

## Pantheon Report

Generated at 2019-07-17 21:00:35 (UTC).  
Data path: GCE Iowa on `ens4` (*remote*) → GCE Sydney on `ens4` (*local*).  
Repeated the test of 24 congestion control schemes 5 times.  
Each test lasted for 30 seconds running 1 flow.  
NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

System info:

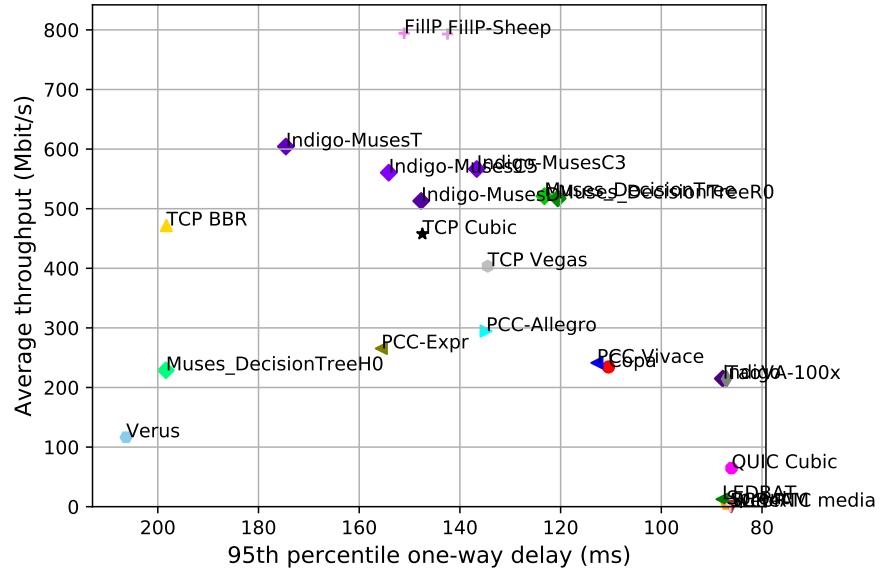
```
Linux 4.15.0-1036-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

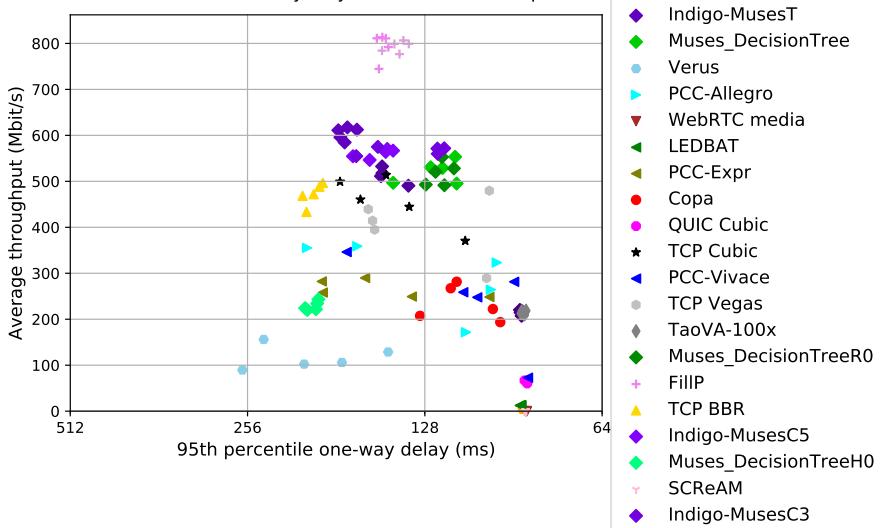
```
branch: muses @ de42328552b3776a75a932a94dfaf722537b0ec
third_party/fillp @ d6da1459332fce56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fc45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd
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/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
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/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4  
third\_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from GCE Iowa to GCE Sydney, 5 runs of 30s each per scheme  
(mean of all runs by scheme)



test from GCE Iowa to GCE Sydney, 5 runs of 30s each per scheme



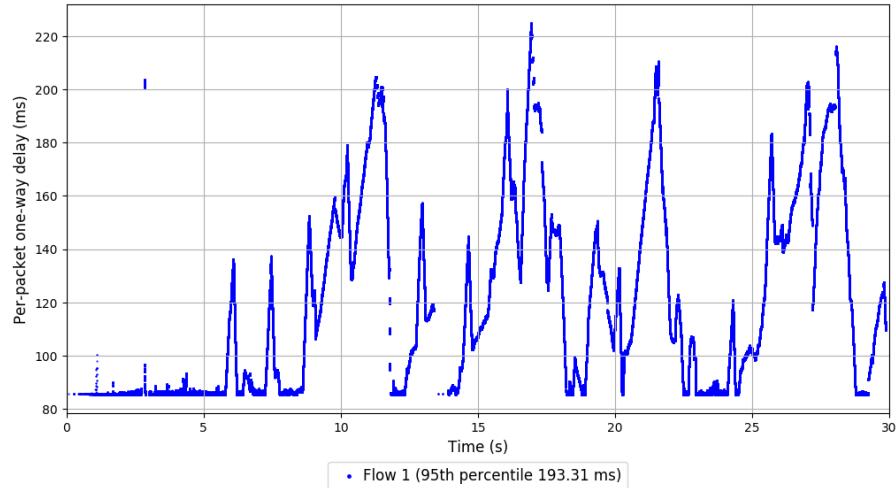
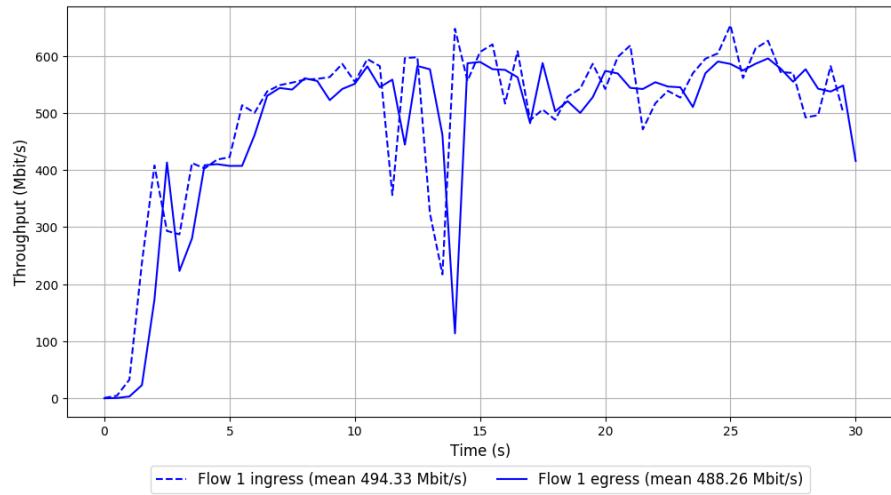
| scheme               | # runs | mean avg tput (Mbit/s)<br>flow 1 | mean 95th-%ile delay (ms)<br>flow 1 | mean loss rate (%)<br>flow 1 |
|----------------------|--------|----------------------------------|-------------------------------------|------------------------------|
| TCP BBR              | 5      | 471.73                           | 198.29                              | 2.31                         |
| Copa                 | 5      | 234.43                           | 110.50                              | 0.83                         |
| TCP Cubic            | 5      | 457.66                           | 147.45                              | 0.92                         |
| FillP                | 5      | 794.46                           | 151.08                              | 2.47                         |
| FillP-Sheep          | 5      | 793.11                           | 142.45                              | 1.75                         |
| Indigo               | 5      | 214.91                           | 87.79                               | 0.85                         |
| Indigo-MusesC3       | 5      | 566.54                           | 136.67                              | 0.82                         |
| Indigo-MusesC5       | 5      | 560.45                           | 154.14                              | 1.08                         |
| Indigo-MusesD        | 4      | 513.00                           | 147.70                              | 0.91                         |
| Indigo-MusesT        | 5      | 604.29                           | 174.57                              | 1.11                         |
| LEDBAT               | 5      | 12.47                            | 87.95                               | 1.15                         |
| Muses_DecisionTree   | 5      | 520.98                           | 123.23                              | 1.18                         |
| Muses_DecisionTreeH0 | 5      | 228.75                           | 198.39                              | 14.30                        |
| Muses_DecisionTreeR0 | 5      | 517.21                           | 120.56                              | 1.14                         |
| PCC-Allegro          | 5      | 294.64                           | 134.80                              | 1.59                         |
| PCC-Expr             | 5      | 265.51                           | 155.61                              | 1.47                         |
| QUIC Cubic           | 4      | 64.64                            | 86.06                               | 0.91                         |
| SCReAM               | 5      | 0.22                             | 86.34                               | 0.54                         |
| Sprout               | 5      | 4.11                             | 87.03                               | 0.57                         |
| TaoVA-100x           | 5      | 214.28                           | 87.06                               | 1.07                         |
| TCP Vegas            | 5      | 403.52                           | 134.49                              | 0.70                         |
| Verus                | 5      | 116.50                           | 206.30                              | 3.00                         |
| PCC-Vivace           | 5      | 241.35                           | 112.79                              | 1.09                         |
| WebRTC media         | 4      | 0.05                             | 86.09                               | 0.00                         |

Run 1: Statistics of TCP BBR

```
Start at: 2019-07-17 16:11:25
End at: 2019-07-17 16:11:55
Local clock offset: 18.625 ms
Remote clock offset: 19.575 ms

# Below is generated by plot.py at 2019-07-17 19:13:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 488.26 Mbit/s
95th percentile per-packet one-way delay: 193.308 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 488.26 Mbit/s
95th percentile per-packet one-way delay: 193.308 ms
Loss rate: 1.80%
```

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

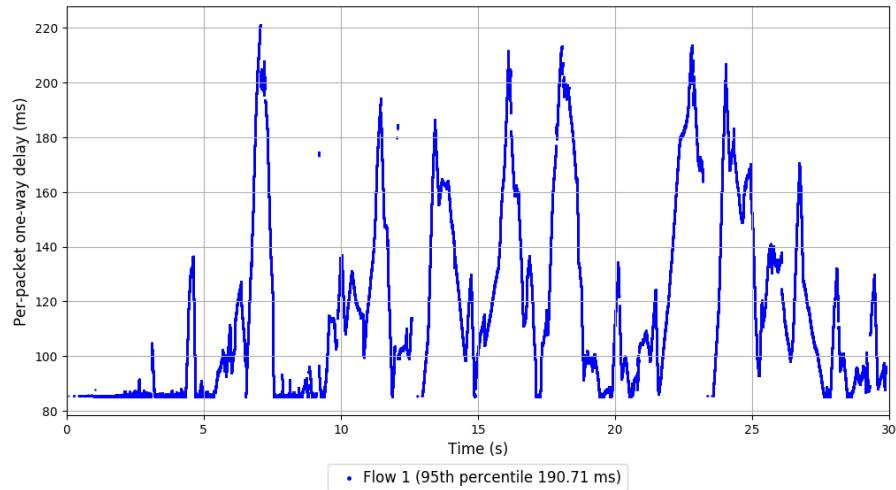
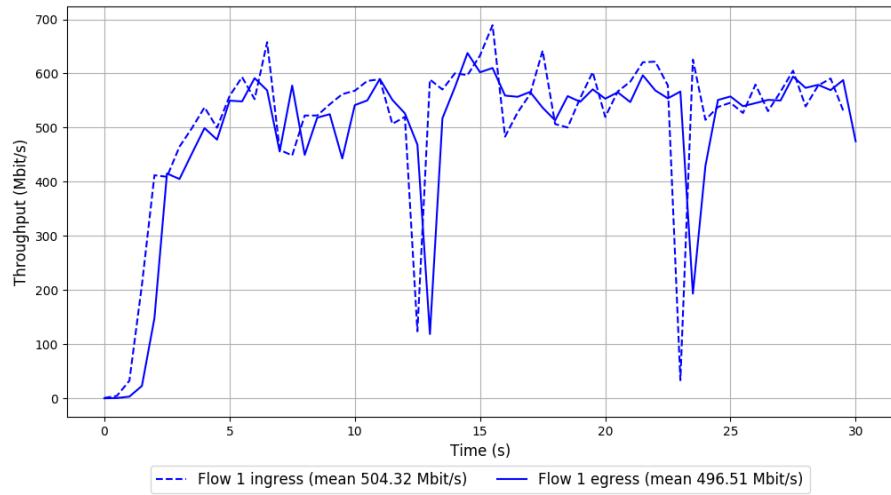


Run 2: Statistics of TCP BBR

```
Start at: 2019-07-17 16:46:49
End at: 2019-07-17 16:47:19
Local clock offset: 25.608 ms
Remote clock offset: 26.898 ms

# Below is generated by plot.py at 2019-07-17 19:13:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 496.51 Mbit/s
95th percentile per-packet one-way delay: 190.706 ms
Loss rate: 2.12%
-- Flow 1:
Average throughput: 496.51 Mbit/s
95th percentile per-packet one-way delay: 190.706 ms
Loss rate: 2.12%
```

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

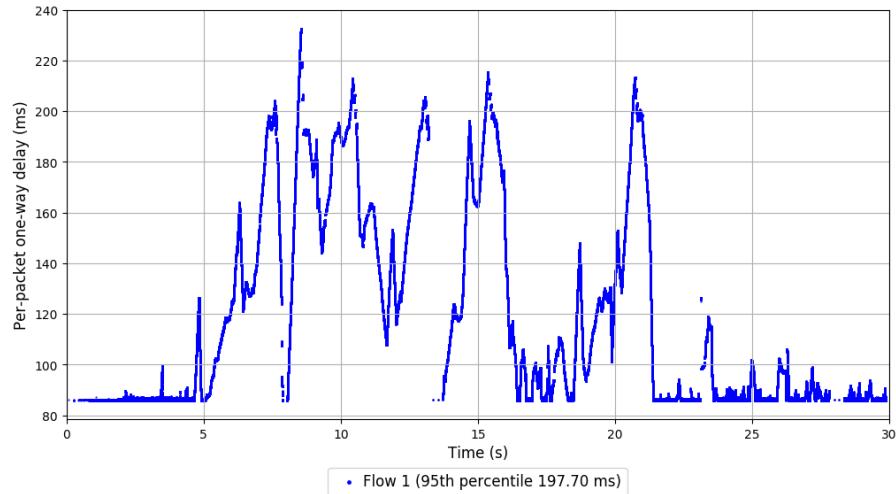
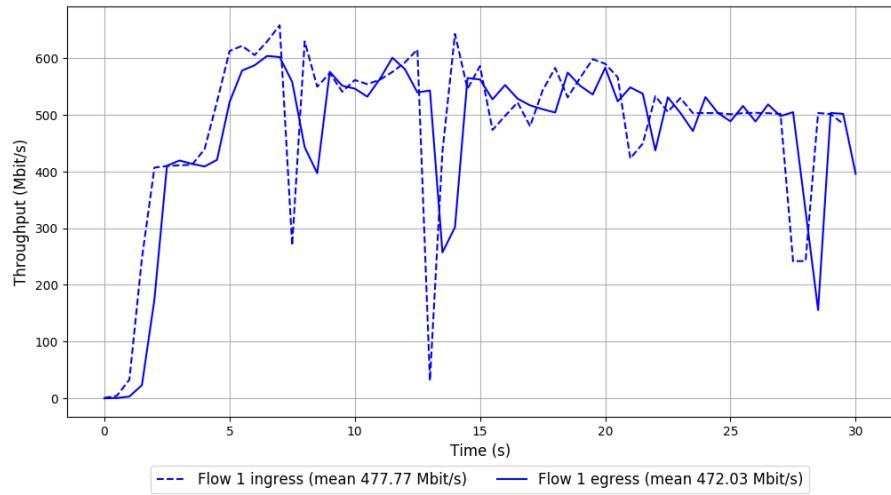


Run 3: Statistics of TCP BBR

```
Start at: 2019-07-17 17:22:05
End at: 2019-07-17 17:22:35
Local clock offset: 10.149 ms
Remote clock offset: 10.445 ms

# Below is generated by plot.py at 2019-07-17 19:13:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 472.03 Mbit/s
95th percentile per-packet one-way delay: 197.700 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 472.03 Mbit/s
95th percentile per-packet one-way delay: 197.700 ms
Loss rate: 1.77%
```

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

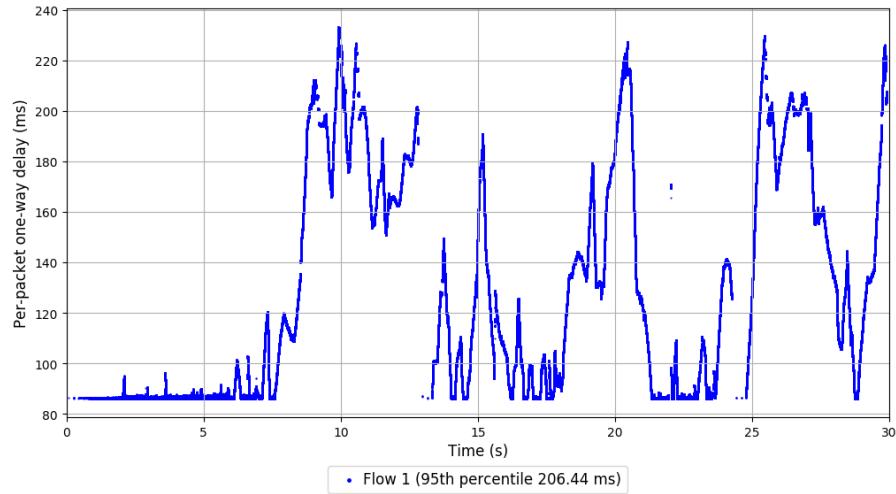
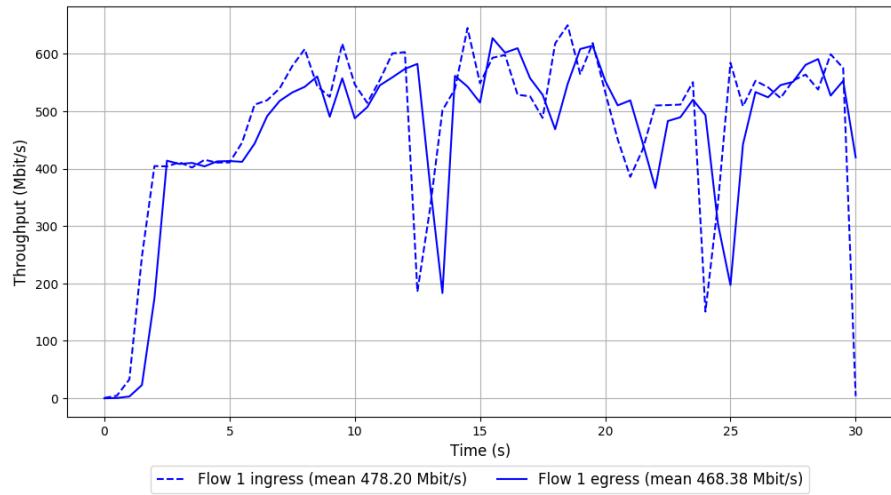


Run 4: Statistics of TCP BBR

```
Start at: 2019-07-17 17:57:36
End at: 2019-07-17 17:58:06
Local clock offset: 3.924 ms
Remote clock offset: 3.86 ms

# Below is generated by plot.py at 2019-07-17 19:13:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 468.38 Mbit/s
95th percentile per-packet one-way delay: 206.444 ms
Loss rate: 2.62%
-- Flow 1:
Average throughput: 468.38 Mbit/s
95th percentile per-packet one-way delay: 206.444 ms
Loss rate: 2.62%
```

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

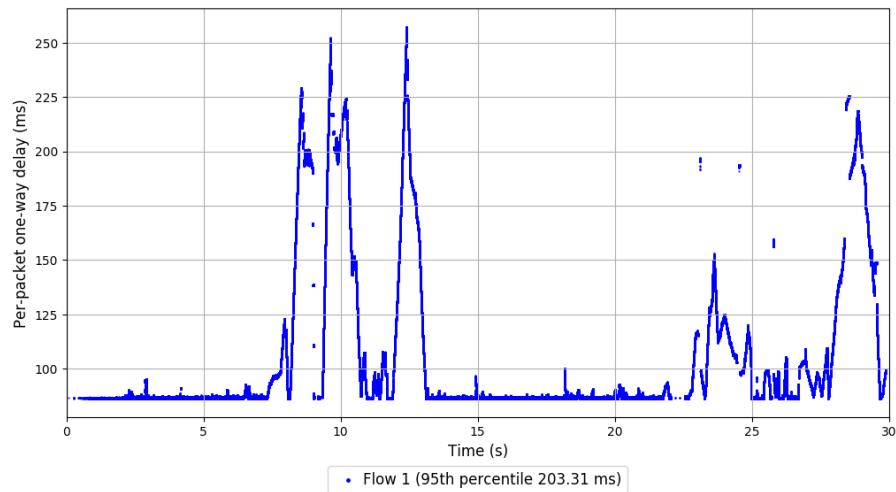
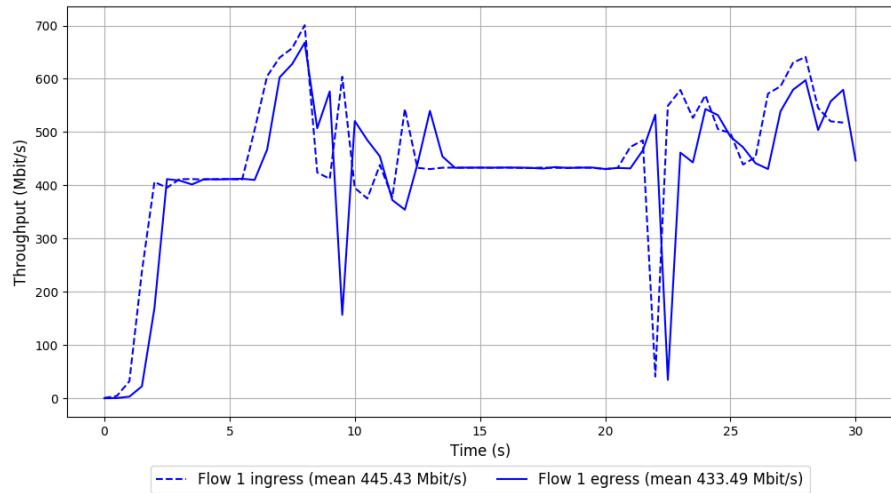


Run 5: Statistics of TCP BBR

```
Start at: 2019-07-17 18:32:59
End at: 2019-07-17 18:33:29
Local clock offset: 2.006 ms
Remote clock offset: 1.89 ms

# Below is generated by plot.py at 2019-07-17 19:13:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 433.49 Mbit/s
95th percentile per-packet one-way delay: 203.311 ms
Loss rate: 3.24%
-- Flow 1:
Average throughput: 433.49 Mbit/s
95th percentile per-packet one-way delay: 203.311 ms
Loss rate: 3.24%
```

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

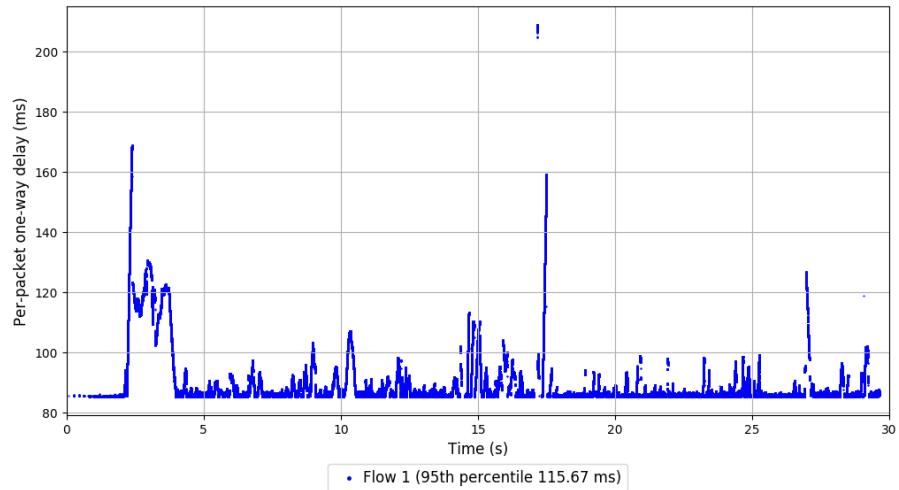
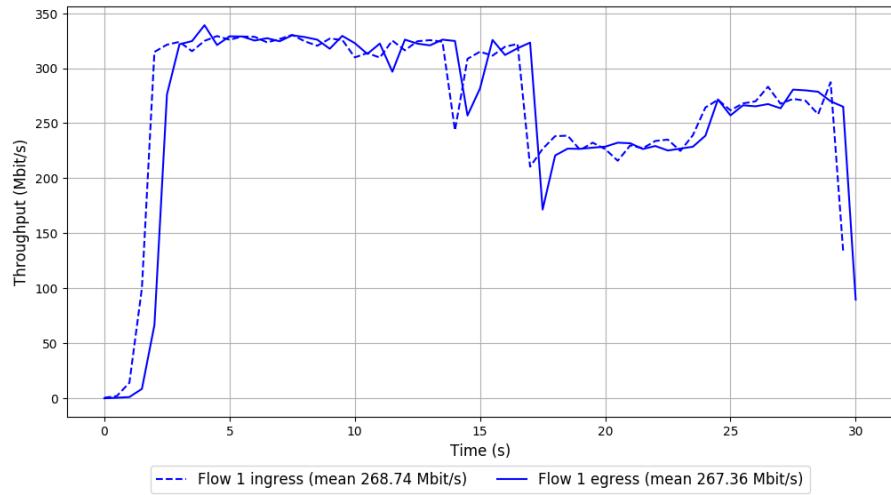


Run 1: Statistics of Copa

```
Start at: 2019-07-17 16:01:43
End at: 2019-07-17 16:02:13
Local clock offset: 9.511 ms
Remote clock offset: 10.403 ms

# Below is generated by plot.py at 2019-07-17 19:13:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 267.36 Mbit/s
95th percentile per-packet one-way delay: 115.674 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 267.36 Mbit/s
95th percentile per-packet one-way delay: 115.674 ms
Loss rate: 1.09%
```

## Run 1: Report of Copa — Data Link

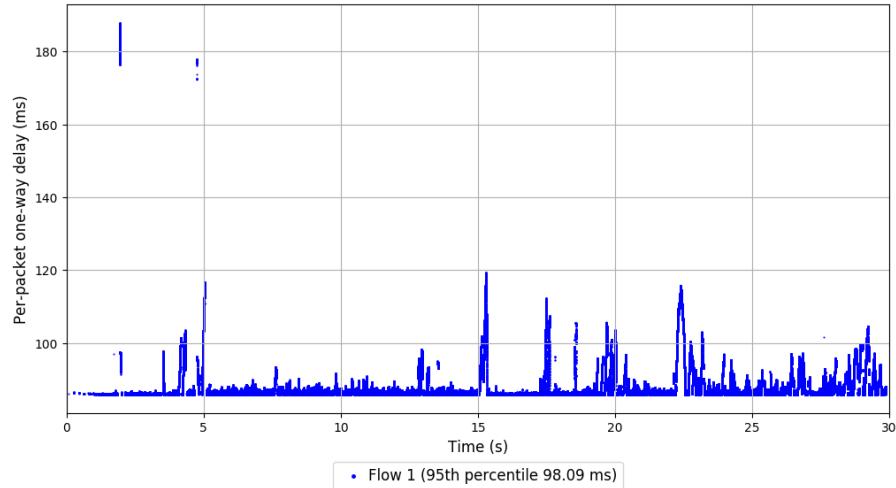
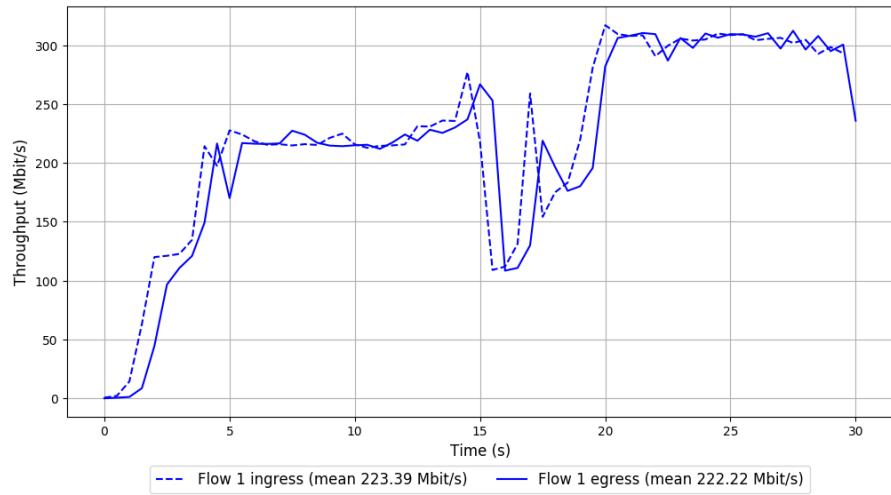


Run 2: Statistics of Copa

```
Start at: 2019-07-17 16:36:56
End at: 2019-07-17 16:37:26
Local clock offset: 20.776 ms
Remote clock offset: 21.67 ms

# Below is generated by plot.py at 2019-07-17 19:13:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.22 Mbit/s
95th percentile per-packet one-way delay: 98.087 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 222.22 Mbit/s
95th percentile per-packet one-way delay: 98.087 ms
Loss rate: 1.09%
```

## Run 2: Report of Copa — Data Link

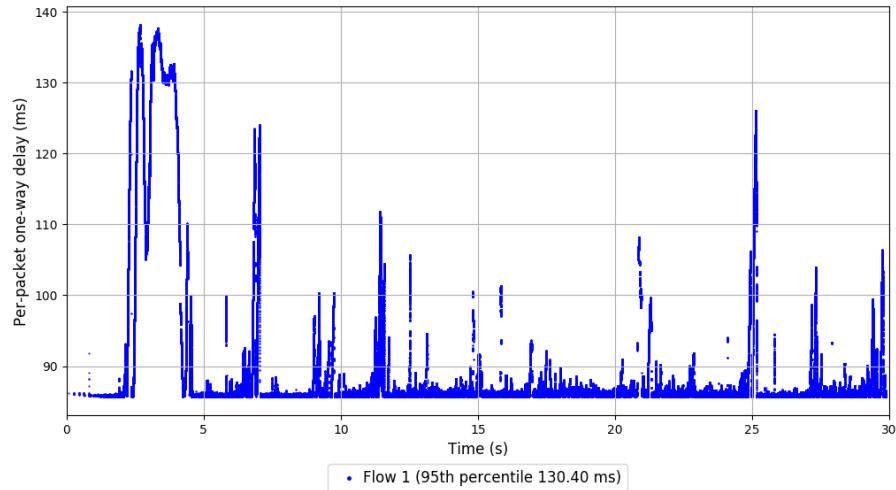
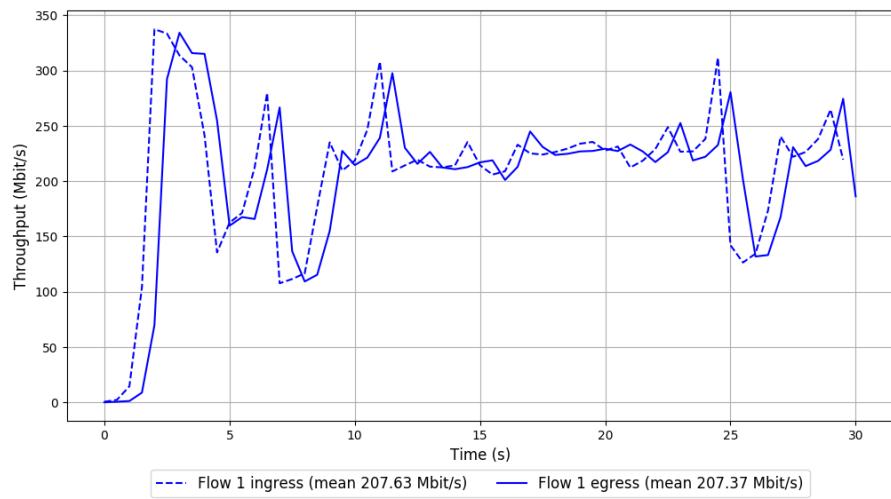


Run 3: Statistics of Copa

```
Start at: 2019-07-17 17:12:24
End at: 2019-07-17 17:12:54
Local clock offset: 16.499 ms
Remote clock offset: 16.96 ms

# Below is generated by plot.py at 2019-07-17 19:13:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 207.37 Mbit/s
95th percentile per-packet one-way delay: 130.402 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 207.37 Mbit/s
95th percentile per-packet one-way delay: 130.402 ms
Loss rate: 0.70%
```

### Run 3: Report of Copa — Data Link

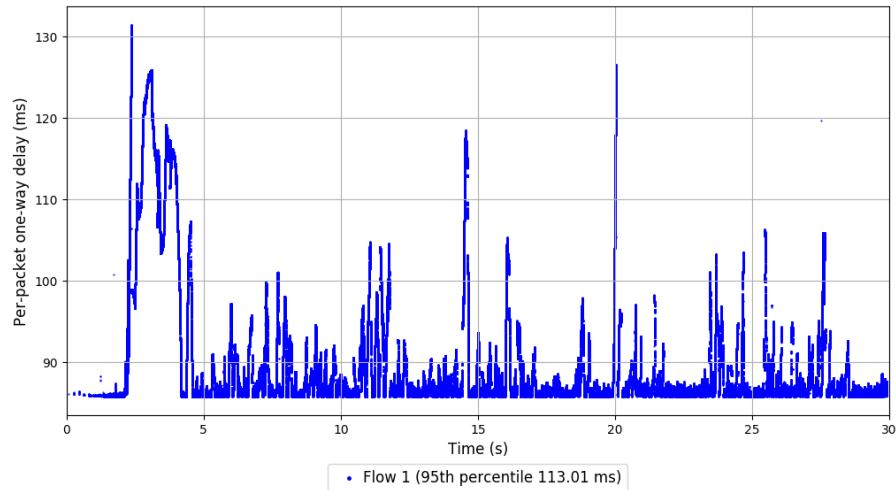
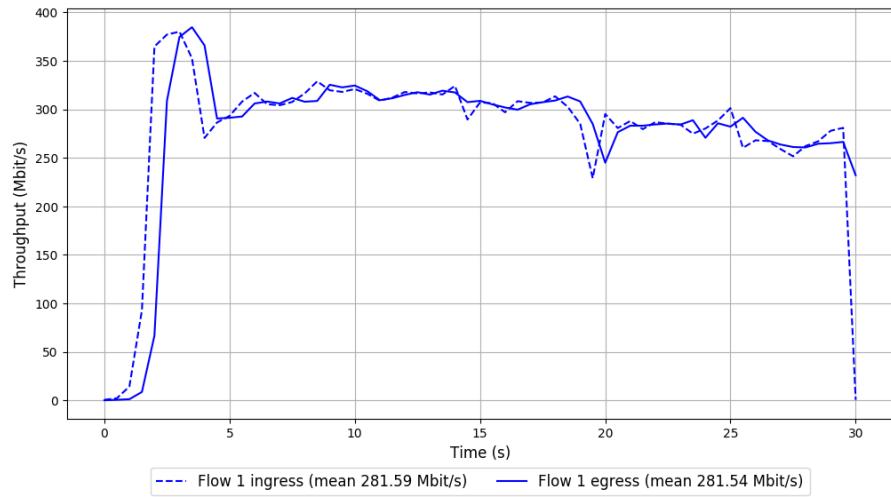


Run 4: Statistics of Copa

```
Start at: 2019-07-17 17:47:38
End at: 2019-07-17 17:48:08
Local clock offset: 4.462 ms
Remote clock offset: 4.651 ms

# Below is generated by plot.py at 2019-07-17 19:21:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 281.54 Mbit/s
95th percentile per-packet one-way delay: 113.012 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 281.54 Mbit/s
95th percentile per-packet one-way delay: 113.012 ms
Loss rate: 0.59%
```

## Run 4: Report of Copa — Data Link

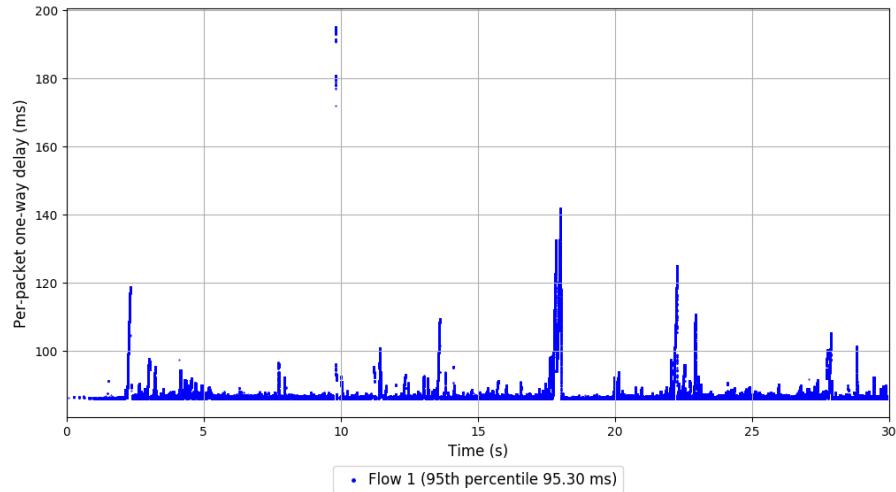
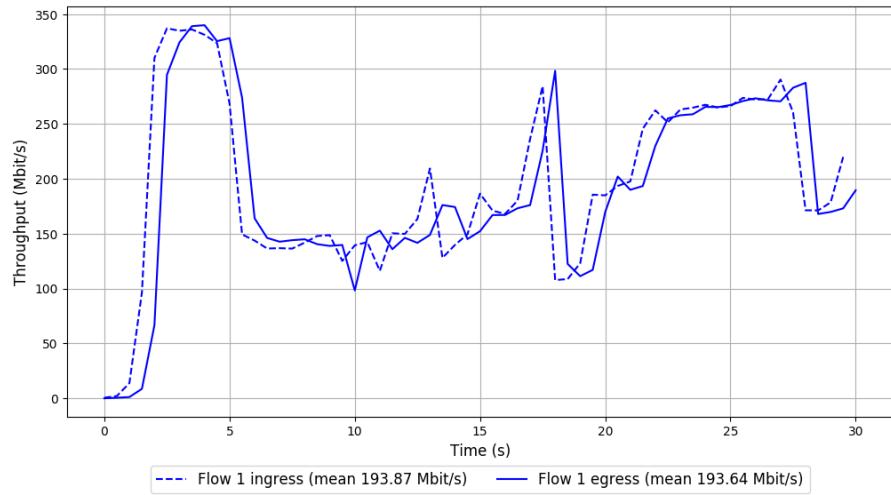


Run 5: Statistics of Copa

```
Start at: 2019-07-17 18:23:17
End at: 2019-07-17 18:23:47
Local clock offset: 1.91 ms
Remote clock offset: 2.004 ms

# Below is generated by plot.py at 2019-07-17 19:21:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 193.64 Mbit/s
95th percentile per-packet one-way delay: 95.303 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 193.64 Mbit/s
95th percentile per-packet one-way delay: 95.303 ms
Loss rate: 0.69%
```

### Run 5: Report of Copa — Data Link

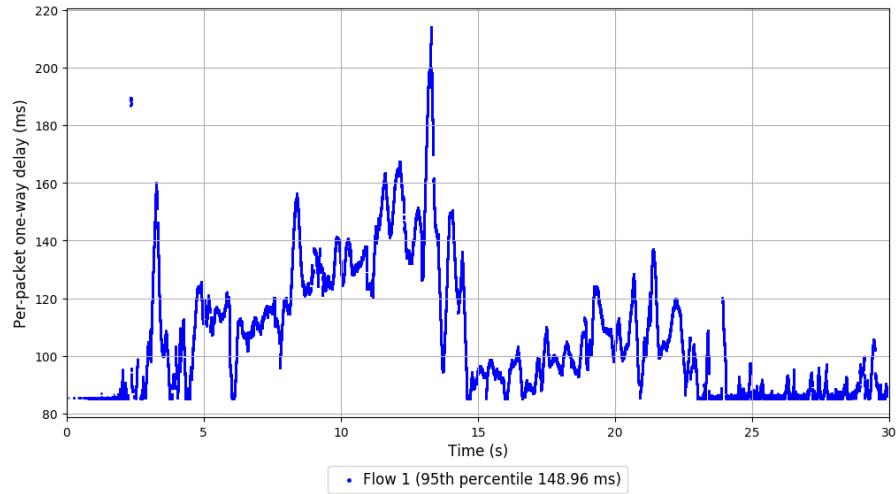
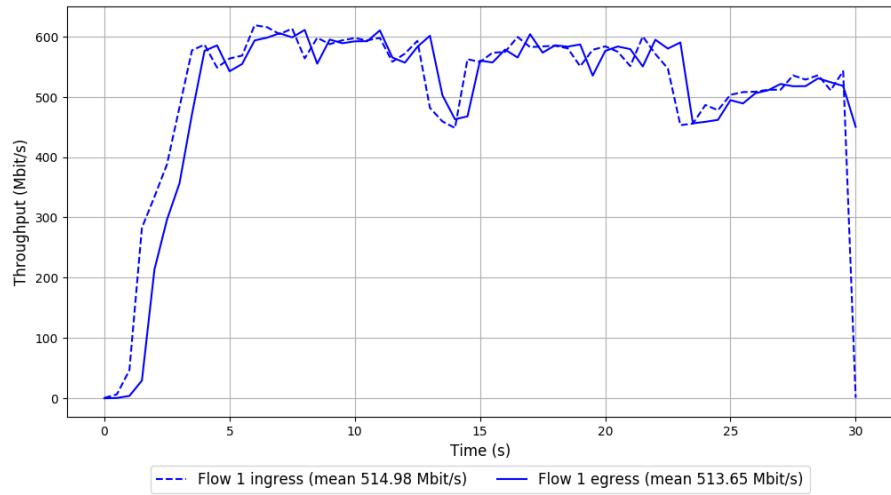


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-07-17 16:21:26
End at: 2019-07-17 16:21:56
Local clock offset: 17.98 ms
Remote clock offset: 19.155 ms

# Below is generated by plot.py at 2019-07-17 19:22:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 513.65 Mbit/s
95th percentile per-packet one-way delay: 148.962 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 513.65 Mbit/s
95th percentile per-packet one-way delay: 148.962 ms
Loss rate: 0.83%
```

Run 1: Report of TCP Cubic — Data Link

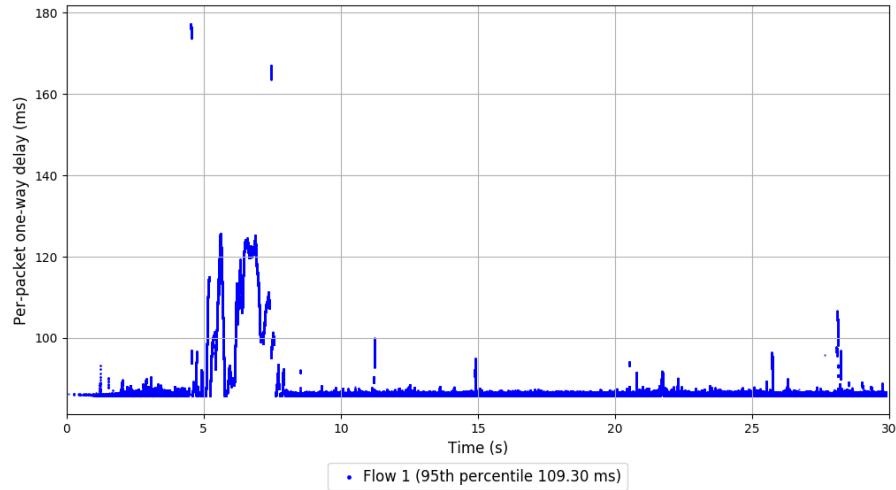
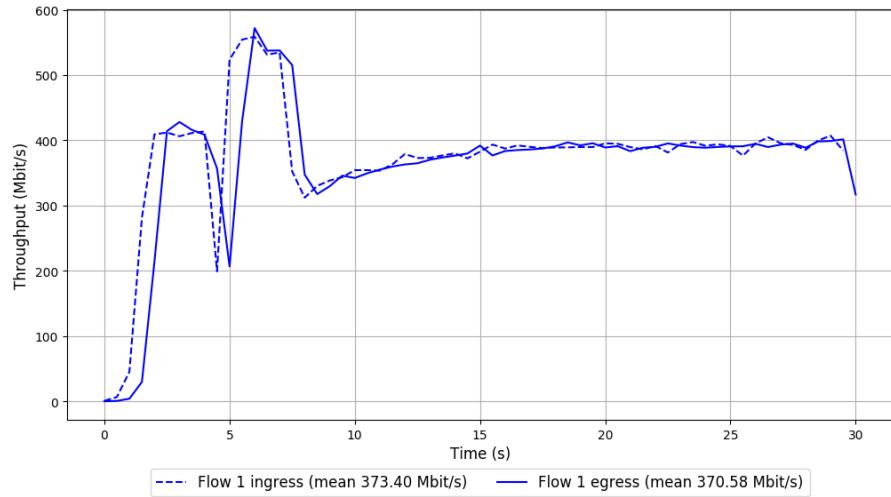


Run 2: Statistics of TCP Cubic

```
Start at: 2019-07-17 16:56:53
End at: 2019-07-17 16:57:23
Local clock offset: 36.038 ms
Remote clock offset: 37.145 ms

# Below is generated by plot.py at 2019-07-17 19:22:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 370.58 Mbit/s
95th percentile per-packet one-way delay: 109.298 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 370.58 Mbit/s
95th percentile per-packet one-way delay: 109.298 ms
Loss rate: 1.32%
```

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

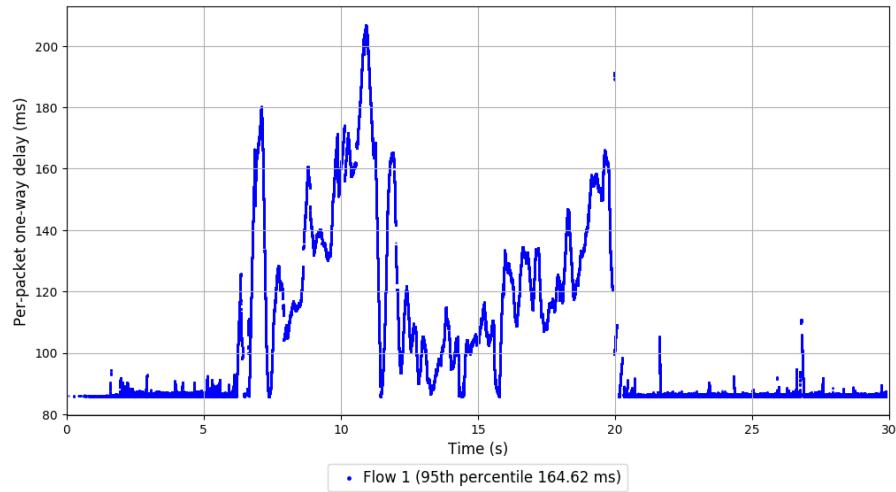
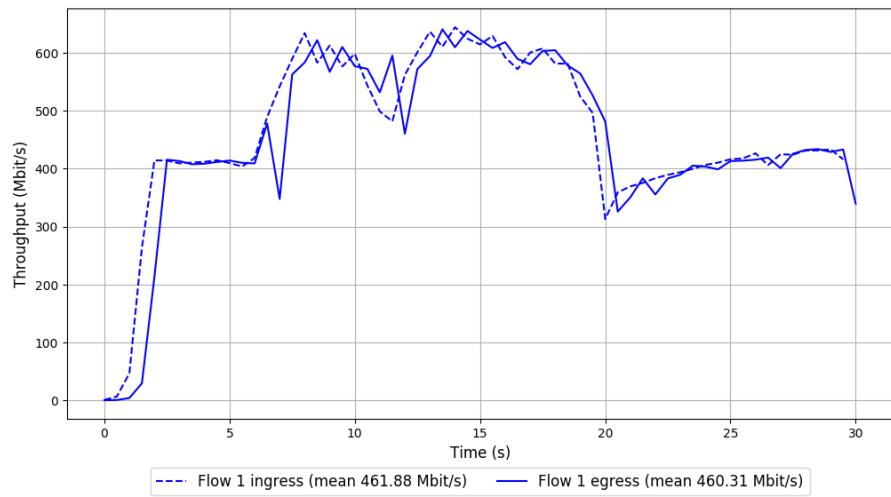


```
Run 3: Statistics of TCP Cubic
```

```
Start at: 2019-07-17 17:32:08
End at: 2019-07-17 17:32:38
Local clock offset: 9.683 ms
Remote clock offset: 10.394 ms

# Below is generated by plot.py at 2019-07-17 19:22:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 460.31 Mbit/s
95th percentile per-packet one-way delay: 164.625 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 460.31 Mbit/s
95th percentile per-packet one-way delay: 164.625 ms
Loss rate: 0.91%
```

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

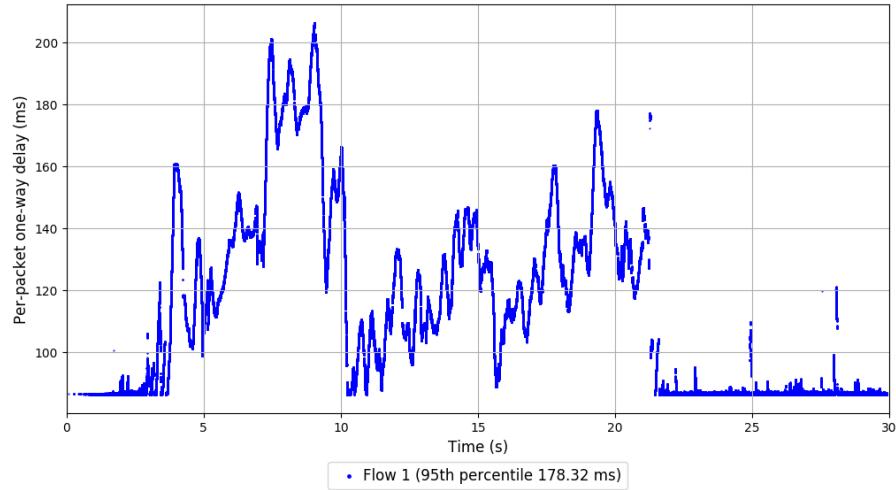
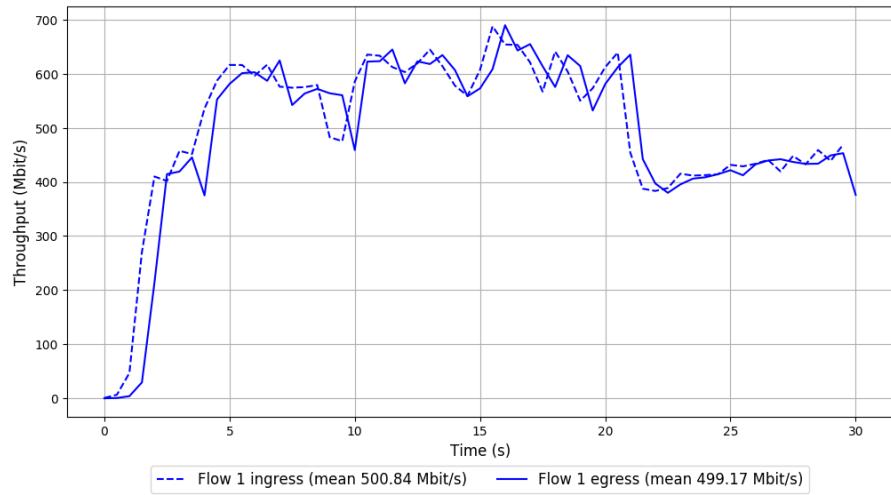


Run 4: Statistics of TCP Cubic

```
Start at: 2019-07-17 18:07:37
End at: 2019-07-17 18:08:07
Local clock offset: 4.761 ms
Remote clock offset: 4.611 ms

# Below is generated by plot.py at 2019-07-17 19:22:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 499.17 Mbit/s
95th percentile per-packet one-way delay: 178.316 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 499.17 Mbit/s
95th percentile per-packet one-way delay: 178.316 ms
Loss rate: 0.91%
```

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

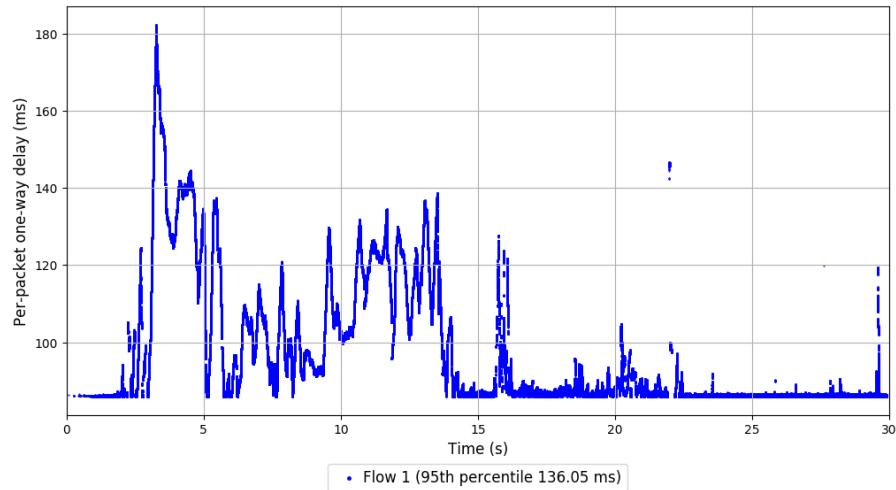
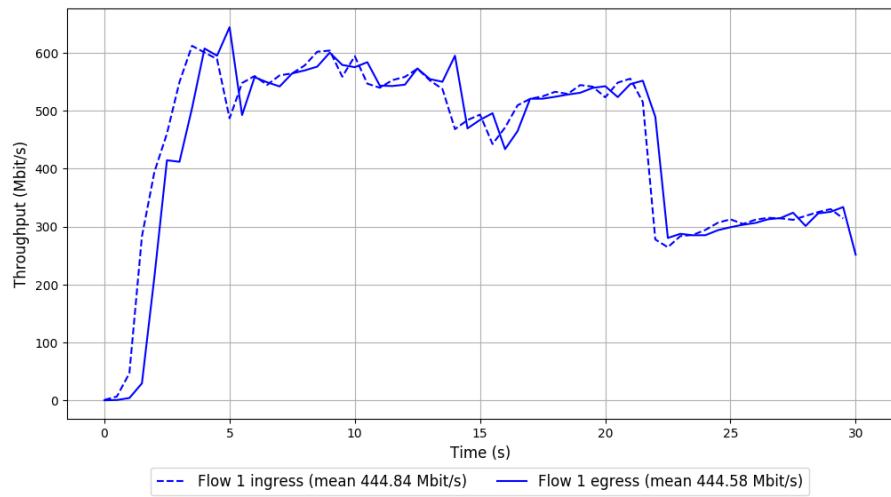


Run 5: Statistics of TCP Cubic

```
Start at: 2019-07-17 18:43:06
End at: 2019-07-17 18:43:36
Local clock offset: 2.441 ms
Remote clock offset: 2.297 ms

# Below is generated by plot.py at 2019-07-17 19:22:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 444.58 Mbit/s
95th percentile per-packet one-way delay: 136.047 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 444.58 Mbit/s
95th percentile per-packet one-way delay: 136.047 ms
Loss rate: 0.63%
```

Run 5: Report of TCP Cubic — Data Link

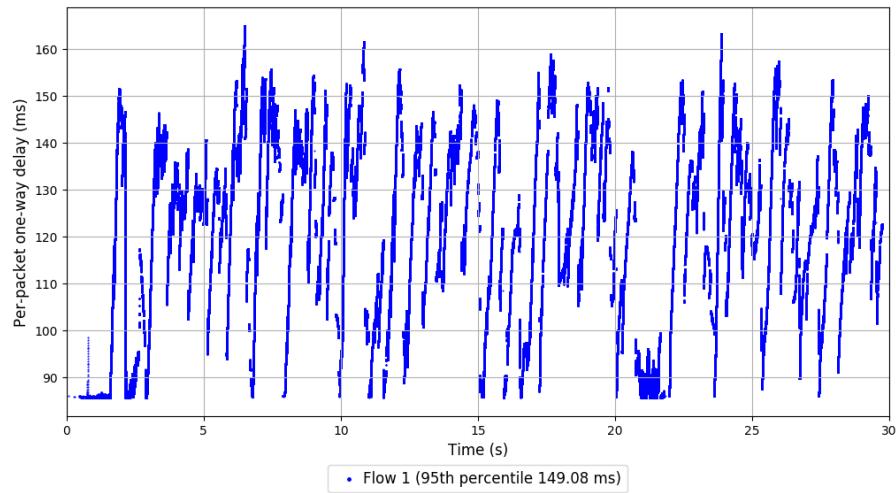
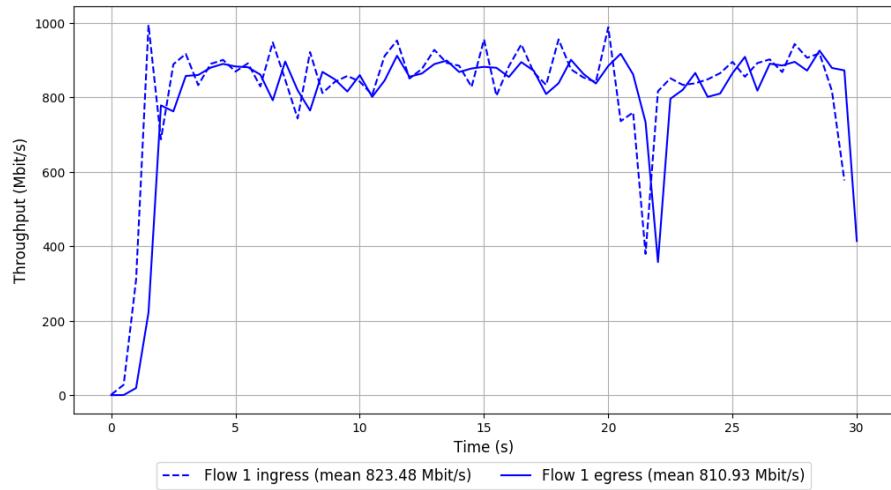


```
Run 1: Statistics of FillP

Start at: 2019-07-17 16:27:42
End at: 2019-07-17 16:28:12
Local clock offset: 26.785 ms
Remote clock offset: 28.07 ms

# Below is generated by plot.py at 2019-07-17 19:31:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 810.93 Mbit/s
95th percentile per-packet one-way delay: 149.079 ms
Loss rate: 2.06%
-- Flow 1:
Average throughput: 810.93 Mbit/s
95th percentile per-packet one-way delay: 149.079 ms
Loss rate: 2.06%
```

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

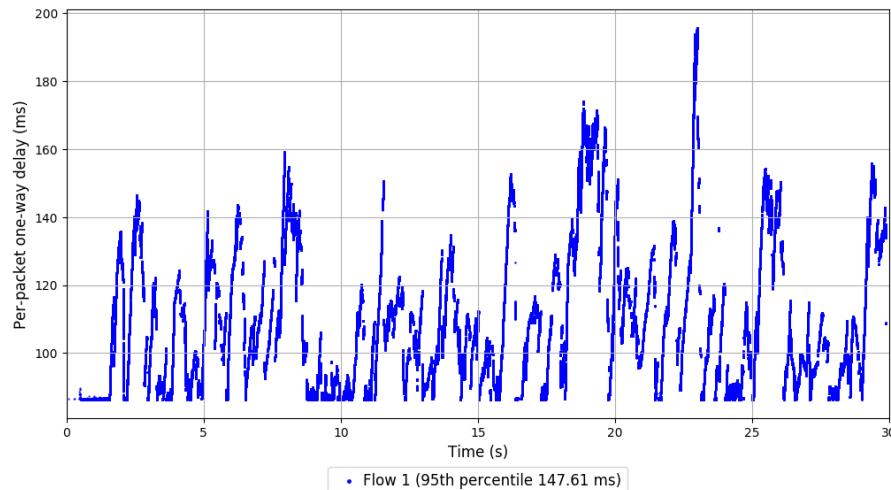
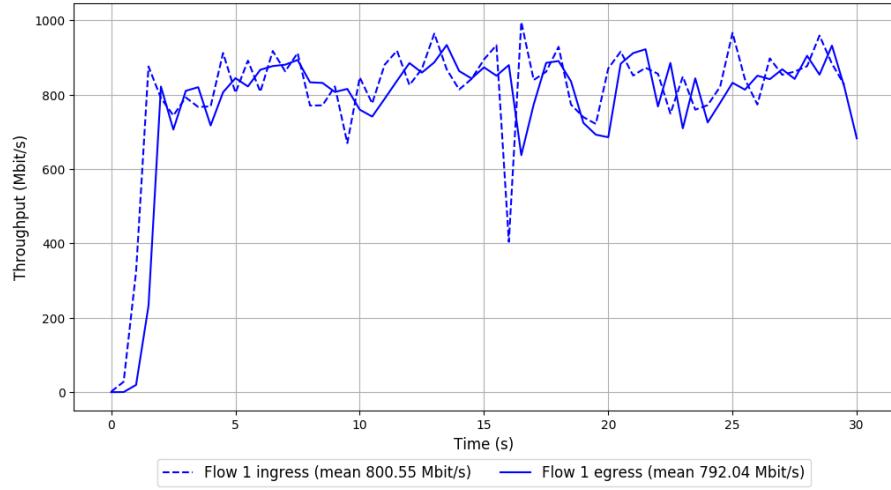


Run 2: Statistics of FillP

```
Start at: 2019-07-17 17:03:04
End at: 2019-07-17 17:03:34
Local clock offset: 41.6 ms
Remote clock offset: 42.002 ms

# Below is generated by plot.py at 2019-07-17 19:38:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 792.04 Mbit/s
95th percentile per-packet one-way delay: 147.608 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 792.04 Mbit/s
95th percentile per-packet one-way delay: 147.608 ms
Loss rate: 1.63%
```

## Run 2: Report of FillP — Data Link

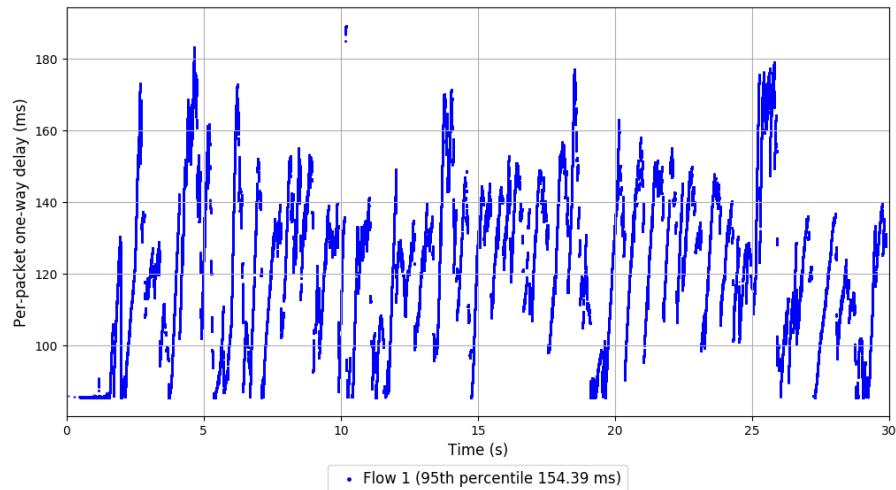
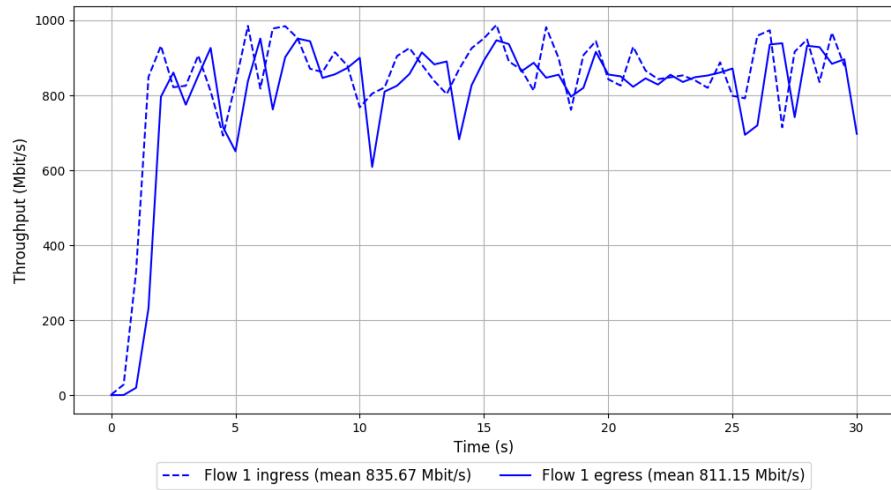


Run 3: Statistics of FillP

```
Start at: 2019-07-17 17:38:18
End at: 2019-07-17 17:38:48
Local clock offset: 9.06 ms
Remote clock offset: 9.702 ms

# Below is generated by plot.py at 2019-07-17 19:39:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 811.15 Mbit/s
95th percentile per-packet one-way delay: 154.394 ms
Loss rate: 3.50%
-- Flow 1:
Average throughput: 811.15 Mbit/s
95th percentile per-packet one-way delay: 154.394 ms
Loss rate: 3.50%
```

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

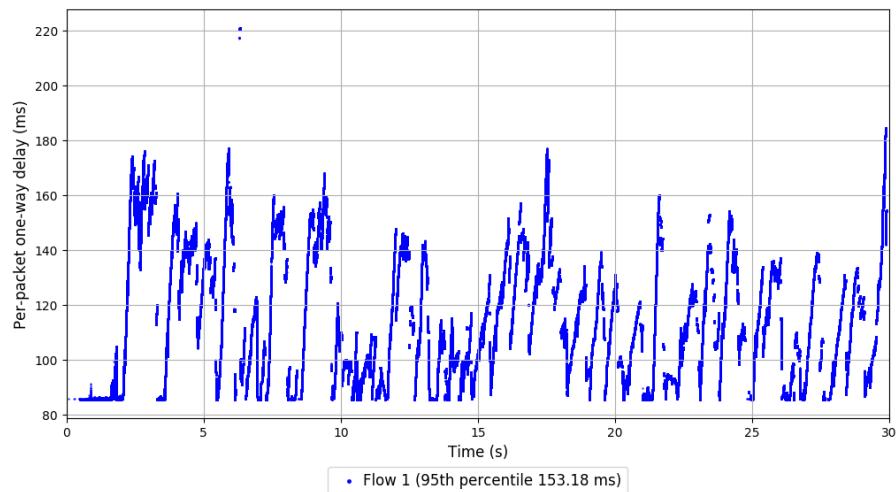
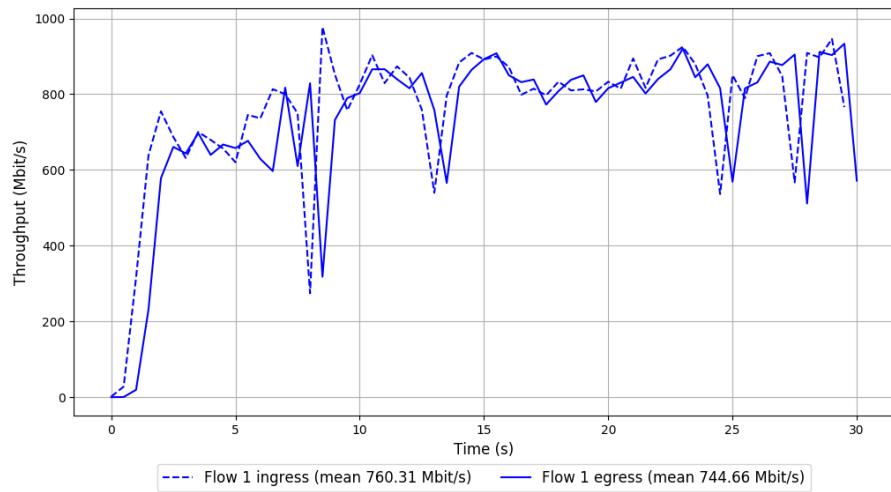


Run 4: Statistics of FillP

```
Start at: 2019-07-17 18:13:52
End at: 2019-07-17 18:14:22
Local clock offset: 3.302 ms
Remote clock offset: 3.727 ms

# Below is generated by plot.py at 2019-07-17 19:39:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 744.66 Mbit/s
95th percentile per-packet one-way delay: 153.179 ms
Loss rate: 2.63%
-- Flow 1:
Average throughput: 744.66 Mbit/s
95th percentile per-packet one-way delay: 153.179 ms
Loss rate: 2.63%
```

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

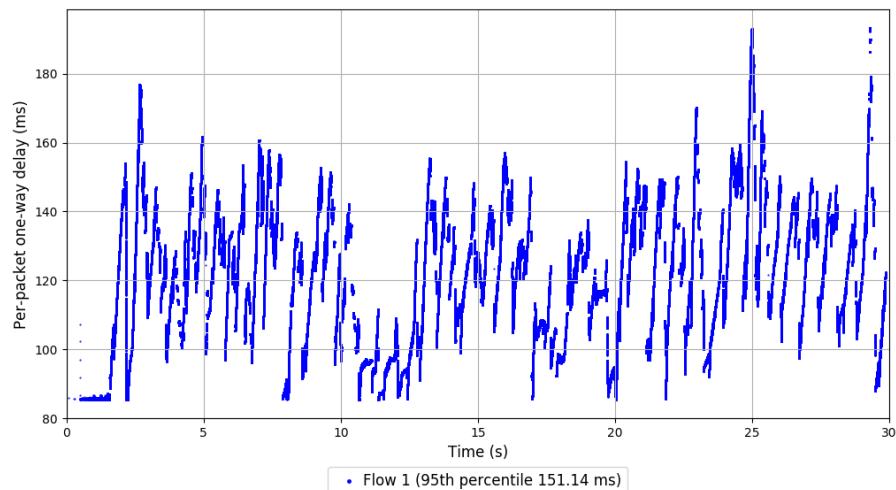
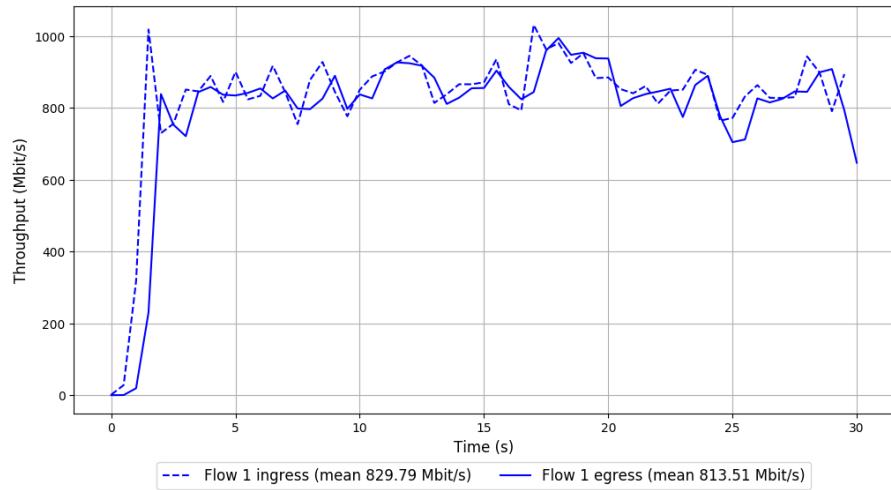


```
Run 5: Statistics of FillP
```

```
Start at: 2019-07-17 18:49:27
End at: 2019-07-17 18:49:57
Local clock offset: 1.211 ms
Remote clock offset: 1.576 ms

# Below is generated by plot.py at 2019-07-17 19:40:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 813.51 Mbit/s
95th percentile per-packet one-way delay: 151.137 ms
Loss rate: 2.53%
-- Flow 1:
Average throughput: 813.51 Mbit/s
95th percentile per-packet one-way delay: 151.137 ms
Loss rate: 2.53%
```

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

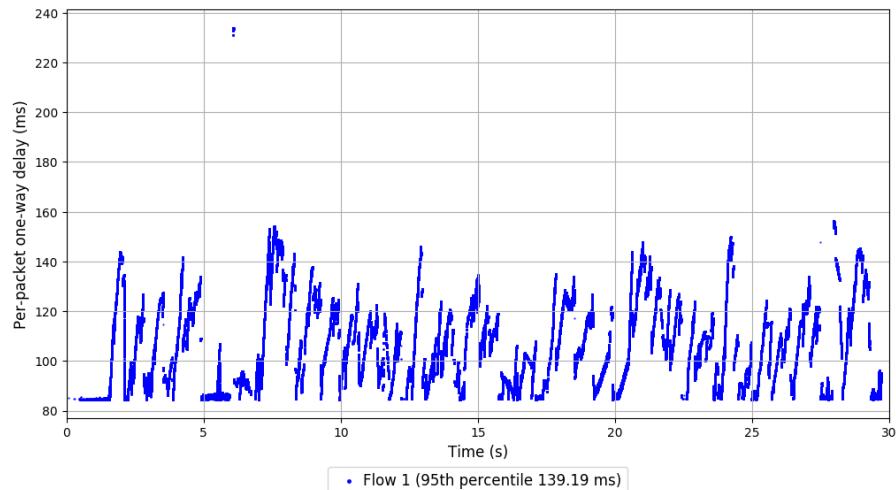
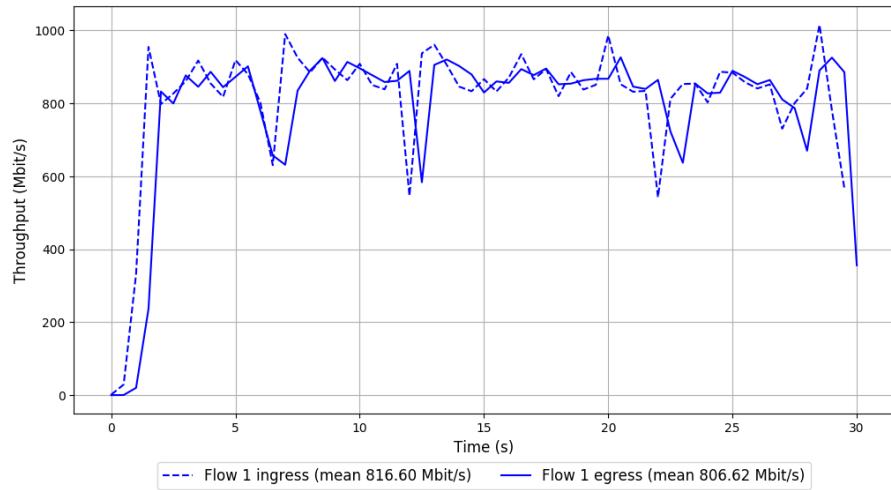


Run 1: Statistics of FillP-Sheep

```
Start at: 2019-07-17 15:56:22
End at: 2019-07-17 15:56:52
Local clock offset: 4.243 ms
Remote clock offset: 5.511 ms

# Below is generated by plot.py at 2019-07-17 19:40:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 806.62 Mbit/s
95th percentile per-packet one-way delay: 139.186 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 806.62 Mbit/s
95th percentile per-packet one-way delay: 139.186 ms
Loss rate: 1.80%
```

## Run 1: Report of FillP-Sheep — Data Link

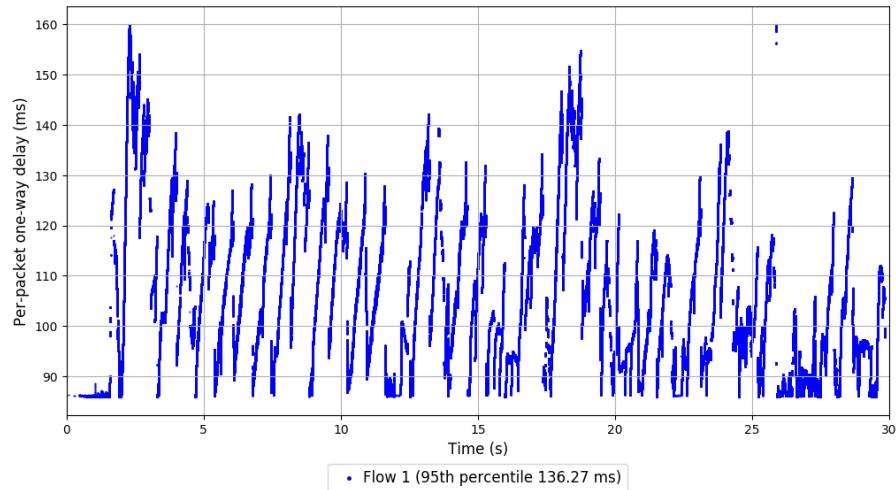
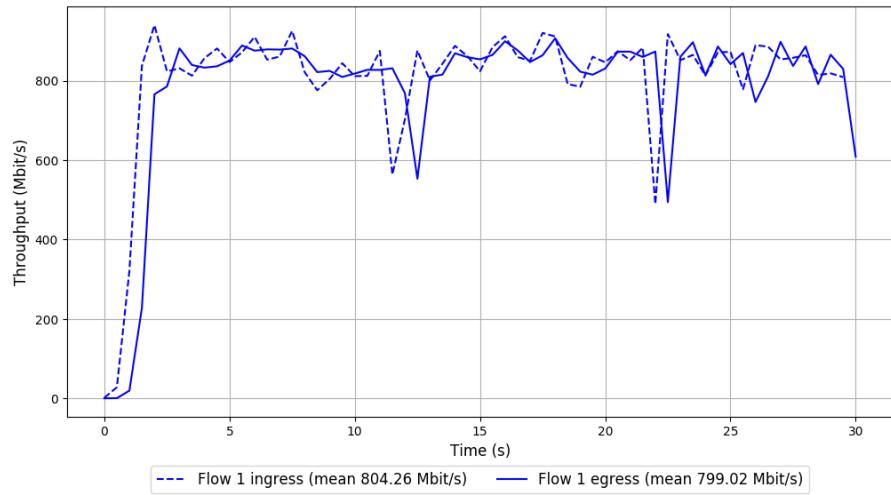


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-07-17 16:31:02
End at: 2019-07-17 16:31:32
Local clock offset: 24.616 ms
Remote clock offset: 25.097 ms

# Below is generated by plot.py at 2019-07-17 19:40:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 799.02 Mbit/s
95th percentile per-packet one-way delay: 136.267 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 799.02 Mbit/s
95th percentile per-packet one-way delay: 136.267 ms
Loss rate: 1.23%
```

Run 2: Report of FillP-Sheep — Data Link

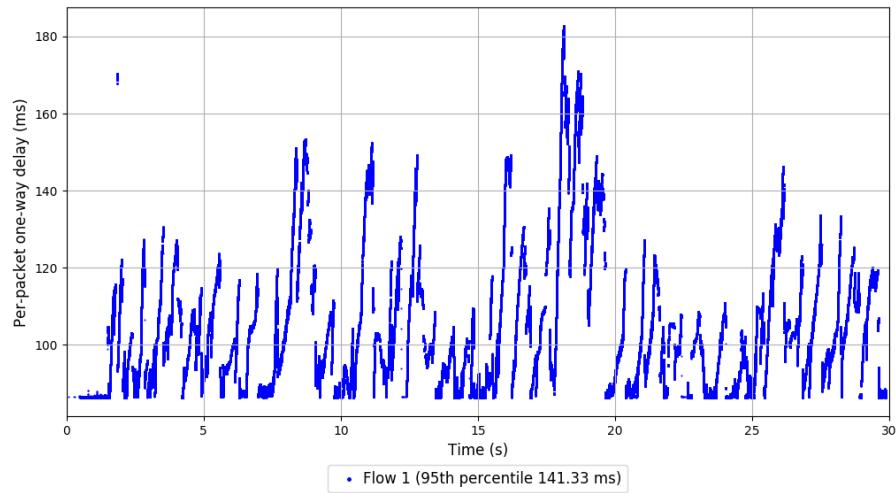
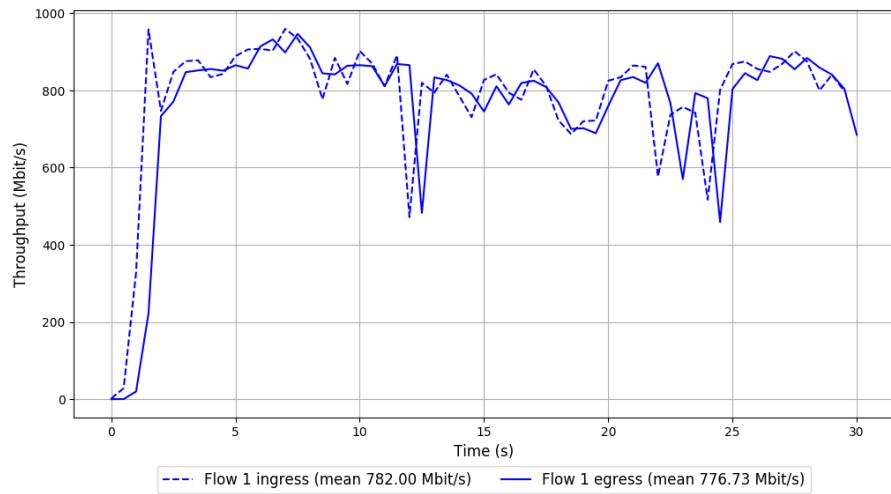


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-07-17 17:06:26
End at: 2019-07-17 17:06:56
Local clock offset: 29.318 ms
Remote clock offset: 29.629 ms

# Below is generated by plot.py at 2019-07-17 19:41:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 776.73 Mbit/s
95th percentile per-packet one-way delay: 141.330 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 776.73 Mbit/s
95th percentile per-packet one-way delay: 141.330 ms
Loss rate: 1.25%
```

### Run 3: Report of FillP-Sheep — Data Link

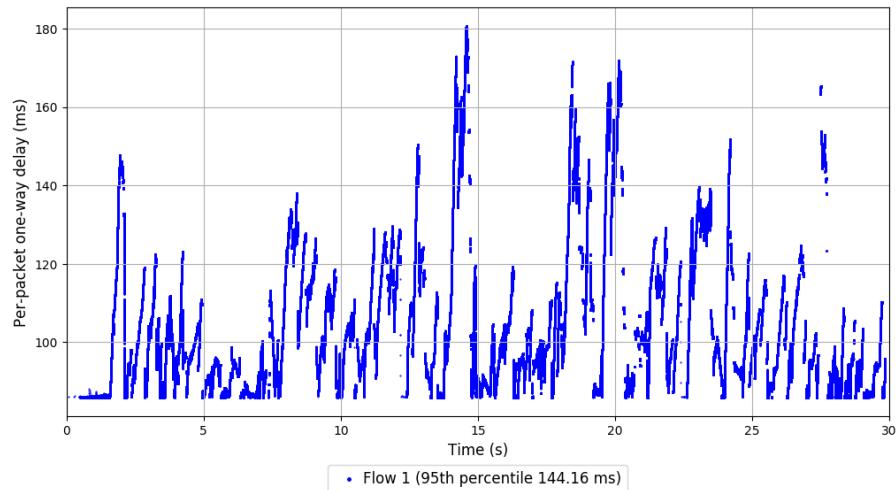
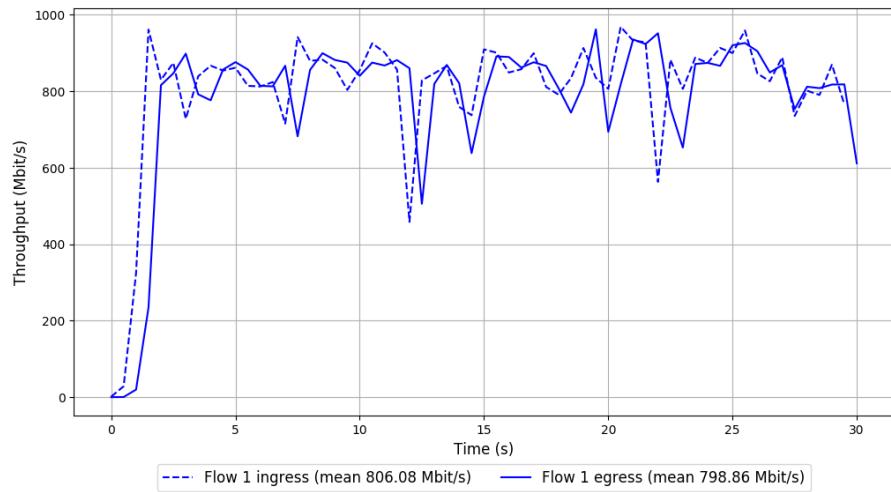


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-07-17 17:41:41
End at: 2019-07-17 17:42:11
Local clock offset: 6.722 ms
Remote clock offset: 6.933 ms

# Below is generated by plot.py at 2019-07-17 19:52:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 798.86 Mbit/s
95th percentile per-packet one-way delay: 144.159 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 798.86 Mbit/s
95th percentile per-packet one-way delay: 144.159 ms
Loss rate: 1.47%
```

## Run 4: Report of FillP-Sheep — Data Link

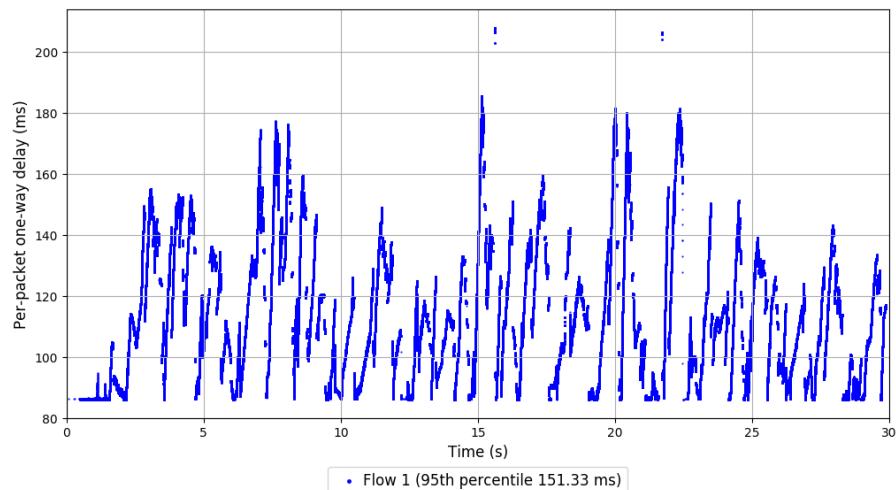
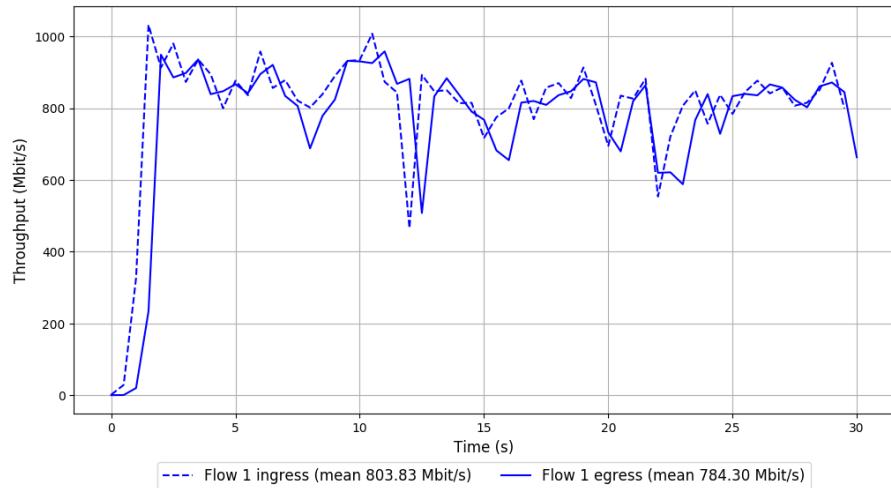


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-07-17 18:17:12
End at: 2019-07-17 18:17:42
Local clock offset: 2.984 ms
Remote clock offset: 2.856 ms

# Below is generated by plot.py at 2019-07-17 19:56:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 784.30 Mbit/s
95th percentile per-packet one-way delay: 151.330 ms
Loss rate: 2.99%
-- Flow 1:
Average throughput: 784.30 Mbit/s
95th percentile per-packet one-way delay: 151.330 ms
Loss rate: 2.99%
```

### Run 5: Report of FillP-Sheep — Data Link

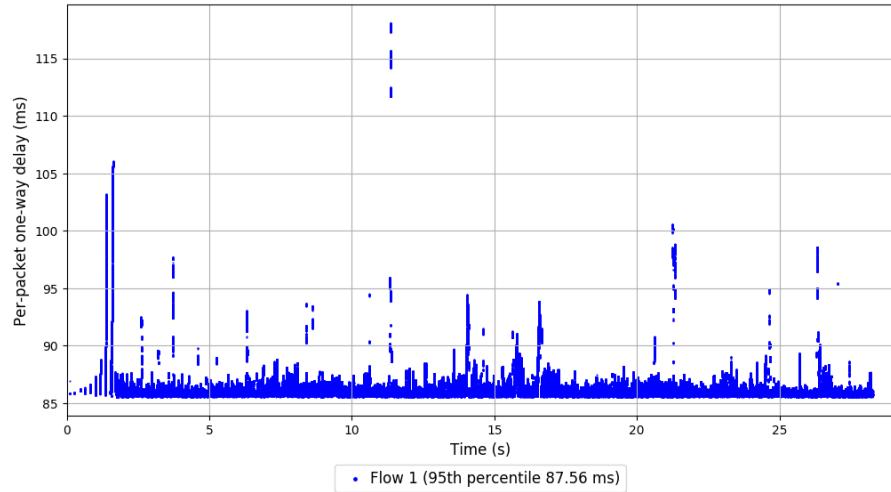
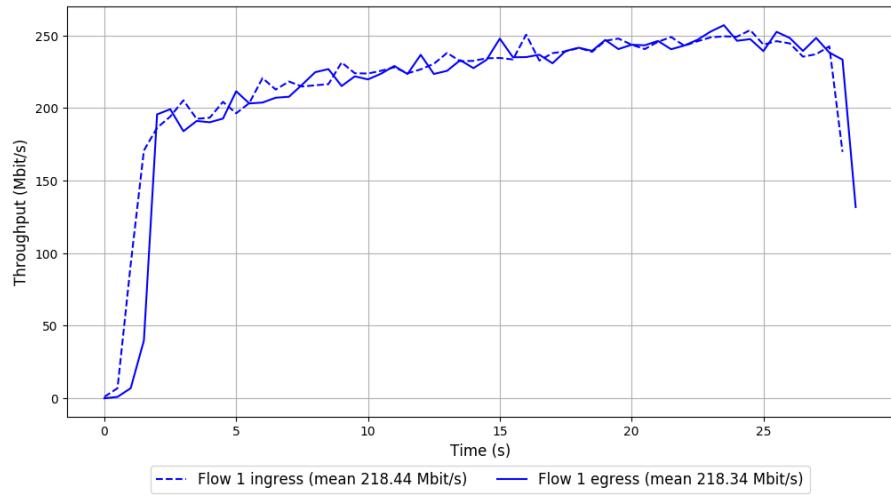


Run 1: Statistics of Indigo

```
Start at: 2019-07-17 16:19:57
End at: 2019-07-17 16:20:27
Local clock offset: 16.291 ms
Remote clock offset: 17.392 ms

# Below is generated by plot.py at 2019-07-17 19:56:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.34 Mbit/s
95th percentile per-packet one-way delay: 87.562 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 218.34 Mbit/s
95th percentile per-packet one-way delay: 87.562 ms
Loss rate: 0.66%
```

## Run 1: Report of Indigo — Data Link

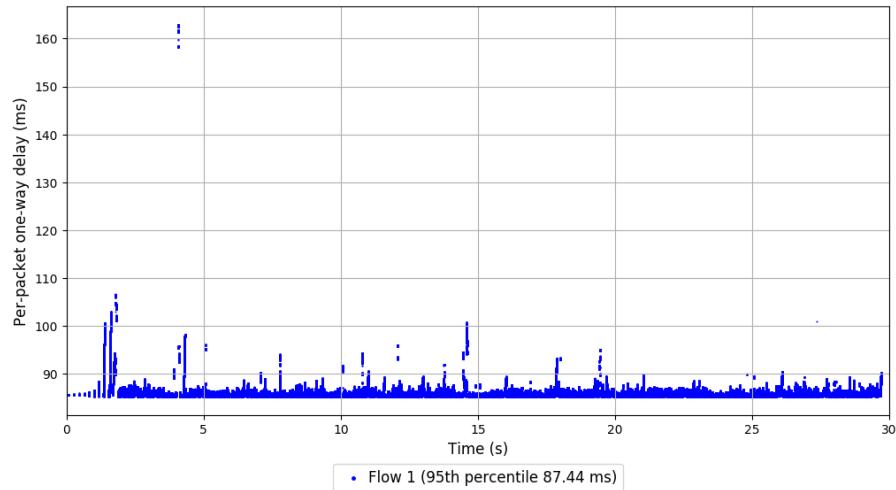
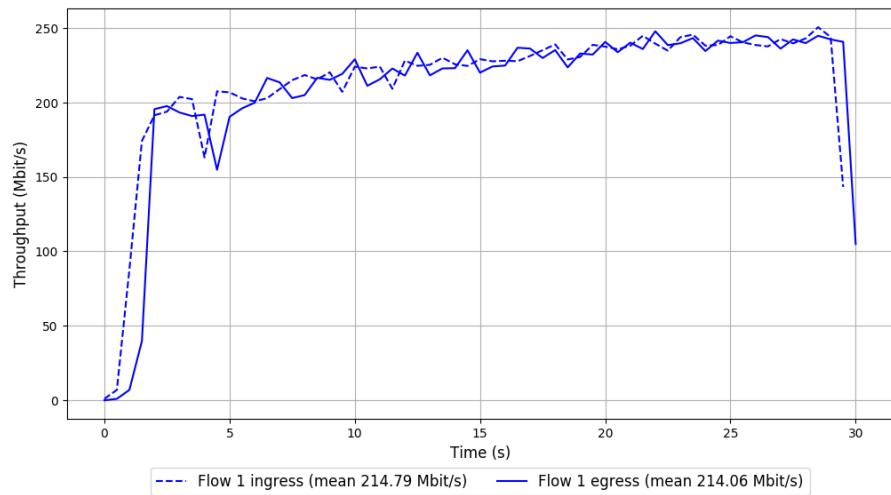


Run 2: Statistics of Indigo

```
Start at: 2019-07-17 16:55:23
End at: 2019-07-17 16:55:53
Local clock offset: 34.027 ms
Remote clock offset: 35.55 ms

# Below is generated by plot.py at 2019-07-17 19:56:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.06 Mbit/s
95th percentile per-packet one-way delay: 87.438 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 214.06 Mbit/s
95th percentile per-packet one-way delay: 87.438 ms
Loss rate: 0.92%
```

## Run 2: Report of Indigo — Data Link

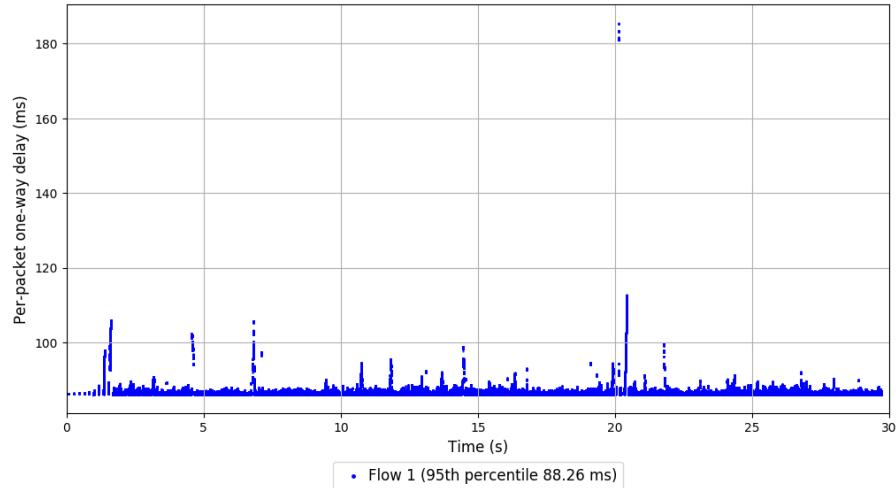
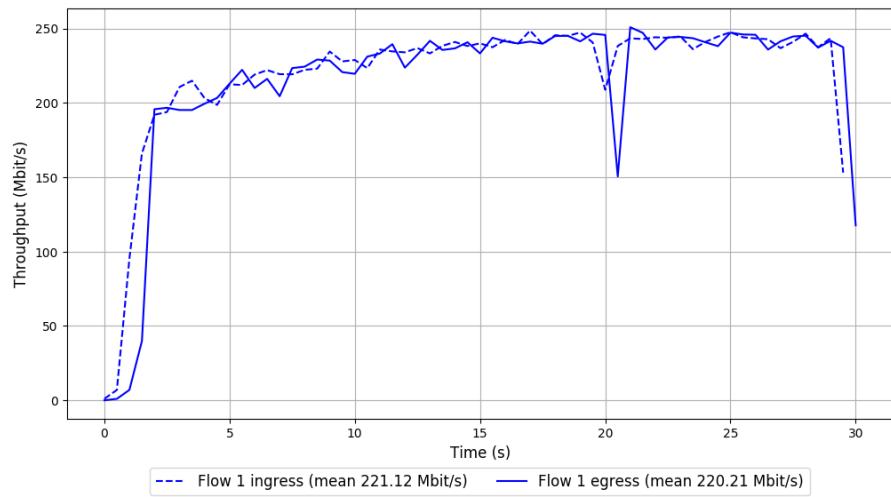


Run 3: Statistics of Indigo

```
Start at: 2019-07-17 17:30:37
End at: 2019-07-17 17:31:08
Local clock offset: 10.1 ms
Remote clock offset: 10.197 ms

# Below is generated by plot.py at 2019-07-17 19:56:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.21 Mbit/s
95th percentile per-packet one-way delay: 88.261 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 220.21 Mbit/s
95th percentile per-packet one-way delay: 88.261 ms
Loss rate: 0.99%
```

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

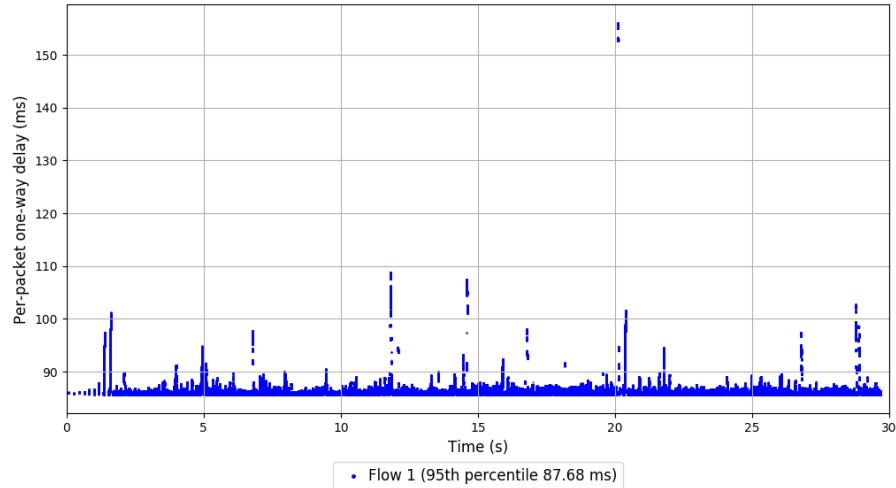
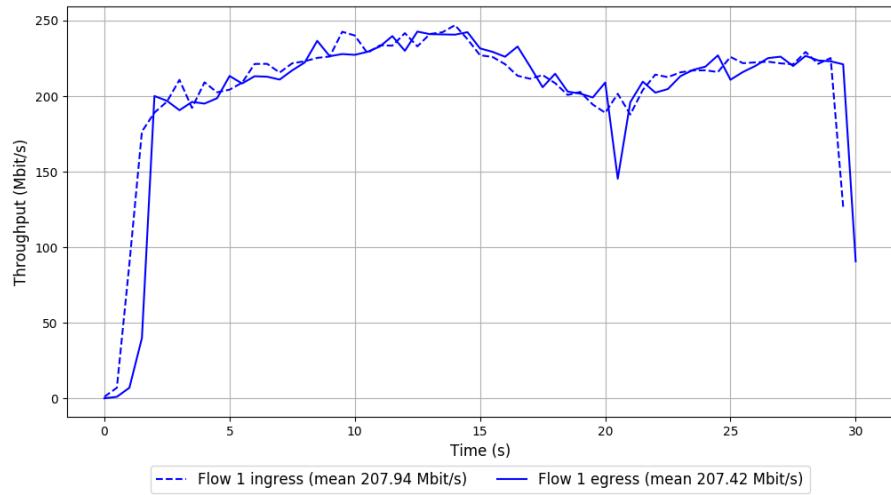


Run 4: Statistics of Indigo

```
Start at: 2019-07-17 18:06:07
End at: 2019-07-17 18:06:37
Local clock offset: 3.998 ms
Remote clock offset: 4.475 ms

# Below is generated by plot.py at 2019-07-17 19:56:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 207.42 Mbit/s
95th percentile per-packet one-way delay: 87.678 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 207.42 Mbit/s
95th percentile per-packet one-way delay: 87.678 ms
Loss rate: 0.83%
```

## Run 4: Report of Indigo — Data Link

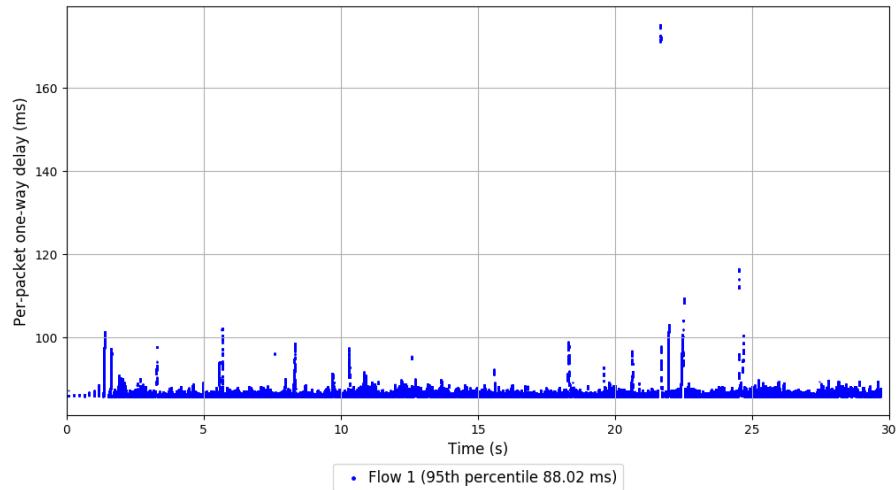
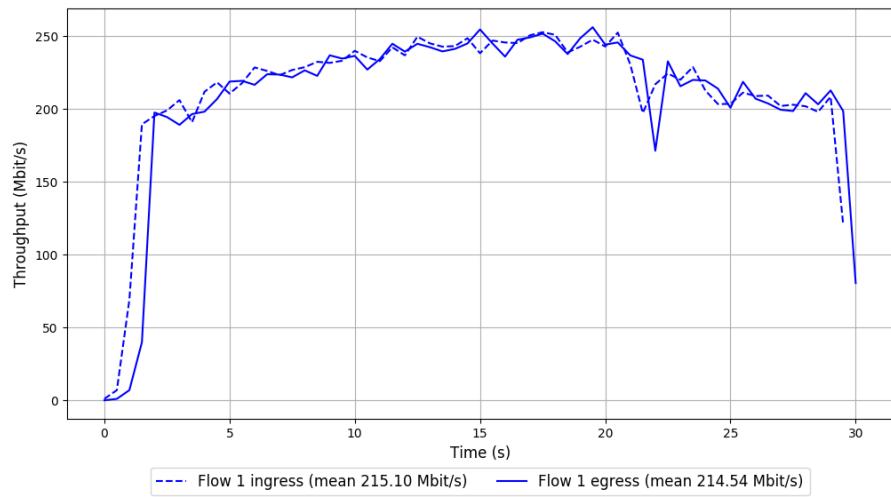


Run 5: Statistics of Indigo

```
Start at: 2019-07-17 18:41:36
End at: 2019-07-17 18:42:06
Local clock offset: 2.16 ms
Remote clock offset: 2.273 ms

# Below is generated by plot.py at 2019-07-17 19:56:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.54 Mbit/s
95th percentile per-packet one-way delay: 88.024 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 214.54 Mbit/s
95th percentile per-packet one-way delay: 88.024 ms
Loss rate: 0.84%
```

## Run 5: Report of Indigo — Data Link

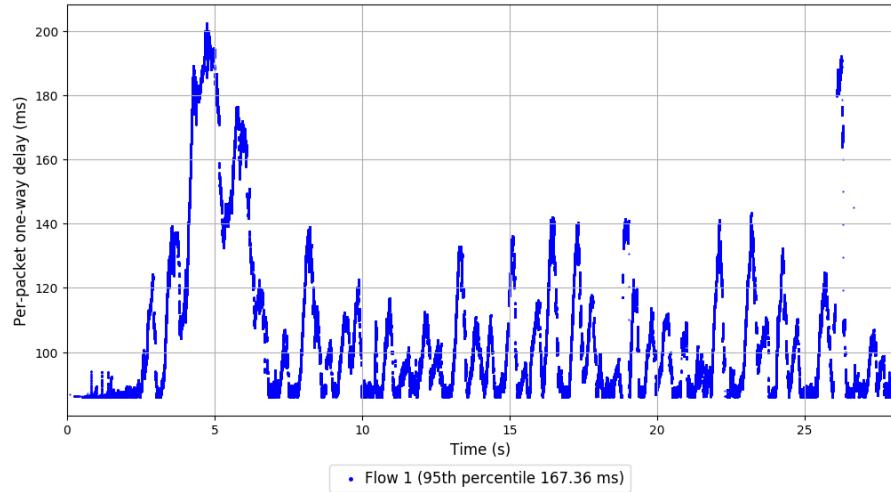
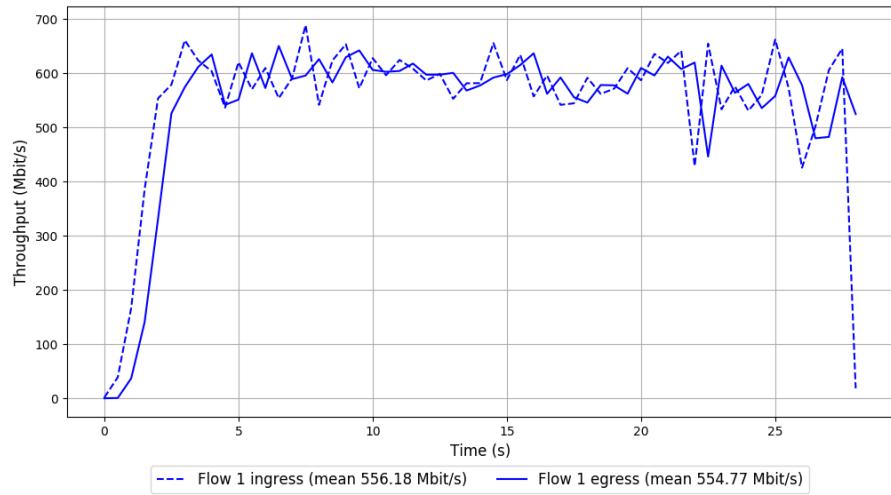


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-07-17 16:24:34
End at: 2019-07-17 16:25:04
Local clock offset: 22.816 ms
Remote clock offset: 23.317 ms

# Below is generated by plot.py at 2019-07-17 19:56:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 554.77 Mbit/s
95th percentile per-packet one-way delay: 167.359 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 554.77 Mbit/s
95th percentile per-packet one-way delay: 167.359 ms
Loss rate: 0.87%
```

## Run 1: Report of Indigo-MusesC3 — Data Link

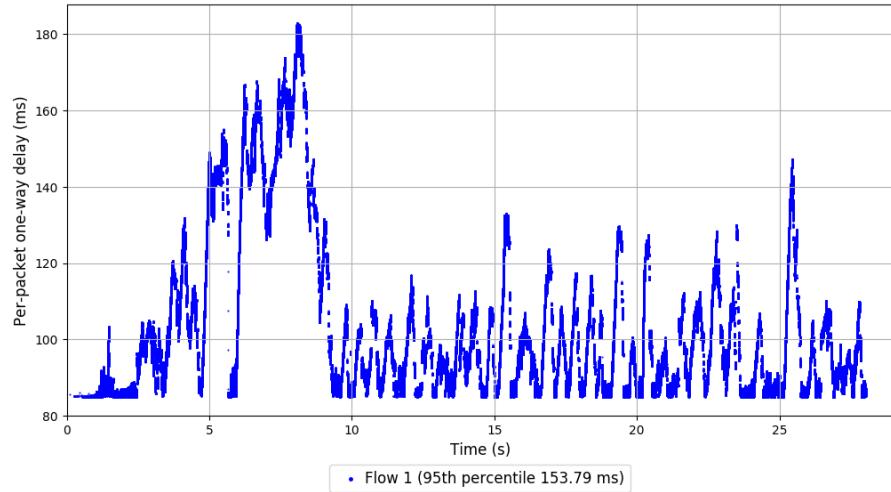
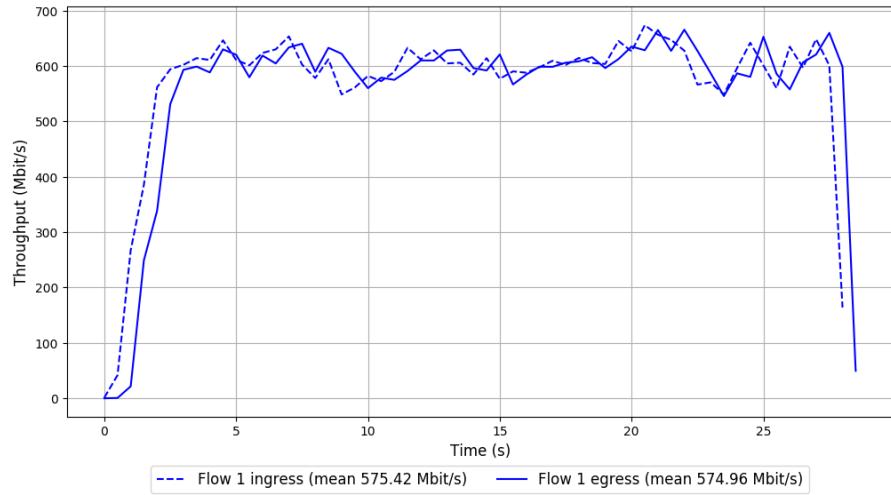


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-07-17 16:59:56
End at: 2019-07-17 17:00:26
Local clock offset: 38.712 ms
Remote clock offset: 40.738 ms

# Below is generated by plot.py at 2019-07-17 19:57:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 574.96 Mbit/s
95th percentile per-packet one-way delay: 153.790 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 574.96 Mbit/s
95th percentile per-packet one-way delay: 153.790 ms
Loss rate: 0.70%
```

## Run 2: Report of Indigo-MusesC3 — Data Link

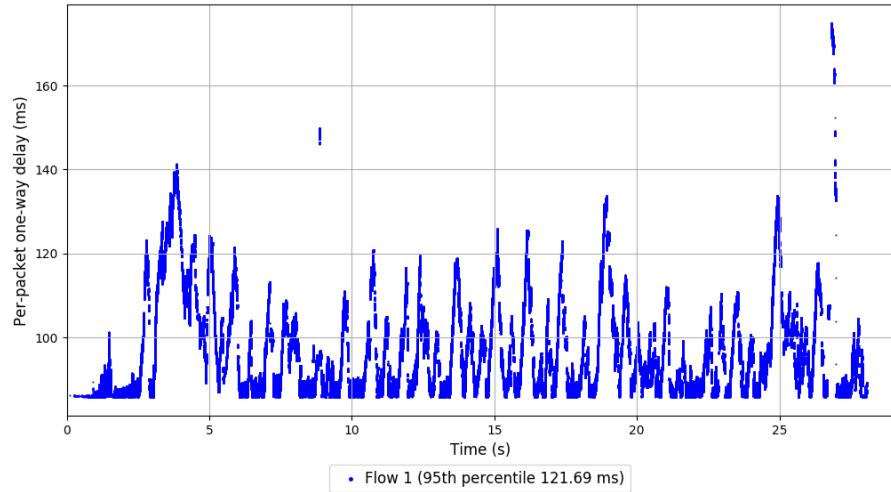
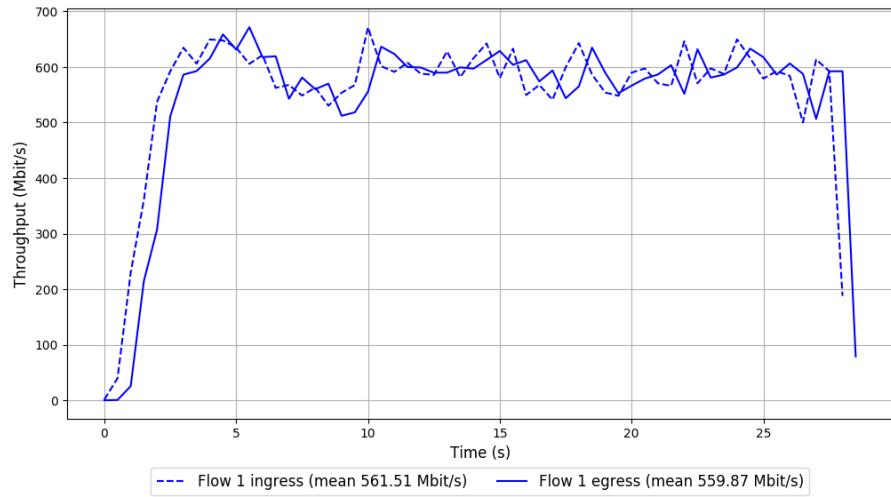


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-07-17 17:35:17
End at: 2019-07-17 17:35:47
Local clock offset: 10.58 ms
Remote clock offset: 10.953 ms

# Below is generated by plot.py at 2019-07-17 19:58:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 559.87 Mbit/s
95th percentile per-packet one-way delay: 121.693 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 559.87 Mbit/s
95th percentile per-packet one-way delay: 121.693 ms
Loss rate: 0.90%
```

### Run 3: Report of Indigo-MusesC3 — Data Link

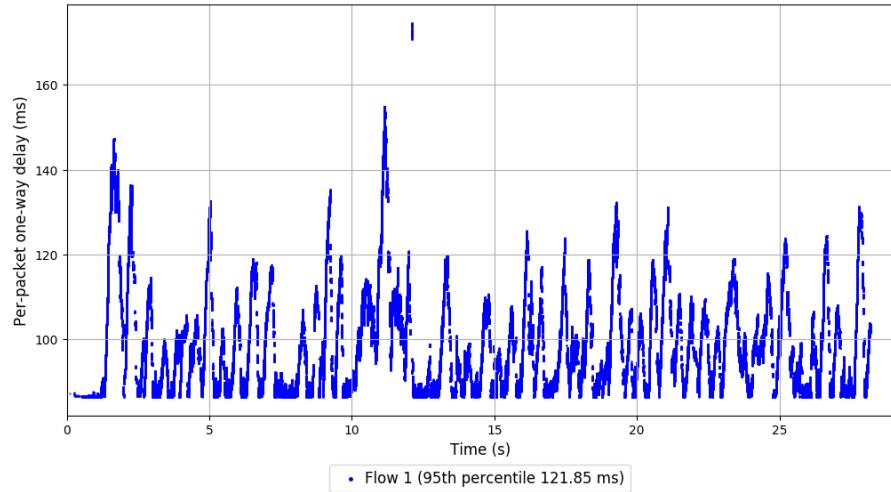
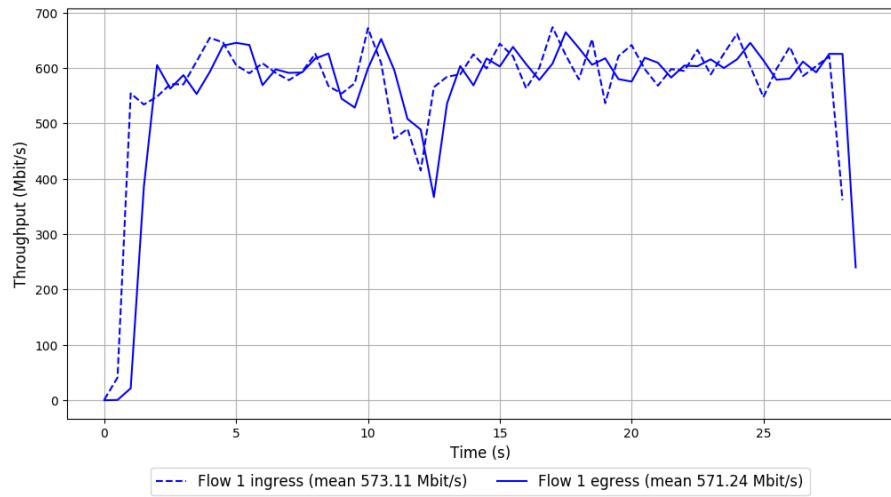


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-07-17 18:10:44
End at: 2019-07-17 18:11:14
Local clock offset: 5.075 ms
Remote clock offset: 4.954 ms

# Below is generated by plot.py at 2019-07-17 19:58:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 571.24 Mbit/s
95th percentile per-packet one-way delay: 121.851 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 571.24 Mbit/s
95th percentile per-packet one-way delay: 121.851 ms
Loss rate: 0.94%
```

## Run 4: Report of Indigo-MusesC3 — Data Link

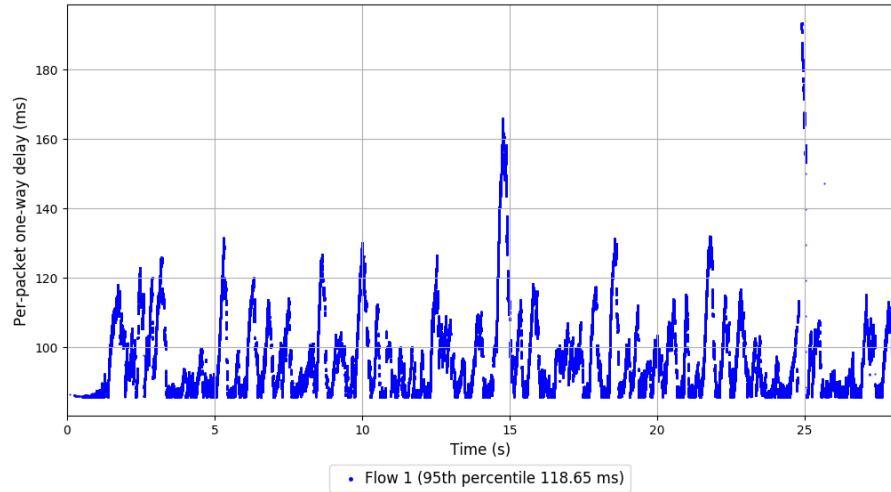
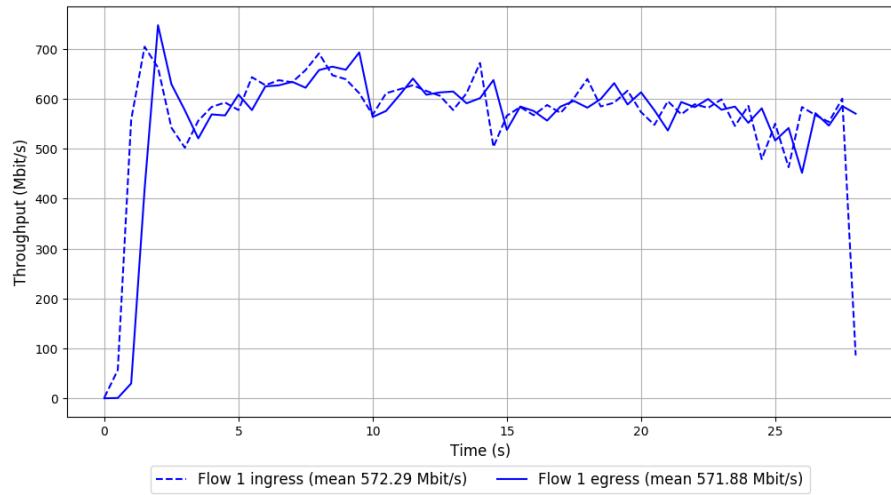


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-07-17 18:46:15
End at: 2019-07-17 18:46:45
Local clock offset: 1.771 ms
Remote clock offset: 2.125 ms

# Below is generated by plot.py at 2019-07-17 19:59:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 571.88 Mbit/s
95th percentile per-packet one-way delay: 118.647 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 571.88 Mbit/s
95th percentile per-packet one-way delay: 118.647 ms
Loss rate: 0.68%
```

## Run 5: Report of Indigo-MusesC3 — Data Link

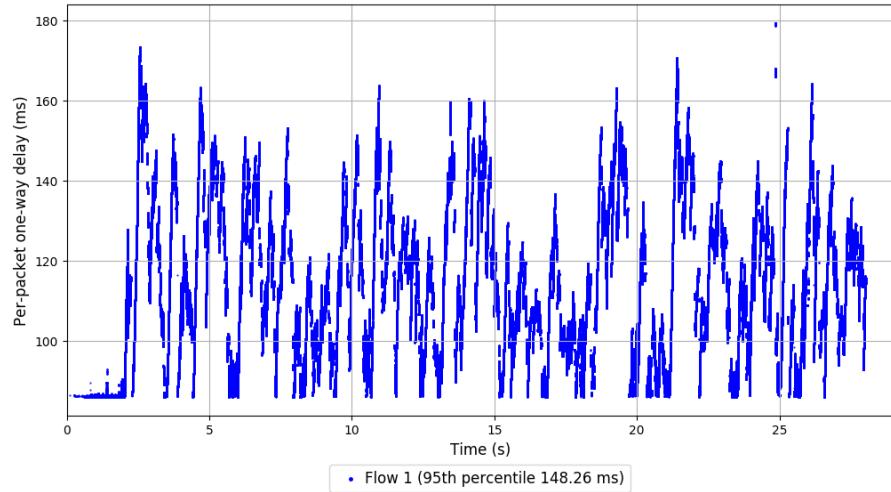
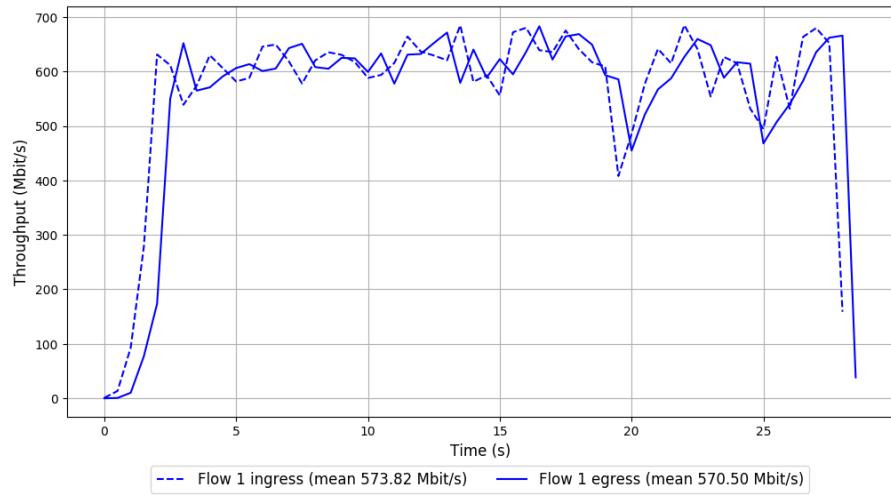


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-07-17 16:16:01
End at: 2019-07-17 16:16:31
Local clock offset: 14.043 ms
Remote clock offset: 14.601 ms

# Below is generated by plot.py at 2019-07-17 20:00:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 570.50 Mbit/s
95th percentile per-packet one-way delay: 148.256 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 570.50 Mbit/s
95th percentile per-packet one-way delay: 148.256 ms
Loss rate: 1.18%
```

### Run 1: Report of Indigo-MusesC5 — Data Link

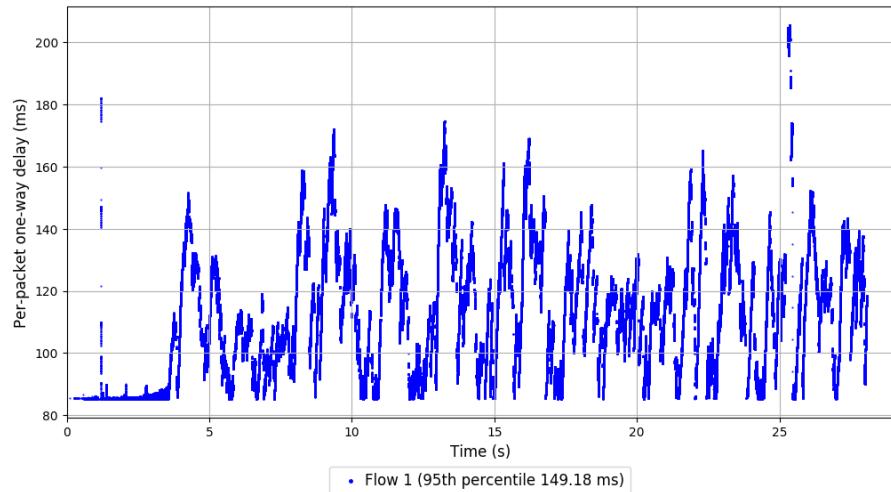
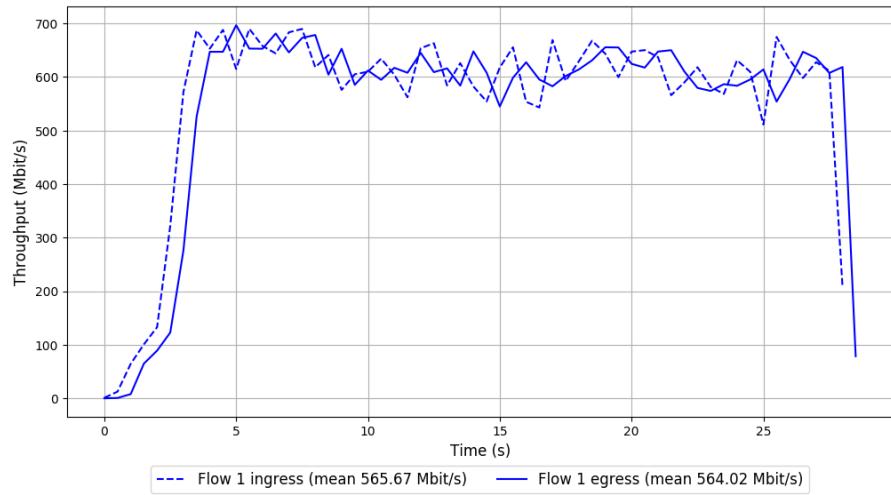


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-07-17 16:51:25
End at: 2019-07-17 16:51:55
Local clock offset: 29.701 ms
Remote clock offset: 31.184 ms

# Below is generated by plot.py at 2019-07-17 20:02:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 564.02 Mbit/s
95th percentile per-packet one-way delay: 149.184 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 564.02 Mbit/s
95th percentile per-packet one-way delay: 149.184 ms
Loss rate: 0.91%
```

## Run 2: Report of Indigo-MusesC5 — Data Link

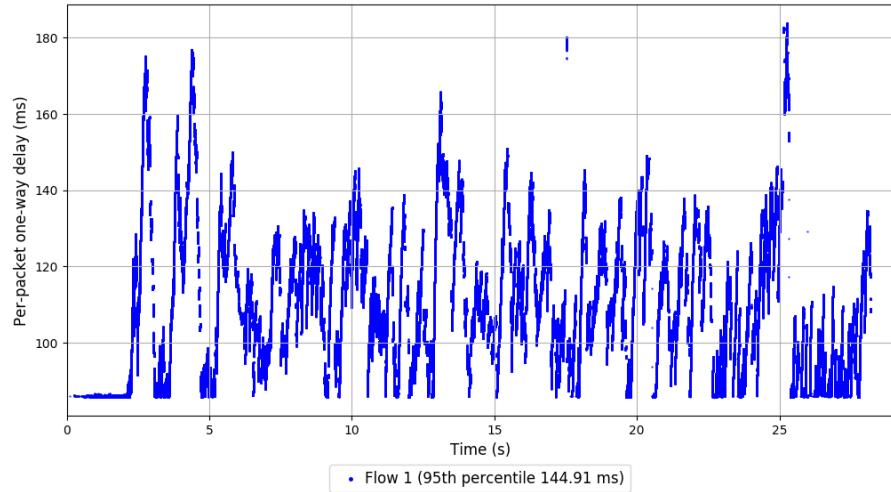
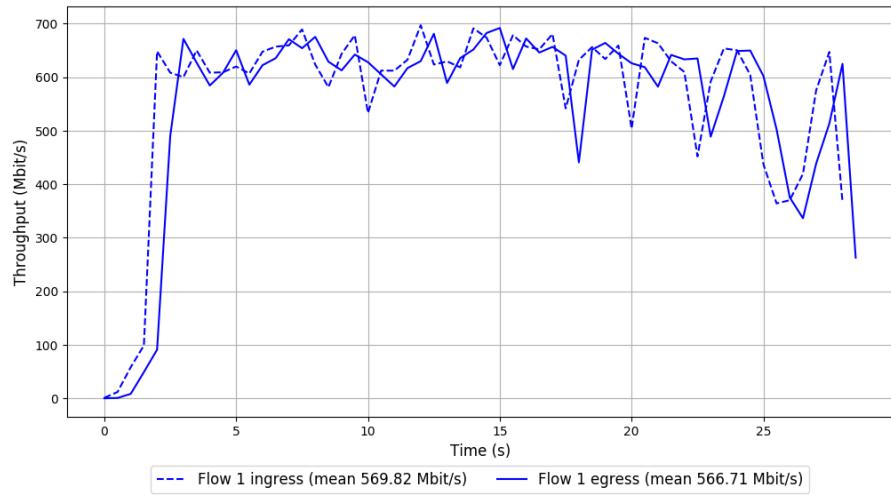


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-07-17 17:26:39
End at: 2019-07-17 17:27:09
Local clock offset: 9.626 ms
Remote clock offset: 9.986 ms

# Below is generated by plot.py at 2019-07-17 20:02:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 566.71 Mbit/s
95th percentile per-packet one-way delay: 144.910 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 566.71 Mbit/s
95th percentile per-packet one-way delay: 144.910 ms
Loss rate: 1.15%
```

### Run 3: Report of Indigo-MusesC5 — Data Link

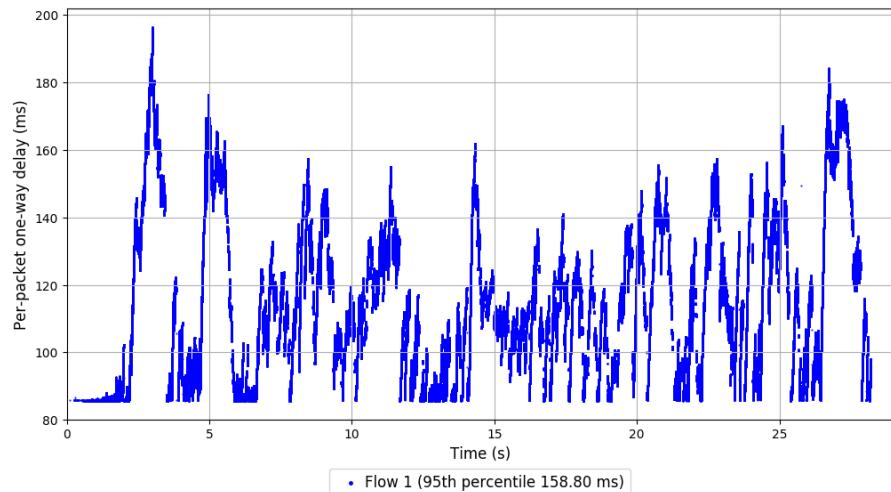
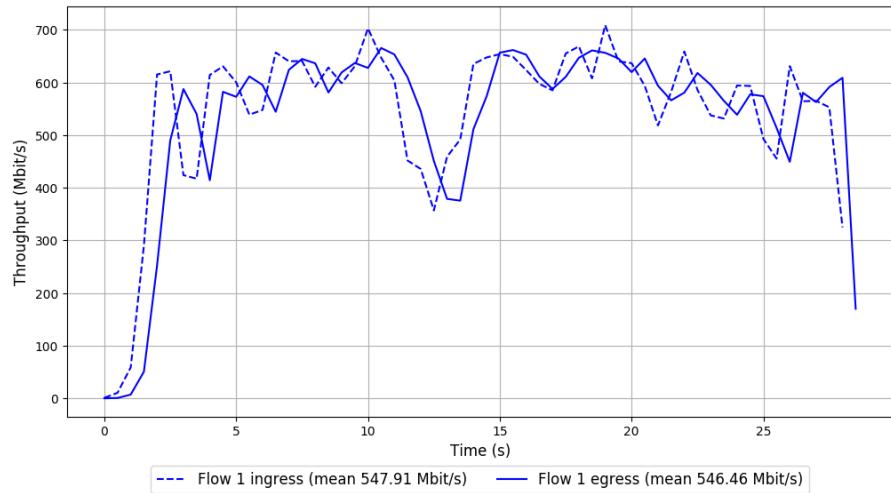


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-07-17 18:02:09
End at: 2019-07-17 18:02:40
Local clock offset: 3.405 ms
Remote clock offset: 4.156 ms

# Below is generated by plot.py at 2019-07-17 20:07:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 546.46 Mbit/s
95th percentile per-packet one-way delay: 158.799 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 546.46 Mbit/s
95th percentile per-packet one-way delay: 158.799 ms
Loss rate: 0.88%
```

## Run 4: Report of Indigo-MusesC5 — Data Link

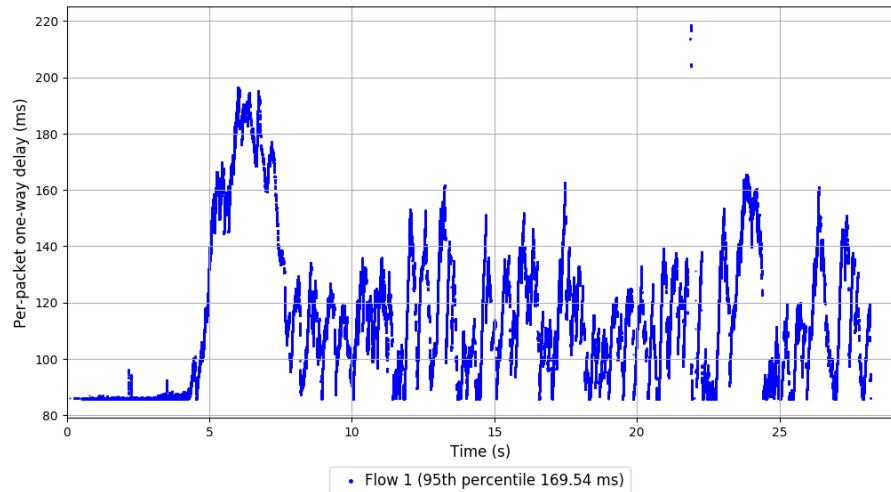
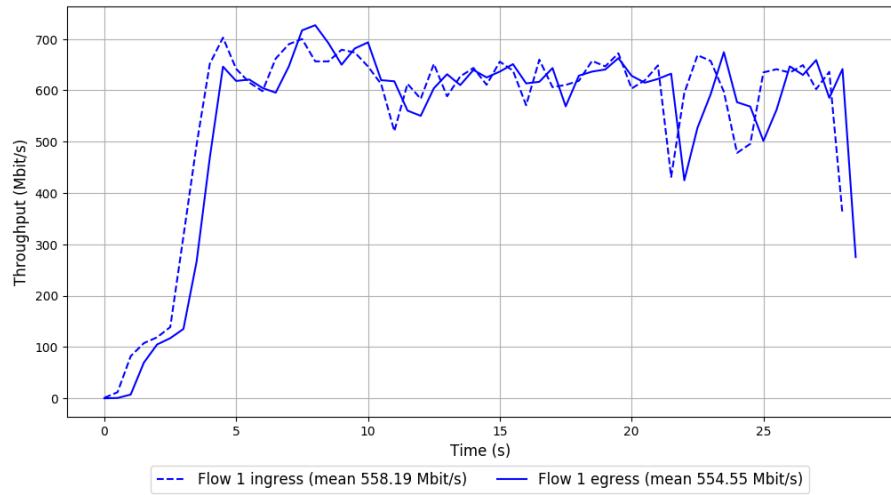


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-07-17 18:37:34
End at: 2019-07-17 18:38:04
Local clock offset: 2.005 ms
Remote clock offset: 2.068 ms

# Below is generated by plot.py at 2019-07-17 20:08:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 554.55 Mbit/s
95th percentile per-packet one-way delay: 169.542 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 554.55 Mbit/s
95th percentile per-packet one-way delay: 169.542 ms
Loss rate: 1.26%
```

## Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

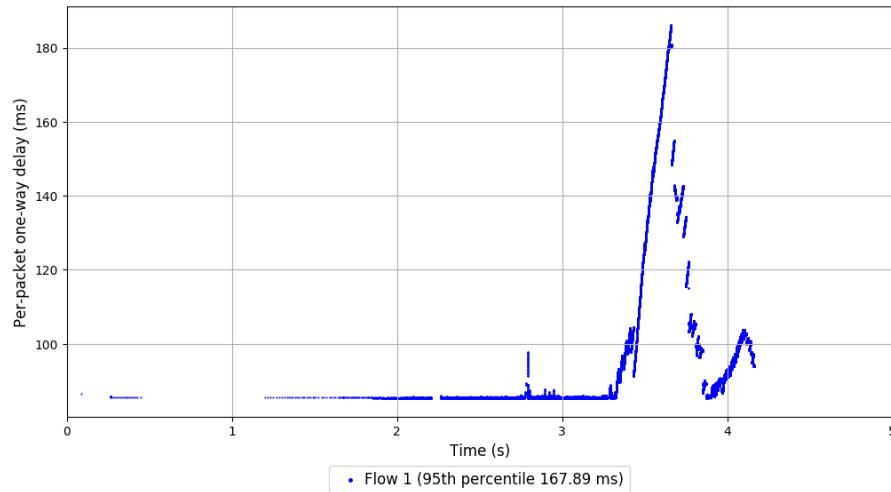
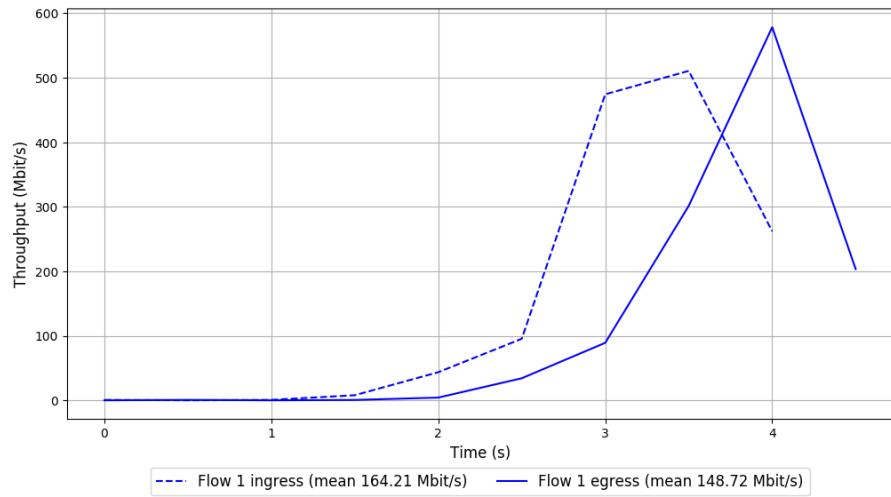
Start at: 2019-07-17 16:00:33

End at: 2019-07-17 16:01:03

Local clock offset: 6.541 ms

Remote clock offset: 7.37 ms

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

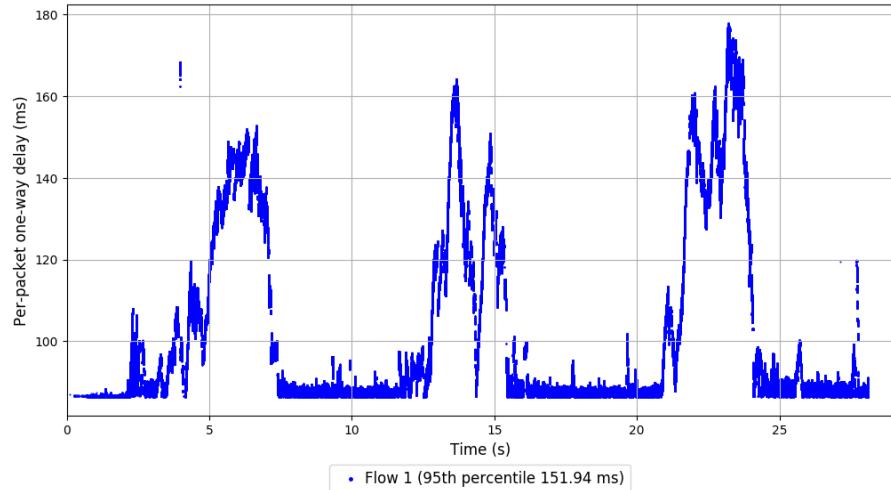
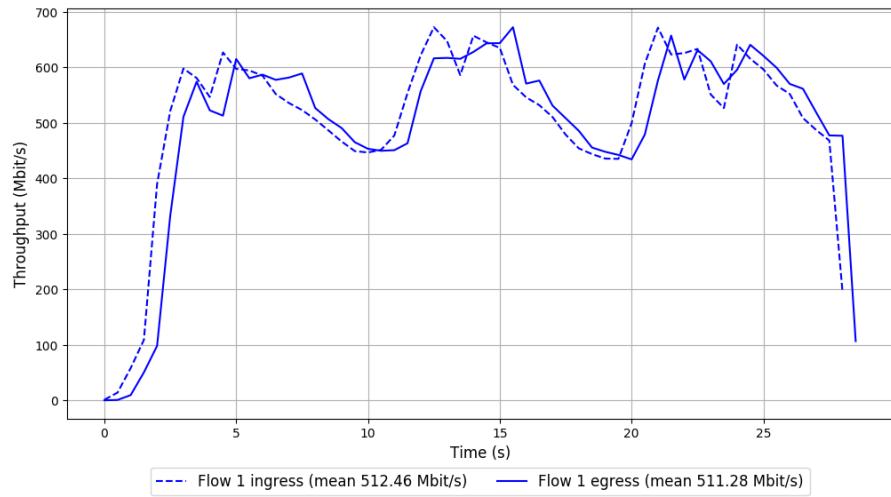


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-07-17 16:35:22
End at: 2019-07-17 16:35:52
Local clock offset: 21.523 ms
Remote clock offset: 21.908 ms

# Below is generated by plot.py at 2019-07-17 20:08:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 511.28 Mbit/s
95th percentile per-packet one-way delay: 151.943 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 511.28 Mbit/s
95th percentile per-packet one-way delay: 151.943 ms
Loss rate: 0.85%
```

## Run 2: Report of Indigo-MusesD — Data Link

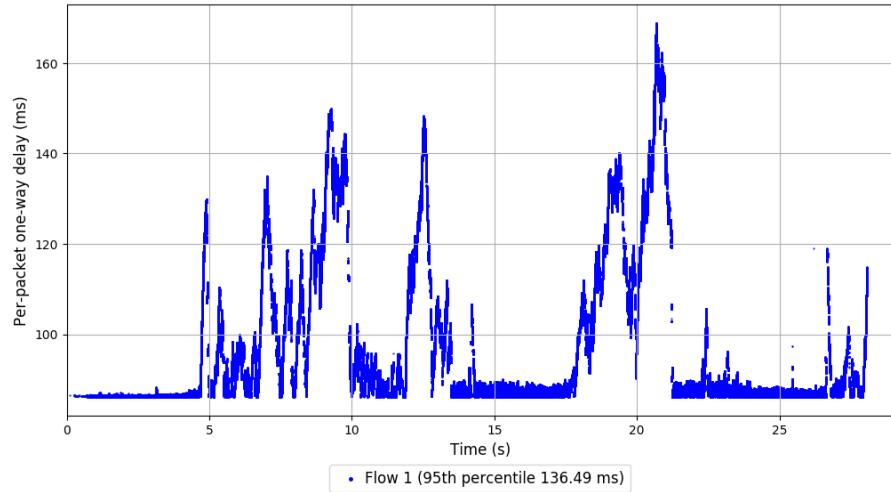
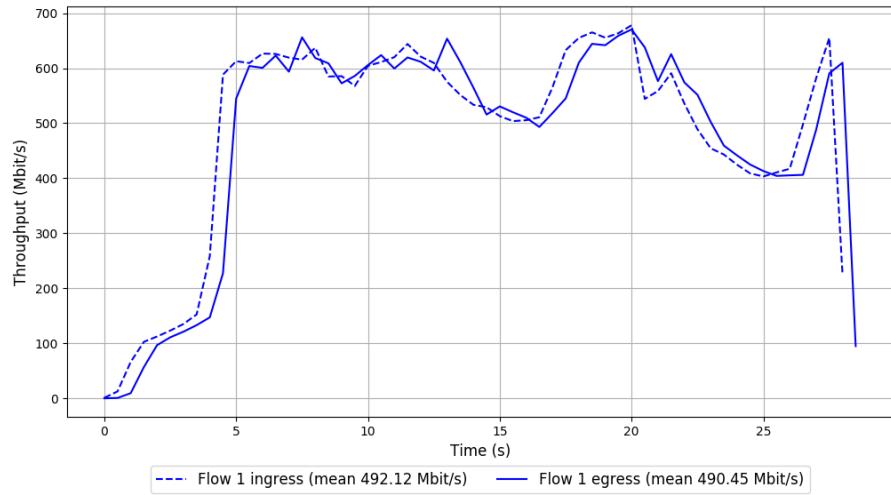


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-07-17 17:10:49
End at: 2019-07-17 17:11:20
Local clock offset: 19.208 ms
Remote clock offset: 19.305 ms

# Below is generated by plot.py at 2019-07-17 20:08:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 490.45 Mbit/s
95th percentile per-packet one-way delay: 136.491 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 490.45 Mbit/s
95th percentile per-packet one-way delay: 136.491 ms
Loss rate: 0.95%
```

### Run 3: Report of Indigo-MusesD — Data Link

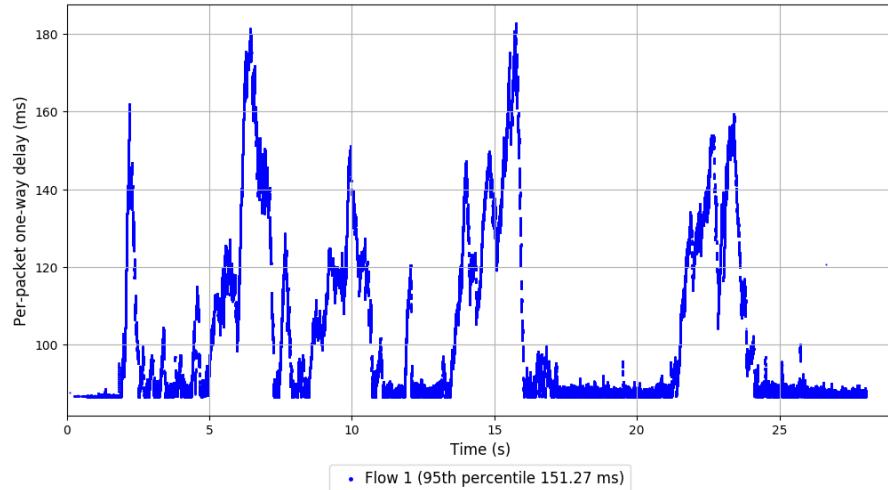
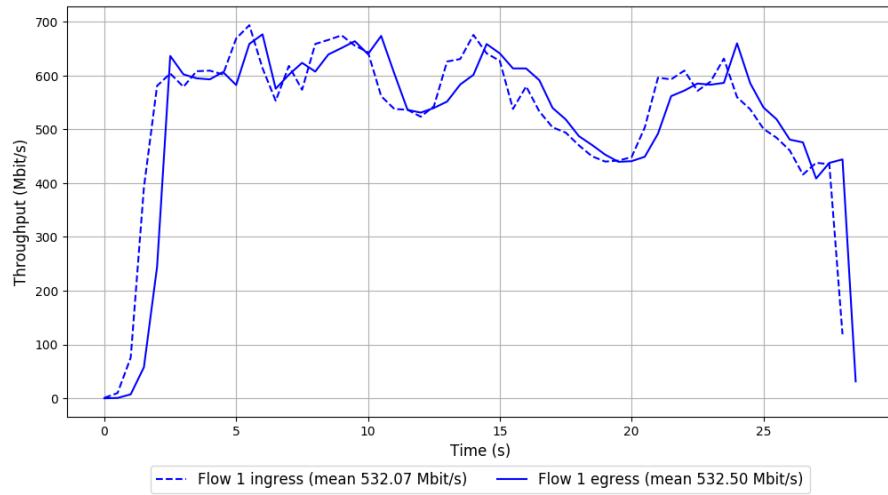


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-07-17 17:46:03
End at: 2019-07-17 17:46:33
Local clock offset: 5.273 ms
Remote clock offset: 5.021 ms

# Below is generated by plot.py at 2019-07-17 20:09:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 532.50 Mbit/s
95th percentile per-packet one-way delay: 151.273 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 532.50 Mbit/s
95th percentile per-packet one-way delay: 151.273 ms
Loss rate: 0.55%
```

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

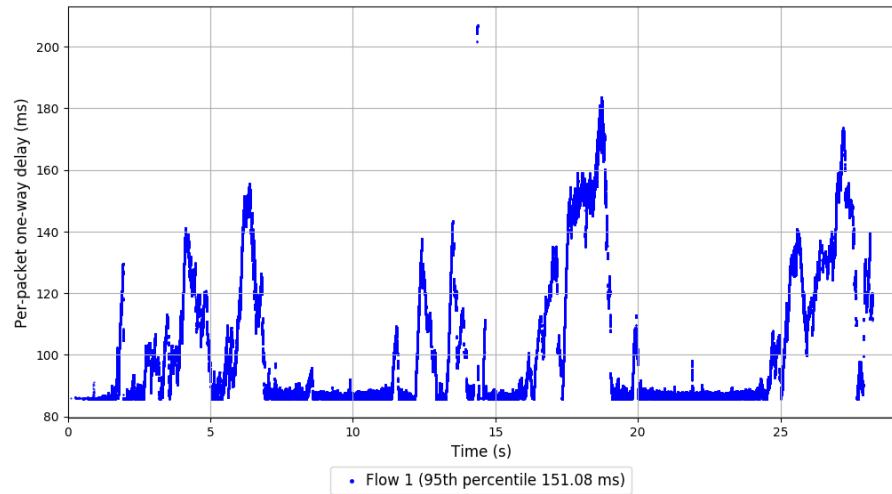
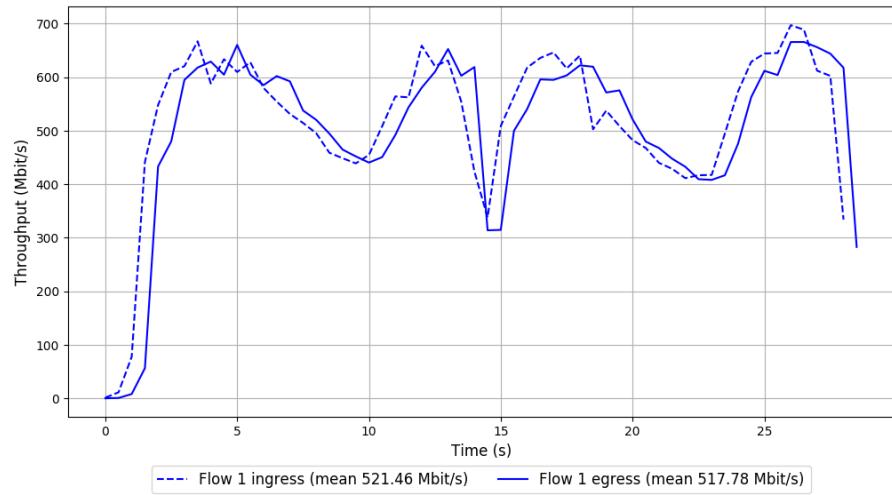


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-07-17 18:21:42
End at: 2019-07-17 18:22:12
Local clock offset: 1.994 ms
Remote clock offset: 2.182 ms

# Below is generated by plot.py at 2019-07-17 20:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 517.78 Mbit/s
95th percentile per-packet one-way delay: 151.077 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 517.78 Mbit/s
95th percentile per-packet one-way delay: 151.077 ms
Loss rate: 1.31%
```

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

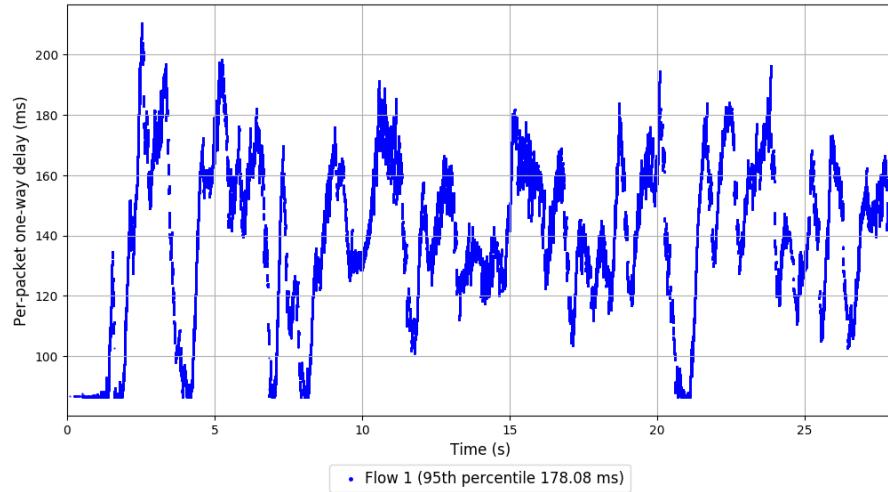
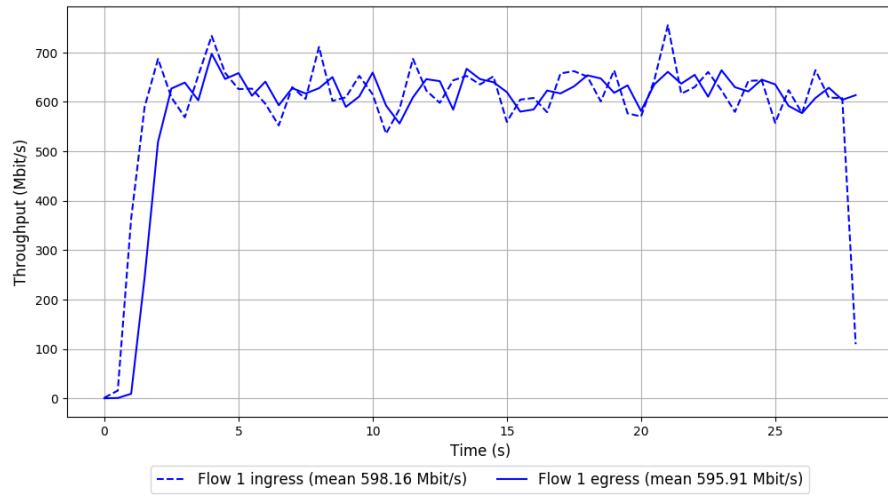


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-07-17 16:29:24
End at: 2019-07-17 16:29:54
Local clock offset: 26.954 ms
Remote clock offset: 27.357 ms

# Below is generated by plot.py at 2019-07-17 20:13:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 595.91 Mbit/s
95th percentile per-packet one-way delay: 178.082 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 595.91 Mbit/s
95th percentile per-packet one-way delay: 178.082 ms
Loss rate: 1.00%
```

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

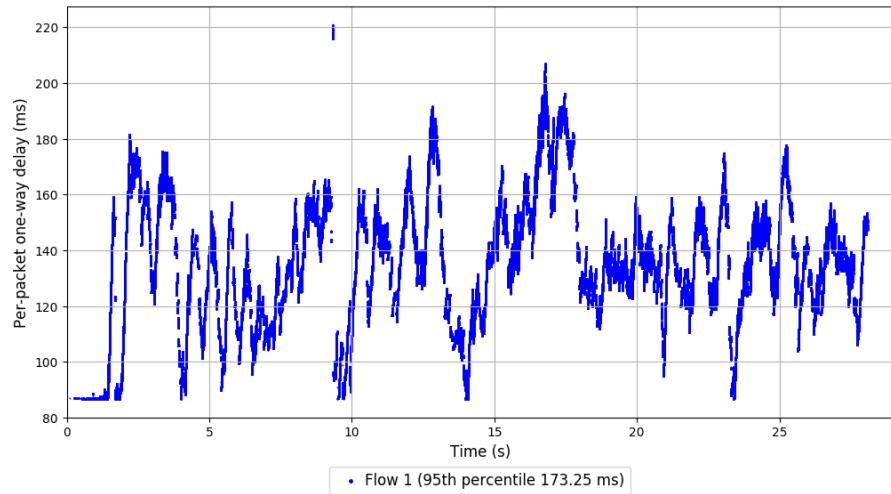
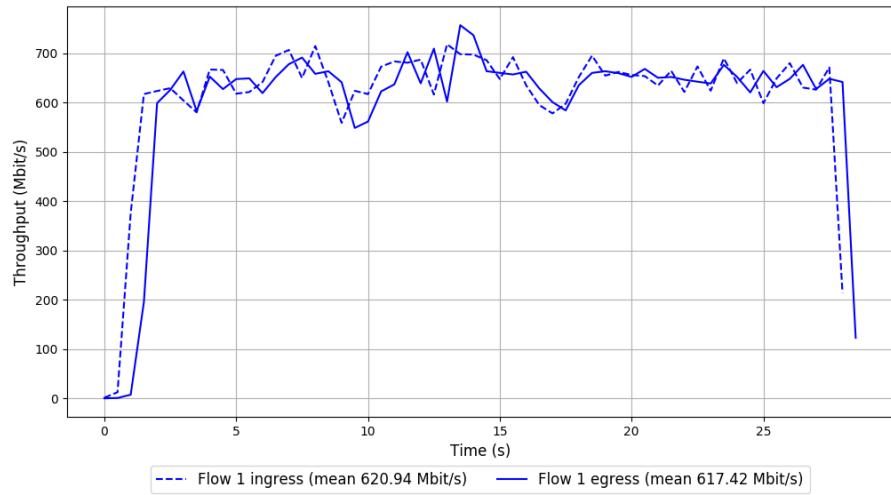


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-07-17 17:04:47
End at: 2019-07-17 17:05:17
Local clock offset: 34.385 ms
Remote clock offset: 34.266 ms

# Below is generated by plot.py at 2019-07-17 20:14:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 617.42 Mbit/s
95th percentile per-packet one-way delay: 173.250 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 617.42 Mbit/s
95th percentile per-packet one-way delay: 173.250 ms
Loss rate: 1.15%
```

## Run 2: Report of Indigo-MusesT — Data Link

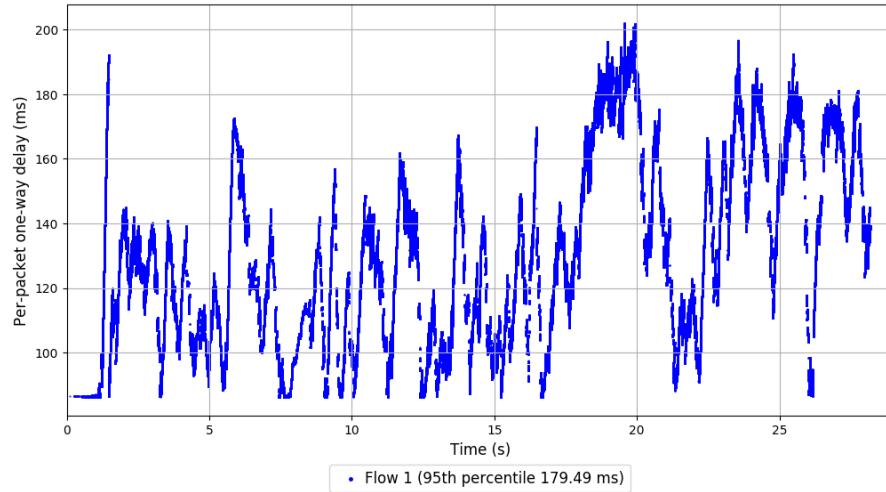
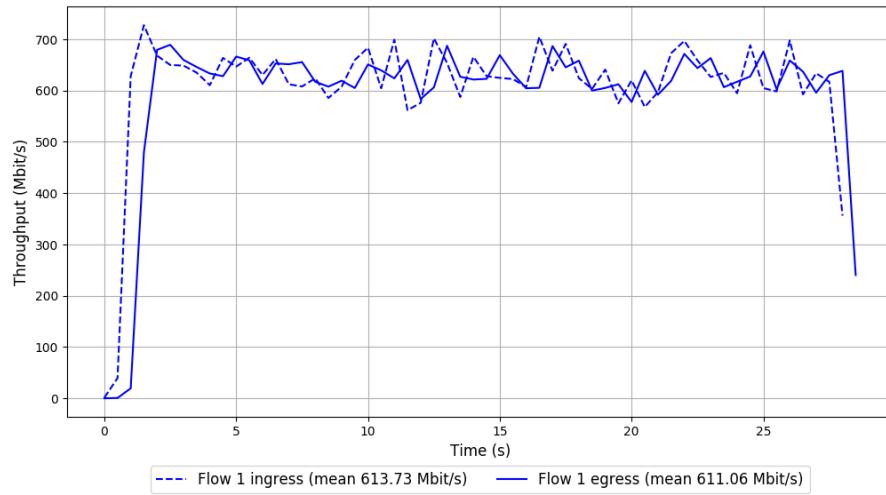


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-07-17 17:40:02
End at: 2019-07-17 17:40:32
Local clock offset: 7.923 ms
Remote clock offset: 8.083 ms

# Below is generated by plot.py at 2019-07-17 20:19:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 611.06 Mbit/s
95th percentile per-packet one-way delay: 179.492 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 611.06 Mbit/s
95th percentile per-packet one-way delay: 179.492 ms
Loss rate: 1.05%
```

### Run 3: Report of Indigo-MusesT — Data Link

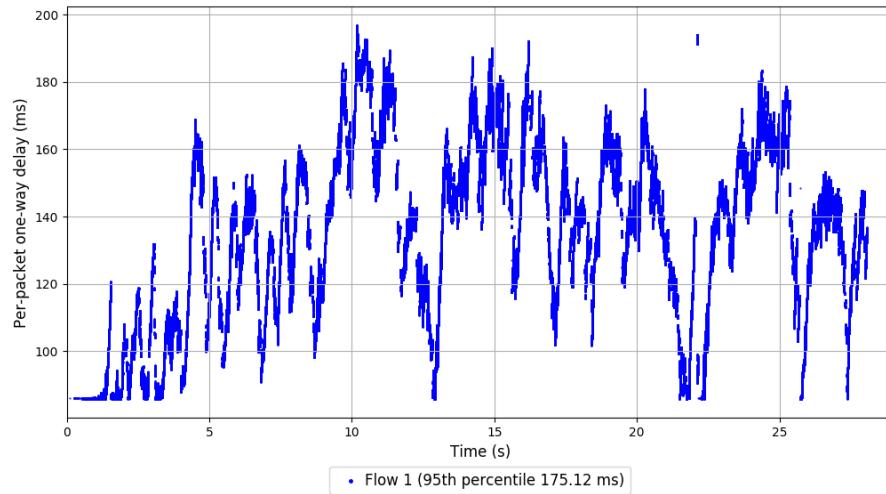
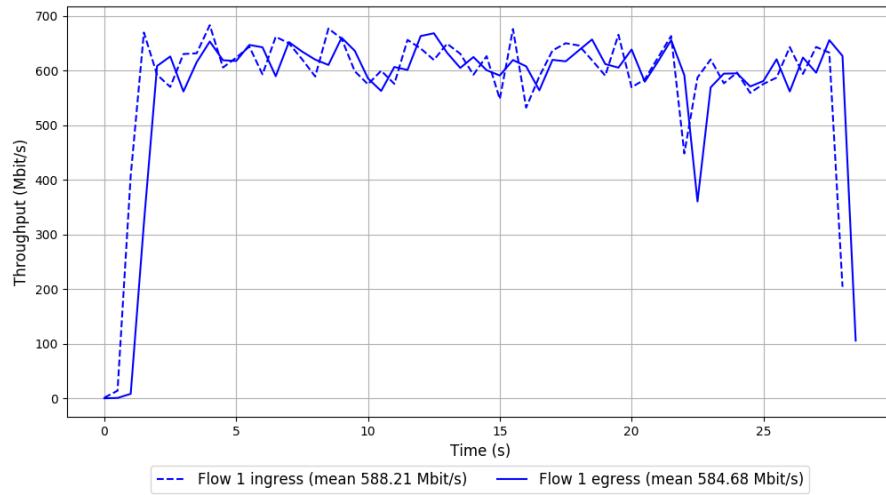


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-07-17 18:15:34
End at: 2019-07-17 18:16:04
Local clock offset: 2.683 ms
Remote clock offset: 3.199 ms

# Below is generated by plot.py at 2019-07-17 20:19:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 584.68 Mbit/s
95th percentile per-packet one-way delay: 175.115 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 584.68 Mbit/s
95th percentile per-packet one-way delay: 175.115 ms
Loss rate: 1.21%
```

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

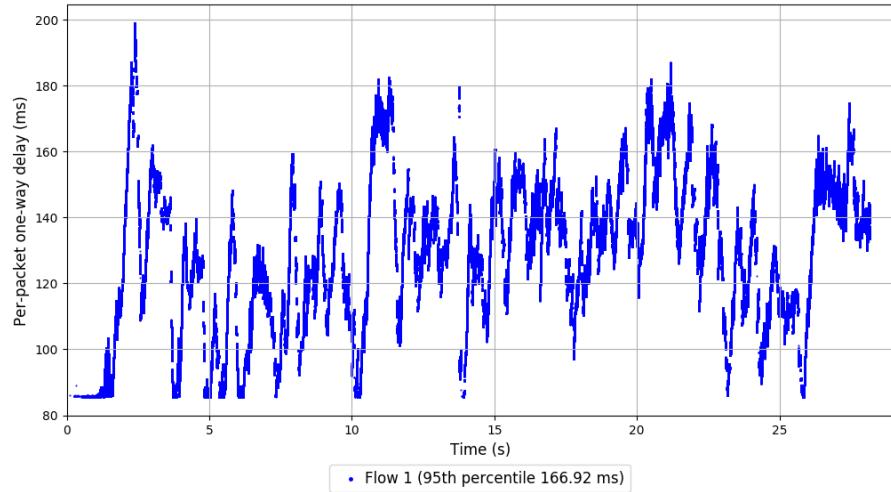
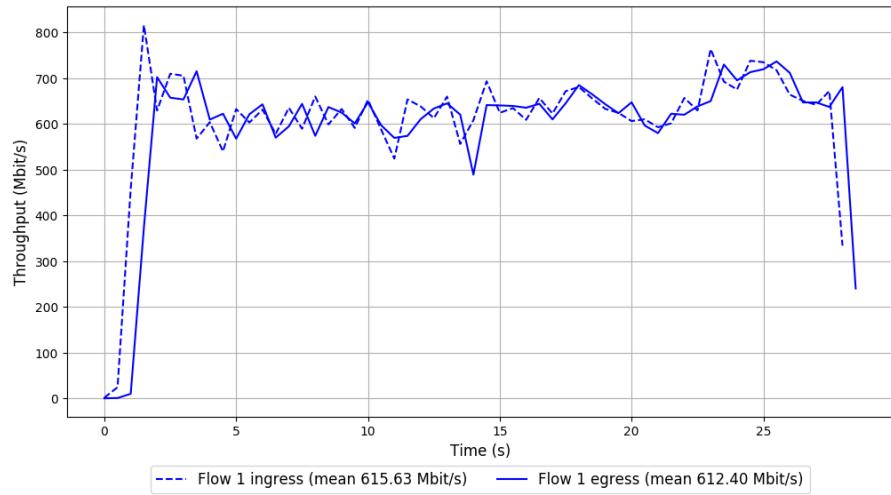


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-07-17 18:51:12
End at: 2019-07-17 18:51:42
Local clock offset: 1.095 ms
Remote clock offset: 1.342 ms

# Below is generated by plot.py at 2019-07-17 20:19:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 612.40 Mbit/s
95th percentile per-packet one-way delay: 166.918 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 612.40 Mbit/s
95th percentile per-packet one-way delay: 166.918 ms
Loss rate: 1.14%
```

Run 5: Report of Indigo-MusesT — Data Link

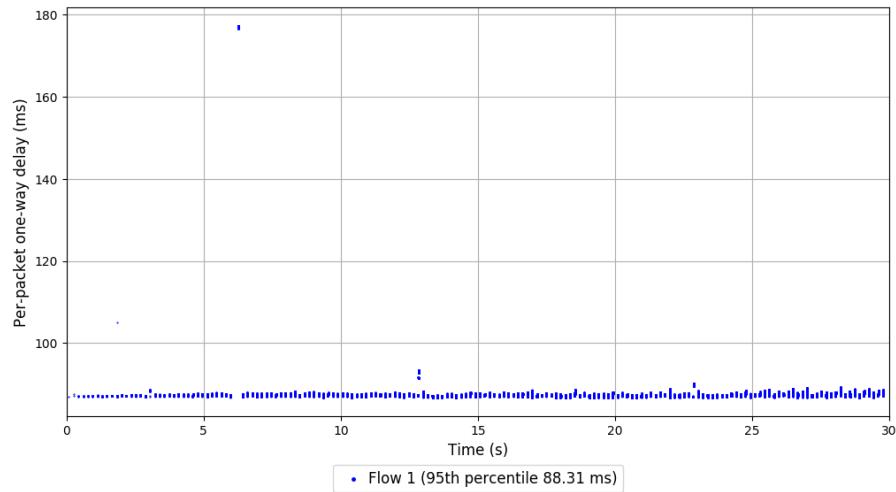
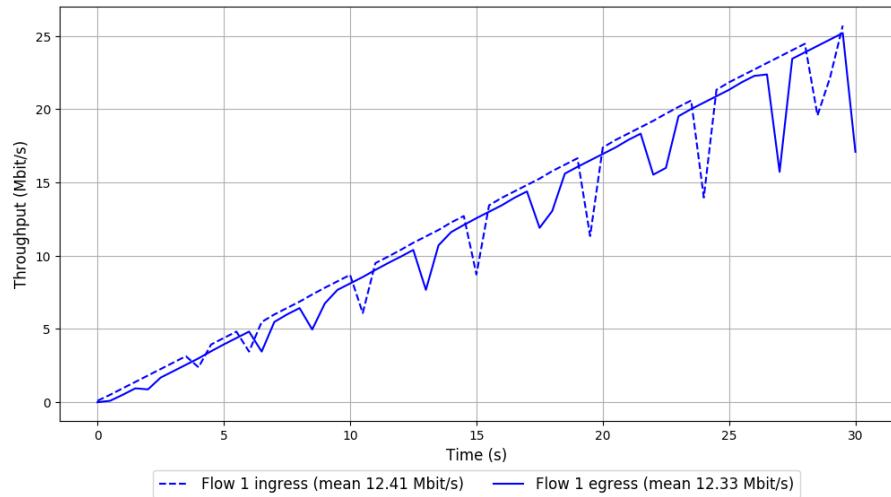


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2019-07-17 15:59:22
End at: 2019-07-17 15:59:52
Local clock offset: 7.256 ms
Remote clock offset: 6.595 ms

# Below is generated by plot.py at 2019-07-17 20:19:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.33 Mbit/s
95th percentile per-packet one-way delay: 88.307 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 12.33 Mbit/s
95th percentile per-packet one-way delay: 88.307 ms
Loss rate: 1.16%
```

## Run 1: Report of LEDBAT — Data Link

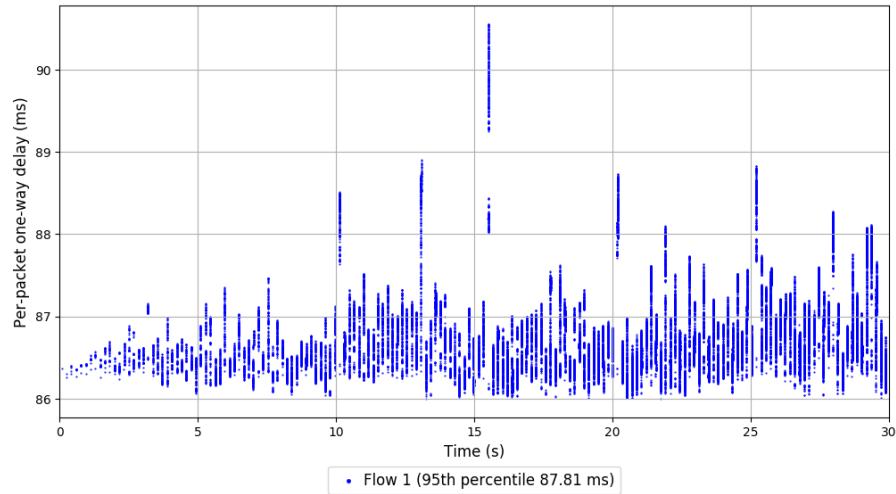
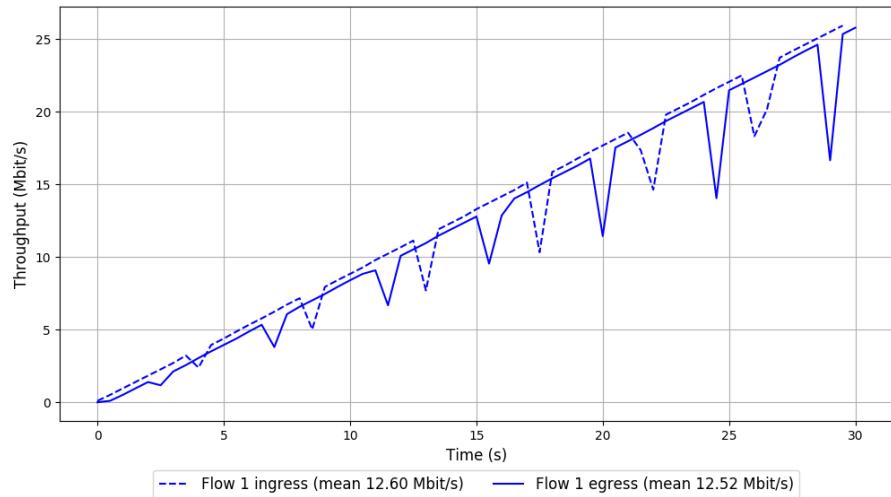


Run 2: Statistics of LEDBAT

```
Start at: 2019-07-17 16:34:11
End at: 2019-07-17 16:34:41
Local clock offset: 21.546 ms
Remote clock offset: 22.252 ms

# Below is generated by plot.py at 2019-07-17 20:19:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 87.814 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 87.814 ms
Loss rate: 1.15%
```

## Run 2: Report of LEDBAT — Data Link

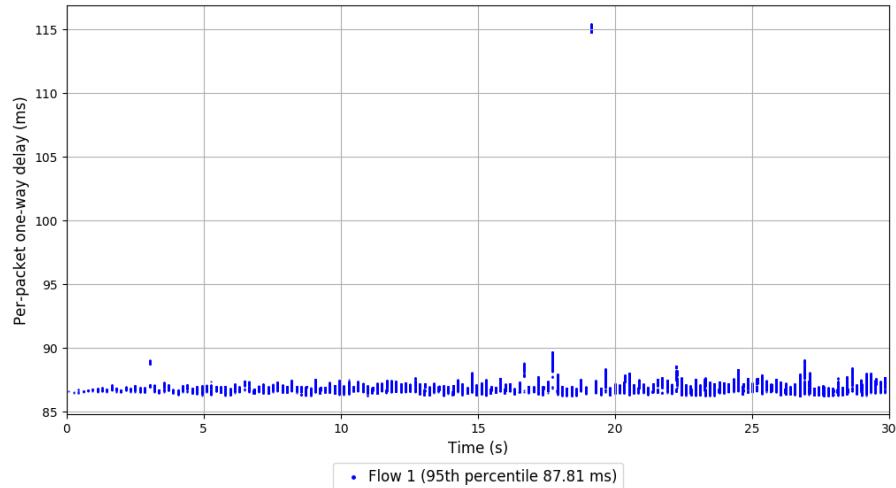
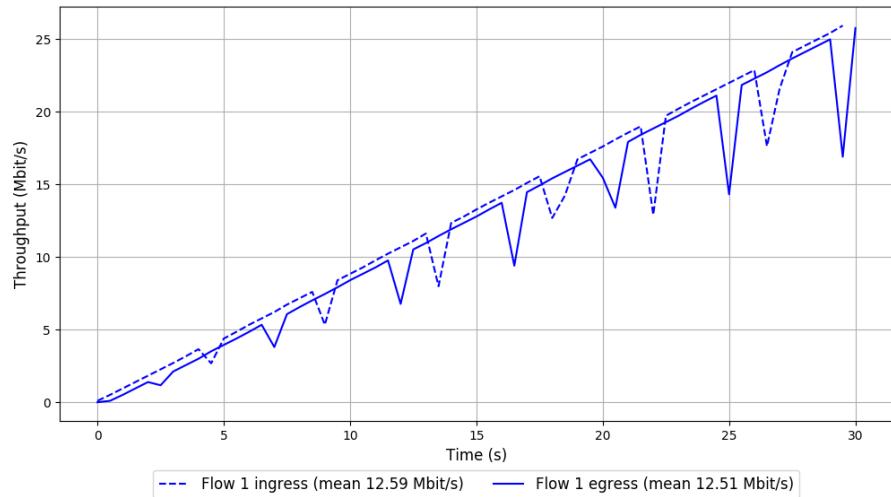


Run 3: Statistics of LEDBAT

```
Start at: 2019-07-17 17:09:39
End at: 2019-07-17 17:10:09
Local clock offset: 21.413 ms
Remote clock offset: 21.462 ms

# Below is generated by plot.py at 2019-07-17 20:19:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.51 Mbit/s
95th percentile per-packet one-way delay: 87.813 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 12.51 Mbit/s
95th percentile per-packet one-way delay: 87.813 ms
Loss rate: 1.15%
```

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

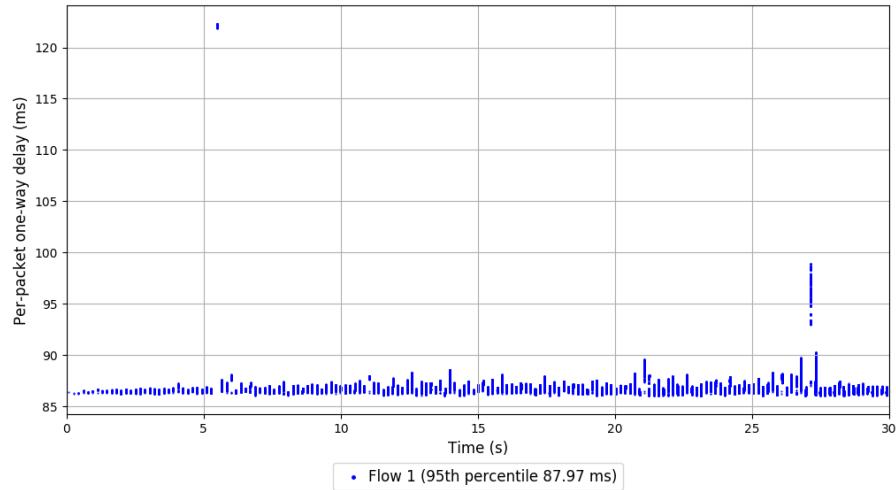
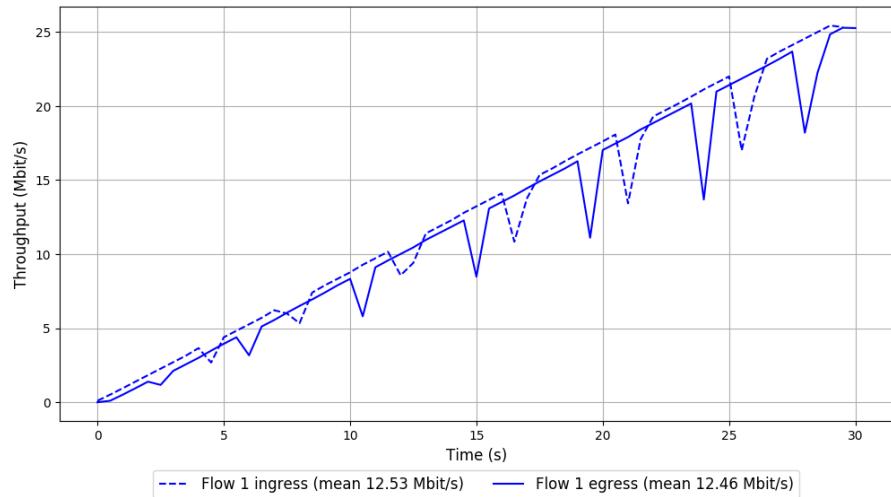


Run 4: Statistics of LEDBAT

```
Start at: 2019-07-17 17:44:52
End at: 2019-07-17 17:45:22
Local clock offset: 5.141 ms
Remote clock offset: 5.389 ms

# Below is generated by plot.py at 2019-07-17 20:19:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.46 Mbit/s
95th percentile per-packet one-way delay: 87.970 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 12.46 Mbit/s
95th percentile per-packet one-way delay: 87.970 ms
Loss rate: 1.14%
```

## Run 4: Report of LEDBAT — Data Link

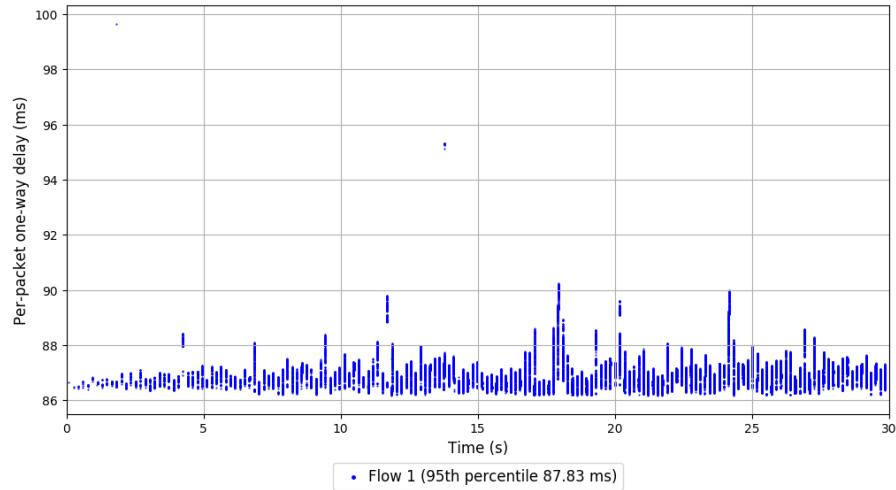
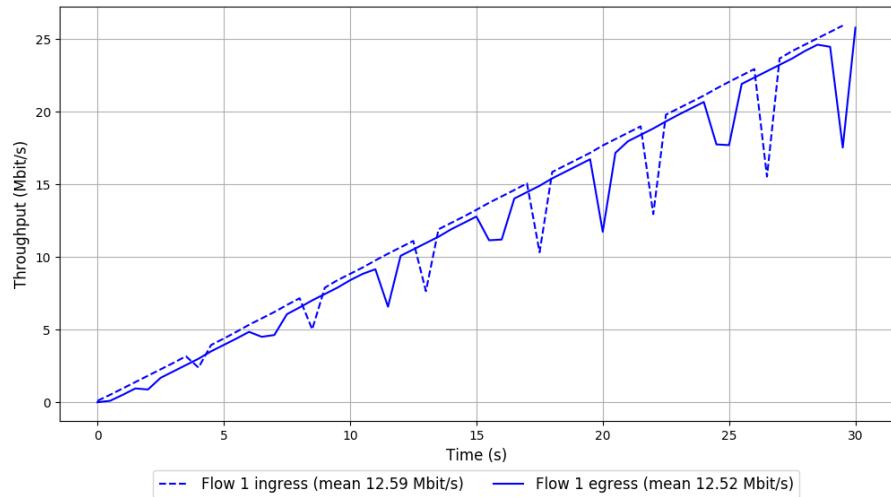


Run 5: Statistics of LEDBAT

```
Start at: 2019-07-17 18:20:31
End at: 2019-07-17 18:21:01
Local clock offset: 2.564 ms
Remote clock offset: 2.281 ms

# Below is generated by plot.py at 2019-07-17 20:19:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 87.827 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 87.827 ms
Loss rate: 1.15%
```

## Run 5: Report of LEDBAT — Data Link

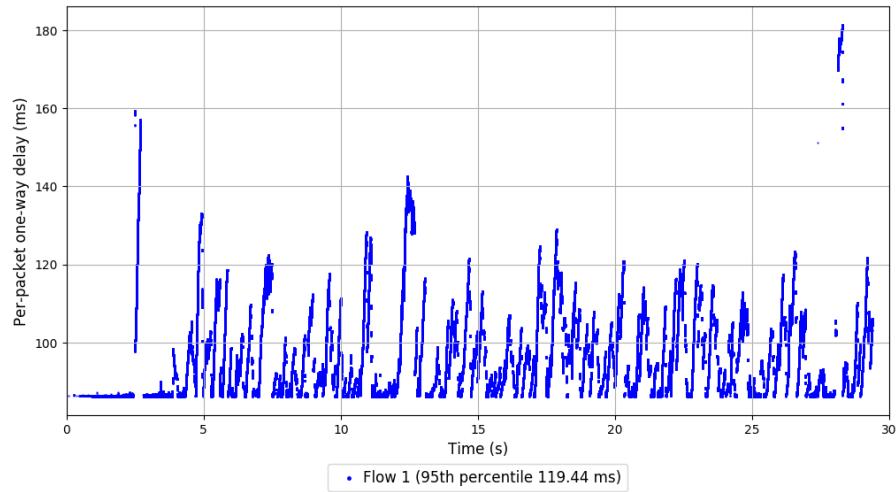
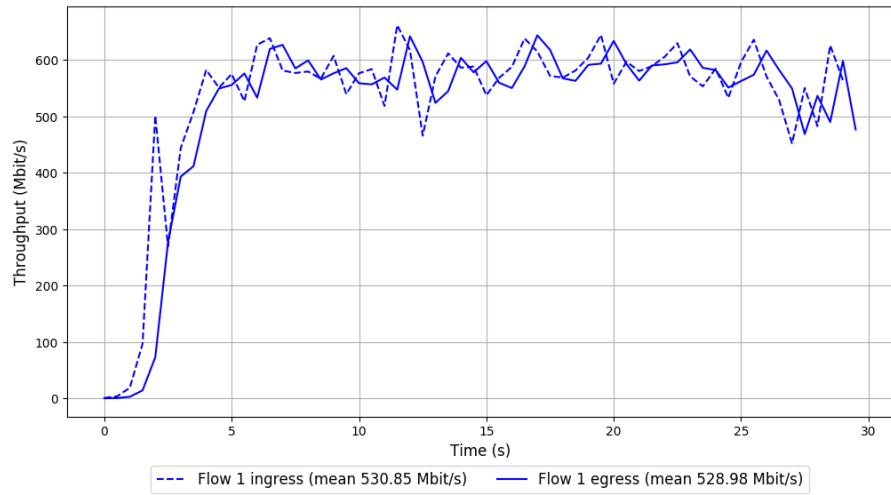


```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-07-17 16:14:25
End at: 2019-07-17 16:14:55
Local clock offset: 14.559 ms
Remote clock offset: 14.965 ms

# Below is generated by plot.py at 2019-07-17 20:20:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 528.98 Mbit/s
95th percentile per-packet one-way delay: 119.436 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 528.98 Mbit/s
95th percentile per-packet one-way delay: 119.436 ms
Loss rate: 0.93%
```

Run 1: Report of Muses\_DecisionTree — Data Link

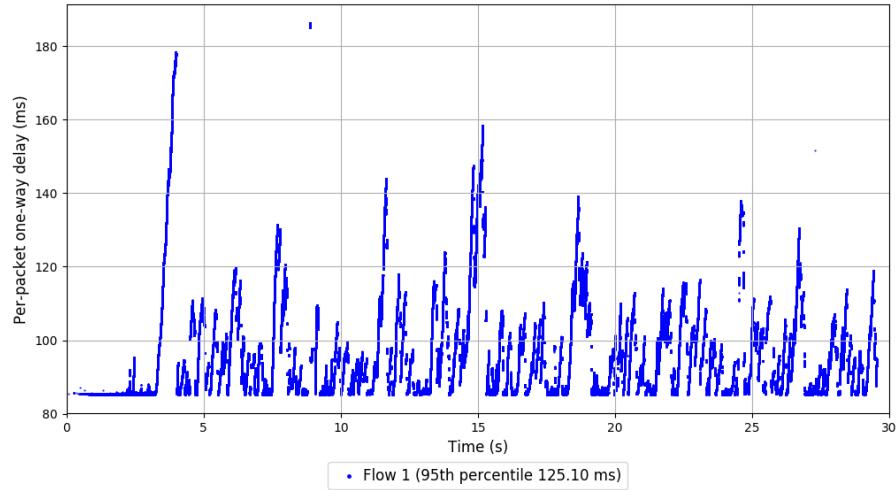
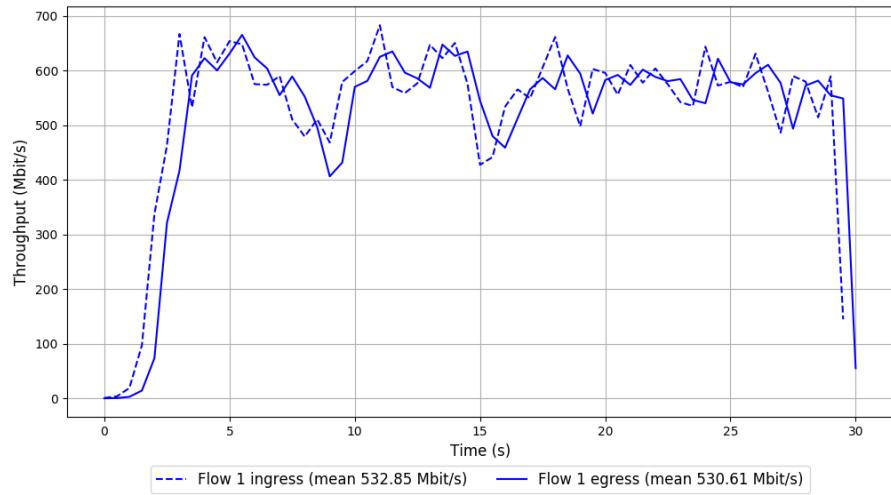


```
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-07-17 16:49:49
End at: 2019-07-17 16:50:19
Local clock offset: 28.051 ms
Remote clock offset: 29.524 ms

# Below is generated by plot.py at 2019-07-17 20:20:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 530.61 Mbit/s
95th percentile per-packet one-way delay: 125.098 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 530.61 Mbit/s
95th percentile per-packet one-way delay: 125.098 ms
Loss rate: 1.00%
```

## Run 2: Report of Muses\_DecisionTree — Data Link

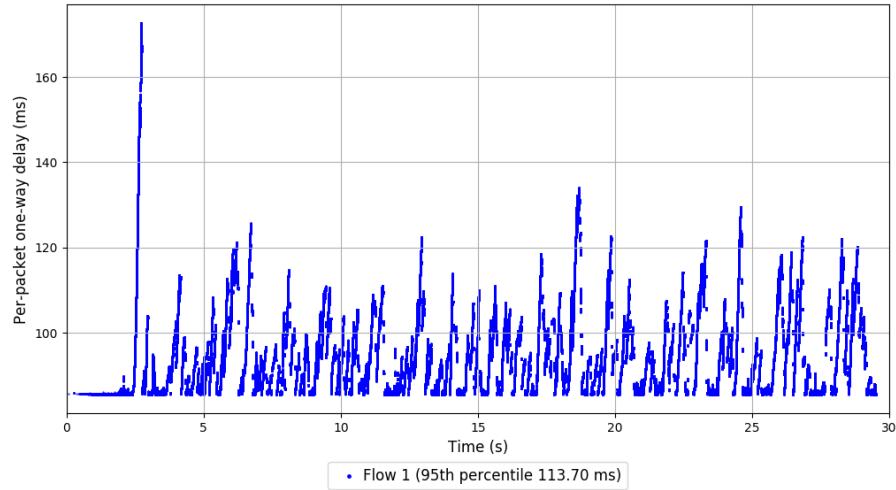
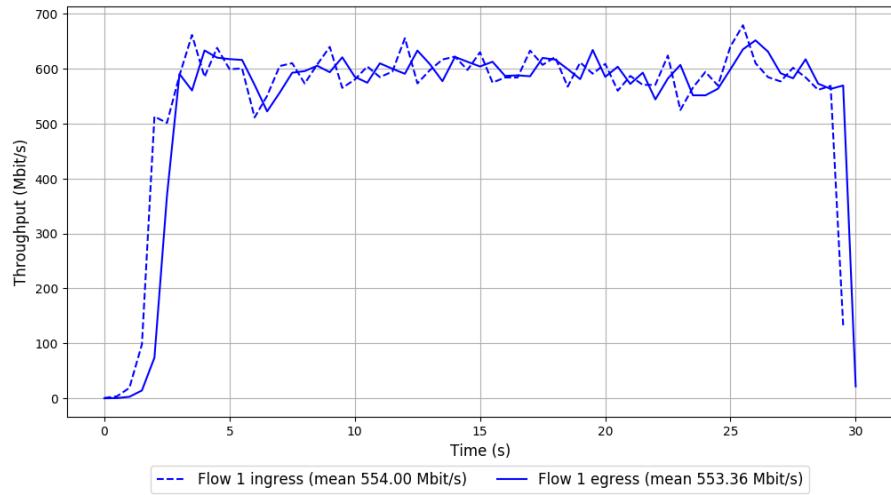


```
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-07-17 17:25:01
End at: 2019-07-17 17:25:31
Local clock offset: 9.285 ms
Remote clock offset: 10.018 ms

# Below is generated by plot.py at 2019-07-17 20:21:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 553.36 Mbit/s
95th percentile per-packet one-way delay: 113.699 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 553.36 Mbit/s
95th percentile per-packet one-way delay: 113.699 ms
Loss rate: 0.70%
```

### Run 3: Report of Muses\_DecisionTree — Data Link

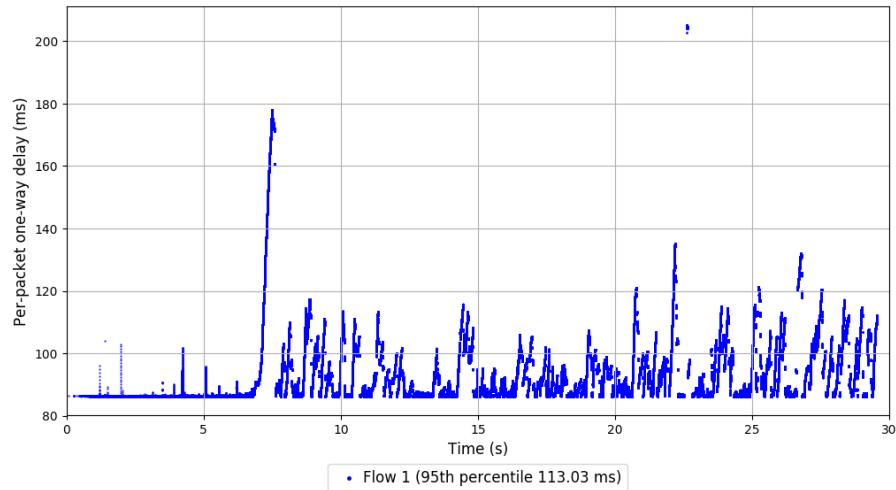
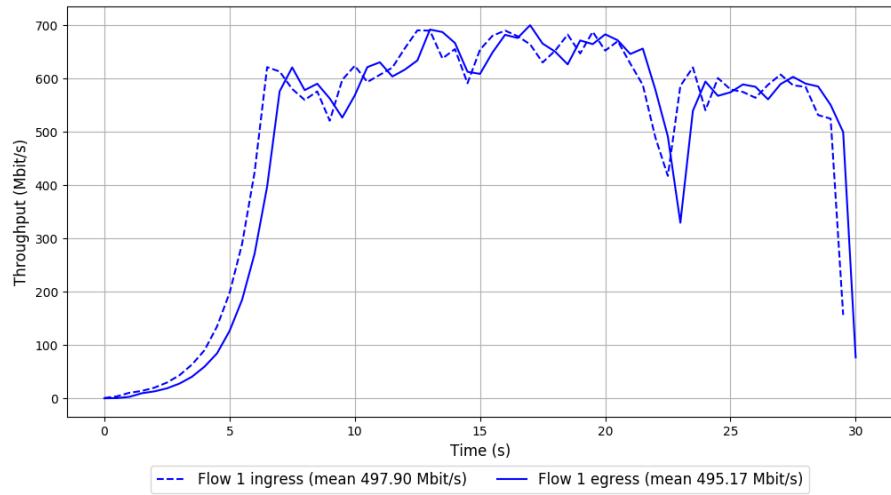


```
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-07-17 18:00:35
End at: 2019-07-17 18:01:05
Local clock offset: 4.062 ms
Remote clock offset: 3.996 ms

# Below is generated by plot.py at 2019-07-17 20:24:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 495.17 Mbit/s
95th percentile per-packet one-way delay: 113.030 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 495.17 Mbit/s
95th percentile per-packet one-way delay: 113.030 ms
Loss rate: 1.14%
```

Run 4: Report of Muses\_DecisionTree — Data Link

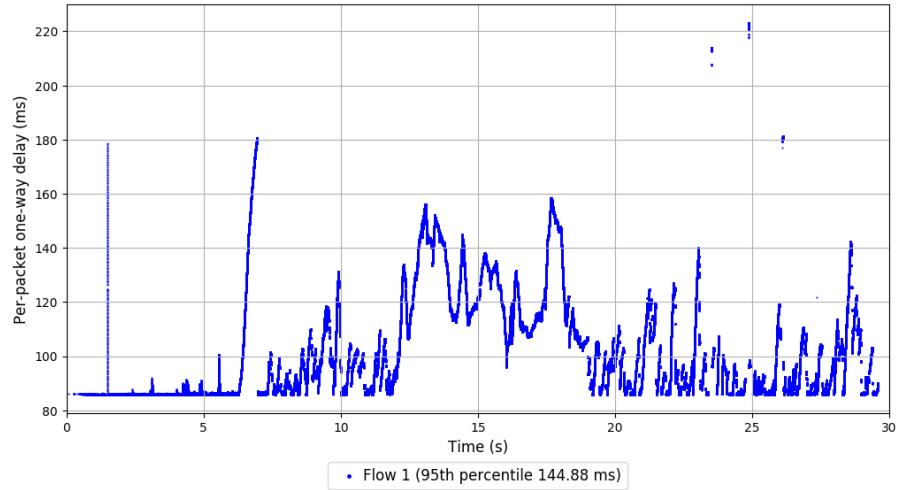
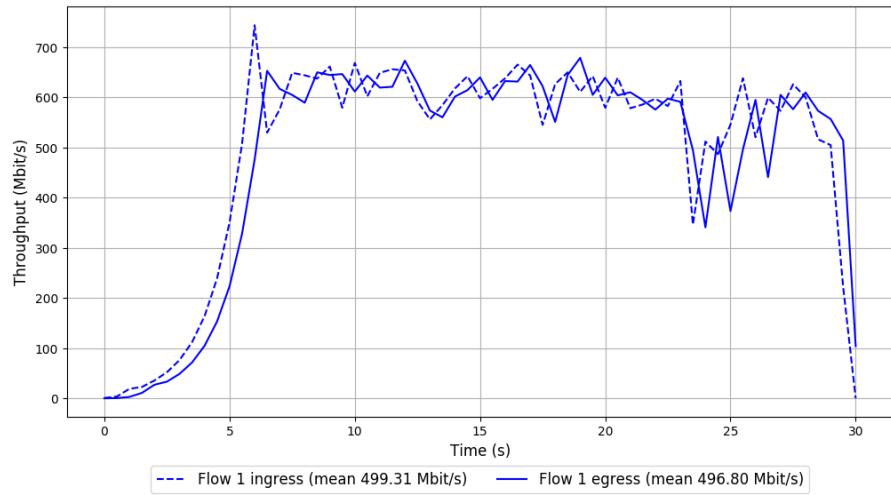


```
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-07-17 18:35:56
End at: 2019-07-17 18:36:26
Local clock offset: 1.939 ms
Remote clock offset: 1.976 ms

# Below is generated by plot.py at 2019-07-17 20:25:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 496.80 Mbit/s
95th percentile per-packet one-way delay: 144.879 ms
Loss rate: 2.13%
-- Flow 1:
Average throughput: 496.80 Mbit/s
95th percentile per-packet one-way delay: 144.879 ms
Loss rate: 2.13%
```

Run 5: Report of Muses\_DecisionTree — Data Link

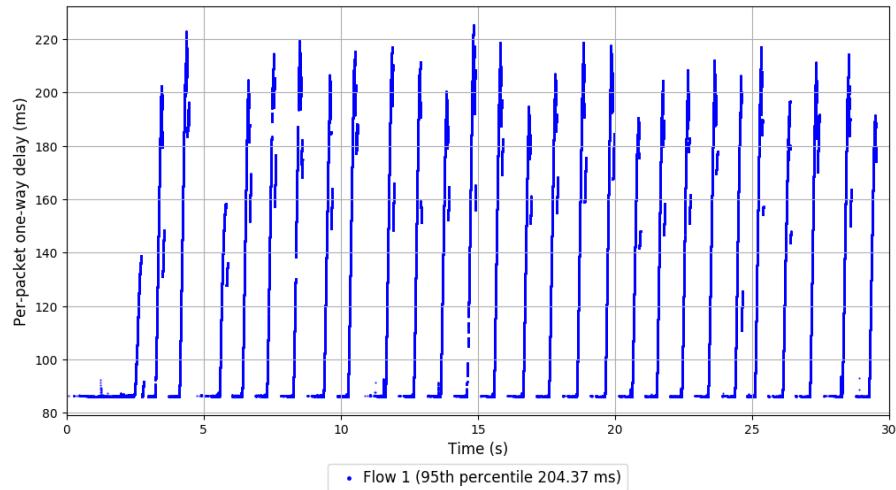
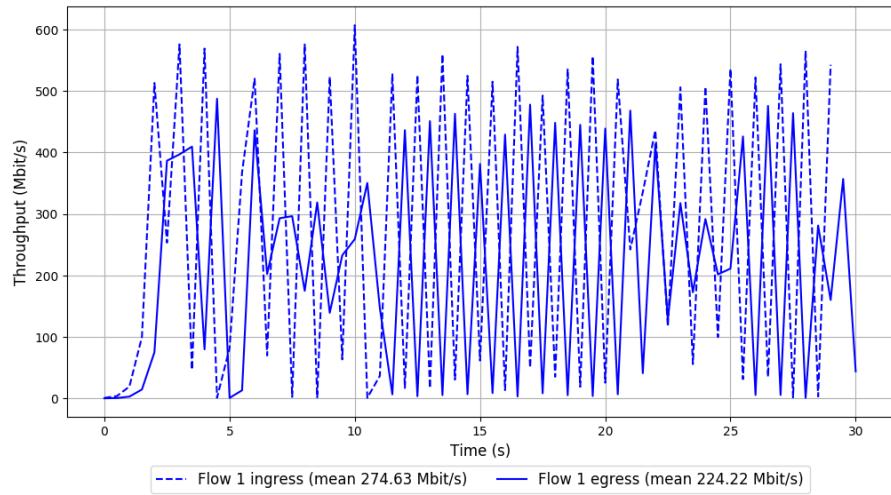


```
Run 1: Statistics of Muses\_DecisionTreeH0

Start at: 2019-07-17 16:13:03
End at: 2019-07-17 16:13:33
Local clock offset: 16.202 ms
Remote clock offset: 16.287 ms

# Below is generated by plot.py at 2019-07-17 20:25:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.22 Mbit/s
95th percentile per-packet one-way delay: 204.371 ms
Loss rate: 18.29%
-- Flow 1:
Average throughput: 224.22 Mbit/s
95th percentile per-packet one-way delay: 204.371 ms
Loss rate: 18.29%
```

Run 1: Report of Muses\_DecisionTreeH0 — Data Link

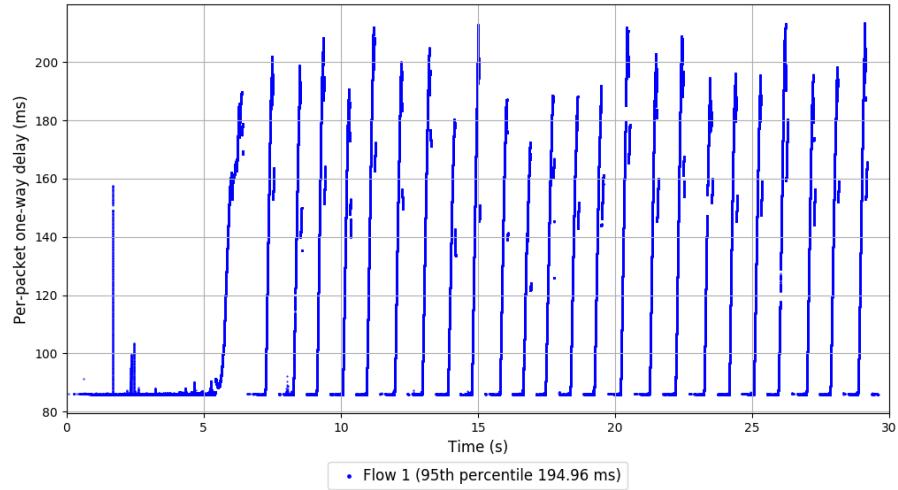
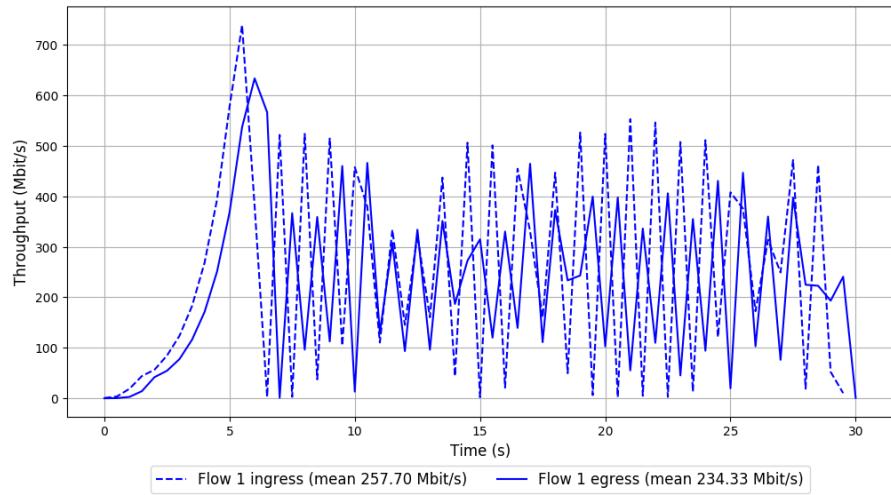


```
Run 2: Statistics of Muses\_DecisionTreeH0

Start at: 2019-07-17 16:48:26
End at: 2019-07-17 16:48:56
Local clock offset: 27.209 ms
Remote clock offset: 28.273 ms

# Below is generated by plot.py at 2019-07-17 20:25:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 234.33 Mbit/s
95th percentile per-packet one-way delay: 194.960 ms
Loss rate: 9.60%
-- Flow 1:
Average throughput: 234.33 Mbit/s
95th percentile per-packet one-way delay: 194.960 ms
Loss rate: 9.60%
```

Run 2: Report of Muses\_DecisionTreeH0 — Data Link

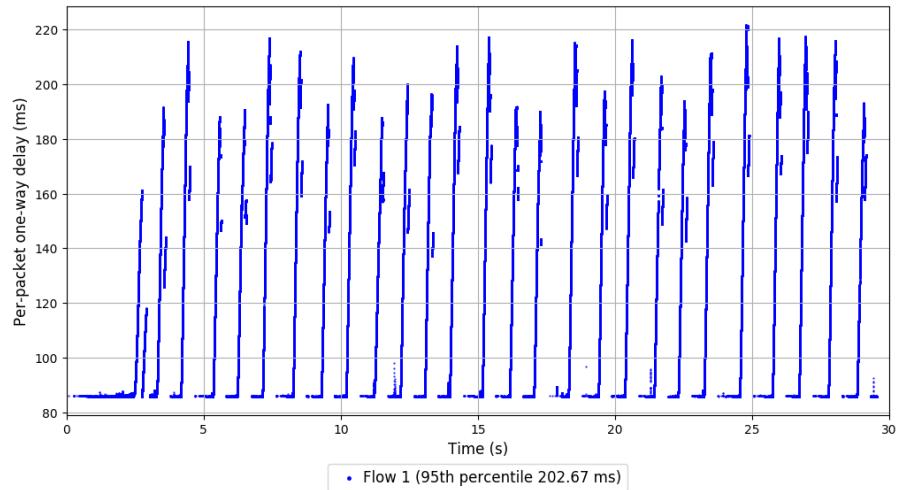
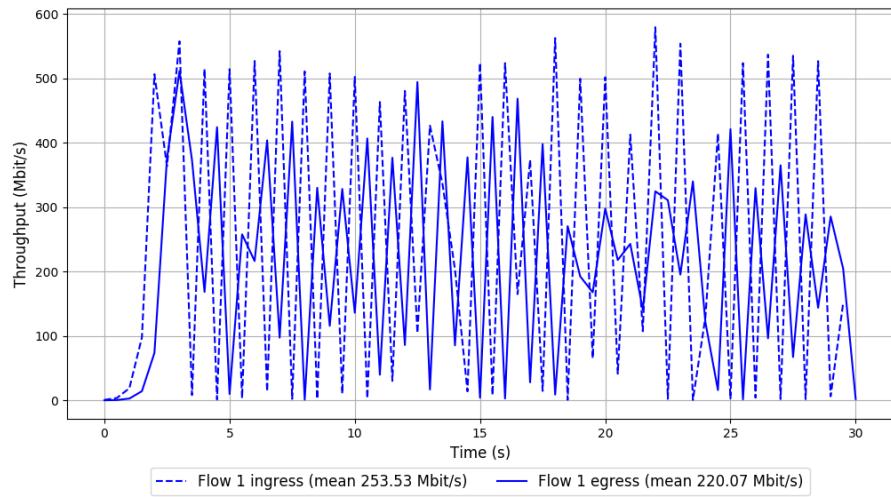


```
Run 3: Statistics of Muses\_DecisionTreeH0

Start at: 2019-07-17 17:23:40
End at: 2019-07-17 17:24:10
Local clock offset: 9.835 ms
Remote clock offset: 10.15 ms

# Below is generated by plot.py at 2019-07-17 20:25:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.07 Mbit/s
95th percentile per-packet one-way delay: 202.672 ms
Loss rate: 13.70%
-- Flow 1:
Average throughput: 220.07 Mbit/s
95th percentile per-packet one-way delay: 202.672 ms
Loss rate: 13.70%
```

Run 3: Report of Muses\_DecisionTreeH0 — Data Link

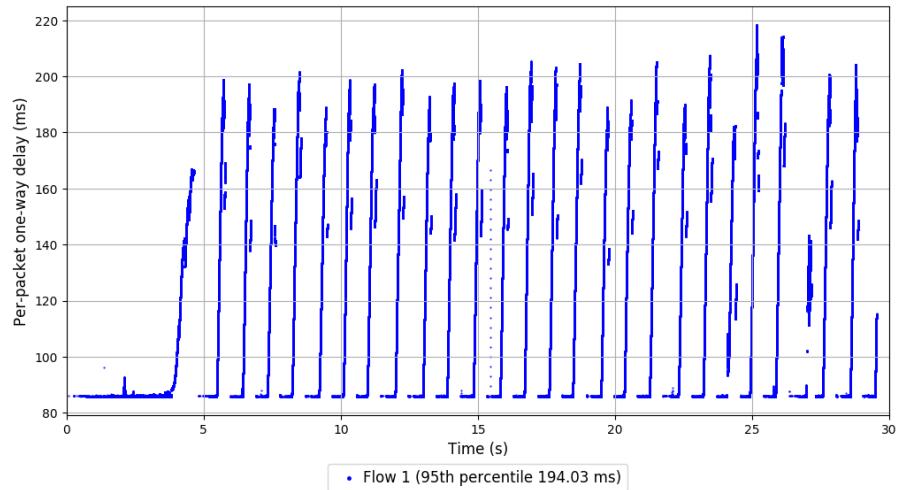
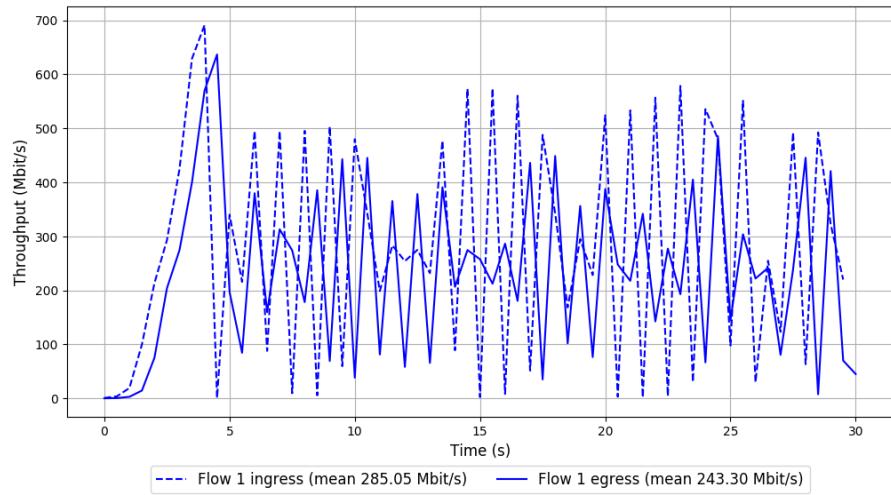


```
Run 4: Statistics of Muses\_DecisionTreeH0

Start at: 2019-07-17 17:59:12
End at: 2019-07-17 17:59:42
Local clock offset: 3.664 ms
Remote clock offset: 3.94 ms

# Below is generated by plot.py at 2019-07-17 20:25:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 243.30 Mbit/s
95th percentile per-packet one-way delay: 194.034 ms
Loss rate: 15.14%
-- Flow 1:
Average throughput: 243.30 Mbit/s
95th percentile per-packet one-way delay: 194.034 ms
Loss rate: 15.14%
```

Run 4: Report of Muses\_DecisionTreeH0 — Data Link

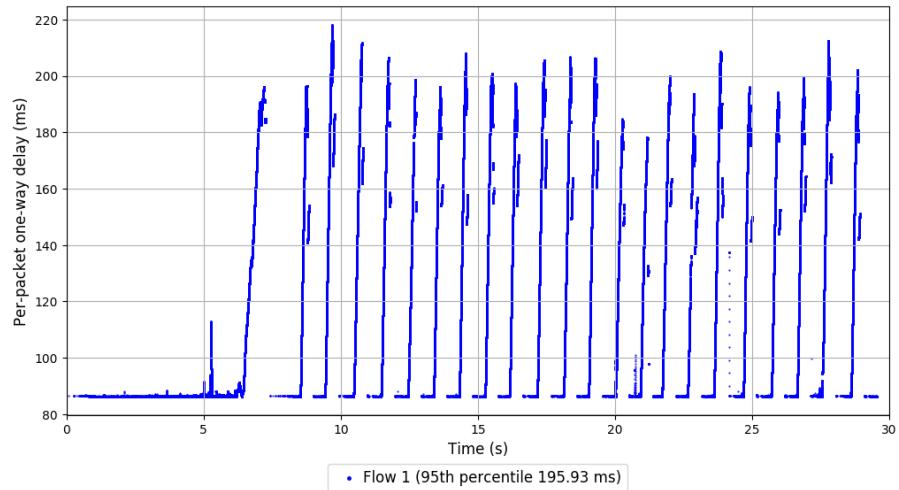
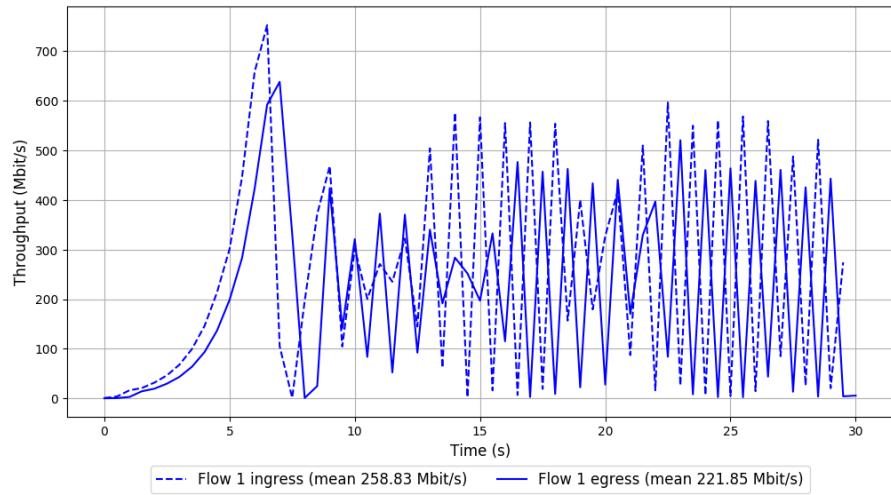


```
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2019-07-17 18:34:33
End at: 2019-07-17 18:35:03
Local clock offset: 2.314 ms
Remote clock offset: 1.954 ms

# Below is generated by plot.py at 2019-07-17 20:25:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.85 Mbit/s
95th percentile per-packet one-way delay: 195.925 ms
Loss rate: 14.79%
-- Flow 1:
Average throughput: 221.85 Mbit/s
95th percentile per-packet one-way delay: 195.925 ms
Loss rate: 14.79%
```

Run 5: Report of Muses\_DecisionTreeH0 — Data Link

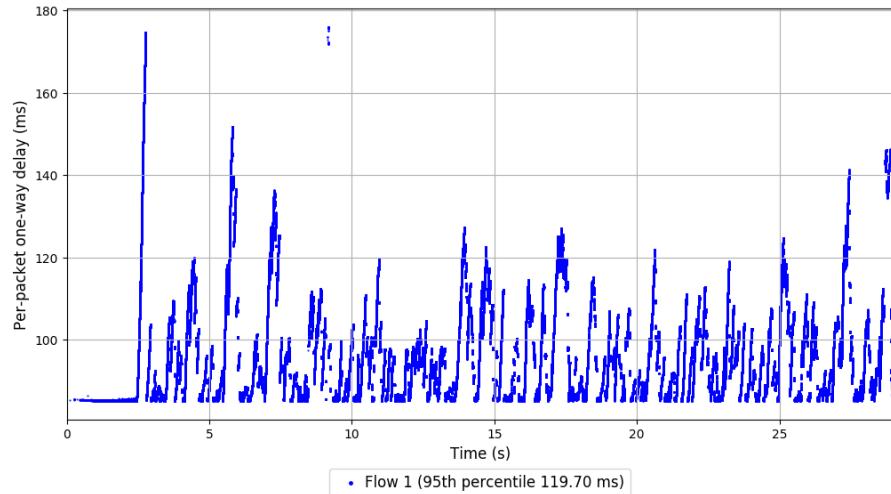
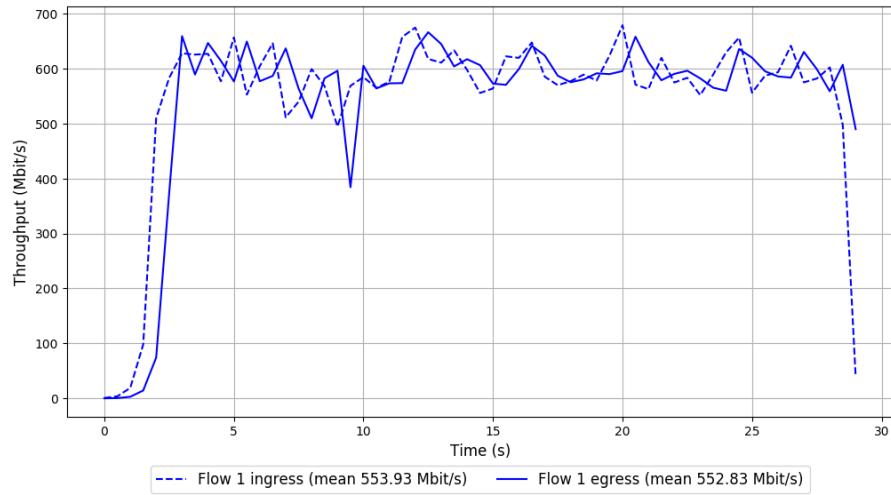


```
Run 1: Statistics of Muses\_DecisionTreeR0

Start at: 2019-07-17 16:08:18
End at: 2019-07-17 16:08:48
Local clock offset: 12.302 ms
Remote clock offset: 13.421 ms

# Below is generated by plot.py at 2019-07-17 20:32:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 552.83 Mbit/s
95th percentile per-packet one-way delay: 119.697 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 552.83 Mbit/s
95th percentile per-packet one-way delay: 119.697 ms
Loss rate: 0.79%
```

Run 1: Report of Muses\_DecisionTreeR0 — Data Link

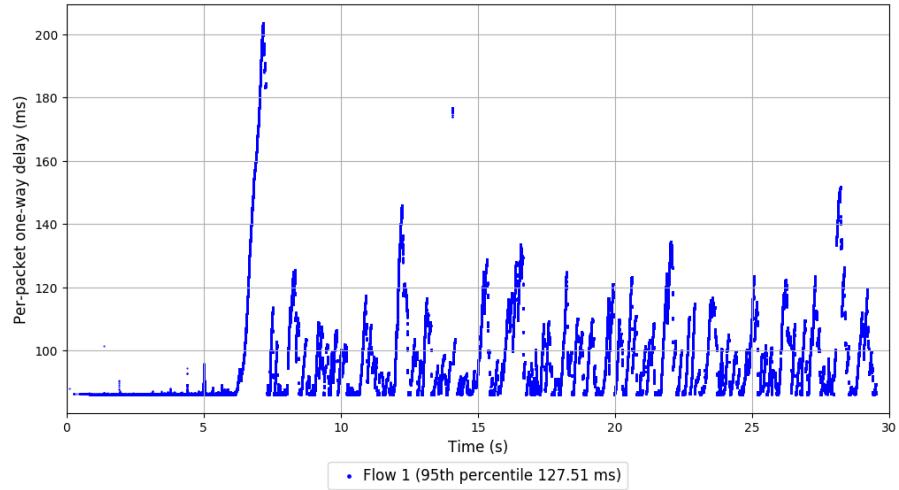
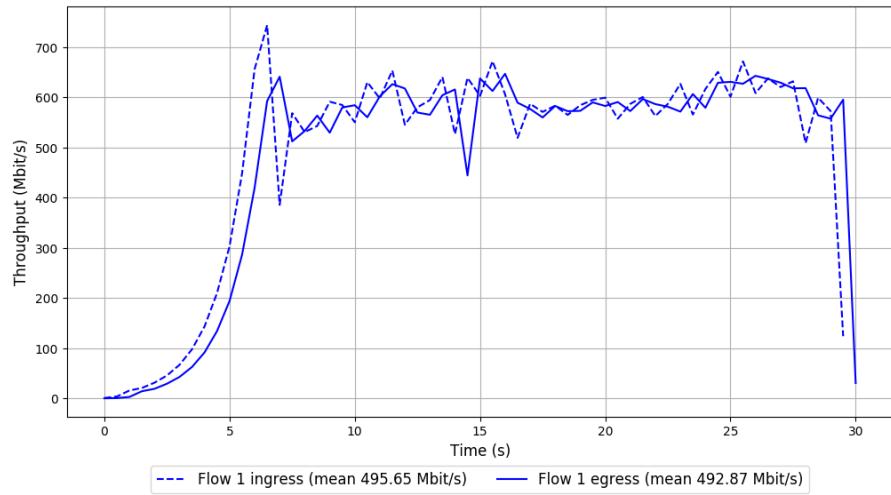


```
Run 2: Statistics of Muses\_DecisionTreeR0

Start at: 2019-07-17 16:43:44
End at: 2019-07-17 16:44:14
Local clock offset: 23.497 ms
Remote clock offset: 24.238 ms

# Below is generated by plot.py at 2019-07-17 20:33:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 492.87 Mbit/s
95th percentile per-packet one-way delay: 127.510 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 492.87 Mbit/s
95th percentile per-packet one-way delay: 127.510 ms
Loss rate: 1.15%
```

Run 2: Report of Muses\_DecisionTreeR0 — Data Link

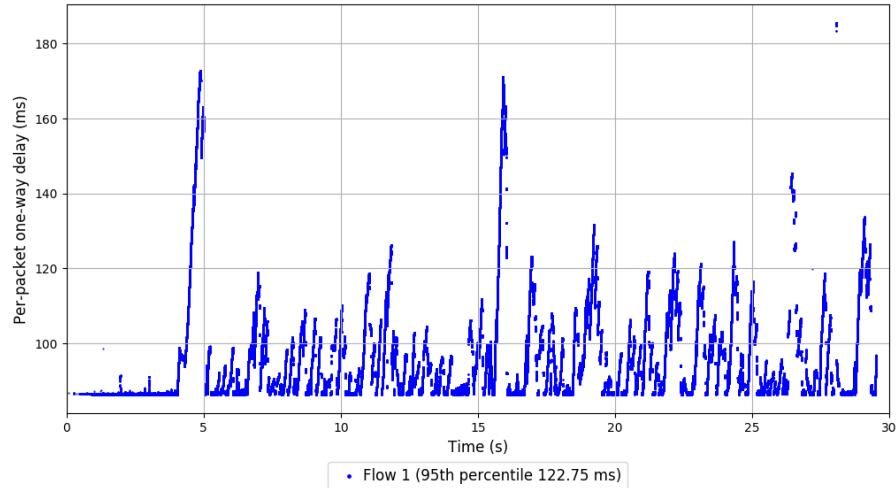
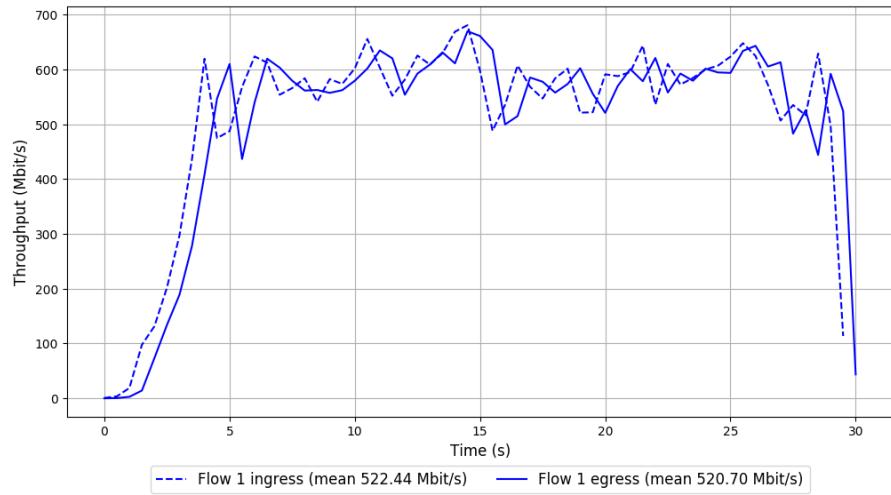


```
Run 3: Statistics of Muses\_DecisionTreeR0

Start at: 2019-07-17 17:18:59
End at: 2019-07-17 17:19:29
Local clock offset: 11.329 ms
Remote clock offset: 11.536 ms

# Below is generated by plot.py at 2019-07-17 20:33:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 520.70 Mbit/s
95th percentile per-packet one-way delay: 122.750 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 520.70 Mbit/s
95th percentile per-packet one-way delay: 122.750 ms
Loss rate: 0.92%
```

Run 3: Report of Muses\_DecisionTreeR0 — Data Link

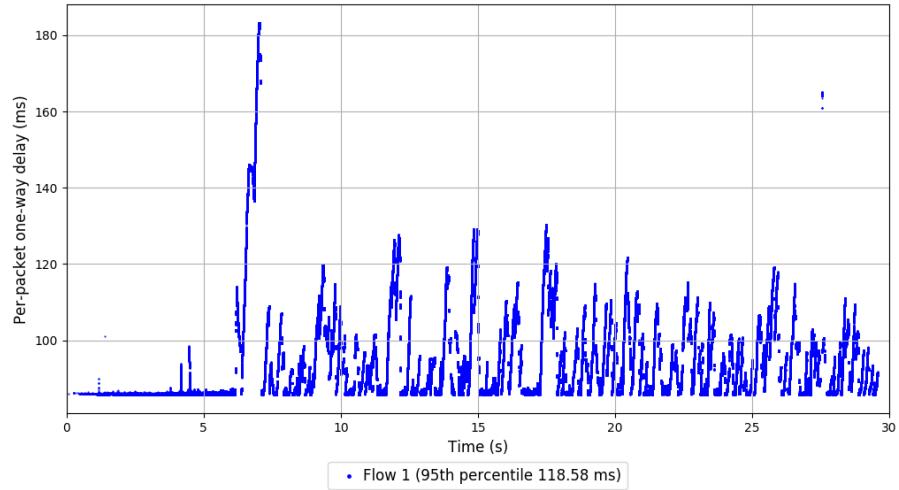
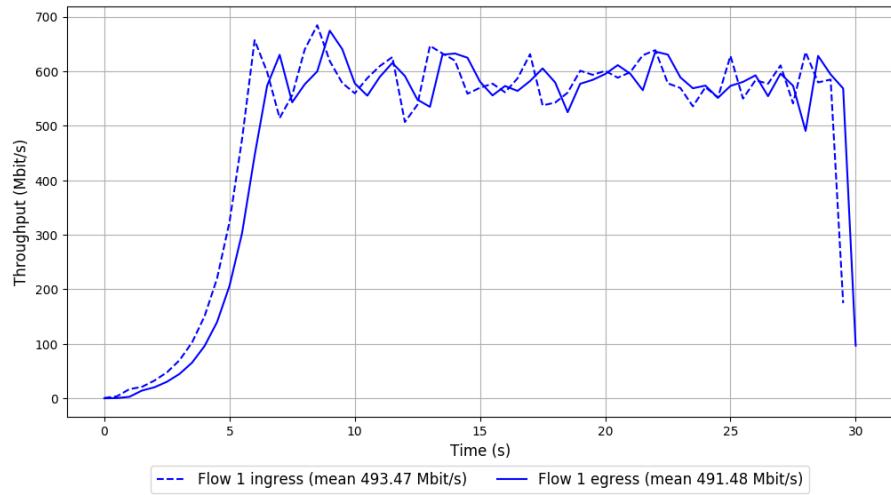


```
Run 4: Statistics of Muses\_DecisionTreeR0

Start at: 2019-07-17 17:54:30
End at: 2019-07-17 17:55:00
Local clock offset: 3.348 ms
Remote clock offset: 3.887 ms

# Below is generated by plot.py at 2019-07-17 20:33:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 491.48 Mbit/s
95th percentile per-packet one-way delay: 118.580 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 491.48 Mbit/s
95th percentile per-packet one-way delay: 118.580 ms
Loss rate: 0.99%
```

Run 4: Report of Muses\_DecisionTreeR0 — Data Link

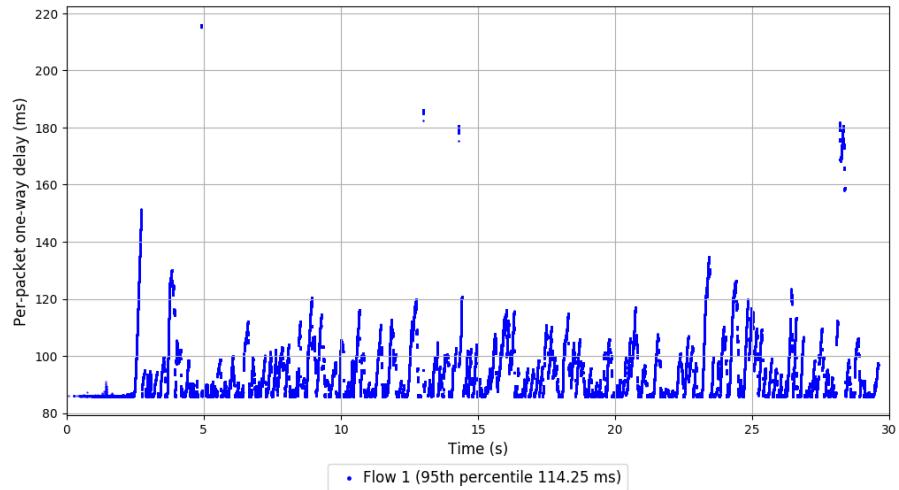
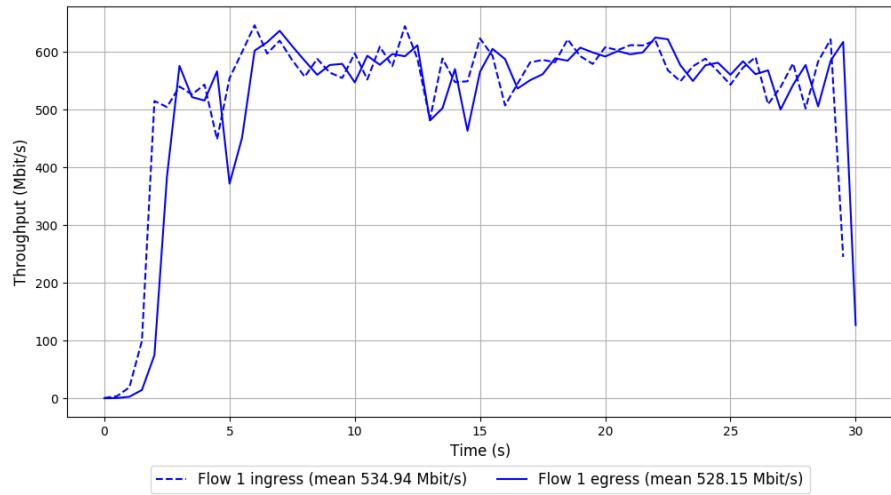


```
Run 5: Statistics of Muses\_DecisionTreeR0

Start at: 2019-07-17 18:29:53
End at: 2019-07-17 18:30:23
Local clock offset: 1.807 ms
Remote clock offset: 1.832 ms

# Below is generated by plot.py at 2019-07-17 20:35:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 528.15 Mbit/s
95th percentile per-packet one-way delay: 114.254 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 528.15 Mbit/s
95th percentile per-packet one-way delay: 114.254 ms
Loss rate: 1.84%
```

Run 5: Report of Muses\_DecisionTreeR0 — Data Link

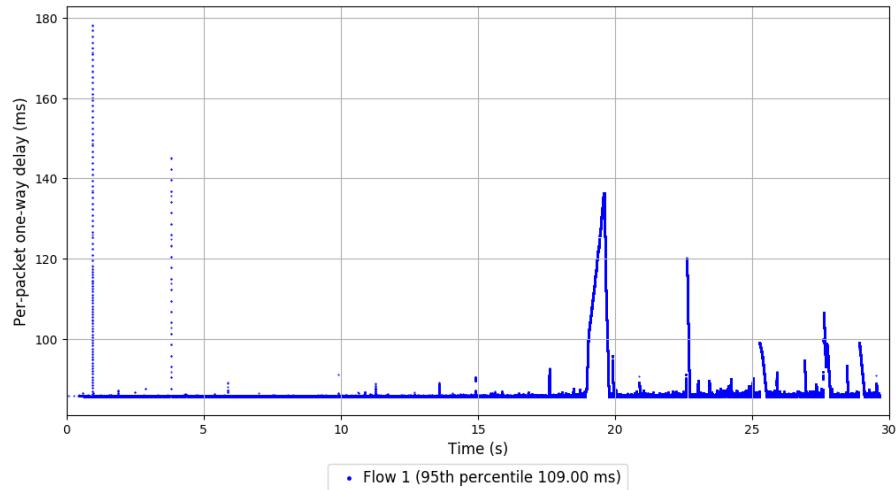
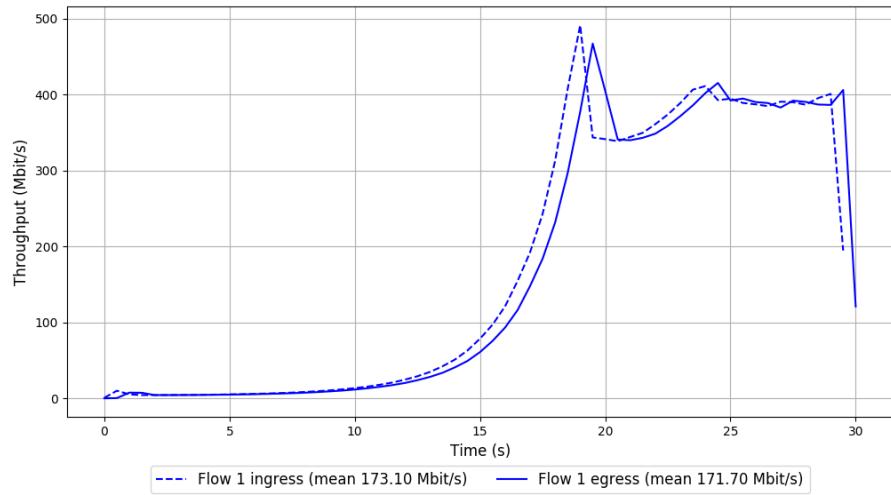


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-07-17 16:06:57
End at: 2019-07-17 16:07:27
Local clock offset: 10.873 ms
Remote clock offset: 11.482 ms

# Below is generated by plot.py at 2019-07-17 20:35:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 171.70 Mbit/s
95th percentile per-packet one-way delay: 108.997 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 171.70 Mbit/s
95th percentile per-packet one-way delay: 108.997 ms
Loss rate: 1.39%
```

Run 1: Report of PCC-Allegro — Data Link

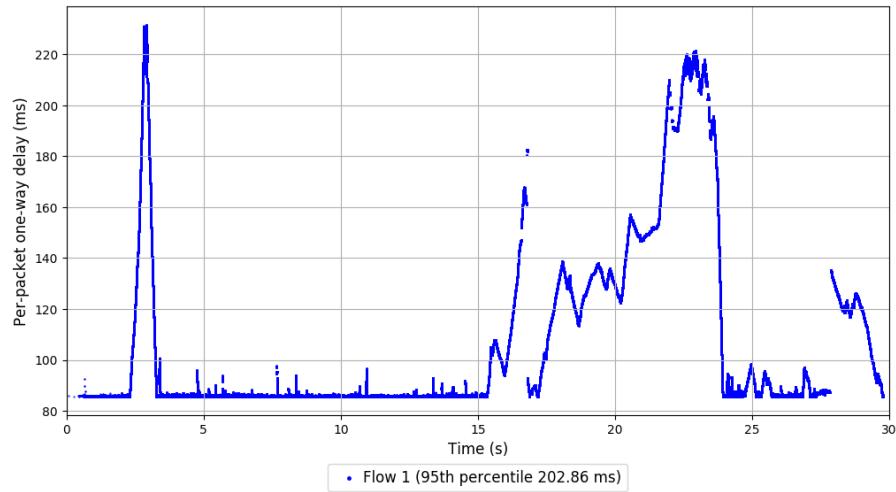
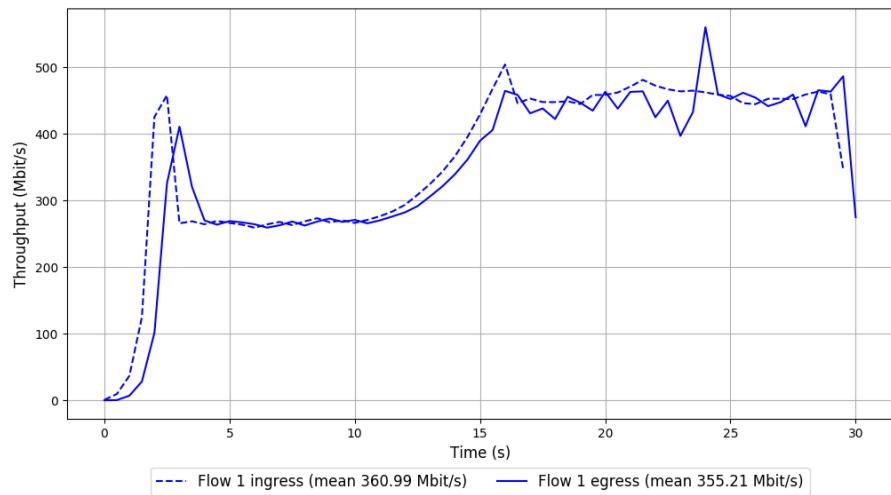


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-07-17 16:42:11
End at: 2019-07-17 16:42:41
Local clock offset: 22.523 ms
Remote clock offset: 23.441 ms

# Below is generated by plot.py at 2019-07-17 20:37:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 355.21 Mbit/s
95th percentile per-packet one-way delay: 202.864 ms
Loss rate: 2.17%
-- Flow 1:
Average throughput: 355.21 Mbit/s
95th percentile per-packet one-way delay: 202.864 ms
Loss rate: 2.17%
```

Run 2: Report of PCC-Allegro — Data Link

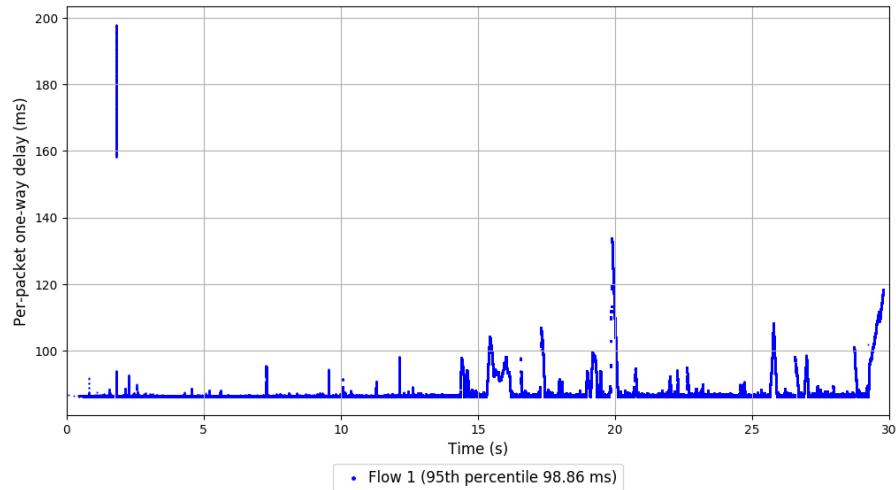
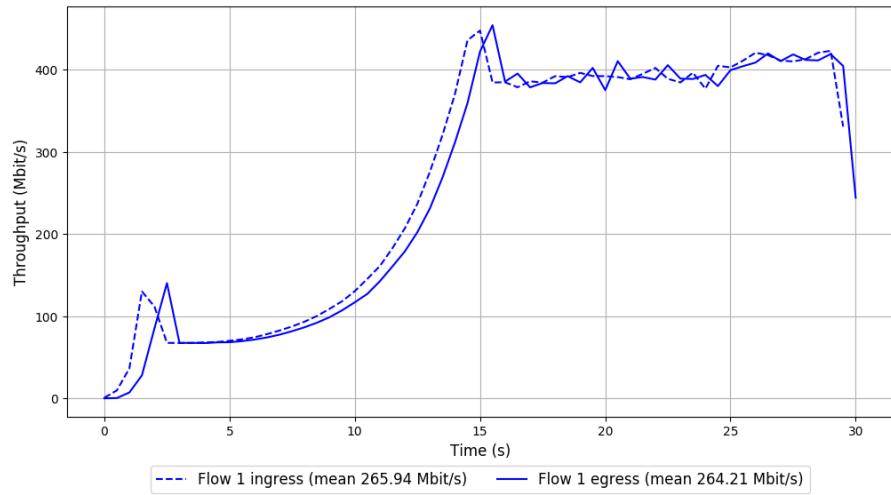


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-07-17 17:17:32
End at: 2019-07-17 17:18:02
Local clock offset: 11.967 ms
Remote clock offset: 12.237 ms

# Below is generated by plot.py at 2019-07-17 20:37:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 264.21 Mbit/s
95th percentile per-packet one-way delay: 98.856 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 264.21 Mbit/s
95th percentile per-packet one-way delay: 98.856 ms
Loss rate: 1.23%
```

Run 3: Report of PCC-Allegro — Data Link

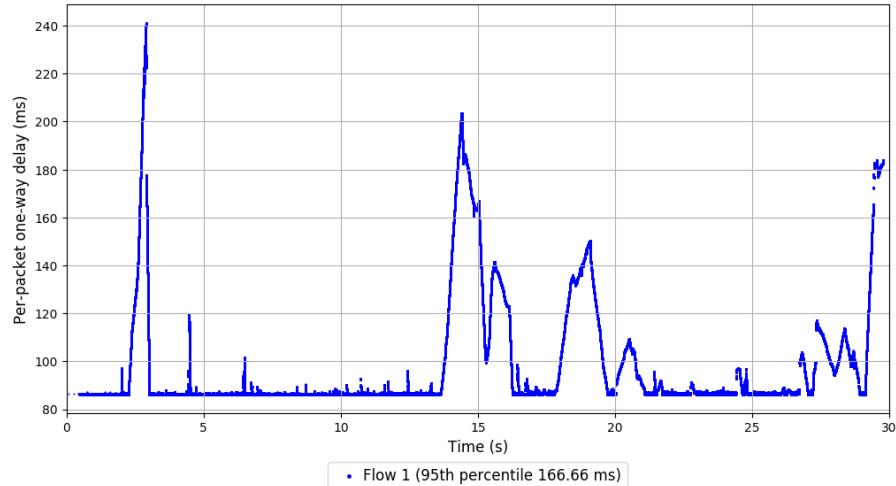
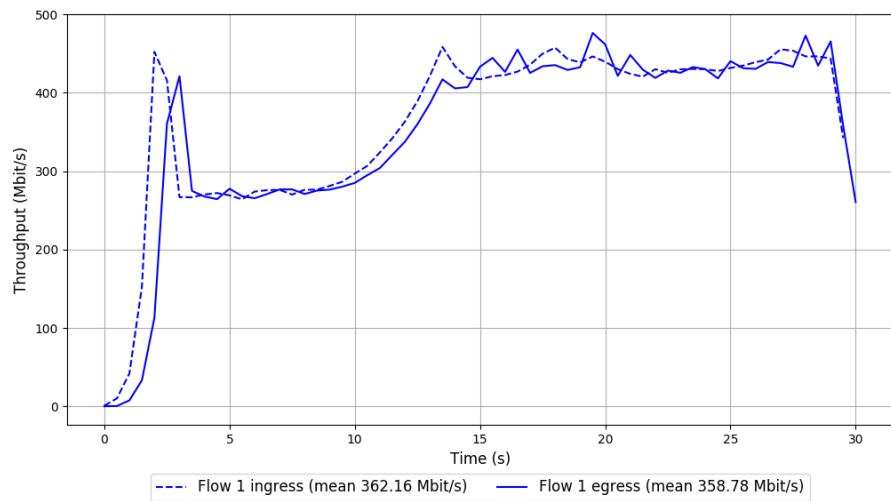


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-07-17 17:52:55
End at: 2019-07-17 17:53:25
Local clock offset: 3.989 ms
Remote clock offset: 3.934 ms

# Below is generated by plot.py at 2019-07-17 20:45:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 358.78 Mbit/s
95th percentile per-packet one-way delay: 166.660 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 358.78 Mbit/s
95th percentile per-packet one-way delay: 166.660 ms
Loss rate: 1.51%
```

Run 4: Report of PCC-Allegro — Data Link

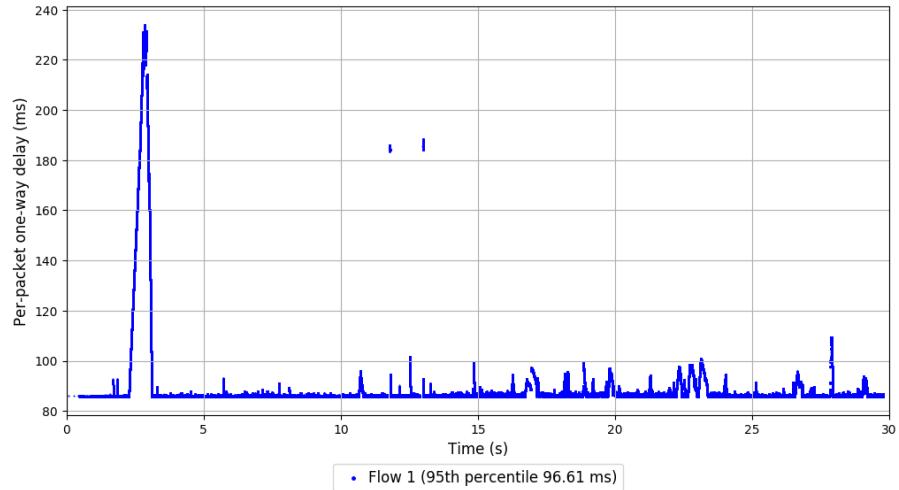
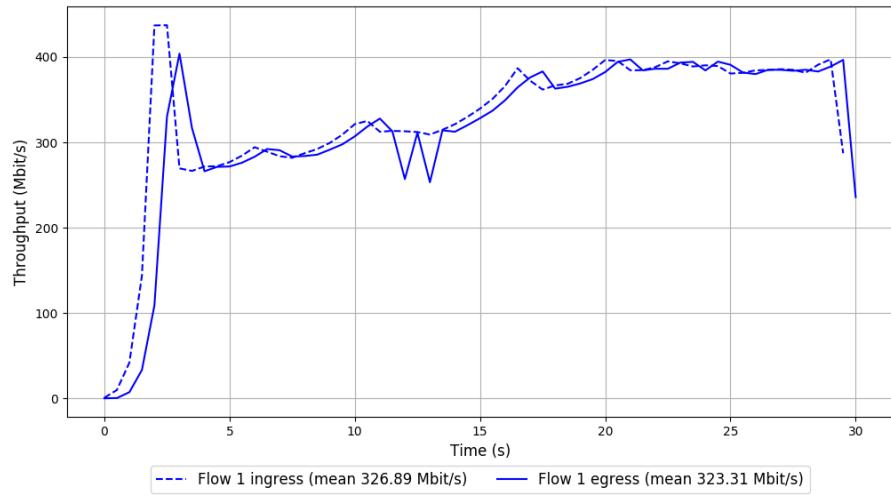


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-07-17 18:28:22
End at: 2019-07-17 18:28:52
Local clock offset: 1.801 ms
Remote clock offset: 1.845 ms

# Below is generated by plot.py at 2019-07-17 20:45:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 323.31 Mbit/s
95th percentile per-packet one-way delay: 96.611 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 323.31 Mbit/s
95th percentile per-packet one-way delay: 96.611 ms
Loss rate: 1.67%
```

Run 5: Report of PCC-Allegro — Data Link

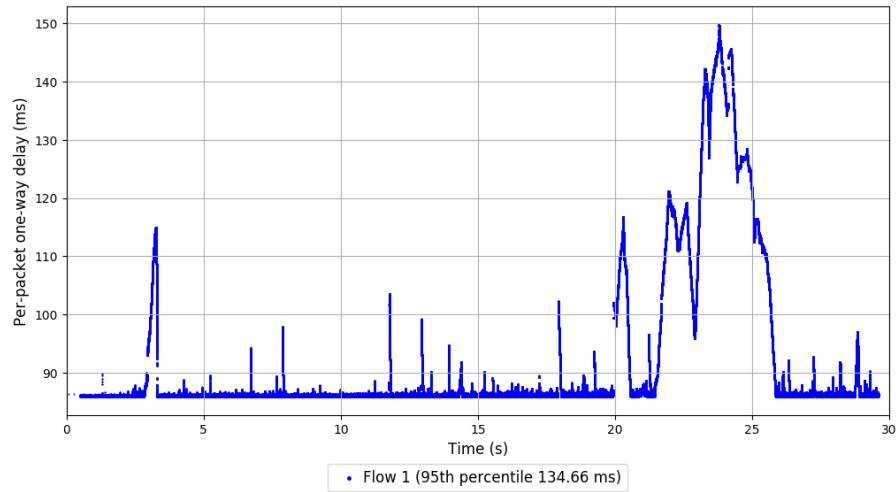
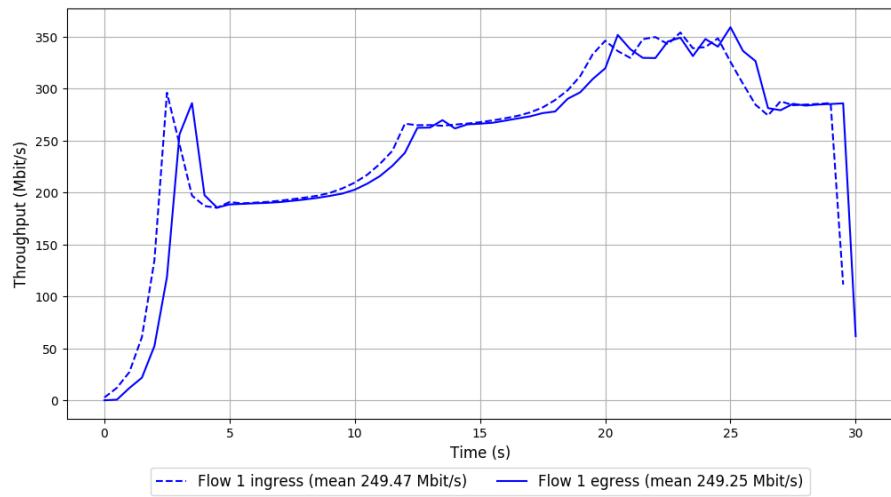


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-07-17 16:23:01
End at: 2019-07-17 16:23:31
Local clock offset: 20.394 ms
Remote clock offset: 21.289 ms

# Below is generated by plot.py at 2019-07-17 20:45:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 249.25 Mbit/s
95th percentile per-packet one-way delay: 134.665 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 249.25 Mbit/s
95th percentile per-packet one-way delay: 134.665 ms
Loss rate: 0.67%
```

Run 1: Report of PCC-Expr — Data Link

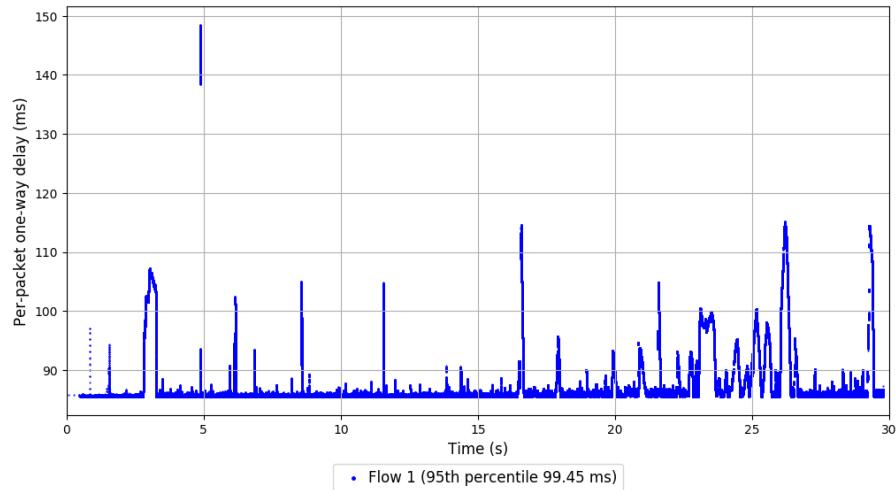
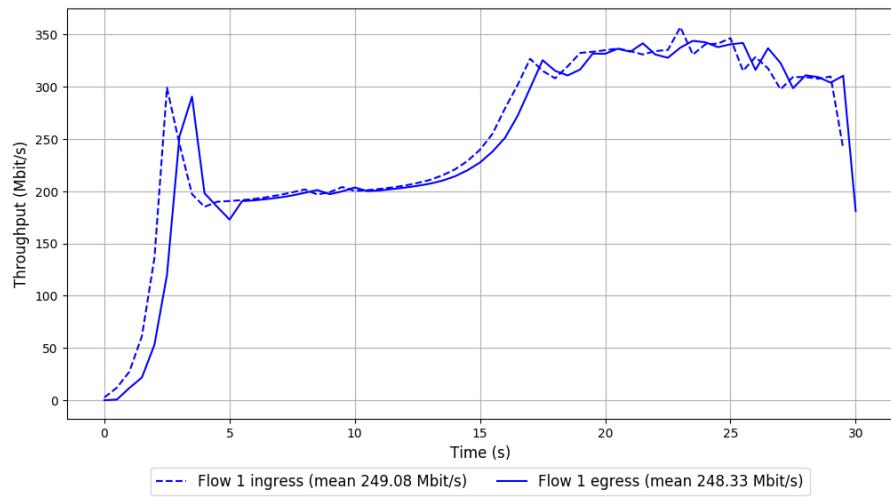


Run 2: Statistics of PCC-Expr

```
Start at: 2019-07-17 16:58:23
End at: 2019-07-17 16:58:53
Local clock offset: 37.552 ms
Remote clock offset: 38.894 ms

# Below is generated by plot.py at 2019-07-17 20:45:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 248.33 Mbit/s
95th percentile per-packet one-way delay: 99.447 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 248.33 Mbit/s
95th percentile per-packet one-way delay: 99.447 ms
Loss rate: 0.88%
```

Run 2: Report of PCC-Expr — Data Link

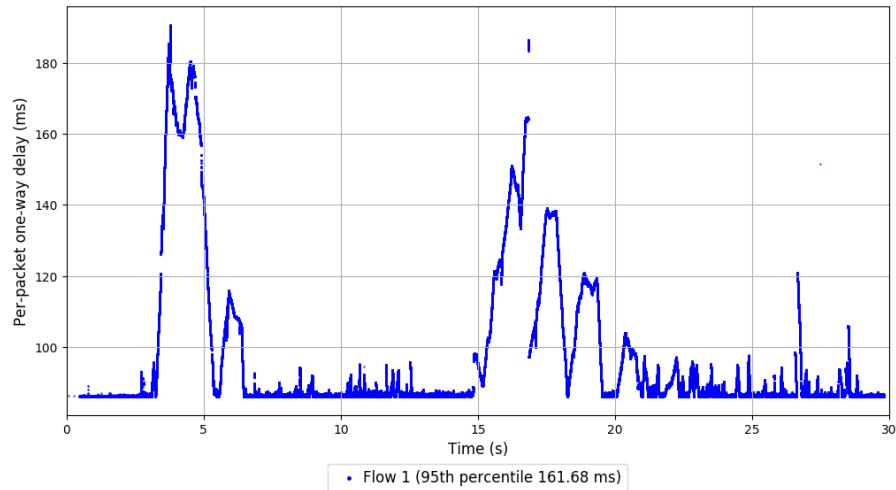
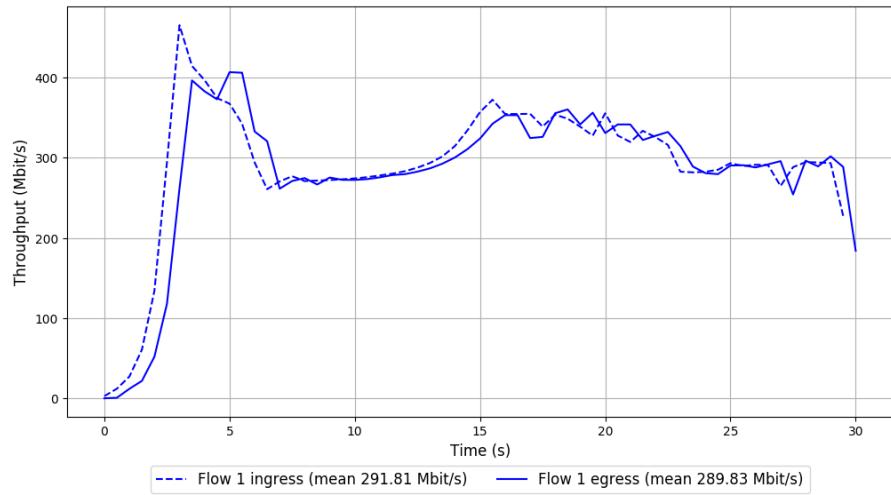


Run 3: Statistics of PCC-Expr

```
Start at: 2019-07-17 17:33:41
End at: 2019-07-17 17:34:11
Local clock offset: 10.288 ms
Remote clock offset: 10.664 ms

# Below is generated by plot.py at 2019-07-17 20:45:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 289.83 Mbit/s
95th percentile per-packet one-way delay: 161.683 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 289.83 Mbit/s
95th percentile per-packet one-way delay: 161.683 ms
Loss rate: 1.26%
```

Run 3: Report of PCC-Expr — Data Link

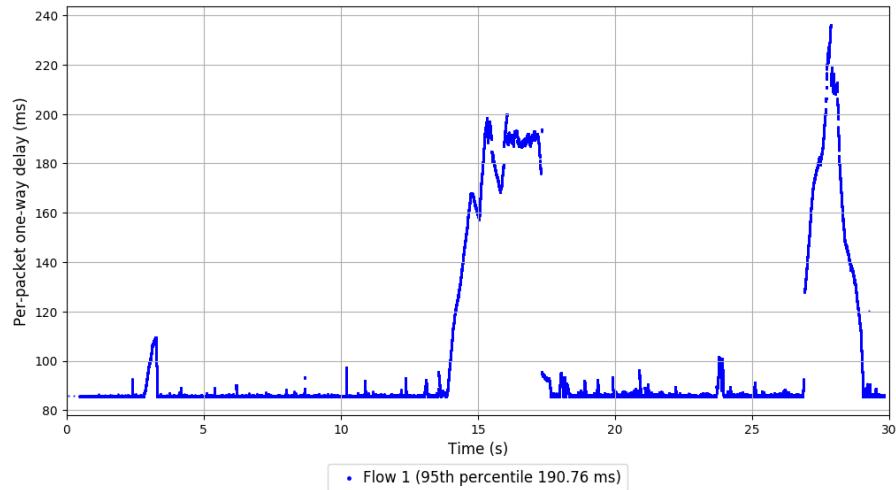
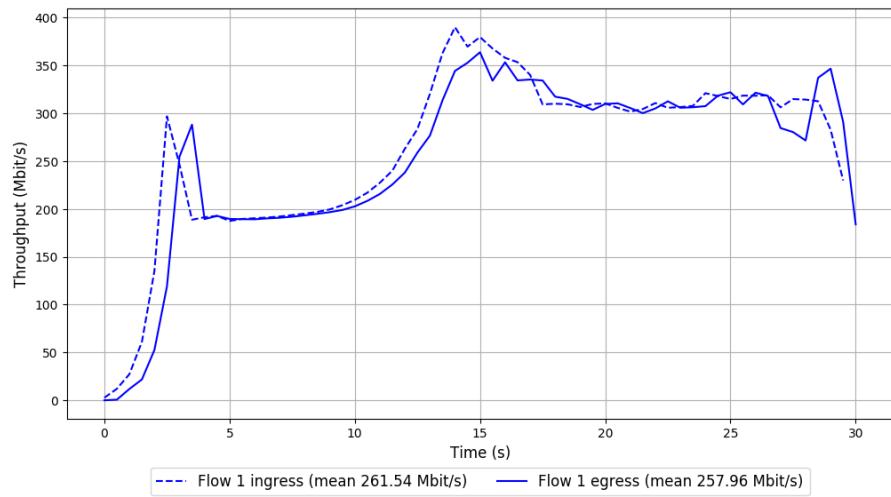


Run 4: Statistics of PCC-Expr

```
Start at: 2019-07-17 18:09:11
End at: 2019-07-17 18:09:41
Local clock offset: 4.142 ms
Remote clock offset: 4.757 ms

# Below is generated by plot.py at 2019-07-17 20:45:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 257.96 Mbit/s
95th percentile per-packet one-way delay: 190.757 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 257.96 Mbit/s
95th percentile per-packet one-way delay: 190.757 ms
Loss rate: 1.94%
```

Run 4: Report of PCC-Expr — Data Link

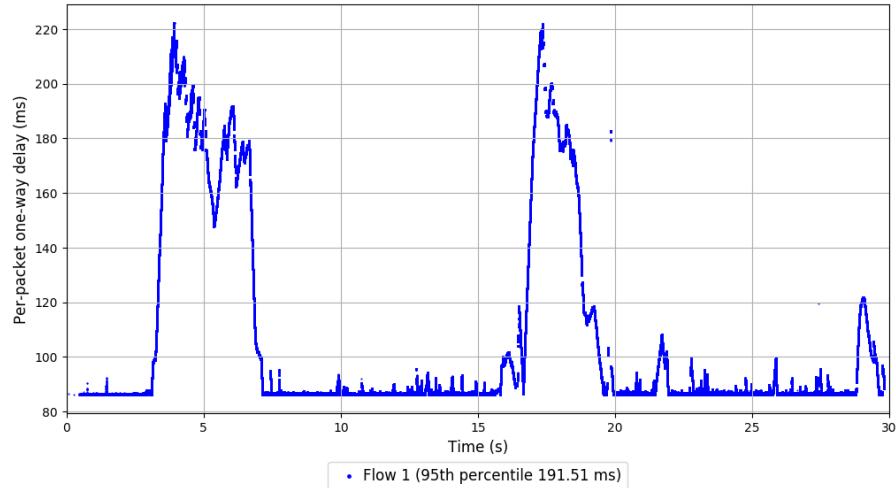
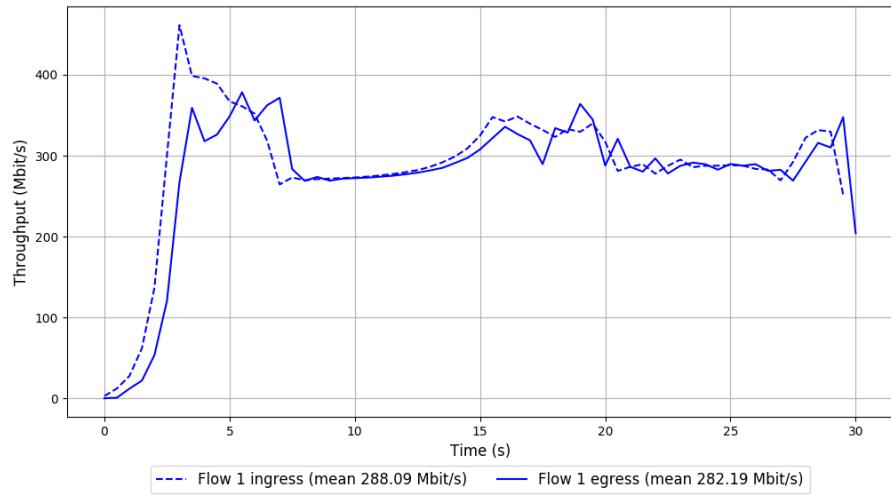


Run 5: Statistics of PCC-Expr

```
Start at: 2019-07-17 18:44:38
End at: 2019-07-17 18:45:08
Local clock offset: 2.803 ms
Remote clock offset: 2.444 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 282.19 Mbit/s
95th percentile per-packet one-way delay: 191.507 ms
Loss rate: 2.62%
-- Flow 1:
Average throughput: 282.19 Mbit/s
95th percentile per-packet one-way delay: 191.507 ms
Loss rate: 2.62%
```

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

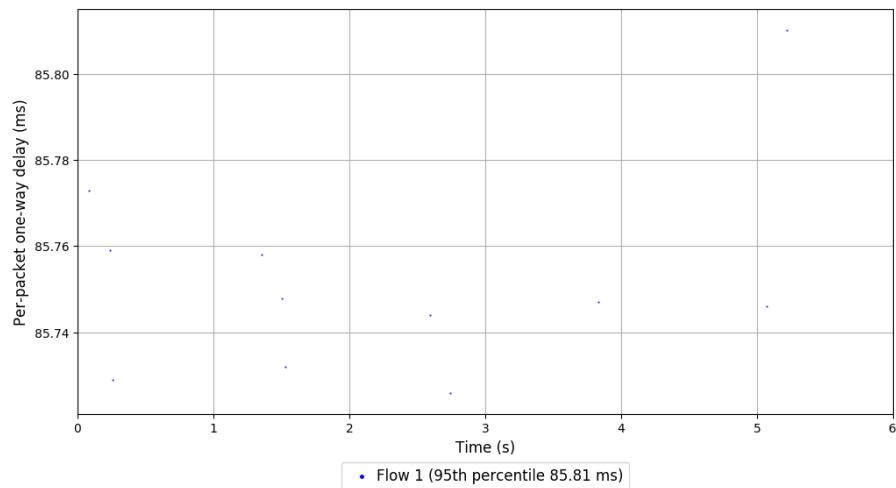
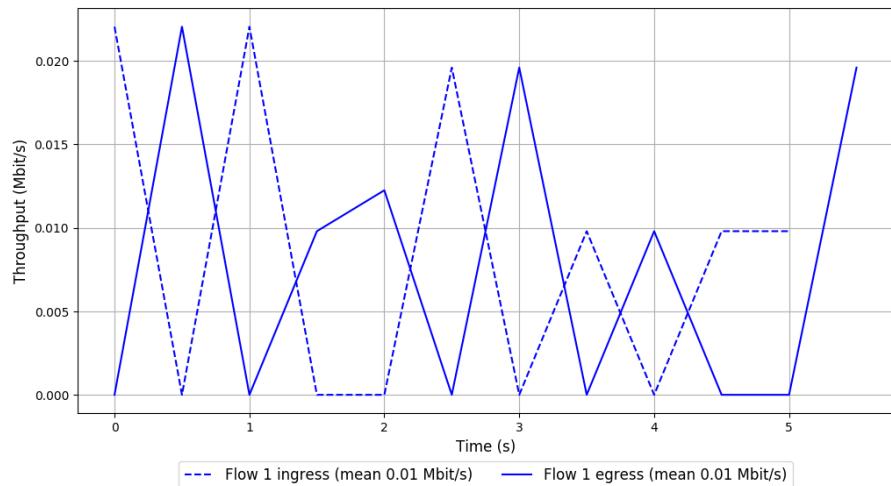
Start at: 2019-07-17 16:17:38

End at: 2019-07-17 16:18:08

Local clock offset: 14.585 ms

Remote clock offset: 15.314 ms

Run 1: Report of QUIC Cubic — Data Link

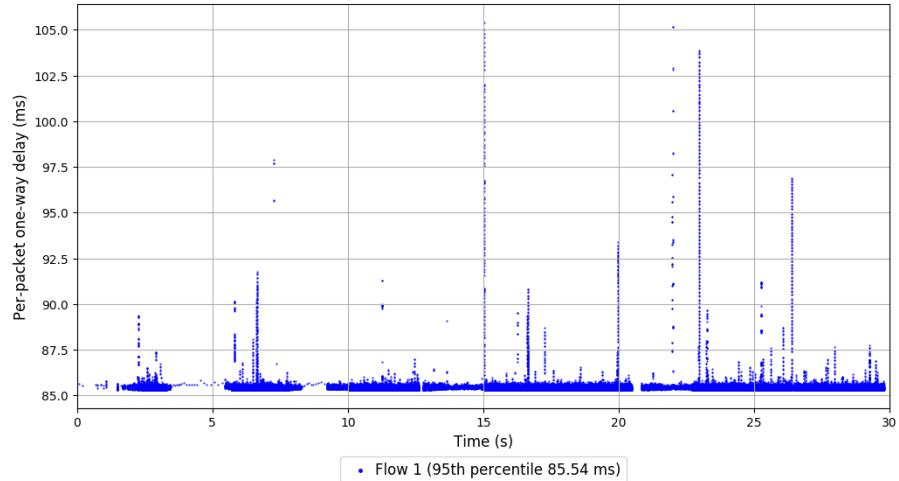
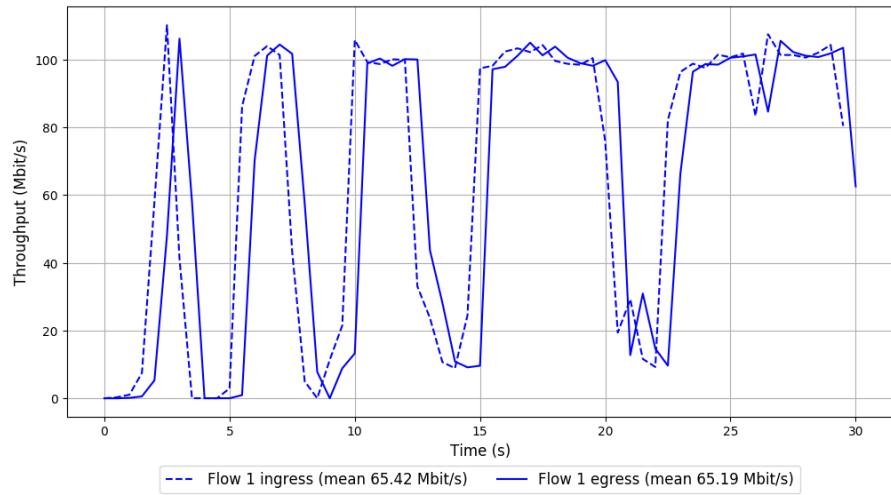


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-07-17 16:53:01
End at: 2019-07-17 16:53:31
Local clock offset: 31.356 ms
Remote clock offset: 32.761 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.19 Mbit/s
95th percentile per-packet one-way delay: 85.541 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 65.19 Mbit/s
95th percentile per-packet one-way delay: 85.541 ms
Loss rate: 0.92%
```

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

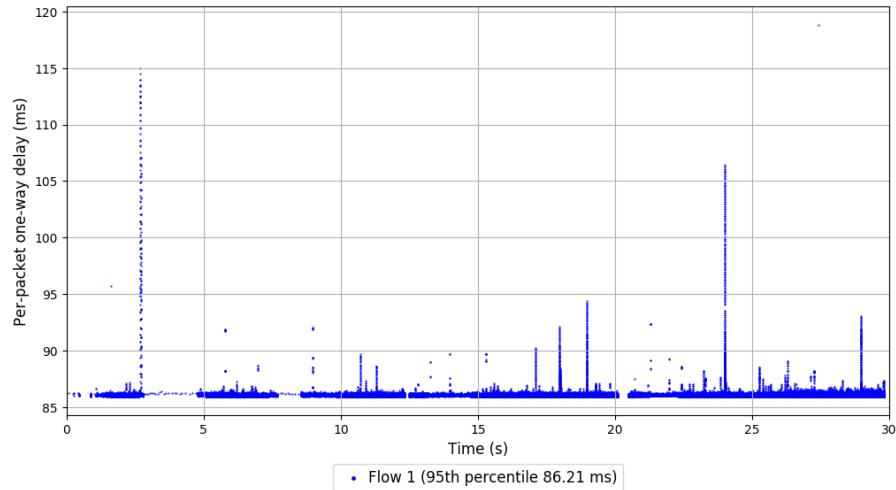
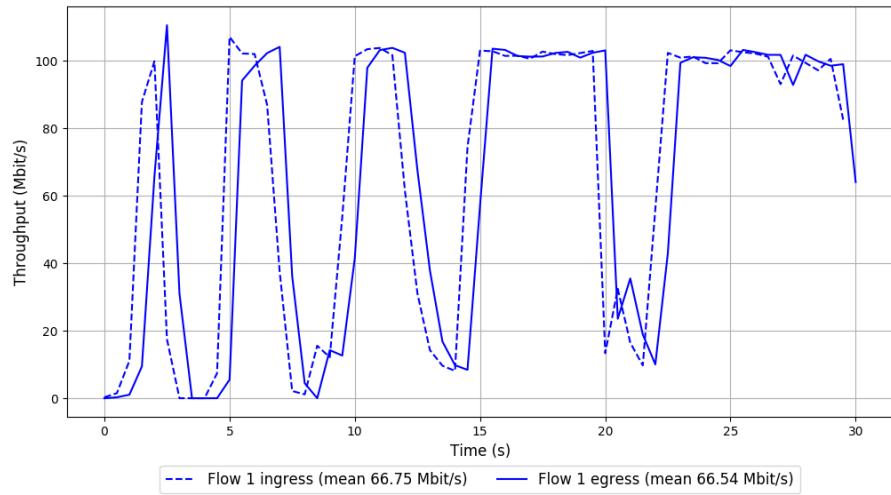


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-07-17 17:28:15
End at: 2019-07-17 17:28:45
Local clock offset: 9.872 ms
Remote clock offset: 10.012 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.54 Mbit/s
95th percentile per-packet one-way delay: 86.210 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 66.54 Mbit/s
95th percentile per-packet one-way delay: 86.210 ms
Loss rate: 0.90%
```

Run 3: Report of QUIC Cubic — Data Link

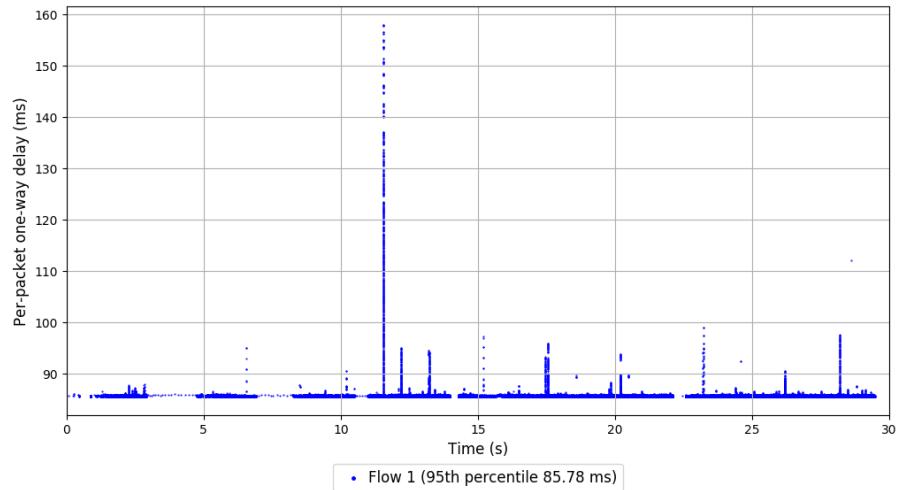
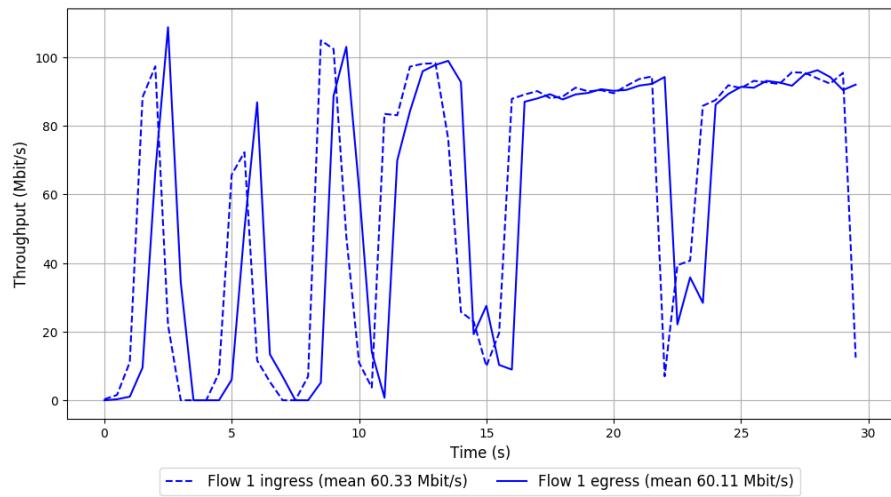


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-07-17 18:03:46
End at: 2019-07-17 18:04:16
Local clock offset: 3.799 ms
Remote clock offset: 4.246 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.11 Mbit/s
95th percentile per-packet one-way delay: 85.776 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 60.11 Mbit/s
95th percentile per-packet one-way delay: 85.776 ms
Loss rate: 0.93%
```

Run 4: Report of QUIC Cubic — Data Link

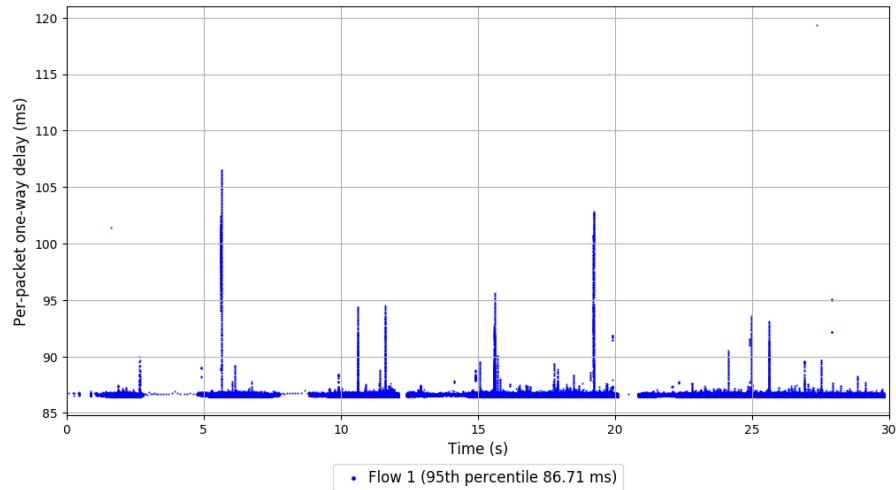
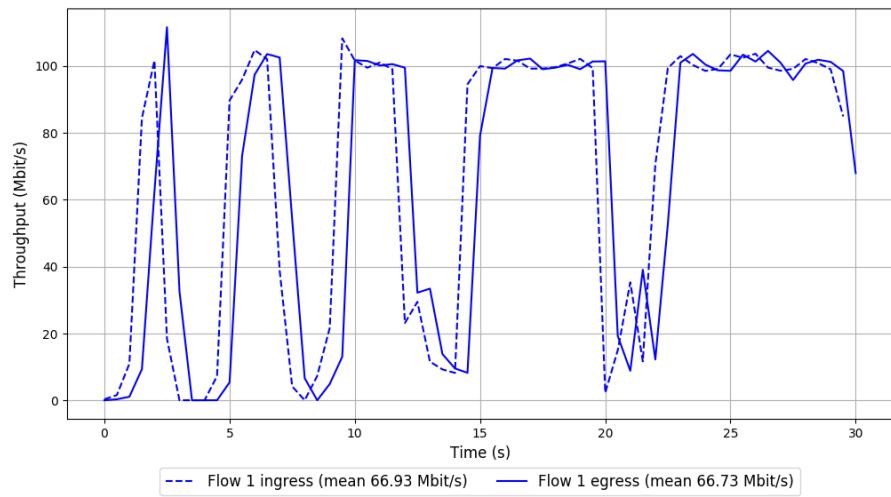


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-07-17 18:39:14
End at: 2019-07-17 18:39:44
Local clock offset: 2.472 ms
Remote clock offset: 2.111 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.73 Mbit/s
95th percentile per-packet one-way delay: 86.712 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 66.73 Mbit/s
95th percentile per-packet one-way delay: 86.712 ms
Loss rate: 0.88%
```

Run 5: Report of QUIC Cubic — Data Link

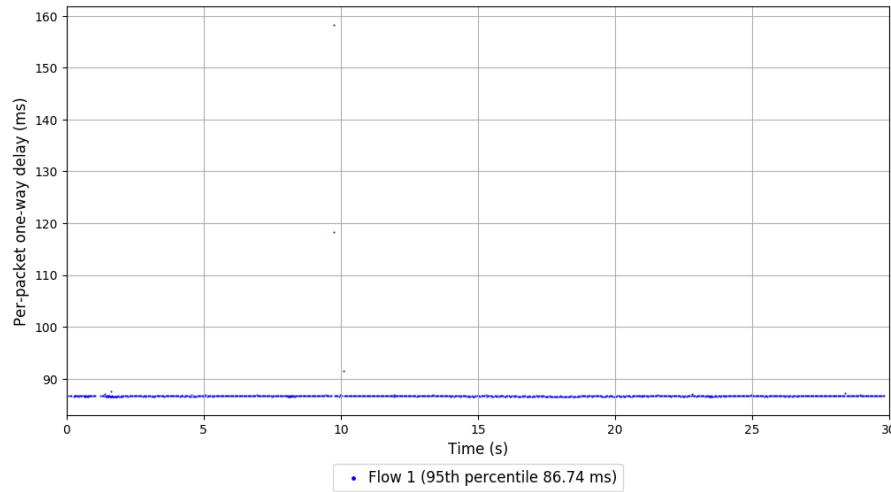
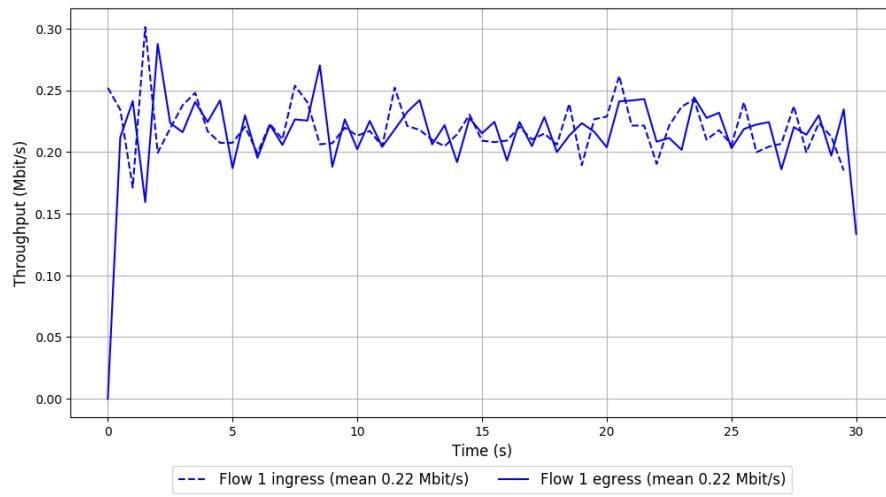


Run 1: Statistics of SCReAM

```
Start at: 2019-07-17 16:03:18
End at: 2019-07-17 16:03:48
Local clock offset: 11.942 ms
Remote clock offset: 11.683 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.736 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.736 ms
Loss rate: 0.64%
```

Run 1: Report of SCReAM — Data Link

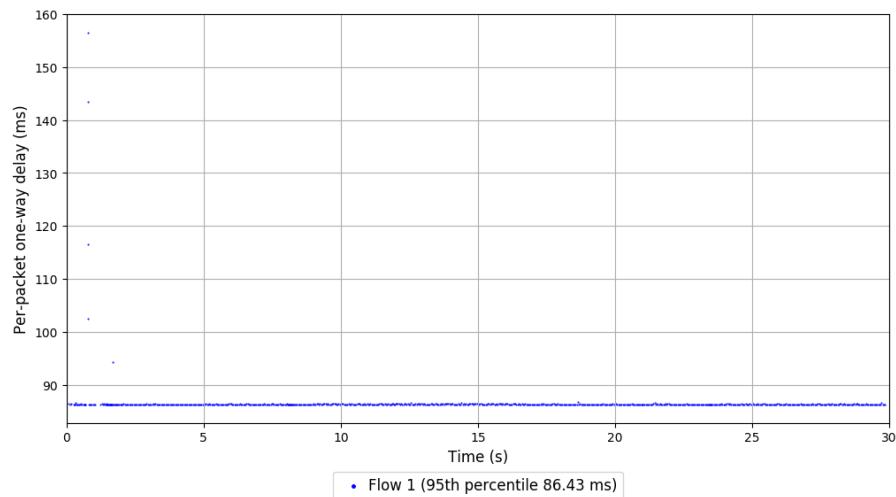
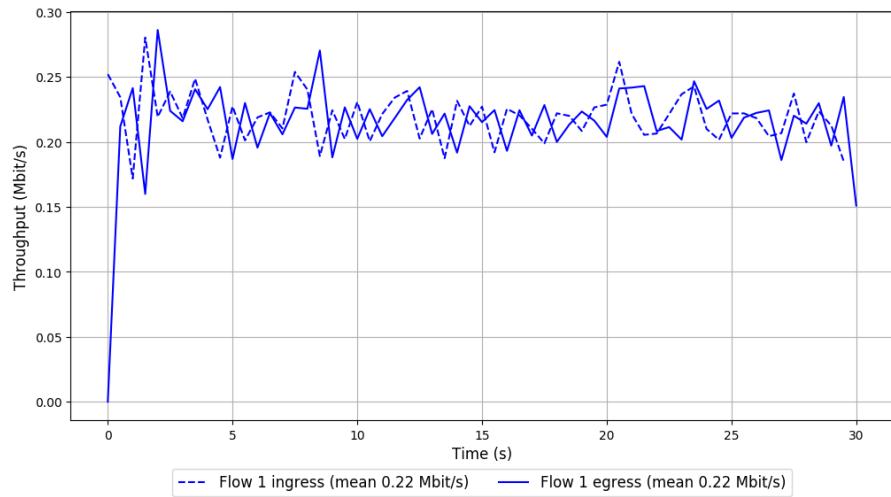


Run 2: Statistics of SCReAM

```
Start at: 2019-07-17 16:38:27
End at: 2019-07-17 16:38:57
Local clock offset: 21.176 ms
Remote clock offset: 21.833 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.429 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.429 ms
Loss rate: 0.51%
```

## Run 2: Report of SCReAM — Data Link

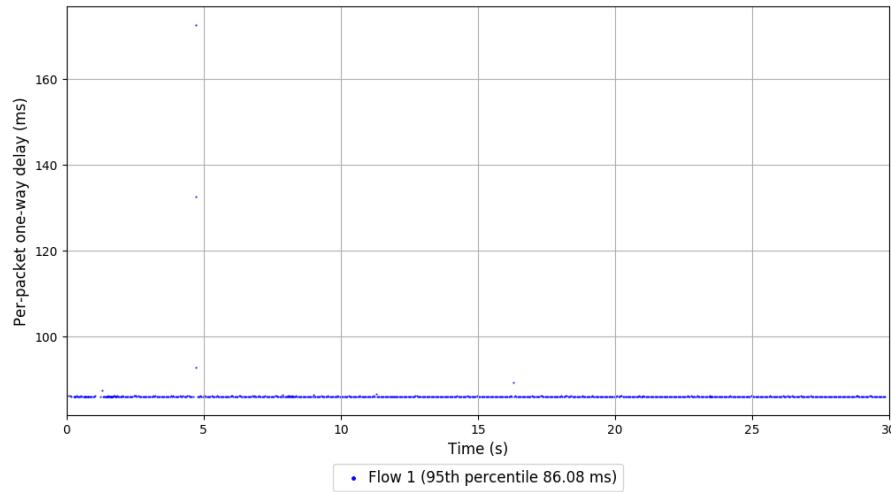
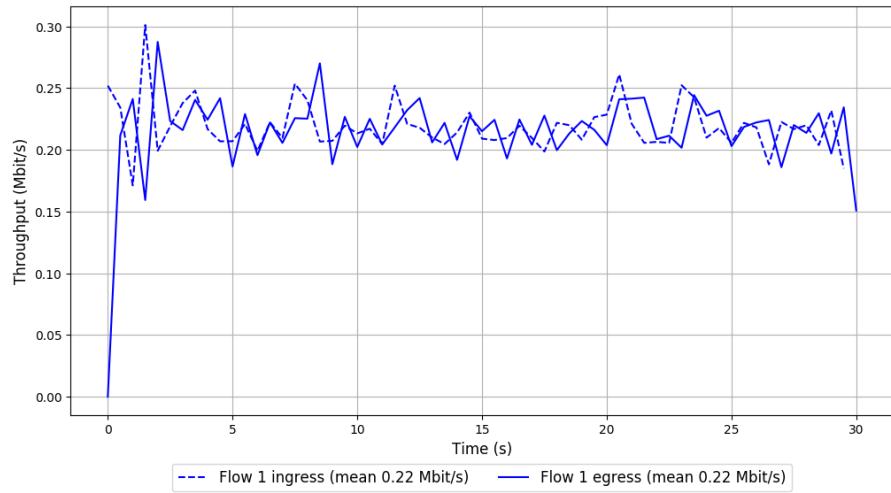


Run 3: Statistics of SCReAM

```
Start at: 2019-07-17 17:13:53
End at: 2019-07-17 17:14:23
Local clock offset: 14.641 ms
Remote clock offset: 15.079 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.083 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.083 ms
Loss rate: 0.51%
```

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

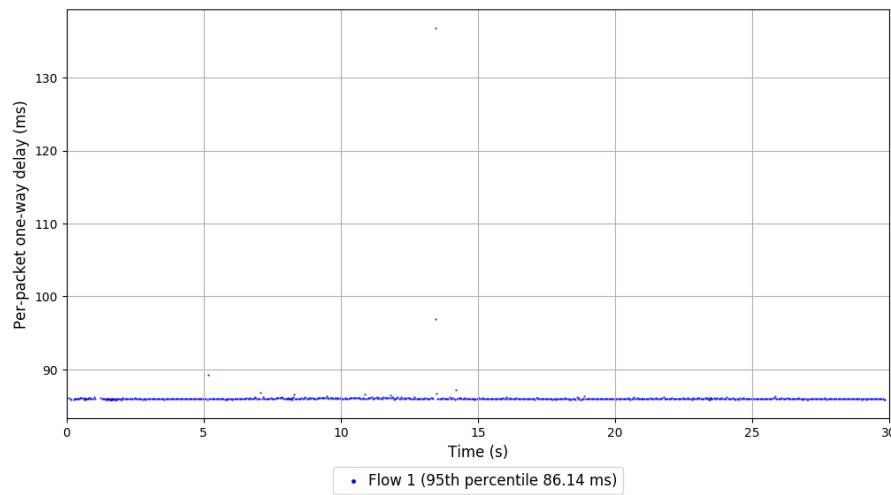
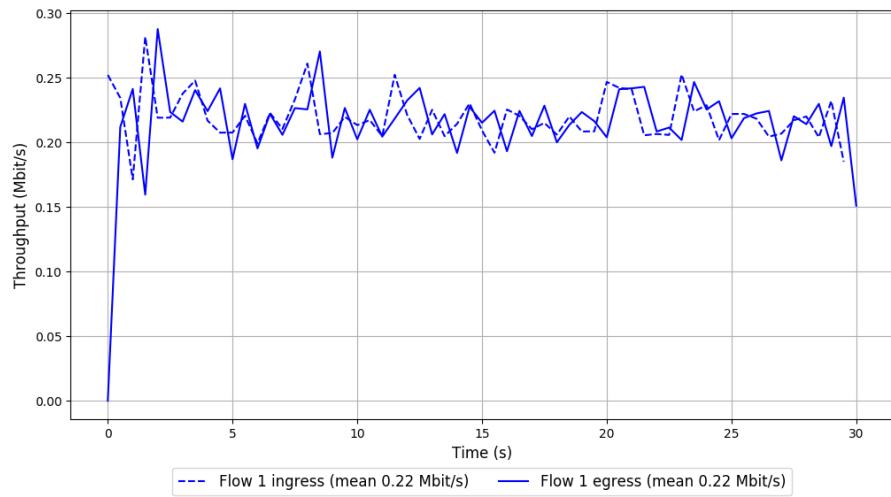


Run 4: Statistics of SCReAM

```
Start at: 2019-07-17 17:49:14
End at: 2019-07-17 17:49:44
Local clock offset: 3.694 ms
Remote clock offset: 4.314 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.137 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.137 ms
Loss rate: 0.51%
```

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

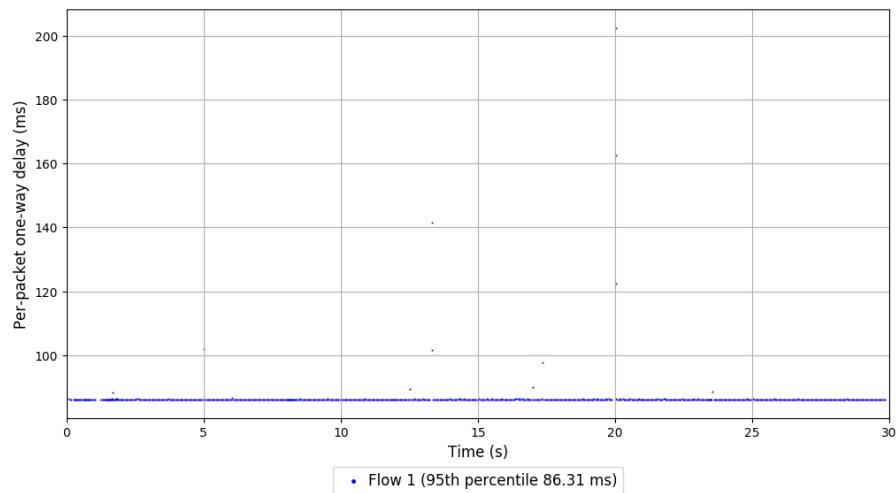
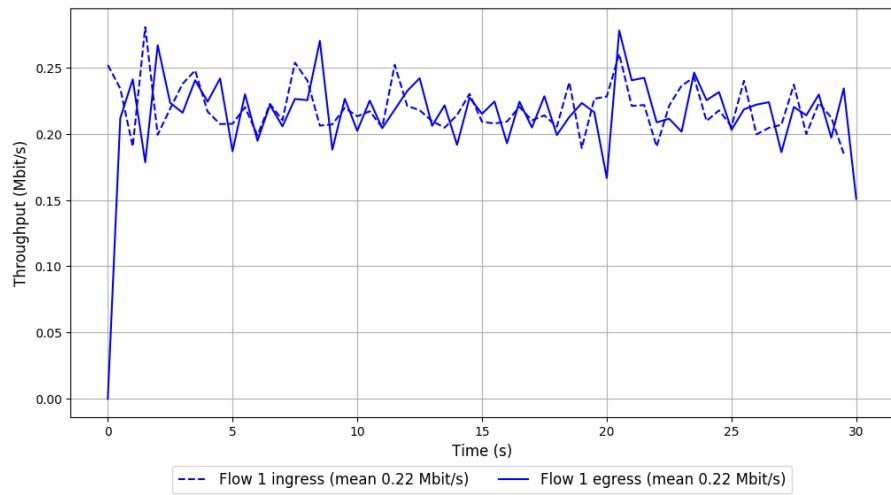


Run 5: Statistics of SCReAM

```
Start at: 2019-07-17 18:24:44
End at: 2019-07-17 18:25:14
Local clock offset: 2.098 ms
Remote clock offset: 1.952 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.312 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.312 ms
Loss rate: 0.51%
```

Run 5: Report of SCReAM — Data Link

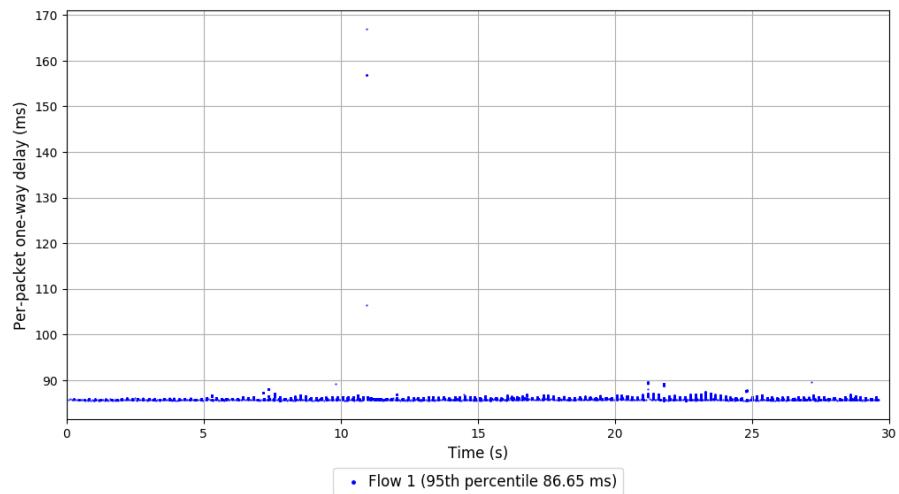
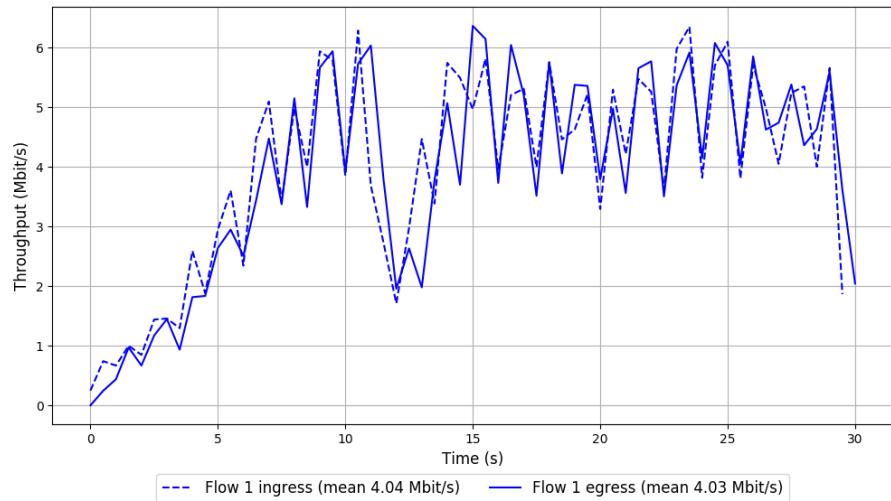


Run 1: Statistics of Sprout

```
Start at: 2019-07-17 16:05:47
End at: 2019-07-17 16:06:17
Local clock offset: 9.247 ms
Remote clock offset: 10.019 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 86.650 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 86.650 ms
Loss rate: 0.78%
```

## Run 1: Report of Sprout — Data Link

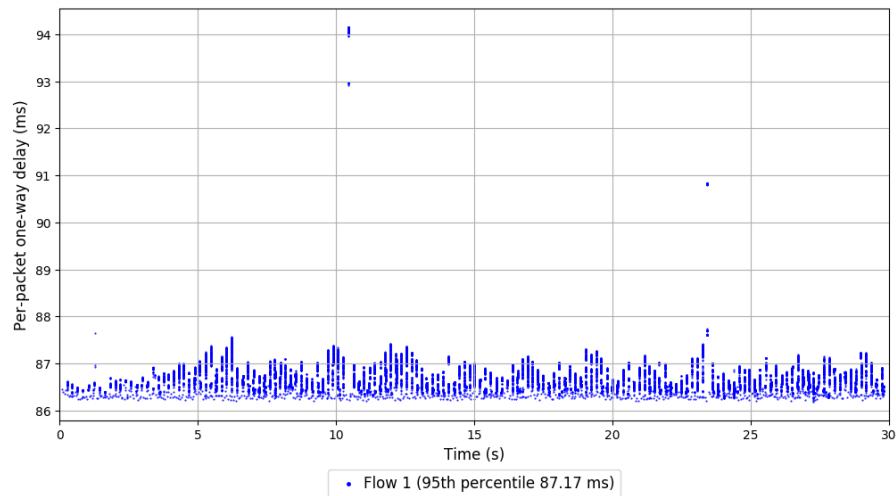
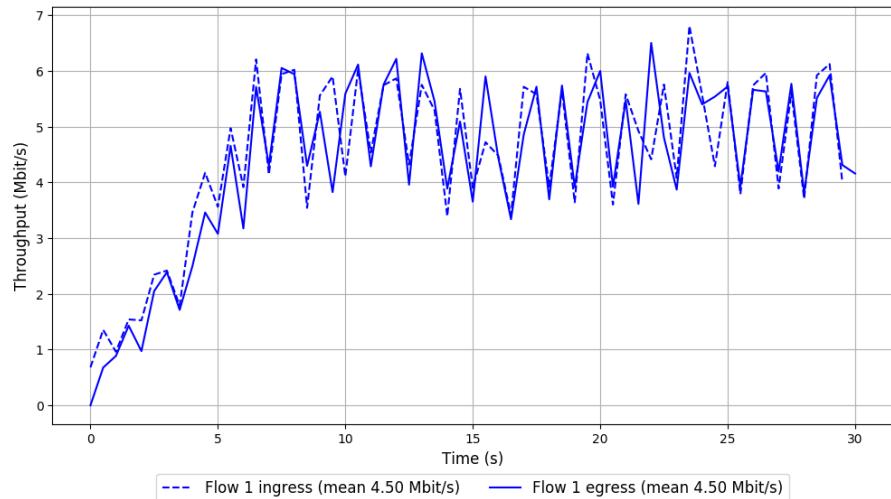


Run 2: Statistics of Sprout

```
Start at: 2019-07-17 16:41:01
End at: 2019-07-17 16:41:31
Local clock offset: 22.321 ms
Remote clock offset: 22.704 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.50 Mbit/s
95th percentile per-packet one-way delay: 87.171 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 4.50 Mbit/s
95th percentile per-packet one-way delay: 87.171 ms
Loss rate: 0.62%
```

## Run 2: Report of Sprout — Data Link

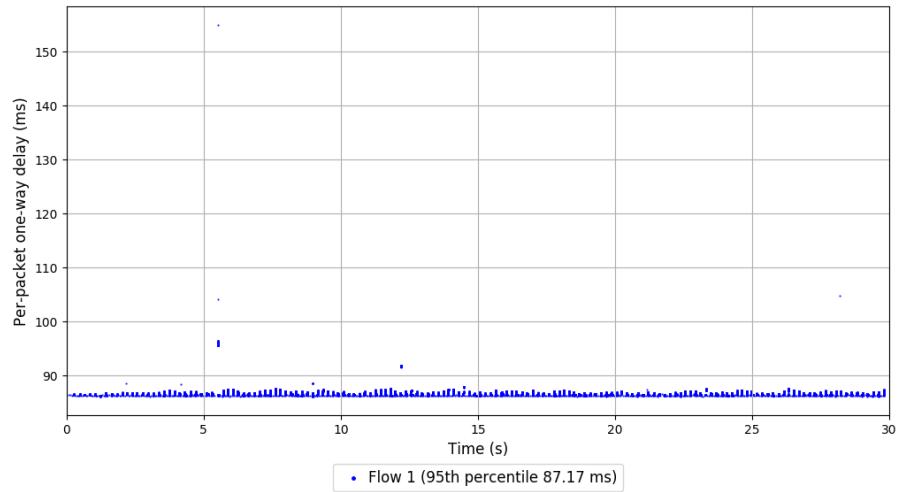
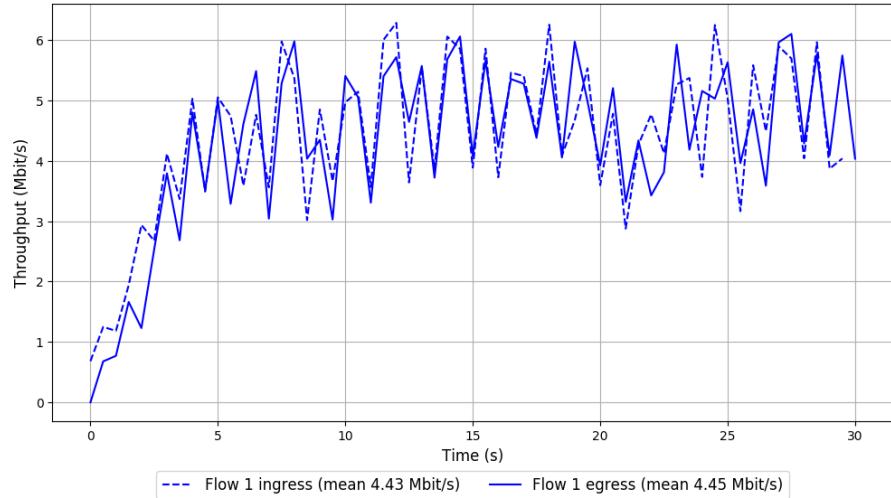


Run 3: Statistics of Sprout

```
Start at: 2019-07-17 17:16:22
End at: 2019-07-17 17:16:52
Local clock offset: 12.516 ms
Remote clock offset: 12.974 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 87.175 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 87.175 ms
Loss rate: 0.00%
```

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

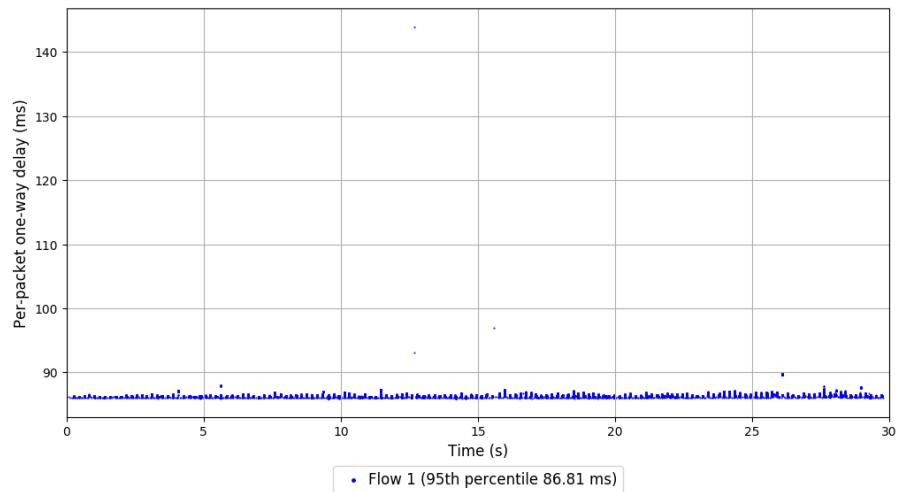
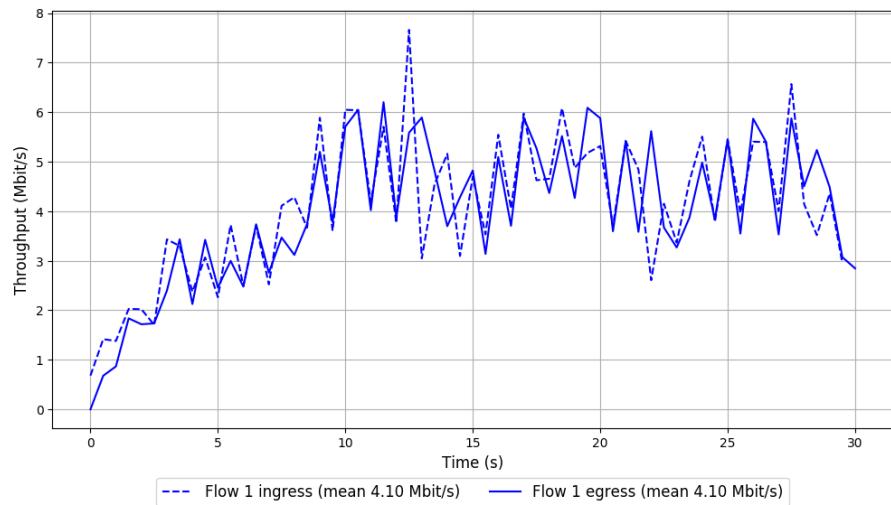


Run 4: Statistics of Sprout

```
Start at: 2019-07-17 17:51:45
End at: 2019-07-17 17:52:15
Local clock offset: 3.839 ms
Remote clock offset: 4.006 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 86.814 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 86.814 ms
Loss rate: 0.57%
```

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

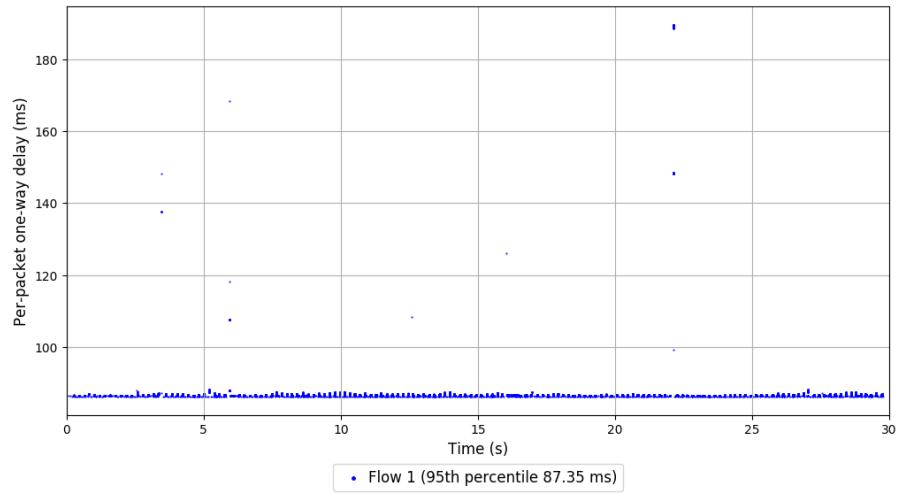
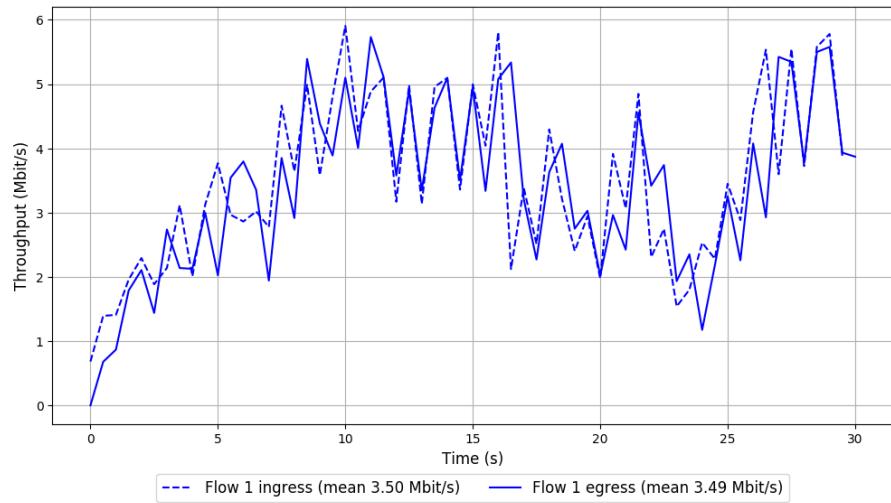


Run 5: Statistics of Sprout

```
Start at: 2019-07-17 18:27:12
End at: 2019-07-17 18:27:42
Local clock offset: 2.185 ms
Remote clock offset: 1.864 ms

# Below is generated by plot.py at 2019-07-17 20:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 87.350 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 87.350 ms
Loss rate: 0.89%
```

## Run 5: Report of Sprout — Data Link

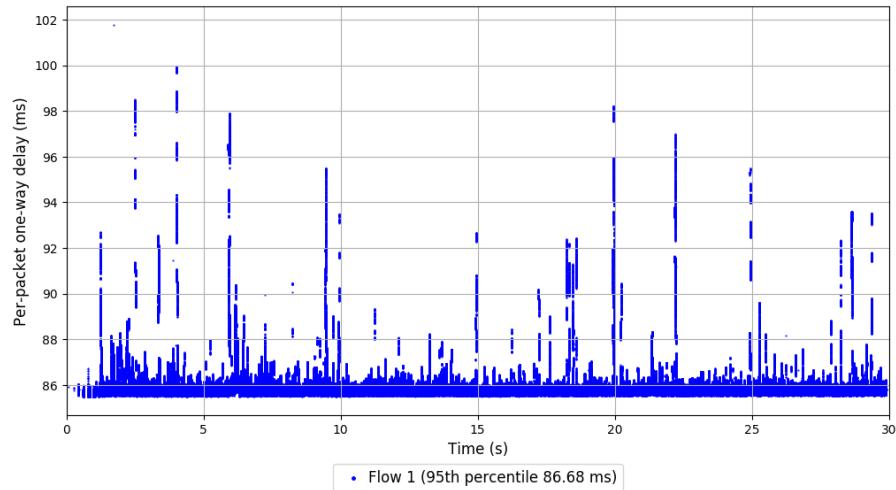
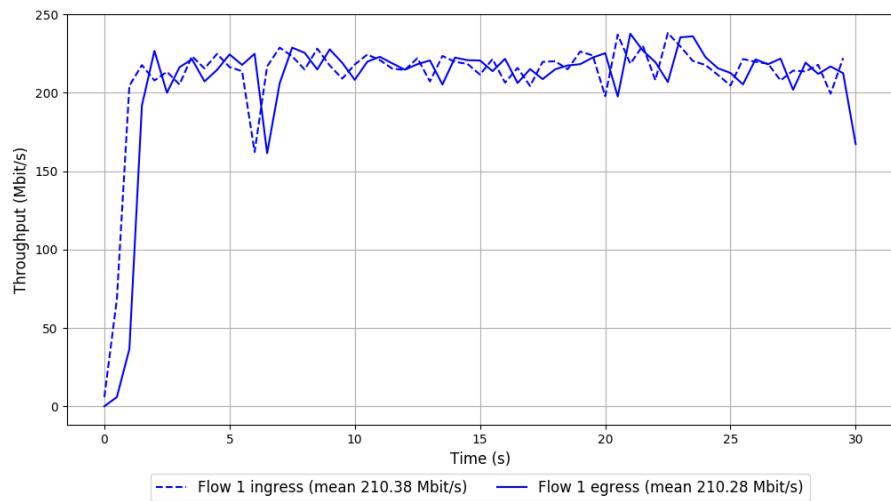


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-07-17 16:09:55
End at: 2019-07-17 16:10:25
Local clock offset: 15.982 ms
Remote clock offset: 16.91 ms

# Below is generated by plot.py at 2019-07-17 20:51:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 210.28 Mbit/s
95th percentile per-packet one-way delay: 86.677 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 210.28 Mbit/s
95th percentile per-packet one-way delay: 86.677 ms
Loss rate: 0.63%
```

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

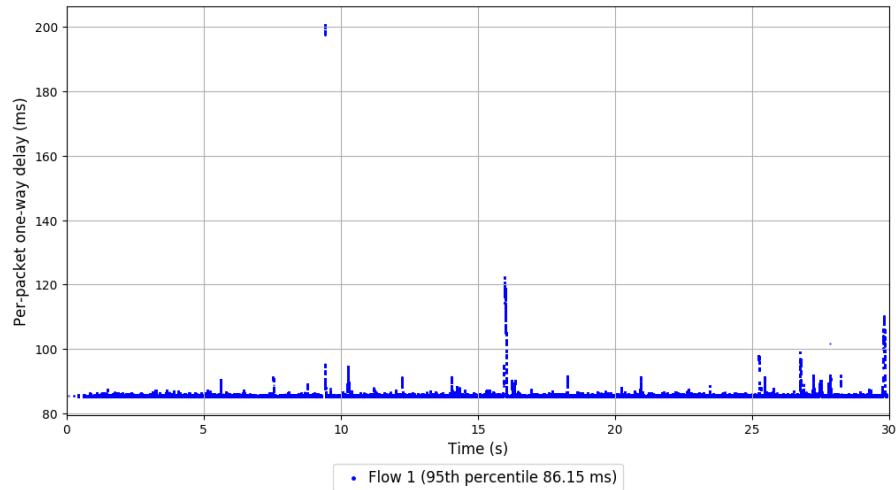
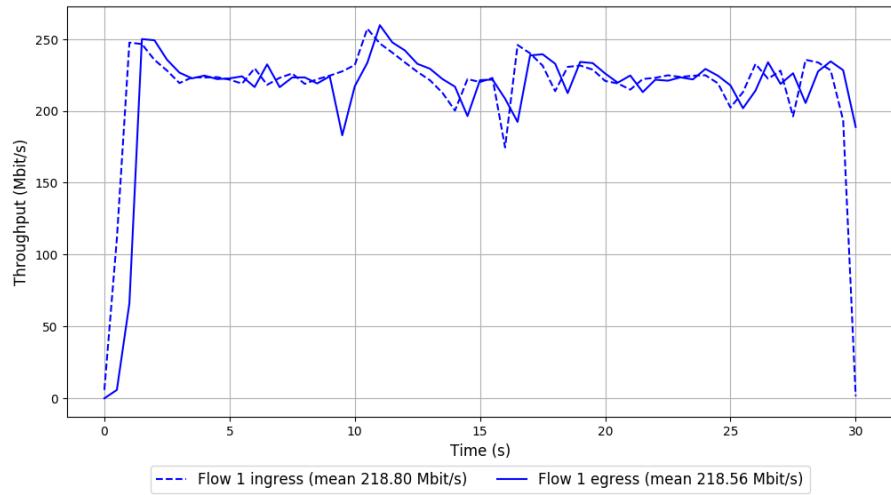


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-07-17 16:45:19
End at: 2019-07-17 16:45:49
Local clock offset: 24.297 ms
Remote clock offset: 25.605 ms

# Below is generated by plot.py at 2019-07-17 20:52:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.56 Mbit/s
95th percentile per-packet one-way delay: 86.148 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 218.56 Mbit/s
95th percentile per-packet one-way delay: 86.148 ms
Loss rate: 0.69%
```

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

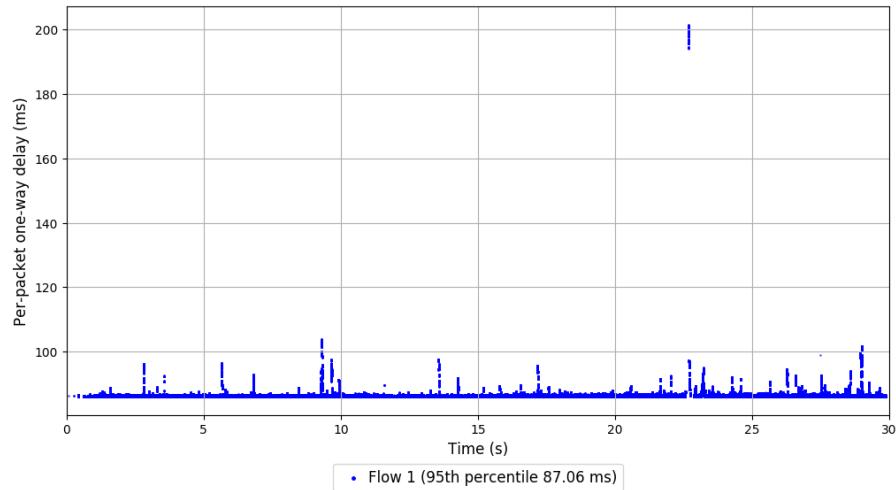
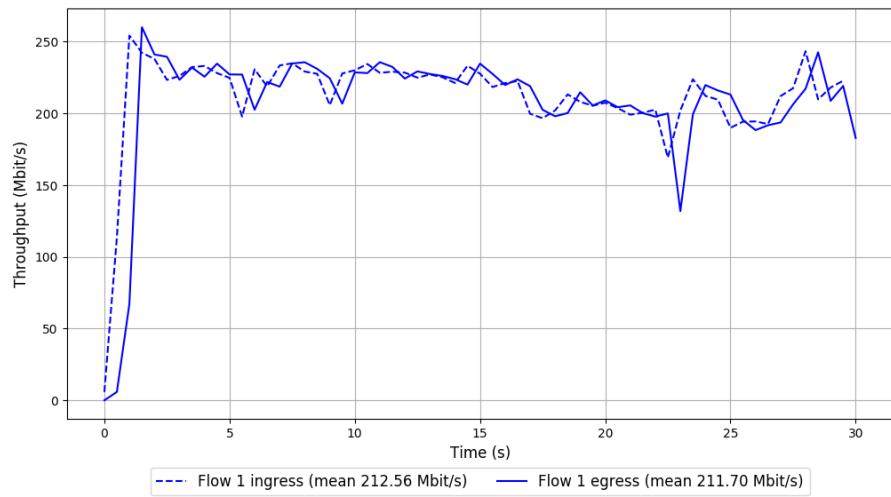


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-07-17 17:20:35
End at: 2019-07-17 17:21:05
Local clock offset: 10.733 ms
Remote clock offset: 10.788 ms

# Below is generated by plot.py at 2019-07-17 20:52:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.70 Mbit/s
95th percentile per-packet one-way delay: 87.059 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 211.70 Mbit/s
95th percentile per-packet one-way delay: 87.059 ms
Loss rate: 0.98%
```

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

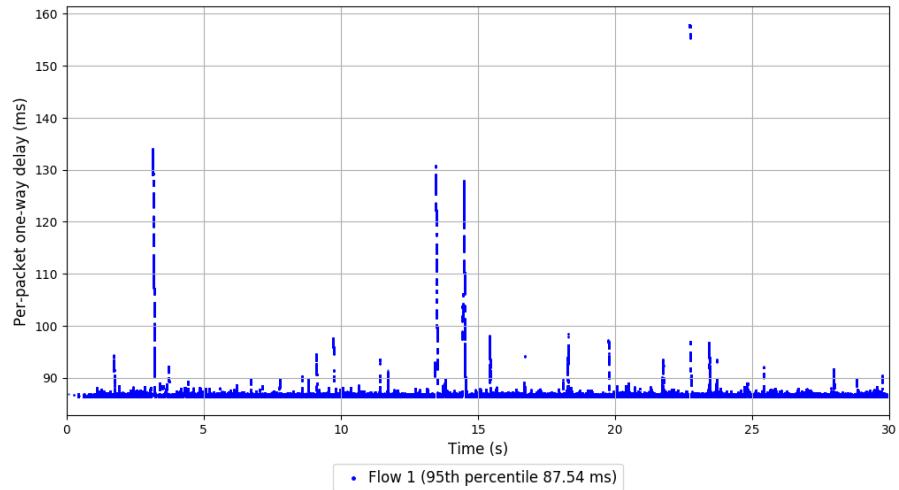
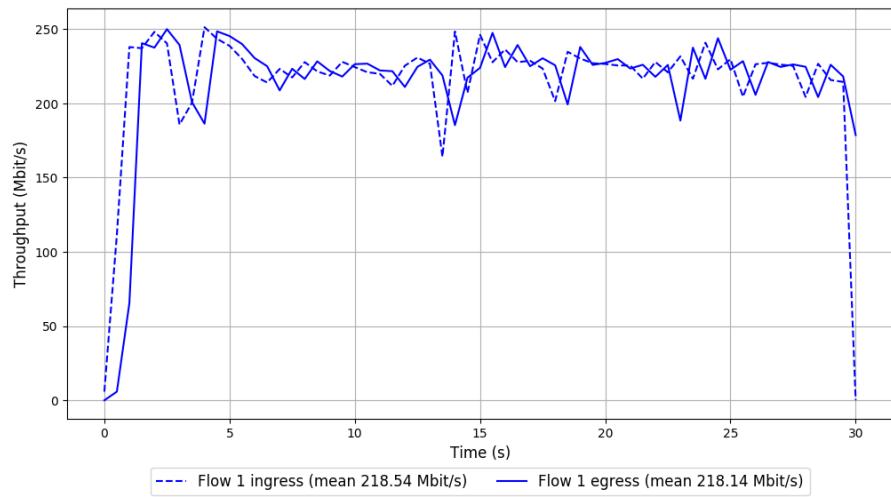


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-07-17 17:56:05
End at: 2019-07-17 17:56:35
Local clock offset: 3.886 ms
Remote clock offset: 3.864 ms

# Below is generated by plot.py at 2019-07-17 20:52:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.14 Mbit/s
95th percentile per-packet one-way delay: 87.539 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 218.14 Mbit/s
95th percentile per-packet one-way delay: 87.539 ms
Loss rate: 0.76%
```

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

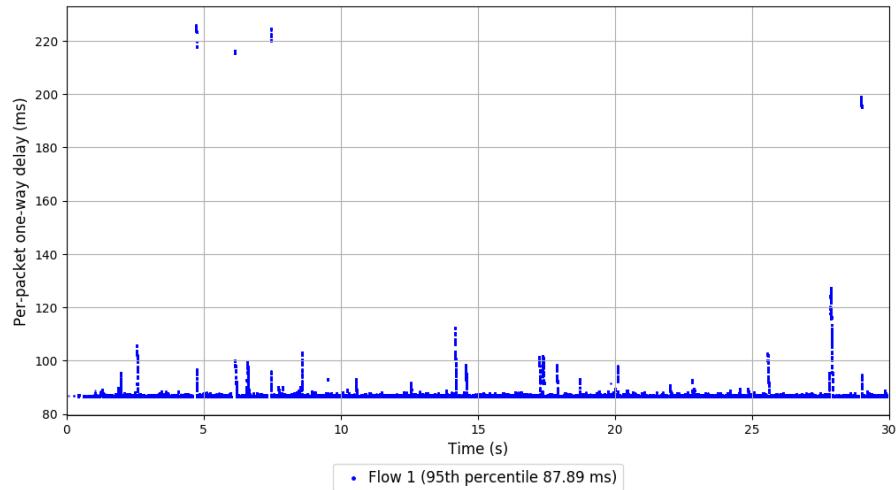
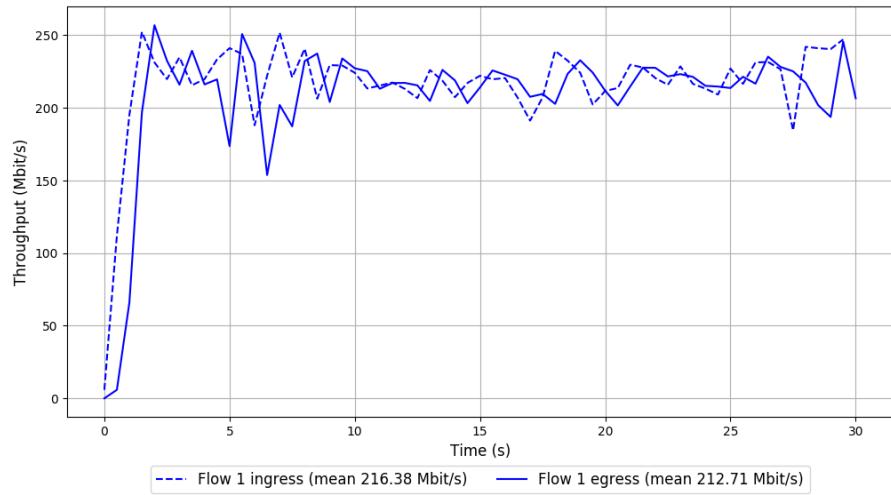


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-07-17 18:31:29
End at: 2019-07-17 18:31:59
Local clock offset: 2.25 ms
Remote clock offset: 1.879 ms

# Below is generated by plot.py at 2019-07-17 20:52:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 212.71 Mbit/s
95th percentile per-packet one-way delay: 87.892 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 212.71 Mbit/s
95th percentile per-packet one-way delay: 87.892 ms
Loss rate: 2.27%
```

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

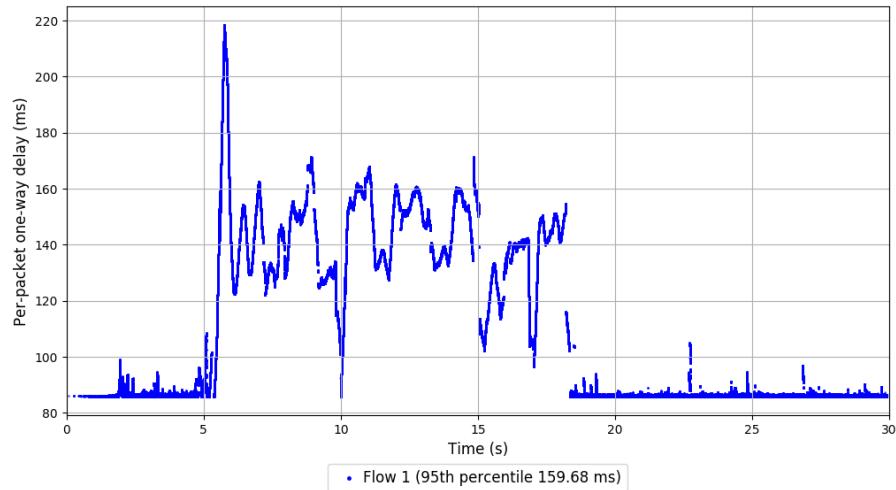
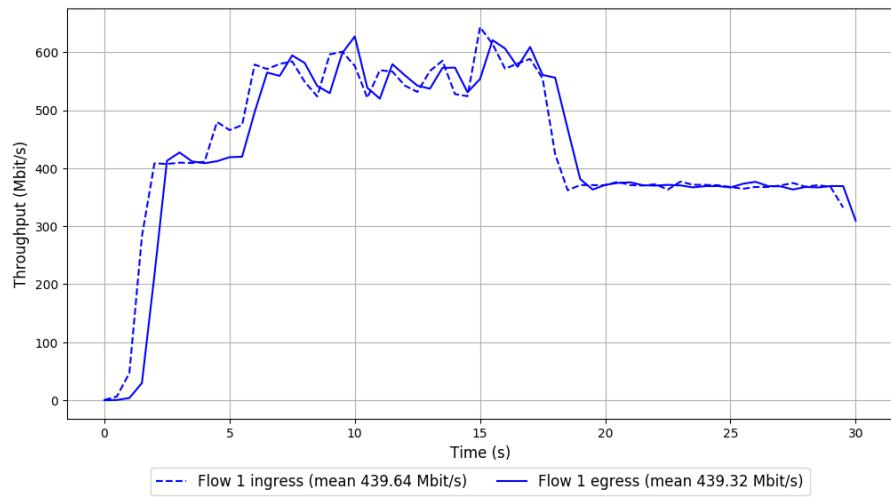


Run 1: Statistics of TCP Vegas

```
Start at: 2019-07-17 16:26:10
End at: 2019-07-17 16:26:40
Local clock offset: 24.889 ms
Remote clock offset: 25.759 ms

# Below is generated by plot.py at 2019-07-17 20:53:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 439.32 Mbit/s
95th percentile per-packet one-way delay: 159.682 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 439.32 Mbit/s
95th percentile per-packet one-way delay: 159.682 ms
Loss rate: 0.49%
```

Run 1: Report of TCP Vegas — Data Link

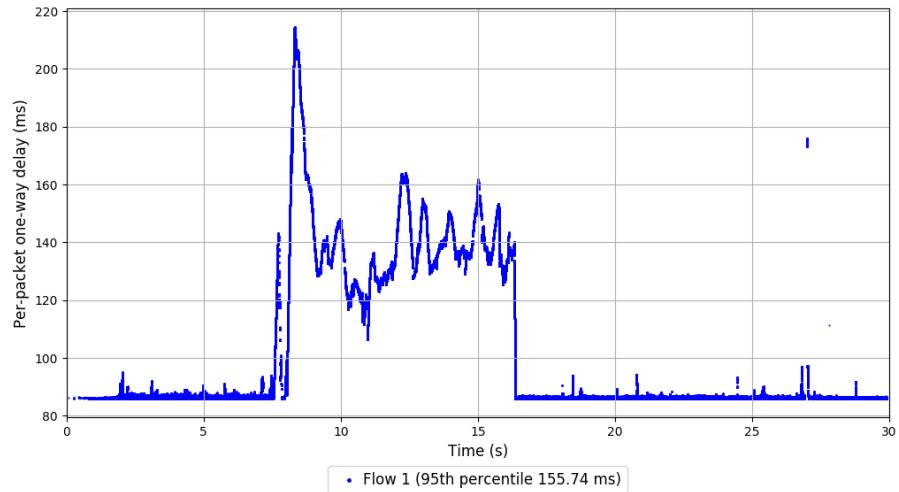
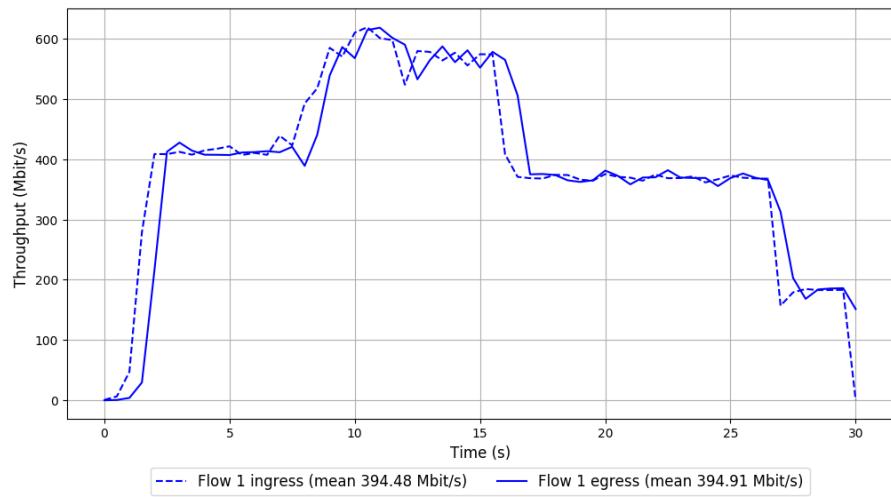


Run 2: Statistics of TCP Vegas

```
Start at: 2019-07-17 17:01:34
End at: 2019-07-17 17:02:04
Local clock offset: 41.71 ms
Remote clock offset: 42.869 ms

# Below is generated by plot.py at 2019-07-17 20:53:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 394.91 Mbit/s
95th percentile per-packet one-way delay: 155.740 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 394.91 Mbit/s
95th percentile per-packet one-way delay: 155.740 ms
Loss rate: 0.47%
```

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

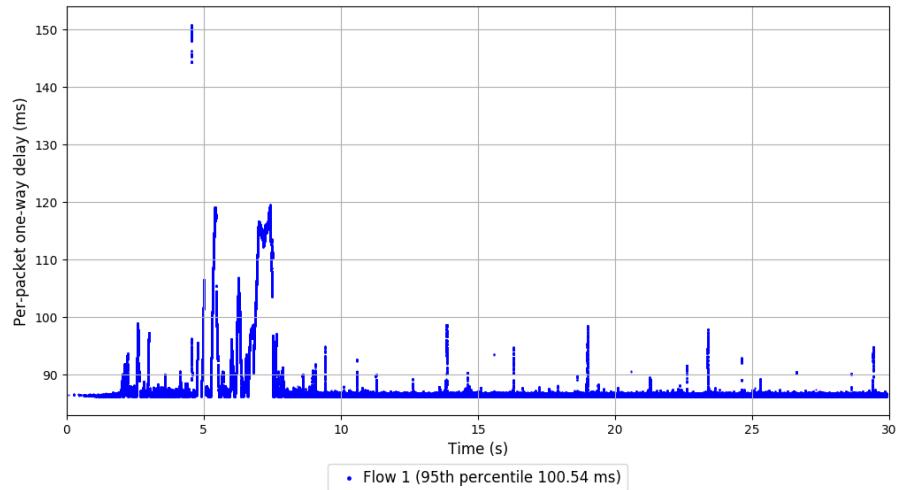
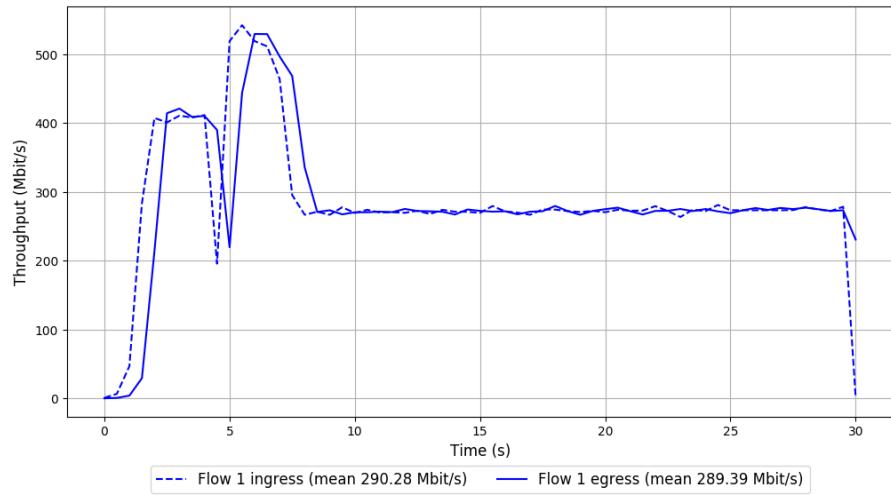


Run 3: Statistics of TCP Vegas

```
Start at: 2019-07-17 17:36:53
End at: 2019-07-17 17:37:23
Local clock offset: 10.888 ms
Remote clock offset: 10.898 ms

# Below is generated by plot.py at 2019-07-17 20:53:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 289.39 Mbit/s
95th percentile per-packet one-way delay: 100.542 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 289.39 Mbit/s
95th percentile per-packet one-way delay: 100.542 ms
Loss rate: 0.88%
```

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

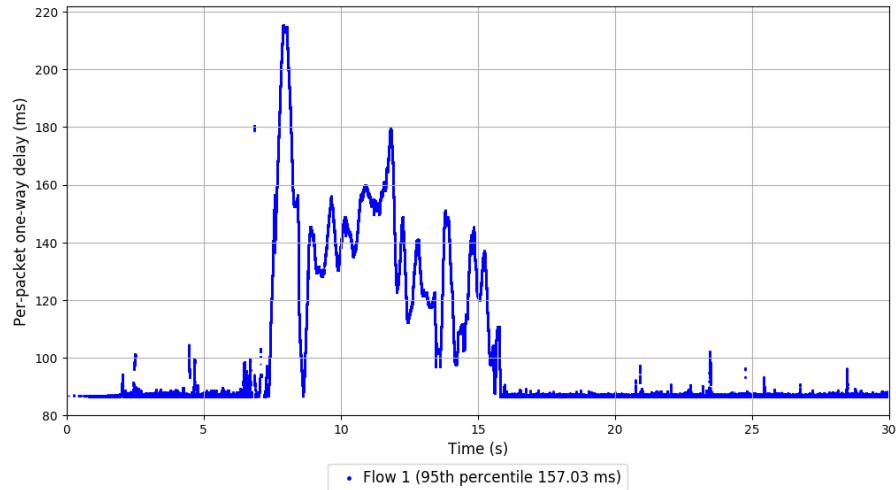
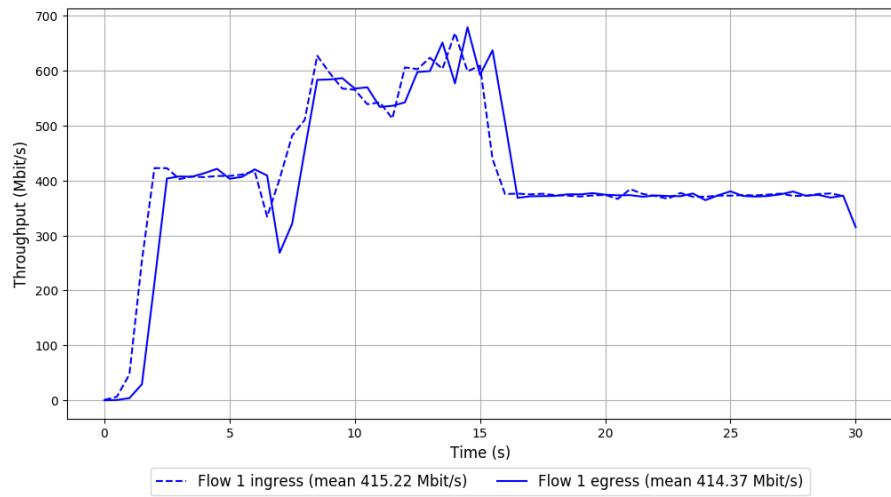


Run 4: Statistics of TCP Vegas

```
Start at: 2019-07-17 18:12:21
End at: 2019-07-17 18:12:51
Local clock offset: 4.473 ms
Remote clock offset: 4.318 ms

# Below is generated by plot.py at 2019-07-17 20:59:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 414.37 Mbit/s
95th percentile per-packet one-way delay: 157.030 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 414.37 Mbit/s
95th percentile per-packet one-way delay: 157.030 ms
Loss rate: 0.78%
```

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

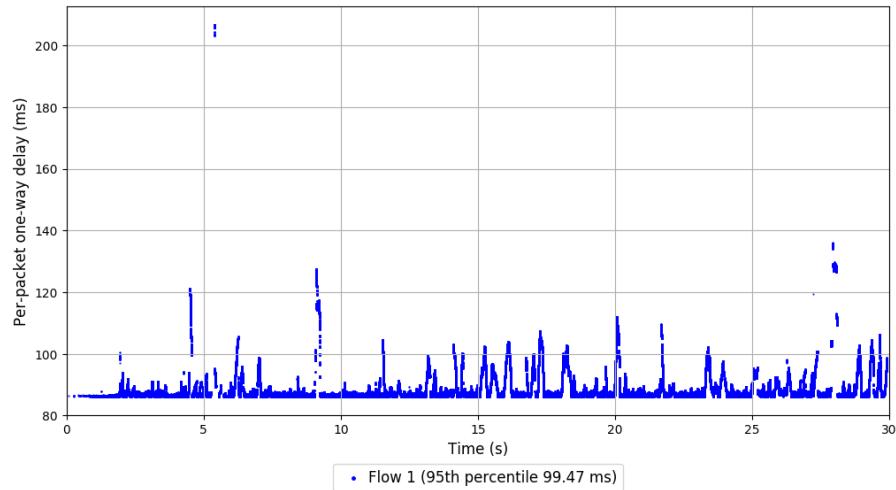
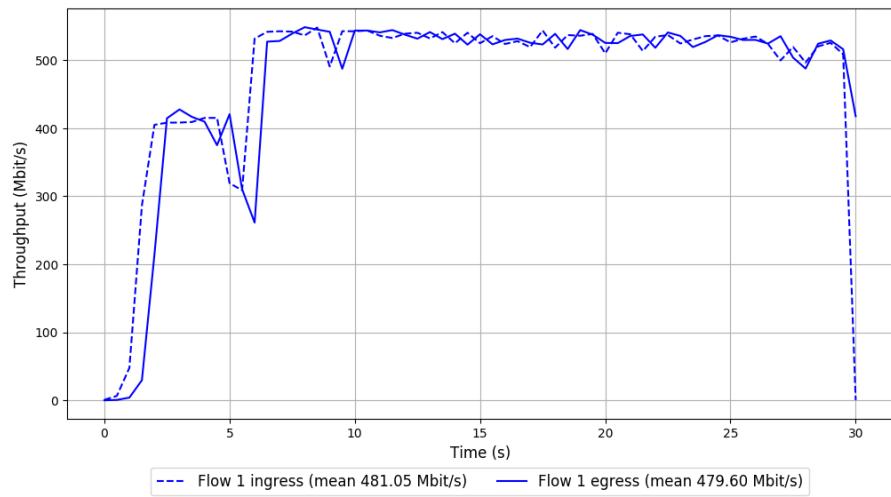


Run 5: Statistics of TCP Vegas

```
Start at: 2019-07-17 18:47:53
End at: 2019-07-17 18:48:23
Local clock offset: 2.19 ms
Remote clock offset: 1.844 ms

# Below is generated by plot.py at 2019-07-17 21:00:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 479.60 Mbit/s
95th percentile per-packet one-way delay: 99.471 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 479.60 Mbit/s
95th percentile per-packet one-way delay: 99.471 ms
Loss rate: 0.87%
```

Run 5: Report of TCP Vegas — Data Link

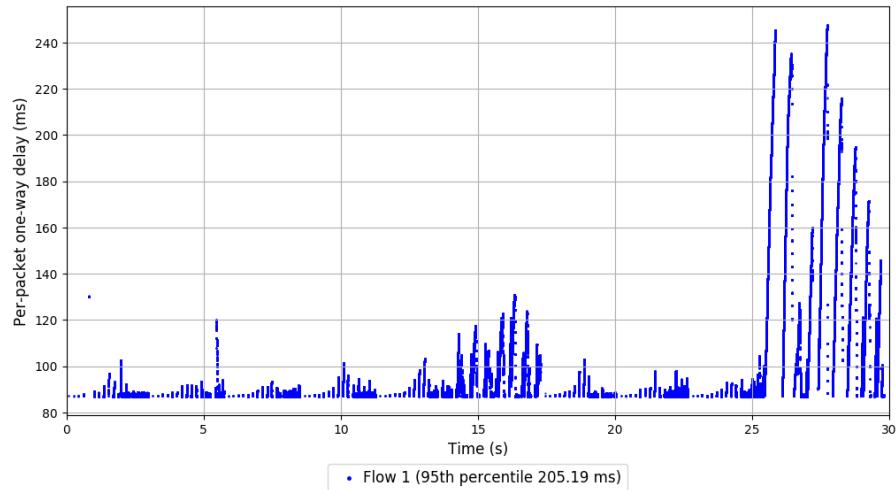
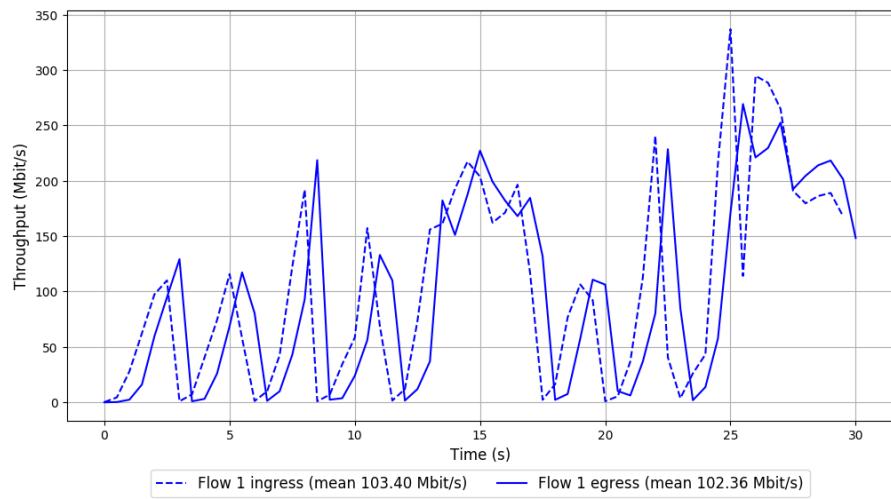


Run 1: Statistics of Verus

```
Start at: 2019-07-17 16:04:27
End at: 2019-07-17 16:04:57
Local clock offset: 10.314 ms
Remote clock offset: 9.955 ms

# Below is generated by plot.py at 2019-07-17 21:00:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 102.36 Mbit/s
95th percentile per-packet one-way delay: 205.191 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 102.36 Mbit/s
95th percentile per-packet one-way delay: 205.191 ms
Loss rate: 1.72%
```

## Run 1: Report of Verus — Data Link

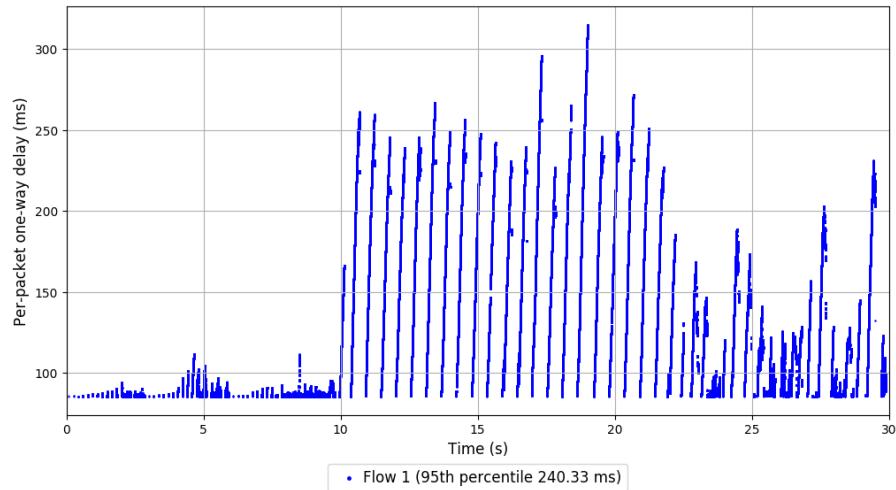
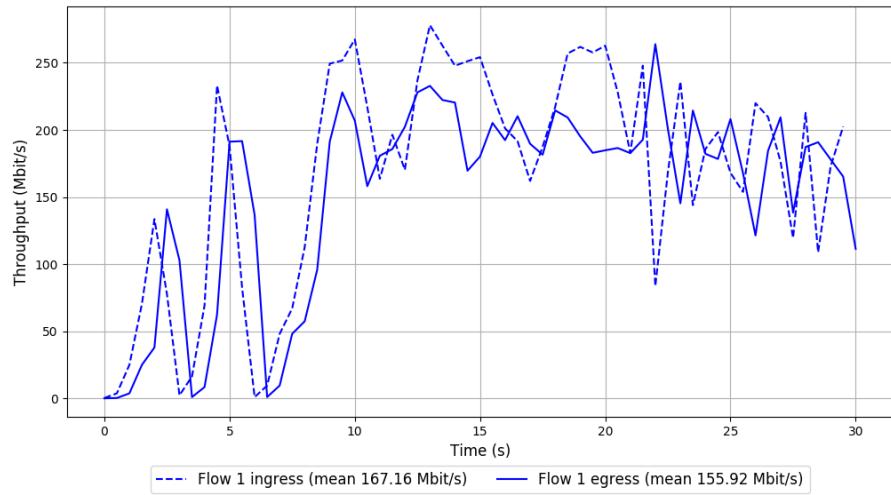


Run 2: Statistics of Verus

```
Start at: 2019-07-17 16:39:36
End at: 2019-07-17 16:40:06
Local clock offset: 20.97 ms
Remote clock offset: 22.102 ms

# Below is generated by plot.py at 2019-07-17 21:00:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 155.92 Mbit/s
95th percentile per-packet one-way delay: 240.327 ms
Loss rate: 7.24%
-- Flow 1:
Average throughput: 155.92 Mbit/s
95th percentile per-packet one-way delay: 240.327 ms
Loss rate: 7.24%
```

## Run 2: Report of Verus — Data Link

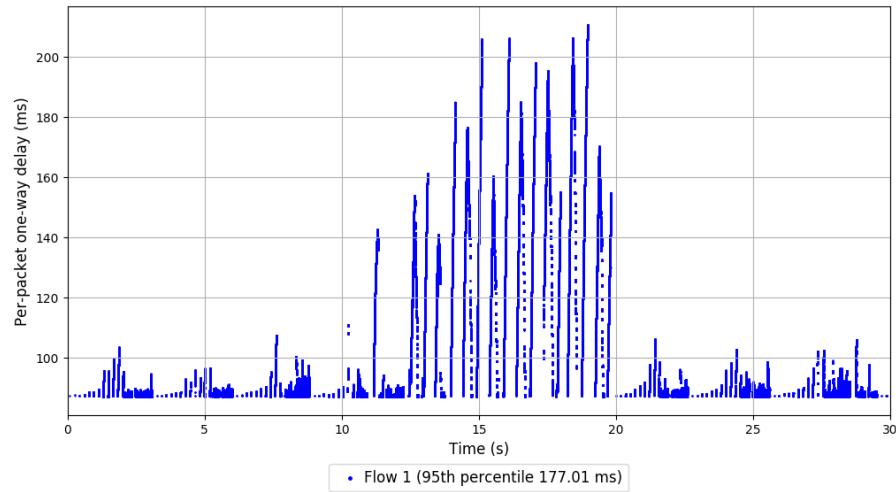
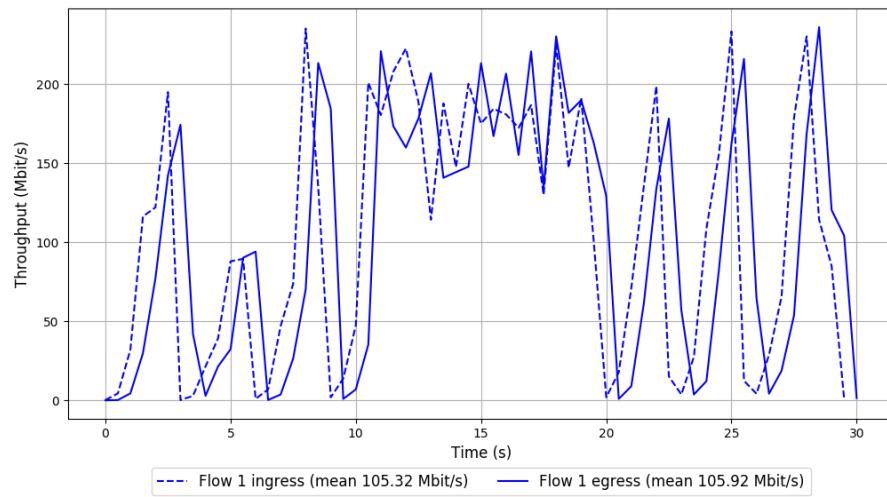


Run 3: Statistics of Verus

```
Start at: 2019-07-17 17:15:02
End at: 2019-07-17 17:15:32
Local clock offset: 14.402 ms
Remote clock offset: 13.902 ms

# Below is generated by plot.py at 2019-07-17 21:00:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 105.92 Mbit/s
95th percentile per-packet one-way delay: 177.013 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 105.92 Mbit/s
95th percentile per-packet one-way delay: 177.013 ms
Loss rate: 0.01%
```

Run 3: Report of Verus — Data Link

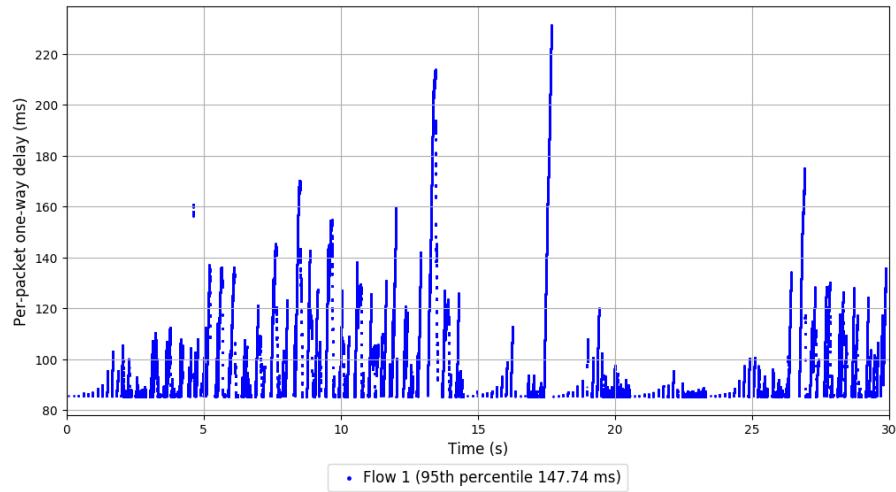
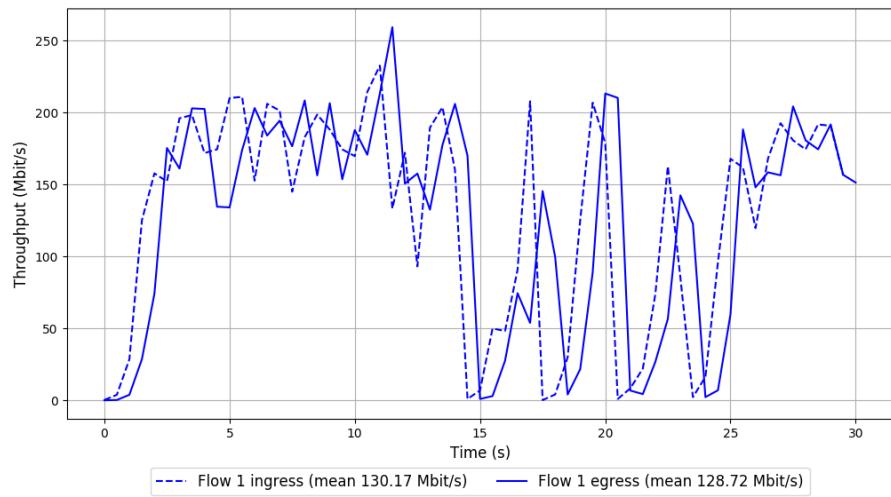


Run 4: Statistics of Verus

```
Start at: 2019-07-17 17:50:23
End at: 2019-07-17 17:50:53
Local clock offset: 3.478 ms
Remote clock offset: 4.168 ms

# Below is generated by plot.py at 2019-07-17 21:00:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 128.72 Mbit/s
95th percentile per-packet one-way delay: 147.744 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 128.72 Mbit/s
95th percentile per-packet one-way delay: 147.744 ms
Loss rate: 1.12%
```

## Run 4: Report of Verus — Data Link

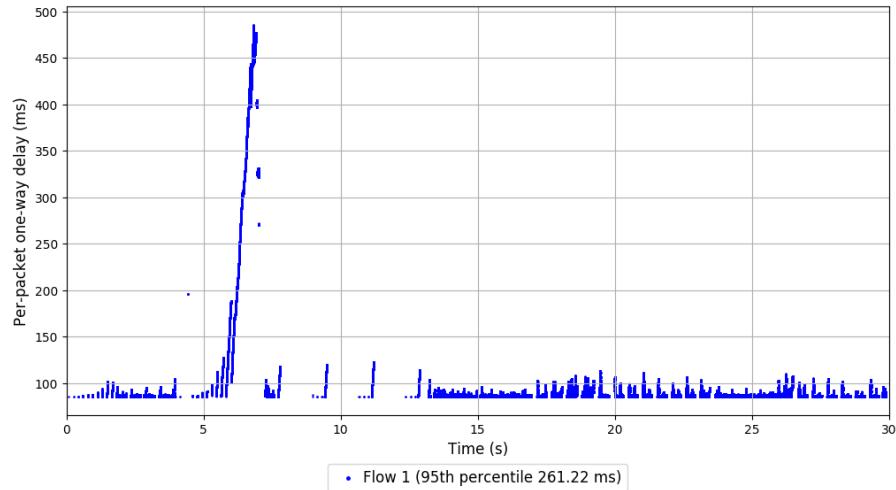
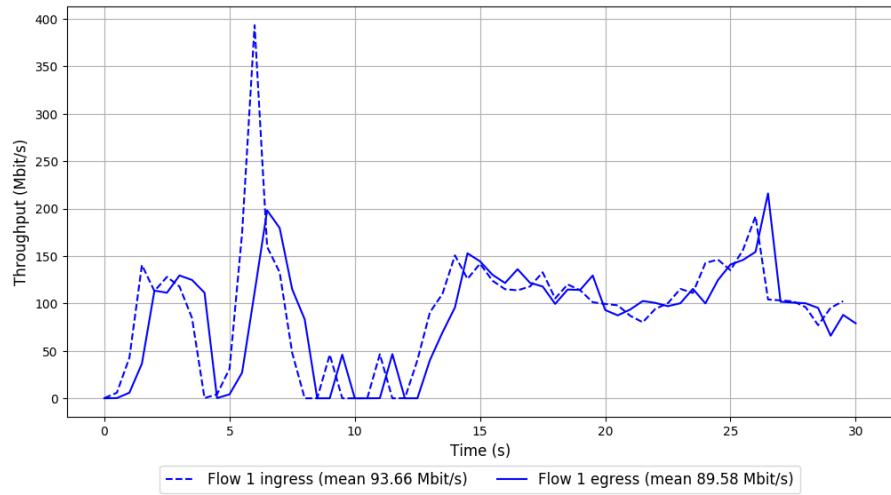


Run 5: Statistics of Verus

```
Start at: 2019-07-17 18:25:54
End at: 2019-07-17 18:26:24
Local clock offset: 1.681 ms
Remote clock offset: 1.898 ms

# Below is generated by plot.py at 2019-07-17 21:00:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.58 Mbit/s
95th percentile per-packet one-way delay: 261.218 ms
Loss rate: 4.91%
-- Flow 1:
Average throughput: 89.58 Mbit/s
95th percentile per-packet one-way delay: 261.218 ms
Loss rate: 4.91%
```

Run 5: Report of Verus — Data Link

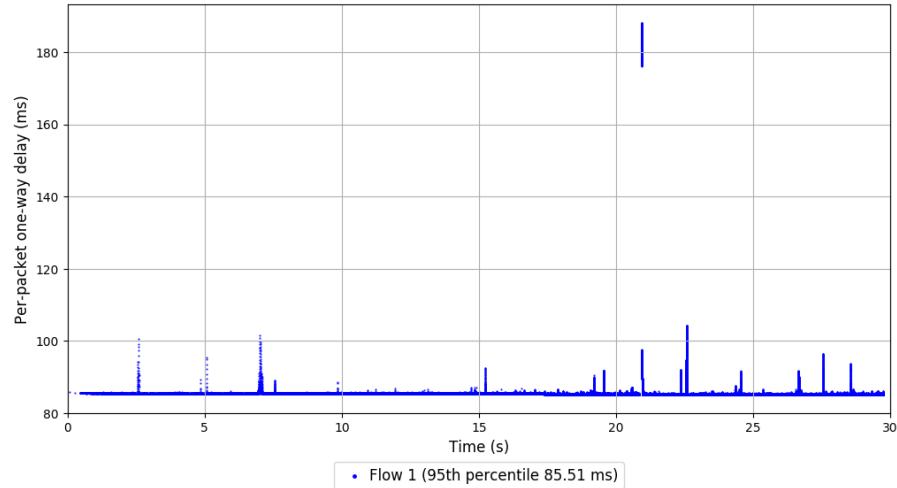
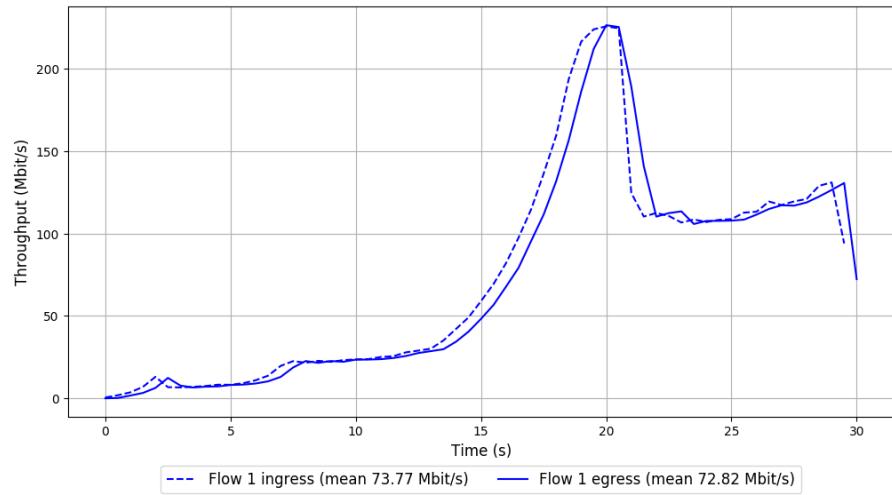


Run 1: Statistics of PCC-Vivace

```
Start at: 2019-07-17 15:58:07
End at: 2019-07-17 15:58:37
Local clock offset: 6.228 ms
Remote clock offset: 7.241 ms

# Below is generated by plot.py at 2019-07-17 21:00:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.82 Mbit/s
95th percentile per-packet one-way delay: 85.513 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 72.82 Mbit/s
95th percentile per-packet one-way delay: 85.513 ms
Loss rate: 1.86%
```

Run 1: Report of PCC-Vivace — Data Link

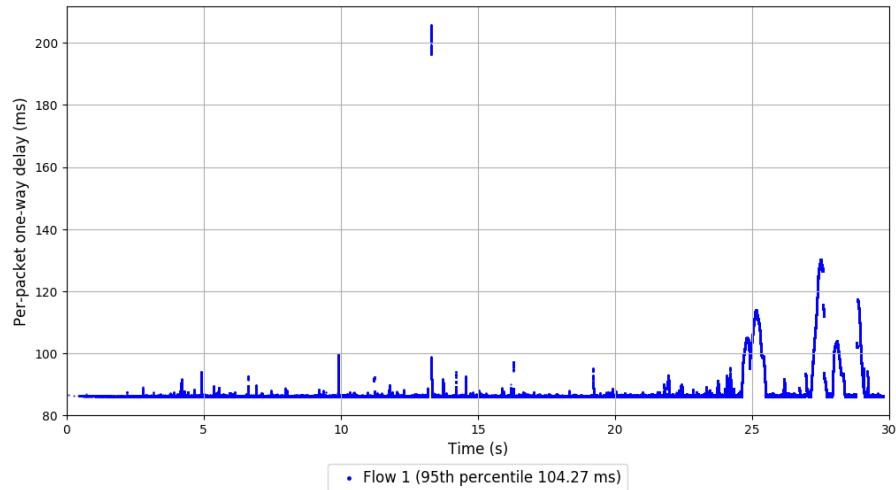
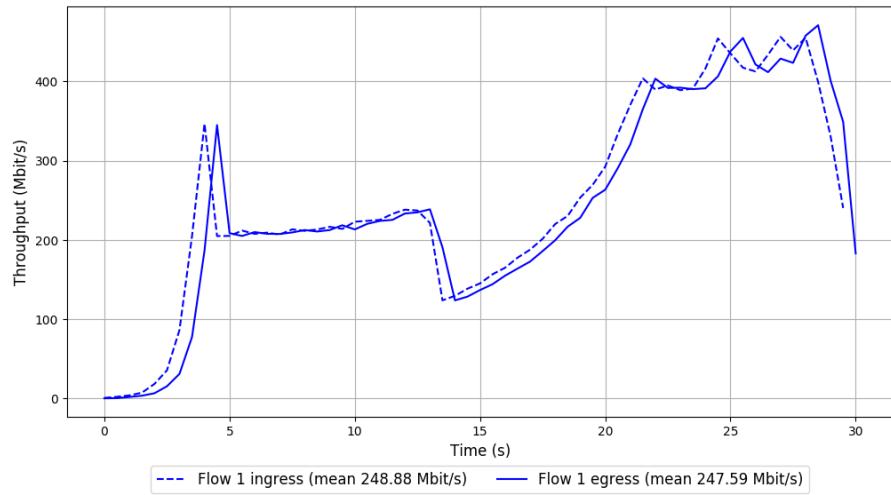


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-07-17 16:32:44
End at: 2019-07-17 16:33:14
Local clock offset: 23.029 ms
Remote clock offset: 23.38 ms

# Below is generated by plot.py at 2019-07-17 21:00:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 247.59 Mbit/s
95th percentile per-packet one-way delay: 104.269 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 247.59 Mbit/s
95th percentile per-packet one-way delay: 104.269 ms
Loss rate: 1.10%
```

Run 2: Report of PCC-Vivace — Data Link

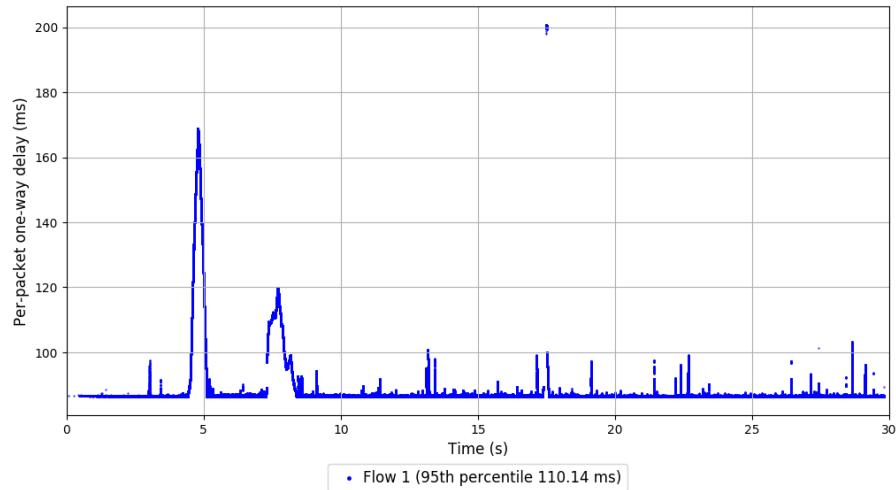
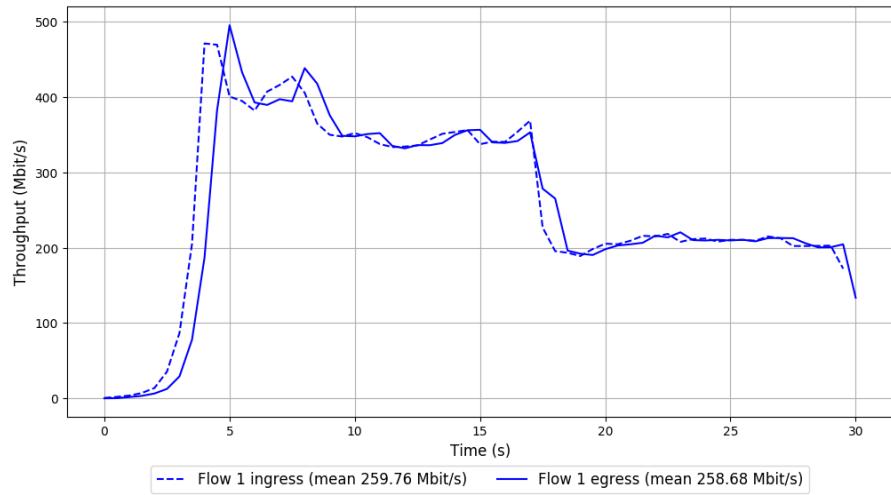


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-07-17 17:08:10
End at: 2019-07-17 17:08:40
Local clock offset: 24.918 ms
Remote clock offset: 24.884 ms

# Below is generated by plot.py at 2019-07-17 21:00:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 258.68 Mbit/s
95th percentile per-packet one-way delay: 110.140 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 258.68 Mbit/s
95th percentile per-packet one-way delay: 110.140 ms
Loss rate: 0.98%
```

### Run 3: Report of PCC-Vivace — Data Link

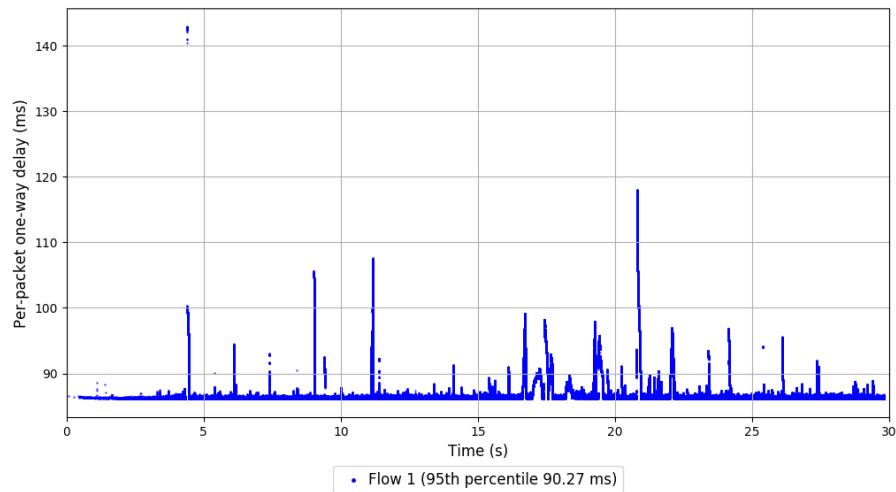
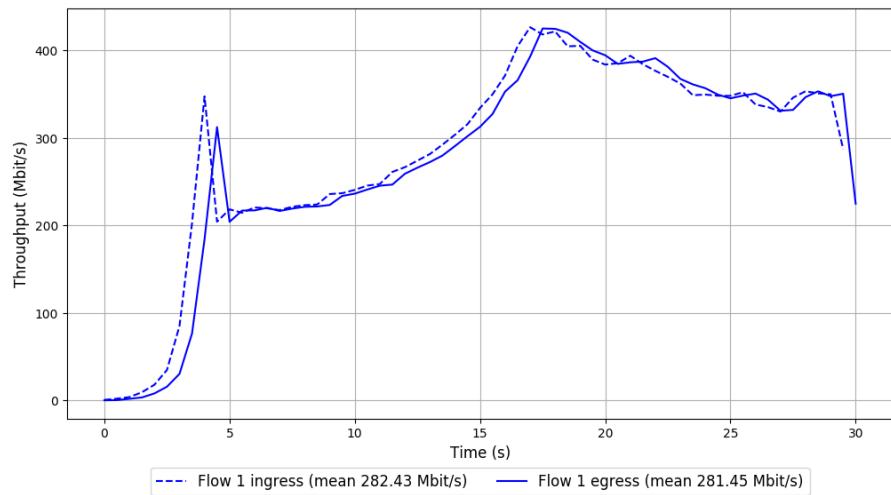


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-07-17 17:43:23
End at: 2019-07-17 17:43:53
Local clock offset: 6.271 ms
Remote clock offset: 6.093 ms

# Below is generated by plot.py at 2019-07-17 21:00:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 281.45 Mbit/s
95th percentile per-packet one-way delay: 90.265 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 281.45 Mbit/s
95th percentile per-packet one-way delay: 90.265 ms
Loss rate: 0.93%
```

Run 4: Report of PCC-Vivace — Data Link

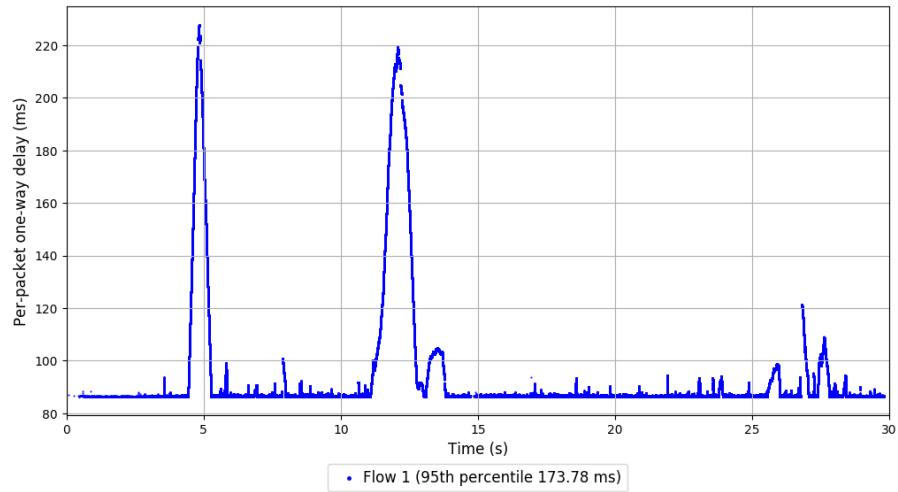
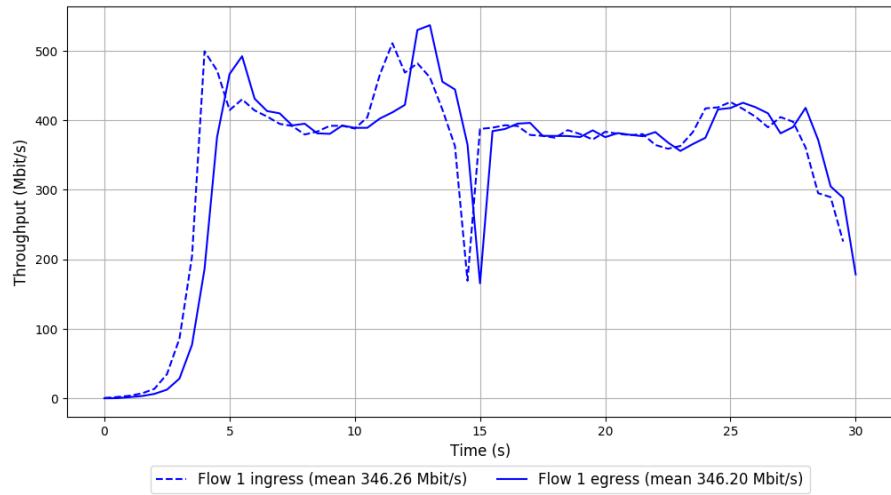


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-07-17 18:18:56
End at: 2019-07-17 18:19:26
Local clock offset: 2.616 ms
Remote clock offset: 2.476 ms

# Below is generated by plot.py at 2019-07-17 21:00:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 346.20 Mbit/s
95th percentile per-packet one-way delay: 173.781 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 346.20 Mbit/s
95th percentile per-packet one-way delay: 173.781 ms
Loss rate: 0.60%
```

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

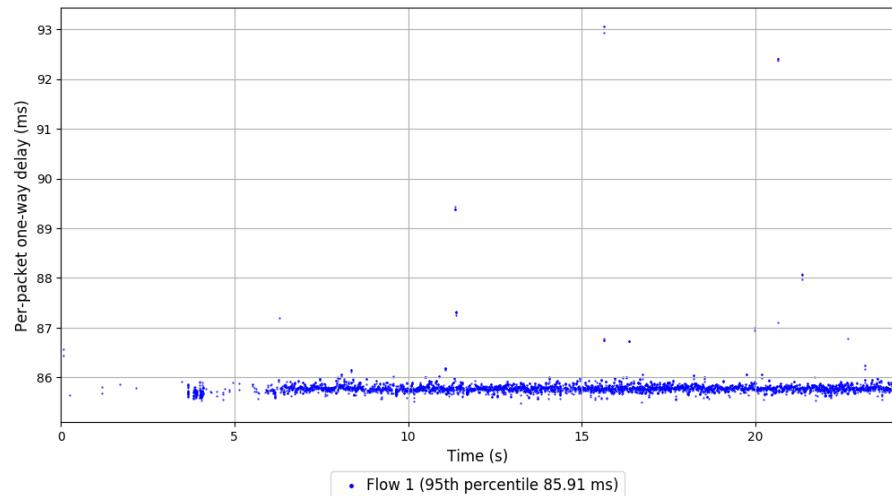
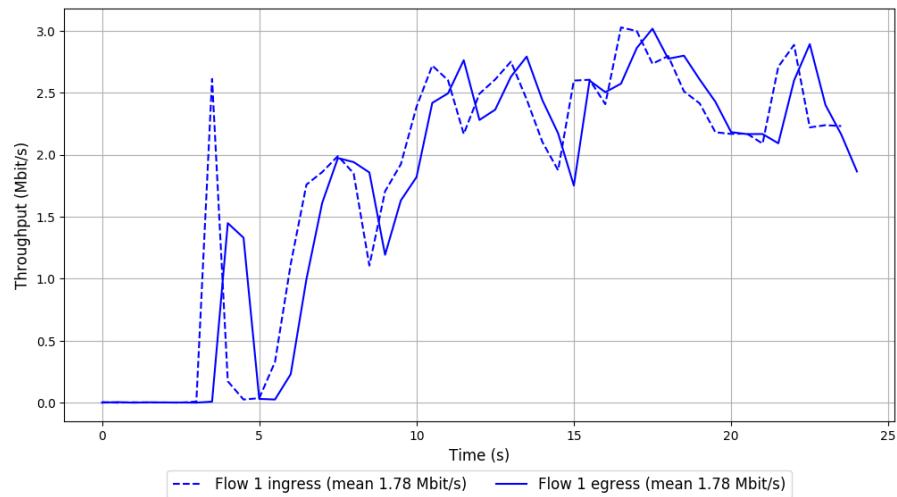
Start at: 2019-07-17 16:18:47

End at: 2019-07-17 16:19:17

Local clock offset: 14.862 ms

Remote clock offset: 15.997 ms

Run 1: Report of WebRTC media — Data Link

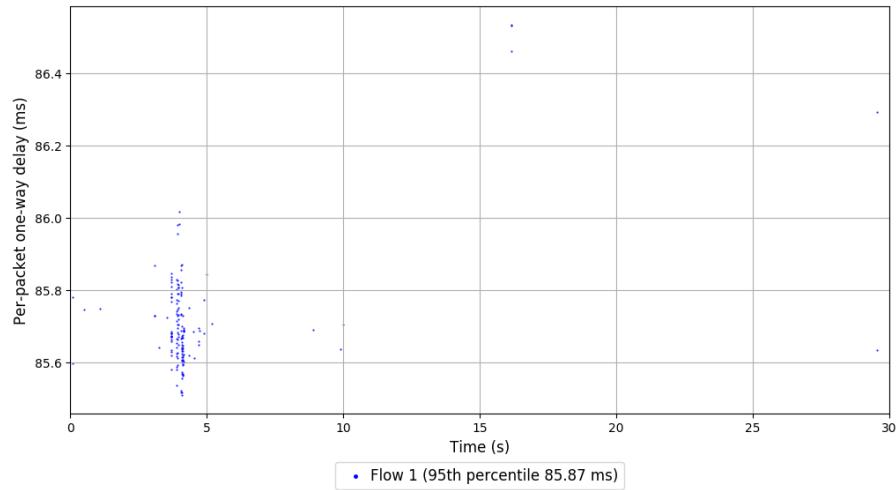
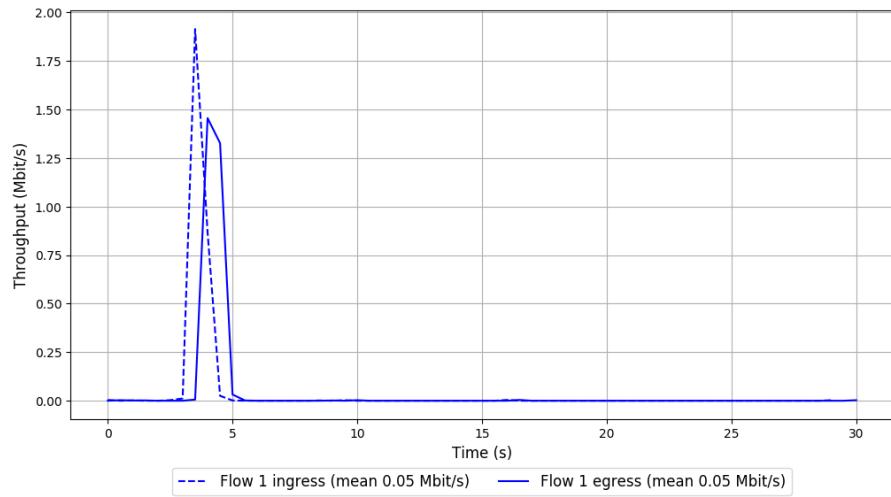


Run 2: Statistics of WebRTC media

```
Start at: 2019-07-17 16:54:15
End at: 2019-07-17 16:54:45
Local clock offset: 32.853 ms
Remote clock offset: 34.177 ms

# Below is generated by plot.py at 2019-07-17 21:00:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 85.871 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 85.871 ms
Loss rate: 0.00%
```

## Run 2: Report of WebRTC media — Data Link

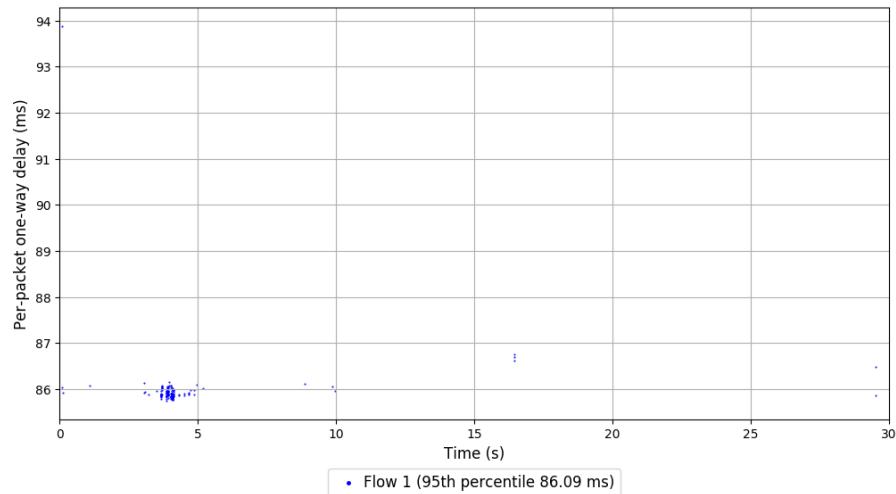
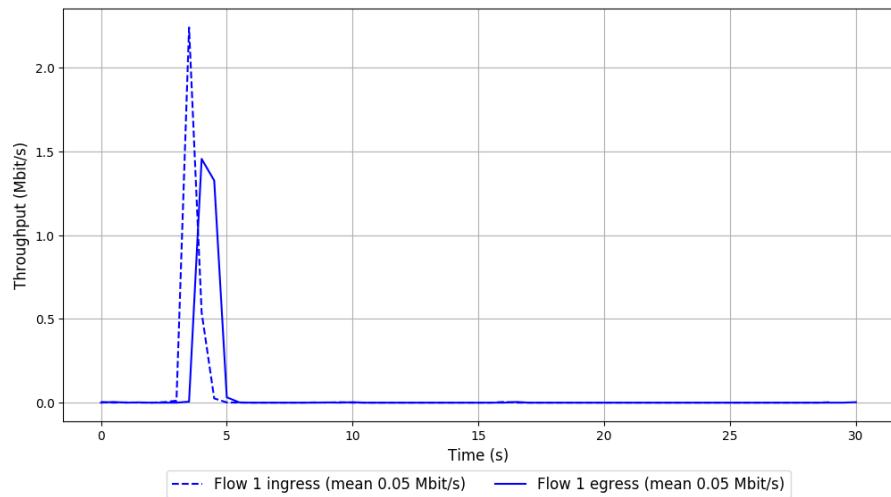


Run 3: Statistics of WebRTC media

```
Start at: 2019-07-17 17:29:29
End at: 2019-07-17 17:29:59
Local clock offset: 9.733 ms
Remote clock offset: 10.093 ms

# Below is generated by plot.py at 2019-07-17 21:00:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.090 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.090 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

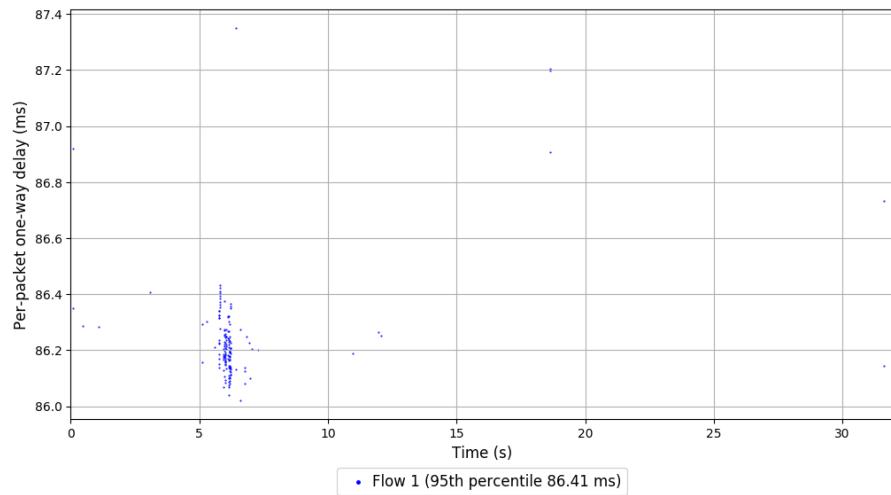
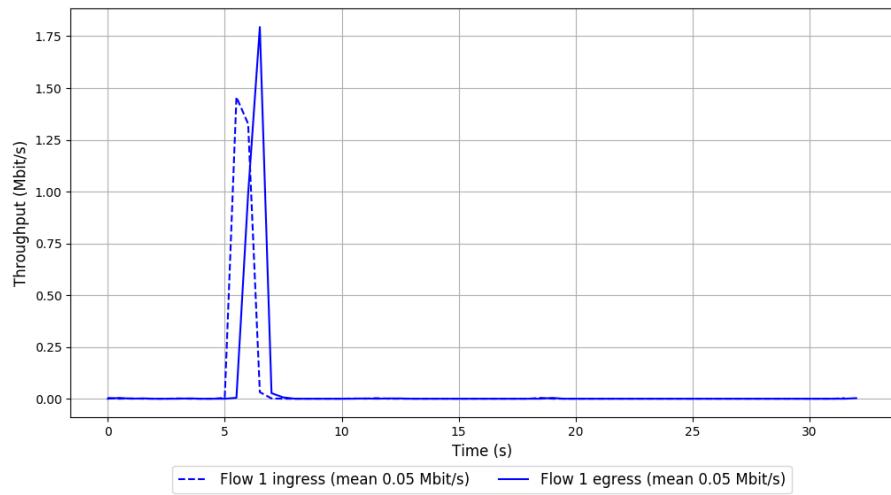


Run 4: Statistics of WebRTC media

```
Start at: 2019-07-17 18:04:59
End at: 2019-07-17 18:05:29
Local clock offset: 4.266 ms
Remote clock offset: 4.338 ms

# Below is generated by plot.py at 2019-07-17 21:00:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.410 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.410 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-07-17 18:40:27
End at: 2019-07-17 18:40:57
Local clock offset: 1.725 ms
Remote clock offset: 2.18 ms

# Below is generated by plot.py at 2019-07-17 21:00:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.002 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.002 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

