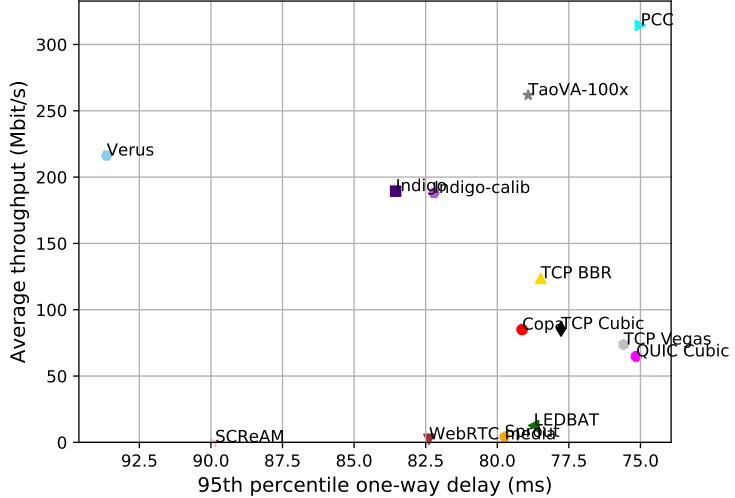


## Pantheon Report

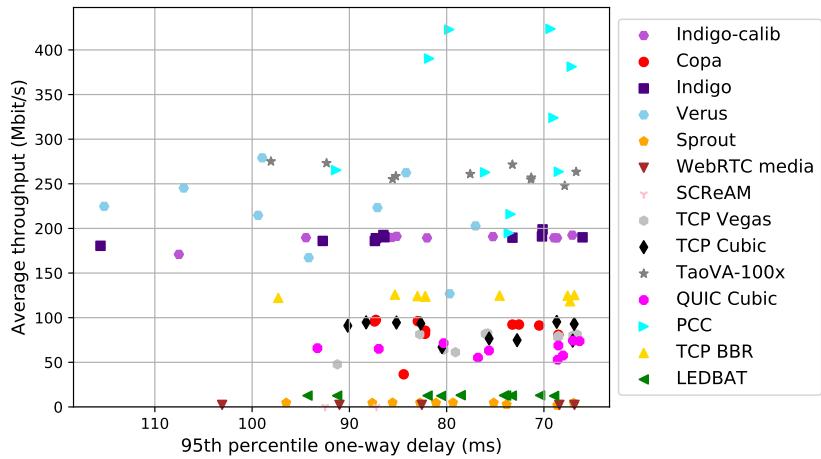
Generated at 2017-11-21 06:05:04 (UTC).  
Data path: Colombia Ethernet (*remote*) → AWS Brazil 2 Ethernet (*local*).  
Repeated the test of 14 congestion control schemes 10 times.  
Each test lasted for 30 seconds running 1 flow.  
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).  
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo\_fast**).  
NTP offsets were measured against **gps.ntp.br** and have been applied to correct the timestamps in logs.

Git summary:  
branch: **indigos** @ e3a57ad5ac5cfaca0e3f983c8dd4cc3509e0262  
third\_party/calibrated\_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50  
M datagrump/sender.cc  
third\_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737  
third\_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55  
third\_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2  
third\_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89  
third\_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c  
third\_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5  
third\_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db  
third\_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda  
third\_party/koho\_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681  
M datagrump/sender.cc  
third\_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
third\_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4  
third\_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1  
M receiver/src/buffer.h  
M receiver/src/core.cpp  
M sender/src/buffer.h  
M sender/src/core.cpp  
third\_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42  
third\_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885  
third\_party/sourdough @ f1a14bffe749737437f61b1eaeb30b267cde681  
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 Colombia Ethernet to AWS Brazil 2 Ethernet, 10 runs of 30s each per scheme  
(mean of all runs by scheme)



test from Colombia Ethernet to AWS Brazil 2 Ethernet, 10 runs of 30s each per scheme



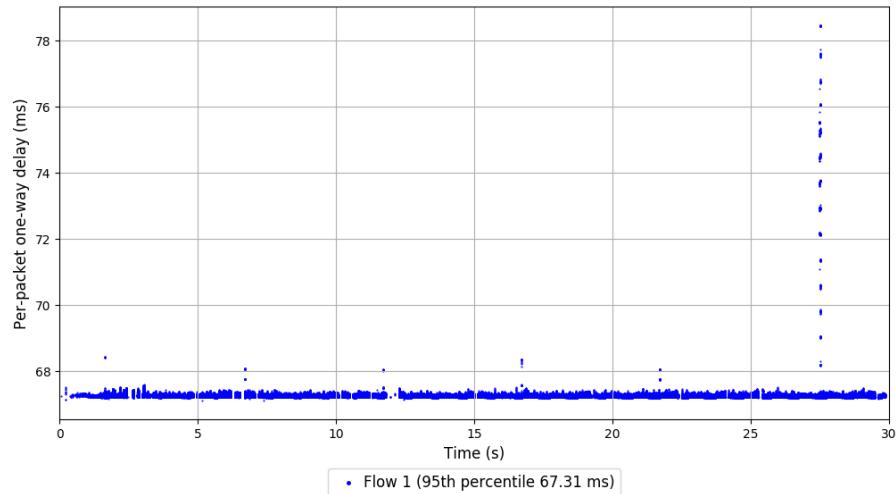
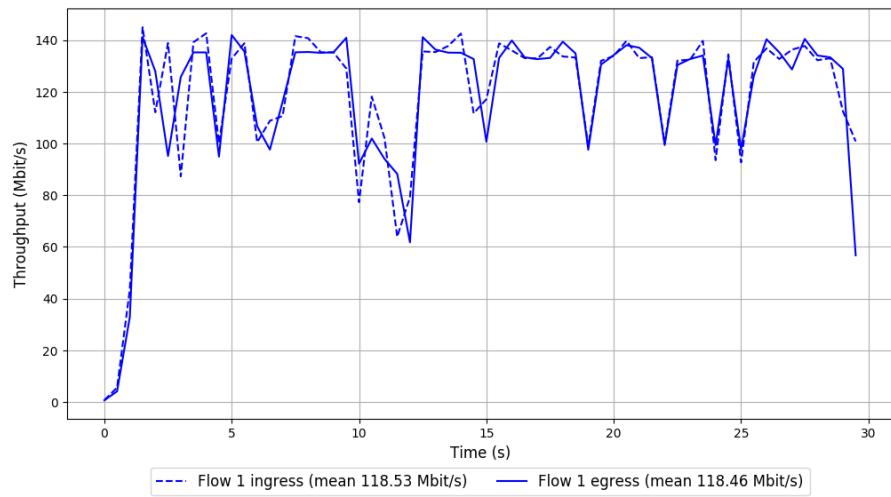
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	9	123.69	78.48	0.62
TCP Cubic	10	85.47	77.77	0.60
LEDBAT	10	12.71	78.73	1.13
PCC	10	314.43	74.99	6.03
QUIC Cubic	10	64.80	75.15	0.80
SCReAM	2	0.22	89.85	0.57
WebRTC media	5	2.28	82.39	0.64
Sprout	10	4.12	79.74	0.72
TaoVA-100x	10	261.77	78.92	0.62
TCP Vegas	10	73.76	75.59	0.59
Verus	9	216.27	93.64	1.33
Copa	10	85.00	79.13	0.62
Indigo	10	189.40	83.55	0.58
Indigo-calib	10	188.02	82.21	0.60

Run 1: Statistics of TCP BBR

```
Start at: 2017-11-20 23:28:04
End at: 2017-11-20 23:28:34
Local clock offset: -0.207 ms
Remote clock offset: 15.199 ms

# Below is generated by plot.py at 2017-11-21 05:32:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 118.46 Mbit/s
95th percentile per-packet one-way delay: 67.312 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 118.46 Mbit/s
95th percentile per-packet one-way delay: 67.312 ms
Loss rate: 0.63%
```

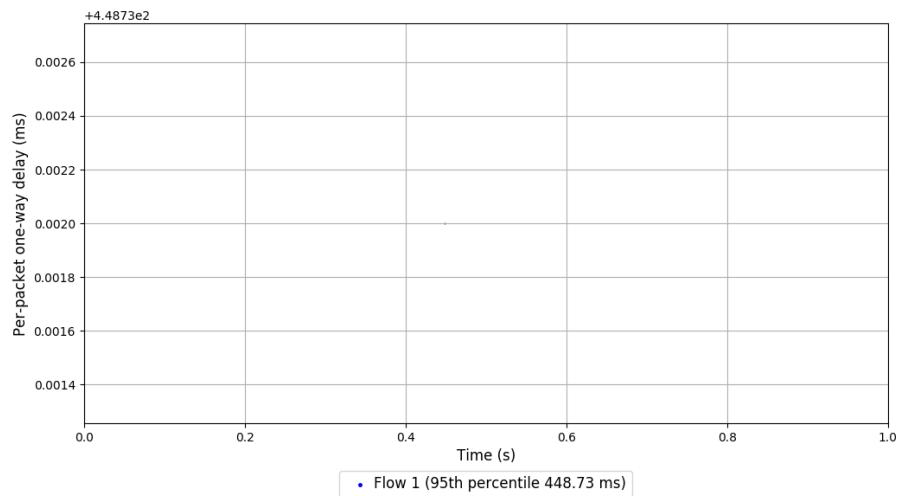
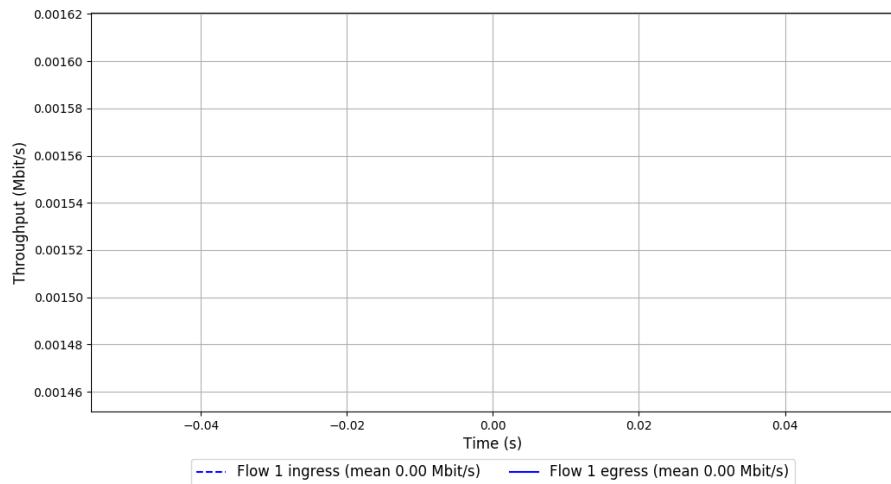
## Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-20 23:46:25  
End at: 2017-11-20 23:46:55  
Local clock offset: -0.241 ms  
Remote clock offset: 10.163 ms

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

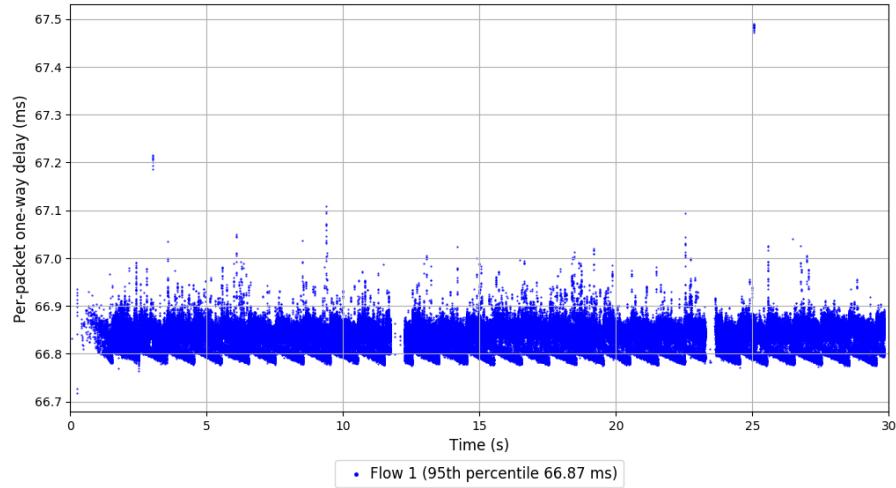
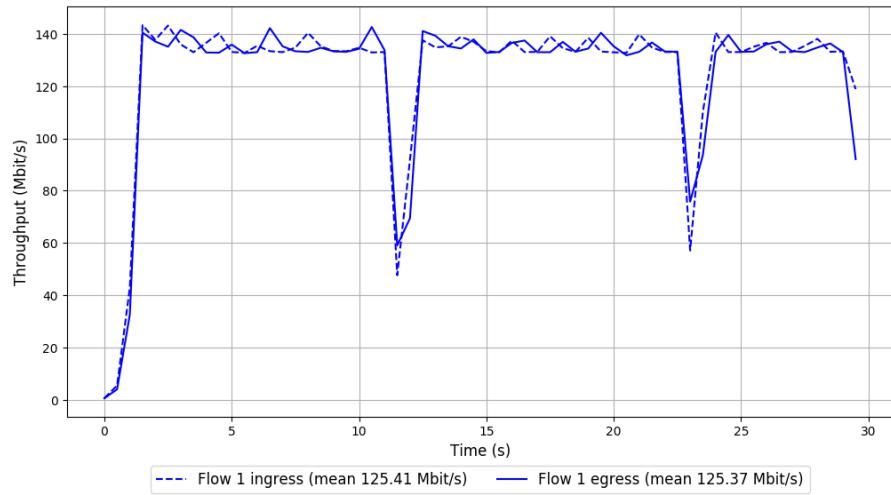


Run 3: Statistics of TCP BBR

```
Start at: 2017-11-21 00:04:35
End at: 2017-11-21 00:05:05
Local clock offset: -0.195 ms
Remote clock offset: 15.091 ms

# Below is generated by plot.py at 2017-11-21 05:32:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 125.37 Mbit/s
95th percentile per-packet one-way delay: 66.869 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 125.37 Mbit/s
95th percentile per-packet one-way delay: 66.869 ms
Loss rate: 0.60%
```

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

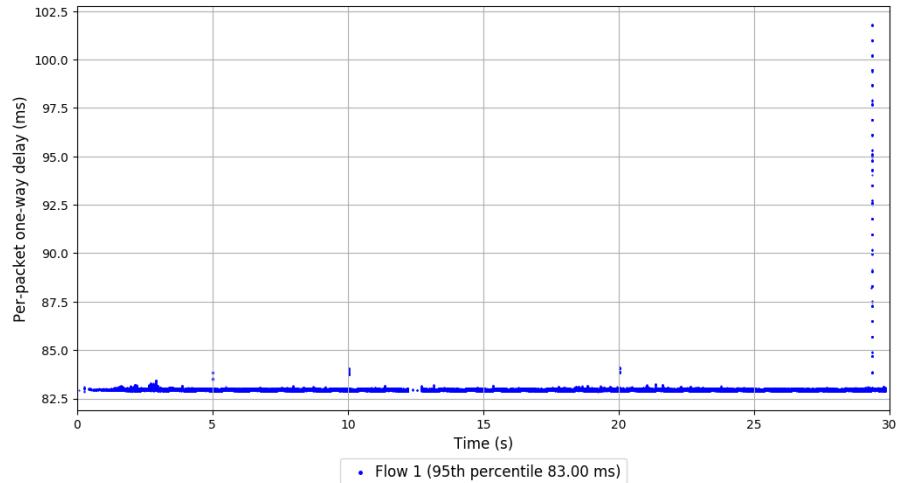
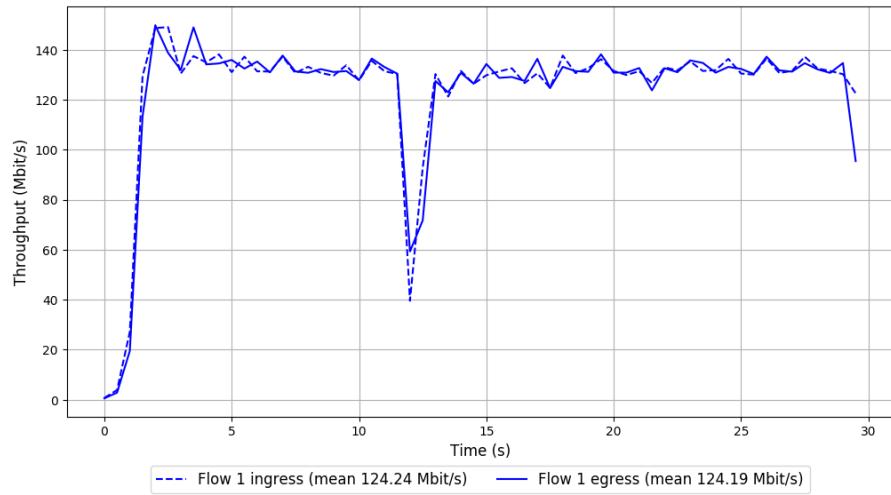


Run 4: Statistics of TCP BBR

```
Start at: 2017-11-21 00:22:37
End at: 2017-11-21 00:23:07
Local clock offset: -0.162 ms
Remote clock offset: -1.407 ms

# Below is generated by plot.py at 2017-11-21 05:32:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 124.19 Mbit/s
95th percentile per-packet one-way delay: 83.000 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 124.19 Mbit/s
95th percentile per-packet one-way delay: 83.000 ms
Loss rate: 0.63%
```

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

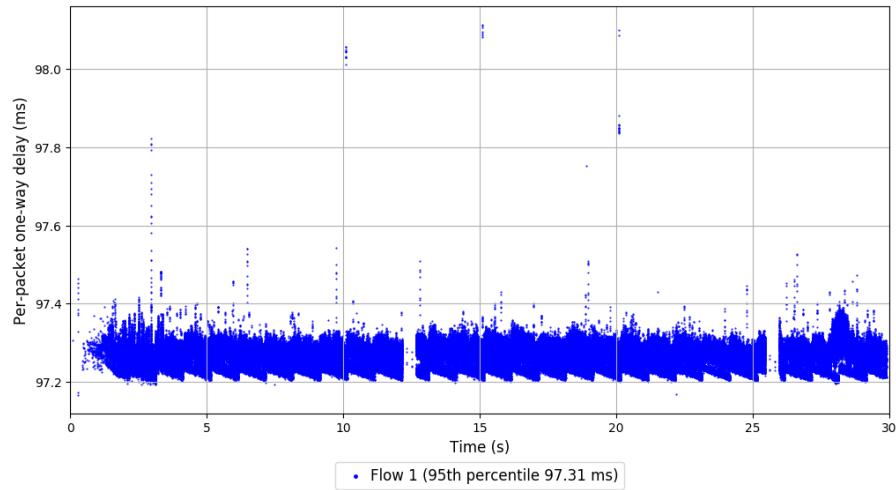
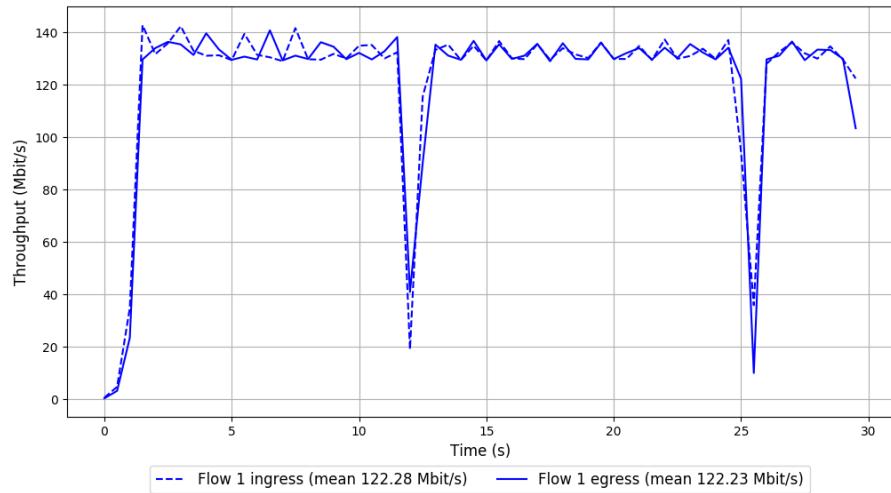


Run 5: Statistics of TCP BBR

```
Start at: 2017-11-21 00:40:47
End at: 2017-11-21 00:41:17
Local clock offset: -0.21 ms
Remote clock offset: -13.97 ms

# Below is generated by plot.py at 2017-11-21 05:32:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 122.23 Mbit/s
95th percentile per-packet one-way delay: 97.311 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 122.23 Mbit/s
95th percentile per-packet one-way delay: 97.311 ms
Loss rate: 0.61%
```

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

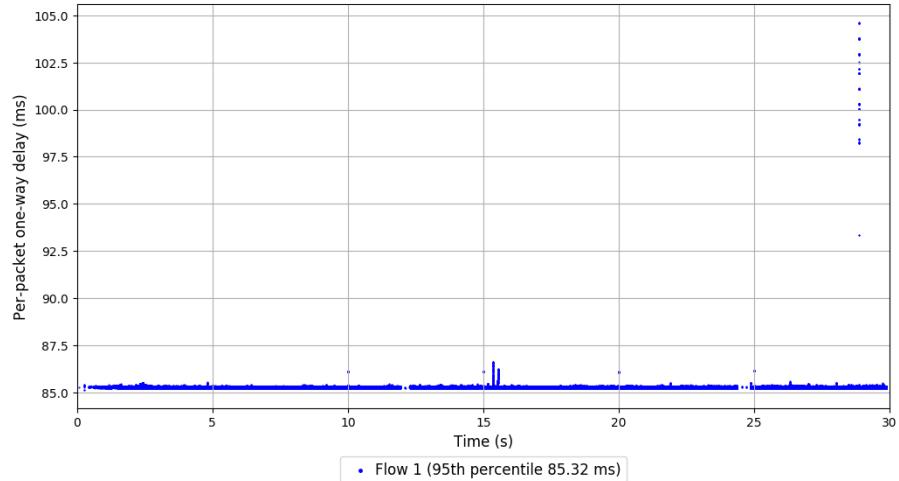
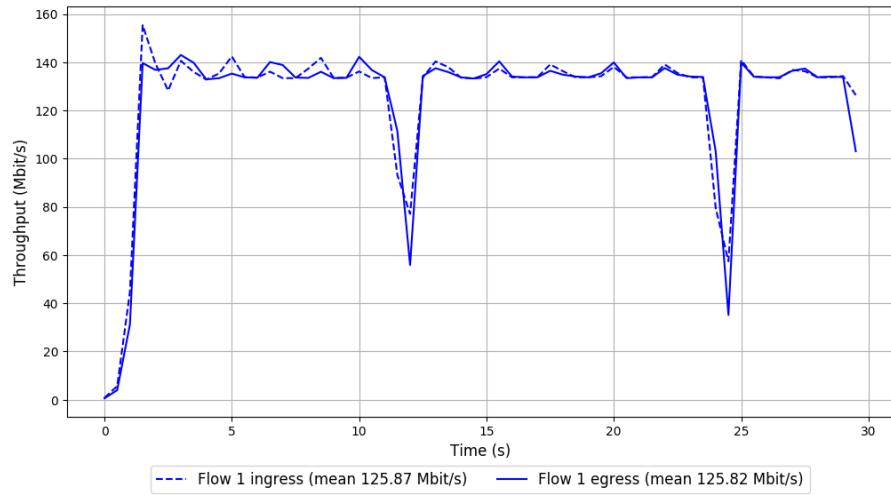


Run 6: Statistics of TCP BBR

```
Start at: 2017-11-21 00:58:45
End at: 2017-11-21 00:59:15
Local clock offset: -0.279 ms
Remote clock offset: -3.964 ms

# Below is generated by plot.py at 2017-11-21 05:32:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 125.82 Mbit/s
95th percentile per-packet one-way delay: 85.321 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 125.82 Mbit/s
95th percentile per-packet one-way delay: 85.321 ms
Loss rate: 0.61%
```

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

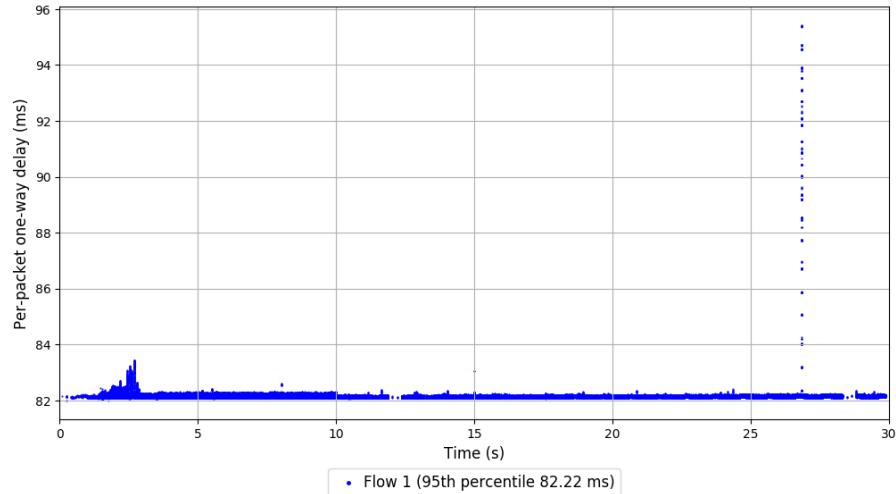
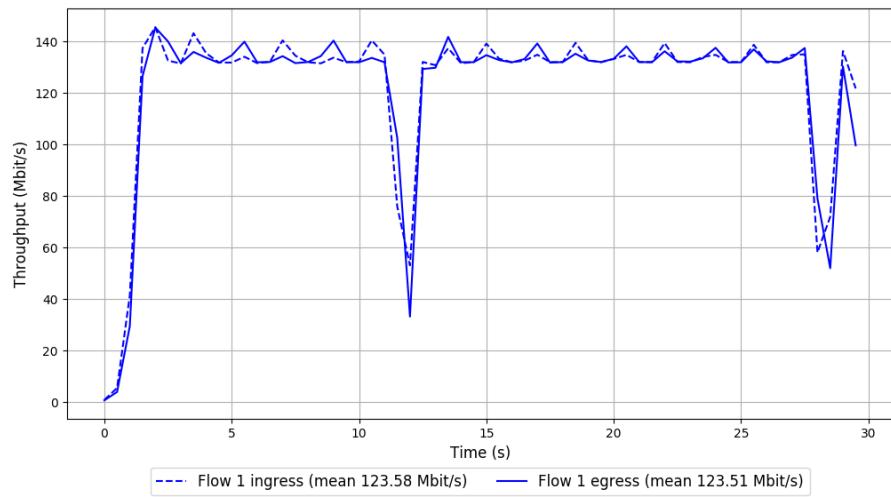


Run 7: Statistics of TCP BBR

```
Start at: 2017-11-21 01:16:55
End at: 2017-11-21 01:17:25
Local clock offset: -0.334 ms
Remote clock offset: 1.895 ms

# Below is generated by plot.py at 2017-11-21 05:32:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 123.51 Mbit/s
95th percentile per-packet one-way delay: 82.218 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 123.51 Mbit/s
95th percentile per-packet one-way delay: 82.218 ms
Loss rate: 0.65%
```

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

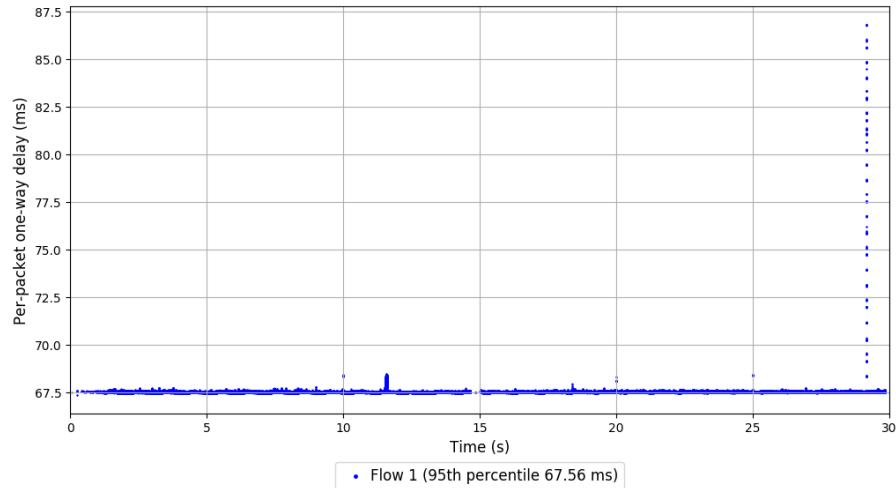
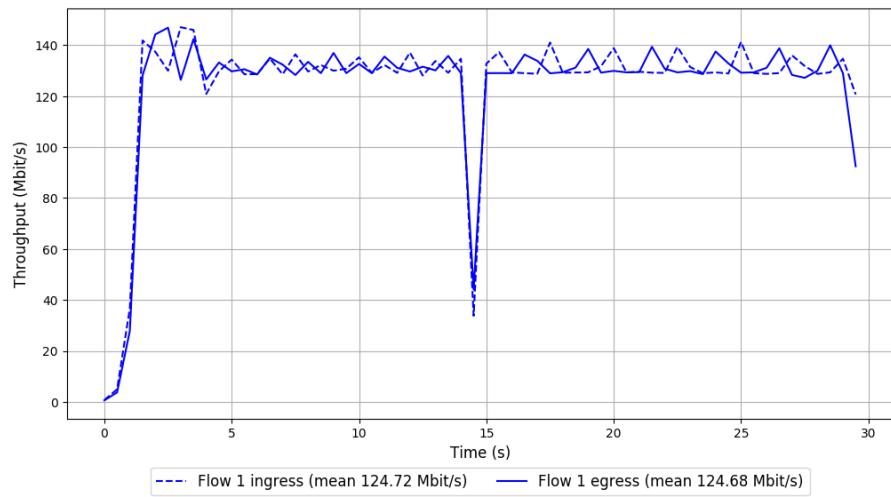


Run 8: Statistics of TCP BBR

```
Start at: 2017-11-21 01:34:56
End at: 2017-11-21 01:35:26
Local clock offset: -0.309 ms
Remote clock offset: 17.671 ms

# Below is generated by plot.py at 2017-11-21 05:32:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 124.68 Mbit/s
95th percentile per-packet one-way delay: 67.563 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 124.68 Mbit/s
95th percentile per-packet one-way delay: 67.563 ms
Loss rate: 0.60%
```

Run 8: Report of TCP BBR — Data Link

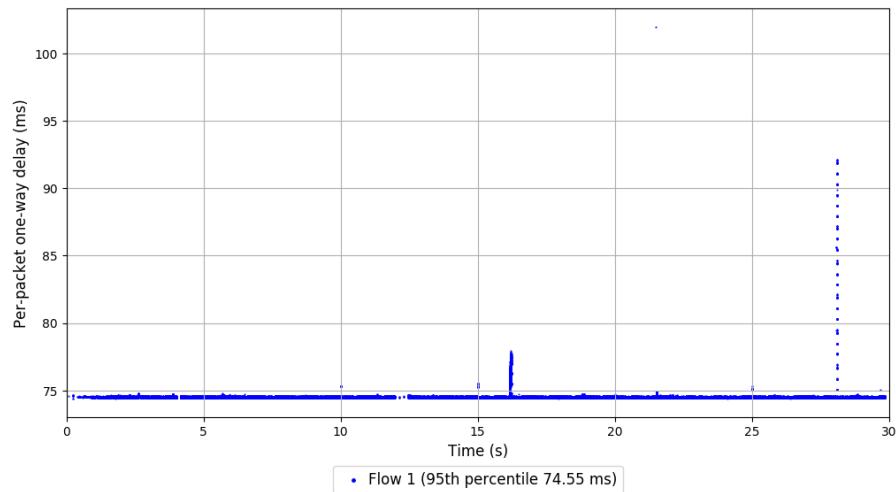
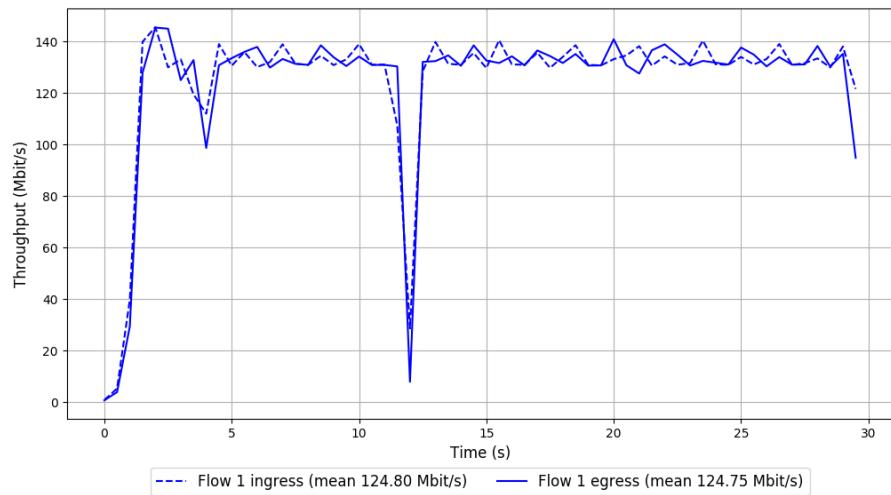


Run 9: Statistics of TCP BBR

```
Start at: 2017-11-21 01:52:55
End at: 2017-11-21 01:53:25
Local clock offset: -0.328 ms
Remote clock offset: 10.528 ms

# Below is generated by plot.py at 2017-11-21 05:32:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 124.75 Mbit/s
95th percentile per-packet one-way delay: 74.551 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 124.75 Mbit/s
95th percentile per-packet one-way delay: 74.551 ms
Loss rate: 0.64%
```

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

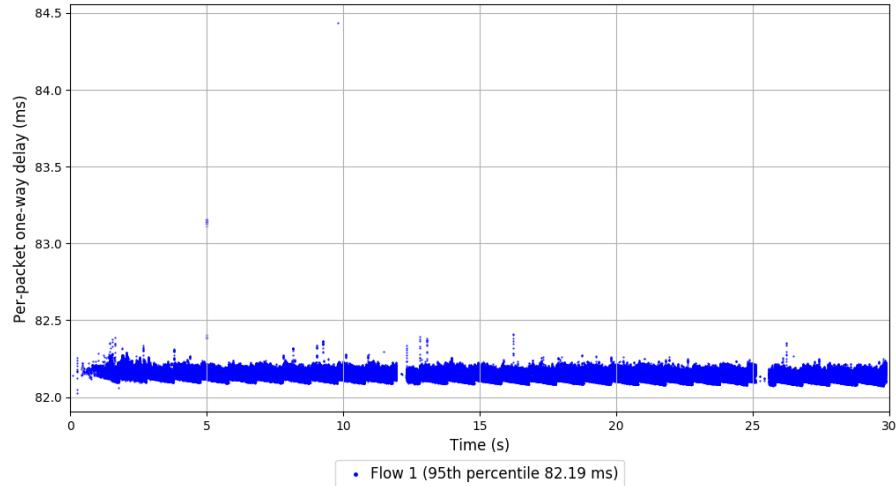
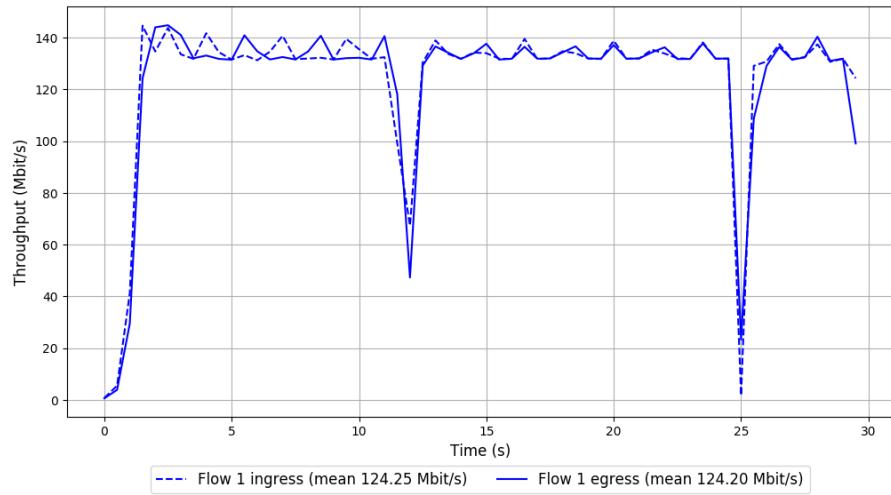


Run 10: Statistics of TCP BBR

```
Start at: 2017-11-21 02:11:15
End at: 2017-11-21 02:11:45
Local clock offset: -0.192 ms
Remote clock offset: 2.446 ms

# Below is generated by plot.py at 2017-11-21 05:34:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 124.20 Mbit/s
95th percentile per-packet one-way delay: 82.195 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 124.20 Mbit/s
95th percentile per-packet one-way delay: 82.195 ms
Loss rate: 0.61%
```

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

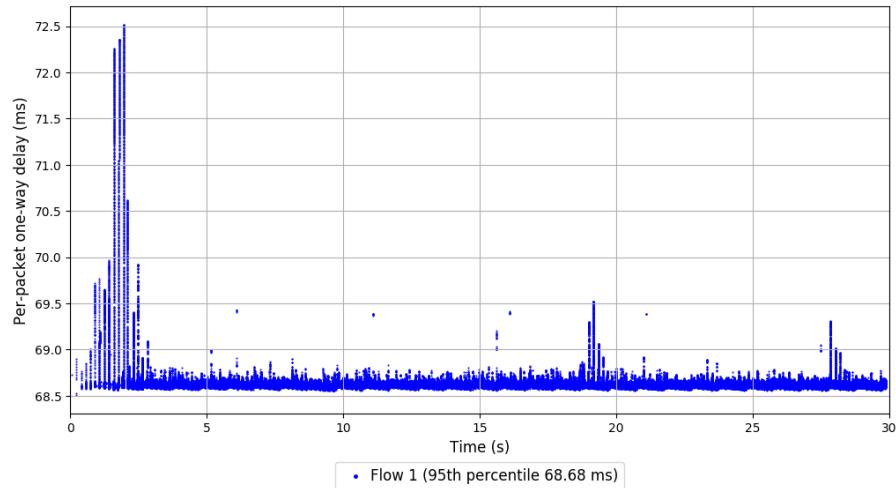
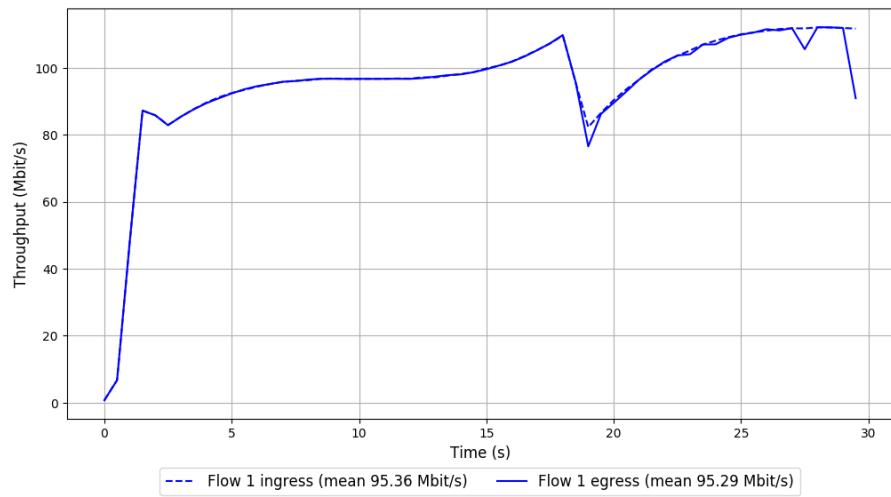


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2017-11-20 23:26:49
End at: 2017-11-20 23:27:19
Local clock offset: -0.251 ms
Remote clock offset: 13.113 ms

# Below is generated by plot.py at 2017-11-21 05:34:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.29 Mbit/s
95th percentile per-packet one-way delay: 68.682 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 95.29 Mbit/s
95th percentile per-packet one-way delay: 68.682 ms
Loss rate: 0.66%
```

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

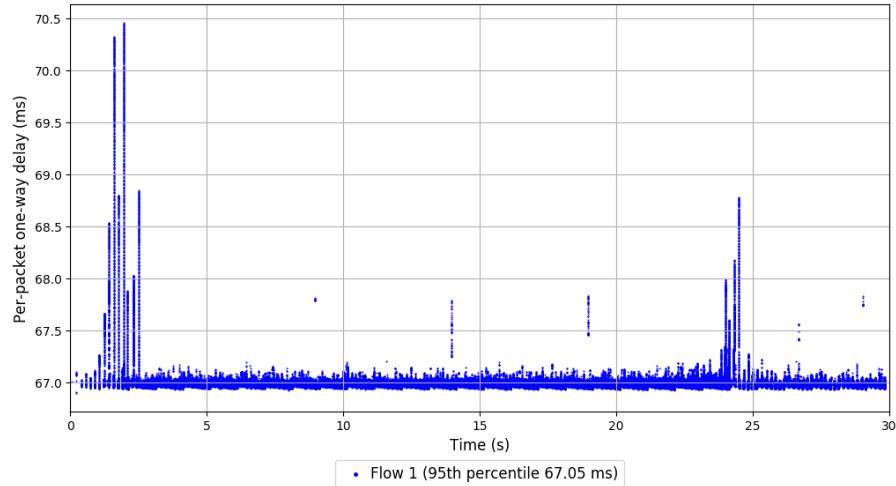
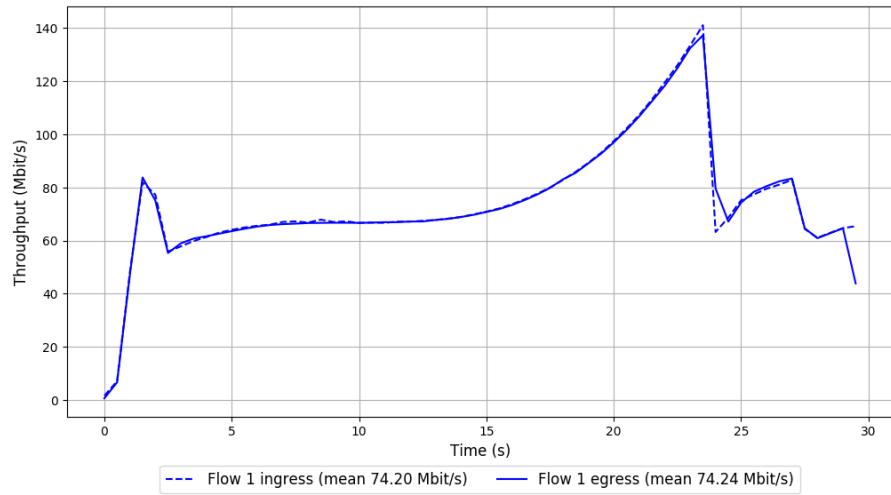


Run 2: Statistics of TCP Cubic

```
Start at: 2017-11-20 23:45:11
End at: 2017-11-20 23:45:41
Local clock offset: -0.256 ms
Remote clock offset: 14.843 ms

# Below is generated by plot.py at 2017-11-21 05:34:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.24 Mbit/s
95th percentile per-packet one-way delay: 67.045 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 74.24 Mbit/s
95th percentile per-packet one-way delay: 67.045 ms
Loss rate: 0.50%
```

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

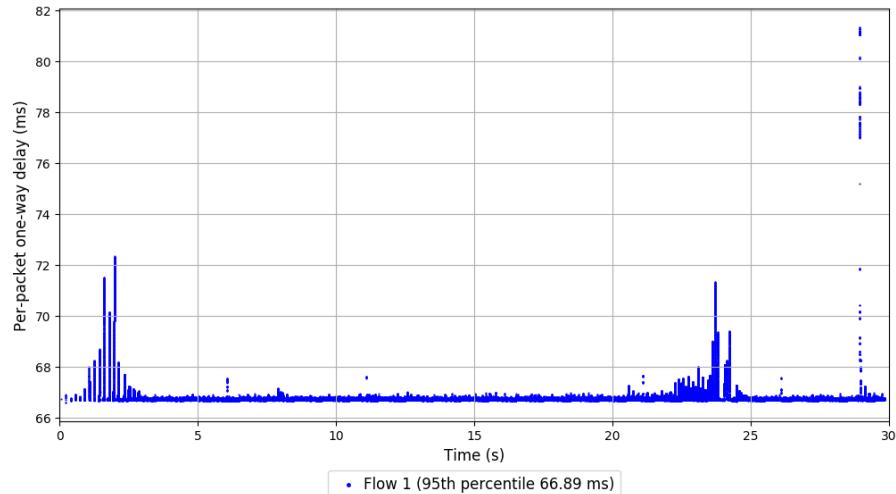
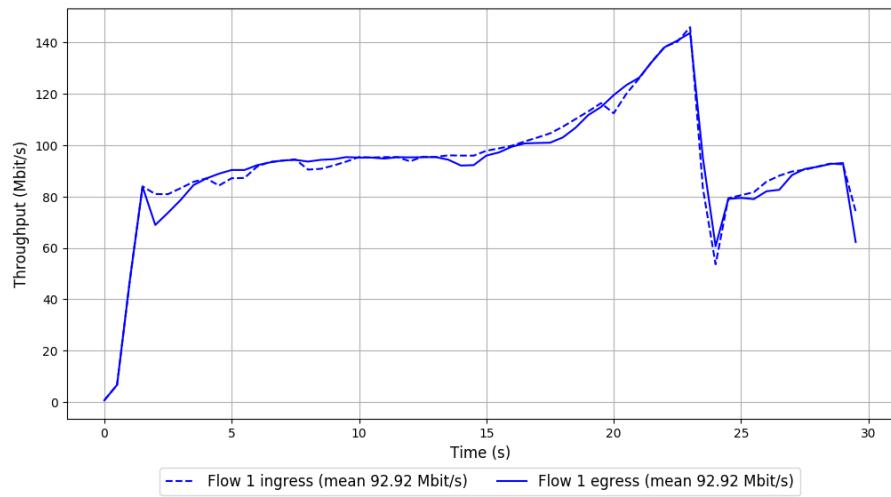


```
Run 3: Statistics of TCP Cubic
```

```
Start at: 2017-11-21 00:03:20
End at: 2017-11-21 00:03:50
Local clock offset: -0.181 ms
Remote clock offset: 15.009 ms

# Below is generated by plot.py at 2017-11-21 05:34:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.92 Mbit/s
95th percentile per-packet one-way delay: 66.885 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 92.92 Mbit/s
95th percentile per-packet one-way delay: 66.885 ms
Loss rate: 0.56%
```

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

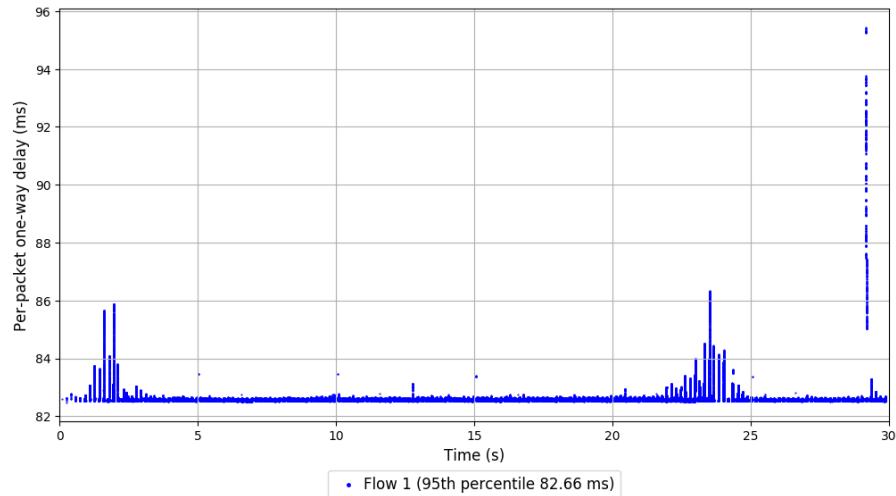
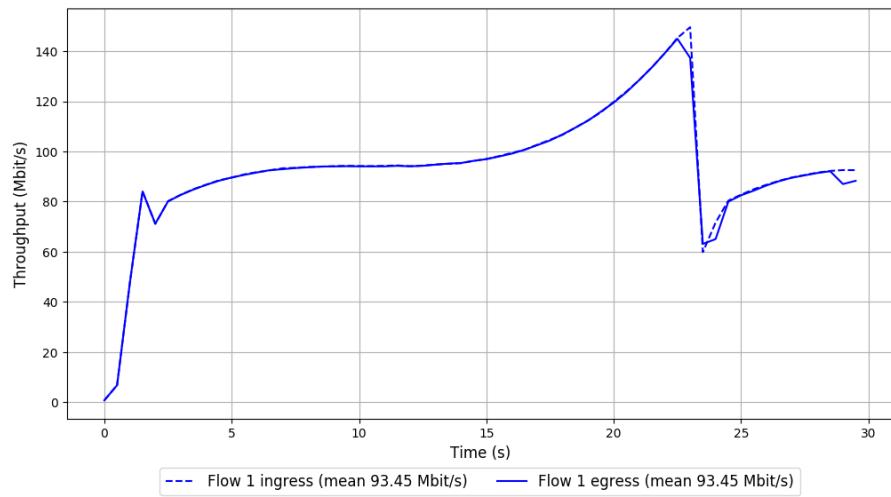


Run 4: Statistics of TCP Cubic

```
Start at: 2017-11-21 00:21:20
End at: 2017-11-21 00:21:50
Local clock offset: -0.157 ms
Remote clock offset: -0.766 ms

# Below is generated by plot.py at 2017-11-21 05:34:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.45 Mbit/s
95th percentile per-packet one-way delay: 82.657 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 93.45 Mbit/s
95th percentile per-packet one-way delay: 82.657 ms
Loss rate: 0.56%
```

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

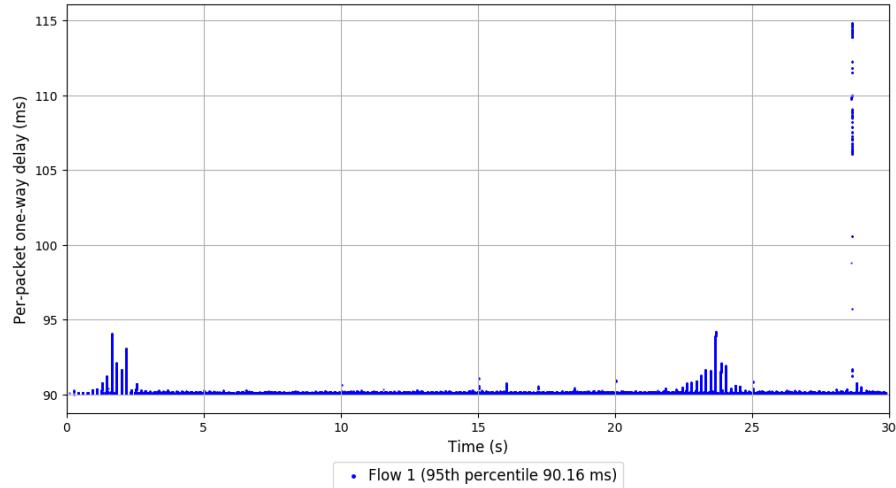
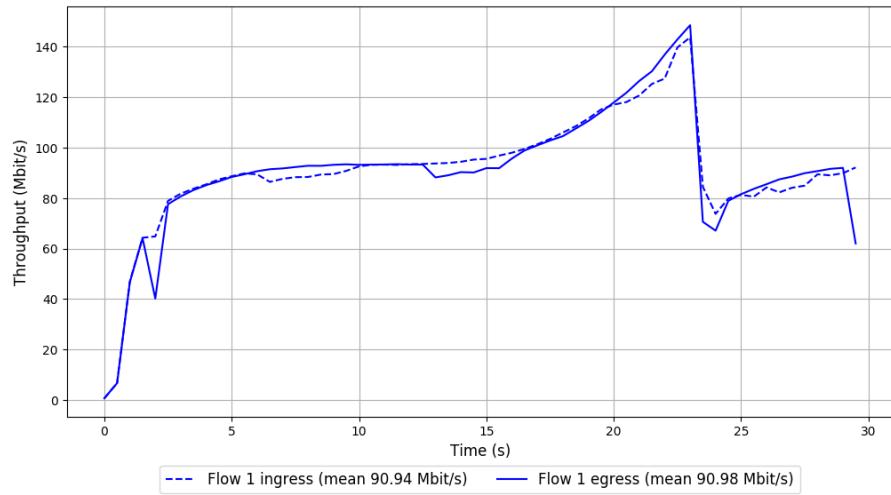


Run 5: Statistics of TCP Cubic

```
Start at: 2017-11-21 00:39:32
End at: 2017-11-21 00:40:02
Local clock offset: -0.186 ms
Remote clock offset: -6.623 ms

# Below is generated by plot.py at 2017-11-21 05:34:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.98 Mbit/s
95th percentile per-packet one-way delay: 90.162 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 90.98 Mbit/s
95th percentile per-packet one-way delay: 90.162 ms
Loss rate: 0.57%
```

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

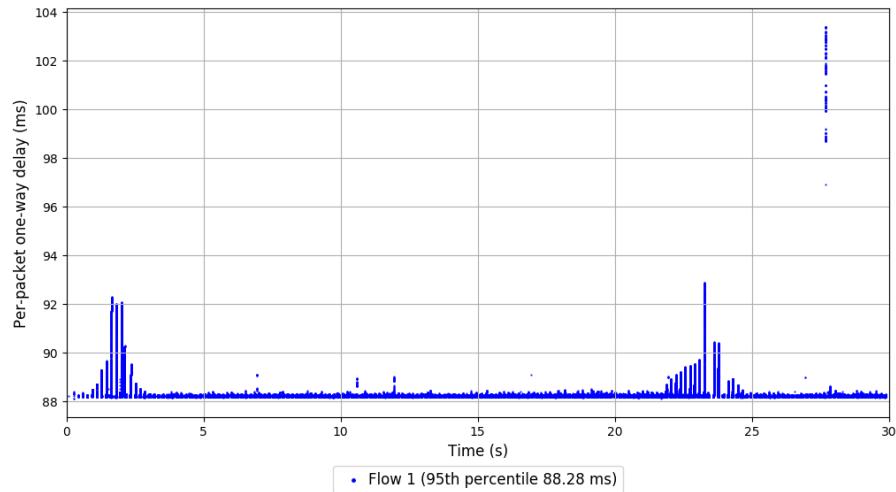
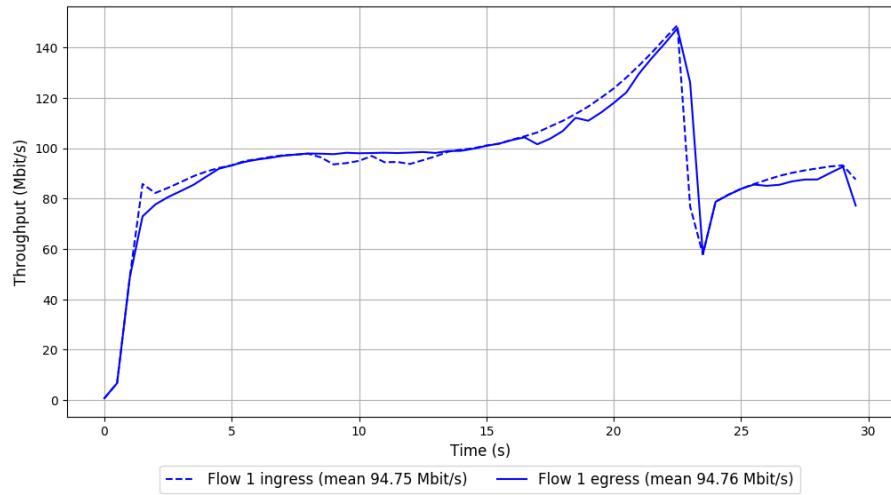


Run 6: Statistics of TCP Cubic

```
Start at: 2017-11-21 00:57:30
End at: 2017-11-21 00:58:00
Local clock offset: -0.373 ms
Remote clock offset: -5.327 ms

# Below is generated by plot.py at 2017-11-21 05:34:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.76 Mbit/s
95th percentile per-packet one-way delay: 88.278 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 94.76 Mbit/s
95th percentile per-packet one-way delay: 88.278 ms
Loss rate: 0.55%
```

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

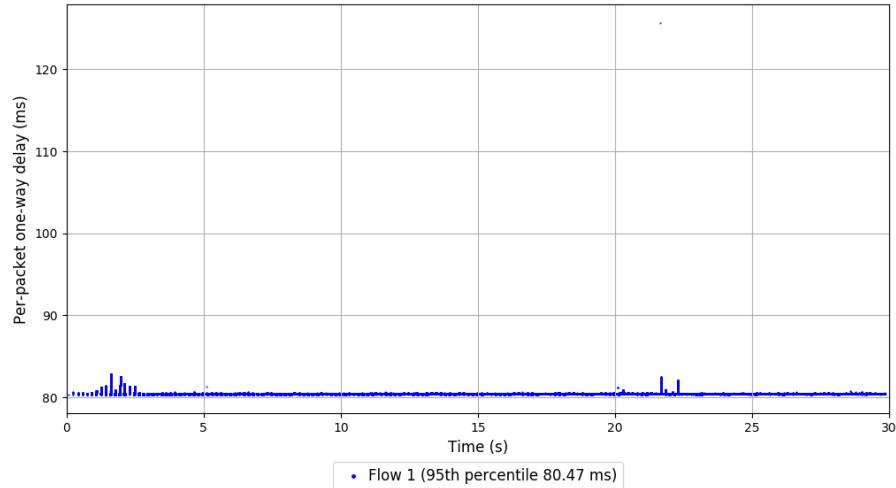
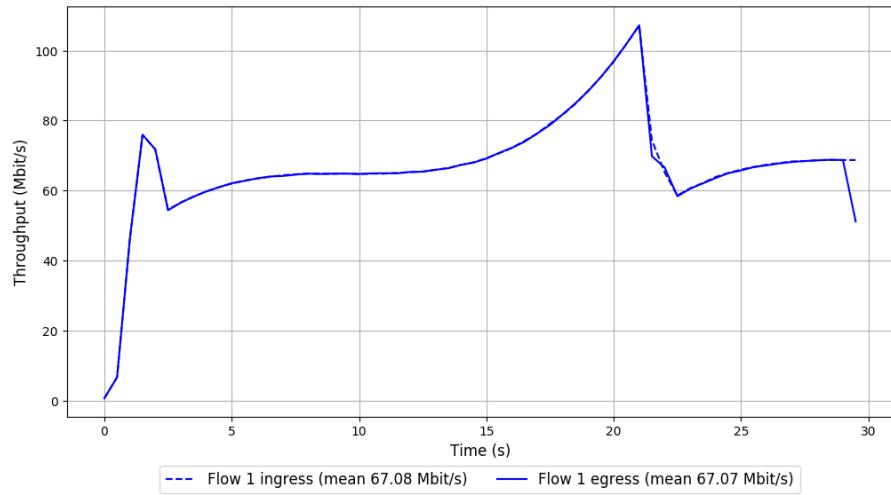


Run 7: Statistics of TCP Cubic

```
Start at: 2017-11-21 01:15:41
End at: 2017-11-21 01:16:11
Local clock offset: -0.339 ms
Remote clock offset: 1.708 ms

# Below is generated by plot.py at 2017-11-21 05:34:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.07 Mbit/s
95th percentile per-packet one-way delay: 80.473 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 67.07 Mbit/s
95th percentile per-packet one-way delay: 80.473 ms
Loss rate: 0.57%
```

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

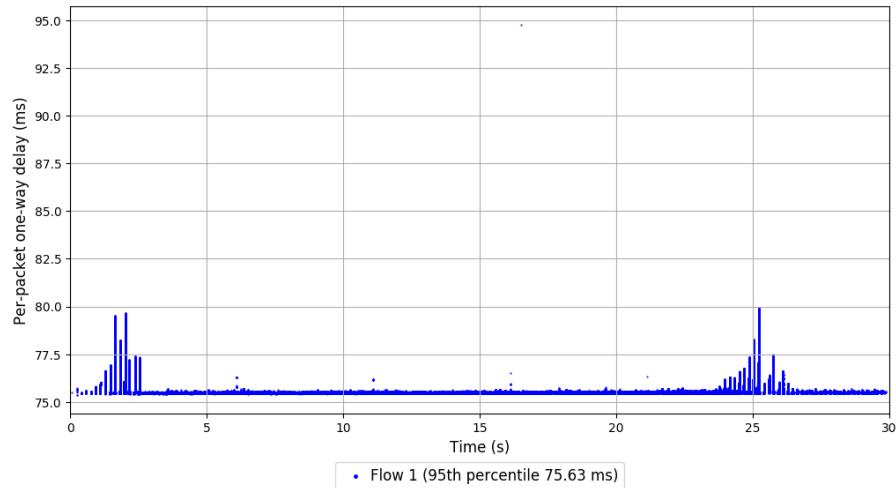
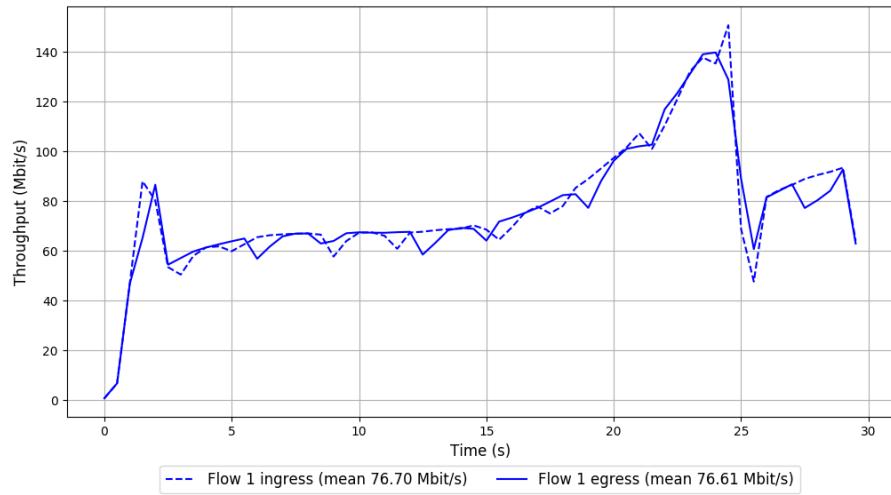


Run 8: Statistics of TCP Cubic

```
Start at: 2017-11-21 01:33:42
End at: 2017-11-21 01:34:12
Local clock offset: -0.281 ms
Remote clock offset: 9.435 ms

# Below is generated by plot.py at 2017-11-21 05:34:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.61 Mbit/s
95th percentile per-packet one-way delay: 75.634 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 76.61 Mbit/s
95th percentile per-packet one-way delay: 75.634 ms
Loss rate: 0.69%
```

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

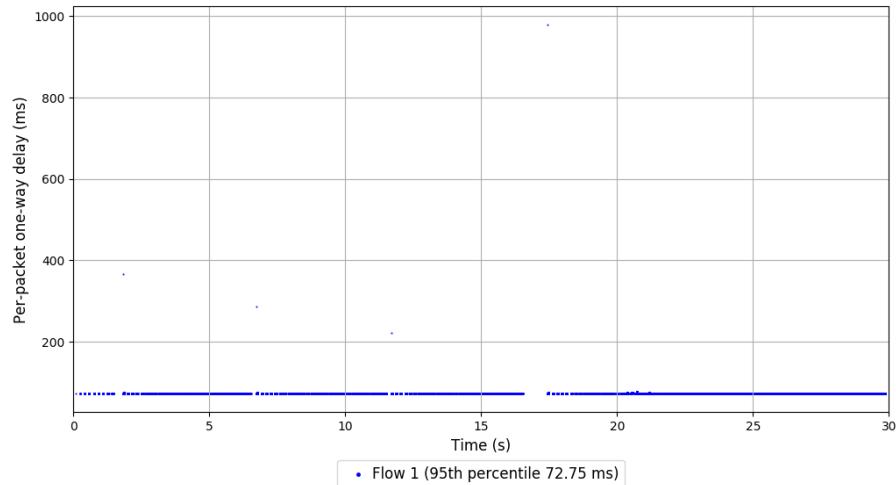
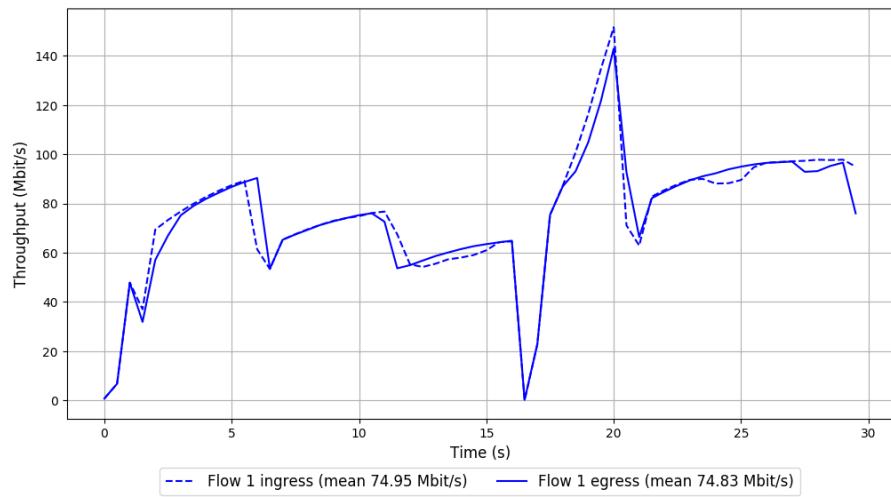


Run 9: Statistics of TCP Cubic

```
Start at: 2017-11-21 01:51:41
End at: 2017-11-21 01:52:11
Local clock offset: -0.266 ms
Remote clock offset: 12.695 ms

# Below is generated by plot.py at 2017-11-21 05:34:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.83 Mbit/s
95th percentile per-packet one-way delay: 72.755 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 74.83 Mbit/s
95th percentile per-packet one-way delay: 72.755 ms
Loss rate: 0.73%
```

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

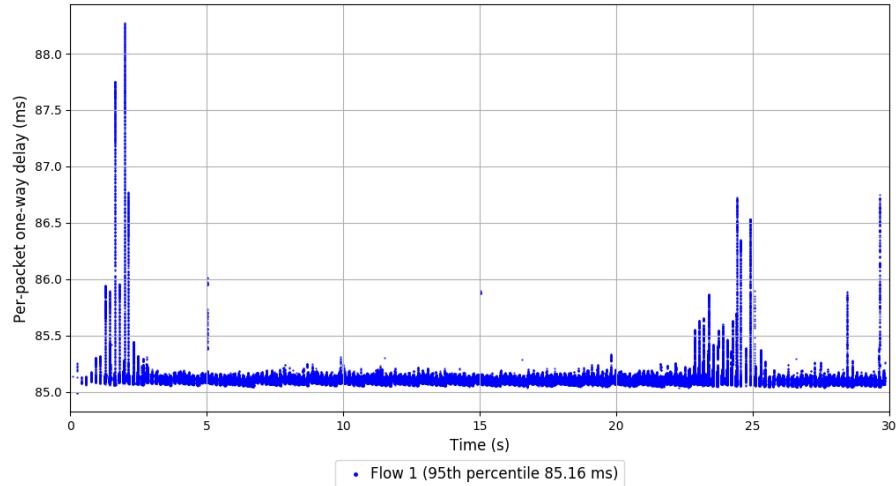
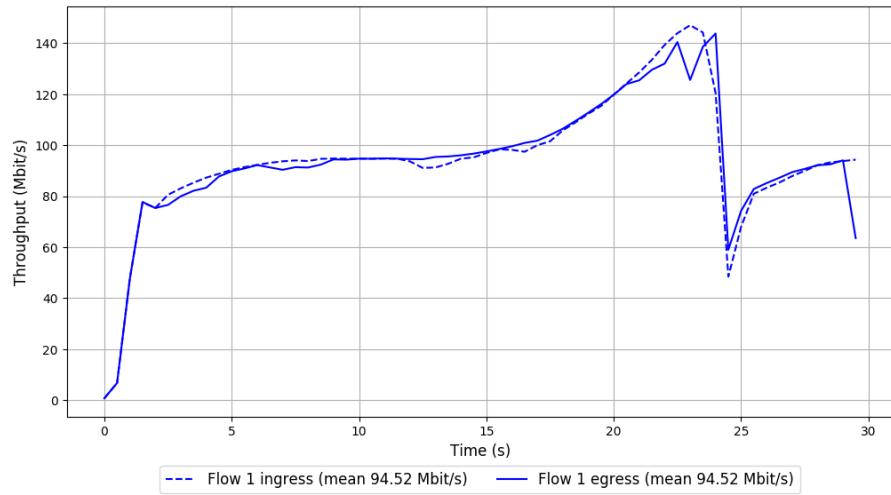


Run 10: Statistics of TCP Cubic

```
Start at: 2017-11-21 02:10:00
End at: 2017-11-21 02:10:30
Local clock offset: -0.273 ms
Remote clock offset: -2.636 ms

# Below is generated by plot.py at 2017-11-21 05:35:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.52 Mbit/s
95th percentile per-packet one-way delay: 85.160 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 94.52 Mbit/s
95th percentile per-packet one-way delay: 85.160 ms
Loss rate: 0.56%
```

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

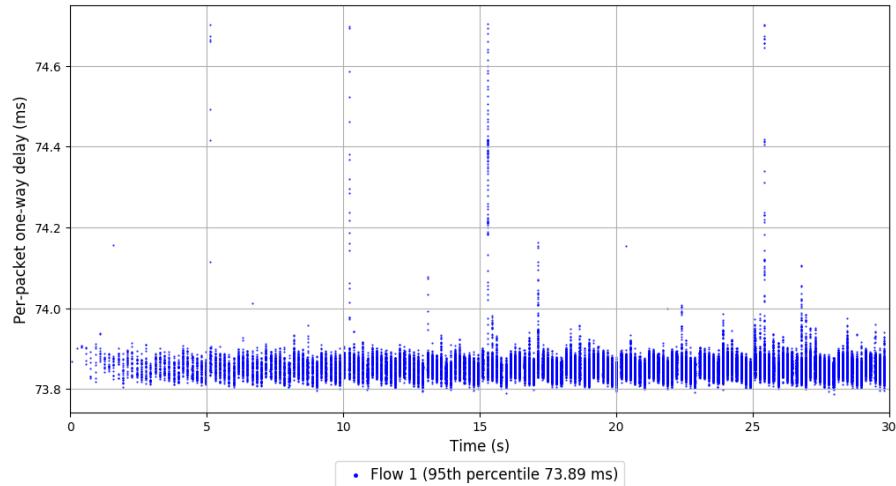
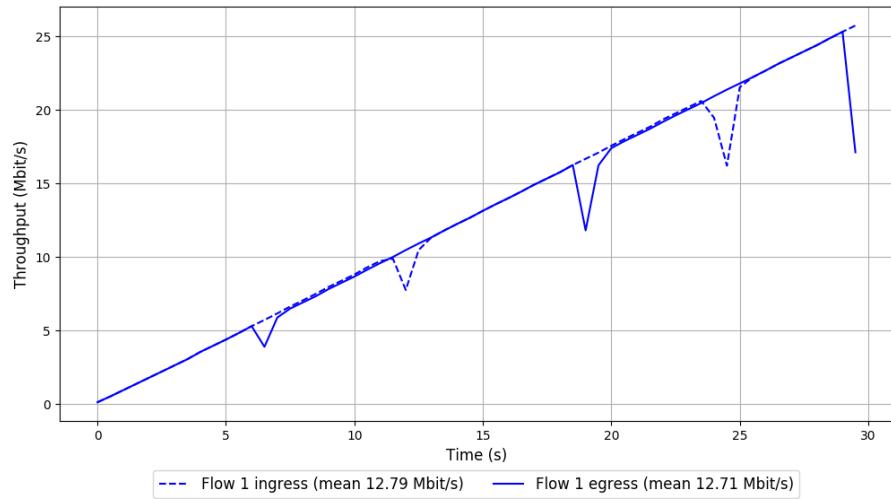


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2017-11-20 23:29:20
End at: 2017-11-20 23:29:50
Local clock offset: -0.288 ms
Remote clock offset: 10.343 ms

# Below is generated by plot.py at 2017-11-21 05:35:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.71 Mbit/s
95th percentile per-packet one-way delay: 73.890 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 12.71 Mbit/s
95th percentile per-packet one-way delay: 73.890 ms
Loss rate: 1.13%
```

## Run 1: Report of LEDBAT — Data Link

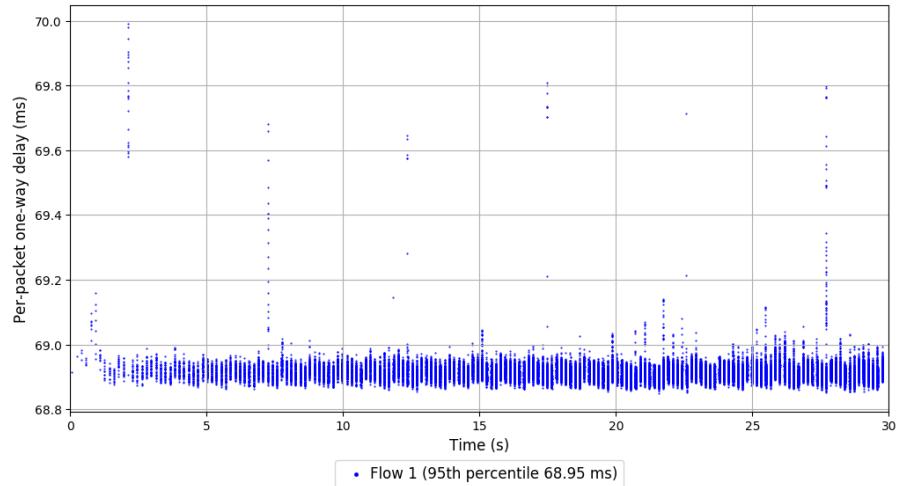
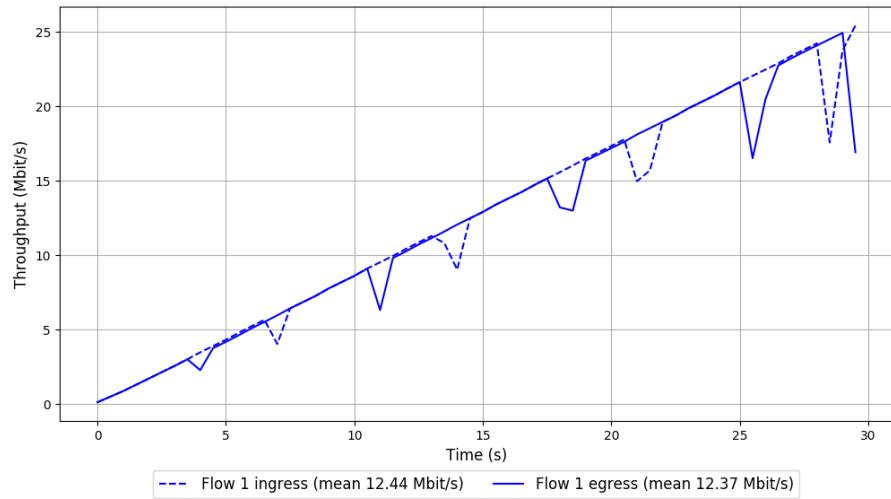


Run 2: Statistics of LEDBAT

```
Start at: 2017-11-20 23:47:34
End at: 2017-11-20 23:48:04
Local clock offset: -0.233 ms
Remote clock offset: 15.211 ms

# Below is generated by plot.py at 2017-11-21 05:35:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.37 Mbit/s
95th percentile per-packet one-way delay: 68.953 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 12.37 Mbit/s
95th percentile per-packet one-way delay: 68.953 ms
Loss rate: 1.15%
```

## Run 2: Report of LEDBAT — Data Link

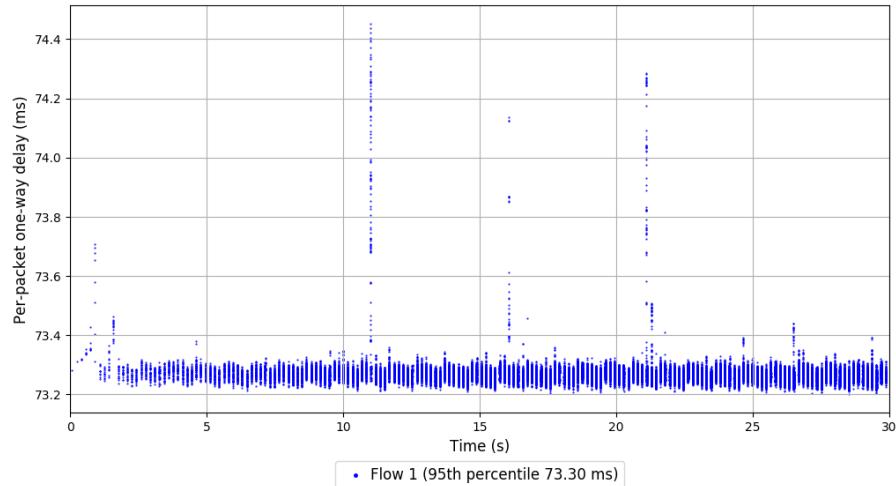
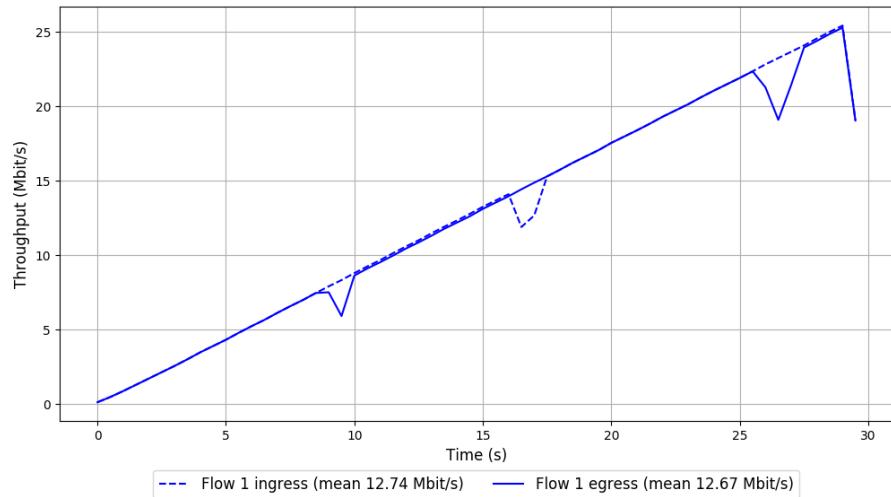


```
Run 3: Statistics of LEDBAT
```

```
Start at: 2017-11-21 00:05:51
End at: 2017-11-21 00:06:21
Local clock offset: -0.161 ms
Remote clock offset: 10.066 ms

# Below is generated by plot.py at 2017-11-21 05:35:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.67 Mbit/s
95th percentile per-packet one-way delay: 73.299 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 12.67 Mbit/s
95th percentile per-packet one-way delay: 73.299 ms
Loss rate: 1.12%
```

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

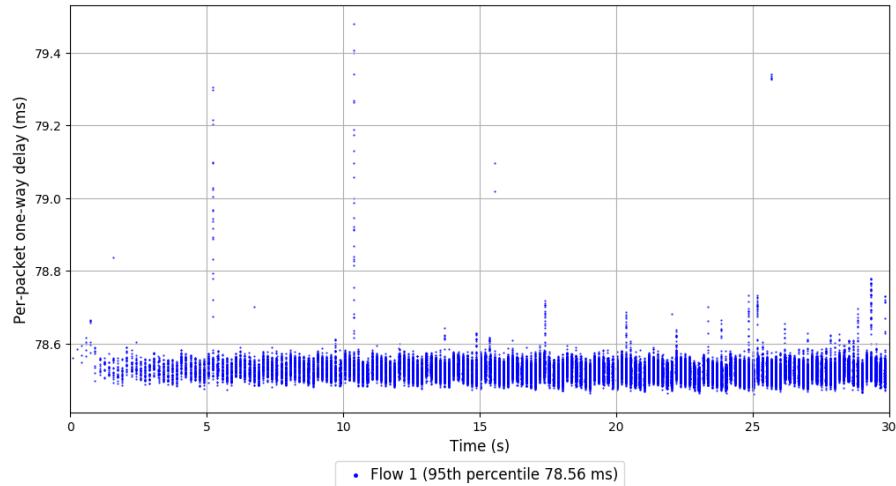
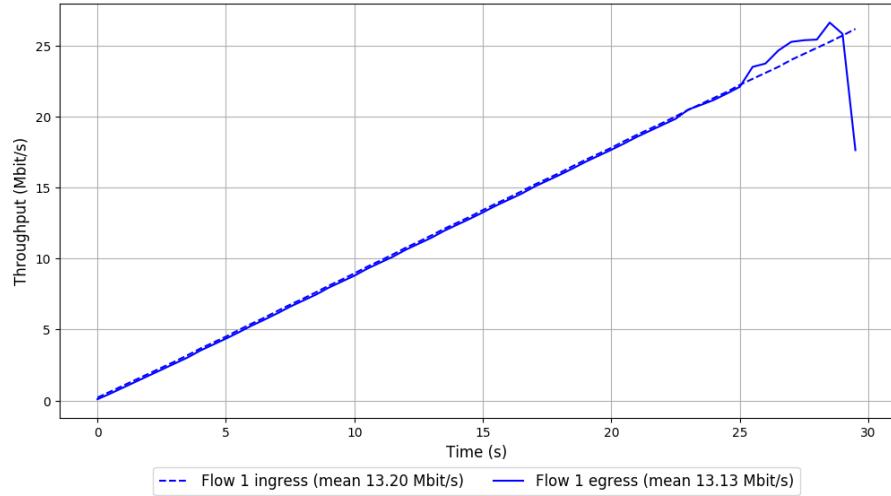


Run 4: Statistics of LEDBAT

```
Start at: 2017-11-21 00:23:53
End at: 2017-11-21 00:24:23
Local clock offset: -0.15 ms
Remote clock offset: 2.792 ms

# Below is generated by plot.py at 2017-11-21 05:35:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.13 Mbit/s
95th percentile per-packet one-way delay: 78.561 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 13.13 Mbit/s
95th percentile per-packet one-way delay: 78.561 ms
Loss rate: 1.11%
```

## Run 4: Report of LEDBAT — Data Link

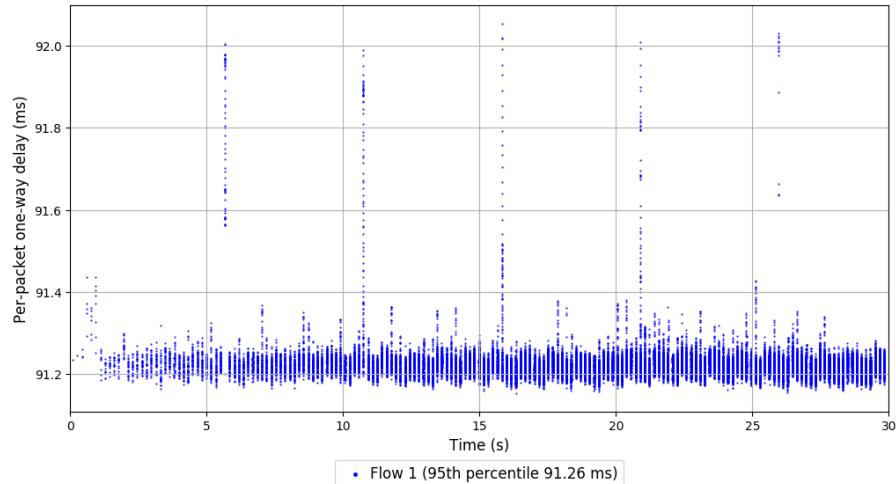
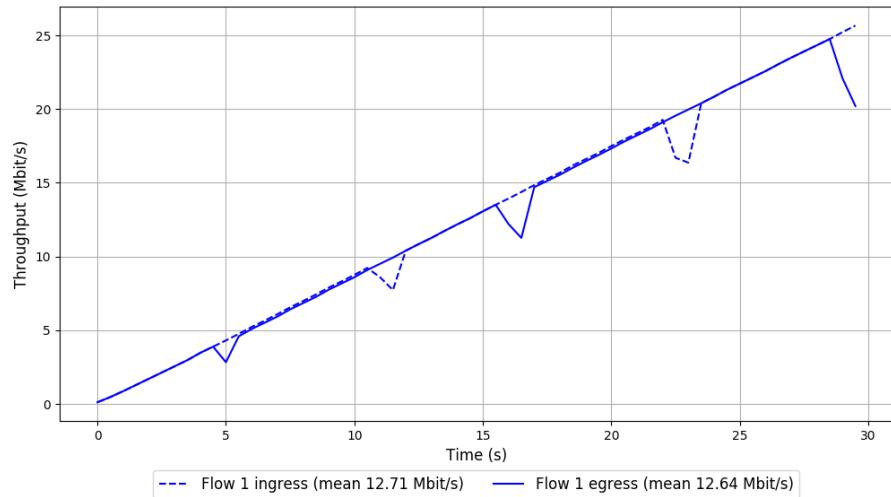


Run 5: Statistics of LEDBAT

```
Start at: 2017-11-21 00:42:03
End at: 2017-11-21 00:42:33
Local clock offset: -0.234 ms
Remote clock offset: -9.63 ms

# Below is generated by plot.py at 2017-11-21 05:35:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.64 Mbit/s
95th percentile per-packet one-way delay: 91.260 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 12.64 Mbit/s
95th percentile per-packet one-way delay: 91.260 ms
Loss rate: 1.13%
```

## Run 5: Report of LEDBAT — Data Link

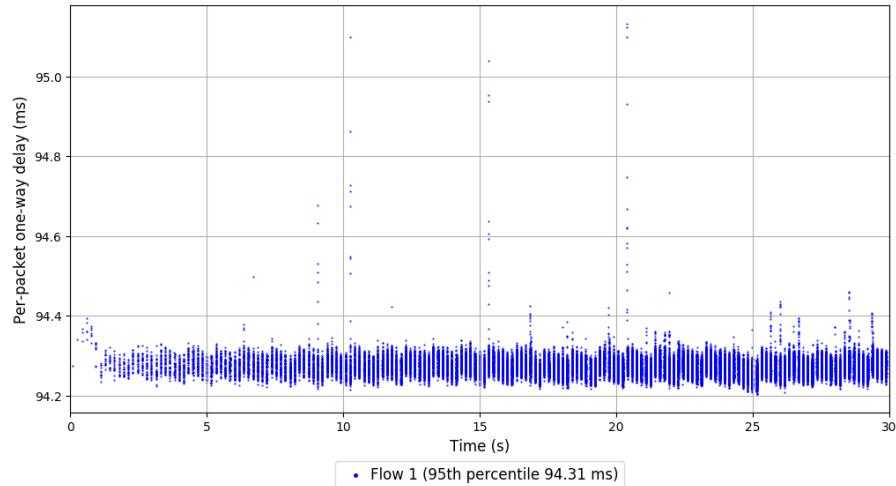
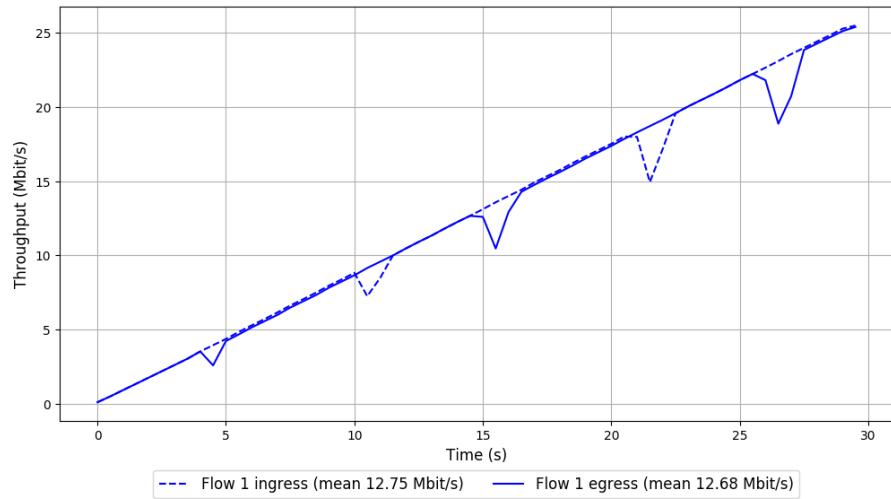


Run 6: Statistics of LEDBAT

```
Start at: 2017-11-21 01:00:01
End at: 2017-11-21 01:00:31
Local clock offset: -0.322 ms
Remote clock offset: -10.916 ms

# Below is generated by plot.py at 2017-11-21 05:35:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 94.309 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 94.309 ms
Loss rate: 1.12%
```

## Run 6: Report of LEDBAT — Data Link

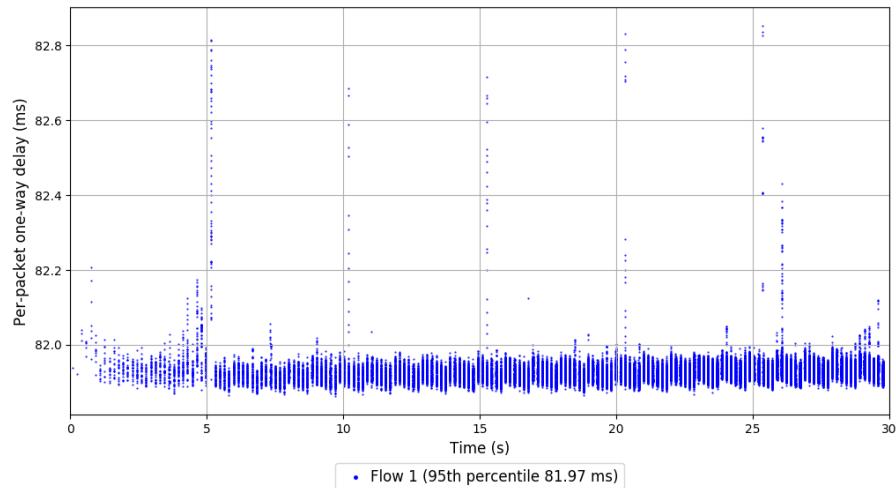
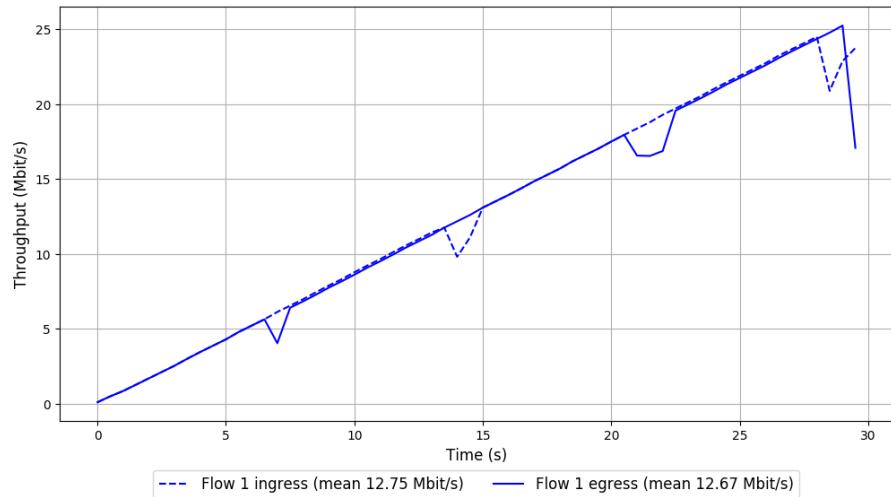


```
Run 7: Statistics of LEDBAT
```

```
Start at: 2017-11-21 01:18:11
End at: 2017-11-21 01:18:41
Local clock offset: -0.347 ms
Remote clock offset: 1.961 ms

# Below is generated by plot.py at 2017-11-21 05:35:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.67 Mbit/s
95th percentile per-packet one-way delay: 81.965 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 12.67 Mbit/s
95th percentile per-packet one-way delay: 81.965 ms
Loss rate: 1.13%
```

## Run 7: Report of LEDBAT — Data Link

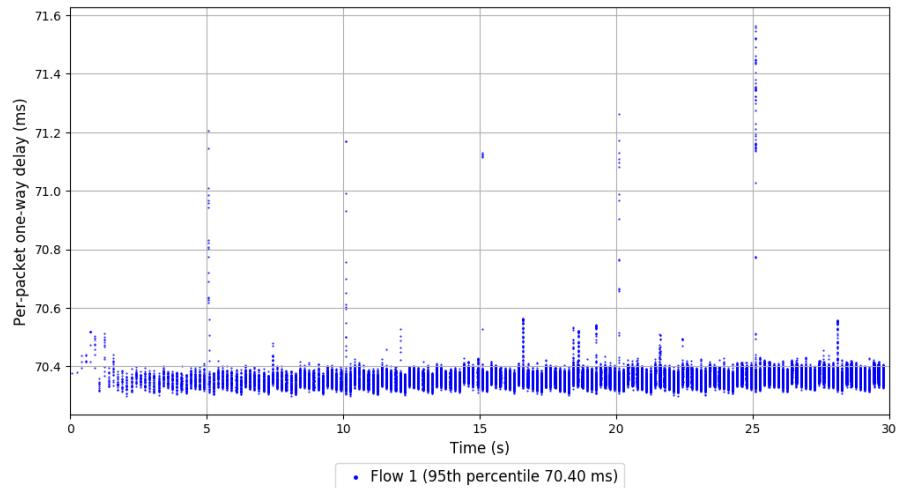
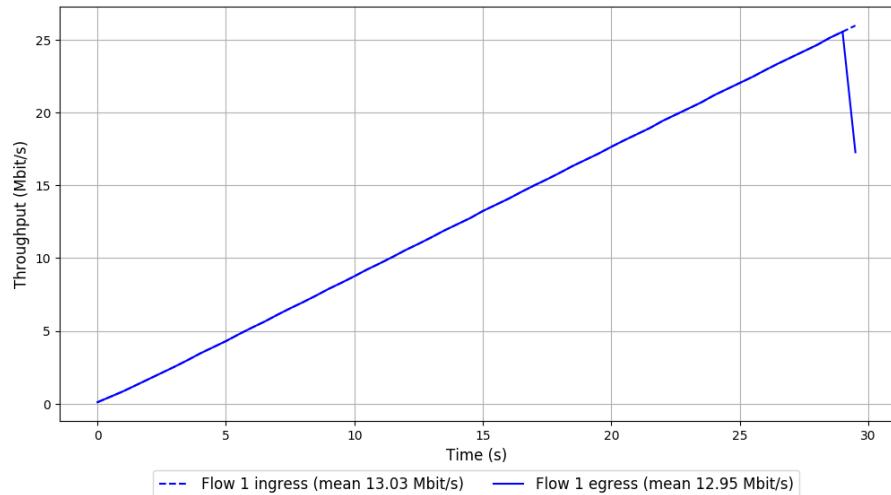


Run 8: Statistics of LEDBAT

```
Start at: 2017-11-21 01:36:12
End at: 2017-11-21 01:36:42
Local clock offset: -0.366 ms
Remote clock offset: 12.69 ms

# Below is generated by plot.py at 2017-11-21 05:35:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.95 Mbit/s
95th percentile per-packet one-way delay: 70.396 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 12.95 Mbit/s
95th percentile per-packet one-way delay: 70.396 ms
Loss rate: 1.12%
```

Run 8: Report of LEDBAT — Data Link

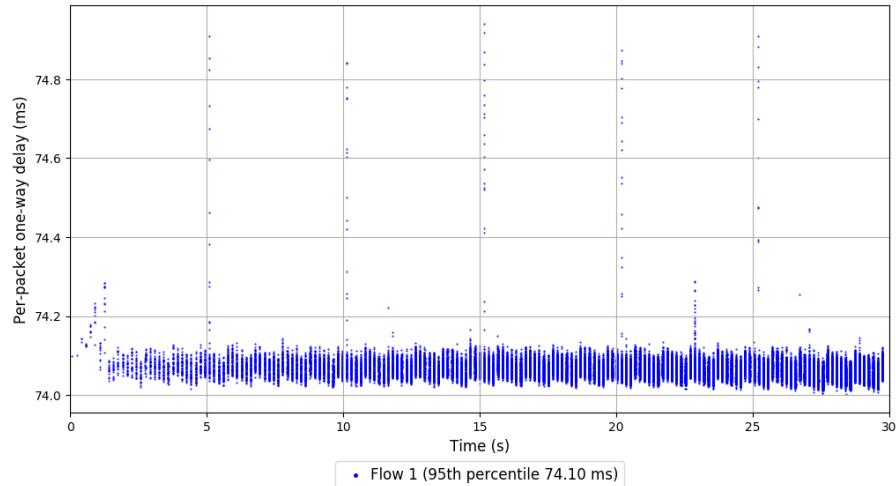
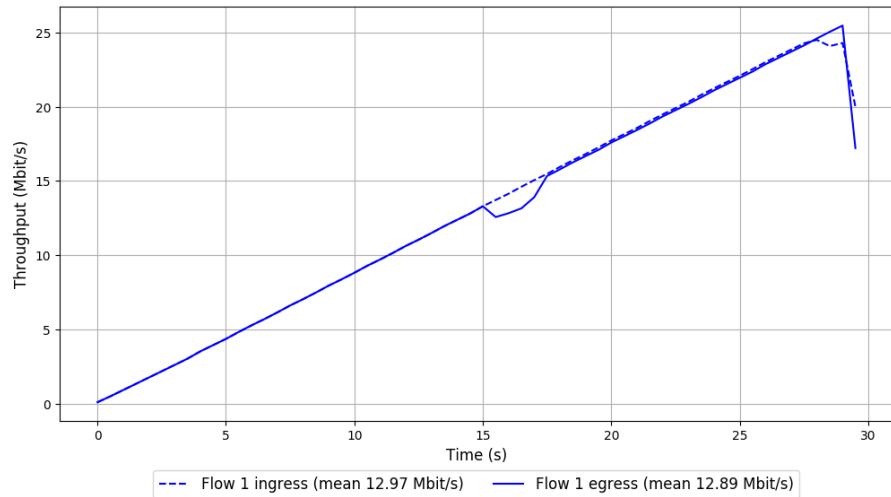


Run 9: Statistics of LEDBAT

```
Start at: 2017-11-21 01:54:11
End at: 2017-11-21 01:54:41
Local clock offset: -0.263 ms
Remote clock offset: 9.41 ms

# Below is generated by plot.py at 2017-11-21 05:35:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.89 Mbit/s
95th percentile per-packet one-way delay: 74.102 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 12.89 Mbit/s
95th percentile per-packet one-way delay: 74.102 ms
Loss rate: 1.12%
```

## Run 9: Report of LEDBAT — Data Link

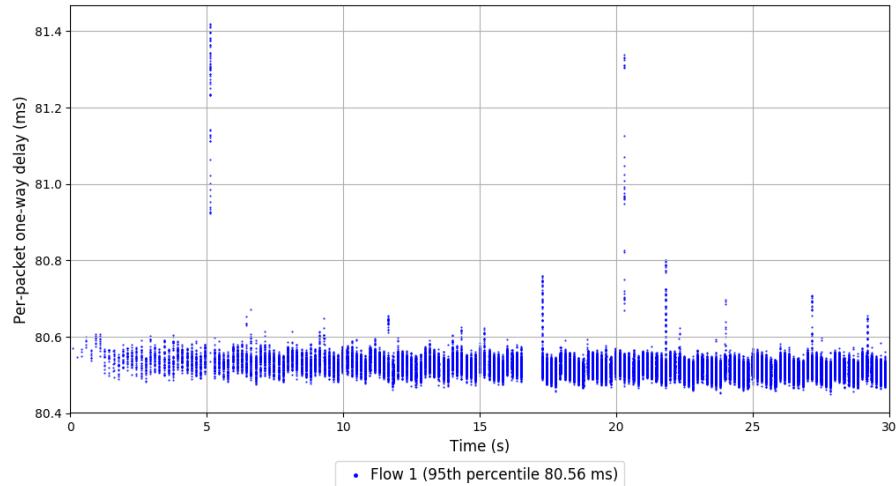
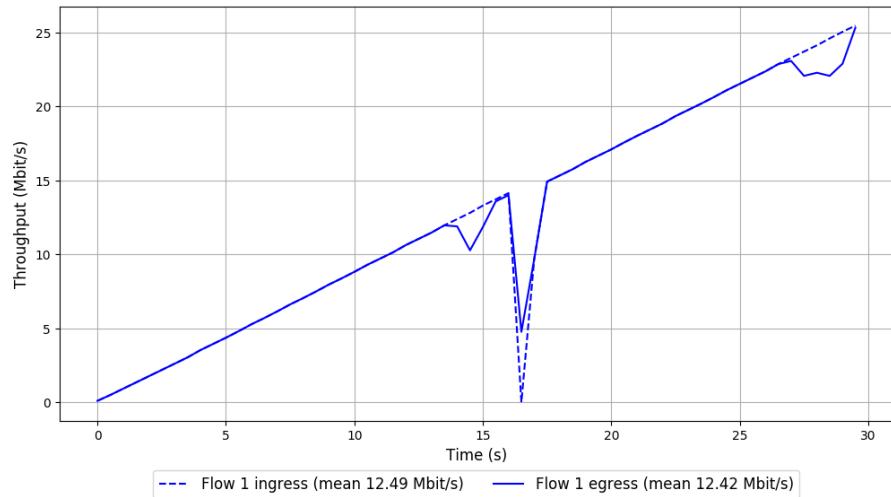


Run 10: Statistics of LEDBAT

```
Start at: 2017-11-21 02:12:31
End at: 2017-11-21 02:13:01
Local clock offset: -0.267 ms
Remote clock offset: 2.328 ms

# Below is generated by plot.py at 2017-11-21 05:35:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.42 Mbit/s
95th percentile per-packet one-way delay: 80.556 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 12.42 Mbit/s
95th percentile per-packet one-way delay: 80.556 ms
Loss rate: 1.14%
```

## Run 10: Report of LEDBAT — Data Link

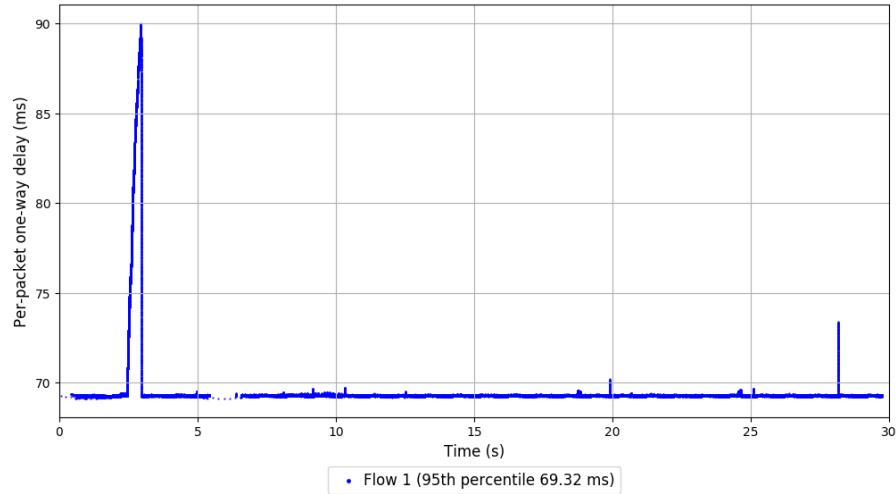
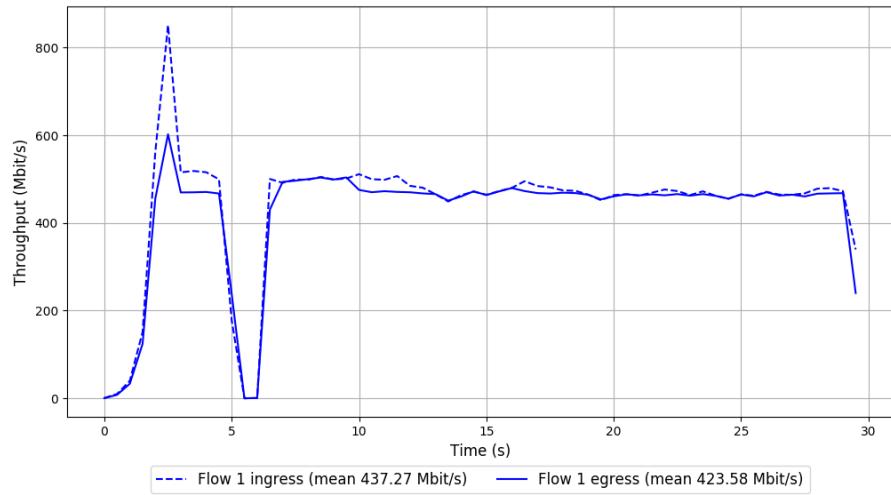


Run 1: Statistics of PCC

```
Start at: 2017-11-20 23:31:44
End at: 2017-11-20 23:32:14
Local clock offset: -0.234 ms
Remote clock offset: 14.952 ms

# Below is generated by plot.py at 2017-11-21 05:40:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 423.58 Mbit/s
95th percentile per-packet one-way delay: 69.320 ms
Loss rate: 3.68%
-- Flow 1:
Average throughput: 423.58 Mbit/s
95th percentile per-packet one-way delay: 69.320 ms
Loss rate: 3.68%
```

### Run 1: Report of PCC — Data Link

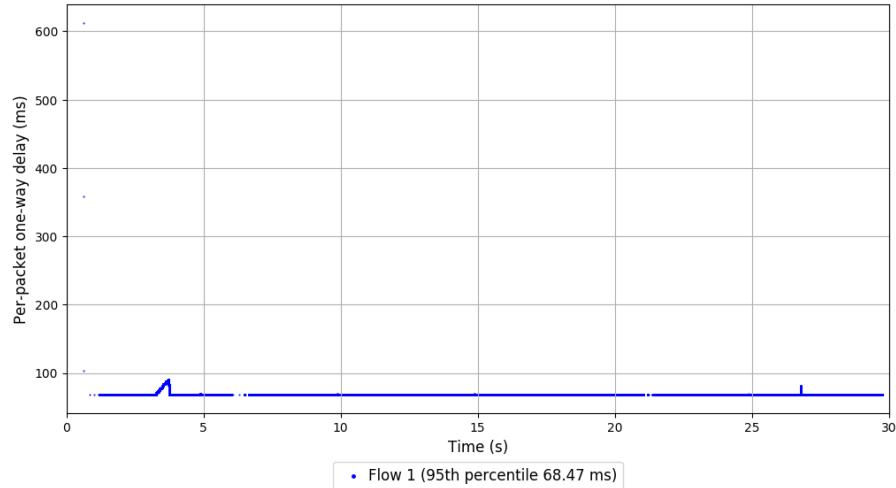
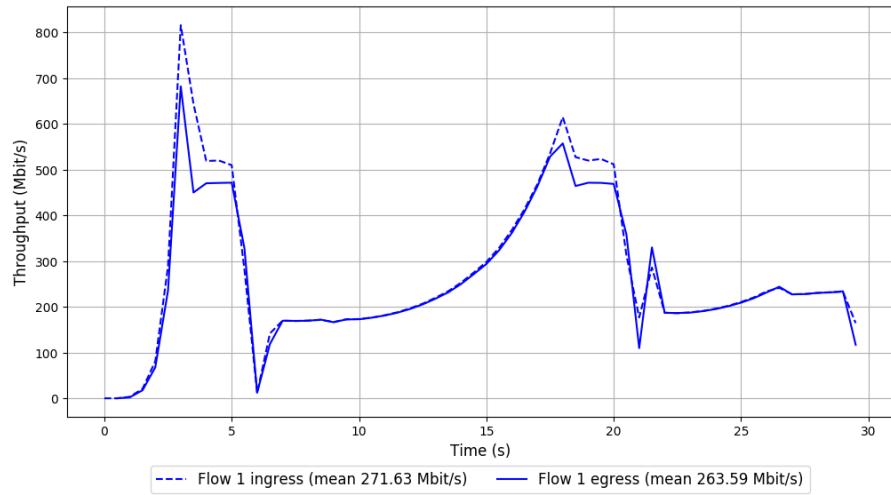


Run 2: Statistics of PCC

```
Start at: 2017-11-20 23:49:59
End at: 2017-11-20 23:50:29
Local clock offset: -0.277 ms
Remote clock offset: 14.913 ms

# Below is generated by plot.py at 2017-11-21 05:40:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 263.59 Mbit/s
95th percentile per-packet one-way delay: 68.466 ms
Loss rate: 5.28%
-- Flow 1:
Average throughput: 263.59 Mbit/s
95th percentile per-packet one-way delay: 68.466 ms
Loss rate: 5.28%
```

## Run 2: Report of PCC — Data Link

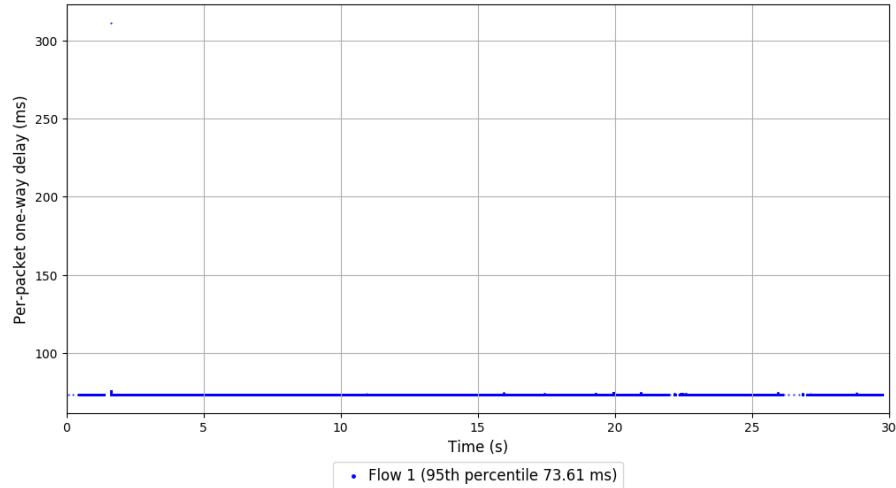
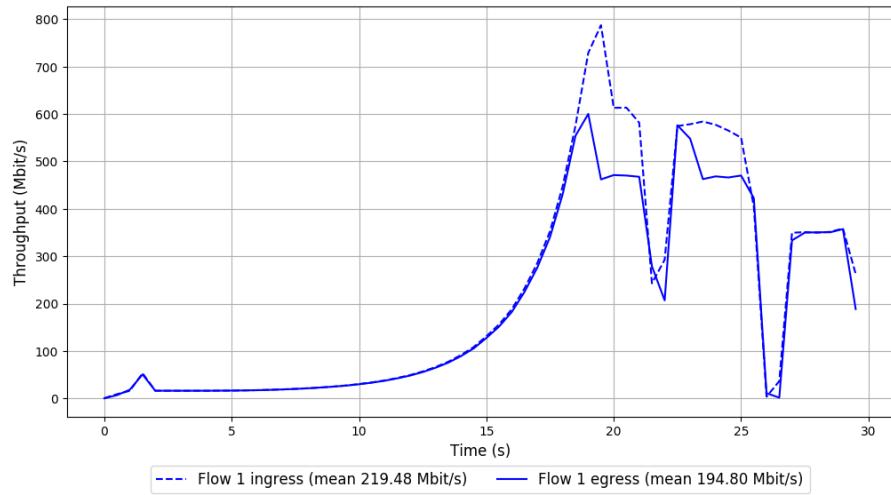


Run 3: Statistics of PCC

```
Start at: 2017-11-21 00:08:19
End at: 2017-11-21 00:08:49
Local clock offset: -0.181 ms
Remote clock offset: 10.128 ms

# Below is generated by plot.py at 2017-11-21 05:40:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 194.80 Mbit/s
95th percentile per-packet one-way delay: 73.612 ms
Loss rate: 11.76%
-- Flow 1:
Average throughput: 194.80 Mbit/s
95th percentile per-packet one-way delay: 73.612 ms
Loss rate: 11.76%
```

### Run 3: Report of PCC — Data Link

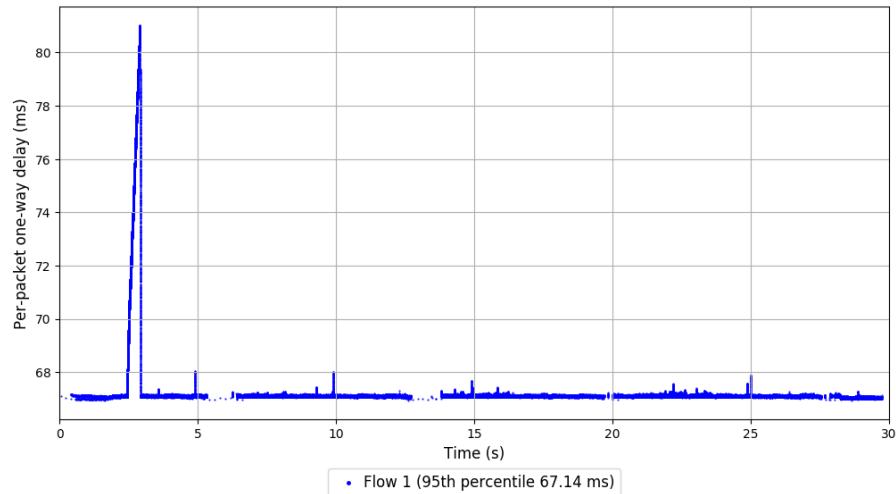
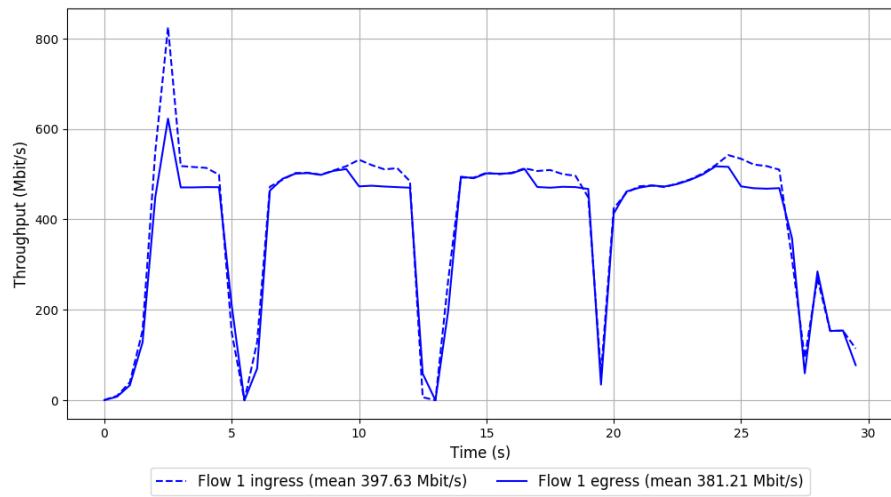


Run 4: Statistics of PCC

```
Start at: 2017-11-21 00:26:18
End at: 2017-11-21 00:26:48
Local clock offset: -0.174 ms
Remote clock offset: 14.843 ms

# Below is generated by plot.py at 2017-11-21 05:40:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 381.21 Mbit/s
95th percentile per-packet one-way delay: 67.141 ms
Loss rate: 4.72%
-- Flow 1:
Average throughput: 381.21 Mbit/s
95th percentile per-packet one-way delay: 67.141 ms
Loss rate: 4.72%
```

## Run 4: Report of PCC — Data Link

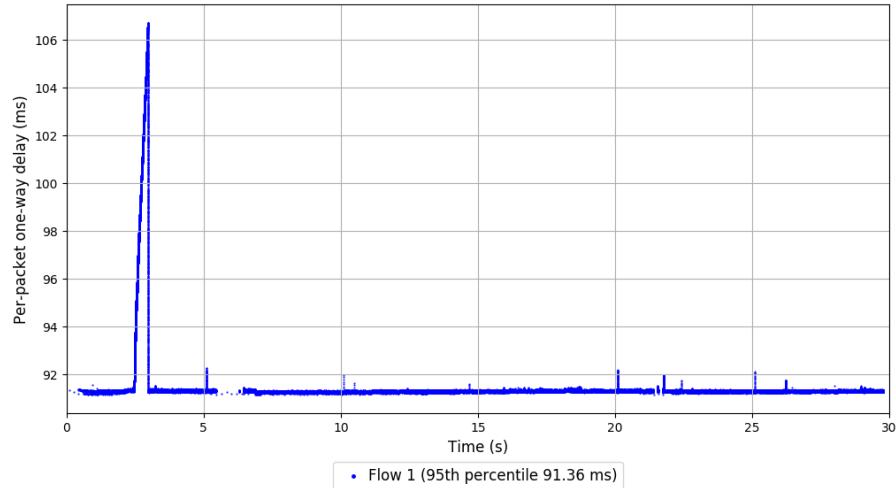
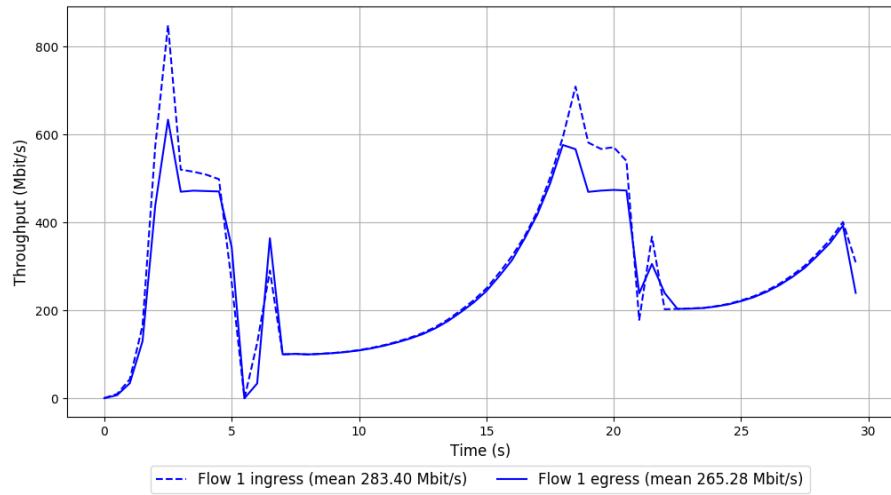


Run 5: Statistics of PCC

```
Start at: 2017-11-21 00:44:27
End at: 2017-11-21 00:44:57
Local clock offset: -0.293 ms
Remote clock offset: -9.84 ms

# Below is generated by plot.py at 2017-11-21 05:40:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 265.28 Mbit/s
95th percentile per-packet one-way delay: 91.358 ms
Loss rate: 6.92%
-- Flow 1:
Average throughput: 265.28 Mbit/s
95th percentile per-packet one-way delay: 91.358 ms
Loss rate: 6.92%
```

### Run 5: Report of PCC — Data Link

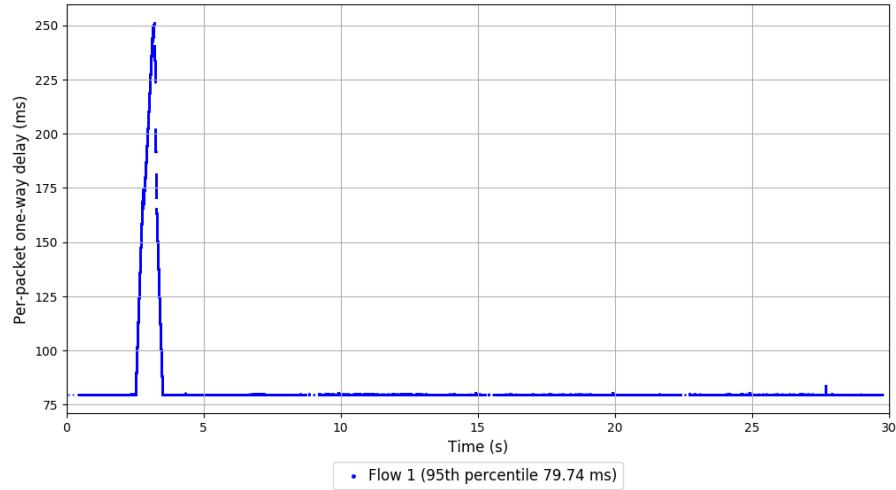
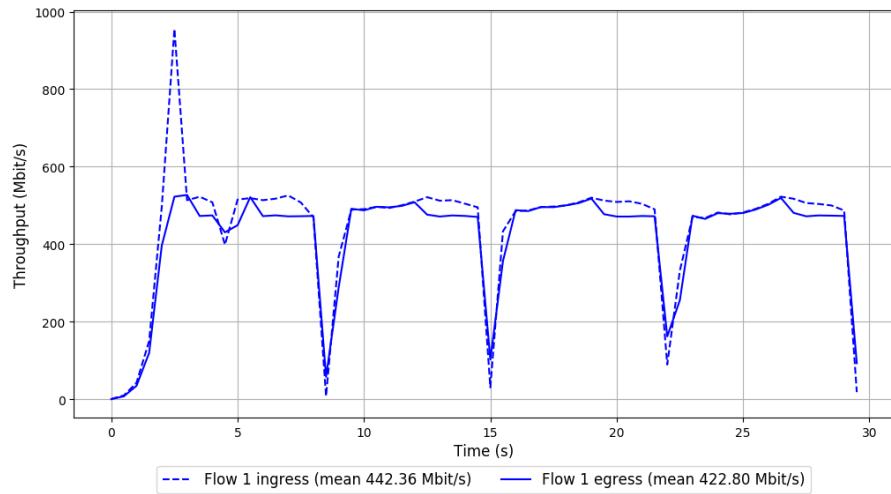


Run 6: Statistics of PCC

```
Start at: 2017-11-21 01:02:27
End at: 2017-11-21 01:02:57
Local clock offset: -0.381 ms
Remote clock offset: 1.3 ms

# Below is generated by plot.py at 2017-11-21 05:41:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 422.80 Mbit/s
95th percentile per-packet one-way delay: 79.739 ms
Loss rate: 4.95%
-- Flow 1:
Average throughput: 422.80 Mbit/s
95th percentile per-packet one-way delay: 79.739 ms
Loss rate: 4.95%
```

### Run 6: Report of PCC — Data Link

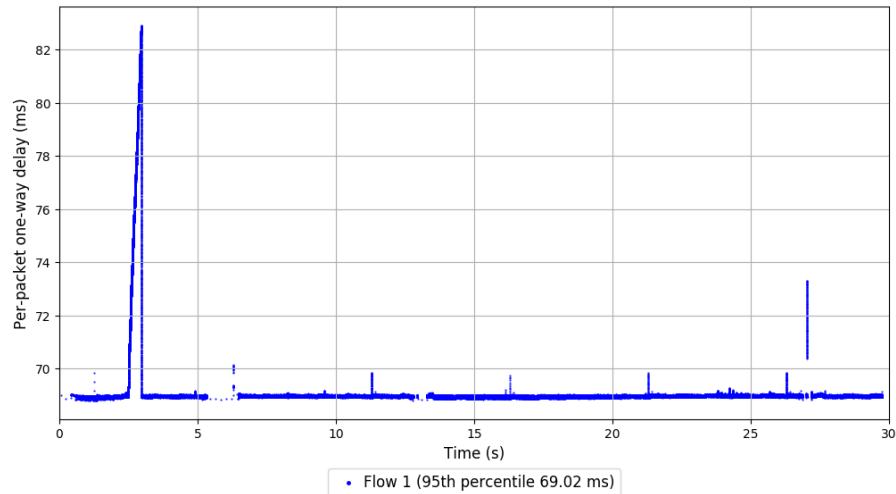
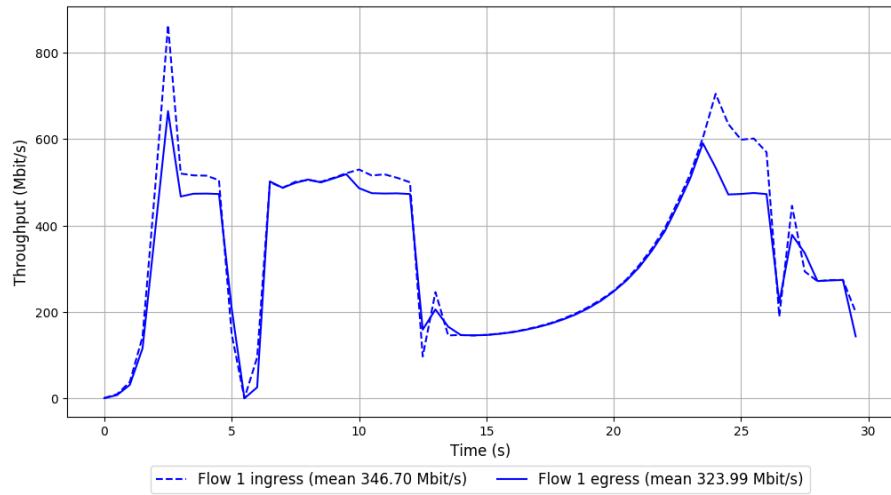


Run 7: Statistics of PCC

```
Start at: 2017-11-21 01:20:35
End at: 2017-11-21 01:21:05
Local clock offset: -0.317 ms
Remote clock offset: 13.197 ms

# Below is generated by plot.py at 2017-11-21 05:41:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 323.99 Mbit/s
95th percentile per-packet one-way delay: 69.017 ms
Loss rate: 7.08%
-- Flow 1:
Average throughput: 323.99 Mbit/s
95th percentile per-packet one-way delay: 69.017 ms
Loss rate: 7.08%
```

### Run 7: Report of PCC — Data Link

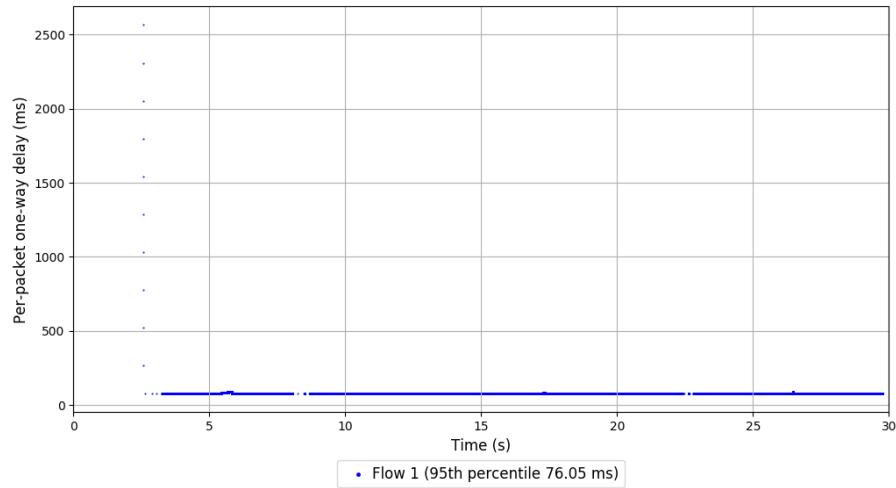
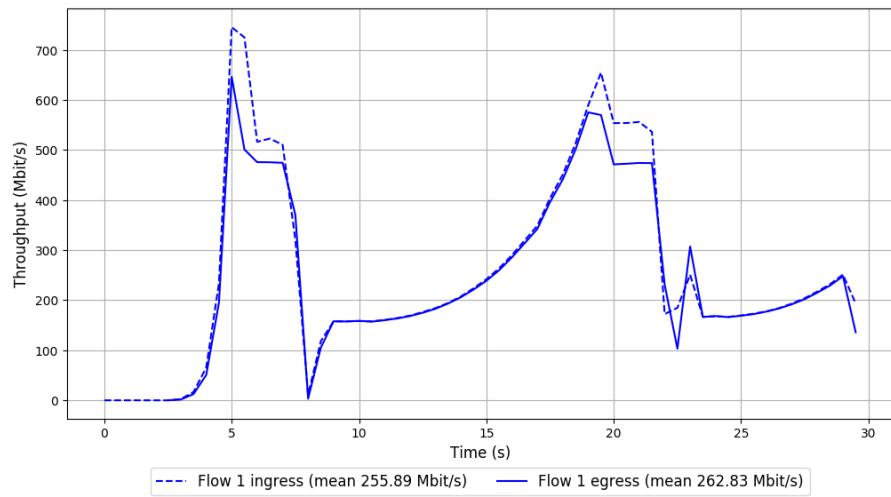


Run 8: Statistics of PCC

```
Start at: 2017-11-21 01:38:36
End at: 2017-11-21 01:39:06
Local clock offset: -0.281 ms
Remote clock offset: 9.617 ms

# Below is generated by plot.py at 2017-11-21 05:41:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 262.83 Mbit/s
95th percentile per-packet one-way delay: 76.045 ms
Loss rate: 6.44%
-- Flow 1:
Average throughput: 262.83 Mbit/s
95th percentile per-packet one-way delay: 76.045 ms
Loss rate: 6.44%
```

Run 8: Report of PCC — Data Link

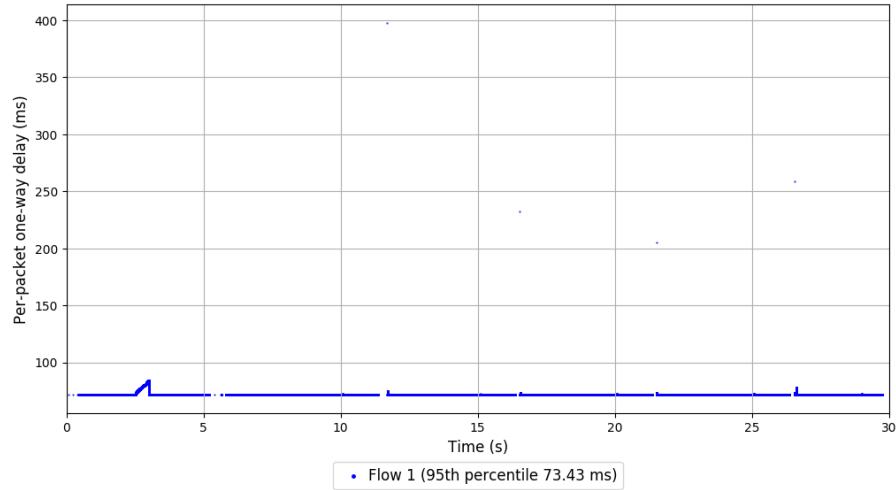
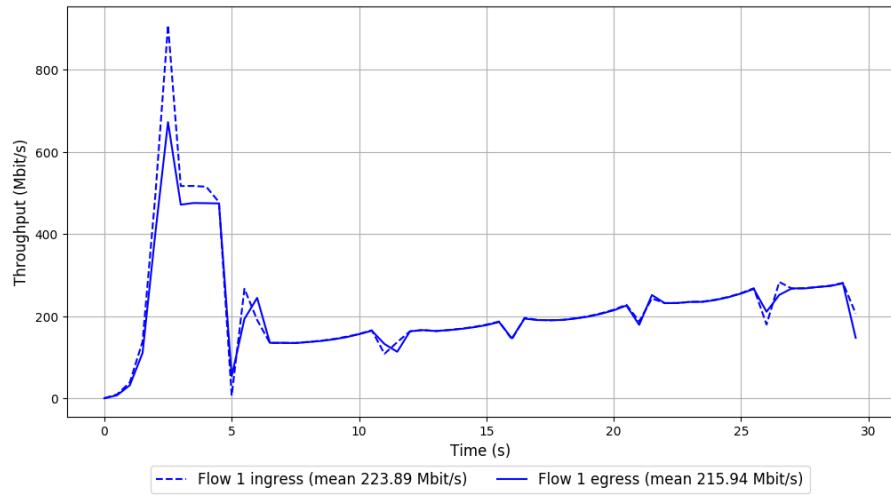


Run 9: Statistics of PCC

```
Start at: 2017-11-21 01:56:35
End at: 2017-11-21 01:57:05
Local clock offset: -0.308 ms
Remote clock offset: 13.044 ms

# Below is generated by plot.py at 2017-11-21 05:41:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.94 Mbit/s
95th percentile per-packet one-way delay: 73.433 ms
Loss rate: 4.10%
-- Flow 1:
Average throughput: 215.94 Mbit/s
95th percentile per-packet one-way delay: 73.433 ms
Loss rate: 4.10%
```

### Run 9: Report of PCC — Data Link

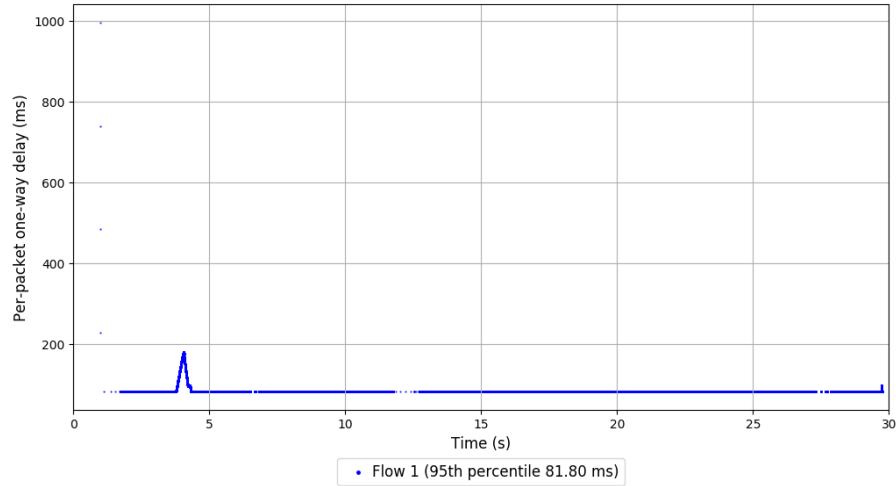
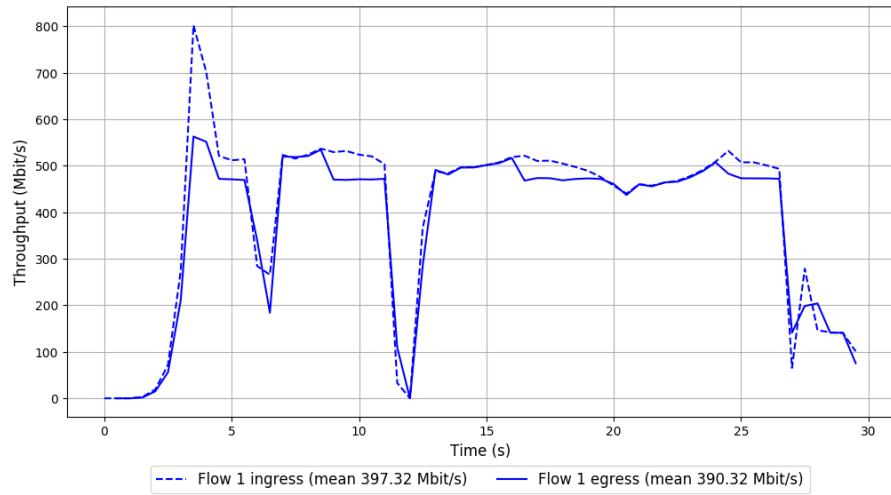


Run 10: Statistics of PCC

```
Start at: 2017-11-21 02:14:56
End at: 2017-11-21 02:15:26
Local clock offset: -0.214 ms
Remote clock offset: 2.388 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 390.32 Mbit/s
95th percentile per-packet one-way delay: 81.795 ms
Loss rate: 5.33%
-- Flow 1:
Average throughput: 390.32 Mbit/s
95th percentile per-packet one-way delay: 81.795 ms
Loss rate: 5.33%
```

## Run 10: Report of PCC — Data Link

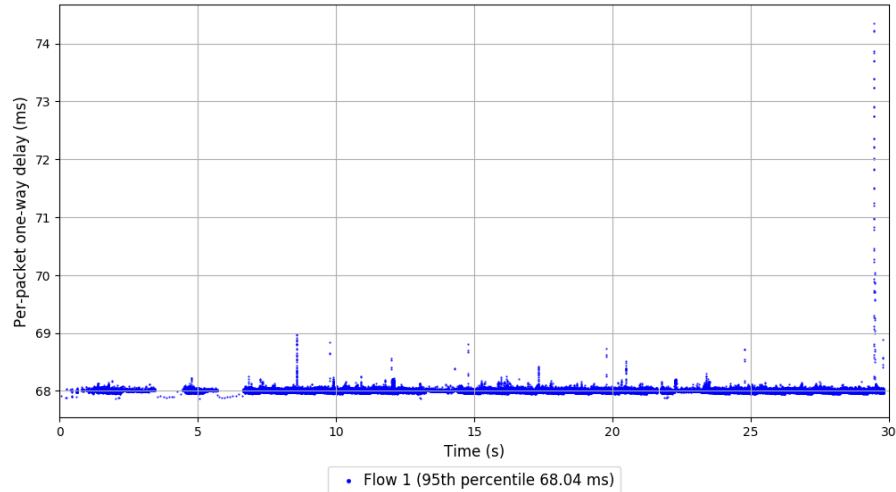
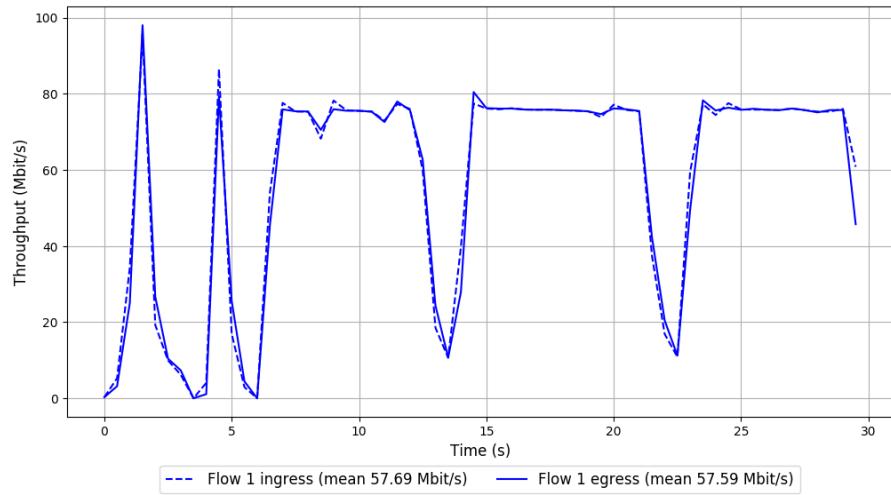


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2017-11-20 23:30:31
End at: 2017-11-20 23:31:01
Local clock offset: -0.221 ms
Remote clock offset: 15.083 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.59 Mbit/s
95th percentile per-packet one-way delay: 68.036 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 57.59 Mbit/s
95th percentile per-packet one-way delay: 68.036 ms
Loss rate: 0.74%
```

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

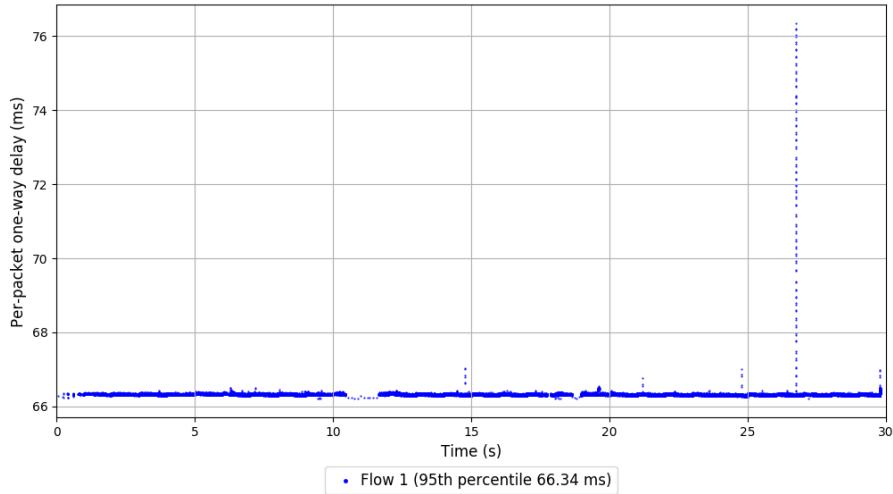
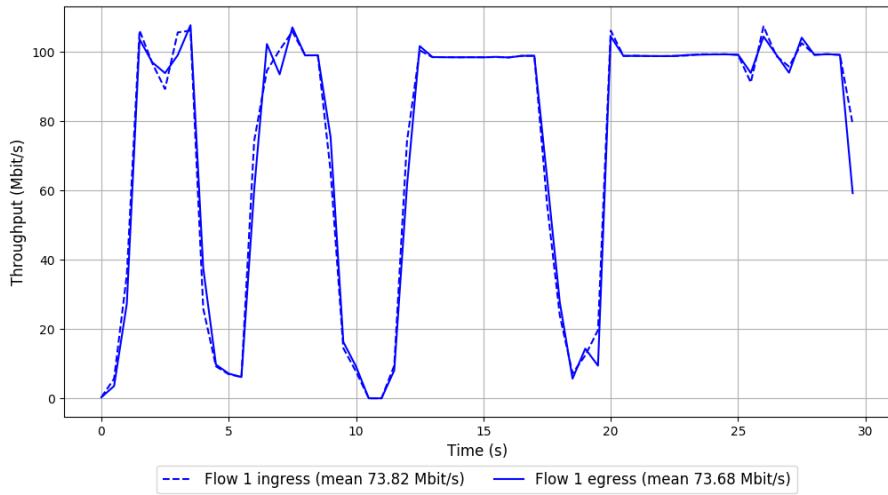


Run 2: Statistics of QUIC Cubic

```
Start at: 2017-11-20 23:48:45
End at: 2017-11-20 23:49:15
Local clock offset: -0.245 ms
Remote clock offset: 15.365 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.68 Mbit/s
95th percentile per-packet one-way delay: 66.337 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 73.68 Mbit/s
95th percentile per-packet one-way delay: 66.337 ms
Loss rate: 0.75%
```

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

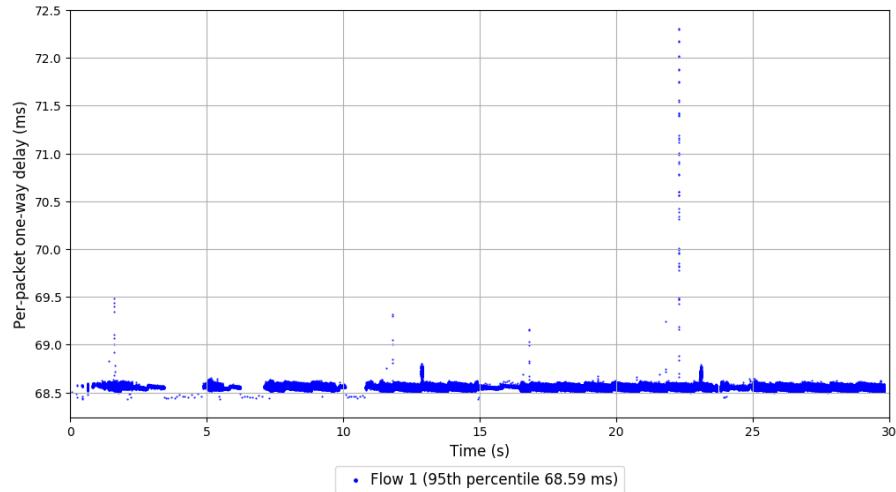
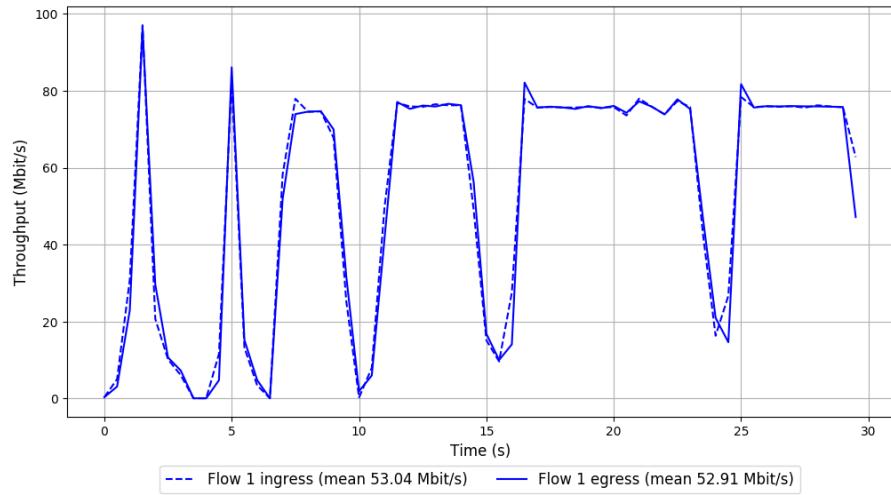


```
Run 3: Statistics of QUIC Cubic
```

```
Start at: 2017-11-21 00:07:01
End at: 2017-11-21 00:07:31
Local clock offset: -0.173 ms
Remote clock offset: 15.429 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.91 Mbit/s
95th percentile per-packet one-way delay: 68.587 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 52.91 Mbit/s
95th percentile per-packet one-way delay: 68.587 ms
Loss rate: 0.82%
```

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

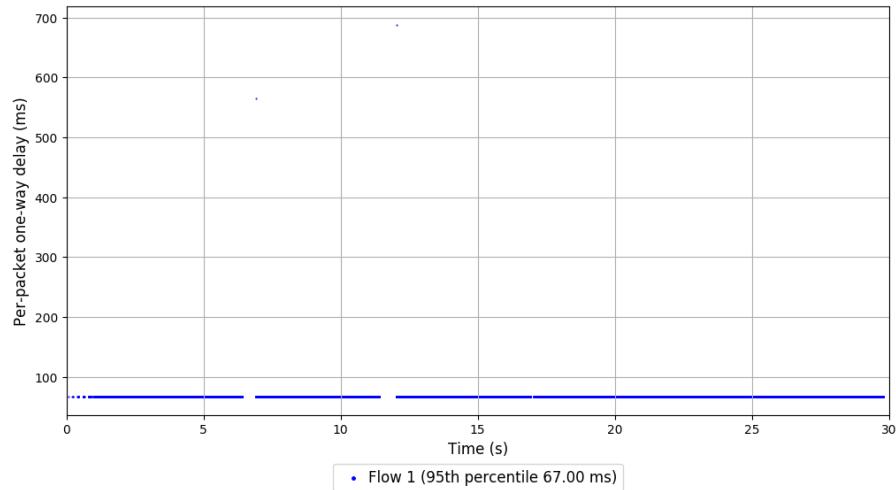
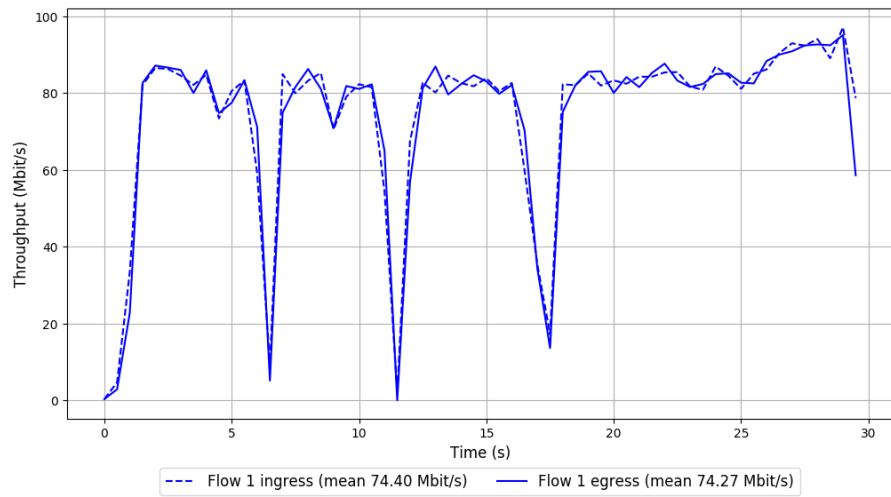


Run 4: Statistics of QUIC Cubic

```
Start at: 2017-11-21 00:25:04
End at: 2017-11-21 00:25:34
Local clock offset: -0.246 ms
Remote clock offset: 14.888 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.27 Mbit/s
95th percentile per-packet one-way delay: 67.005 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 74.27 Mbit/s
95th percentile per-packet one-way delay: 67.005 ms
Loss rate: 0.75%
```

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

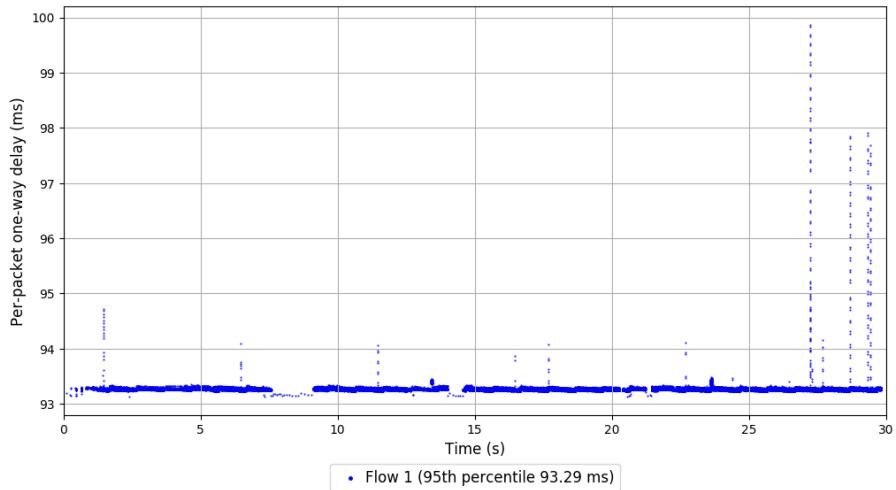
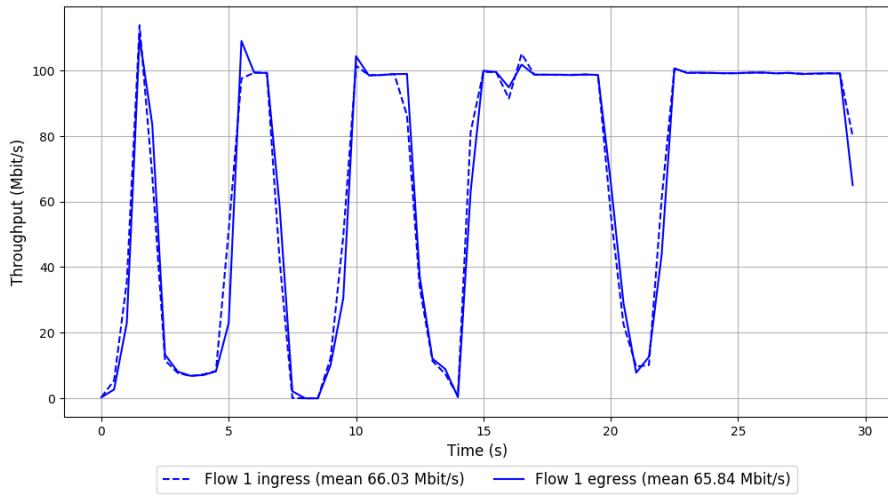


Run 5: Statistics of QUIC Cubic

```
Start at: 2017-11-21 00:43:14
End at: 2017-11-21 00:43:44
Local clock offset: -0.185 ms
Remote clock offset: -9.998 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.84 Mbit/s
95th percentile per-packet one-way delay: 93.288 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 65.84 Mbit/s
95th percentile per-packet one-way delay: 93.288 ms
Loss rate: 0.84%
```

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

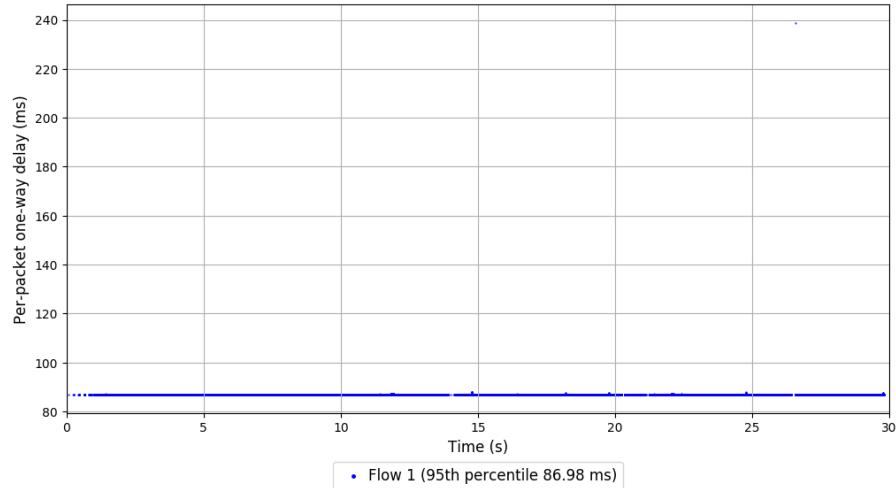
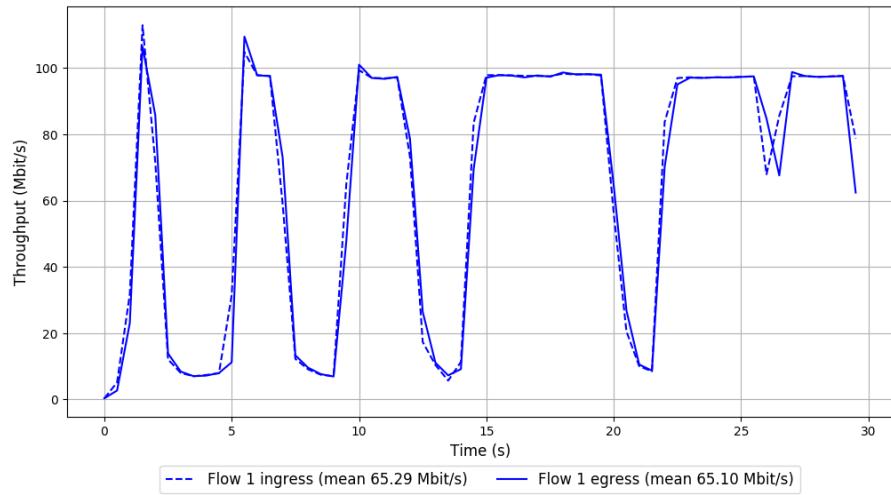


```
Run 6: Statistics of QUIC Cubic
```

```
Start at: 2017-11-21 01:01:13
End at: 2017-11-21 01:01:43
Local clock offset: -0.292 ms
Remote clock offset: -3.34 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.10 Mbit/s
95th percentile per-packet one-way delay: 86.981 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 65.10 Mbit/s
95th percentile per-packet one-way delay: 86.981 ms
Loss rate: 0.85%
```

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

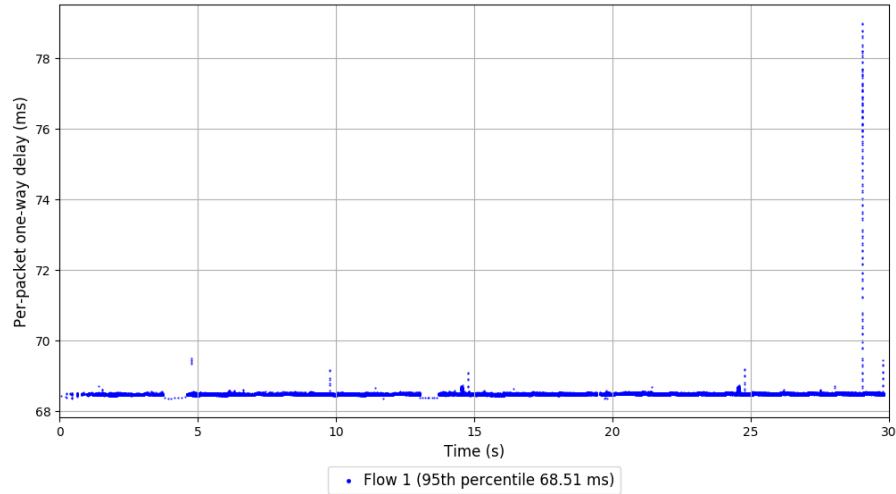
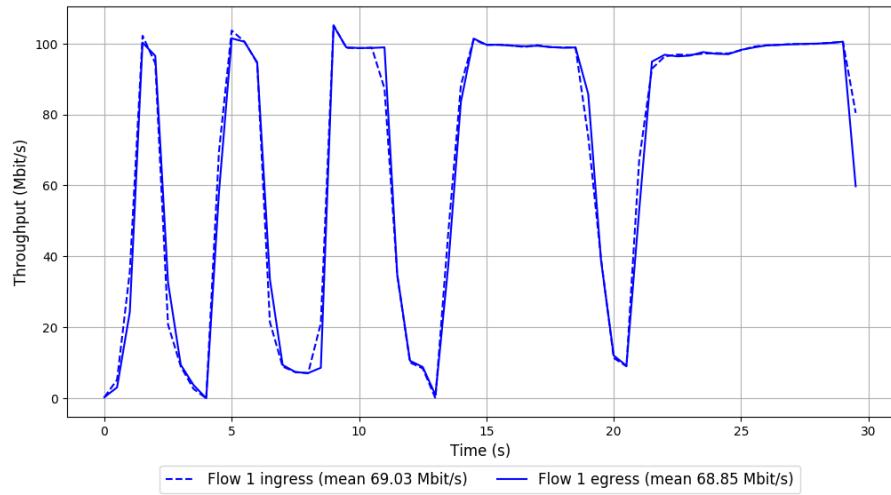


Run 7: Statistics of QUIC Cubic

```
Start at: 2017-11-21 01:19:22
End at: 2017-11-21 01:19:52
Local clock offset: -0.315 ms
Remote clock offset: 15.896 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.85 Mbit/s
95th percentile per-packet one-way delay: 68.513 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 68.85 Mbit/s
95th percentile per-packet one-way delay: 68.513 ms
Loss rate: 0.83%
```

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

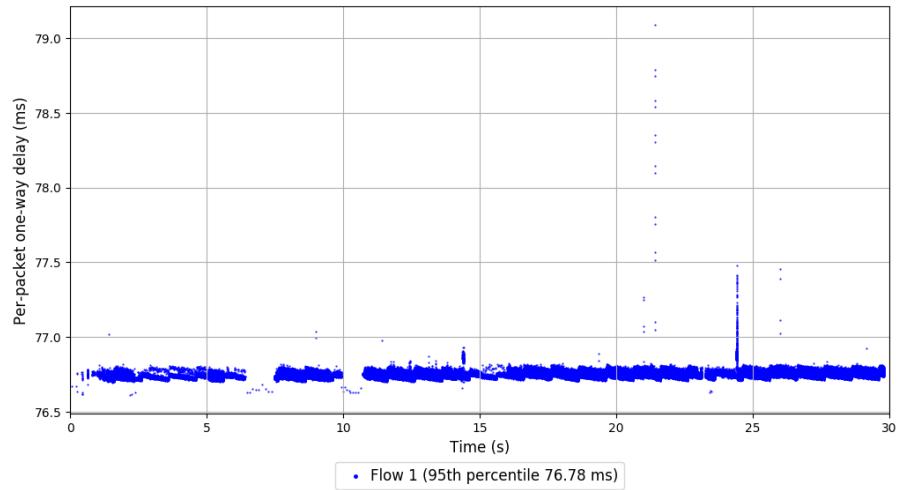
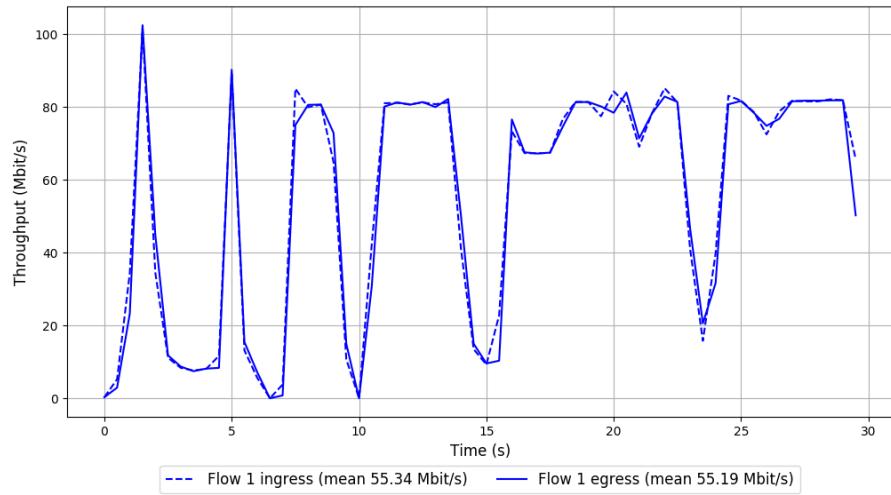


Run 8: Statistics of QUIC Cubic

```
Start at: 2017-11-21 01:37:23
End at: 2017-11-21 01:37:53
Local clock offset: -0.284 ms
Remote clock offset: 7.833 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.19 Mbit/s
95th percentile per-packet one-way delay: 76.780 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 55.19 Mbit/s
95th percentile per-packet one-way delay: 76.780 ms
Loss rate: 0.85%
```

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

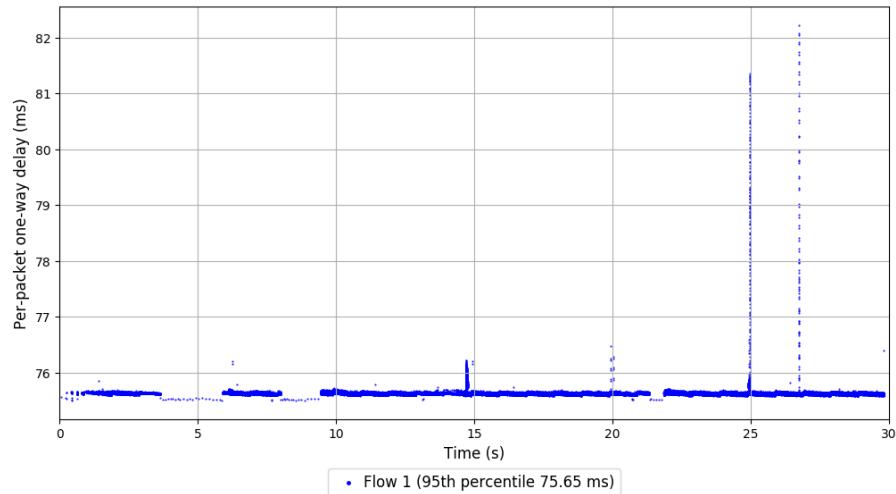
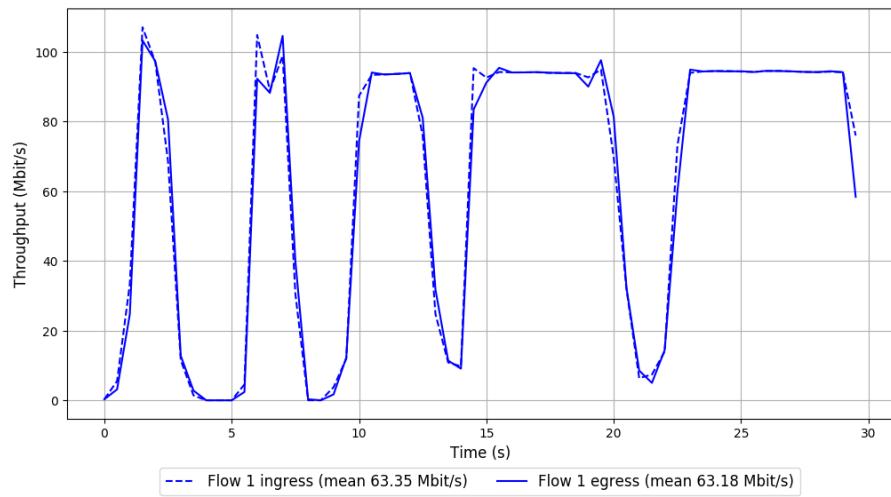


Run 9: Statistics of QUIC Cubic

```
Start at: 2017-11-21 01:55:22
End at: 2017-11-21 01:55:52
Local clock offset: -0.254 ms
Remote clock offset: 9.23 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.18 Mbit/s
95th percentile per-packet one-way delay: 75.649 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 63.18 Mbit/s
95th percentile per-packet one-way delay: 75.649 ms
Loss rate: 0.84%
```

Run 9: Report of QUIC Cubic — Data Link

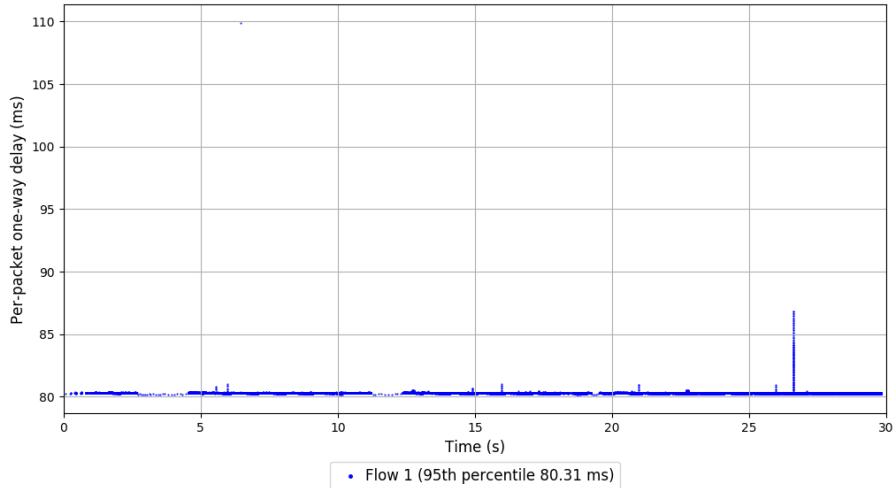
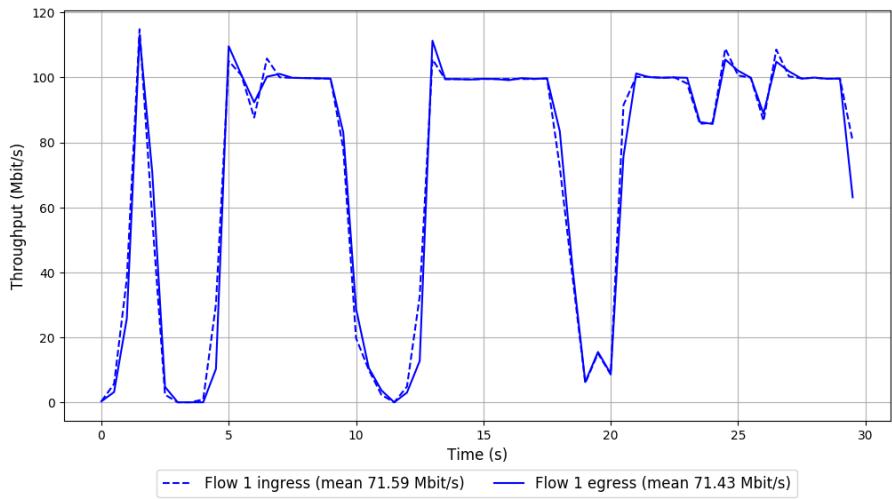


Run 10: Statistics of QUIC Cubic

```
Start at: 2017-11-21 02:13:42
End at: 2017-11-21 02:14:12
Local clock offset: -0.256 ms
Remote clock offset: 2.253 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.43 Mbit/s
95th percentile per-packet one-way delay: 80.311 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 71.43 Mbit/s
95th percentile per-packet one-way delay: 80.311 ms
Loss rate: 0.78%
```

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



Run 1: Statistics of SCReAM

Start at: 2017-11-20 23:38:45

End at: 2017-11-20 23:39:15

Local clock offset: -0.266 ms

Remote clock offset: 15.697 ms

Run 1: Report of SCReAM — Data Link

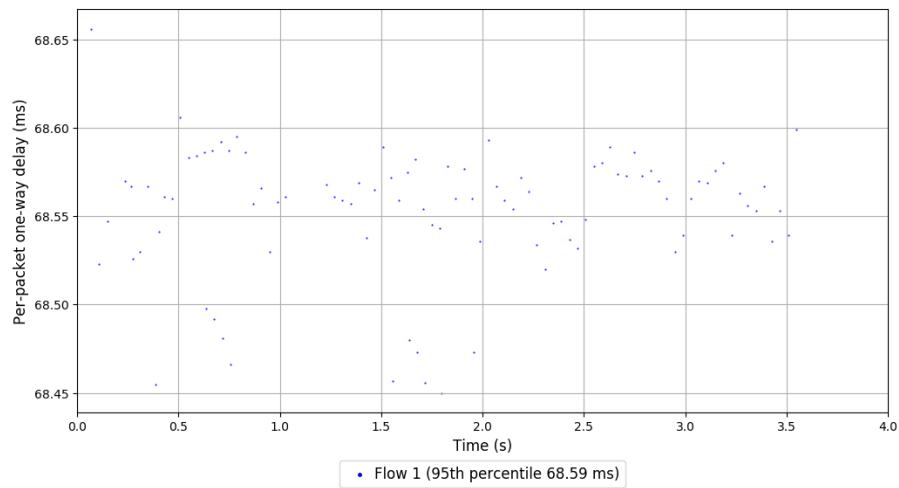
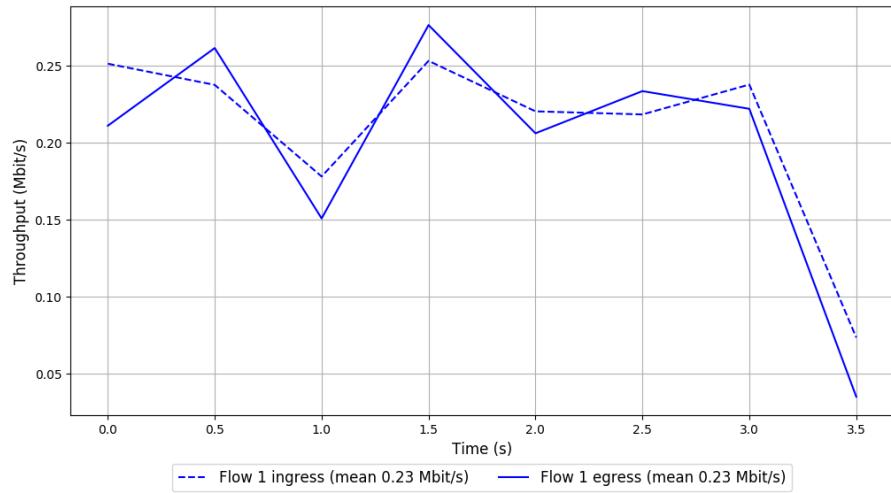
Figure is missing

Figure is missing

Run 2: Statistics of SCReAM

Start at: 2017-11-20 23:56:56  
End at: 2017-11-20 23:57:26  
Local clock offset: -0.196 ms  
Remote clock offset: 15.062 ms

Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SCReAM

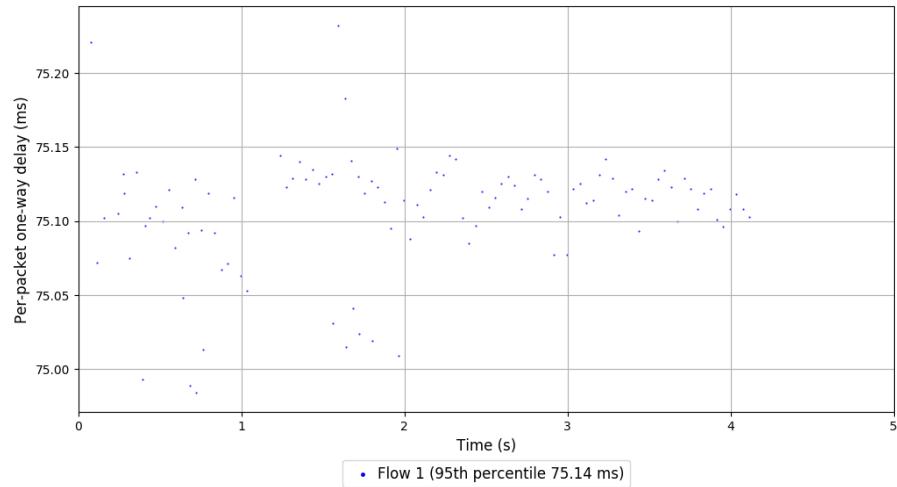
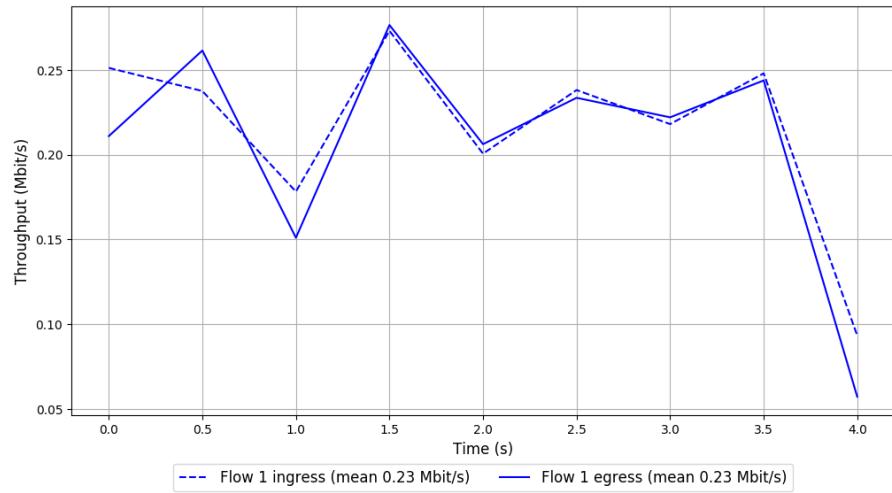
Start at: 2017-11-21 00:15:04

End at: 2017-11-21 00:15:34

Local clock offset: -0.234 ms

Remote clock offset: 7.175 ms

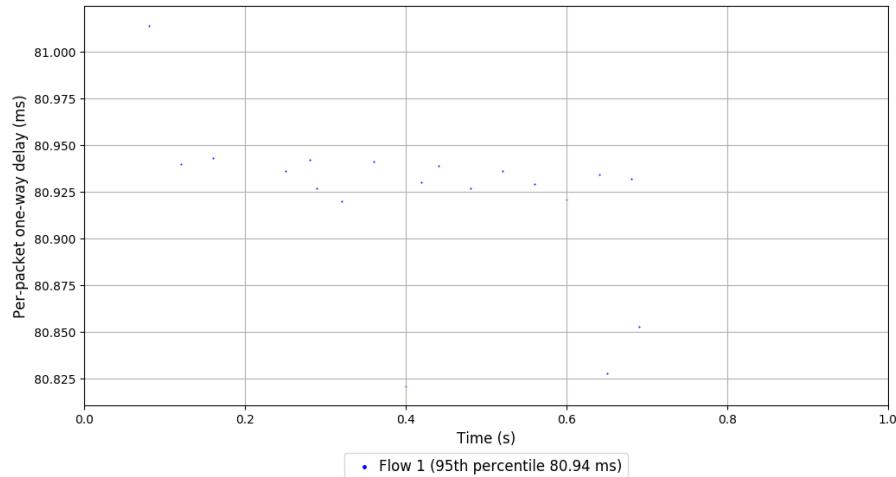
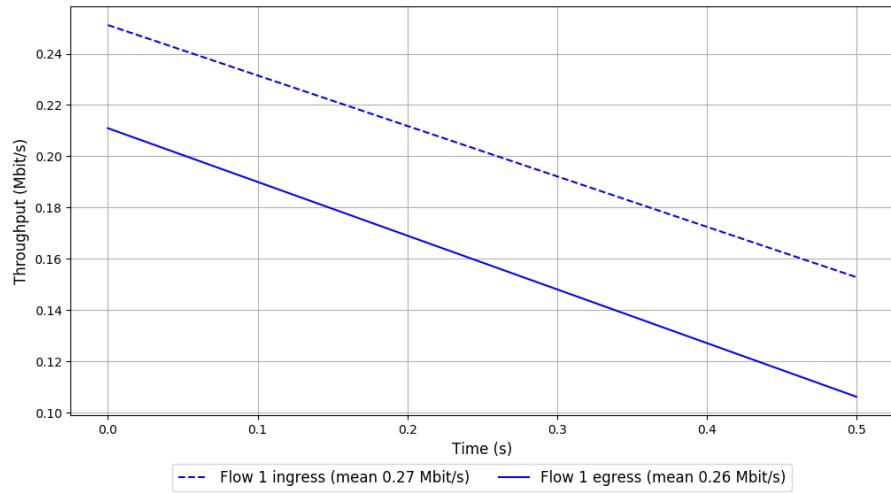
### Run 3: Report of SCReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-11-21 00:33:11  
End at: 2017-11-21 00:33:41  
Local clock offset: -0.237 ms  
Remote clock offset: 0.667 ms

## Run 4: Report of SCReAM — Data Link

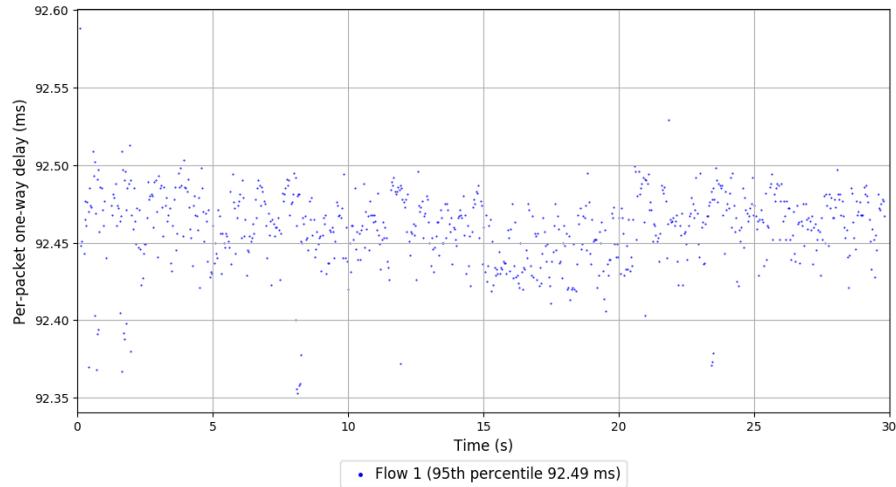
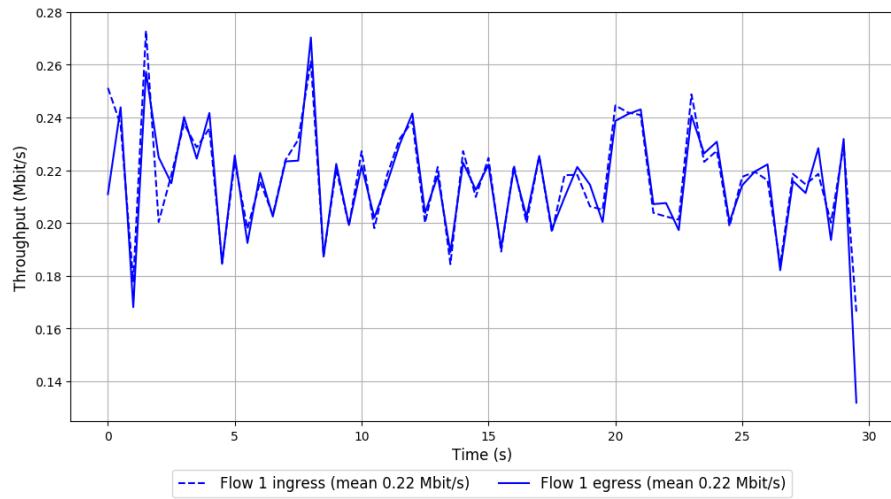


Run 5: Statistics of SCReAM

```
Start at: 2017-11-21 00:51:11
End at: 2017-11-21 00:51:41
Local clock offset: -0.258 ms
Remote clock offset: -9.497 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.491 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.491 ms
Loss rate: 0.51%
```

## Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-21 01:09:22  
End at: 2017-11-21 01:09:52  
Local clock offset: -0.332 ms  
Remote clock offset: 0.867 ms

Run 6: Report of SCReAM — Data Link

Figure is missing

Figure is missing

Run 7: Statistics of SCReAM

Start at: 2017-11-21 01:27:19  
End at: 2017-11-21 01:27:49  
Local clock offset: -0.38 ms  
Remote clock offset: 13.429 ms

Run 7: Report of SCReAM — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of SCReAM

Start at: 2017-11-21 01:45:23  
End at: 2017-11-21 01:45:53  
Local clock offset: -0.279 ms  
Remote clock offset: 9.494 ms

Run 8: Report of SCReAM — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of SCReAM

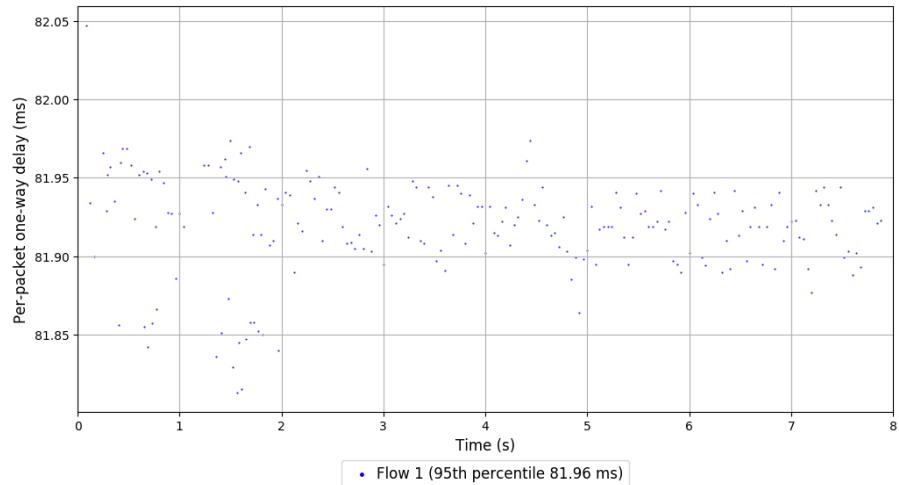
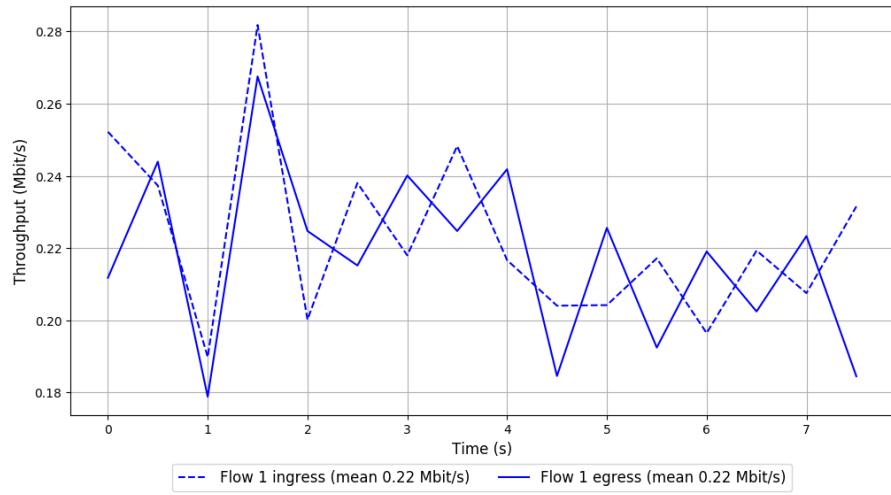
Start at: 2017-11-21 02:03:35

End at: 2017-11-21 02:04:05

Local clock offset: -0.309 ms

Remote clock offset: 2.608 ms

## Run 9: Report of SCReAM — Data Link

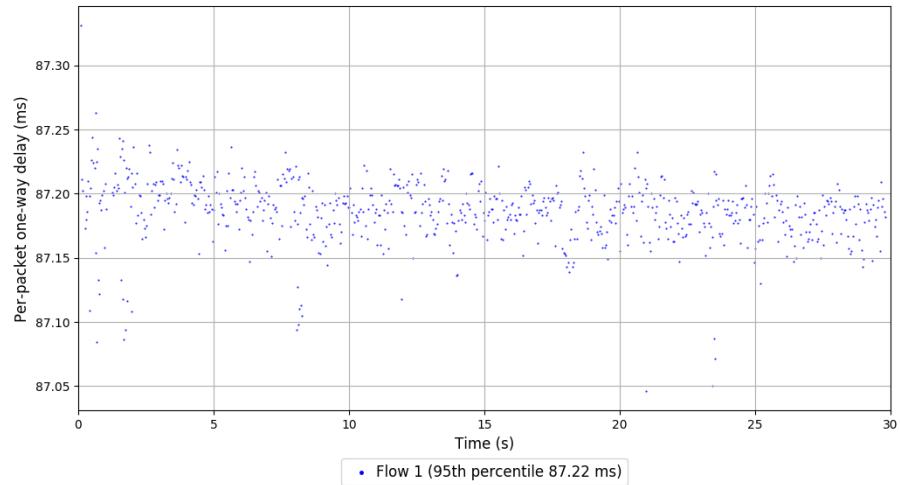
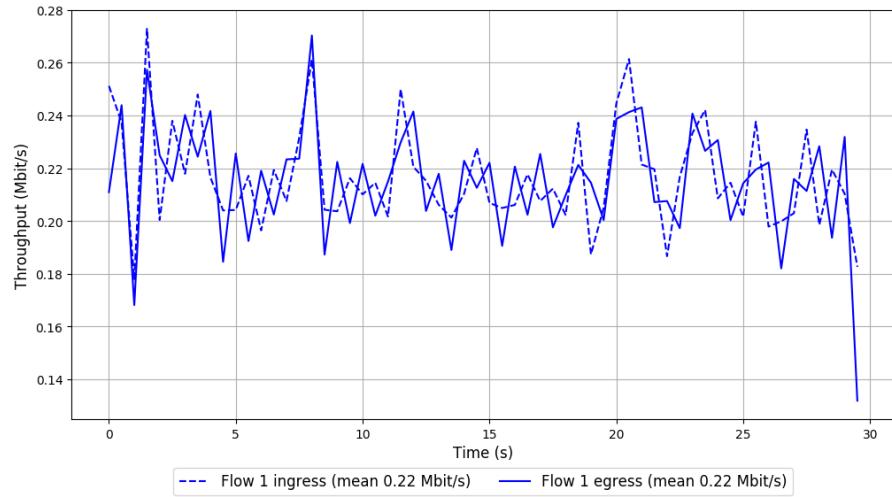


Run 10: Statistics of SCReAM

```
Start at: 2017-11-21 02:21:41
End at: 2017-11-21 02:22:11
Local clock offset: -0.136 ms
Remote clock offset: -2.94 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.218 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.218 ms
Loss rate: 0.64%
```

## Run 10: Report of SCReAM — Data Link



Run 1: Statistics of WebRTC media

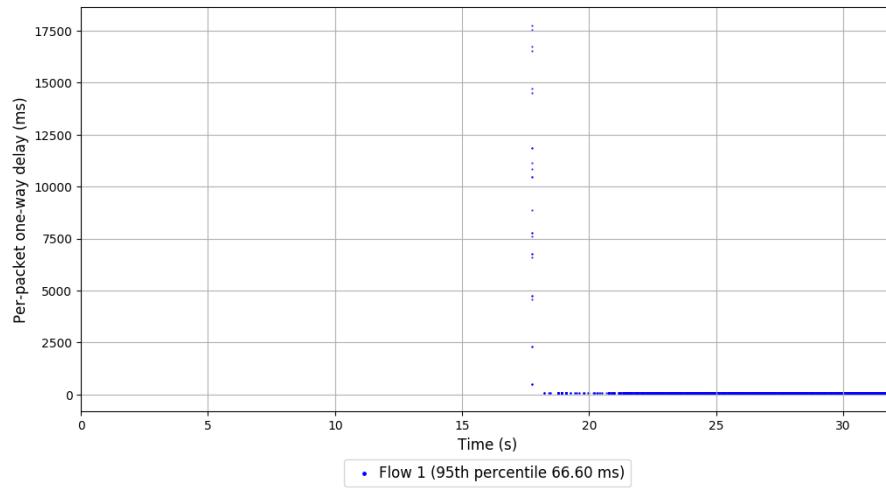
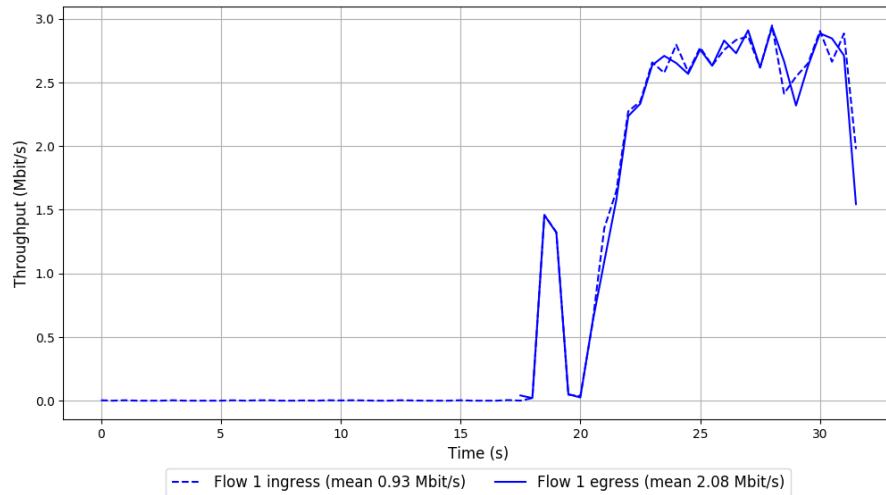
Start at: 2017-11-20 23:39:54

End at: 2017-11-20 23:40:24

Local clock offset: -0.273 ms

Remote clock offset: 15.109 ms

### Run 1: Report of WebRTC media — Data Link

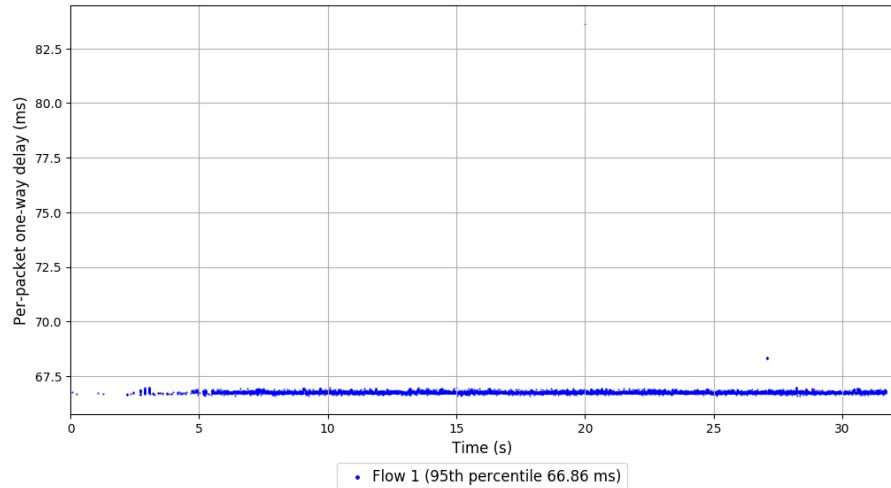
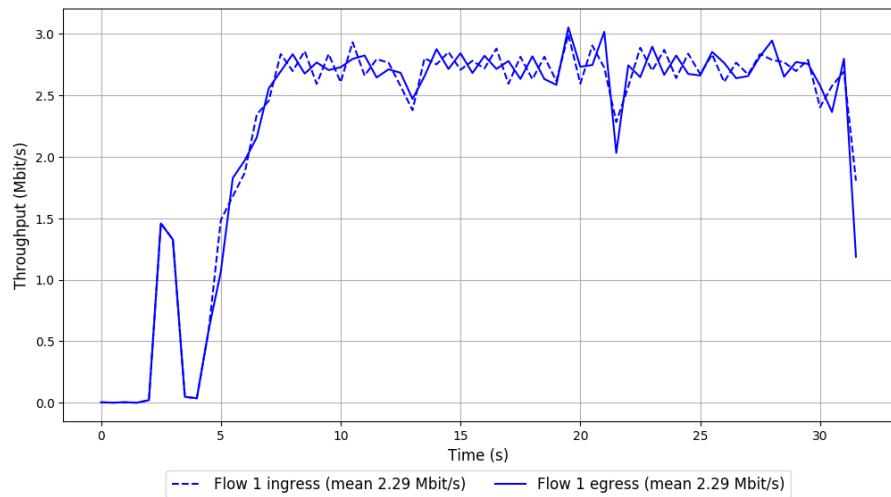


```
Run 2: Statistics of WebRTC media

Start at: 2017-11-20 23:58:06
End at: 2017-11-20 23:58:36
Local clock offset: -0.256 ms
Remote clock offset: 15.091 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 66.858 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 66.858 ms
Loss rate: 0.62%
```

Run 2: Report of WebRTC media — Data Link

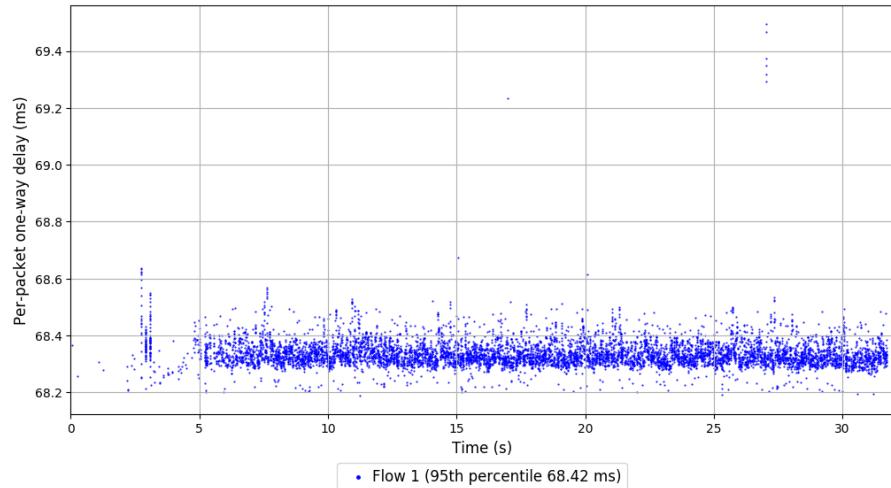
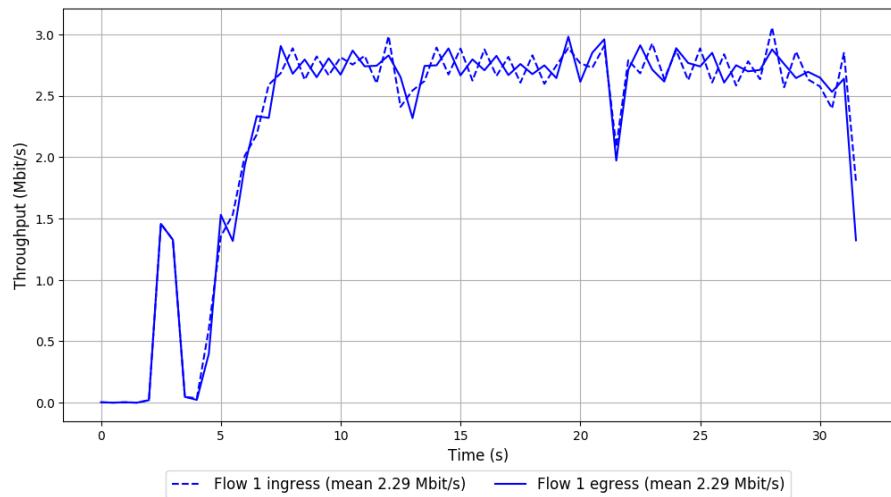


Run 3: Statistics of WebRTC media

```
Start at: 2017-11-21 00:16:14
End at: 2017-11-21 00:16:44
Local clock offset: -0.153 ms
Remote clock offset: 15.086 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 68.418 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 68.418 ms
Loss rate: 0.62%
```

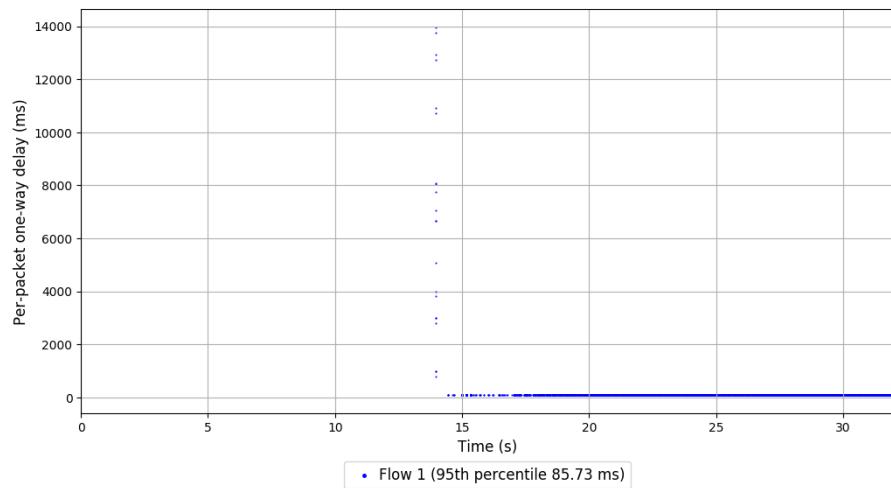
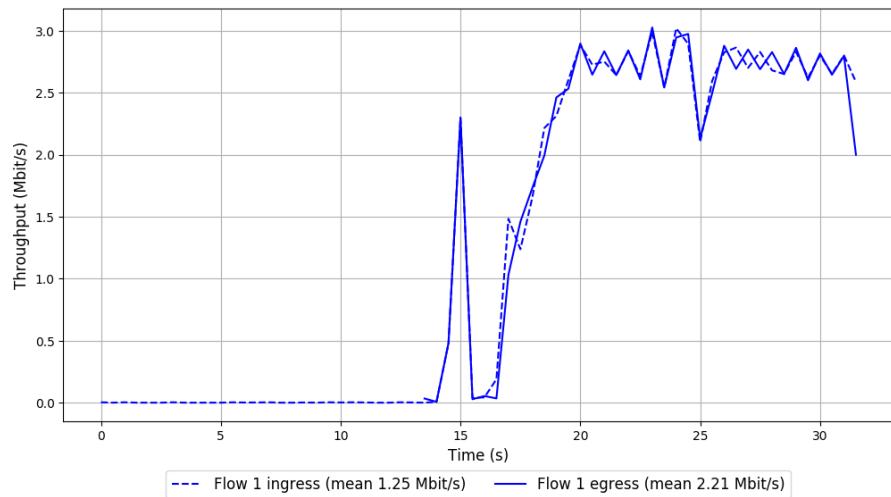
Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-21 00:34:20  
End at: 2017-11-21 00:34:50  
Local clock offset: -0.17 ms  
Remote clock offset: -3.983 ms

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

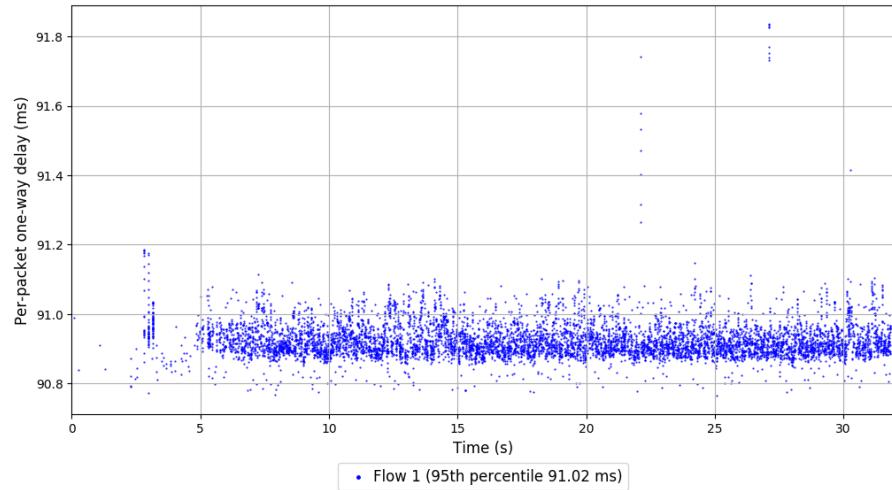
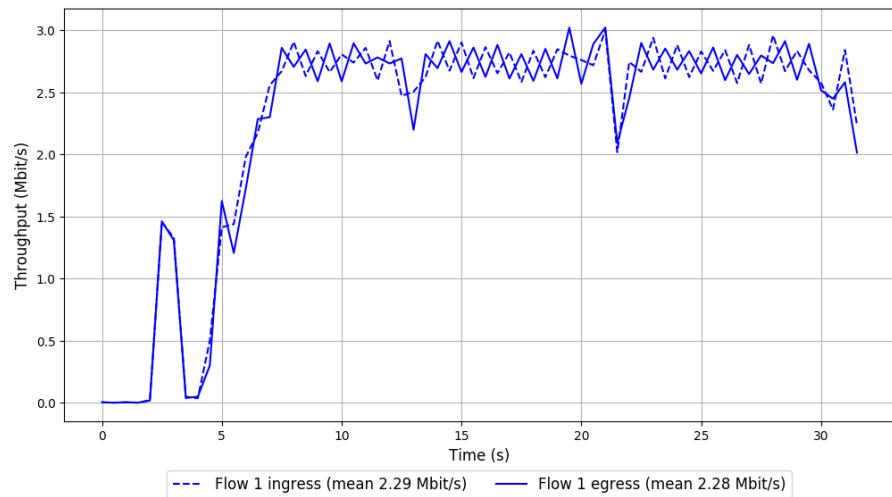


Run 5: Statistics of WebRTC media

```
Start at: 2017-11-21 00:52:20
End at: 2017-11-21 00:52:50
Local clock offset: -0.269 ms
Remote clock offset: -9.364 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 91.019 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 91.019 ms
Loss rate: 0.62%
```

Run 5: Report of WebRTC media — Data Link

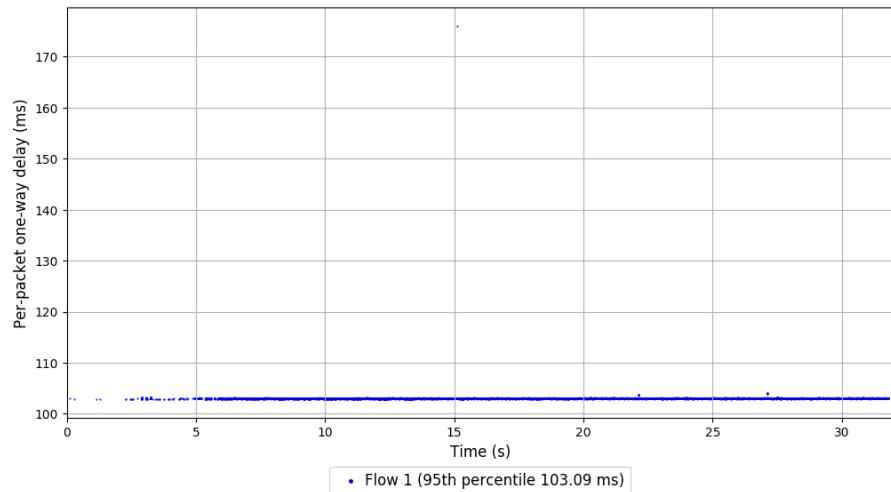
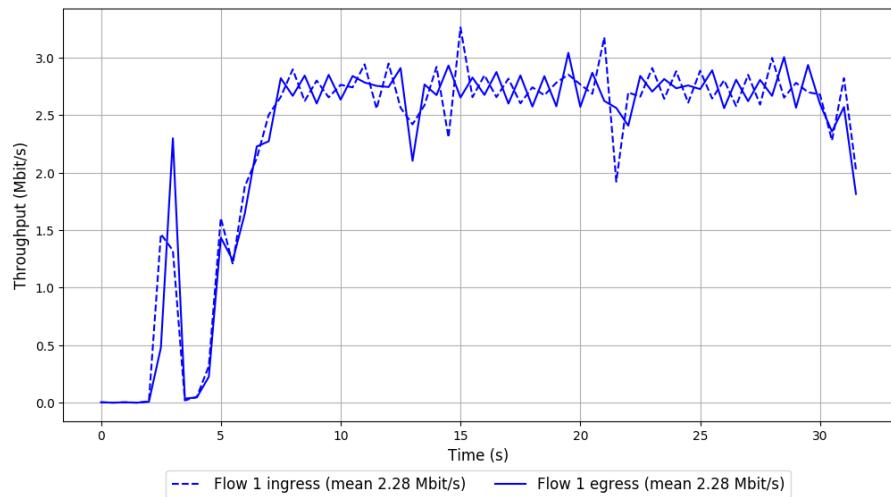


```
Run 6: Statistics of WebRTC media

Start at: 2017-11-21 01:10:32
End at: 2017-11-21 01:11:02
Local clock offset: -0.422 ms
Remote clock offset: -19.163 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 103.086 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 103.086 ms
Loss rate: 0.60%
```

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

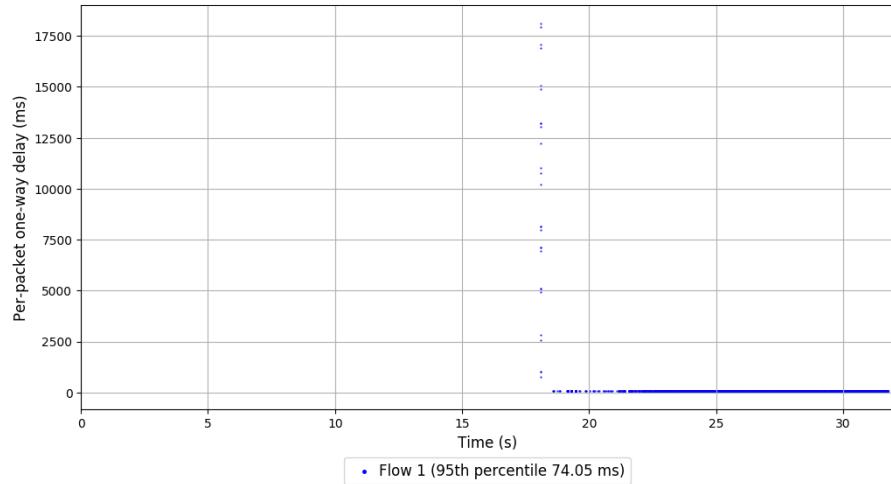
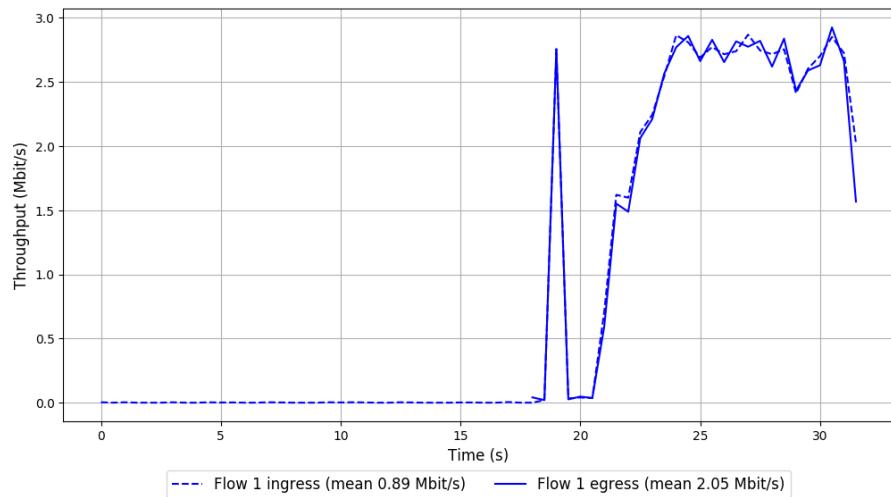
Start at: 2017-11-21 01:28:28

End at: 2017-11-21 01:28:58

Local clock offset: -0.315 ms

Remote clock offset: 8.625 ms

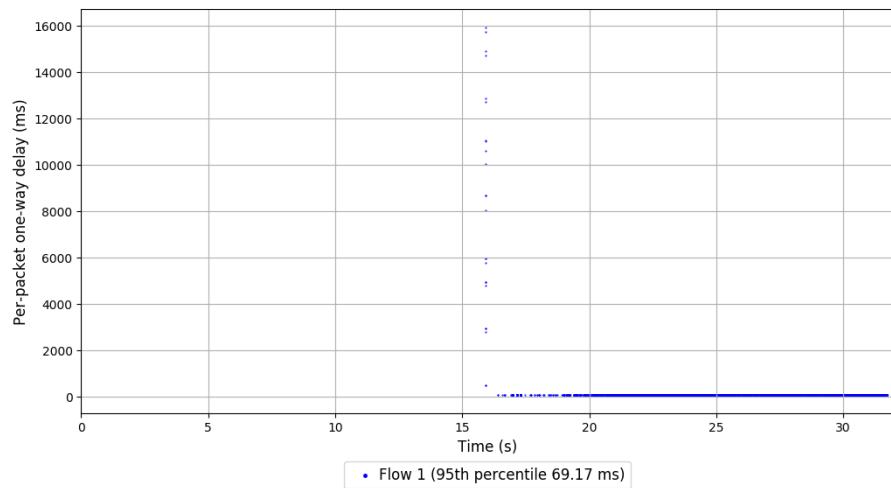
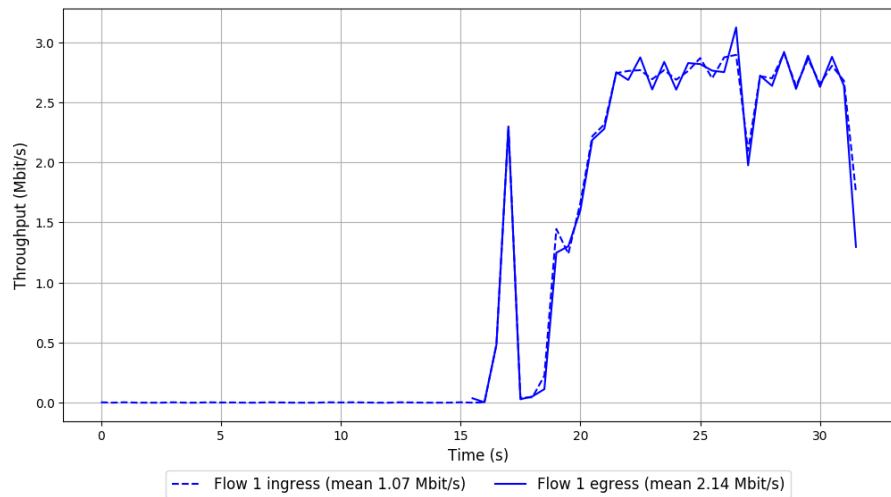
Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-21 01:46:32  
End at: 2017-11-21 01:47:02  
Local clock offset: -0.254 ms  
Remote clock offset: 14.276 ms

Run 8: Report of WebRTC media — Data Link

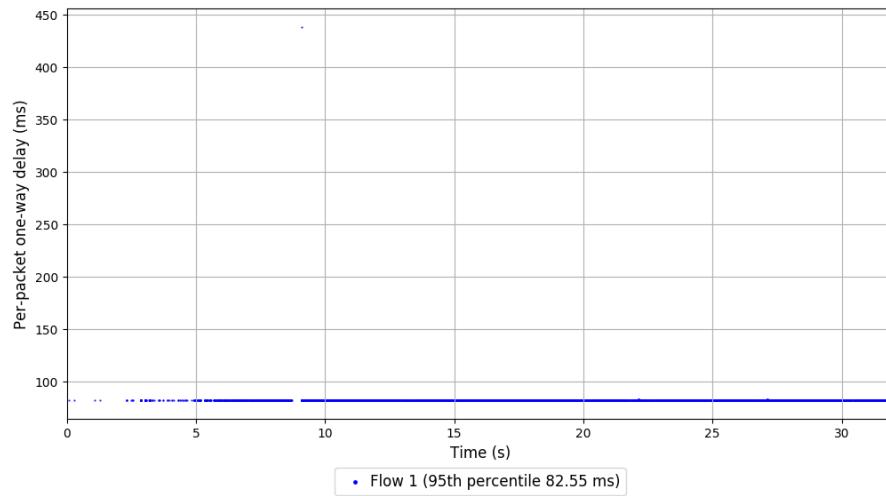
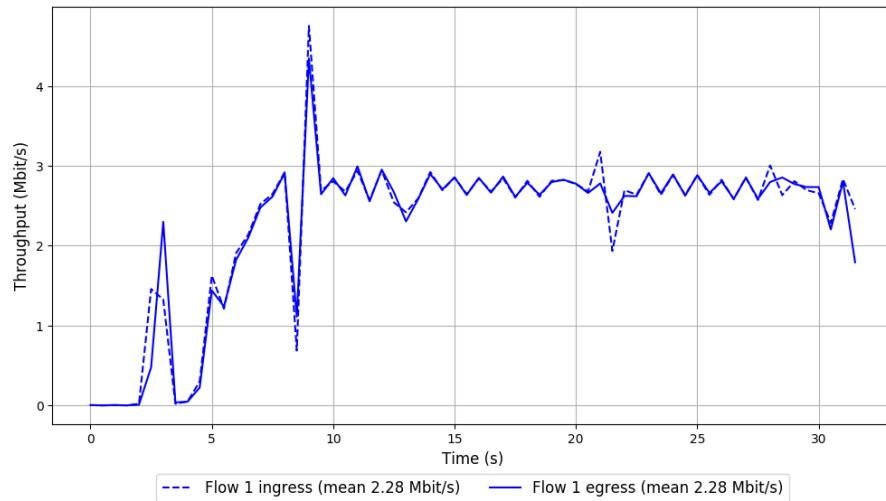


Run 9: Statistics of WebRTC media

```
Start at: 2017-11-21 02:04:44
End at: 2017-11-21 02:05:14
Local clock offset: -0.227 ms
Remote clock offset: 2.587 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 82.551 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 82.551 ms
Loss rate: 0.76%
```

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

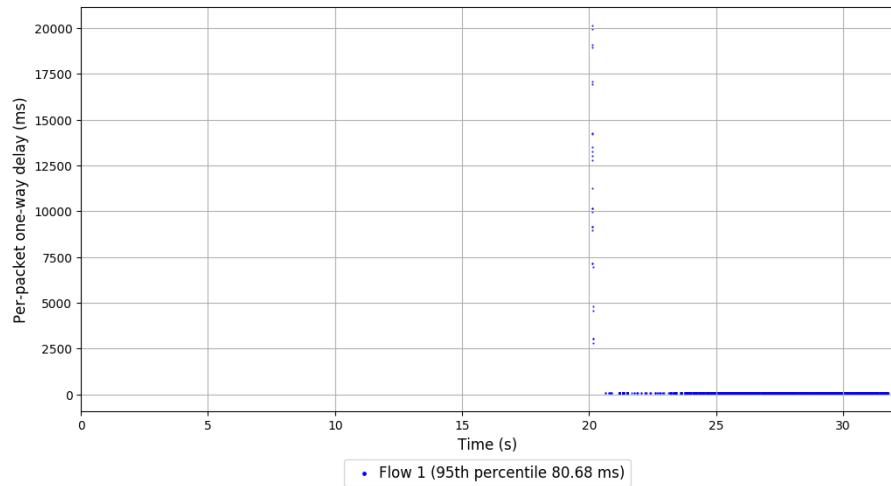
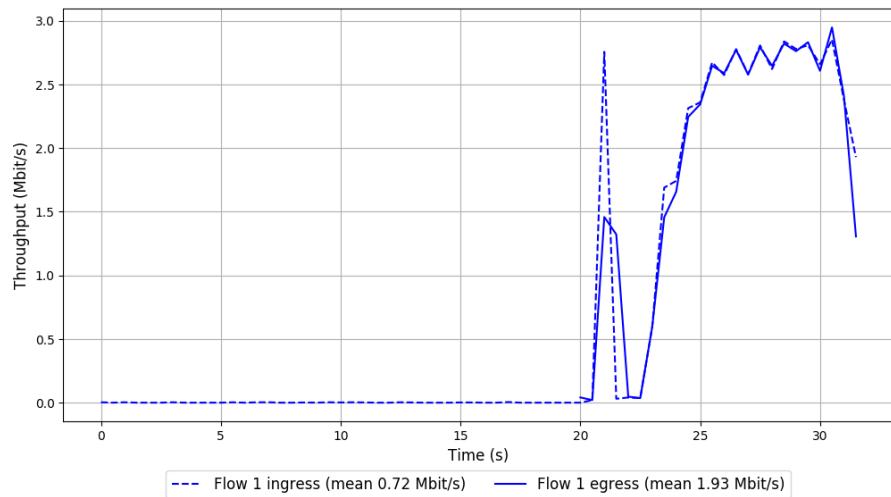
Start at: 2017-11-21 02:22:51

End at: 2017-11-21 02:23:21

Local clock offset: -0.234 ms

Remote clock offset: 1.901 ms

Run 10: Report of WebRTC media — Data Link

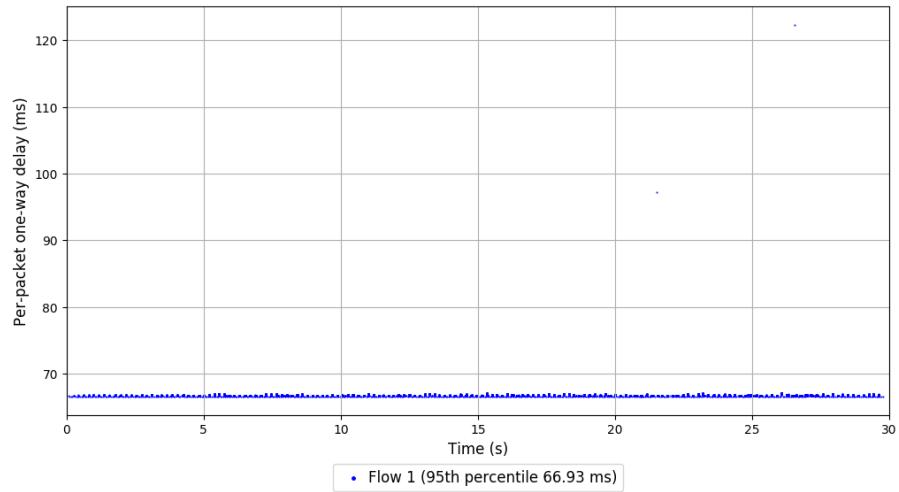
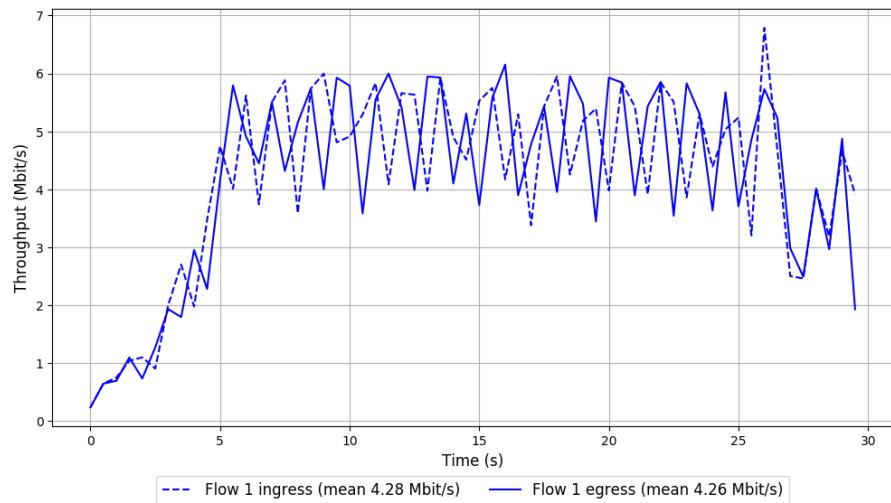


Run 1: Statistics of Sprout

```
Start at: 2017-11-20 23:42:39
End at: 2017-11-20 23:43:09
Local clock offset: -0.264 ms
Remote clock offset: 15.114 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 66.930 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 66.930 ms
Loss rate: 0.78%
```

## Run 1: Report of Sprout — Data Link

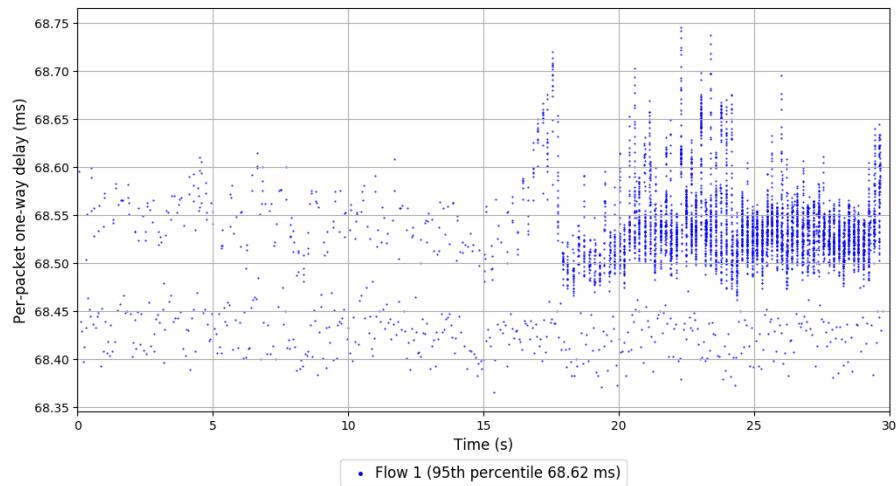
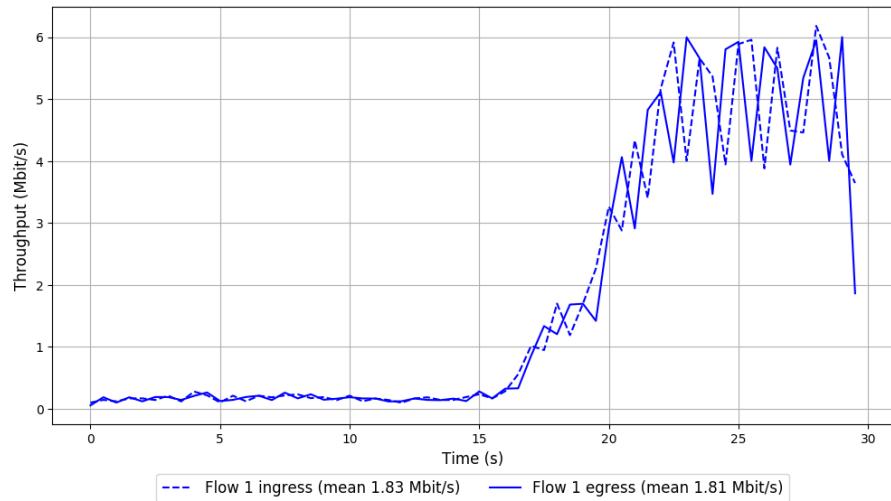


Run 2: Statistics of Sprout

```
Start at: 2017-11-21 00:00:47
End at: 2017-11-21 00:01:17
Local clock offset: -0.182 ms
Remote clock offset: 15.096 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 68.622 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 68.622 ms
Loss rate: 1.63%
```

## Run 2: Report of Sprout — Data Link

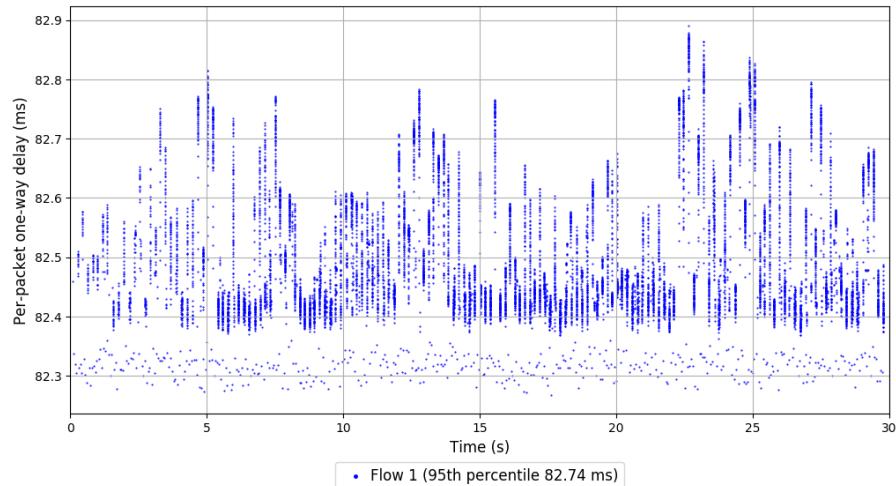
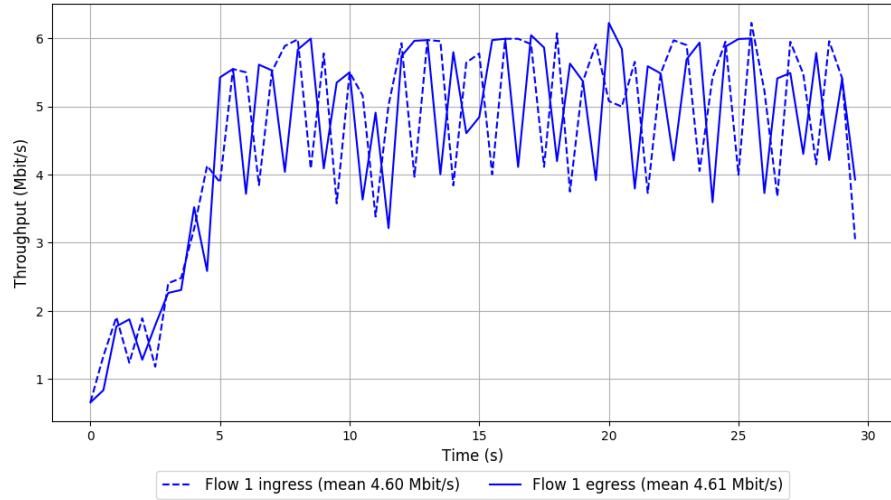


Run 3: Statistics of Sprout

```
Start at: 2017-11-21 00:18:55
End at: 2017-11-21 00:19:25
Local clock offset: -0.157 ms
Remote clock offset: 1.512 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.61 Mbit/s
95th percentile per-packet one-way delay: 82.736 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 4.61 Mbit/s
95th percentile per-packet one-way delay: 82.736 ms
Loss rate: 0.32%
```

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

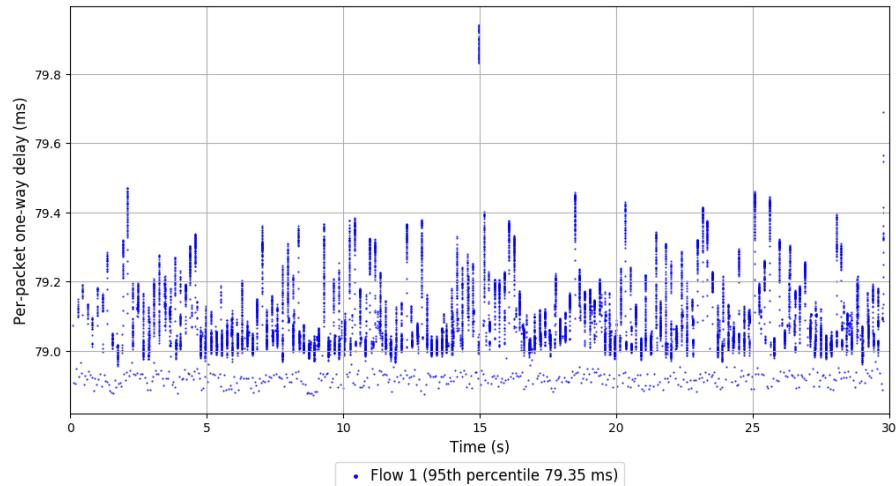
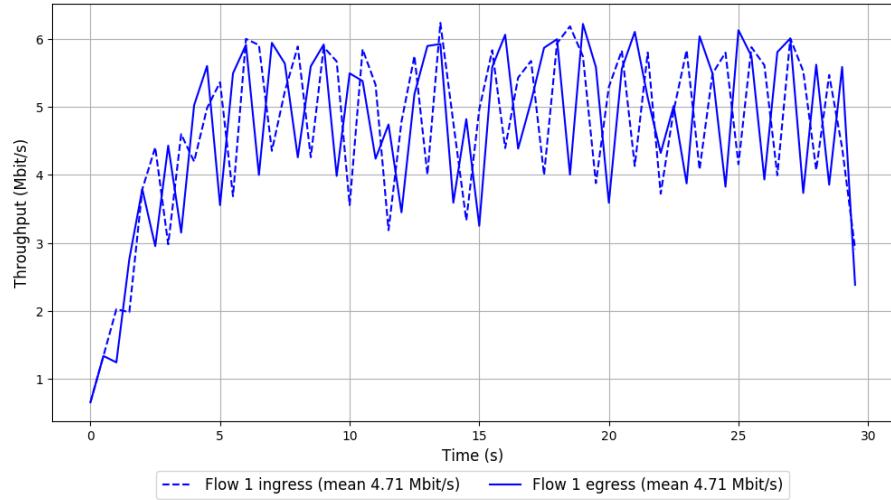


Run 4: Statistics of Sprout

```
Start at: 2017-11-21 00:37:03
End at: 2017-11-21 00:37:33
Local clock offset: -0.199 ms
Remote clock offset: 2.362 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 79.347 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 79.347 ms
Loss rate: 0.42%
```

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

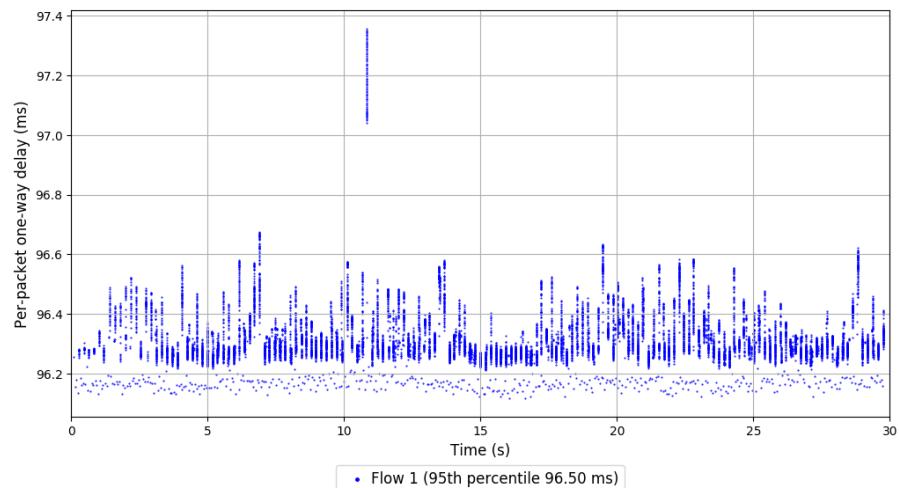
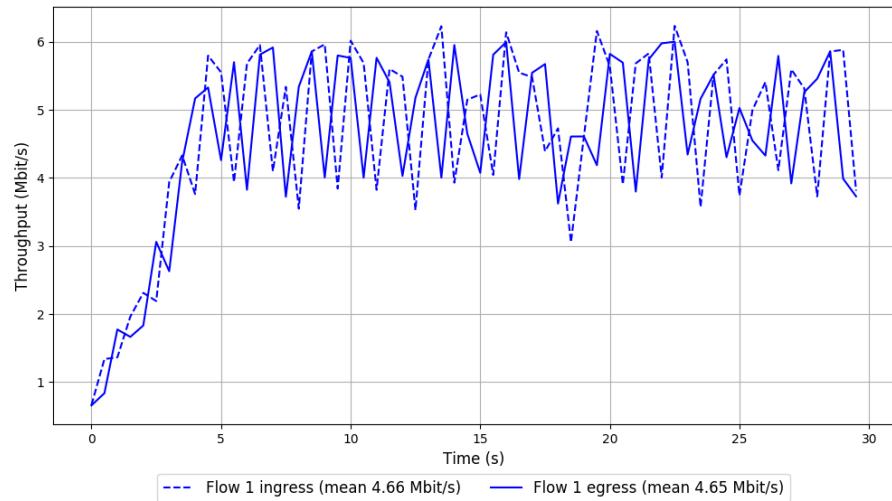


Run 5: Statistics of Sprout

```
Start at: 2017-11-21 00:55:02
End at: 2017-11-21 00:55:32
Local clock offset: -0.27 ms
Remote clock offset: -14.879 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.65 Mbit/s
95th percentile per-packet one-way delay: 96.498 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 4.65 Mbit/s
95th percentile per-packet one-way delay: 96.498 ms
Loss rate: 0.71%
```

Run 5: Report of Sprout — Data Link

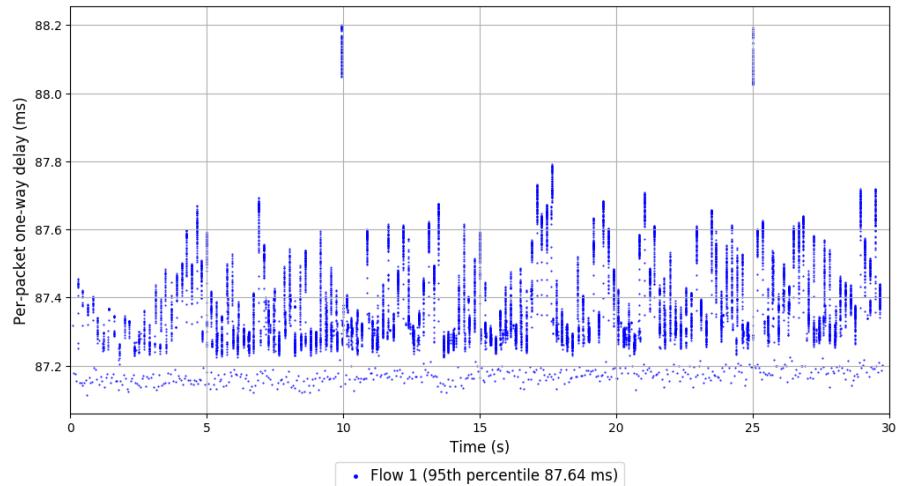
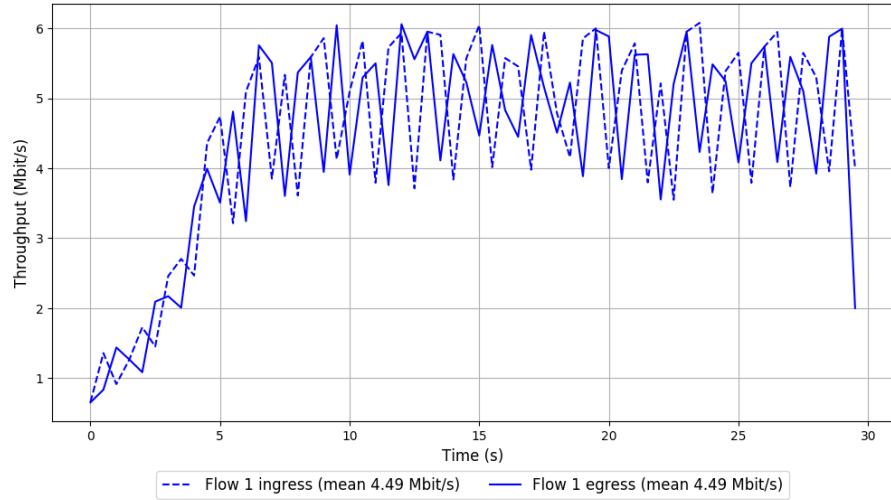


Run 6: Statistics of Sprout

```
Start at: 2017-11-21 01:13:14
End at: 2017-11-21 01:13:44
Local clock offset: -0.372 ms
Remote clock offset: -3.21 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.49 Mbit/s
95th percentile per-packet one-way delay: 87.643 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 4.49 Mbit/s
95th percentile per-packet one-way delay: 87.643 ms
Loss rate: 0.75%
```

Run 6: Report of Sprout — Data Link

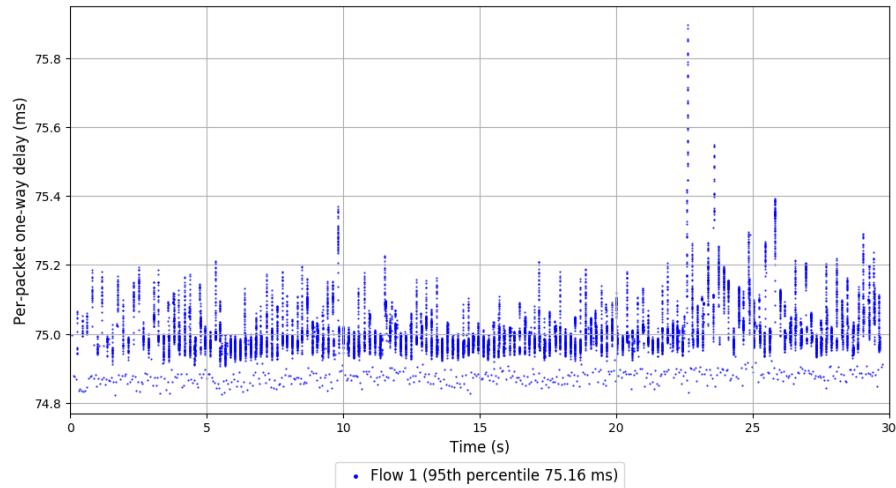
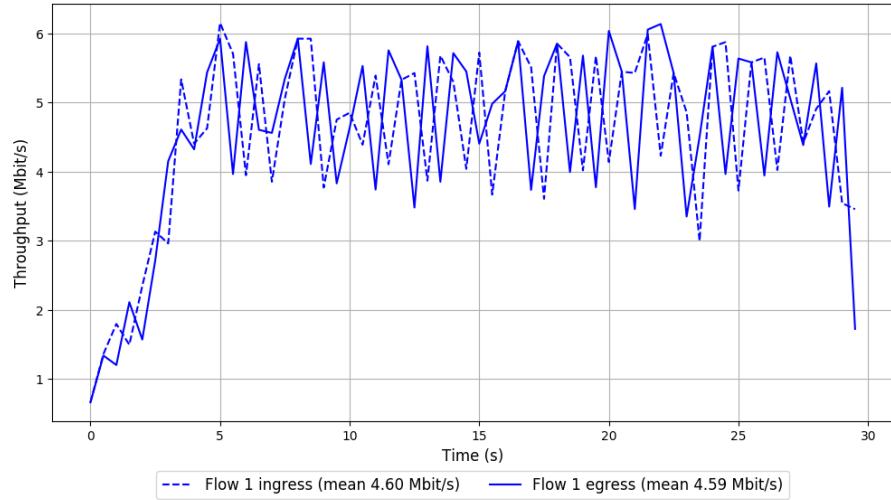


Run 7: Statistics of Sprout

```
Start at: 2017-11-21 01:31:14
End at: 2017-11-21 01:31:44
Local clock offset: -0.271 ms
Remote clock offset: 9.813 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.59 Mbit/s
95th percentile per-packet one-way delay: 75.160 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 4.59 Mbit/s
95th percentile per-packet one-way delay: 75.160 ms
Loss rate: 0.63%
```

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

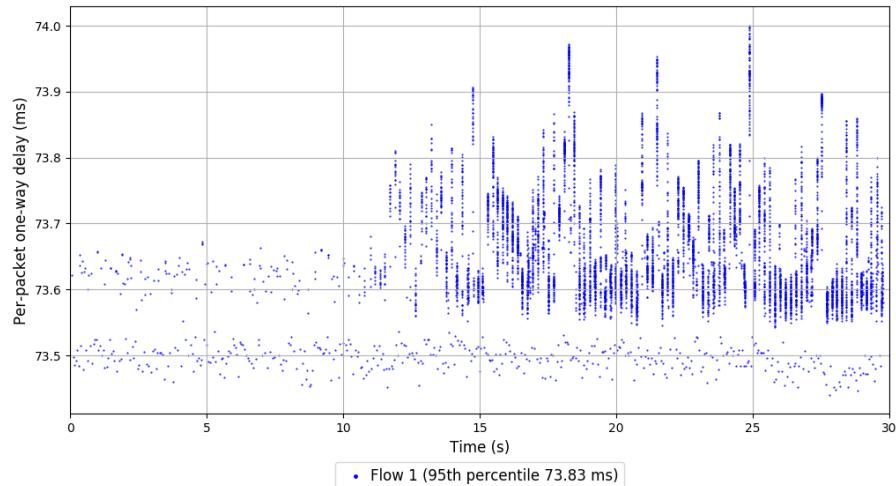
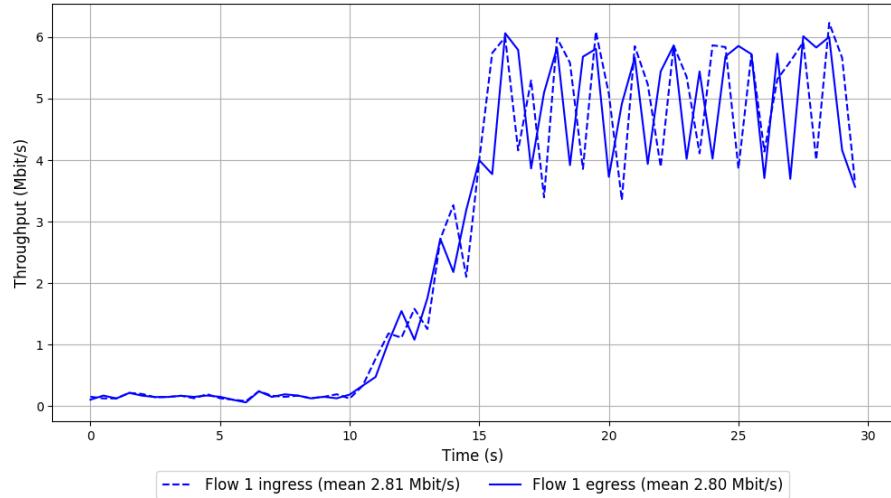


Run 8: Statistics of Sprout

```
Start at: 2017-11-21 01:49:13
End at: 2017-11-21 01:49:43
Local clock offset: -0.281 ms
Remote clock offset: 11.811 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: 73.834 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: 73.834 ms
Loss rate: 1.06%
```

Run 8: Report of Sprout — Data Link

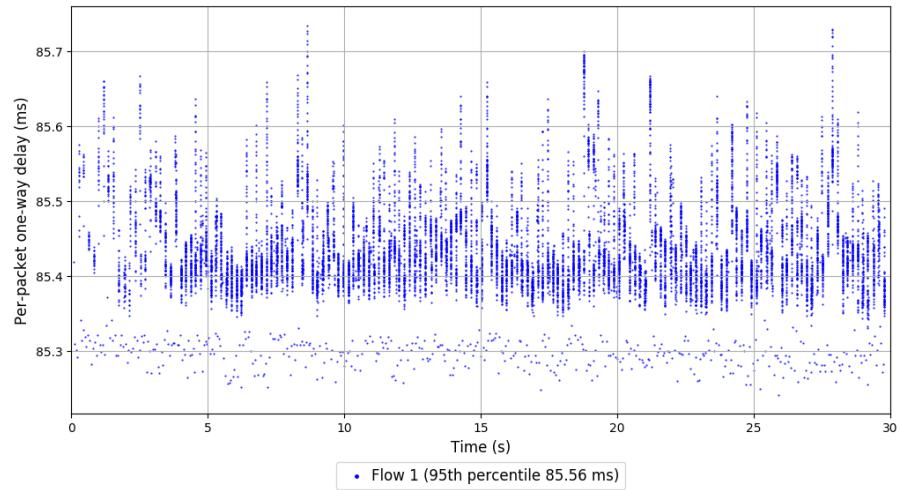
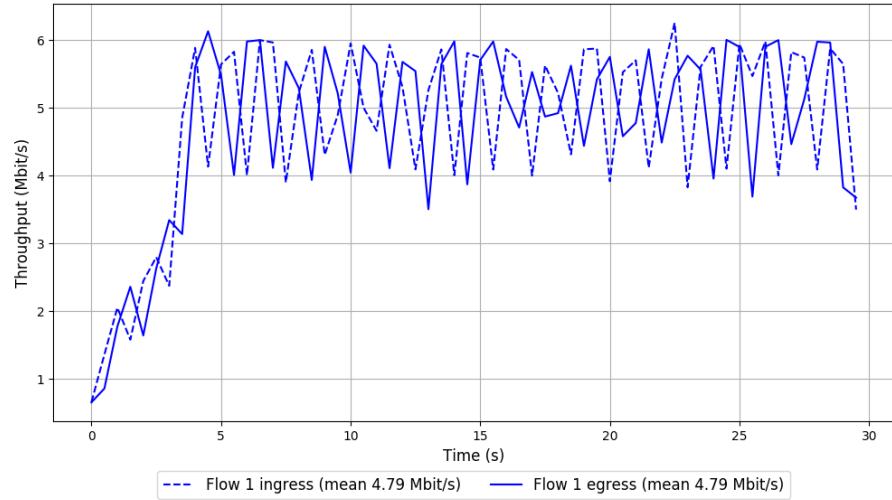


Run 9: Statistics of Sprout

```
Start at: 2017-11-21 02:07:28
End at: 2017-11-21 02:07:58
Local clock offset: -0.232 ms
Remote clock offset: -2.284 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.79 Mbit/s
95th percentile per-packet one-way delay: 85.558 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 4.79 Mbit/s
95th percentile per-packet one-way delay: 85.558 ms
Loss rate: 0.57%
```

Run 9: Report of Sprout — Data Link

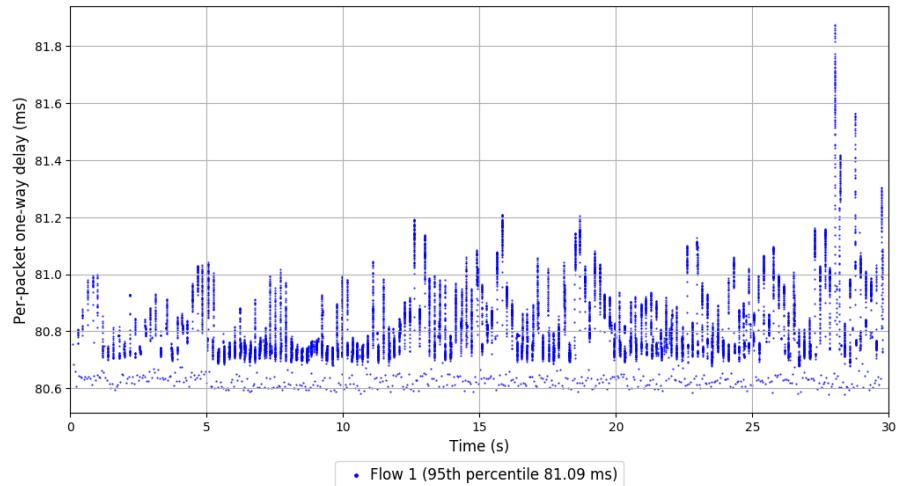
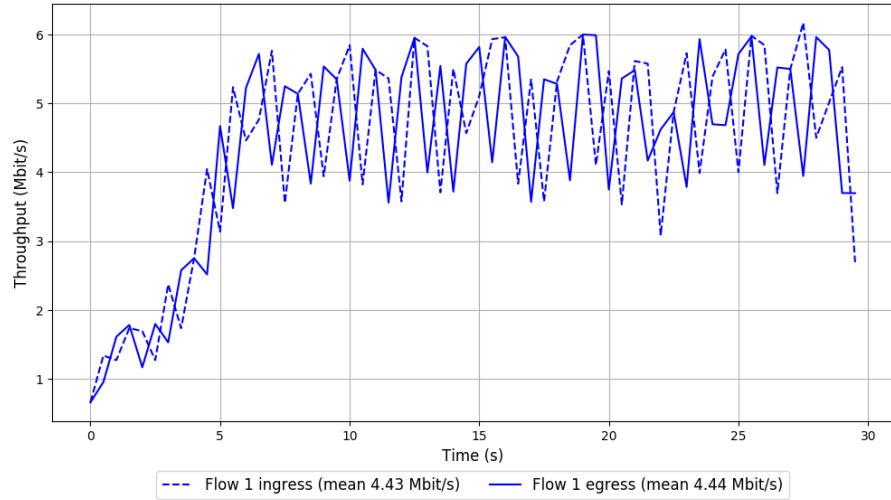


Run 10: Statistics of Sprout

```
Start at: 2017-11-21 02:25:31
End at: 2017-11-21 02:26:01
Local clock offset: -0.142 ms
Remote clock offset: 1.748 ms

# Below is generated by plot.py at 2017-11-21 05:43:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.44 Mbit/s
95th percentile per-packet one-way delay: 81.093 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 4.44 Mbit/s
95th percentile per-packet one-way delay: 81.093 ms
Loss rate: 0.31%
```

Run 10: Report of Sprout — Data Link

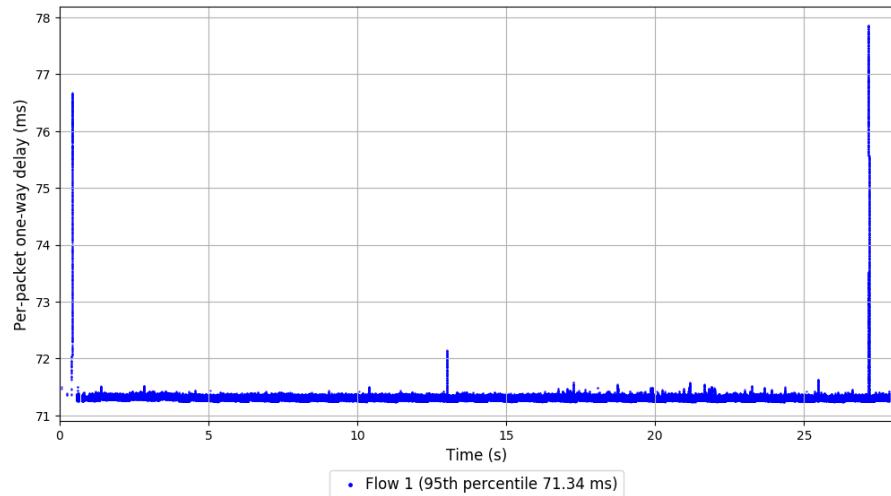
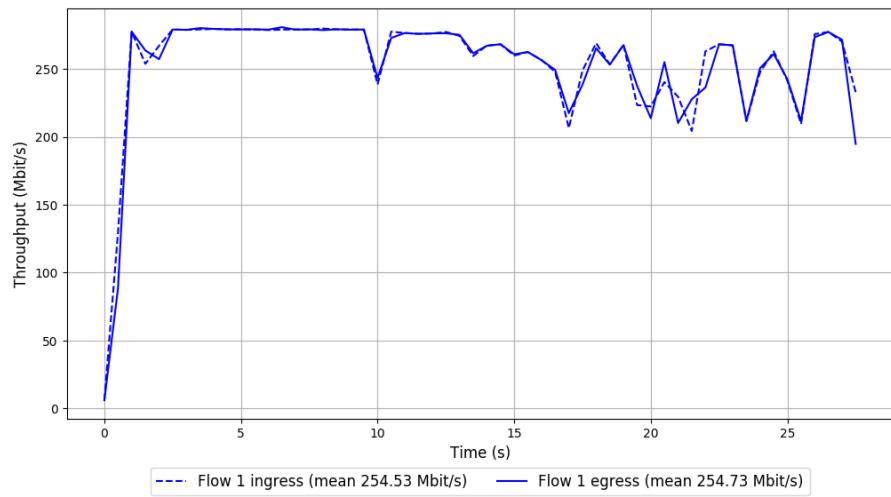


Run 1: Statistics of TaoVA-100x

```
Start at: 2017-11-20 23:41:04
End at: 2017-11-20 23:41:34
Local clock offset: -0.287 ms
Remote clock offset: 10.293 ms

# Below is generated by plot.py at 2017-11-21 05:48:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 254.73 Mbit/s
95th percentile per-packet one-way delay: 71.339 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 254.73 Mbit/s
95th percentile per-packet one-way delay: 71.339 ms
Loss rate: 0.53%
```

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

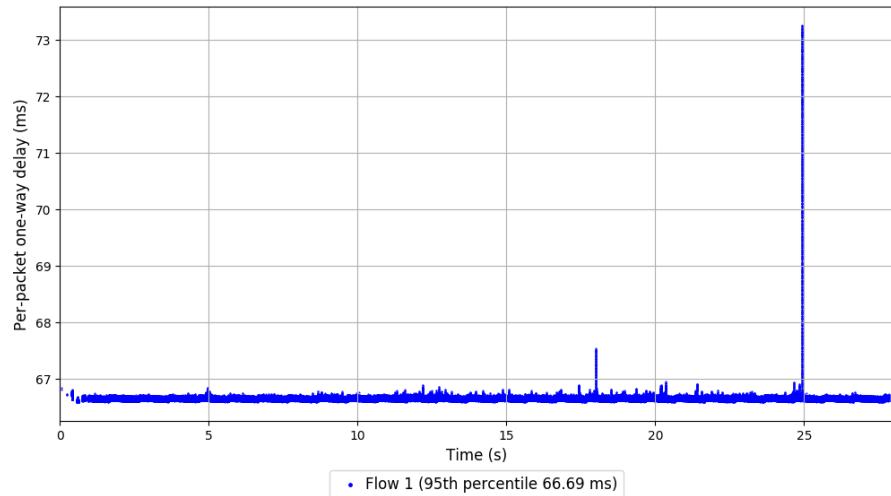
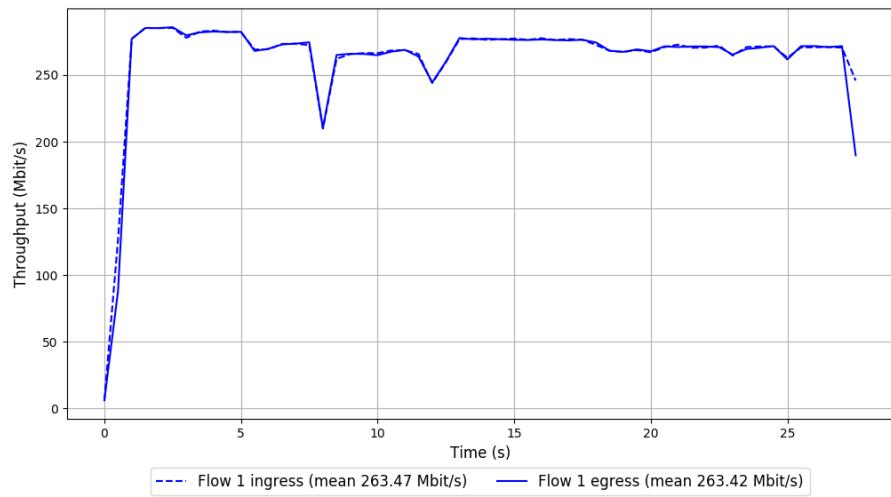


Run 2: Statistics of TaoVA-100x

```
Start at: 2017-11-20 23:59:16
End at: 2017-11-20 23:59:46
Local clock offset: -0.195 ms
Remote clock offset: 15.525 ms

# Below is generated by plot.py at 2017-11-21 05:48:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 263.42 Mbit/s
95th percentile per-packet one-way delay: 66.687 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 263.42 Mbit/s
95th percentile per-packet one-way delay: 66.687 ms
Loss rate: 0.62%
```

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

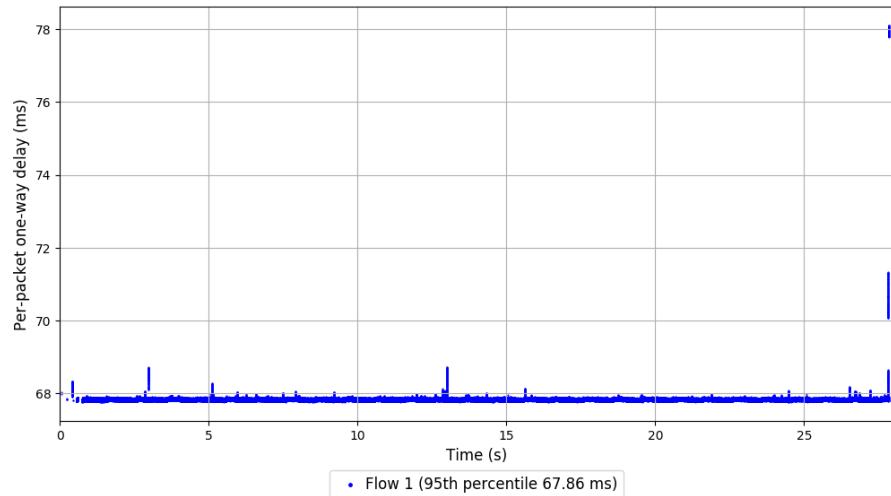
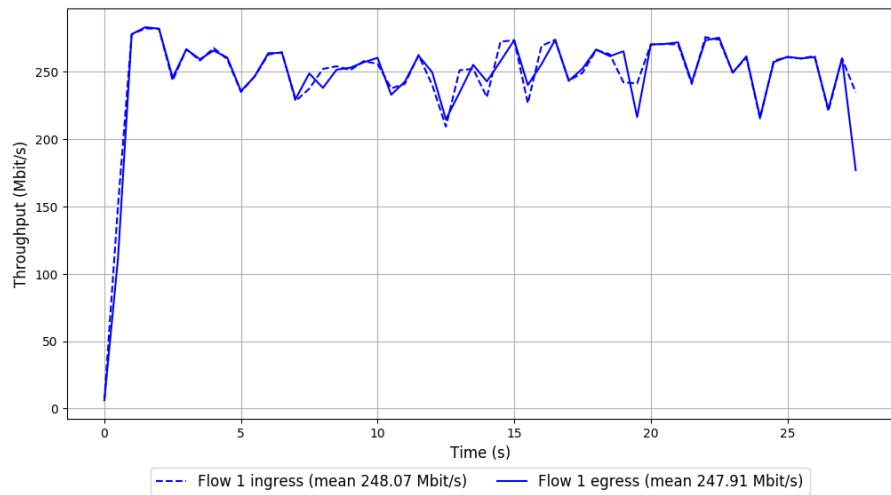


Run 3: Statistics of TaoVA-100x

```
Start at: 2017-11-21 00:17:24
End at: 2017-11-21 00:17:54
Local clock offset: -0.138 ms
Remote clock offset: 14.262 ms

# Below is generated by plot.py at 2017-11-21 05:48:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 247.91 Mbit/s
95th percentile per-packet one-way delay: 67.864 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 247.91 Mbit/s
95th percentile per-packet one-way delay: 67.864 ms
Loss rate: 0.67%
```

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

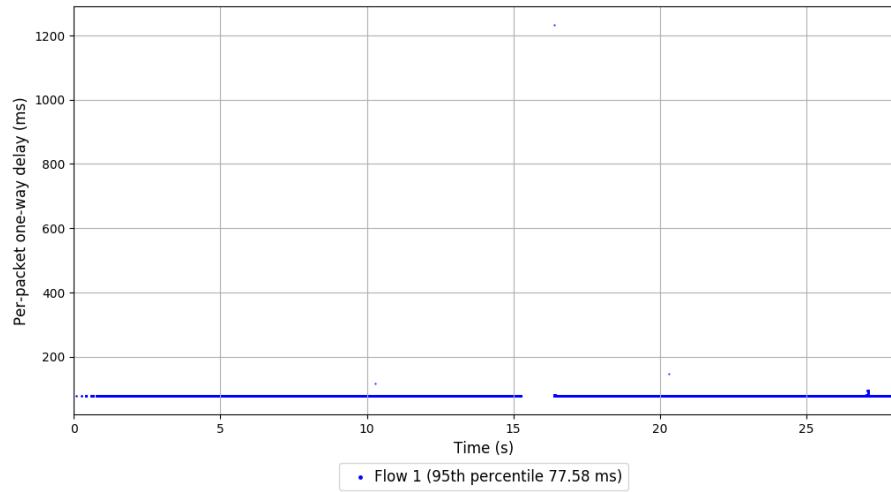
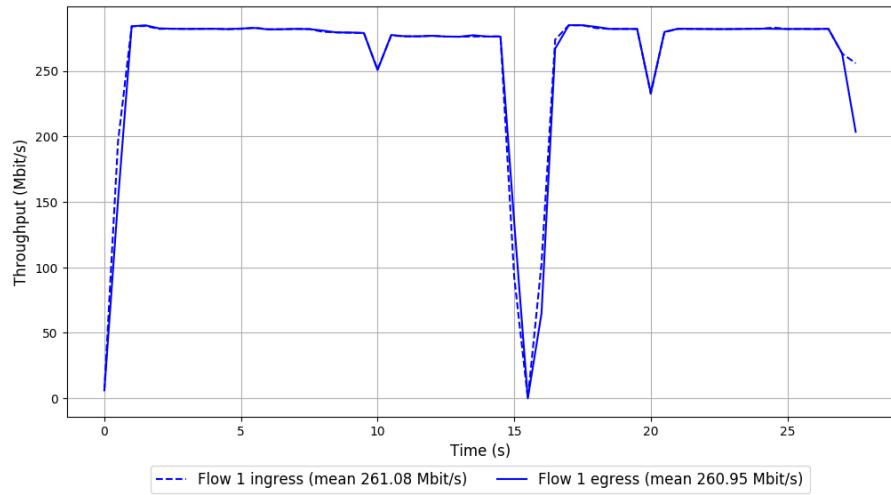


Run 4: Statistics of TaoVA-100x

```
Start at: 2017-11-21 00:35:31
End at: 2017-11-21 00:36:01
Local clock offset: -0.17 ms
Remote clock offset: 4.38 ms

# Below is generated by plot.py at 2017-11-21 05:48:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 260.95 Mbit/s
95th percentile per-packet one-way delay: 77.576 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 260.95 Mbit/s
95th percentile per-packet one-way delay: 77.576 ms
Loss rate: 0.66%
```

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

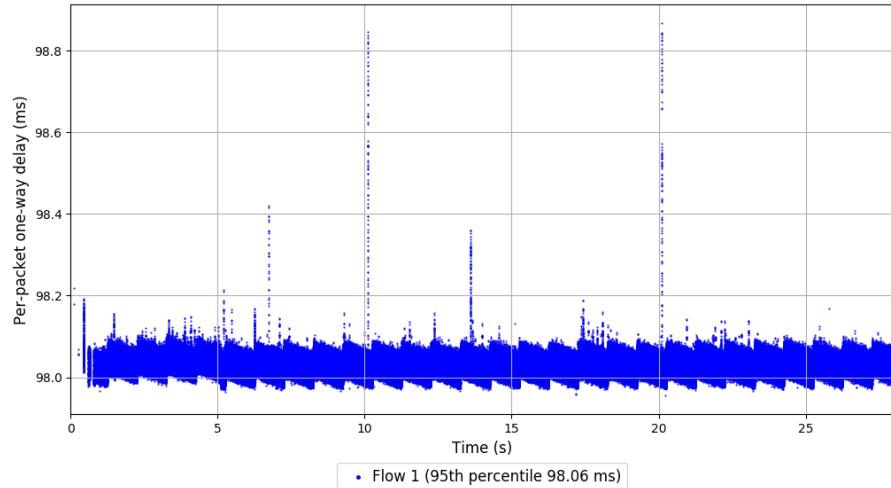
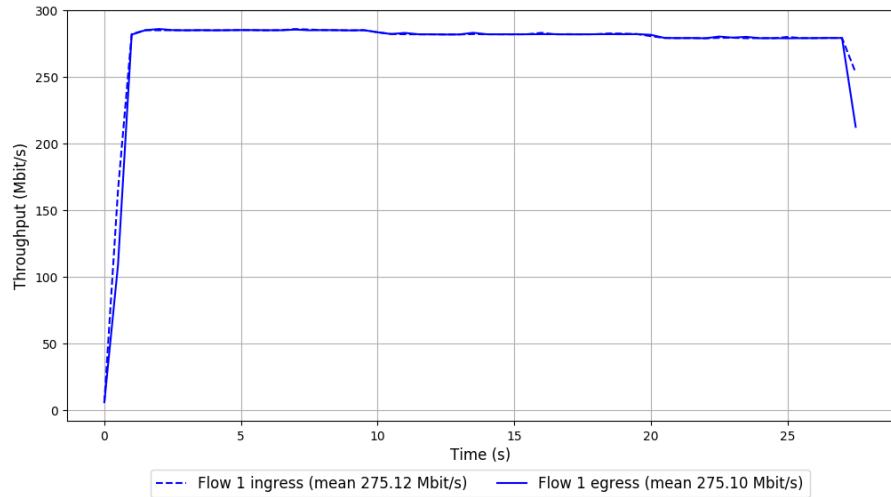


Run 5: Statistics of TaoVA-100x

```
Start at: 2017-11-21 00:53:30
End at: 2017-11-21 00:54:00
Local clock offset: -0.321 ms
Remote clock offset: -14.857 ms

# Below is generated by plot.py at 2017-11-21 05:48:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 275.10 Mbit/s
95th percentile per-packet one-way delay: 98.062 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 275.10 Mbit/s
95th percentile per-packet one-way delay: 98.062 ms
Loss rate: 0.62%
```

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

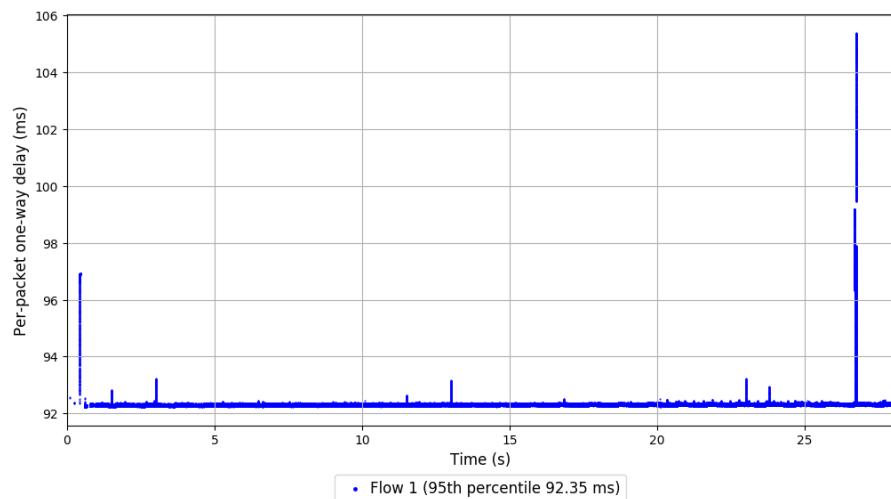
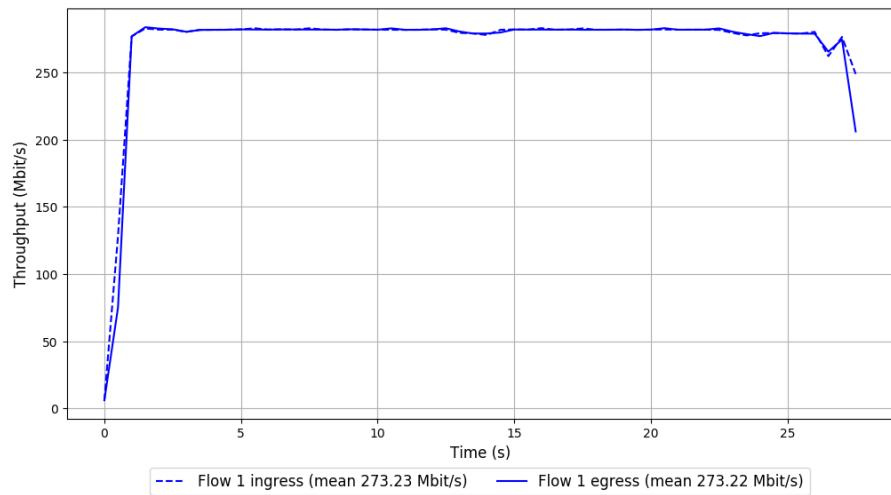


Run 6: Statistics of TaoVA-100x

```
Start at: 2017-11-21 01:11:42
End at: 2017-11-21 01:12:12
Local clock offset: -0.366 ms
Remote clock offset: -8.839 ms

# Below is generated by plot.py at 2017-11-21 05:48:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 273.22 Mbit/s
95th percentile per-packet one-way delay: 92.348 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 273.22 Mbit/s
95th percentile per-packet one-way delay: 92.348 ms
Loss rate: 0.61%
```

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

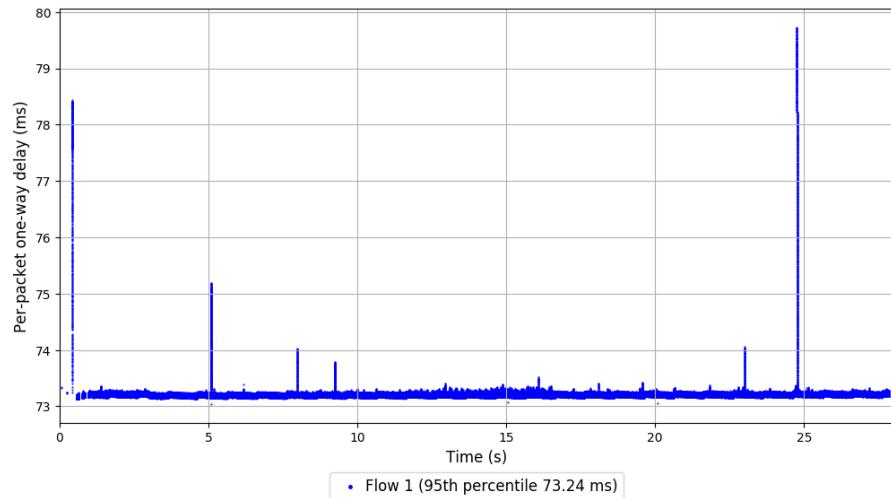
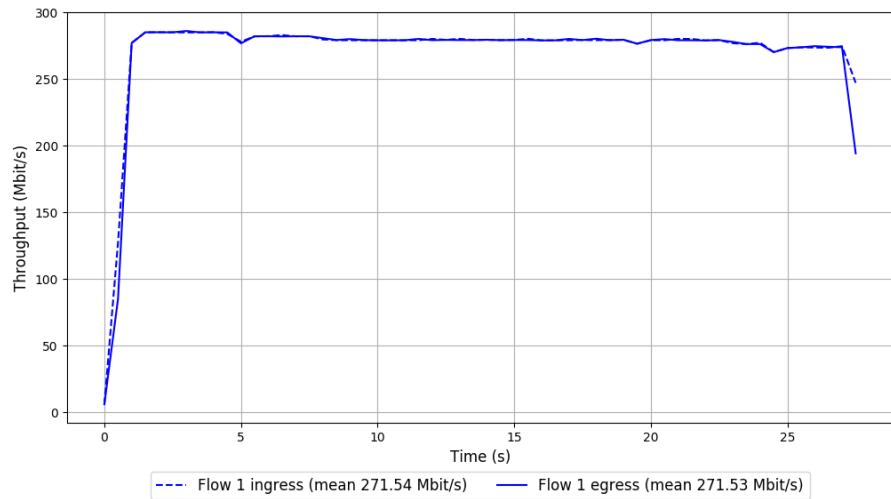


Run 7: Statistics of TaoVA-100x

```
Start at: 2017-11-21 01:29:38
End at: 2017-11-21 01:30:08
Local clock offset: -0.291 ms
Remote clock offset: 11.333 ms

# Below is generated by plot.py at 2017-11-21 05:48:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 271.53 Mbit/s
95th percentile per-packet one-way delay: 73.240 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 271.53 Mbit/s
95th percentile per-packet one-way delay: 73.240 ms
Loss rate: 0.61%
```

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

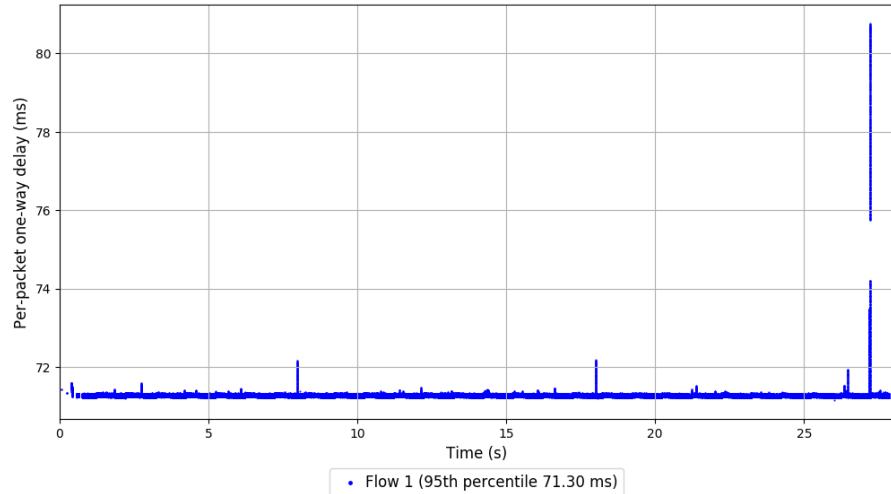
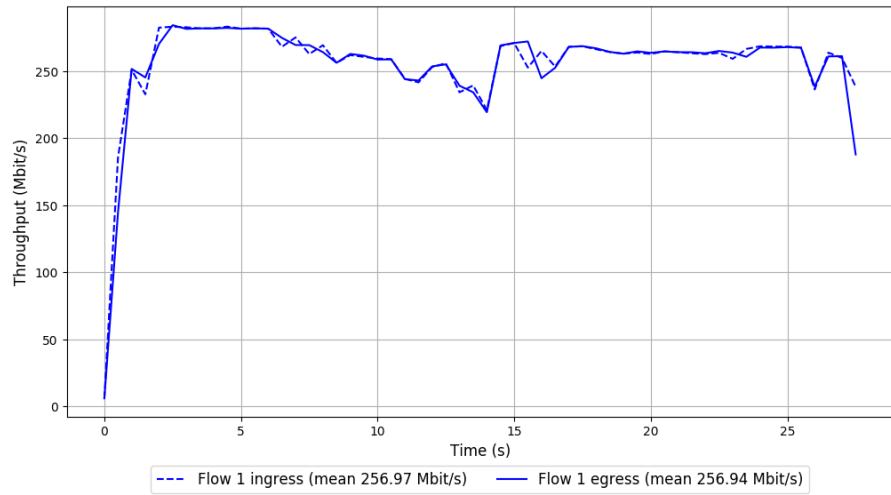


Run 8: Statistics of TaoVA-100x

```
Start at: 2017-11-21 01:47:42
End at: 2017-11-21 01:48:12
Local clock offset: -0.281 ms
Remote clock offset: 11.583 ms

# Below is generated by plot.py at 2017-11-21 05:50:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 256.94 Mbit/s
95th percentile per-packet one-way delay: 71.302 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 256.94 Mbit/s
95th percentile per-packet one-way delay: 71.302 ms
Loss rate: 0.62%
```

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

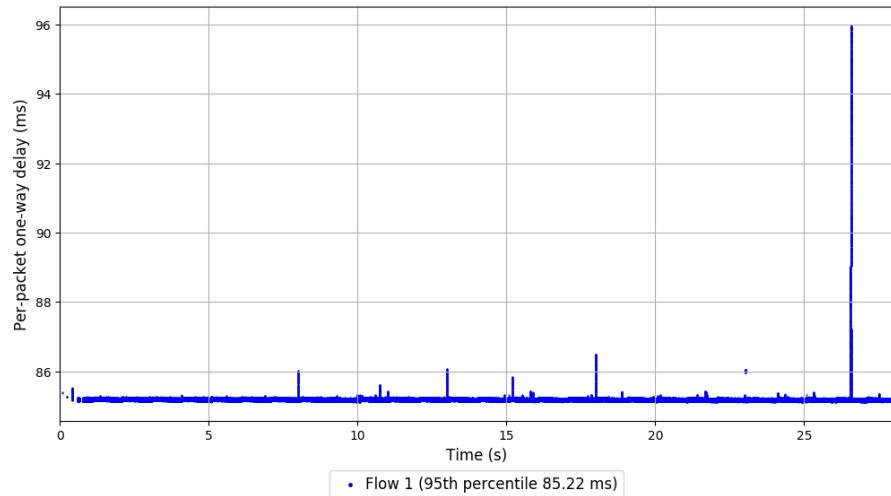
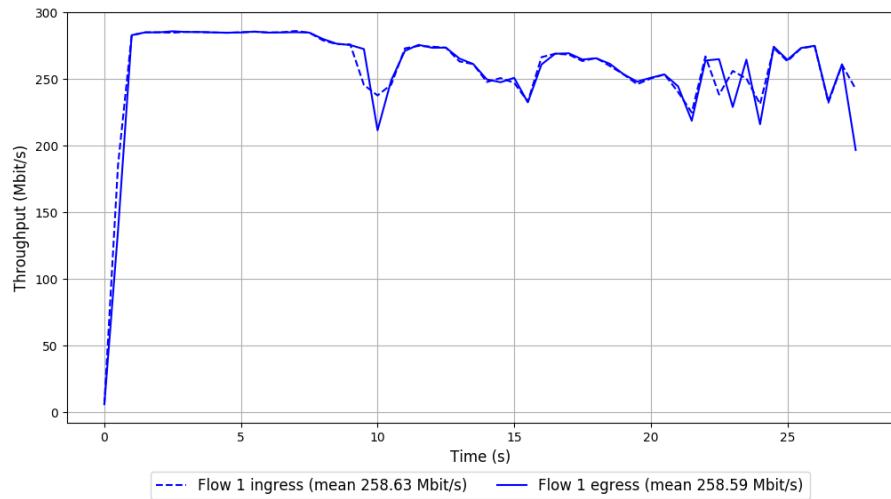


Run 9: Statistics of TaoVA-100x

```
Start at: 2017-11-21 02:05:54
End at: 2017-11-21 02:06:24
Local clock offset: -0.249 ms
Remote clock offset: -2.316 ms

# Below is generated by plot.py at 2017-11-21 05:54:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 258.59 Mbit/s
95th percentile per-packet one-way delay: 85.224 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 258.59 Mbit/s
95th percentile per-packet one-way delay: 85.224 ms
Loss rate: 0.62%
```

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

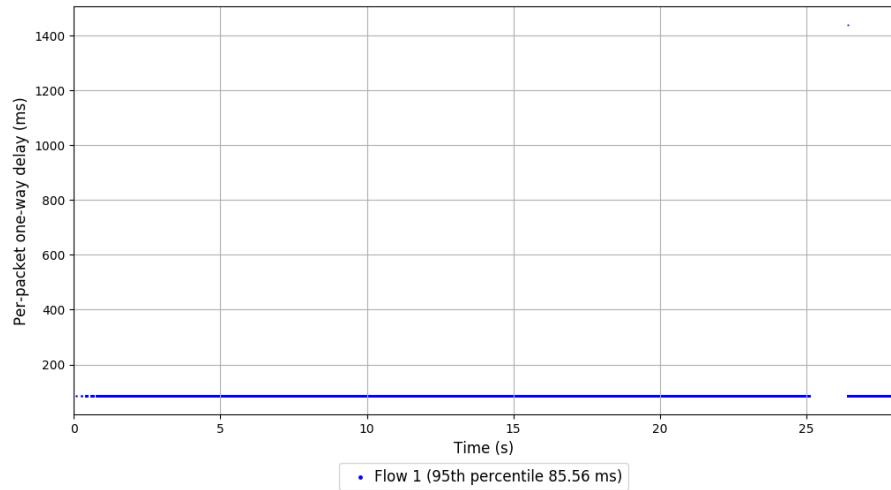
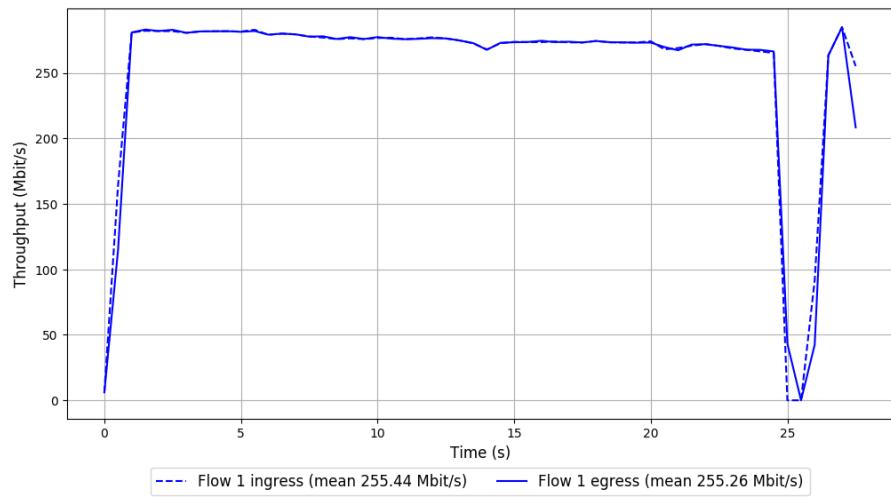


Run 10: Statistics of TaoVA-100x

```
Start at: 2017-11-21 02:24:01
End at: 2017-11-21 02:24:31
Local clock offset: -0.138 ms
Remote clock offset: -3.252 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 255.26 Mbit/s
95th percentile per-packet one-way delay: 85.559 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 255.26 Mbit/s
95th percentile per-packet one-way delay: 85.559 ms
Loss rate: 0.67%
```

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

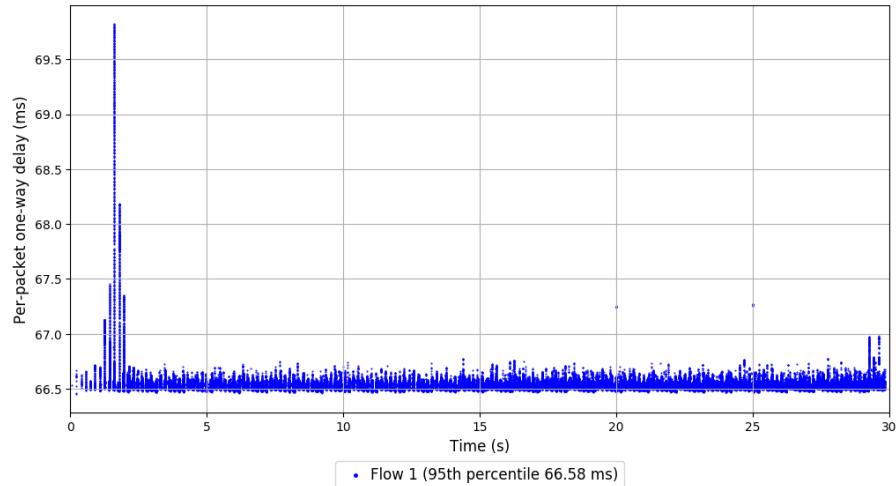
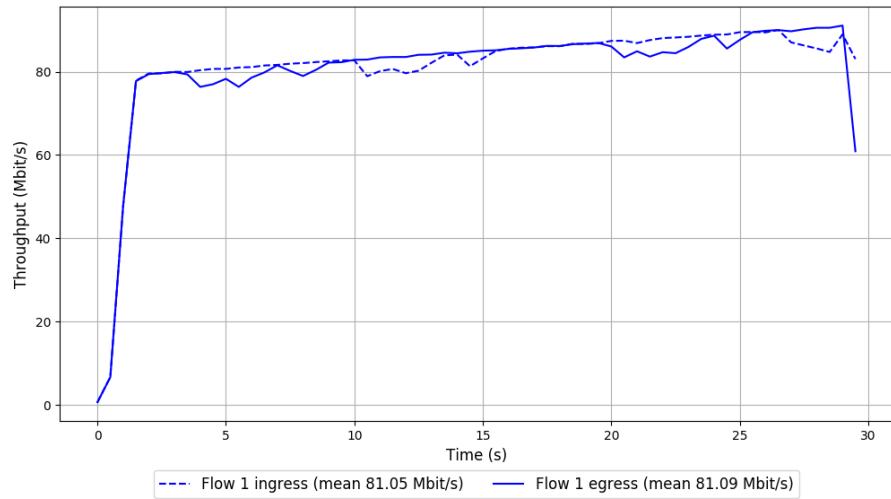


Run 1: Statistics of TCP Vegas

```
Start at: 2017-11-20 23:34:47
End at: 2017-11-20 23:35:17
Local clock offset: -0.249 ms
Remote clock offset: 15.828 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.09 Mbit/s
95th percentile per-packet one-way delay: 66.585 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 81.09 Mbit/s
95th percentile per-packet one-way delay: 66.585 ms
Loss rate: 0.63%
```

Run 1: Report of TCP Vegas — Data Link

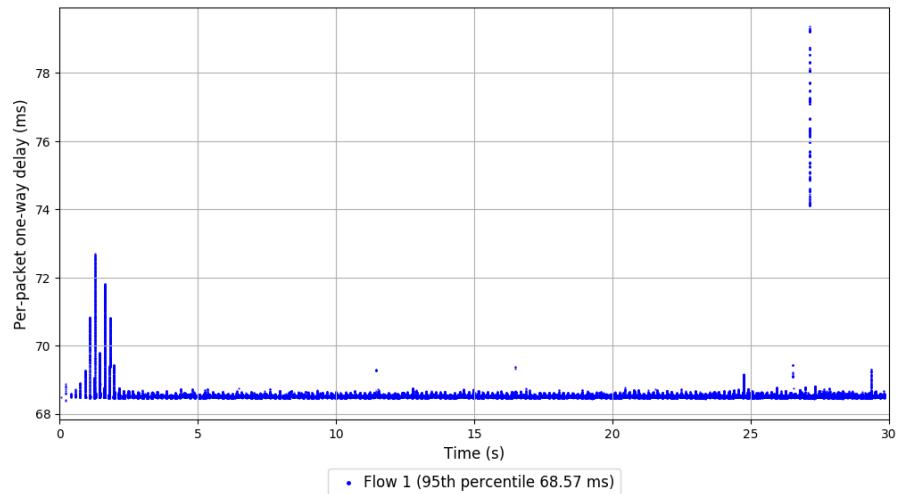
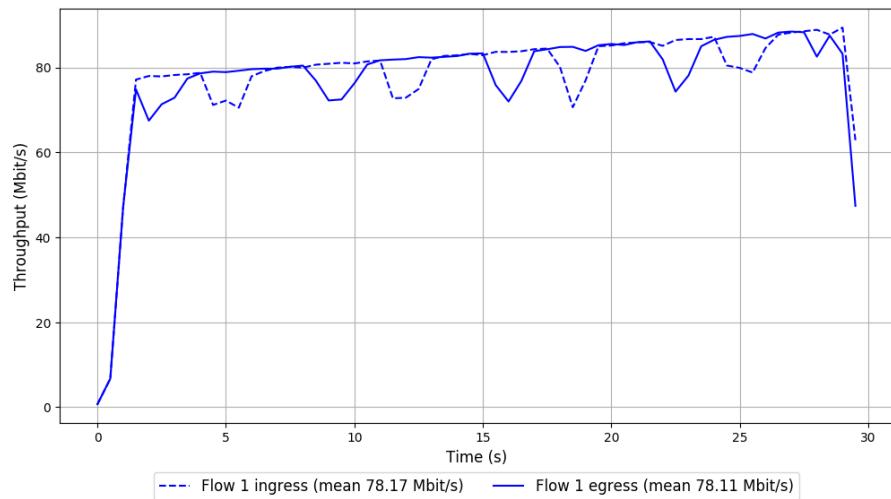


Run 2: Statistics of TCP Vegas

```
Start at: 2017-11-20 23:52:53
End at: 2017-11-20 23:53:23
Local clock offset: -0.273 ms
Remote clock offset: 15.266 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.11 Mbit/s
95th percentile per-packet one-way delay: 68.572 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 78.11 Mbit/s
95th percentile per-packet one-way delay: 68.572 ms
Loss rate: 0.63%
```

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

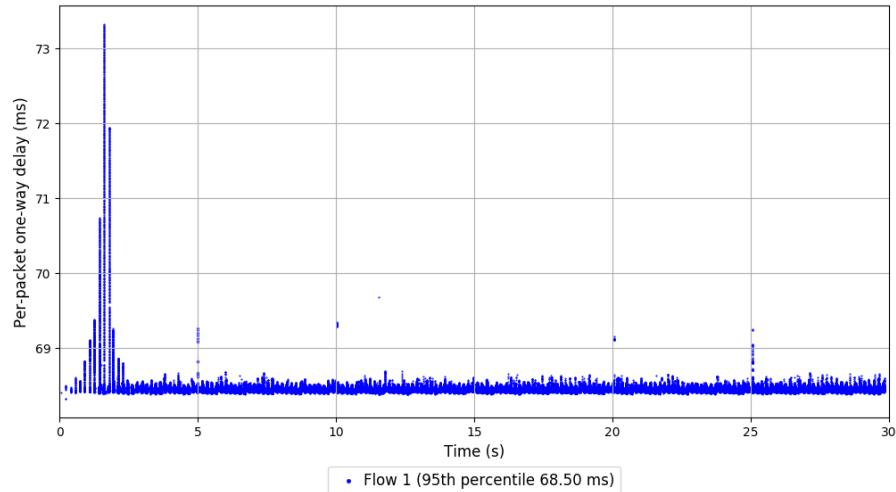
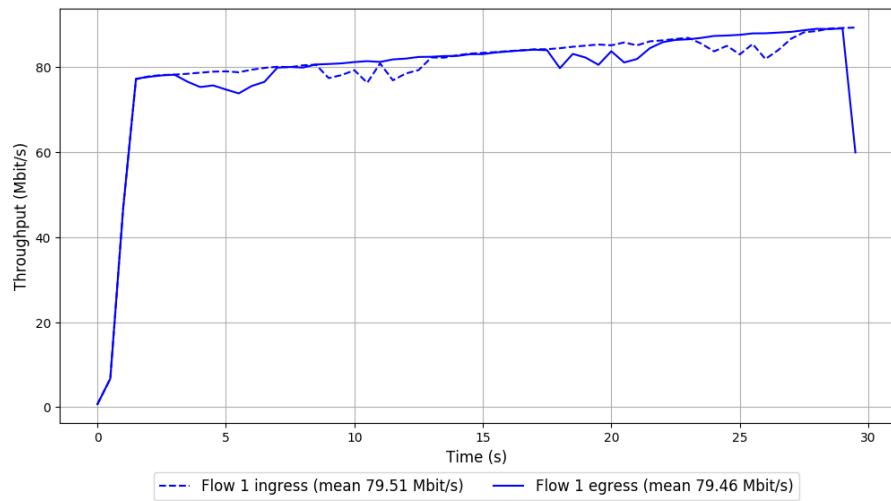


Run 3: Statistics of TCP Vegas

```
Start at: 2017-11-21 00:11:00
End at: 2017-11-21 00:11:30
Local clock offset: -0.181 ms
Remote clock offset: 13.666 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.46 Mbit/s
95th percentile per-packet one-way delay: 68.502 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 79.46 Mbit/s
95th percentile per-packet one-way delay: 68.502 ms
Loss rate: 0.63%
```

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

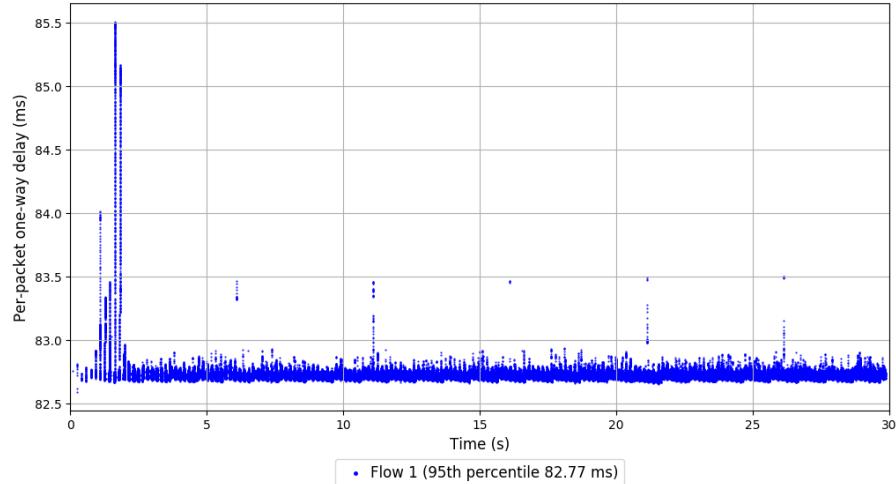
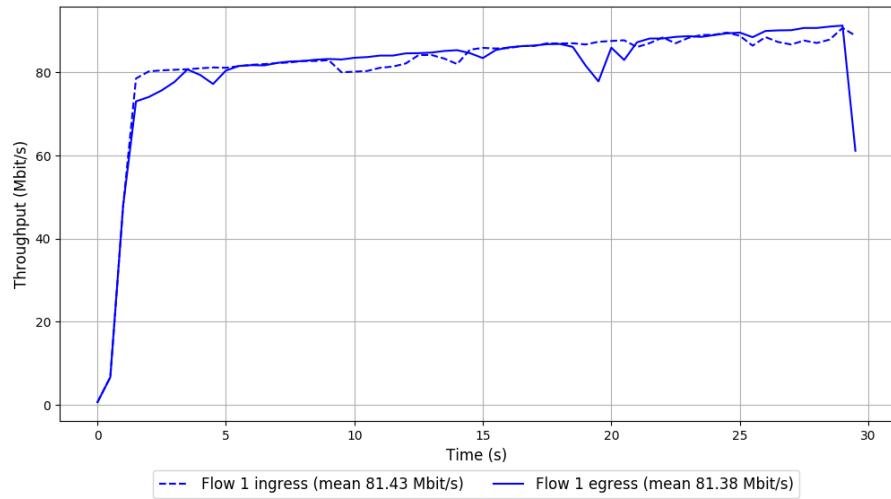


Run 4: Statistics of TCP Vegas

```
Start at: 2017-11-21 00:29:10
End at: 2017-11-21 00:29:40
Local clock offset: -0.177 ms
Remote clock offset: -1.486 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.38 Mbit/s
95th percentile per-packet one-way delay: 82.769 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 81.38 Mbit/s
95th percentile per-packet one-way delay: 82.769 ms
Loss rate: 0.62%
```

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

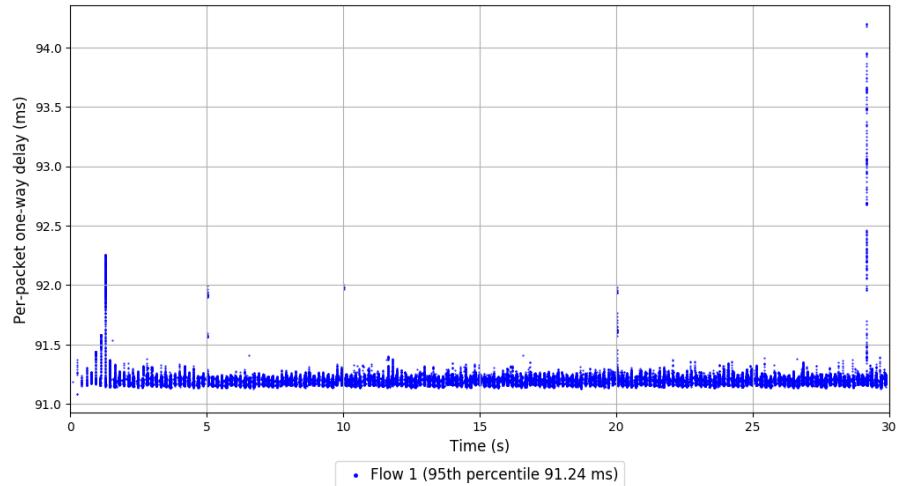
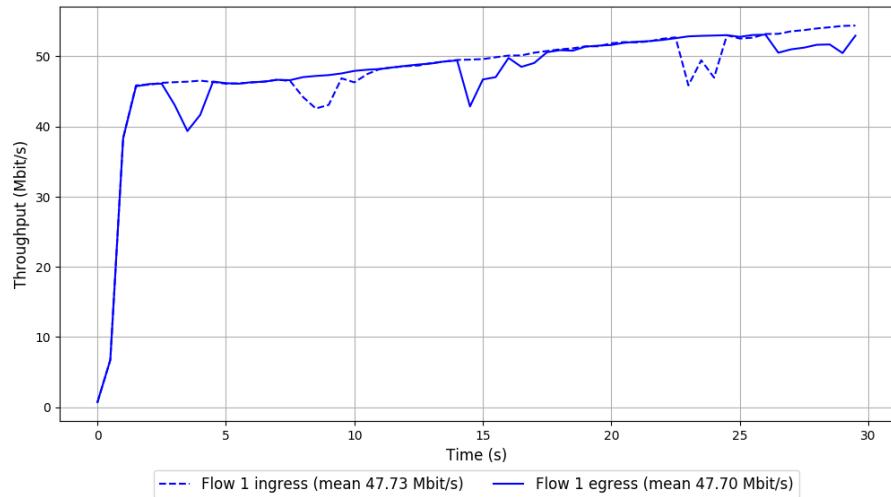


Run 5: Statistics of TCP Vegas

```
Start at: 2017-11-21 00:47:13
End at: 2017-11-21 00:47:43
Local clock offset: -0.228 ms
Remote clock offset: -10.062 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.70 Mbit/s
95th percentile per-packet one-way delay: 91.238 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 47.70 Mbit/s
95th percentile per-packet one-way delay: 91.238 ms
Loss rate: 0.64%
```

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

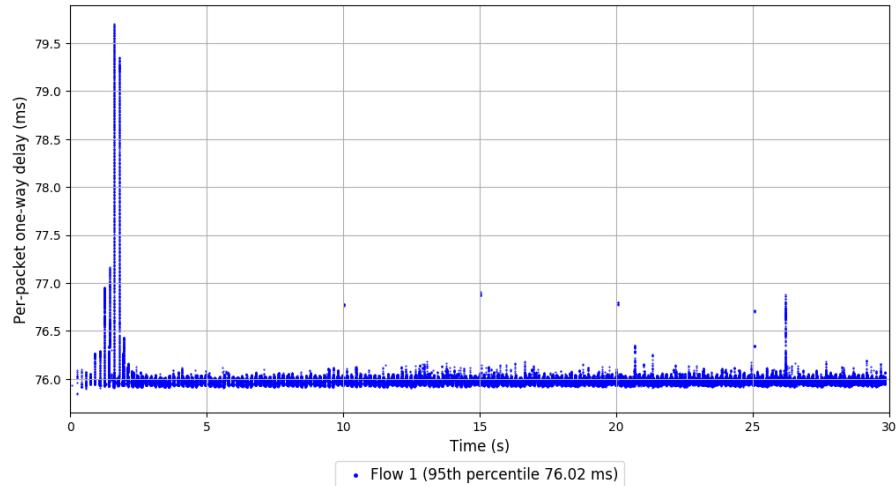
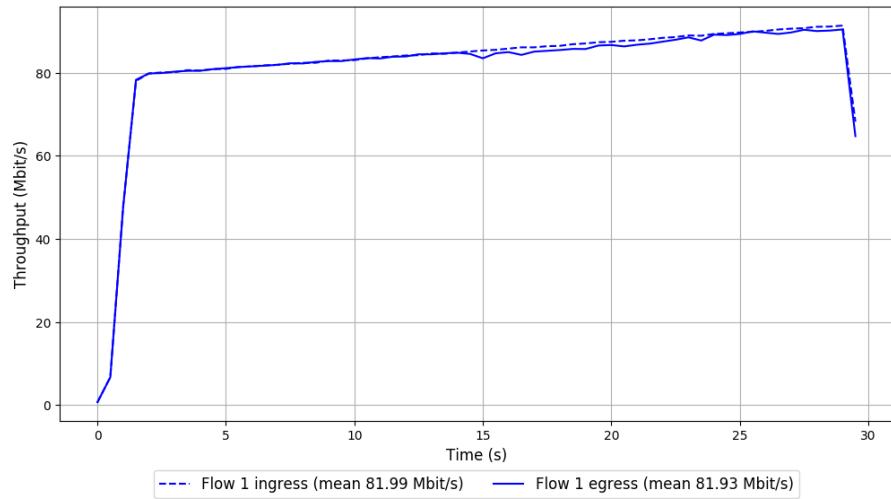


Run 6: Statistics of TCP Vegas

```
Start at: 2017-11-21 01:05:21
End at: 2017-11-21 01:05:51
Local clock offset: -0.403 ms
Remote clock offset: 5.281 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.93 Mbit/s
95th percentile per-packet one-way delay: 76.021 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 81.93 Mbit/s
95th percentile per-packet one-way delay: 76.021 ms
Loss rate: 0.62%
```

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

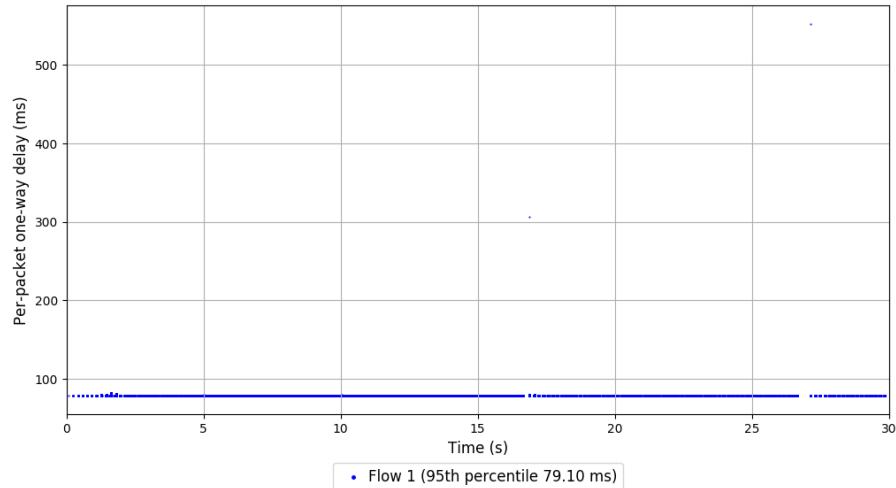
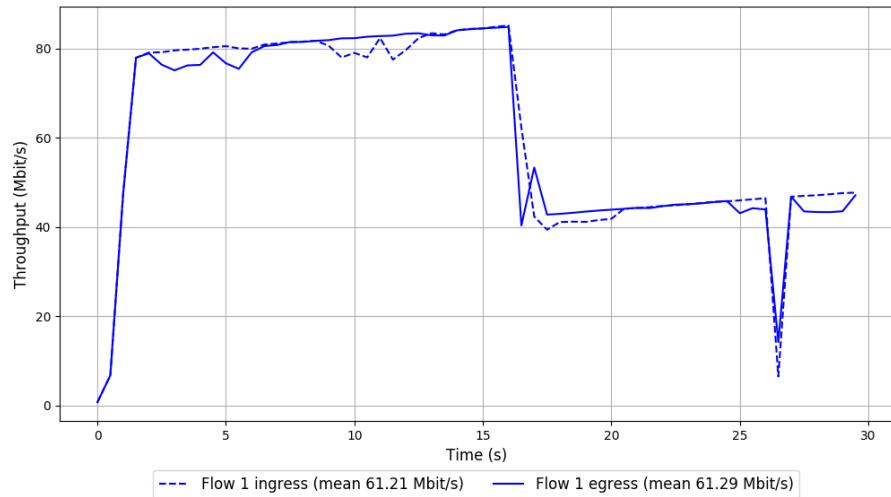


Run 7: Statistics of TCP Vegas

```
Start at: 2017-11-21 01:23:22
End at: 2017-11-21 01:23:52
Local clock offset: -0.398 ms
Remote clock offset: 5.49 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.29 Mbit/s
95th percentile per-packet one-way delay: 79.096 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 61.29 Mbit/s
95th percentile per-packet one-way delay: 79.096 ms
Loss rate: 0.43%
```

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

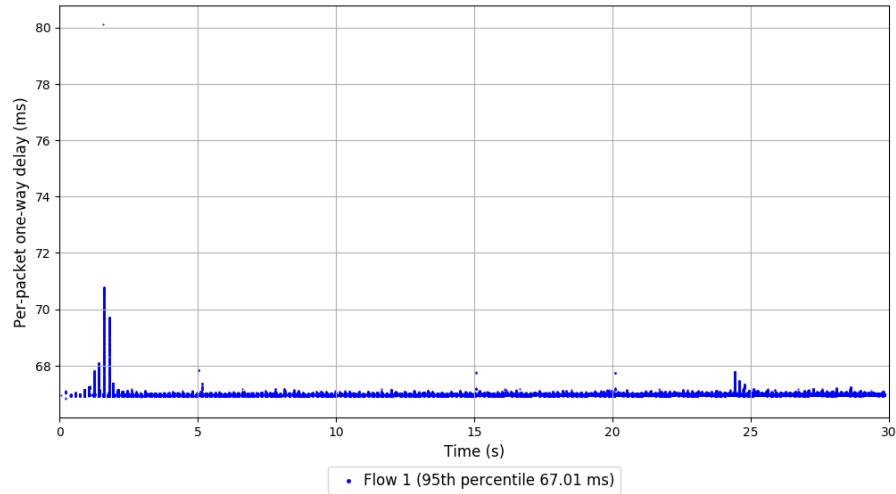
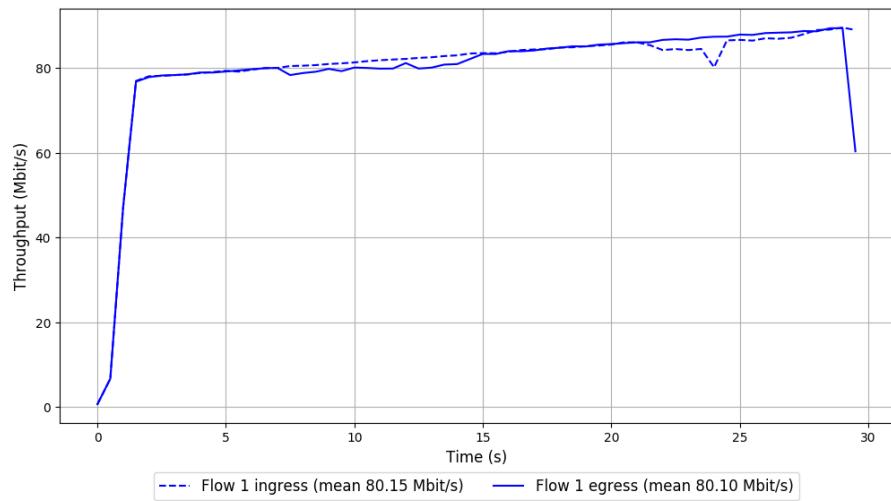


Run 8: Statistics of TCP Vegas

```
Start at: 2017-11-21 01:41:23
End at: 2017-11-21 01:41:53
Local clock offset: -0.279 ms
Remote clock offset: 16.411 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.10 Mbit/s
95th percentile per-packet one-way delay: 67.014 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 80.10 Mbit/s
95th percentile per-packet one-way delay: 67.014 ms
Loss rate: 0.62%
```

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

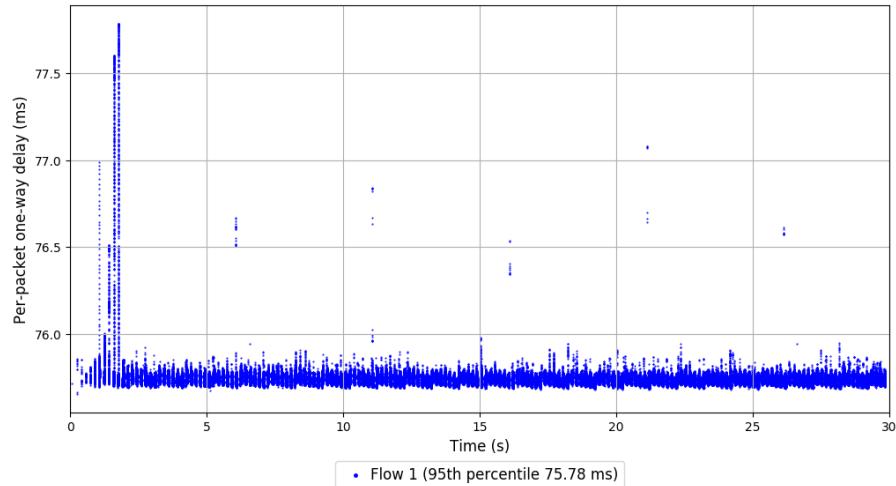
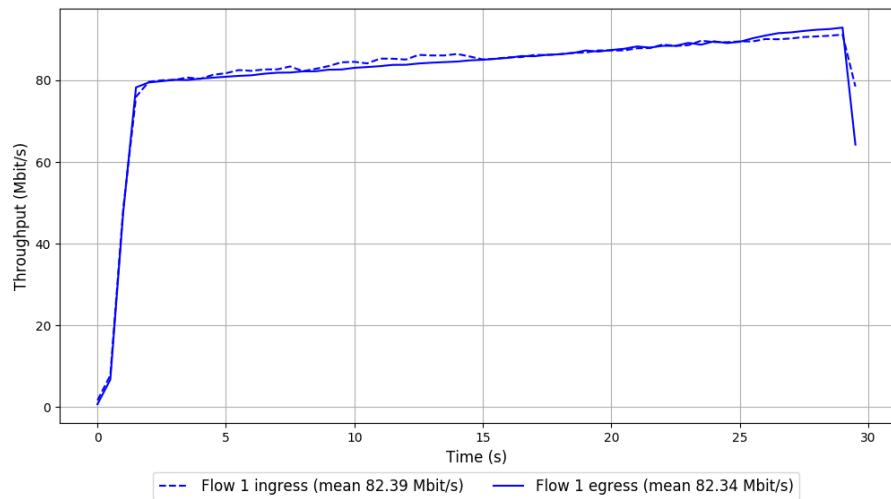


Run 9: Statistics of TCP Vegas

```
Start at: 2017-11-21 01:59:26
End at: 2017-11-21 01:59:56
Local clock offset: -0.329 ms
Remote clock offset: 6.893 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.34 Mbit/s
95th percentile per-packet one-way delay: 75.782 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 82.34 Mbit/s
95th percentile per-packet one-way delay: 75.782 ms
Loss rate: 0.62%
```

Run 9: Report of TCP Vegas — Data Link

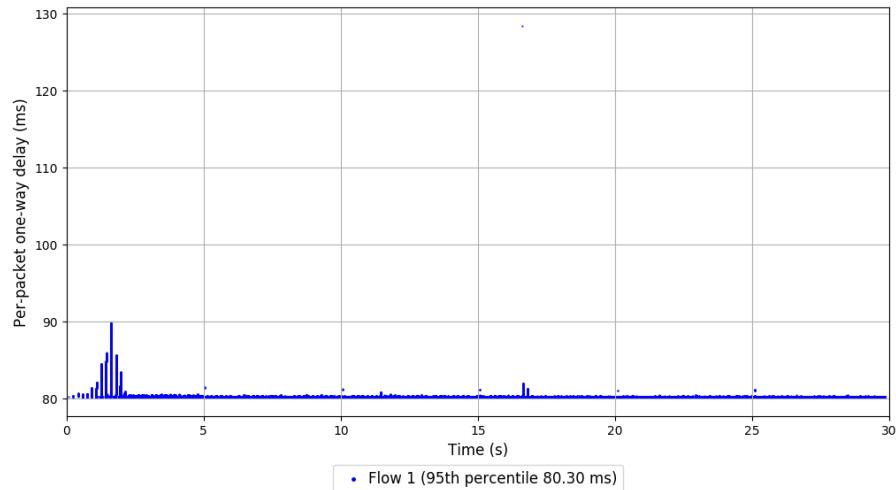
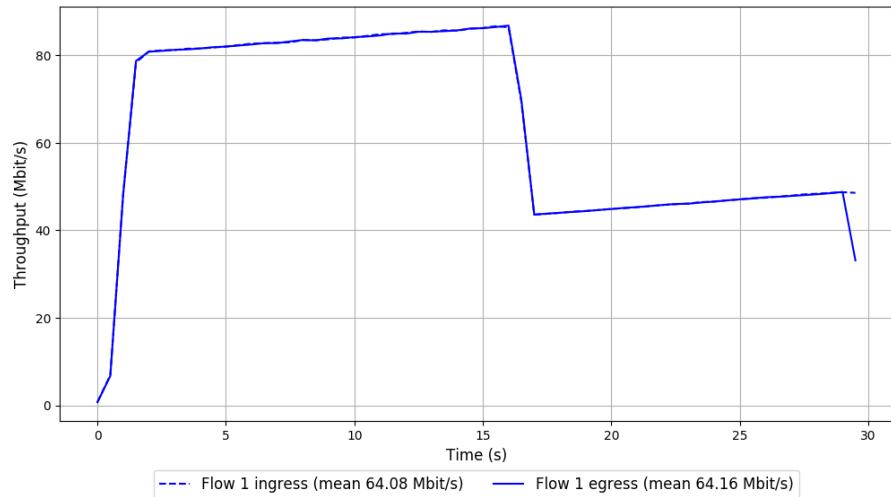


Run 10: Statistics of TCP Vegas

```
Start at: 2017-11-21 02:17:45
End at: 2017-11-21 02:18:15
Local clock offset: -0.188 ms
Remote clock offset: 2.225 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.16 Mbit/s
95th percentile per-packet one-way delay: 80.296 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 64.16 Mbit/s
95th percentile per-packet one-way delay: 80.296 ms
Loss rate: 0.43%
```

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

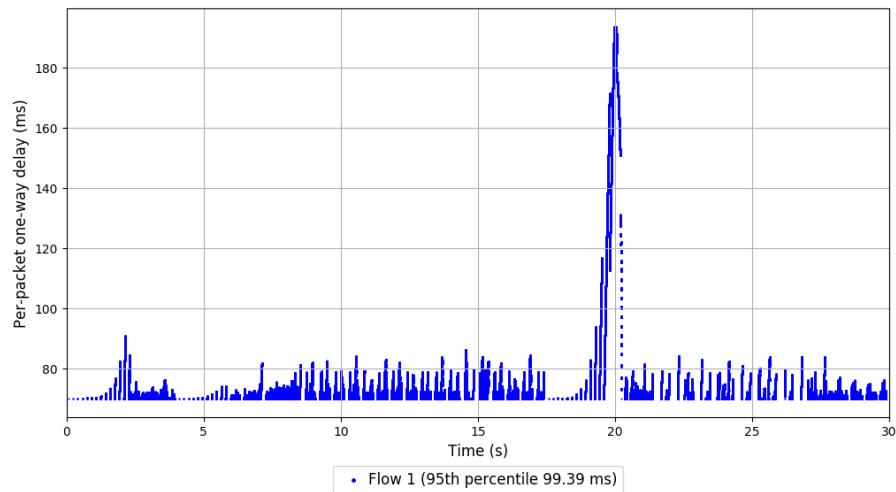
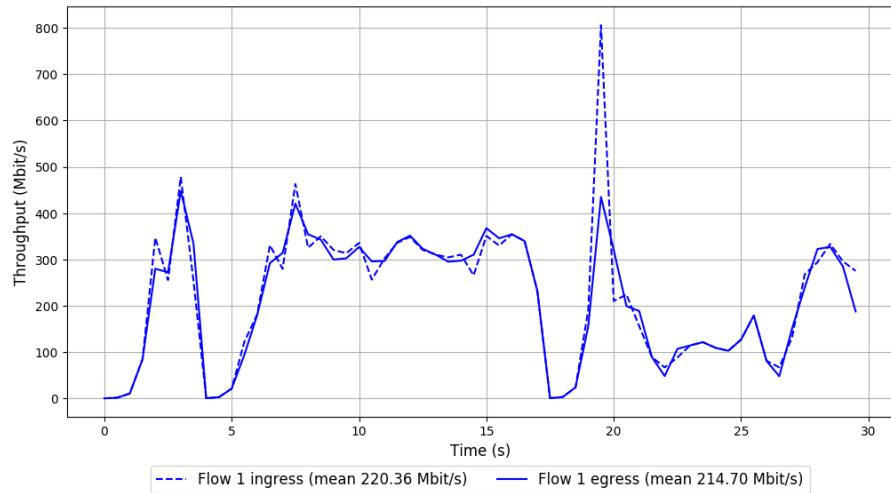


Run 1: Statistics of Verus

```
Start at: 2017-11-20 23:33:17
End at: 2017-11-20 23:33:48
Local clock offset: -0.252 ms
Remote clock offset: 13.694 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.70 Mbit/s
95th percentile per-packet one-way delay: 99.386 ms
Loss rate: 2.98%
-- Flow 1:
Average throughput: 214.70 Mbit/s
95th percentile per-packet one-way delay: 99.386 ms
Loss rate: 2.98%
```

### Run 1: Report of Verus — Data Link

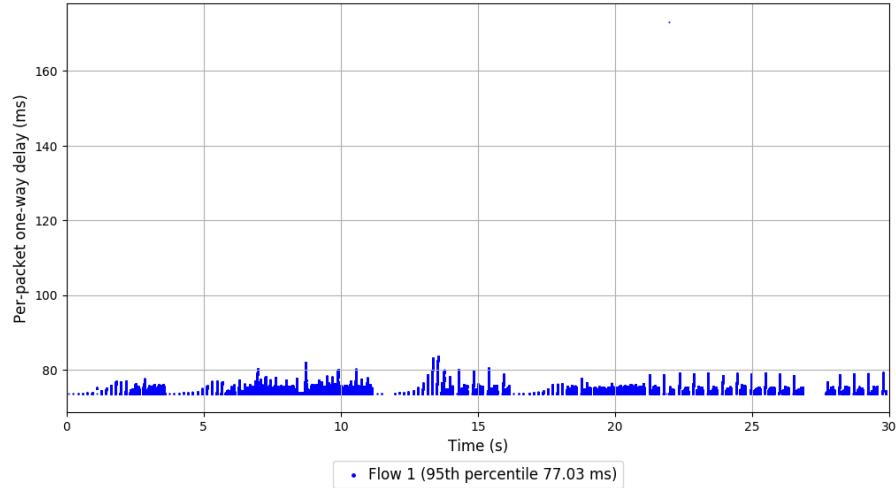
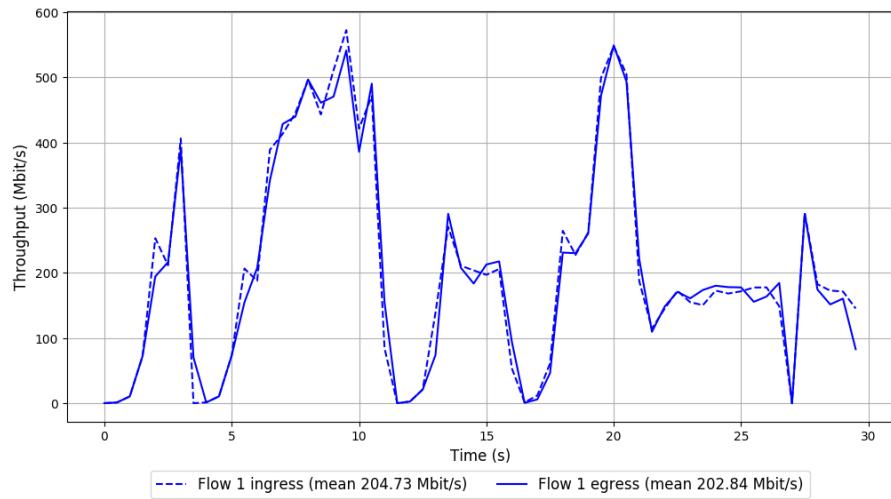


Run 2: Statistics of Verus

```
Start at: 2017-11-20 23:51:25
End at: 2017-11-20 23:51:55
Local clock offset: -0.299 ms
Remote clock offset: 10.338 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.84 Mbit/s
95th percentile per-packet one-way delay: 77.029 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 202.84 Mbit/s
95th percentile per-packet one-way delay: 77.029 ms
Loss rate: 1.48%
```

## Run 2: Report of Verus — Data Link

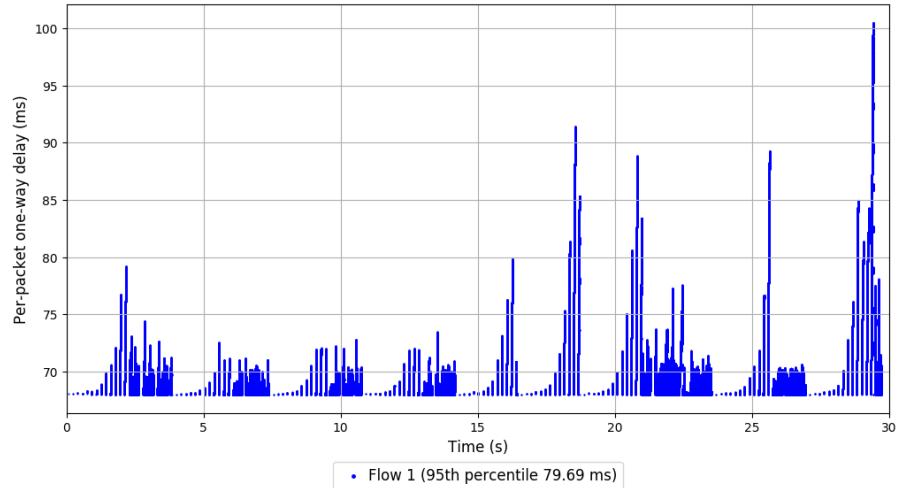
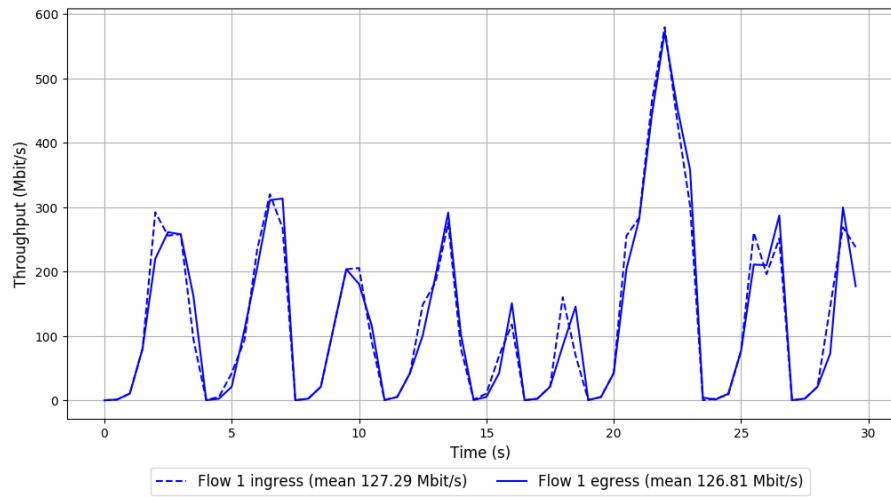


Run 3: Statistics of Verus

```
Start at: 2017-11-21 00:09:41
End at: 2017-11-21 00:10:11
Local clock offset: -0.211 ms
Remote clock offset: 15.222 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 126.81 Mbit/s
95th percentile per-packet one-way delay: 79.689 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 126.81 Mbit/s
95th percentile per-packet one-way delay: 79.689 ms
Loss rate: 1.35%
```

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

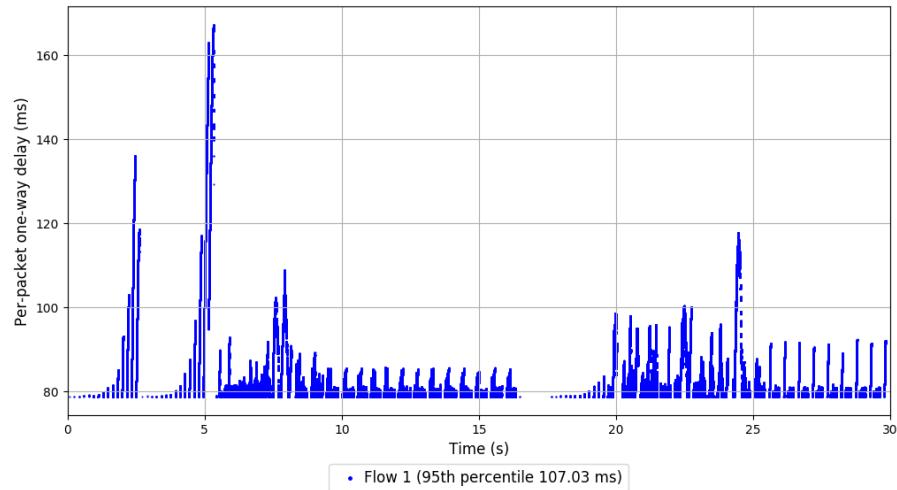
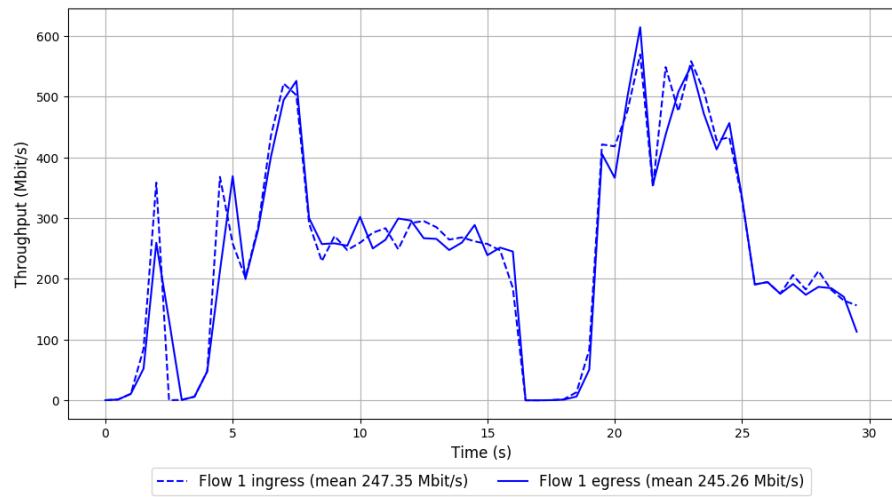


Run 4: Statistics of Verus

```
Start at: 2017-11-21 00:27:44
End at: 2017-11-21 00:28:14
Local clock offset: -0.134 ms
Remote clock offset: 5.042 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 245.26 Mbit/s
95th percentile per-packet one-way delay: 107.033 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 245.26 Mbit/s
95th percentile per-packet one-way delay: 107.033 ms
Loss rate: 1.60%
```

## Run 4: Report of Verus — Data Link

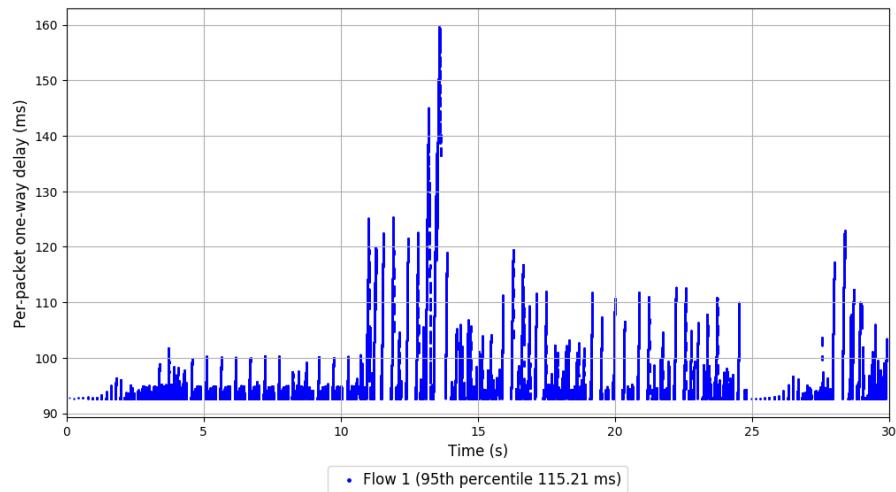
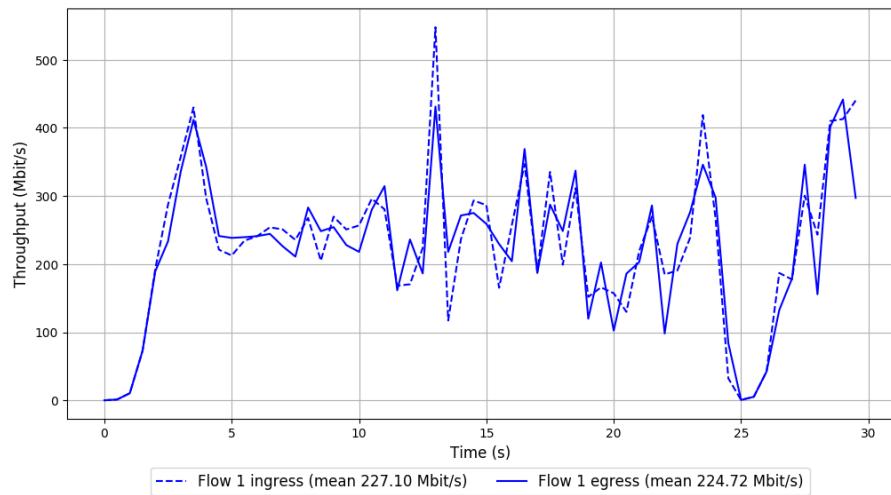


Run 5: Statistics of Verus

```
Start at: 2017-11-21 00:45:47
End at: 2017-11-21 00:46:17
Local clock offset: -0.24 ms
Remote clock offset: -9.272 ms

# Below is generated by plot.py at 2017-11-21 05:54:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.72 Mbit/s
95th percentile per-packet one-way delay: 115.211 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 224.72 Mbit/s
95th percentile per-packet one-way delay: 115.211 ms
Loss rate: 1.60%
```

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

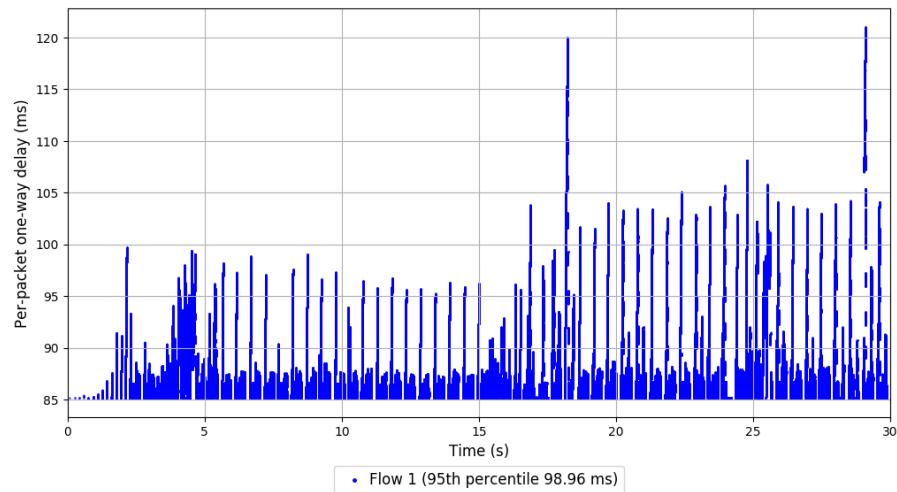
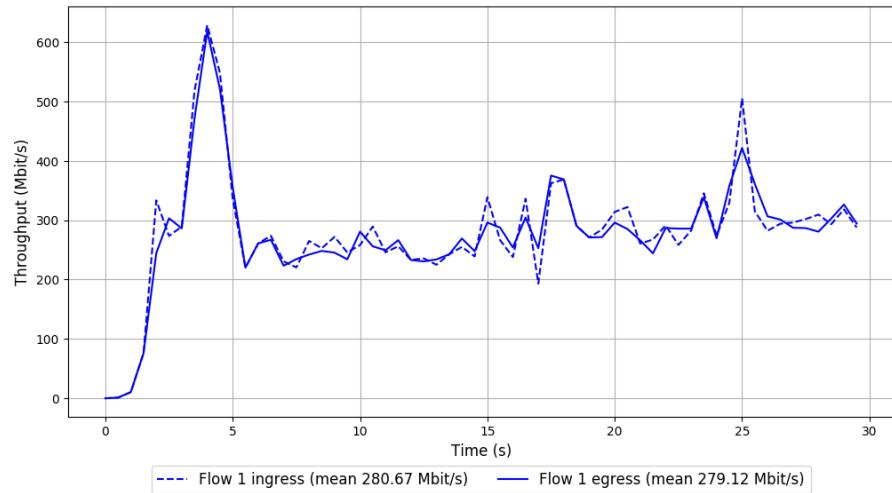


Run 6: Statistics of Verus

```
Start at: 2017-11-21 01:03:53
End at: 2017-11-21 01:04:23
Local clock offset: -0.318 ms
Remote clock offset: -1.513 ms

# Below is generated by plot.py at 2017-11-21 05:55:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 279.12 Mbit/s
95th percentile per-packet one-way delay: 98.963 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 279.12 Mbit/s
95th percentile per-packet one-way delay: 98.963 ms
Loss rate: 1.21%
```

Run 6: Report of Verus — Data Link

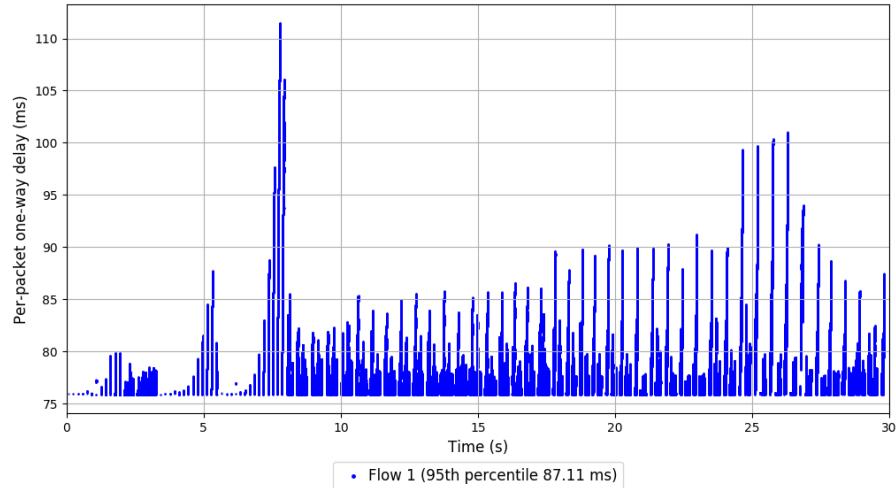
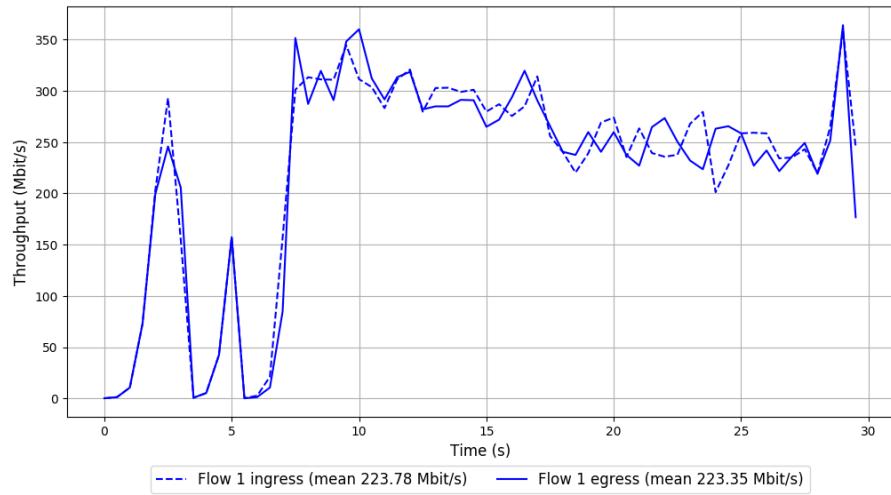


Run 7: Statistics of Verus

```
Start at: 2017-11-21 01:21:57
End at: 2017-11-21 01:22:28
Local clock offset: -0.332 ms
Remote clock offset: 8.372 ms

# Below is generated by plot.py at 2017-11-21 05:55:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.35 Mbit/s
95th percentile per-packet one-way delay: 87.114 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 223.35 Mbit/s
95th percentile per-packet one-way delay: 87.114 ms
Loss rate: 0.98%
```

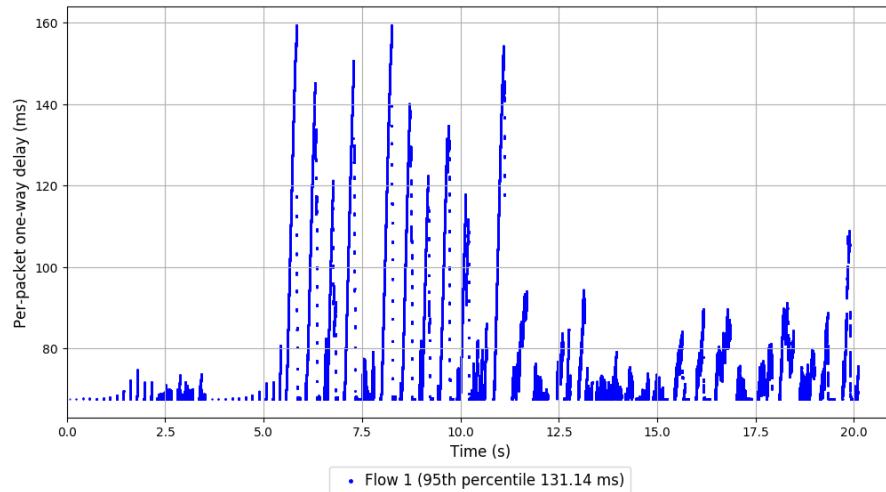
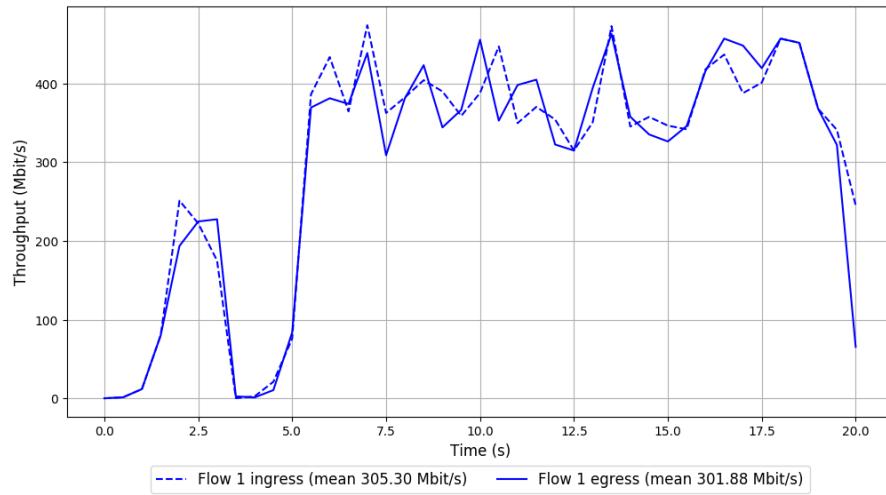
### Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-21 01:39:55  
End at: 2017-11-21 01:40:25  
Local clock offset: -0.289 ms  
Remote clock offset: 17.777 ms

Run 8: Report of Verus — Data Link

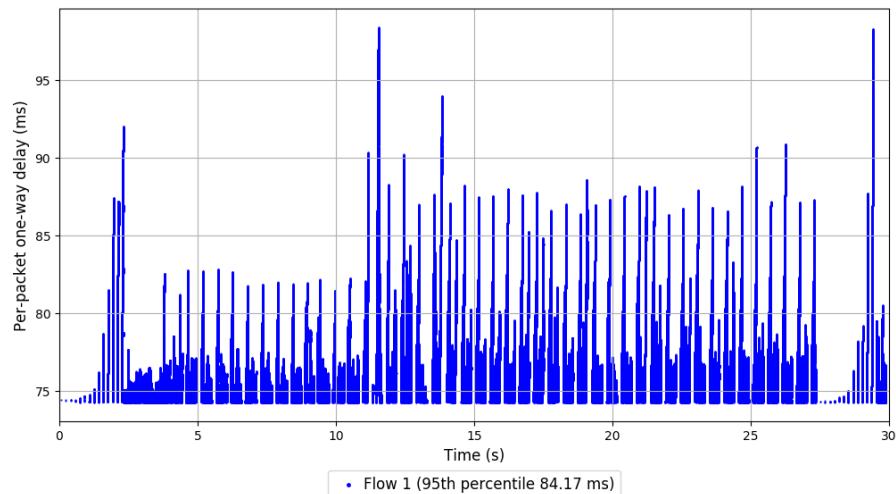
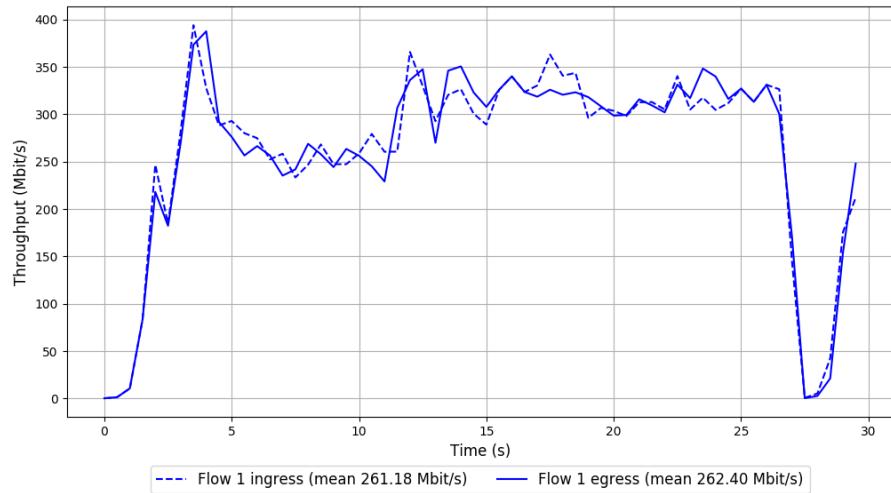


Run 9: Statistics of Verus

```
Start at: 2017-11-21 01:57:53
End at: 2017-11-21 01:58:23
Local clock offset: -0.262 ms
Remote clock offset: 10.437 ms

# Below is generated by plot.py at 2017-11-21 05:57:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 262.40 Mbit/s
95th percentile per-packet one-way delay: 84.166 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 262.40 Mbit/s
95th percentile per-packet one-way delay: 84.166 ms
Loss rate: 0.06%
```

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

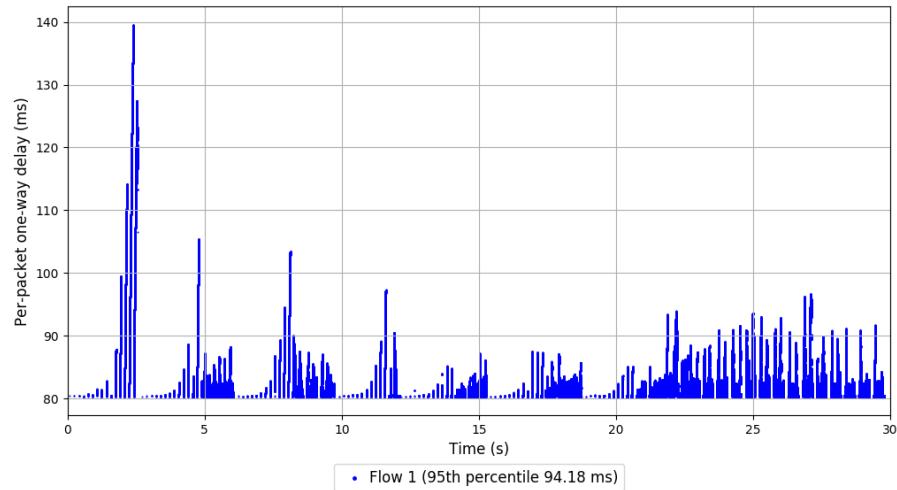
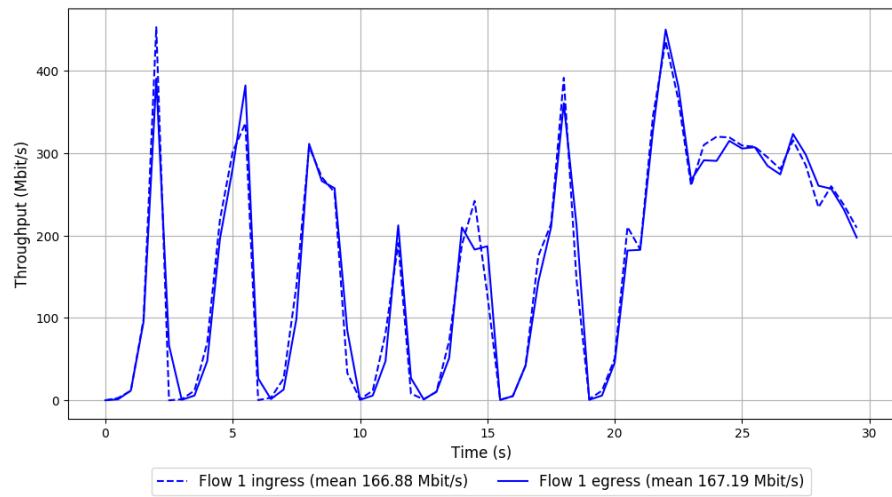


Run 10: Statistics of Verus

```
Start at: 2017-11-21 02:16:19
End at: 2017-11-21 02:16:49
Local clock offset: -0.202 ms
Remote clock offset: 2.117 ms

# Below is generated by plot.py at 2017-11-21 05:57:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 167.19 Mbit/s
95th percentile per-packet one-way delay: 94.183 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 167.19 Mbit/s
95th percentile per-packet one-way delay: 94.183 ms
Loss rate: 0.68%
```

Run 10: Report of Verus — Data Link

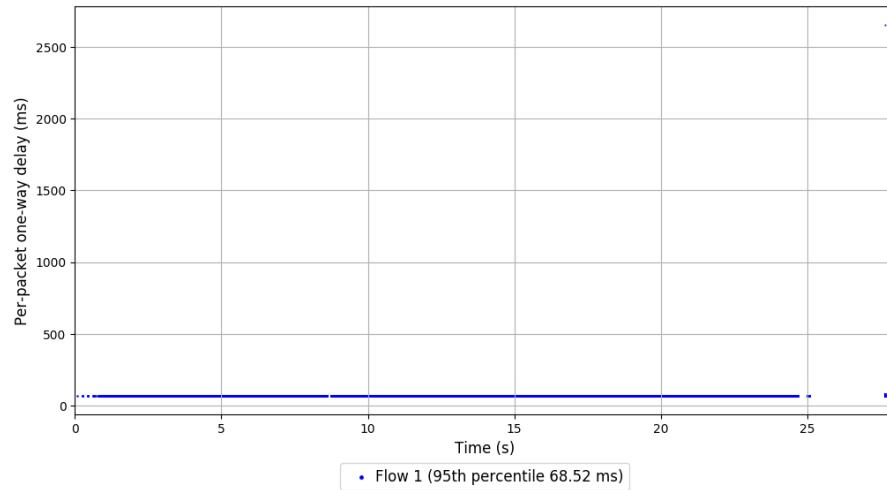
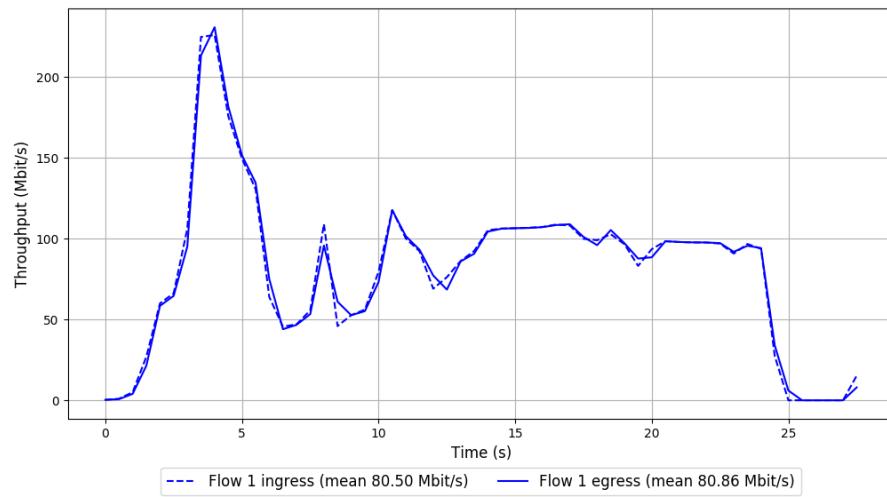


Run 1: Statistics of Copa

```
Start at: 2017-11-20 23:43:54
End at: 2017-11-20 23:44:24
Local clock offset: -0.258 ms
Remote clock offset: 15.402 ms

# Below is generated by plot.py at 2017-11-21 05:57:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.86 Mbit/s
95th percentile per-packet one-way delay: 68.519 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 80.86 Mbit/s
95th percentile per-packet one-way delay: 68.519 ms
Loss rate: 0.16%
```

Run 1: Report of Copa — Data Link

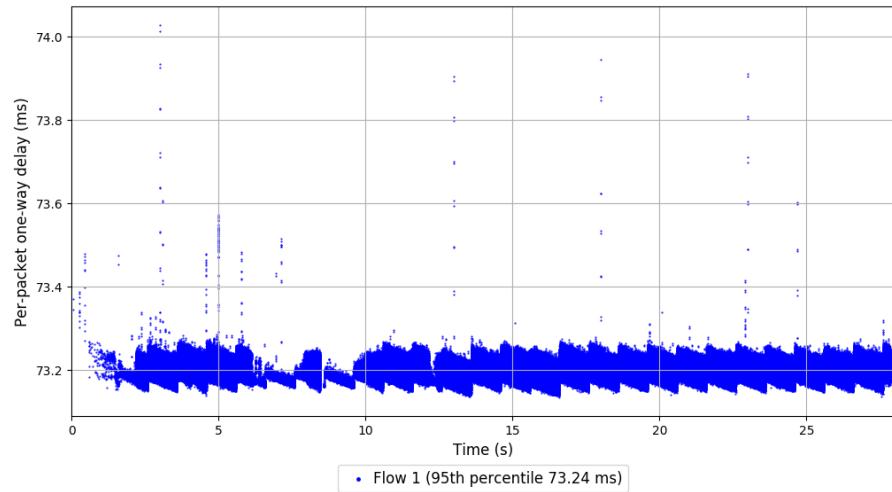
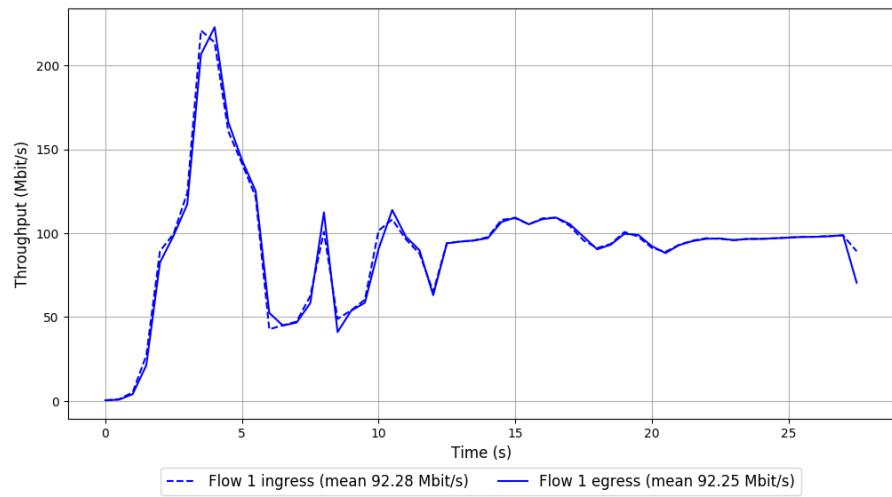


Run 2: Statistics of Copa

```
Start at: 2017-11-21 00:01:57
End at: 2017-11-21 00:02:27
Local clock offset: -0.194 ms
Remote clock offset: 10.557 ms

# Below is generated by plot.py at 2017-11-21 05:57:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.25 Mbit/s
95th percentile per-packet one-way delay: 73.240 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 92.25 Mbit/s
95th percentile per-packet one-way delay: 73.240 ms
Loss rate: 0.64%
```

Run 2: Report of Copa — Data Link

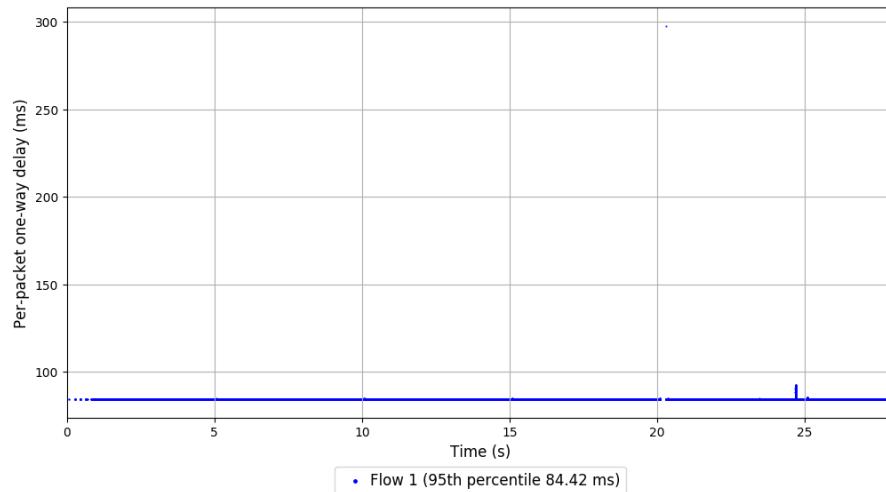
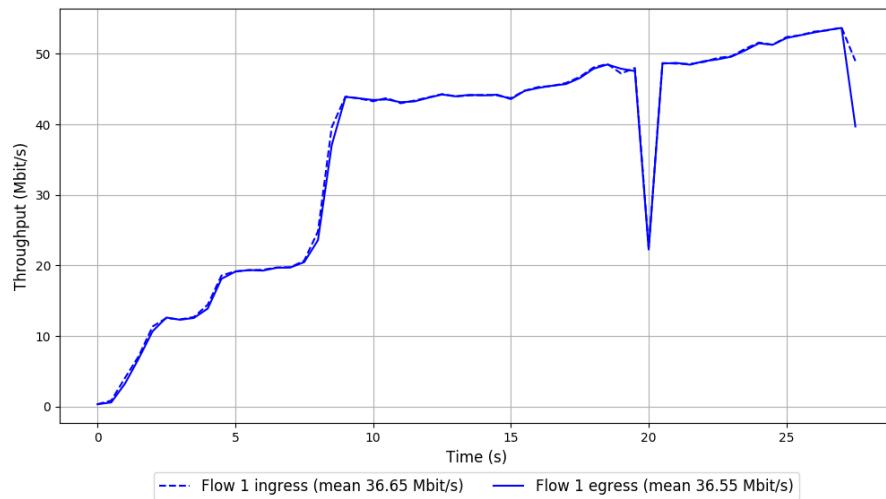


Run 3: Statistics of Copa

```
Start at: 2017-11-21 00:20:06
End at: 2017-11-21 00:20:36
Local clock offset: -0.166 ms
Remote clock offset: -0.48 ms

# Below is generated by plot.py at 2017-11-21 05:57:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.55 Mbit/s
95th percentile per-packet one-way delay: 84.415 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 36.55 Mbit/s
95th percentile per-packet one-way delay: 84.415 ms
Loss rate: 0.89%
```

Run 3: Report of Copa — Data Link

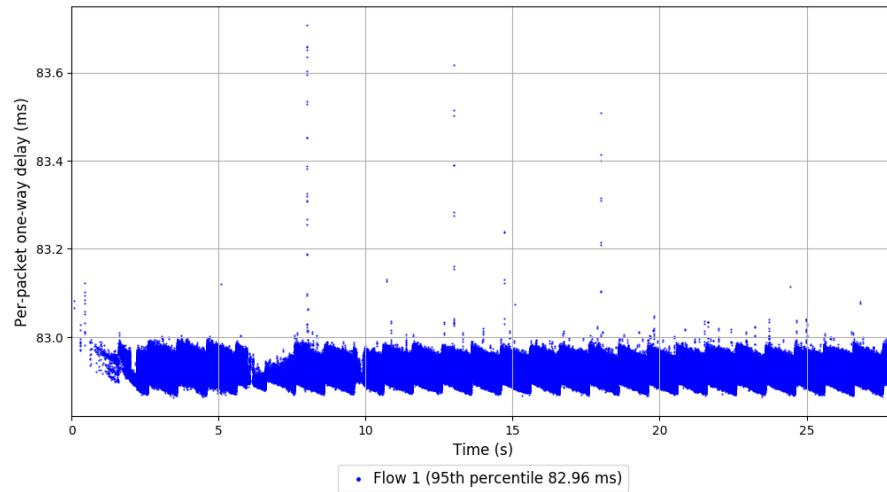
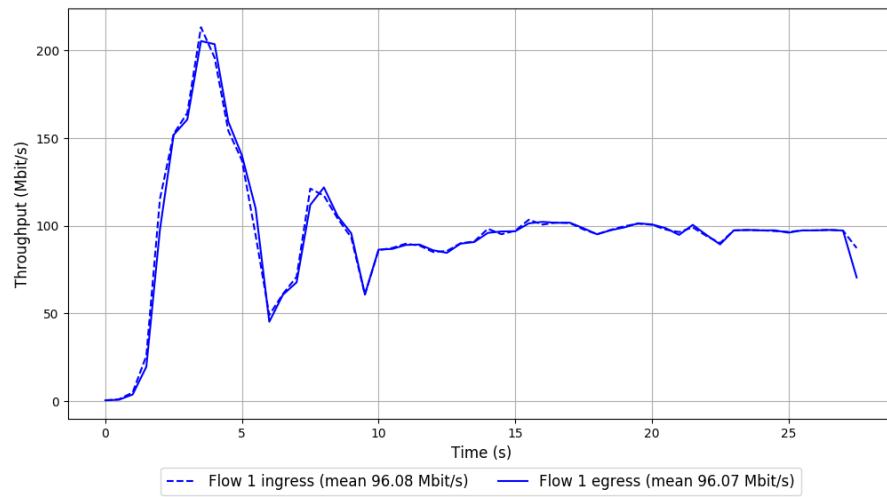


Run 4: Statistics of Copa

```
Start at: 2017-11-21 00:38:14
End at: 2017-11-21 00:38:44
Local clock offset: -0.254 ms
Remote clock offset: 0.735 ms

# Below is generated by plot.py at 2017-11-21 05:57:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.07 Mbit/s
95th percentile per-packet one-way delay: 82.963 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 96.07 Mbit/s
95th percentile per-packet one-way delay: 82.963 ms
Loss rate: 0.61%
```

Run 4: Report of Copa — Data Link

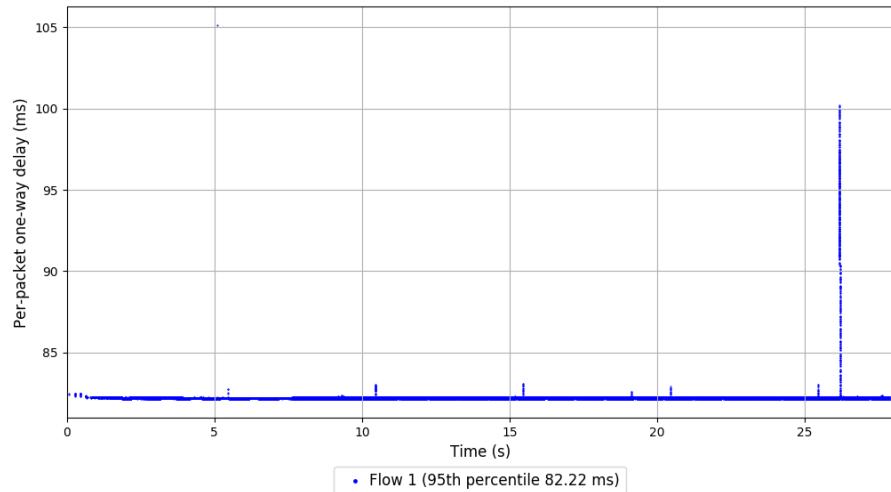
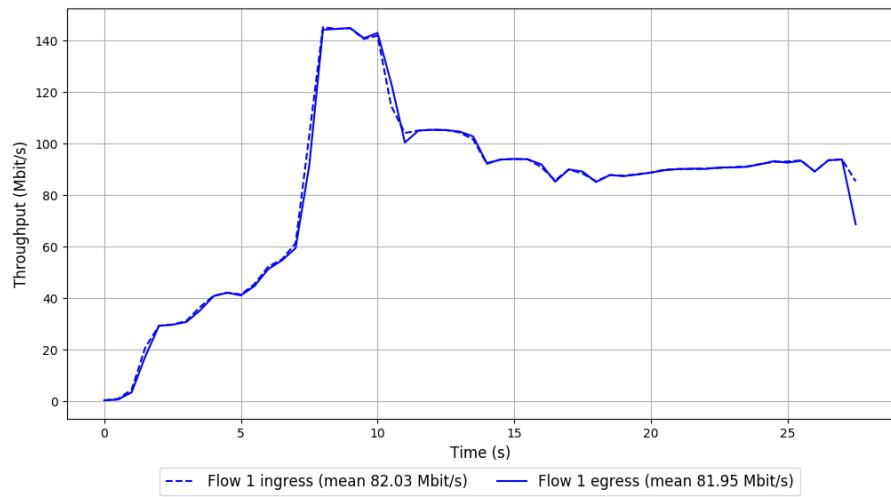


Run 5: Statistics of Copa

```
Start at: 2017-11-21 00:56:12
End at: 2017-11-21 00:56:42
Local clock offset: -0.361 ms
Remote clock offset: 0.956 ms

# Below is generated by plot.py at 2017-11-21 05:57:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.95 Mbit/s
95th percentile per-packet one-way delay: 82.225 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 81.95 Mbit/s
95th percentile per-packet one-way delay: 82.225 ms
Loss rate: 0.70%
```

### Run 5: Report of Copa — Data Link

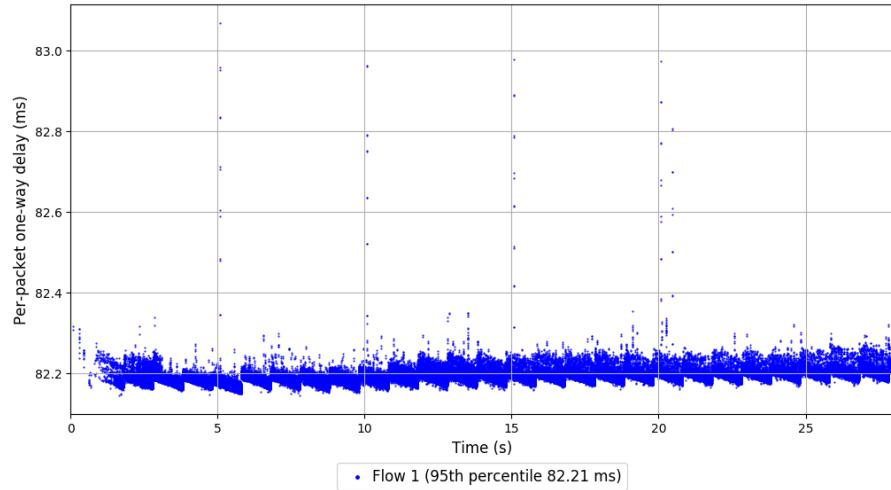
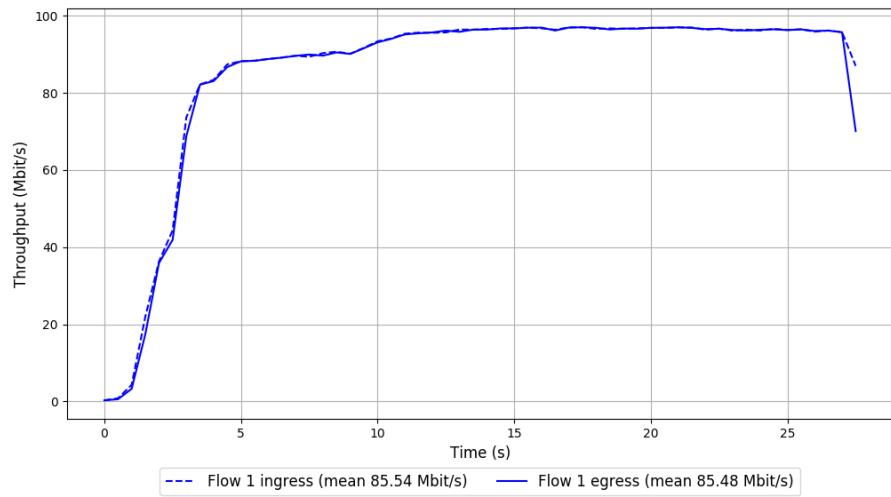


Run 6: Statistics of Copa

```
Start at: 2017-11-21 01:14:24
End at: 2017-11-21 01:14:54
Local clock offset: -0.364 ms
Remote clock offset: 1.676 ms

# Below is generated by plot.py at 2017-11-21 05:57:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.48 Mbit/s
95th percentile per-packet one-way delay: 82.211 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 85.48 Mbit/s
95th percentile per-packet one-way delay: 82.211 ms
Loss rate: 0.68%
```

Run 6: Report of Copa — Data Link

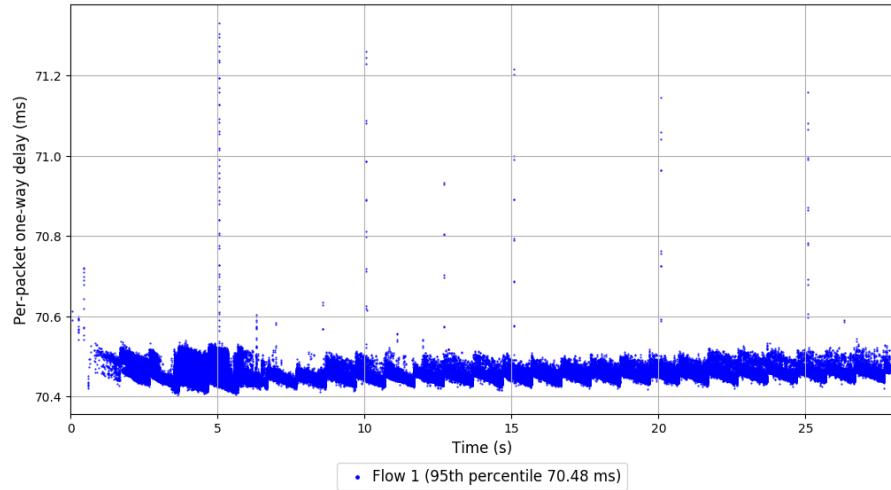
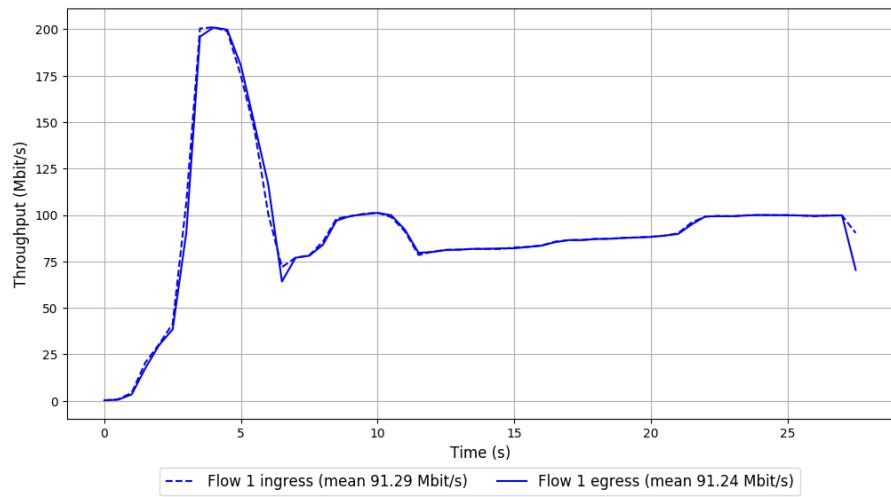


Run 7: Statistics of Copa

```
Start at: 2017-11-21 01:32:24
End at: 2017-11-21 01:32:54
Local clock offset: -0.28 ms
Remote clock offset: 14.197 ms

# Below is generated by plot.py at 2017-11-21 05:58:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.24 Mbit/s
95th percentile per-packet one-way delay: 70.484 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 91.24 Mbit/s
95th percentile per-packet one-way delay: 70.484 ms
Loss rate: 0.66%
```

### Run 7: Report of Copa — Data Link

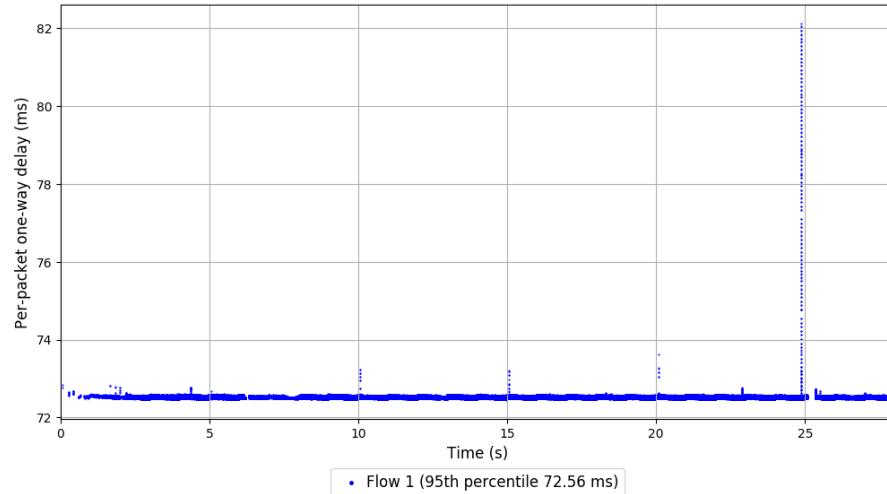
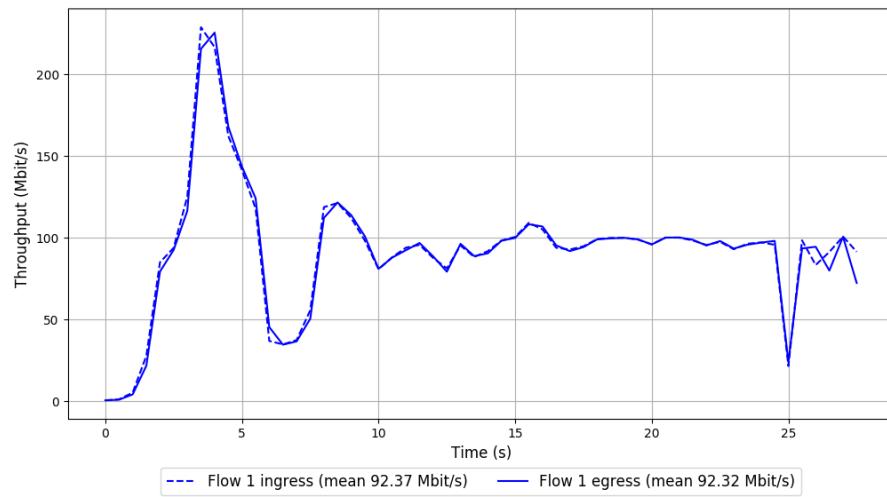


Run 8: Statistics of Copa

```
Start at: 2017-11-21 01:50:23
End at: 2017-11-21 01:50:53
Local clock offset: -0.265 ms
Remote clock offset: 10.5 ms

# Below is generated by plot.py at 2017-11-21 05:58:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.32 Mbit/s
95th percentile per-packet one-way delay: 72.565 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 92.32 Mbit/s
95th percentile per-packet one-way delay: 72.565 ms
Loss rate: 0.65%
```

Run 8: Report of Copa — Data Link

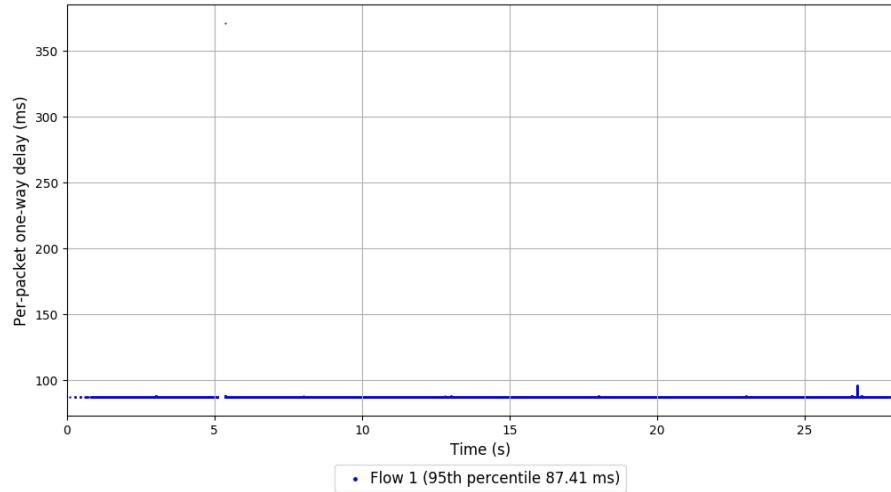
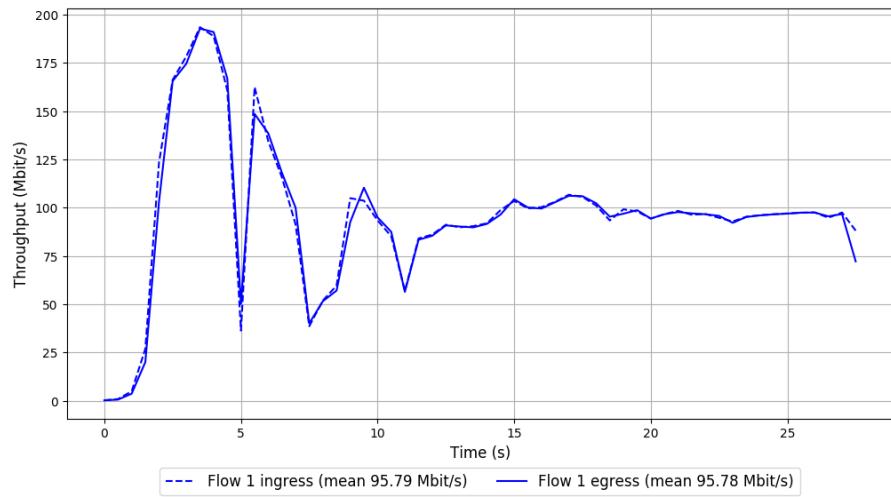


Run 9: Statistics of Copa

```
Start at: 2017-11-21 02:08:38
End at: 2017-11-21 02:09:08
Local clock offset: -0.225 ms
Remote clock offset: -2.466 ms

# Below is generated by plot.py at 2017-11-21 05:58:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.78 Mbit/s
95th percentile per-packet one-way delay: 87.410 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 95.78 Mbit/s
95th percentile per-packet one-way delay: 87.410 ms
Loss rate: 0.62%
```

### Run 9: Report of Copa — Data Link

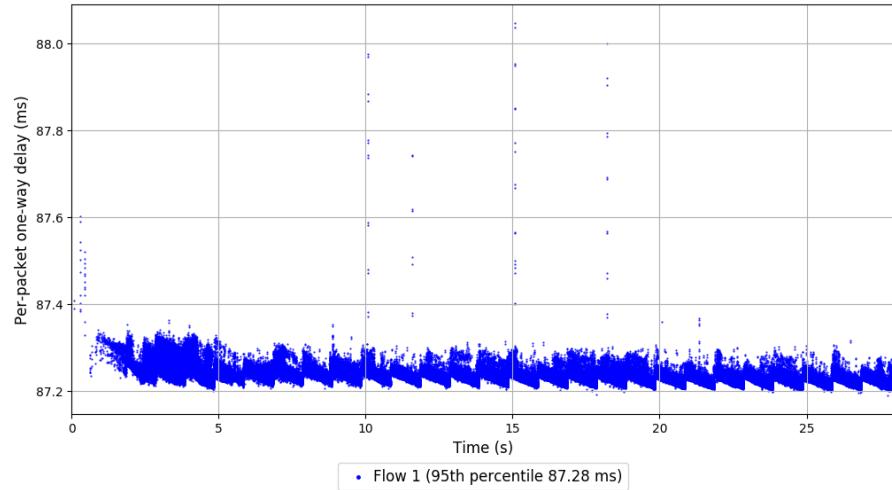
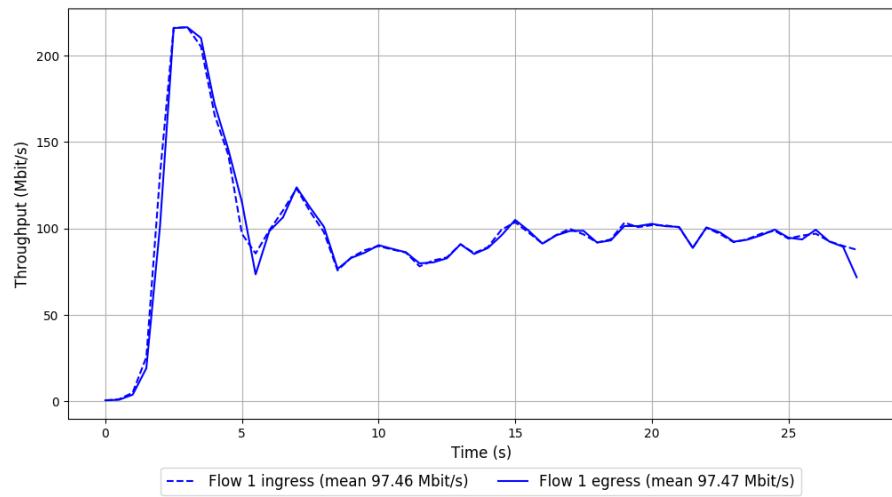


Run 10: Statistics of Copa

```
Start at: 2017-11-21 02:26:41
End at: 2017-11-21 02:27:11
Local clock offset: -0.202 ms
Remote clock offset: -3.305 ms

# Below is generated by plot.py at 2017-11-21 05:59:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 87.277 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 87.277 ms
Loss rate: 0.60%
```

Run 10: Report of Copa — Data Link

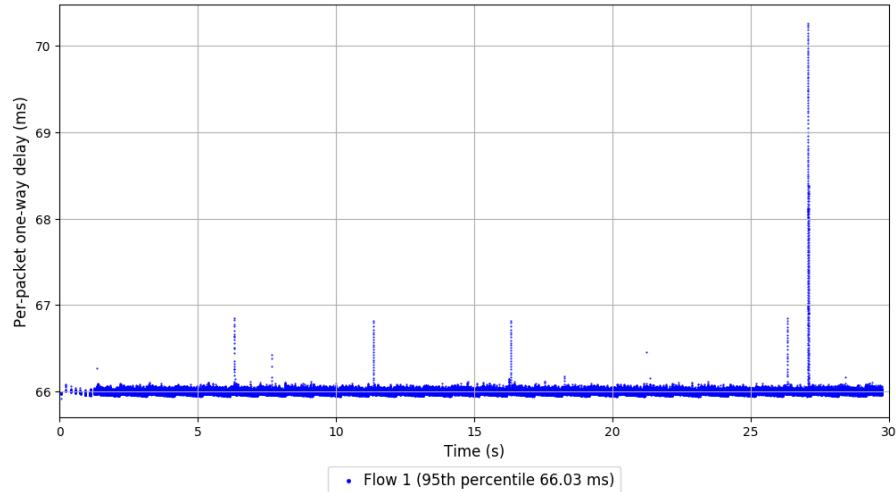
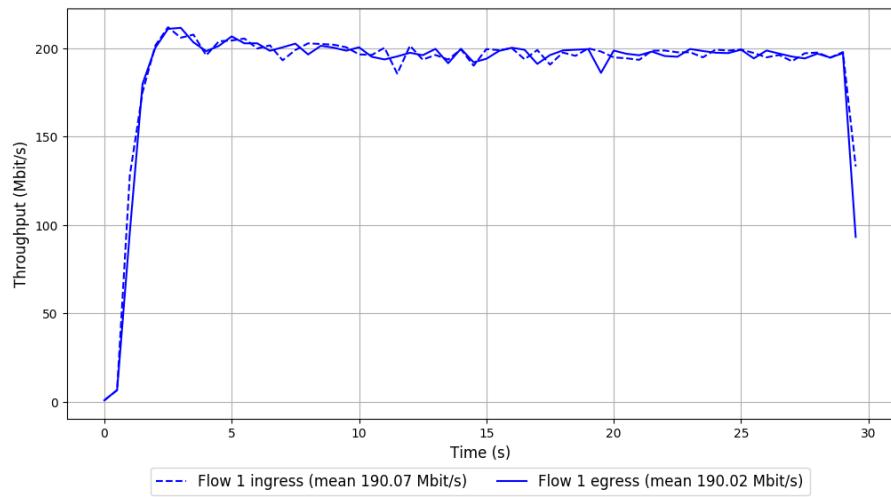


Run 1: Statistics of Indigo

```
Start at: 2017-11-20 23:36:01
End at: 2017-11-20 23:36:31
Local clock offset: -0.242 ms
Remote clock offset: 15.857 ms

# Below is generated by plot.py at 2017-11-21 06:00:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.02 Mbit/s
95th percentile per-packet one-way delay: 66.029 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 190.02 Mbit/s
95th percentile per-packet one-way delay: 66.029 ms
Loss rate: 0.58%
```

Run 1: Report of Indigo — Data Link

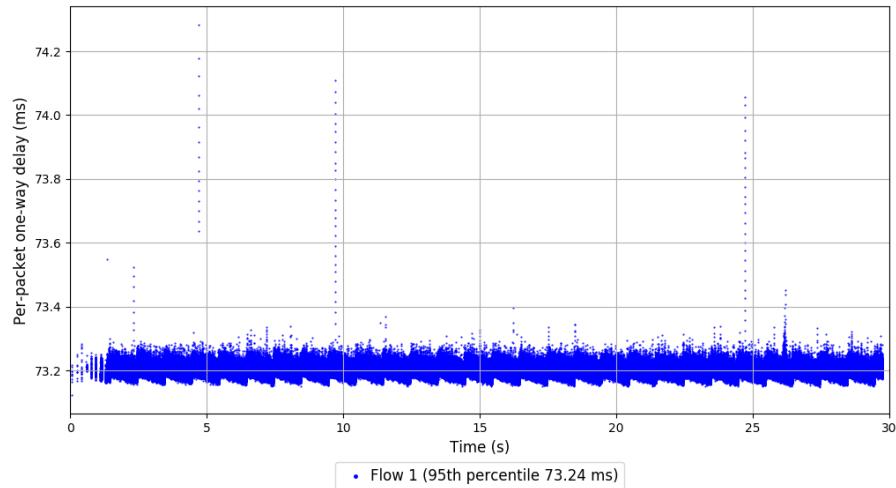
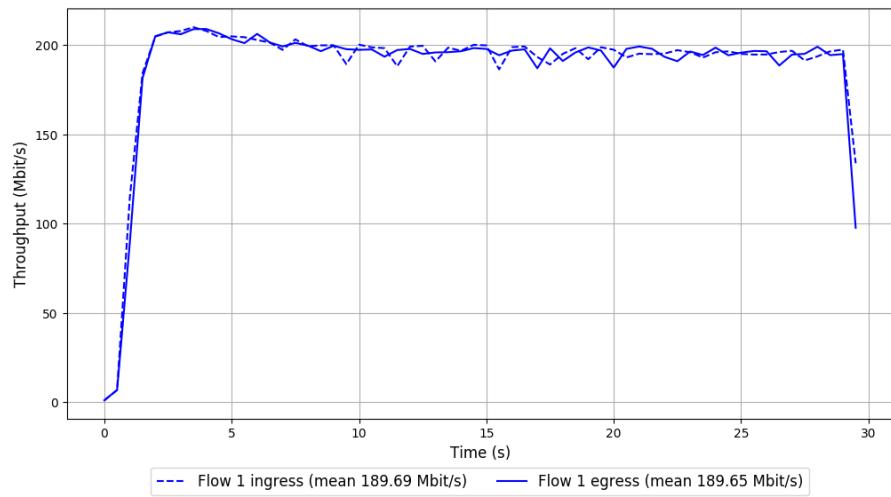


Run 2: Statistics of Indigo

```
Start at: 2017-11-20 23:54:07
End at: 2017-11-20 23:54:37
Local clock offset: -0.189 ms
Remote clock offset: 10.438 ms

# Below is generated by plot.py at 2017-11-21 06:00:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.65 Mbit/s
95th percentile per-packet one-way delay: 73.237 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 189.65 Mbit/s
95th percentile per-packet one-way delay: 73.237 ms
Loss rate: 0.59%
```

## Run 2: Report of Indigo — Data Link

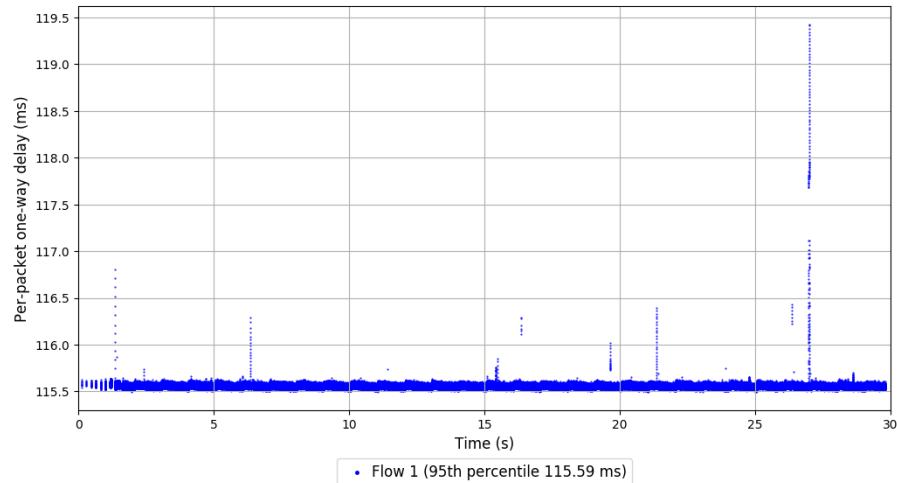
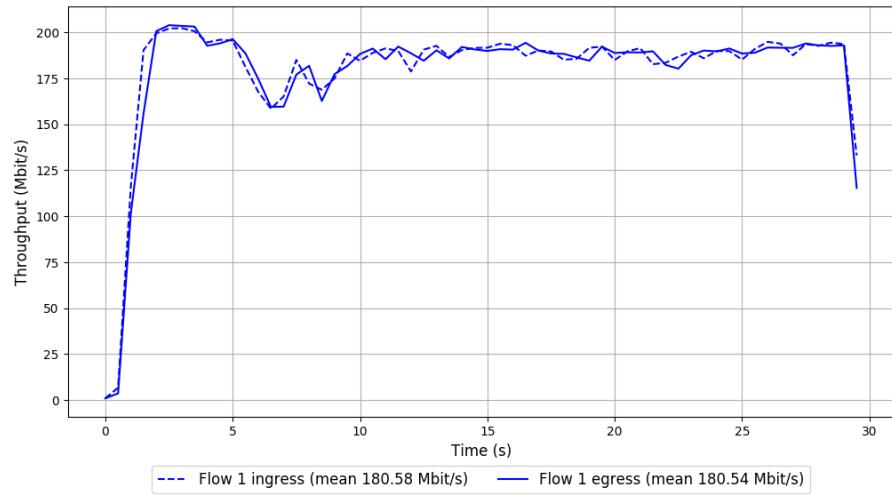


Run 3: Statistics of Indigo

```
Start at: 2017-11-21 00:12:14
End at: 2017-11-21 00:12:44
Local clock offset: -0.174 ms
Remote clock offset: -34.159 ms

# Below is generated by plot.py at 2017-11-21 06:00:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 180.54 Mbit/s
95th percentile per-packet one-way delay: 115.588 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 180.54 Mbit/s
95th percentile per-packet one-way delay: 115.588 ms
Loss rate: 0.59%
```

Run 3: Report of Indigo — Data Link

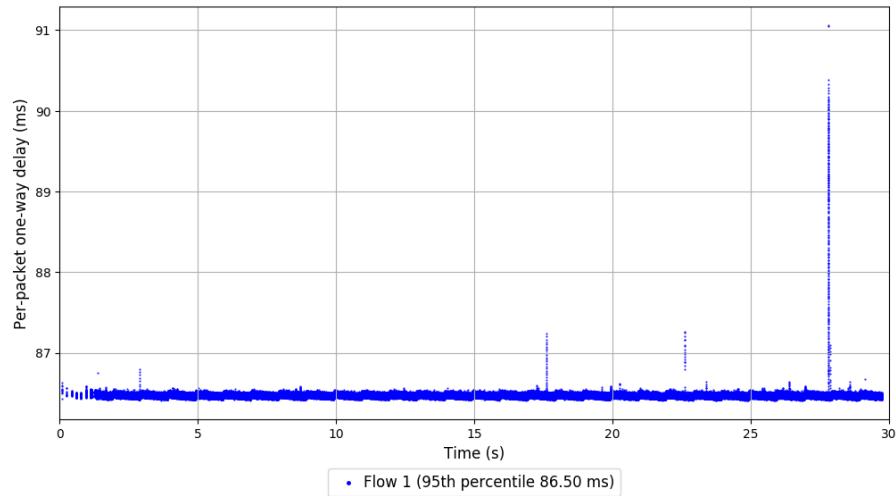
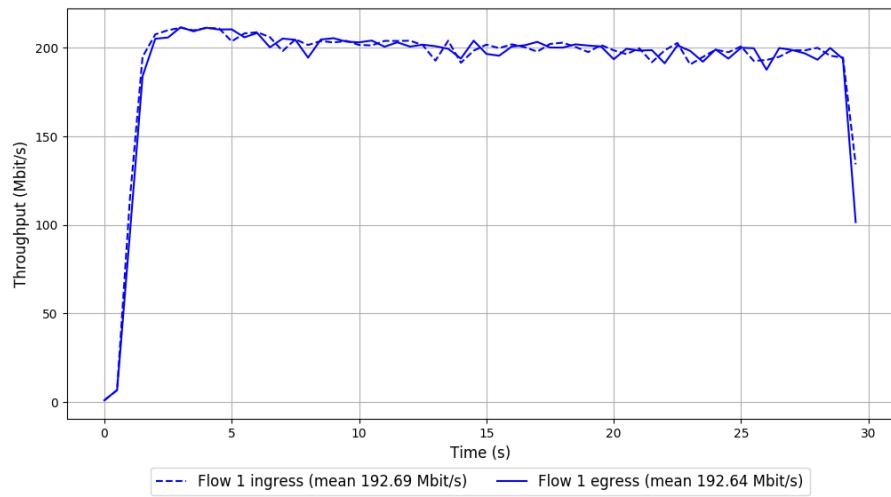


Run 4: Statistics of Indigo

```
Start at: 2017-11-21 00:30:24
End at: 2017-11-21 00:30:54
Local clock offset: -0.202 ms
Remote clock offset: -3.218 ms

# Below is generated by plot.py at 2017-11-21 06:00:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 192.64 Mbit/s
95th percentile per-packet one-way delay: 86.503 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 192.64 Mbit/s
95th percentile per-packet one-way delay: 86.503 ms
Loss rate: 0.59%
```

Run 4: Report of Indigo — Data Link

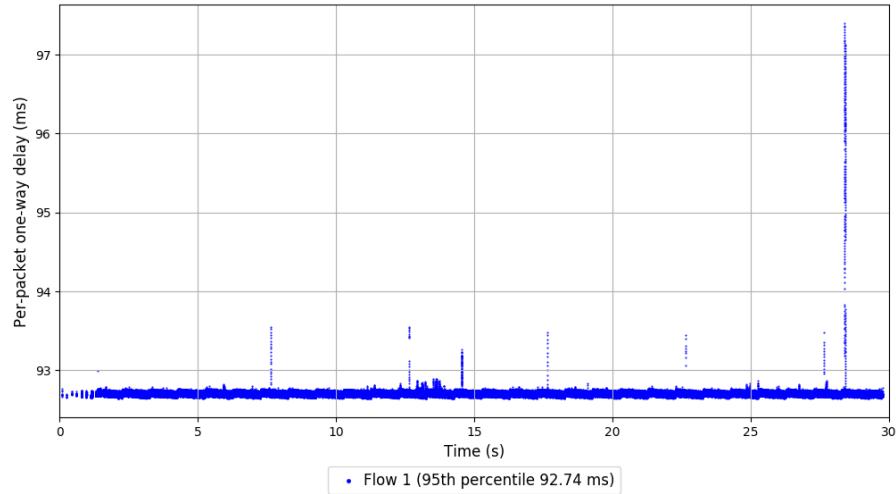
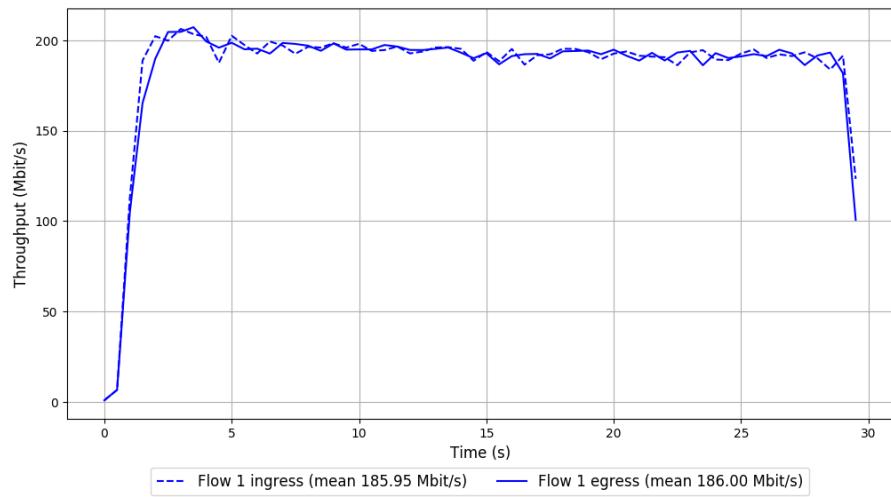


Run 5: Statistics of Indigo

```
Start at: 2017-11-21 00:48:25
End at: 2017-11-21 00:48:55
Local clock offset: -0.244 ms
Remote clock offset: -9.533 ms

# Below is generated by plot.py at 2017-11-21 06:01:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.00 Mbit/s
95th percentile per-packet one-way delay: 92.740 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 186.00 Mbit/s
95th percentile per-packet one-way delay: 92.740 ms
Loss rate: 0.56%
```

Run 5: Report of Indigo — Data Link

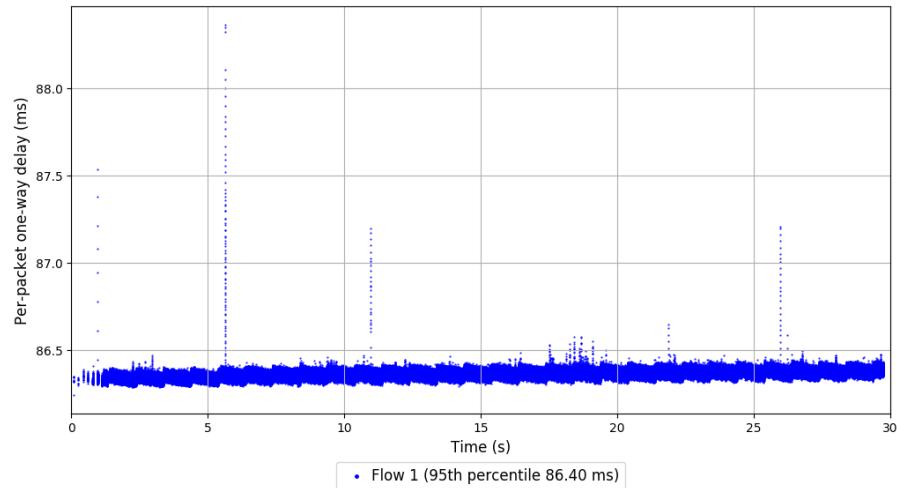
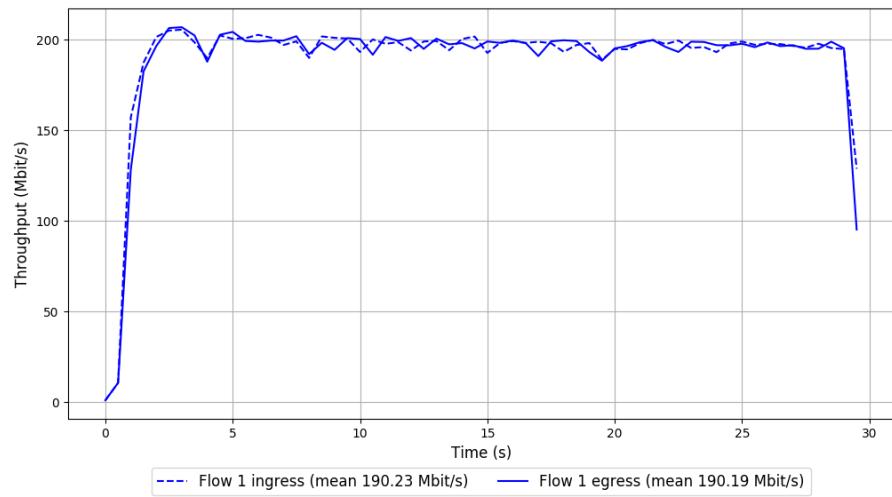


Run 6: Statistics of Indigo

```
Start at: 2017-11-21 01:06:35
End at: 2017-11-21 01:07:05
Local clock offset: -0.394 ms
Remote clock offset: -2.765 ms

# Below is generated by plot.py at 2017-11-21 06:01:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.19 Mbit/s
95th percentile per-packet one-way delay: 86.404 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 190.19 Mbit/s
95th percentile per-packet one-way delay: 86.404 ms
Loss rate: 0.59%
```

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-21 01:24:35

End at: 2017-11-21 01:25:05

Local clock offset: -0.292 ms

Remote clock offset: 14.088 ms

# Below is generated by plot.py at 2017-11-21 06:01:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 198.93 Mbit/s

95th percentile per-packet one-way delay: 70.141 ms

Loss rate: 0.60%

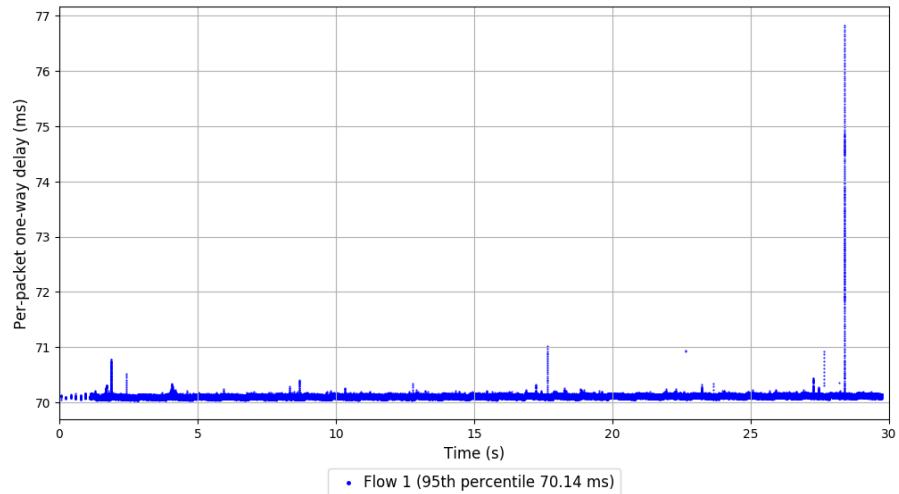
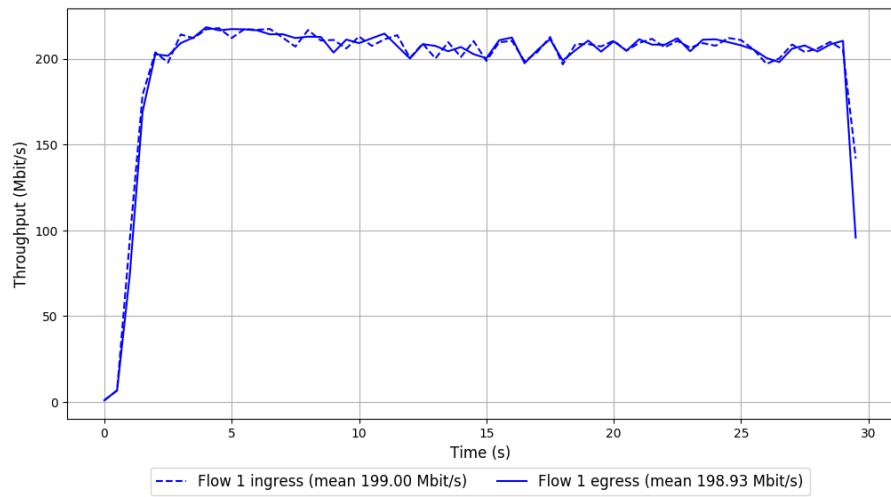
-- Flow 1:

Average throughput: 198.93 Mbit/s

95th percentile per-packet one-way delay: 70.141 ms

Loss rate: 0.60%

Run 7: Report of Indigo — Data Link

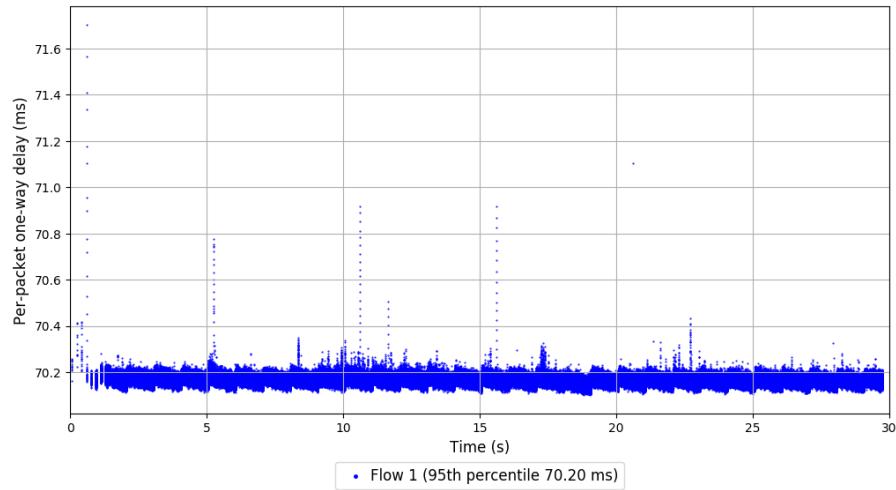
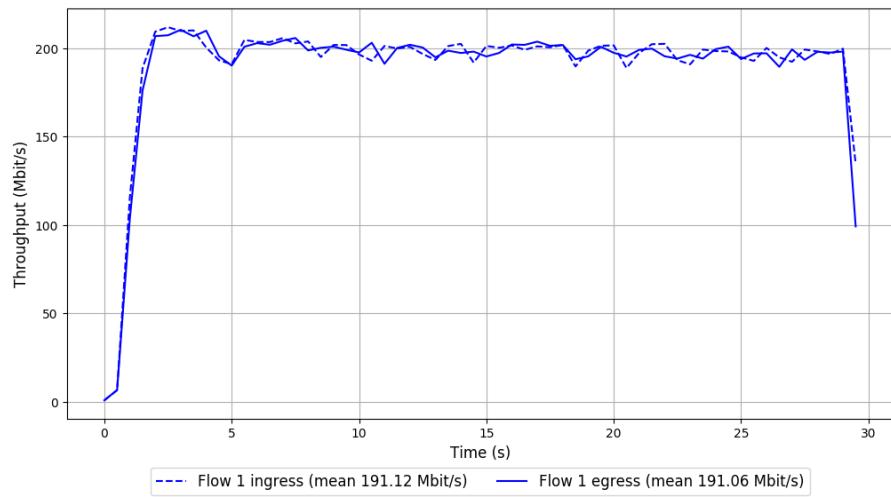


Run 8: Statistics of Indigo

```
Start at: 2017-11-21 01:42:37
End at: 2017-11-21 01:43:07
Local clock offset: -0.288 ms
Remote clock offset: 15.062 ms

# Below is generated by plot.py at 2017-11-21 06:01:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.06 Mbit/s
95th percentile per-packet one-way delay: 70.200 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 191.06 Mbit/s
95th percentile per-packet one-way delay: 70.200 ms
Loss rate: 0.59%
```

Run 8: Report of Indigo — Data Link

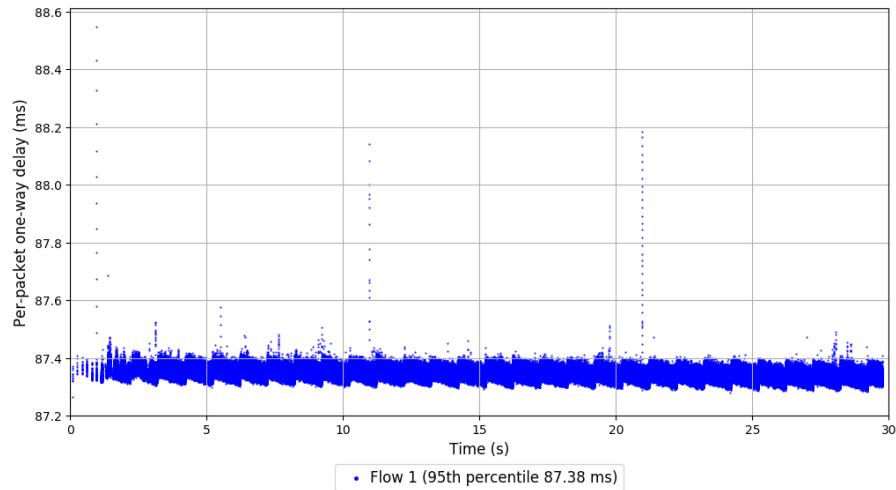
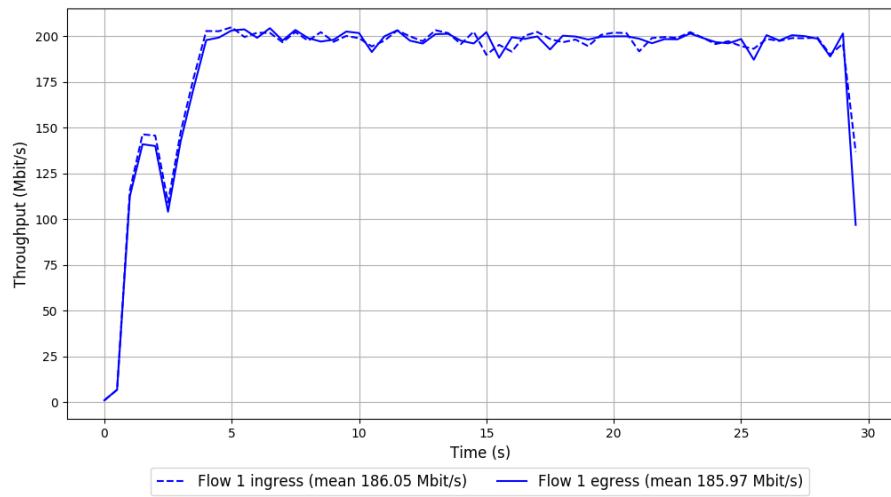


Run 9: Statistics of Indigo

```
Start at: 2017-11-21 02:00:40
End at: 2017-11-21 02:01:10
Local clock offset: -0.265 ms
Remote clock offset: -2.13 ms

# Below is generated by plot.py at 2017-11-21 06:02:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 185.97 Mbit/s
95th percentile per-packet one-way delay: 87.381 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 185.97 Mbit/s
95th percentile per-packet one-way delay: 87.381 ms
Loss rate: 0.61%
```

Run 9: Report of Indigo — Data Link

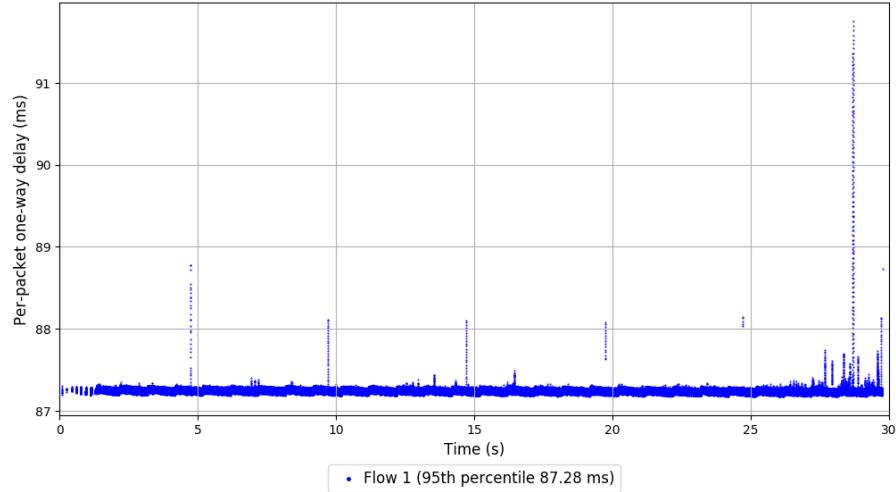
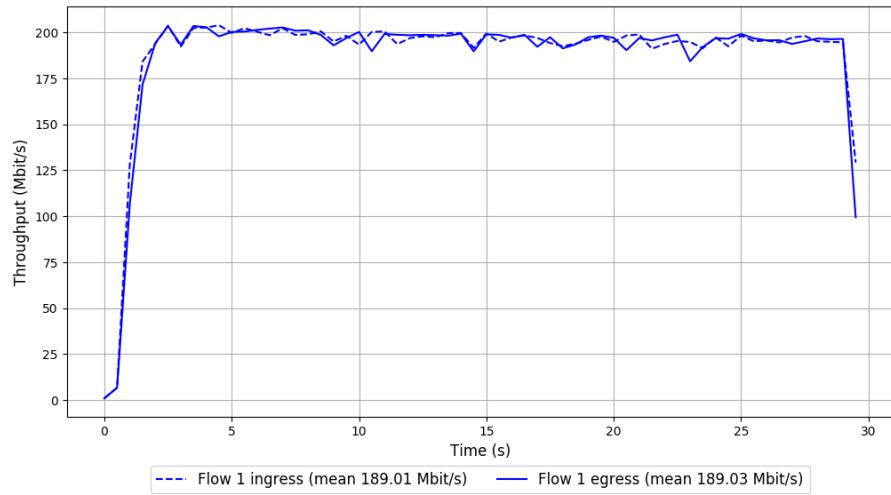


Run 10: Statistics of Indigo

```
Start at: 2017-11-21 02:18:58
End at: 2017-11-21 02:19:28
Local clock offset: -0.17 ms
Remote clock offset: -2.972 ms

# Below is generated by plot.py at 2017-11-21 06:02:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.03 Mbit/s
95th percentile per-packet one-way delay: 87.276 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 189.03 Mbit/s
95th percentile per-packet one-way delay: 87.276 ms
Loss rate: 0.55%
```

Run 10: Report of Indigo — Data Link

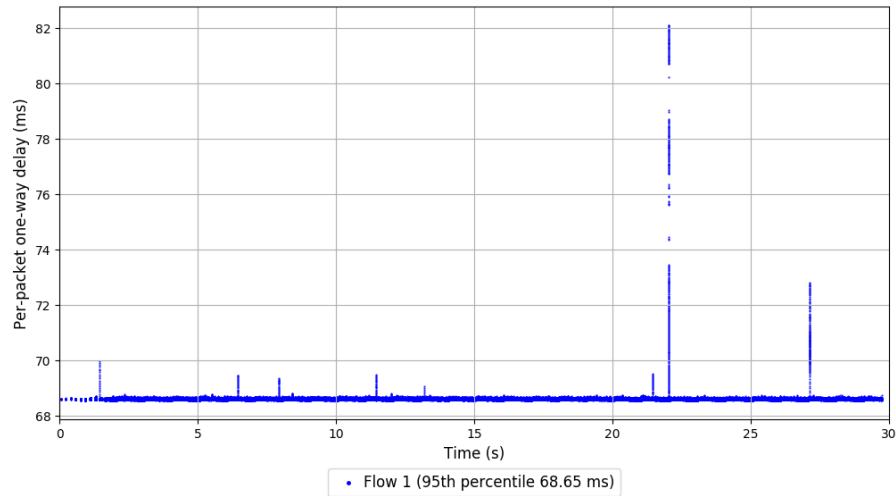
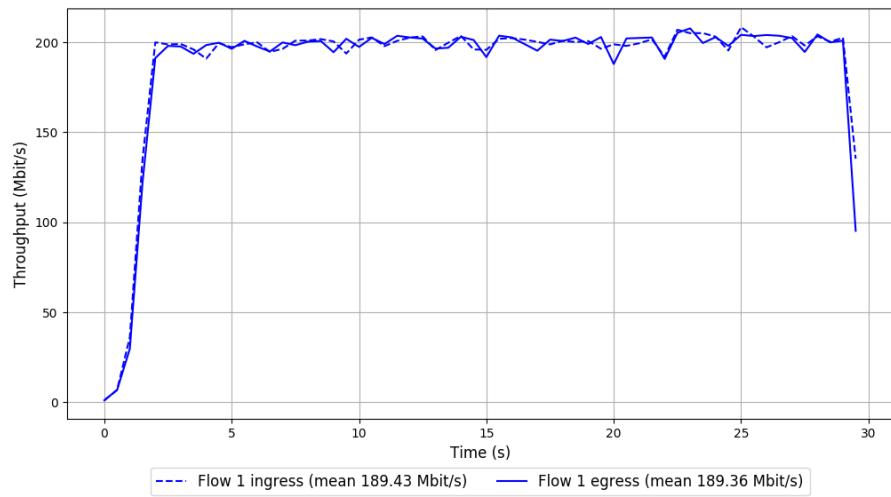


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-20 23:37:23
End at: 2017-11-20 23:37:53
Local clock offset: -0.254 ms
Remote clock offset: 15.17 ms

# Below is generated by plot.py at 2017-11-21 06:02:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.36 Mbit/s
95th percentile per-packet one-way delay: 68.653 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 189.36 Mbit/s
95th percentile per-packet one-way delay: 68.653 ms
Loss rate: 0.60%
```

Run 1: Report of Indigo-calib — Data Link

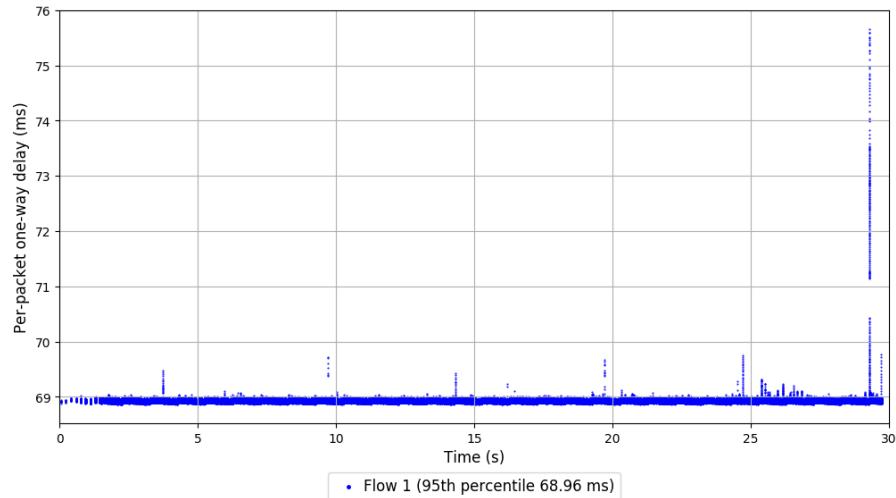
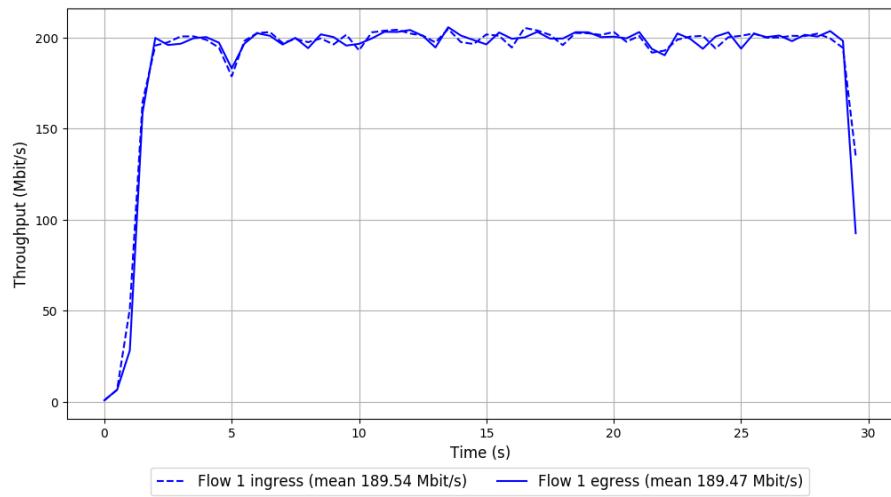


Run 2: Statistics of Indigo-calib

```
Start at: 2017-11-20 23:55:30
End at: 2017-11-20 23:56:00
Local clock offset: -0.21 ms
Remote clock offset: 14.876 ms

# Below is generated by plot.py at 2017-11-21 06:03:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.47 Mbit/s
95th percentile per-packet one-way delay: 68.956 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 189.47 Mbit/s
95th percentile per-packet one-way delay: 68.956 ms
Loss rate: 0.60%
```

Run 2: Report of Indigo-calib — Data Link

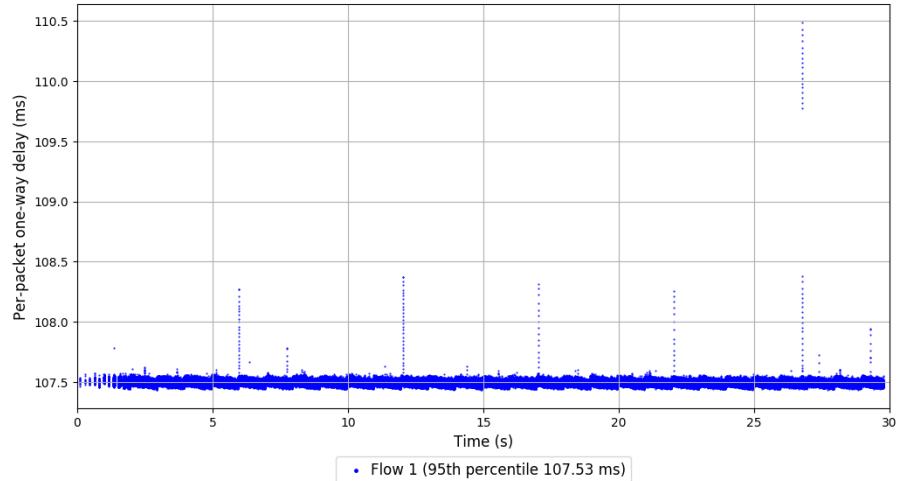
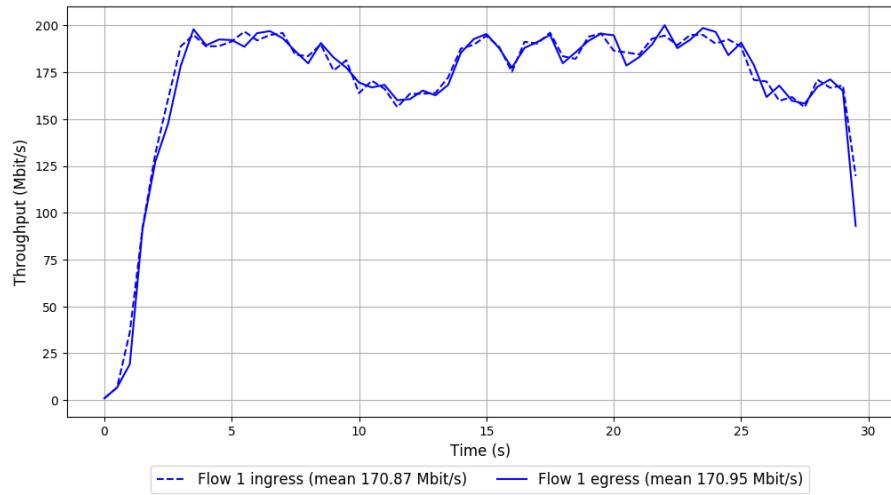


Run 3: Statistics of Indigo-calib

```
Start at: 2017-11-21 00:13:36
End at: 2017-11-21 00:14:06
Local clock offset: -0.154 ms
Remote clock offset: -24.228 ms

# Below is generated by plot.py at 2017-11-21 06:03:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 170.95 Mbit/s
95th percentile per-packet one-way delay: 107.529 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 170.95 Mbit/s
95th percentile per-packet one-way delay: 107.529 ms
Loss rate: 0.60%
```

Run 3: Report of Indigo-calib — Data Link

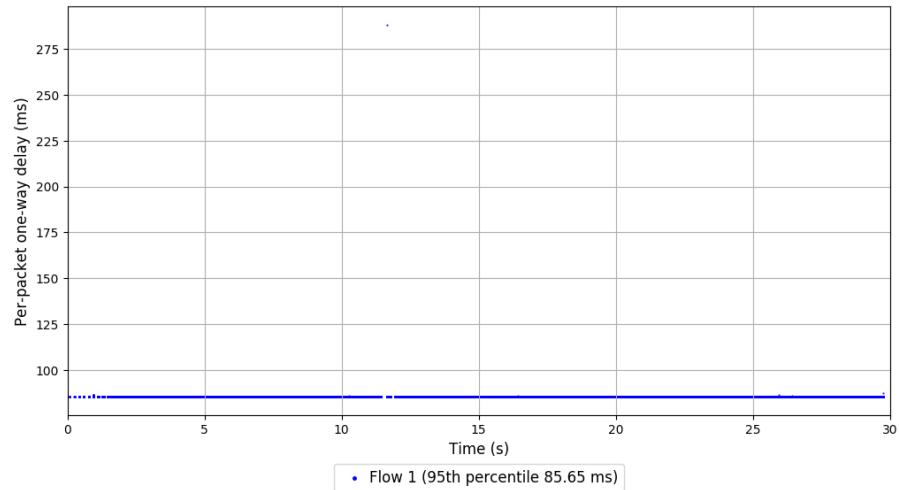
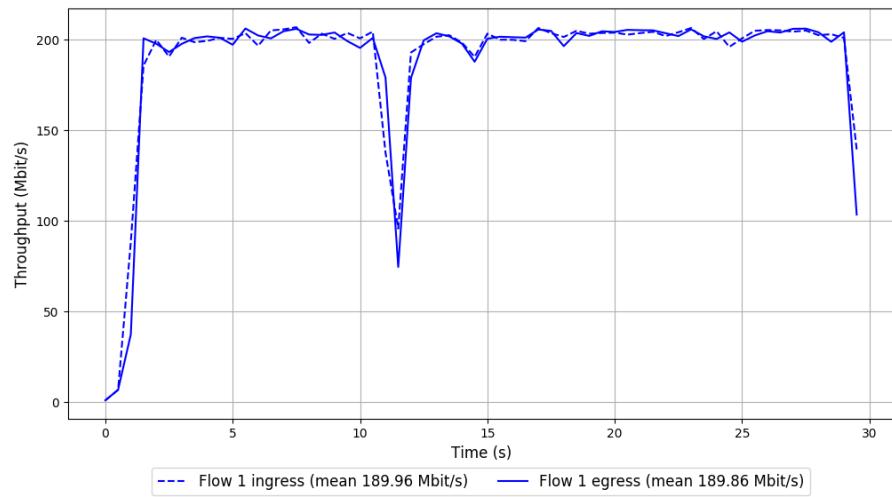


Run 4: Statistics of Indigo-calib

```
Start at: 2017-11-21 00:31:48
End at: 2017-11-21 00:32:18
Local clock offset: -0.182 ms
Remote clock offset: -4.133 ms

# Below is generated by plot.py at 2017-11-21 06:04:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.86 Mbit/s
95th percentile per-packet one-way delay: 85.649 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 189.86 Mbit/s
95th percentile per-packet one-way delay: 85.649 ms
Loss rate: 0.61%
```

Run 4: Report of Indigo-calib — Data Link

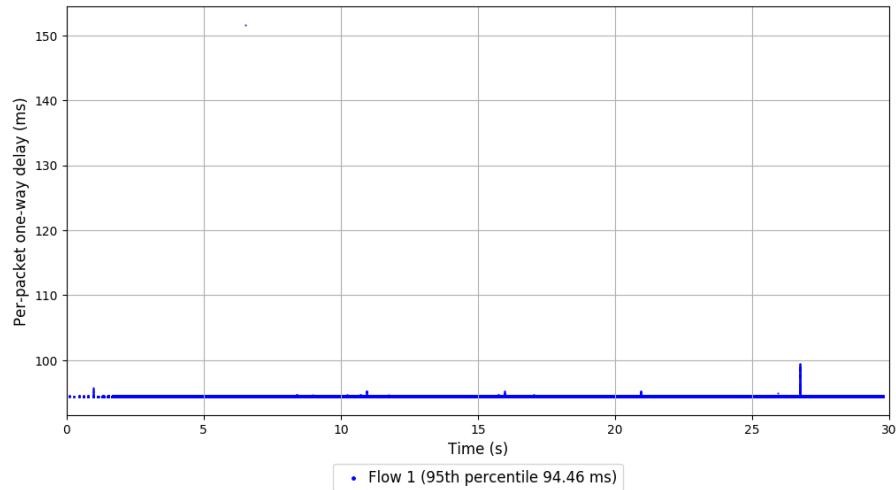
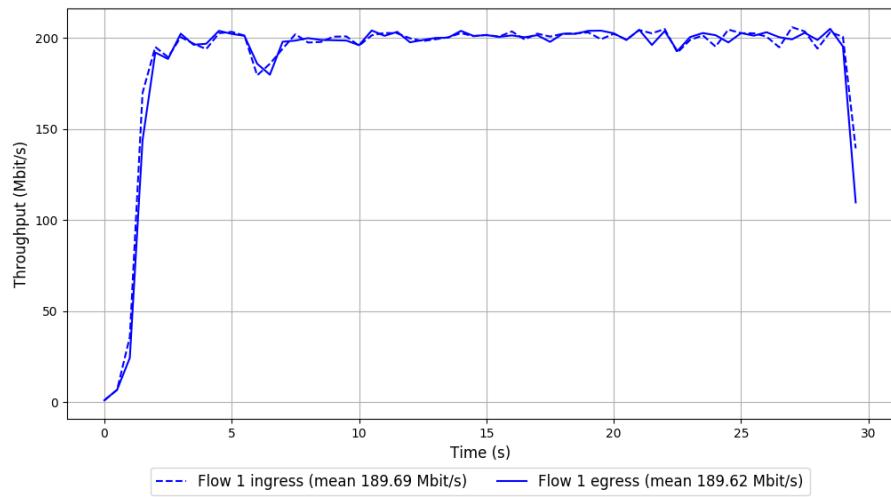


Run 5: Statistics of Indigo-calib

```
Start at: 2017-11-21 00:49:49
End at: 2017-11-21 00:50:19
Local clock offset: -0.25 ms
Remote clock offset: -11.256 ms

# Below is generated by plot.py at 2017-11-21 06:04:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.62 Mbit/s
95th percentile per-packet one-way delay: 94.462 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 189.62 Mbit/s
95th percentile per-packet one-way delay: 94.462 ms
Loss rate: 0.60%
```

Run 5: Report of Indigo-calib — Data Link

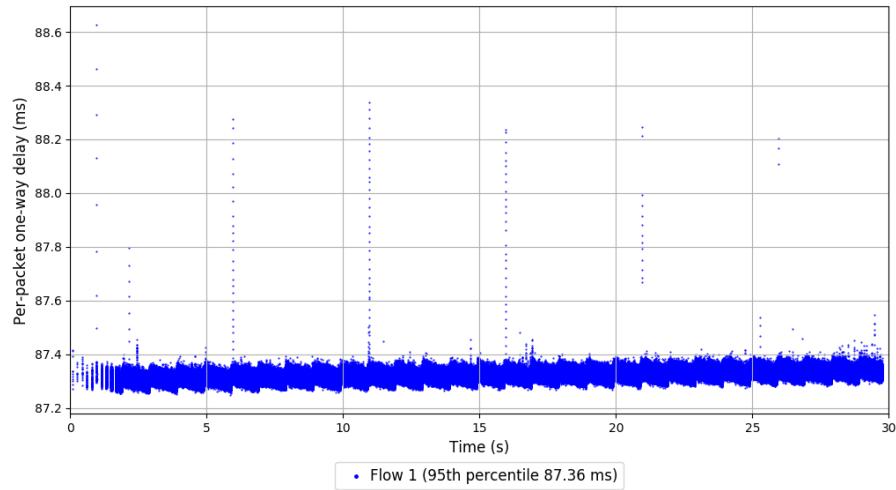
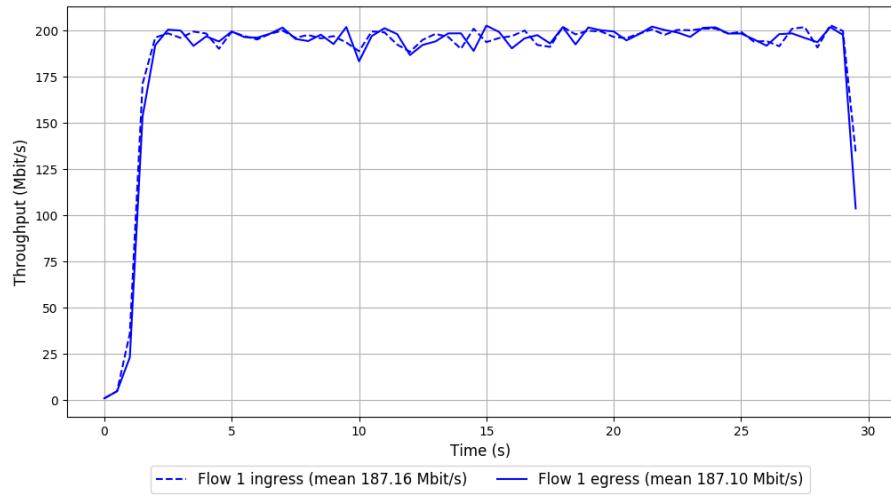


Run 6: Statistics of Indigo-calib

```
Start at: 2017-11-21 01:07:58
End at: 2017-11-21 01:08:28
Local clock offset: -0.342 ms
Remote clock offset: -4.1 ms

# Below is generated by plot.py at 2017-11-21 06:04:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 187.10 Mbit/s
95th percentile per-packet one-way delay: 87.358 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 187.10 Mbit/s
95th percentile per-packet one-way delay: 87.358 ms
Loss rate: 0.60%
```

Run 6: Report of Indigo-calib — Data Link

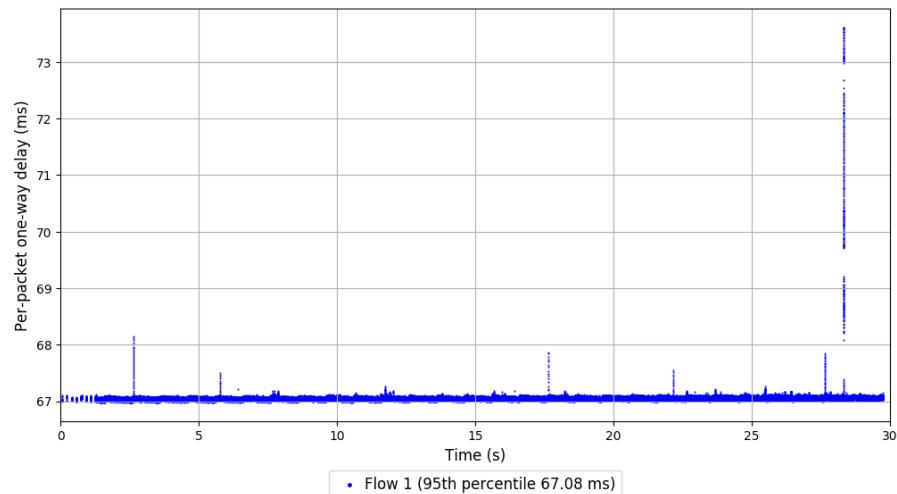
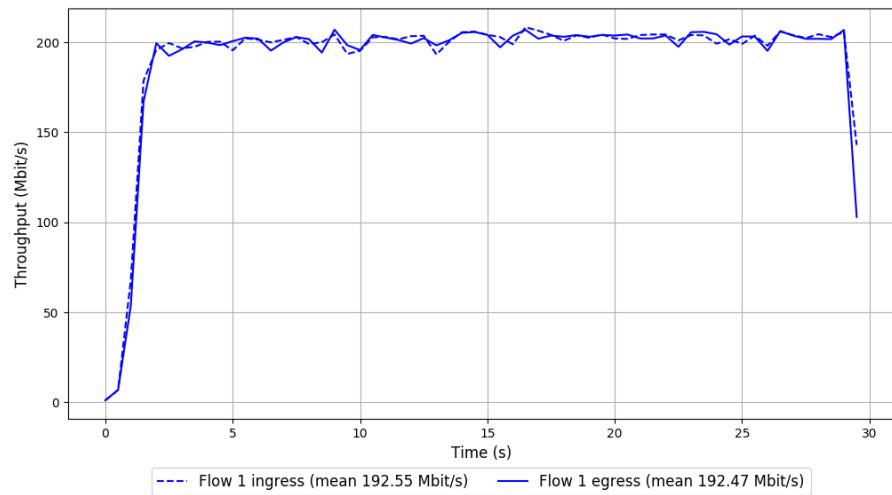


Run 7: Statistics of Indigo-calib

```
Start at: 2017-11-21 01:25:57
End at: 2017-11-21 01:26:27
Local clock offset: -0.301 ms
Remote clock offset: 15.578 ms

# Below is generated by plot.py at 2017-11-21 06:05:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 192.47 Mbit/s
95th percentile per-packet one-way delay: 67.080 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 192.47 Mbit/s
95th percentile per-packet one-way delay: 67.080 ms
Loss rate: 0.60%
```

Run 7: Report of Indigo-calib — Data Link

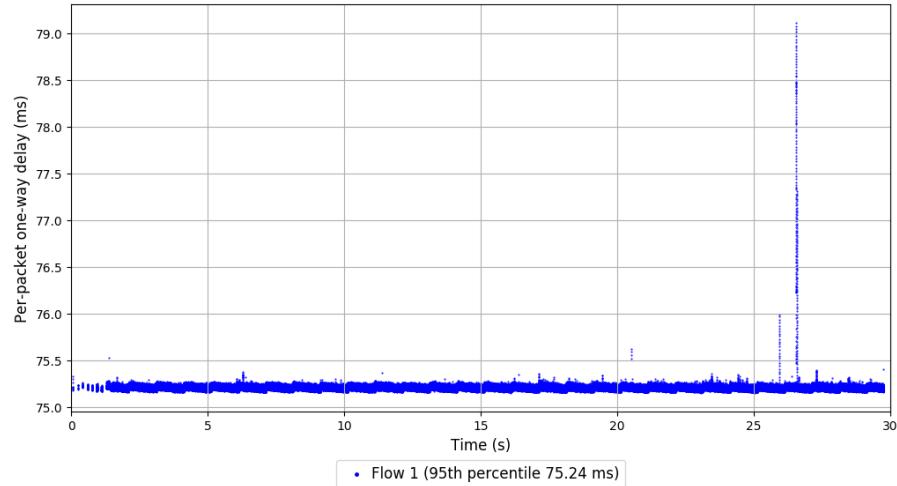
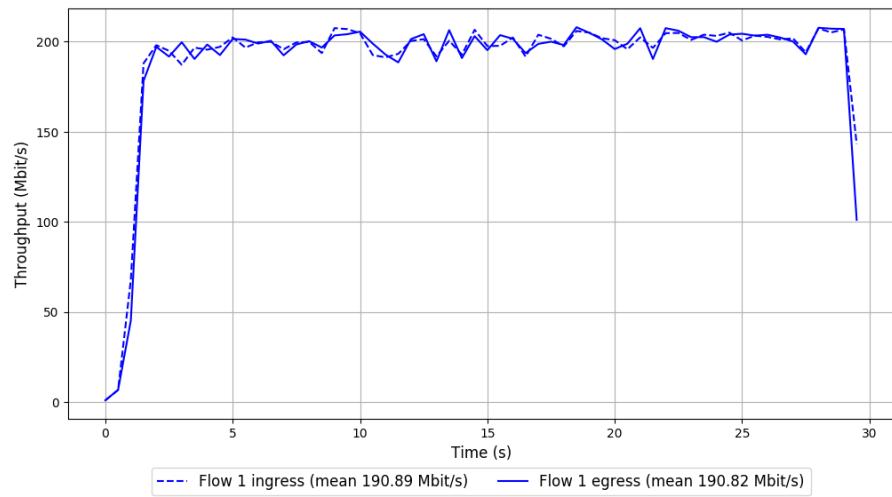


Run 8: Statistics of Indigo-calib

```
Start at: 2017-11-21 01:43:59
End at: 2017-11-21 01:44:29
Local clock offset: -0.359 ms
Remote clock offset: 9.666 ms

# Below is generated by plot.py at 2017-11-21 06:05:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.82 Mbit/s
95th percentile per-packet one-way delay: 75.243 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 190.82 Mbit/s
95th percentile per-packet one-way delay: 75.243 ms
Loss rate: 0.61%
```

Run 8: Report of Indigo-calib — Data Link

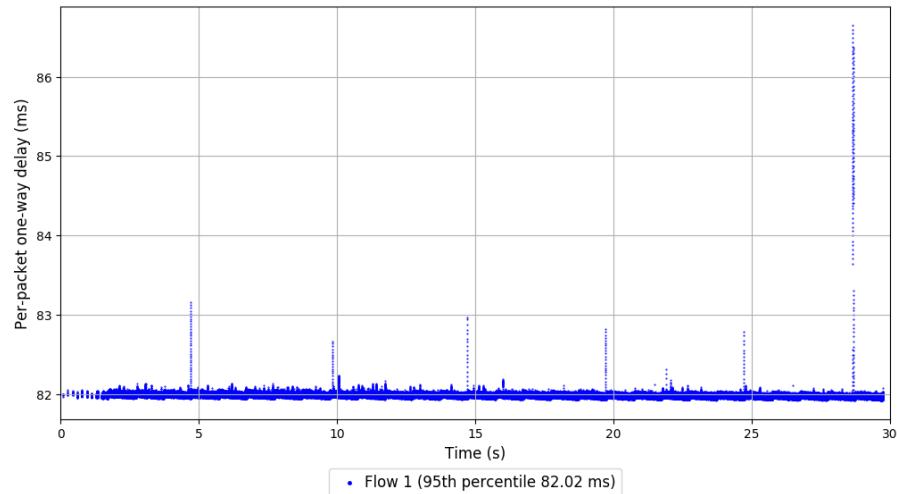
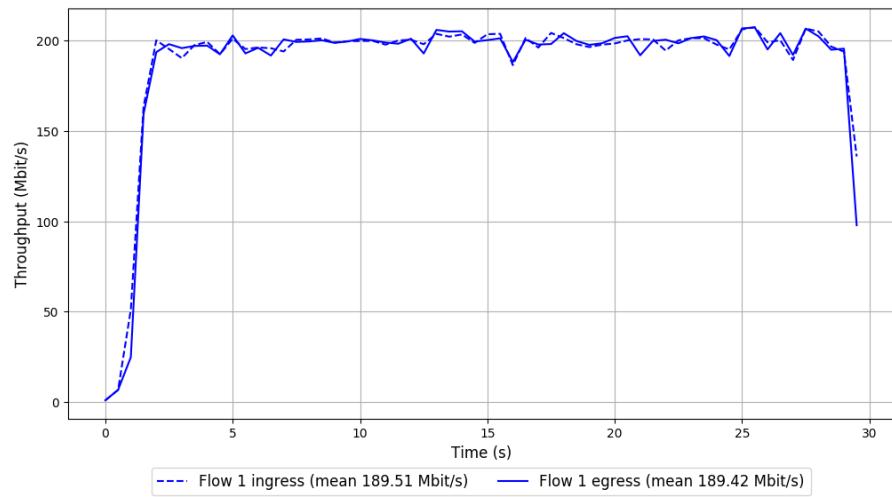


Run 9: Statistics of Indigo-calib

```
Start at: 2017-11-21 02:02:08
End at: 2017-11-21 02:02:38
Local clock offset: -0.251 ms
Remote clock offset: 2.735 ms

# Below is generated by plot.py at 2017-11-21 06:05:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.42 Mbit/s
95th percentile per-packet one-way delay: 82.018 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 189.42 Mbit/s
95th percentile per-packet one-way delay: 82.018 ms
Loss rate: 0.62%
```

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

```
Start at: 2017-11-21 02:20:19
End at: 2017-11-21 02:20:49
Local clock offset: -0.171 ms
Remote clock offset: -2.978 ms

# Below is generated by plot.py at 2017-11-21 06:05:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.13 Mbit/s
95th percentile per-packet one-way delay: 85.144 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 191.13 Mbit/s
95th percentile per-packet one-way delay: 85.144 ms
Loss rate: 0.60%
```

Run 10: Report of Indigo-calib — Data Link

