

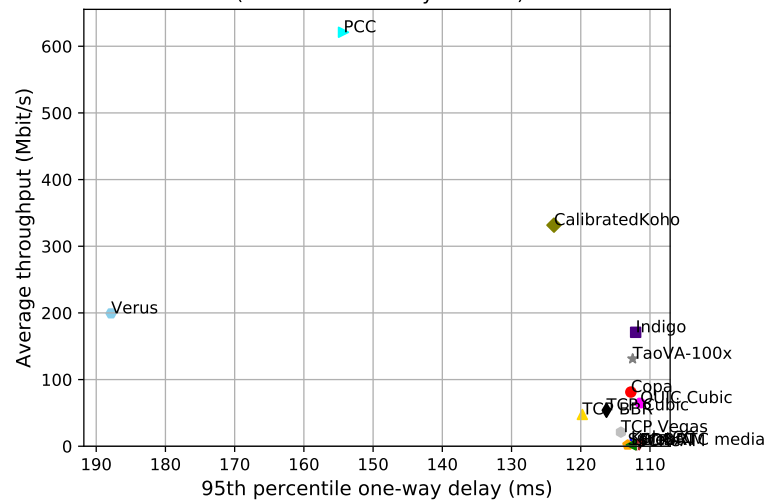
## Pantheon Report

Generated at 2017-09-18 02:25:00 (UTC).  
Data path: GCE London Ethernet (*local*) → GCE Tokyo Ethernet (*remote*).  
Repeated the test of 15 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**).

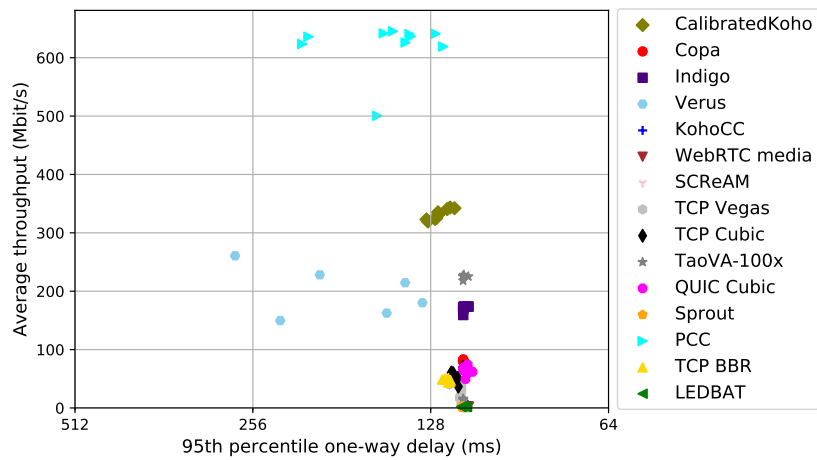
Git summary:

```
branch: master @ 57453dc11f8da93a2e03eea75289fea01b816298
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from GCE London 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        | 9      | 47.72                            | 119.77                              | 0.02                         |
| CalibratedKoho | 10     | 331.63                           | 123.87                              | 0.01                         |
| Copa           | 10     | 81.27                            | 112.76                              | 0.00                         |
| TCP Cubic      | 9      | 53.90                            | 116.28                              | 0.02                         |
| Indigo         | 10     | 170.90                           | 112.07                              | 0.00                         |
| KohoCC         | 10     | 5.15                             | 112.75                              | 0.02                         |
| LEDBAT         | 9      | 1.90                             | 112.72                              | 0.26                         |
| PCC            | 10     | 620.98                           | 154.28                              | 0.96                         |
| QUIC Cubic     | 9      | 64.80                            | 111.41                              | 0.00                         |
| SCReAM         | 10     | 0.20                             | 111.91                              | 0.00                         |
| Sprout         | 10     | 2.05                             | 113.22                              | 0.22                         |
| TaoVA-100x     | 9      | 131.19                           | 112.51                              | 0.00                         |
| TCP Vegas      | 10     | 21.09                            | 114.20                              | 0.03                         |
| Verus          | 6      | 199.27                           | 187.86                              | 1.00                         |
| WebRTC media   | 10     | 2.13                             | 111.56                              | 0.00                         |

Run 1: Statistics of TCP BBR

Start at: 2017-09-17 22:57:38

End at: 2017-09-17 22:58:08

# Below is generated by plot.py at 2017-09-18 01:46:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 43.52 Mbit/s

95th percentile per-packet one-way delay: 119.556 ms

Loss rate: 0.01%

-- Flow 1:

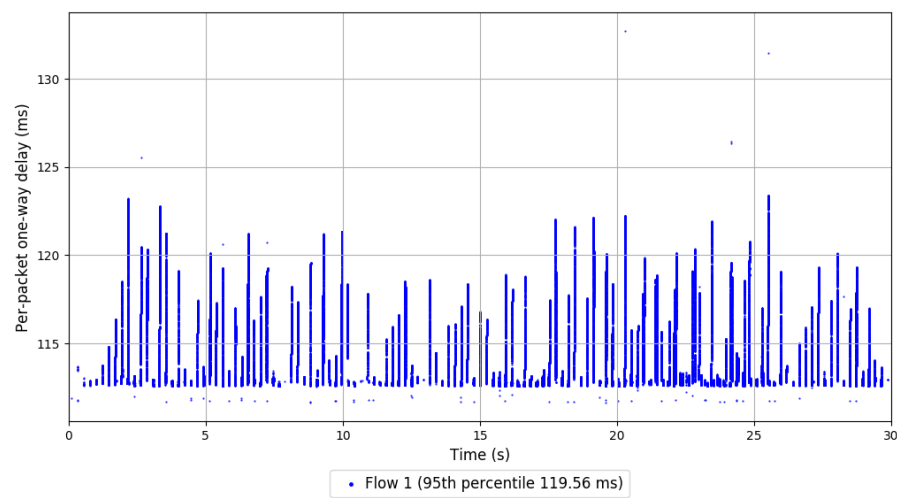
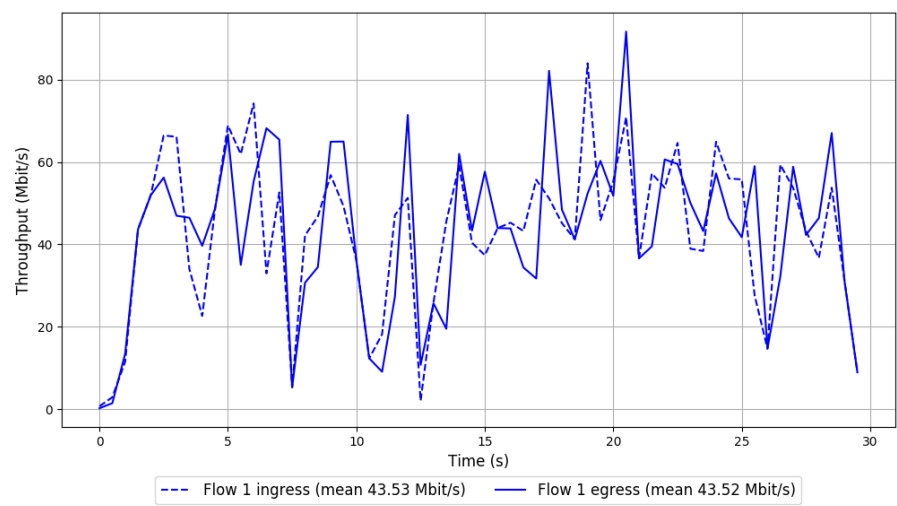
Average throughput: 43.52 Mbit/s

95th percentile per-packet one-way delay: 119.556 ms

Loss rate: 0.01%



Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-09-17 23:09:50

End at: 2017-09-17 23:10:20

# Below is generated by plot.py at 2017-09-18 01:47:04

# Datalink statistics

-- Total of 1 flow:

Average throughput: 48.48 Mbit/s

95th percentile per-packet one-way delay: 122.460 ms

Loss rate: 0.00%

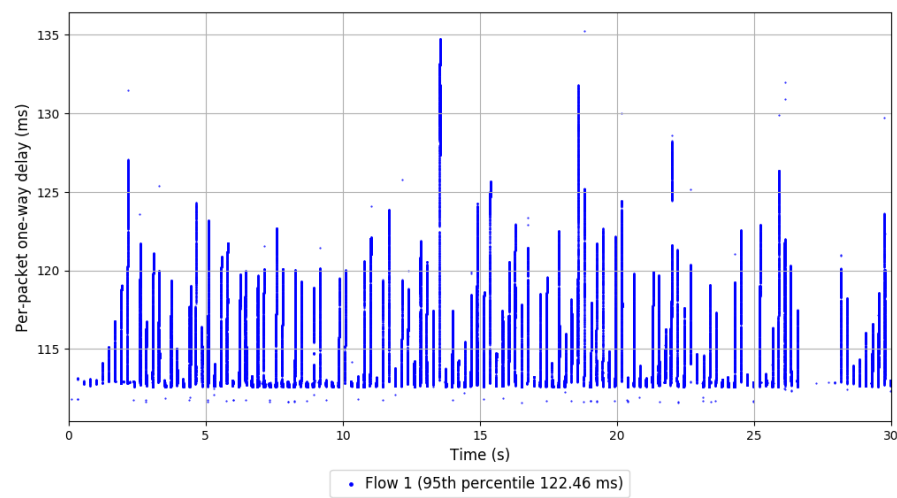
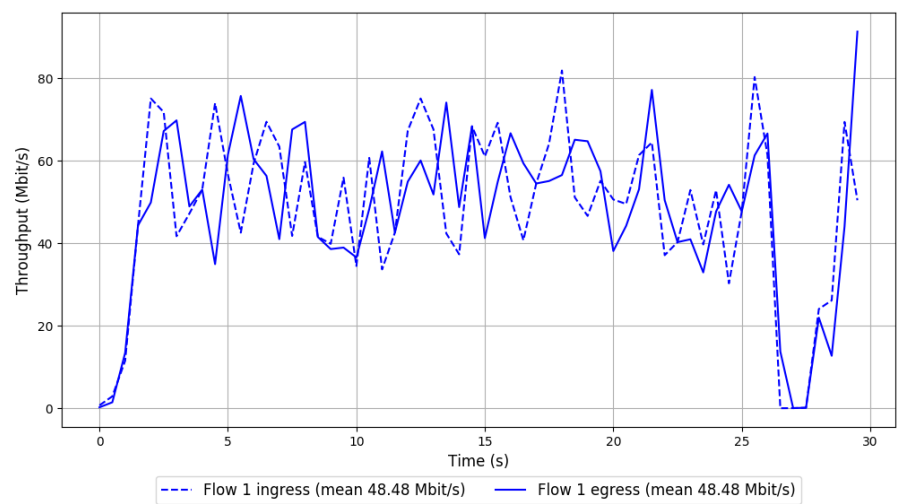
-- Flow 1:

Average throughput: 48.48 Mbit/s

95th percentile per-packet one-way delay: 122.460 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-09-17 23:21:38

End at: 2017-09-17 23:22:08

# Below is generated by plot.py at 2017-09-18 01:47:06

# Datalink statistics

-- Total of 1 flow:

Average throughput: 50.52 Mbit/s

95th percentile per-packet one-way delay: 121.096 ms

Loss rate: 0.02%

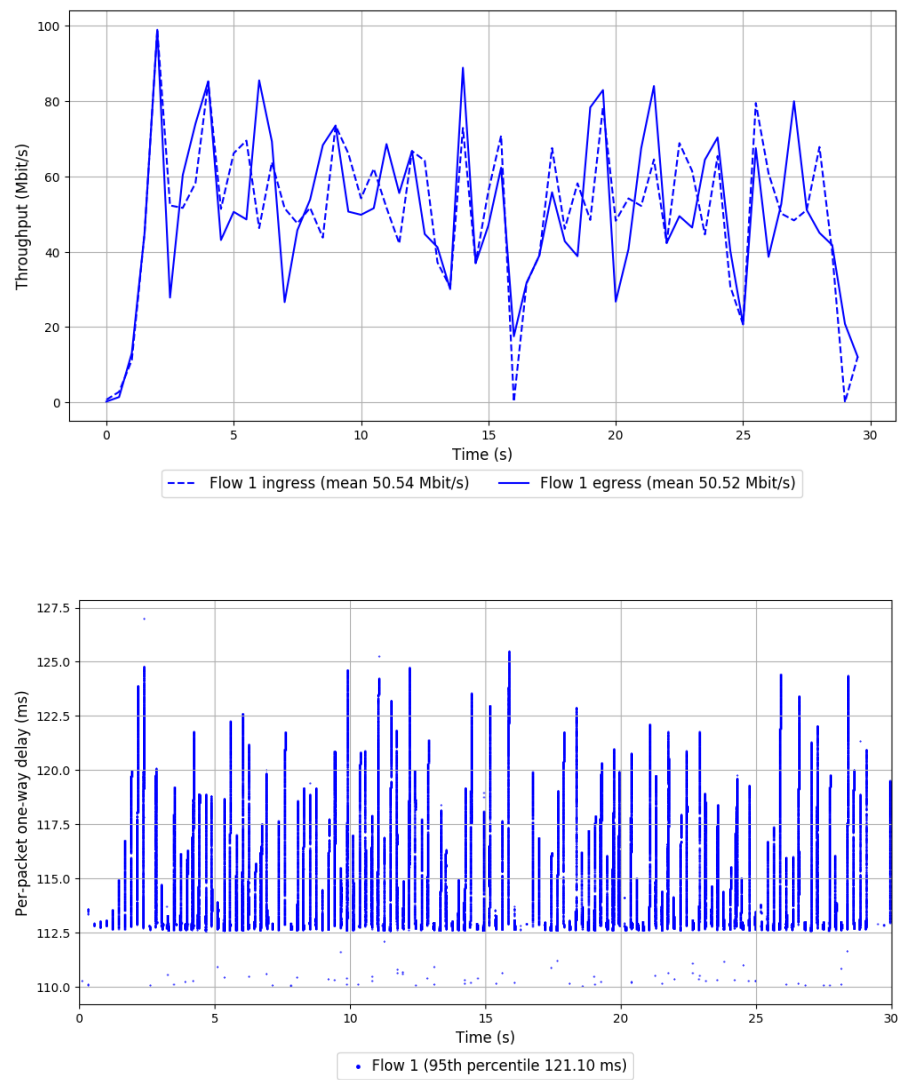
-- Flow 1:

Average throughput: 50.52 Mbit/s

95th percentile per-packet one-way delay: 121.096 ms

Loss rate: 0.02%

Run 3: Report of TCP BBR — Data Link

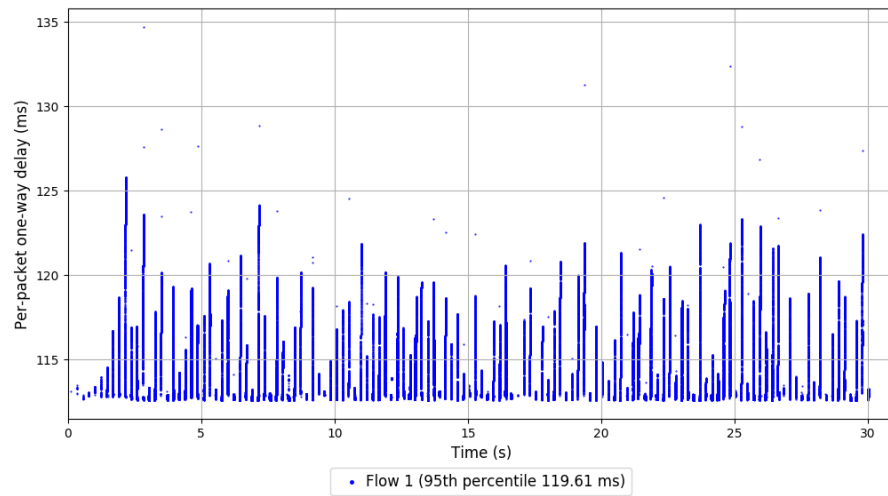
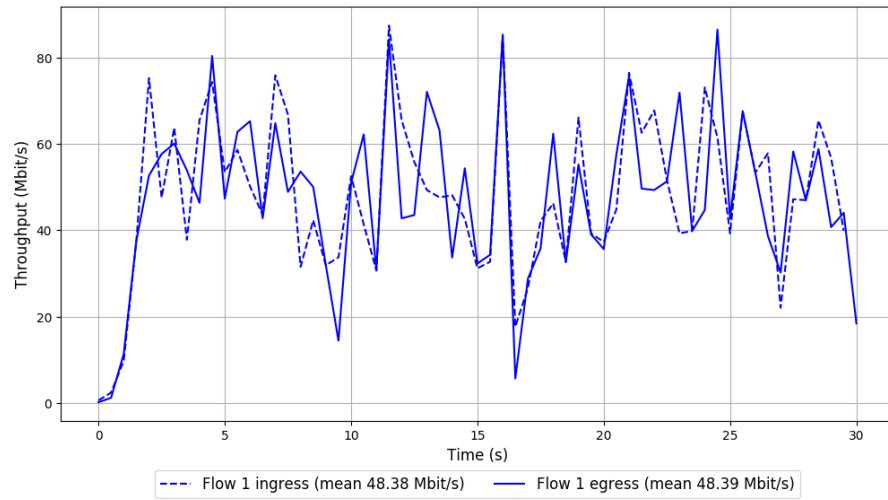


```
Run 4: Statistics of TCP BBR

Start at: 2017-09-17 23:33:50
End at: 2017-09-17 23:34:20

# Below is generated by plot.py at 2017-09-18 01:47:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.39 Mbit/s
95th percentile per-packet one-way delay: 119.614 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 48.39 Mbit/s
95th percentile per-packet one-way delay: 119.614 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of TCP BBR

Start at: 2017-09-17 23:45:38

End at: 2017-09-17 23:46:08

# Below is generated by plot.py at 2017-09-18 01:47:06

# Datalink statistics

-- Total of 1 flow:

Average throughput: 47.77 Mbit/s

95th percentile per-packet one-way delay: 118.565 ms

Loss rate: 0.02%

-- Flow 1:

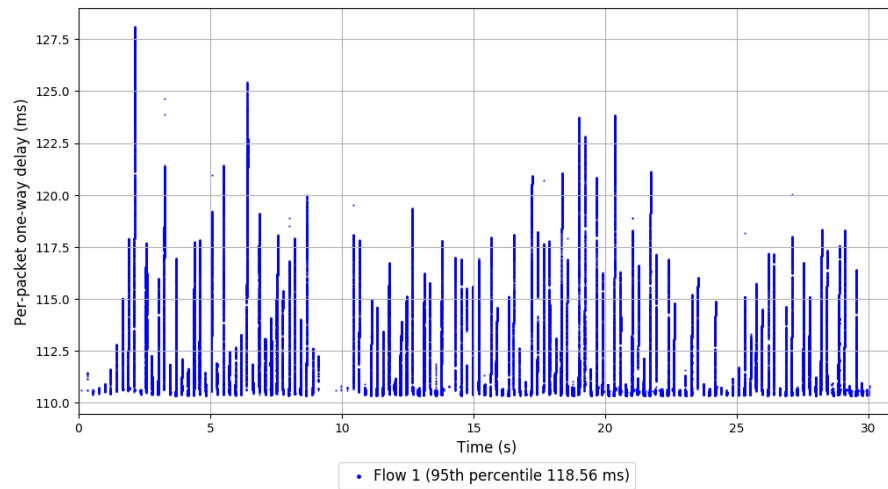
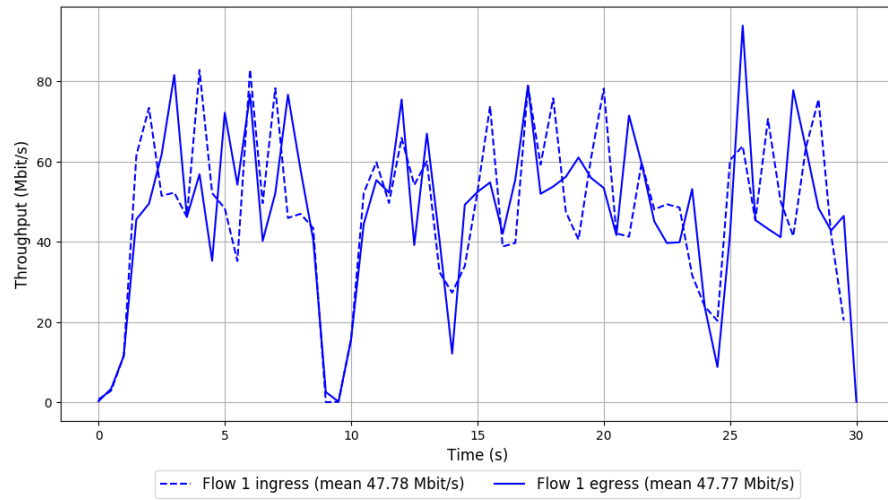
Average throughput: 47.77 Mbit/s

95th percentile per-packet one-way delay: 118.565 ms

Loss rate: 0.02%



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



Run 6: Statistics of TCP BBR

Start at: 2017-09-17 23:57:49

End at: 2017-09-17 23:58:19

# Below is generated by plot.py at 2017-09-18 01:47:06

# Datalink statistics

-- Total of 1 flow:

Average throughput: 44.26 Mbit/s

95th percentile per-packet one-way delay: 118.676 ms

Loss rate: 0.01%

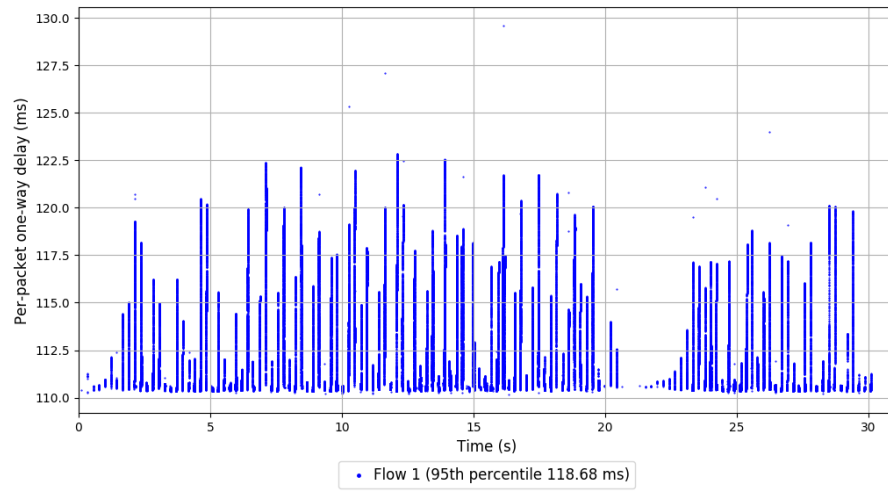
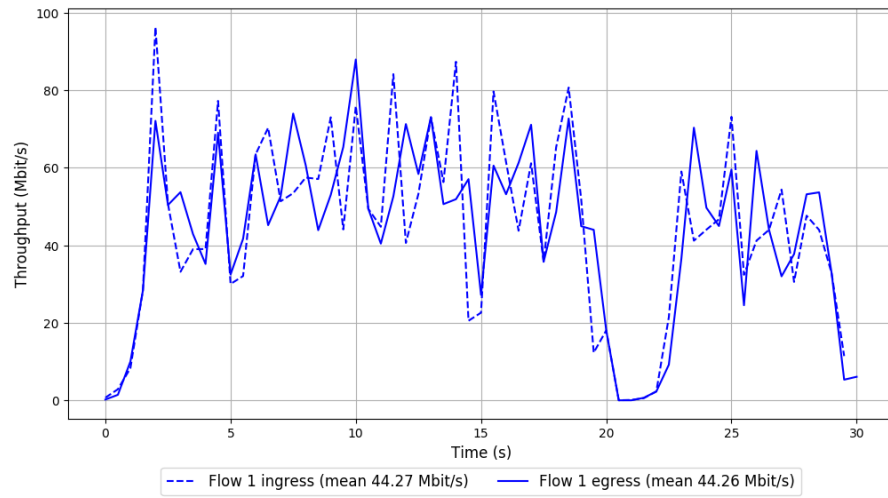
-- Flow 1:

Average throughput: 44.26 Mbit/s

95th percentile per-packet one-way delay: 118.676 ms

Loss rate: 0.01%

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



Run 7: Statistics of TCP BBR

Start at: 2017-09-18 00:09:49

End at: 2017-09-18 00:10:19

# Below is generated by plot.py at 2017-09-18 01:47:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 51.35 Mbit/s

95th percentile per-packet one-way delay: 119.519 ms

Loss rate: 0.01%

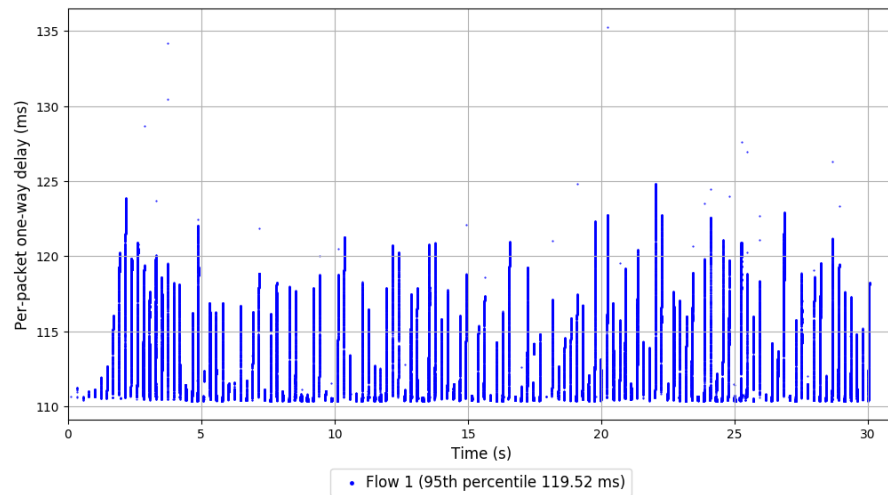
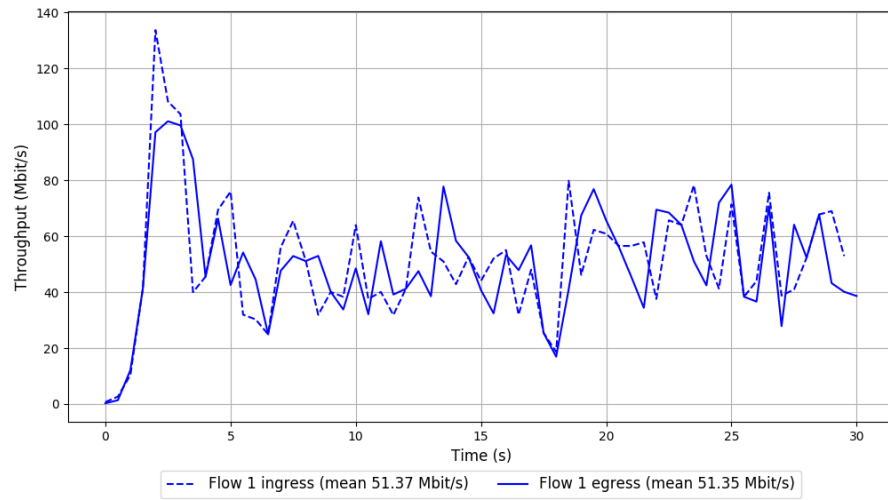
-- Flow 1:

Average throughput: 51.35 Mbit/s

95th percentile per-packet one-way delay: 119.519 ms

Loss rate: 0.01%

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



Run 8: Statistics of TCP BBR

Start at: 2017-09-18 00:21:38

End at: 2017-09-18 00:22:08

# Below is generated by plot.py at 2017-09-18 01:47:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 48.64 Mbit/s

95th percentile per-packet one-way delay: 119.975 ms

Loss rate: 0.02%

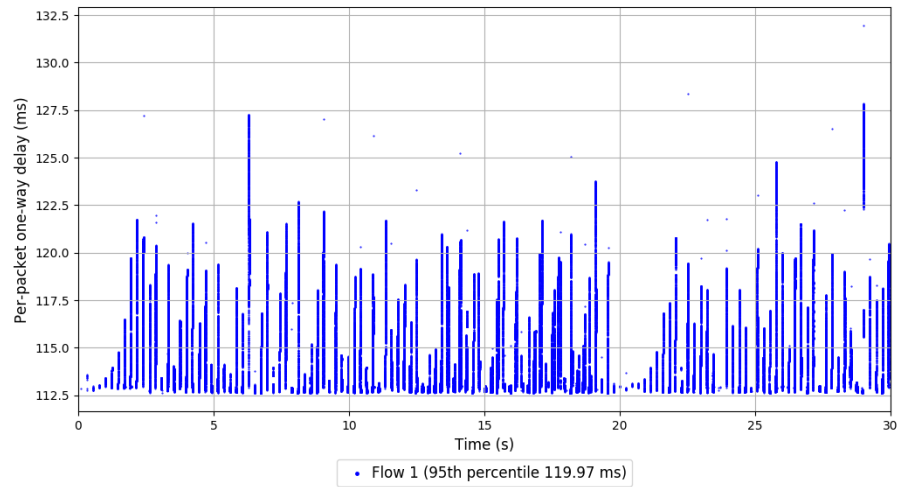
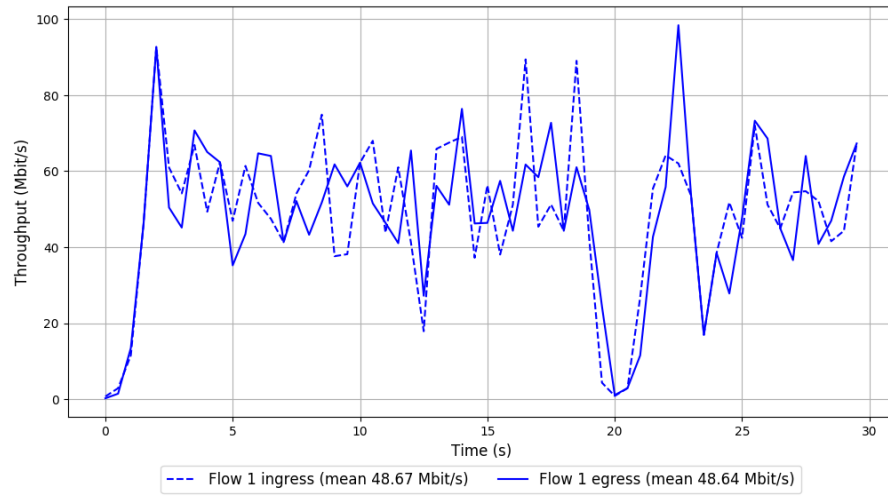
-- Flow 1:

Average throughput: 48.64 Mbit/s

95th percentile per-packet one-way delay: 119.975 ms

Loss rate: 0.02%

# Run 8: Report of TCP BBR — Data Link



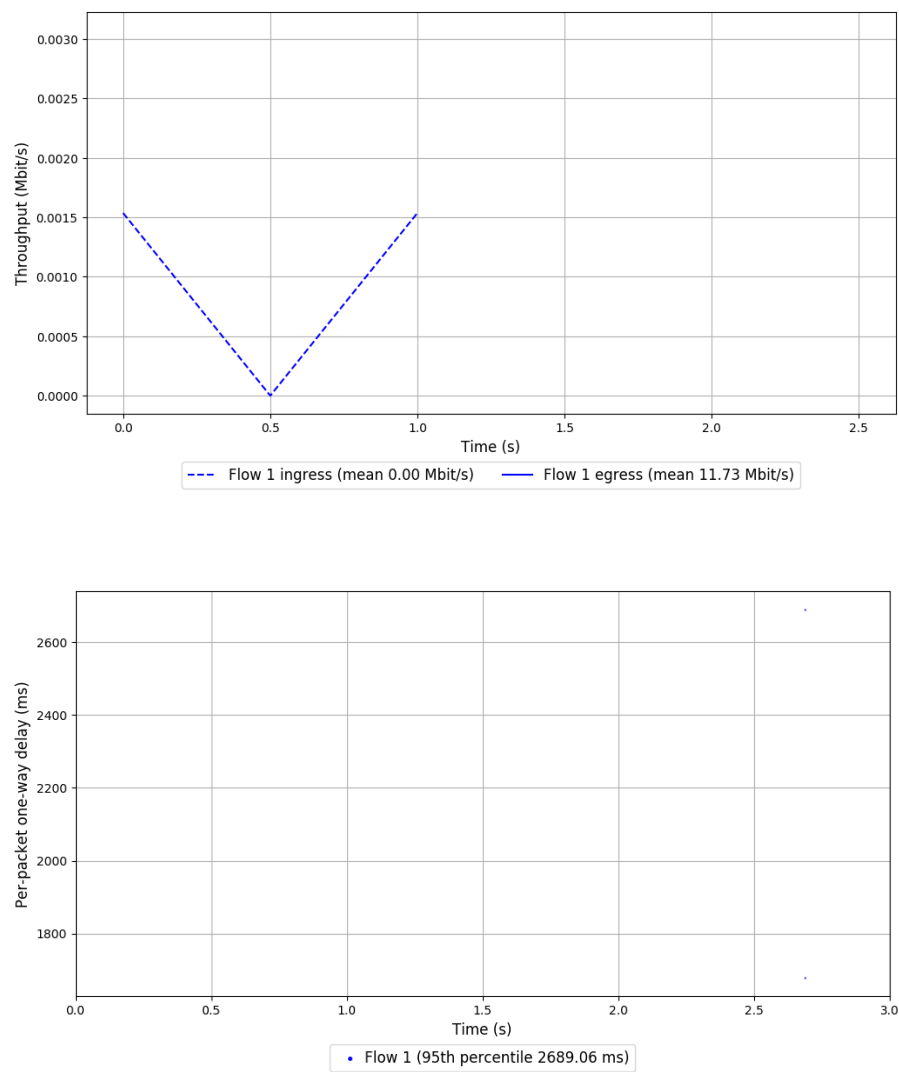
Run 9: Statistics of TCP BBR

Start at: 2017-09-18 00:33:57

End at: 2017-09-18 00:34:27



Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-09-18 00:45:34

End at: 2017-09-18 00:46:04

# Below is generated by plot.py at 2017-09-18 01:47:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 46.51 Mbit/s

95th percentile per-packet one-way delay: 118.493 ms

Loss rate: 0.06%

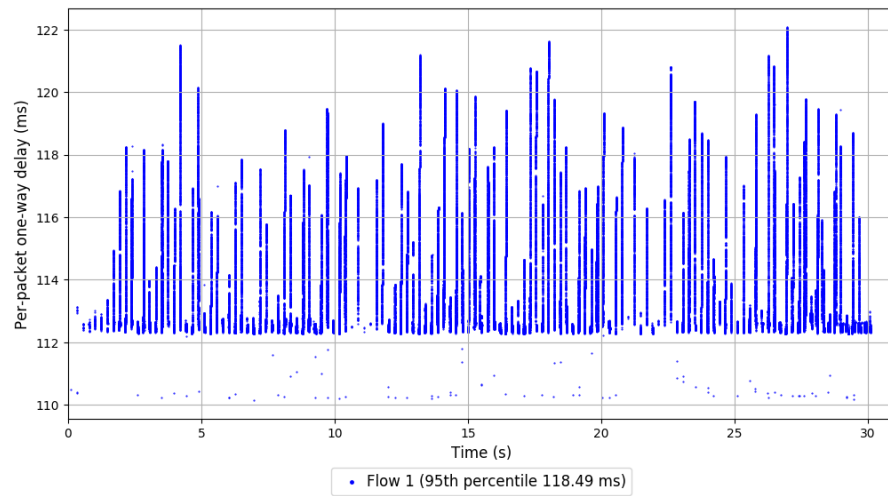
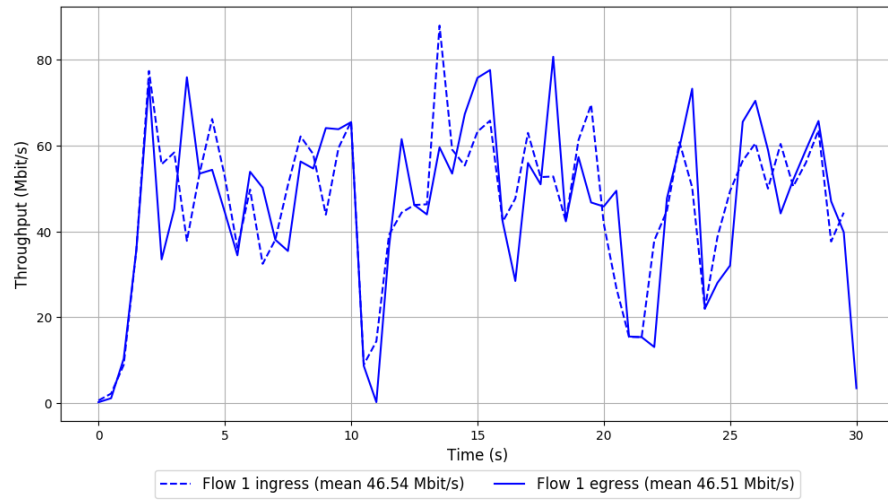
-- Flow 1:

Average throughput: 46.51 Mbit/s

95th percentile per-packet one-way delay: 118.493 ms

Loss rate: 0.06%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-09-17 23:00:35

End at: 2017-09-17 23:01:05

# Below is generated by plot.py at 2017-09-18 01:52:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 335.30 Mbit/s

95th percentile per-packet one-way delay: 124.389 ms

Loss rate: 0.01%

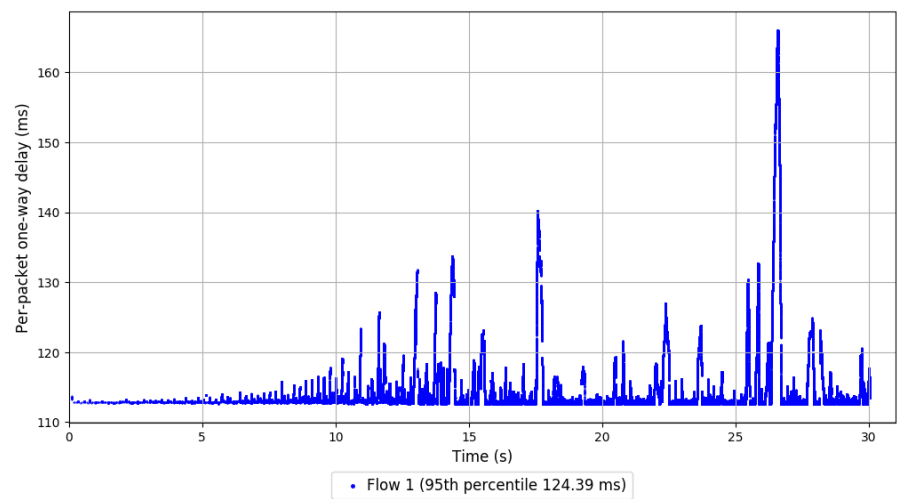
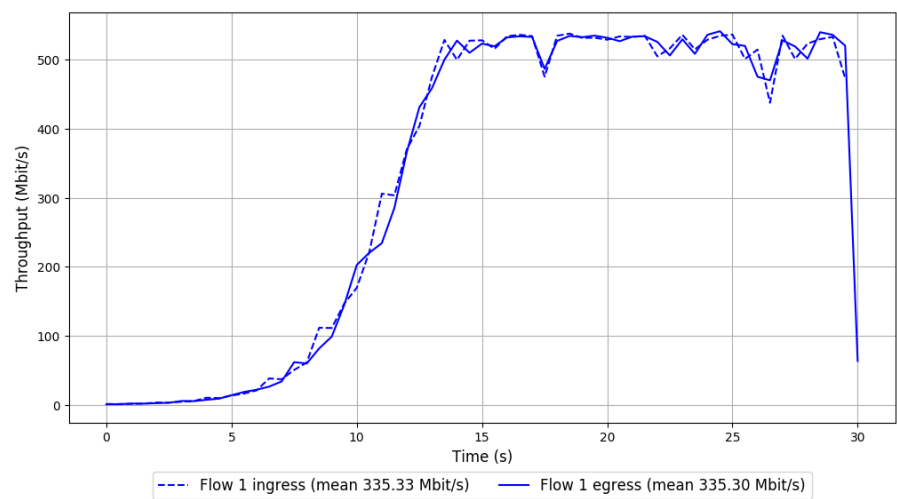
-- Flow 1:

Average throughput: 335.30 Mbit/s

95th percentile per-packet one-way delay: 124.389 ms

Loss rate: 0.01%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-09-17 23:12:54

End at: 2017-09-17 23:13:24

# Below is generated by plot.py at 2017-09-18 01:52:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 325.40 Mbit/s

95th percentile per-packet one-way delay: 125.219 ms

Loss rate: 0.01%

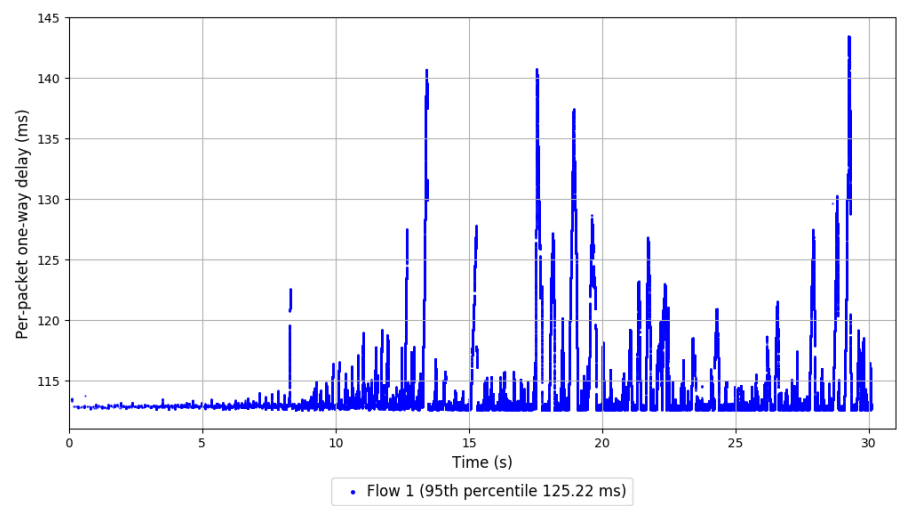
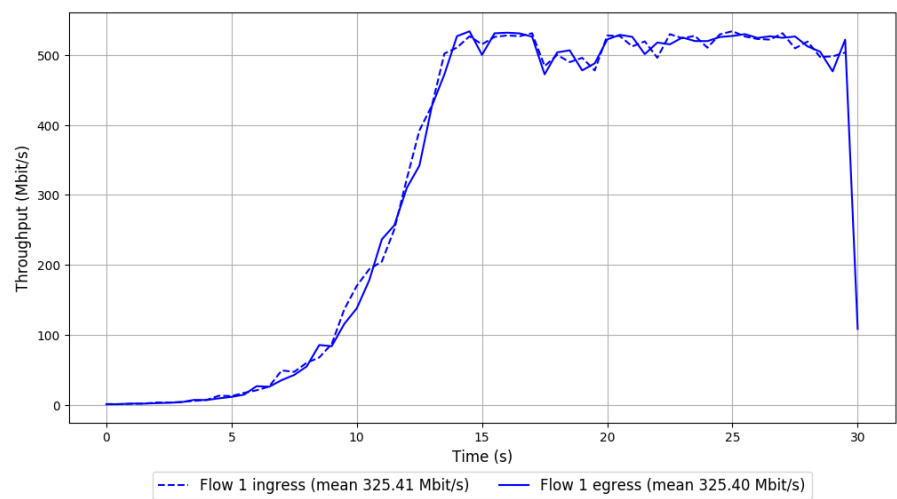
-- Flow 1:

Average throughput: 325.40 Mbit/s

95th percentile per-packet one-way delay: 125.219 ms

Loss rate: 0.01%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-09-17 23:24:42

End at: 2017-09-17 23:25:12

# Below is generated by plot.py at 2017-09-18 01:52:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 323.77 Mbit/s

95th percentile per-packet one-way delay: 125.840 ms

Loss rate: 0.00%

-- Flow 1:

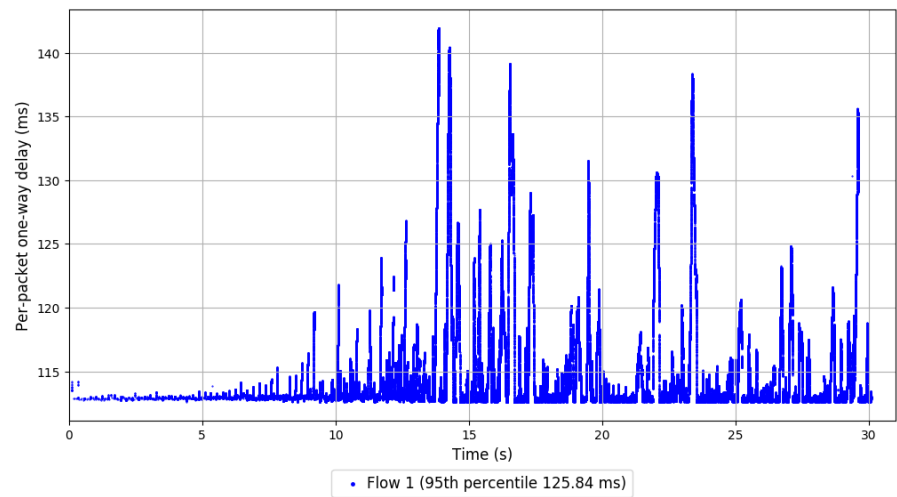
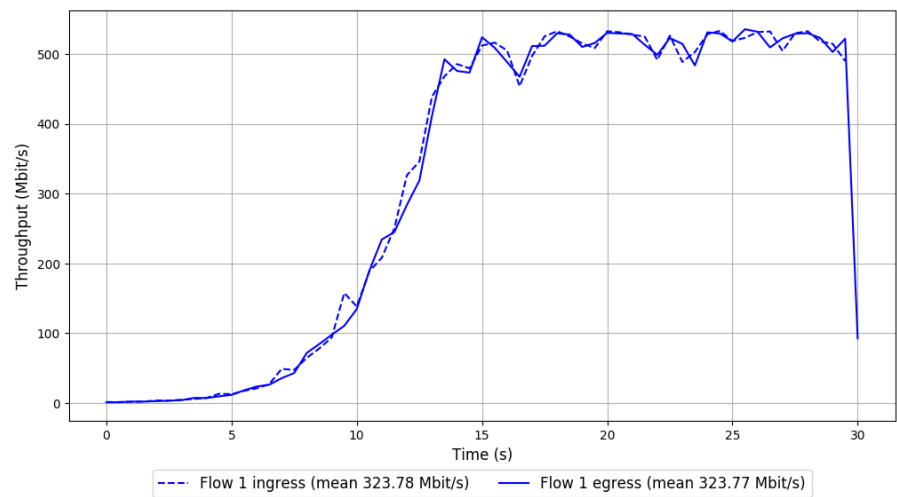
Average throughput: 323.77 Mbit/s

95th percentile per-packet one-way delay: 125.840 ms

Loss rate: 0.00%



Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-09-17 23:36:55

End at: 2017-09-17 23:37:25

# Below is generated by plot.py at 2017-09-18 01:52:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 331.88 Mbit/s

95th percentile per-packet one-way delay: 124.205 ms

Loss rate: 0.01%

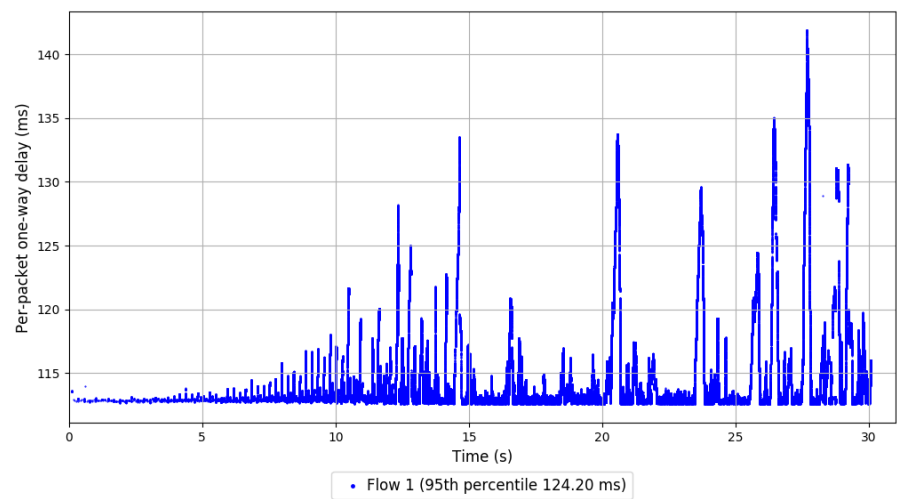
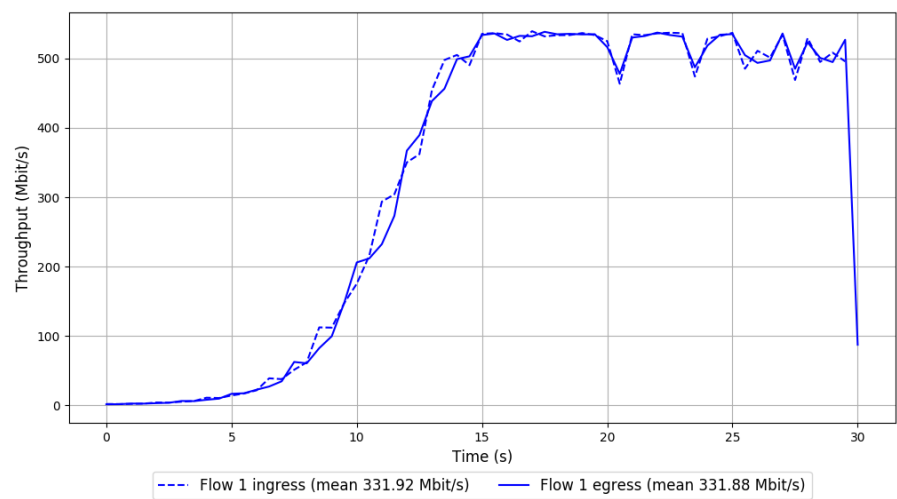
-- Flow 1:

Average throughput: 331.88 Mbit/s

95th percentile per-packet one-way delay: 124.205 ms

Loss rate: 0.01%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-09-17 23:48:43

End at: 2017-09-17 23:49:13

# Below is generated by plot.py at 2017-09-18 01:52:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 322.96 Mbit/s

95th percentile per-packet one-way delay: 130.137 ms

Loss rate: 0.02%

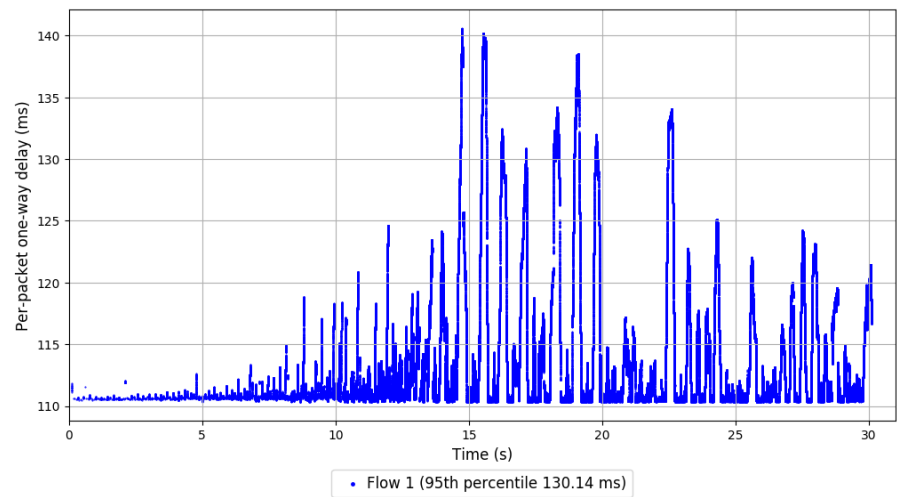
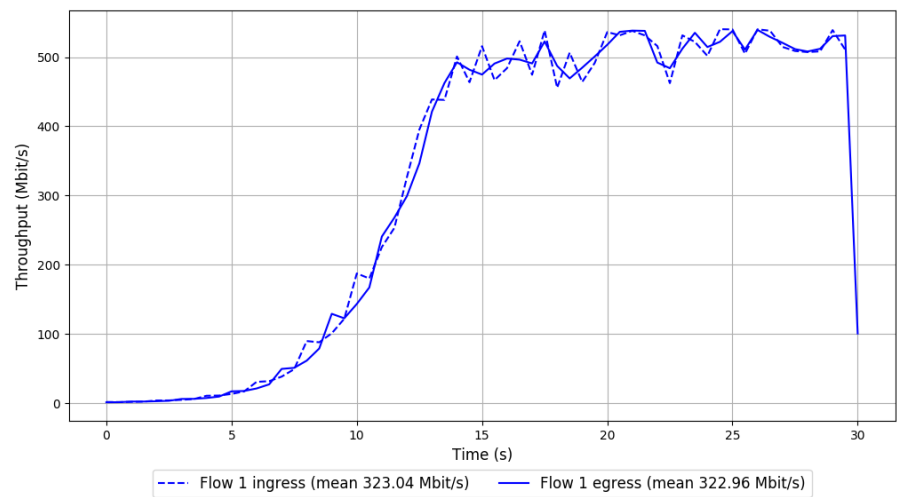
-- Flow 1:

Average throughput: 322.96 Mbit/s

95th percentile per-packet one-way delay: 130.137 ms

Loss rate: 0.02%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-09-18 00:00:54

End at: 2017-09-18 00:01:24

# Below is generated by plot.py at 2017-09-18 01:52:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 343.38 Mbit/s

95th percentile per-packet one-way delay: 118.666 ms

Loss rate: 0.00%

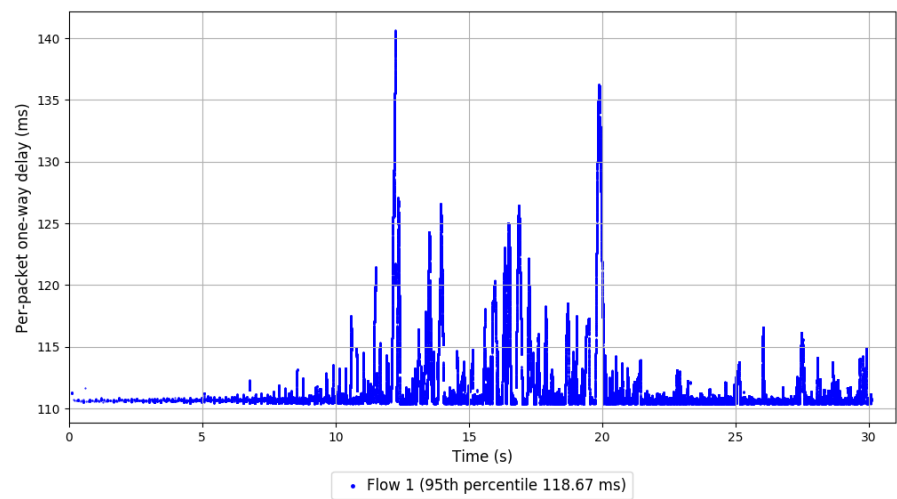
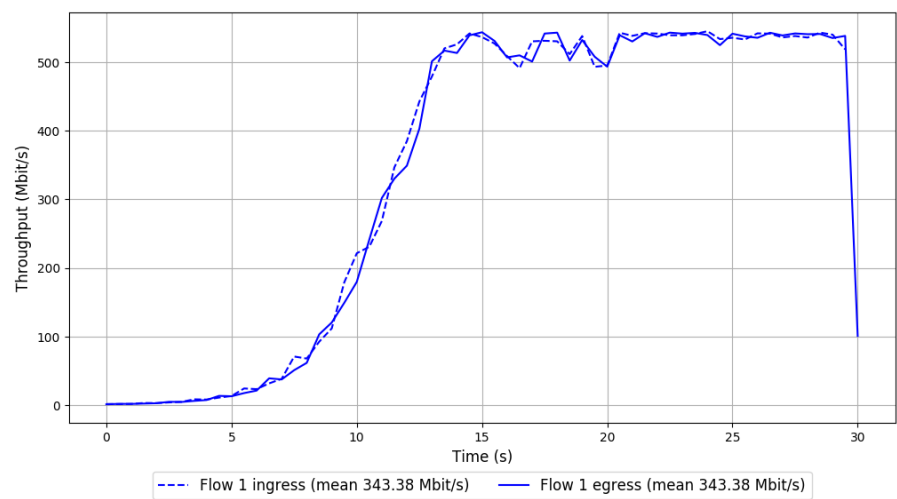
-- Flow 1:

Average throughput: 343.38 Mbit/s

95th percentile per-packet one-way delay: 118.666 ms

Loss rate: 0.00%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-09-18 00:12:53

End at: 2017-09-18 00:13:23

# Below is generated by plot.py at 2017-09-18 01:52:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 342.18 Mbit/s

95th percentile per-packet one-way delay: 116.655 ms

Loss rate: 0.01%

-- Flow 1:

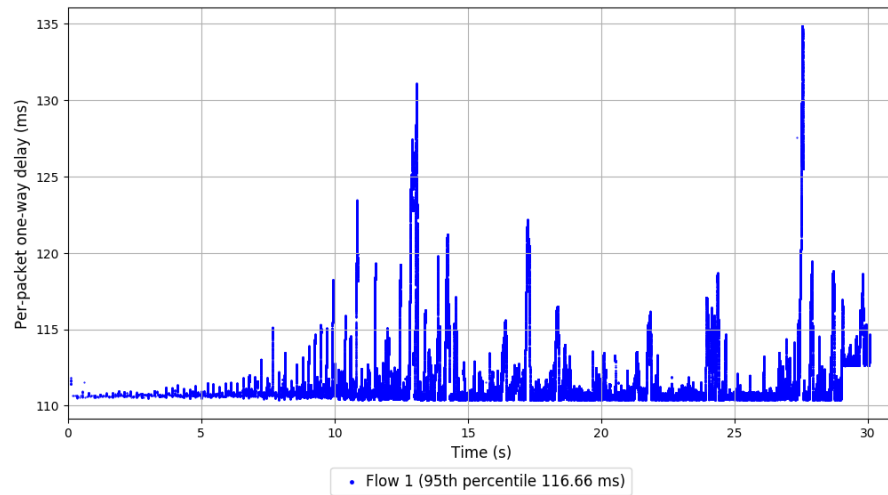
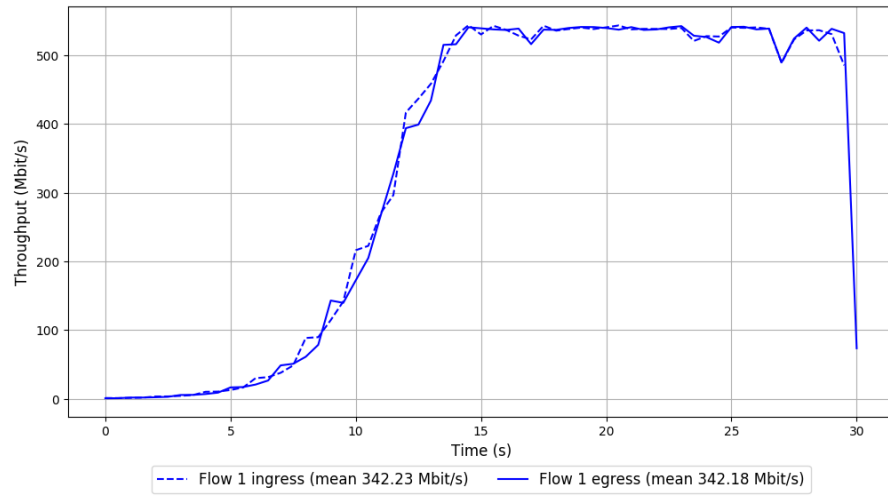
Average throughput: 342.18 Mbit/s

95th percentile per-packet one-way delay: 116.655 ms

Loss rate: 0.01%



## Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-09-18 00:24:42

End at: 2017-09-18 00:25:12

# Below is generated by plot.py at 2017-09-18 01:53:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 340.73 Mbit/s

95th percentile per-packet one-way delay: 120.056 ms

Loss rate: 0.00%

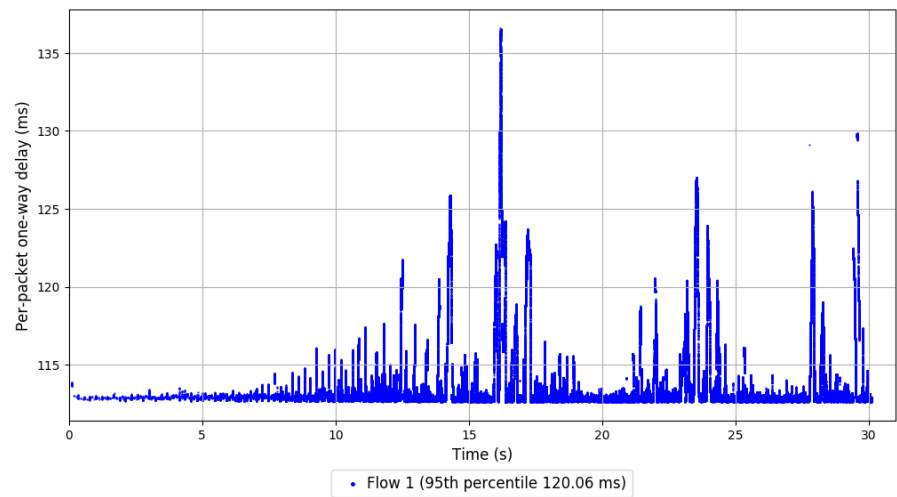
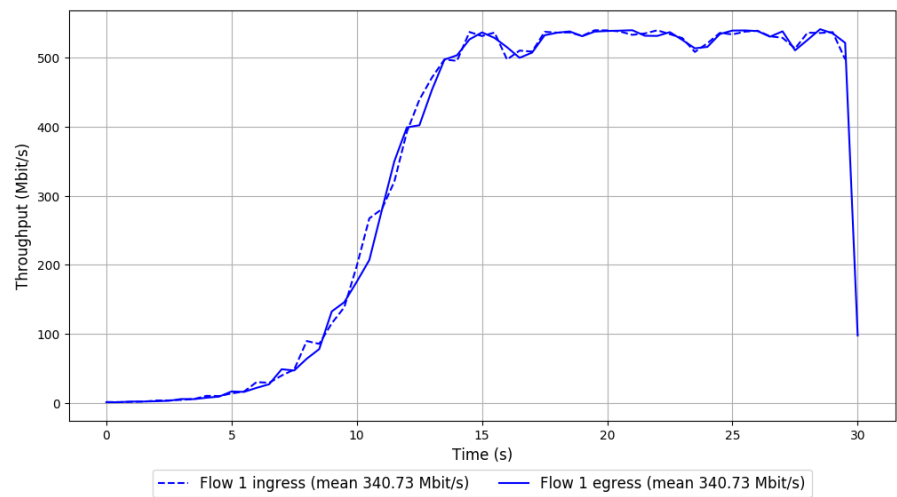
-- Flow 1:

Average throughput: 340.73 Mbit/s

95th percentile per-packet one-way delay: 120.056 ms

Loss rate: 0.00%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-09-18 00:36:57

End at: 2017-09-18 00:37:27

# Below is generated by plot.py at 2017-09-18 01:58:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 331.34 Mbit/s

95th percentile per-packet one-way delay: 124.164 ms

Loss rate: 0.00%

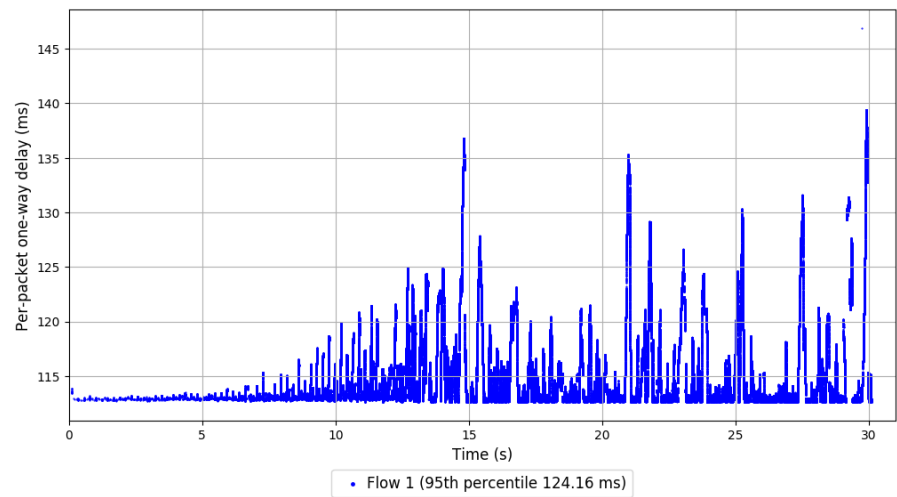
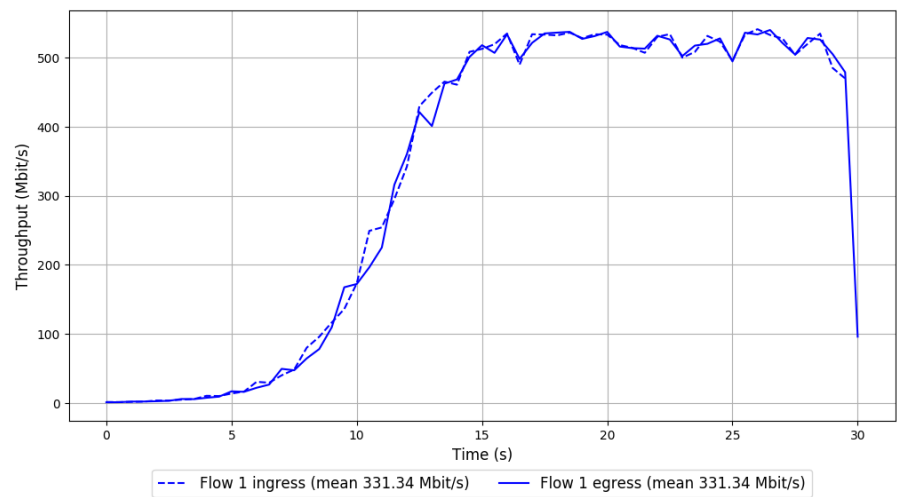
-- Flow 1:

Average throughput: 331.34 Mbit/s

95th percentile per-packet one-way delay: 124.164 ms

Loss rate: 0.00%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-09-18 00:48:38

End at: 2017-09-18 00:49:08

# Below is generated by plot.py at 2017-09-18 01:58:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 319.39 Mbit/s

95th percentile per-packet one-way delay: 129.388 ms

Loss rate: 0.04%

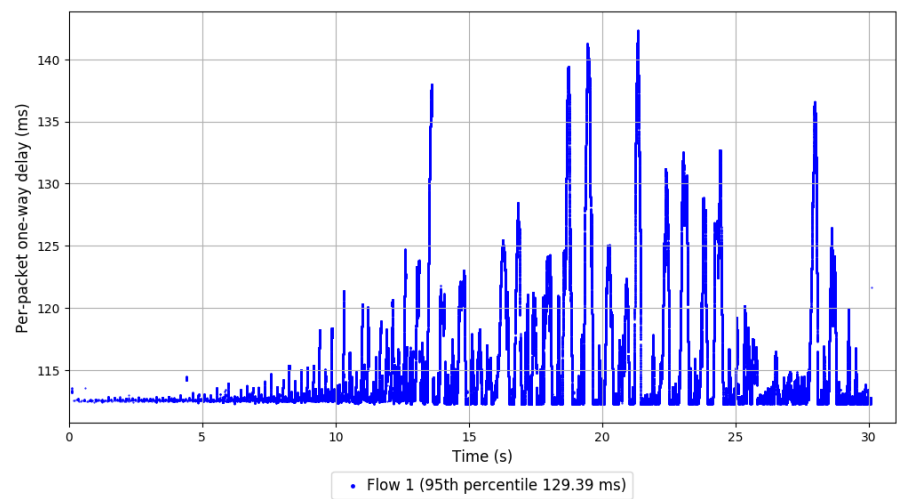
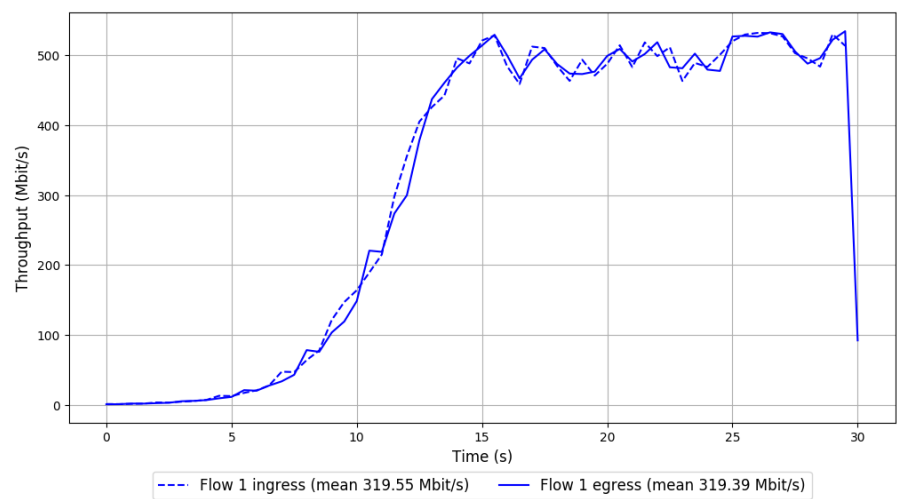
-- Flow 1:

Average throughput: 319.39 Mbit/s

95th percentile per-packet one-way delay: 129.388 ms

Loss rate: 0.04%

Run 10: Report of CalibratedKoho — Data Link



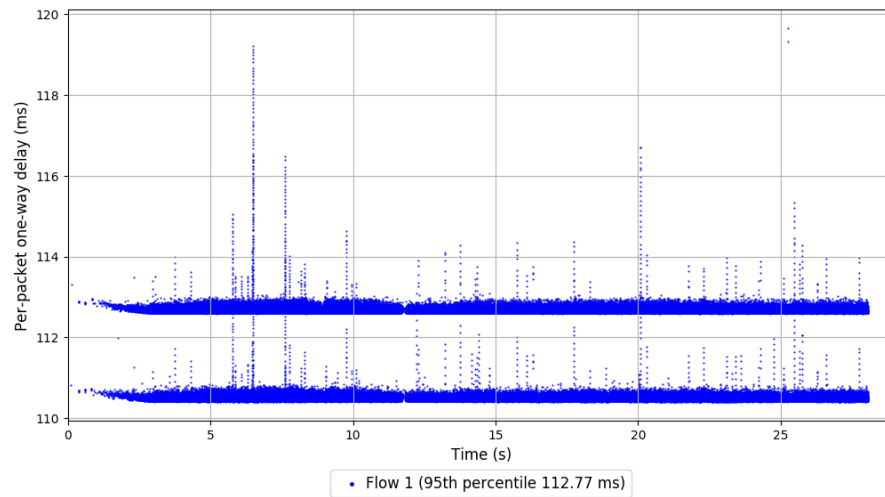
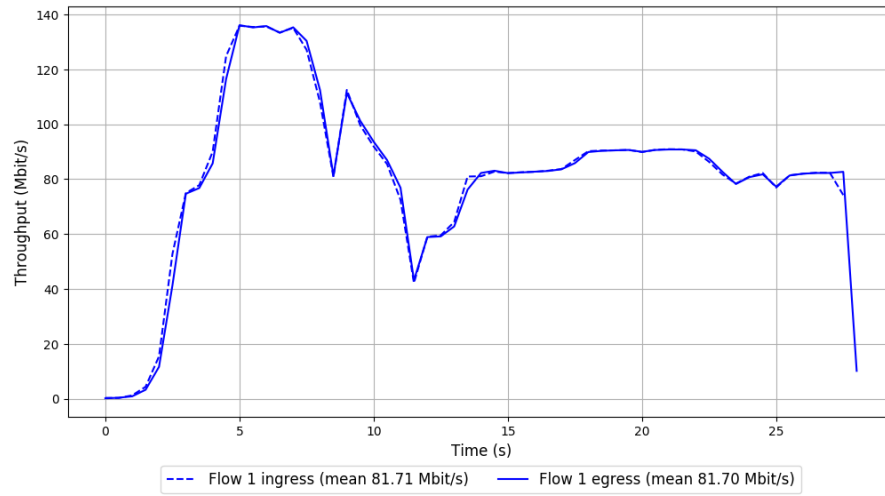
```
Run 1: Statistics of Copa

Start at: 2017-09-17 22:51:23
End at: 2017-09-17 22:51:53

# Below is generated by plot.py at 2017-09-18 01:58:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.70 Mbit/s
95th percentile per-packet one-way delay: 112.765 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 81.70 Mbit/s
95th percentile per-packet one-way delay: 112.765 ms
Loss rate: 0.00%
```



### Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-09-17 23:03:26

End at: 2017-09-17 23:03:56

# Below is generated by plot.py at 2017-09-18 01:58:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 81.20 Mbit/s

95th percentile per-packet one-way delay: 112.746 ms

Loss rate: 0.00%

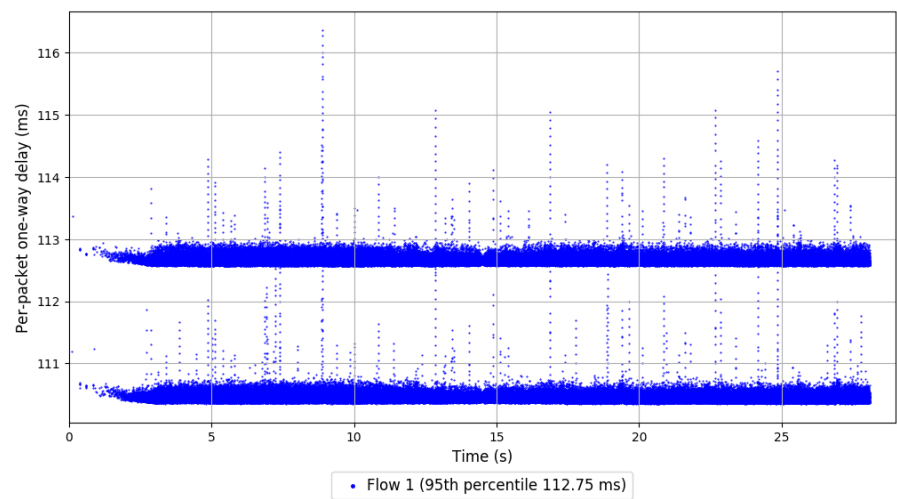
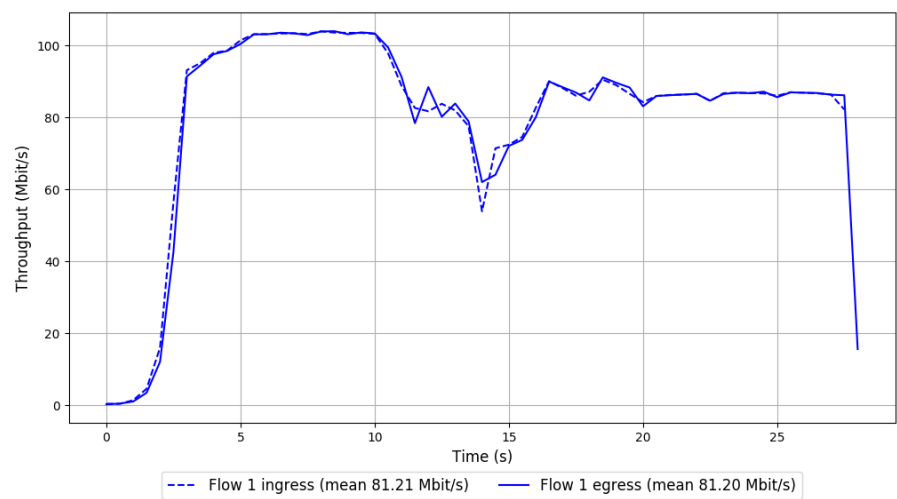
-- Flow 1:

Average throughput: 81.20 Mbit/s

95th percentile per-packet one-way delay: 112.746 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-09-17 23:15:26

End at: 2017-09-17 23:15:56

# Below is generated by plot.py at 2017-09-18 01:58:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 83.21 Mbit/s

95th percentile per-packet one-way delay: 112.768 ms

Loss rate: 0.00%

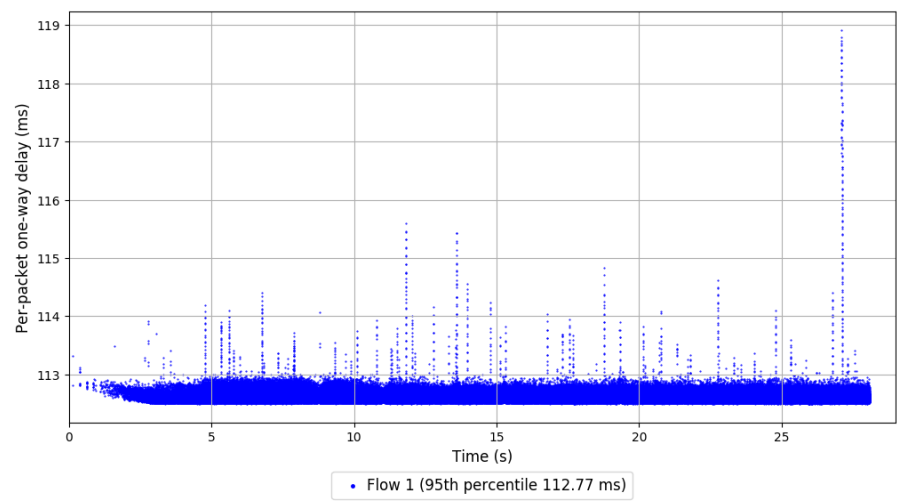
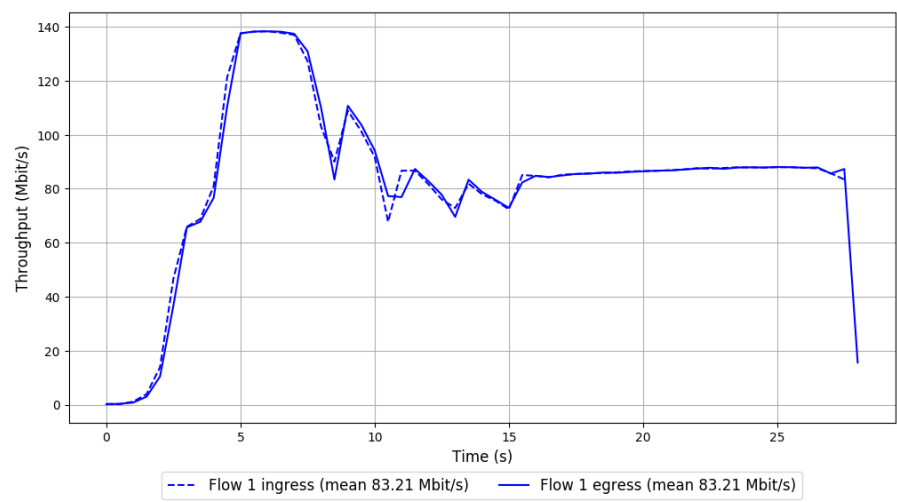
-- Flow 1:

Average throughput: 83.21 Mbit/s

95th percentile per-packet one-way delay: 112.768 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-09-17 23:27:33

End at: 2017-09-17 23:28:03

# Below is generated by plot.py at 2017-09-18 01:58:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 82.03 Mbit/s

95th percentile per-packet one-way delay: 112.824 ms

Loss rate: 0.00%

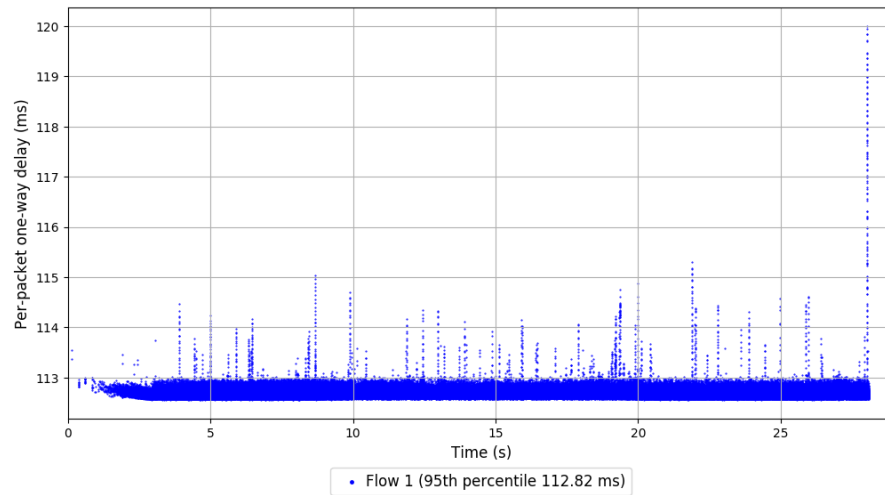
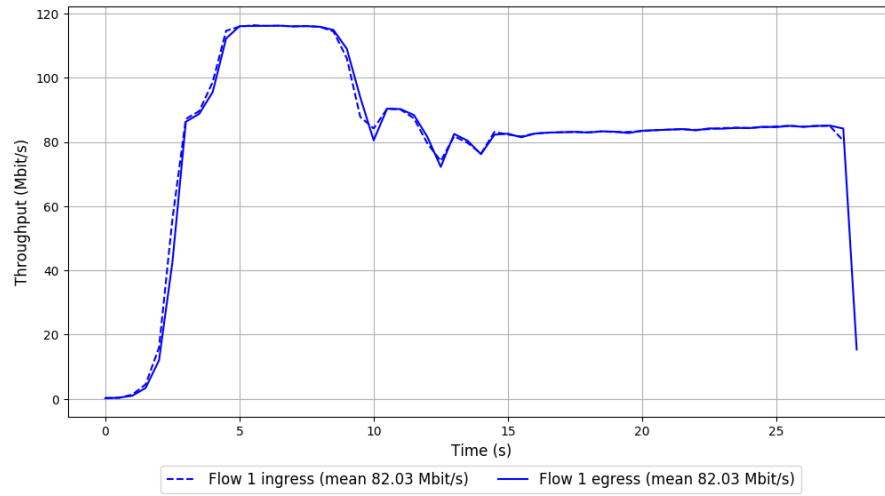
-- Flow 1:

Average throughput: 82.03 Mbit/s

95th percentile per-packet one-way delay: 112.824 ms

Loss rate: 0.00%

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



Run 5: Statistics of Copa

Start at: 2017-09-17 23:39:25

End at: 2017-09-17 23:39:55

# Below is generated by plot.py at 2017-09-18 01:58:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 81.25 Mbit/s

95th percentile per-packet one-way delay: 112.744 ms

Loss rate: 0.00%

-- Flow 1:

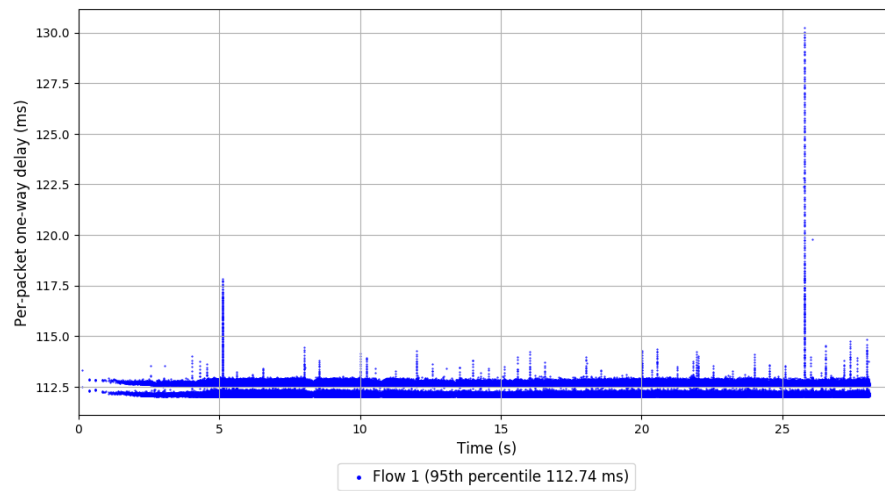
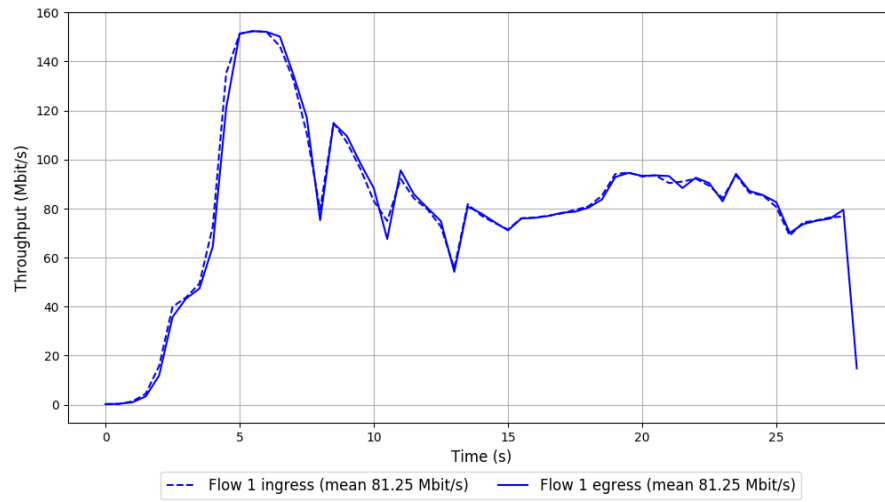
Average throughput: 81.25 Mbit/s

95th percentile per-packet one-way delay: 112.744 ms

Loss rate: 0.00%



## Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-09-17 23:51:33

End at: 2017-09-17 23:52:03

# Below is generated by plot.py at 2017-09-18 01:58:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 81.08 Mbit/s

95th percentile per-packet one-way delay: 112.649 ms

Loss rate: 0.00%

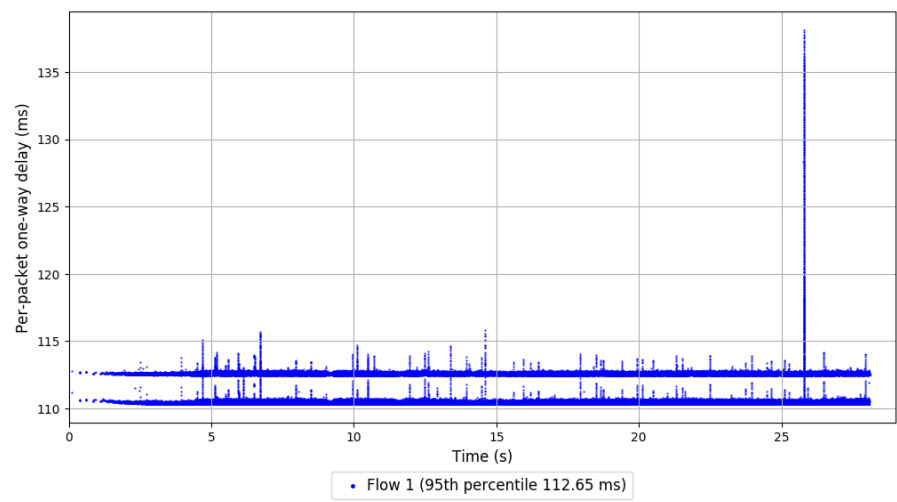
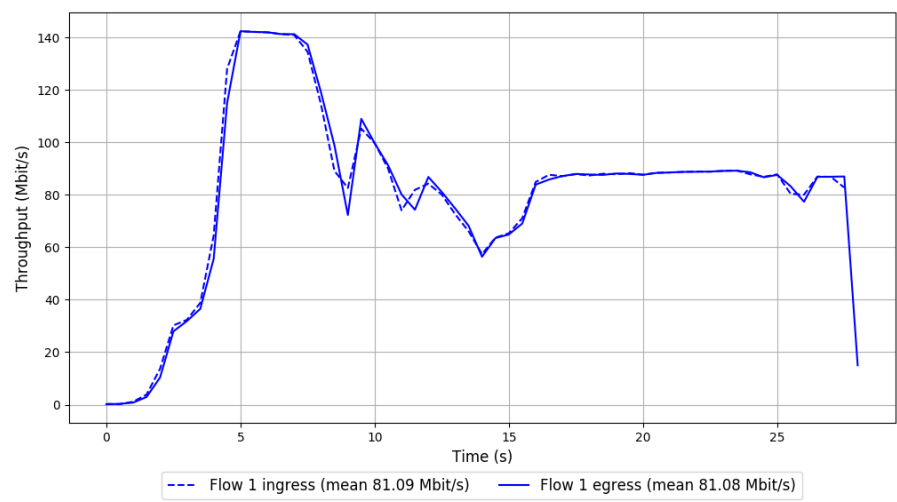
-- Flow 1:

Average throughput: 81.08 Mbit/s

95th percentile per-packet one-way delay: 112.649 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-09-18 00:03:26

End at: 2017-09-18 00:03:56

# Below is generated by plot.py at 2017-09-18 01:58:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 79.47 Mbit/s

95th percentile per-packet one-way delay: 112.783 ms

Loss rate: 0.00%

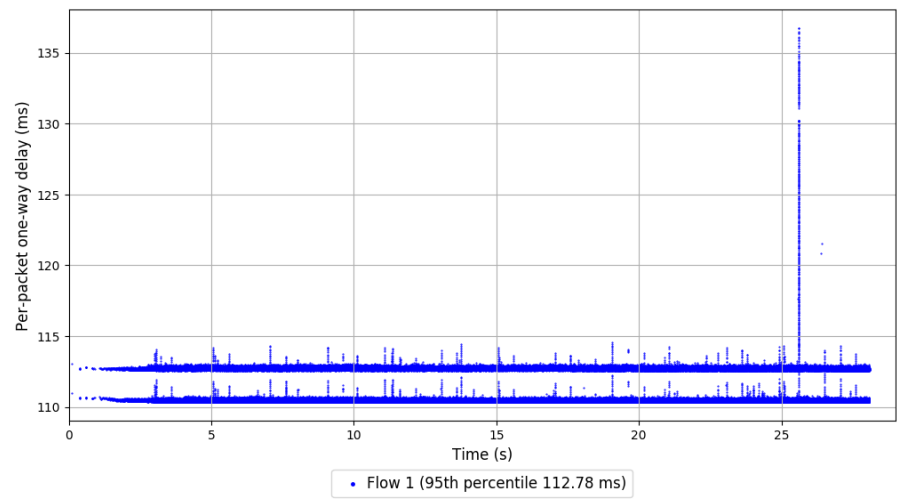
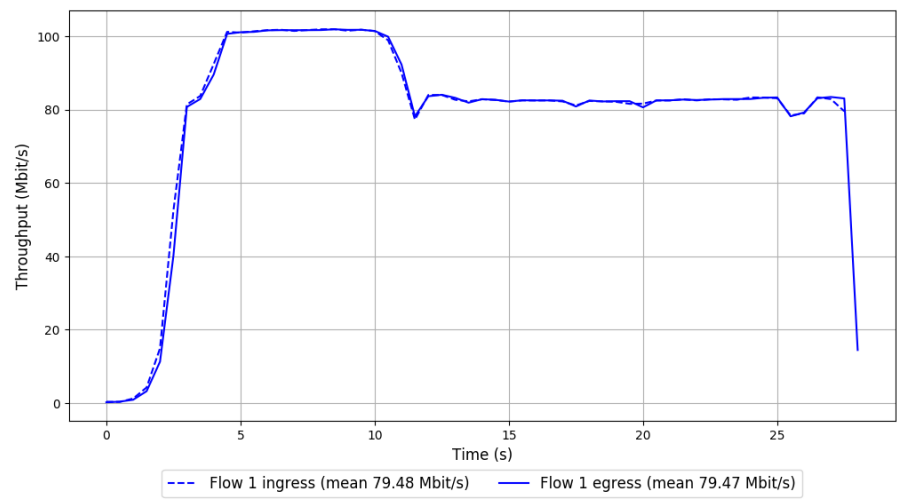
-- Flow 1:

Average throughput: 79.47 Mbit/s

95th percentile per-packet one-way delay: 112.783 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-09-18 00:15:24

End at: 2017-09-18 00:15:54

# Below is generated by plot.py at 2017-09-18 01:58:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 80.41 Mbit/s

95th percentile per-packet one-way delay: 112.808 ms

Loss rate: 0.00%

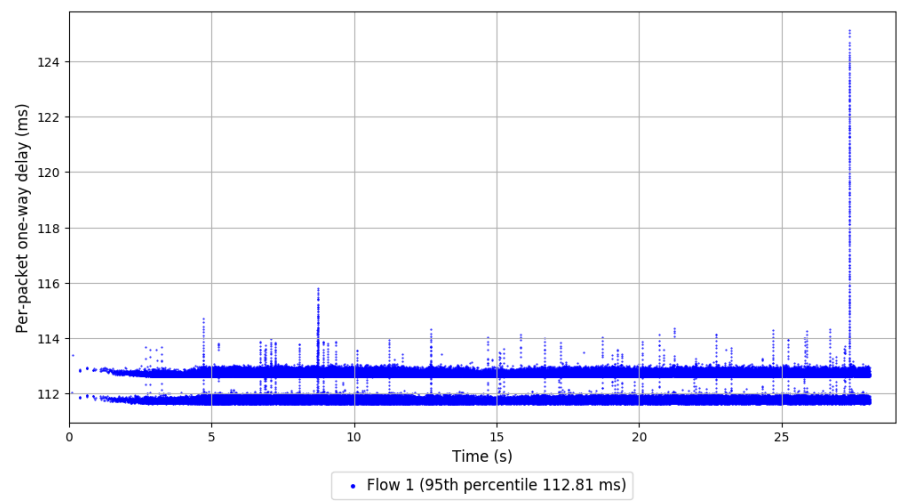
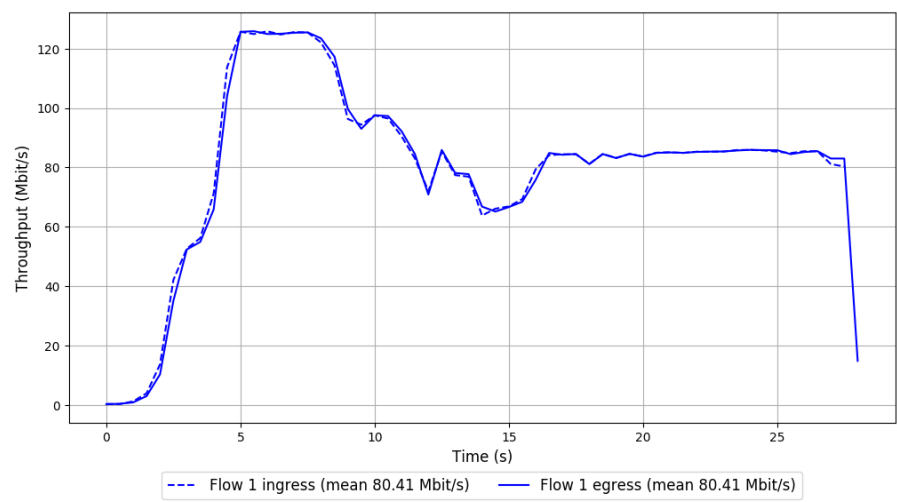
-- Flow 1:

Average throughput: 80.41 Mbit/s

95th percentile per-packet one-way delay: 112.808 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-09-18 00:27:34

End at: 2017-09-18 00:28:04

# Below is generated by plot.py at 2017-09-18 01:58:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 80.61 Mbit/s

95th percentile per-packet one-way delay: 112.786 ms

Loss rate: 0.00%

-- Flow 1:

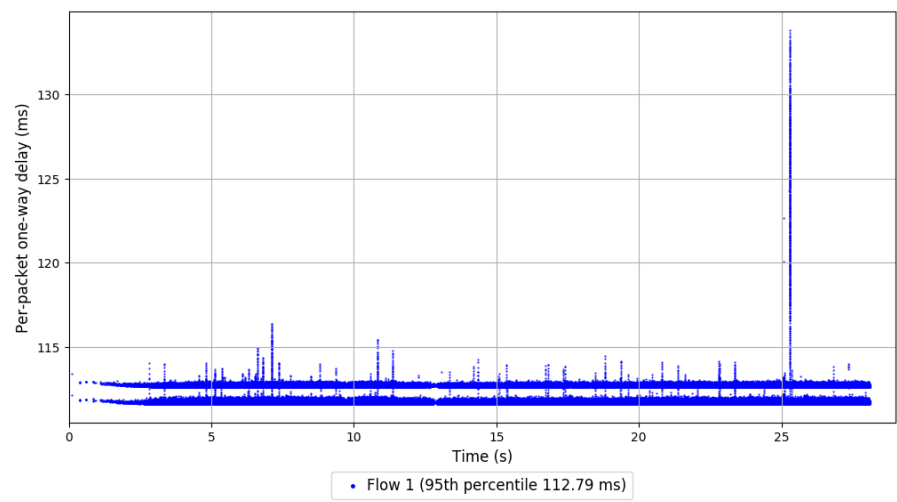
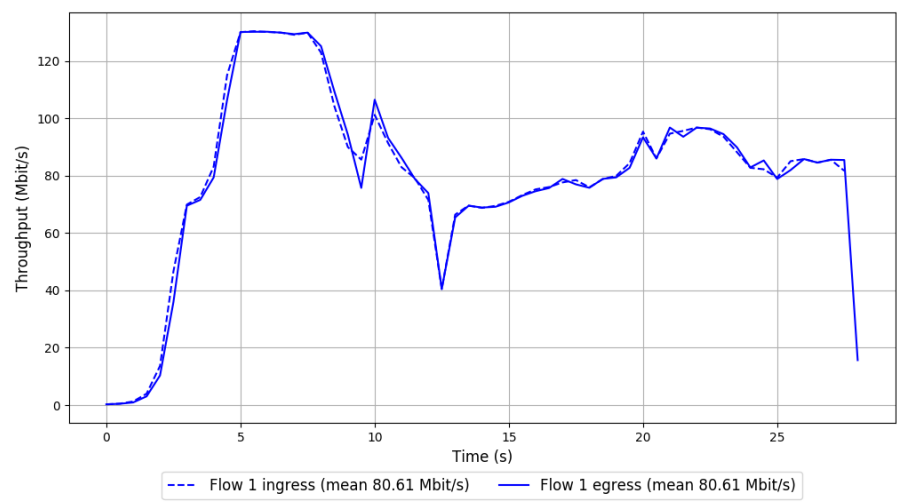
Average throughput: 80.61 Mbit/s

95th percentile per-packet one-way delay: 112.786 ms

Loss rate: 0.00%



Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-09-18 00:39:27

End at: 2017-09-18 00:39:57

# Below is generated by plot.py at 2017-09-18 01:58:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 81.76 Mbit/s

95th percentile per-packet one-way delay: 112.765 ms

Loss rate: 0.00%

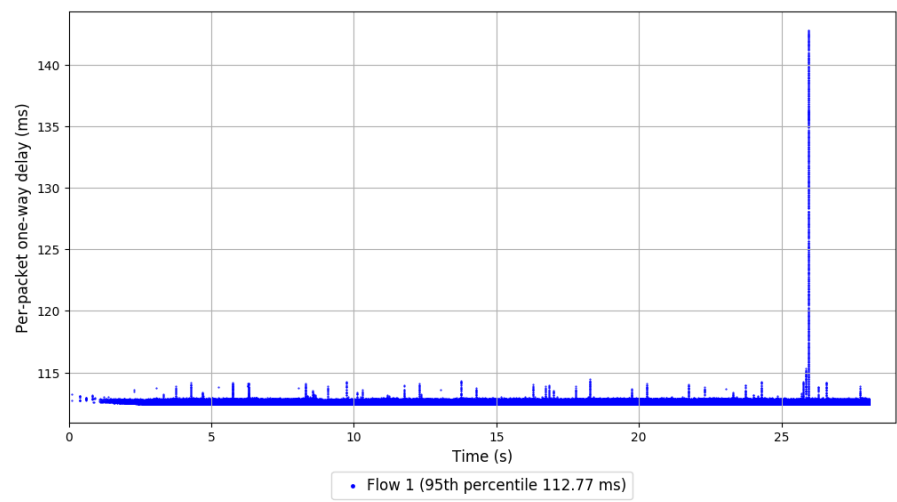
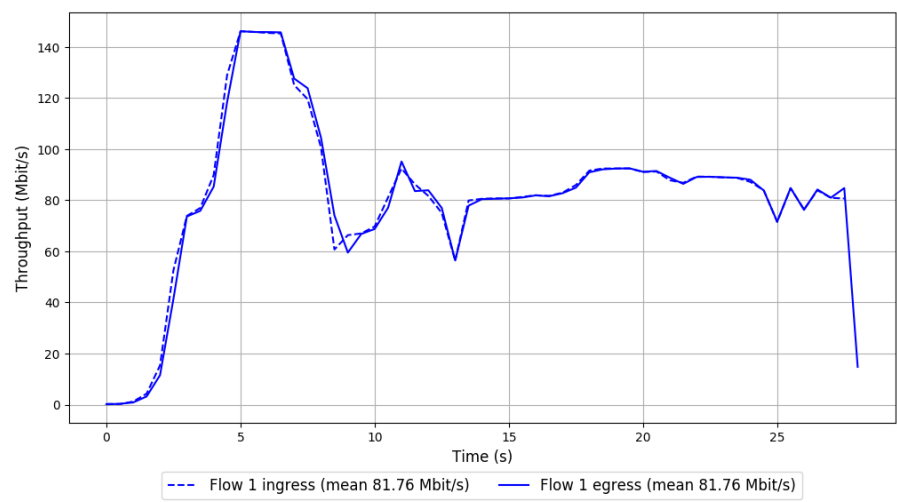
-- Flow 1:

Average throughput: 81.76 Mbit/s

95th percentile per-packet one-way delay: 112.765 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-09-17 22:54:14

End at: 2017-09-17 22:54:44

# Below is generated by plot.py at 2017-09-18 01:58:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 59.83 Mbit/s

95th percentile per-packet one-way delay: 118.209 ms

Loss rate: 0.02%

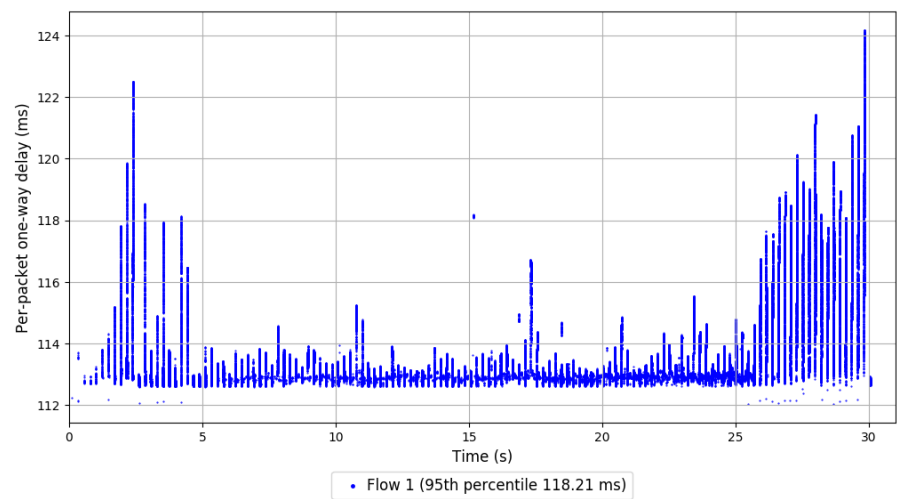
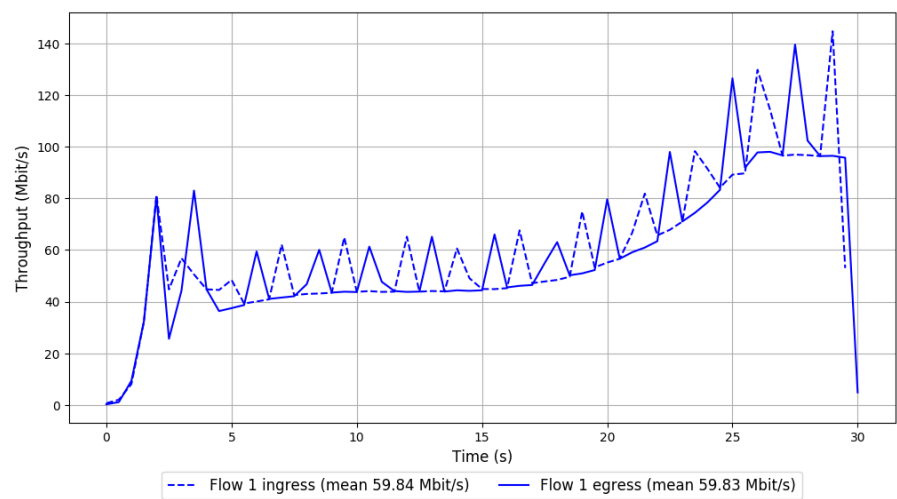
-- Flow 1:

Average throughput: 59.83 Mbit/s

95th percentile per-packet one-way delay: 118.209 ms

Loss rate: 0.02%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-09-17 23:06:17

End at: 2017-09-17 23:06:47

# Below is generated by plot.py at 2017-09-18 01:58:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 60.70 Mbit/s

95th percentile per-packet one-way delay: 117.974 ms

Loss rate: 0.00%

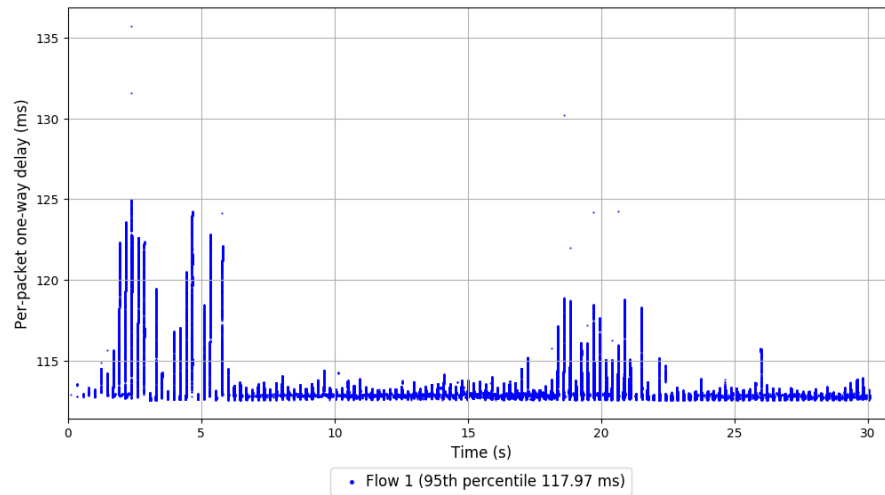
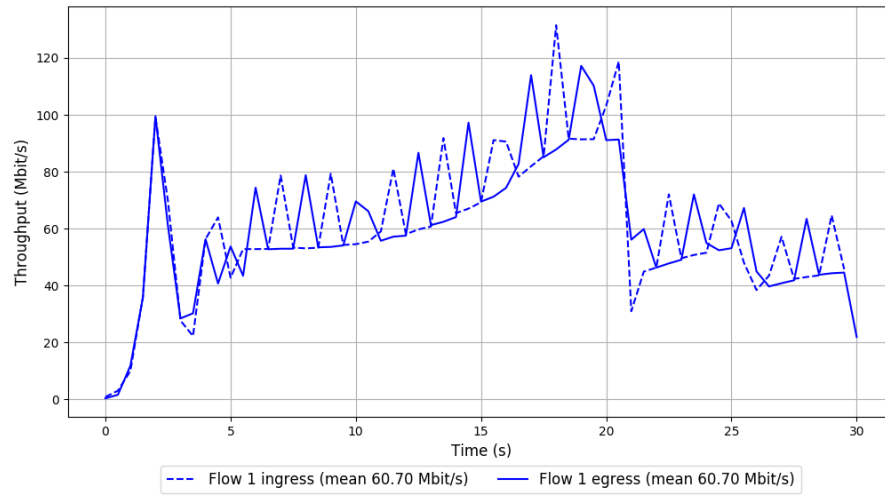
-- Flow 1:

Average throughput: 60.70 Mbit/s

95th percentile per-packet one-way delay: 117.974 ms

Loss rate: 0.00%

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



Run 3: Statistics of TCP Cubic

Start at: 2017-09-17 23:18:17

End at: 2017-09-17 23:18:47

# Below is generated by plot.py at 2017-09-18 01:58:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 51.60 Mbit/s

95th percentile per-packet one-way delay: 115.146 ms

Loss rate: 0.03%

-- Flow 1:

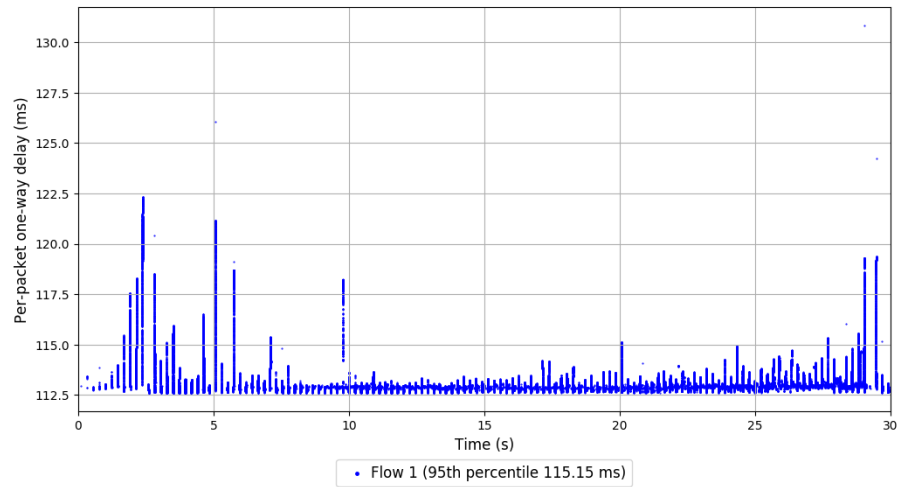
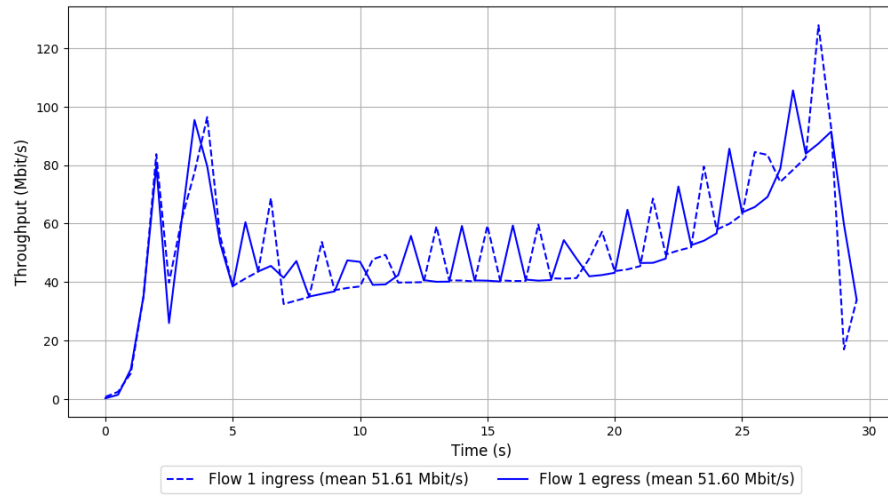
Average throughput: 51.60 Mbit/s

95th percentile per-packet one-way delay: 115.146 ms

Loss rate: 0.03%



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



Run 4: Statistics of TCP Cubic

Start at: 2017-09-17 23:30:24

End at: 2017-09-17 23:30:54

# Below is generated by plot.py at 2017-09-18 01:58:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 36.58 Mbit/s

95th percentile per-packet one-way delay: 114.925 ms

Loss rate: 0.02%

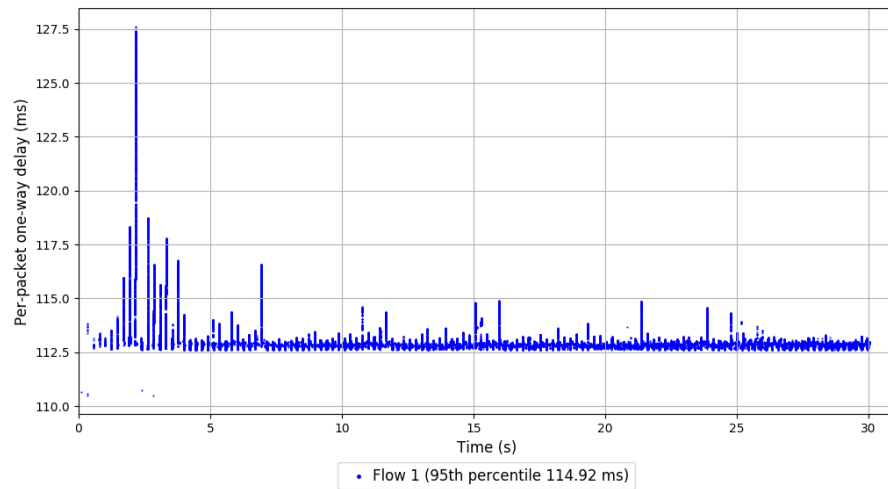
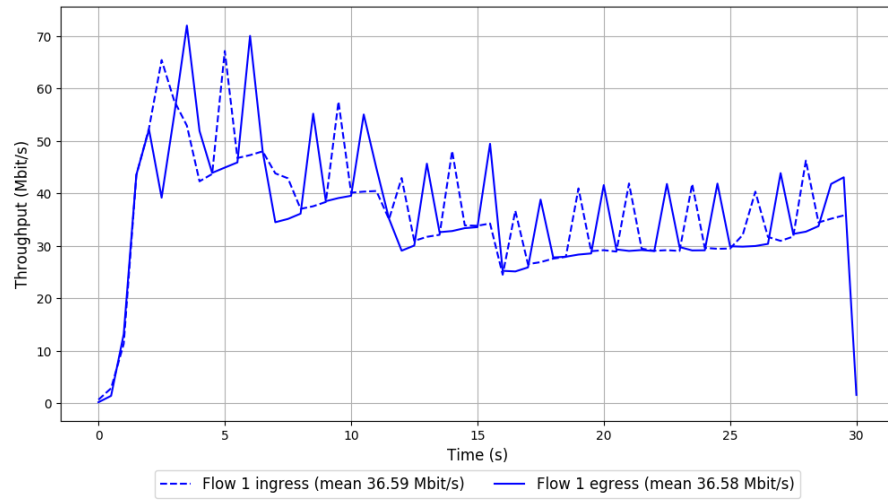
-- Flow 1:

Average throughput: 36.58 Mbit/s

95th percentile per-packet one-way delay: 114.925 ms

Loss rate: 0.02%

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

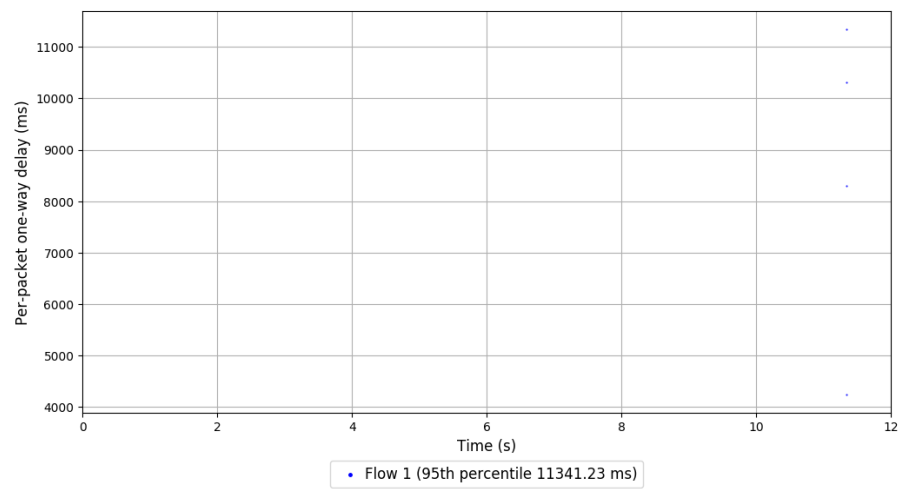
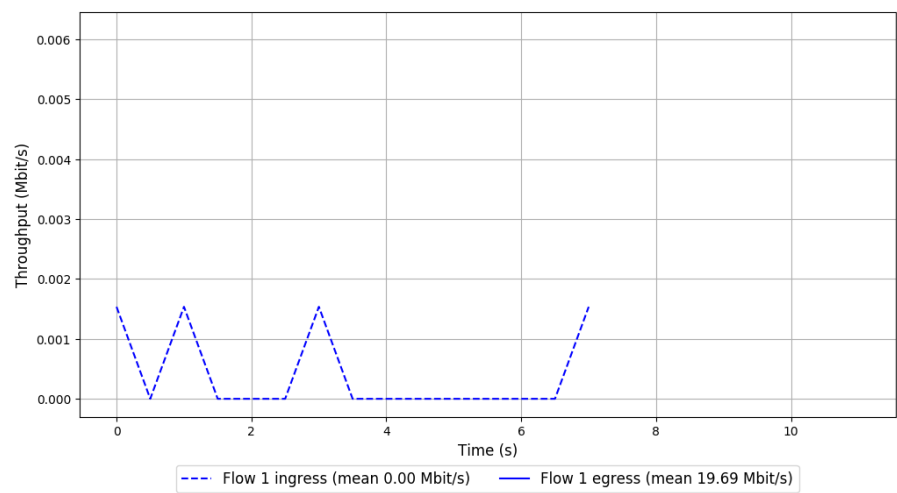


Run 5: Statistics of TCP Cubic

Start at: 2017-09-17 23:42:16

End at: 2017-09-17 23:42:46

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-09-17 23:54:24

End at: 2017-09-17 23:54:54

# Below is generated by plot.py at 2017-09-18 01:58:10

# Datalink statistics

-- Total of 1 flow:

Average throughput: 59.32 Mbit/s

95th percentile per-packet one-way delay: 117.212 ms

Loss rate: 0.00%

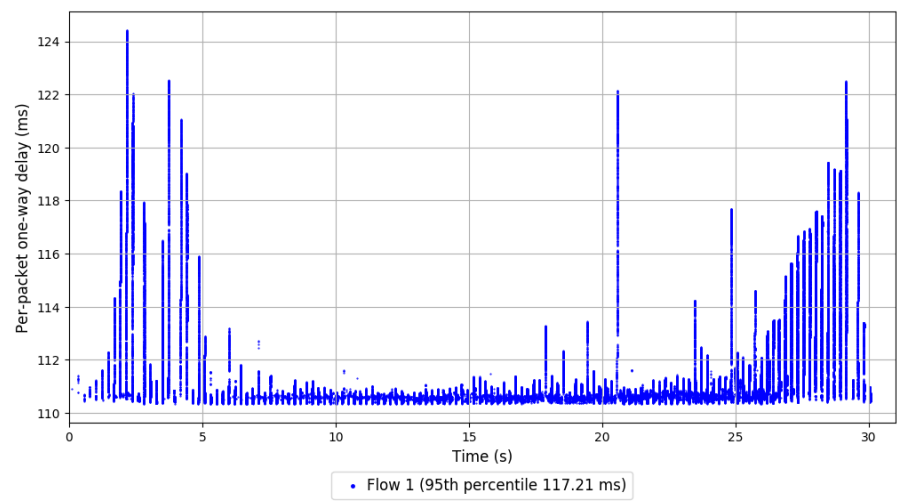
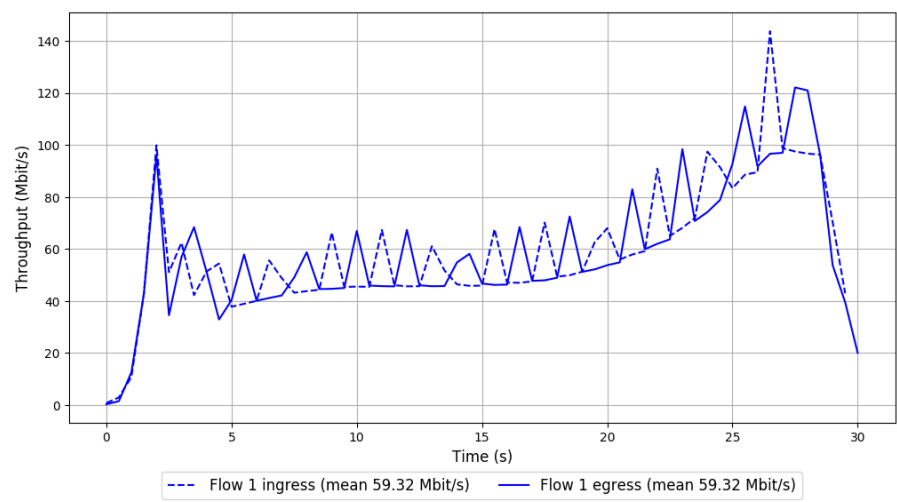
-- Flow 1:

Average throughput: 59.32 Mbit/s

95th percentile per-packet one-way delay: 117.212 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-09-18 00:06:17

End at: 2017-09-18 00:06:47

# Below is generated by plot.py at 2017-09-18 01:58:19

# Datalink statistics

-- Total of 1 flow:

Average throughput: 70.07 Mbit/s

95th percentile per-packet one-way delay: 112.923 ms

Loss rate: 0.00%

-- Flow 1:

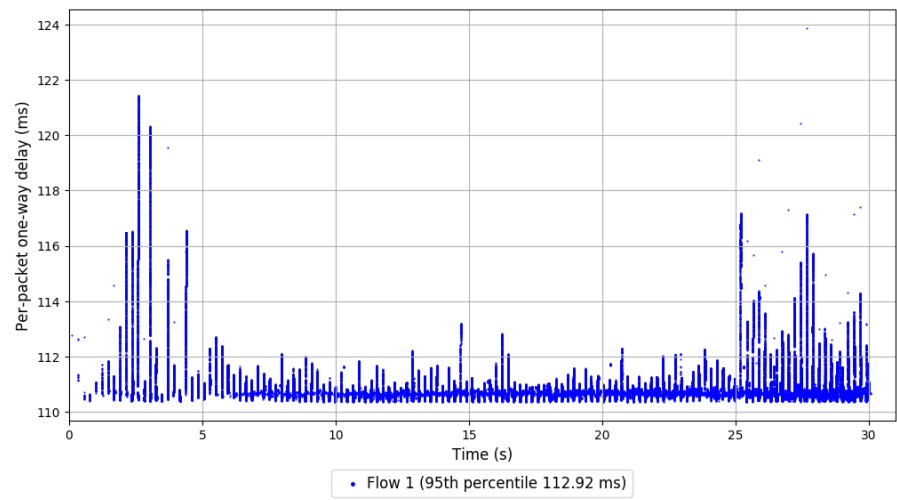
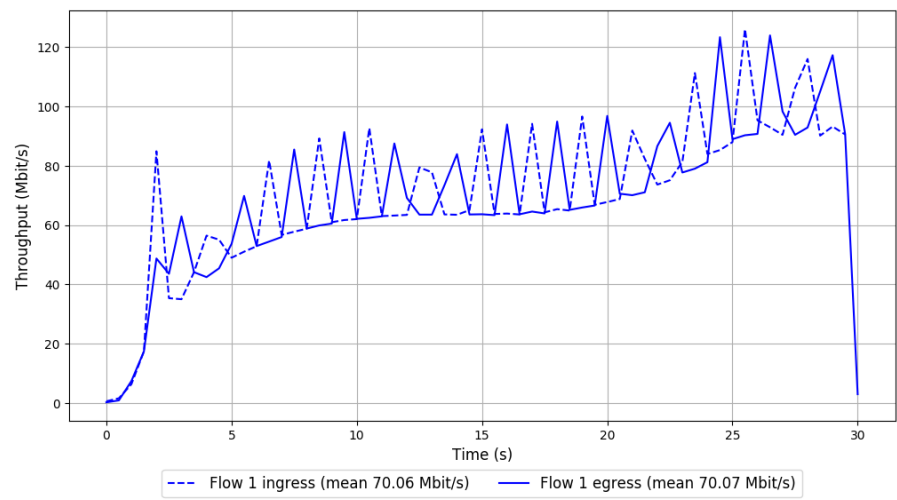
Average throughput: 70.07 Mbit/s

95th percentile per-packet one-way delay: 112.923 ms

Loss rate: 0.00%



Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-09-18 00:18:15

End at: 2017-09-18 00:18:45

# Below is generated by plot.py at 2017-09-18 01:58:19

# Datalink statistics

-- Total of 1 flow:

Average throughput: 48.45 Mbit/s

95th percentile per-packet one-way delay: 117.509 ms

Loss rate: 0.00%

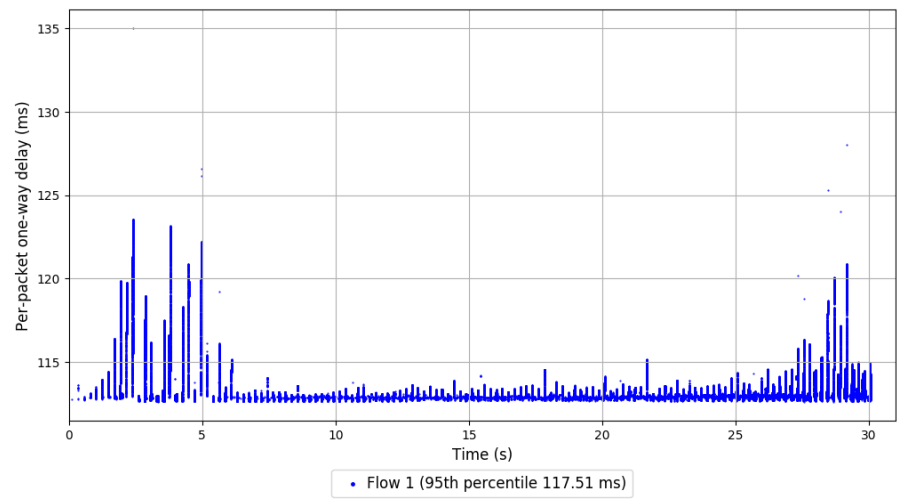
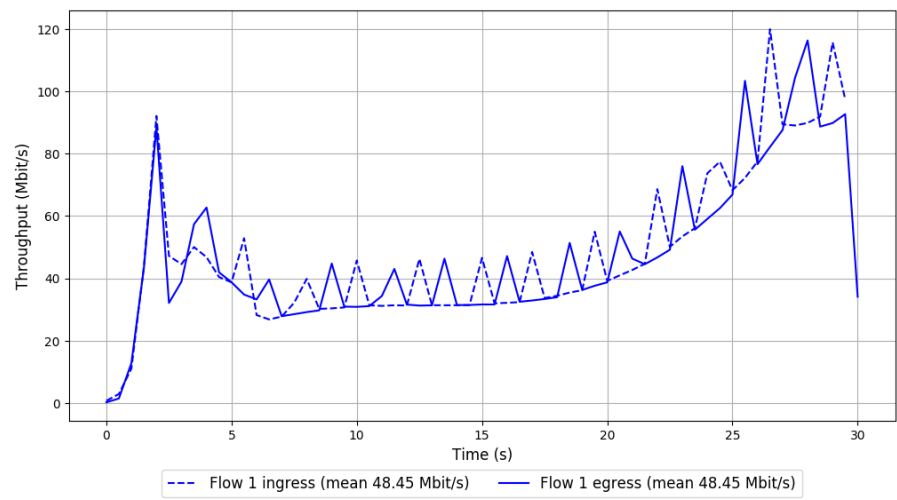
-- Flow 1:

Average throughput: 48.45 Mbit/s

95th percentile per-packet one-way delay: 117.509 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-09-18 00:30:25

End at: 2017-09-18 00:30:55

# Below is generated by plot.py at 2017-09-18 01:58:19

# Datalink statistics

-- Total of 1 flow:

Average throughput: 50.49 Mbit/s

95th percentile per-packet one-way delay: 116.743 ms

Loss rate: 0.10%

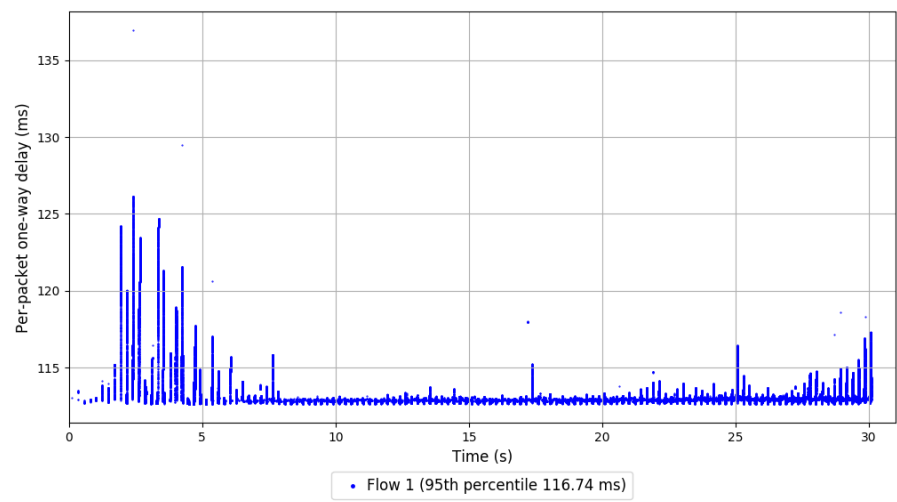
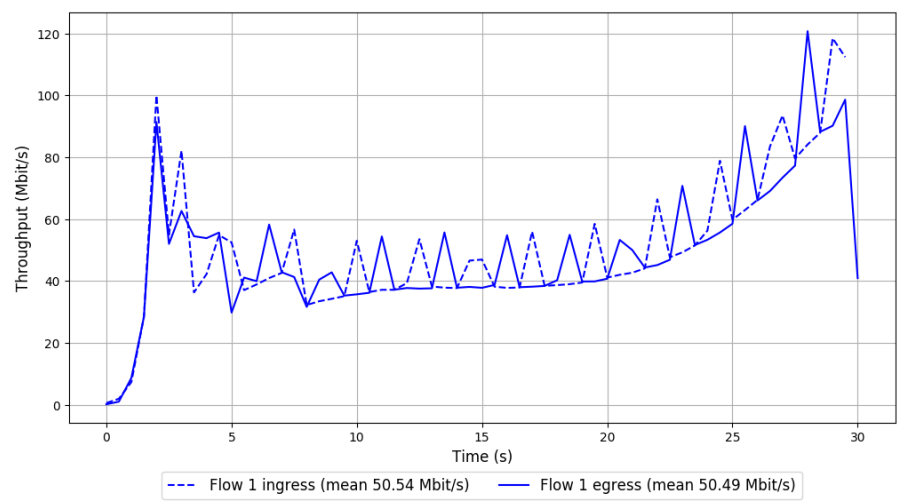
-- Flow 1:

Average throughput: 50.49 Mbit/s

95th percentile per-packet one-way delay: 116.743 ms

Loss rate: 0.10%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-09-18 00:42:18

End at: 2017-09-18 00:42:48

# Below is generated by plot.py at 2017-09-18 01:58:19

# Datalink statistics

-- Total of 1 flow:

Average throughput: 48.09 Mbit/s

95th percentile per-packet one-way delay: 115.916 ms

Loss rate: 0.01%

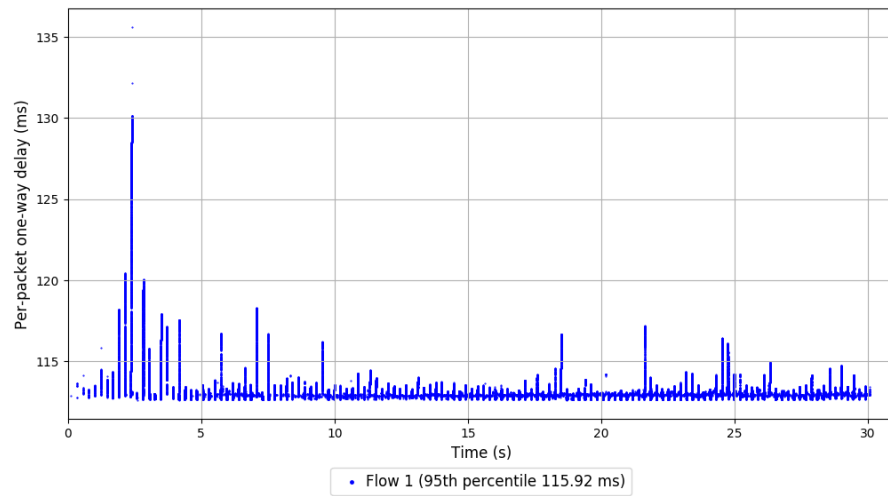
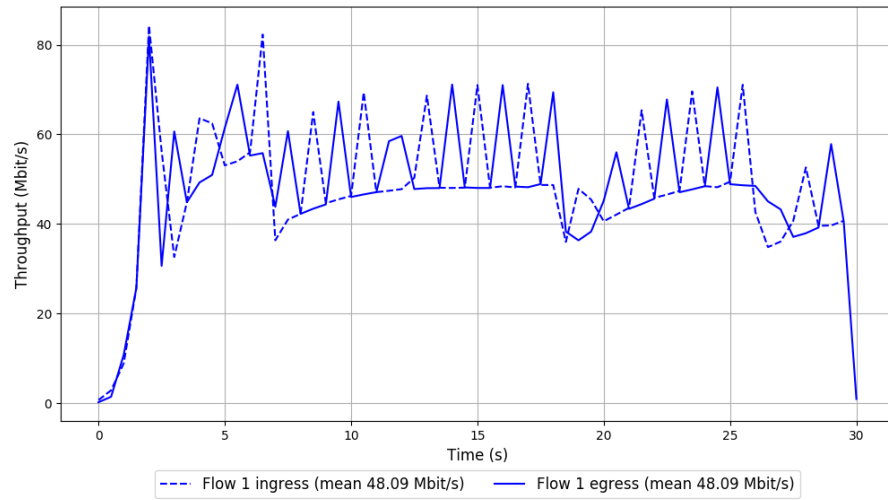
-- Flow 1:

Average throughput: 48.09 Mbit/s

95th percentile per-packet one-way delay: 115.916 ms

Loss rate: 0.01%

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



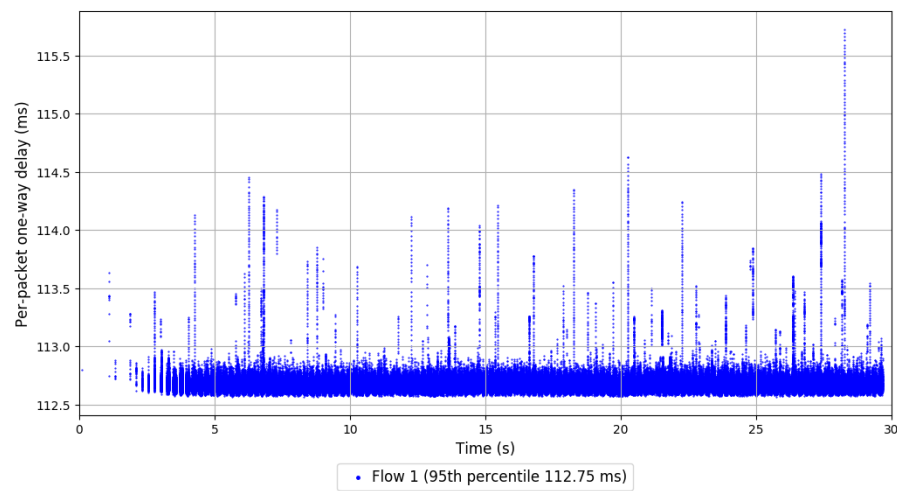
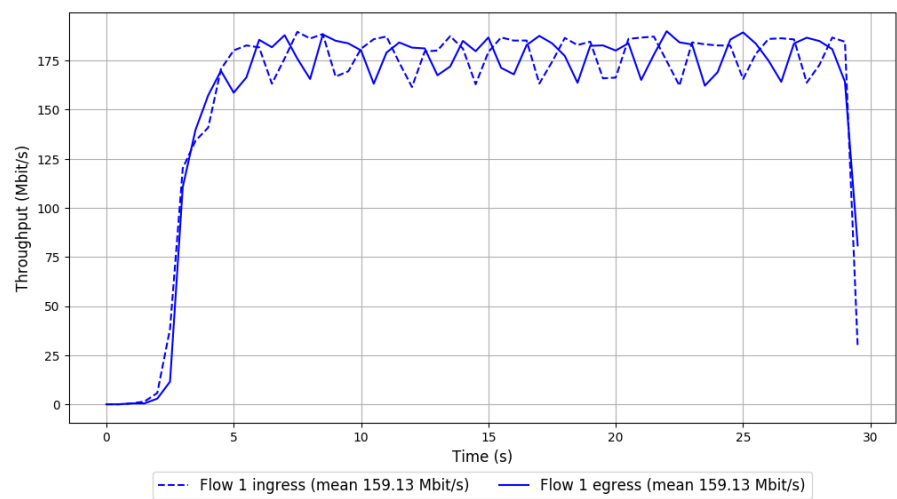
```
Run 1: Statistics of Indigo

Start at: 2017-09-17 22:59:02
End at: 2017-09-17 22:59:32

# Below is generated by plot.py at 2017-09-18 02:00:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 159.13 Mbit/s
95th percentile per-packet one-way delay: 112.750 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 159.13 Mbit/s
95th percentile per-packet one-way delay: 112.750 ms
Loss rate: 0.00%
```



Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-09-17 23:11:19

End at: 2017-09-17 23:11:49

# Below is generated by plot.py at 2017-09-18 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 171.31 Mbit/s

95th percentile per-packet one-way delay: 112.760 ms

Loss rate: 0.00%

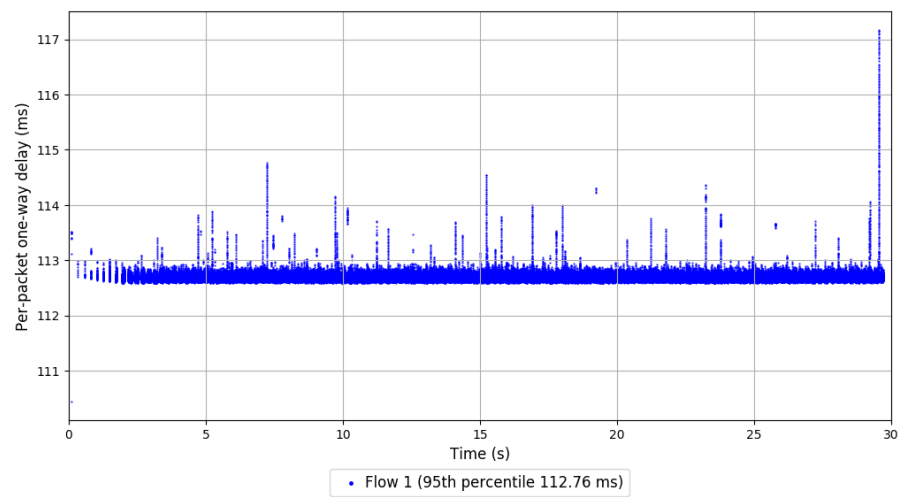
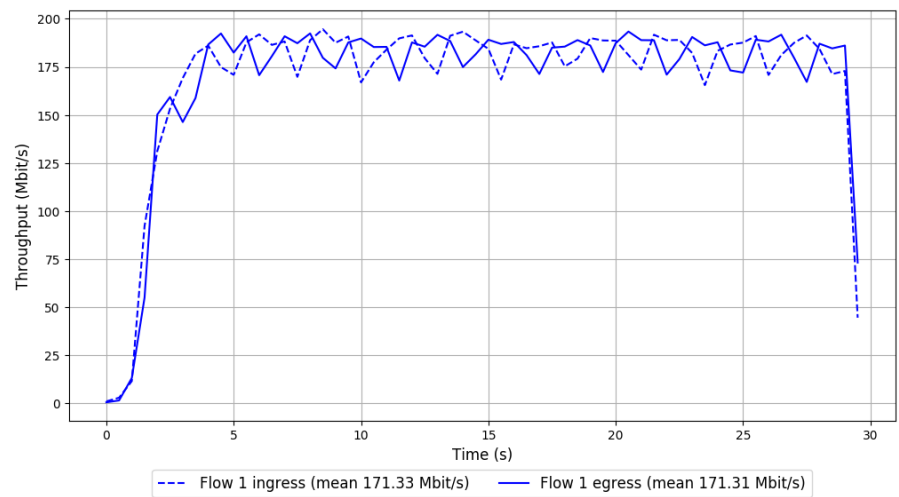
-- Flow 1:

Average throughput: 171.31 Mbit/s

95th percentile per-packet one-way delay: 112.760 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-09-17 23:23:08

End at: 2017-09-17 23:23:38

# Below is generated by plot.py at 2017-09-18 02:00:51

# Datalink statistics

-- Total of 1 flow:

Average throughput: 171.23 Mbit/s

95th percentile per-packet one-way delay: 112.774 ms

Loss rate: 0.00%

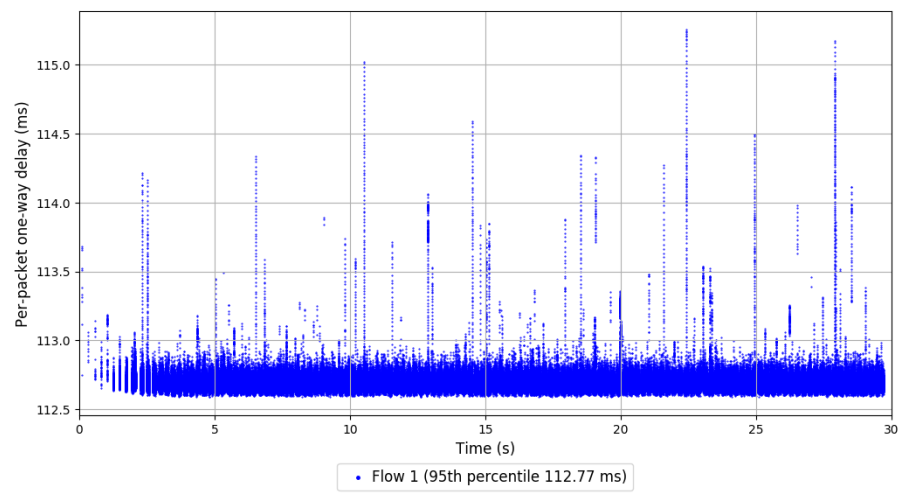
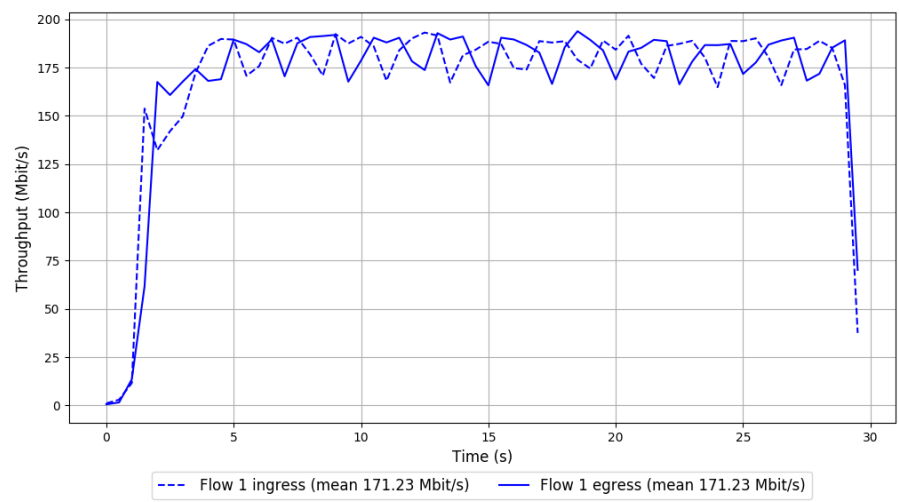
-- Flow 1:

Average throughput: 171.23 Mbit/s

95th percentile per-packet one-way delay: 112.774 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-09-17 23:35:20

End at: 2017-09-17 23:35:50

# Below is generated by plot.py at 2017-09-18 02:01:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 172.81 Mbit/s

95th percentile per-packet one-way delay: 112.761 ms

Loss rate: 0.00%

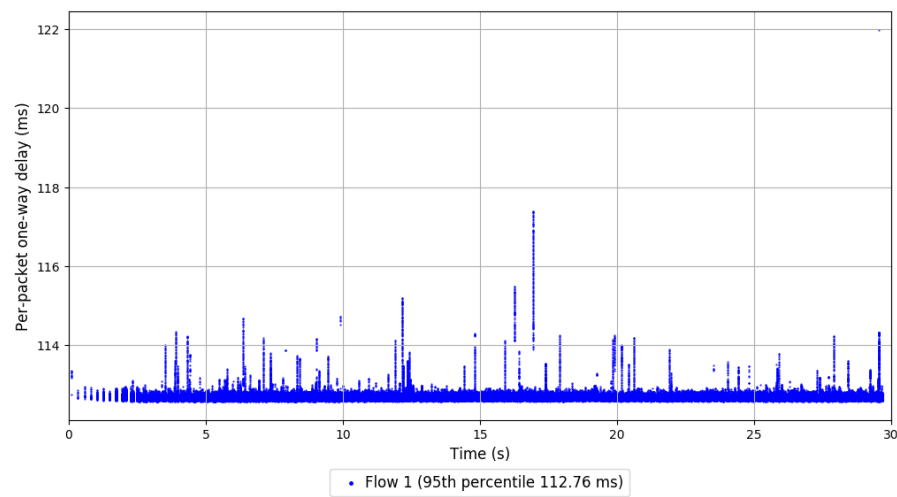
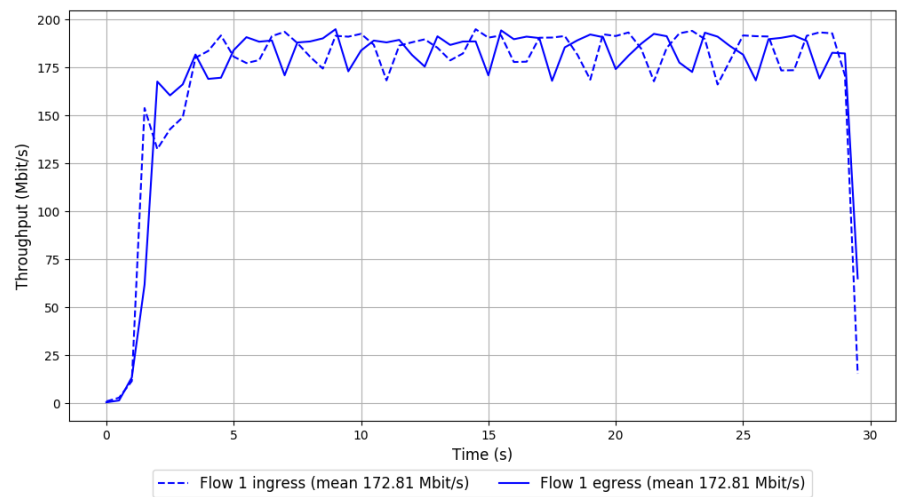
-- Flow 1:

Average throughput: 172.81 Mbit/s

95th percentile per-packet one-way delay: 112.761 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-09-17 23:47:08

End at: 2017-09-17 23:47:38

# Below is generated by plot.py at 2017-09-18 02:01:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 173.63 Mbit/s

95th percentile per-packet one-way delay: 110.517 ms

Loss rate: 0.00%

-- Flow 1:

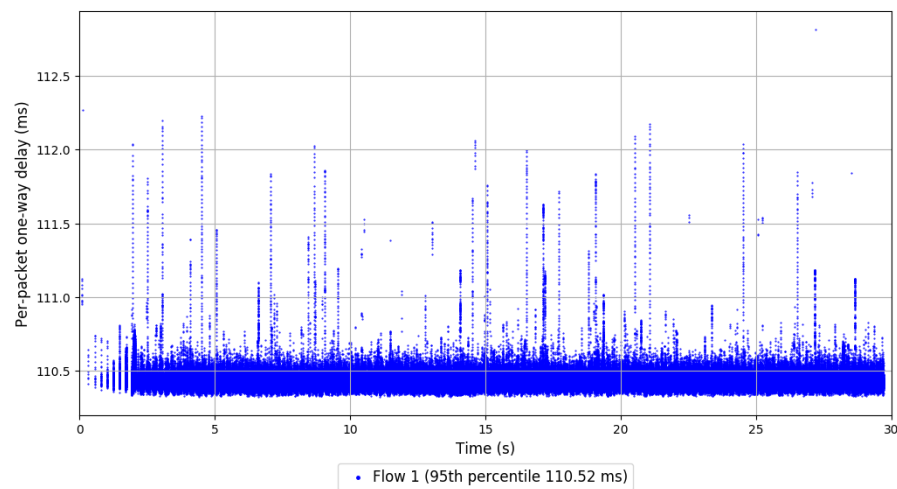
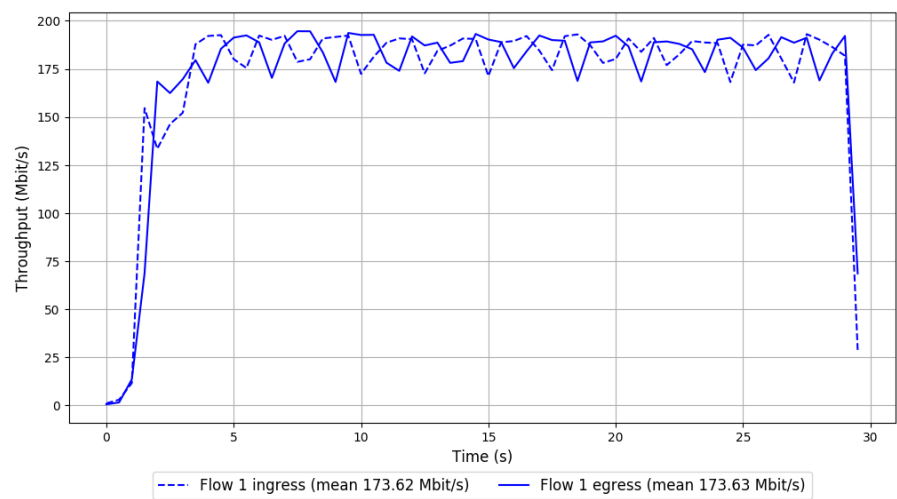
Average throughput: 173.63 Mbit/s

95th percentile per-packet one-way delay: 110.517 ms

Loss rate: 0.00%



Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-09-17 23:59:19

End at: 2017-09-17 23:59:49

# Below is generated by plot.py at 2017-09-18 02:01:06

# Datalink statistics

-- Total of 1 flow:

Average throughput: 173.73 Mbit/s

95th percentile per-packet one-way delay: 110.529 ms

Loss rate: 0.00%

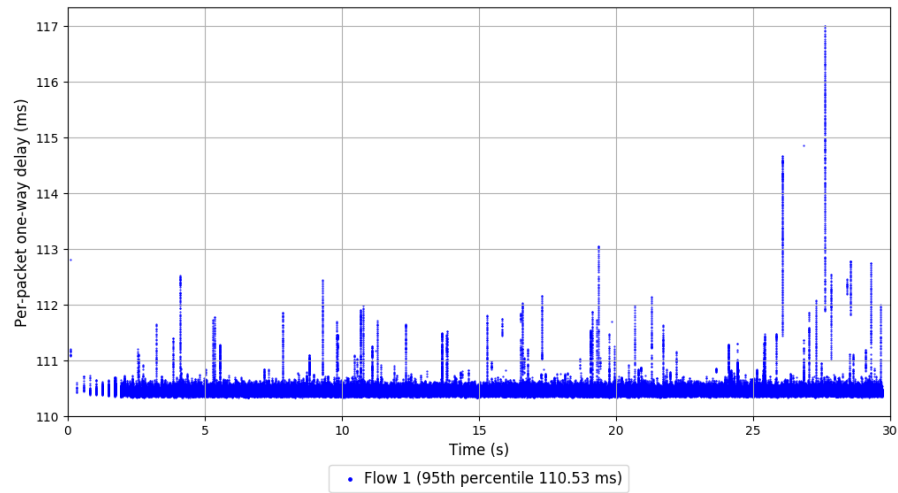
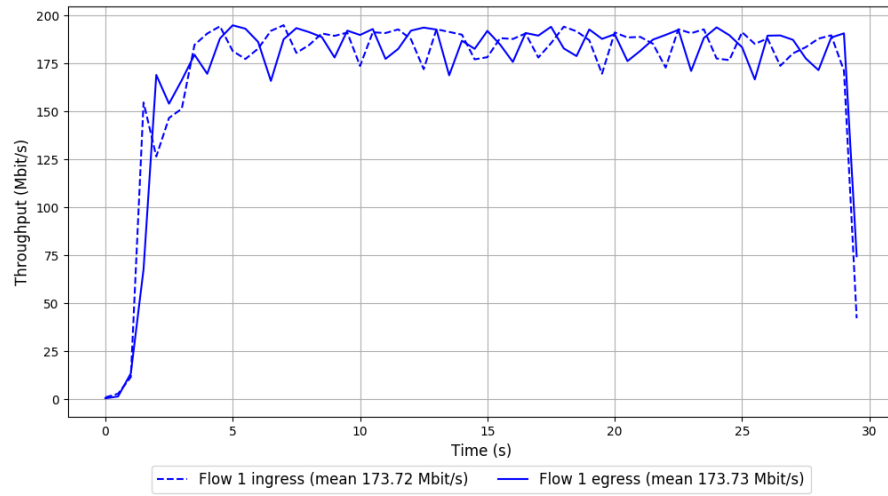
-- Flow 1:

Average throughput: 173.73 Mbit/s

95th percentile per-packet one-way delay: 110.529 ms

Loss rate: 0.00%

## Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-09-18 00:11:18

End at: 2017-09-18 00:11:48

# Below is generated by plot.py at 2017-09-18 02:01:19

# Datalink statistics

-- Total of 1 flow:

Average throughput: 173.59 Mbit/s

95th percentile per-packet one-way delay: 110.556 ms

Loss rate: 0.00%

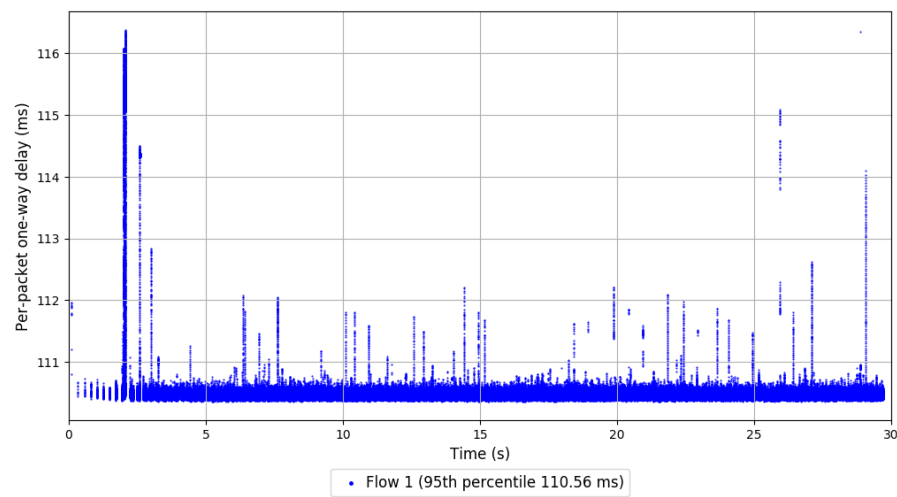
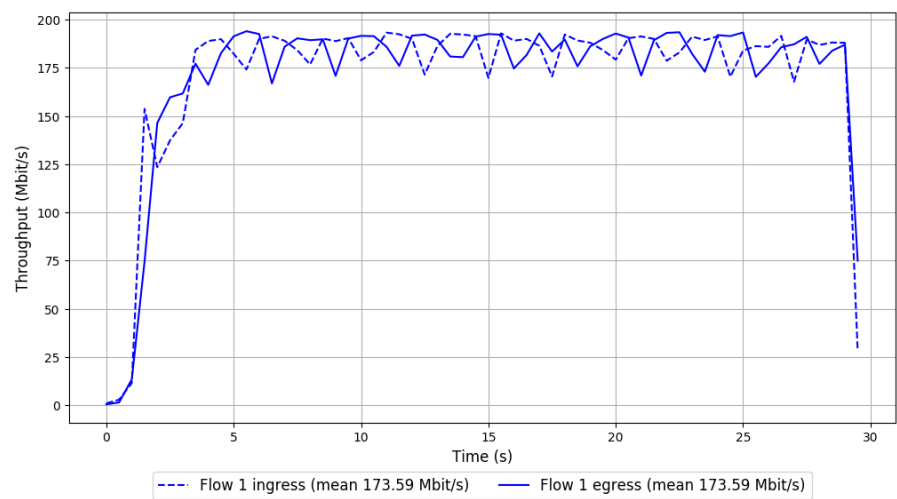
-- Flow 1:

Average throughput: 173.59 Mbit/s

95th percentile per-packet one-way delay: 110.556 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-09-18 00:23:08

End at: 2017-09-18 00:23:38

# Below is generated by plot.py at 2017-09-18 02:01:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 171.94 Mbit/s

95th percentile per-packet one-way delay: 112.798 ms

Loss rate: 0.00%

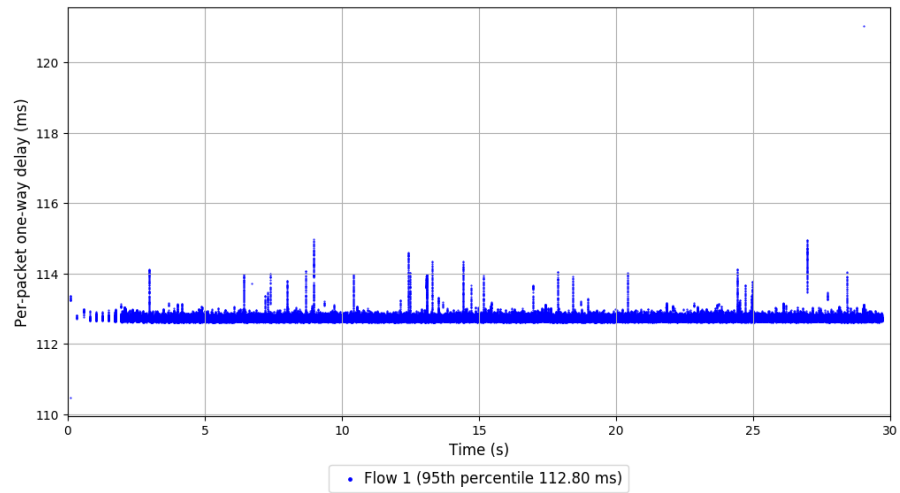
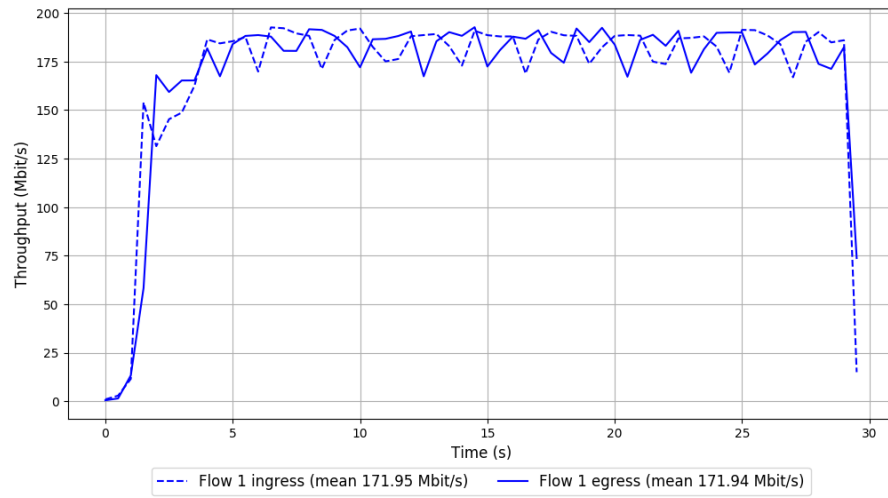
-- Flow 1:

Average throughput: 171.94 Mbit/s

95th percentile per-packet one-way delay: 112.798 ms

Loss rate: 0.00%

## Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-09-18 00:35:22

End at: 2017-09-18 00:35:52

# Below is generated by plot.py at 2017-09-18 02:03:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 167.60 Mbit/s

95th percentile per-packet one-way delay: 112.798 ms

Loss rate: 0.00%

-- Flow 1:

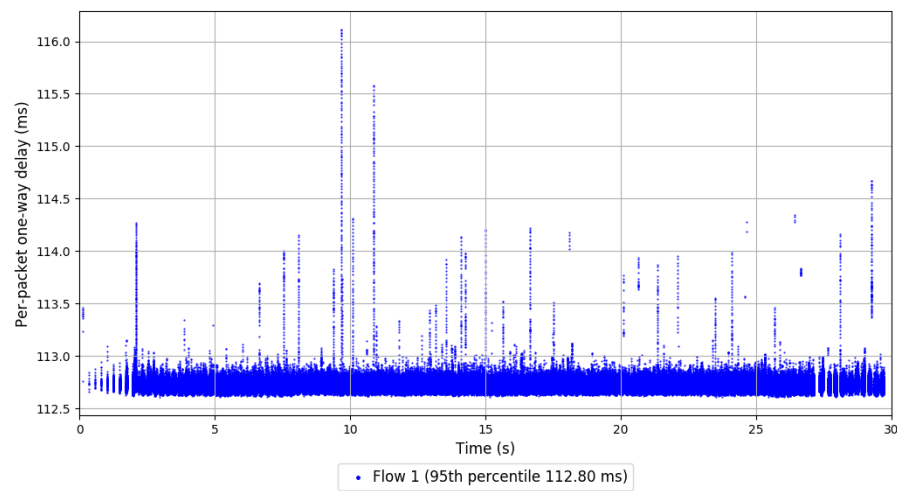
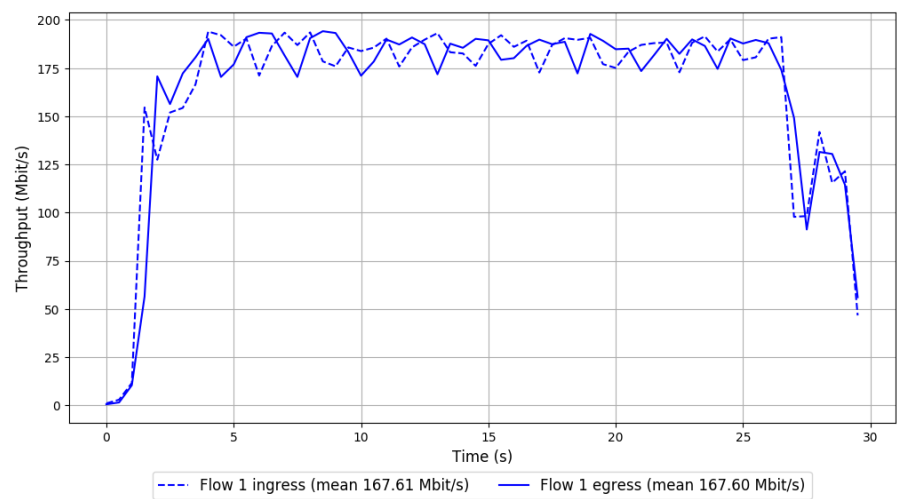
Average throughput: 167.60 Mbit/s

95th percentile per-packet one-way delay: 112.798 ms

Loss rate: 0.00%



Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-09-18 00:47:04

End at: 2017-09-18 00:47:34

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 174.06 Mbit/s

95th percentile per-packet one-way delay: 112.457 ms

Loss rate: 0.00%

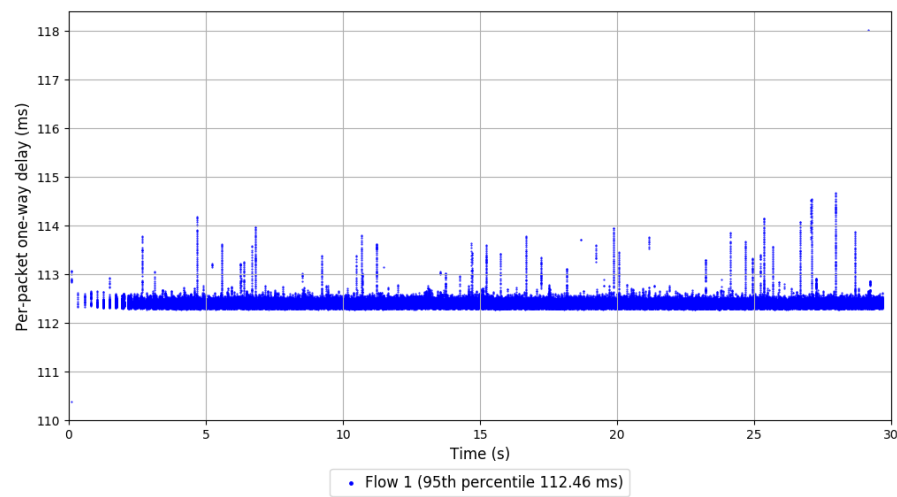
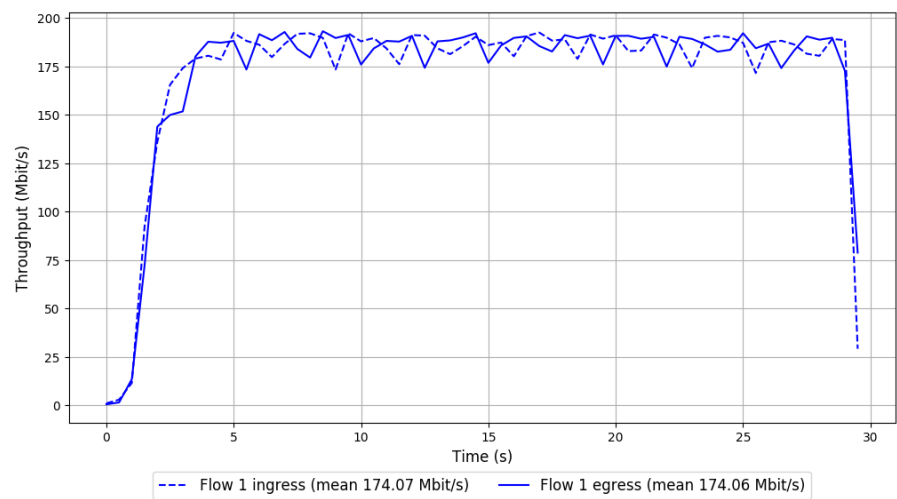
-- Flow 1:

Average throughput: 174.06 Mbit/s

95th percentile per-packet one-way delay: 112.457 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

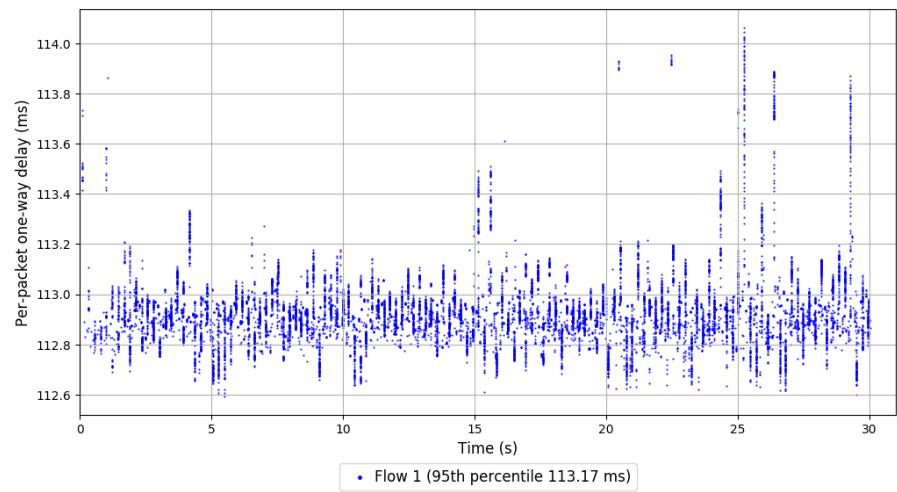
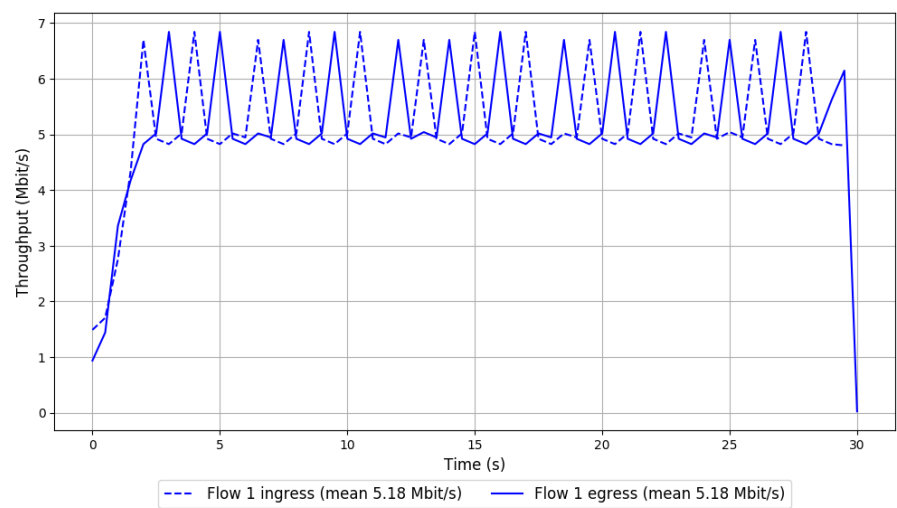


```
Run 1: Statistics of KohoCC

Start at: 2017-09-17 22:54:58
End at: 2017-09-17 22:55:28

# Below is generated by plot.py at 2017-09-18 02:03:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 113.168 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 113.168 ms
Loss rate: 0.00%
```

Run 1: Report of KohoCC — Data Link

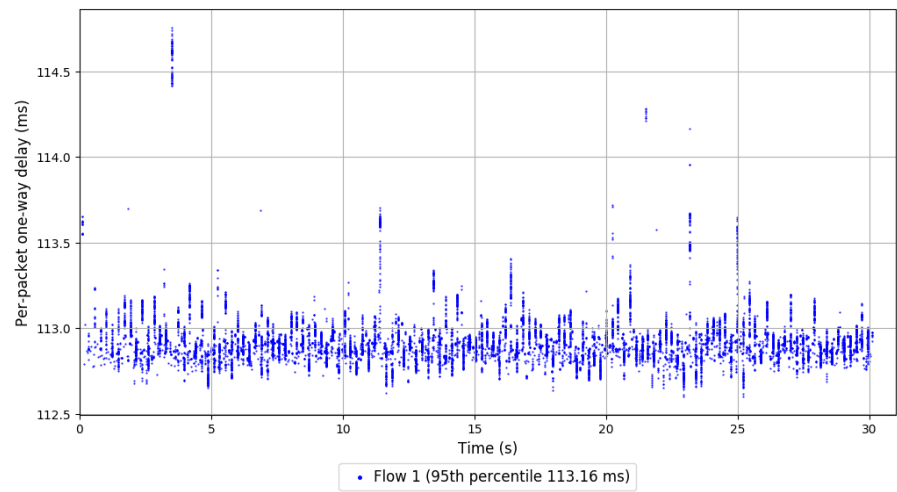
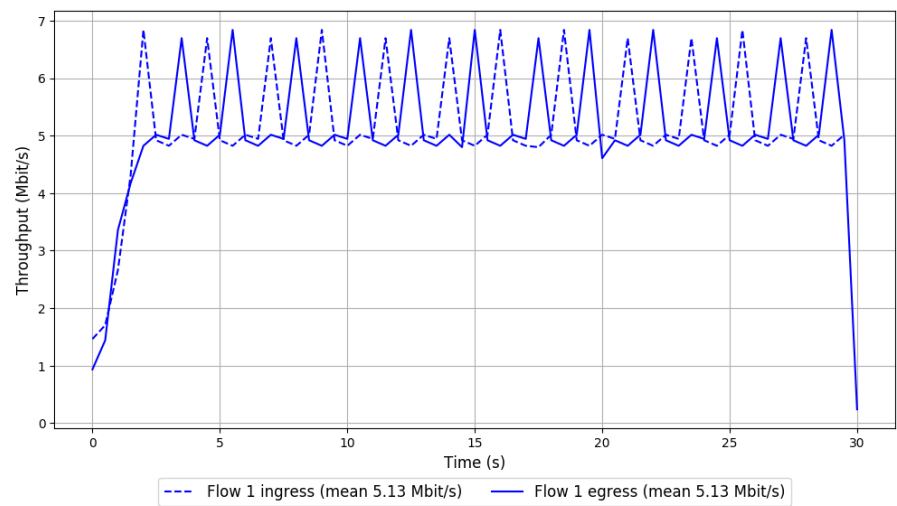


```
Run 2: Statistics of KohoCC

Start at: 2017-09-17 23:07:01
End at: 2017-09-17 23:07:31

# Below is generated by plot.py at 2017-09-18 02:03:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.13 Mbit/s
95th percentile per-packet one-way delay: 113.161 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 5.13 Mbit/s
95th percentile per-packet one-way delay: 113.161 ms
Loss rate: 0.06%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-09-17 23:19:01

End at: 2017-09-17 23:19:31

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.147 ms

Loss rate: 0.02%

-- Flow 1:

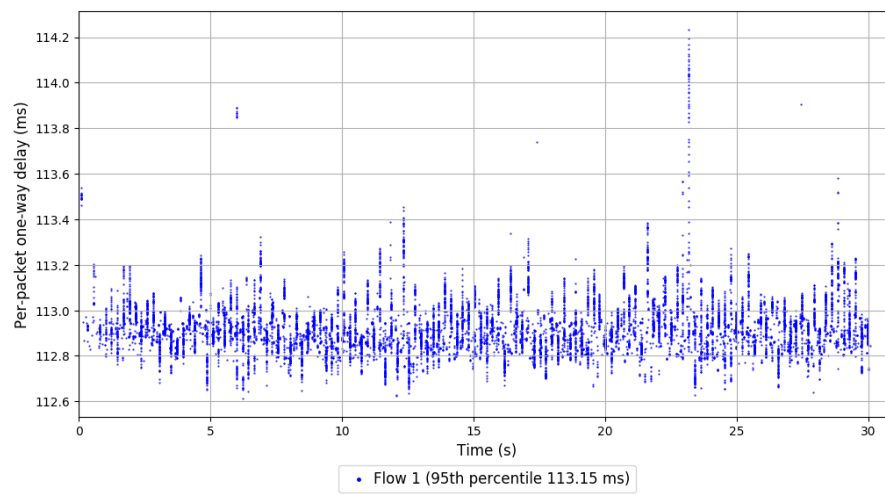
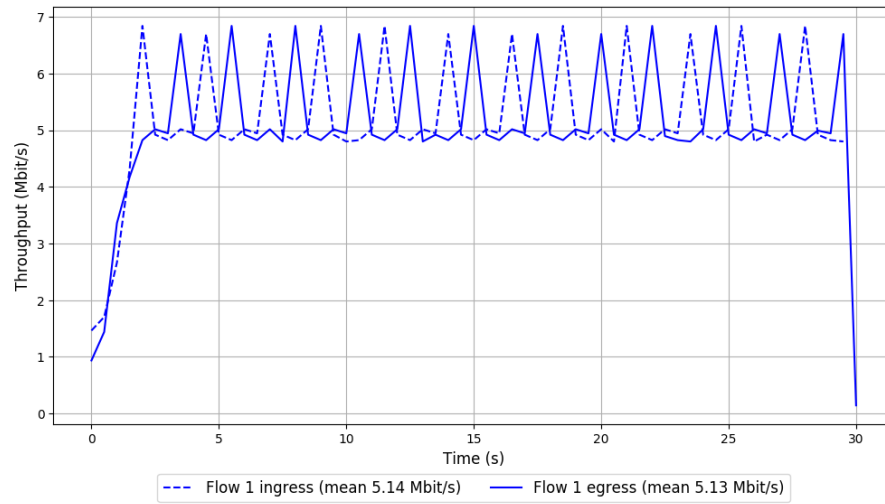
Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.147 ms

Loss rate: 0.02%



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



Run 4: Statistics of KohoCC

Start at: 2017-09-17 23:31:07

End at: 2017-09-17 23:31:37

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.183 ms

Loss rate: 0.08%

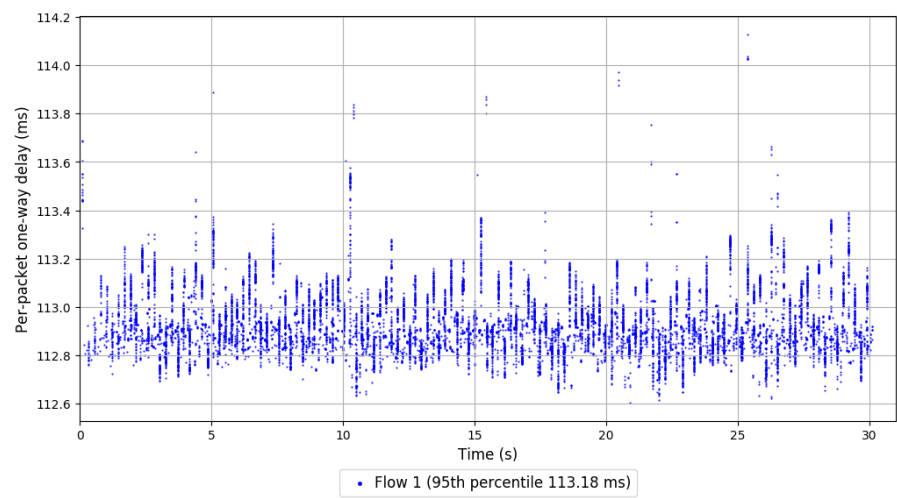
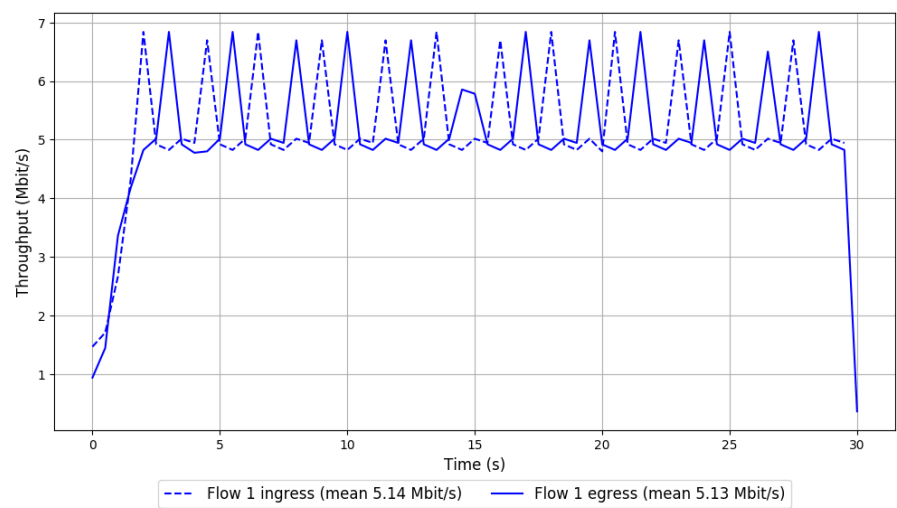
-- Flow 1:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.183 ms

Loss rate: 0.08%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-09-17 23:42:56

End at: 2017-09-17 23:43:26

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.340 ms

Loss rate: 0.00%

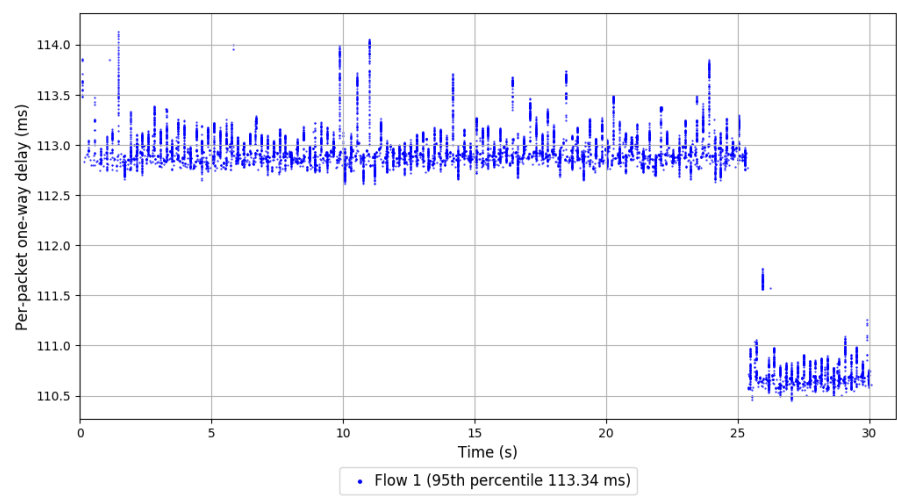
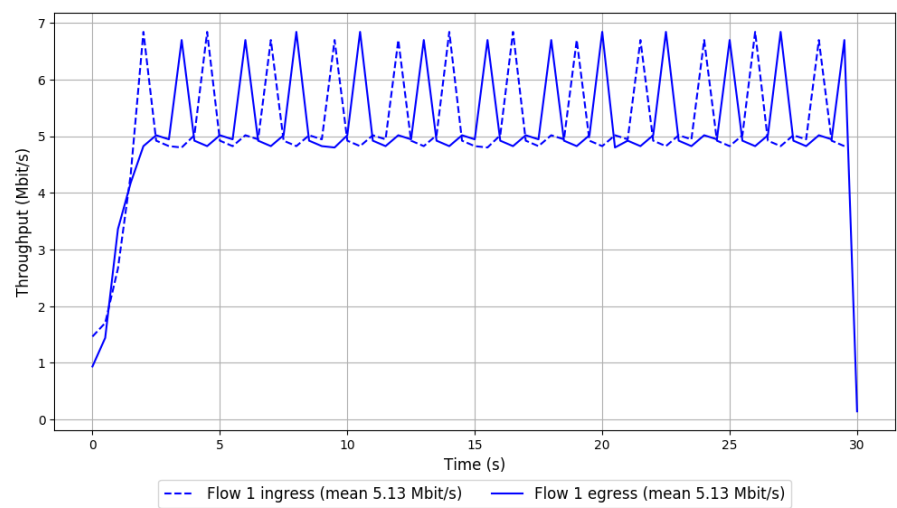
-- Flow 1:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.340 ms

Loss rate: 0.00%

Run 5: Report of KohoCC — Data Link

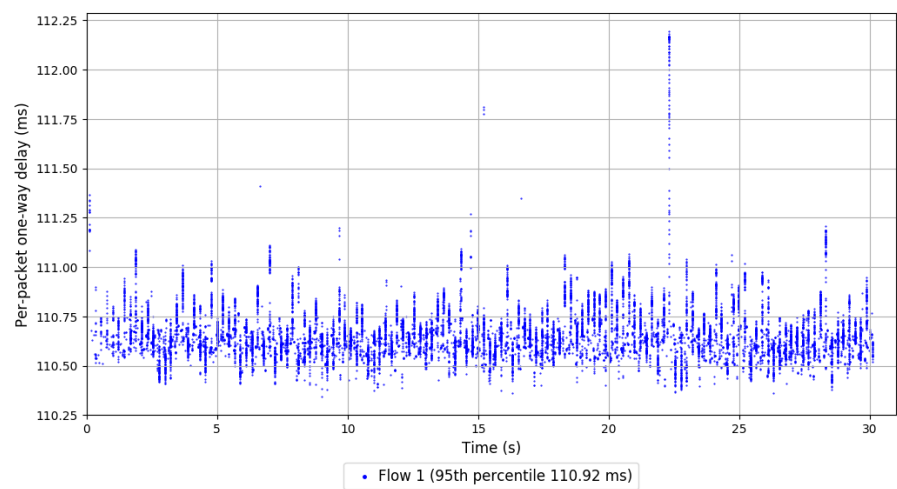
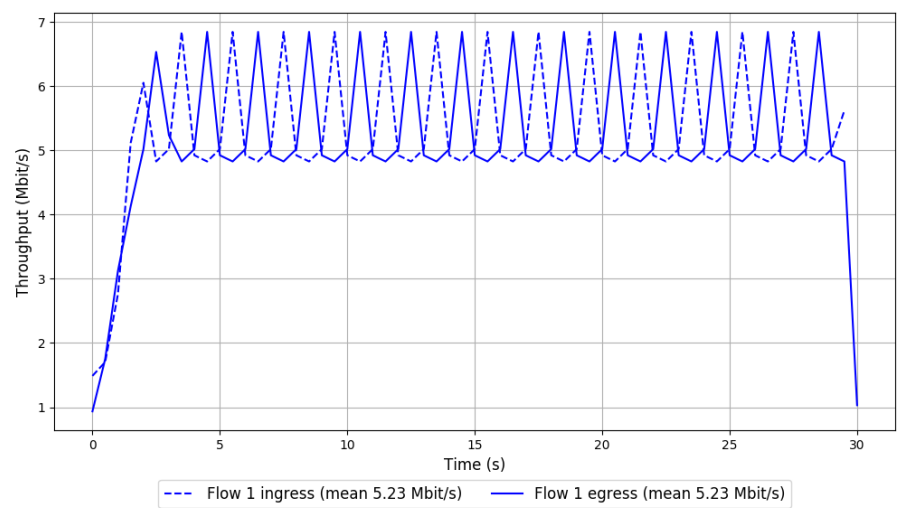


```
Run 6: Statistics of KohoCC

Start at: 2017-09-17 23:55:09
End at: 2017-09-17 23:55:39

# Below is generated by plot.py at 2017-09-18 02:03:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.23 Mbit/s
95th percentile per-packet one-way delay: 110.918 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.23 Mbit/s
95th percentile per-packet one-way delay: 110.918 ms
Loss rate: 0.00%
```

Run 6: Report of KohoCC — Data Link



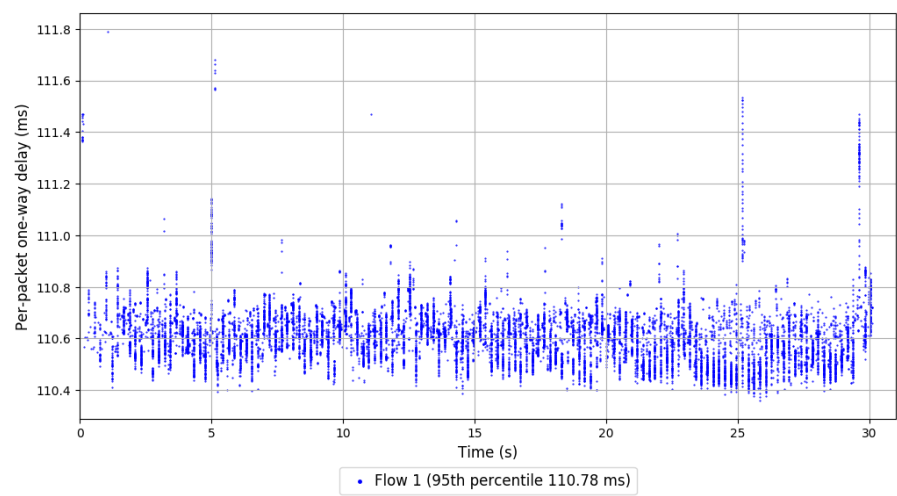
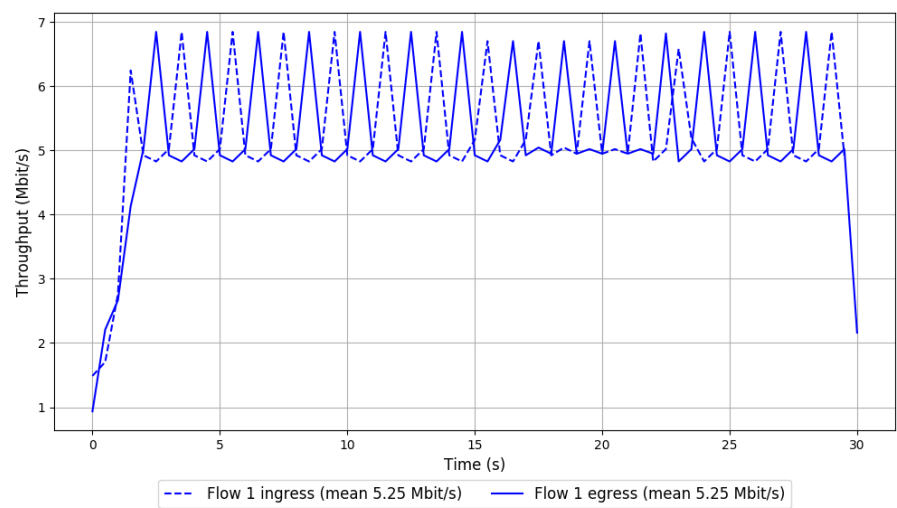
```
Run 7: Statistics of KohoCC

Start at: 2017-09-18 00:07:02
End at: 2017-09-18 00:07:32

# Below is generated by plot.py at 2017-09-18 02:03:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.25 Mbit/s
95th percentile per-packet one-way delay: 110.776 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.25 Mbit/s
95th percentile per-packet one-way delay: 110.776 ms
Loss rate: 0.00%
```



Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-09-18 00:18:59

End at: 2017-09-18 00:19:29

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 113.313 ms

Loss rate: 0.00%

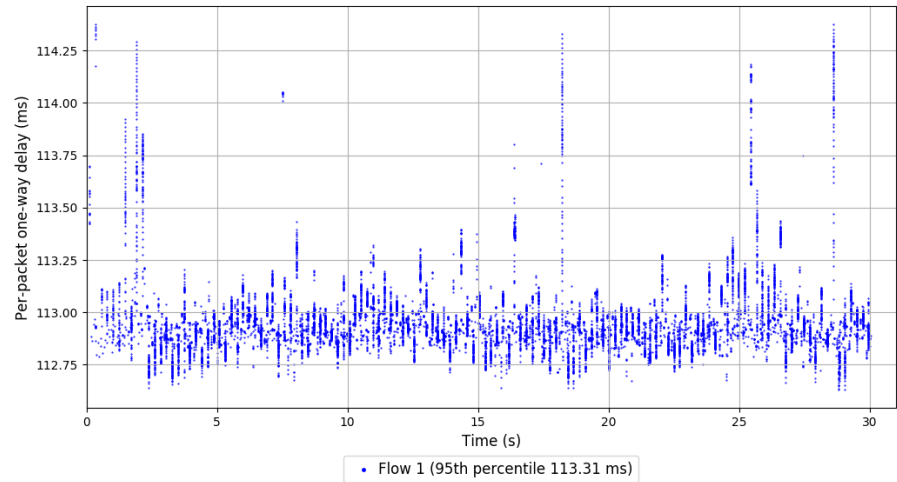
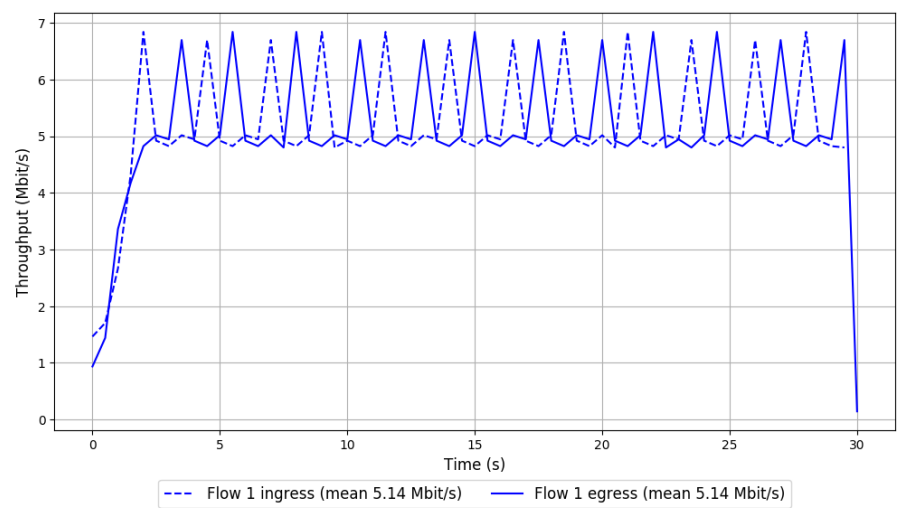
-- Flow 1:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 113.313 ms

Loss rate: 0.00%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-09-18 00:31:10

End at: 2017-09-18 00:31:40

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.140 ms

Loss rate: 0.00%

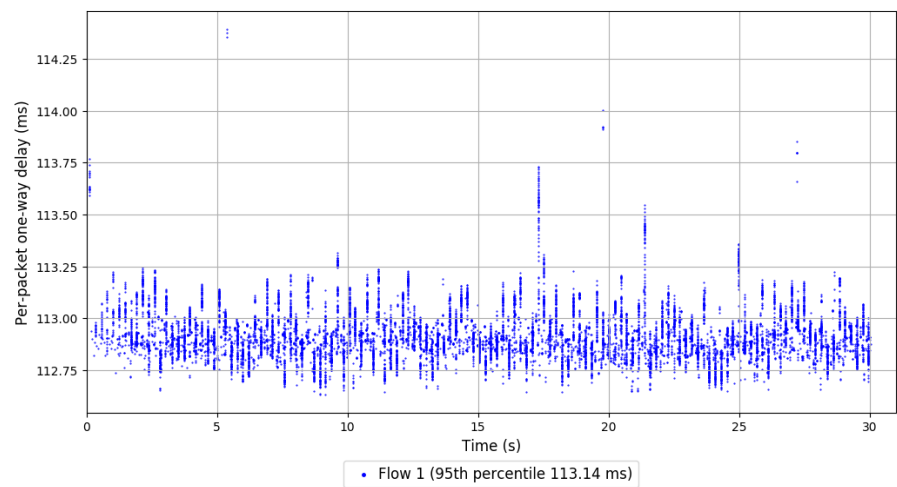
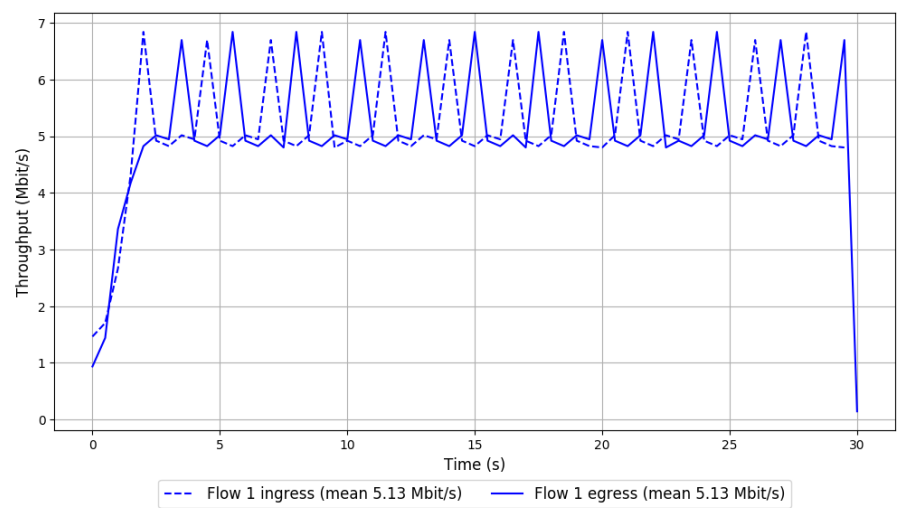
-- Flow 1:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.140 ms

Loss rate: 0.00%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-09-18 00:43:02

End at: 2017-09-18 00:43:32

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 5.09 Mbit/s

95th percentile per-packet one-way delay: 113.403 ms

Loss rate: 0.06%

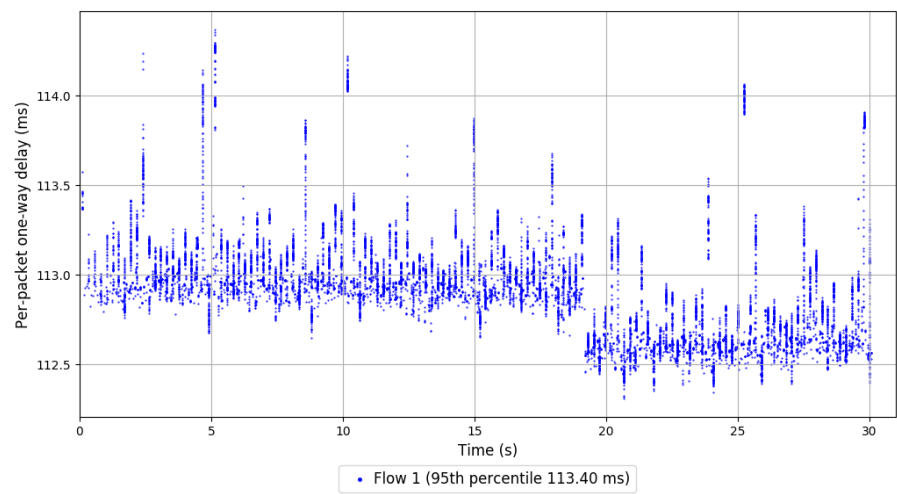
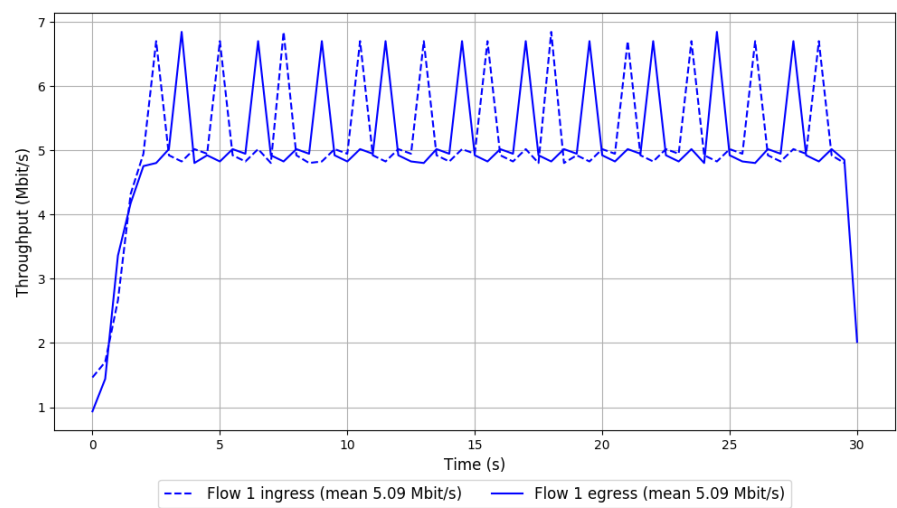
-- Flow 1:

Average throughput: 5.09 Mbit/s

95th percentile per-packet one-way delay: 113.403 ms

Loss rate: 0.06%

Run 10: Report of KohoCC — Data Link



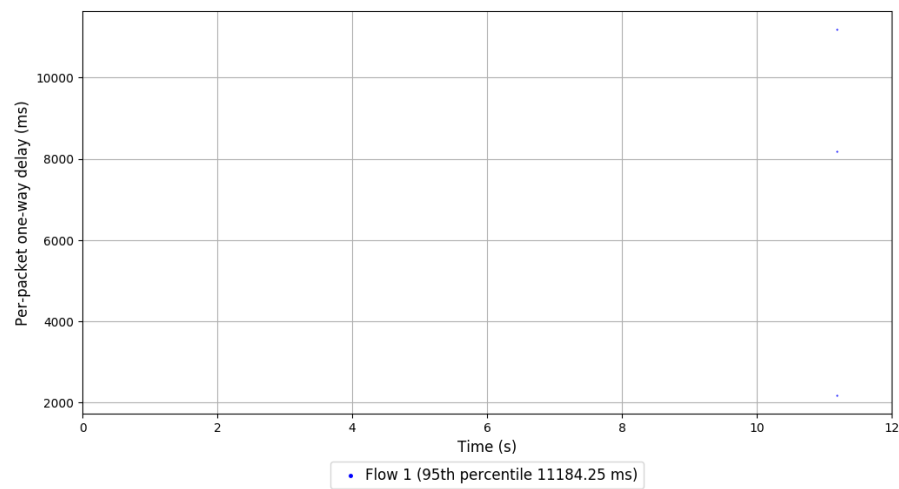
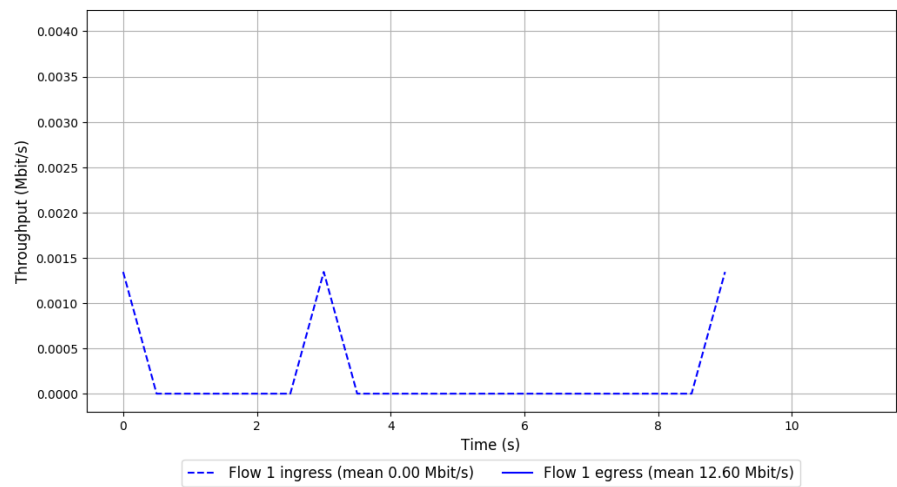
Run 1: Statistics of LEDBAT

Start at: 2017-09-17 22:59:55

End at: 2017-09-17 23:00:25



Run 1: Report of LEDBAT — Data Link

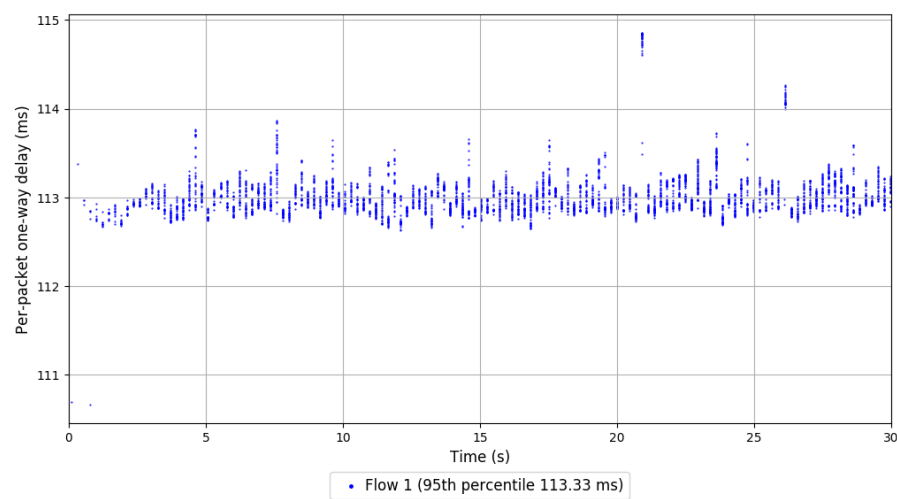
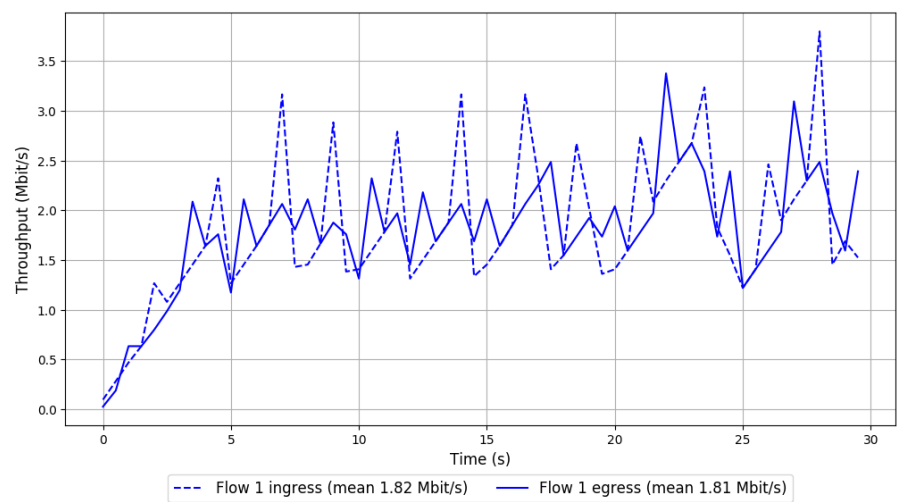


```
Run 2: Statistics of LEDBAT

Start at: 2017-09-17 23:12:13
End at: 2017-09-17 23:12:43

# Below is generated by plot.py at 2017-09-18 02:03:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 113.332 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 113.332 ms
Loss rate: 0.39%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-09-17 23:24:01

End at: 2017-09-17 23:24:31

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 113.387 ms

Loss rate: 0.00%

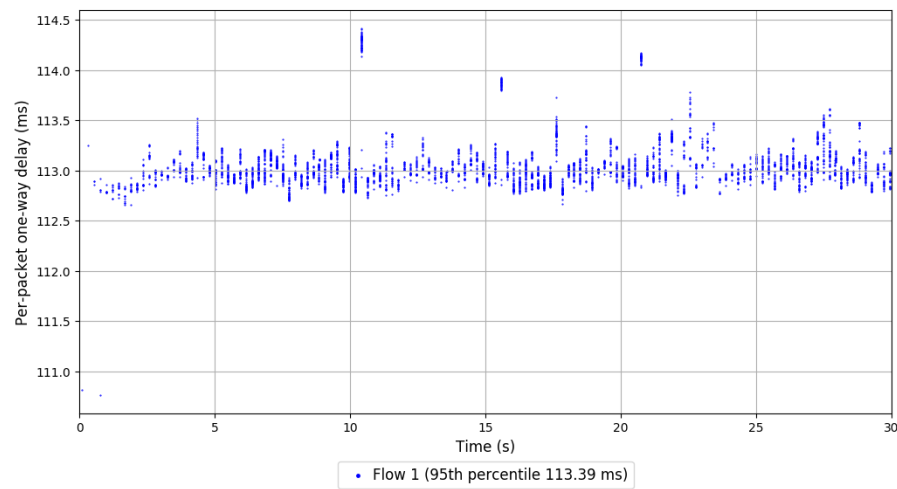
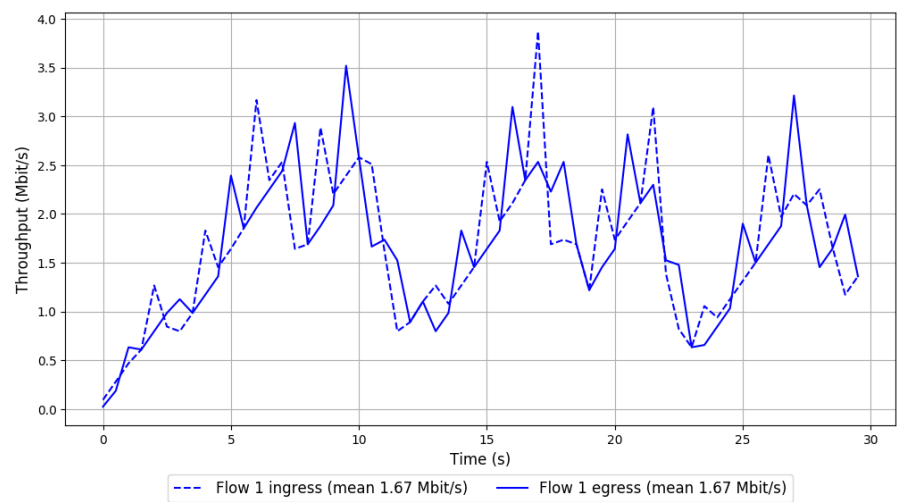
-- Flow 1:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 113.387 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-09-17 23:36:14

End at: 2017-09-17 23:36:44

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 113.389 ms

Loss rate: 0.07%

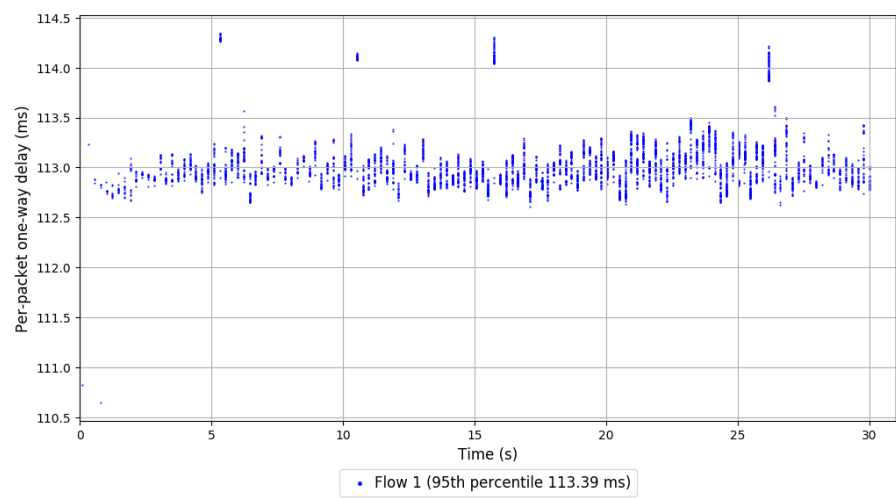
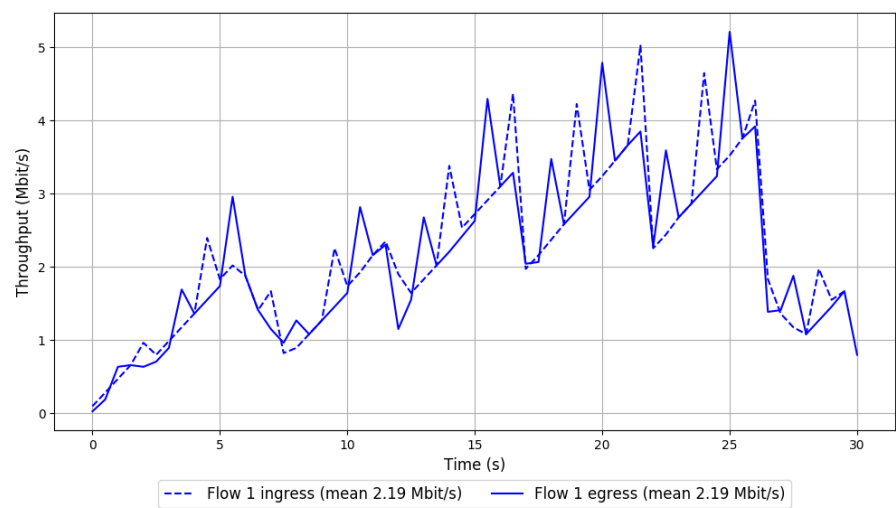
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 113.389 ms

Loss rate: 0.07%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-09-17 23:48:02

End at: 2017-09-17 23:48:32

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.91 Mbit/s

95th percentile per-packet one-way delay: 111.747 ms

Loss rate: 0.74%

-- Flow 1:

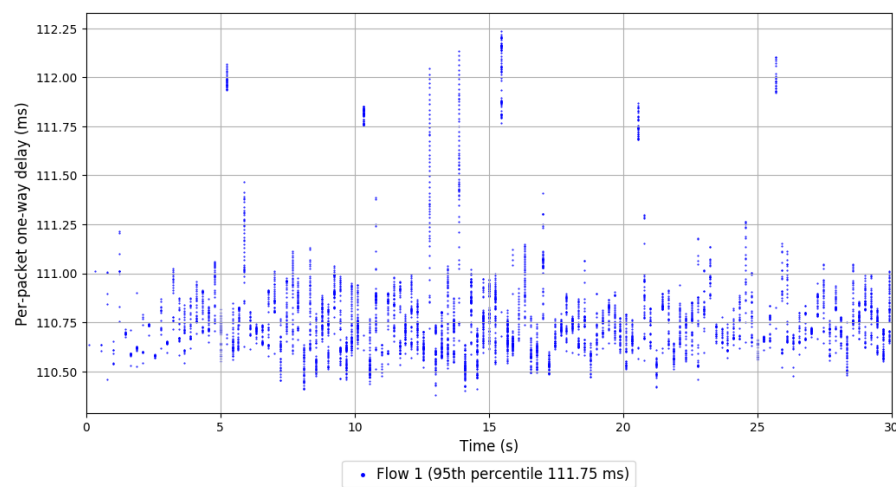
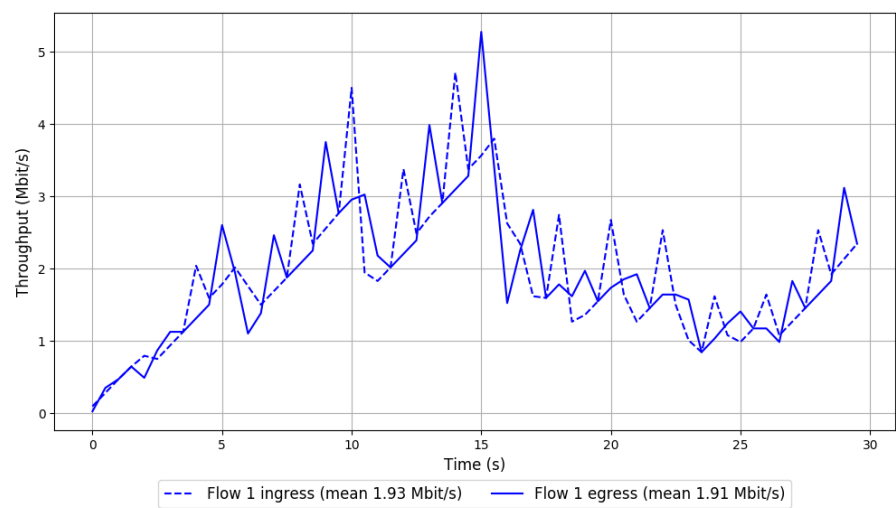
Average throughput: 1.91 Mbit/s

95th percentile per-packet one-way delay: 111.747 ms

Loss rate: 0.74%



Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-09-18 00:00:13

End at: 2017-09-18 00:00:43

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 111.223 ms

Loss rate: 0.09%

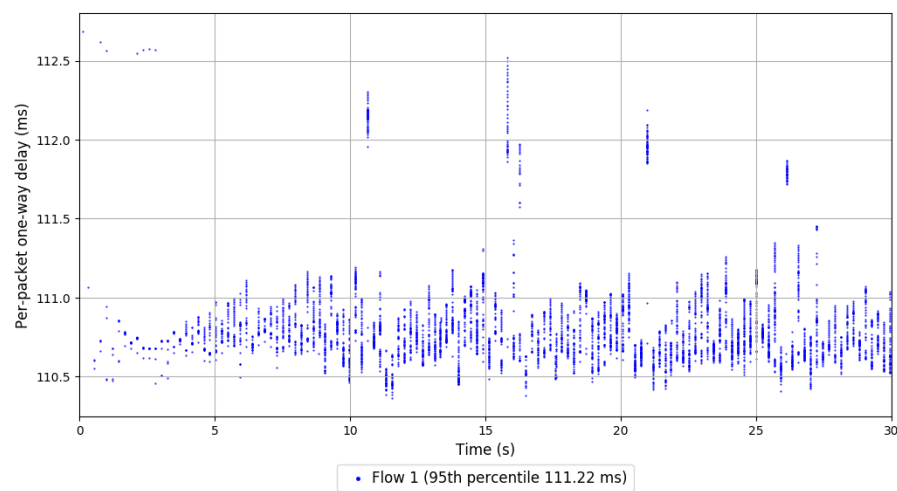
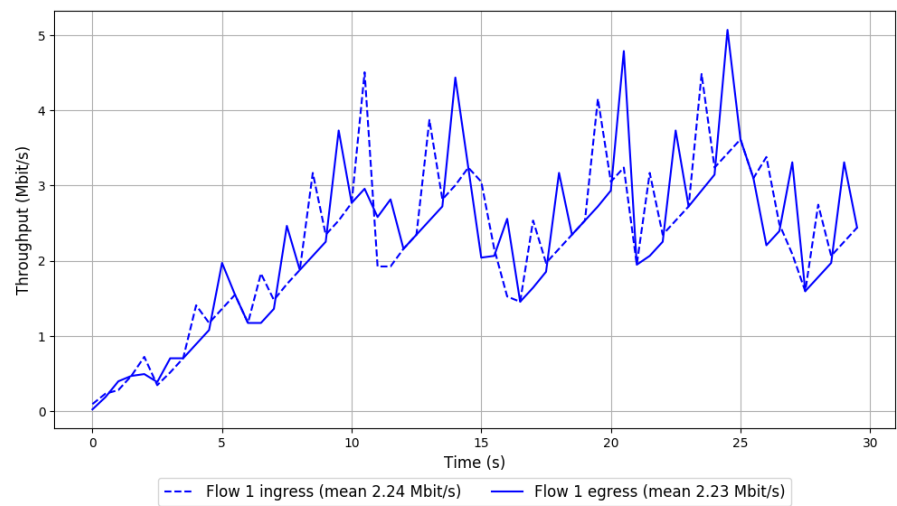
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 111.223 ms

Loss rate: 0.09%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-09-18 00:12:12

End at: 2017-09-18 00:12:42

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 111.099 ms

Loss rate: 0.37%

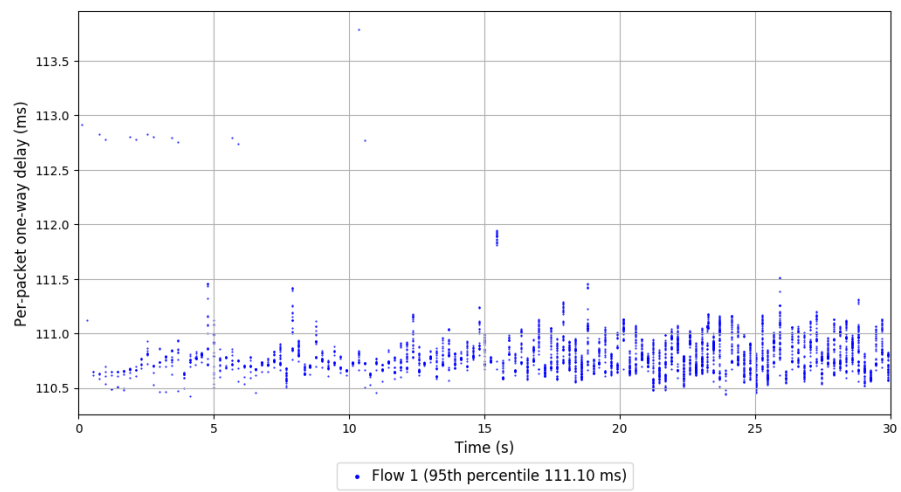
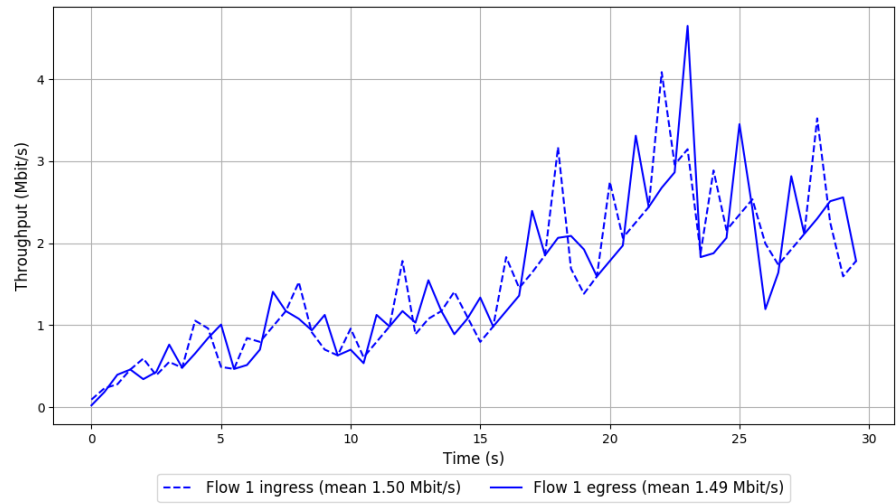
-- Flow 1:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 111.099 ms

Loss rate: 0.37%

## Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-09-18 00:24:02

End at: 2017-09-18 00:24:32

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 113.542 ms

Loss rate: 0.20%

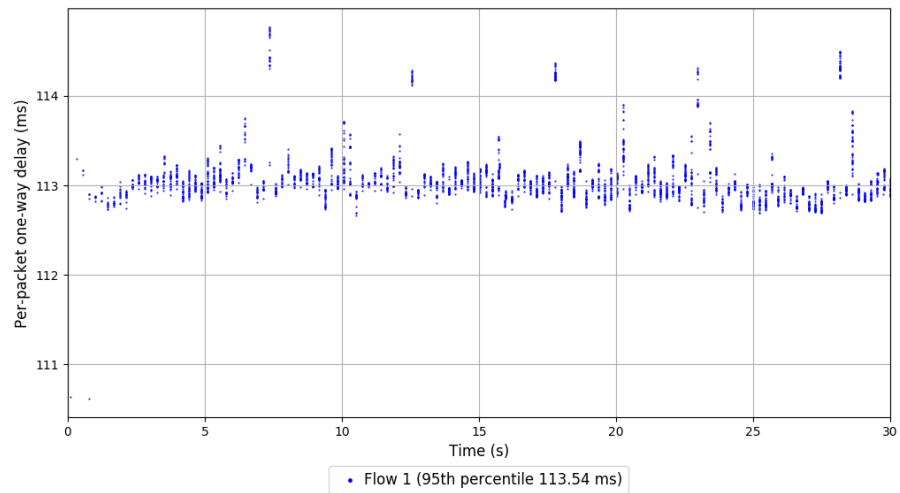
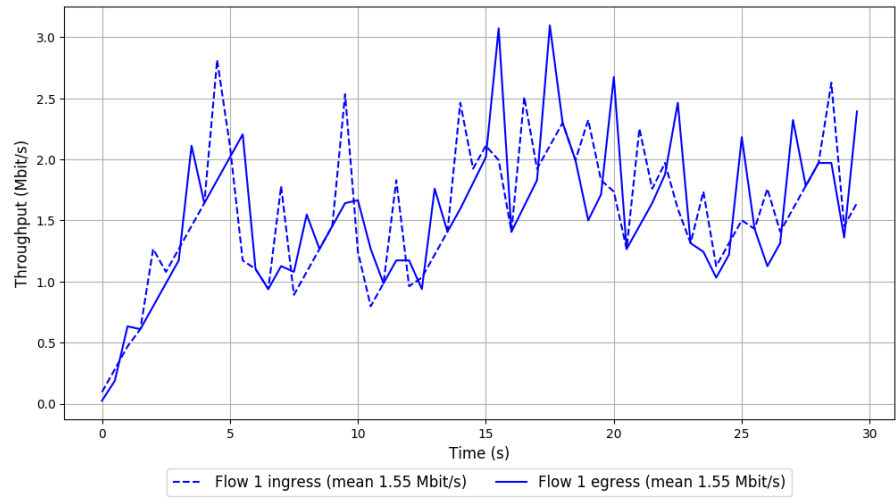
-- Flow 1:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 113.542 ms

Loss rate: 0.20%

## Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-09-18 00:36:16

End at: 2017-09-18 00:36:46

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 113.573 ms

Loss rate: 0.28%

-- Flow 1:

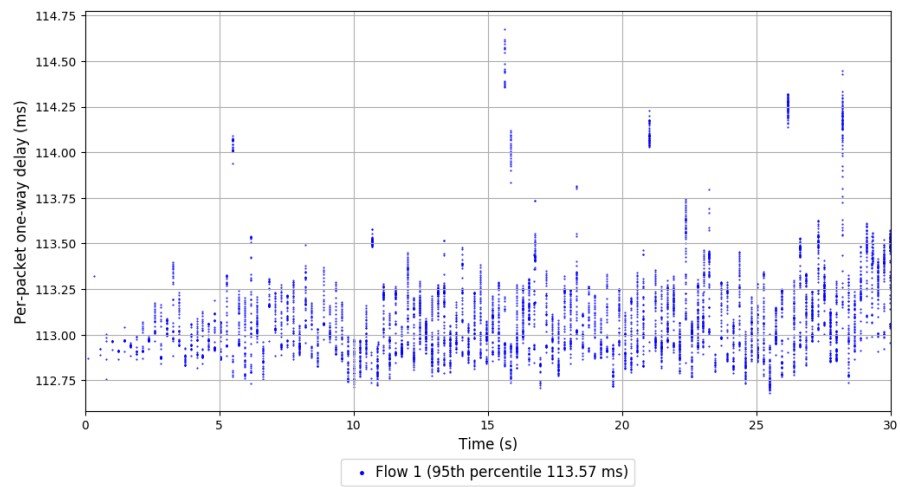
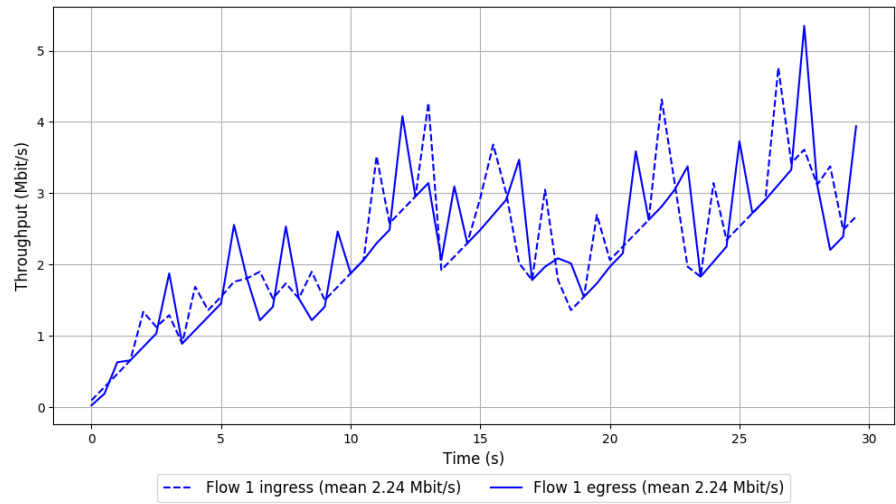
Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 113.573 ms

Loss rate: 0.28%



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



Run 10: Statistics of LEDBAT

Start at: 2017-09-18 00:47:57

End at: 2017-09-18 00:48:27

# Below is generated by plot.py at 2017-09-18 02:03:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 113.198 ms

Loss rate: 0.20%

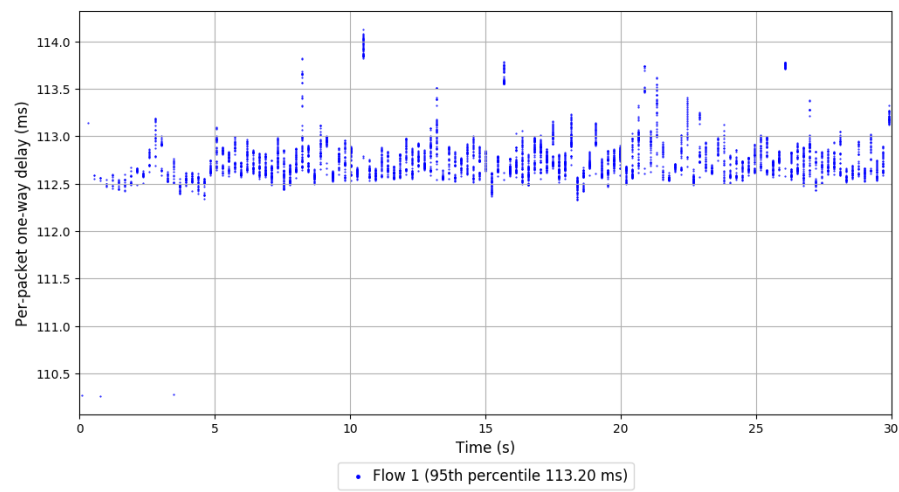
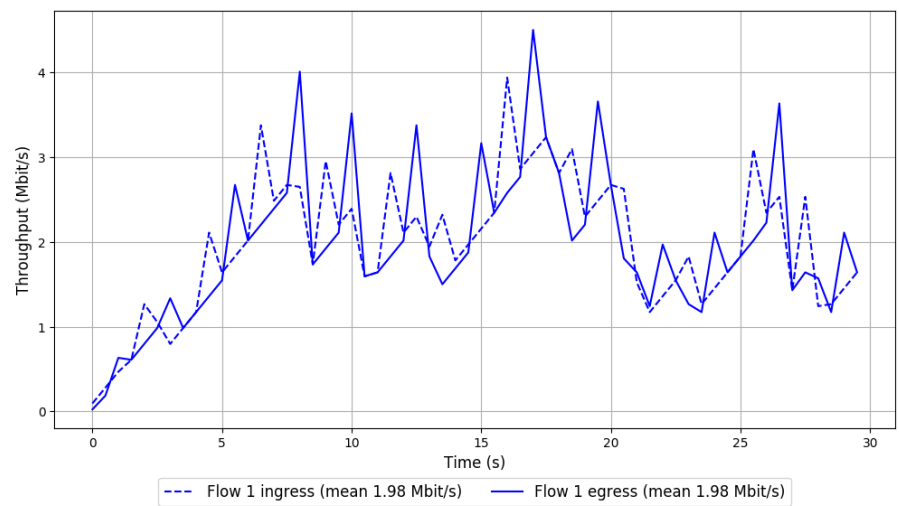
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 113.198 ms

Loss rate: 0.20%

Run 10: Report of LEDBAT — Data Link

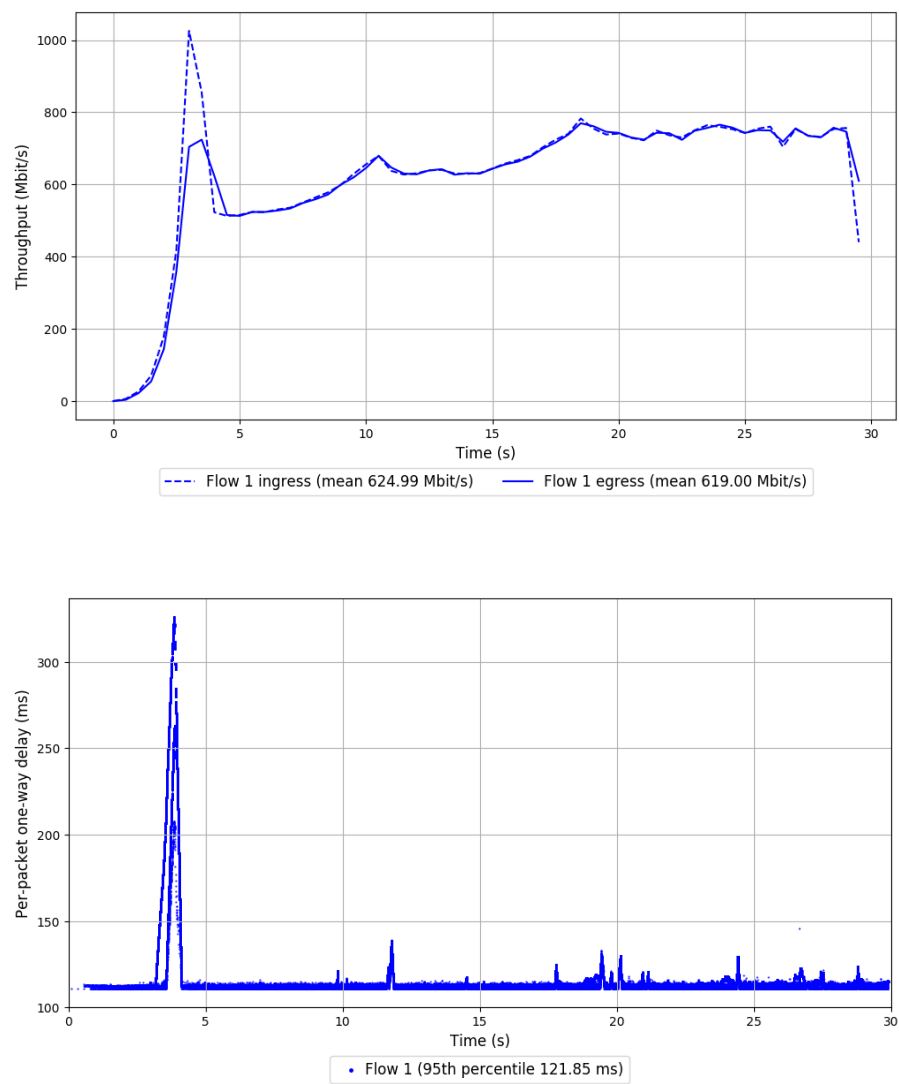


```
Run 1: Statistics of PCC

Start at: 2017-09-17 22:55:40
End at: 2017-09-17 22:56:10

# Below is generated by plot.py at 2017-09-18 02:11:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 619.00 Mbit/s
95th percentile per-packet one-way delay: 121.849 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 619.00 Mbit/s
95th percentile per-packet one-way delay: 121.849 ms
Loss rate: 0.95%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-09-17 23:07:43

End at: 2017-09-17 23:08:13

# Below is generated by plot.py at 2017-09-18 02:12:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 641.74 Mbit/s

95th percentile per-packet one-way delay: 153.699 ms

Loss rate: 0.67%

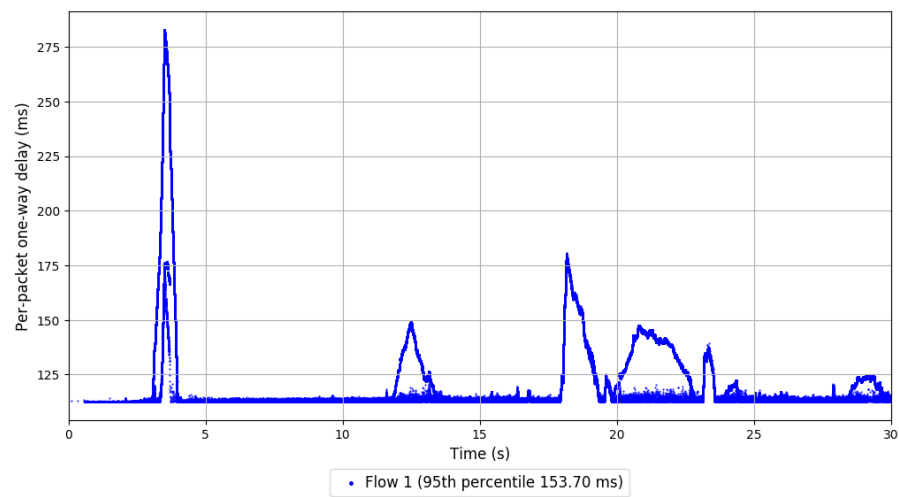
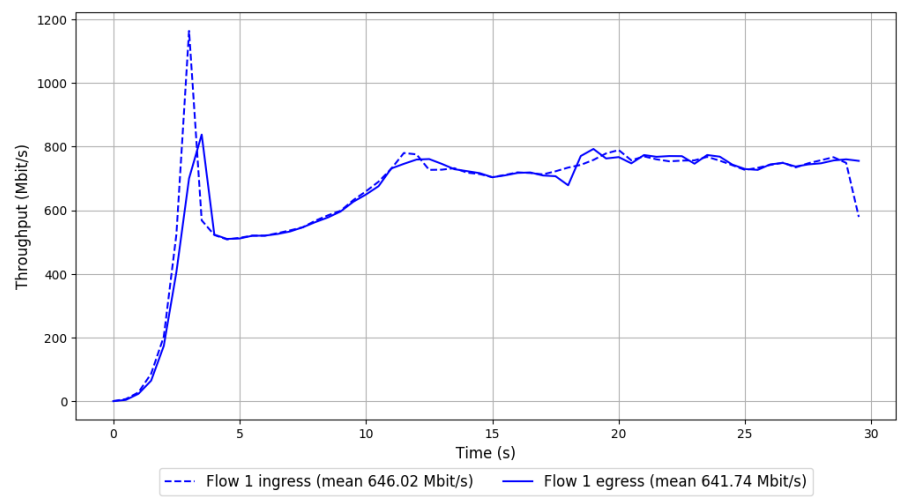
-- Flow 1:

Average throughput: 641.74 Mbit/s

95th percentile per-packet one-way delay: 153.699 ms

Loss rate: 0.67%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-09-17 23:19:43

End at: 2017-09-17 23:20:13

# Below is generated by plot.py at 2017-09-18 02:12:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 623.41 Mbit/s

95th percentile per-packet one-way delay: 211.180 ms

Loss rate: 1.87%

-- Flow 1:

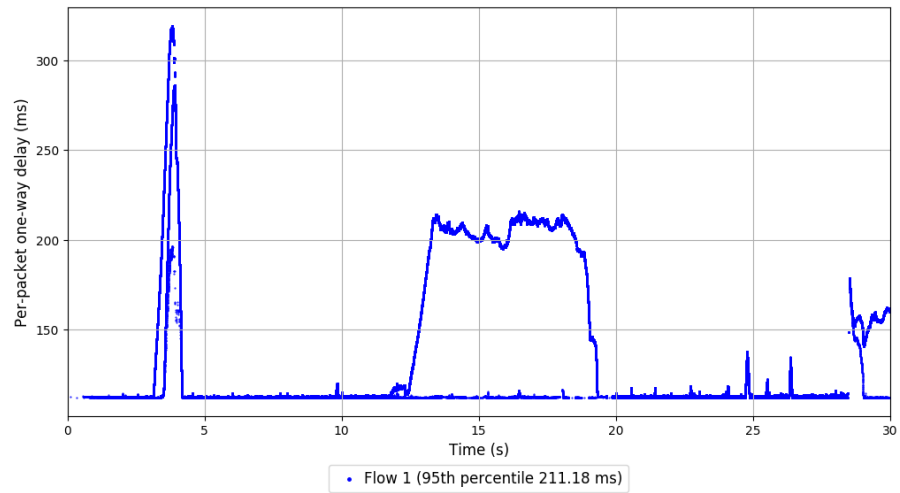
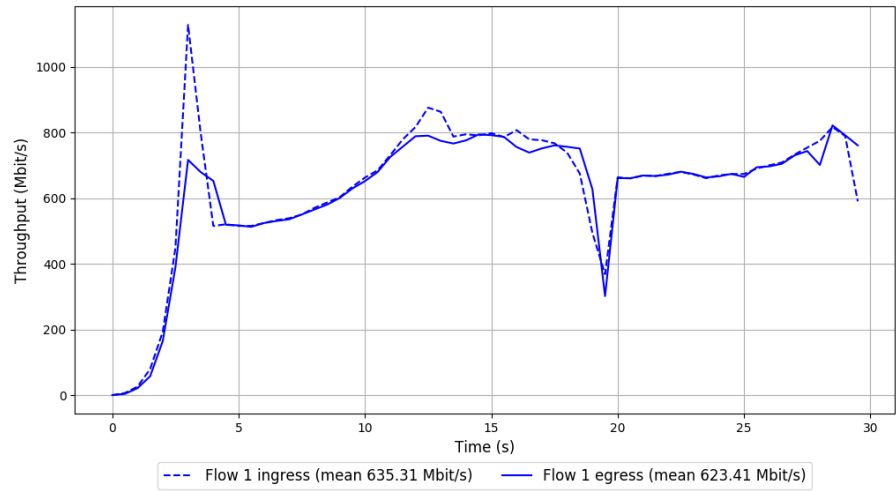
Average throughput: 623.41 Mbit/s

95th percentile per-packet one-way delay: 211.180 ms

Loss rate: 1.87%



### Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-09-17 23:31:49

End at: 2017-09-17 23:32:19

# Below is generated by plot.py at 2017-09-18 02:12:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 641.03 Mbit/s

95th percentile per-packet one-way delay: 125.556 ms

Loss rate: 0.62%

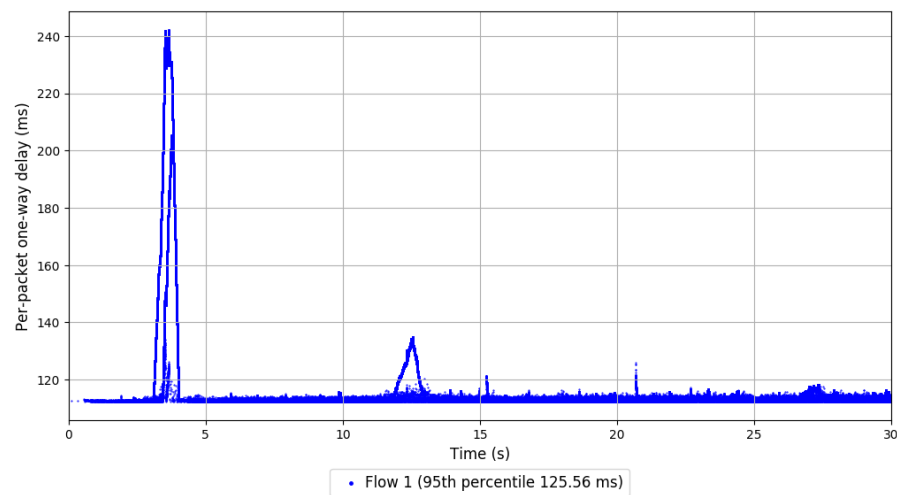
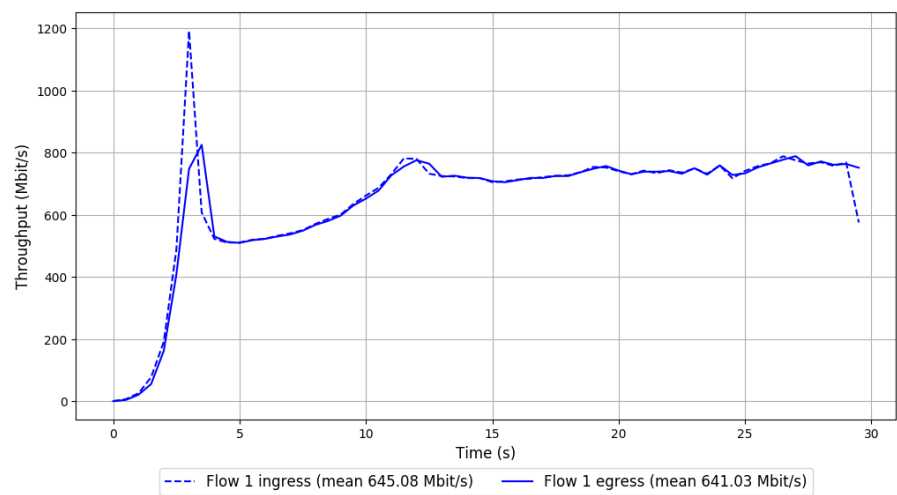
-- Flow 1:

Average throughput: 641.03 Mbit/s

95th percentile per-packet one-way delay: 125.556 ms

Loss rate: 0.62%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-09-17 23:43:37

End at: 2017-09-17 23:44:07

# Below is generated by plot.py at 2017-09-18 02:12:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 625.92 Mbit/s

95th percentile per-packet one-way delay: 141.146 ms

Loss rate: 0.63%

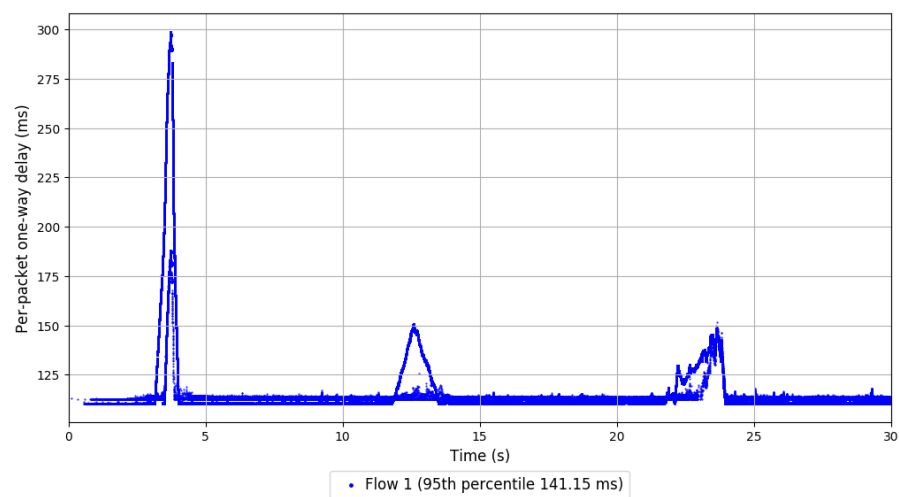
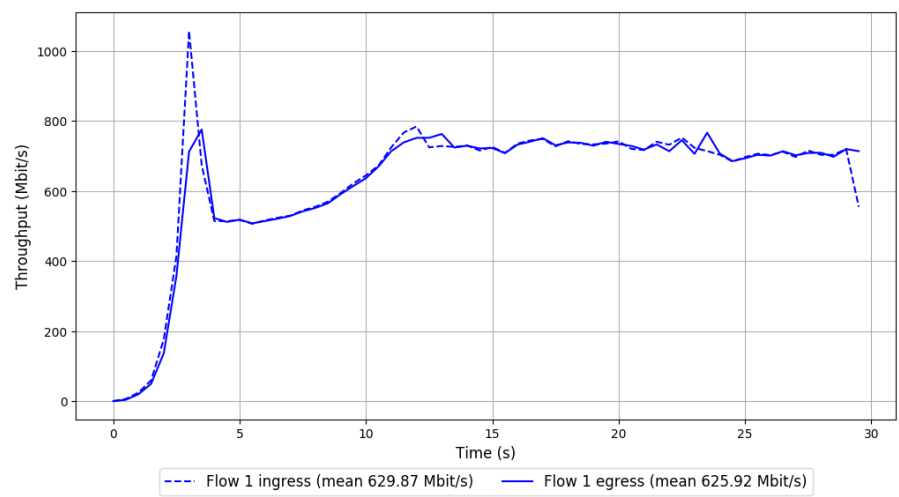
-- Flow 1:

Average throughput: 625.92 Mbit/s

95th percentile per-packet one-way delay: 141.146 ms

Loss rate: 0.63%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-09-17 23:55:50

End at: 2017-09-17 23:56:20

# Below is generated by plot.py at 2017-09-18 02:12:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 636.41 Mbit/s

95th percentile per-packet one-way delay: 138.304 ms

Loss rate: 0.79%

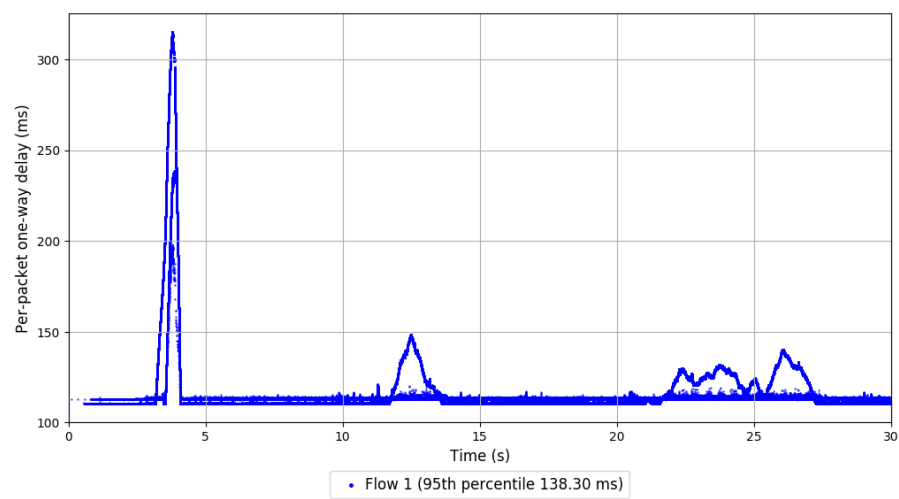
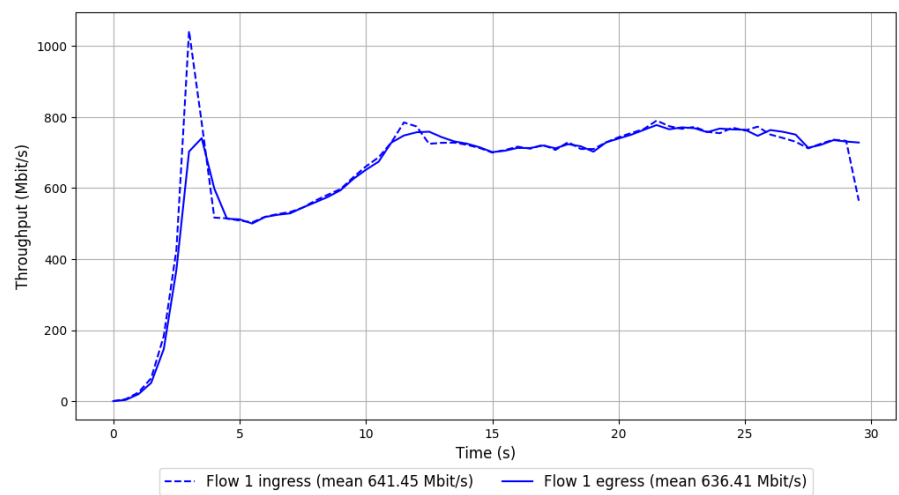
-- Flow 1:

Average throughput: 636.41 Mbit/s

95th percentile per-packet one-way delay: 138.304 ms

Loss rate: 0.79%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-09-18 00:07:44

End at: 2017-09-18 00:08:14

# Below is generated by plot.py at 2017-09-18 02:14:37

# Datalink statistics

-- Total of 1 flow:

Average throughput: 636.01 Mbit/s

95th percentile per-packet one-way delay: 206.151 ms

Loss rate: 0.86%

-- Flow 1:

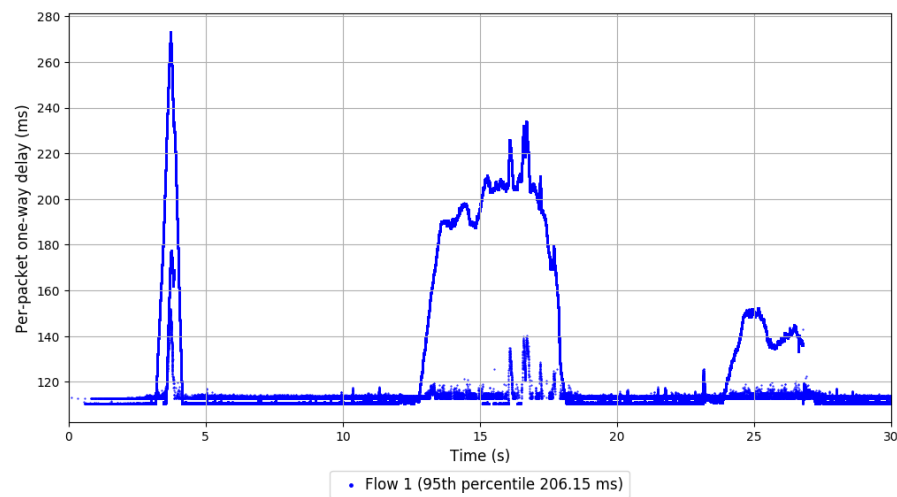
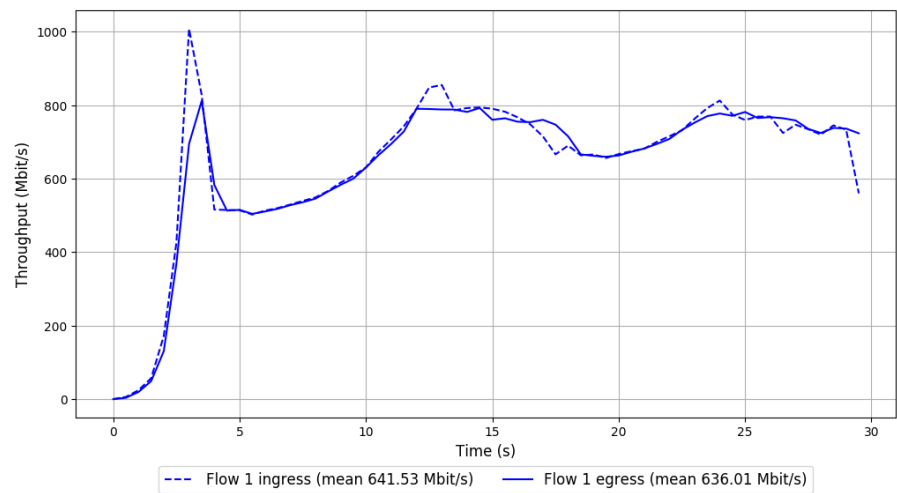
Average throughput: 636.01 Mbit/s

95th percentile per-packet one-way delay: 206.151 ms

Loss rate: 0.86%



Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-09-18 00:19:41

End at: 2017-09-18 00:20:11

# Below is generated by plot.py at 2017-09-18 02:15:09

# Datalink statistics

-- Total of 1 flow:

Average throughput: 645.35 Mbit/s

95th percentile per-packet one-way delay: 148.286 ms

Loss rate: 0.93%

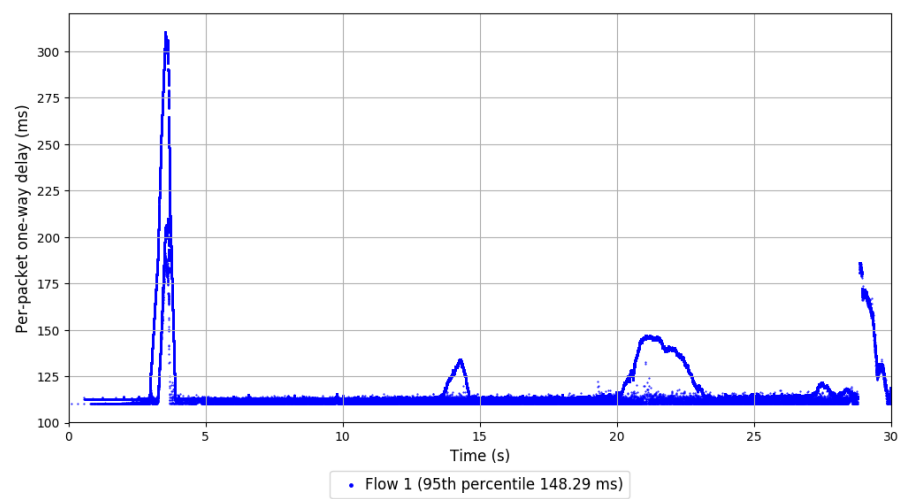
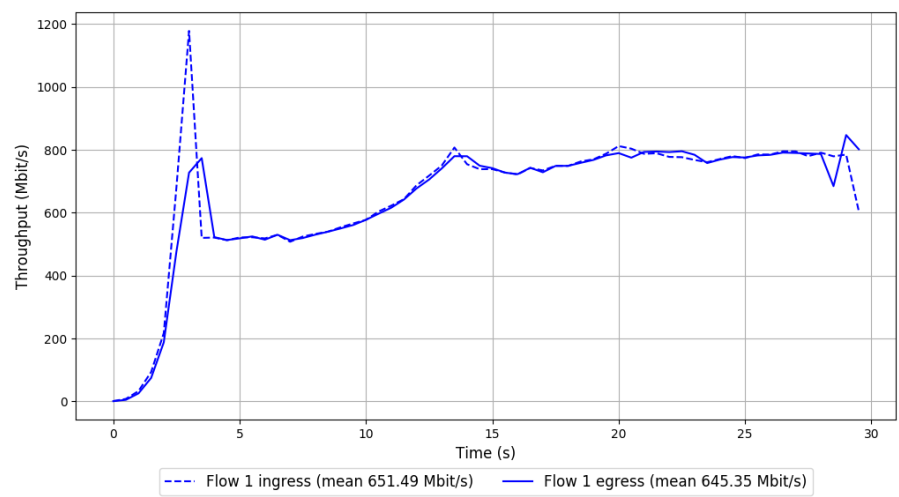
-- Flow 1:

Average throughput: 645.35 Mbit/s

95th percentile per-packet one-way delay: 148.286 ms

Loss rate: 0.93%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-09-18 00:31:51

End at: 2017-09-18 00:32:21

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 640.46 Mbit/s

95th percentile per-packet one-way delay: 138.992 ms

Loss rate: 0.58%

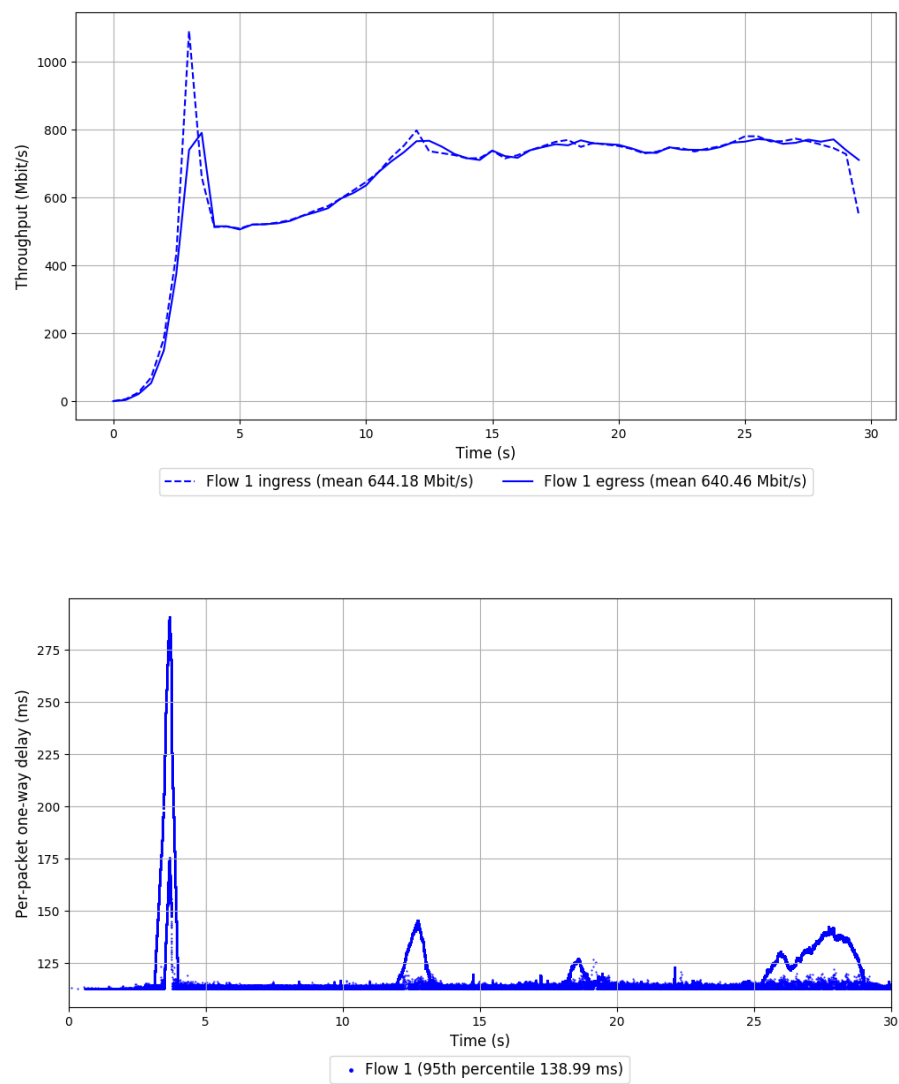
-- Flow 1:

Average throughput: 640.46 Mbit/s

95th percentile per-packet one-way delay: 138.992 ms

Loss rate: 0.58%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-09-18 00:43:44

End at: 2017-09-18 00:44:14

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 500.46 Mbit/s

95th percentile per-packet one-way delay: 157.591 ms

Loss rate: 1.69%

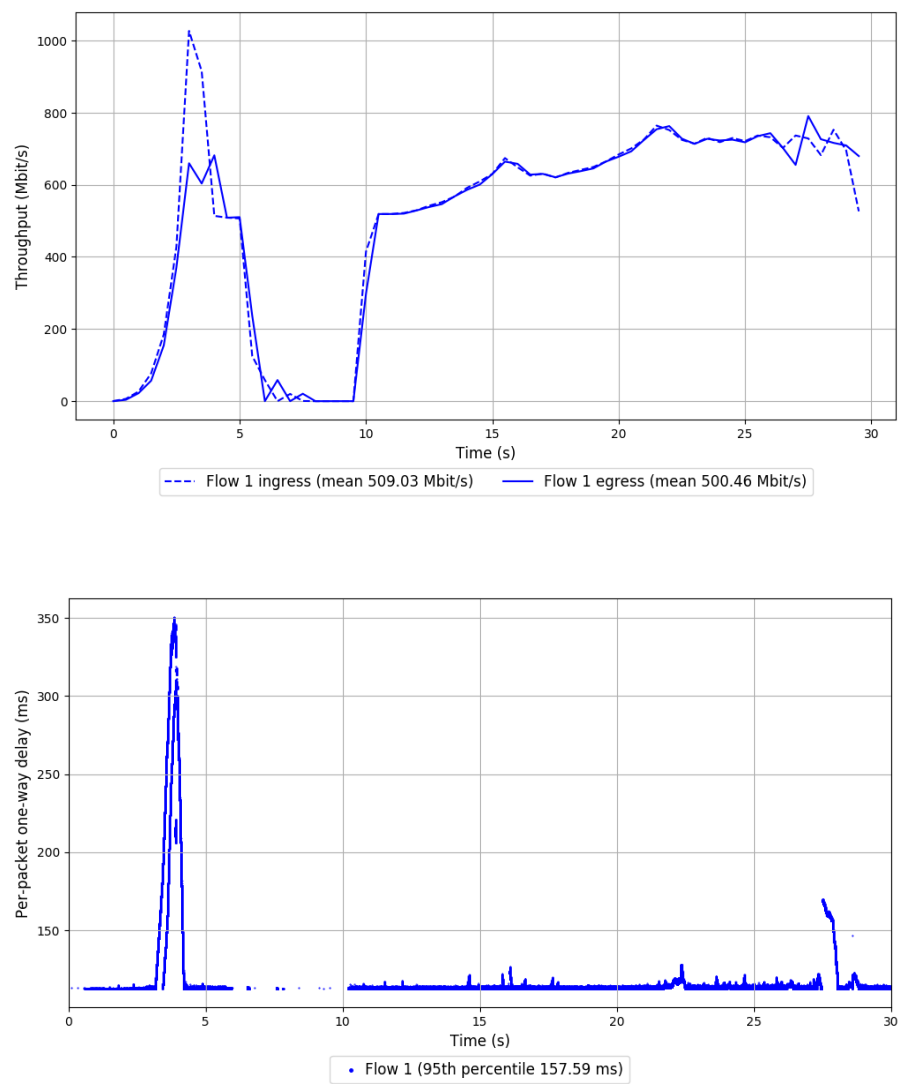
-- Flow 1:

Average throughput: 500.46 Mbit/s

95th percentile per-packet one-way delay: 157.591 ms

Loss rate: 1.69%

Run 10: Report of PCC — Data Link



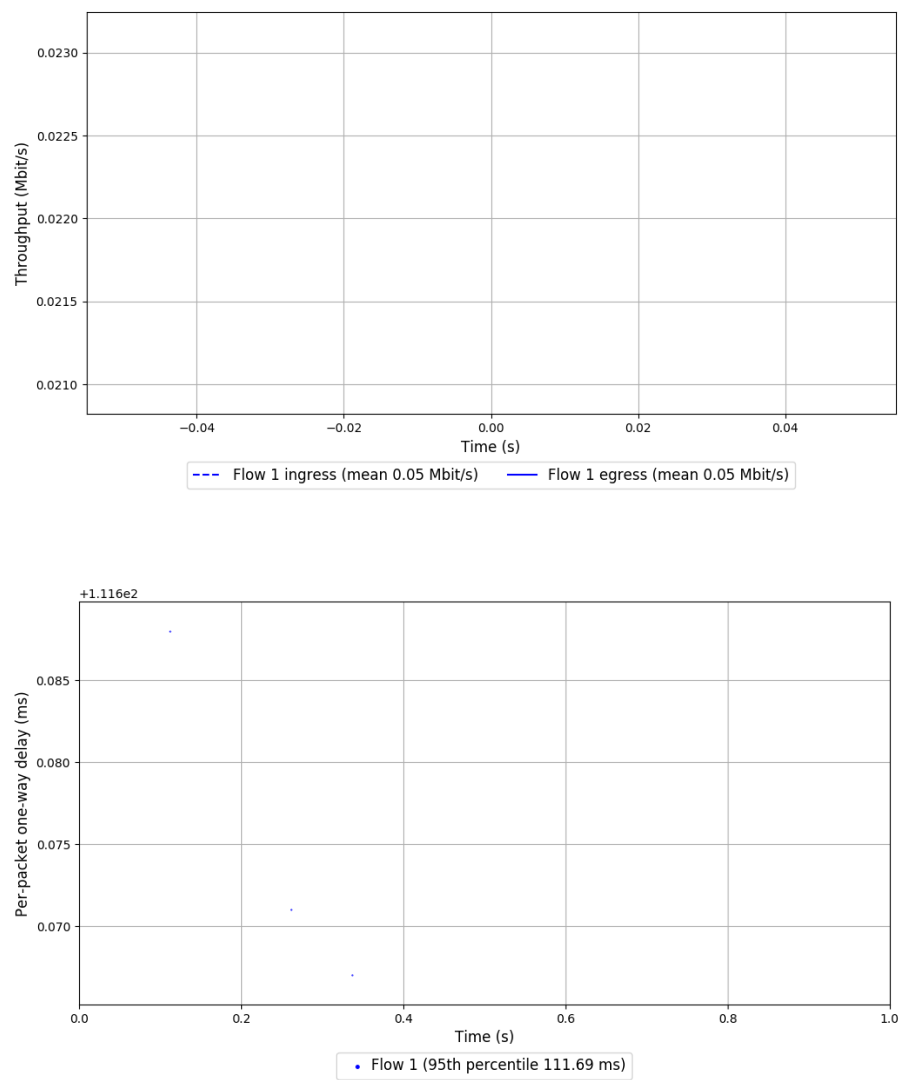
Run 1: Statistics of QUIC Cubic

Start at: 2017-09-17 22:58:22

End at: 2017-09-17 22:58:52



Run 1: Report of QUIC Cubic — Data Link

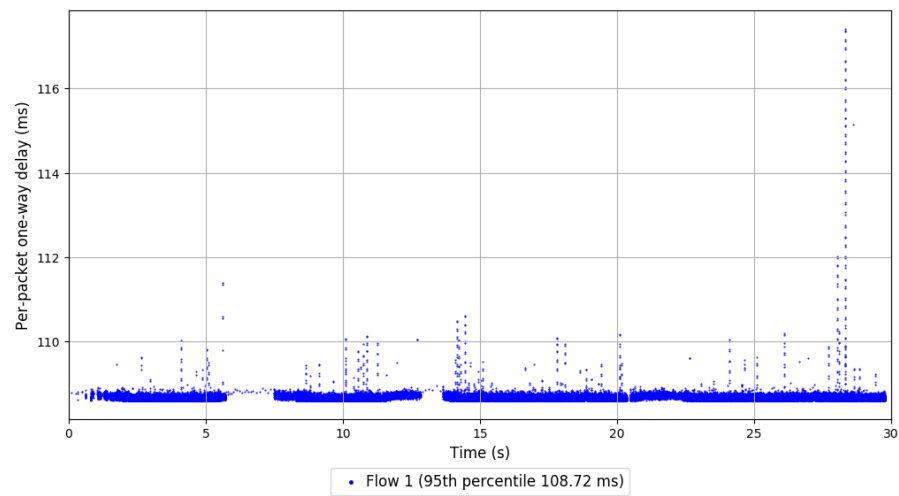
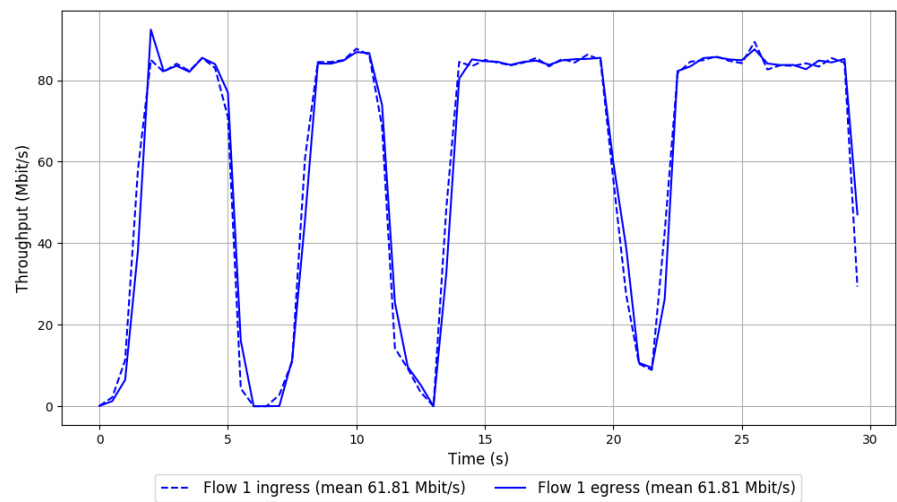


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-09-17 23:10:34
End at: 2017-09-17 23:11:04

# Below is generated by plot.py at 2017-09-18 02:22:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.81 Mbit/s
95th percentile per-packet one-way delay: 108.725 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.81 Mbit/s
95th percentile per-packet one-way delay: 108.725 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-09-17 23:22:23

End at: 2017-09-17 23:22:53

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 67.09 Mbit/s

95th percentile per-packet one-way delay: 112.811 ms

Loss rate: 0.00%

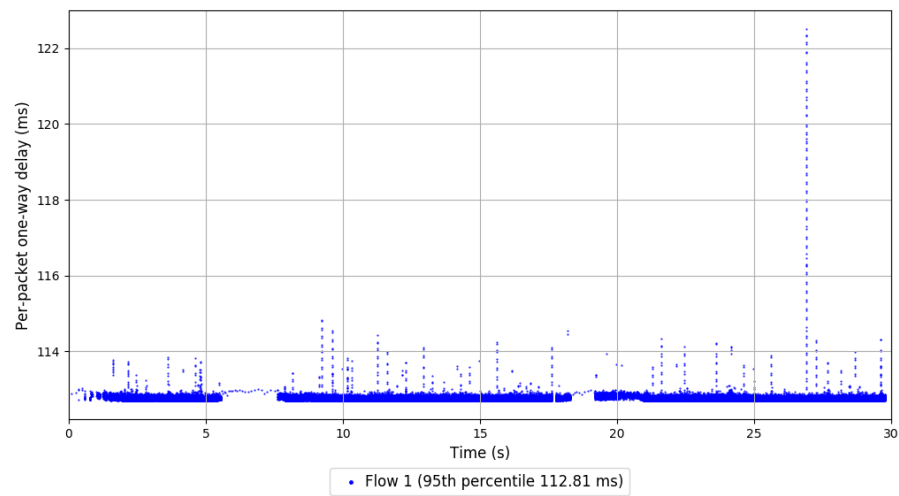
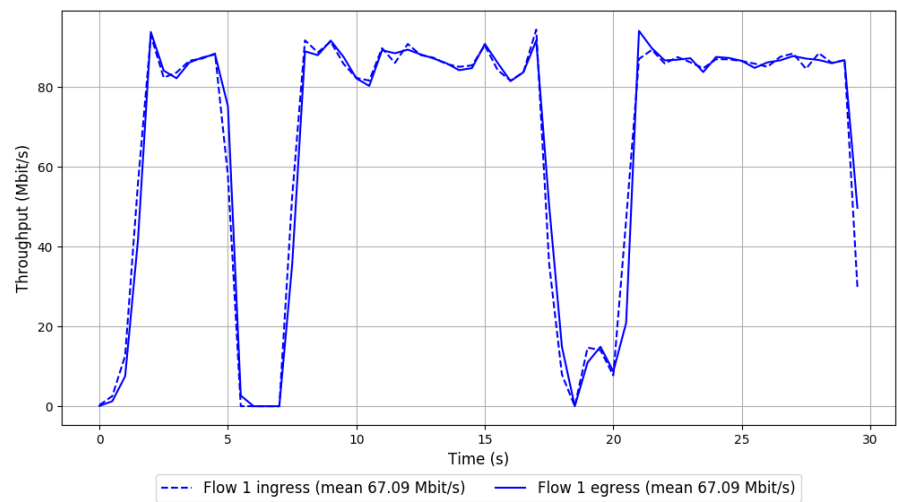
-- Flow 1:

Average throughput: 67.09 Mbit/s

95th percentile per-packet one-way delay: 112.811 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-09-17 23:34:35

End at: 2017-09-17 23:35:05

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 69.28 Mbit/s

95th percentile per-packet one-way delay: 112.276 ms

Loss rate: 0.00%

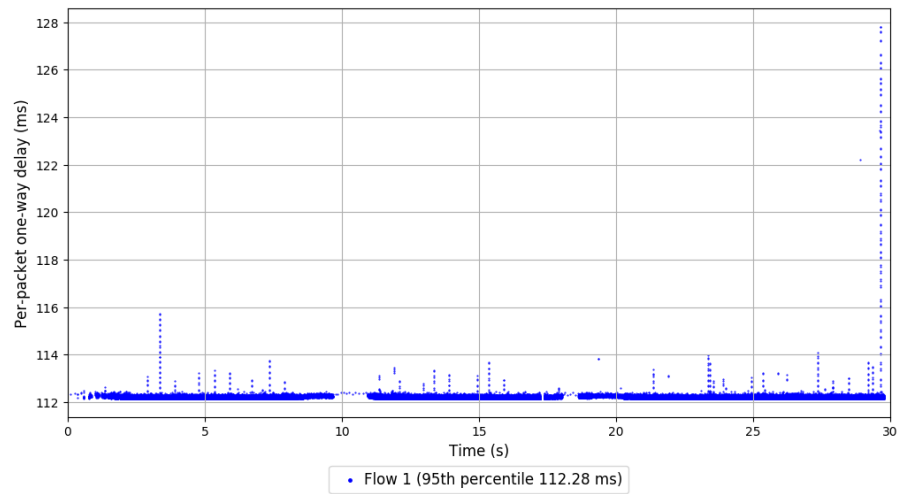
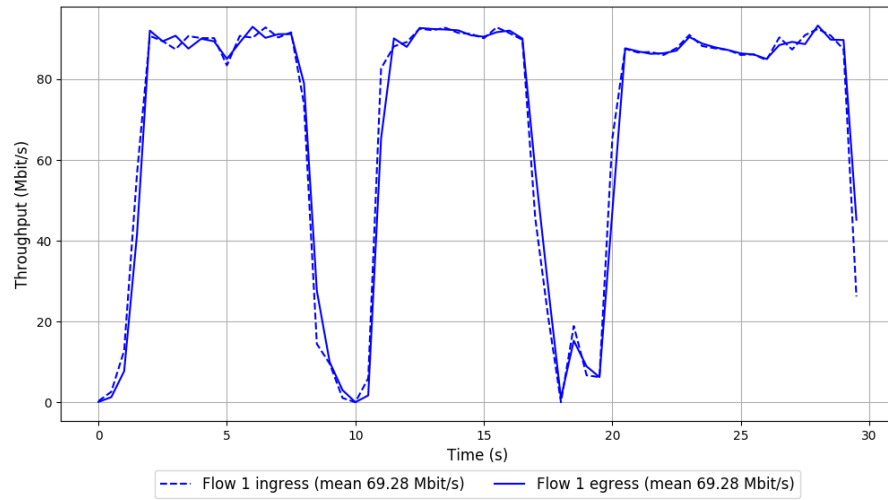
-- Flow 1:

Average throughput: 69.28 Mbit/s

95th percentile per-packet one-way delay: 112.276 ms

Loss rate: 0.00%

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



Run 5: Statistics of QUIC Cubic

Start at: 2017-09-17 23:46:23

End at: 2017-09-17 23:46:53

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 66.90 Mbit/s

95th percentile per-packet one-way delay: 110.498 ms

Loss rate: 0.00%

-- Flow 1:

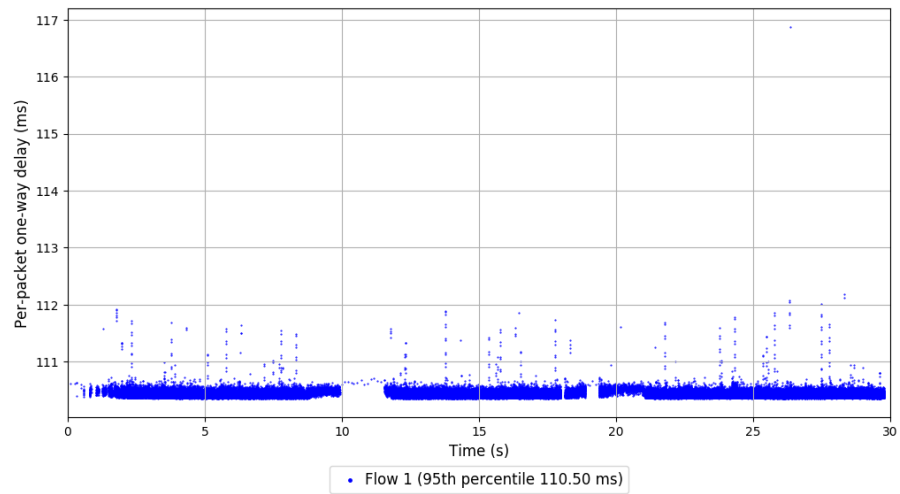
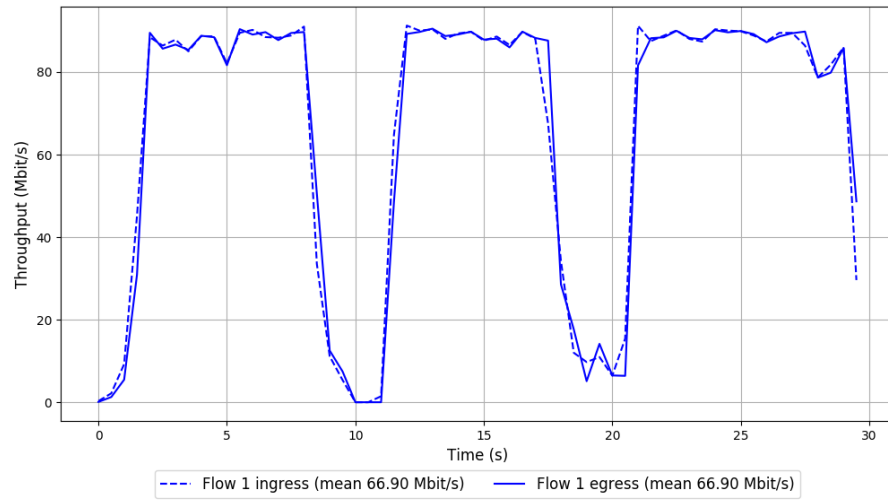
Average throughput: 66.90 Mbit/s

95th percentile per-packet one-way delay: 110.498 ms

Loss rate: 0.00%



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



Run 6: Statistics of QUIC Cubic

Start at: 2017-09-17 23:58:33

End at: 2017-09-17 23:59:03

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 74.44 Mbit/s

95th percentile per-packet one-way delay: 110.825 ms

Loss rate: 0.00%

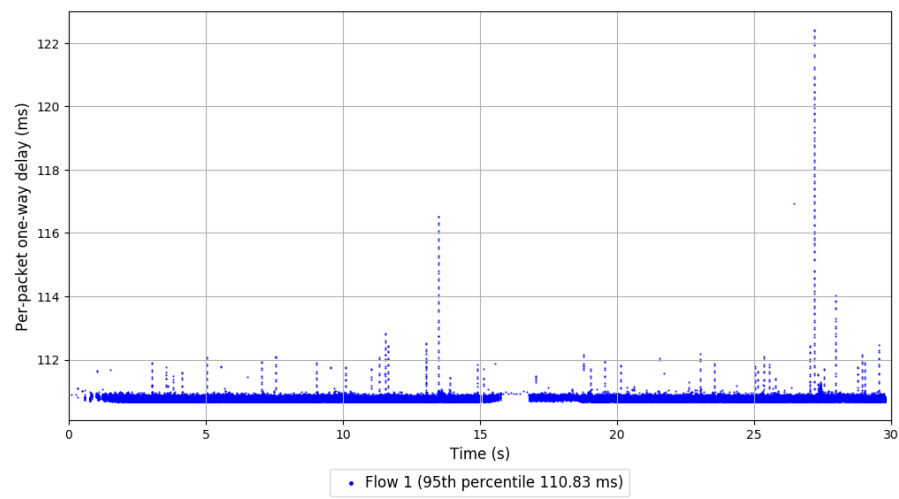
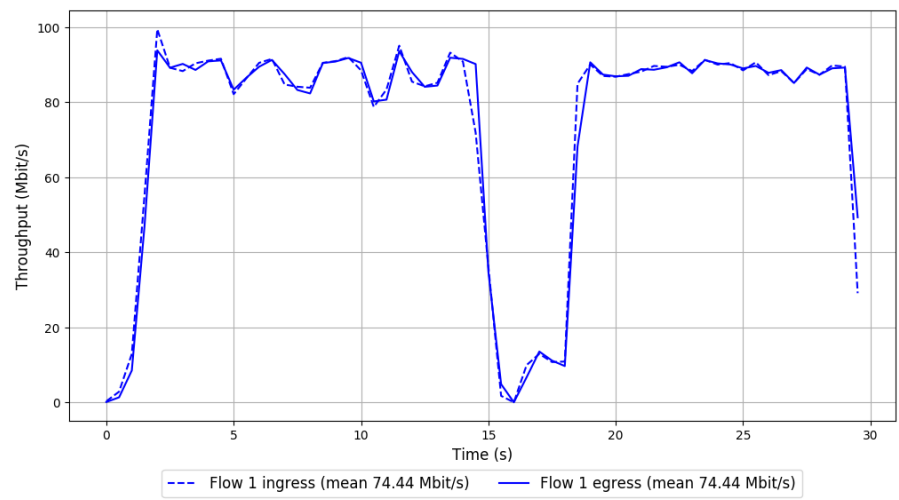
-- Flow 1:

Average throughput: 74.44 Mbit/s

95th percentile per-packet one-way delay: 110.825 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-09-18 00:10:34

End at: 2017-09-18 00:11:04

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 49.52 Mbit/s

95th percentile per-packet one-way delay: 111.764 ms

Loss rate: 0.00%

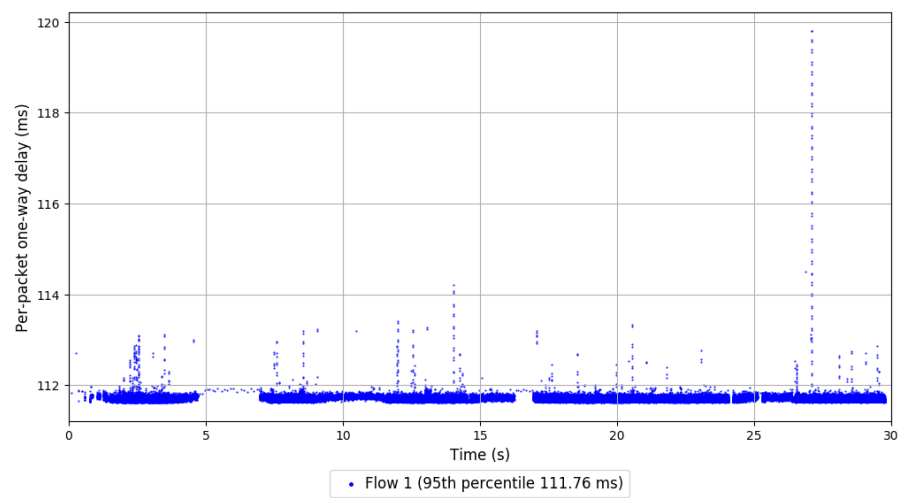
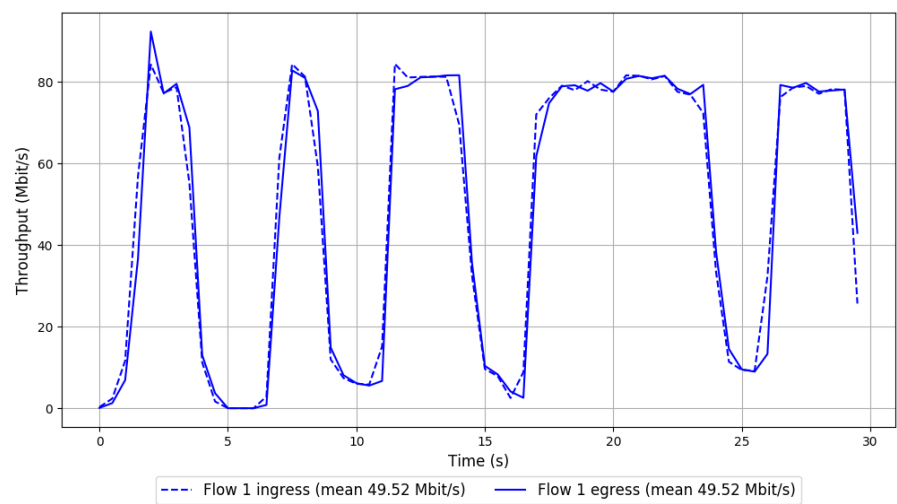
-- Flow 1:

Average throughput: 49.52 Mbit/s

95th percentile per-packet one-way delay: 111.764 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-09-18 00:22:23

End at: 2017-09-18 00:22:53

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 61.09 Mbit/s

95th percentile per-packet one-way delay: 110.499 ms

Loss rate: 0.00%

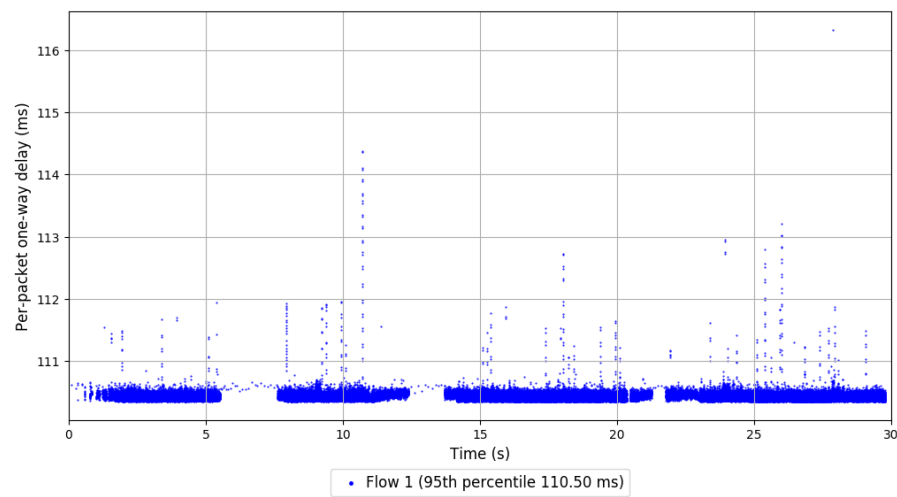
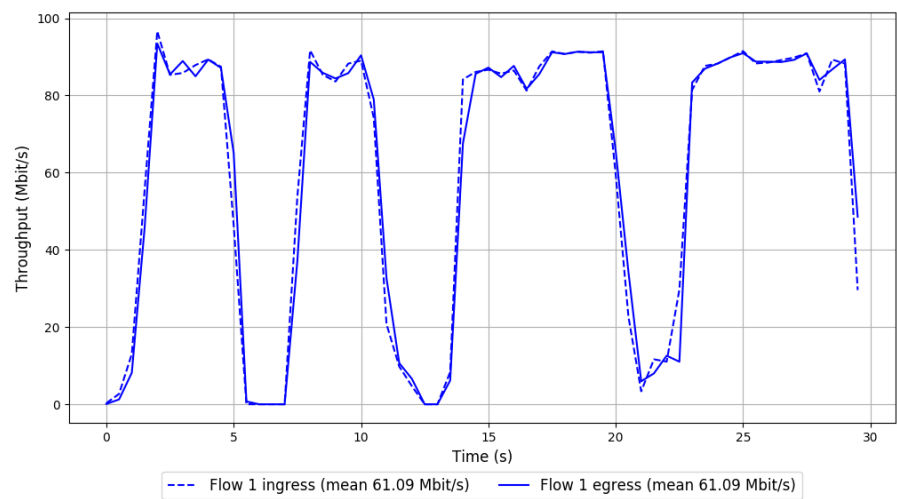
-- Flow 1:

Average throughput: 61.09 Mbit/s

95th percentile per-packet one-way delay: 110.499 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-09-18 00:34:37

End at: 2017-09-18 00:35:07

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 68.98 Mbit/s

95th percentile per-packet one-way delay: 112.665 ms

Loss rate: 0.00%

-- Flow 1:

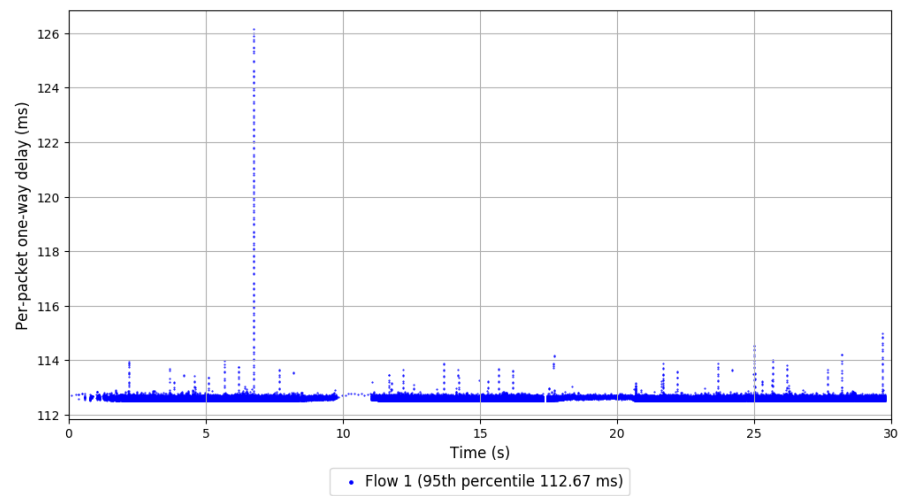
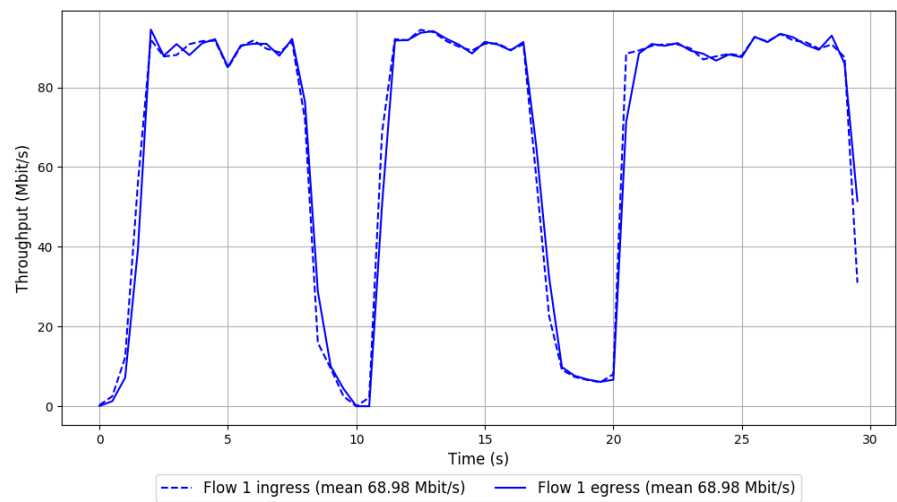
Average throughput: 68.98 Mbit/s

95th percentile per-packet one-way delay: 112.665 ms

Loss rate: 0.00%



Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-09-18 00:46:19

End at: 2017-09-18 00:46:49

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 64.06 Mbit/s

95th percentile per-packet one-way delay: 112.616 ms

Loss rate: 0.01%

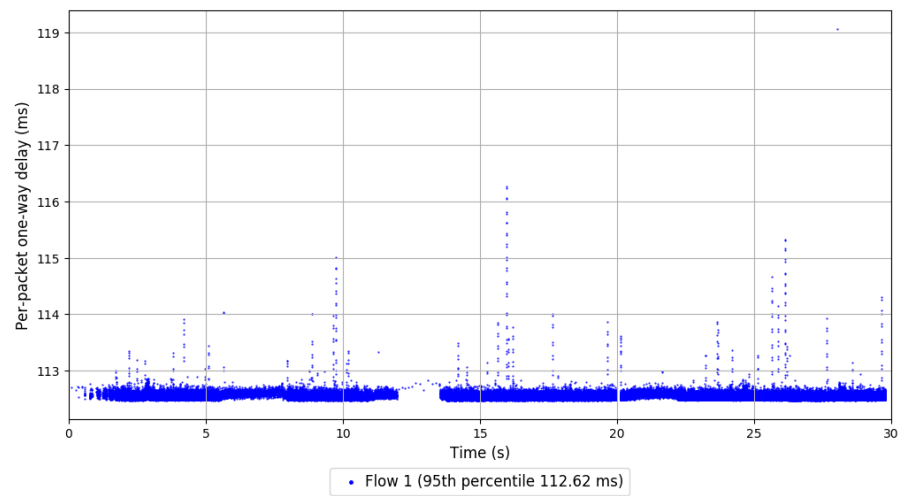
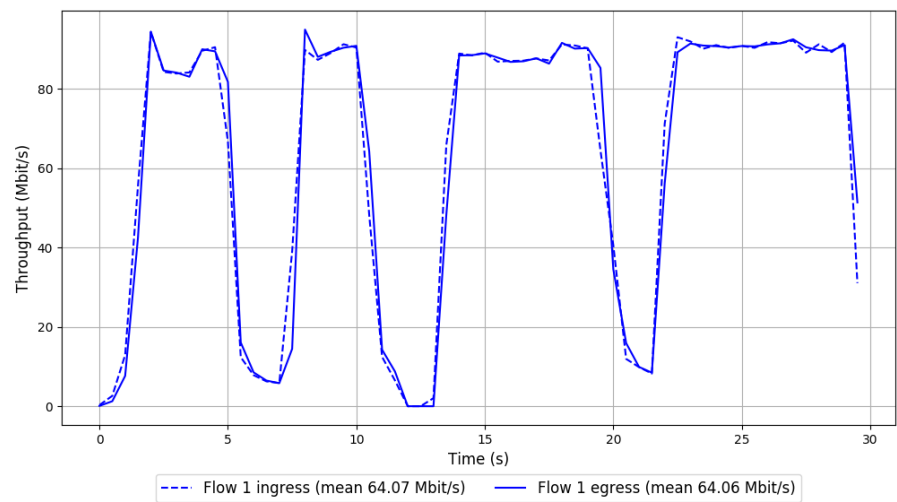
-- Flow 1:

Average throughput: 64.06 Mbit/s

95th percentile per-packet one-way delay: 112.616 ms

Loss rate: 0.01%

Run 10: Report of QUIC Cubic — Data Link

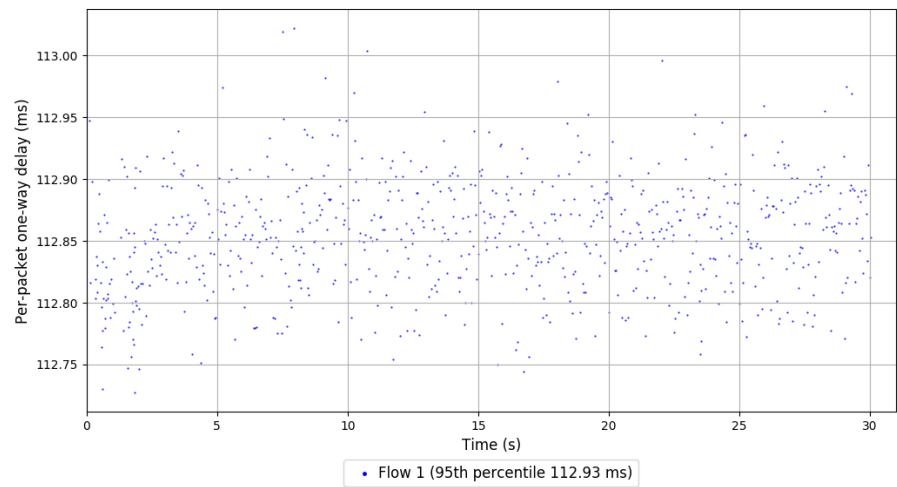
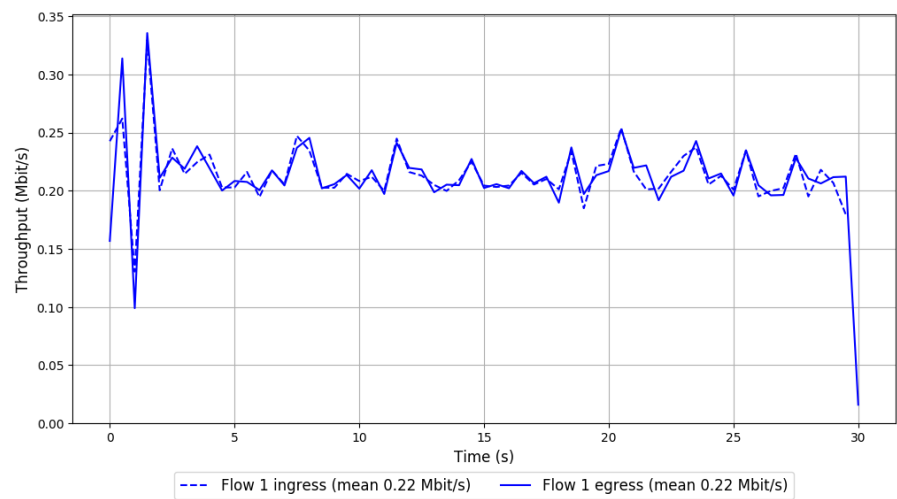


```
Run 1: Statistics of SCReAM

Start at: 2017-09-17 22:52:53
End at: 2017-09-17 22:53:23

# Below is generated by plot.py at 2017-09-18 02:22:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.927 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.927 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

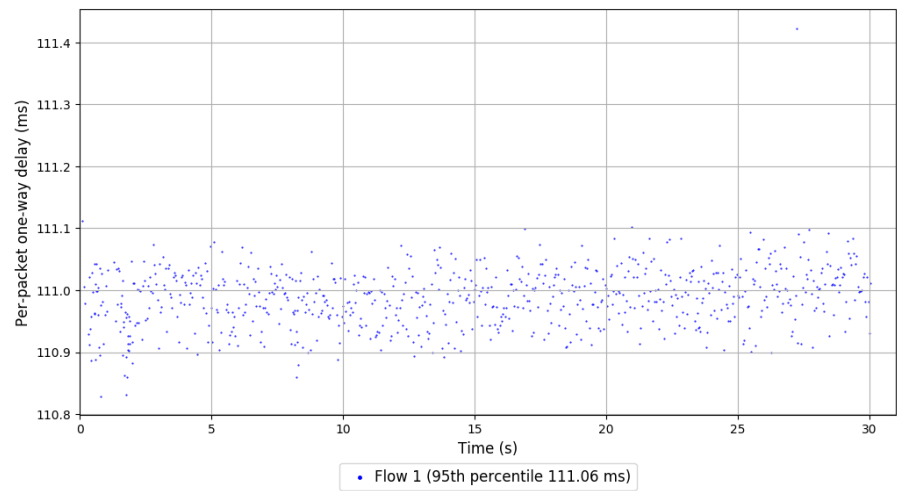
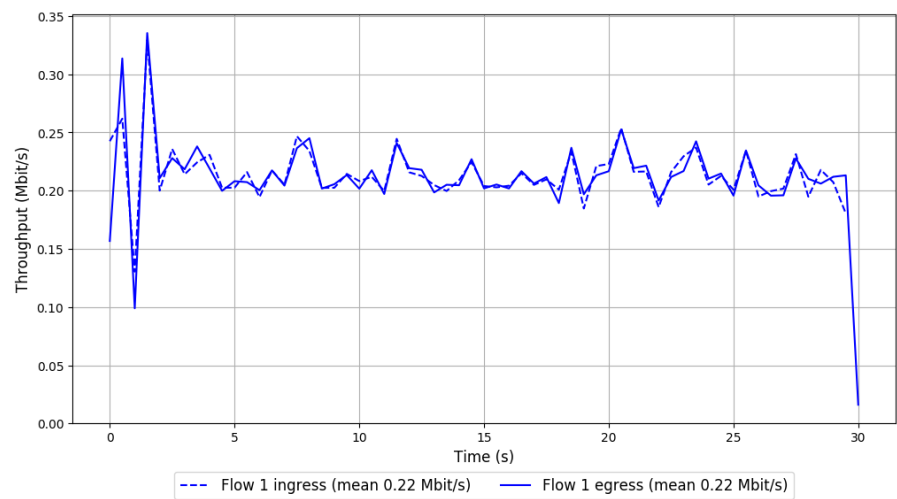


```
Run 2: Statistics of SCReAM

Start at: 2017-09-17 23:04:56
End at: 2017-09-17 23:05:26

# Below is generated by plot.py at 2017-09-18 02:22:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.059 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.059 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-09-17 23:16:56

End at: 2017-09-17 23:17:26

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

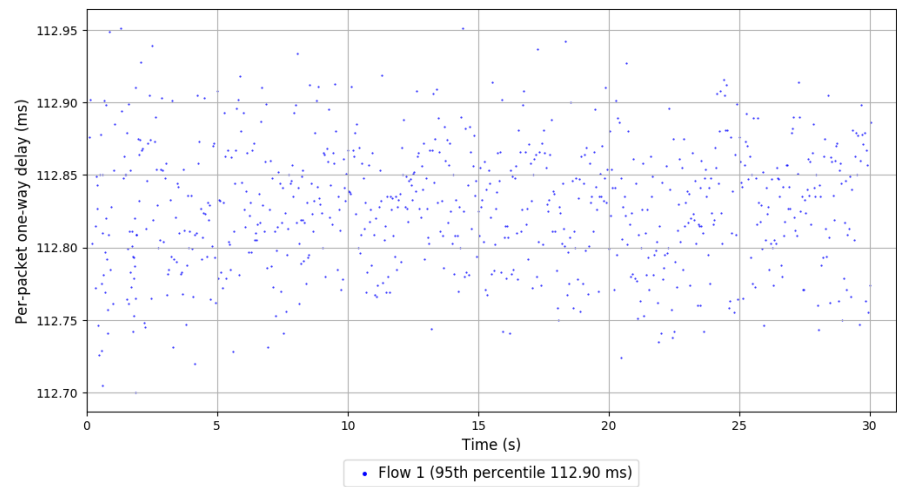
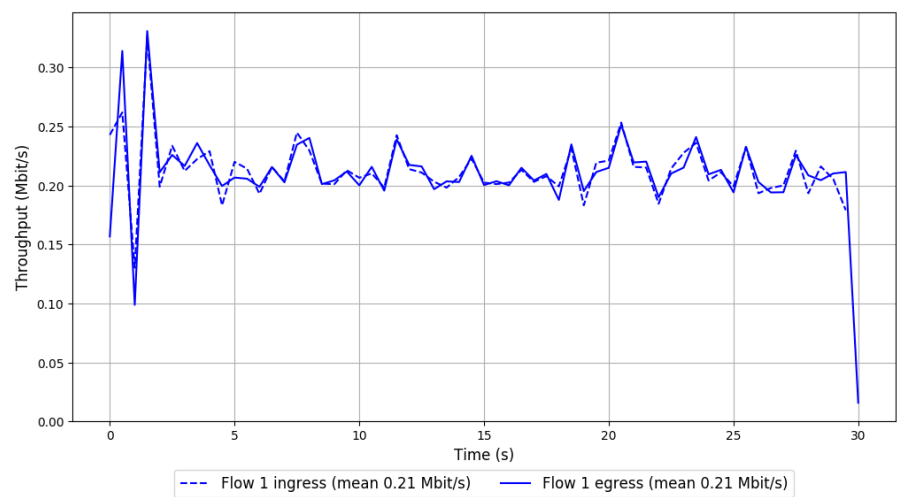
Average throughput: 0.21 Mbit/s

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

Loss rate: 0.00%



Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-09-17 23:29:03

End at: 2017-09-17 23:29:33

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.420 ms

Loss rate: 0.00%

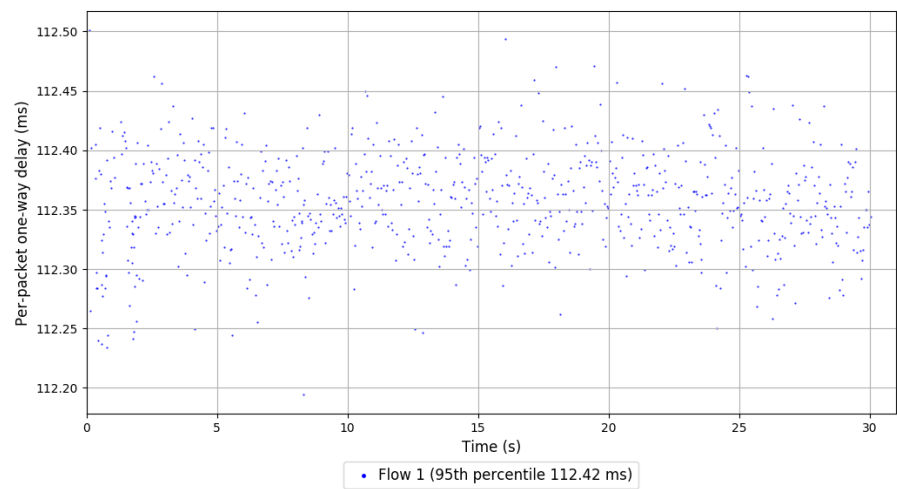
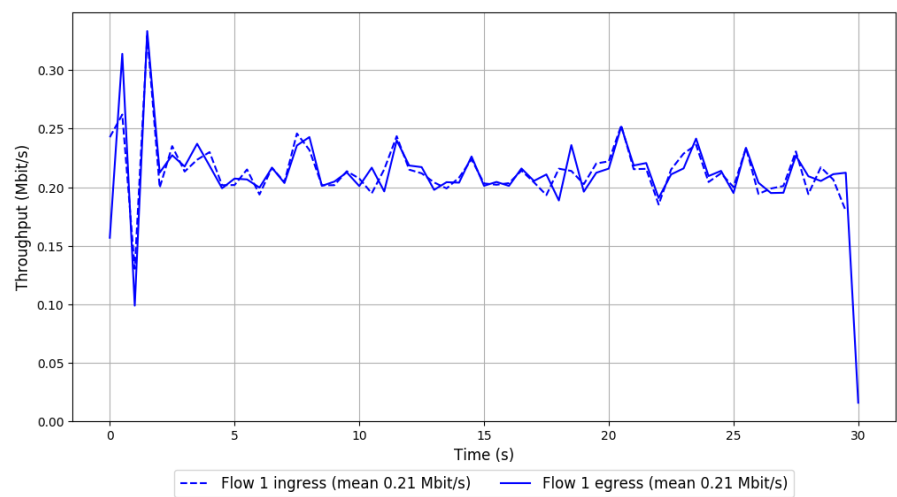
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.420 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-09-17 23:40:54

End at: 2017-09-17 23:41:25

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 111.044 ms

Loss rate: 0.00%

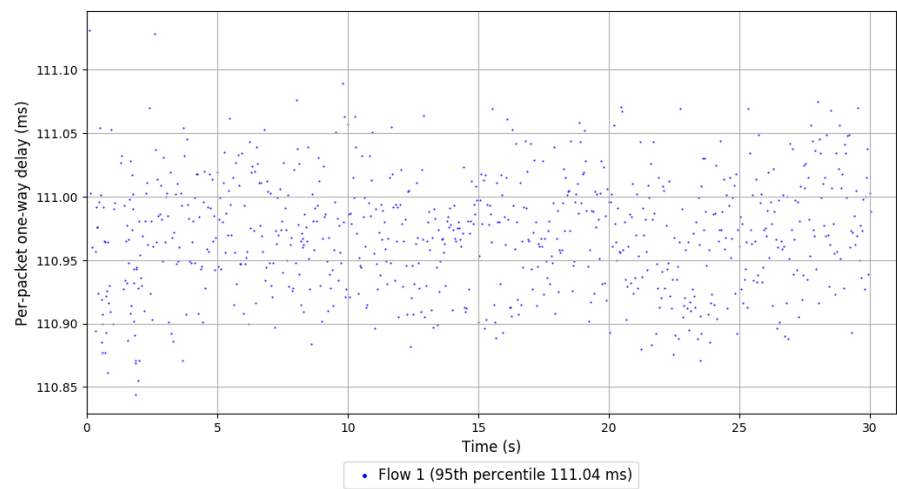
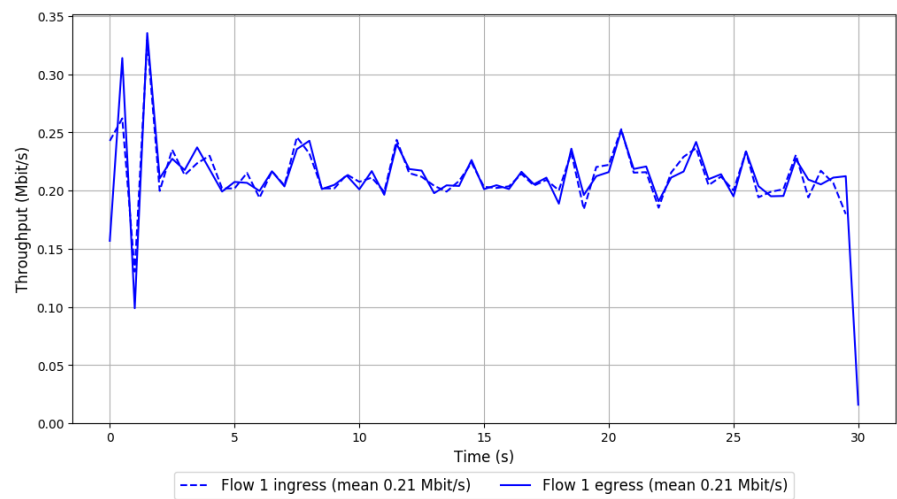
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 111.044 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-09-17 23:53:03

End at: 2017-09-17 23:53:33

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.062 ms

Loss rate: 0.00%

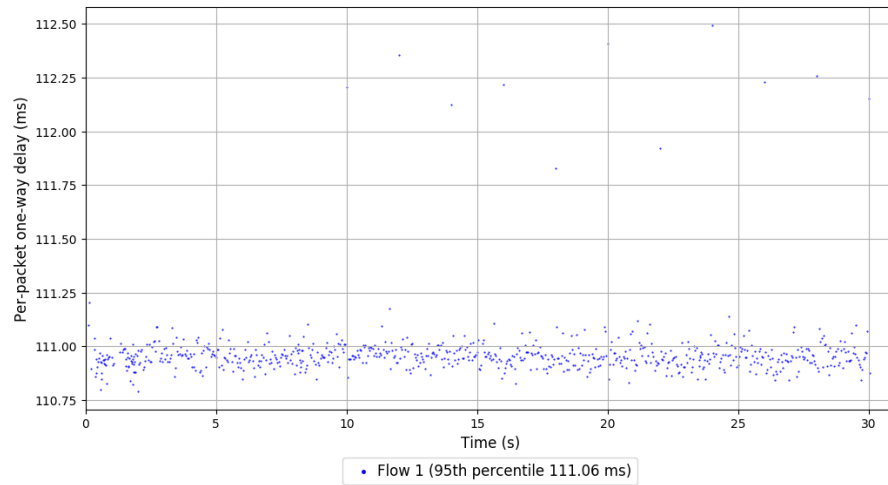
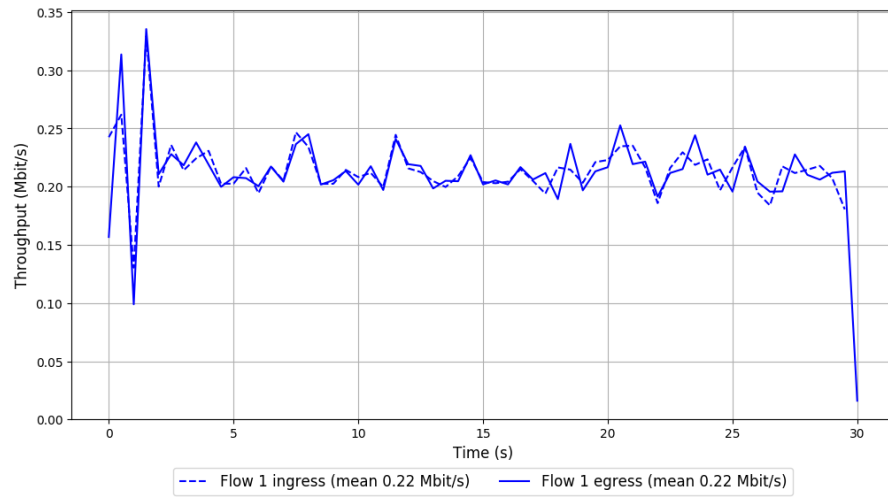
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.062 ms

Loss rate: 0.00%

## Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-09-18 00:04:56

End at: 2017-09-18 00:05:26

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.873 ms

Loss rate: 0.00%

-- Flow 1:

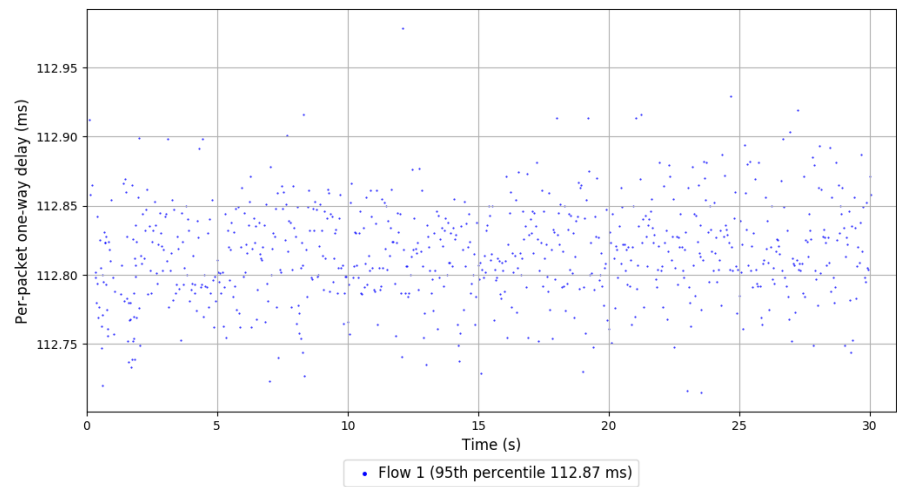
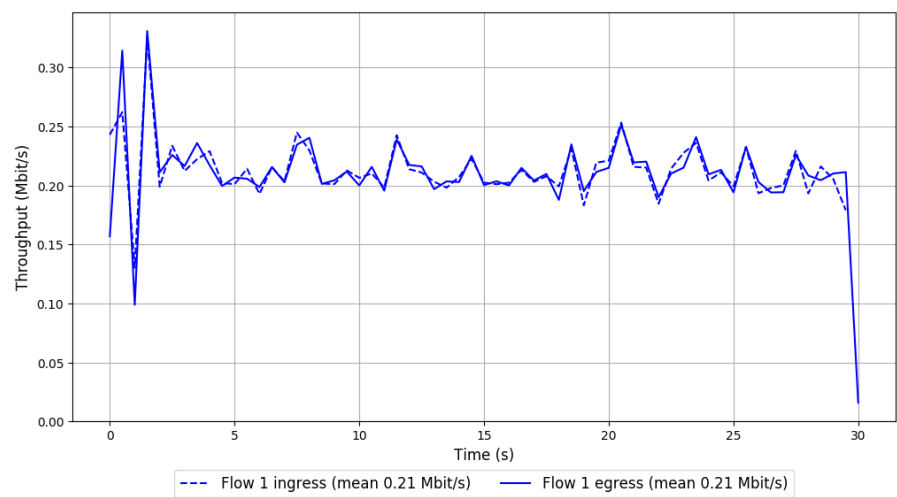
Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.873 ms

Loss rate: 0.00%



Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-09-18 00:16:54

End at: 2017-09-18 00:17:24

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.905 ms

Loss rate: 0.00%

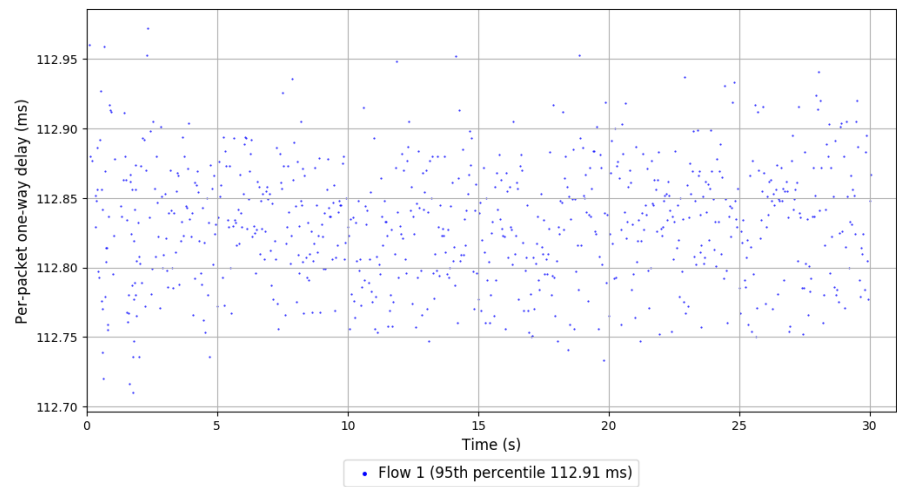
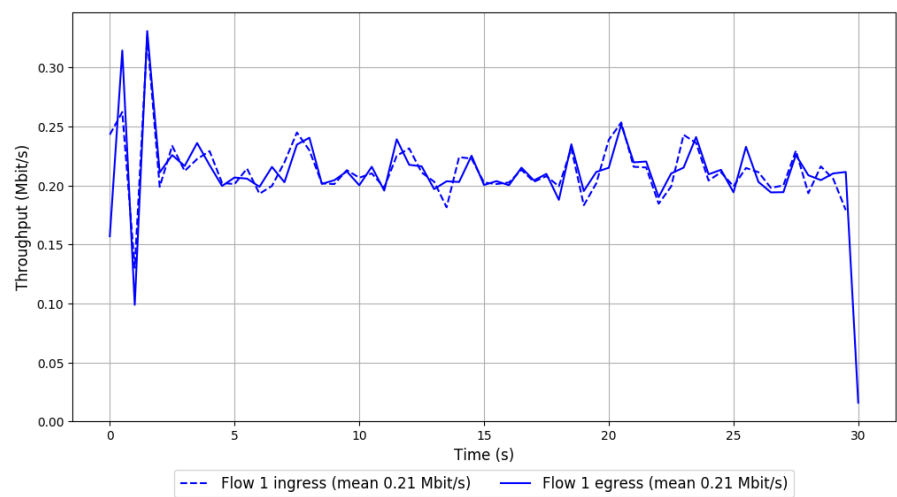
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.905 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-09-18 00:29:04

End at: 2017-09-18 00:29:34

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.040 ms

Loss rate: 0.00%

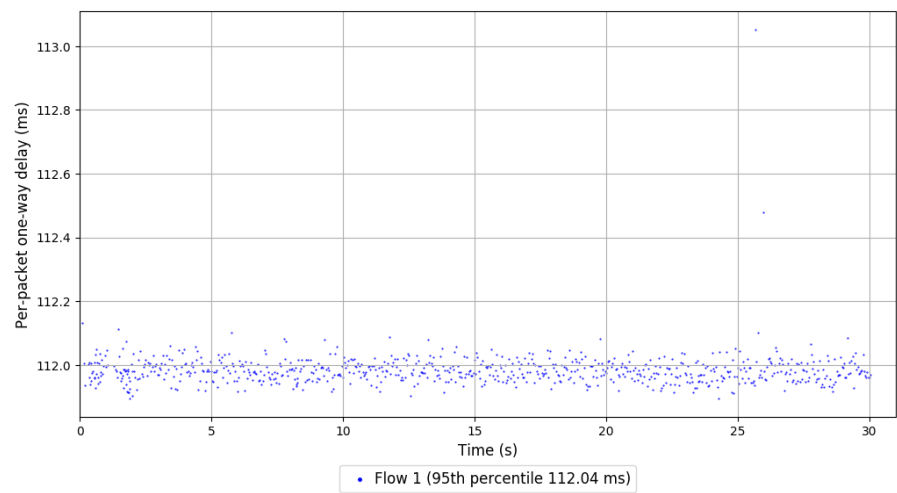
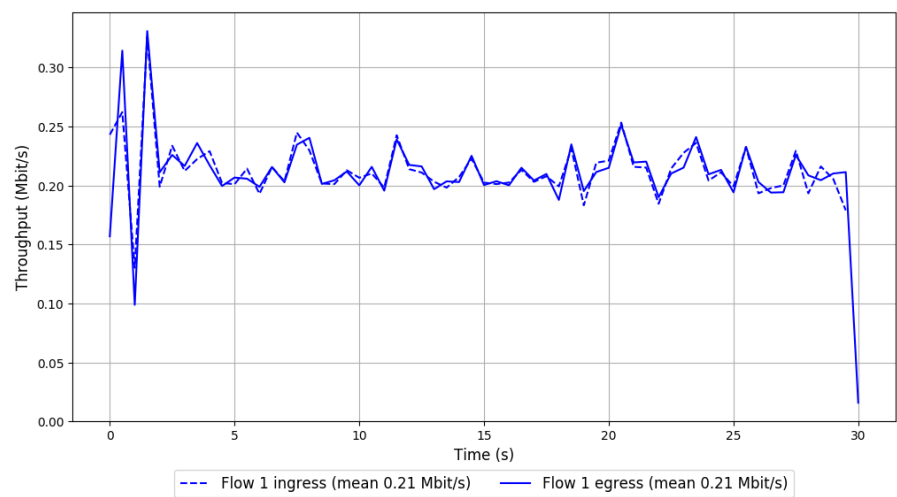
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.040 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-09-18 00:40:57

End at: 2017-09-18 00:41:27

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 109.905 ms

Loss rate: 0.00%

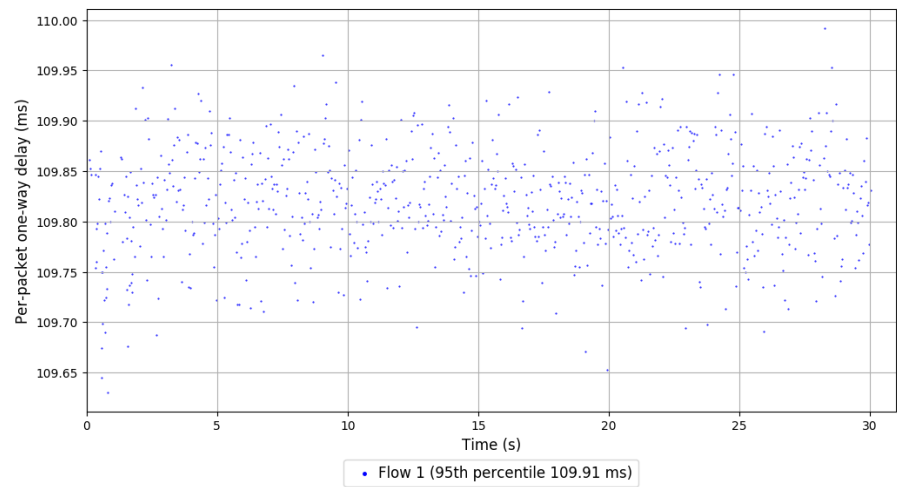
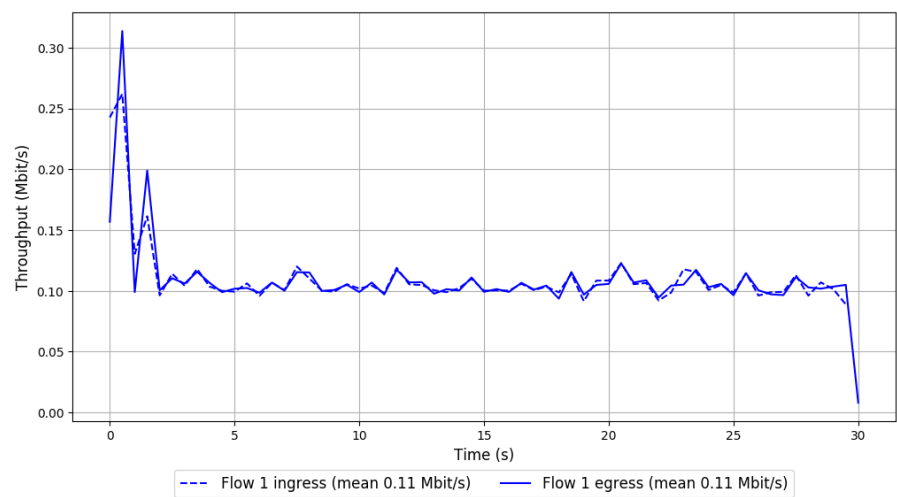
-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 109.905 ms

Loss rate: 0.00%

Run 10: Report of SCSReAM — Data Link



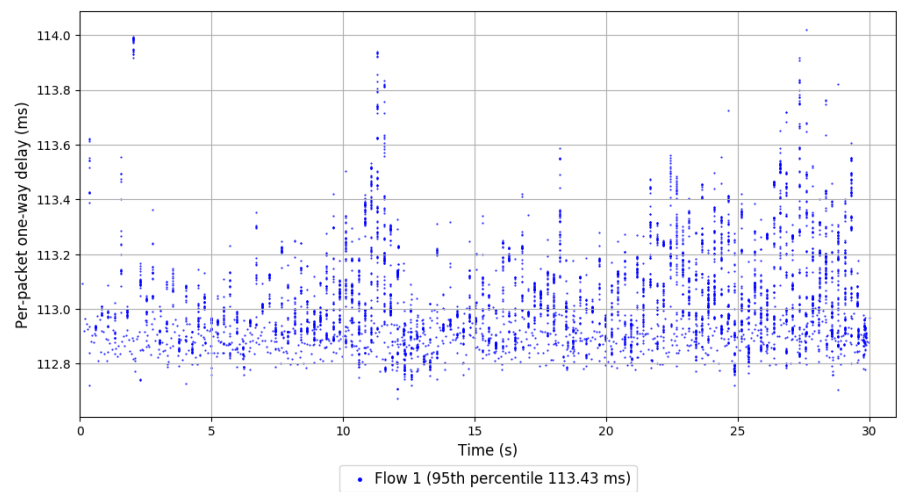
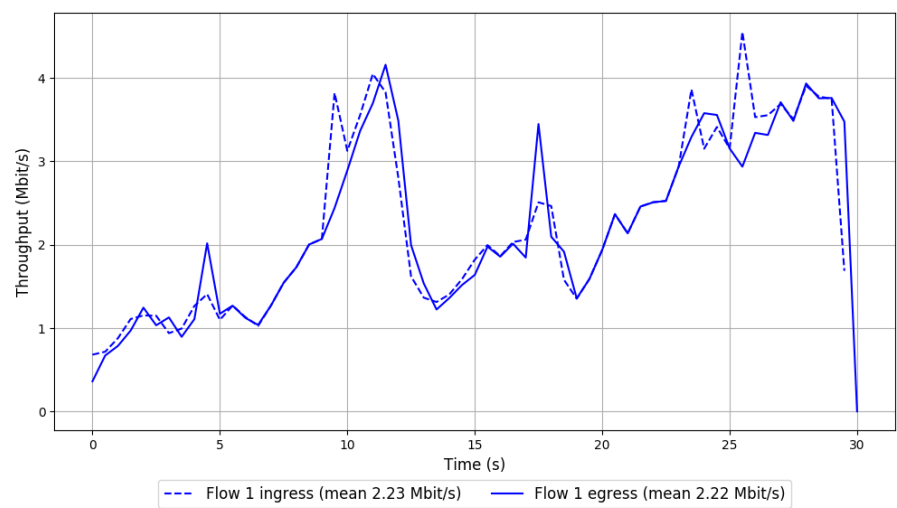
```
Run 1: Statistics of Sprout

Start at: 2017-09-17 22:53:33
End at: 2017-09-17 22:54:03

# Below is generated by plot.py at 2017-09-18 02:22:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 113.432 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 113.432 ms
Loss rate: 0.43%
```



Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-09-17 23:05:36

End at: 2017-09-17 23:06:06

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 113.409 ms

Loss rate: 0.43%

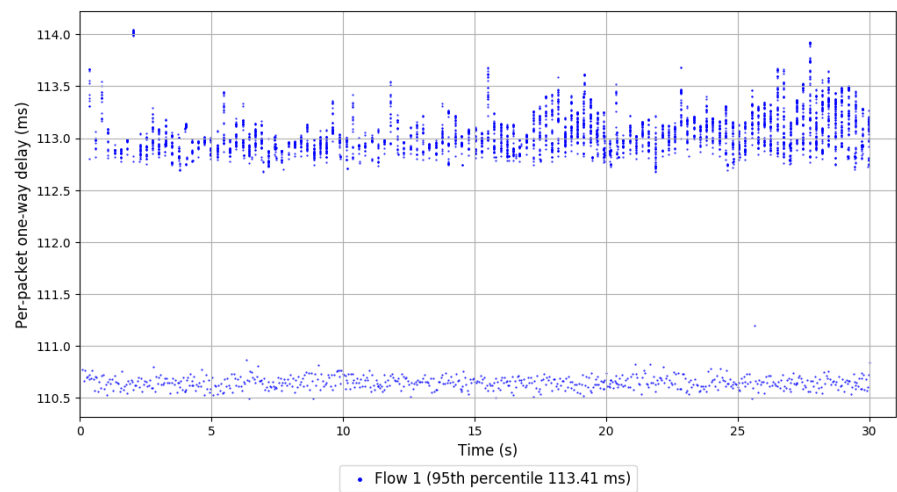
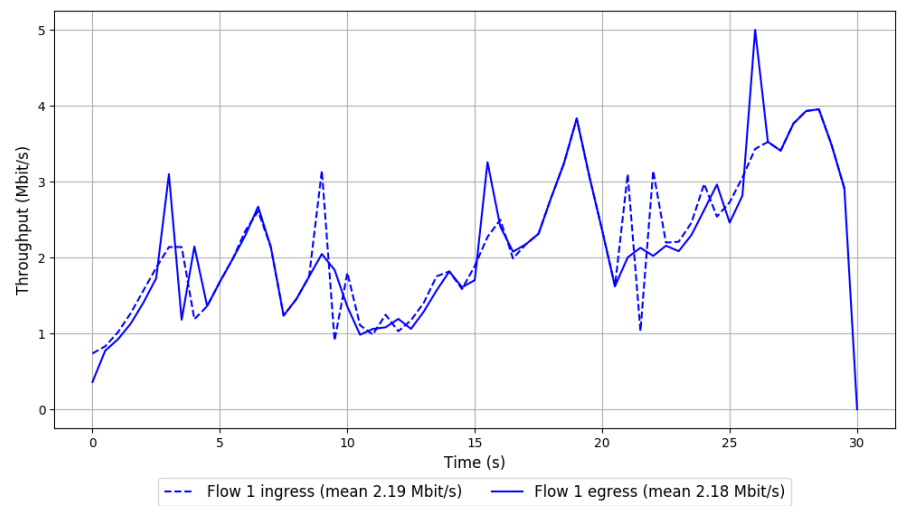
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 113.409 ms

Loss rate: 0.43%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-09-17 23:17:36

End at: 2017-09-17 23:18:06

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 113.391 ms

Loss rate: 0.21%

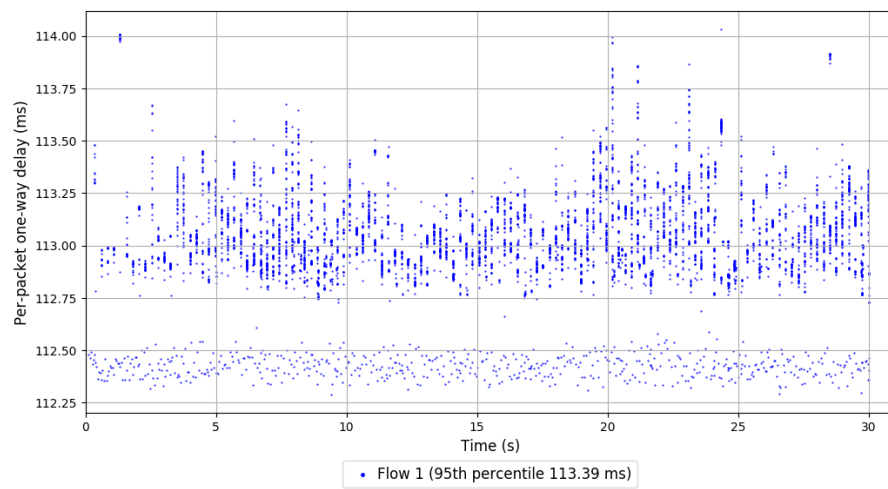
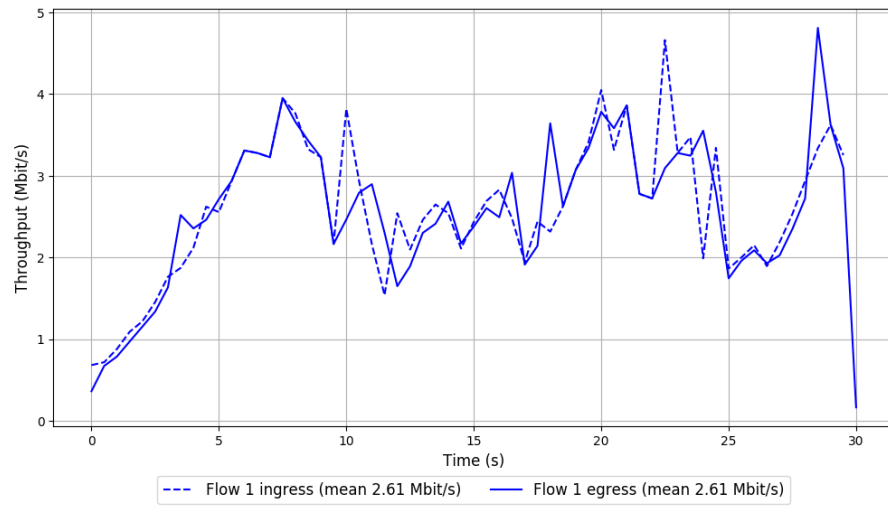
-- Flow 1:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 113.391 ms

Loss rate: 0.21%

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



Run 4: Statistics of Sprout

Start at: 2017-09-17 23:29:43

End at: 2017-09-17 23:30:13

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 113.357 ms

Loss rate: 0.09%

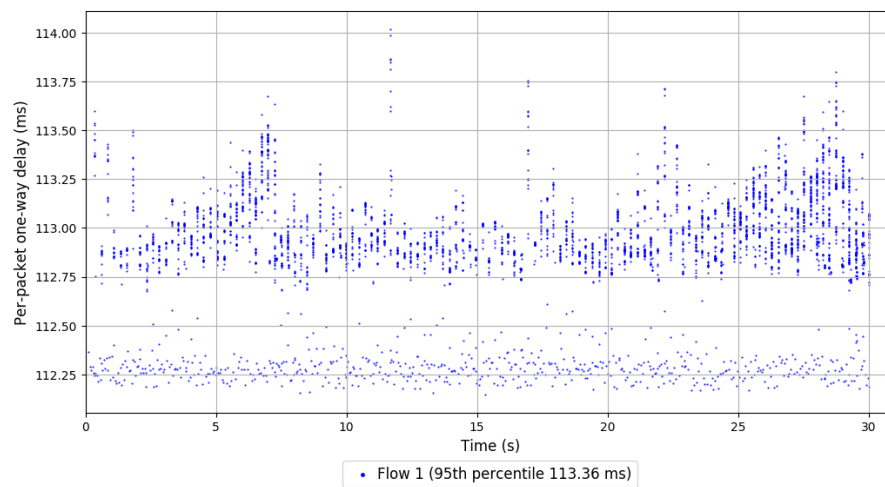
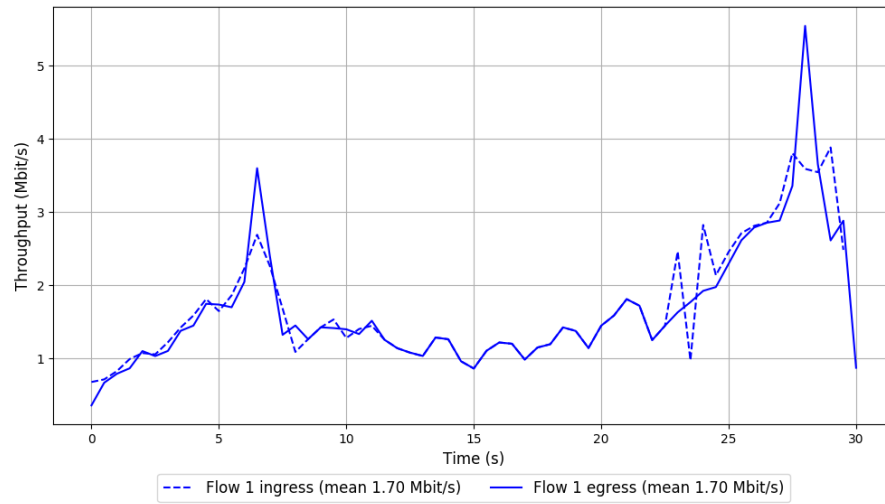
-- Flow 1:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 113.357 ms

Loss rate: 0.09%

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



Run 5: Statistics of Sprout

Start at: 2017-09-17 23:41:35

End at: 2017-09-17 23:42:05

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 113.334 ms

Loss rate: 0.00%

-- Flow 1:

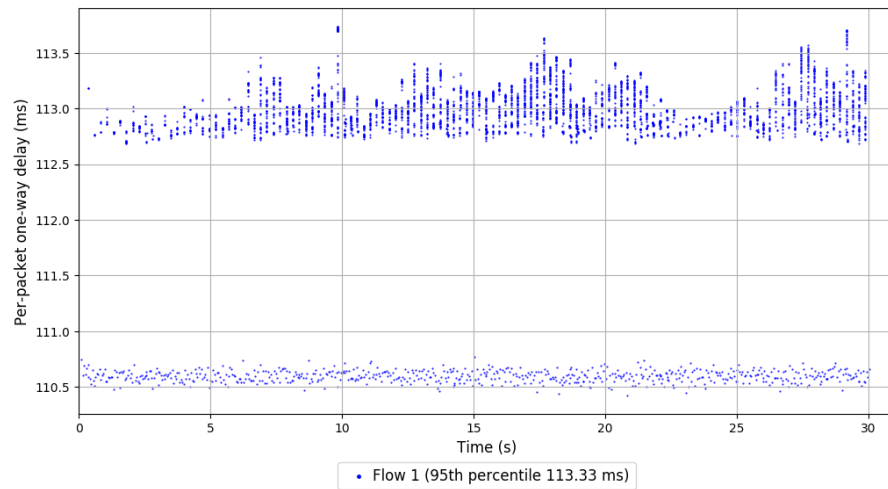
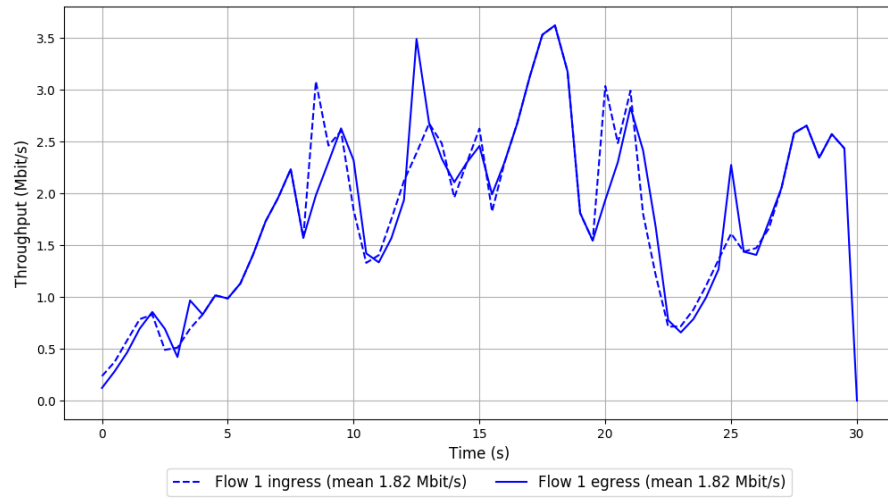
Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 113.334 ms

Loss rate: 0.00%



## Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-09-17 23:53:43

End at: 2017-09-17 23:54:13

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 112.643 ms

Loss rate: 0.24%

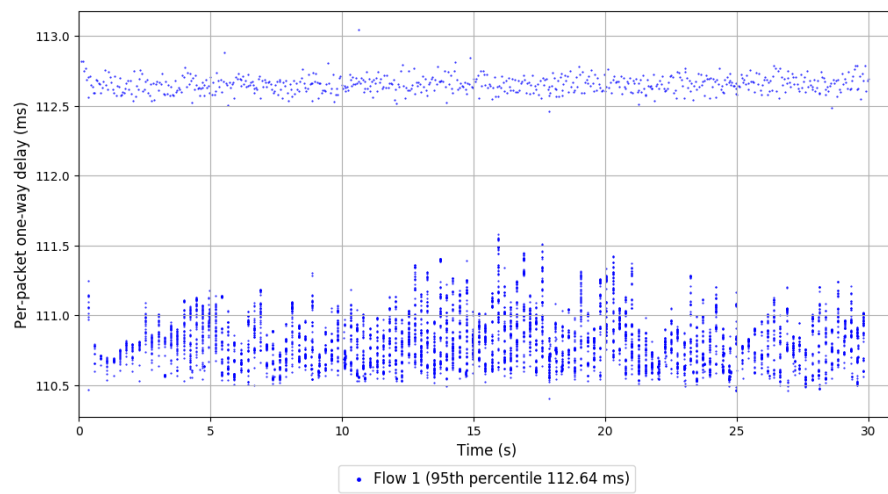
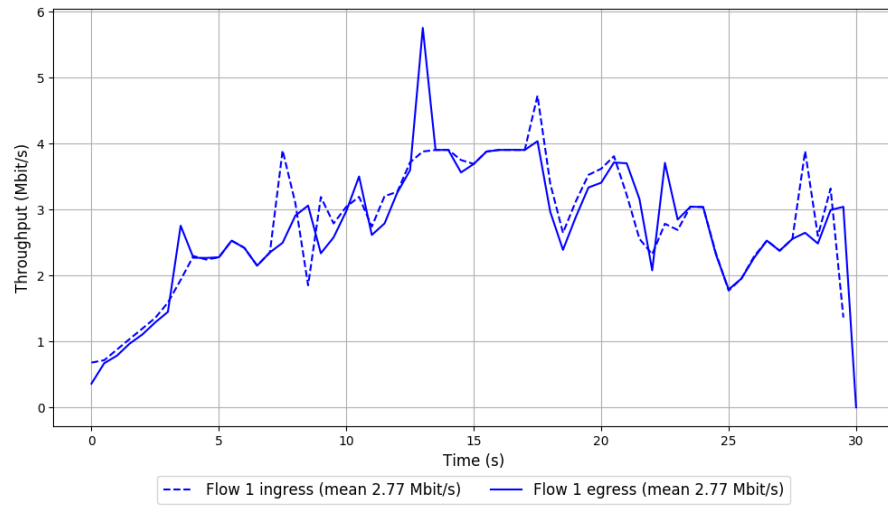
-- Flow 1:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 112.643 ms

Loss rate: 0.24%

## Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-09-18 00:05:36

End at: 2017-09-18 00:06:06

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.48 Mbit/s

95th percentile per-packet one-way delay: 112.781 ms

Loss rate: 0.18%

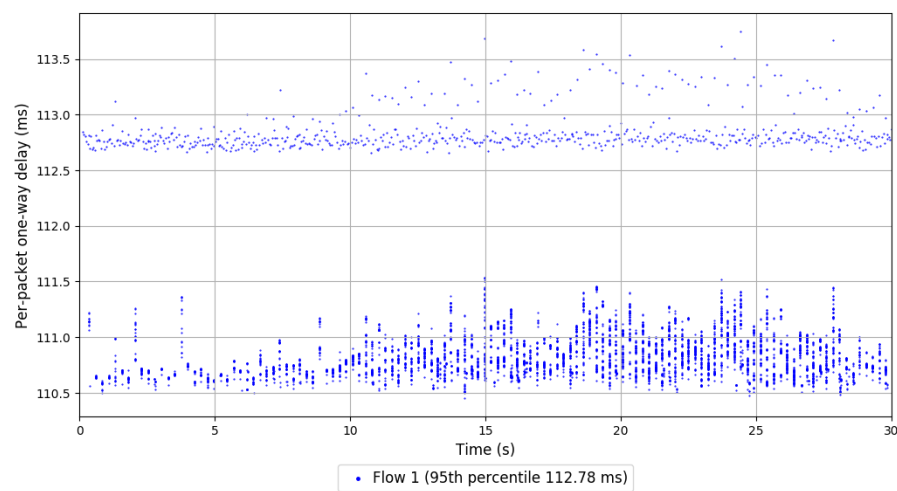
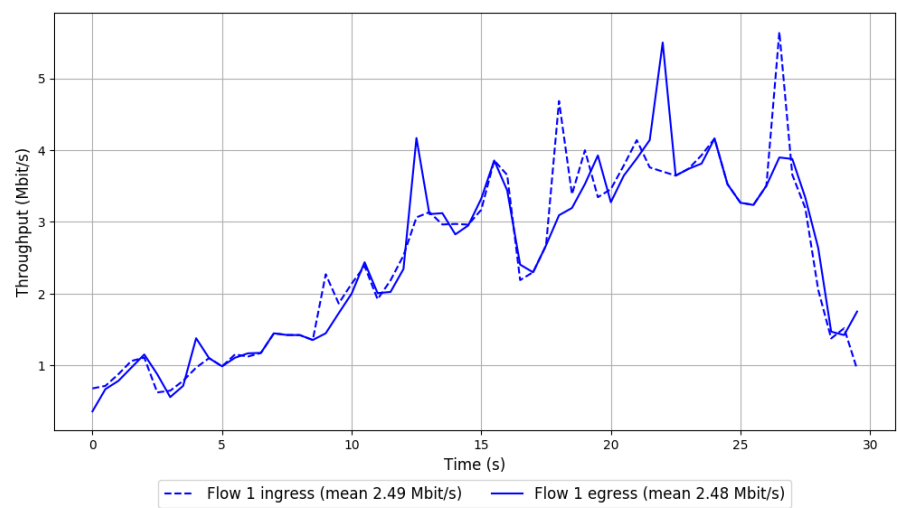
-- Flow 1:

Average throughput: 2.48 Mbit/s

95th percentile per-packet one-way delay: 112.781 ms

Loss rate: 0.18%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-09-18 00:17:34

End at: 2017-09-18 00:18:04

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 113.254 ms

Loss rate: 0.34%

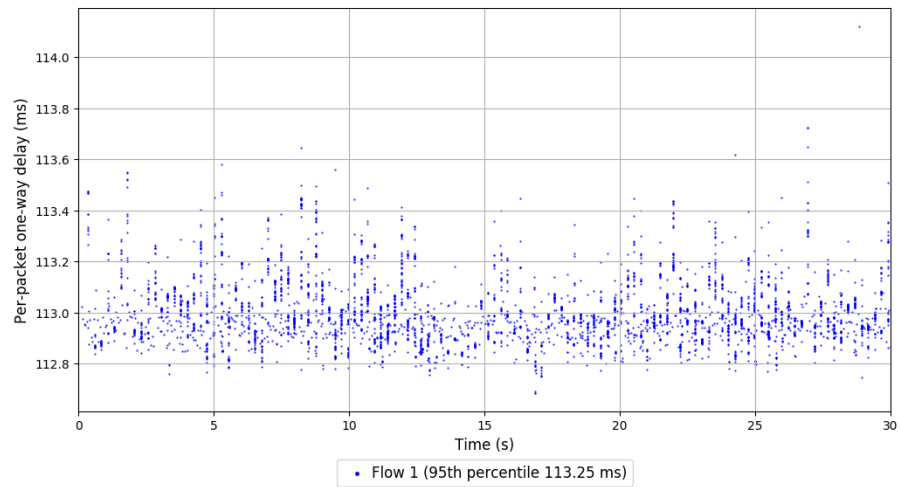
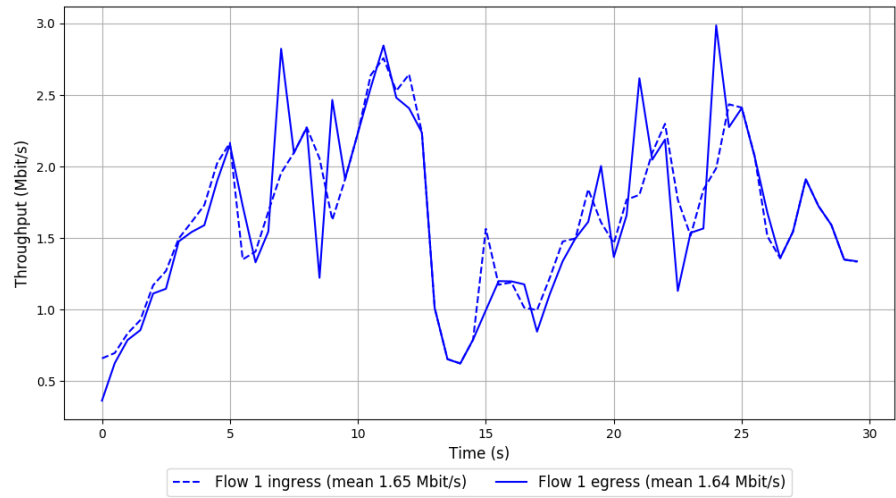
-- Flow 1:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 113.254 ms

Loss rate: 0.34%

## Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-09-18 00:29:44

End at: 2017-09-18 00:30:14

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 113.265 ms

Loss rate: 0.00%

-- Flow 1:

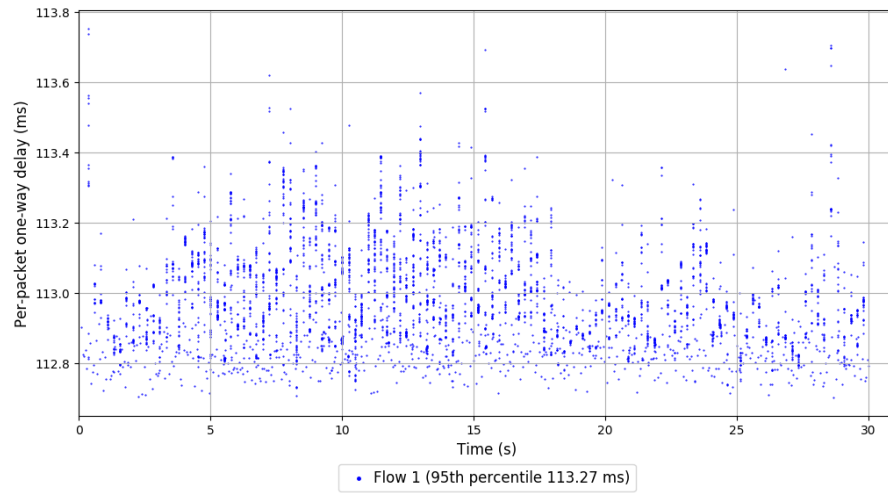
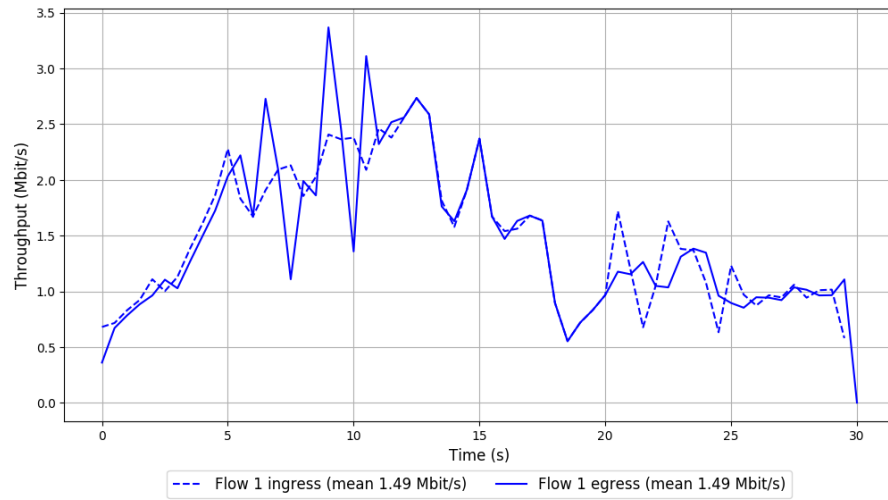
Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 113.265 ms

Loss rate: 0.00%



## Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-09-18 00:41:38

End at: 2017-09-18 00:42:08

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.60 Mbit/s

95th percentile per-packet one-way delay: 113.330 ms

Loss rate: 0.32%

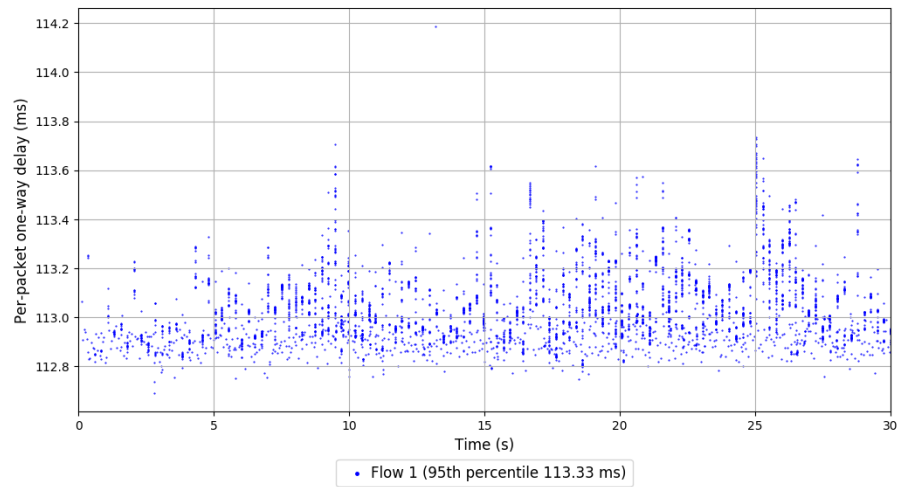
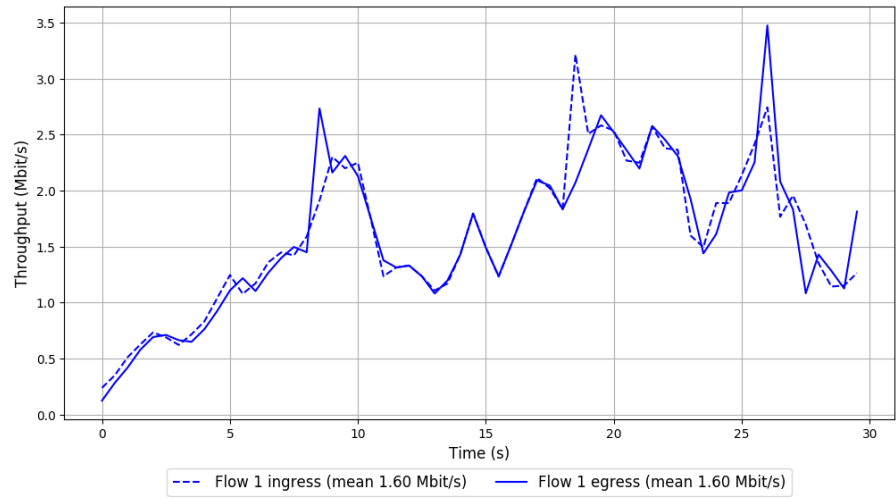
-- Flow 1:

Average throughput: 1.60 Mbit/s

95th percentile per-packet one-way delay: 113.330 ms

Loss rate: 0.32%

## Run 10: Report of Sprout — Data Link

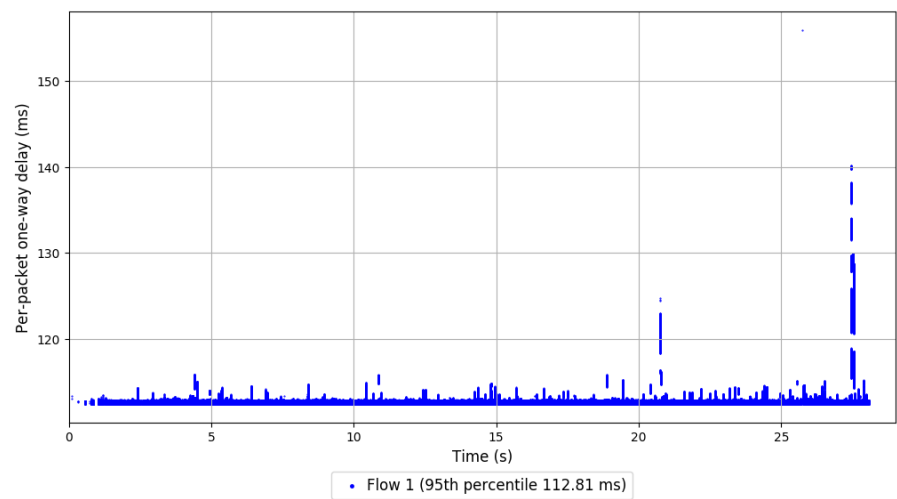
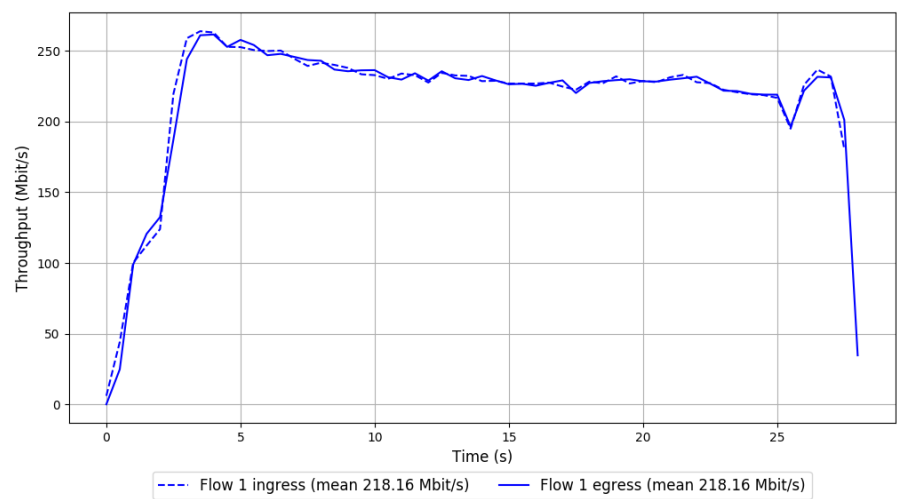


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-09-17 23:01:40
End at: 2017-09-17 23:02:10

# Below is generated by plot.py at 2017-09-18 02:22:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.16 Mbit/s
95th percentile per-packet one-way delay: 112.805 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 218.16 Mbit/s
95th percentile per-packet one-way delay: 112.805 ms
Loss rate: 0.00%
```

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

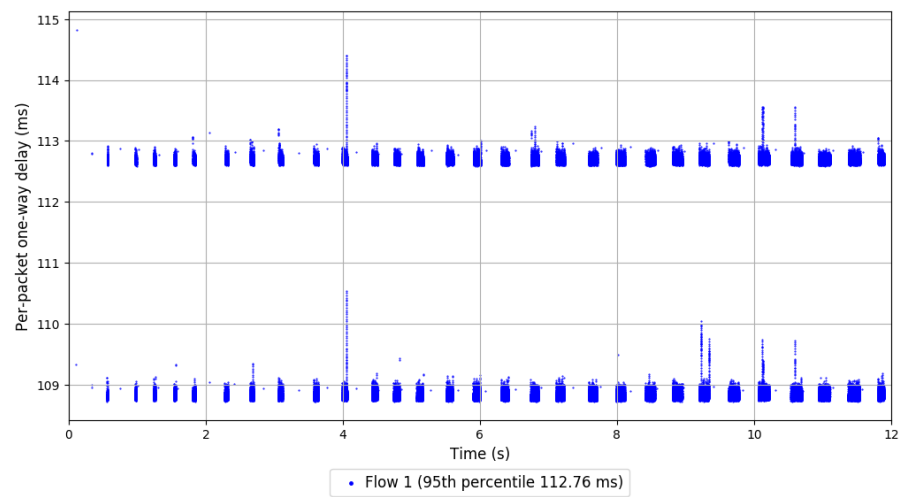
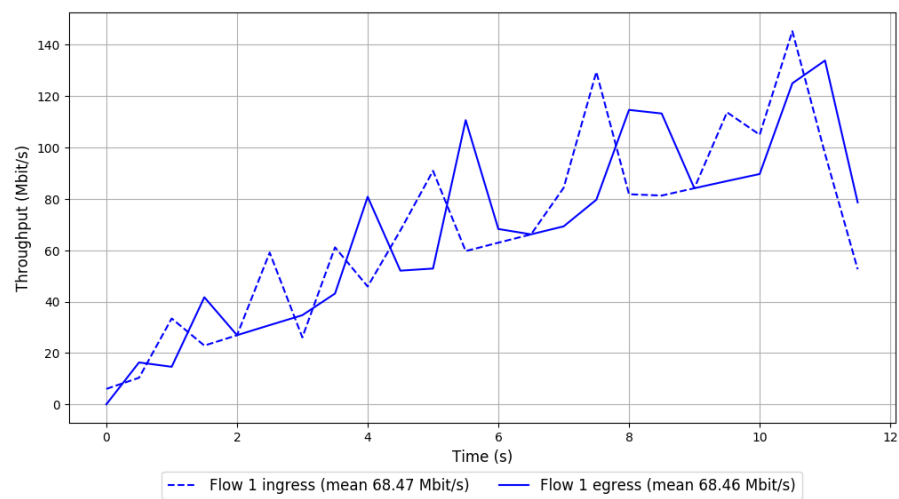


Run 2: Statistics of TaoVA-100x

Start at: 2017-09-17 23:13:59

End at: 2017-09-17 23:14:29

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-09-17 23:25:47

End at: 2017-09-17 23:26:17

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 225.61 Mbit/s

95th percentile per-packet one-way delay: 112.908 ms

Loss rate: 0.00%

-- Flow 1:

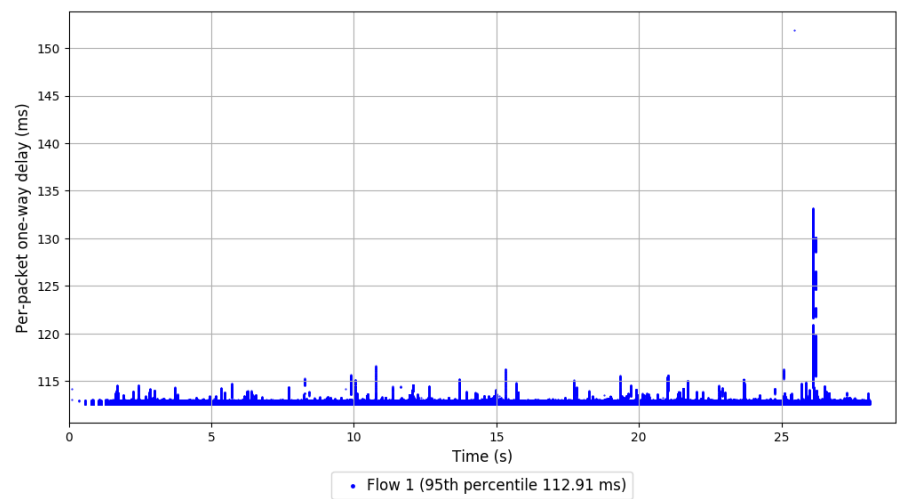
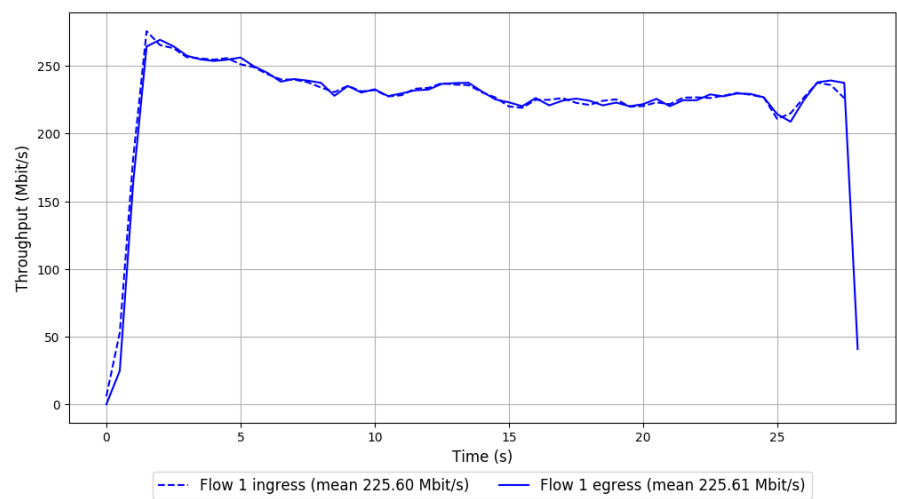
Average throughput: 225.61 Mbit/s

95th percentile per-packet one-way delay: 112.908 ms

Loss rate: 0.00%



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

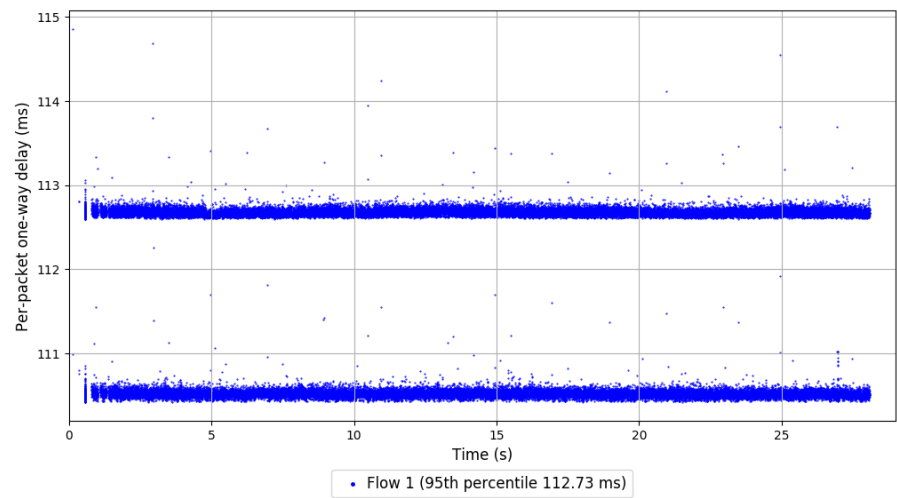
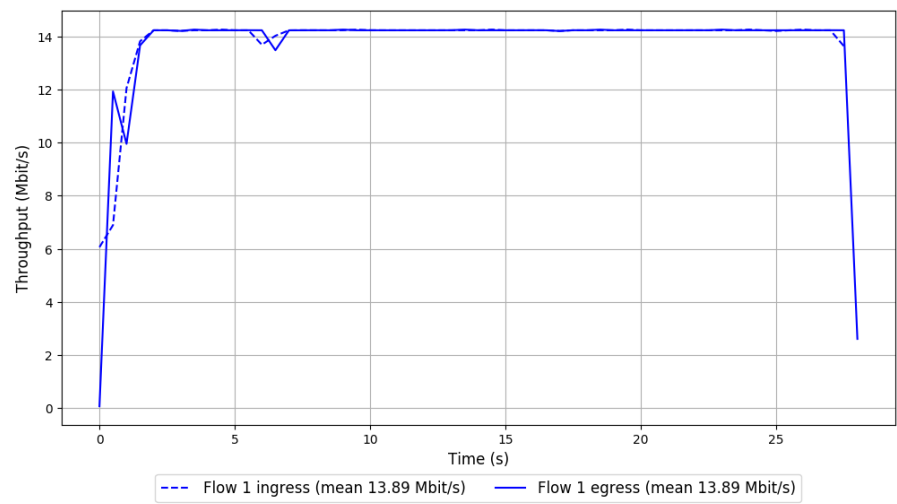


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-09-17 23:38:00
End at: 2017-09-17 23:38:30

# Below is generated by plot.py at 2017-09-18 02:22:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.89 Mbit/s
95th percentile per-packet one-way delay: 112.730 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.89 Mbit/s
95th percentile per-packet one-way delay: 112.730 ms
Loss rate: 0.00%
```

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

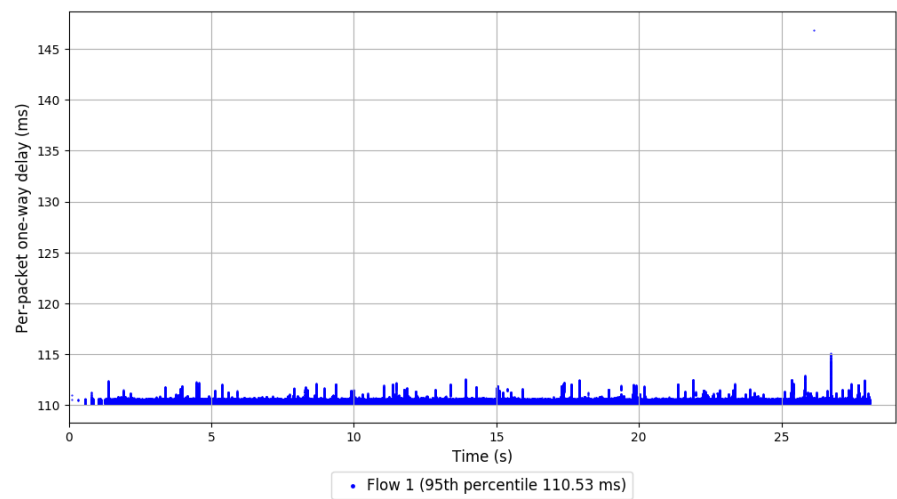
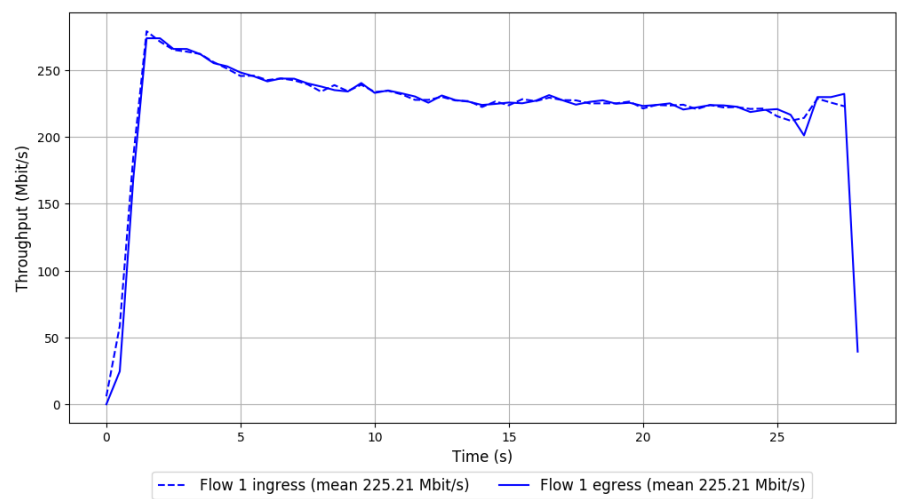


```
Run 5: Statistics of TaoVA-100x

Start at: 2017-09-17 23:49:47
End at: 2017-09-17 23:50:17

# Below is generated by plot.py at 2017-09-18 02:22:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.21 Mbit/s
95th percentile per-packet one-way delay: 110.526 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 225.21 Mbit/s
95th percentile per-packet one-way delay: 110.526 ms
Loss rate: 0.00%
```

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

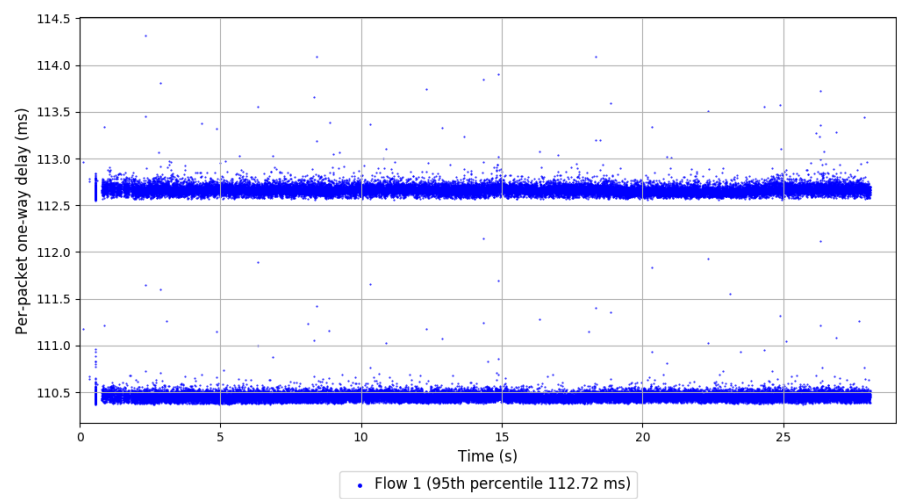
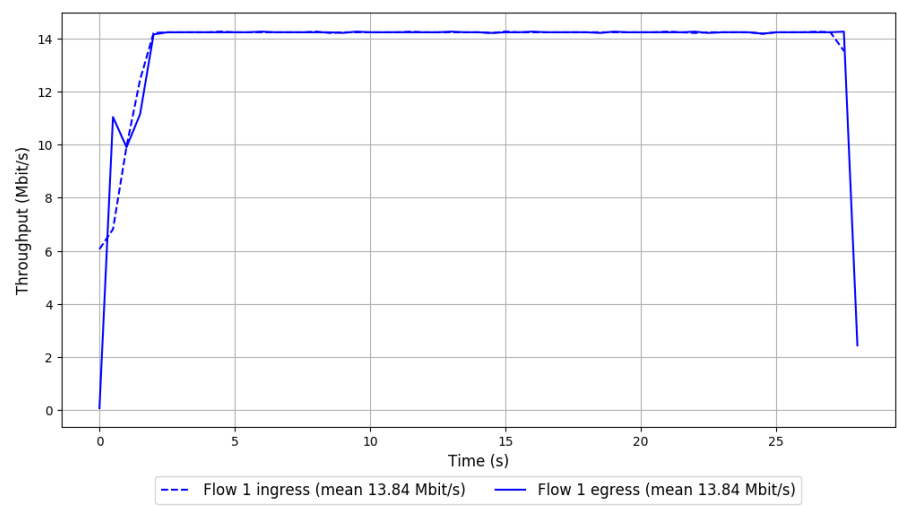


```
Run 6: Statistics of TaoVA-100x

Start at: 2017-09-18 00:02:00
End at: 2017-09-18 00:02:30

# Below is generated by plot.py at 2017-09-18 02:22:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.84 Mbit/s
95th percentile per-packet one-way delay: 112.718 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.84 Mbit/s
95th percentile per-packet one-way delay: 112.718 ms
Loss rate: 0.00%
```

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



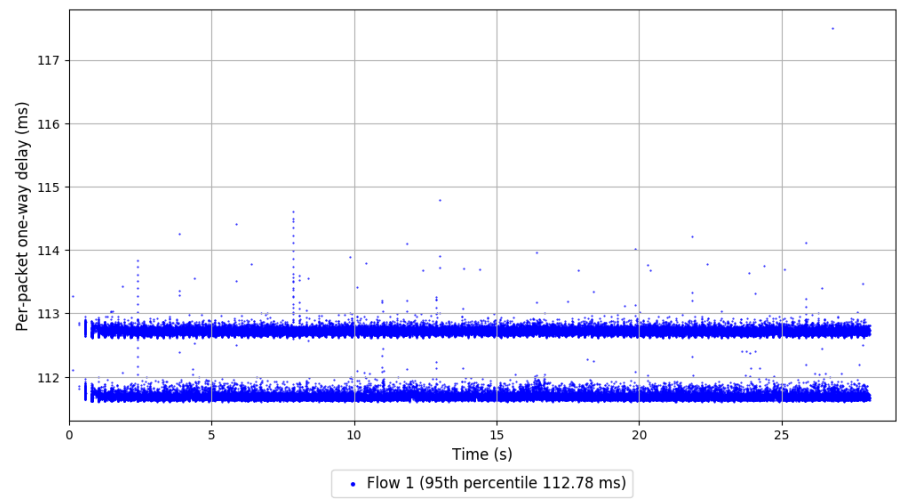
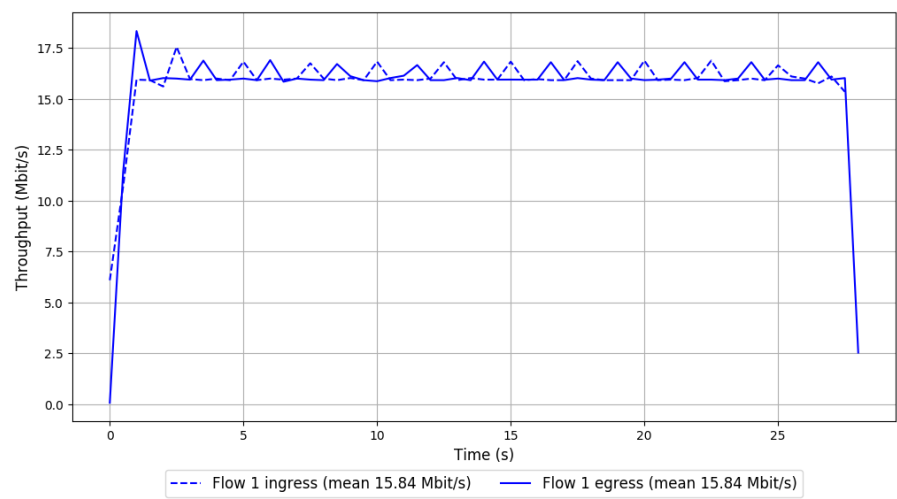
```
Run 7: Statistics of TaoVA-100x

Start at: 2017-09-18 00:13:59
End at: 2017-09-18 00:14:29

# Below is generated by plot.py at 2017-09-18 02:22:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 15.84 Mbit/s
95th percentile per-packet one-way delay: 112.785 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 15.84 Mbit/s
95th percentile per-packet one-way delay: 112.785 ms
Loss rate: 0.00%
```



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



Run 8: Statistics of TaoVA-100x

Start at: 2017-09-18 00:25:49

End at: 2017-09-18 00:26:19

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 226.43 Mbit/s

95th percentile per-packet one-way delay: 112.791 ms

Loss rate: 0.00%

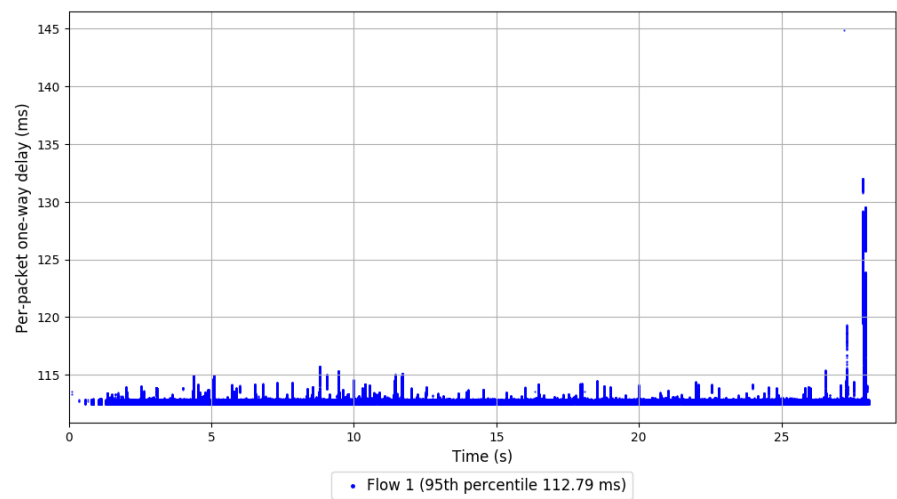
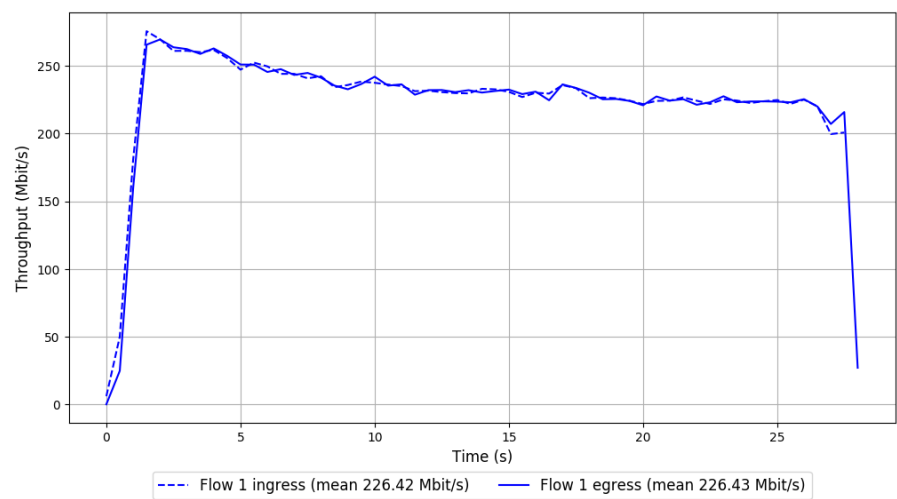
-- Flow 1:

Average throughput: 226.43 Mbit/s

95th percentile per-packet one-way delay: 112.791 ms

Loss rate: 0.00%

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

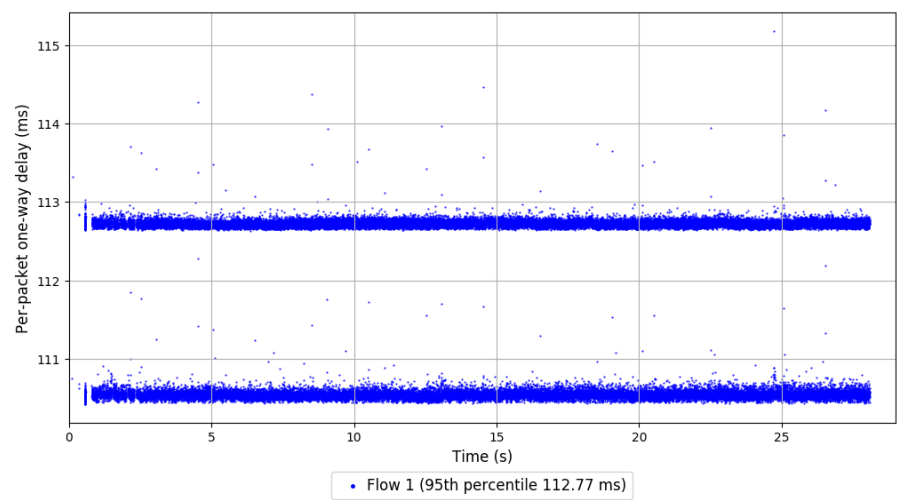
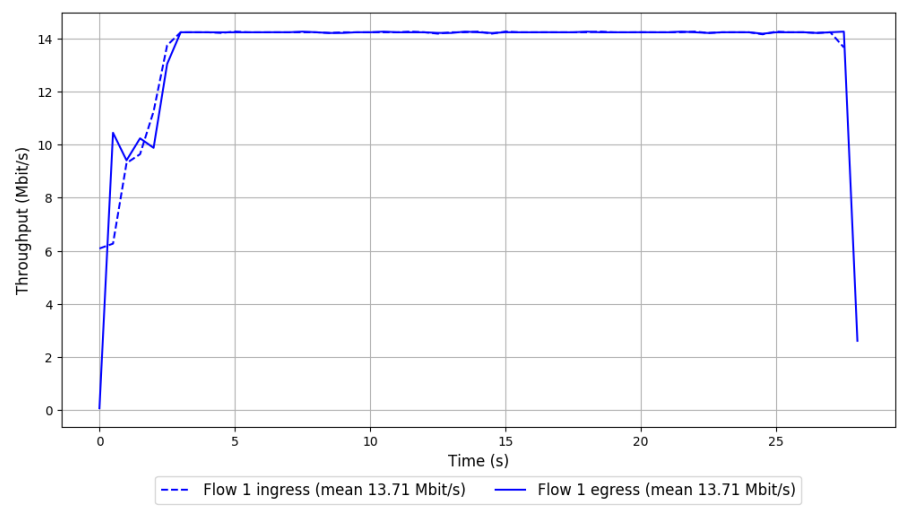


```
Run 9: Statistics of TaoVA-100x

Start at: 2017-09-18 00:38:02
End at: 2017-09-18 00:38:32

# Below is generated by plot.py at 2017-09-18 02:22:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.71 Mbit/s
95th percentile per-packet one-way delay: 112.774 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.71 Mbit/s
95th percentile per-packet one-way delay: 112.774 ms
Loss rate: 0.00%
```

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

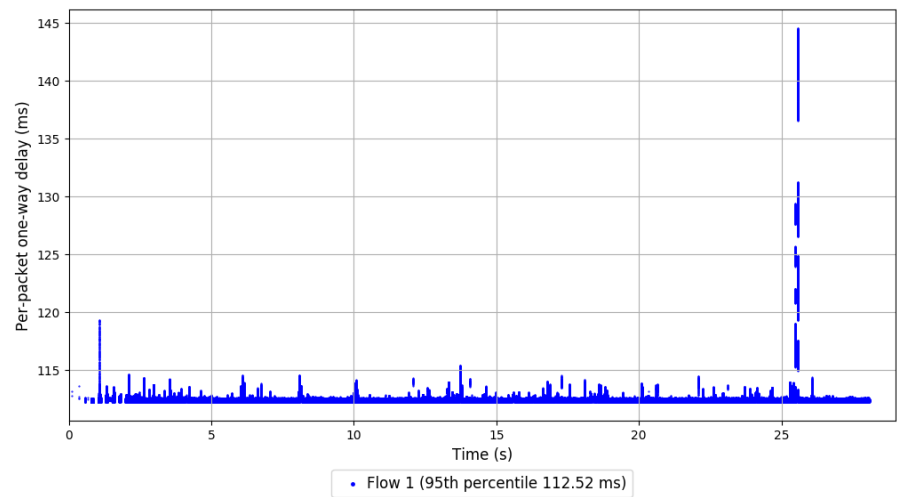
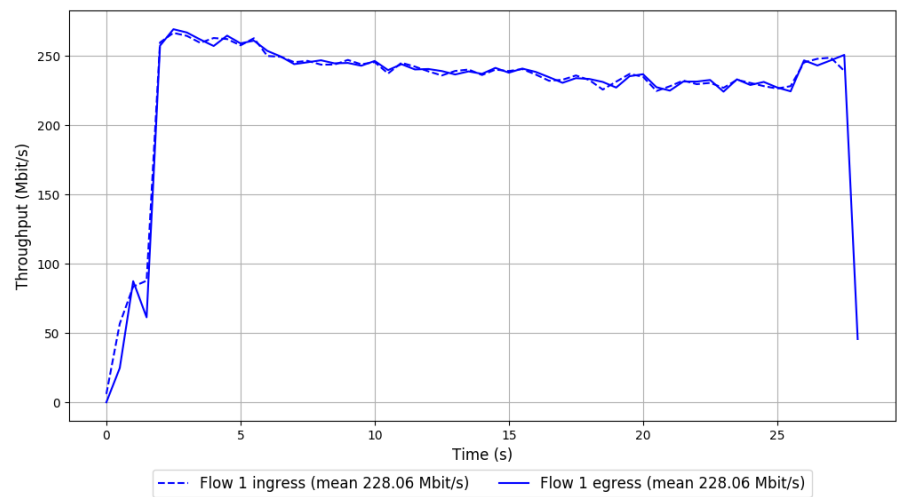


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-09-18 00:49:43
End at: 2017-09-18 00:50:13

# Below is generated by plot.py at 2017-09-18 02:22:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 228.06 Mbit/s
95th percentile per-packet one-way delay: 112.520 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 228.06 Mbit/s
95th percentile per-packet one-way delay: 112.520 ms
Loss rate: 0.01%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-09-17 23:02:42

End at: 2017-09-17 23:03:12

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 41.34 Mbit/s

95th percentile per-packet one-way delay: 113.456 ms

Loss rate: 0.00%

-- Flow 1:

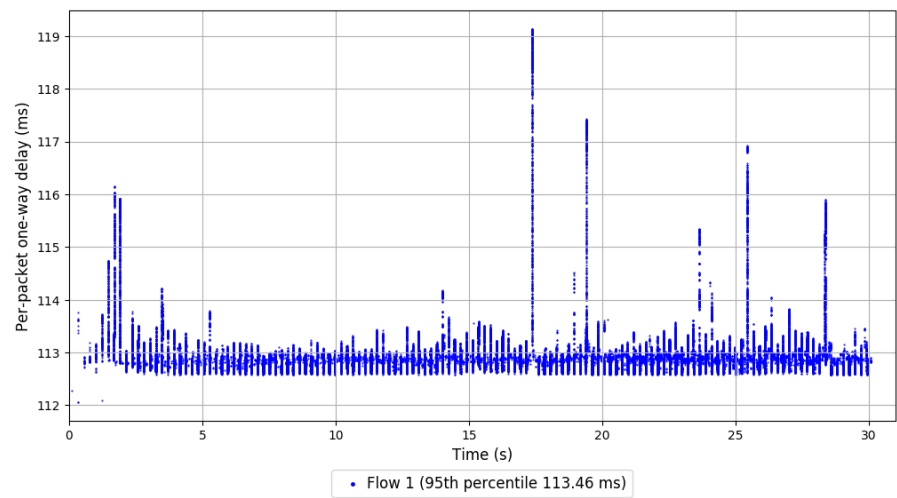
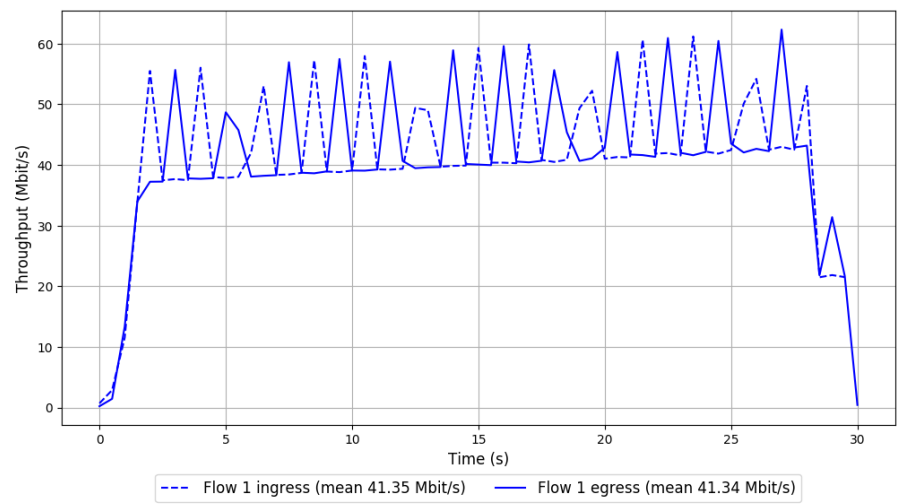
Average throughput: 41.34 Mbit/s

95th percentile per-packet one-way delay: 113.456 ms

Loss rate: 0.00%



Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-09-17 23:14:42

End at: 2017-09-17 23:15:12

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 40.11 Mbit/s

95th percentile per-packet one-way delay: 118.985 ms

Loss rate: 0.02%

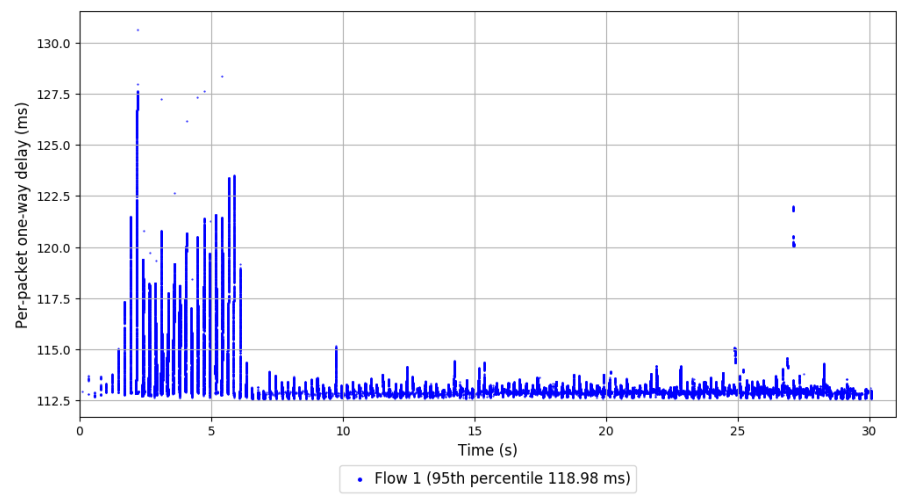
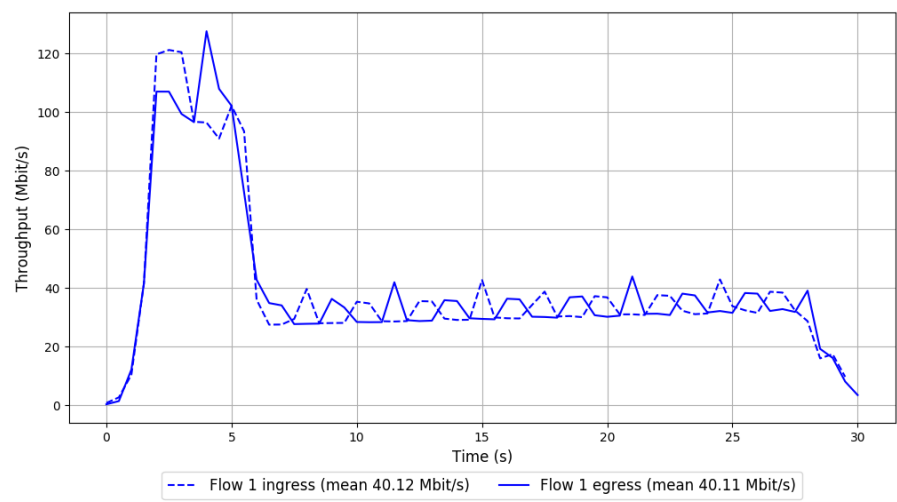
-- Flow 1:

Average throughput: 40.11 Mbit/s

95th percentile per-packet one-way delay: 118.985 ms

Loss rate: 0.02%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-09-17 23:26:50

End at: 2017-09-17 23:27:20

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 22.25 Mbit/s

95th percentile per-packet one-way delay: 113.691 ms

Loss rate: 0.02%

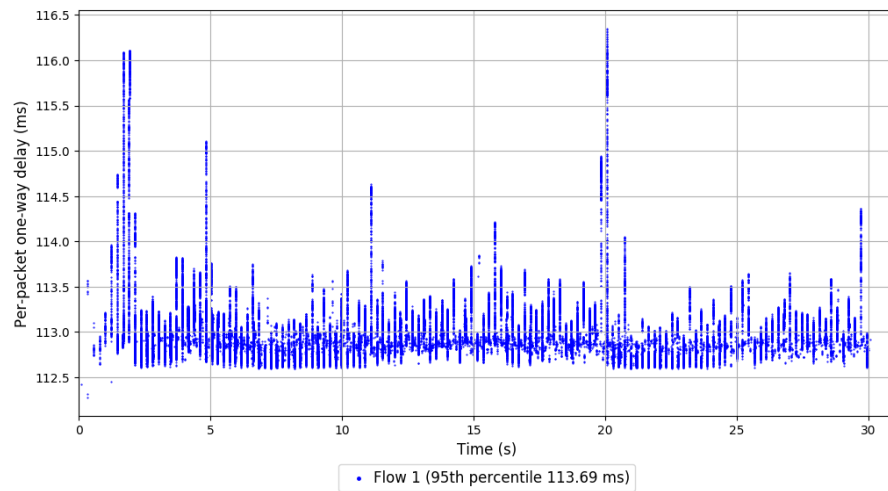
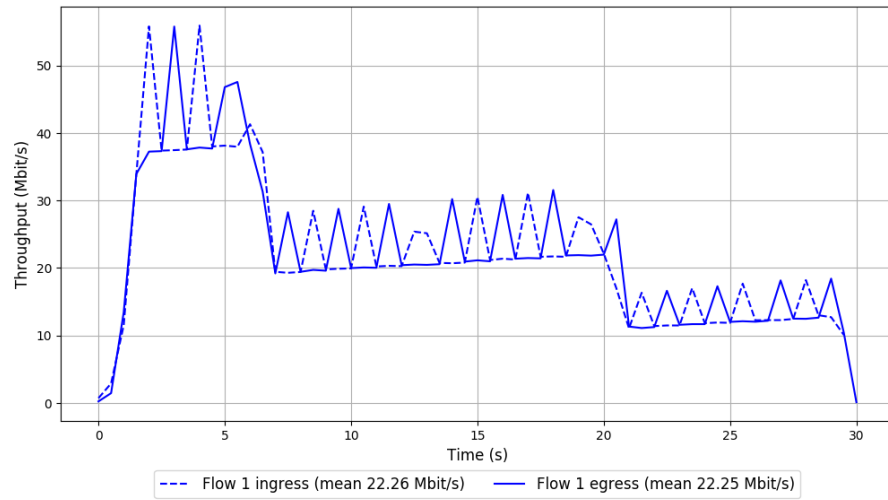
-- Flow 1:

Average throughput: 22.25 Mbit/s

95th percentile per-packet one-way delay: 113.691 ms

Loss rate: 0.02%

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



Run 4: Statistics of TCP Vegas

Start at: 2017-09-17 23:38:42

End at: 2017-09-17 23:39:12

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 11.68 Mbit/s

95th percentile per-packet one-way delay: 113.197 ms

Loss rate: 0.02%

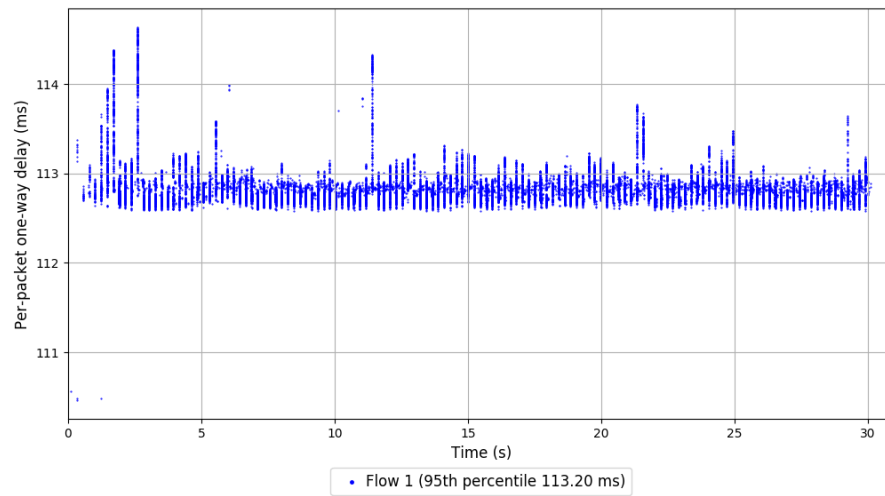
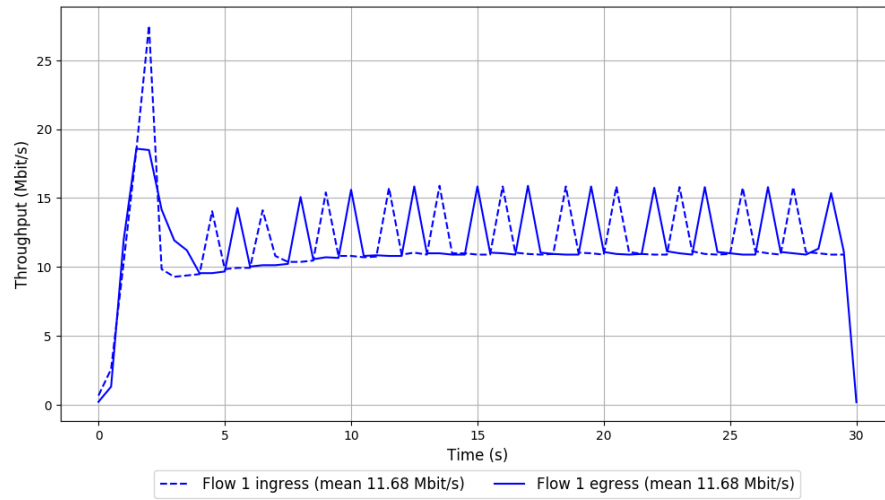
-- Flow 1:

Average throughput: 11.68 Mbit/s

95th percentile per-packet one-way delay: 113.197 ms

Loss rate: 0.02%

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



Run 5: Statistics of TCP Vegas

Start at: 2017-09-17 23:50:50

End at: 2017-09-17 23:51:20

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 19.25 Mbit/s

95th percentile per-packet one-way delay: 114.165 ms

Loss rate: 0.04%

-- Flow 1:

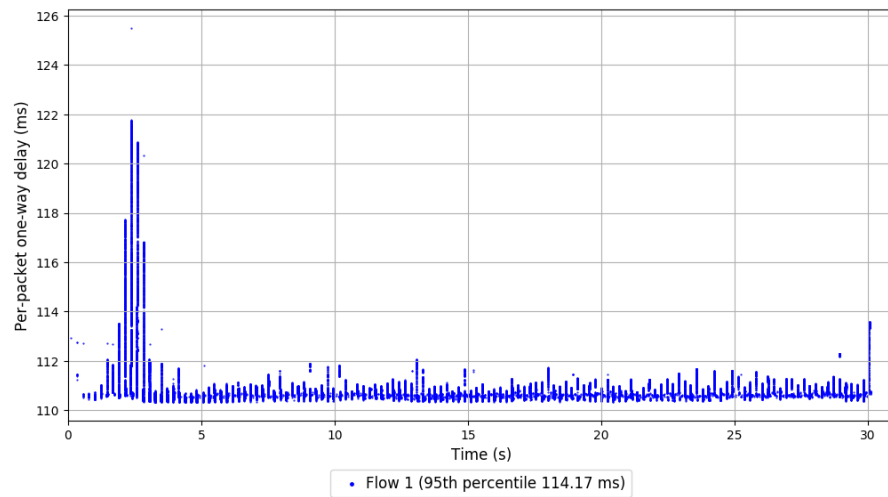
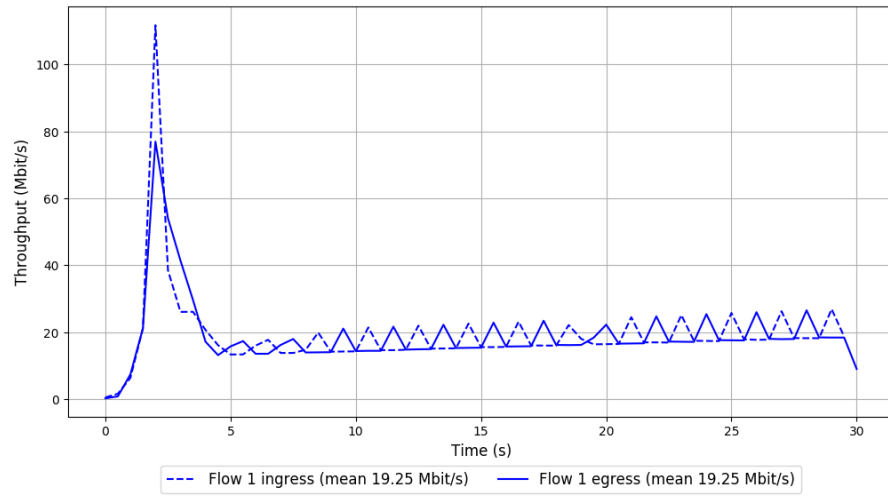
Average throughput: 19.25 Mbit/s

95th percentile per-packet one-way delay: 114.165 ms

Loss rate: 0.04%



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



Run 6: Statistics of TCP Vegas

Start at: 2017-09-18 00:02:43

End at: 2017-09-18 00:03:13

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 17.10 Mbit/s

95th percentile per-packet one-way delay: 114.371 ms

Loss rate: 0.02%

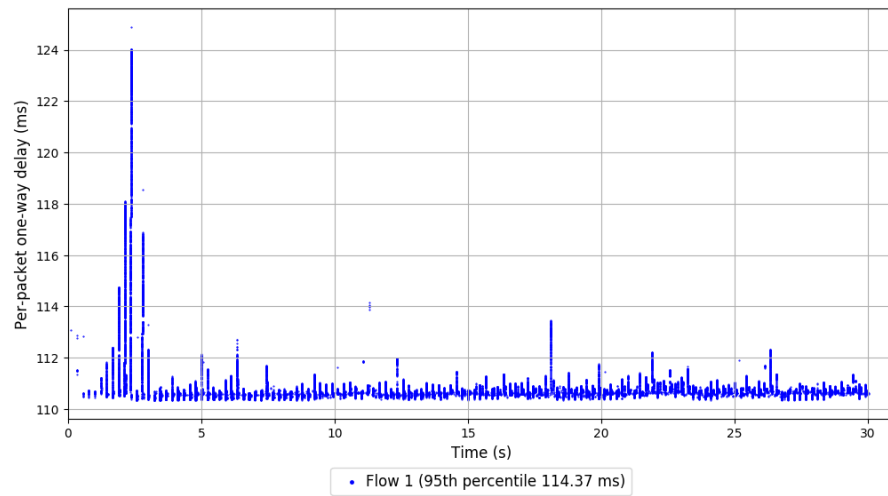
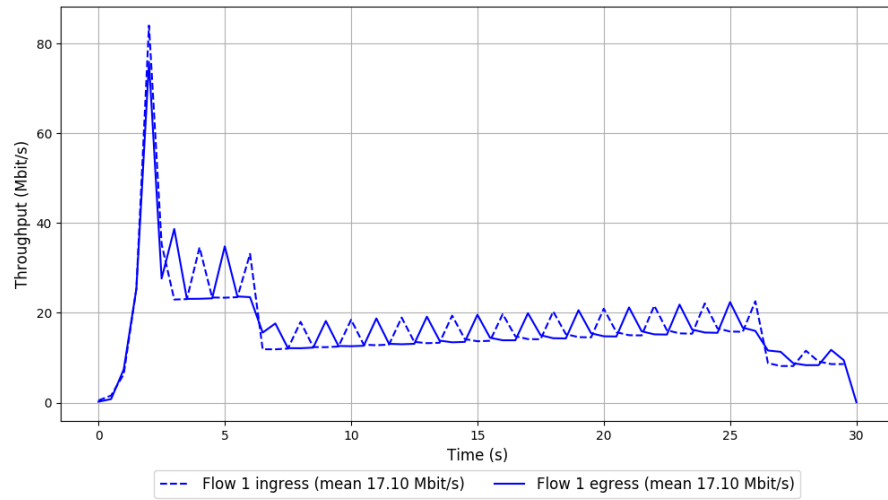
-- Flow 1:

Average throughput: 17.10 Mbit/s

95th percentile per-packet one-way delay: 114.371 ms

Loss rate: 0.02%

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



Run 7: Statistics of TCP Vegas

Start at: 2017-09-18 00:14:42

End at: 2017-09-18 00:15:12

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 11.45 Mbit/s

95th percentile per-packet one-way delay: 113.461 ms

Loss rate: 0.00%

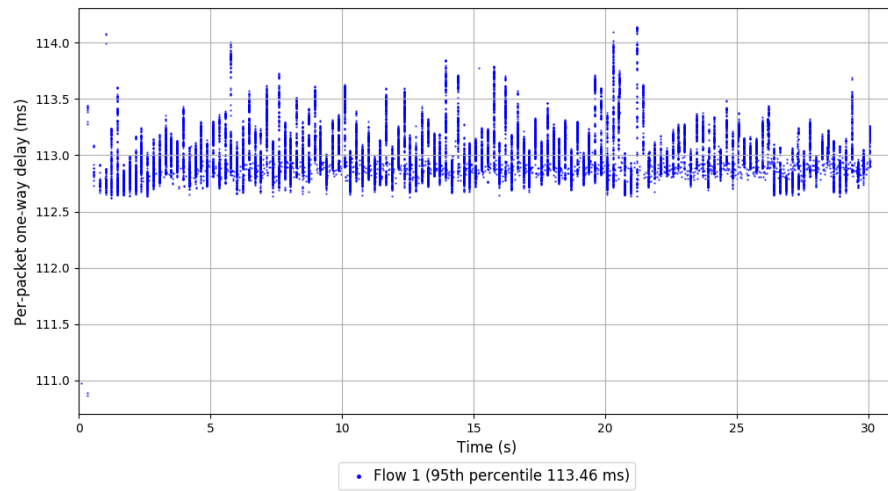
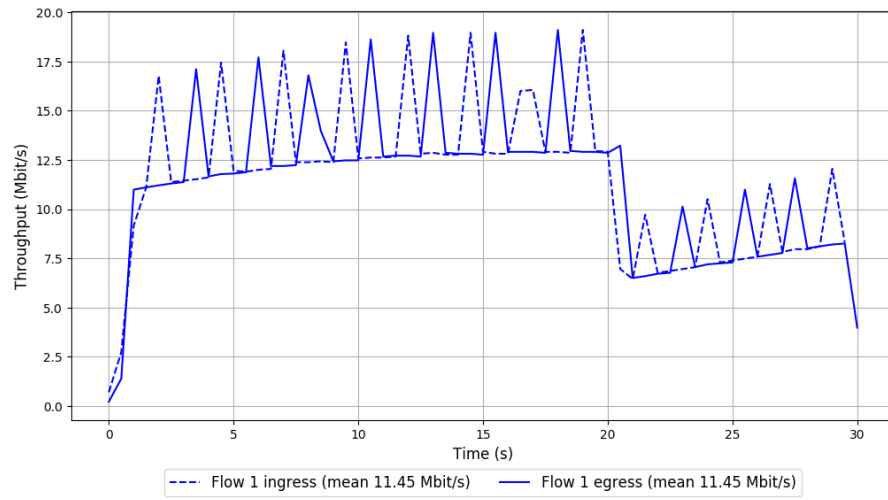
-- Flow 1:

Average throughput: 11.45 Mbit/s

95th percentile per-packet one-way delay: 113.461 ms

Loss rate: 0.00%

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



Run 8: Statistics of TCP Vegas

Start at: 2017-09-18 00:26:52

End at: 2017-09-18 00:27:22

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 8.03 Mbit/s

95th percentile per-packet one-way delay: 113.565 ms

Loss rate: 0.05%

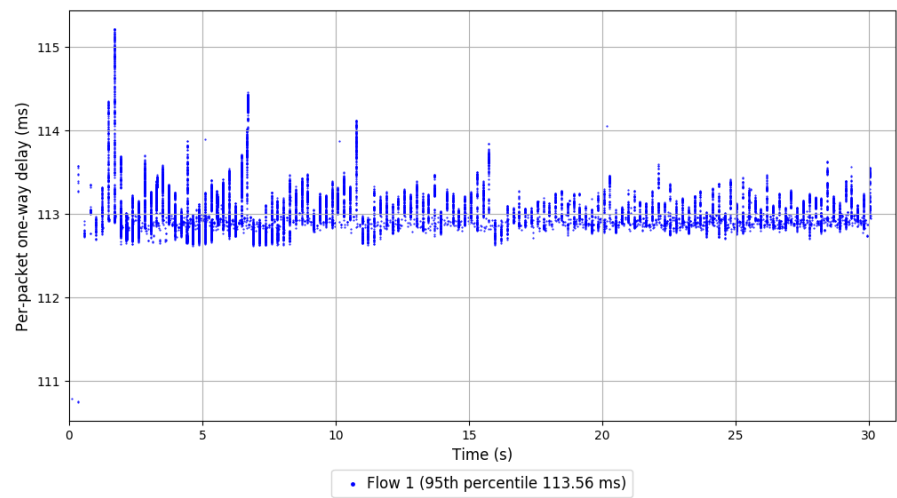
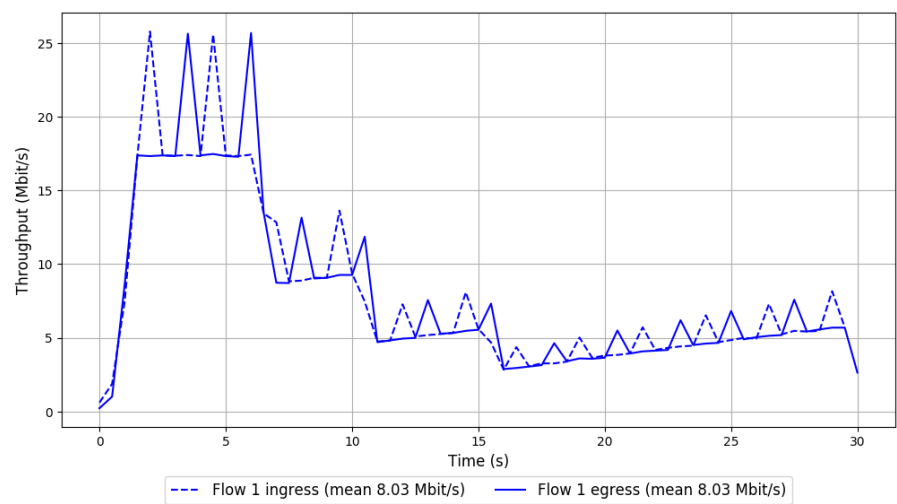
-- Flow 1:

Average throughput: 8.03 Mbit/s

95th percentile per-packet one-way delay: 113.565 ms

Loss rate: 0.05%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-09-18 00:38:45

End at: 2017-09-18 00:39:15

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 8.44 Mbit/s

95th percentile per-packet one-way delay: 113.651 ms

Loss rate: 0.11%

-- Flow 1:

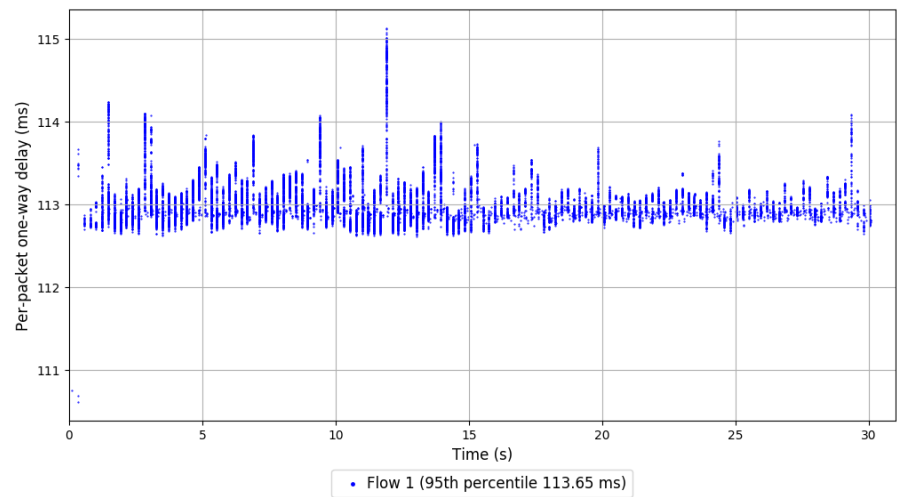
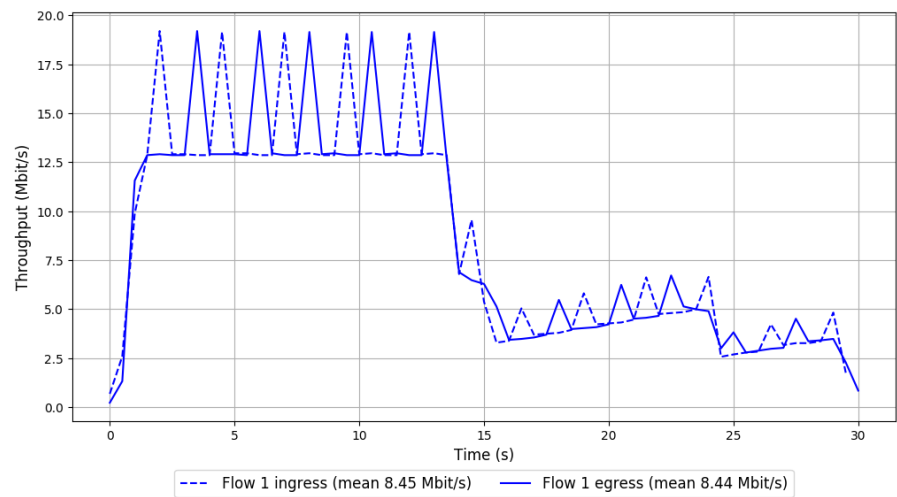
Average throughput: 8.44 Mbit/s

95th percentile per-packet one-way delay: 113.651 ms

Loss rate: 0.11%



Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-09-18 00:50:45

End at: 2017-09-18 00:51:15

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 31.23 Mbit/s

95th percentile per-packet one-way delay: 113.470 ms

Loss rate: 0.00%

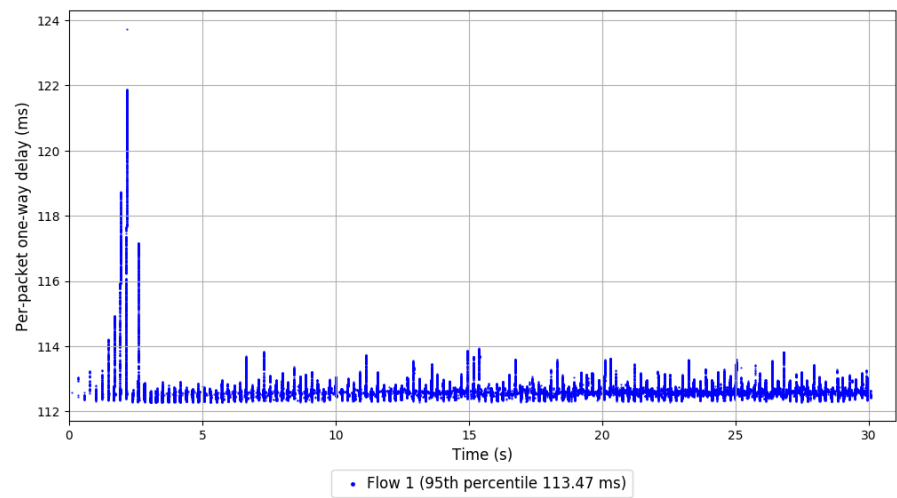
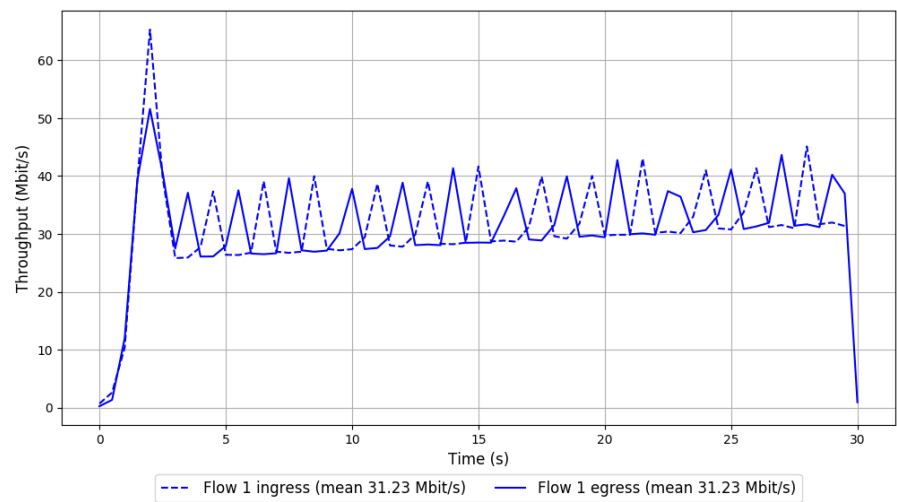
-- Flow 1:

Average throughput: 31.23 Mbit/s

95th percentile per-packet one-way delay: 113.470 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-09-17 22:56:45

End at: 2017-09-17 22:57:15

# Below is generated by plot.py at 2017-09-18 02:22:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 149.72 Mbit/s

95th percentile per-packet one-way delay: 230.069 ms

Loss rate: 1.01%

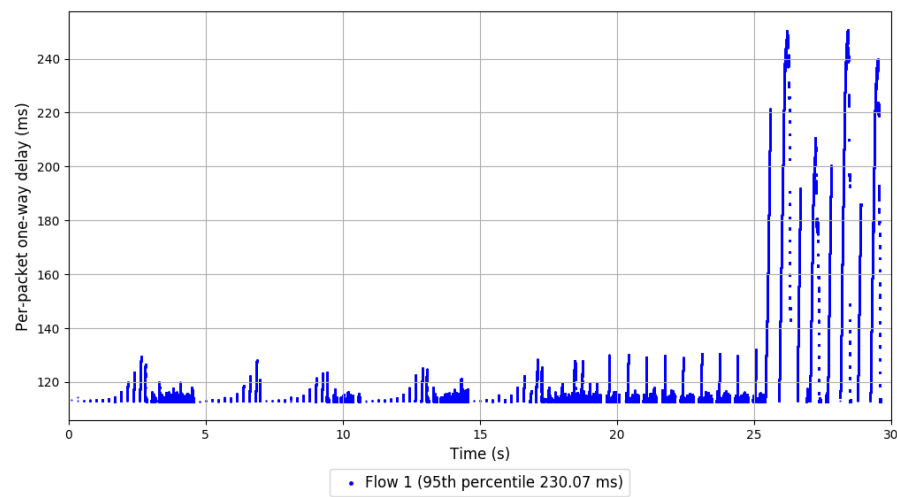
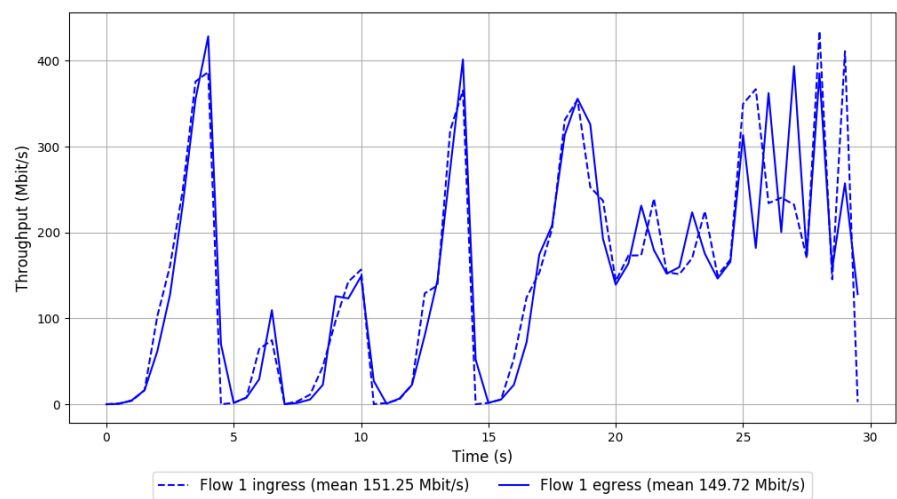
-- Flow 1:

Average throughput: 149.72 Mbit/s

95th percentile per-packet one-way delay: 230.069 ms

Loss rate: 1.01%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-09-17 23:08:49

End at: 2017-09-17 23:09:19

# Below is generated by plot.py at 2017-09-18 02:24:53

# Datalink statistics

-- Total of 1 flow:

Average throughput: 260.64 Mbit/s

95th percentile per-packet one-way delay: 274.334 ms

Loss rate: 3.73%

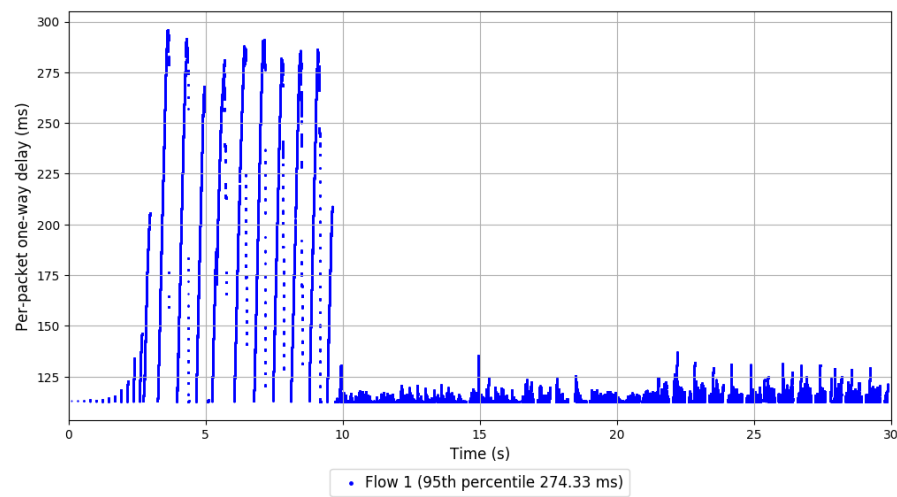
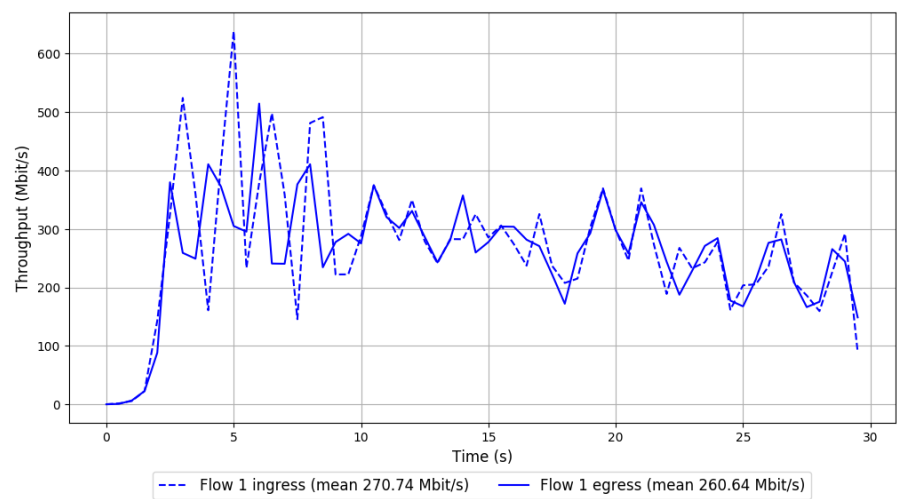
-- Flow 1:

Average throughput: 260.64 Mbit/s

95th percentile per-packet one-way delay: 274.334 ms

Loss rate: 3.73%

Run 2: Report of Verus — Data Link



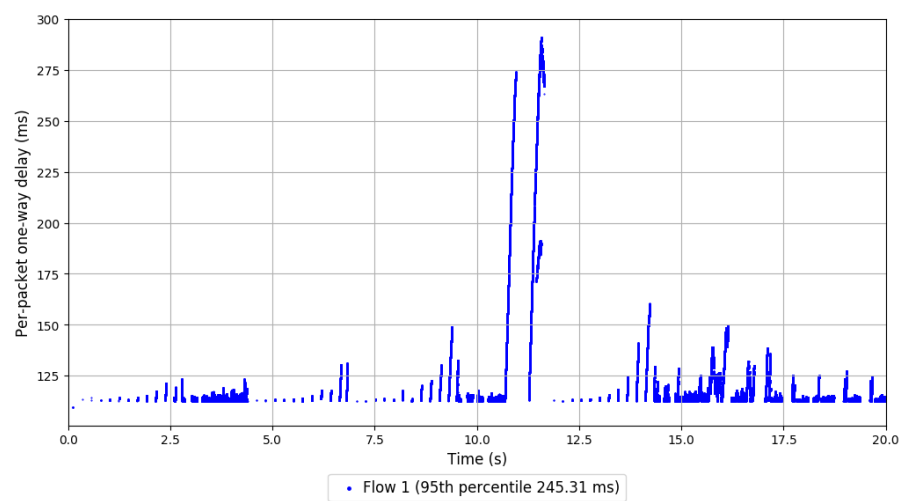
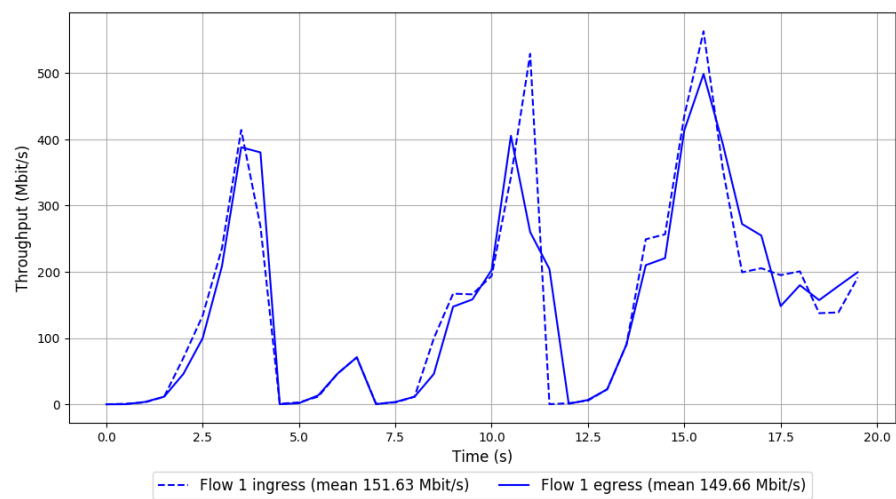
Run 3: Statistics of Verus

Start at: 2017-09-17 23:20:49

End at: 2017-09-17 23:21:19



Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-09-17 23:32:56

End at: 2017-09-17 23:33:26

# Below is generated by plot.py at 2017-09-18 02:24:53

# Datalink statistics

-- Total of 1 flow:

Average throughput: 180.14 Mbit/s

95th percentile per-packet one-way delay: 132.196 ms

Loss rate: 0.01%

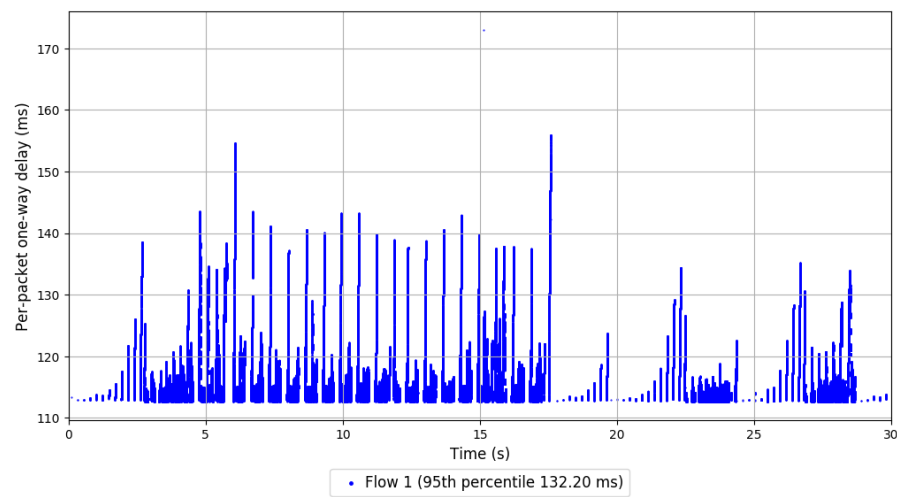
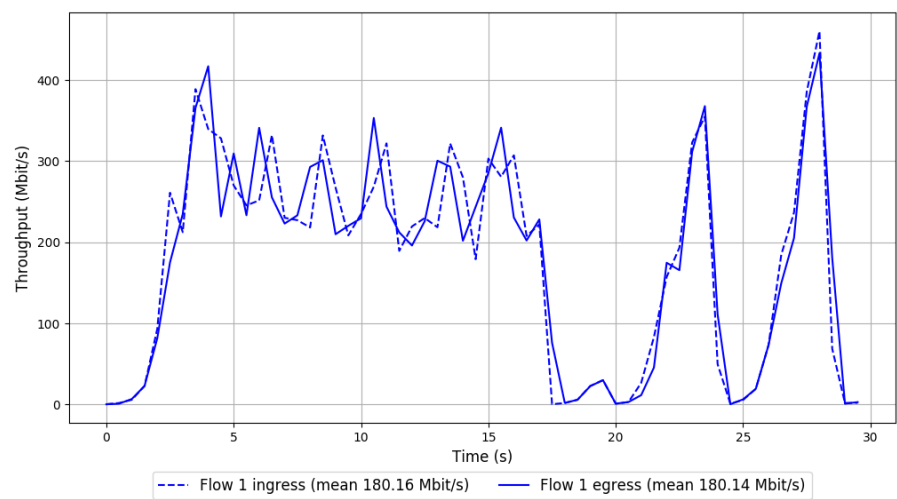
-- Flow 1:

Average throughput: 180.14 Mbit/s

95th percentile per-packet one-way delay: 132.196 ms

Loss rate: 0.01%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-09-17 23:44:45

End at: 2017-09-17 23:45:15

# Below is generated by plot.py at 2017-09-18 02:24:53

# Datalink statistics

-- Total of 1 flow:

Average throughput: 162.51 Mbit/s

95th percentile per-packet one-way delay: 151.942 ms

Loss rate: 0.02%

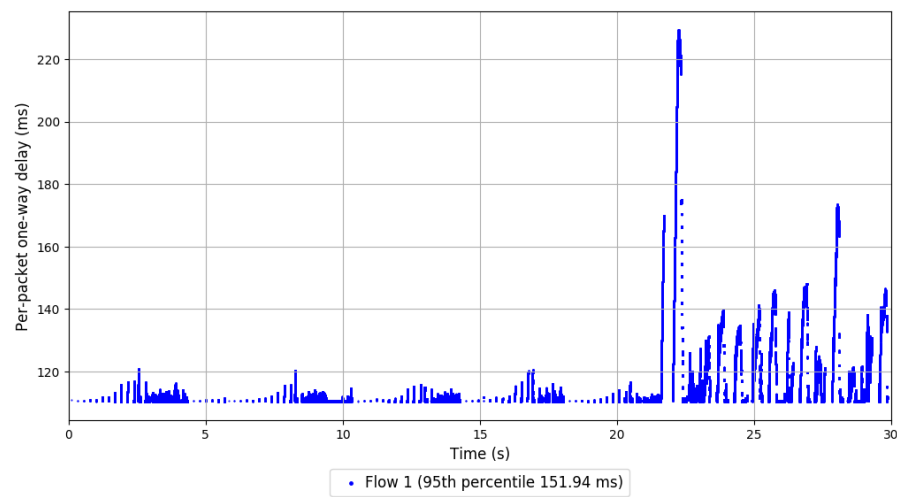
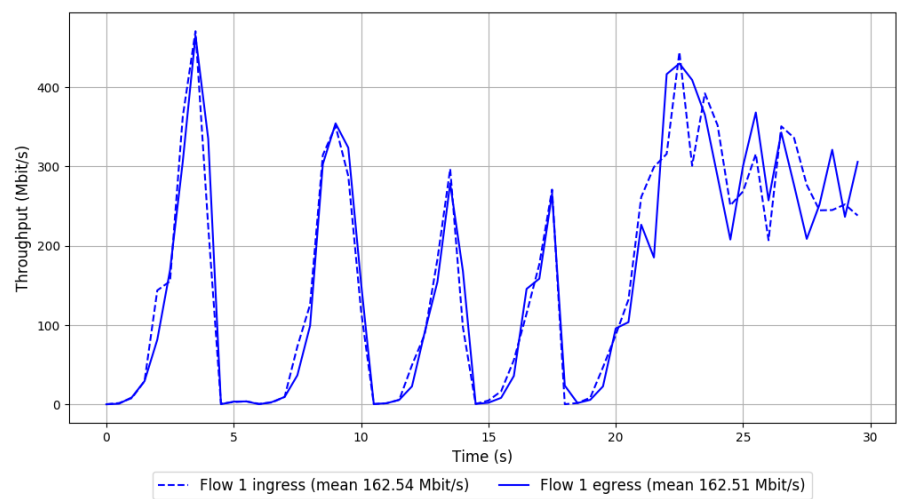
-- Flow 1:

Average throughput: 162.51 Mbit/s

95th percentile per-packet one-way delay: 151.942 ms

Loss rate: 0.02%

Run 5: Report of Verus — Data Link

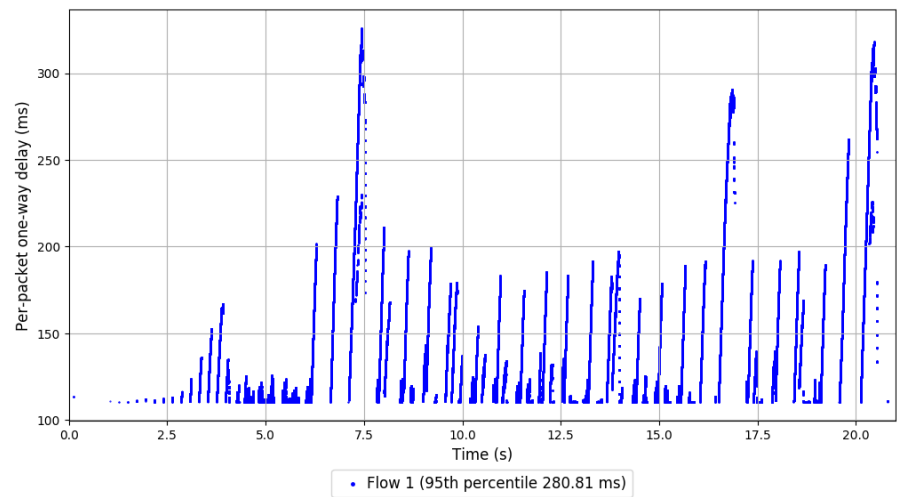
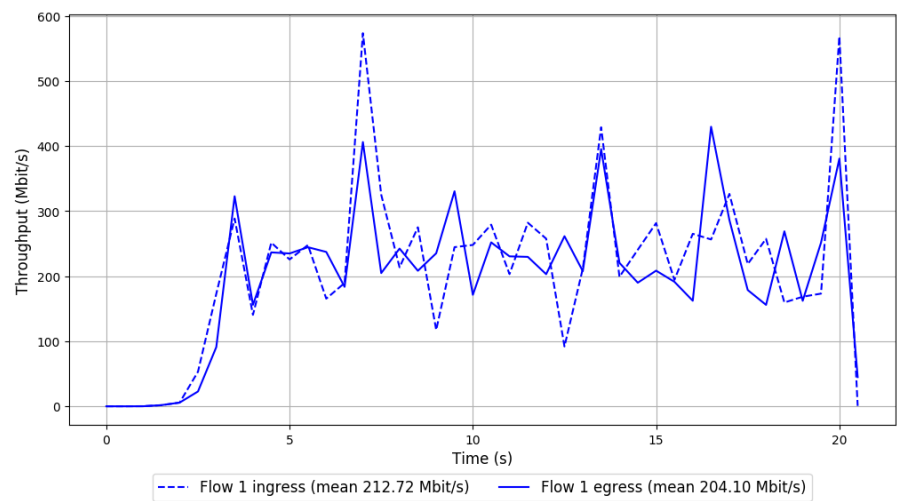


Run 6: Statistics of Verus

Start at: 2017-09-17 23:56:57

End at: 2017-09-17 23:57:27

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-09-18 00:08:51

End at: 2017-09-18 00:09:21

# Below is generated by plot.py at 2017-09-18 02:24:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 228.08 Mbit/s

95th percentile per-packet one-way delay: 197.218 ms

Loss rate: 0.69%

-- Flow 1:

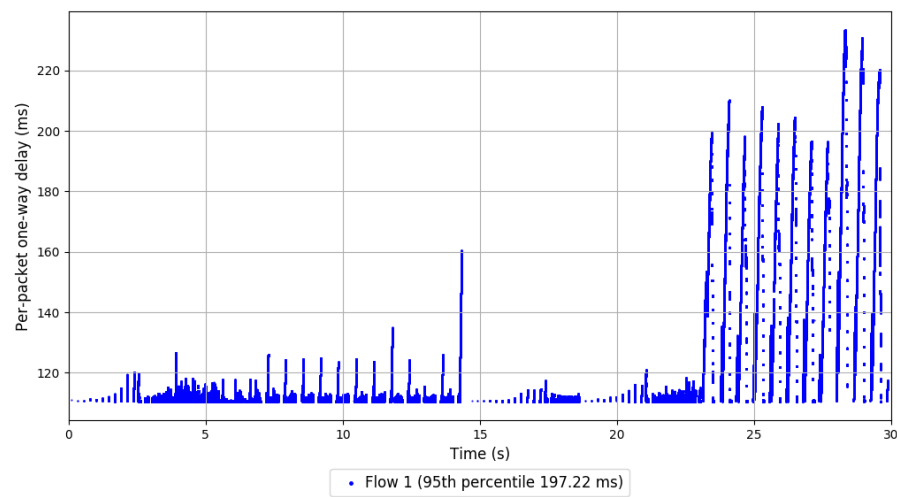
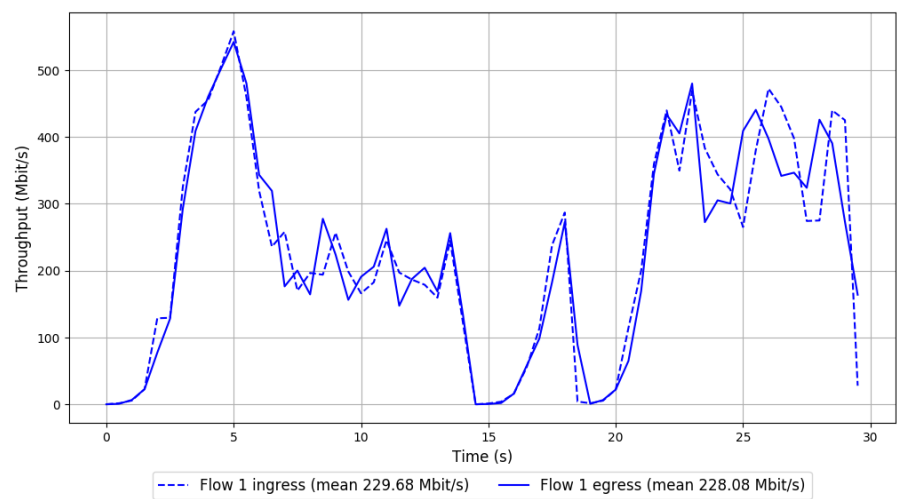
Average throughput: 228.08 Mbit/s

95th percentile per-packet one-way delay: 197.218 ms

Loss rate: 0.69%



Run 7: Report of Verus — Data Link

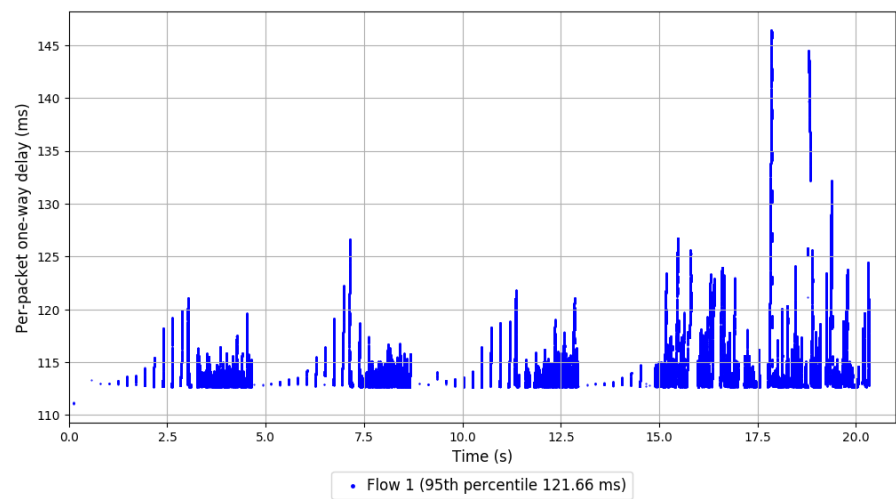
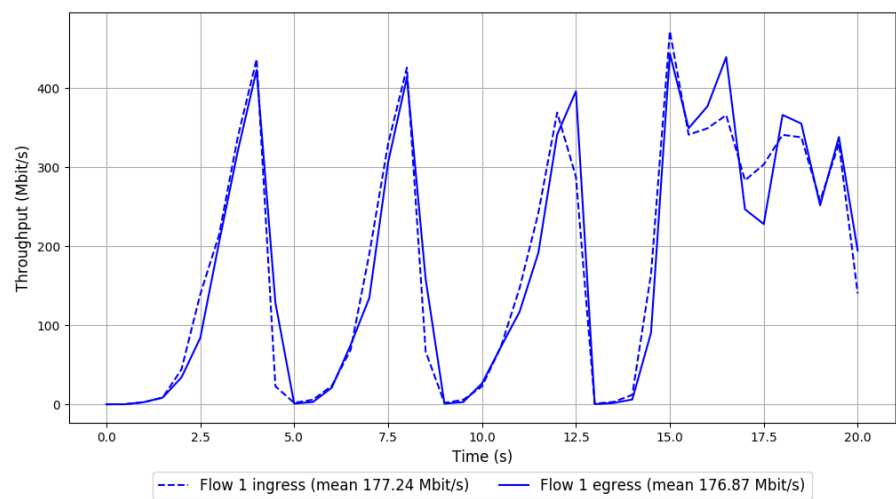


Run 8: Statistics of Verus

Start at: 2017-09-18 00:20:48

End at: 2017-09-18 00:21:18

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-09-18 00:32:59

End at: 2017-09-18 00:33:29

# Below is generated by plot.py at 2017-09-18 02:24:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 214.54 Mbit/s

95th percentile per-packet one-way delay: 141.383 ms

Loss rate: 0.56%

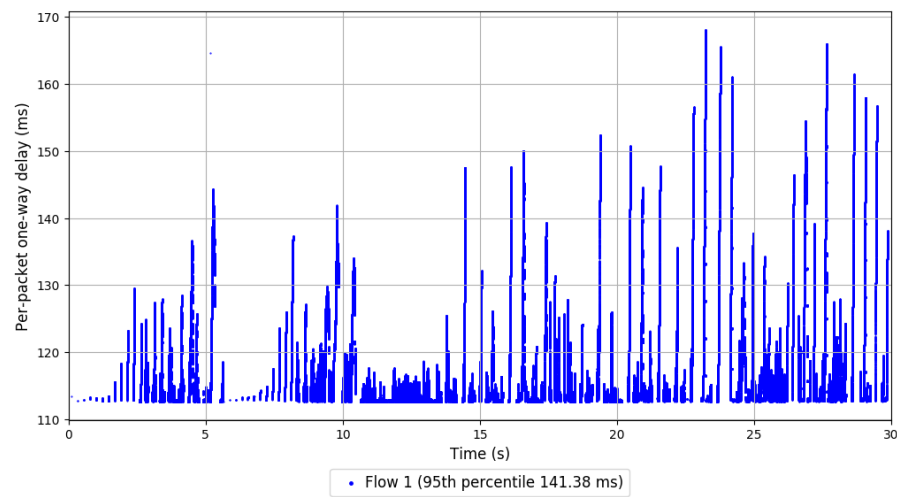
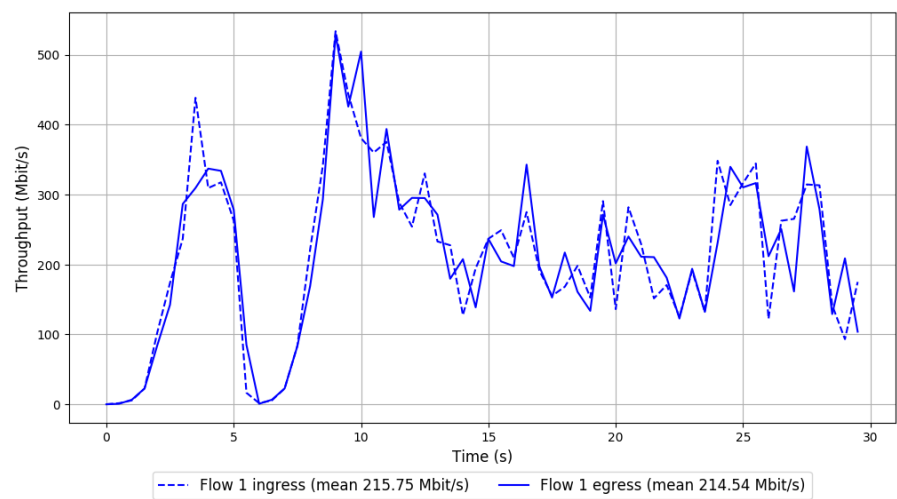
-- Flow 1:

Average throughput: 214.54 Mbit/s

95th percentile per-packet one-way delay: 141.383 ms

Loss rate: 0.56%

Run 9: Report of Verus — Data Link

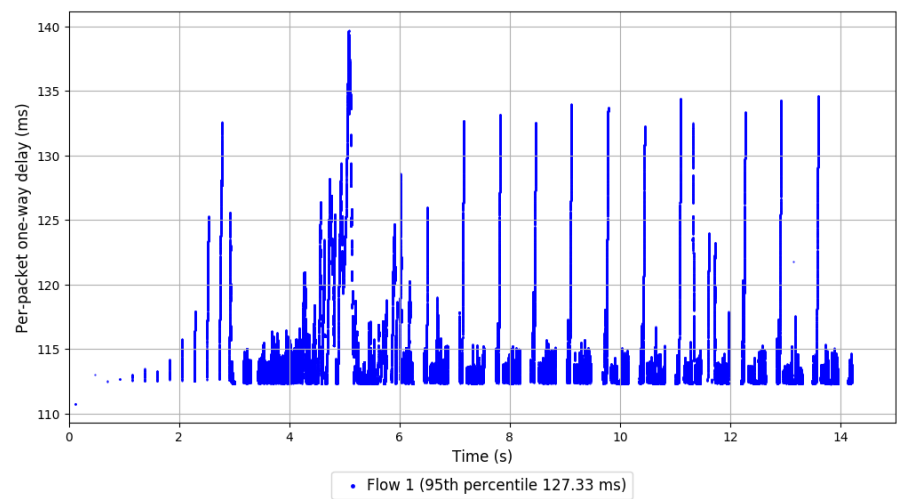
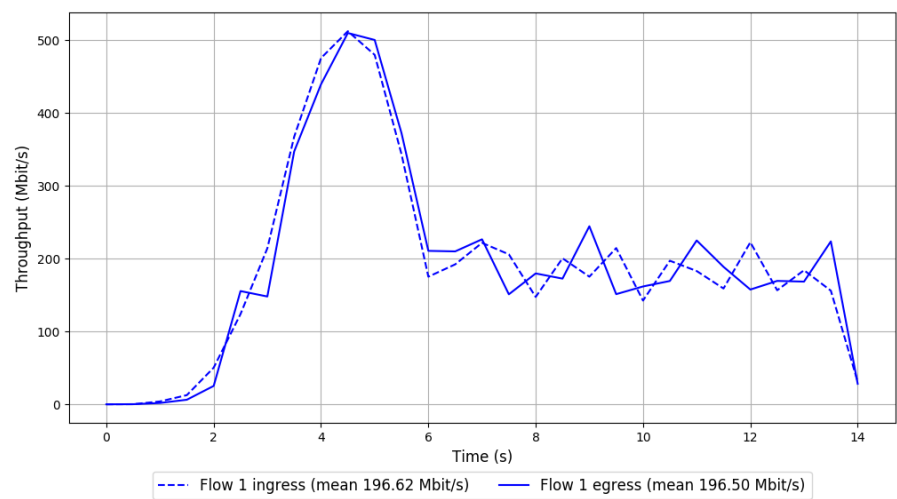


Run 10: Statistics of Verus

Start at: 2017-09-18 00:44:46

End at: 2017-09-18 00:45:16

Run 10: Report of Verus — Data Link



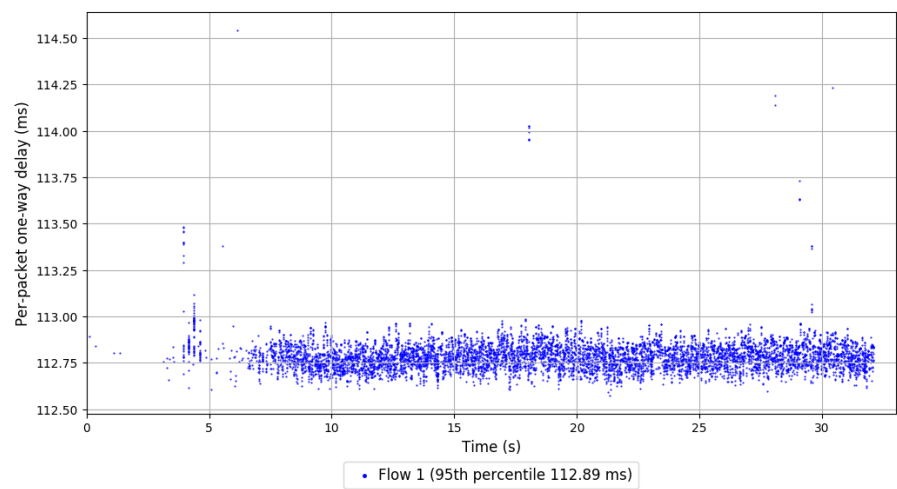
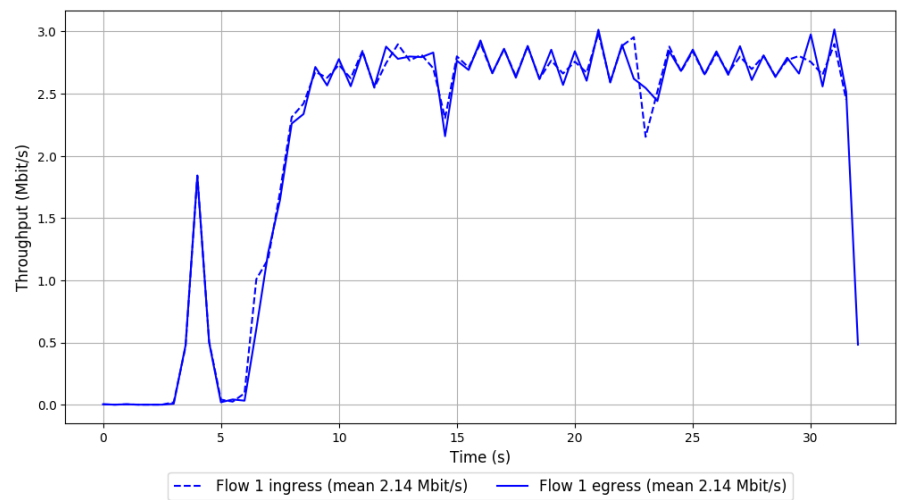
```
Run 1: Statistics of WebRTC media

Start at: 2017-09-17 22:52:12
End at: 2017-09-17 22:52:42

# Below is generated by plot.py at 2017-09-18 02:24:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 112.893 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 112.893 ms
Loss rate: 0.01%
```



Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-09-17 23:04:15

End at: 2017-09-17 23:04:45

# Below is generated by plot.py at 2017-09-18 02:24:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 110.626 ms

Loss rate: 0.00%

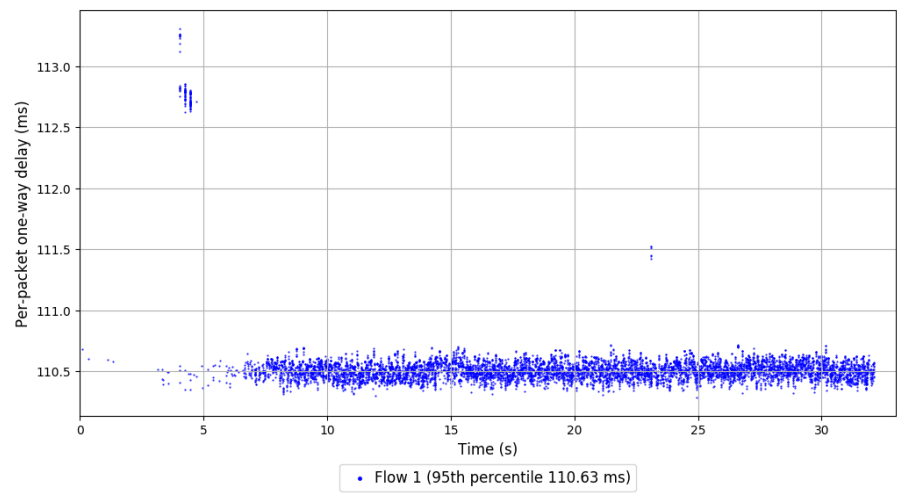
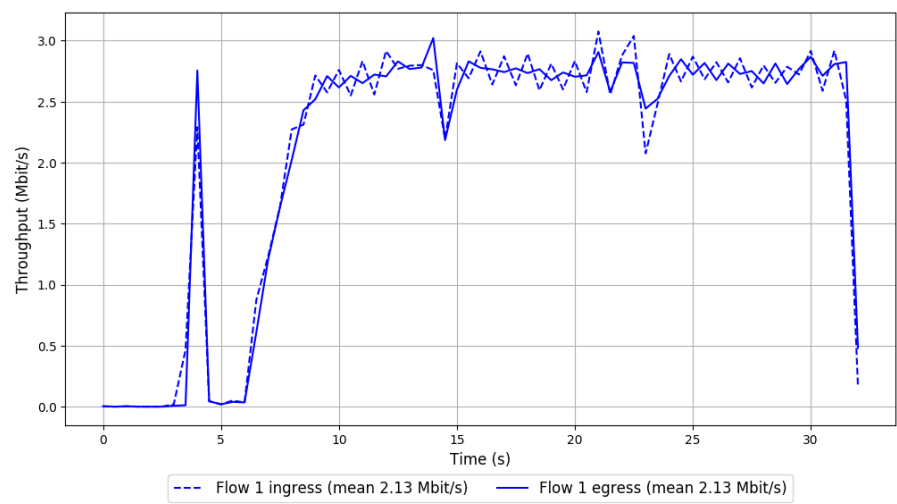
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 110.626 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-09-17 23:16:15

End at: 2017-09-17 23:16:45

# Below is generated by plot.py at 2017-09-18 02:24:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 110.712 ms

Loss rate: 0.00%

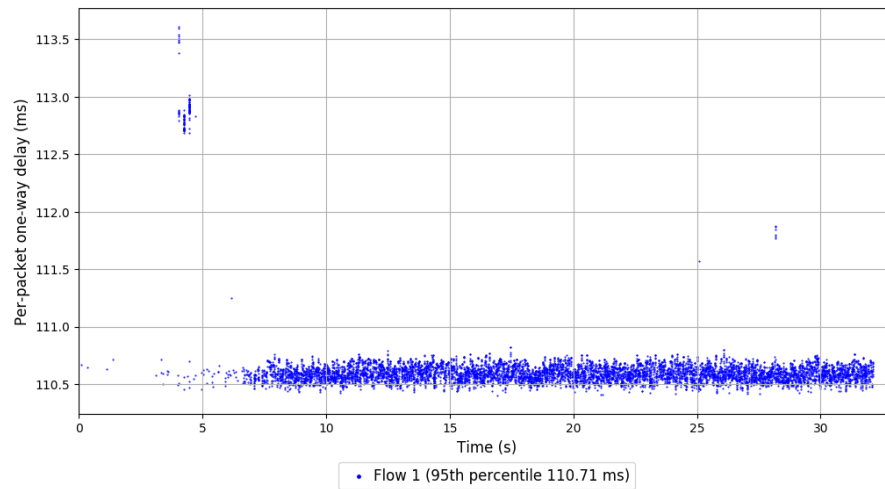
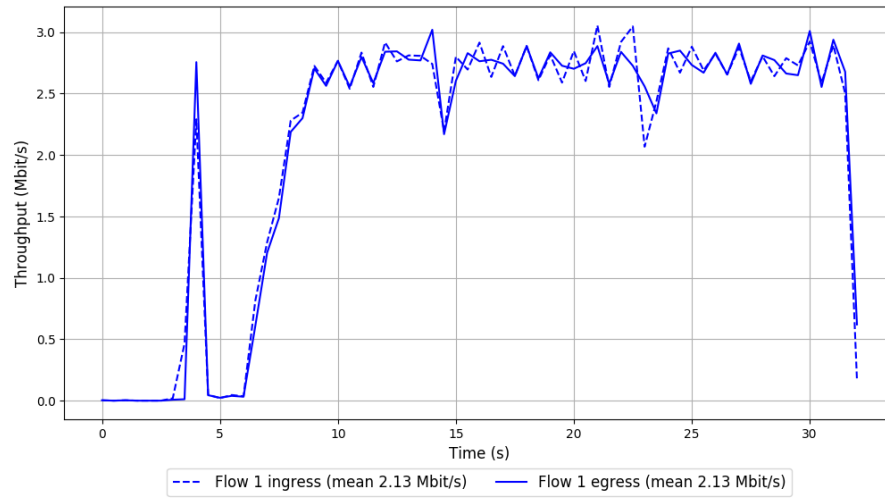
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 110.712 ms

Loss rate: 0.00%

### Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-09-17 23:28:22

End at: 2017-09-17 23:28:52

# Below is generated by plot.py at 2017-09-18 02:24:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 112.898 ms

Loss rate: 0.00%

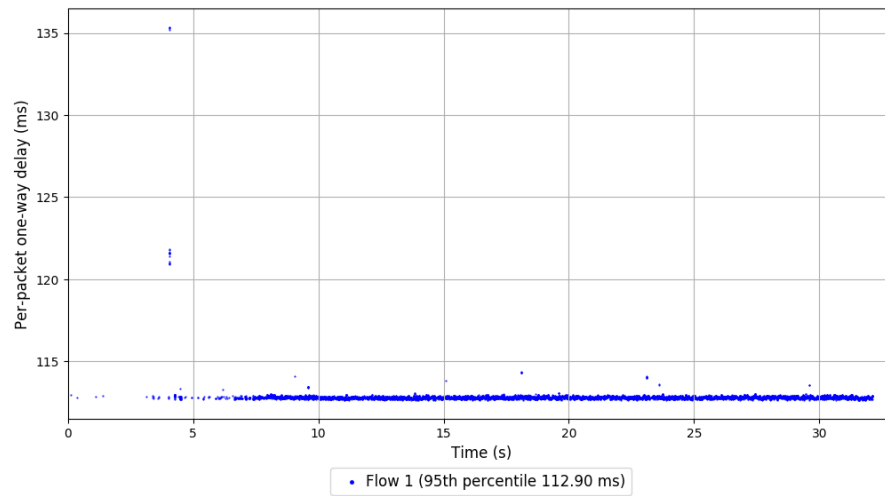
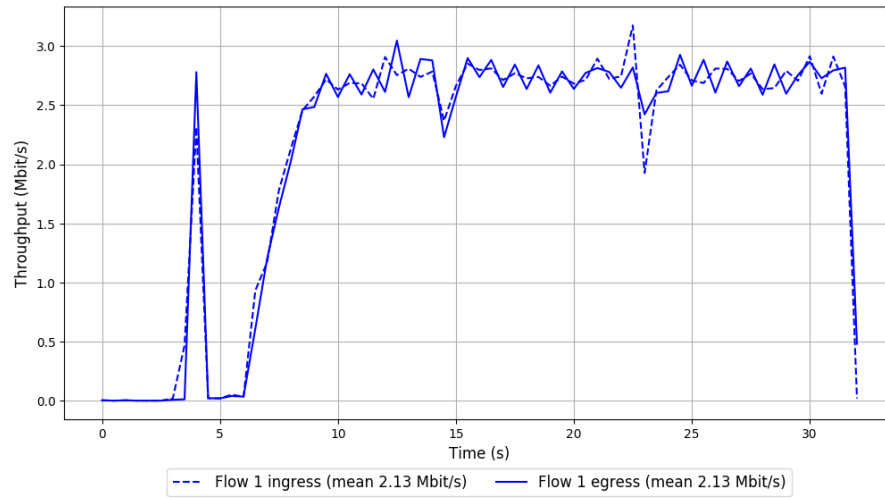
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 112.898 ms

Loss rate: 0.00%

#### Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-09-17 23:40:14

End at: 2017-09-17 23:40:44

# Below is generated by plot.py at 2017-09-18 02:24:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 110.721 ms

Loss rate: 0.00%

-- Flow 1:

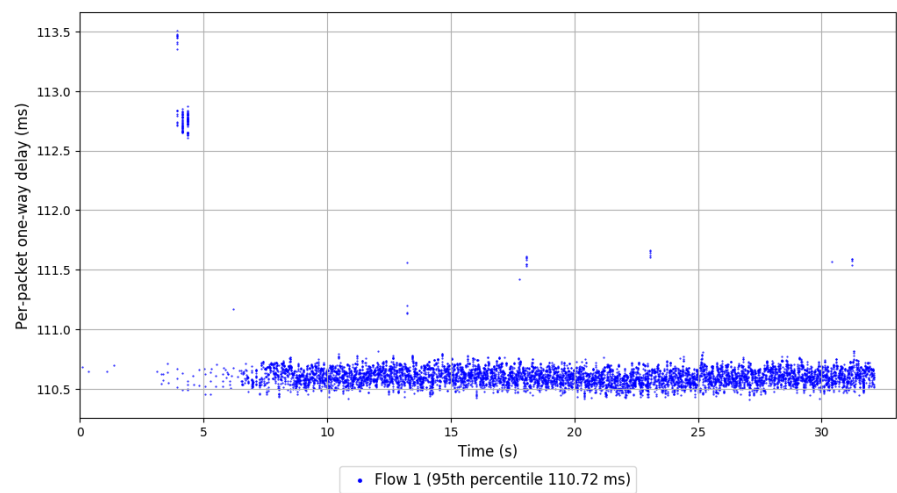
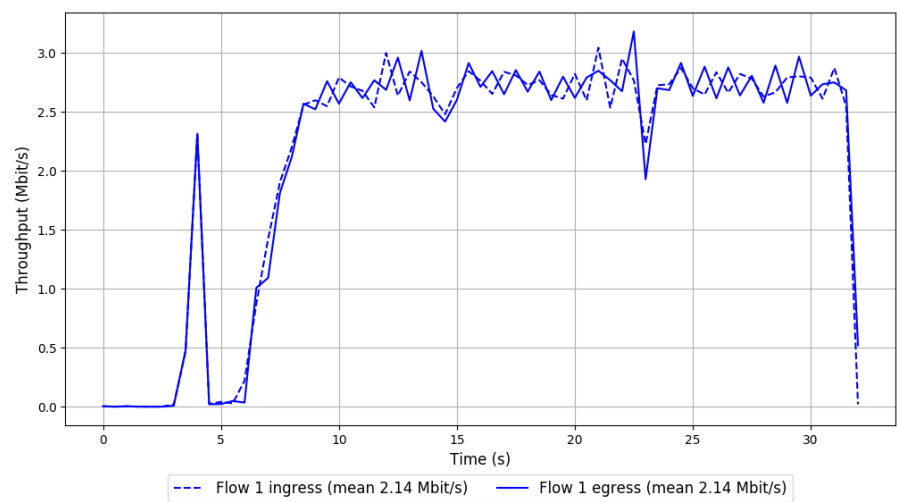
Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 110.721 ms

Loss rate: 0.00%



Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-09-17 23:52:22

End at: 2017-09-17 23:52:52

# Below is generated by plot.py at 2017-09-18 02:24:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 111.091 ms

Loss rate: 0.00%

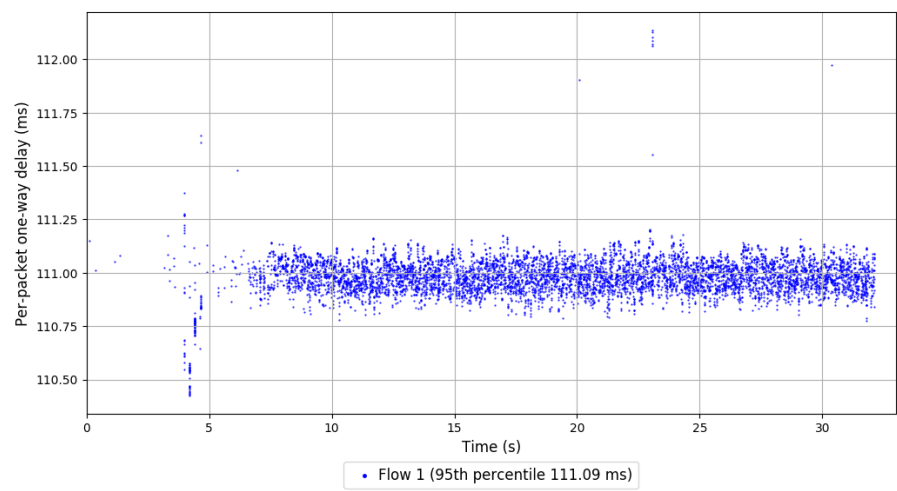
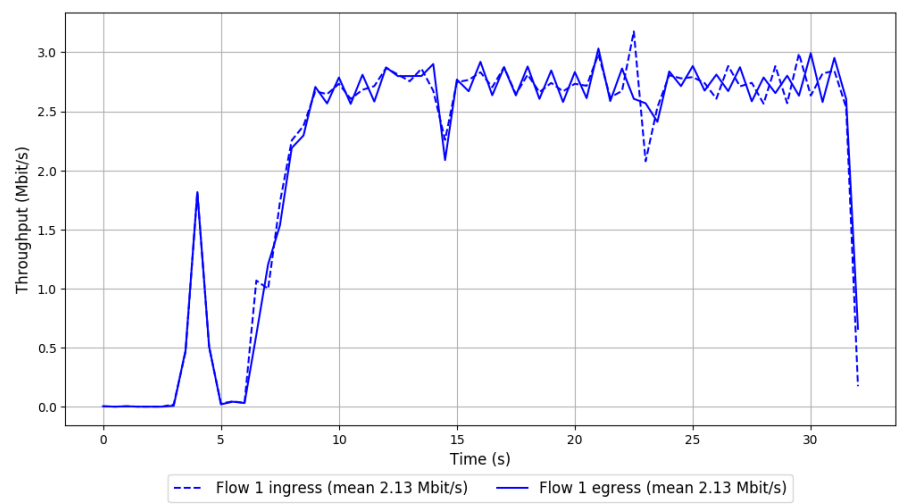
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 111.091 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-09-18 00:04:15

End at: 2017-09-18 00:04:45

# Below is generated by plot.py at 2017-09-18 02:24:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 110.897 ms

Loss rate: 0.00%

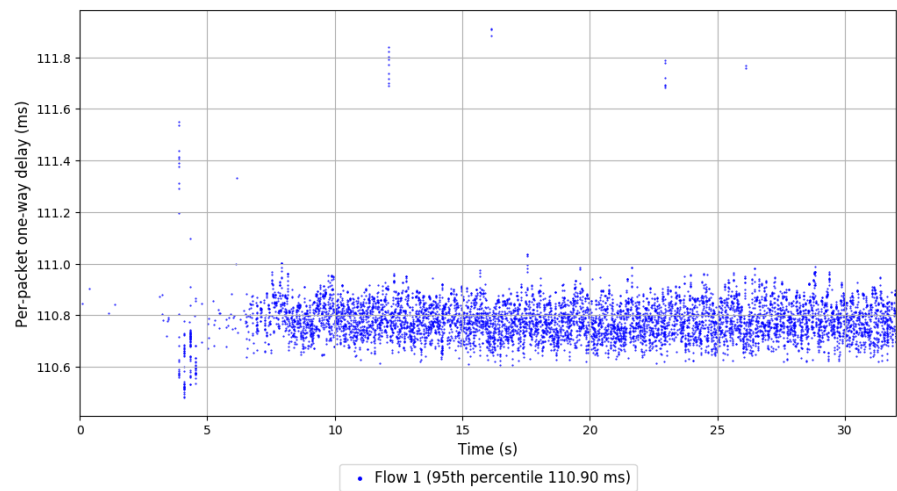
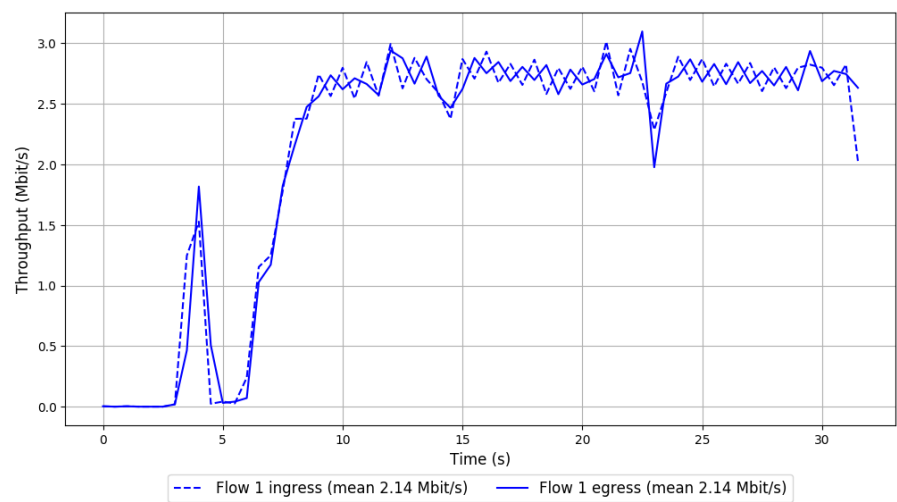
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 110.897 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-09-18 00:16:13

End at: 2017-09-18 00:16:43

# Below is generated by plot.py at 2017-09-18 02:24:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 112.911 ms

Loss rate: 0.00%

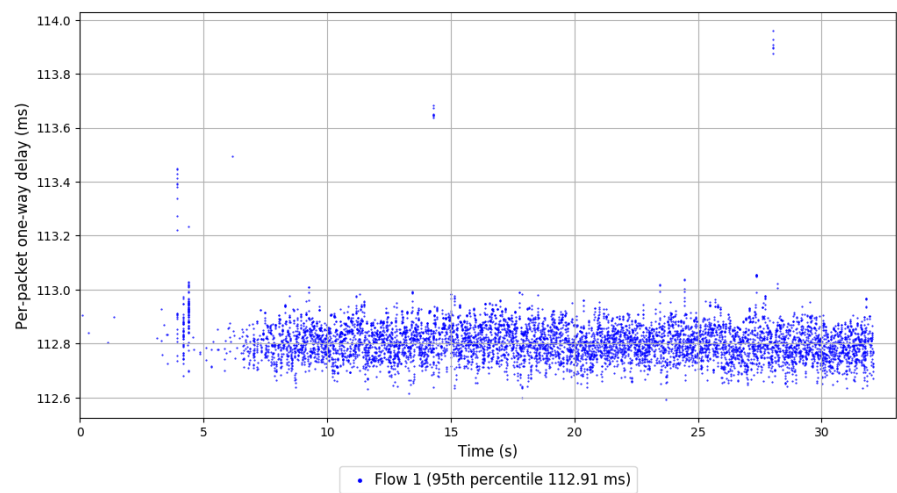
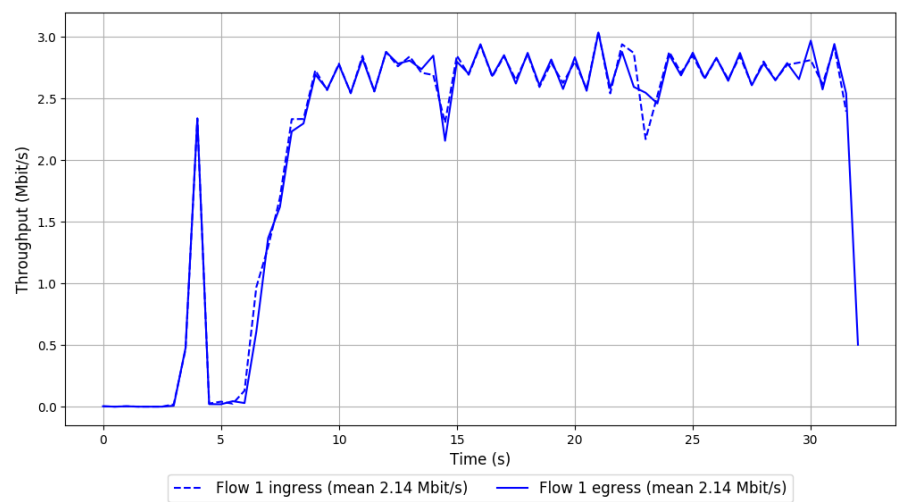
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 112.911 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-09-18 00:28:23

End at: 2017-09-18 00:28:53

# Below is generated by plot.py at 2017-09-18 02:24:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 112.512 ms

Loss rate: 0.00%

-- Flow 1:

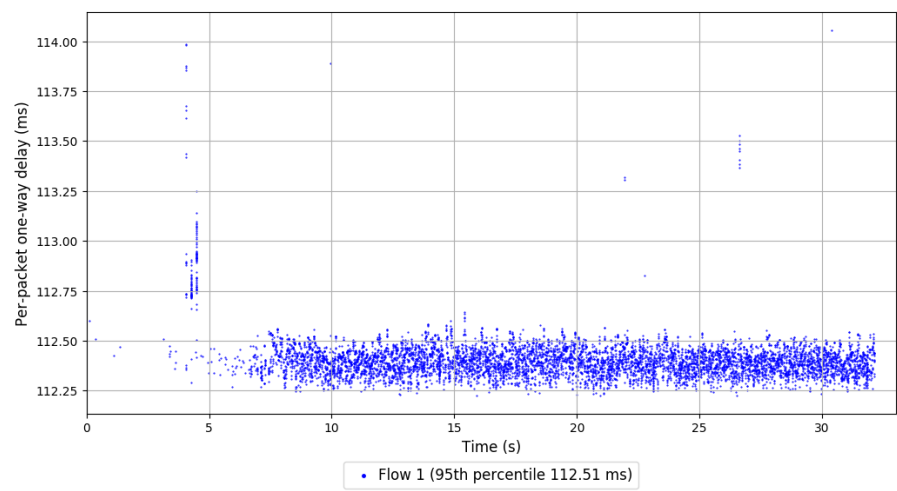
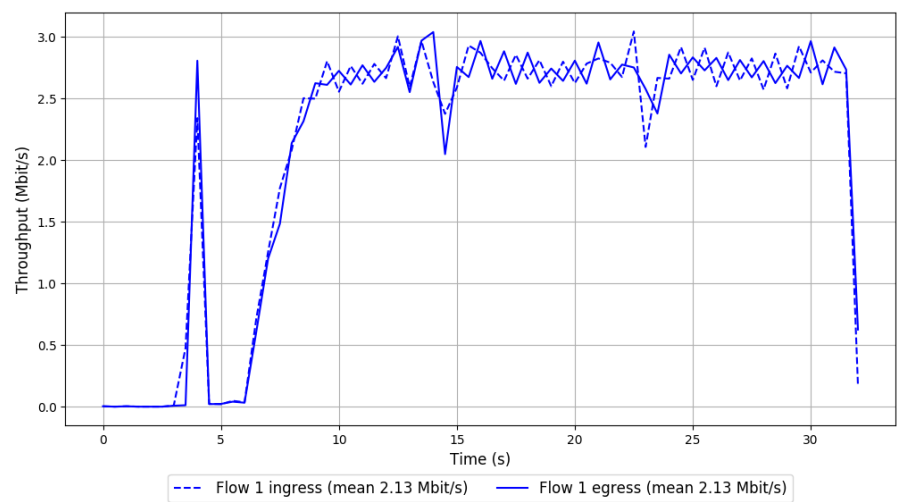
Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 112.512 ms

Loss rate: 0.00%



Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-09-18 00:40:16

End at: 2017-09-18 00:40:46

# Below is generated by plot.py at 2017-09-18 02:24:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 110.296 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 110.296 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

