

Pantheon Report

Generated at 2019-06-27 05:12:25 (UTC).
Data path: GCE London on `ens4` (*remote*) → GCE Tokyo 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.

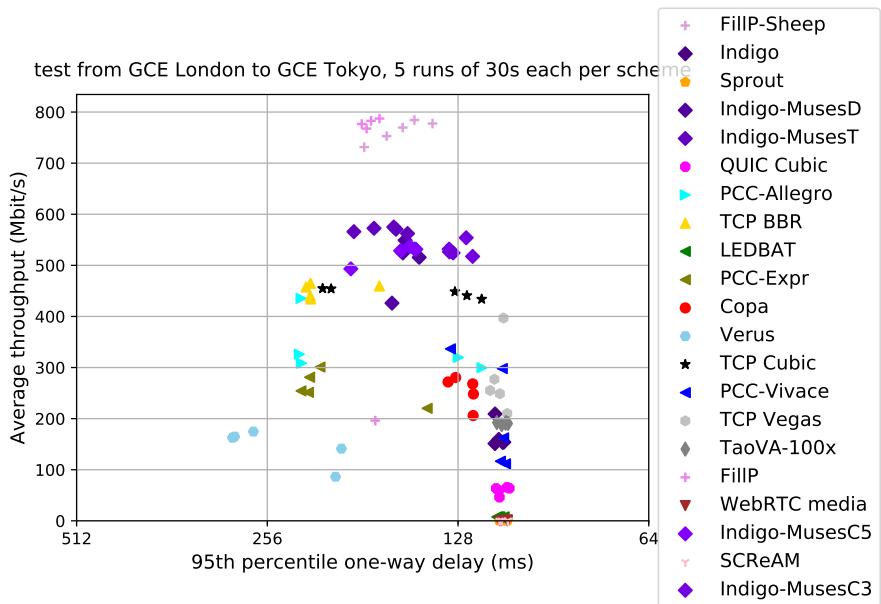
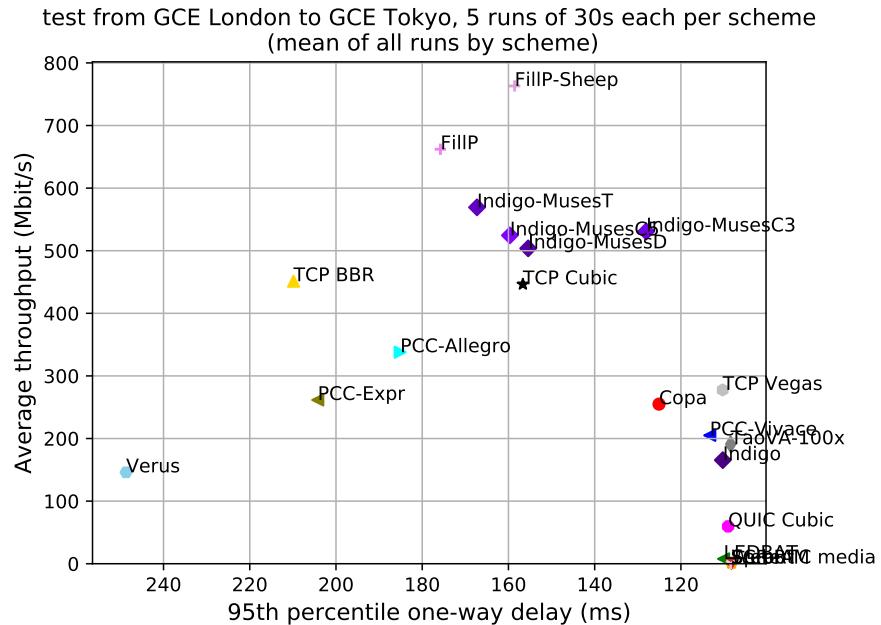
System info:

```
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
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851



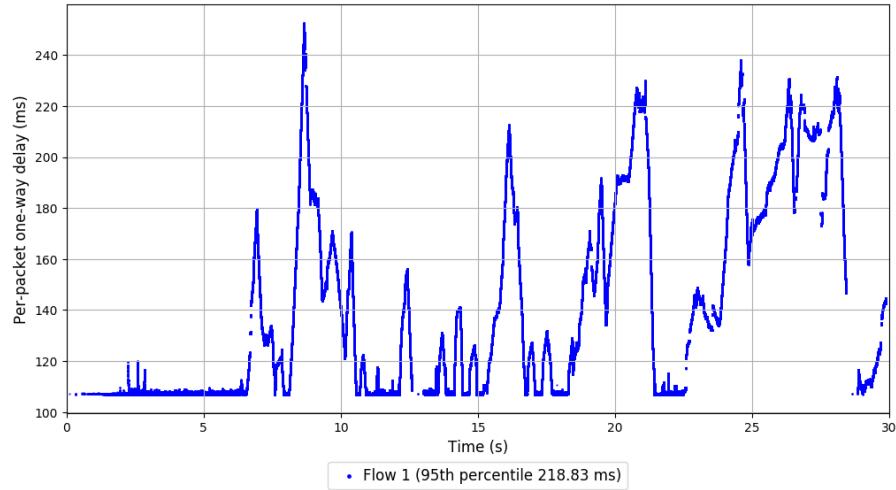
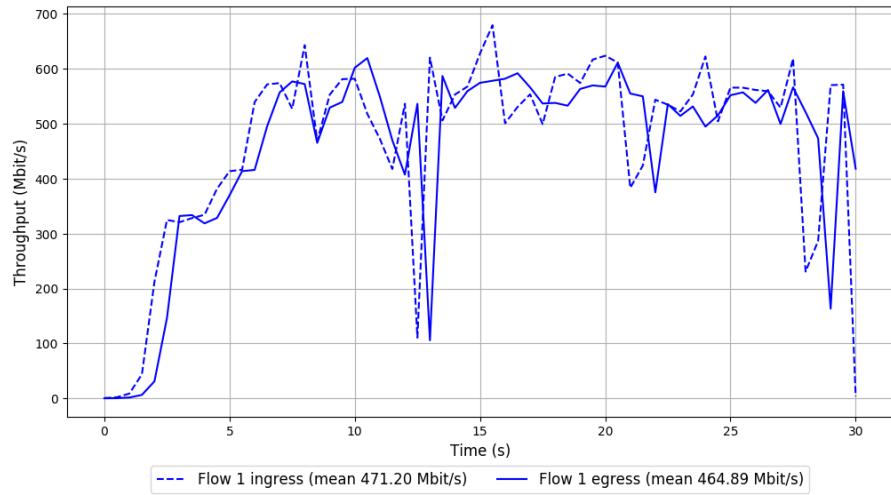
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	451.30	209.85	1.71
Copa	5	254.93	125.08	0.86
TCP Cubic	5	446.41	156.66	0.91
FillP	5	662.12	175.78	3.58
FillP-Sheep	5	763.20	158.56	1.53
Indigo	5	165.49	110.28	0.88
Indigo-MusesC3	5	530.79	128.05	0.93
Indigo-MusesC5	5	524.49	159.67	1.06
Indigo-MusesD	4	503.75	155.42	0.92
Indigo-MusesT	5	569.29	167.29	1.04
LEDBAT	5	7.73	110.11	1.47
Muses_DecisionTree	0	N/A	N/A	N/A
PCC-Allegro	5	337.86	185.11	2.81
PCC-Expr	5	261.56	204.23	5.14
QUIC Cubic	5	59.62	109.05	1.12
SCReAM	5	0.22	108.46	0.69
Sprout	5	0.52	108.26	0.54
TaoVA-100x	5	190.86	108.46	0.78
TCP Vegas	5	277.60	110.32	0.71
Verus	5	145.97	248.69	9.36
PCC-Vivace	5	205.03	113.30	1.15
WebRTC media	4	0.53	108.30	0.26

Run 1: Statistics of TCP BBR

```
Start at: 2019-06-27 01:08:56
End at: 2019-06-27 01:09:26
Local clock offset: 12.574 ms
Remote clock offset: 14.079 ms

# Below is generated by plot.py at 2019-06-27 03:47:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 464.89 Mbit/s
95th percentile per-packet one-way delay: 218.829 ms
Loss rate: 2.06%
-- Flow 1:
Average throughput: 464.89 Mbit/s
95th percentile per-packet one-way delay: 218.829 ms
Loss rate: 2.06%
```

Run 1: Report of TCP BBR — Data Link

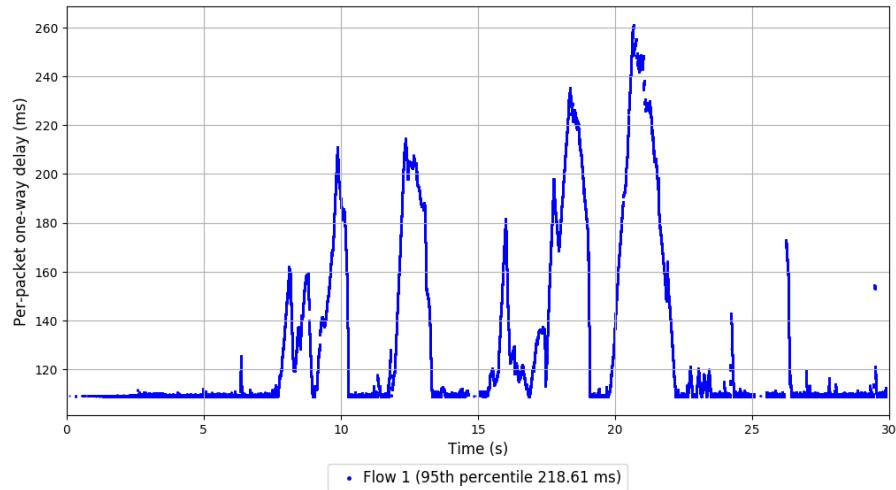
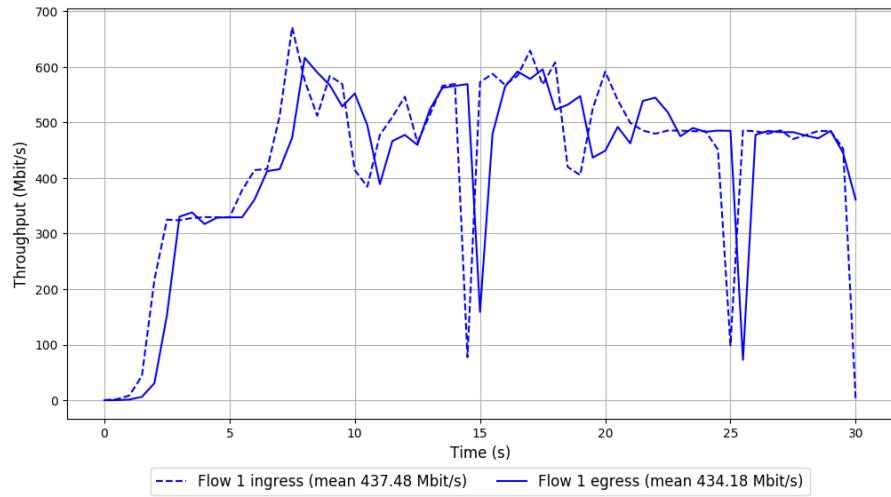


Run 2: Statistics of TCP BBR

```
Start at: 2019-06-27 01:40:57
End at: 2019-06-27 01:41:27
Local clock offset: 23.658 ms
Remote clock offset: 26.4 ms

# Below is generated by plot.py at 2019-06-27 03:47:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 434.18 Mbit/s
95th percentile per-packet one-way delay: 218.612 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 434.18 Mbit/s
95th percentile per-packet one-way delay: 218.612 ms
Loss rate: 1.48%
```

Run 2: Report of TCP BBR — Data Link

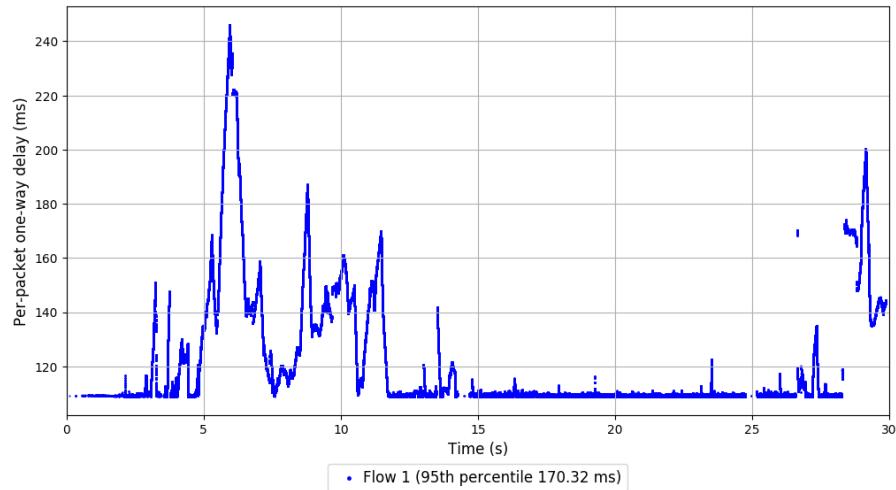
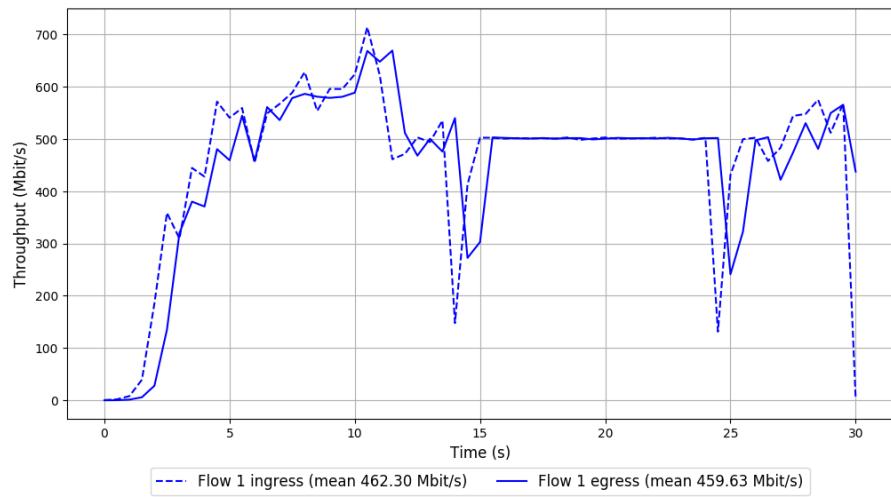


Run 3: Statistics of TCP BBR

```
Start at: 2019-06-27 02:13:00
End at: 2019-06-27 02:13:30
Local clock offset: 14.4 ms
Remote clock offset: 10.886 ms

# Below is generated by plot.py at 2019-06-27 03:47:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 459.63 Mbit/s
95th percentile per-packet one-way delay: 170.323 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 459.63 Mbit/s
95th percentile per-packet one-way delay: 170.323 ms
Loss rate: 1.31%
```

Run 3: Report of TCP BBR — Data Link

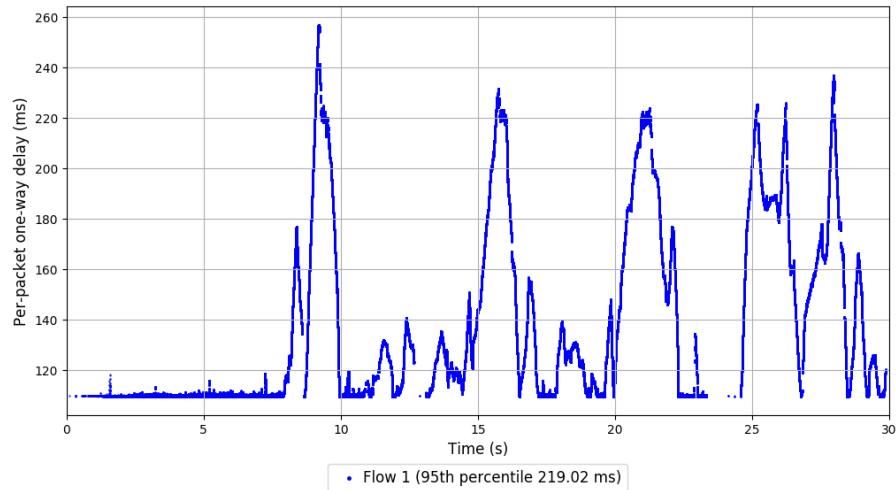
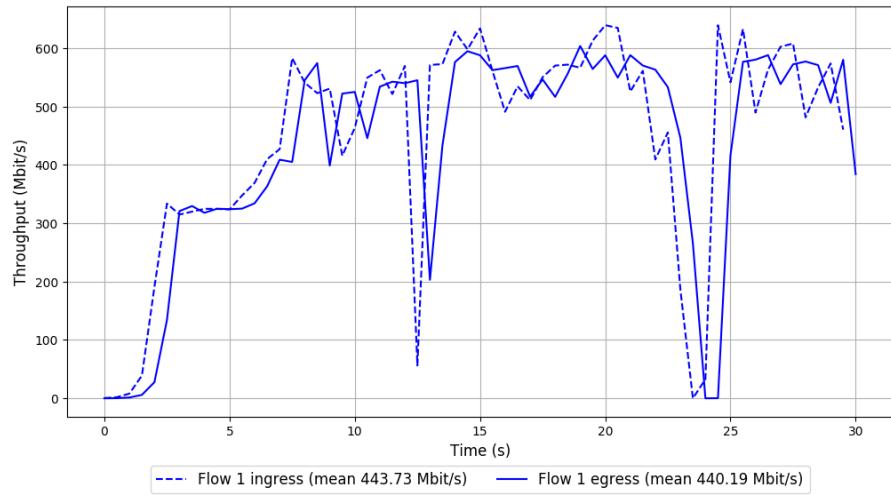


Run 4: Statistics of TCP BBR

```
Start at: 2019-06-27 02:44:51
End at: 2019-06-27 02:45:21
Local clock offset: 7.167 ms
Remote clock offset: 3.956 ms

# Below is generated by plot.py at 2019-06-27 03:47:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 440.19 Mbit/s
95th percentile per-packet one-way delay: 219.024 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 440.19 Mbit/s
95th percentile per-packet one-way delay: 219.024 ms
Loss rate: 1.53%
```

Run 4: Report of TCP BBR — Data Link

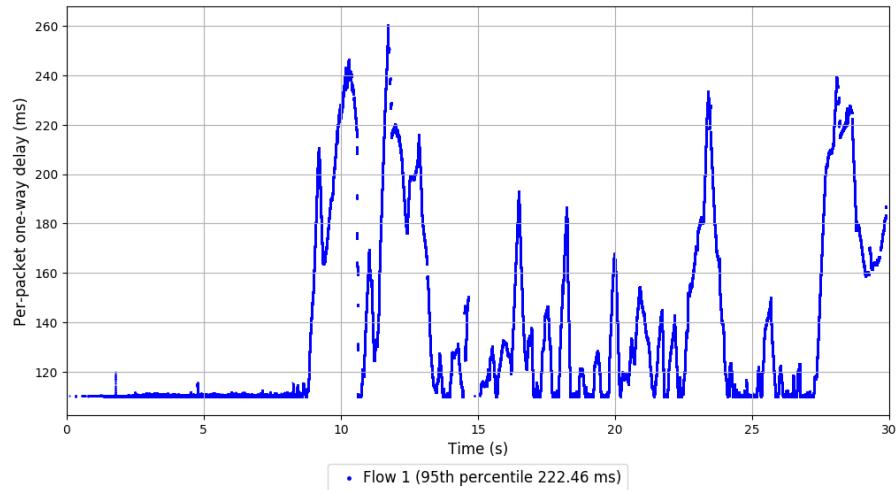
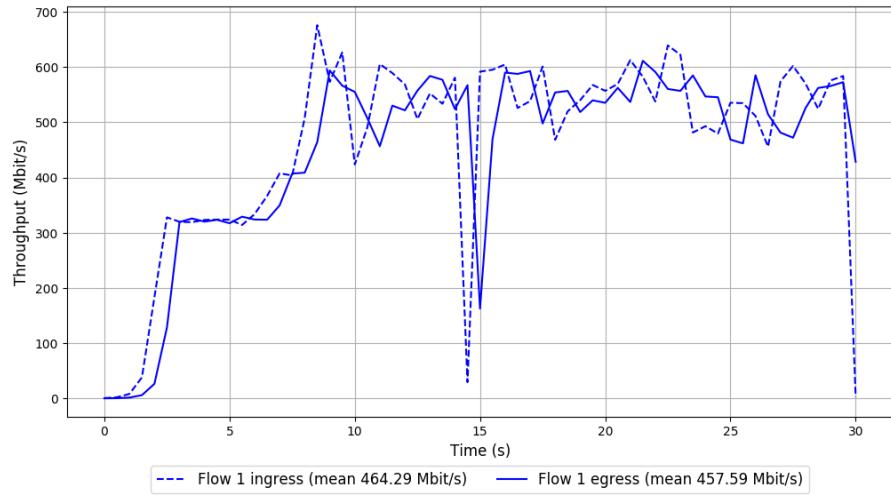


Run 5: Statistics of TCP BBR

```
Start at: 2019-06-27 03:17:09
End at: 2019-06-27 03:17:39
Local clock offset: 3.718 ms
Remote clock offset: 1.77 ms

# Below is generated by plot.py at 2019-06-27 03:47:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 457.59 Mbit/s
95th percentile per-packet one-way delay: 222.464 ms
Loss rate: 2.16%
-- Flow 1:
Average throughput: 457.59 Mbit/s
95th percentile per-packet one-way delay: 222.464 ms
Loss rate: 2.16%
```

Run 5: Report of TCP BBR — Data Link

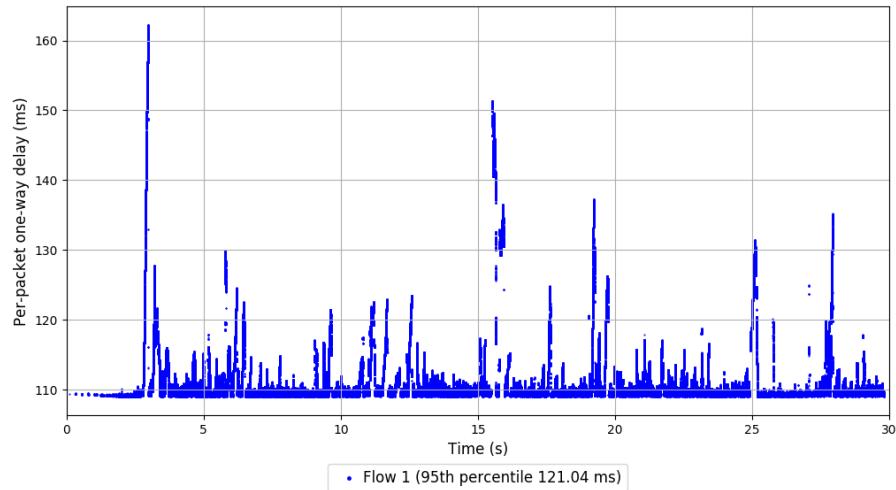
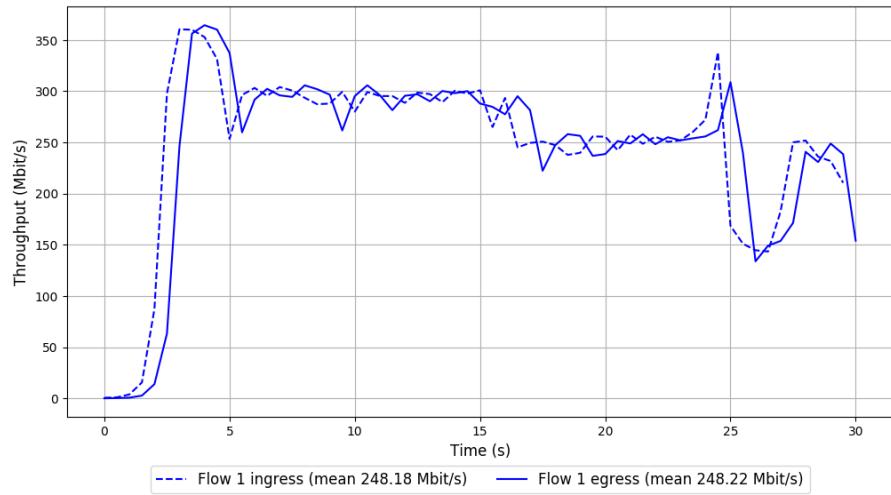


Run 1: Statistics of Copa

```
Start at: 2019-06-27 01:13:08
End at: 2019-06-27 01:13:38
Local clock offset: 14.431 ms
Remote clock offset: 16.467 ms

# Below is generated by plot.py at 2019-06-27 03:47:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 248.22 Mbit/s
95th percentile per-packet one-way delay: 121.040 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 248.22 Mbit/s
95th percentile per-packet one-way delay: 121.040 ms
Loss rate: 0.71%
```

Run 1: Report of Copa — Data Link

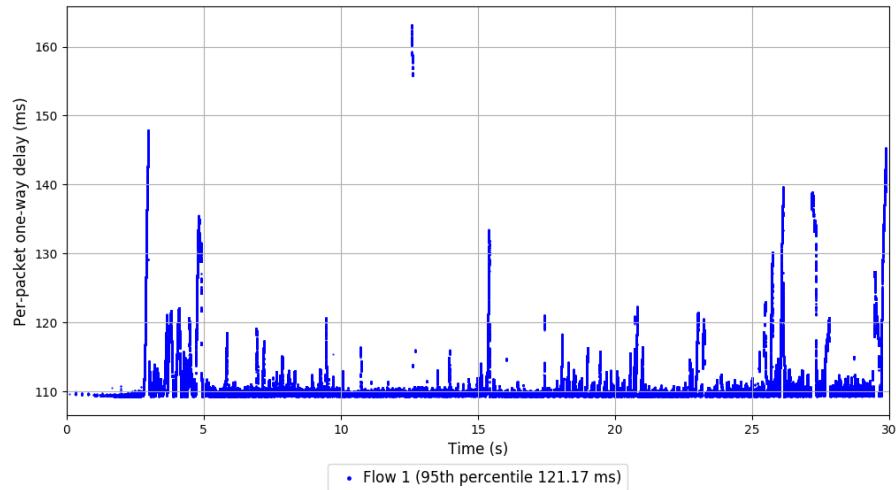
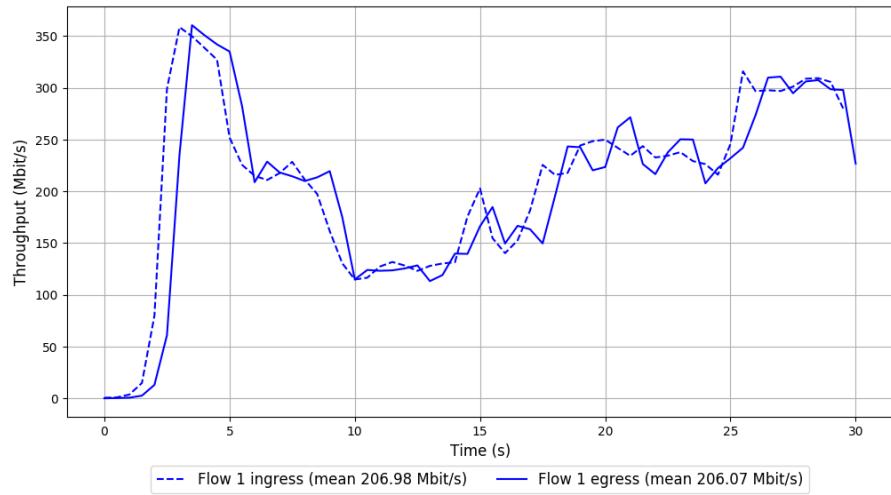


Run 2: Statistics of Copa

```
Start at: 2019-06-27 01:45:14
End at: 2019-06-27 01:45:44
Local clock offset: 27.195 ms
Remote clock offset: 30.572 ms

# Below is generated by plot.py at 2019-06-27 03:47:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 206.07 Mbit/s
95th percentile per-packet one-way delay: 121.169 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 206.07 Mbit/s
95th percentile per-packet one-way delay: 121.169 ms
Loss rate: 1.17%
```

Run 2: Report of Copa — Data Link

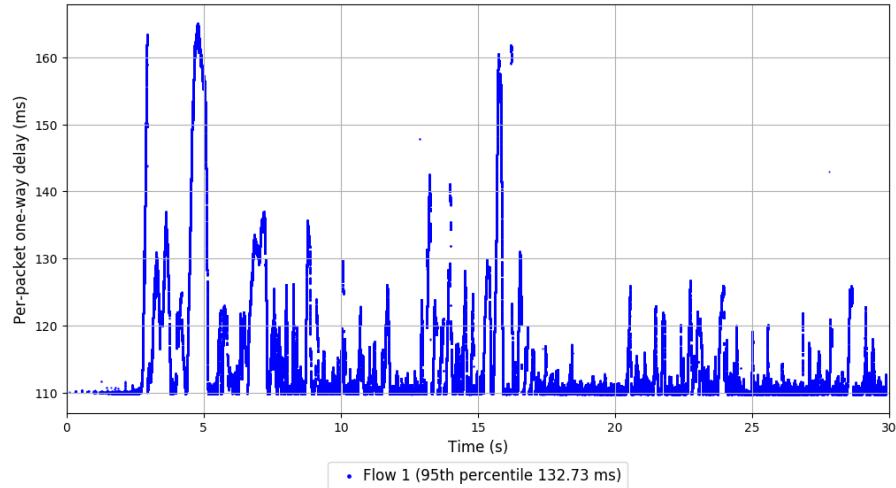
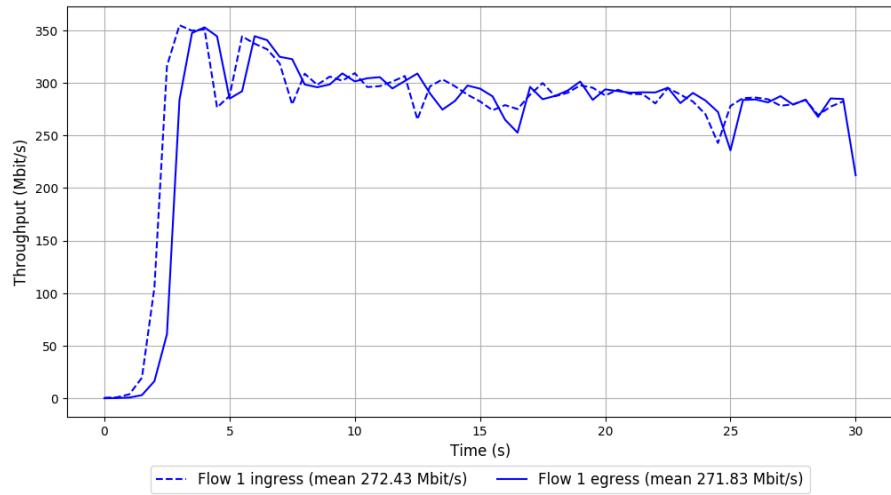


Run 3: Statistics of Copa

```
Start at: 2019-06-27 02:17:10
End at: 2019-06-27 02:17:40
Local clock offset: 14.665 ms
Remote clock offset: 9.828 ms

# Below is generated by plot.py at 2019-06-27 03:48:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 271.83 Mbit/s
95th percentile per-packet one-way delay: 132.729 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 271.83 Mbit/s
95th percentile per-packet one-way delay: 132.729 ms
Loss rate: 0.94%
```

Run 3: Report of Copa — Data Link

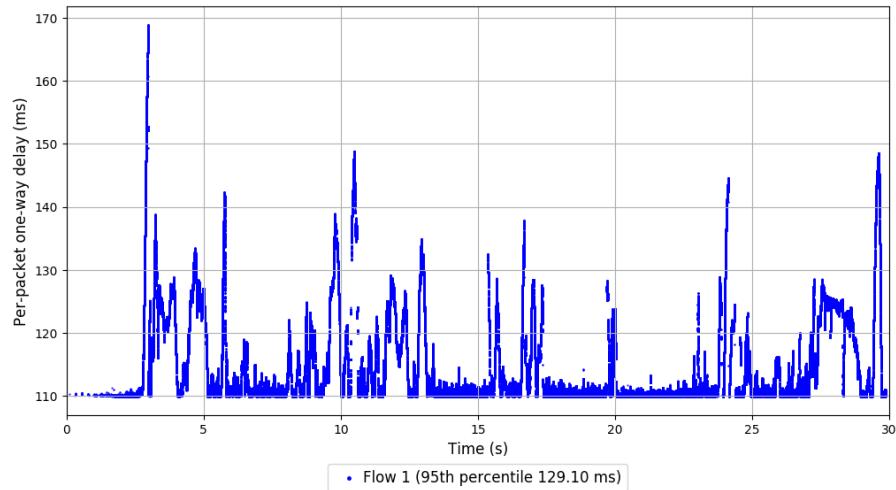
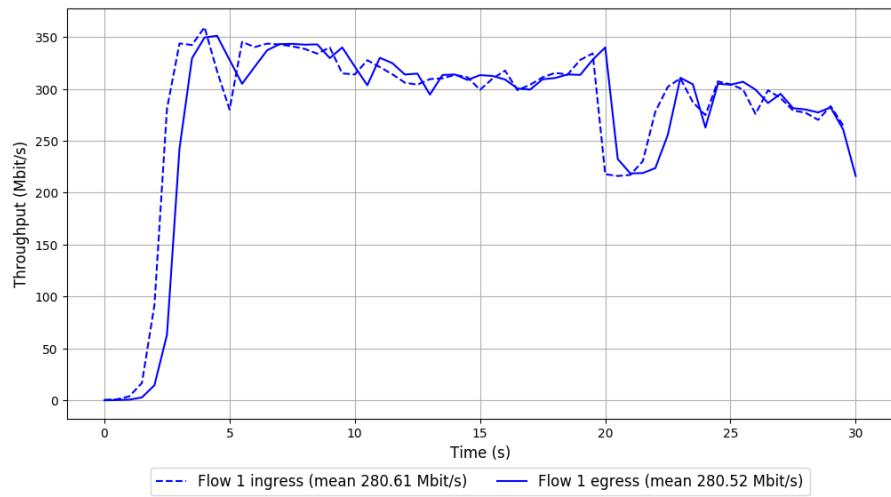


Run 4: Statistics of Copa

```
Start at: 2019-06-27 02:49:03
End at: 2019-06-27 02:49:33
Local clock offset: 6.985 ms
Remote clock offset: 3.405 ms

# Below is generated by plot.py at 2019-06-27 03:56:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 280.52 Mbit/s
95th percentile per-packet one-way delay: 129.097 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 280.52 Mbit/s
95th percentile per-packet one-way delay: 129.097 ms
Loss rate: 0.76%
```

Run 4: Report of Copa — Data Link

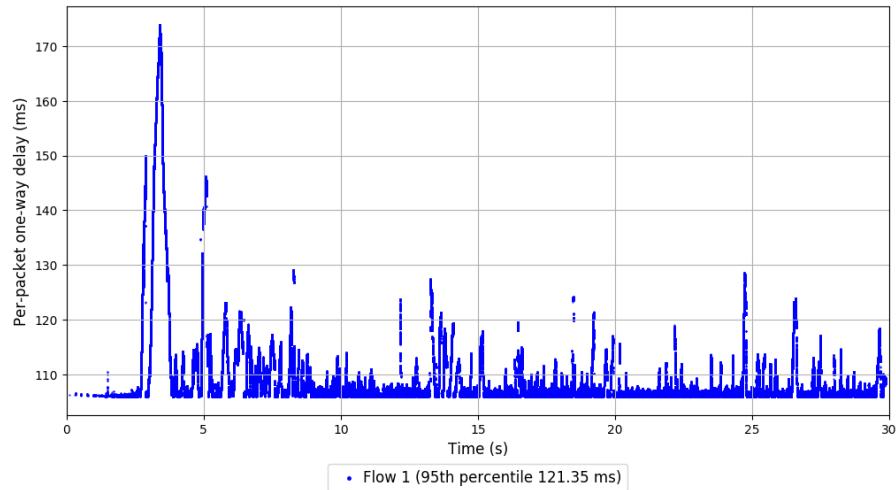
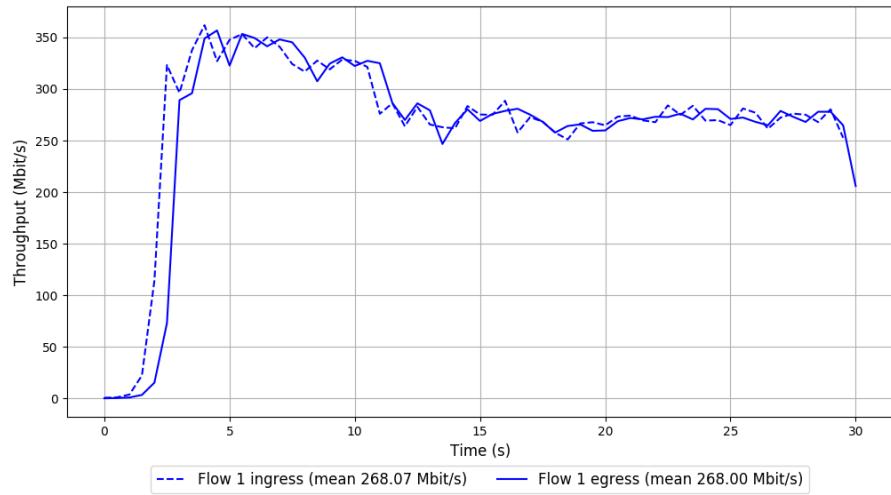


Run 5: Statistics of Copa

```
Start at: 2019-06-27 03:21:18
End at: 2019-06-27 03:21:48
Local clock offset: 3.457 ms
Remote clock offset: 1.673 ms

# Below is generated by plot.py at 2019-06-27 03:56:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 268.00 Mbit/s
95th percentile per-packet one-way delay: 121.348 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 268.00 Mbit/s
95th percentile per-packet one-way delay: 121.348 ms
Loss rate: 0.74%
```

Run 5: Report of Copa — Data Link

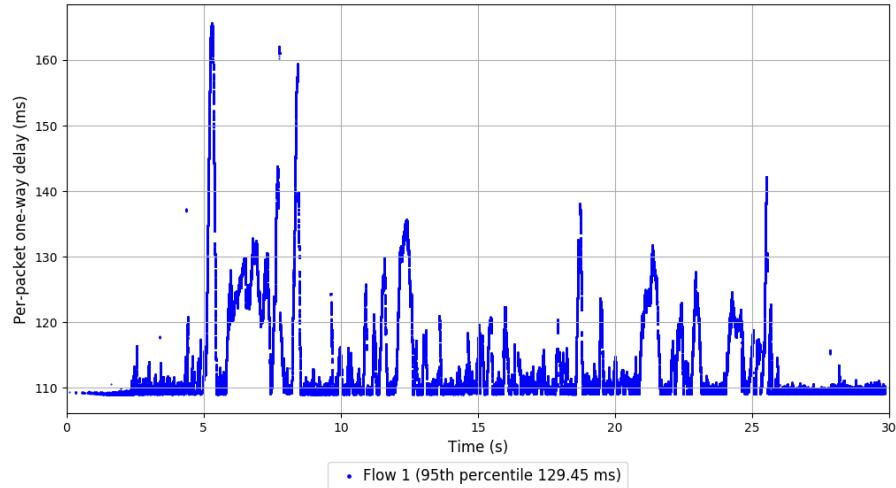
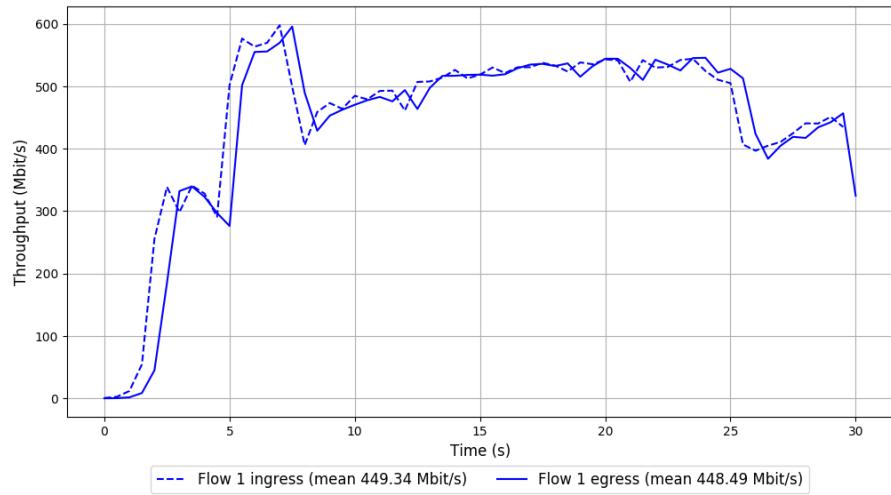


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-06-27 00:55:19
End at: 2019-06-27 00:55:49
Local clock offset: 8.692 ms
Remote clock offset: 10.399 ms

# Below is generated by plot.py at 2019-06-27 03:56:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 448.49 Mbit/s
95th percentile per-packet one-way delay: 129.449 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 448.49 Mbit/s
95th percentile per-packet one-way delay: 129.449 ms
Loss rate: 0.91%
```

Run 1: Report of TCP Cubic — Data Link

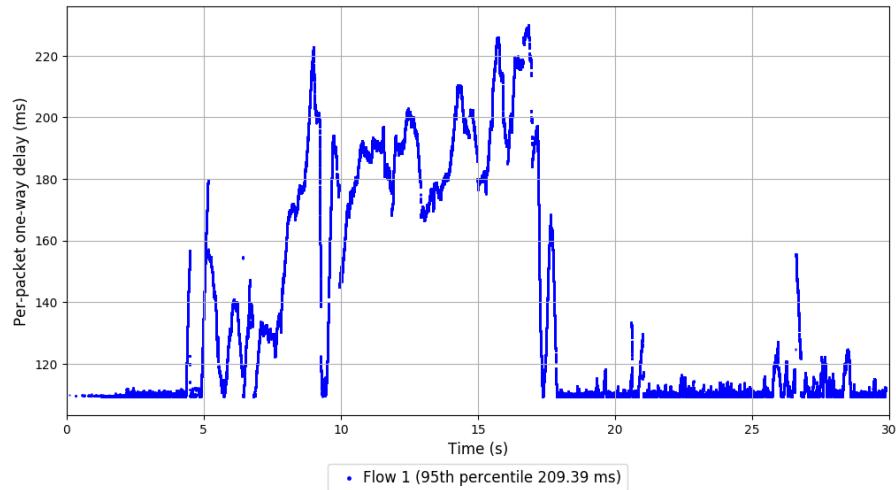
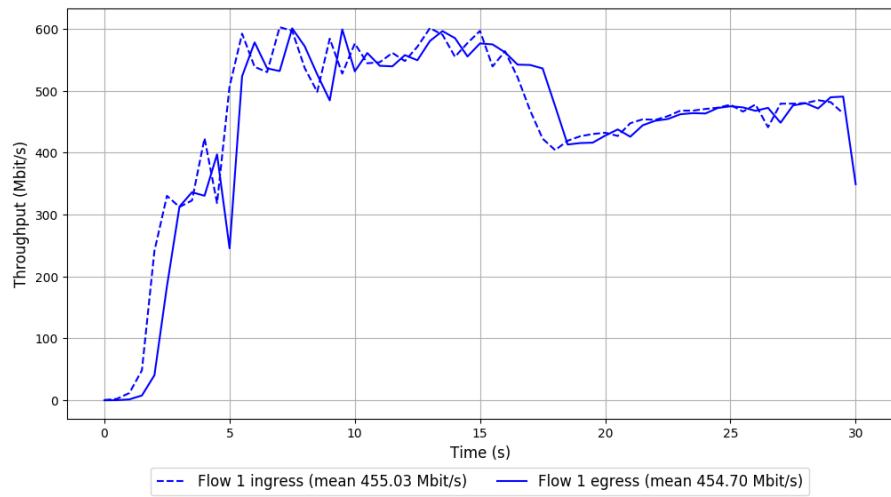


Run 2: Statistics of TCP Cubic

```
Start at: 2019-06-27 01:27:17
End at: 2019-06-27 01:27:47
Local clock offset: 19.812 ms
Remote clock offset: 21.471 ms

# Below is generated by plot.py at 2019-06-27 03:56:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 454.70 Mbit/s
95th percentile per-packet one-way delay: 209.387 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 454.70 Mbit/s
95th percentile per-packet one-way delay: 209.387 ms
Loss rate: 0.80%
```

Run 2: Report of TCP Cubic — Data Link

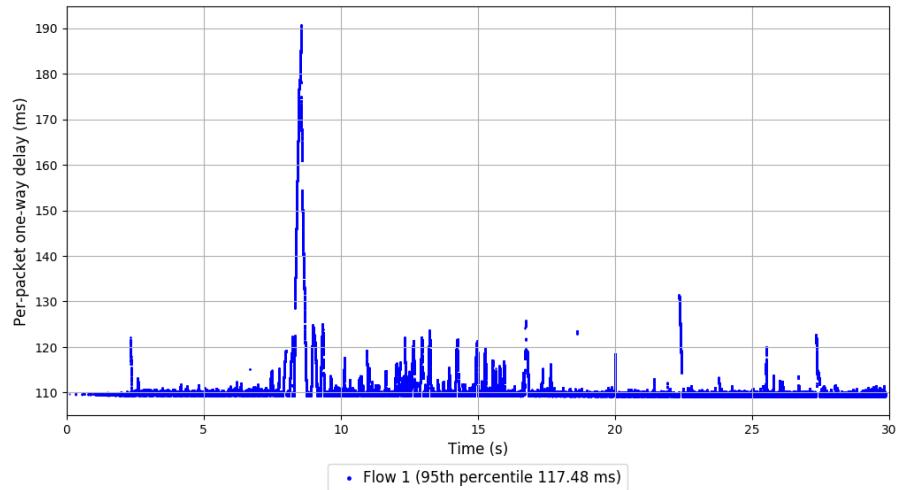
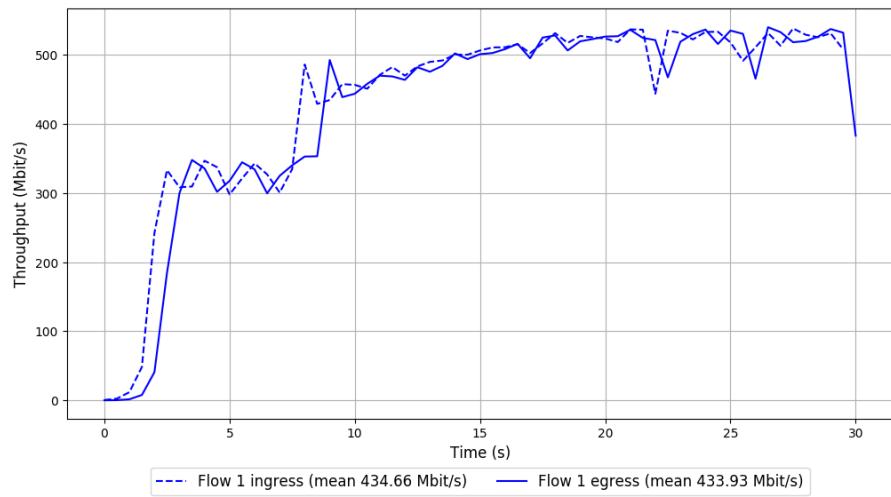


Run 3: Statistics of TCP Cubic

```
Start at: 2019-06-27 01:59:31
End at: 2019-06-27 02:00:01
Local clock offset: 28.066 ms
Remote clock offset: 29.626 ms

# Below is generated by plot.py at 2019-06-27 03:56:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 433.93 Mbit/s
95th percentile per-packet one-way delay: 117.479 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 433.93 Mbit/s
95th percentile per-packet one-way delay: 117.479 ms
Loss rate: 0.90%
```

Run 3: Report of TCP Cubic — Data Link

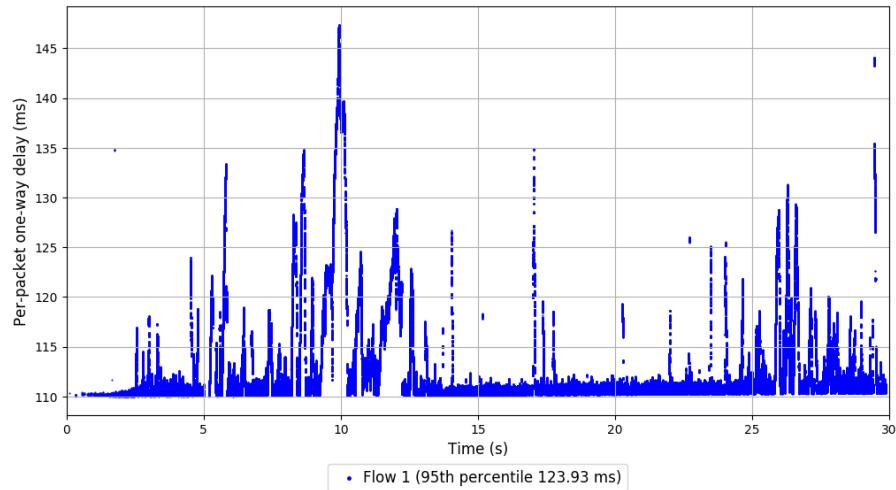
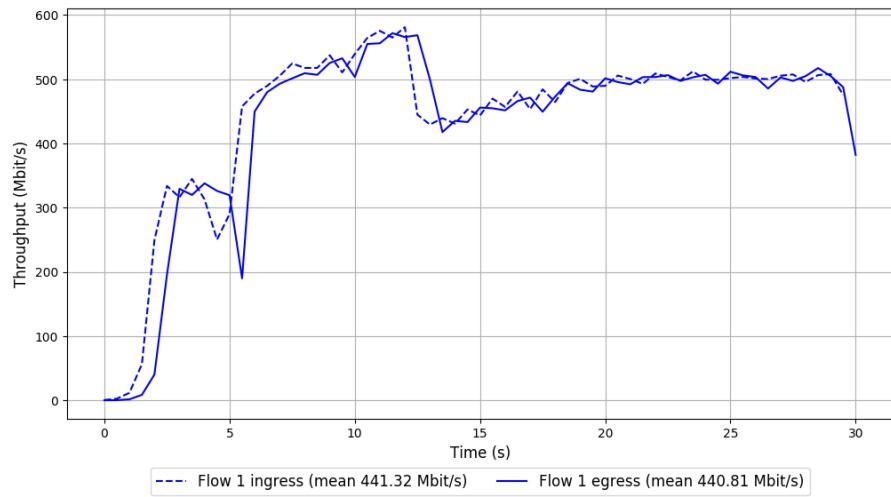


Run 4: Statistics of TCP Cubic

```
Start at: 2019-06-27 02:31:21
End at: 2019-06-27 02:31:52
Local clock offset: 17.85 ms
Remote clock offset: 9.632 ms

# Below is generated by plot.py at 2019-06-27 03:56:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 440.81 Mbit/s
95th percentile per-packet one-way delay: 123.934 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 440.81 Mbit/s
95th percentile per-packet one-way delay: 123.934 ms
Loss rate: 0.84%
```

Run 4: Report of TCP Cubic — Data Link

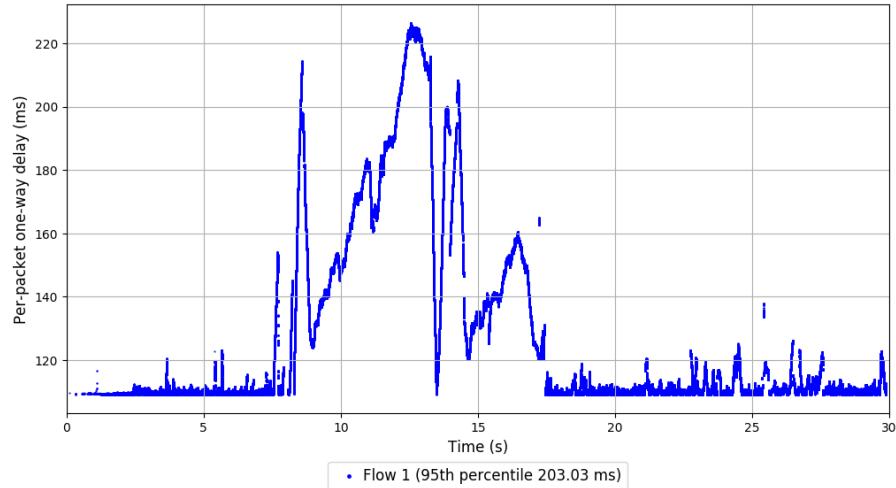
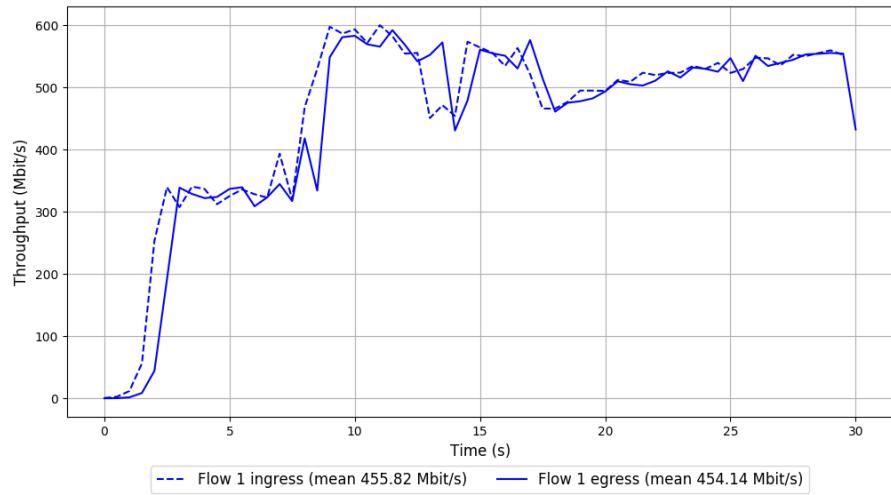


Run 5: Statistics of TCP Cubic

```
Start at: 2019-06-27 03:03:39
End at: 2019-06-27 03:04:09
Local clock offset: 9.153 ms
Remote clock offset: 4.746 ms

# Below is generated by plot.py at 2019-06-27 03:56:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 454.14 Mbit/s
95th percentile per-packet one-way delay: 203.028 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 454.14 Mbit/s
95th percentile per-packet one-way delay: 203.028 ms
Loss rate: 1.09%
```

Run 5: Report of TCP Cubic — Data Link

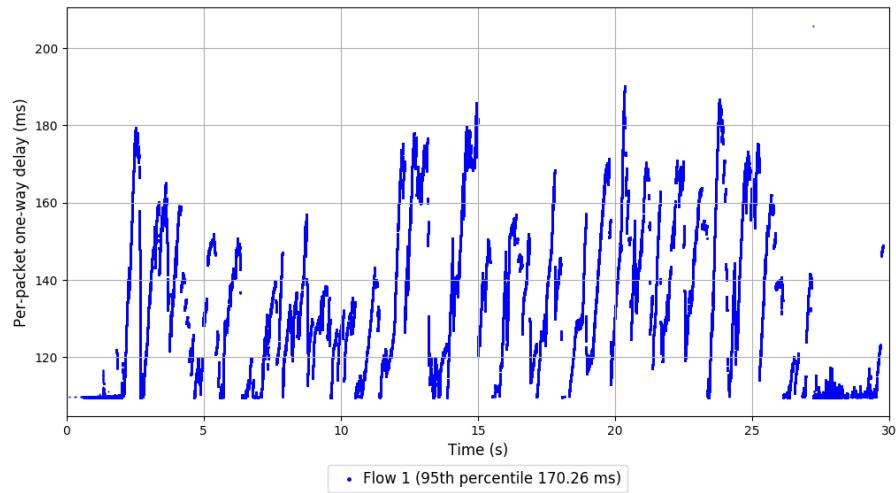
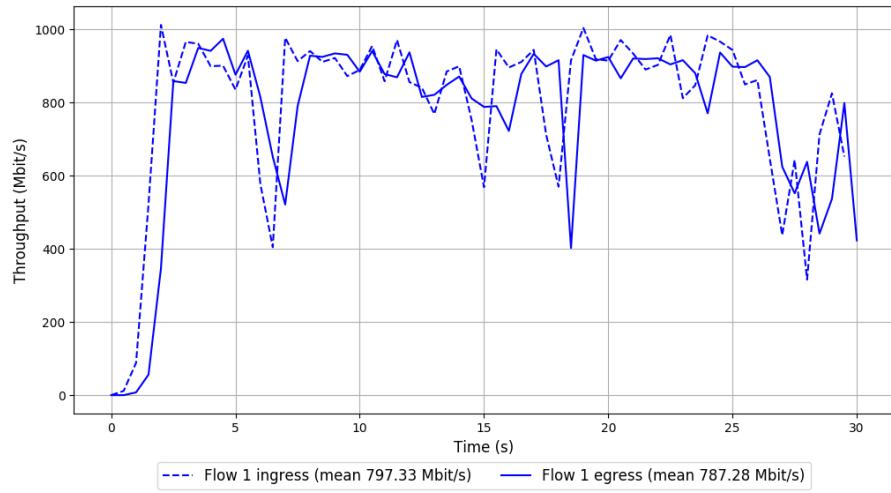


Run 1: Statistics of FillP

```
Start at: 2019-06-27 01:17:21
End at: 2019-06-27 01:17:51
Local clock offset: 19.001 ms
Remote clock offset: 21.599 ms

# Below is generated by plot.py at 2019-06-27 04:04:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 787.28 Mbit/s
95th percentile per-packet one-way delay: 170.256 ms
Loss rate: 1.99%
-- Flow 1:
Average throughput: 787.28 Mbit/s
95th percentile per-packet one-way delay: 170.256 ms
Loss rate: 1.99%
```

Run 1: Report of FillP — Data Link

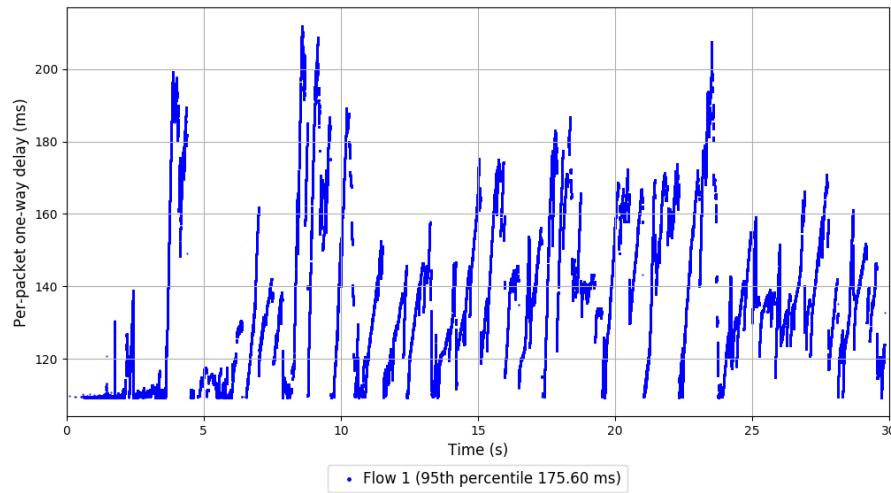
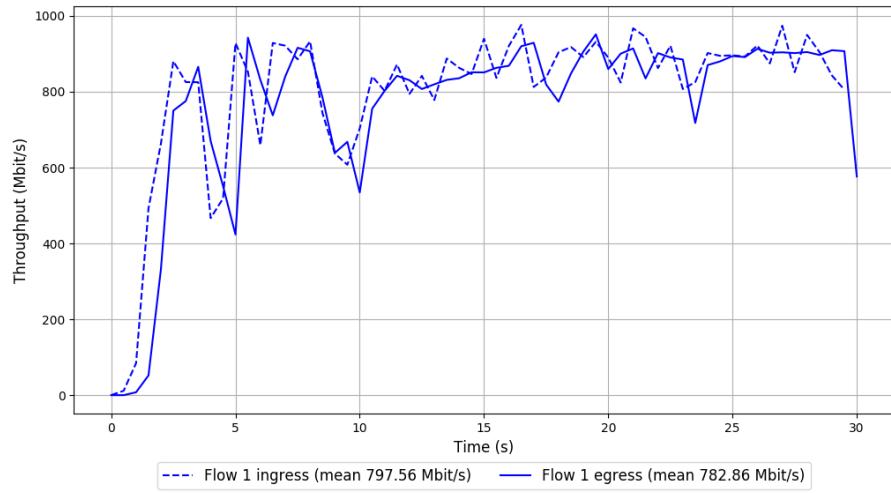


Run 2: Statistics of FillP

```
Start at: 2019-06-27 01:49:23
End at: 2019-06-27 01:49:53
Local clock offset: 31.177 ms
Remote clock offset: 35.172 ms

# Below is generated by plot.py at 2019-06-27 04:13:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 782.86 Mbit/s
95th percentile per-packet one-way delay: 175.603 ms
Loss rate: 2.57%
-- Flow 1:
Average throughput: 782.86 Mbit/s
95th percentile per-packet one-way delay: 175.603 ms
Loss rate: 2.57%
```

Run 2: Report of FillP — Data Link

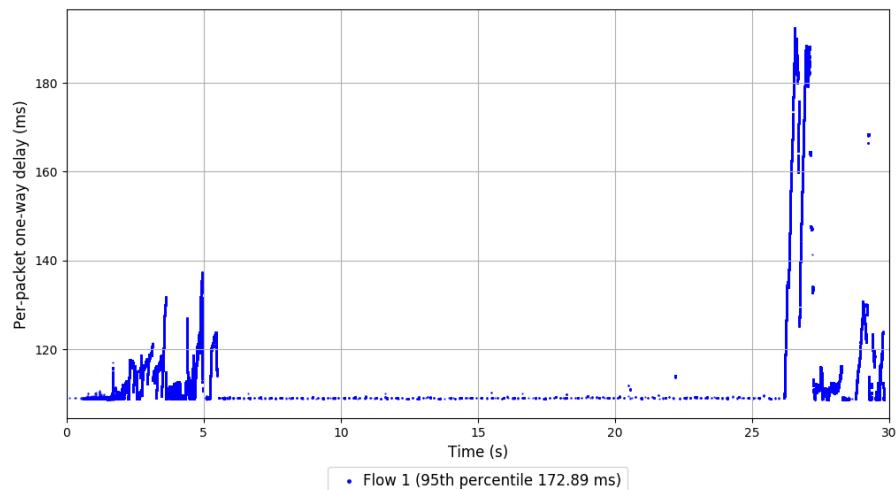
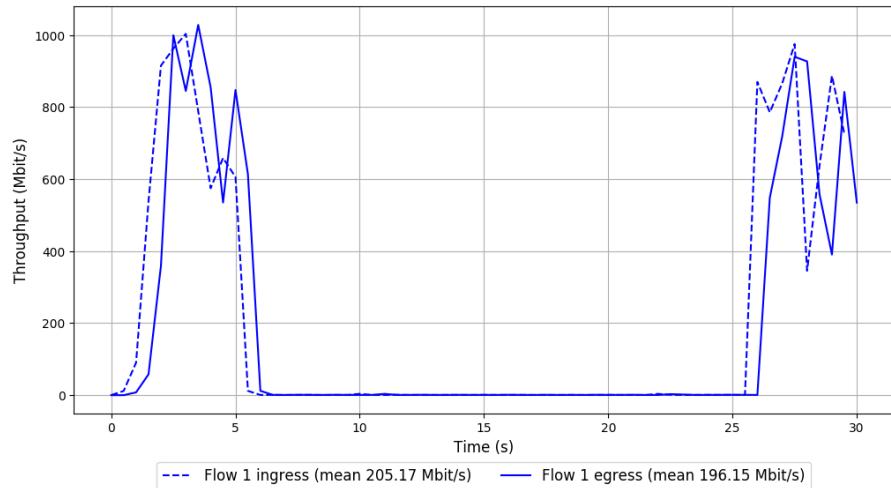


Run 3: Statistics of FillP

```
Start at: 2019-06-27 02:21:27
End at: 2019-06-27 02:21:57
Local clock offset: 15.437 ms
Remote clock offset: 9.709 ms

# Below is generated by plot.py at 2019-06-27 04:13:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 196.15 Mbit/s
95th percentile per-packet one-way delay: 172.890 ms
Loss rate: 5.14%
-- Flow 1:
Average throughput: 196.15 Mbit/s
95th percentile per-packet one-way delay: 172.890 ms
Loss rate: 5.14%
```

Run 3: Report of FillP — Data Link

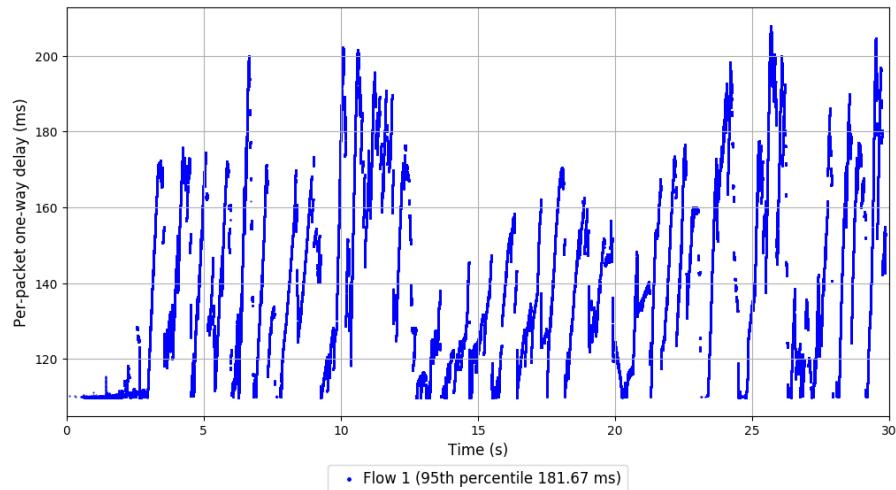
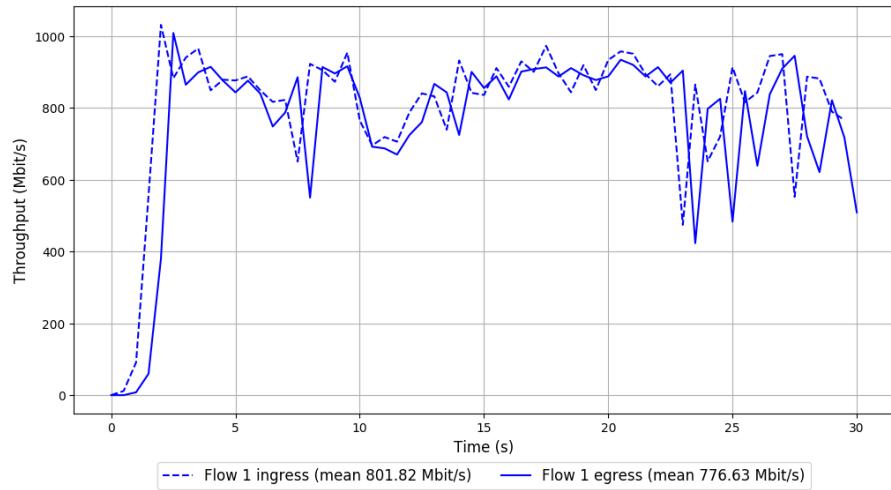


Run 4: Statistics of FillP

```
Start at: 2019-06-27 02:53:21
End at: 2019-06-27 02:53:51
Local clock offset: 7.288 ms
Remote clock offset: 3.483 ms

# Below is generated by plot.py at 2019-06-27 04:13:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 776.63 Mbit/s
95th percentile per-packet one-way delay: 181.666 ms
Loss rate: 3.85%
-- Flow 1:
Average throughput: 776.63 Mbit/s
95th percentile per-packet one-way delay: 181.666 ms
Loss rate: 3.85%
```

Run 4: Report of FillP — Data Link

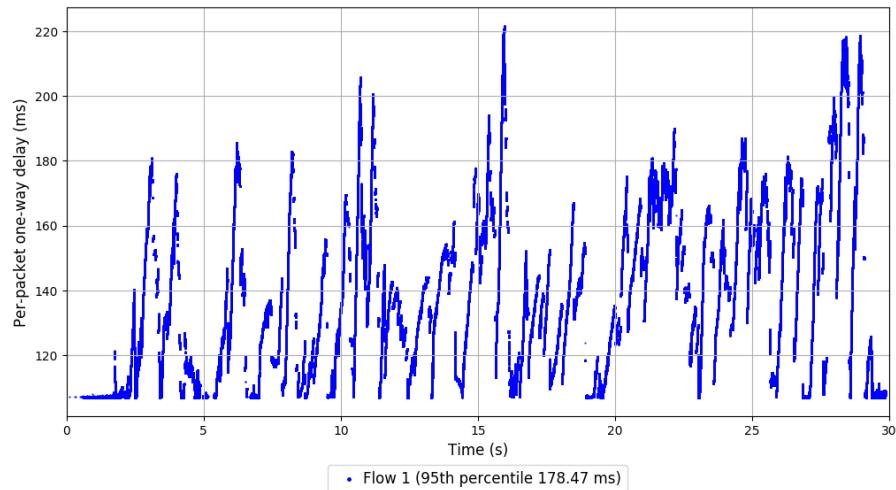
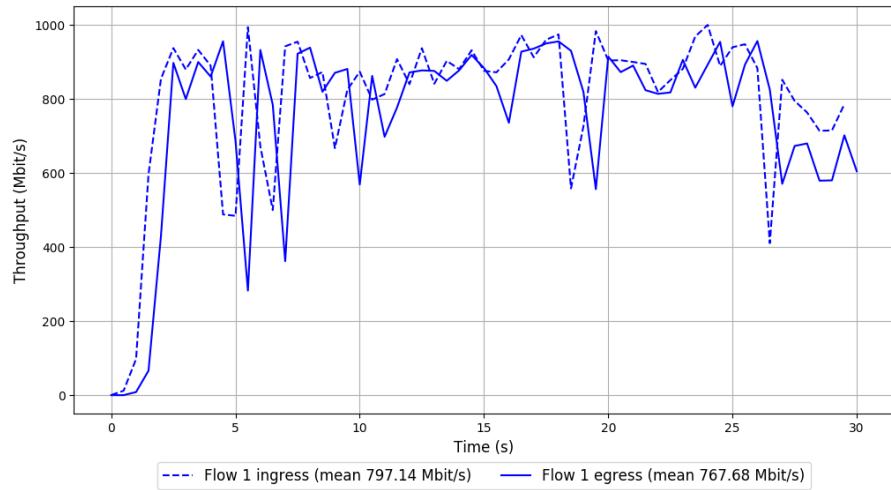


Run 5: Statistics of FillP

```
Start at: 2019-06-27 03:25:34
End at: 2019-06-27 03:26:04
Local clock offset: 3.506 ms
Remote clock offset: 1.677 ms

# Below is generated by plot.py at 2019-06-27 04:13:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 767.68 Mbit/s
95th percentile per-packet one-way delay: 178.468 ms
Loss rate: 4.36%
-- Flow 1:
Average throughput: 767.68 Mbit/s
95th percentile per-packet one-way delay: 178.468 ms
Loss rate: 4.36%
```

Run 5: Report of FillP — Data Link

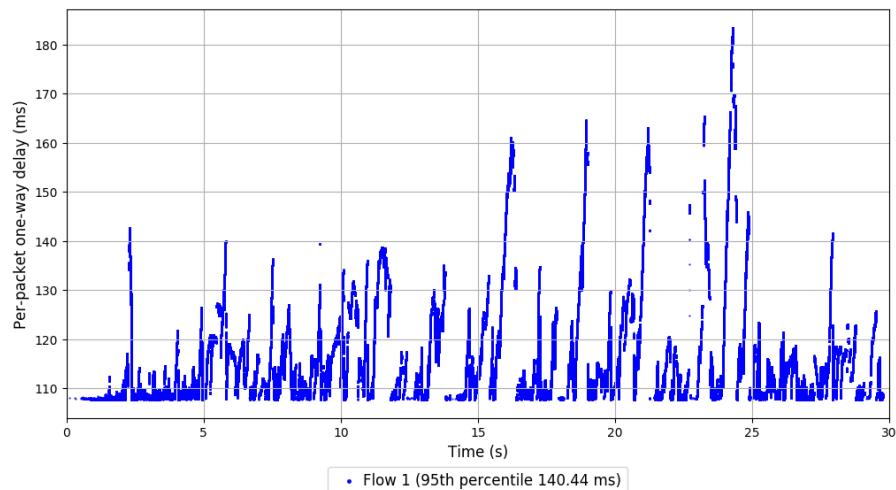
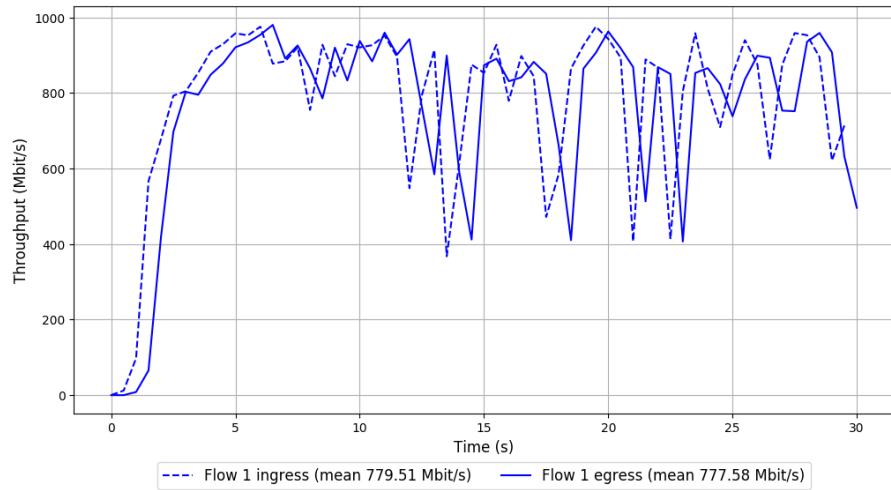


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-06-27 00:56:53
End at: 2019-06-27 00:57:23
Local clock offset: 11.019 ms
Remote clock offset: 10.784 ms

# Below is generated by plot.py at 2019-06-27 04:13:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 777.58 Mbit/s
95th percentile per-packet one-way delay: 140.435 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 777.58 Mbit/s
95th percentile per-packet one-way delay: 140.435 ms
Loss rate: 0.98%
```

Run 1: Report of FillP-Sheep — Data Link

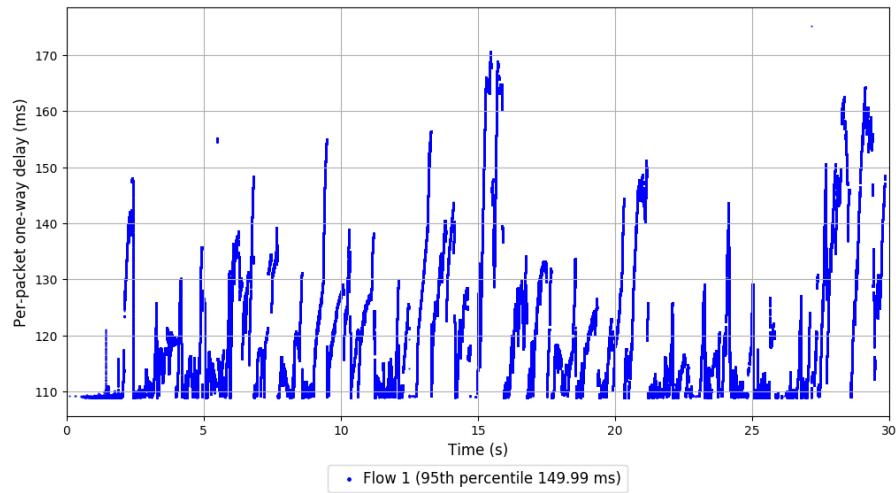
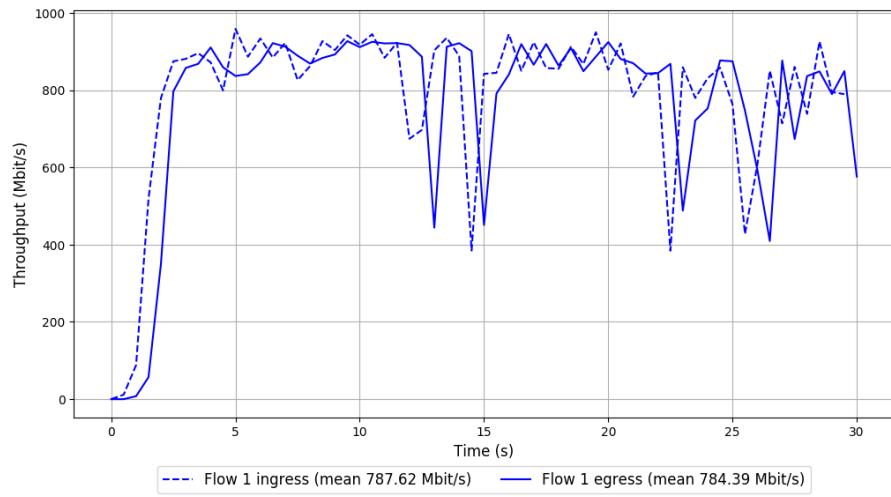


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-06-27 01:28:51
End at: 2019-06-27 01:29:21
Local clock offset: 19.146 ms
Remote clock offset: 21.19 ms

# Below is generated by plot.py at 2019-06-27 04:13:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 784.39 Mbit/s
95th percentile per-packet one-way delay: 149.985 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 784.39 Mbit/s
95th percentile per-packet one-way delay: 149.985 ms
Loss rate: 1.14%
```

Run 2: Report of FillP-Sheep — Data Link

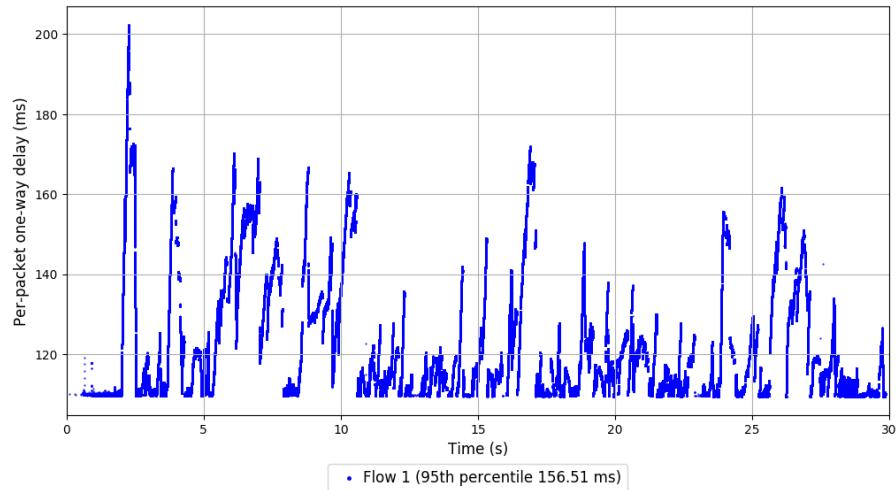
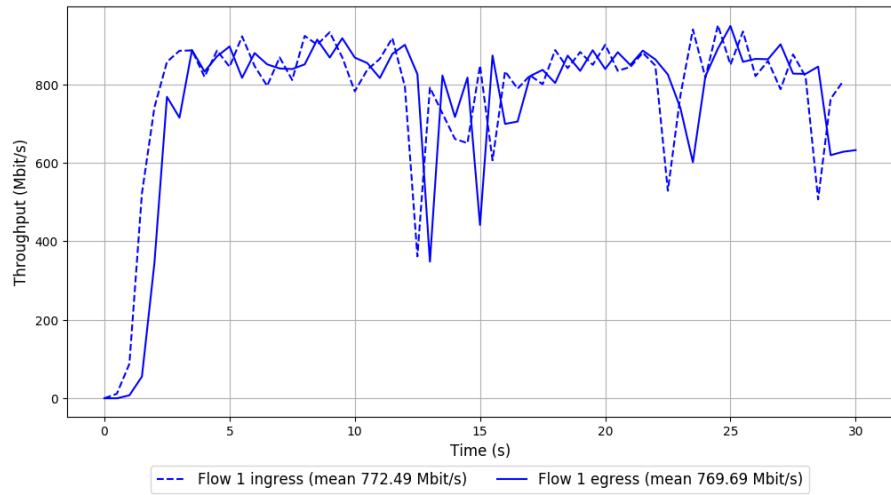


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-06-27 02:01:04
End at: 2019-06-27 02:01:34
Local clock offset: 24.368 ms
Remote clock offset: 24.916 ms

# Below is generated by plot.py at 2019-06-27 04:13:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 769.69 Mbit/s
95th percentile per-packet one-way delay: 156.508 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 769.69 Mbit/s
95th percentile per-packet one-way delay: 156.508 ms
Loss rate: 1.10%
```

Run 3: Report of FillP-Sheep — Data Link

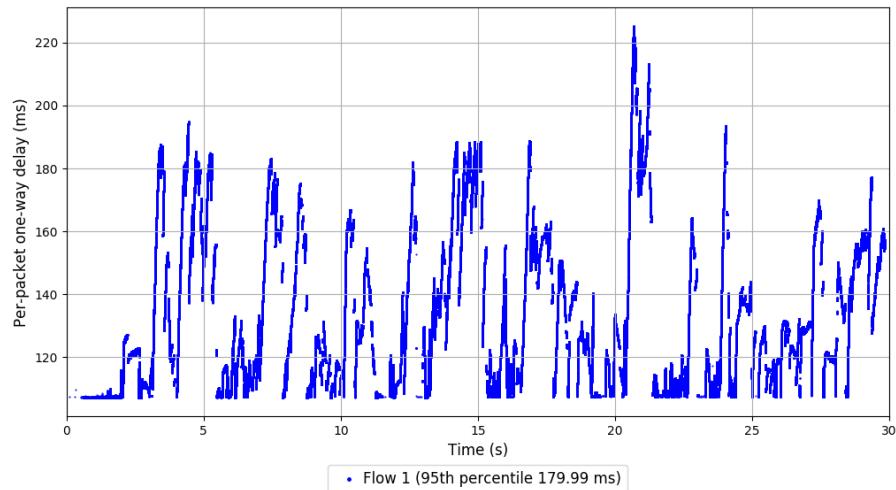
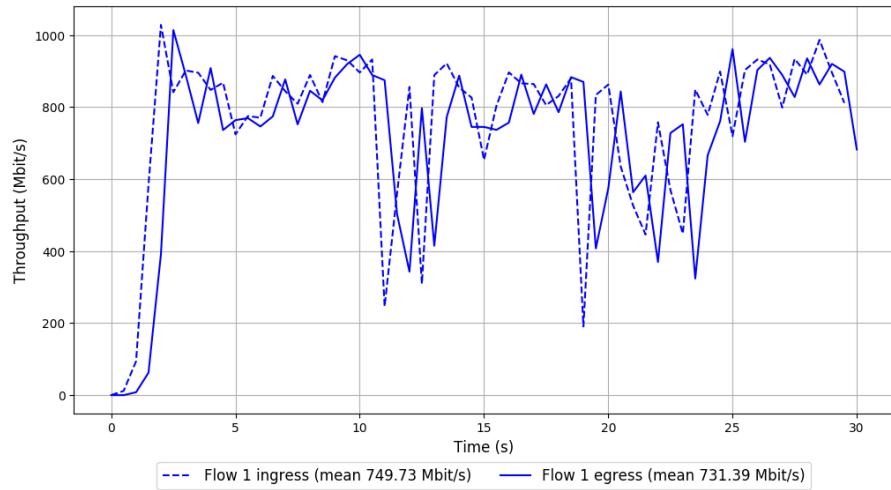


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-06-27 02:32:55
End at: 2019-06-27 02:33:25
Local clock offset: 14.878 ms
Remote clock offset: 8.254 ms

# Below is generated by plot.py at 2019-06-27 04:16:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 731.39 Mbit/s
95th percentile per-packet one-way delay: 179.989 ms
Loss rate: 3.16%
-- Flow 1:
Average throughput: 731.39 Mbit/s
95th percentile per-packet one-way delay: 179.989 ms
Loss rate: 3.16%
```

Run 4: Report of FillP-Sheep — Data Link

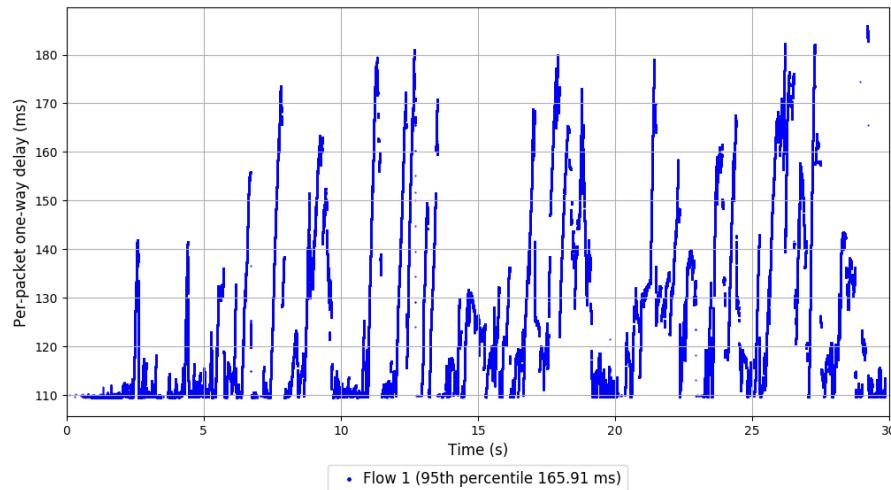
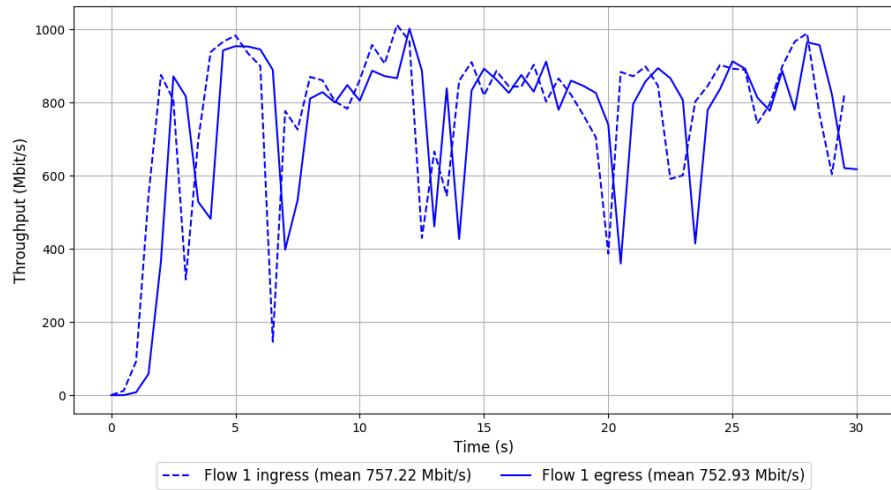


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-06-27 03:05:14
End at: 2019-06-27 03:05:44
Local clock offset: 8.833 ms
Remote clock offset: 4.455 ms

# Below is generated by plot.py at 2019-06-27 04:23:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 752.93 Mbit/s
95th percentile per-packet one-way delay: 165.905 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 752.93 Mbit/s
95th percentile per-packet one-way delay: 165.905 ms
Loss rate: 1.29%
```

Run 5: Report of FillP-Sheep — Data Link

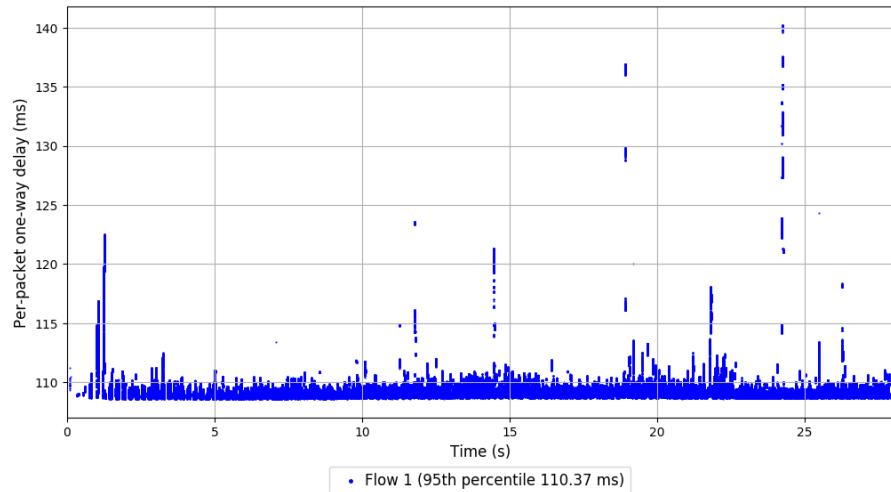
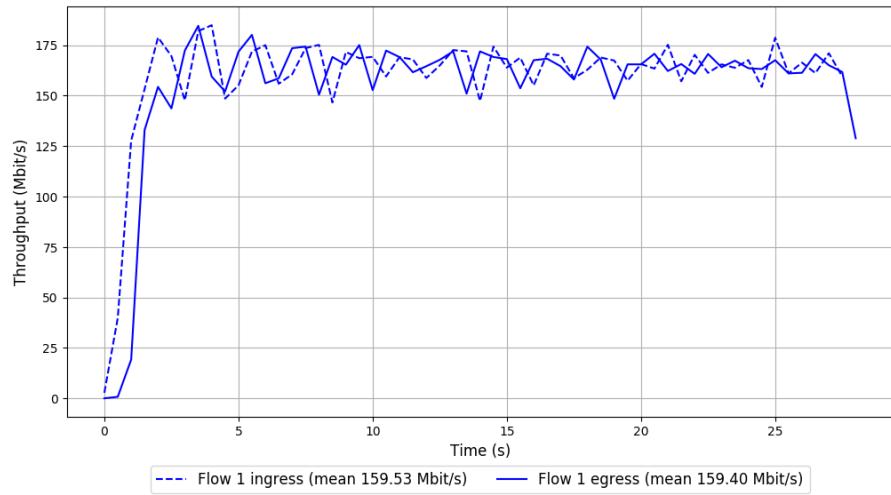


Run 1: Statistics of Indigo

```
Start at: 2019-06-27 01:19:06
End at: 2019-06-27 01:19:36
Local clock offset: 21.218 ms
Remote clock offset: 24.037 ms

# Below is generated by plot.py at 2019-06-27 04:23:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 159.40 Mbit/s
95th percentile per-packet one-way delay: 110.372 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 159.40 Mbit/s
95th percentile per-packet one-way delay: 110.372 ms
Loss rate: 0.87%
```

Run 1: Report of Indigo — Data Link

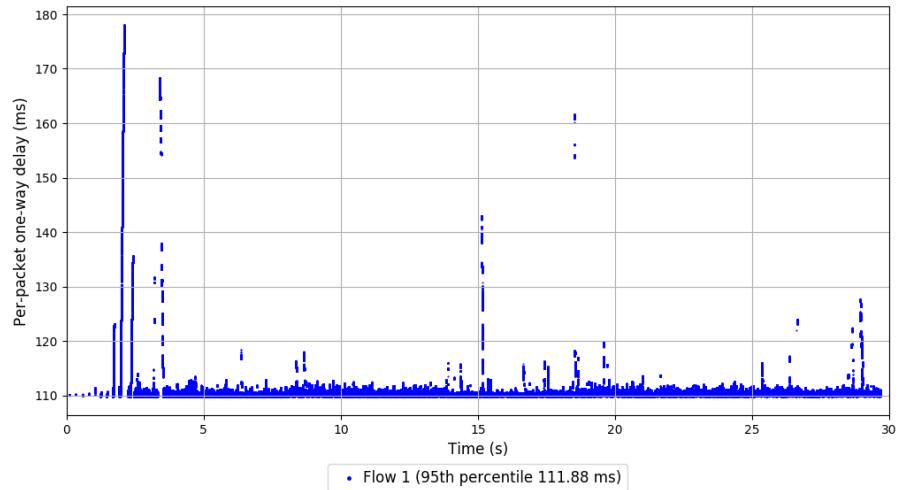
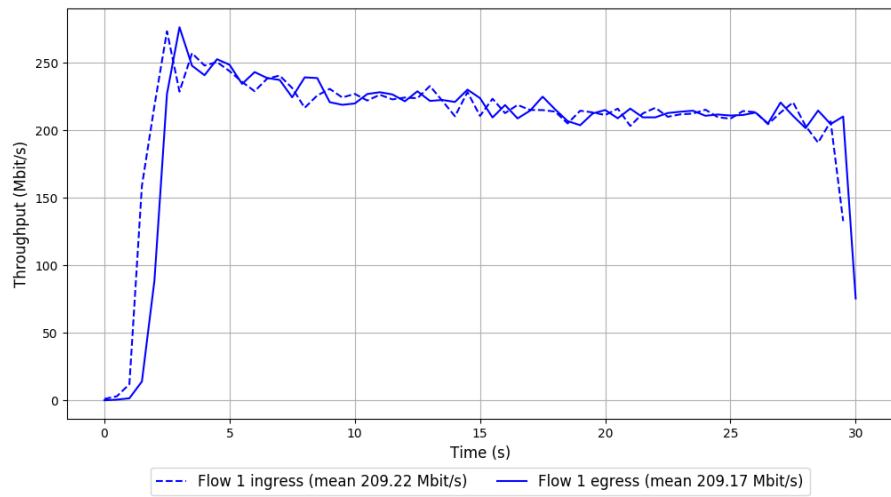


Run 2: Statistics of Indigo

```
Start at: 2019-06-27 01:51:08
End at: 2019-06-27 01:51:38
Local clock offset: 33.144 ms
Remote clock offset: 36.956 ms

# Below is generated by plot.py at 2019-06-27 04:23:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 209.17 Mbit/s
95th percentile per-packet one-way delay: 111.879 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 209.17 Mbit/s
95th percentile per-packet one-way delay: 111.879 ms
Loss rate: 0.76%
```

Run 2: Report of Indigo — Data Link

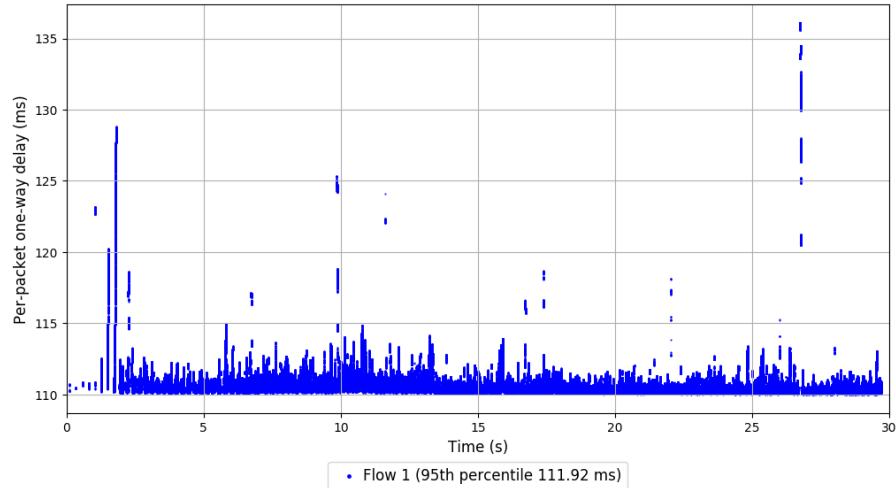
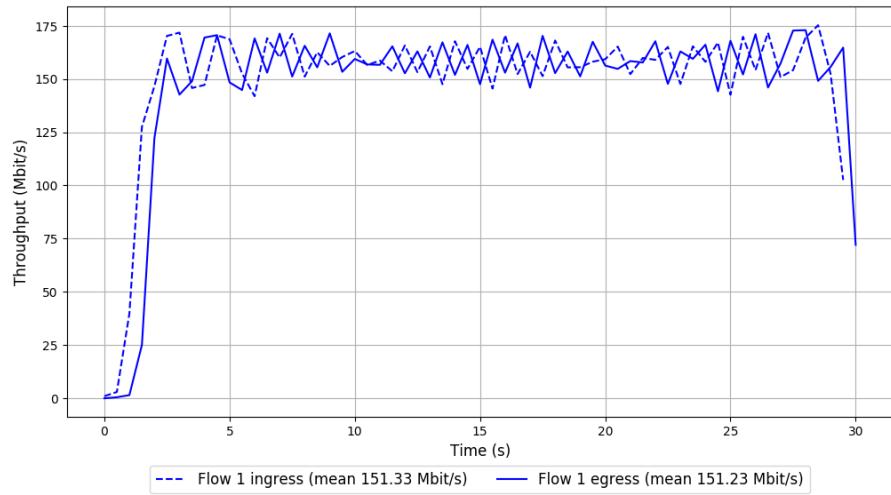


Run 3: Statistics of Indigo

```
Start at: 2019-06-27 02:22:47
End at: 2019-06-27 02:23:17
Local clock offset: 16.03 ms
Remote clock offset: 9.432 ms

# Below is generated by plot.py at 2019-06-27 04:23:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 151.23 Mbit/s
95th percentile per-packet one-way delay: 111.916 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 151.23 Mbit/s
95th percentile per-packet one-way delay: 111.916 ms
Loss rate: 0.81%
```

Run 3: Report of Indigo — Data Link

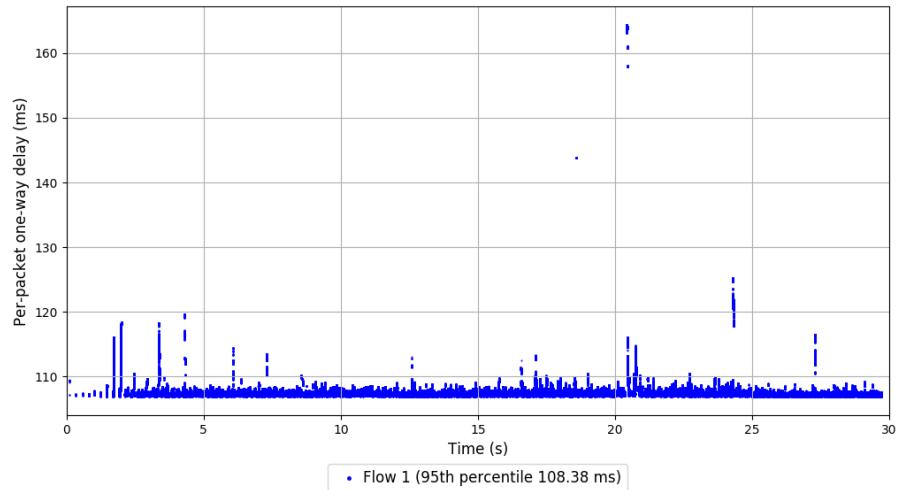
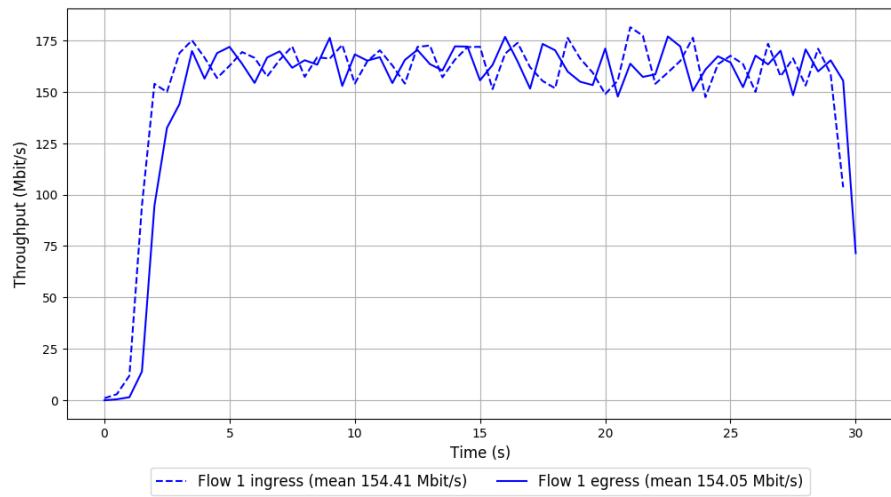


Run 4: Statistics of Indigo

```
Start at: 2019-06-27 02:55:06
End at: 2019-06-27 02:55:36
Local clock offset: 7.45 ms
Remote clock offset: 3.968 ms

# Below is generated by plot.py at 2019-06-27 04:23:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 154.05 Mbit/s
95th percentile per-packet one-way delay: 108.381 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 154.05 Mbit/s
95th percentile per-packet one-way delay: 108.381 ms
Loss rate: 0.96%
```

Run 4: Report of Indigo — Data Link

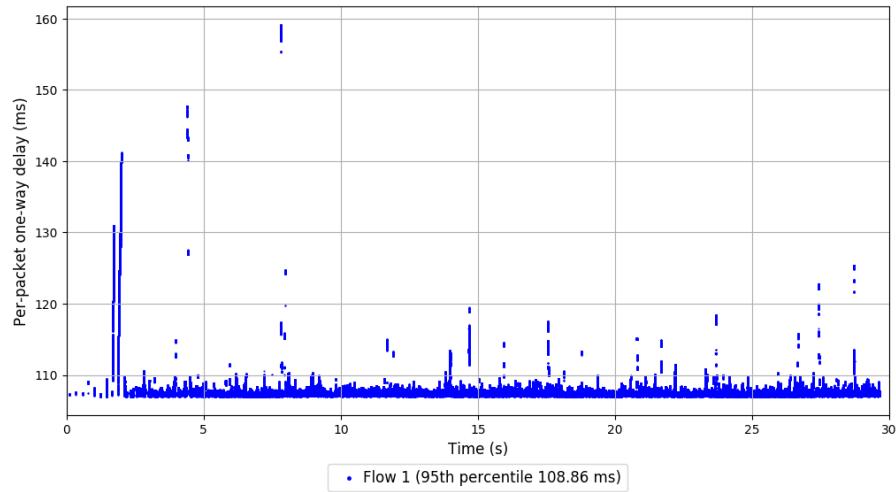
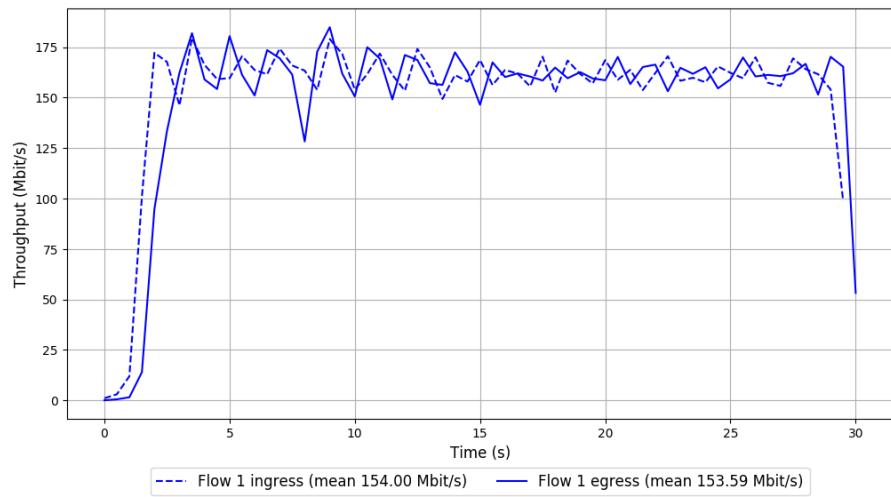


Run 5: Statistics of Indigo

```
Start at: 2019-06-27 03:27:19
End at: 2019-06-27 03:27:49
Local clock offset: 3.655 ms
Remote clock offset: 1.728 ms

# Below is generated by plot.py at 2019-06-27 04:23:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 153.59 Mbit/s
95th percentile per-packet one-way delay: 108.857 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 153.59 Mbit/s
95th percentile per-packet one-way delay: 108.857 ms
Loss rate: 1.00%
```

Run 5: Report of Indigo — Data Link

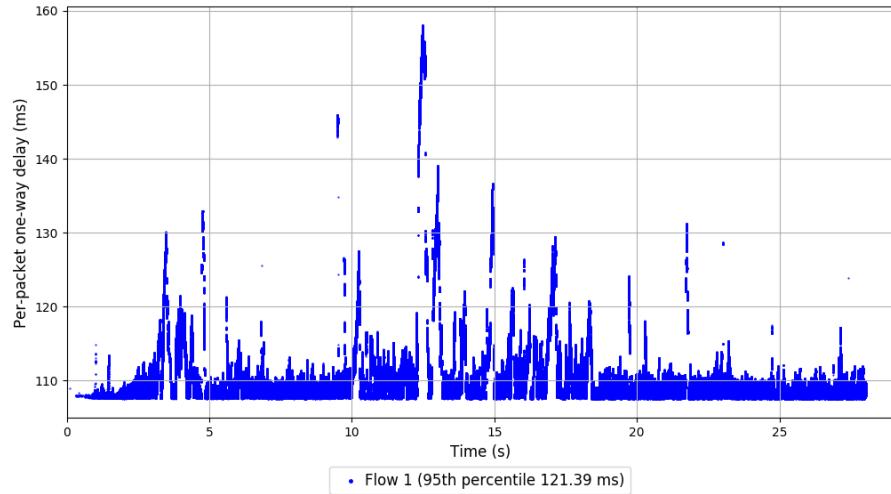
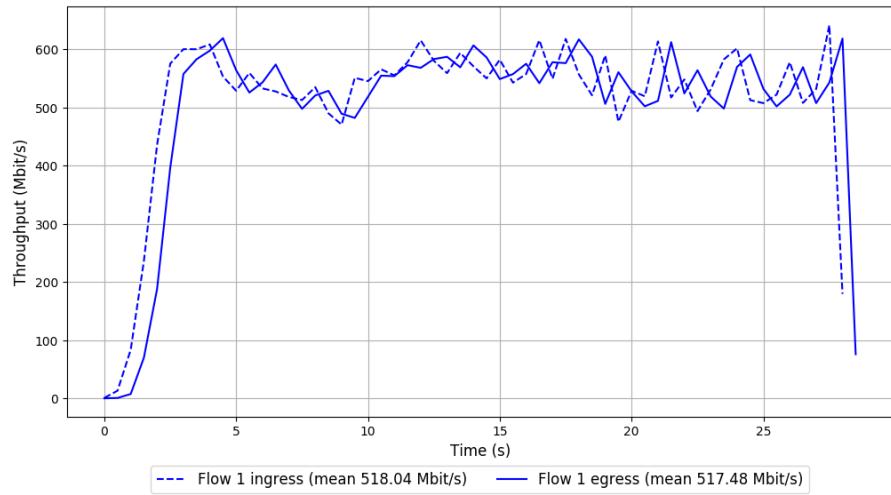


```
Run 1: Statistics of Indigo-MusesC3
```

```
Start at: 2019-06-27 01:05:42
End at: 2019-06-27 01:06:12
Local clock offset: 16.034 ms
Remote clock offset: 16.869 ms

# Below is generated by plot.py at 2019-06-27 04:23:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 517.48 Mbit/s
95th percentile per-packet one-way delay: 121.391 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 517.48 Mbit/s
95th percentile per-packet one-way delay: 121.391 ms
Loss rate: 0.89%
```

Run 1: Report of Indigo-MusesC3 — Data Link

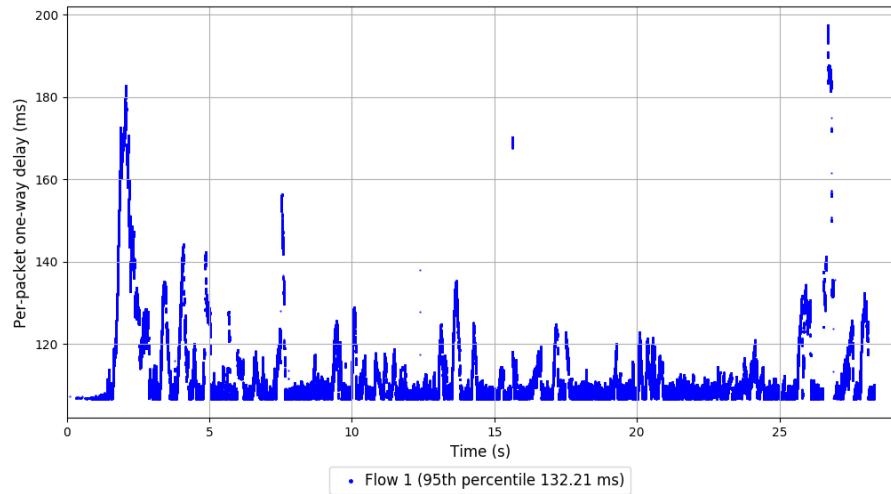
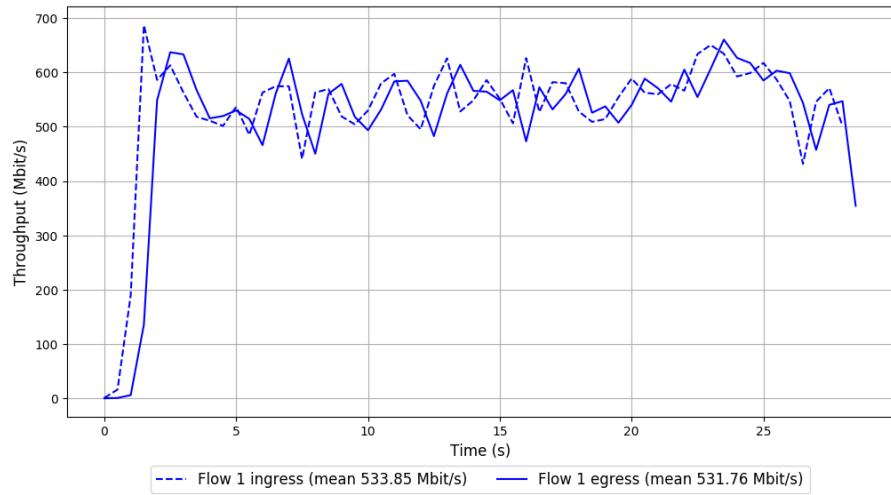


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 01:37:39
End at: 2019-06-27 01:38:09
Local clock offset: 21.412 ms
Remote clock offset: 23.991 ms

# Below is generated by plot.py at 2019-06-27 04:27:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 531.76 Mbit/s
95th percentile per-packet one-way delay: 132.206 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 531.76 Mbit/s
95th percentile per-packet one-way delay: 132.206 ms
Loss rate: 1.16%
```

Run 2: Report of Indigo-MusesC3 — Data Link

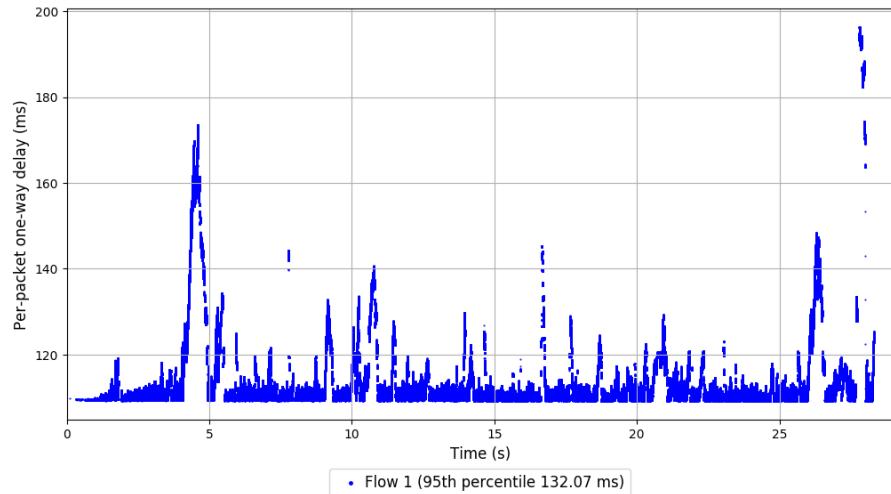
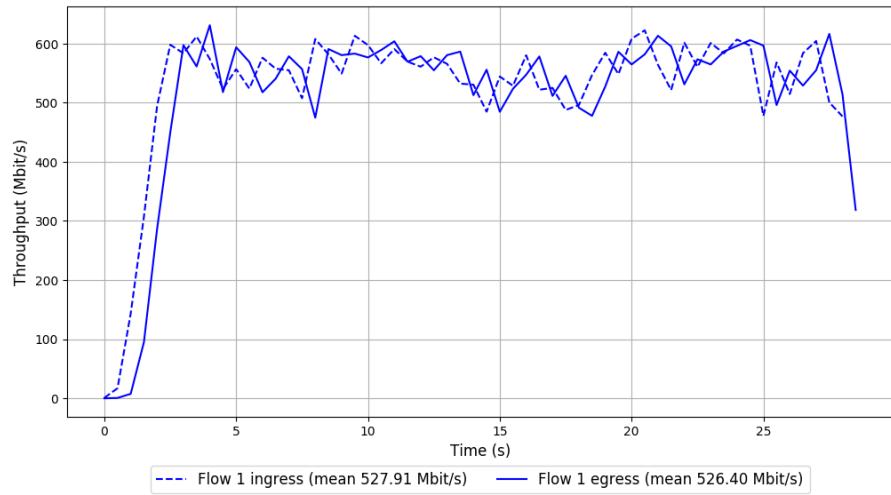


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 02:09:47
End at: 2019-06-27 02:10:17
Local clock offset: 15.205 ms
Remote clock offset: 12.204 ms

# Below is generated by plot.py at 2019-06-27 04:28:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 526.40 Mbit/s
95th percentile per-packet one-way delay: 132.067 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 526.40 Mbit/s
95th percentile per-packet one-way delay: 132.067 ms
Loss rate: 1.02%
```

Run 3: Report of Indigo-MusesC3 — Data Link

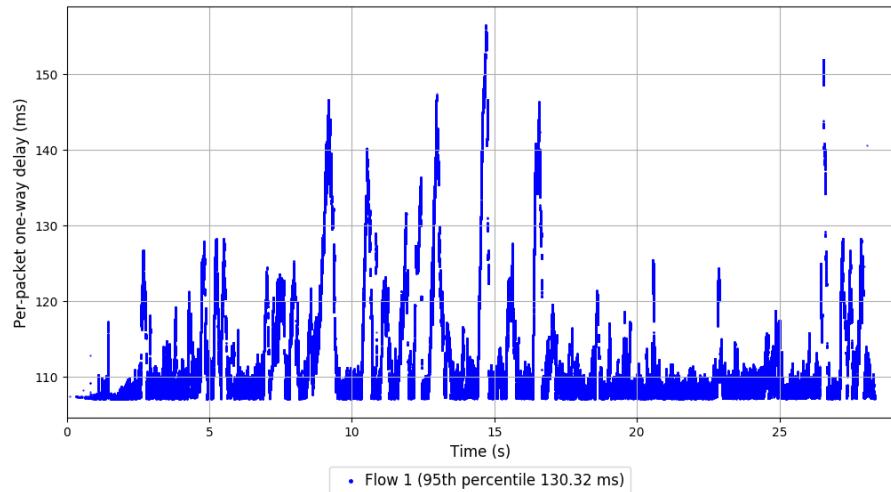
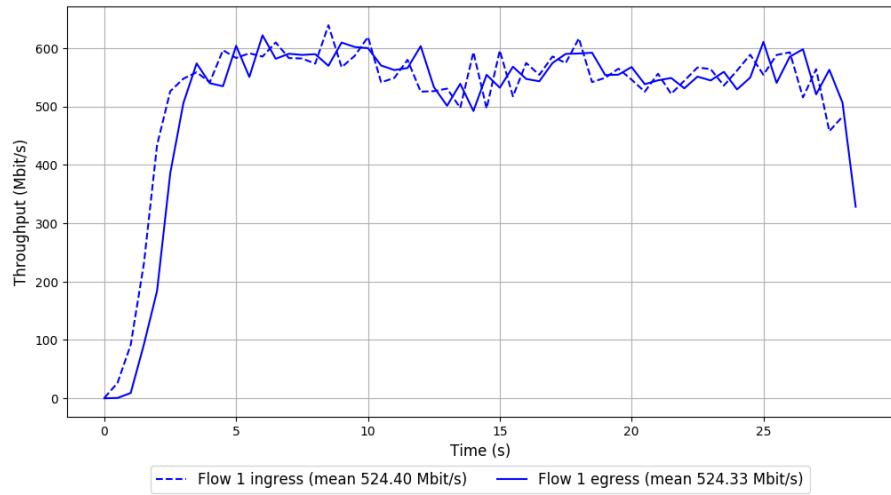


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 02:41:42
End at: 2019-06-27 02:42:12
Local clock offset: 7.98 ms
Remote clock offset: 4.335 ms

# Below is generated by plot.py at 2019-06-27 04:28:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 524.33 Mbit/s
95th percentile per-packet one-way delay: 130.316 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 524.33 Mbit/s
95th percentile per-packet one-way delay: 130.316 ms
Loss rate: 0.79%
```

Run 4: Report of Indigo-MusesC3 — Data Link

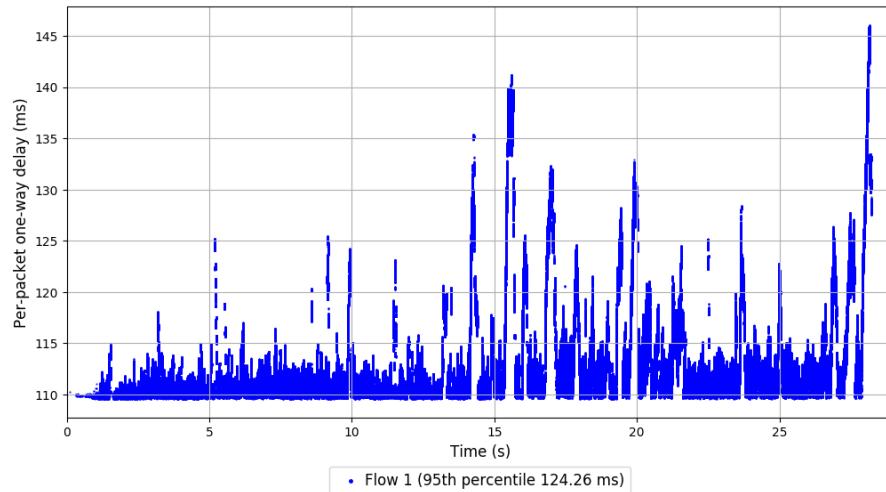
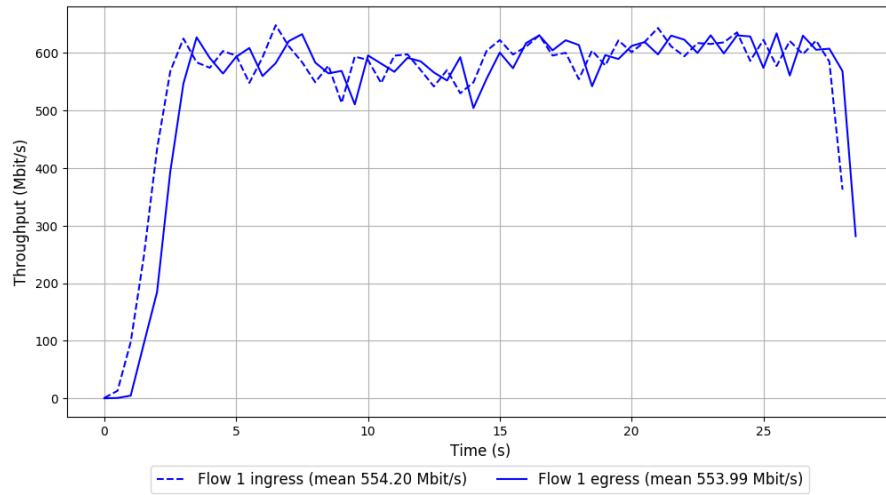


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 03:13:56
End at: 2019-06-27 03:14:26
Local clock offset: 4.26 ms
Remote clock offset: 2.132 ms

# Below is generated by plot.py at 2019-06-27 04:29:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 553.99 Mbit/s
95th percentile per-packet one-way delay: 124.262 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 553.99 Mbit/s
95th percentile per-packet one-way delay: 124.262 ms
Loss rate: 0.80%
```

Run 5: Report of Indigo-MusesC3 — Data Link

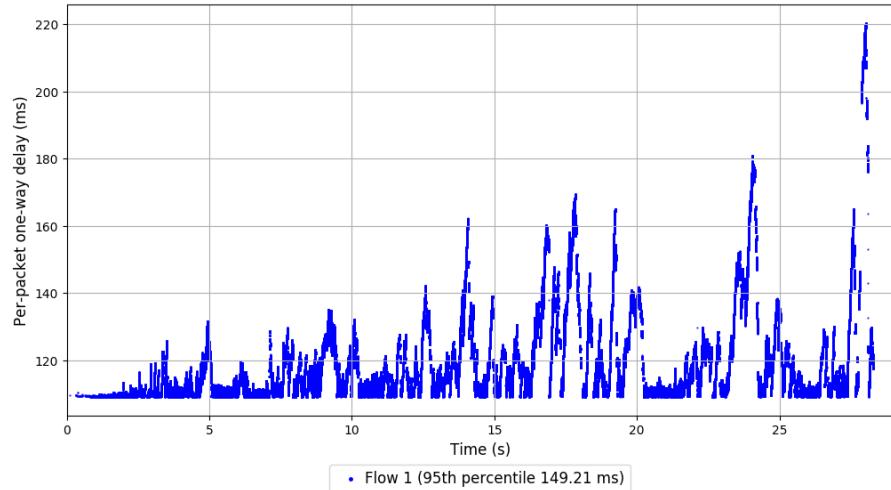
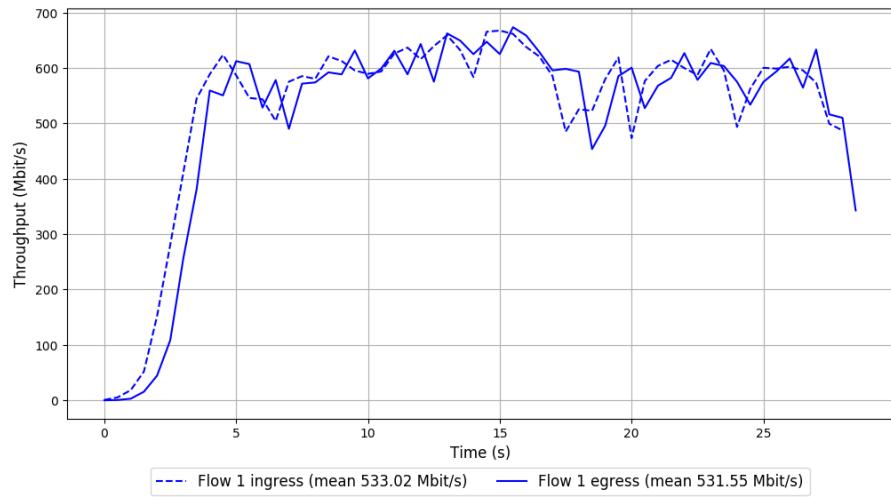


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 01:04:05
End at: 2019-06-27 01:04:35
Local clock offset: 15.197 ms
Remote clock offset: 17.464 ms

# Below is generated by plot.py at 2019-06-27 04:29:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 531.55 Mbit/s
95th percentile per-packet one-way delay: 149.210 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 531.55 Mbit/s
95th percentile per-packet one-way delay: 149.210 ms
Loss rate: 1.03%
```

Run 1: Report of Indigo-MusesC5 — Data Link

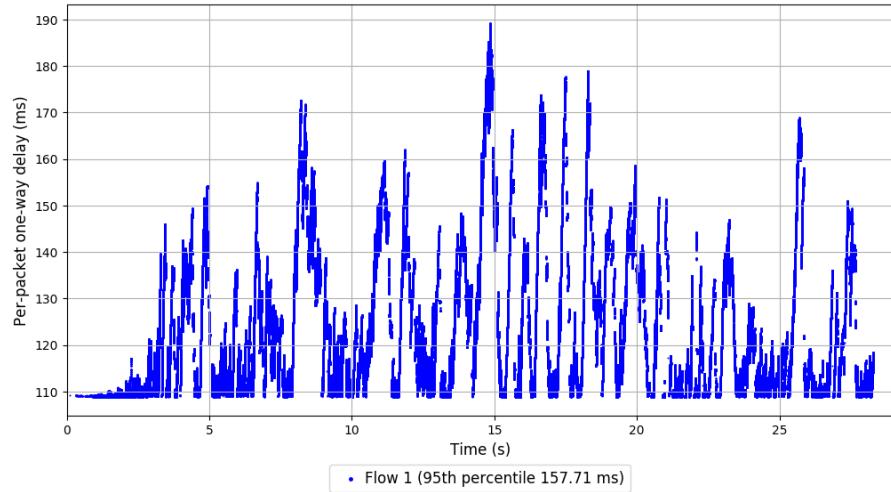
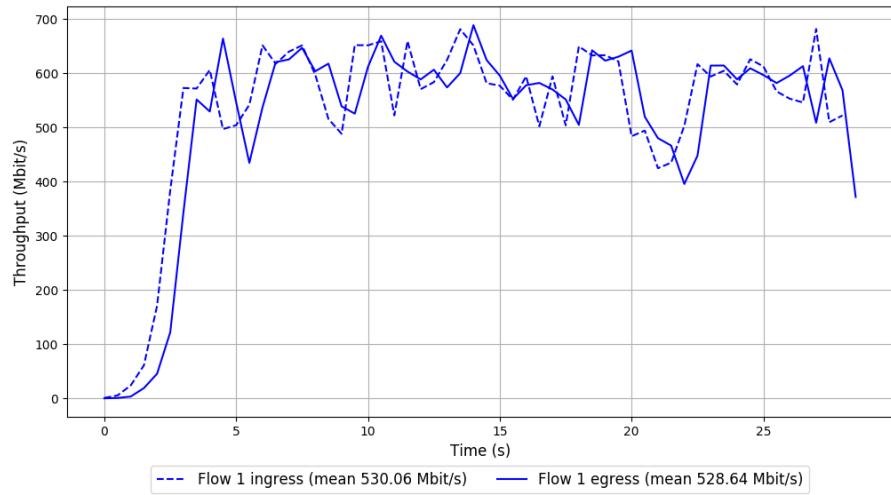


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 01:36:03
End at: 2019-06-27 01:36:33
Local clock offset: 20.42 ms
Remote clock offset: 22.868 ms

# Below is generated by plot.py at 2019-06-27 04:30:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 528.64 Mbit/s
95th percentile per-packet one-way delay: 157.714 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 528.64 Mbit/s
95th percentile per-packet one-way delay: 157.714 ms
Loss rate: 1.04%
```

Run 2: Report of Indigo-MusesC5 — Data Link

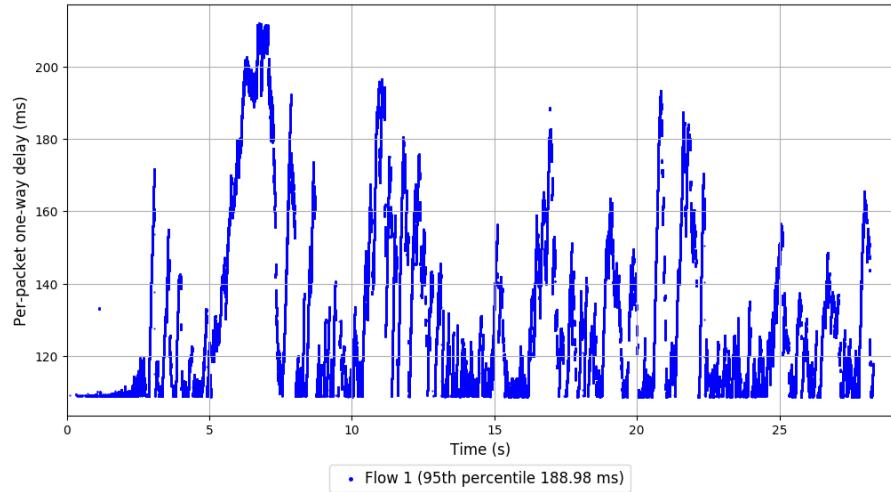
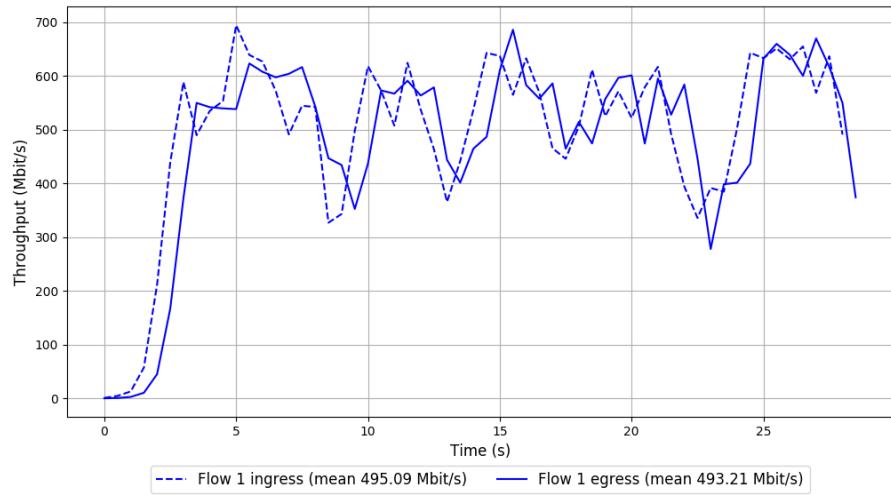


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 02:08:12
End at: 2019-06-27 02:08:42
Local clock offset: 15.895 ms
Remote clock offset: 13.905 ms

# Below is generated by plot.py at 2019-06-27 04:32:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 493.21 Mbit/s
95th percentile per-packet one-way delay: 188.980 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 493.21 Mbit/s
95th percentile per-packet one-way delay: 188.980 ms
Loss rate: 1.16%
```

Run 3: Report of Indigo-MusesC5 — Data Link

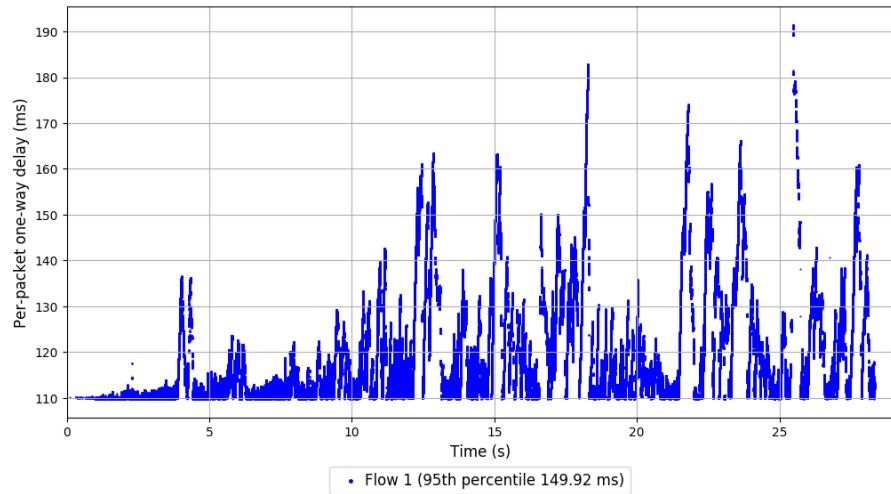
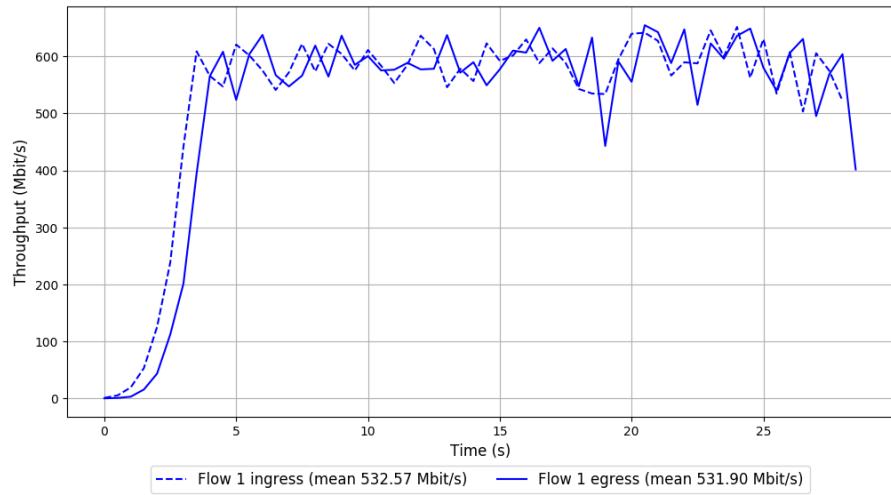


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 02:40:05
End at: 2019-06-27 02:40:35
Local clock offset: 8.754 ms
Remote clock offset: 4.747 ms

# Below is generated by plot.py at 2019-06-27 04:34:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 531.90 Mbit/s
95th percentile per-packet one-way delay: 149.923 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 531.90 Mbit/s
95th percentile per-packet one-way delay: 149.923 ms
Loss rate: 0.90%
```

Run 4: Report of Indigo-MusesC5 — Data Link

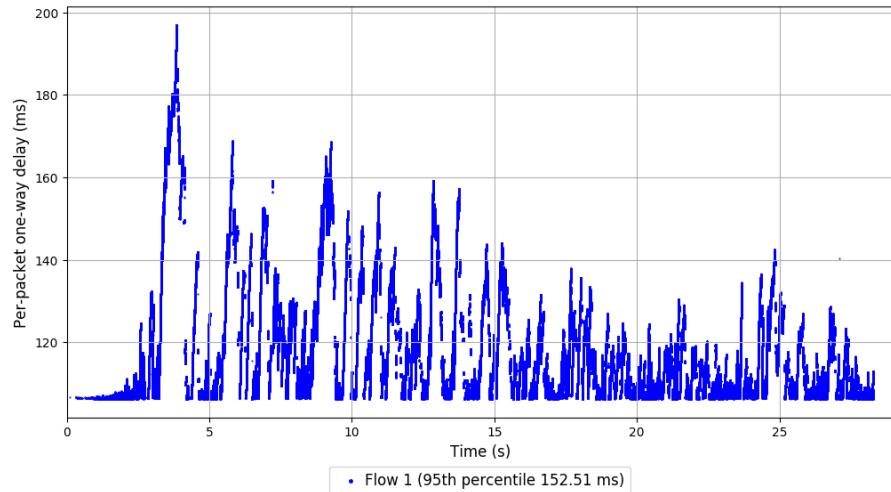
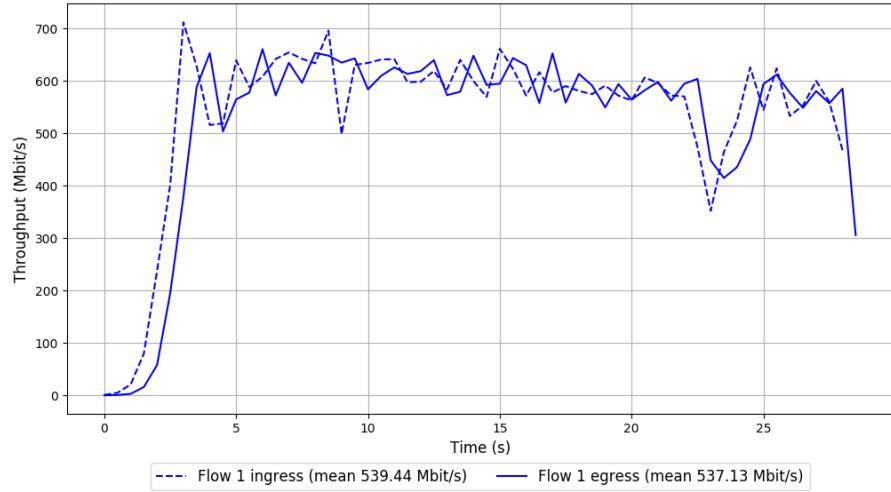


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 03:12:18
End at: 2019-06-27 03:12:48
Local clock offset: 4.917 ms
Remote clock offset: 2.377 ms

# Below is generated by plot.py at 2019-06-27 04:36:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 537.13 Mbit/s
95th percentile per-packet one-way delay: 152.515 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 537.13 Mbit/s
95th percentile per-packet one-way delay: 152.515 ms
Loss rate: 1.18%
```

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

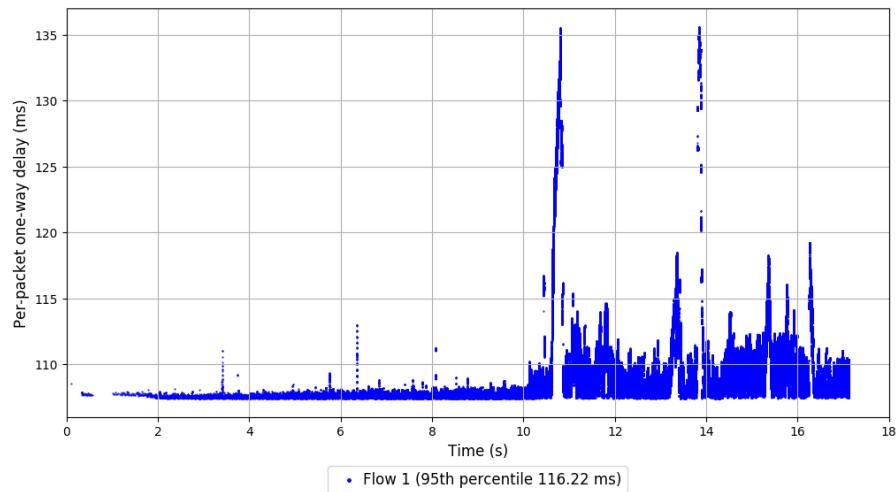
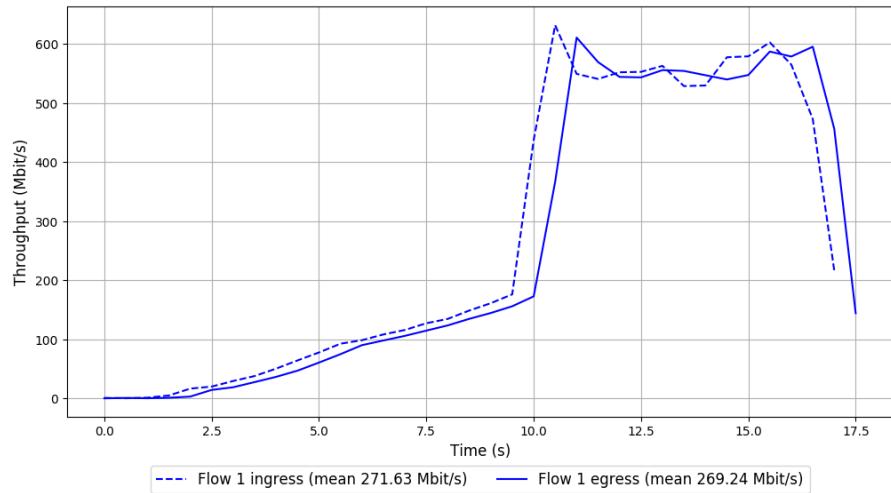
Start at: 2019-06-27 00:52:47

End at: 2019-06-27 00:53:17

Local clock offset: 6.505 ms

Remote clock offset: 6.461 ms

Run 1: Report of Indigo-MusesD — Data Link

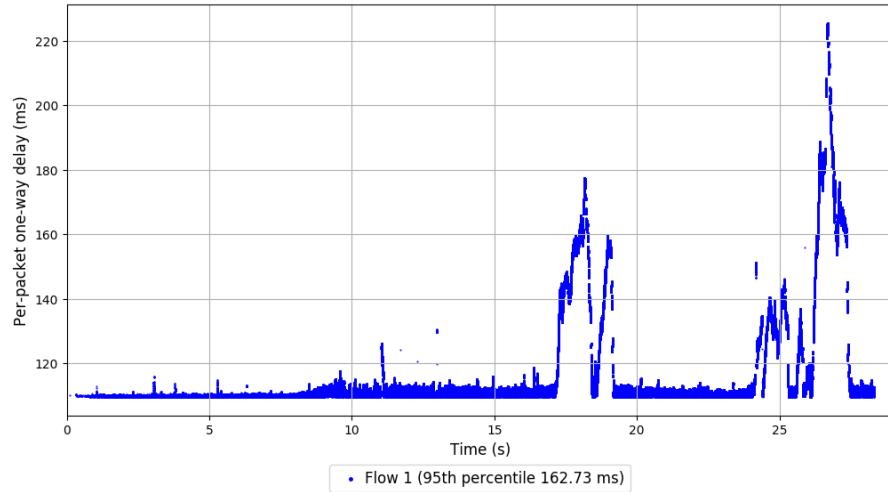
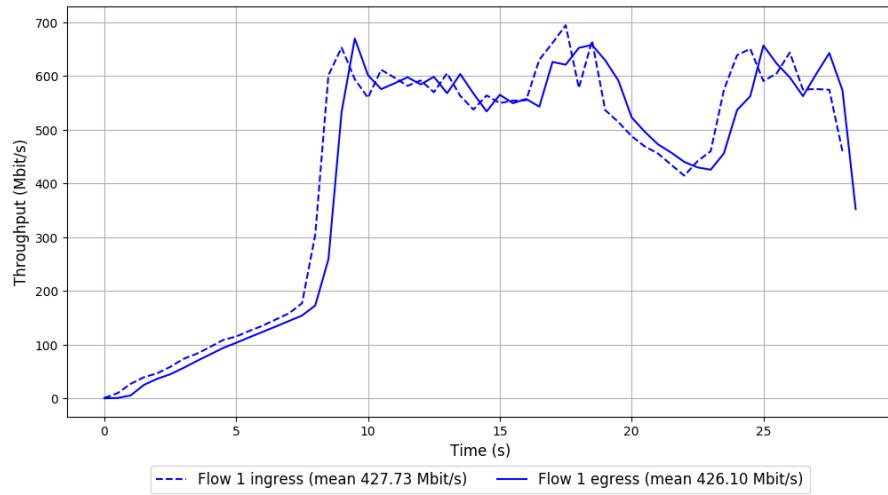


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 01:24:31
End at: 2019-06-27 01:25:01
Local clock offset: 22.394 ms
Remote clock offset: 24.393 ms

# Below is generated by plot.py at 2019-06-27 04:36:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 426.10 Mbit/s
95th percentile per-packet one-way delay: 162.726 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 426.10 Mbit/s
95th percentile per-packet one-way delay: 162.726 ms
Loss rate: 1.16%
```

Run 2: Report of Indigo-MusesD — Data Link

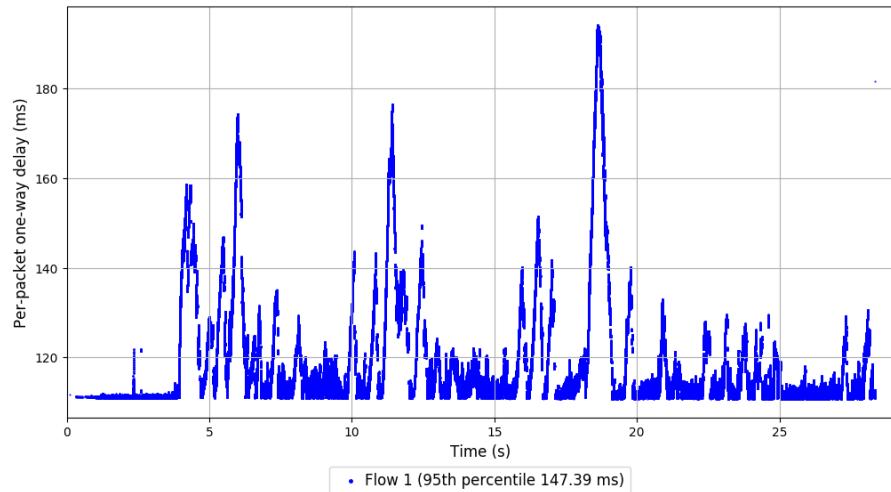
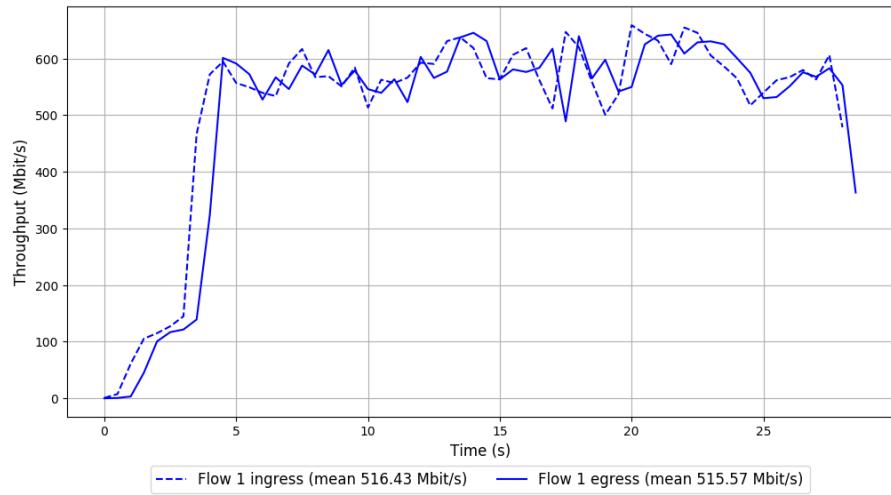


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 01:56:41
End at: 2019-06-27 01:57:11
Local clock offset: 37.045 ms
Remote clock offset: 39.404 ms

# Below is generated by plot.py at 2019-06-27 04:38:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 515.57 Mbit/s
95th percentile per-packet one-way delay: 147.389 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 515.57 Mbit/s
95th percentile per-packet one-way delay: 147.389 ms
Loss rate: 0.94%
```

Run 3: Report of Indigo-MusesD — Data Link

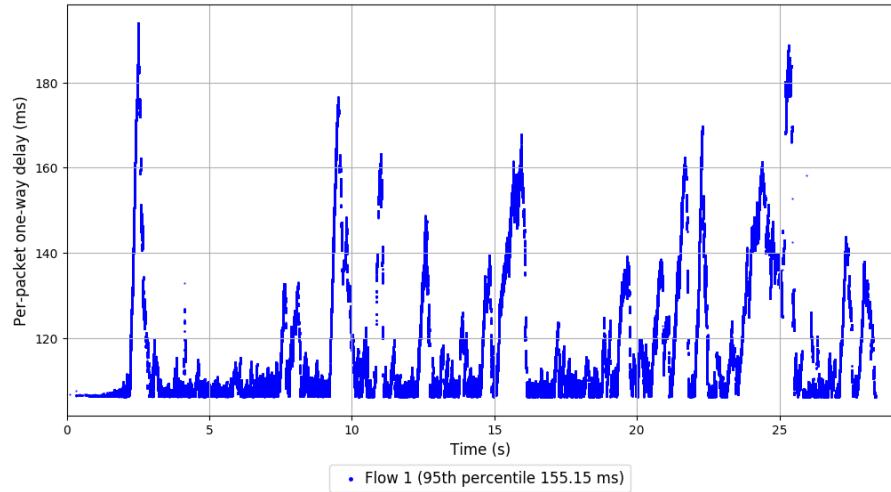
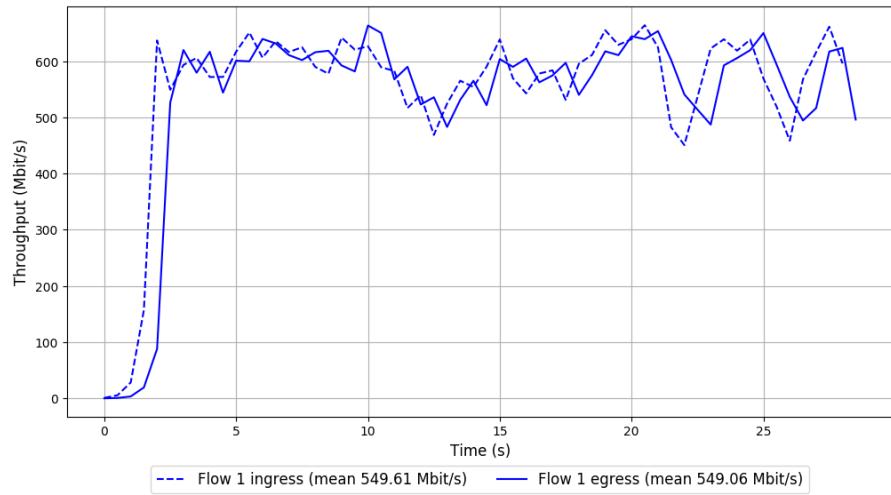


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 02:28:29
End at: 2019-06-27 02:28:59
Local clock offset: 18.154 ms
Remote clock offset: 10.591 ms

# Below is generated by plot.py at 2019-06-27 04:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 549.06 Mbit/s
95th percentile per-packet one-way delay: 155.150 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 549.06 Mbit/s
95th percentile per-packet one-way delay: 155.150 ms
Loss rate: 0.87%
```

Run 4: Report of Indigo-MusesD — Data Link

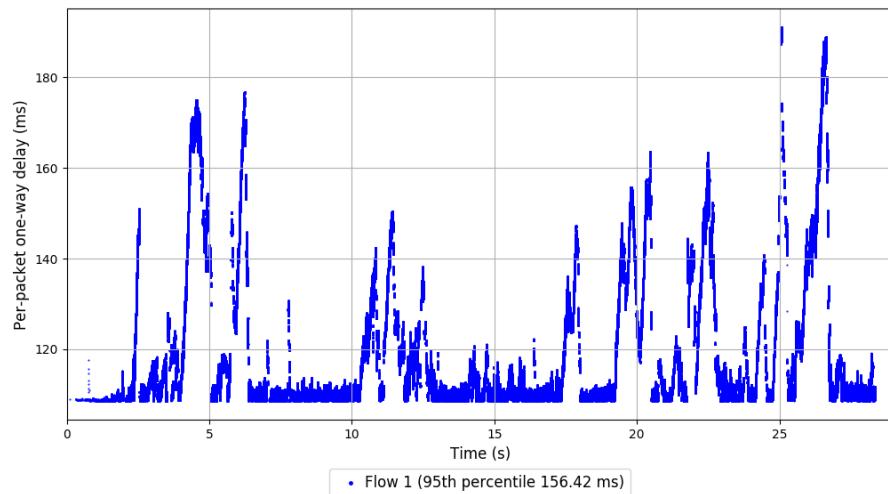
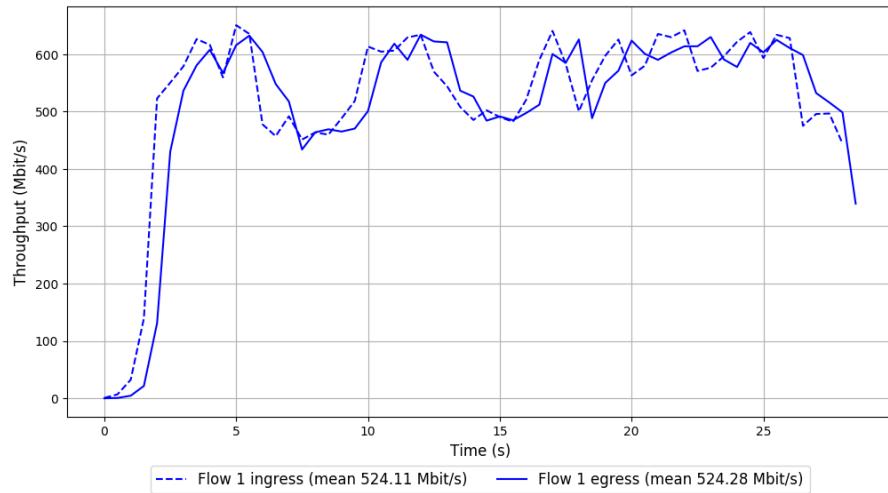


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 03:00:48
End at: 2019-06-27 03:01:18
Local clock offset: 8.234 ms
Remote clock offset: 4.473 ms

# Below is generated by plot.py at 2019-06-27 04:40:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 524.28 Mbit/s
95th percentile per-packet one-way delay: 156.419 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 524.28 Mbit/s
95th percentile per-packet one-way delay: 156.419 ms
Loss rate: 0.73%
```

Run 5: Report of Indigo-MusesD — Data Link

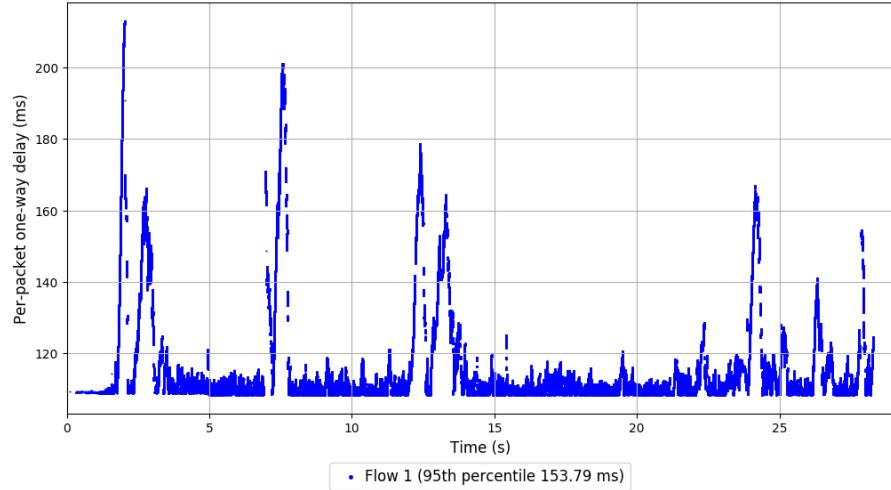
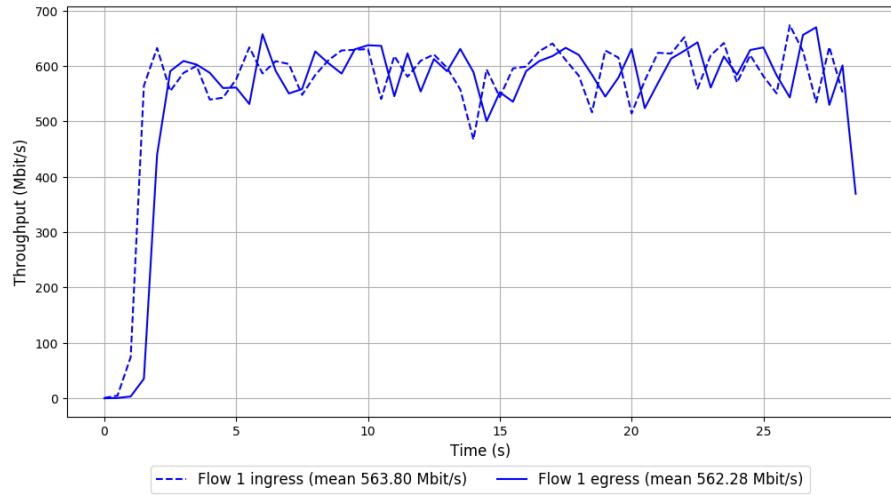


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 01:01:15
End at: 2019-06-27 01:01:45
Local clock offset: 9.694 ms
Remote clock offset: 12.212 ms

# Below is generated by plot.py at 2019-06-27 04:42:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 562.28 Mbit/s
95th percentile per-packet one-way delay: 153.788 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 562.28 Mbit/s
95th percentile per-packet one-way delay: 153.788 ms
Loss rate: 1.05%
```

Run 1: Report of Indigo-MusesT — Data Link

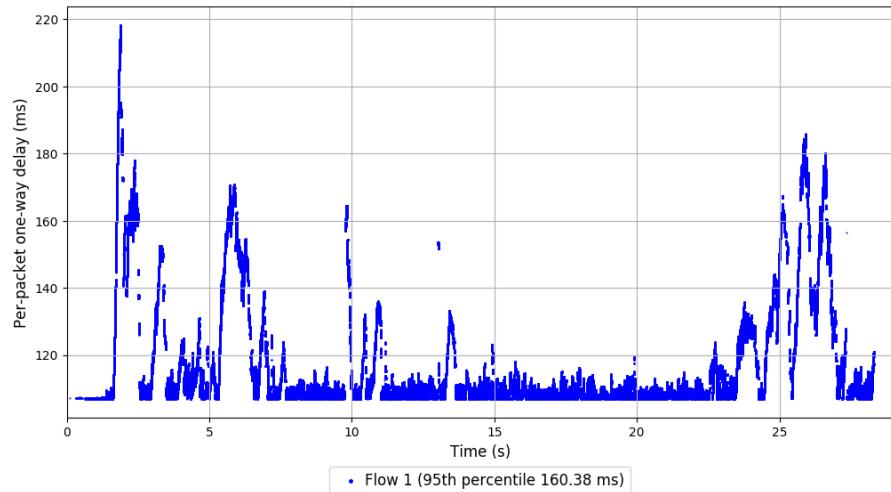
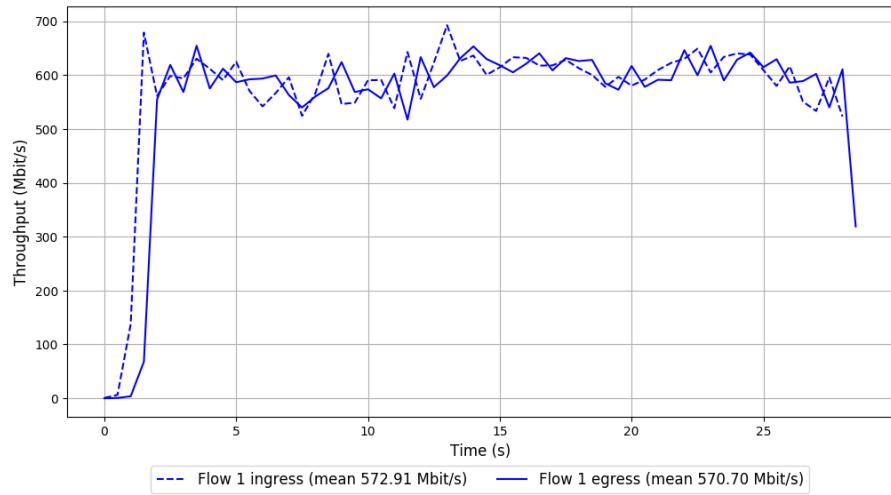


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 01:33:12
End at: 2019-06-27 01:33:42
Local clock offset: 19.233 ms
Remote clock offset: 21.458 ms

# Below is generated by plot.py at 2019-06-27 04:43:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 570.70 Mbit/s
95th percentile per-packet one-way delay: 160.376 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 570.70 Mbit/s
95th percentile per-packet one-way delay: 160.376 ms
Loss rate: 1.14%
```

Run 2: Report of Indigo-MusesT — Data Link

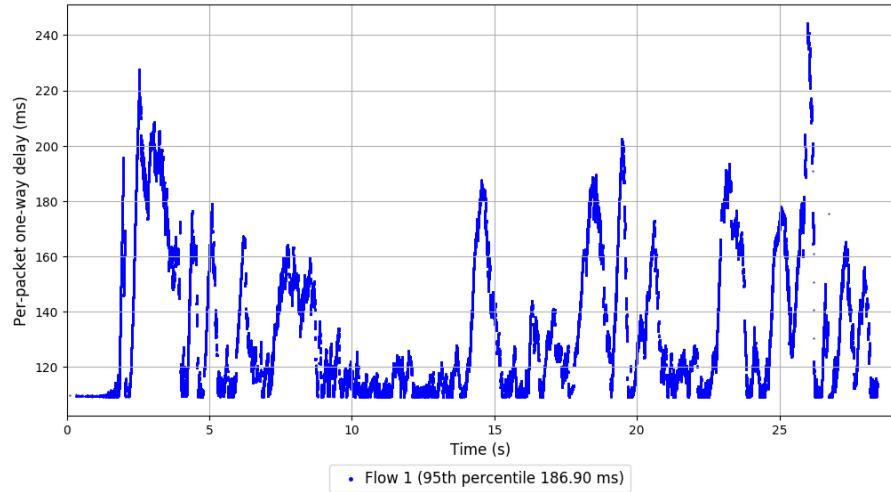
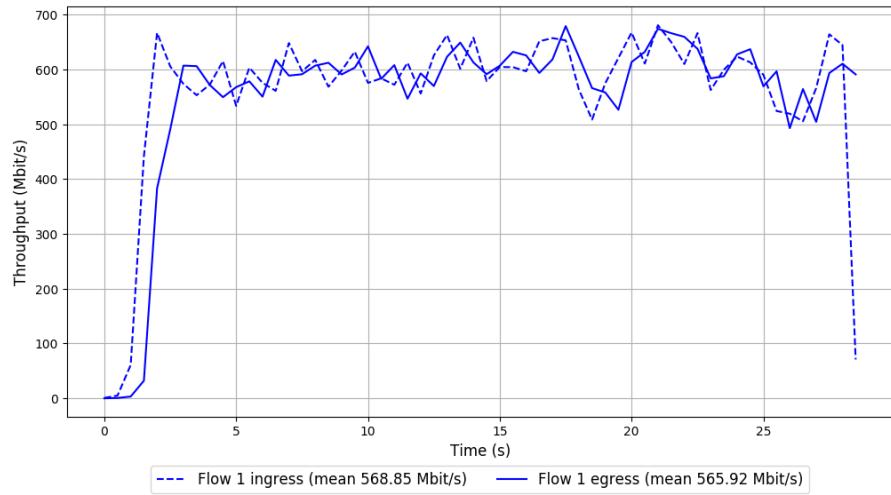


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 02:05:21
End at: 2019-06-27 02:05:51
Local clock offset: 17.515 ms
Remote clock offset: 17.178 ms

# Below is generated by plot.py at 2019-06-27 04:45:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 565.92 Mbit/s
95th percentile per-packet one-way delay: 186.902 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 565.92 Mbit/s
95th percentile per-packet one-way delay: 186.902 ms
Loss rate: 1.29%
```

Run 3: Report of Indigo-MusesT — Data Link

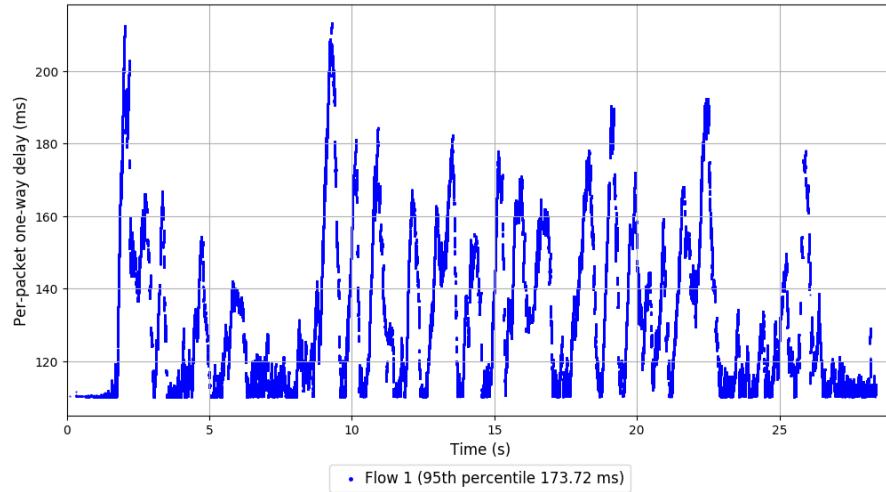
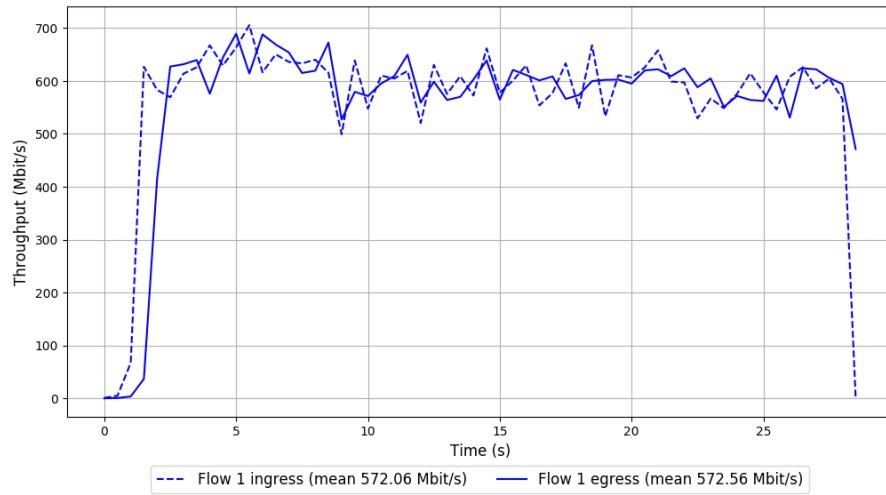


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 02:37:15
End at: 2019-06-27 02:37:45
Local clock offset: 10.424 ms
Remote clock offset: 5.757 ms

# Below is generated by plot.py at 2019-06-27 04:46:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 572.56 Mbit/s
95th percentile per-packet one-way delay: 173.716 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 572.56 Mbit/s
95th percentile per-packet one-way delay: 173.716 ms
Loss rate: 0.69%
```

Run 4: Report of Indigo-MusesT — Data Link

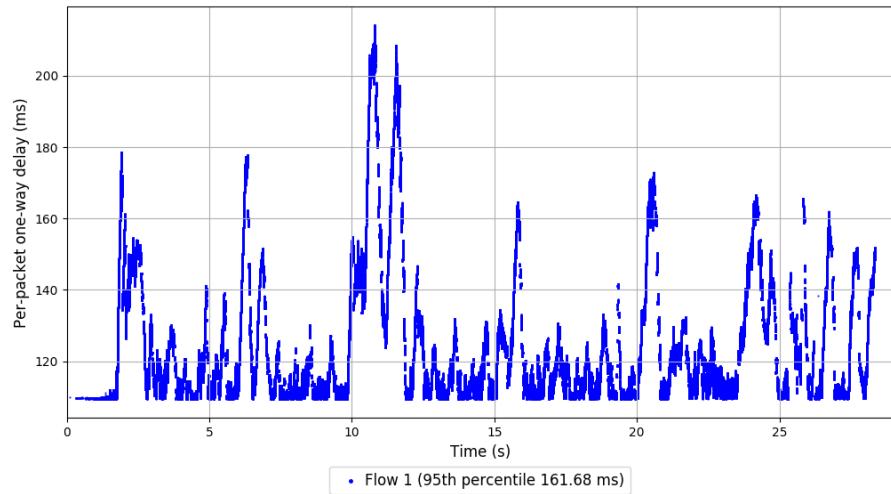
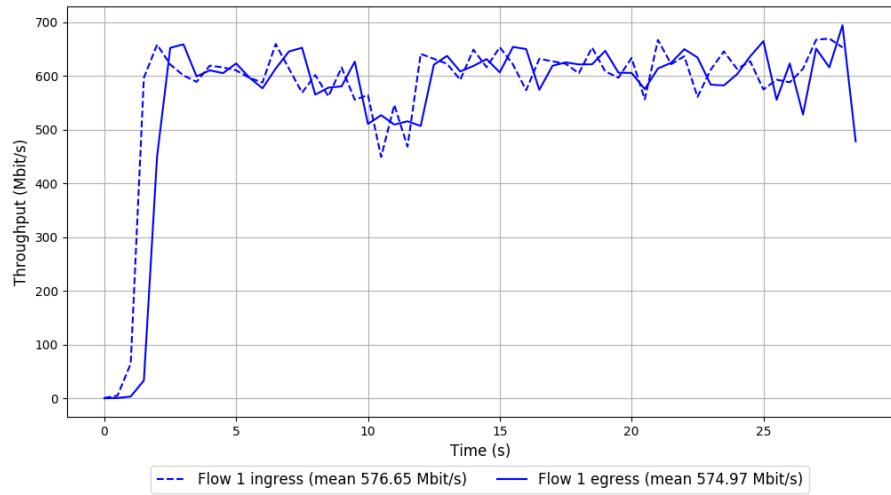


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 03:09:26
End at: 2019-06-27 03:09:56
Local clock offset: 5.952 ms
Remote clock offset: 2.9 ms

# Below is generated by plot.py at 2019-06-27 04:47:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 574.97 Mbit/s
95th percentile per-packet one-way delay: 161.681 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 574.97 Mbit/s
95th percentile per-packet one-way delay: 161.681 ms
Loss rate: 1.05%
```

Run 5: Report of Indigo-MusesT — Data Link

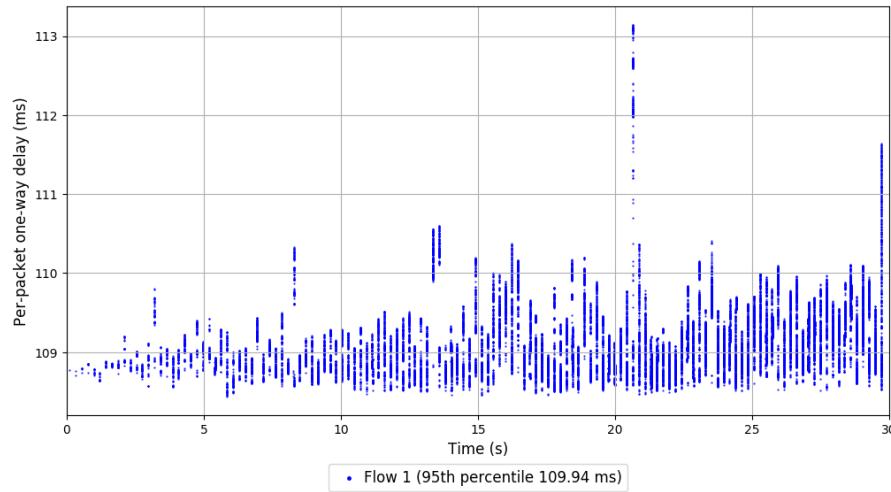
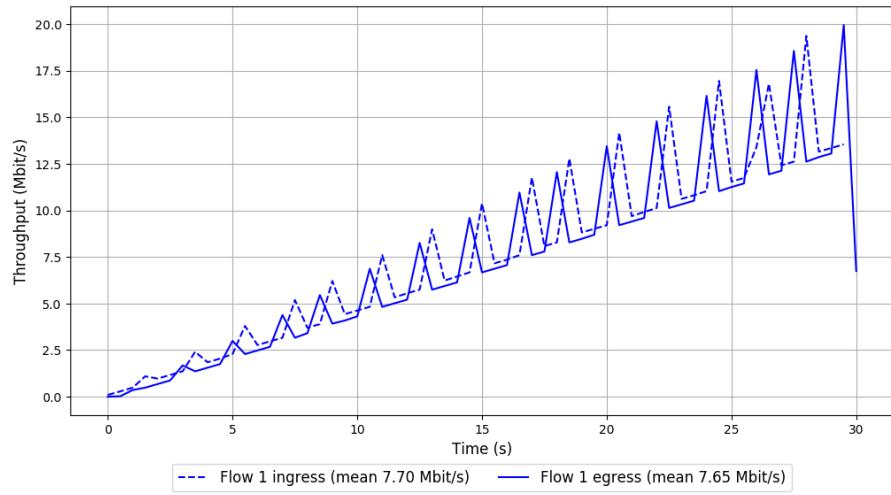


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2019-06-27 01:02:54
End at: 2019-06-27 01:03:24
Local clock offset: 12.759 ms
Remote clock offset: 15.419 ms

# Below is generated by plot.py at 2019-06-27 04:47:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.65 Mbit/s
95th percentile per-packet one-way delay: 109.944 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 7.65 Mbit/s
95th percentile per-packet one-way delay: 109.944 ms
Loss rate: 1.48%
```

Run 1: Report of LEDBAT — Data Link

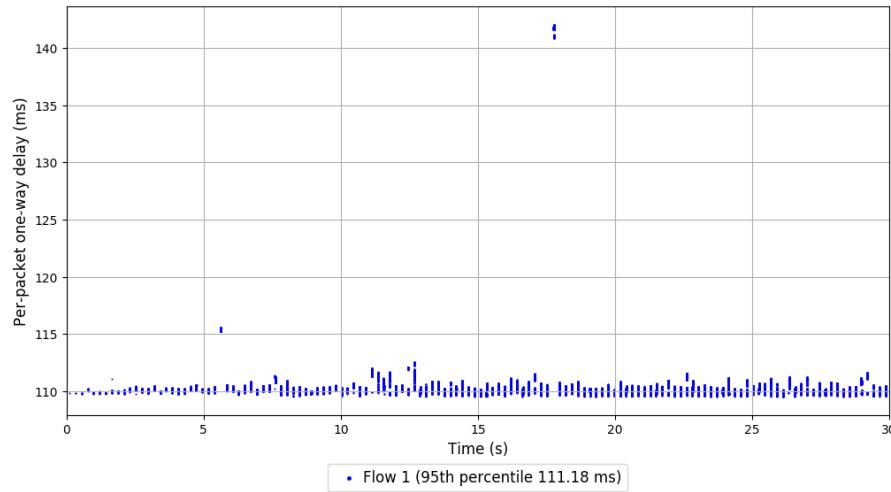
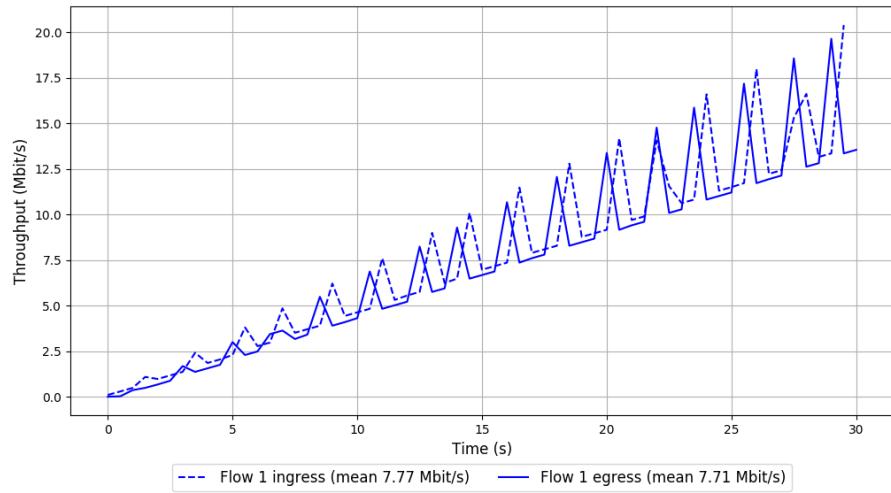


Run 2: Statistics of LEDBAT

```
Start at: 2019-06-27 01:34:51
End at: 2019-06-27 01:35:21
Local clock offset: 20.46 ms
Remote clock offset: 22.108 ms

# Below is generated by plot.py at 2019-06-27 04:47:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 111.182 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 111.182 ms
Loss rate: 1.47%
```

Run 2: Report of LEDBAT — Data Link

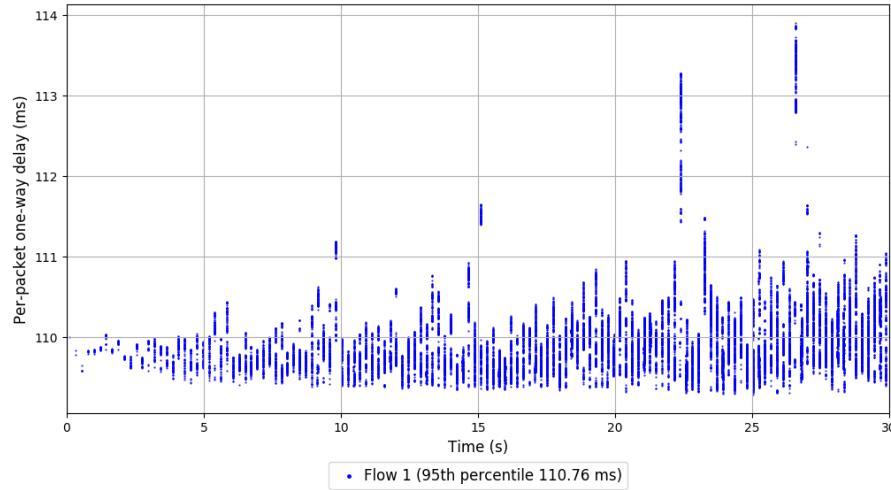
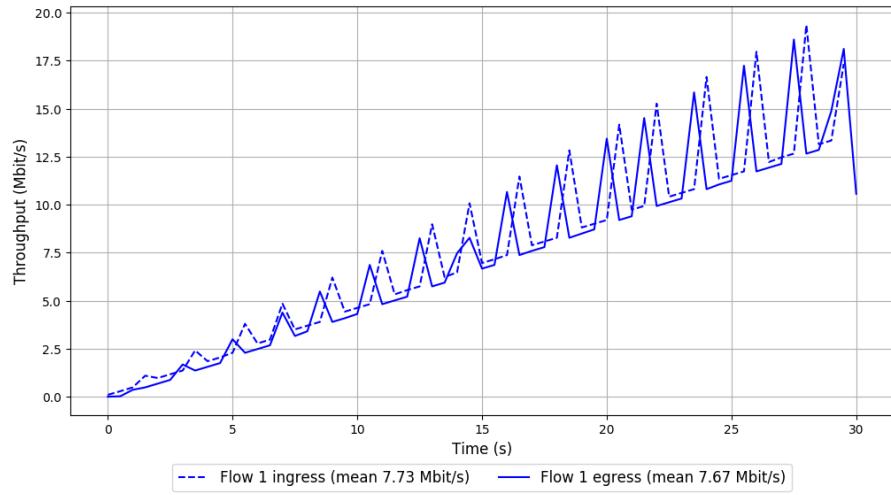


Run 3: Statistics of LEDBAT

```
Start at: 2019-06-27 02:07:01
End at: 2019-06-27 02:07:31
Local clock offset: 16.842 ms
Remote clock offset: 14.918 ms

# Below is generated by plot.py at 2019-06-27 04:47:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.67 Mbit/s
95th percentile per-packet one-way delay: 110.761 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 7.67 Mbit/s
95th percentile per-packet one-way delay: 110.761 ms
Loss rate: 1.46%
```

Run 3: Report of LEDBAT — Data Link

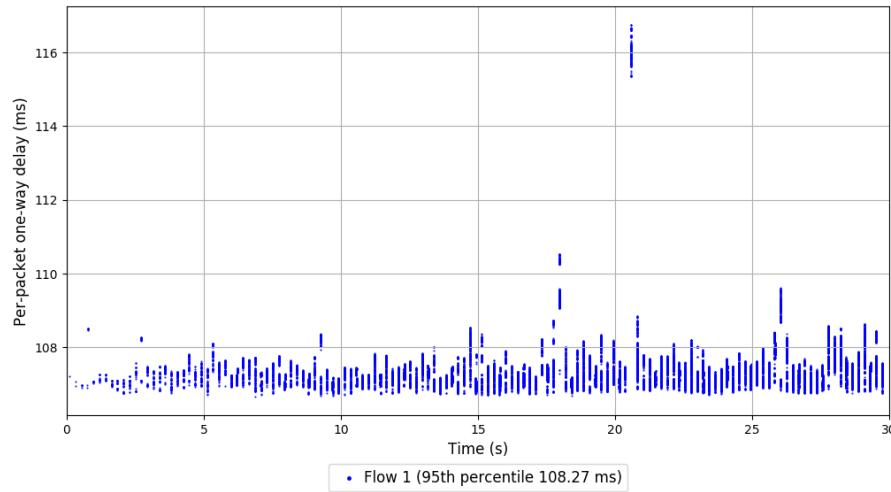
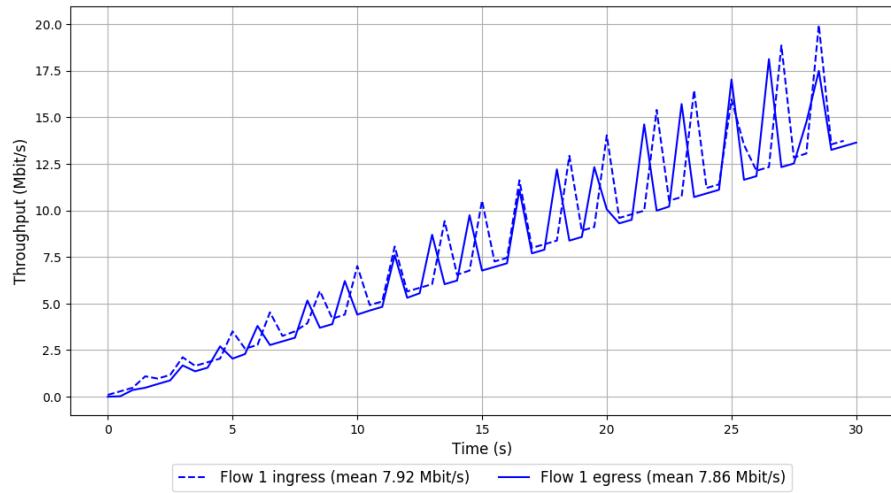


Run 4: Statistics of LEDBAT

```
Start at: 2019-06-27 02:38:54
End at: 2019-06-27 02:39:24
Local clock offset: 9.159 ms
Remote clock offset: 5.139 ms

# Below is generated by plot.py at 2019-06-27 04:47:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.86 Mbit/s
95th percentile per-packet one-way delay: 108.266 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 7.86 Mbit/s
95th percentile per-packet one-way delay: 108.266 ms
Loss rate: 1.46%
```

Run 4: Report of LEDBAT — Data Link

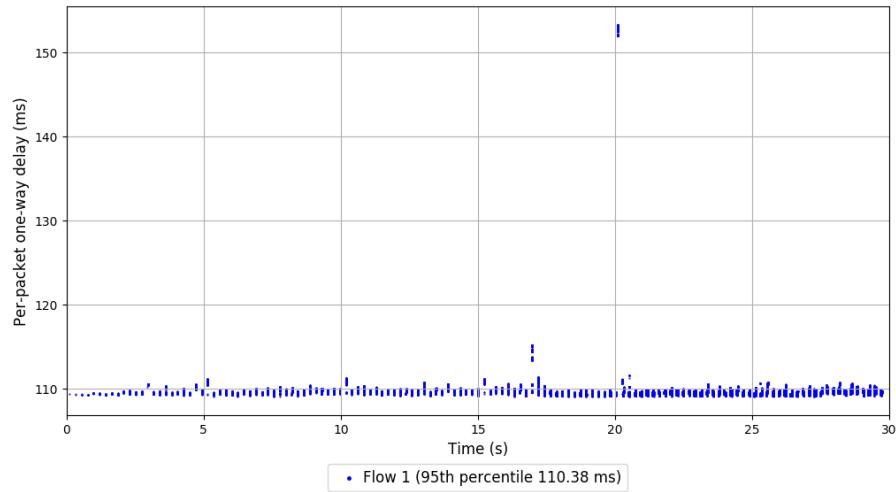
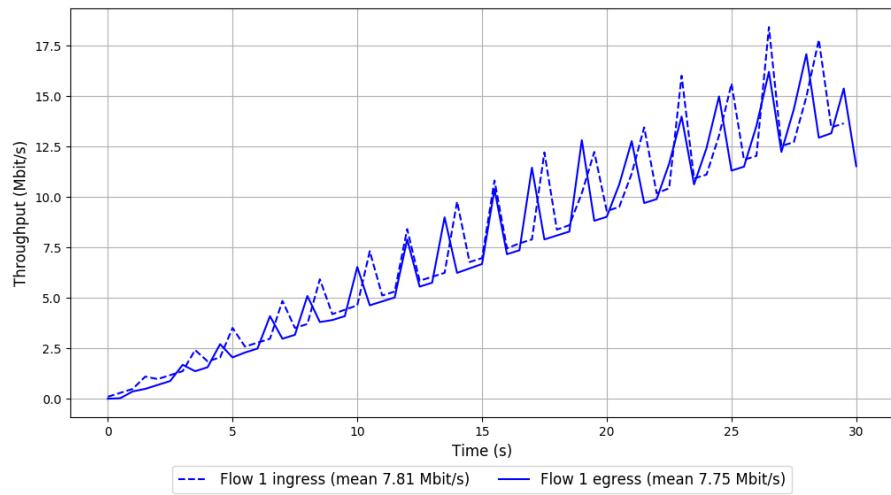


Run 5: Statistics of LEDBAT

```
Start at: 2019-06-27 03:11:07
End at: 2019-06-27 03:11:37
Local clock offset: 5.099 ms
Remote clock offset: 2.519 ms

# Below is generated by plot.py at 2019-06-27 04:47:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.75 Mbit/s
95th percentile per-packet one-way delay: 110.384 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 7.75 Mbit/s
95th percentile per-packet one-way delay: 110.384 ms
Loss rate: 1.47%
```

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of Muses_DecisionTree

Start at: 2019-06-27 01:00:05

End at: 2019-06-27 01:00:35

Local clock offset: 9.212 ms

Remote clock offset: 10.578 ms

Run 1: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of Muses_DecisionTree

Start at: 2019-06-27 01:32:03

End at: 2019-06-27 01:32:33

Local clock offset: 19.596 ms

Remote clock offset: 21.138 ms

Run 2: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of Muses_DecisionTree

Start at: 2019-06-27 02:04:12

End at: 2019-06-27 02:04:42

Local clock offset: 19.565 ms

Remote clock offset: 18.774 ms

Run 3: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 4: Statistics of Muses_DecisionTree

Start at: 2019-06-27 02:36:05

End at: 2019-06-27 02:36:36

Local clock offset: 10.456 ms

Remote clock offset: 6.298 ms

Run 4: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 5: Statistics of Muses_DecisionTree

Start at: 2019-06-27 03:08:17

End at: 2019-06-27 03:08:47

Local clock offset: 6.281 ms

Remote clock offset: 3.306 ms

Run 5: Report of Muses_DecisionTree — Data Link

Figure is missing

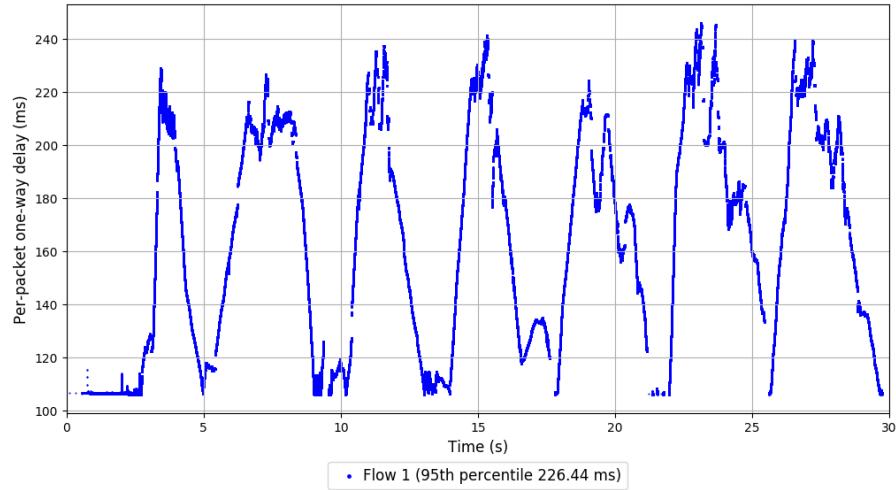
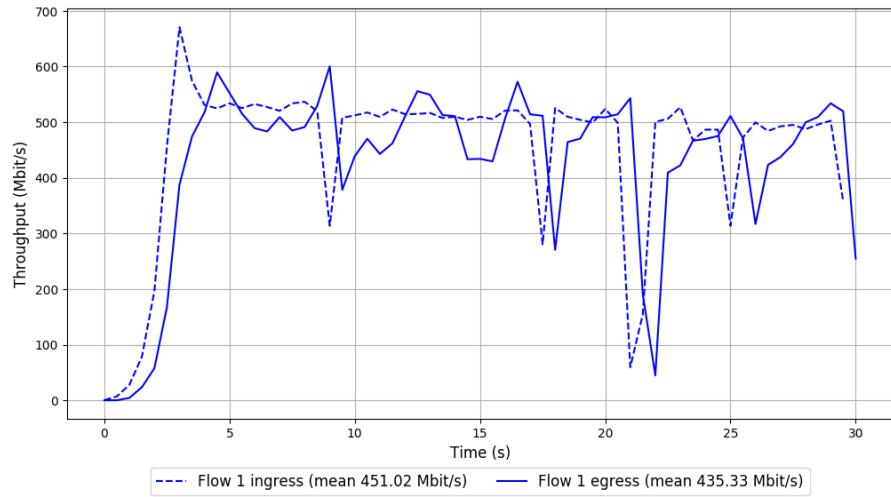
Figure is missing

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

```
Start at: 2019-06-27 00:49:41
End at: 2019-06-27 00:50:11
Local clock offset: 2.987 ms
Remote clock offset: 3.831 ms

# Below is generated by plot.py at 2019-06-27 04:56:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 435.33 Mbit/s
95th percentile per-packet one-way delay: 226.438 ms
Loss rate: 4.18%
-- Flow 1:
Average throughput: 435.33 Mbit/s
95th percentile per-packet one-way delay: 226.438 ms
Loss rate: 4.18%
```

Run 1: Report of PCC-Allegro — Data Link

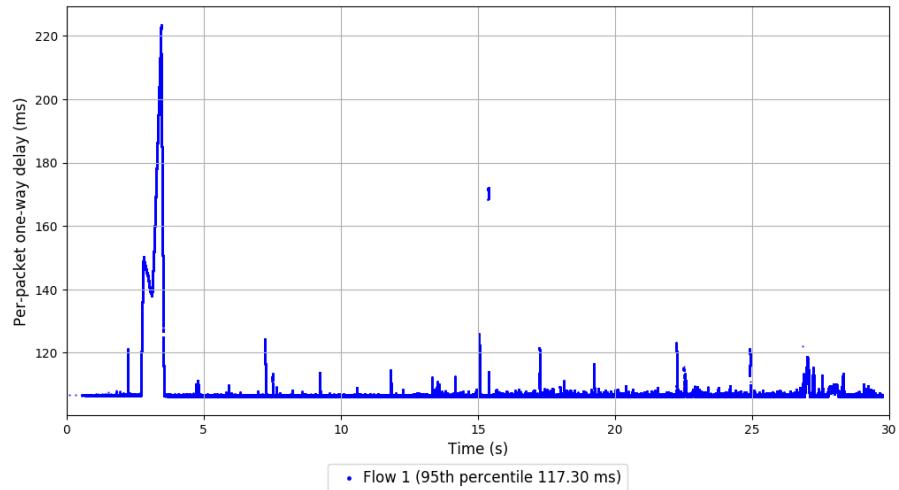
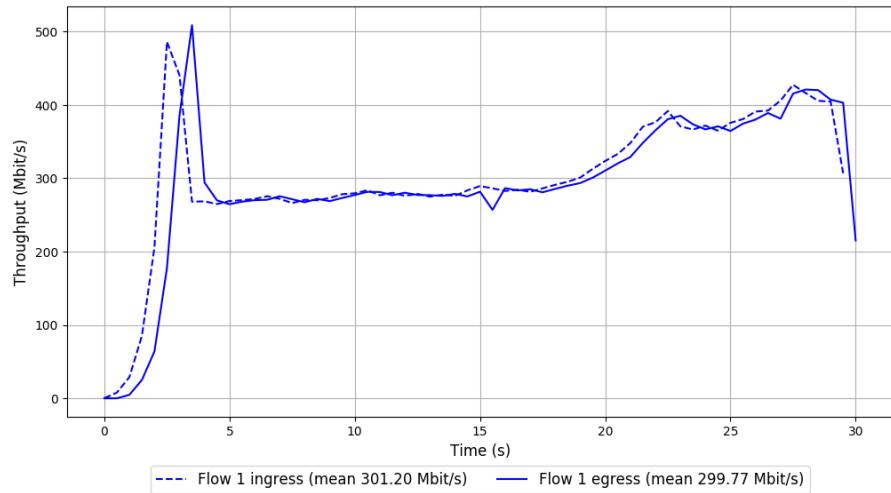


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-06-27 01:21:41
End at: 2019-06-27 01:22:11
Local clock offset: 25.004 ms
Remote clock offset: 28.141 ms

# Below is generated by plot.py at 2019-06-27 04:56:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 299.77 Mbit/s
95th percentile per-packet one-way delay: 117.298 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 299.77 Mbit/s
95th percentile per-packet one-way delay: 117.298 ms
Loss rate: 1.20%
```

Run 2: Report of PCC-Allegro — Data Link

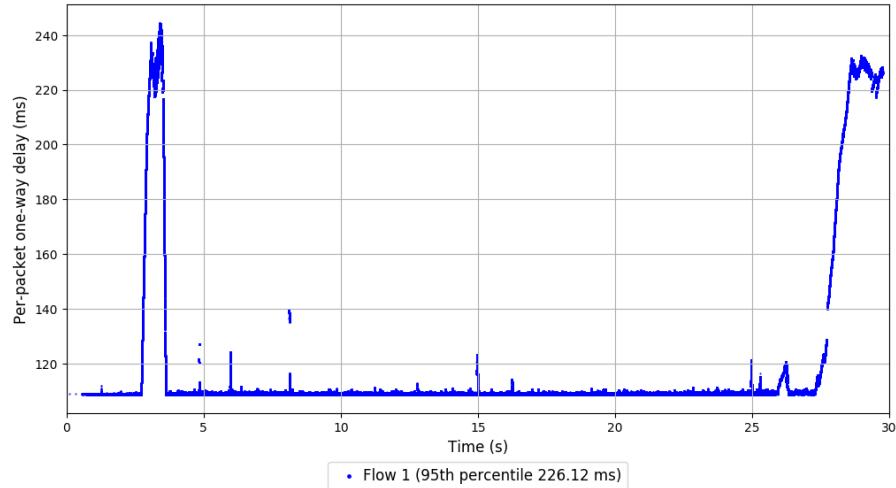
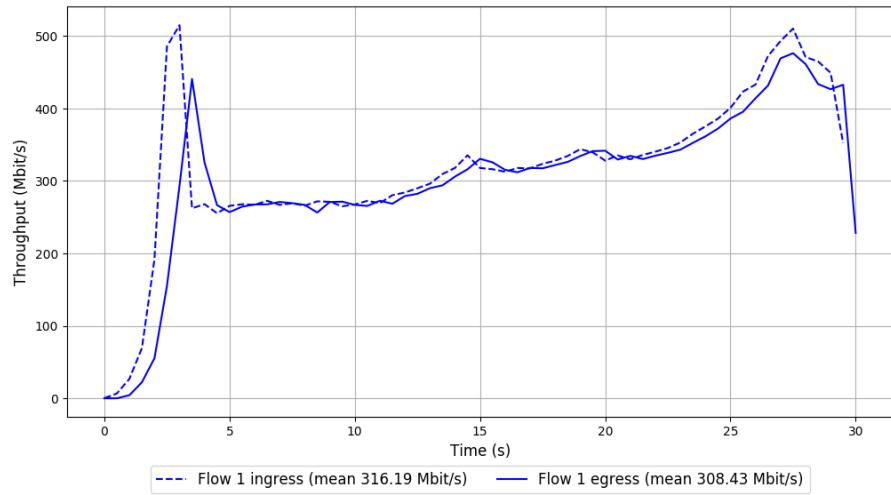


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-06-27 01:53:48
End at: 2019-06-27 01:54:18
Local clock offset: 35.836 ms
Remote clock offset: 40.074 ms

# Below is generated by plot.py at 2019-06-27 04:56:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 308.43 Mbit/s
95th percentile per-packet one-way delay: 226.122 ms
Loss rate: 3.17%
-- Flow 1:
Average throughput: 308.43 Mbit/s
95th percentile per-packet one-way delay: 226.122 ms
Loss rate: 3.17%
```

Run 3: Report of PCC-Allegro — Data Link

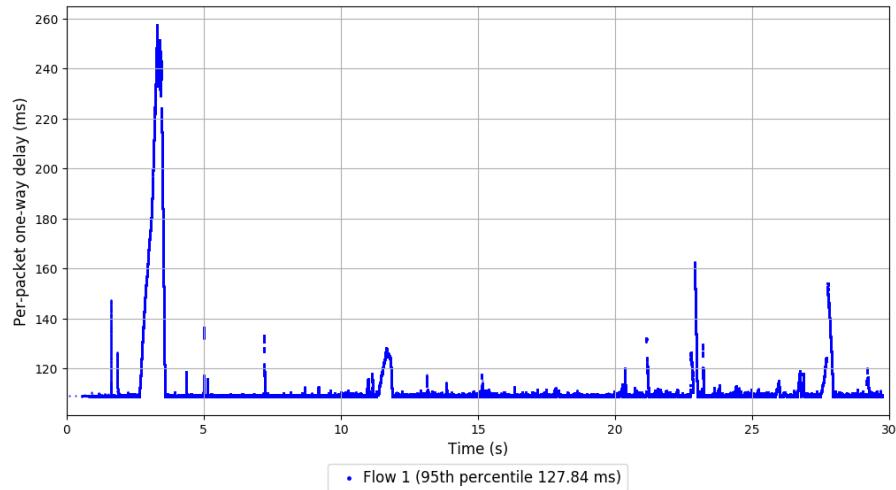
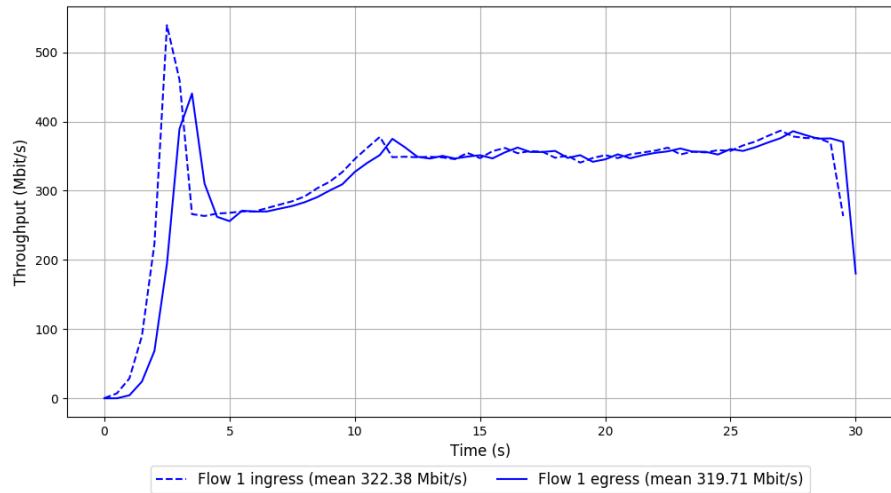


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-06-27 02:25:22
End at: 2019-06-27 02:25:52
Local clock offset: 16.972 ms
Remote clock offset: 10.081 ms

# Below is generated by plot.py at 2019-06-27 04:56:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 319.71 Mbit/s
95th percentile per-packet one-way delay: 127.837 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 319.71 Mbit/s
95th percentile per-packet one-way delay: 127.837 ms
Loss rate: 1.56%
```

Run 4: Report of PCC-Allegro — Data Link

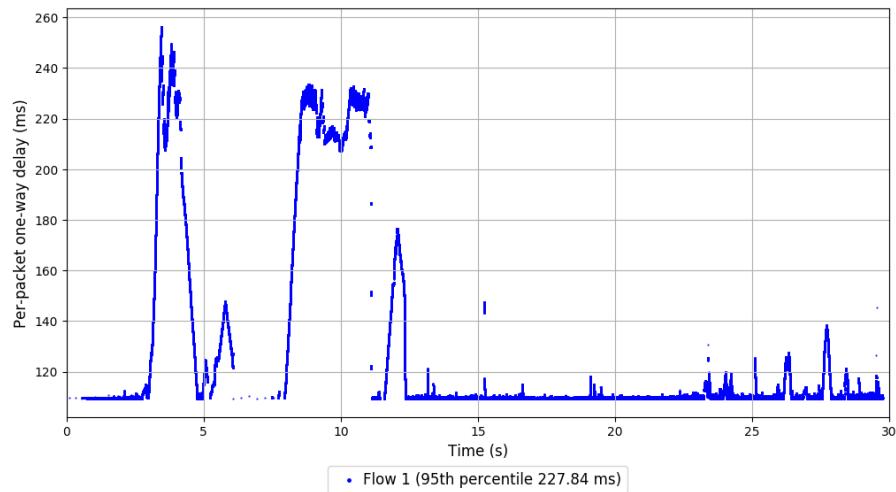
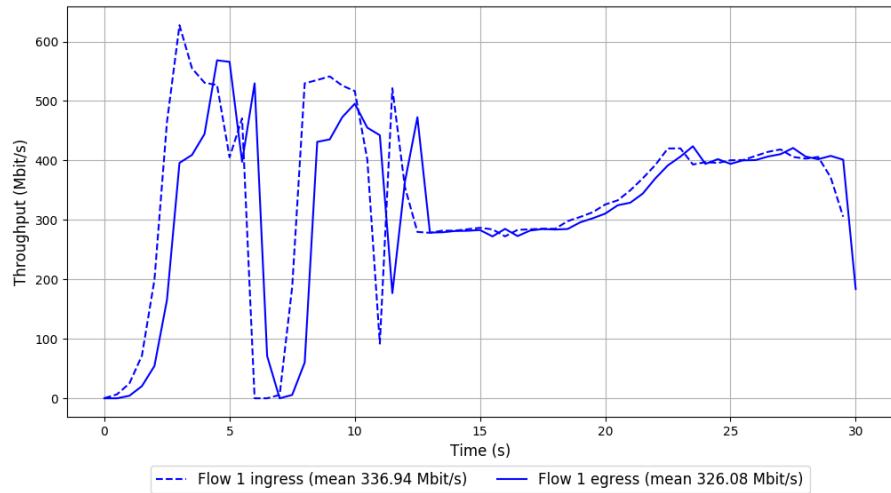


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-06-27 02:57:41
End at: 2019-06-27 02:58:11
Local clock offset: 7.824 ms
Remote clock offset: 4.149 ms

# Below is generated by plot.py at 2019-06-27 04:56:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 326.08 Mbit/s
95th percentile per-packet one-way delay: 227.840 ms
Loss rate: 3.93%
-- Flow 1:
Average throughput: 326.08 Mbit/s
95th percentile per-packet one-way delay: 227.840 ms
Loss rate: 3.93%
```

Run 5: Report of PCC-Allegro — Data Link

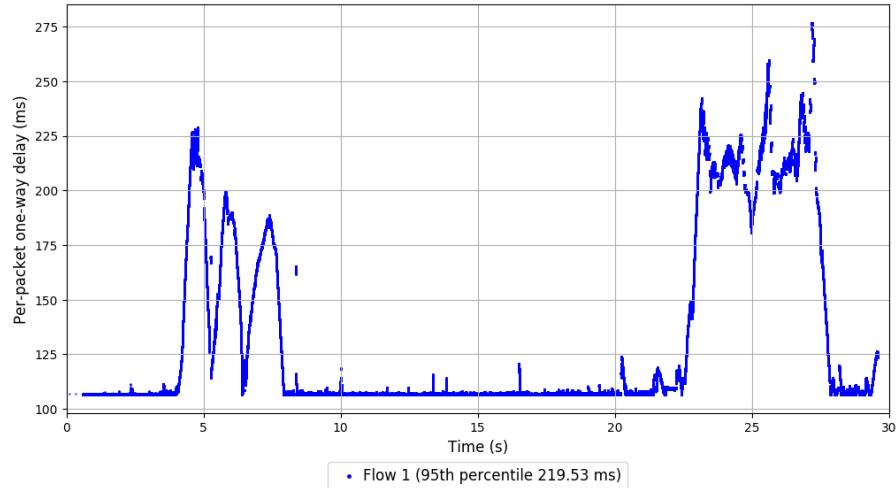
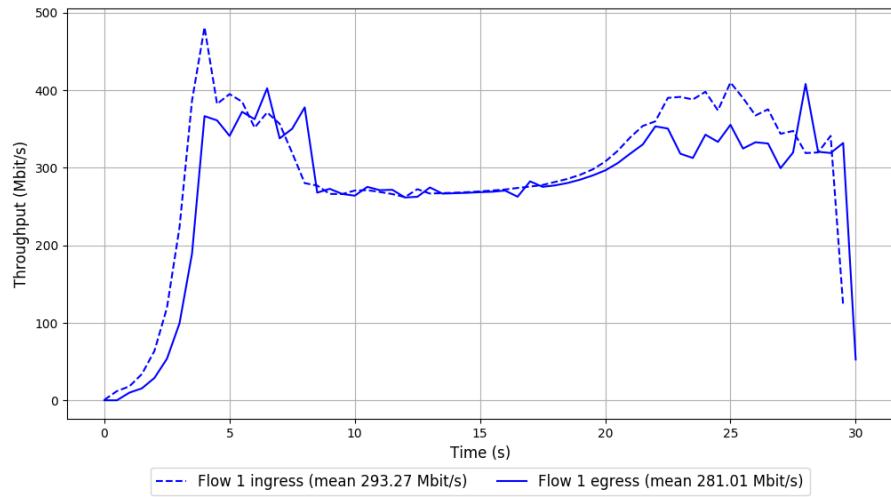


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-06-27 01:07:18
End at: 2019-06-27 01:07:48
Local clock offset: 13.268 ms
Remote clock offset: 14.854 ms

# Below is generated by plot.py at 2019-06-27 04:56:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 281.01 Mbit/s
95th percentile per-packet one-way delay: 219.527 ms
Loss rate: 4.88%
-- Flow 1:
Average throughput: 281.01 Mbit/s
95th percentile per-packet one-way delay: 219.527 ms
Loss rate: 4.88%
```

Run 1: Report of PCC-Expr — Data Link

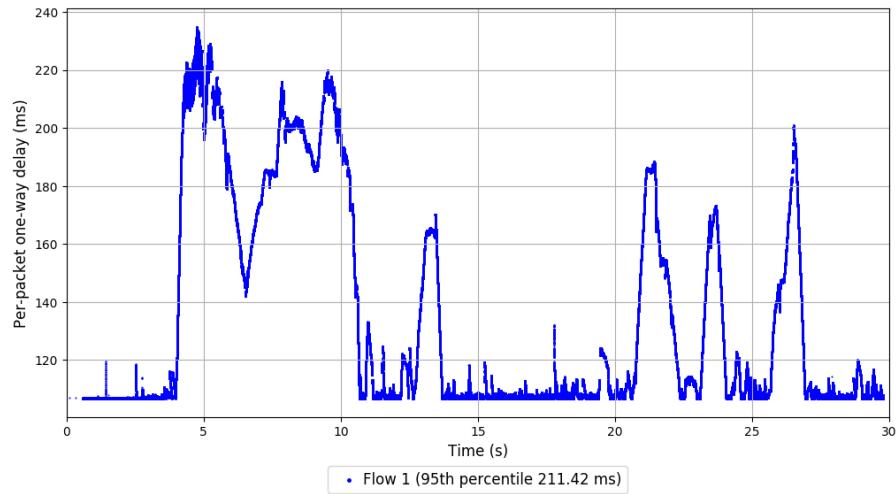
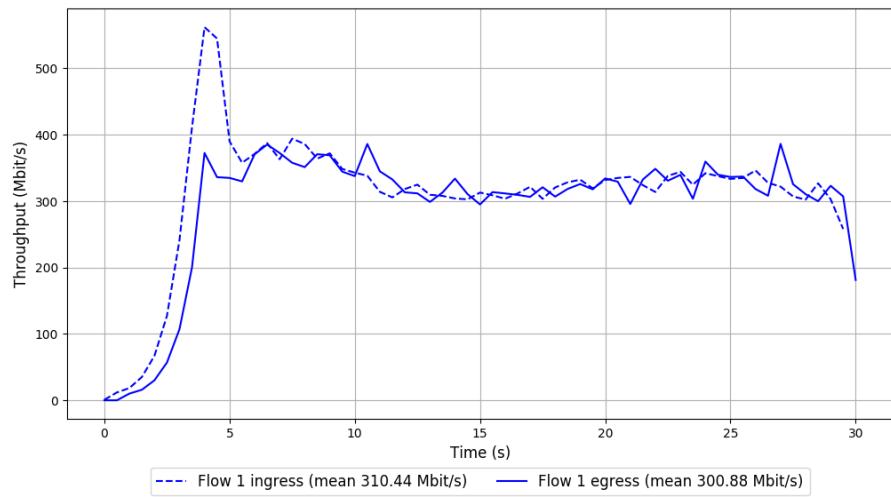


Run 2: Statistics of PCC-Expr

```
Start at: 2019-06-27 01:39:17
End at: 2019-06-27 01:39:47
Local clock offset: 22.386 ms
Remote clock offset: 25.035 ms

# Below is generated by plot.py at 2019-06-27 04:58:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 300.88 Mbit/s
95th percentile per-packet one-way delay: 211.420 ms
Loss rate: 3.79%
-- Flow 1:
Average throughput: 300.88 Mbit/s
95th percentile per-packet one-way delay: 211.420 ms
Loss rate: 3.79%
```

Run 2: Report of PCC-Expr — Data Link

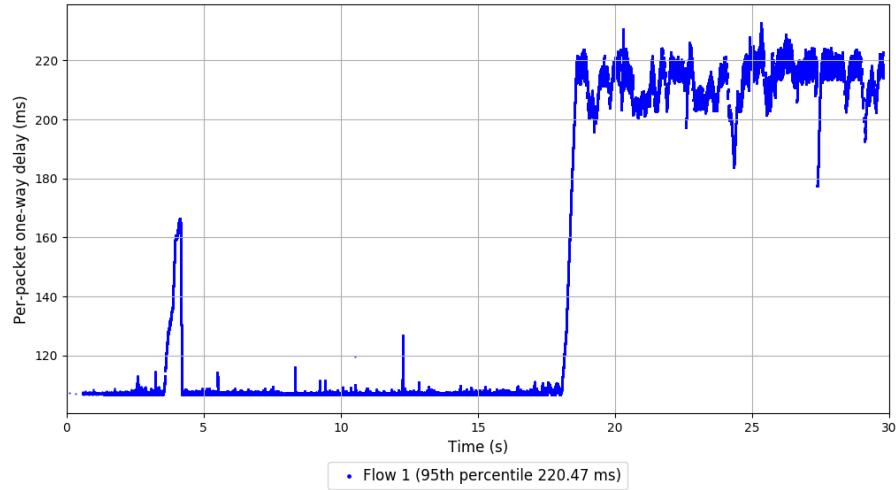
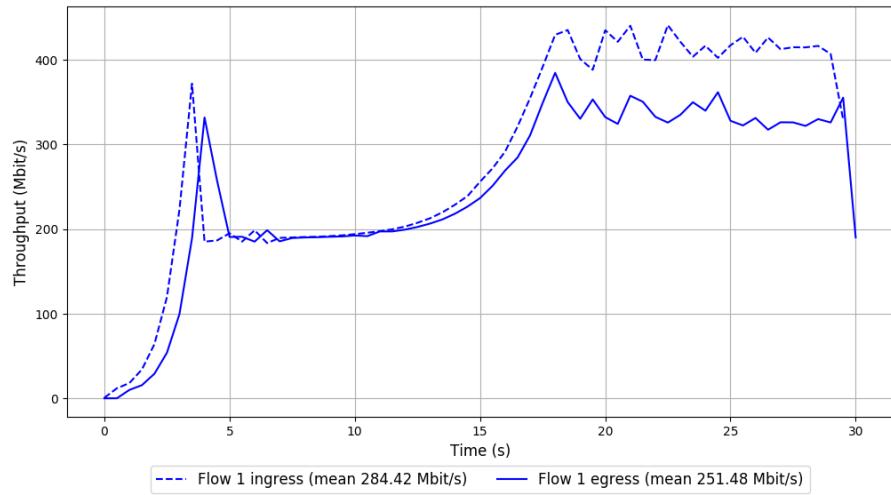


Run 3: Statistics of PCC-Expr

```
Start at: 2019-06-27 02:11:24
End at: 2019-06-27 02:11:54
Local clock offset: 14.607 ms
Remote clock offset: 11.525 ms

# Below is generated by plot.py at 2019-06-27 04:58:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 251.48 Mbit/s
95th percentile per-packet one-way delay: 220.473 ms
Loss rate: 12.23%
-- Flow 1:
Average throughput: 251.48 Mbit/s
95th percentile per-packet one-way delay: 220.473 ms
Loss rate: 12.23%
```

Run 3: Report of PCC-Expr — Data Link

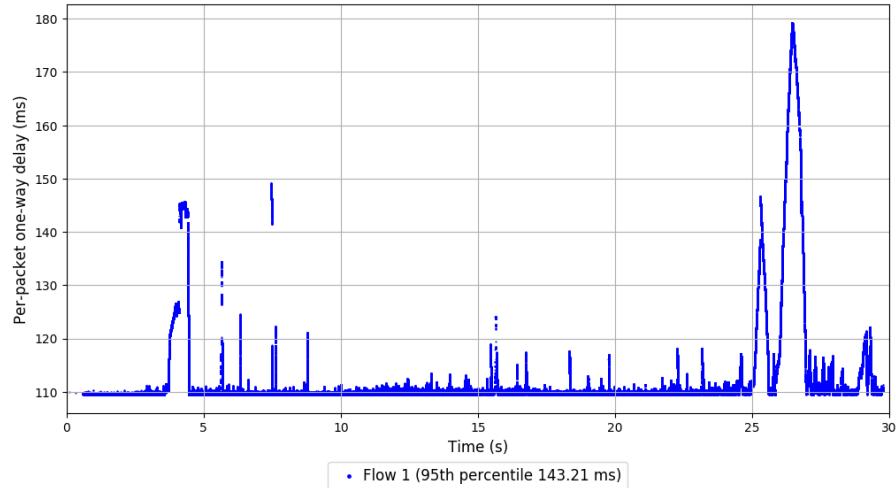
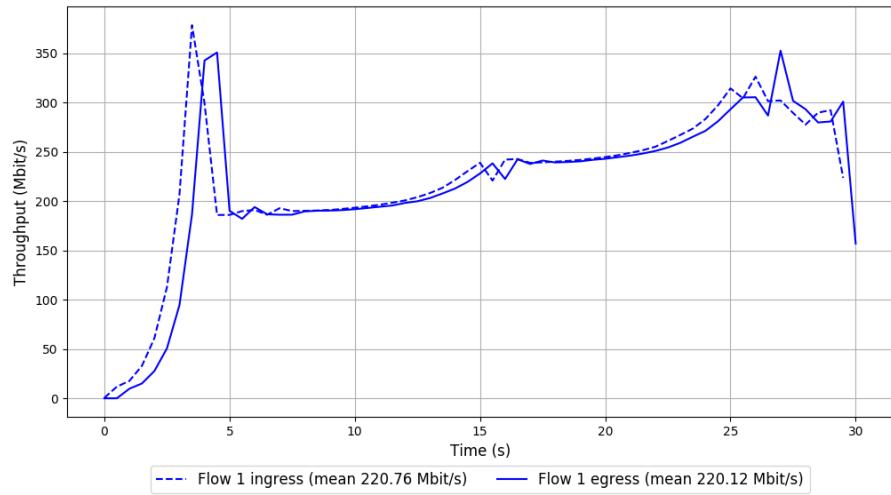


Run 4: Statistics of PCC-Expr

```
Start at: 2019-06-27 02:43:19
End at: 2019-06-27 02:43:49
Local clock offset: 7.448 ms
Remote clock offset: 4.108 ms

# Below is generated by plot.py at 2019-06-27 04:59:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.12 Mbit/s
95th percentile per-packet one-way delay: 143.212 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 220.12 Mbit/s
95th percentile per-packet one-way delay: 143.212 ms
Loss rate: 1.02%
```

Run 4: Report of PCC-Expr — Data Link

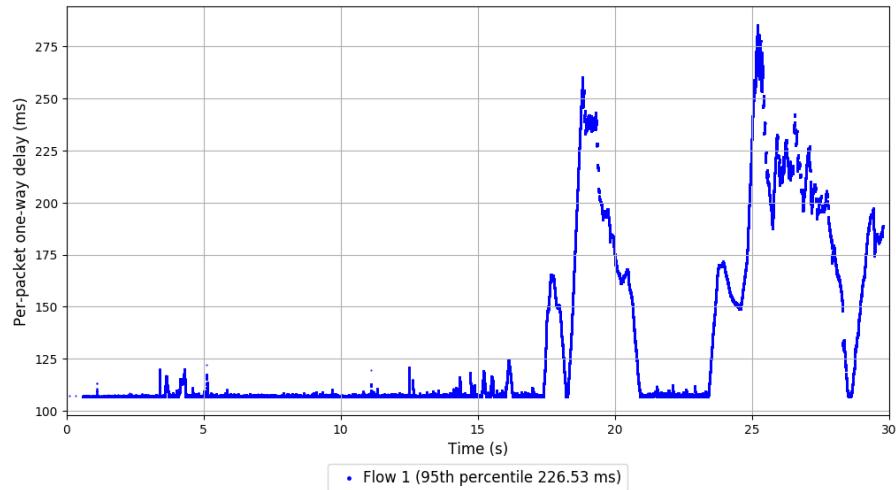
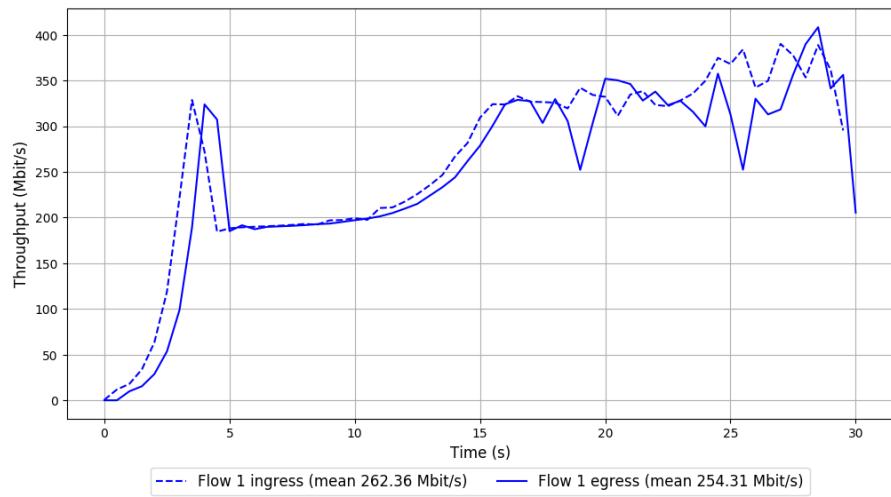


Run 5: Statistics of PCC-Expr

```
Start at: 2019-06-27 03:15:34
End at: 2019-06-27 03:16:04
Local clock offset: 3.883 ms
Remote clock offset: 1.907 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 254.31 Mbit/s
95th percentile per-packet one-way delay: 226.532 ms
Loss rate: 3.77%
-- Flow 1:
Average throughput: 254.31 Mbit/s
95th percentile per-packet one-way delay: 226.532 ms
Loss rate: 3.77%
```

Run 5: Report of PCC-Expr — Data Link

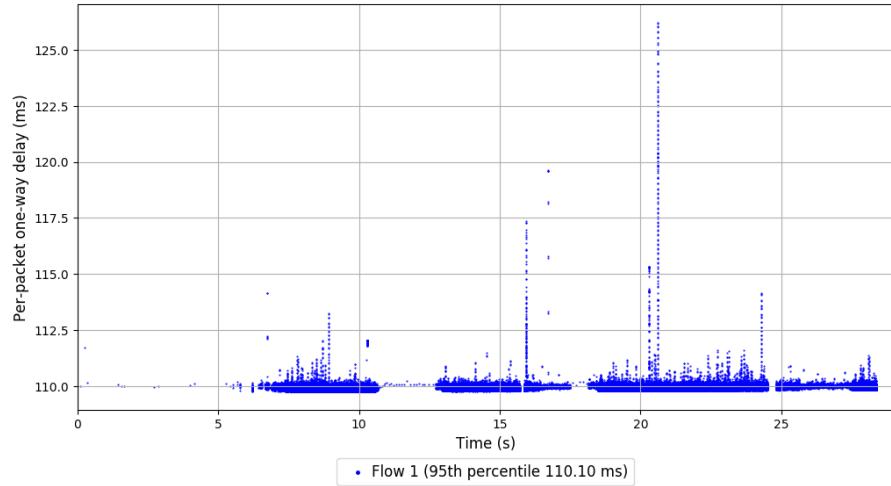
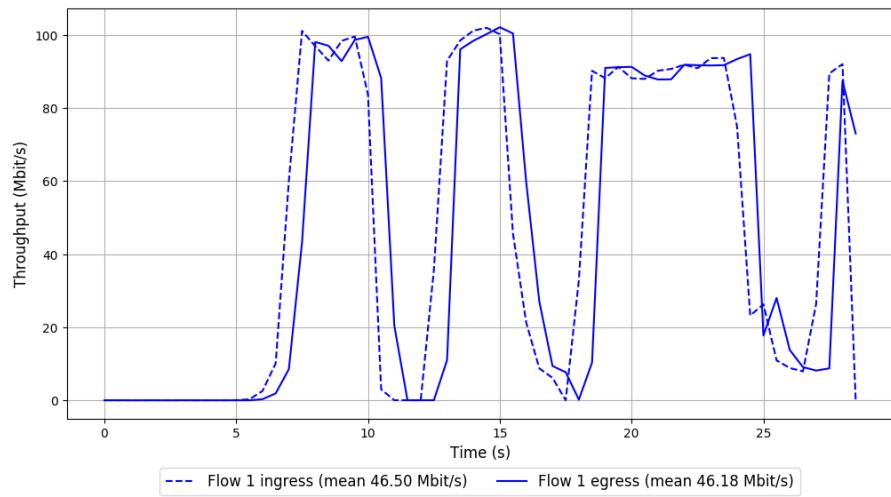


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-06-27 00:54:06
End at: 2019-06-27 00:54:36
Local clock offset: 6.303 ms
Remote clock offset: 7.037 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.18 Mbit/s
95th percentile per-packet one-way delay: 110.102 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 46.18 Mbit/s
95th percentile per-packet one-way delay: 110.102 ms
Loss rate: 1.52%
```

Run 1: Report of QUIC Cubic — Data Link

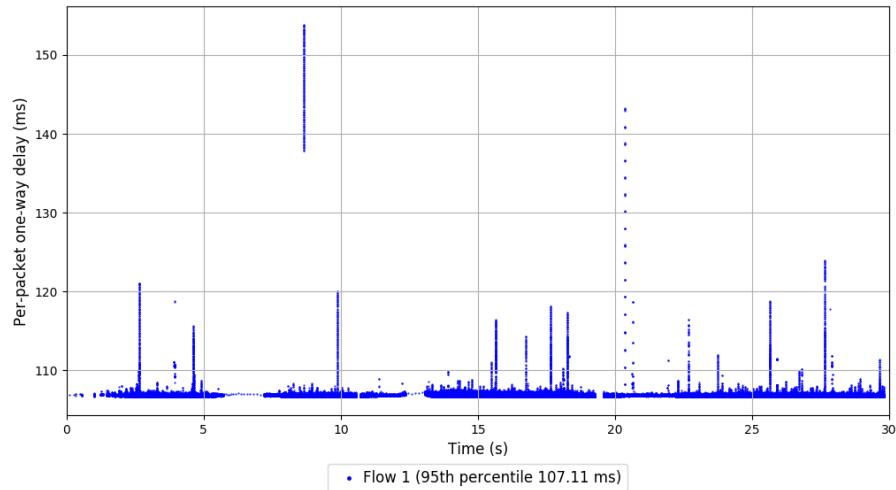
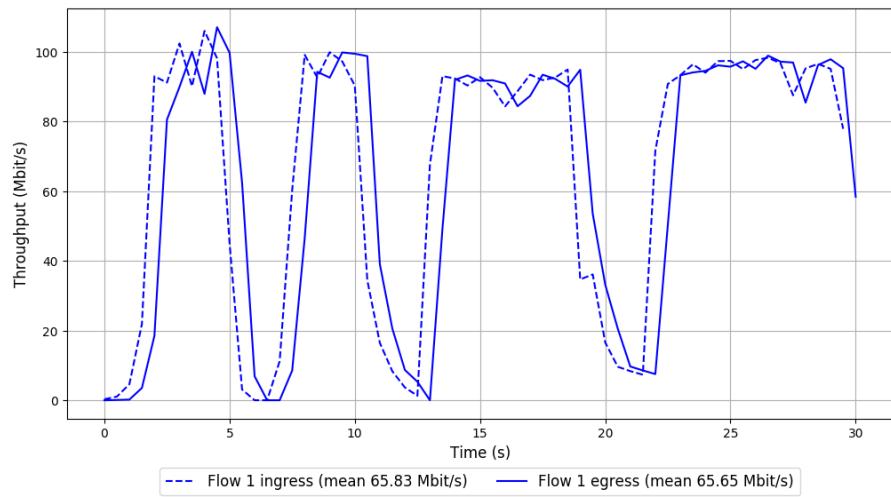


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-06-27 01:26:03
End at: 2019-06-27 01:26:33
Local clock offset: 20.711 ms
Remote clock offset: 23.039 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.65 Mbit/s
95th percentile per-packet one-way delay: 107.113 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 65.65 Mbit/s
95th percentile per-packet one-way delay: 107.113 ms
Loss rate: 1.01%
```

Run 2: Report of QUIC Cubic — Data Link

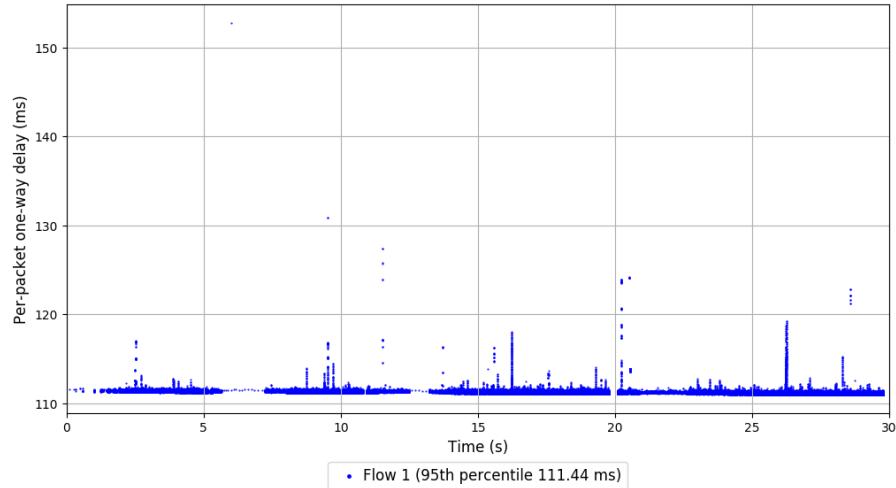
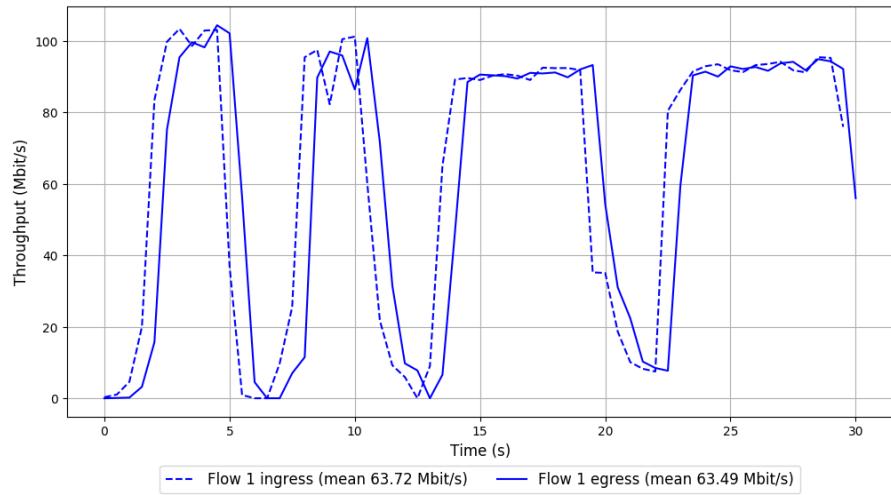


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-06-27 01:58:17
End at: 2019-06-27 01:58:47
Local clock offset: 32.351 ms
Remote clock offset: 33.396 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.49 Mbit/s
95th percentile per-packet one-way delay: 111.445 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 63.49 Mbit/s
95th percentile per-packet one-way delay: 111.445 ms
Loss rate: 1.11%
```

Run 3: Report of QUIC Cubic — Data Link

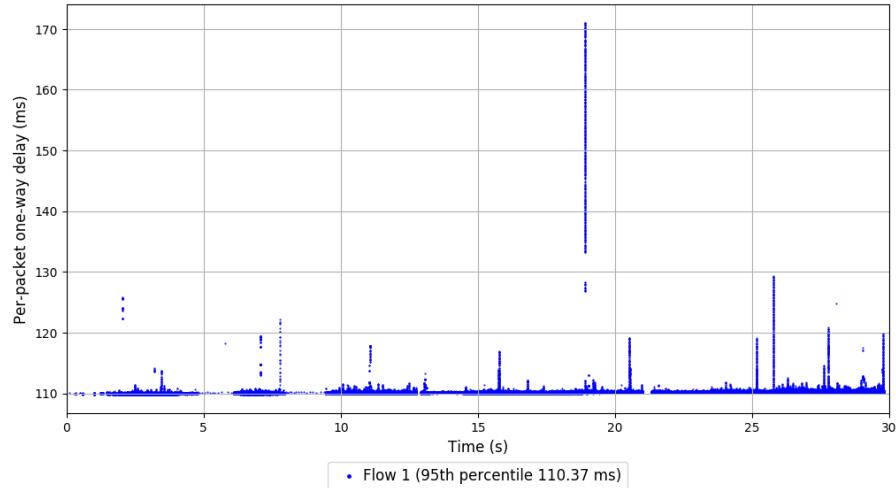
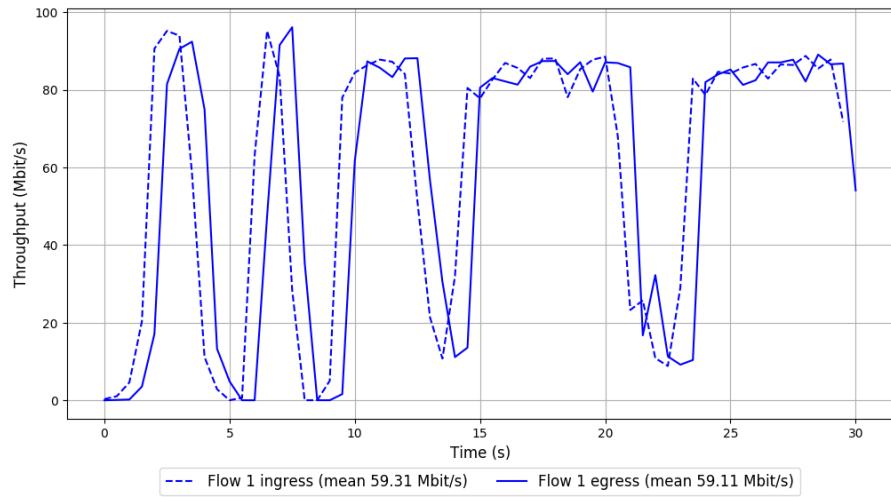


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-06-27 02:30:08
End at: 2019-06-27 02:30:38
Local clock offset: 19.102 ms
Remote clock offset: 10.82 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.11 Mbit/s
95th percentile per-packet one-way delay: 110.371 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 59.11 Mbit/s
95th percentile per-packet one-way delay: 110.371 ms
Loss rate: 1.06%
```

Run 4: Report of QUIC Cubic — Data Link

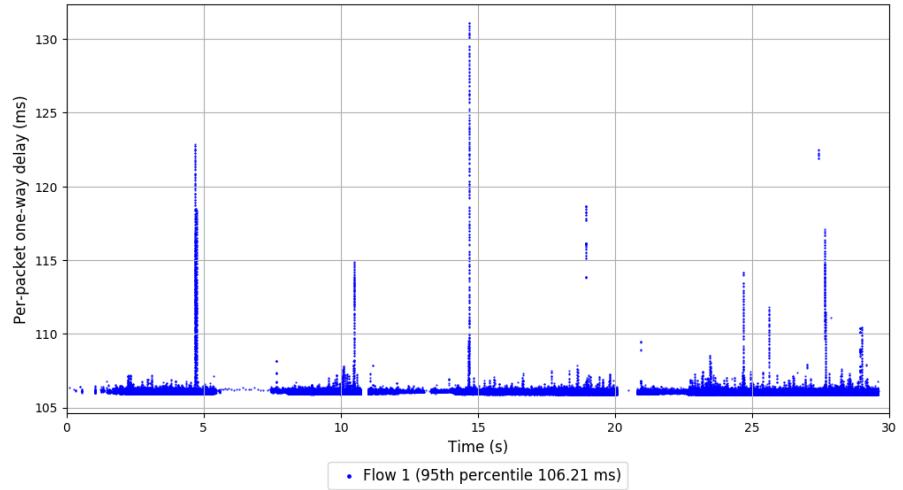
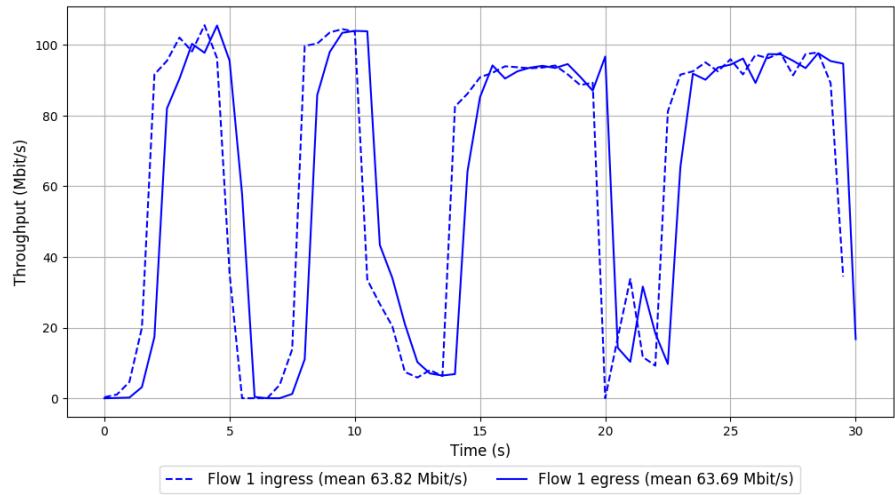


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-06-27 03:02:26
End at: 2019-06-27 03:02:56
Local clock offset: 8.849 ms
Remote clock offset: 4.655 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.69 Mbit/s
95th percentile per-packet one-way delay: 106.211 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 63.69 Mbit/s
95th percentile per-packet one-way delay: 106.211 ms
Loss rate: 0.91%
```

Run 5: Report of QUIC Cubic — Data Link

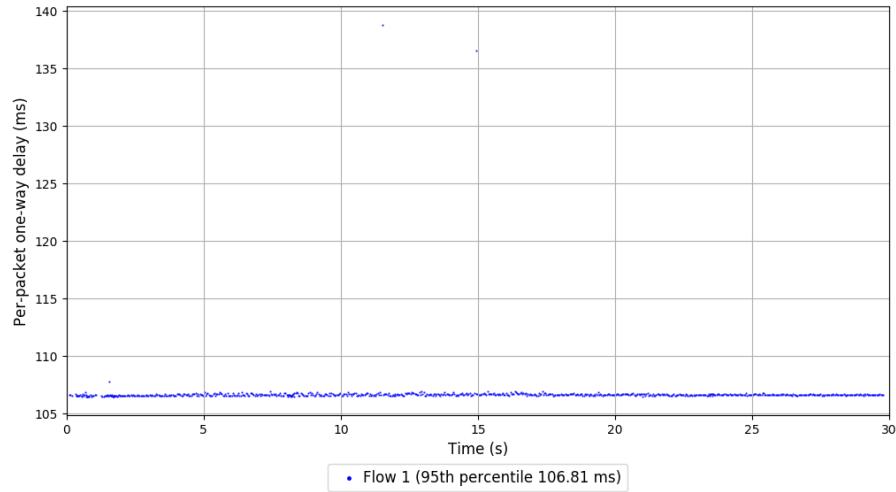
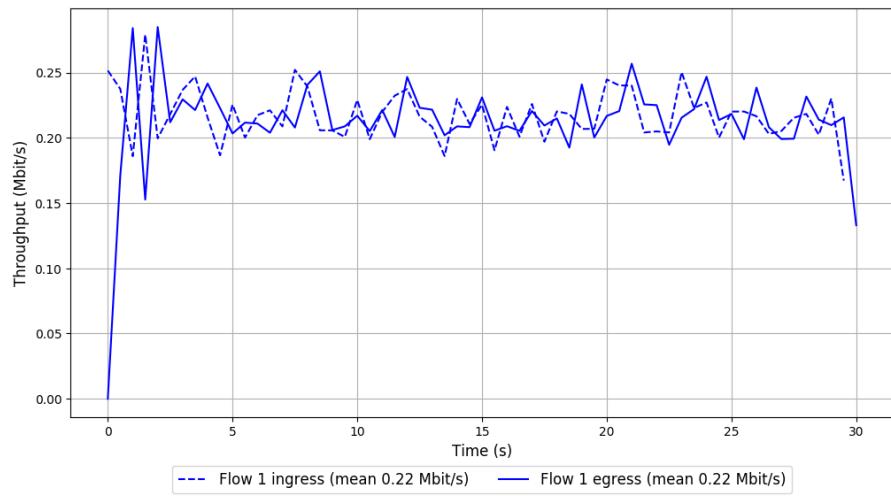


```
Run 1: Statistics of SCReAM
```

```
Start at: 2019-06-27 01:16:12
End at: 2019-06-27 01:16:42
Local clock offset: 17.84 ms
Remote clock offset: 20.249 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 106.809 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 106.809 ms
Loss rate: 0.64%
```

Run 1: Report of SCReAM — Data Link

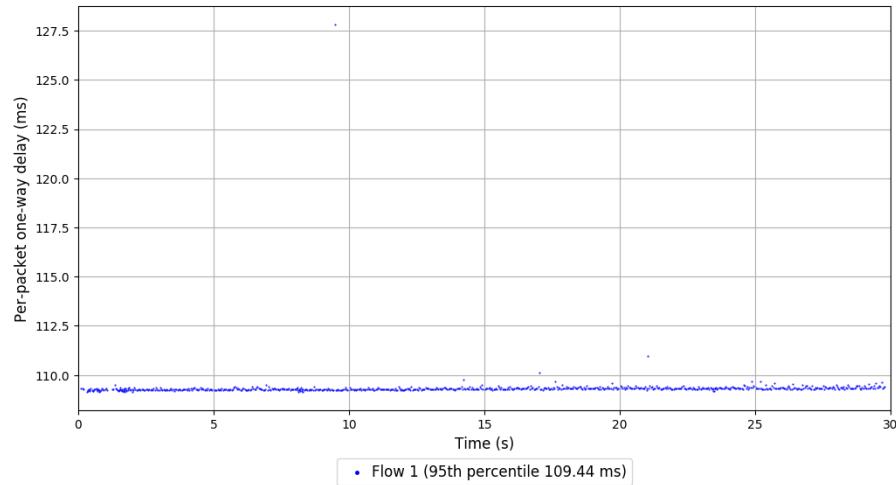
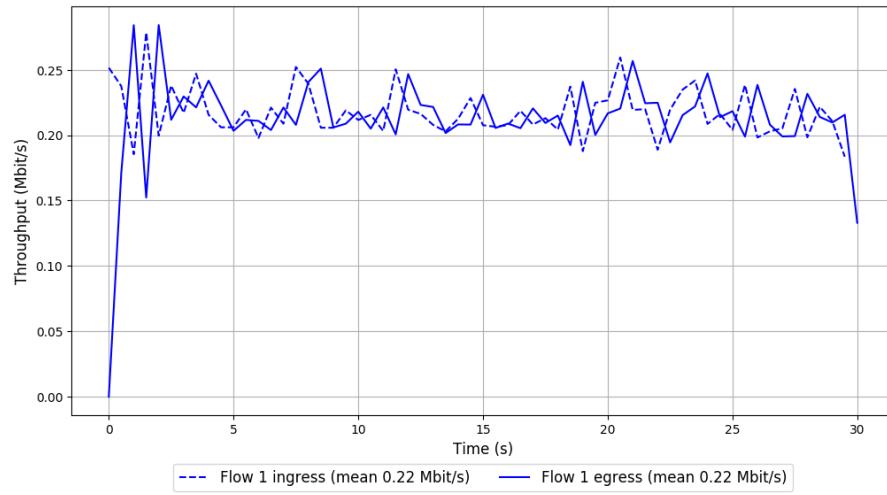


Run 2: Statistics of SCReAM

```
Start at: 2019-06-27 01:48:14
End at: 2019-06-27 01:48:44
Local clock offset: 29.392 ms
Remote clock offset: 33.63 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.441 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.441 ms
Loss rate: 0.77%
```

Run 2: Report of SCReAM — Data Link

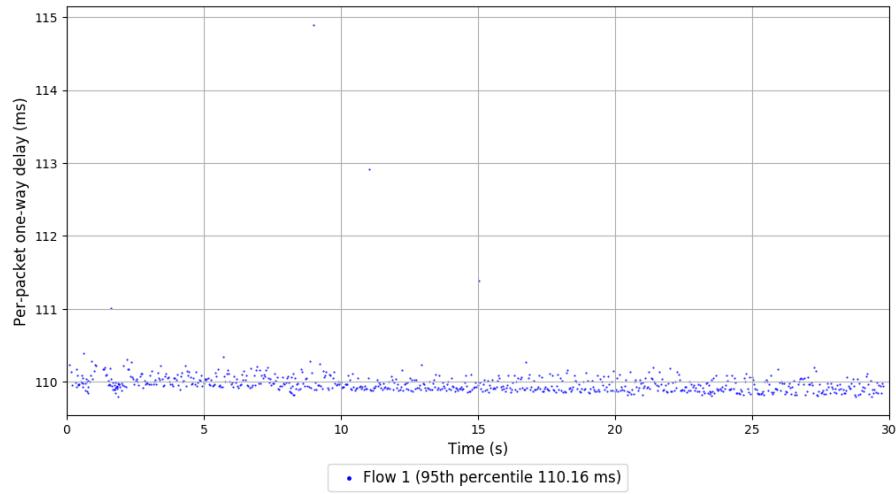
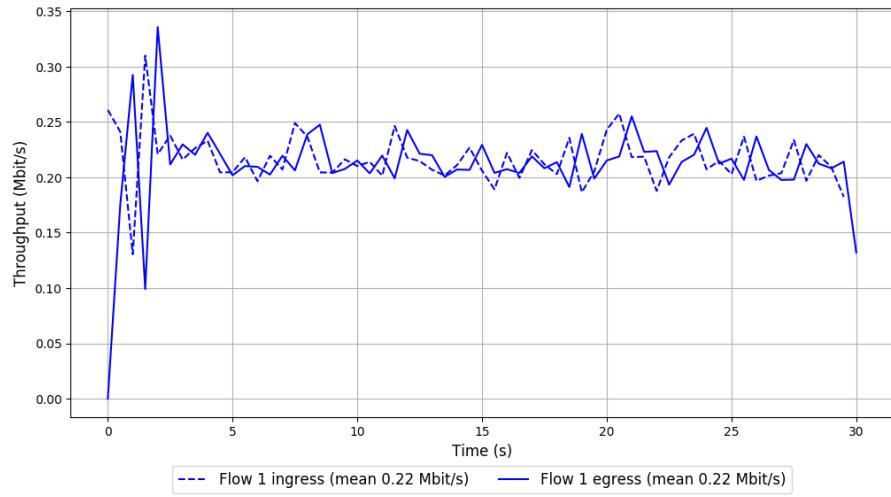


Run 3: Statistics of SCReAM

```
Start at: 2019-06-27 02:20:18
End at: 2019-06-27 02:20:48
Local clock offset: 15.235 ms
Remote clock offset: 9.674 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.162 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.162 ms
Loss rate: 0.77%
```

Run 3: Report of SCReAM — Data Link

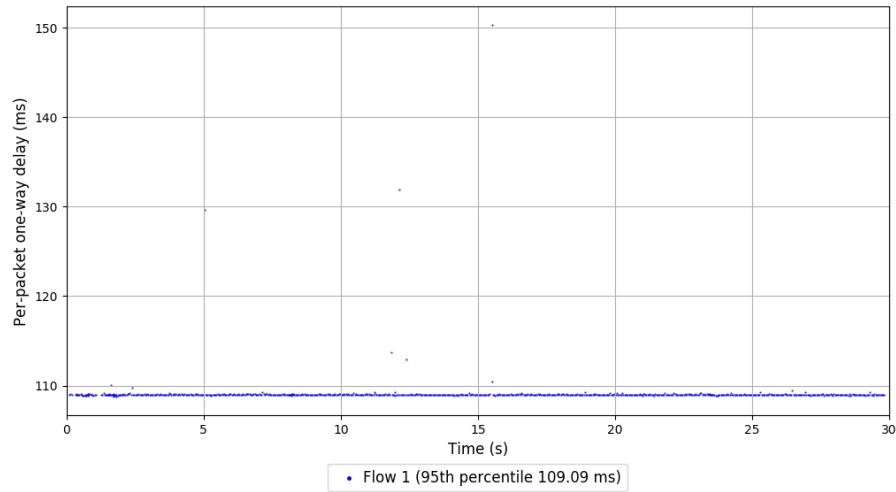
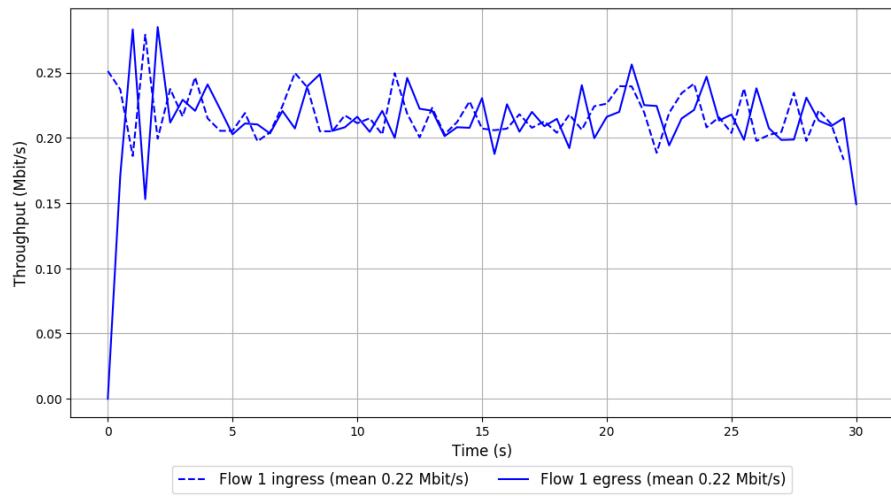


Run 4: Statistics of SCReAM

```
Start at: 2019-06-27 02:52:11
End at: 2019-06-27 02:52:41
Local clock offset: 7.143 ms
Remote clock offset: 3.819 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.086 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.086 ms
Loss rate: 0.64%
```

Run 4: Report of SCReAM — Data Link

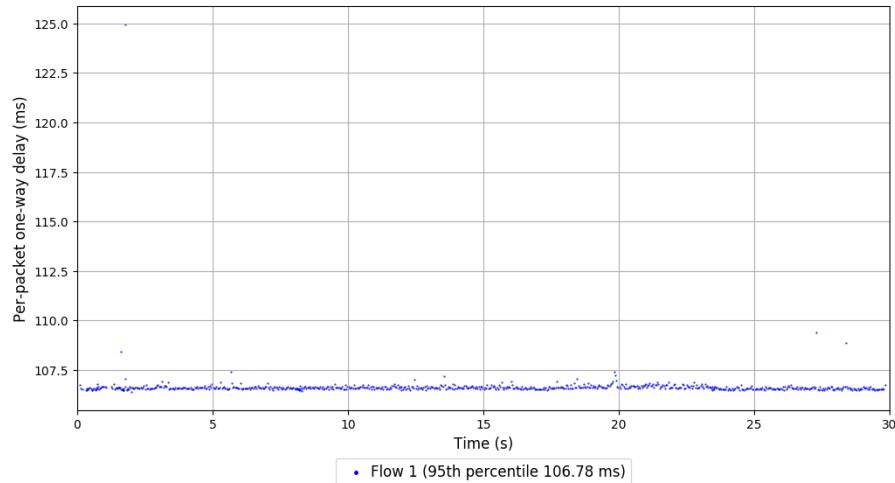
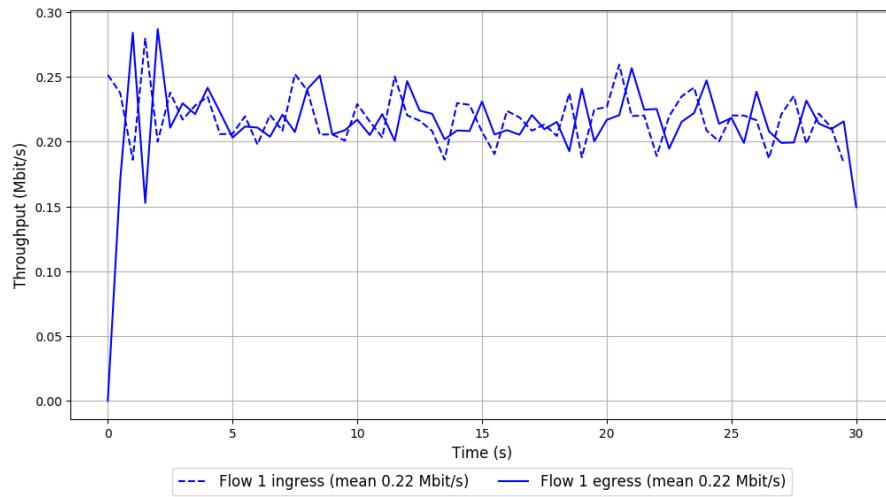


Run 5: Statistics of SCReAM

```
Start at: 2019-06-27 03:24:25
End at: 2019-06-27 03:24:55
Local clock offset: 2.862 ms
Remote clock offset: 1.613 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 106.780 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 106.780 ms
Loss rate: 0.64%
```

Run 5: Report of SCReAM — Data Link

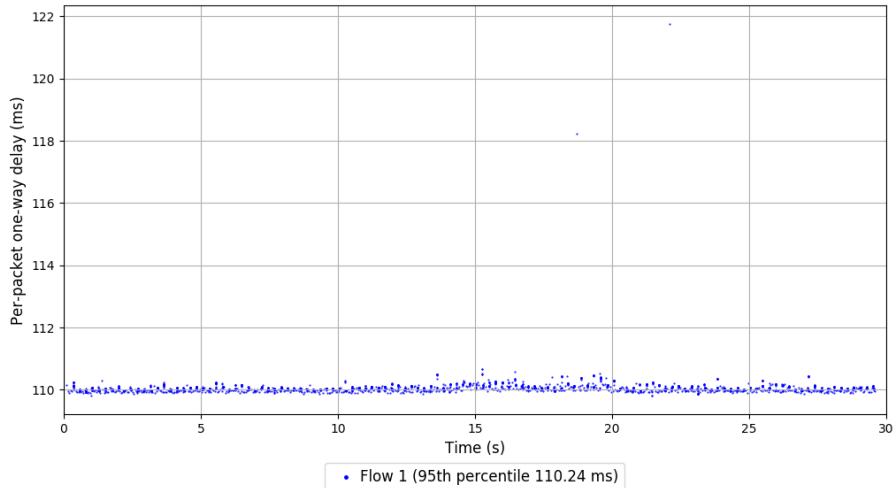
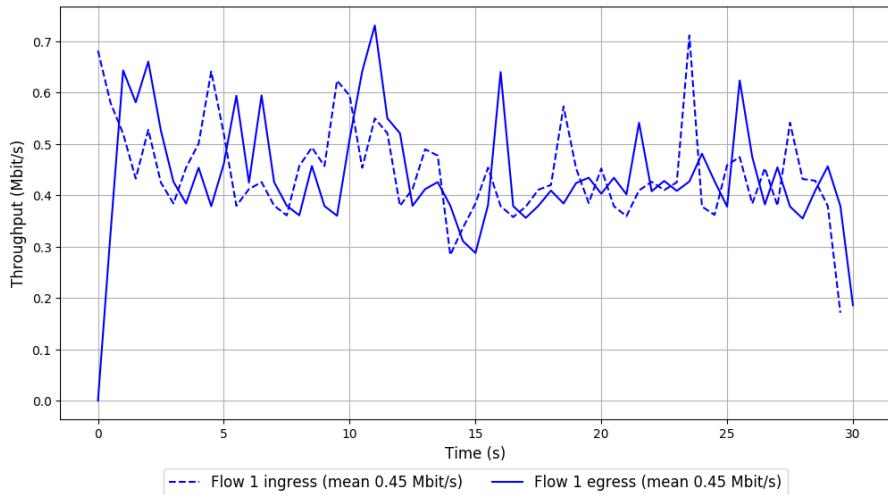


Run 1: Statistics of Sprout

```
Start at: 2019-06-27 01:10:34
End at: 2019-06-27 01:11:04
Local clock offset: 12.835 ms
Remote clock offset: 14.058 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 110.242 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 110.242 ms
Loss rate: 0.64%
```

Run 1: Report of Sprout — Data Link

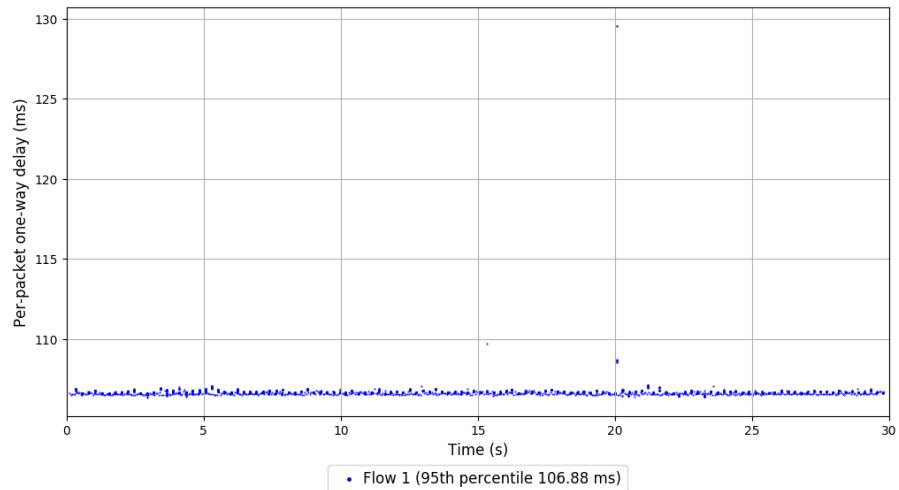
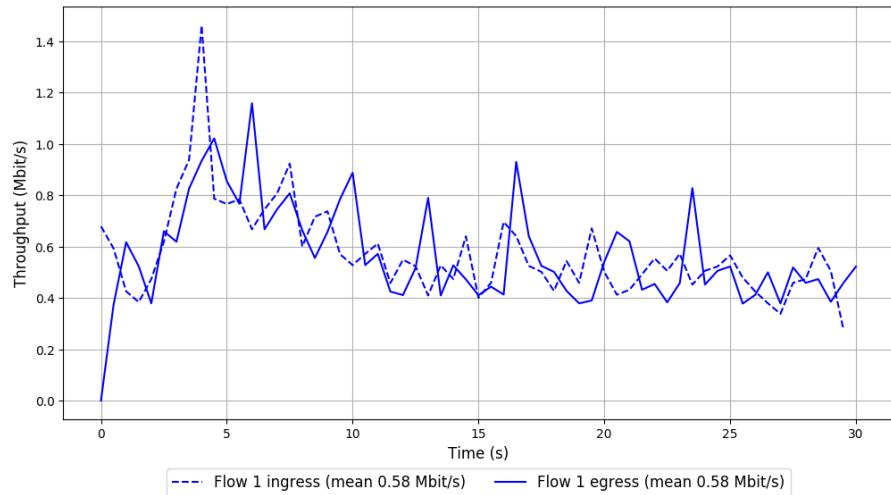


Run 2: Statistics of Sprout

```
Start at: 2019-06-27 01:42:33
End at: 2019-06-27 01:43:03
Local clock offset: 24.772 ms
Remote clock offset: 28.069 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 106.880 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 106.880 ms
Loss rate: 0.05%
```

Run 2: Report of Sprout — Data Link

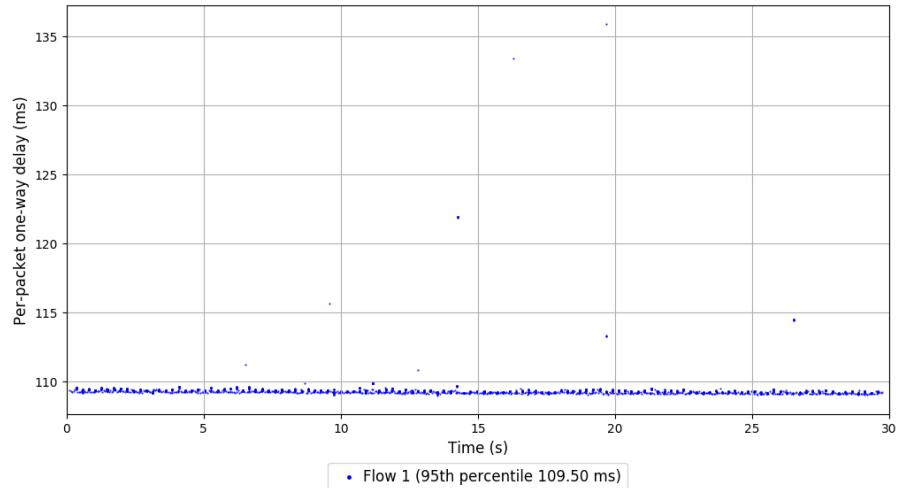
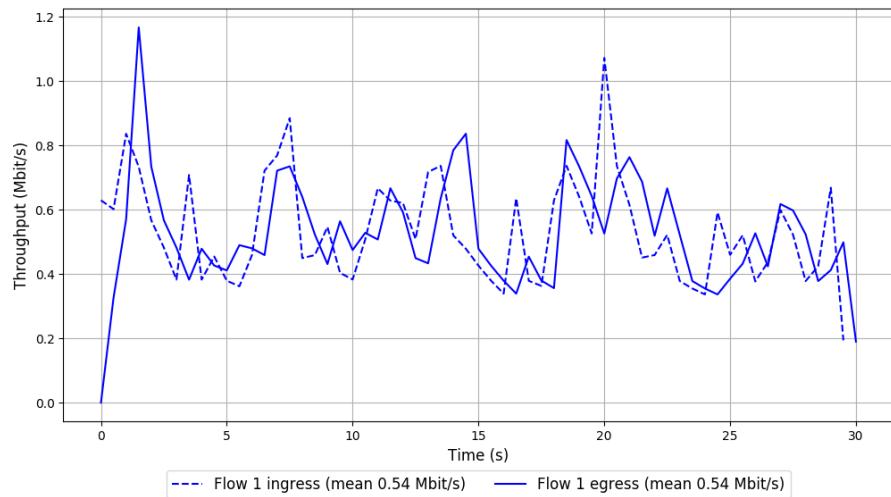


Run 3: Statistics of Sprout

```
Start at: 2019-06-27 02:14:37
End at: 2019-06-27 02:15:07
Local clock offset: 14.243 ms
Remote clock offset: 10.309 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 109.500 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 109.500 ms
Loss rate: 0.59%
```

Run 3: Report of Sprout — Data Link

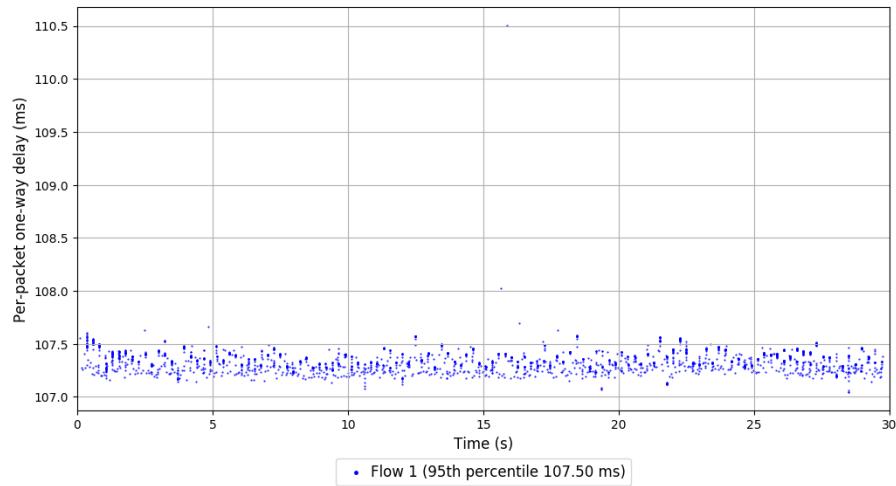
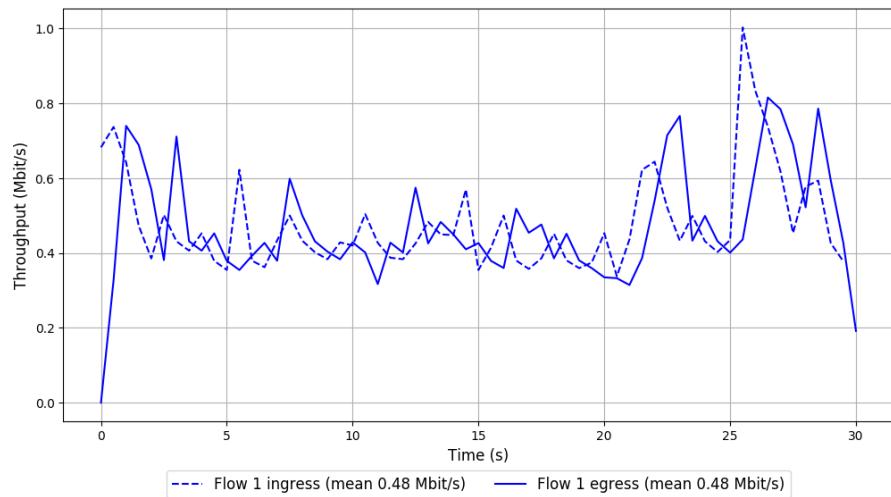


Run 4: Statistics of Sprout

```
Start at: 2019-06-27 02:46:28
End at: 2019-06-27 02:46:58
Local clock offset: 7.087 ms
Remote clock offset: 3.821 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 107.497 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 107.497 ms
Loss rate: 0.66%
```

Run 4: Report of Sprout — Data Link

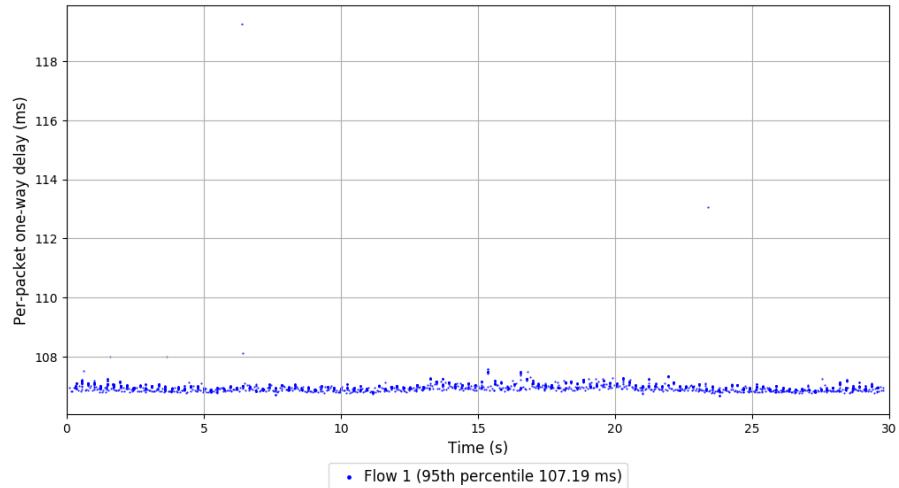
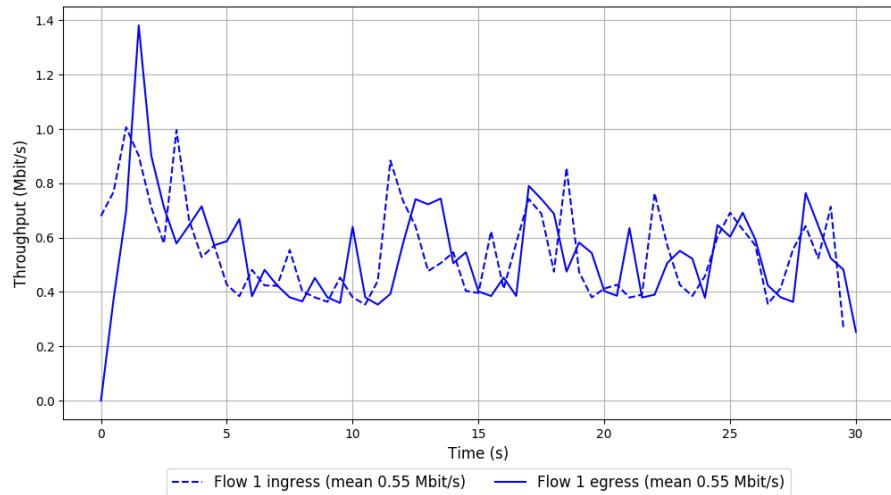


Run 5: Statistics of Sprout

```
Start at: 2019-06-27 03:18:47
End at: 2019-06-27 03:19:17
Local clock offset: 3.498 ms
Remote clock offset: 1.676 ms

# Below is generated by plot.py at 2019-06-27 05:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 107.189 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 107.189 ms
Loss rate: 0.76%
```

Run 5: Report of Sprout — Data Link

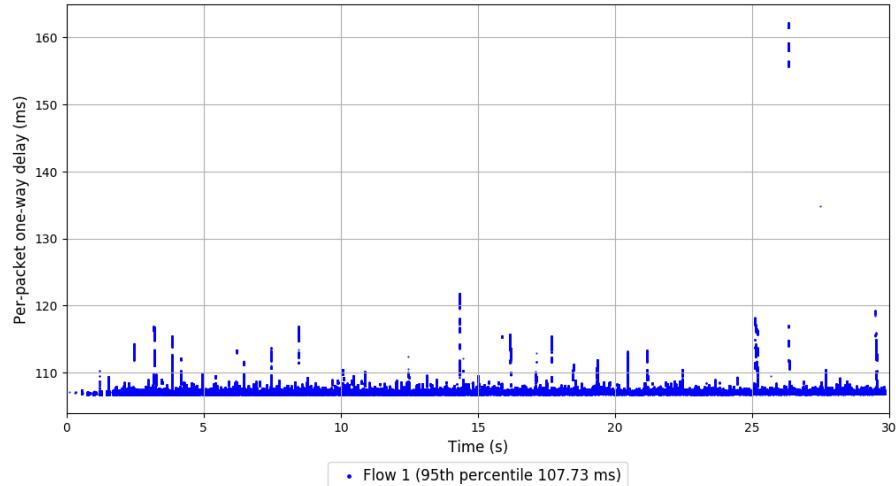
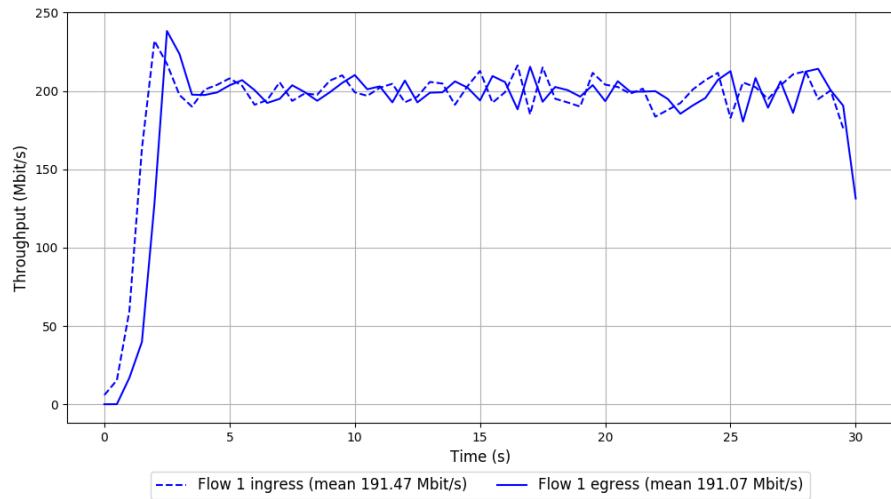


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-06-27 01:14:42
End at: 2019-06-27 01:15:12
Local clock offset: 16.06 ms
Remote clock offset: 18.095 ms

# Below is generated by plot.py at 2019-06-27 05:04:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.07 Mbit/s
95th percentile per-packet one-way delay: 107.726 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 191.07 Mbit/s
95th percentile per-packet one-way delay: 107.726 ms
Loss rate: 0.94%
```

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

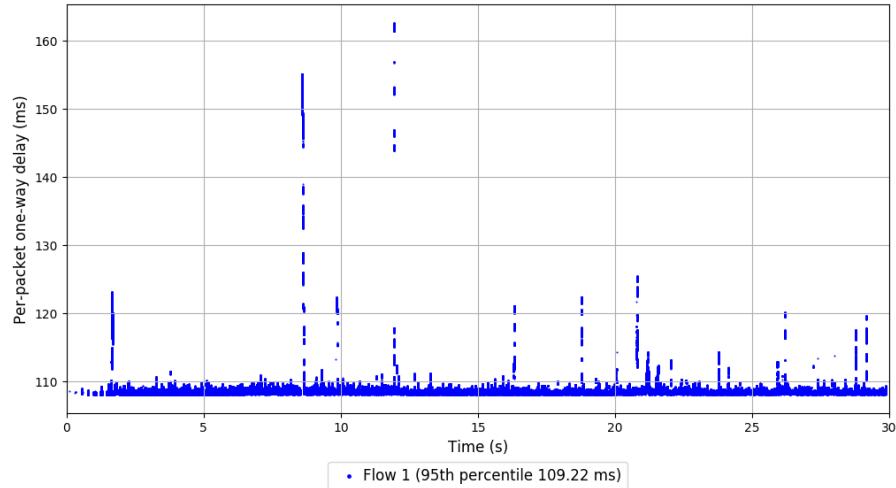
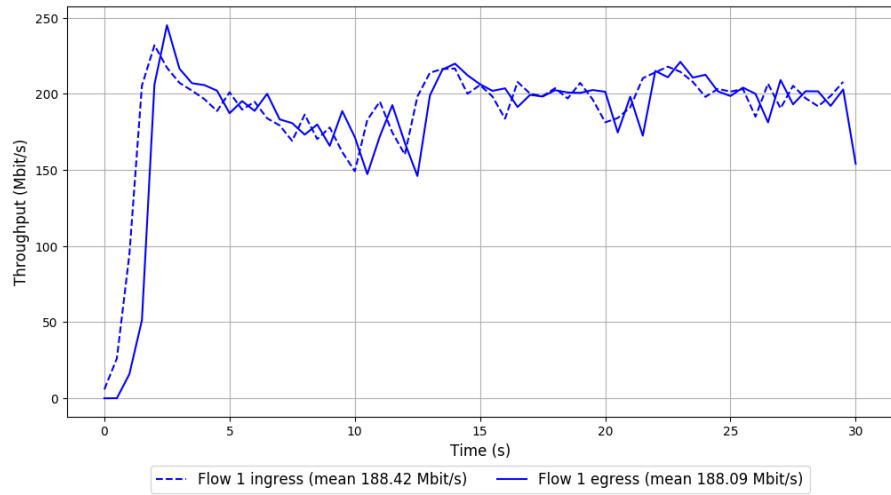


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-06-27 01:46:45
End at: 2019-06-27 01:47:15
Local clock offset: 28.141 ms
Remote clock offset: 32.215 ms

# Below is generated by plot.py at 2019-06-27 05:04:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 188.09 Mbit/s
95th percentile per-packet one-way delay: 109.221 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 188.09 Mbit/s
95th percentile per-packet one-way delay: 109.221 ms
Loss rate: 0.91%
```

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

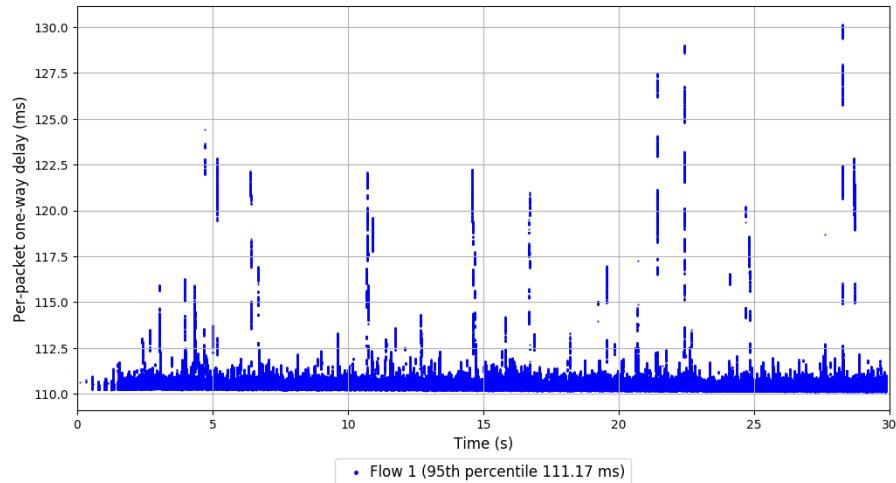
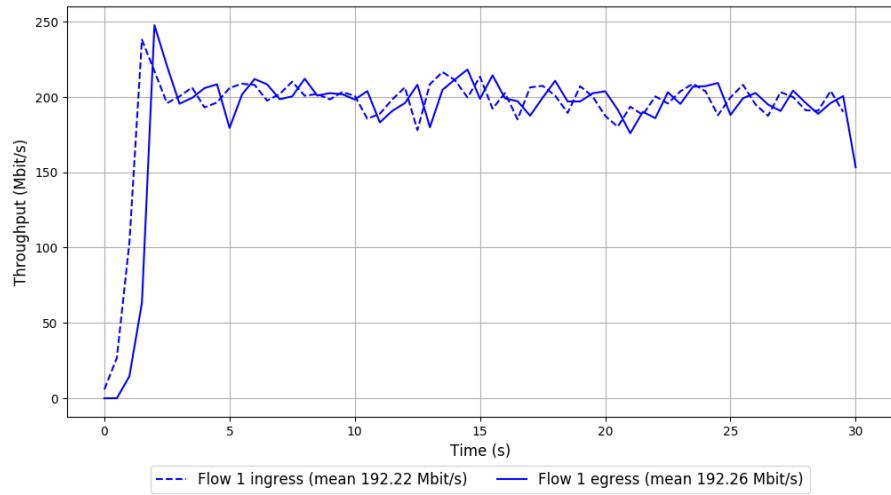


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-06-27 02:18:48
End at: 2019-06-27 02:19:18
Local clock offset: 15.402 ms
Remote clock offset: 9.719 ms

# Below is generated by plot.py at 2019-06-27 05:04:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 192.26 Mbit/s
95th percentile per-packet one-way delay: 111.171 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 192.26 Mbit/s
95th percentile per-packet one-way delay: 111.171 ms
Loss rate: 0.72%
```

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

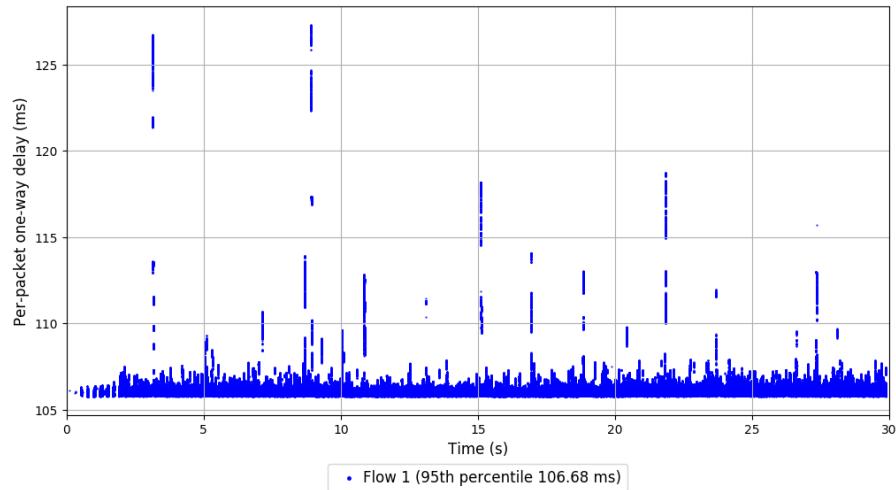
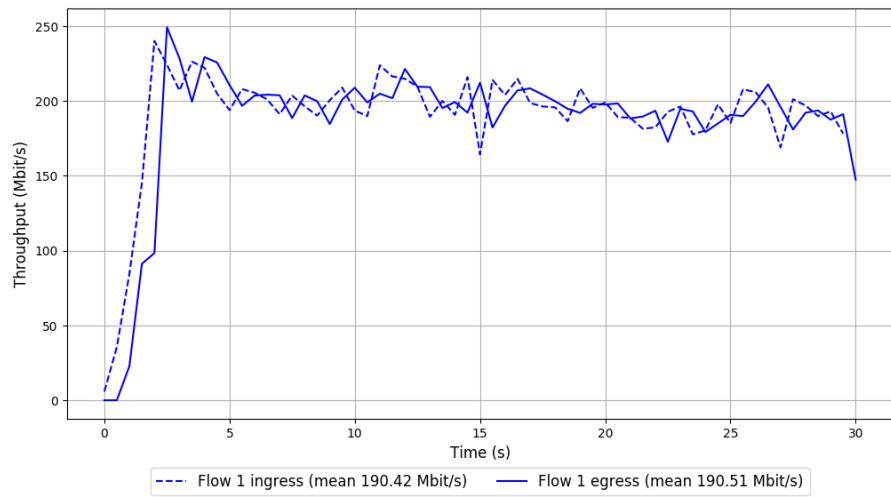


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-06-27 02:50:42
End at: 2019-06-27 02:51:12
Local clock offset: 6.889 ms
Remote clock offset: 3.786 ms

# Below is generated by plot.py at 2019-06-27 05:04:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.51 Mbit/s
95th percentile per-packet one-way delay: 106.682 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 190.51 Mbit/s
95th percentile per-packet one-way delay: 106.682 ms
Loss rate: 0.66%
```

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

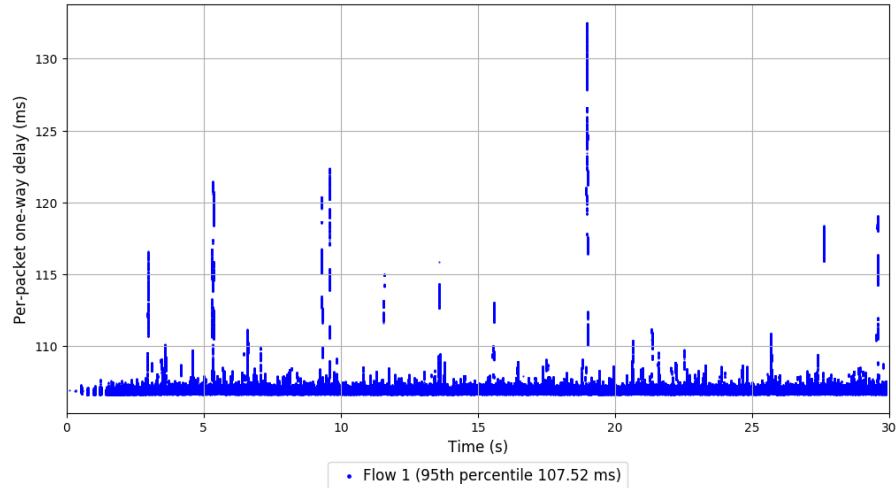
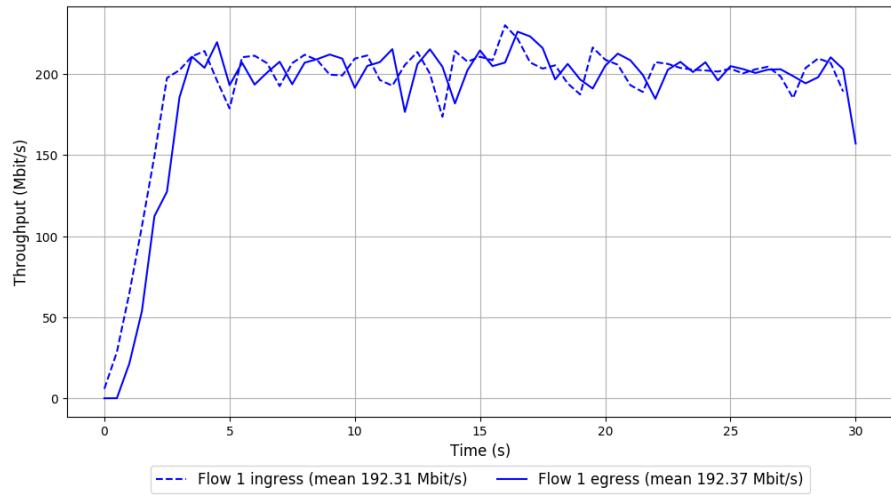


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-06-27 03:22:55
End at: 2019-06-27 03:23:25
Local clock offset: 3.468 ms
Remote clock offset: 1.617 ms

# Below is generated by plot.py at 2019-06-27 05:04:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 192.37 Mbit/s
95th percentile per-packet one-way delay: 107.520 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 192.37 Mbit/s
95th percentile per-packet one-way delay: 107.520 ms
Loss rate: 0.68%
```

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

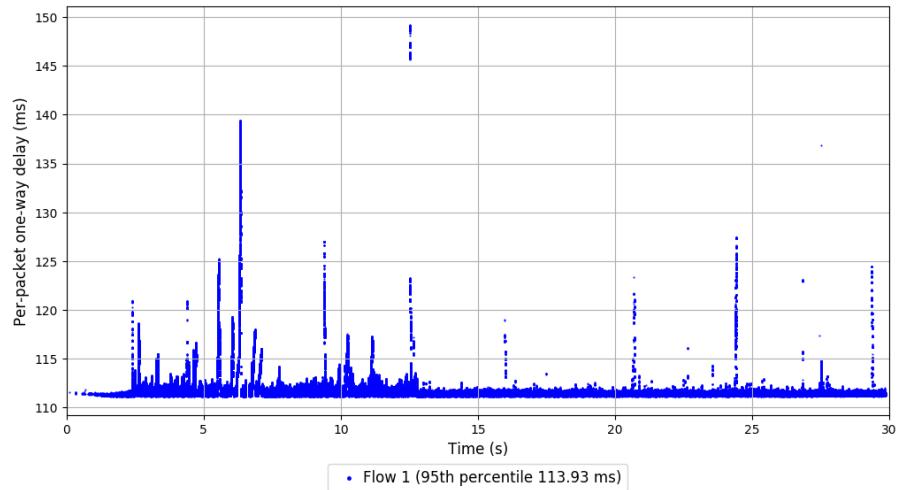
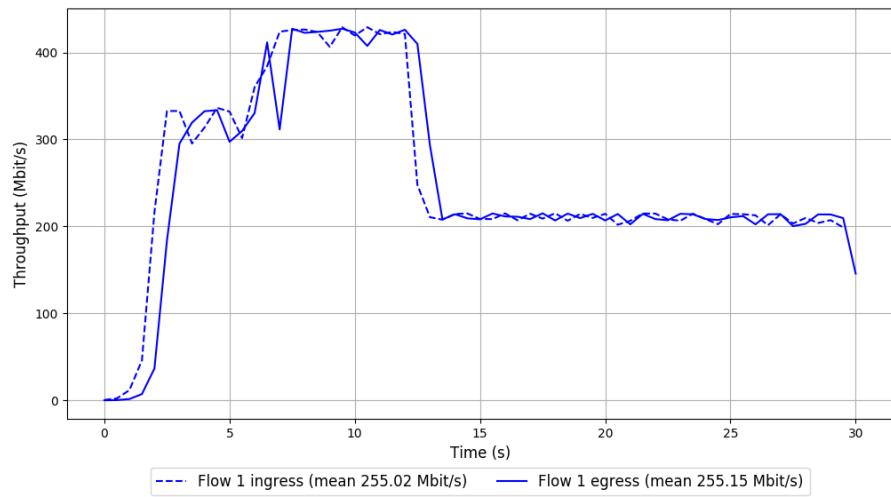


Run 1: Statistics of TCP Vegas

```
Start at: 2019-06-27 01:11:44
End at: 2019-06-27 01:12:14
Local clock offset: 13.316 ms
Remote clock offset: 15.123 ms

# Below is generated by plot.py at 2019-06-27 05:04:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 255.15 Mbit/s
95th percentile per-packet one-way delay: 113.927 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 255.15 Mbit/s
95th percentile per-packet one-way delay: 113.927 ms
Loss rate: 0.69%
```

Run 1: Report of TCP Vegas — Data Link

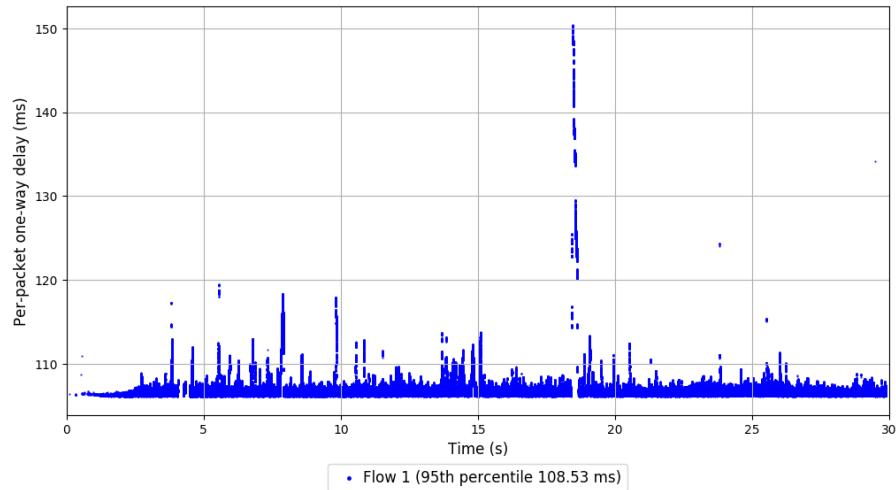
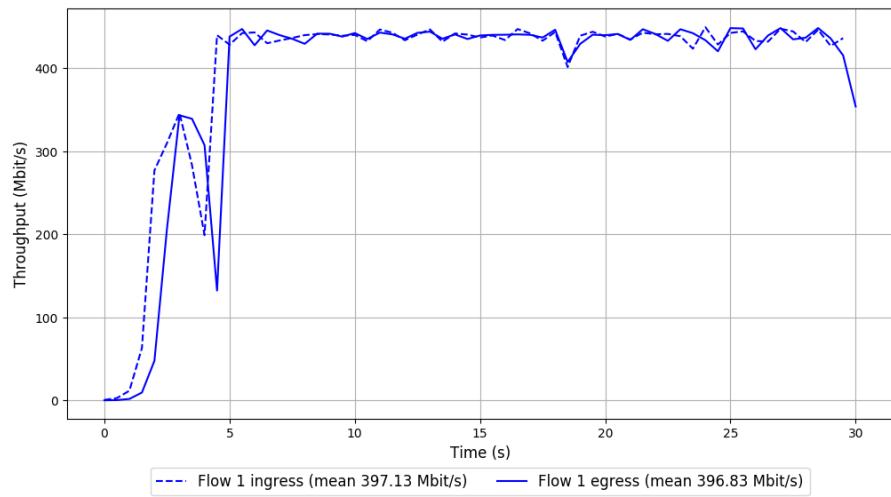


Run 2: Statistics of TCP Vegas

```
Start at: 2019-06-27 01:43:43
End at: 2019-06-27 01:44:13
Local clock offset: 25.731 ms
Remote clock offset: 29.209 ms

# Below is generated by plot.py at 2019-06-27 05:07:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 396.83 Mbit/s
95th percentile per-packet one-way delay: 108.533 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 396.83 Mbit/s
95th percentile per-packet one-way delay: 108.533 ms
Loss rate: 0.79%
```

Run 2: Report of TCP Vegas — Data Link

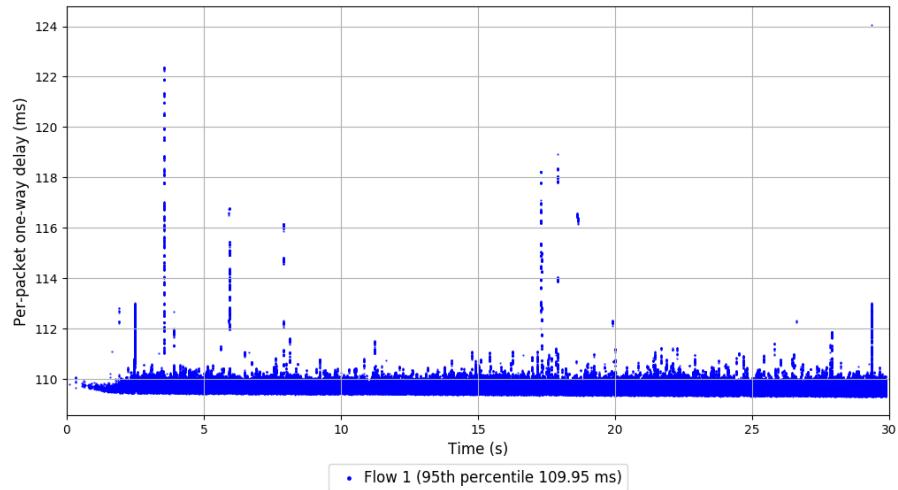
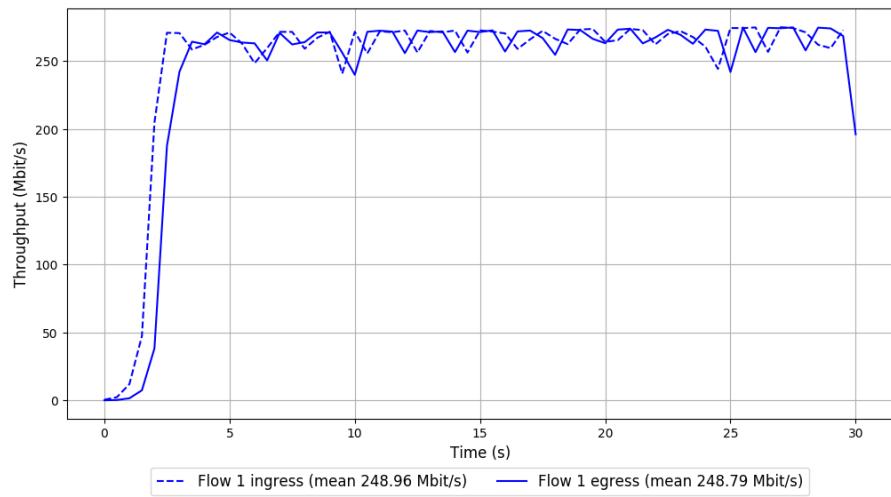


Run 3: Statistics of TCP Vegas

```
Start at: 2019-06-27 02:15:47
End at: 2019-06-27 02:16:17
Local clock offset: 13.789 ms
Remote clock offset: 10.074 ms

# Below is generated by plot.py at 2019-06-27 05:07:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 248.79 Mbit/s
95th percentile per-packet one-way delay: 109.949 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 248.79 Mbit/s
95th percentile per-packet one-way delay: 109.949 ms
Loss rate: 0.80%
```

Run 3: Report of TCP Vegas — Data Link

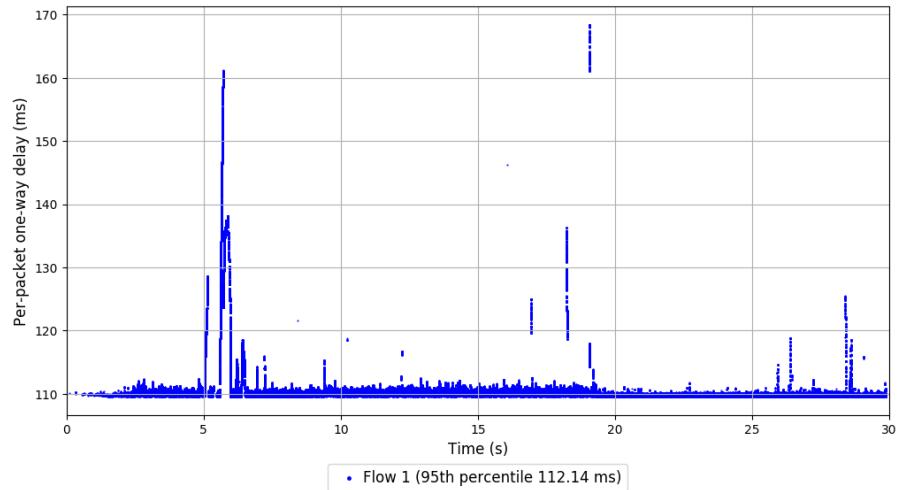
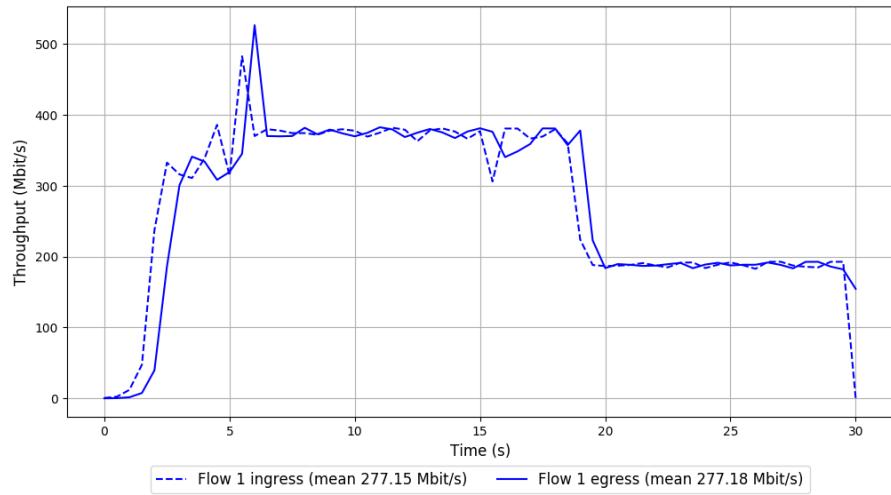


Run 4: Statistics of TCP Vegas

```
Start at: 2019-06-27 02:47:38
End at: 2019-06-27 02:48:08
Local clock offset: 7.015 ms
Remote clock offset: 3.777 ms

# Below is generated by plot.py at 2019-06-27 05:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 277.18 Mbit/s
95th percentile per-packet one-way delay: 112.138 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 277.18 Mbit/s
95th percentile per-packet one-way delay: 112.138 ms
Loss rate: 0.72%
```

Run 4: Report of TCP Vegas — Data Link

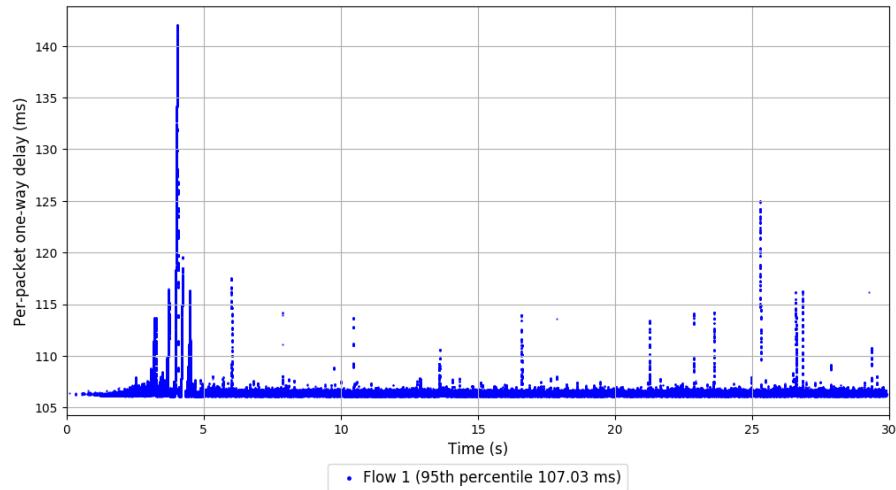
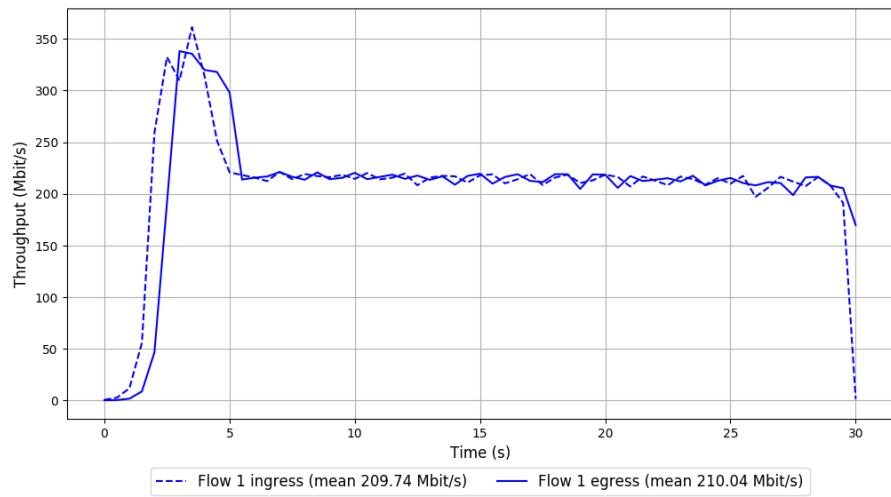


Run 5: Statistics of TCP Vegas

```
Start at: 2019-06-27 03:19:57
End at: 2019-06-27 03:20:27
Local clock offset: 3.89 ms
Remote clock offset: 2.022 ms

# Below is generated by plot.py at 2019-06-27 05:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 210.04 Mbit/s
95th percentile per-packet one-way delay: 107.035 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 210.04 Mbit/s
95th percentile per-packet one-way delay: 107.035 ms
Loss rate: 0.57%
```

Run 5: Report of TCP Vegas — Data Link

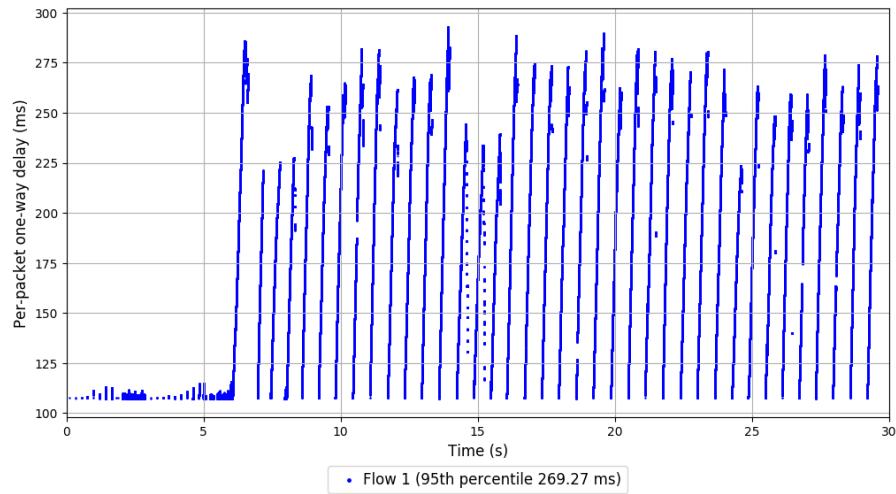
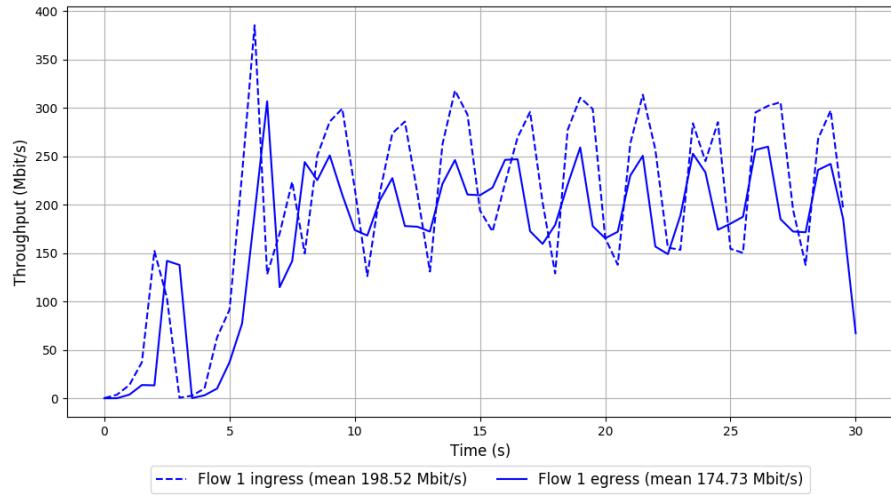


Run 1: Statistics of Verus

```
Start at: 2019-06-27 00:58:37
End at: 2019-06-27 00:59:07
Local clock offset: 8.399 ms
Remote clock offset: 9.064 ms

# Below is generated by plot.py at 2019-06-27 05:11:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 174.73 Mbit/s
95th percentile per-packet one-way delay: 269.266 ms
Loss rate: 13.13%
-- Flow 1:
Average throughput: 174.73 Mbit/s
95th percentile per-packet one-way delay: 269.266 ms
Loss rate: 13.13%
```

Run 1: Report of Verus — Data Link

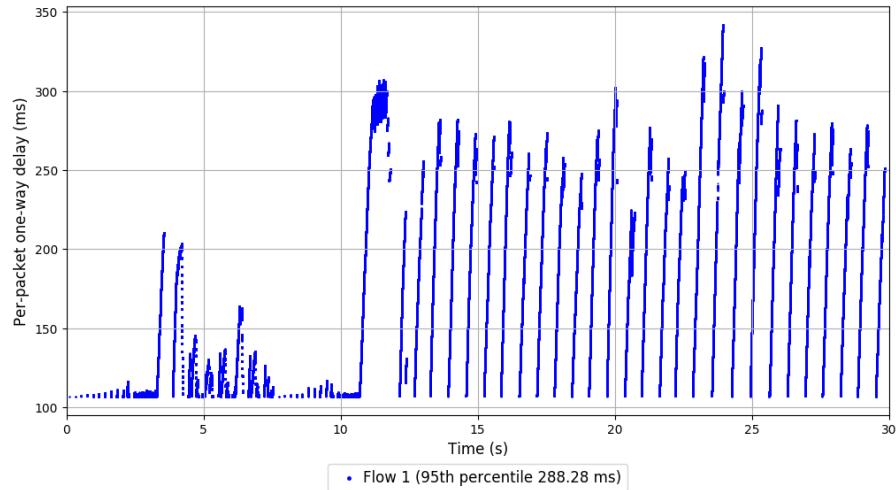
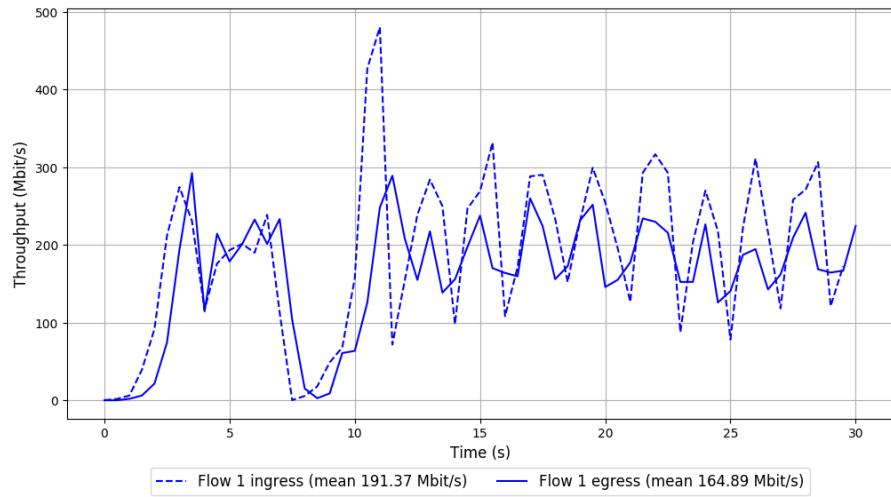


Run 2: Statistics of Verus

```
Start at: 2019-06-27 01:30:35
End at: 2019-06-27 01:31:05
Local clock offset: 19.033 ms
Remote clock offset: 21.023 ms

# Below is generated by plot.py at 2019-06-27 05:11:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 164.89 Mbit/s
95th percentile per-packet one-way delay: 288.281 ms
Loss rate: 13.60%
-- Flow 1:
Average throughput: 164.89 Mbit/s
95th percentile per-packet one-way delay: 288.281 ms
Loss rate: 13.60%
```

Run 2: Report of Verus — Data Link

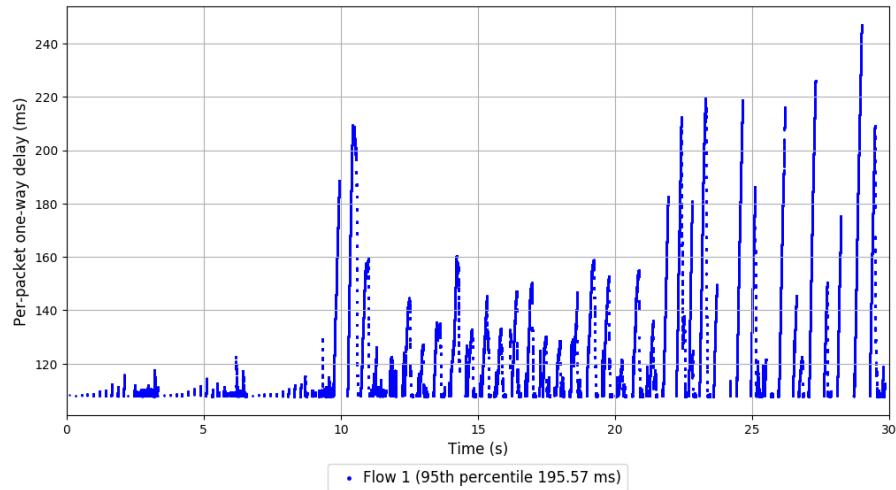
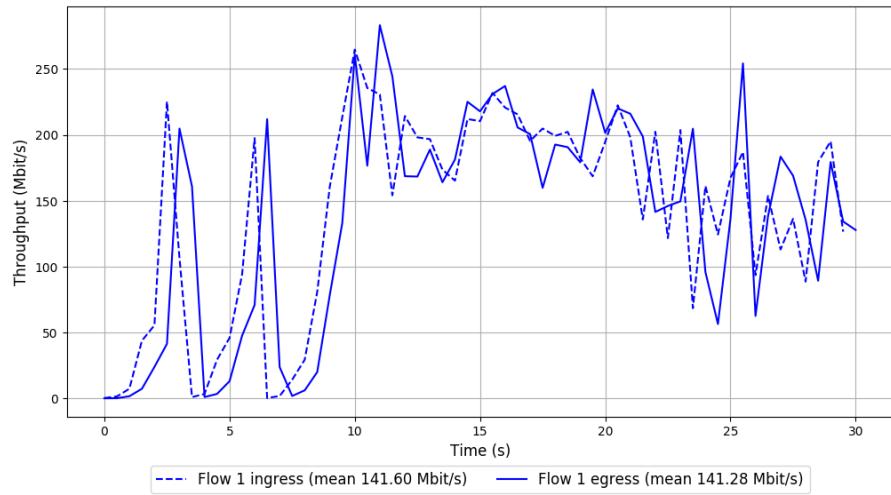


Run 3: Statistics of Verus

```
Start at: 2019-06-27 02:02:47
End at: 2019-06-27 02:03:17
Local clock offset: 21.762 ms
Remote clock offset: 21.15 ms

# Below is generated by plot.py at 2019-06-27 05:11:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 141.28 Mbit/s
95th percentile per-packet one-way delay: 195.567 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 141.28 Mbit/s
95th percentile per-packet one-way delay: 195.567 ms
Loss rate: 0.70%
```

Run 3: Report of Verus — Data Link

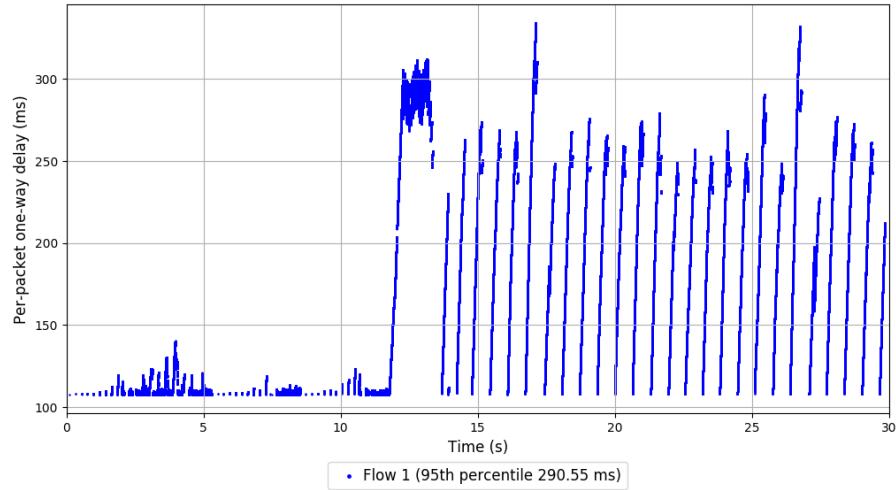
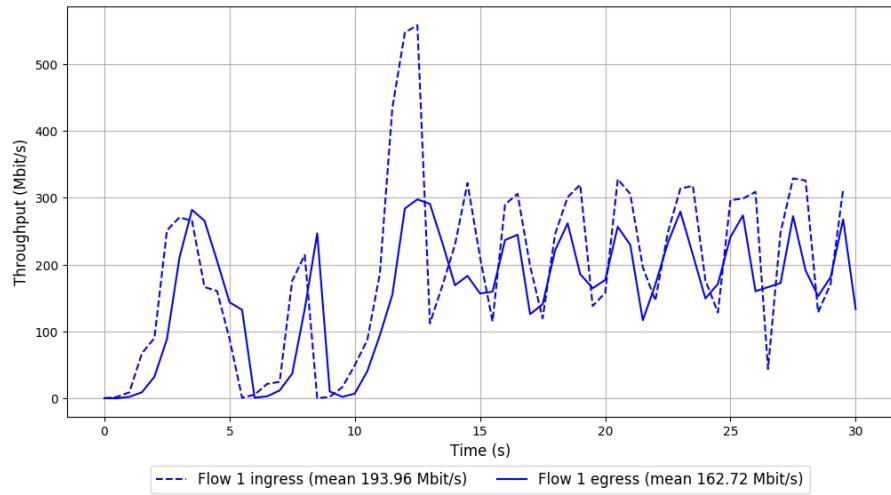


Run 4: Statistics of Verus

```
Start at: 2019-06-27 02:34:38
End at: 2019-06-27 02:35:08
Local clock offset: 12.769 ms
Remote clock offset: 6.674 ms

# Below is generated by plot.py at 2019-06-27 05:11:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 162.72 Mbit/s
95th percentile per-packet one-way delay: 290.549 ms
Loss rate: 16.24%
-- Flow 1:
Average throughput: 162.72 Mbit/s
95th percentile per-packet one-way delay: 290.549 ms
Loss rate: 16.24%
```

Run 4: Report of Verus — Data Link

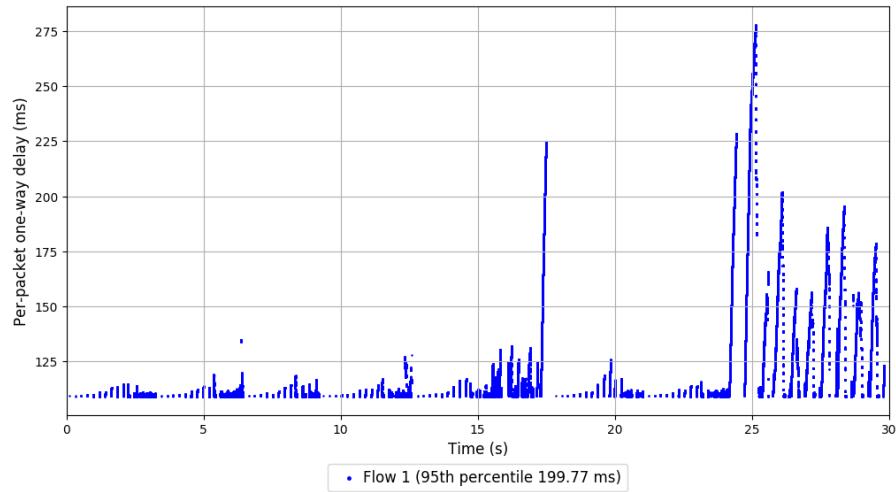
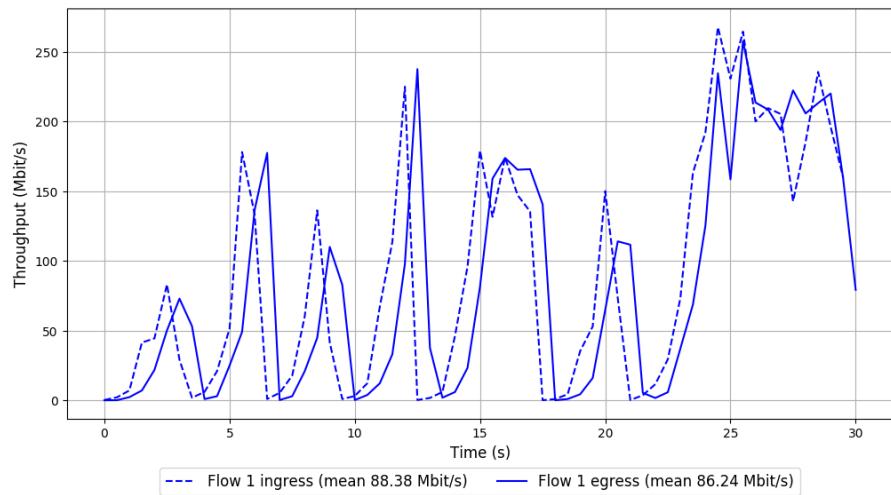


Run 5: Statistics of Verus

```
Start at: 2019-06-27 03:06:58
End at: 2019-06-27 03:07:28
Local clock offset: 7.068 ms
Remote clock offset: 3.662 ms

# Below is generated by plot.py at 2019-06-27 05:11:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.24 Mbit/s
95th percentile per-packet one-way delay: 199.772 ms
Loss rate: 3.13%
-- Flow 1:
Average throughput: 86.24 Mbit/s
95th percentile per-packet one-way delay: 199.772 ms
Loss rate: 3.13%
```

Run 5: Report of Verus — Data Link

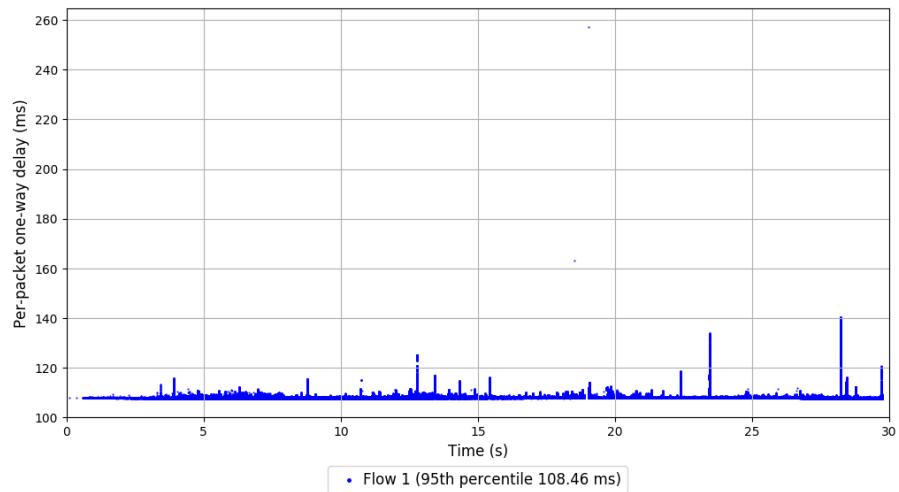
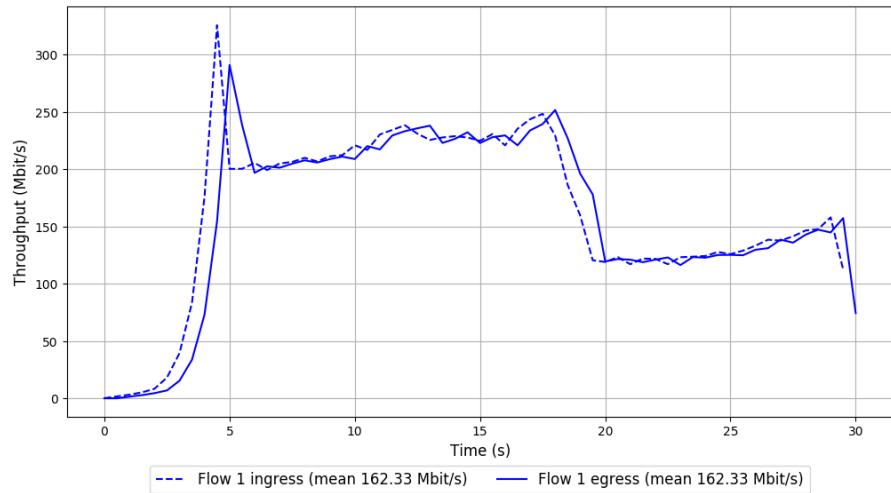


Run 1: Statistics of PCC-Vivace

```
Start at: 2019-06-27 00:51:25
End at: 2019-06-27 00:51:55
Local clock offset: 4.331 ms
Remote clock offset: 6.282 ms

# Below is generated by plot.py at 2019-06-27 05:11:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 162.33 Mbit/s
95th percentile per-packet one-way delay: 108.463 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 162.33 Mbit/s
95th percentile per-packet one-way delay: 108.463 ms
Loss rate: 0.74%
```

Run 1: Report of PCC-Vivace — Data Link

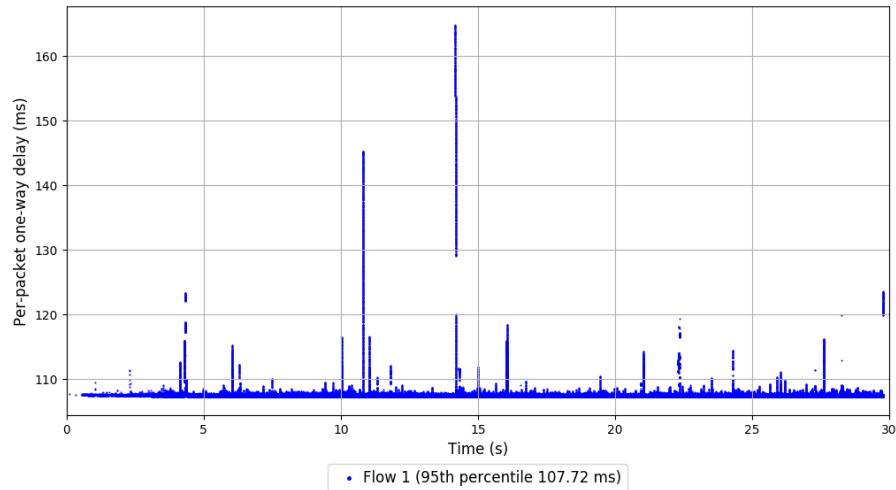
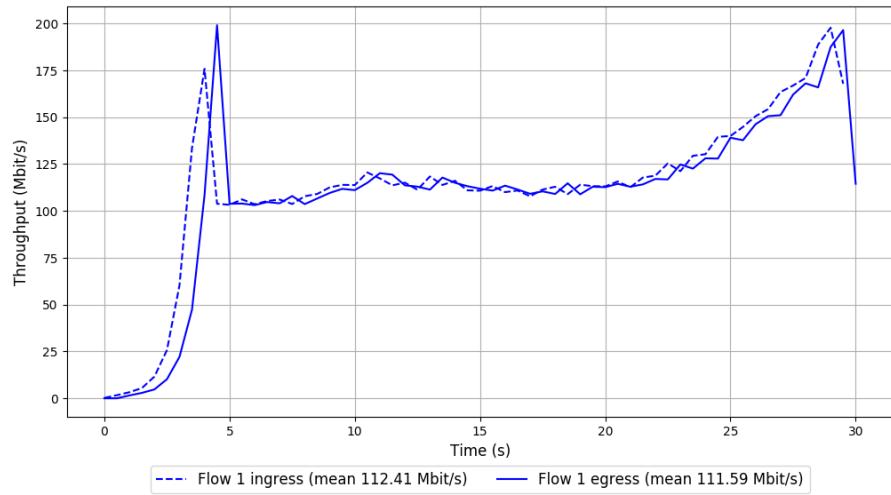


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-06-27 01:23:12
End at: 2019-06-27 01:23:42
Local clock offset: 24.002 ms
Remote clock offset: 25.921 ms

# Below is generated by plot.py at 2019-06-27 05:11:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 111.59 Mbit/s
95th percentile per-packet one-way delay: 107.718 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 111.59 Mbit/s
95th percentile per-packet one-way delay: 107.718 ms
Loss rate: 1.45%
```

Run 2: Report of PCC-Vivace — Data Link

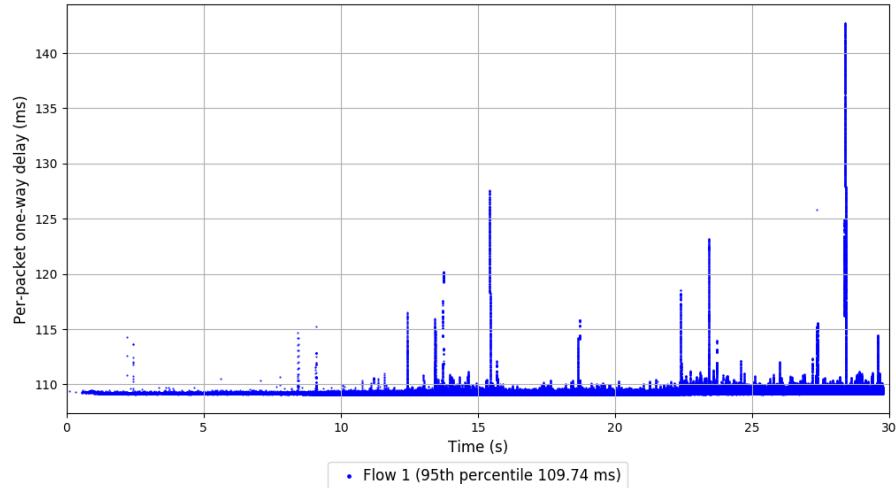
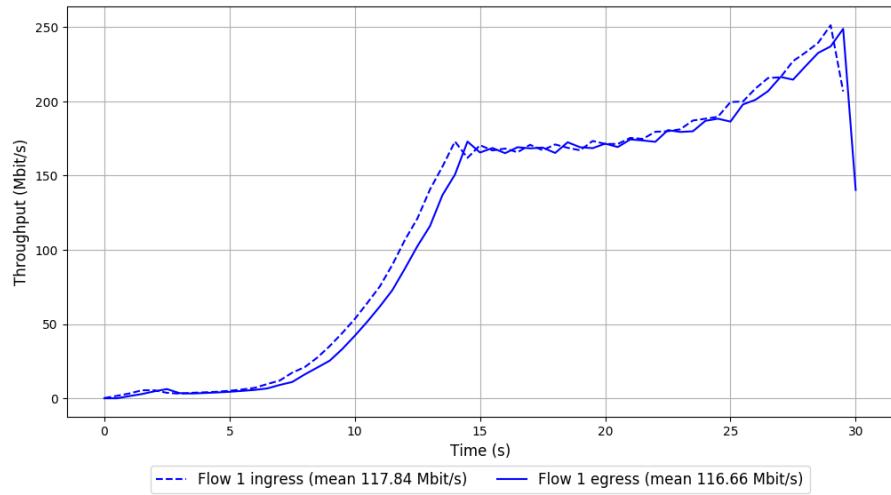


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-06-27 01:55:21
End at: 2019-06-27 01:55:51
Local clock offset: 37.427 ms
Remote clock offset: 41.677 ms

# Below is generated by plot.py at 2019-06-27 05:11:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 116.66 Mbit/s
95th percentile per-packet one-way delay: 109.737 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 116.66 Mbit/s
95th percentile per-packet one-way delay: 109.737 ms
Loss rate: 1.73%
```

Run 3: Report of PCC-Vivace — Data Link

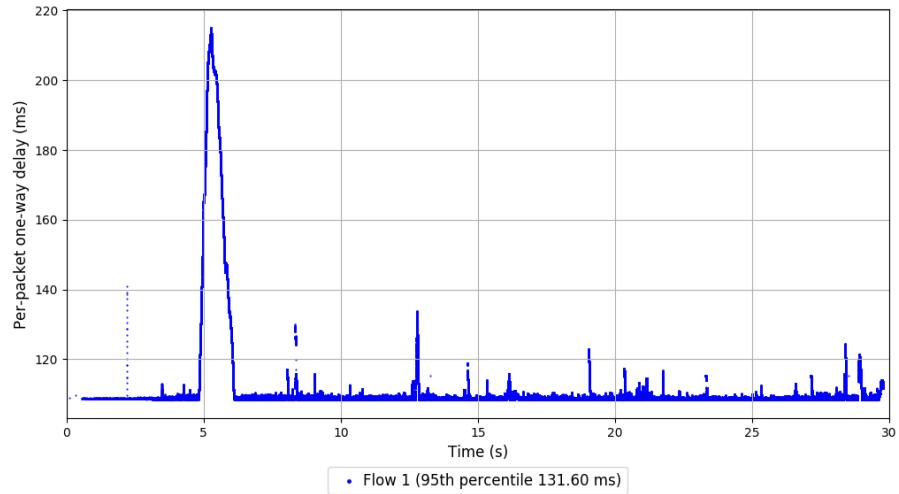
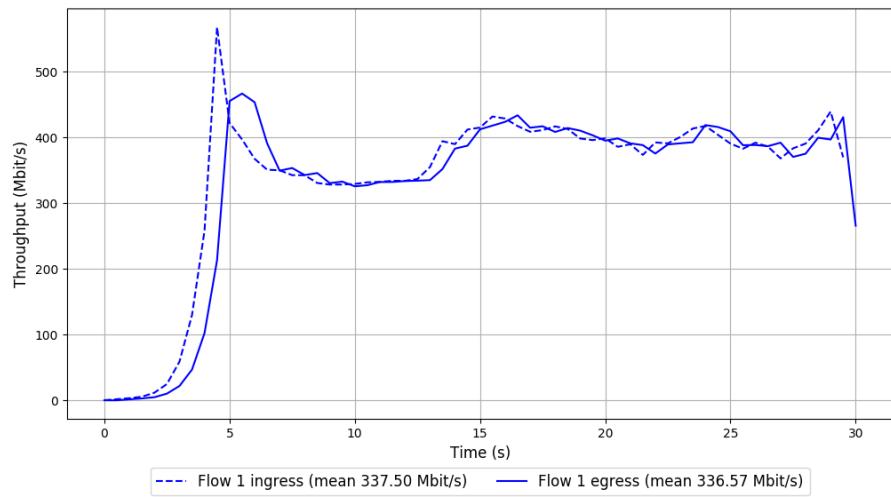


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-06-27 02:26:54
End at: 2019-06-27 02:27:24
Local clock offset: 17.513 ms
Remote clock offset: 10.288 ms

# Below is generated by plot.py at 2019-06-27 05:12:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 336.57 Mbit/s
95th percentile per-packet one-way delay: 131.598 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 336.57 Mbit/s
95th percentile per-packet one-way delay: 131.598 ms
Loss rate: 1.01%
```

Run 4: Report of PCC-Vivace — Data Link

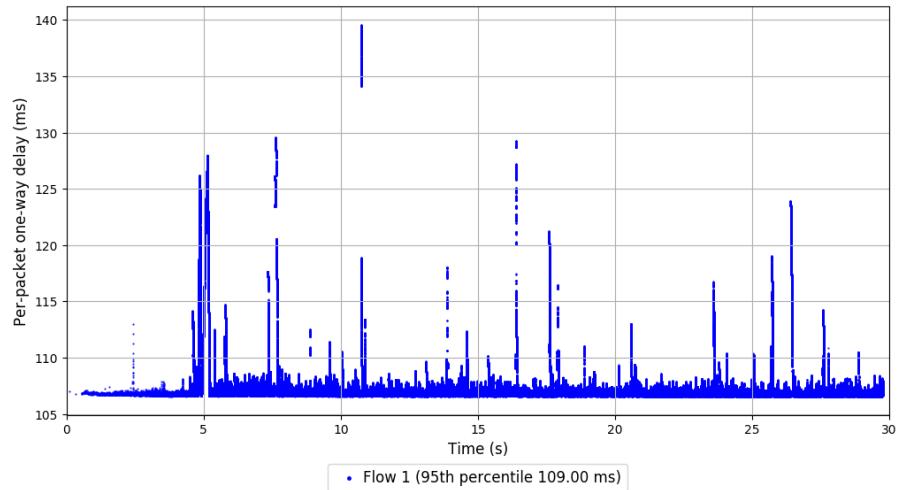
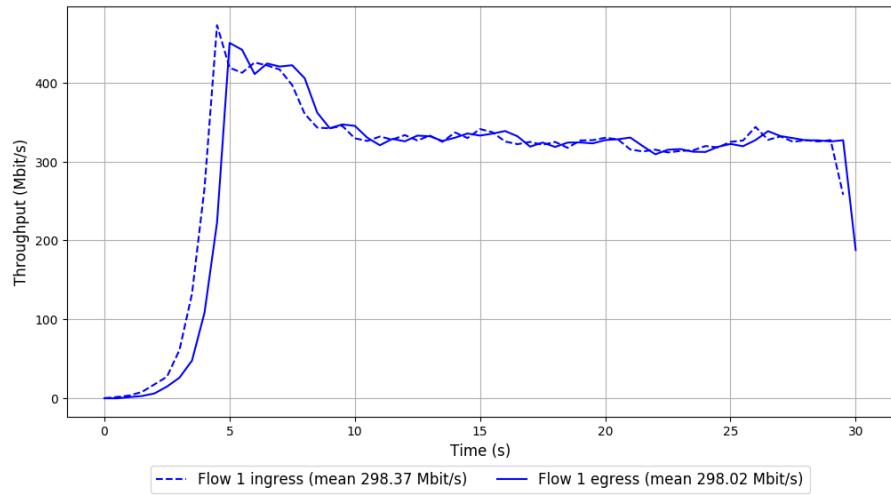


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-06-27 02:59:16
End at: 2019-06-27 02:59:46
Local clock offset: 7.938 ms
Remote clock offset: 4.364 ms

# Below is generated by plot.py at 2019-06-27 05:12:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 298.02 Mbit/s
95th percentile per-packet one-way delay: 109.004 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 298.02 Mbit/s
95th percentile per-packet one-way delay: 109.004 ms
Loss rate: 0.84%
```

Run 5: Report of PCC-Vivace — Data Link

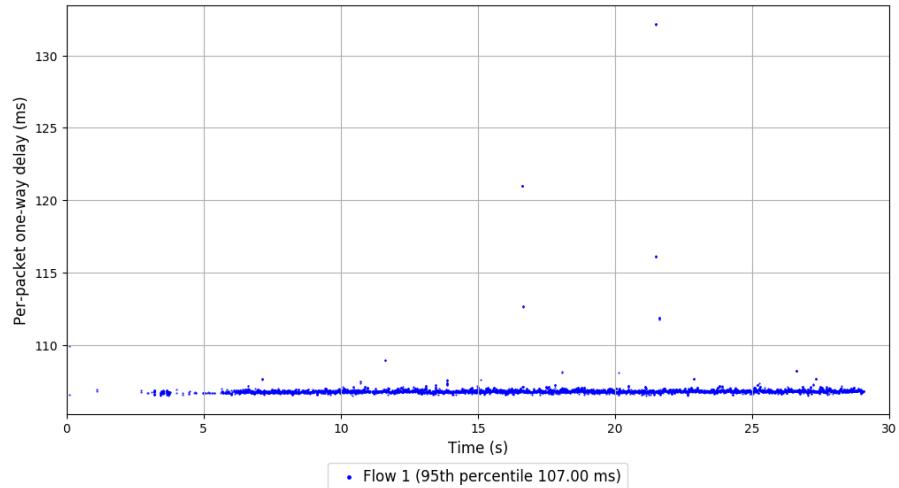
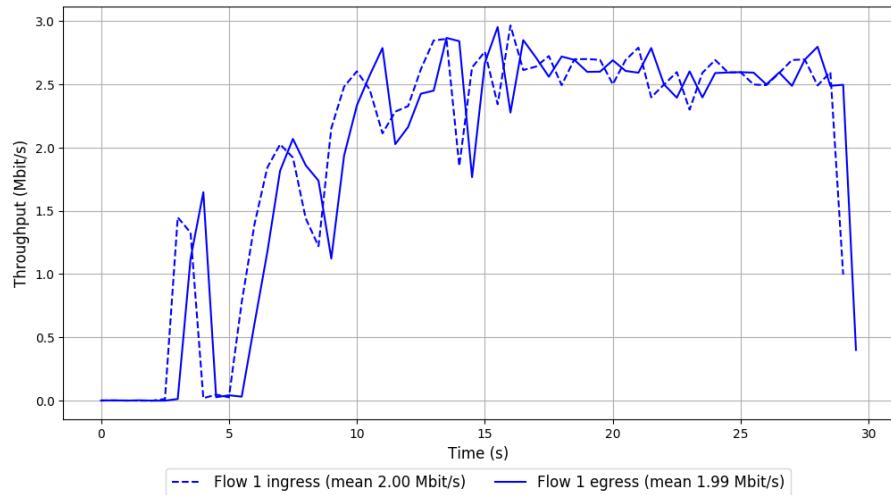


```
Run 1: Statistics of WebRTC media
```

```
Start at: 2019-06-27 01:20:31
End at: 2019-06-27 01:21:01
Local clock offset: 23.444 ms
Remote clock offset: 26.322 ms

# Below is generated by plot.py at 2019-06-27 05:12:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 106.995 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 106.995 ms
Loss rate: 1.02%
```

Run 1: Report of WebRTC media — Data Link

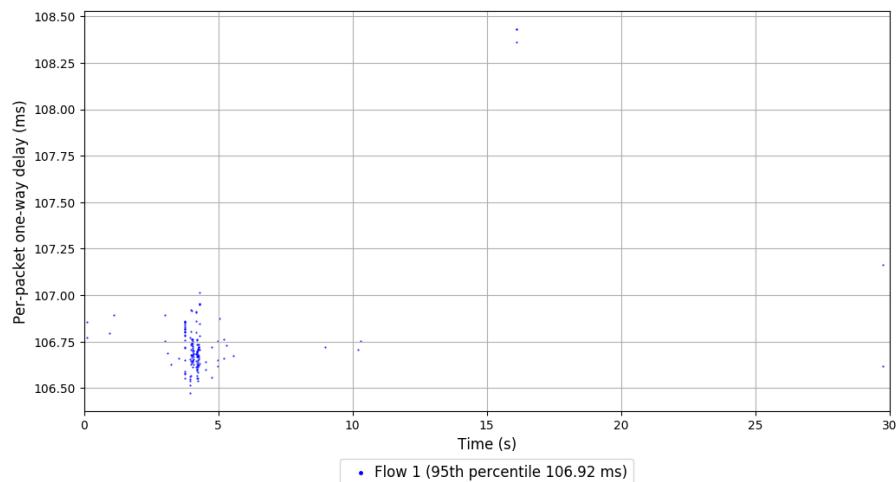
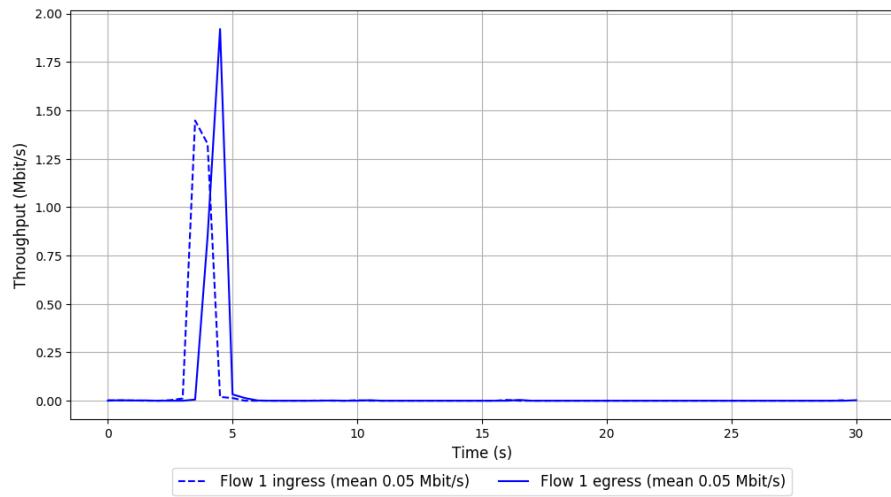


Run 2: Statistics of WebRTC media

```
Start at: 2019-06-27 01:52:39
End at: 2019-06-27 01:53:09
Local clock offset: 34.651 ms
Remote clock offset: 38.746 ms

# Below is generated by plot.py at 2019-06-27 05:12:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 106.921 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 106.921 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

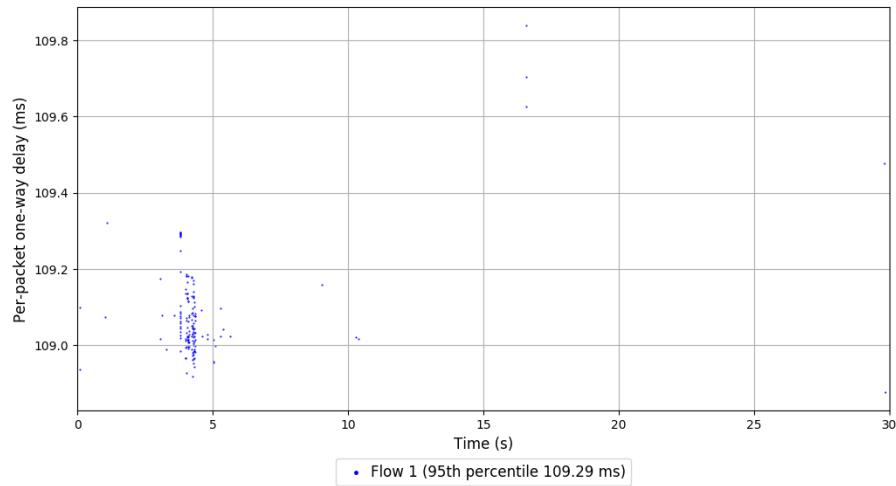
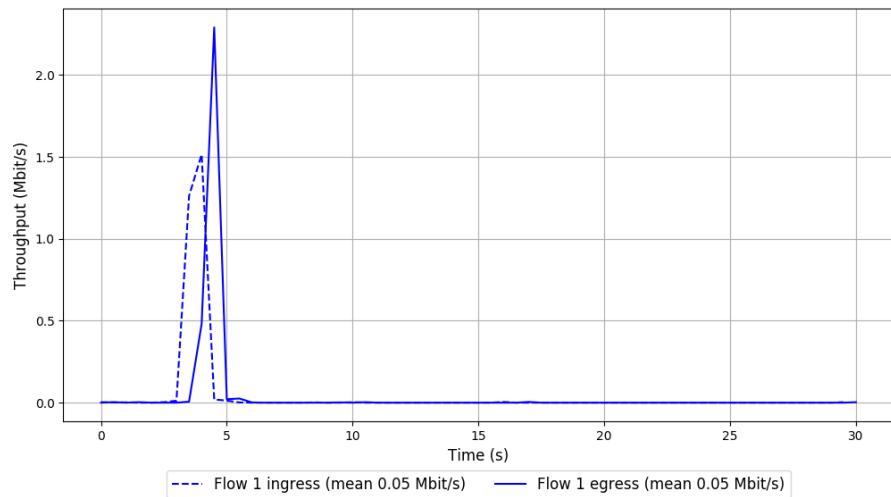


Run 3: Statistics of WebRTC media

```
Start at: 2019-06-27 02:24:12
End at: 2019-06-27 02:24:42
Local clock offset: 16.464 ms
Remote clock offset: 9.916 ms

# Below is generated by plot.py at 2019-06-27 05:12:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.292 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.292 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

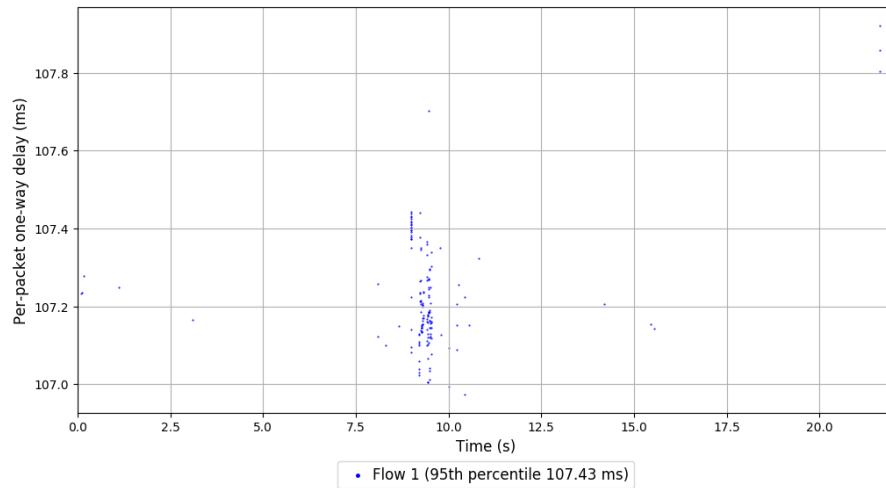
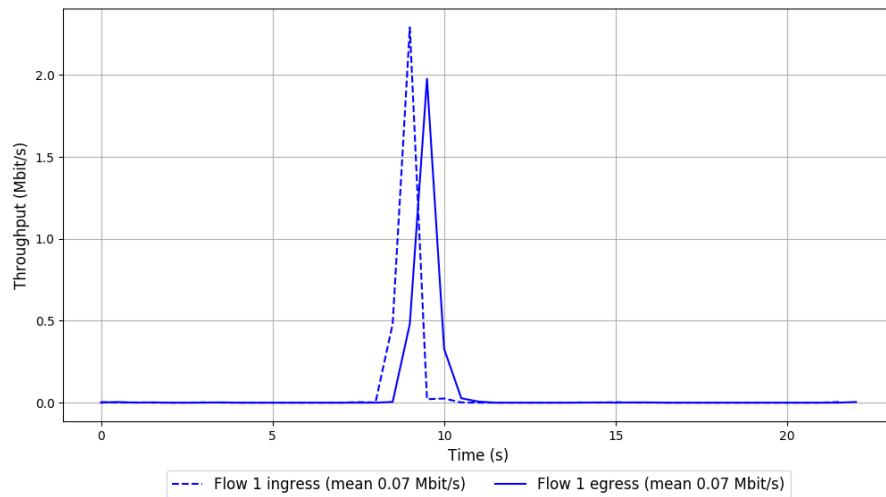
Start at: 2019-06-27 02:56:32

End at: 2019-06-27 02:57:02

Local clock offset: 7.699 ms

Remote clock offset: 4.075 ms

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-06-27 03:28:44
End at: 2019-06-27 03:29:14
Local clock offset: 3.706 ms
Remote clock offset: 1.755 ms

# Below is generated by plot.py at 2019-06-27 05:12:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.991 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.991 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

