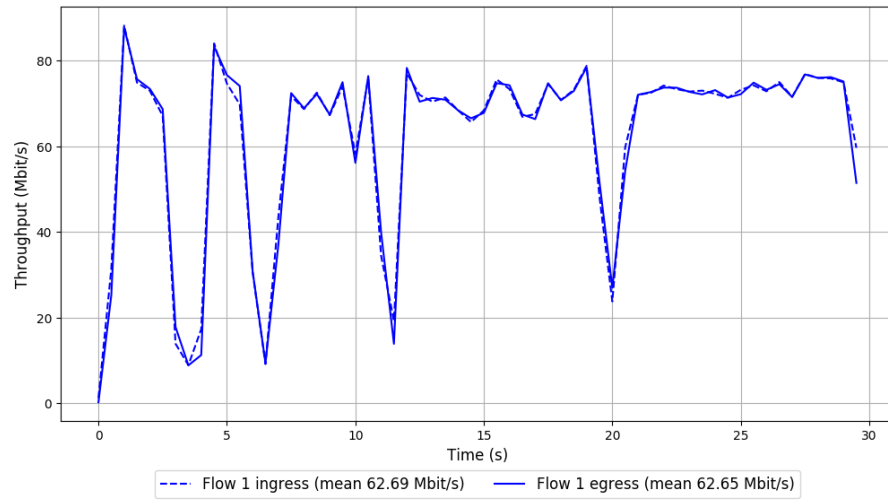
-- Flow 1:

Average throughput: 62.65 Mbit/s

95th percentile per-packet one-way delay: 47.936 ms

Loss rate: 0.40%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-05 11:47:26

End at: 2017-12-05 11:47:56

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.65 Mbit/s

95th percentile per-packet one-way delay: 48.052 ms

Loss rate: 0.38%

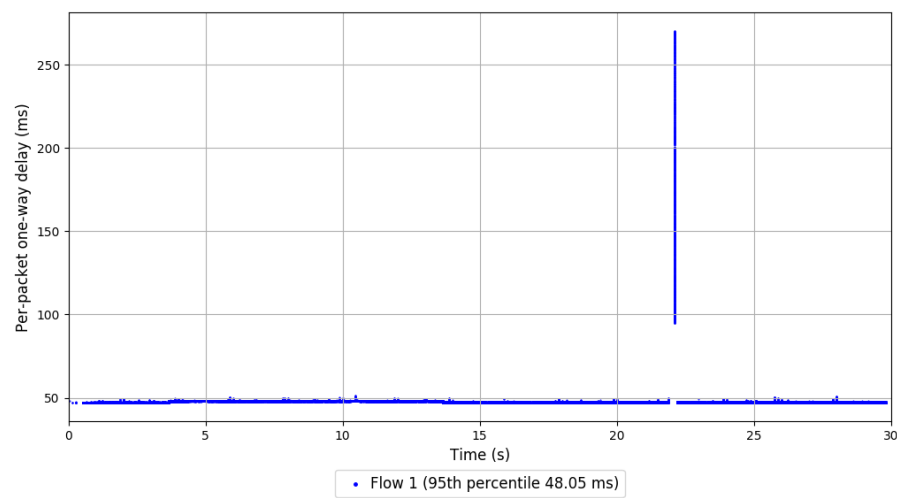
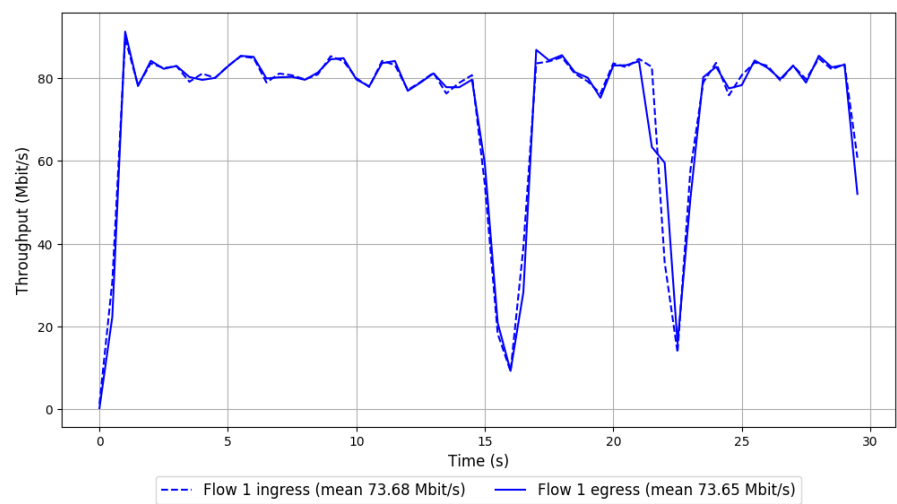
-- Flow 1:

Average throughput: 73.65 Mbit/s

95th percentile per-packet one-way delay: 48.052 ms

Loss rate: 0.38%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-05 11:57:56

End at: 2017-12-05 11:58:26

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.00 Mbit/s

95th percentile per-packet one-way delay: 48.250 ms

Loss rate: 0.39%

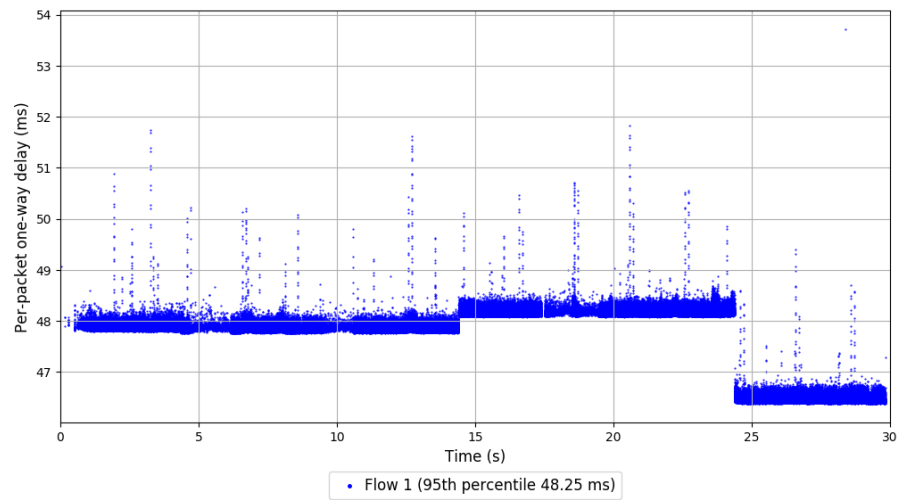
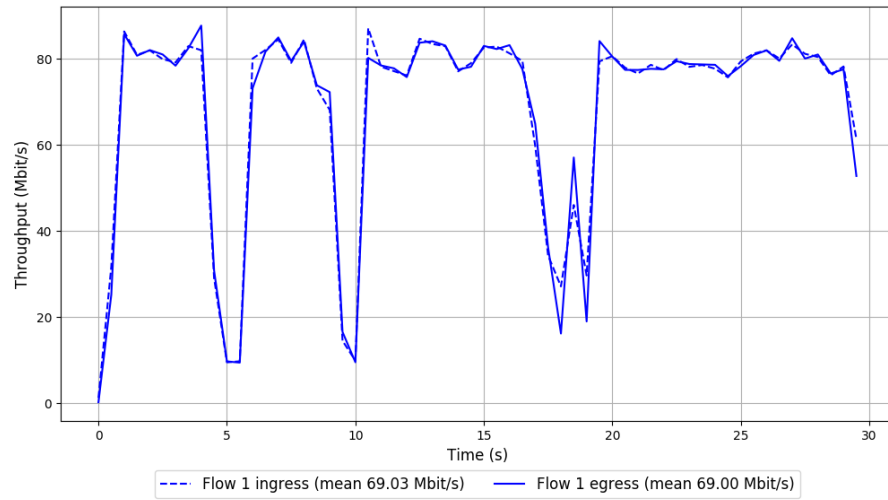
-- Flow 1:

Average throughput: 69.00 Mbit/s

95th percentile per-packet one-way delay: 48.250 ms

Loss rate: 0.39%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

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

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

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.43 Mbit/s

95th percentile per-packet one-way delay: 48.682 ms

Loss rate: 0.38%

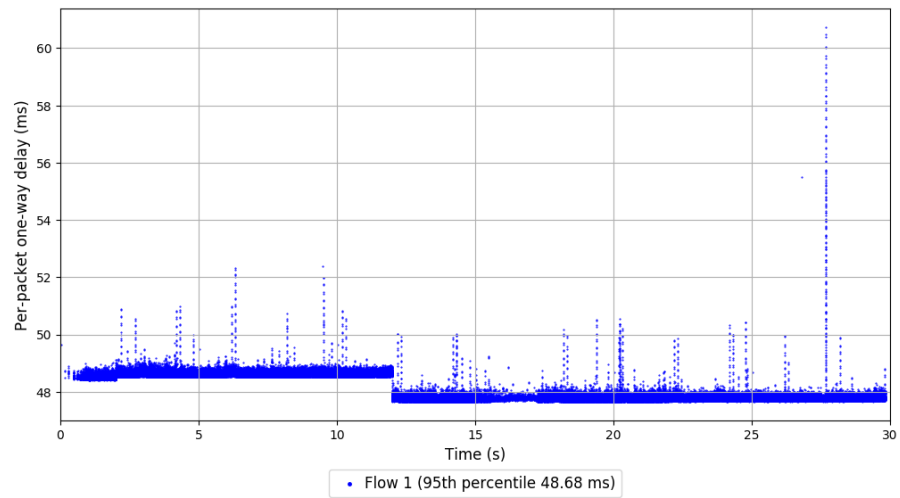
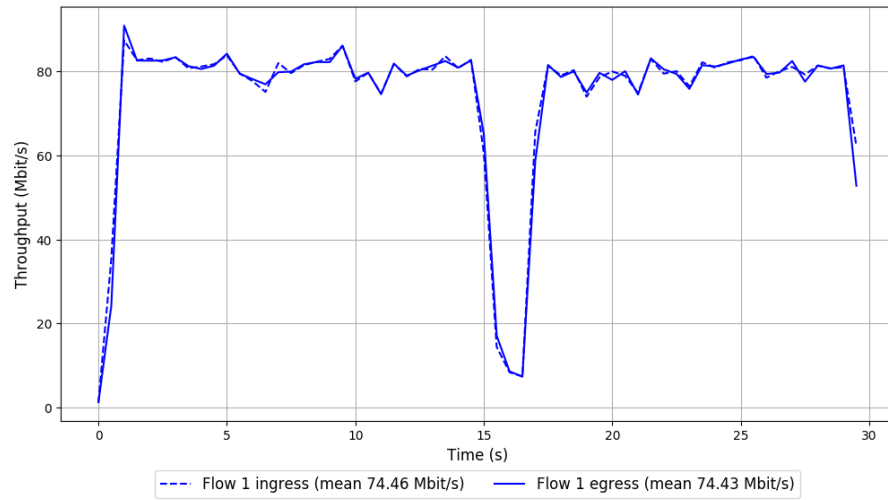
-- Flow 1:

Average throughput: 74.43 Mbit/s

95th percentile per-packet one-way delay: 48.682 ms

Loss rate: 0.38%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

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

End at: 2017-12-05 12:19:28

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.46 Mbit/s

95th percentile per-packet one-way delay: 48.634 ms

Loss rate: 0.90%

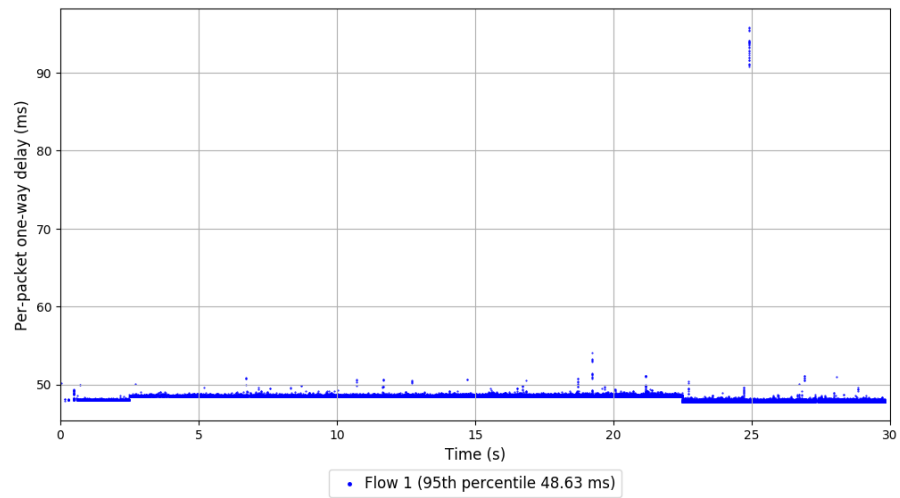
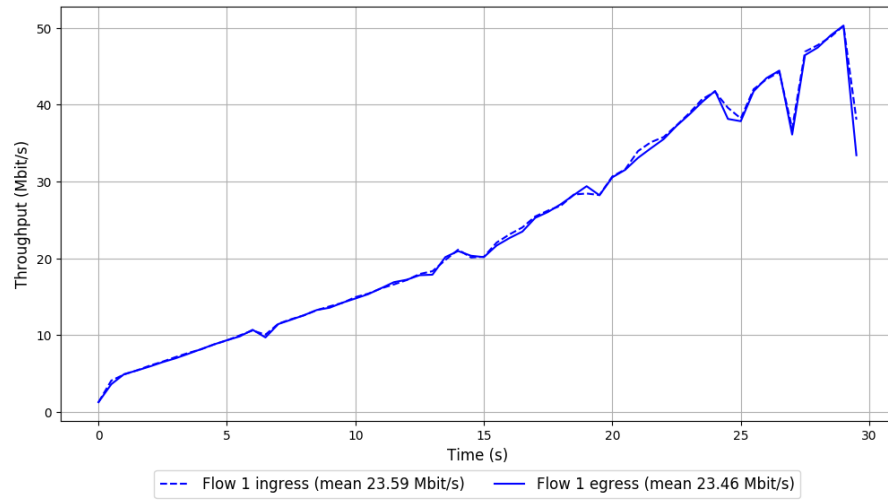
-- Flow 1:

Average throughput: 23.46 Mbit/s

95th percentile per-packet one-way delay: 48.634 ms

Loss rate: 0.90%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-05 12:29:26

End at: 2017-12-05 12:29:56

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.59 Mbit/s

95th percentile per-packet one-way delay: 49.437 ms

Loss rate: 0.37%

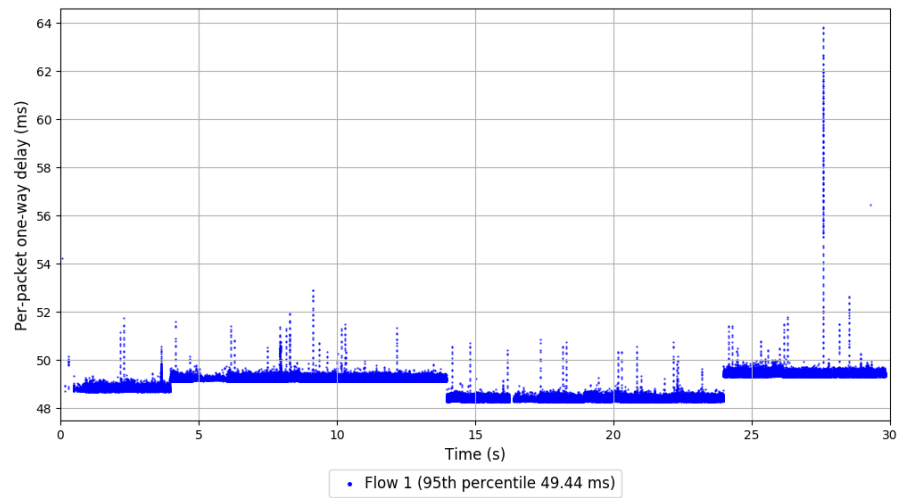
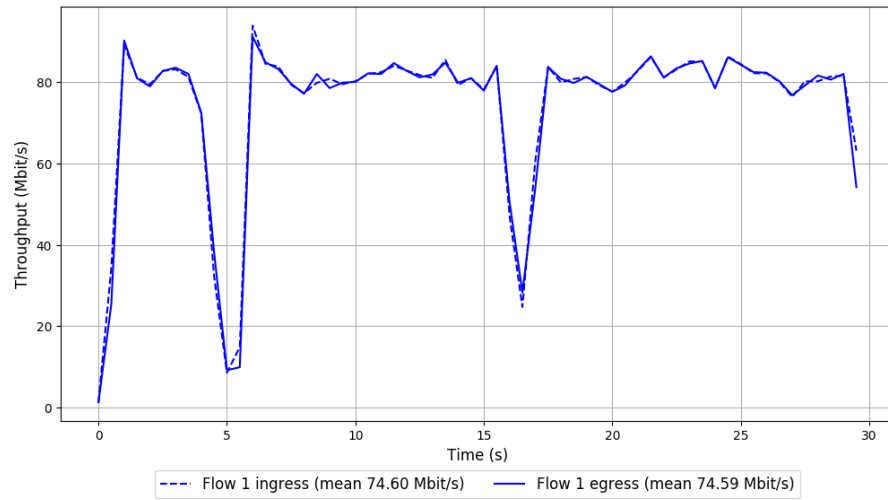
-- Flow 1:

Average throughput: 74.59 Mbit/s

95th percentile per-packet one-way delay: 49.437 ms

Loss rate: 0.37%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-05 12:39:56

End at: 2017-12-05 12:40:26

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.12 Mbit/s

95th percentile per-packet one-way delay: 49.749 ms

Loss rate: 0.34%

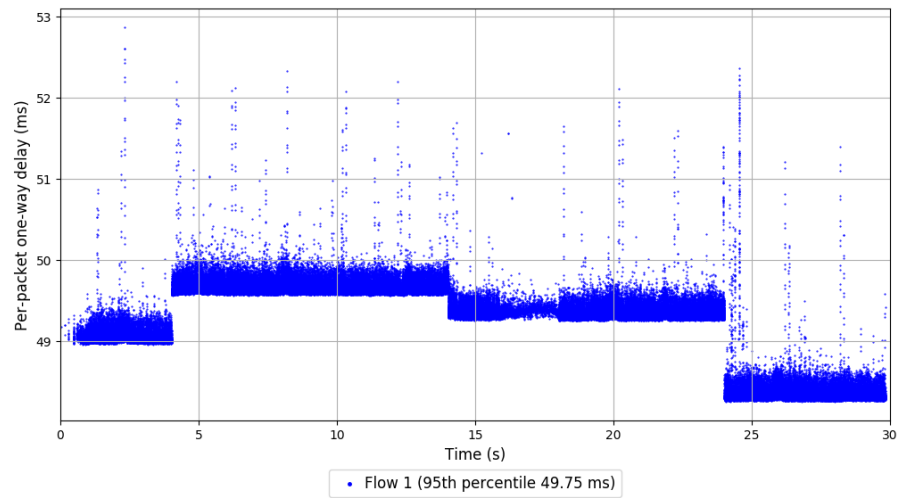
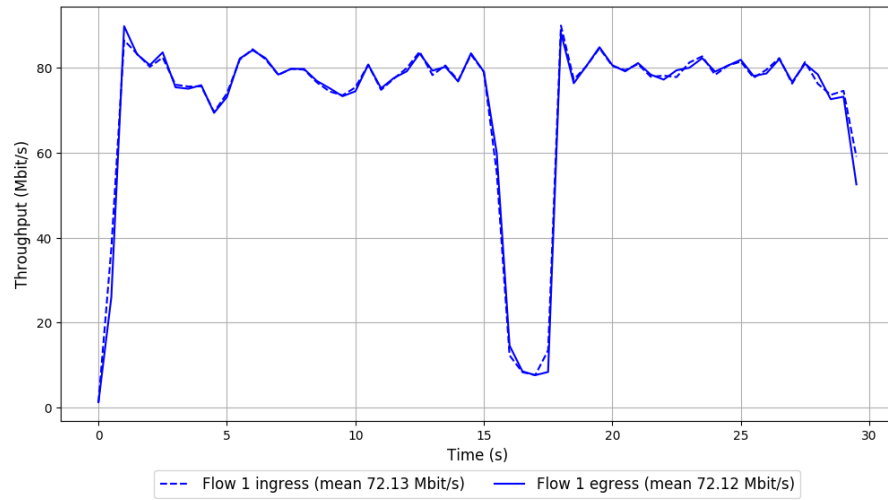
-- Flow 1:

Average throughput: 72.12 Mbit/s

95th percentile per-packet one-way delay: 49.749 ms

Loss rate: 0.34%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-05 12:50:28

End at: 2017-12-05 12:50:58

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.68 Mbit/s

95th percentile per-packet one-way delay: 49.565 ms

Loss rate: 0.37%

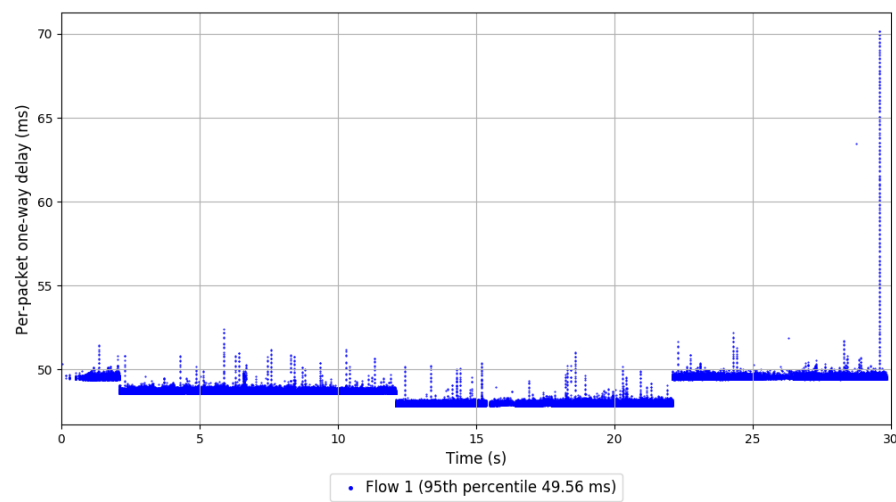
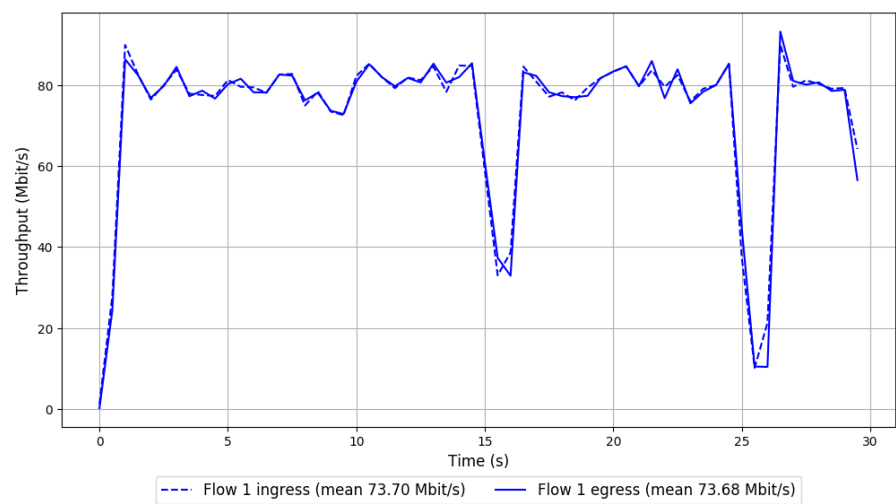
-- Flow 1:

Average throughput: 73.68 Mbit/s

95th percentile per-packet one-way delay: 49.565 ms

Loss rate: 0.37%

Run 9: Report of QUIC Cubic — Data Link

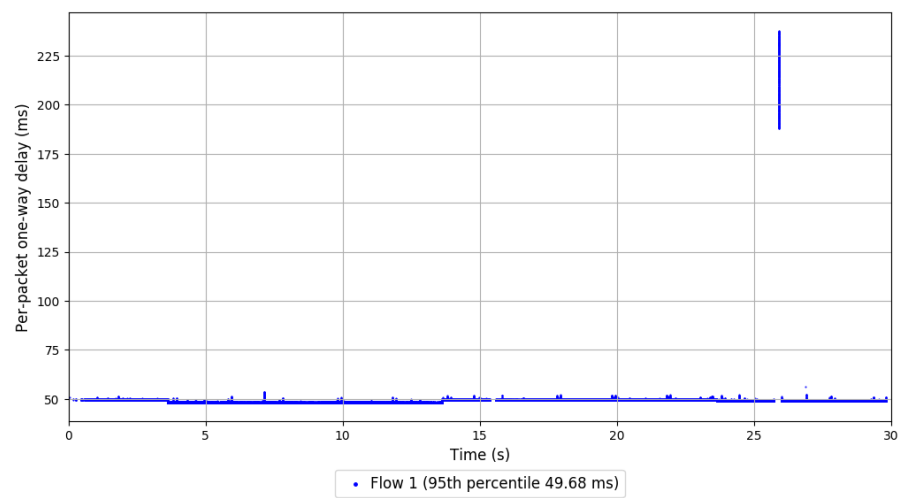
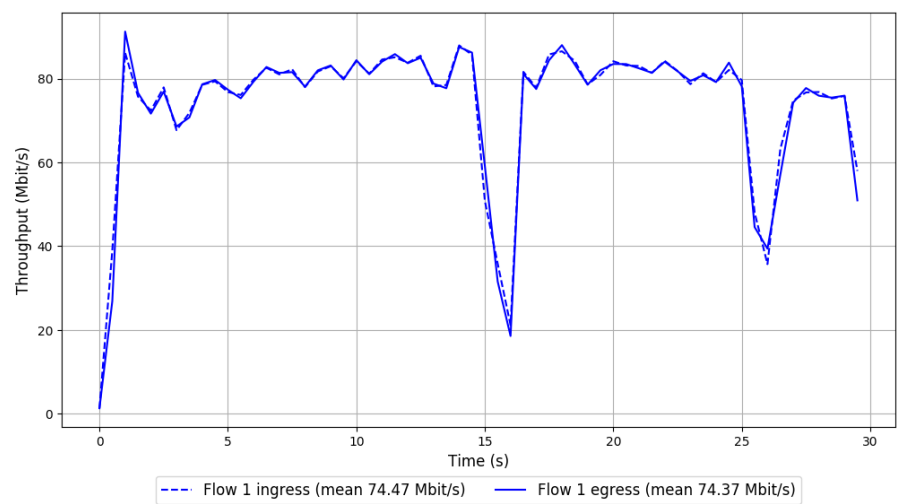


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-05 13:00:56
End at: 2017-12-05 13:01:26

# Below is generated by plot.py at 2017-12-05 15:17:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.37 Mbit/s
95th percentile per-packet one-way delay: 49.683 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 74.37 Mbit/s
95th percentile per-packet one-way delay: 49.683 ms
Loss rate: 0.47%
```

Run 10: Report of QUIC Cubic — Data Link

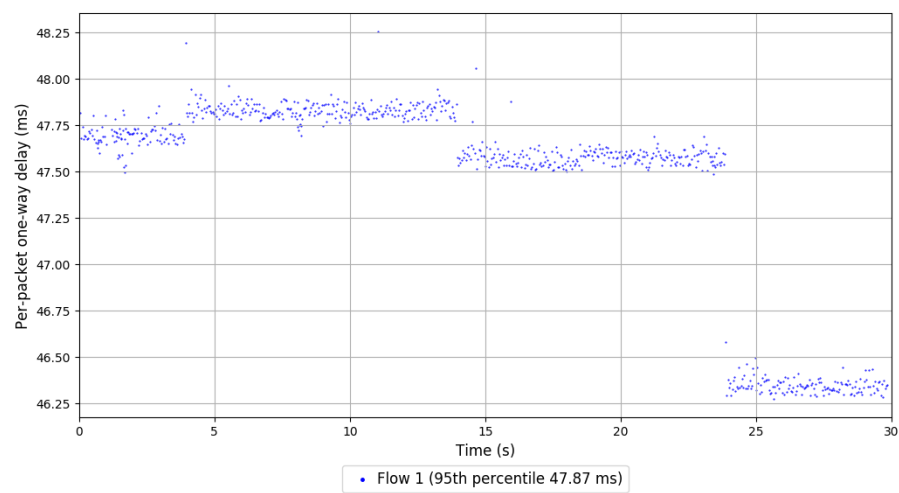
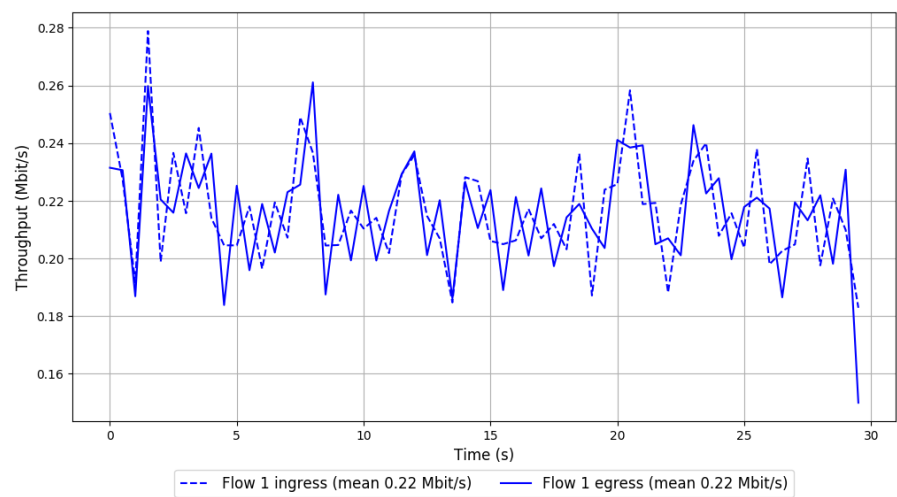


```
Run 1: Statistics of SCReAM

Start at: 2017-12-05 11:21:16
End at: 2017-12-05 11:21:46

# Below is generated by plot.py at 2017-12-05 15:17:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.873 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.873 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link

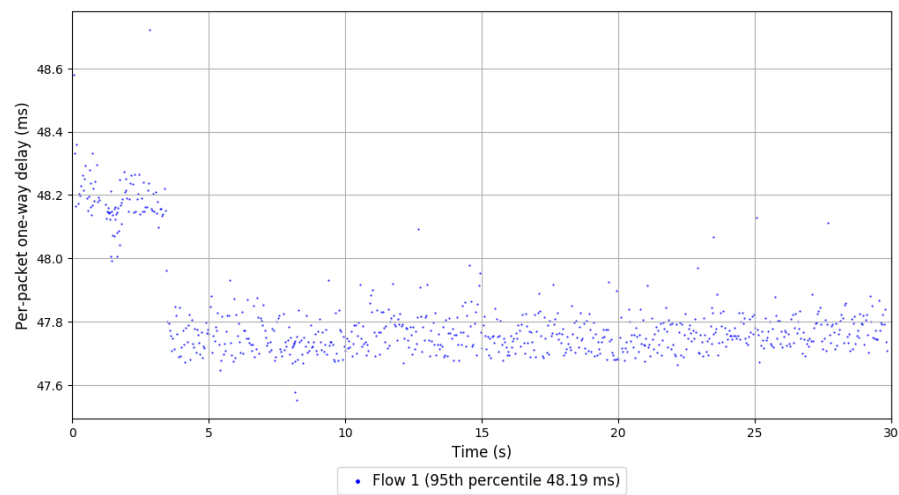
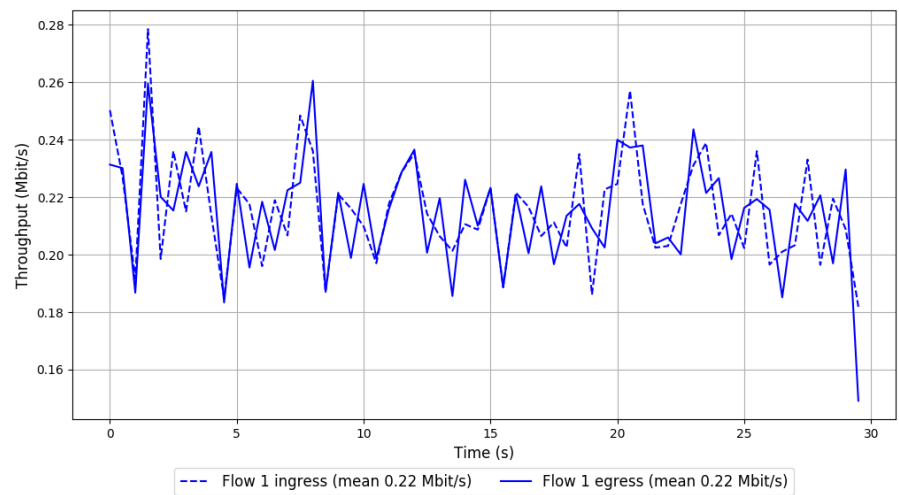


```
Run 2: Statistics of SCReAM

Start at: 2017-12-05 11:31:47
End at: 2017-12-05 11:32:17

# Below is generated by plot.py at 2017-12-05 15:17:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.191 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.191 ms
Loss rate: 0.38%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-05 11:42:17

End at: 2017-12-05 11:42:47

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.351 ms

Loss rate: 0.38%

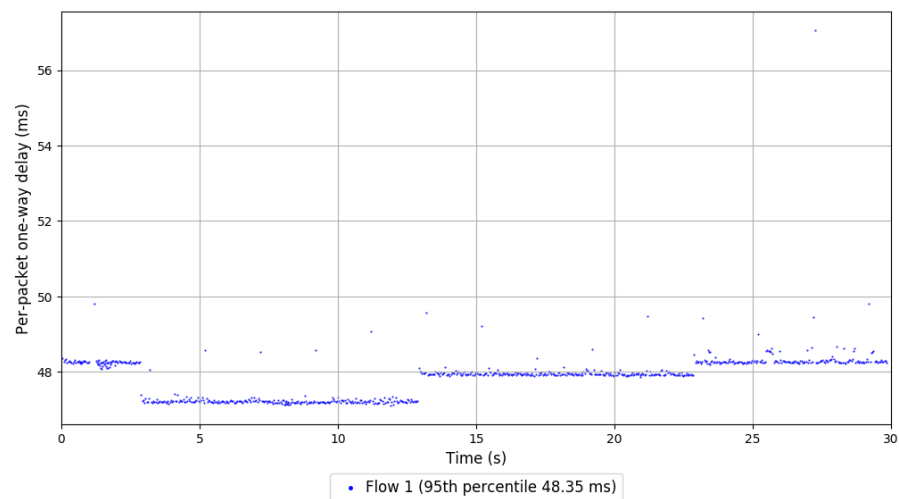
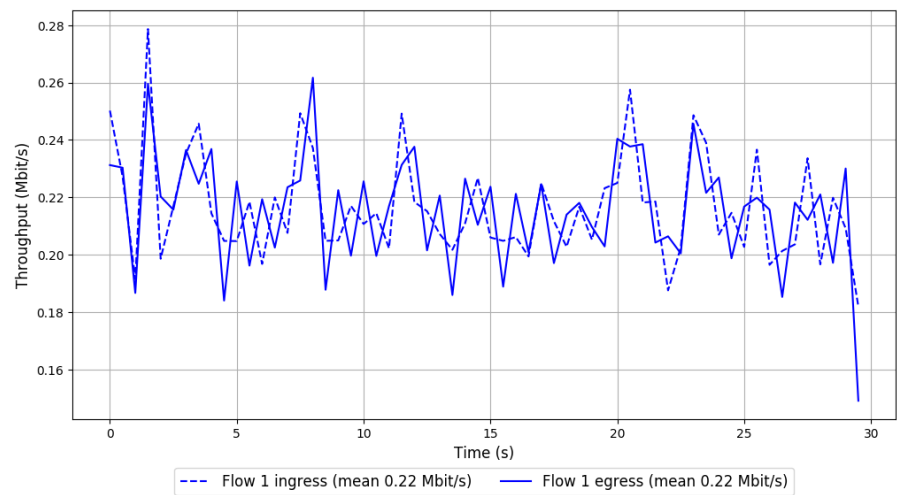
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.351 ms

Loss rate: 0.38%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-05 11:52:48

End at: 2017-12-05 11:53:18

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.066 ms

Loss rate: 0.38%

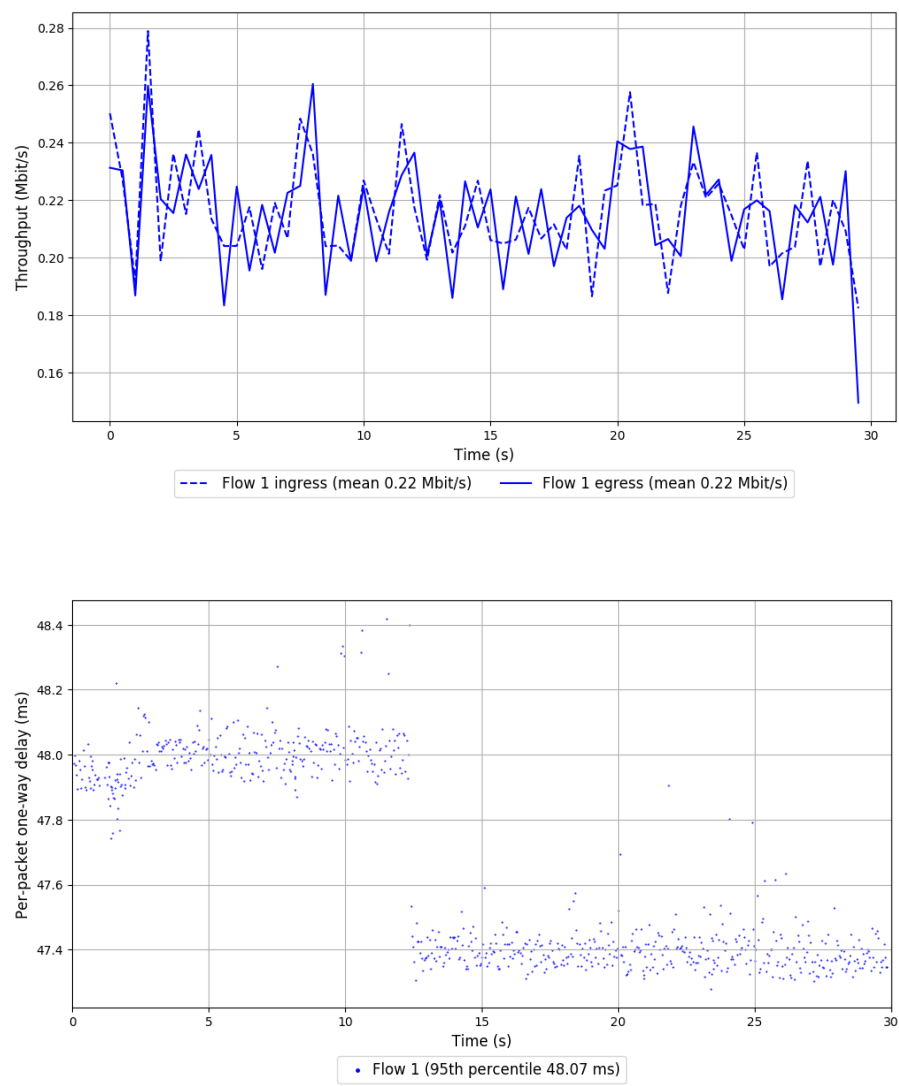
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.066 ms

Loss rate: 0.38%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-05 12:03:21

End at: 2017-12-05 12:03:51

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.468 ms

Loss rate: 0.38%

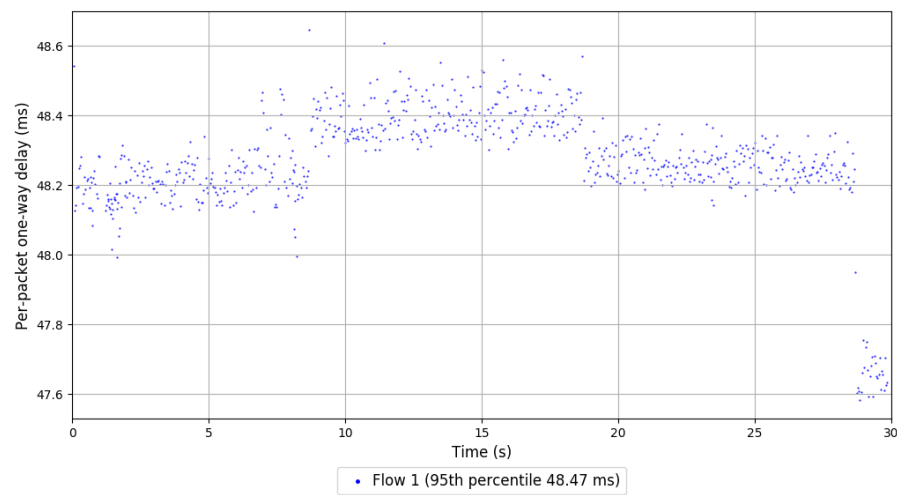
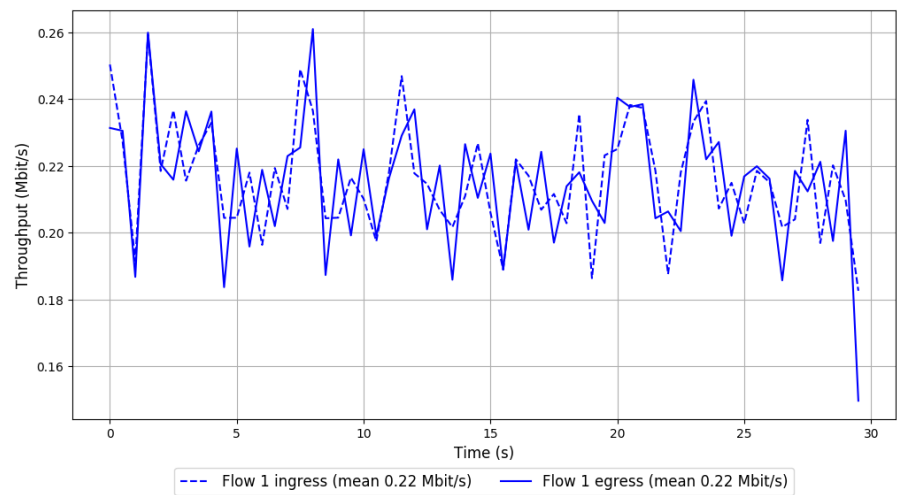
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.468 ms

Loss rate: 0.38%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-05 12:13:48

End at: 2017-12-05 12:14:18

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.578 ms

Loss rate: 0.38%

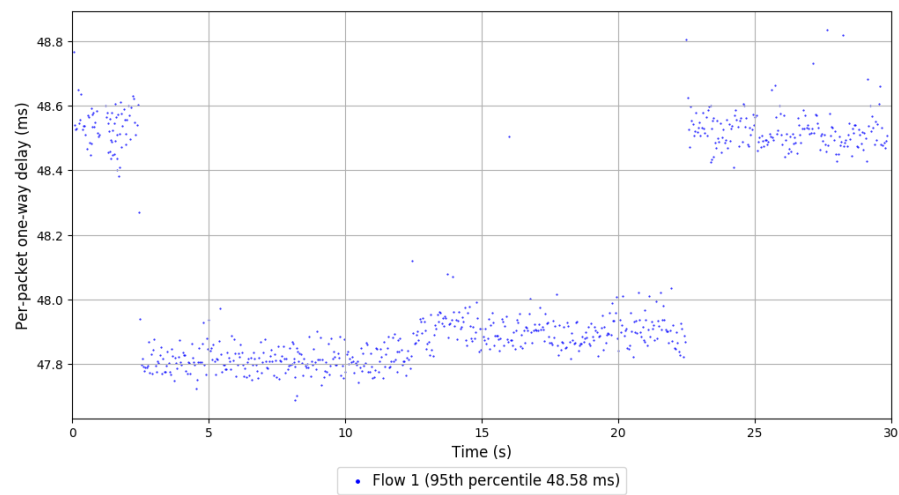
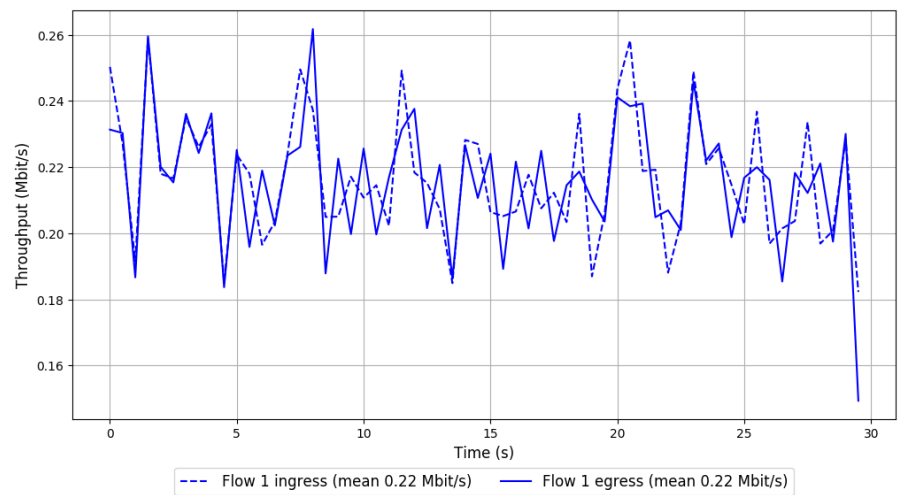
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.578 ms

Loss rate: 0.38%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-05 12:24:17

End at: 2017-12-05 12:24:47

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.457 ms

Loss rate: 0.38%

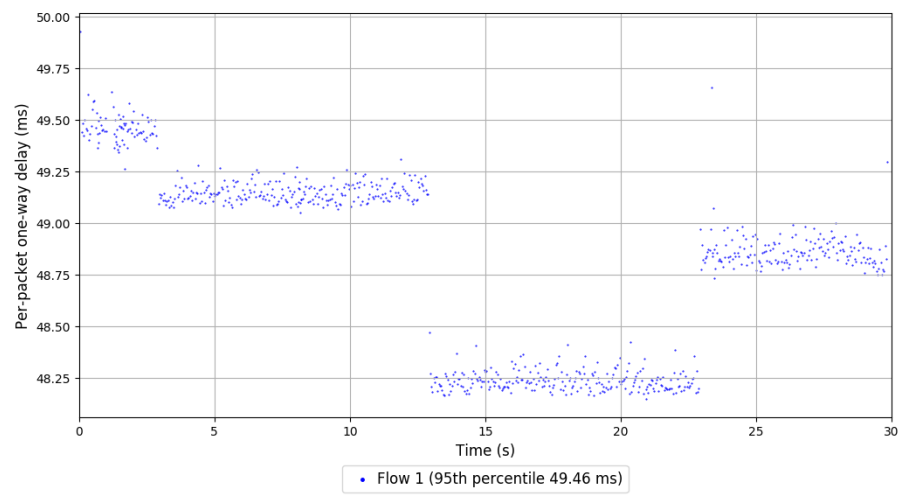
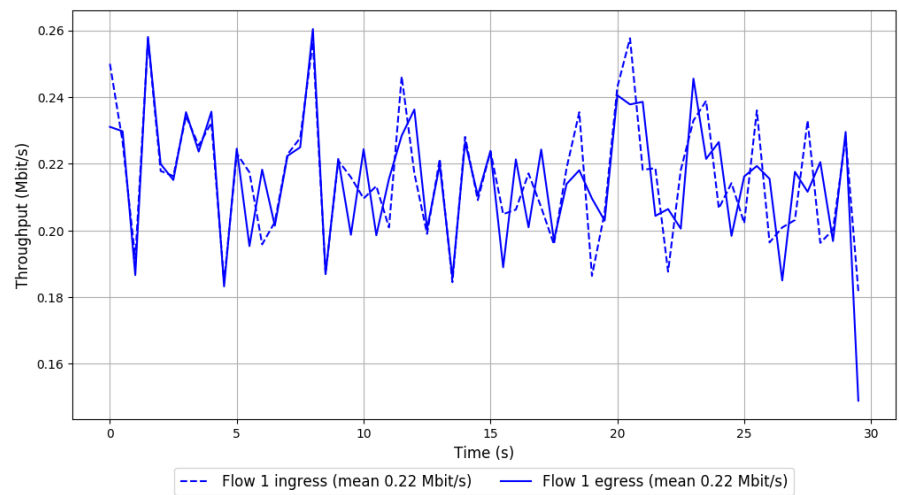
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.457 ms

Loss rate: 0.38%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-05 12:34:47

End at: 2017-12-05 12:35:17

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.404 ms

Loss rate: 0.38%

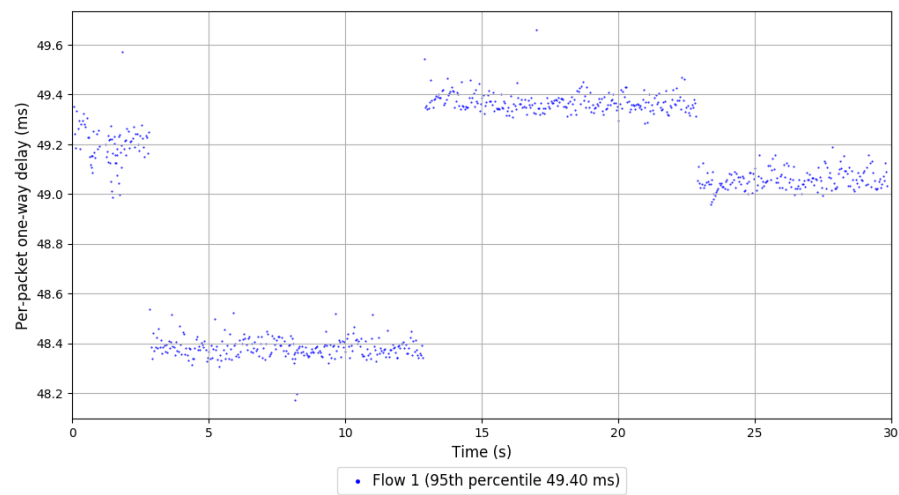
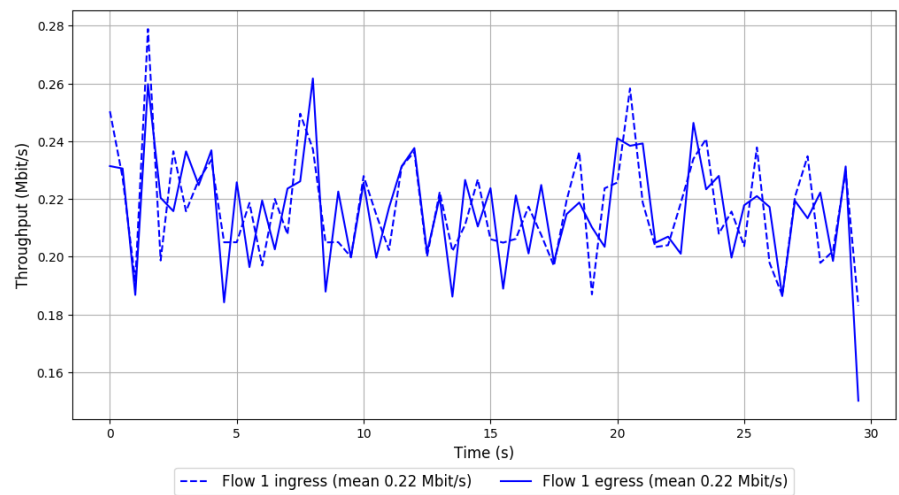
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.404 ms

Loss rate: 0.38%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-05 12:45:19

End at: 2017-12-05 12:45:49

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.483 ms

Loss rate: 0.38%

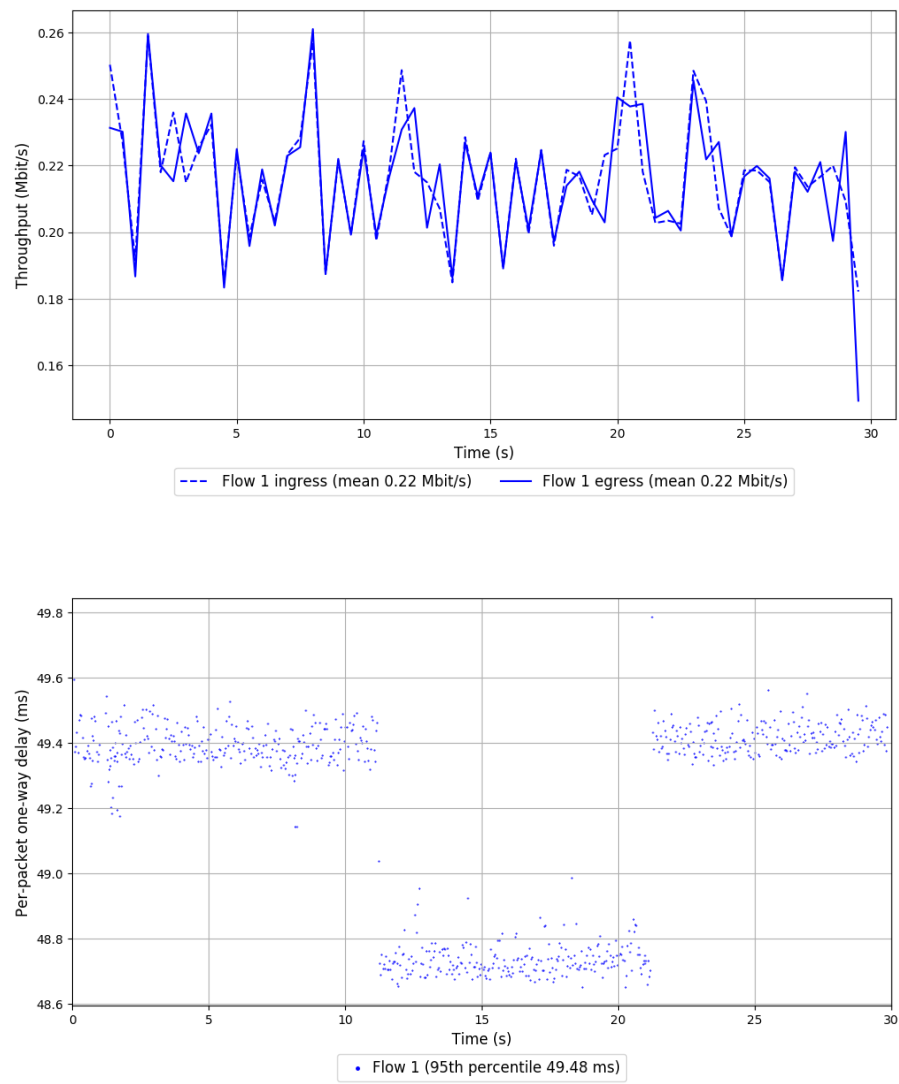
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.483 ms

Loss rate: 0.38%

Run 9: Report of SReAM — Data Link

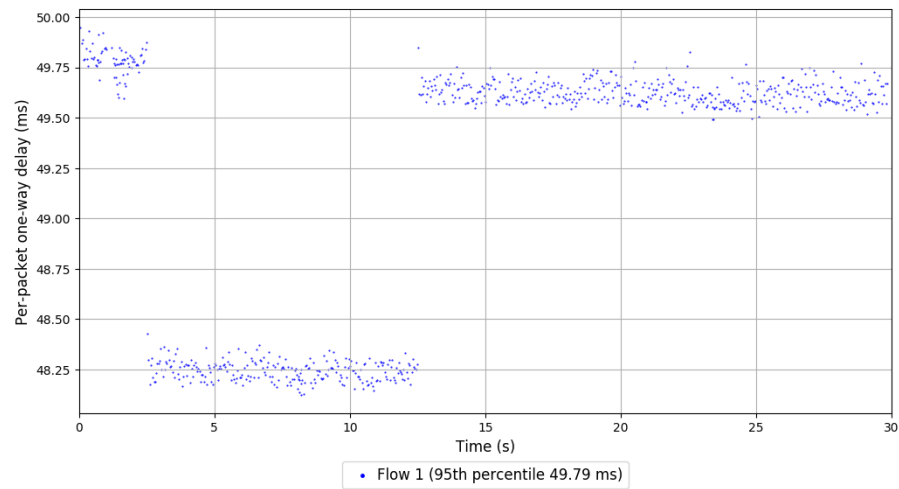
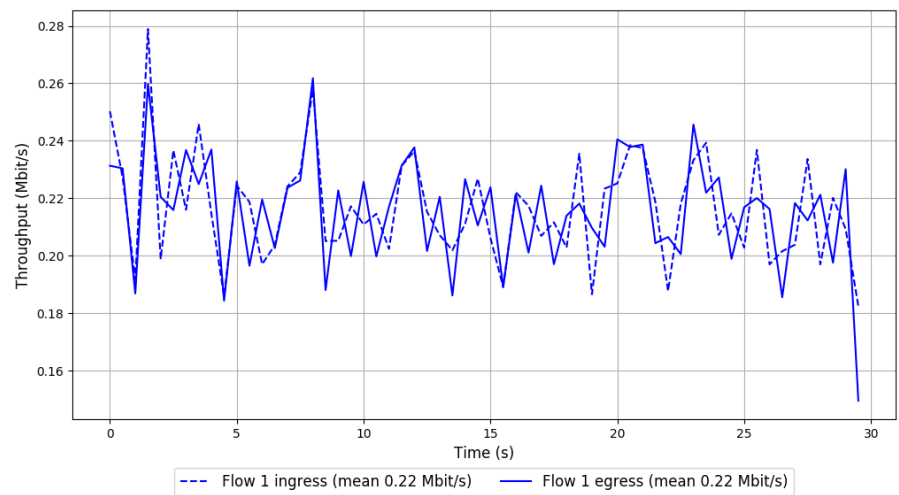


```
Run 10: Statistics of SReAM

Start at: 2017-12-05 12:55:48
End at: 2017-12-05 12:56:18

# Below is generated by plot.py at 2017-12-05 15:17:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.789 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.789 ms
Loss rate: 0.38%
```

Run 10: Report of SCRaM — Data Link

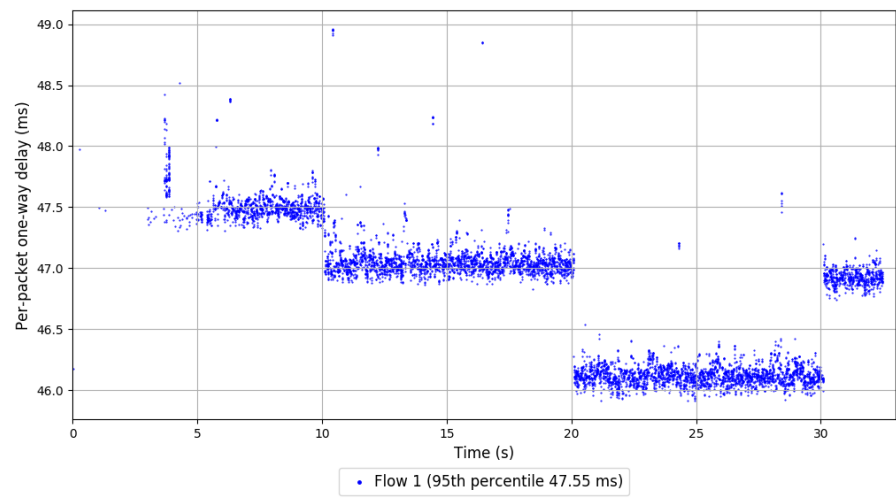
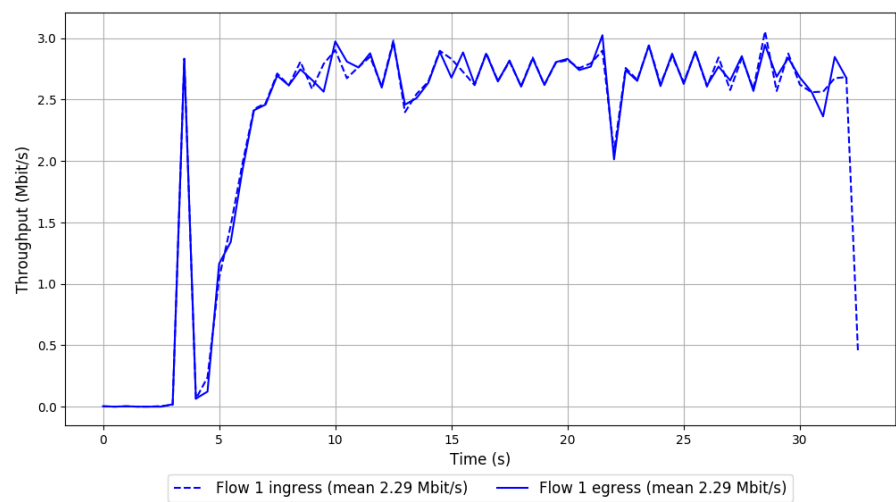


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-05 11:22:43
End at: 2017-12-05 11:23:13

# Below is generated by plot.py at 2017-12-05 15:17:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 47.553 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 47.553 ms
Loss rate: 0.45%
```

Run 1: Report of WebRTC media — Data Link

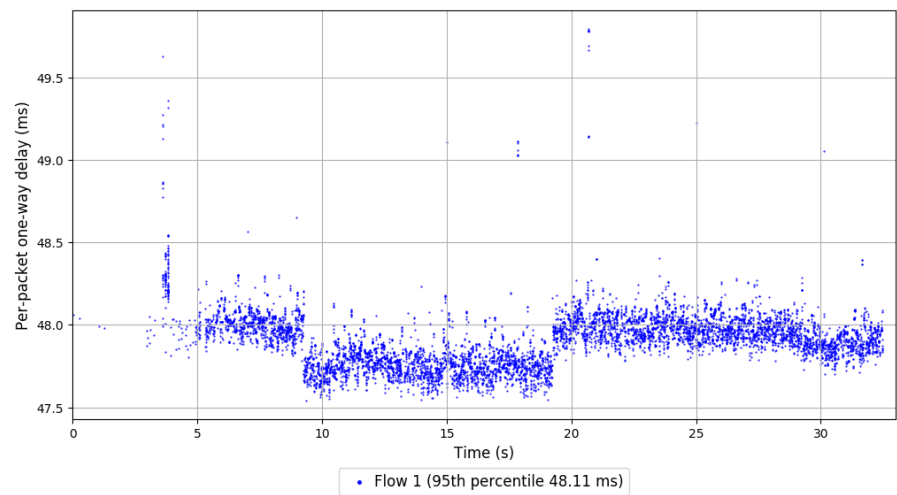
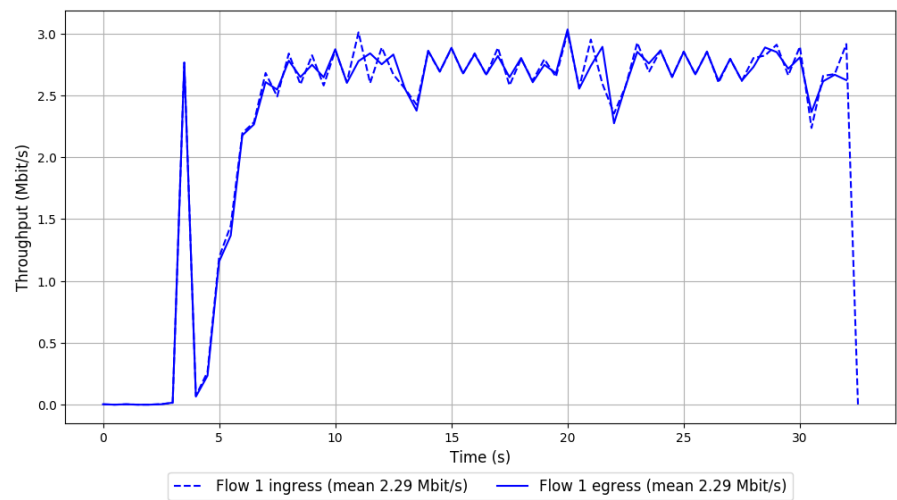


```
Run 2: Statistics of WebRTC media

Start at: 2017-12-05 11:33:13
End at: 2017-12-05 11:33:43

# Below is generated by plot.py at 2017-12-05 15:17:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 48.112 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 48.112 ms
Loss rate: 0.35%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-05 11:43:43

End at: 2017-12-05 11:44:13

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 48.449 ms

Loss rate: 0.30%

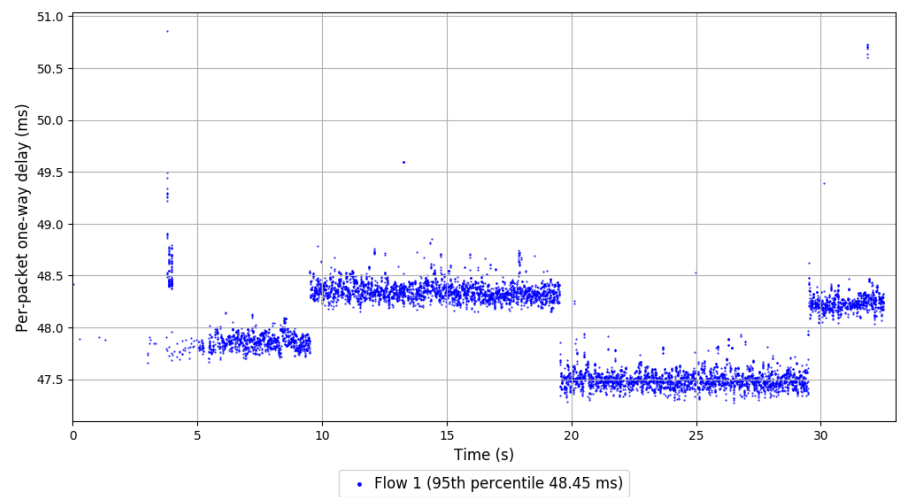
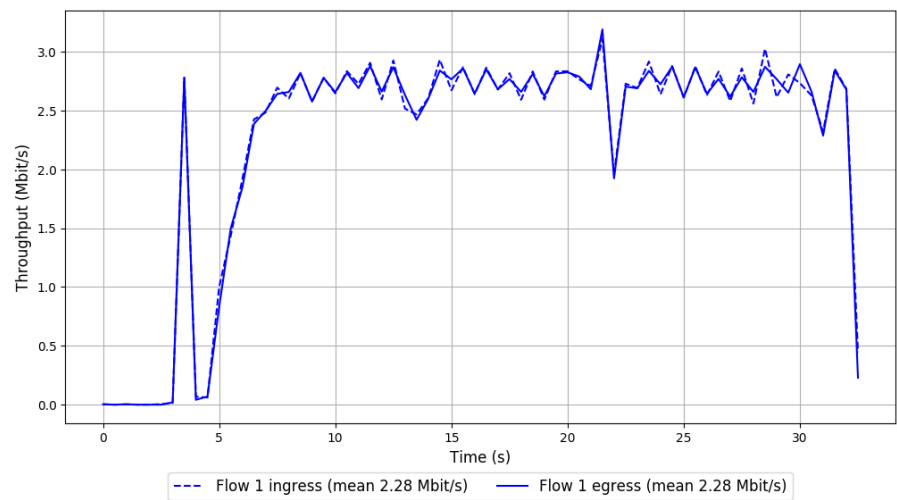
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 48.449 ms

Loss rate: 0.30%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-05 11:54:14

End at: 2017-12-05 11:54:44

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 48.412 ms

Loss rate: 0.44%

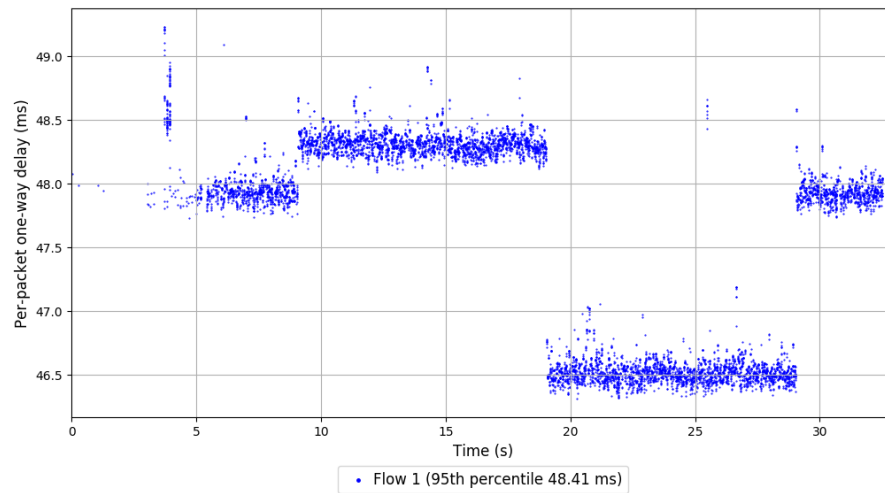
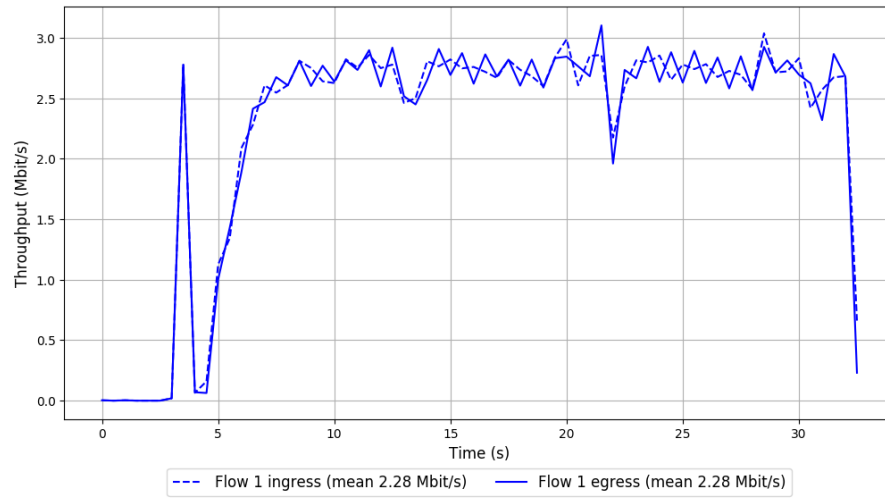
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 48.412 ms

Loss rate: 0.44%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-05 12:04:48

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

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 48.800 ms

Loss rate: 0.45%

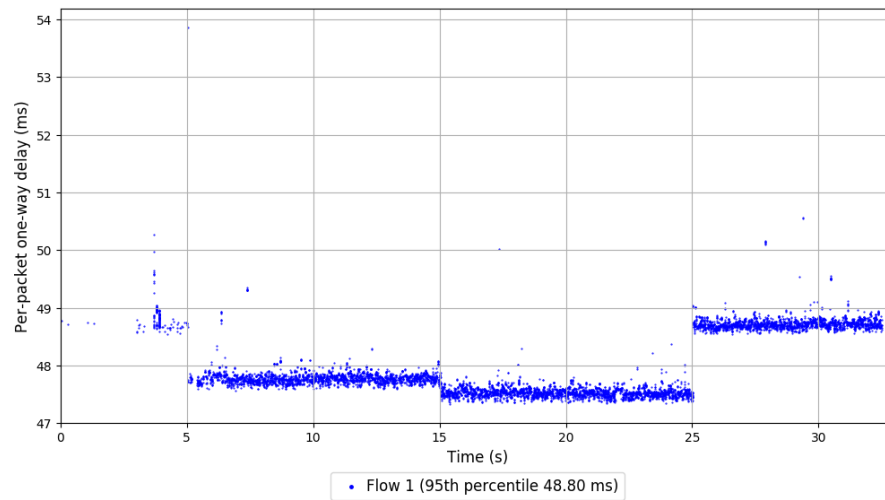
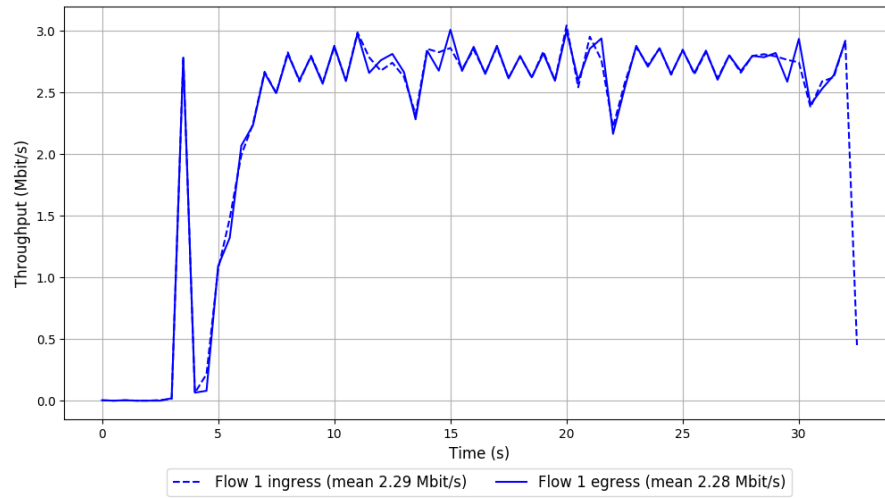
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 48.800 ms

Loss rate: 0.45%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-05 12:15:14

End at: 2017-12-05 12:15:44

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 49.212 ms

Loss rate: 0.35%

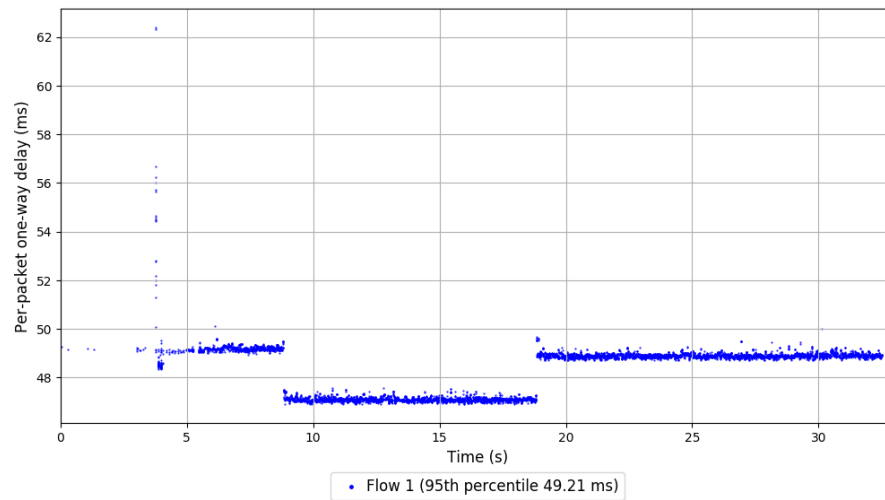
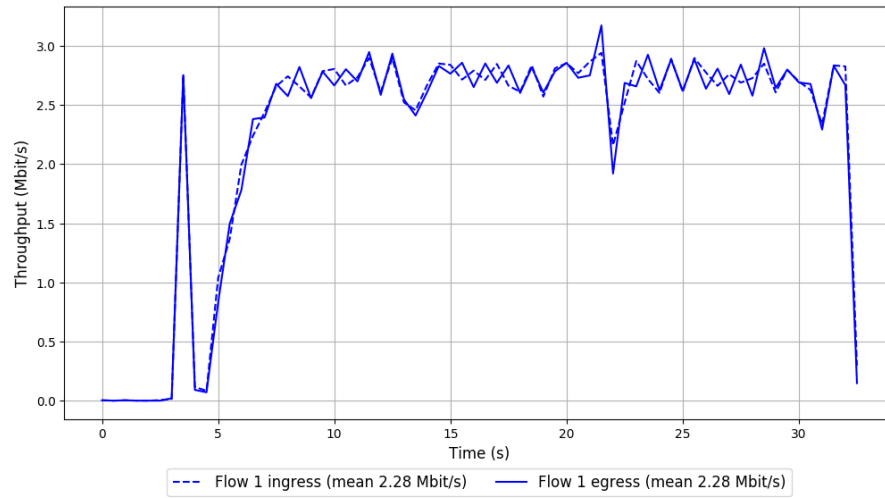
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 49.212 ms

Loss rate: 0.35%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-05 12:25:44

End at: 2017-12-05 12:26:14

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 49.373 ms

Loss rate: 0.35%

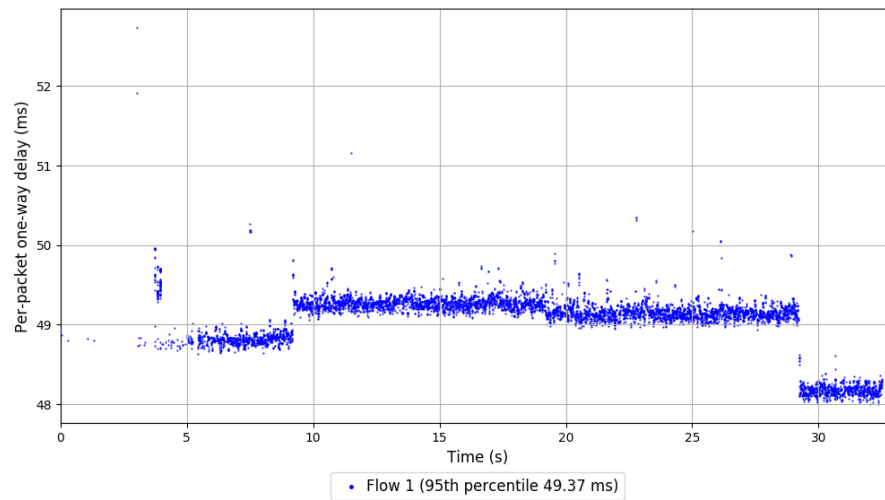
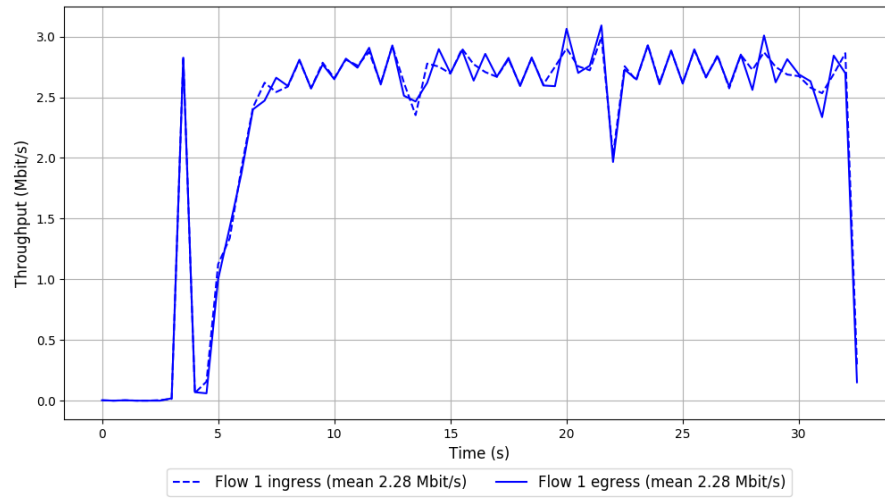
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 49.373 ms

Loss rate: 0.35%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-05 12:36:13

End at: 2017-12-05 12:36:44

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.209 ms

Loss rate: 0.46%

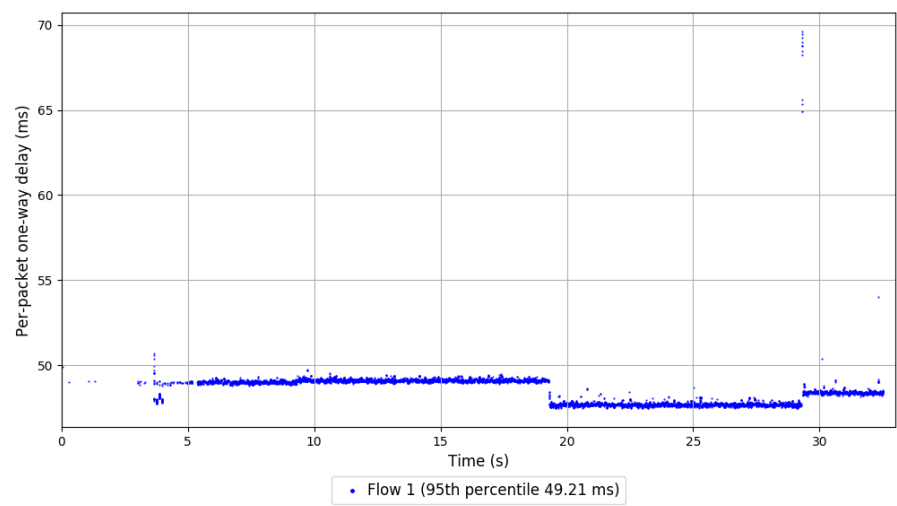
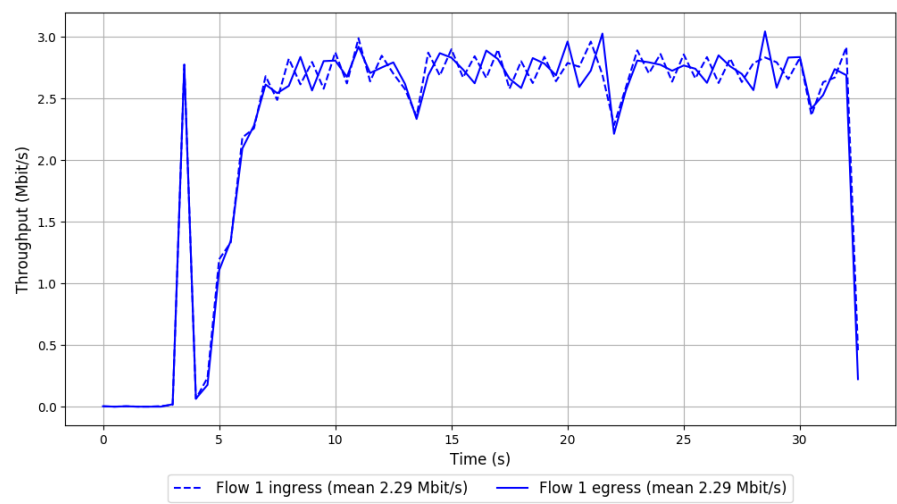
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.209 ms

Loss rate: 0.46%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-05 12:46:45

End at: 2017-12-05 12:47:15

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 49.302 ms

Loss rate: 0.45%

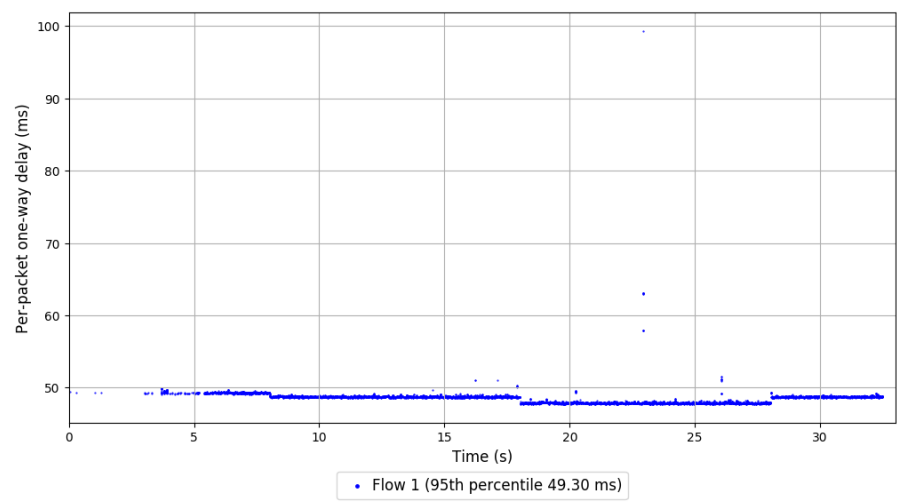
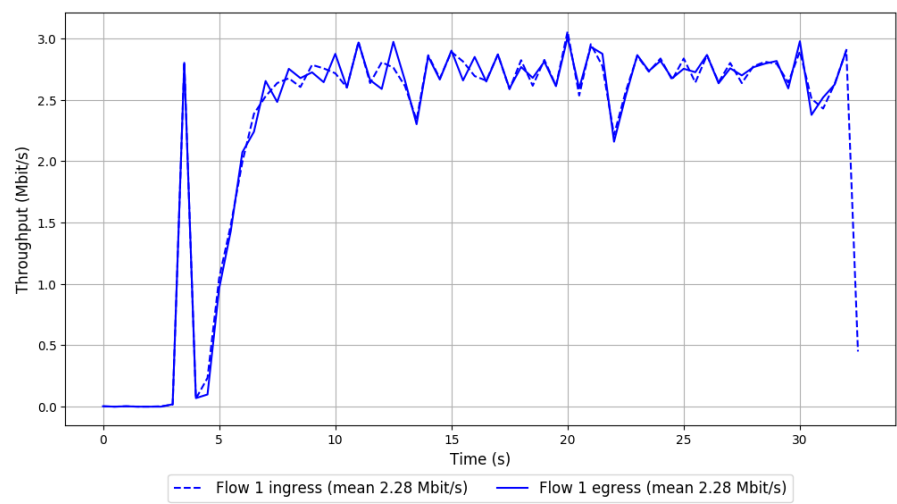
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 49.302 ms

Loss rate: 0.45%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-05 12:57:14

End at: 2017-12-05 12:57:44

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 49.686 ms

Loss rate: 0.39%

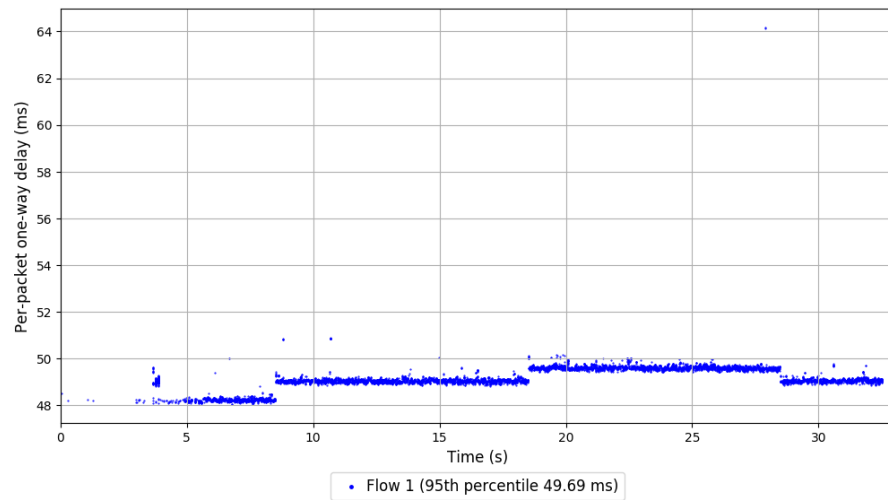
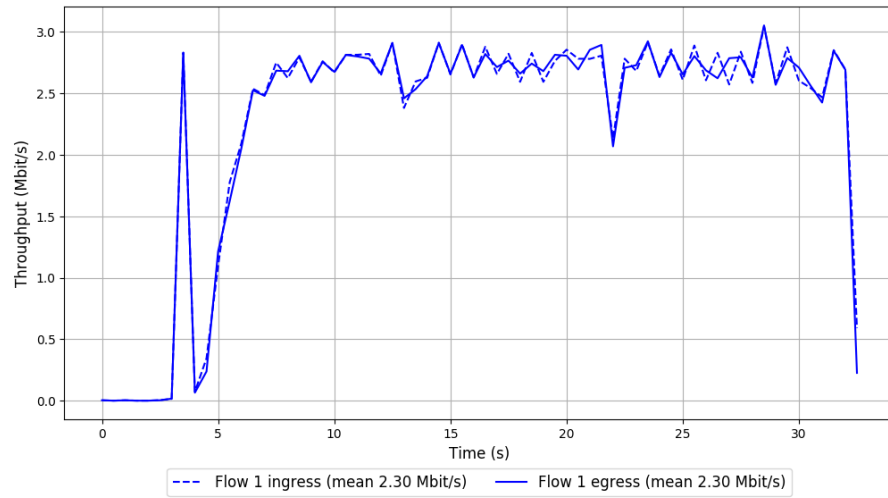
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 49.686 ms

Loss rate: 0.39%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-05 11:24:59

End at: 2017-12-05 11:25:29

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 48.392 ms

Loss rate: 0.50%

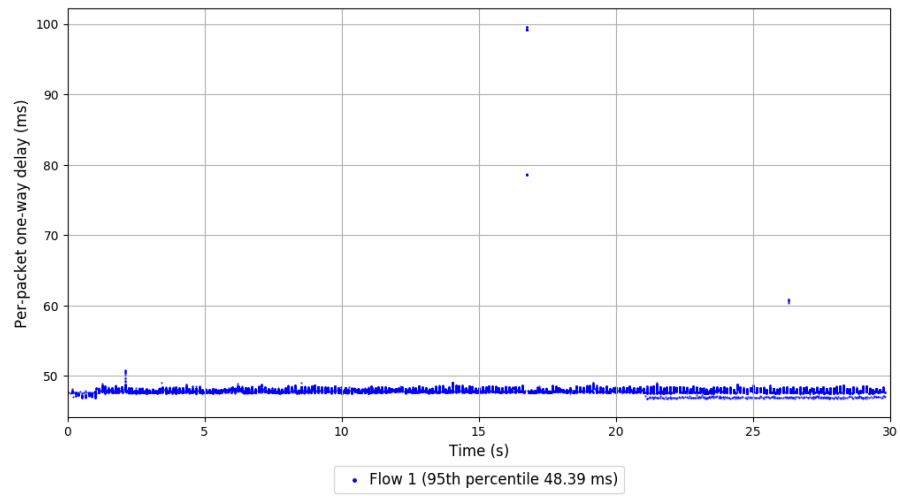
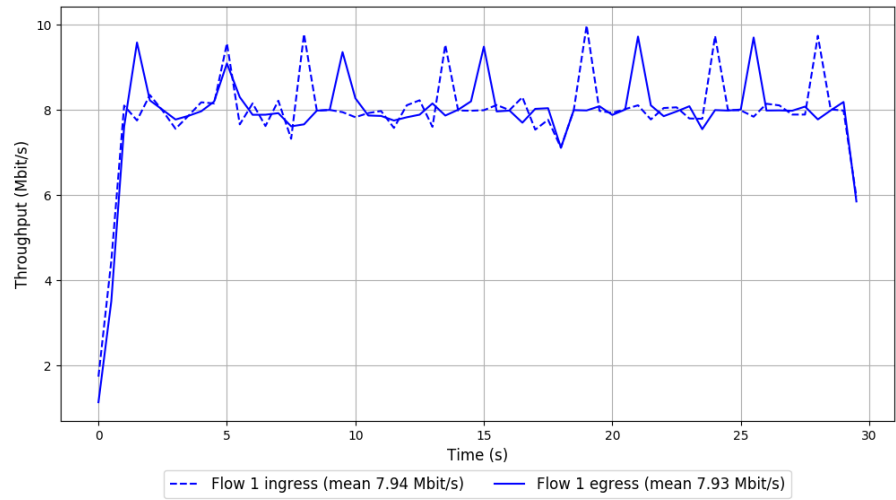
-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 48.392 ms

Loss rate: 0.50%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-05 11:35:27

End at: 2017-12-05 11:35:57

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 48.767 ms

Loss rate: 0.54%

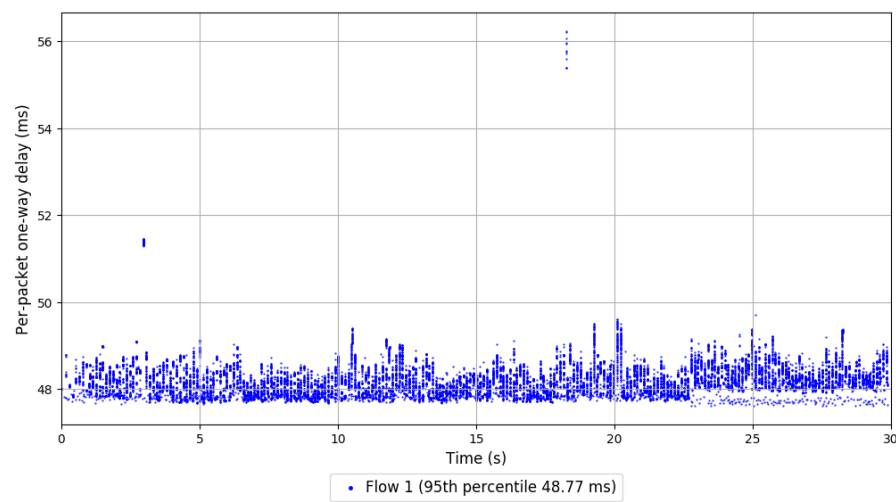
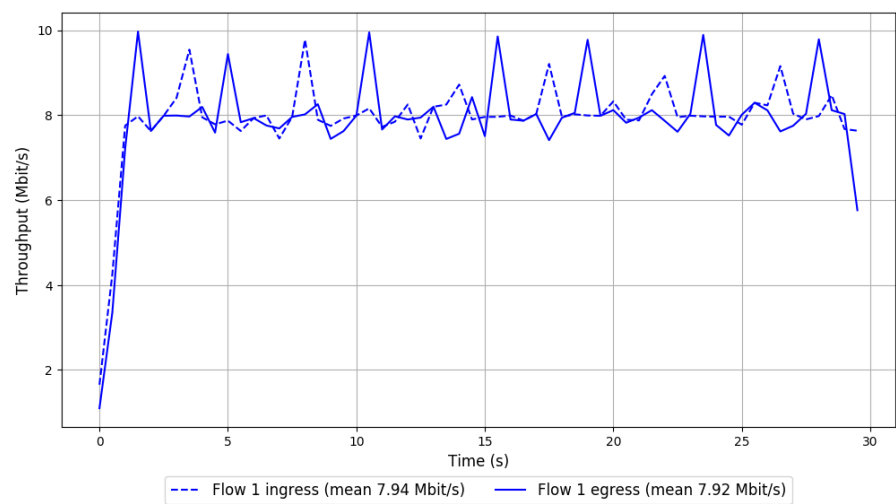
-- Flow 1:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 48.767 ms

Loss rate: 0.54%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-05 11:46:00

End at: 2017-12-05 11:46:30

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 49.318 ms

Loss rate: 0.26%

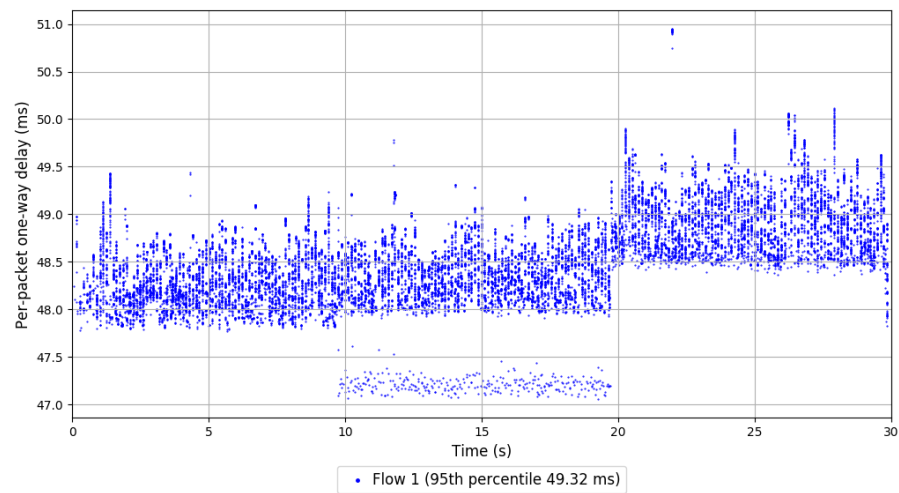
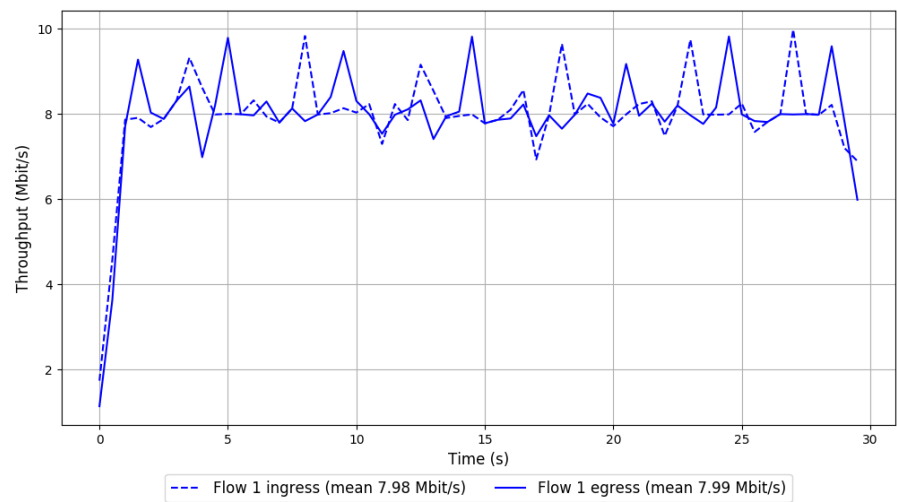
-- Flow 1:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 49.318 ms

Loss rate: 0.26%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-05 11:56:29

End at: 2017-12-05 11:56:59

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 48.940 ms

Loss rate: 0.88%

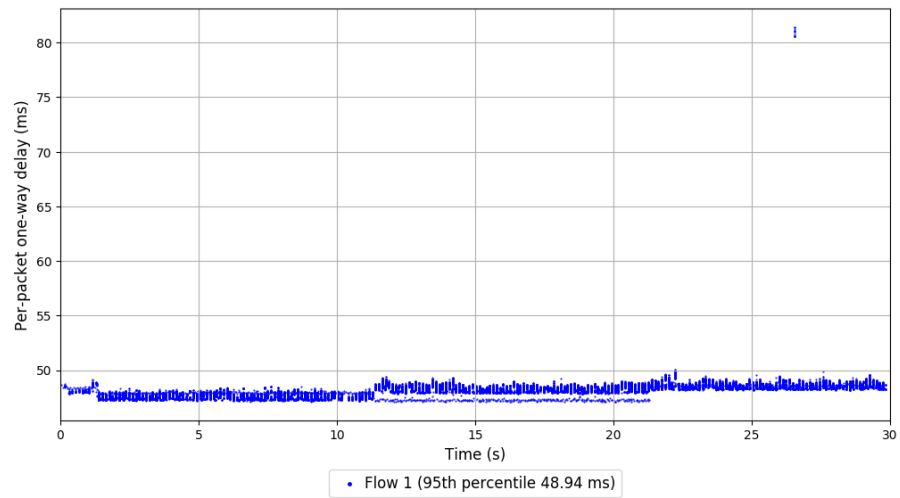
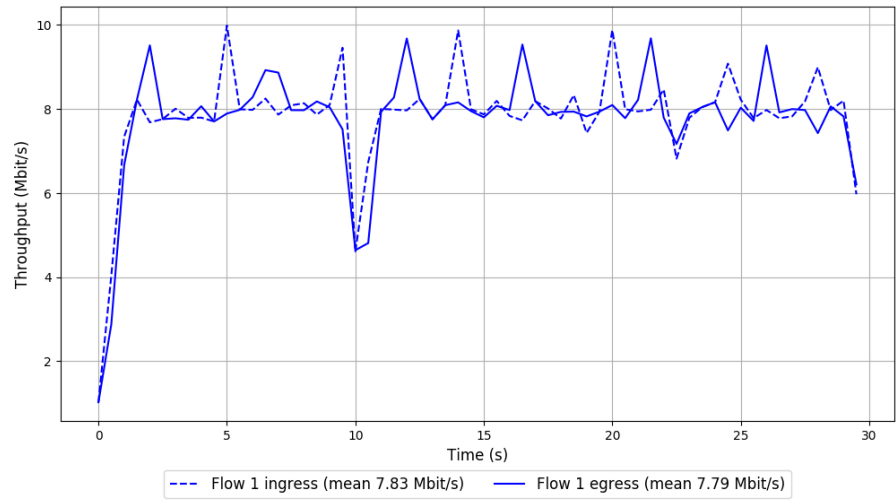
-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 48.940 ms

Loss rate: 0.88%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-05 12:07:03

End at: 2017-12-05 12:07:33

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 49.671 ms

Loss rate: 1.68%

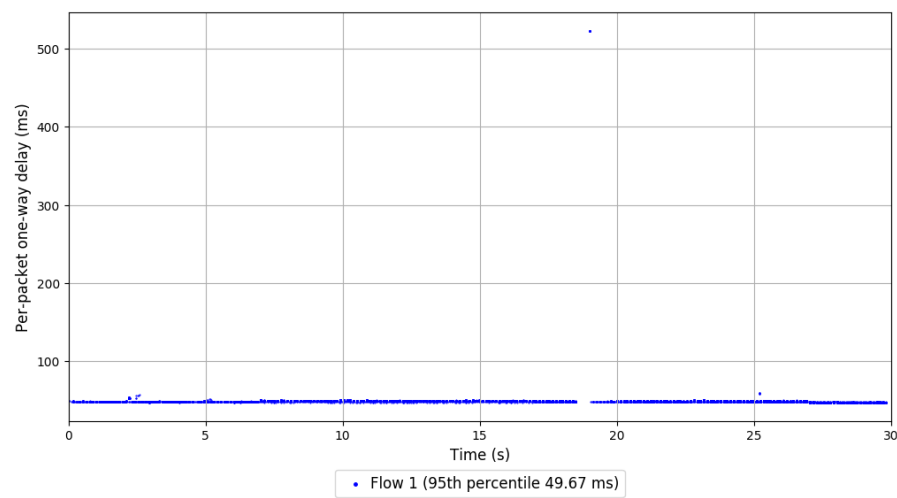
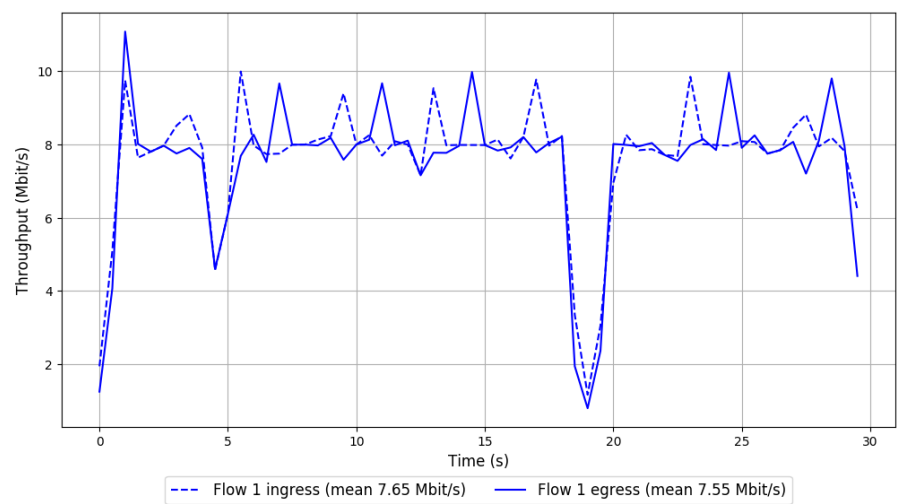
-- Flow 1:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 49.671 ms

Loss rate: 1.68%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-05 12:17:31

End at: 2017-12-05 12:18:01

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 50.030 ms

Loss rate: 0.45%

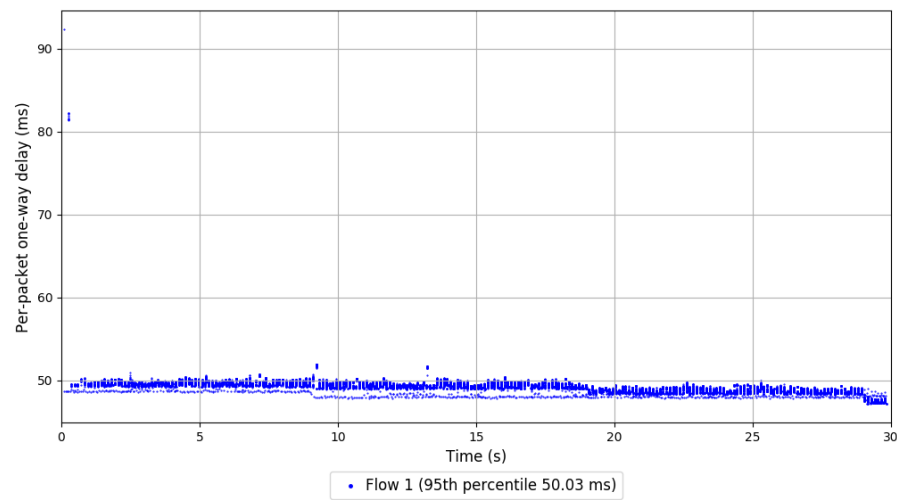
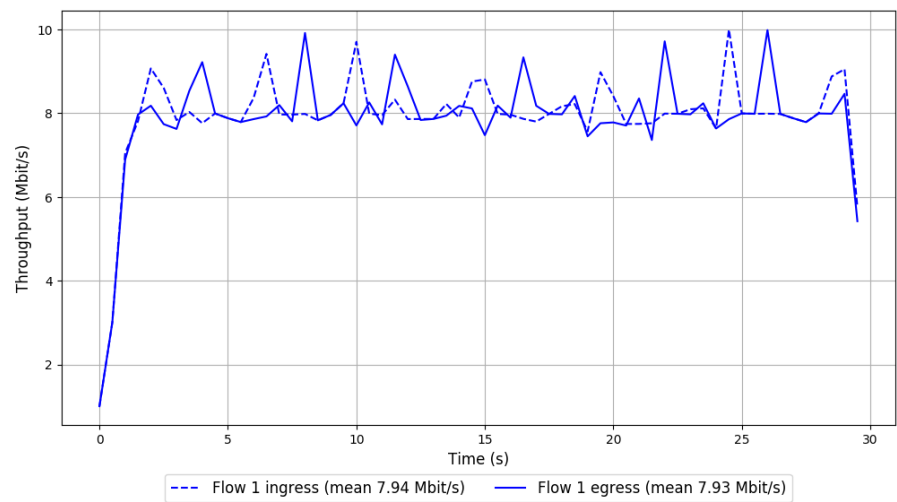
-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 50.030 ms

Loss rate: 0.45%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-05 12:28:00

End at: 2017-12-05 12:28:30

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 50.172 ms

Loss rate: 0.84%

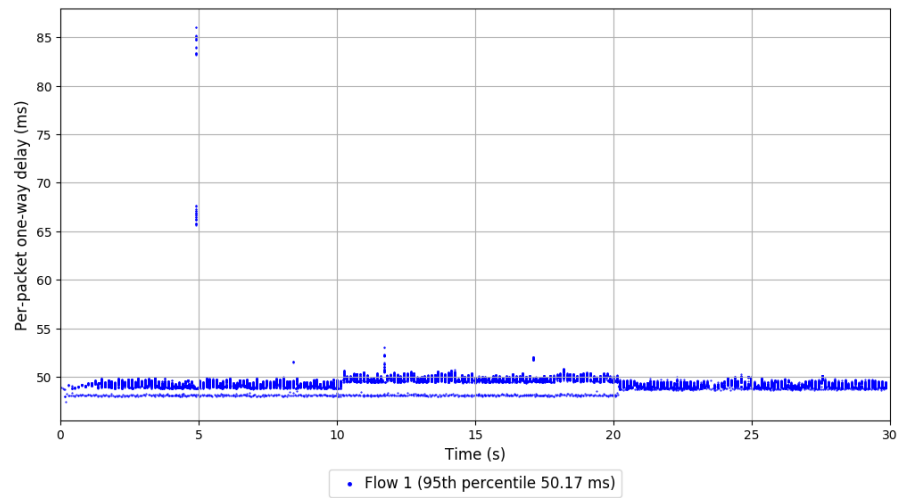
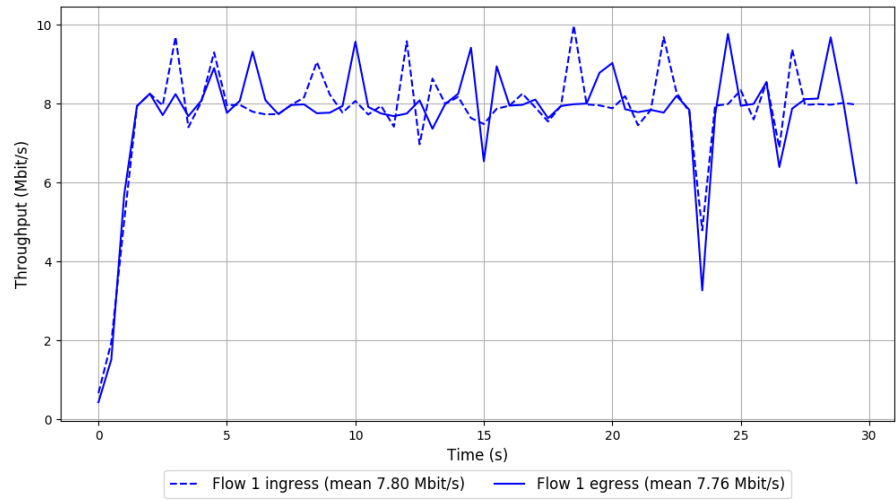
-- Flow 1:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 50.172 ms

Loss rate: 0.84%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-05 12:38:30

End at: 2017-12-05 12:39:00

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 49.995 ms

Loss rate: 0.58%

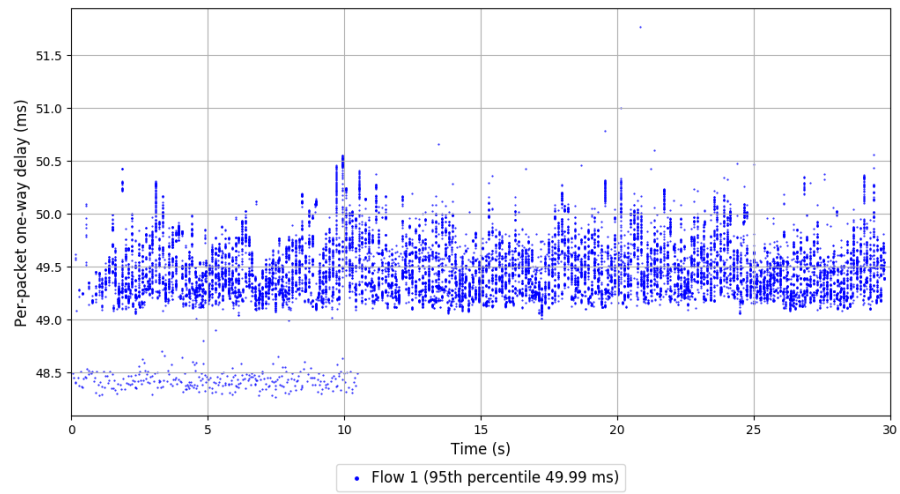
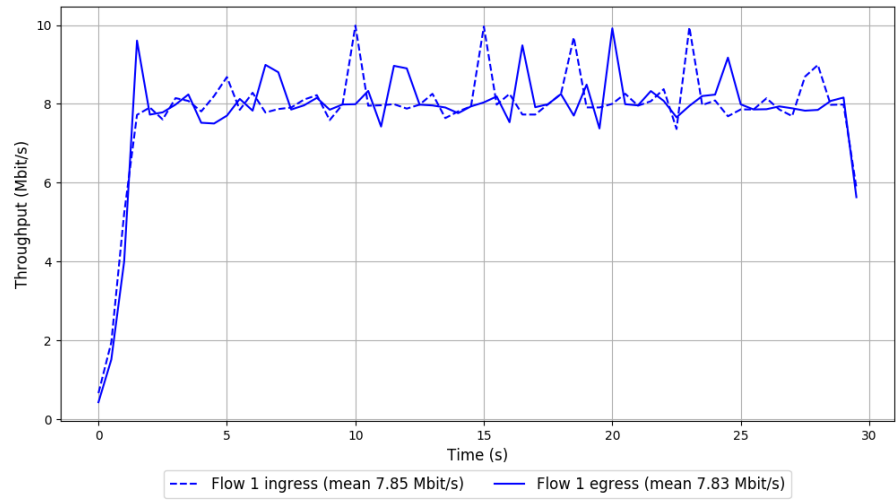
-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 49.995 ms

Loss rate: 0.58%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-05 12:49:02

End at: 2017-12-05 12:49:32

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 50.003 ms

Loss rate: 1.58%

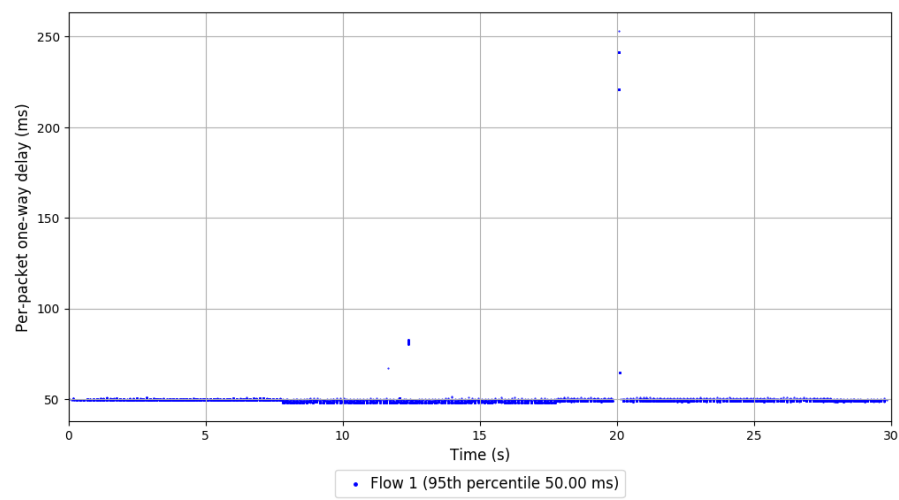
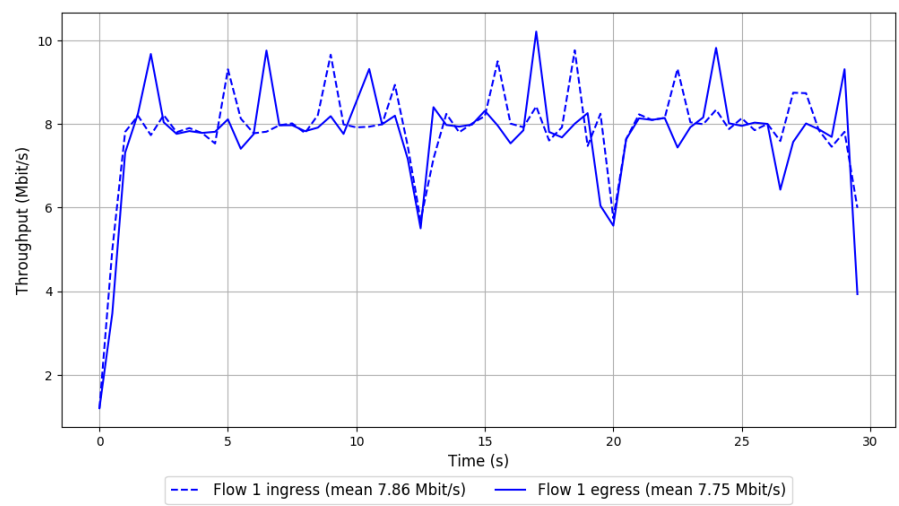
-- Flow 1:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 50.003 ms

Loss rate: 1.58%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-05 12:59:30

End at: 2017-12-05 13:00:00

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 50.330 ms

Loss rate: 0.44%

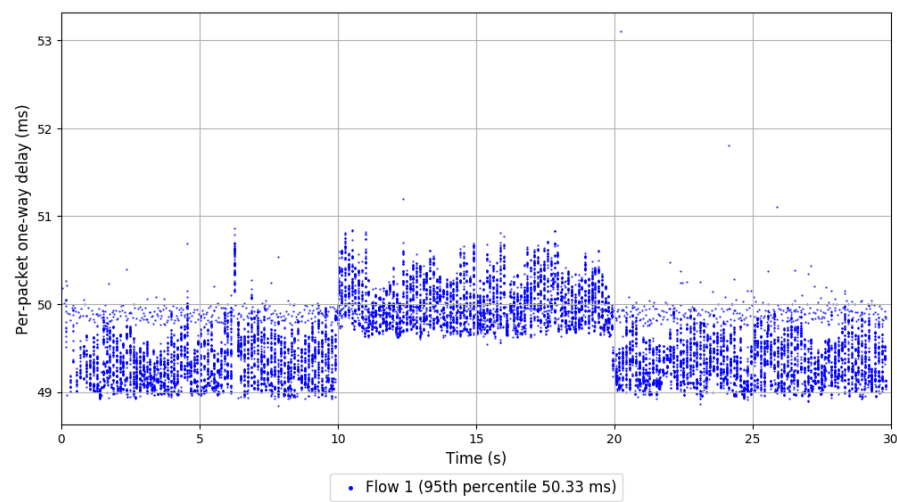
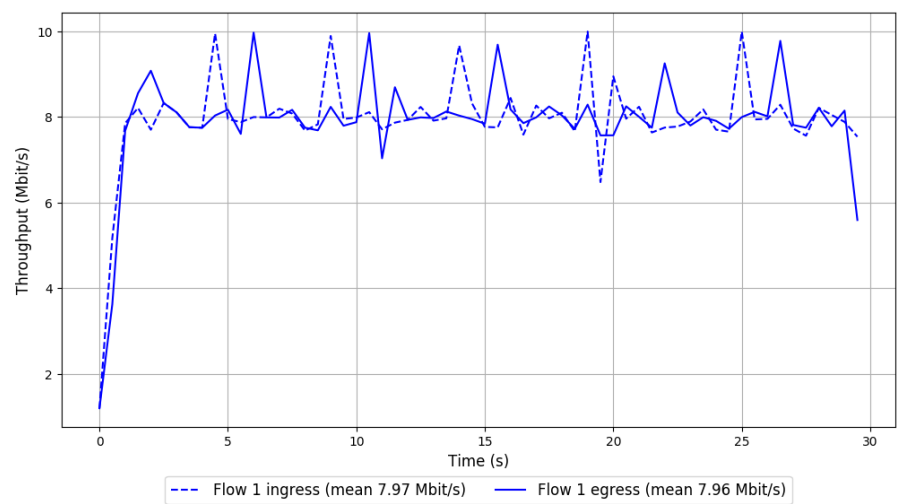
-- Flow 1:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 50.330 ms

Loss rate: 0.44%

Run 10: Report of Sprout — Data Link

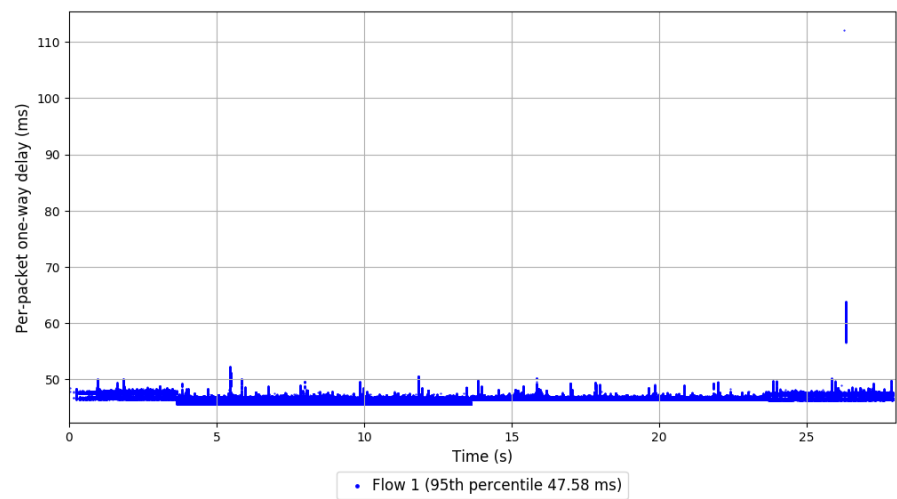
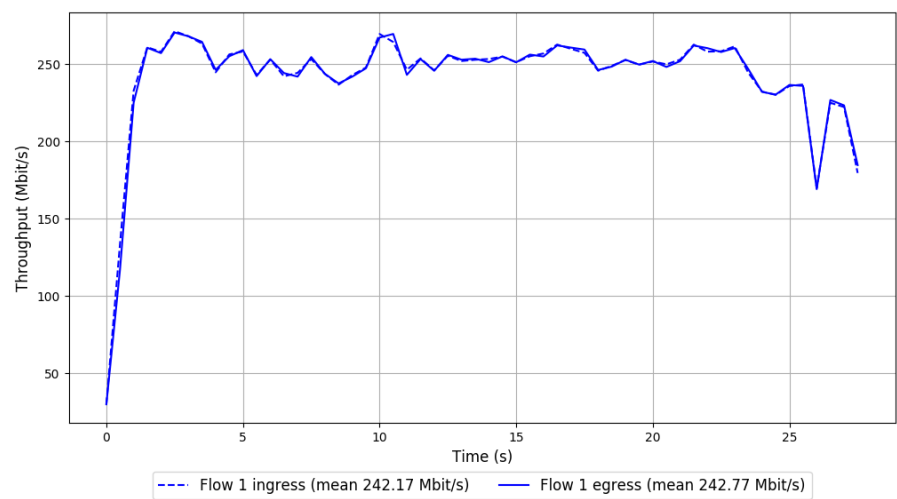


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-05 11:18:04
End at: 2017-12-05 11:18:35

# Below is generated by plot.py at 2017-12-05 15:17:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 242.77 Mbit/s
95th percentile per-packet one-way delay: 47.578 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 242.77 Mbit/s
95th percentile per-packet one-way delay: 47.578 ms
Loss rate: 0.12%
```

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

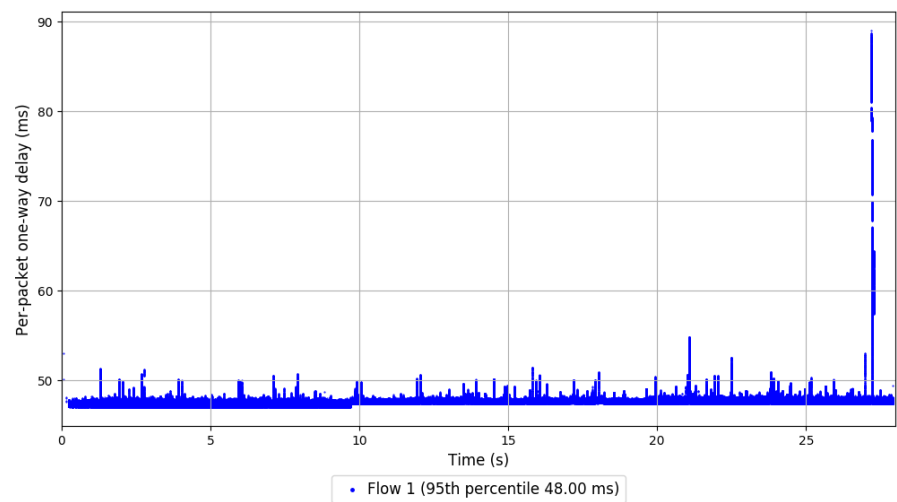
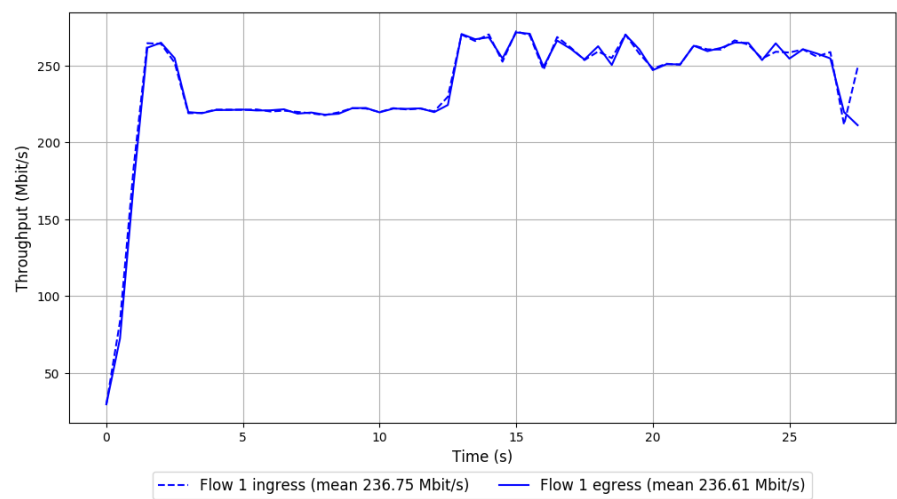


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-05 11:28:38
End at: 2017-12-05 11:29:08

# Below is generated by plot.py at 2017-12-05 15:17:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 236.61 Mbit/s
95th percentile per-packet one-way delay: 47.998 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 236.61 Mbit/s
95th percentile per-packet one-way delay: 47.998 ms
Loss rate: 0.43%
```

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

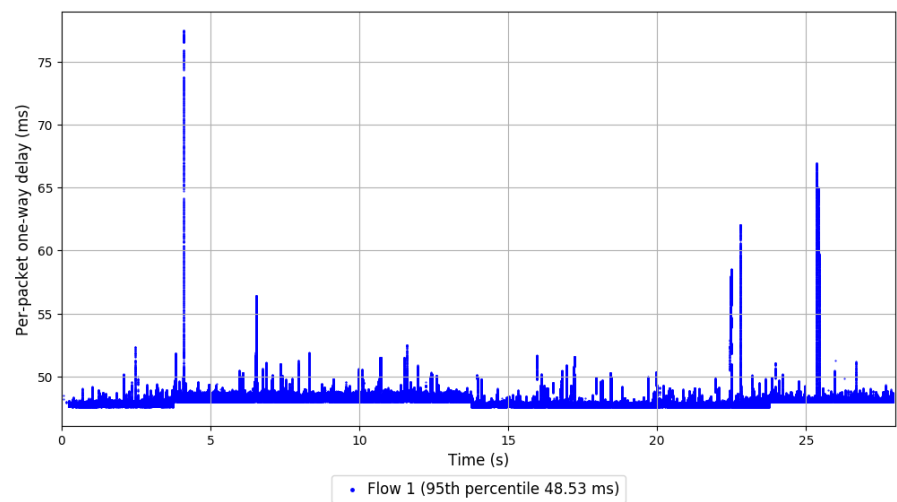
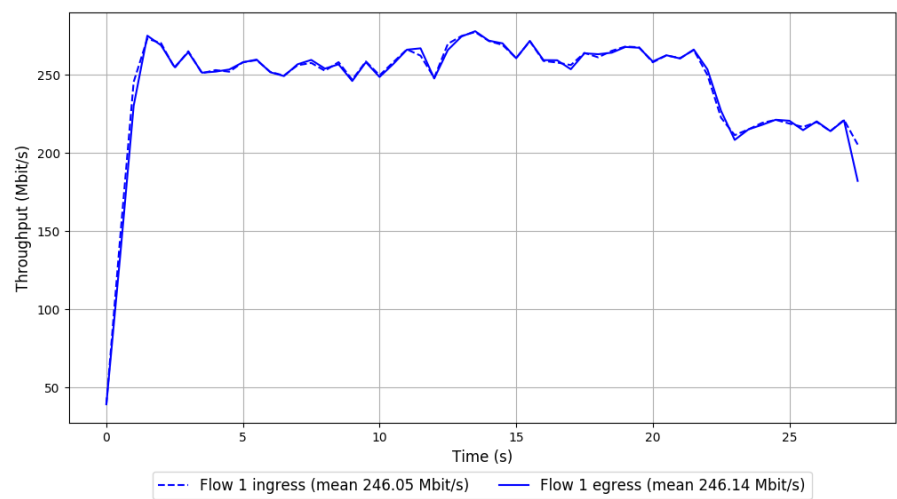


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-05 11:39:04
End at: 2017-12-05 11:39:34

# Below is generated by plot.py at 2017-12-05 15:17:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 246.14 Mbit/s
95th percentile per-packet one-way delay: 48.535 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 246.14 Mbit/s
95th percentile per-packet one-way delay: 48.535 ms
Loss rate: 0.33%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-05 11:49:39

End at: 2017-12-05 11:50:09

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 247.54 Mbit/s

95th percentile per-packet one-way delay: 48.534 ms

Loss rate: 0.37%

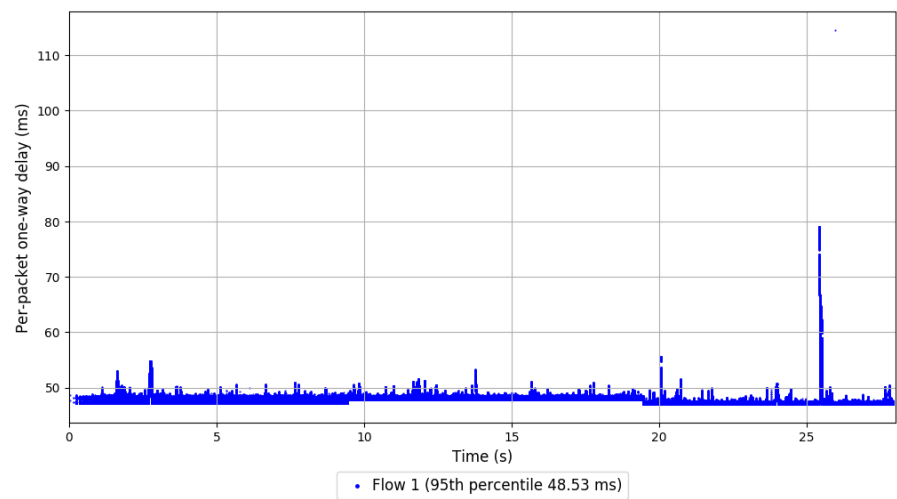
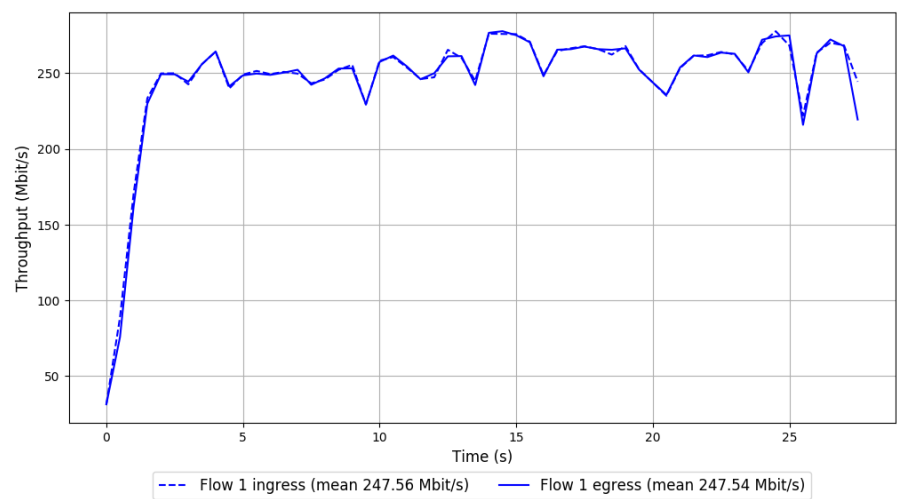
-- Flow 1:

Average throughput: 247.54 Mbit/s

95th percentile per-packet one-way delay: 48.534 ms

Loss rate: 0.37%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-05 12:00:10

End at: 2017-12-05 12:00:40

Below is generated by plot.py at 2017-12-05 15:17:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 234.34 Mbit/s

95th percentile per-packet one-way delay: 48.405 ms

Loss rate: 0.45%

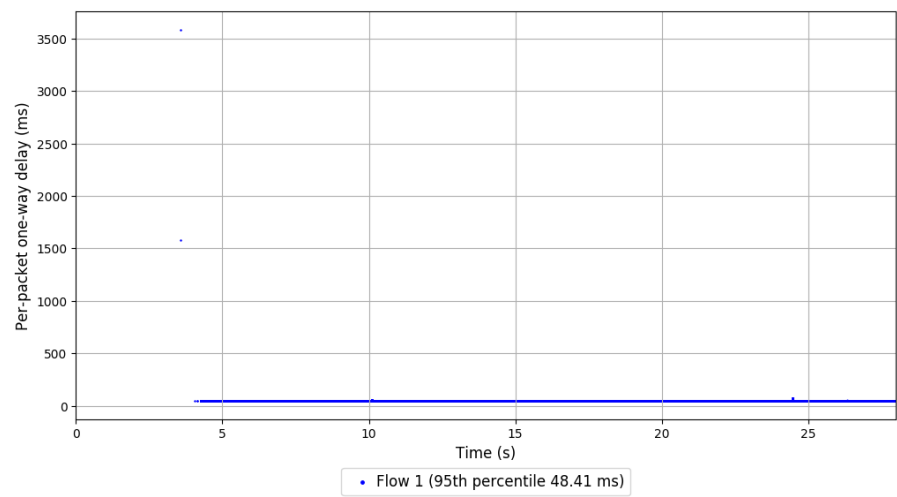
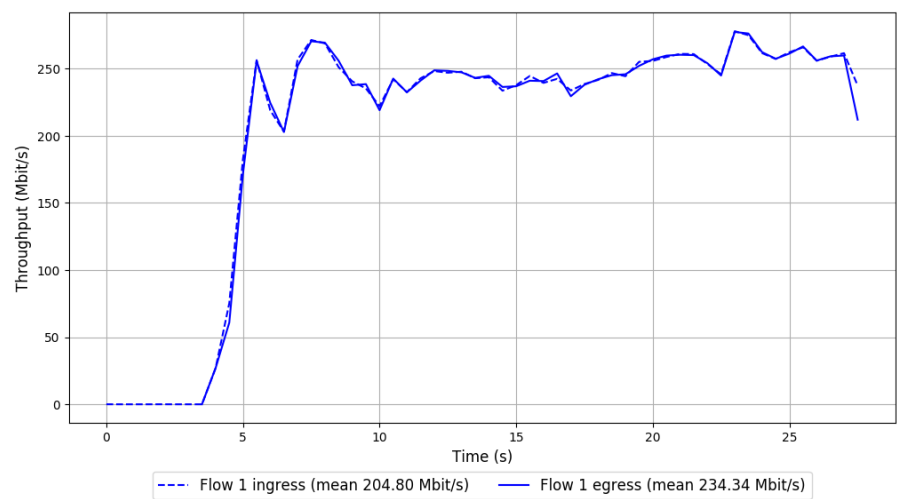
-- Flow 1:

Average throughput: 234.34 Mbit/s

95th percentile per-packet one-way delay: 48.405 ms

Loss rate: 0.45%

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

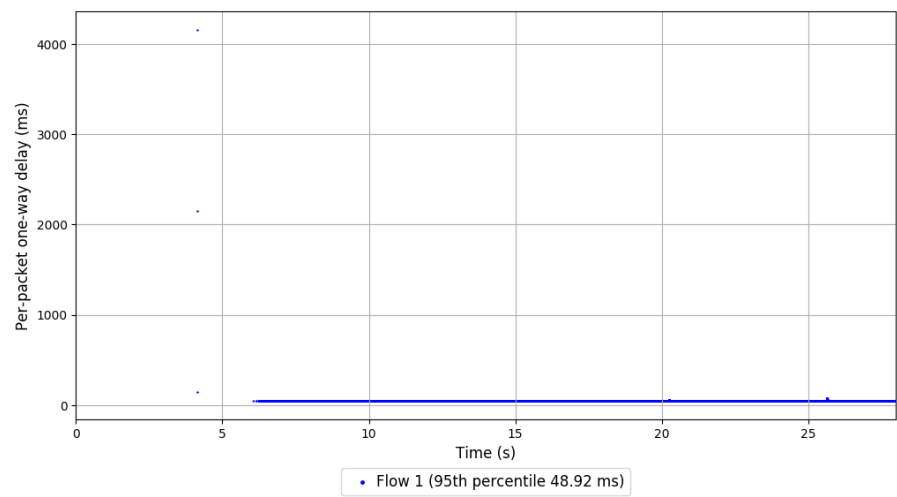
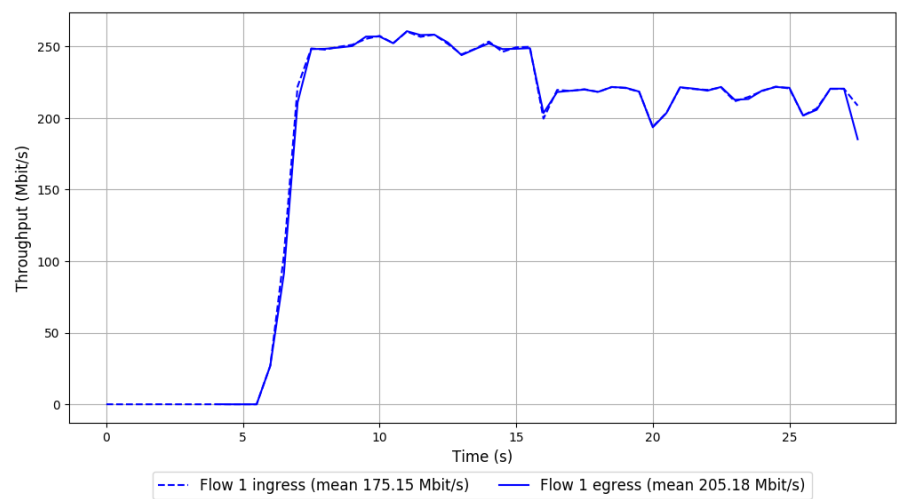


Run 6: Statistics of TaoVA-100x

Start at: 2017-12-05 12:10:42

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

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-05 12:21:07

End at: 2017-12-05 12:21:37

Below is generated by plot.py at 2017-12-05 15:21:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 206.61 Mbit/s

95th percentile per-packet one-way delay: 48.965 ms

Loss rate: 0.39%

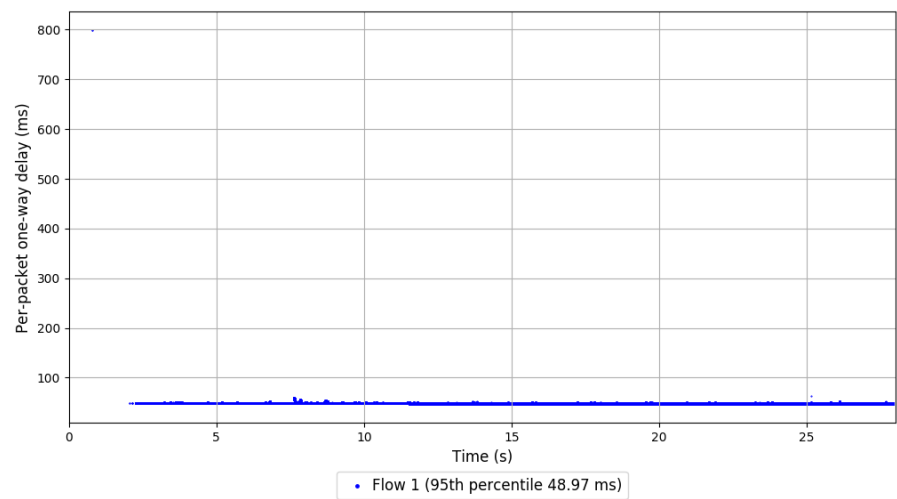
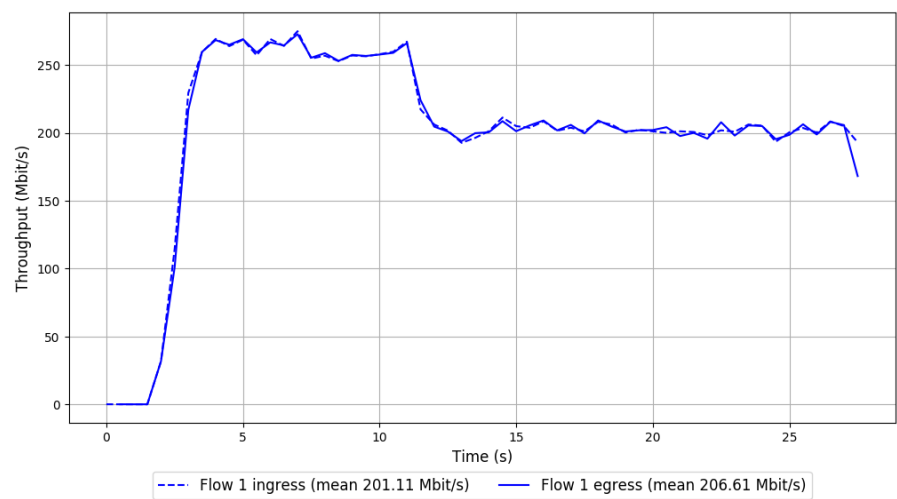
-- Flow 1:

Average throughput: 206.61 Mbit/s

95th percentile per-packet one-way delay: 48.965 ms

Loss rate: 0.39%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-05 12:31:41

End at: 2017-12-05 12:32:11

Below is generated by plot.py at 2017-12-05 15:22:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.48 Mbit/s

95th percentile per-packet one-way delay: 49.393 ms

Loss rate: 0.45%

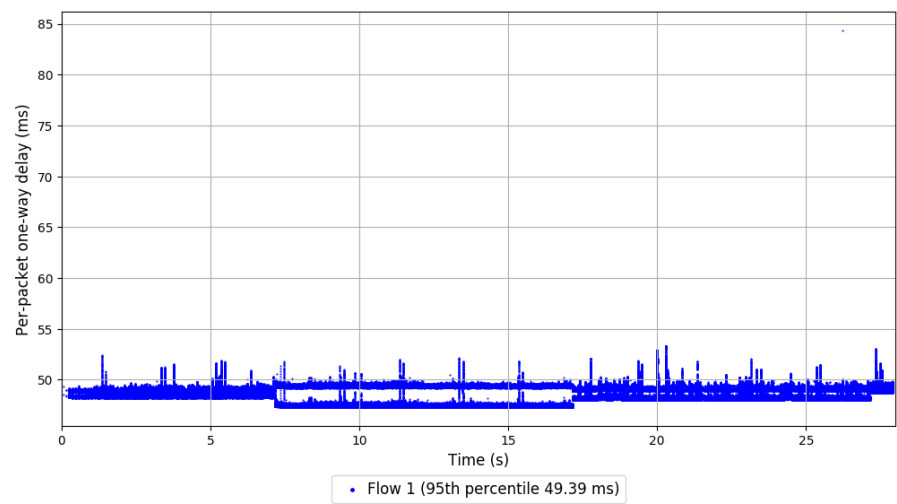
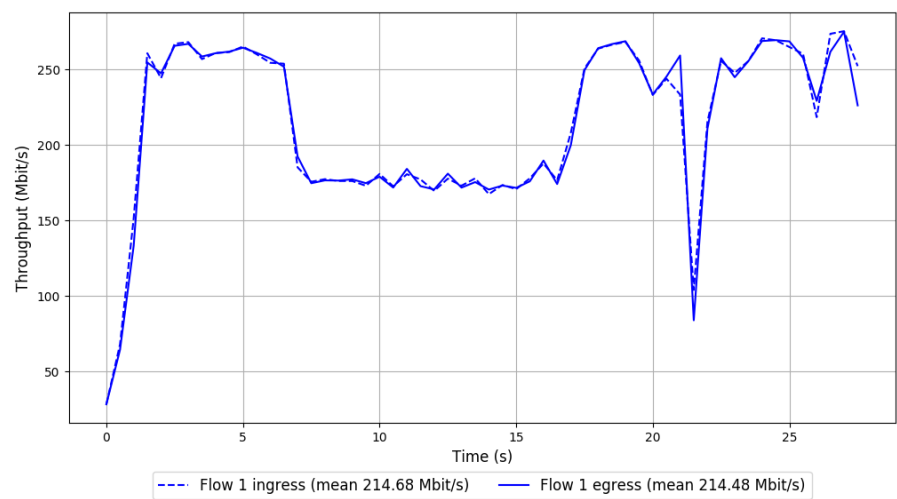
-- Flow 1:

Average throughput: 214.48 Mbit/s

95th percentile per-packet one-way delay: 49.393 ms

Loss rate: 0.45%

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



Run 9: Statistics of TaoVA-100x

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

End at: 2017-12-05 12:42:40

Below is generated by plot.py at 2017-12-05 15:23:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.90 Mbit/s

95th percentile per-packet one-way delay: 49.521 ms

Loss rate: 0.43%

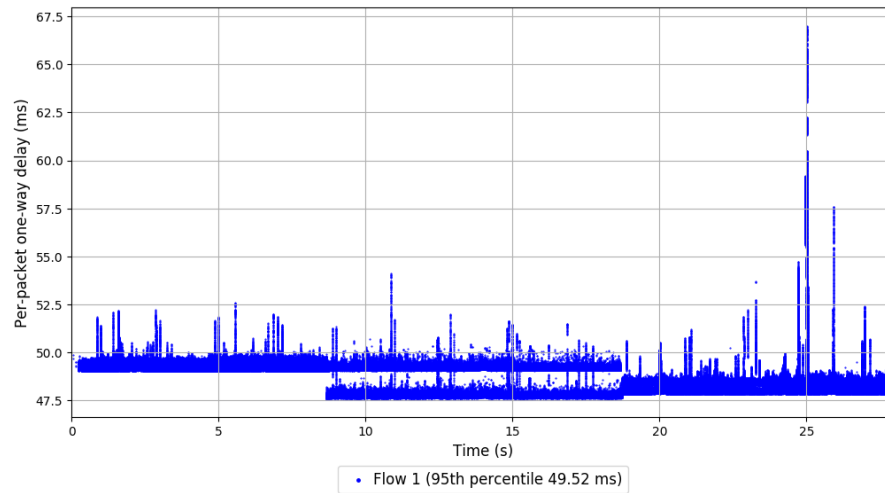
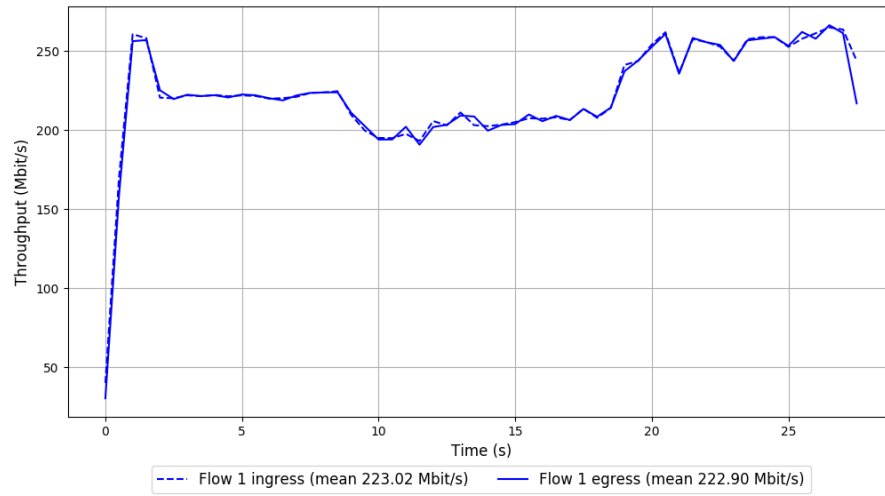
-- Flow 1:

Average throughput: 222.90 Mbit/s

95th percentile per-packet one-way delay: 49.521 ms

Loss rate: 0.43%

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

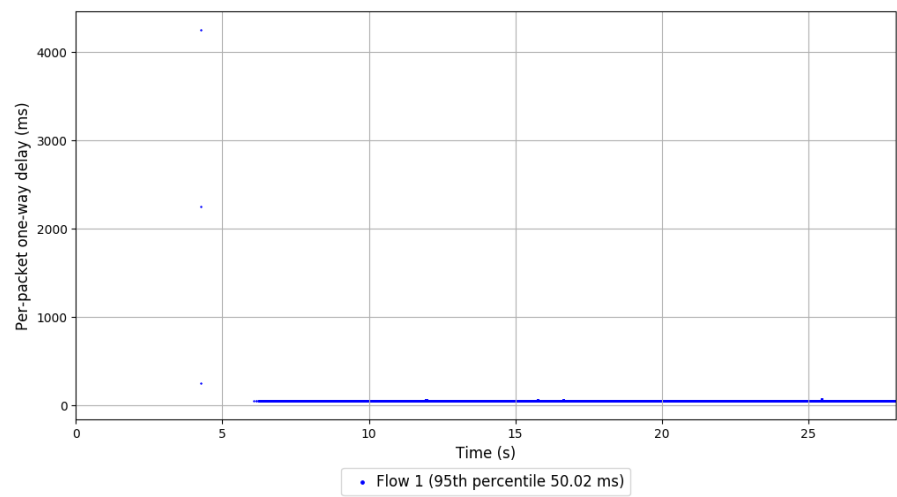
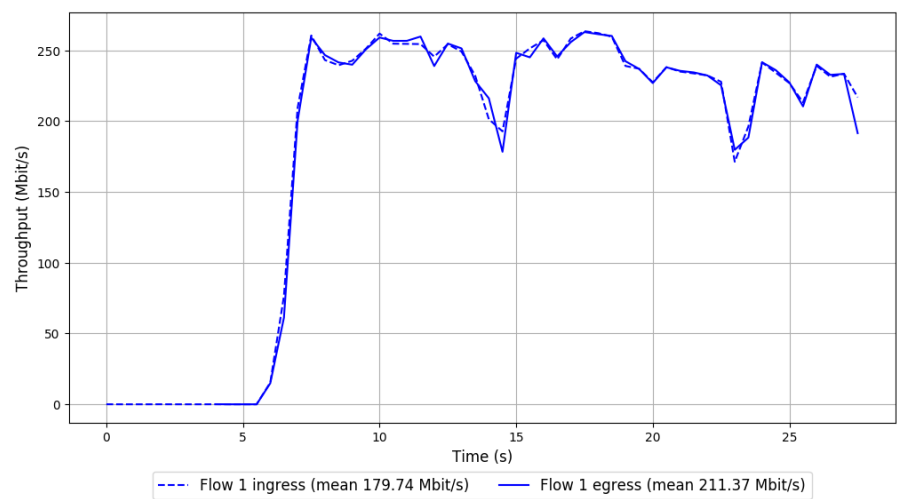


Run 10: Statistics of TaoVA-100x

Start at: 2017-12-05 12:52:39

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

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-05 11:23:20

End at: 2017-12-05 11:23:50

Below is generated by plot.py at 2017-12-05 15:23:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.47 Mbit/s

95th percentile per-packet one-way delay: 48.802 ms

Loss rate: 1.23%

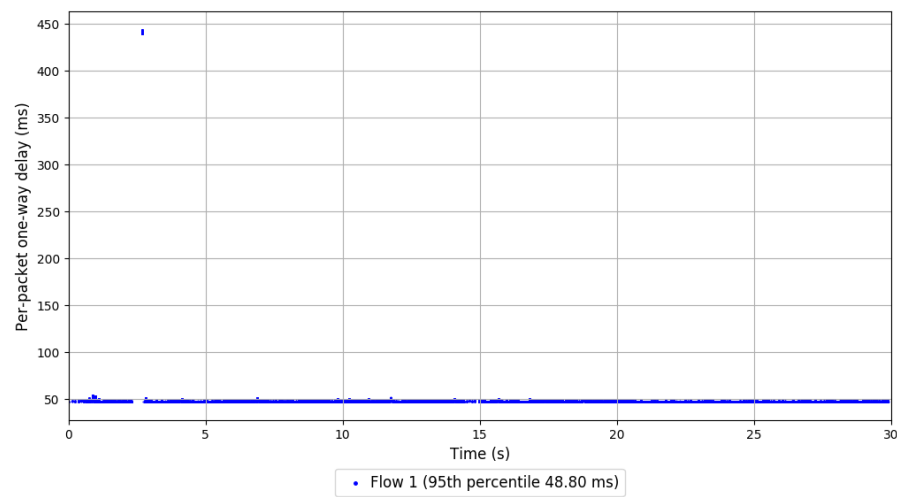
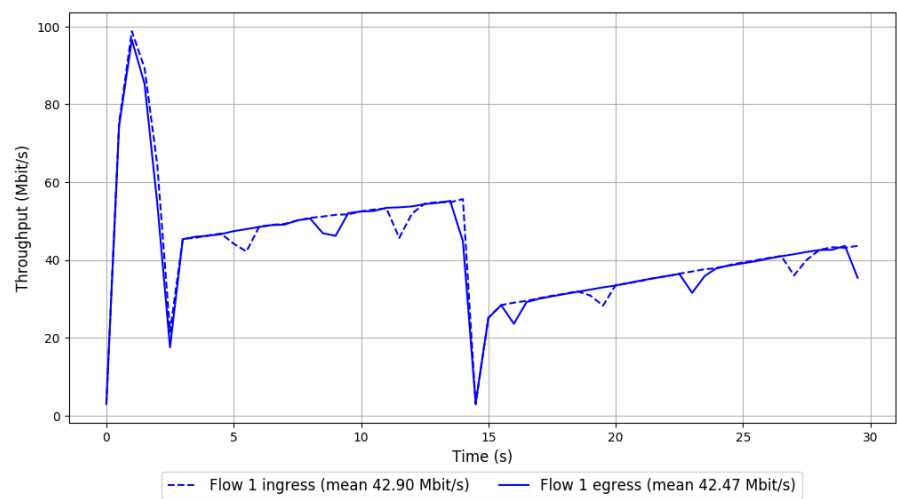
-- Flow 1:

Average throughput: 42.47 Mbit/s

95th percentile per-packet one-way delay: 48.802 ms

Loss rate: 1.23%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-05 11:33:50

End at: 2017-12-05 11:34:20

Below is generated by plot.py at 2017-12-05 15:23:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.64 Mbit/s

95th percentile per-packet one-way delay: 48.468 ms

Loss rate: 0.68%

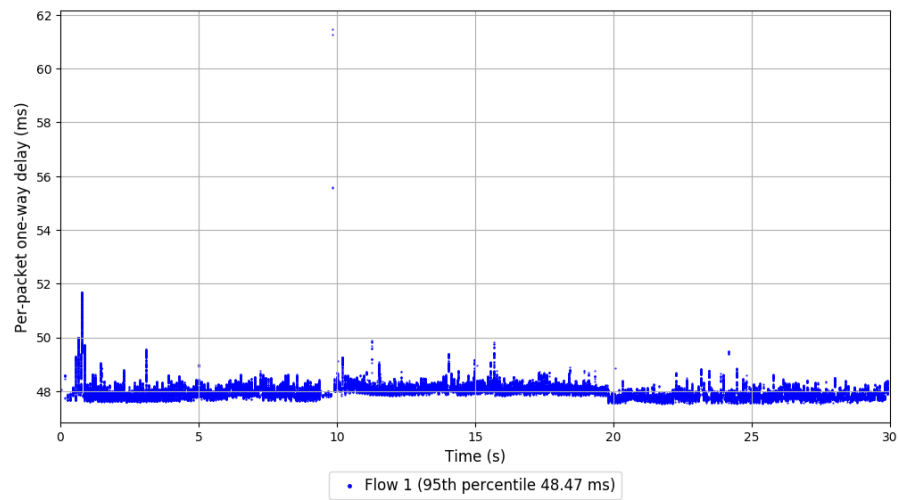
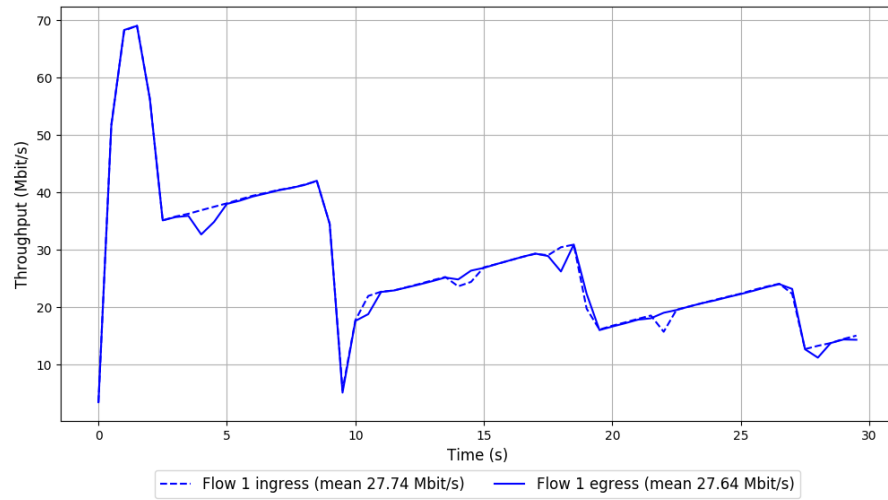
-- Flow 1:

Average throughput: 27.64 Mbit/s

95th percentile per-packet one-way delay: 48.468 ms

Loss rate: 0.68%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-05 11:44:20

End at: 2017-12-05 11:44:50

Below is generated by plot.py at 2017-12-05 15:23:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.84 Mbit/s

95th percentile per-packet one-way delay: 49.070 ms

Loss rate: 0.37%

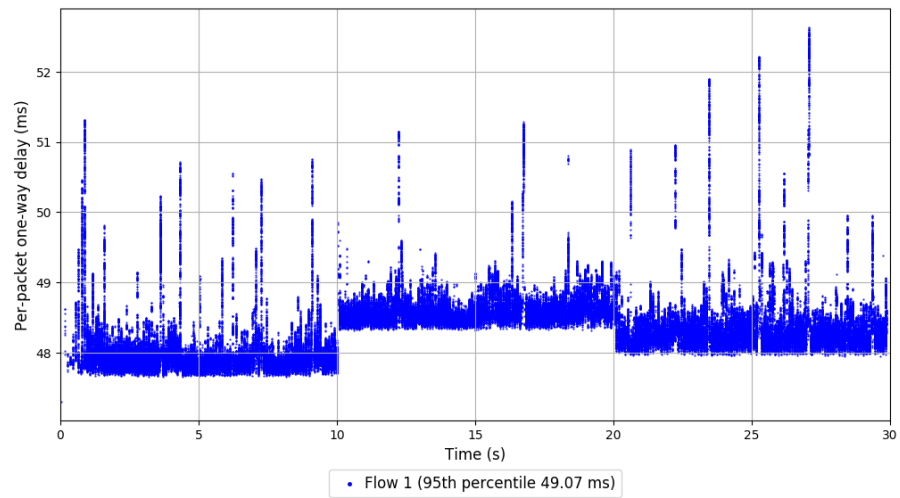
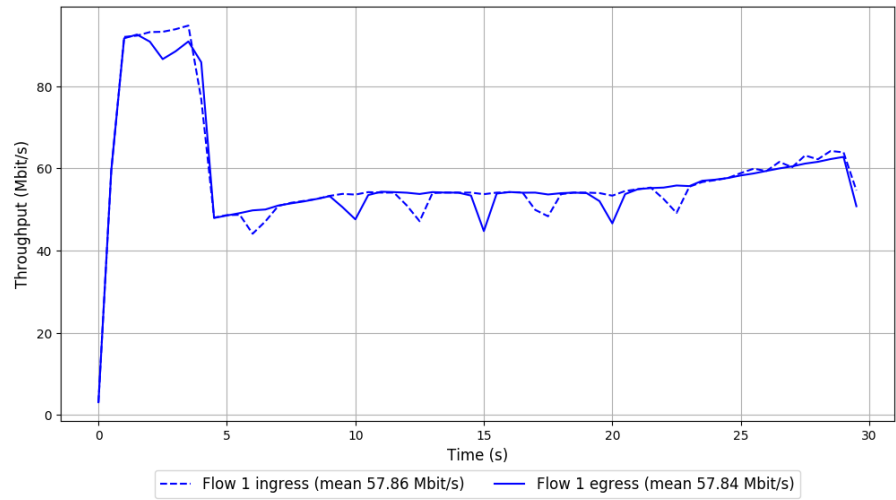
-- Flow 1:

Average throughput: 57.84 Mbit/s

95th percentile per-packet one-way delay: 49.070 ms

Loss rate: 0.37%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-05 11:54:51

End at: 2017-12-05 11:55:21

Below is generated by plot.py at 2017-12-05 15:23:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.78 Mbit/s

95th percentile per-packet one-way delay: 49.212 ms

Loss rate: 0.62%

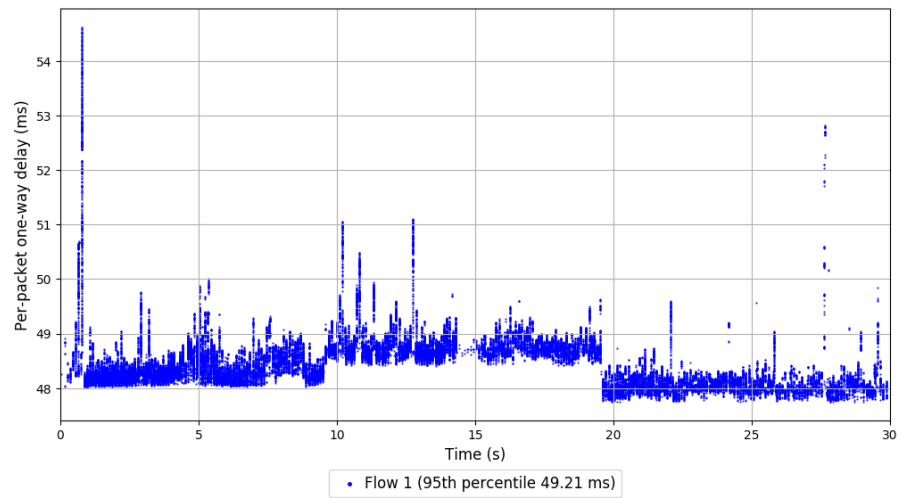
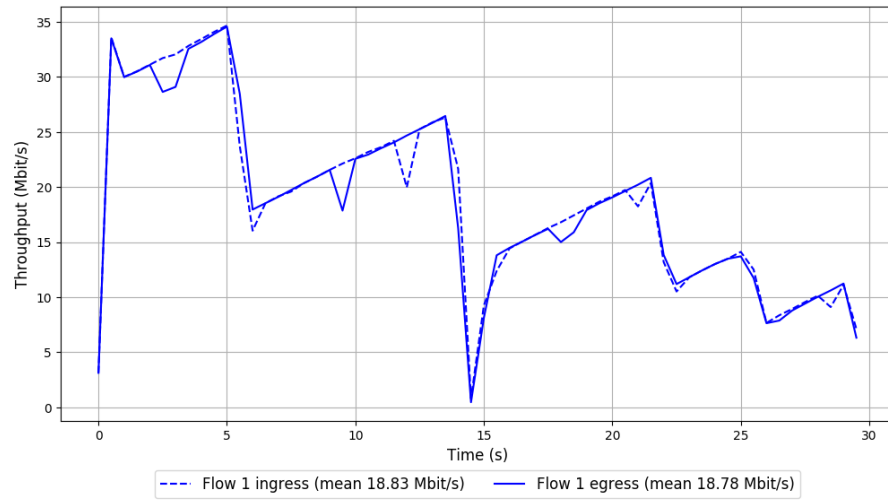
-- Flow 1:

Average throughput: 18.78 Mbit/s

95th percentile per-packet one-way delay: 49.212 ms

Loss rate: 0.62%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

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

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

Below is generated by plot.py at 2017-12-05 15:23:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.22 Mbit/s

95th percentile per-packet one-way delay: 48.997 ms

Loss rate: 0.27%

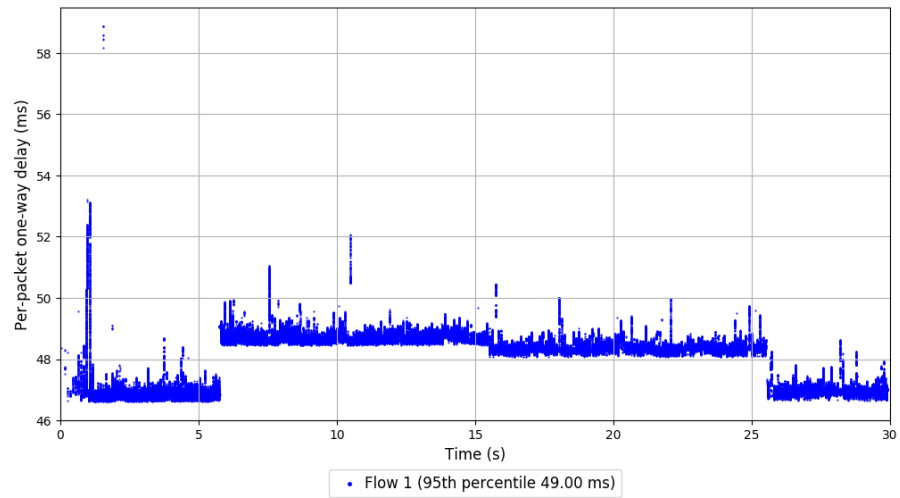
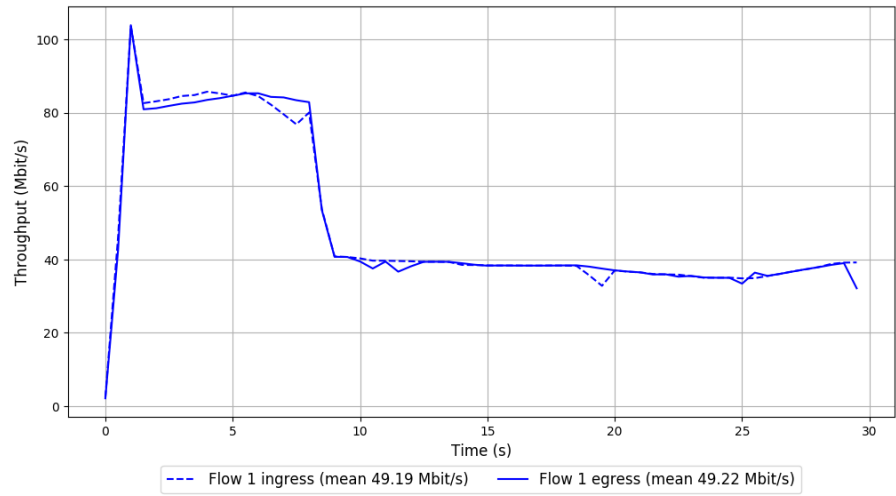
-- Flow 1:

Average throughput: 49.22 Mbit/s

95th percentile per-packet one-way delay: 48.997 ms

Loss rate: 0.27%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

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

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

Below is generated by plot.py at 2017-12-05 15:23:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.78 Mbit/s

95th percentile per-packet one-way delay: 55.576 ms

Loss rate: 0.24%

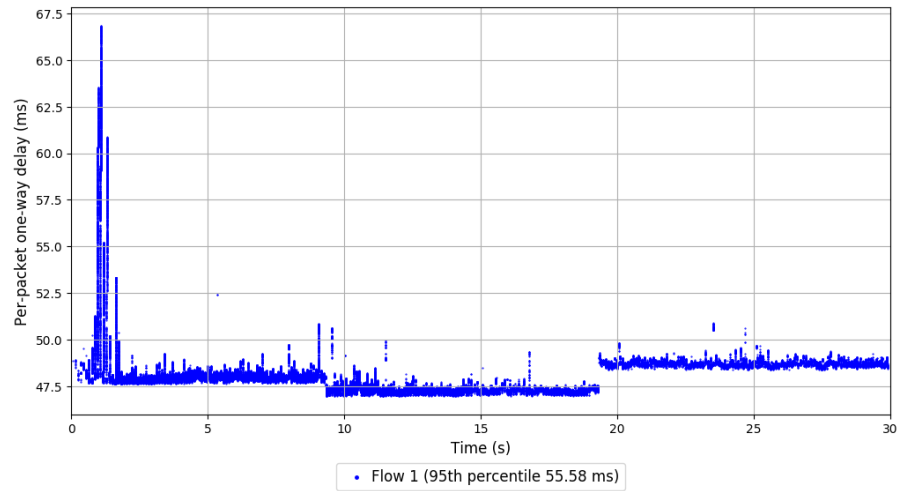
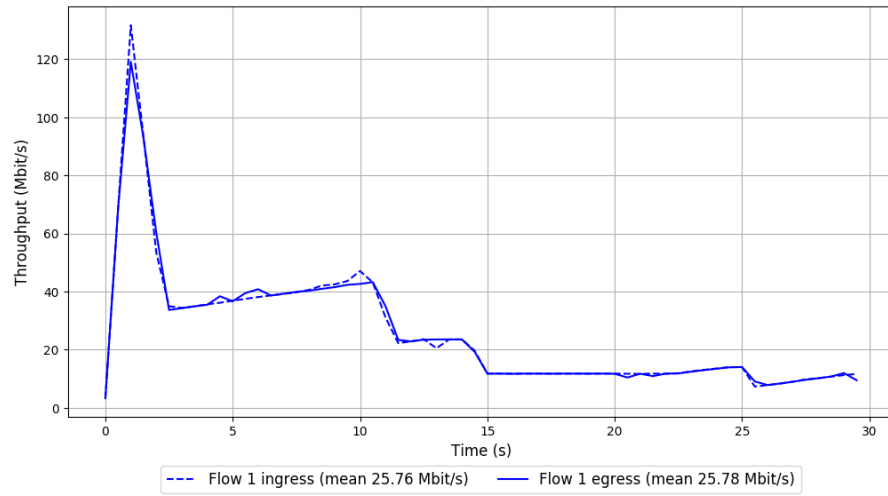
-- Flow 1:

Average throughput: 25.78 Mbit/s

95th percentile per-packet one-way delay: 55.576 ms

Loss rate: 0.24%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-05 12:26:20

End at: 2017-12-05 12:26:50

Below is generated by plot.py at 2017-12-05 15:23:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.04 Mbit/s

95th percentile per-packet one-way delay: 49.297 ms

Loss rate: 0.24%

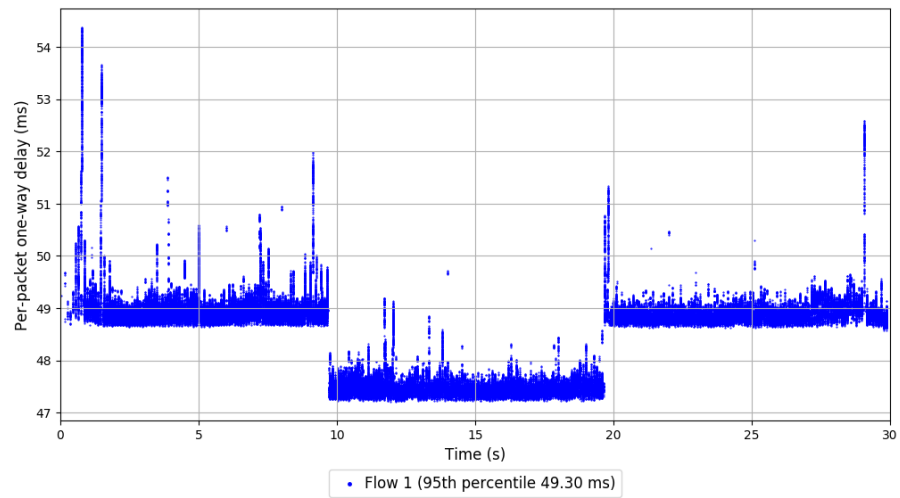
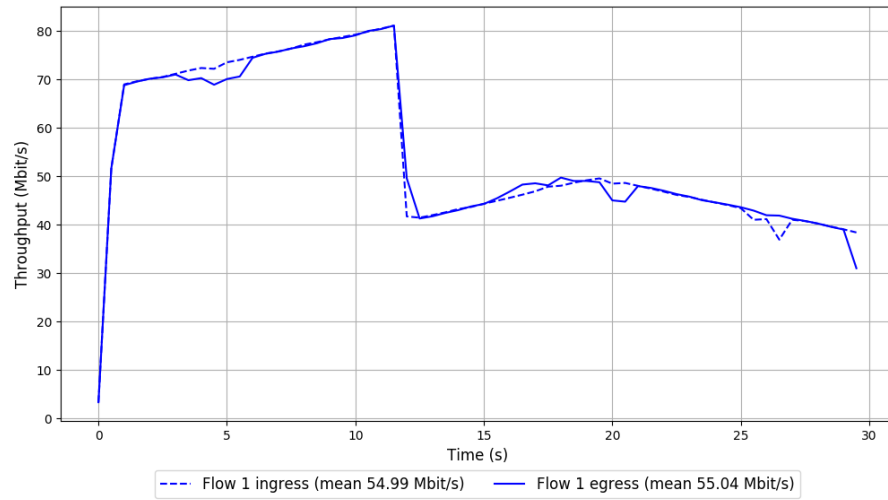
-- Flow 1:

Average throughput: 55.04 Mbit/s

95th percentile per-packet one-way delay: 49.297 ms

Loss rate: 0.24%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-05 12:36:50

End at: 2017-12-05 12:37:21

Below is generated by plot.py at 2017-12-05 15:23:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.62 Mbit/s

95th percentile per-packet one-way delay: 49.757 ms

Loss rate: 0.14%

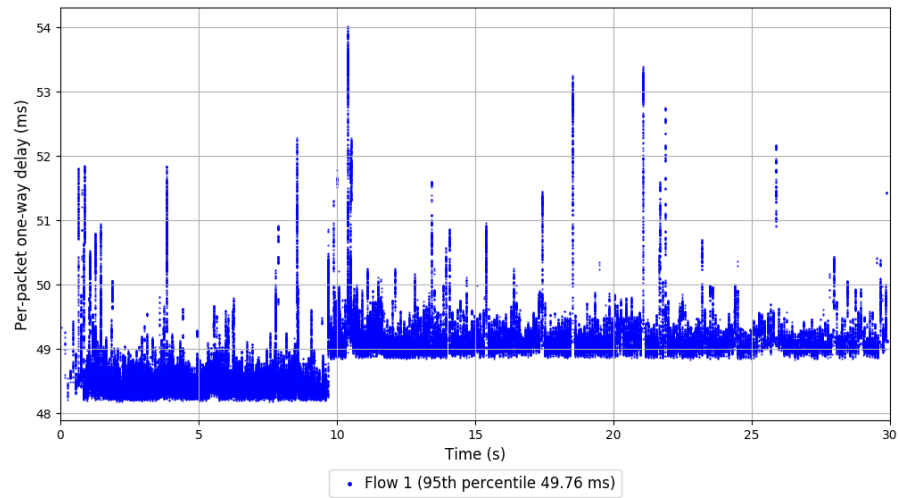
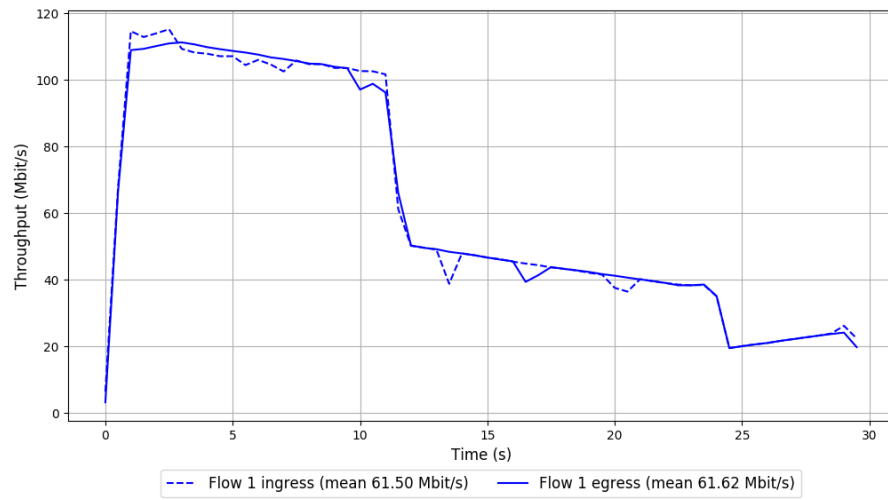
-- Flow 1:

Average throughput: 61.62 Mbit/s

95th percentile per-packet one-way delay: 49.757 ms

Loss rate: 0.14%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-05 12:47:22

End at: 2017-12-05 12:47:52

Below is generated by plot.py at 2017-12-05 15:23:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.11 Mbit/s

95th percentile per-packet one-way delay: 50.101 ms

Loss rate: 0.12%

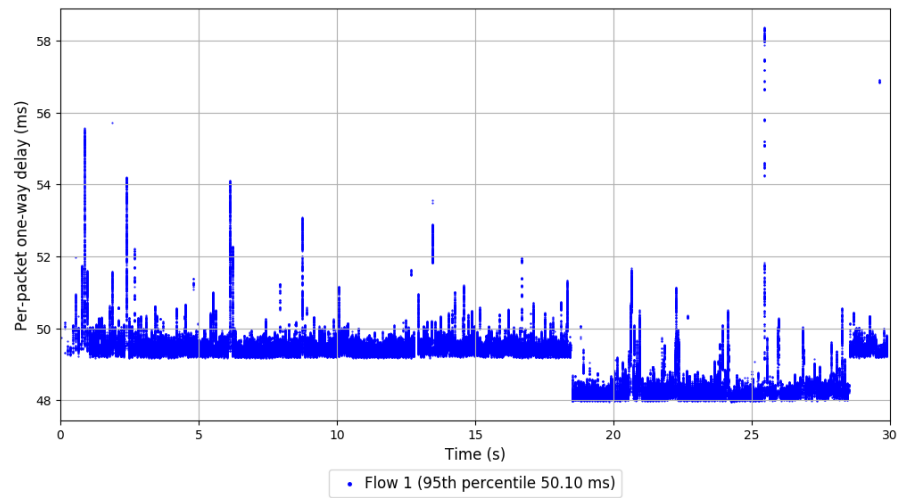
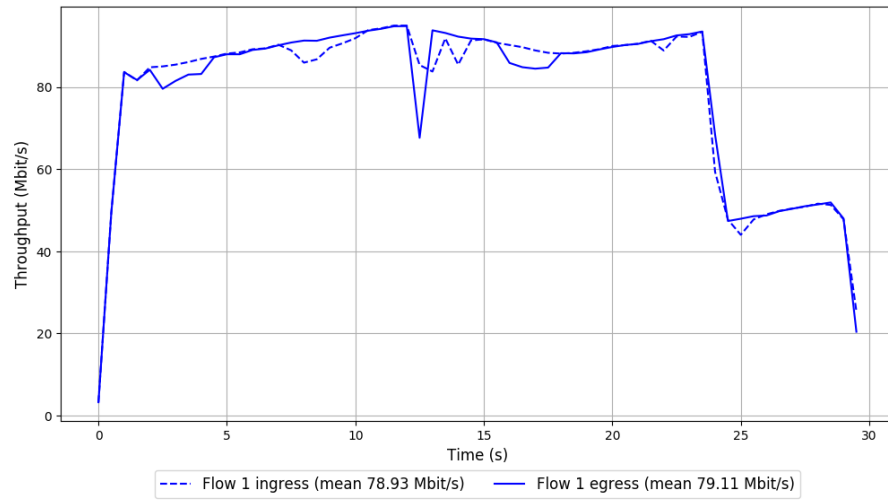
-- Flow 1:

Average throughput: 79.11 Mbit/s

95th percentile per-packet one-way delay: 50.101 ms

Loss rate: 0.12%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-05 12:57:51

End at: 2017-12-05 12:58:21

Below is generated by plot.py at 2017-12-05 15:23:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.87 Mbit/s

95th percentile per-packet one-way delay: 50.478 ms

Loss rate: 0.22%

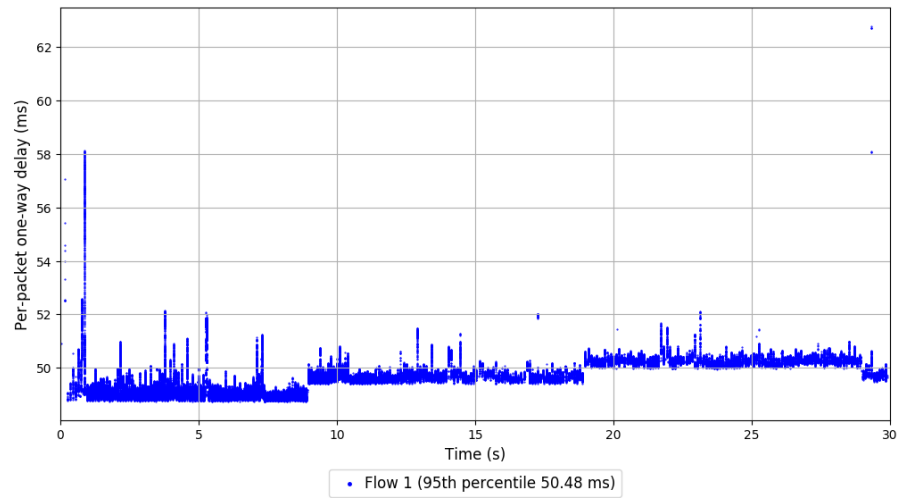
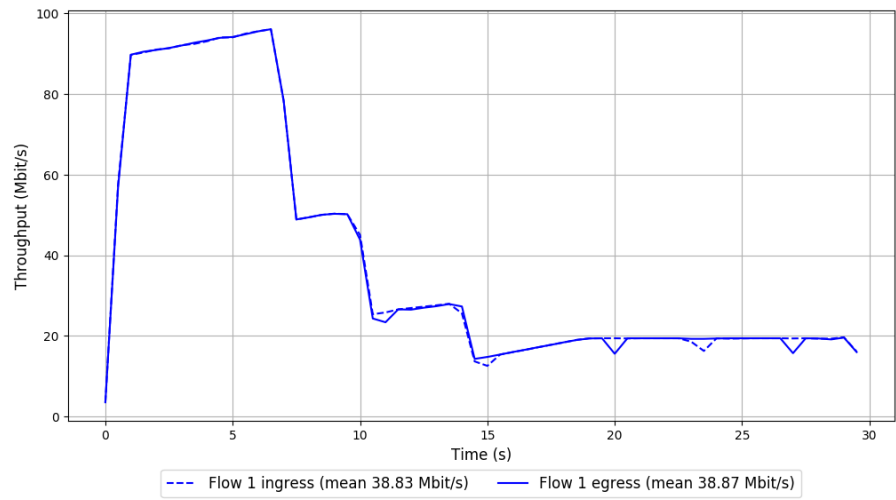
-- Flow 1:

Average throughput: 38.87 Mbit/s

95th percentile per-packet one-way delay: 50.478 ms

Loss rate: 0.22%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-05 11:17:07

End at: 2017-12-05 11:17:37

Below is generated by plot.py at 2017-12-05 15:23:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 305.95 Mbit/s

95th percentile per-packet one-way delay: 72.076 ms

Loss rate: 1.28%

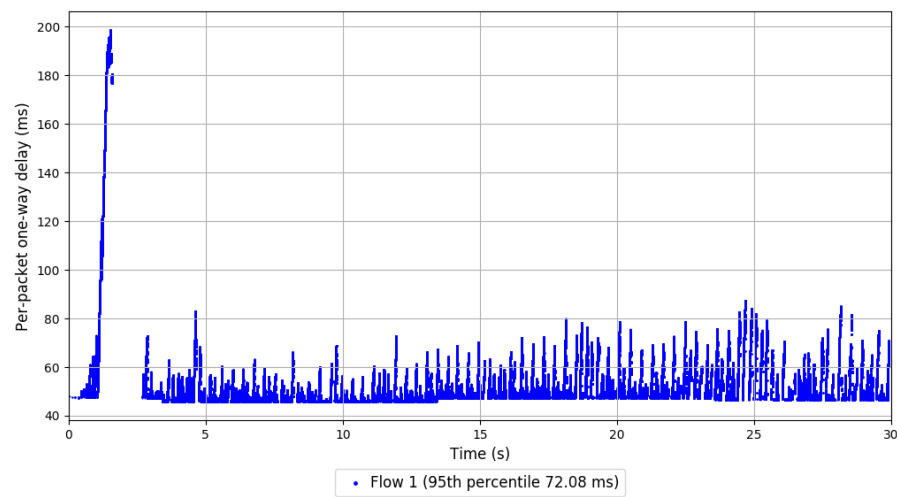
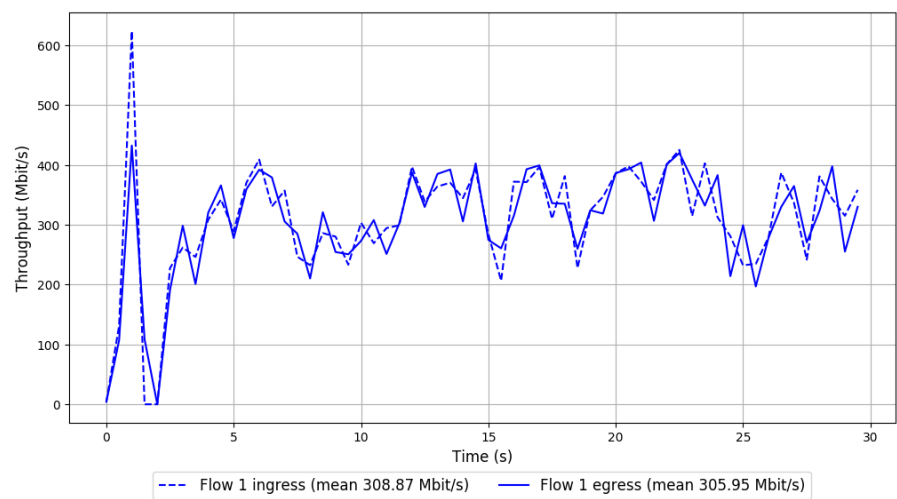
-- Flow 1:

Average throughput: 305.95 Mbit/s

95th percentile per-packet one-way delay: 72.076 ms

Loss rate: 1.28%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-05 11:27:43

End at: 2017-12-05 11:28:13

Below is generated by plot.py at 2017-12-05 15:23:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 275.23 Mbit/s

95th percentile per-packet one-way delay: 96.321 ms

Loss rate: 0.65%

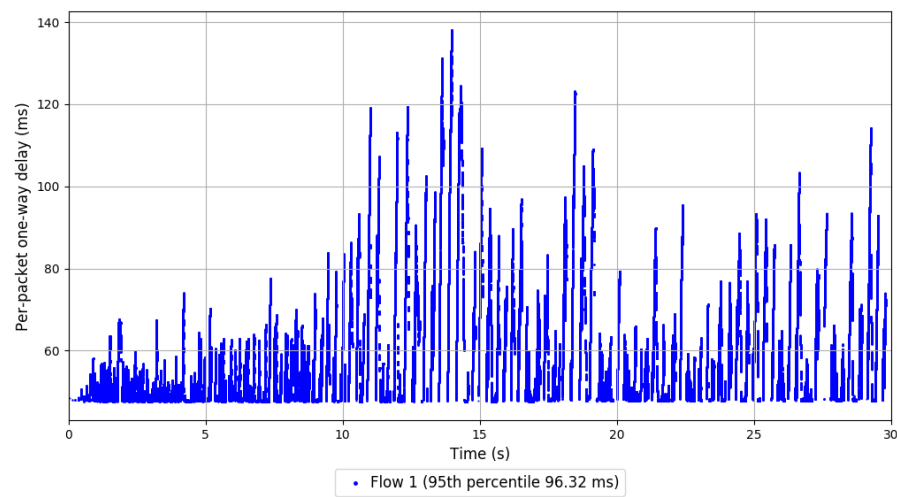
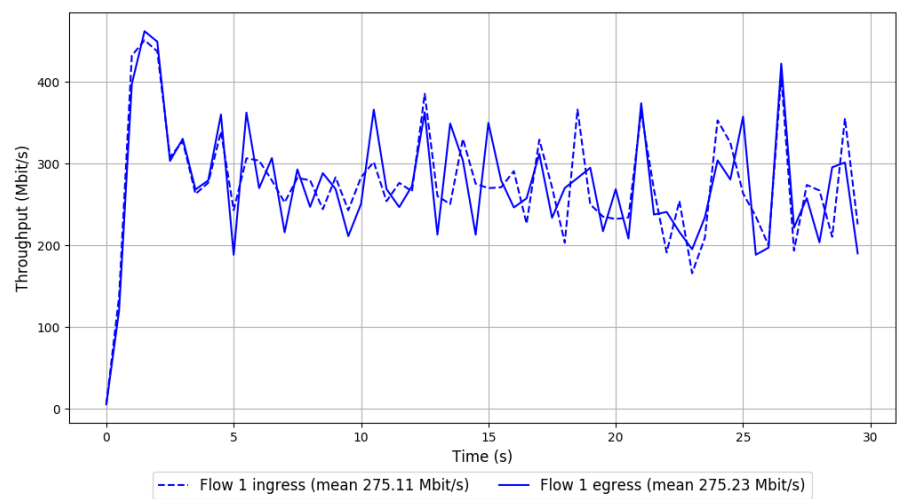
-- Flow 1:

Average throughput: 275.23 Mbit/s

95th percentile per-packet one-way delay: 96.321 ms

Loss rate: 0.65%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-05 11:38:12

End at: 2017-12-05 11:38:42

Below is generated by plot.py at 2017-12-05 15:23:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.41 Mbit/s

95th percentile per-packet one-way delay: 71.101 ms

Loss rate: 0.01%

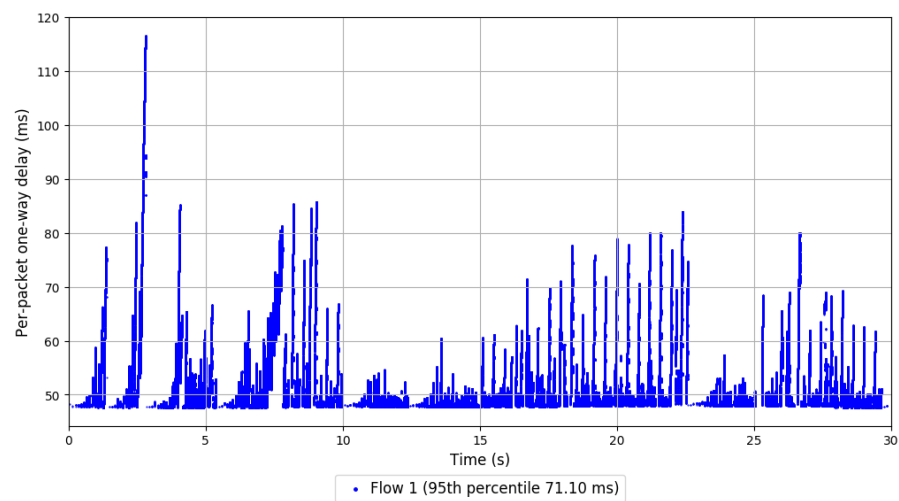
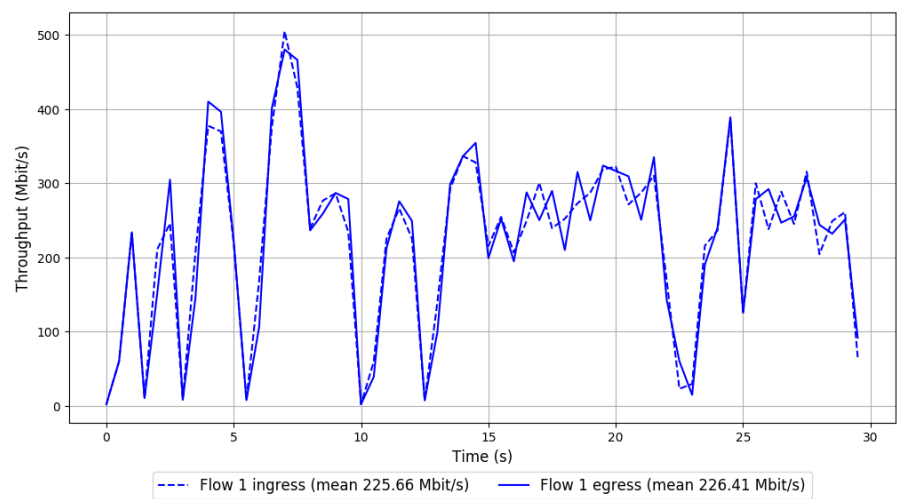
-- Flow 1:

Average throughput: 226.41 Mbit/s

95th percentile per-packet one-way delay: 71.101 ms

Loss rate: 0.01%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-05 11:48:45

End at: 2017-12-05 11:49:15

Below is generated by plot.py at 2017-12-05 15:23:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 244.25 Mbit/s

95th percentile per-packet one-way delay: 111.930 ms

Loss rate: 0.60%

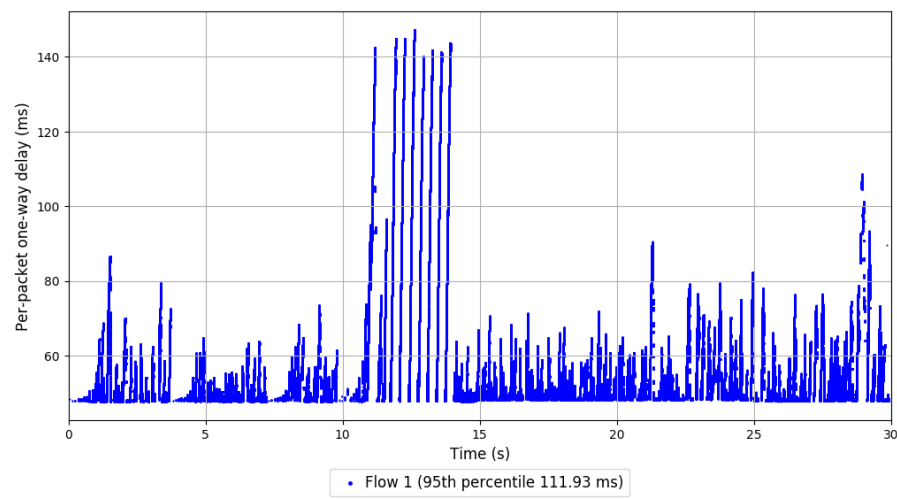
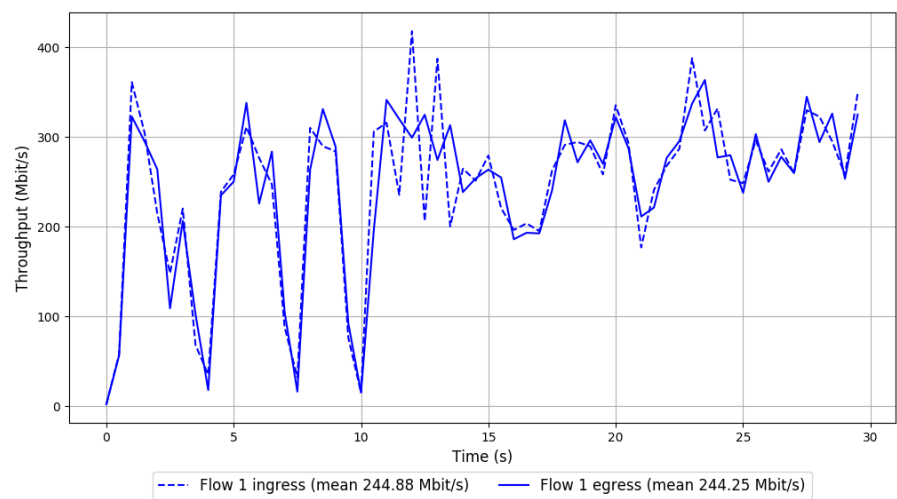
-- Flow 1:

Average throughput: 244.25 Mbit/s

95th percentile per-packet one-way delay: 111.930 ms

Loss rate: 0.60%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-05 11:59:14

End at: 2017-12-05 11:59:44

Below is generated by plot.py at 2017-12-05 15:26:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 268.26 Mbit/s

95th percentile per-packet one-way delay: 142.110 ms

Loss rate: 0.94%

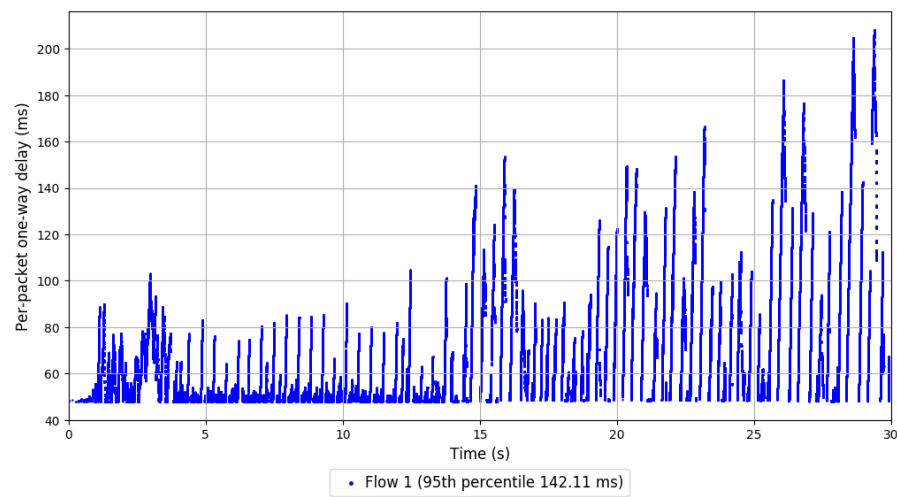
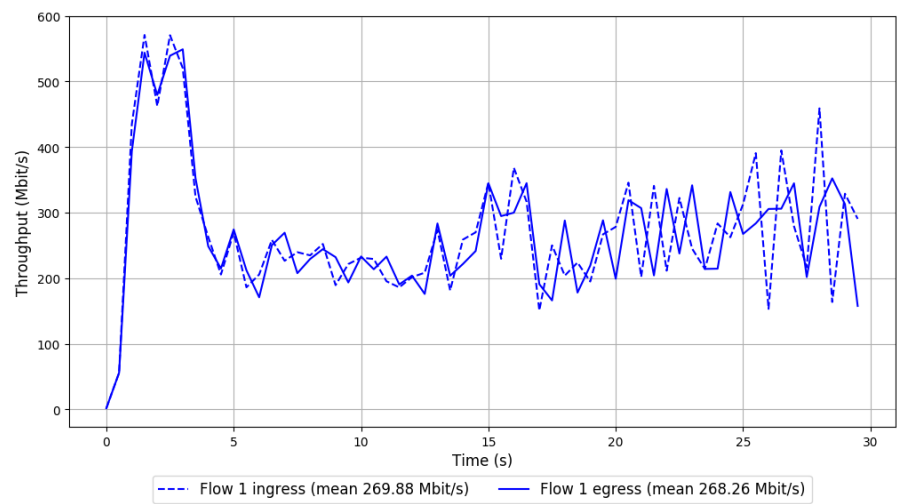
-- Flow 1:

Average throughput: 268.26 Mbit/s

95th percentile per-packet one-way delay: 142.110 ms

Loss rate: 0.94%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

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

End at: 2017-12-05 12:10:17

Below is generated by plot.py at 2017-12-05 15:26:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 259.75 Mbit/s

95th percentile per-packet one-way delay: 106.499 ms

Loss rate: 0.66%

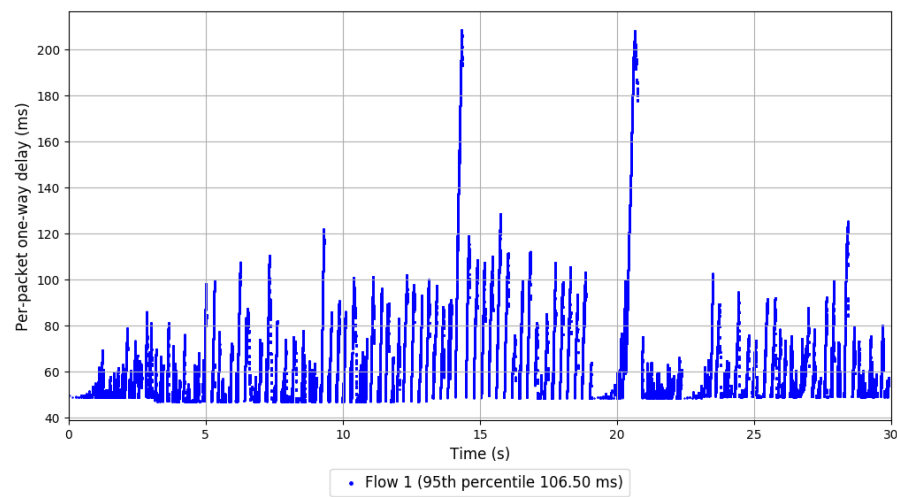
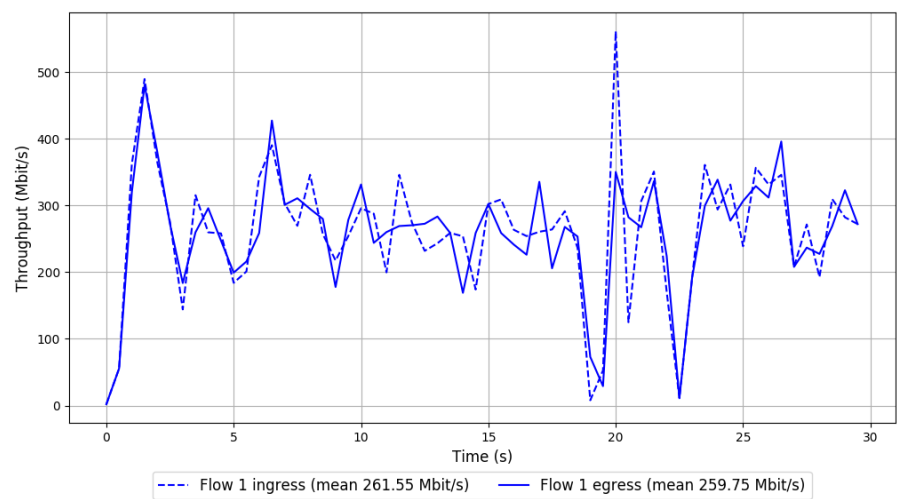
-- Flow 1:

Average throughput: 259.75 Mbit/s

95th percentile per-packet one-way delay: 106.499 ms

Loss rate: 0.66%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-05 12:20:13

End at: 2017-12-05 12:20:43

Below is generated by plot.py at 2017-12-05 15:26:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 223.62 Mbit/s

95th percentile per-packet one-way delay: 88.647 ms

Loss rate: 0.38%

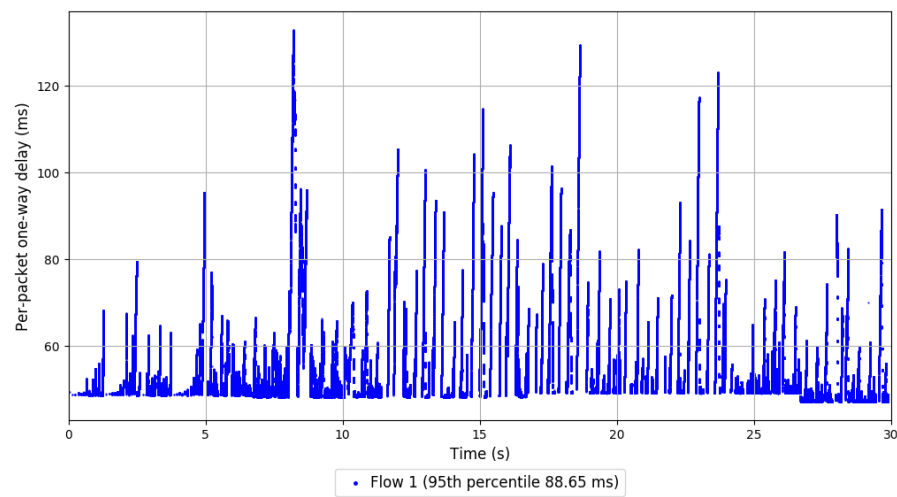
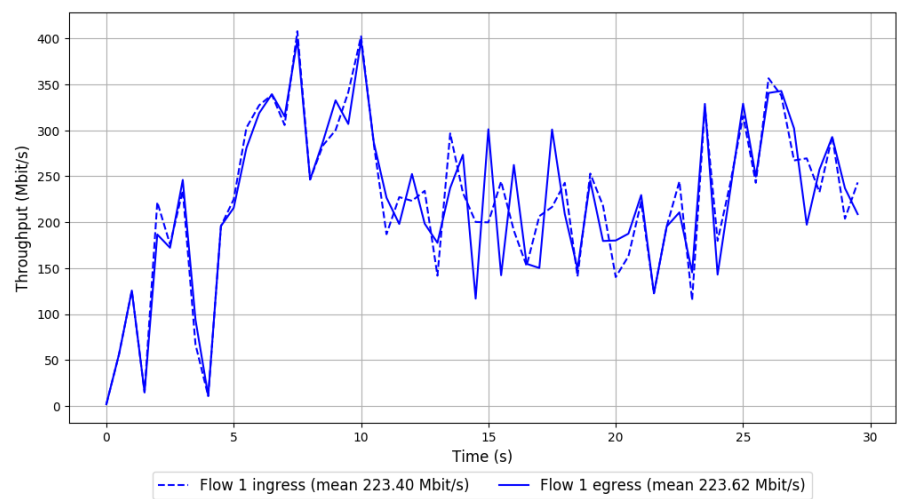
-- Flow 1:

Average throughput: 223.62 Mbit/s

95th percentile per-packet one-way delay: 88.647 ms

Loss rate: 0.38%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-05 12:30:45

End at: 2017-12-05 12:31:15

Below is generated by plot.py at 2017-12-05 15:27:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 275.28 Mbit/s

95th percentile per-packet one-way delay: 89.571 ms

Loss rate: 0.14%

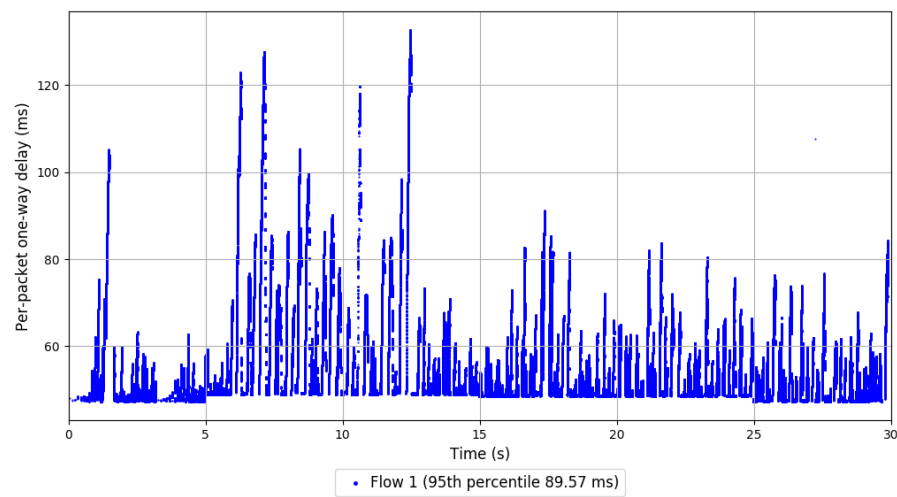
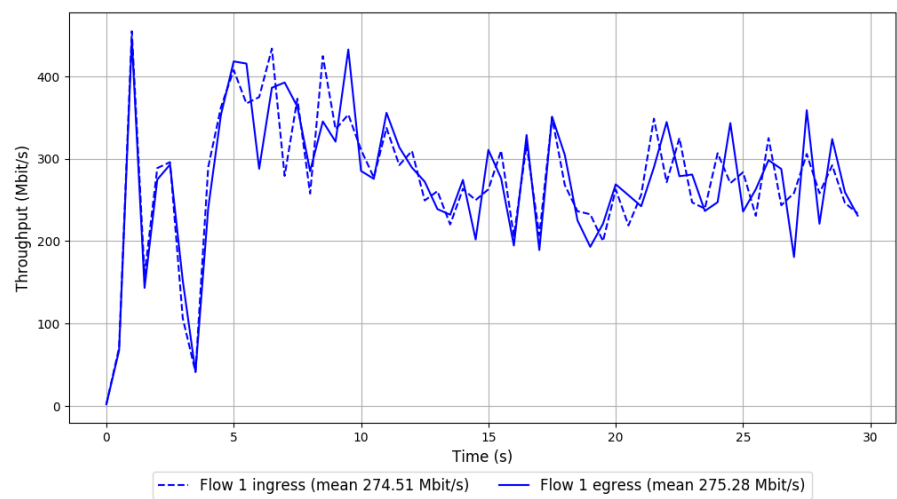
-- Flow 1:

Average throughput: 275.28 Mbit/s

95th percentile per-packet one-way delay: 89.571 ms

Loss rate: 0.14%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-05 12:41:15

End at: 2017-12-05 12:41:45

Below is generated by plot.py at 2017-12-05 15:27:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 258.88 Mbit/s

95th percentile per-packet one-way delay: 89.703 ms

Loss rate: 0.64%

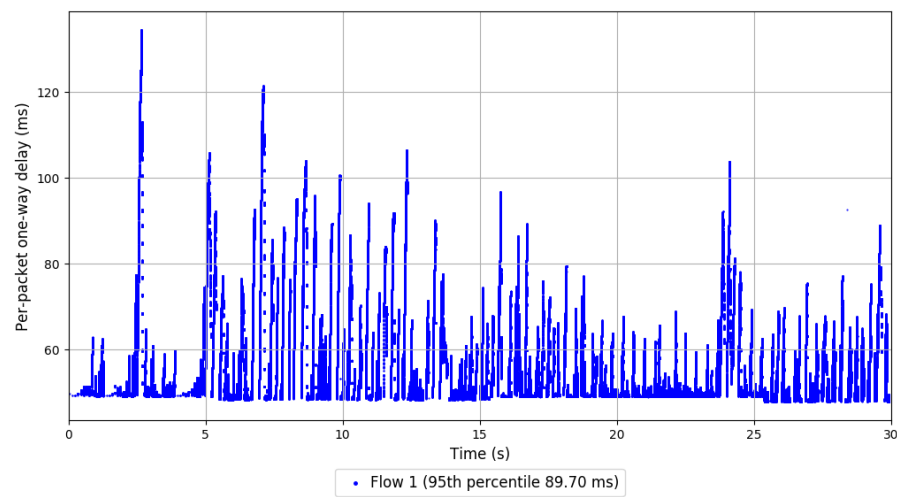
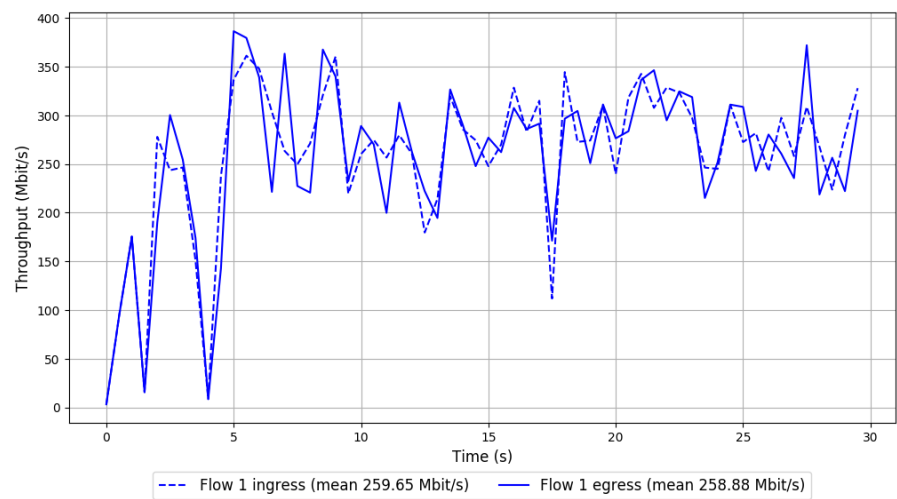
-- Flow 1:

Average throughput: 258.88 Mbit/s

95th percentile per-packet one-way delay: 89.703 ms

Loss rate: 0.64%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-05 12:51:47

End at: 2017-12-05 12:52:17

Below is generated by plot.py at 2017-12-05 15:27:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.36 Mbit/s

95th percentile per-packet one-way delay: 90.708 ms

Loss rate: 0.56%

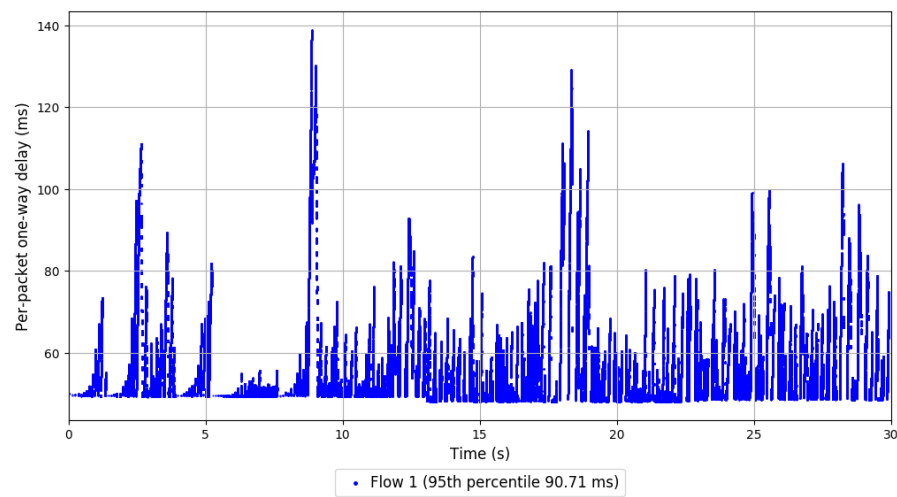
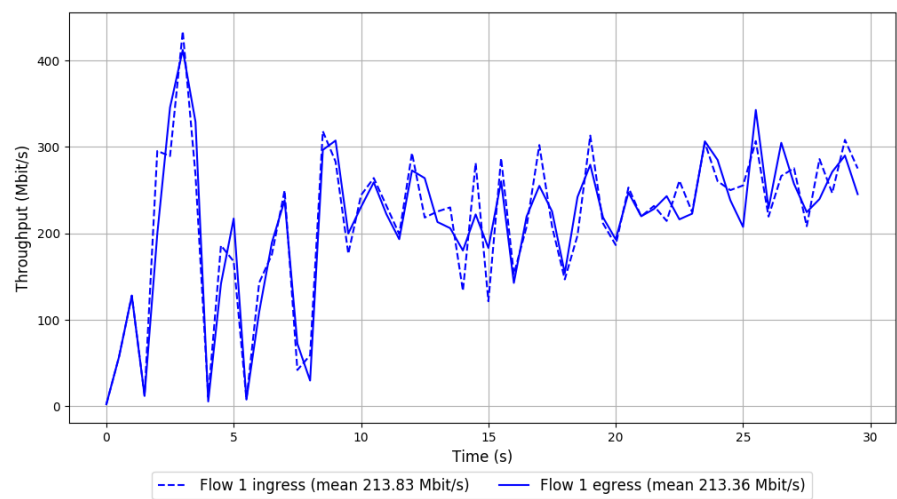
-- Flow 1:

Average throughput: 213.36 Mbit/s

95th percentile per-packet one-way delay: 90.708 ms

Loss rate: 0.56%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-05 11:19:51

End at: 2017-12-05 11:20:21

Below is generated by plot.py at 2017-12-05 15:27:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.38 Mbit/s

95th percentile per-packet one-way delay: 47.805 ms

Loss rate: 0.30%

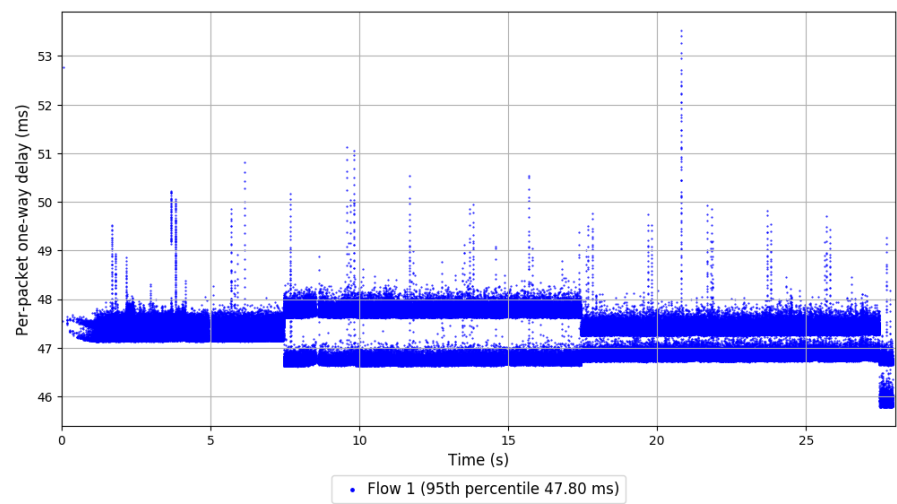
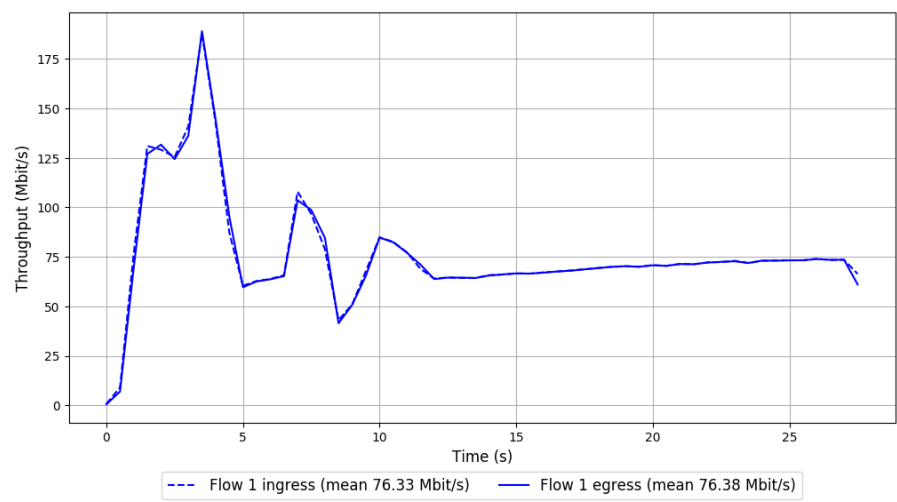
-- Flow 1:

Average throughput: 76.38 Mbit/s

95th percentile per-packet one-way delay: 47.805 ms

Loss rate: 0.30%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-05 11:30:23

End at: 2017-12-05 11:30:54

Below is generated by plot.py at 2017-12-05 15:27:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.46 Mbit/s

95th percentile per-packet one-way delay: 48.282 ms

Loss rate: 0.11%

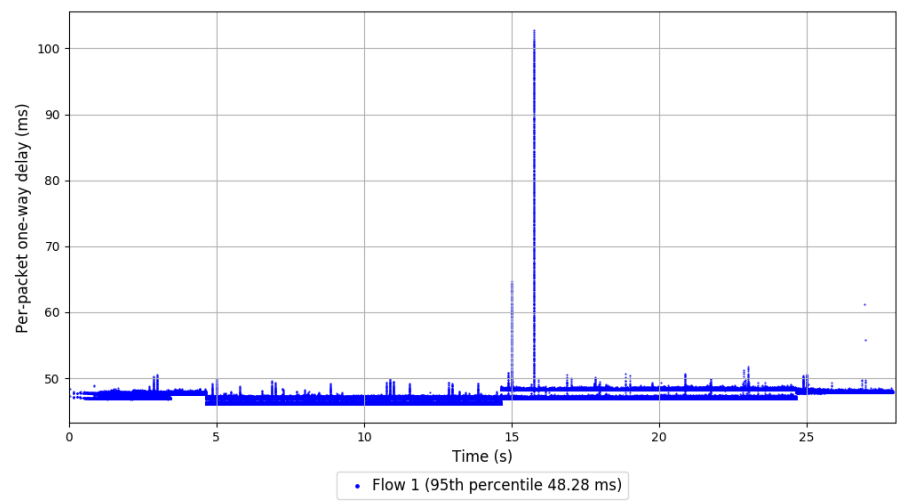
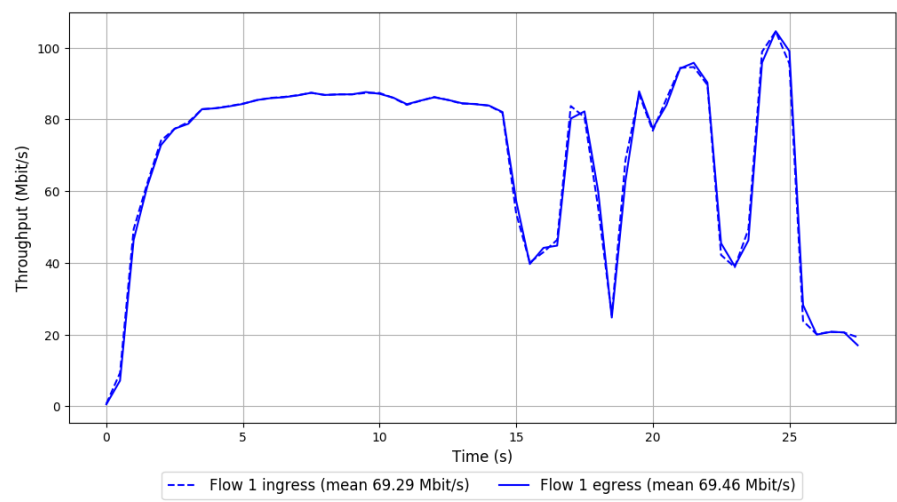
-- Flow 1:

Average throughput: 69.46 Mbit/s

95th percentile per-packet one-way delay: 48.282 ms

Loss rate: 0.11%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-05 11:40:51

End at: 2017-12-05 11:41:21

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.76 Mbit/s

95th percentile per-packet one-way delay: 47.930 ms

Loss rate: 0.39%

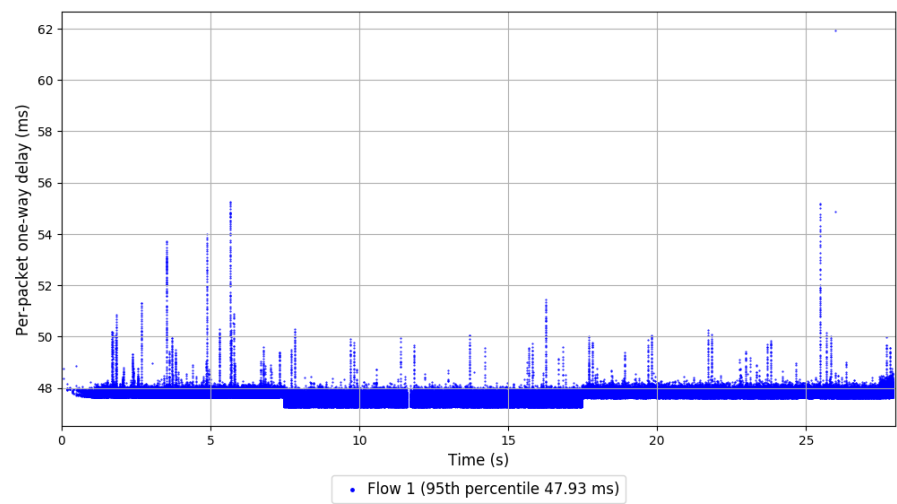
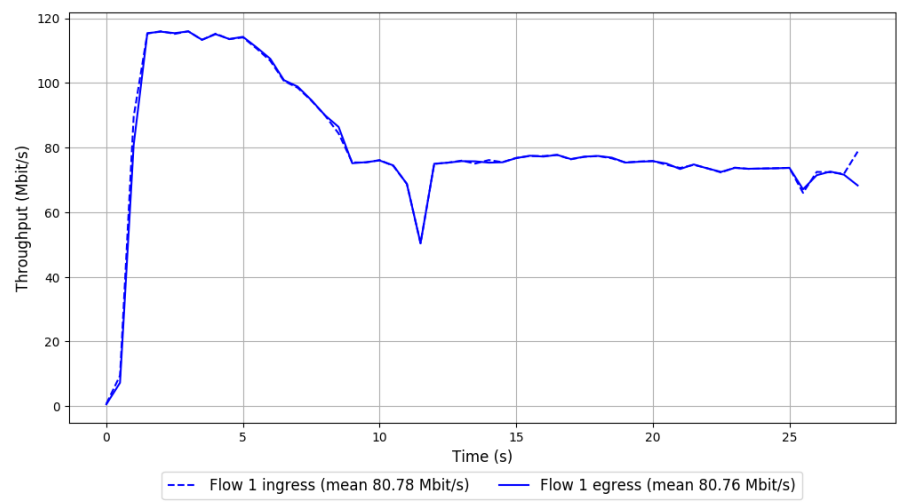
-- Flow 1:

Average throughput: 80.76 Mbit/s

95th percentile per-packet one-way delay: 47.930 ms

Loss rate: 0.39%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-05 11:51:24

End at: 2017-12-05 11:51:54

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.12 Mbit/s

95th percentile per-packet one-way delay: 48.161 ms

Loss rate: 0.37%

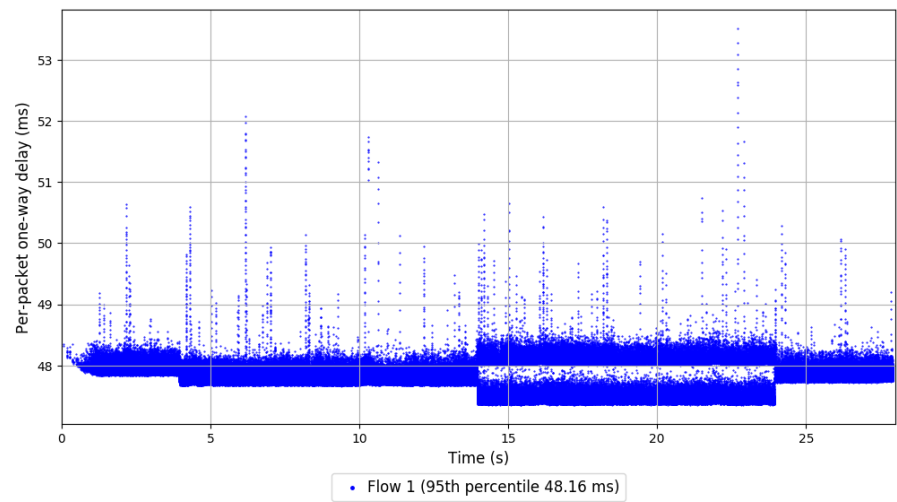
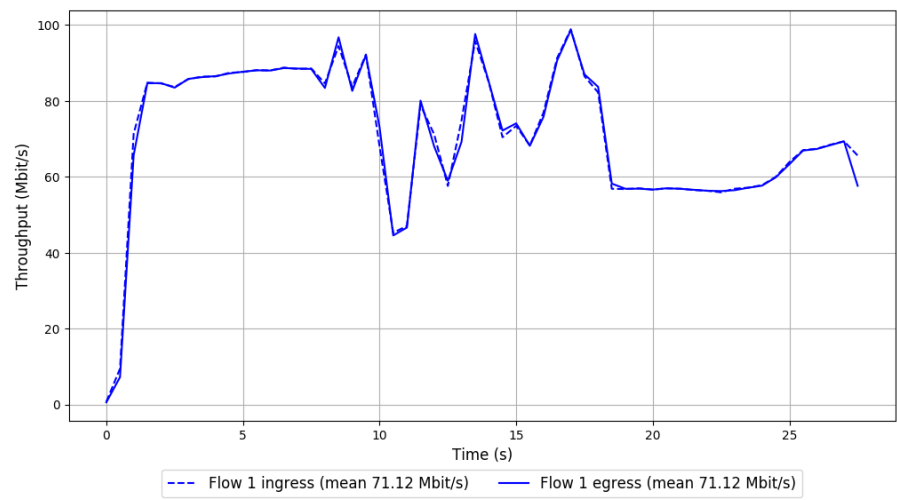
-- Flow 1:

Average throughput: 71.12 Mbit/s

95th percentile per-packet one-way delay: 48.161 ms

Loss rate: 0.37%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-05 12:01:53

End at: 2017-12-05 12:02:23

Below is generated by plot.py at 2017-12-05 15:28:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.48 Mbit/s

95th percentile per-packet one-way delay: 48.622 ms

Loss rate: 0.28%

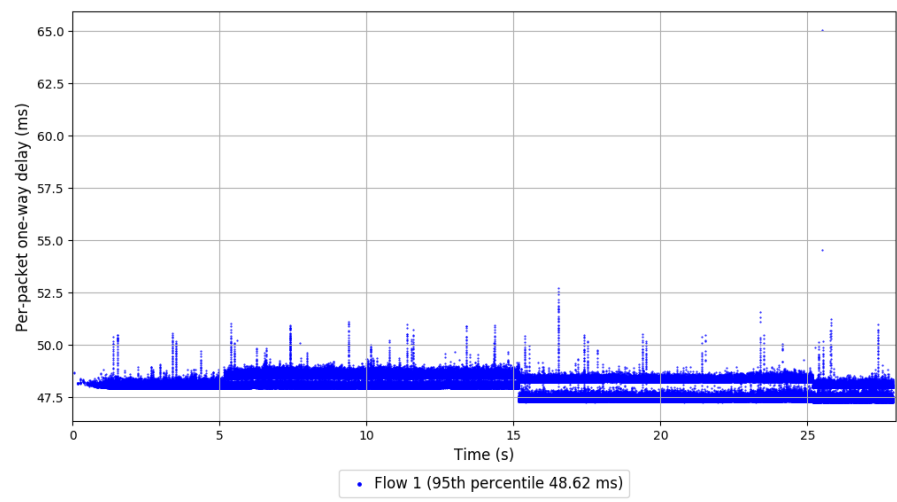
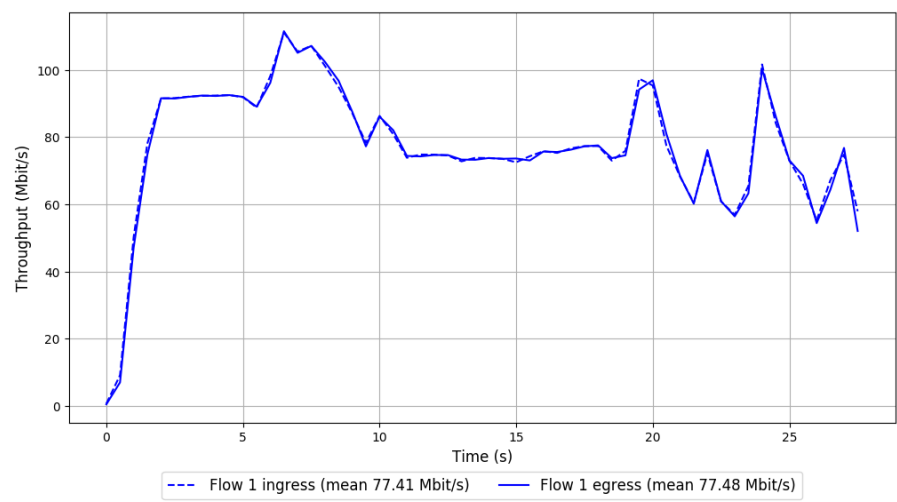
-- Flow 1:

Average throughput: 77.48 Mbit/s

95th percentile per-packet one-way delay: 48.622 ms

Loss rate: 0.28%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

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

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

Below is generated by plot.py at 2017-12-05 15:28:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.84 Mbit/s

95th percentile per-packet one-way delay: 48.661 ms

Loss rate: 0.73%

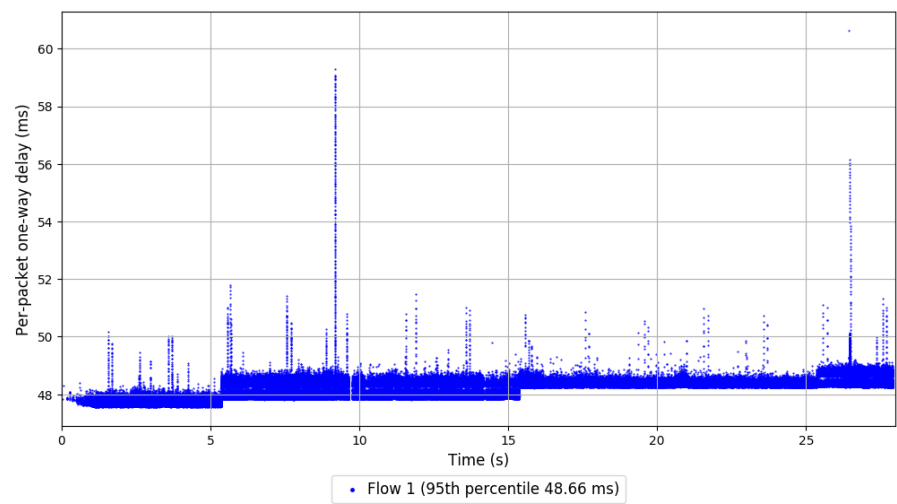
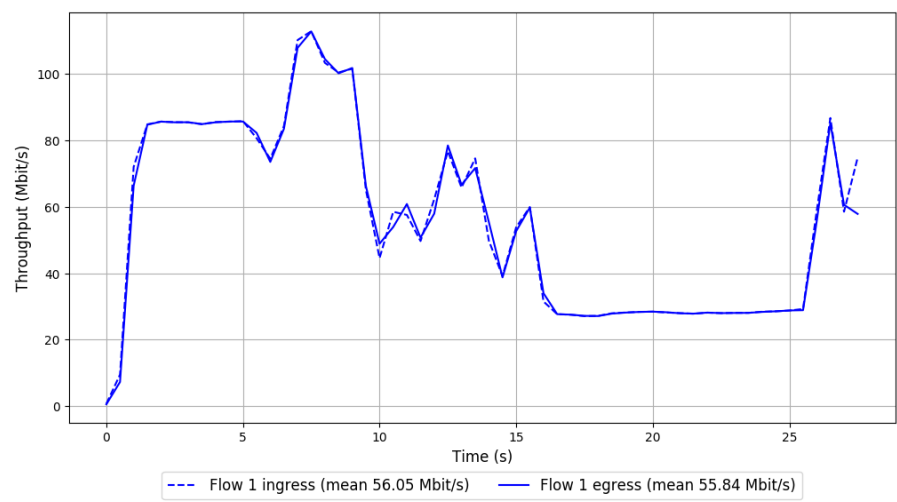
-- Flow 1:

Average throughput: 55.84 Mbit/s

95th percentile per-packet one-way delay: 48.661 ms

Loss rate: 0.73%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-05 12:22:51

End at: 2017-12-05 12:23:21

Below is generated by plot.py at 2017-12-05 15:28:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.49 Mbit/s

95th percentile per-packet one-way delay: 49.046 ms

Loss rate: 0.16%

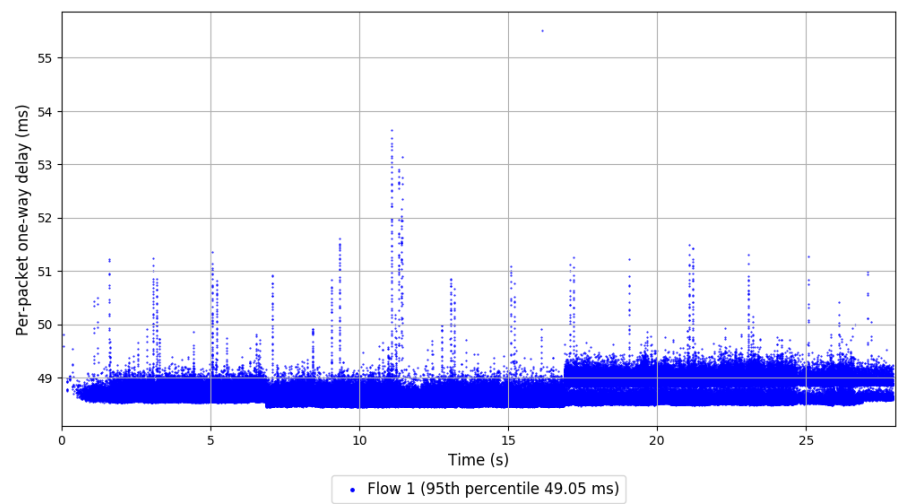
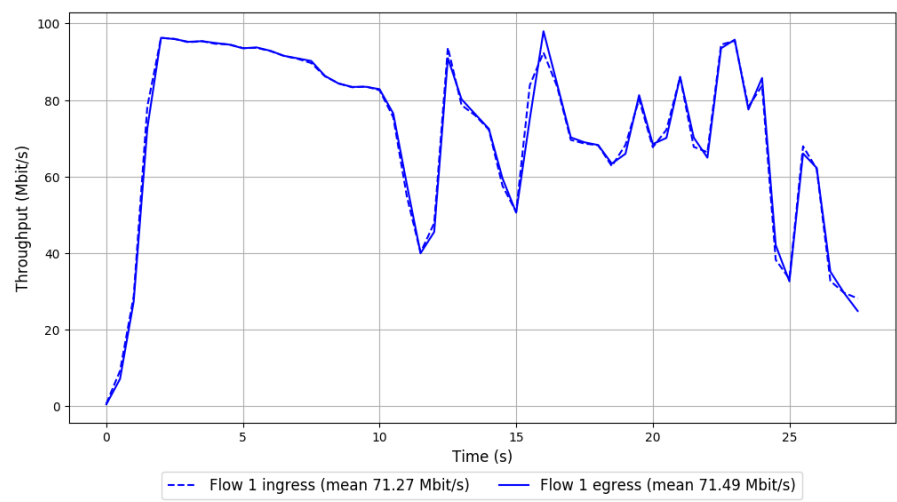
-- Flow 1:

Average throughput: 71.49 Mbit/s

95th percentile per-packet one-way delay: 49.046 ms

Loss rate: 0.16%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-05 12:33:25

End at: 2017-12-05 12:33:55

Below is generated by plot.py at 2017-12-05 15:29:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.66 Mbit/s

95th percentile per-packet one-way delay: 49.101 ms

Loss rate: 0.34%

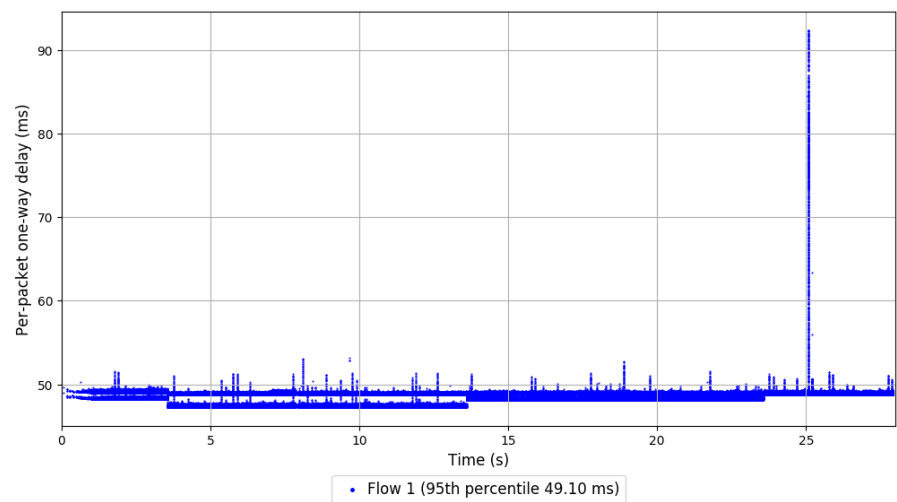
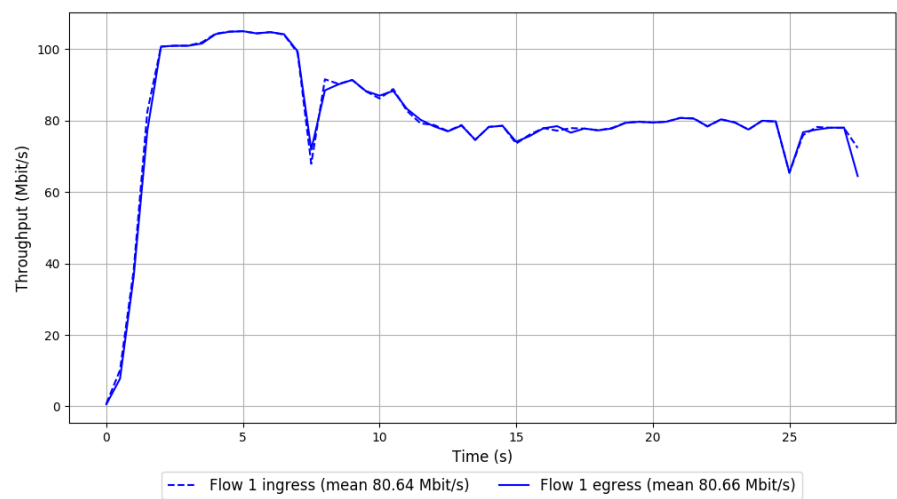
-- Flow 1:

Average throughput: 80.66 Mbit/s

95th percentile per-packet one-way delay: 49.101 ms

Loss rate: 0.34%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-05 12:43:54

End at: 2017-12-05 12:44:24

Below is generated by plot.py at 2017-12-05 15:29:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.25 Mbit/s

95th percentile per-packet one-way delay: 49.867 ms

Loss rate: 0.61%

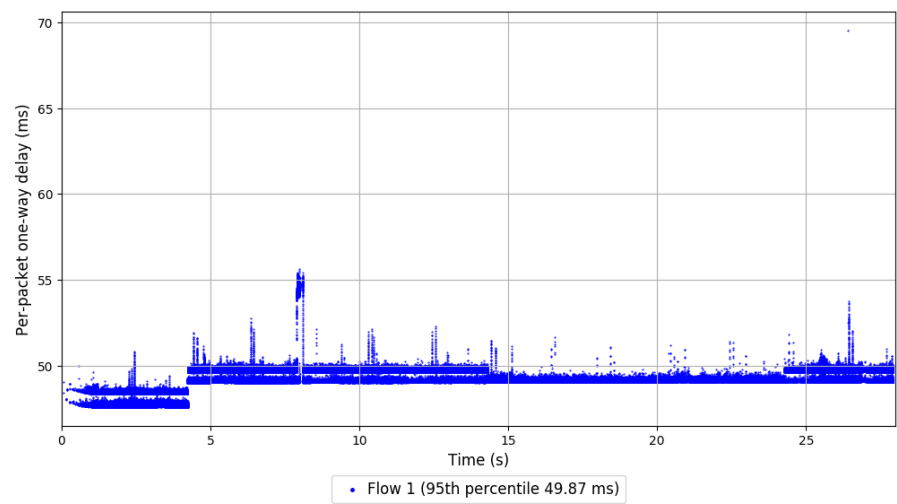
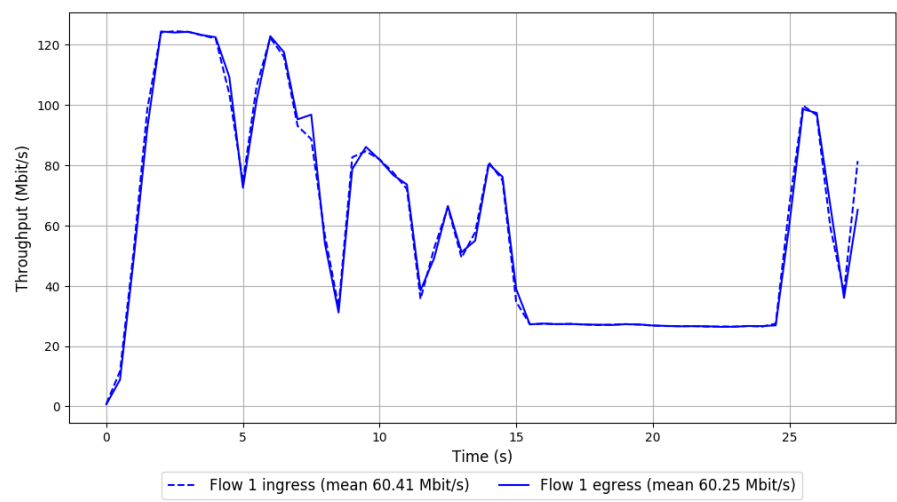
-- Flow 1:

Average throughput: 60.25 Mbit/s

95th percentile per-packet one-way delay: 49.867 ms

Loss rate: 0.61%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-05 12:54:20

End at: 2017-12-05 12:54:50

Below is generated by plot.py at 2017-12-05 15:29:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.51 Mbit/s

95th percentile per-packet one-way delay: 48.980 ms

Loss rate: 0.35%

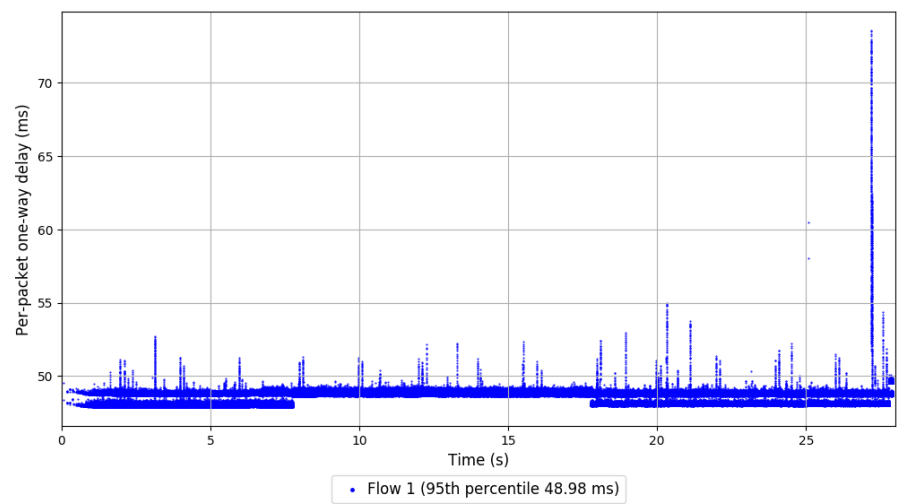
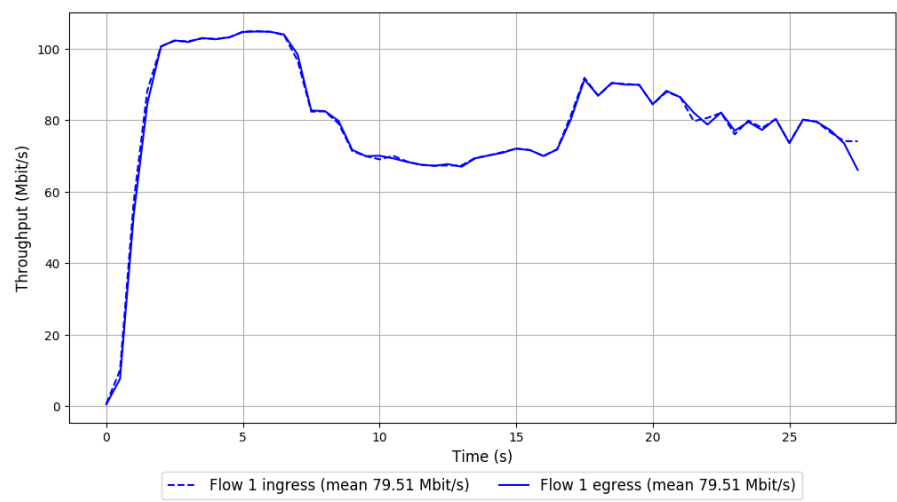
-- Flow 1:

Average throughput: 79.51 Mbit/s

95th percentile per-packet one-way delay: 48.980 ms

Loss rate: 0.35%

Run 10: Report of Copa — Data Link

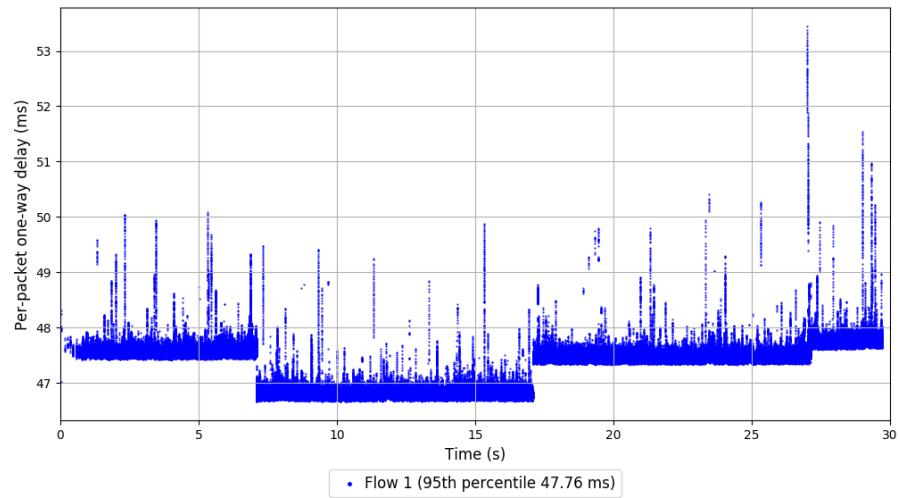
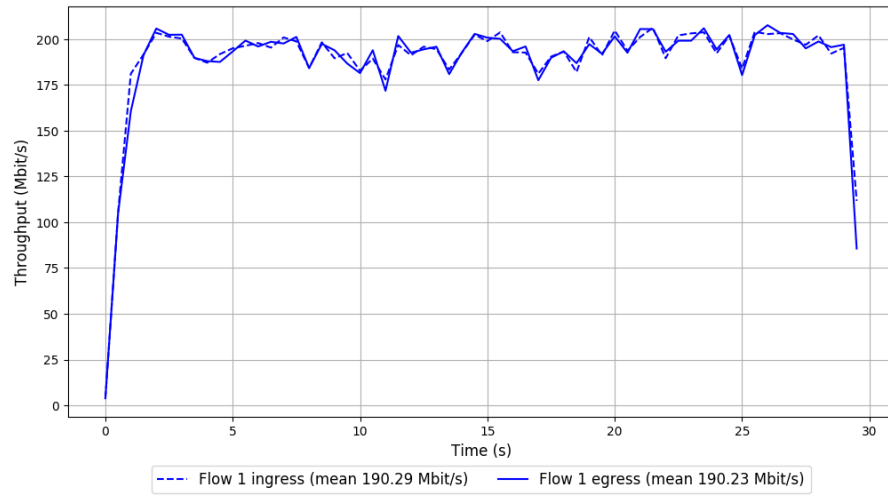


```
Run 1: Statistics of Indigo

Start at: 2017-12-05 11:21:53
End at: 2017-12-05 11:22:23

# Below is generated by plot.py at 2017-12-05 15:31:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.23 Mbit/s
95th percentile per-packet one-way delay: 47.756 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 190.23 Mbit/s
95th percentile per-packet one-way delay: 47.756 ms
Loss rate: 0.36%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-05 11:32:23

End at: 2017-12-05 11:32:53

Below is generated by plot.py at 2017-12-05 15:31:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.16 Mbit/s

95th percentile per-packet one-way delay: 48.188 ms

Loss rate: 0.48%

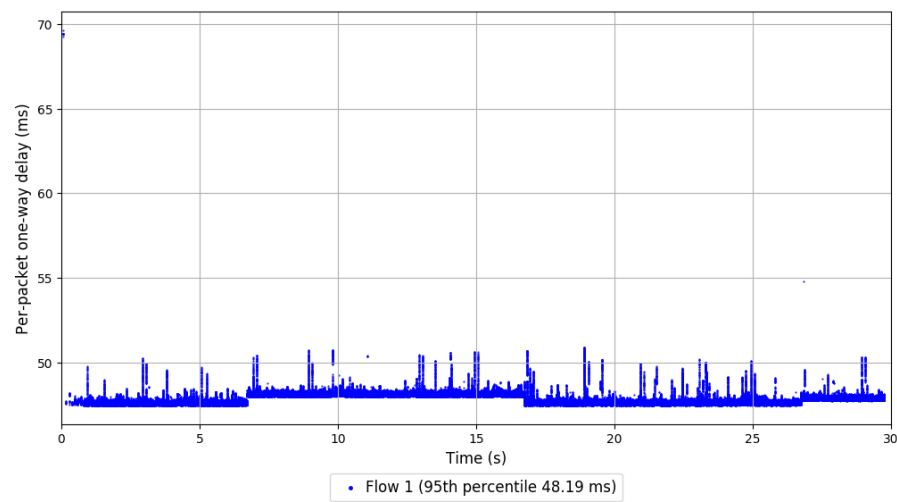
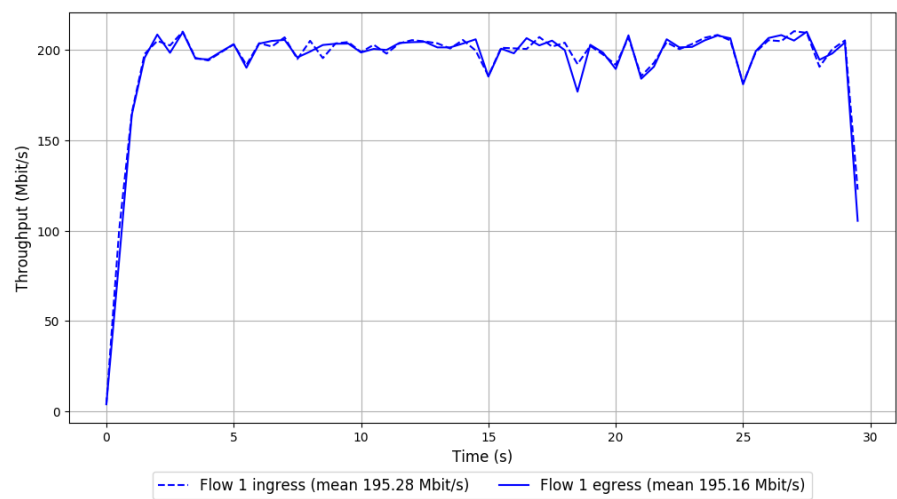
-- Flow 1:

Average throughput: 195.16 Mbit/s

95th percentile per-packet one-way delay: 48.188 ms

Loss rate: 0.48%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-05 11:42:54

End at: 2017-12-05 11:43:24

Below is generated by plot.py at 2017-12-05 15:31:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.32 Mbit/s

95th percentile per-packet one-way delay: 48.488 ms

Loss rate: 0.69%

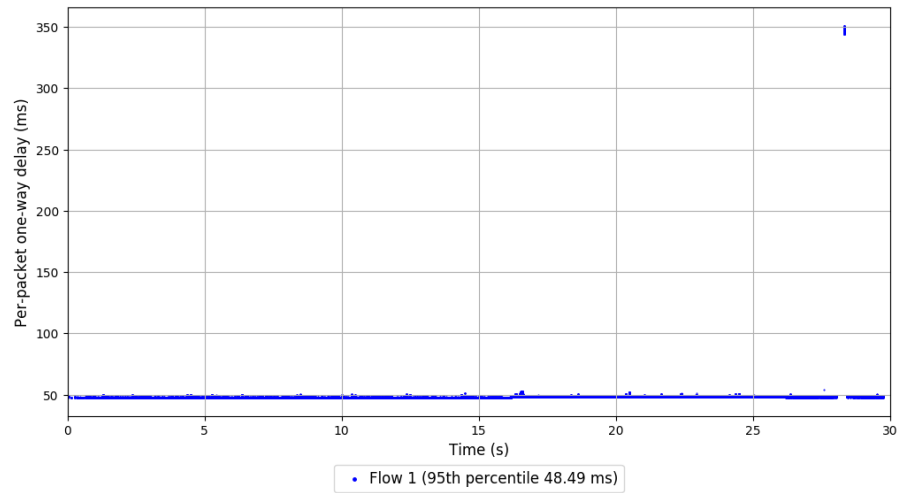
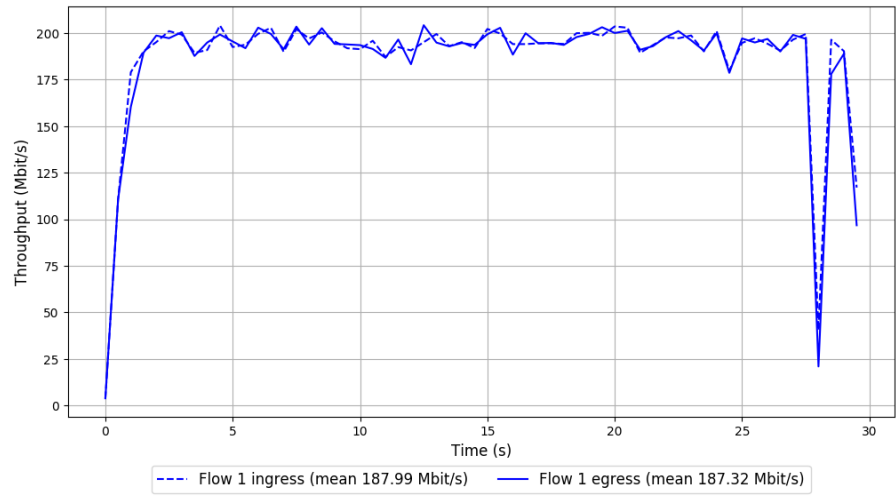
-- Flow 1:

Average throughput: 187.32 Mbit/s

95th percentile per-packet one-way delay: 48.488 ms

Loss rate: 0.69%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-05 11:53:24

End at: 2017-12-05 11:53:54

Below is generated by plot.py at 2017-12-05 15:31:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.10 Mbit/s

95th percentile per-packet one-way delay: 48.402 ms

Loss rate: 0.35%

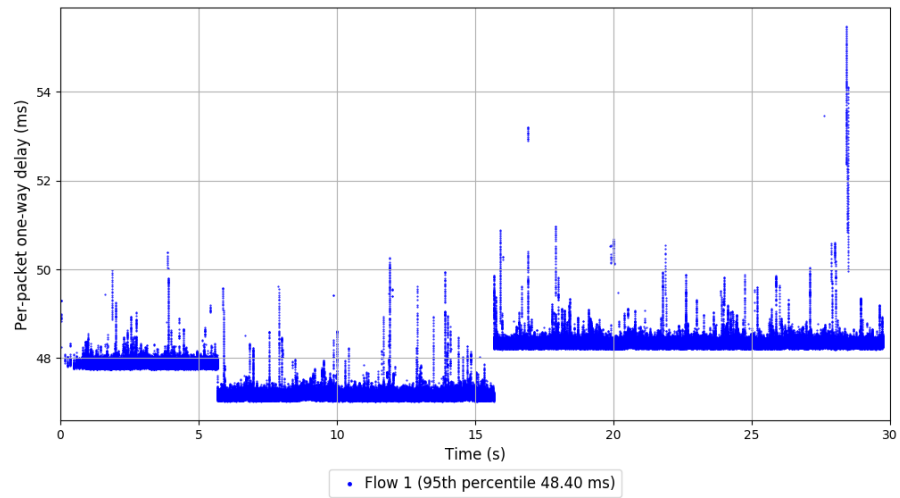
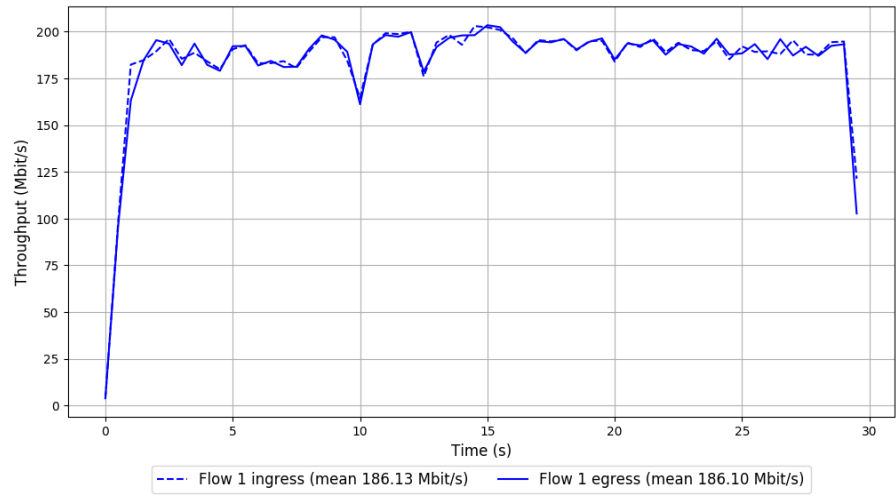
-- Flow 1:

Average throughput: 186.10 Mbit/s

95th percentile per-packet one-way delay: 48.402 ms

Loss rate: 0.35%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

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

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

Below is generated by plot.py at 2017-12-05 15:31:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.25 Mbit/s

95th percentile per-packet one-way delay: 48.430 ms

Loss rate: 0.33%

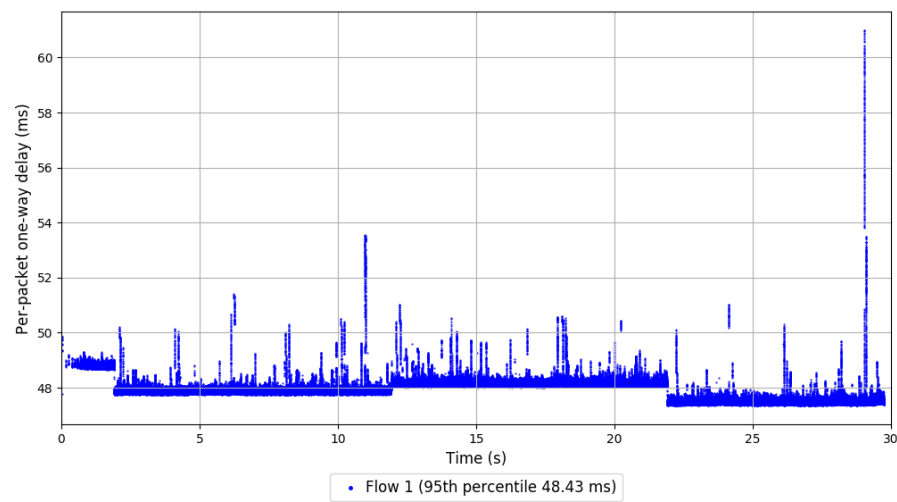
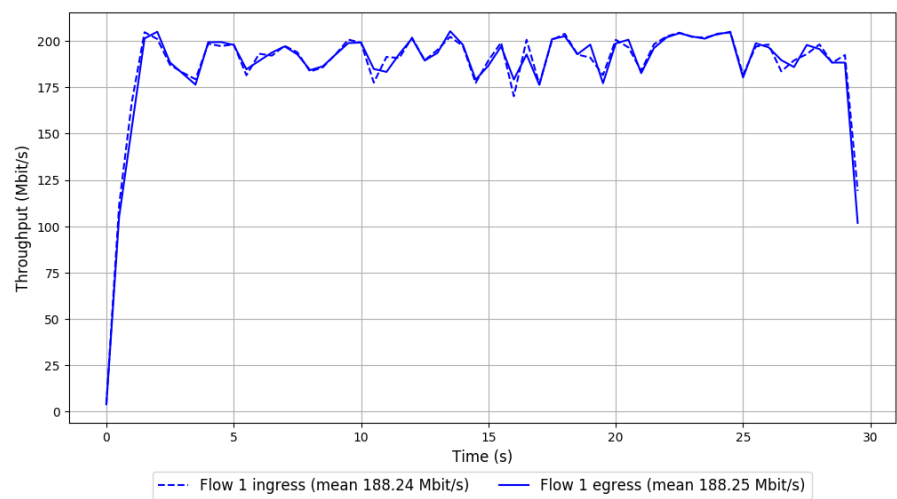
-- Flow 1:

Average throughput: 188.25 Mbit/s

95th percentile per-packet one-way delay: 48.430 ms

Loss rate: 0.33%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-05 12:14:24

End at: 2017-12-05 12:14:54

Below is generated by plot.py at 2017-12-05 15:32:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.04 Mbit/s

95th percentile per-packet one-way delay: 49.054 ms

Loss rate: 0.54%

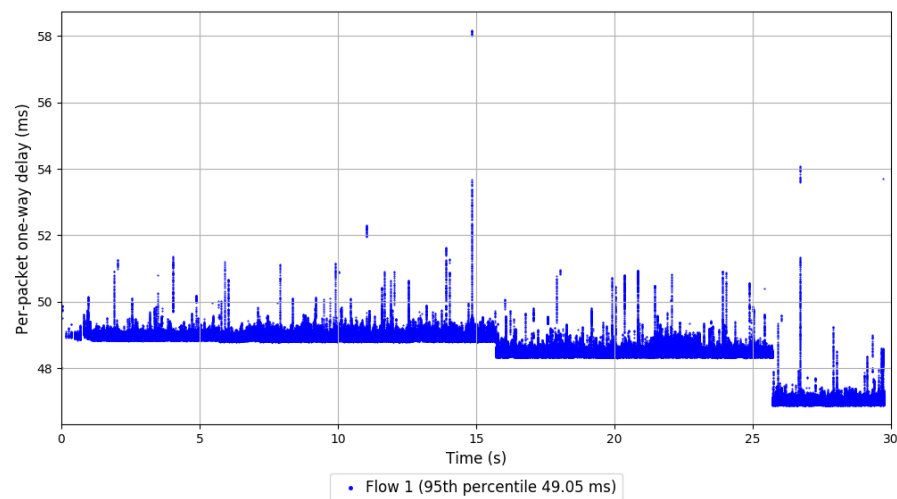
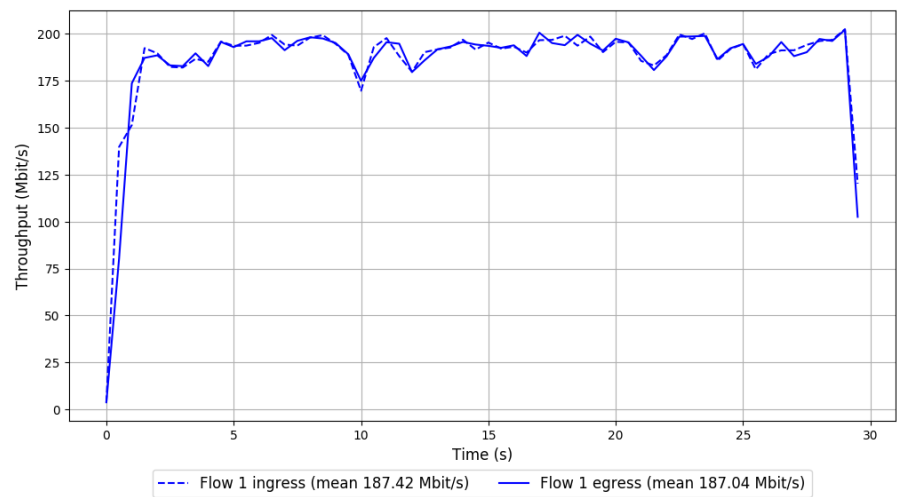
-- Flow 1:

Average throughput: 187.04 Mbit/s

95th percentile per-packet one-way delay: 49.054 ms

Loss rate: 0.54%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

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

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

Below is generated by plot.py at 2017-12-05 15:32:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.59 Mbit/s

95th percentile per-packet one-way delay: 49.465 ms

Loss rate: 0.36%

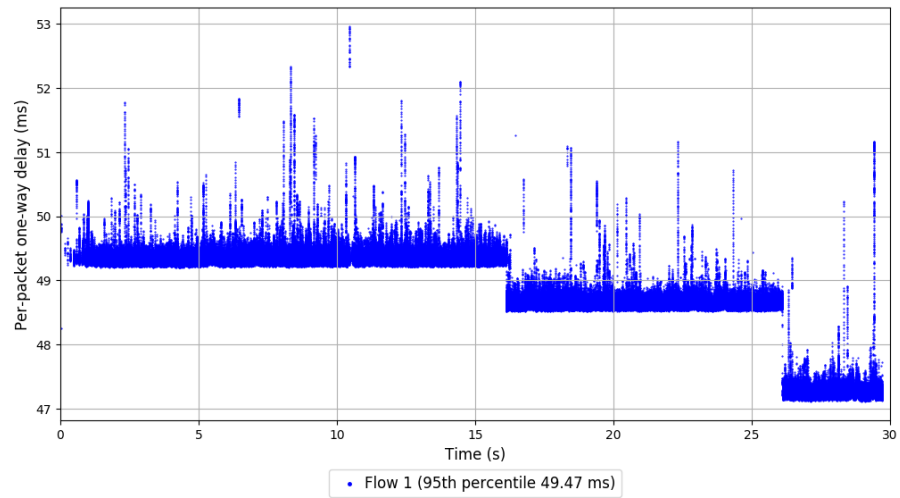
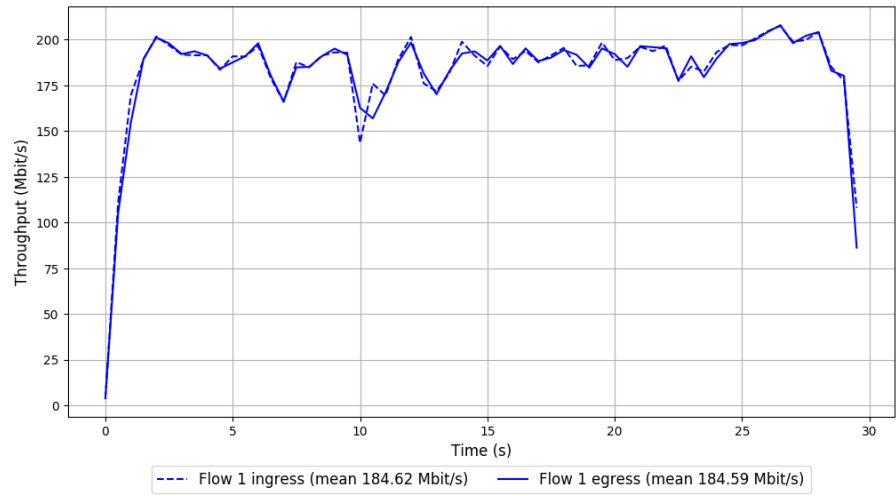
-- Flow 1:

Average throughput: 184.59 Mbit/s

95th percentile per-packet one-way delay: 49.465 ms

Loss rate: 0.36%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-05 12:35:24

End at: 2017-12-05 12:35:54

Below is generated by plot.py at 2017-12-05 15:33:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.66 Mbit/s

95th percentile per-packet one-way delay: 49.448 ms

Loss rate: 0.37%

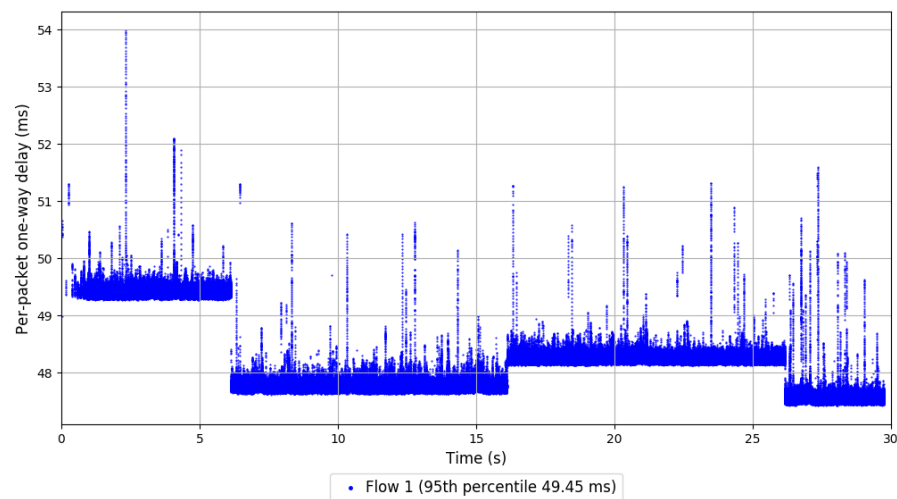
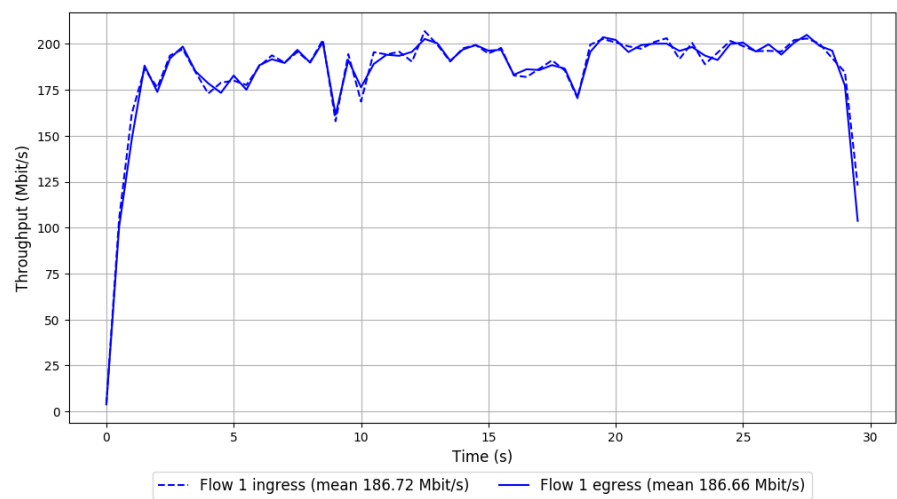
-- Flow 1:

Average throughput: 186.66 Mbit/s

95th percentile per-packet one-way delay: 49.448 ms

Loss rate: 0.37%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-05 12:45:56

End at: 2017-12-05 12:46:26

Below is generated by plot.py at 2017-12-05 15:34:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.33 Mbit/s

95th percentile per-packet one-way delay: 49.414 ms

Loss rate: 0.71%

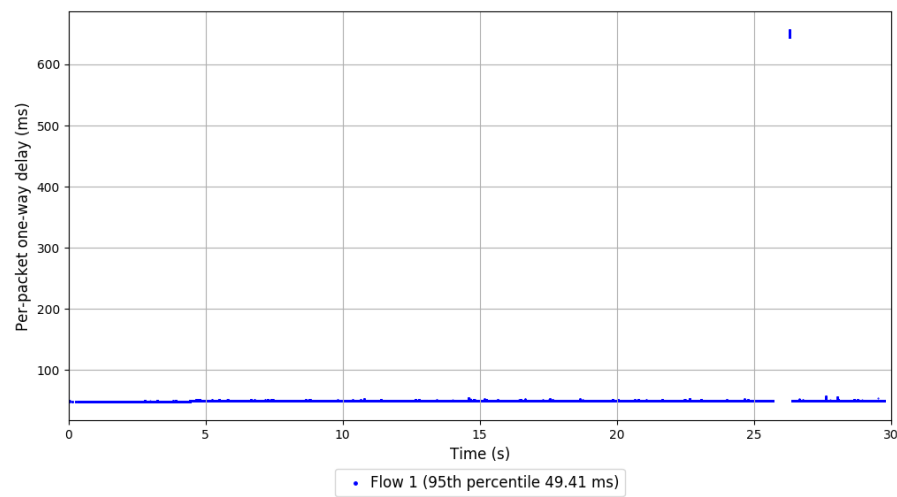
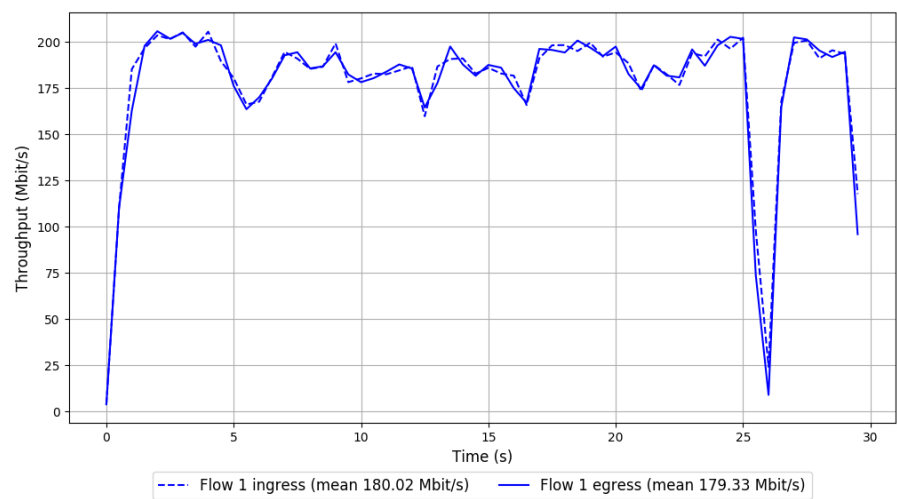
-- Flow 1:

Average throughput: 179.33 Mbit/s

95th percentile per-packet one-way delay: 49.414 ms

Loss rate: 0.71%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-05 12:56:24

End at: 2017-12-05 12:56:54

Below is generated by plot.py at 2017-12-05 15:34:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.70 Mbit/s

95th percentile per-packet one-way delay: 48.978 ms

Loss rate: 0.34%

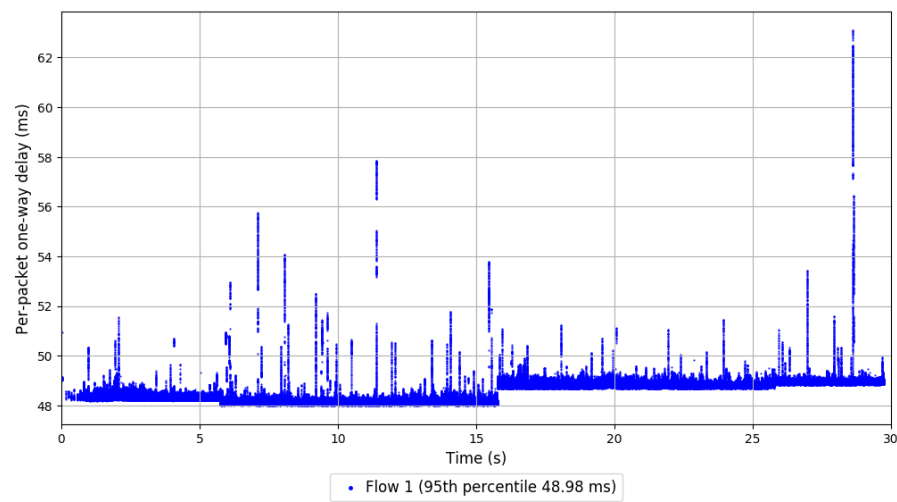
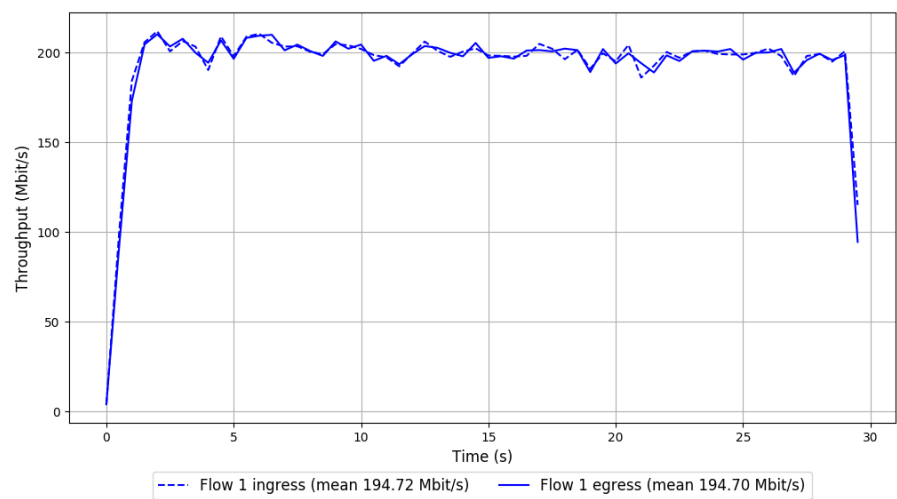
-- Flow 1:

Average throughput: 194.70 Mbit/s

95th percentile per-packet one-way delay: 48.978 ms

Loss rate: 0.34%

Run 10: Report of Indigo — Data Link

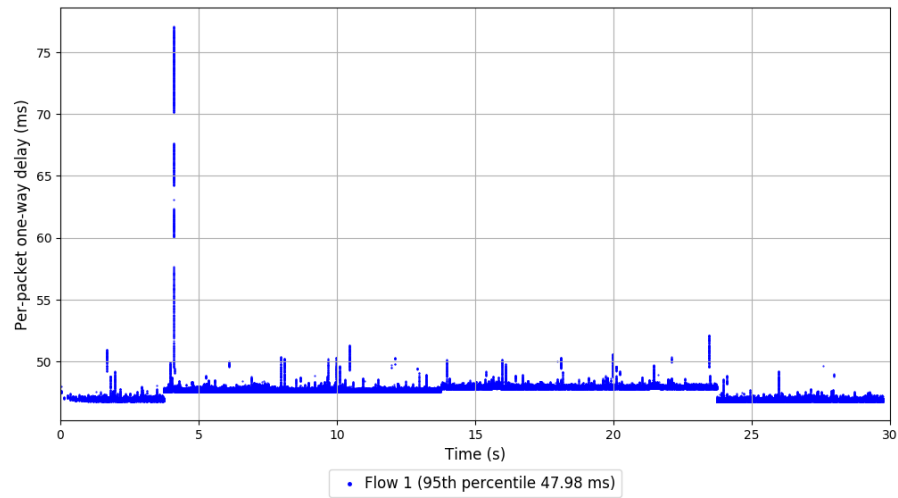
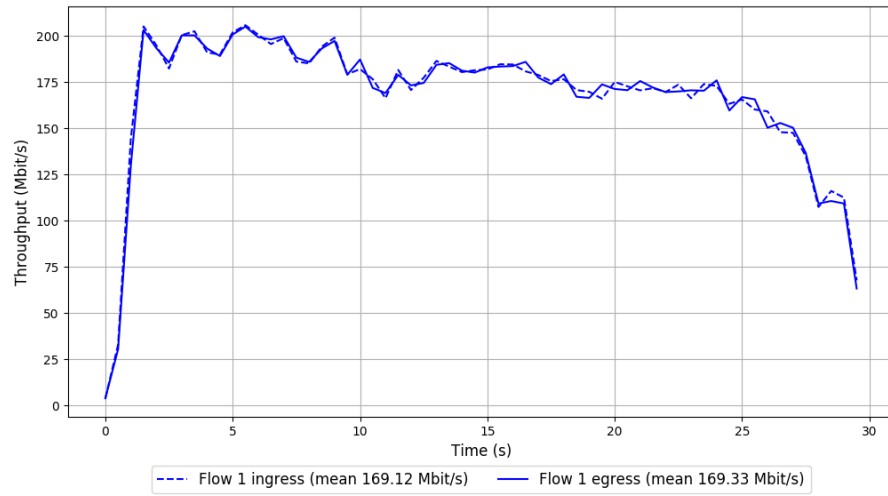


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-05 11:25:36
End at: 2017-12-05 11:26:06

# Below is generated by plot.py at 2017-12-05 15:34:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.33 Mbit/s
95th percentile per-packet one-way delay: 47.975 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 169.33 Mbit/s
95th percentile per-packet one-way delay: 47.975 ms
Loss rate: 0.22%
```

Run 1: Report of Indigo-calib — Data Link

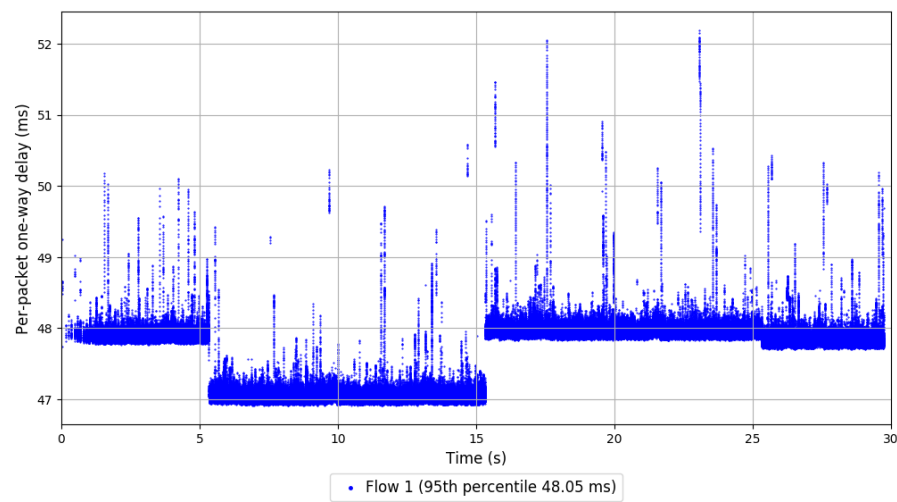
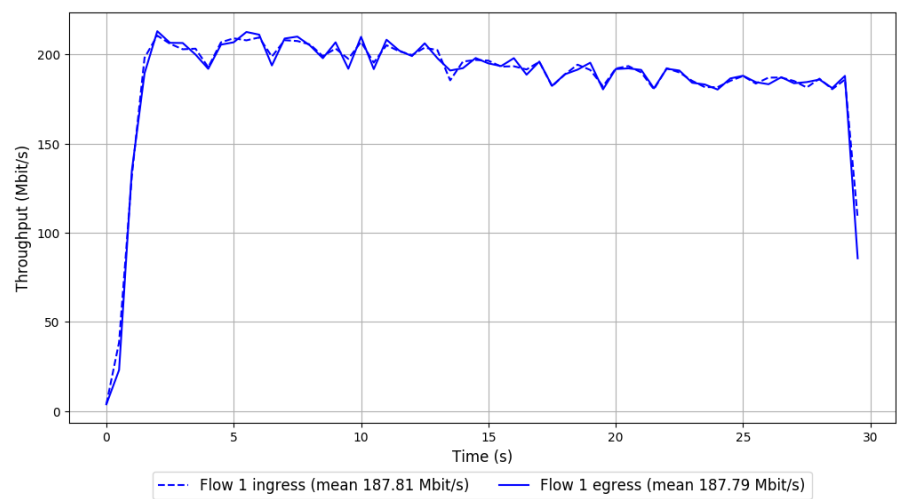


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-05 11:36:05
End at: 2017-12-05 11:36:35

# Below is generated by plot.py at 2017-12-05 15:34:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 187.79 Mbit/s
95th percentile per-packet one-way delay: 48.047 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 187.79 Mbit/s
95th percentile per-packet one-way delay: 48.047 ms
Loss rate: 0.34%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-12-05 11:46:38

End at: 2017-12-05 11:47:08

Below is generated by plot.py at 2017-12-05 15:34:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.30 Mbit/s

95th percentile per-packet one-way delay: 48.024 ms

Loss rate: 0.28%

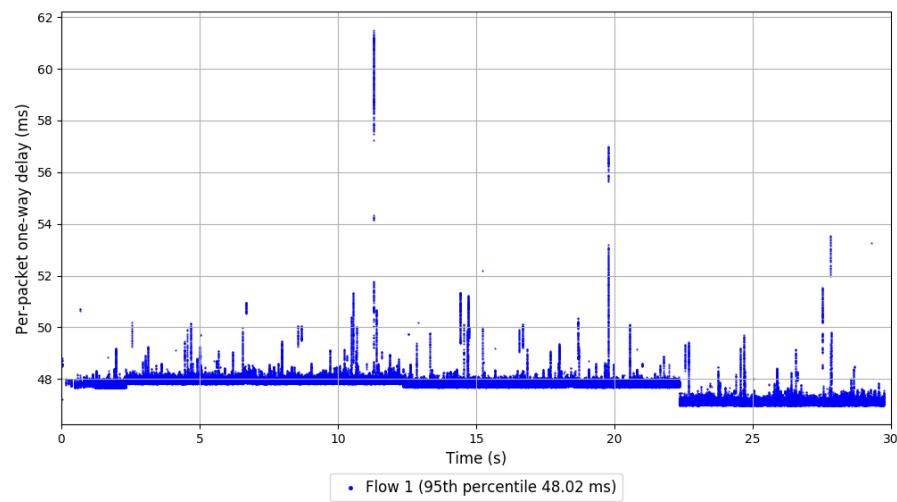
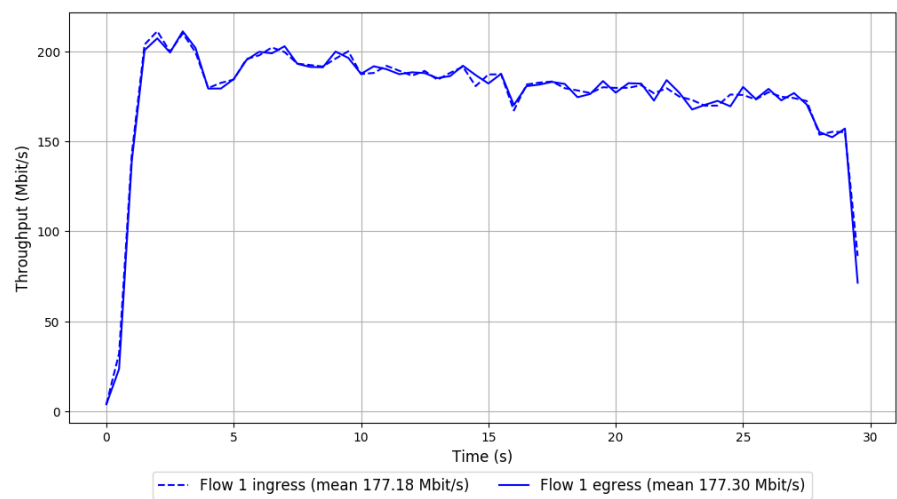
-- Flow 1:

Average throughput: 177.30 Mbit/s

95th percentile per-packet one-way delay: 48.024 ms

Loss rate: 0.28%

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-05 11:57:06

End at: 2017-12-05 11:57:36

Below is generated by plot.py at 2017-12-05 15:35:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.47 Mbit/s

95th percentile per-packet one-way delay: 47.969 ms

Loss rate: 0.50%

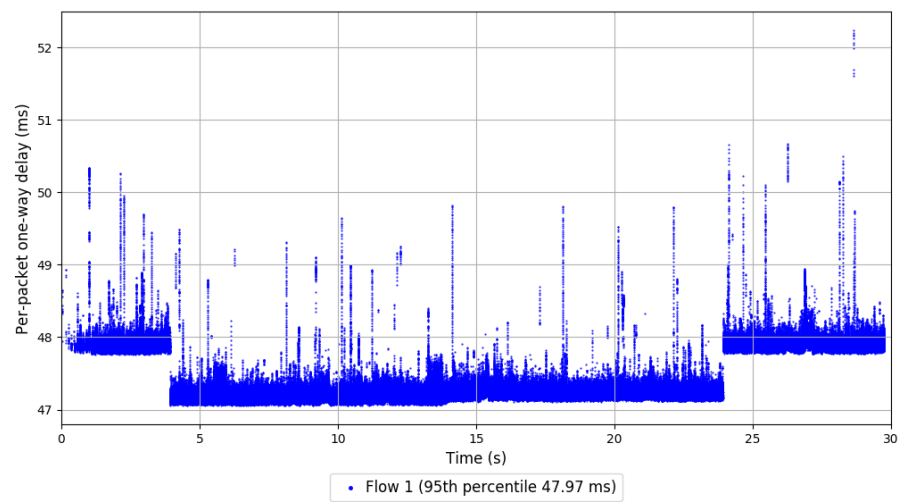
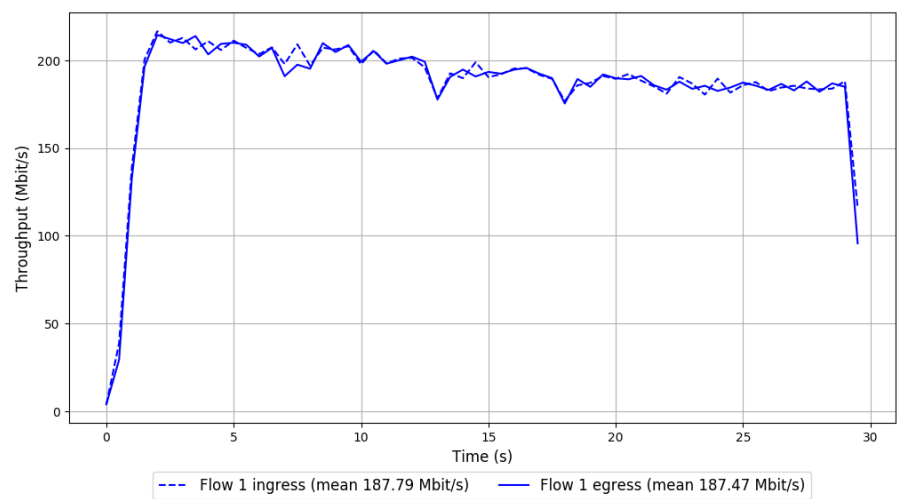
-- Flow 1:

Average throughput: 187.47 Mbit/s

95th percentile per-packet one-way delay: 47.969 ms

Loss rate: 0.50%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-05 12:07:40

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

Below is generated by plot.py at 2017-12-05 15:35:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 161.27 Mbit/s

95th percentile per-packet one-way delay: 48.268 ms

Loss rate: 0.23%

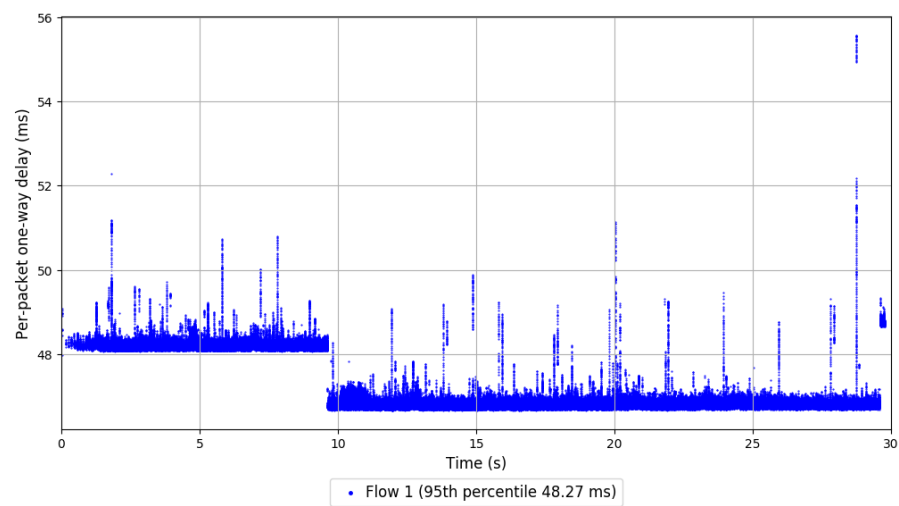
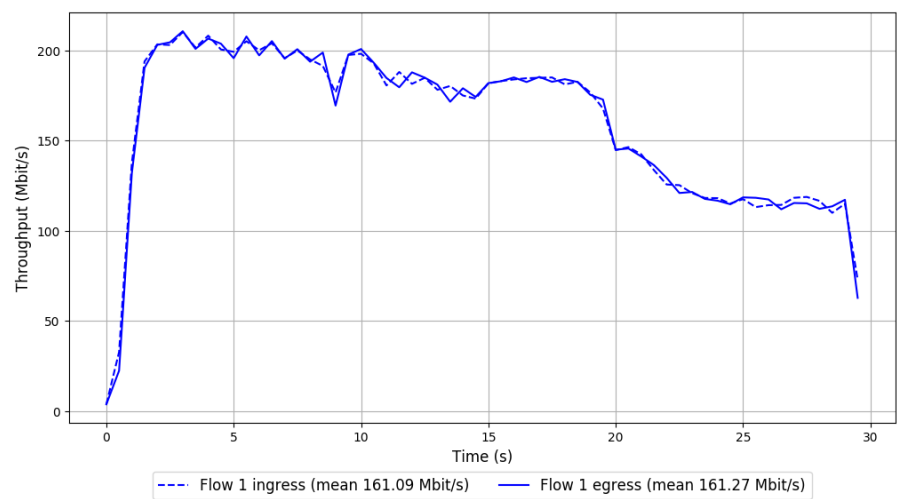
-- Flow 1:

Average throughput: 161.27 Mbit/s

95th percentile per-packet one-way delay: 48.268 ms

Loss rate: 0.23%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

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

End at: 2017-12-05 12:18:38

Below is generated by plot.py at 2017-12-05 15:35:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.82 Mbit/s

95th percentile per-packet one-way delay: 48.613 ms

Loss rate: 0.23%

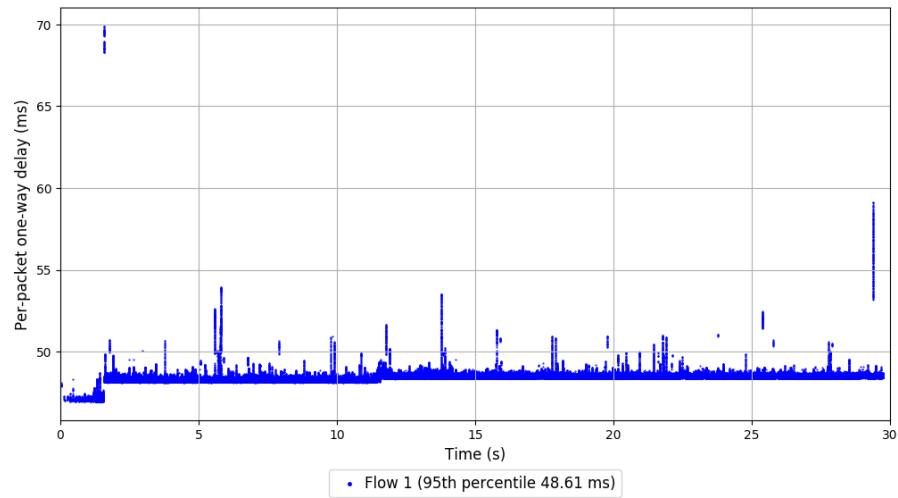
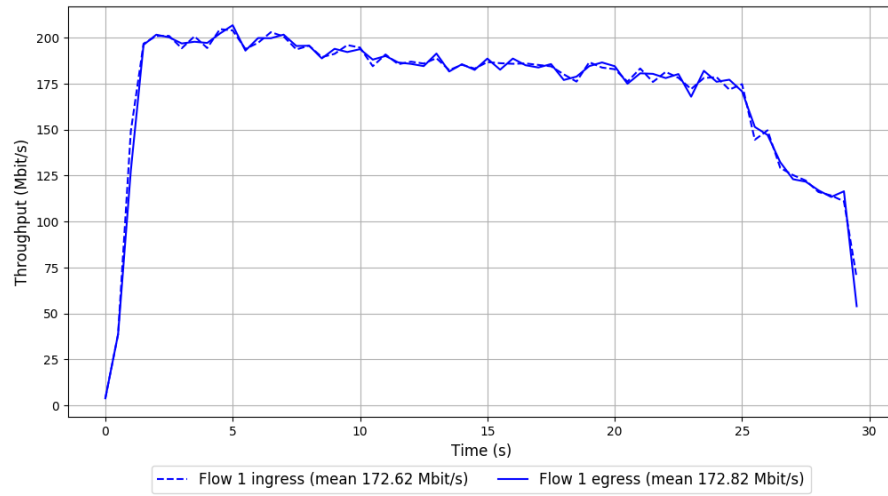
-- Flow 1:

Average throughput: 172.82 Mbit/s

95th percentile per-packet one-way delay: 48.613 ms

Loss rate: 0.23%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-05 12:28:37

End at: 2017-12-05 12:29:07

Below is generated by plot.py at 2017-12-05 15:36:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.22 Mbit/s

95th percentile per-packet one-way delay: 48.872 ms

Loss rate: 0.21%

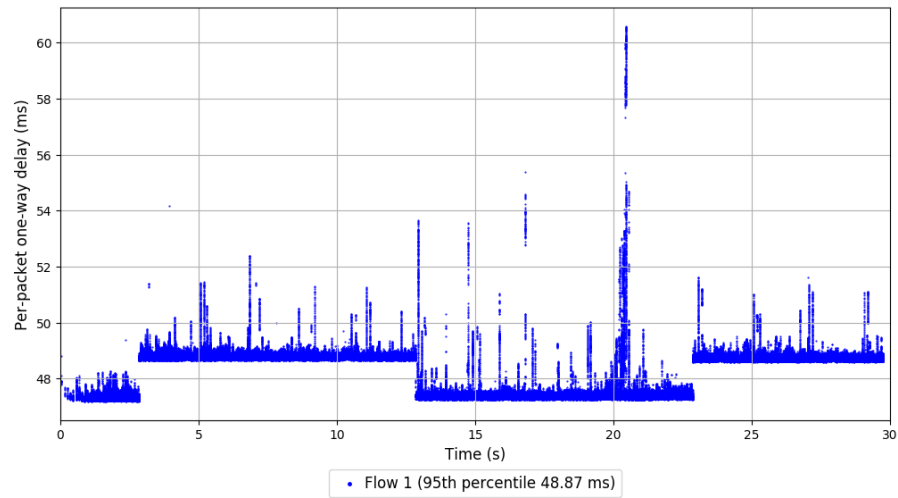
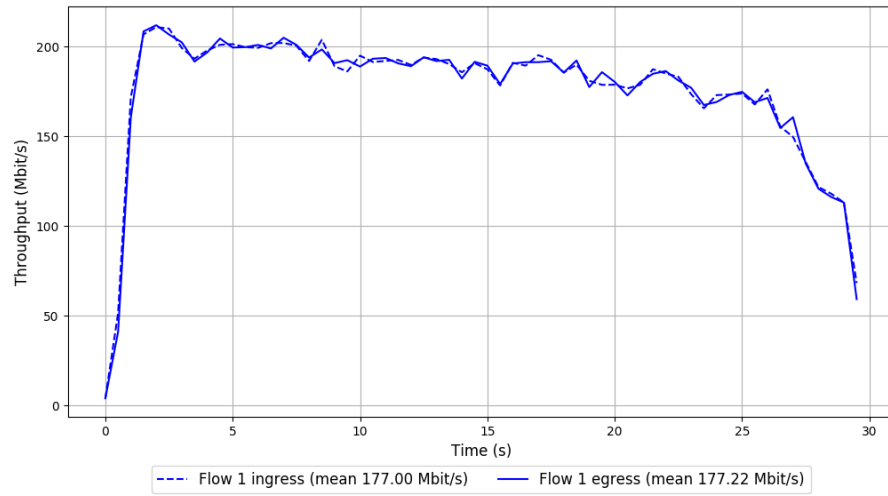
-- Flow 1:

Average throughput: 177.22 Mbit/s

95th percentile per-packet one-way delay: 48.872 ms

Loss rate: 0.21%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-05 12:39:07

End at: 2017-12-05 12:39:37

Below is generated by plot.py at 2017-12-05 15:36:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.63 Mbit/s

95th percentile per-packet one-way delay: 49.226 ms

Loss rate: 0.34%

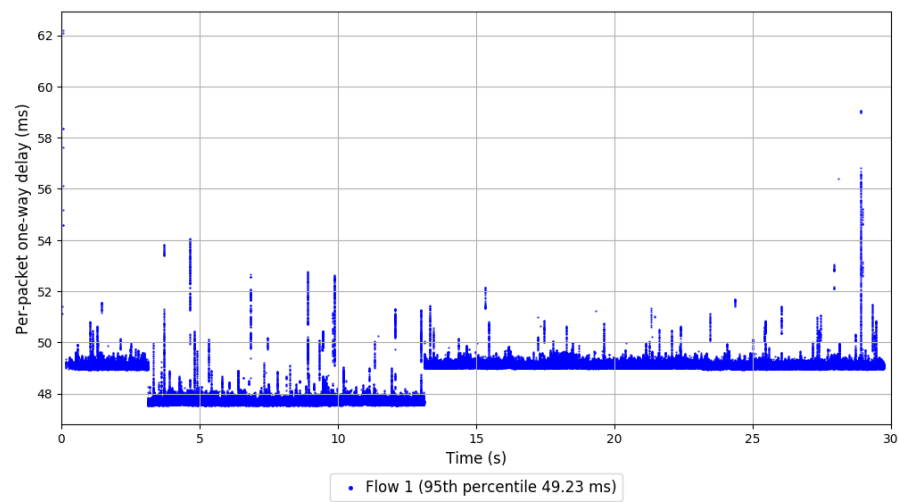
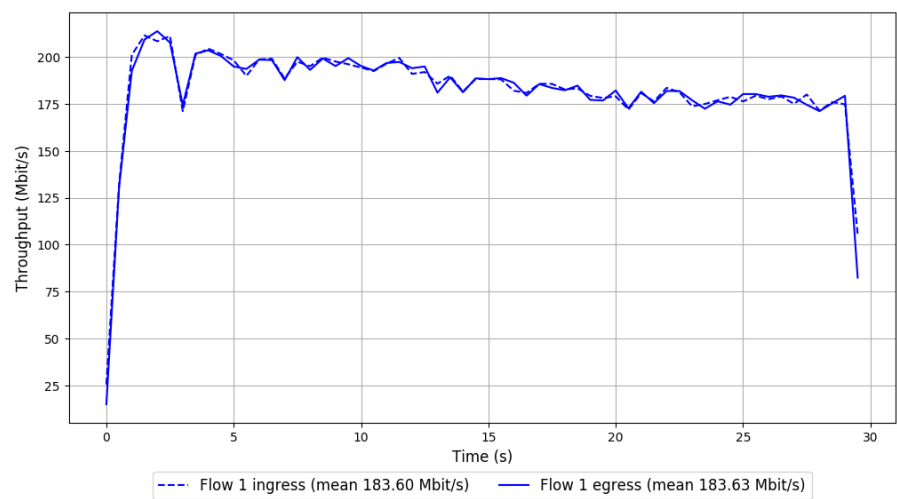
-- Flow 1:

Average throughput: 183.63 Mbit/s

95th percentile per-packet one-way delay: 49.226 ms

Loss rate: 0.34%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-05 12:49:40

End at: 2017-12-05 12:50:10

Below is generated by plot.py at 2017-12-05 15:36:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 167.52 Mbit/s

95th percentile per-packet one-way delay: 49.481 ms

Loss rate: 0.21%

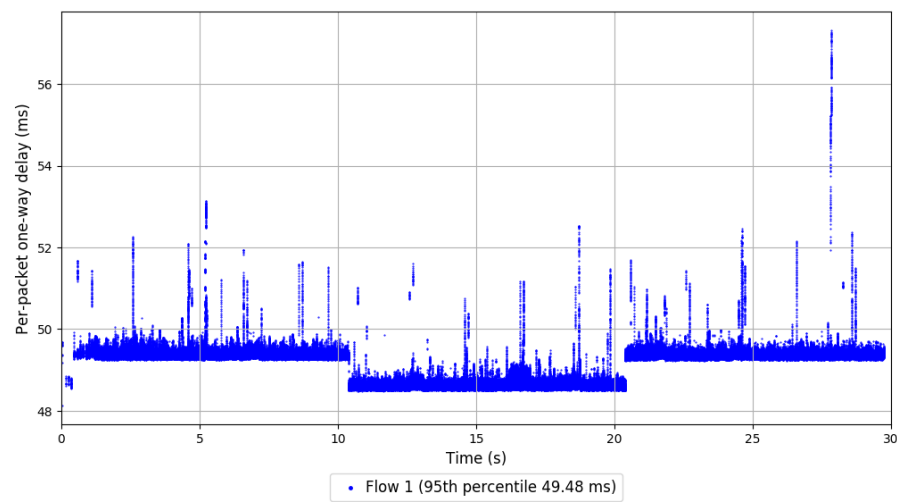
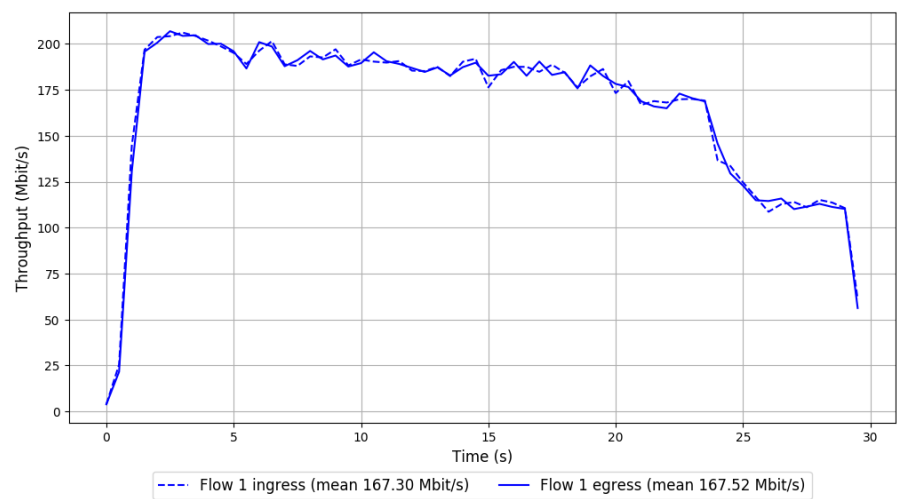
-- Flow 1:

Average throughput: 167.52 Mbit/s

95th percentile per-packet one-way delay: 49.481 ms

Loss rate: 0.21%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-05 13:00:07

End at: 2017-12-05 13:00:38

Below is generated by plot.py at 2017-12-05 15:36:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.02 Mbit/s

95th percentile per-packet one-way delay: 49.738 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 181.02 Mbit/s

95th percentile per-packet one-way delay: 49.738 ms

Loss rate: 0.32%

Run 10: Report of Indigo-calib — Data Link

