

Pantheon Report

Generated at 2019-06-28 19:17:59 (UTC).
Data path: GCE Tokyo on `ens4` (*remote*) → GCE Sydney on `ens4` (*local*).
Repeated the test of 22 congestion control schemes 5 times.
Each test lasted for 30 seconds running 1 flow.
NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

System info:

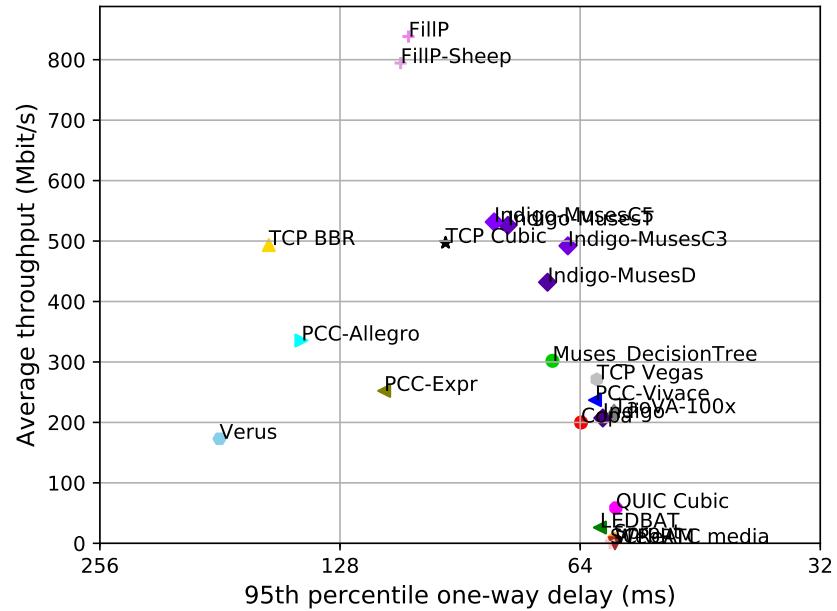
```
Linux 4.15.0-1032-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

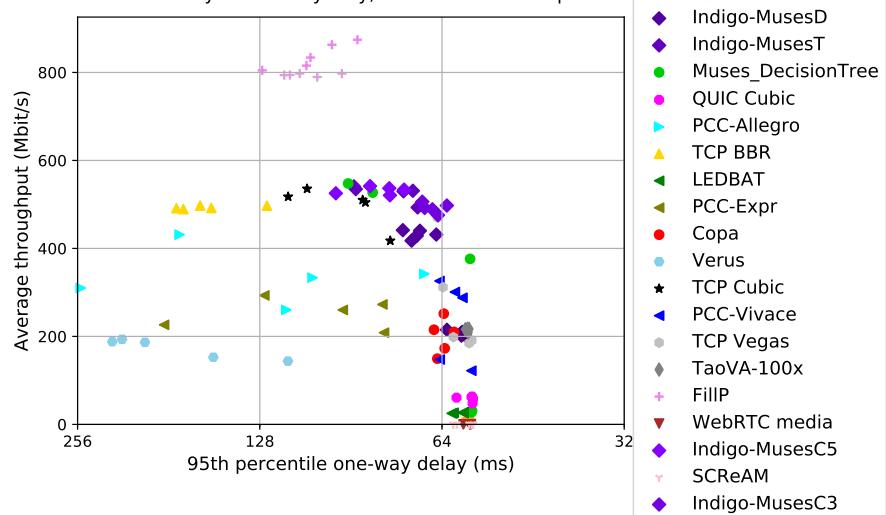
```
branch: muses @ c3953d08f32ec7ebbdede2d2f0cbdeed262571ef
third_party/fillp @ d6da1459332fce56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fc45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
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 GCE Tokyo to GCE Sydney, 5 runs of 30s each per scheme
(mean of all runs by scheme)



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



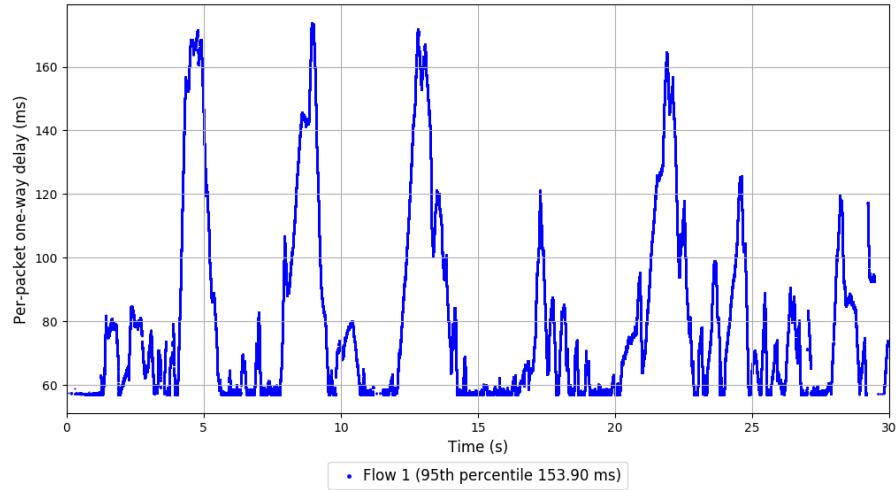
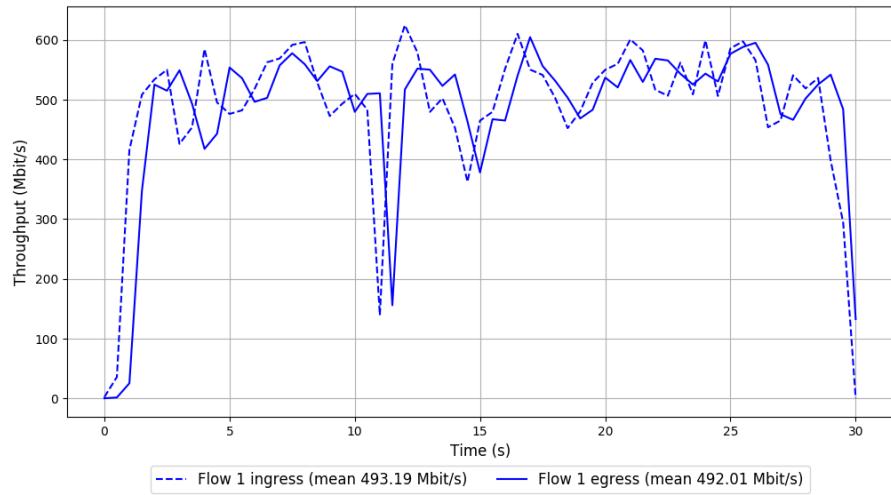
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	493.49	157.21	0.97
Copa	5	199.88	63.84	0.44
TCP Cubic	5	497.08	94.39	0.47
FillP	5	838.32	105.03	0.67
FillP-Sheep	5	794.48	107.46	0.69
Indigo	5	207.34	59.95	0.46
Indigo-MusesC3	5	492.06	66.31	0.53
Indigo-MusesC5	5	531.61	82.03	0.49
Indigo-MusesD	5	431.87	70.32	0.55
Indigo-MusesT	5	525.96	78.83	0.59
LEDBAT	5	26.07	60.45	0.72
Muses_DecisionTree	5	301.90	69.32	0.46
PCC-Allegro	5	335.45	143.09	1.11
PCC-Expr	5	252.17	112.70	3.31
QUIC Cubic	5	58.52	57.74	0.67
SCReAM	5	0.22	58.71	0.41
Sprout	5	7.55	58.05	0.36
TaoVA-100x	5	215.26	58.04	0.44
TCP Vegas	5	271.12	61.00	0.39
Verus	5	172.91	181.26	2.72
PCC-Vivace	5	236.85	61.32	0.57
WebRTC media	4	0.05	57.88	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-06-28 14:53:28
End at: 2019-06-28 14:53:58
Local clock offset: 0.118 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2019-06-28 17:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 492.01 Mbit/s
95th percentile per-packet one-way delay: 153.898 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 492.01 Mbit/s
95th percentile per-packet one-way delay: 153.898 ms
Loss rate: 0.63%
```

Run 1: Report of TCP BBR — Data Link

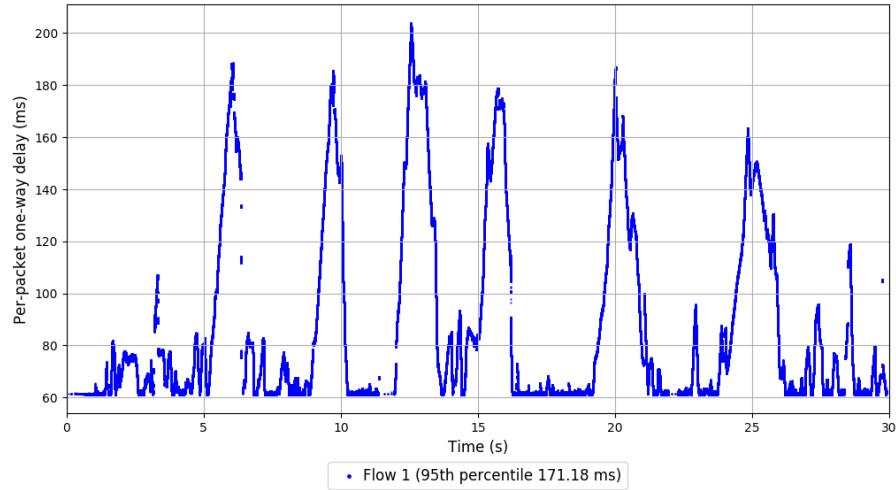
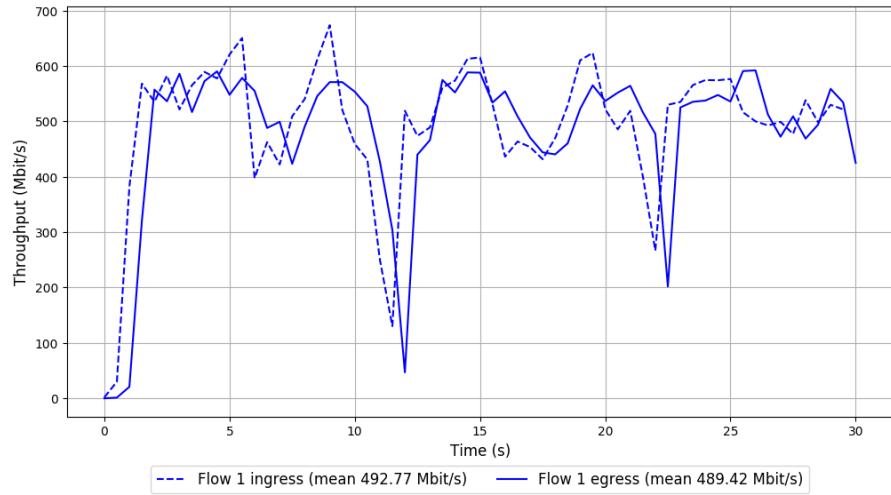


Run 2: Statistics of TCP BBR

```
Start at: 2019-06-28 15:24:50
End at: 2019-06-28 15:25:20
Local clock offset: -0.192 ms
Remote clock offset: -0.923 ms

# Below is generated by plot.py at 2019-06-28 17:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 489.42 Mbit/s
95th percentile per-packet one-way delay: 171.179 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 489.42 Mbit/s
95th percentile per-packet one-way delay: 171.179 ms
Loss rate: 1.09%
```

Run 2: Report of TCP BBR — Data Link

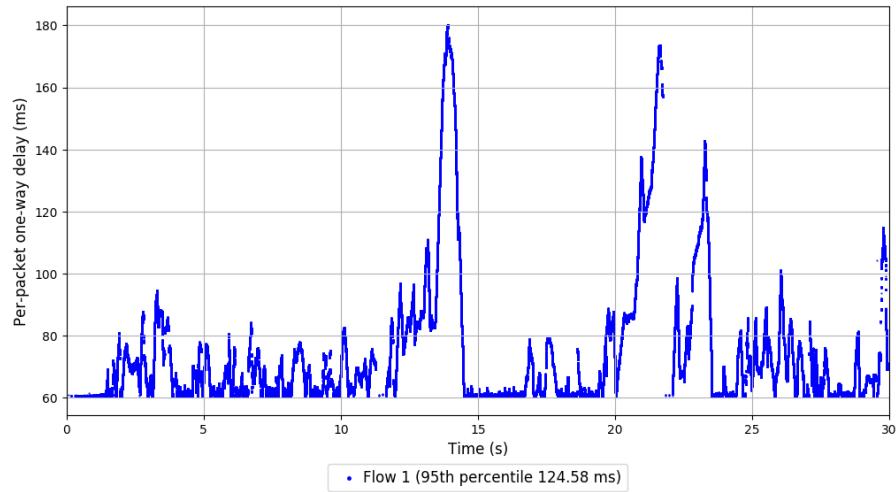
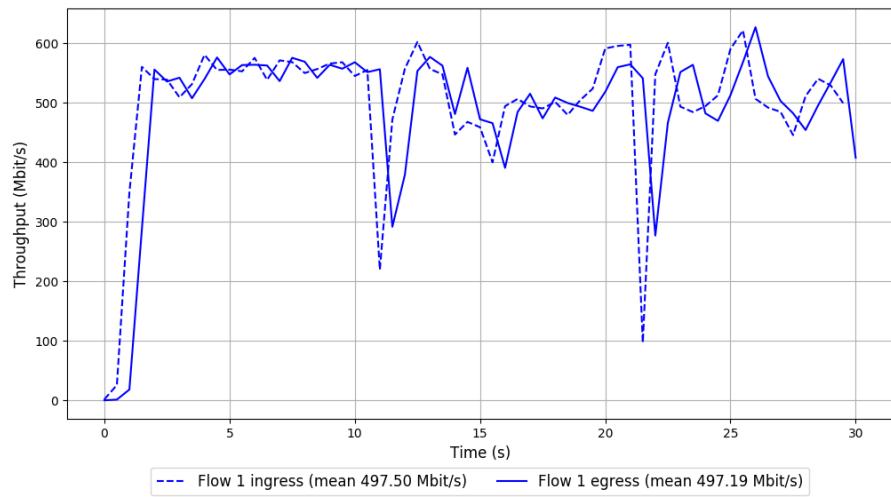


Run 3: Statistics of TCP BBR

```
Start at: 2019-06-28 15:56:12
End at: 2019-06-28 15:56:42
Local clock offset: 0.119 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2019-06-28 17:44:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 497.19 Mbit/s
95th percentile per-packet one-way delay: 124.582 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 497.19 Mbit/s
95th percentile per-packet one-way delay: 124.582 ms
Loss rate: 0.47%
```

Run 3: Report of TCP BBR — Data Link

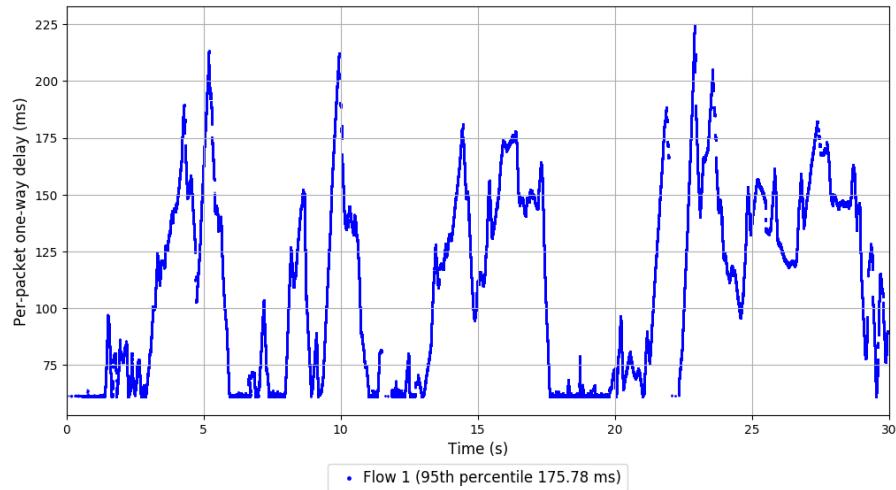
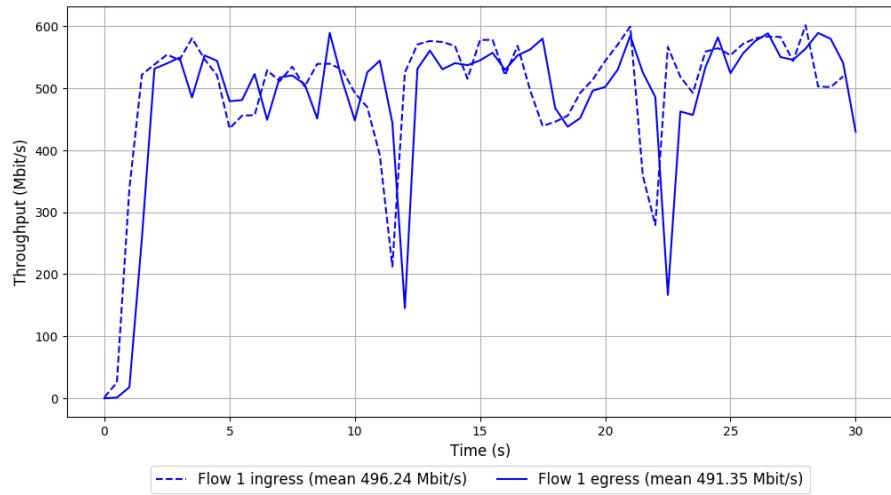


Run 4: Statistics of TCP BBR

```
Start at: 2019-06-28 16:27:33
End at: 2019-06-28 16:28:03
Local clock offset: -0.091 ms
Remote clock offset: -0.827 ms

# Below is generated by plot.py at 2019-06-28 17:44:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 491.35 Mbit/s
95th percentile per-packet one-way delay: 175.785 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 491.35 Mbit/s
95th percentile per-packet one-way delay: 175.785 ms
Loss rate: 1.39%
```

Run 4: Report of TCP BBR — Data Link

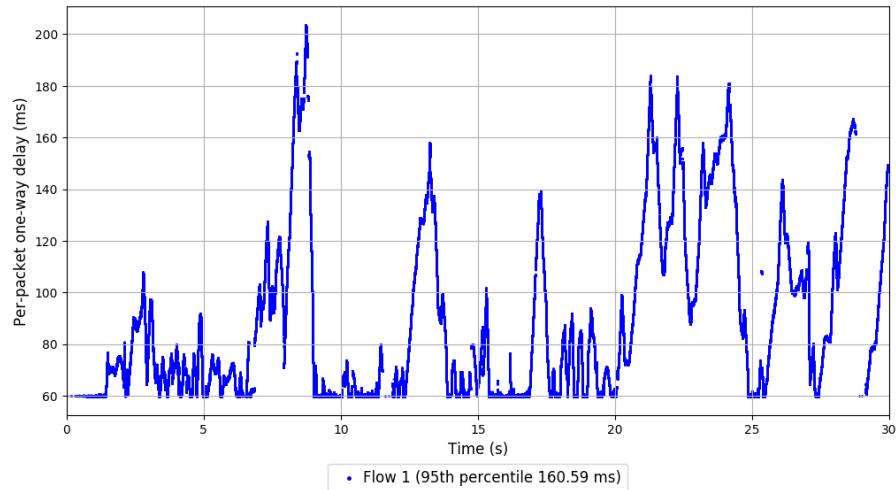
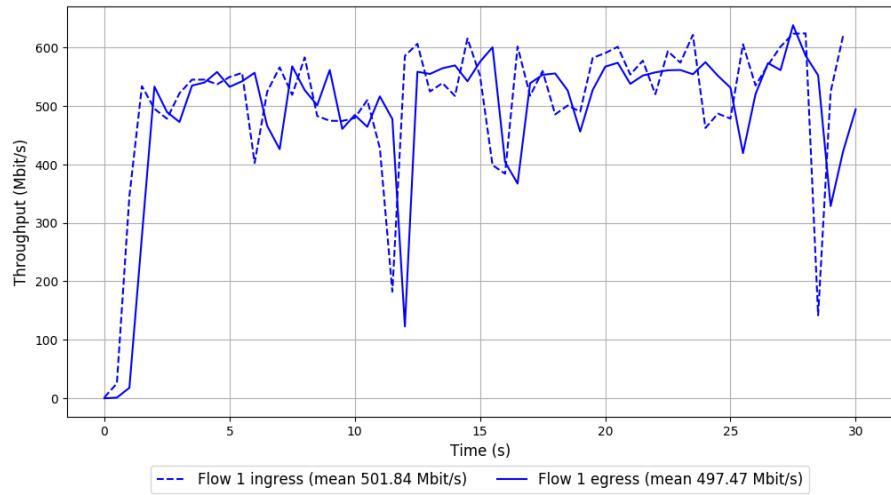


Run 5: Statistics of TCP BBR

```
Start at: 2019-06-28 16:59:04
End at: 2019-06-28 16:59:34
Local clock offset: -0.469 ms
Remote clock offset: 0.092 ms

# Below is generated by plot.py at 2019-06-28 17:44:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 497.47 Mbit/s
95th percentile per-packet one-way delay: 160.591 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 497.47 Mbit/s
95th percentile per-packet one-way delay: 160.591 ms
Loss rate: 1.26%
```

Run 5: Report of TCP BBR — Data Link

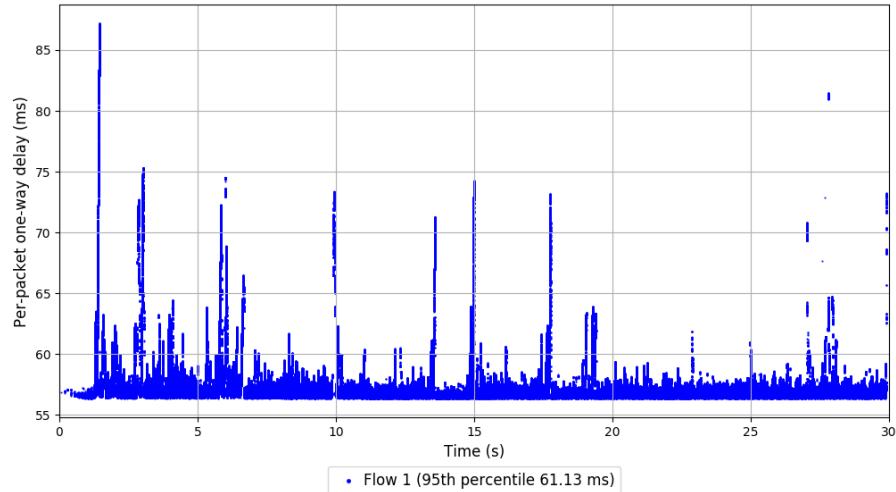
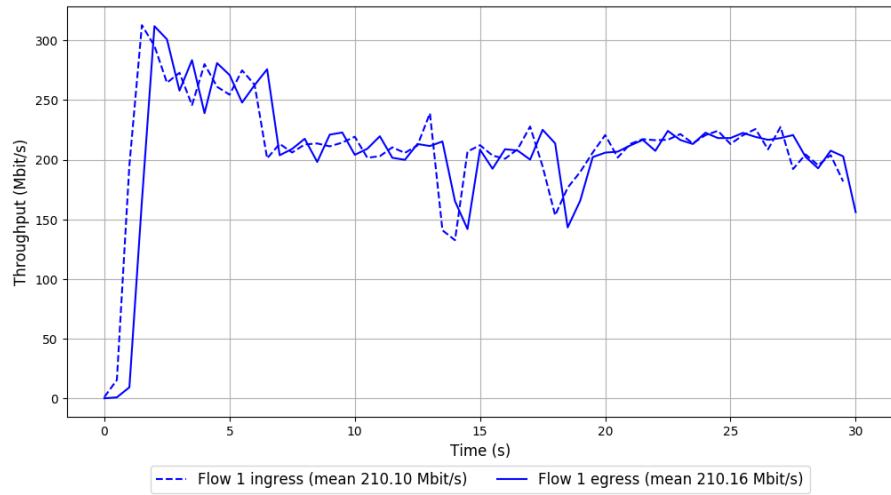


Run 1: Statistics of Copa

```
Start at: 2019-06-28 15:05:22
End at: 2019-06-28 15:05:52
Local clock offset: -0.009 ms
Remote clock offset: 0.25 ms

# Below is generated by plot.py at 2019-06-28 17:44:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 210.16 Mbit/s
95th percentile per-packet one-way delay: 61.134 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 210.16 Mbit/s
95th percentile per-packet one-way delay: 61.134 ms
Loss rate: 0.35%
```

Run 1: Report of Copa — Data Link

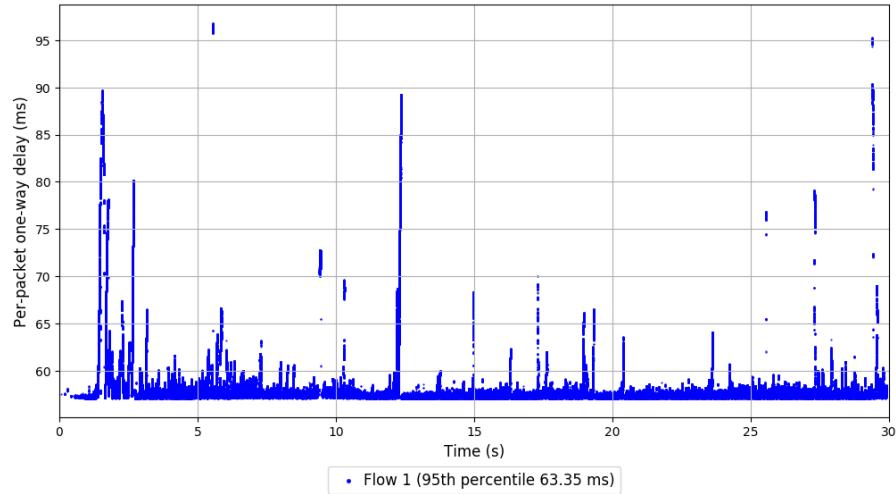
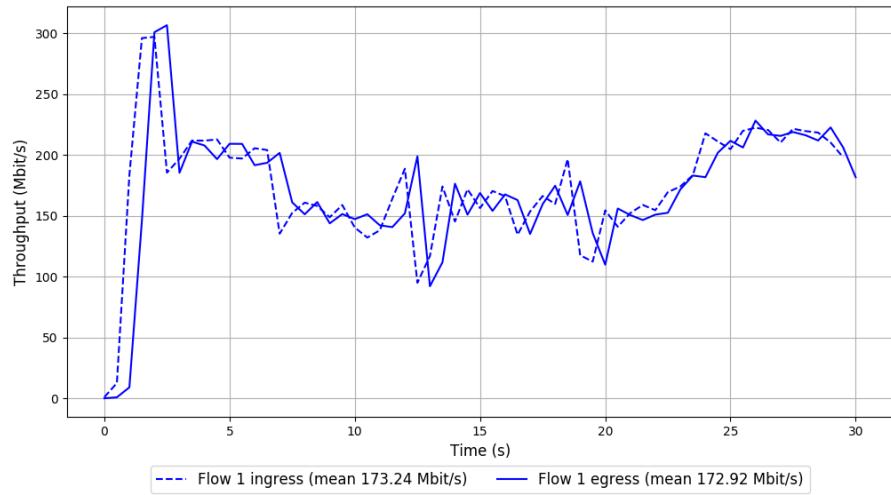


Run 2: Statistics of Copa

```
Start at: 2019-06-28 15:36:54
End at: 2019-06-28 15:37:24
Local clock offset: 0.437 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2019-06-28 17:44:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 172.92 Mbit/s
95th percentile per-packet one-way delay: 63.354 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 172.92 Mbit/s
95th percentile per-packet one-way delay: 63.354 ms
Loss rate: 0.58%
```

Run 2: Report of Copa — Data Link

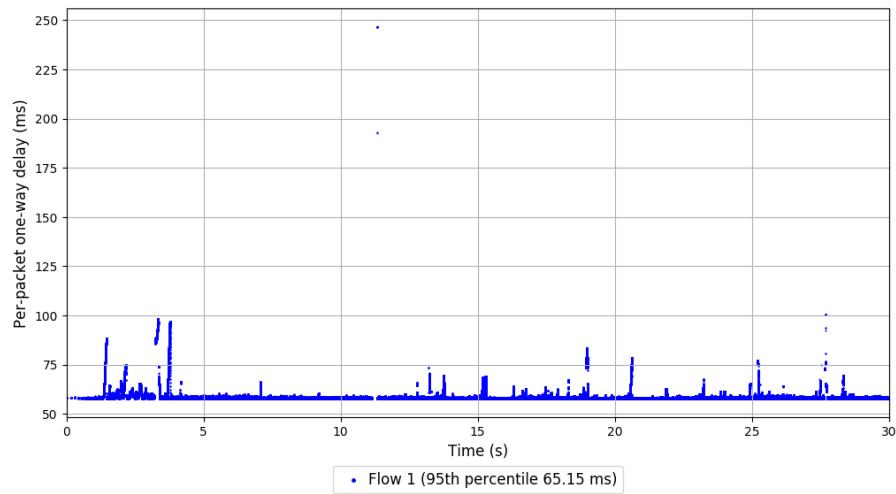
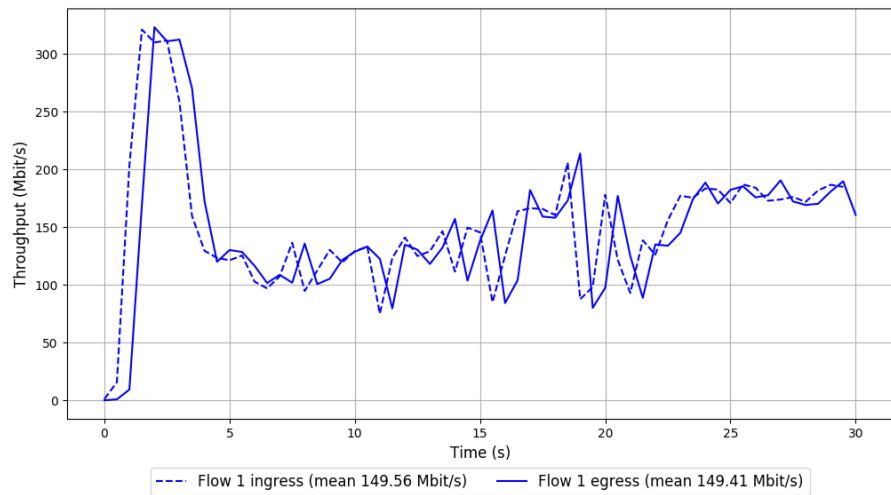


Run 3: Statistics of Copa

```
Start at: 2019-06-28 16:07:48
End at: 2019-06-28 16:08:18
Local clock offset: 0.297 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2019-06-28 17:44:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 149.41 Mbit/s
95th percentile per-packet one-way delay: 65.146 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 149.41 Mbit/s
95th percentile per-packet one-way delay: 65.146 ms
Loss rate: 0.48%
```

Run 3: Report of Copa — Data Link

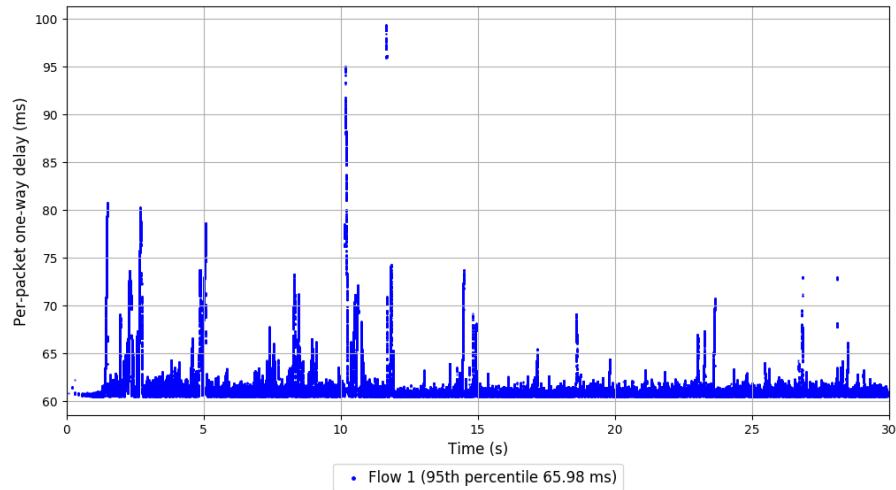
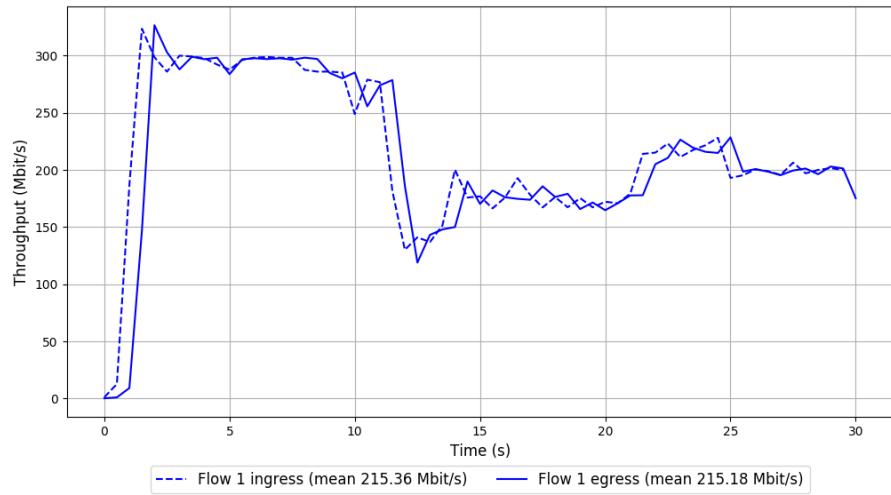


Run 4: Statistics of Copa

```
Start at: 2019-06-28 16:39:24
End at: 2019-06-28 16:39:54
Local clock offset: -0.094 ms
Remote clock offset: -0.091 ms

# Below is generated by plot.py at 2019-06-28 17:47:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.18 Mbit/s
95th percentile per-packet one-way delay: 65.978 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 215.18 Mbit/s
95th percentile per-packet one-way delay: 65.978 ms
Loss rate: 0.48%
```

Run 4: Report of Copa — Data Link

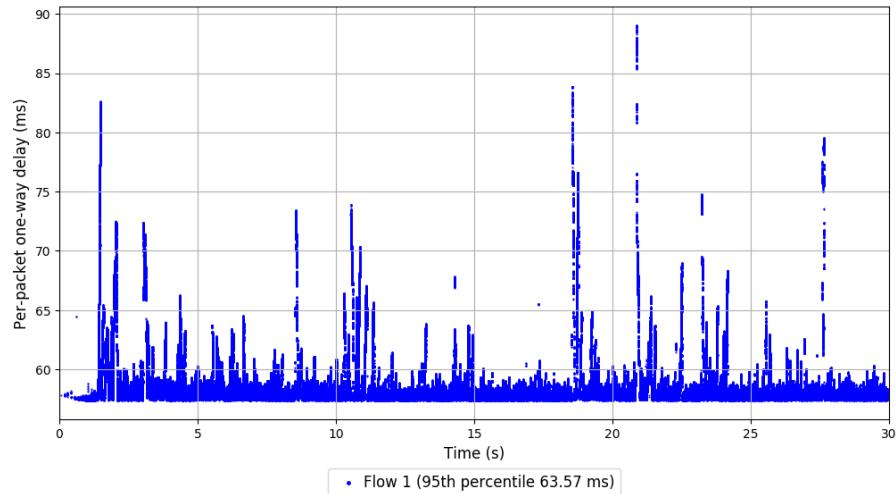
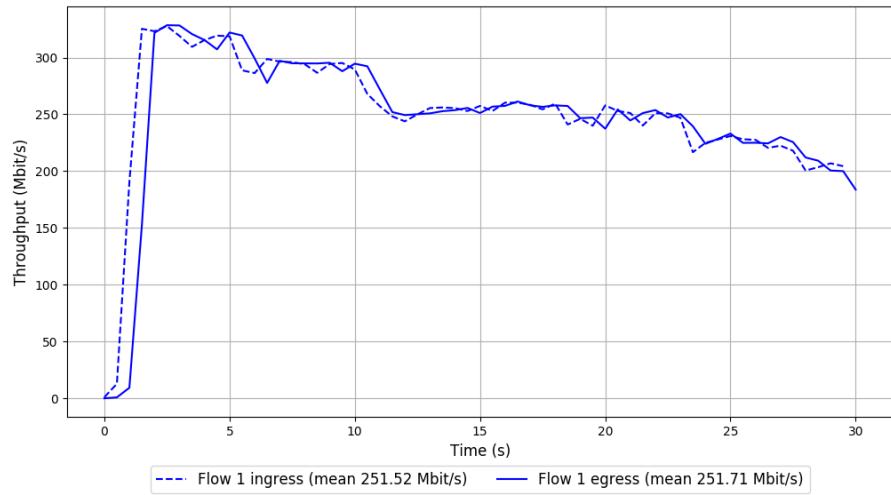


Run 5: Statistics of Copa

```
Start at: 2019-06-28 17:10:36
End at: 2019-06-28 17:11:06
Local clock offset: 0.384 ms
Remote clock offset: 0.115 ms

# Below is generated by plot.py at 2019-06-28 17:49:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 251.71 Mbit/s
95th percentile per-packet one-way delay: 63.569 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 251.71 Mbit/s
95th percentile per-packet one-way delay: 63.569 ms
Loss rate: 0.32%
```

Run 5: Report of Copa — Data Link

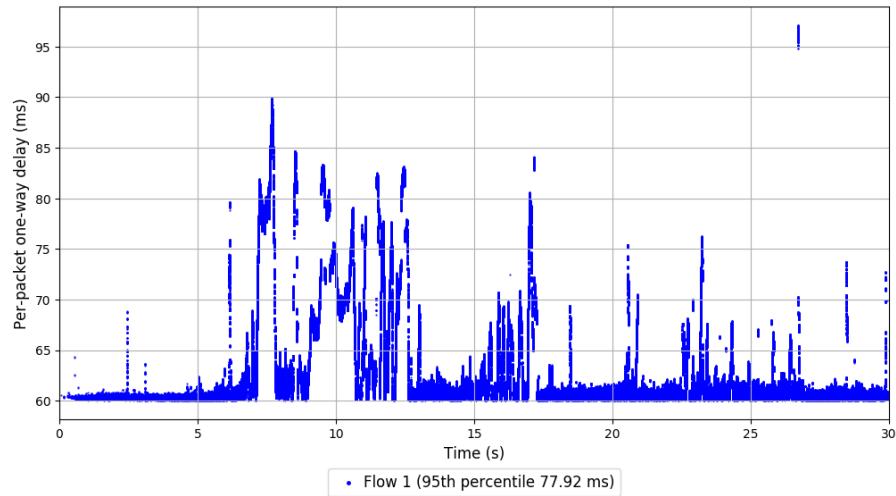
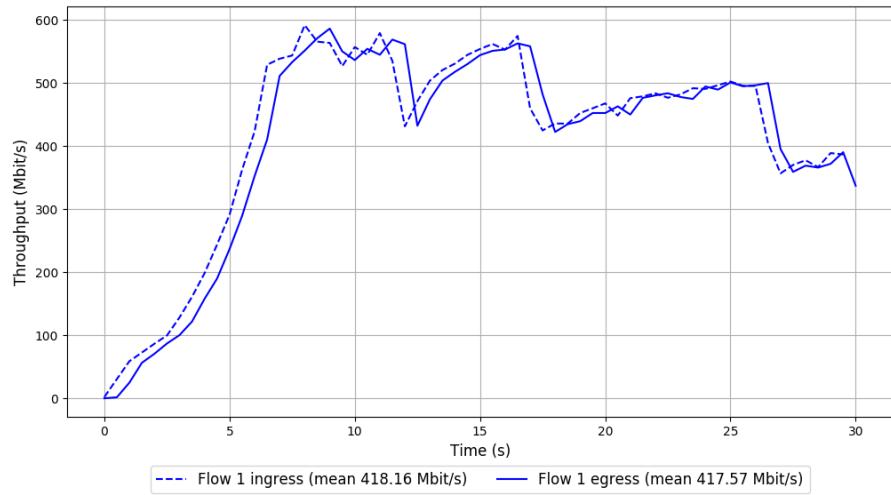


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-06-28 14:55:03
End at: 2019-06-28 14:55:33
Local clock offset: 0.118 ms
Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2019-06-28 17:49:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 417.57 Mbit/s
95th percentile per-packet one-way delay: 77.921 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 417.57 Mbit/s
95th percentile per-packet one-way delay: 77.921 ms
Loss rate: 0.54%
```

Run 1: Report of TCP Cubic — Data Link

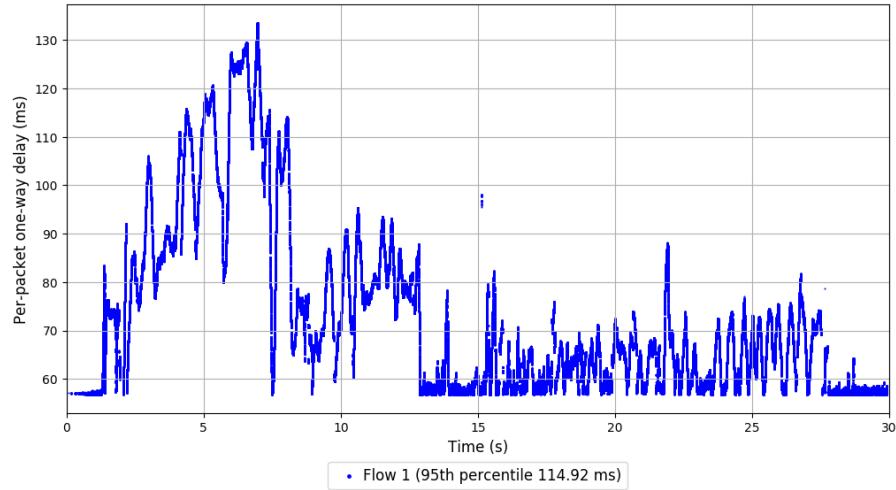
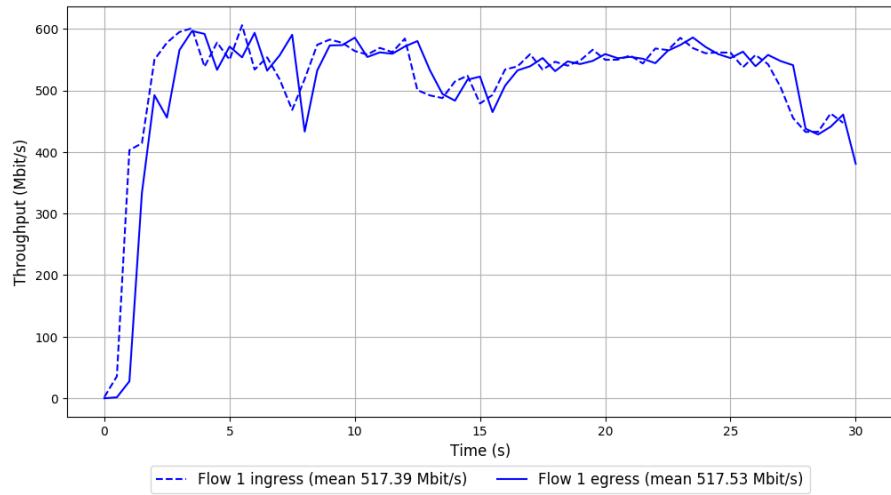


Run 2: Statistics of TCP Cubic

```
Start at: 2019-06-28 15:26:26
End at: 2019-06-28 15:26:56
Local clock offset: -0.002 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2019-06-28 17:53:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 517.53 Mbit/s
95th percentile per-packet one-way delay: 114.918 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 517.53 Mbit/s
95th percentile per-packet one-way delay: 114.918 ms
Loss rate: 0.37%
```

Run 2: Report of TCP Cubic — Data Link

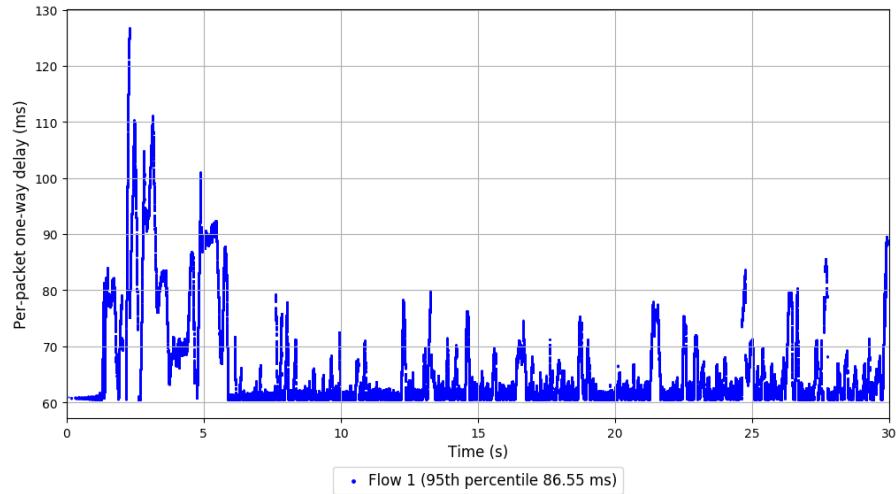
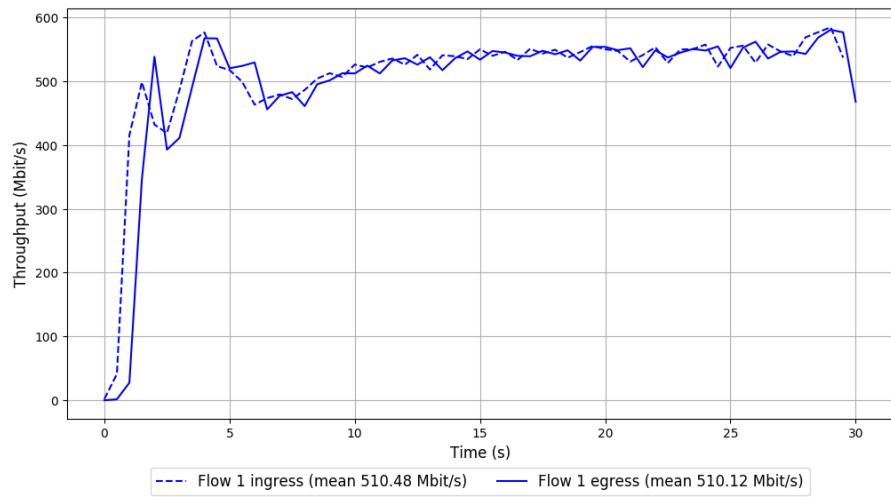


Run 3: Statistics of TCP Cubic

```
Start at: 2019-06-28 15:57:47
End at: 2019-06-28 15:58:17
Local clock offset: -0.122 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-06-28 17:53:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 510.12 Mbit/s
95th percentile per-packet one-way delay: 86.549 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 510.12 Mbit/s
95th percentile per-packet one-way delay: 86.549 ms
Loss rate: 0.47%
```

Run 3: Report of TCP Cubic — Data Link

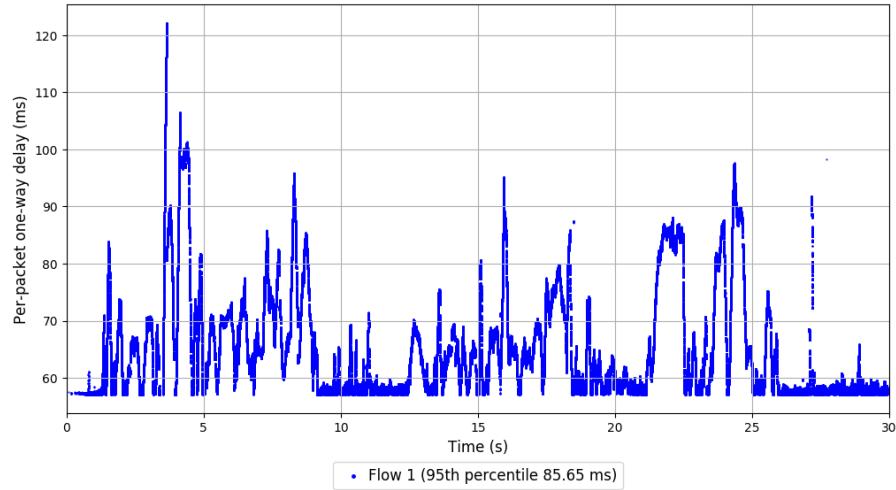
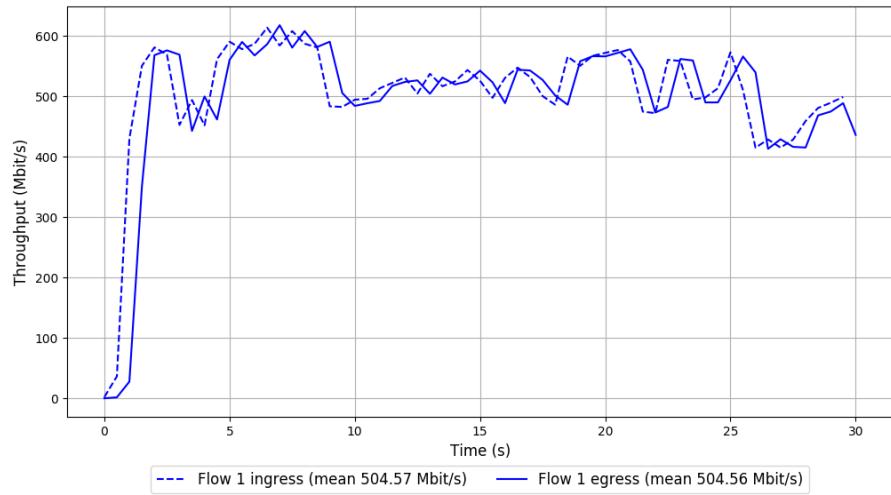


Run 4: Statistics of TCP Cubic

```
Start at: 2019-06-28 16:29:08
End at: 2019-06-28 16:29:38
Local clock offset: -0.229 ms
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2019-06-28 17:53:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 504.56 Mbit/s
95th percentile per-packet one-way delay: 85.649 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 504.56 Mbit/s
95th percentile per-packet one-way delay: 85.649 ms
Loss rate: 0.40%
```

Run 4: Report of TCP Cubic — Data Link

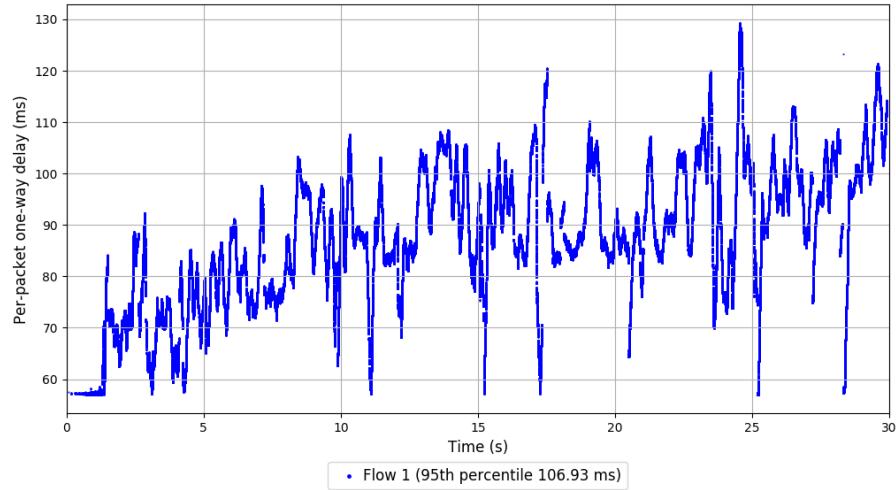
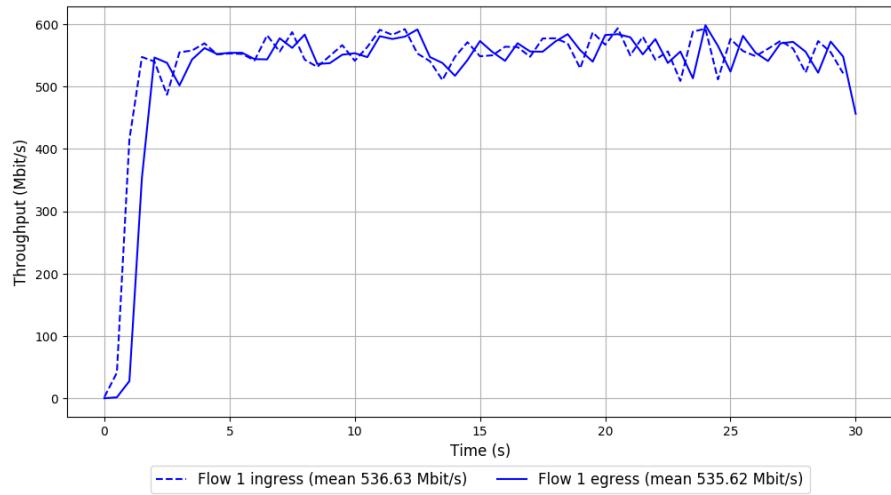


Run 5: Statistics of TCP Cubic

```
Start at: 2019-06-28 17:00:39
End at: 2019-06-28 17:01:09
Local clock offset: -0.06 ms
Remote clock offset: 0.089 ms

# Below is generated by plot.py at 2019-06-28 17:53:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 535.62 Mbit/s
95th percentile per-packet one-way delay: 106.927 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 535.62 Mbit/s
95th percentile per-packet one-way delay: 106.927 ms
Loss rate: 0.58%
```

Run 5: Report of TCP Cubic — Data Link

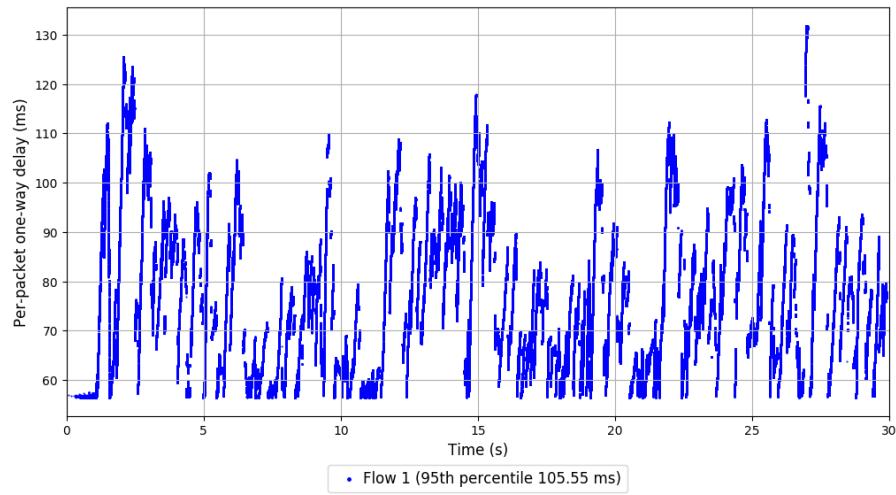
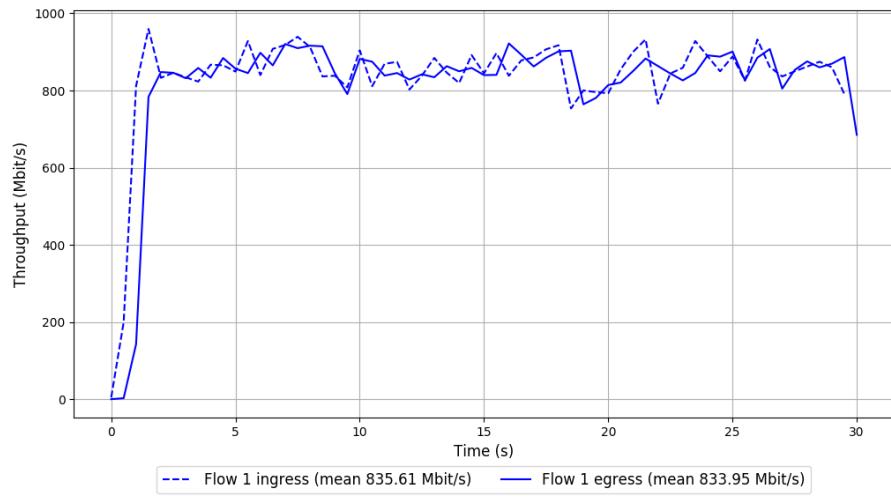


```
Run 1: Statistics of FillP

Start at: 2019-06-28 14:59:30
End at: 2019-06-28 15:00:00
Local clock offset: -0.193 ms
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2019-06-28 18:02:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 833.95 Mbit/s
95th percentile per-packet one-way delay: 105.548 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 833.95 Mbit/s
95th percentile per-packet one-way delay: 105.548 ms
Loss rate: 0.60%
```

Run 1: Report of FillP — Data Link

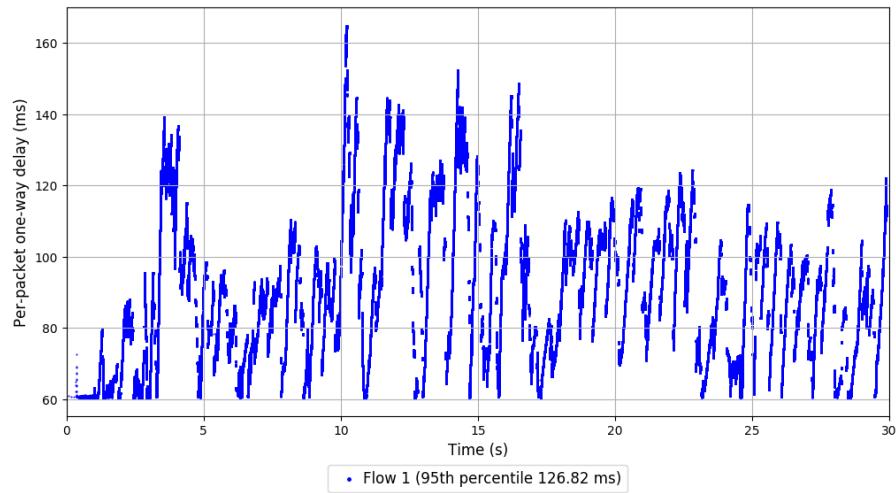
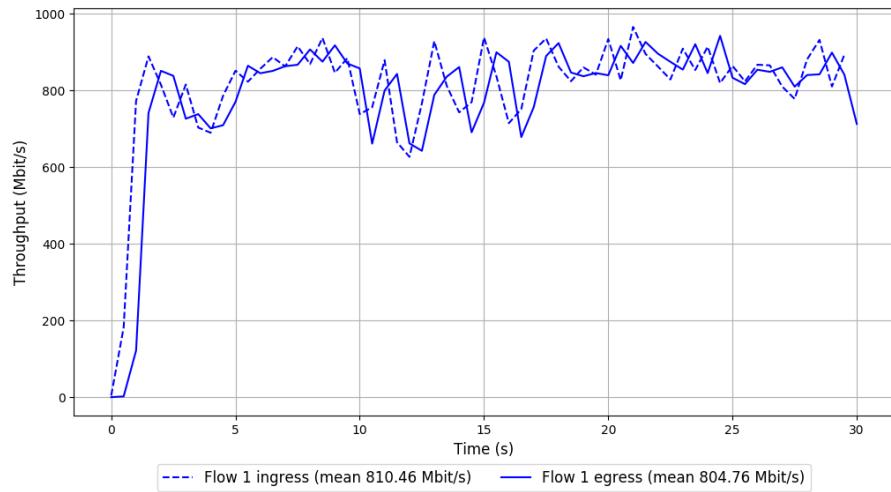


```
Run 2: Statistics of FillP
```

```
Start at: 2019-06-28 15:31:02
End at: 2019-06-28 15:31:32
Local clock offset: 0.39 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2019-06-28 18:05:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 804.76 Mbit/s
95th percentile per-packet one-way delay: 126.817 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 804.76 Mbit/s
95th percentile per-packet one-way delay: 126.817 ms
Loss rate: 1.11%
```

Run 2: Report of FillP — Data Link

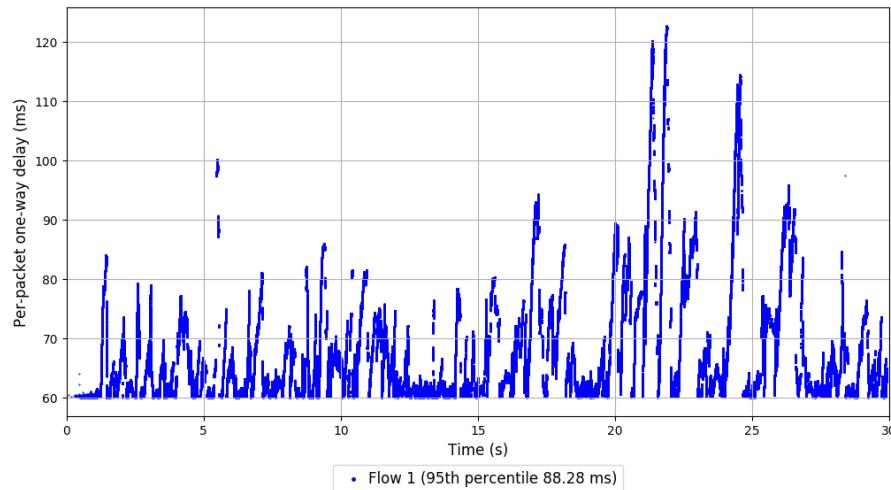
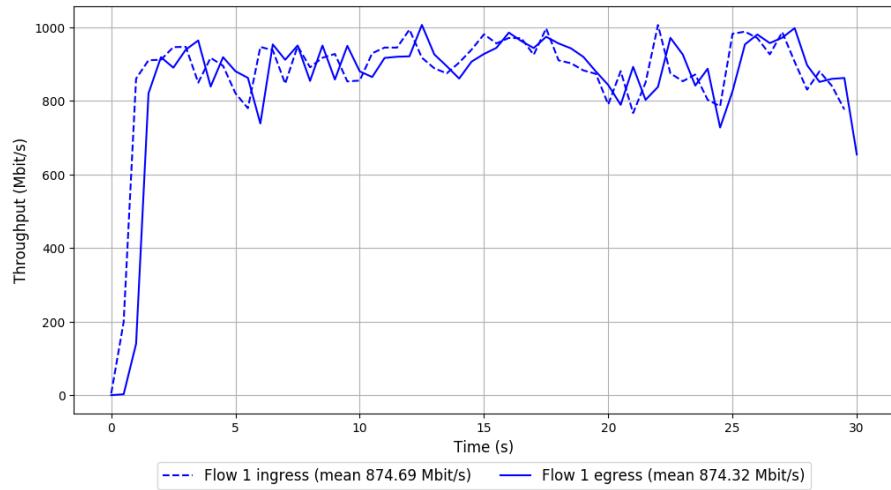


```
Run 3: Statistics of FillP
```

```
Start at: 2019-06-28 16:02:18
End at: 2019-06-28 16:02:48
Local clock offset: -0.436 ms
Remote clock offset: 0.067 ms

# Below is generated by plot.py at 2019-06-28 18:10:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 874.32 Mbit/s
95th percentile per-packet one-way delay: 88.282 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 874.32 Mbit/s
95th percentile per-packet one-way delay: 88.282 ms
Loss rate: 0.45%
```

Run 3: Report of FillP — Data Link

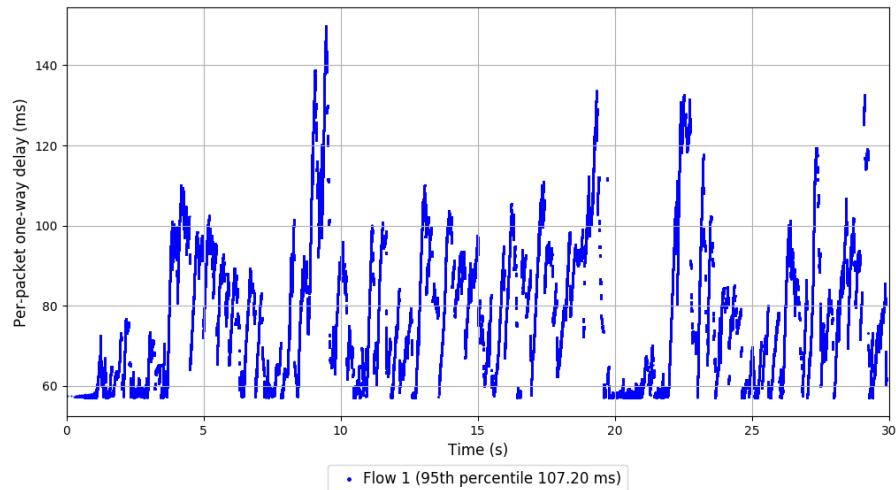
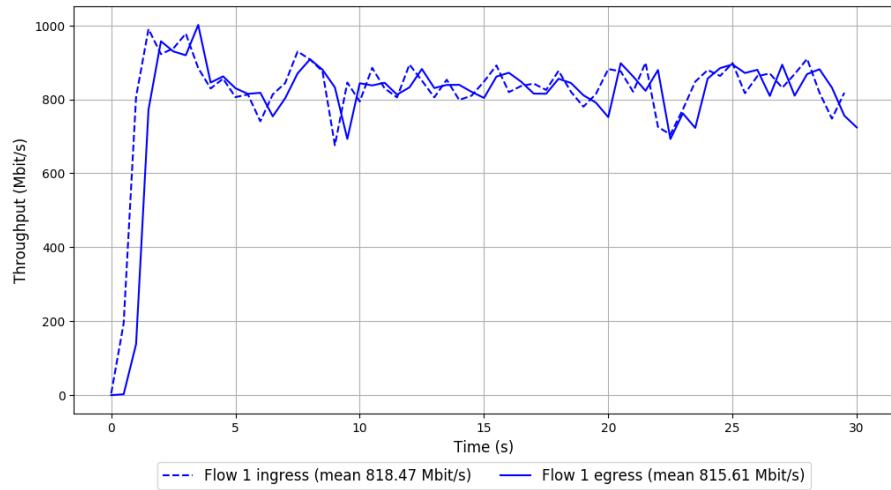


Run 4: Statistics of FillP

```
Start at: 2019-06-28 16:33:40
End at: 2019-06-28 16:34:10
Local clock offset: -0.154 ms
Remote clock offset: -0.014 ms

# Below is generated by plot.py at 2019-06-28 18:10:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 815.61 Mbit/s
95th percentile per-packet one-way delay: 107.204 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 815.61 Mbit/s
95th percentile per-packet one-way delay: 107.204 ms
Loss rate: 0.74%
```

Run 4: Report of FillP — Data Link

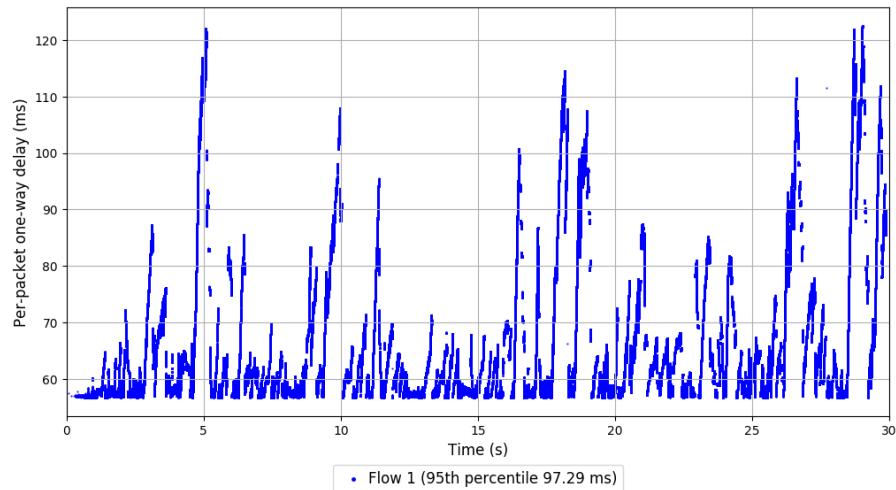
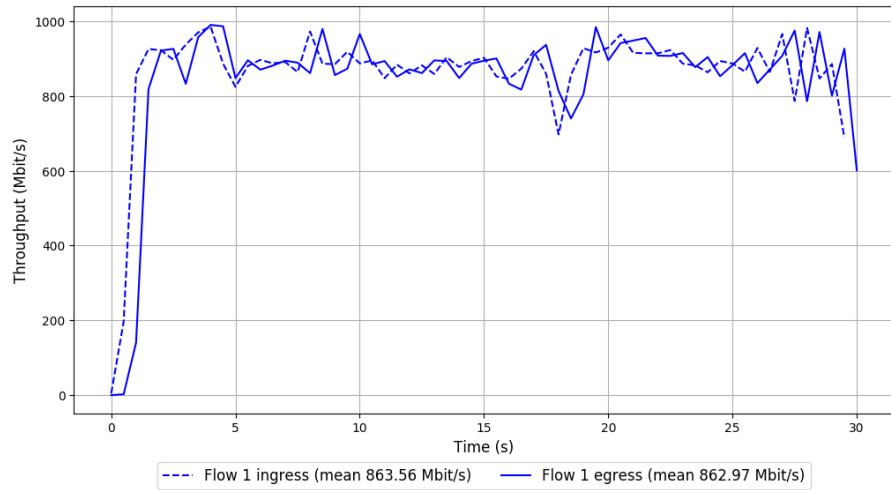


Run 5: Statistics of FillP

```
Start at: 2019-06-28 17:05:08
End at: 2019-06-28 17:05:38
Local clock offset: -0.318 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2019-06-28 18:13:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 862.97 Mbit/s
95th percentile per-packet one-way delay: 97.287 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 862.97 Mbit/s
95th percentile per-packet one-way delay: 97.287 ms
Loss rate: 0.45%
```

Run 5: Report of FillP — Data Link

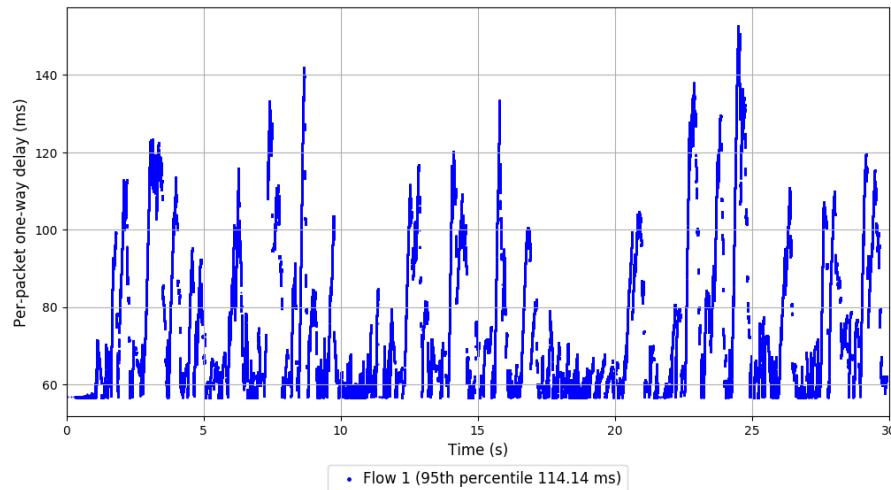
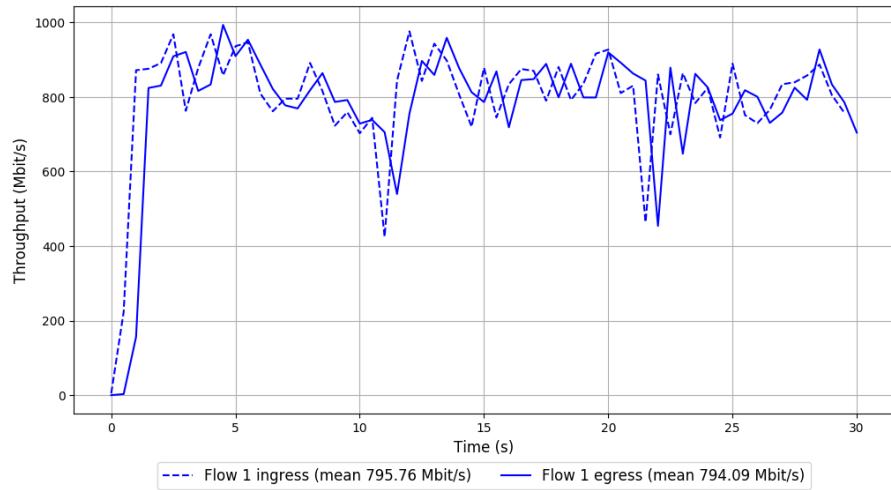


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-06-28 15:17:50
End at: 2019-06-28 15:18:20
Local clock offset: 0.055 ms
Remote clock offset: 0.413 ms

# Below is generated by plot.py at 2019-06-28 18:13:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 794.09 Mbit/s
95th percentile per-packet one-way delay: 114.142 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 794.09 Mbit/s
95th percentile per-packet one-way delay: 114.142 ms
Loss rate: 0.61%
```

Run 1: Report of FillP-Sheep — Data Link

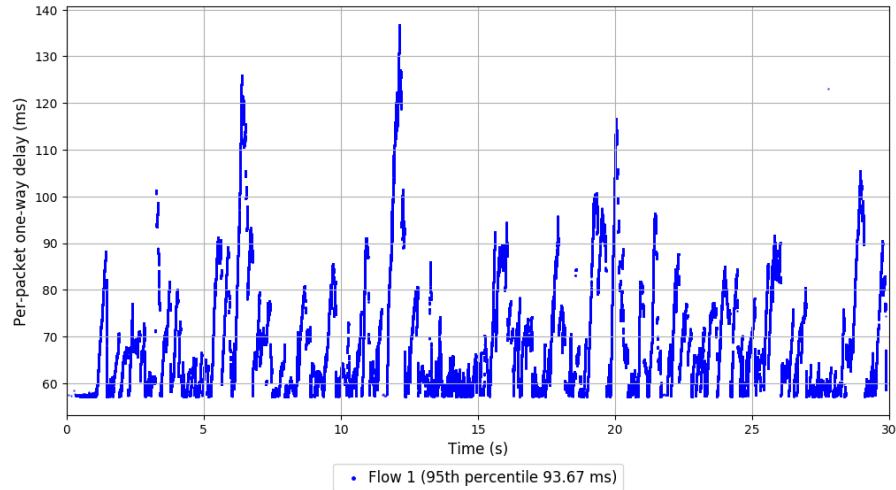
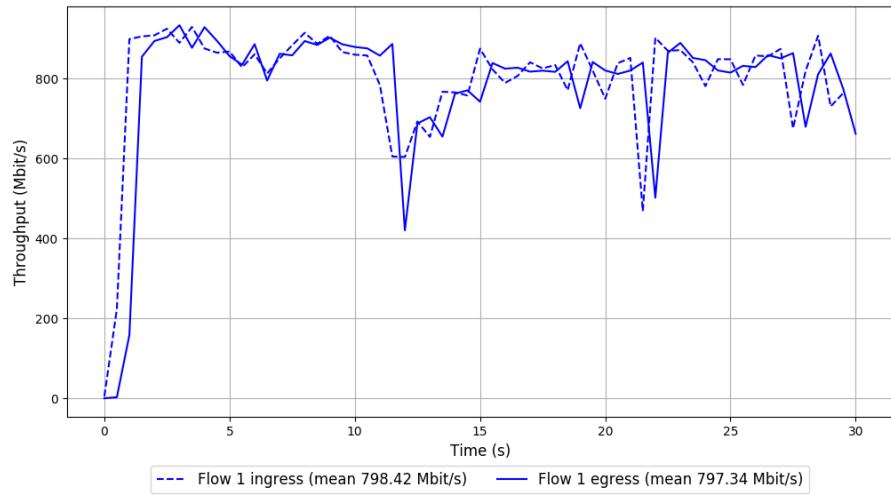


```
Run 2: Statistics of FillP-Sheep
```

```
Start at: 2019-06-28 15:49:11
End at: 2019-06-28 15:49:41
Local clock offset: -0.248 ms
Remote clock offset: -0.263 ms

# Below is generated by plot.py at 2019-06-28 18:13:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 797.34 Mbit/s
95th percentile per-packet one-way delay: 93.666 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 797.34 Mbit/s
95th percentile per-packet one-way delay: 93.666 ms
Loss rate: 0.53%
```

Run 2: Report of FillP-Sheep — Data Link

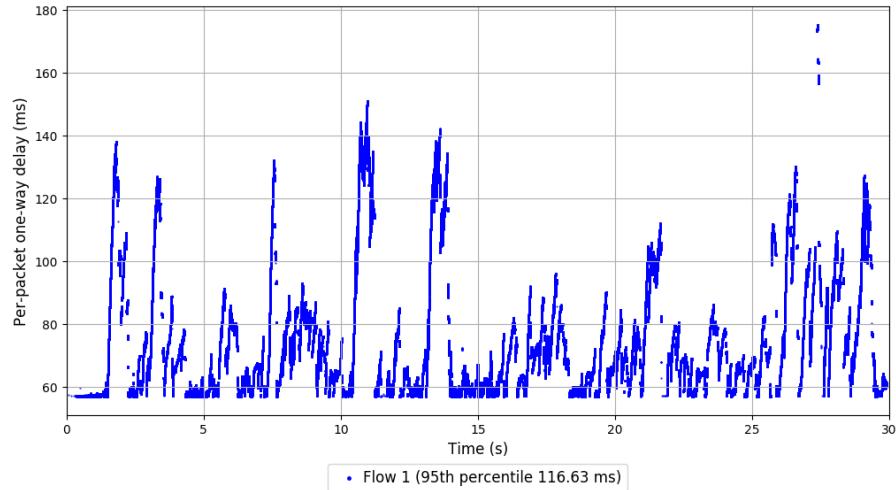
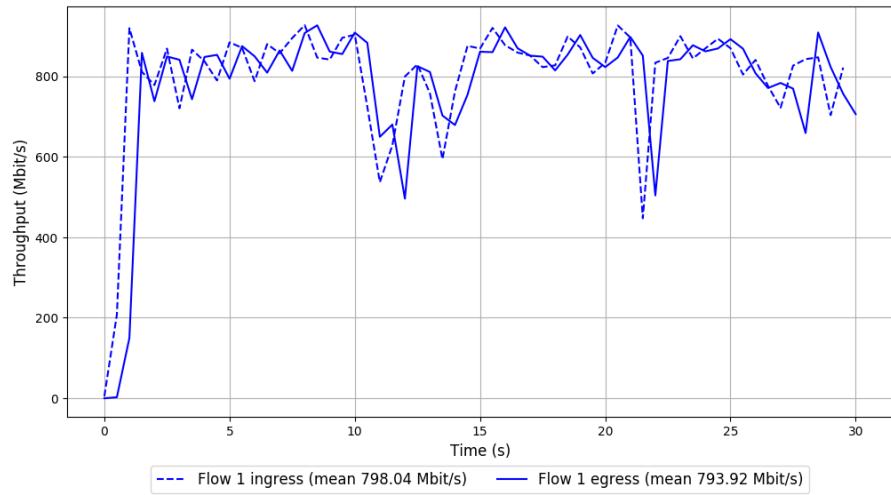


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-06-28 16:20:31
End at: 2019-06-28 16:21:01
Local clock offset: -0.117 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2019-06-28 18:13:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 793.92 Mbit/s
95th percentile per-packet one-way delay: 116.632 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 793.92 Mbit/s
95th percentile per-packet one-way delay: 116.632 ms
Loss rate: 0.91%
```

Run 3: Report of FillP-Sheep — Data Link

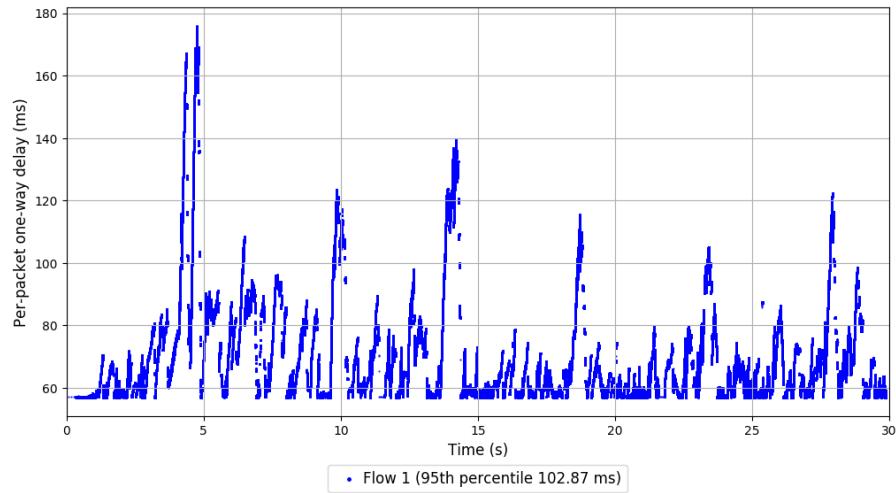
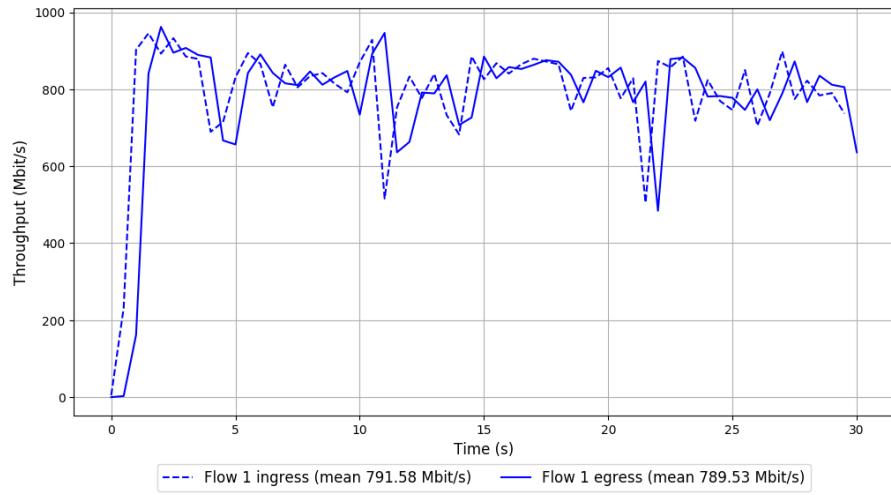


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-06-28 16:52:04
End at: 2019-06-28 16:52:34
Local clock offset: -0.363 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2019-06-28 18:22:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 789.53 Mbit/s
95th percentile per-packet one-way delay: 102.873 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 789.53 Mbit/s
95th percentile per-packet one-way delay: 102.873 ms
Loss rate: 0.62%
```

Run 4: Report of FillP-Sheep — Data Link

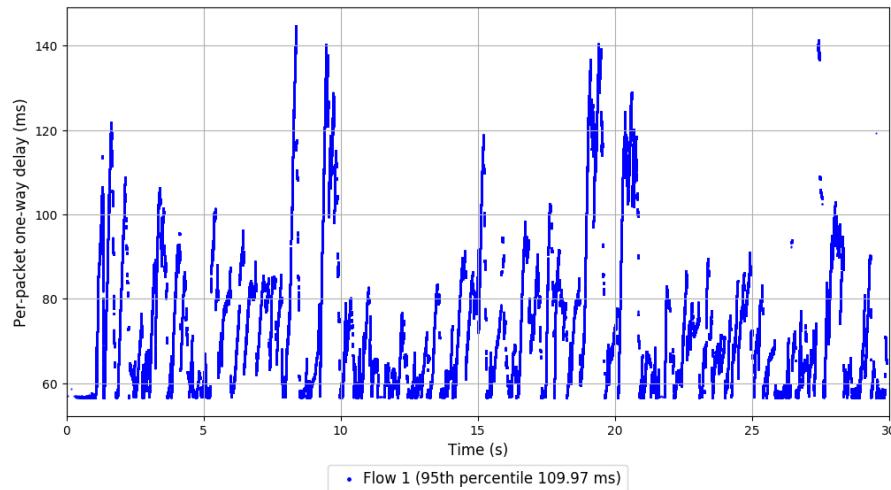
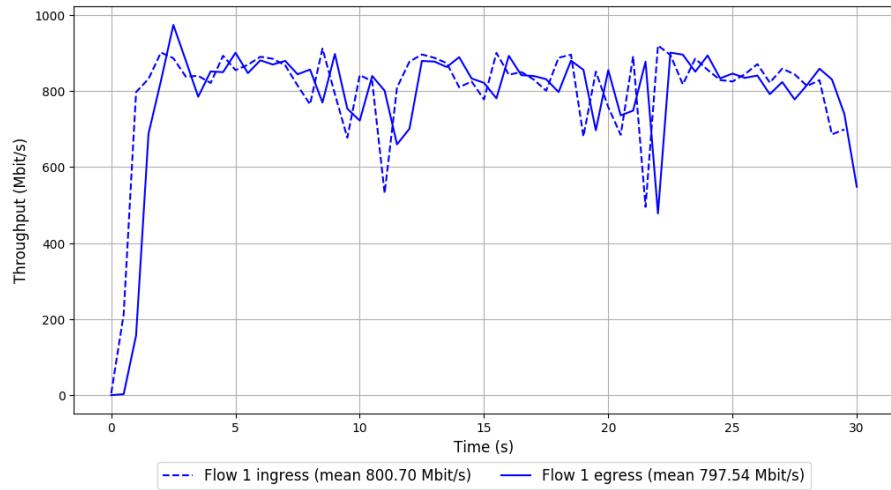


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-06-28 17:23:03
End at: 2019-06-28 17:23:33
Local clock offset: -0.441 ms
Remote clock offset: 0.102 ms

# Below is generated by plot.py at 2019-06-28 18:25:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 797.54 Mbit/s
95th percentile per-packet one-way delay: 109.973 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 797.54 Mbit/s
95th percentile per-packet one-way delay: 109.973 ms
Loss rate: 0.79%
```

Run 5: Report of FillP-Sheep — Data Link

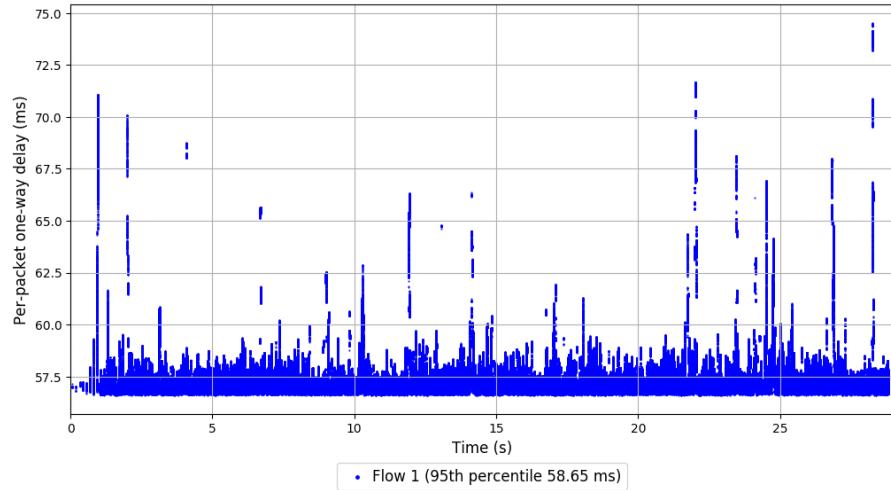
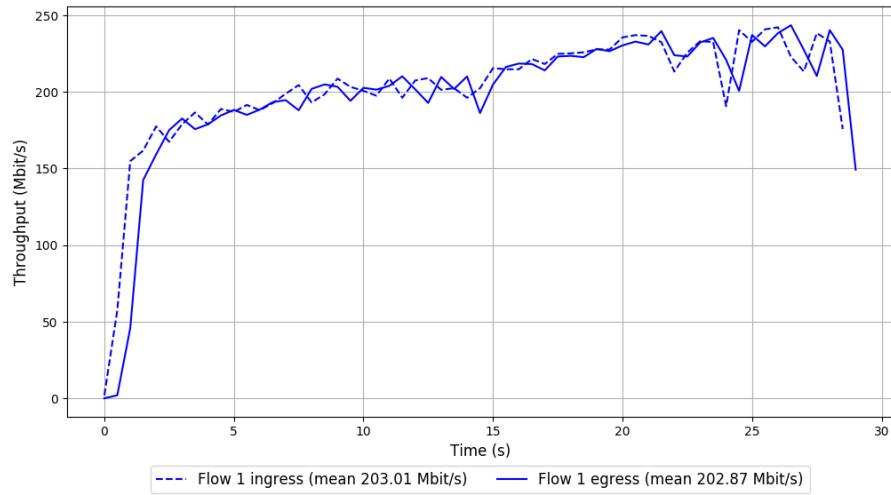


Run 1: Statistics of Indigo

```
Start at: 2019-06-28 14:56:31
End at: 2019-06-28 14:57:01
Local clock offset: -0.124 ms
Remote clock offset: -0.095 ms

# Below is generated by plot.py at 2019-06-28 18:25:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.87 Mbit/s
95th percentile per-packet one-way delay: 58.649 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 202.87 Mbit/s
95th percentile per-packet one-way delay: 58.649 ms
Loss rate: 0.48%
```

Run 1: Report of Indigo — Data Link

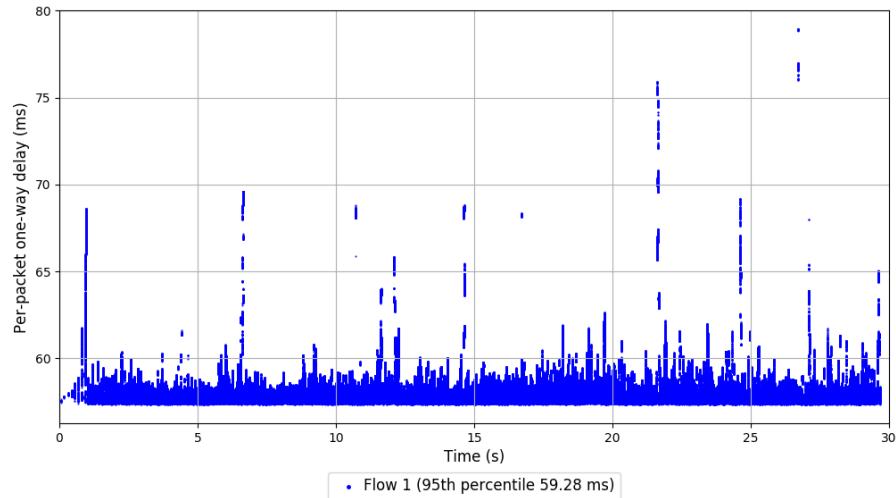
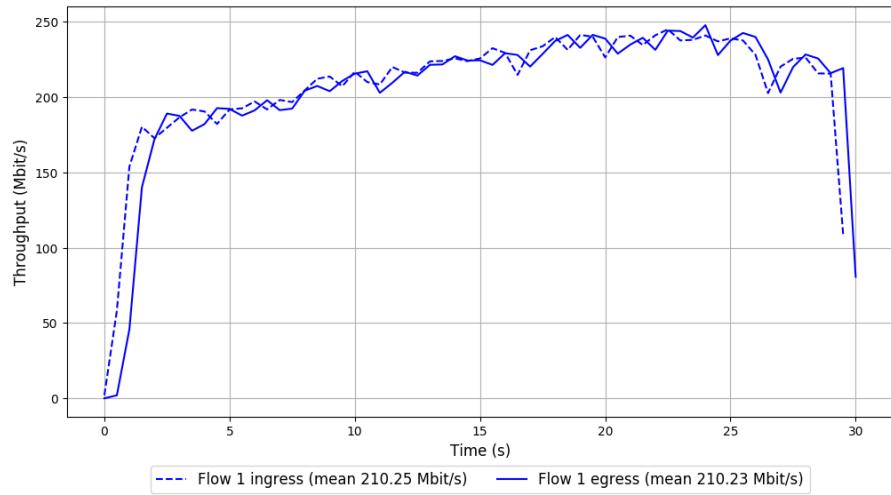


Run 2: Statistics of Indigo

```
Start at: 2019-06-28 15:28:00
End at: 2019-06-28 15:28:30
Local clock offset: -0.017 ms
Remote clock offset: -0.257 ms

# Below is generated by plot.py at 2019-06-28 18:25:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 210.23 Mbit/s
95th percentile per-packet one-way delay: 59.277 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 210.23 Mbit/s
95th percentile per-packet one-way delay: 59.277 ms
Loss rate: 0.41%
```

Run 2: Report of Indigo — Data Link

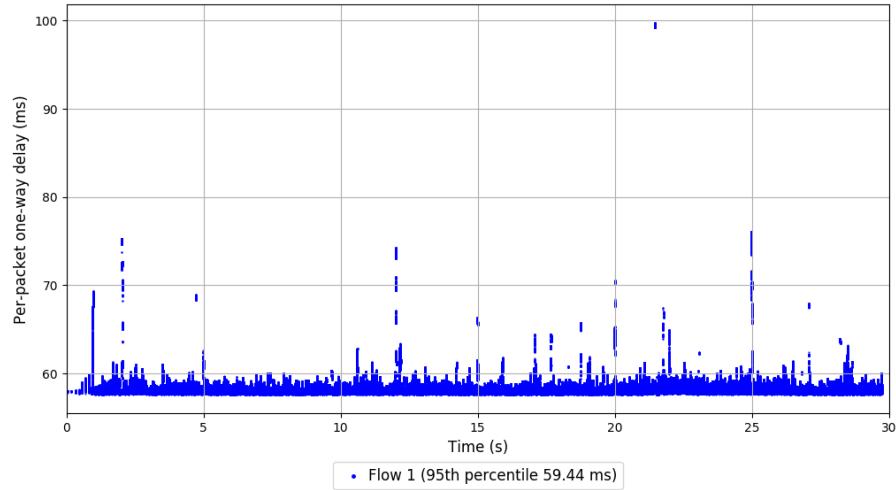
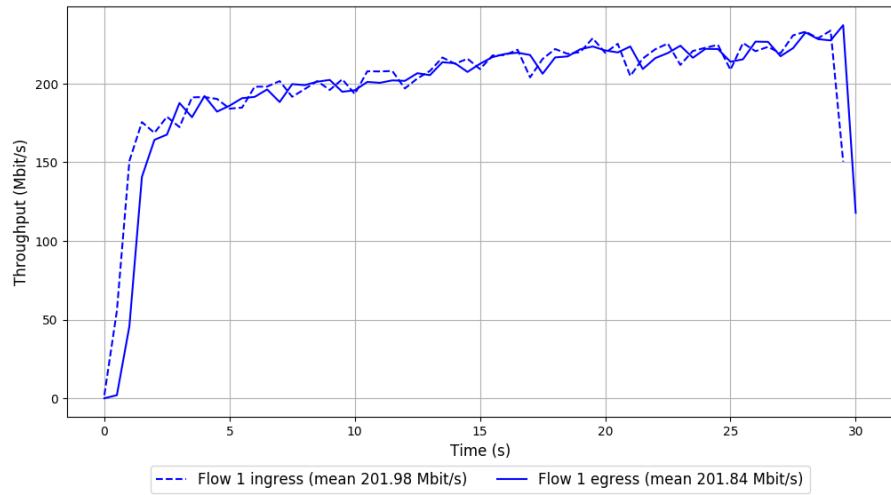


Run 3: Statistics of Indigo

```
Start at: 2019-06-28 15:59:19
End at: 2019-06-28 15:59:49
Local clock offset: 0.337 ms
Remote clock offset: -0.117 ms

# Below is generated by plot.py at 2019-06-28 18:25:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 201.84 Mbit/s
95th percentile per-packet one-way delay: 59.443 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 201.84 Mbit/s
95th percentile per-packet one-way delay: 59.443 ms
Loss rate: 0.47%
```

Run 3: Report of Indigo — Data Link

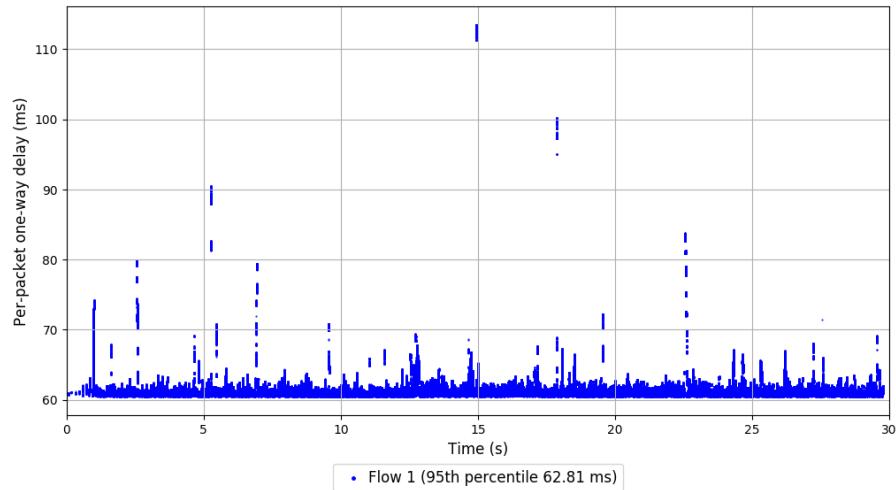
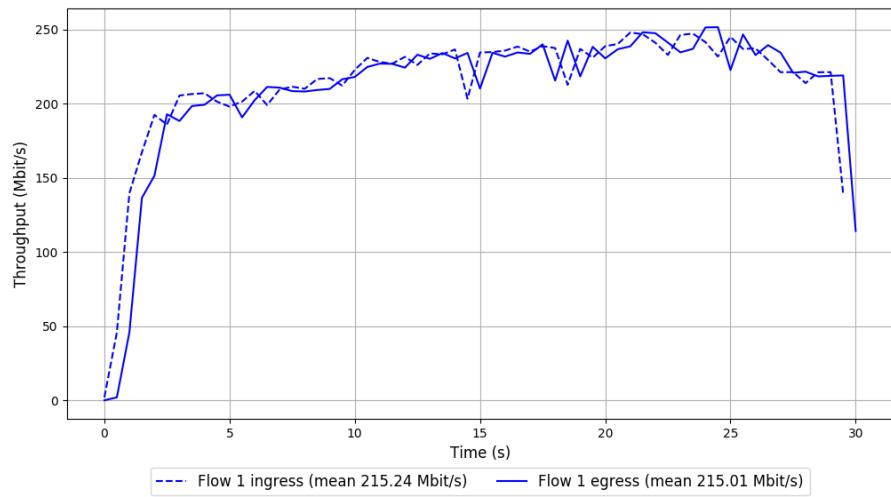


Run 4: Statistics of Indigo

```
Start at: 2019-06-28 16:30:42
End at: 2019-06-28 16:31:12
Local clock offset: 0.081 ms
Remote clock offset: 0.1 ms

# Below is generated by plot.py at 2019-06-28 18:25:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.01 Mbit/s
95th percentile per-packet one-way delay: 62.806 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 215.01 Mbit/s
95th percentile per-packet one-way delay: 62.806 ms
Loss rate: 0.52%
```

Run 4: Report of Indigo — Data Link

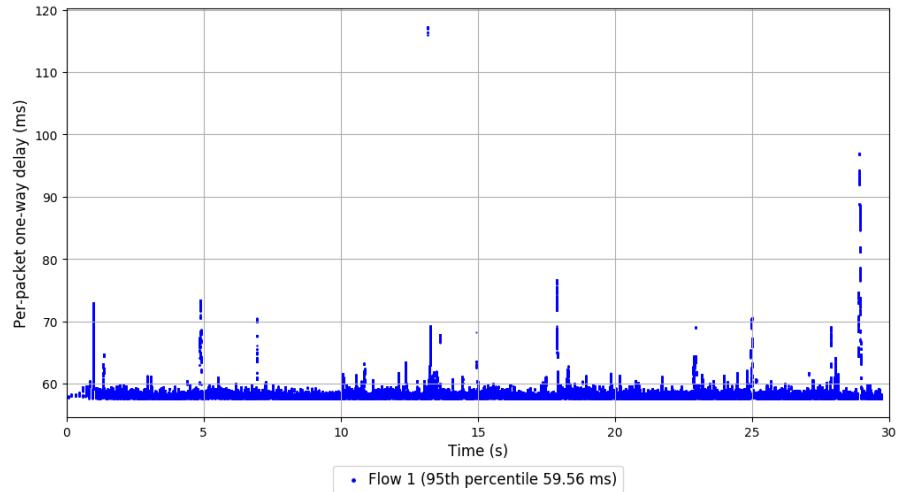
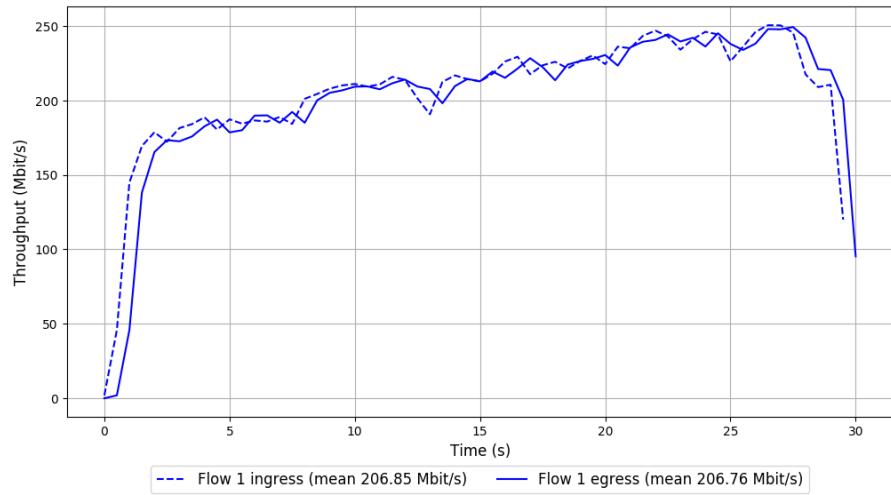


Run 5: Statistics of Indigo

```
Start at: 2019-06-28 17:02:13
End at: 2019-06-28 17:02:43
Local clock offset: 0.373 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2019-06-28 18:25:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 206.76 Mbit/s
95th percentile per-packet one-way delay: 59.561 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 206.76 Mbit/s
95th percentile per-packet one-way delay: 59.561 ms
Loss rate: 0.43%
```

Run 5: Report of Indigo — Data Link

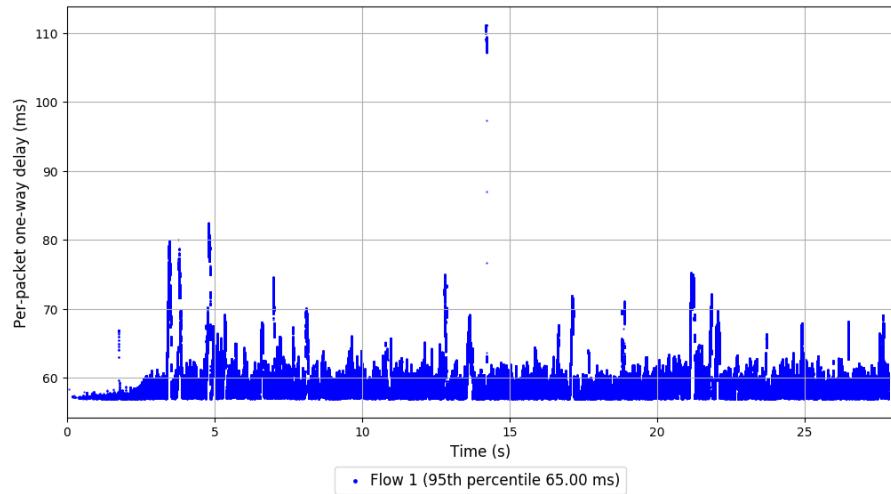
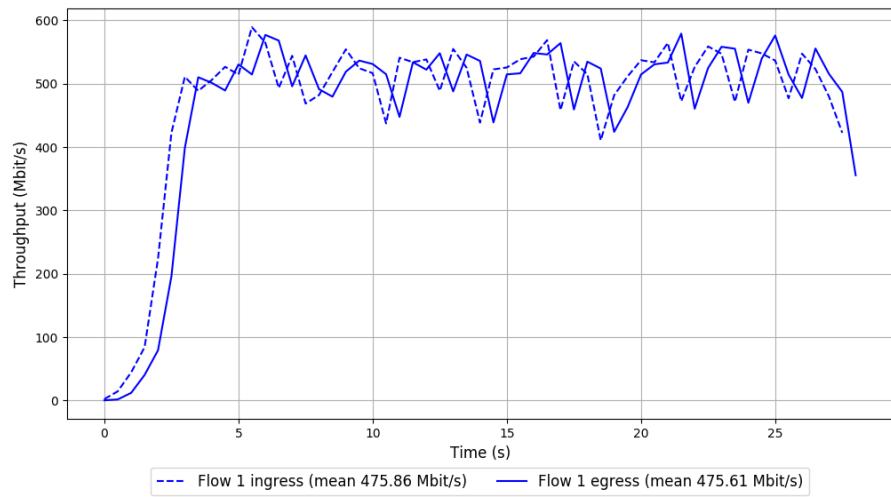


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 14:49:41
End at: 2019-06-28 14:50:11
Local clock offset: 0.294 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2019-06-28 18:25:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 475.61 Mbit/s
95th percentile per-packet one-way delay: 64.996 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 475.61 Mbit/s
95th percentile per-packet one-way delay: 64.996 ms
Loss rate: 0.48%
```

Run 1: Report of Indigo-MusesC3 — Data Link

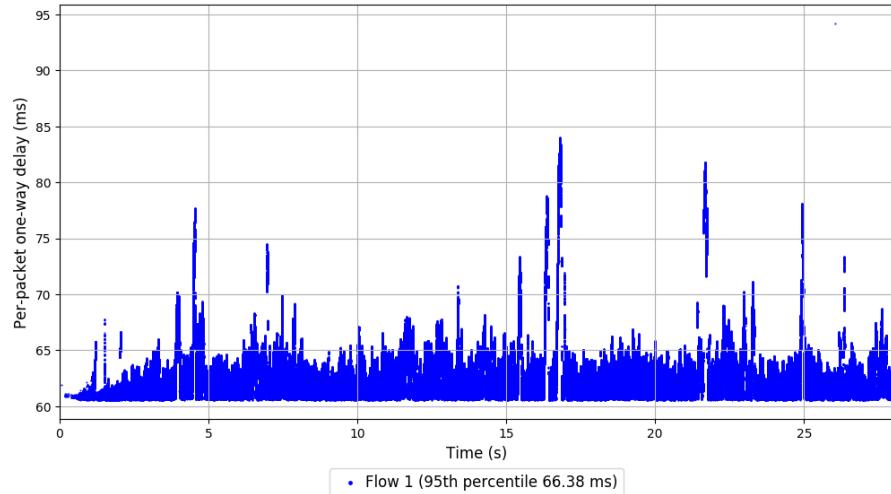
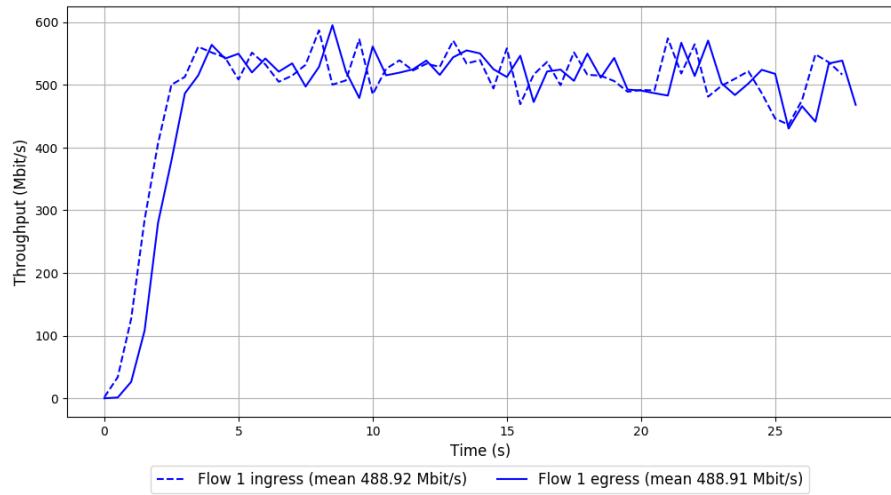


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 15:21:03
End at: 2019-06-28 15:21:33
Local clock offset: 0.268 ms
Remote clock offset: -0.225 ms

# Below is generated by plot.py at 2019-06-28 18:25:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 488.91 Mbit/s
95th percentile per-packet one-way delay: 66.378 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 488.91 Mbit/s
95th percentile per-packet one-way delay: 66.378 ms
Loss rate: 0.44%
```

Run 2: Report of Indigo-MusesC3 — Data Link

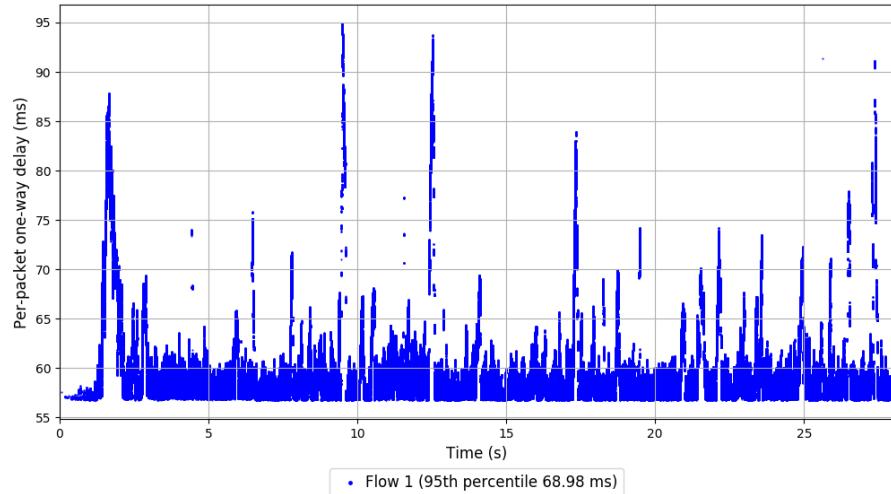
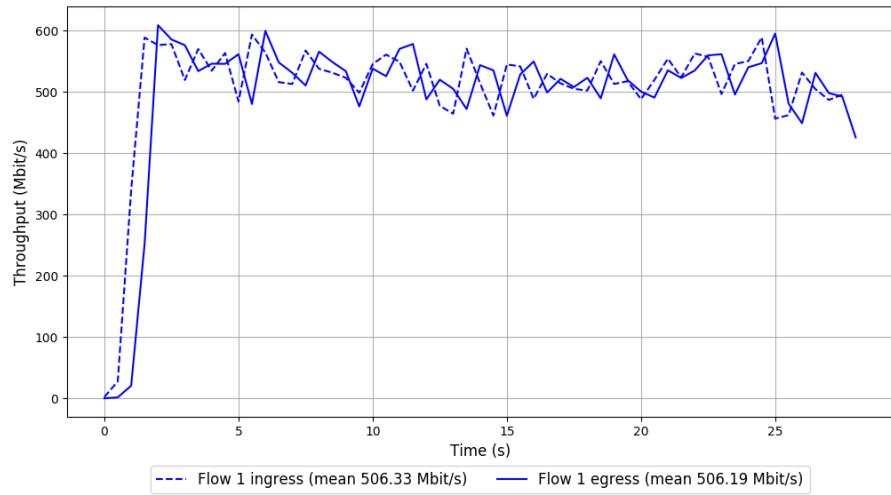


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 15:52:23
End at: 2019-06-28 15:52:53
Local clock offset: -0.11 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2019-06-28 18:27:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 506.19 Mbit/s
95th percentile per-packet one-way delay: 68.979 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 506.19 Mbit/s
95th percentile per-packet one-way delay: 68.979 ms
Loss rate: 0.45%
```

Run 3: Report of Indigo-MusesC3 — Data Link

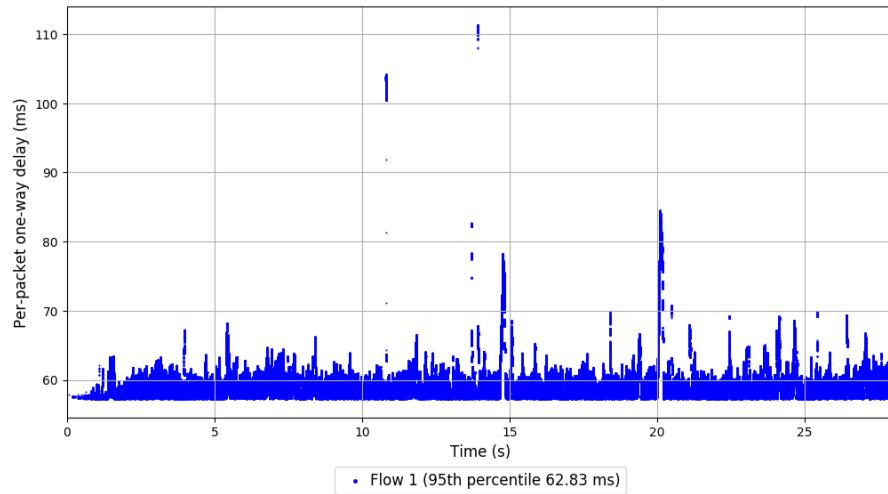
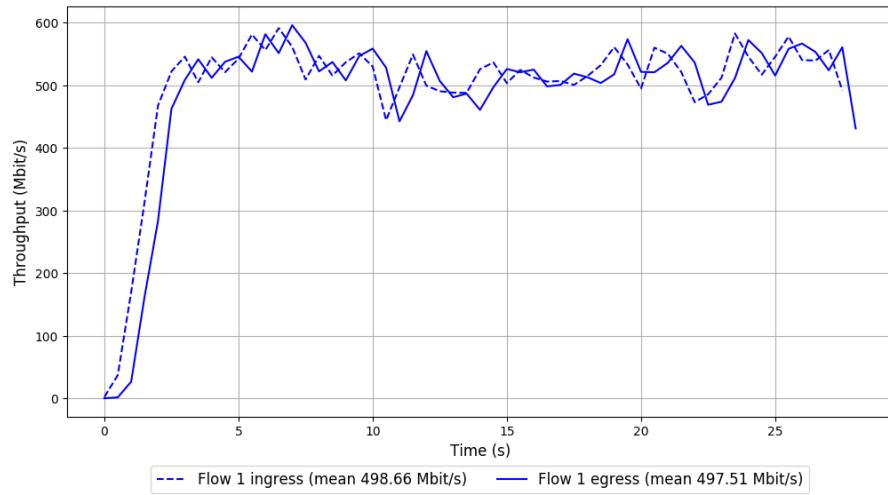


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 16:23:44
End at: 2019-06-28 16:24:14
Local clock offset: 0.089 ms
Remote clock offset: -0.0 ms

# Below is generated by plot.py at 2019-06-28 18:28:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 497.51 Mbit/s
95th percentile per-packet one-way delay: 62.829 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 497.51 Mbit/s
95th percentile per-packet one-way delay: 62.829 ms
Loss rate: 0.66%
```

Run 4: Report of Indigo-MusesC3 — Data Link

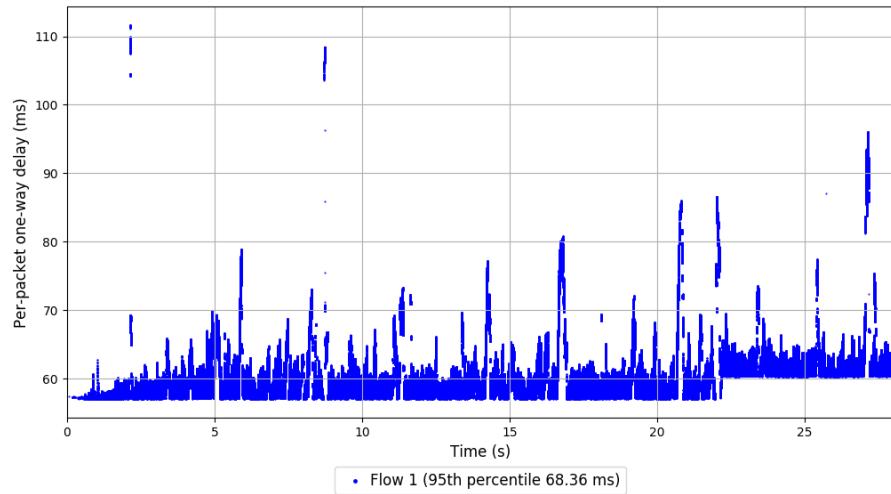
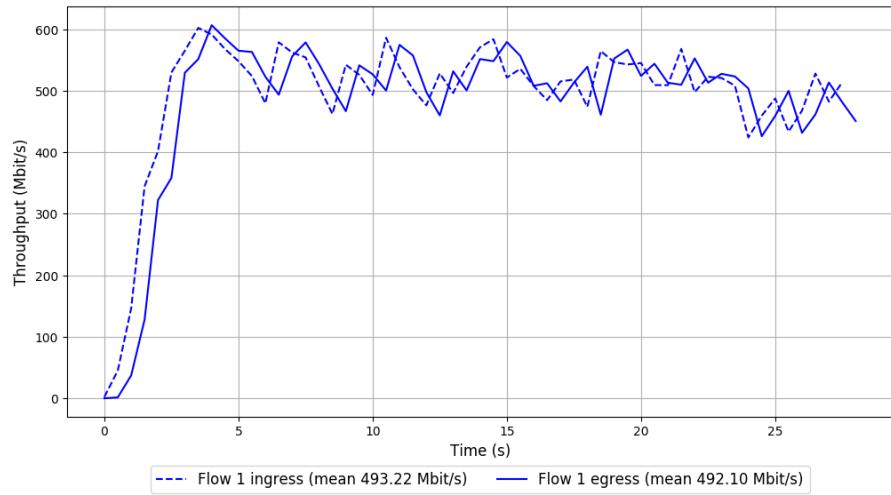


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-06-28 16:55:16
End at: 2019-06-28 16:55:46
Local clock offset: 0.002 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2019-06-28 18:29:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 492.10 Mbit/s
95th percentile per-packet one-way delay: 68.365 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 492.10 Mbit/s
95th percentile per-packet one-way delay: 68.365 ms
Loss rate: 0.63%
```

Run 5: Report of Indigo-MusesC3 — Data Link

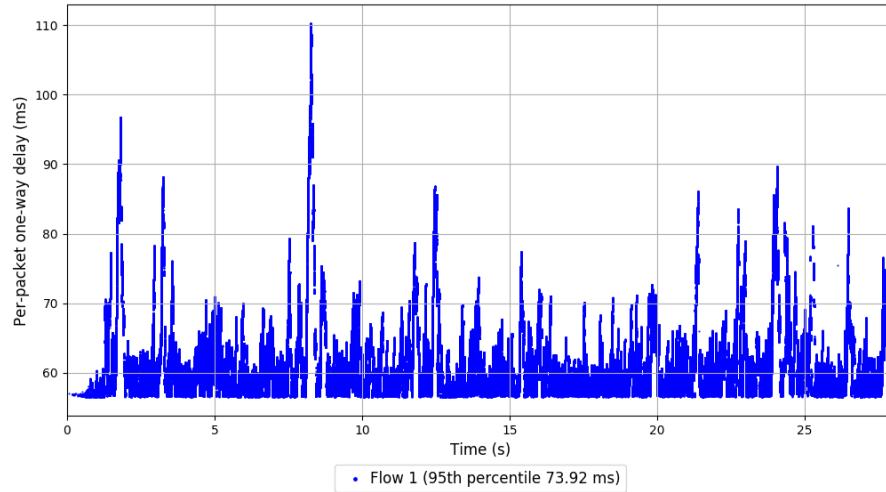
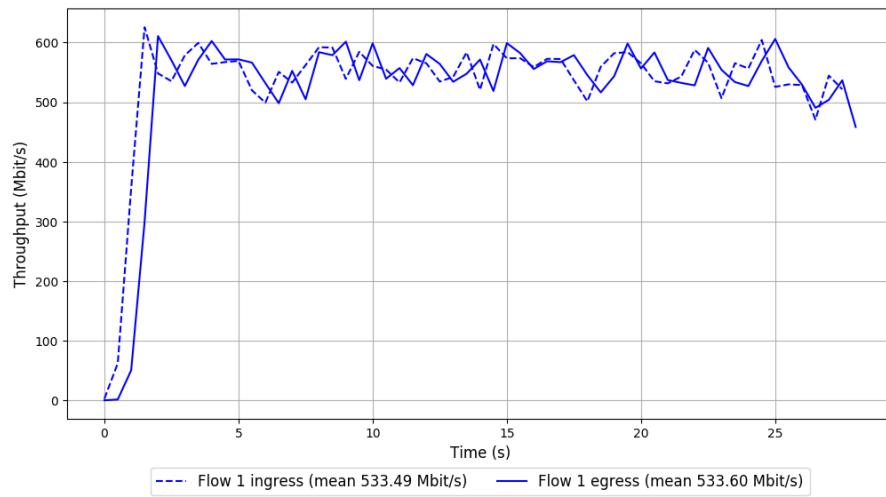


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 15:12:08
End at: 2019-06-28 15:12:38
Local clock offset: -0.188 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2019-06-28 18:30:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 533.60 Mbit/s
95th percentile per-packet one-way delay: 73.921 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 533.60 Mbit/s
95th percentile per-packet one-way delay: 73.921 ms
Loss rate: 0.40%
```

Run 1: Report of Indigo-MusesC5 — Data Link

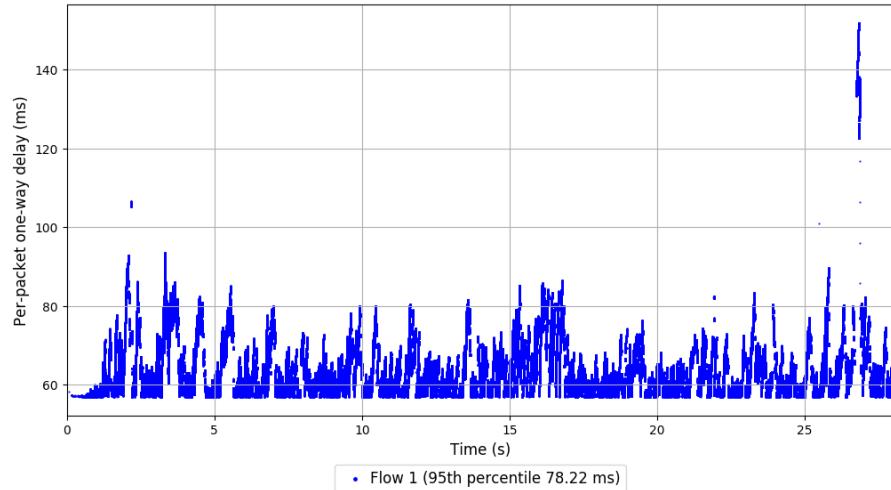
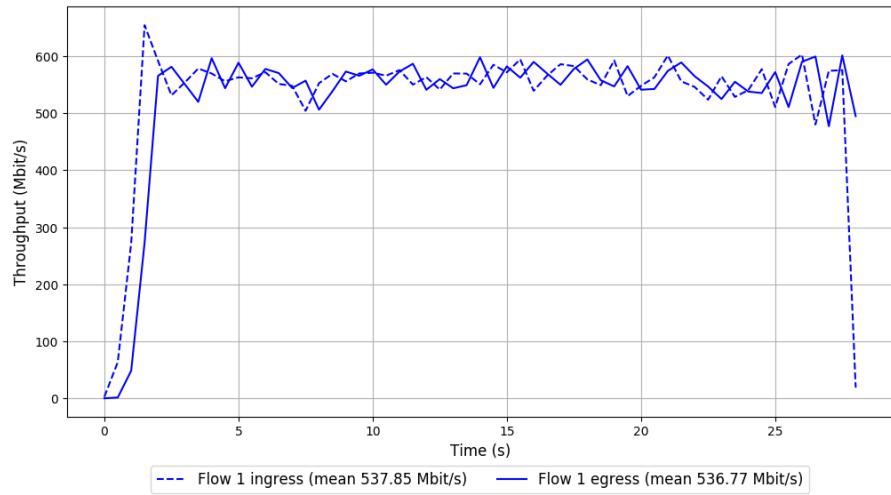


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 15:43:26
End at: 2019-06-28 15:43:56
Local clock offset: -0.091 ms
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2019-06-28 18:32:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 536.77 Mbit/s
95th percentile per-packet one-way delay: 78.217 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 536.77 Mbit/s
95th percentile per-packet one-way delay: 78.217 ms
Loss rate: 0.63%
```

Run 2: Report of Indigo-MusesC5 — Data Link

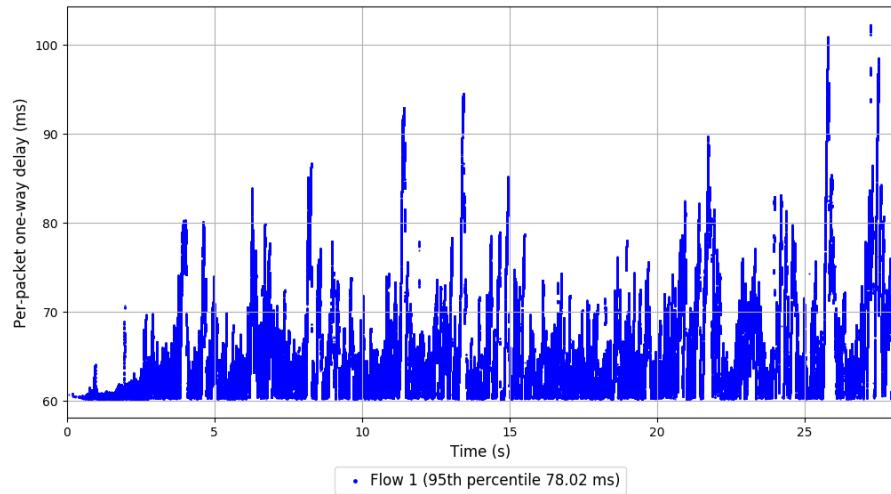
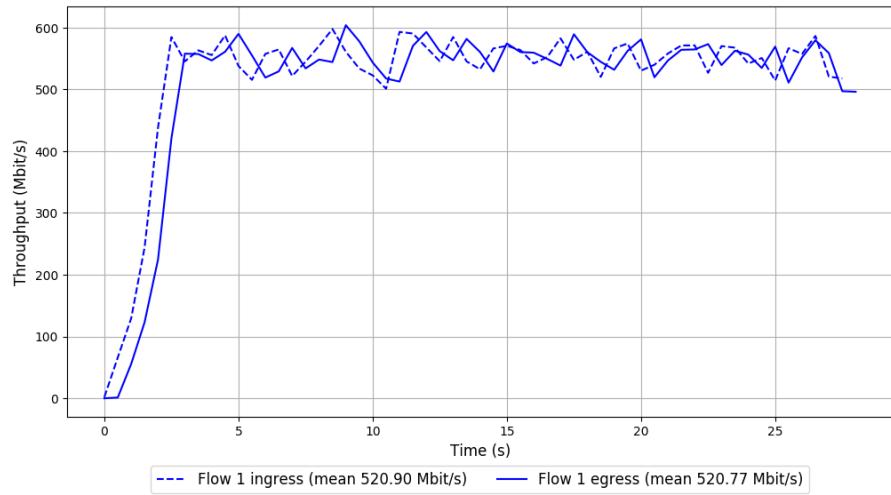


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 16:14:31
End at: 2019-06-28 16:15:01
Local clock offset: -0.482 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2019-06-28 18:33:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 520.77 Mbit/s
95th percentile per-packet one-way delay: 78.018 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 520.77 Mbit/s
95th percentile per-packet one-way delay: 78.018 ms
Loss rate: 0.45%
```

Run 3: Report of Indigo-MusesC5 — Data Link

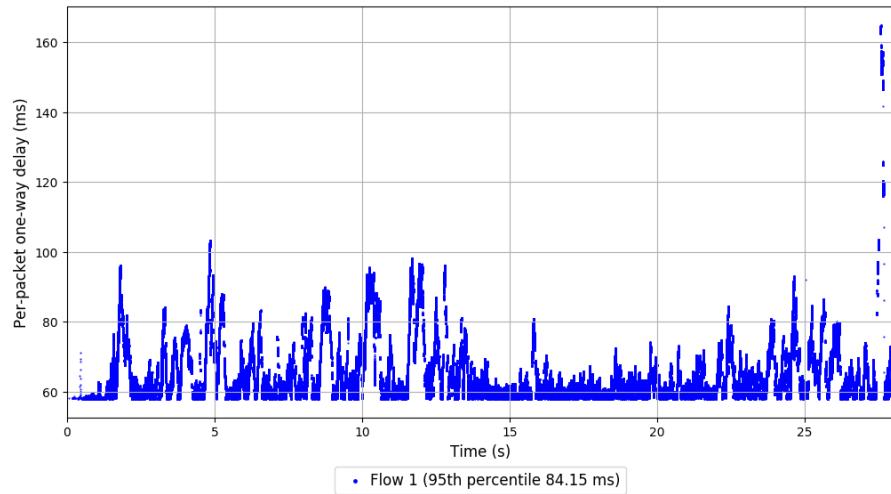
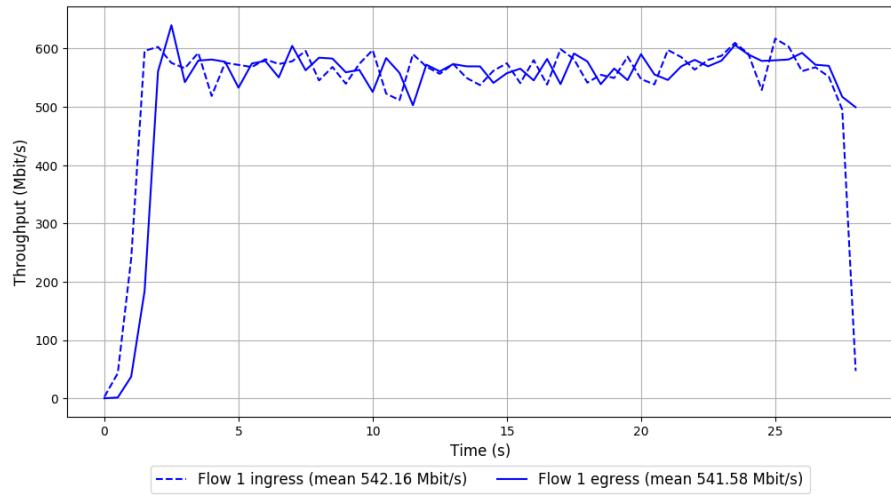


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 16:46:12
End at: 2019-06-28 16:46:42
Local clock offset: 0.303 ms
Remote clock offset: -0.489 ms

# Below is generated by plot.py at 2019-06-28 18:36:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 541.58 Mbit/s
95th percentile per-packet one-way delay: 84.151 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 541.58 Mbit/s
95th percentile per-packet one-way delay: 84.151 ms
Loss rate: 0.52%
```

Run 4: Report of Indigo-MusesC5 — Data Link

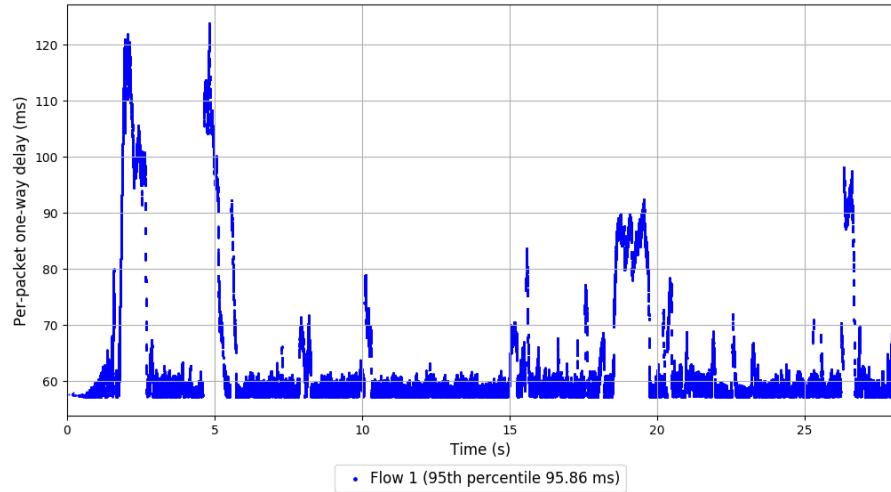
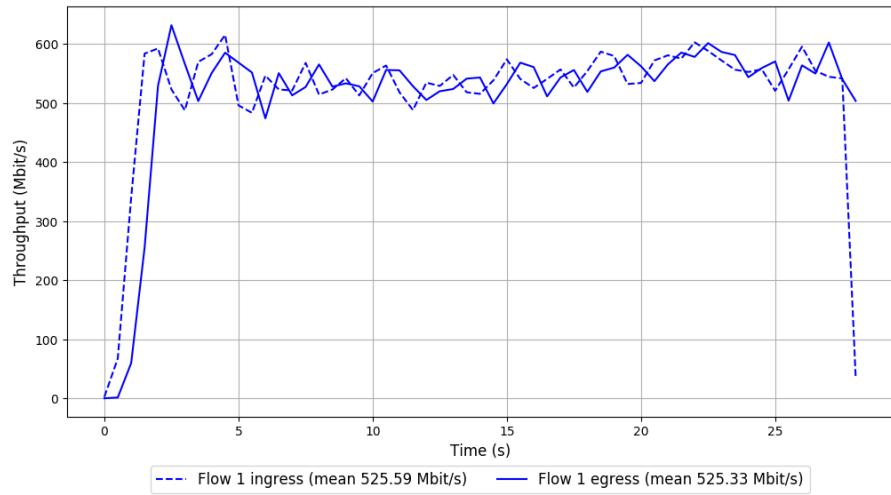


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-06-28 17:17:17
End at: 2019-06-28 17:17:47
Local clock offset: -0.047 ms
Remote clock offset: -0.113 ms

# Below is generated by plot.py at 2019-06-28 18:36:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 525.33 Mbit/s
95th percentile per-packet one-way delay: 95.855 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 525.33 Mbit/s
95th percentile per-packet one-way delay: 95.855 ms
Loss rate: 0.47%
```

Run 5: Report of Indigo-MusesC5 — Data Link

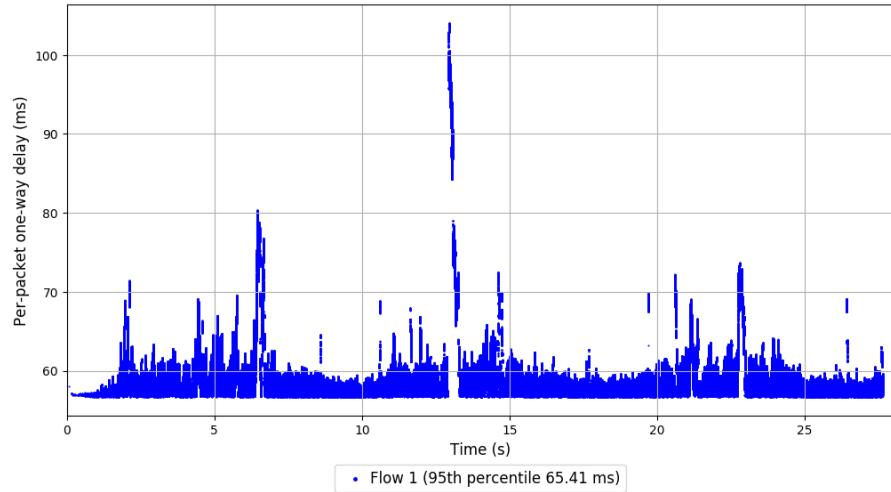
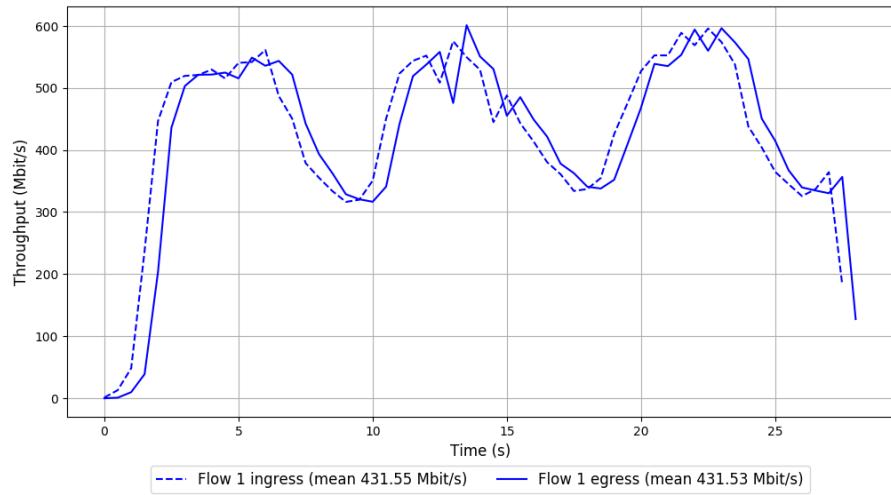


```
Run 1: Statistics of Indigo-MusesD
```

```
Start at: 2019-06-28 15:01:12
End at: 2019-06-28 15:01:42
Local clock offset: -0.292 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2019-06-28 18:36:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 431.53 Mbit/s
95th percentile per-packet one-way delay: 65.411 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 431.53 Mbit/s
95th percentile per-packet one-way delay: 65.411 ms
Loss rate: 0.43%
```

Run 1: Report of Indigo-MusesD — Data Link

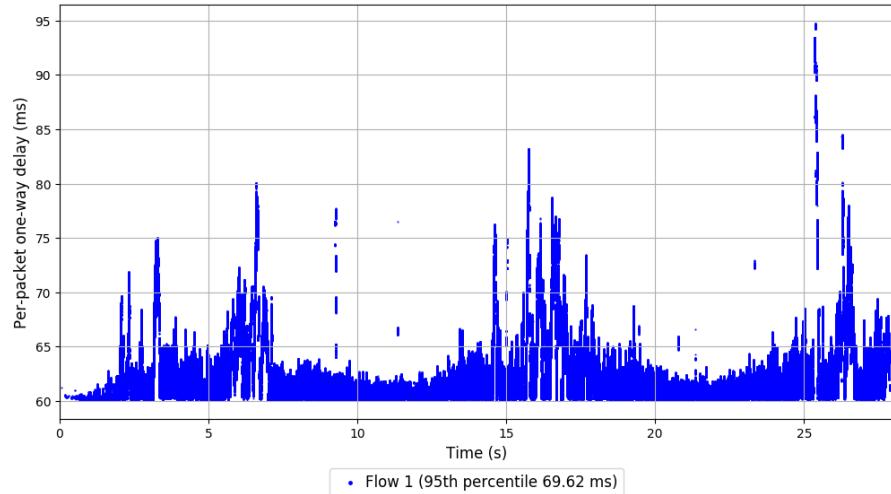
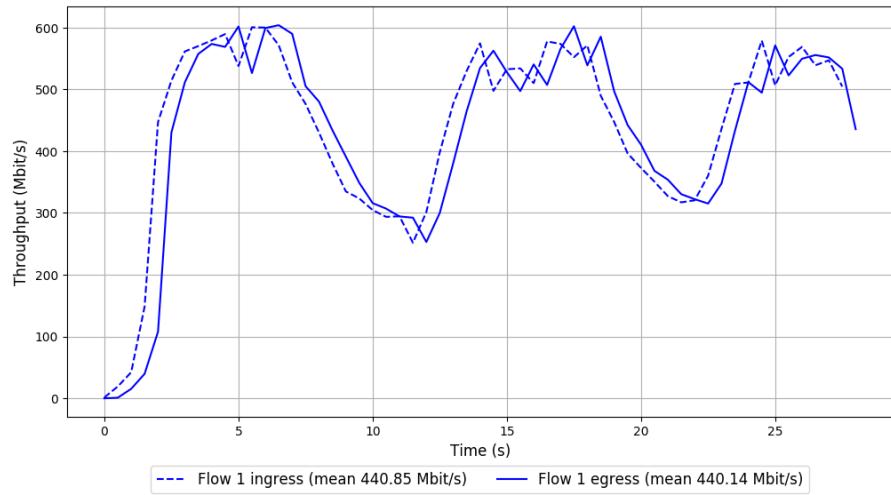


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 15:32:43
End at: 2019-06-28 15:33:13
Local clock offset: -0.017 ms
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2019-06-28 18:37:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 440.14 Mbit/s
95th percentile per-packet one-way delay: 69.617 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 440.14 Mbit/s
95th percentile per-packet one-way delay: 69.617 ms
Loss rate: 0.60%
```

Run 2: Report of Indigo-MusesD — Data Link

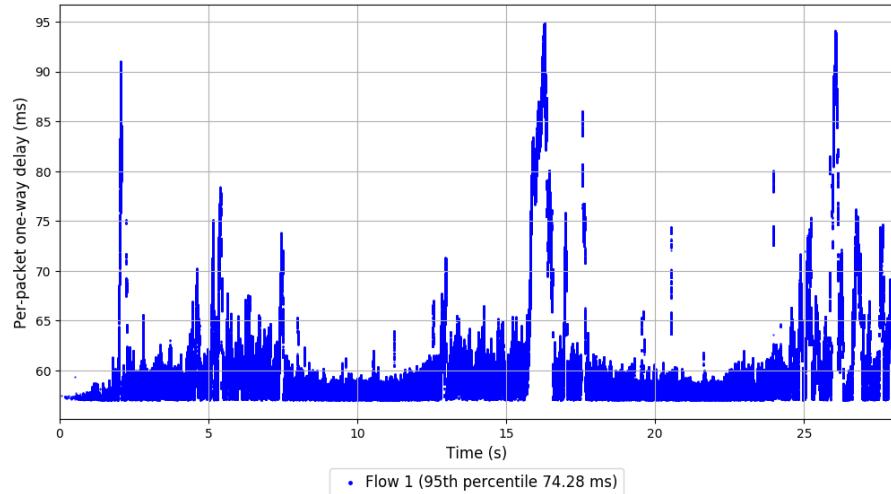
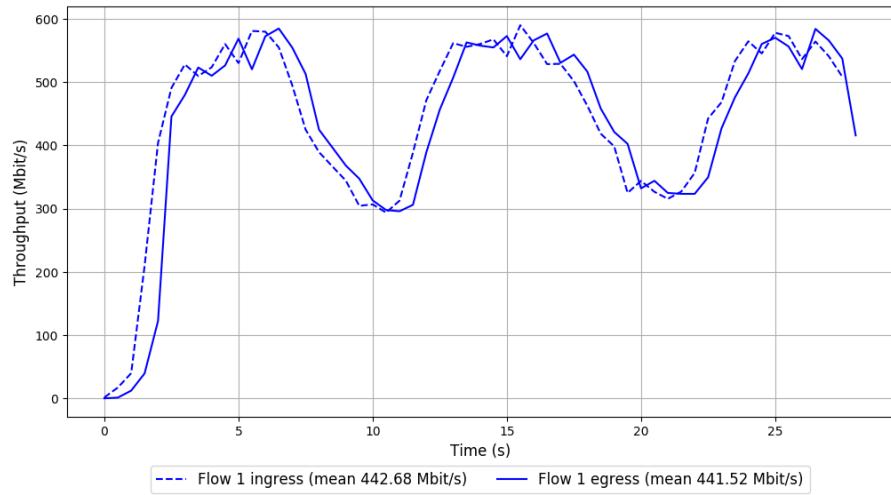


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 16:04:02
End at: 2019-06-28 16:04:32
Local clock offset: 0.127 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2019-06-28 18:37:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 441.52 Mbit/s
95th percentile per-packet one-way delay: 74.280 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 441.52 Mbit/s
95th percentile per-packet one-way delay: 74.280 ms
Loss rate: 0.69%
```

Run 3: Report of Indigo-MusesD — Data Link

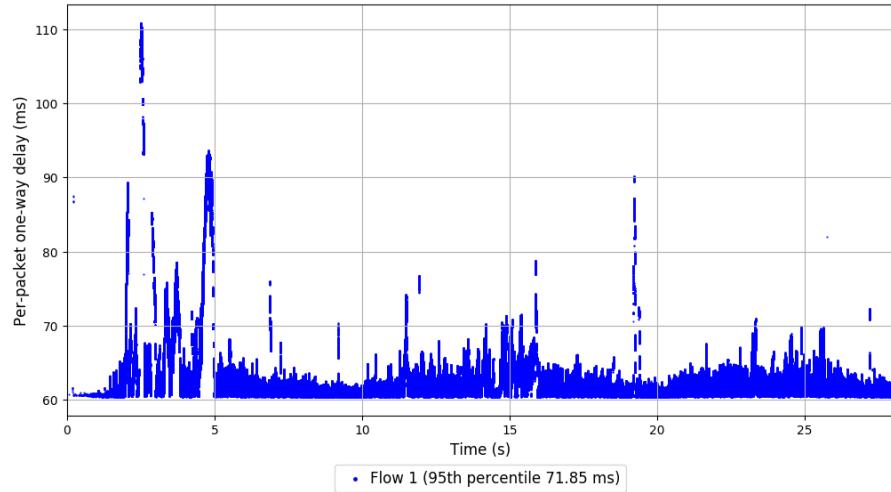
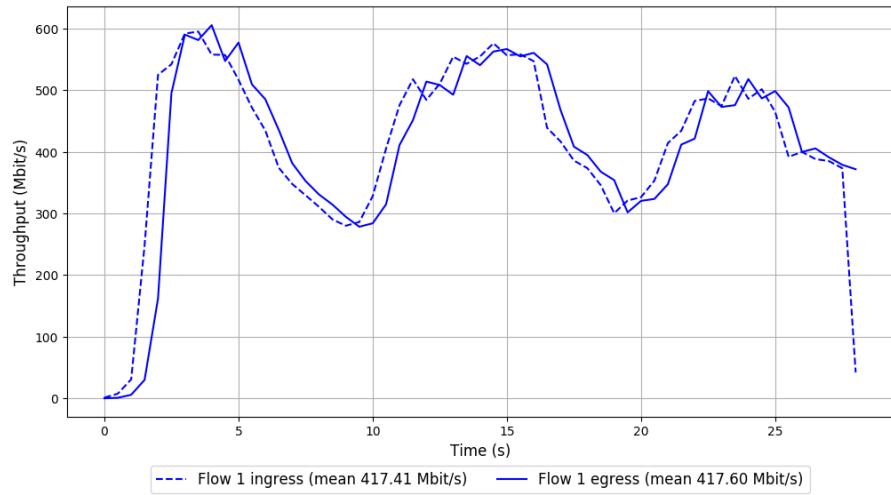


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 16:35:22
End at: 2019-06-28 16:35:52
Local clock offset: -0.099 ms
Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2019-06-28 18:38:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 417.60 Mbit/s
95th percentile per-packet one-way delay: 71.850 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 417.60 Mbit/s
95th percentile per-packet one-way delay: 71.850 ms
Loss rate: 0.40%
```

Run 4: Report of Indigo-MusesD — Data Link

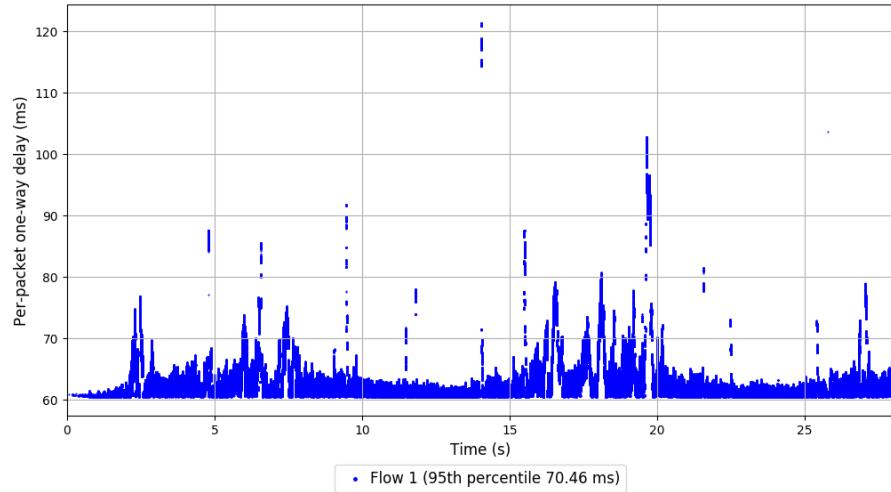
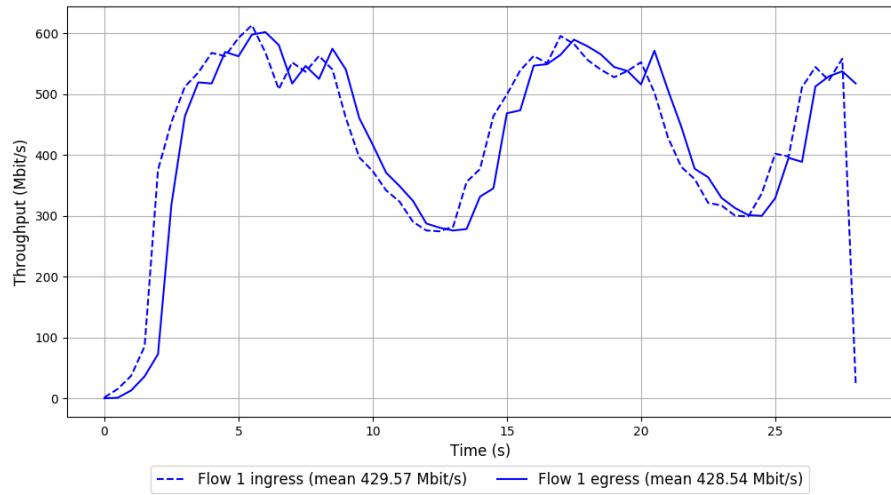


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-06-28 17:06:50
End at: 2019-06-28 17:07:20
Local clock offset: 0.131 ms
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2019-06-28 18:40:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 428.54 Mbit/s
95th percentile per-packet one-way delay: 70.459 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 428.54 Mbit/s
95th percentile per-packet one-way delay: 70.459 ms
Loss rate: 0.65%
```

Run 5: Report of Indigo-MusesD — Data Link

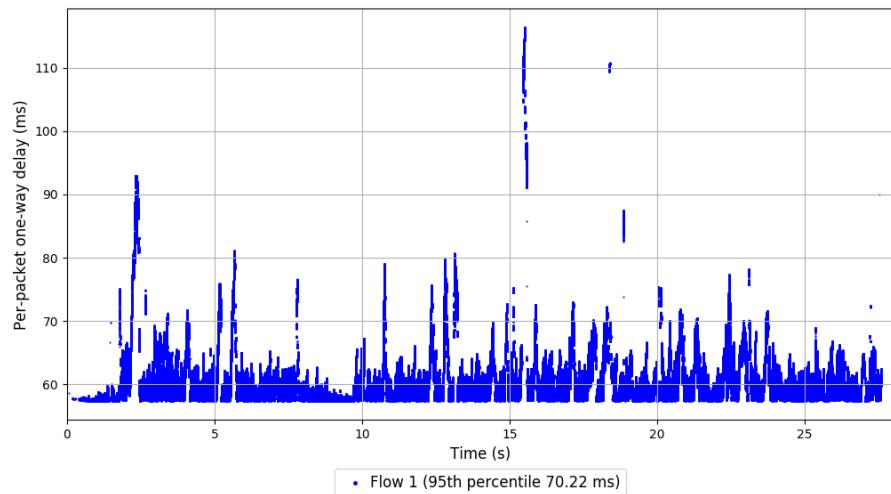
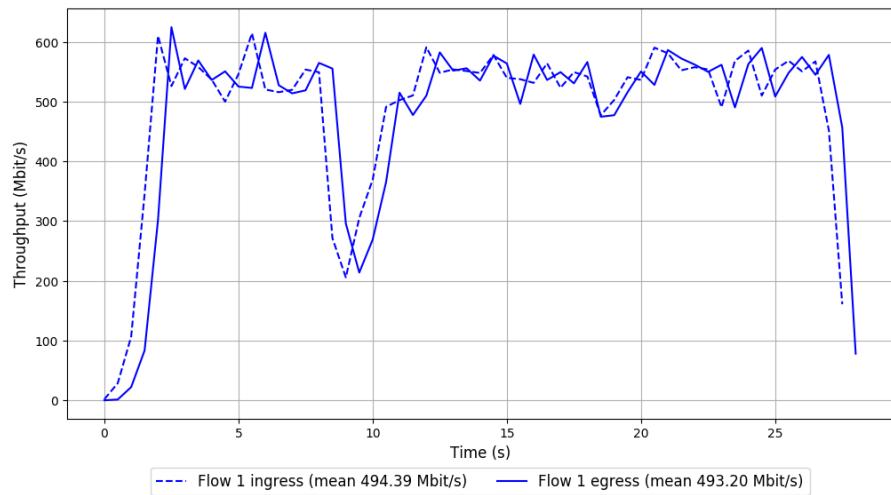


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 14:48:09
End at: 2019-06-28 14:48:39
Local clock offset: 0.343 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2019-06-28 18:41:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 493.20 Mbit/s
95th percentile per-packet one-way delay: 70.222 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 493.20 Mbit/s
95th percentile per-packet one-way delay: 70.222 ms
Loss rate: 0.67%
```

Run 1: Report of Indigo-MusesT — Data Link

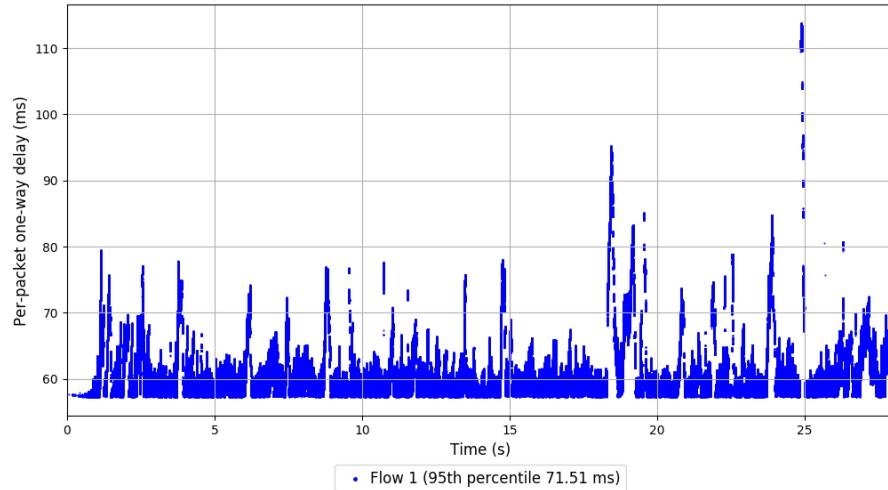
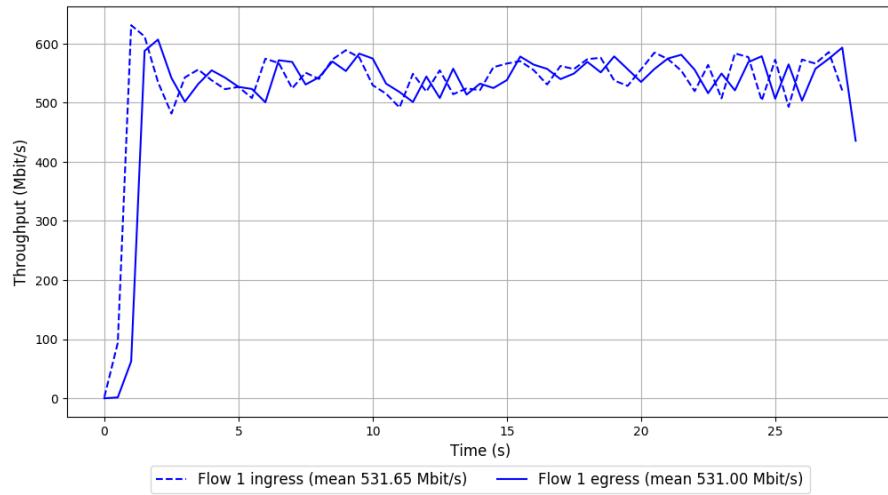


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 15:19:30
End at: 2019-06-28 15:20:00
Local clock offset: 0.421 ms
Remote clock offset: -0.161 ms

# Below is generated by plot.py at 2019-06-28 18:45:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 531.00 Mbit/s
95th percentile per-packet one-way delay: 71.506 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 531.00 Mbit/s
95th percentile per-packet one-way delay: 71.506 ms
Loss rate: 0.51%
```

Run 2: Report of Indigo-MusesT — Data Link

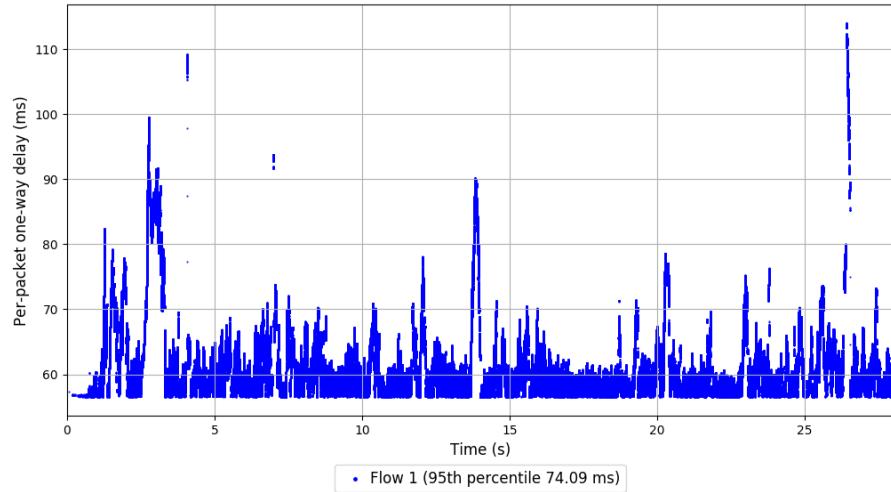
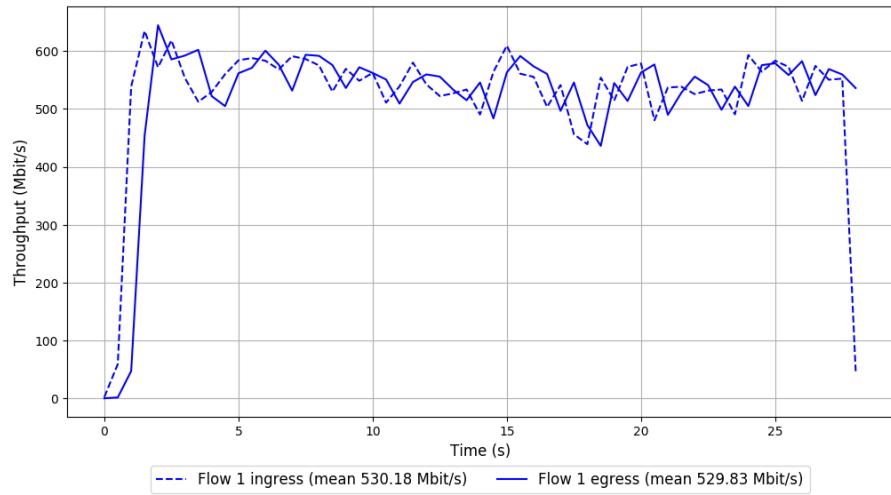


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 15:50:51
End at: 2019-06-28 15:51:21
Local clock offset: -0.265 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-06-28 18:45:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 529.83 Mbit/s
95th percentile per-packet one-way delay: 74.091 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 529.83 Mbit/s
95th percentile per-packet one-way delay: 74.091 ms
Loss rate: 0.49%
```

Run 3: Report of Indigo-MusesT — Data Link

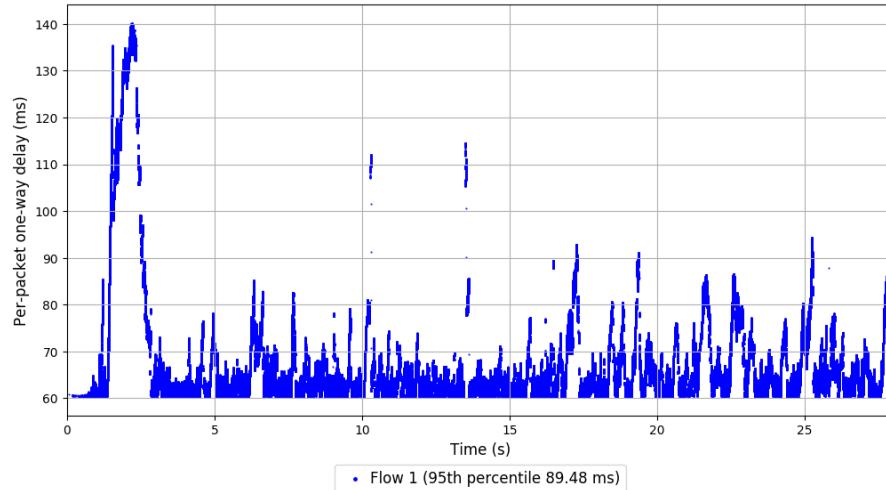
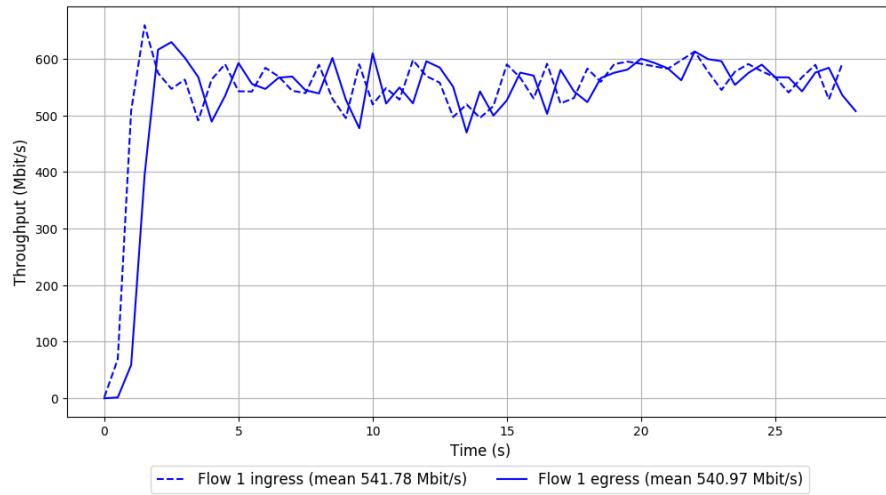


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 16:22:11
End at: 2019-06-28 16:22:41
Local clock offset: 0.094 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2019-06-28 18:46:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 540.97 Mbit/s
95th percentile per-packet one-way delay: 89.476 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 540.97 Mbit/s
95th percentile per-packet one-way delay: 89.476 ms
Loss rate: 0.58%
```

Run 4: Report of Indigo-MusesT — Data Link

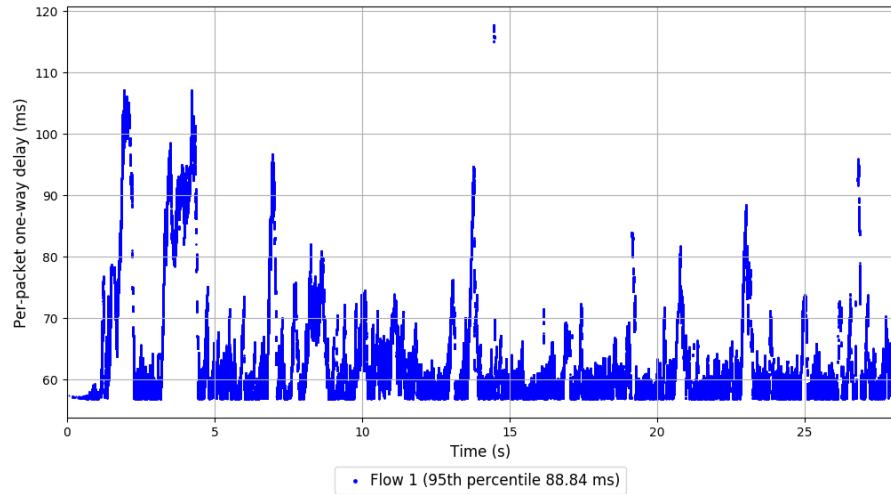
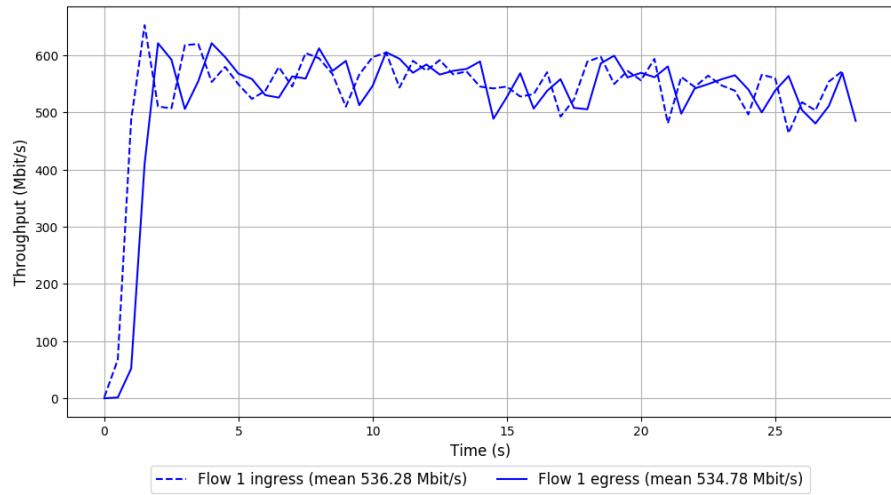


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-06-28 16:53:43
End at: 2019-06-28 16:54:13
Local clock offset: -0.078 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2019-06-28 18:47:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 534.78 Mbit/s
95th percentile per-packet one-way delay: 88.841 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 534.78 Mbit/s
95th percentile per-packet one-way delay: 88.841 ms
Loss rate: 0.69%
```

Run 5: Report of Indigo-MusesT — Data Link

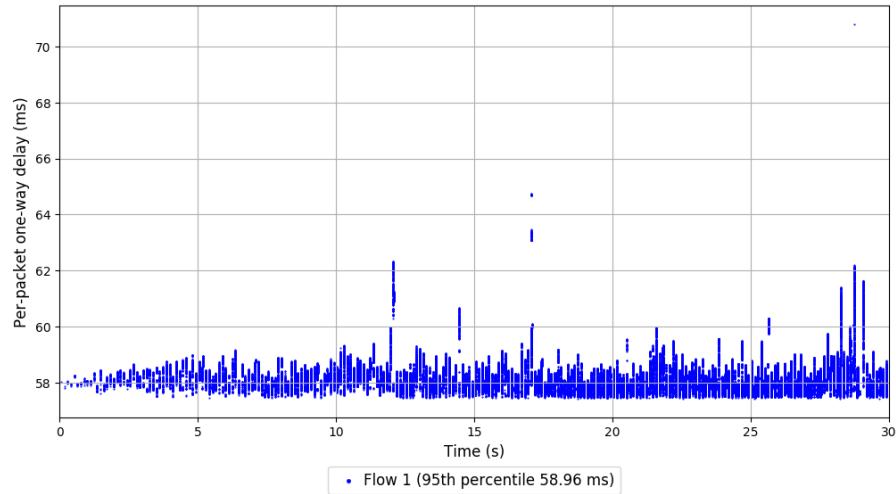
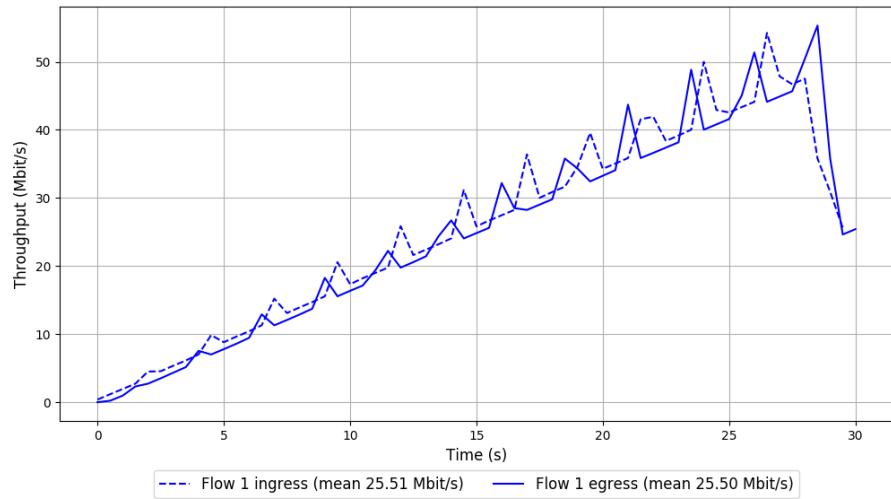


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2019-06-28 15:06:50
End at: 2019-06-28 15:07:20
Local clock offset: 0.505 ms
Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2019-06-28 18:47:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.50 Mbit/s
95th percentile per-packet one-way delay: 58.956 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 25.50 Mbit/s
95th percentile per-packet one-way delay: 58.956 ms
Loss rate: 0.42%
```

Run 1: Report of LEDBAT — Data Link

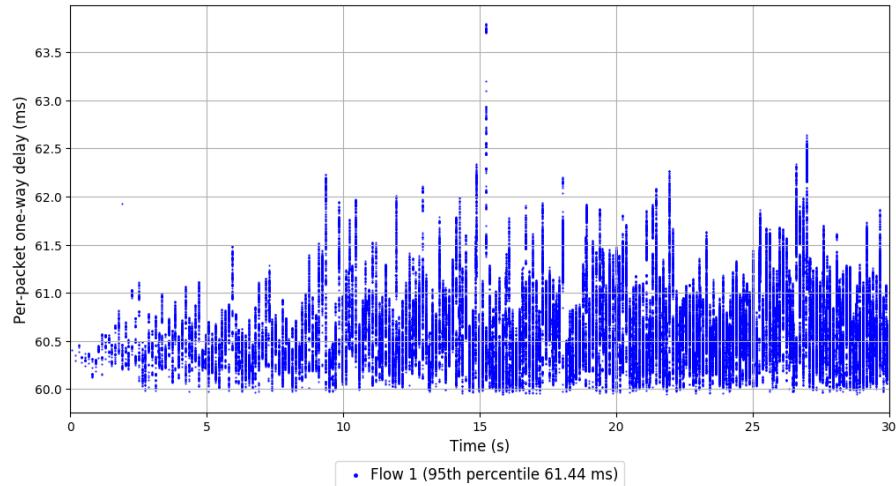
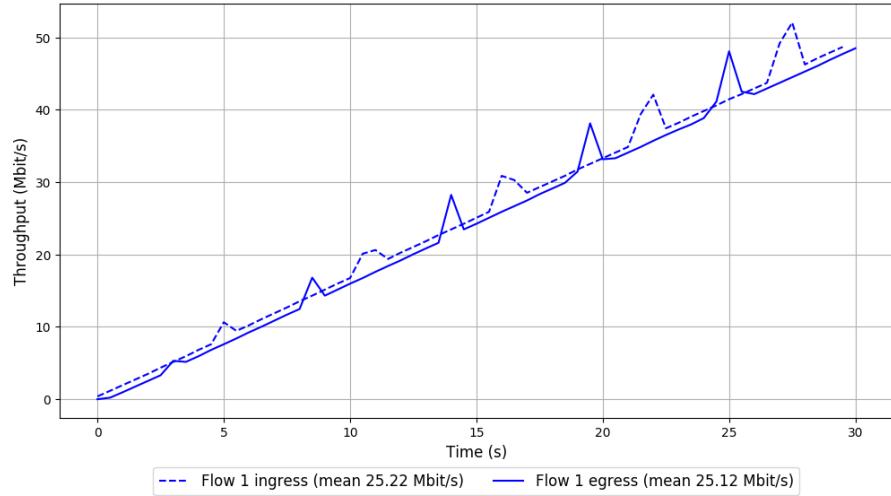


Run 2: Statistics of LEDBAT

```
Start at: 2019-06-28 15:38:19
End at: 2019-06-28 15:38:49
Local clock offset: -0.273 ms
Remote clock offset: -0.154 ms

# Below is generated by plot.py at 2019-06-28 18:47:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.12 Mbit/s
95th percentile per-packet one-way delay: 61.444 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 25.12 Mbit/s
95th percentile per-packet one-way delay: 61.444 ms
Loss rate: 0.81%
```

Run 2: Report of LEDBAT — Data Link

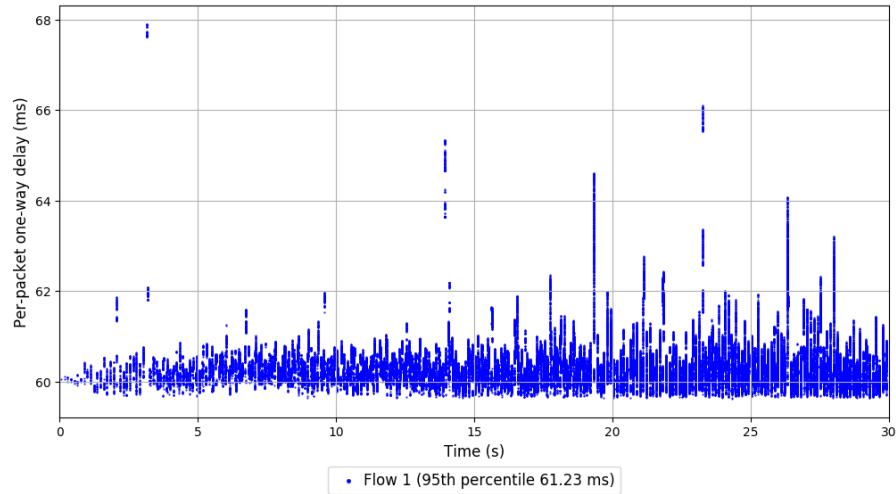
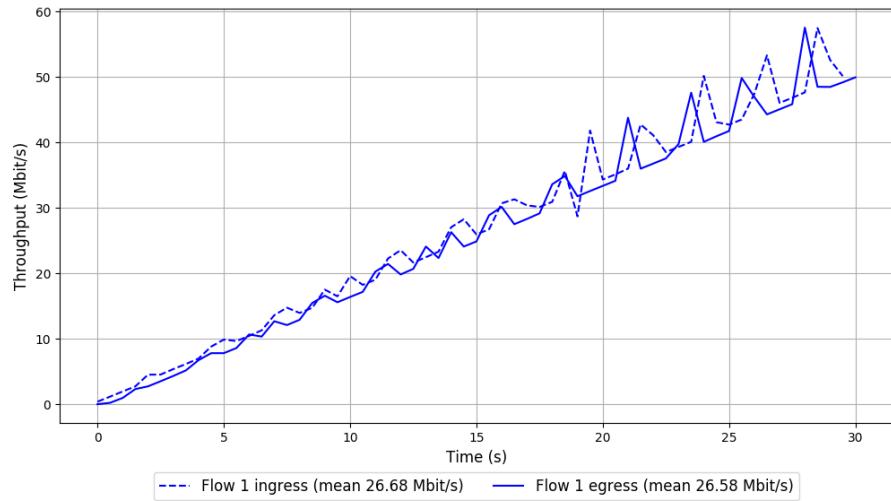


Run 3: Statistics of LEDBAT

```
Start at: 2019-06-28 16:09:11
End at: 2019-06-28 16:09:41
Local clock offset: -0.484 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2019-06-28 18:47:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.58 Mbit/s
95th percentile per-packet one-way delay: 61.231 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 26.58 Mbit/s
95th percentile per-packet one-way delay: 61.231 ms
Loss rate: 0.79%
```

Run 3: Report of LEDBAT — Data Link

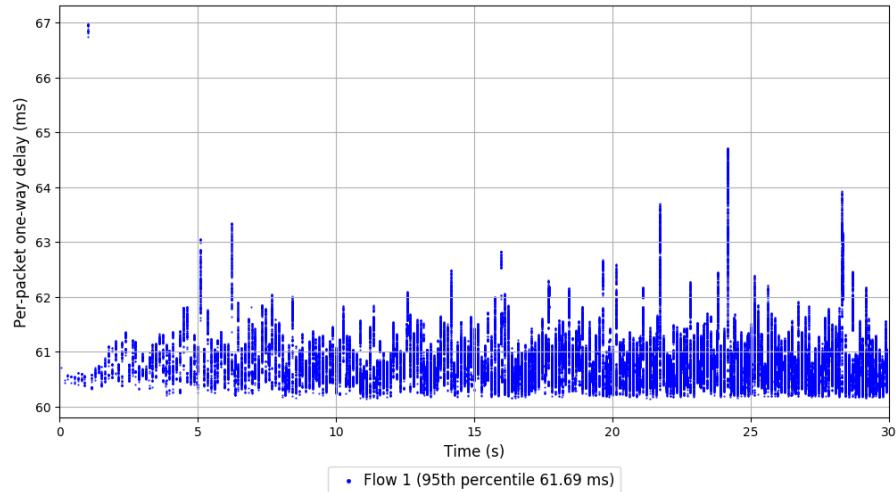
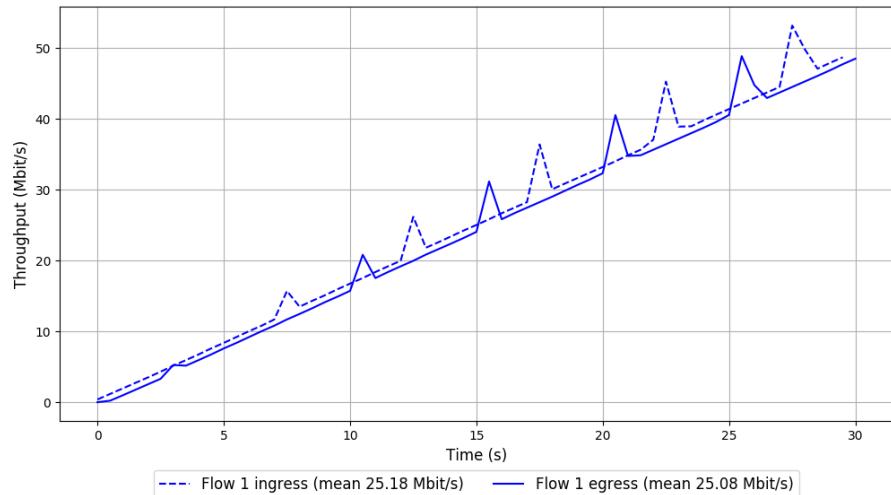


Run 4: Statistics of LEDBAT

```
Start at: 2019-06-28 16:40:52
End at: 2019-06-28 16:41:22
Local clock offset: -0.356 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2019-06-28 18:47:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.08 Mbit/s
95th percentile per-packet one-way delay: 61.692 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 25.08 Mbit/s
95th percentile per-packet one-way delay: 61.692 ms
Loss rate: 0.81%
```

Run 4: Report of LEDBAT — Data Link

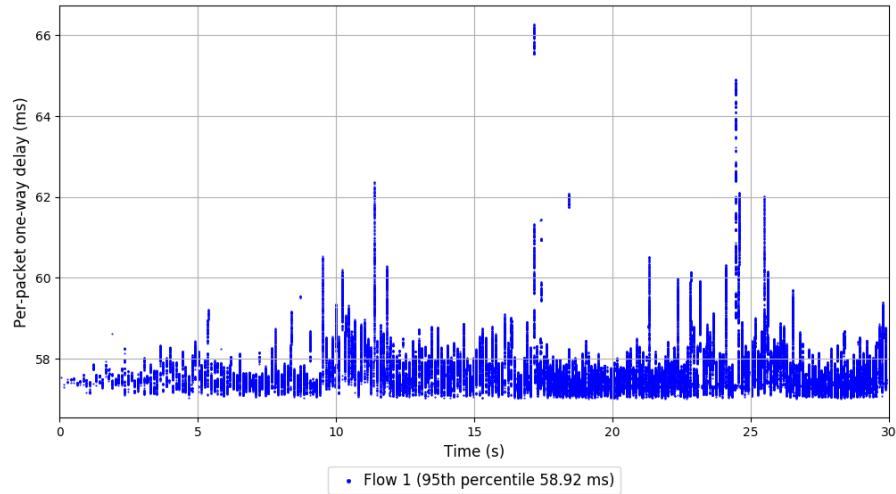
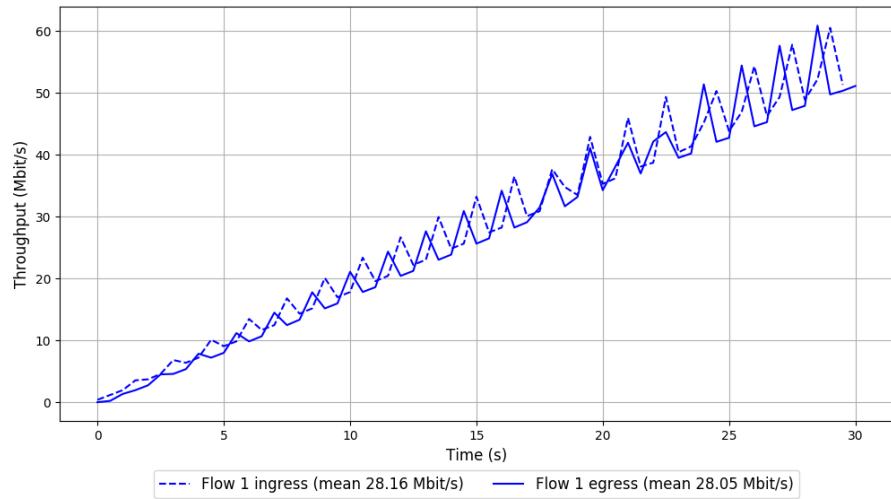


Run 5: Statistics of LEDBAT

```
Start at: 2019-06-28 17:12:07
End at: 2019-06-28 17:12:37
Local clock offset: -0.057 ms
Remote clock offset: 0.108 ms

# Below is generated by plot.py at 2019-06-28 18:47:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.05 Mbit/s
95th percentile per-packet one-way delay: 58.924 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 28.05 Mbit/s
95th percentile per-packet one-way delay: 58.924 ms
Loss rate: 0.76%
```

Run 5: Report of LEDBAT — Data Link

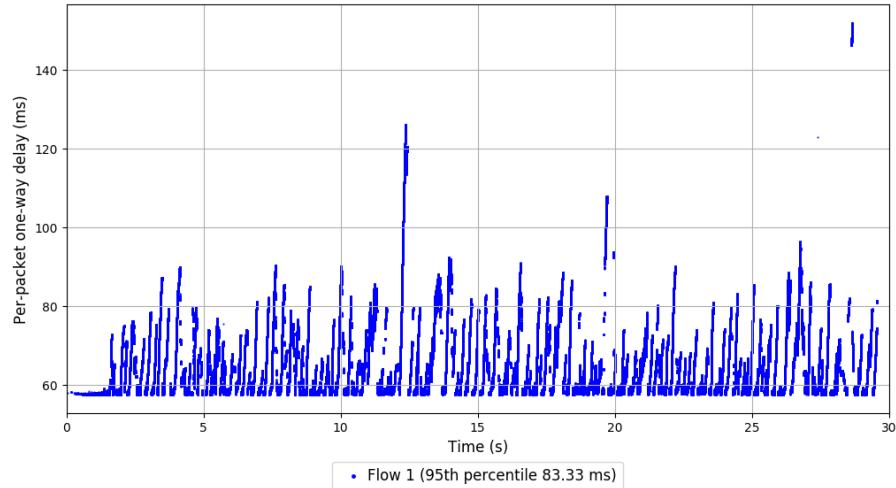
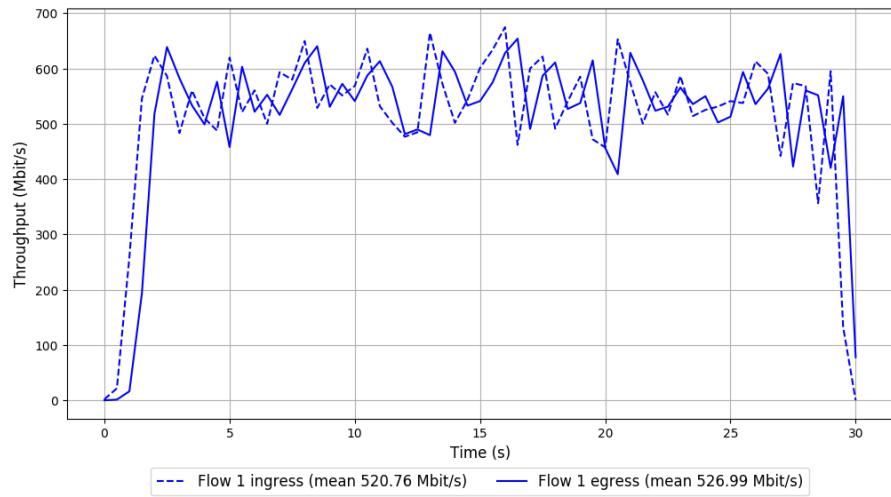


```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 15:02:40
End at: 2019-06-28 15:03:10
Local clock offset: 0.548 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2019-06-28 18:50:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 526.99 Mbit/s
95th percentile per-packet one-way delay: 83.325 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 526.99 Mbit/s
95th percentile per-packet one-way delay: 83.325 ms
Loss rate: 0.58%
```

Run 1: Report of Muses_DecisionTree — Data Link

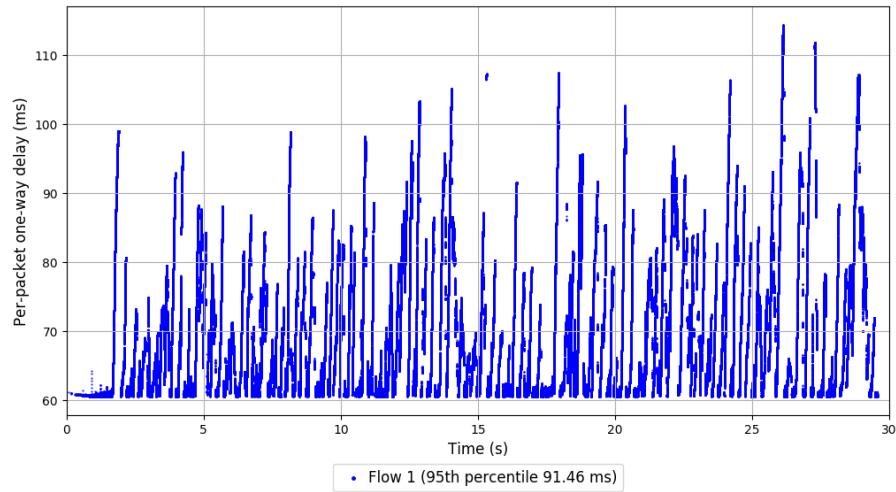
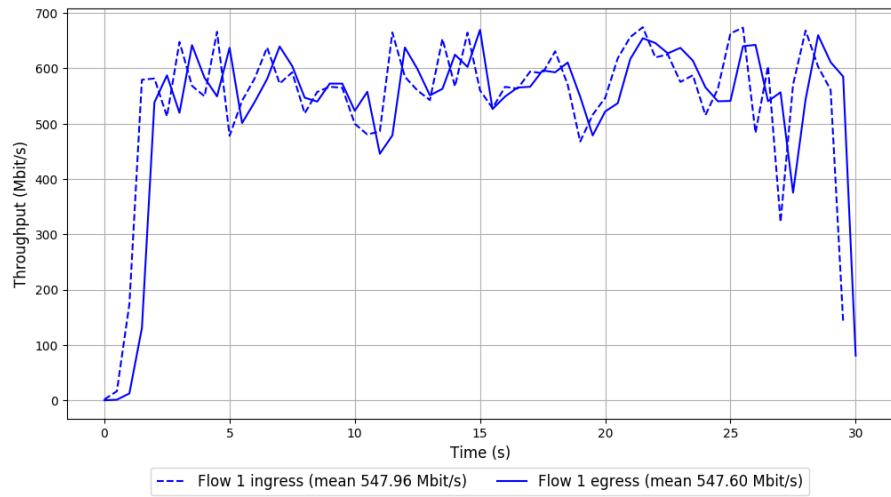


```
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 15:34:11
End at: 2019-06-28 15:34:41
Local clock offset: 0.248 ms
Remote clock offset: -0.258 ms

# Below is generated by plot.py at 2019-06-28 18:51:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 547.60 Mbit/s
95th percentile per-packet one-way delay: 91.462 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 547.60 Mbit/s
95th percentile per-packet one-way delay: 91.462 ms
Loss rate: 0.47%
```

Run 2: Report of Muses_DecisionTree — Data Link

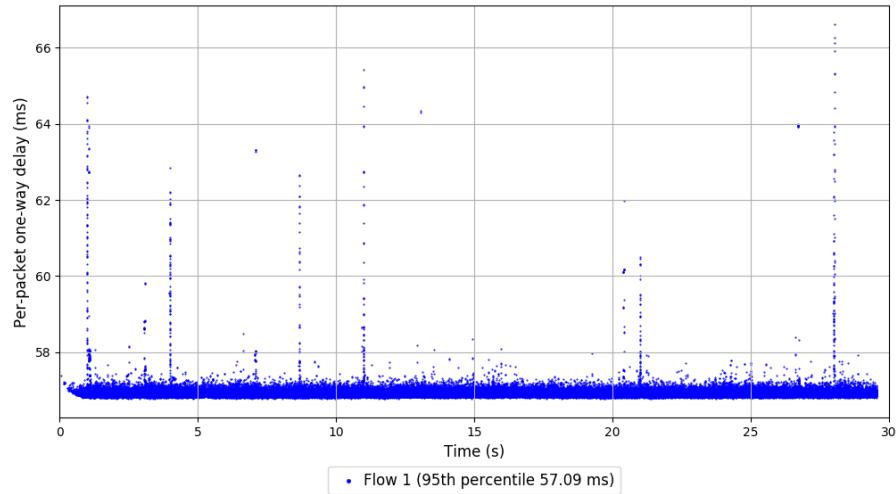
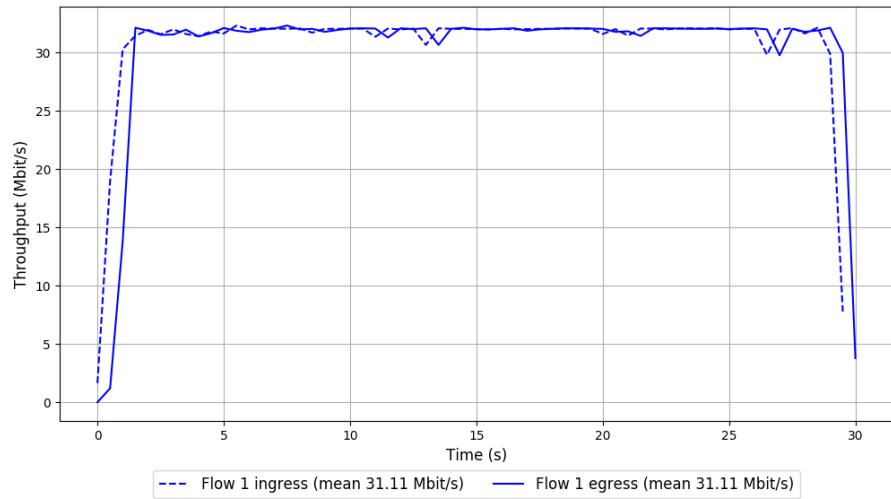


```
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 16:05:30
End at: 2019-06-28 16:06:00
Local clock offset: -0.119 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2019-06-28 18:51:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.11 Mbit/s
95th percentile per-packet one-way delay: 57.091 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 31.11 Mbit/s
95th percentile per-packet one-way delay: 57.091 ms
Loss rate: 0.41%
```

Run 3: Report of Muses_DecisionTree — Data Link

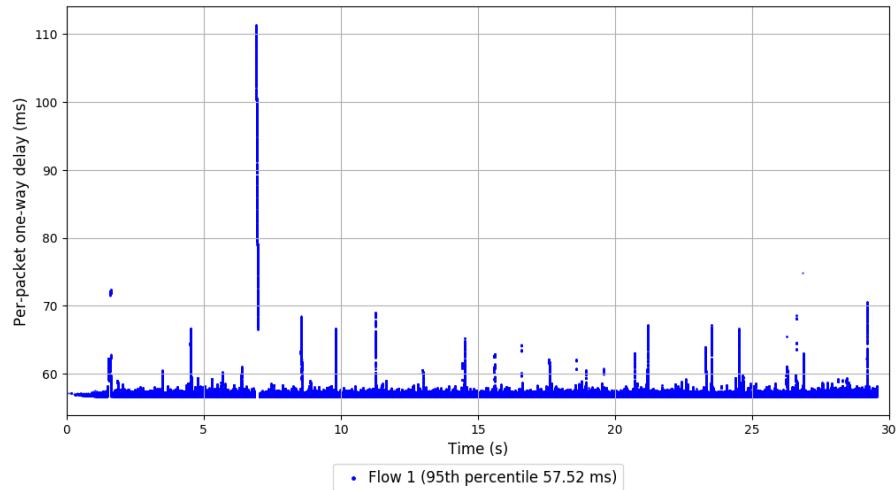
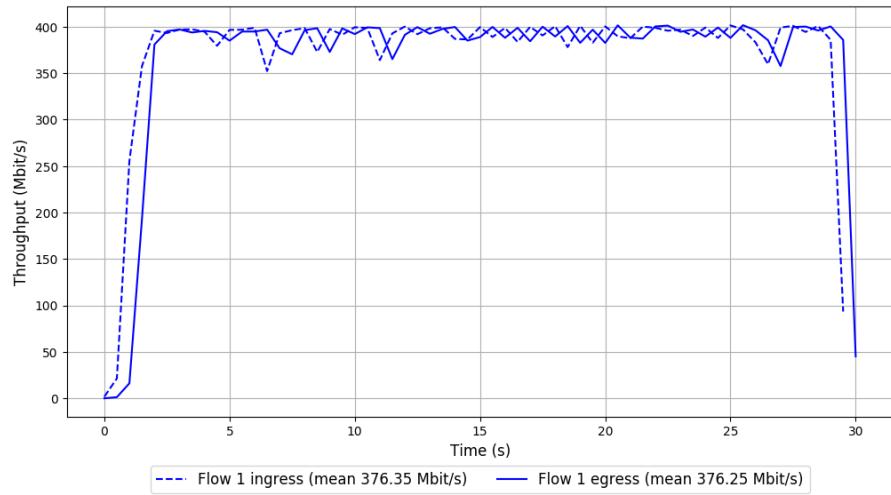


```
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 16:36:50
End at: 2019-06-28 16:37:20
Local clock offset: -0.268 ms
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2019-06-28 18:51:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 376.25 Mbit/s
95th percentile per-packet one-way delay: 57.515 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 376.25 Mbit/s
95th percentile per-packet one-way delay: 57.515 ms
Loss rate: 0.42%
```

Run 4: Report of Muses_DecisionTree — Data Link

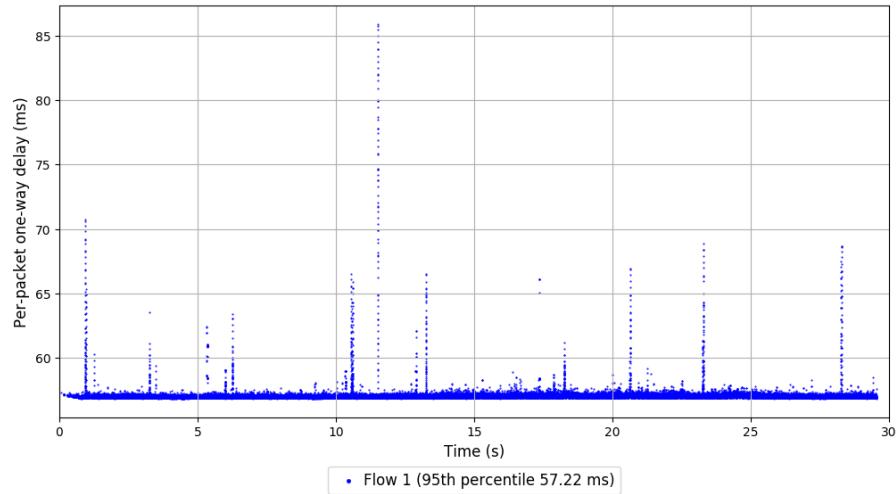
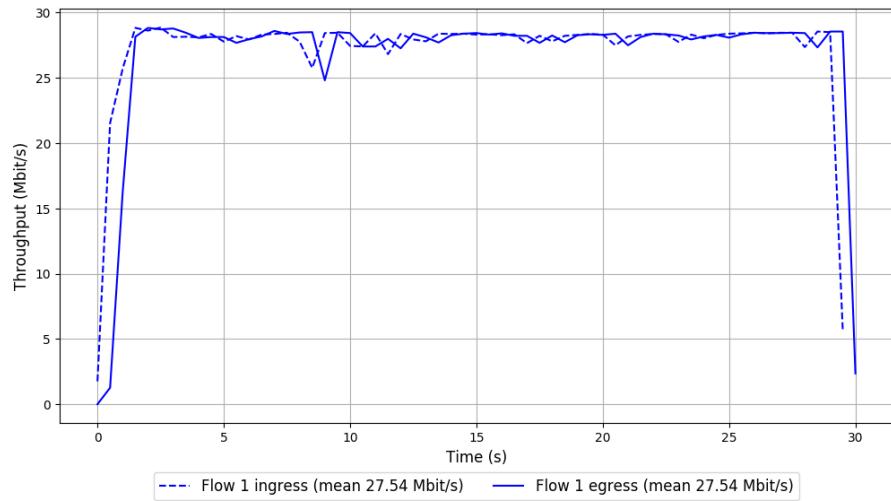


```
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-06-28 17:08:18
End at: 2019-06-28 17:08:48
Local clock offset: -0.213 ms
Remote clock offset: -0.003 ms

# Below is generated by plot.py at 2019-06-28 18:51:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 27.54 Mbit/s
95th percentile per-packet one-way delay: 57.220 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 27.54 Mbit/s
95th percentile per-packet one-way delay: 57.220 ms
Loss rate: 0.40%
```

Run 5: Report of Muses_DecisionTree — Data Link

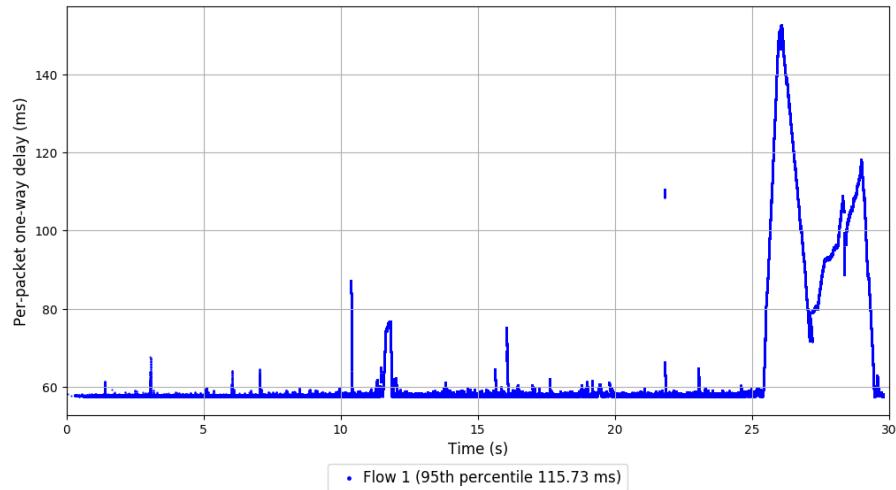
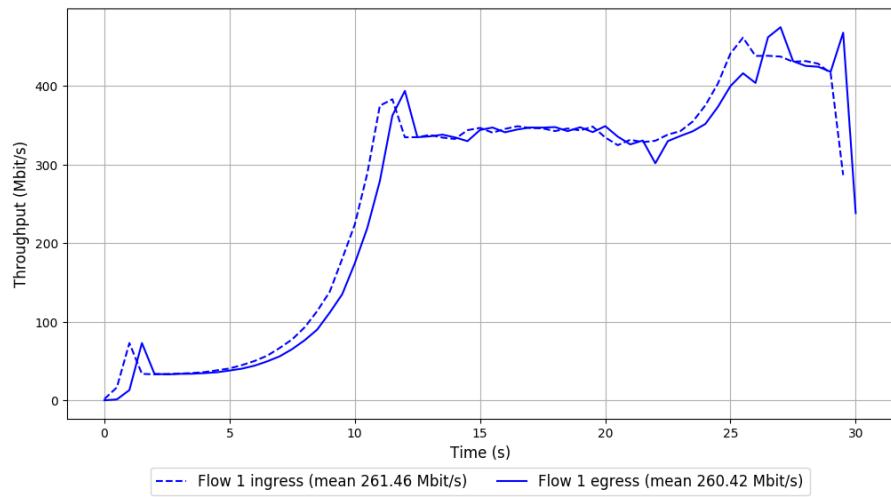


Run 1: Statistics of PCC-Allegro

```
Start at: 2019-06-28 15:14:58
End at: 2019-06-28 15:15:28
Local clock offset: 0.504 ms
Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2019-06-28 18:52:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 260.42 Mbit/s
95th percentile per-packet one-way delay: 115.729 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 260.42 Mbit/s
95th percentile per-packet one-way delay: 115.729 ms
Loss rate: 0.79%
```

Run 1: Report of PCC-Allegro — Data Link

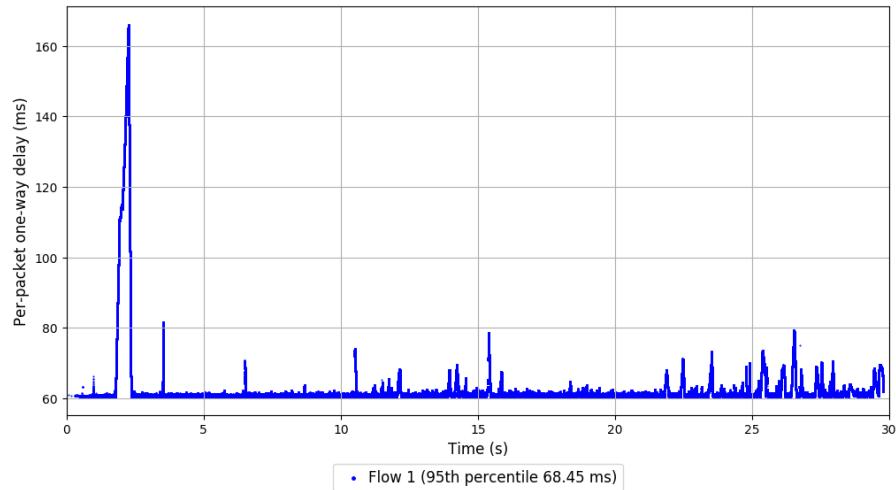
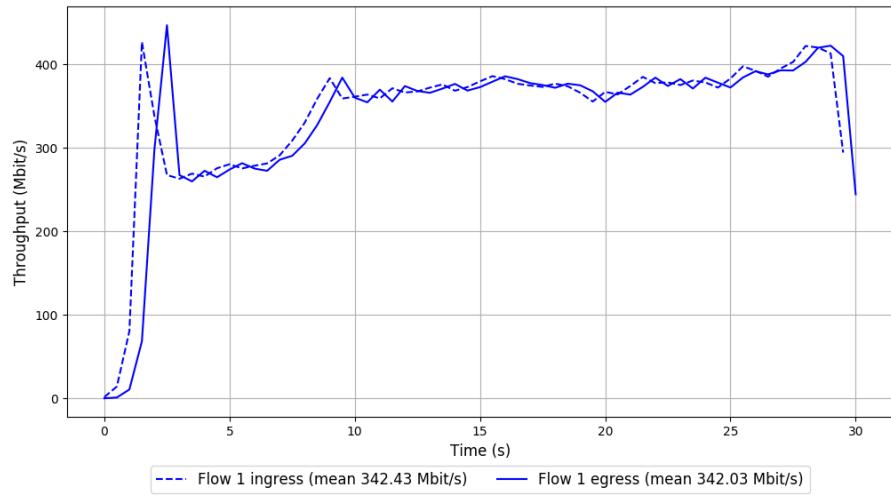


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-06-28 15:46:18
End at: 2019-06-28 15:46:48
Local clock offset: 0.403 ms
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2019-06-28 18:58:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 342.03 Mbit/s
95th percentile per-packet one-way delay: 68.453 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 342.03 Mbit/s
95th percentile per-packet one-way delay: 68.453 ms
Loss rate: 0.53%
```

Run 2: Report of PCC-Allegro — Data Link

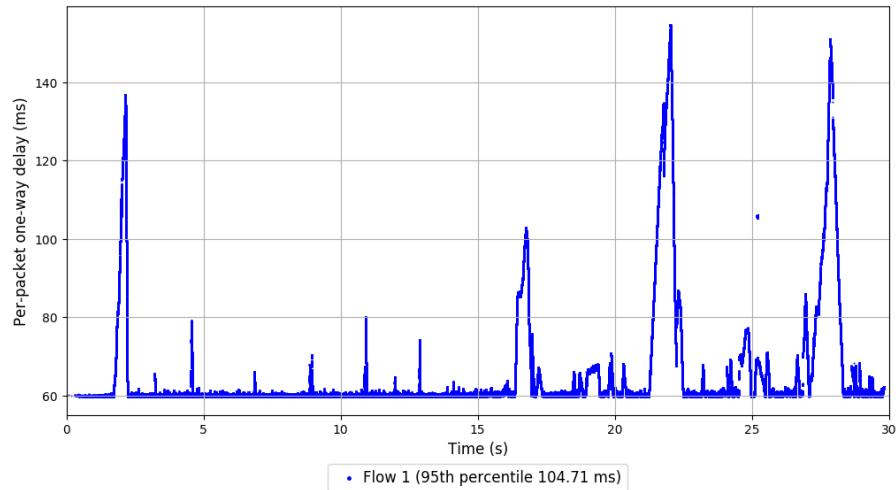
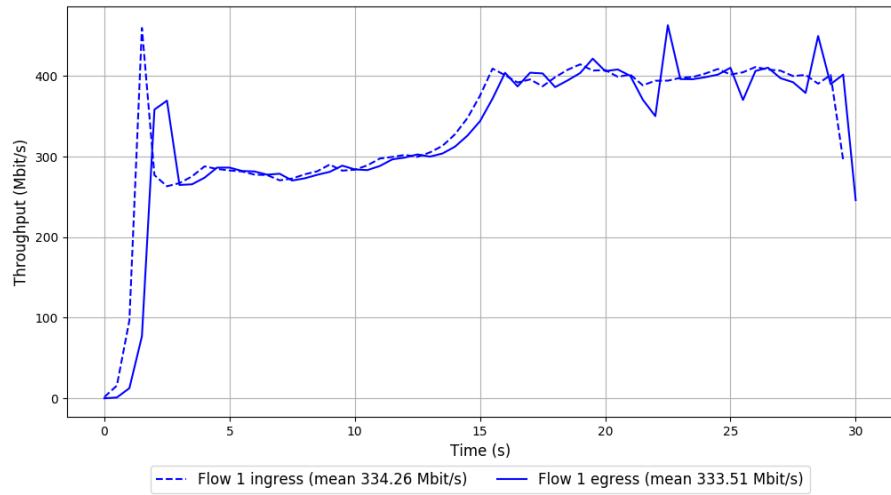


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-06-28 16:17:35
End at: 2019-06-28 16:18:05
Local clock offset: -0.538 ms
Remote clock offset: -0.132 ms

# Below is generated by plot.py at 2019-06-28 18:58:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 333.51 Mbit/s
95th percentile per-packet one-way delay: 104.710 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 333.51 Mbit/s
95th percentile per-packet one-way delay: 104.710 ms
Loss rate: 0.63%
```

Run 3: Report of PCC-Allegro — Data Link

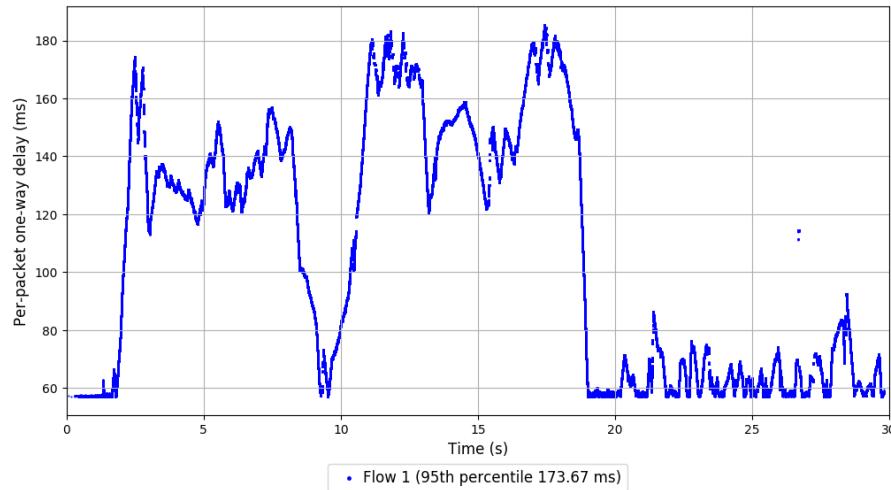
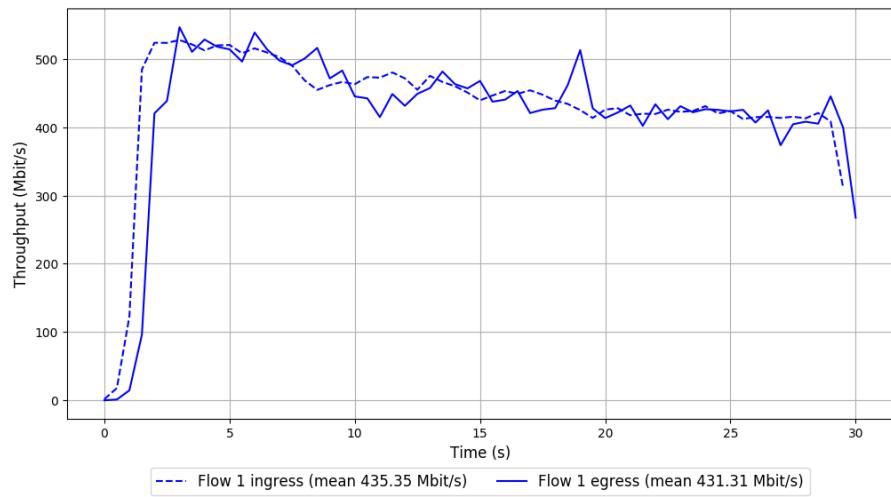


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-06-28 16:49:03
End at: 2019-06-28 16:49:33
Local clock offset: -0.098 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2019-06-28 19:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 431.31 Mbit/s
95th percentile per-packet one-way delay: 173.670 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 431.31 Mbit/s
95th percentile per-packet one-way delay: 173.670 ms
Loss rate: 1.31%
```

Run 4: Report of PCC-Allegro — Data Link

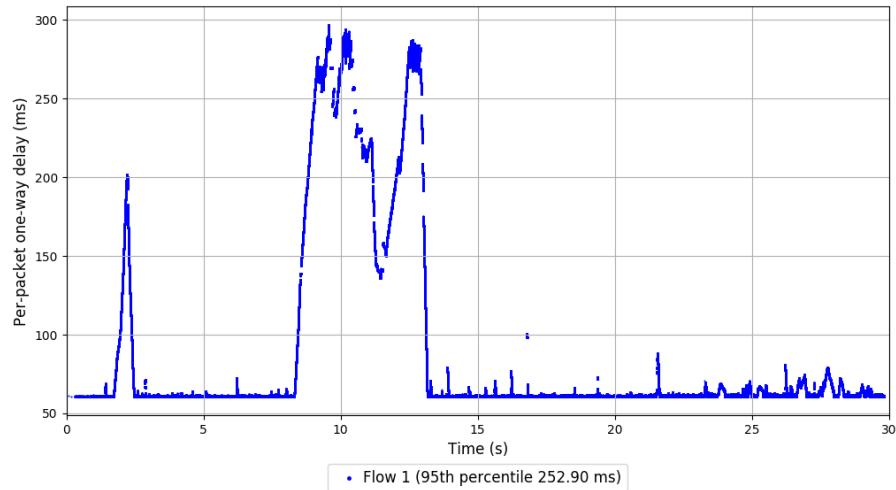
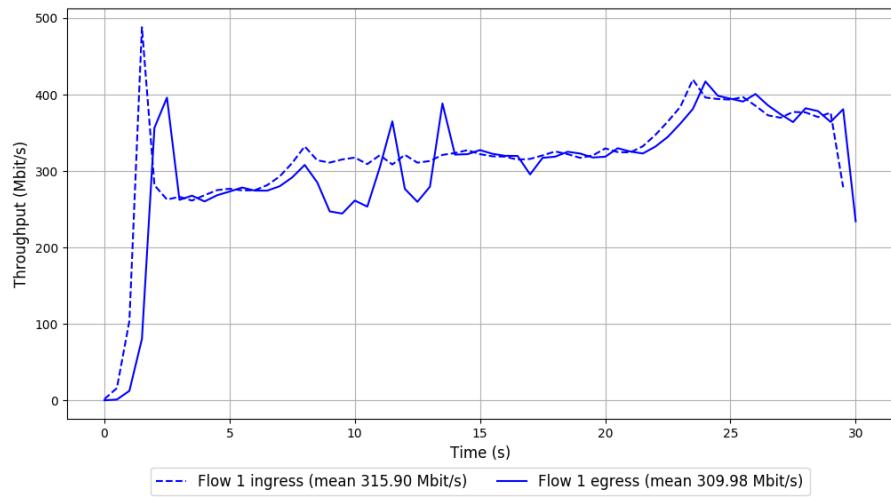


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-06-28 17:20:13
End at: 2019-06-28 17:20:43
Local clock offset: 0.22 ms
Remote clock offset: -0.136 ms

# Below is generated by plot.py at 2019-06-28 19:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 309.98 Mbit/s
95th percentile per-packet one-way delay: 252.896 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 309.98 Mbit/s
95th percentile per-packet one-way delay: 252.896 ms
Loss rate: 2.27%
```

Run 5: Report of PCC-Allegro — Data Link

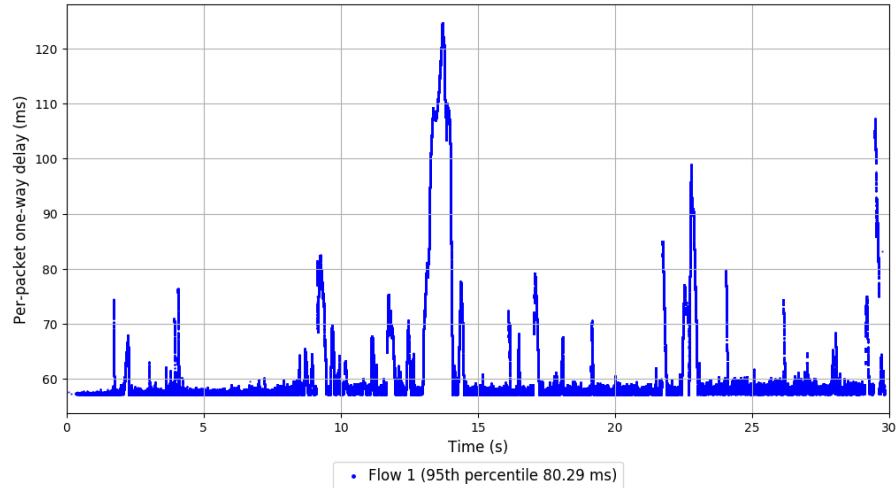
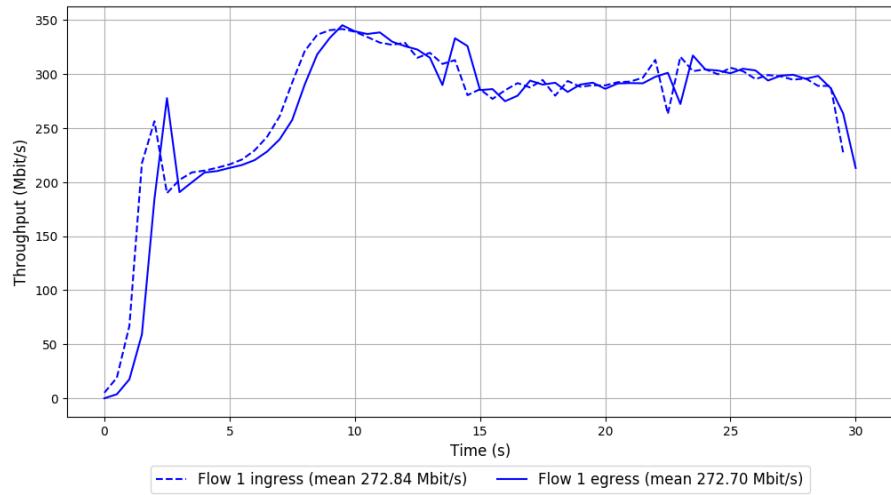


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-06-28 14:57:57
End at: 2019-06-28 14:58:27
Local clock offset: 0.152 ms
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2019-06-28 19:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 272.70 Mbit/s
95th percentile per-packet one-way delay: 80.289 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 272.70 Mbit/s
95th percentile per-packet one-way delay: 80.289 ms
Loss rate: 0.45%
```

Run 1: Report of PCC-Expr — Data Link

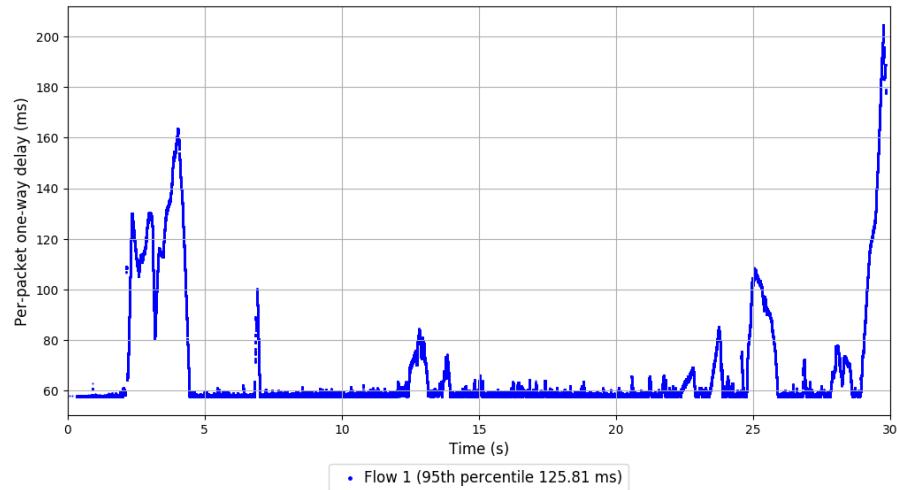
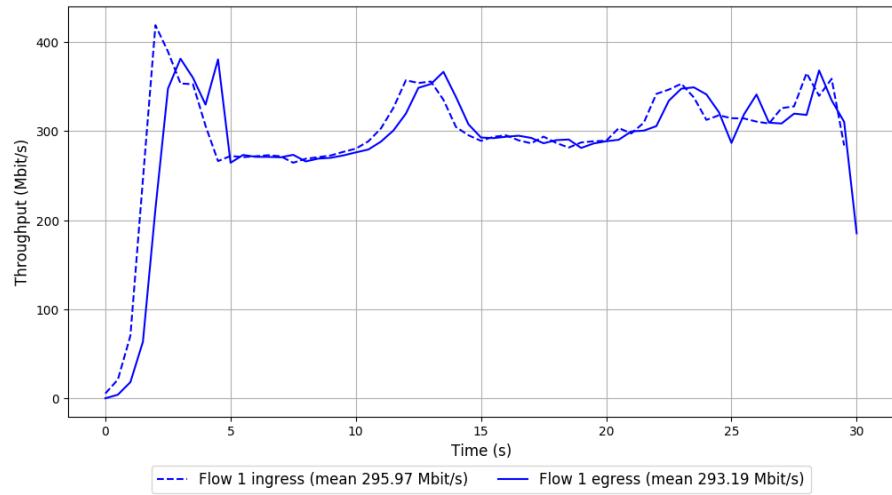


Run 2: Statistics of PCC-Expr

```
Start at: 2019-06-28 15:29:28
End at: 2019-06-28 15:29:58
Local clock offset: -0.209 ms
Remote clock offset: -0.878 ms

# Below is generated by plot.py at 2019-06-28 19:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 293.19 Mbit/s
95th percentile per-packet one-way delay: 125.807 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 293.19 Mbit/s
95th percentile per-packet one-way delay: 125.807 ms
Loss rate: 1.33%
```

Run 2: Report of PCC-Expr — Data Link

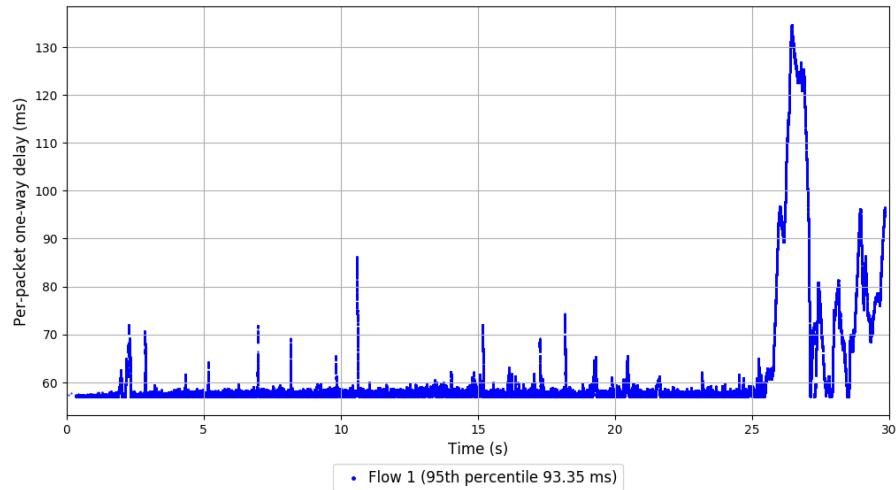
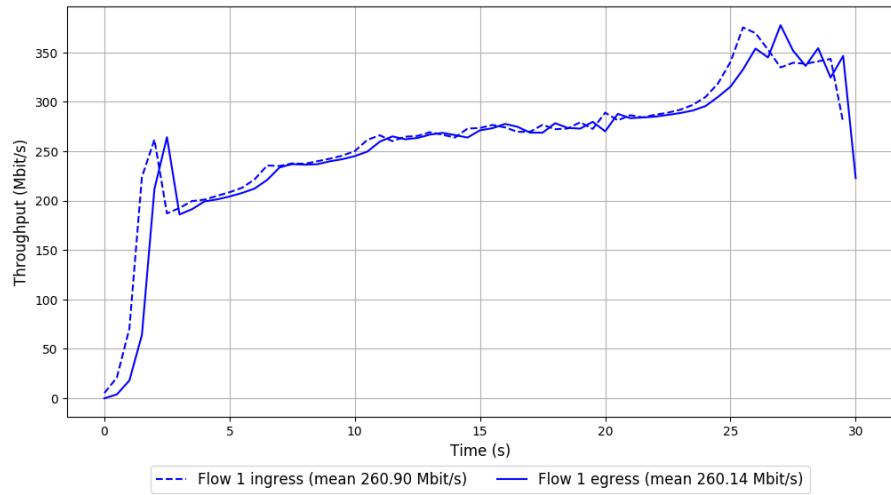


Run 3: Statistics of PCC-Expr

```
Start at: 2019-06-28 16:00:46
End at: 2019-06-28 16:01:16
Local clock offset: -0.096 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-06-28 19:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 260.14 Mbit/s
95th percentile per-packet one-way delay: 93.354 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 260.14 Mbit/s
95th percentile per-packet one-way delay: 93.354 ms
Loss rate: 0.69%
```

Run 3: Report of PCC-Expr — Data Link

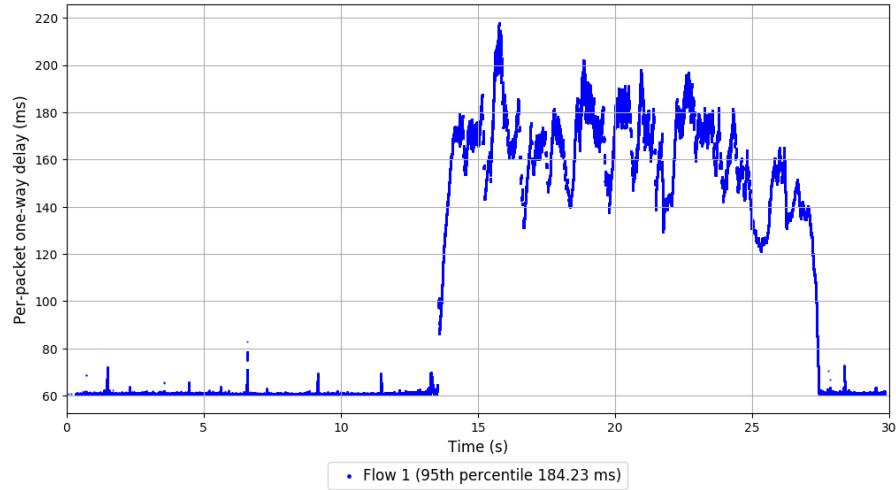
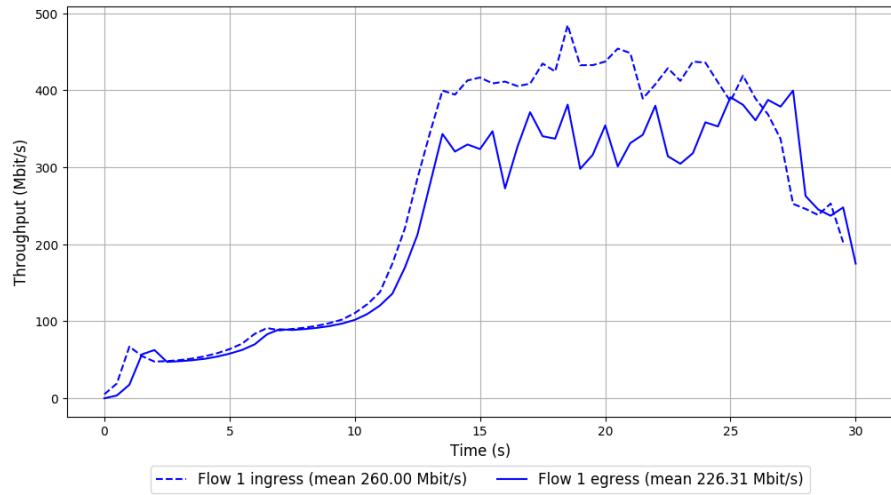


Run 4: Statistics of PCC-Expr

```
Start at: 2019-06-28 16:32:10
End at: 2019-06-28 16:32:40
Local clock offset: 0.084 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2019-06-28 19:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.31 Mbit/s
95th percentile per-packet one-way delay: 184.233 ms
Loss rate: 13.31%
-- Flow 1:
Average throughput: 226.31 Mbit/s
95th percentile per-packet one-way delay: 184.233 ms
Loss rate: 13.31%
```

Run 4: Report of PCC-Expr — Data Link

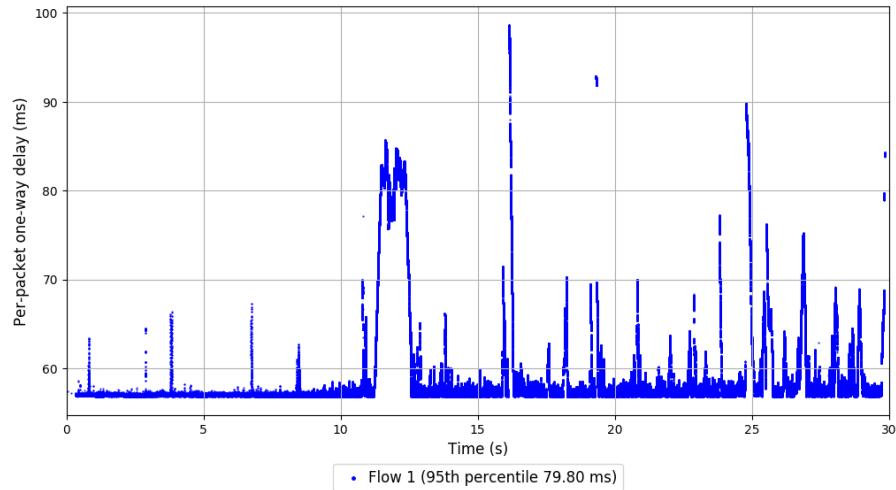
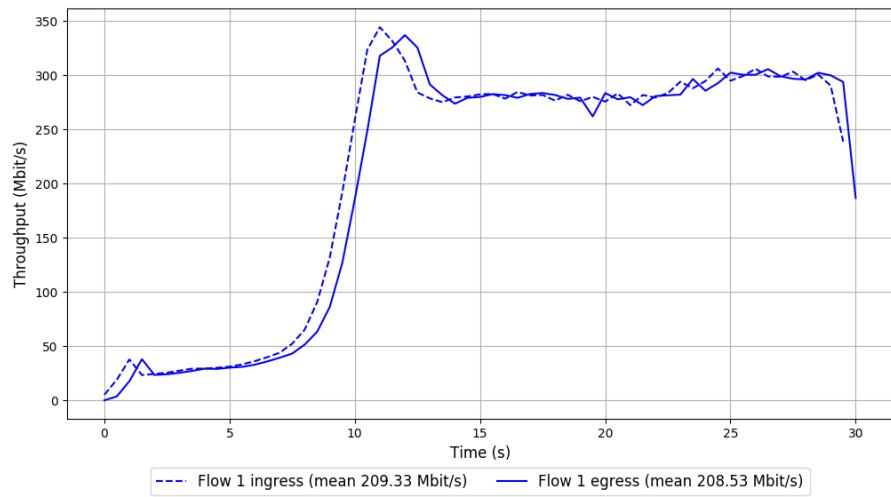


Run 5: Statistics of PCC-Expr

```
Start at: 2019-06-28 17:03:41
End at: 2019-06-28 17:04:11
Local clock offset: -0.072 ms
Remote clock offset: 0.146 ms

# Below is generated by plot.py at 2019-06-28 19:05:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 208.53 Mbit/s
95th percentile per-packet one-way delay: 79.804 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 208.53 Mbit/s
95th percentile per-packet one-way delay: 79.804 ms
Loss rate: 0.77%
```

Run 5: Report of PCC-Expr — Data Link

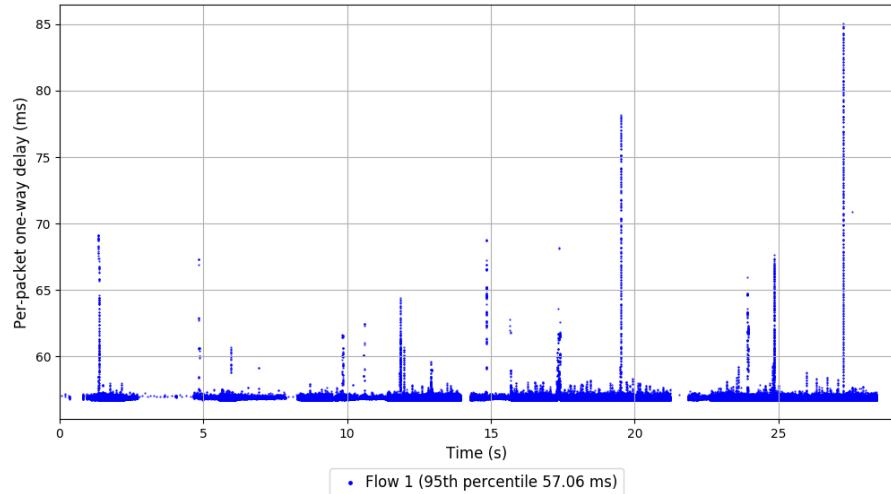
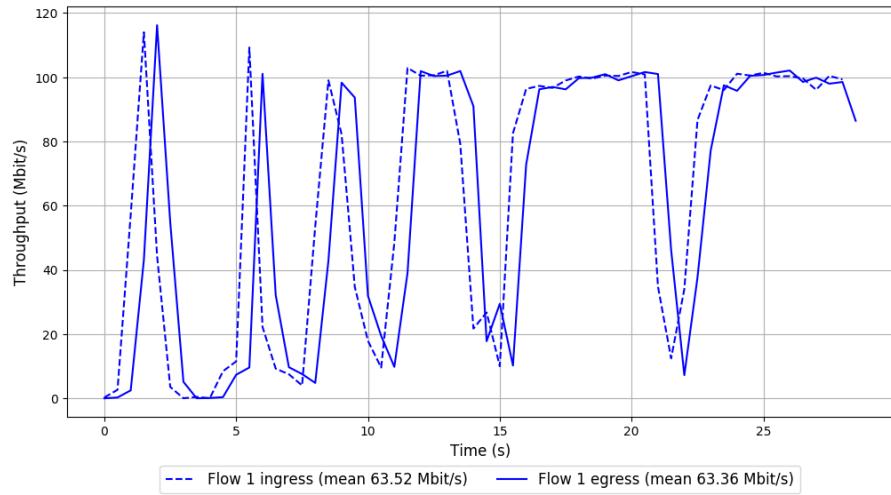


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-06-28 15:09:28
End at: 2019-06-28 15:09:58
Local clock offset: 0.109 ms
Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2019-06-28 19:05:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.36 Mbit/s
95th percentile per-packet one-way delay: 57.060 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 63.36 Mbit/s
95th percentile per-packet one-way delay: 57.060 ms
Loss rate: 0.67%
```

Run 1: Report of QUIC Cubic — Data Link

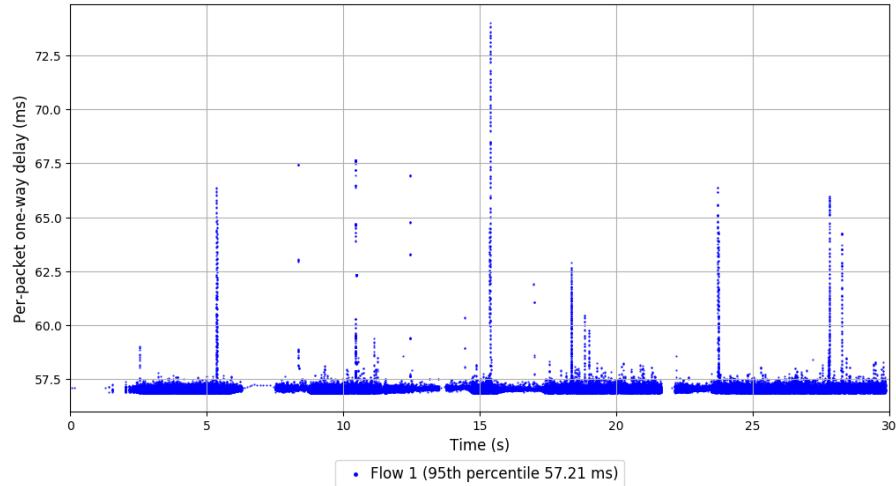
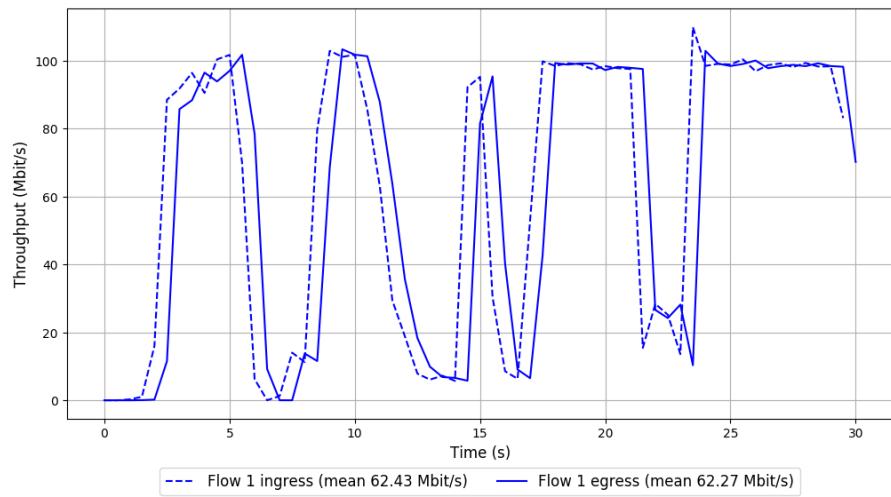


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-06-28 15:40:46
End at: 2019-06-28 15:41:16
Local clock offset: -0.061 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-06-28 19:05:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.27 Mbit/s
95th percentile per-packet one-way delay: 57.206 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 62.27 Mbit/s
95th percentile per-packet one-way delay: 57.206 ms
Loss rate: 0.65%
```

Run 2: Report of QUIC Cubic — Data Link

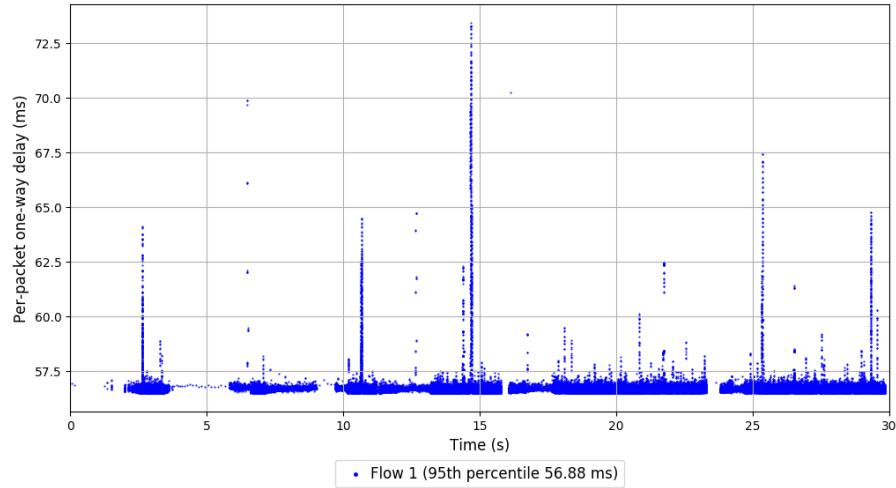
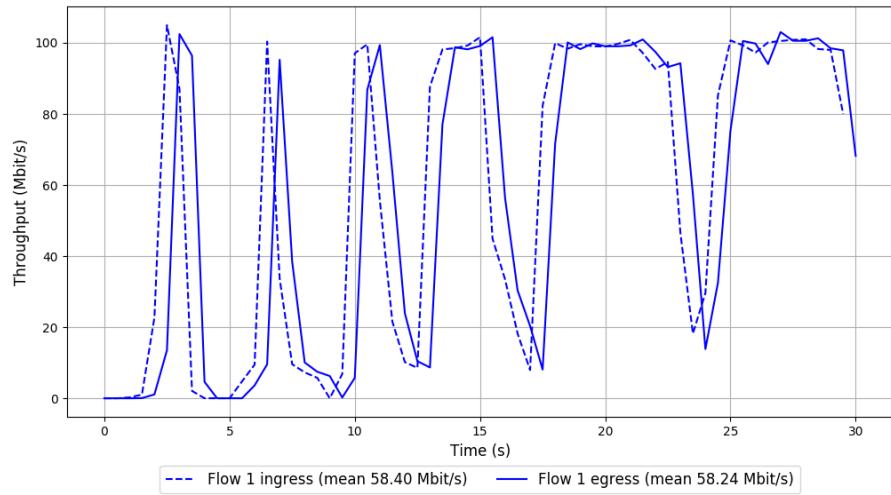


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-06-28 16:11:52
End at: 2019-06-28 16:12:22
Local clock offset: -0.365 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-06-28 19:05:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.24 Mbit/s
95th percentile per-packet one-way delay: 56.884 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 58.24 Mbit/s
95th percentile per-packet one-way delay: 56.884 ms
Loss rate: 0.66%
```

Run 3: Report of QUIC Cubic — Data Link

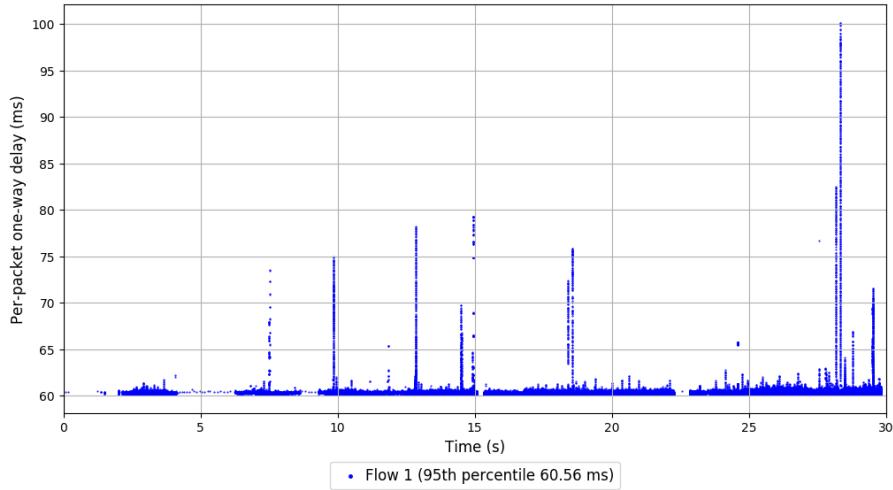
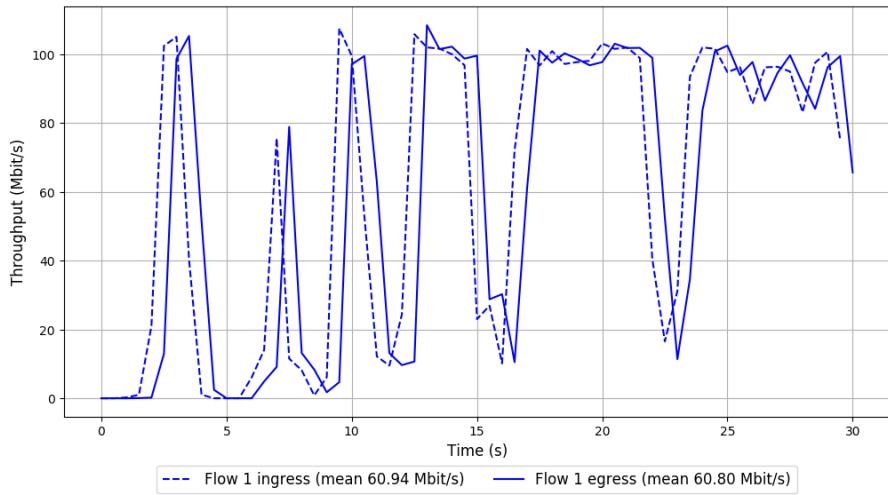


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-06-28 16:43:32
End at: 2019-06-28 16:44:02
Local clock offset: -0.269 ms
Remote clock offset: 0.096 ms

# Below is generated by plot.py at 2019-06-28 19:05:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.80 Mbit/s
95th percentile per-packet one-way delay: 60.559 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 60.80 Mbit/s
95th percentile per-packet one-way delay: 60.559 ms
Loss rate: 0.63%
```

Run 4: Report of QUIC Cubic — Data Link

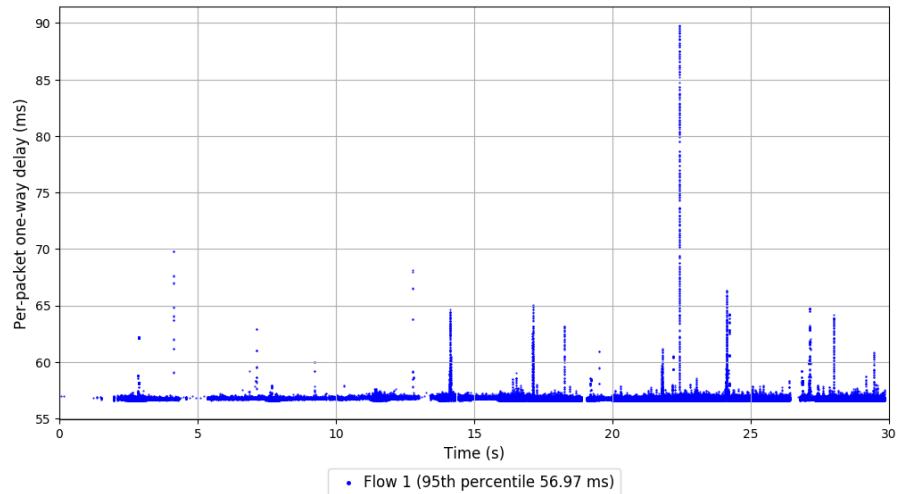
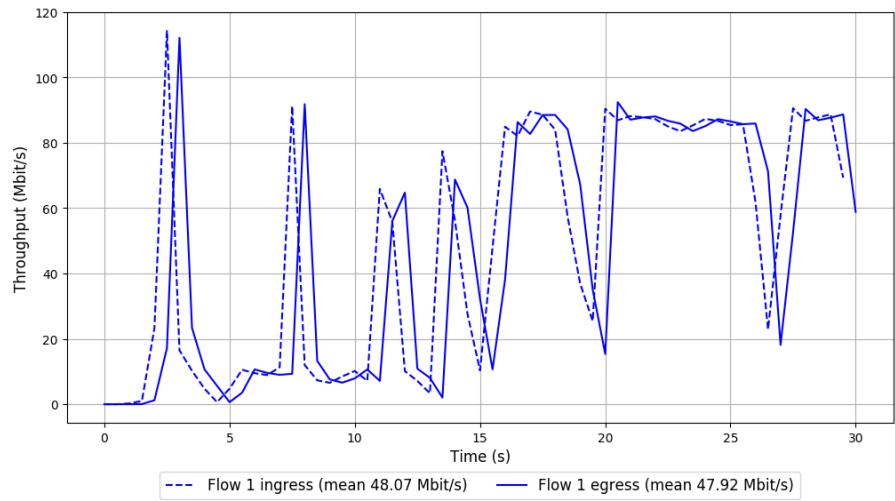


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-06-28 17:14:37
End at: 2019-06-28 17:15:07
Local clock offset: -0.047 ms
Remote clock offset: 0.192 ms

# Below is generated by plot.py at 2019-06-28 19:05:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.92 Mbit/s
95th percentile per-packet one-way delay: 56.974 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 47.92 Mbit/s
95th percentile per-packet one-way delay: 56.974 ms
Loss rate: 0.72%
```

Run 5: Report of QUIC Cubic — Data Link

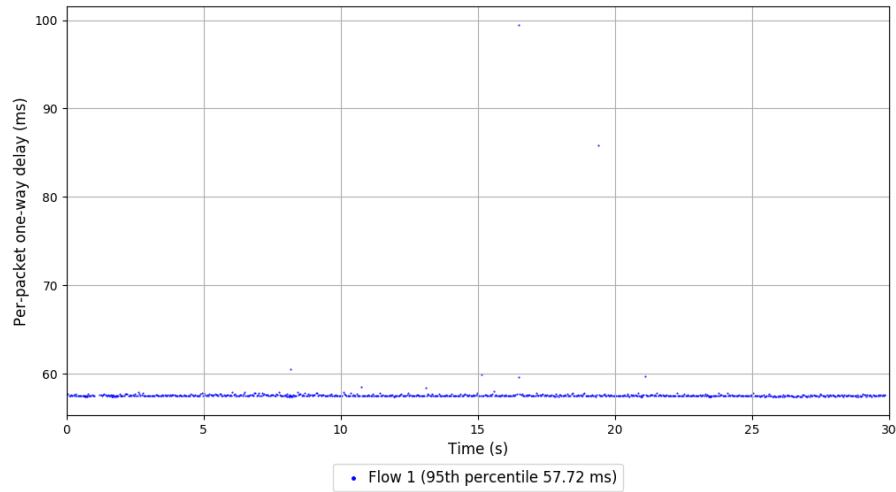
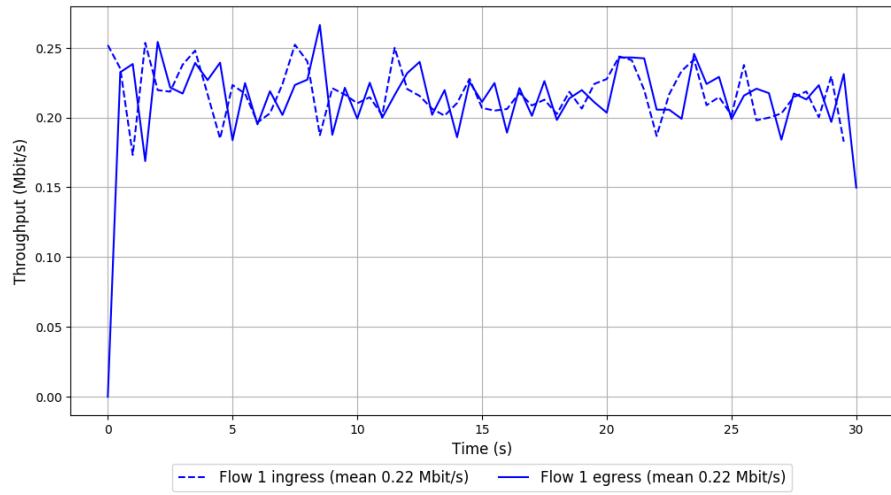


```
Run 1: Statistics of SCReAM
```

```
Start at: 2019-06-28 14:51:10
End at: 2019-06-28 14:51:40
Local clock offset: -0.088 ms
Remote clock offset: -0.247 ms

# Below is generated by plot.py at 2019-06-28 19:05:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.723 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.723 ms
Loss rate: 0.38%
```

Run 1: Report of SCReAM — Data Link

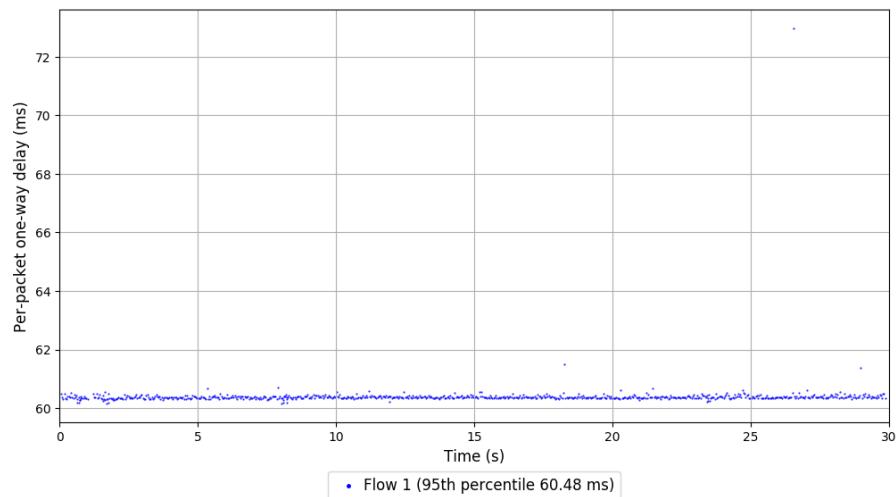
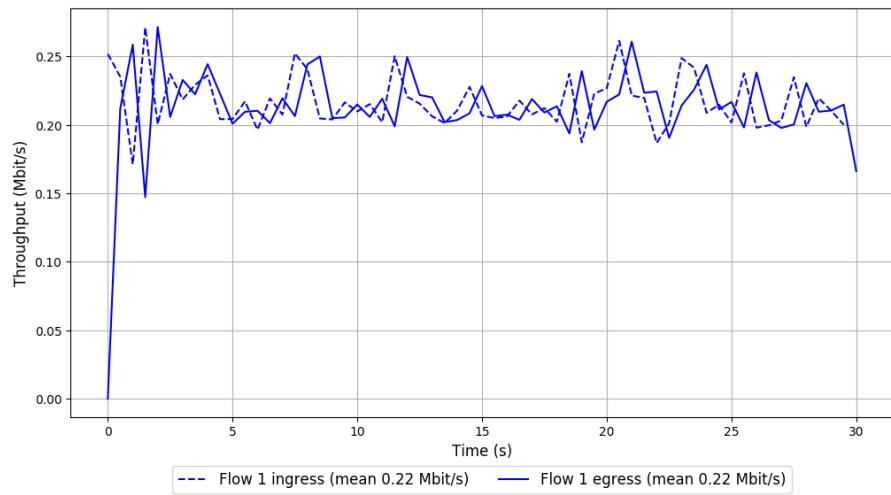


Run 2: Statistics of SCReAM

```
Start at: 2019-06-28 15:22:33
End at: 2019-06-28 15:23:03
Local clock offset: -0.263 ms
Remote clock offset: -0.259 ms

# Below is generated by plot.py at 2019-06-28 19:05:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.480 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.480 ms
Loss rate: 0.51%
```

Run 2: Report of SCReAM — Data Link

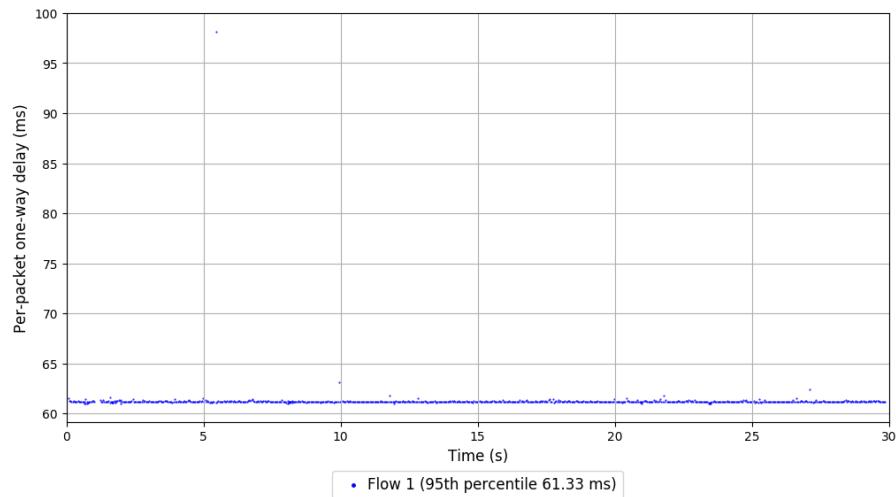
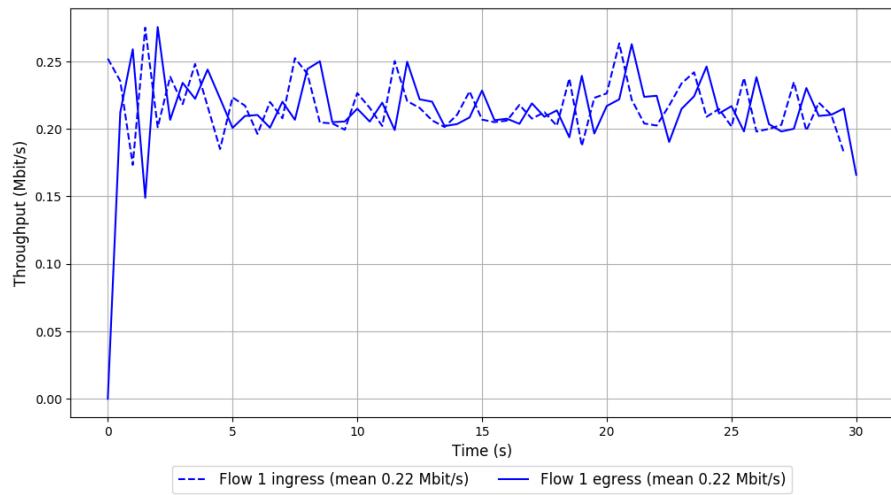


Run 3: Statistics of SCReAM

```
Start at: 2019-06-28 15:53:55
End at: 2019-06-28 15:54:25
Local clock offset: 0.369 ms
Remote clock offset: -0.089 ms

# Below is generated by plot.py at 2019-06-28 19:05:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.331 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.331 ms
Loss rate: 0.38%
```

Run 3: Report of SCReAM — Data Link

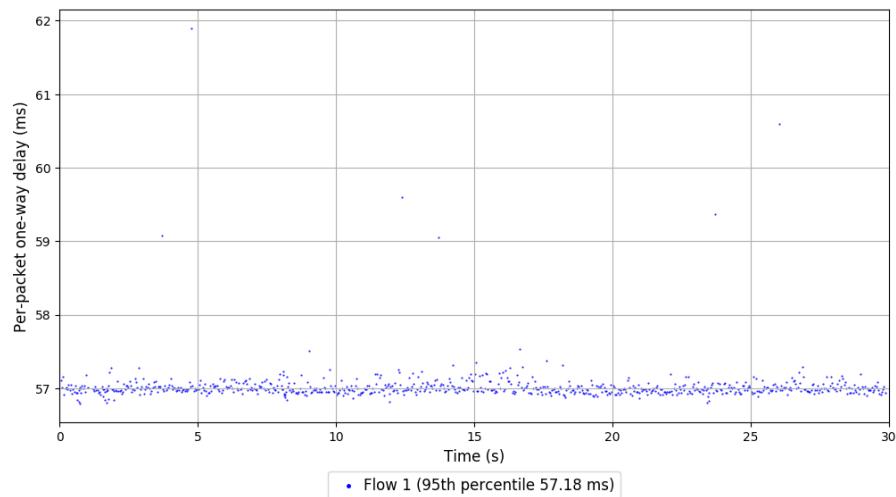
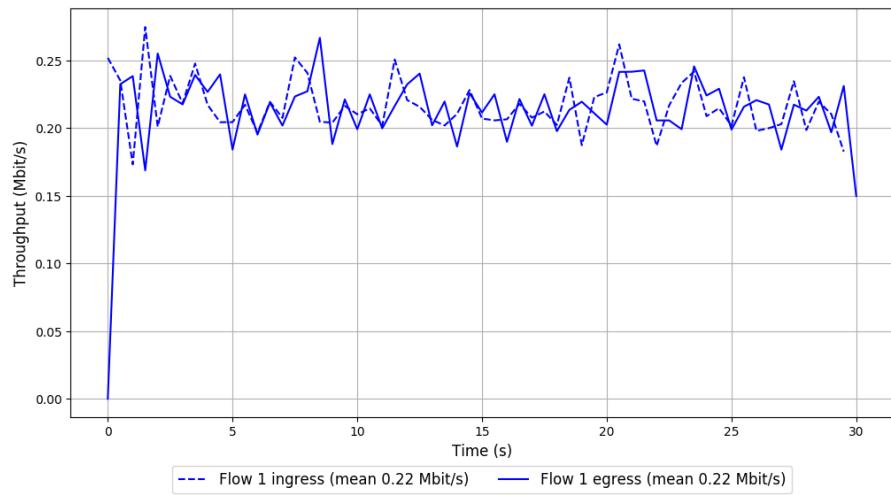


Run 4: Statistics of SCReAM

```
Start at: 2019-06-28 16:25:15
End at: 2019-06-28 16:25:45
Local clock offset: -0.513 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2019-06-28 19:05:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.181 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.181 ms
Loss rate: 0.38%
```

Run 4: Report of SCReAM — Data Link

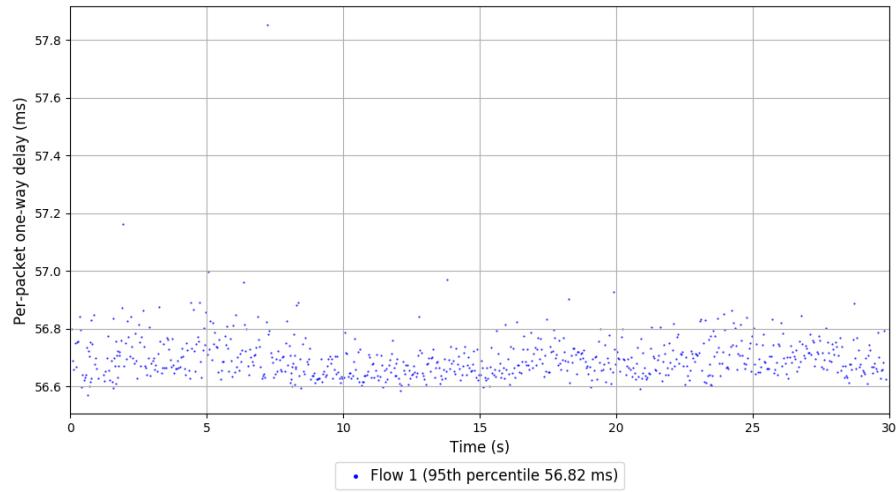
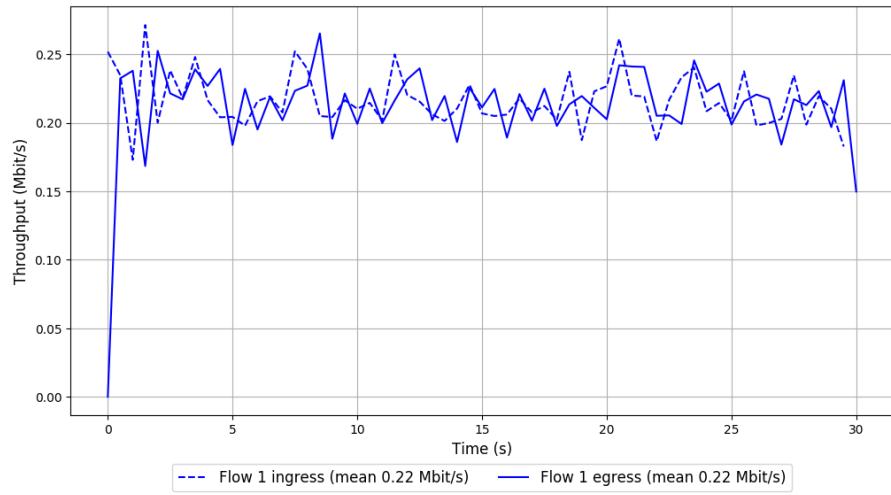


Run 5: Statistics of SCReAM

```
Start at: 2019-06-28 16:56:47
End at: 2019-06-28 16:57:17
Local clock offset: -0.207 ms
Remote clock offset: 0.149 ms

# Below is generated by plot.py at 2019-06-28 19:05:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.824 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.824 ms
Loss rate: 0.38%
```

Run 5: Report of SCReAM — Data Link

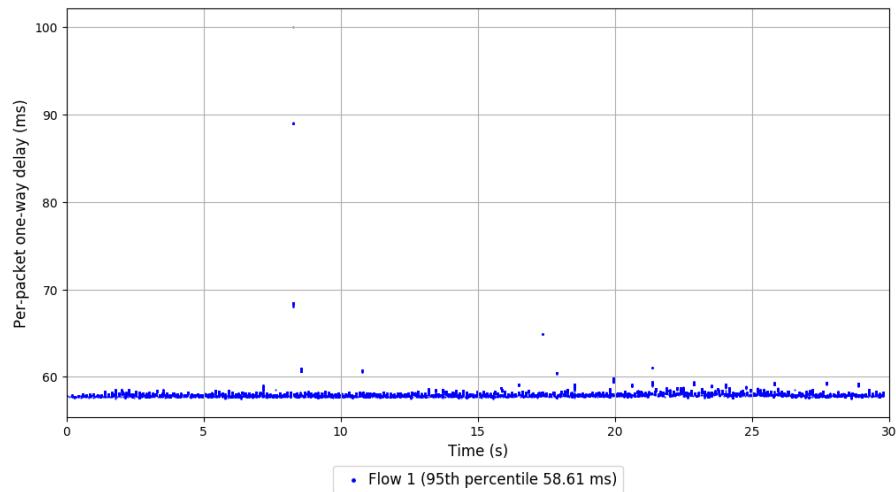
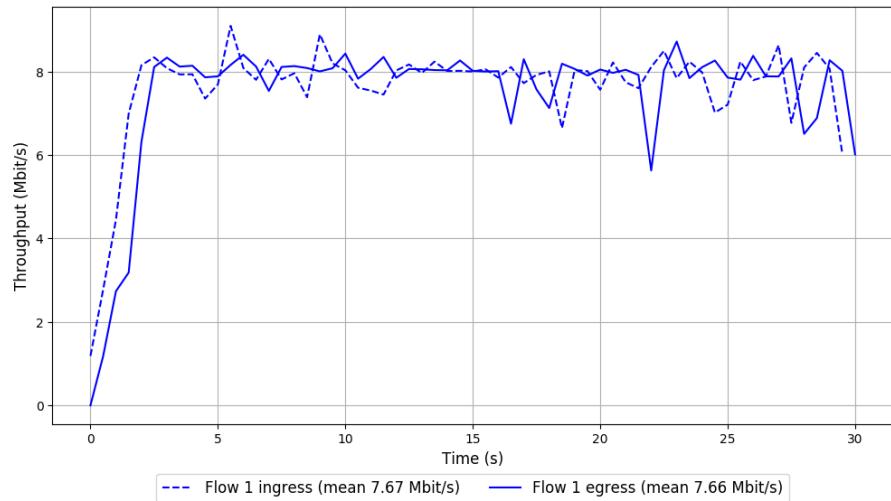


Run 1: Statistics of Sprout

```
Start at: 2019-06-28 14:52:19
End at: 2019-06-28 14:52:49
Local clock offset: 0.397 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2019-06-28 19:05:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 58.610 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 58.610 ms
Loss rate: 0.44%
```

Run 1: Report of Sprout — Data Link

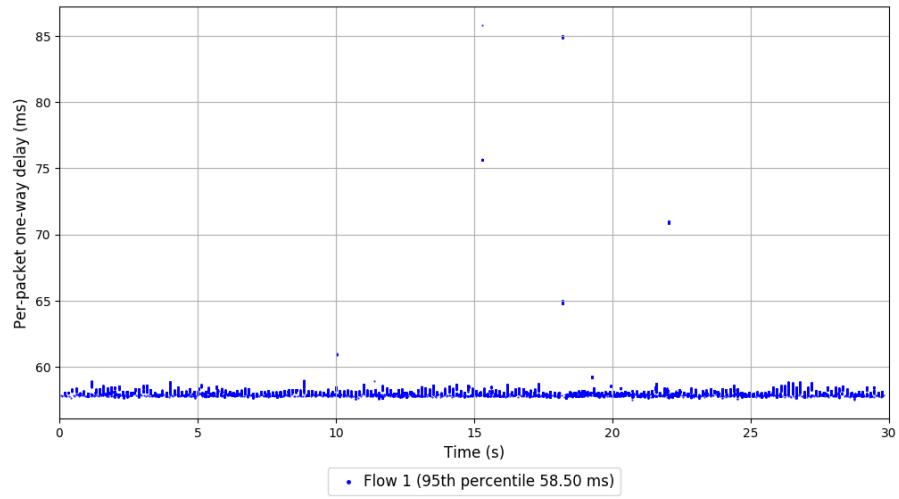
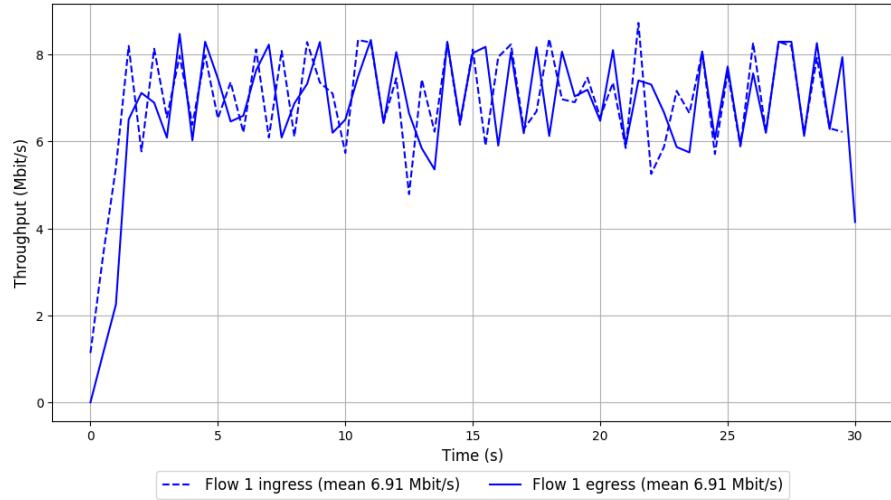


Run 2: Statistics of Sprout

```
Start at: 2019-06-28 15:23:41
End at: 2019-06-28 15:24:12
Local clock offset: 0.426 ms
Remote clock offset: -0.155 ms

# Below is generated by plot.py at 2019-06-28 19:05:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.91 Mbit/s
95th percentile per-packet one-way delay: 58.497 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 6.91 Mbit/s
95th percentile per-packet one-way delay: 58.497 ms
Loss rate: 0.50%
```

Run 2: Report of Sprout — Data Link

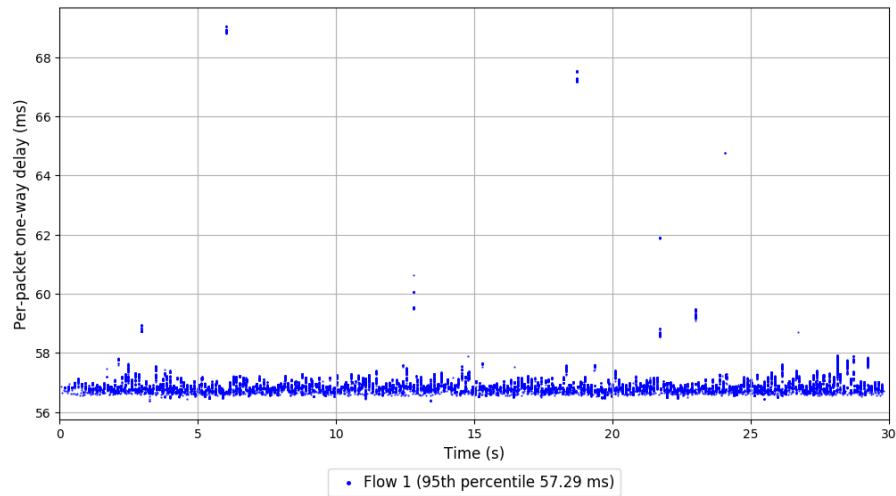
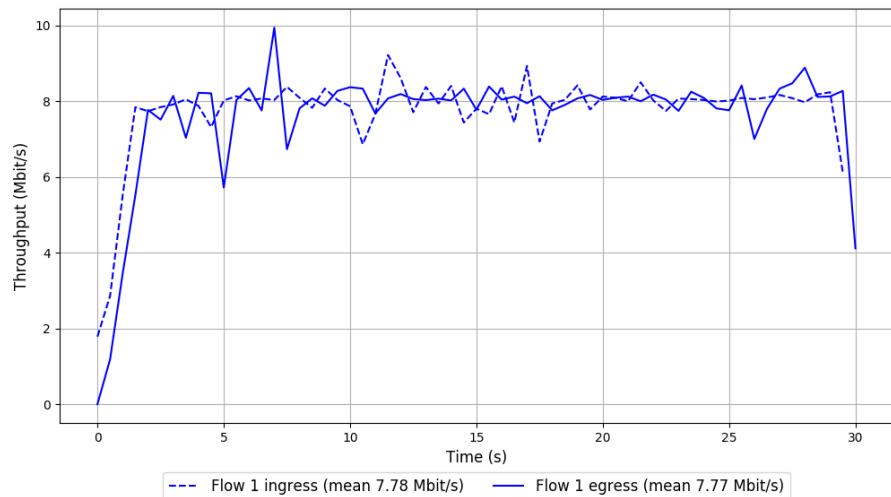


Run 3: Statistics of Sprout

```
Start at: 2019-06-28 15:55:03
End at: 2019-06-28 15:55:33
Local clock offset: -0.525 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2019-06-28 19:05:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.77 Mbit/s
95th percentile per-packet one-way delay: 57.290 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 7.77 Mbit/s
95th percentile per-packet one-way delay: 57.290 ms
Loss rate: 0.44%
```

Run 3: Report of Sprout — Data Link

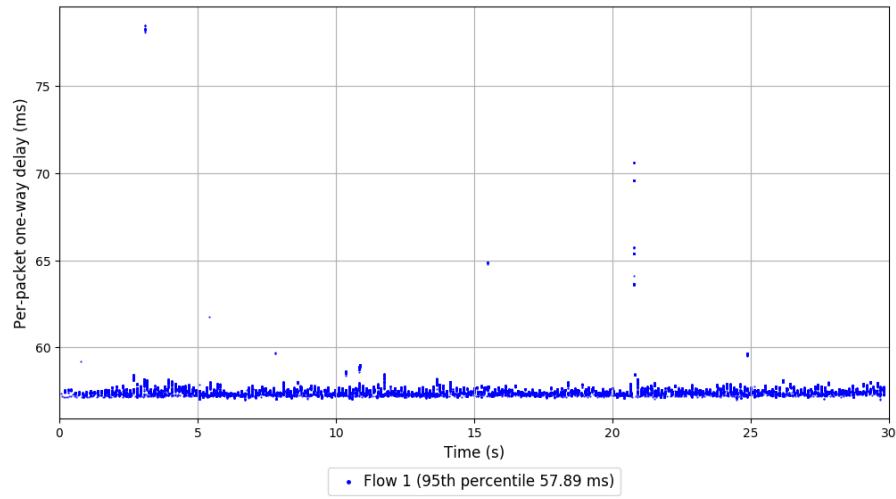
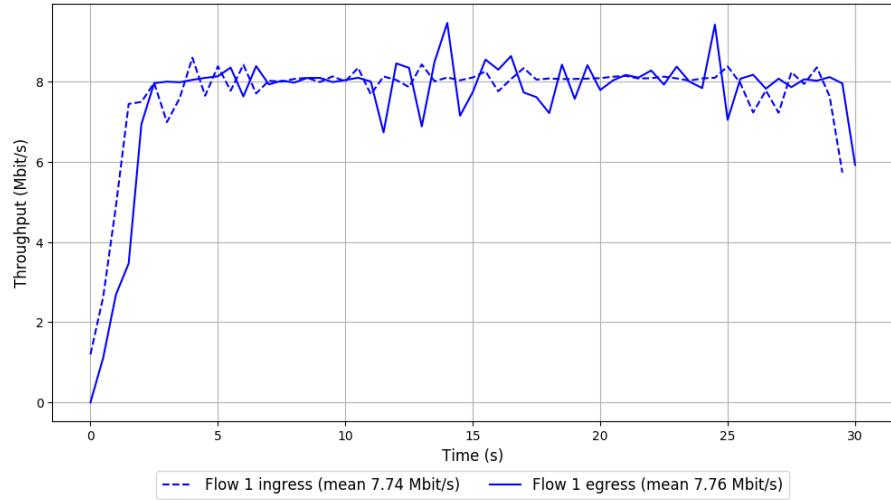


Run 4: Statistics of Sprout

```
Start at: 2019-06-28 16:26:24
End at: 2019-06-28 16:26:54
Local clock offset: 0.112 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-06-28 19:05:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.76 Mbit/s
95th percentile per-packet one-way delay: 57.893 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 7.76 Mbit/s
95th percentile per-packet one-way delay: 57.893 ms
Loss rate: 0.02%
```

Run 4: Report of Sprout — Data Link

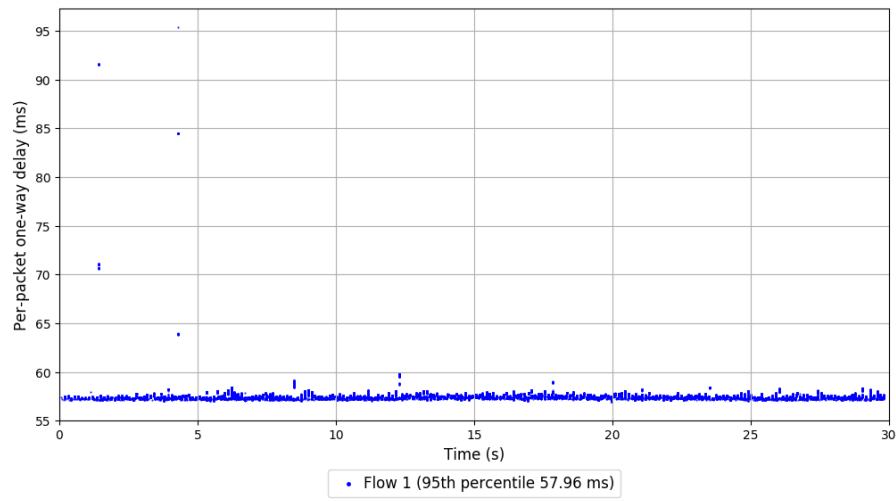
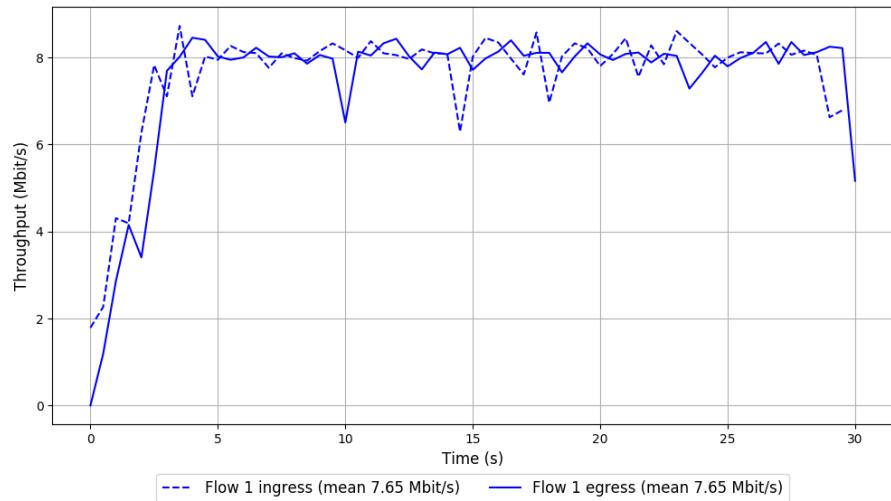


Run 5: Statistics of Sprout

```
Start at: 2019-06-28 16:57:55
End at: 2019-06-28 16:58:25
Local clock offset: 0.11 ms
Remote clock offset: -0.098 ms

# Below is generated by plot.py at 2019-06-28 19:05:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.65 Mbit/s
95th percentile per-packet one-way delay: 57.957 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 7.65 Mbit/s
95th percentile per-packet one-way delay: 57.957 ms
Loss rate: 0.41%
```

Run 5: Report of Sprout — Data Link

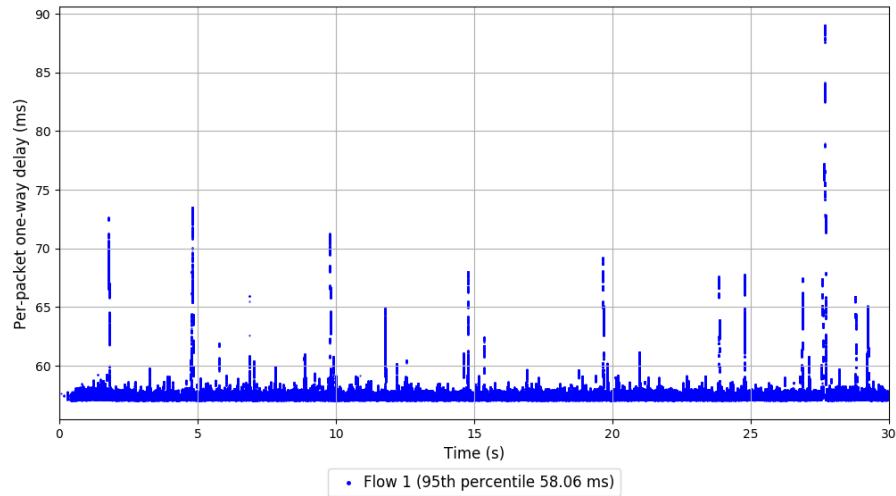
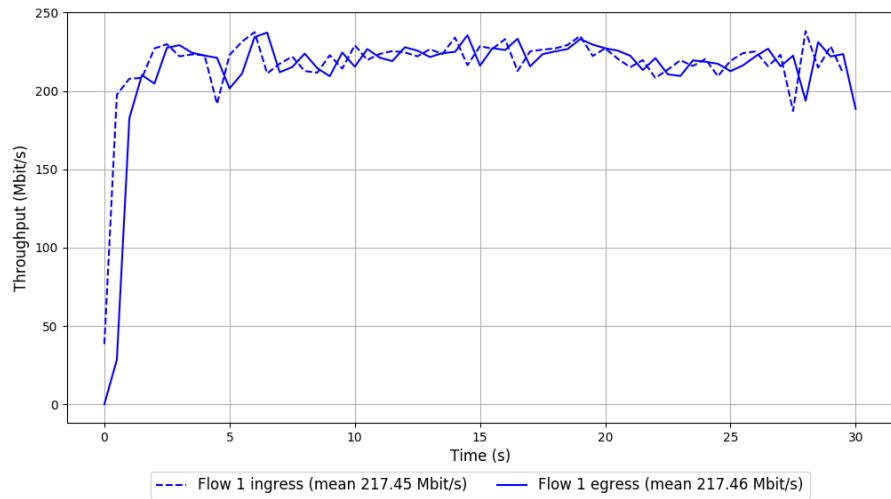


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-06-28 15:10:40
End at: 2019-06-28 15:11:10
Local clock offset: 0.125 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2019-06-28 19:09:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.46 Mbit/s
95th percentile per-packet one-way delay: 58.065 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 217.46 Mbit/s
95th percentile per-packet one-way delay: 58.065 ms
Loss rate: 0.37%
```

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

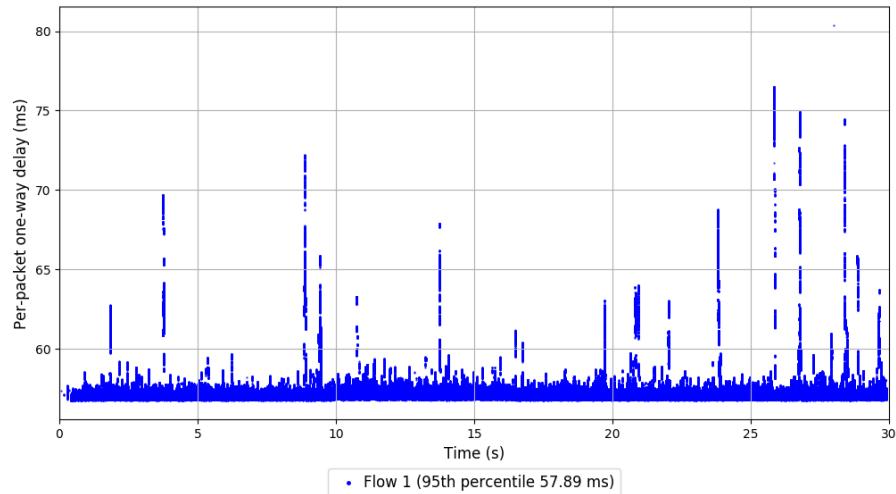
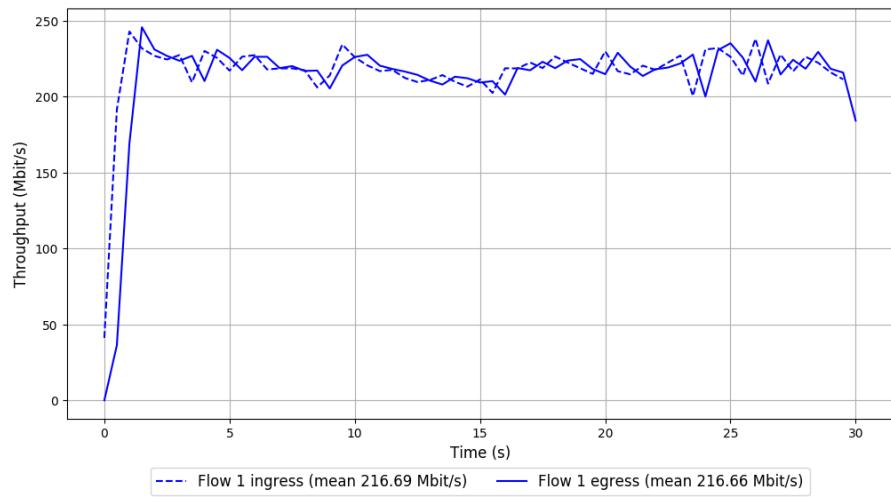


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-06-28 15:41:58
End at: 2019-06-28 15:42:28
Local clock offset: -0.073 ms
Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2019-06-28 19:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.66 Mbit/s
95th percentile per-packet one-way delay: 57.888 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 216.66 Mbit/s
95th percentile per-packet one-way delay: 57.888 ms
Loss rate: 0.41%
```

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

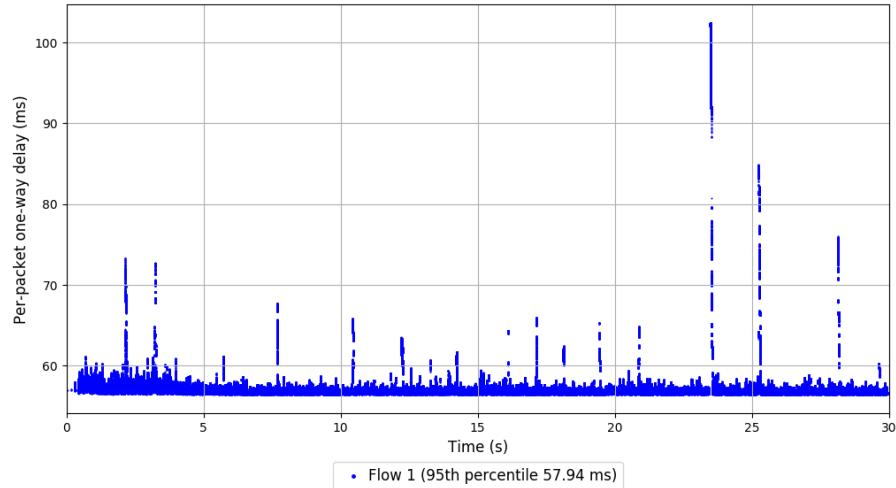
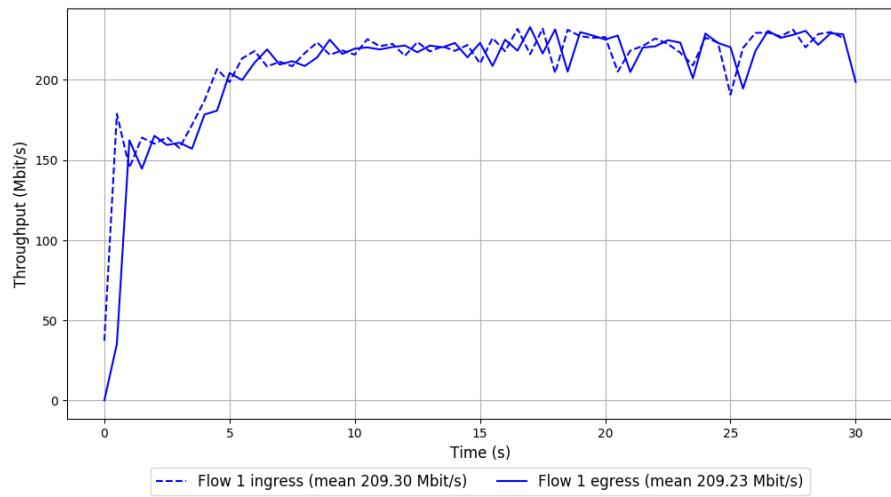


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-06-28 16:13:03
End at: 2019-06-28 16:13:33
Local clock offset: -0.306 ms
Remote clock offset: 0.182 ms

# Below is generated by plot.py at 2019-06-28 19:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 209.23 Mbit/s
95th percentile per-packet one-way delay: 57.937 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 209.23 Mbit/s
95th percentile per-packet one-way delay: 57.937 ms
Loss rate: 0.43%
```

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

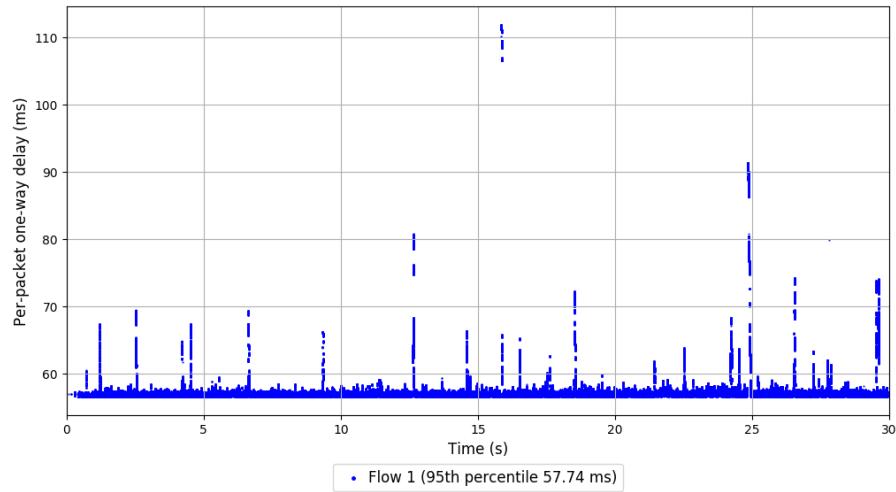
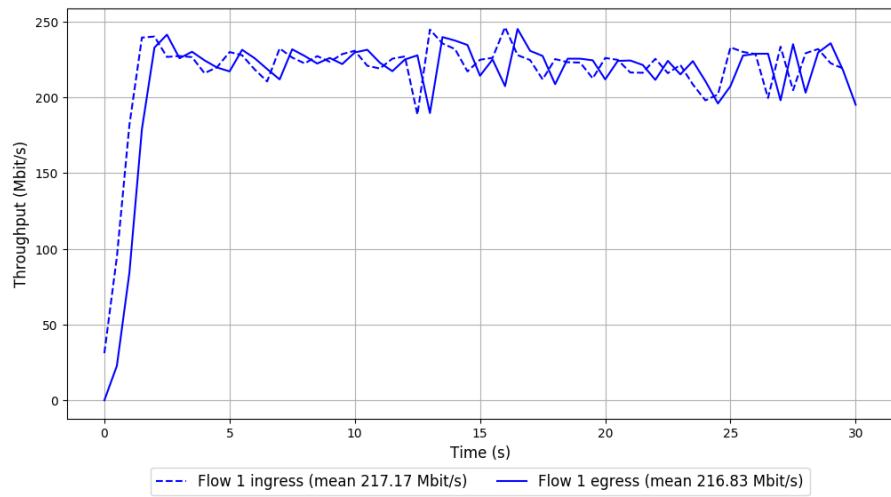


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-06-28 16:44:44
End at: 2019-06-28 16:45:14
Local clock offset: 0.078 ms
Remote clock offset: 0.397 ms

# Below is generated by plot.py at 2019-06-28 19:09:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.83 Mbit/s
95th percentile per-packet one-way delay: 57.745 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 216.83 Mbit/s
95th percentile per-packet one-way delay: 57.745 ms
Loss rate: 0.54%
```

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

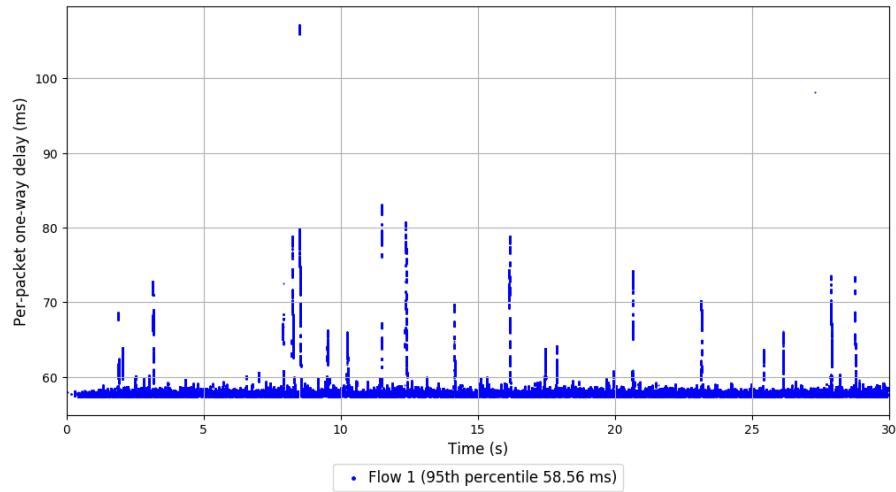
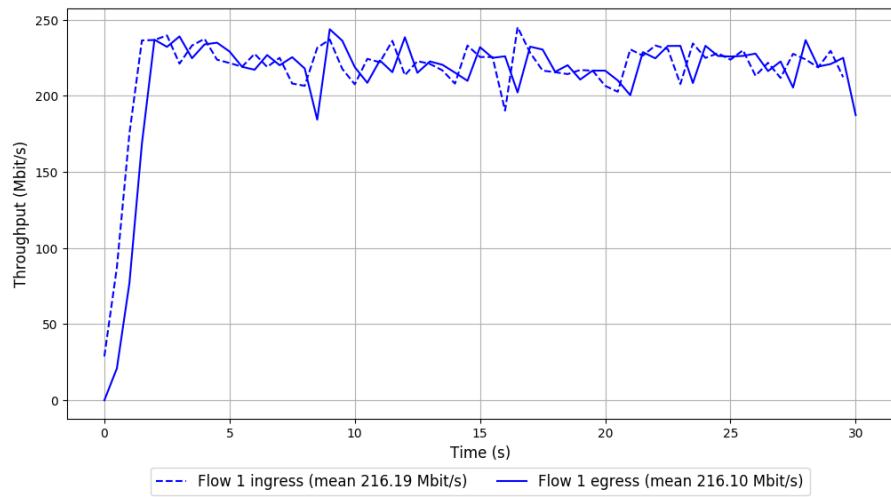


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-06-28 17:15:48
End at: 2019-06-28 17:16:18
Local clock offset: 0.183 ms
Remote clock offset: -0.155 ms

# Below is generated by plot.py at 2019-06-28 19:09:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.10 Mbit/s
95th percentile per-packet one-way delay: 58.559 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 216.10 Mbit/s
95th percentile per-packet one-way delay: 58.559 ms
Loss rate: 0.43%
```

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

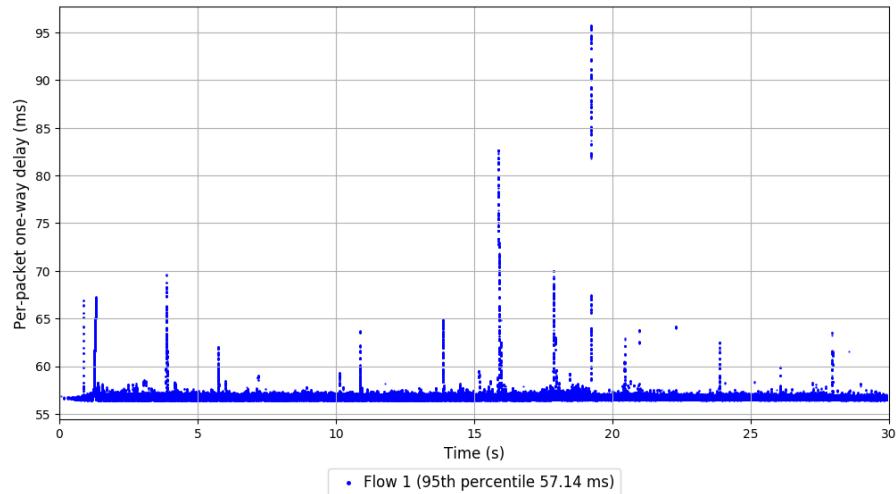
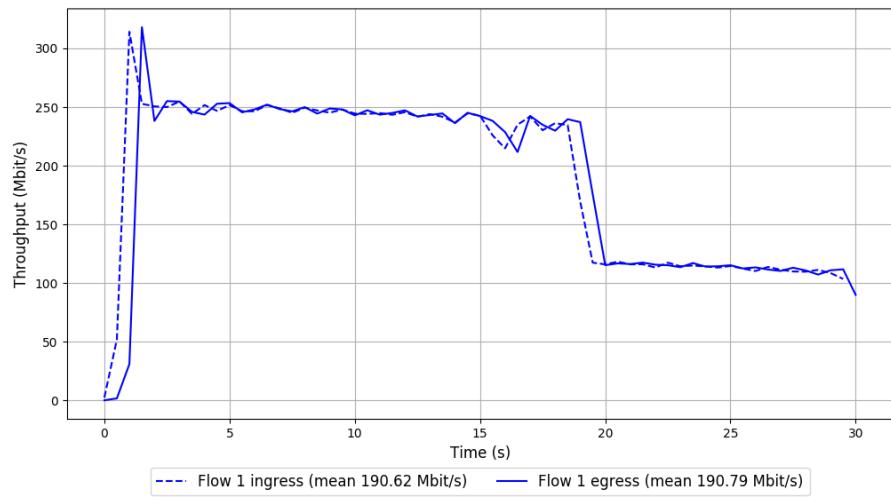


Run 1: Statistics of TCP Vegas

```
Start at: 2019-06-28 15:13:41
End at: 2019-06-28 15:14:11
Local clock offset: -0.367 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2019-06-28 19:09:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.79 Mbit/s
95th percentile per-packet one-way delay: 57.140 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 190.79 Mbit/s
95th percentile per-packet one-way delay: 57.140 ms
Loss rate: 0.29%
```

Run 1: Report of TCP Vegas — Data Link

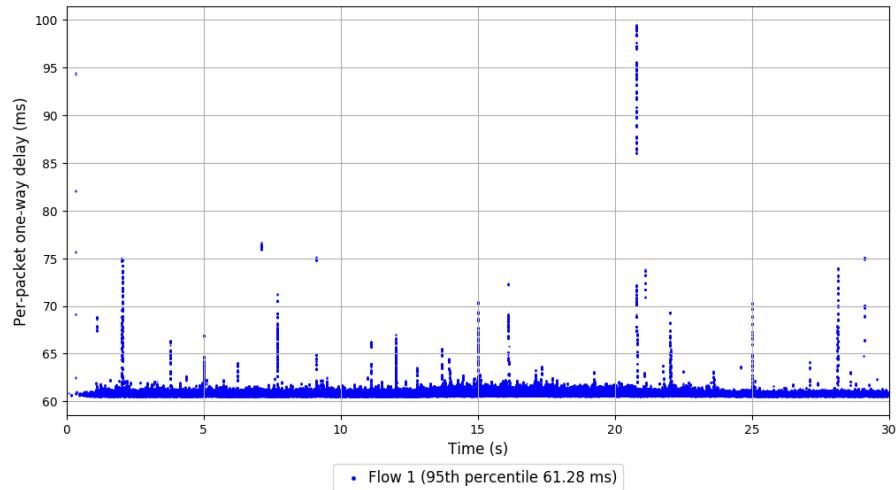
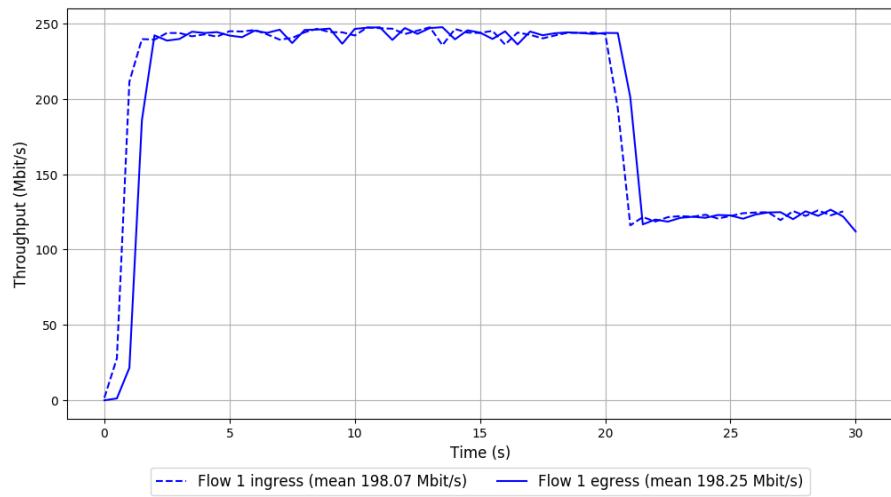


Run 2: Statistics of TCP Vegas

```
Start at: 2019-06-28 15:45:00
End at: 2019-06-28 15:45:30
Local clock offset: 0.34 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2019-06-28 19:09:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 198.25 Mbit/s
95th percentile per-packet one-way delay: 61.284 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 198.25 Mbit/s
95th percentile per-packet one-way delay: 61.284 ms
Loss rate: 0.31%
```

Run 2: Report of TCP Vegas — Data Link

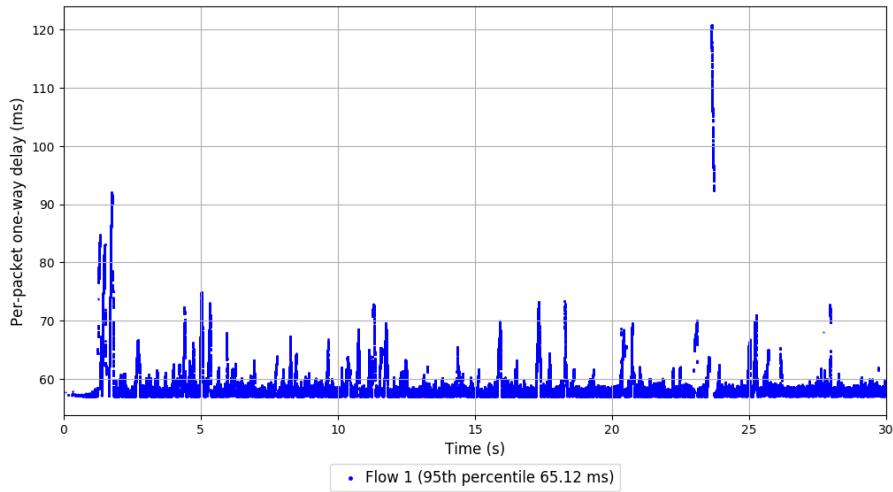
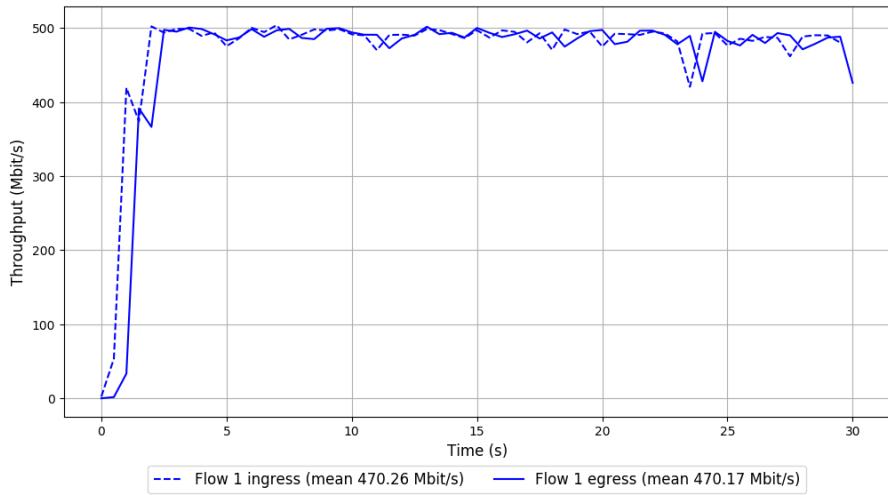


Run 3: Statistics of TCP Vegas

```
Start at: 2019-06-28 16:16:03
End at: 2019-06-28 16:16:33
Local clock offset: -0.102 ms
Remote clock offset: -0.202 ms

# Below is generated by plot.py at 2019-06-28 19:15:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 470.17 Mbit/s
95th percentile per-packet one-way delay: 65.118 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 470.17 Mbit/s
95th percentile per-packet one-way delay: 65.118 ms
Loss rate: 0.40%
```

Run 3: Report of TCP Vegas — Data Link

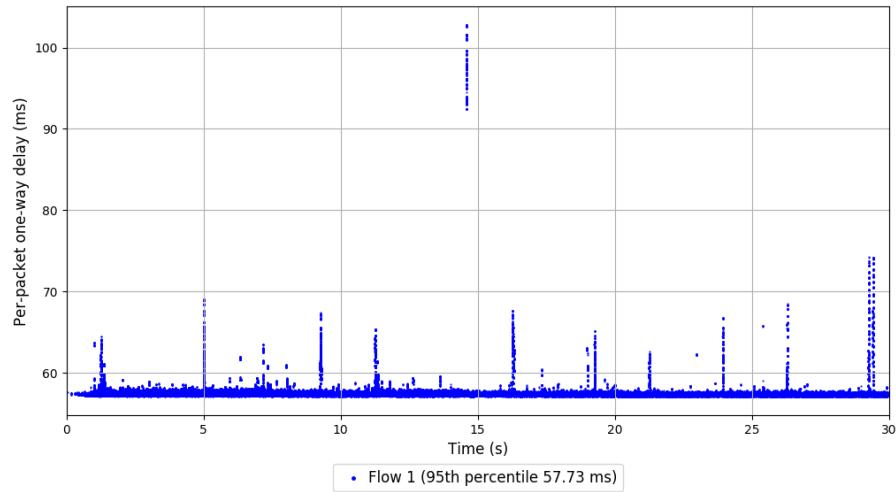
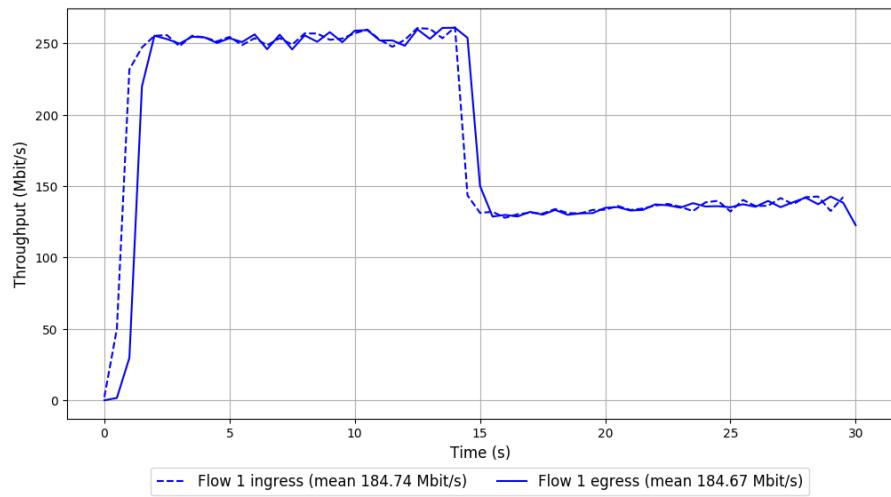


Run 4: Statistics of TCP Vegas

```
Start at: 2019-06-28 16:47:45
End at: 2019-06-28 16:48:15
Local clock offset: -0.072 ms
Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2019-06-28 19:15:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.67 Mbit/s
95th percentile per-packet one-way delay: 57.726 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 184.67 Mbit/s
95th percentile per-packet one-way delay: 57.726 ms
Loss rate: 0.42%
```

Run 4: Report of TCP Vegas — Data Link

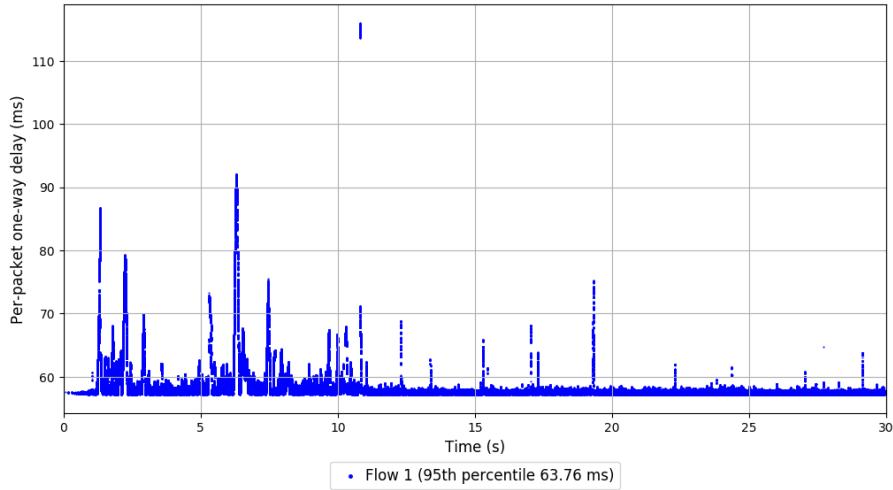
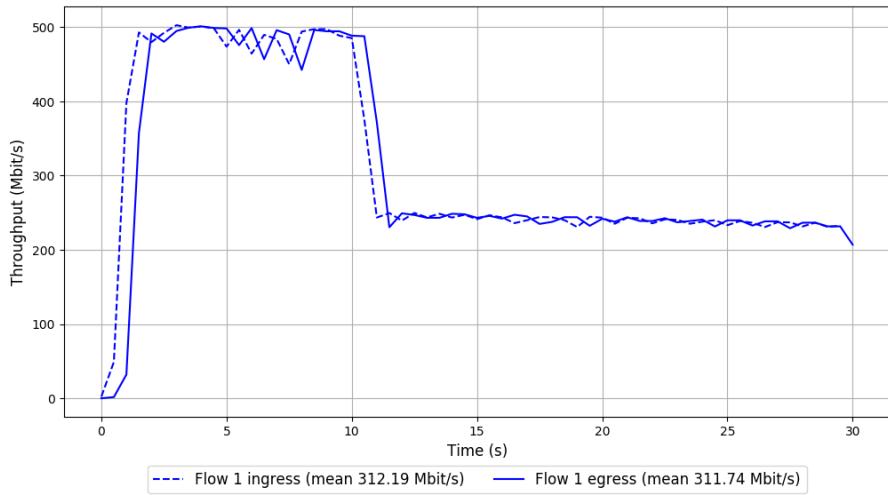


Run 5: Statistics of TCP Vegas

```
Start at: 2019-06-28 17:18:49
End at: 2019-06-28 17:19:19
Local clock offset: 0.005 ms
Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2019-06-28 19:15:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 311.74 Mbit/s
95th percentile per-packet one-way delay: 63.756 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 311.74 Mbit/s
95th percentile per-packet one-way delay: 63.756 ms
Loss rate: 0.53%
```

Run 5: Report of TCP Vegas — Data Link

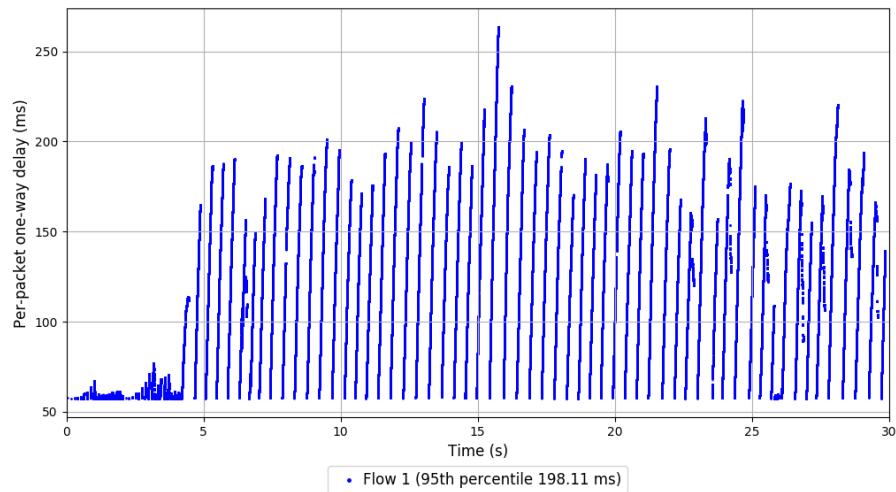
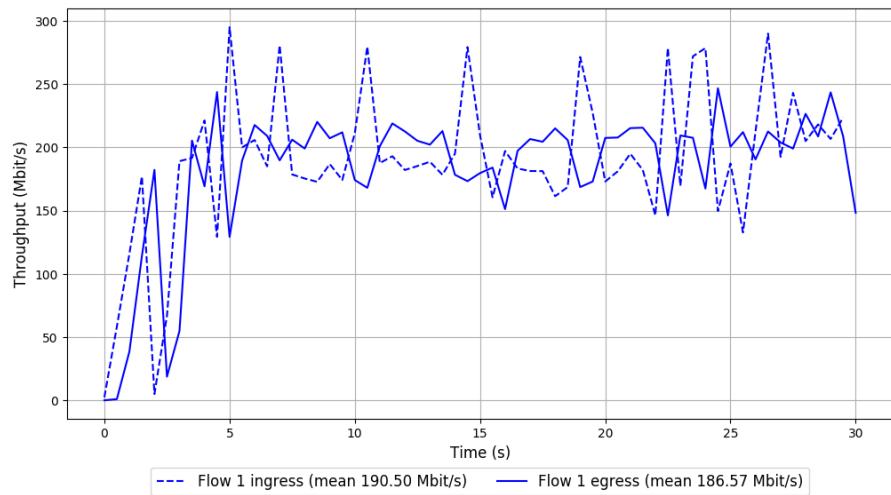


Run 1: Statistics of Verus

```
Start at: 2019-06-28 15:16:23
End at: 2019-06-28 15:16:53
Local clock offset: -0.062 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2019-06-28 19:16:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.57 Mbit/s
95th percentile per-packet one-way delay: 198.111 ms
Loss rate: 2.20%
-- Flow 1:
Average throughput: 186.57 Mbit/s
95th percentile per-packet one-way delay: 198.111 ms
Loss rate: 2.20%
```

Run 1: Report of Verus — Data Link

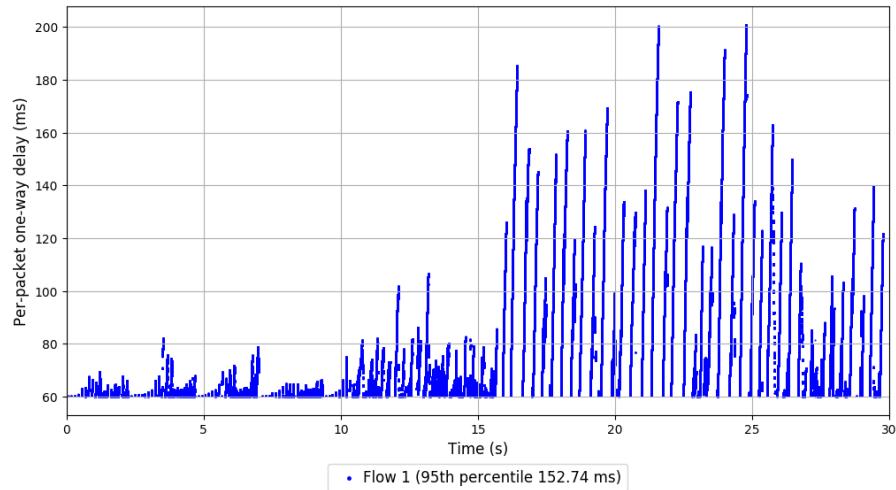
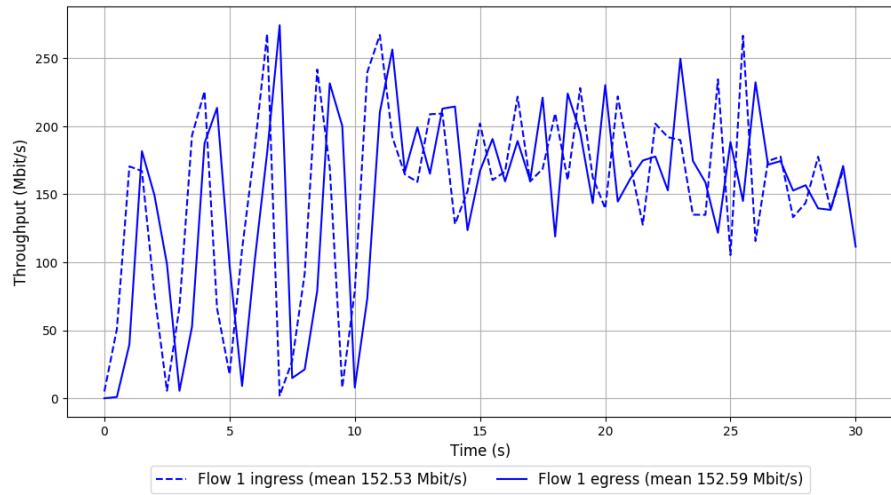


Run 2: Statistics of Verus

```
Start at: 2019-06-28 15:47:49
End at: 2019-06-28 15:48:19
Local clock offset: -0.075 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2019-06-28 19:16:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 152.59 Mbit/s
95th percentile per-packet one-way delay: 152.736 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 152.59 Mbit/s
95th percentile per-packet one-way delay: 152.736 ms
Loss rate: 0.76%
```

Run 2: Report of Verus — Data Link

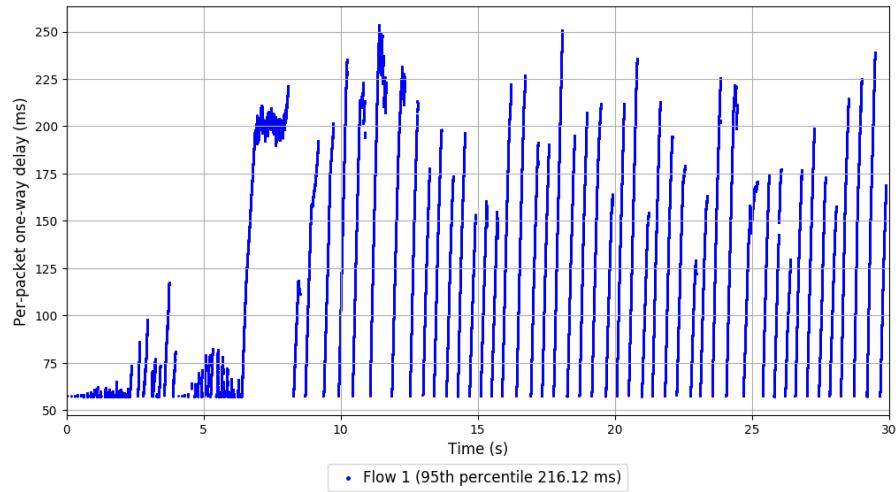
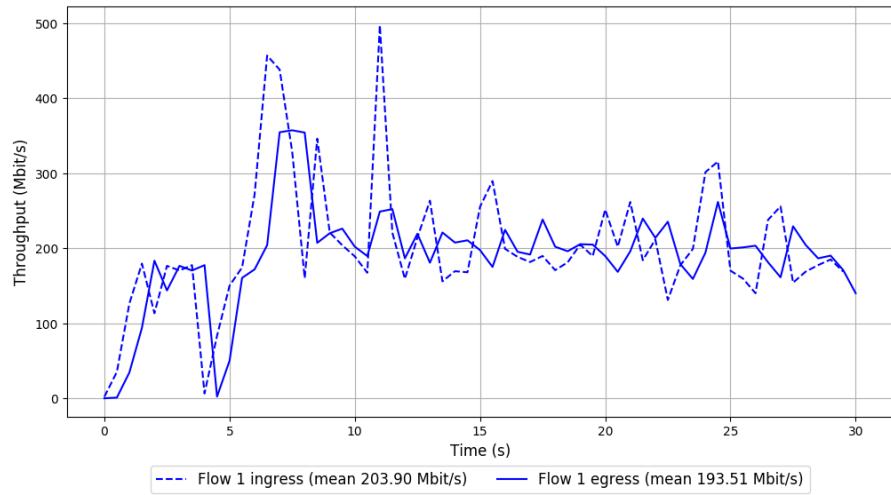


Run 3: Statistics of Verus

```
Start at: 2019-06-28 16:19:05
End at: 2019-06-28 16:19:35
Local clock offset: -0.109 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2019-06-28 19:16:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 193.51 Mbit/s
95th percentile per-packet one-way delay: 216.121 ms
Loss rate: 4.84%
-- Flow 1:
Average throughput: 193.51 Mbit/s
95th percentile per-packet one-way delay: 216.121 ms
Loss rate: 4.84%
```

Run 3: Report of Verus — Data Link

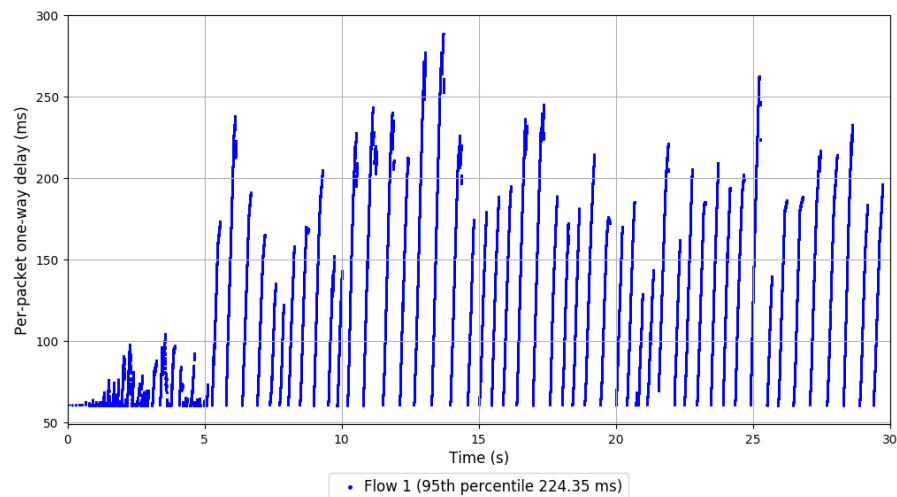
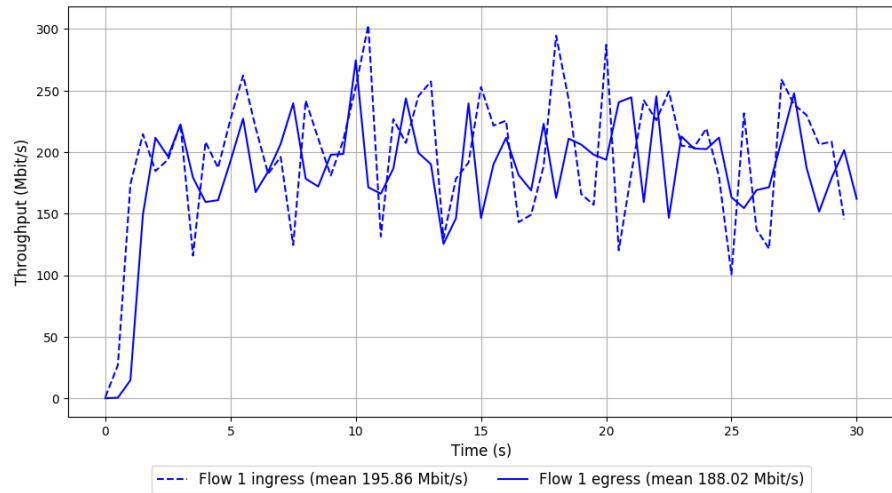


Run 4: Statistics of Verus

```
Start at: 2019-06-28 16:50:39
End at: 2019-06-28 16:51:09
Local clock offset: -0.498 ms
Remote clock offset: -0.155 ms

# Below is generated by plot.py at 2019-06-28 19:16:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 188.02 Mbit/s
95th percentile per-packet one-way delay: 224.348 ms
Loss rate: 4.99%
-- Flow 1:
Average throughput: 188.02 Mbit/s
95th percentile per-packet one-way delay: 224.348 ms
Loss rate: 4.99%
```

Run 4: Report of Verus — Data Link

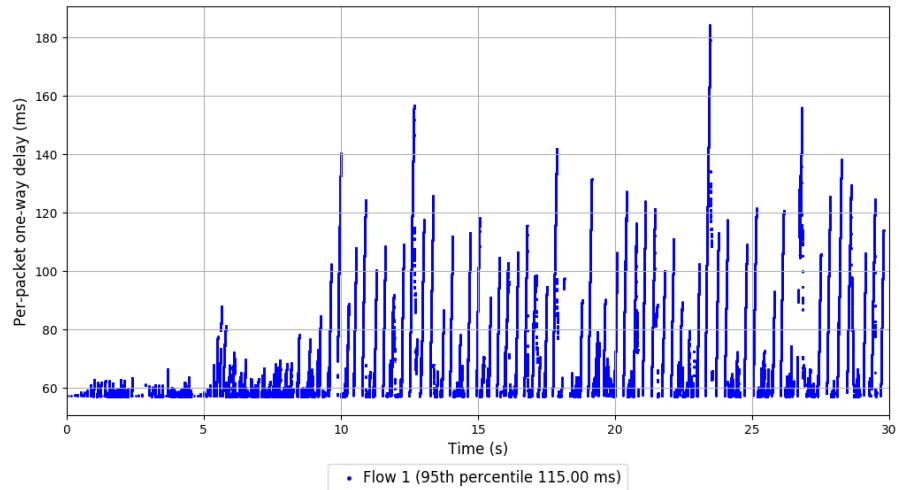
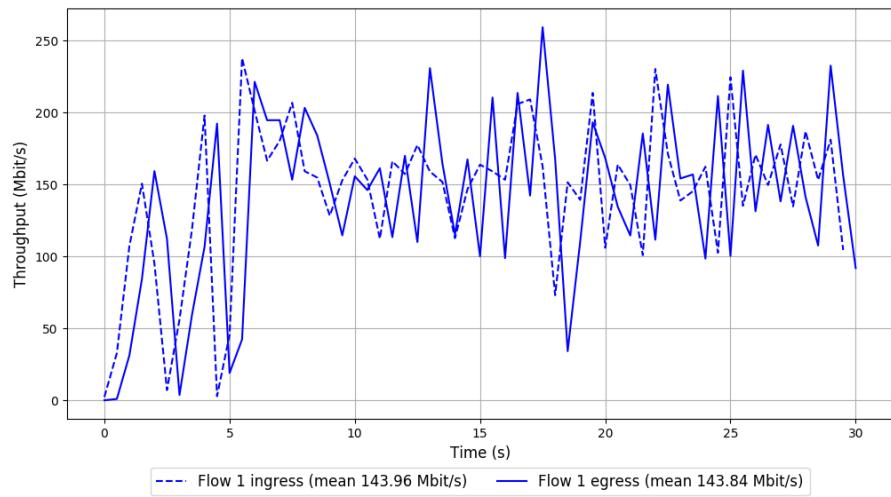


Run 5: Statistics of Verus

```
Start at: 2019-06-28 17:21:42
End at: 2019-06-28 17:22:12
Local clock offset: -0.217 ms
Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2019-06-28 19:16:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 143.84 Mbit/s
95th percentile per-packet one-way delay: 115.002 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 143.84 Mbit/s
95th percentile per-packet one-way delay: 115.002 ms
Loss rate: 0.83%
```

Run 5: Report of Verus — Data Link

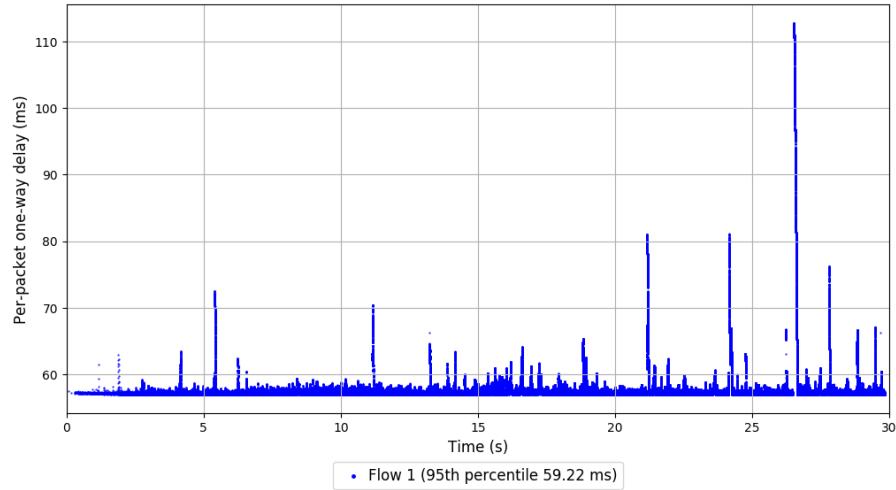
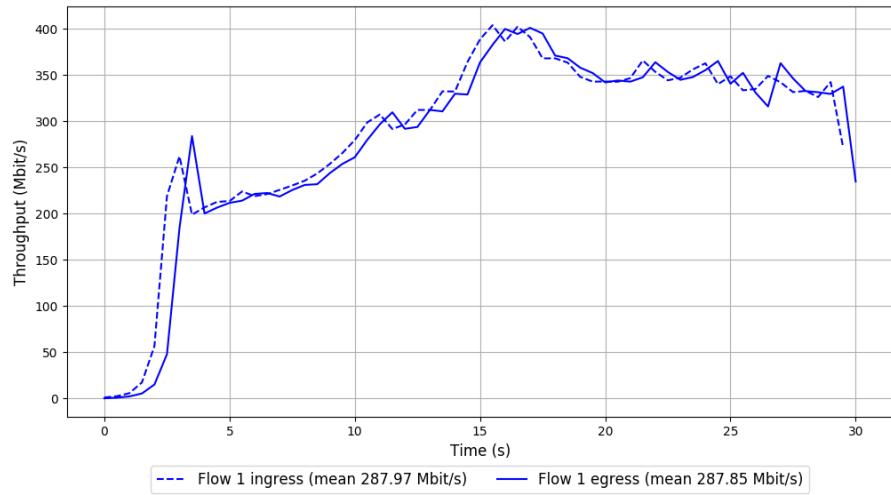


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-06-28 15:08:00
End at: 2019-06-28 15:08:30
Local clock offset: -0.083 ms
Remote clock offset: -0.219 ms

# Below is generated by plot.py at 2019-06-28 19:16:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 287.85 Mbit/s
95th percentile per-packet one-way delay: 59.218 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 287.85 Mbit/s
95th percentile per-packet one-way delay: 59.218 ms
Loss rate: 0.44%
```

Run 1: Report of PCC-Vivace — Data Link

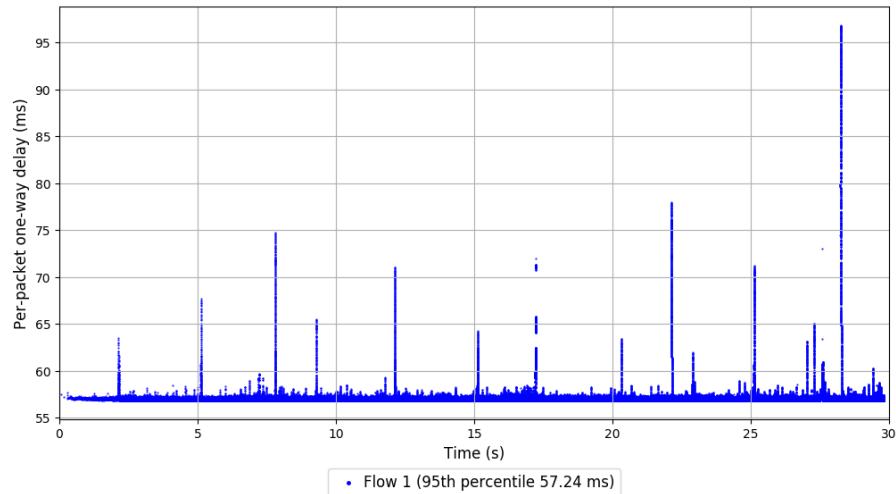
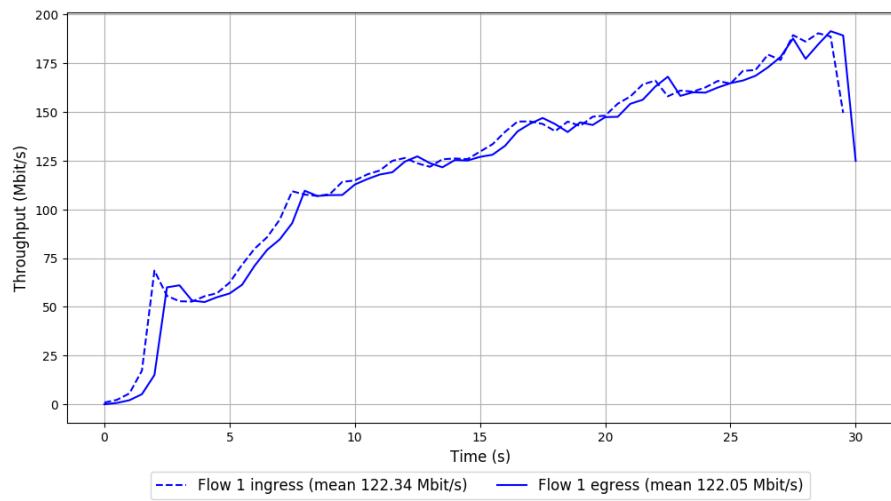


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-06-28 15:39:29
End at: 2019-06-28 15:39:59
Local clock offset: -0.048 ms
Remote clock offset: -0.226 ms

# Below is generated by plot.py at 2019-06-28 19:16:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 122.05 Mbit/s
95th percentile per-packet one-way delay: 57.245 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 122.05 Mbit/s
95th percentile per-packet one-way delay: 57.245 ms
Loss rate: 0.63%
```

Run 2: Report of PCC-Vivace — Data Link

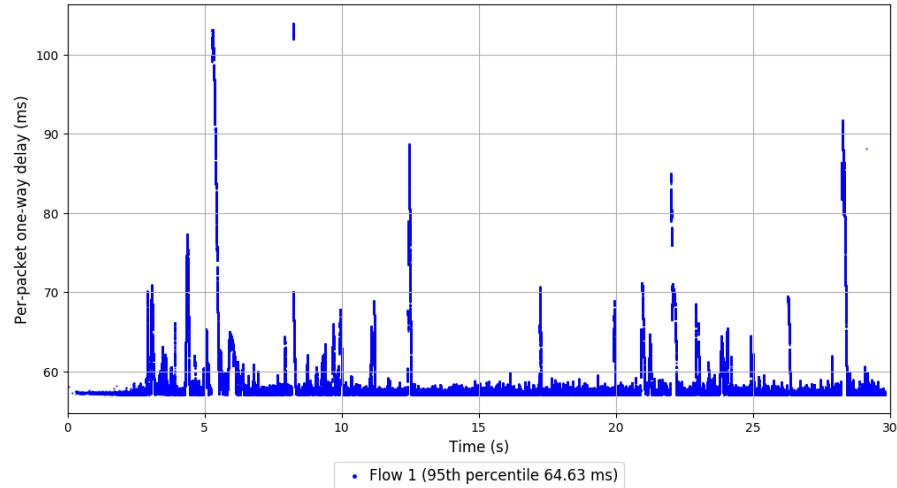
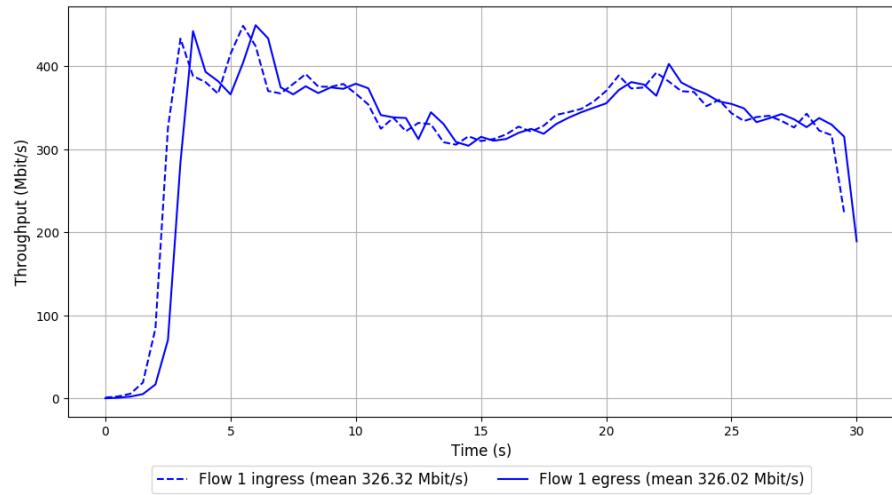


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-06-28 16:10:22
End at: 2019-06-28 16:10:52
Local clock offset: -0.086 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2019-06-28 19:17:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 326.02 Mbit/s
95th percentile per-packet one-way delay: 64.630 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 326.02 Mbit/s
95th percentile per-packet one-way delay: 64.630 ms
Loss rate: 0.49%
```

Run 3: Report of PCC-Vivace — Data Link

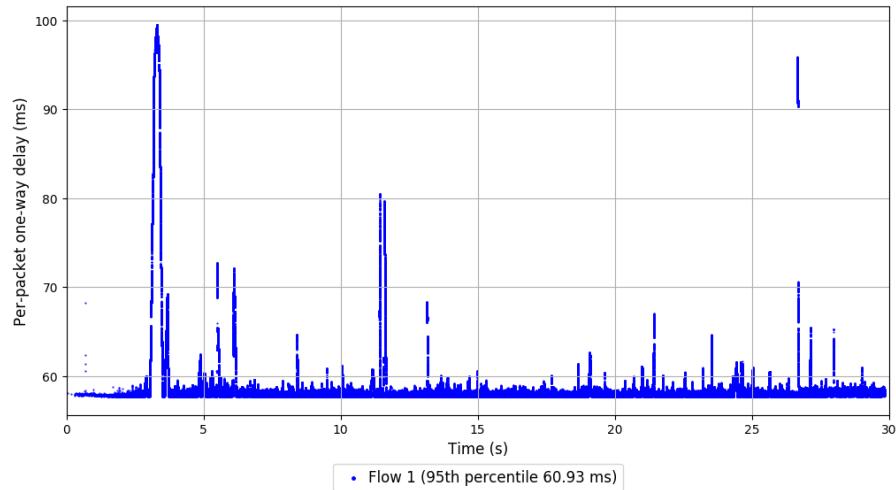
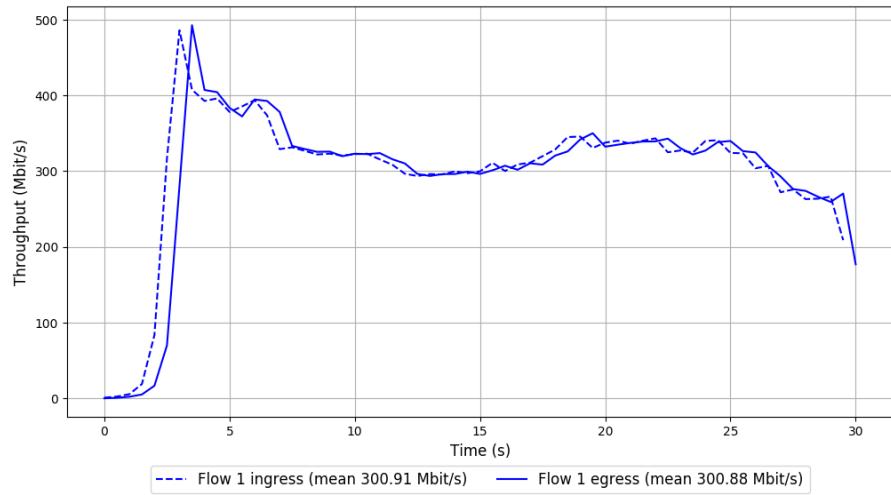


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-06-28 16:42:03
End at: 2019-06-28 16:42:33
Local clock offset: 0.175 ms
Remote clock offset: -0.409 ms

# Below is generated by plot.py at 2019-06-28 19:17:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 300.88 Mbit/s
95th percentile per-packet one-way delay: 60.934 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 300.88 Mbit/s
95th percentile per-packet one-way delay: 60.934 ms
Loss rate: 0.41%
```

Run 4: Report of PCC-Vivace — Data Link

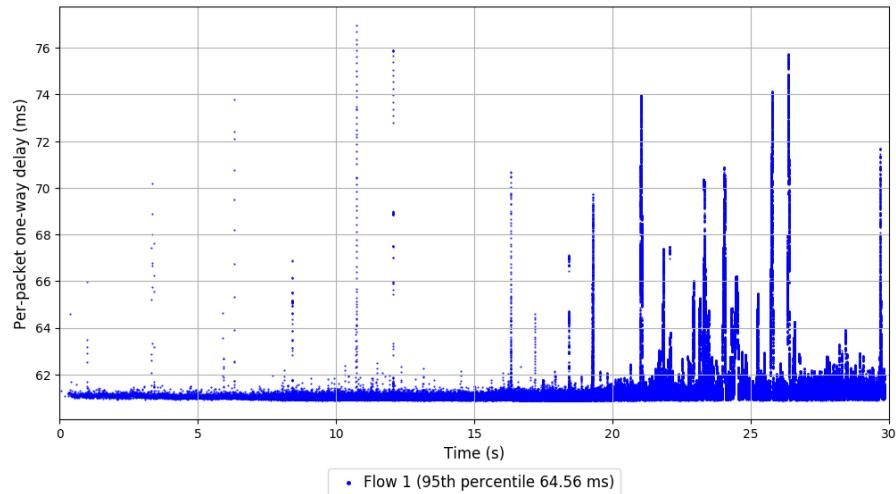
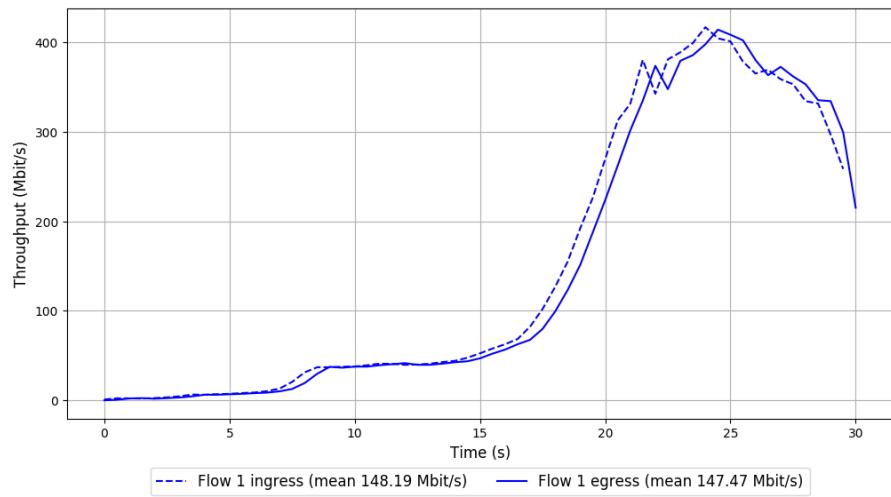


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-06-28 17:13:18
End at: 2019-06-28 17:13:48
Local clock offset: 0.347 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2019-06-28 19:17:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 147.47 Mbit/s
95th percentile per-packet one-way delay: 64.562 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 147.47 Mbit/s
95th percentile per-packet one-way delay: 64.562 ms
Loss rate: 0.89%
```

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

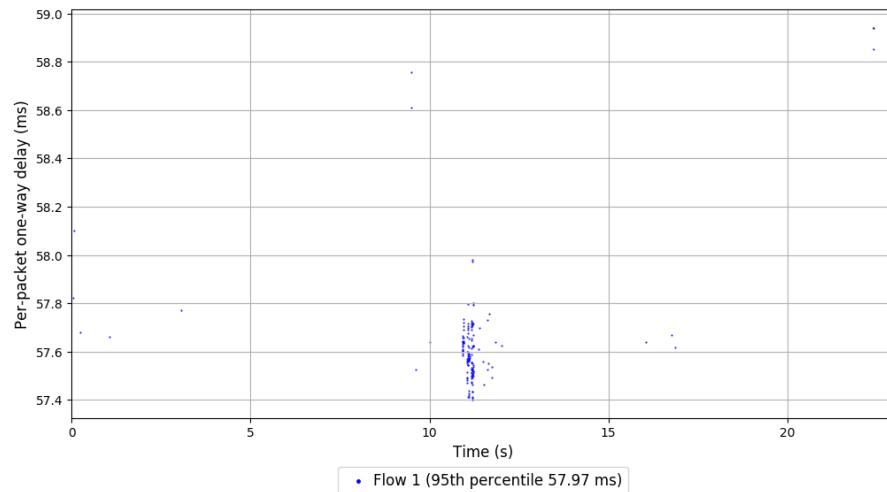
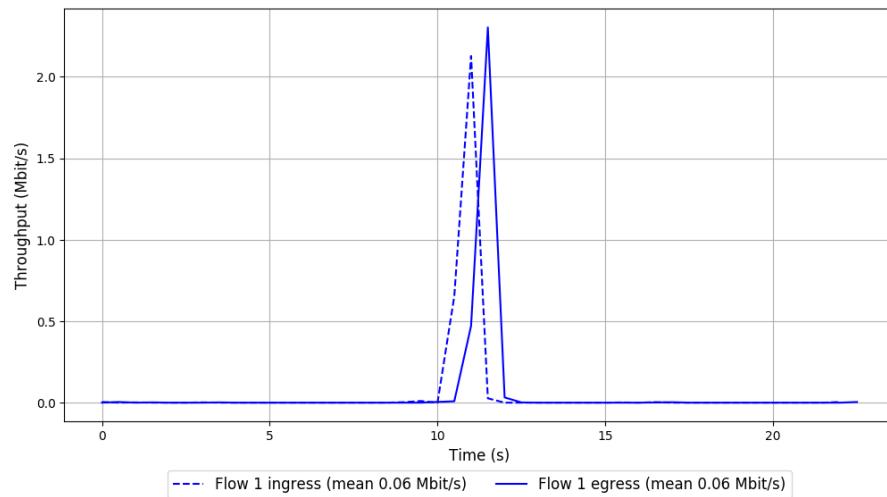
Start at: 2019-06-28 15:04:14

End at: 2019-06-28 15:04:44

Local clock offset: 0.397 ms

Remote clock offset: -0.357 ms

Run 1: Report of WebRTC media — Data Link

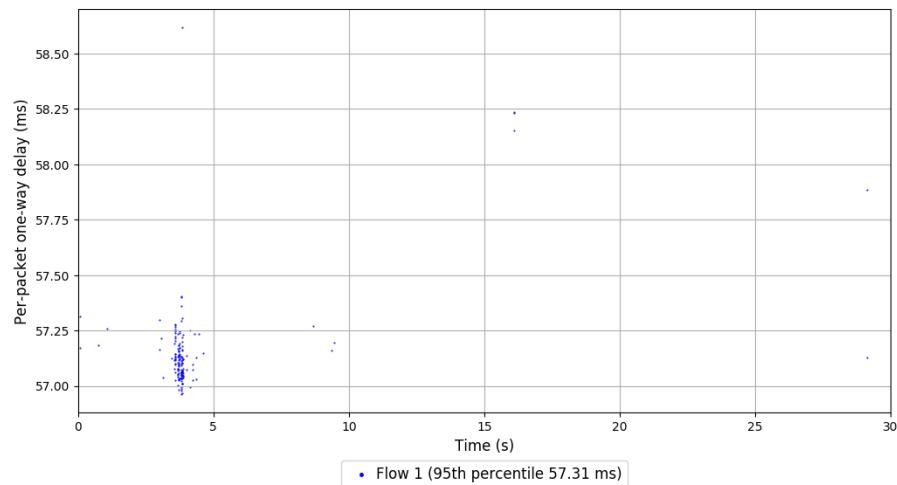
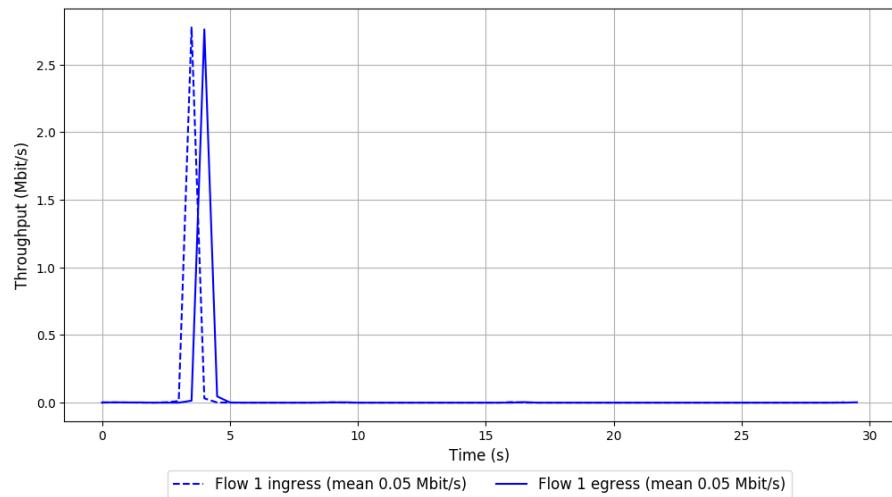


Run 2: Statistics of WebRTC media

```
Start at: 2019-06-28 15:35:46
End at: 2019-06-28 15:36:16
Local clock offset: -0.075 ms
Remote clock offset: -0.268 ms

# Below is generated by plot.py at 2019-06-28 19:17:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.315 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.315 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

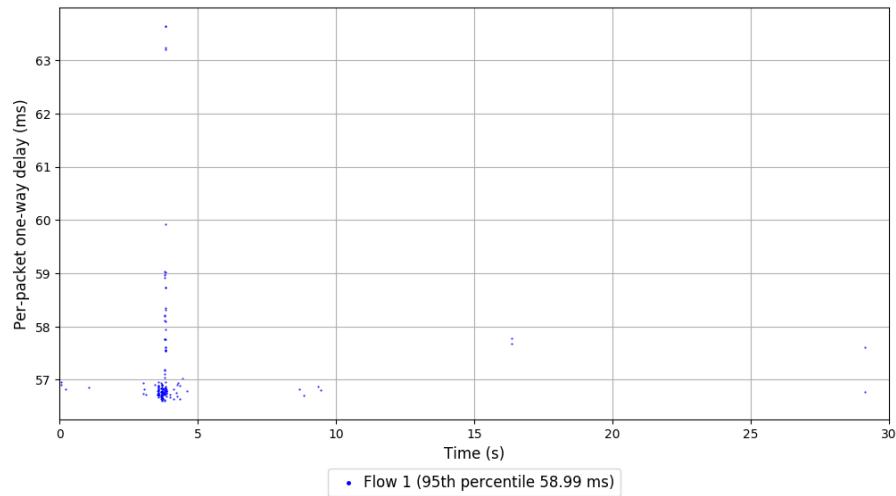
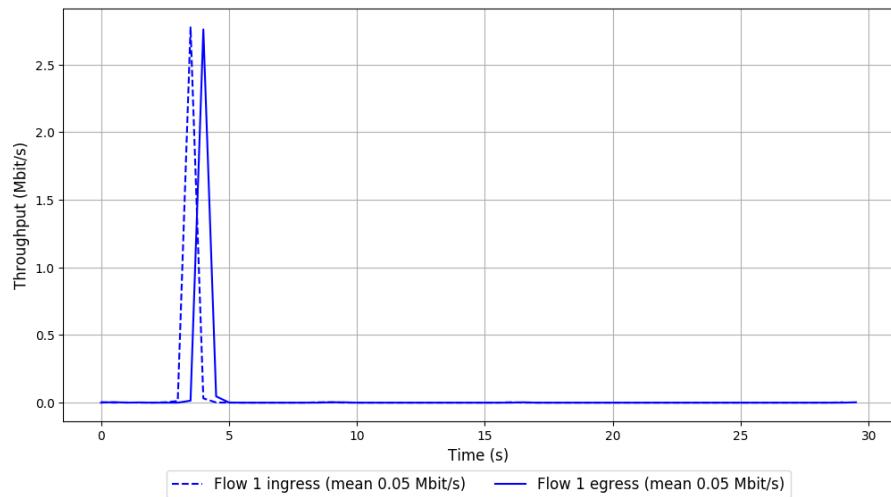


```
Run 3: Statistics of WebRTC media

Start at: 2019-06-28 16:06:40
End at: 2019-06-28 16:07:10
Local clock offset: -0.318 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2019-06-28 19:17:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 58.995 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 58.995 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

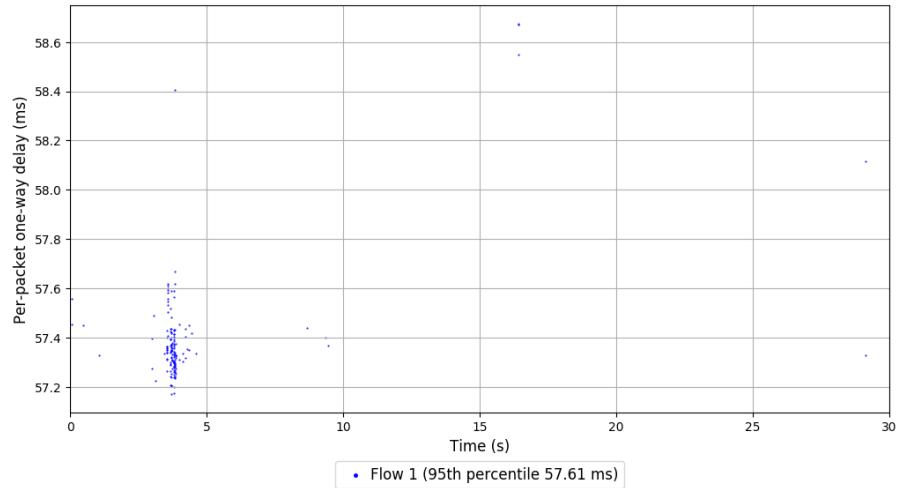
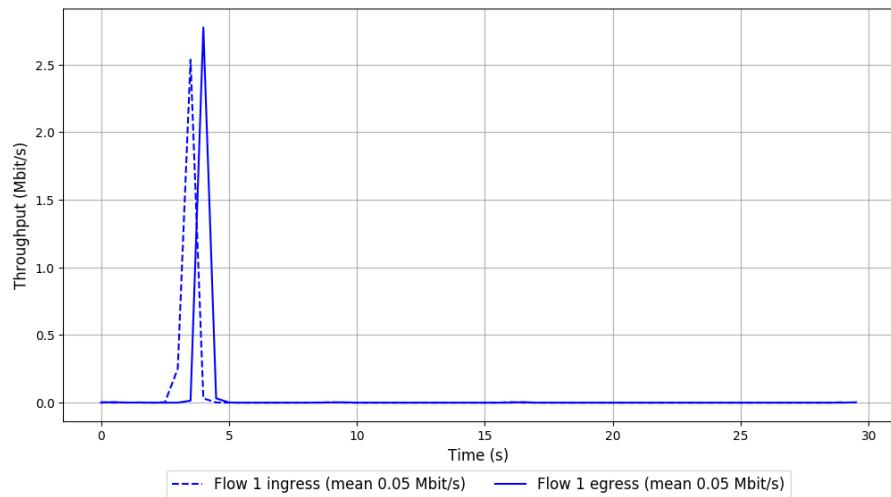


Run 4: Statistics of WebRTC media

```
Start at: 2019-06-28 16:38:16
End at: 2019-06-28 16:38:46
Local clock offset: -0.01 ms
Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2019-06-28 19:17:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.611 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.611 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-06-28 17:09:28
End at: 2019-06-28 17:09:58
Local clock offset: -0.068 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2019-06-28 19:17:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.606 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.606 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

