

Pantheon Report

Generated at 2019-06-27 21:26:15 (UTC).
Data path: AWS Brazil 2 on `ens5` (*local*) → Colombia on `p4p1` (*remote*).
Repeated the test of 22 congestion control schemes 5 times.
Each test lasted for 30 seconds running 1 flow.
NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.

System info:

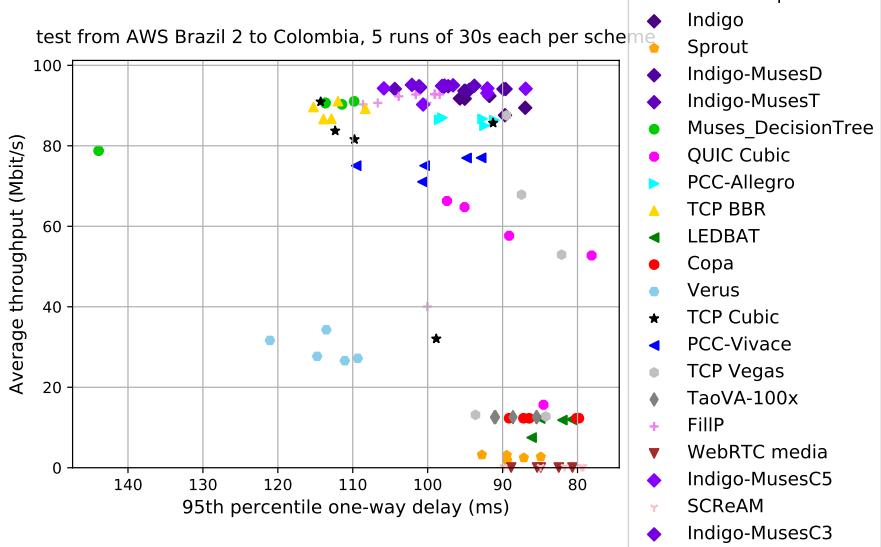
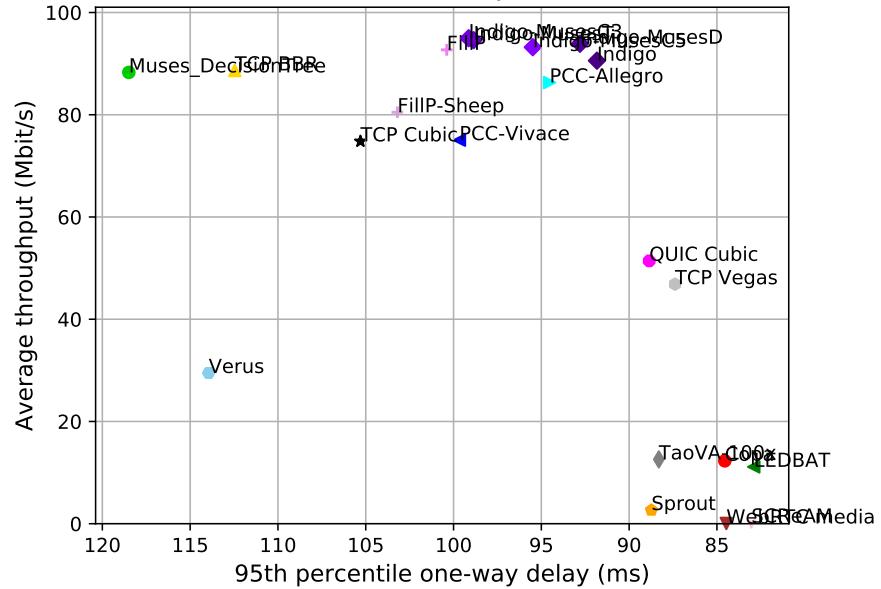
```
Linux 4.15.0-1039-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

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
```

test from AWS Brazil 2 to Colombia, 5 runs of 30s each per scheme
(mean of all runs by scheme)



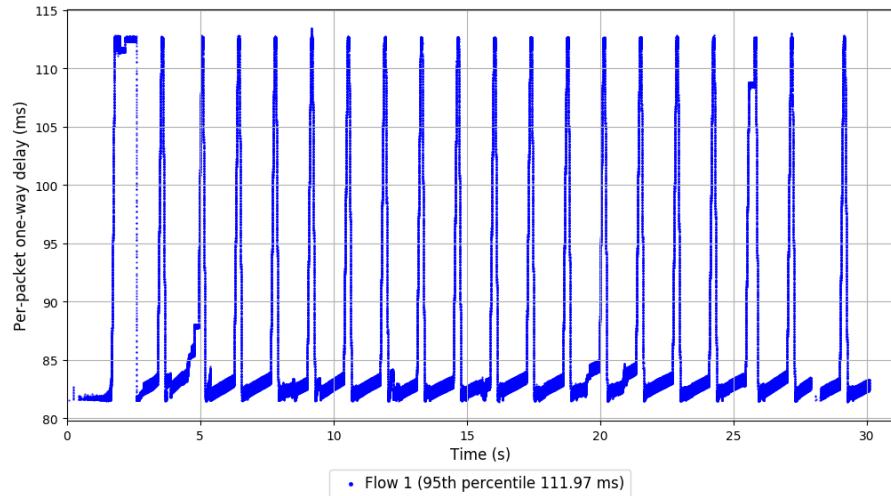
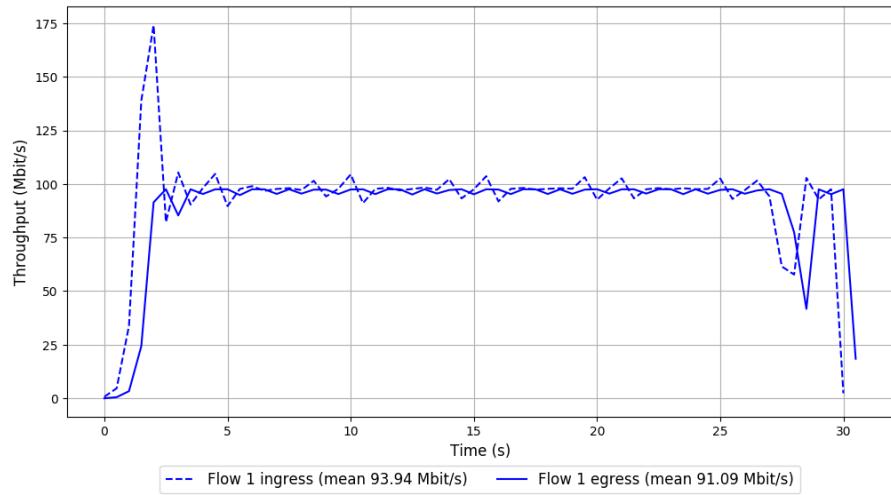
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	88.67	112.46	3.39
Copa	5	12.31	84.55	70.72
TCP Cubic	5	74.80	105.30	0.65
FillP	5	92.69	100.39	1.03
FillP-Sheep	5	80.49	103.20	1.35
Indigo	5	90.58	91.83	0.87
Indigo-MusesC3	5	94.97	99.14	0.30
Indigo-MusesC5	5	93.21	95.49	0.08
Indigo-MusesD	5	93.89	92.80	0.02
Indigo-MusesT	5	94.59	98.86	2.73
LEDBAT	5	11.13	82.90	0.01
Muses_DecisionTree	5	88.29	118.49	2.94
PCC-Allegro	5	86.30	94.53	1.53
PCC-Expr	0	N/A	N/A	N/A
QUIC Cubic	5	51.42	88.86	0.26
SCReAM	5	0.22	83.04	0.03
Sprout	5	2.67	88.73	0.00
TaoVA-100x	5	12.58	88.31	20.43
TCP Vegas	5	46.85	87.39	0.92
Verus	5	29.49	113.94	17.59
PCC-Vivace	5	75.03	99.67	0.08
WebRTC media	5	0.05	84.47	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-06-27 19:27:08
End at: 2019-06-27 19:27:38
Local clock offset: -5.877 ms
Remote clock offset: 142.261 ms

# Below is generated by plot.py at 2019-06-27 21:17:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.09 Mbit/s
95th percentile per-packet one-way delay: 111.975 ms
Loss rate: 3.03%
-- Flow 1:
Average throughput: 91.09 Mbit/s
95th percentile per-packet one-way delay: 111.975 ms
Loss rate: 3.03%
```

Run 1: Report of TCP BBR — Data Link

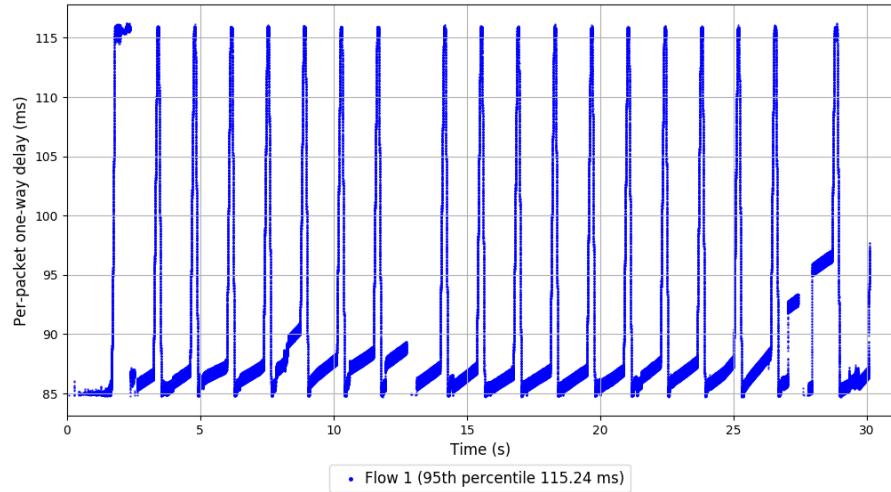
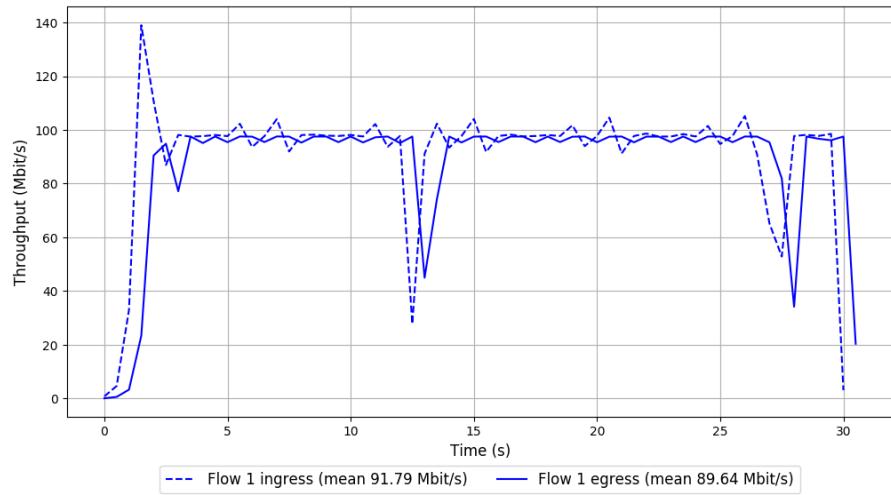


Run 2: Statistics of TCP BBR

```
Start at: 2019-06-27 19:52:53
End at: 2019-06-27 19:53:23
Local clock offset: -6.492 ms
Remote clock offset: 146.477 ms

# Below is generated by plot.py at 2019-06-27 21:17:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.64 Mbit/s
95th percentile per-packet one-way delay: 115.237 ms
Loss rate: 2.31%
-- Flow 1:
Average throughput: 89.64 Mbit/s
95th percentile per-packet one-way delay: 115.237 ms
Loss rate: 2.31%
```

Run 2: Report of TCP BBR — Data Link

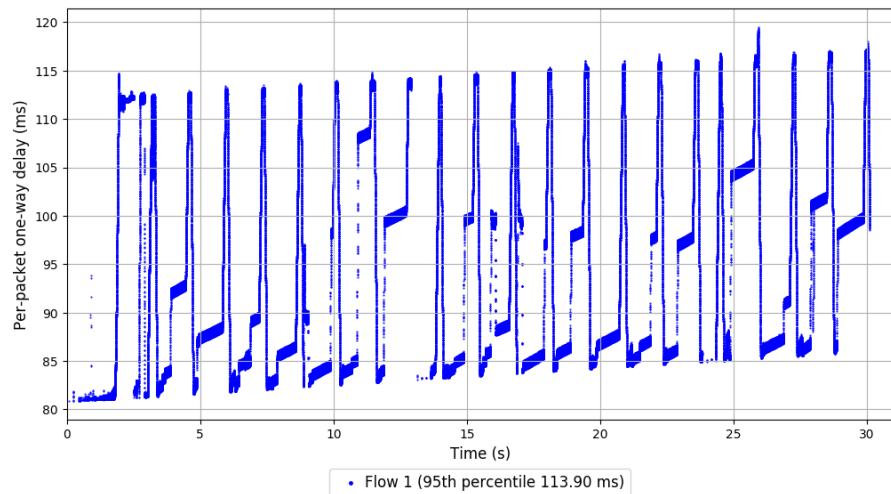
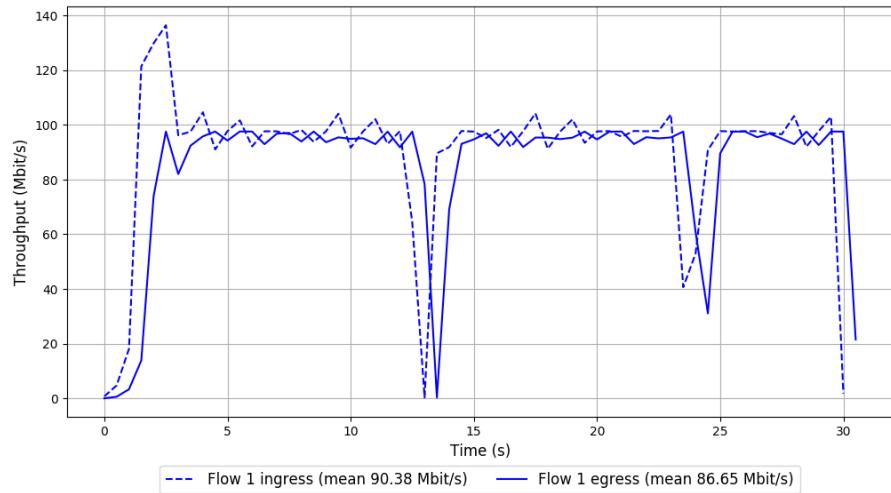


Run 3: Statistics of TCP BBR

```
Start at: 2019-06-27 20:18:46
End at: 2019-06-27 20:19:16
Local clock offset: -6.487 ms
Remote clock offset: 59.909 ms

# Below is generated by plot.py at 2019-06-27 21:17:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.65 Mbit/s
95th percentile per-packet one-way delay: 113.902 ms
Loss rate: 4.07%
-- Flow 1:
Average throughput: 86.65 Mbit/s
95th percentile per-packet one-way delay: 113.902 ms
Loss rate: 4.07%
```

Run 3: Report of TCP BBR — Data Link

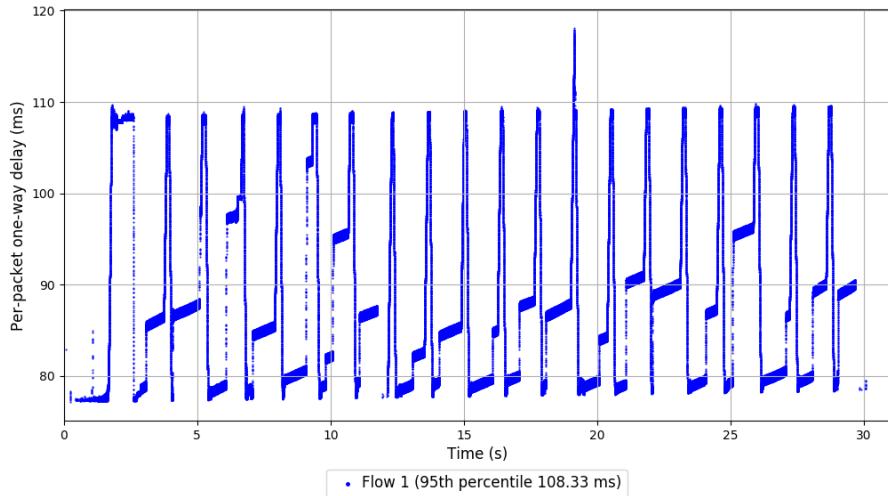
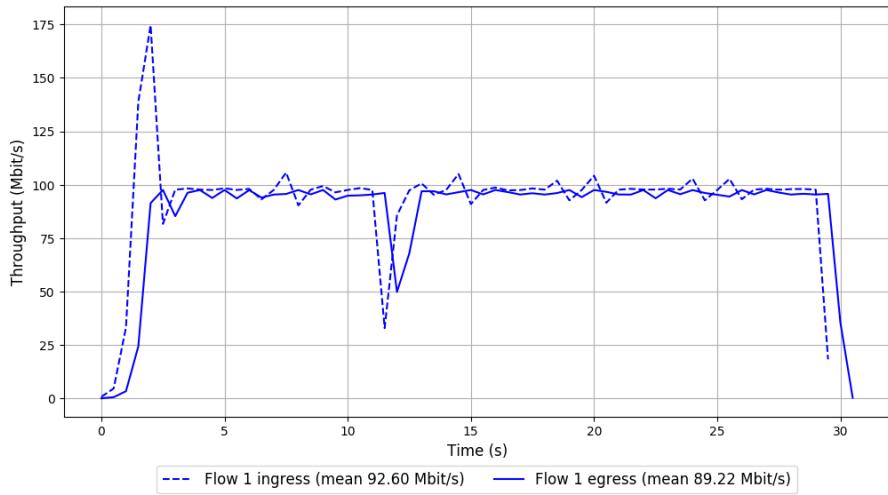


Run 4: Statistics of TCP BBR

```
Start at: 2019-06-27 20:44:36
End at: 2019-06-27 20:45:06
Local clock offset: -6.392 ms
Remote clock offset: -66.908 ms

# Below is generated by plot.py at 2019-06-27 21:17:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.22 Mbit/s
95th percentile per-packet one-way delay: 108.326 ms
Loss rate: 3.65%
-- Flow 1:
Average throughput: 89.22 Mbit/s
95th percentile per-packet one-way delay: 108.326 ms
Loss rate: 3.65%
```

Run 4: Report of TCP BBR — Data Link

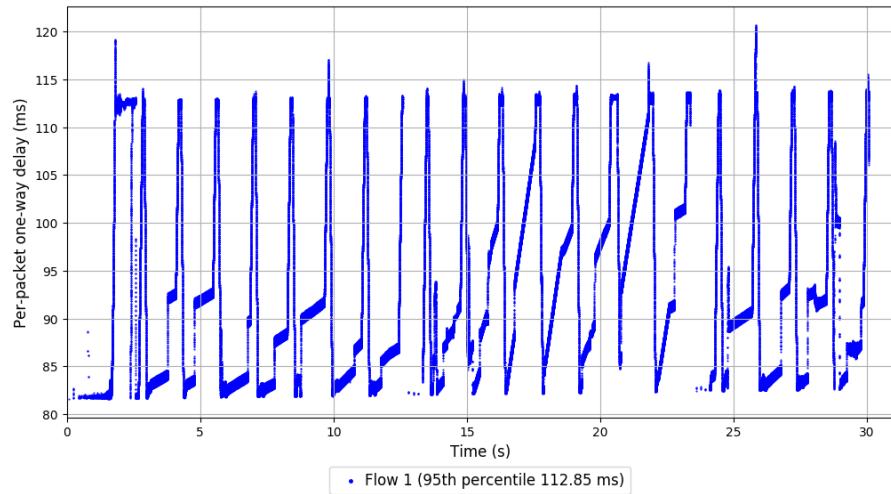
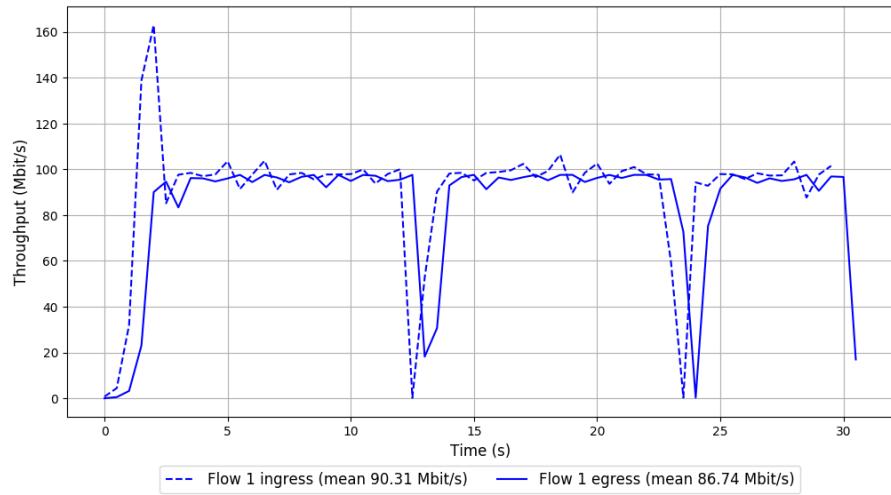


Run 5: Statistics of TCP BBR

```
Start at: 2019-06-27 21:10:28
End at: 2019-06-27 21:10:58
Local clock offset: -6.614 ms
Remote clock offset: -122.468 ms

# Below is generated by plot.py at 2019-06-27 21:17:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: 112.850 ms
Loss rate: 3.88%
-- Flow 1:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: 112.850 ms
Loss rate: 3.88%
```

Run 5: Report of TCP BBR — Data Link

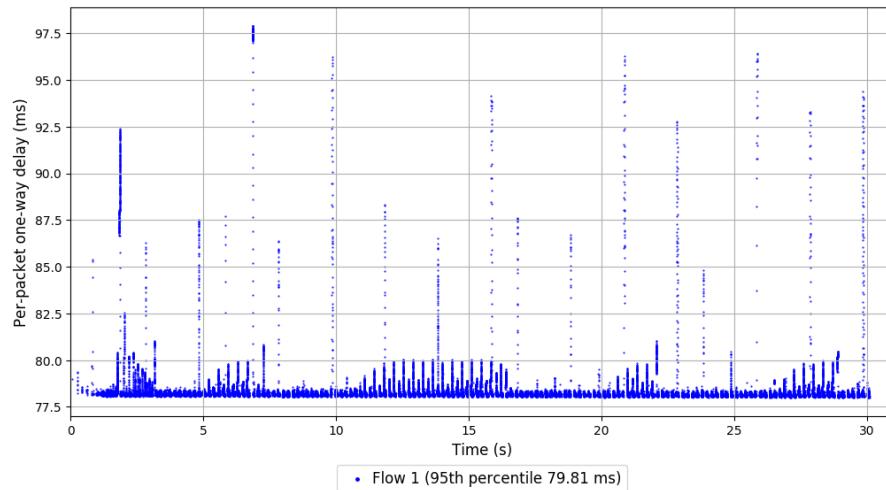
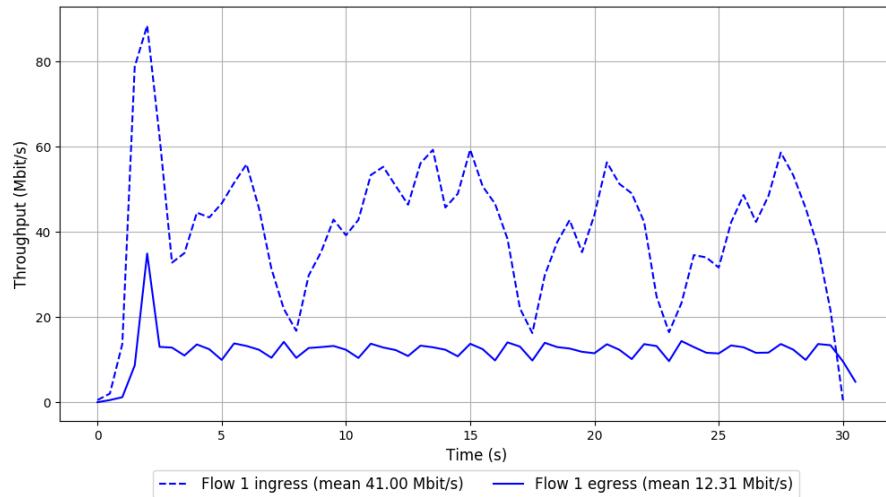


Run 1: Statistics of Copa

```
Start at: 2019-06-27 19:08:14
End at: 2019-06-27 19:08:44
Local clock offset: -6.803 ms
Remote clock offset: 135.667 ms

# Below is generated by plot.py at 2019-06-27 21:17:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.31 Mbit/s
95th percentile per-packet one-way delay: 79.814 ms
Loss rate: 69.98%
-- Flow 1:
Average throughput: 12.31 Mbit/s
95th percentile per-packet one-way delay: 79.814 ms
Loss rate: 69.98%
```

Run 1: Report of Copa — Data Link

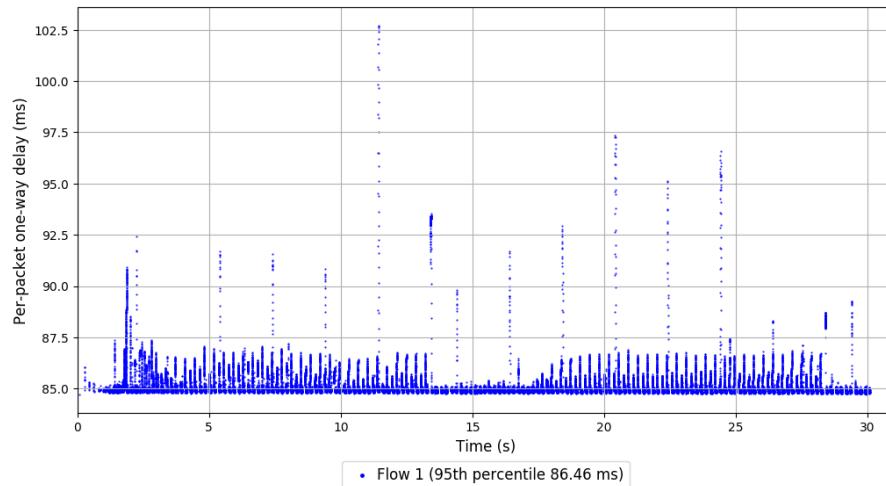
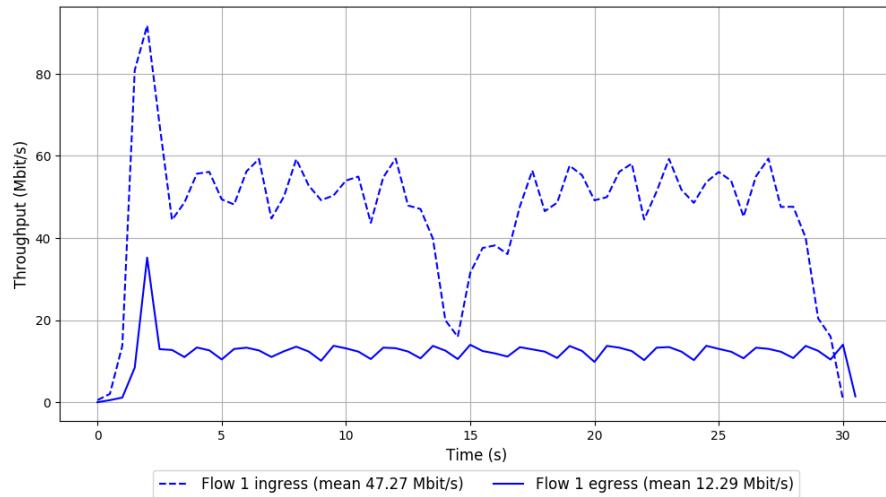


Run 2: Statistics of Copa

```
Start at: 2019-06-27 19:34:04
End at: 2019-06-27 19:34:34
Local clock offset: -6.362 ms
Remote clock offset: 145.179 ms

# Below is generated by plot.py at 2019-06-27 21:17:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.29 Mbit/s
95th percentile per-packet one-way delay: 86.457 ms
Loss rate: 74.01%
-- Flow 1:
Average throughput: 12.29 Mbit/s
95th percentile per-packet one-way delay: 86.457 ms
Loss rate: 74.01%
```

Run 2: Report of Copa — Data Link

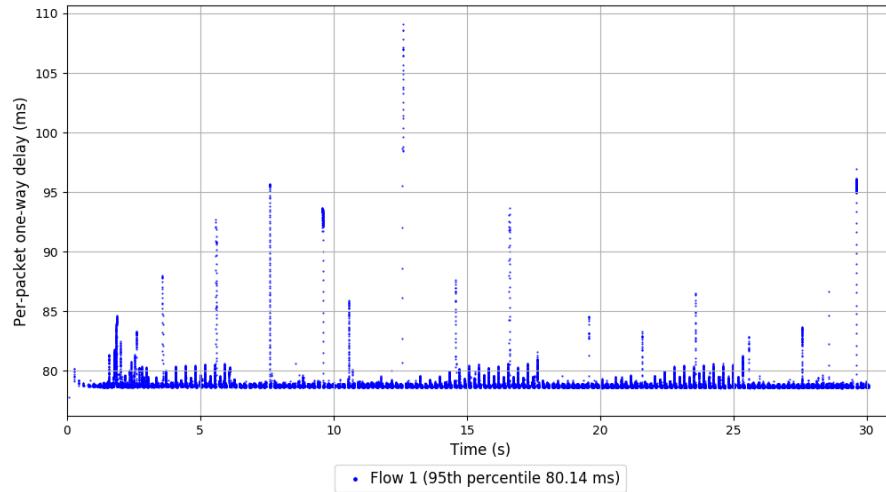
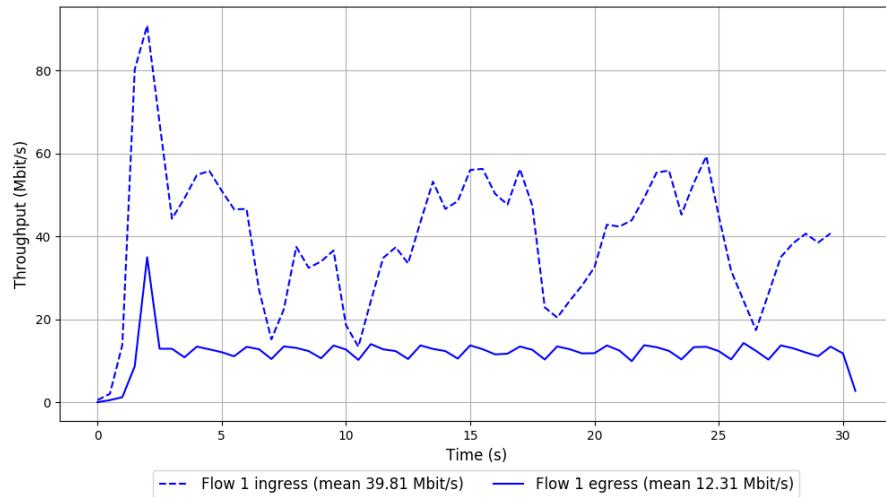


Run 3: Statistics of Copa

```
Start at: 2019-06-27 19:59:50
End at: 2019-06-27 20:00:20
Local clock offset: -6.411 ms
Remote clock offset: 142.405 ms

# Below is generated by plot.py at 2019-06-27 21:17:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.31 Mbit/s
95th percentile per-packet one-way delay: 80.140 ms
Loss rate: 69.08%
-- Flow 1:
Average throughput: 12.31 Mbit/s
95th percentile per-packet one-way delay: 80.140 ms
Loss rate: 69.08%
```

Run 3: Report of Copa — Data Link

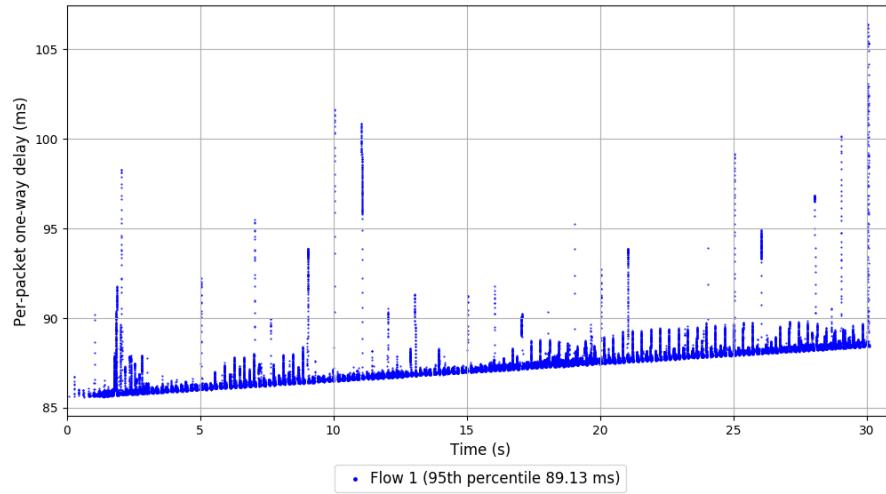
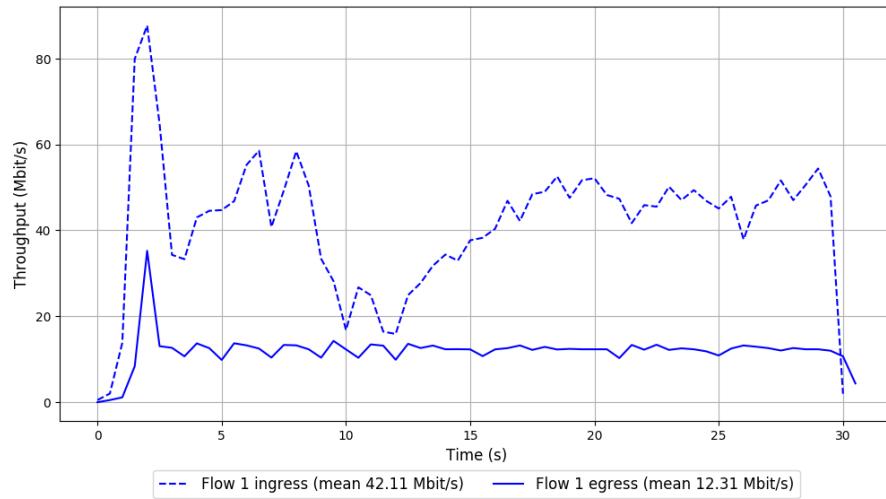


Run 4: Statistics of Copa

```
Start at: 2019-06-27 20:25:43
End at: 2019-06-27 20:26:13
Local clock offset: -6.06 ms
Remote clock offset: 9.124 ms

# Below is generated by plot.py at 2019-06-27 21:17:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.31 Mbit/s
95th percentile per-packet one-way delay: 89.130 ms
Loss rate: 70.78%
-- Flow 1:
Average throughput: 12.31 Mbit/s
95th percentile per-packet one-way delay: 89.130 ms
Loss rate: 70.78%
```

Run 4: Report of Copa — Data Link

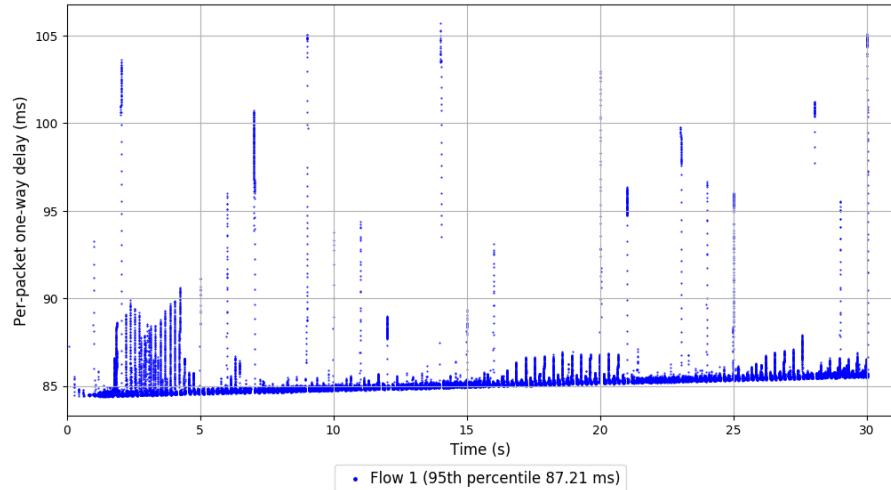
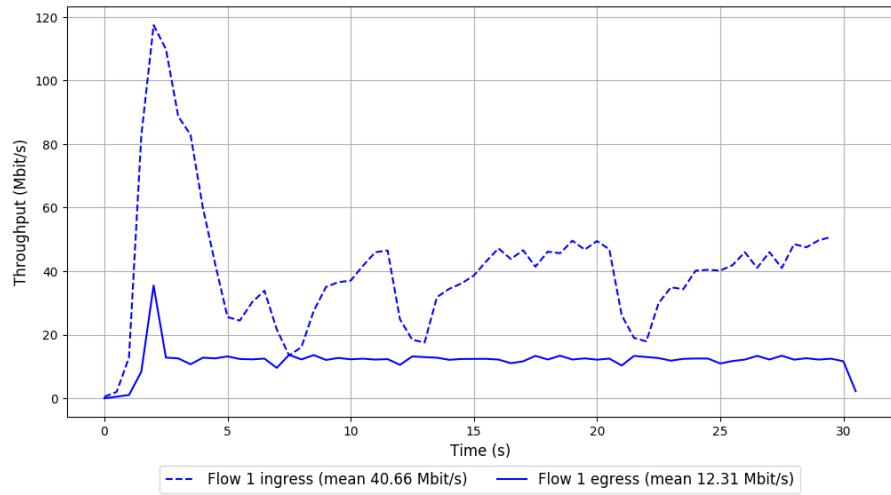


Run 5: Statistics of Copa

```
Start at: 2019-06-27 20:51:33
End at: 2019-06-27 20:52:03
Local clock offset: -6.44 ms
Remote clock offset: -77.281 ms

# Below is generated by plot.py at 2019-06-27 21:17:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.31 Mbit/s
95th percentile per-packet one-way delay: 87.213 ms
Loss rate: 69.74%
-- Flow 1:
Average throughput: 12.31 Mbit/s
95th percentile per-packet one-way delay: 87.213 ms
Loss rate: 69.74%
```

Run 5: Report of Copa — Data Link

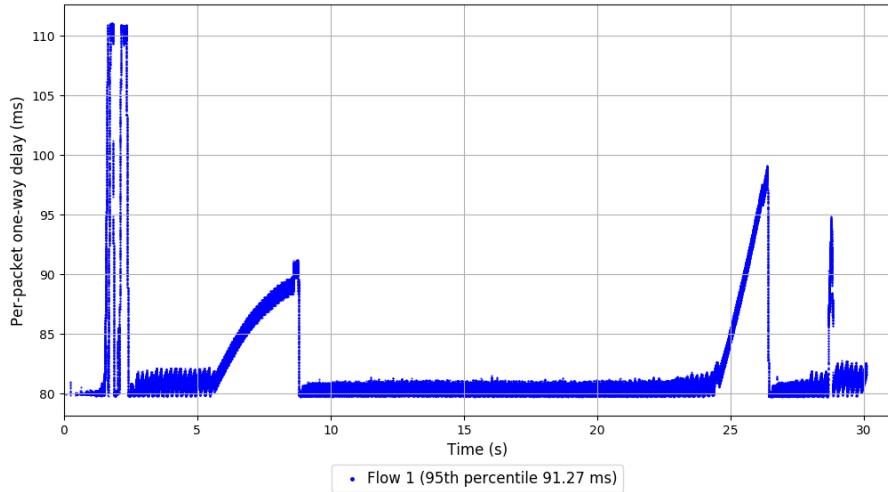
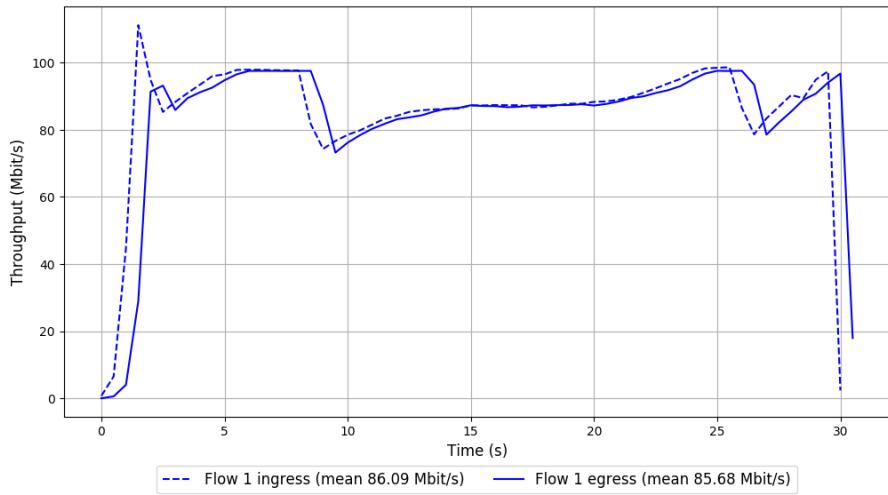


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-06-27 19:09:23
End at: 2019-06-27 19:09:53
Local clock offset: -7.456 ms
Remote clock offset: 135.912 ms

# Below is generated by plot.py at 2019-06-27 21:17:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.68 Mbit/s
95th percentile per-packet one-way delay: 91.265 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 85.68 Mbit/s
95th percentile per-packet one-way delay: 91.265 ms
Loss rate: 0.48%
```

Run 1: Report of TCP Cubic — Data Link

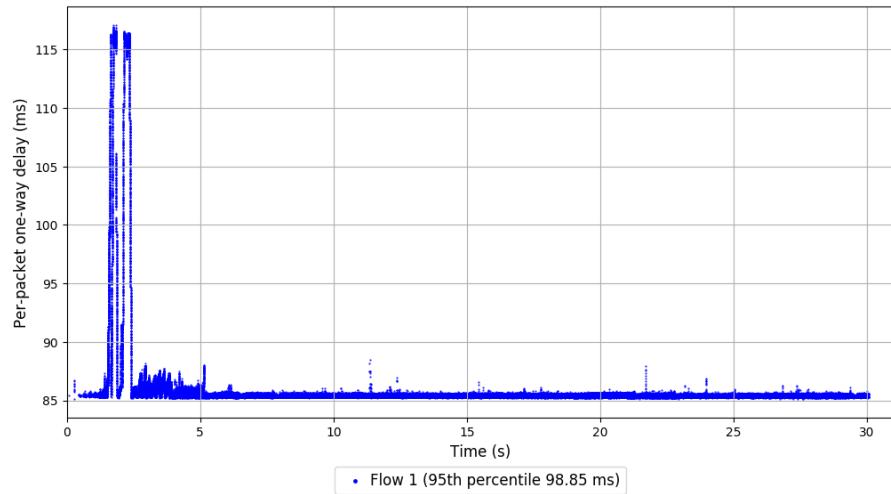
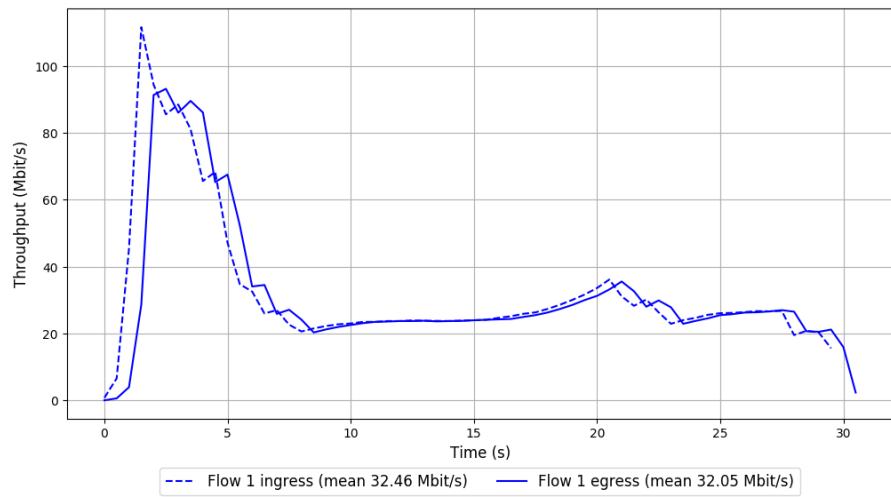


Run 2: Statistics of TCP Cubic

```
Start at: 2019-06-27 19:35:14
End at: 2019-06-27 19:35:44
Local clock offset: -5.548 ms
Remote clock offset: 145.566 ms

# Below is generated by plot.py at 2019-06-27 21:17:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.05 Mbit/s
95th percentile per-packet one-way delay: 98.853 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 32.05 Mbit/s
95th percentile per-packet one-way delay: 98.853 ms
Loss rate: 1.27%
```

Run 2: Report of TCP Cubic — Data Link

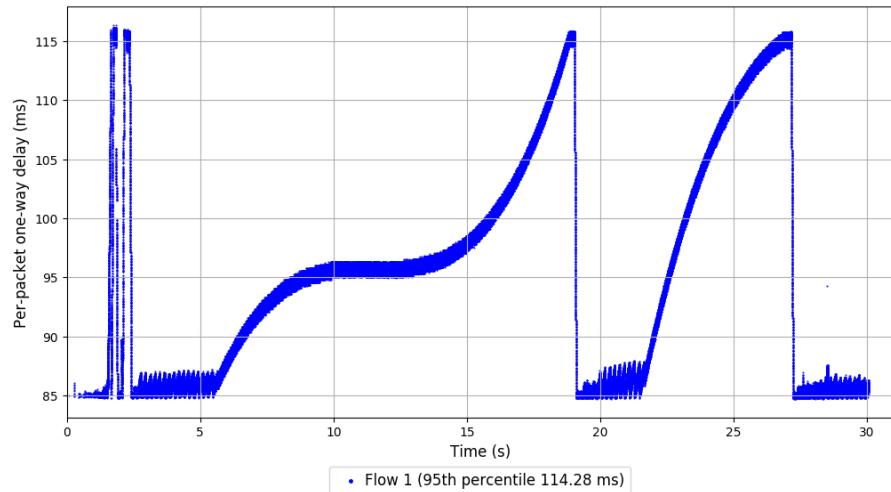
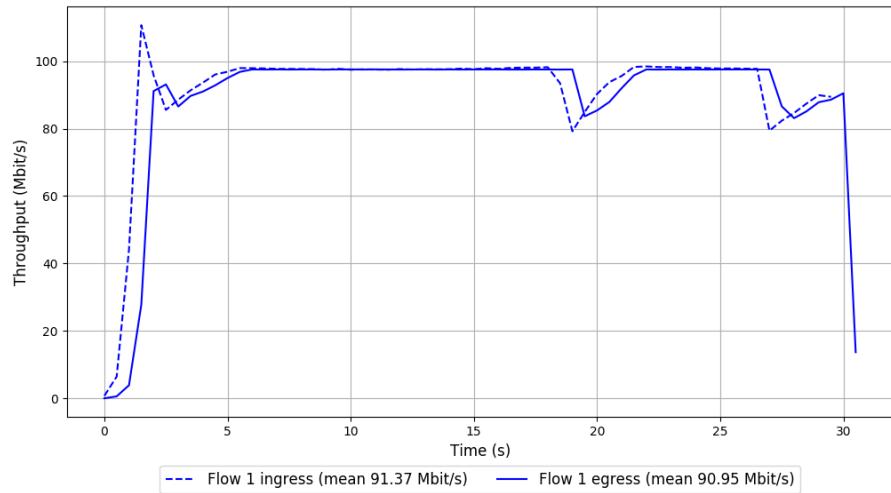


Run 3: Statistics of TCP Cubic

```
Start at: 2019-06-27 20:00:59
End at: 2019-06-27 20:01:29
Local clock offset: -6.612 ms
Remote clock offset: 147.602 ms

# Below is generated by plot.py at 2019-06-27 21:17:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.95 Mbit/s
95th percentile per-packet one-way delay: 114.285 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 90.95 Mbit/s
95th percentile per-packet one-way delay: 114.285 ms
Loss rate: 0.46%
```

Run 3: Report of TCP Cubic — Data Link

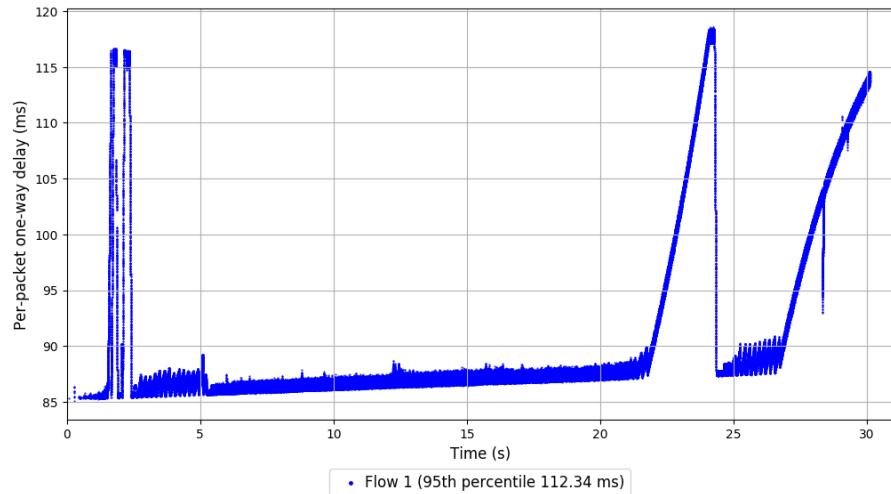
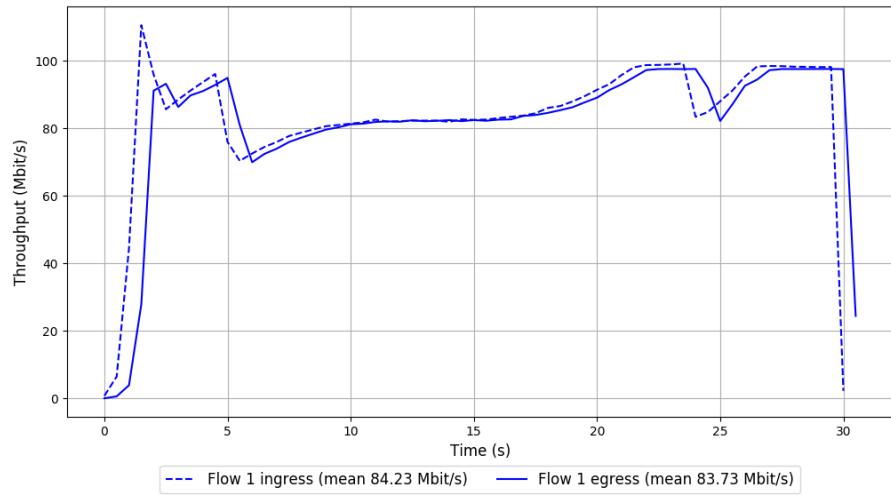


Run 4: Statistics of TCP Cubic

```
Start at: 2019-06-27 20:26:52
End at: 2019-06-27 20:27:22
Local clock offset: -7.171 ms
Remote clock offset: 0.235 ms

# Below is generated by plot.py at 2019-06-27 21:17:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.73 Mbit/s
95th percentile per-packet one-way delay: 112.342 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 83.73 Mbit/s
95th percentile per-packet one-way delay: 112.342 ms
Loss rate: 0.51%
```

Run 4: Report of TCP Cubic — Data Link

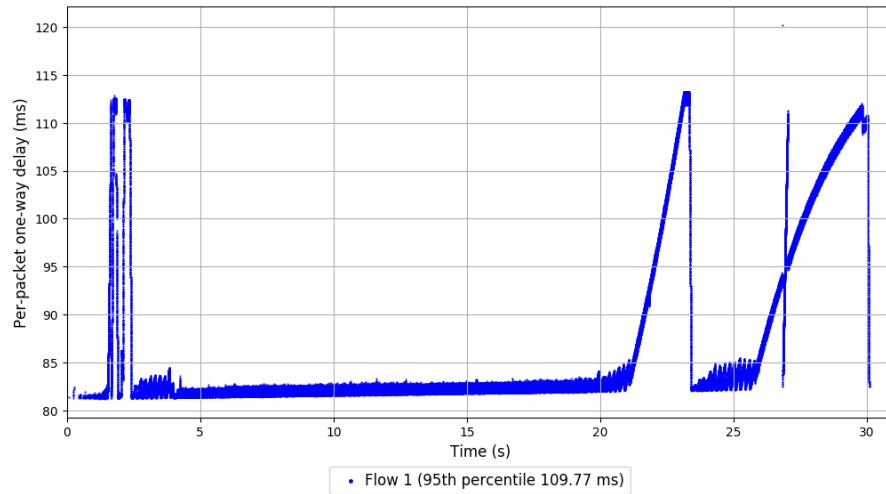
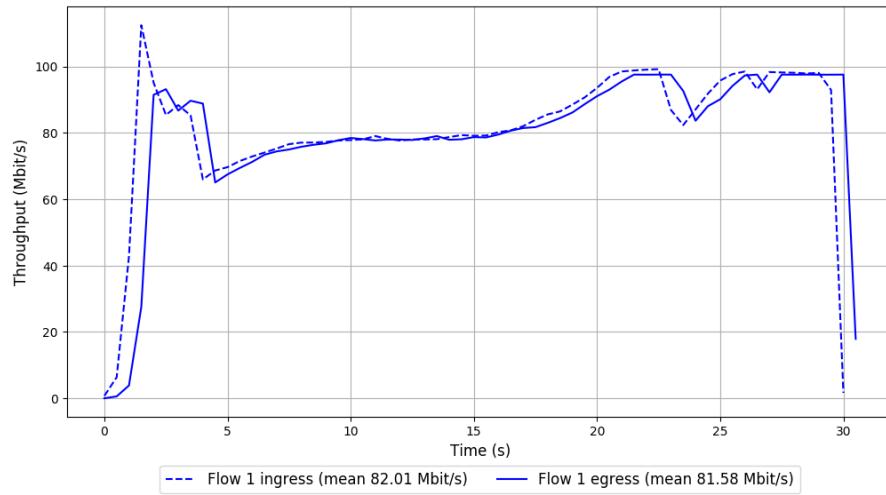


Run 5: Statistics of TCP Cubic

```
Start at: 2019-06-27 20:52:42
End at: 2019-06-27 20:53:12
Local clock offset: -6.933 ms
Remote clock offset: -85.541 ms

# Below is generated by plot.py at 2019-06-27 21:17:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.58 Mbit/s
95th percentile per-packet one-way delay: 109.765 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 81.58 Mbit/s
95th percentile per-packet one-way delay: 109.765 ms
Loss rate: 0.53%
```

Run 5: Report of TCP Cubic — Data Link

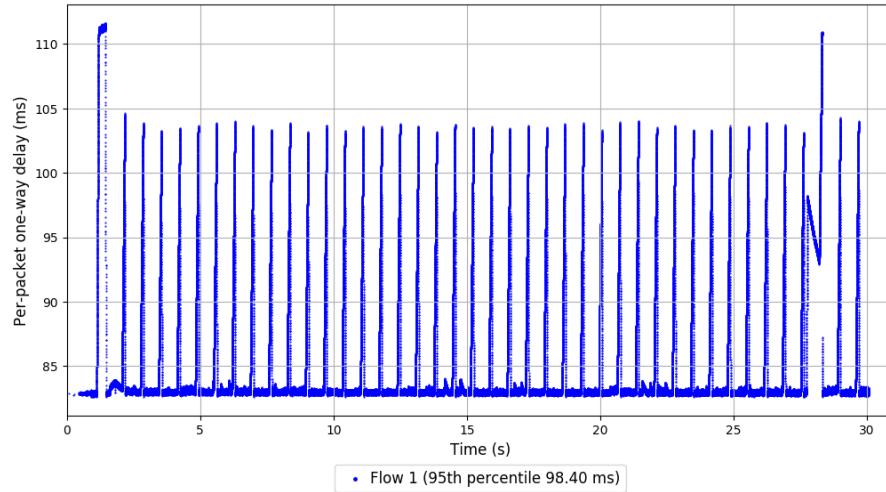
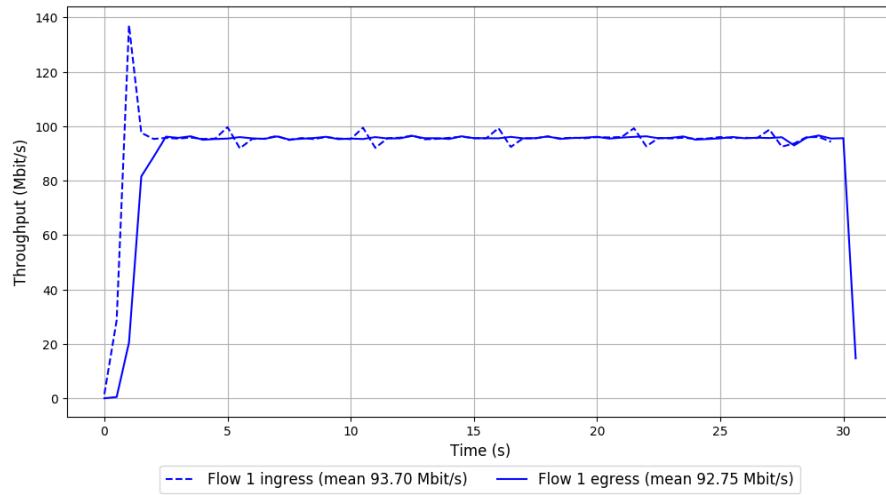


```
Run 1: Statistics of FillP
```

```
Start at: 2019-06-27 19:14:06
End at: 2019-06-27 19:14:36
Local clock offset: -7.413 ms
Remote clock offset: 141.376 ms

# Below is generated by plot.py at 2019-06-27 21:18:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.75 Mbit/s
95th percentile per-packet one-way delay: 98.402 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 92.75 Mbit/s
95th percentile per-packet one-way delay: 98.402 ms
Loss rate: 1.01%
```

Run 1: Report of FillP — Data Link

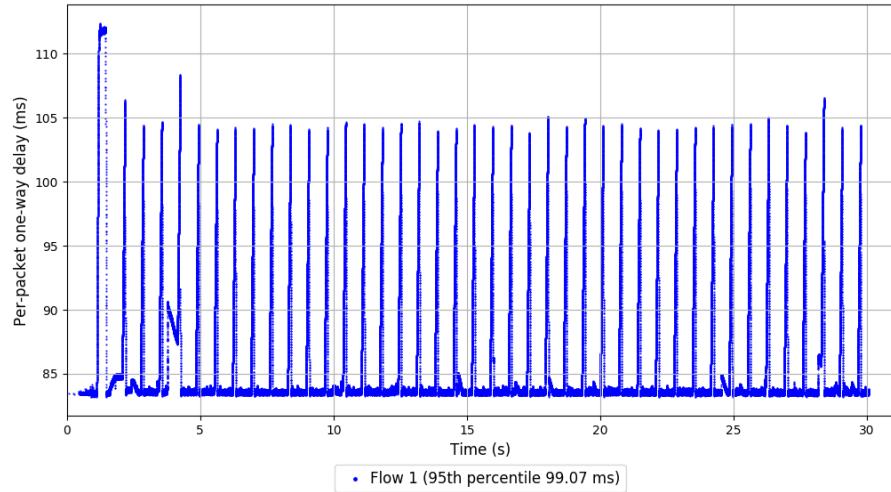
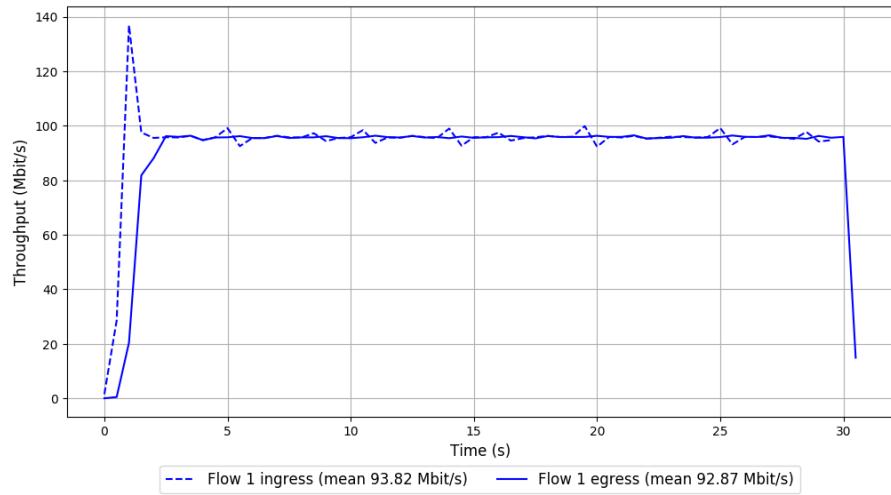


Run 2: Statistics of FillP

```
Start at: 2019-06-27 19:39:51
End at: 2019-06-27 19:40:21
Local clock offset: -6.235 ms
Remote clock offset: 144.796 ms

# Below is generated by plot.py at 2019-06-27 21:18:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.87 Mbit/s
95th percentile per-packet one-way delay: 99.071 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 92.87 Mbit/s
95th percentile per-packet one-way delay: 99.071 ms
Loss rate: 1.01%
```

Run 2: Report of FillP — Data Link

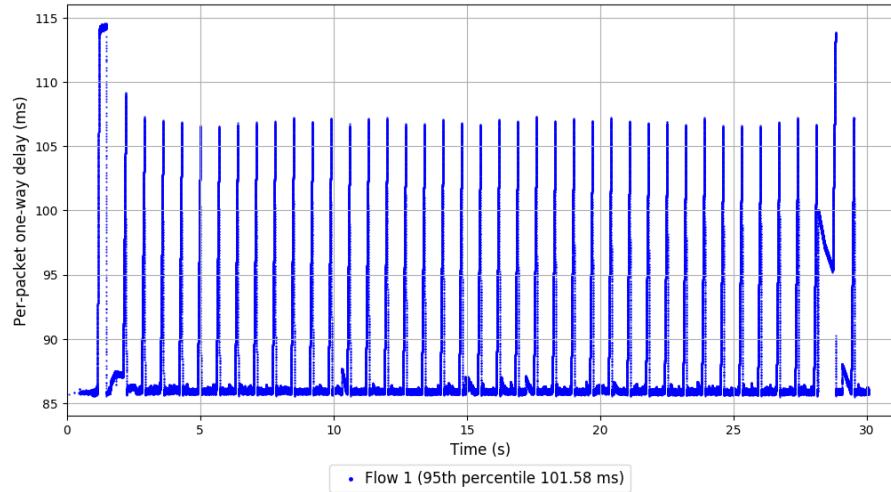
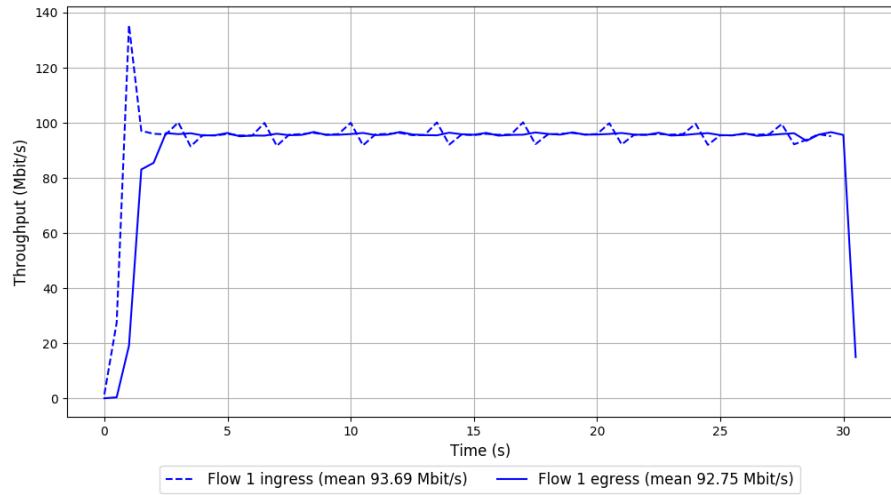


Run 3: Statistics of FillP

```
Start at: 2019-06-27 20:05:41
End at: 2019-06-27 20:06:11
Local clock offset: -6.499 ms
Remote clock offset: 148.505 ms

# Below is generated by plot.py at 2019-06-27 21:18:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.75 Mbit/s
95th percentile per-packet one-way delay: 101.583 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 92.75 Mbit/s
95th percentile per-packet one-way delay: 101.583 ms
Loss rate: 1.02%
```

Run 3: Report of FillP — Data Link

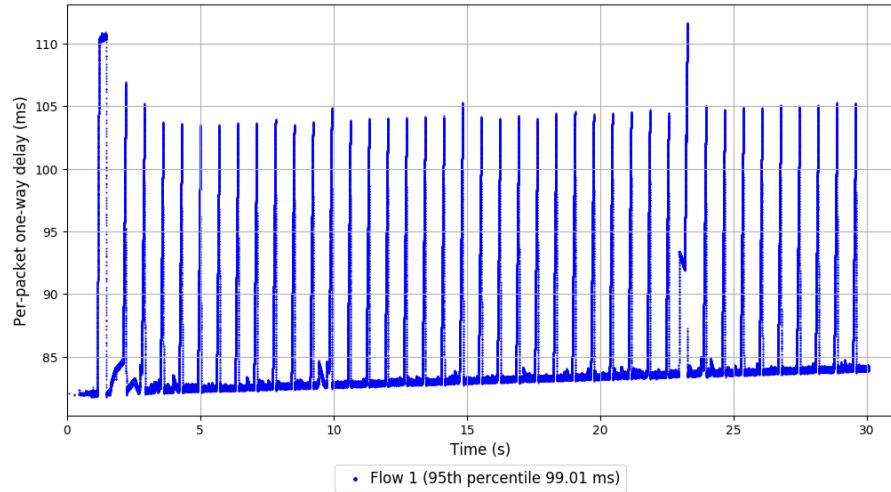
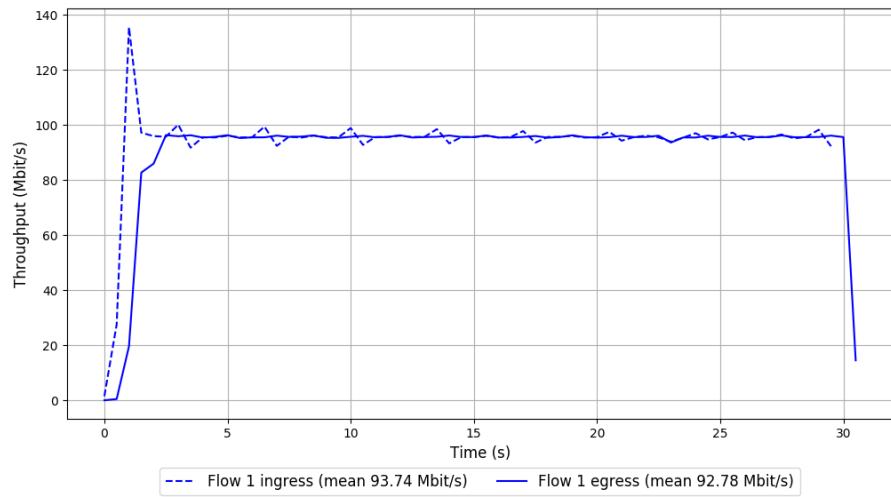


Run 4: Statistics of FillP

```
Start at: 2019-06-27 20:31:34
End at: 2019-06-27 20:32:04
Local clock offset: -6.213 ms
Remote clock offset: -24.894 ms

# Below is generated by plot.py at 2019-06-27 21:18:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.78 Mbit/s
95th percentile per-packet one-way delay: 99.014 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 92.78 Mbit/s
95th percentile per-packet one-way delay: 99.014 ms
Loss rate: 1.02%
```

Run 4: Report of FillP — Data Link

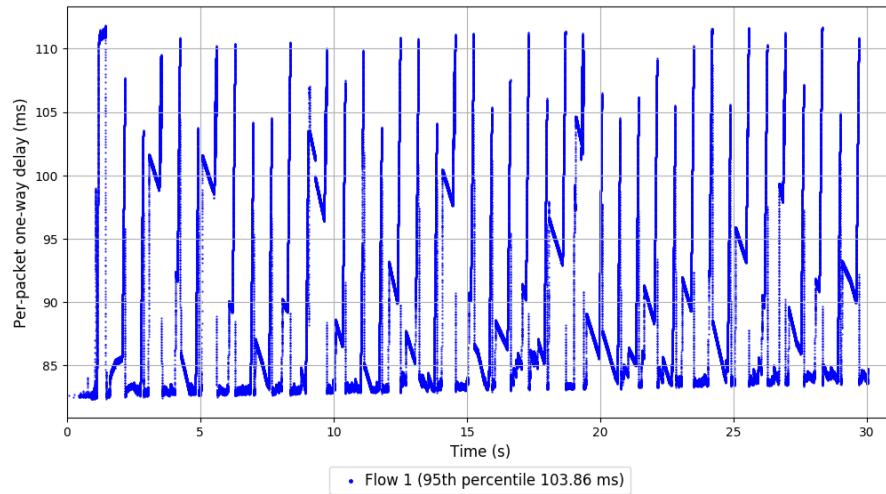
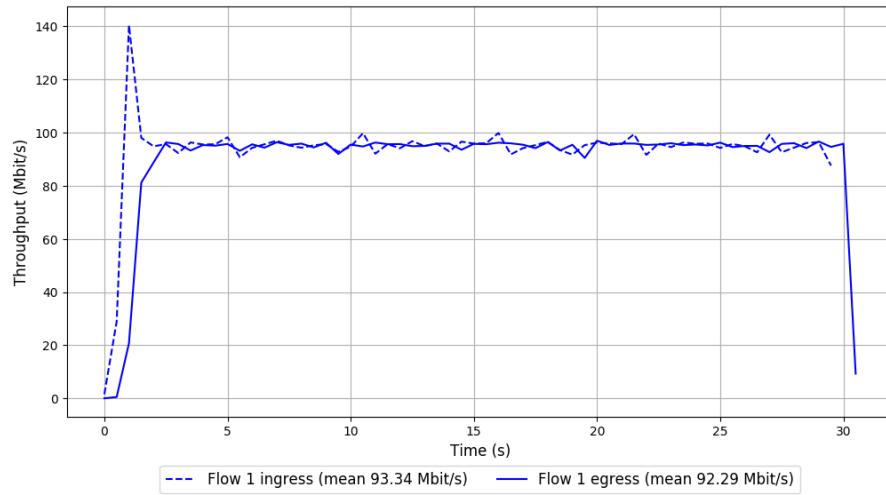


Run 5: Statistics of FillP

```
Start at: 2019-06-27 20:57:24
End at: 2019-06-27 20:57:54
Local clock offset: -5.872 ms
Remote clock offset: -90.978 ms

# Below is generated by plot.py at 2019-06-27 21:18:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.29 Mbit/s
95th percentile per-packet one-way delay: 103.864 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 92.29 Mbit/s
95th percentile per-packet one-way delay: 103.864 ms
Loss rate: 1.11%
```

Run 5: Report of FillP — Data Link

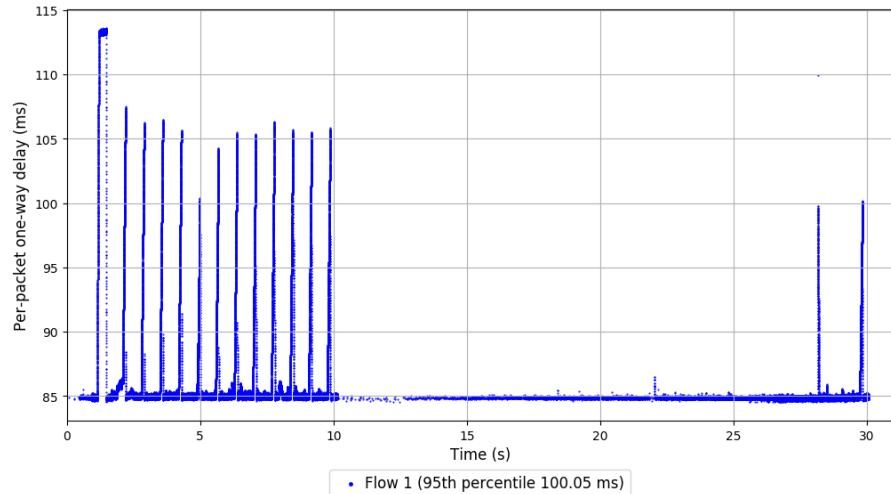
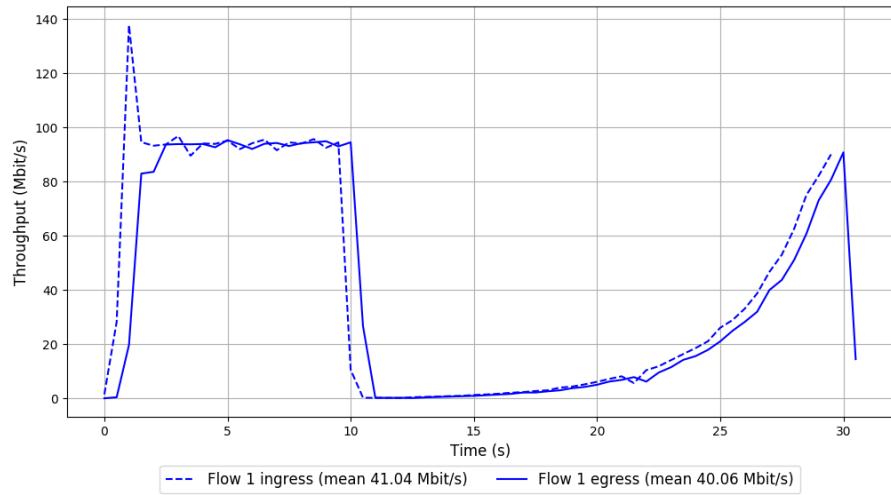


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-06-27 19:25:58
End at: 2019-06-27 19:26:28
Local clock offset: -6.772 ms
Remote clock offset: 143.082 ms

# Below is generated by plot.py at 2019-06-27 21:18:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.06 Mbit/s
95th percentile per-packet one-way delay: 100.048 ms
Loss rate: 2.39%
-- Flow 1:
Average throughput: 40.06 Mbit/s
95th percentile per-packet one-way delay: 100.048 ms
Loss rate: 2.39%
```

Run 1: Report of FillP-Sheep — Data Link

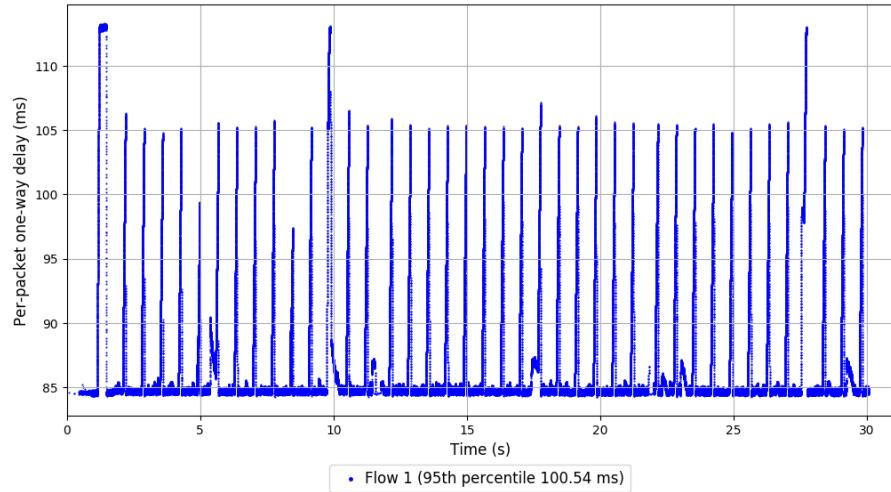
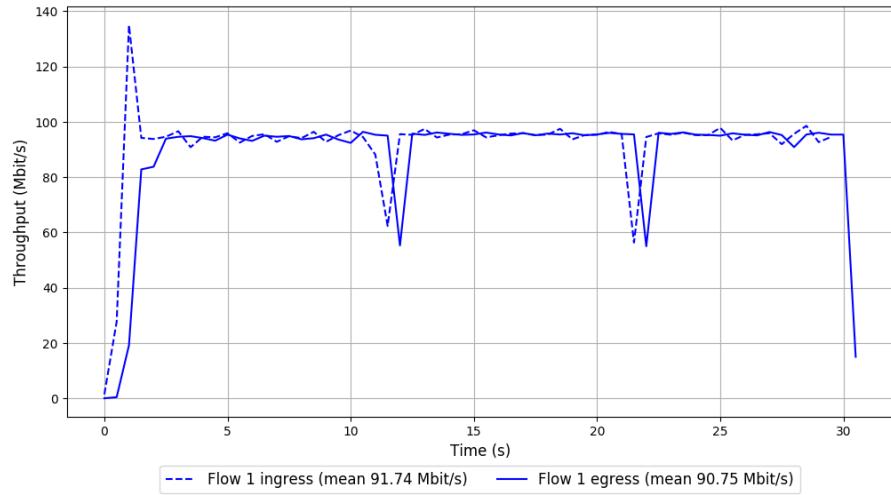


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-06-27 19:51:42
End at: 2019-06-27 19:52:12
Local clock offset: -5.673 ms
Remote clock offset: 146.376 ms

# Below is generated by plot.py at 2019-06-27 21:19:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.75 Mbit/s
95th percentile per-packet one-way delay: 100.539 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 90.75 Mbit/s
95th percentile per-packet one-way delay: 100.539 ms
Loss rate: 1.09%
```

Run 2: Report of FillP-Sheep — Data Link

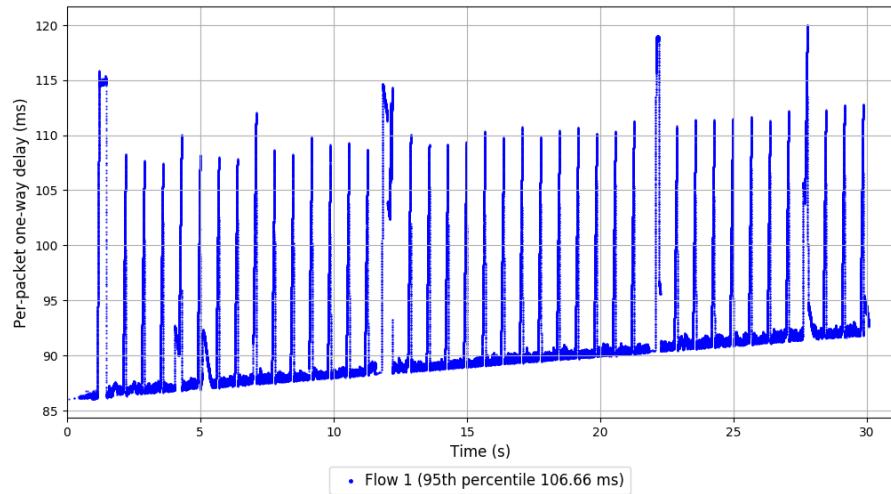
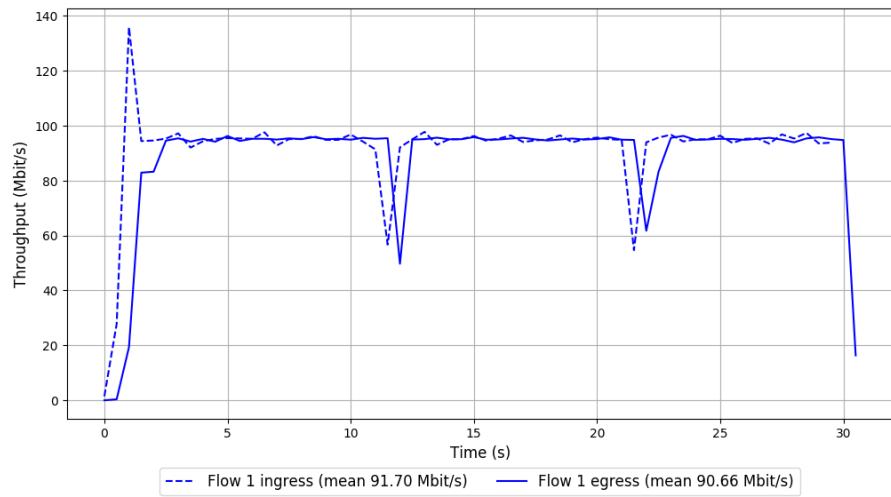


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-06-27 20:17:34
End at: 2019-06-27 20:18:04
Local clock offset: -6.438 ms
Remote clock offset: 76.789 ms

# Below is generated by plot.py at 2019-06-27 21:19:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.66 Mbit/s
95th percentile per-packet one-way delay: 106.660 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 90.66 Mbit/s
95th percentile per-packet one-way delay: 106.660 ms
Loss rate: 1.12%
```

Run 3: Report of FillP-Sheep — Data Link

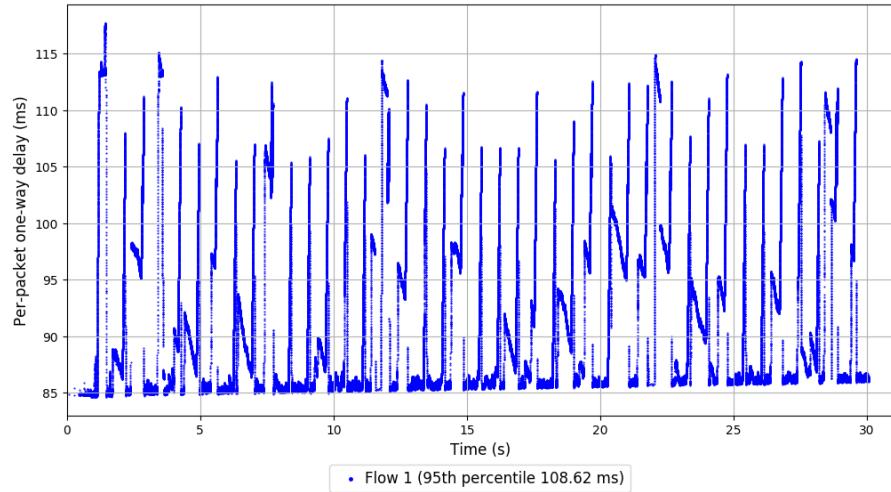
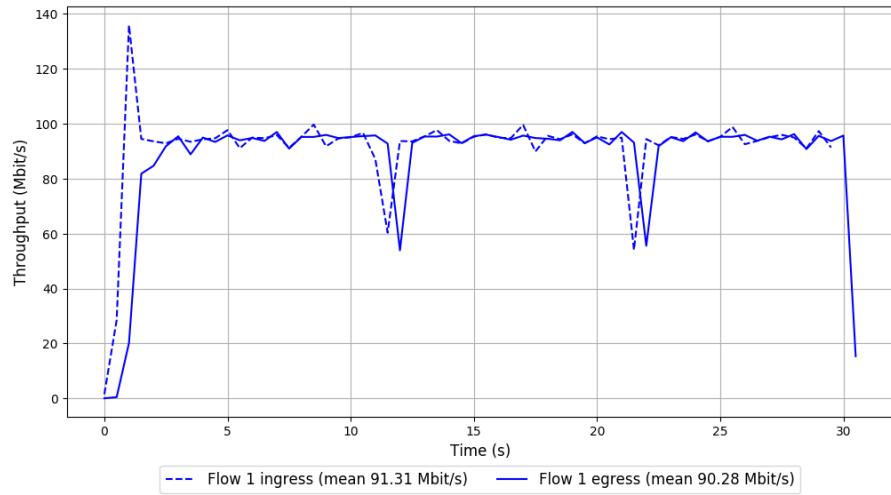


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-06-27 20:43:24
End at: 2019-06-27 20:43:54
Local clock offset: -7.165 ms
Remote clock offset: -57.336 ms

# Below is generated by plot.py at 2019-06-27 21:19:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.28 Mbit/s
95th percentile per-packet one-way delay: 108.620 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 90.28 Mbit/s
95th percentile per-packet one-way delay: 108.620 ms
Loss rate: 1.12%
```

Run 4: Report of FillP-Sheep — Data Link

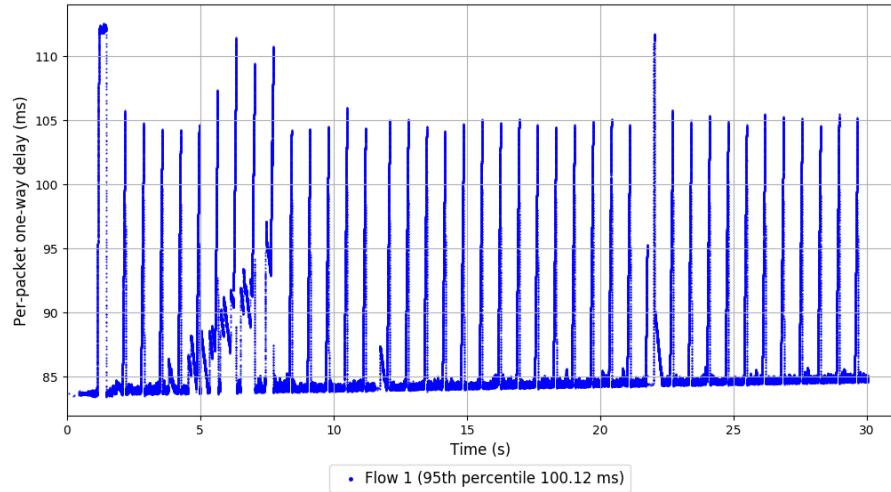
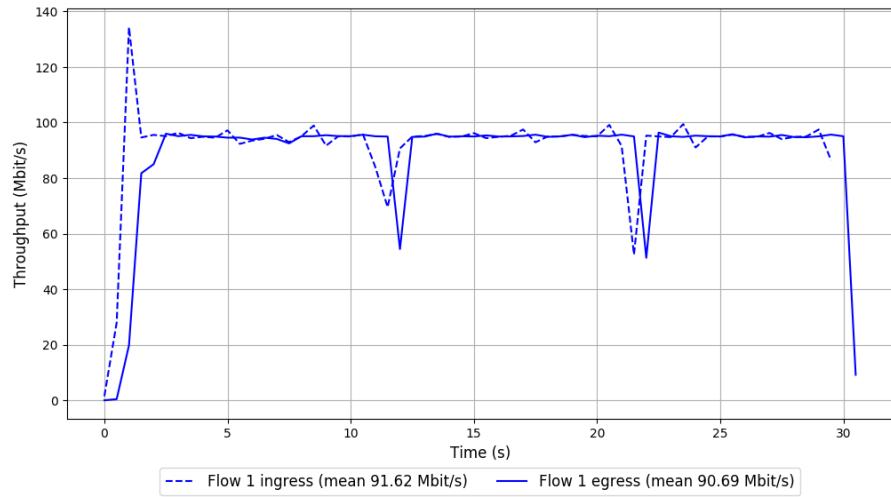


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-06-27 21:09:17
End at: 2019-06-27 21:09:47
Local clock offset: -6.681 ms
Remote clock offset: -117.415 ms

# Below is generated by plot.py at 2019-06-27 21:19:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.69 Mbit/s
95th percentile per-packet one-way delay: 100.116 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 90.69 Mbit/s
95th percentile per-packet one-way delay: 100.116 ms
Loss rate: 1.02%
```

Run 5: Report of FillP-Sheep — Data Link

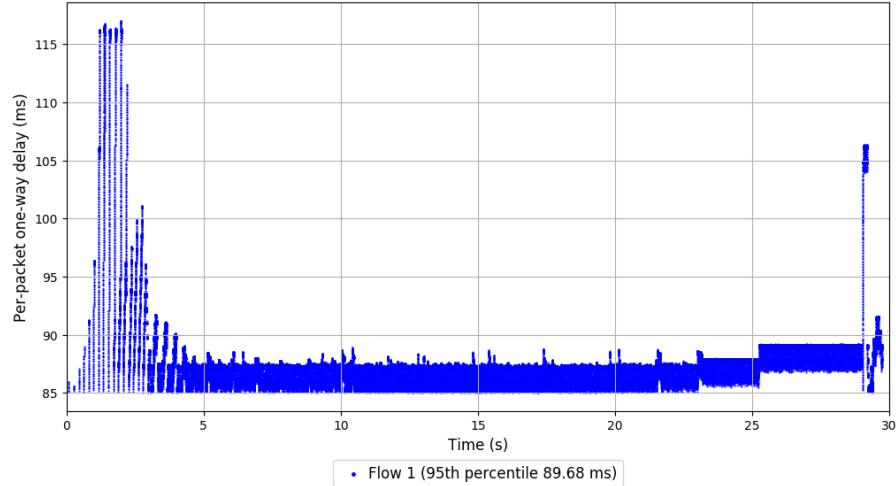
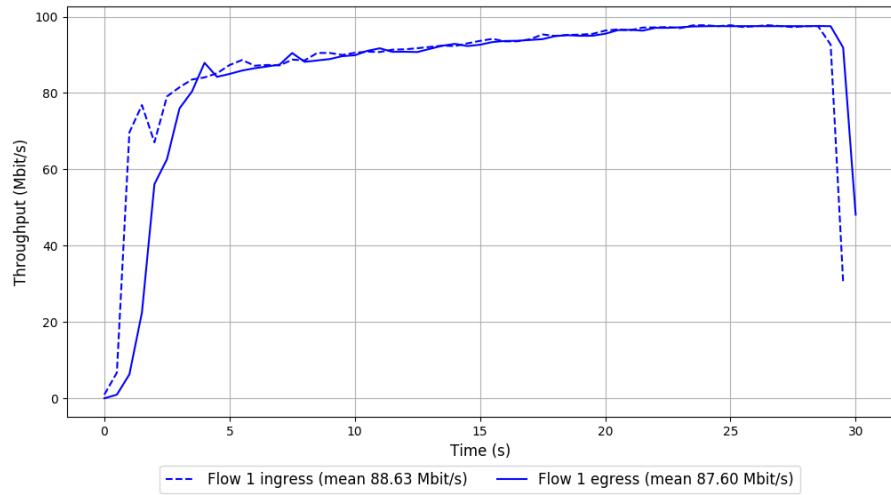


Run 1: Statistics of Indigo

```
Start at: 2019-06-27 19:21:10
End at: 2019-06-27 19:21:40
Local clock offset: -6.369 ms
Remote clock offset: 143.48 ms

# Below is generated by plot.py at 2019-06-27 21:19:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.60 Mbit/s
95th percentile per-packet one-way delay: 89.678 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 87.60 Mbit/s
95th percentile per-packet one-way delay: 89.678 ms
Loss rate: 1.15%
```

Run 1: Report of Indigo — Data Link

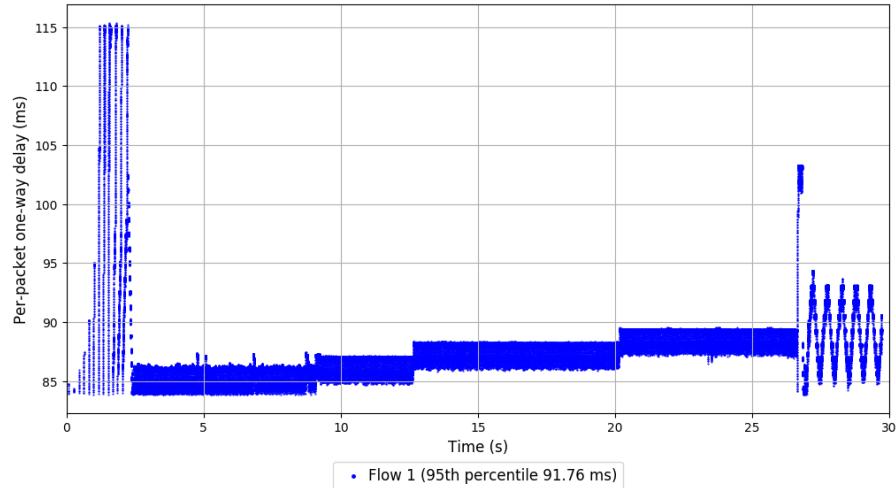
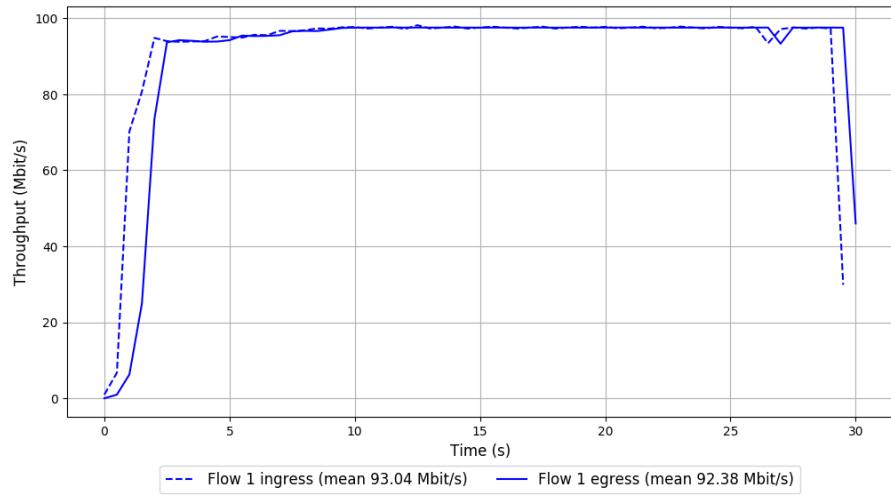


Run 2: Statistics of Indigo

```
Start at: 2019-06-27 19:46:56
End at: 2019-06-27 19:47:26
Local clock offset: -5.351 ms
Remote clock offset: 145.8 ms

# Below is generated by plot.py at 2019-06-27 21:19:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.38 Mbit/s
95th percentile per-packet one-way delay: 91.759 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 92.38 Mbit/s
95th percentile per-packet one-way delay: 91.759 ms
Loss rate: 0.70%
```

Run 2: Report of Indigo — Data Link

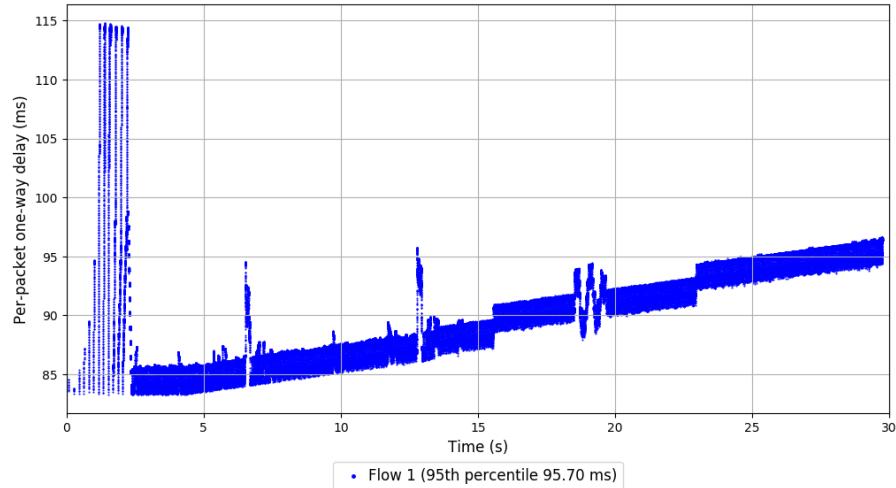
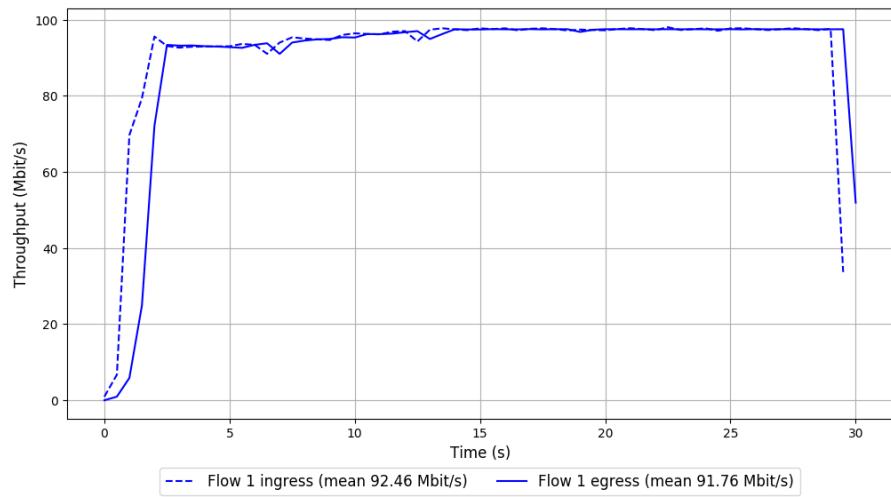


Run 3: Statistics of Indigo

```
Start at: 2019-06-27 20:12:45
End at: 2019-06-27 20:13:15
Local clock offset: -5.68 ms
Remote clock offset: 148.186 ms

# Below is generated by plot.py at 2019-06-27 21:19:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.76 Mbit/s
95th percentile per-packet one-way delay: 95.698 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 91.76 Mbit/s
95th percentile per-packet one-way delay: 95.698 ms
Loss rate: 0.72%
```

Run 3: Report of Indigo — Data Link

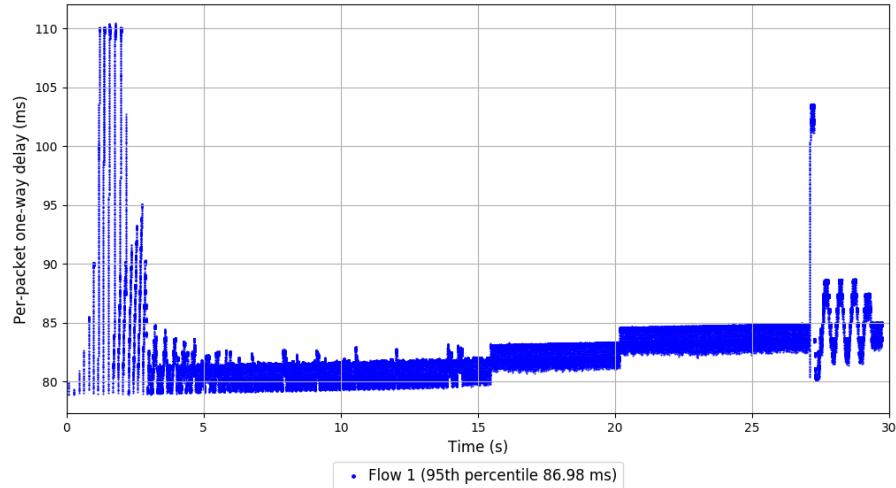
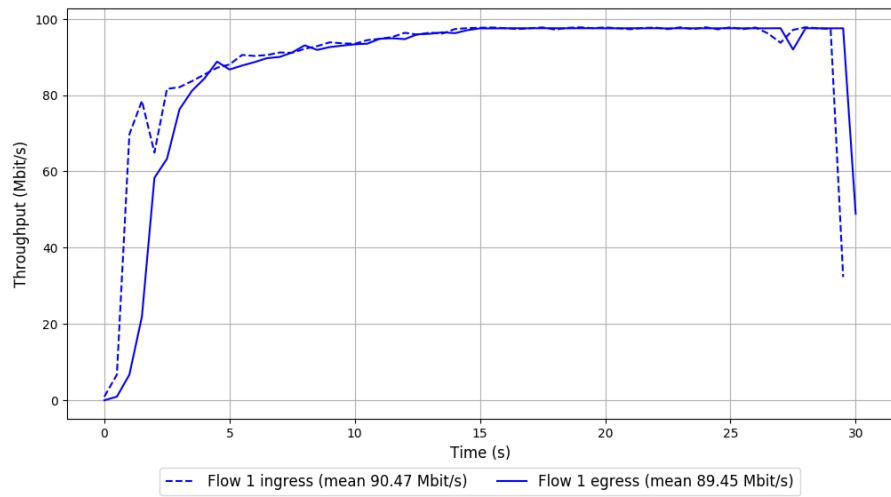


Run 4: Statistics of Indigo

```
Start at: 2019-06-27 20:38:38
End at: 2019-06-27 20:39:08
Local clock offset: -7.181 ms
Remote clock offset: -50.849 ms

# Below is generated by plot.py at 2019-06-27 21:19:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.45 Mbit/s
95th percentile per-packet one-way delay: 86.979 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 89.45 Mbit/s
95th percentile per-packet one-way delay: 86.979 ms
Loss rate: 1.11%
```

Run 4: Report of Indigo — Data Link

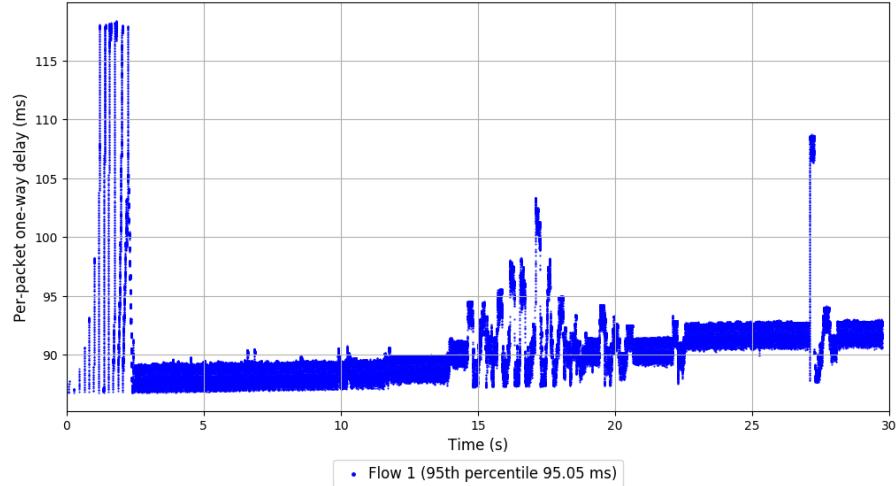
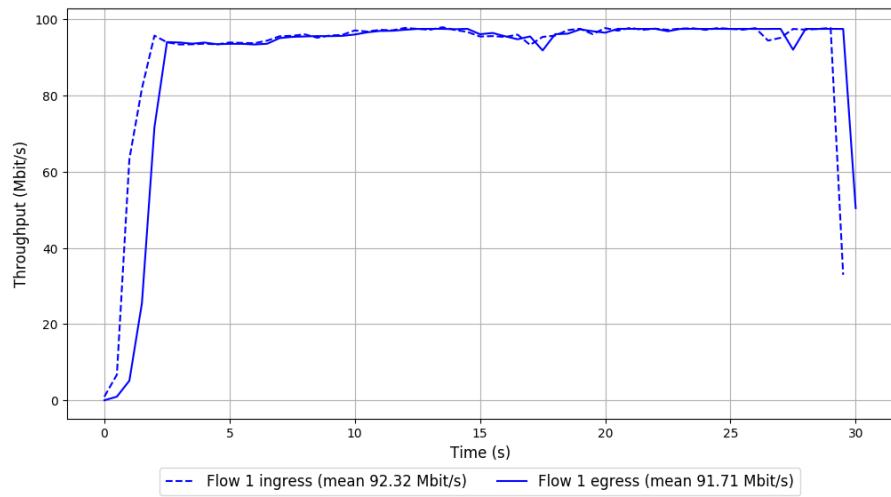


Run 5: Statistics of Indigo

```
Start at: 2019-06-27 21:04:28
End at: 2019-06-27 21:04:58
Local clock offset: -6.501 ms
Remote clock offset: -104.909 ms

# Below is generated by plot.py at 2019-06-27 21:20:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.71 Mbit/s
95th percentile per-packet one-way delay: 95.054 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 91.71 Mbit/s
95th percentile per-packet one-way delay: 95.054 ms
Loss rate: 0.66%
```

Run 5: Report of Indigo — Data Link

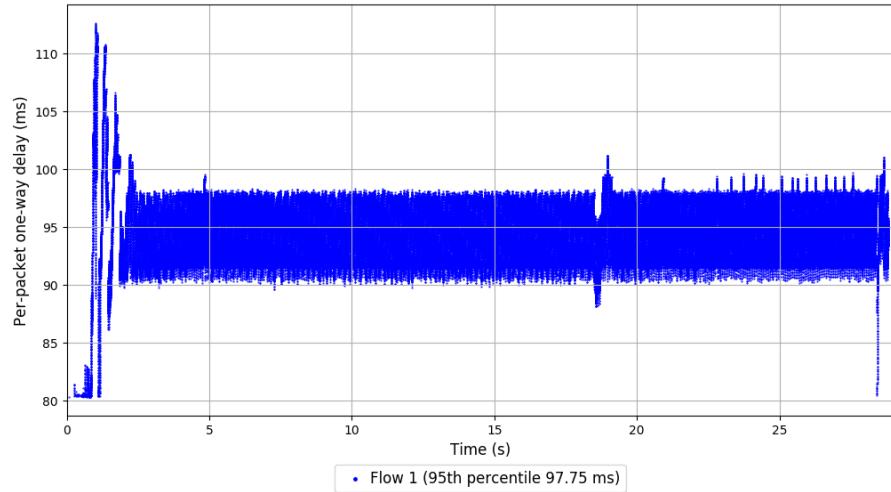
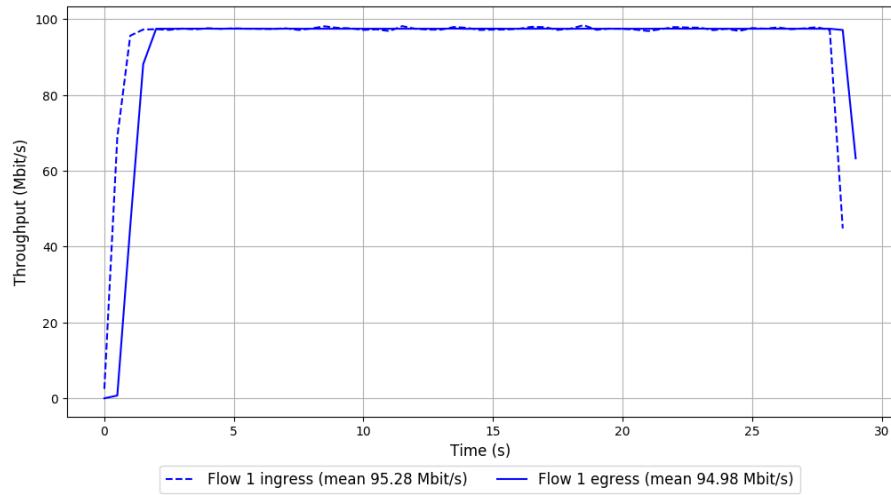


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 19:19:58
End at: 2019-06-27 19:20:28
Local clock offset: -7.308 ms
Remote clock offset: 137.256 ms

# Below is generated by plot.py at 2019-06-27 21:20:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.98 Mbit/s
95th percentile per-packet one-way delay: 97.755 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 94.98 Mbit/s
95th percentile per-packet one-way delay: 97.755 ms
Loss rate: 0.27%
```

Run 1: Report of Indigo-MusesC3 — Data Link

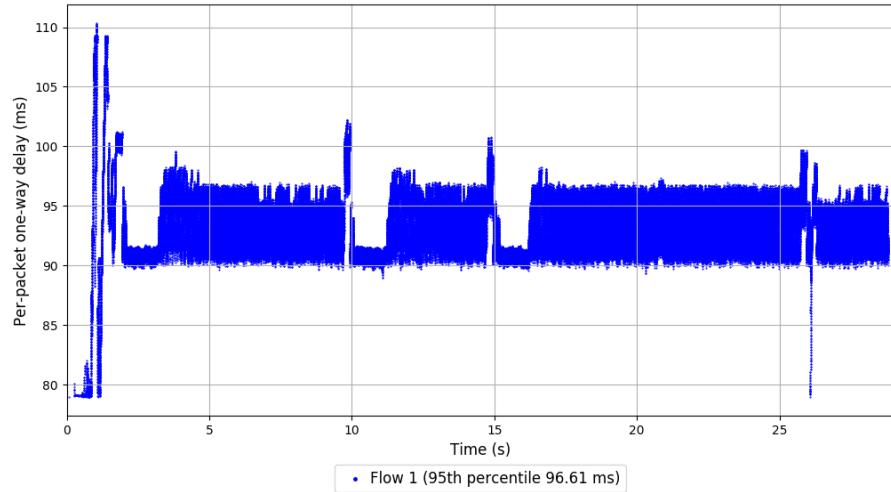
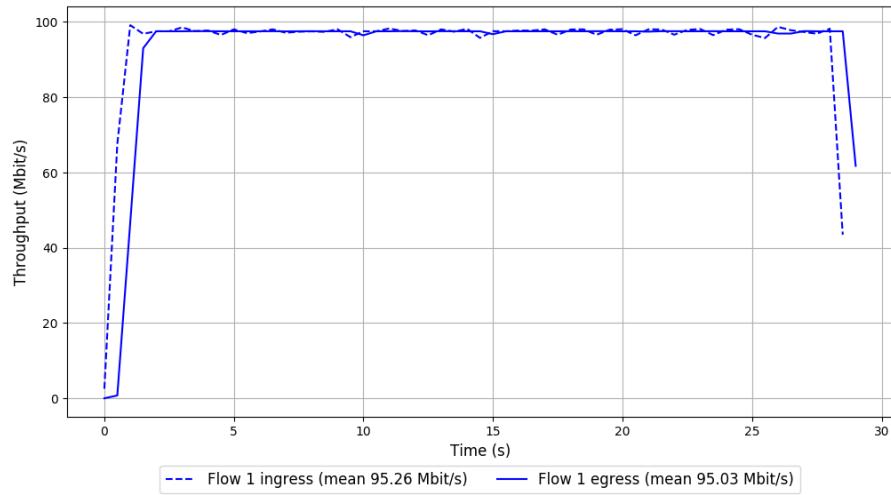


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 19:45:44
End at: 2019-06-27 19:46:14
Local clock offset: -6.196 ms
Remote clock offset: 140.566 ms

# Below is generated by plot.py at 2019-06-27 21:20:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.03 Mbit/s
95th percentile per-packet one-way delay: 96.607 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 95.03 Mbit/s
95th percentile per-packet one-way delay: 96.607 ms
Loss rate: 0.19%
```

Run 2: Report of Indigo-MusesC3 — Data Link

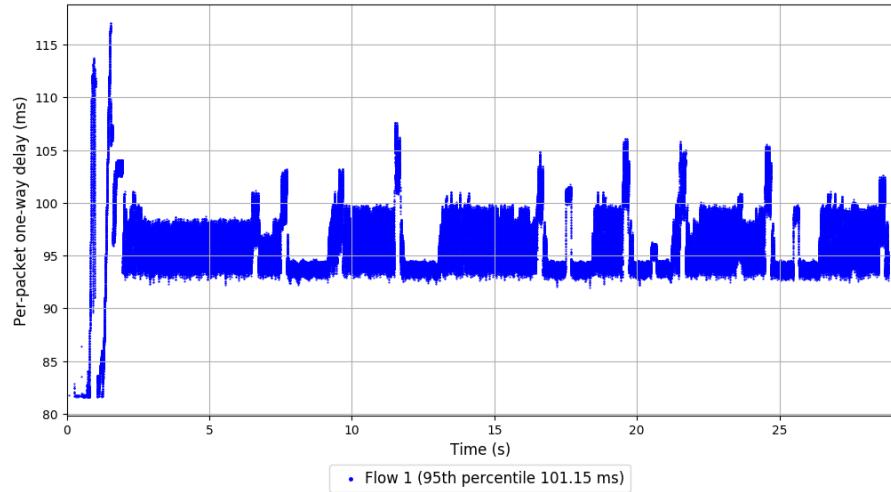
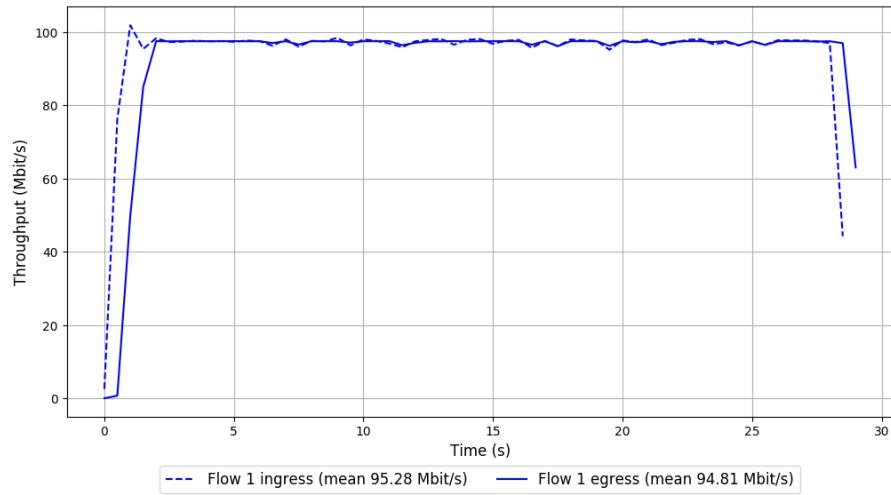


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 20:11:33
End at: 2019-06-27 20:12:03
Local clock offset: -5.66 ms
Remote clock offset: 147.821 ms

# Below is generated by plot.py at 2019-06-27 21:20:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.81 Mbit/s
95th percentile per-packet one-way delay: 101.147 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 94.81 Mbit/s
95th percentile per-packet one-way delay: 101.147 ms
Loss rate: 0.45%
```

Run 3: Report of Indigo-MusesC3 — Data Link

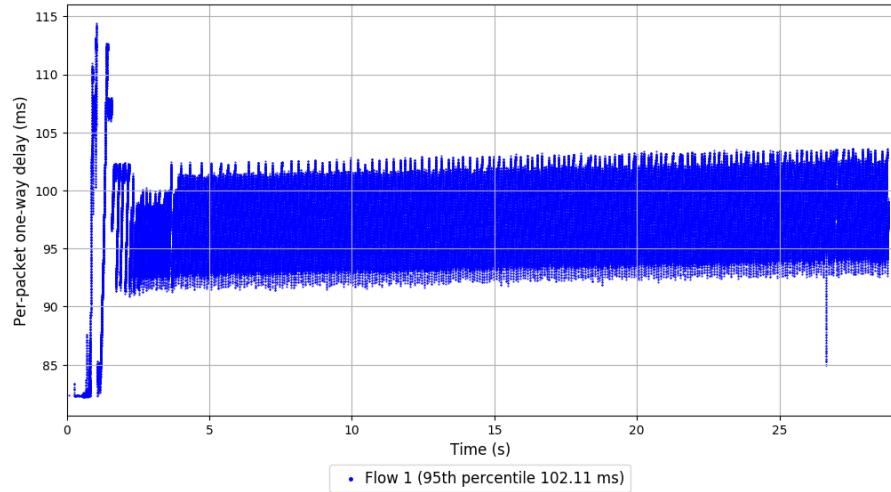
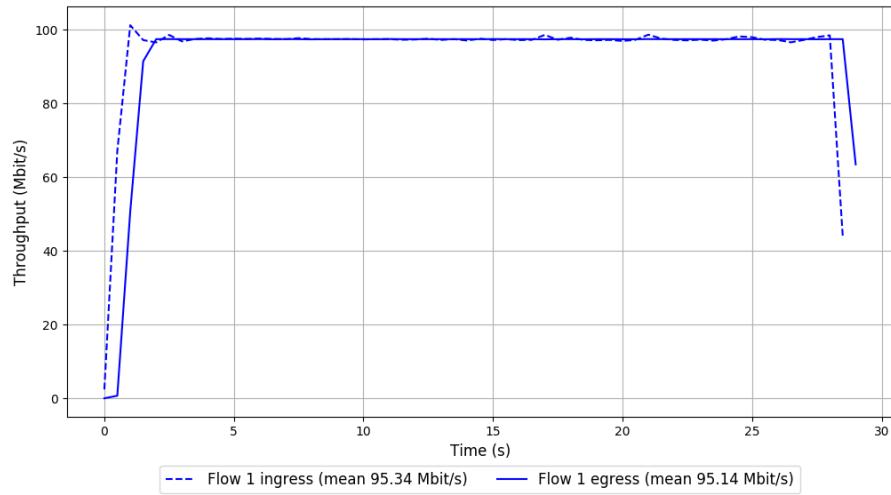


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 20:37:26
End at: 2019-06-27 20:37:56
Local clock offset: -7.402 ms
Remote clock offset: -47.011 ms

# Below is generated by plot.py at 2019-06-27 21:20:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.14 Mbit/s
95th percentile per-packet one-way delay: 102.106 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 95.14 Mbit/s
95th percentile per-packet one-way delay: 102.106 ms
Loss rate: 0.17%
```

Run 4: Report of Indigo-MusesC3 — Data Link

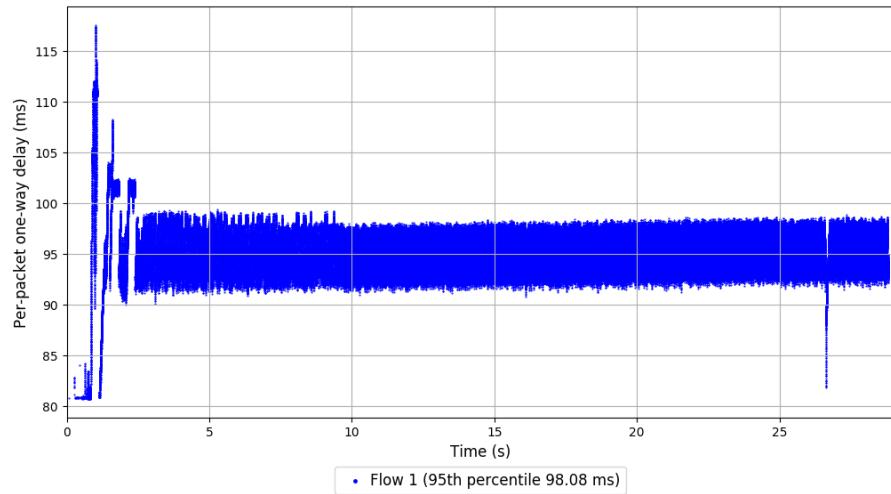
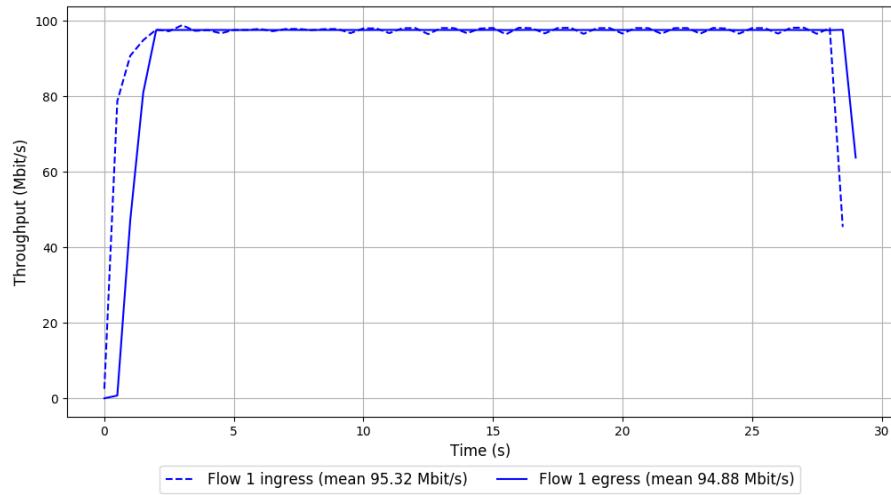


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 21:03:16
End at: 2019-06-27 21:03:46
Local clock offset: -5.741 ms
Remote clock offset: -107.15 ms

# Below is generated by plot.py at 2019-06-27 21:20:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.88 Mbit/s
95th percentile per-packet one-way delay: 98.083 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 94.88 Mbit/s
95th percentile per-packet one-way delay: 98.083 ms
Loss rate: 0.42%
```

Run 5: Report of Indigo-MusesC3 — Data Link

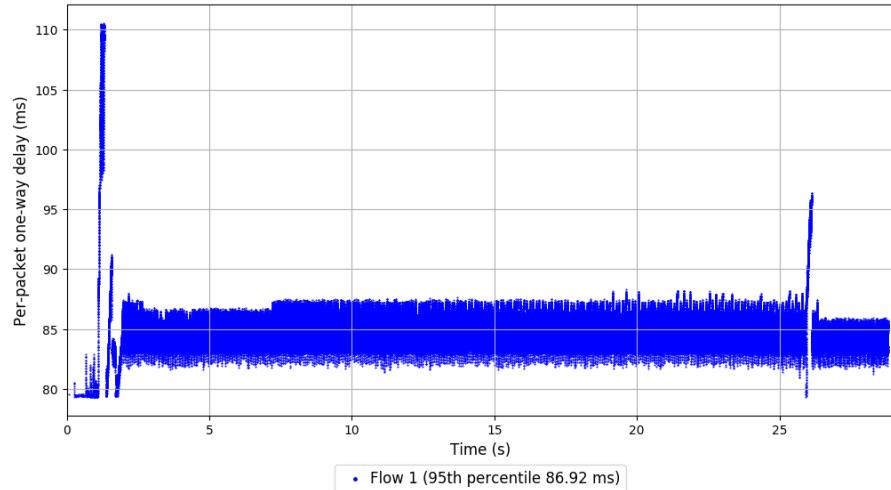
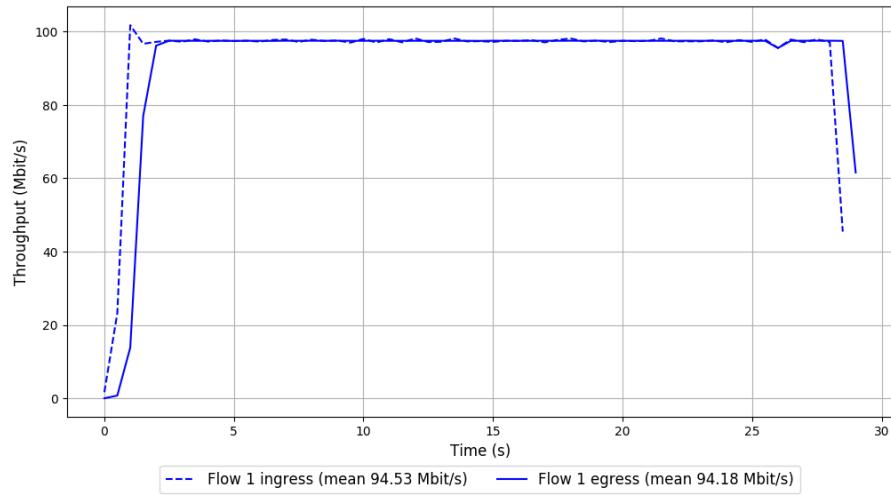


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 19:23:35
End at: 2019-06-27 19:24:05
Local clock offset: -6.15 ms
Remote clock offset: 138.767 ms

# Below is generated by plot.py at 2019-06-27 21:20:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.18 Mbit/s
95th percentile per-packet one-way delay: 86.922 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 94.18 Mbit/s
95th percentile per-packet one-way delay: 86.922 ms
Loss rate: 0.35%
```

Run 1: Report of Indigo-MusesC5 — Data Link

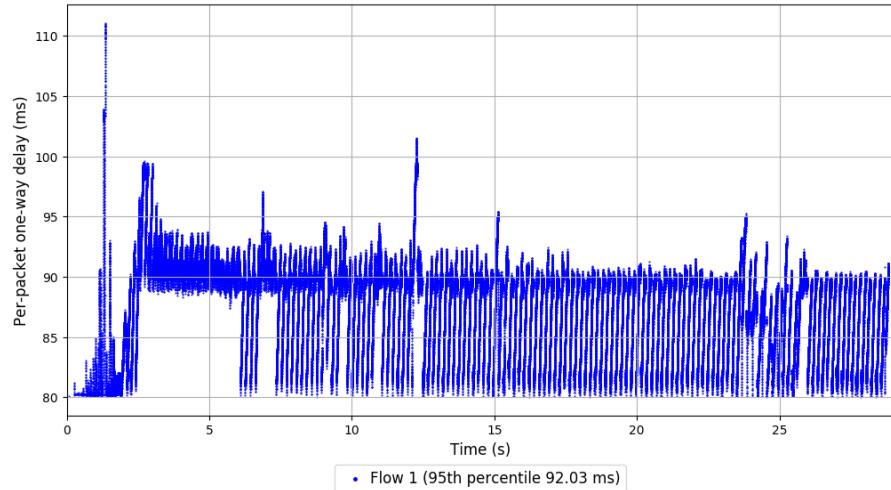
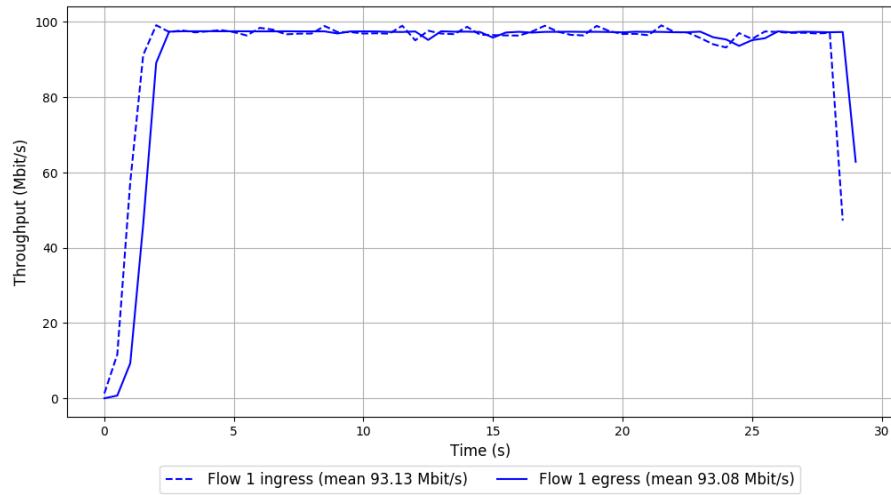


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 19:49:21
End at: 2019-06-27 19:49:51
Local clock offset: -5.577 ms
Remote clock offset: 142.174 ms

# Below is generated by plot.py at 2019-06-27 21:20:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.08 Mbit/s
95th percentile per-packet one-way delay: 92.031 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 93.08 Mbit/s
95th percentile per-packet one-way delay: 92.031 ms
Loss rate: 0.02%
```

Run 2: Report of Indigo-MusesC5 — Data Link

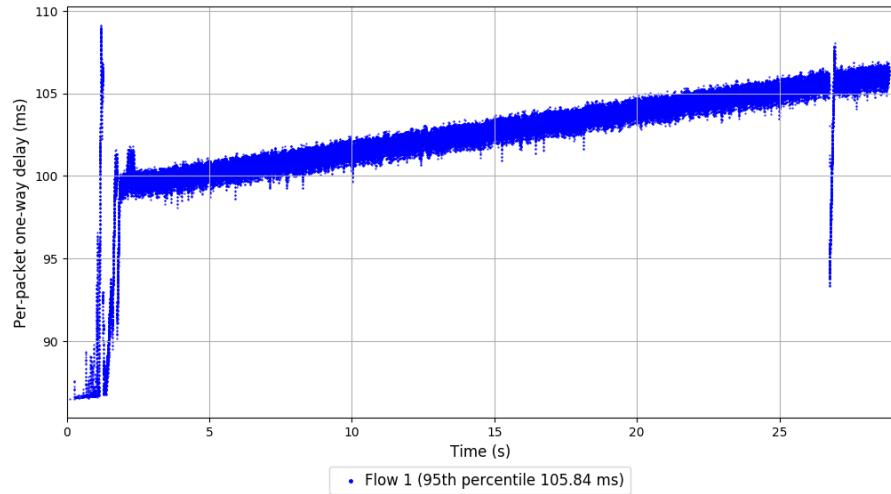
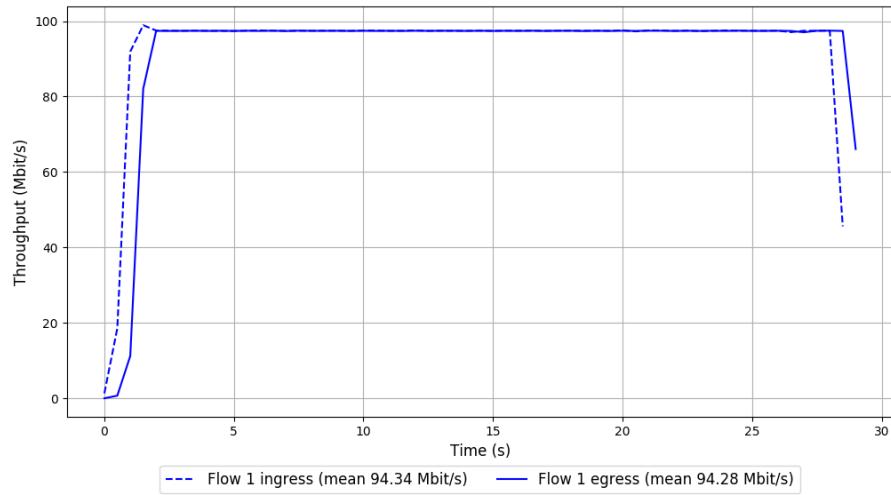


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 20:15:11
End at: 2019-06-27 20:15:41
Local clock offset: -5.904 ms
Remote clock offset: 111.147 ms

# Below is generated by plot.py at 2019-06-27 21:21:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.28 Mbit/s
95th percentile per-packet one-way delay: 105.840 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 94.28 Mbit/s
95th percentile per-packet one-way delay: 105.840 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC5 — Data Link

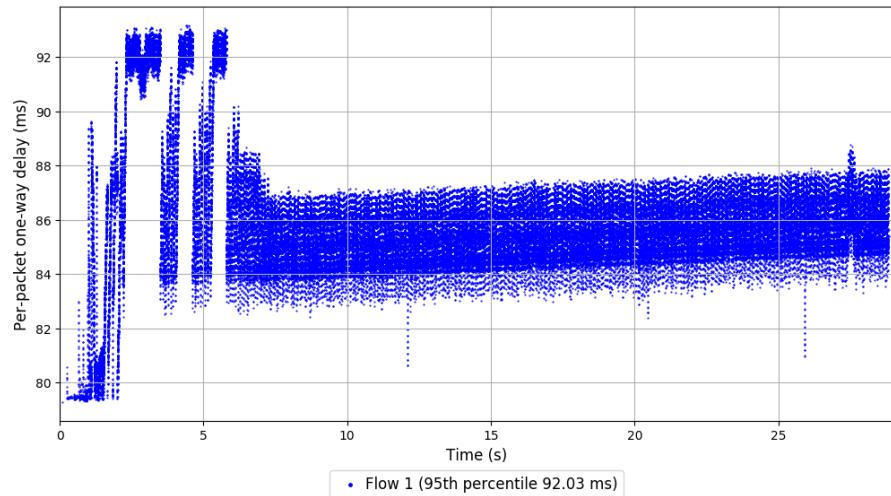
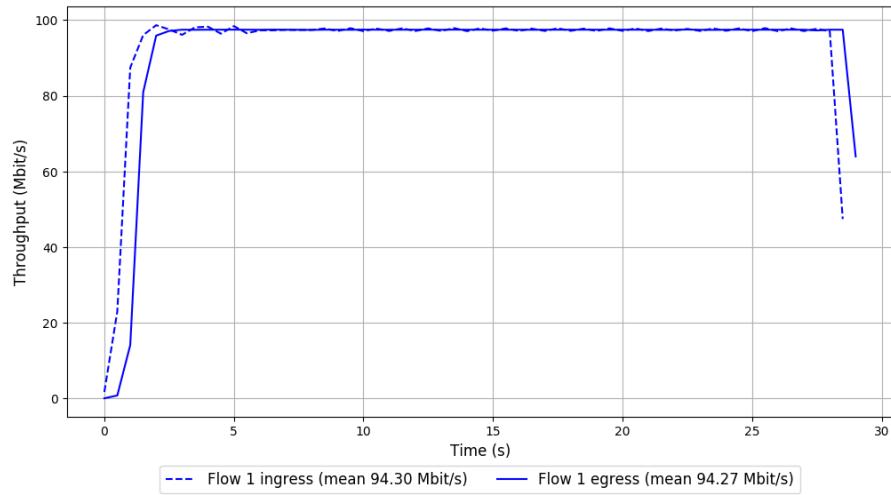


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 20:41:04
End at: 2019-06-27 20:41:34
Local clock offset: -7.359 ms
Remote clock offset: -56.927 ms

# Below is generated by plot.py at 2019-06-27 21:21:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.27 Mbit/s
95th percentile per-packet one-way delay: 92.032 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 94.27 Mbit/s
95th percentile per-packet one-way delay: 92.032 ms
Loss rate: 0.01%
```

Run 4: Report of Indigo-MusesC5 — Data Link

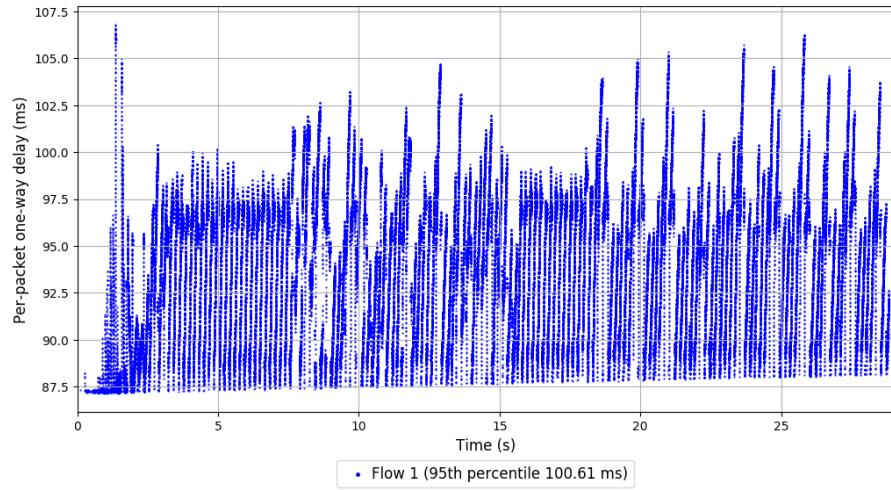
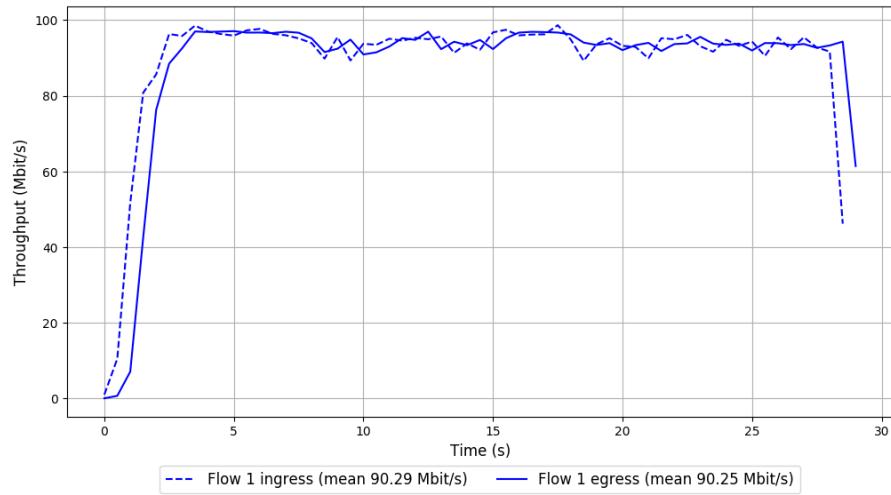


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 21:06:53
End at: 2019-06-27 21:07:23
Local clock offset: -6.663 ms
Remote clock offset: -110.396 ms

# Below is generated by plot.py at 2019-06-27 21:21:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.25 Mbit/s
95th percentile per-packet one-way delay: 100.608 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 90.25 Mbit/s
95th percentile per-packet one-way delay: 100.608 ms
Loss rate: 0.04%
```

Run 5: Report of Indigo-MusesC5 — Data Link

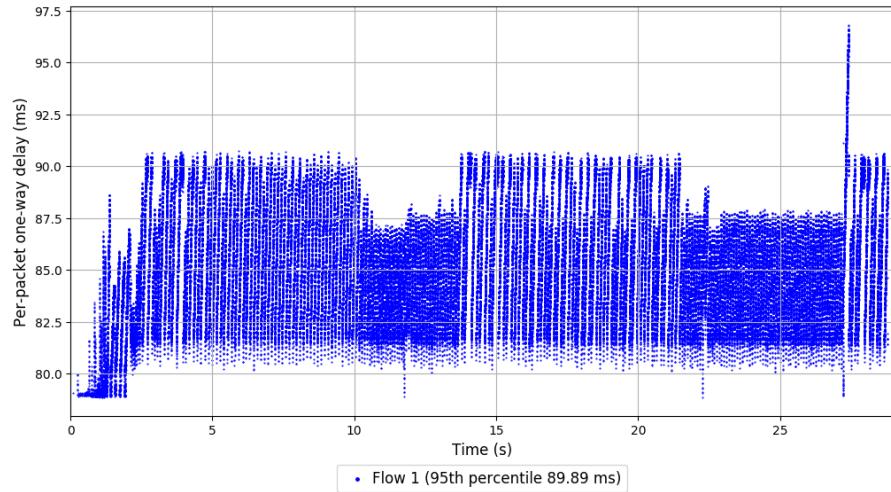
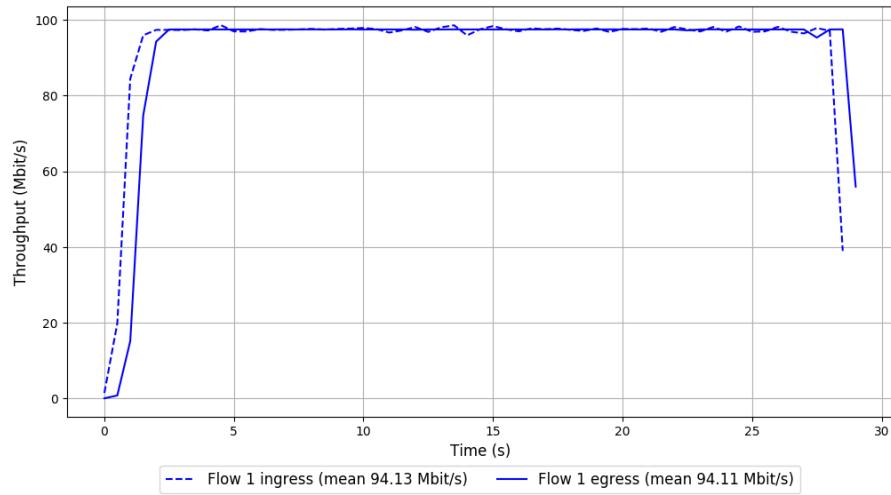


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 19:10:35
End at: 2019-06-27 19:11:05
Local clock offset: -6.669 ms
Remote clock offset: 136.973 ms

# Below is generated by plot.py at 2019-06-27 21:21:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.11 Mbit/s
95th percentile per-packet one-way delay: 89.887 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 94.11 Mbit/s
95th percentile per-packet one-way delay: 89.887 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesD — Data Link

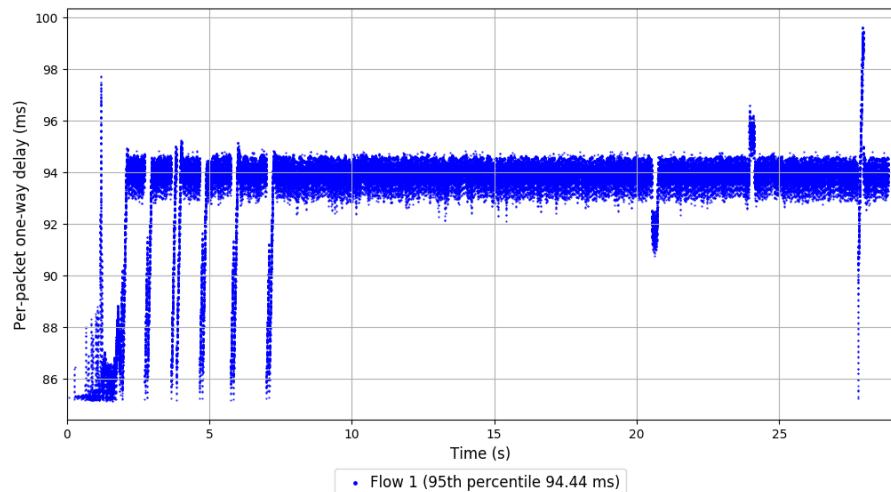
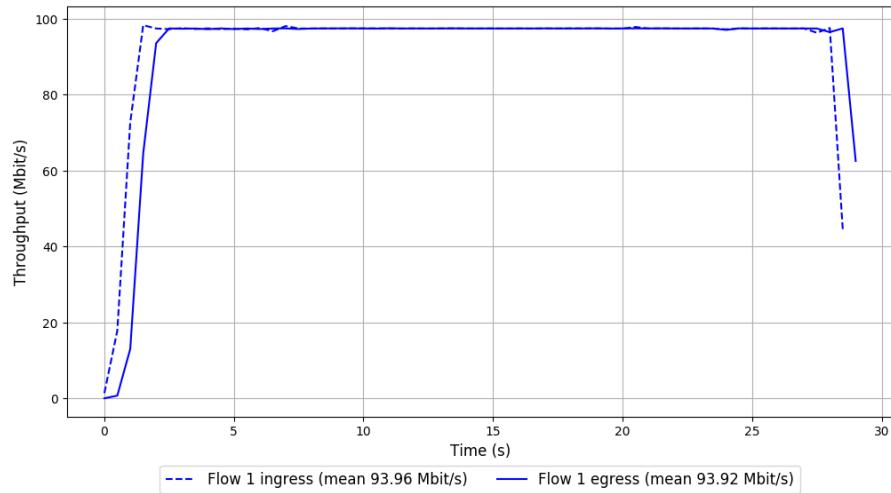


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 19:36:23
End at: 2019-06-27 19:36:53
Local clock offset: -6.299 ms
Remote clock offset: 144.394 ms

# Below is generated by plot.py at 2019-06-27 21:21:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.92 Mbit/s
95th percentile per-packet one-way delay: 94.438 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 93.92 Mbit/s
95th percentile per-packet one-way delay: 94.438 ms
Loss rate: 0.02%
```

Run 2: Report of Indigo-MusesD — Data Link

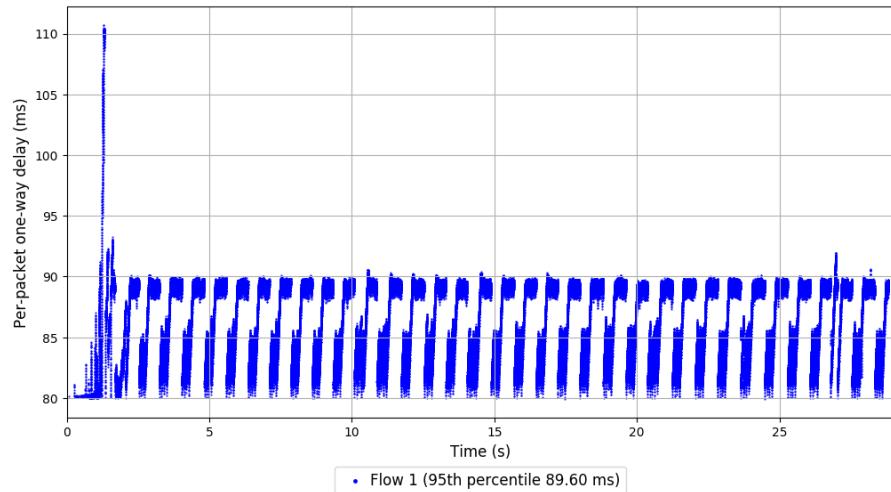
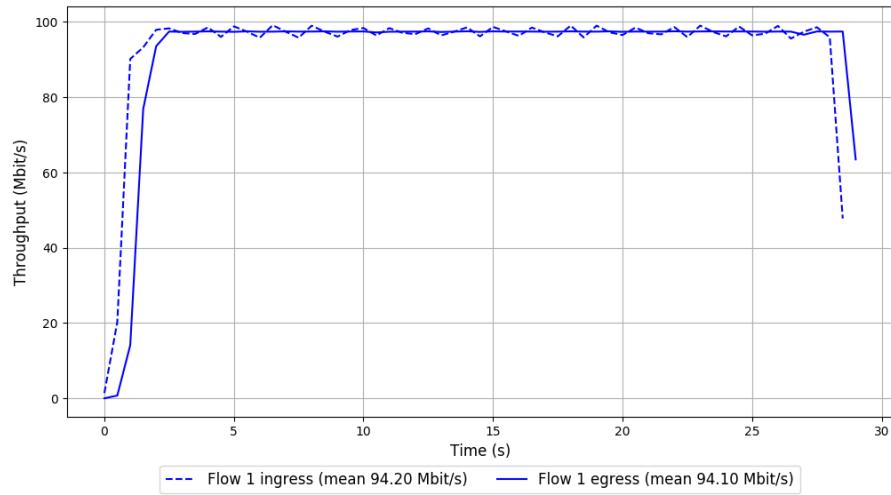


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 20:02:11
End at: 2019-06-27 20:02:41
Local clock offset: -5.683 ms
Remote clock offset: 143.875 ms

# Below is generated by plot.py at 2019-06-27 21:21:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.10 Mbit/s
95th percentile per-packet one-way delay: 89.600 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 94.10 Mbit/s
95th percentile per-packet one-way delay: 89.600 ms
Loss rate: 0.07%
```

Run 3: Report of Indigo-MusesD — Data Link

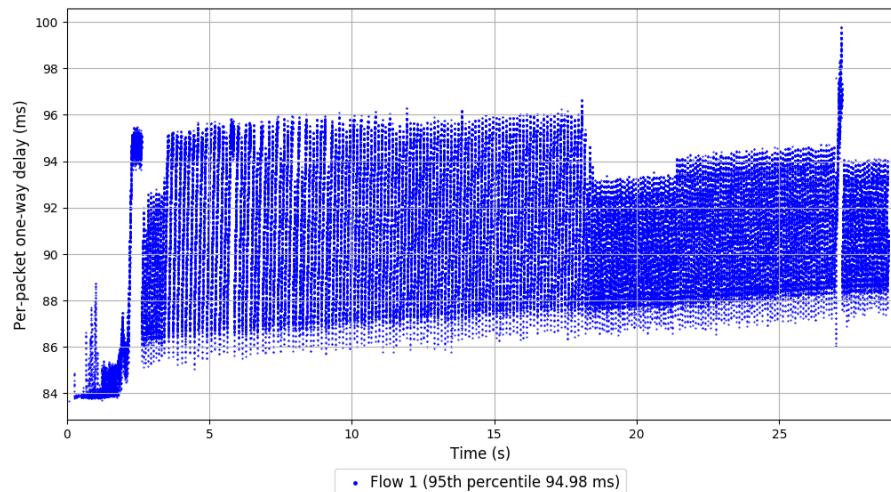
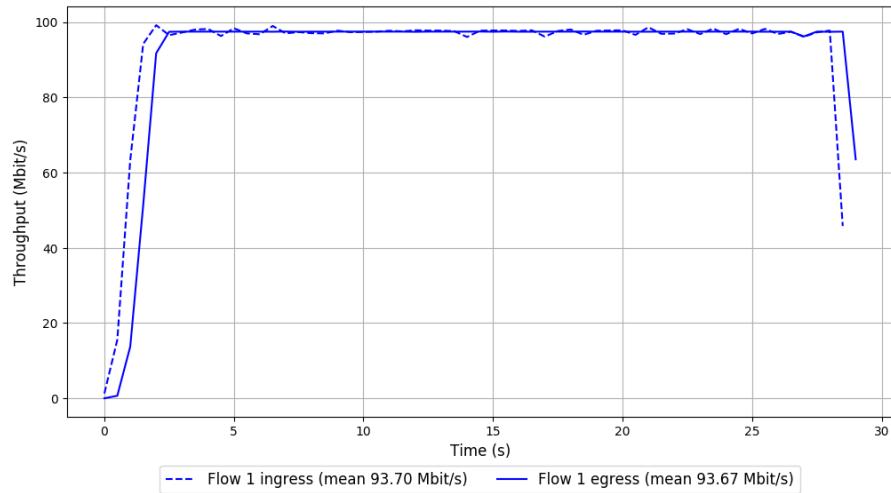


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 20:28:04
End at: 2019-06-27 20:28:34
Local clock offset: -6.209 ms
Remote clock offset: -5.103 ms

# Below is generated by plot.py at 2019-06-27 21:22:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.67 Mbit/s
95th percentile per-packet one-way delay: 94.984 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 93.67 Mbit/s
95th percentile per-packet one-way delay: 94.984 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesD — Data Link

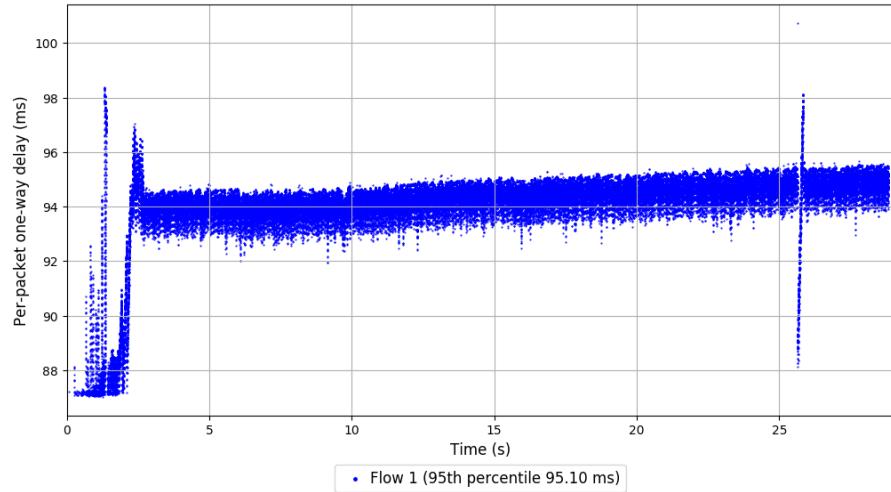
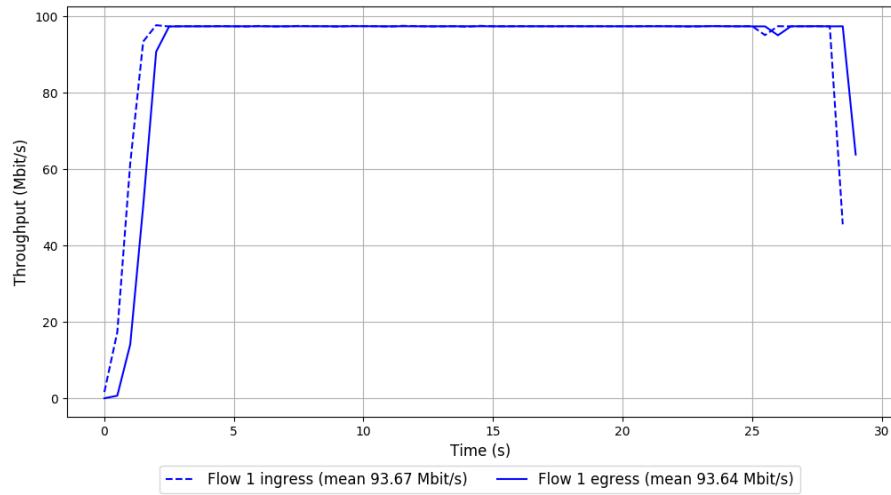


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 20:53:53
End at: 2019-06-27 20:54:23
Local clock offset: -7.049 ms
Remote clock offset: -82.085 ms

# Below is generated by plot.py at 2019-06-27 21:22:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.64 Mbit/s
95th percentile per-packet one-way delay: 95.098 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 93.64 Mbit/s
95th percentile per-packet one-way delay: 95.098 ms
Loss rate: 0.01%
```

Run 5: Report of Indigo-MusesD — Data Link

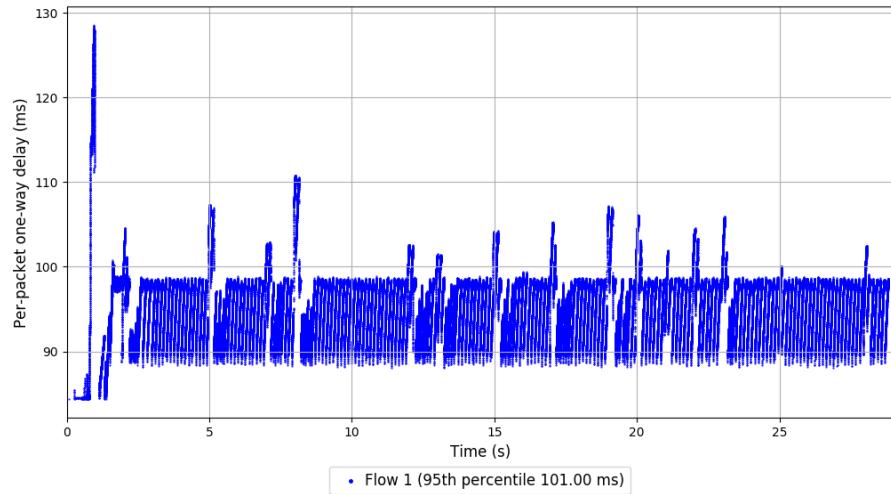
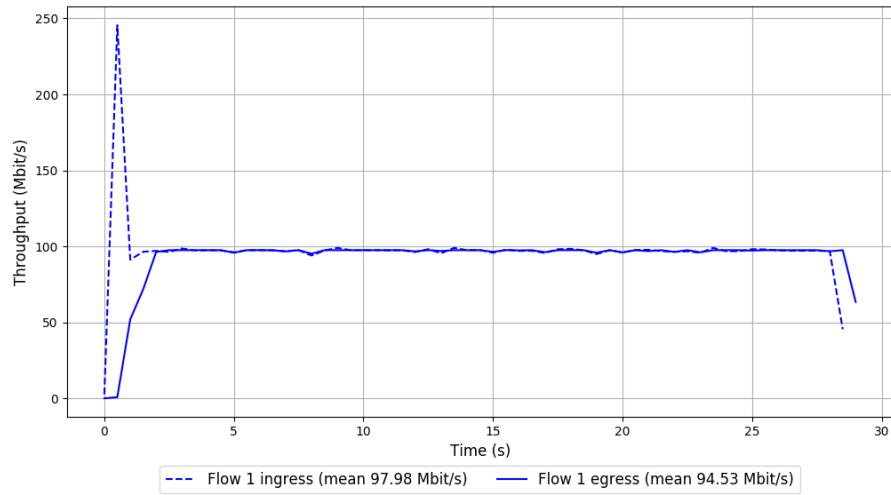


```
Run 1: Statistics of Indigo-MusesT
```

```
Start at: 2019-06-27 19:30:37
End at: 2019-06-27 19:31:07
Local clock offset: -6.701 ms
Remote clock offset: 144.833 ms

# Below is generated by plot.py at 2019-06-27 21:22:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.53 Mbit/s
95th percentile per-packet one-way delay: 100.997 ms
Loss rate: 3.47%
-- Flow 1:
Average throughput: 94.53 Mbit/s
95th percentile per-packet one-way delay: 100.997 ms
Loss rate: 3.47%
```

Run 1: Report of Indigo-MusesT — Data Link

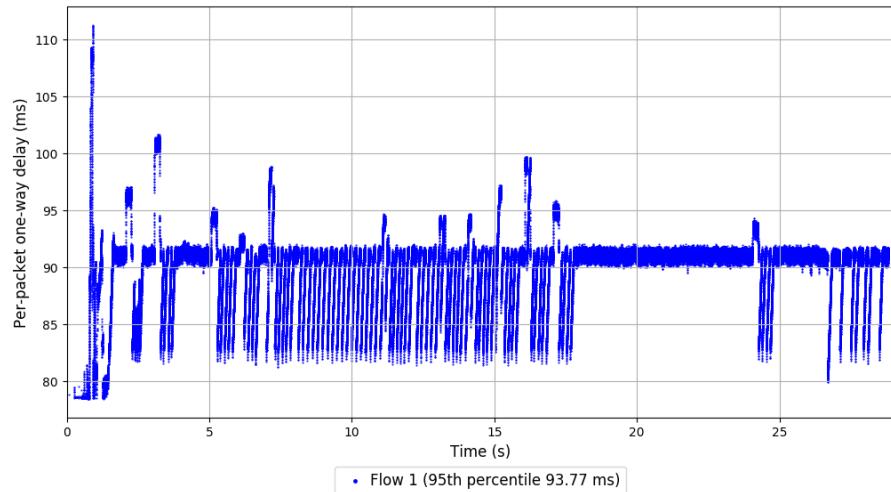
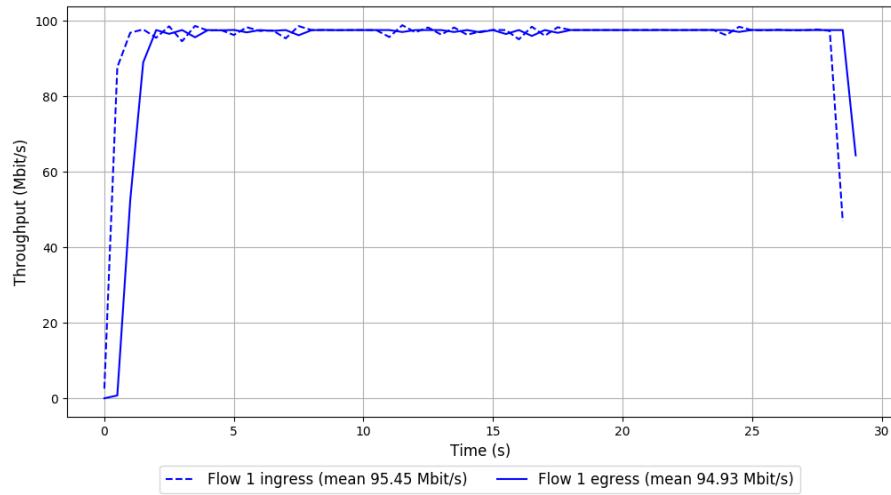


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 19:56:23
End at: 2019-06-27 19:56:53
Local clock offset: -5.552 ms
Remote clock offset: 143.123 ms

# Below is generated by plot.py at 2019-06-27 21:22:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.93 Mbit/s
95th percentile per-packet one-way delay: 93.770 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 94.93 Mbit/s
95th percentile per-packet one-way delay: 93.770 ms
Loss rate: 0.50%
```

Run 2: Report of Indigo-MusesT — Data Link

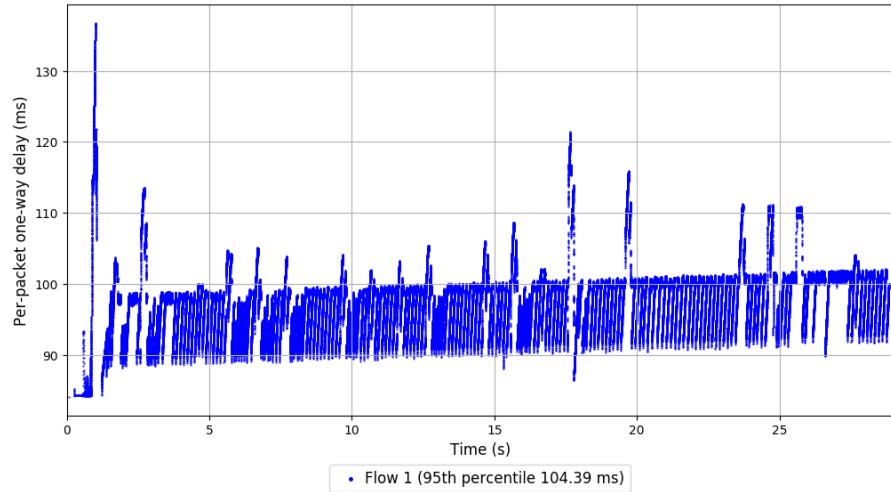
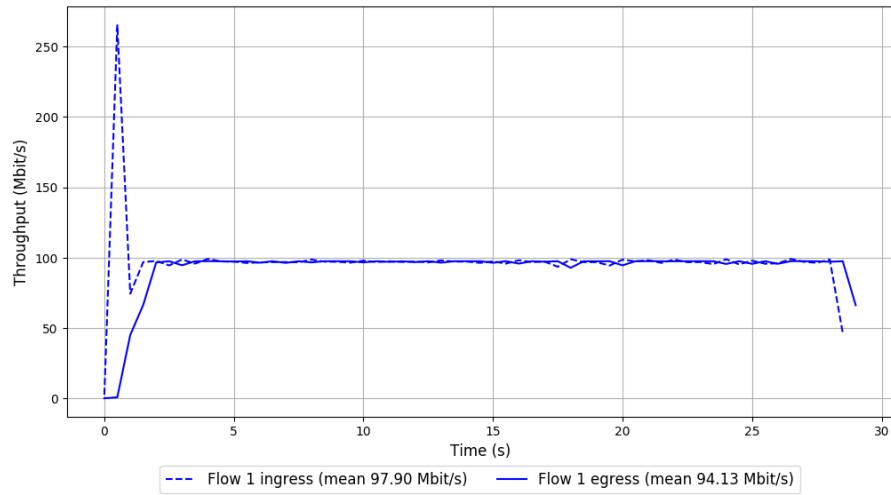


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 20:22:16
End at: 2019-06-27 20:22:46
Local clock offset: -6.148 ms
Remote clock offset: 31.485 ms

# Below is generated by plot.py at 2019-06-27 21:22:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.13 Mbit/s
95th percentile per-packet one-way delay: 104.385 ms
Loss rate: 3.80%
-- Flow 1:
Average throughput: 94.13 Mbit/s
95th percentile per-packet one-way delay: 104.385 ms
Loss rate: 3.80%
```

Run 3: Report of Indigo-MusesT — Data Link

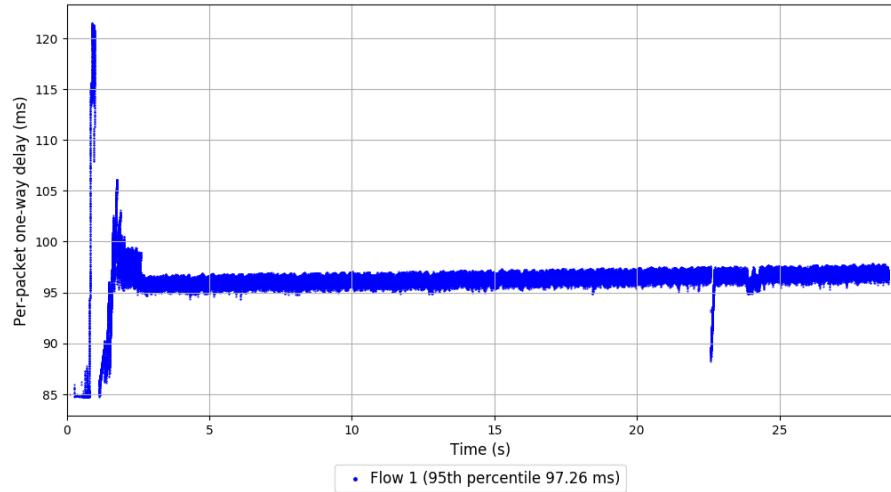
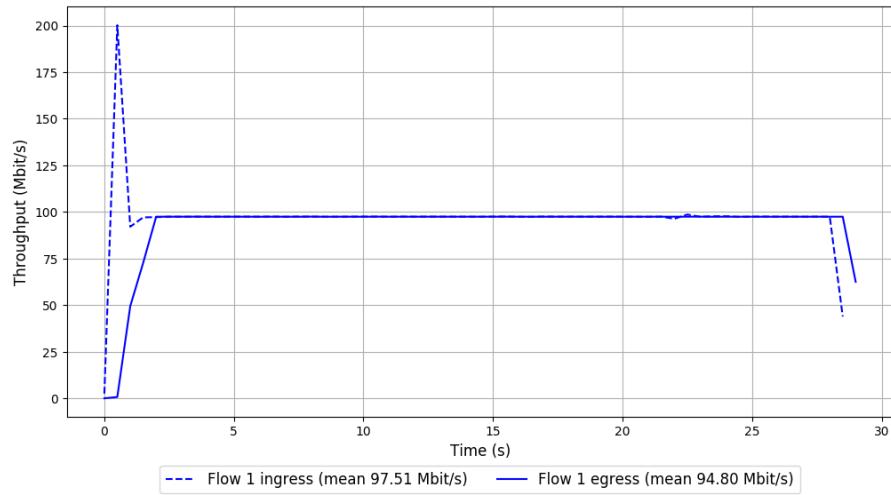


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 20:48:06
End at: 2019-06-27 20:48:36
Local clock offset: -6.504 ms
Remote clock offset: -69.818 ms

# Below is generated by plot.py at 2019-06-27 21:22:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.80 Mbit/s
95th percentile per-packet one-way delay: 97.259 ms
Loss rate: 2.74%
-- Flow 1:
Average throughput: 94.80 Mbit/s
95th percentile per-packet one-way delay: 97.259 ms
Loss rate: 2.74%
```

Run 4: Report of Indigo-MusesT — Data Link

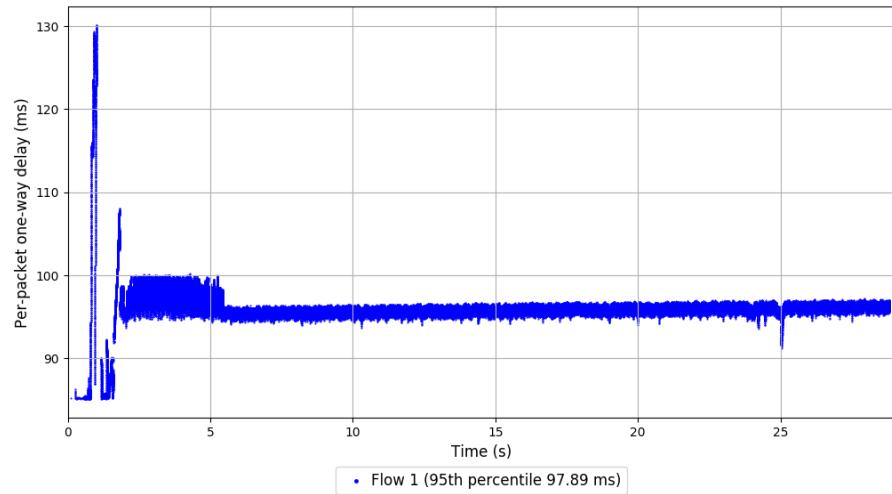
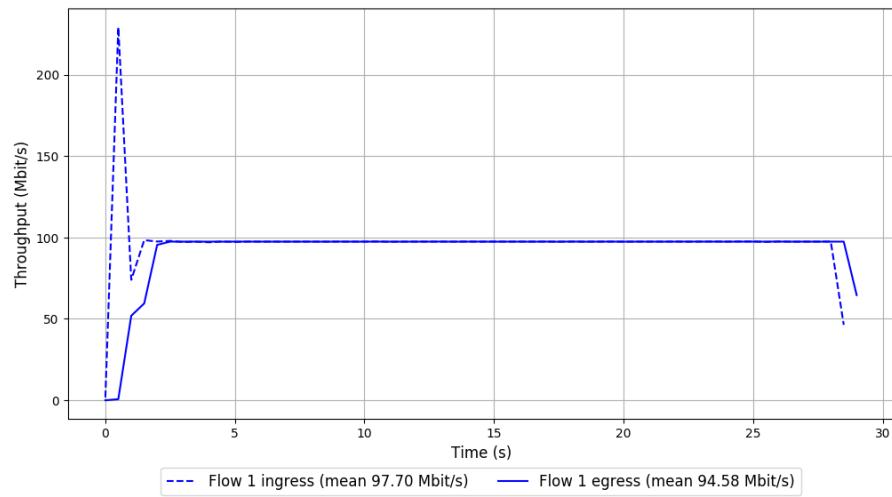


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 21:13:58
End at: 2019-06-27 21:14:28
Local clock offset: -5.552 ms
Remote clock offset: -126.022 ms

# Below is generated by plot.py at 2019-06-27 21:22:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.58 Mbit/s
95th percentile per-packet one-way delay: 97.888 ms
Loss rate: 3.16%
-- Flow 1:
Average throughput: 94.58 Mbit/s
95th percentile per-packet one-way delay: 97.888 ms
Loss rate: 3.16%
```

Run 5: Report of Indigo-MusesT — Data Link

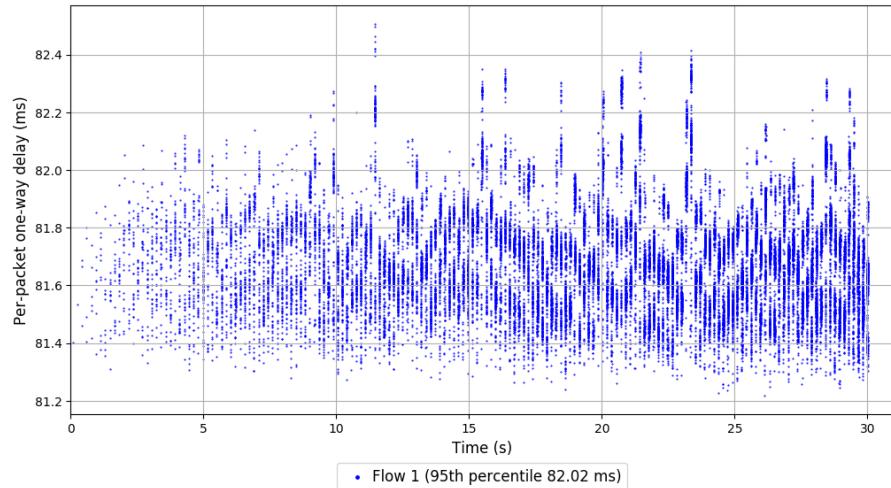
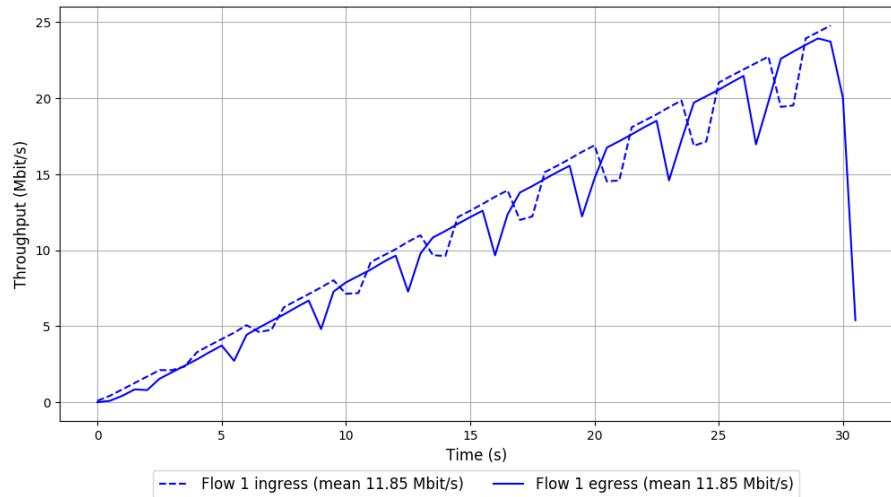


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2019-06-27 19:15:17
End at: 2019-06-27 19:15:47
Local clock offset: -7.446 ms
Remote clock offset: 137.79 ms

# Below is generated by plot.py at 2019-06-27 21:22:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.85 Mbit/s
95th percentile per-packet one-way delay: 82.022 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.85 Mbit/s
95th percentile per-packet one-way delay: 82.022 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

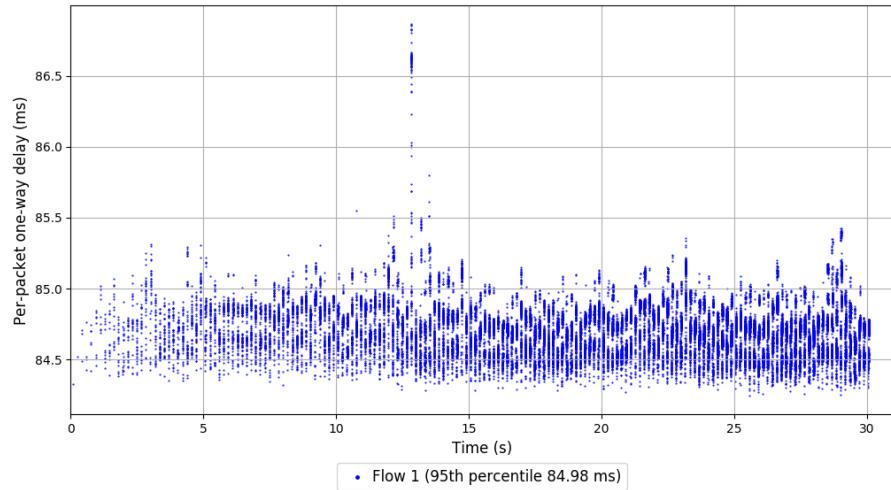
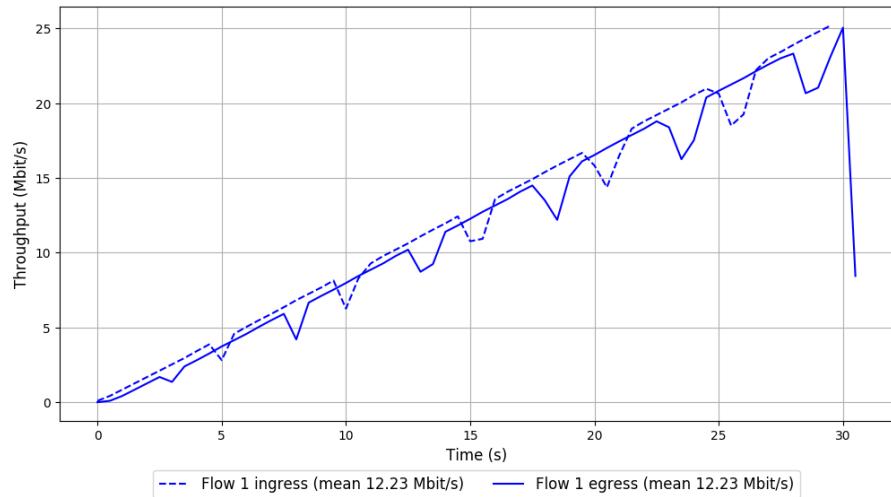


Run 2: Statistics of LEDBAT

```
Start at: 2019-06-27 19:41:03
End at: 2019-06-27 19:41:33
Local clock offset: -6.429 ms
Remote clock offset: 146.179 ms

# Below is generated by plot.py at 2019-06-27 21:22:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.23 Mbit/s
95th percentile per-packet one-way delay: 84.981 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.23 Mbit/s
95th percentile per-packet one-way delay: 84.981 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

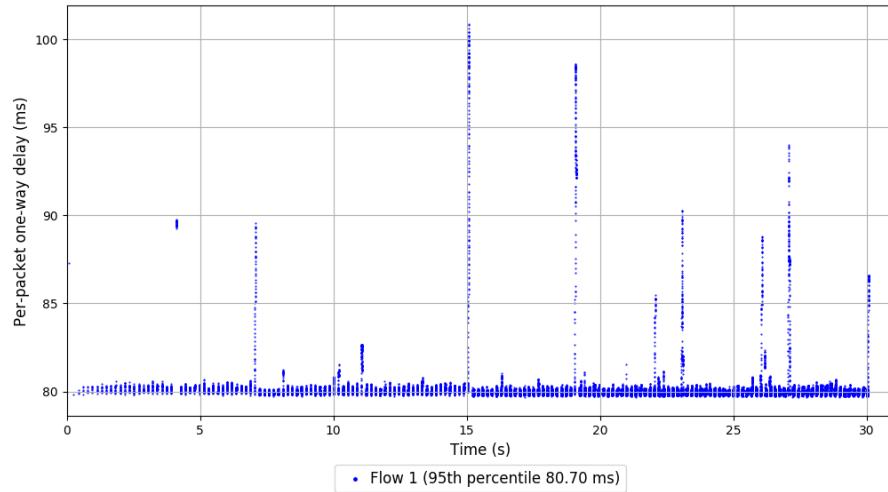
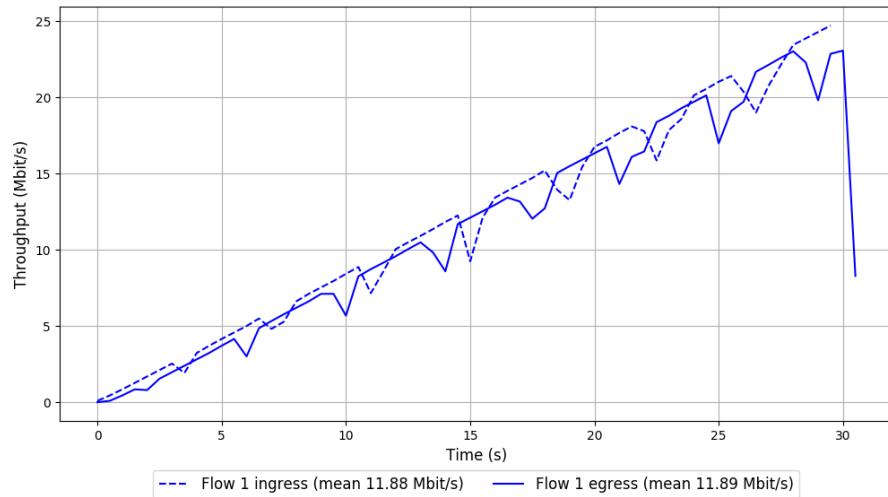


Run 3: Statistics of LEDBAT

```
Start at: 2019-06-27 20:06:53
End at: 2019-06-27 20:07:23
Local clock offset: -6.485 ms
Remote clock offset: 143.429 ms

# Below is generated by plot.py at 2019-06-27 21:22:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.89 Mbit/s
95th percentile per-packet one-way delay: 80.701 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.89 Mbit/s
95th percentile per-packet one-way delay: 80.701 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

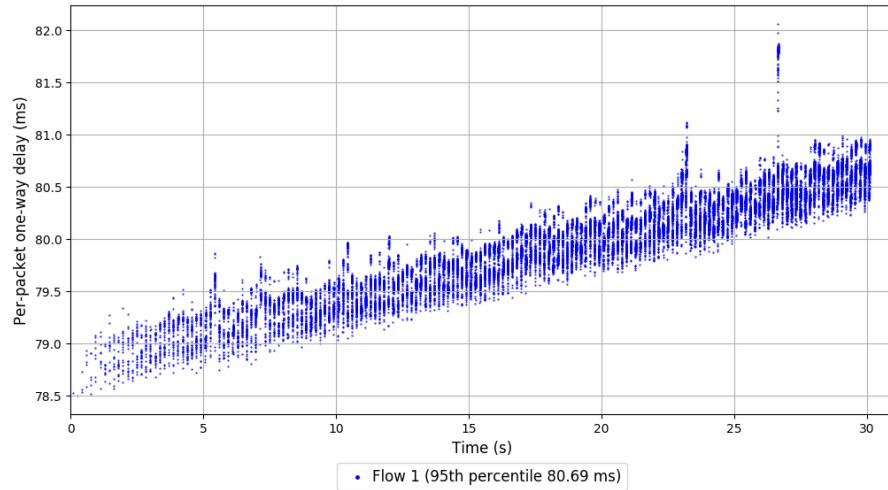
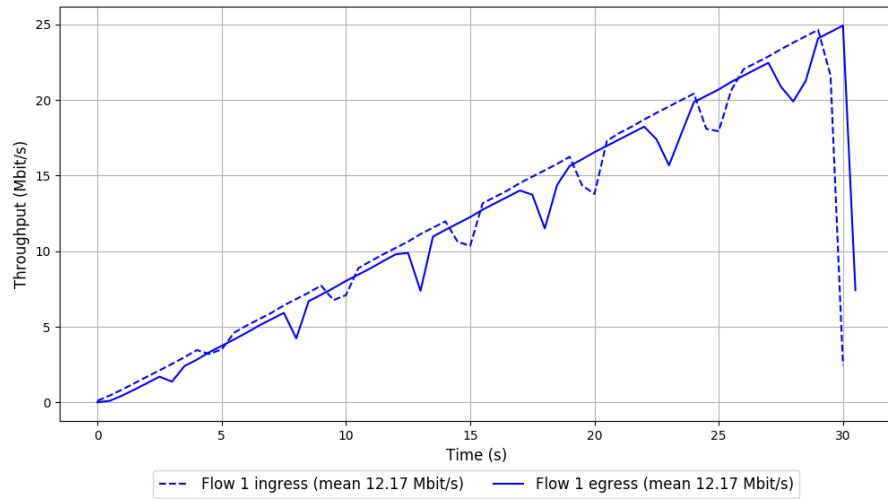


Run 4: Statistics of LEDBAT

```
Start at: 2019-06-27 20:32:45
End at: 2019-06-27 20:33:15
Local clock offset: -6.452 ms
Remote clock offset: -30.745 ms

# Below is generated by plot.py at 2019-06-27 21:22:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.17 Mbit/s
95th percentile per-packet one-way delay: 80.685 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.17 Mbit/s
95th percentile per-packet one-way delay: 80.685 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

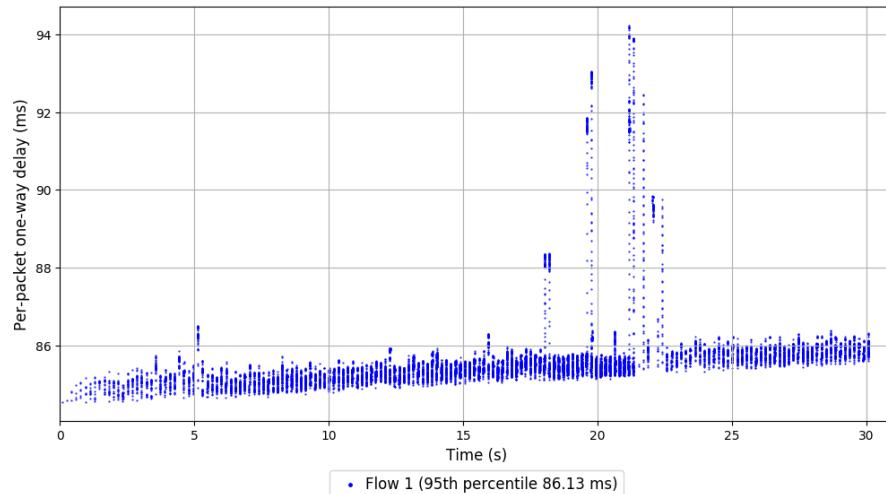
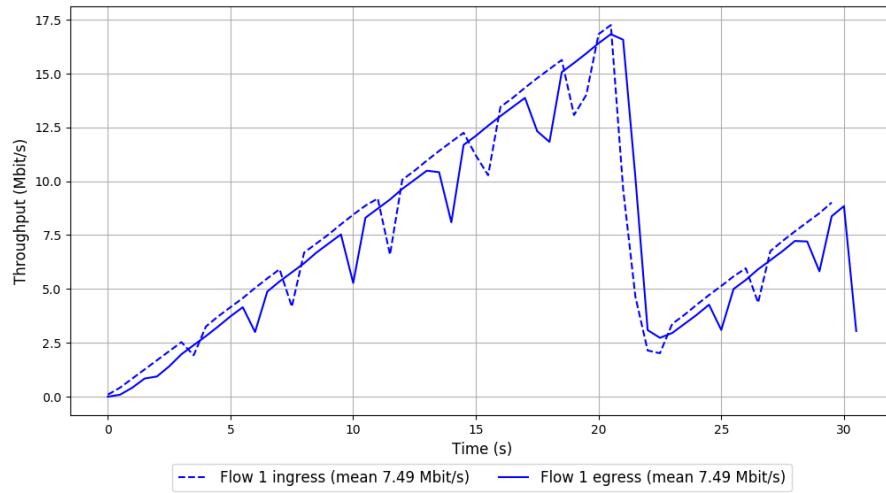


Run 5: Statistics of LEDBAT

```
Start at: 2019-06-27 20:58:35
End at: 2019-06-27 20:59:05
Local clock offset: -6.616 ms
Remote clock offset: -93.634 ms

# Below is generated by plot.py at 2019-06-27 21:22:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 86.131 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 86.131 ms
Loss rate: 0.04%
```

Run 5: Report of LEDBAT — Data Link

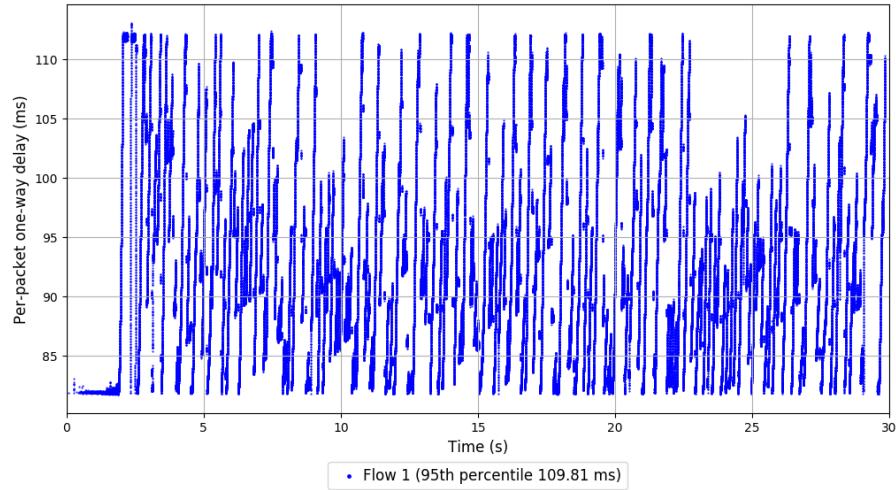
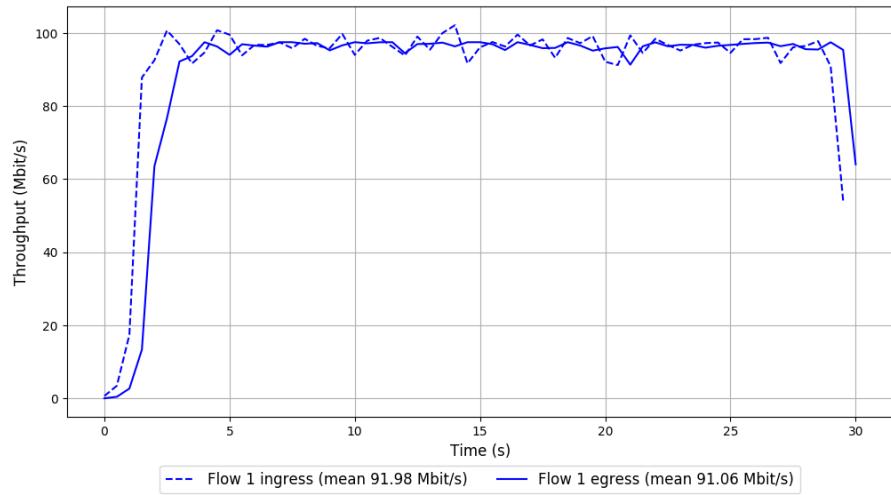


```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-06-27 19:17:35
End at: 2019-06-27 19:18:05
Local clock offset: -7.675 ms
Remote clock offset: 138.016 ms

# Below is generated by plot.py at 2019-06-27 21:23:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.06 Mbit/s
95th percentile per-packet one-way delay: 109.813 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 91.06 Mbit/s
95th percentile per-packet one-way delay: 109.813 ms
Loss rate: 0.91%
```

Run 1: Report of Muses_DecisionTree — Data Link

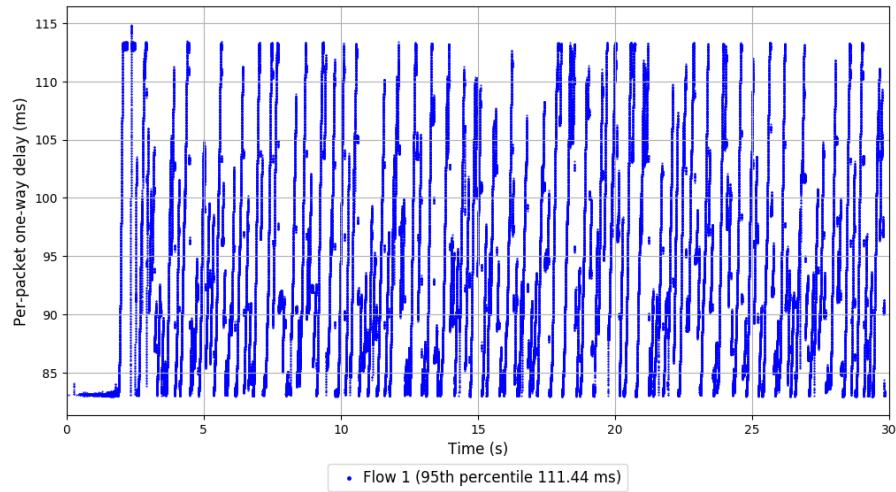
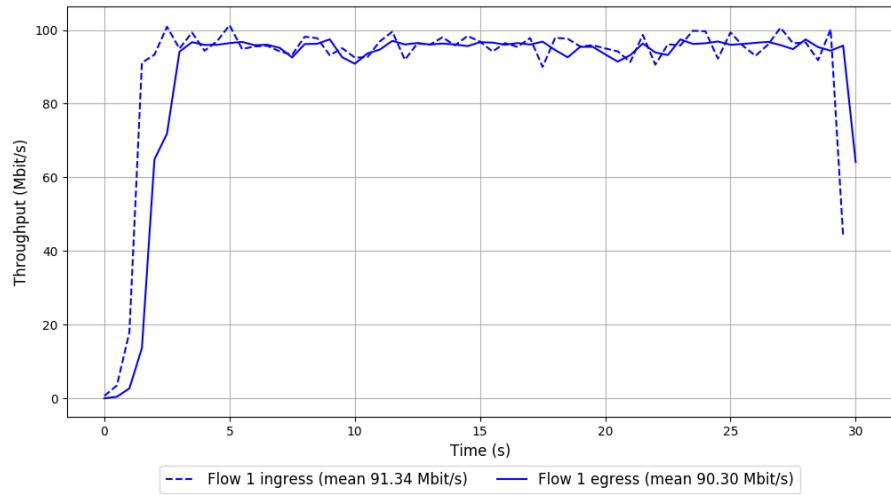


```
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-06-27 19:43:20
End at: 2019-06-27 19:43:50
Local clock offset: -5.583 ms
Remote clock offset: 144.196 ms

# Below is generated by plot.py at 2019-06-27 21:23:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.30 Mbit/s
95th percentile per-packet one-way delay: 111.435 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 90.30 Mbit/s
95th percentile per-packet one-way delay: 111.435 ms
Loss rate: 1.14%
```

Run 2: Report of Muses_DecisionTree — Data Link

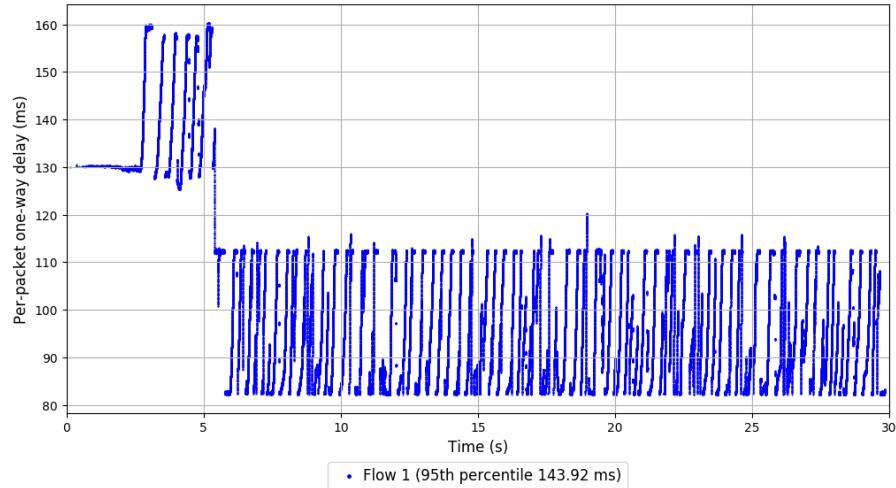
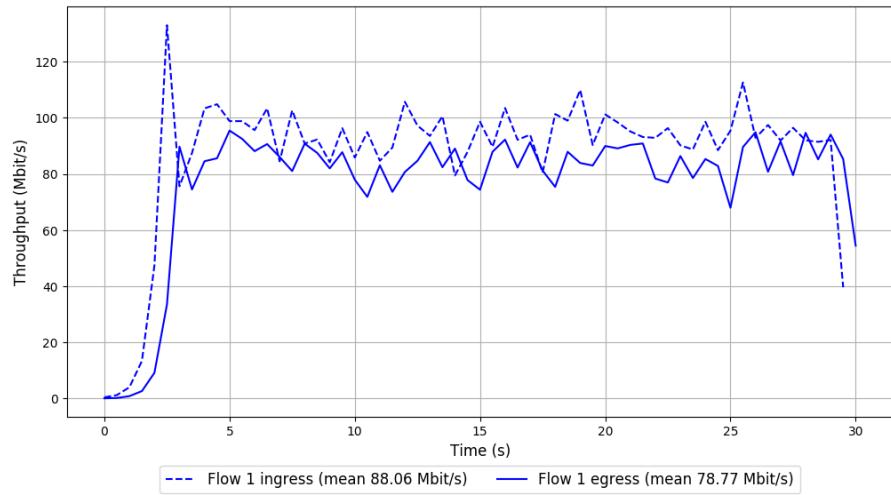


```
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-06-27 20:09:10
End at: 2019-06-27 20:09:40
Local clock offset: -5.629 ms
Remote clock offset: 148.851 ms

# Below is generated by plot.py at 2019-06-27 21:23:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.77 Mbit/s
95th percentile per-packet one-way delay: 143.920 ms
Loss rate: 10.69%
-- Flow 1:
Average throughput: 78.77 Mbit/s
95th percentile per-packet one-way delay: 143.920 ms
Loss rate: 10.69%
```

Run 3: Report of Muses_DecisionTree — Data Link

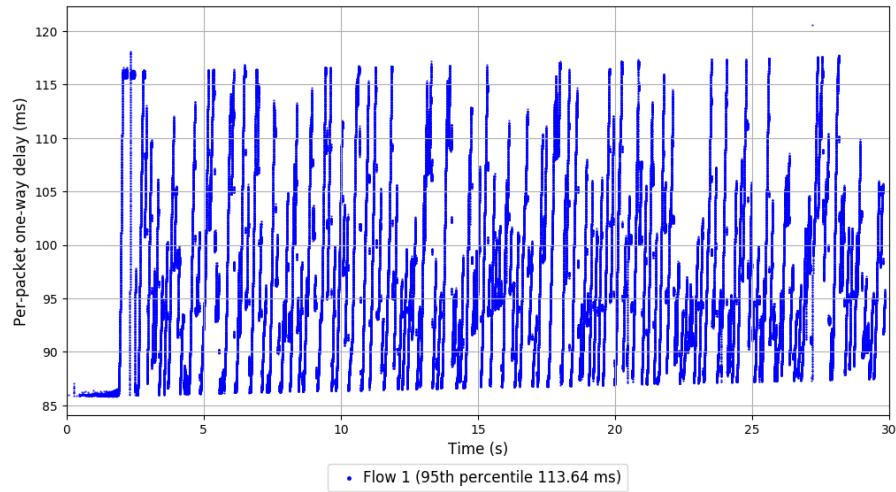
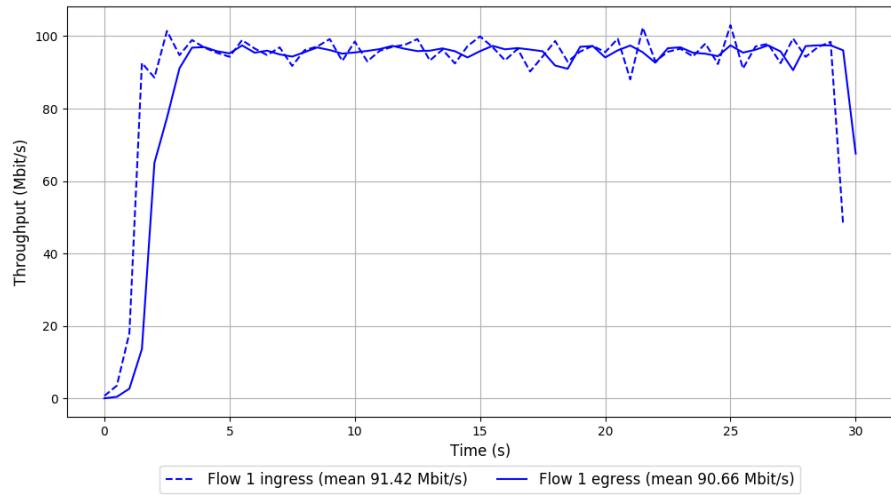


```
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-06-27 20:35:03
End at: 2019-06-27 20:35:33
Local clock offset: -6.484 ms
Remote clock offset: -33.046 ms

# Below is generated by plot.py at 2019-06-27 21:23:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.66 Mbit/s
95th percentile per-packet one-way delay: 113.639 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 90.66 Mbit/s
95th percentile per-packet one-way delay: 113.639 ms
Loss rate: 0.80%
```

Run 4: Report of Muses_DecisionTree — Data Link

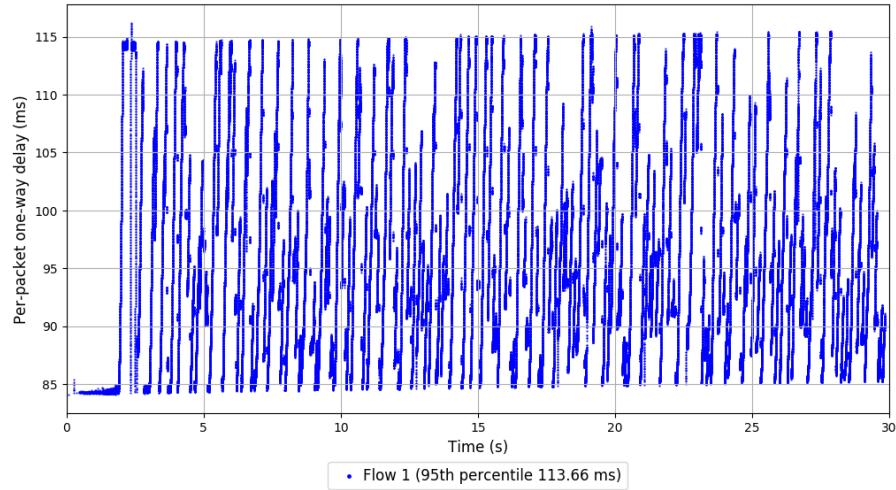
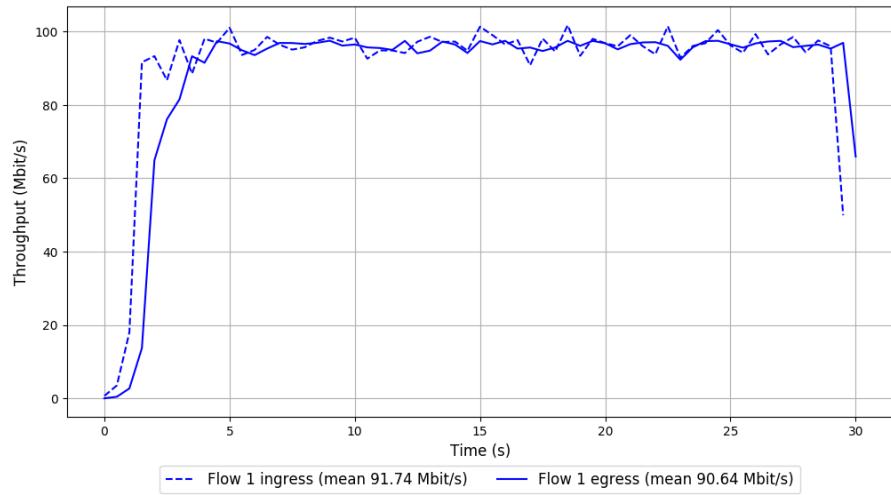


```
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-06-27 21:00:53
End at: 2019-06-27 21:01:23
Local clock offset: -5.766 ms
Remote clock offset: -99.091 ms

# Below is generated by plot.py at 2019-06-27 21:24:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.64 Mbit/s
95th percentile per-packet one-way delay: 113.658 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 90.64 Mbit/s
95th percentile per-packet one-way delay: 113.658 ms
Loss rate: 1.18%
```

Run 5: Report of Muses_DecisionTree — Data Link

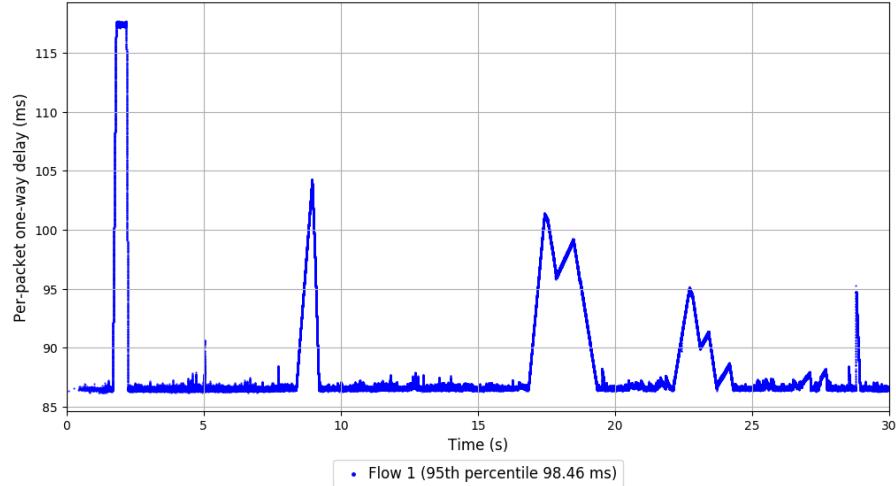
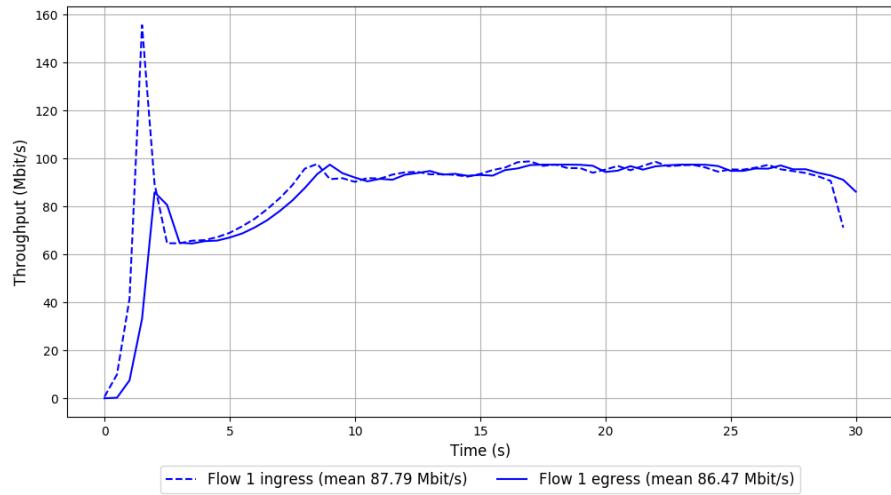


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-06-27 19:18:47
End at: 2019-06-27 19:19:17
Local clock offset: -6.64 ms
Remote clock offset: 143.269 ms

# Below is generated by plot.py at 2019-06-27 21:24:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.47 Mbit/s
95th percentile per-packet one-way delay: 98.464 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 86.47 Mbit/s
95th percentile per-packet one-way delay: 98.464 ms
Loss rate: 1.51%
```

Run 1: Report of PCC-Allegro — Data Link

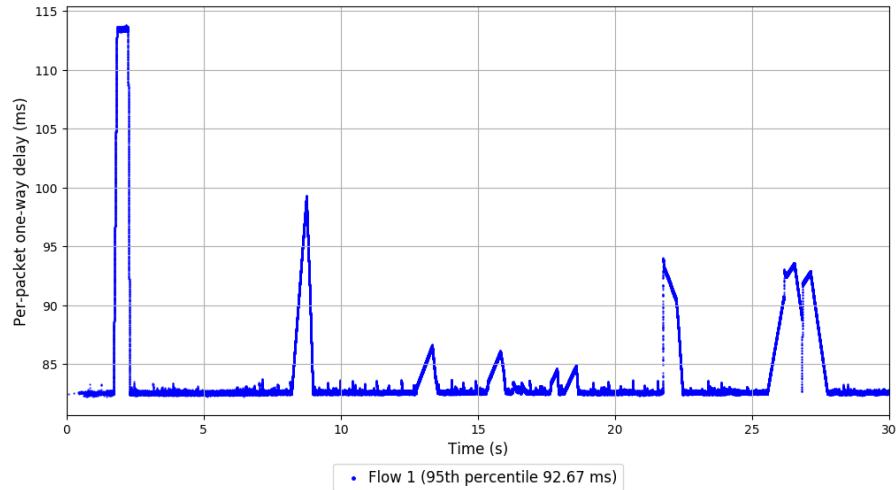
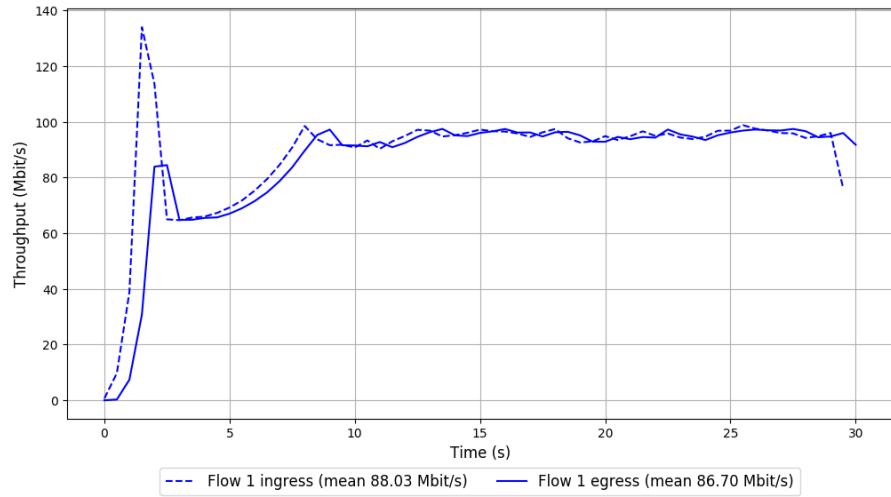


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-06-27 19:44:32
End at: 2019-06-27 19:45:02
Local clock offset: -6.366 ms
Remote clock offset: 144.288 ms

# Below is generated by plot.py at 2019-06-27 21:24:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.70 Mbit/s
95th percentile per-packet one-way delay: 92.672 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 86.70 Mbit/s
95th percentile per-packet one-way delay: 92.672 ms
Loss rate: 1.51%
```

Run 2: Report of PCC-Allegro — Data Link

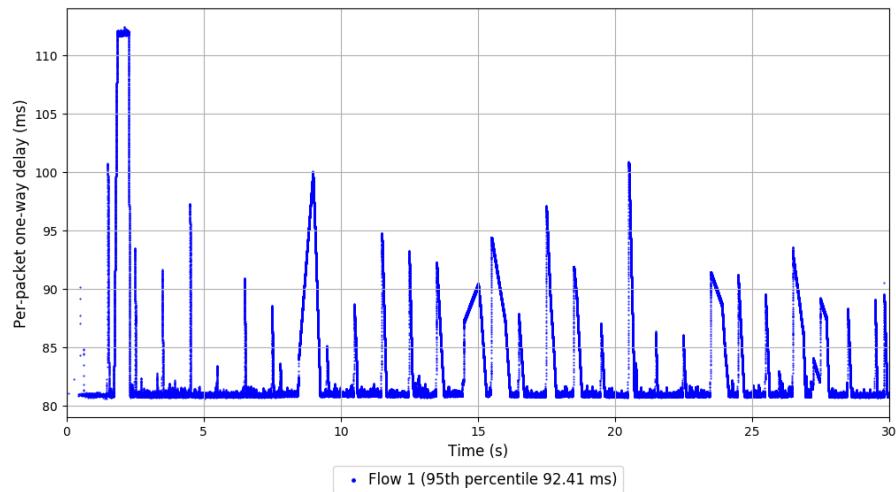
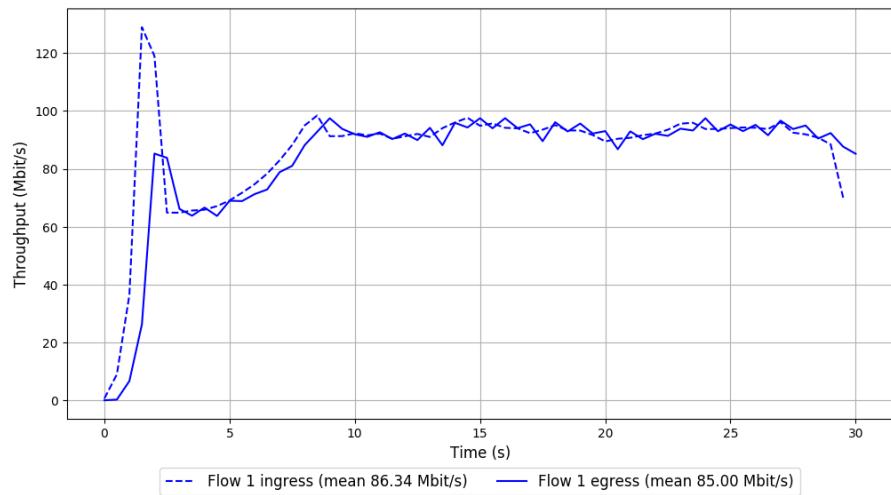


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-06-27 20:10:22
End at: 2019-06-27 20:10:52
Local clock offset: -6.512 ms
Remote clock offset: 144.934 ms

# Below is generated by plot.py at 2019-06-27 21:24:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.00 Mbit/s
95th percentile per-packet one-way delay: 92.413 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 85.00 Mbit/s
95th percentile per-packet one-way delay: 92.413 ms
Loss rate: 1.56%
```

Run 3: Report of PCC-Allegro — Data Link

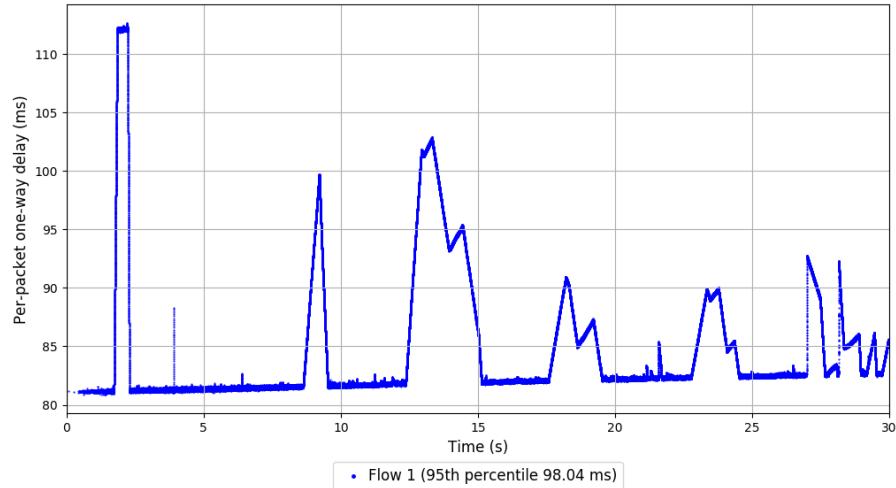
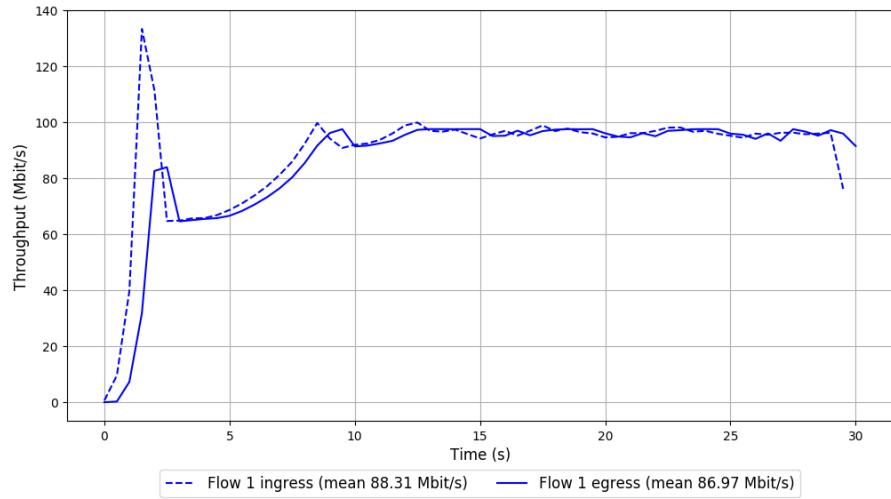


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-06-27 20:36:15
End at: 2019-06-27 20:36:45
Local clock offset: -7.288 ms
Remote clock offset: -43.388 ms

# Below is generated by plot.py at 2019-06-27 21:24:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.97 Mbit/s
95th percentile per-packet one-way delay: 98.037 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 86.97 Mbit/s
95th percentile per-packet one-way delay: 98.037 ms
Loss rate: 1.51%
```

Run 4: Report of PCC-Allegro — Data Link

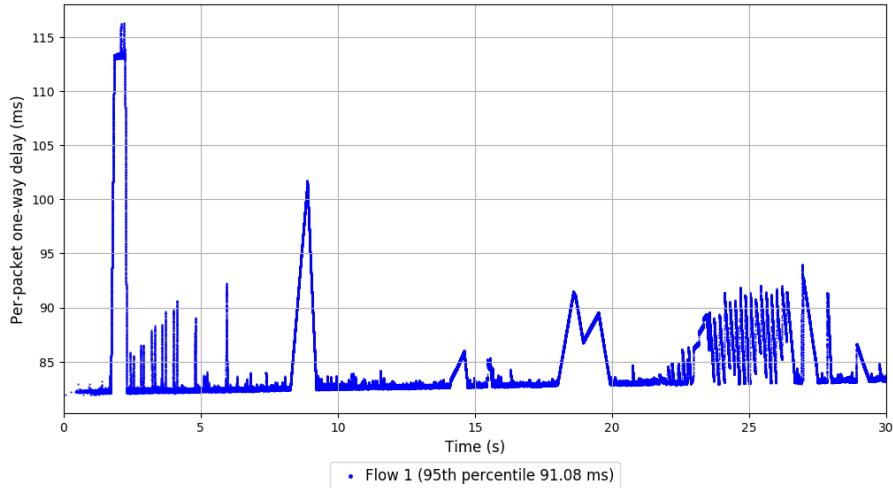
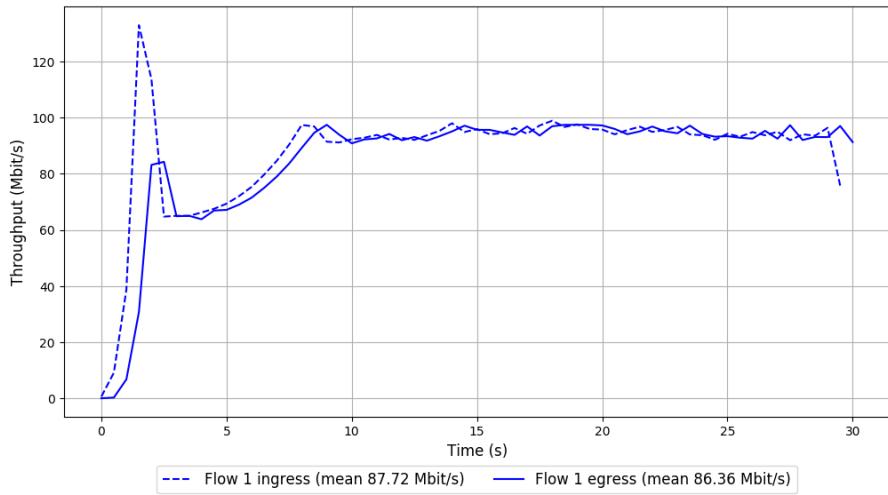


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-06-27 21:02:05
End at: 2019-06-27 21:02:35
Local clock offset: -6.553 ms
Remote clock offset: -105.026 ms

# Below is generated by plot.py at 2019-06-27 21:24:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.36 Mbit/s
95th percentile per-packet one-way delay: 91.079 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 86.36 Mbit/s
95th percentile per-packet one-way delay: 91.079 ms
Loss rate: 1.55%
```

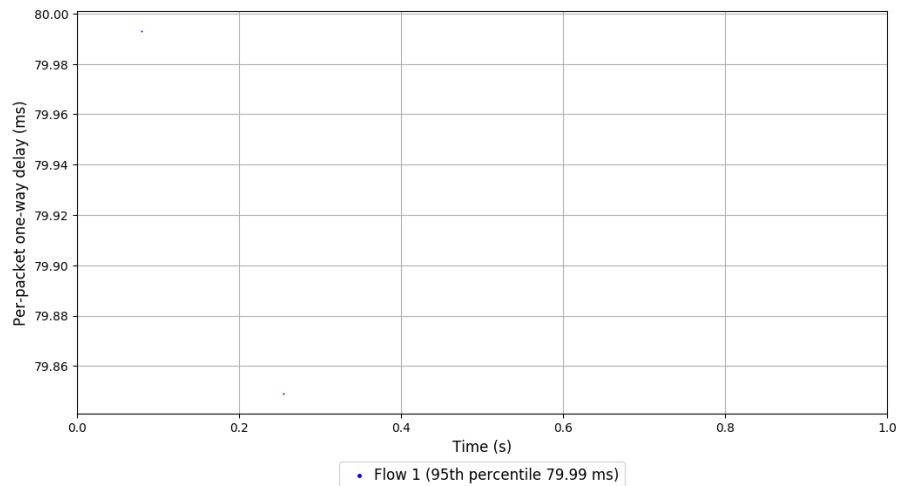
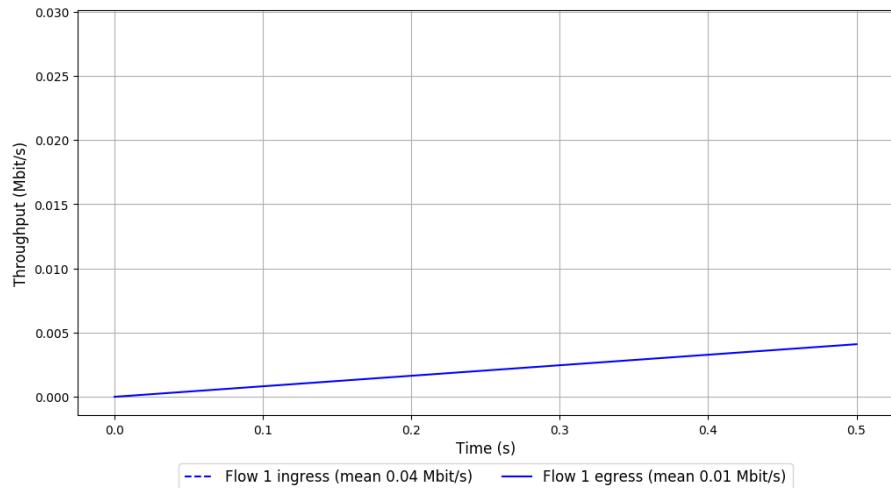
Run 5: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2019-06-27 19:07:07
End at: 2019-06-27 19:07:37
Local clock offset: -7.583 ms
Remote clock offset: 135.474 ms

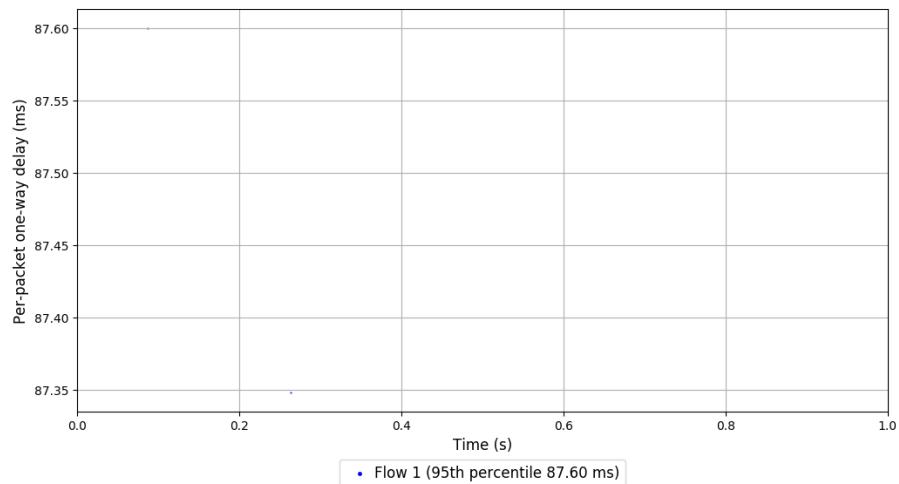
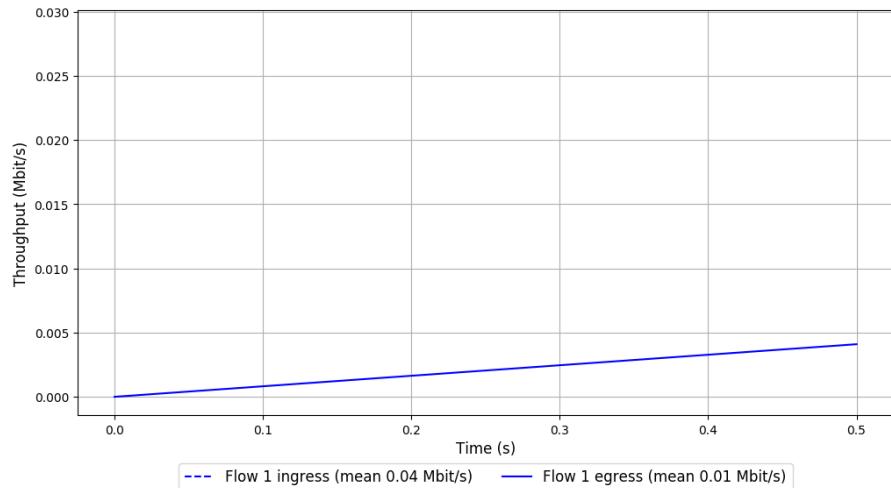
Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2019-06-27 19:32:57
End at: 2019-06-27 19:33:27
Local clock offset: -6.419 ms
Remote clock offset: 144.817 ms

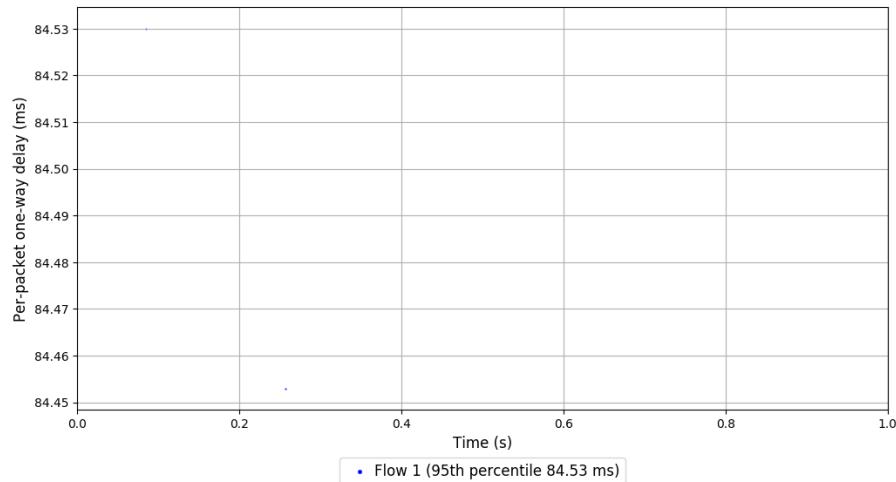
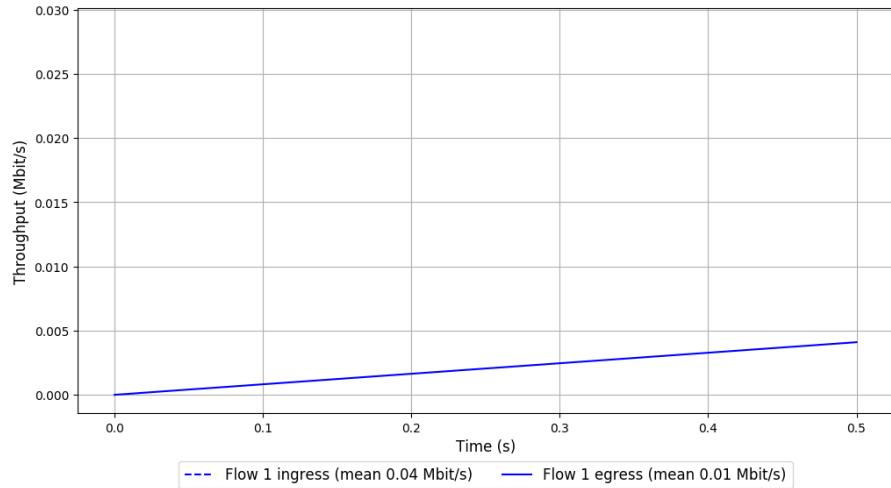
Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2019-06-27 19:58:43
End at: 2019-06-27 19:59:13
Local clock offset: -6.449 ms
Remote clock offset: 148.696 ms

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

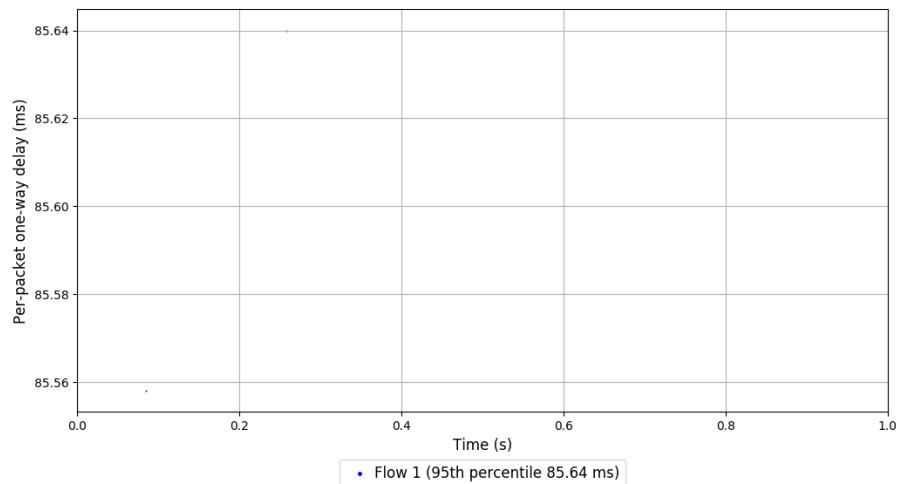
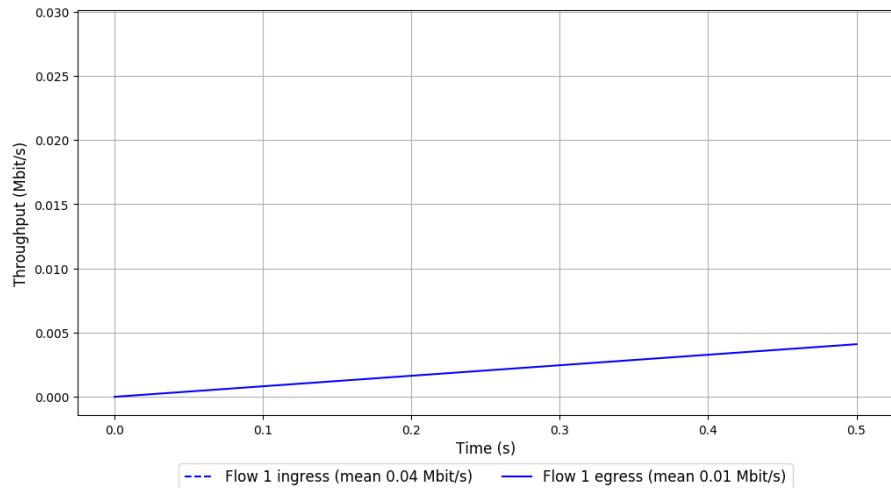
Start at: 2019-06-27 20:24:35

End at: 2019-06-27 20:25:05

Local clock offset: -5.999 ms

Remote clock offset: 16.695 ms

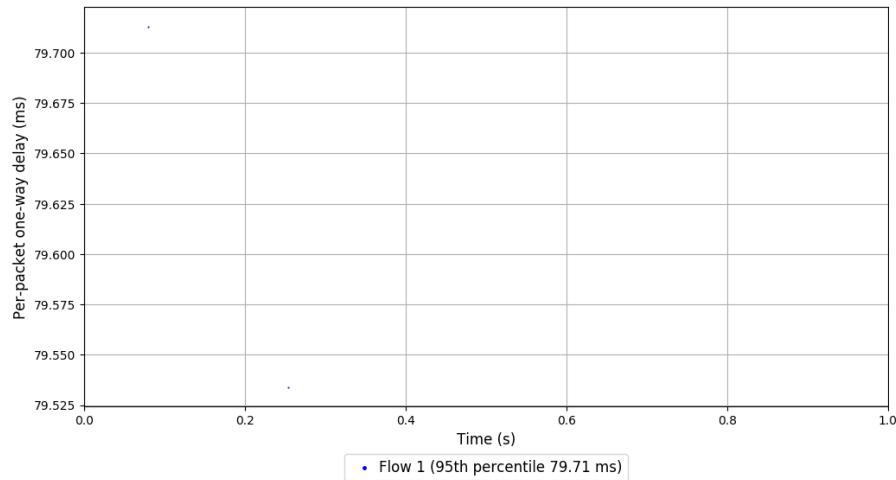
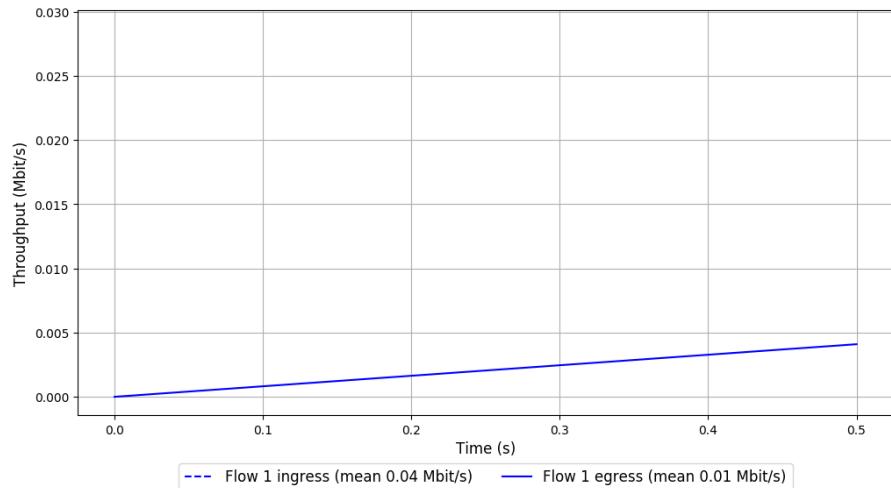
Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2019-06-27 20:50:25
End at: 2019-06-27 20:50:55
Local clock offset: -6.265 ms
Remote clock offset: -80.252 ms

Run 5: Report of PCC-Expr — Data Link

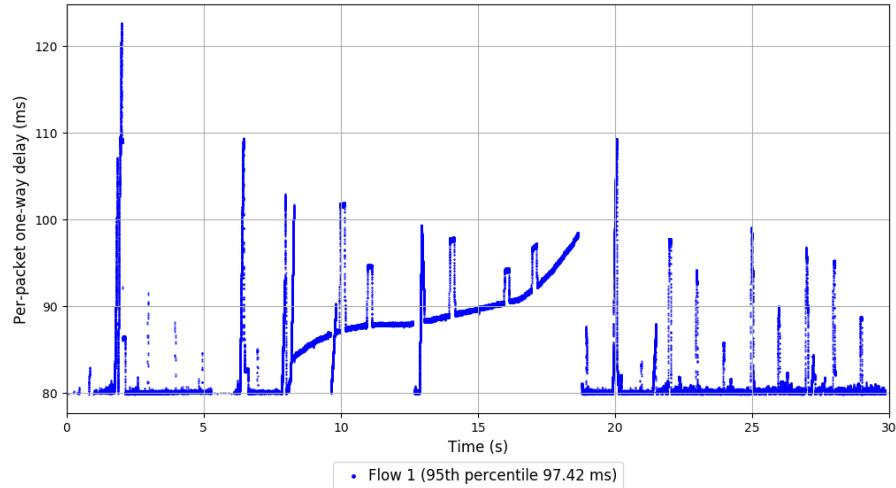
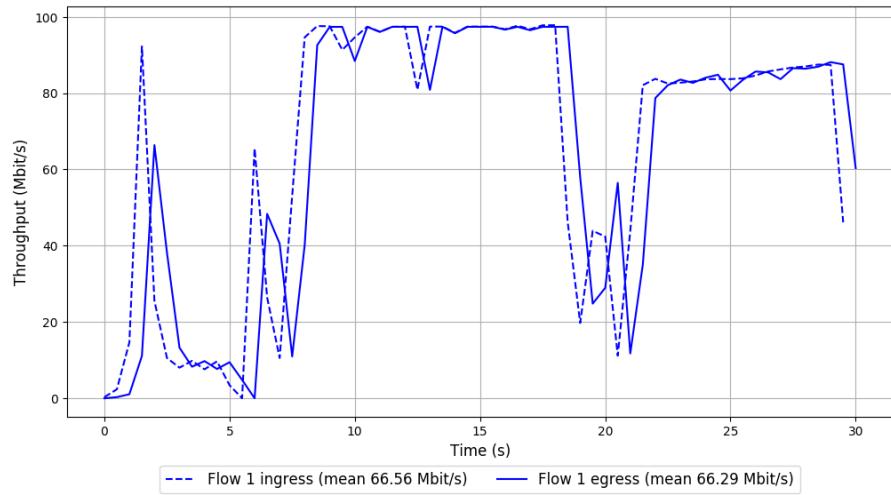


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-06-27 19:12:54
End at: 2019-06-27 19:13:24
Local clock offset: -7.404 ms
Remote clock offset: 137.332 ms

# Below is generated by plot.py at 2019-06-27 21:24:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.29 Mbit/s
95th percentile per-packet one-way delay: 97.421 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 66.29 Mbit/s
95th percentile per-packet one-way delay: 97.421 ms
Loss rate: 0.40%
```

Run 1: Report of QUIC Cubic — Data Link

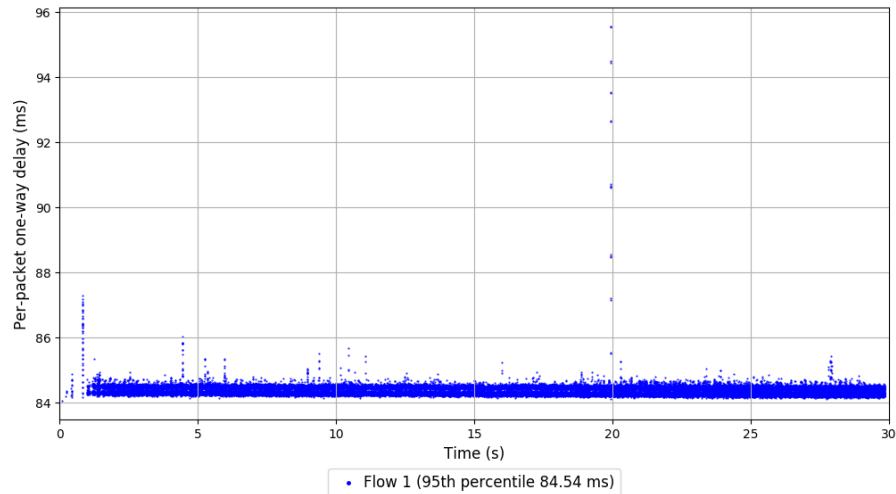
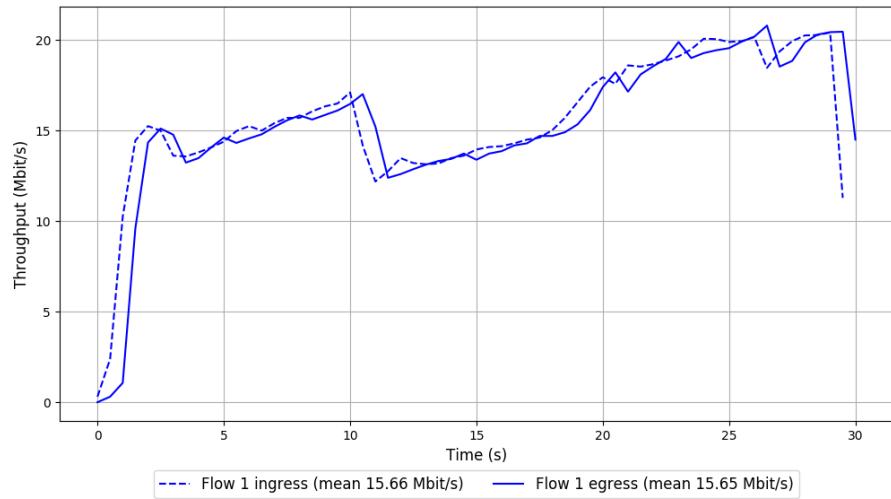


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-06-27 19:38:42
End at: 2019-06-27 19:39:12
Local clock offset: -5.487 ms
Remote clock offset: 144.673 ms

# Below is generated by plot.py at 2019-06-27 21:24:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 15.65 Mbit/s
95th percentile per-packet one-way delay: 84.539 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 15.65 Mbit/s
95th percentile per-packet one-way delay: 84.539 ms
Loss rate: 0.03%
```

Run 2: Report of QUIC Cubic — Data Link

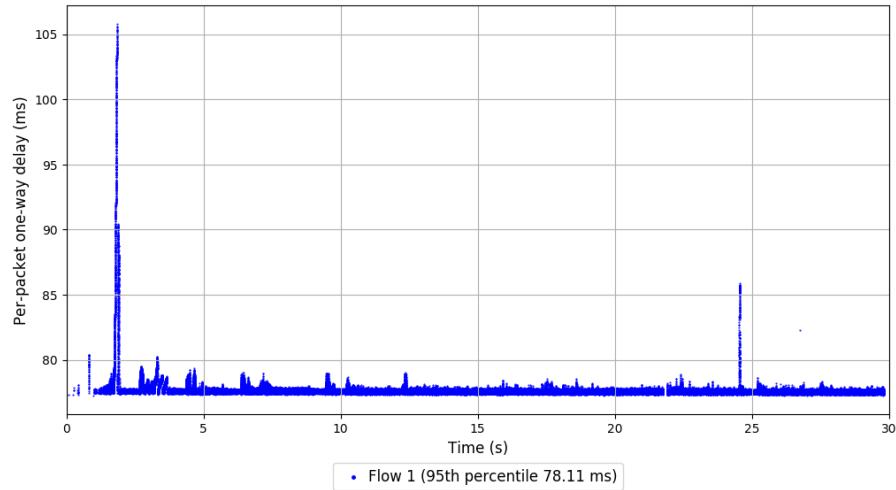
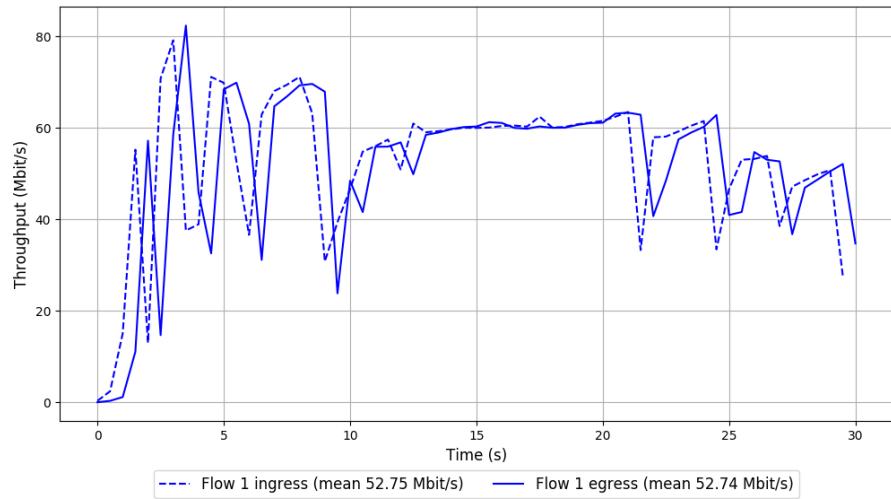


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-06-27 20:04:31
End at: 2019-06-27 20:05:01
Local clock offset: -5.633 ms
Remote clock offset: 143.154 ms

# Below is generated by plot.py at 2019-06-27 21:24:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.74 Mbit/s
95th percentile per-packet one-way delay: 78.114 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 52.74 Mbit/s
95th percentile per-packet one-way delay: 78.114 ms
Loss rate: 0.02%
```

Run 3: Report of QUIC Cubic — Data Link

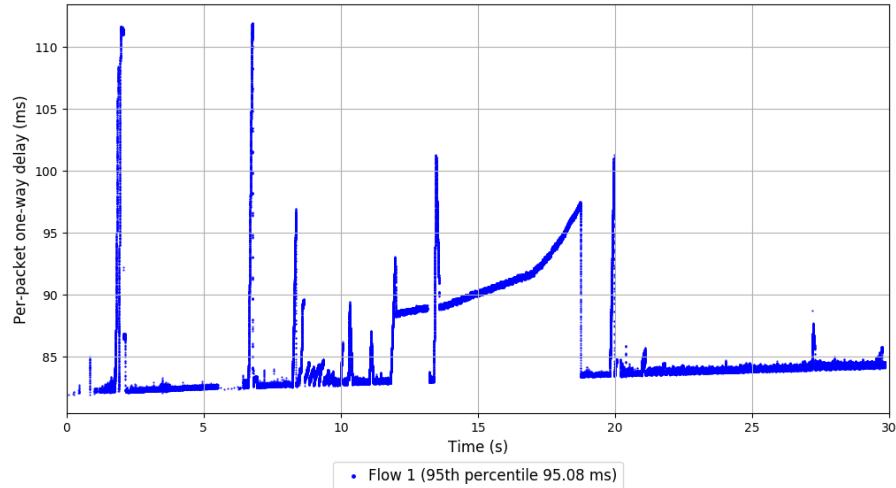
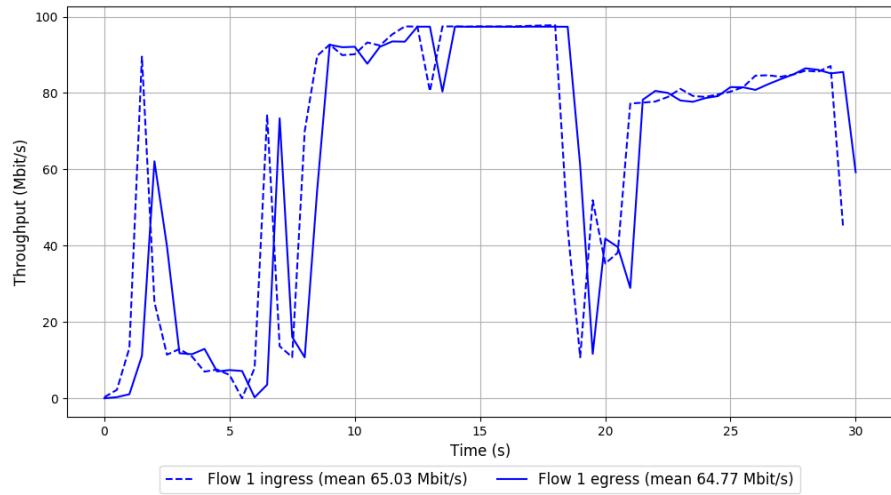


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-06-27 20:30:23
End at: 2019-06-27 20:30:53
Local clock offset: -6.97 ms
Remote clock offset: -21.515 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.77 Mbit/s
95th percentile per-packet one-way delay: 95.077 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 64.77 Mbit/s
95th percentile per-packet one-way delay: 95.077 ms
Loss rate: 0.41%
```

Run 4: Report of QUIC Cubic — Data Link

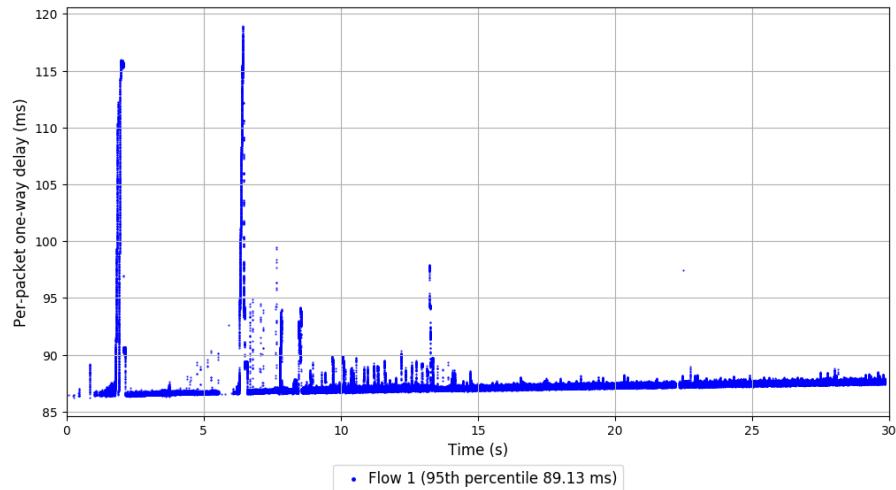
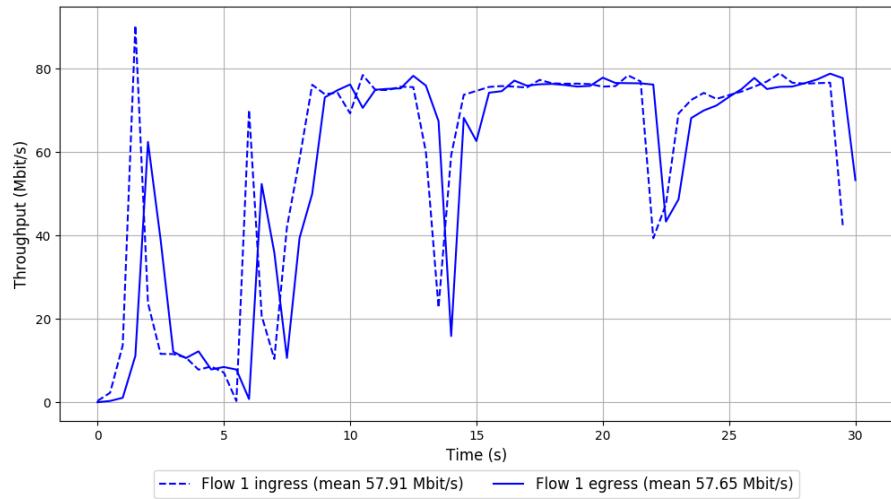


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-06-27 20:56:13
End at: 2019-06-27 20:56:43
Local clock offset: -6.71 ms
Remote clock offset: -88.118 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.65 Mbit/s
95th percentile per-packet one-way delay: 89.126 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 57.65 Mbit/s
95th percentile per-packet one-way delay: 89.126 ms
Loss rate: 0.44%
```

Run 5: Report of QUIC Cubic — Data Link

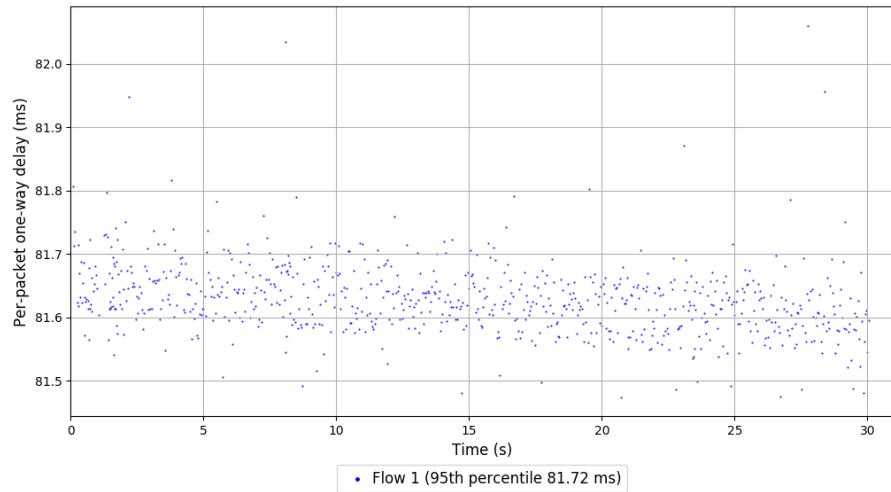
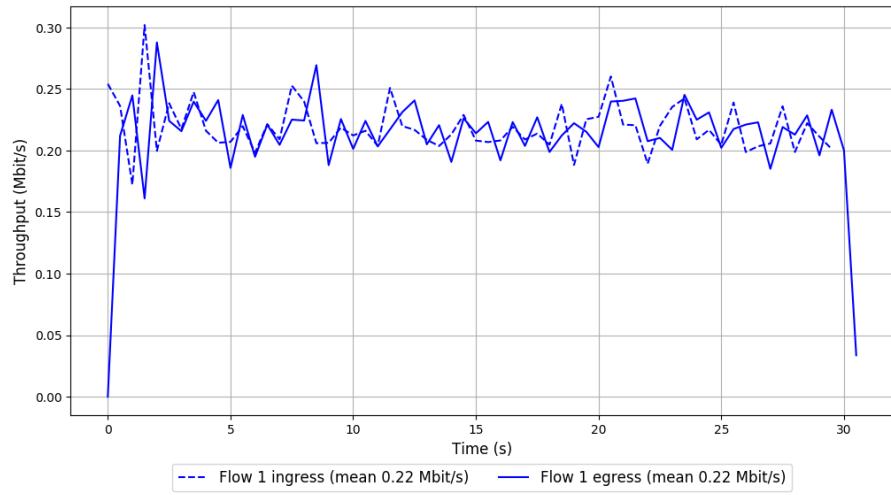


```
Run 1: Statistics of SCReAM

Start at: 2019-06-27 19:05:59
End at: 2019-06-27 19:06:29
Local clock offset: -7.346 ms
Remote clock offset: 135.521 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.715 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.715 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

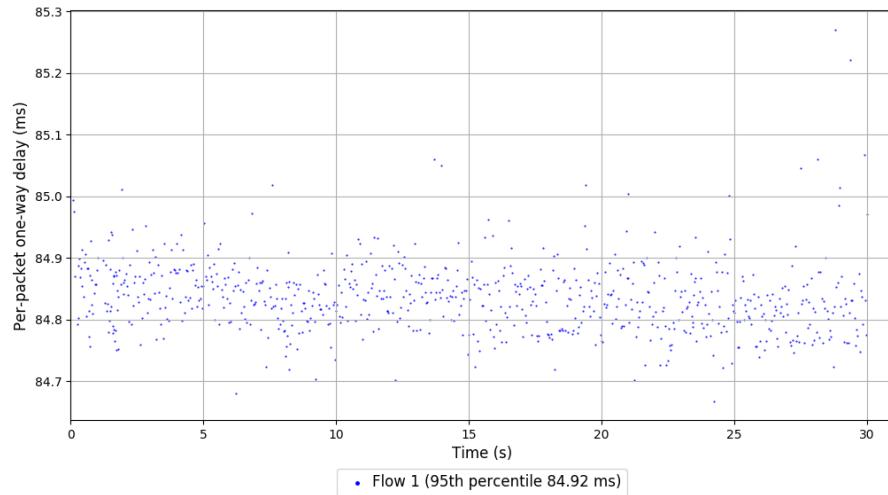
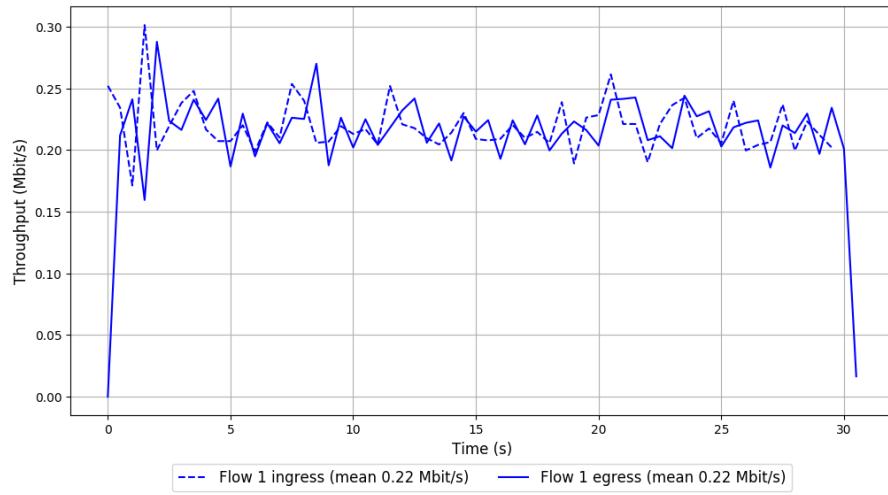


Run 2: Statistics of SCReAM

```
Start at: 2019-06-27 19:31:50
End at: 2019-06-27 19:32:20
Local clock offset: -6.448 ms
Remote clock offset: 143.839 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.924 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.924 ms
Loss rate: 0.13%
```

Run 2: Report of SCReAM — Data Link

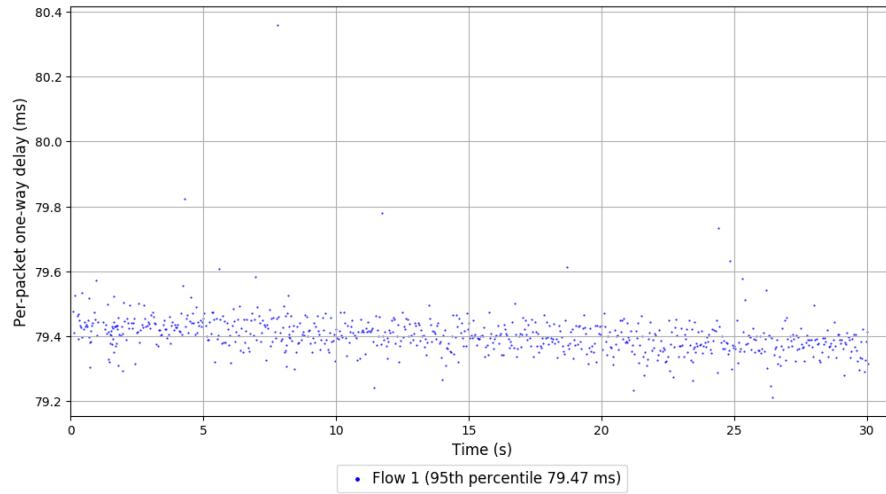
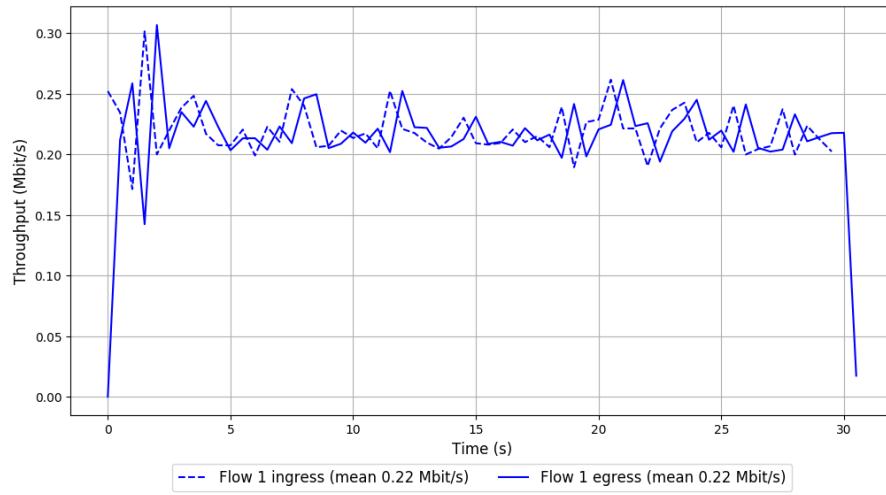


Run 3: Statistics of SCReAM

```
Start at: 2019-06-27 19:57:35
End at: 2019-06-27 19:58:05
Local clock offset: -5.592 ms
Remote clock offset: 143.394 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.474 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.474 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

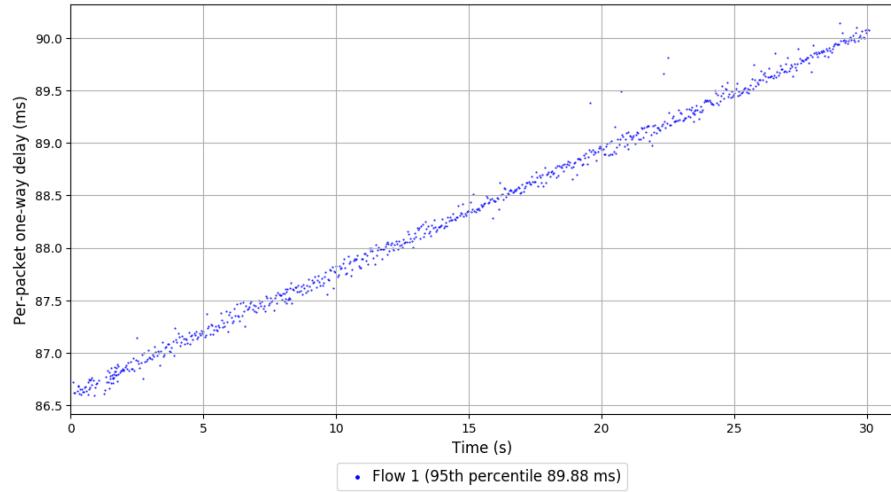
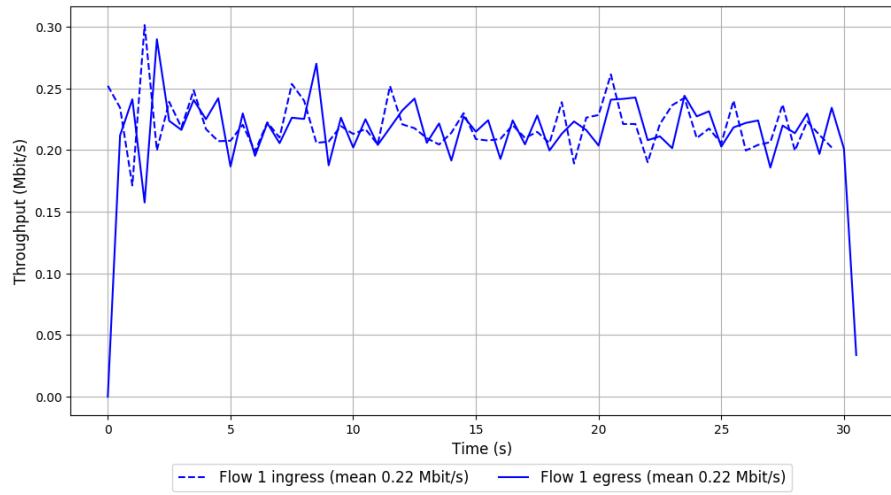


Run 4: Statistics of SCReAM

```
Start at: 2019-06-27 20:23:28
End at: 2019-06-27 20:23:58
Local clock offset: -6.823 ms
Remote clock offset: 22.886 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.879 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.879 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

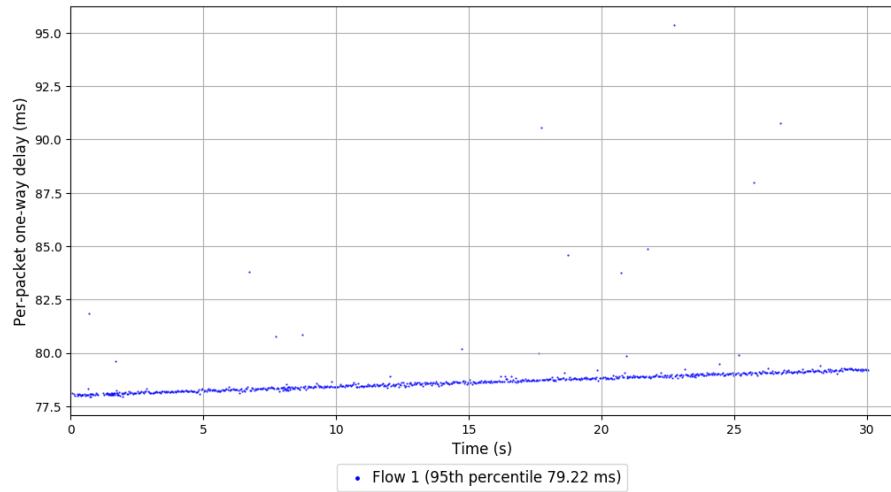
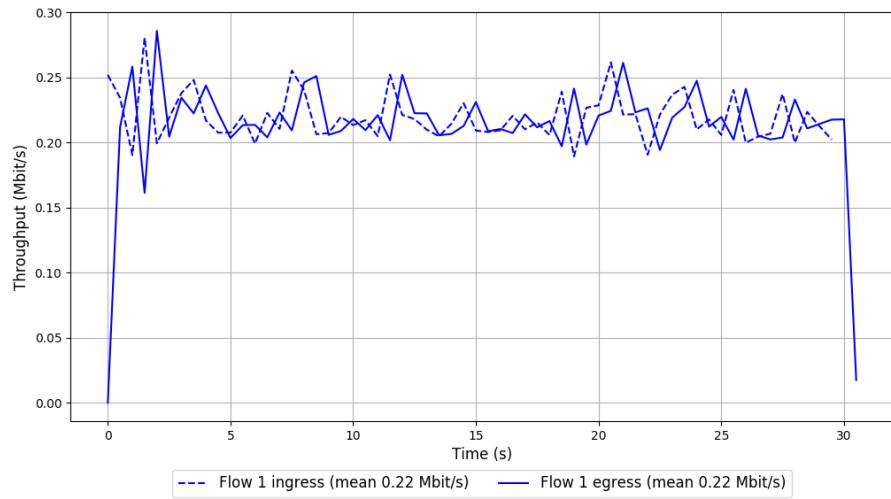


Run 5: Statistics of SCReAM

```
Start at: 2019-06-27 20:49:18
End at: 2019-06-27 20:49:48
Local clock offset: -6.536 ms
Remote clock offset: -77.693 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.218 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.218 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

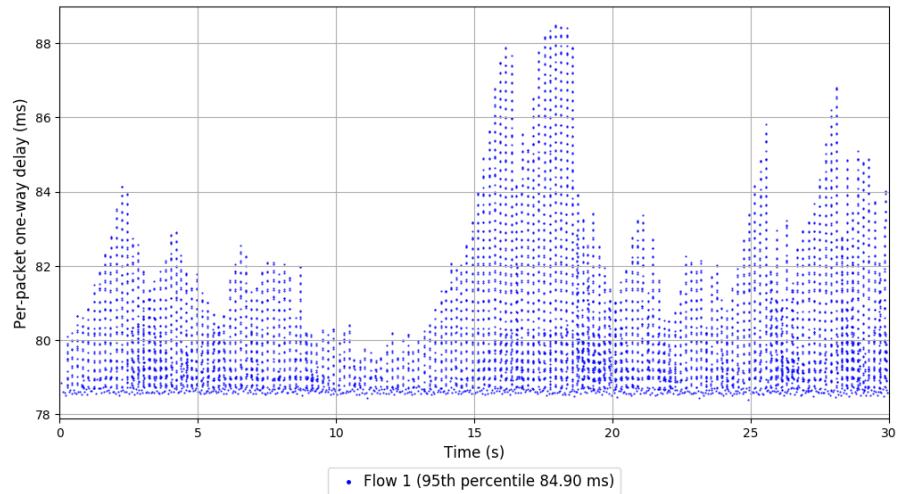
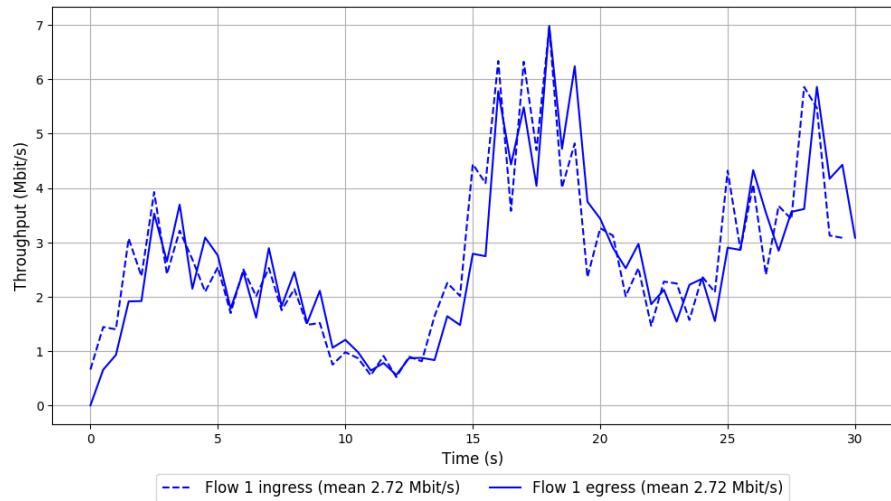


Run 1: Statistics of Sprout

```
Start at: 2019-06-27 19:29:30
End at: 2019-06-27 19:30:00
Local clock offset: -5.728 ms
Remote clock offset: 138.236 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.72 Mbit/s
95th percentile per-packet one-way delay: 84.900 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.72 Mbit/s
95th percentile per-packet one-way delay: 84.900 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

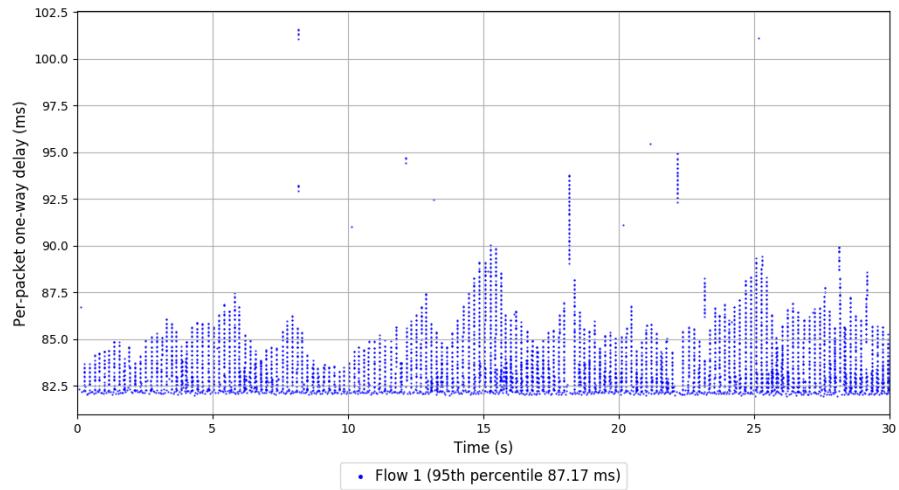
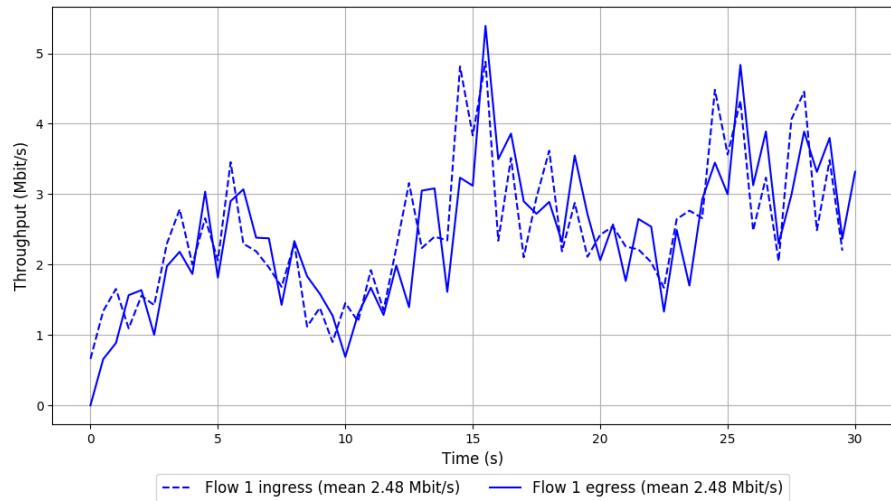


Run 2: Statistics of Sprout

```
Start at: 2019-06-27 19:55:15
End at: 2019-06-27 19:55:45
Local clock offset: -6.39 ms
Remote clock offset: 145.894 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.48 Mbit/s
95th percentile per-packet one-way delay: 87.166 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.48 Mbit/s
95th percentile per-packet one-way delay: 87.166 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

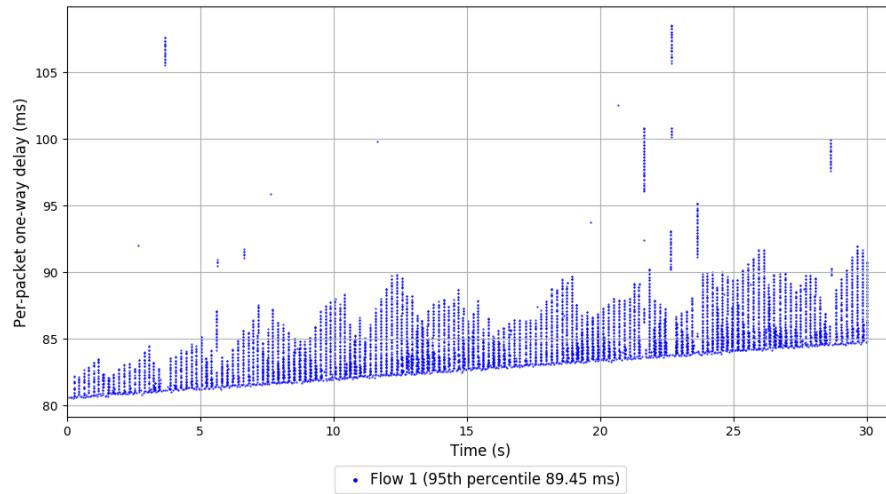
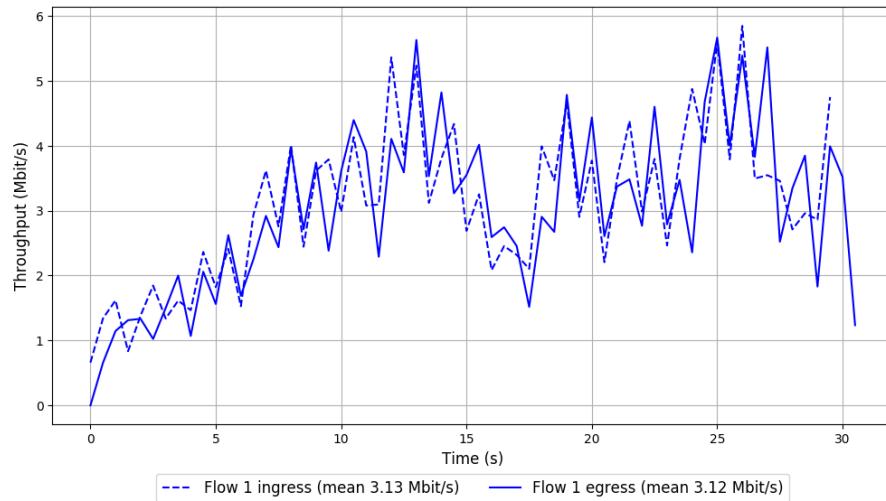


Run 3: Statistics of Sprout

```
Start at: 2019-06-27 20:21:08
End at: 2019-06-27 20:21:38
Local clock offset: -6.859 ms
Remote clock offset: 36.816 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.12 Mbit/s
95th percentile per-packet one-way delay: 89.447 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.12 Mbit/s
95th percentile per-packet one-way delay: 89.447 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

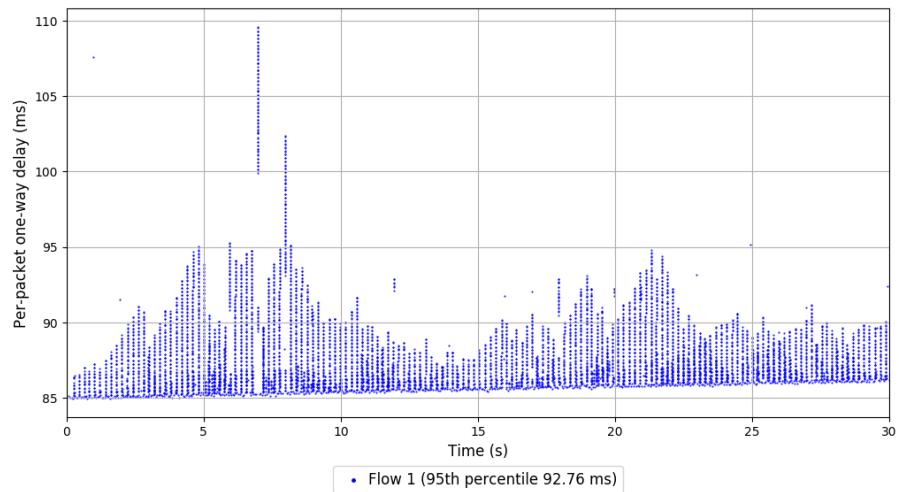
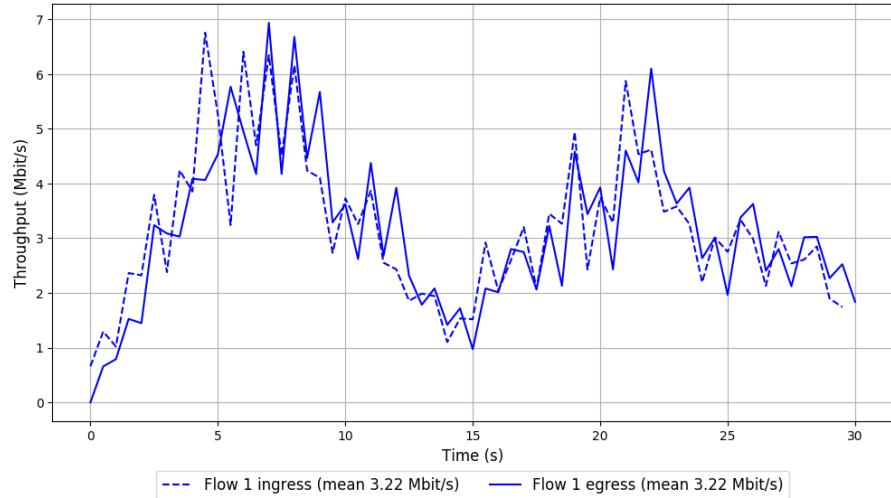


Run 4: Statistics of Sprout

```
Start at: 2019-06-27 20:46:58
End at: 2019-06-27 20:47:28
Local clock offset: -6.48 ms
Remote clock offset: -67.003 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.22 Mbit/s
95th percentile per-packet one-way delay: 92.760 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.22 Mbit/s
95th percentile per-packet one-way delay: 92.760 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

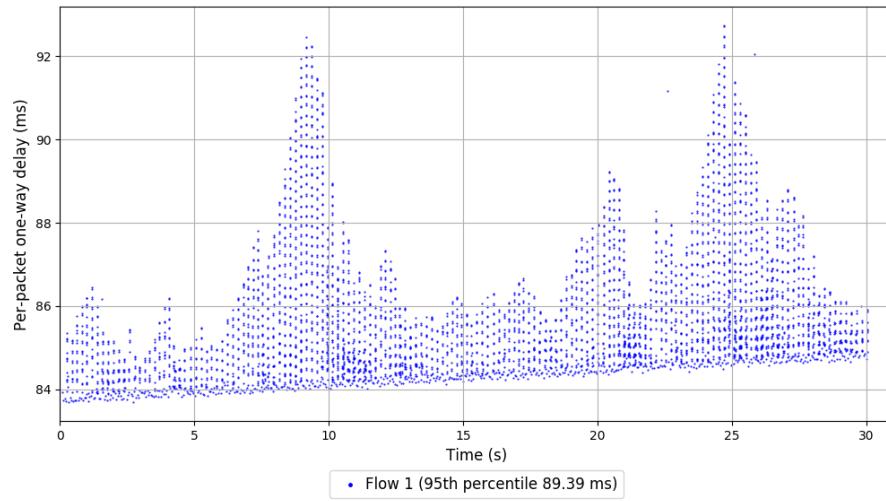
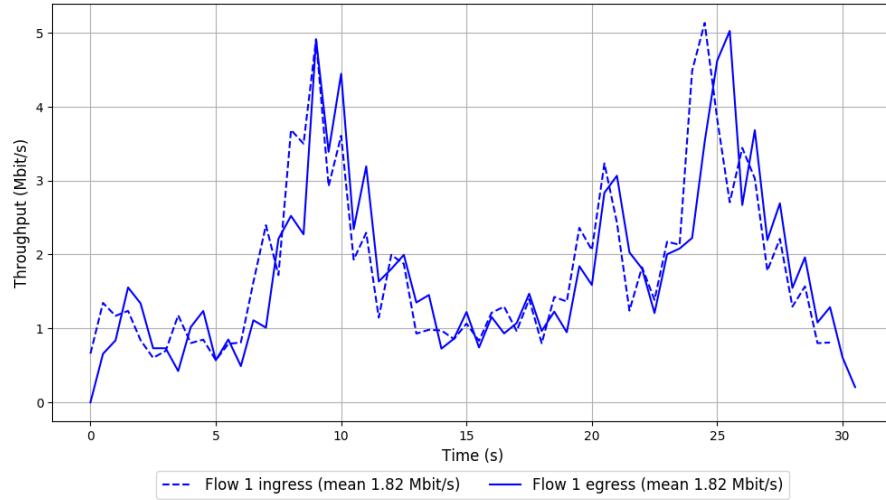


Run 5: Statistics of Sprout

```
Start at: 2019-06-27 21:12:50
End at: 2019-06-27 21:13:20
Local clock offset: -5.59 ms
Remote clock offset: -124.494 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 89.390 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 89.390 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

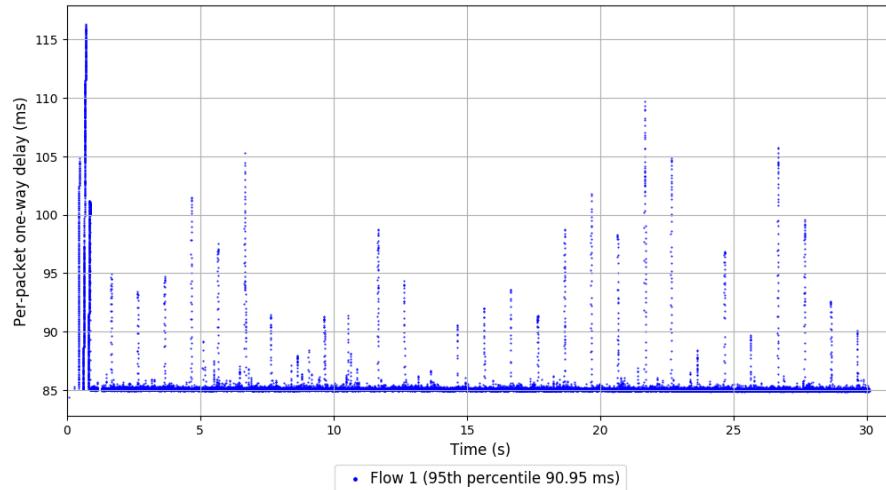
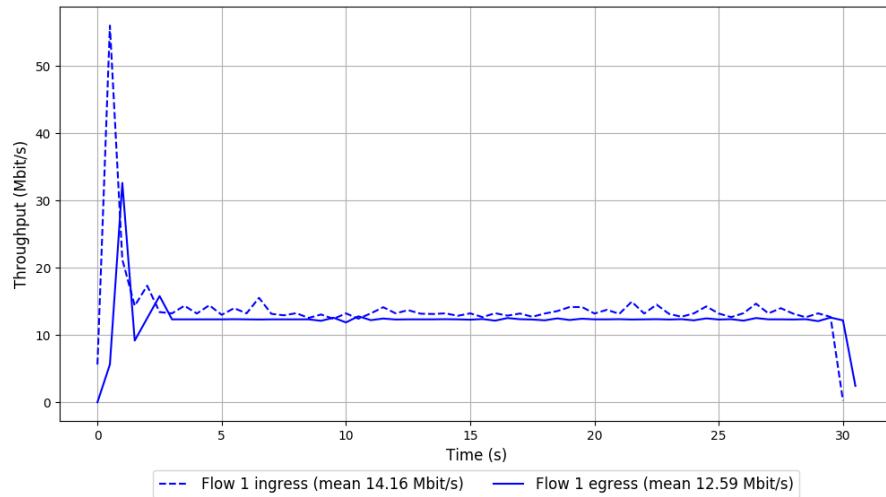


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-06-27 19:16:26
End at: 2019-06-27 19:16:56
Local clock offset: -7.507 ms
Remote clock offset: 142.988 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 90.948 ms
Loss rate: 11.10%
-- Flow 1:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 90.948 ms
Loss rate: 11.10%
```

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

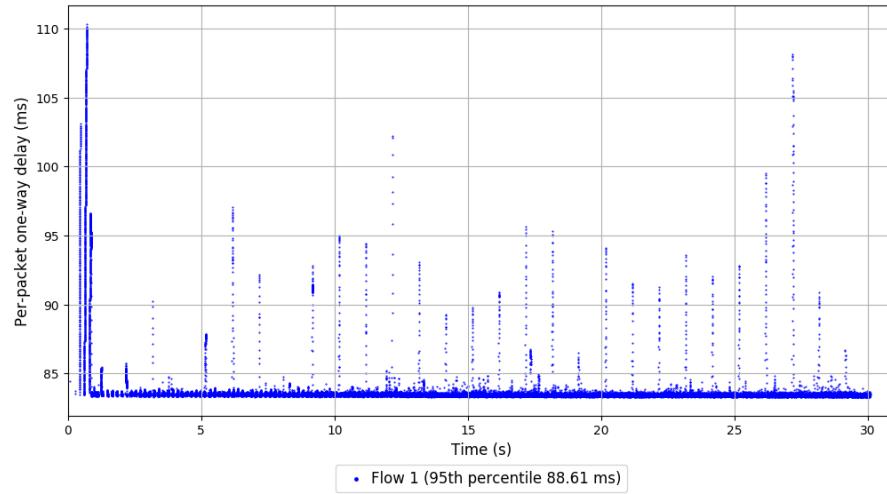
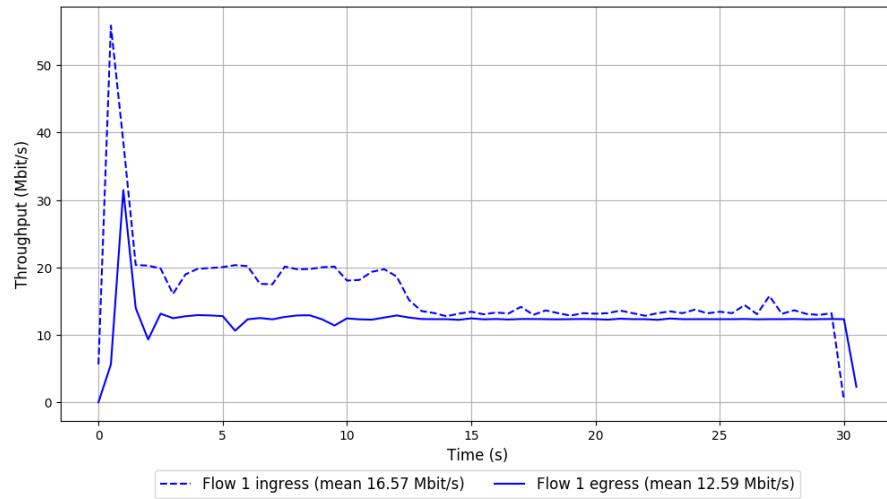


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-06-27 19:42:11
End at: 2019-06-27 19:42:42
Local clock offset: -5.687 ms
Remote clock offset: 145.299 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 88.613 ms
Loss rate: 24.00%
-- Flow 1:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 88.613 ms
Loss rate: 24.00%
```

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

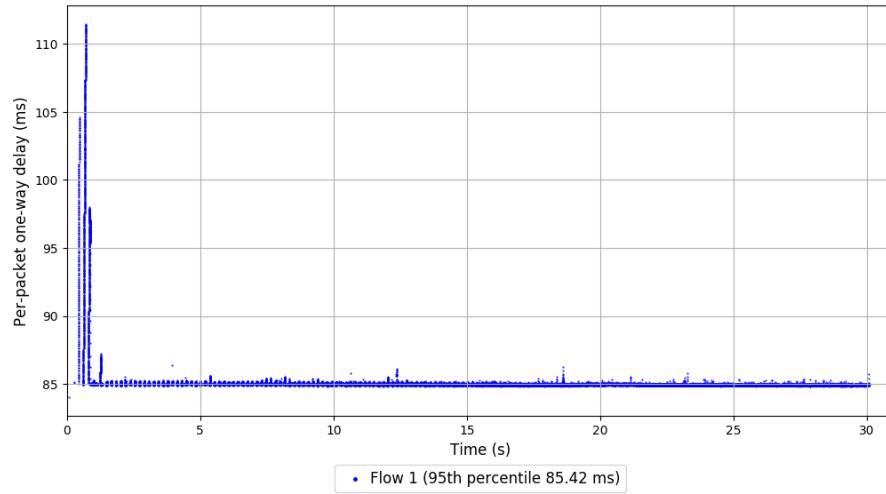
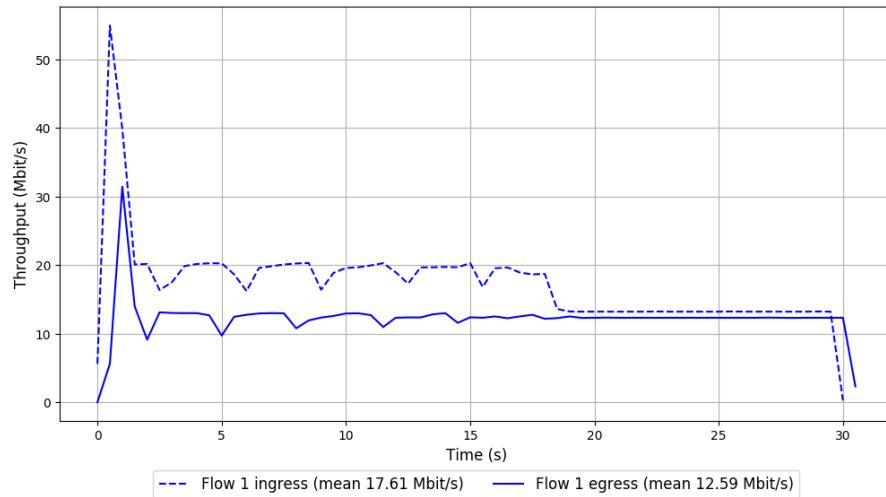


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-06-27 20:08:01
End at: 2019-06-27 20:08:31
Local clock offset: -6.664 ms
Remote clock offset: 148.576 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 85.423 ms
Loss rate: 28.52%
-- Flow 1:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 85.423 ms
Loss rate: 28.52%
```

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

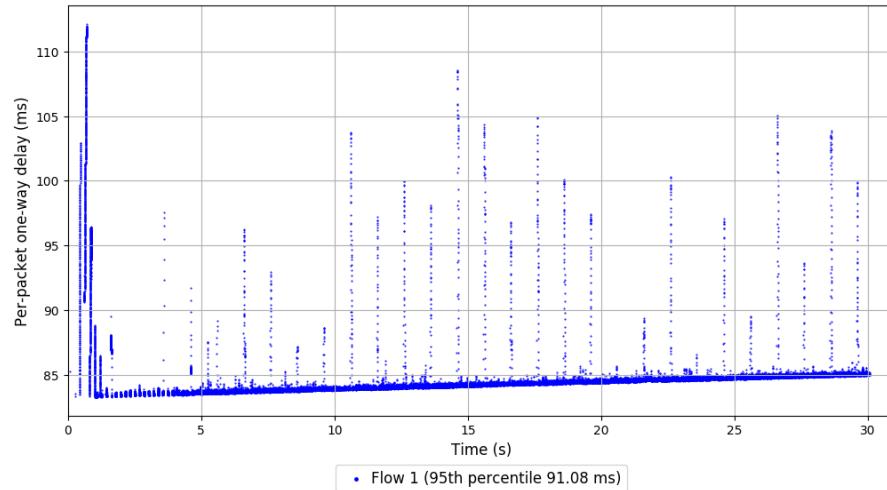
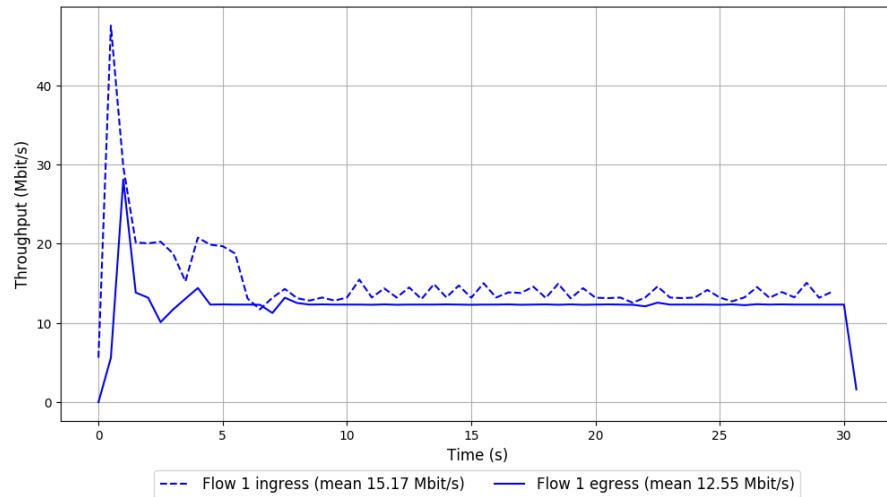


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-06-27 20:33:54
End at: 2019-06-27 20:34:24
Local clock offset: -7.047 ms
Remote clock offset: -31.268 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.55 Mbit/s
95th percentile per-packet one-way delay: 91.078 ms
Loss rate: 17.29%
-- Flow 1:
Average throughput: 12.55 Mbit/s
95th percentile per-packet one-way delay: 91.078 ms
Loss rate: 17.29%
```

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

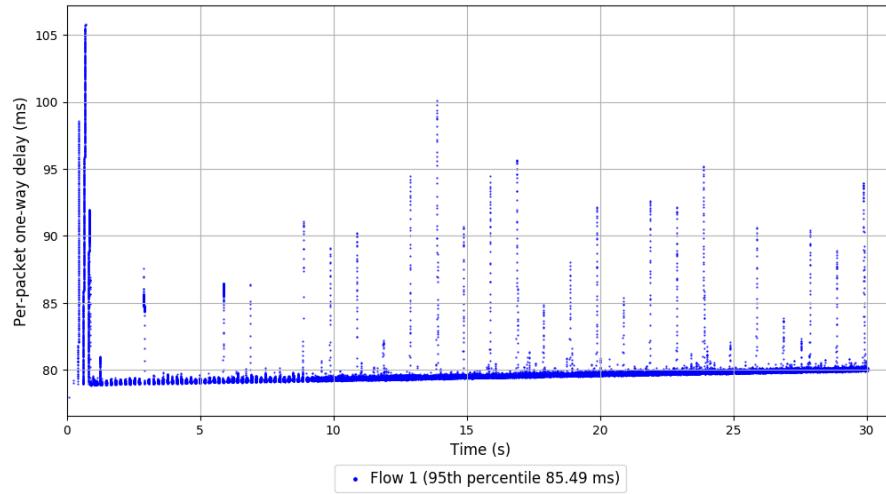
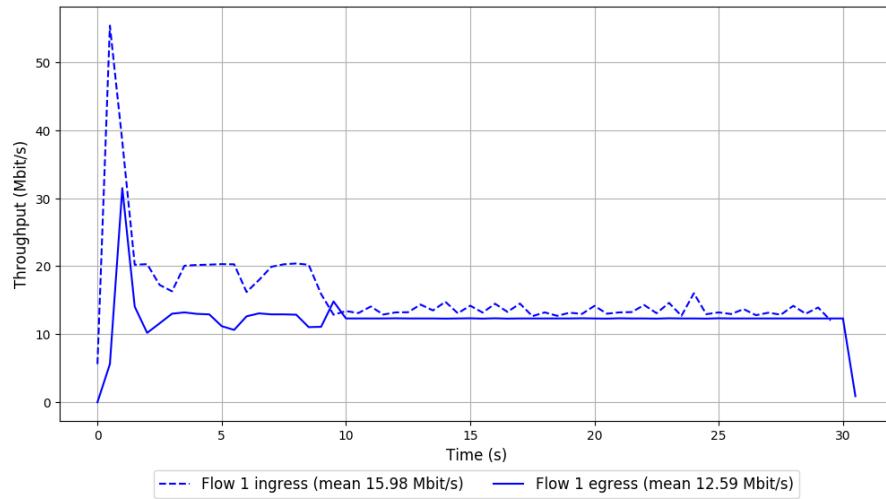


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-06-27 20:59:44
End at: 2019-06-27 21:00:14
Local clock offset: -6.598 ms
Remote clock offset: -101.272 ms

# Below is generated by plot.py at 2019-06-27 21:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 85.486 ms
Loss rate: 21.22%
-- Flow 1:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 85.486 ms
Loss rate: 21.22%
```

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

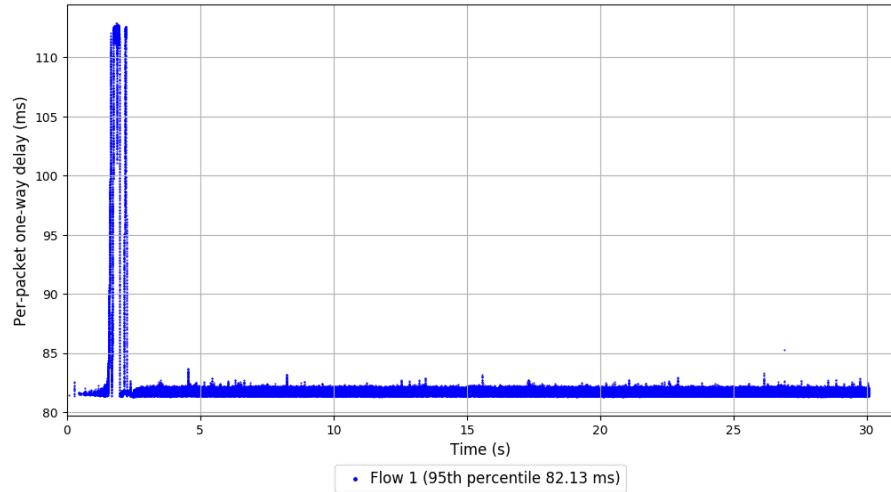
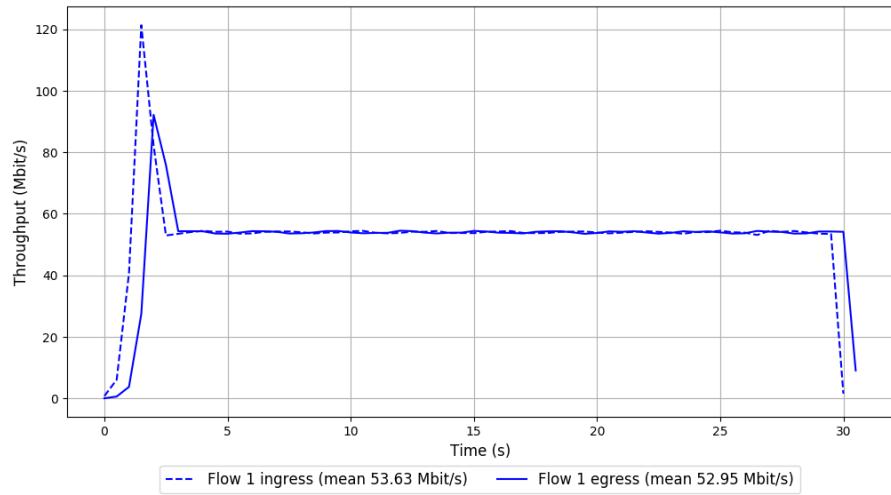


Run 1: Statistics of TCP Vegas

```
Start at: 2019-06-27 19:24:47
End at: 2019-06-27 19:25:17
Local clock offset: -6.8 ms
Remote clock offset: 137.692 ms

# Below is generated by plot.py at 2019-06-27 21:25:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.95 Mbit/s
95th percentile per-packet one-way delay: 82.127 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 52.95 Mbit/s
95th percentile per-packet one-way delay: 82.127 ms
Loss rate: 1.28%
```

Run 1: Report of TCP Vegas — Data Link

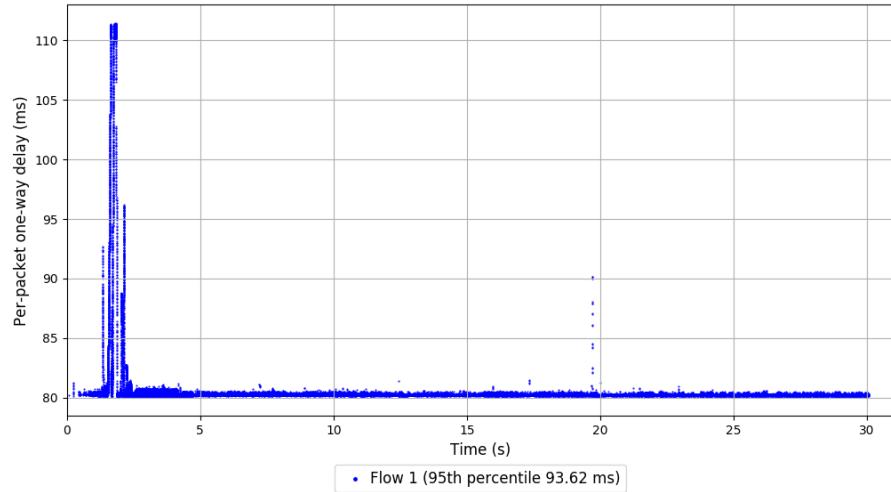
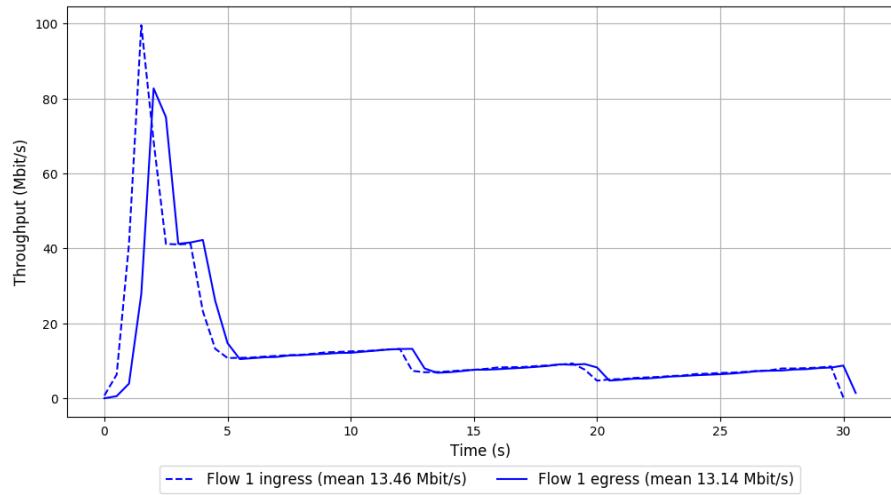


Run 2: Statistics of TCP Vegas

```
Start at: 2019-06-27 19:50:33
End at: 2019-06-27 19:51:03
Local clock offset: -6.185 ms
Remote clock offset: 141.252 ms

# Below is generated by plot.py at 2019-06-27 21:25:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.14 Mbit/s
95th percentile per-packet one-way delay: 93.617 ms
Loss rate: 2.34%
-- Flow 1:
Average throughput: 13.14 Mbit/s
95th percentile per-packet one-way delay: 93.617 ms
Loss rate: 2.34%
```

Run 2: Report of TCP Vegas — Data Link

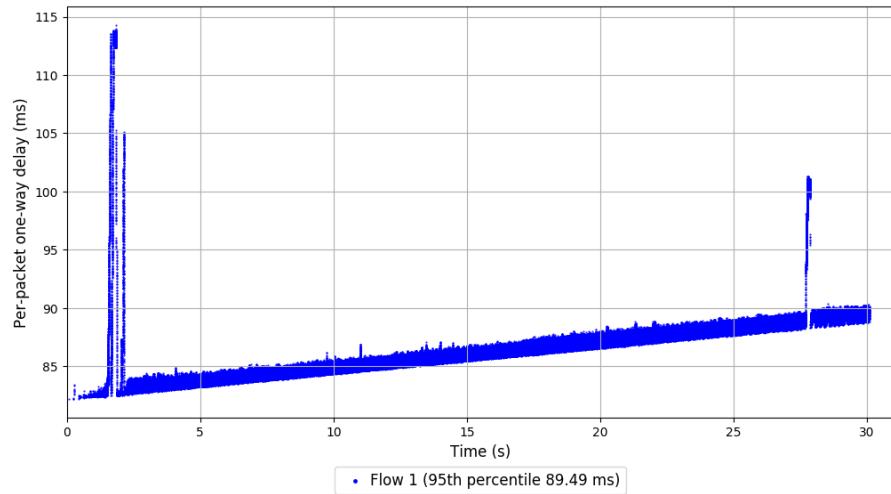
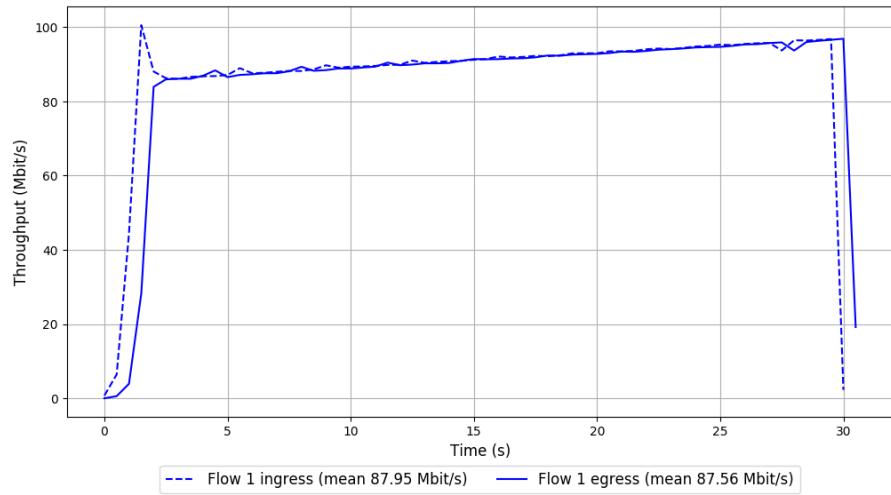


Run 3: Statistics of TCP Vegas

```
Start at: 2019-06-27 20:16:23
End at: 2019-06-27 20:16:53
Local clock offset: -5.666 ms
Remote clock offset: 89.404 ms

# Below is generated by plot.py at 2019-06-27 21:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.56 Mbit/s
95th percentile per-packet one-way delay: 89.489 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 87.56 Mbit/s
95th percentile per-packet one-way delay: 89.489 ms
Loss rate: 0.43%
```

Run 3: Report of TCP Vegas — Data Link

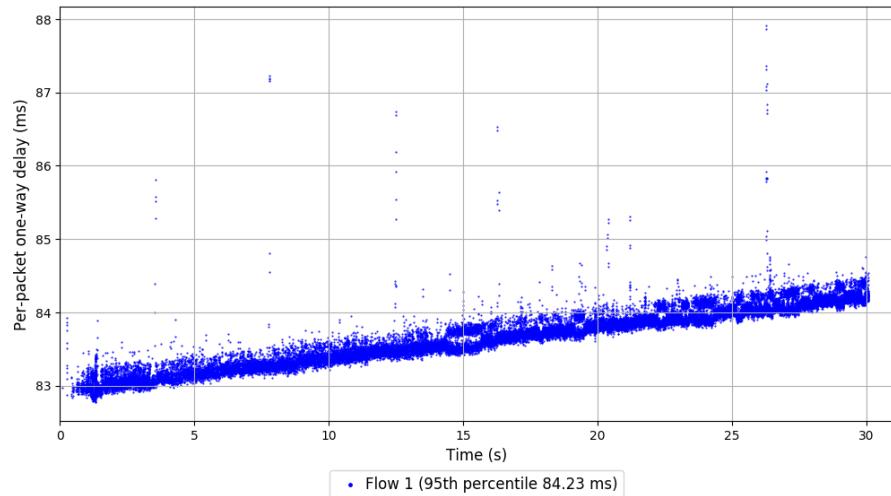
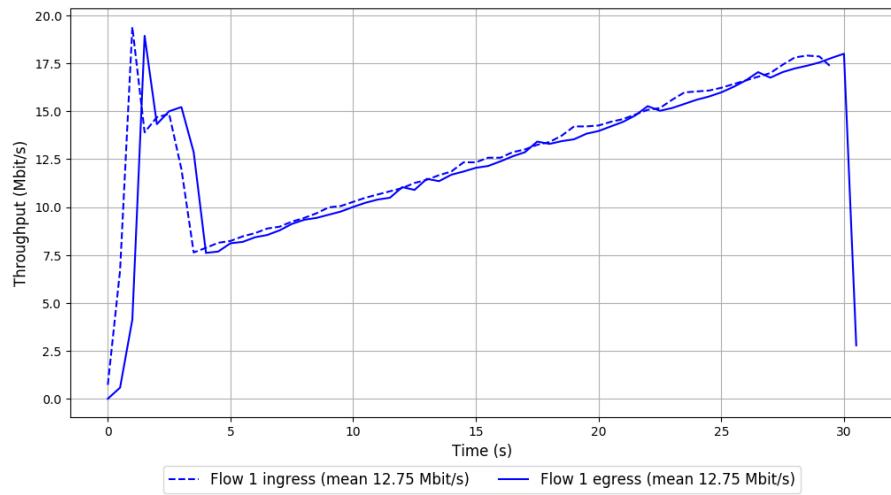


Run 4: Statistics of TCP Vegas

```
Start at: 2019-06-27 20:42:16
End at: 2019-06-27 20:42:46
Local clock offset: -7.233 ms
Remote clock offset: -56.458 ms

# Below is generated by plot.py at 2019-06-27 21:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.75 Mbit/s
95th percentile per-packet one-way delay: 84.234 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.75 Mbit/s
95th percentile per-packet one-way delay: 84.234 ms
Loss rate: 0.01%
```

Run 4: Report of TCP Vegas — Data Link

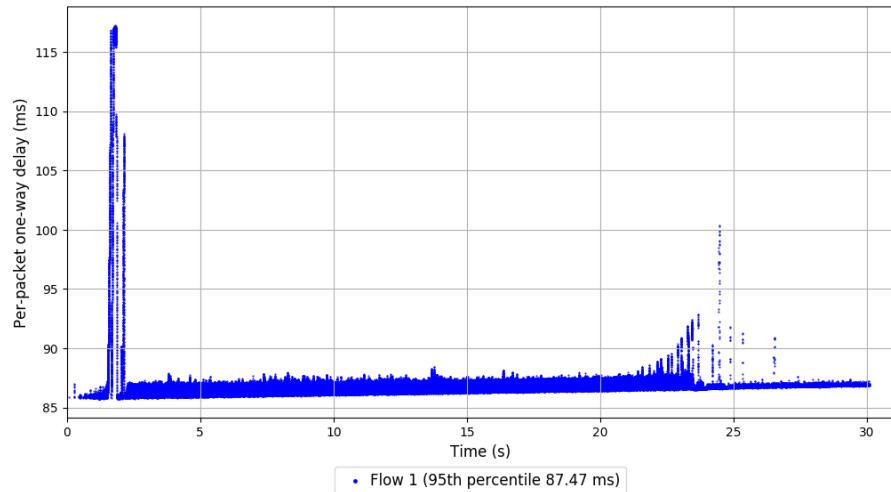
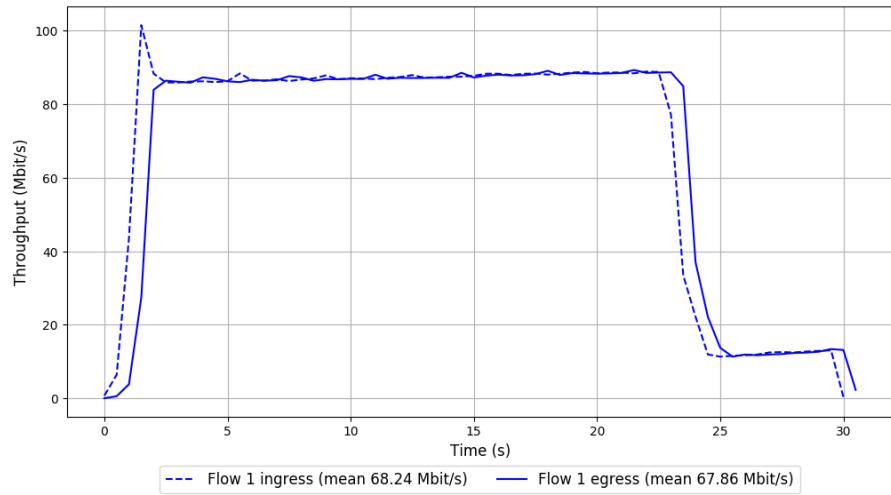


Run 5: Statistics of TCP Vegas

```
Start at: 2019-06-27 21:08:05
End at: 2019-06-27 21:08:35
Local clock offset: -6.445 ms
Remote clock offset: -113.553 ms

# Below is generated by plot.py at 2019-06-27 21:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.86 Mbit/s
95th percentile per-packet one-way delay: 87.475 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 67.86 Mbit/s
95th percentile per-packet one-way delay: 87.475 ms
Loss rate: 0.55%
```

Run 5: Report of TCP Vegas — Data Link

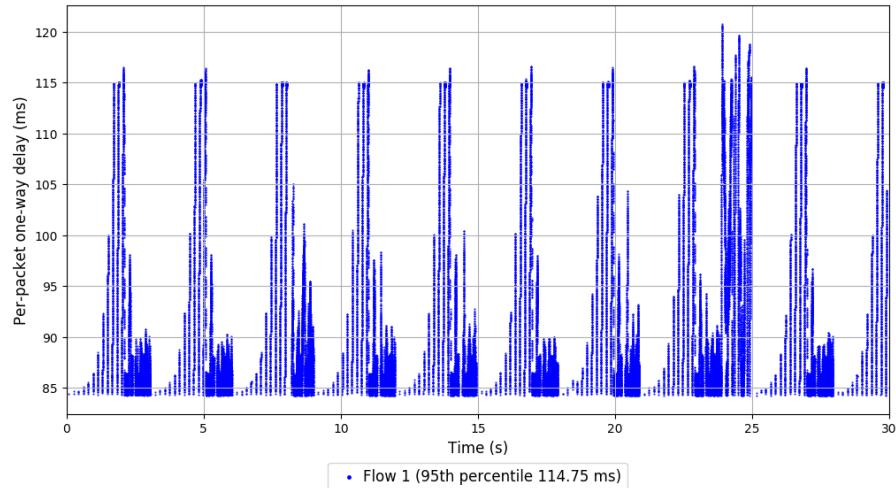
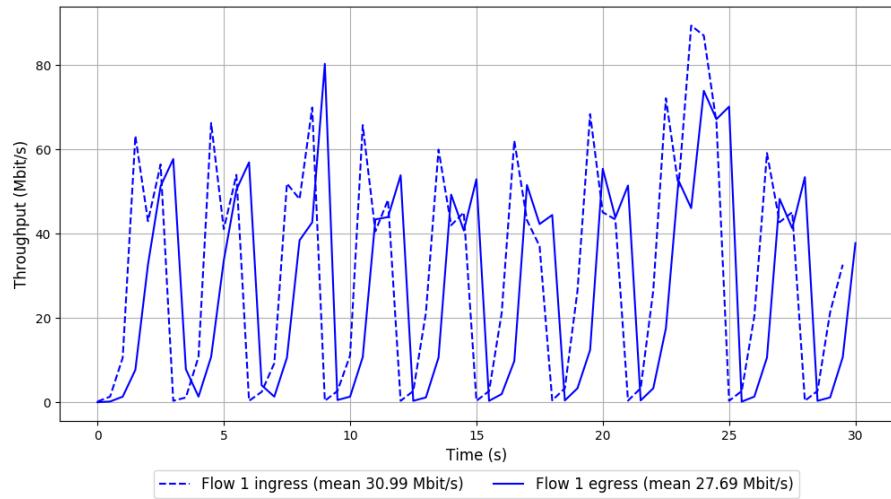


Run 1: Statistics of Verus

```
Start at: 2019-06-27 19:28:20
End at: 2019-06-27 19:28:50
Local clock offset: -6.603 ms
Remote clock offset: 142.463 ms

# Below is generated by plot.py at 2019-06-27 21:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 27.69 Mbit/s
95th percentile per-packet one-way delay: 114.747 ms
Loss rate: 10.60%
-- Flow 1:
Average throughput: 27.69 Mbit/s
95th percentile per-packet one-way delay: 114.747 ms
Loss rate: 10.60%
```

Run 1: Report of Verus — Data Link

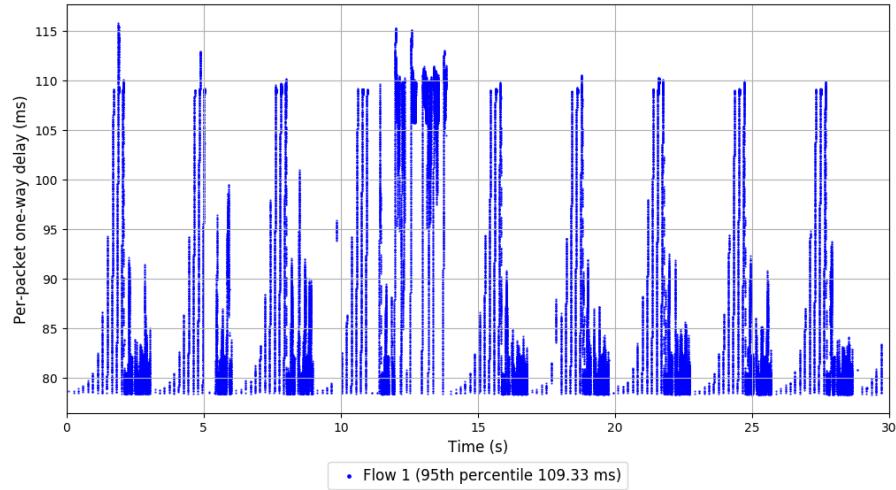
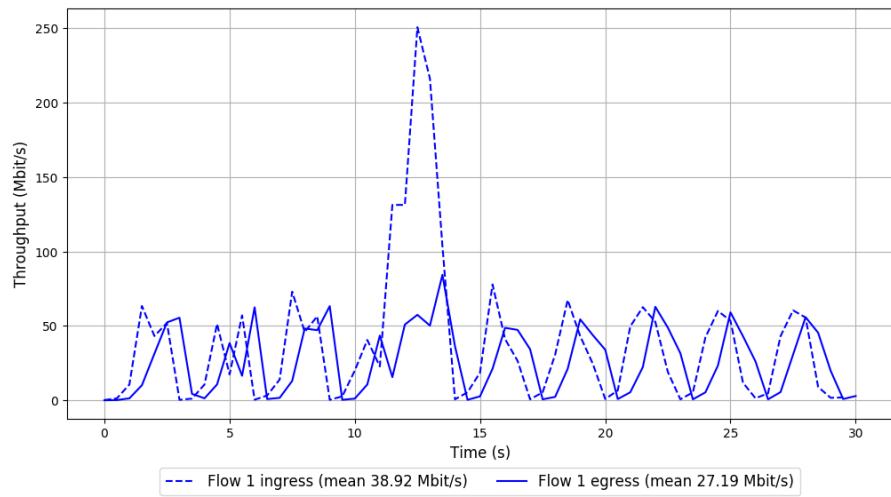


Run 2: Statistics of Verus

```
Start at: 2019-06-27 19:54:06
End at: 2019-06-27 19:54:36
Local clock offset: -5.506 ms
Remote clock offset: 141.66 ms

# Below is generated by plot.py at 2019-06-27 21:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 27.19 Mbit/s
95th percentile per-packet one-way delay: 109.335 ms
Loss rate: 30.12%
-- Flow 1:
Average throughput: 27.19 Mbit/s
95th percentile per-packet one-way delay: 109.335 ms
Loss rate: 30.12%
```

Run 2: Report of Verus — Data Link

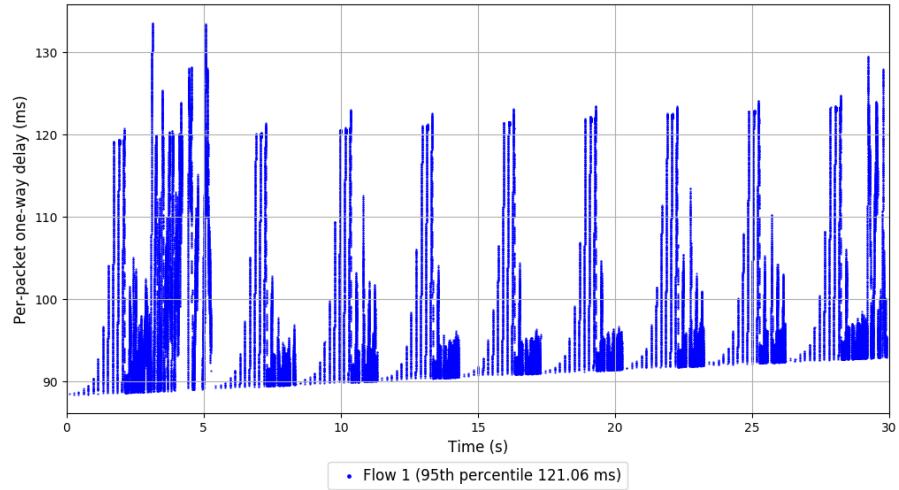
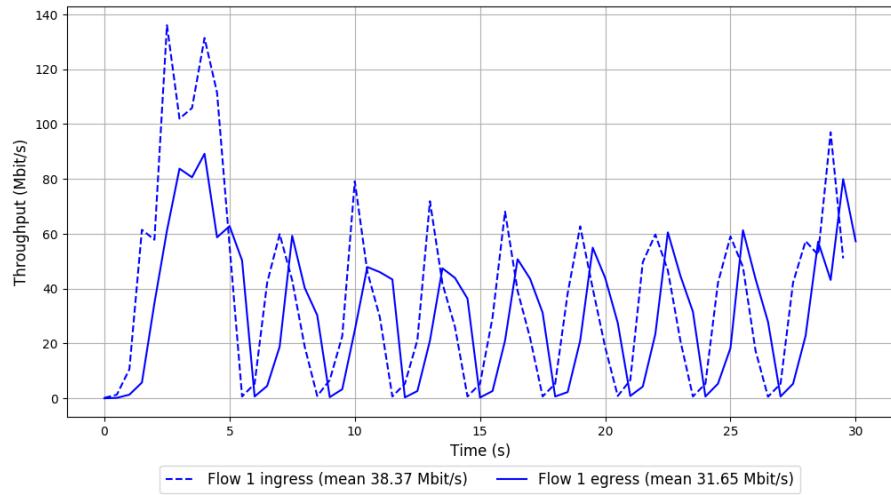


Run 3: Statistics of Verus

```
Start at: 2019-06-27 20:19:58
End at: 2019-06-27 20:20:28
Local clock offset: -6.577 ms
Remote clock offset: 52.473 ms

# Below is generated by plot.py at 2019-06-27 21:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.65 Mbit/s
95th percentile per-packet one-way delay: 121.055 ms
Loss rate: 17.50%
-- Flow 1:
Average throughput: 31.65 Mbit/s
95th percentile per-packet one-way delay: 121.055 ms
Loss rate: 17.50%
```

Run 3: Report of Verus — Data Link

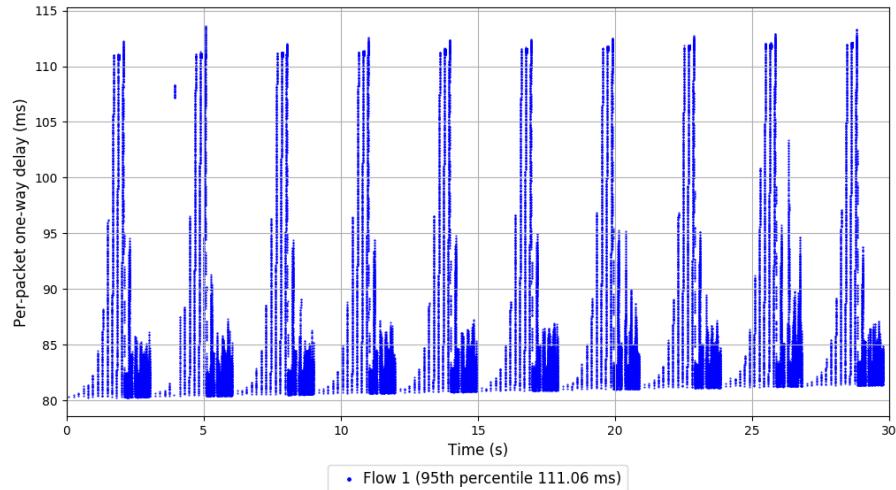
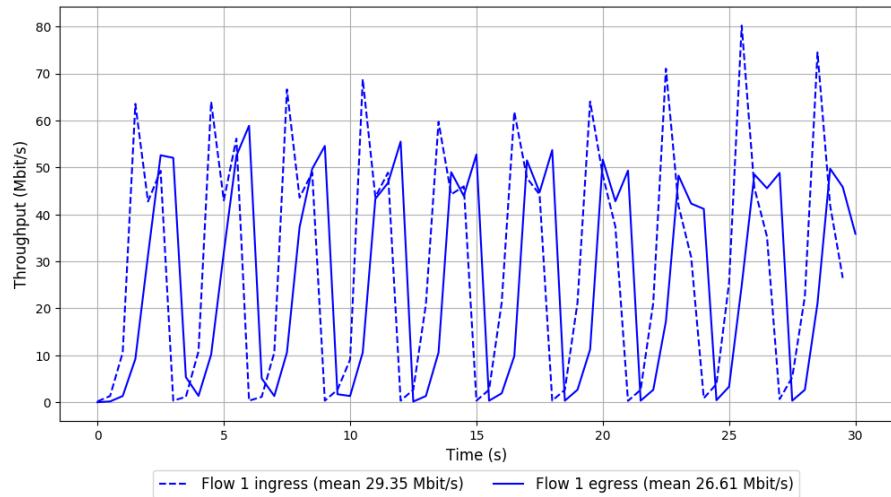


Run 4: Statistics of Verus

```
Start at: 2019-06-27 20:45:48
End at: 2019-06-27 20:46:18
Local clock offset: -7.192 ms
Remote clock offset: -69.376 ms

# Below is generated by plot.py at 2019-06-27 21:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.61 Mbit/s
95th percentile per-packet one-way delay: 111.062 ms
Loss rate: 9.35%
-- Flow 1:
Average throughput: 26.61 Mbit/s
95th percentile per-packet one-way delay: 111.062 ms
Loss rate: 9.35%
```

Run 4: Report of Verus — Data Link

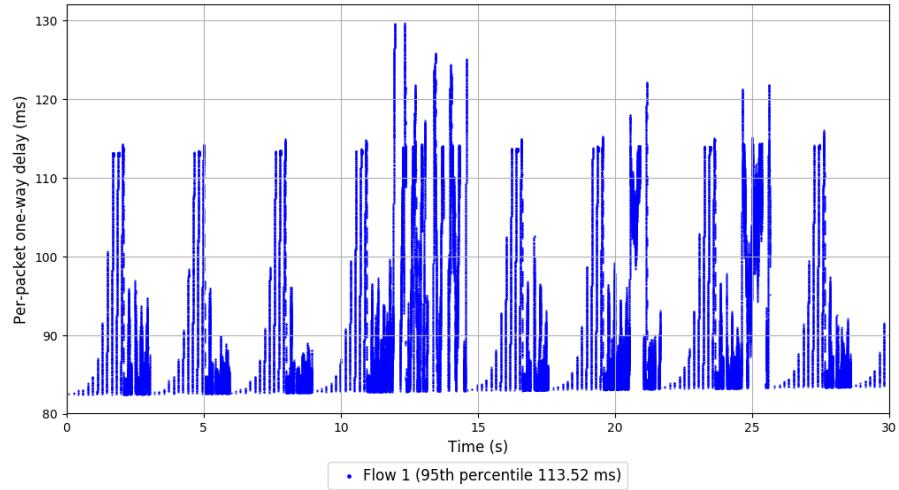
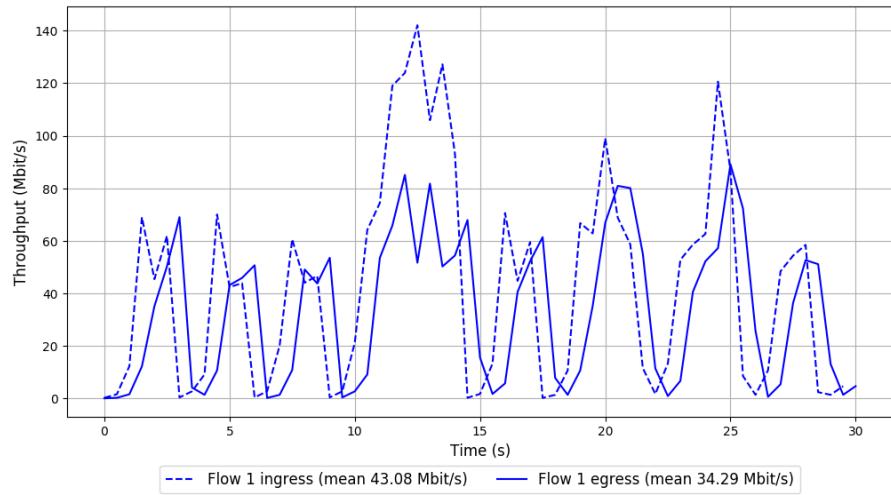


Run 5: Statistics of Verus

```
Start at: 2019-06-27 21:11:40
End at: 2019-06-27 21:12:10
Local clock offset: -5.605 ms
Remote clock offset: -121.355 ms

# Below is generated by plot.py at 2019-06-27 21:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.29 Mbit/s
95th percentile per-packet one-way delay: 113.523 ms
Loss rate: 20.37%
-- Flow 1:
Average throughput: 34.29 Mbit/s
95th percentile per-packet one-way delay: 113.523 ms
Loss rate: 20.37%
```

Run 5: Report of Verus — Data Link

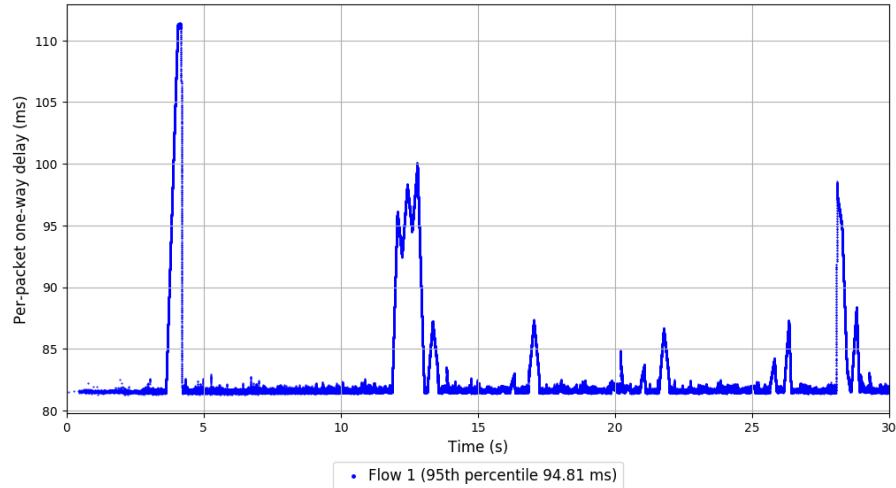
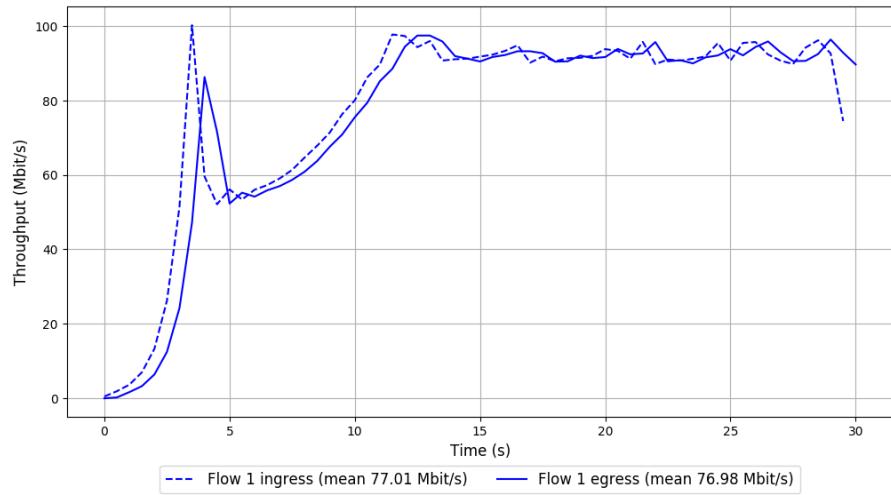


```
Run 1: Statistics of PCC-Vivace

Start at: 2019-06-27 19:22:23
End at: 2019-06-27 19:22:53
Local clock offset: -7.201 ms
Remote clock offset: 138.609 ms

# Below is generated by plot.py at 2019-06-27 21:26:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.98 Mbit/s
95th percentile per-packet one-way delay: 94.811 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 76.98 Mbit/s
95th percentile per-packet one-way delay: 94.811 ms
Loss rate: 0.05%
```

Run 1: Report of PCC-Vivace — Data Link

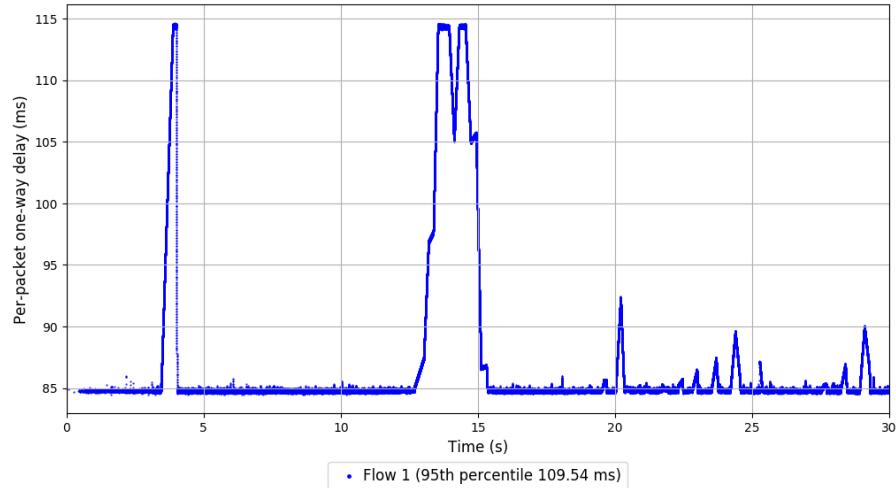
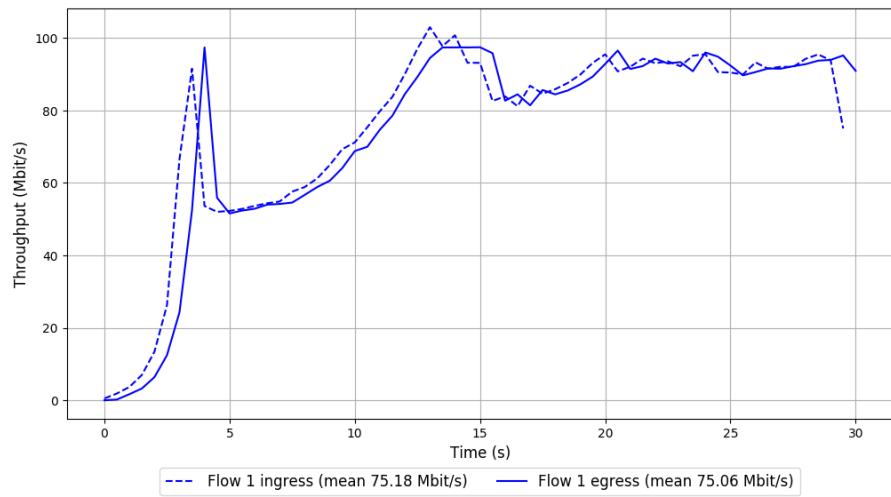


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-06-27 19:48:09
End at: 2019-06-27 19:48:39
Local clock offset: -6.089 ms
Remote clock offset: 146.001 ms

# Below is generated by plot.py at 2019-06-27 21:26:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.06 Mbit/s
95th percentile per-packet one-way delay: 109.543 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 75.06 Mbit/s
95th percentile per-packet one-way delay: 109.543 ms
Loss rate: 0.16%
```

Run 2: Report of PCC-Vivace — Data Link

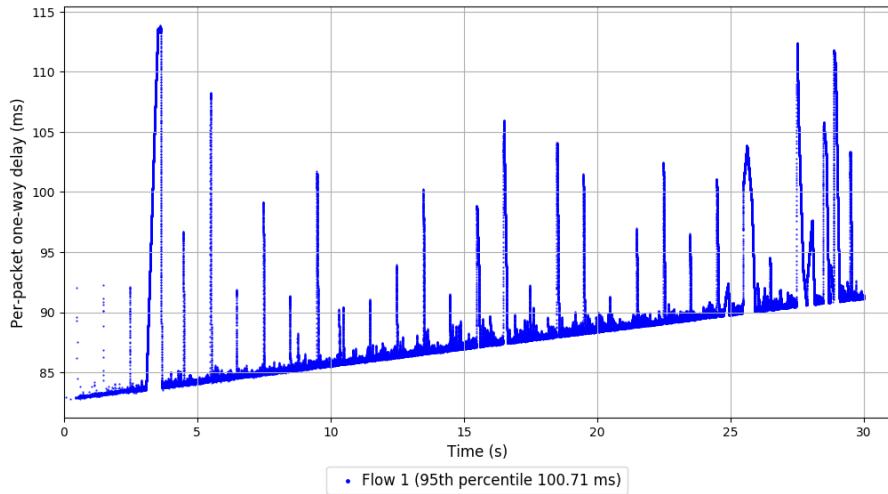
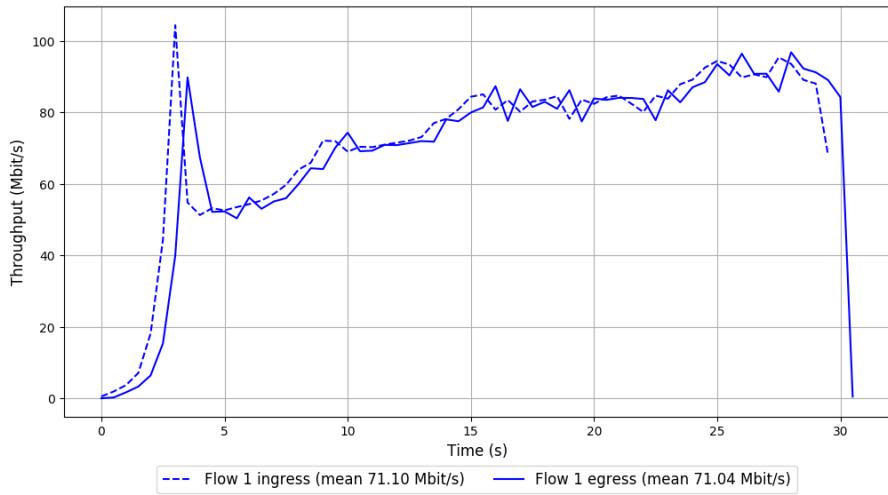


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-06-27 20:13:58
End at: 2019-06-27 20:14:28
Local clock offset: -5.96 ms
Remote clock offset: 128.5 ms

# Below is generated by plot.py at 2019-06-27 21:26:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.04 Mbit/s
95th percentile per-packet one-way delay: 100.712 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 71.04 Mbit/s
95th percentile per-packet one-way delay: 100.712 ms
Loss rate: 0.05%
```

Run 3: Report of PCC-Vivace — Data Link

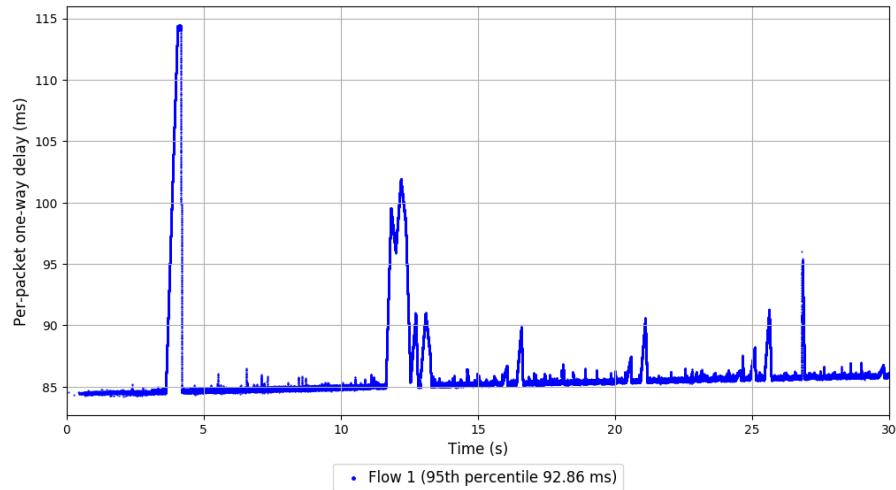
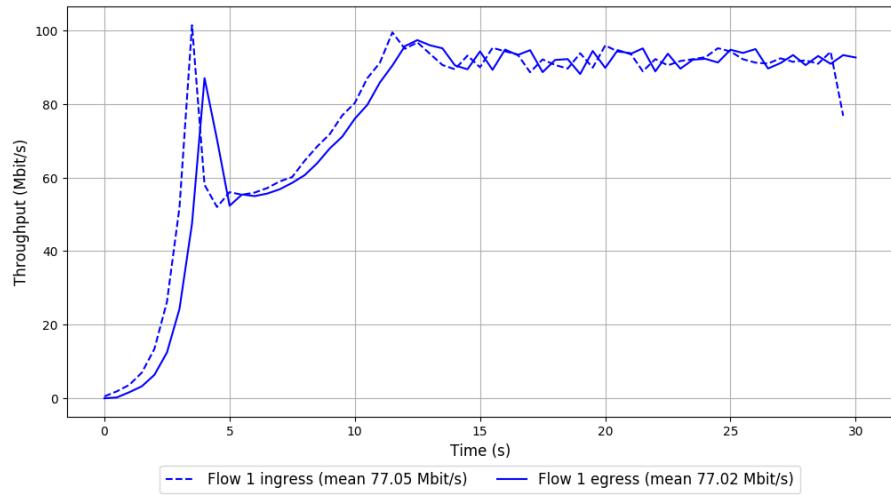


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-06-27 20:39:51
End at: 2019-06-27 20:40:21
Local clock offset: -6.553 ms
Remote clock offset: -48.464 ms

# Below is generated by plot.py at 2019-06-27 21:26:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.02 Mbit/s
95th percentile per-packet one-way delay: 92.860 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 77.02 Mbit/s
95th percentile per-packet one-way delay: 92.860 ms
Loss rate: 0.04%
```

Run 4: Report of PCC-Vivace — Data Link

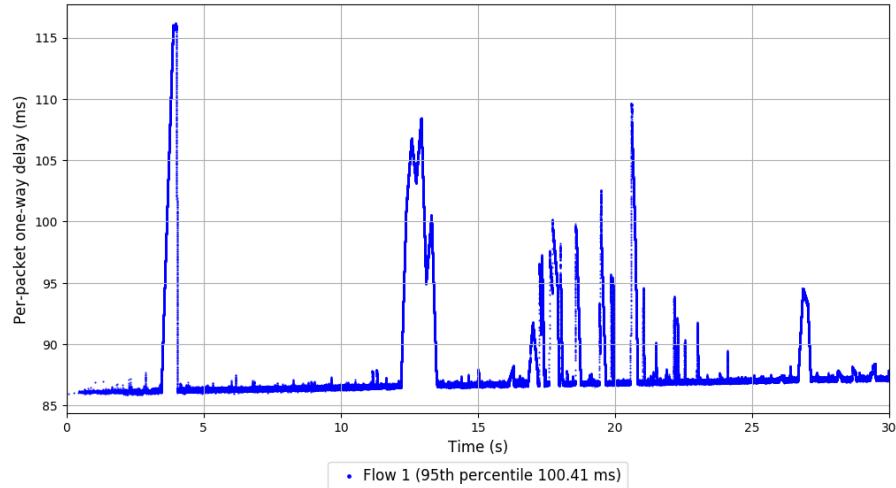
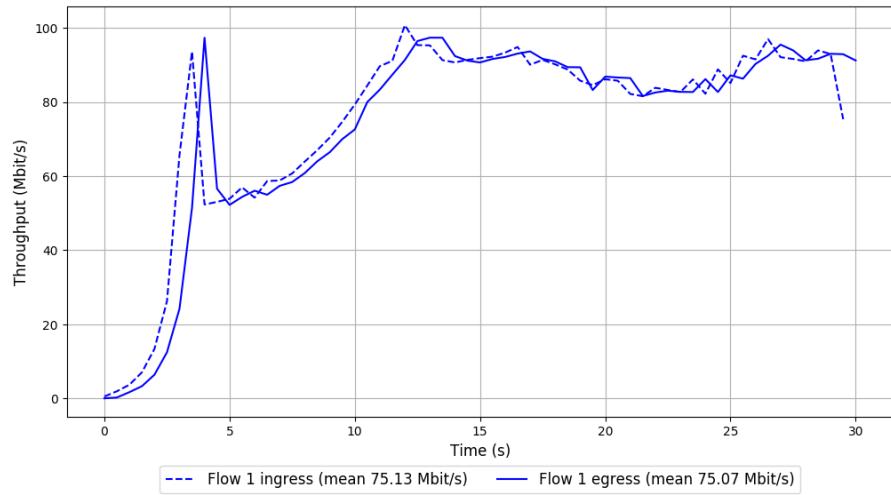


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-06-27 21:05:41
End at: 2019-06-27 21:06:11
Local clock offset: -6.487 ms
Remote clock offset: -108.55 ms

# Below is generated by plot.py at 2019-06-27 21:26:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.07 Mbit/s
95th percentile per-packet one-way delay: 100.414 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 75.07 Mbit/s
95th percentile per-packet one-way delay: 100.414 ms
Loss rate: 0.08%
```

Run 5: Report of PCC-Vivace — Data Link

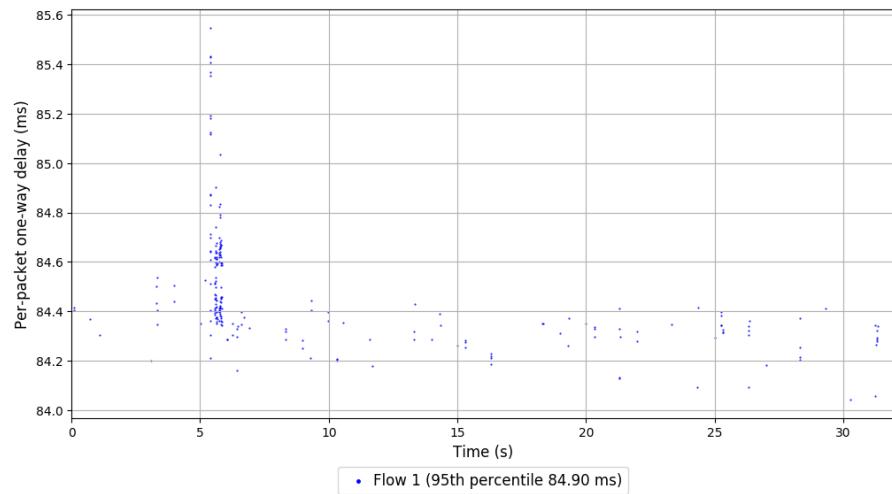
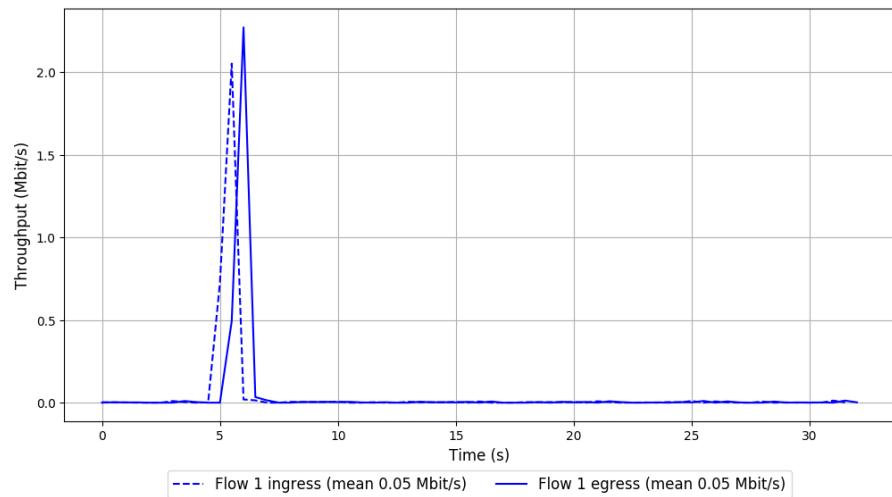


```
Run 1: Statistics of WebRTC media

Start at: 2019-06-27 19:11:47
End at: 2019-06-27 19:12:17
Local clock offset: -6.625 ms
Remote clock offset: 141.109 ms

# Below is generated by plot.py at 2019-06-27 21:26:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 84.901 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 84.901 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

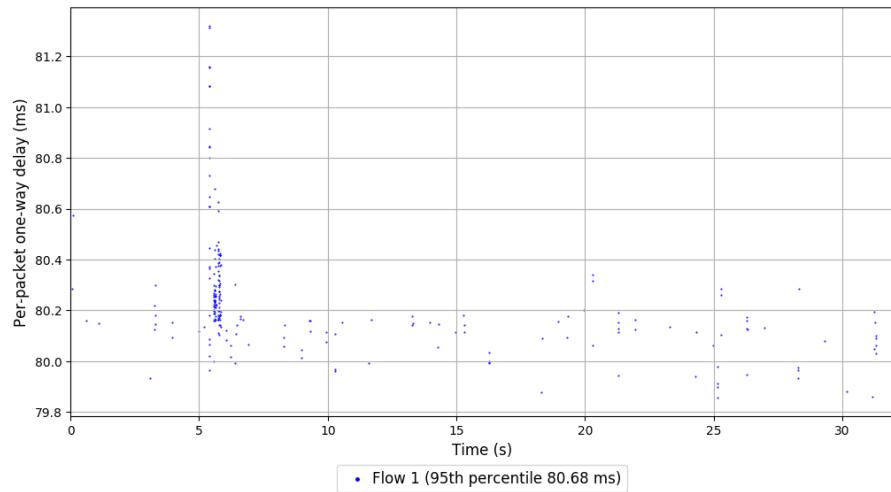
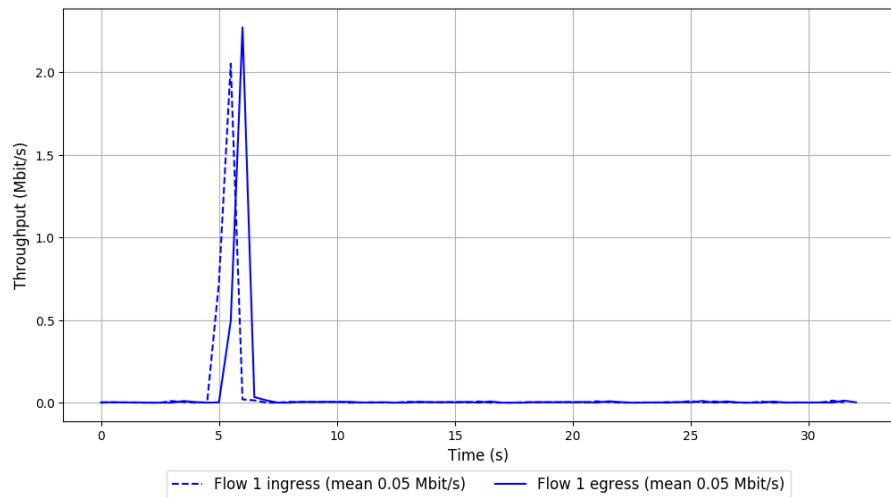


Run 2: Statistics of WebRTC media

```
Start at: 2019-06-27 19:37:35
End at: 2019-06-27 19:38:05
Local clock offset: -6.287 ms
Remote clock offset: 139.466 ms

# Below is generated by plot.py at 2019-06-27 21:26:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 80.678 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 80.678 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

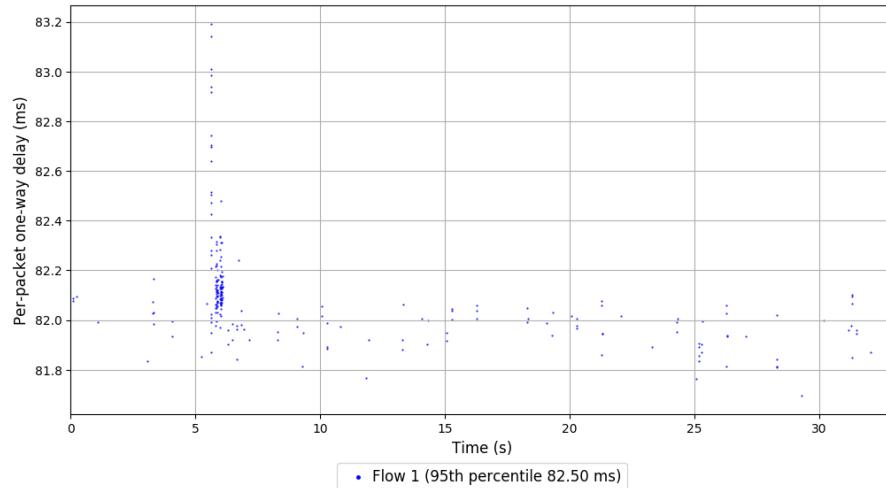
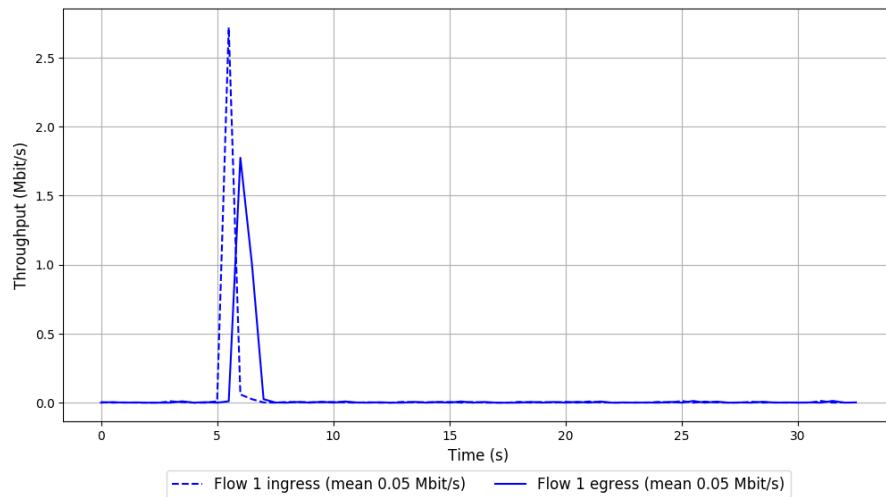


Run 3: Statistics of WebRTC media

```
Start at: 2019-06-27 20:03:23
End at: 2019-06-27 20:03:53
Local clock offset: -5.641 ms
Remote clock offset: 147.75 ms

# Below is generated by plot.py at 2019-06-27 21:26:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 82.503 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 82.503 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

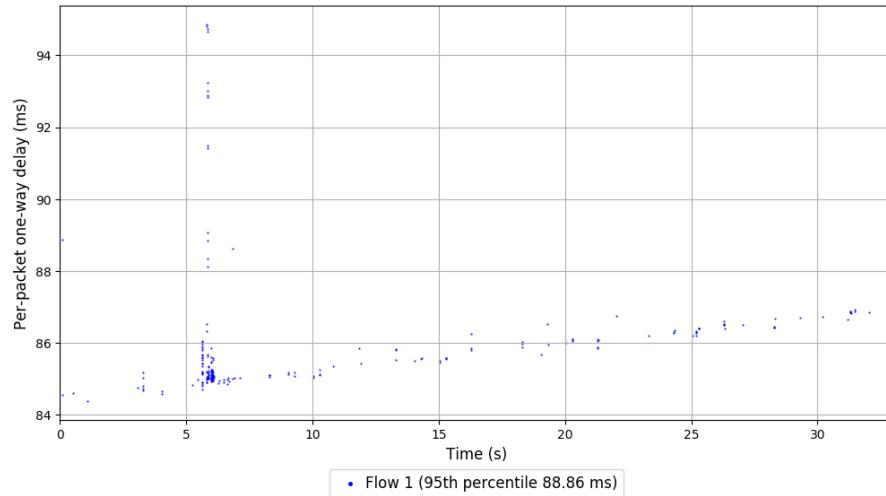
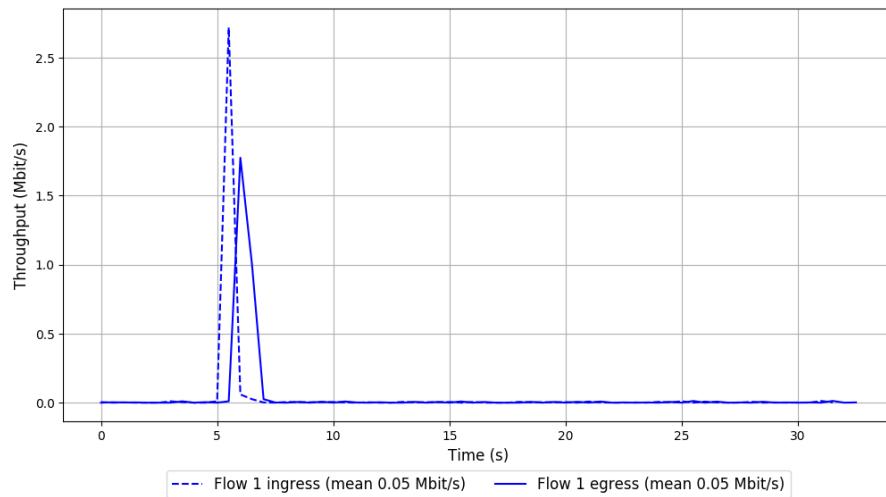


Run 4: Statistics of WebRTC media

```
Start at: 2019-06-27 20:29:16
End at: 2019-06-27 20:29:46
Local clock offset: -6.16 ms
Remote clock offset: -9.765 ms

# Below is generated by plot.py at 2019-06-27 21:26:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 88.860 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 88.860 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-06-27 20:55:06
End at: 2019-06-27 20:55:36
Local clock offset: -6.785 ms
Remote clock offset: -87.199 ms

# Below is generated by plot.py at 2019-06-27 21:26:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 85.390 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 85.390 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

