

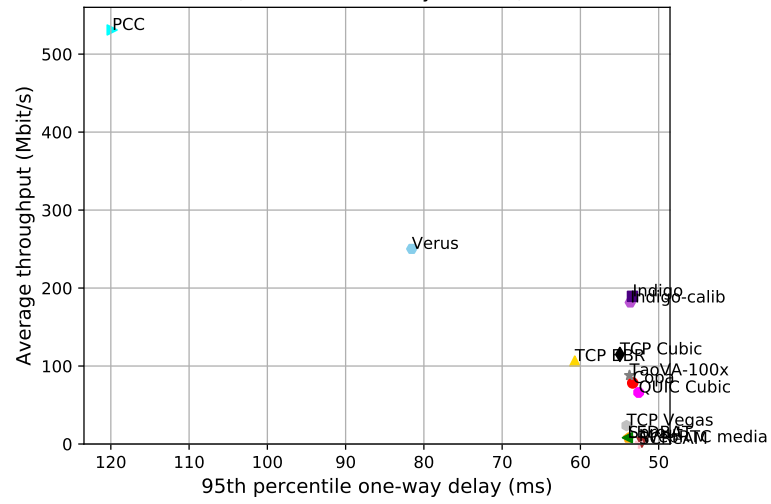
## Pantheon Report

Generated at 2017-12-05 16:08:26 (UTC).  
Data path: GCE Sydney Ethernet (*local*) → GCE Tokyo Ethernet (*remote*).  
Repeated the test of 14 congestion control schemes 10 times.  
Each test lasted for 30 seconds running 1 flow.  
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).  
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo\_fast**).

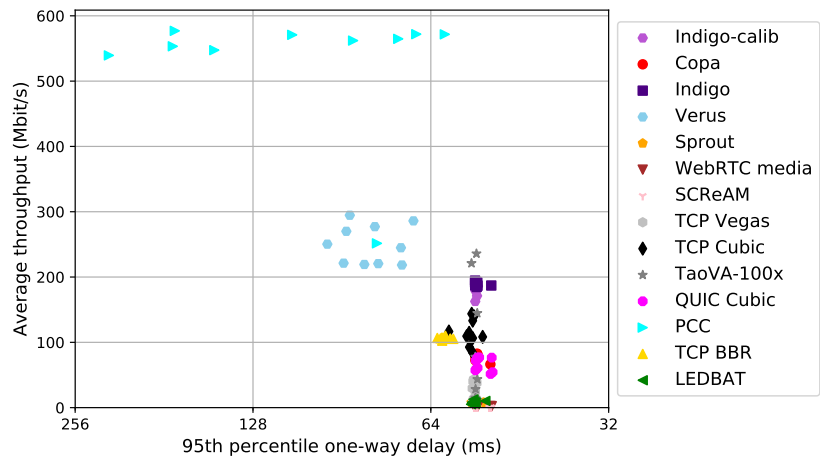
Git summary:

```
branch: indigos @ 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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



| scheme       | # runs | mean avg tput (Mbit/s)<br>flow 1 | mean 95th-%ile delay (ms)<br>flow 1 | mean loss rate (%)<br>flow 1 |
|--------------|--------|----------------------------------|-------------------------------------|------------------------------|
| TCP BBR      | 10     | 106.38                           | 60.72                               | 0.10                         |
| TCP Cubic    | 10     | 114.93                           | 54.96                               | 0.04                         |
| LEDBAT       | 10     | 8.10                             | 54.00                               | 0.25                         |
| PCC          | 10     | 530.98                           | 119.83                              | 0.66                         |
| QUIC Cubic   | 10     | 66.06                            | 52.56                               | 0.00                         |
| SCReAM       | 10     | 0.21                             | 52.51                               | 0.01                         |
| WebRTC media | 10     | 2.29                             | 52.14                               | 0.00                         |
| Sprout       | 10     | 7.81                             | 53.87                               | 0.11                         |
| TaoVA-100x   | 9      | 88.03                            | 53.73                               | 0.01                         |
| TCP Vegas    | 10     | 23.59                            | 54.11                               | 0.21                         |
| Verus        | 10     | 250.25                           | 81.55                               | 0.19                         |
| Copa         | 10     | 78.25                            | 53.32                               | 0.00                         |
| Indigo       | 10     | 189.38                           | 53.35                               | 0.00                         |
| Indigo-calib | 10     | 181.50                           | 53.63                               | 0.03                         |

Run 1: Statistics of TCP BBR

Start at: 2017-12-05 13:03:16

End at: 2017-12-05 13:03:46

# Below is generated by plot.py at 2017-12-05 15:32:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 106.71 Mbit/s

95th percentile per-packet one-way delay: 62.398 ms

Loss rate: 0.46%

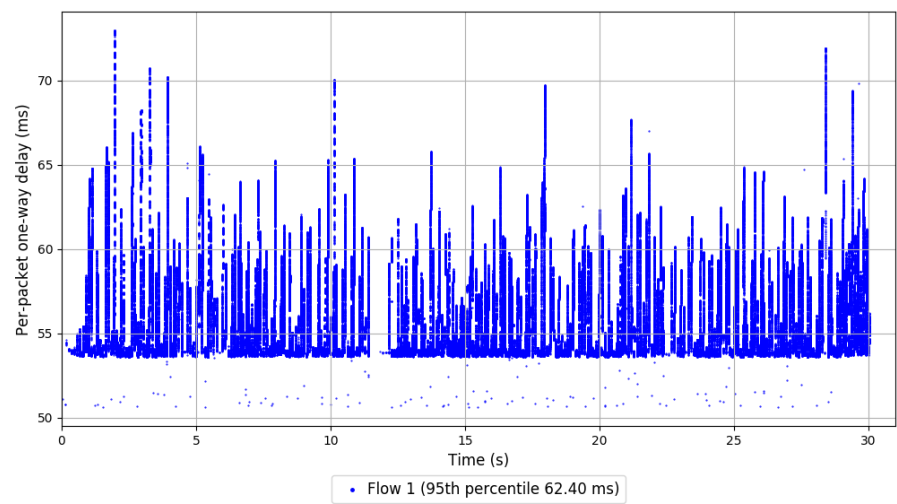
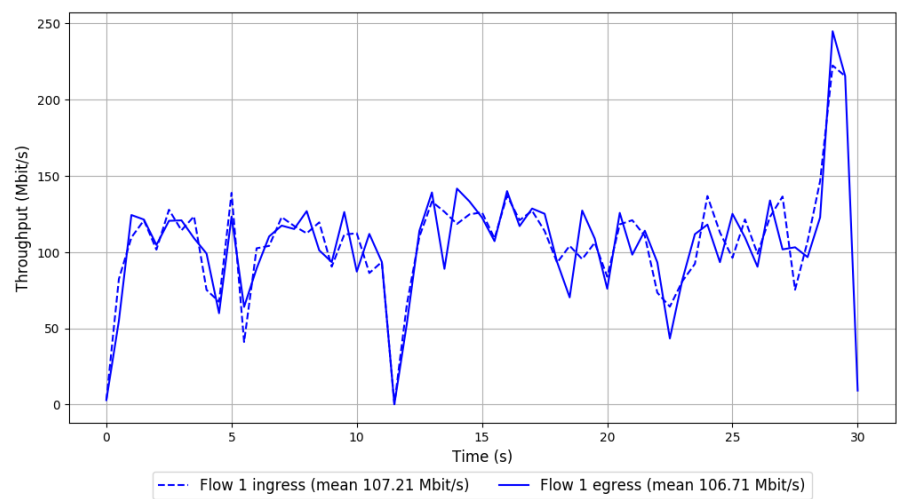
-- Flow 1:

Average throughput: 106.71 Mbit/s

95th percentile per-packet one-way delay: 62.398 ms

Loss rate: 0.46%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-05 13:13:31

End at: 2017-12-05 13:14:01

# Below is generated by plot.py at 2017-12-05 15:32:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 102.52 Mbit/s

95th percentile per-packet one-way delay: 61.229 ms

Loss rate: 0.02%

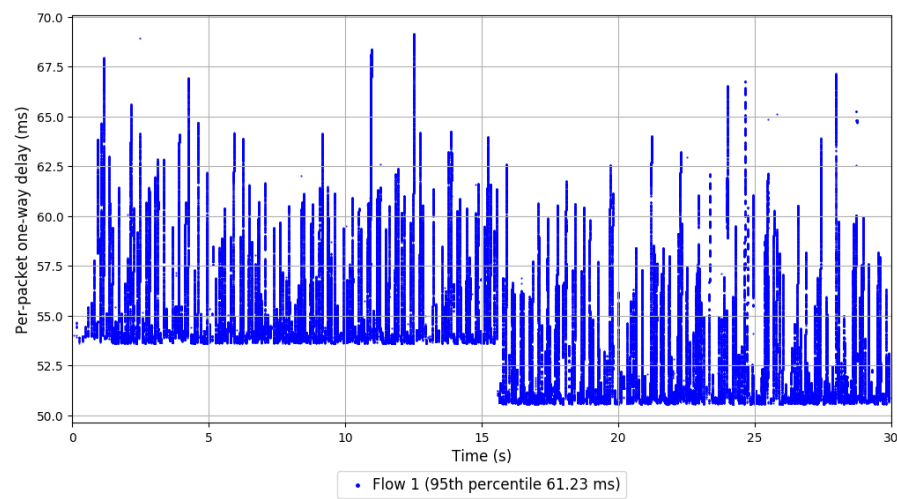
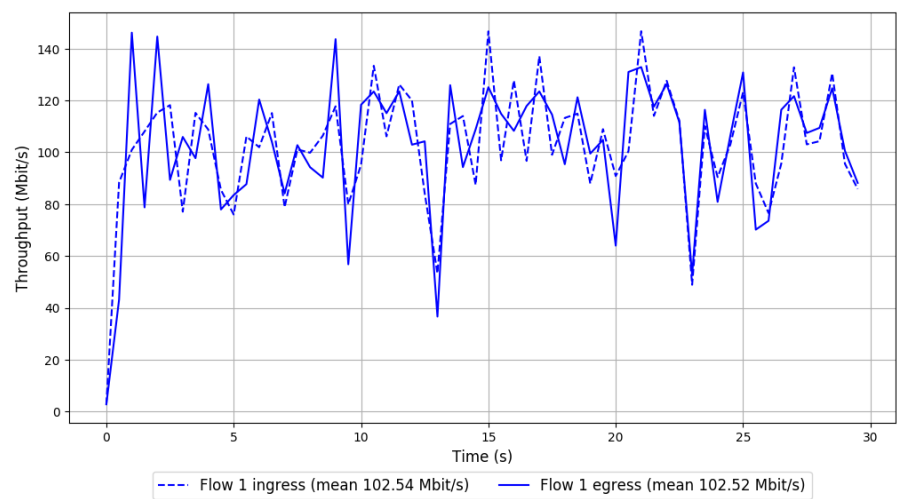
-- Flow 1:

Average throughput: 102.52 Mbit/s

95th percentile per-packet one-way delay: 61.229 ms

Loss rate: 0.02%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-05 13:23:56

End at: 2017-12-05 13:24:26

# Below is generated by plot.py at 2017-12-05 15:32:11

# Datalink statistics

-- Total of 1 flow:

Average throughput: 106.06 Mbit/s

95th percentile per-packet one-way delay: 61.633 ms

Loss rate: 0.00%

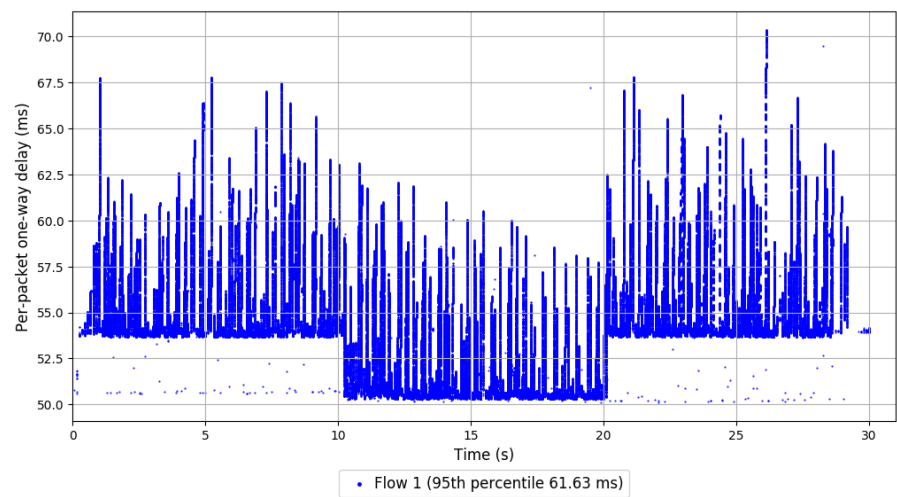
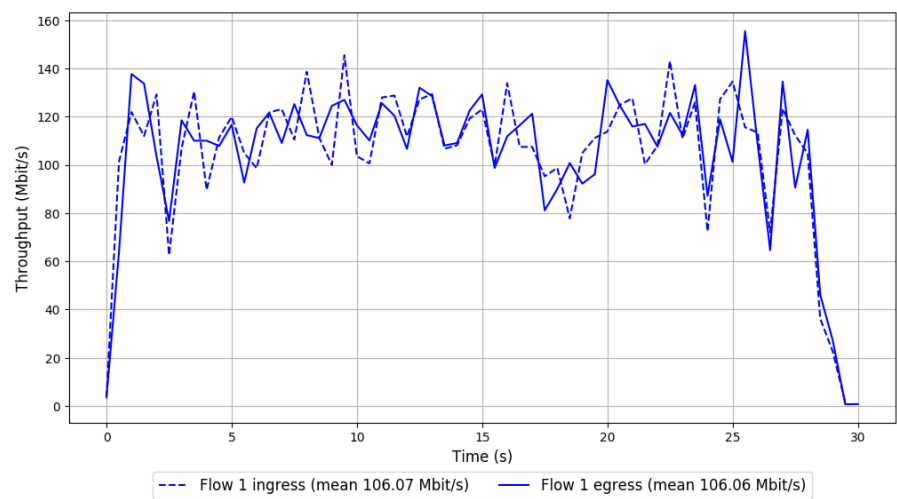
-- Flow 1:

Average throughput: 106.06 Mbit/s

95th percentile per-packet one-way delay: 61.633 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-05 13:34:17

End at: 2017-12-05 13:34:47

# Below is generated by plot.py at 2017-12-05 15:32:11

# Datalink statistics

-- Total of 1 flow:

Average throughput: 107.53 Mbit/s

95th percentile per-packet one-way delay: 60.713 ms

Loss rate: 0.01%

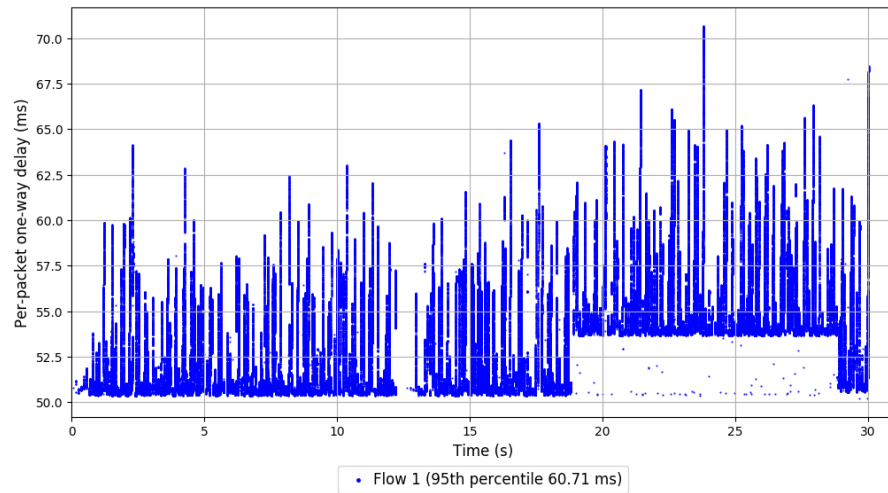
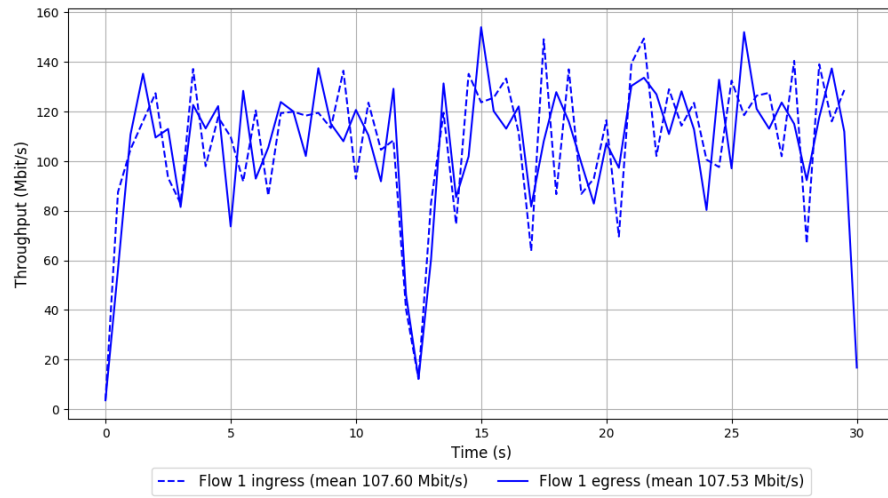
-- Flow 1:

Average throughput: 107.53 Mbit/s

95th percentile per-packet one-way delay: 60.713 ms

Loss rate: 0.01%

#### Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-05 13:44:31

End at: 2017-12-05 13:45:01

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

# Datalink statistics

-- Total of 1 flow:

Average throughput: 107.08 Mbit/s

95th percentile per-packet one-way delay: 60.778 ms

Loss rate: 0.06%

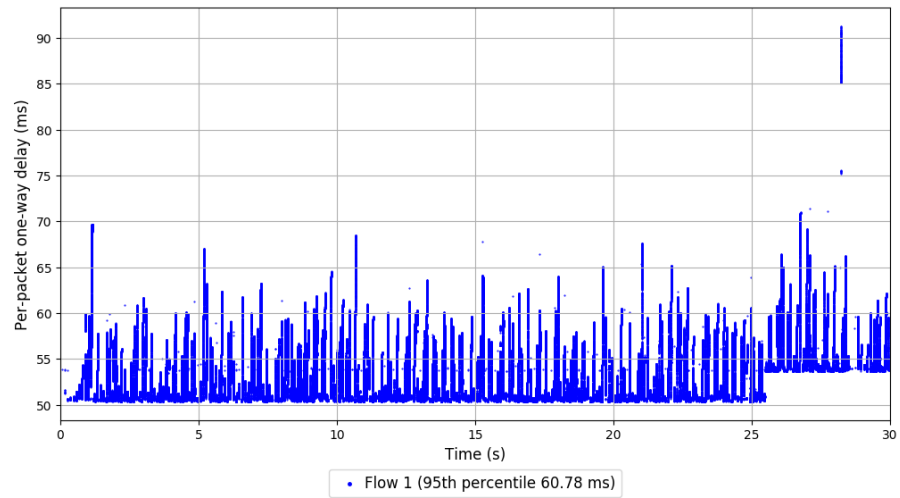
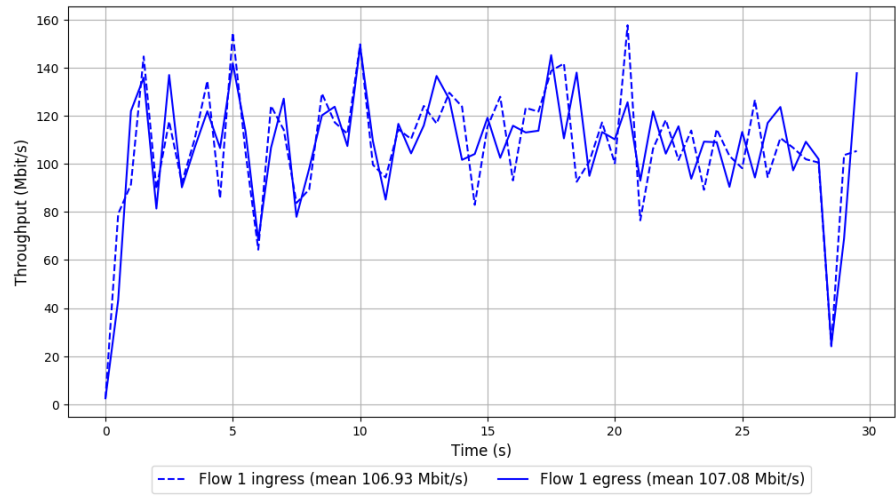
-- Flow 1:

Average throughput: 107.08 Mbit/s

95th percentile per-packet one-way delay: 60.778 ms

Loss rate: 0.06%

### Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-05 13:54:44

End at: 2017-12-05 13:55:14

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

# Datalink statistics

-- Total of 1 flow:

Average throughput: 107.30 Mbit/s

95th percentile per-packet one-way delay: 61.275 ms

Loss rate: 0.23%

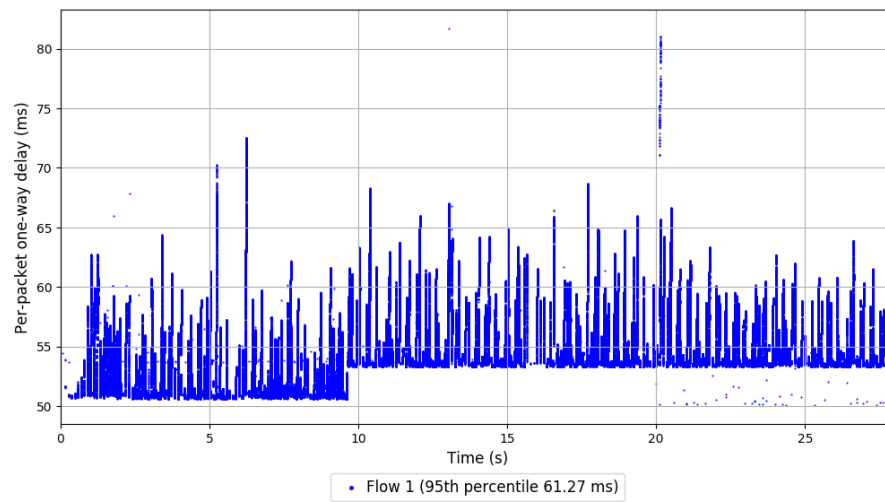
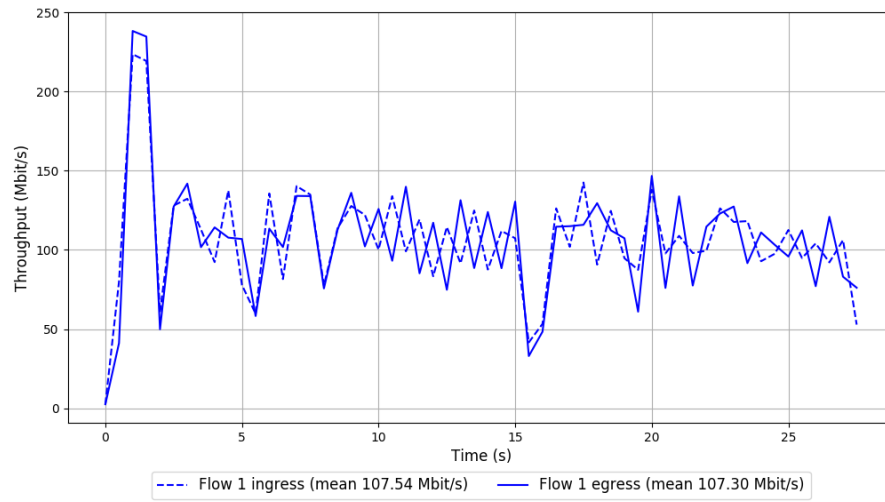
-- Flow 1:

Average throughput: 107.30 Mbit/s

95th percentile per-packet one-way delay: 61.275 ms

Loss rate: 0.23%

## Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-05 14:05:01

End at: 2017-12-05 14:05:31

# Below is generated by plot.py at 2017-12-05 15:32:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 110.13 Mbit/s

95th percentile per-packet one-way delay: 60.458 ms

Loss rate: 0.07%

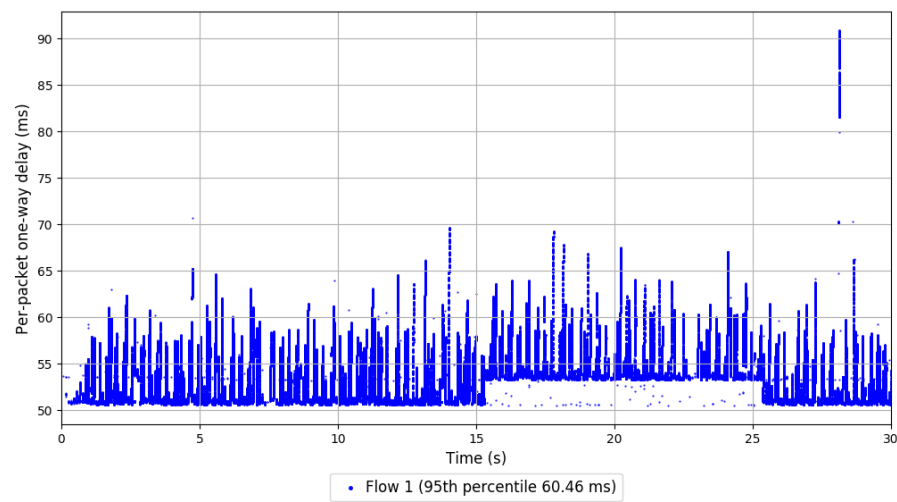
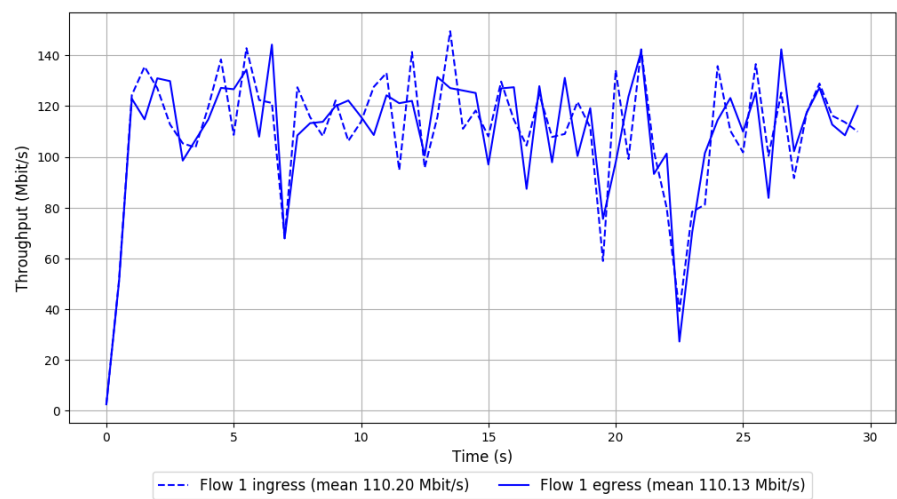
-- Flow 1:

Average throughput: 110.13 Mbit/s

95th percentile per-packet one-way delay: 60.458 ms

Loss rate: 0.07%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-05 14:15:34

End at: 2017-12-05 14:16:04

# Below is generated by plot.py at 2017-12-05 15:32:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 105.80 Mbit/s

95th percentile per-packet one-way delay: 59.328 ms

Loss rate: 0.03%

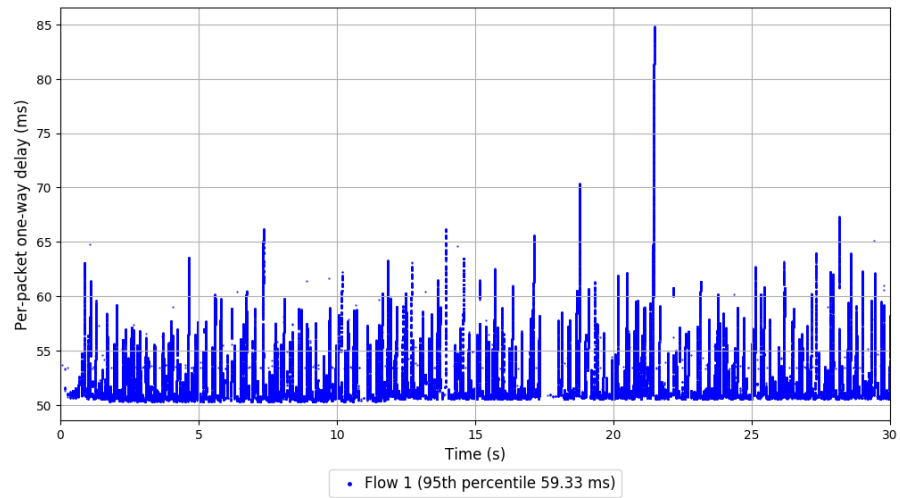
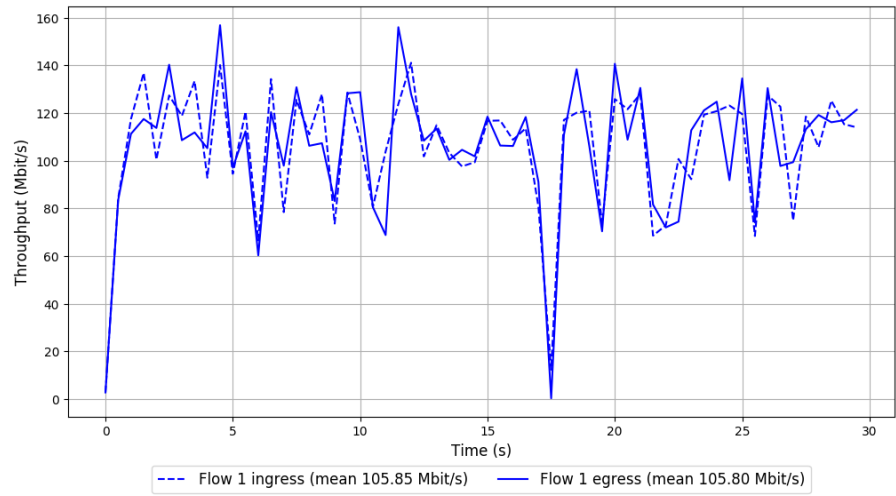
-- Flow 1:

Average throughput: 105.80 Mbit/s

95th percentile per-packet one-way delay: 59.328 ms

Loss rate: 0.03%

### Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-05 14:26:01

End at: 2017-12-05 14:26:31

# Below is generated by plot.py at 2017-12-05 15:34:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 105.34 Mbit/s

95th percentile per-packet one-way delay: 58.630 ms

Loss rate: 0.01%

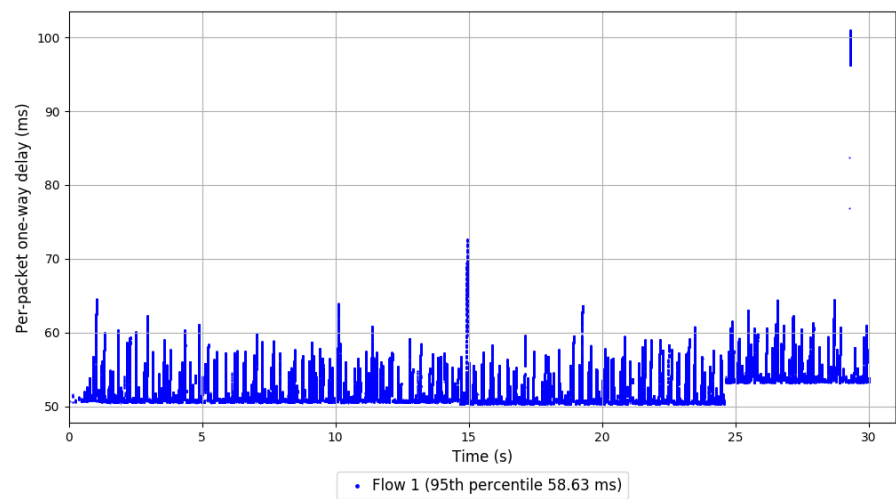
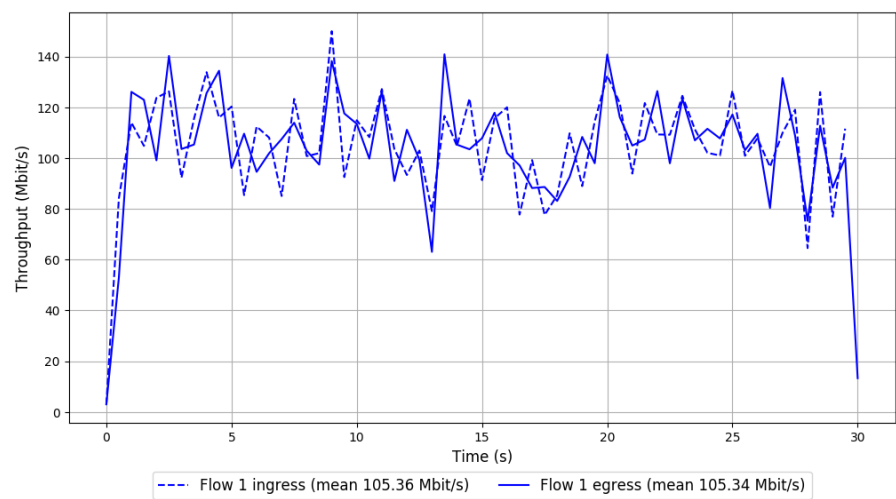
-- Flow 1:

Average throughput: 105.34 Mbit/s

95th percentile per-packet one-way delay: 58.630 ms

Loss rate: 0.01%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-05 14:36:17

End at: 2017-12-05 14:36:47

# Below is generated by plot.py at 2017-12-05 15:34:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 105.30 Mbit/s

95th percentile per-packet one-way delay: 60.761 ms

Loss rate: 0.15%

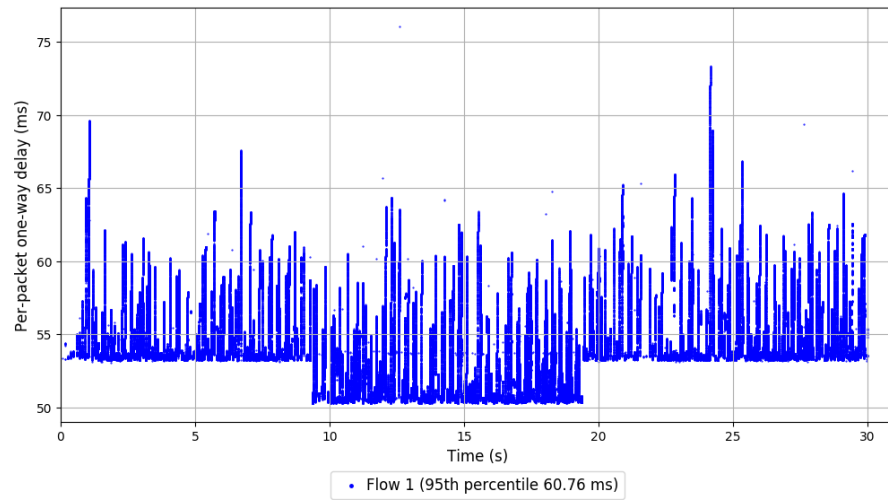
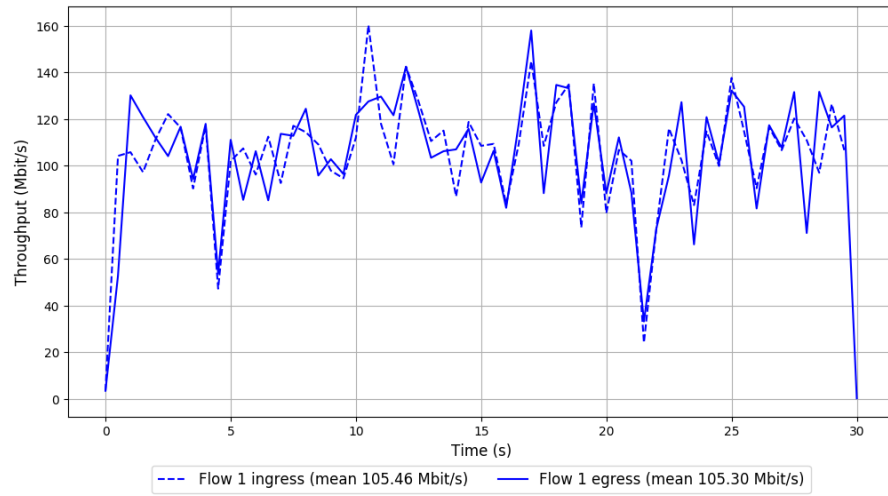
-- Flow 1:

Average throughput: 105.30 Mbit/s

95th percentile per-packet one-way delay: 60.761 ms

Loss rate: 0.15%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-05 13:07:38

End at: 2017-12-05 13:08:08

# Below is generated by plot.py at 2017-12-05 15:34:06

# Datalink statistics

-- Total of 1 flow:

Average throughput: 109.43 Mbit/s

95th percentile per-packet one-way delay: 55.649 ms

Loss rate: 0.00%

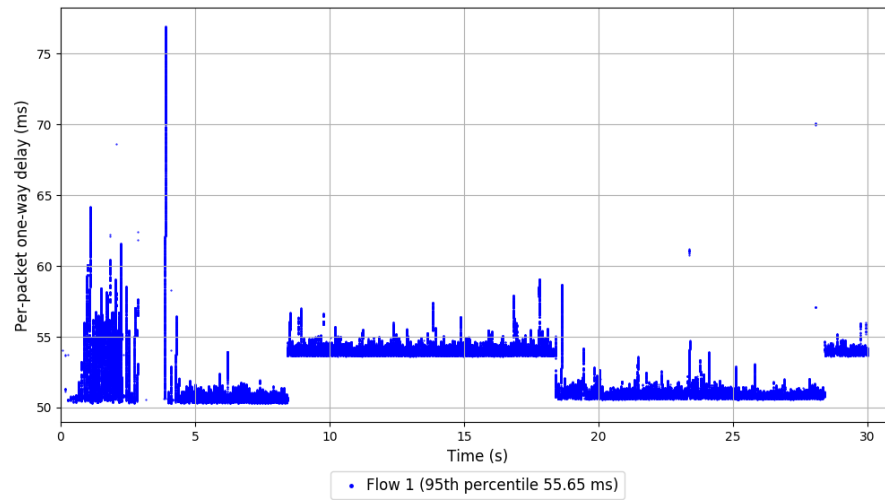
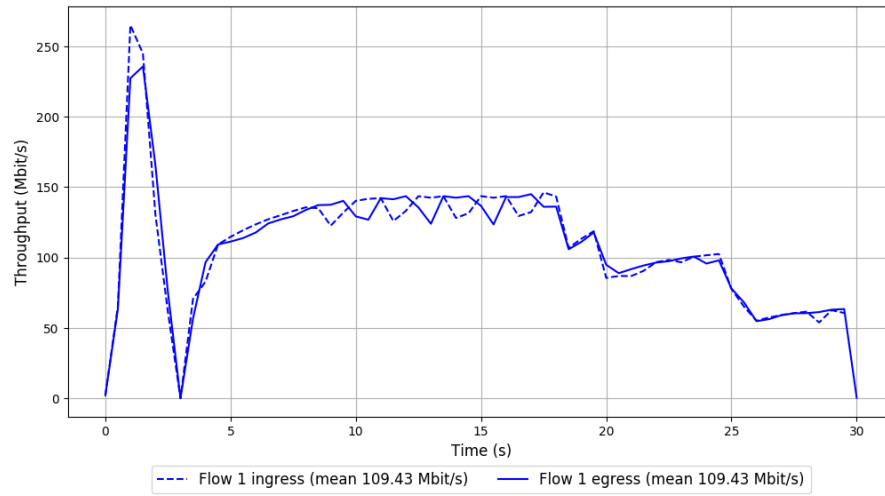
-- Flow 1:

Average throughput: 109.43 Mbit/s

95th percentile per-packet one-way delay: 55.649 ms

Loss rate: 0.00%

### Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-05 13:17:51

End at: 2017-12-05 13:18:21

# Below is generated by plot.py at 2017-12-05 15:34:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 143.72 Mbit/s

95th percentile per-packet one-way delay: 54.575 ms

Loss rate: 0.00%

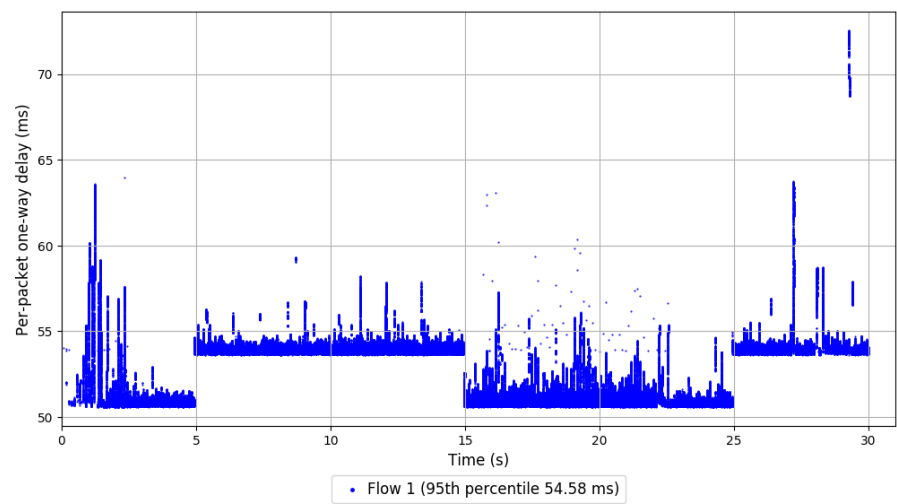
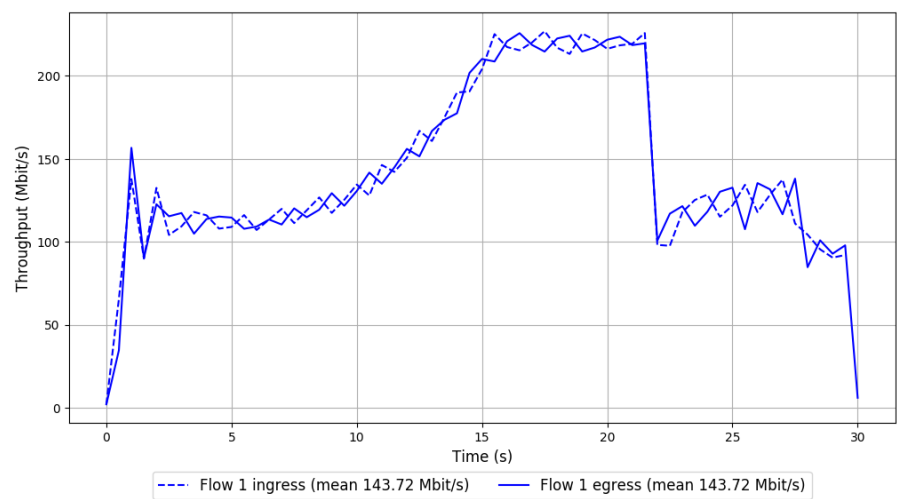
-- Flow 1:

Average throughput: 143.72 Mbit/s

95th percentile per-packet one-way delay: 54.575 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-05 13:28:17

End at: 2017-12-05 13:28:47

# Below is generated by plot.py at 2017-12-05 15:34:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 114.55 Mbit/s

95th percentile per-packet one-way delay: 55.122 ms

Loss rate: 0.37%

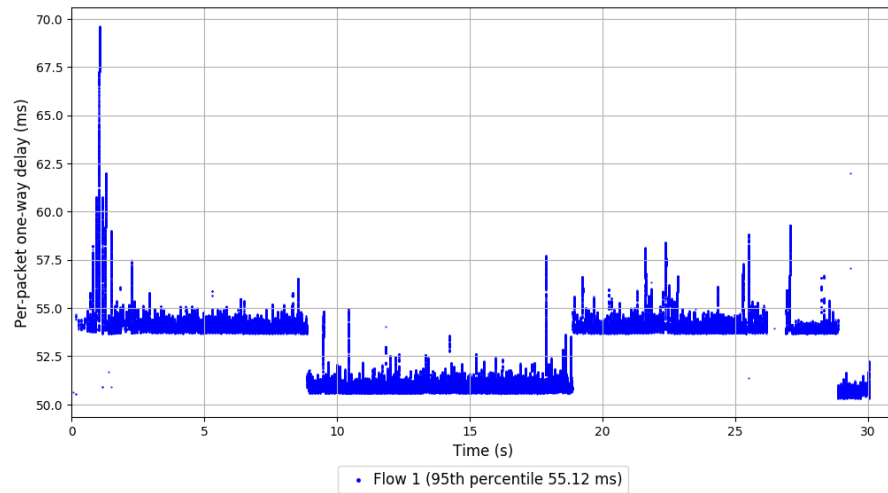
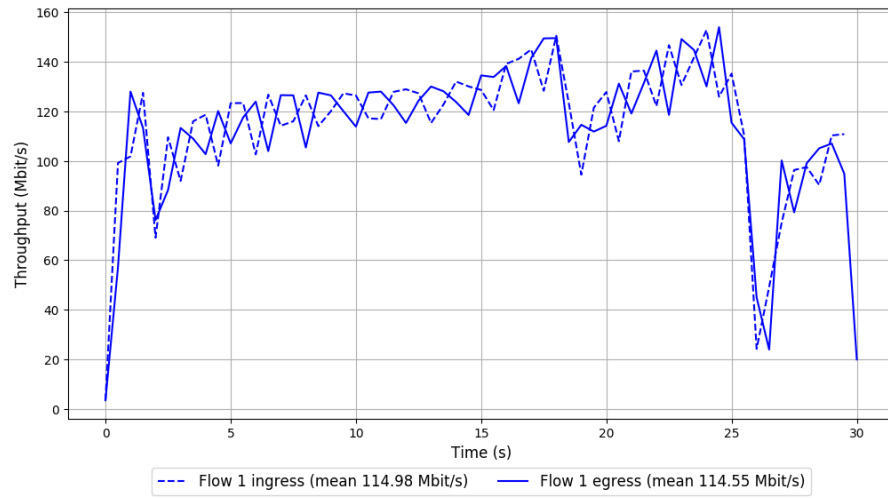
-- Flow 1:

Average throughput: 114.55 Mbit/s

95th percentile per-packet one-way delay: 55.122 ms

Loss rate: 0.37%

### Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-05 13:38:37

End at: 2017-12-05 13:39:08

# Below is generated by plot.py at 2017-12-05 15:34:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 116.60 Mbit/s

95th percentile per-packet one-way delay: 59.646 ms

Loss rate: 0.04%

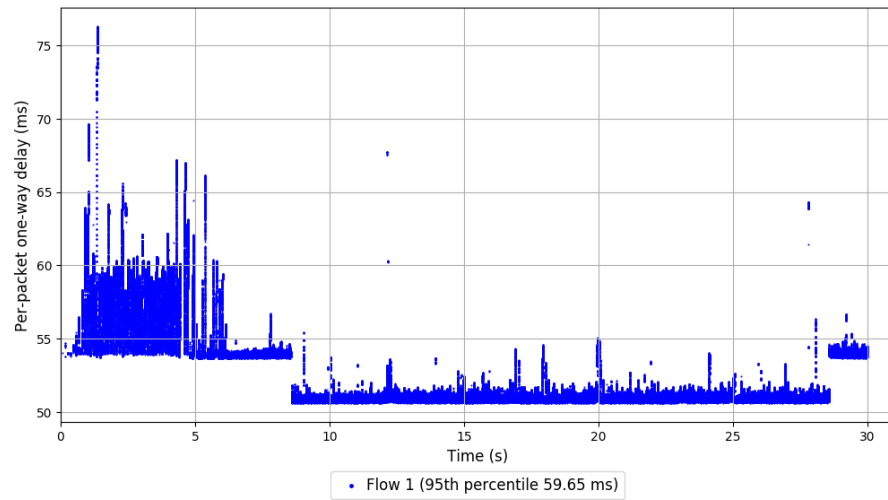
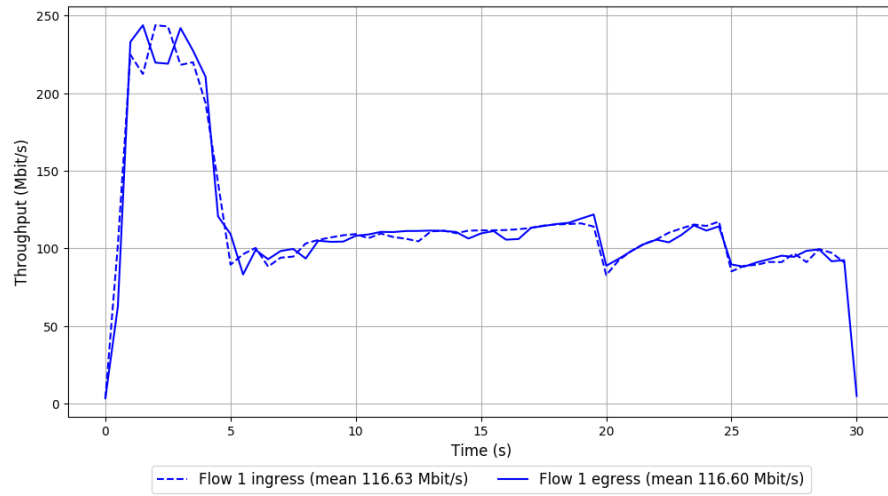
-- Flow 1:

Average throughput: 116.60 Mbit/s

95th percentile per-packet one-way delay: 59.646 ms

Loss rate: 0.04%

#### Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-05 13:48:52

End at: 2017-12-05 13:49:22

# Below is generated by plot.py at 2017-12-05 15:34:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 133.16 Mbit/s

95th percentile per-packet one-way delay: 54.364 ms

Loss rate: 0.00%

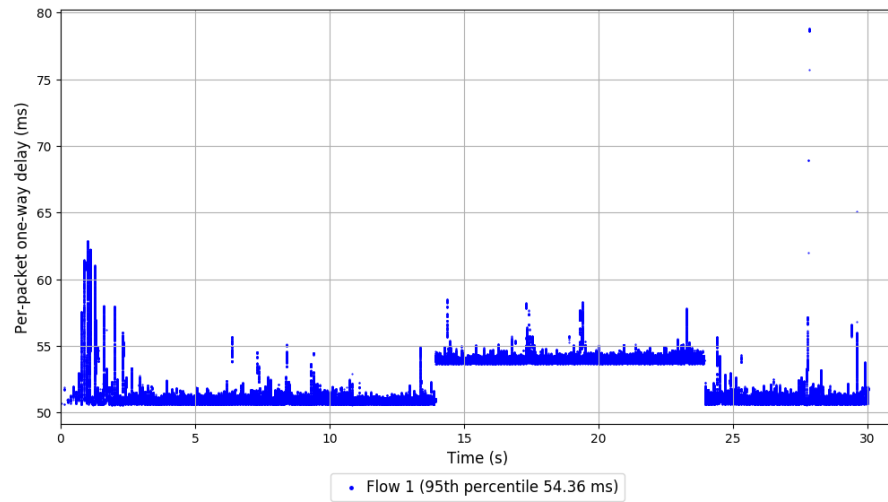
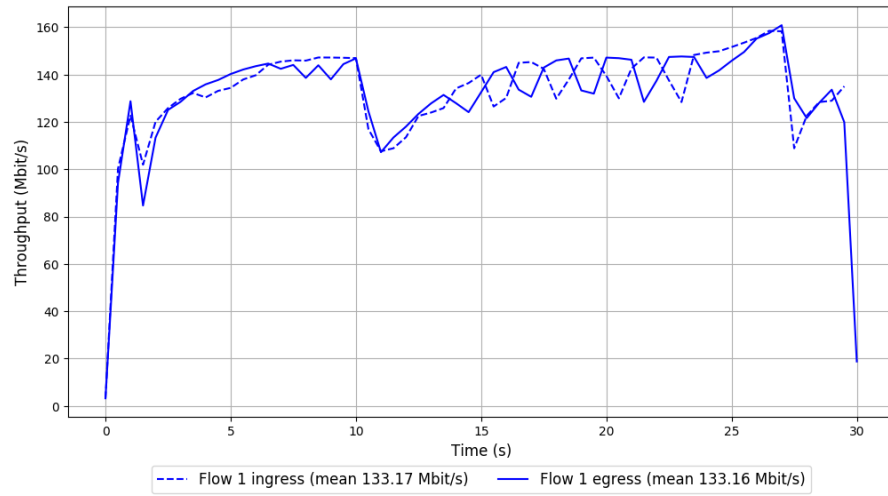
-- Flow 1:

Average throughput: 133.16 Mbit/s

95th percentile per-packet one-way delay: 54.364 ms

Loss rate: 0.00%

### Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-05 13:59:05

End at: 2017-12-05 13:59:35

# Below is generated by plot.py at 2017-12-05 15:34:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 84.48 Mbit/s

95th percentile per-packet one-way delay: 54.401 ms

Loss rate: 0.02%

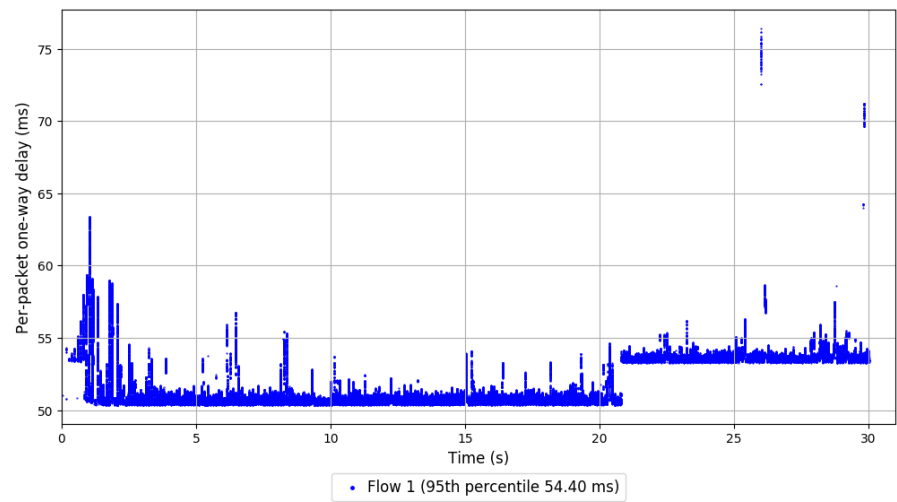
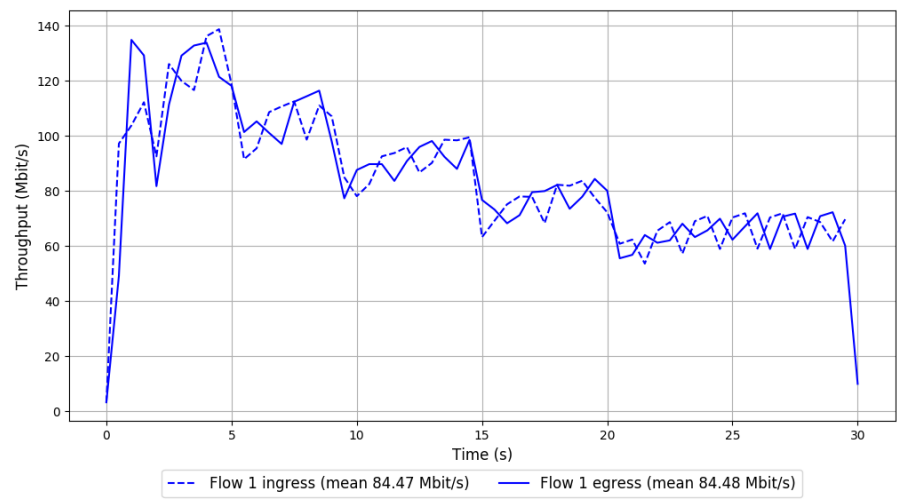
-- Flow 1:

Average throughput: 84.48 Mbit/s

95th percentile per-packet one-way delay: 54.401 ms

Loss rate: 0.02%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-05 14:09:21

End at: 2017-12-05 14:09:51

# Below is generated by plot.py at 2017-12-05 15:35:27

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.66 Mbit/s

95th percentile per-packet one-way delay: 55.065 ms

Loss rate: 0.01%

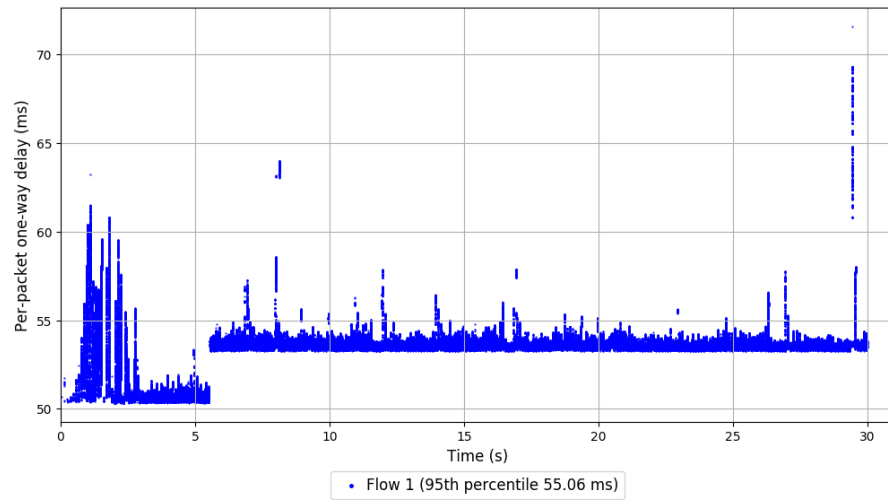
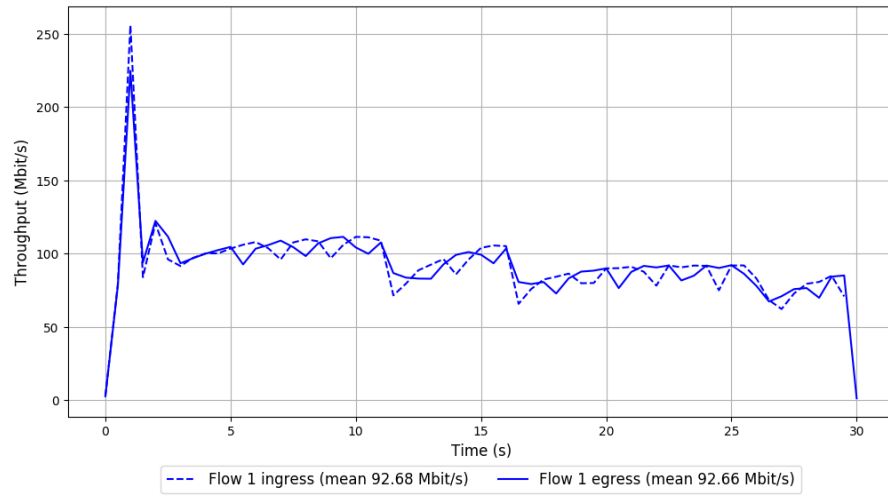
-- Flow 1:

Average throughput: 92.66 Mbit/s

95th percentile per-packet one-way delay: 55.065 ms

Loss rate: 0.01%

### Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-05 14:19:55

End at: 2017-12-05 14:20:25

# Below is generated by plot.py at 2017-12-05 15:36:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 139.86 Mbit/s

95th percentile per-packet one-way delay: 54.083 ms

Loss rate: 0.00%

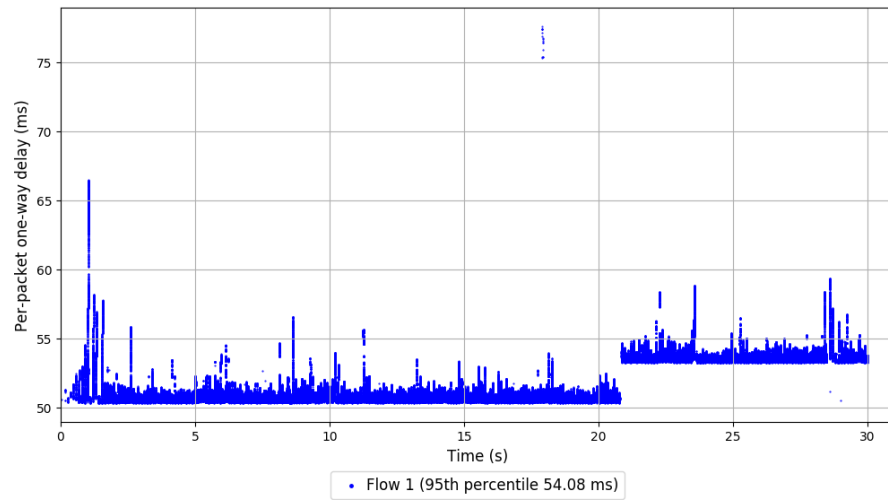
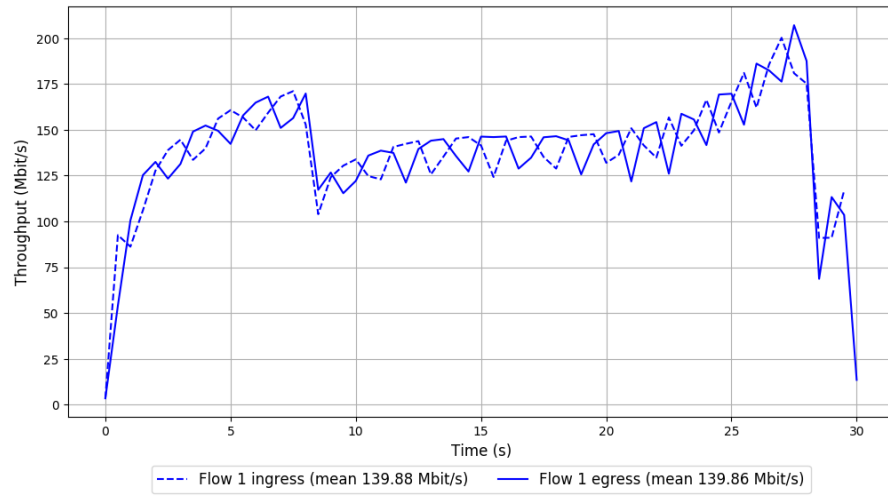
-- Flow 1:

Average throughput: 139.86 Mbit/s

95th percentile per-packet one-way delay: 54.083 ms

Loss rate: 0.00%

## Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-05 14:30:25

End at: 2017-12-05 14:30:55

# Below is generated by plot.py at 2017-12-05 15:36:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 108.35 Mbit/s

95th percentile per-packet one-way delay: 52.290 ms

Loss rate: 0.00%

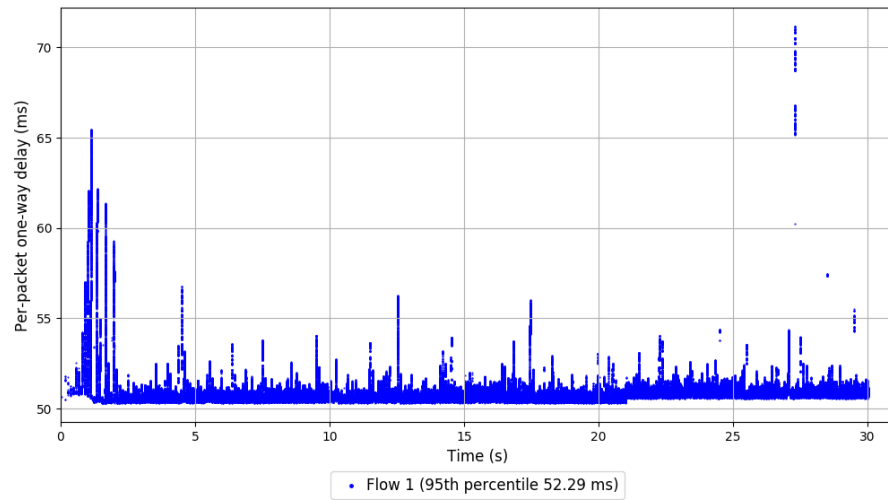
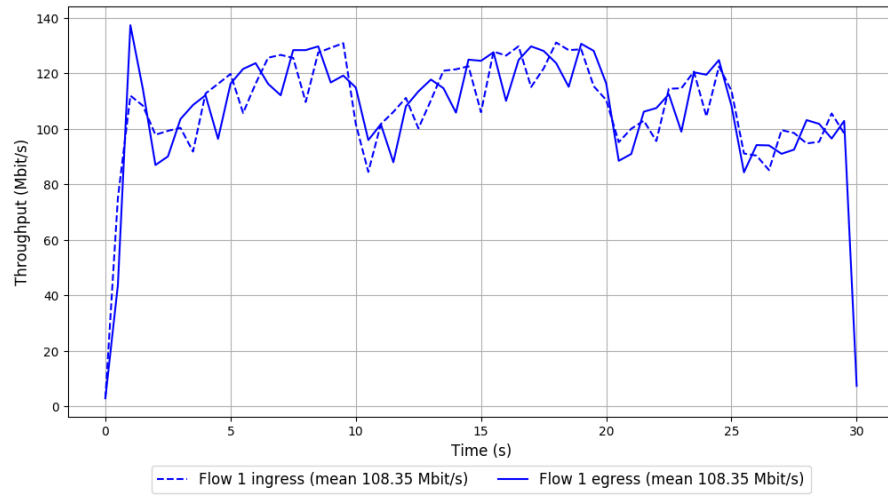
-- Flow 1:

Average throughput: 108.35 Mbit/s

95th percentile per-packet one-way delay: 52.290 ms

Loss rate: 0.00%

### Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-05 14:40:38

End at: 2017-12-05 14:41:08

# Below is generated by plot.py at 2017-12-05 15:36:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 106.52 Mbit/s

95th percentile per-packet one-way delay: 54.364 ms

Loss rate: 0.01%

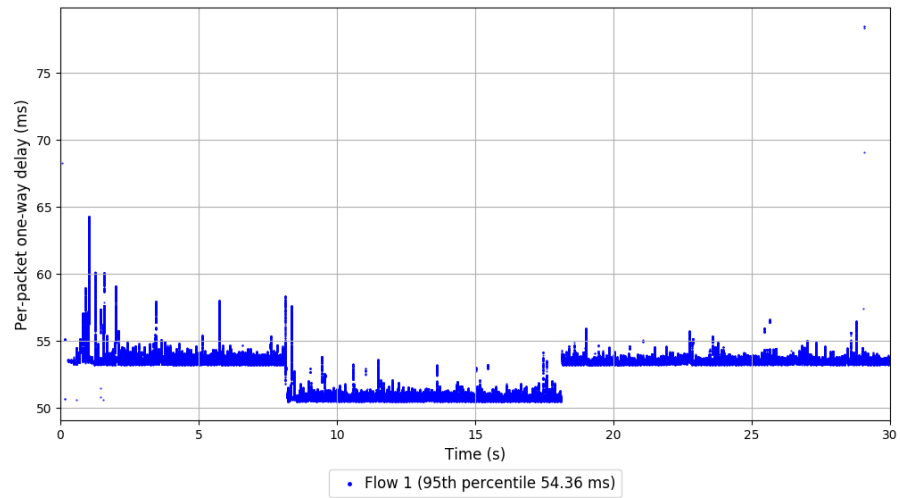
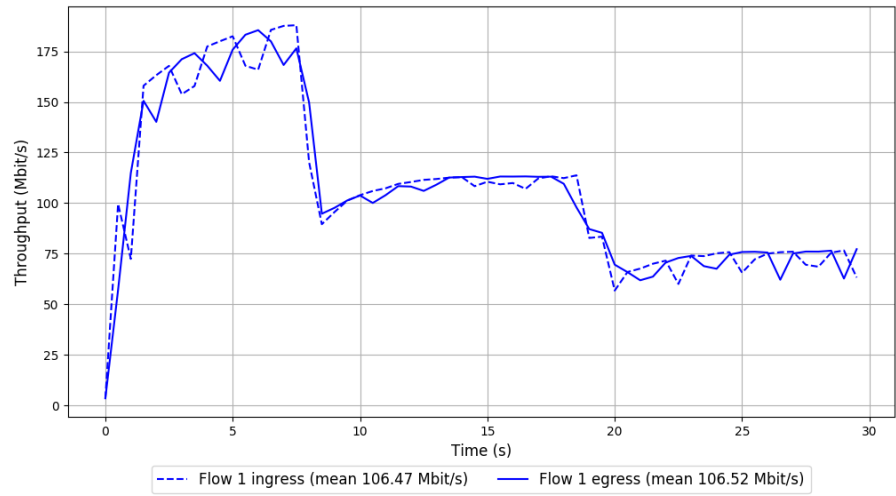
-- Flow 1:

Average throughput: 106.52 Mbit/s

95th percentile per-packet one-way delay: 54.364 ms

Loss rate: 0.01%

### Run 10: Report of TCP Cubic — Data Link

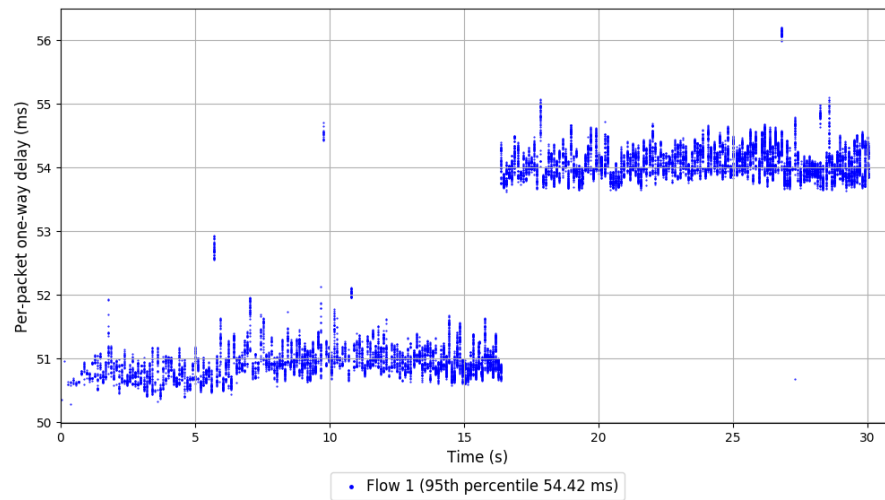
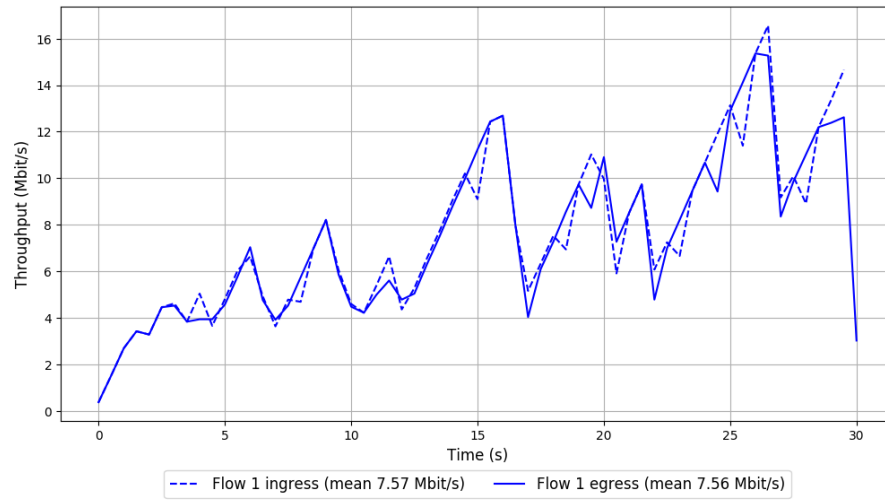


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-05 13:02:00
End at: 2017-12-05 13:02:30

# Below is generated by plot.py at 2017-12-05 15:36:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.56 Mbit/s
95th percentile per-packet one-way delay: 54.420 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 7.56 Mbit/s
95th percentile per-packet one-way delay: 54.420 ms
Loss rate: 0.16%
```

# Run 1: Report of LEDBAT — Data Link

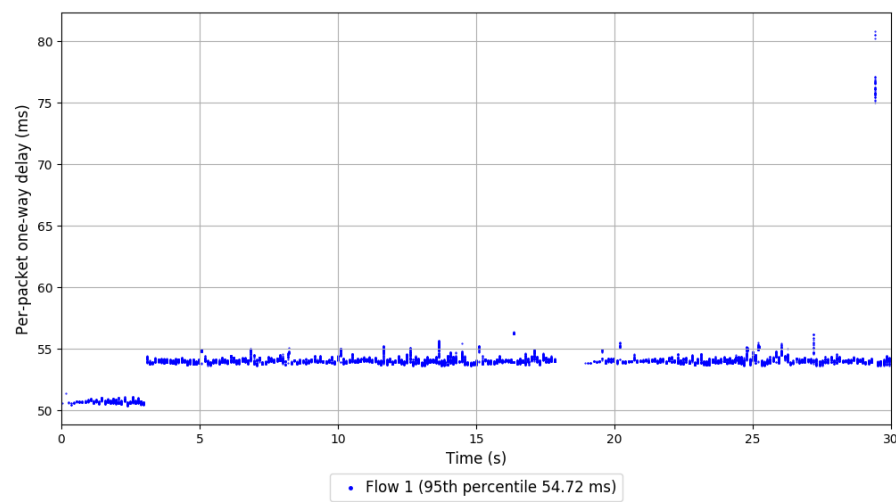
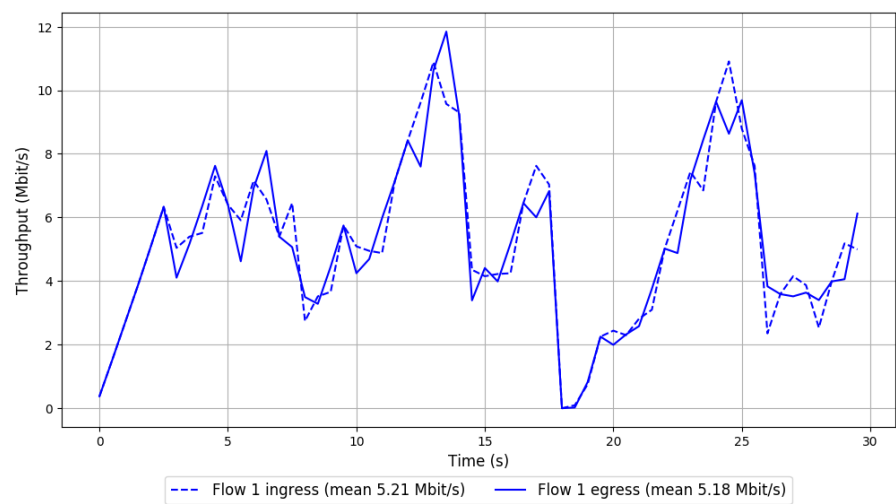


```
Run 2: Statistics of LEDBAT

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

# Below is generated by plot.py at 2017-12-05 15:36:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 54.716 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 54.716 ms
Loss rate: 0.69%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-05 13:22:34

End at: 2017-12-05 13:23:04

# Below is generated by plot.py at 2017-12-05 15:36:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 8.22 Mbit/s

95th percentile per-packet one-way delay: 54.499 ms

Loss rate: 0.58%

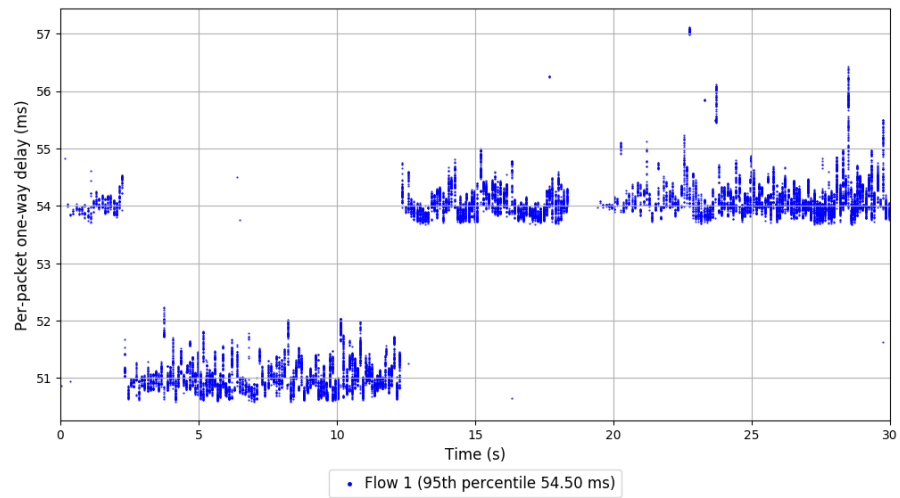
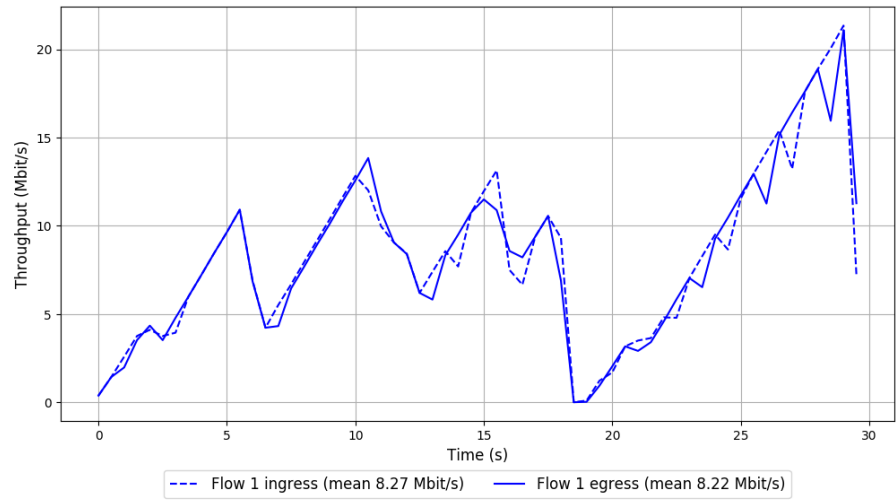
-- Flow 1:

Average throughput: 8.22 Mbit/s

95th percentile per-packet one-way delay: 54.499 ms

Loss rate: 0.58%

### Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-05 13:32:42

End at: 2017-12-05 13:33:12

# Below is generated by plot.py at 2017-12-05 15:36:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 12.59 Mbit/s

95th percentile per-packet one-way delay: 54.208 ms

Loss rate: 0.01%

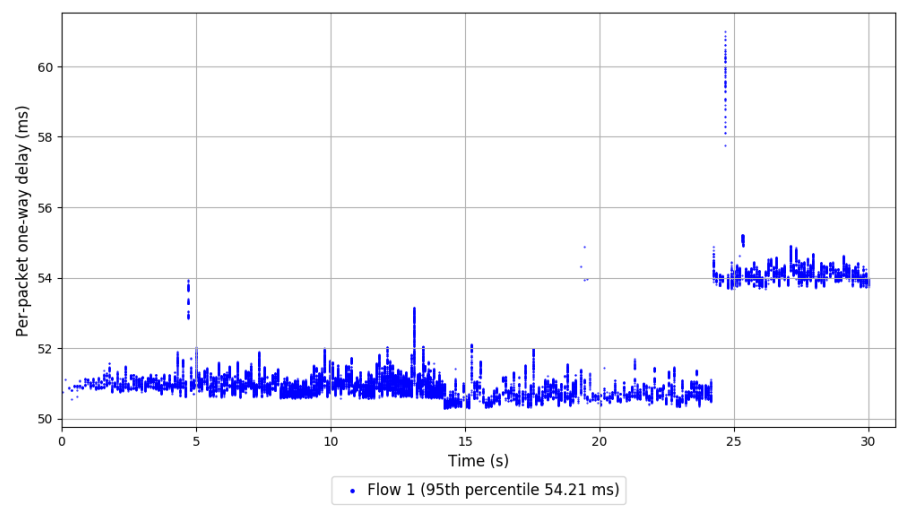
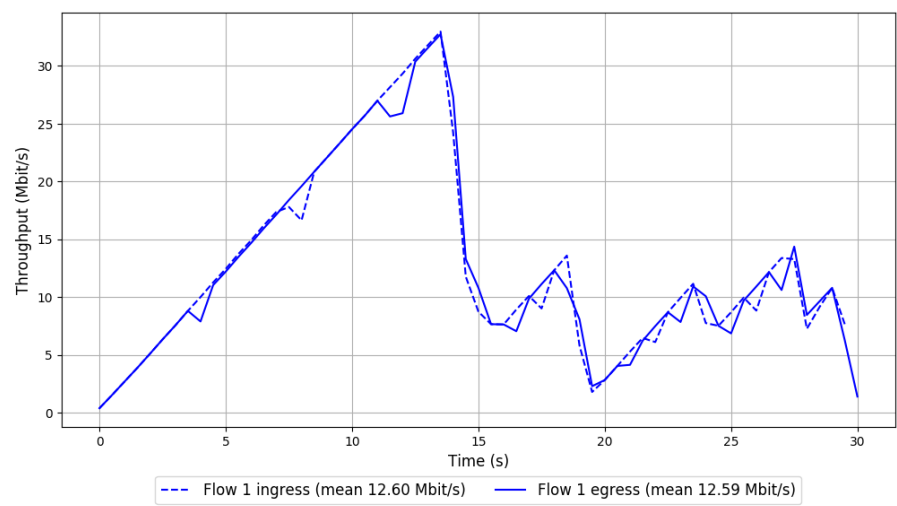
-- Flow 1:

Average throughput: 12.59 Mbit/s

95th percentile per-packet one-way delay: 54.208 ms

Loss rate: 0.01%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-05 13:43:13

End at: 2017-12-05 13:43:43

# Below is generated by plot.py at 2017-12-05 15:36:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 6.98 Mbit/s

95th percentile per-packet one-way delay: 54.381 ms

Loss rate: 0.17%

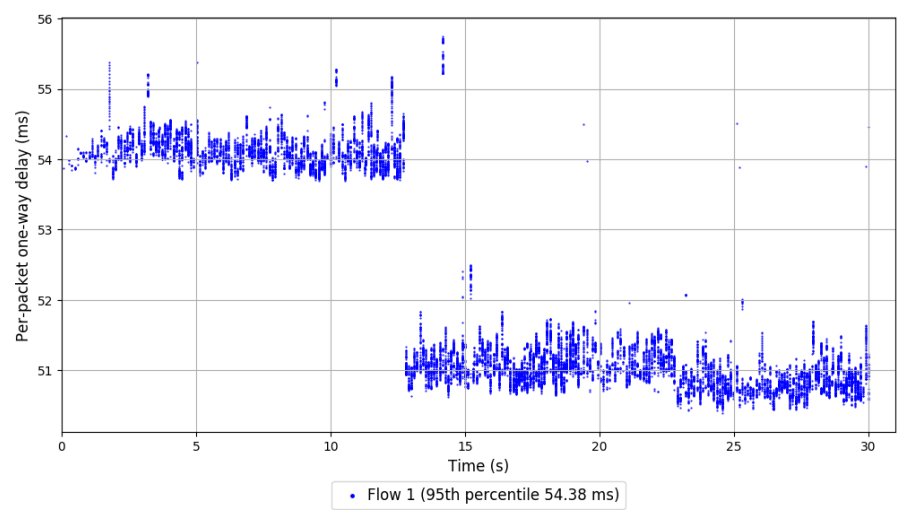
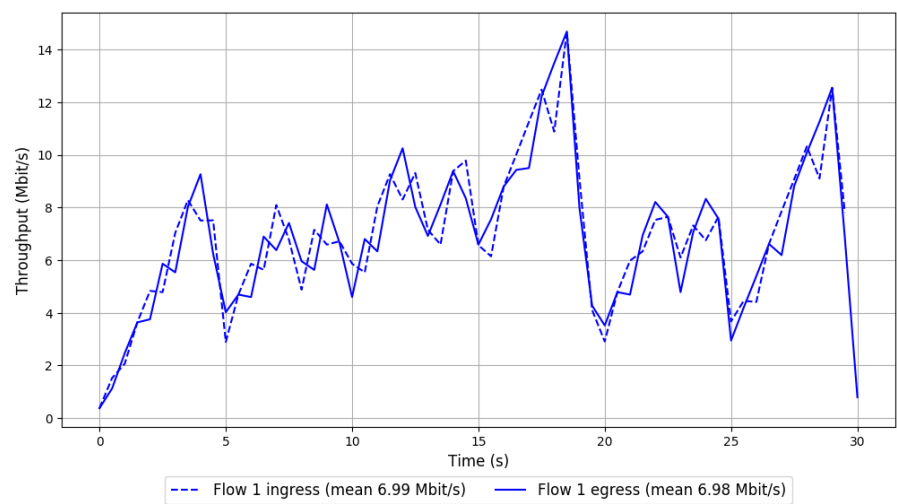
-- Flow 1:

Average throughput: 6.98 Mbit/s

95th percentile per-packet one-way delay: 54.381 ms

Loss rate: 0.17%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-05 13:53:28

End at: 2017-12-05 13:53:58

# Below is generated by plot.py at 2017-12-05 15:36:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 8.59 Mbit/s

95th percentile per-packet one-way delay: 54.181 ms

Loss rate: 0.09%

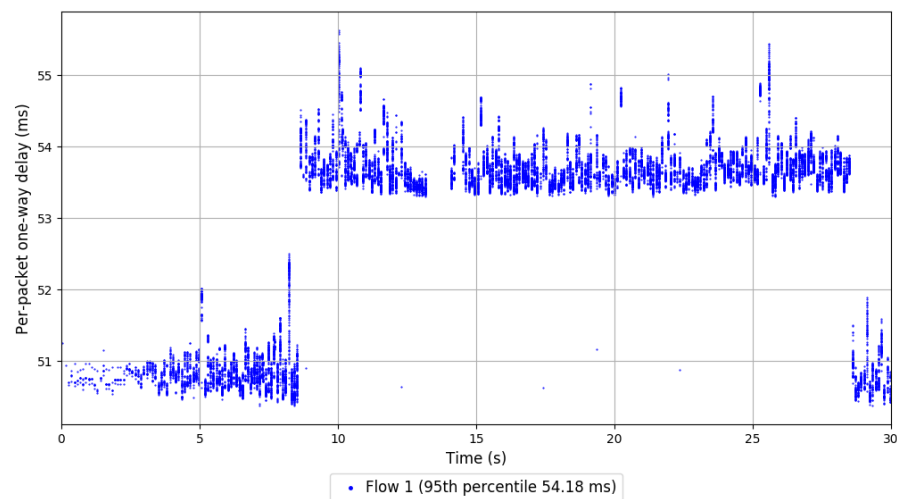
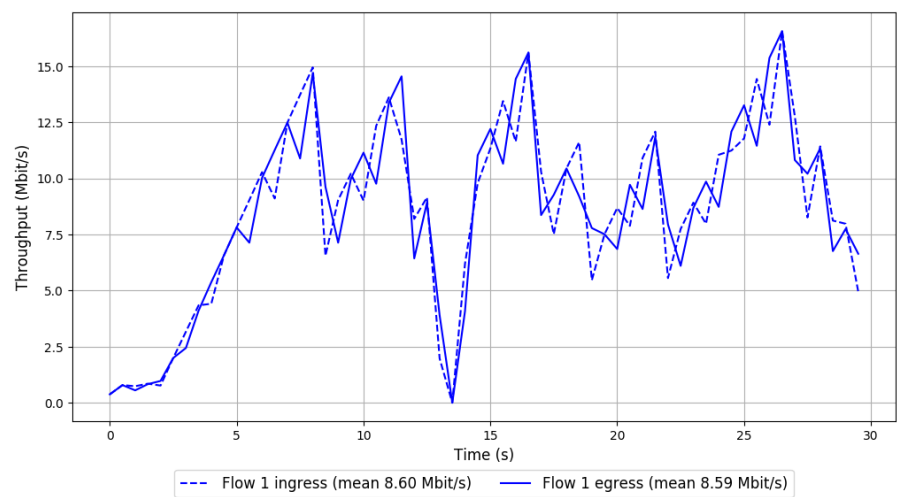
-- Flow 1:

Average throughput: 8.59 Mbit/s

95th percentile per-packet one-way delay: 54.181 ms

Loss rate: 0.09%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-05 14:03:41

End at: 2017-12-05 14:04:11

# Below is generated by plot.py at 2017-12-05 15:36:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 10.28 Mbit/s

95th percentile per-packet one-way delay: 51.747 ms

Loss rate: 0.18%

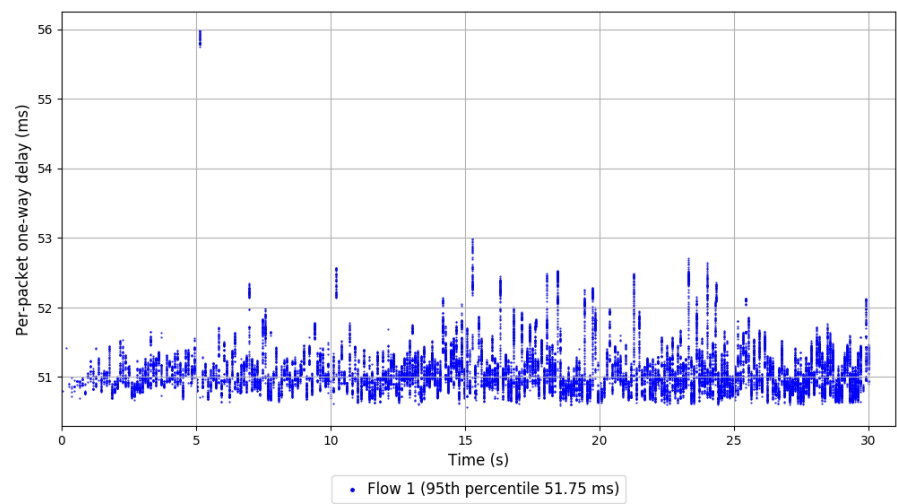
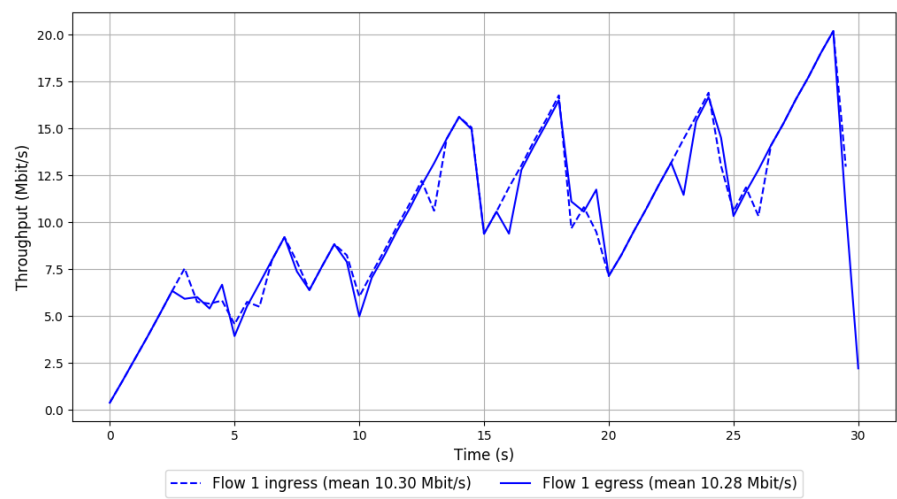
-- Flow 1:

Average throughput: 10.28 Mbit/s

95th percentile per-packet one-way delay: 51.747 ms

Loss rate: 0.18%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-05 14:13:58

End at: 2017-12-05 14:14:28

# Below is generated by plot.py at 2017-12-05 15:36:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 8.18 Mbit/s

95th percentile per-packet one-way delay: 53.754 ms

Loss rate: 0.13%

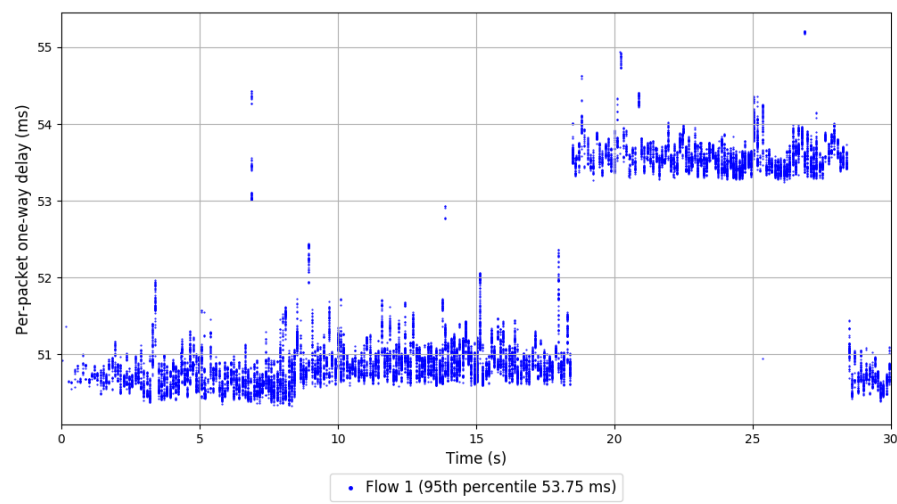
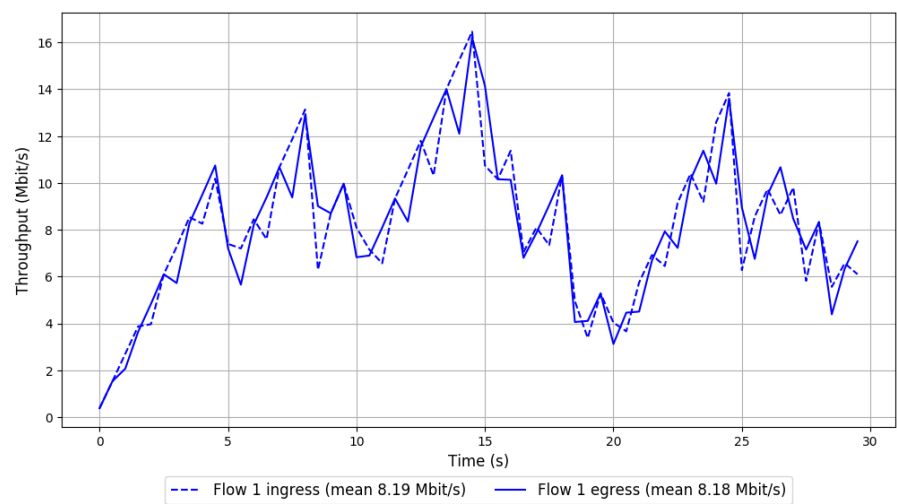
-- Flow 1:

Average throughput: 8.18 Mbit/s

95th percentile per-packet one-way delay: 53.754 ms

Loss rate: 0.13%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-05 14:24:33

End at: 2017-12-05 14:25:03

# Below is generated by plot.py at 2017-12-05 15:36:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.28 Mbit/s

95th percentile per-packet one-way delay: 54.156 ms

Loss rate: 0.23%

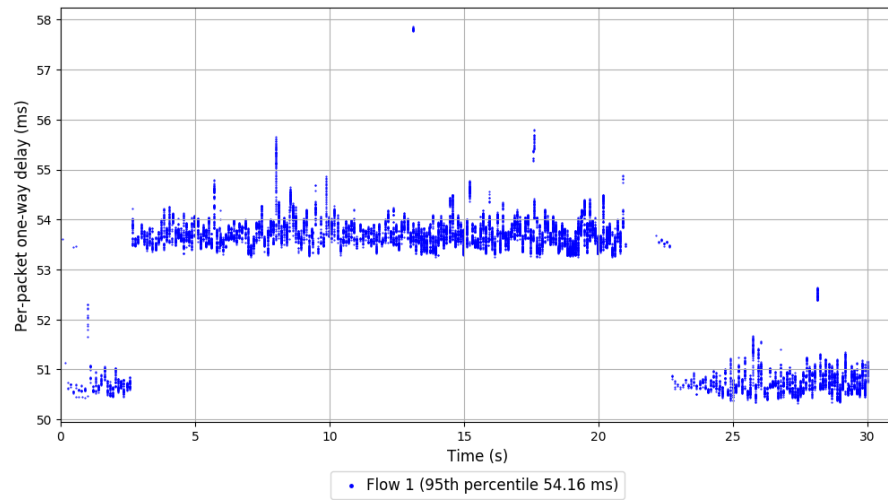
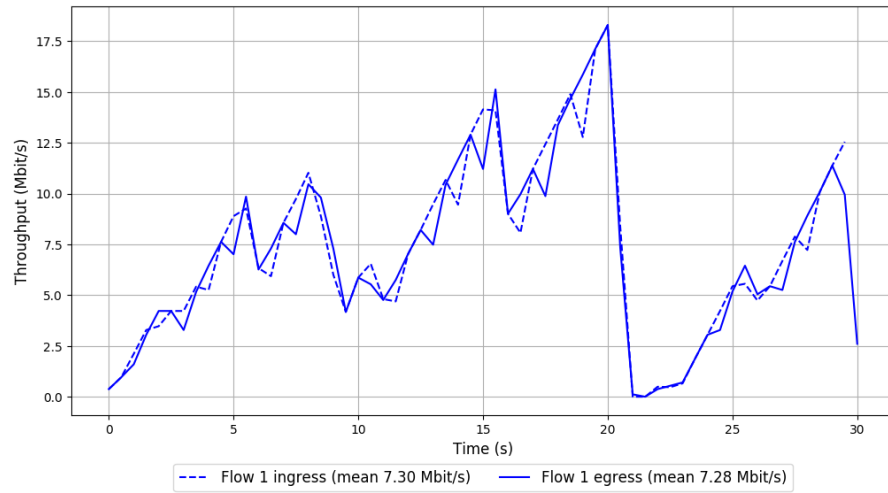
-- Flow 1:

Average throughput: 7.28 Mbit/s

95th percentile per-packet one-way delay: 54.156 ms

Loss rate: 0.23%

### Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-05 14:35:00

End at: 2017-12-05 14:35:30

# Below is generated by plot.py at 2017-12-05 15:36:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 6.12 Mbit/s

95th percentile per-packet one-way delay: 53.938 ms

Loss rate: 0.29%

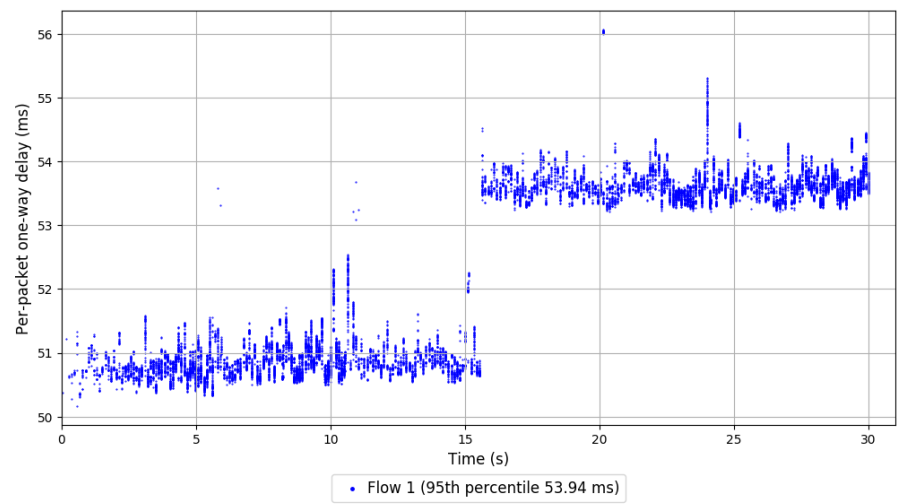
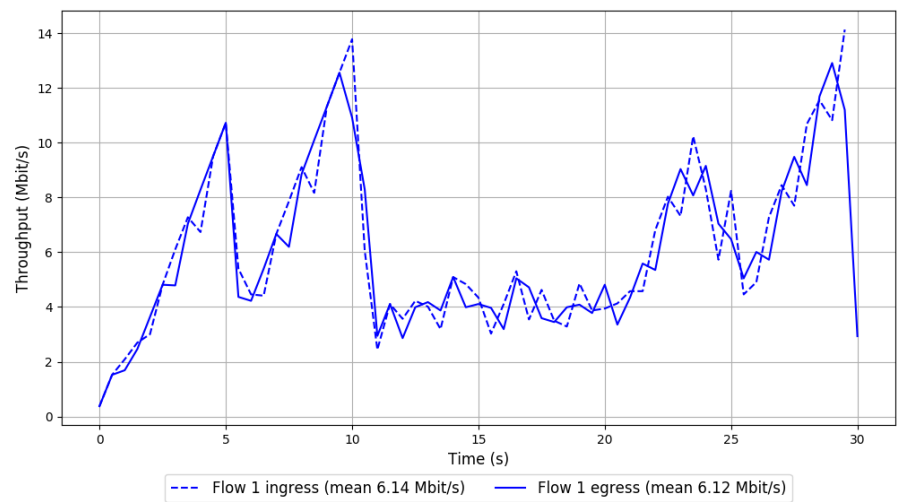
-- Flow 1:

Average throughput: 6.12 Mbit/s

95th percentile per-packet one-way delay: 53.938 ms

Loss rate: 0.29%

Run 10: Report of LEDBAT — Data Link

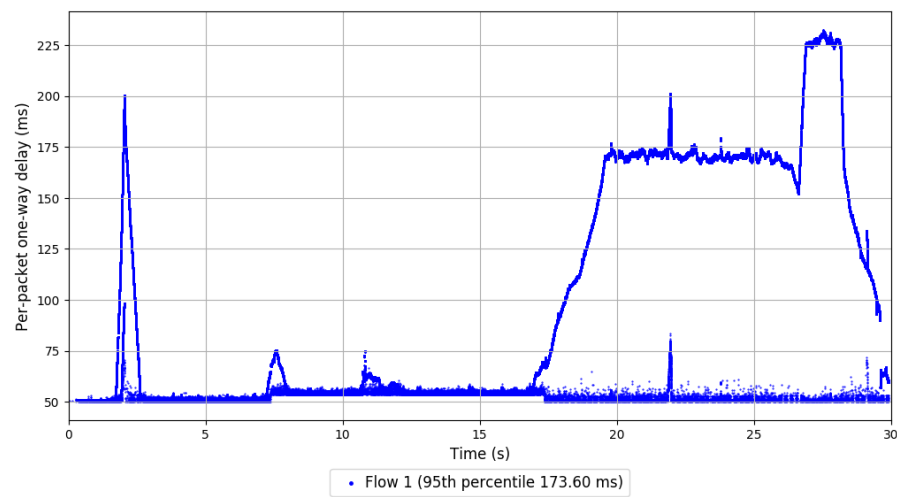
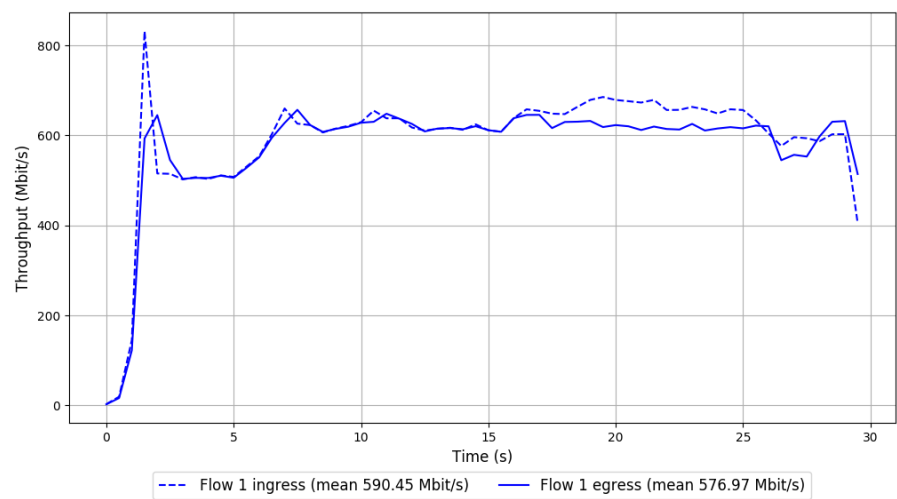


```
Run 1: Statistics of PCC

Start at: 2017-12-05 13:08:59
End at: 2017-12-05 13:09:29

# Below is generated by plot.py at 2017-12-05 15:44:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 576.97 Mbit/s
95th percentile per-packet one-way delay: 173.602 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 576.97 Mbit/s
95th percentile per-packet one-way delay: 173.602 ms
Loss rate: 2.27%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-05 13:19:14

End at: 2017-12-05 13:19:44

# Below is generated by plot.py at 2017-12-05 15:44:32

# Datalink statistics

-- Total of 1 flow:

Average throughput: 564.74 Mbit/s

95th percentile per-packet one-way delay: 72.669 ms

Loss rate: 0.28%

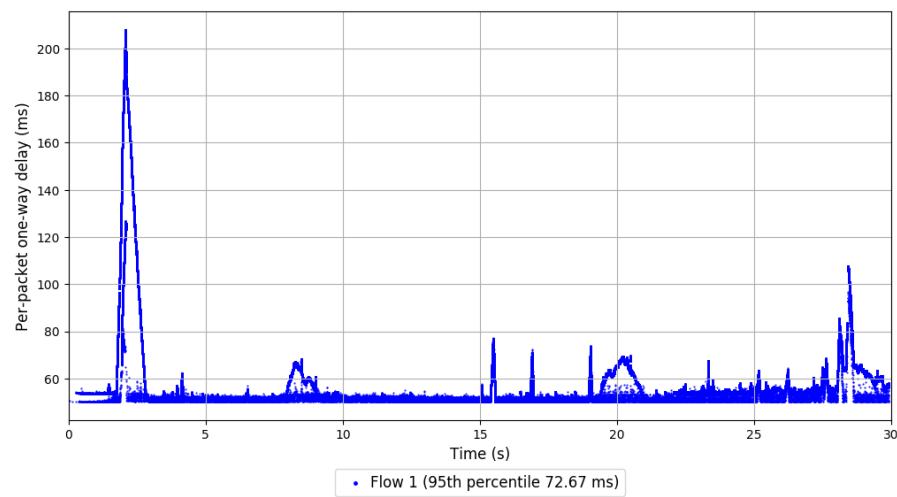
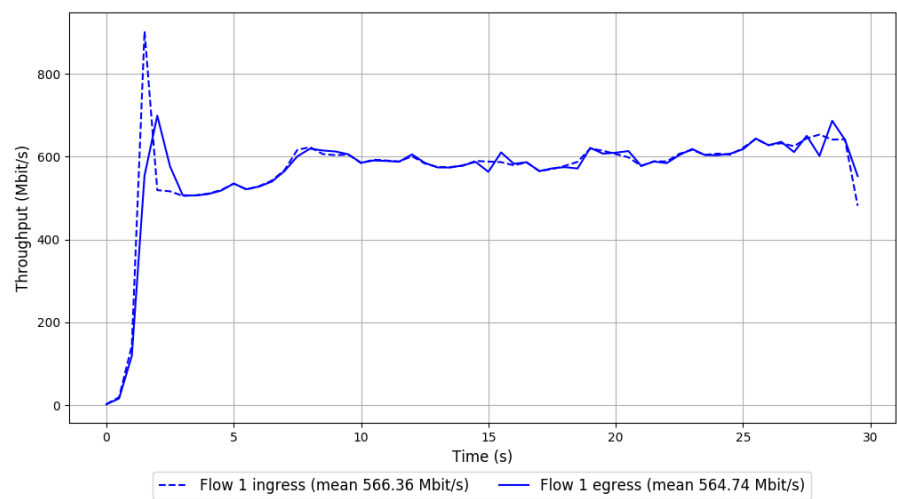
-- Flow 1:

Average throughput: 564.74 Mbit/s

95th percentile per-packet one-way delay: 72.669 ms

Loss rate: 0.28%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-05 13:29:38

End at: 2017-12-05 13:30:08

# Below is generated by plot.py at 2017-12-05 15:44:32

# Datalink statistics

-- Total of 1 flow:

Average throughput: 251.56 Mbit/s

95th percentile per-packet one-way delay: 78.948 ms

Loss rate: 0.18%

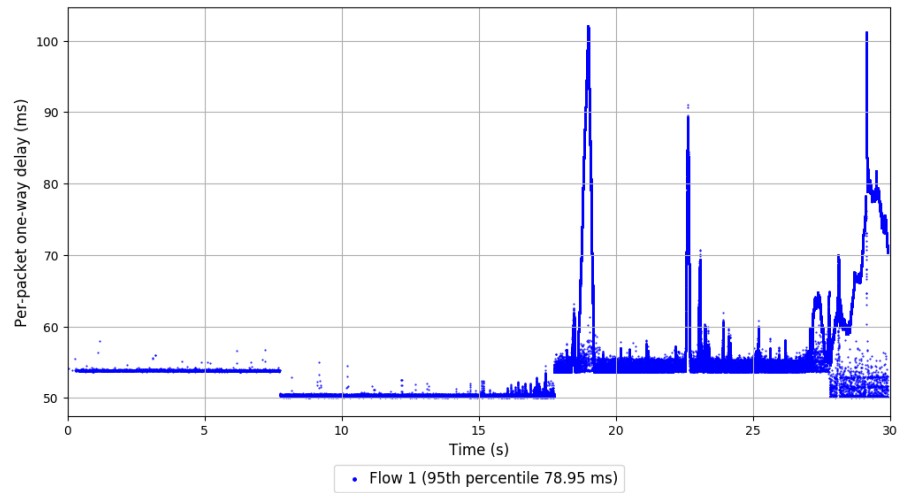
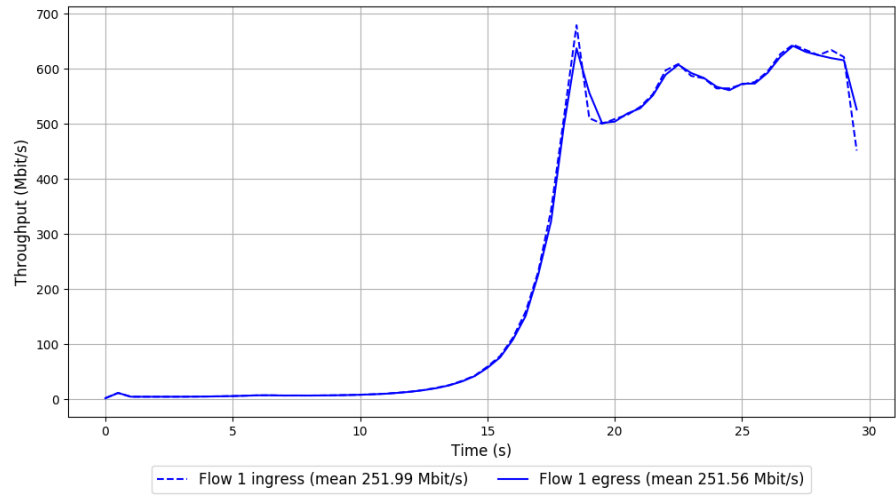
-- Flow 1:

Average throughput: 251.56 Mbit/s

95th percentile per-packet one-way delay: 78.948 ms

Loss rate: 0.18%

### Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-05 13:39:58

End at: 2017-12-05 13:40:29

# Below is generated by plot.py at 2017-12-05 15:44:32

# Datalink statistics

-- Total of 1 flow:

Average throughput: 562.07 Mbit/s

95th percentile per-packet one-way delay: 86.645 ms

Loss rate: 0.30%

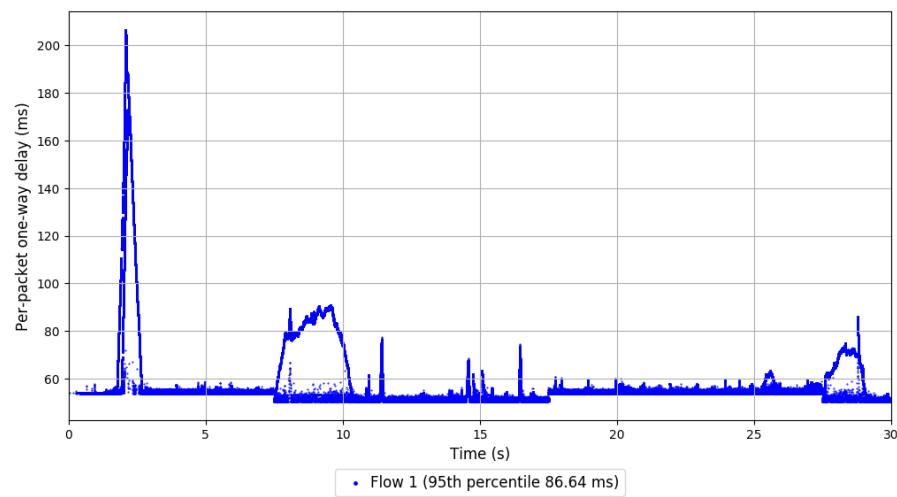
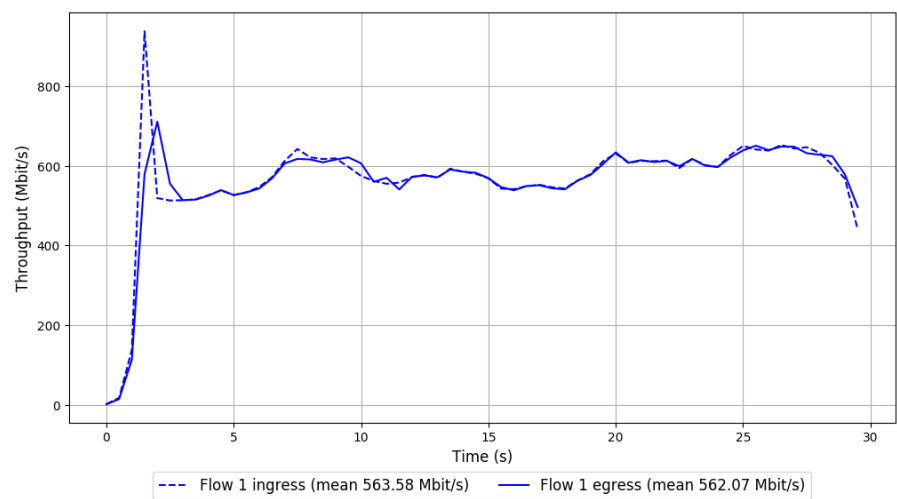
-- Flow 1:

Average throughput: 562.07 Mbit/s

95th percentile per-packet one-way delay: 86.645 ms

Loss rate: 0.30%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-05 13:50:14

End at: 2017-12-05 13:50:44

# Below is generated by plot.py at 2017-12-05 15:44:37

# Datalink statistics

-- Total of 1 flow:

Average throughput: 547.41 Mbit/s

95th percentile per-packet one-way delay: 148.831 ms

Loss rate: 0.43%

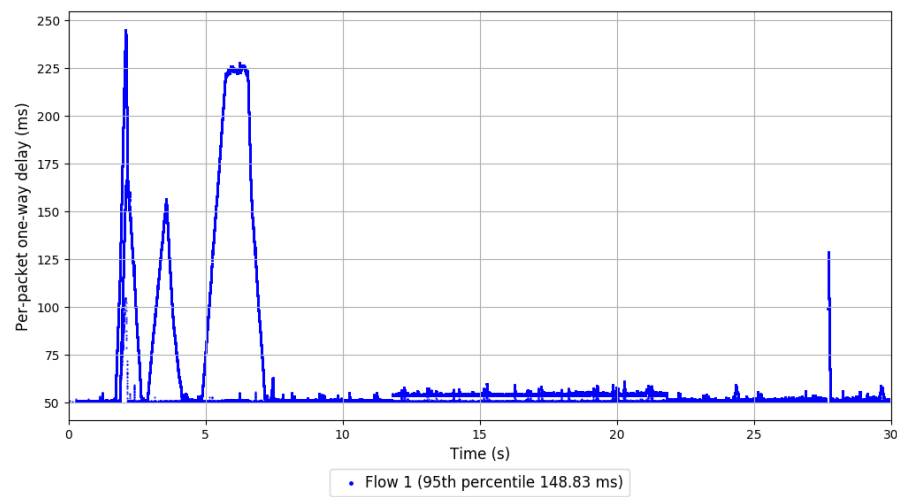
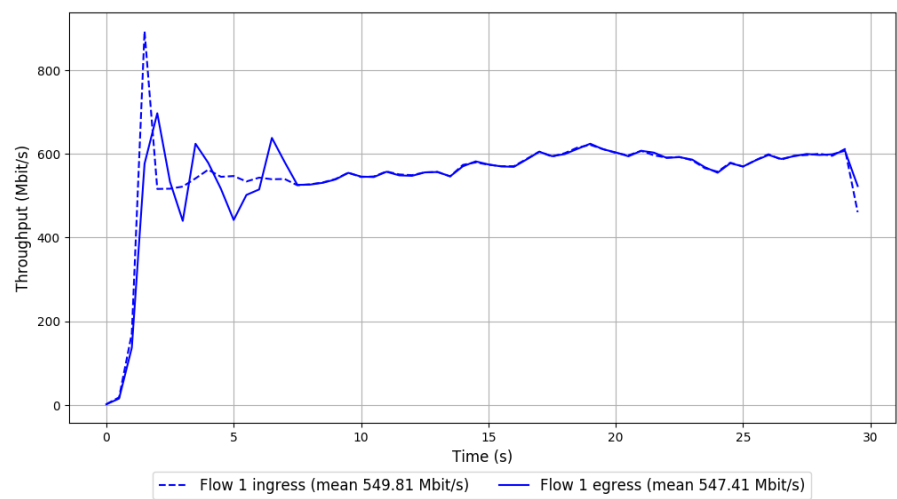
-- Flow 1:

Average throughput: 547.41 Mbit/s

95th percentile per-packet one-way delay: 148.831 ms

Loss rate: 0.43%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-05 14:00:25

End at: 2017-12-05 14:00:55

# Below is generated by plot.py at 2017-12-05 15:44:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 539.38 Mbit/s

95th percentile per-packet one-way delay: 224.463 ms

Loss rate: 1.62%

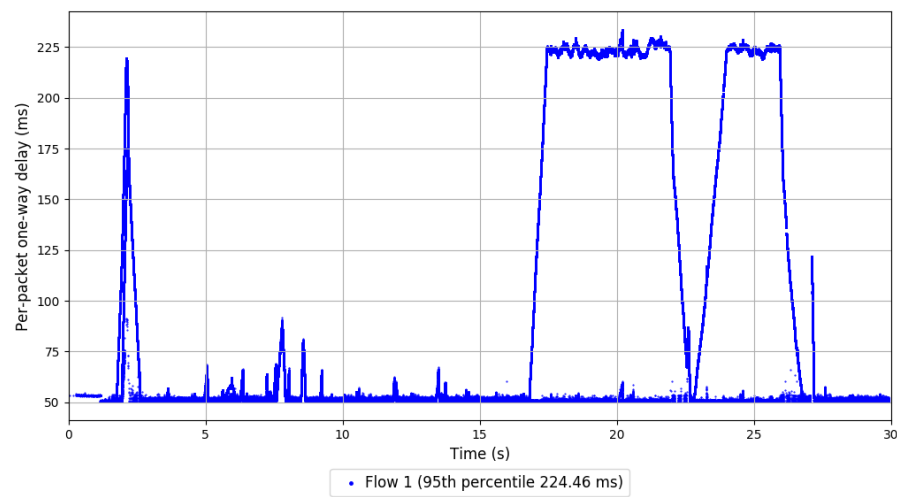
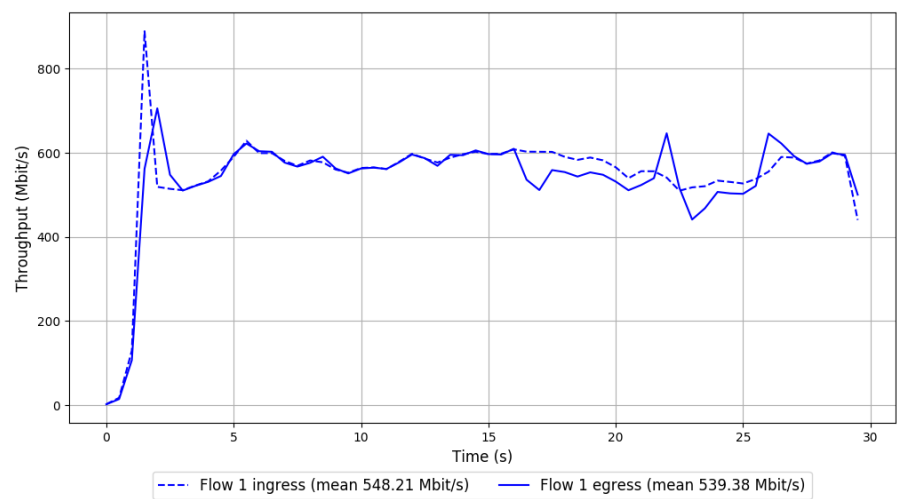
-- Flow 1:

Average throughput: 539.38 Mbit/s

95th percentile per-packet one-way delay: 224.463 ms

Loss rate: 1.62%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-05 14:10:40

End at: 2017-12-05 14:11:11

# Below is generated by plot.py at 2017-12-05 15:45:18

# Datalink statistics

-- Total of 1 flow:

Average throughput: 571.88 Mbit/s

95th percentile per-packet one-way delay: 67.734 ms

Loss rate: 0.23%

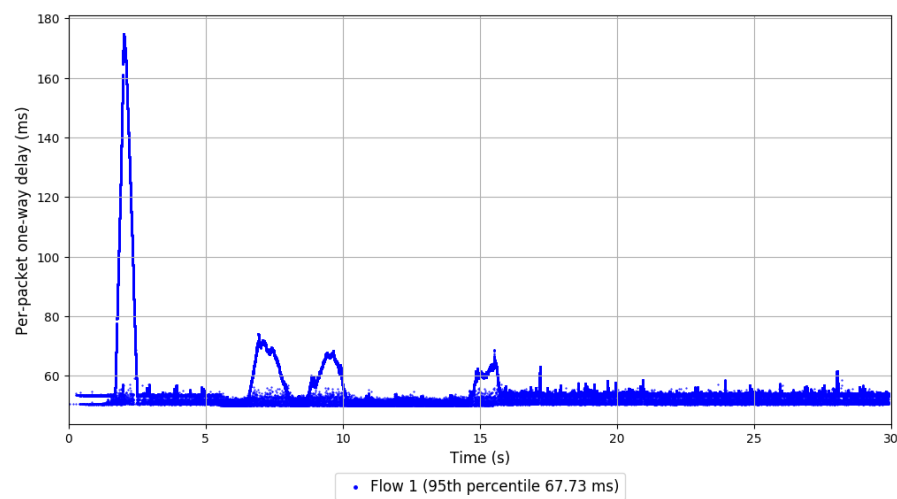
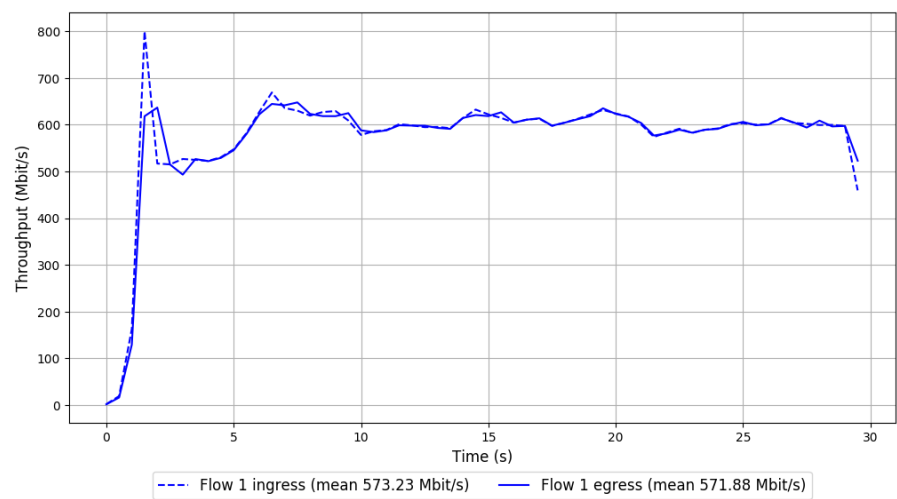
-- Flow 1:

Average throughput: 571.88 Mbit/s

95th percentile per-packet one-way delay: 67.734 ms

Loss rate: 0.23%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-05 14:21:18

End at: 2017-12-05 14:21:48

# Below is generated by plot.py at 2017-12-05 15:45:42

# Datalink statistics

-- Total of 1 flow:

Average throughput: 553.32 Mbit/s

95th percentile per-packet one-way delay: 174.947 ms

Loss rate: 0.90%

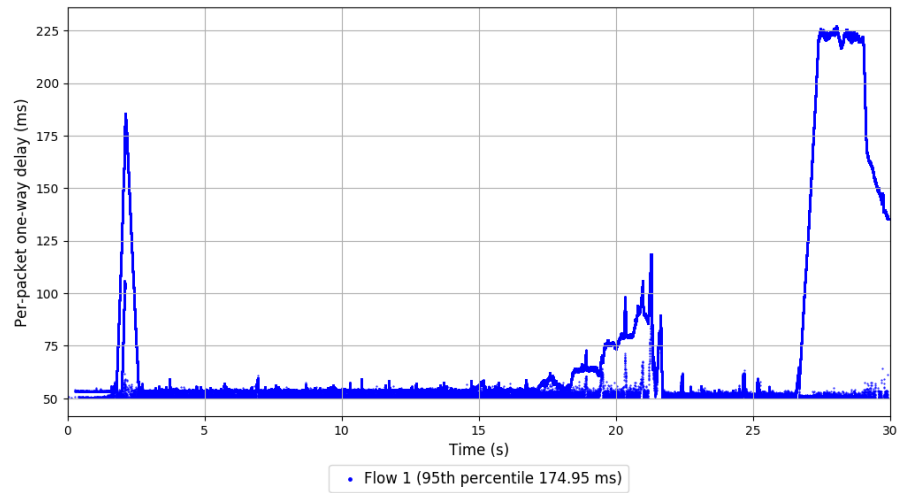
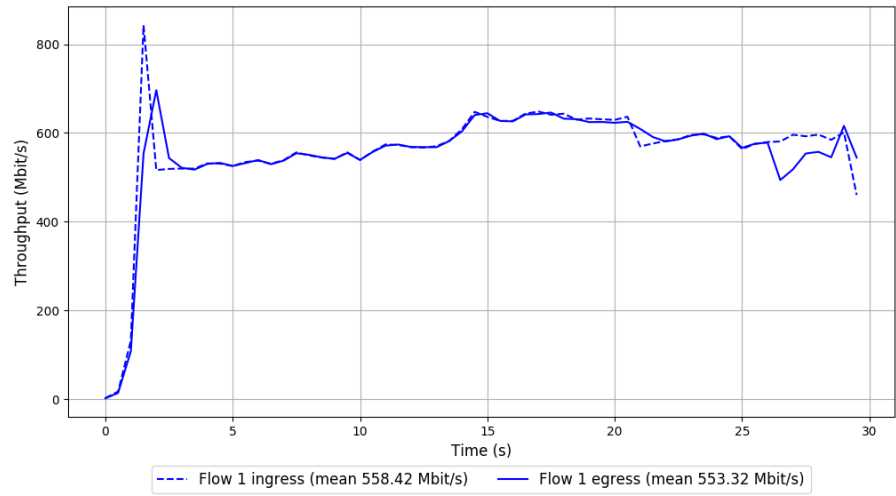
-- Flow 1:

Average throughput: 553.32 Mbit/s

95th percentile per-packet one-way delay: 174.947 ms

Loss rate: 0.90%

## Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-05 14:31:46

End at: 2017-12-05 14:32:16

# Below is generated by plot.py at 2017-12-05 15:50:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 570.87 Mbit/s

95th percentile per-packet one-way delay: 109.858 ms

Loss rate: 0.19%

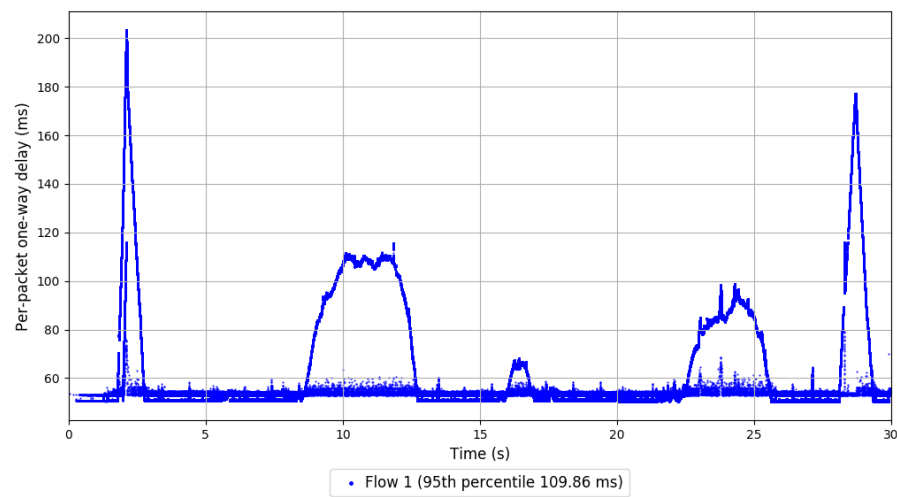
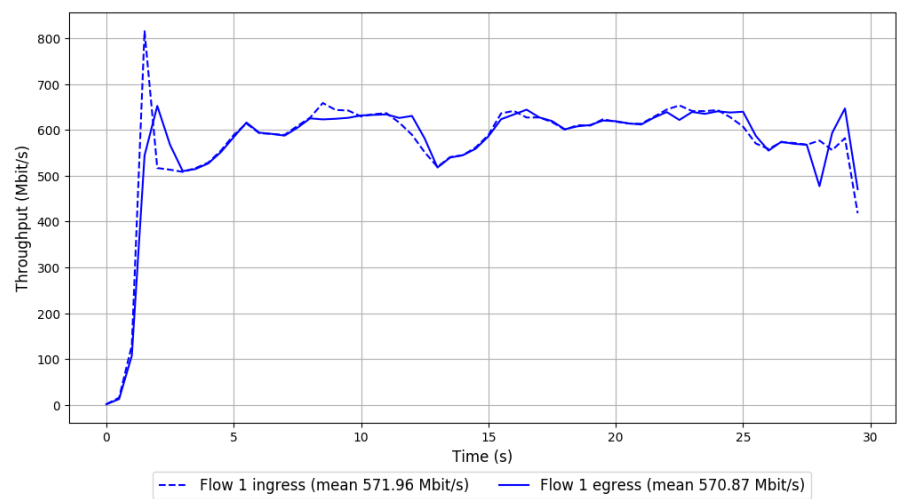
-- Flow 1:

Average throughput: 570.87 Mbit/s

95th percentile per-packet one-way delay: 109.858 ms

Loss rate: 0.19%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-05 14:41:59

End at: 2017-12-05 14:42:29

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 571.64 Mbit/s

95th percentile per-packet one-way delay: 60.599 ms

Loss rate: 0.21%

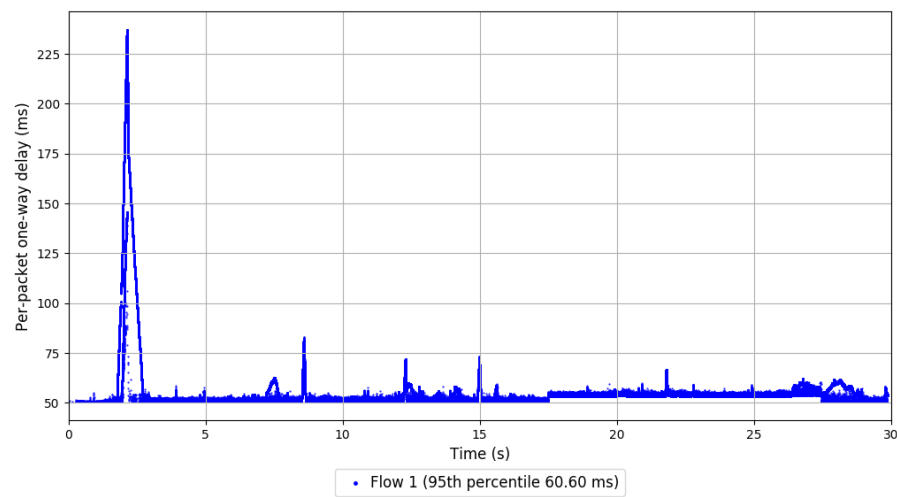
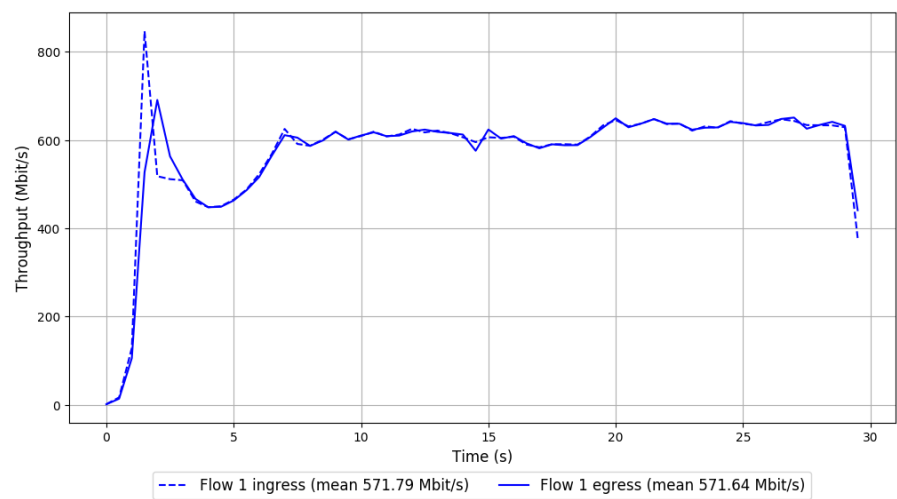
-- Flow 1:

Average throughput: 571.64 Mbit/s

95th percentile per-packet one-way delay: 60.599 ms

Loss rate: 0.21%

Run 10: Report of PCC — Data Link

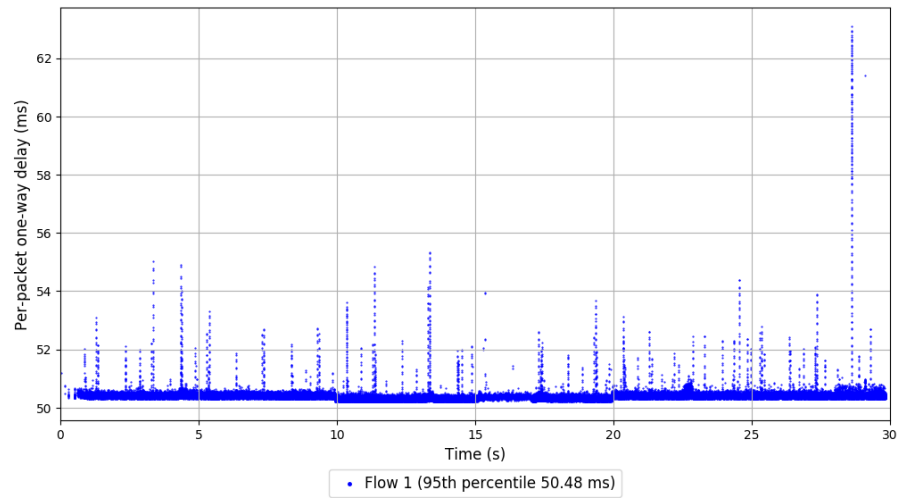
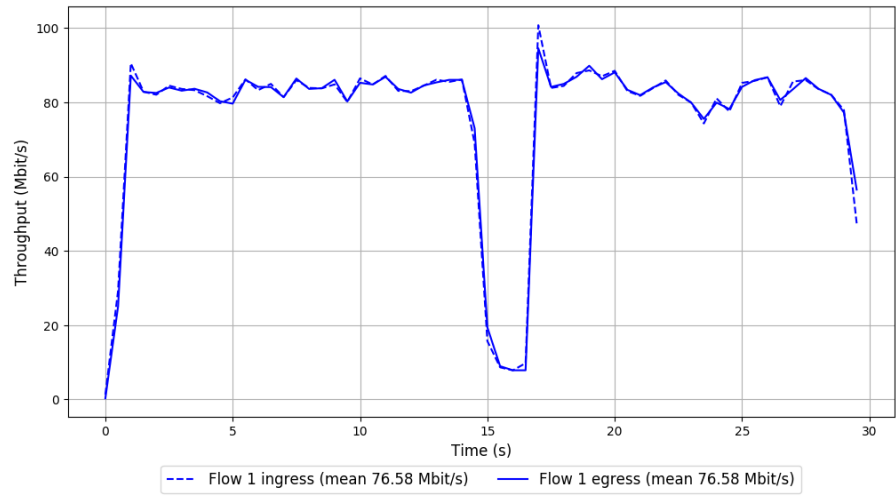


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-05 13:06:56
End at: 2017-12-05 13:07:26

# Below is generated by plot.py at 2017-12-05 15:54:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.58 Mbit/s
95th percentile per-packet one-way delay: 50.477 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.58 Mbit/s
95th percentile per-packet one-way delay: 50.477 ms
Loss rate: 0.00%
```

### Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-05 13:17:11

End at: 2017-12-05 13:17:41

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 57.19 Mbit/s

95th percentile per-packet one-way delay: 53.792 ms

Loss rate: 0.00%

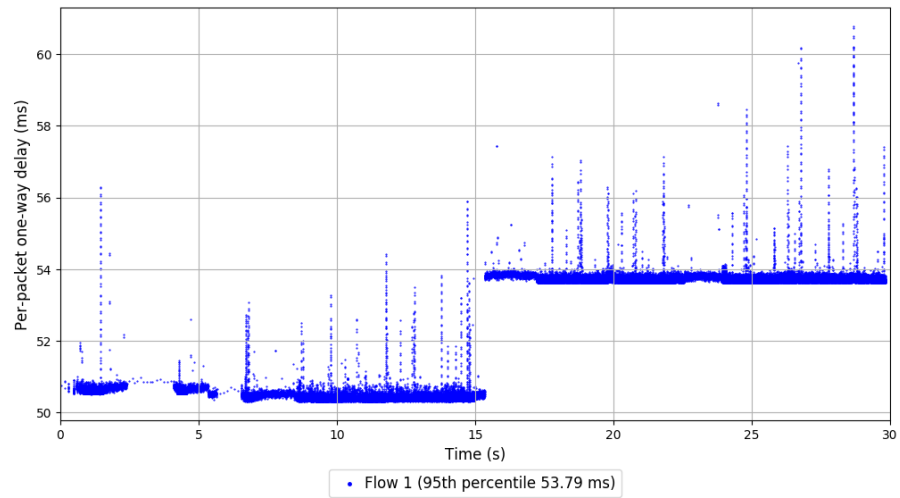
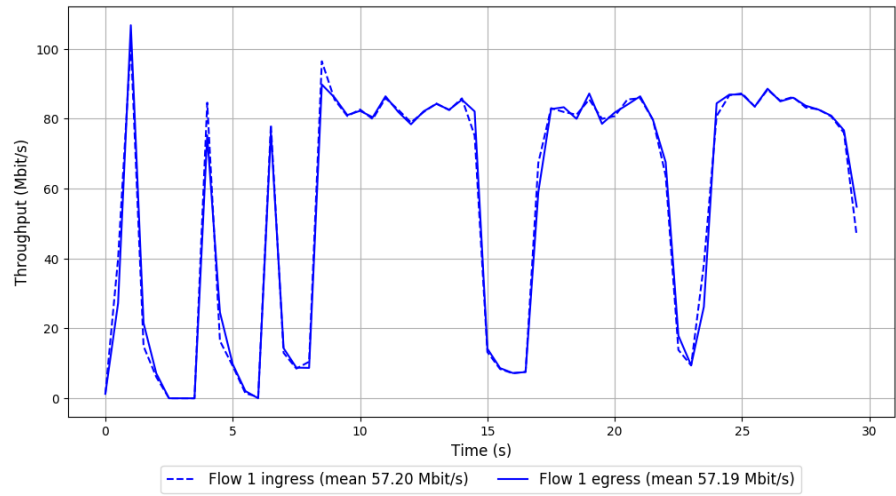
-- Flow 1:

Average throughput: 57.19 Mbit/s

95th percentile per-packet one-way delay: 53.792 ms

Loss rate: 0.00%

## Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-05 13:27:37

End at: 2017-12-05 13:28:07

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 51.59 Mbit/s

95th percentile per-packet one-way delay: 50.696 ms

Loss rate: 0.00%

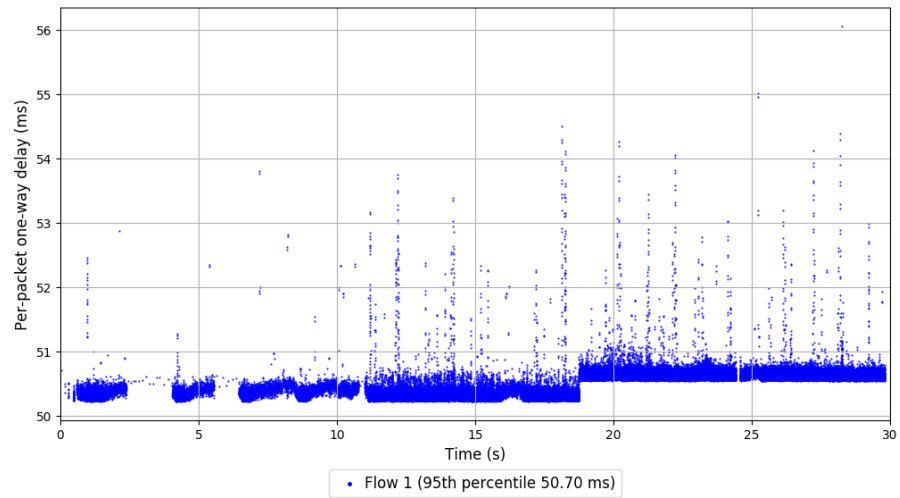
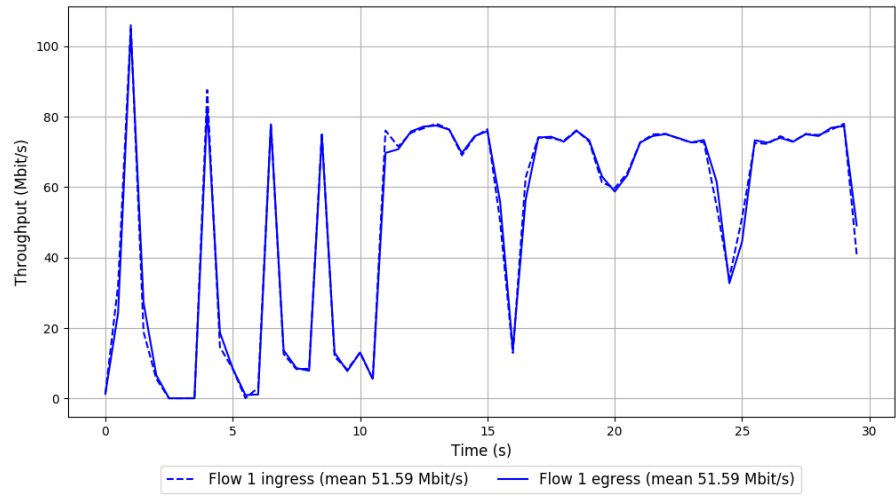
-- Flow 1:

Average throughput: 51.59 Mbit/s

95th percentile per-packet one-way delay: 50.696 ms

Loss rate: 0.00%

### Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-05 13:37:57

End at: 2017-12-05 13:38:27

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 54.28 Mbit/s

95th percentile per-packet one-way delay: 50.302 ms

Loss rate: 0.00%

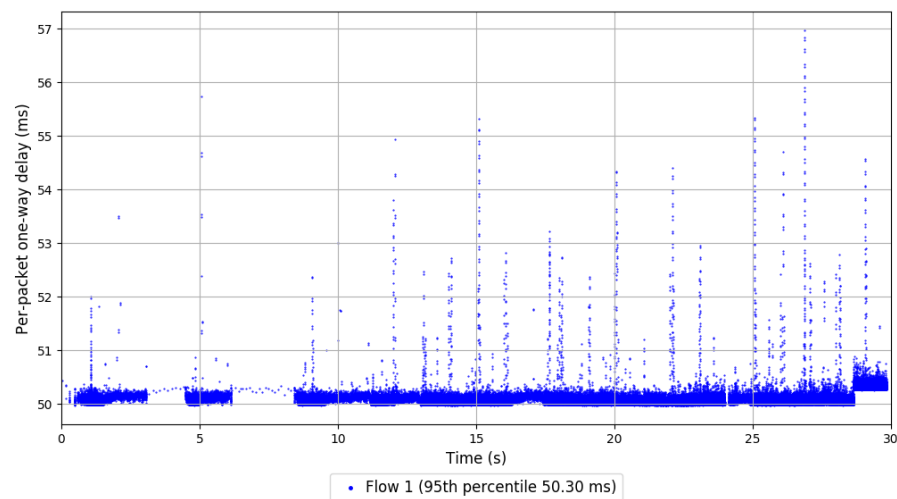
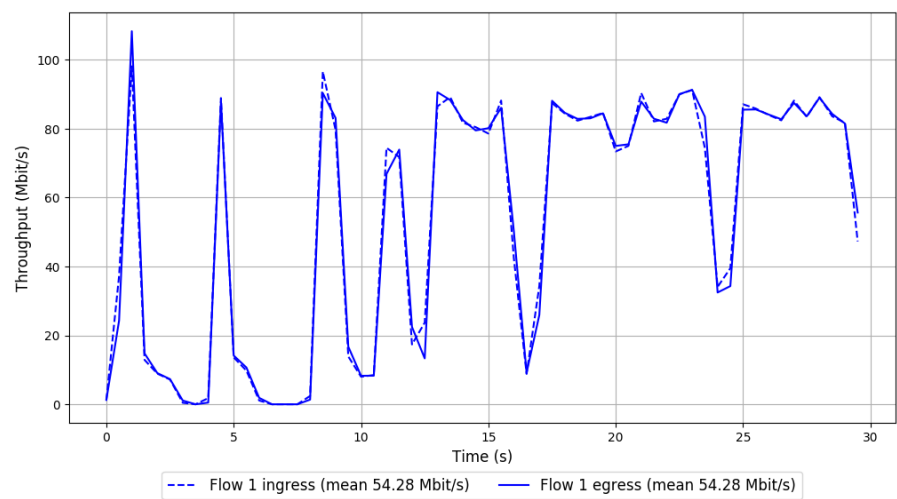
-- Flow 1:

Average throughput: 54.28 Mbit/s

95th percentile per-packet one-way delay: 50.302 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-05 13:48:11

End at: 2017-12-05 13:48:41

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 72.32 Mbit/s

95th percentile per-packet one-way delay: 53.721 ms

Loss rate: 0.00%

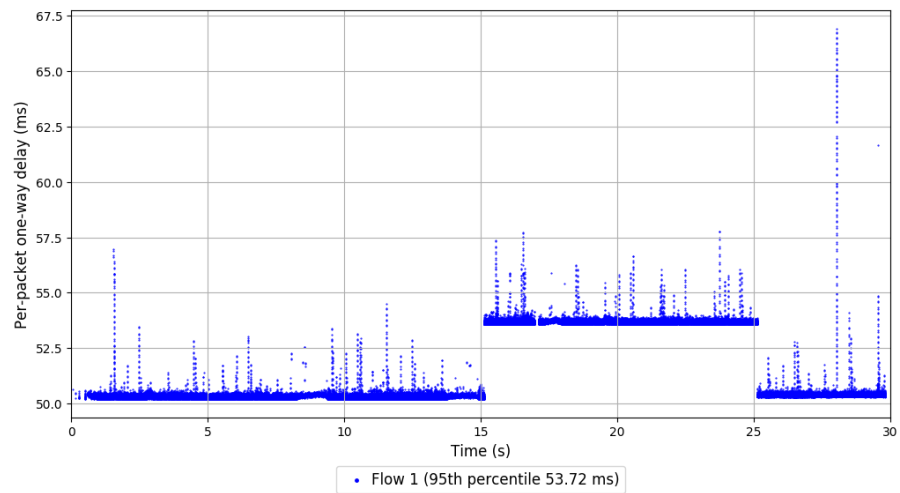
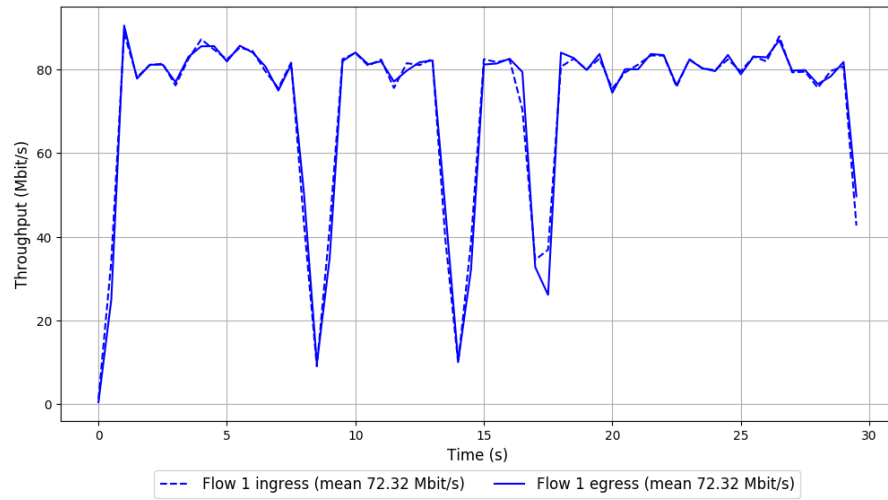
-- Flow 1:

Average throughput: 72.32 Mbit/s

95th percentile per-packet one-way delay: 53.721 ms

Loss rate: 0.00%

### Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-05 13:58:24

End at: 2017-12-05 13:58:54

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 76.68 Mbit/s

95th percentile per-packet one-way delay: 53.384 ms

Loss rate: 0.00%

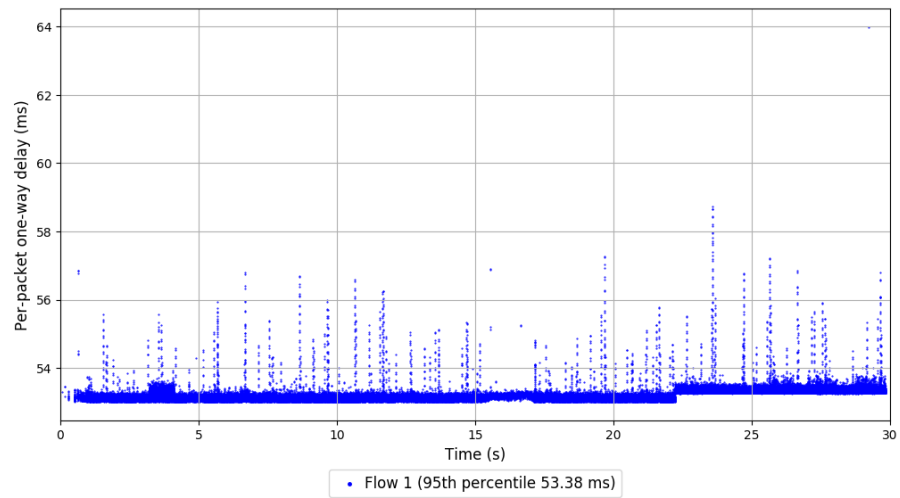
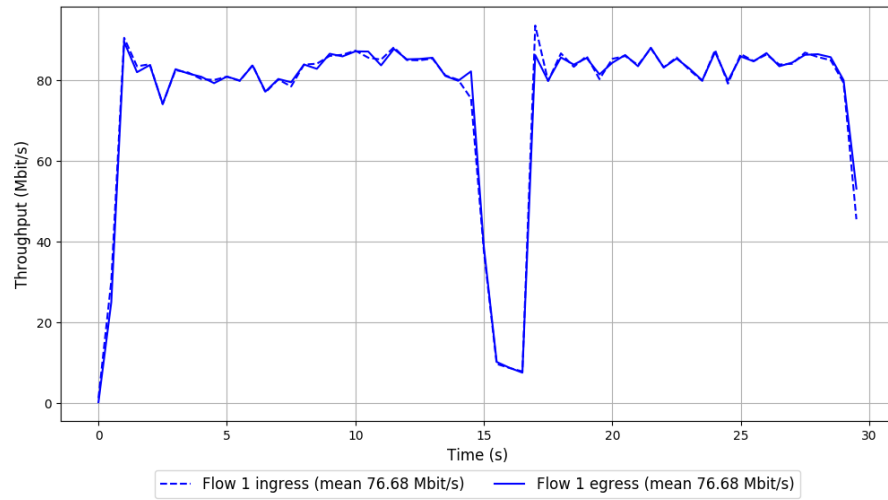
-- Flow 1:

Average throughput: 76.68 Mbit/s

95th percentile per-packet one-way delay: 53.384 ms

Loss rate: 0.00%

## Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-05 14:08:40

End at: 2017-12-05 14:09:10

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 59.54 Mbit/s

95th percentile per-packet one-way delay: 53.590 ms

Loss rate: 0.00%

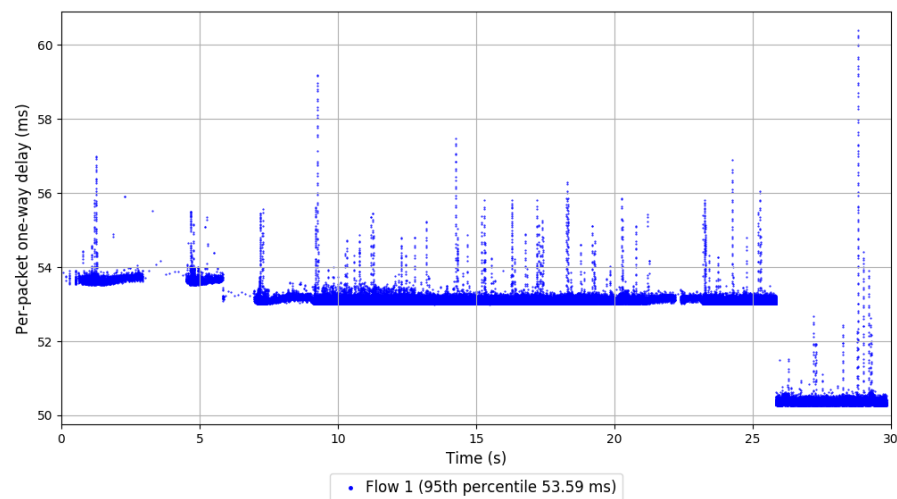
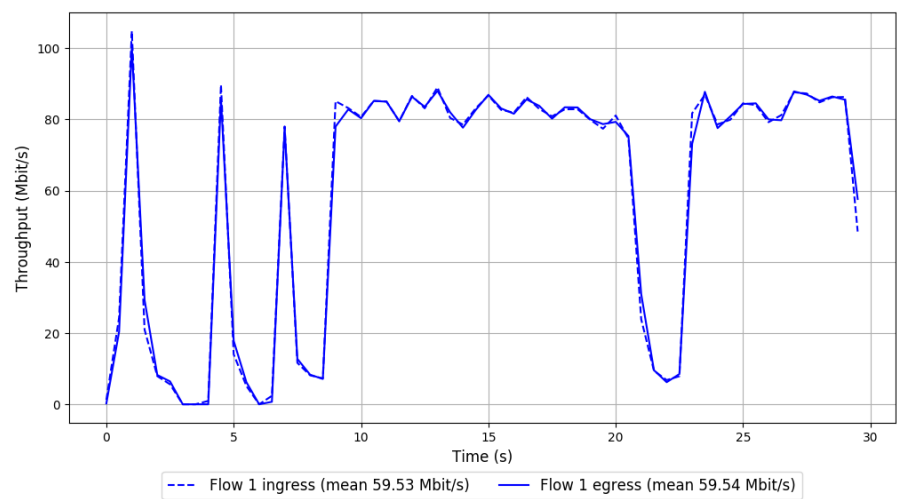
-- Flow 1:

Average throughput: 59.54 Mbit/s

95th percentile per-packet one-way delay: 53.590 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-05 14:19:15

End at: 2017-12-05 14:19:45

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 60.91 Mbit/s

95th percentile per-packet one-way delay: 53.337 ms

Loss rate: 0.00%

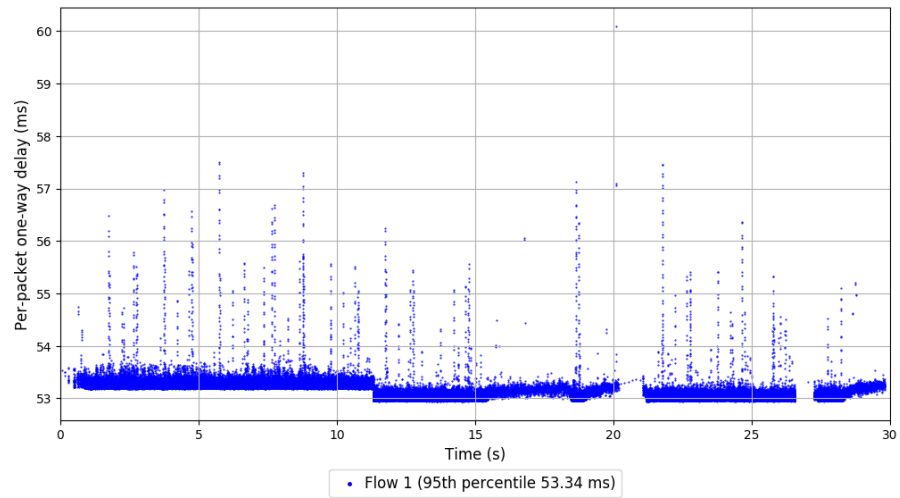
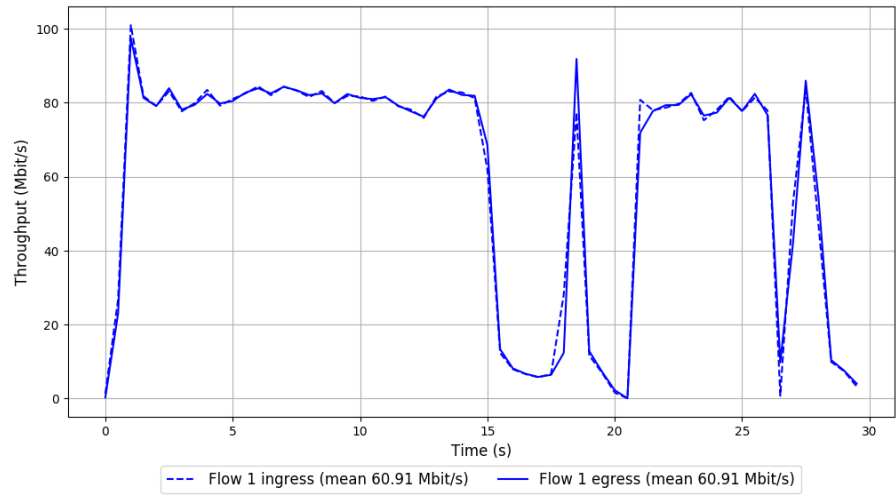
-- Flow 1:

Average throughput: 60.91 Mbit/s

95th percentile per-packet one-way delay: 53.337 ms

Loss rate: 0.00%

## Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-05 14:29:43

End at: 2017-12-05 14:30:13

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 76.99 Mbit/s

95th percentile per-packet one-way delay: 53.005 ms

Loss rate: 0.00%

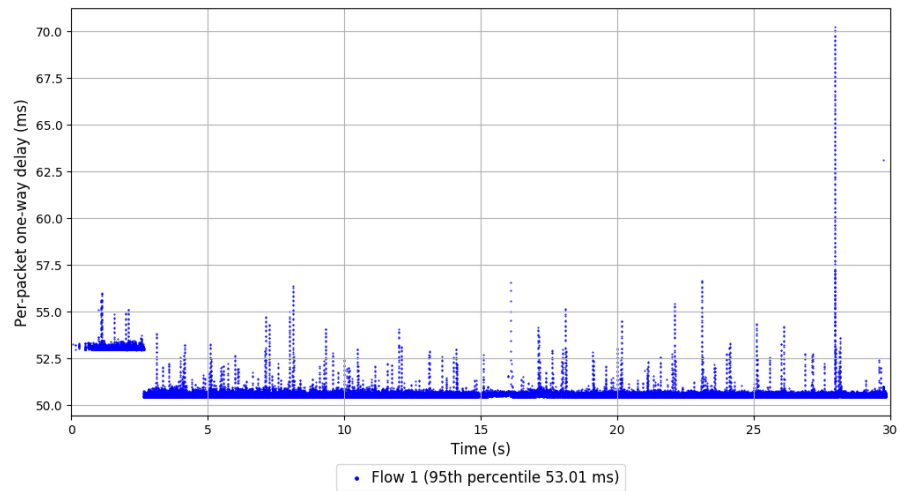
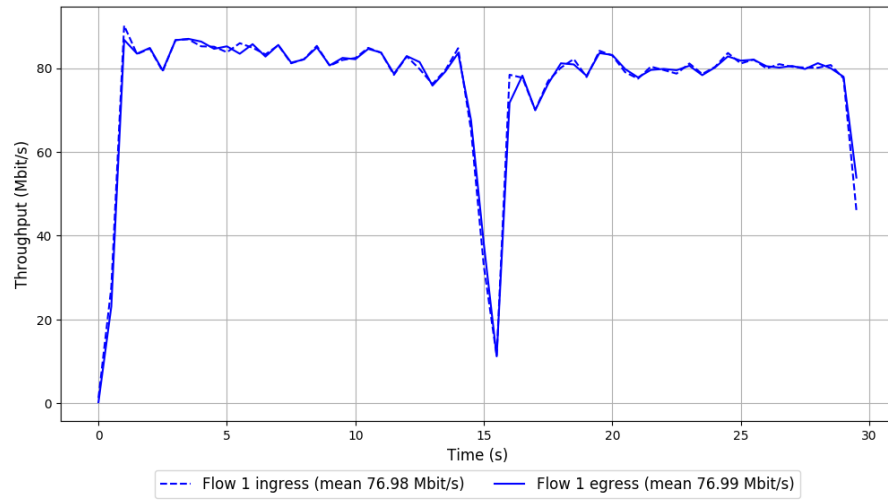
-- Flow 1:

Average throughput: 76.99 Mbit/s

95th percentile per-packet one-way delay: 53.005 ms

Loss rate: 0.00%

### Run 9: Report of QUIC Cubic — Data Link

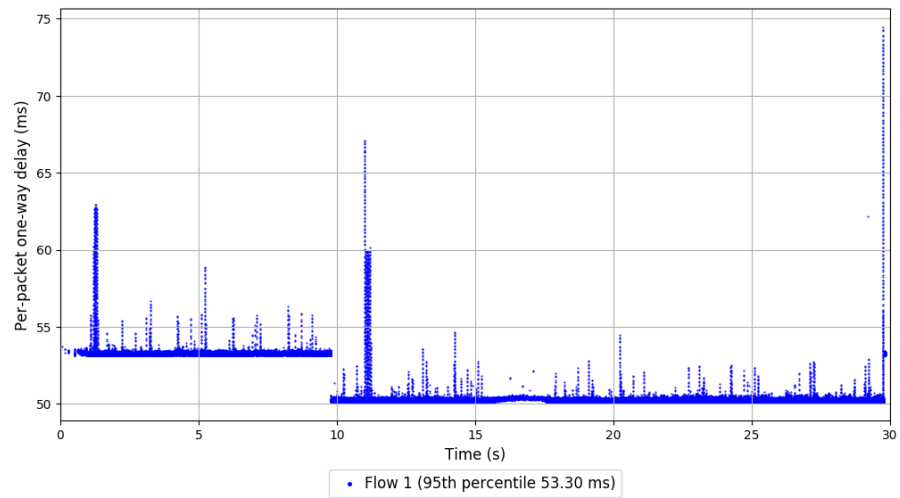
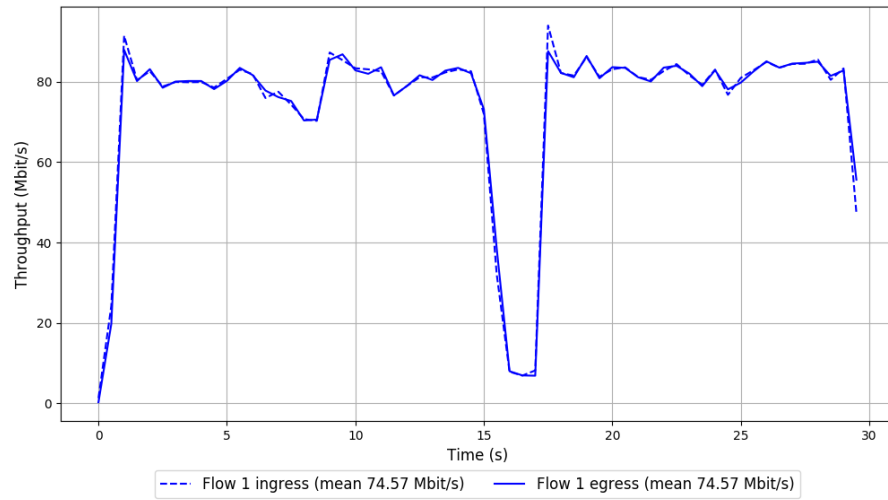


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-05 14:39:56
End at: 2017-12-05 14:40:26

# Below is generated by plot.py at 2017-12-05 15:54:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.57 Mbit/s
95th percentile per-packet one-way delay: 53.295 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 74.57 Mbit/s
95th percentile per-packet one-way delay: 53.295 ms
Loss rate: 0.00%
```

# Run 10: Report of QUIC Cubic — Data Link

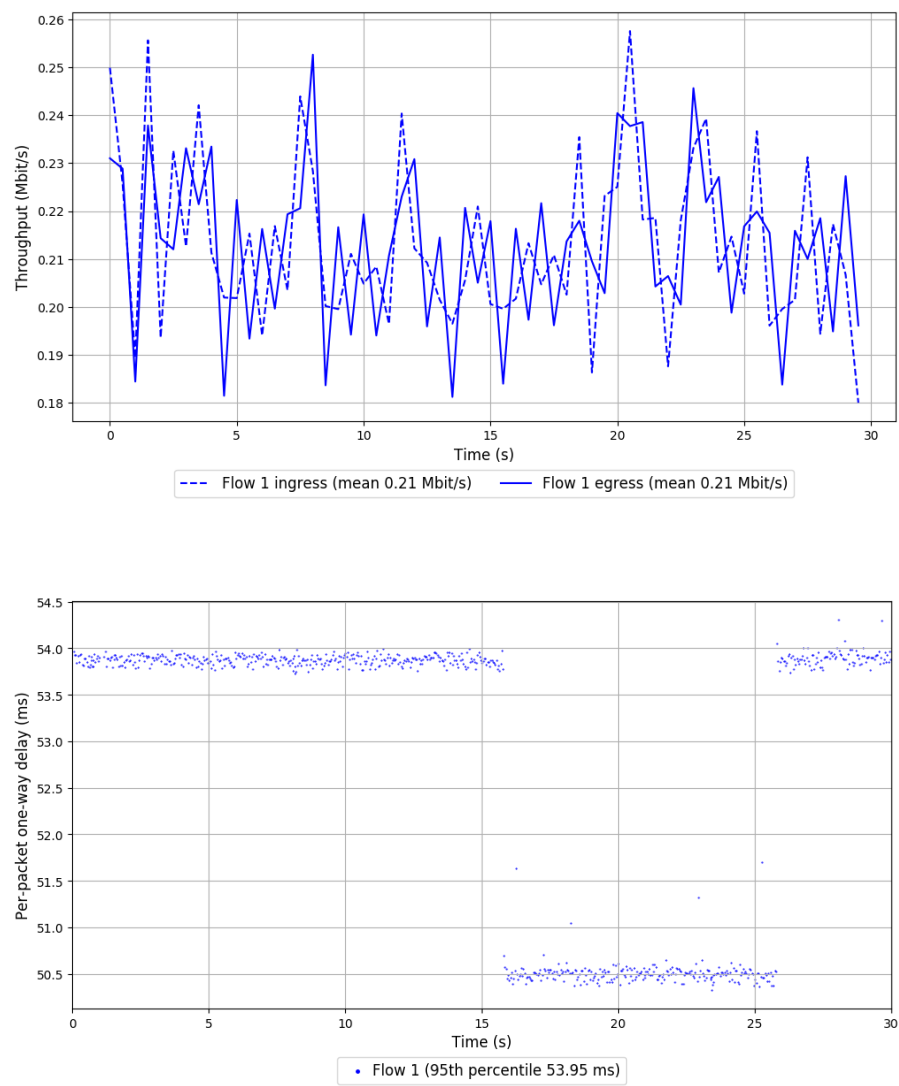


```
Run 1: Statistics of SCReAM

Start at: 2017-12-05 13:04:00
End at: 2017-12-05 13:04:30

# Below is generated by plot.py at 2017-12-05 15:54:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.952 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.952 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

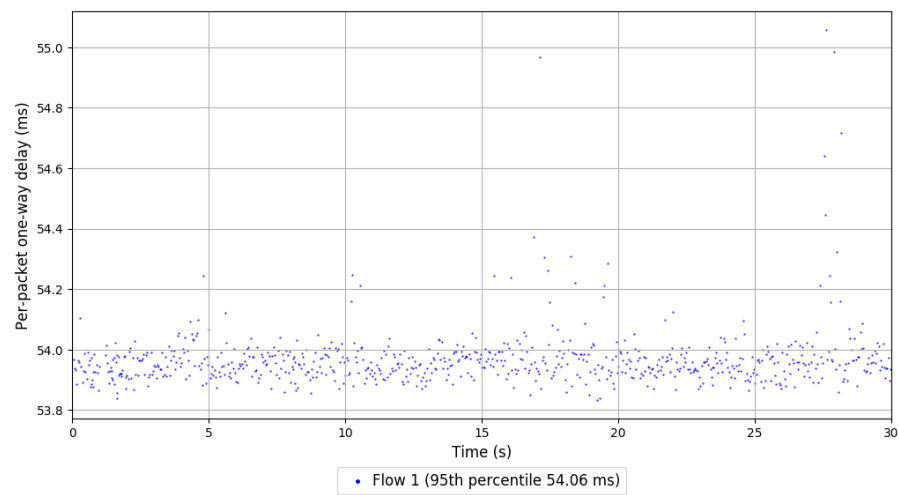
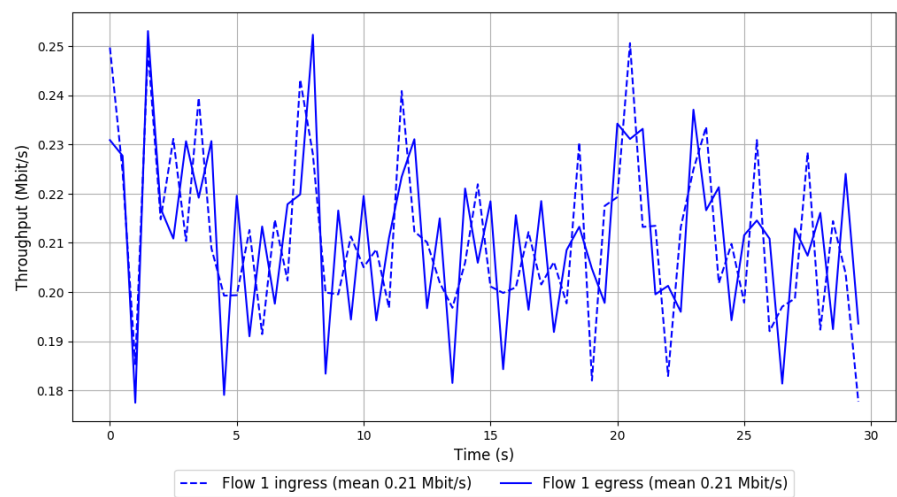


```
Run 2: Statistics of SCReAM

Start at: 2017-12-05 13:14:15
End at: 2017-12-05 13:14:45

# Below is generated by plot.py at 2017-12-05 15:54:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.065 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.065 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-05 13:24:40

End at: 2017-12-05 13:25:10

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.990 ms

Loss rate: 0.00%

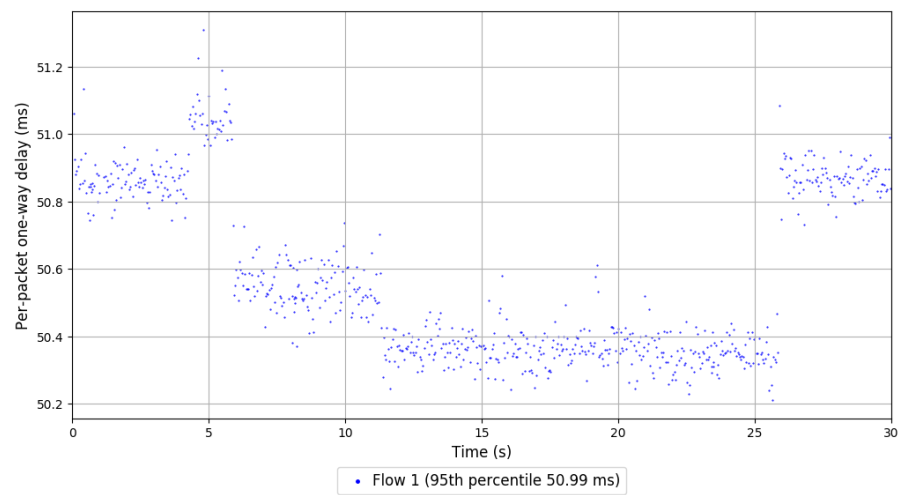
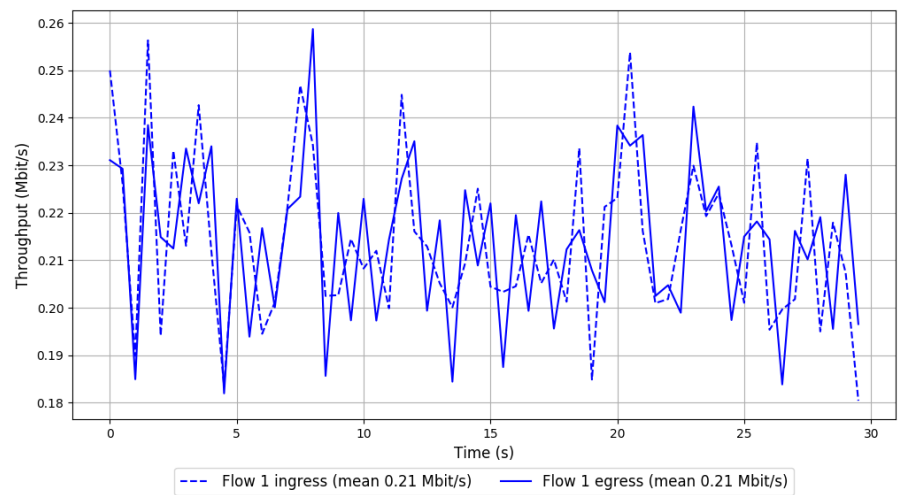
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.990 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-05 13:35:01

End at: 2017-12-05 13:35:32

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.697 ms

Loss rate: 0.00%

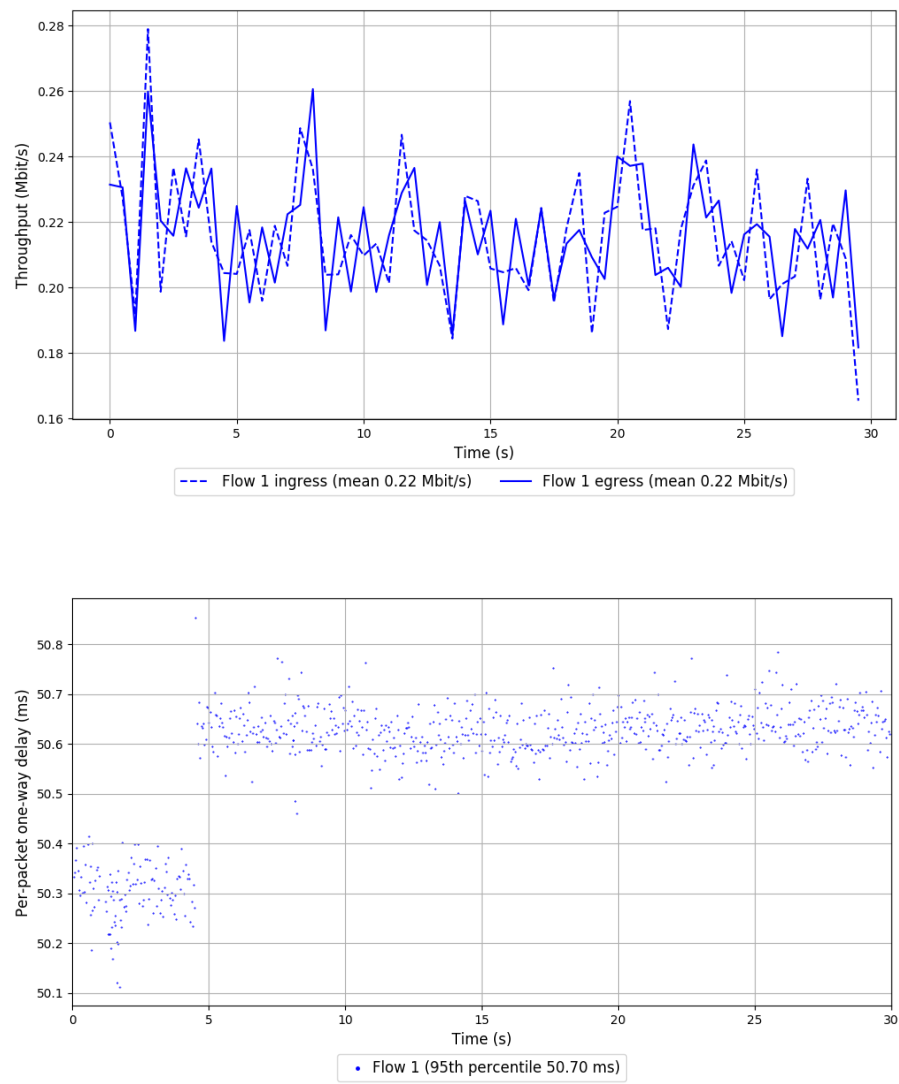
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.697 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-05 13:45:15

End at: 2017-12-05 13:45:45

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.588 ms

Loss rate: 0.00%

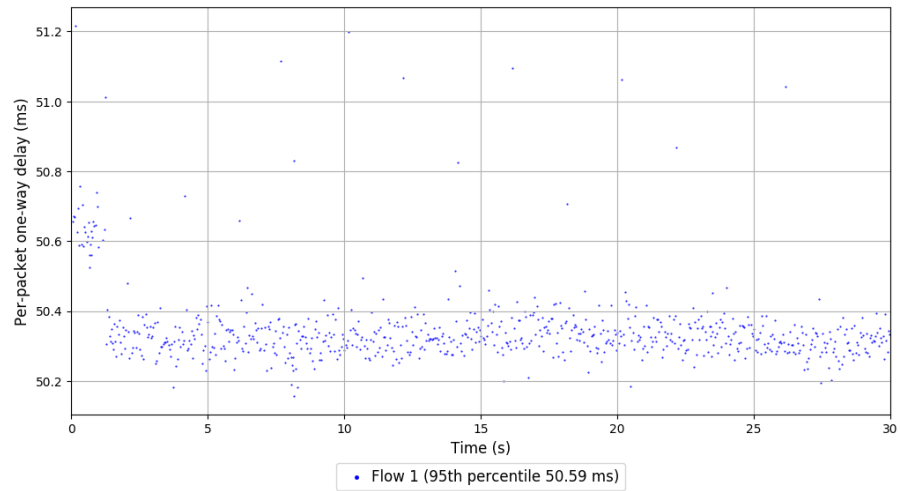
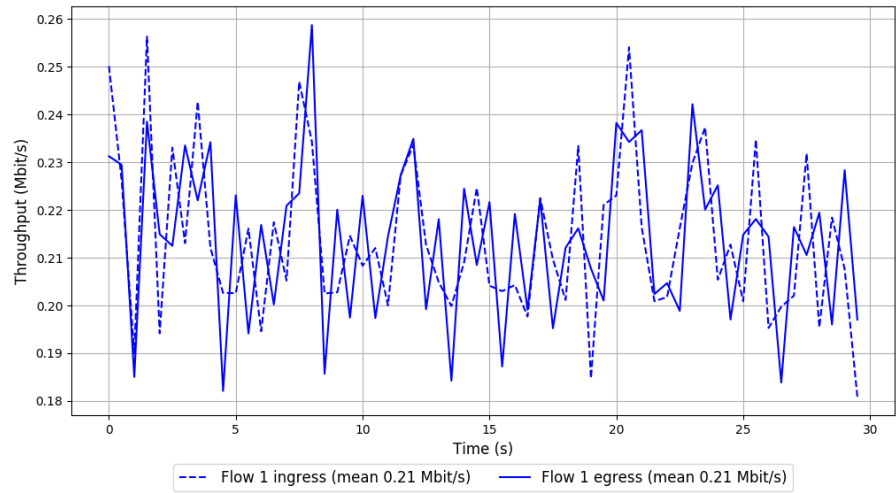
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.588 ms

Loss rate: 0.00%

## Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-05 13:55:28

End at: 2017-12-05 13:55:58

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.679 ms

Loss rate: 0.00%

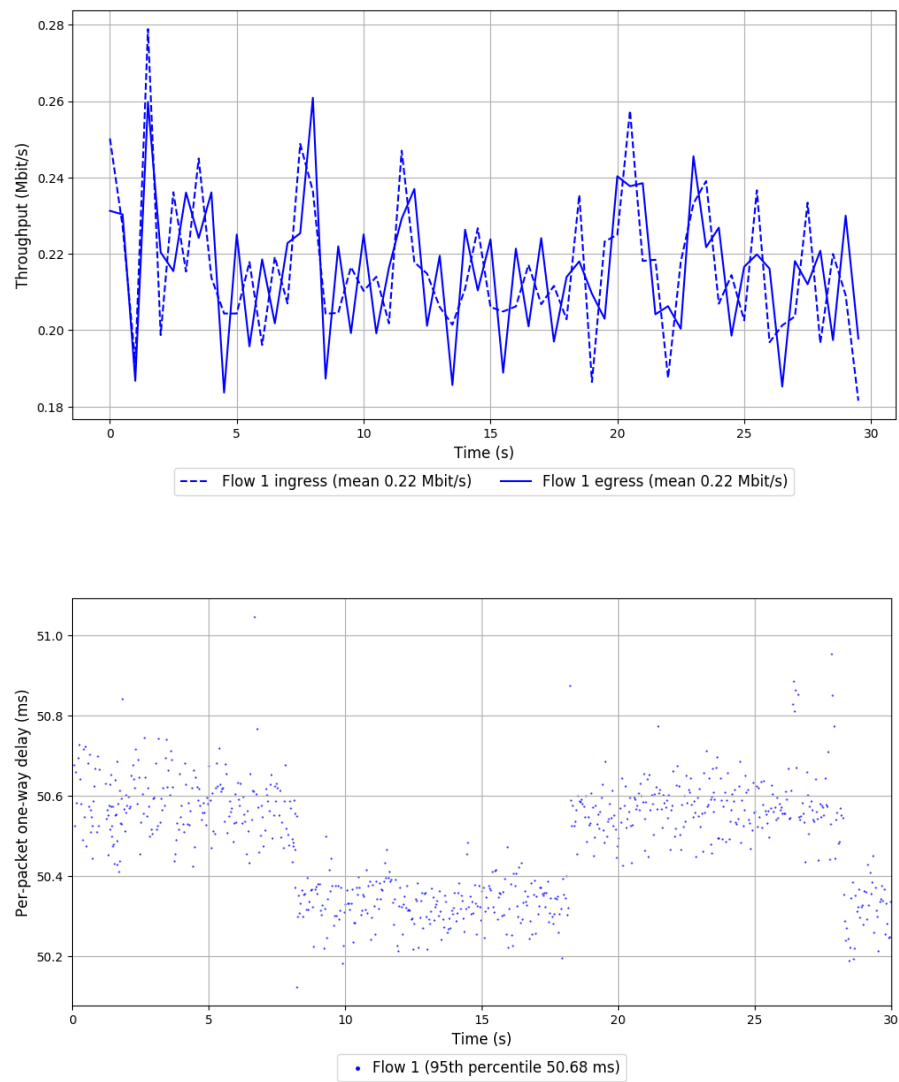
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.679 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-05 14:05:45

End at: 2017-12-05 14:06:15

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.626 ms

Loss rate: 0.00%

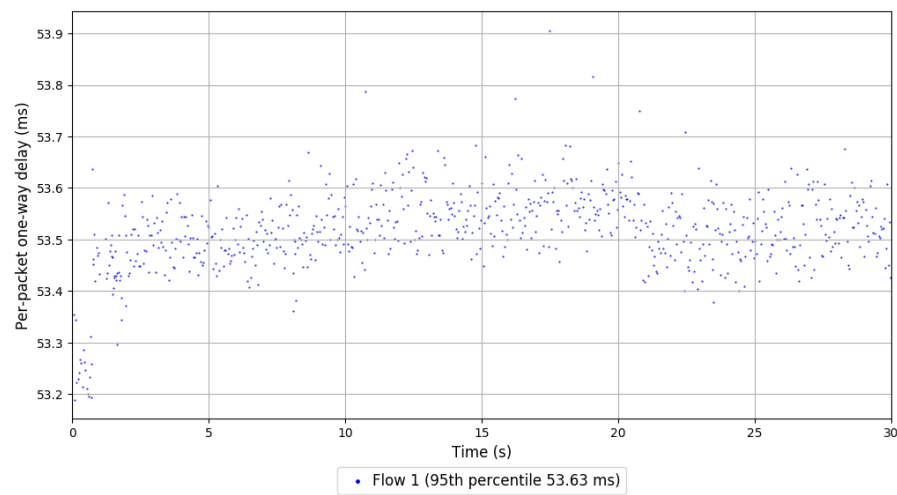
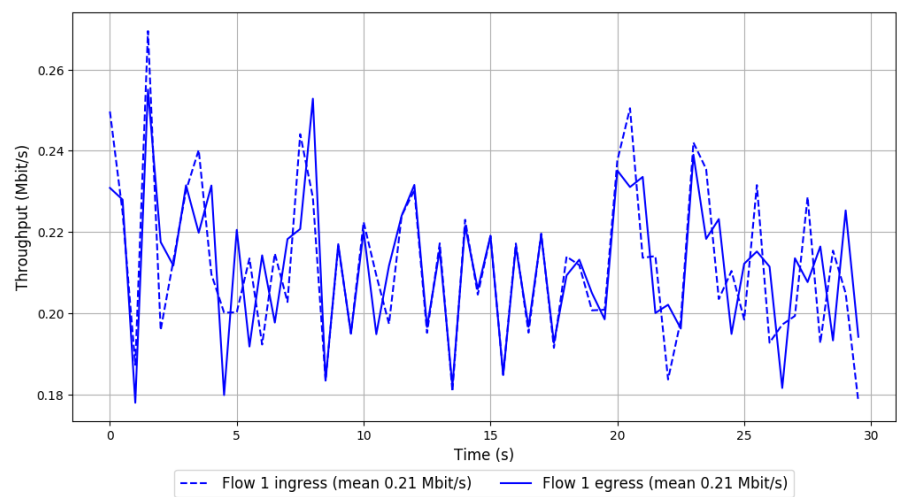
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.626 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-05 14:16:18

End at: 2017-12-05 14:16:48

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 53.576 ms

Loss rate: 0.00%

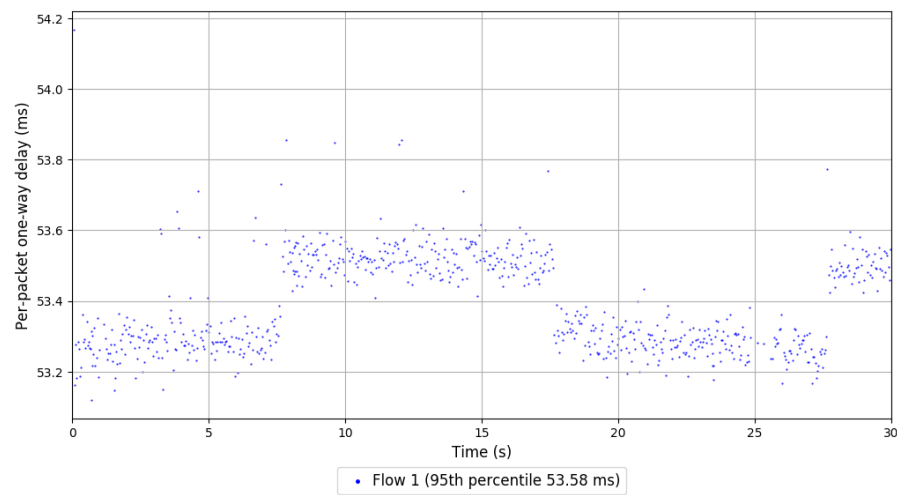
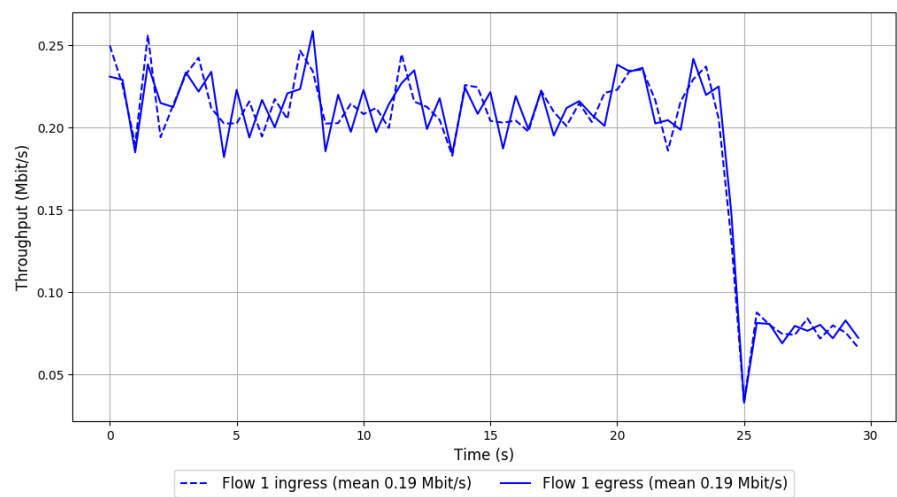
-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 53.576 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-05 14:26:46

End at: 2017-12-05 14:27:16

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.325 ms

Loss rate: 0.00%

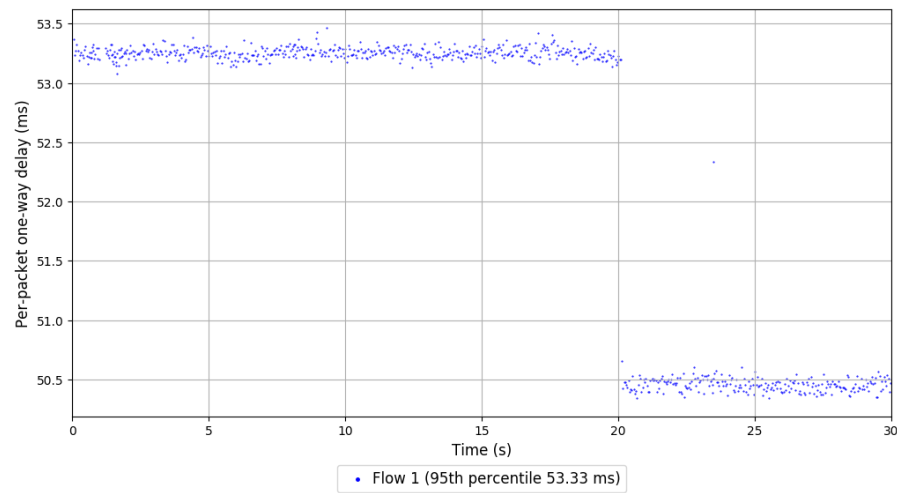
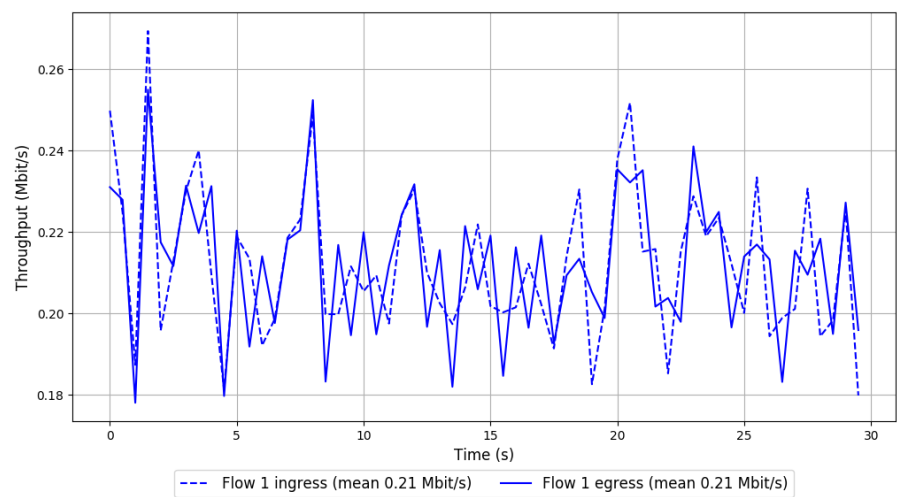
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.325 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-05 14:37:01

End at: 2017-12-05 14:37:31

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.562 ms

Loss rate: 0.12%

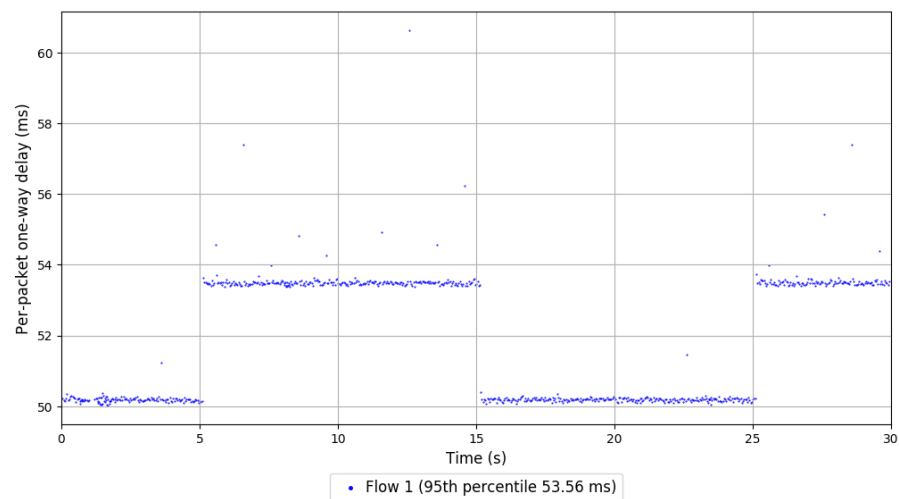
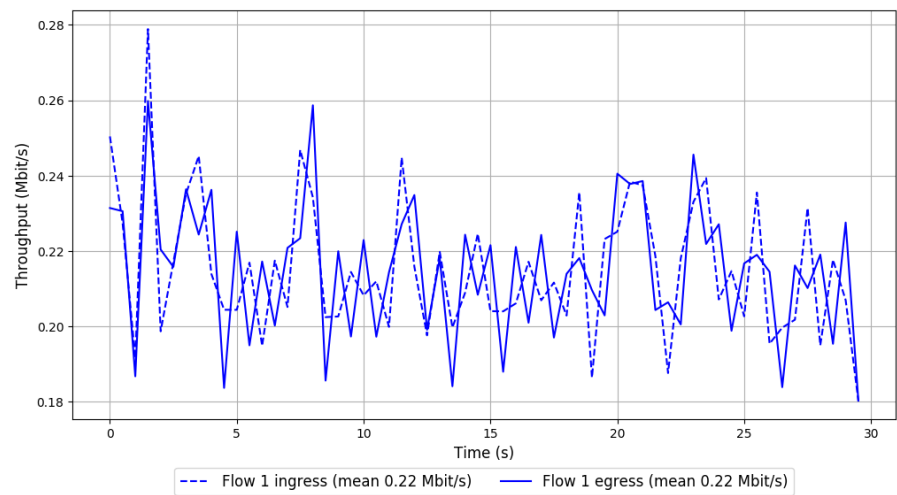
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.562 ms

Loss rate: 0.12%

Run 10: Report of SReAM — Data Link

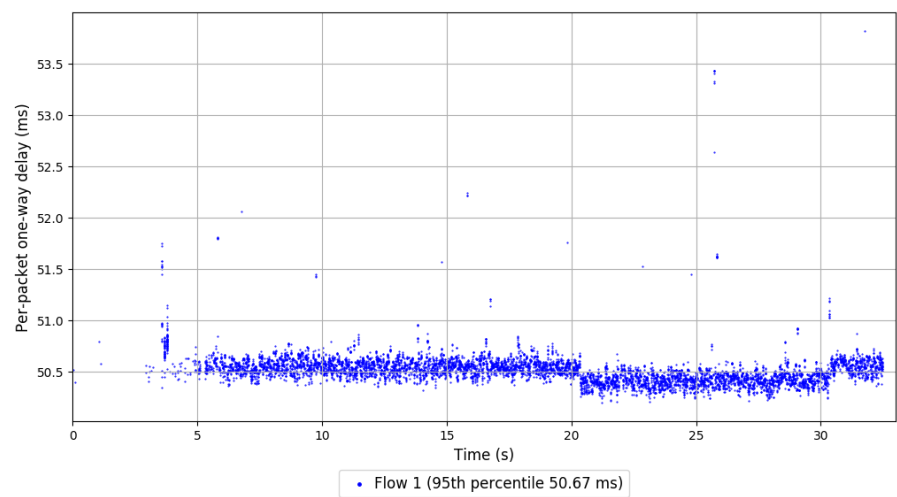
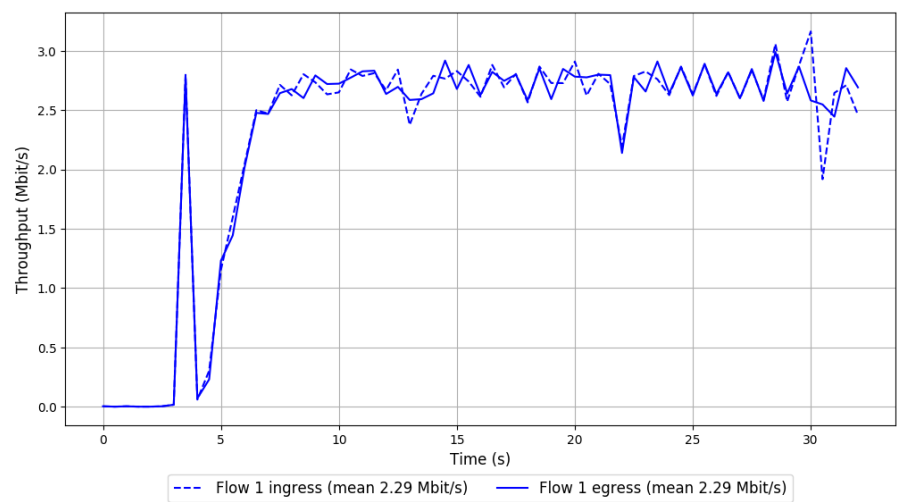


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-05 13:09:58
End at: 2017-12-05 13:10:28

# Below is generated by plot.py at 2017-12-05 15:54:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.673 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.673 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-05 13:20:14

End at: 2017-12-05 13:20:44

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 54.057 ms

Loss rate: 0.00%

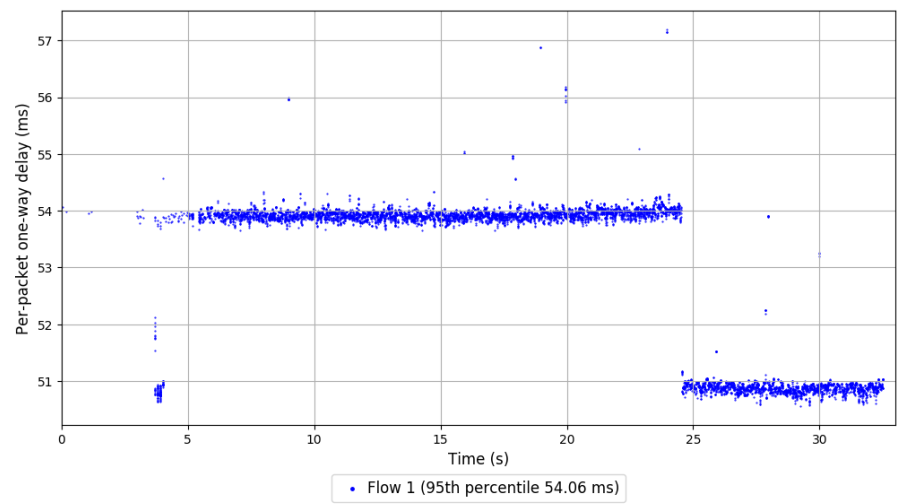
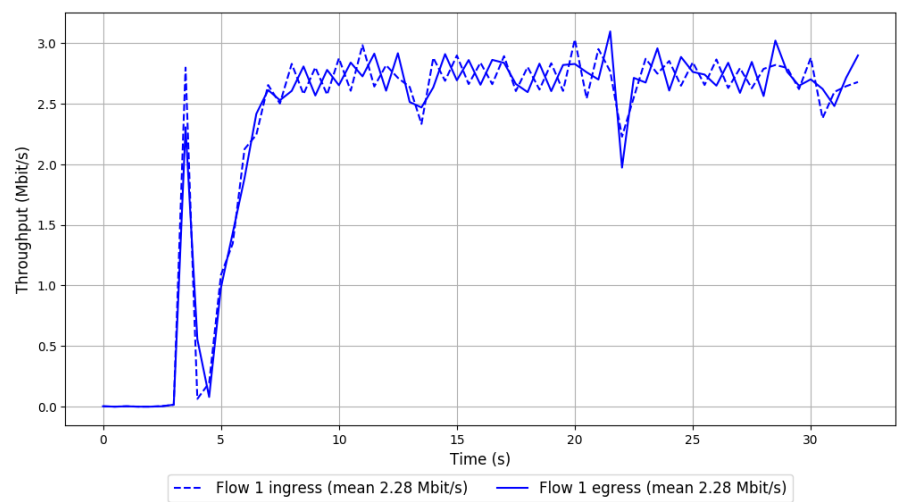
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 54.057 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-05 13:30:25

End at: 2017-12-05 13:30:55

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.605 ms

Loss rate: 0.00%

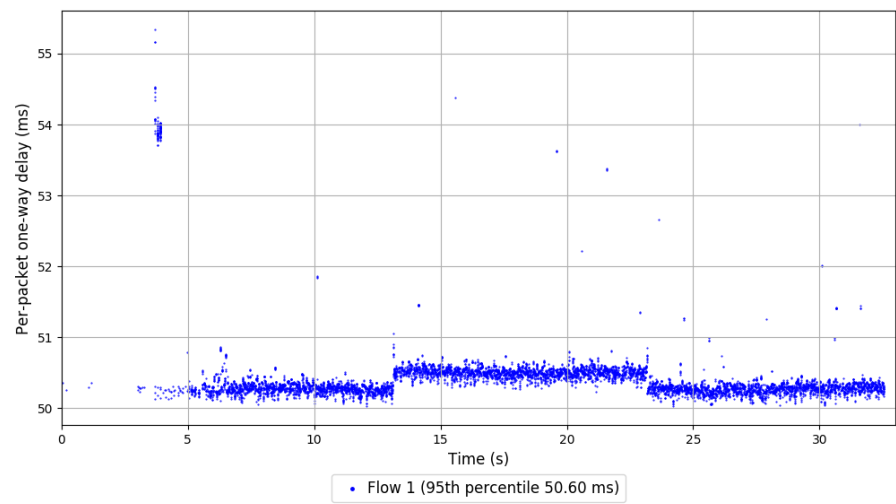
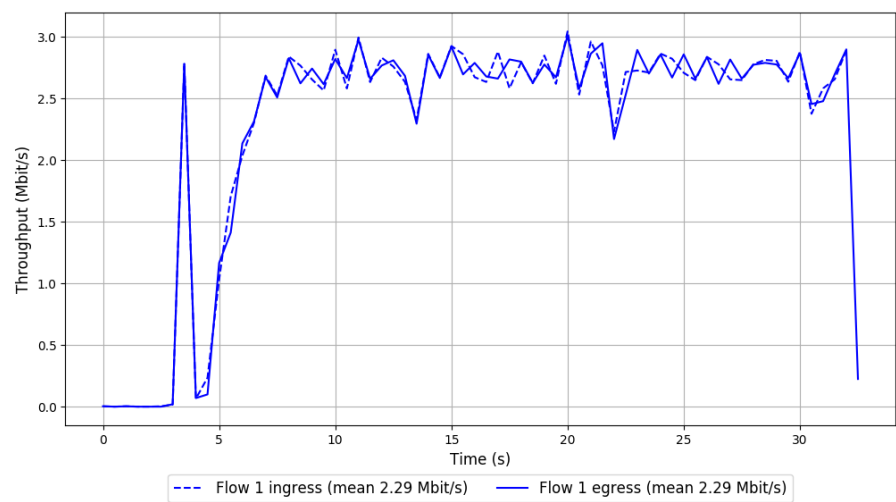
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.605 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-05 13:40:57

End at: 2017-12-05 13:41:27

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.475 ms

Loss rate: 0.00%

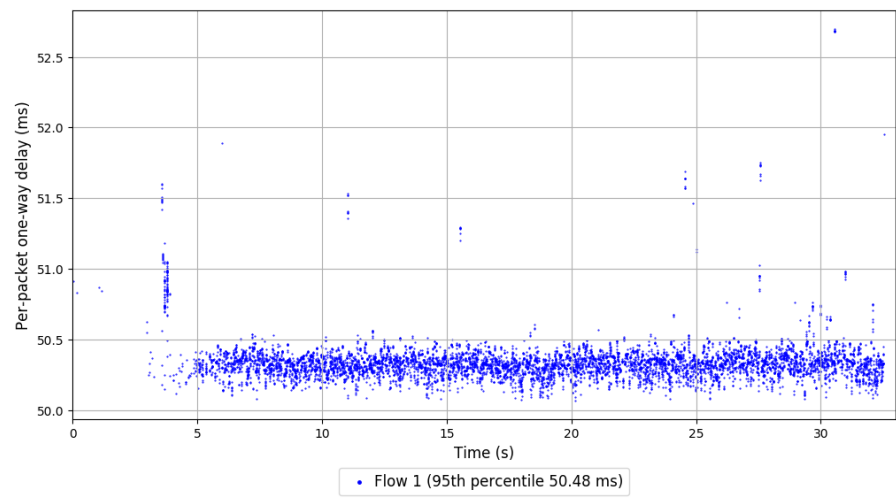
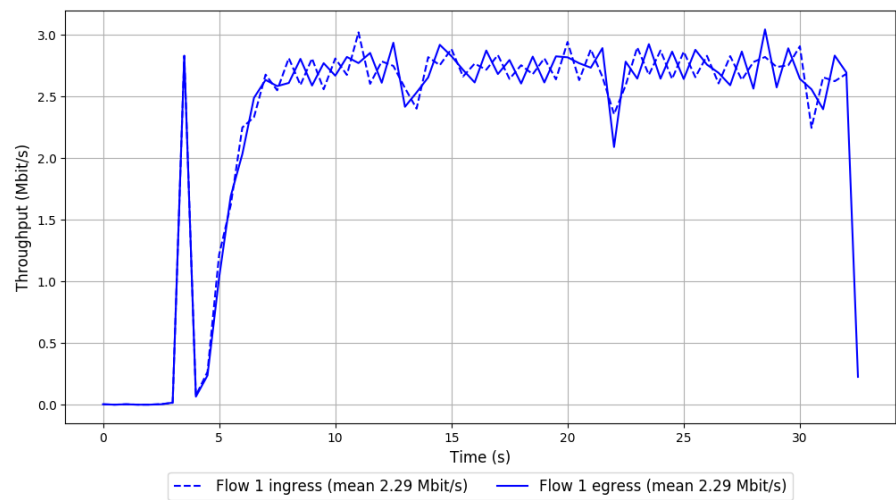
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.475 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-05 13:51:13

End at: 2017-12-05 13:51:43

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.337 ms

Loss rate: 0.00%

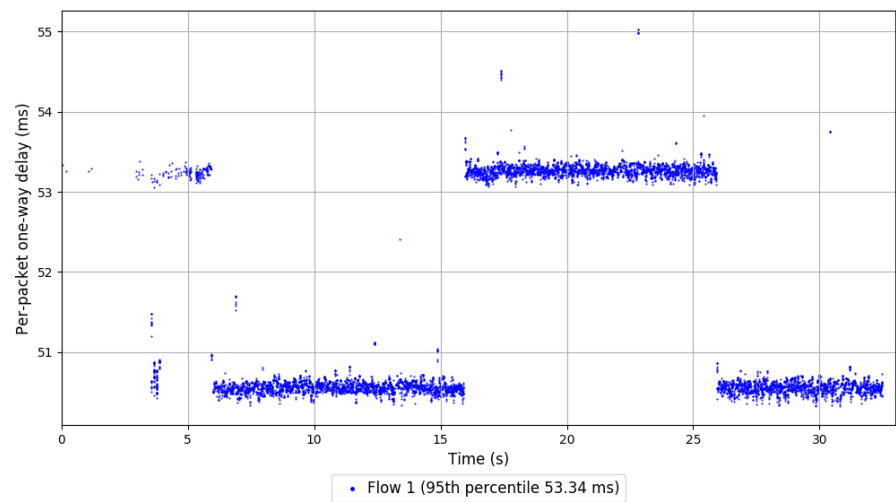
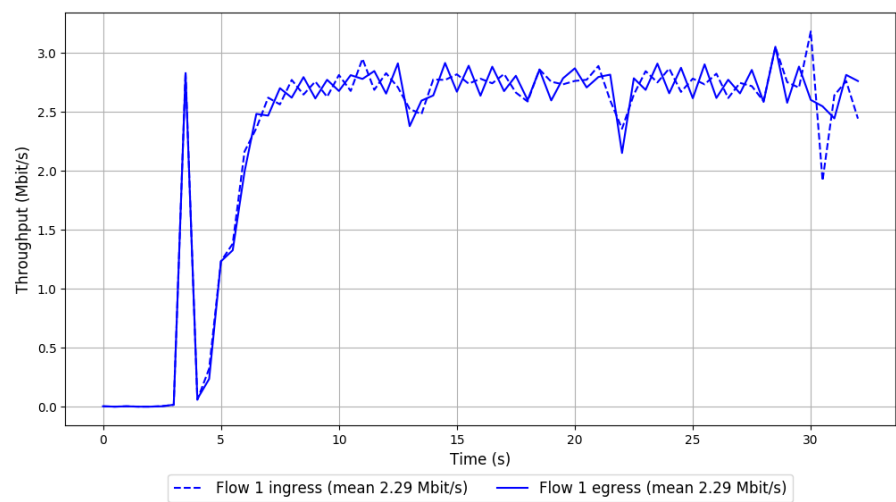
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.337 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-05 14:01:23

End at: 2017-12-05 14:01:53

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.659 ms

Loss rate: 0.00%

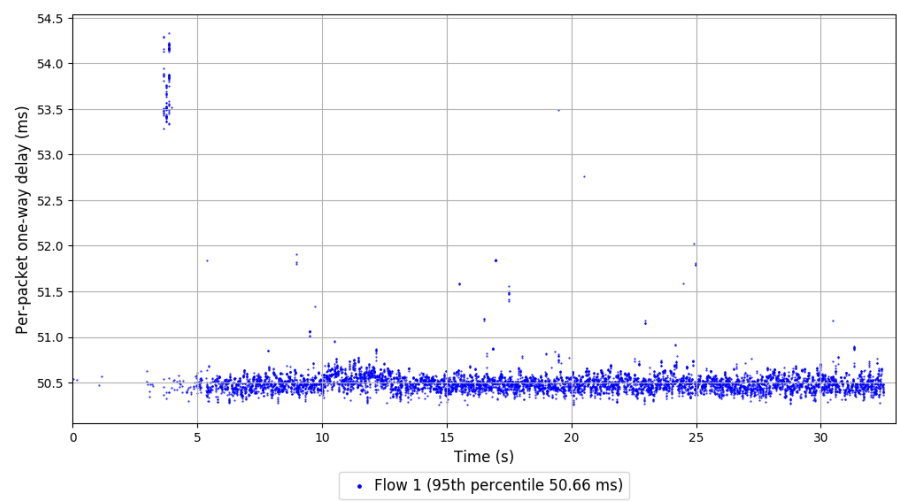
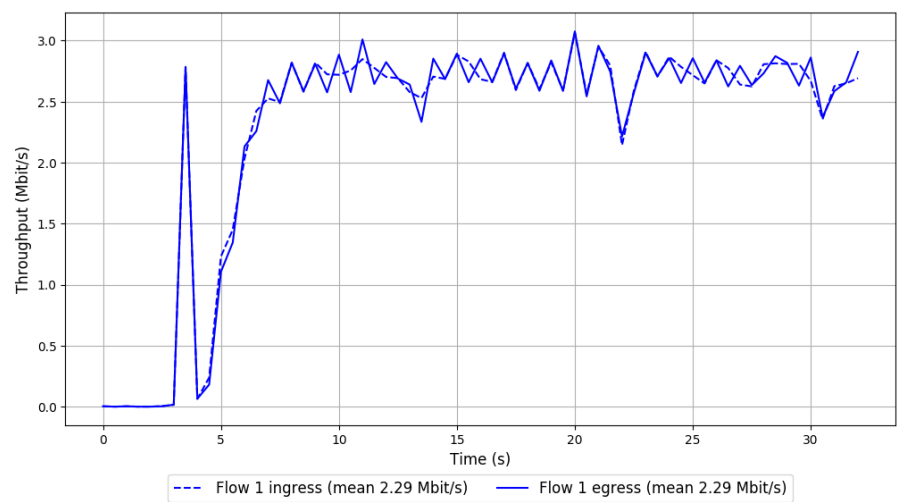
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.659 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-05 14:11:39

End at: 2017-12-05 14:12:09

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.832 ms

Loss rate: 0.00%

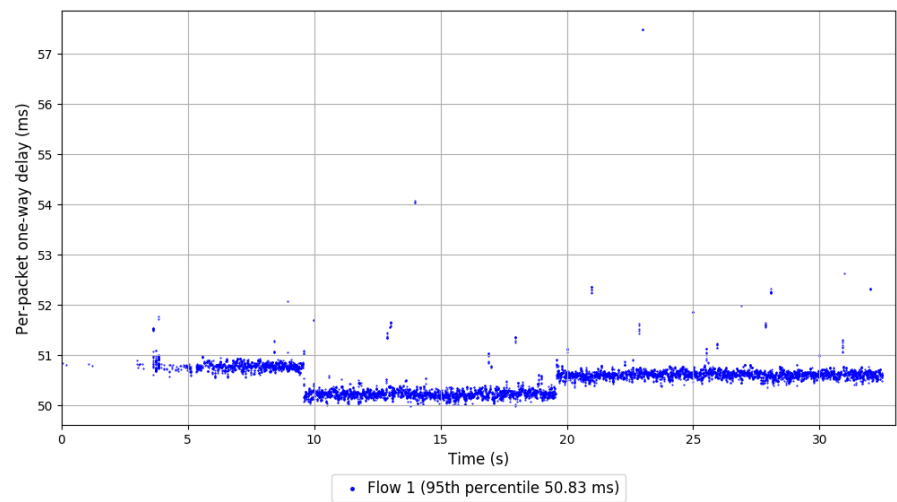
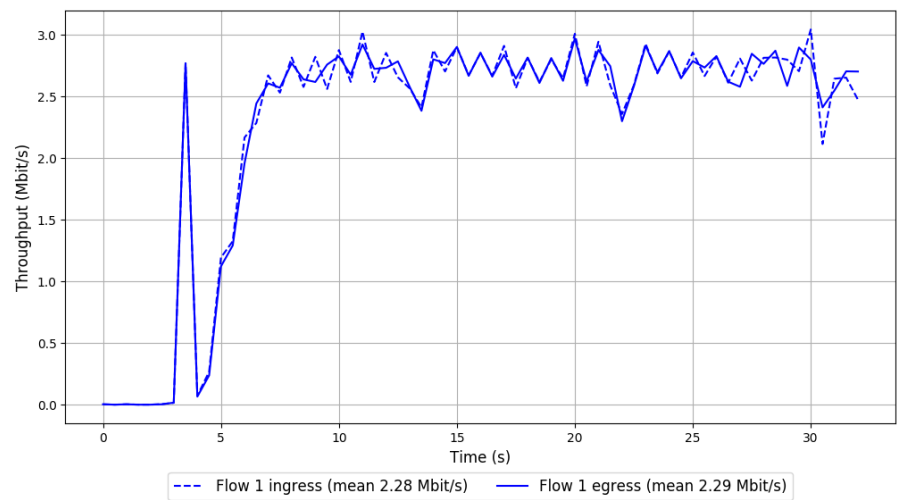
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.832 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-05 14:22:17

End at: 2017-12-05 14:22:47

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.267 ms

Loss rate: 0.00%

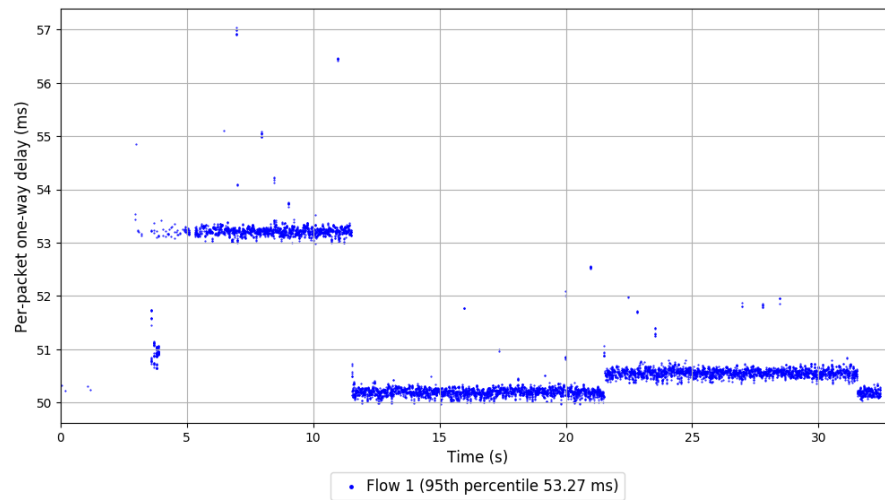
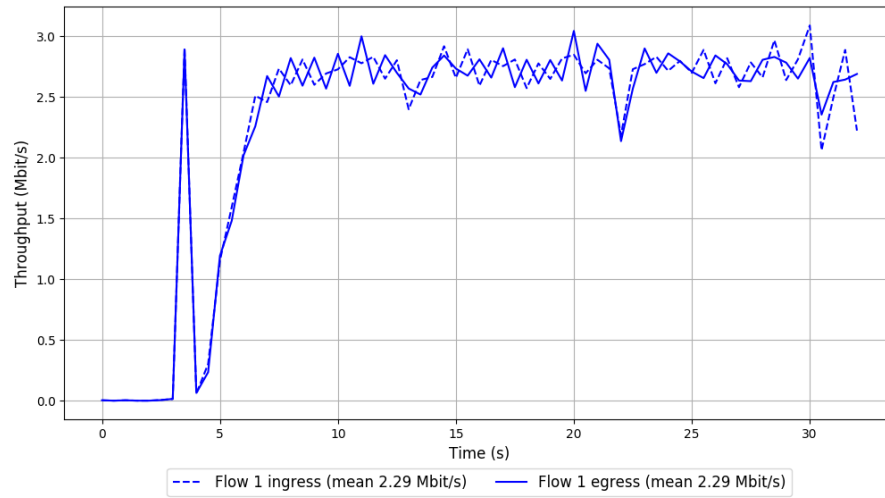
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.267 ms

Loss rate: 0.00%

### Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-05 14:32:45

End at: 2017-12-05 14:33:15

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.963 ms

Loss rate: 0.00%

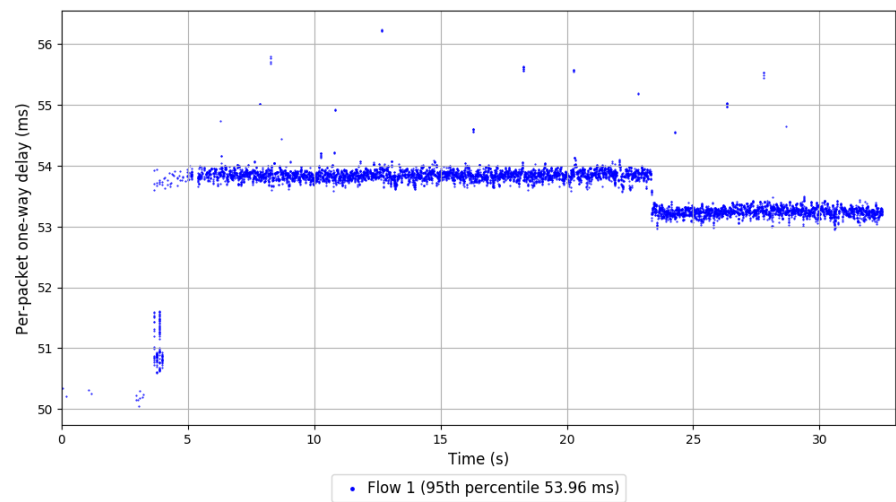
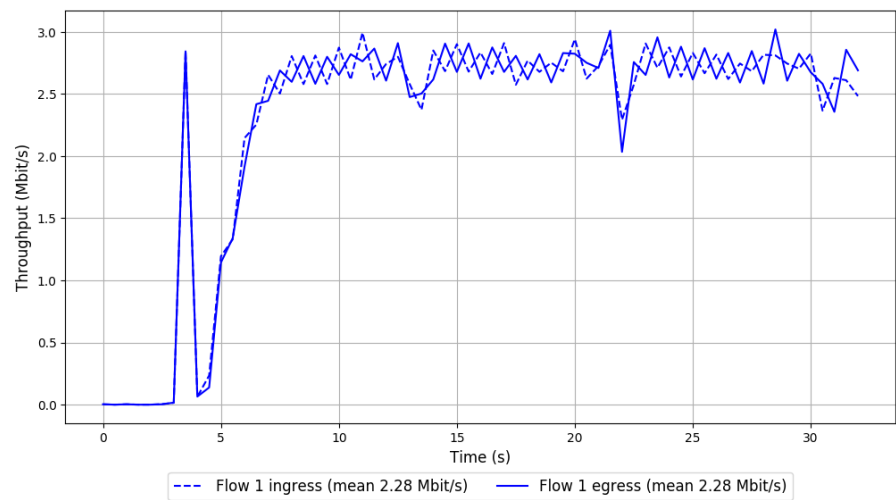
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.963 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-05 14:42:58

End at: 2017-12-05 14:43:28

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.564 ms

Loss rate: 0.00%

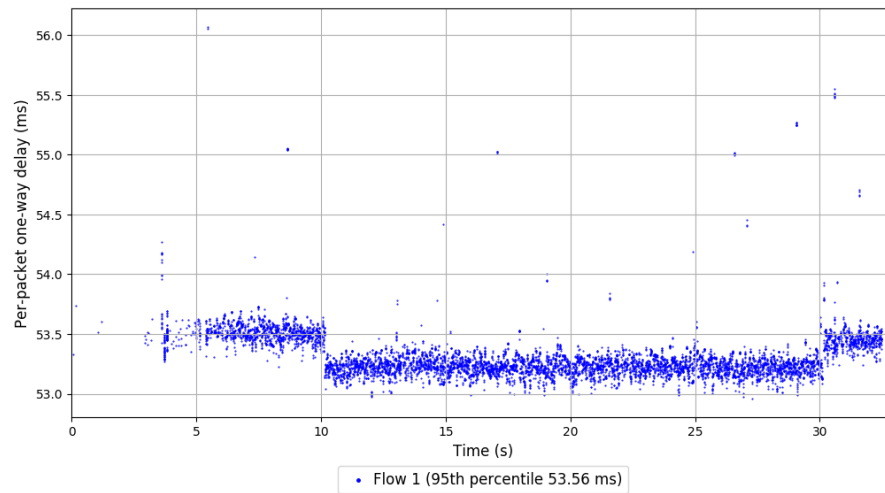
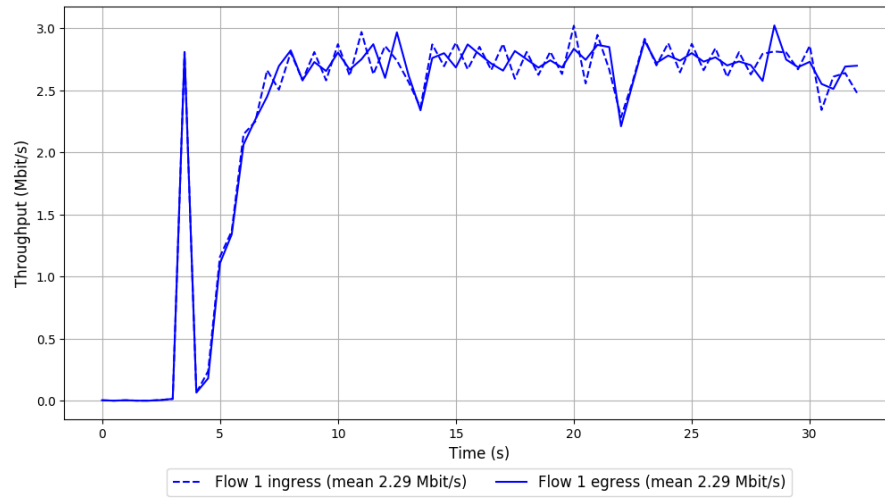
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.564 ms

Loss rate: 0.00%

# Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-05 13:08:21

End at: 2017-12-05 13:08:51

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 52.040 ms

Loss rate: 0.06%

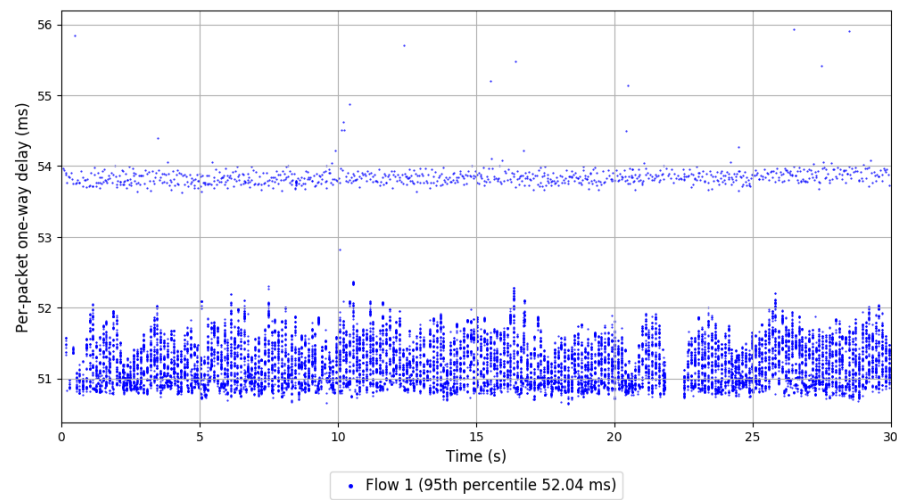
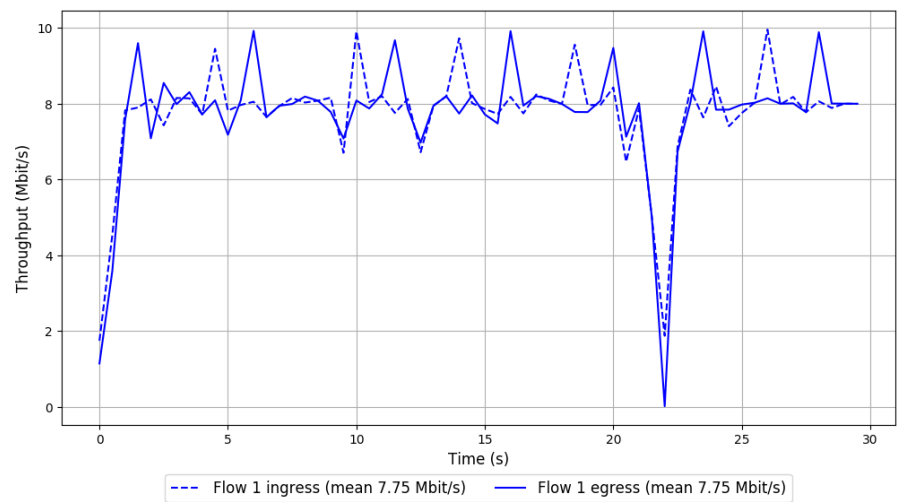
-- Flow 1:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 52.040 ms

Loss rate: 0.06%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-05 13:18:36

End at: 2017-12-05 13:19:06

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 54.512 ms

Loss rate: 0.09%

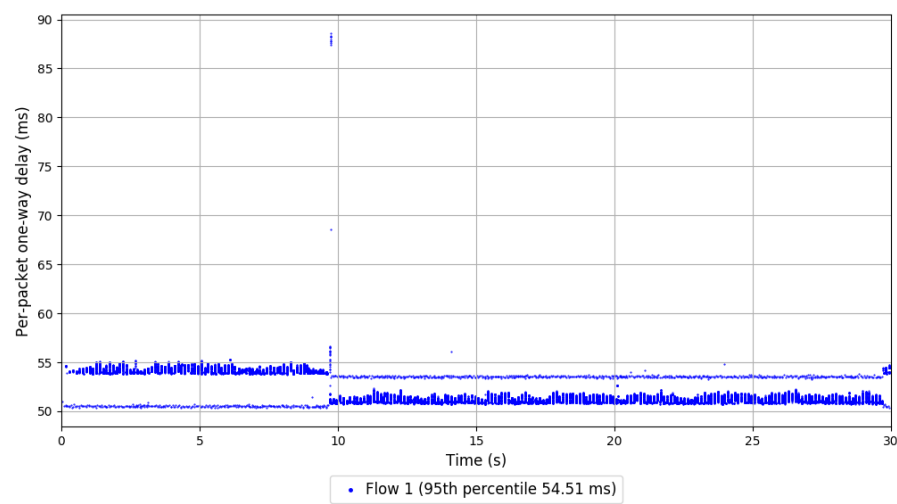
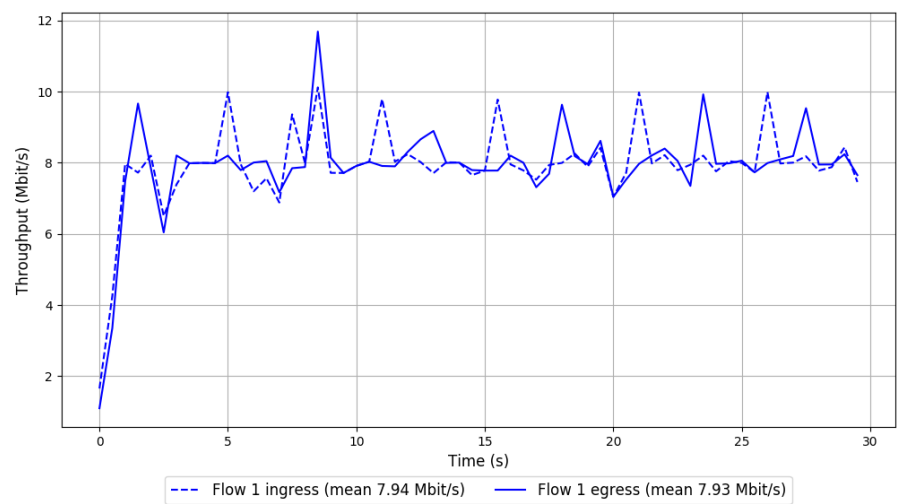
-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 54.512 ms

Loss rate: 0.09%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-05 13:29:01

End at: 2017-12-05 13:29:31

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 52.220 ms

Loss rate: 0.15%

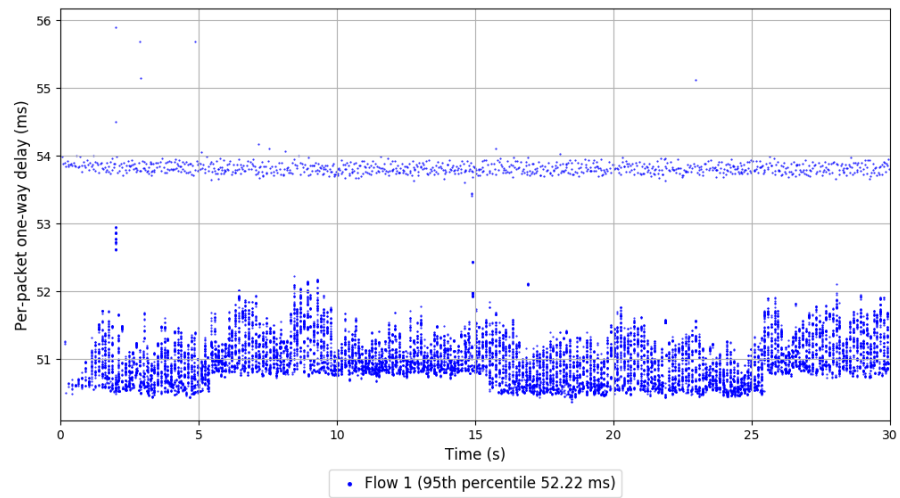
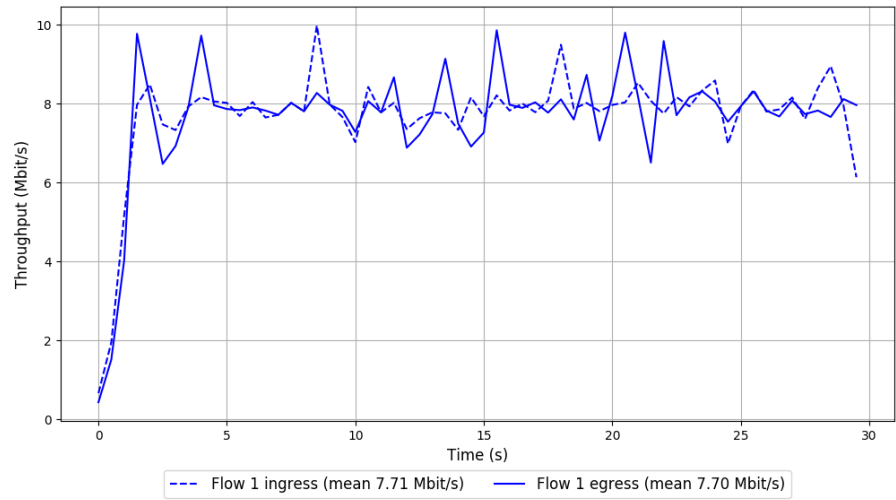
-- Flow 1:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 52.220 ms

Loss rate: 0.15%

### Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-05 13:39:21

End at: 2017-12-05 13:39:51

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 54.627 ms

Loss rate: 0.01%

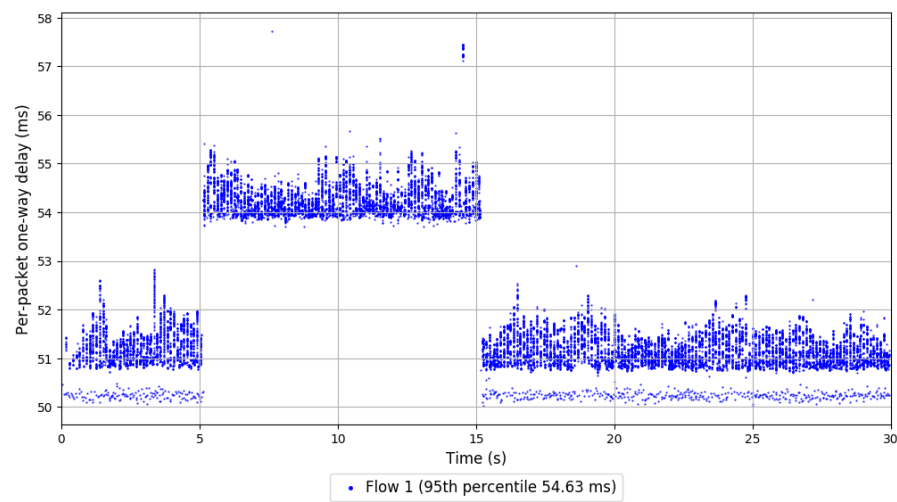
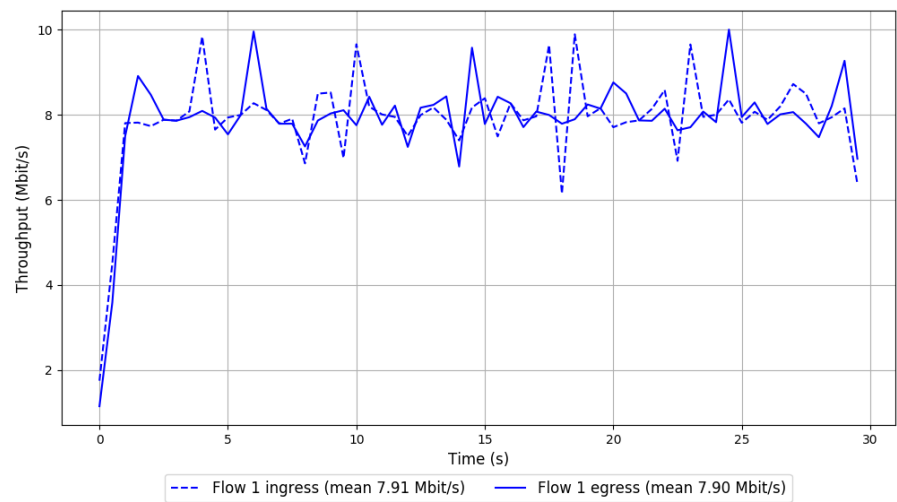
-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 54.627 ms

Loss rate: 0.01%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-05 13:49:37

End at: 2017-12-05 13:50:07

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 54.571 ms

Loss rate: 0.05%

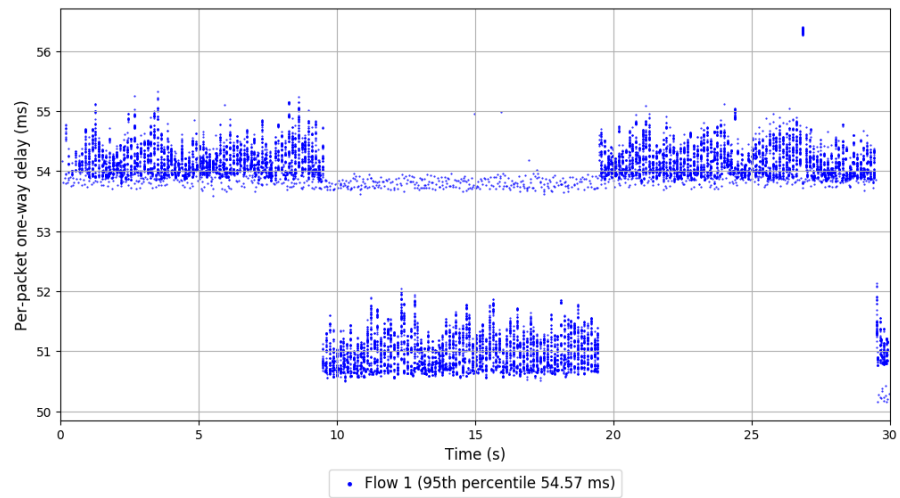
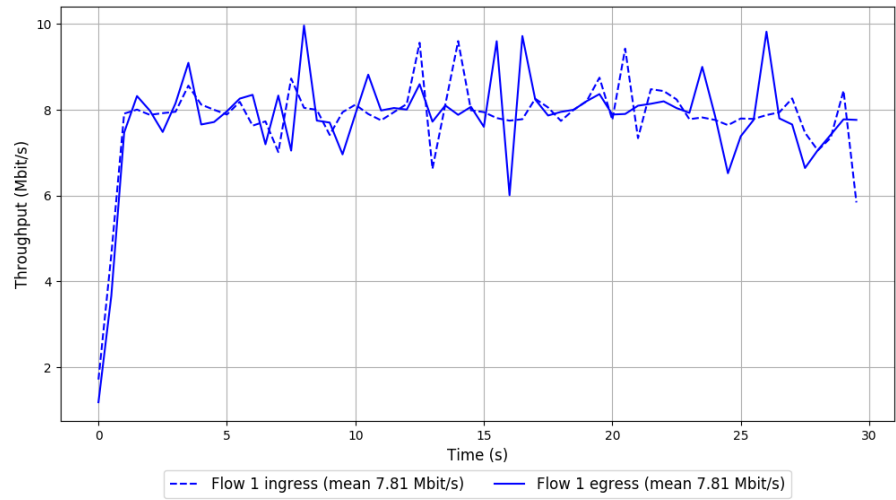
-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 54.571 ms

Loss rate: 0.05%

### Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-05 13:59:47

End at: 2017-12-05 14:00:17

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 54.198 ms

Loss rate: 0.08%

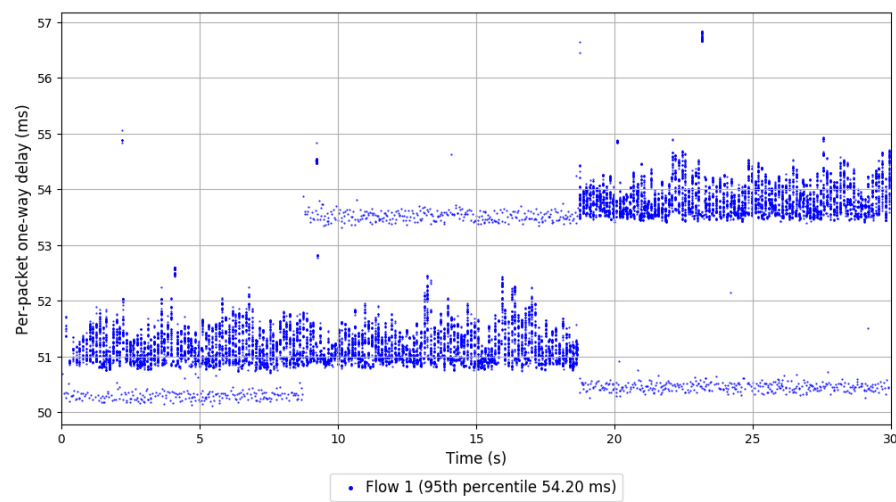
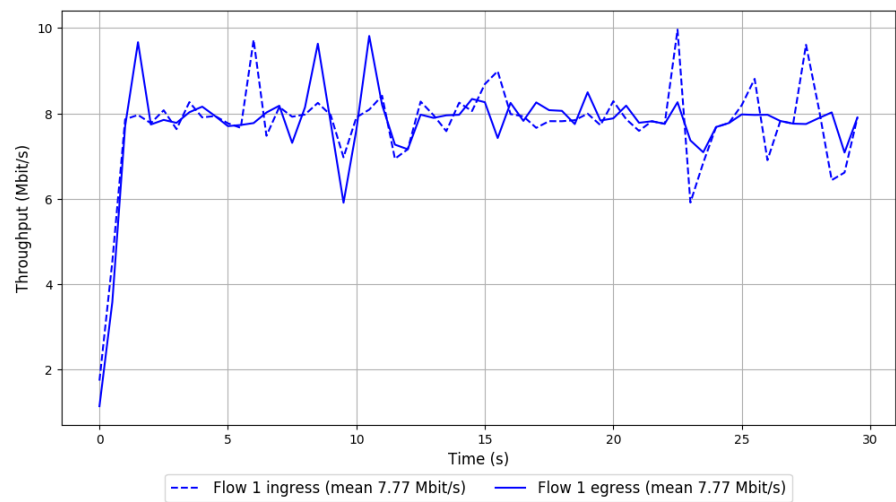
-- Flow 1:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 54.198 ms

Loss rate: 0.08%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-05 14:10:03

End at: 2017-12-05 14:10:33

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 54.078 ms

Loss rate: 0.01%

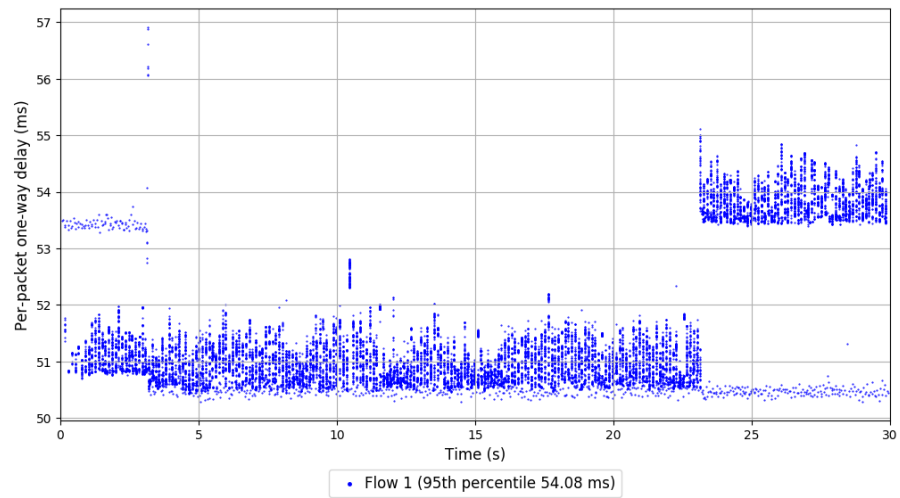
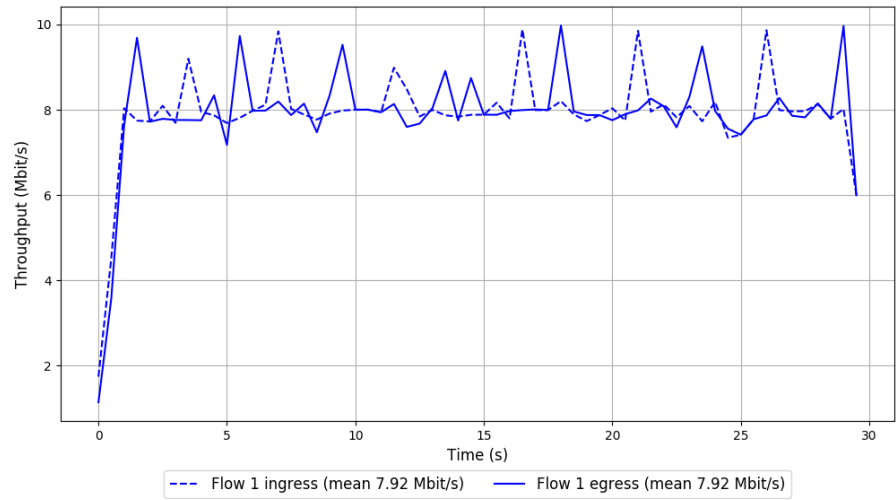
-- Flow 1:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 54.078 ms

Loss rate: 0.01%

### Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-05 14:20:40

End at: 2017-12-05 14:21:10

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 54.225 ms

Loss rate: 0.43%

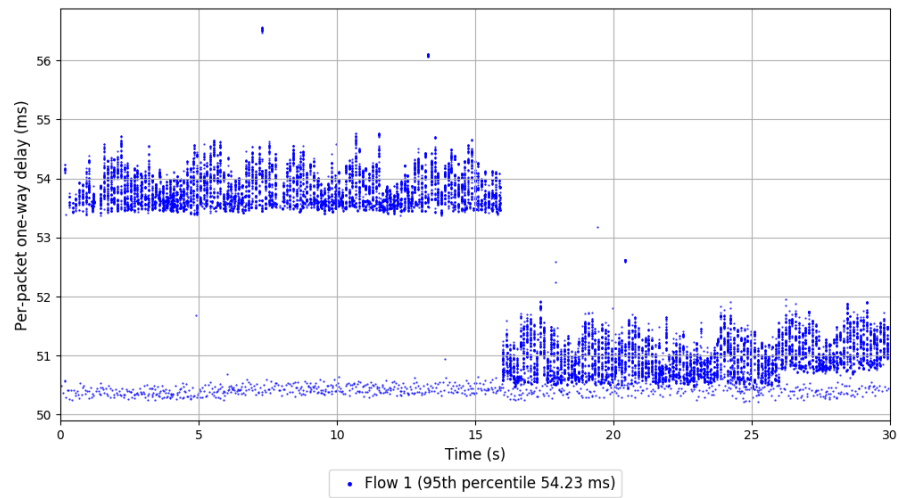
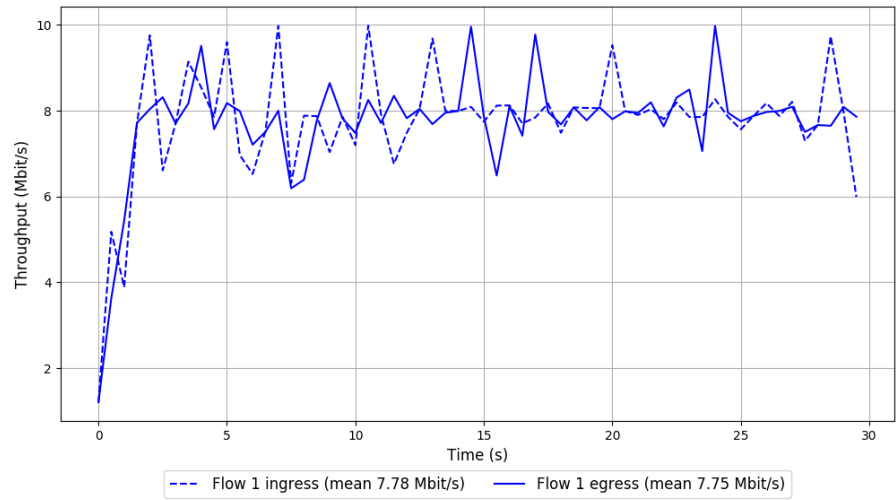
-- Flow 1:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 54.225 ms

Loss rate: 0.43%

## Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-05 14:31:08

End at: 2017-12-05 14:31:38

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 54.165 ms

Loss rate: 0.04%

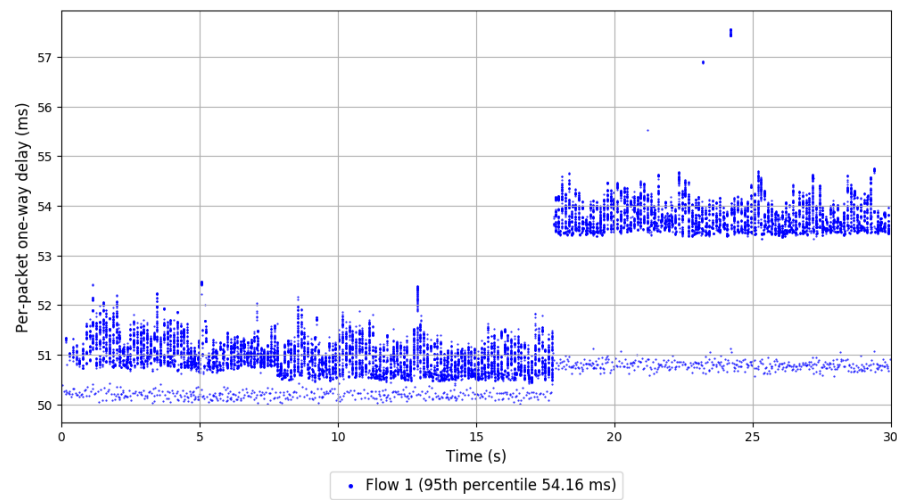
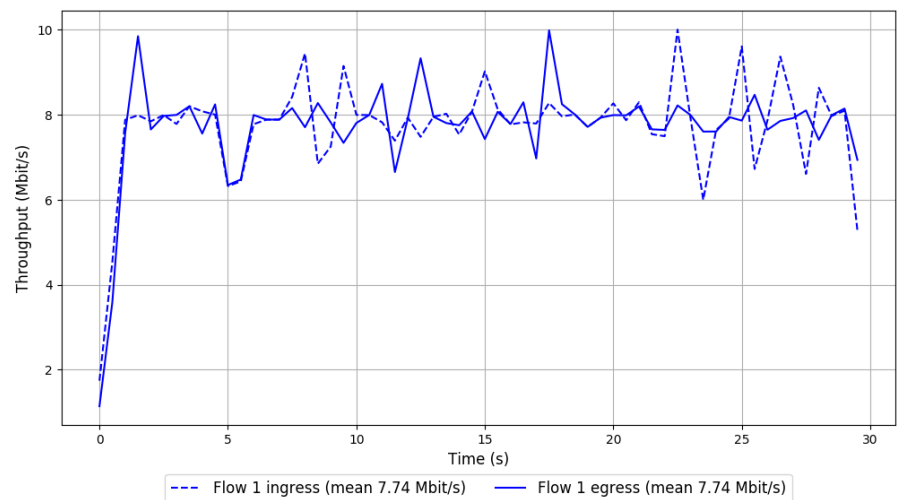
-- Flow 1:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 54.165 ms

Loss rate: 0.04%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-05 14:41:21

End at: 2017-12-05 14:41:51

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 54.050 ms

Loss rate: 0.15%

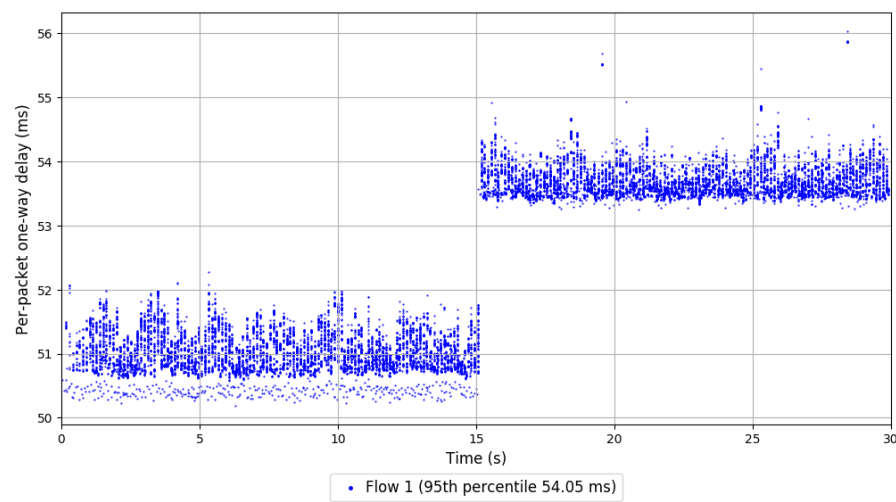
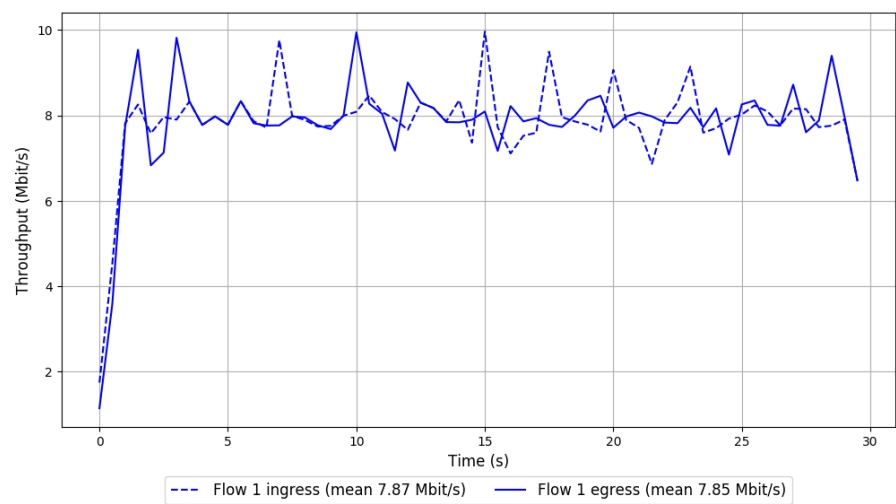
-- Flow 1:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 54.050 ms

Loss rate: 0.15%

Run 10: Report of Sprout — Data Link

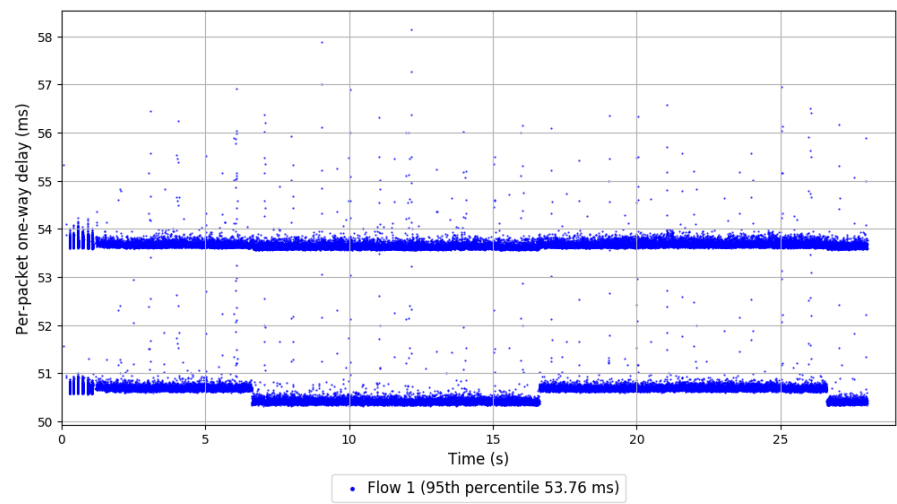
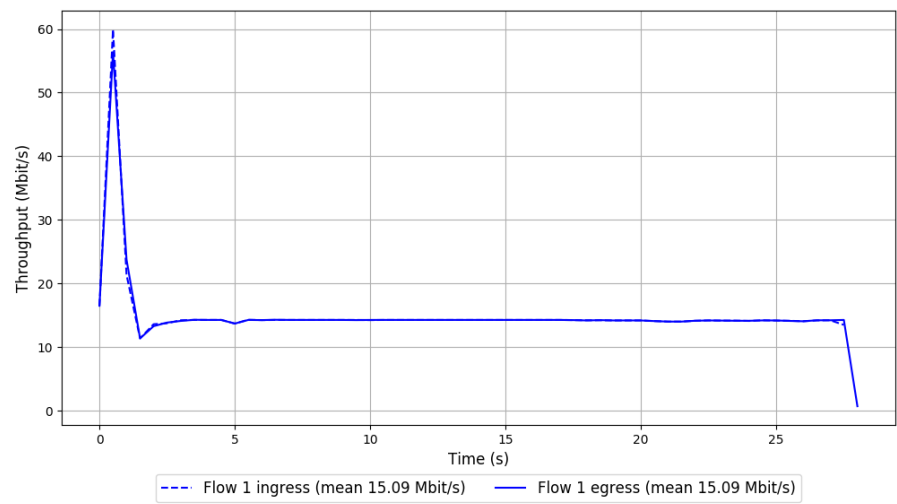


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-05 13:02:37
End at: 2017-12-05 13:03:07

# Below is generated by plot.py at 2017-12-05 15:54:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 15.09 Mbit/s
95th percentile per-packet one-way delay: 53.762 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 15.09 Mbit/s
95th percentile per-packet one-way delay: 53.762 ms
Loss rate: 0.00%
```

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

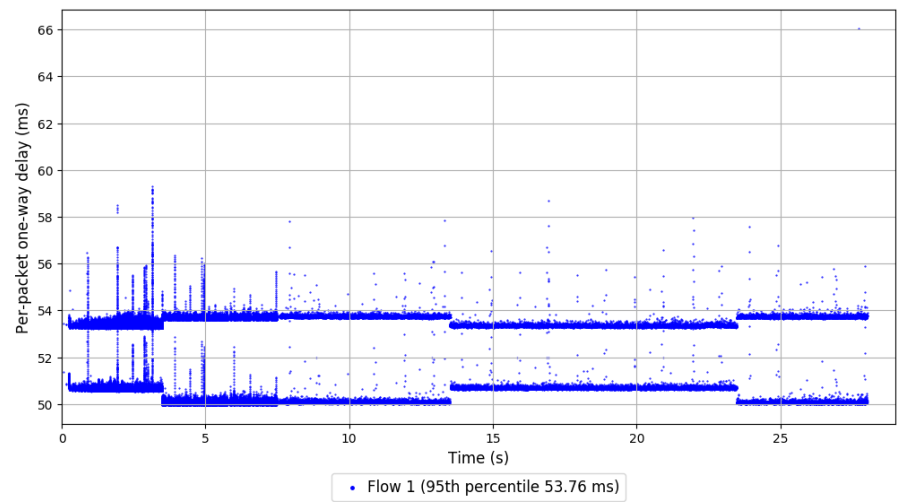
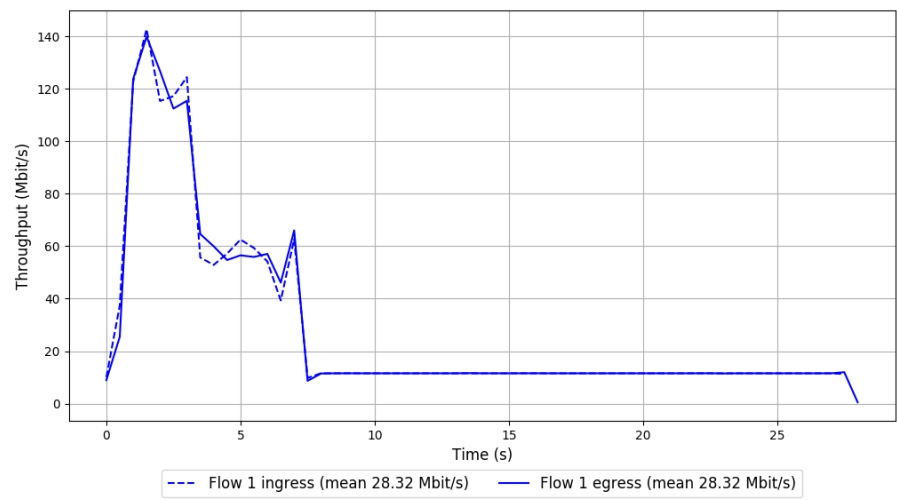


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-05 13:12:51
End at: 2017-12-05 13:13:21

# Below is generated by plot.py at 2017-12-05 15:54:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.32 Mbit/s
95th percentile per-packet one-way delay: 53.761 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 28.32 Mbit/s
95th percentile per-packet one-way delay: 53.761 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-05 13:23:11

End at: 2017-12-05 13:23:42

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 77.77 Mbit/s

95th percentile per-packet one-way delay: 53.807 ms

Loss rate: 0.00%

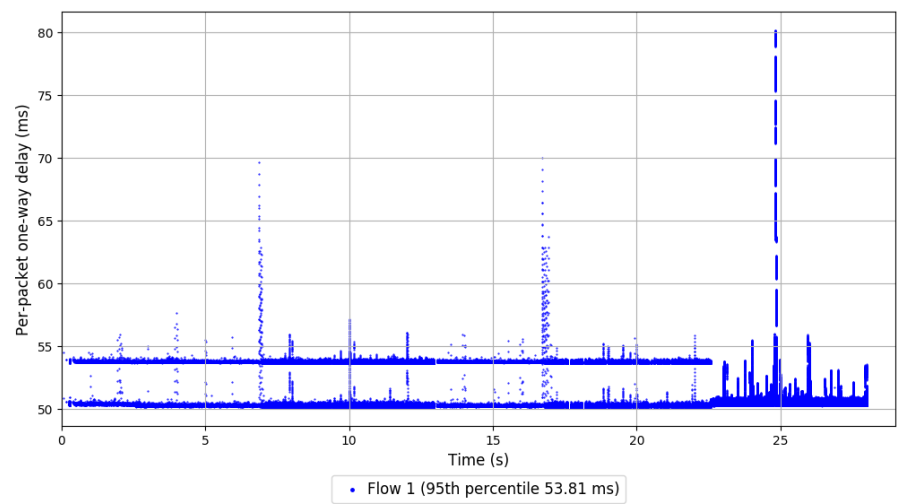
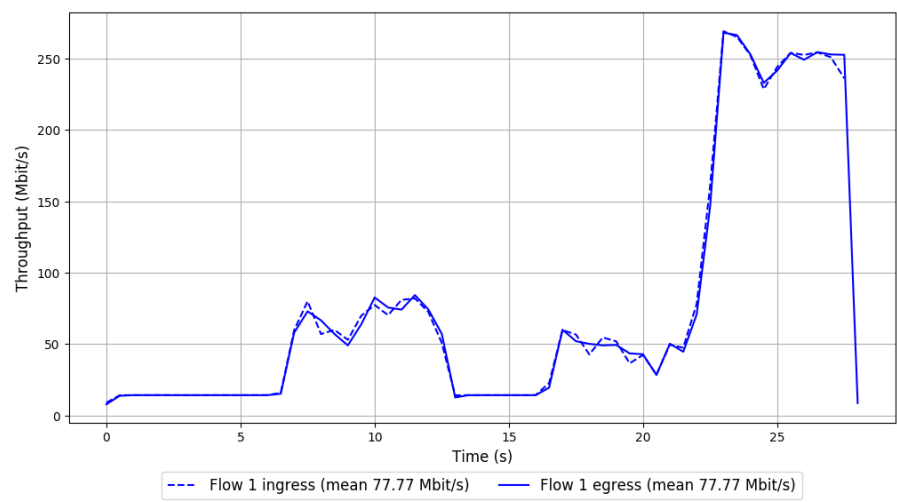
-- Flow 1:

Average throughput: 77.77 Mbit/s

95th percentile per-packet one-way delay: 53.807 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-05 13:33:20

End at: 2017-12-05 13:33:50

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 221.11 Mbit/s

95th percentile per-packet one-way delay: 54.620 ms

Loss rate: 0.02%

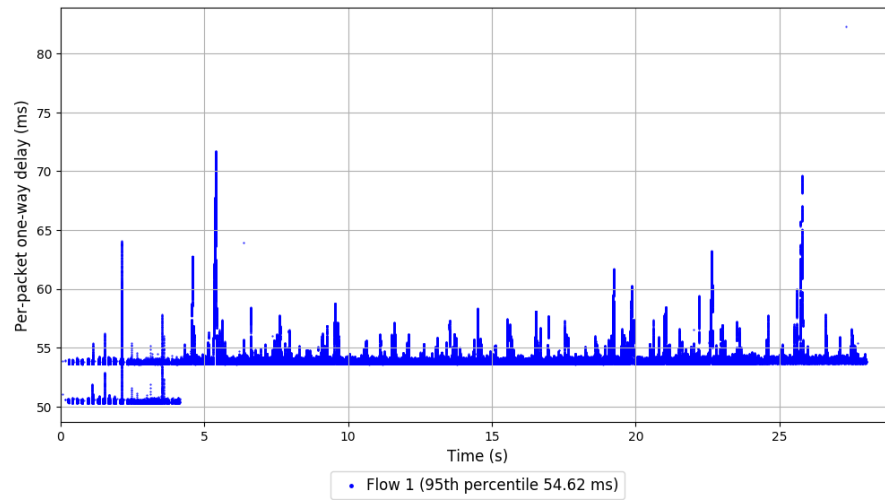
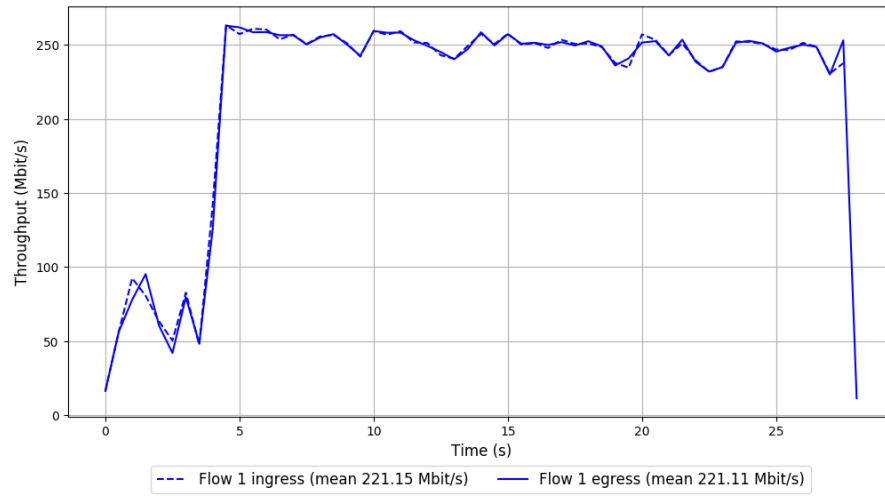
-- Flow 1:

Average throughput: 221.11 Mbit/s

95th percentile per-packet one-way delay: 54.620 ms

Loss rate: 0.02%

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

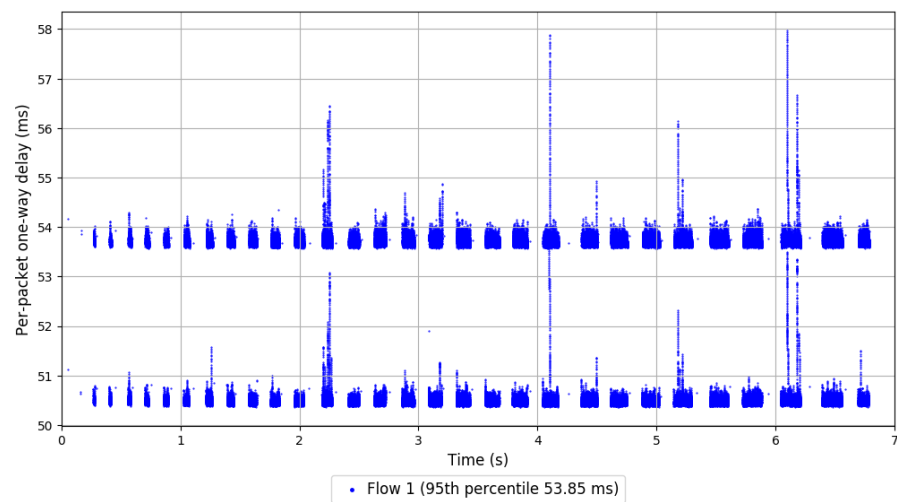
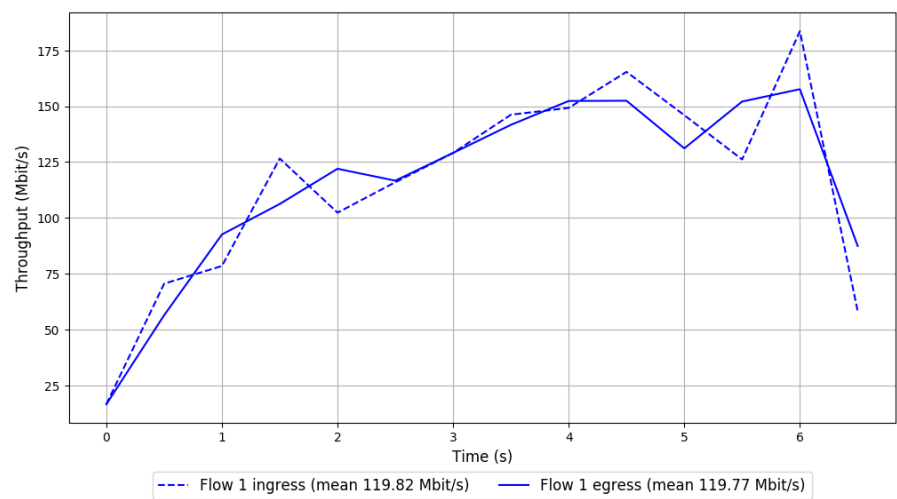


Run 5: Statistics of TaoVA-100x

Start at: 2017-12-05 13:43:51

End at: 2017-12-05 13:44:21

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-05 13:54:05

End at: 2017-12-05 13:54:35

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 14.02 Mbit/s

95th percentile per-packet one-way delay: 53.811 ms

Loss rate: 0.01%

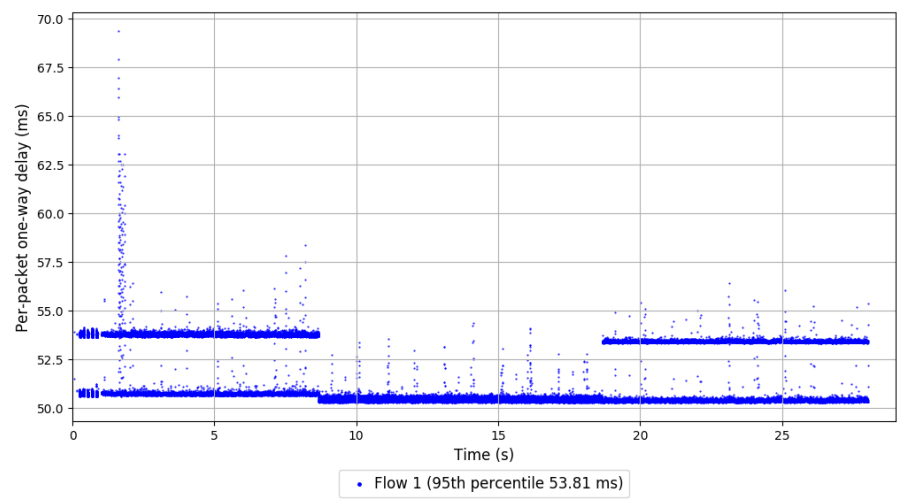
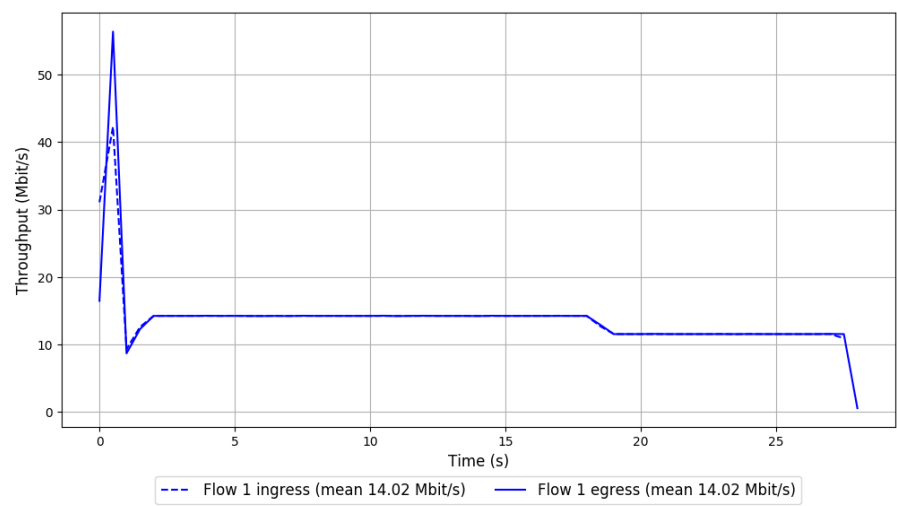
-- Flow 1:

Average throughput: 14.02 Mbit/s

95th percentile per-packet one-way delay: 53.811 ms

Loss rate: 0.01%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-05 14:04:19

End at: 2017-12-05 14:04:49

# Below is generated by plot.py at 2017-12-05 15:54:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 43.44 Mbit/s

95th percentile per-packet one-way delay: 53.388 ms

Loss rate: 0.00%

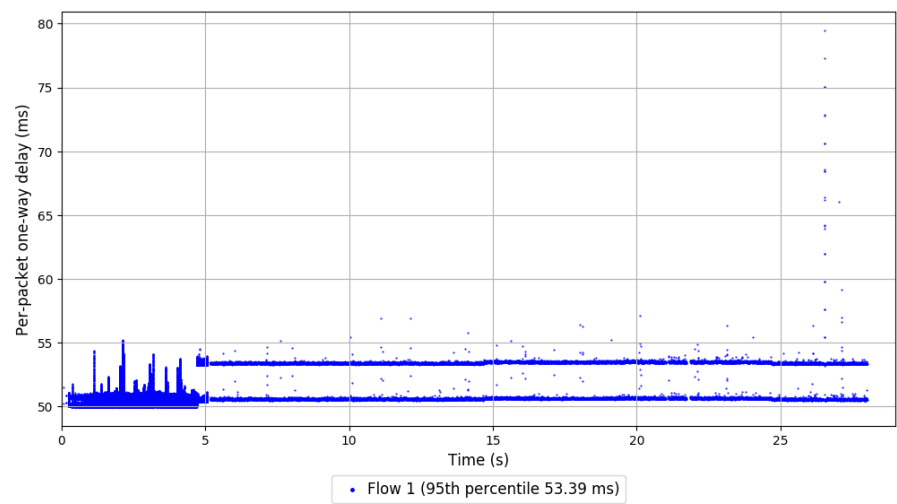
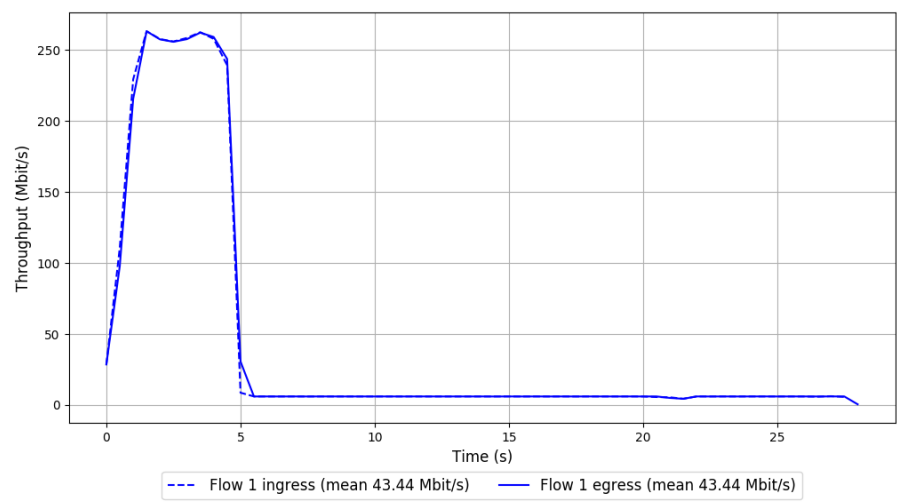
-- Flow 1:

Average throughput: 43.44 Mbit/s

95th percentile per-packet one-way delay: 53.388 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-05 14:14:35

End at: 2017-12-05 14:15:06

# Below is generated by plot.py at 2017-12-05 15:55:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 235.84 Mbit/s

95th percentile per-packet one-way delay: 53.572 ms

Loss rate: 0.01%

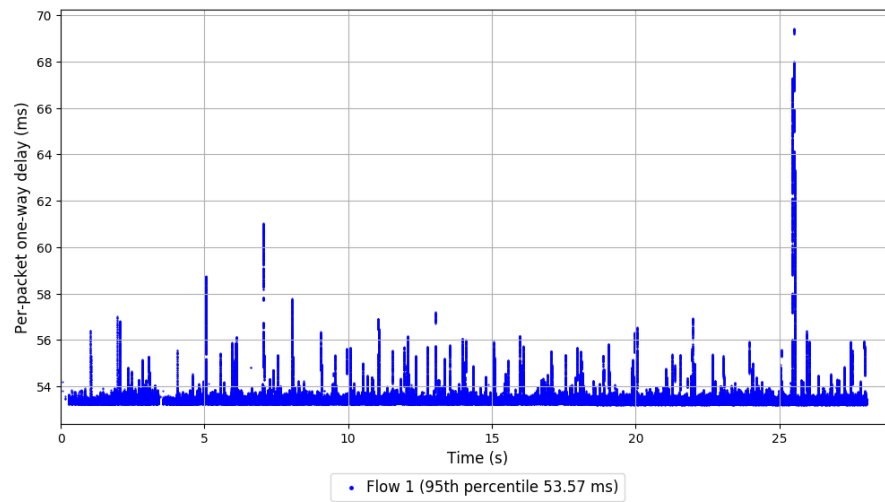
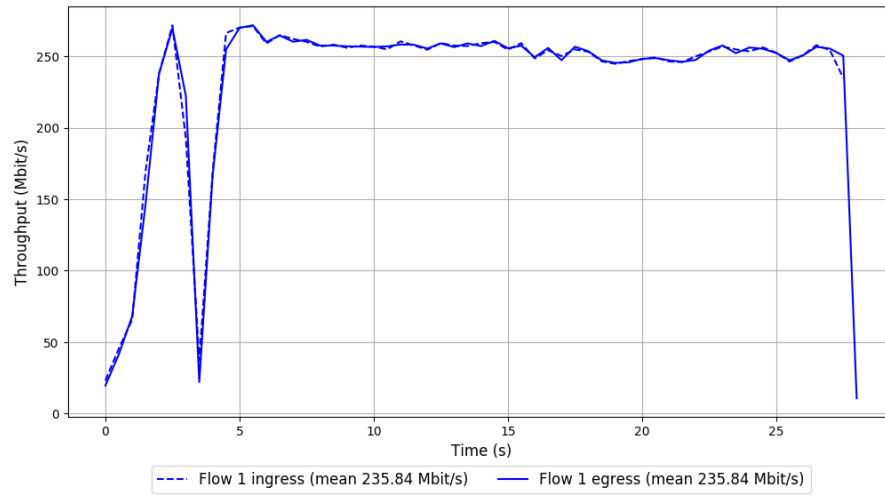
-- Flow 1:

Average throughput: 235.84 Mbit/s

95th percentile per-packet one-way delay: 53.572 ms

Loss rate: 0.01%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-05 14:25:11

End at: 2017-12-05 14:25:41

# Below is generated by plot.py at 2017-12-05 15:55:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 144.70 Mbit/s

95th percentile per-packet one-way delay: 53.401 ms

Loss rate: 0.01%

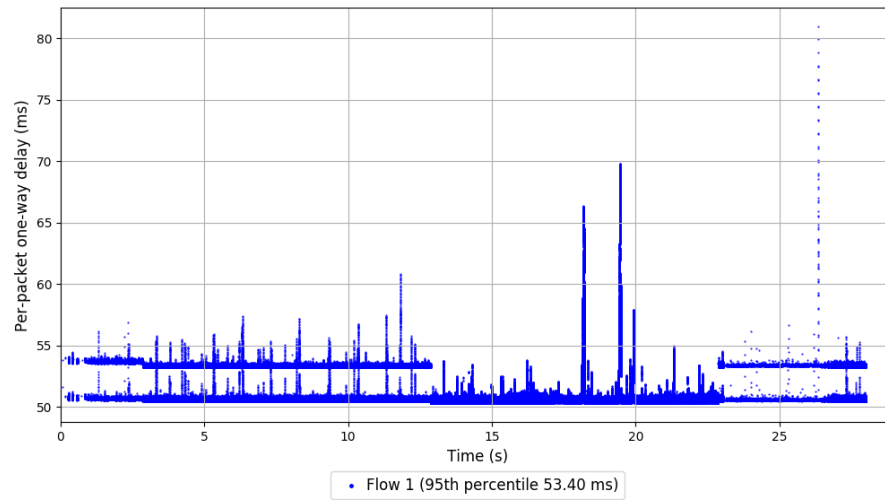
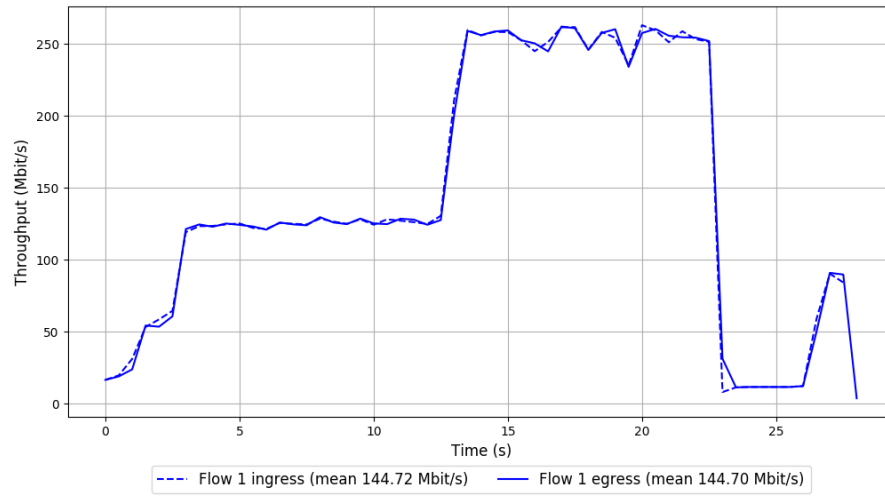
-- Flow 1:

Average throughput: 144.70 Mbit/s

95th percentile per-packet one-way delay: 53.401 ms

Loss rate: 0.01%

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

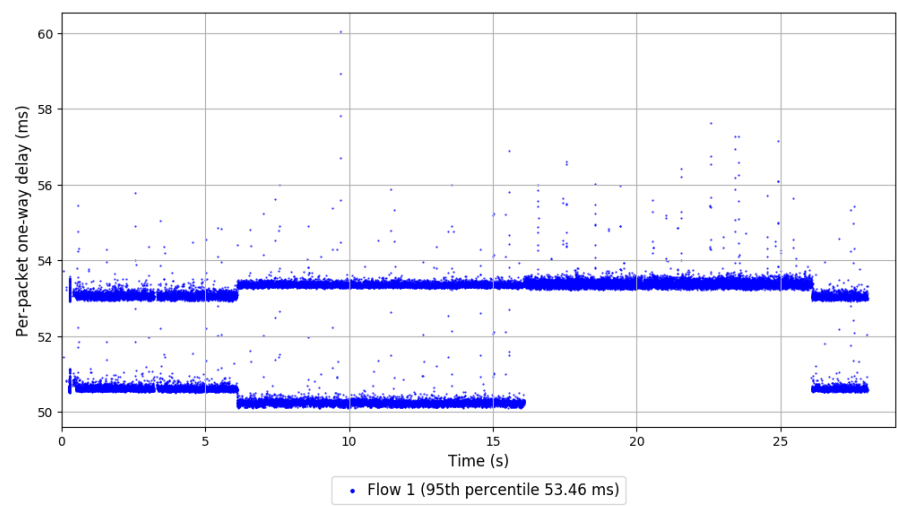
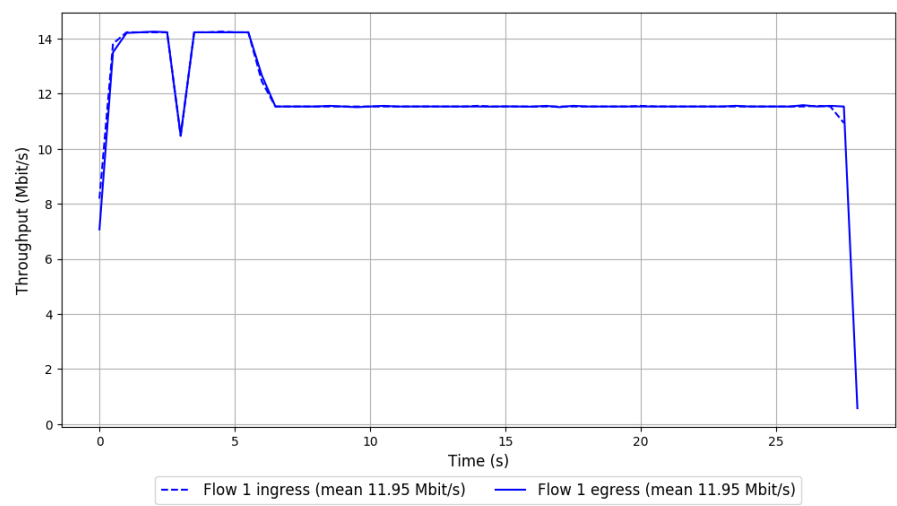


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-05 14:35:38
End at: 2017-12-05 14:36:08

# Below is generated by plot.py at 2017-12-05 15:55:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.95 Mbit/s
95th percentile per-packet one-way delay: 53.456 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.95 Mbit/s
95th percentile per-packet one-way delay: 53.456 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-05 13:05:27

End at: 2017-12-05 13:05:57

# Below is generated by plot.py at 2017-12-05 15:55:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 10.53 Mbit/s

95th percentile per-packet one-way delay: 54.322 ms

Loss rate: 0.03%

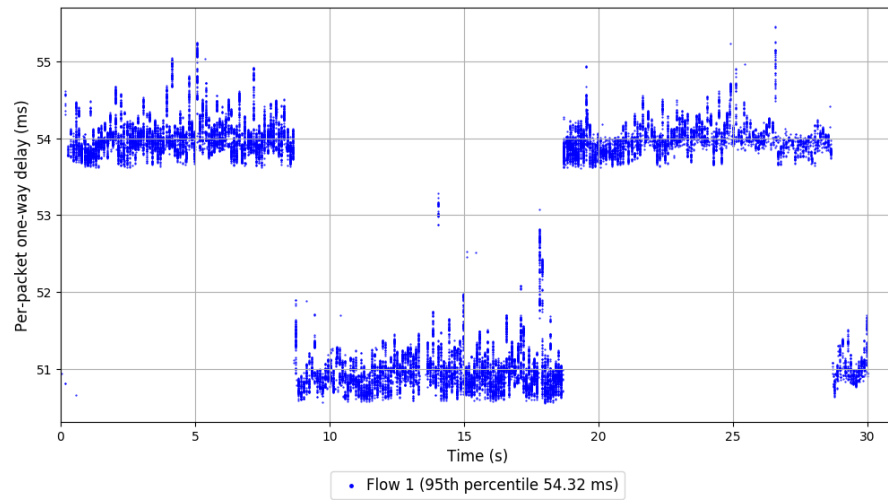
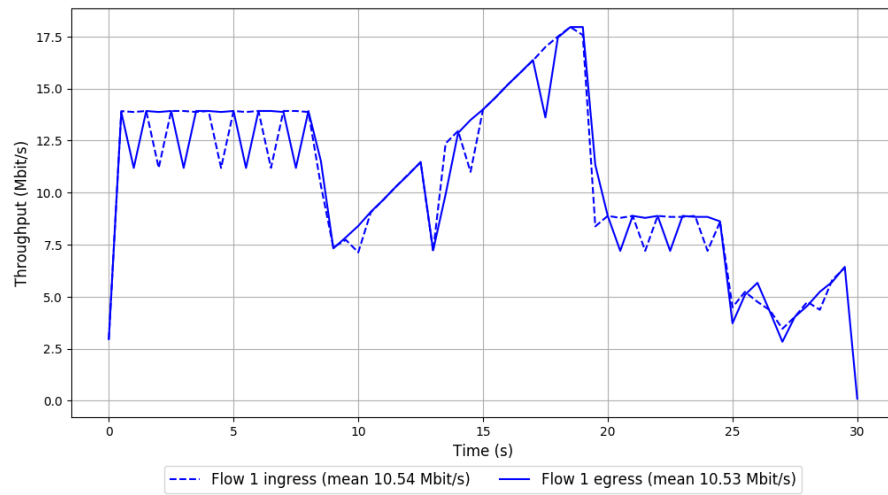
-- Flow 1:

Average throughput: 10.53 Mbit/s

95th percentile per-packet one-way delay: 54.322 ms

Loss rate: 0.03%

### Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-05 13:15:43

End at: 2017-12-05 13:16:13

# Below is generated by plot.py at 2017-12-05 15:55:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 54.389 ms

Loss rate: 0.04%

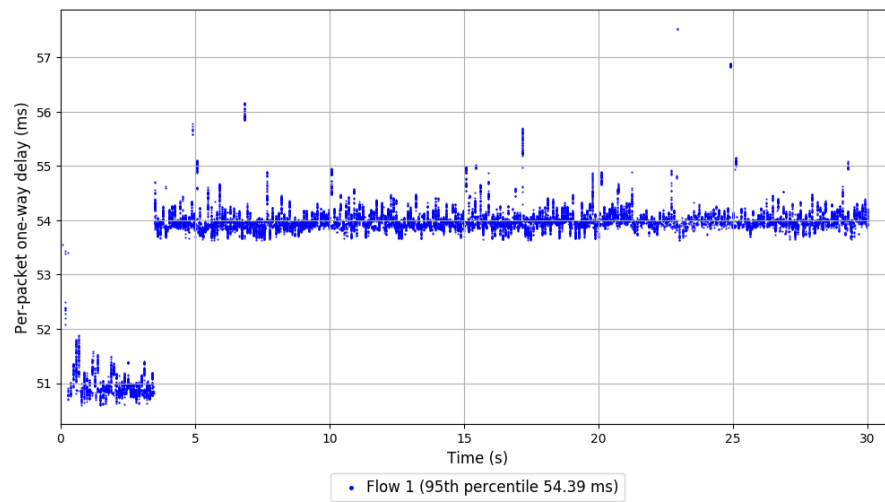
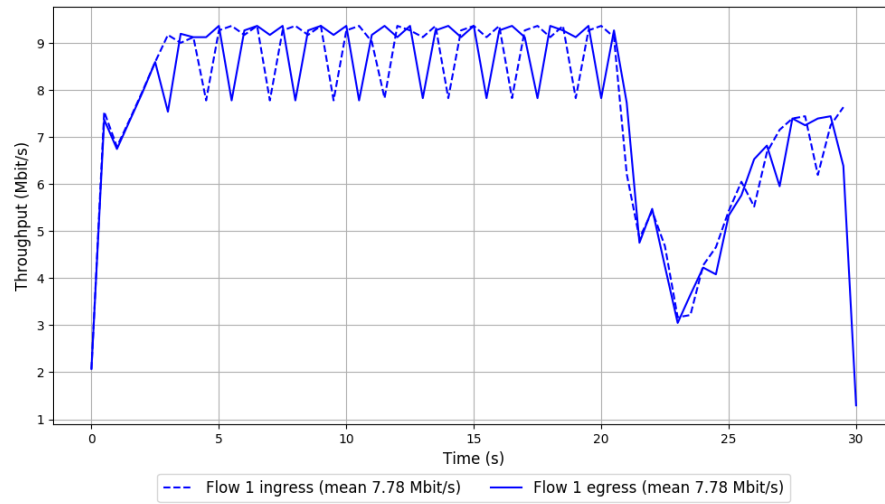
-- Flow 1:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 54.389 ms

Loss rate: 0.04%

## Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-05 13:26:08

End at: 2017-12-05 13:26:38

# Below is generated by plot.py at 2017-12-05 15:55:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 40.16 Mbit/s

95th percentile per-packet one-way delay: 54.298 ms

Loss rate: 0.01%

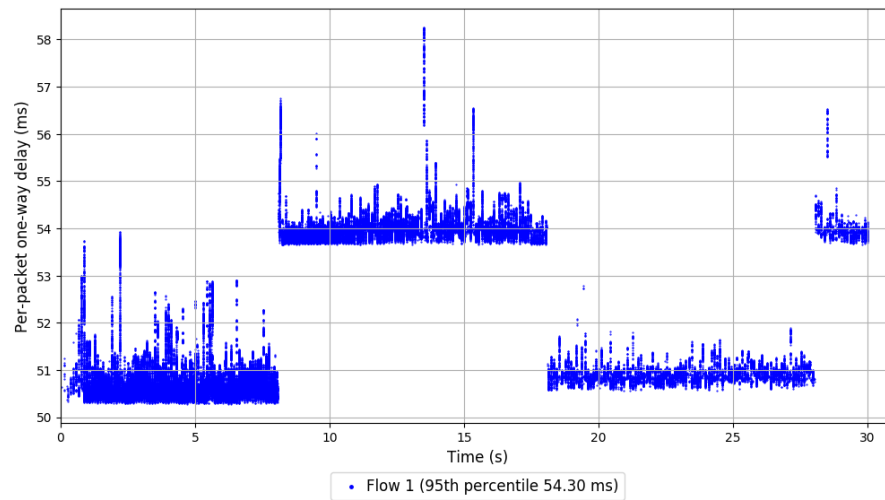
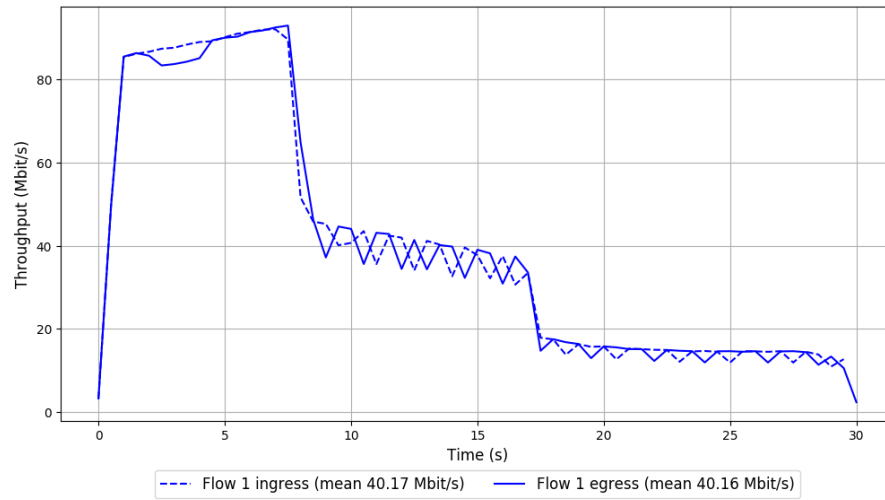
-- Flow 1:

Average throughput: 40.16 Mbit/s

95th percentile per-packet one-way delay: 54.298 ms

Loss rate: 0.01%

### Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-05 13:36:29

End at: 2017-12-05 13:36:59

# Below is generated by plot.py at 2017-12-05 15:55:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 29.48 Mbit/s

95th percentile per-packet one-way delay: 54.458 ms

Loss rate: 0.56%

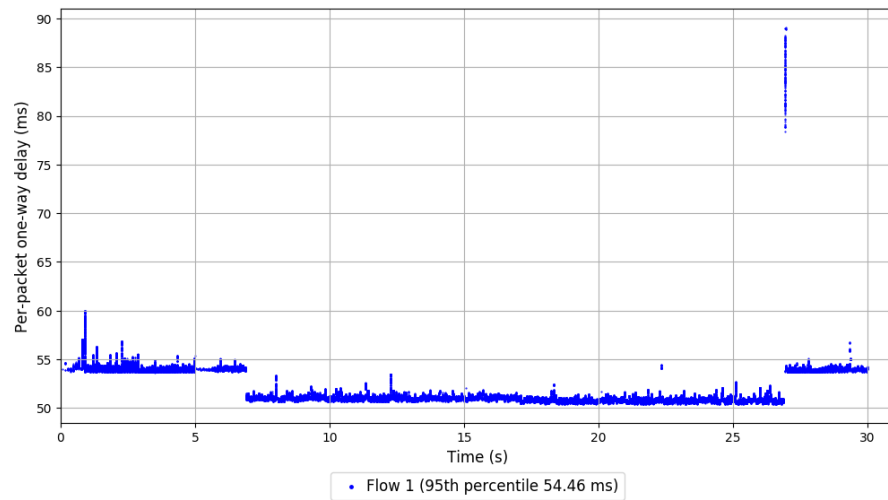
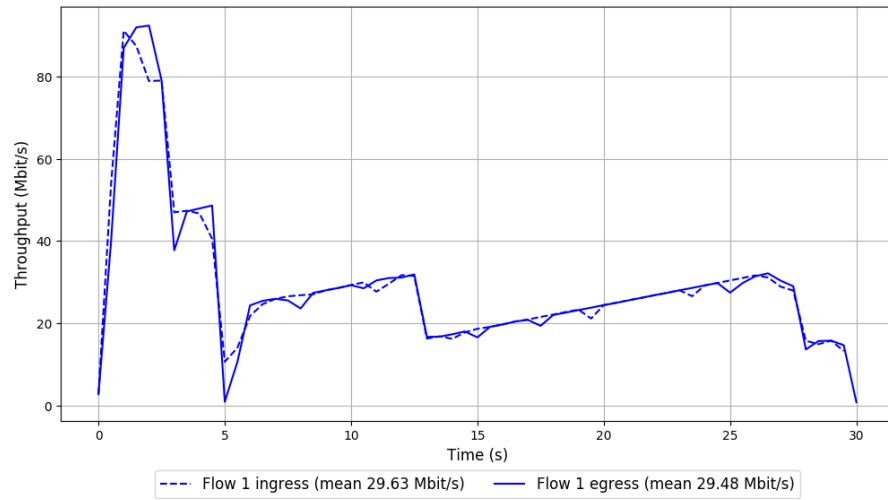
-- Flow 1:

Average throughput: 29.48 Mbit/s

95th percentile per-packet one-way delay: 54.458 ms

Loss rate: 0.56%

#### Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-05 13:46:43

End at: 2017-12-05 13:47:13

# Below is generated by plot.py at 2017-12-05 15:55:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 43.16 Mbit/s

95th percentile per-packet one-way delay: 54.183 ms

Loss rate: 0.00%

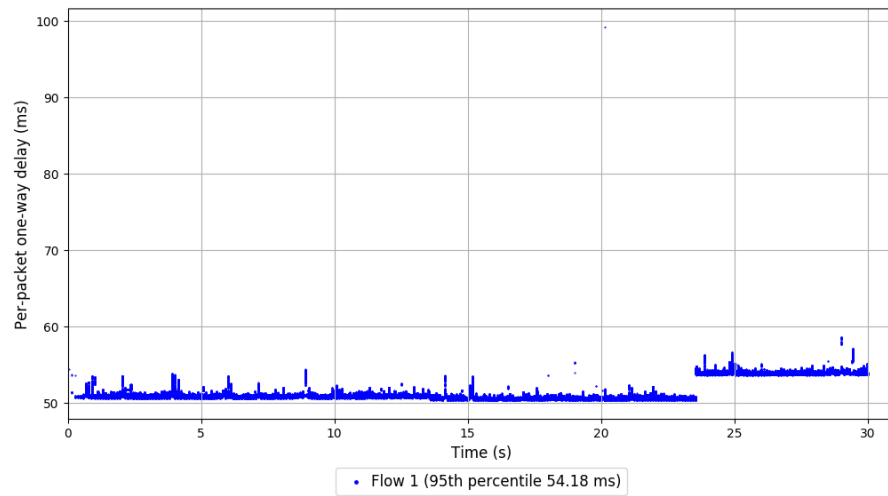
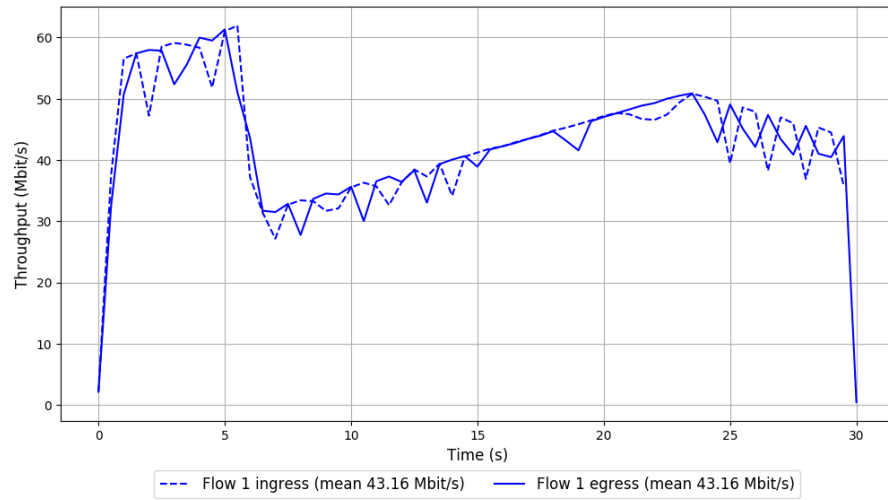
-- Flow 1:

Average throughput: 43.16 Mbit/s

95th percentile per-packet one-way delay: 54.183 ms

Loss rate: 0.00%

### Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-05 13:56:55

End at: 2017-12-05 13:57:25

# Below is generated by plot.py at 2017-12-05 15:55:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 13.39 Mbit/s

95th percentile per-packet one-way delay: 54.203 ms

Loss rate: 1.21%

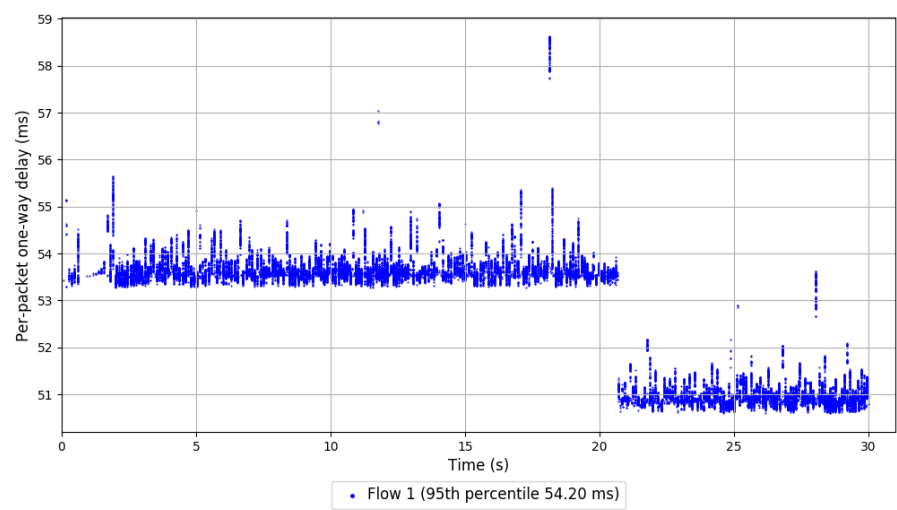
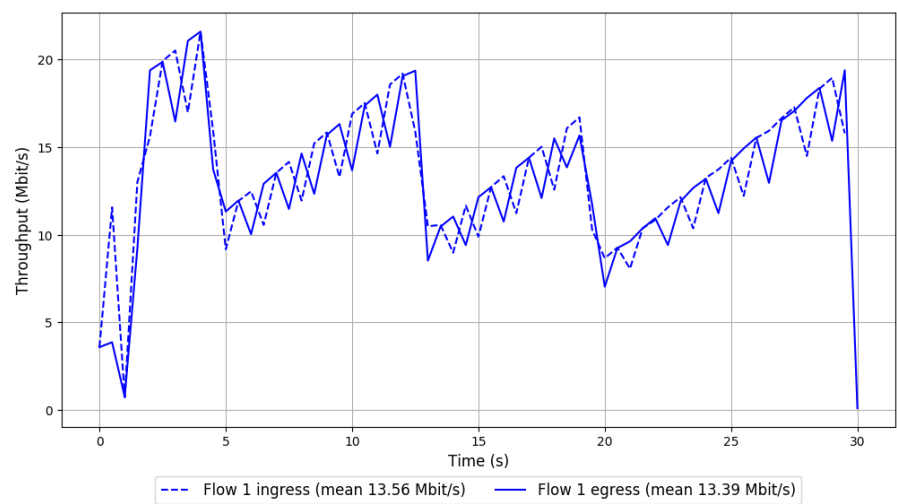
-- Flow 1:

Average throughput: 13.39 Mbit/s

95th percentile per-packet one-way delay: 54.203 ms

Loss rate: 1.21%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-05 14:07:13

End at: 2017-12-05 14:07:43

# Below is generated by plot.py at 2017-12-05 15:55:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 15.25 Mbit/s

95th percentile per-packet one-way delay: 53.971 ms

Loss rate: 0.00%

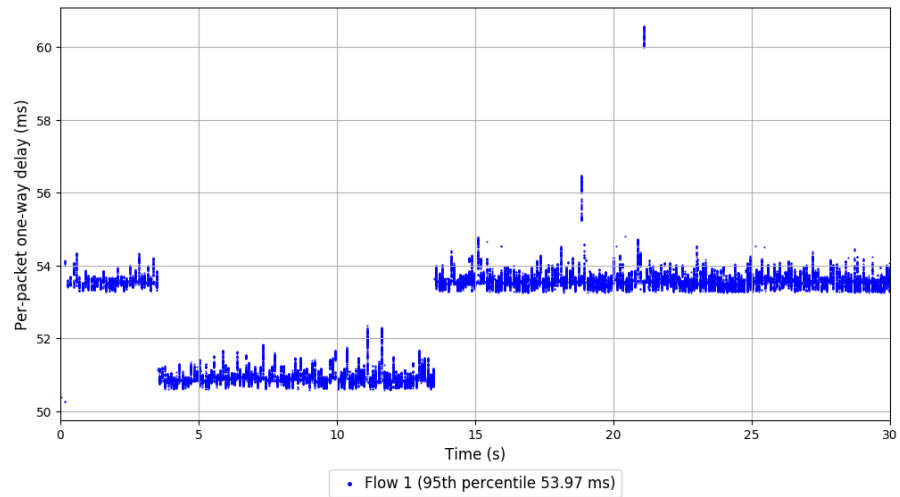
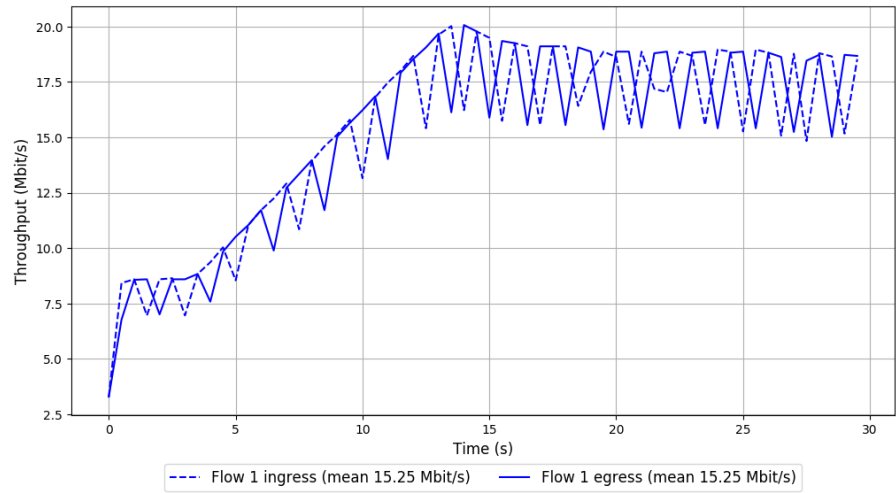
-- Flow 1:

Average throughput: 15.25 Mbit/s

95th percentile per-packet one-way delay: 53.971 ms

Loss rate: 0.00%

## Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-05 14:17:46

End at: 2017-12-05 14:18:16

# Below is generated by plot.py at 2017-12-05 15:55:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 24.42 Mbit/s

95th percentile per-packet one-way delay: 53.796 ms

Loss rate: 0.22%

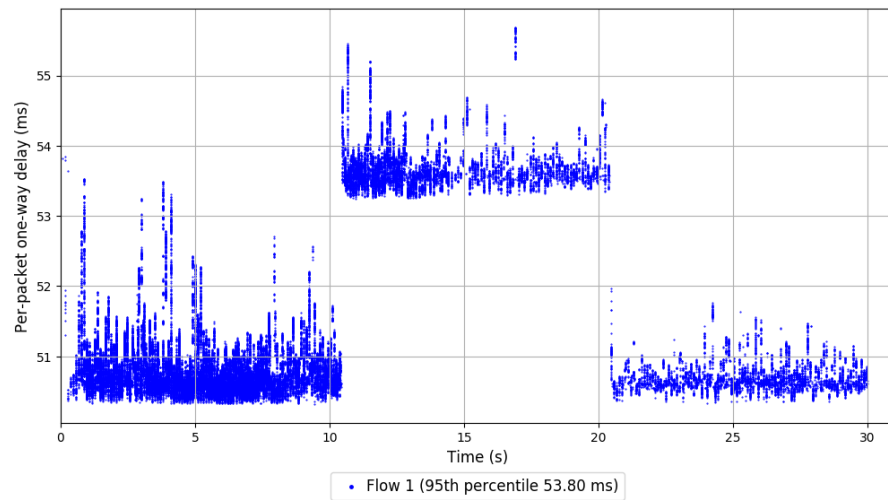
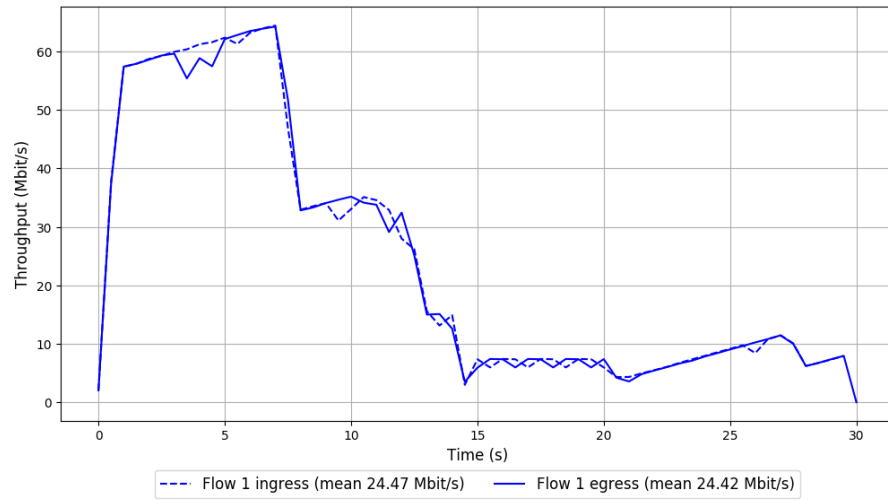
-- Flow 1:

Average throughput: 24.42 Mbit/s

95th percentile per-packet one-way delay: 53.796 ms

Loss rate: 0.22%

### Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-05 14:28:13

End at: 2017-12-05 14:28:43

# Below is generated by plot.py at 2017-12-05 15:55:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 37.90 Mbit/s

95th percentile per-packet one-way delay: 53.483 ms

Loss rate: 0.03%

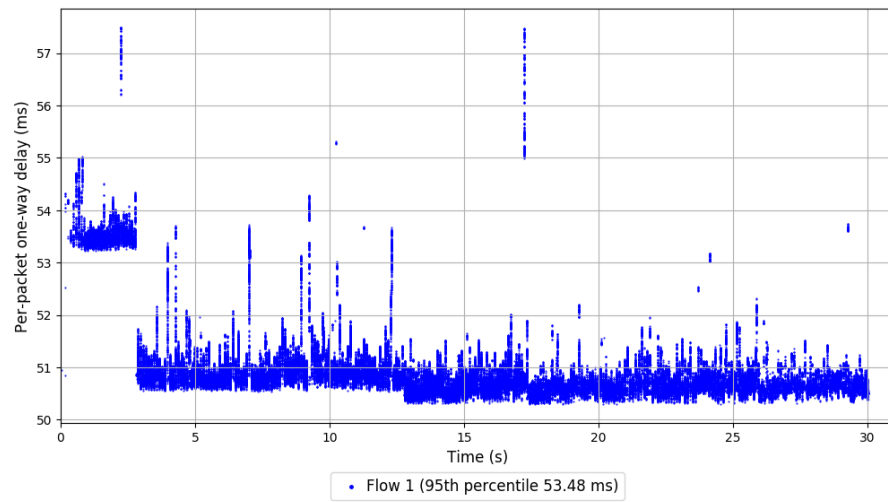
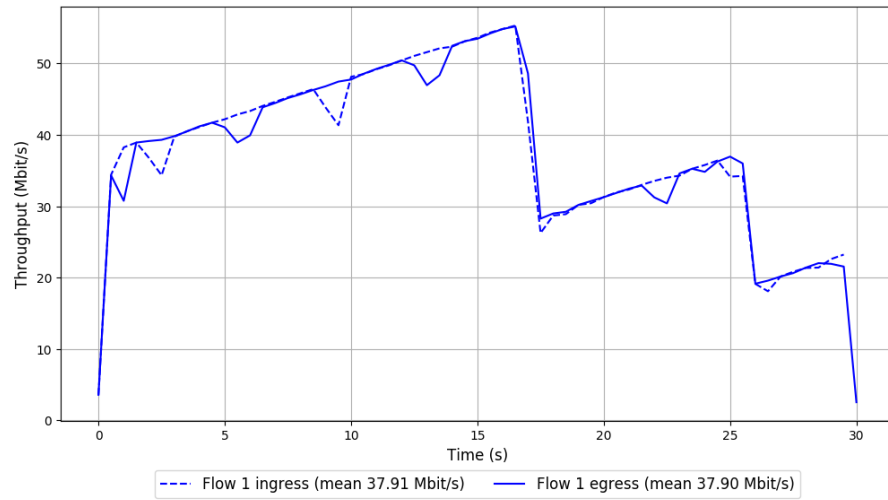
-- Flow 1:

Average throughput: 37.90 Mbit/s

95th percentile per-packet one-way delay: 53.483 ms

Loss rate: 0.03%

### Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-05 14:38:28

End at: 2017-12-05 14:38:58

# Below is generated by plot.py at 2017-12-05 15:55:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 13.78 Mbit/s

95th percentile per-packet one-way delay: 53.956 ms

Loss rate: 0.05%

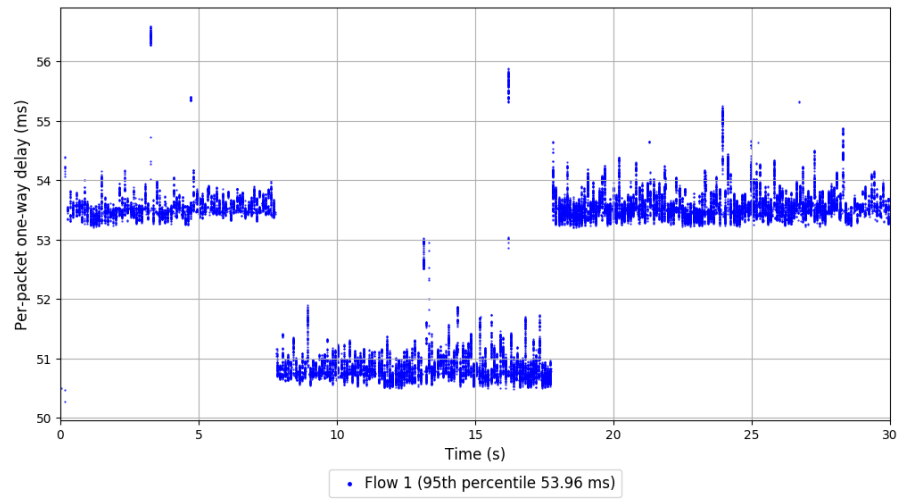
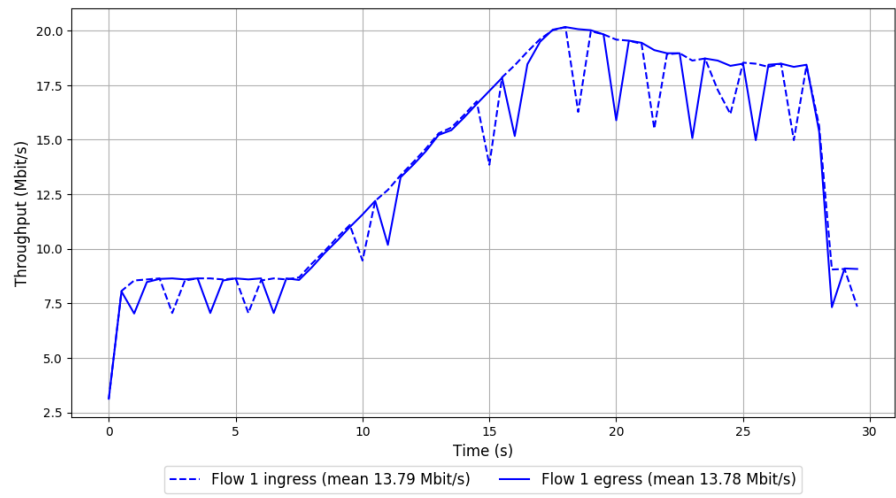
-- Flow 1:

Average throughput: 13.78 Mbit/s

95th percentile per-packet one-way delay: 53.956 ms

Loss rate: 0.05%

# Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-05 13:01:04

End at: 2017-12-05 13:01:34

# Below is generated by plot.py at 2017-12-05 15:55:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 277.14 Mbit/s

95th percentile per-packet one-way delay: 79.603 ms

Loss rate: 0.19%

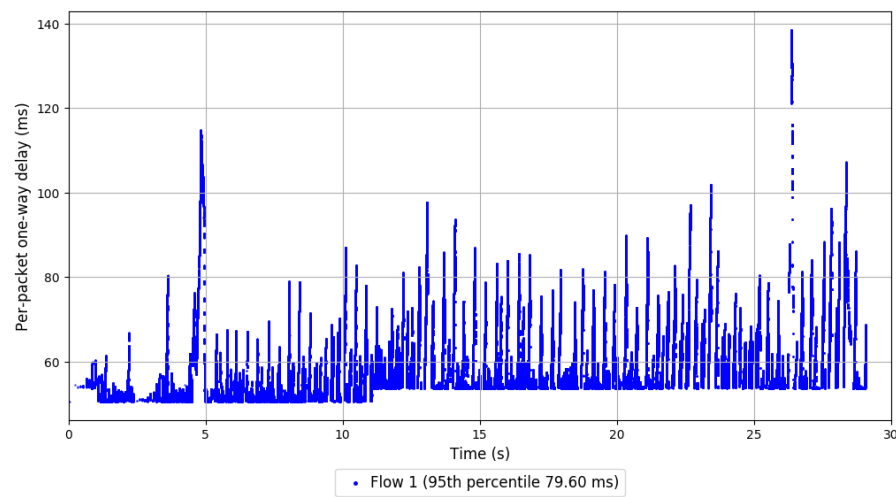
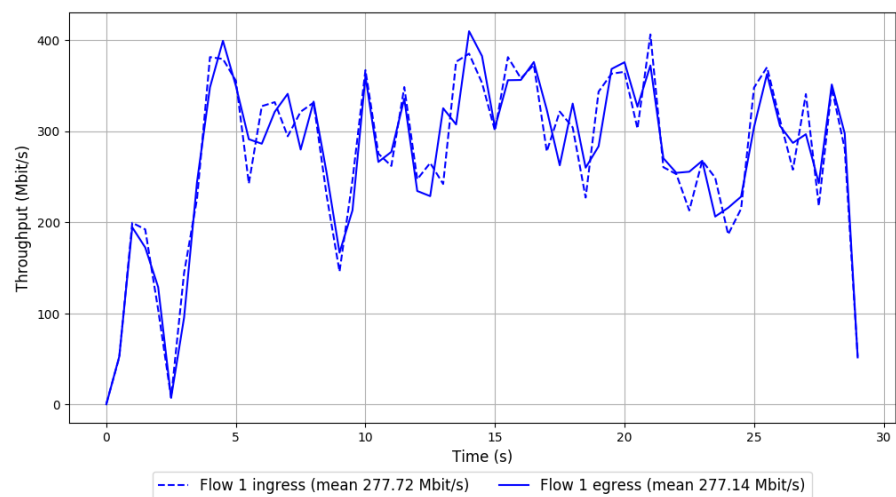
-- Flow 1:

Average throughput: 277.14 Mbit/s

95th percentile per-packet one-way delay: 79.603 ms

Loss rate: 0.19%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-05 13:11:21

End at: 2017-12-05 13:11:51

# Below is generated by plot.py at 2017-12-05 15:55:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 218.42 Mbit/s

95th percentile per-packet one-way delay: 71.620 ms

Loss rate: 0.02%

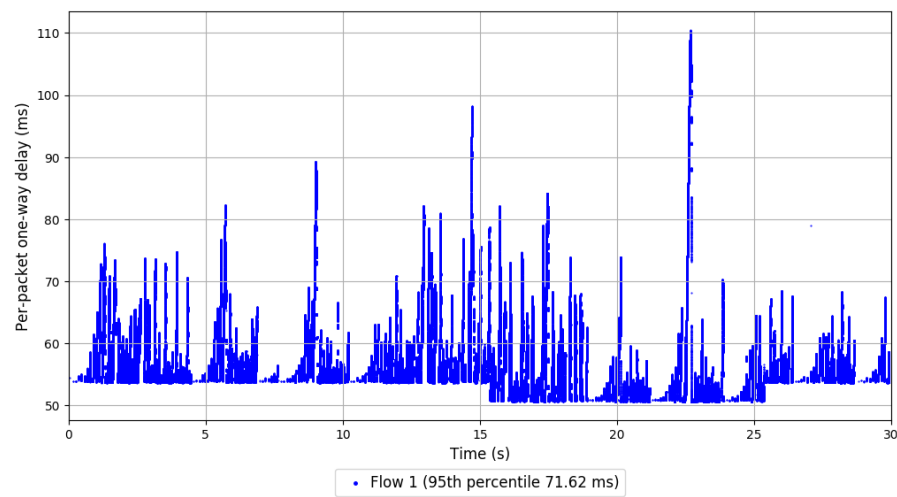
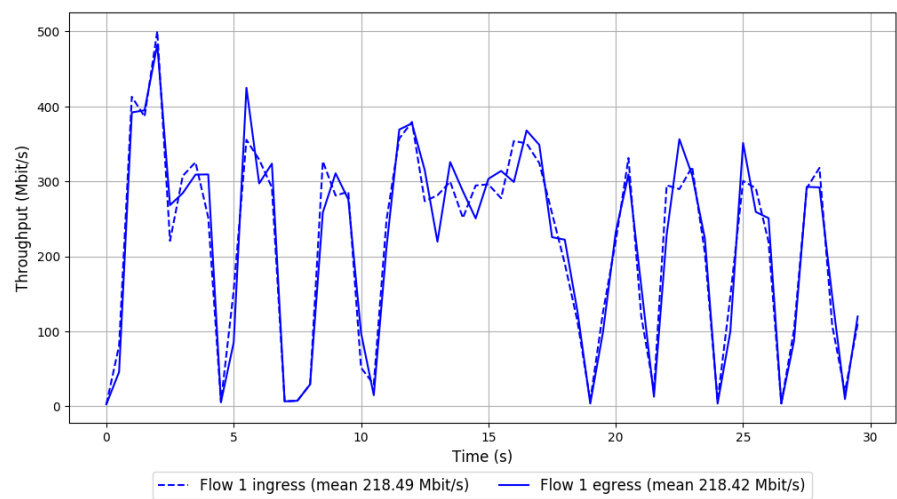
-- Flow 1:

Average throughput: 218.42 Mbit/s

95th percentile per-packet one-way delay: 71.620 ms

Loss rate: 0.02%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-05 13:21:36

End at: 2017-12-05 13:22:06

# Below is generated by plot.py at 2017-12-05 15:55:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 286.00 Mbit/s

95th percentile per-packet one-way delay: 68.484 ms

Loss rate: 1.00%

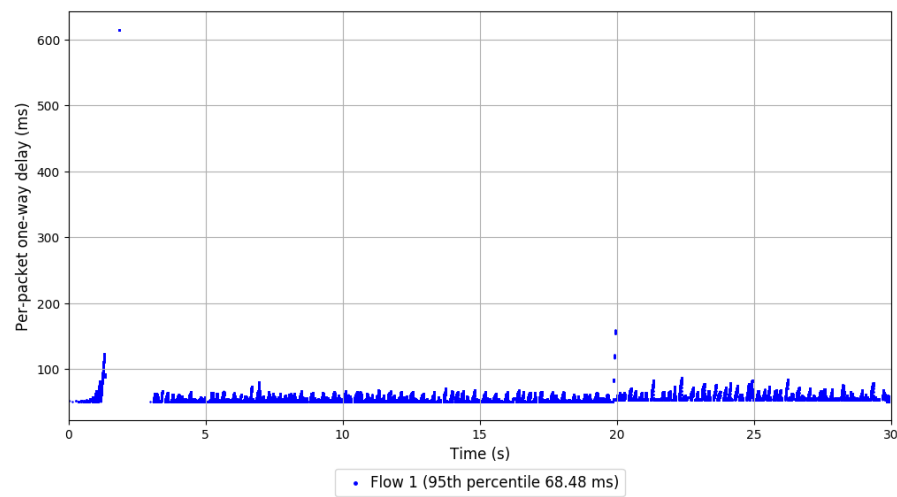
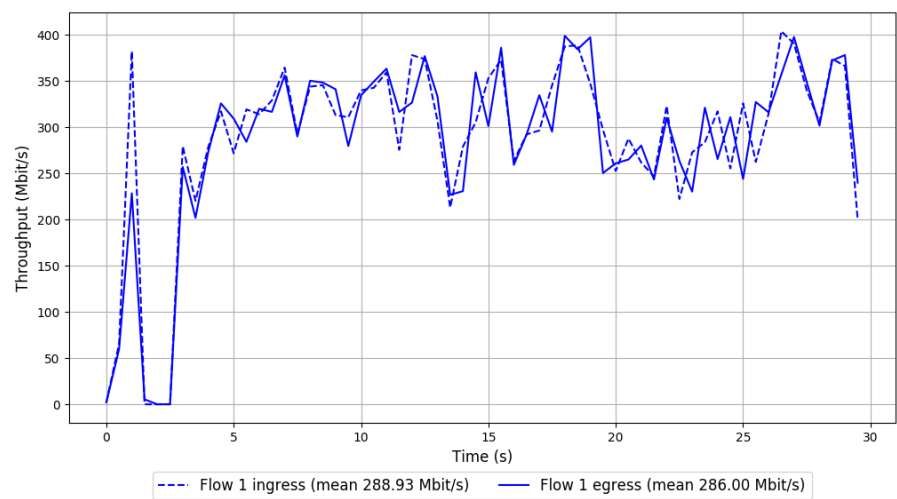
-- Flow 1:

Average throughput: 286.00 Mbit/s

95th percentile per-packet one-way delay: 68.484 ms

Loss rate: 1.00%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-05 13:31:49

End at: 2017-12-05 13:32:19

# Below is generated by plot.py at 2017-12-05 15:55:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 220.51 Mbit/s

95th percentile per-packet one-way delay: 78.549 ms

Loss rate: 0.01%

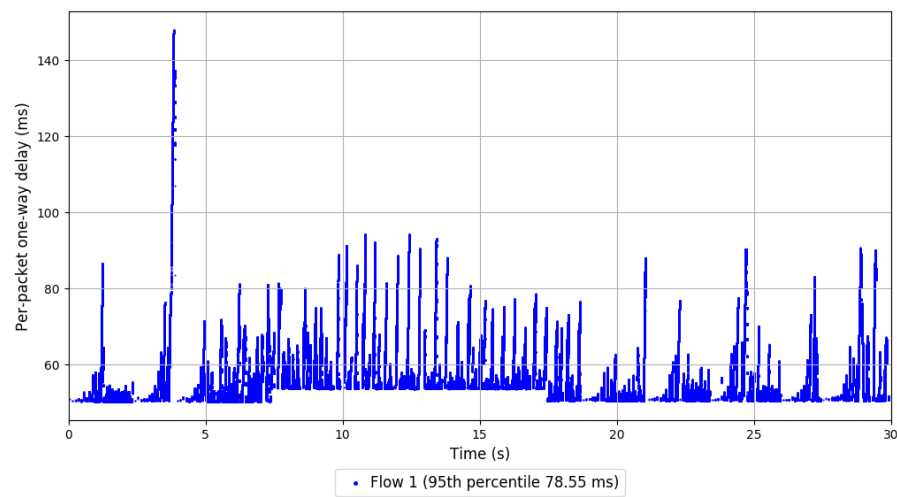
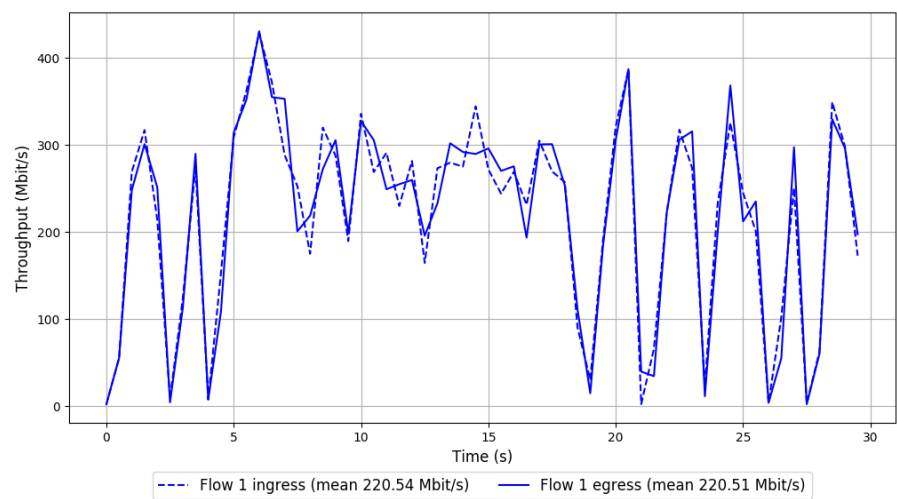
-- Flow 1:

Average throughput: 220.51 Mbit/s

95th percentile per-packet one-way delay: 78.549 ms

Loss rate: 0.01%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-05 13:42:18

End at: 2017-12-05 13:42:48

# Below is generated by plot.py at 2017-12-05 15:57:33

# Datalink statistics

-- Total of 1 flow:

Average throughput: 250.35 Mbit/s

95th percentile per-packet one-way delay: 95.800 ms

Loss rate: 0.27%

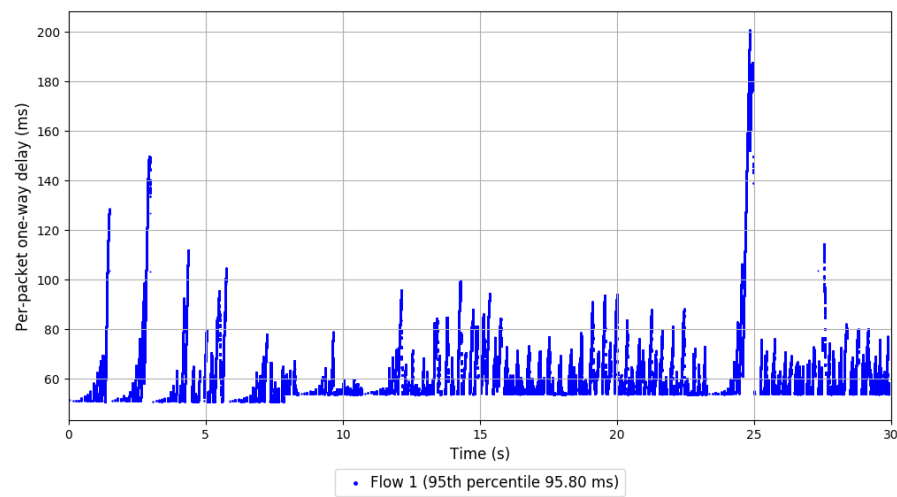
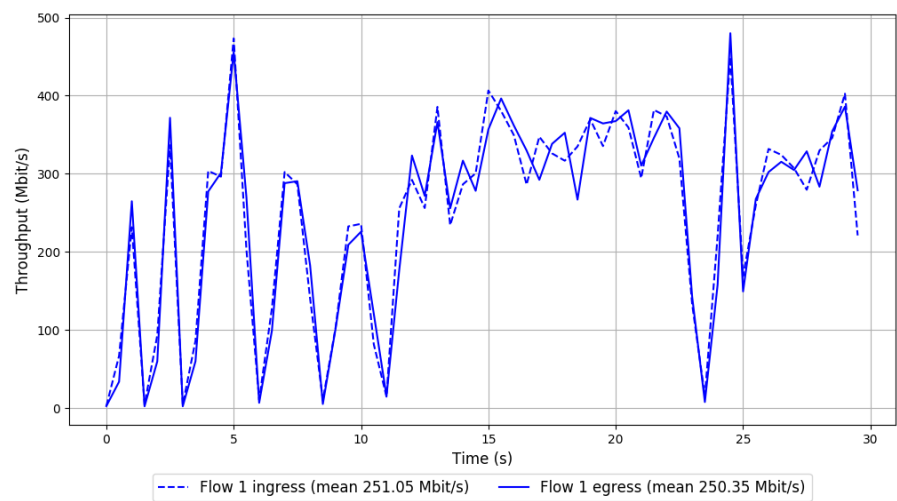
-- Flow 1:

Average throughput: 250.35 Mbit/s

95th percentile per-packet one-way delay: 95.800 ms

Loss rate: 0.27%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-05 13:52:35

End at: 2017-12-05 13:53:05

# Below is generated by plot.py at 2017-12-05 15:58:16

# Datalink statistics

-- Total of 1 flow:

Average throughput: 219.26 Mbit/s

95th percentile per-packet one-way delay: 82.927 ms

Loss rate: 0.01%

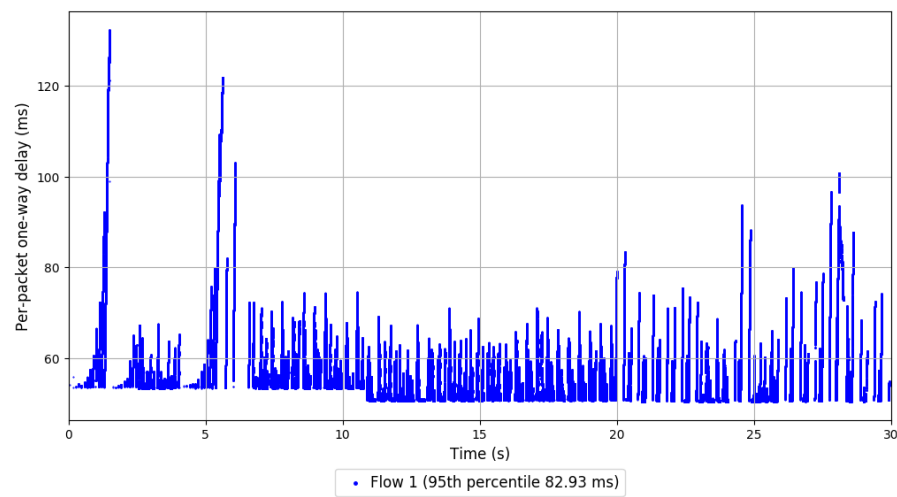
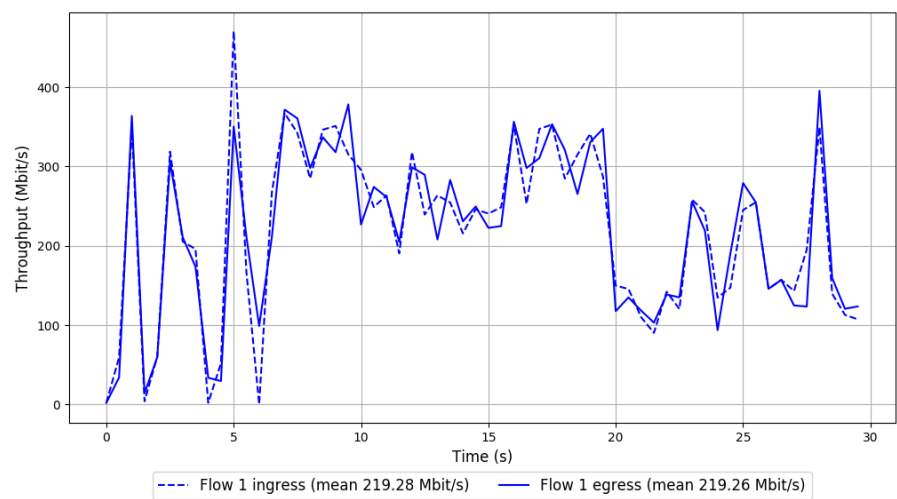
-- Flow 1:

Average throughput: 219.26 Mbit/s

95th percentile per-packet one-way delay: 82.927 ms

Loss rate: 0.01%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-05 14:02:45

End at: 2017-12-05 14:03:15

# Below is generated by plot.py at 2017-12-05 15:58:51

# Datalink statistics

-- Total of 1 flow:

Average throughput: 270.04 Mbit/s

95th percentile per-packet one-way delay: 88.962 ms

Loss rate: 0.11%

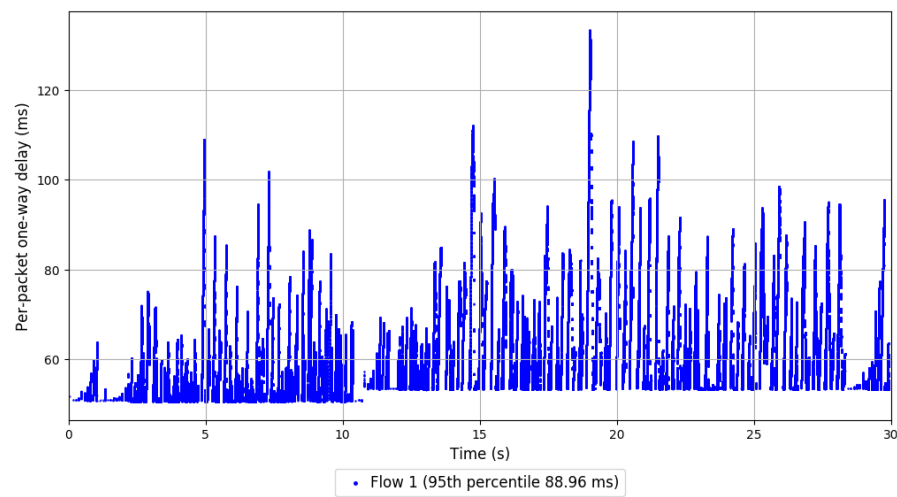
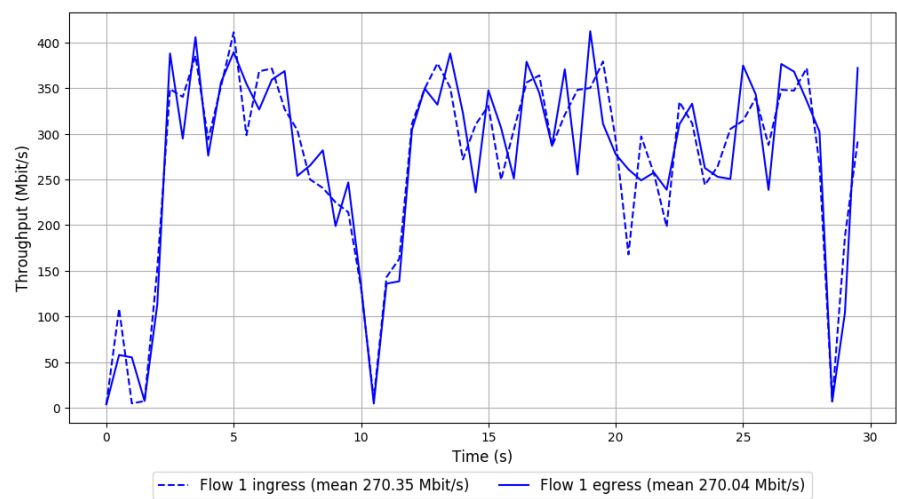
-- Flow 1:

Average throughput: 270.04 Mbit/s

95th percentile per-packet one-way delay: 88.962 ms

Loss rate: 0.11%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-05 14:13:00

End at: 2017-12-05 14:13:30

# Below is generated by plot.py at 2017-12-05 15:59:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 294.63 Mbit/s

95th percentile per-packet one-way delay: 87.768 ms

Loss rate: 0.22%

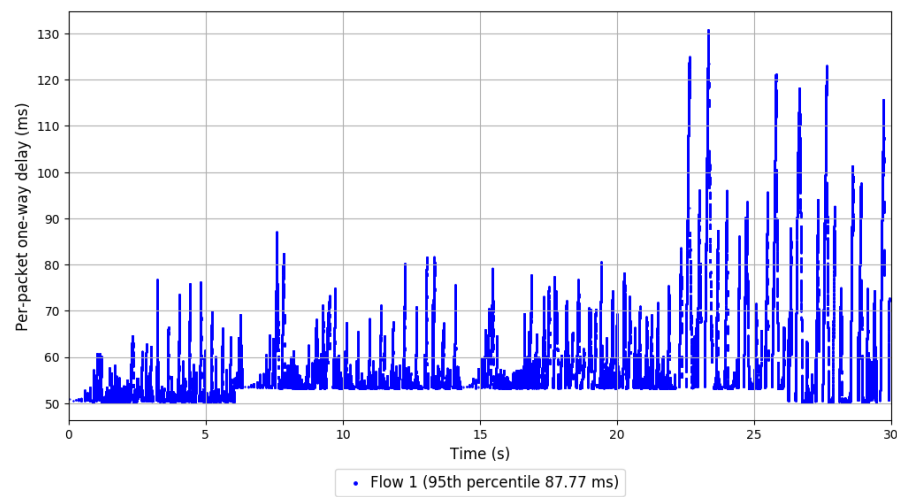
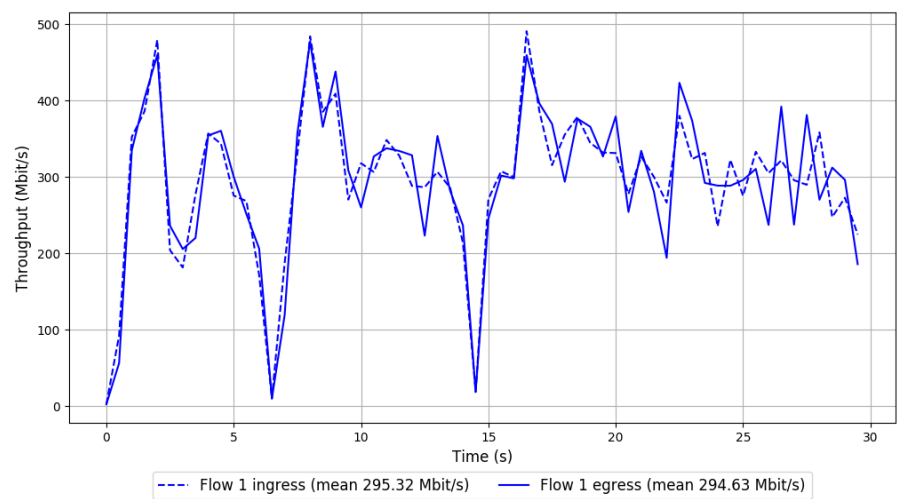
-- Flow 1:

Average throughput: 294.63 Mbit/s

95th percentile per-packet one-way delay: 87.768 ms

Loss rate: 0.22%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-05 14:23:39

End at: 2017-12-05 14:24:09

# Below is generated by plot.py at 2017-12-05 15:59:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 244.85 Mbit/s

95th percentile per-packet one-way delay: 71.907 ms

Loss rate: 0.04%

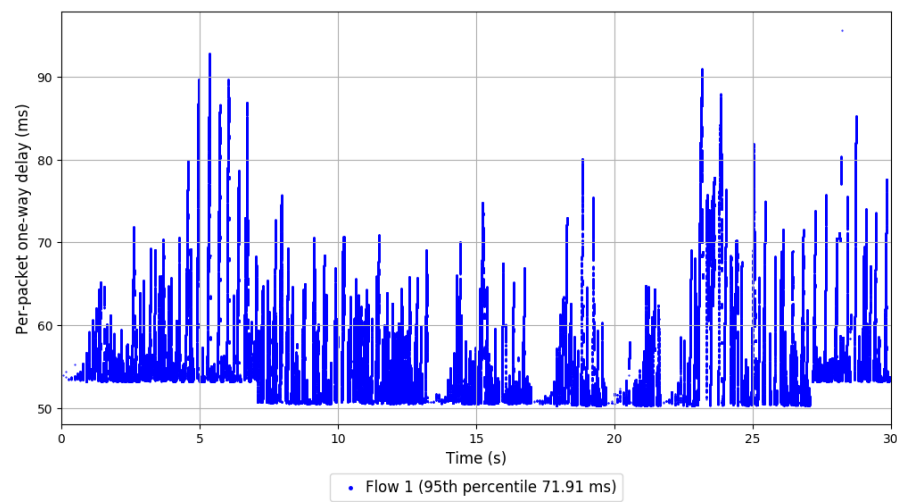
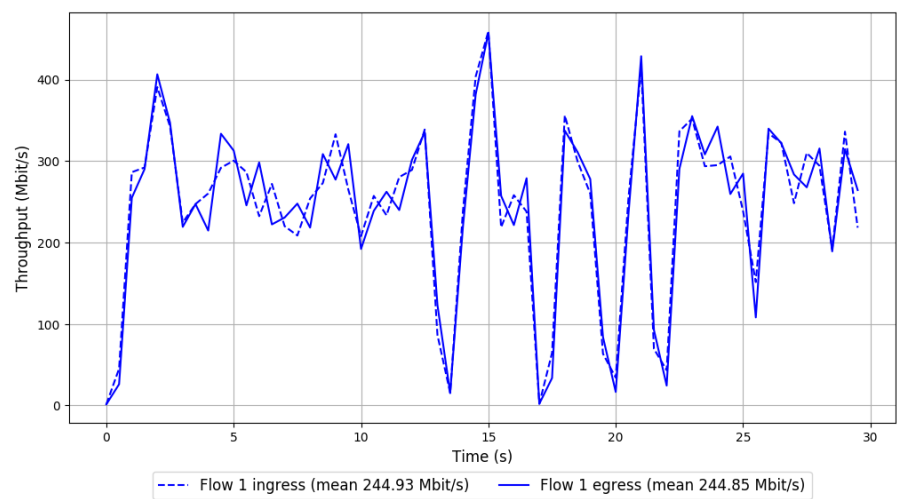
-- Flow 1:

Average throughput: 244.85 Mbit/s

95th percentile per-packet one-way delay: 71.907 ms

Loss rate: 0.04%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-05 14:34:07

End at: 2017-12-05 14:34:37

# Below is generated by plot.py at 2017-12-05 15:59:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 221.25 Mbit/s

95th percentile per-packet one-way delay: 89.911 ms

Loss rate: 0.01%

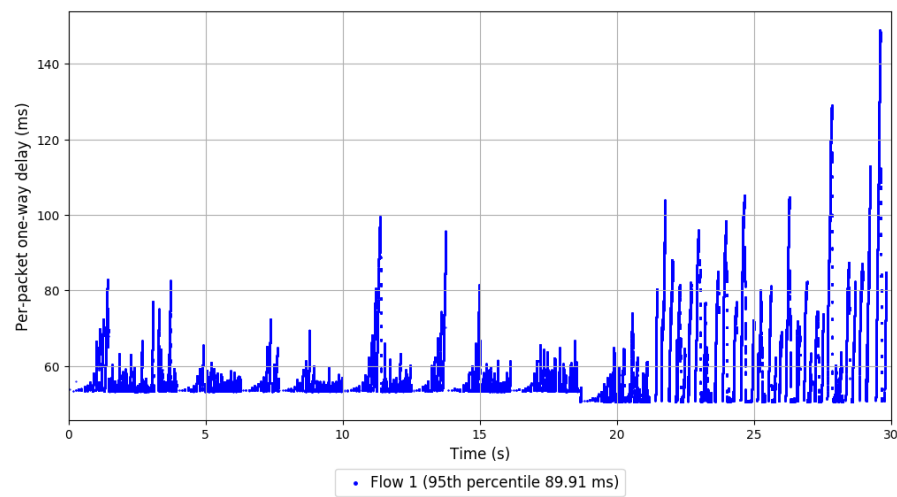
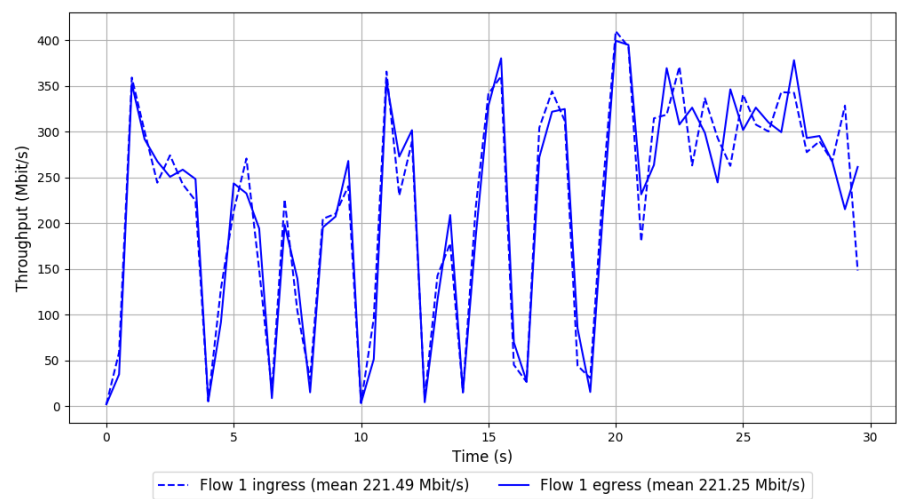
-- Flow 1:

Average throughput: 221.25 Mbit/s

95th percentile per-packet one-way delay: 89.911 ms

Loss rate: 0.01%

Run 10: Report of Verus — Data Link

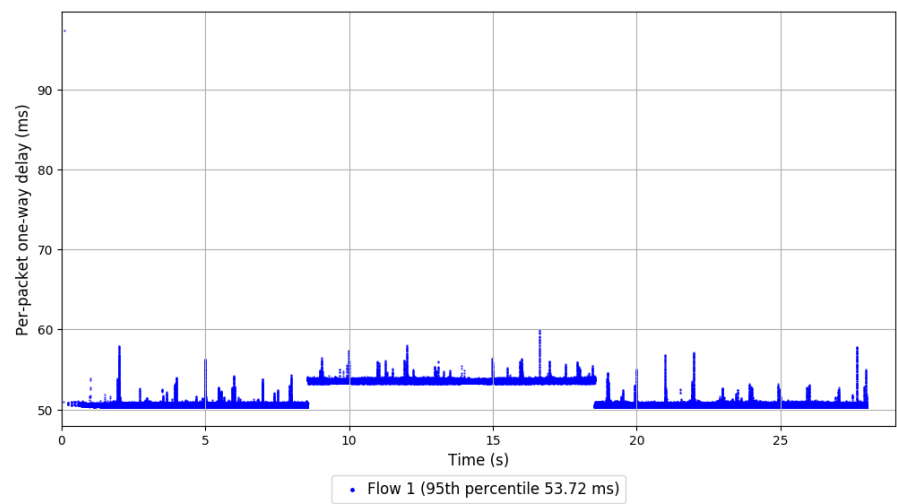
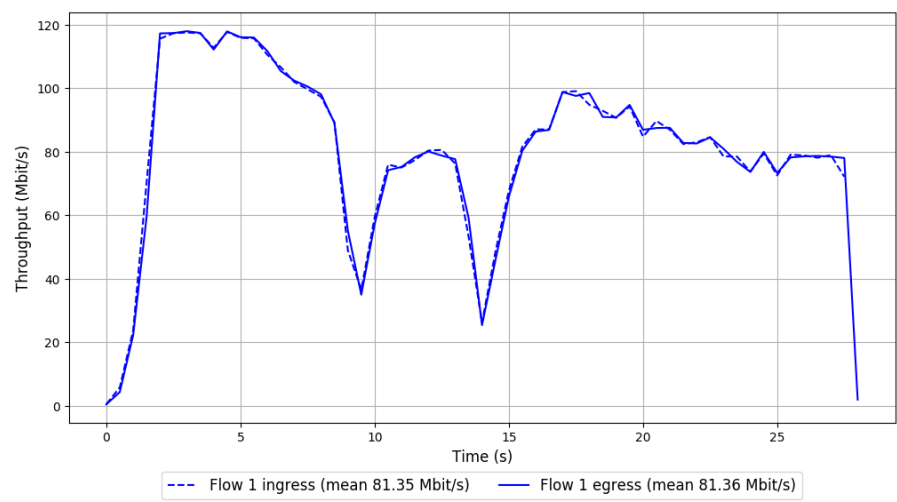


```
Run 1: Statistics of Copa

Start at: 2017-12-05 13:10:35
End at: 2017-12-05 13:11:06

# Below is generated by plot.py at 2017-12-05 15:59:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.36 Mbit/s
95th percentile per-packet one-way delay: 53.722 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 81.36 Mbit/s
95th percentile per-packet one-way delay: 53.722 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-05 13:20:51

End at: 2017-12-05 13:21:21

# Below is generated by plot.py at 2017-12-05 15:59:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 78.67 Mbit/s

95th percentile per-packet one-way delay: 53.817 ms

Loss rate: 0.00%

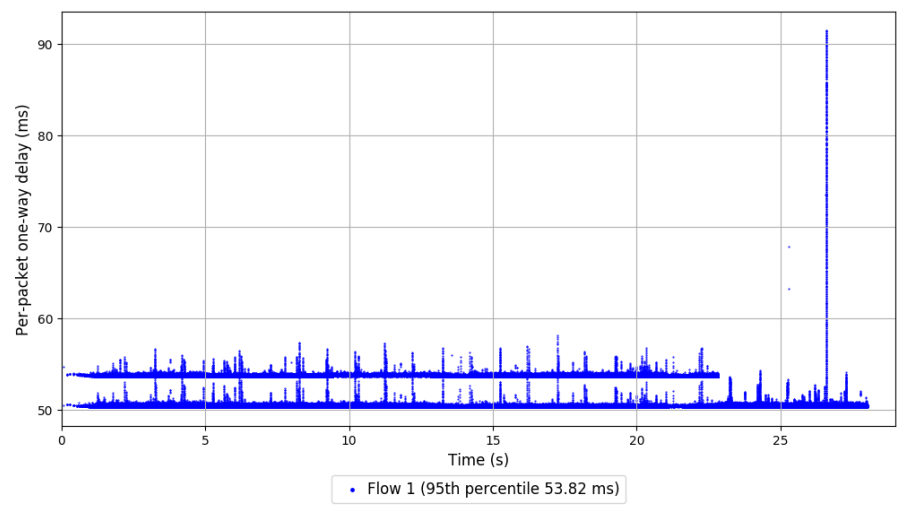
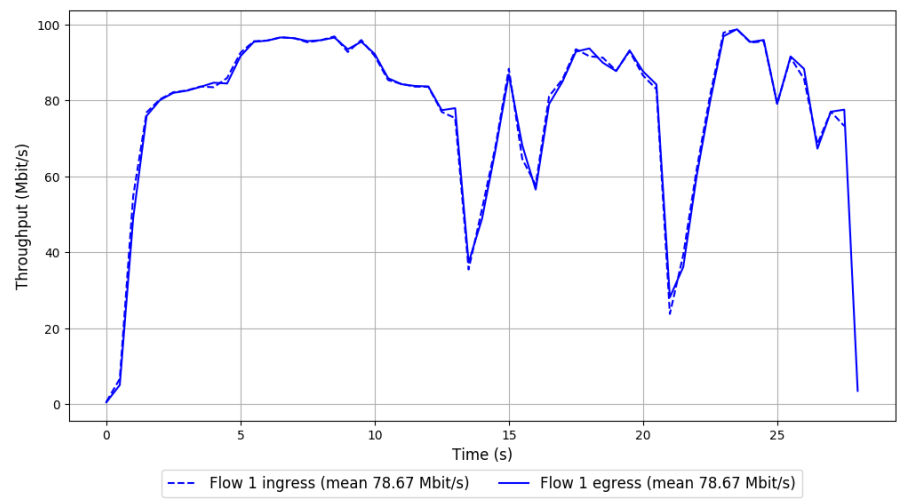
-- Flow 1:

Average throughput: 78.67 Mbit/s

95th percentile per-packet one-way delay: 53.817 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-05 13:31:03

End at: 2017-12-05 13:31:33

# Below is generated by plot.py at 2017-12-05 15:59:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 81.76 Mbit/s

95th percentile per-packet one-way delay: 53.784 ms

Loss rate: 0.01%

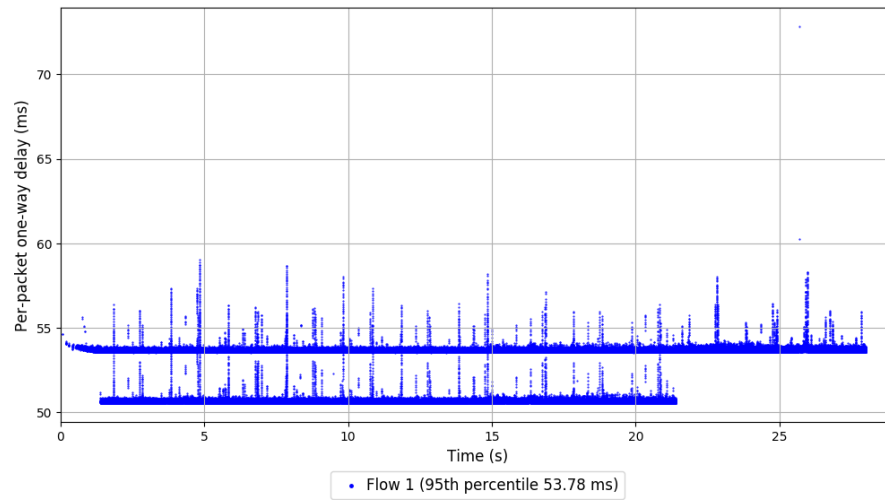
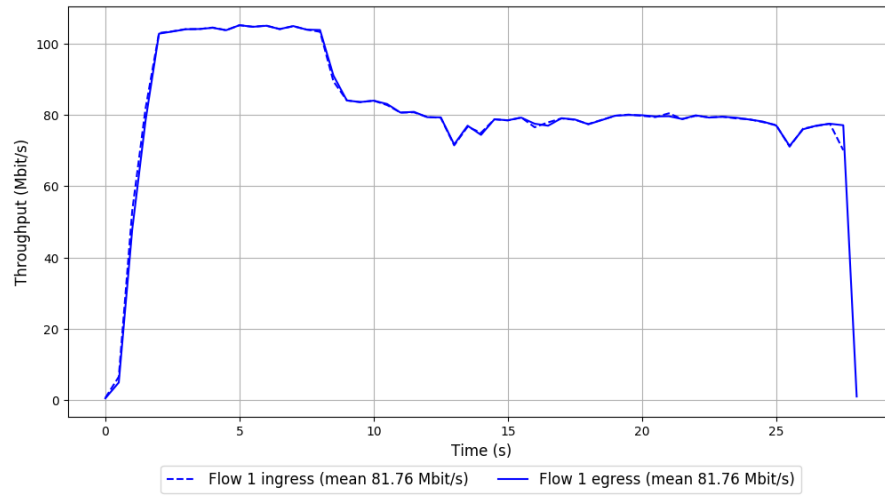
-- Flow 1:

Average throughput: 81.76 Mbit/s

95th percentile per-packet one-way delay: 53.784 ms

Loss rate: 0.01%

### Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-05 13:41:34

End at: 2017-12-05 13:42:04

# Below is generated by plot.py at 2017-12-05 15:59:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 72.59 Mbit/s

95th percentile per-packet one-way delay: 53.806 ms

Loss rate: 0.00%

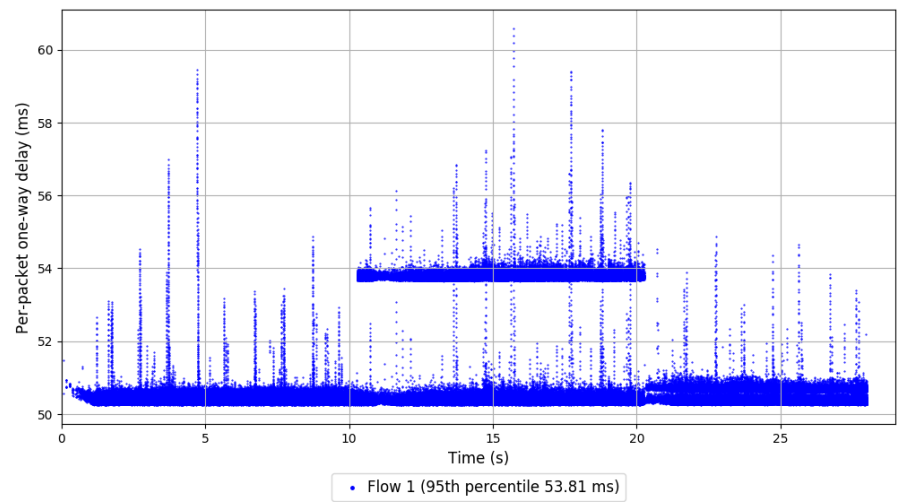
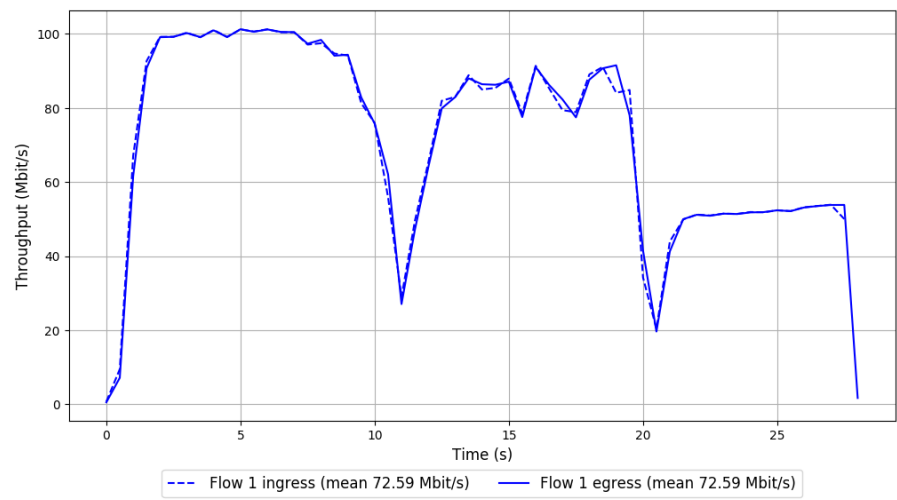
-- Flow 1:

Average throughput: 72.59 Mbit/s

95th percentile per-packet one-way delay: 53.806 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-05 13:51:50

End at: 2017-12-05 13:52:20

# Below is generated by plot.py at 2017-12-05 16:00:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 80.32 Mbit/s

95th percentile per-packet one-way delay: 53.456 ms

Loss rate: 0.00%

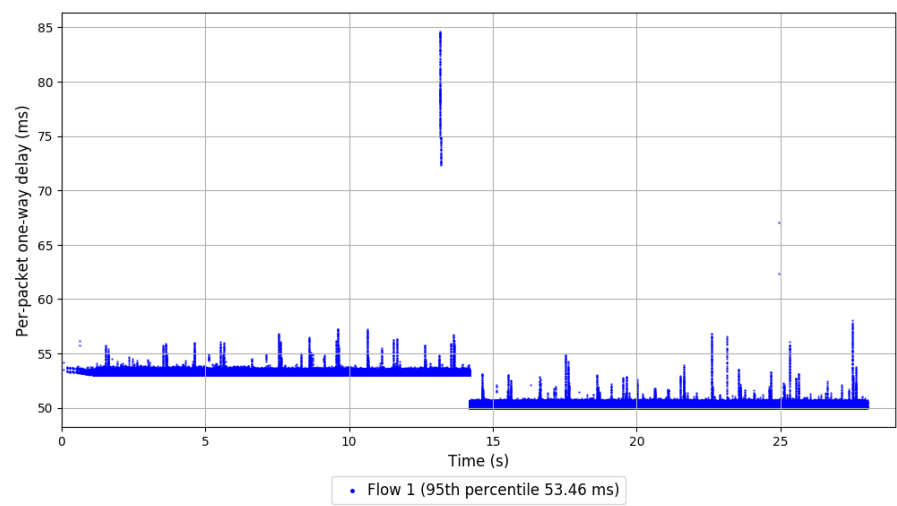
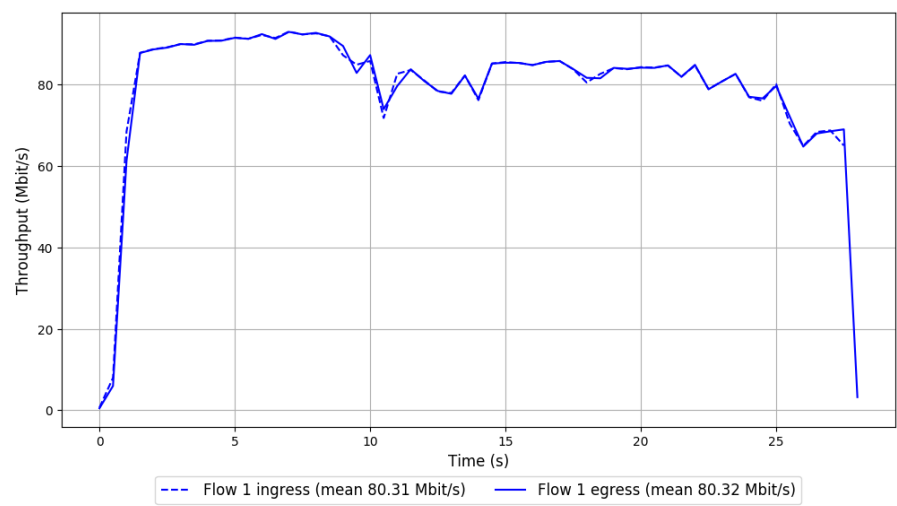
-- Flow 1:

Average throughput: 80.32 Mbit/s

95th percentile per-packet one-way delay: 53.456 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-05 14:02:00

End at: 2017-12-05 14:02:30

# Below is generated by plot.py at 2017-12-05 16:00:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 82.68 Mbit/s

95th percentile per-packet one-way delay: 53.432 ms

Loss rate: 0.00%

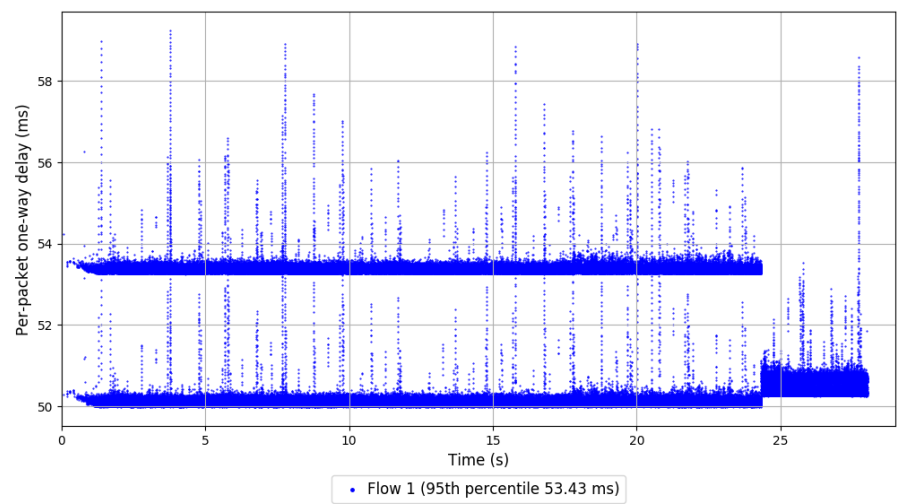
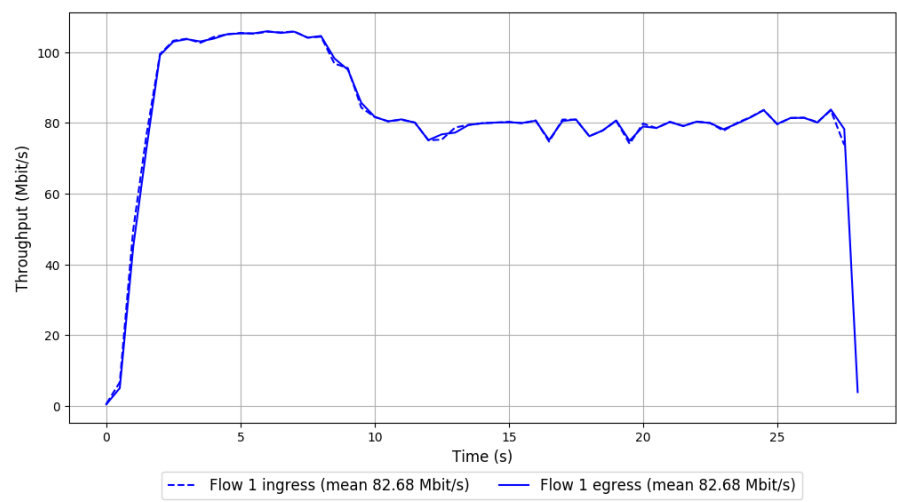
-- Flow 1:

Average throughput: 82.68 Mbit/s

95th percentile per-packet one-way delay: 53.432 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-05 14:12:16

End at: 2017-12-05 14:12:46

# Below is generated by plot.py at 2017-12-05 16:00:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 66.40 Mbit/s

95th percentile per-packet one-way delay: 50.744 ms

Loss rate: 0.00%

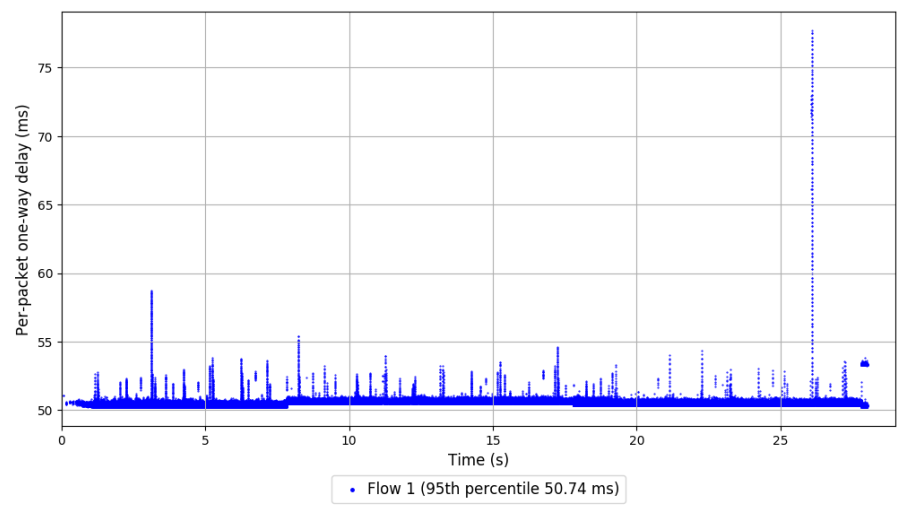
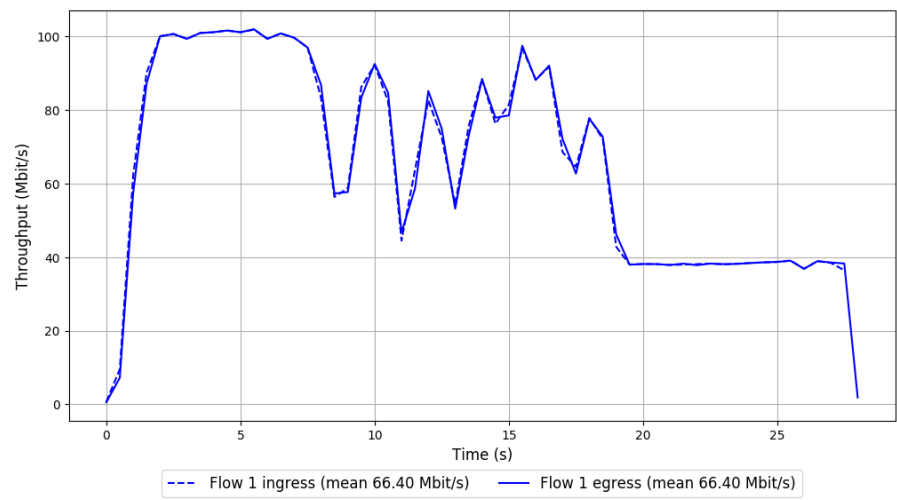
-- Flow 1:

Average throughput: 66.40 Mbit/s

95th percentile per-packet one-way delay: 50.744 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-05 14:22:54

End at: 2017-12-05 14:23:24

# Below is generated by plot.py at 2017-12-05 16:00:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 75.43 Mbit/s

95th percentile per-packet one-way delay: 53.441 ms

Loss rate: 0.00%

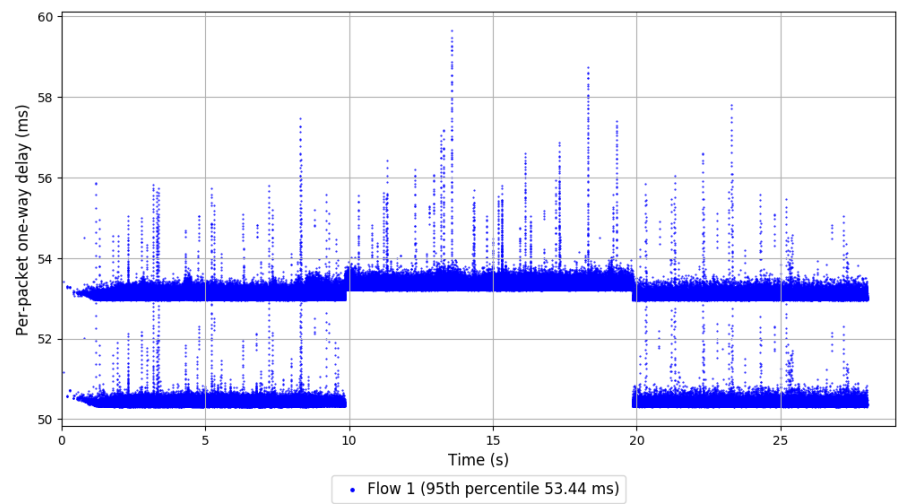
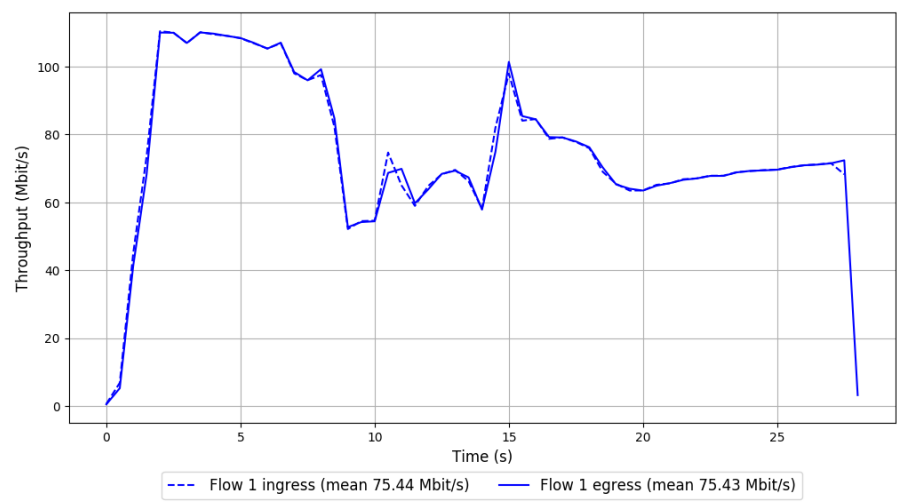
-- Flow 1:

Average throughput: 75.43 Mbit/s

95th percentile per-packet one-way delay: 53.441 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-05 14:33:22

End at: 2017-12-05 14:33:53

# Below is generated by plot.py at 2017-12-05 16:01:17

# Datalink statistics

-- Total of 1 flow:

Average throughput: 81.48 Mbit/s

95th percentile per-packet one-way delay: 53.606 ms

Loss rate: 0.00%

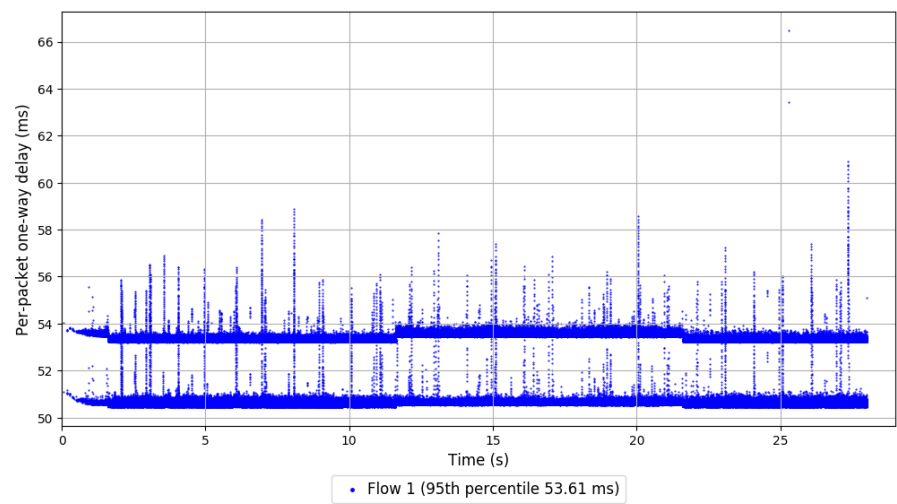
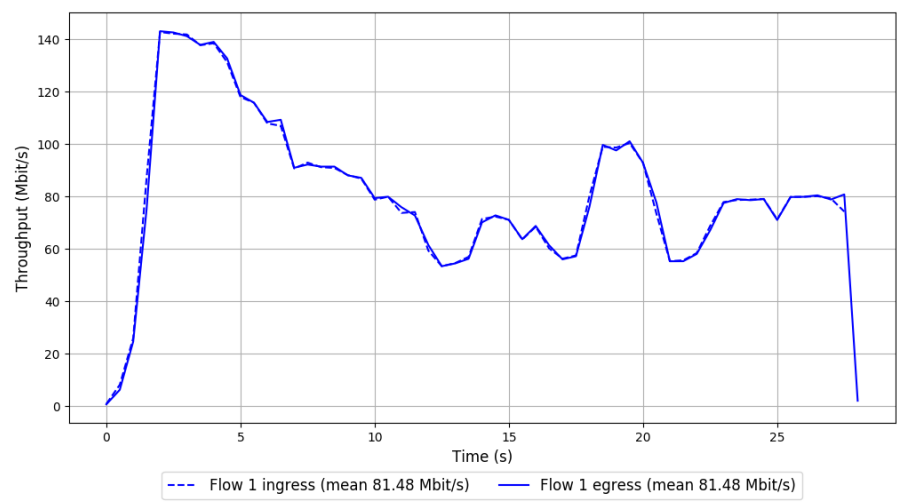
-- Flow 1:

Average throughput: 81.48 Mbit/s

95th percentile per-packet one-way delay: 53.606 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-05 14:43:36

End at: 2017-12-05 14:44:06

# Below is generated by plot.py at 2017-12-05 16:02:10

# Datalink statistics

-- Total of 1 flow:

Average throughput: 81.76 Mbit/s

95th percentile per-packet one-way delay: 53.382 ms

Loss rate: 0.00%

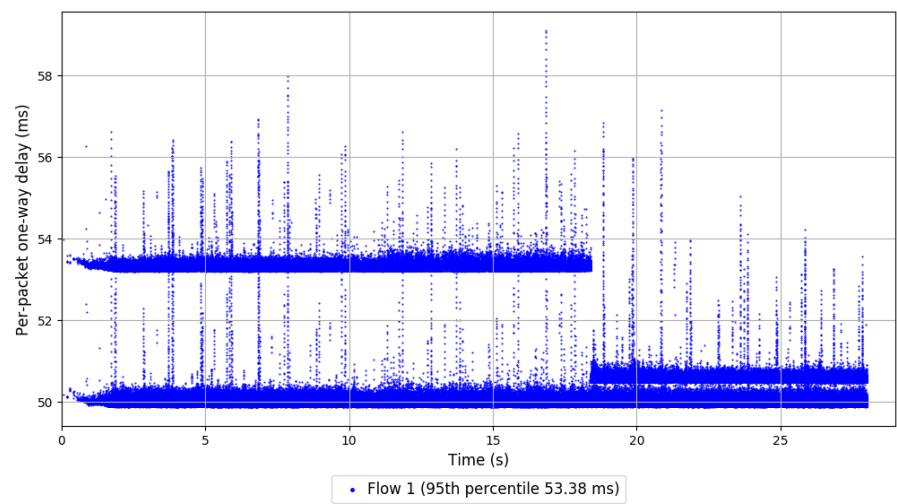
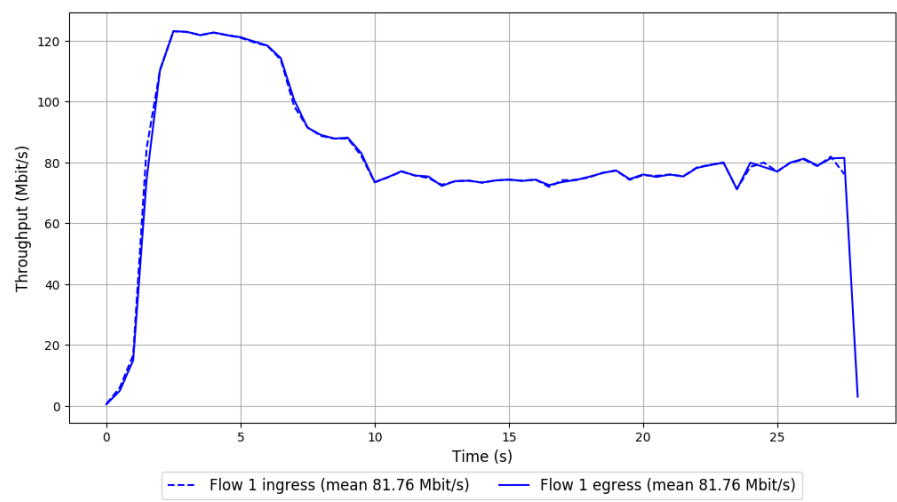
-- Flow 1:

Average throughput: 81.76 Mbit/s

95th percentile per-packet one-way delay: 53.382 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

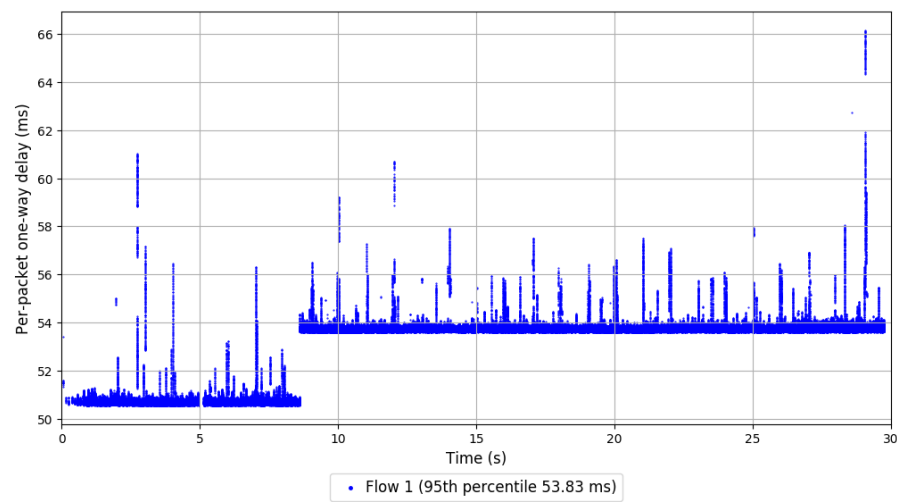
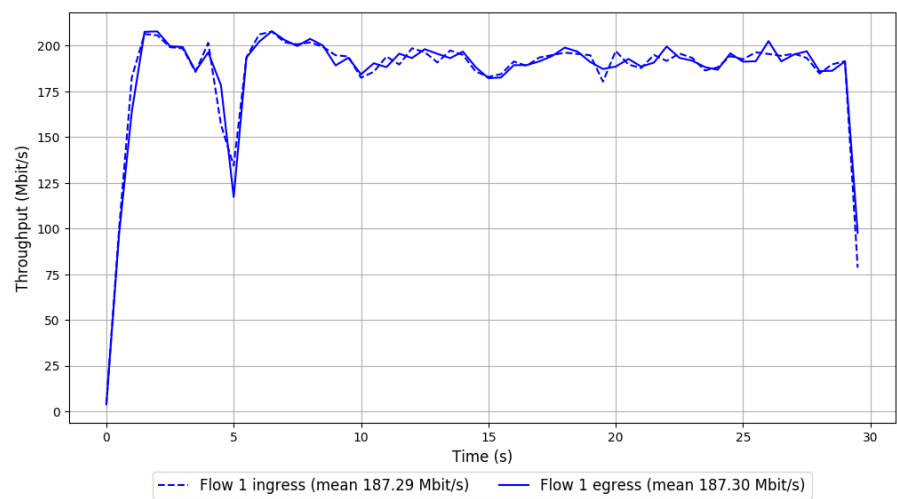


```
Run 1: Statistics of Indigo

Start at: 2017-12-05 13:04:37
End at: 2017-12-05 13:05:07

# Below is generated by plot.py at 2017-12-05 16:03:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 187.30 Mbit/s
95th percentile per-packet one-way delay: 53.833 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 187.30 Mbit/s
95th percentile per-packet one-way delay: 53.833 ms
Loss rate: 0.01%
```

Run 1: Report of Indigo — Data Link

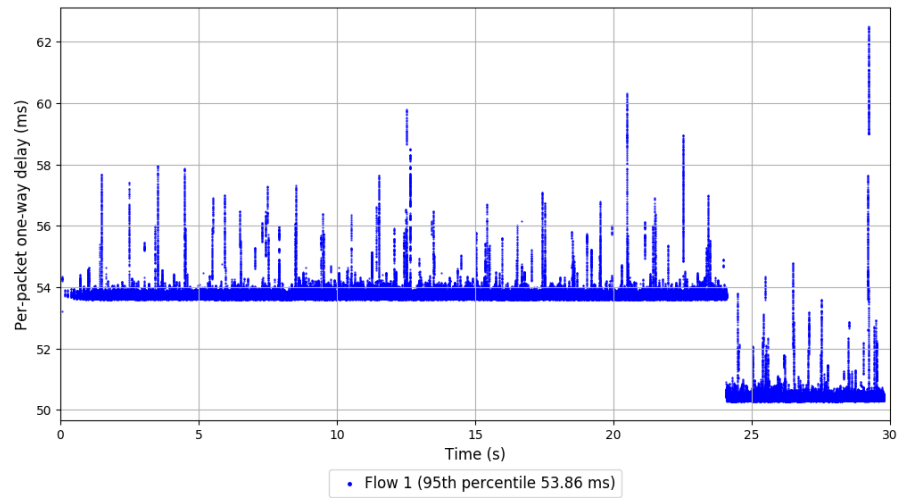
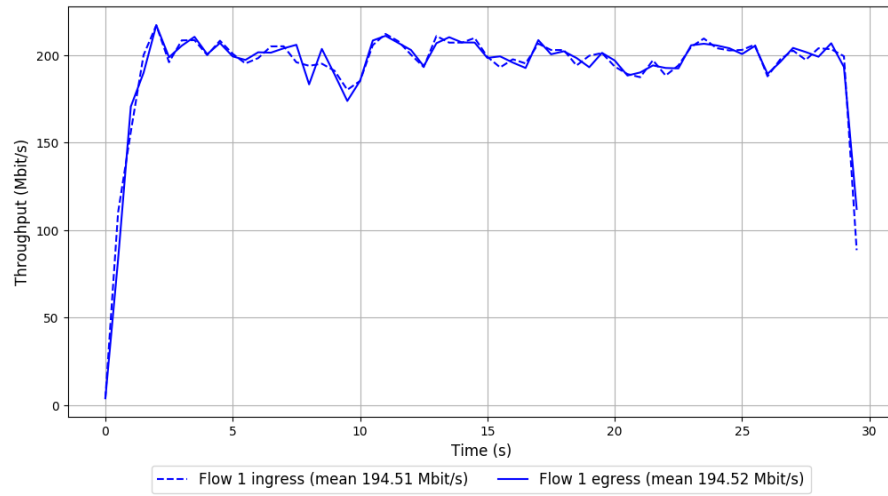


```
Run 2: Statistics of Indigo

Start at: 2017-12-05 13:14:52
End at: 2017-12-05 13:15:22

# Below is generated by plot.py at 2017-12-05 16:03:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 194.52 Mbit/s
95th percentile per-packet one-way delay: 53.859 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 194.52 Mbit/s
95th percentile per-packet one-way delay: 53.859 ms
Loss rate: 0.01%
```

## Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-05 13:25:17

End at: 2017-12-05 13:25:47

# Below is generated by plot.py at 2017-12-05 16:03:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 190.70 Mbit/s

95th percentile per-packet one-way delay: 53.831 ms

Loss rate: 0.00%

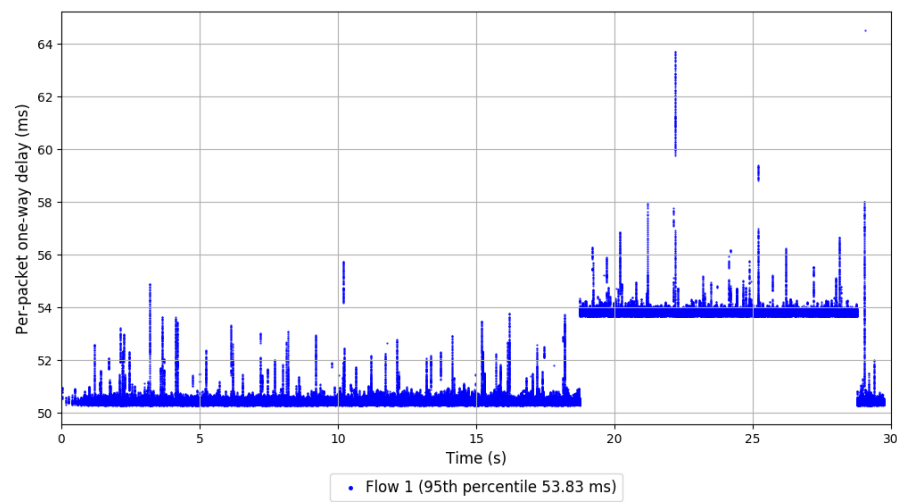
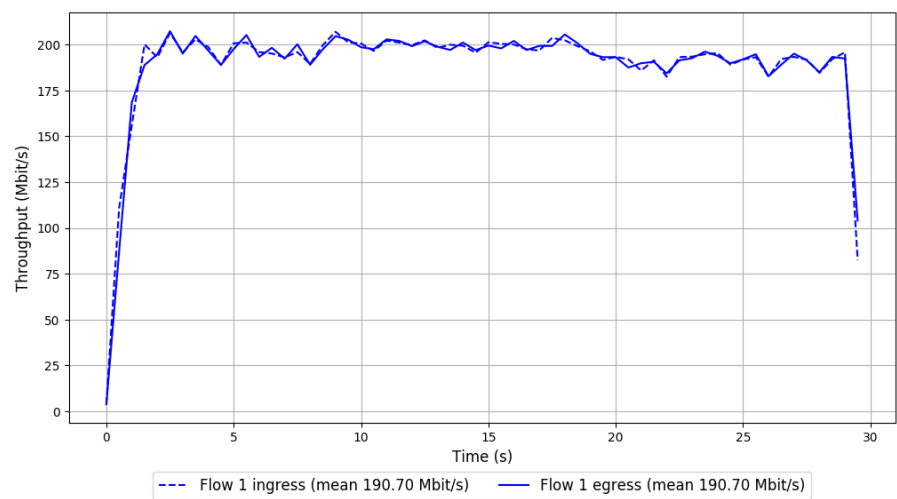
-- Flow 1:

Average throughput: 190.70 Mbit/s

95th percentile per-packet one-way delay: 53.831 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-05 13:35:38

End at: 2017-12-05 13:36:08

# Below is generated by plot.py at 2017-12-05 16:03:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 191.44 Mbit/s

95th percentile per-packet one-way delay: 53.856 ms

Loss rate: 0.00%

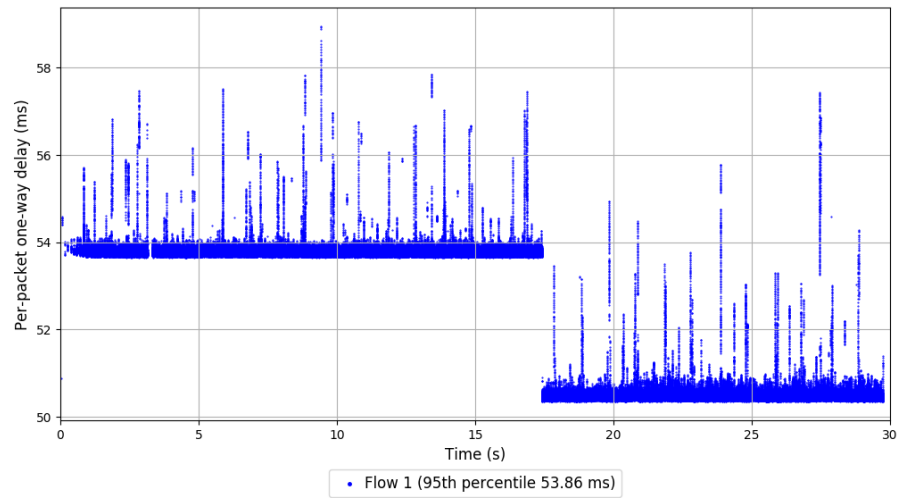
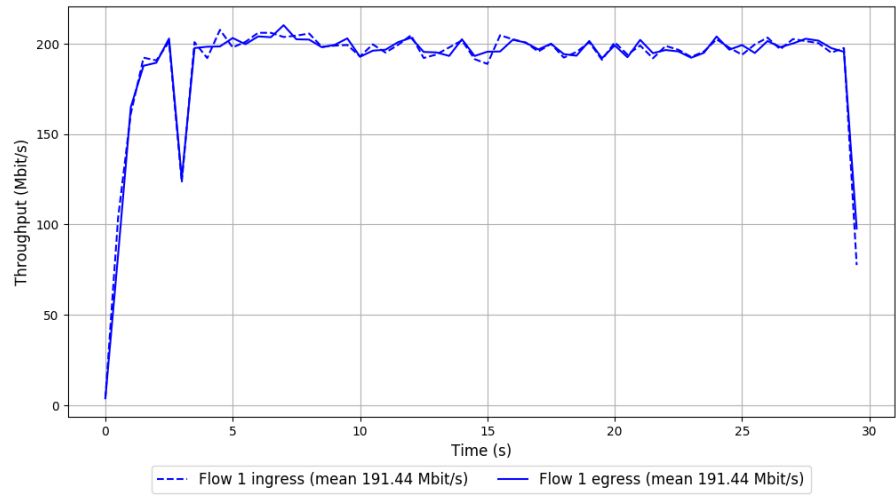
-- Flow 1:

Average throughput: 191.44 Mbit/s

95th percentile per-packet one-way delay: 53.856 ms

Loss rate: 0.00%

#### Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-05 13:45:52

End at: 2017-12-05 13:46:22

# Below is generated by plot.py at 2017-12-05 16:03:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 192.04 Mbit/s

95th percentile per-packet one-way delay: 53.807 ms

Loss rate: 0.01%

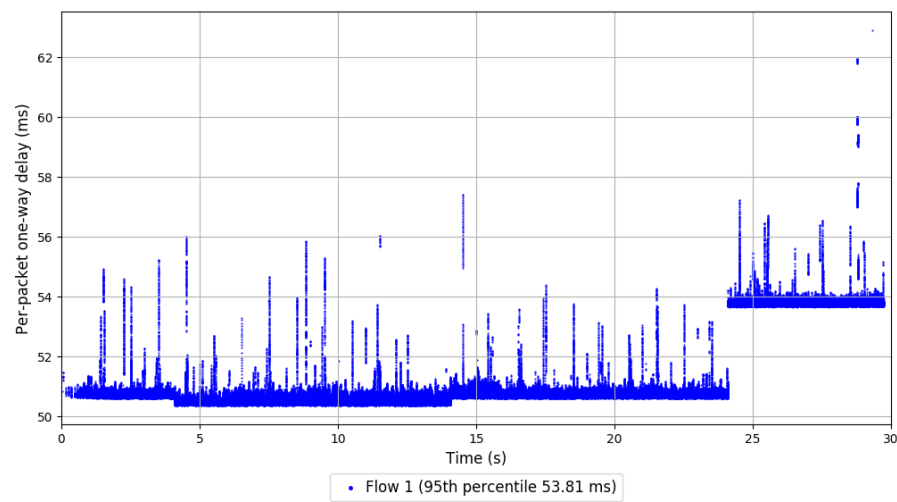
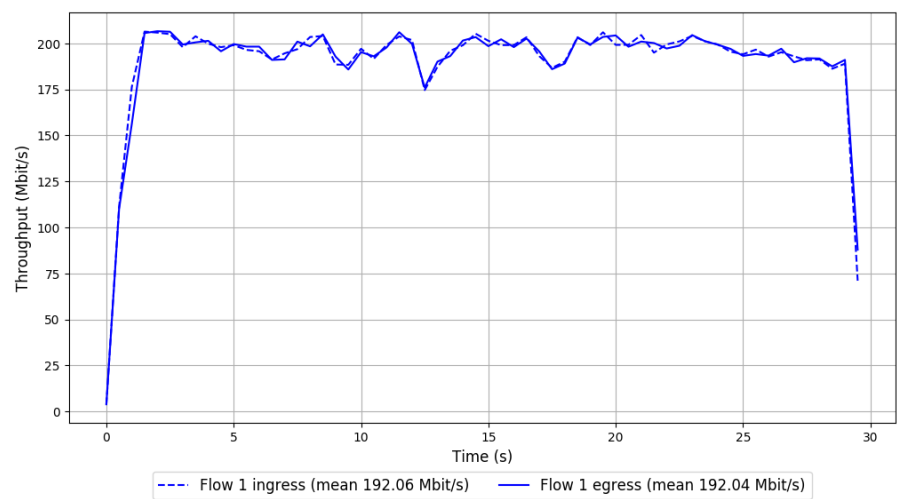
-- Flow 1:

Average throughput: 192.04 Mbit/s

95th percentile per-packet one-way delay: 53.807 ms

Loss rate: 0.01%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-05 13:56:05

End at: 2017-12-05 13:56:35

# Below is generated by plot.py at 2017-12-05 16:04:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 187.89 Mbit/s

95th percentile per-packet one-way delay: 53.452 ms

Loss rate: 0.00%

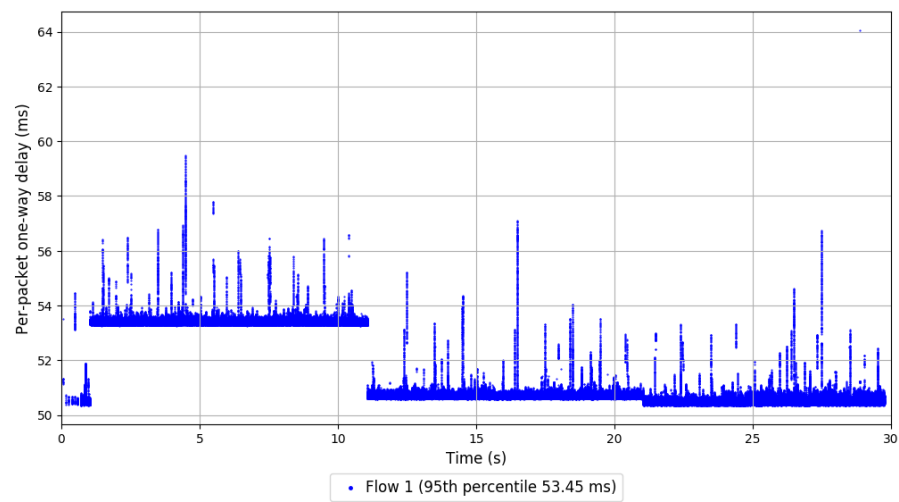
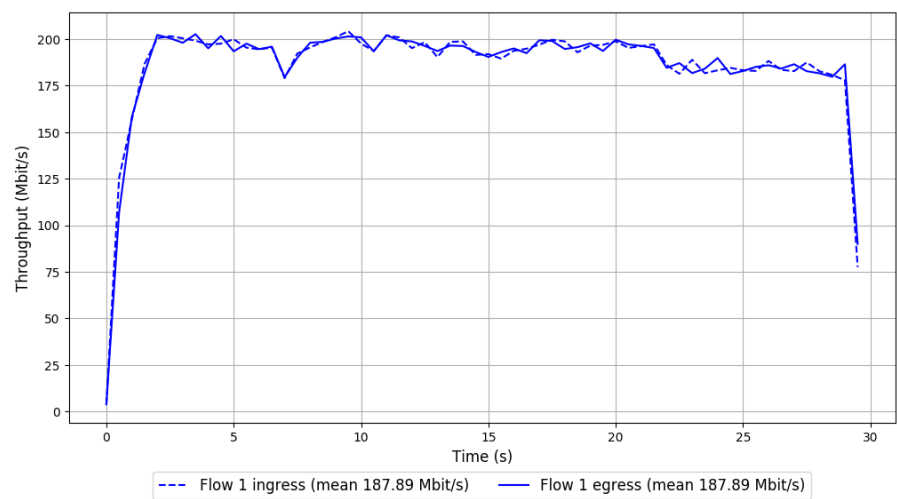
-- Flow 1:

Average throughput: 187.89 Mbit/s

95th percentile per-packet one-way delay: 53.452 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-05 14:06:22

End at: 2017-12-05 14:06:52

# Below is generated by plot.py at 2017-12-05 16:04:27

# Datalink statistics

-- Total of 1 flow:

Average throughput: 184.75 Mbit/s

95th percentile per-packet one-way delay: 53.525 ms

Loss rate: 0.01%

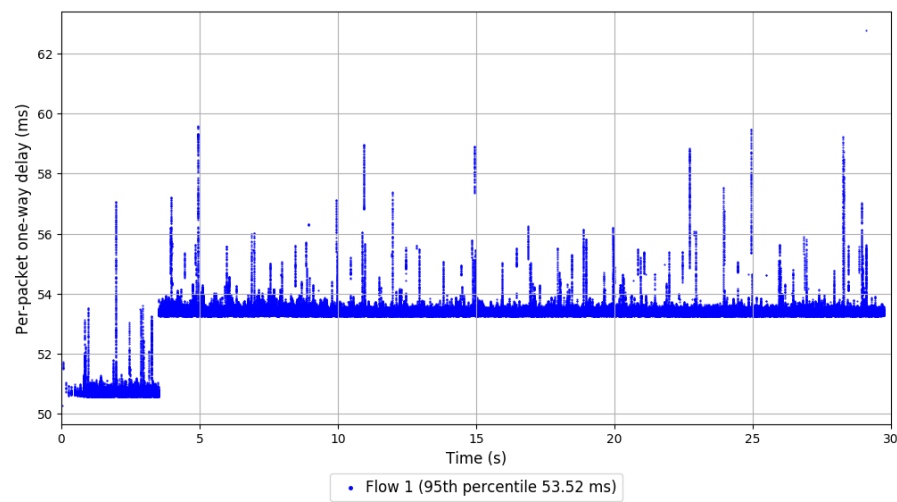
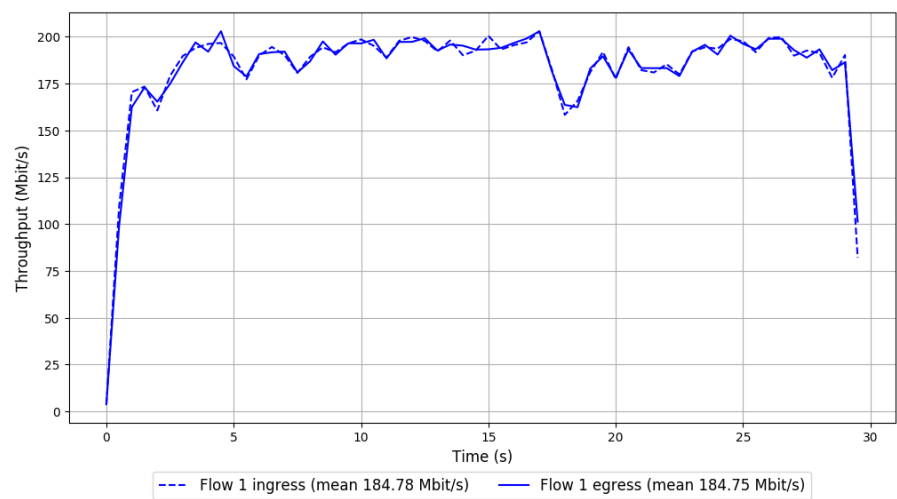
-- Flow 1:

Average throughput: 184.75 Mbit/s

95th percentile per-packet one-way delay: 53.525 ms

Loss rate: 0.01%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-05 14:16:55

End at: 2017-12-05 14:17:25

# Below is generated by plot.py at 2017-12-05 16:05:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 187.02 Mbit/s

95th percentile per-packet one-way delay: 50.565 ms

Loss rate: 0.00%

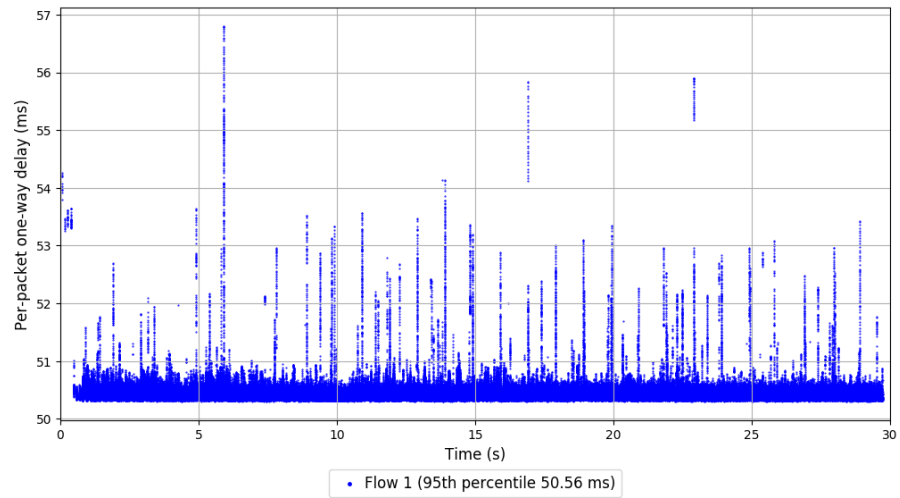
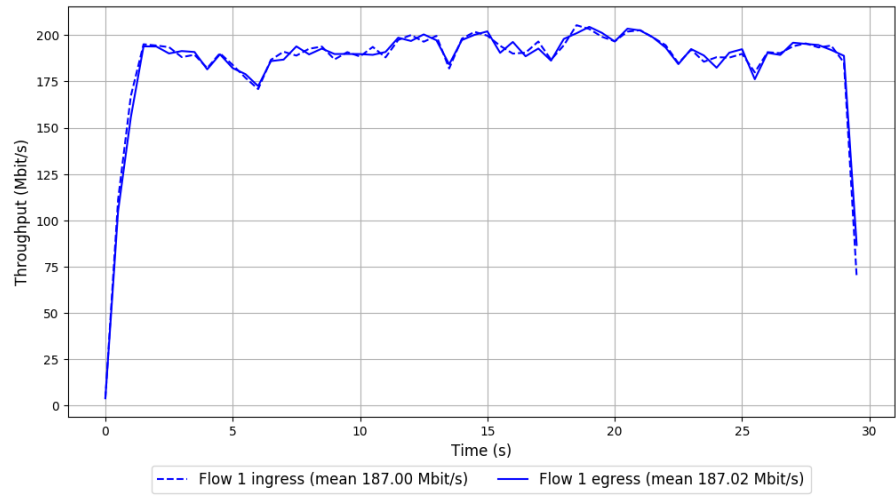
-- Flow 1:

Average throughput: 187.02 Mbit/s

95th percentile per-packet one-way delay: 50.565 ms

Loss rate: 0.00%

## Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-05 14:27:23

End at: 2017-12-05 14:27:53

# Below is generated by plot.py at 2017-12-05 16:06:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 191.68 Mbit/s

95th percentile per-packet one-way delay: 53.400 ms

Loss rate: 0.00%

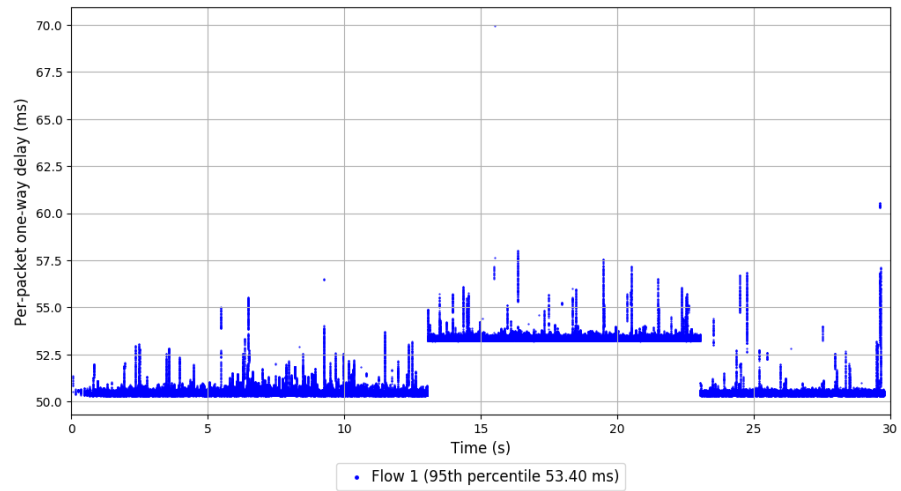
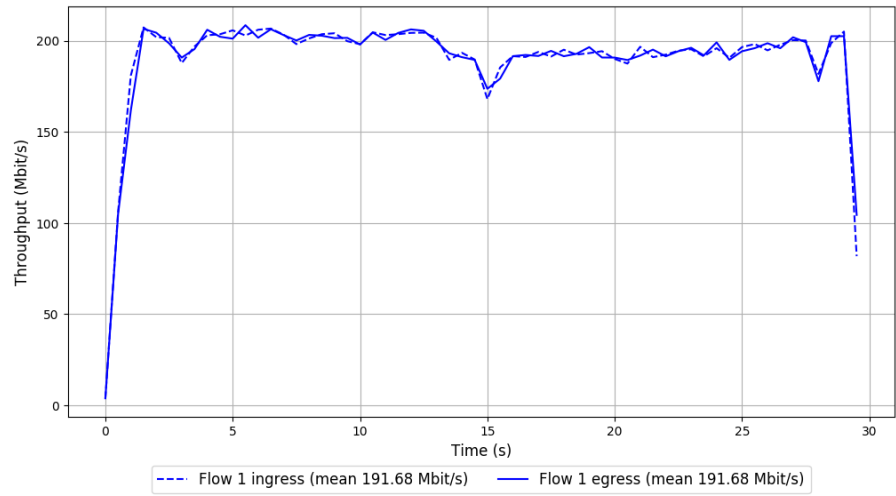
-- Flow 1:

Average throughput: 191.68 Mbit/s

95th percentile per-packet one-way delay: 53.400 ms

Loss rate: 0.00%

### Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-05 14:37:38

End at: 2017-12-05 14:38:08

# Below is generated by plot.py at 2017-12-05 16:06:34

# Datalink statistics

-- Total of 1 flow:

Average throughput: 186.49 Mbit/s

95th percentile per-packet one-way delay: 53.361 ms

Loss rate: 0.00%

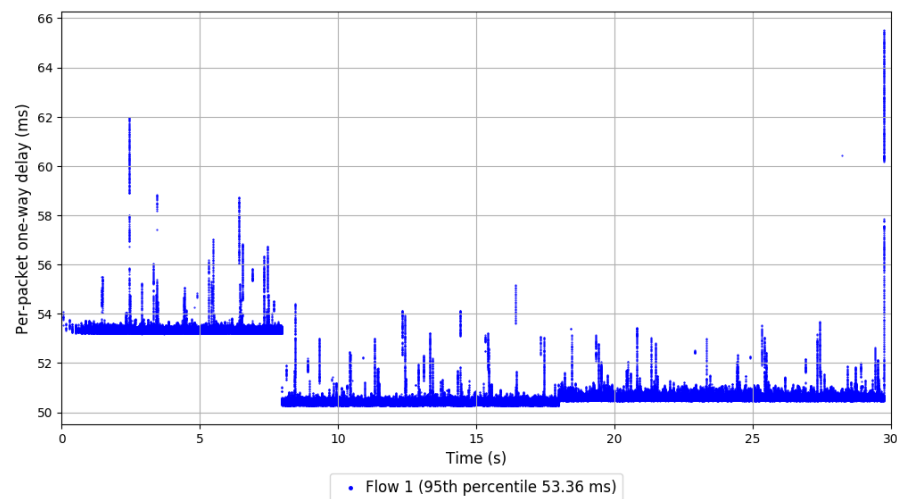
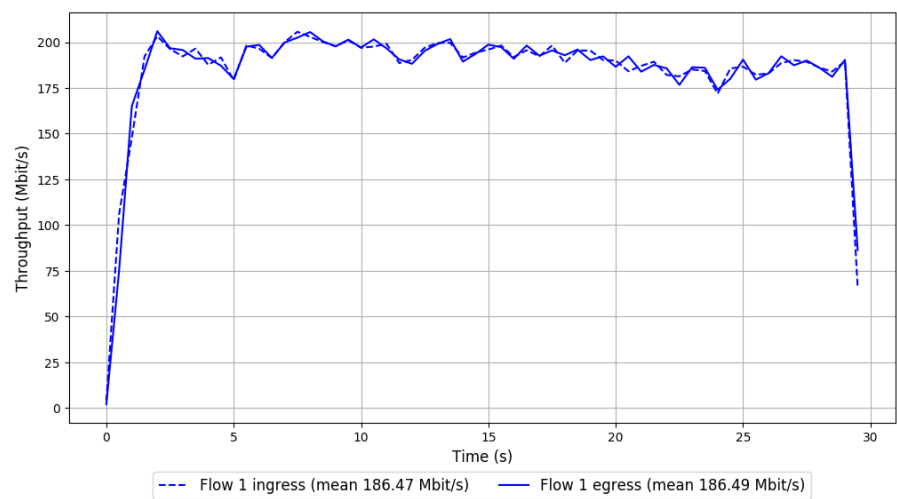
-- Flow 1:

Average throughput: 186.49 Mbit/s

95th percentile per-packet one-way delay: 53.361 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

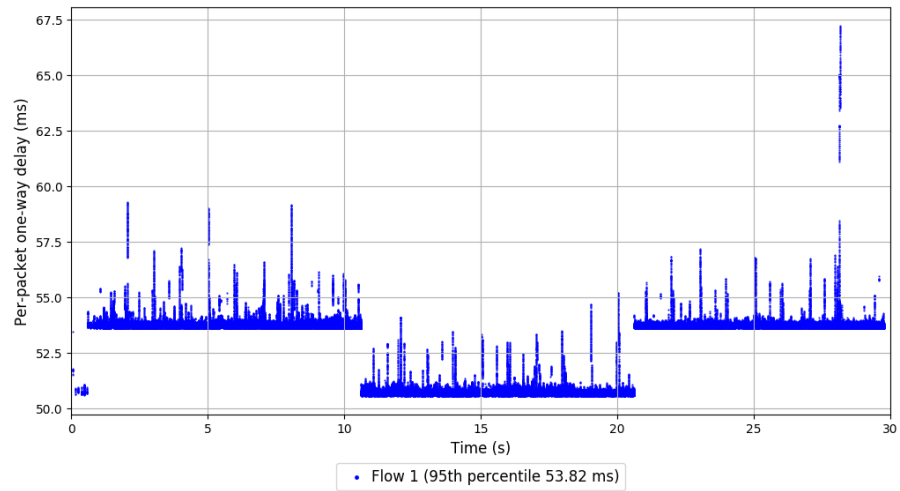
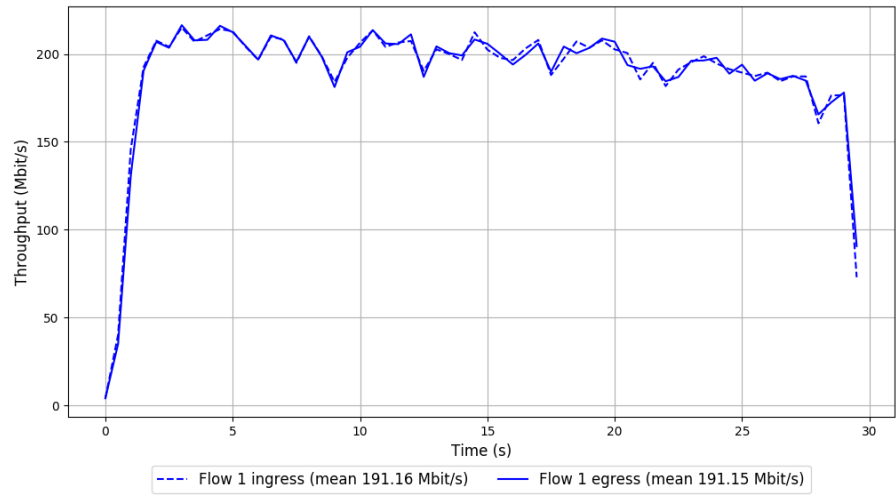


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-05 13:06:05
End at: 2017-12-05 13:06:35

# Below is generated by plot.py at 2017-12-05 16:06:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.15 Mbit/s
95th percentile per-packet one-way delay: 53.822 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 191.15 Mbit/s
95th percentile per-packet one-way delay: 53.822 ms
Loss rate: 0.01%
```

## Run 1: Report of Indigo-calib — Data Link

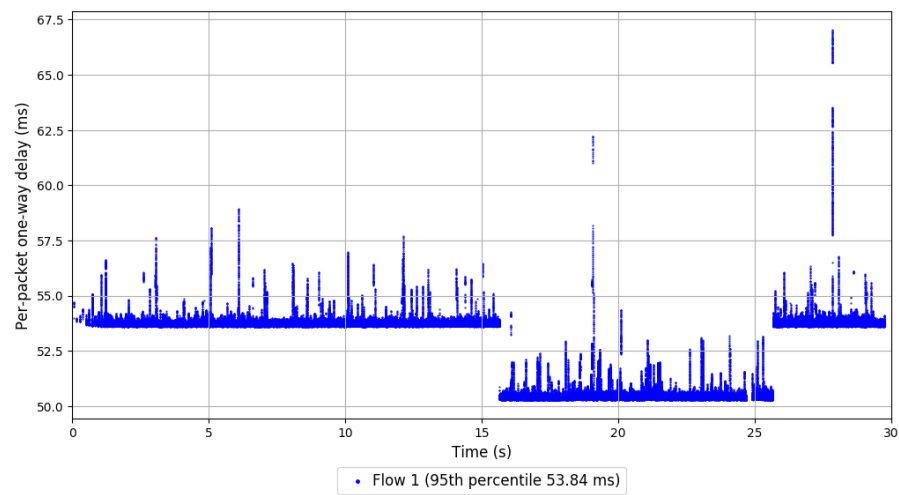
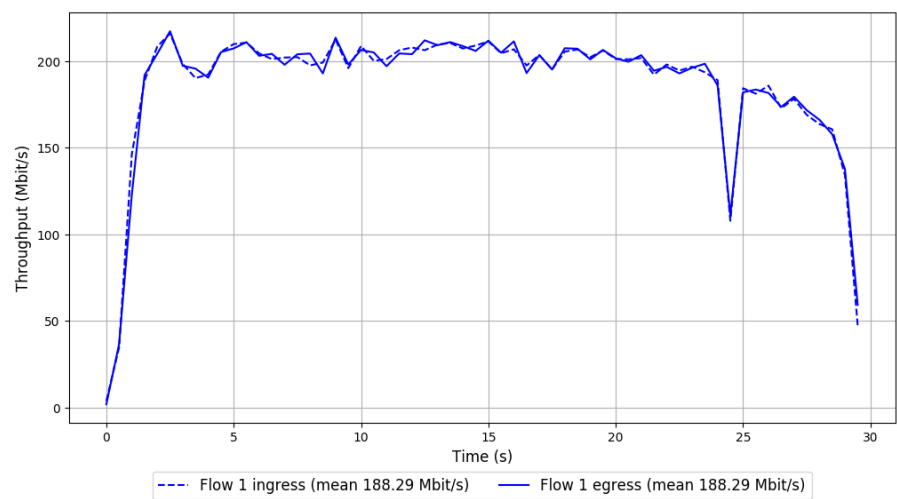


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-05 13:16:20
End at: 2017-12-05 13:16:50

# Below is generated by plot.py at 2017-12-05 16:06:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 188.29 Mbit/s
95th percentile per-packet one-way delay: 53.836 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 188.29 Mbit/s
95th percentile per-packet one-way delay: 53.836 ms
Loss rate: 0.01%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-12-05 13:26:47

End at: 2017-12-05 13:27:17

# Below is generated by plot.py at 2017-12-05 16:06:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 179.38 Mbit/s

95th percentile per-packet one-way delay: 53.820 ms

Loss rate: 0.00%

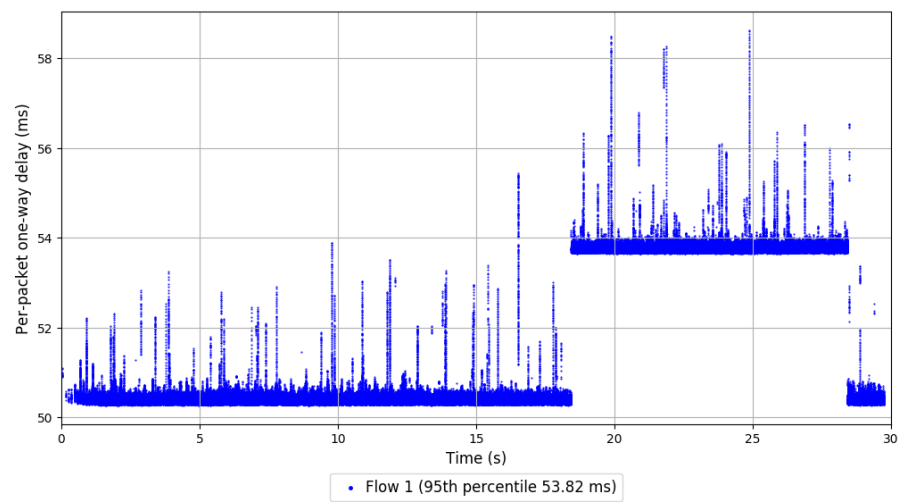
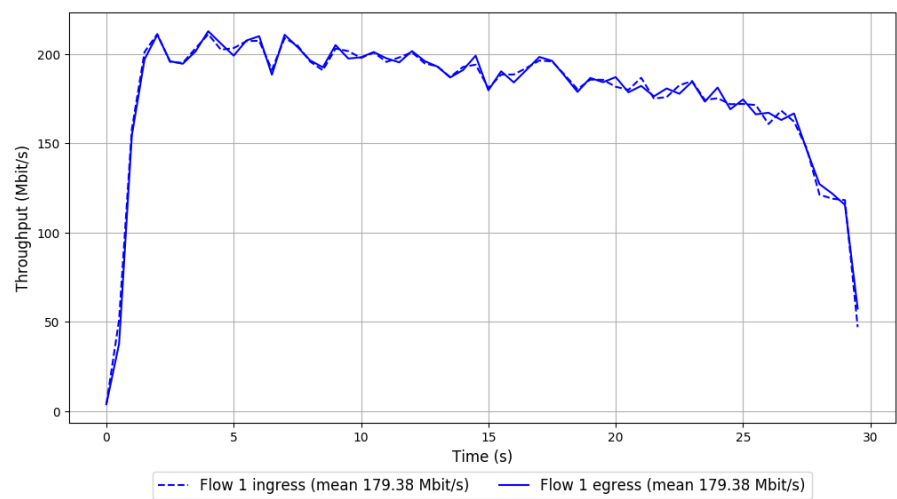
-- Flow 1:

Average throughput: 179.38 Mbit/s

95th percentile per-packet one-way delay: 53.820 ms

Loss rate: 0.00%

Run 3: Report of Indigo-calib — Data Link

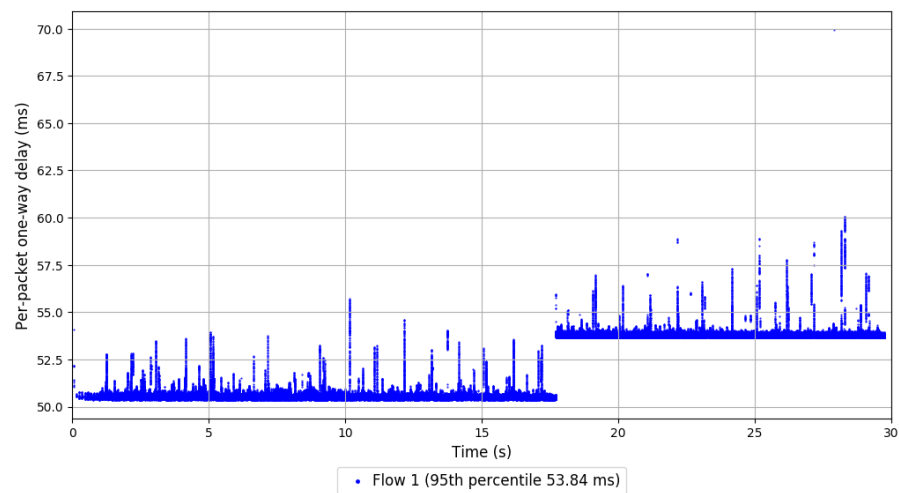
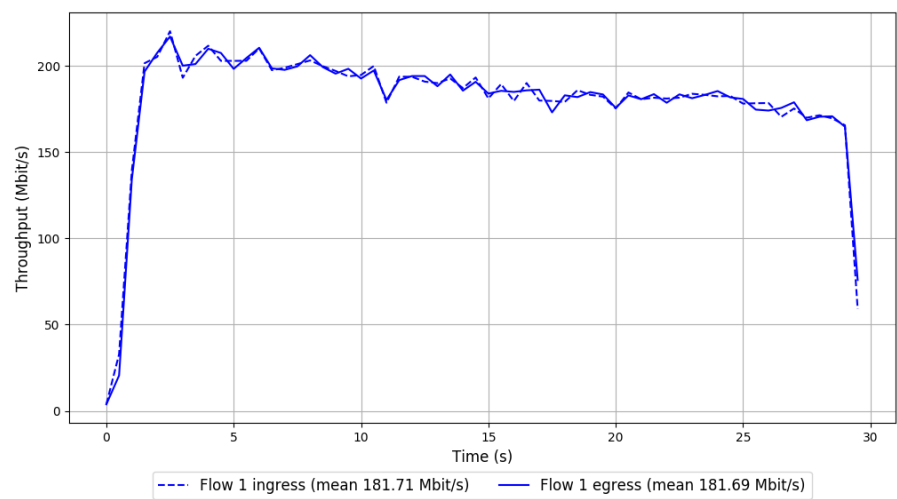


```
Run 4: Statistics of Indigo-calib

Start at: 2017-12-05 13:37:08
End at: 2017-12-05 13:37:38

# Below is generated by plot.py at 2017-12-05 16:07:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.69 Mbit/s
95th percentile per-packet one-way delay: 53.837 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 181.69 Mbit/s
95th percentile per-packet one-way delay: 53.837 ms
Loss rate: 0.01%
```

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-05 13:47:22

End at: 2017-12-05 13:47:52

# Below is generated by plot.py at 2017-12-05 16:07:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 162.65 Mbit/s

95th percentile per-packet one-way delay: 53.826 ms

Loss rate: 0.00%

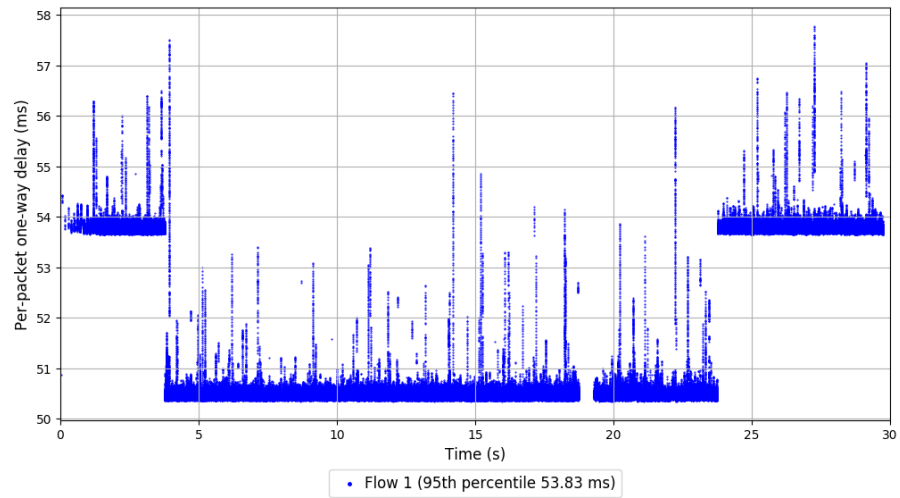
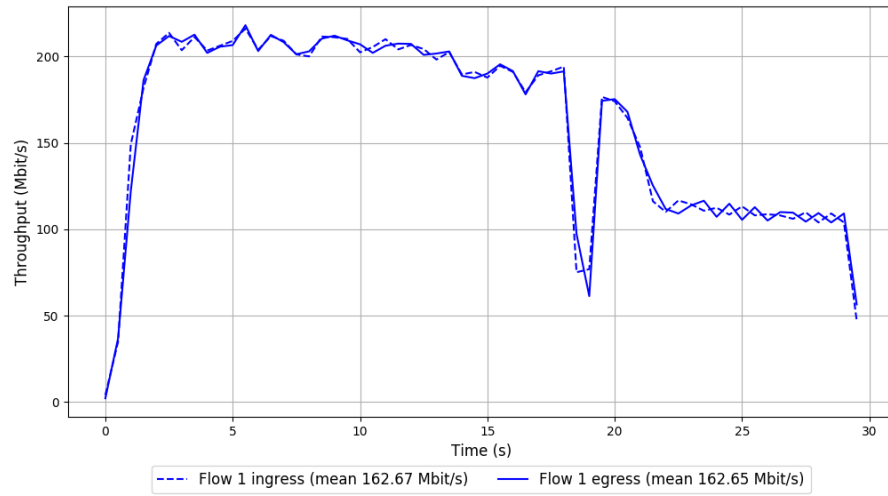
-- Flow 1:

Average throughput: 162.65 Mbit/s

95th percentile per-packet one-way delay: 53.826 ms

Loss rate: 0.00%

### Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-05 13:57:33

End at: 2017-12-05 13:58:03

# Below is generated by plot.py at 2017-12-05 16:08:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 186.31 Mbit/s

95th percentile per-packet one-way delay: 53.483 ms

Loss rate: 0.07%

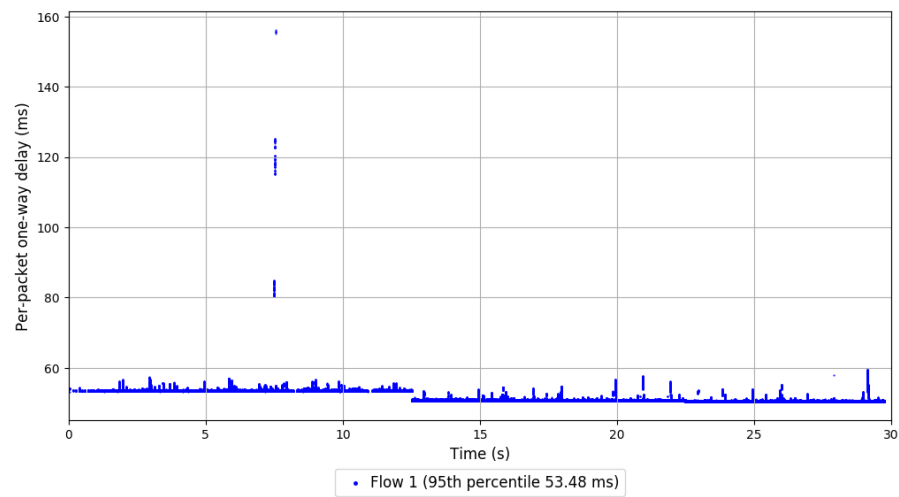
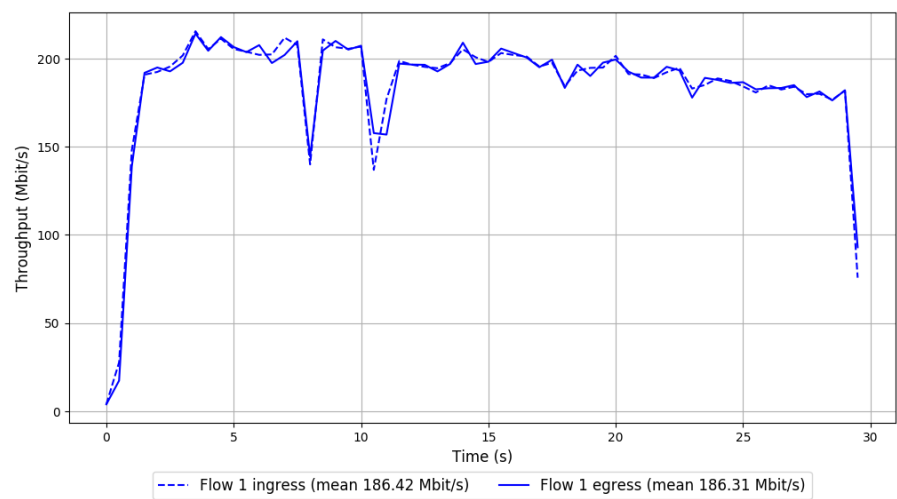
-- Flow 1:

Average throughput: 186.31 Mbit/s

95th percentile per-packet one-way delay: 53.483 ms

Loss rate: 0.07%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-05 14:07:51

End at: 2017-12-05 14:08:21

# Below is generated by plot.py at 2017-12-05 16:08:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 171.23 Mbit/s

95th percentile per-packet one-way delay: 53.449 ms

Loss rate: 0.00%

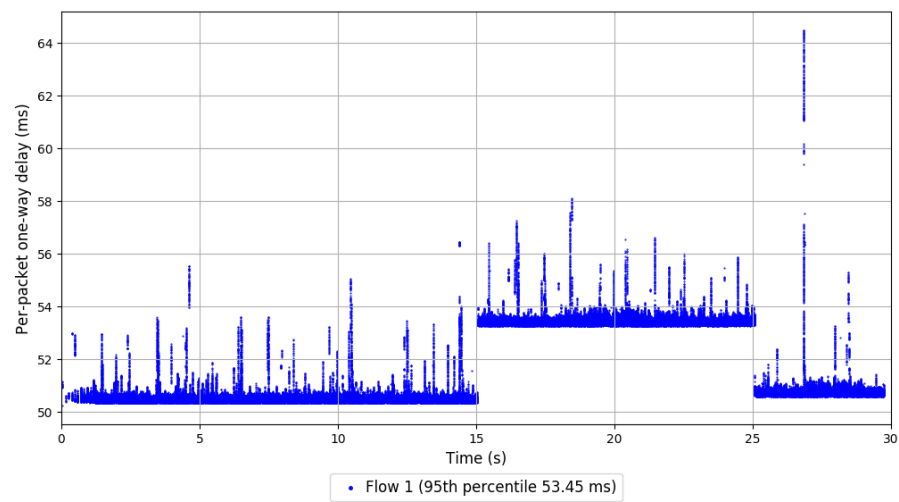
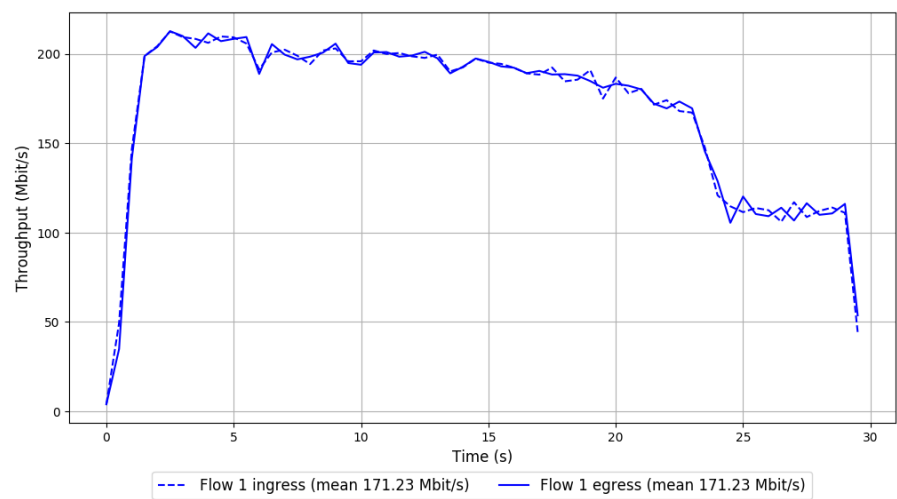
-- Flow 1:

Average throughput: 171.23 Mbit/s

95th percentile per-packet one-way delay: 53.449 ms

Loss rate: 0.00%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-05 14:18:24

End at: 2017-12-05 14:18:54

# Below is generated by plot.py at 2017-12-05 16:08:22

# Datalink statistics

-- Total of 1 flow:

Average throughput: 187.47 Mbit/s

95th percentile per-packet one-way delay: 53.472 ms

Loss rate: 0.00%

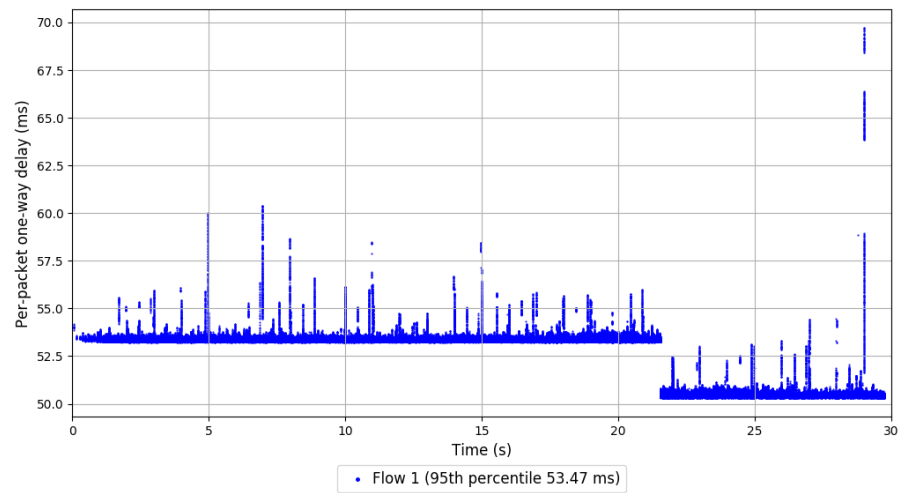
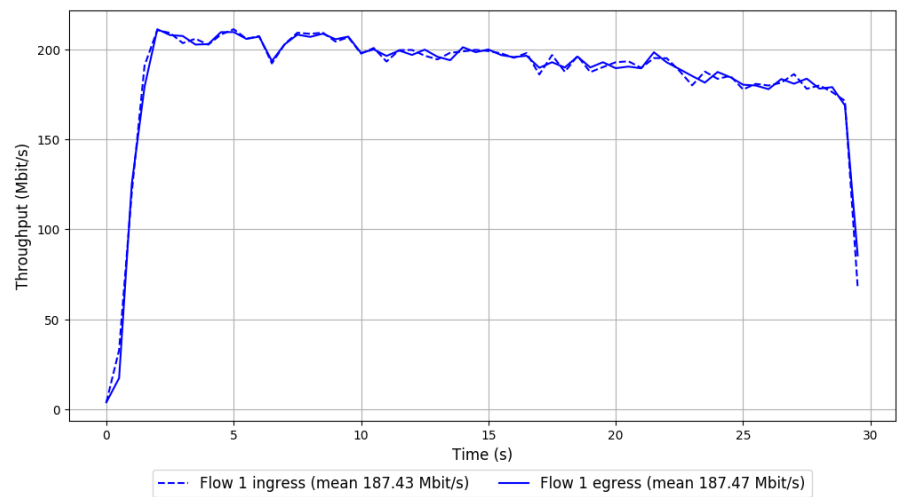
-- Flow 1:

Average throughput: 187.47 Mbit/s

95th percentile per-packet one-way delay: 53.472 ms

Loss rate: 0.00%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-05 14:28:53

End at: 2017-12-05 14:29:23

# Below is generated by plot.py at 2017-12-05 16:08:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 185.88 Mbit/s

95th percentile per-packet one-way delay: 53.267 ms

Loss rate: 0.02%

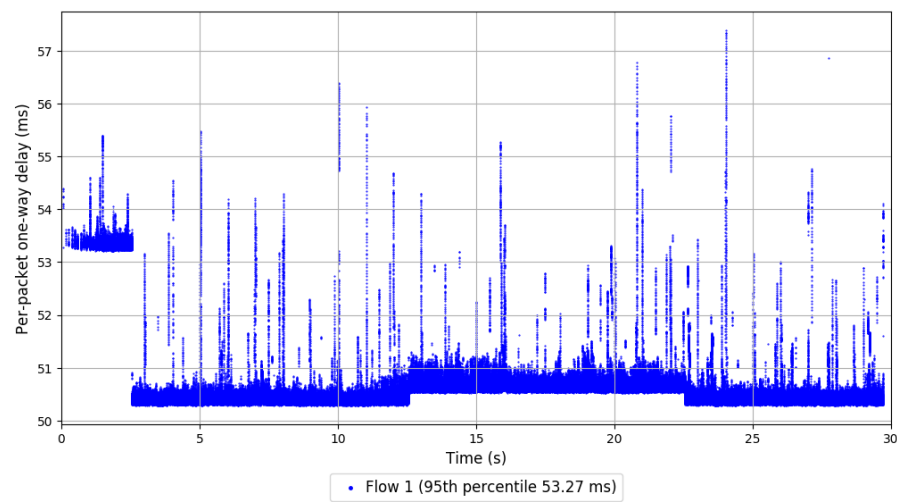
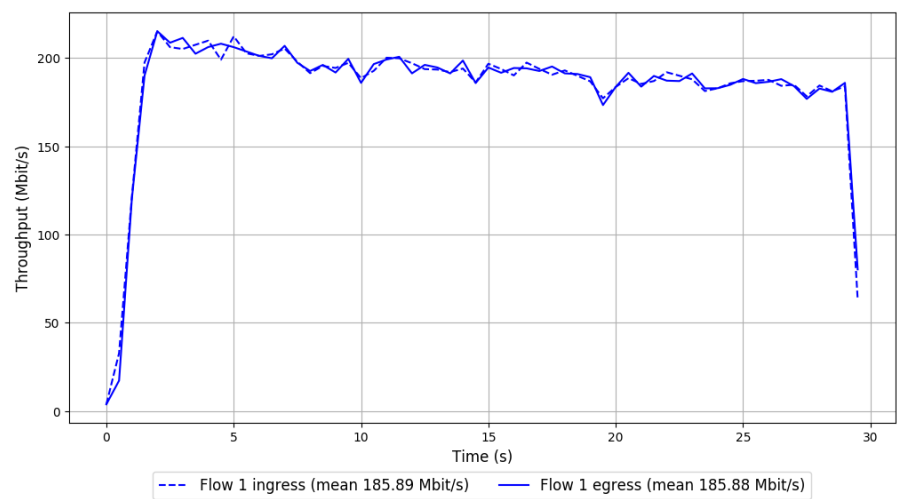
-- Flow 1:

Average throughput: 185.88 Mbit/s

95th percentile per-packet one-way delay: 53.267 ms

Loss rate: 0.02%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-05 14:39:06

End at: 2017-12-05 14:39:36

# Below is generated by plot.py at 2017-12-05 16:08:25

# Datalink statistics

-- Total of 1 flow:

Average throughput: 180.95 Mbit/s

95th percentile per-packet one-way delay: 53.473 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 180.95 Mbit/s

95th percentile per-packet one-way delay: 53.473 ms

Loss rate: 0.15%

# Run 10: Report of Indigo-calib — Data Link

