

## Pantheon Report

Generated at 2019-06-28 08:25:50 (UTC).  
Data path: Mexico on `em1` (*remote*) → AWS California 2 on `ens5` (*local*).  
Repeated the test of 22 congestion control schemes 5 times.  
Each test lasted for 30 seconds running 1 flow.  
NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.

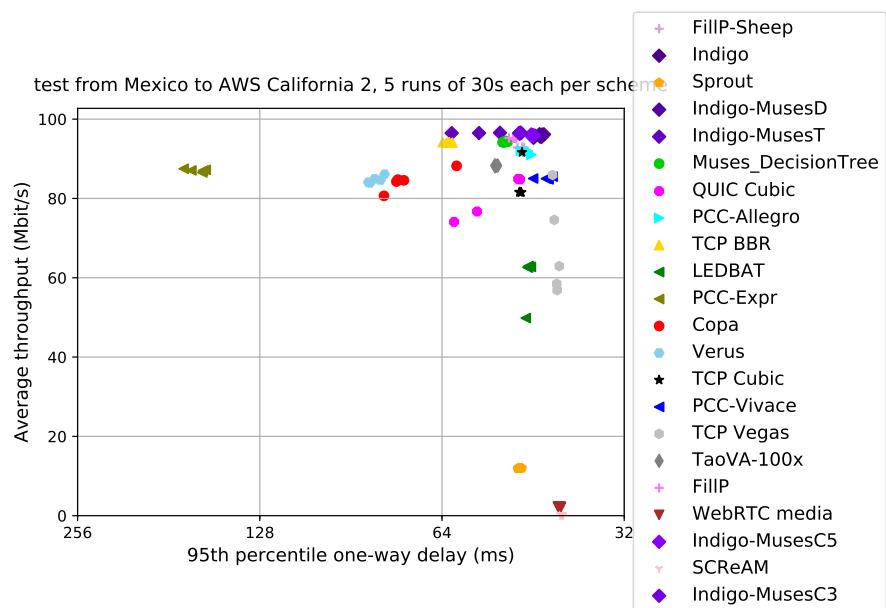
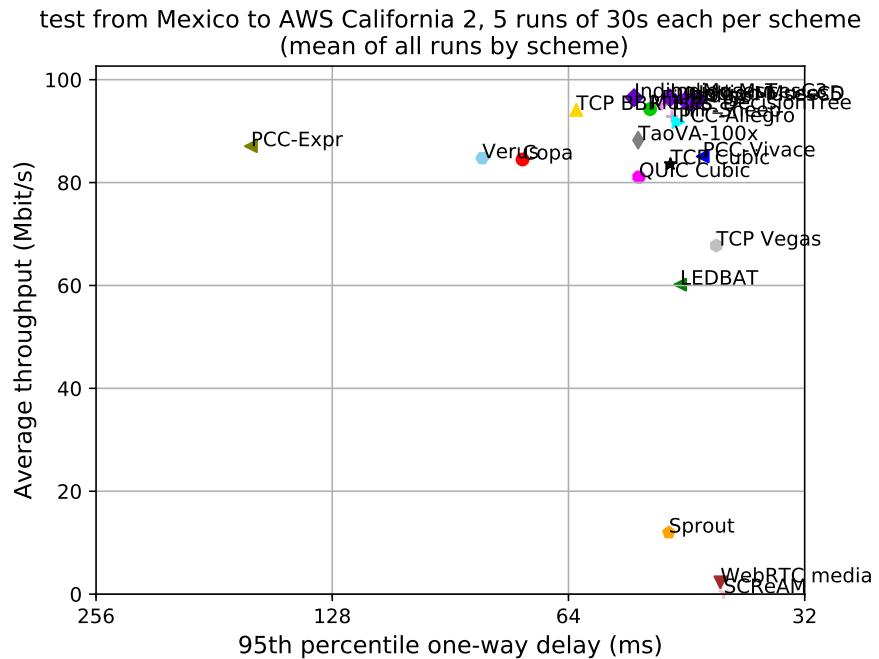
System info:

```
Linux 4.15.0-1039-aws
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 @ c3953d08f32ec7ebbdede2d2f0cbdeed262571ef
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 @ 11c9498ecb1596b02ccd896791a02d03172af7ed
M helpers/_init_.pyc
M helpers/context.py
M helpers/utils.py
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
```



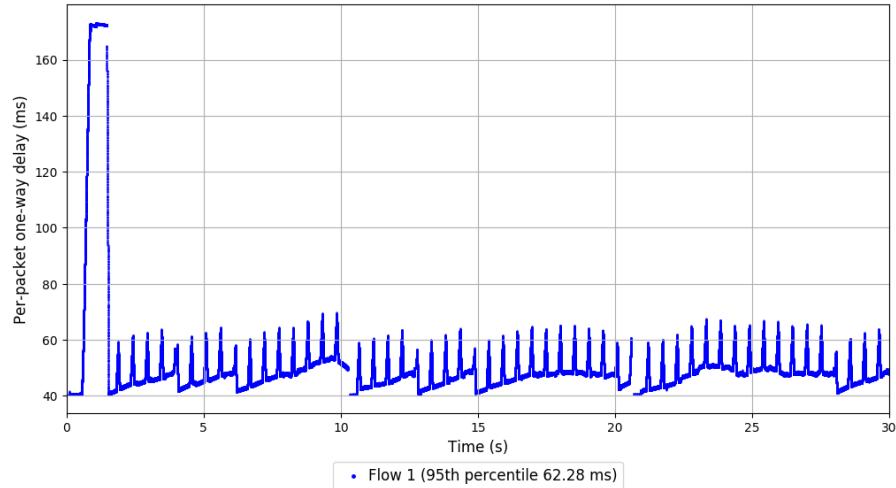
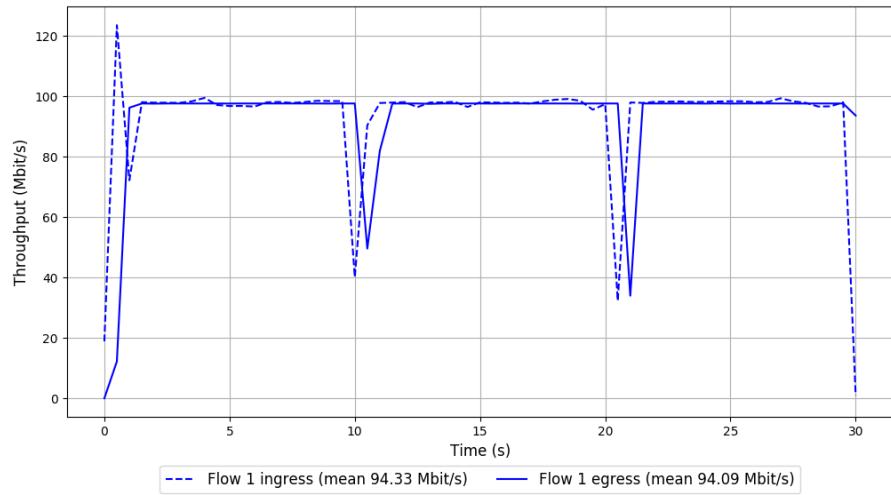
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	94.12	62.55	0.53
Copa	5	84.49	73.24	0.25
TCP Cubic	5	83.59	47.45	0.27
FillP	5	95.17	48.74	0.25
FillP-Sheep	5	92.84	47.24	0.23
Indigo	5	95.61	44.69	0.23
Indigo-MusesC3	5	96.49	47.51	0.25
Indigo-MusesC5	5	95.95	45.41	0.24
Indigo-MusesD	5	96.10	43.71	0.24
Indigo-MusesT	5	96.50	52.78	0.32
LEDBAT	5	60.16	46.12	0.36
Muses_DecisionTree	5	94.28	50.37	0.22
PCC-Allegro	5	91.75	46.34	0.30
PCC-Expr	5	87.08	162.49	0.30
QUIC Cubic	5	81.08	52.06	0.30
SCReAM	5	0.21	40.59	0.26
Sprout	5	11.97	47.68	0.23
TaoVA-100x	5	88.24	52.17	0.26
TCP Vegas	5	67.75	41.48	0.25
Verus	5	84.74	82.43	0.46
PCC-Vivace	5	85.08	43.17	0.24
WebRTC media	5	2.30	40.98	0.23

Run 1: Statistics of TCP BBR

```
Start at: 2019-06-28 06:21:13
End at: 2019-06-28 06:21:43
Local clock offset: -2.058 ms
Remote clock offset: -3.661 ms

# Below is generated by plot.py at 2019-06-28 08:11:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.09 Mbit/s
95th percentile per-packet one-way delay: 62.285 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 94.09 Mbit/s
95th percentile per-packet one-way delay: 62.285 ms
Loss rate: 0.47%
```

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

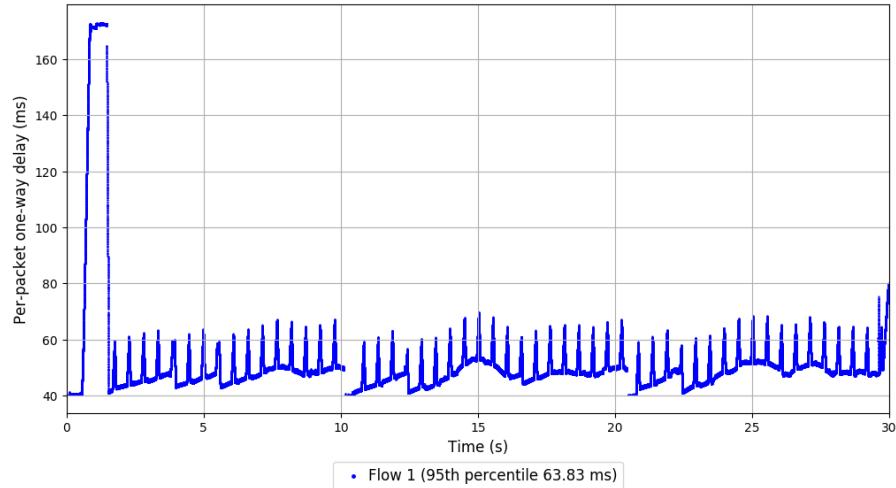
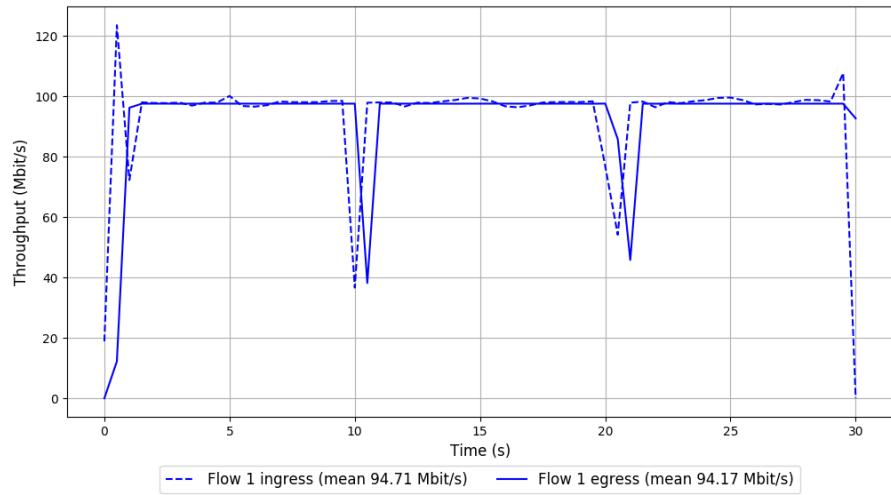


Run 2: Statistics of TCP BBR

```
Start at: 2019-06-28 06:47:08
End at: 2019-06-28 06:47:38
Local clock offset: -4.789 ms
Remote clock offset: -3.553 ms

# Below is generated by plot.py at 2019-06-28 08:11:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 63.825 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 63.825 ms
Loss rate: 0.79%
```

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

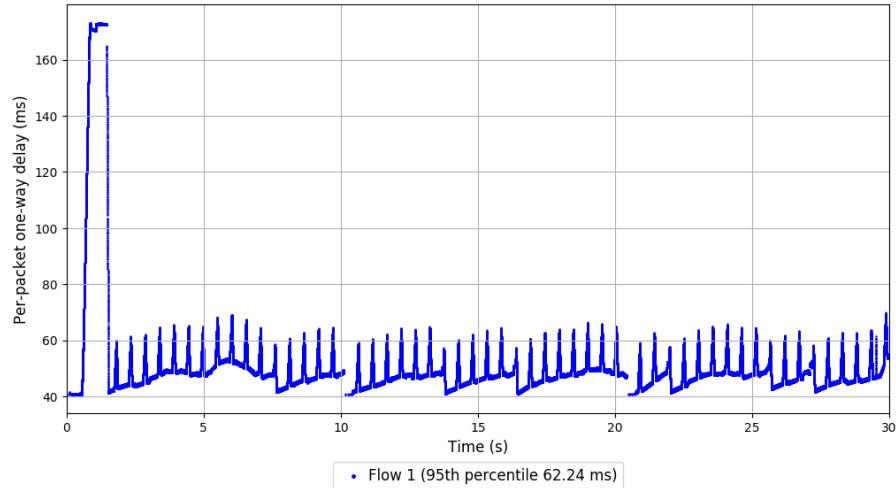
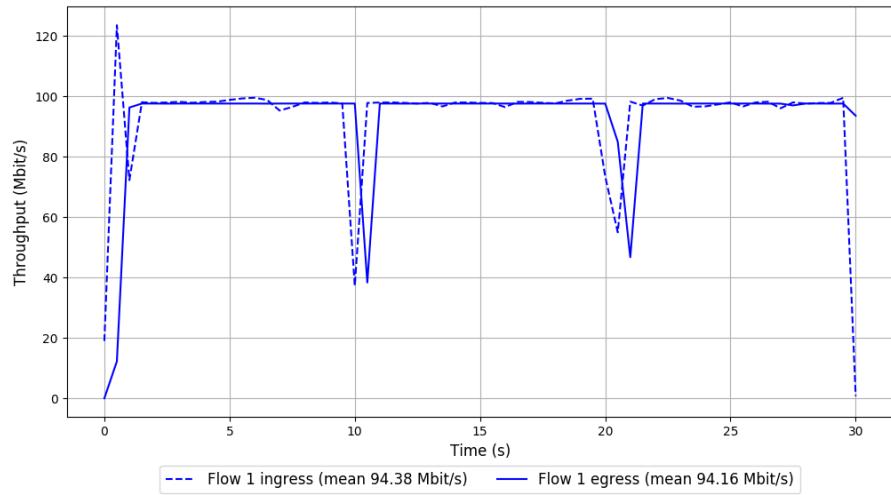


Run 3: Statistics of TCP BBR

```
Start at: 2019-06-28 07:13:12
End at: 2019-06-28 07:13:42
Local clock offset: -3.956 ms
Remote clock offset: -3.368 ms

# Below is generated by plot.py at 2019-06-28 08:11:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 62.244 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 62.244 ms
Loss rate: 0.45%
```

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

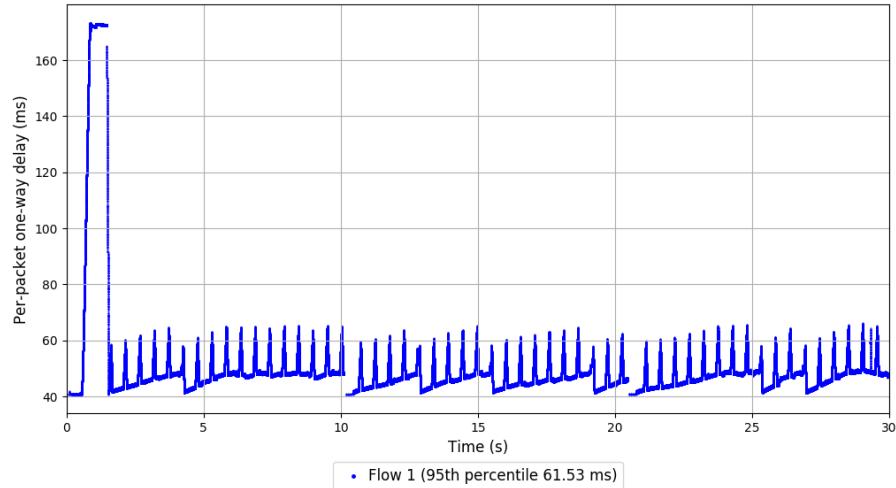
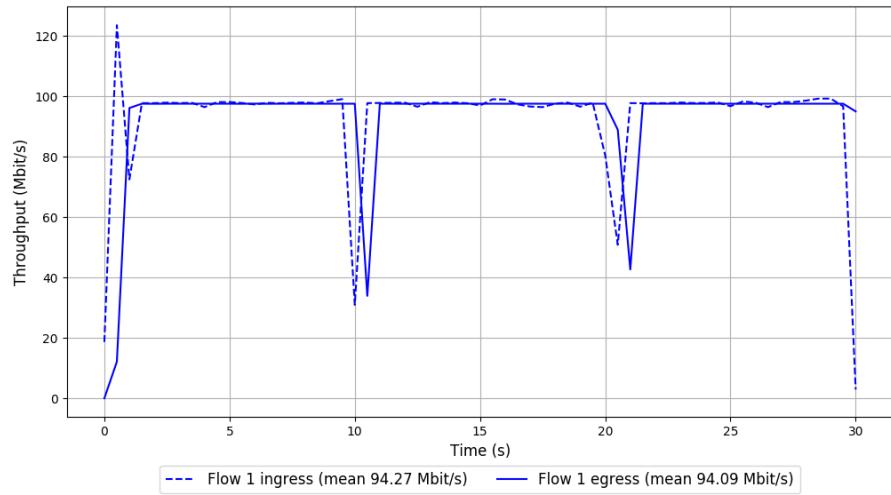


Run 4: Statistics of TCP BBR

```
Start at: 2019-06-28 07:39:05
End at: 2019-06-28 07:39:35
Local clock offset: 0.108 ms
Remote clock offset: -3.172 ms

# Below is generated by plot.py at 2019-06-28 08:11:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.09 Mbit/s
95th percentile per-packet one-way delay: 61.535 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 94.09 Mbit/s
95th percentile per-packet one-way delay: 61.535 ms
Loss rate: 0.40%
```

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

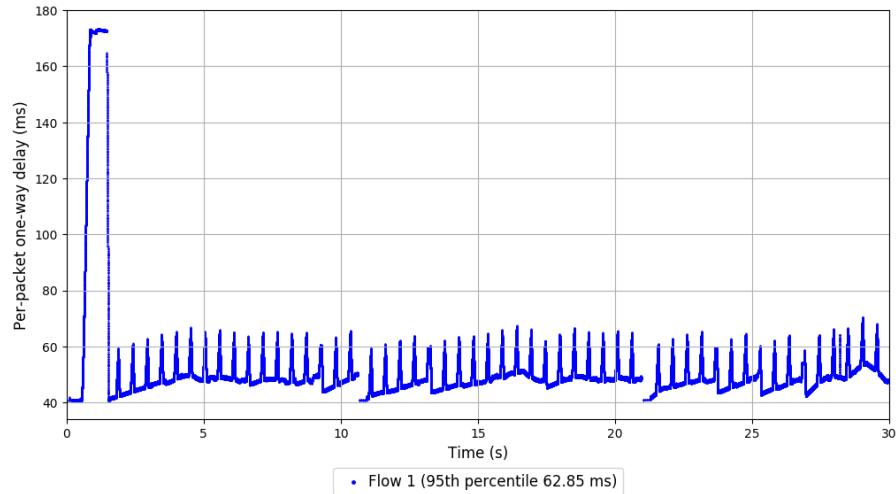
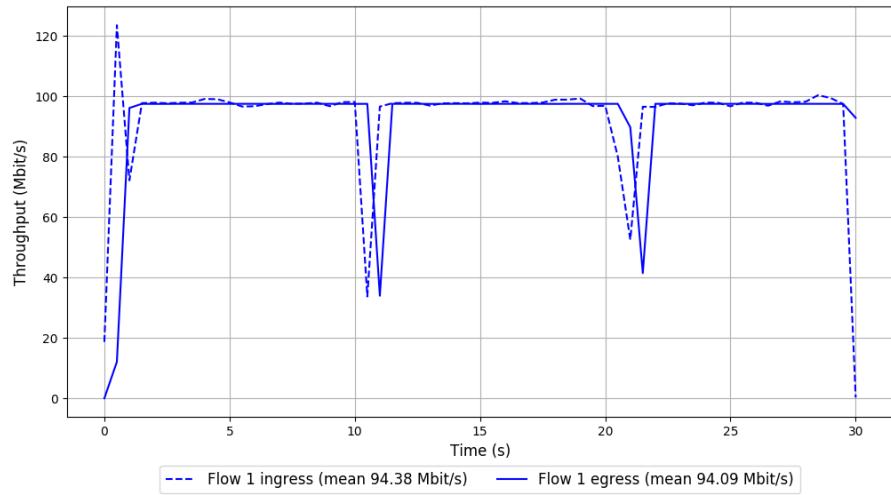


Run 5: Statistics of TCP BBR

```
Start at: 2019-06-28 08:04:59
End at: 2019-06-28 08:05:29
Local clock offset: -2.892 ms
Remote clock offset: -3.008 ms

# Below is generated by plot.py at 2019-06-28 08:11:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.09 Mbit/s
95th percentile per-packet one-way delay: 62.847 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 94.09 Mbit/s
95th percentile per-packet one-way delay: 62.847 ms
Loss rate: 0.53%
```

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

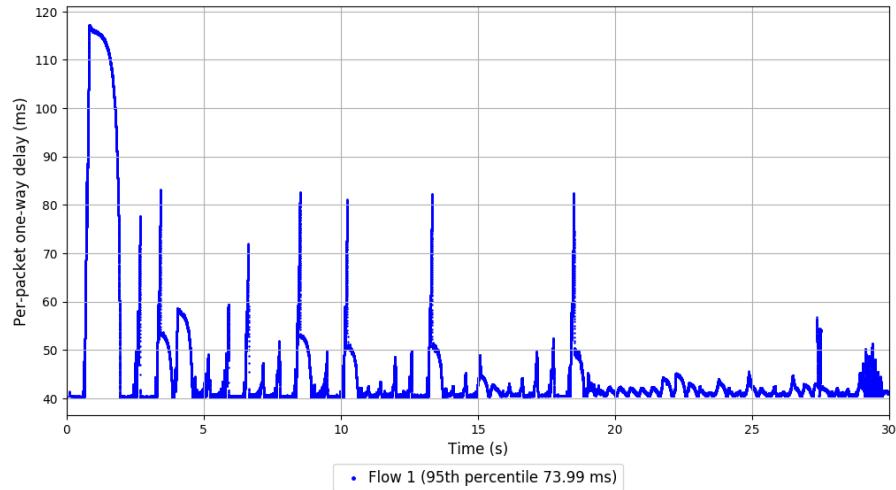
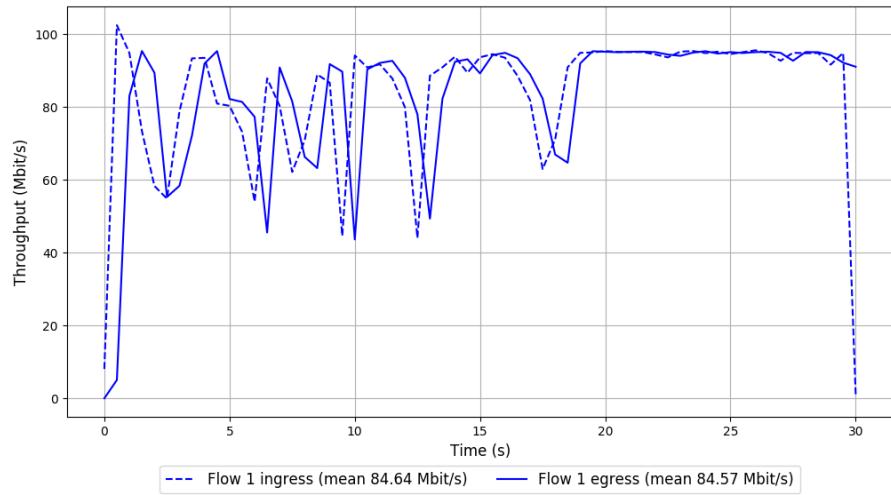


Run 1: Statistics of Copa

```
Start at: 2019-06-28 06:05:23
End at: 2019-06-28 06:05:53
Local clock offset: 0.018 ms
Remote clock offset: -4.277 ms

# Below is generated by plot.py at 2019-06-28 08:12:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.57 Mbit/s
95th percentile per-packet one-way delay: 73.987 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 84.57 Mbit/s
95th percentile per-packet one-way delay: 73.987 ms
Loss rate: 0.30%
```

### Run 1: Report of Copa — Data Link

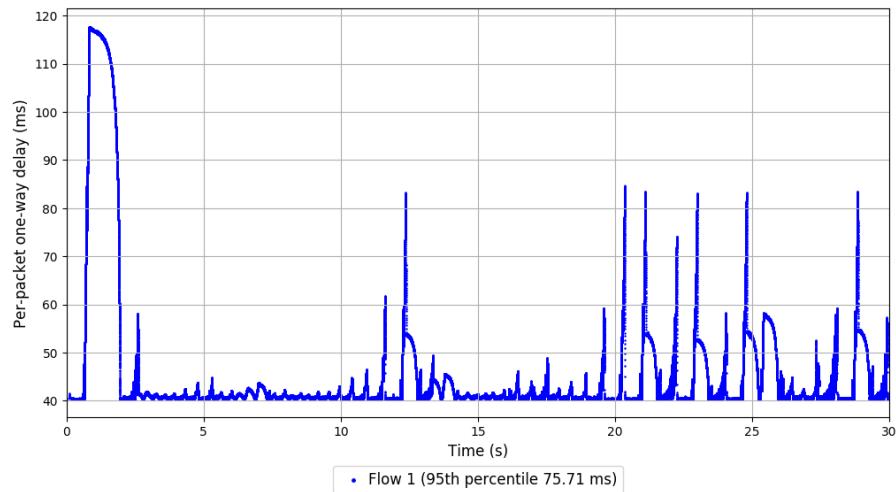
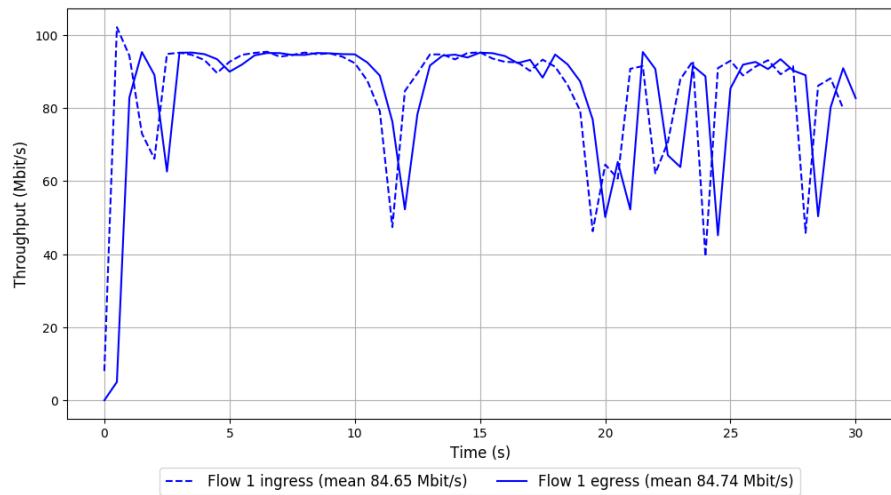


Run 2: Statistics of Copa

```
Start at: 2019-06-28 06:31:47
End at: 2019-06-28 06:32:17
Local clock offset: -3.392 ms
Remote clock offset: -3.509 ms

# Below is generated by plot.py at 2019-06-28 08:12:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.74 Mbit/s
95th percentile per-packet one-way delay: 75.706 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 84.74 Mbit/s
95th percentile per-packet one-way delay: 75.706 ms
Loss rate: 0.11%
```

## Run 2: Report of Copa — Data Link

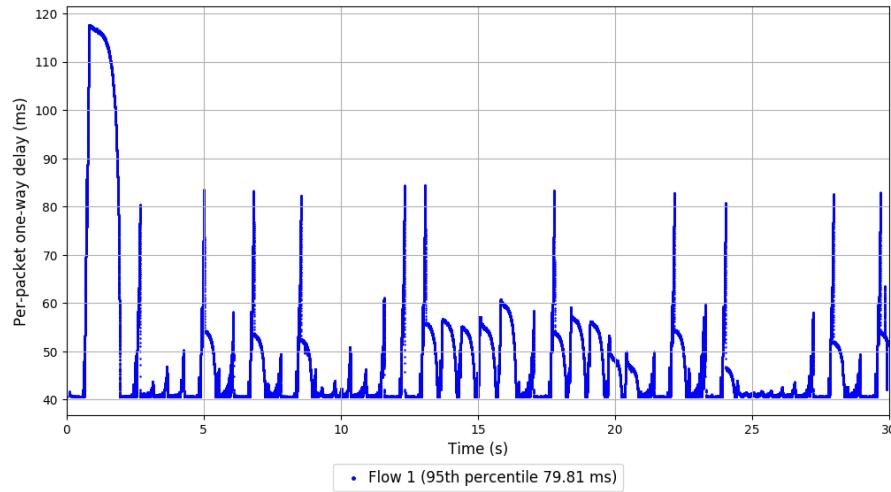
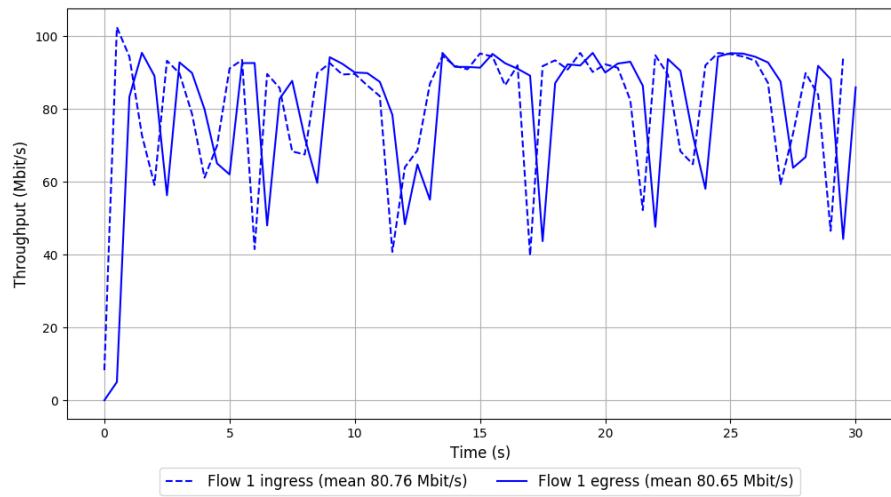


Run 3: Statistics of Copa

```
Start at: 2019-06-28 06:57:54
End at: 2019-06-28 06:58:24
Local clock offset: -3.804 ms
Remote clock offset: -3.665 ms

# Below is generated by plot.py at 2019-06-28 08:12:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.65 Mbit/s
95th percentile per-packet one-way delay: 79.814 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 80.65 Mbit/s
95th percentile per-packet one-way delay: 79.814 ms
Loss rate: 0.36%
```

### Run 3: Report of Copa — Data Link

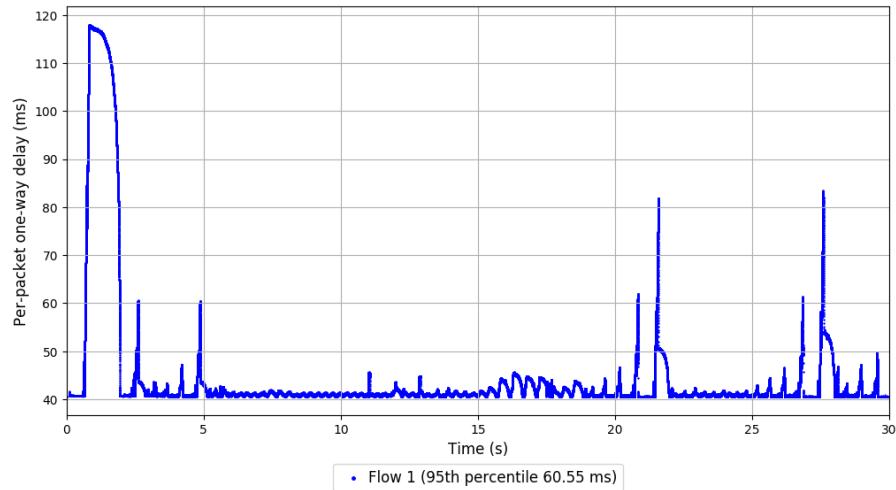
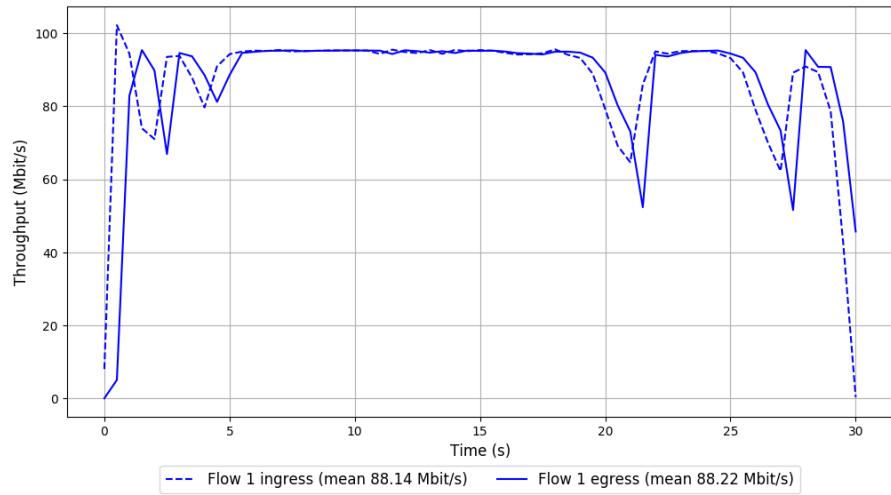


Run 4: Statistics of Copa

```
Start at: 2019-06-28 07:23:45
End at: 2019-06-28 07:24:15
Local clock offset: -1.949 ms
Remote clock offset: -3.246 ms

# Below is generated by plot.py at 2019-06-28 08:13:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.22 Mbit/s
95th percentile per-packet one-way delay: 60.551 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 88.22 Mbit/s
95th percentile per-packet one-way delay: 60.551 ms
Loss rate: 0.13%
```

### Run 4: Report of Copa — Data Link

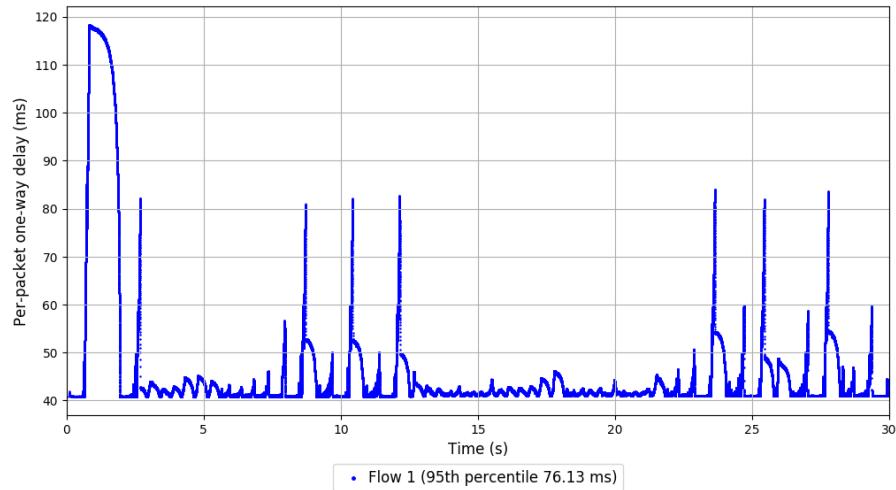
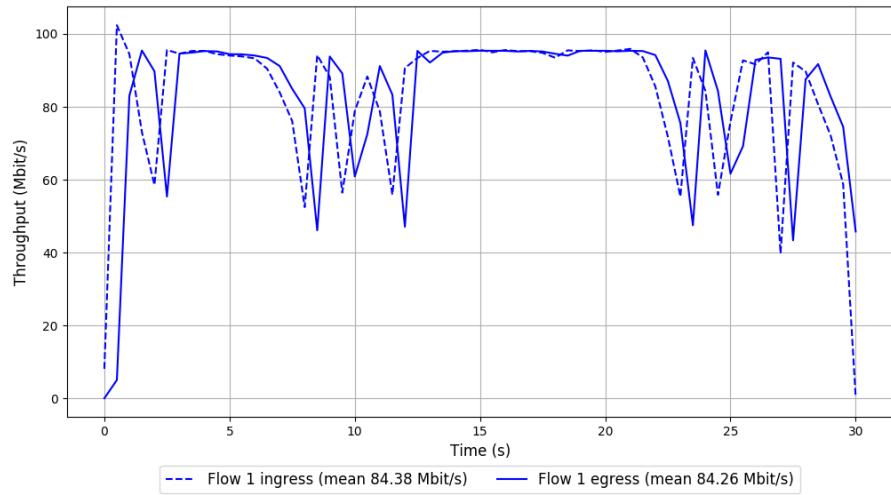


Run 5: Statistics of Copa

```
Start at: 2019-06-28 07:49:39
End at: 2019-06-28 07:50:09
Local clock offset: -0.169 ms
Remote clock offset: -3.141 ms

# Below is generated by plot.py at 2019-06-28 08:13:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.26 Mbit/s
95th percentile per-packet one-way delay: 76.128 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 84.26 Mbit/s
95th percentile per-packet one-way delay: 76.128 ms
Loss rate: 0.35%
```

### Run 5: Report of Copa — Data Link

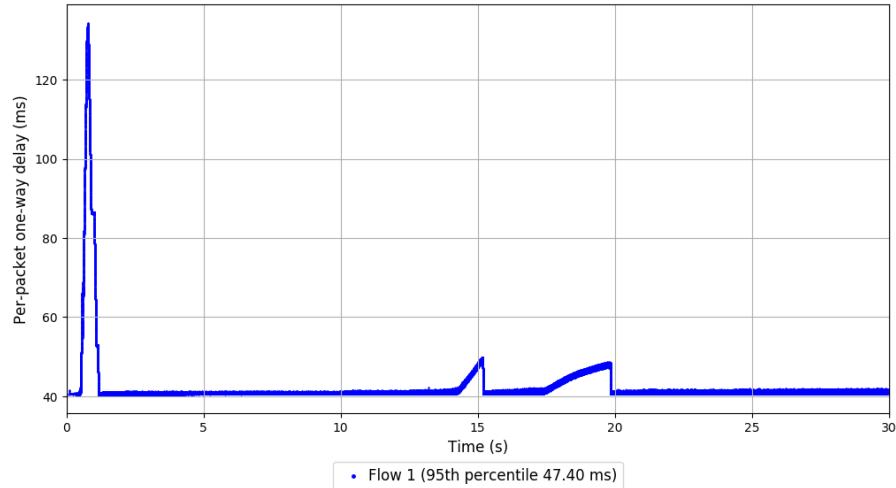
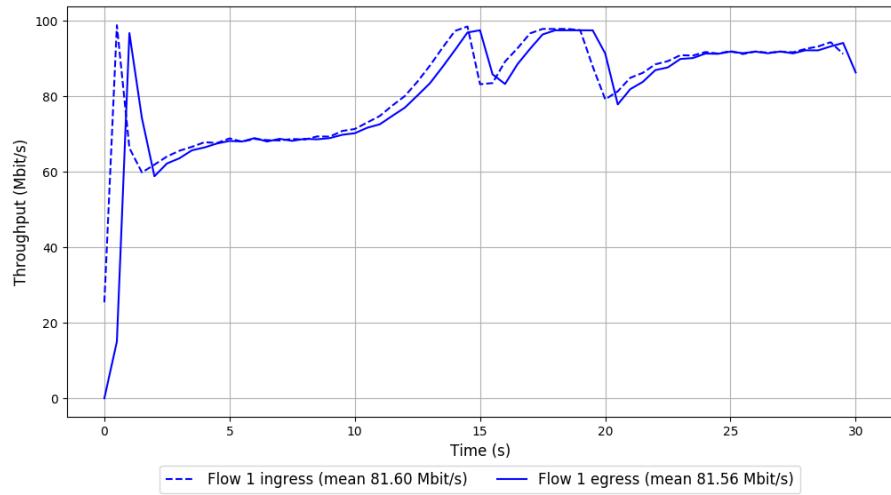


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-06-28 06:18:55
End at: 2019-06-28 06:19:25
Local clock offset: -1.688 ms
Remote clock offset: -3.719 ms

# Below is generated by plot.py at 2019-06-28 08:13:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.56 Mbit/s
95th percentile per-packet one-way delay: 47.404 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 81.56 Mbit/s
95th percentile per-packet one-way delay: 47.404 ms
Loss rate: 0.27%
```

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

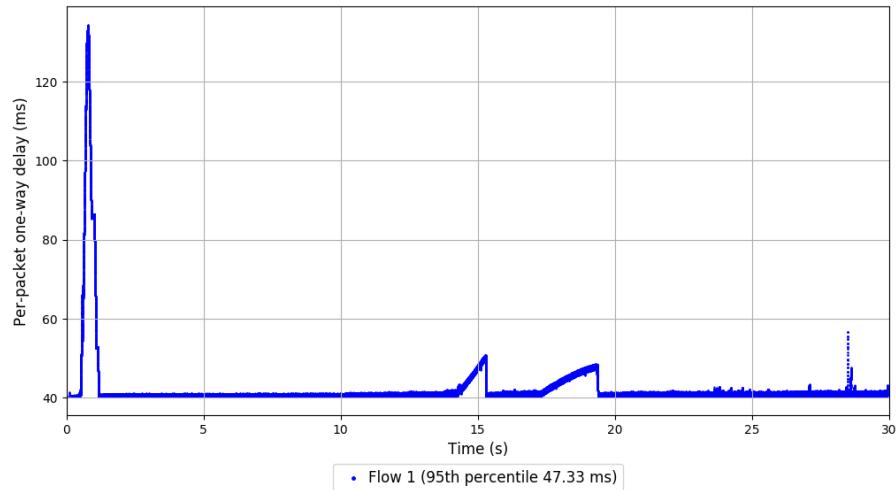
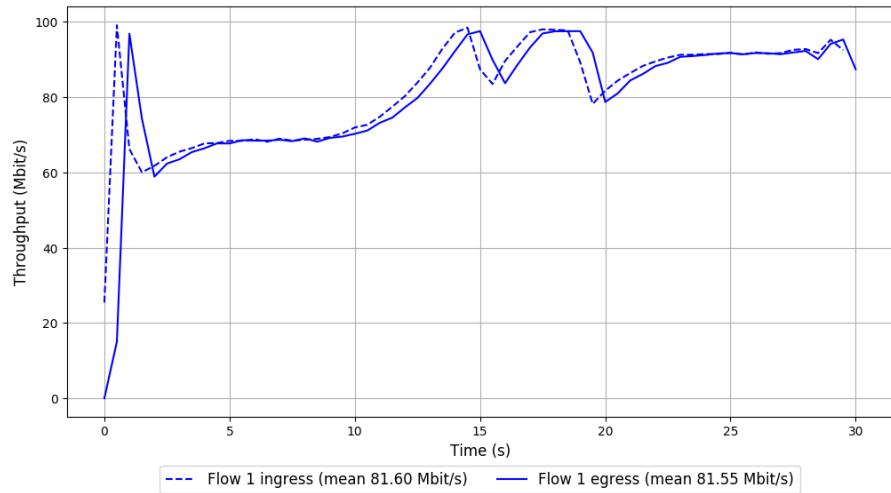


Run 2: Statistics of TCP Cubic

```
Start at: 2019-06-28 06:44:51
End at: 2019-06-28 06:45:21
Local clock offset: -4.616 ms
Remote clock offset: -3.516 ms

# Below is generated by plot.py at 2019-06-28 08:13:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.55 Mbit/s
95th percentile per-packet one-way delay: 47.331 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 81.55 Mbit/s
95th percentile per-packet one-way delay: 47.331 ms
Loss rate: 0.27%
```

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

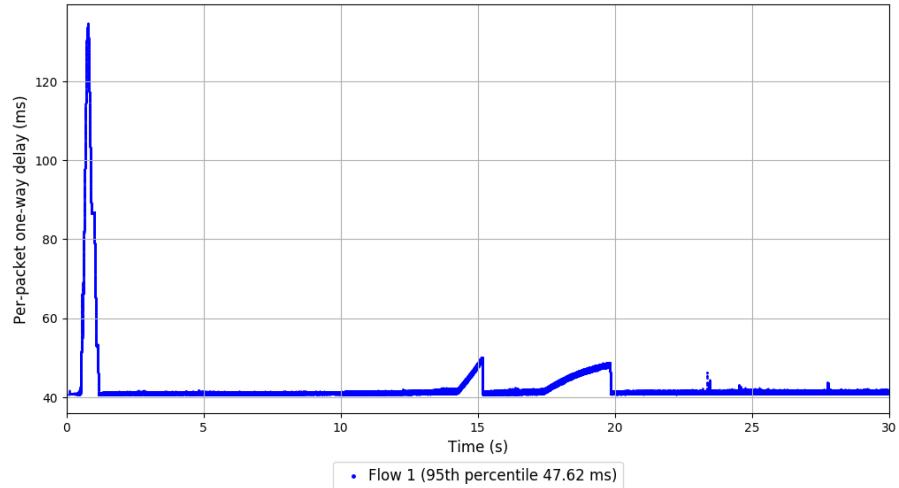
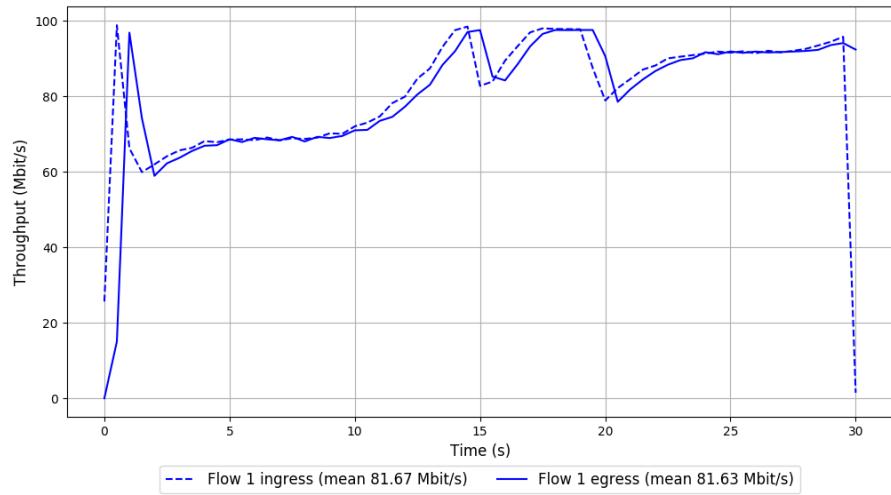


```
Run 3: Statistics of TCP Cubic
```

```
Start at: 2019-06-28 07:10:54
End at: 2019-06-28 07:11:24
Local clock offset: -3.883 ms
Remote clock offset: -3.41 ms

# Below is generated by plot.py at 2019-06-28 08:13:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.63 Mbit/s
95th percentile per-packet one-way delay: 47.623 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 81.63 Mbit/s
95th percentile per-packet one-way delay: 47.623 ms
Loss rate: 0.27%
```

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

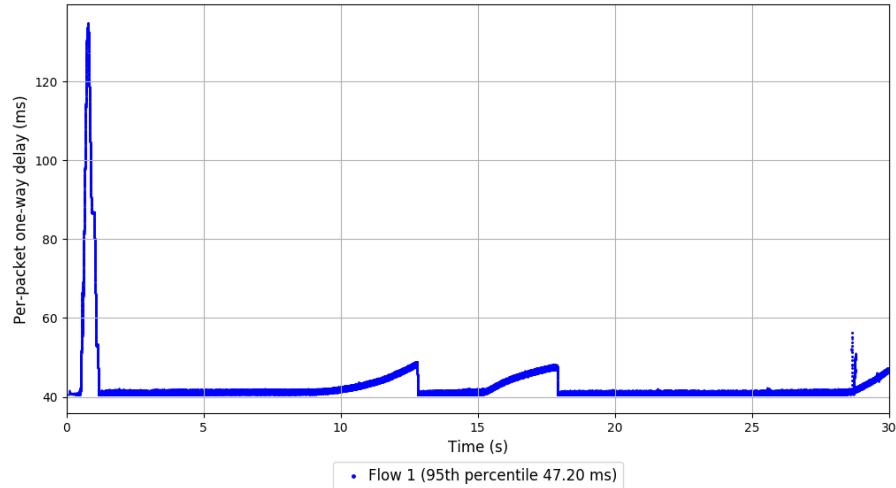
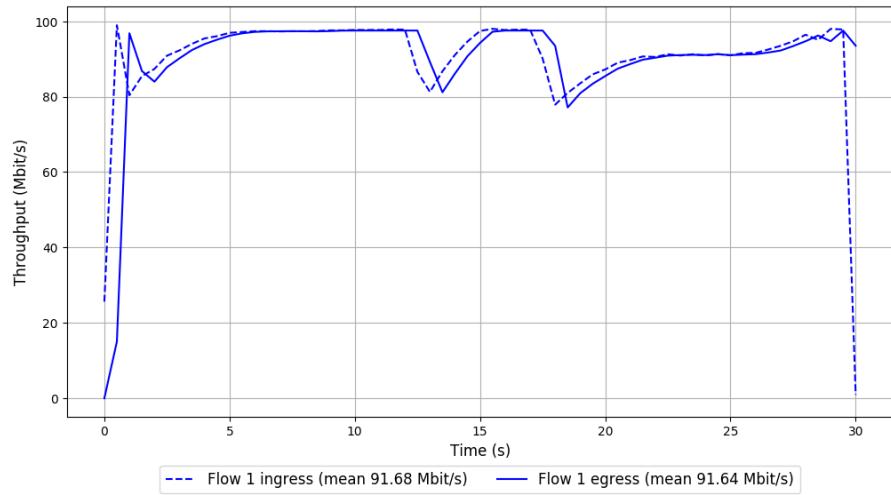


Run 4: Statistics of TCP Cubic

```
Start at: 2019-06-28 07:36:48
End at: 2019-06-28 07:37:18
Local clock offset: -0.022 ms
Remote clock offset: -3.166 ms

# Below is generated by plot.py at 2019-06-28 08:13:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.64 Mbit/s
95th percentile per-packet one-way delay: 47.203 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 91.64 Mbit/s
95th percentile per-packet one-way delay: 47.203 ms
Loss rate: 0.26%
```

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

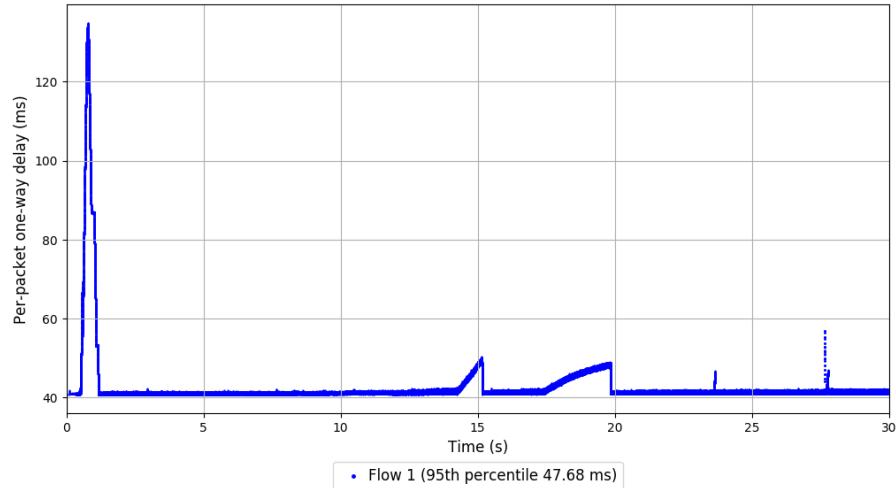
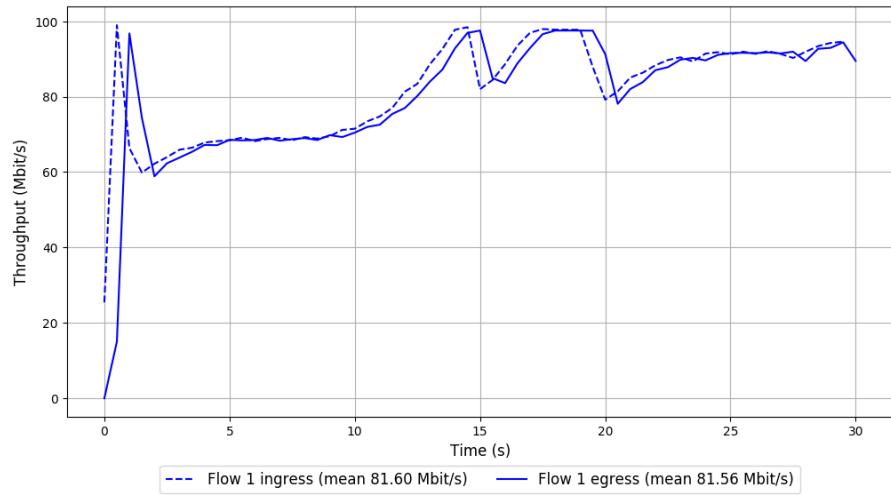


Run 5: Statistics of TCP Cubic

```
Start at: 2019-06-28 08:02:42
End at: 2019-06-28 08:03:12
Local clock offset: -2.678 ms
Remote clock offset: -3.048 ms

# Below is generated by plot.py at 2019-06-28 08:13:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.56 Mbit/s
95th percentile per-packet one-way delay: 47.683 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 81.56 Mbit/s
95th percentile per-packet one-way delay: 47.683 ms
Loss rate: 0.27%
```

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

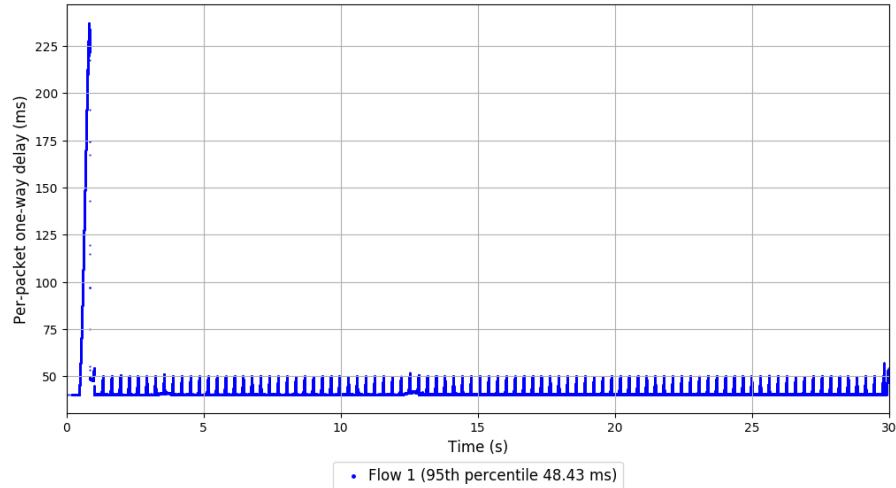
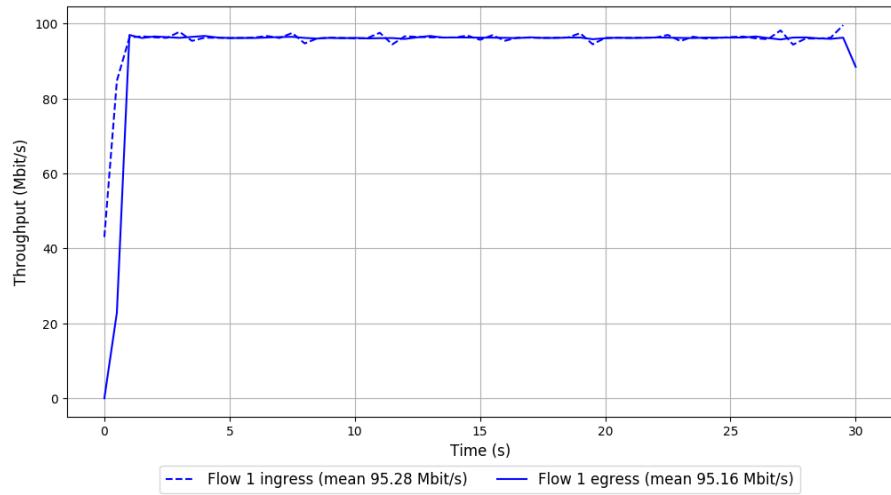


```
Run 1: Statistics of FillP

Start at: 2019-06-28 06:04:13
End at: 2019-06-28 06:04:43
Local clock offset: 0.208 ms
Remote clock offset: -4.336 ms

# Below is generated by plot.py at 2019-06-28 08:13:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.16 Mbit/s
95th percentile per-packet one-way delay: 48.432 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 95.16 Mbit/s
95th percentile per-packet one-way delay: 48.432 ms
Loss rate: 0.34%
```

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

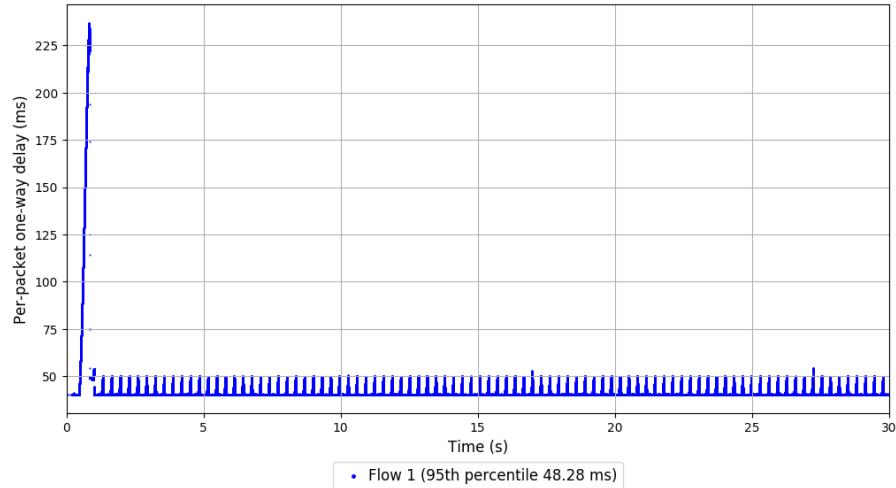
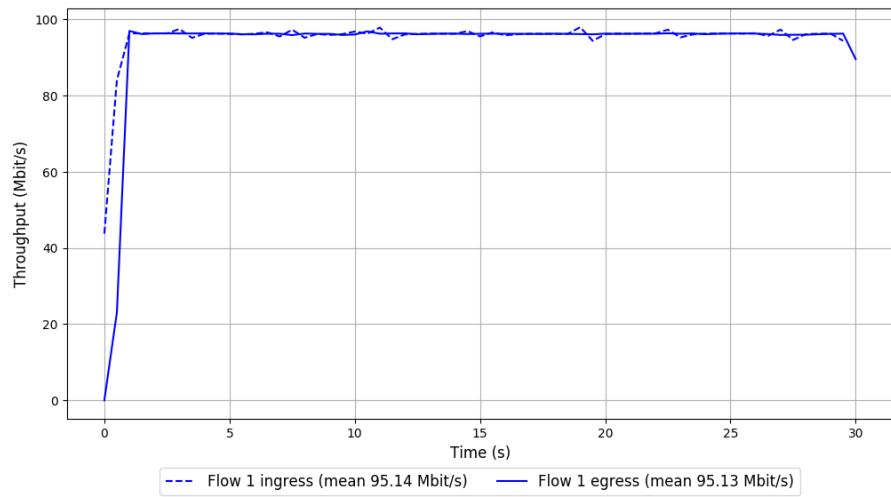


Run 2: Statistics of FillP

```
Start at: 2019-06-28 06:30:37
End at: 2019-06-28 06:31:07
Local clock offset: -3.287 ms
Remote clock offset: -3.498 ms

# Below is generated by plot.py at 2019-06-28 08:13:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.13 Mbit/s
95th percentile per-packet one-way delay: 48.276 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 95.13 Mbit/s
95th percentile per-packet one-way delay: 48.276 ms
Loss rate: 0.22%
```

## Run 2: Report of FillP — Data Link

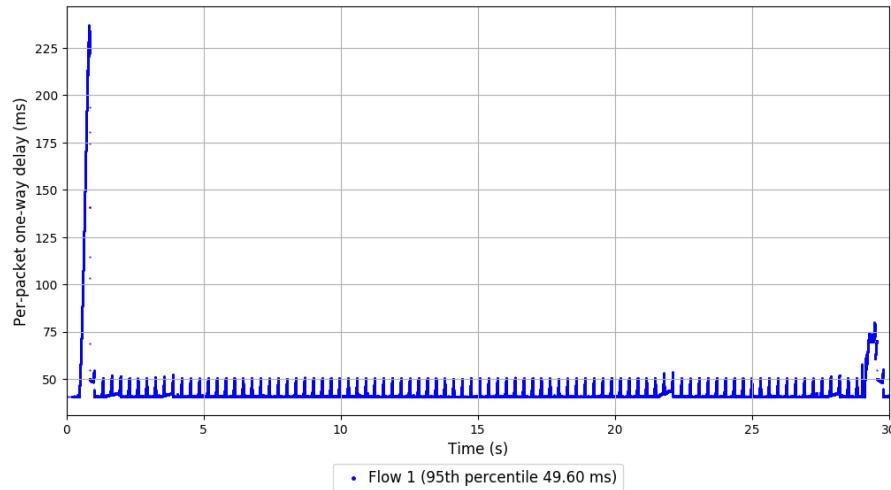
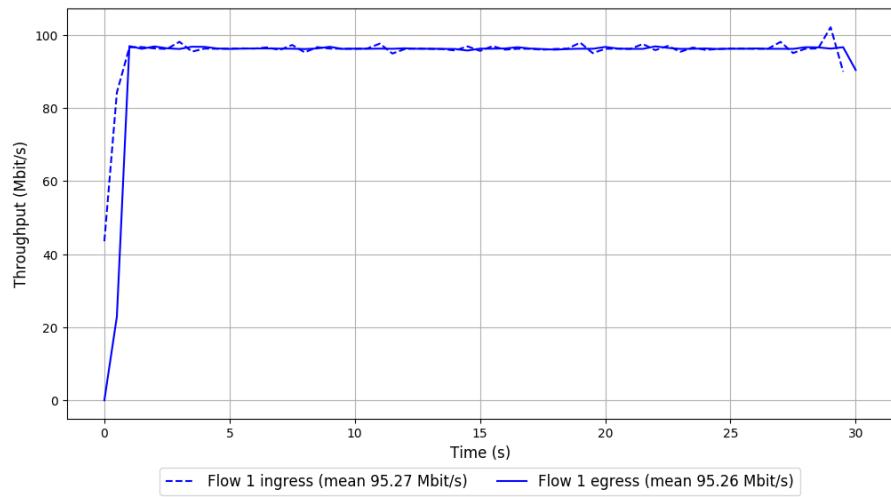


Run 3: Statistics of FillP

```
Start at: 2019-06-28 06:56:43
End at: 2019-06-28 06:57:13
Local clock offset: -3.845 ms
Remote clock offset: -3.758 ms

# Below is generated by plot.py at 2019-06-28 08:13:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.26 Mbit/s
95th percentile per-packet one-way delay: 49.597 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.26 Mbit/s
95th percentile per-packet one-way delay: 49.597 ms
Loss rate: 0.23%
```

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

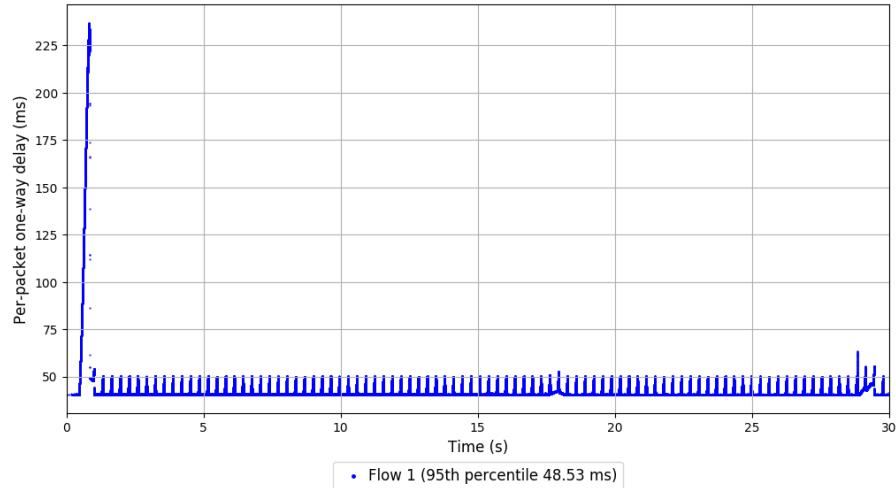
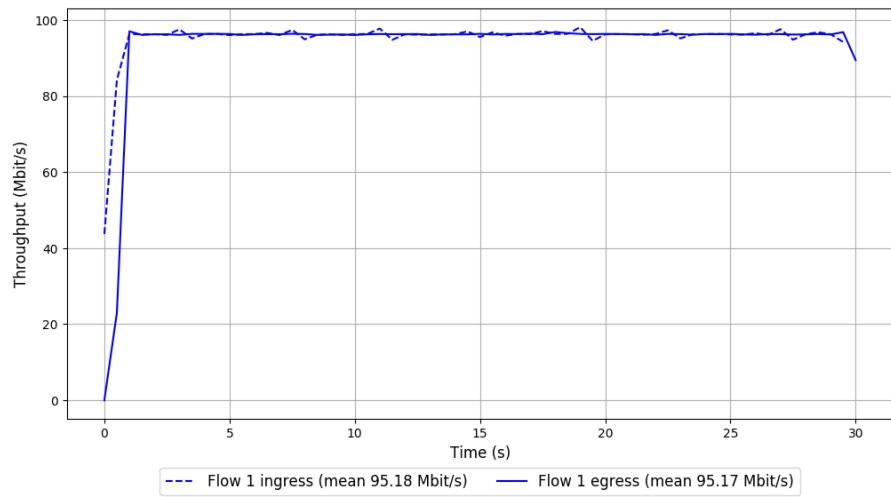


Run 4: Statistics of FillP

```
Start at: 2019-06-28 07:22:35
End at: 2019-06-28 07:23:05
Local clock offset: -2.249 ms
Remote clock offset: -3.285 ms

# Below is generated by plot.py at 2019-06-28 08:13:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.17 Mbit/s
95th percentile per-packet one-way delay: 48.531 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.17 Mbit/s
95th percentile per-packet one-way delay: 48.531 ms
Loss rate: 0.23%
```

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

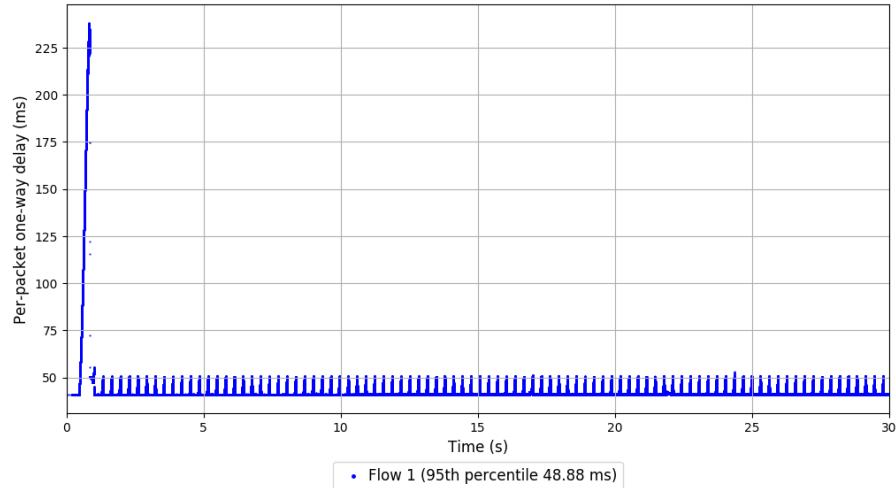
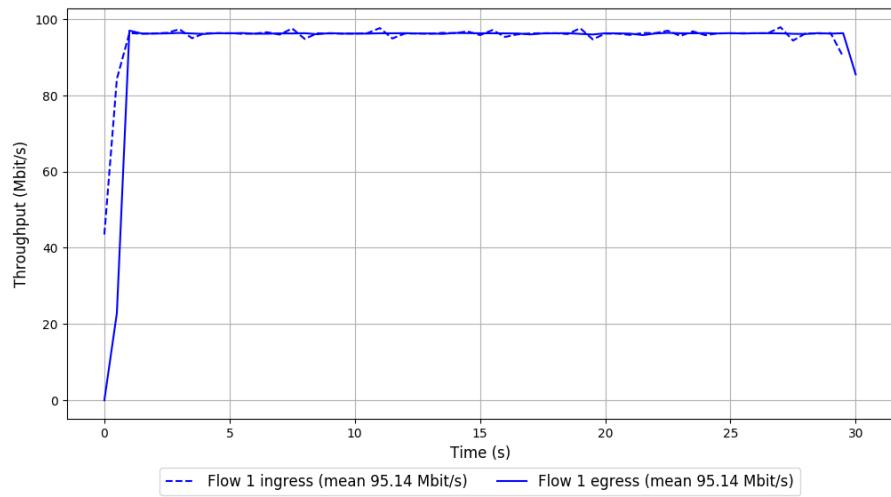


```
Run 5: Statistics of FillP
```

```
Start at: 2019-06-28 07:48:29
End at: 2019-06-28 07:48:59
Local clock offset: 0.347 ms
Remote clock offset: -3.121 ms

# Below is generated by plot.py at 2019-06-28 08:14:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.14 Mbit/s
95th percentile per-packet one-way delay: 48.882 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 95.14 Mbit/s
95th percentile per-packet one-way delay: 48.882 ms
Loss rate: 0.22%
```

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

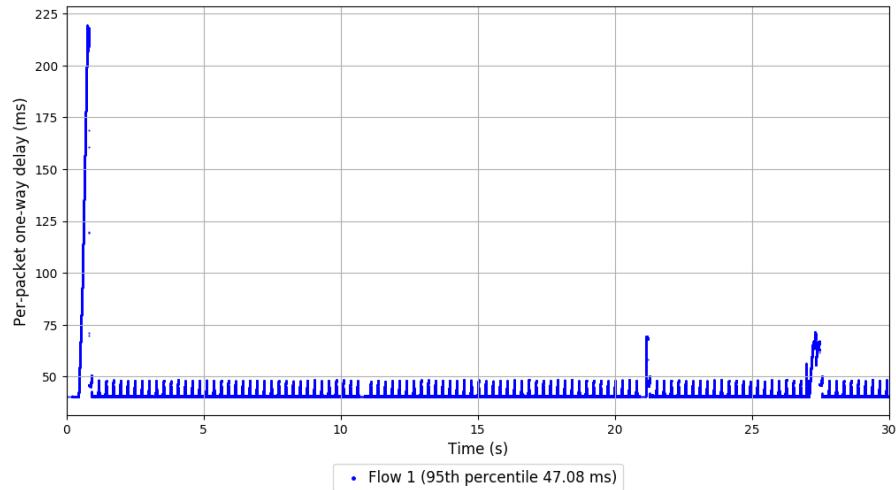
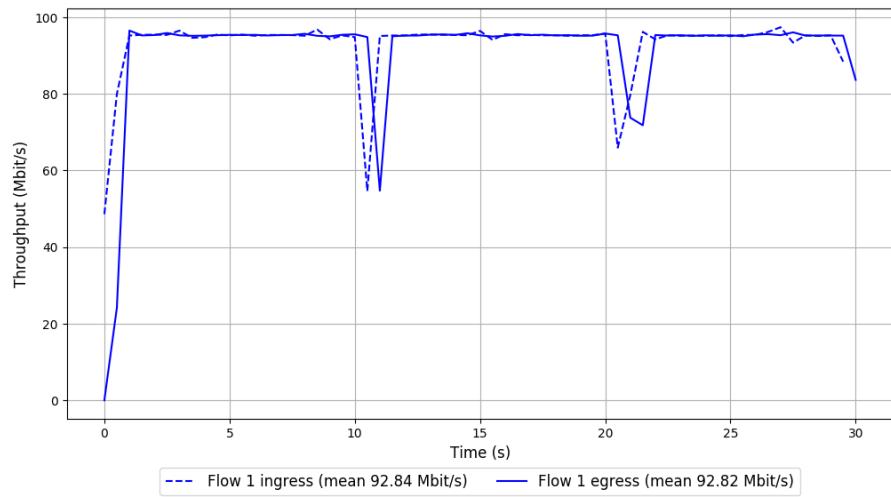


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-06-28 06:14:07
End at: 2019-06-28 06:14:37
Local clock offset: -1.151 ms
Remote clock offset: -3.961 ms

# Below is generated by plot.py at 2019-06-28 08:14:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 47.084 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 47.084 ms
Loss rate: 0.23%
```

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

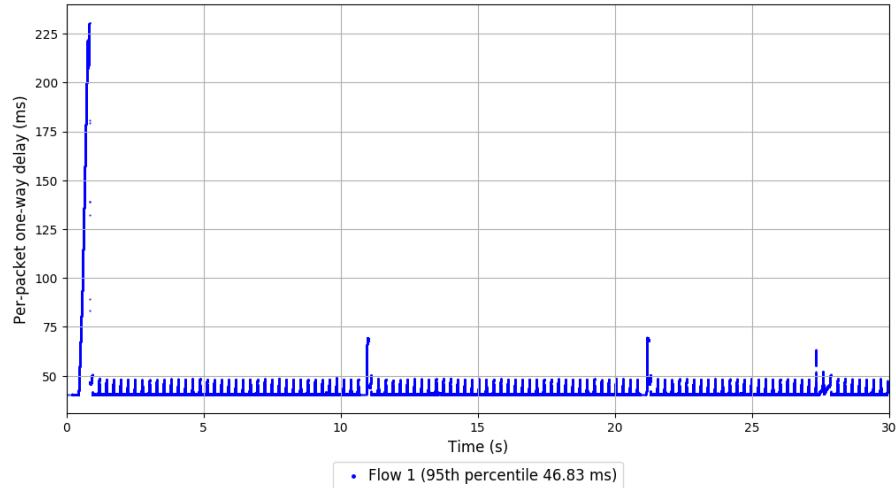
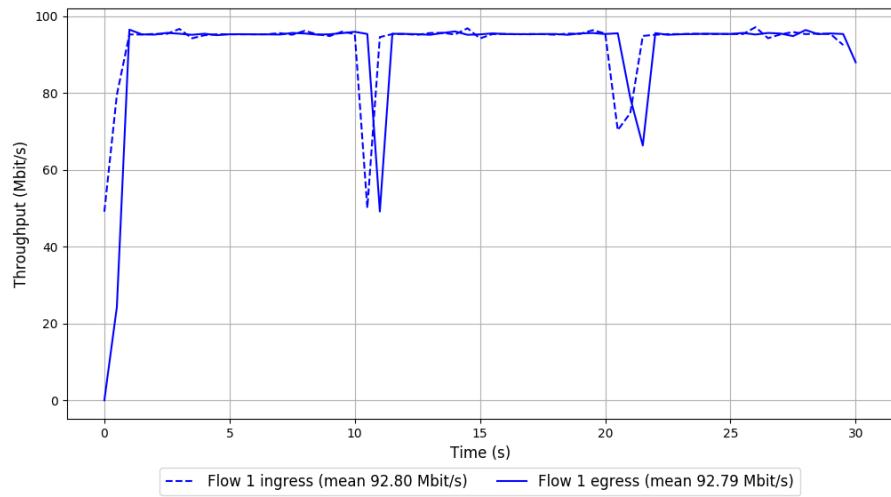


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-06-28 06:40:09
End at: 2019-06-28 06:40:39
Local clock offset: -4.187 ms
Remote clock offset: -3.556 ms

# Below is generated by plot.py at 2019-06-28 08:14:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.79 Mbit/s
95th percentile per-packet one-way delay: 46.826 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 92.79 Mbit/s
95th percentile per-packet one-way delay: 46.826 ms
Loss rate: 0.22%
```

## Run 2: Report of FillP-Sheep — Data Link

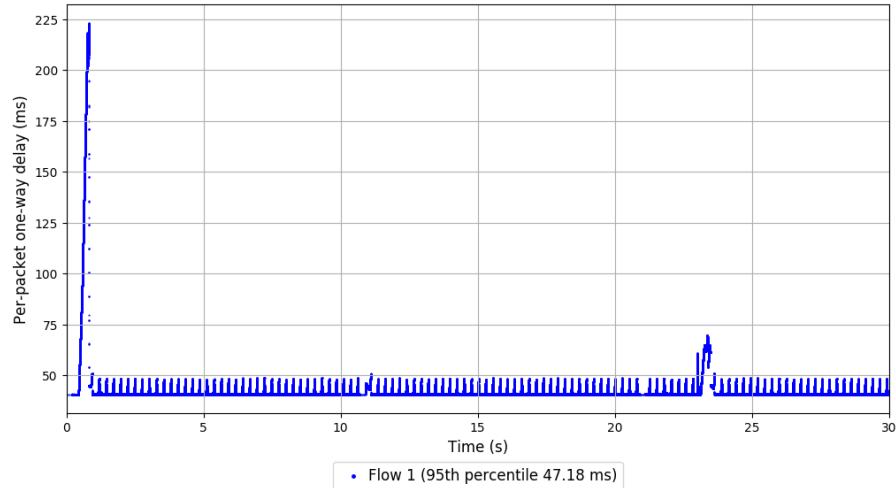
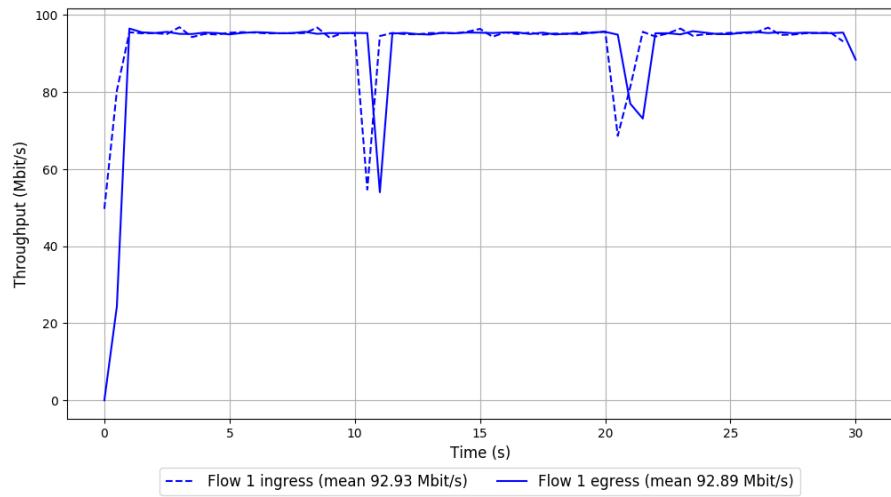


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-06-28 07:06:13
End at: 2019-06-28 07:06:43
Local clock offset: -3.795 ms
Remote clock offset: -3.525 ms

# Below is generated by plot.py at 2019-06-28 08:14:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.89 Mbit/s
95th percentile per-packet one-way delay: 47.177 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 92.89 Mbit/s
95th percentile per-packet one-way delay: 47.177 ms
Loss rate: 0.25%
```

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

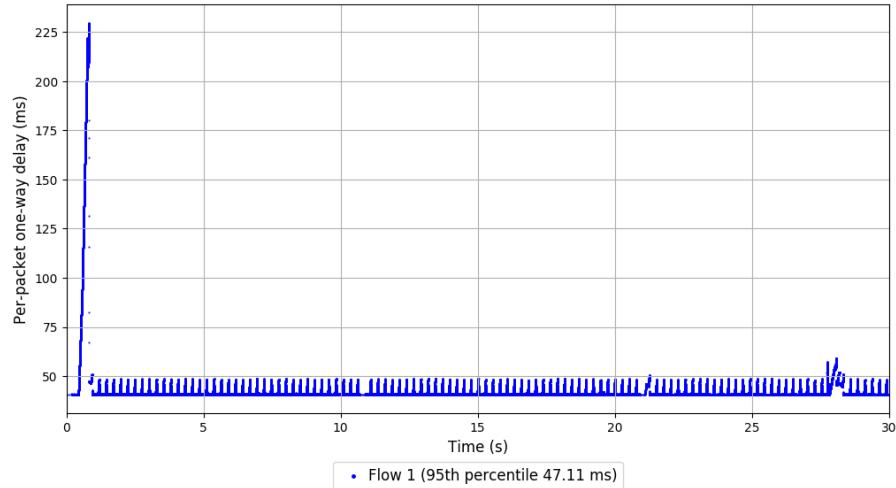
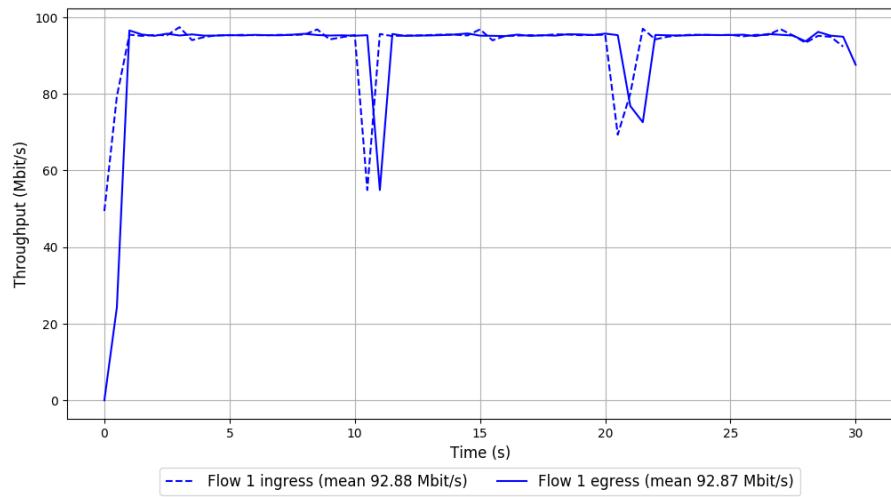


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-06-28 07:32:05
End at: 2019-06-28 07:32:35
Local clock offset: -0.438 ms
Remote clock offset: -3.215 ms

# Below is generated by plot.py at 2019-06-28 08:15:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.87 Mbit/s
95th percentile per-packet one-way delay: 47.114 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 92.87 Mbit/s
95th percentile per-packet one-way delay: 47.114 ms
Loss rate: 0.23%
```

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

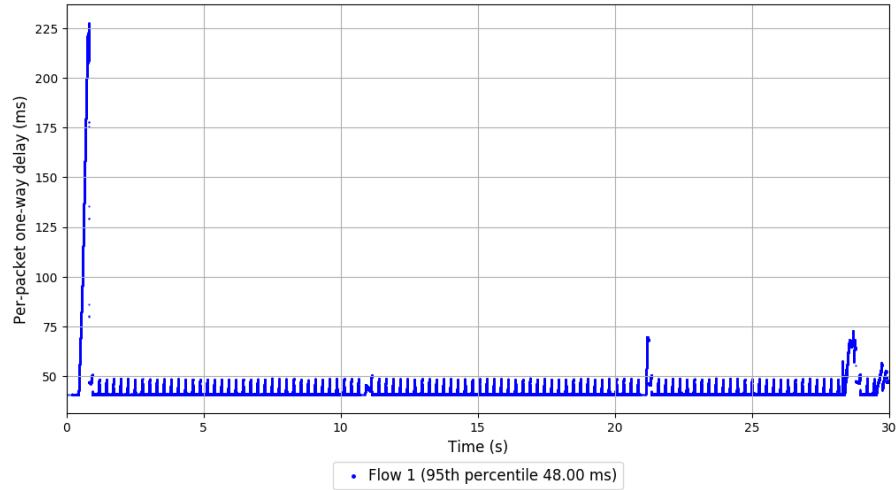
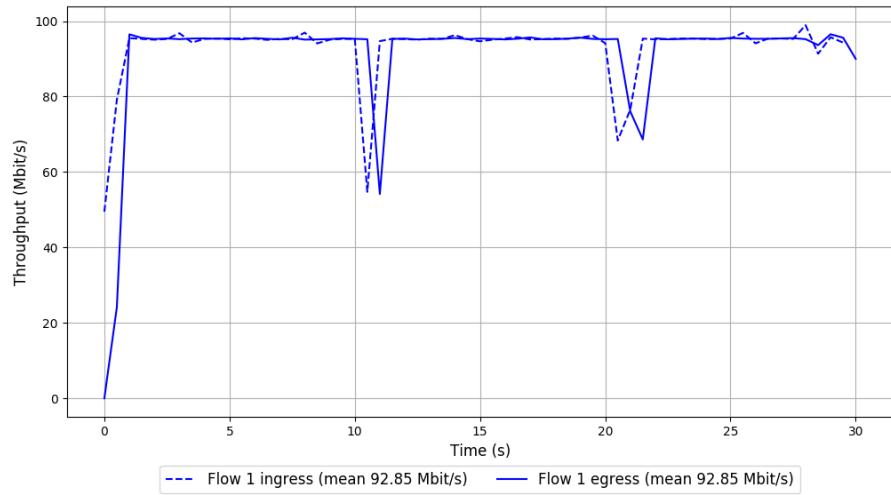


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-06-28 07:57:59
End at: 2019-06-28 07:58:29
Local clock offset: -2.087 ms
Remote clock offset: -3.016 ms

# Below is generated by plot.py at 2019-06-28 08:15:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.85 Mbit/s
95th percentile per-packet one-way delay: 48.002 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 92.85 Mbit/s
95th percentile per-packet one-way delay: 48.002 ms
Loss rate: 0.22%
```

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

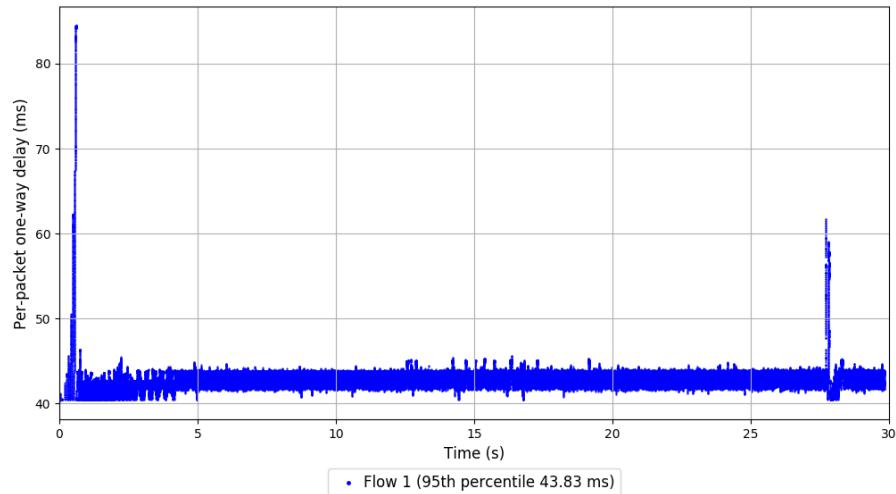
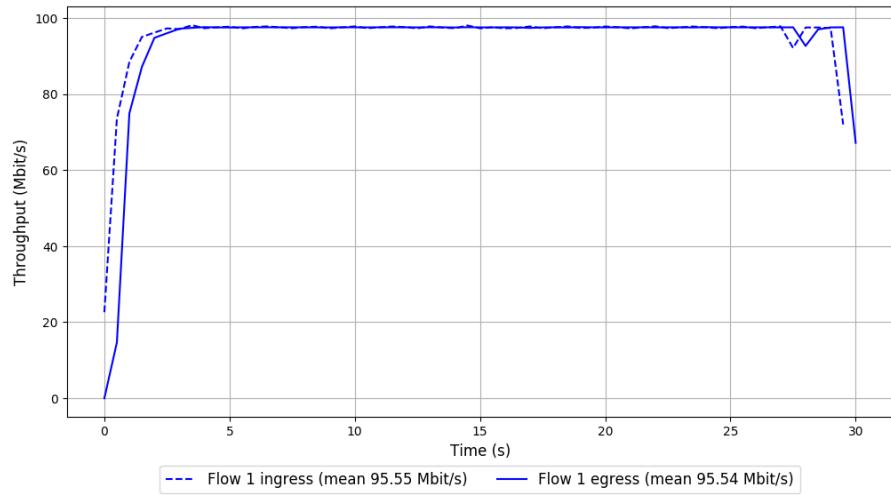


Run 1: Statistics of Indigo

```
Start at: 2019-06-28 06:07:48
End at: 2019-06-28 06:08:18
Local clock offset: -0.368 ms
Remote clock offset: -4.183 ms

# Below is generated by plot.py at 2019-06-28 08:15:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.54 Mbit/s
95th percentile per-packet one-way delay: 43.830 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.54 Mbit/s
95th percentile per-packet one-way delay: 43.830 ms
Loss rate: 0.23%
```

## Run 1: Report of Indigo — Data Link

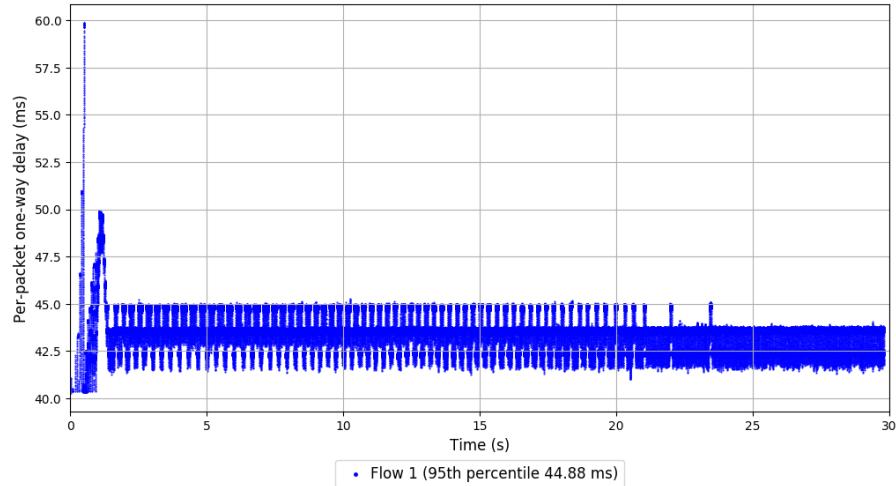
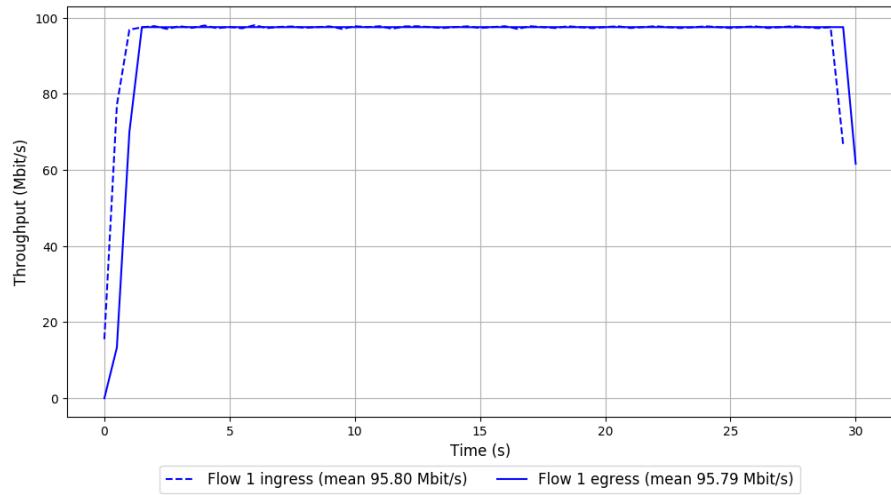


Run 2: Statistics of Indigo

```
Start at: 2019-06-28 06:34:12
End at: 2019-06-28 06:34:42
Local clock offset: -3.664 ms
Remote clock offset: -3.533 ms

# Below is generated by plot.py at 2019-06-28 08:15:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.79 Mbit/s
95th percentile per-packet one-way delay: 44.880 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.79 Mbit/s
95th percentile per-packet one-way delay: 44.880 ms
Loss rate: 0.23%
```

## Run 2: Report of Indigo — Data Link

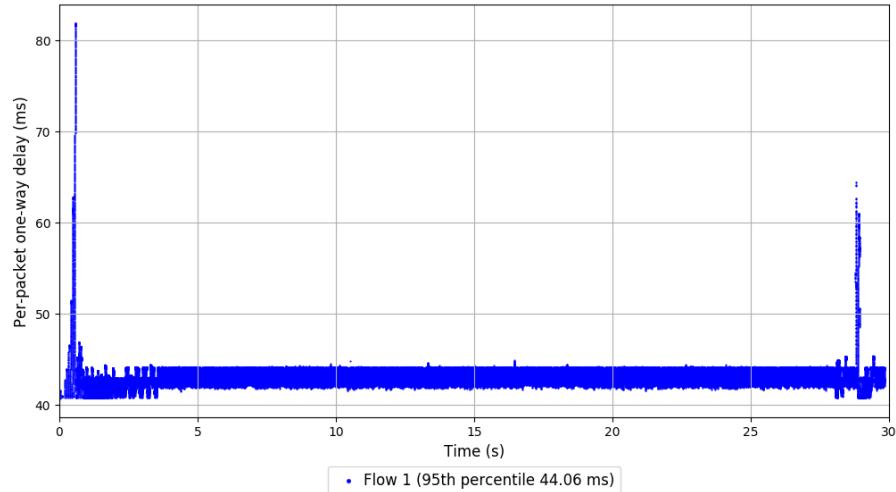
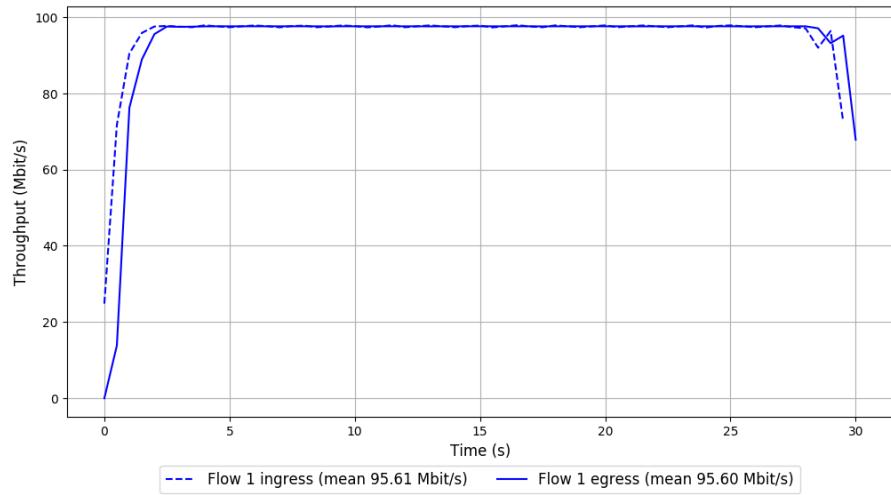


Run 3: Statistics of Indigo

```
Start at: 2019-06-28 07:00:18
End at: 2019-06-28 07:00:48
Local clock offset: -3.759 ms
Remote clock offset: -3.6 ms

# Below is generated by plot.py at 2019-06-28 08:15:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 44.065 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 44.065 ms
Loss rate: 0.23%
```

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

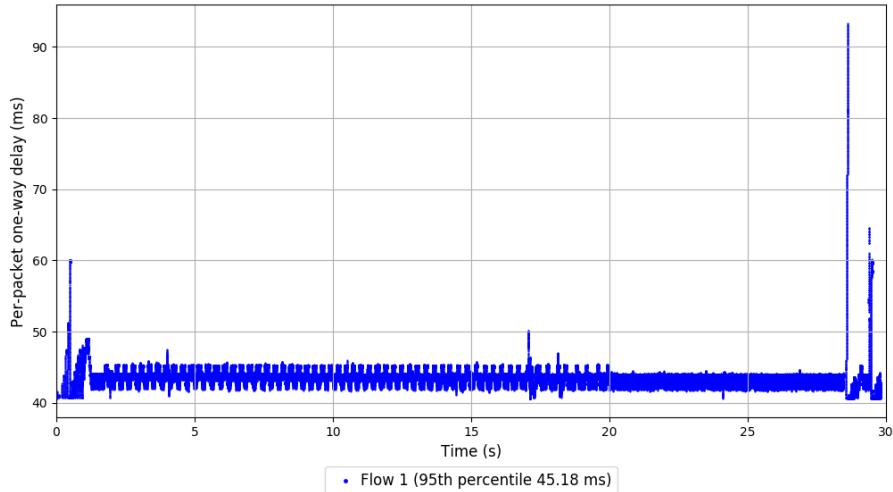
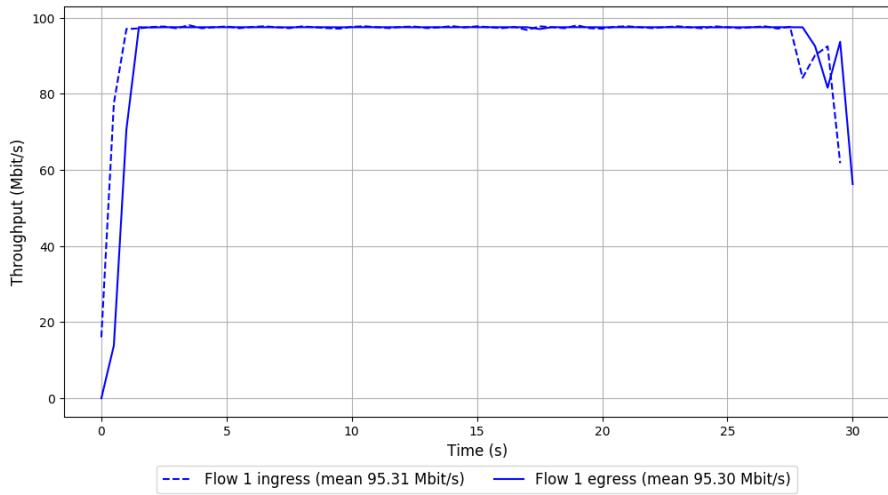


Run 4: Statistics of Indigo

```
Start at: 2019-06-28 07:26:10
End at: 2019-06-28 07:26:40
Local clock offset: -1.376 ms
Remote clock offset: -3.288 ms

# Below is generated by plot.py at 2019-06-28 08:15:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.30 Mbit/s
95th percentile per-packet one-way delay: 45.177 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.30 Mbit/s
95th percentile per-packet one-way delay: 45.177 ms
Loss rate: 0.23%
```

## Run 4: Report of Indigo — Data Link

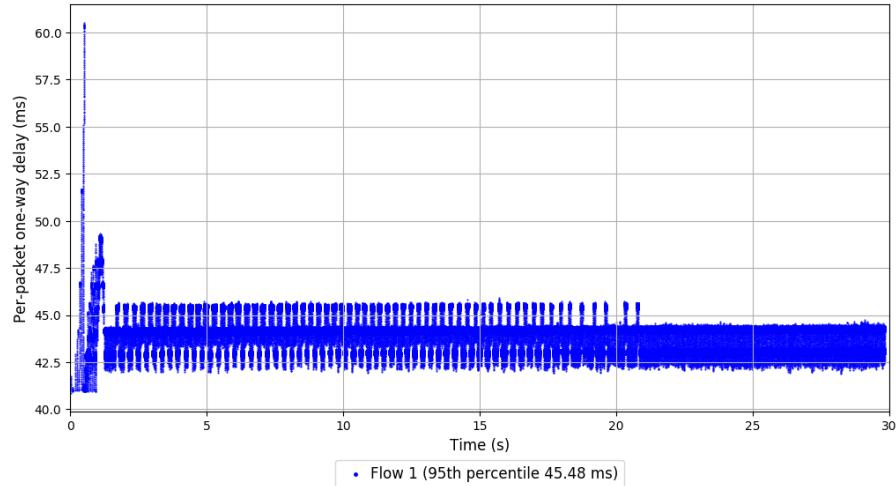
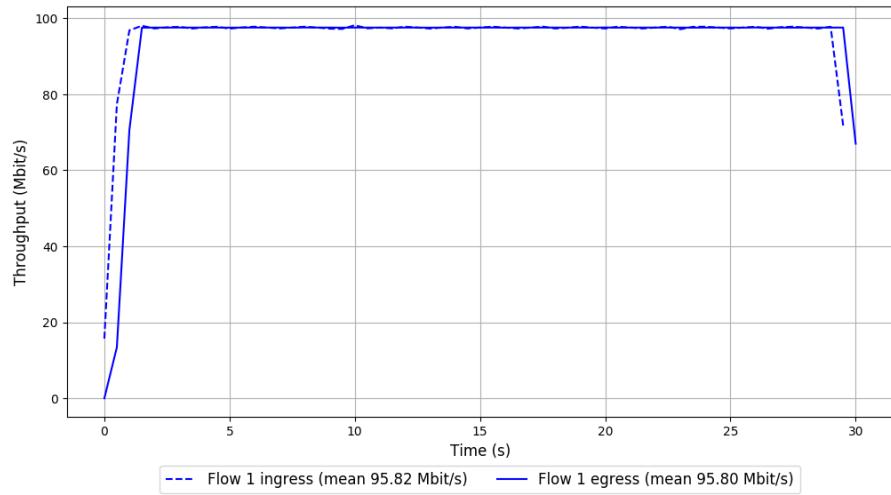


Run 5: Statistics of Indigo

```
Start at: 2019-06-28 07:52:03
End at: 2019-06-28 07:52:33
Local clock offset: -0.846 ms
Remote clock offset: -3.083 ms

# Below is generated by plot.py at 2019-06-28 08:15:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.80 Mbit/s
95th percentile per-packet one-way delay: 45.480 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.80 Mbit/s
95th percentile per-packet one-way delay: 45.480 ms
Loss rate: 0.23%
```

## Run 5: Report of Indigo — Data Link

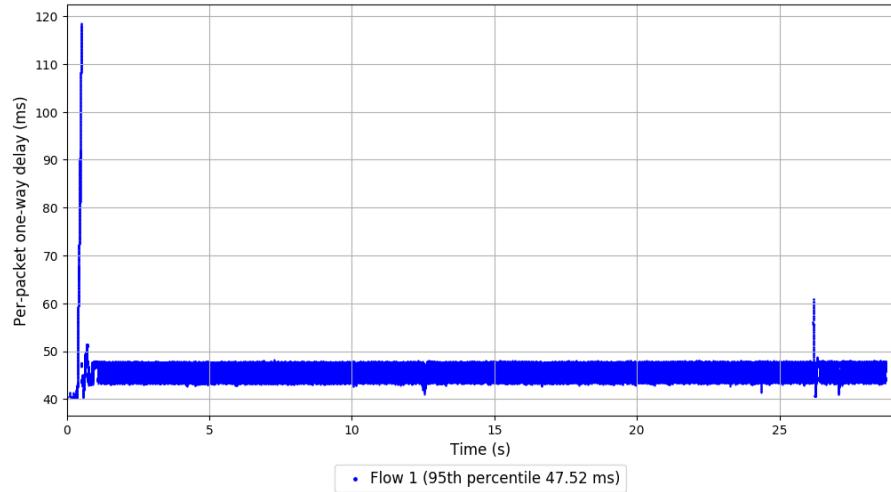
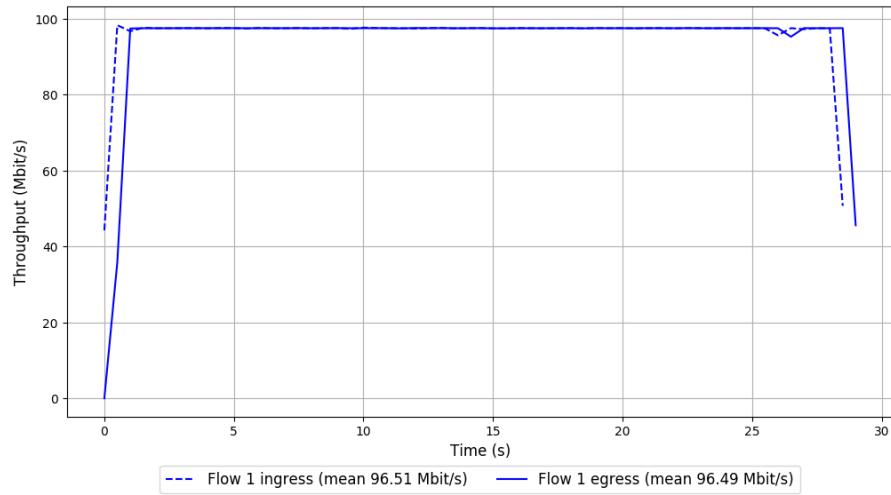


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 06:01:52
End at: 2019-06-28 06:02:22
Local clock offset: 0.712 ms
Remote clock offset: -4.397 ms

# Below is generated by plot.py at 2019-06-28 08:16:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.49 Mbit/s
95th percentile per-packet one-way delay: 47.517 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 96.49 Mbit/s
95th percentile per-packet one-way delay: 47.517 ms
Loss rate: 0.25%
```

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

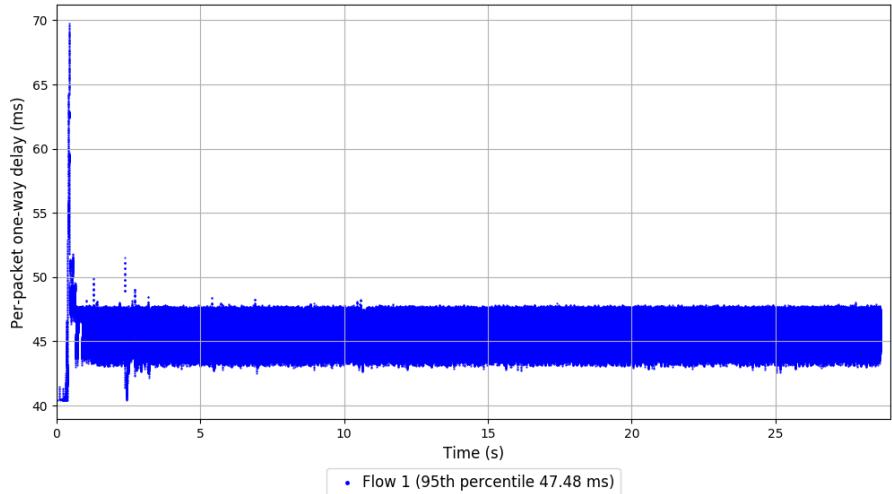
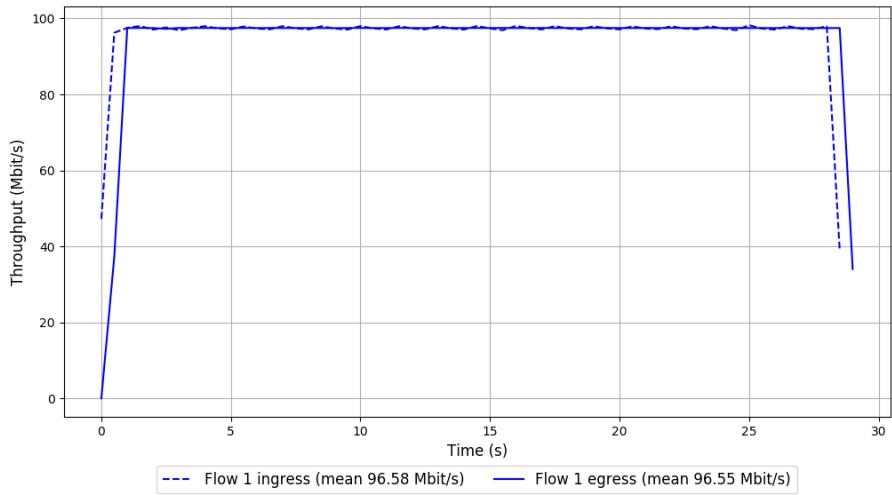


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 06:28:16
End at: 2019-06-28 06:28:46
Local clock offset: -3.053 ms
Remote clock offset: -3.435 ms

# Below is generated by plot.py at 2019-06-28 08:16:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: 47.482 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: 47.482 ms
Loss rate: 0.25%
```

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

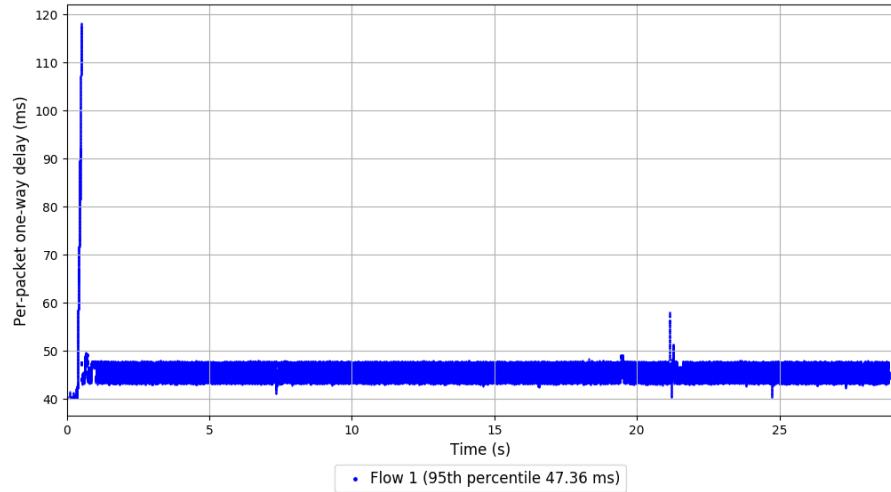
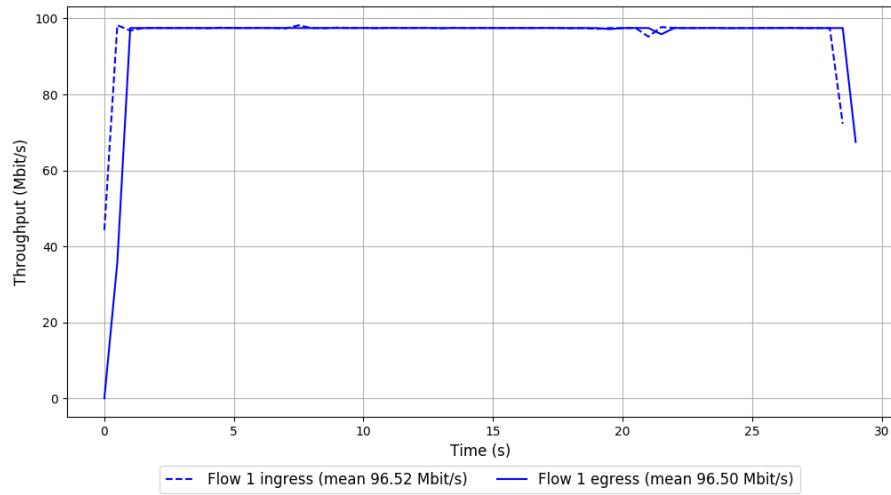


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 06:54:16
End at: 2019-06-28 06:54:46
Local clock offset: -4.017 ms
Remote clock offset: -3.436 ms

# Below is generated by plot.py at 2019-06-28 08:16:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 47.359 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 47.359 ms
Loss rate: 0.24%
```

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

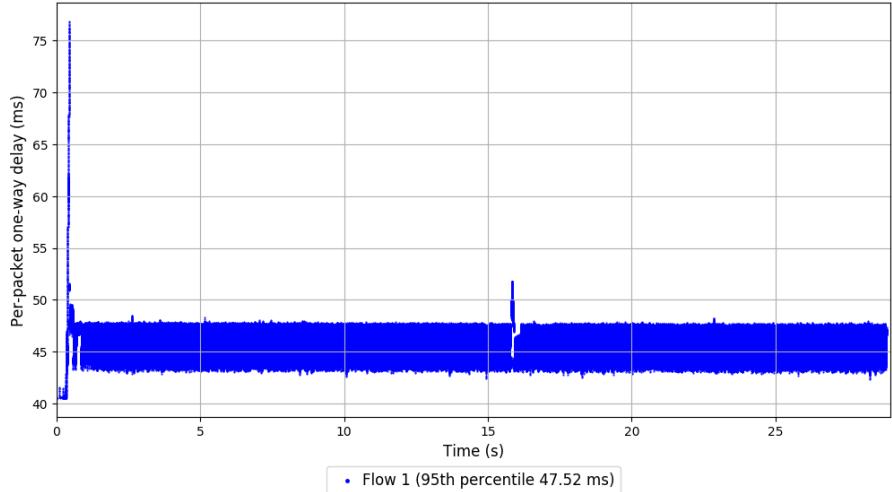
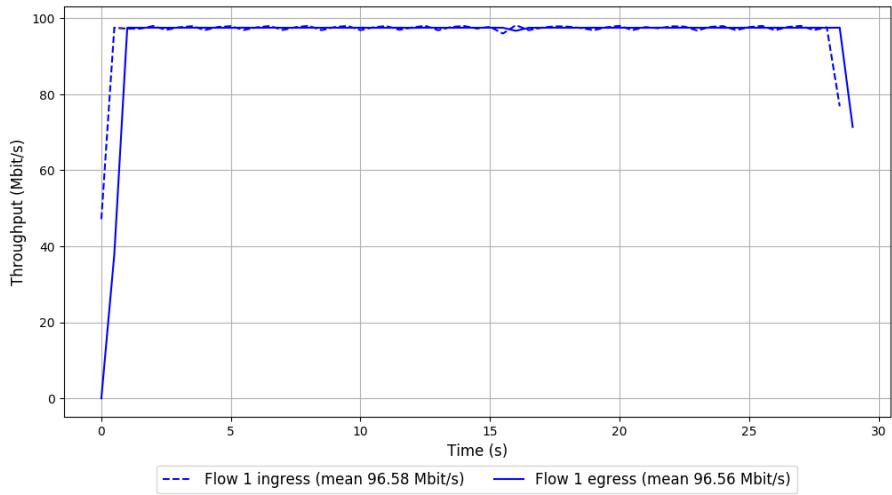


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 07:20:14
End at: 2019-06-28 07:20:44
Local clock offset: -3.152 ms
Remote clock offset: -3.32 ms

# Below is generated by plot.py at 2019-06-28 08:16:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.56 Mbit/s
95th percentile per-packet one-way delay: 47.523 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 96.56 Mbit/s
95th percentile per-packet one-way delay: 47.523 ms
Loss rate: 0.25%
```

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

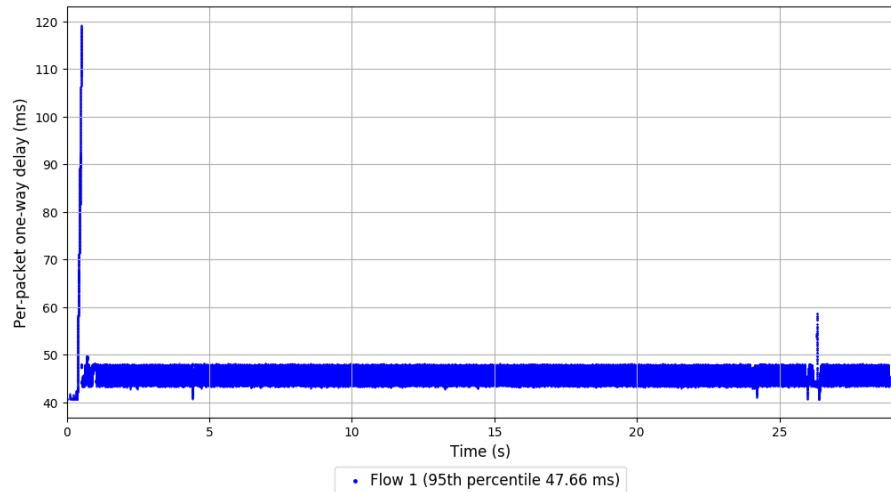
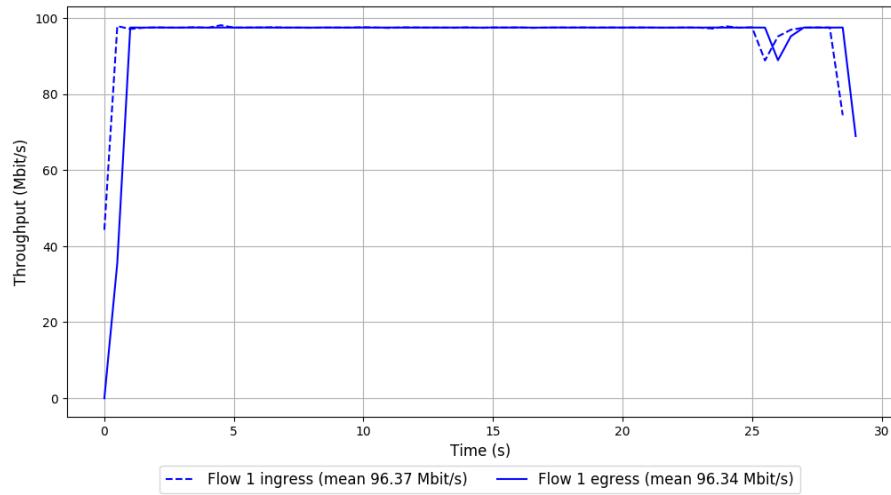


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 07:46:07
End at: 2019-06-28 07:46:37
Local clock offset: 0.415 ms
Remote clock offset: -3.068 ms

# Below is generated by plot.py at 2019-06-28 08:16:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.34 Mbit/s
95th percentile per-packet one-way delay: 47.660 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 96.34 Mbit/s
95th percentile per-packet one-way delay: 47.660 ms
Loss rate: 0.25%
```

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

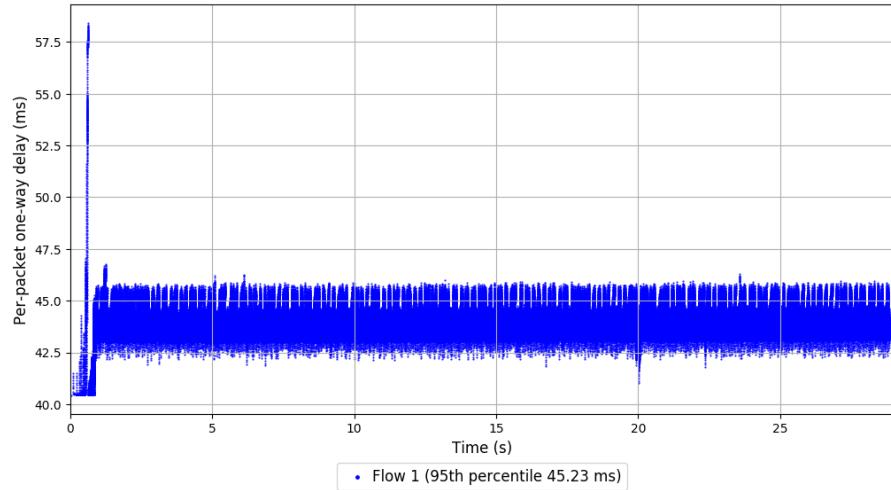
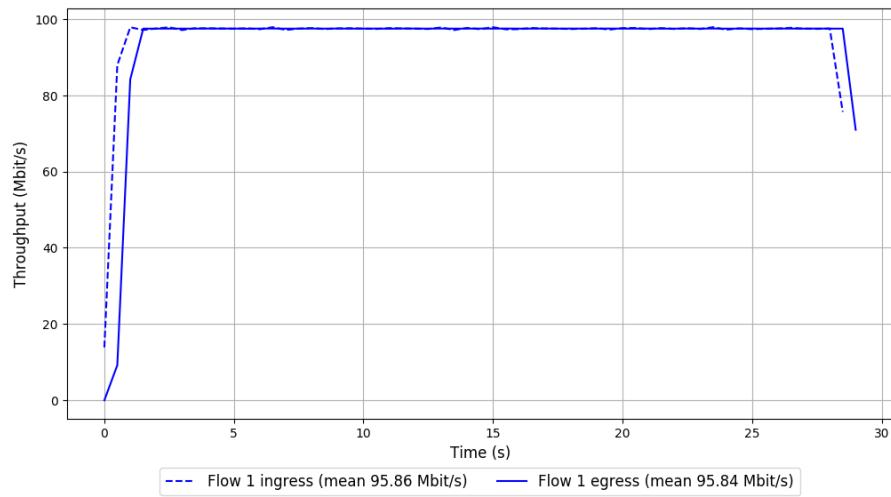


```
Run 1: Statistics of Indigo-MusesC5
```

```
Start at: 2019-06-28 06:17:43
End at: 2019-06-28 06:18:13
Local clock offset: -1.504 ms
Remote clock offset: -3.774 ms

# Below is generated by plot.py at 2019-06-28 08:16:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.84 Mbit/s
95th percentile per-packet one-way delay: 45.233 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.84 Mbit/s
95th percentile per-packet one-way delay: 45.233 ms
Loss rate: 0.24%
```

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

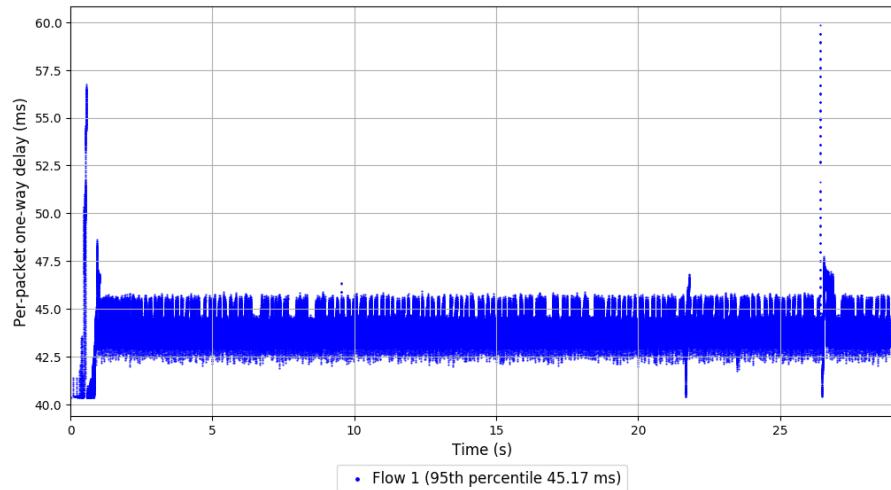
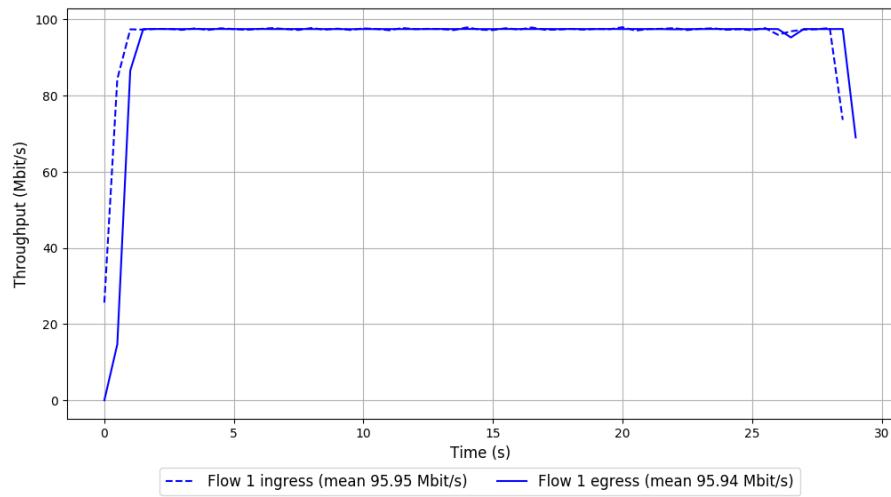


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 06:43:40
End at: 2019-06-28 06:44:10
Local clock offset: -4.507 ms
Remote clock offset: -3.55 ms

# Below is generated by plot.py at 2019-06-28 08:17:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.94 Mbit/s
95th percentile per-packet one-way delay: 45.174 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.94 Mbit/s
95th percentile per-packet one-way delay: 45.174 ms
Loss rate: 0.24%
```

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

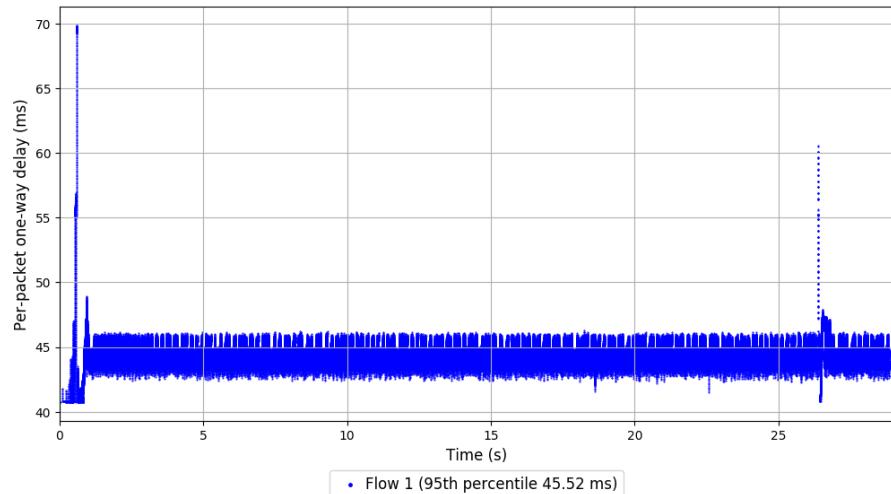
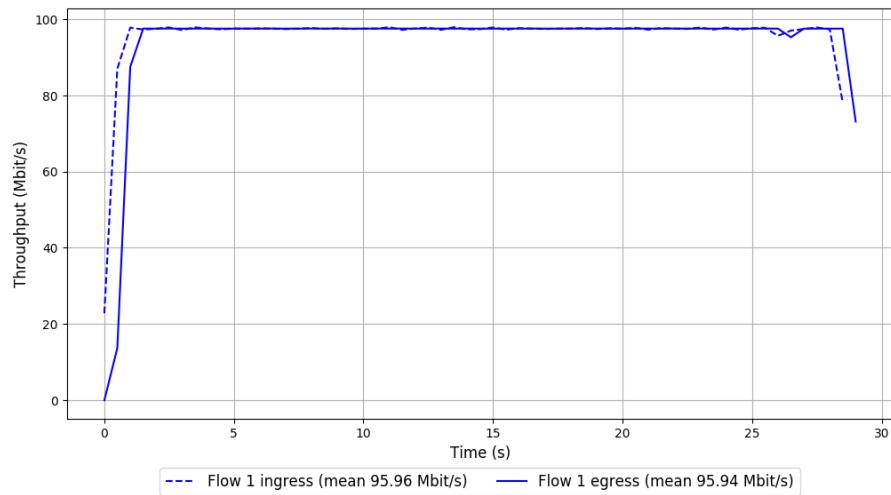


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 07:09:44
End at: 2019-06-28 07:10:14
Local clock offset: -3.866 ms
Remote clock offset: -3.408 ms

# Below is generated by plot.py at 2019-06-28 08:17:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.94 Mbit/s
95th percentile per-packet one-way delay: 45.520 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 95.94 Mbit/s
95th percentile per-packet one-way delay: 45.520 ms
Loss rate: 0.25%
```

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

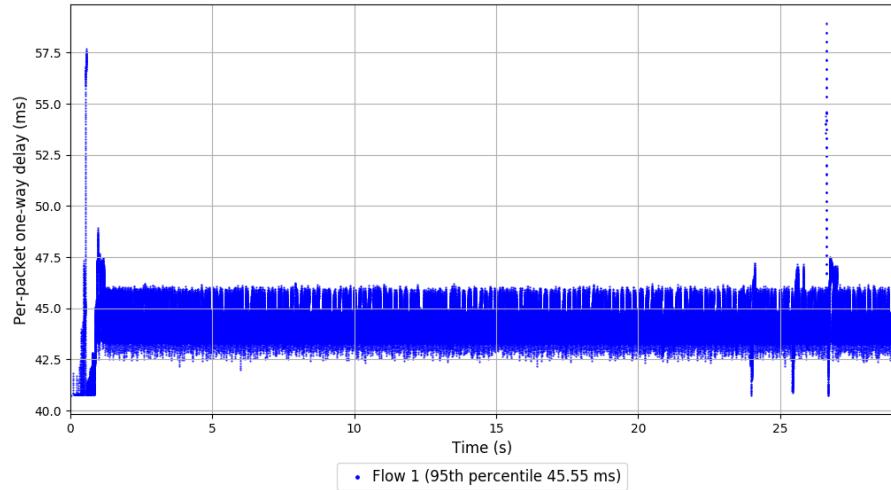
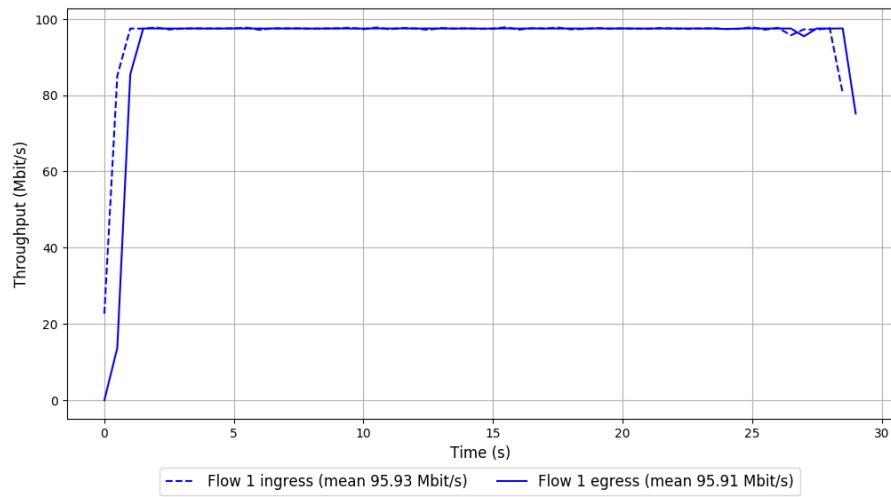


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 07:35:37
End at: 2019-06-28 07:36:07
Local clock offset: -0.137 ms
Remote clock offset: -3.17 ms

# Below is generated by plot.py at 2019-06-28 08:17:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.91 Mbit/s
95th percentile per-packet one-way delay: 45.549 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 95.91 Mbit/s
95th percentile per-packet one-way delay: 45.549 ms
Loss rate: 0.25%
```

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

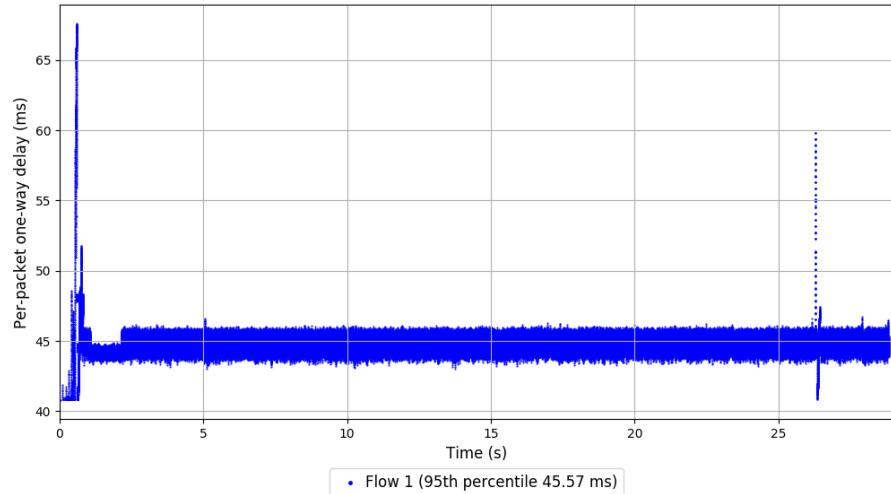
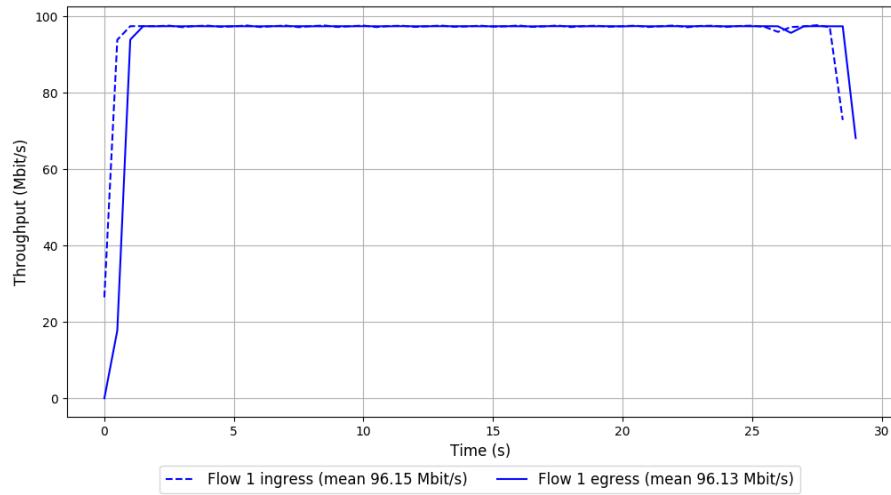


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 08:01:30
End at: 2019-06-28 08:02:00
Local clock offset: -2.537 ms
Remote clock offset: -3.128 ms

# Below is generated by plot.py at 2019-06-28 08:17:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.13 Mbit/s
95th percentile per-packet one-way delay: 45.568 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.13 Mbit/s
95th percentile per-packet one-way delay: 45.568 ms
Loss rate: 0.24%
```

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

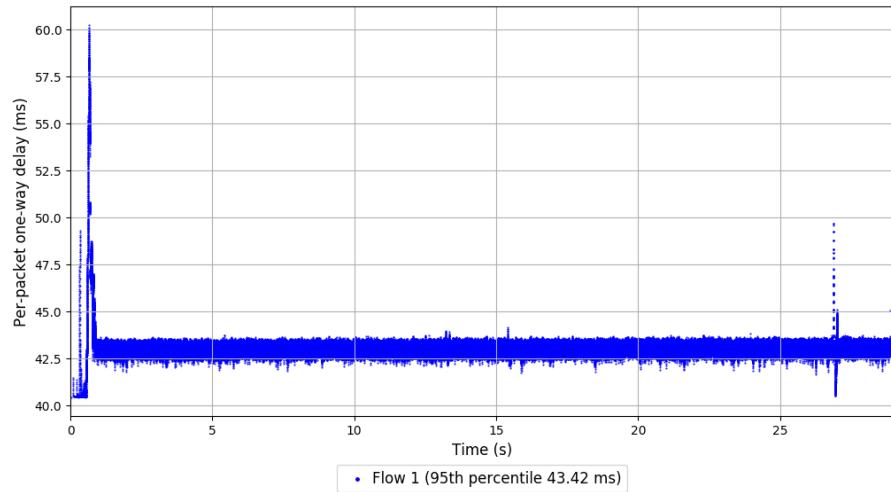
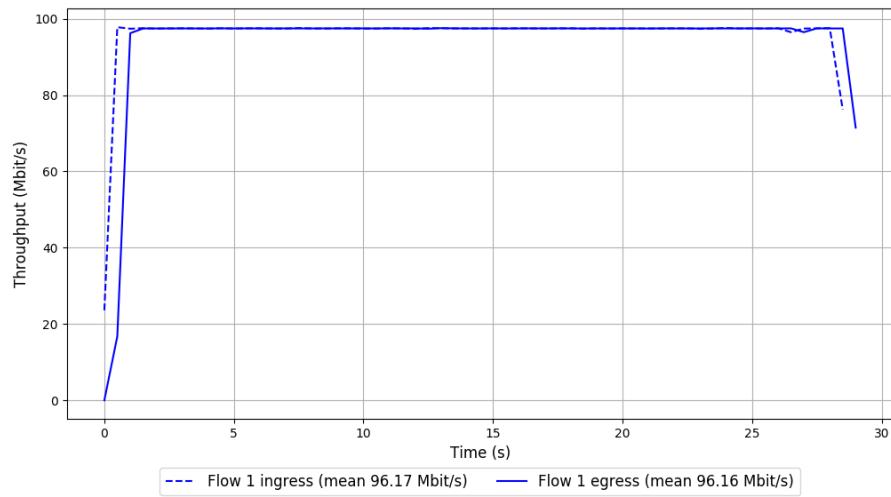


```
Run 1: Statistics of Indigo-MusesD
```

```
Start at: 2019-06-28 06:12:55
End at: 2019-06-28 06:13:25
Local clock offset: -1.029 ms
Remote clock offset: -4.072 ms

# Below is generated by plot.py at 2019-06-28 08:17:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.16 Mbit/s
95th percentile per-packet one-way delay: 43.423 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.16 Mbit/s
95th percentile per-packet one-way delay: 43.423 ms
Loss rate: 0.24%
```

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

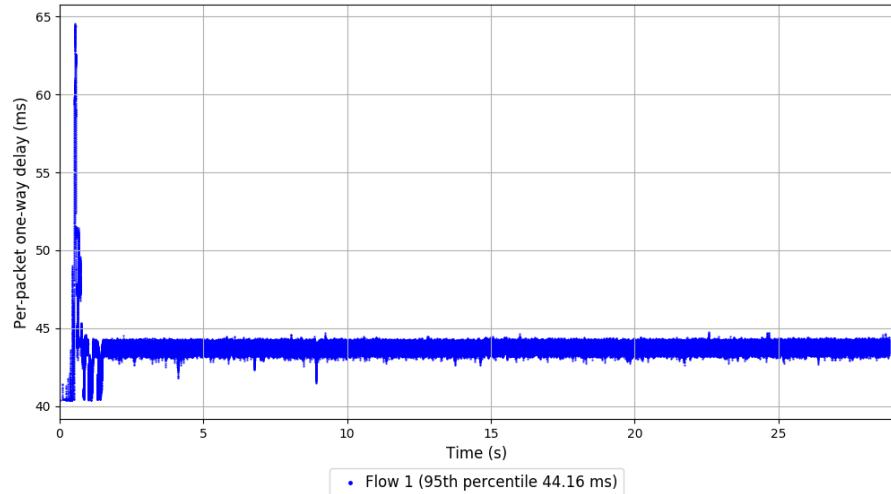
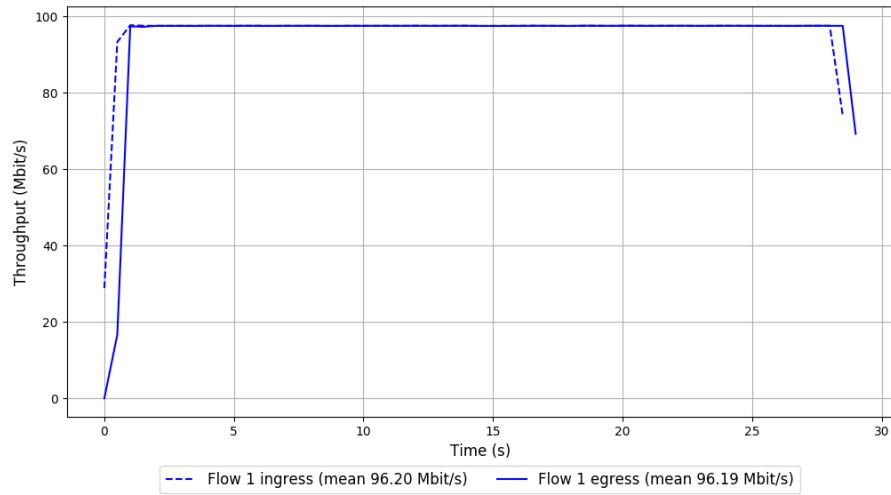


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 06:38:58
End at: 2019-06-28 06:39:28
Local clock offset: -4.068 ms
Remote clock offset: -3.534 ms

# Below is generated by plot.py at 2019-06-28 08:17:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.19 Mbit/s
95th percentile per-packet one-way delay: 44.155 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.19 Mbit/s
95th percentile per-packet one-way delay: 44.155 ms
Loss rate: 0.24%
```

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

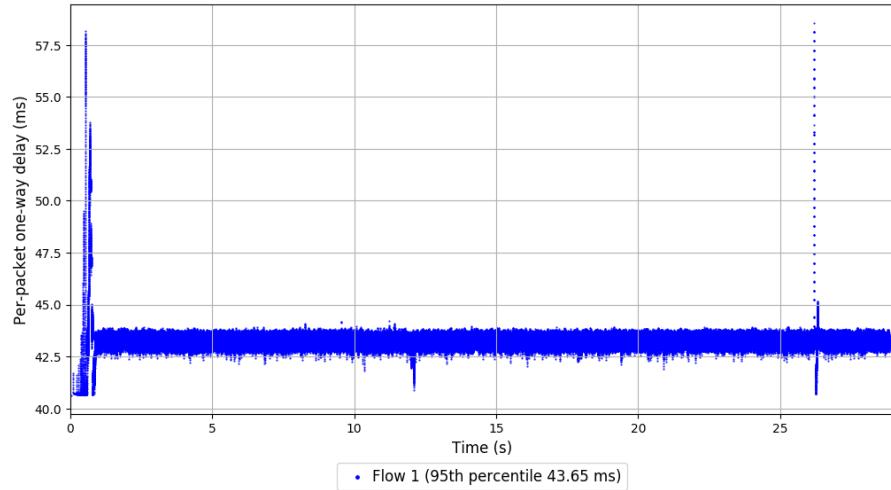
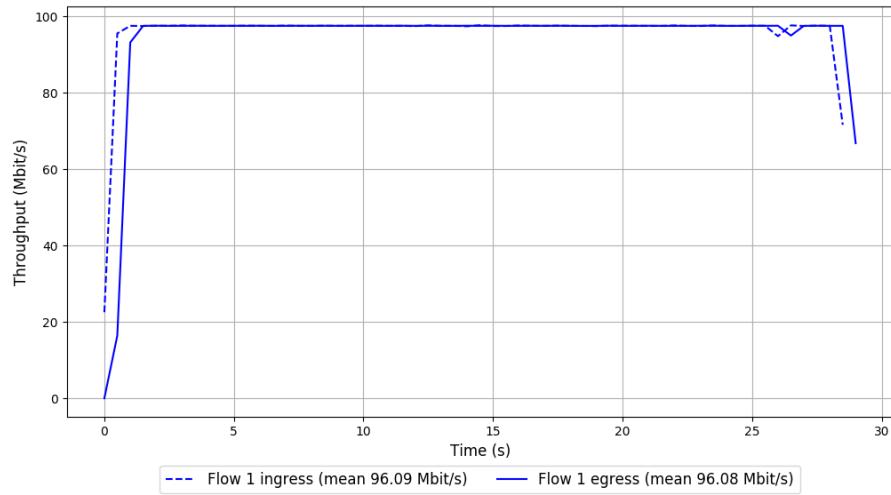


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 07:05:02
End at: 2019-06-28 07:05:32
Local clock offset: -3.775 ms
Remote clock offset: -3.543 ms

# Below is generated by plot.py at 2019-06-28 08:17:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.08 Mbit/s
95th percentile per-packet one-way delay: 43.645 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.08 Mbit/s
95th percentile per-packet one-way delay: 43.645 ms
Loss rate: 0.24%
```

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

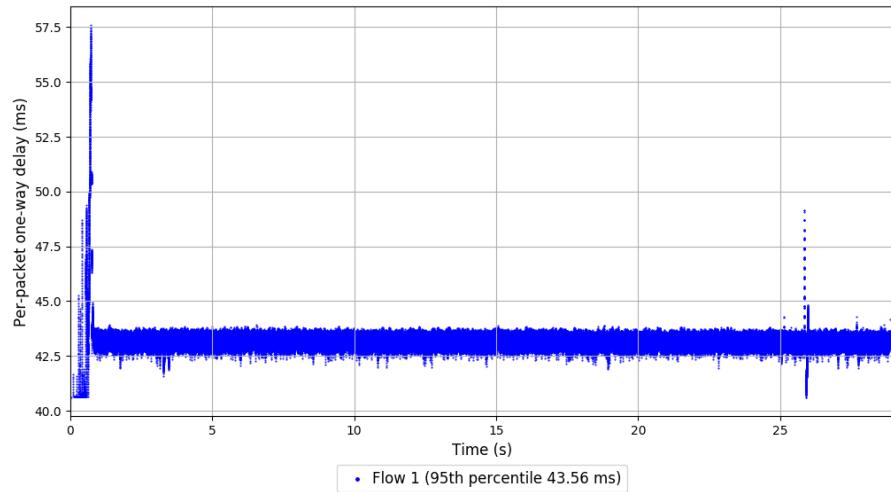
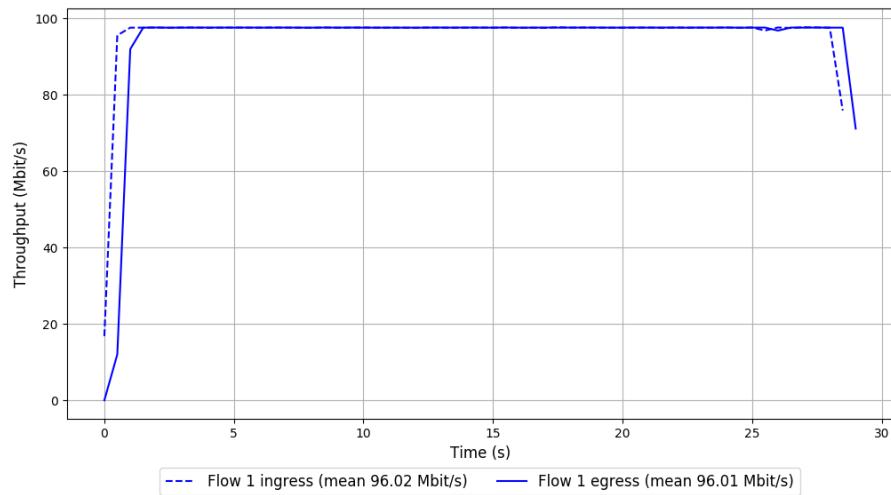


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 07:30:54
End at: 2019-06-28 07:31:24
Local clock offset: -0.609 ms
Remote clock offset: -3.211 ms

# Below is generated by plot.py at 2019-06-28 08:18:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 43.560 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 43.560 ms
Loss rate: 0.24%
```

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

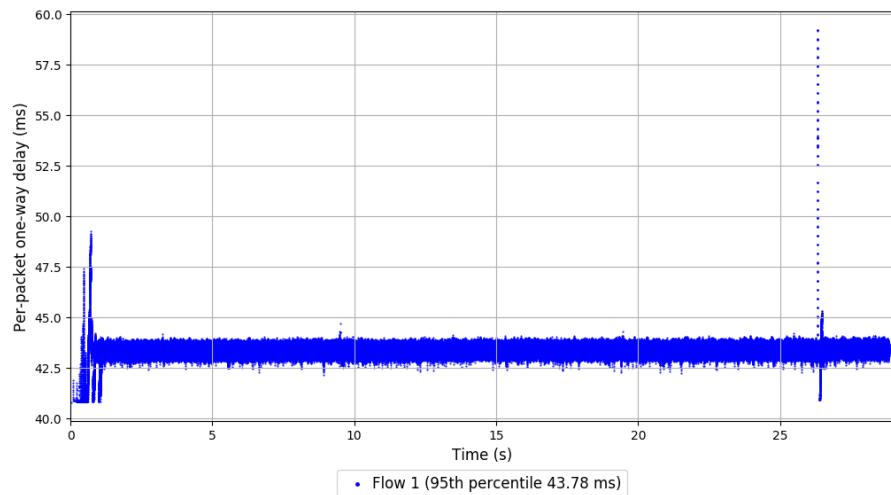
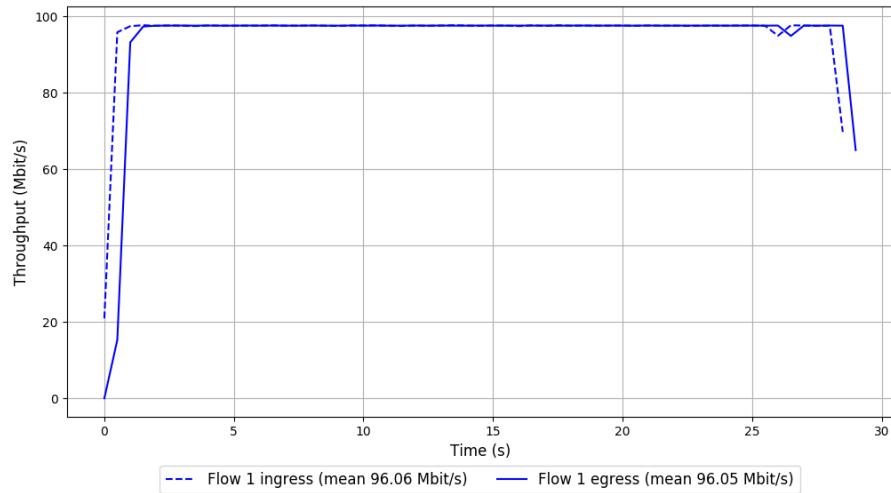


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 07:56:48
End at: 2019-06-28 07:57:18
Local clock offset: -1.926 ms
Remote clock offset: -3.01 ms

# Below is generated by plot.py at 2019-06-28 08:18:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.05 Mbit/s
95th percentile per-packet one-way delay: 43.776 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.05 Mbit/s
95th percentile per-packet one-way delay: 43.776 ms
Loss rate: 0.24%
```

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

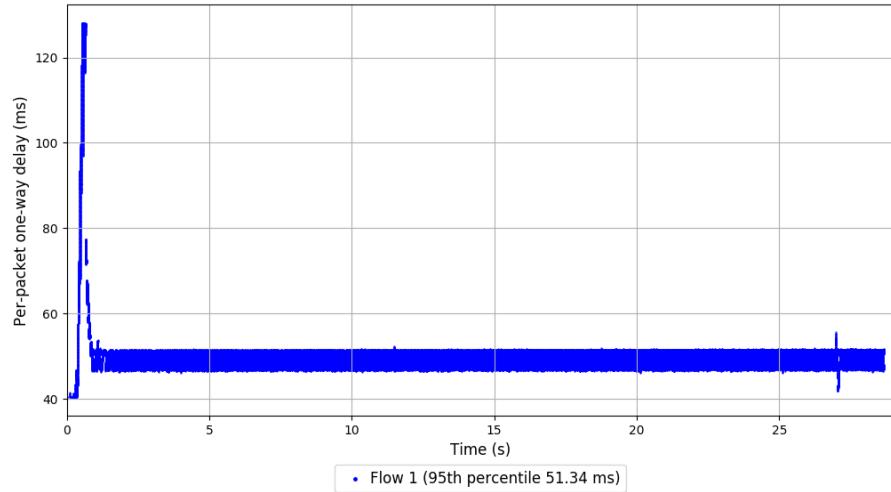
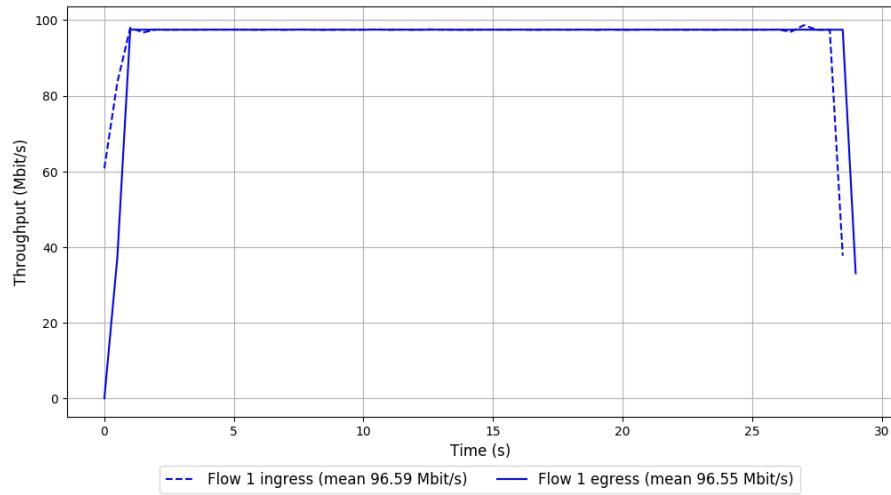


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 05:58:25
End at: 2019-06-28 05:58:55
Local clock offset: 1.644 ms
Remote clock offset: -4.427 ms

# Below is generated by plot.py at 2019-06-28 08:18:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: 51.337 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: 51.337 ms
Loss rate: 0.27%
```

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

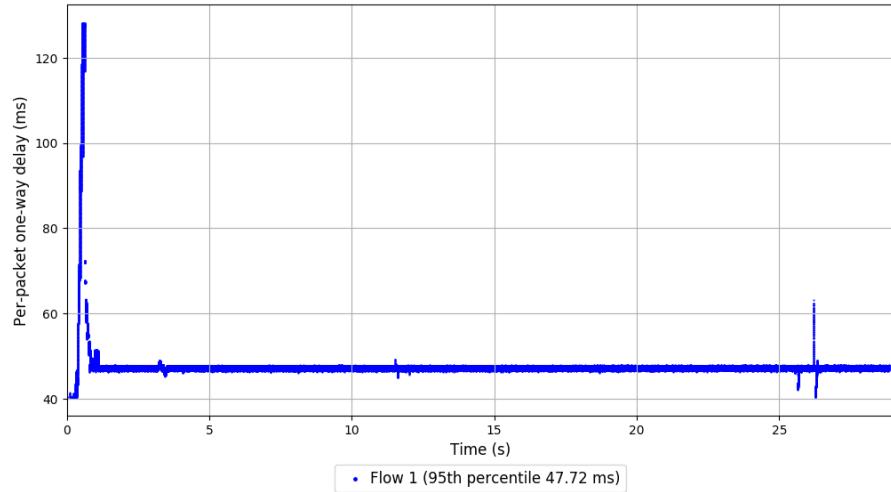
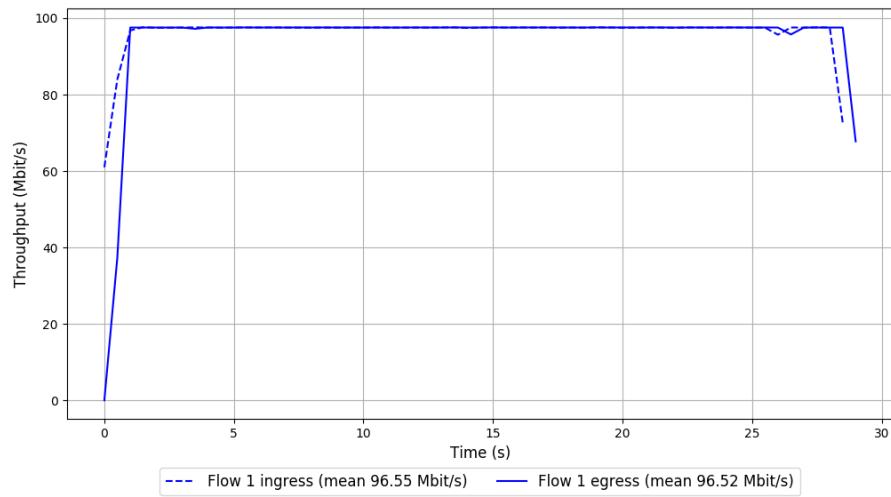


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 06:24:49
End at: 2019-06-28 06:25:19
Local clock offset: -2.609 ms
Remote clock offset: -3.45 ms

# Below is generated by plot.py at 2019-06-28 08:18:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.52 Mbit/s
95th percentile per-packet one-way delay: 47.721 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 96.52 Mbit/s
95th percentile per-packet one-way delay: 47.721 ms
Loss rate: 0.26%
```

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

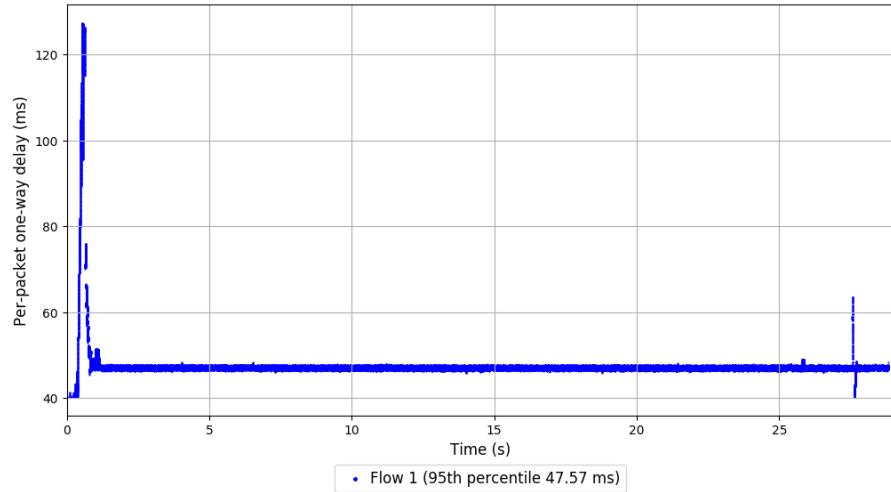
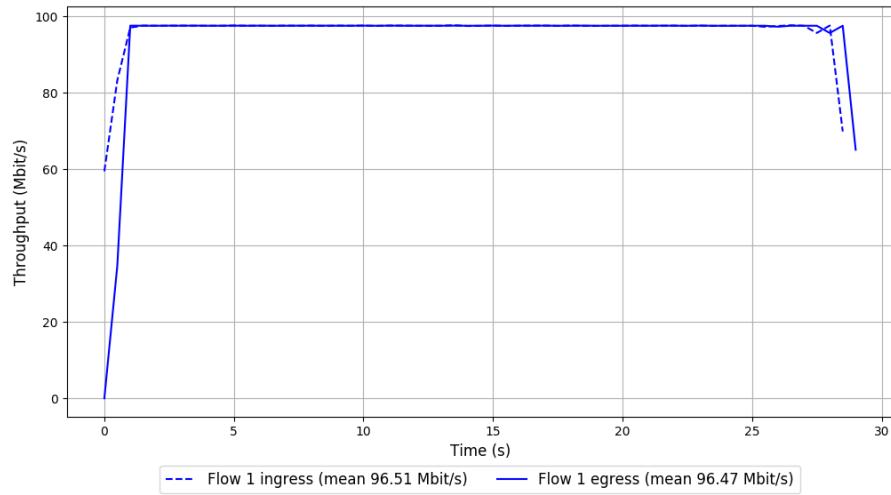


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 06:50:44
End at: 2019-06-28 06:51:14
Local clock offset: -4.354 ms
Remote clock offset: -3.406 ms

# Below is generated by plot.py at 2019-06-28 08:18:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.47 Mbit/s
95th percentile per-packet one-way delay: 47.569 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.47 Mbit/s
95th percentile per-packet one-way delay: 47.569 ms
Loss rate: 0.27%
```

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

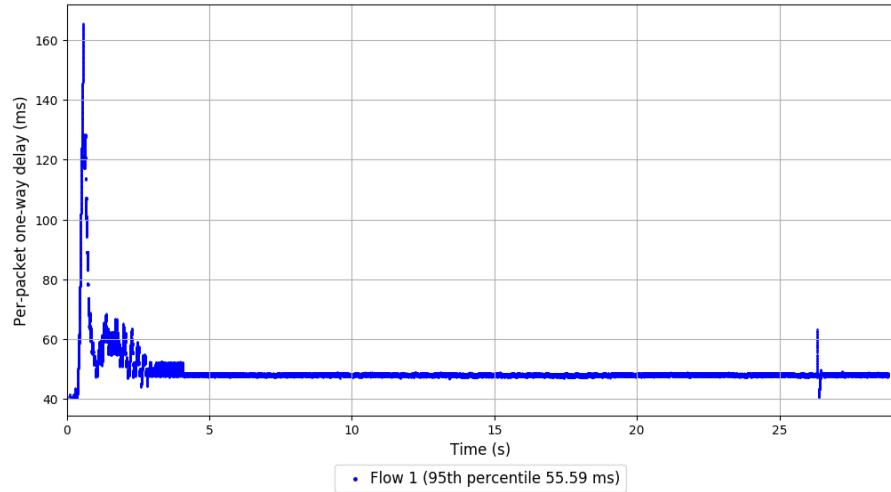
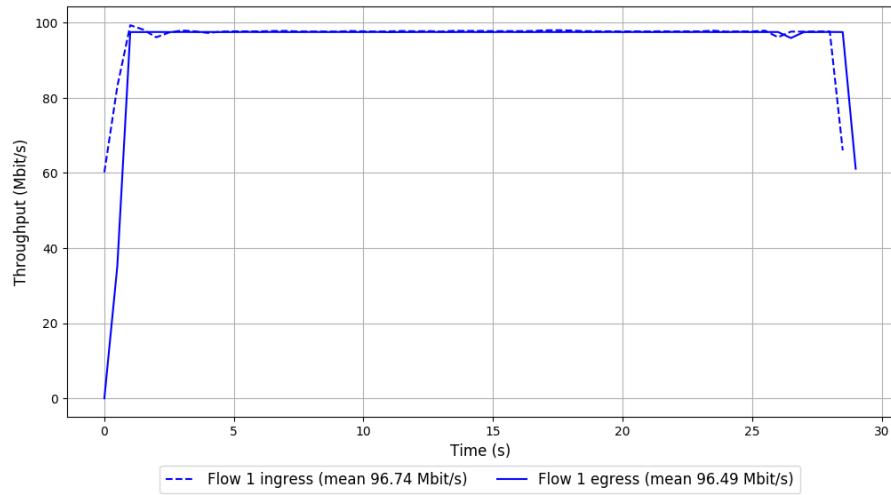


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 07:16:47
End at: 2019-06-28 07:17:17
Local clock offset: -4.083 ms
Remote clock offset: -3.382 ms

# Below is generated by plot.py at 2019-06-28 08:18:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.49 Mbit/s
95th percentile per-packet one-way delay: 55.593 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 96.49 Mbit/s
95th percentile per-packet one-way delay: 55.593 ms
Loss rate: 0.48%
```

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

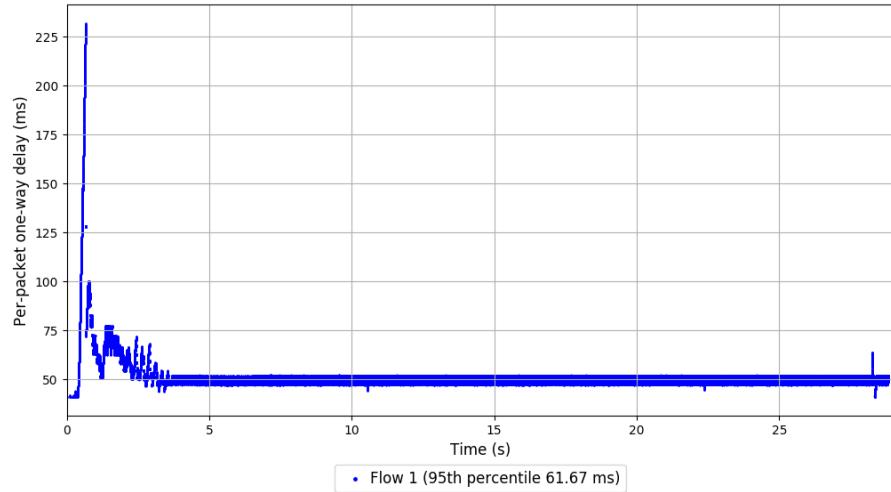
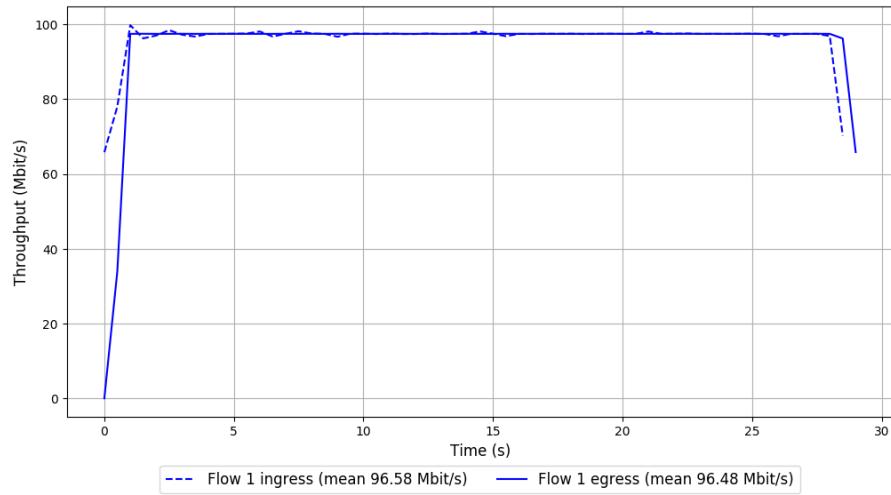


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 07:42:40
End at: 2019-06-28 07:43:10
Local clock offset: 0.265 ms
Remote clock offset: -3.129 ms

# Below is generated by plot.py at 2019-06-28 08:18:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.48 Mbit/s
95th percentile per-packet one-way delay: 61.672 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 96.48 Mbit/s
95th percentile per-packet one-way delay: 61.672 ms
Loss rate: 0.33%
```

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

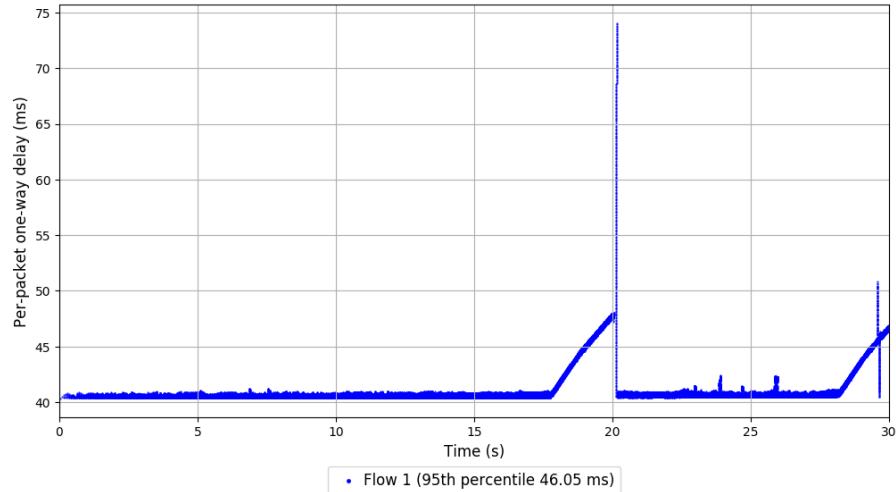
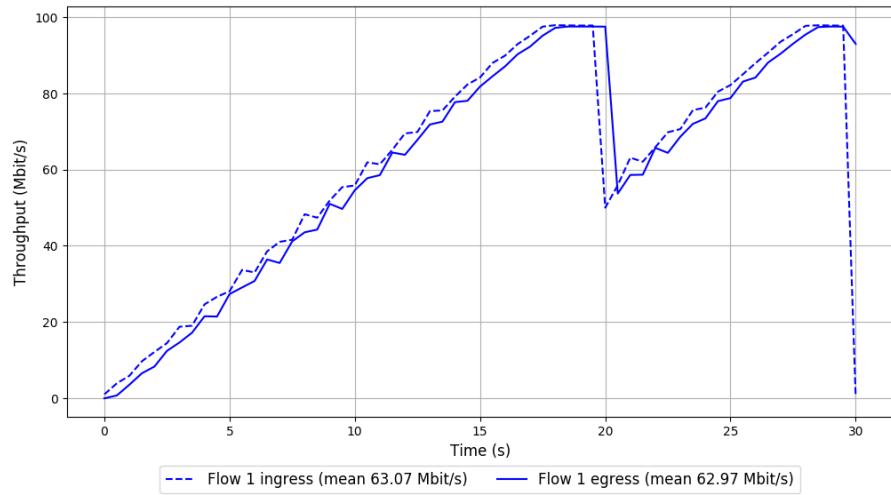


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2019-06-28 06:23:38
End at: 2019-06-28 06:24:08
Local clock offset: -2.456 ms
Remote clock offset: -3.537 ms

# Below is generated by plot.py at 2019-06-28 08:18:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.97 Mbit/s
95th percentile per-packet one-way delay: 46.045 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 62.97 Mbit/s
95th percentile per-packet one-way delay: 46.045 ms
Loss rate: 0.37%
```

## Run 1: Report of LEDBAT — Data Link

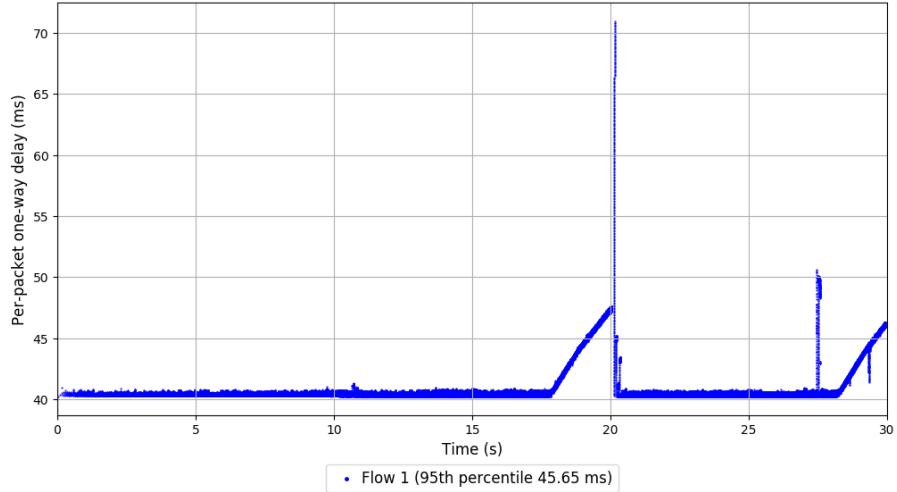
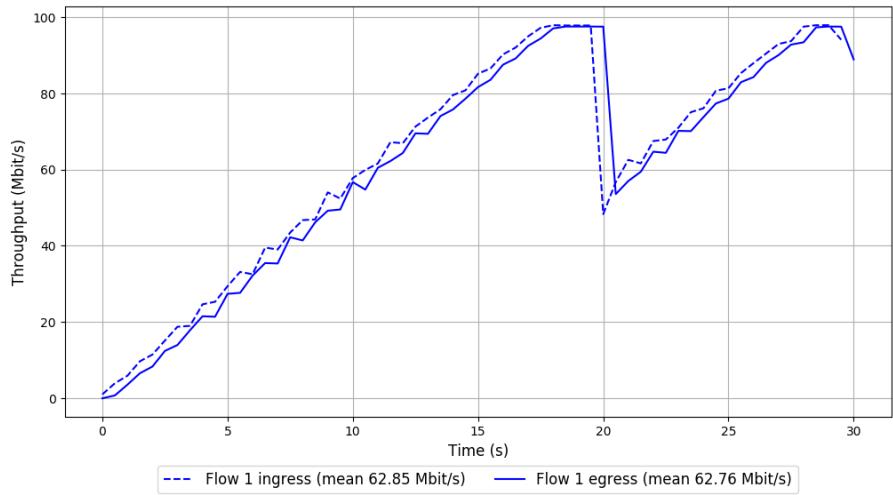


Run 2: Statistics of LEDBAT

```
Start at: 2019-06-28 06:49:34
End at: 2019-06-28 06:50:04
Local clock offset: -4.571 ms
Remote clock offset: -3.396 ms

# Below is generated by plot.py at 2019-06-28 08:19:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.76 Mbit/s
95th percentile per-packet one-way delay: 45.649 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 62.76 Mbit/s
95th percentile per-packet one-way delay: 45.649 ms
Loss rate: 0.37%
```

## Run 2: Report of LEDBAT — Data Link

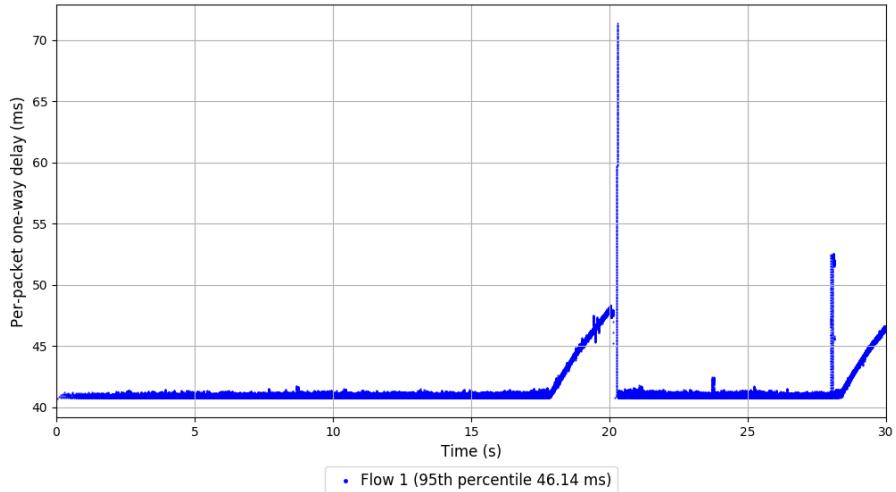
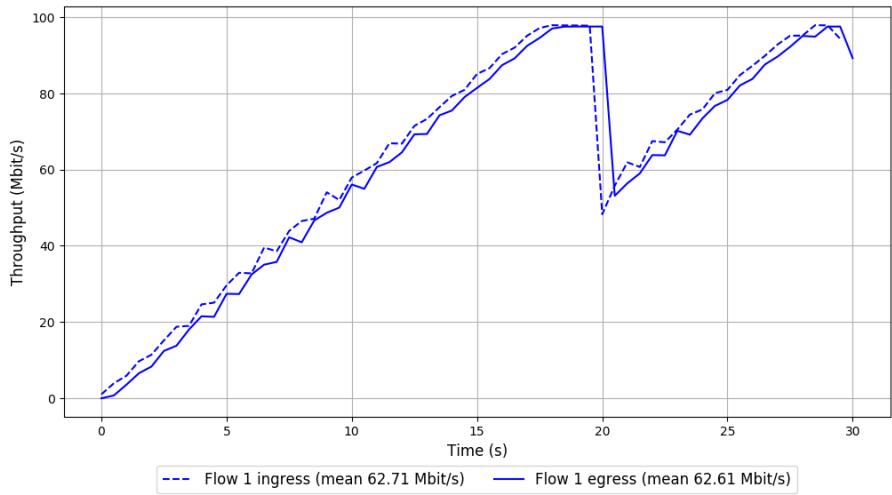


Run 3: Statistics of LEDBAT

```
Start at: 2019-06-28 07:15:37
End at: 2019-06-28 07:16:07
Local clock offset: -4.054 ms
Remote clock offset: -3.421 ms

# Below is generated by plot.py at 2019-06-28 08:19:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.61 Mbit/s
95th percentile per-packet one-way delay: 46.142 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 62.61 Mbit/s
95th percentile per-packet one-way delay: 46.142 ms
Loss rate: 0.37%
```

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

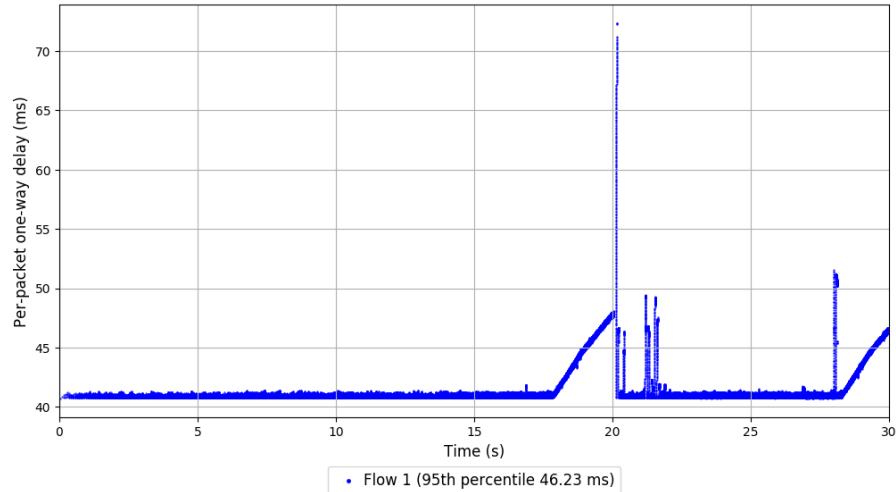
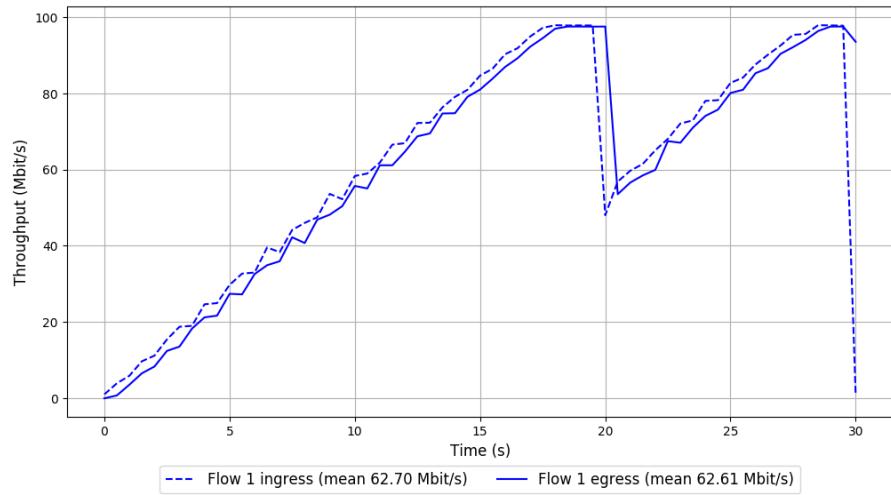


Run 4: Statistics of LEDBAT

```
Start at: 2019-06-28 07:41:30
End at: 2019-06-28 07:42:00
Local clock offset: 0.236 ms
Remote clock offset: -3.113 ms

# Below is generated by plot.py at 2019-06-28 08:19:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.61 Mbit/s
95th percentile per-packet one-way delay: 46.235 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 62.61 Mbit/s
95th percentile per-packet one-way delay: 46.235 ms
Loss rate: 0.37%
```

## Run 4: Report of LEDBAT — Data Link

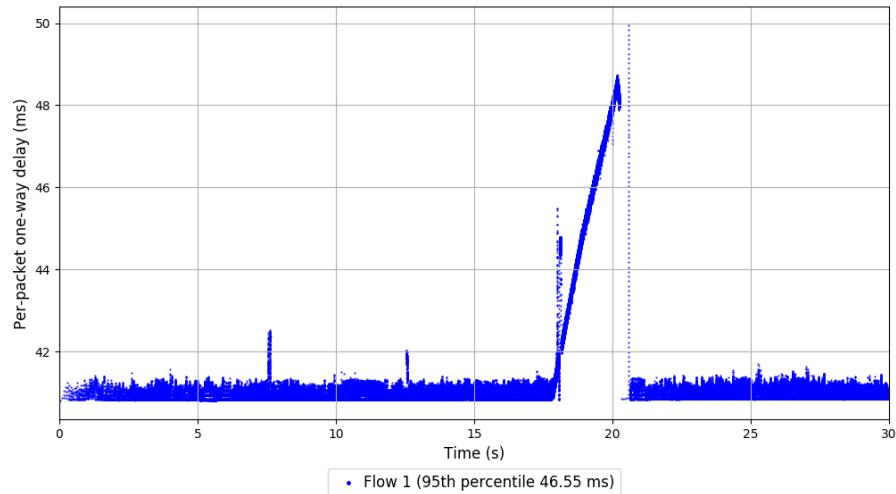
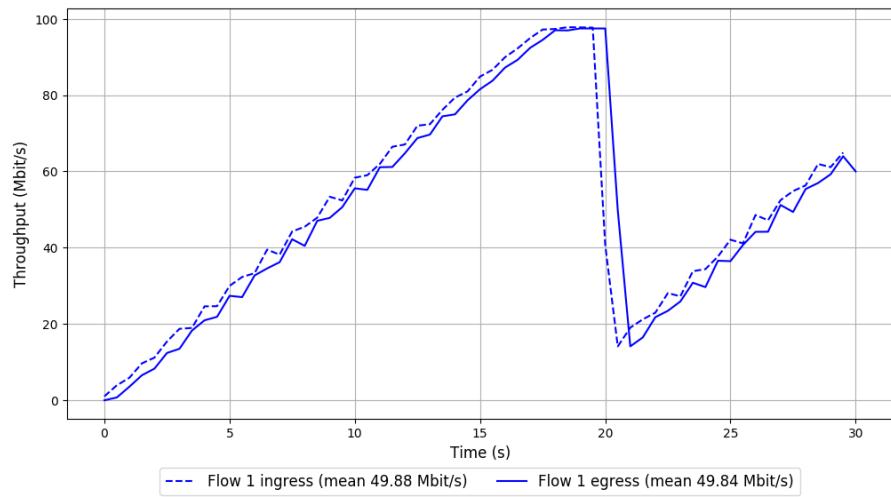


Run 5: Statistics of LEDBAT

```
Start at: 2019-06-28 08:07:26
End at: 2019-06-28 08:07:56
Local clock offset: -3.063 ms
Remote clock offset: -2.972 ms

# Below is generated by plot.py at 2019-06-28 08:19:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.84 Mbit/s
95th percentile per-packet one-way delay: 46.550 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 49.84 Mbit/s
95th percentile per-packet one-way delay: 46.550 ms
Loss rate: 0.30%
```

## Run 5: Report of LEDBAT — Data Link

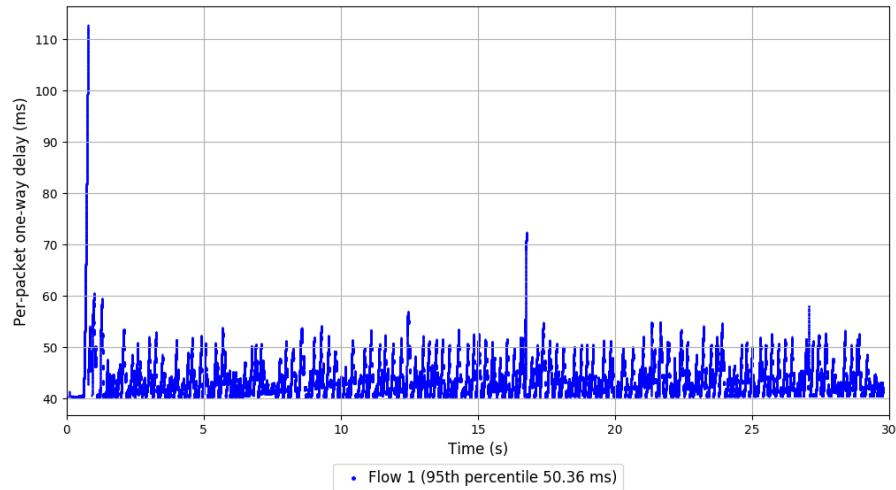
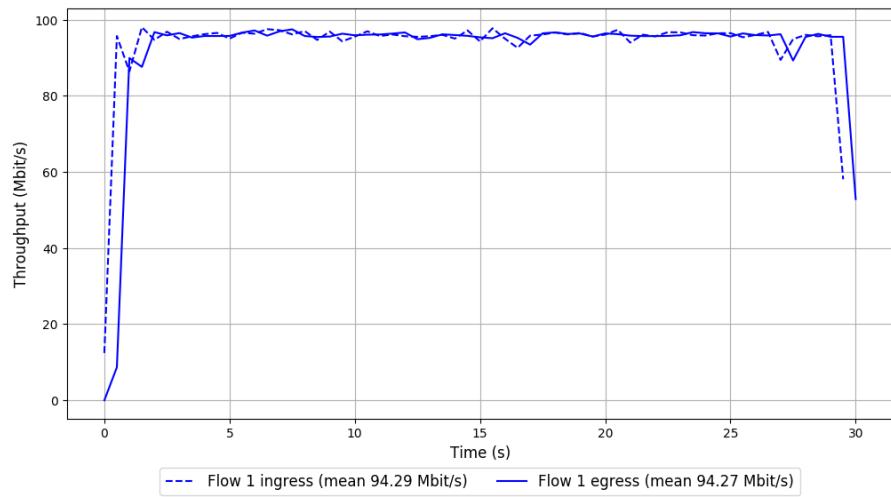


```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 06:06:36
End at: 2019-06-28 06:07:06
Local clock offset: -0.173 ms
Remote clock offset: -4.244 ms

# Below is generated by plot.py at 2019-06-28 08:19:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.27 Mbit/s
95th percentile per-packet one-way delay: 50.364 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 94.27 Mbit/s
95th percentile per-packet one-way delay: 50.364 ms
Loss rate: 0.24%
```

Run 1: Report of Muses\_DecisionTree — Data Link

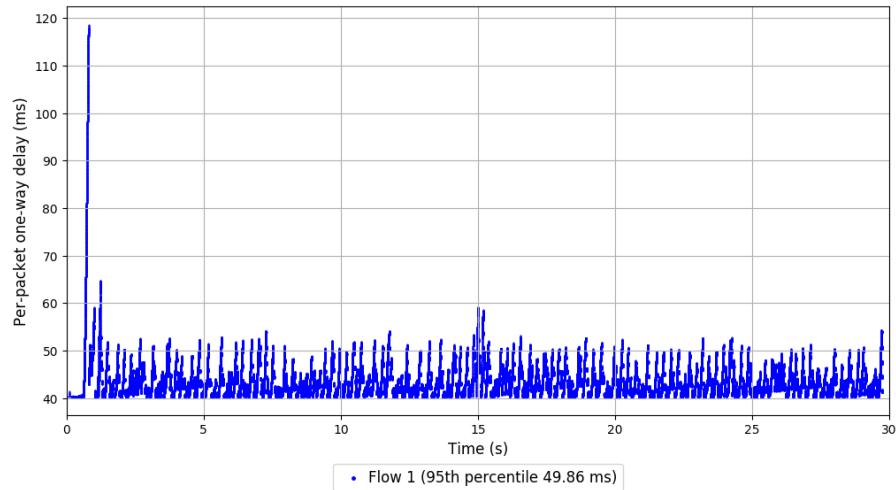
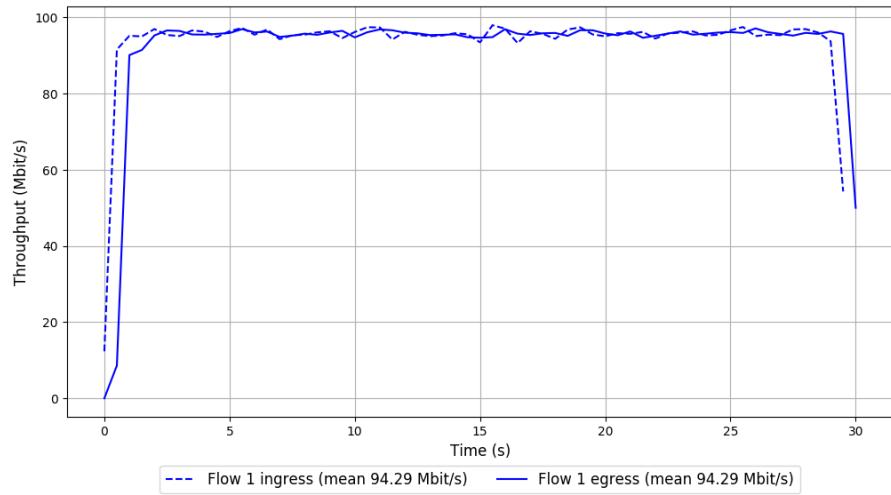


```
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 06:33:01
End at: 2019-06-28 06:33:31
Local clock offset: -3.552 ms
Remote clock offset: -3.533 ms

# Below is generated by plot.py at 2019-06-28 08:19:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.29 Mbit/s
95th percentile per-packet one-way delay: 49.858 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 94.29 Mbit/s
95th percentile per-packet one-way delay: 49.858 ms
Loss rate: 0.22%
```

Run 2: Report of Muses\_DecisionTree — Data Link

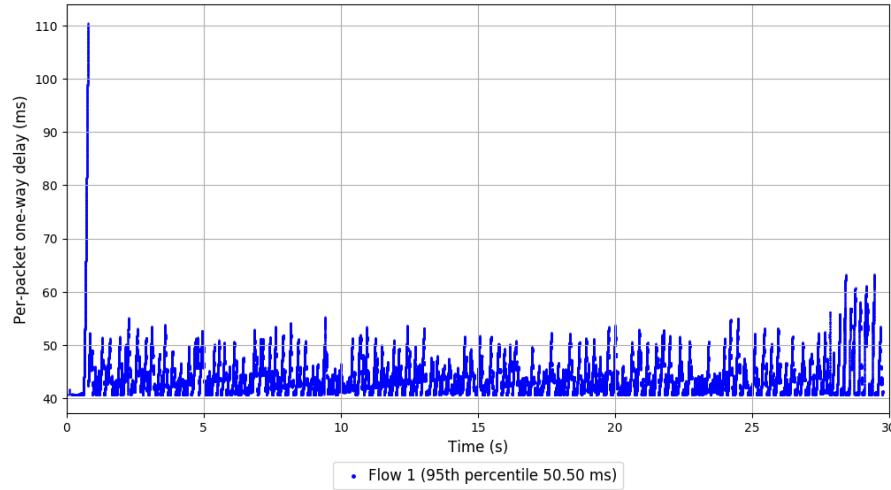
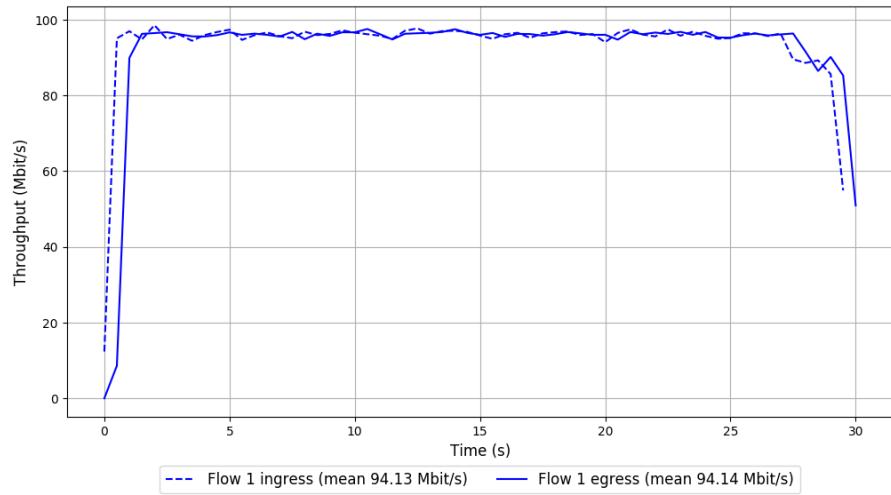


```
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 06:59:07
End at: 2019-06-28 06:59:37
Local clock offset: -3.763 ms
Remote clock offset: -3.621 ms

# Below is generated by plot.py at 2019-06-28 08:19:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 50.504 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 50.504 ms
Loss rate: 0.21%
```

Run 3: Report of Muses\_DecisionTree — Data Link

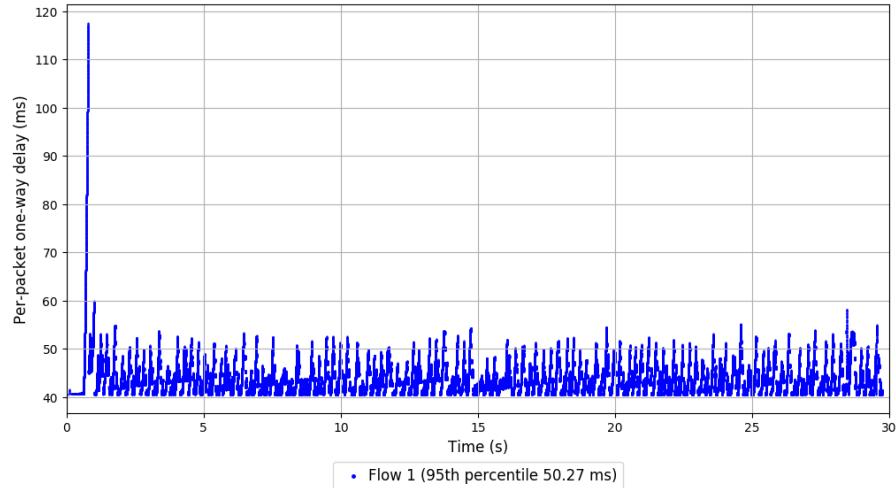
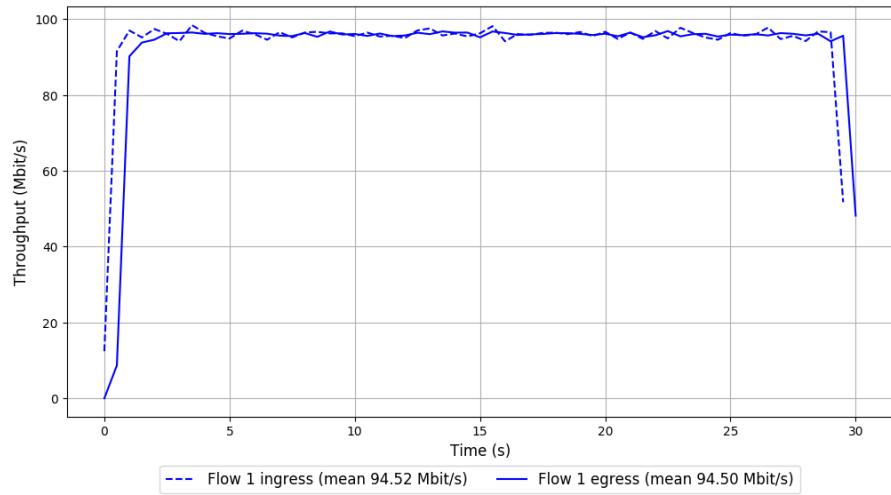


```
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 07:24:59
End at: 2019-06-28 07:25:29
Local clock offset: -1.611 ms
Remote clock offset: -3.264 ms

# Below is generated by plot.py at 2019-06-28 08:19:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.50 Mbit/s
95th percentile per-packet one-way delay: 50.268 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 94.50 Mbit/s
95th percentile per-packet one-way delay: 50.268 ms
Loss rate: 0.24%
```

Run 4: Report of Muses\_DecisionTree — Data Link

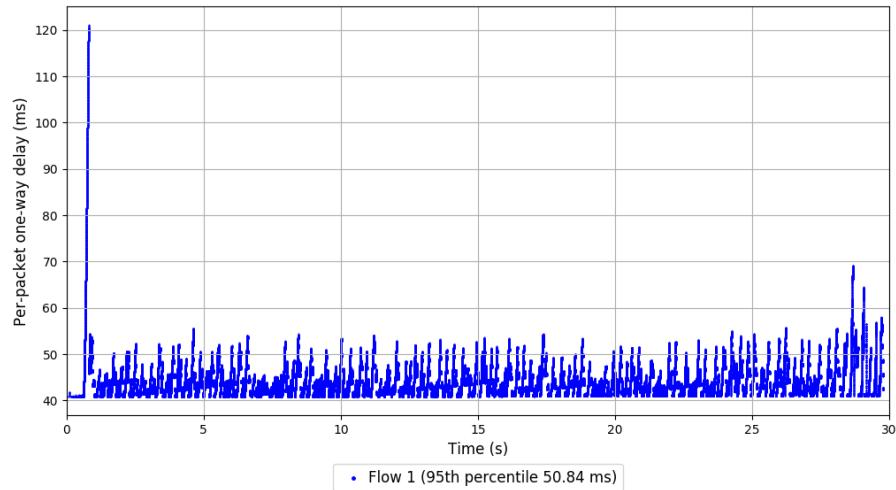
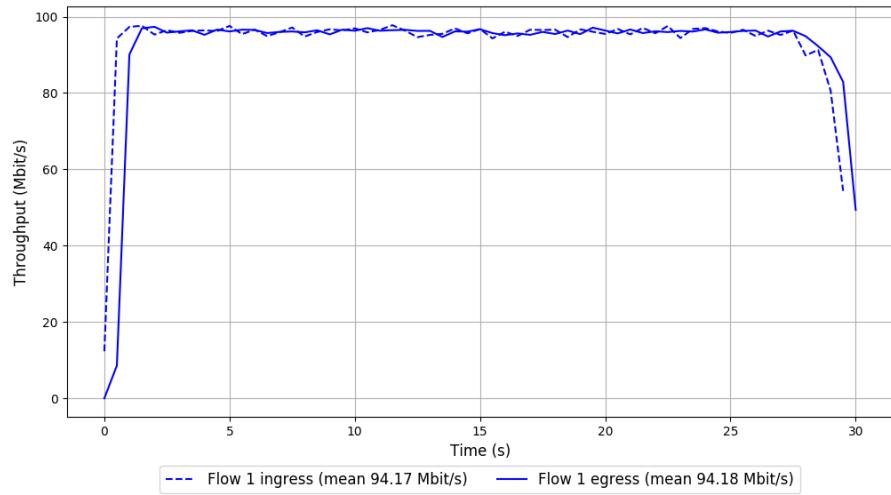


```
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 07:50:52
End at: 2019-06-28 07:51:22
Local clock offset: -0.531 ms
Remote clock offset: -3.101 ms

# Below is generated by plot.py at 2019-06-28 08:20:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.18 Mbit/s
95th percentile per-packet one-way delay: 50.838 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 94.18 Mbit/s
95th percentile per-packet one-way delay: 50.838 ms
Loss rate: 0.21%
```

Run 5: Report of Muses\_DecisionTree — Data Link

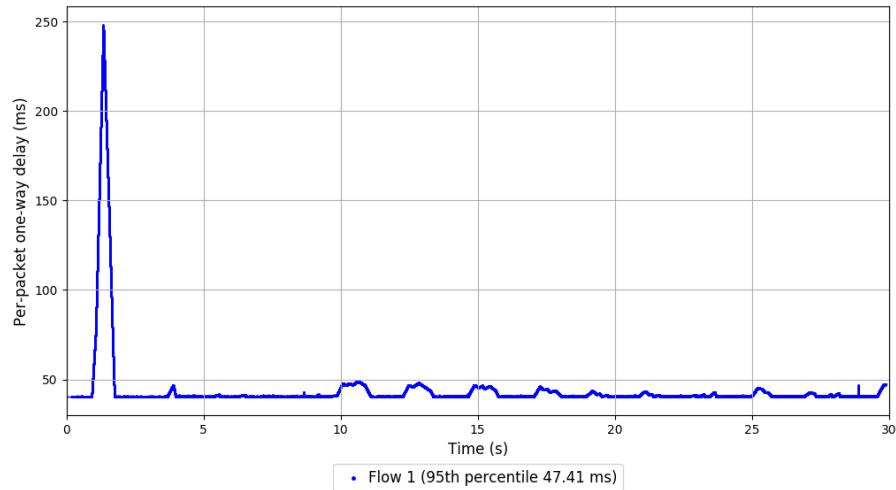
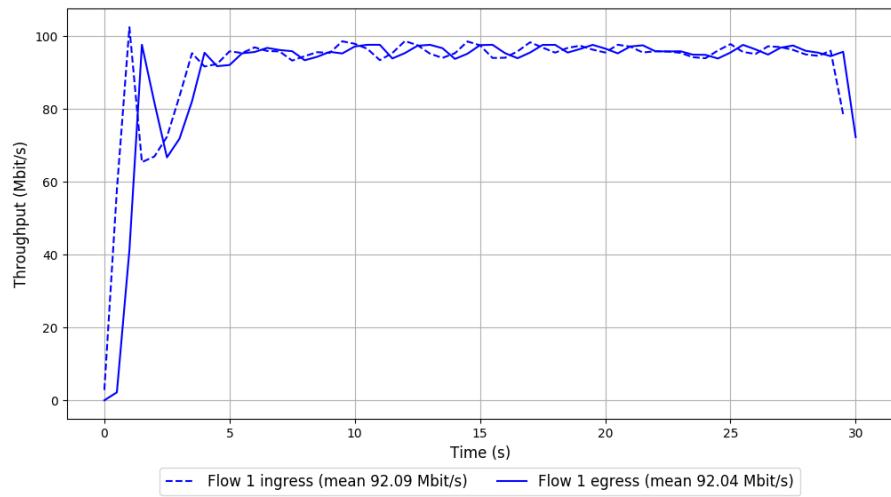


Run 1: Statistics of PCC-Allegro

```
Start at: 2019-06-28 06:00:42
End at: 2019-06-28 06:01:12
Local clock offset: 0.981 ms
Remote clock offset: -4.489 ms

# Below is generated by plot.py at 2019-06-28 08:20:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.04 Mbit/s
95th percentile per-packet one-way delay: 47.411 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 92.04 Mbit/s
95th percentile per-packet one-way delay: 47.411 ms
Loss rate: 0.27%
```

Run 1: Report of PCC-Allegro — Data Link

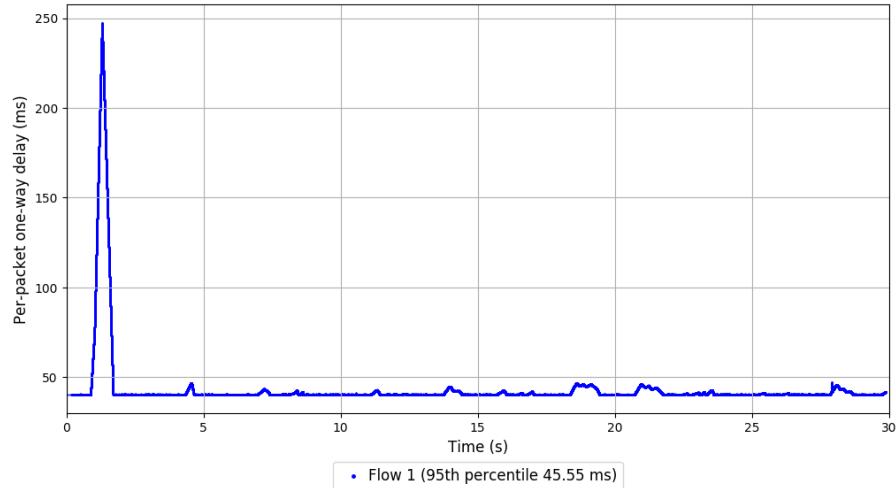
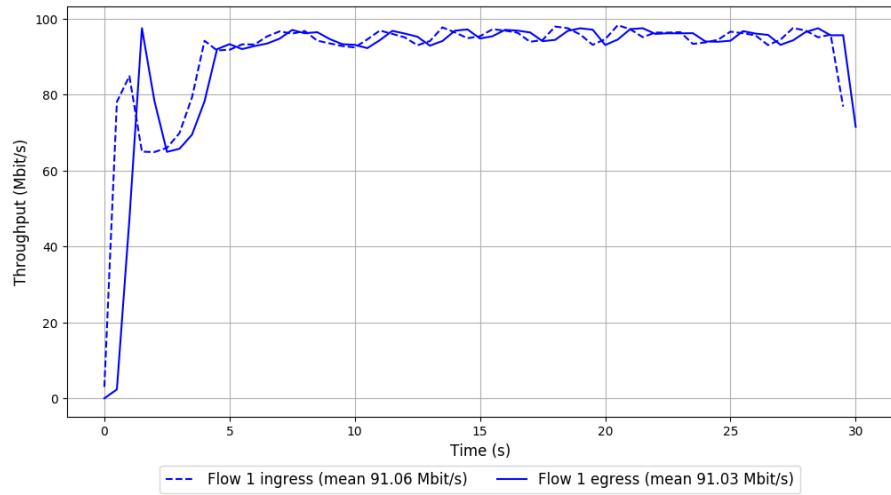


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-06-28 06:27:06
End at: 2019-06-28 06:27:36
Local clock offset: -2.915 ms
Remote clock offset: -3.443 ms

# Below is generated by plot.py at 2019-06-28 08:20:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.03 Mbit/s
95th percentile per-packet one-way delay: 45.548 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 91.03 Mbit/s
95th percentile per-packet one-way delay: 45.548 ms
Loss rate: 0.25%
```

## Run 2: Report of PCC-Allegro — Data Link

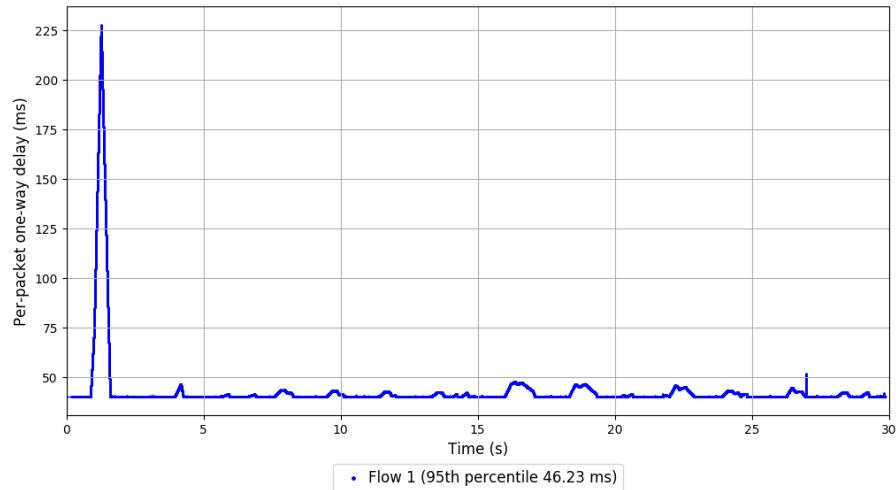
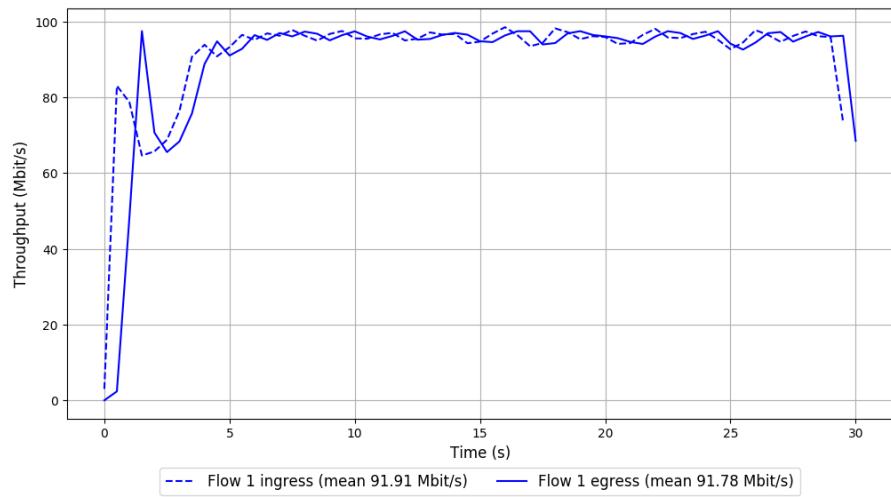


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-06-28 06:53:04
End at: 2019-06-28 06:53:34
Local clock offset: -4.108 ms
Remote clock offset: -3.404 ms

# Below is generated by plot.py at 2019-06-28 08:20:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.78 Mbit/s
95th percentile per-packet one-way delay: 46.230 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 91.78 Mbit/s
95th percentile per-packet one-way delay: 46.230 ms
Loss rate: 0.35%
```

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

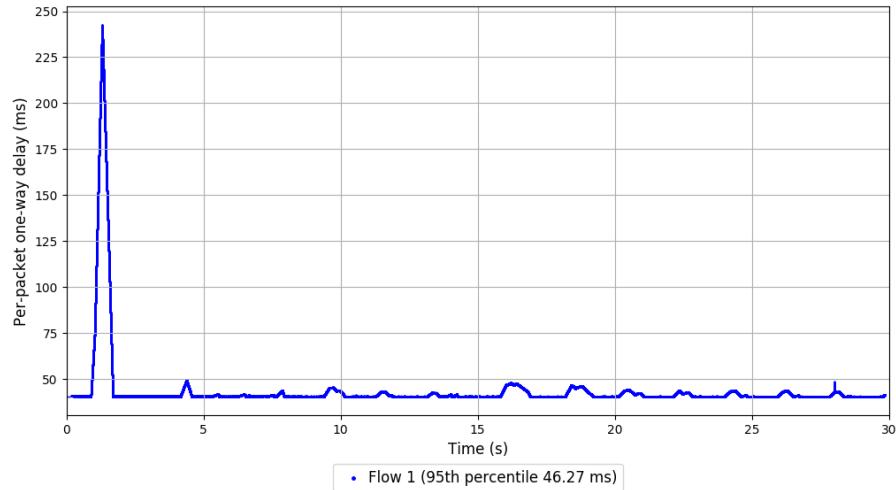
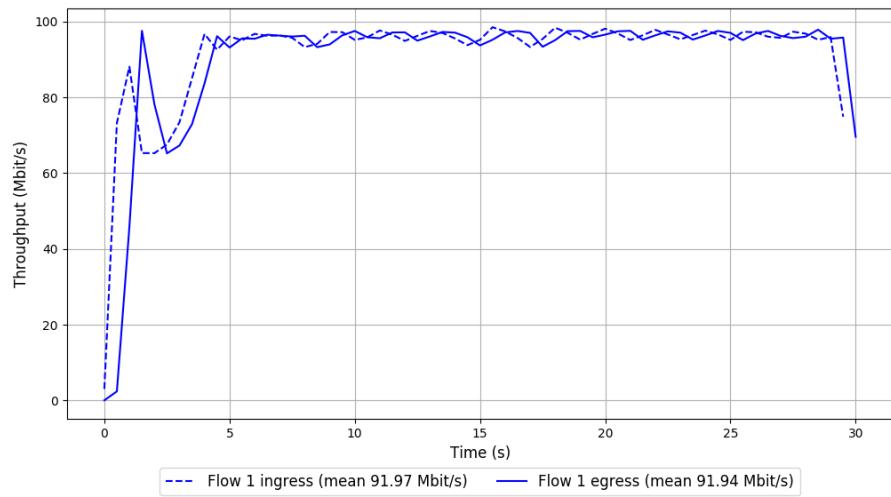


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-06-28 07:19:05
End at: 2019-06-28 07:19:35
Local clock offset: -3.635 ms
Remote clock offset: -3.311 ms

# Below is generated by plot.py at 2019-06-28 08:20:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.94 Mbit/s
95th percentile per-packet one-way delay: 46.272 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 91.94 Mbit/s
95th percentile per-packet one-way delay: 46.272 ms
Loss rate: 0.25%
```

Run 4: Report of PCC-Allegro — Data Link

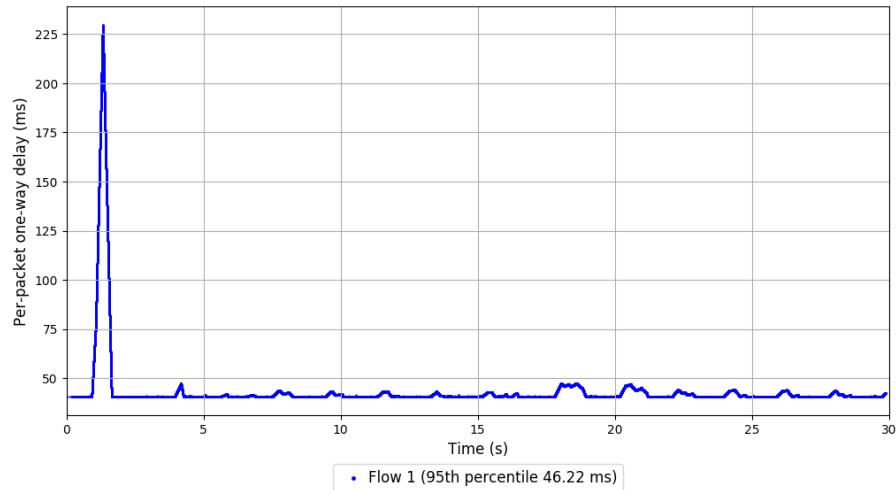
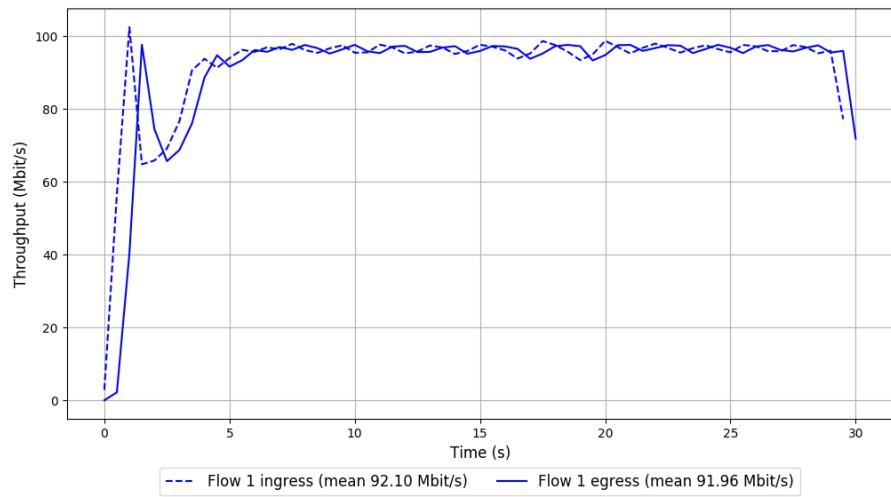


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-06-28 07:44:58
End at: 2019-06-28 07:45:28
Local clock offset: 0.388 ms
Remote clock offset: -3.049 ms

# Below is generated by plot.py at 2019-06-28 08:20:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.96 Mbit/s
95th percentile per-packet one-way delay: 46.221 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 91.96 Mbit/s
95th percentile per-packet one-way delay: 46.221 ms
Loss rate: 0.36%
```

Run 5: Report of PCC-Allegro — Data Link

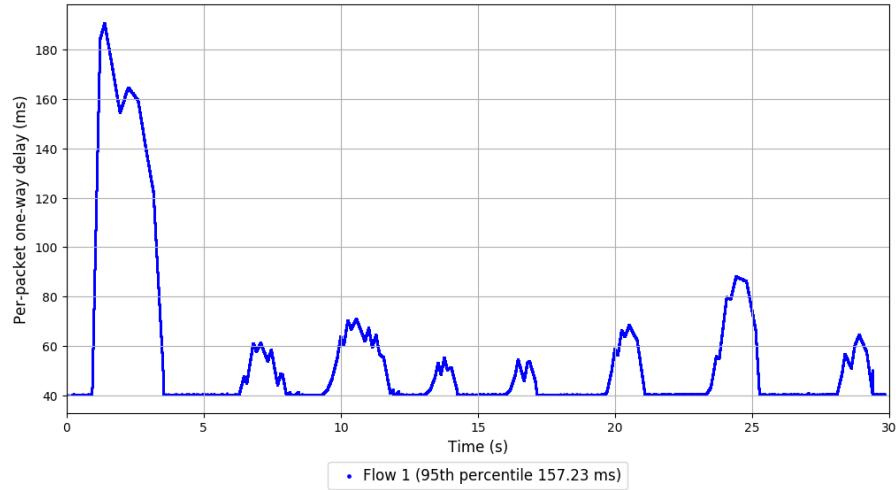
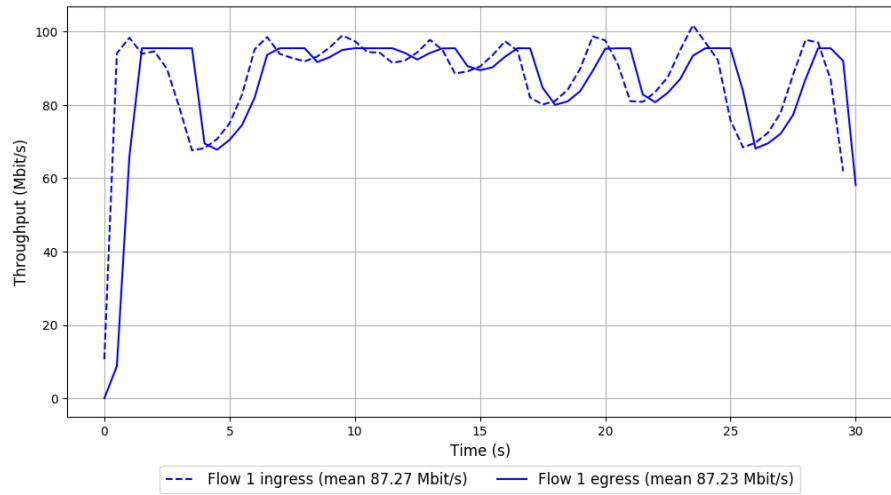


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-06-28 06:10:30
End at: 2019-06-28 06:11:00
Local clock offset: -0.793 ms
Remote clock offset: -4.165 ms

# Below is generated by plot.py at 2019-06-28 08:21:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.23 Mbit/s
95th percentile per-packet one-way delay: 157.228 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 87.23 Mbit/s
95th percentile per-packet one-way delay: 157.228 ms
Loss rate: 0.27%
```

Run 1: Report of PCC-Expr — Data Link

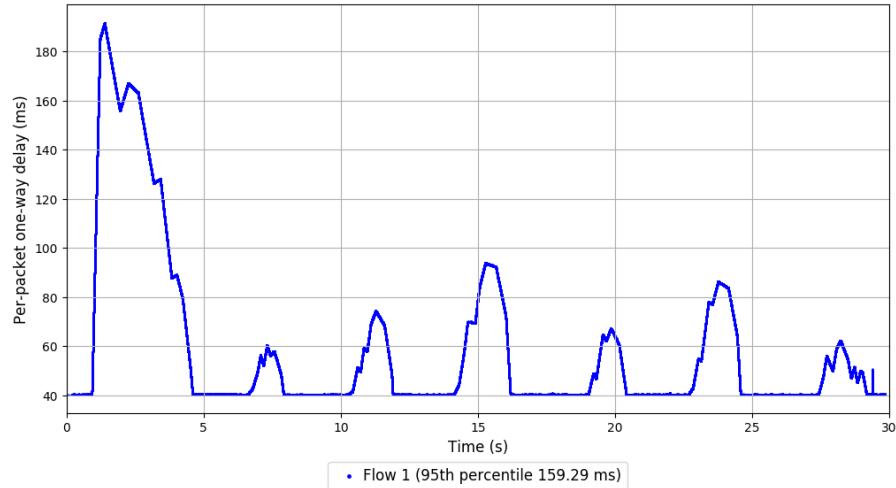
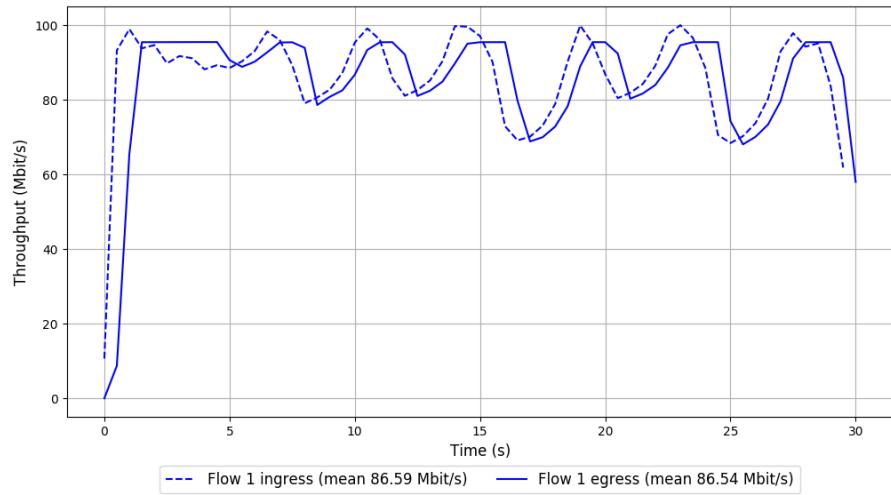


Run 2: Statistics of PCC-Expr

```
Start at: 2019-06-28 06:36:37
End at: 2019-06-28 06:37:07
Local clock offset: -3.867 ms
Remote clock offset: -3.546 ms

# Below is generated by plot.py at 2019-06-28 08:22:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.54 Mbit/s
95th percentile per-packet one-way delay: 159.294 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 86.54 Mbit/s
95th percentile per-packet one-way delay: 159.294 ms
Loss rate: 0.27%
```

Run 2: Report of PCC-Expr — Data Link

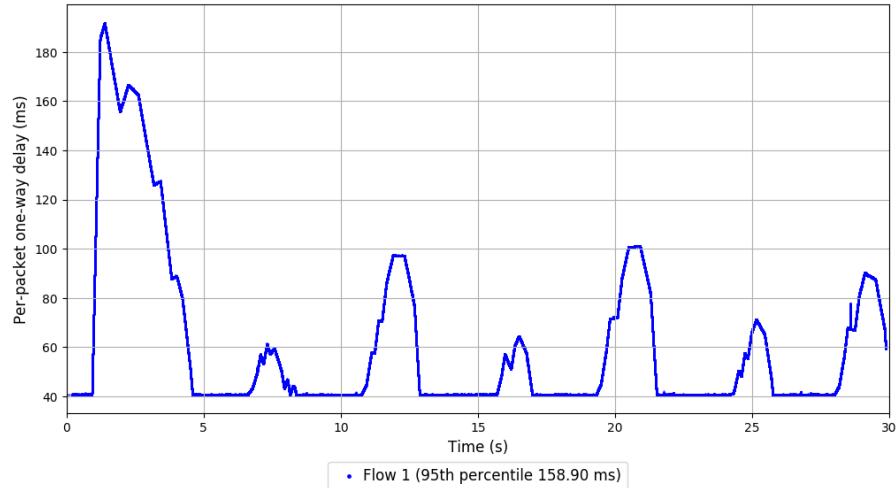
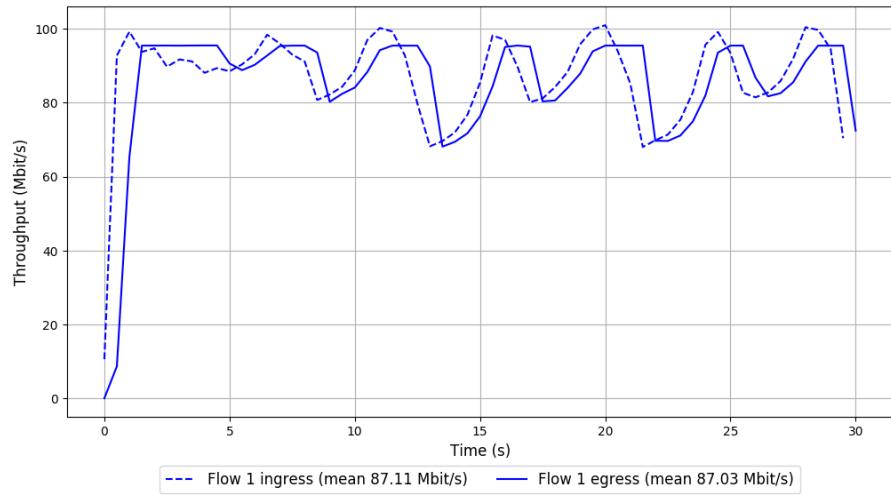


Run 3: Statistics of PCC-Expr

```
Start at: 2019-06-28 07:02:41
End at: 2019-06-28 07:03:11
Local clock offset: -3.74 ms
Remote clock offset: -3.559 ms

# Below is generated by plot.py at 2019-06-28 08:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.03 Mbit/s
95th percentile per-packet one-way delay: 158.904 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 87.03 Mbit/s
95th percentile per-packet one-way delay: 158.904 ms
Loss rate: 0.31%
```

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

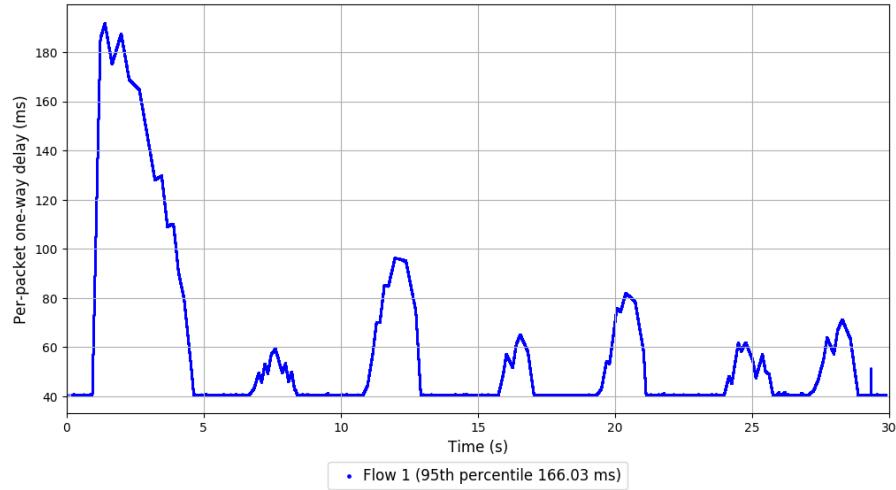
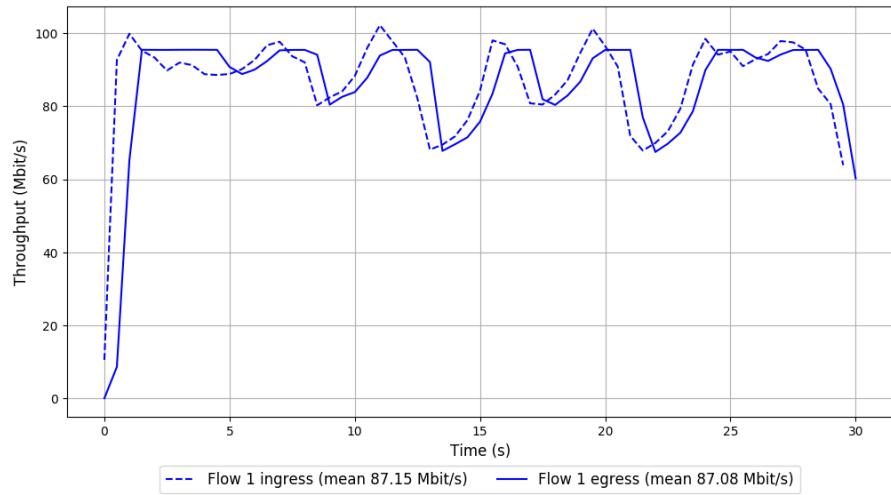


Run 4: Statistics of PCC-Expr

```
Start at: 2019-06-28 07:28:34
End at: 2019-06-28 07:29:04
Local clock offset: -0.914 ms
Remote clock offset: -3.299 ms

# Below is generated by plot.py at 2019-06-28 08:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.08 Mbit/s
95th percentile per-packet one-way delay: 166.030 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 87.08 Mbit/s
95th percentile per-packet one-way delay: 166.030 ms
Loss rate: 0.29%
```

Run 4: Report of PCC-Expr — Data Link

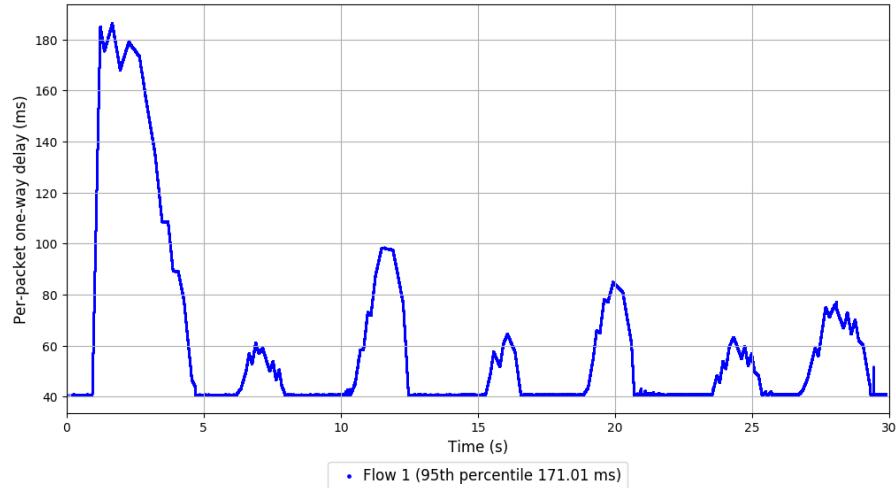
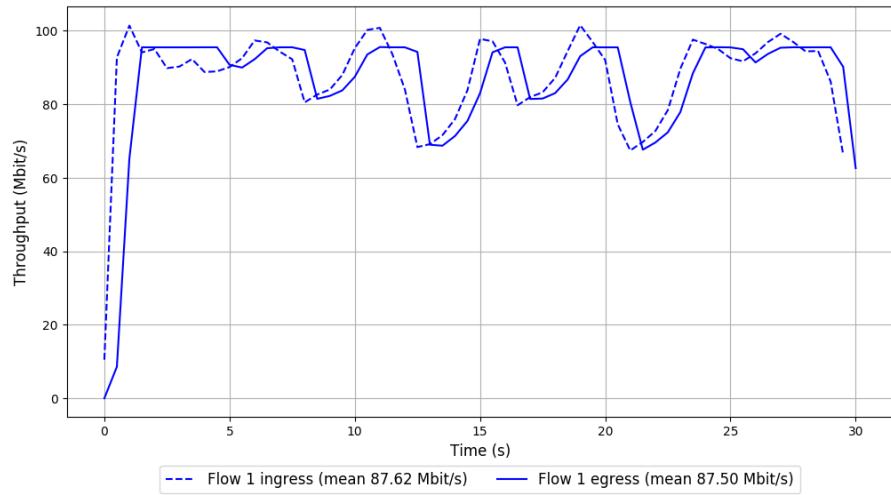


Run 5: Statistics of PCC-Expr

```
Start at: 2019-06-28 07:54:27
End at: 2019-06-28 07:54:57
Local clock offset: -1.423 ms
Remote clock offset: -3.02 ms

# Below is generated by plot.py at 2019-06-28 08:22:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.50 Mbit/s
95th percentile per-packet one-way delay: 171.009 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 87.50 Mbit/s
95th percentile per-packet one-way delay: 171.009 ms
Loss rate: 0.36%
```

### Run 5: Report of PCC-Expr — Data Link

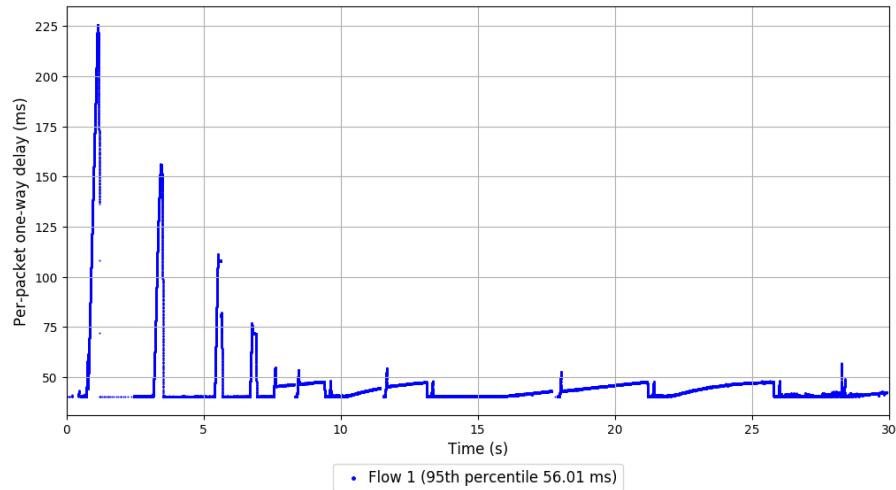
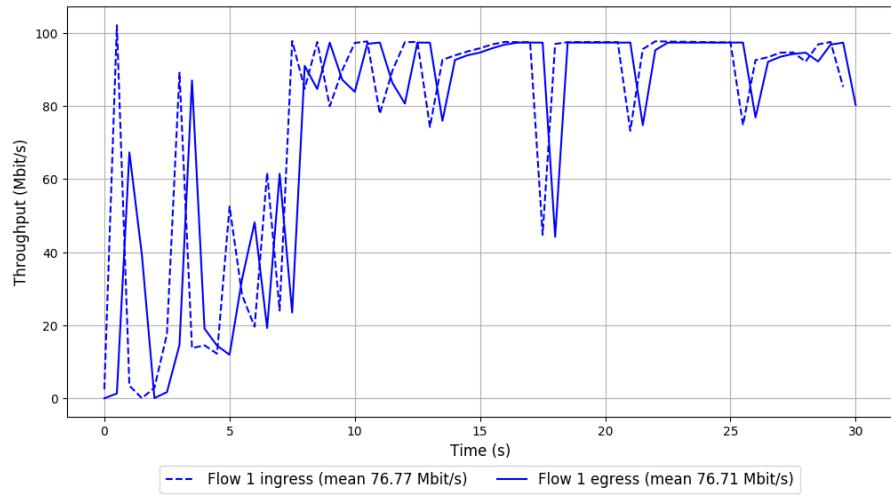


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-06-28 06:03:03
End at: 2019-06-28 06:03:33
Local clock offset: 0.475 ms
Remote clock offset: -4.389 ms

# Below is generated by plot.py at 2019-06-28 08:22:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.71 Mbit/s
95th percentile per-packet one-way delay: 56.012 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 76.71 Mbit/s
95th percentile per-packet one-way delay: 56.012 ms
Loss rate: 0.30%
```

Run 1: Report of QUIC Cubic — Data Link

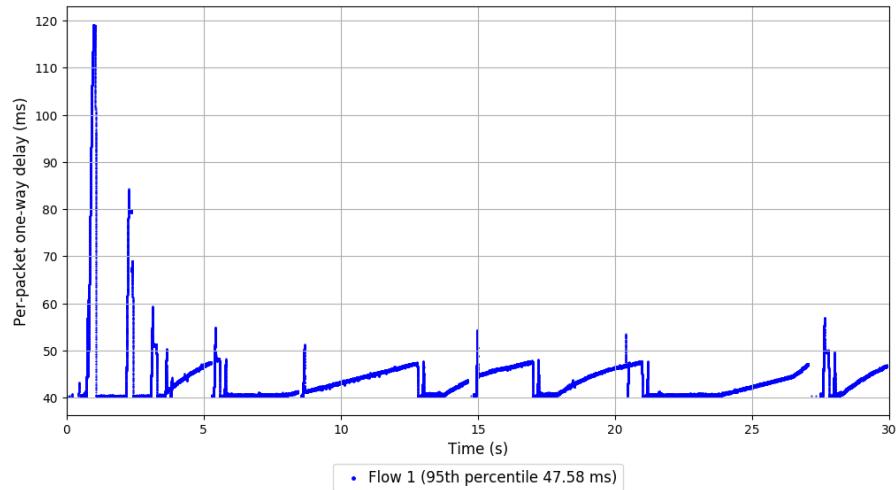
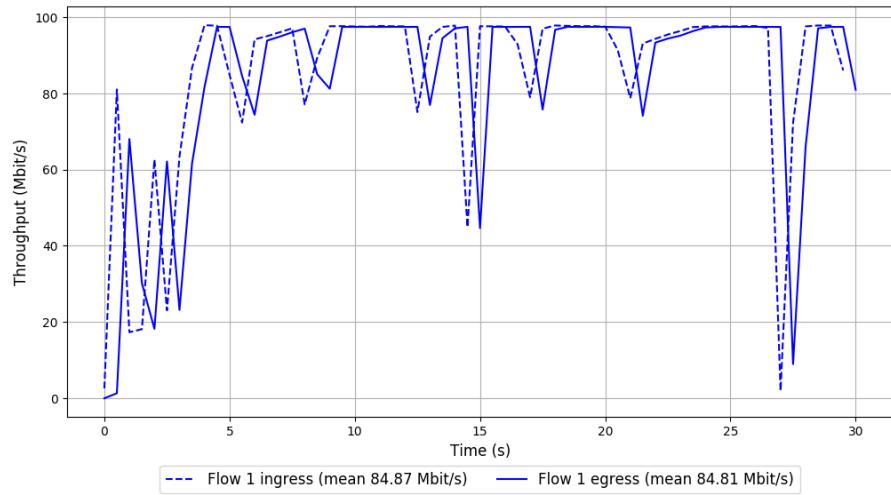


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-06-28 06:29:26
End at: 2019-06-28 06:29:56
Local clock offset: -3.164 ms
Remote clock offset: -3.501 ms

# Below is generated by plot.py at 2019-06-28 08:22:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.81 Mbit/s
95th percentile per-packet one-way delay: 47.579 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 84.81 Mbit/s
95th percentile per-packet one-way delay: 47.579 ms
Loss rate: 0.28%
```

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

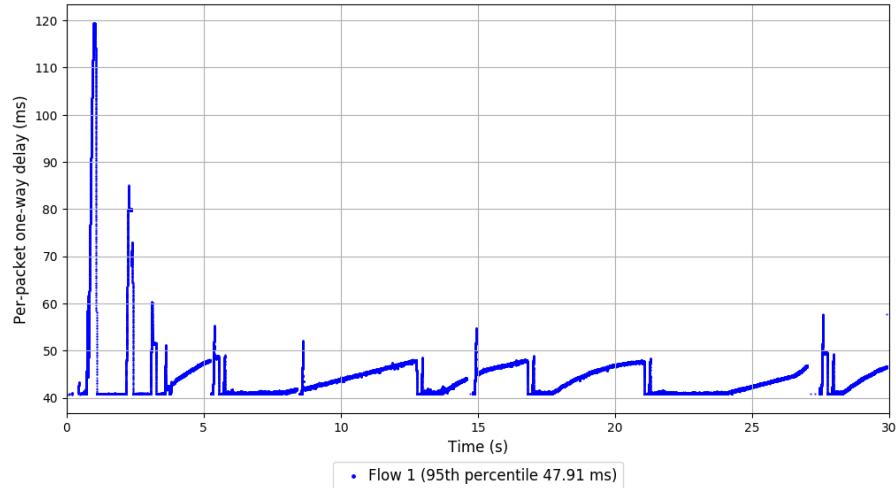
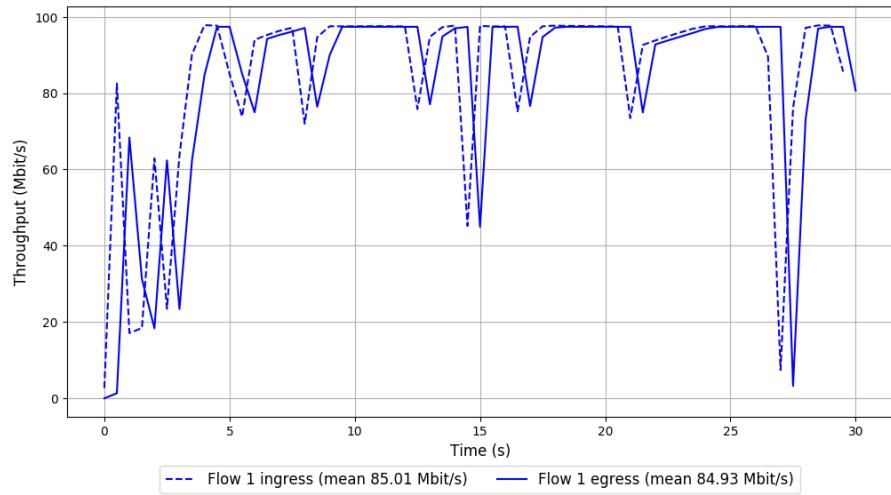


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-06-28 06:55:30
End at: 2019-06-28 06:56:00
Local clock offset: -3.902 ms
Remote clock offset: -3.753 ms

# Below is generated by plot.py at 2019-06-28 08:22:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.93 Mbit/s
95th percentile per-packet one-way delay: 47.908 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 84.93 Mbit/s
95th percentile per-packet one-way delay: 47.908 ms
Loss rate: 0.28%
```

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

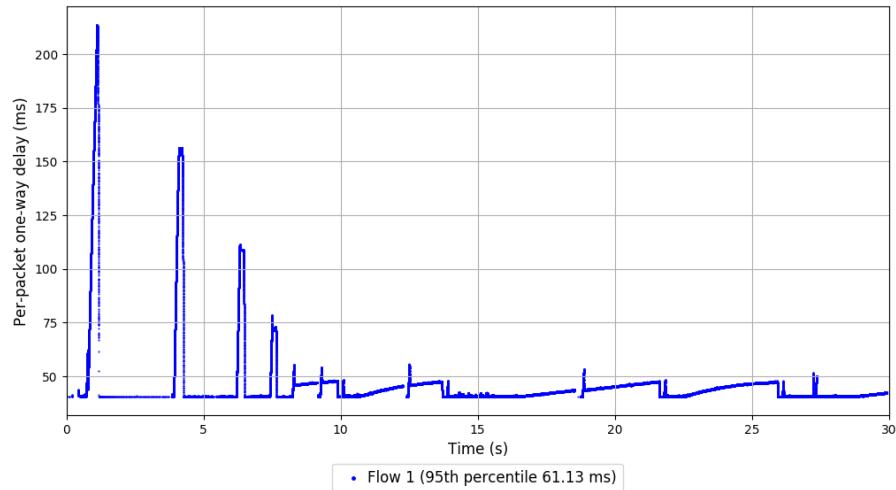
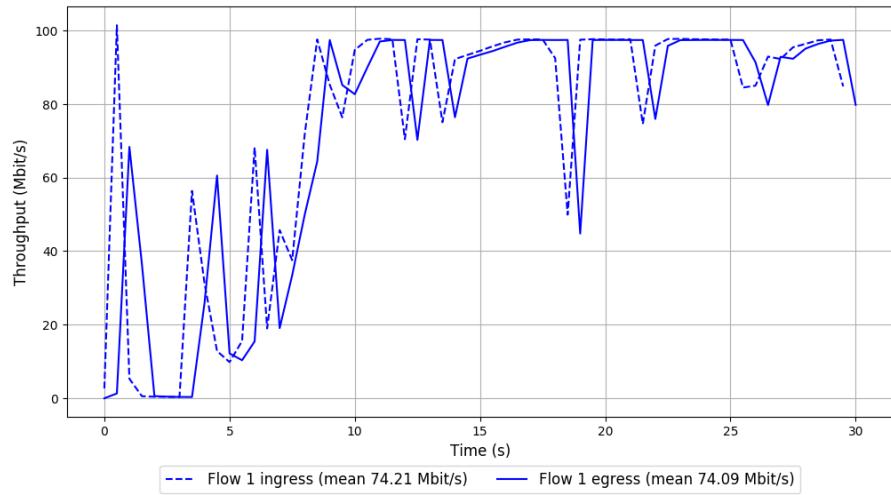


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-06-28 07:21:25
End at: 2019-06-28 07:21:55
Local clock offset: -2.72 ms
Remote clock offset: -3.283 ms

# Below is generated by plot.py at 2019-06-28 08:22:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.09 Mbit/s
95th percentile per-packet one-way delay: 61.134 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 74.09 Mbit/s
95th percentile per-packet one-way delay: 61.134 ms
Loss rate: 0.37%
```

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

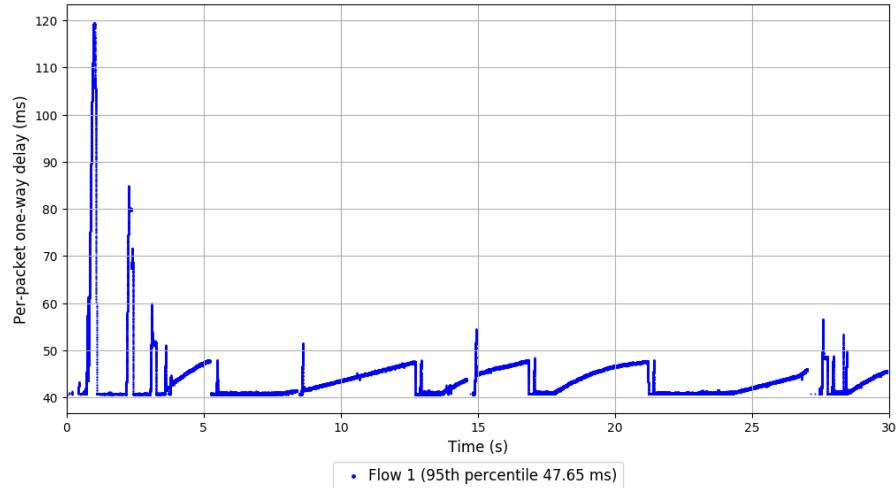
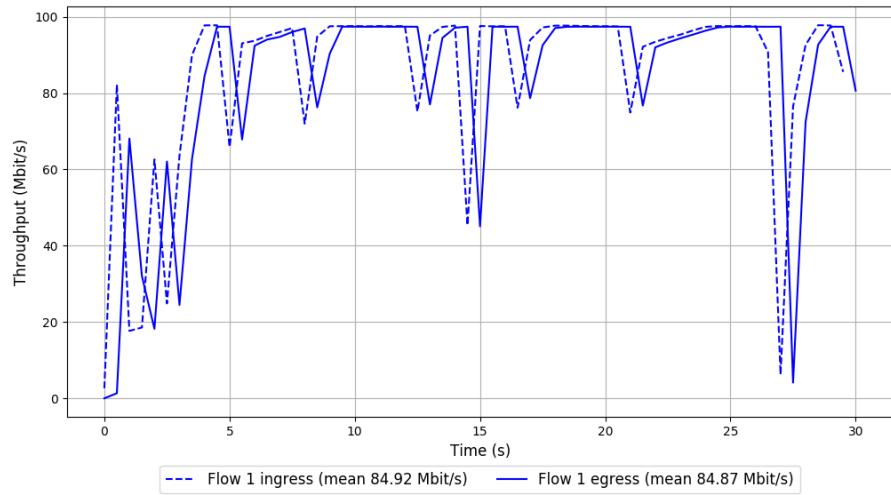


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-06-28 07:47:18
End at: 2019-06-28 07:47:48
Local clock offset: 0.484 ms
Remote clock offset: -3.081 ms

# Below is generated by plot.py at 2019-06-28 08:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.87 Mbit/s
95th percentile per-packet one-way delay: 47.647 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 84.87 Mbit/s
95th percentile per-packet one-way delay: 47.647 ms
Loss rate: 0.27%
```

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

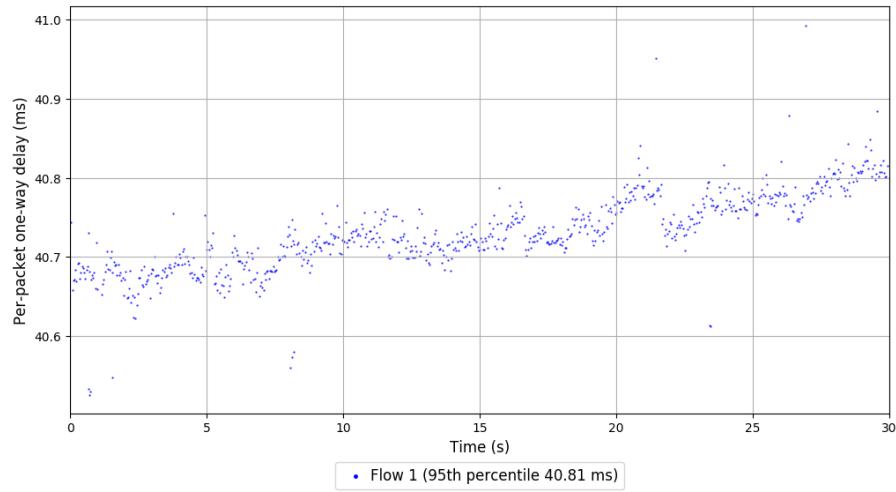
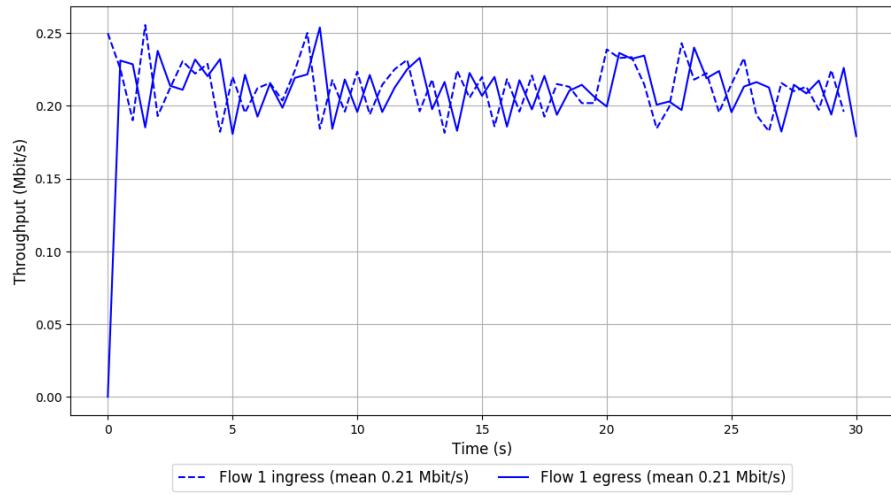


```
Run 1: Statistics of SCReAM

Start at: 2019-06-28 05:59:36
End at: 2019-06-28 06:00:06
Local clock offset: 1.375 ms
Remote clock offset: -4.513 ms

# Below is generated by plot.py at 2019-06-28 08:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.806 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.806 ms
Loss rate: 0.26%
```

Run 1: Report of SCReAM — Data Link

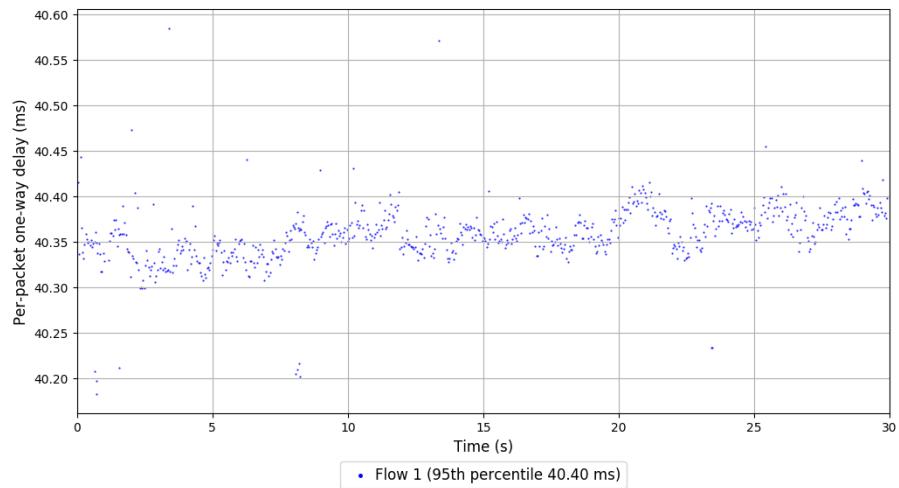
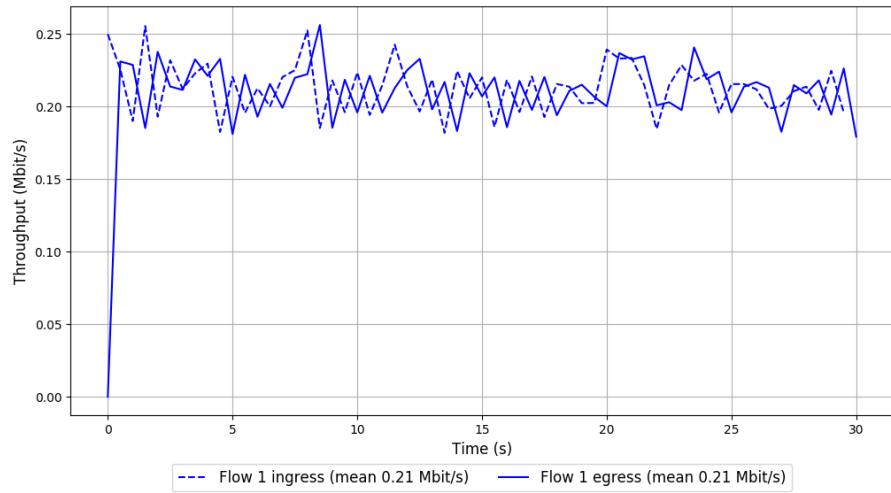


Run 2: Statistics of SCReAM

```
Start at: 2019-06-28 06:25:59
End at: 2019-06-28 06:26:29
Local clock offset: -2.784 ms
Remote clock offset: -3.375 ms

# Below is generated by plot.py at 2019-06-28 08:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.399 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.399 ms
Loss rate: 0.26%
```

Run 2: Report of SCReAM — Data Link

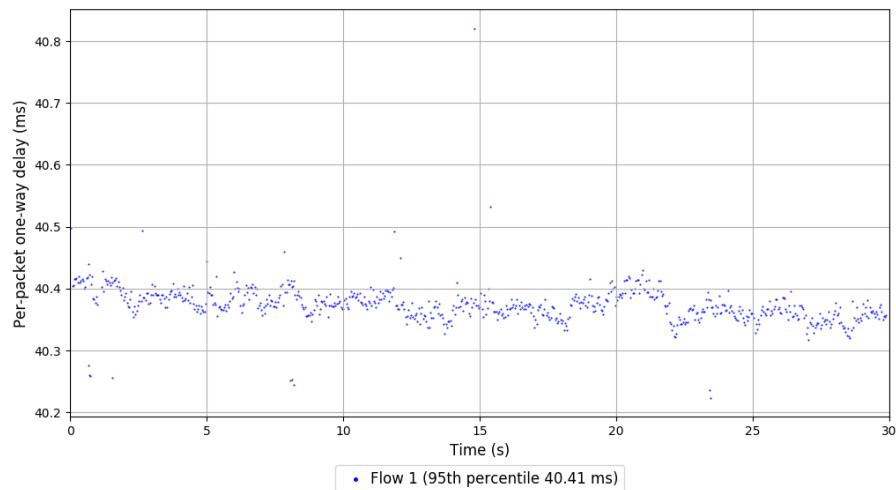
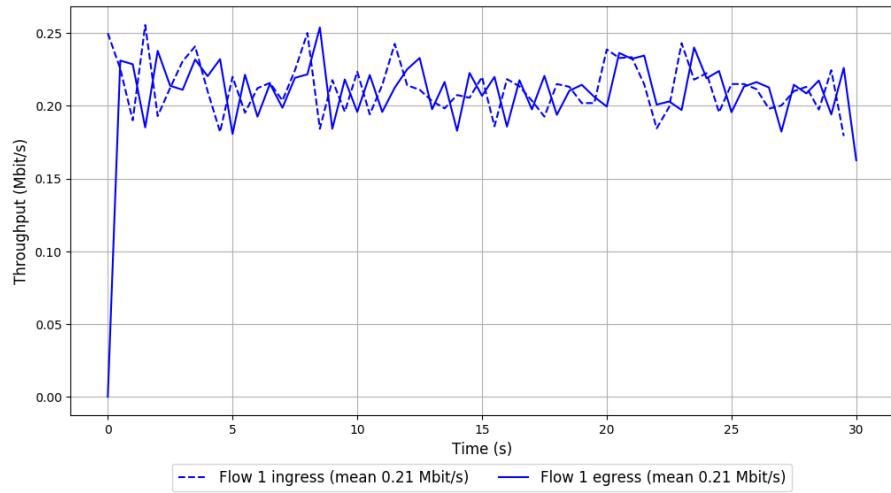


Run 3: Statistics of SCReAM

```
Start at: 2019-06-28 06:51:57
End at: 2019-06-28 06:52:27
Local clock offset: -4.214 ms
Remote clock offset: -3.442 ms

# Below is generated by plot.py at 2019-06-28 08:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.413 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.413 ms
Loss rate: 0.26%
```

Run 3: Report of SCReAM — Data Link

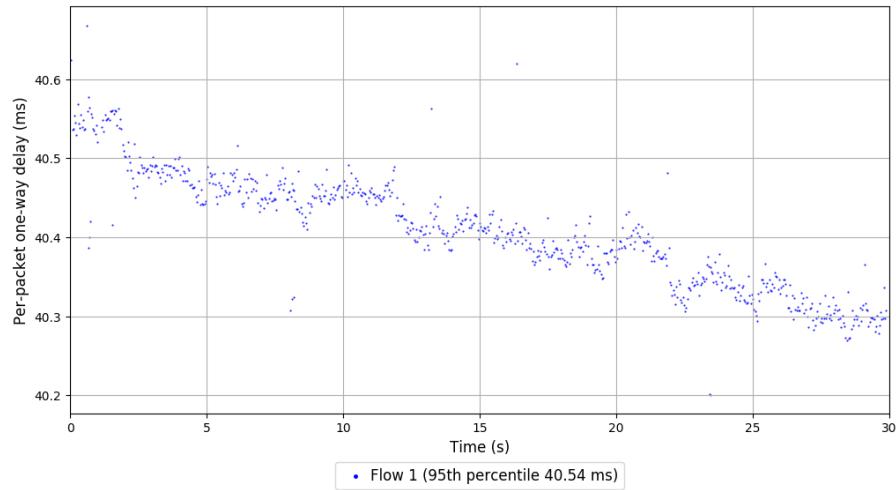
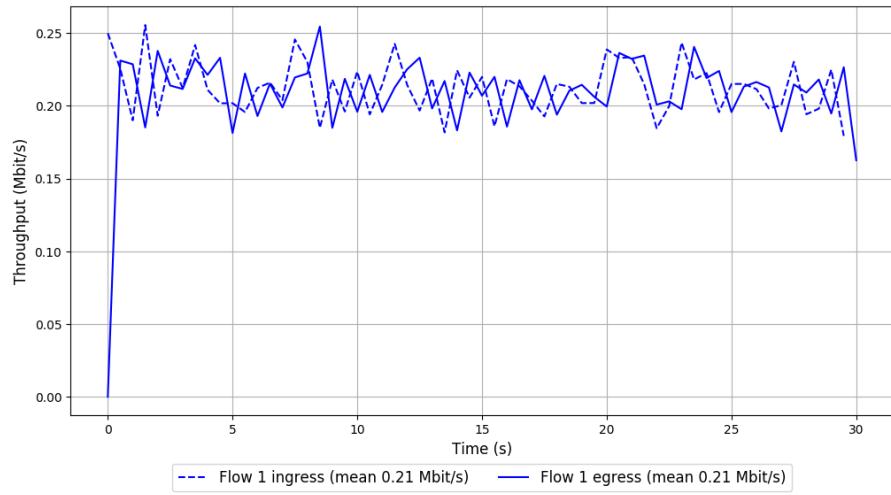


Run 4: Statistics of SCReAM

```
Start at: 2019-06-28 07:17:58
End at: 2019-06-28 07:18:28
Local clock offset: -4.132 ms
Remote clock offset: -3.361 ms

# Below is generated by plot.py at 2019-06-28 08:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.537 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.537 ms
Loss rate: 0.26%
```

Run 4: Report of SCReAM — Data Link

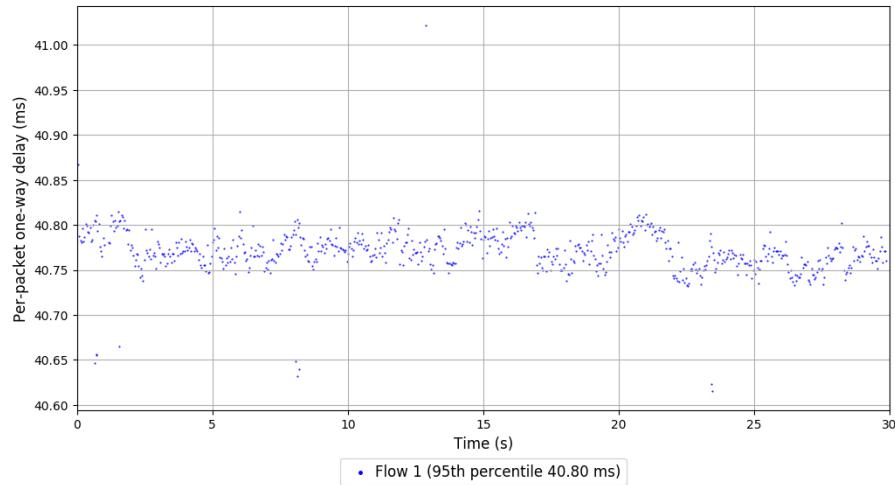
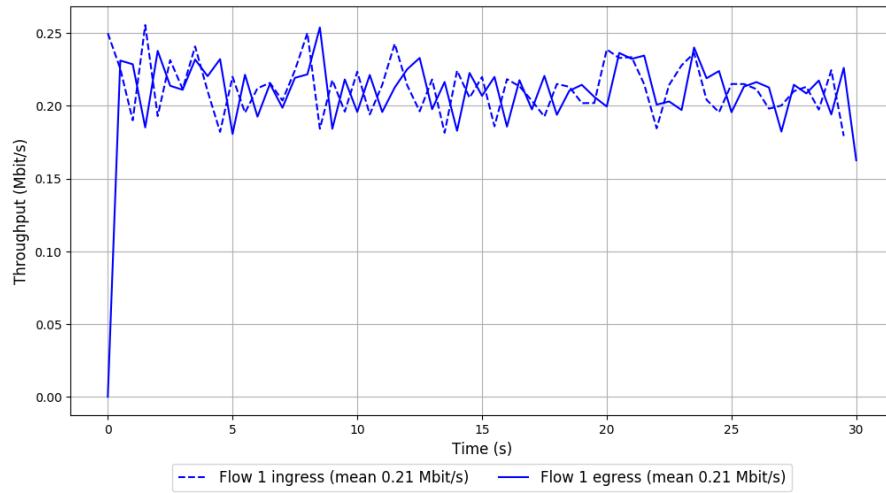


Run 5: Statistics of SCReAM

```
Start at: 2019-06-28 07:43:51
End at: 2019-06-28 07:44:21
Local clock offset: 0.352 ms
Remote clock offset: -3.103 ms

# Below is generated by plot.py at 2019-06-28 08:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.802 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.802 ms
Loss rate: 0.26%
```

Run 5: Report of SCReAM — Data Link

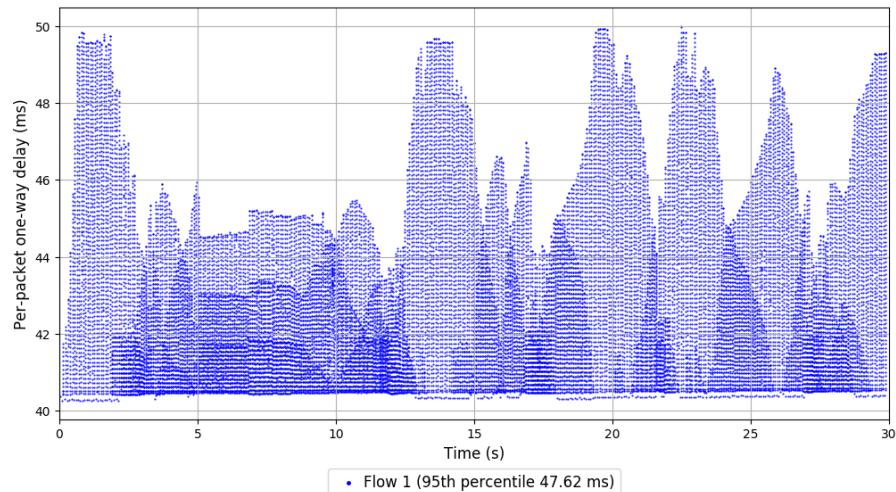
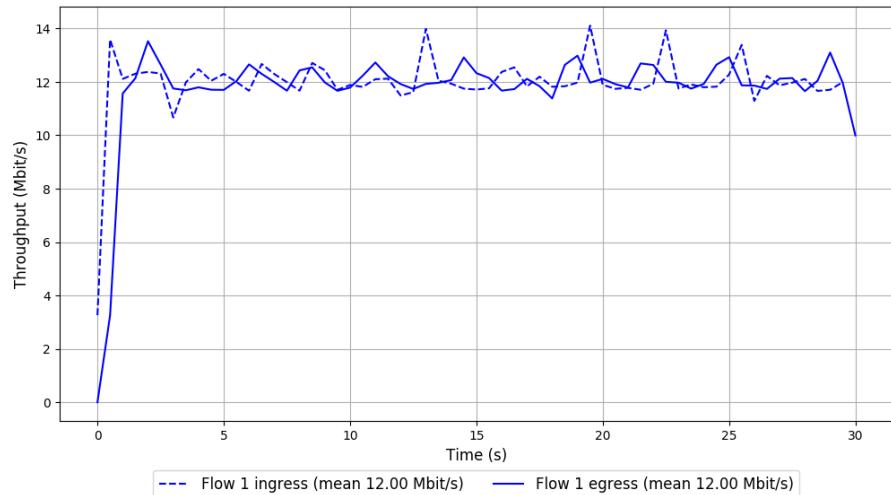


Run 1: Statistics of Sprout

```
Start at: 2019-06-28 06:11:47
End at: 2019-06-28 06:12:17
Local clock offset: -0.903 ms
Remote clock offset: -4.117 ms

# Below is generated by plot.py at 2019-06-28 08:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 47.617 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 47.617 ms
Loss rate: 0.28%
```

Run 1: Report of Sprout — Data Link

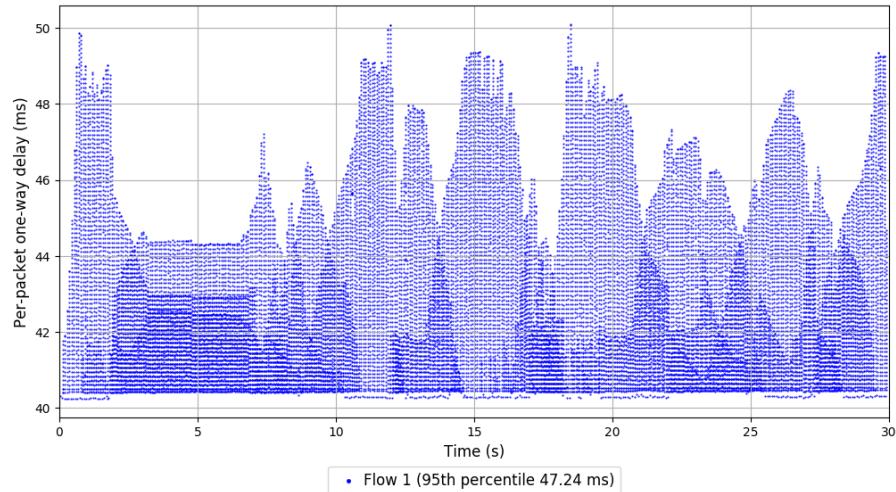
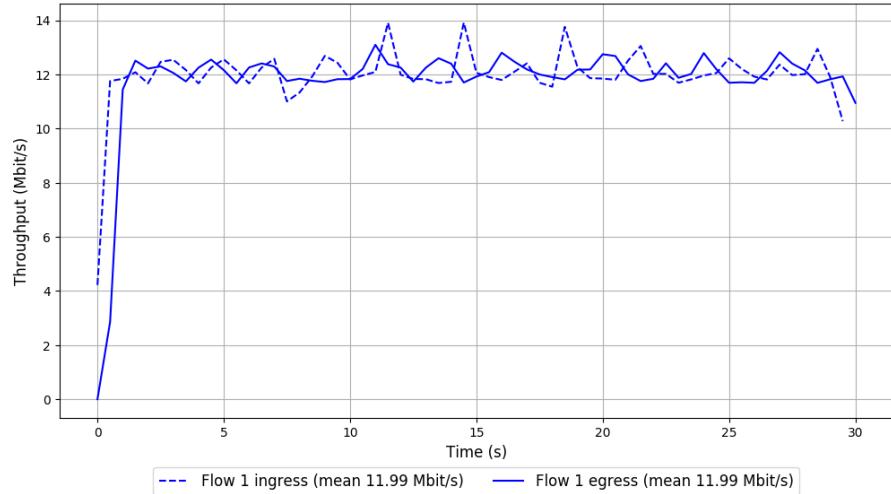


Run 2: Statistics of Sprout

```
Start at: 2019-06-28 06:37:51
End at: 2019-06-28 06:38:21
Local clock offset: -3.964 ms
Remote clock offset: -3.489 ms

# Below is generated by plot.py at 2019-06-28 08:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 47.242 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 47.242 ms
Loss rate: 0.18%
```

## Run 2: Report of Sprout — Data Link

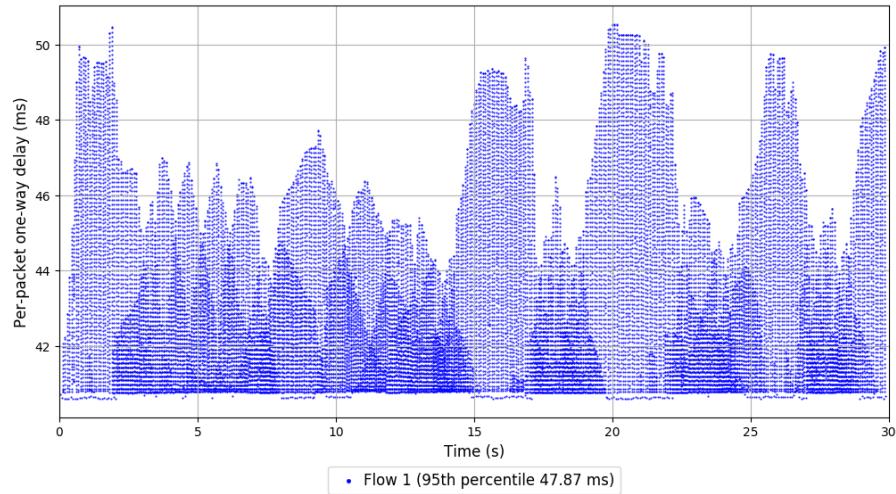
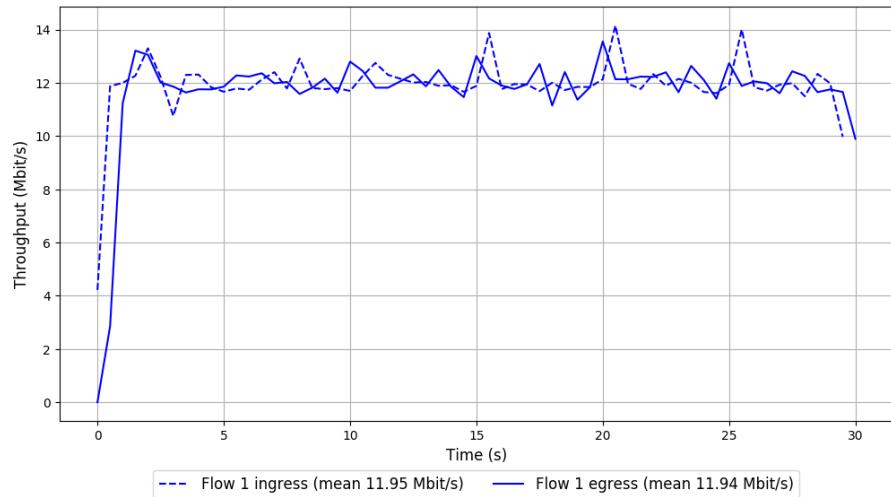


Run 3: Statistics of Sprout

```
Start at: 2019-06-28 07:03:55
End at: 2019-06-28 07:04:25
Local clock offset: -3.754 ms
Remote clock offset: -3.516 ms

# Below is generated by plot.py at 2019-06-28 08:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 47.872 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 47.872 ms
Loss rate: 0.28%
```

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

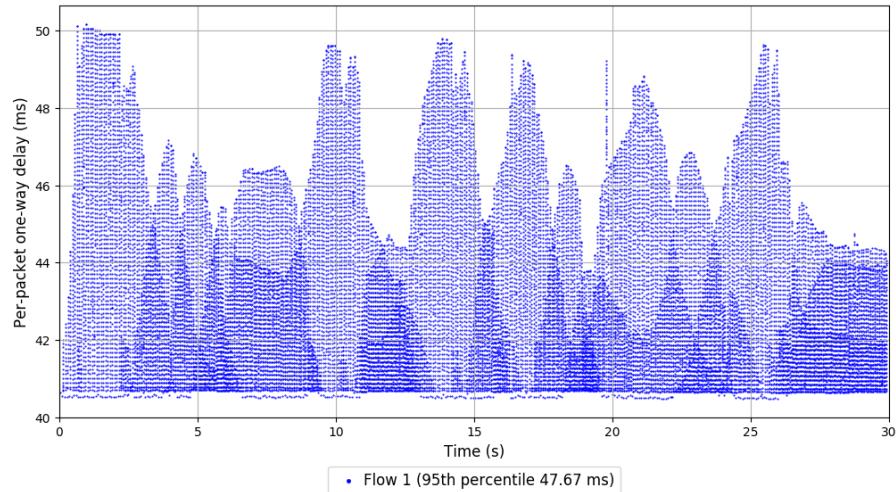
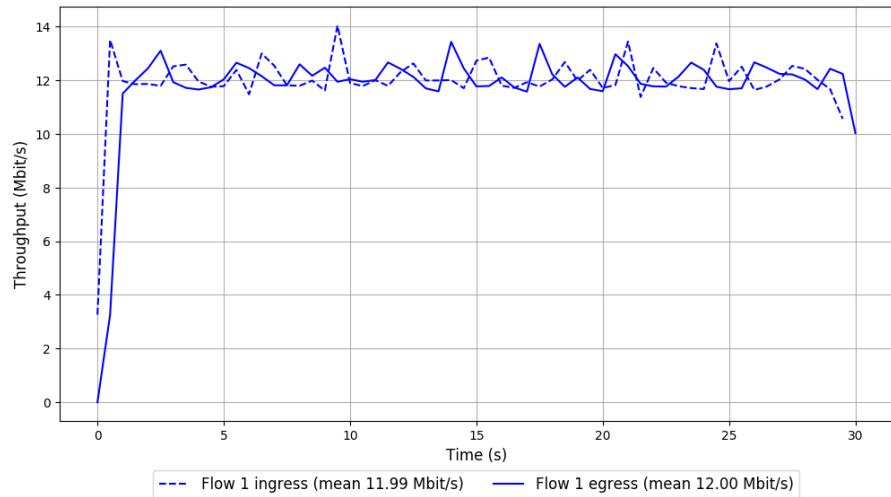


Run 4: Statistics of Sprout

```
Start at: 2019-06-28 07:29:47
End at: 2019-06-28 07:30:17
Local clock offset: -0.726 ms
Remote clock offset: -3.251 ms

# Below is generated by plot.py at 2019-06-28 08:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 47.670 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 47.670 ms
Loss rate: 0.16%
```

## Run 4: Report of Sprout — Data Link

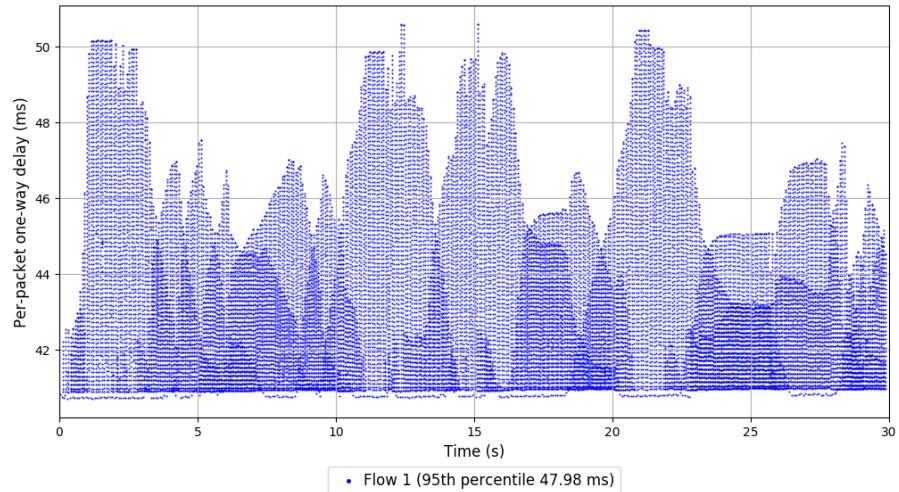
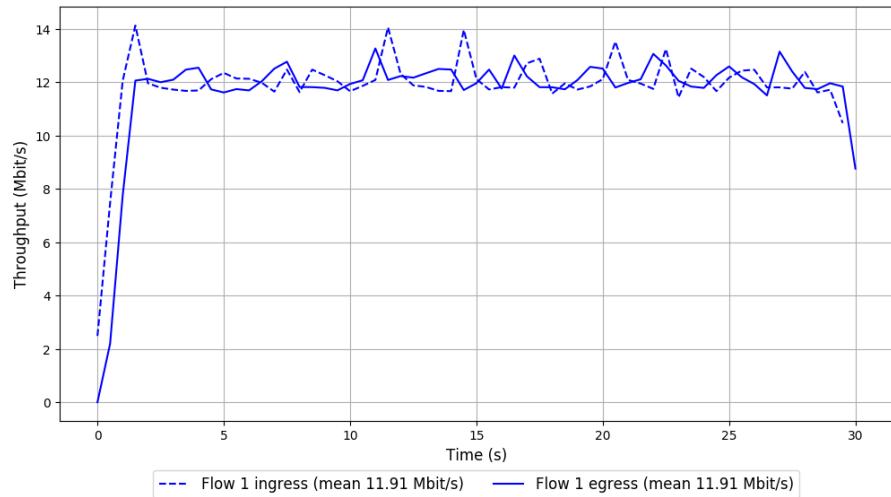


Run 5: Statistics of Sprout

```
Start at: 2019-06-28 07:55:40
End at: 2019-06-28 07:56:10
Local clock offset: -1.696 ms
Remote clock offset: -3.053 ms

# Below is generated by plot.py at 2019-06-28 08:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.91 Mbit/s
95th percentile per-packet one-way delay: 47.977 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 11.91 Mbit/s
95th percentile per-packet one-way delay: 47.977 ms
Loss rate: 0.27%
```

## Run 5: Report of Sprout — Data Link

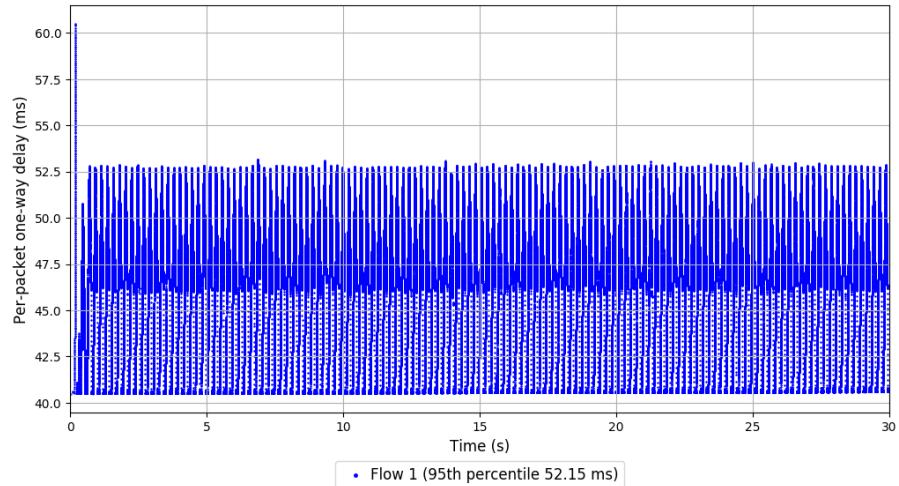
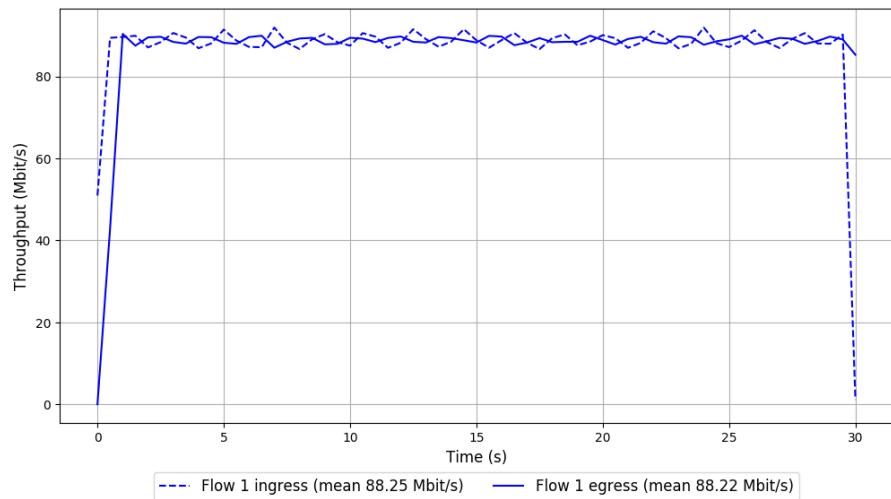


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-06-28 06:22:24
End at: 2019-06-28 06:22:54
Local clock offset: -2.276 ms
Remote clock offset: -3.634 ms

# Below is generated by plot.py at 2019-06-28 08:24:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.22 Mbit/s
95th percentile per-packet one-way delay: 52.154 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 88.22 Mbit/s
95th percentile per-packet one-way delay: 52.154 ms
Loss rate: 0.25%
```

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

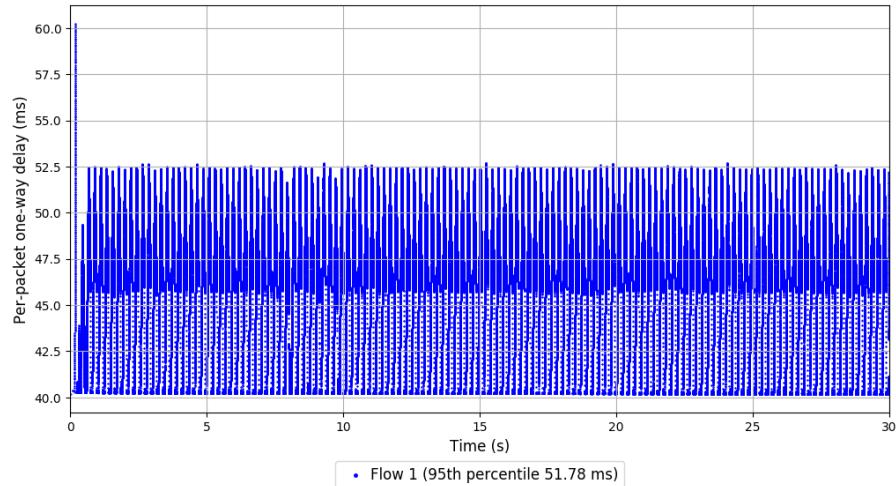
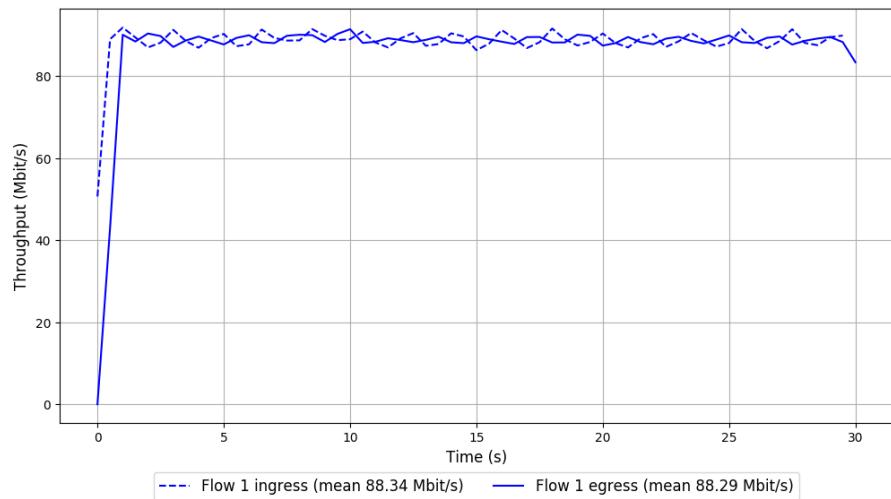


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-06-28 06:48:19
End at: 2019-06-28 06:48:50
Local clock offset: -4.758 ms
Remote clock offset: -3.434 ms

# Below is generated by plot.py at 2019-06-28 08:24:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.29 Mbit/s
95th percentile per-packet one-way delay: 51.782 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 88.29 Mbit/s
95th percentile per-packet one-way delay: 51.782 ms
Loss rate: 0.27%
```

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

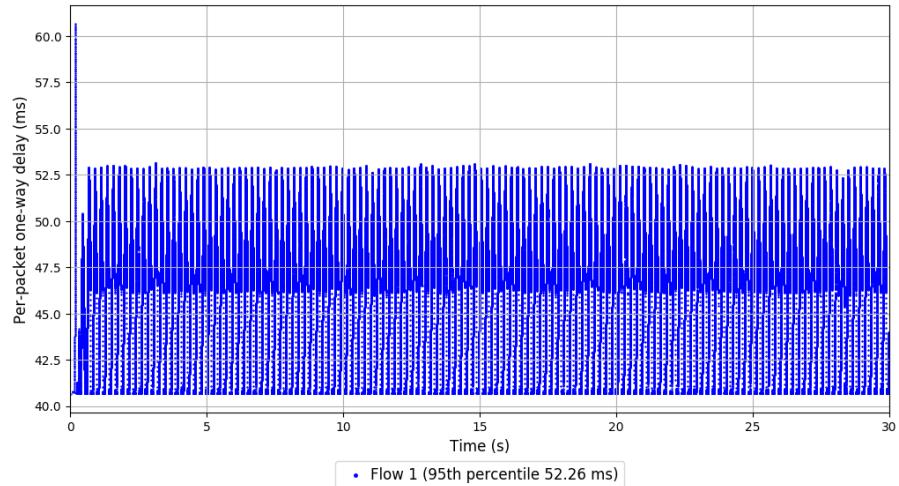
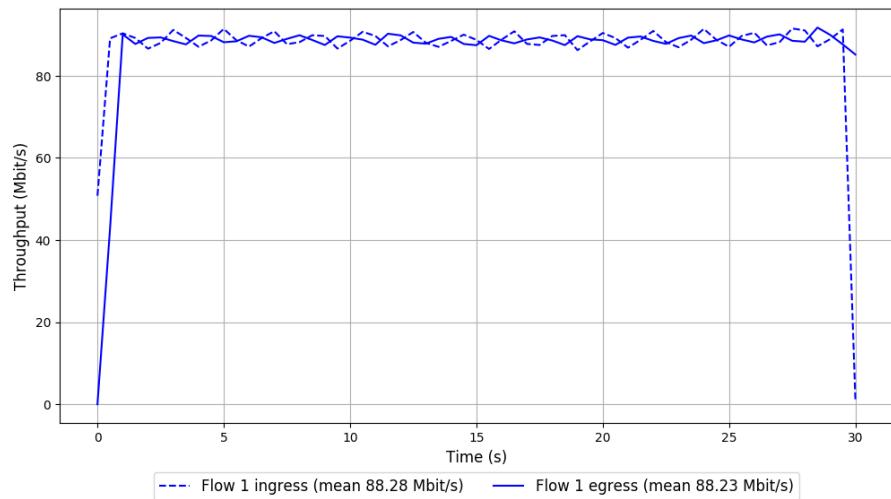


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-06-28 07:14:23
End at: 2019-06-28 07:14:53
Local clock offset: -4.0 ms
Remote clock offset: -3.386 ms

# Below is generated by plot.py at 2019-06-28 08:24:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.23 Mbit/s
95th percentile per-packet one-way delay: 52.260 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 88.23 Mbit/s
95th percentile per-packet one-way delay: 52.260 ms
Loss rate: 0.27%
```

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

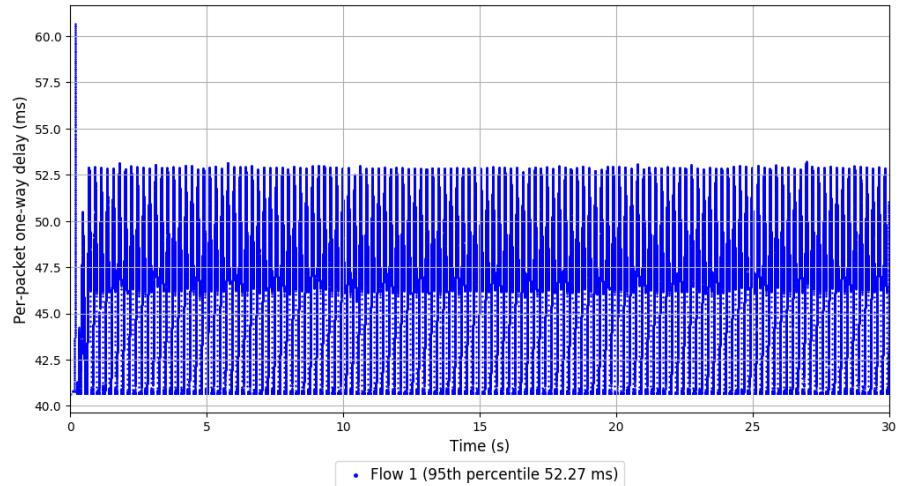
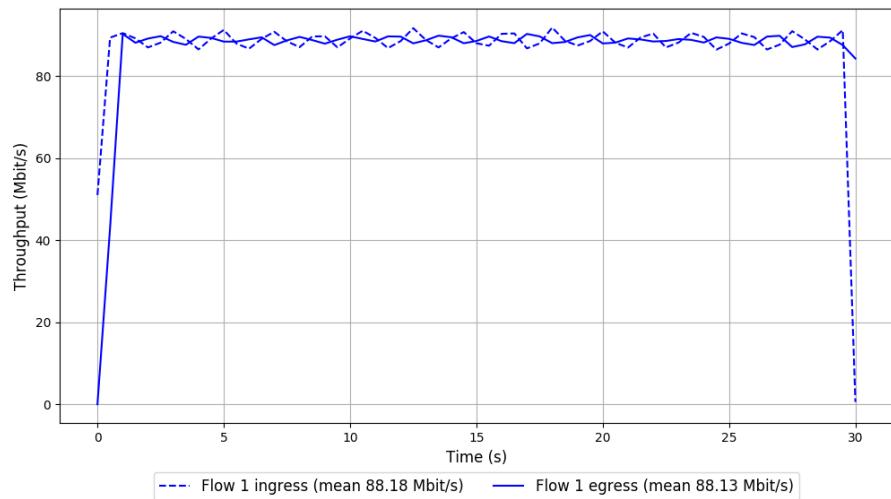


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-06-28 07:40:16
End at: 2019-06-28 07:40:46
Local clock offset: 0.164 ms
Remote clock offset: -3.171 ms

# Below is generated by plot.py at 2019-06-28 08:24:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.13 Mbit/s
95th percentile per-packet one-way delay: 52.266 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 88.13 Mbit/s
95th percentile per-packet one-way delay: 52.266 ms
Loss rate: 0.28%
```

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

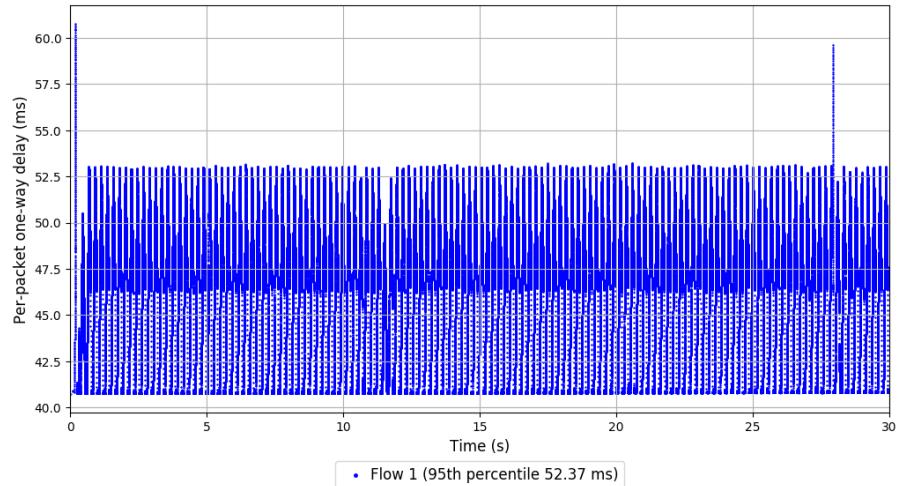
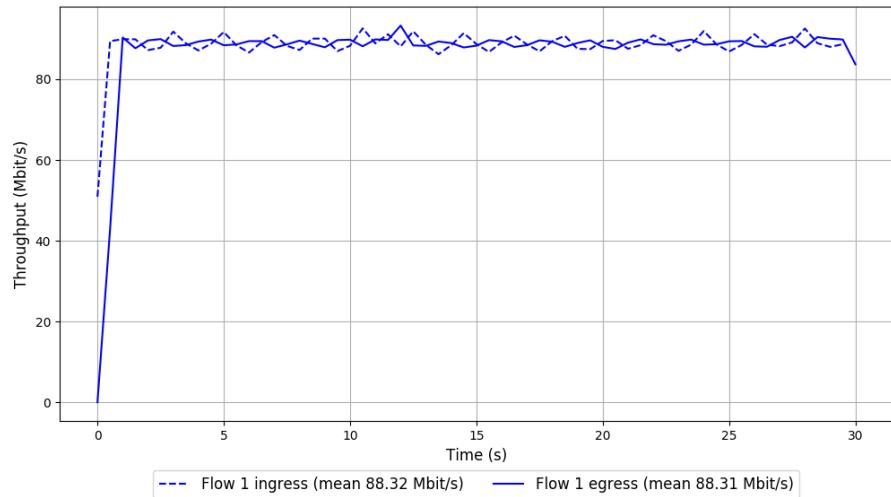


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-06-28 08:06:11
End at: 2019-06-28 08:06:41
Local clock offset: -2.938 ms
Remote clock offset: -2.964 ms

# Below is generated by plot.py at 2019-06-28 08:24:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.31 Mbit/s
95th percentile per-packet one-way delay: 52.365 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 88.31 Mbit/s
95th percentile per-packet one-way delay: 52.365 ms
Loss rate: 0.23%
```

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

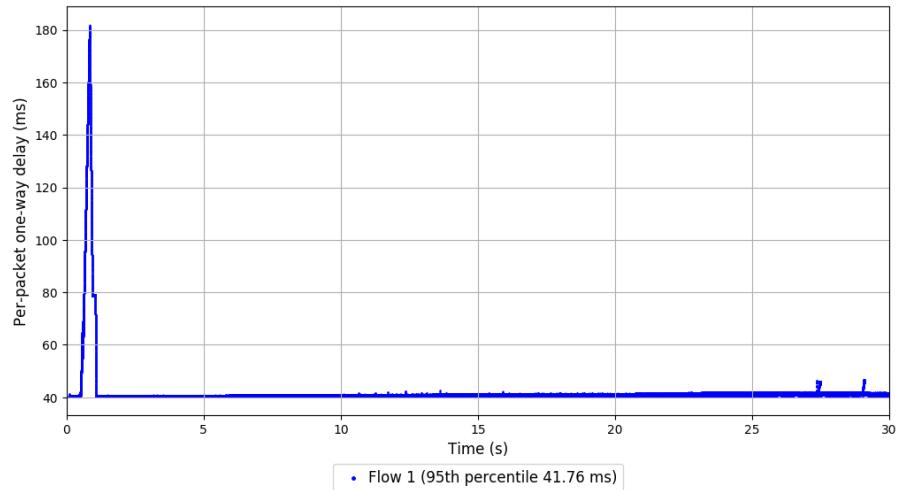
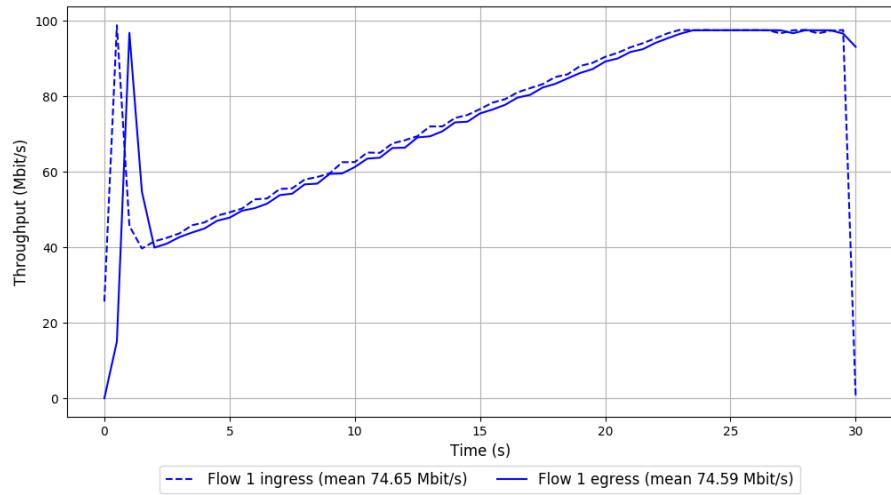


Run 1: Statistics of TCP Vegas

```
Start at: 2019-06-28 06:15:19
End at: 2019-06-28 06:15:49
Local clock offset: -1.277 ms
Remote clock offset: -3.844 ms

# Below is generated by plot.py at 2019-06-28 08:24:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.59 Mbit/s
95th percentile per-packet one-way delay: 41.757 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 74.59 Mbit/s
95th percentile per-packet one-way delay: 41.757 ms
Loss rate: 0.30%
```

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

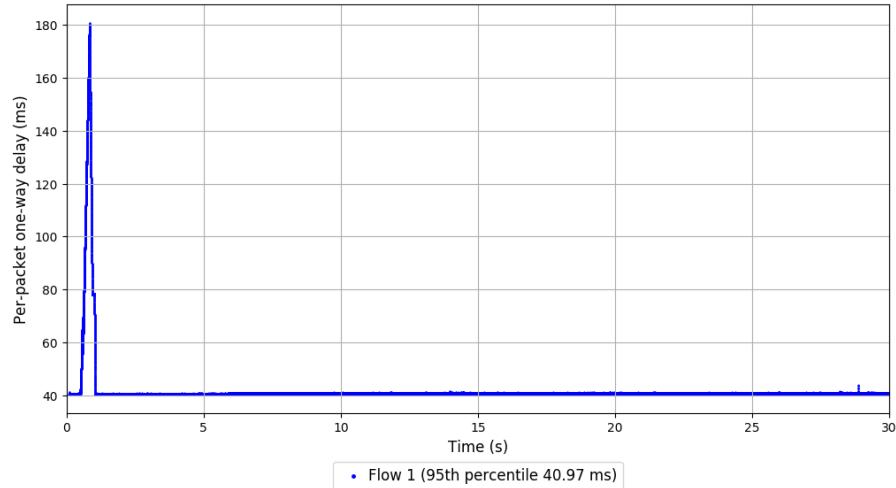
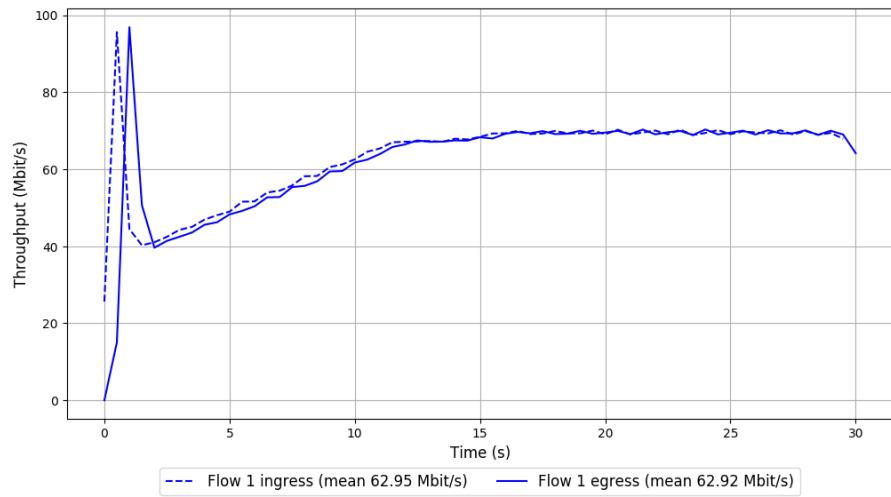


Run 2: Statistics of TCP Vegas

```
Start at: 2019-06-28 06:41:19
End at: 2019-06-28 06:41:49
Local clock offset: -4.293 ms
Remote clock offset: -3.547 ms

# Below is generated by plot.py at 2019-06-28 08:24:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.92 Mbit/s
95th percentile per-packet one-way delay: 40.967 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 62.92 Mbit/s
95th percentile per-packet one-way delay: 40.967 ms
Loss rate: 0.25%
```

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

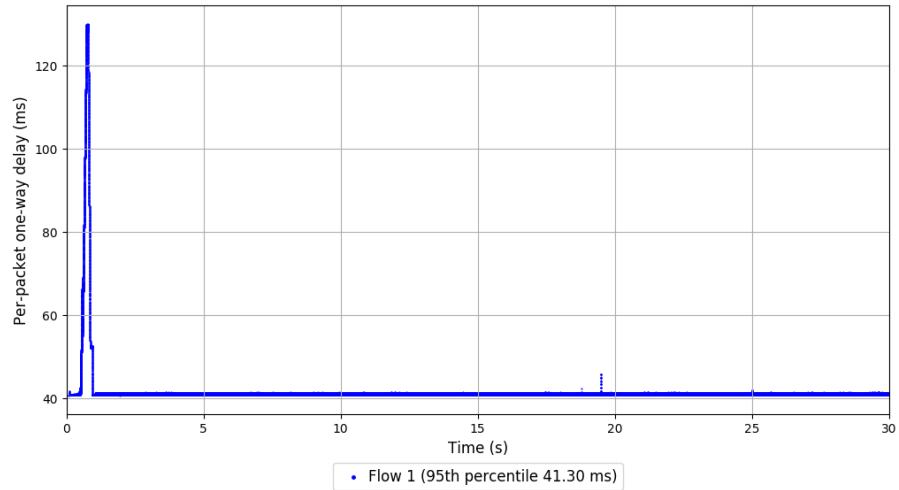
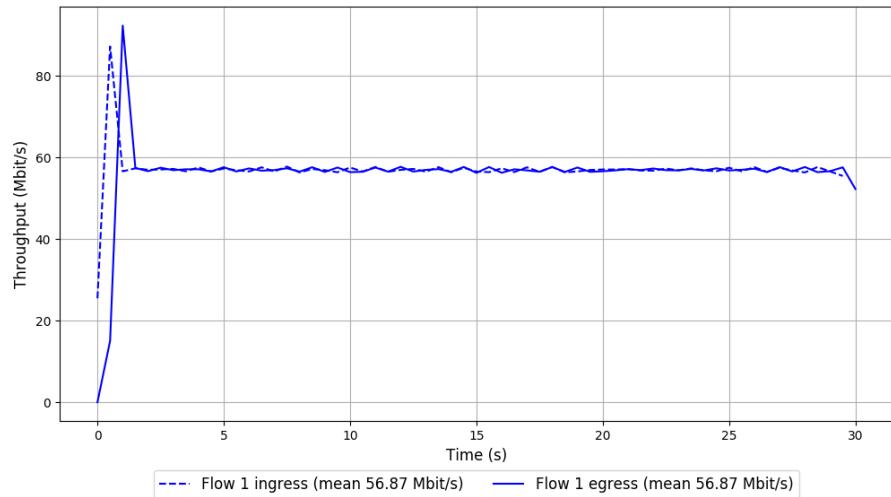


Run 3: Statistics of TCP Vegas

```
Start at: 2019-06-28 07:07:23
End at: 2019-06-28 07:07:53
Local clock offset: -3.79 ms
Remote clock offset: -3.502 ms

# Below is generated by plot.py at 2019-06-28 08:24:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.87 Mbit/s
95th percentile per-packet one-way delay: 41.302 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 56.87 Mbit/s
95th percentile per-packet one-way delay: 41.302 ms
Loss rate: 0.22%
```

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

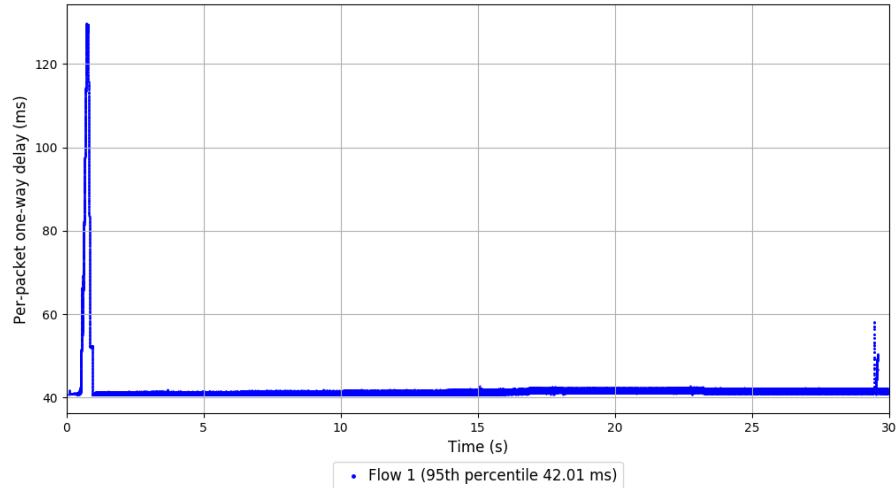
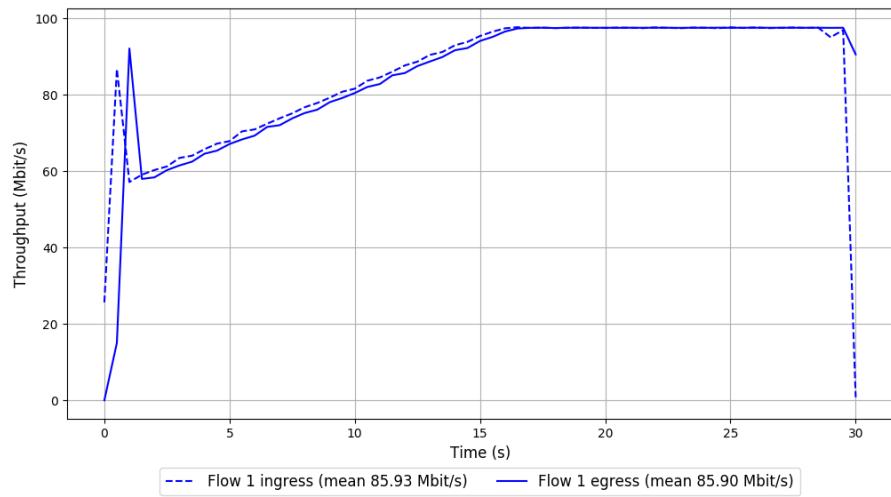


Run 4: Statistics of TCP Vegas

```
Start at: 2019-06-28 07:33:15
End at: 2019-06-28 07:33:45
Local clock offset: -0.329 ms
Remote clock offset: -3.166 ms

# Below is generated by plot.py at 2019-06-28 08:24:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.90 Mbit/s
95th percentile per-packet one-way delay: 42.013 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 85.90 Mbit/s
95th percentile per-packet one-way delay: 42.013 ms
Loss rate: 0.25%
```

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

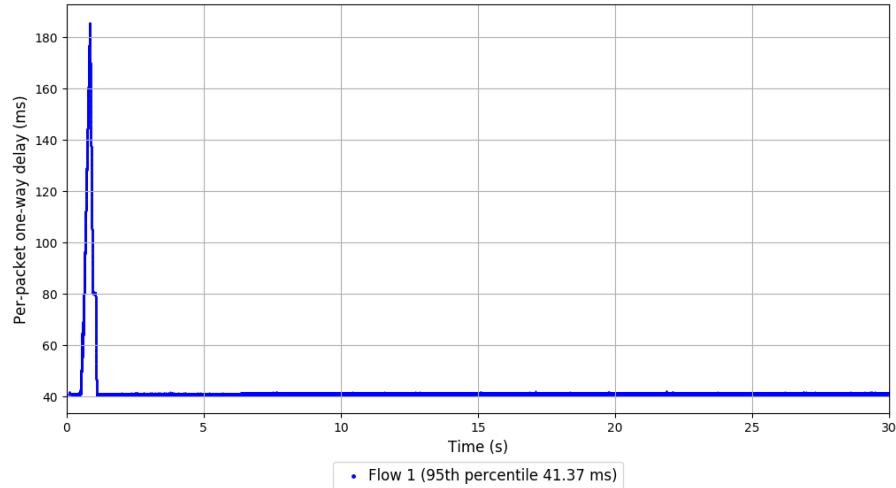
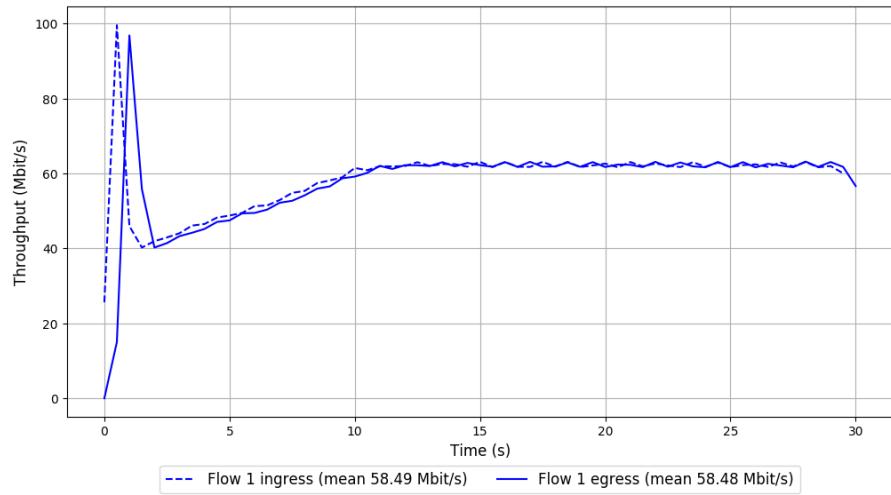


Run 5: Statistics of TCP Vegas

```
Start at: 2019-06-28 07:59:09
End at: 2019-06-28 07:59:39
Local clock offset: -2.277 ms
Remote clock offset: -3.031 ms

# Below is generated by plot.py at 2019-06-28 08:24:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.48 Mbit/s
95th percentile per-packet one-way delay: 41.369 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 58.48 Mbit/s
95th percentile per-packet one-way delay: 41.369 ms
Loss rate: 0.24%
```

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

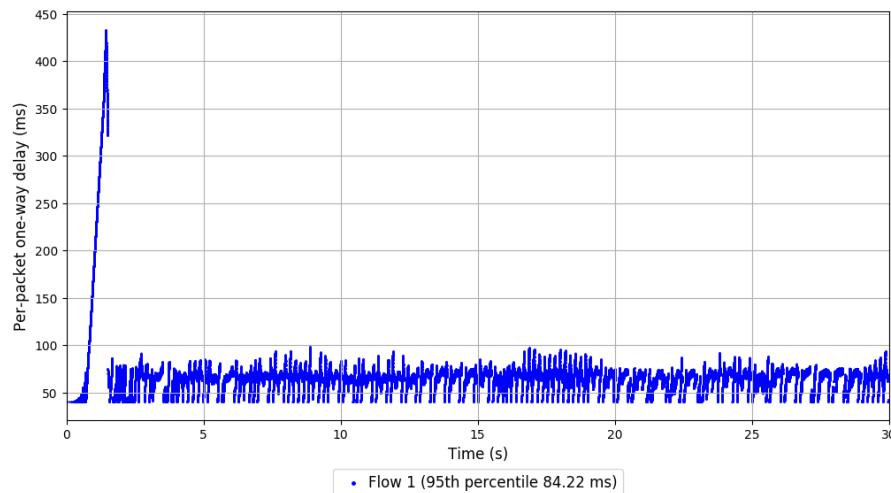
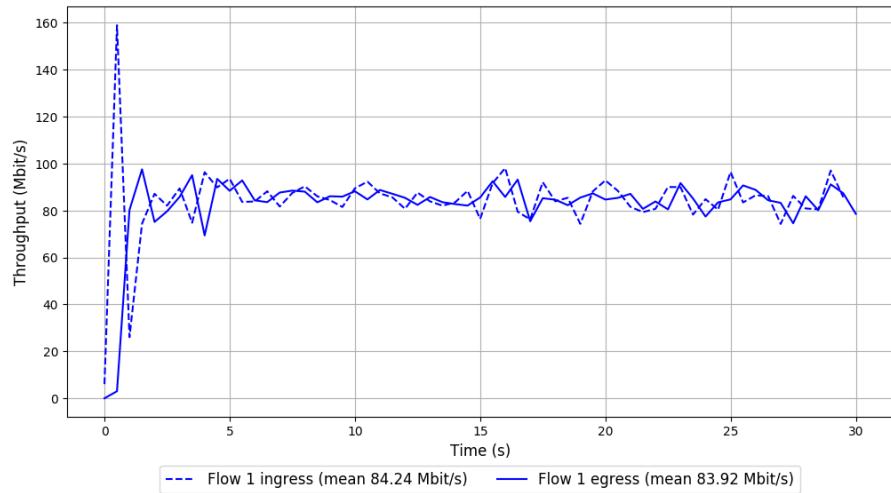


Run 1: Statistics of Verus

```
Start at: 2019-06-28 06:16:30
End at: 2019-06-28 06:17:00
Local clock offset: -1.396 ms
Remote clock offset: -3.841 ms

# Below is generated by plot.py at 2019-06-28 08:24:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.92 Mbit/s
95th percentile per-packet one-way delay: 84.218 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 83.92 Mbit/s
95th percentile per-packet one-way delay: 84.218 ms
Loss rate: 0.59%
```

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

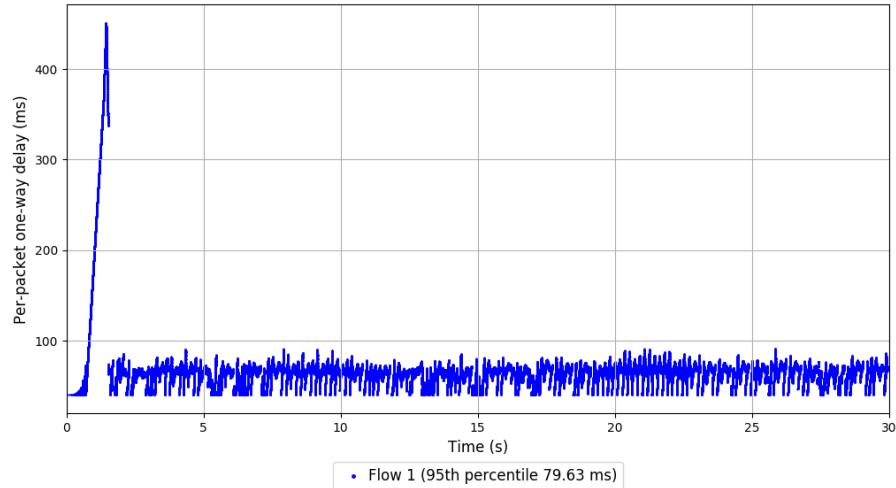
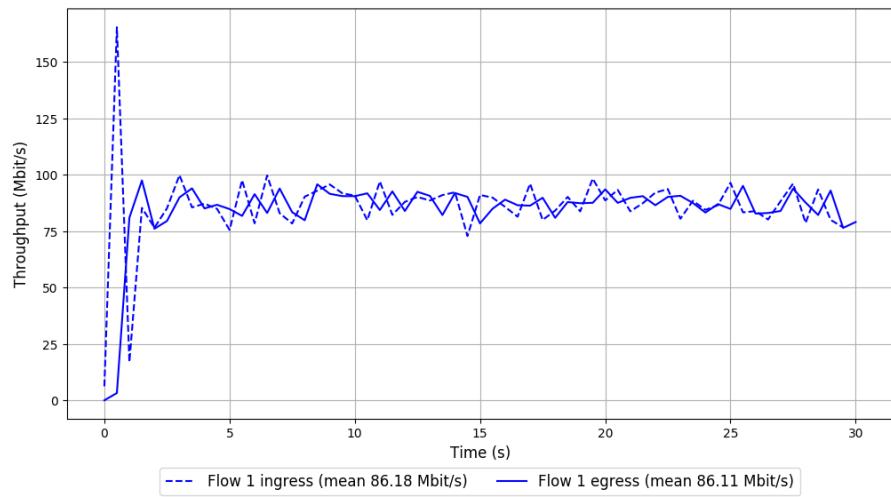


Run 2: Statistics of Verus

```
Start at: 2019-06-28 06:42:29
End at: 2019-06-28 06:42:59
Local clock offset: -4.39 ms
Remote clock offset: -3.578 ms

# Below is generated by plot.py at 2019-06-28 08:25:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.11 Mbit/s
95th percentile per-packet one-way delay: 79.632 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 86.11 Mbit/s
95th percentile per-packet one-way delay: 79.632 ms
Loss rate: 0.36%
```

## Run 2: Report of Verus — Data Link

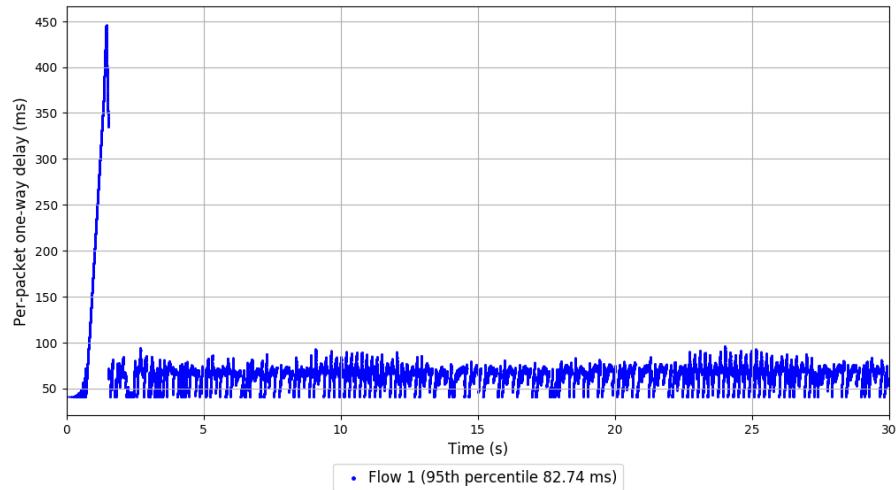
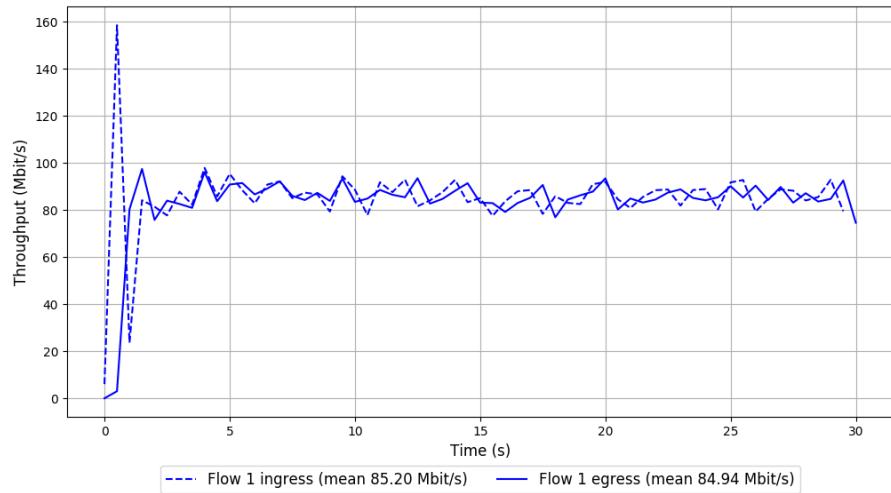


Run 3: Statistics of Verus

```
Start at: 2019-06-28 07:08:32
End at: 2019-06-28 07:09:02
Local clock offset: -3.801 ms
Remote clock offset: -3.466 ms

# Below is generated by plot.py at 2019-06-28 08:25:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.94 Mbit/s
95th percentile per-packet one-way delay: 82.738 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 84.94 Mbit/s
95th percentile per-packet one-way delay: 82.738 ms
Loss rate: 0.51%
```

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

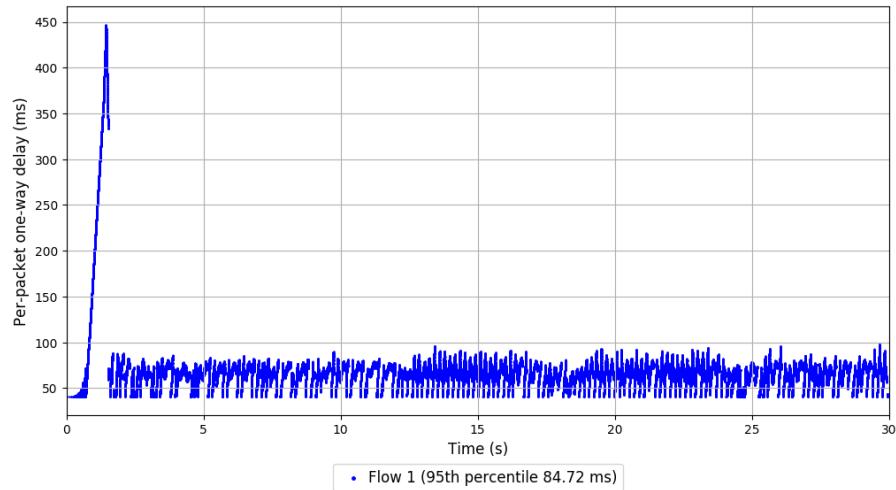
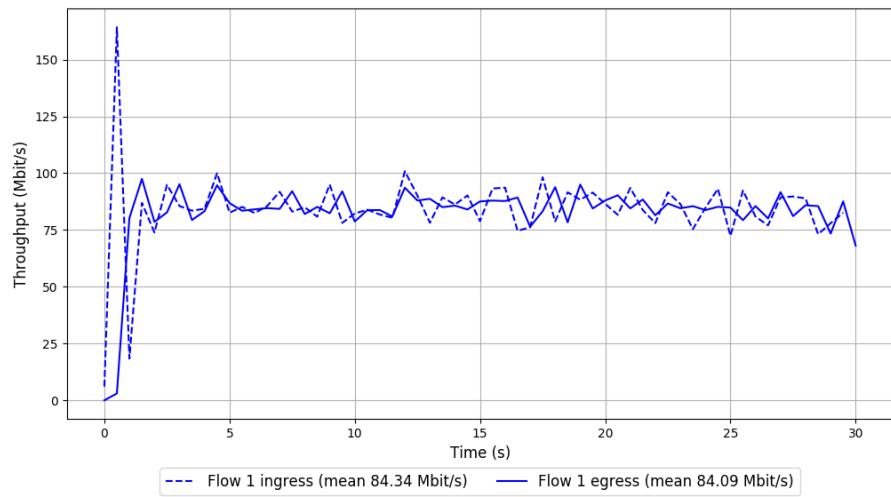


Run 4: Statistics of Verus

```
Start at: 2019-06-28 07:34:26
End at: 2019-06-28 07:34:56
Local clock offset: -0.206 ms
Remote clock offset: -3.146 ms

# Below is generated by plot.py at 2019-06-28 08:25:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.09 Mbit/s
95th percentile per-packet one-way delay: 84.724 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 84.09 Mbit/s
95th percentile per-packet one-way delay: 84.724 ms
Loss rate: 0.51%
```

Run 4: Report of Verus — Data Link

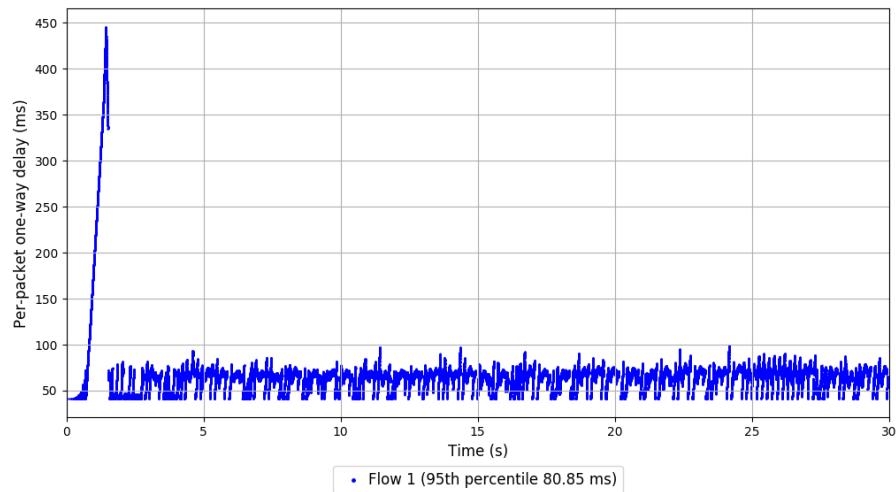
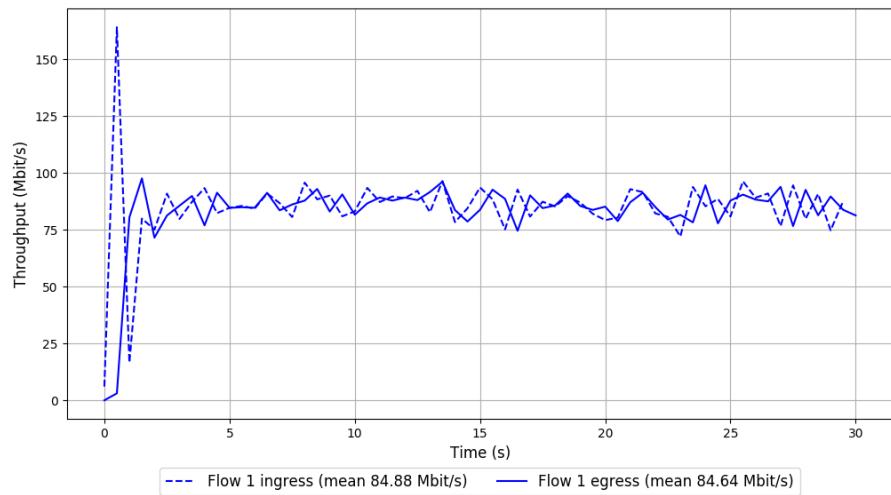


Run 5: Statistics of Verus

```
Start at: 2019-06-28 08:00:18
End at: 2019-06-28 08:00:48
Local clock offset: -2.366 ms
Remote clock offset: -3.048 ms

# Below is generated by plot.py at 2019-06-28 08:25:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.64 Mbit/s
95th percentile per-packet one-way delay: 80.854 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 84.64 Mbit/s
95th percentile per-packet one-way delay: 80.854 ms
Loss rate: 0.34%
```

Run 5: Report of Verus — Data Link

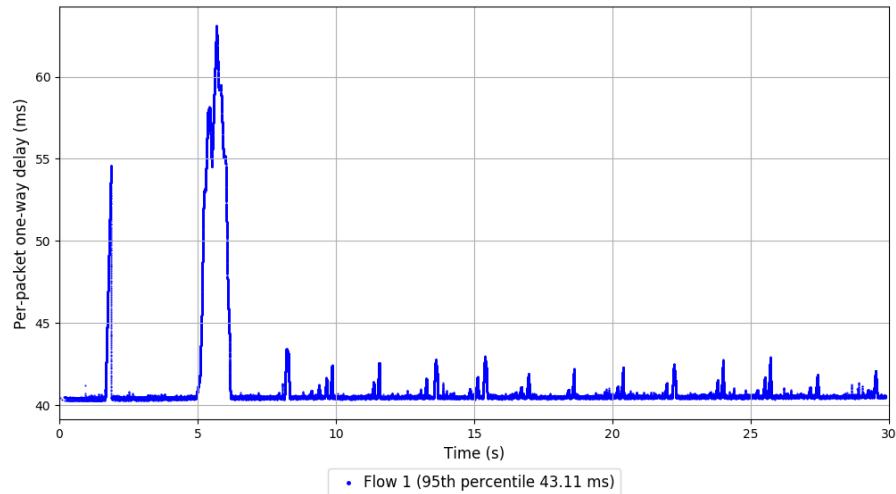
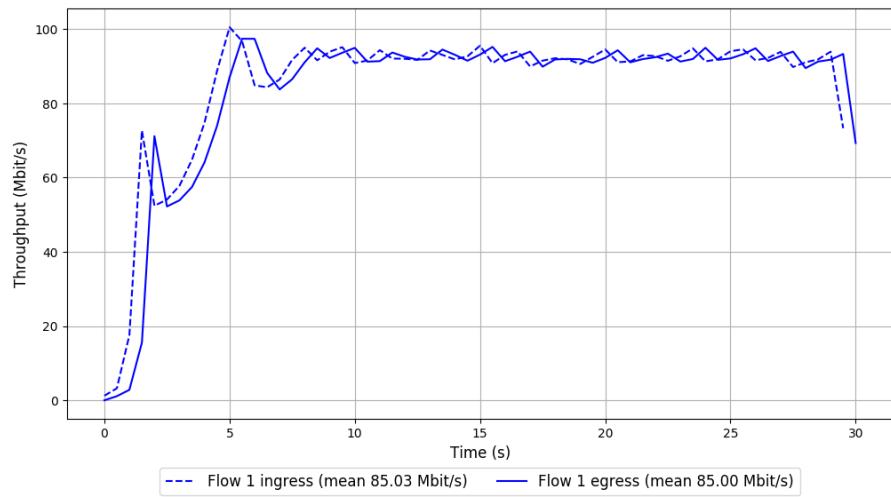


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-06-28 06:09:12
End at: 2019-06-28 06:09:42
Local clock offset: -0.591 ms
Remote clock offset: -4.203 ms

# Below is generated by plot.py at 2019-06-28 08:25:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.00 Mbit/s
95th percentile per-packet one-way delay: 43.107 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 85.00 Mbit/s
95th percentile per-packet one-way delay: 43.107 ms
Loss rate: 0.25%
```

Run 1: Report of PCC-Vivace — Data Link

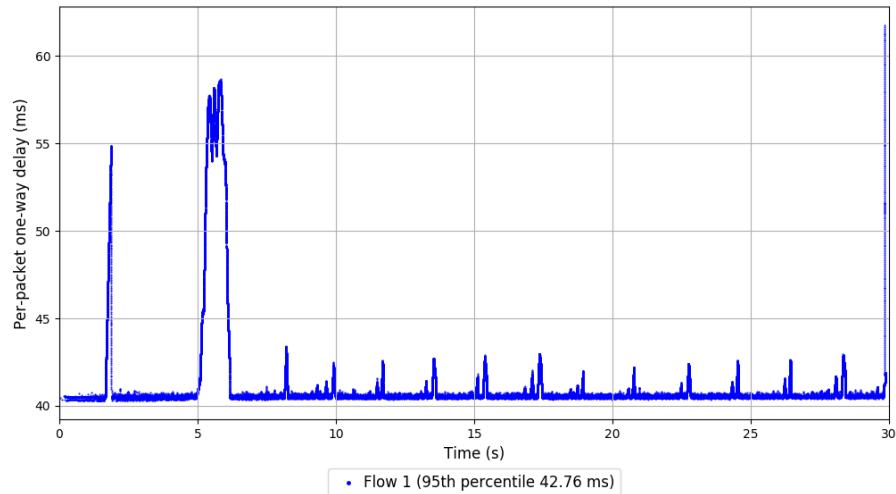
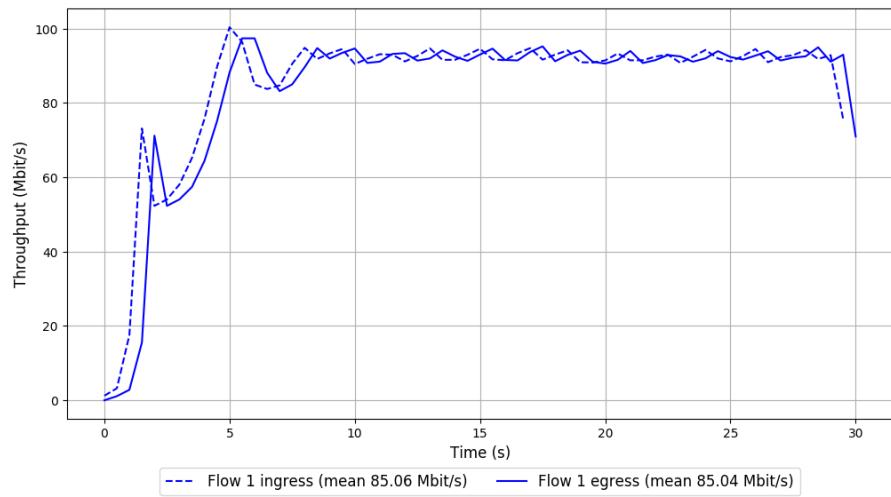


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-06-28 06:35:25
End at: 2019-06-28 06:35:55
Local clock offset: -3.722 ms
Remote clock offset: -3.522 ms

# Below is generated by plot.py at 2019-06-28 08:25:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.04 Mbit/s
95th percentile per-packet one-way delay: 42.759 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 85.04 Mbit/s
95th percentile per-packet one-way delay: 42.759 ms
Loss rate: 0.25%
```

Run 2: Report of PCC-Vivace — Data Link

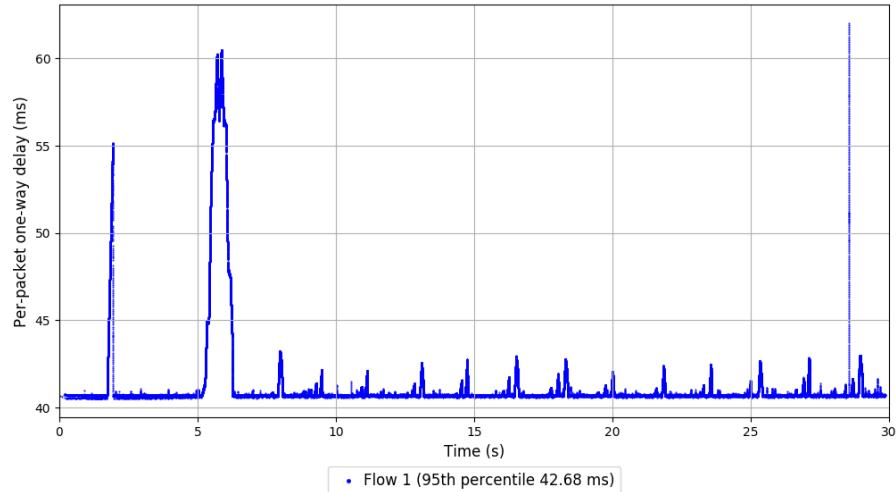
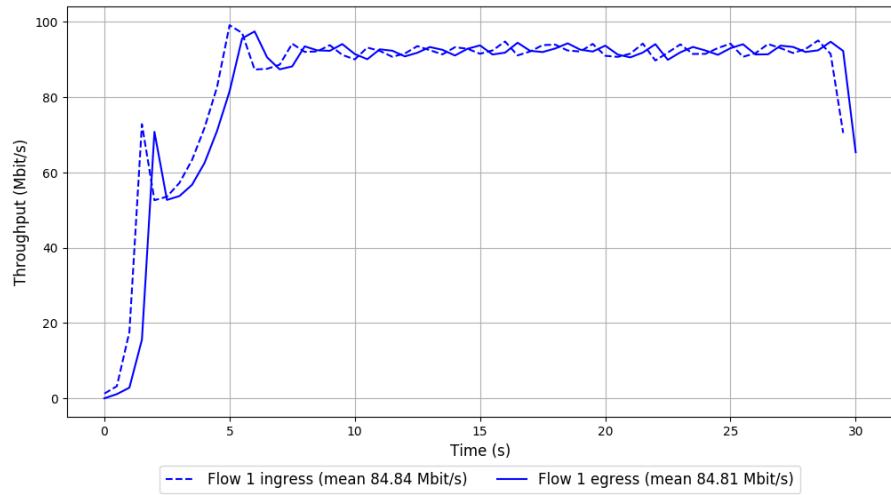


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-06-28 07:01:30
End at: 2019-06-28 07:02:00
Local clock offset: -3.77 ms
Remote clock offset: -3.521 ms

# Below is generated by plot.py at 2019-06-28 08:25:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.81 Mbit/s
95th percentile per-packet one-way delay: 42.684 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 84.81 Mbit/s
95th percentile per-packet one-way delay: 42.684 ms
Loss rate: 0.25%
```

Run 3: Report of PCC-Vivace — Data Link

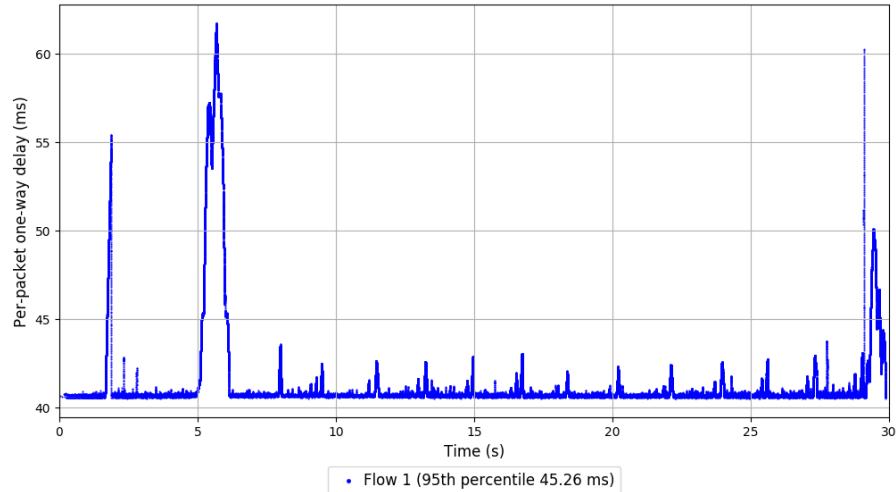
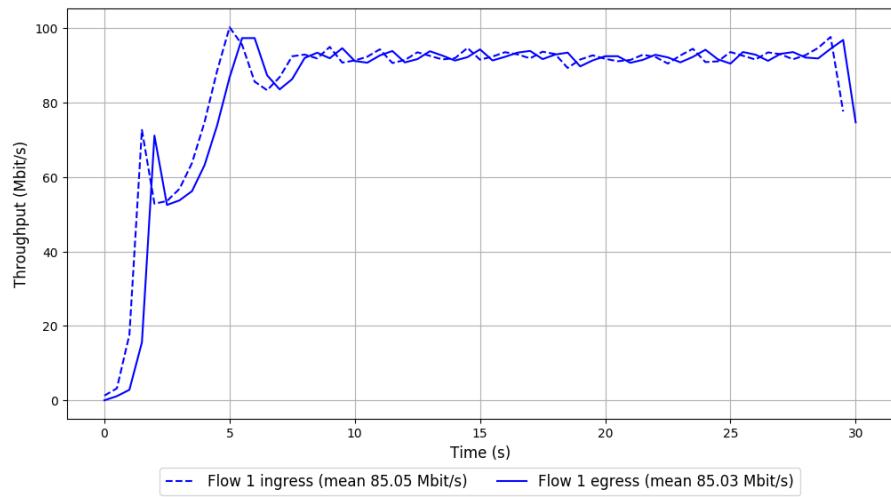


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-06-28 07:27:22
End at: 2019-06-28 07:27:52
Local clock offset: -1.105 ms
Remote clock offset: -3.268 ms

# Below is generated by plot.py at 2019-06-28 08:25:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.03 Mbit/s
95th percentile per-packet one-way delay: 45.257 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 85.03 Mbit/s
95th percentile per-packet one-way delay: 45.257 ms
Loss rate: 0.24%
```

Run 4: Report of PCC-Vivace — Data Link

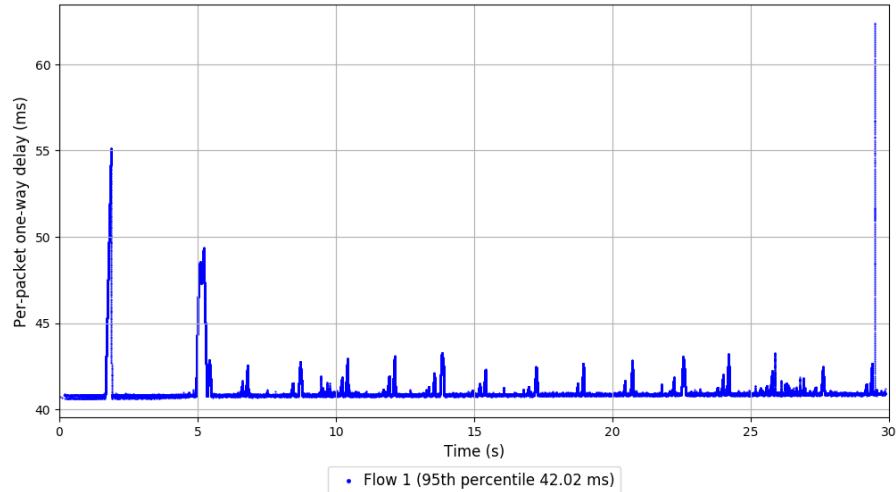
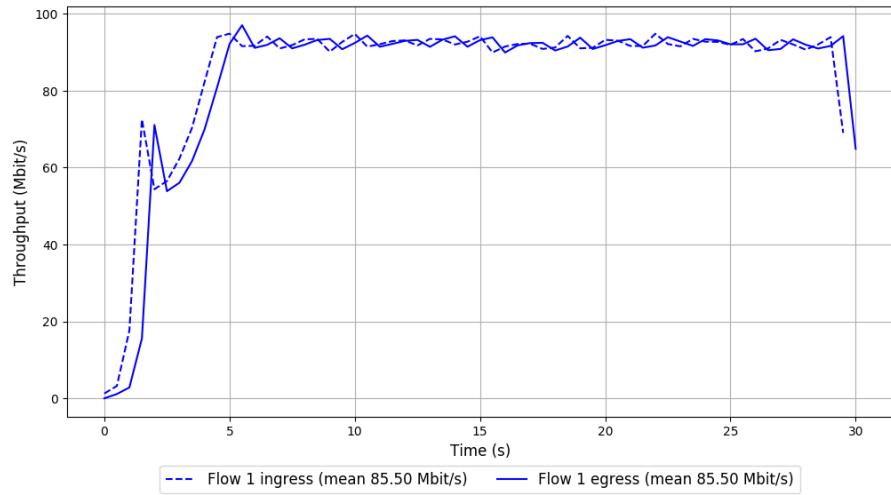


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-06-28 07:53:15
End at: 2019-06-28 07:53:45
Local clock offset: -1.188 ms
Remote clock offset: -3.054 ms

# Below is generated by plot.py at 2019-06-28 08:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.50 Mbit/s
95th percentile per-packet one-way delay: 42.021 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 85.50 Mbit/s
95th percentile per-packet one-way delay: 42.021 ms
Loss rate: 0.22%
```

Run 5: Report of PCC-Vivace — Data Link

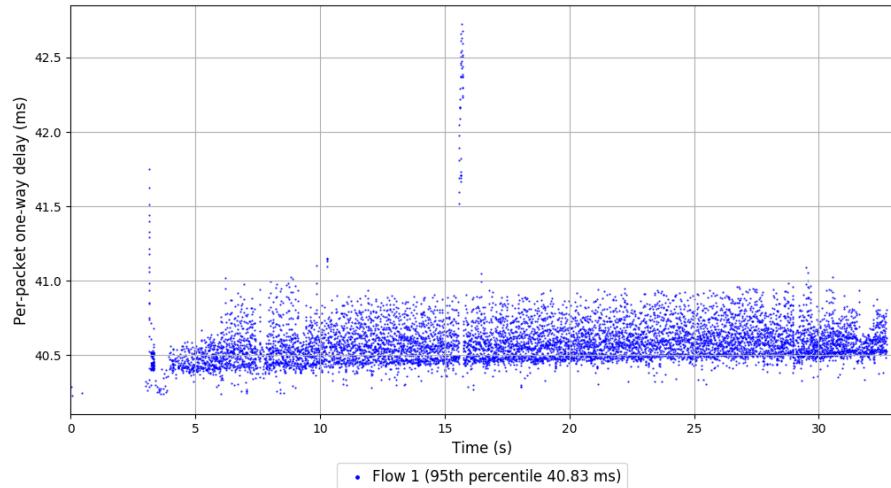
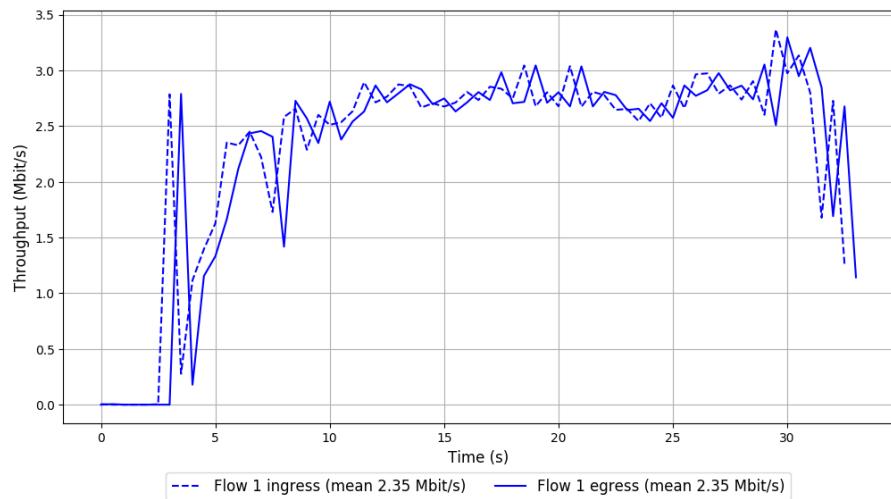


```
Run 1: Statistics of WebRTC media

Start at: 2019-06-28 06:20:06
End at: 2019-06-28 06:20:36
Local clock offset: -1.934 ms
Remote clock offset: -3.683 ms

# Below is generated by plot.py at 2019-06-28 08:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 40.828 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 40.828 ms
Loss rate: 0.20%
```

Run 1: Report of WebRTC media — Data Link

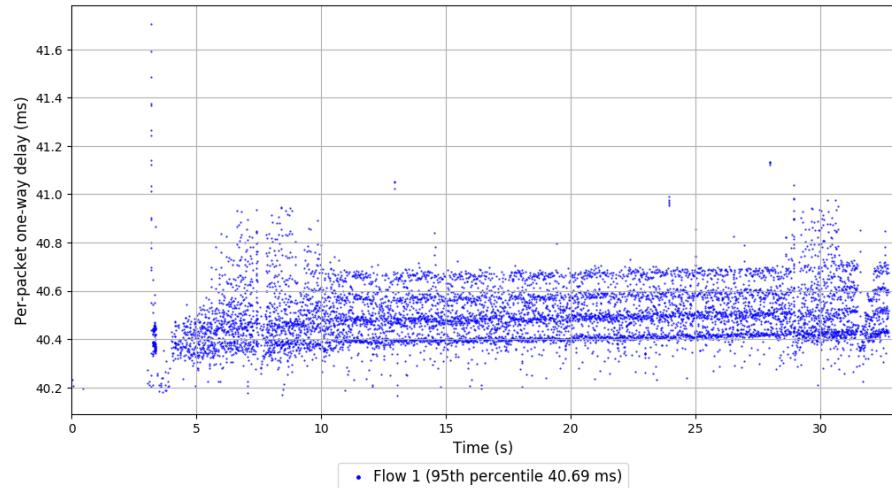
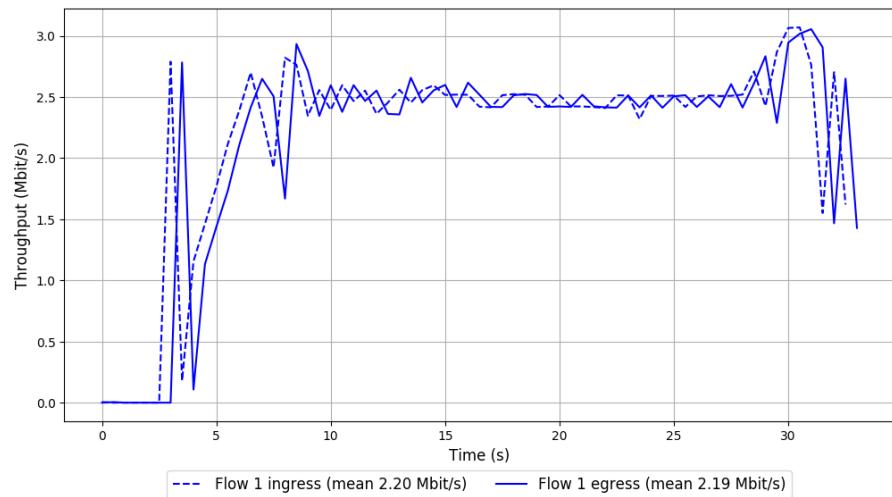


Run 2: Statistics of WebRTC media

```
Start at: 2019-06-28 06:46:01
End at: 2019-06-28 06:46:31
Local clock offset: -4.686 ms
Remote clock offset: -3.49 ms

# Below is generated by plot.py at 2019-06-28 08:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 40.691 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 40.691 ms
Loss rate: 0.27%
```

Run 2: Report of WebRTC media — Data Link

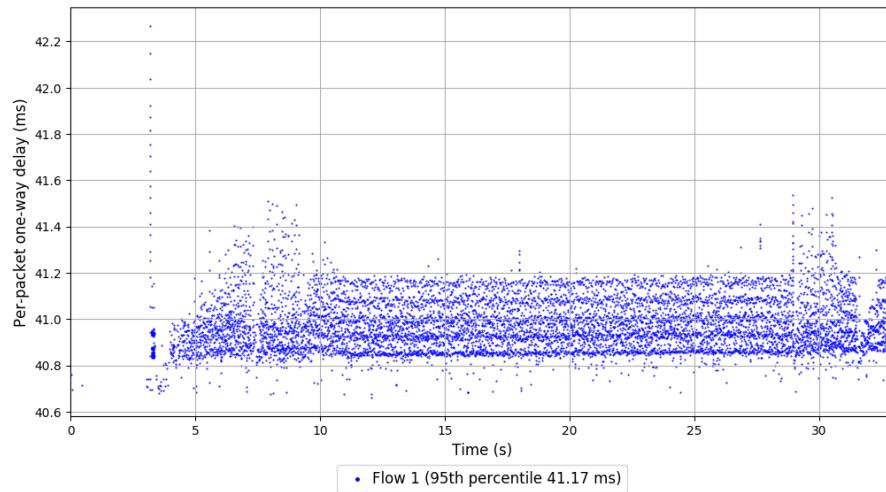
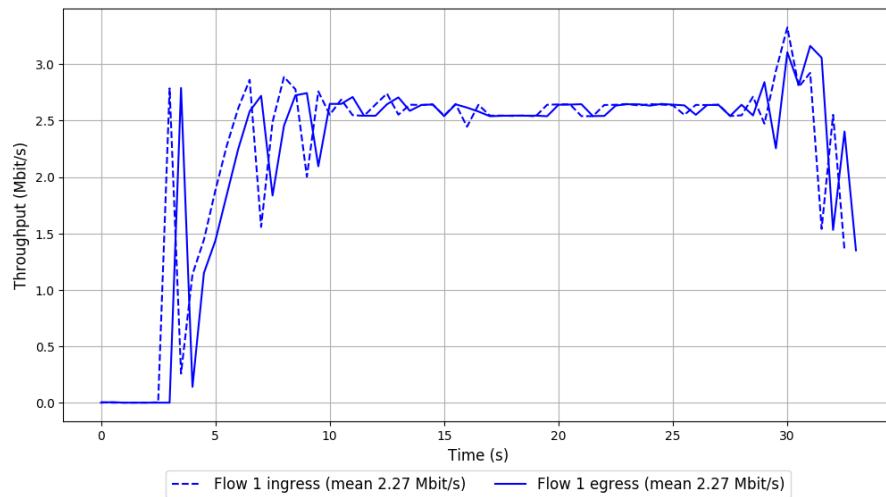


```
Run 3: Statistics of WebRTC media

Start at: 2019-06-28 07:12:05
End at: 2019-06-28 07:12:35
Local clock offset: -3.92 ms
Remote clock offset: -3.426 ms

# Below is generated by plot.py at 2019-06-28 08:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 41.172 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 41.172 ms
Loss rate: 0.20%
```

Run 3: Report of WebRTC media — Data Link

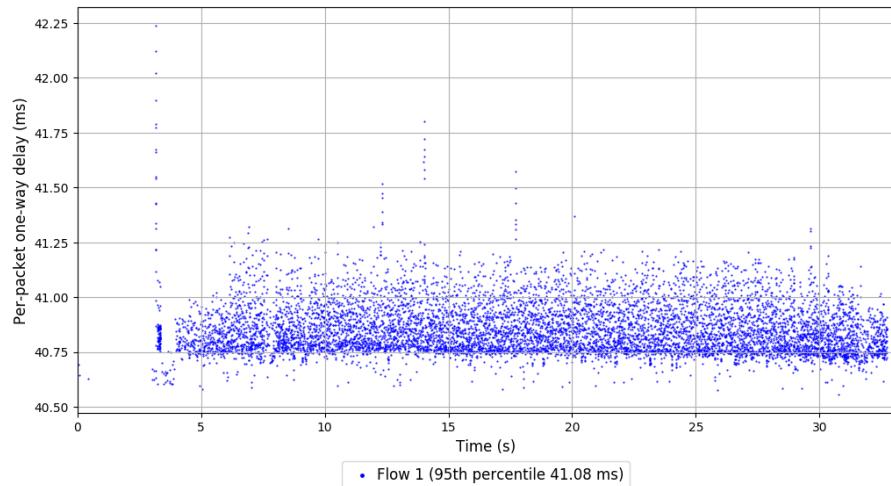
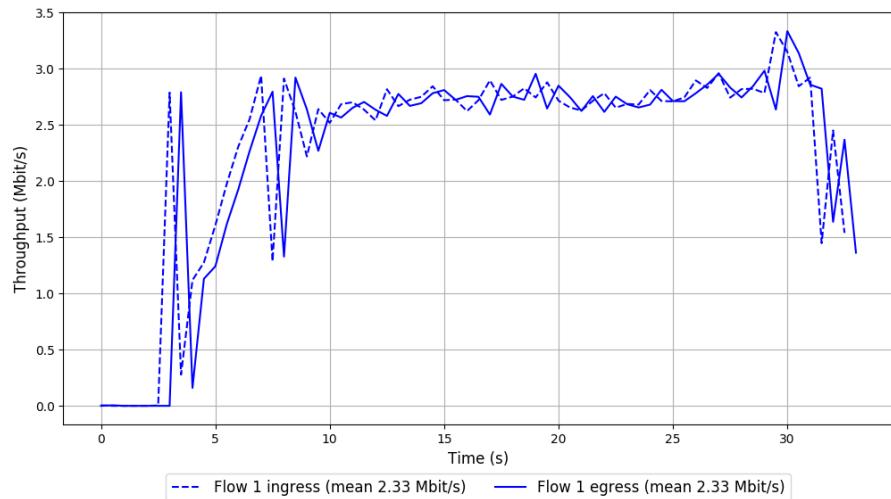


Run 4: Statistics of WebRTC media

```
Start at: 2019-06-28 07:37:58
End at: 2019-06-28 07:38:28
Local clock offset: 0.04 ms
Remote clock offset: -3.184 ms

# Below is generated by plot.py at 2019-06-28 08:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 41.078 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 41.078 ms
Loss rate: 0.24%
```

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



```
Run 5: Statistics of WebRTC media

Start at: 2019-06-28 08:03:52
End at: 2019-06-28 08:04:22
Local clock offset: -2.774 ms
Remote clock offset: -2.978 ms

# Below is generated by plot.py at 2019-06-28 08:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 41.144 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 41.144 ms
Loss rate: 0.25%
```

Run 5: Report of WebRTC media — Data Link

