

Pantheon Report

Generated at 2019-01-21 23:24:58 (UTC).

Data path: India on `em1` (*remote*) → AWS India 1 on `ens5` (*local*).

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

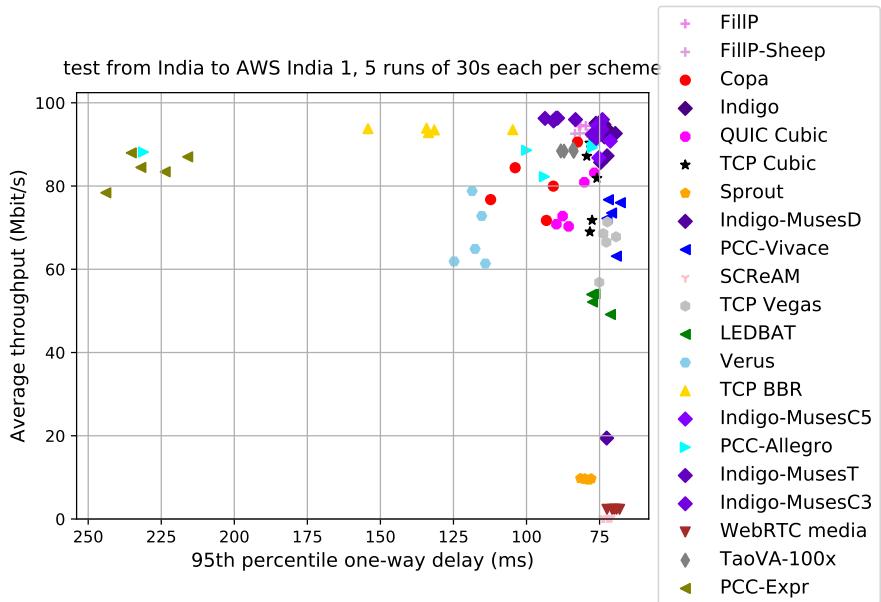
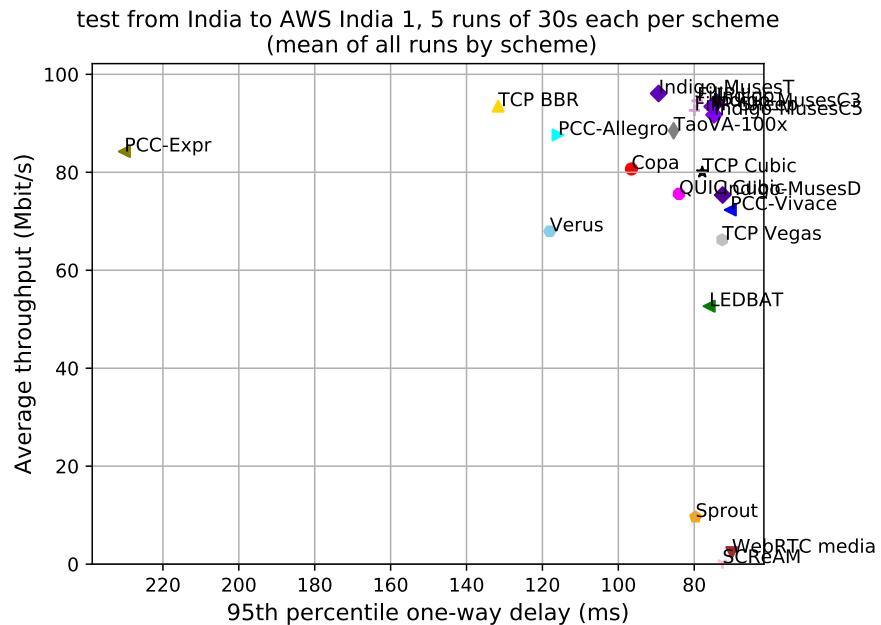
System info:

```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ 89d24e57783e7fbfec537a619071de937b639e38
third_party/fillp @ d6da1459332fce56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fc45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 1ddcff131048c6962f123bcd22b4d166a422adde
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
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



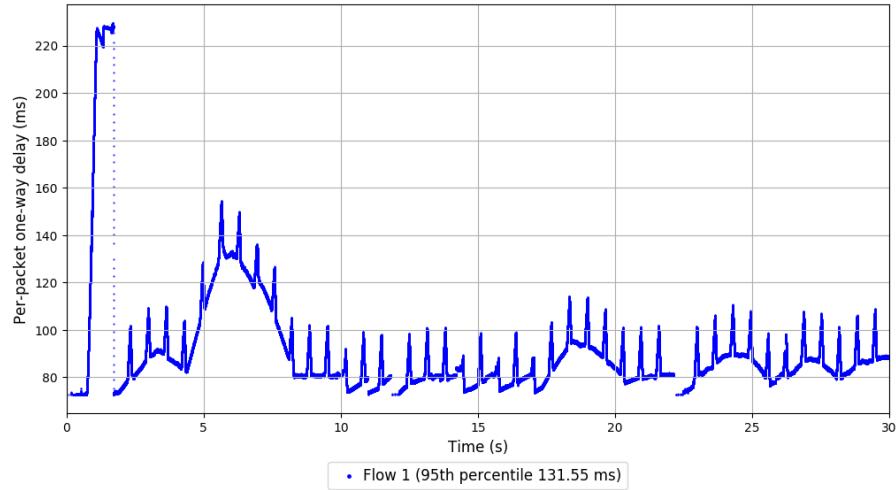
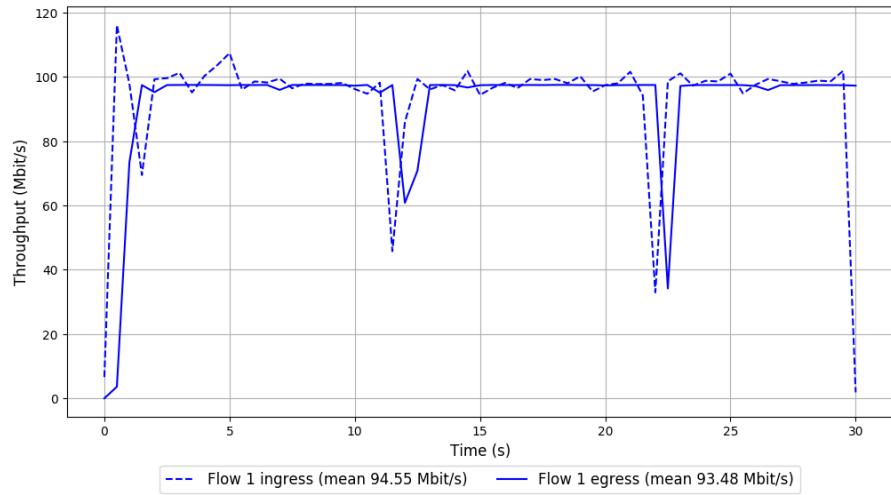
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	93.51	131.66	1.34
Copa	5	80.68	96.54	0.24
TCP Cubic	5	80.04	77.89	0.31
FillP	5	94.60	79.22	0.31
FillP-Sheep	5	92.63	79.95	0.28
Indigo	5	94.35	74.15	0.28
Indigo-MusesC3	5	93.42	75.26	0.27
Indigo-MusesC5	5	91.73	74.79	0.28
Indigo-MusesD	5	75.37	72.51	0.29
Indigo-MusesT	5	96.09	89.39	0.73
LEDBAT	5	52.66	76.07	0.31
PCC-Allegro	5	87.63	115.88	0.42
PCC-Expr	5	84.25	230.17	0.34
QUIC Cubic	5	75.60	84.00	0.35
SCReAM	5	0.22	72.56	0.23
Sprout	5	9.62	79.66	0.22
TaoVA-100x	5	88.49	85.43	0.30
TCP Vegas	5	66.22	72.64	0.33
Verus	5	67.95	118.07	0.33
PCC-Vivace	5	72.32	70.50	0.36
WebRTC media	5	2.33	70.10	0.25

Run 1: Statistics of TCP BBR

```
Start at: 2019-01-21 21:14:58
End at: 2019-01-21 21:15:29
Local clock offset: 1.415 ms
Remote clock offset: -3.079 ms

# Below is generated by plot.py at 2019-01-21 23:13:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.48 Mbit/s
95th percentile per-packet one-way delay: 131.554 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 93.48 Mbit/s
95th percentile per-packet one-way delay: 131.554 ms
Loss rate: 1.39%
```

Run 1: Report of TCP BBR — Data Link

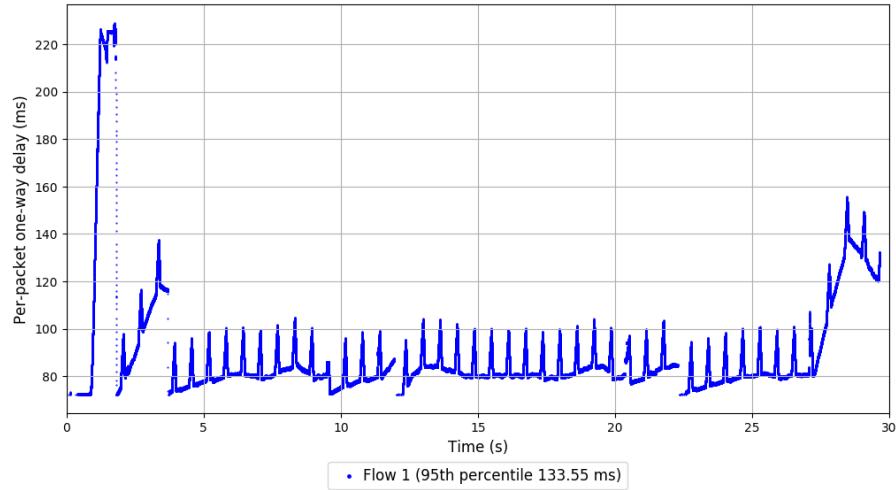
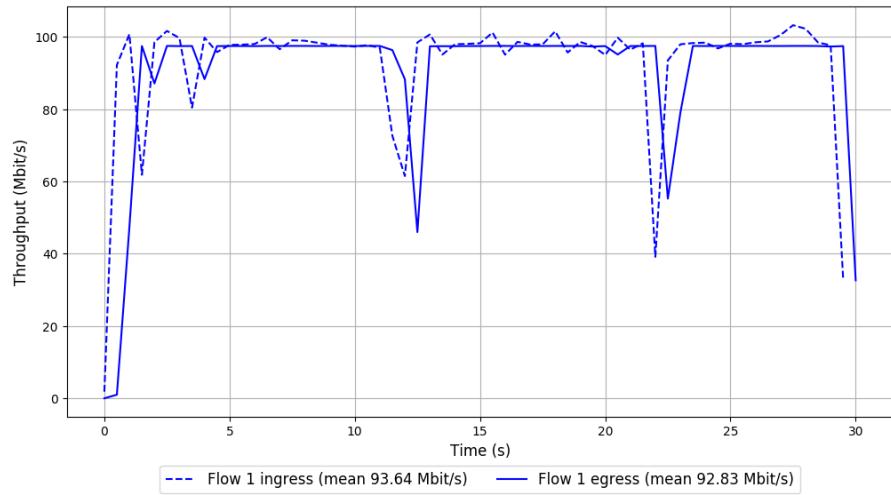


Run 2: Statistics of TCP BBR

```
Start at: 2019-01-21 21:40:53
End at: 2019-01-21 21:41:23
Local clock offset: 1.895 ms
Remote clock offset: -3.988 ms

# Below is generated by plot.py at 2019-01-21 23:13:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.83 Mbit/s
95th percentile per-packet one-way delay: 133.549 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 92.83 Mbit/s
95th percentile per-packet one-way delay: 133.549 ms
Loss rate: 1.12%
```

Run 2: Report of TCP BBR — Data Link

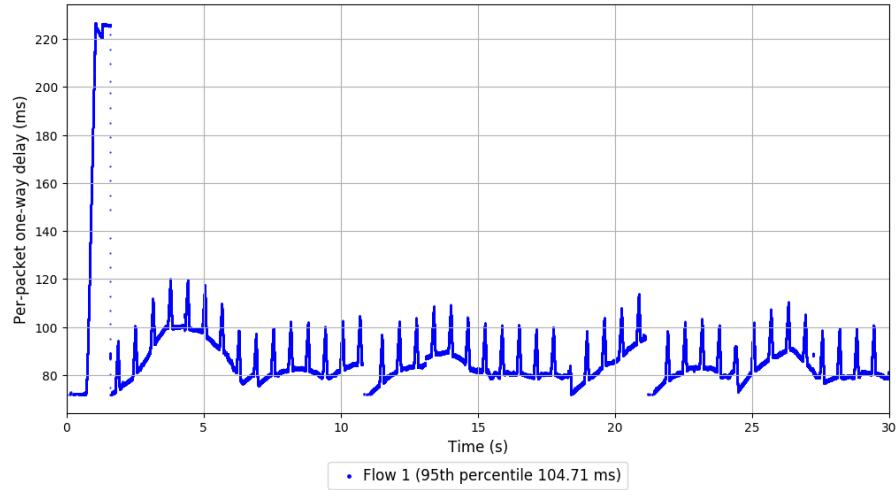
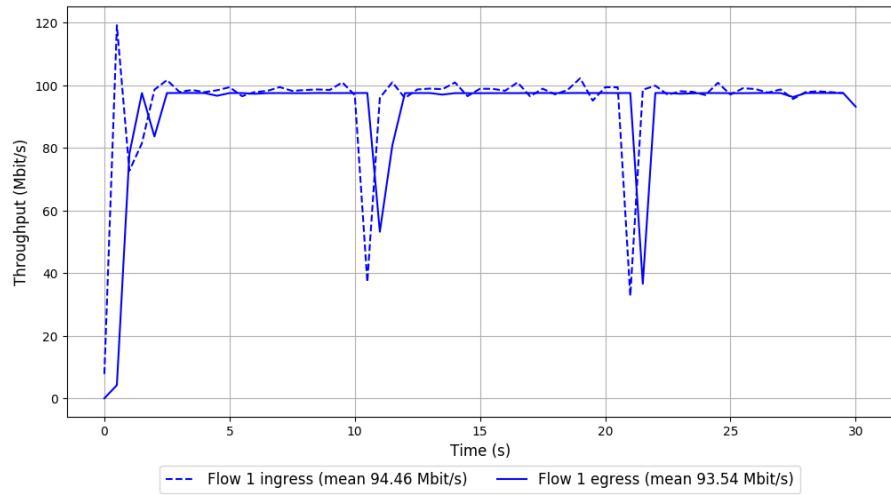


Run 3: Statistics of TCP BBR

```
Start at: 2019-01-21 22:06:02
End at: 2019-01-21 22:06:32
Local clock offset: -1.04 ms
Remote clock offset: -4.836 ms

# Below is generated by plot.py at 2019-01-21 23:13:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.54 Mbit/s
95th percentile per-packet one-way delay: 104.712 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 93.54 Mbit/s
95th percentile per-packet one-way delay: 104.712 ms
Loss rate: 1.23%
```

Run 3: Report of TCP BBR — Data Link

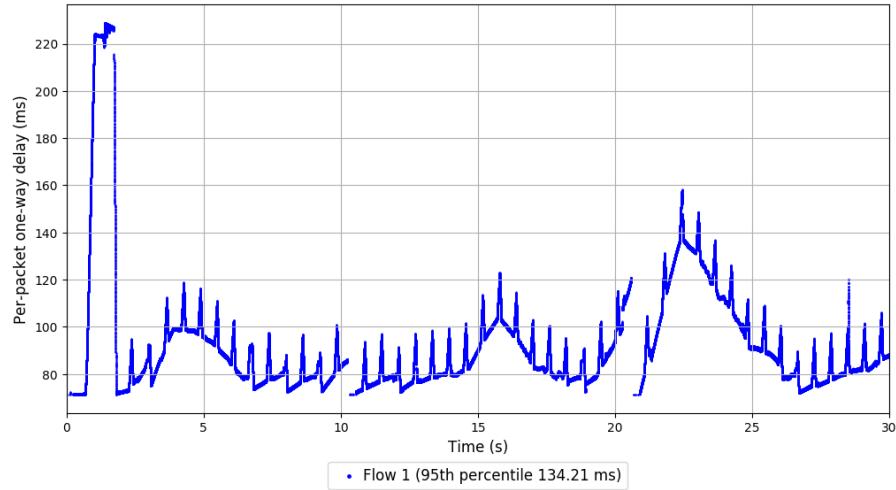
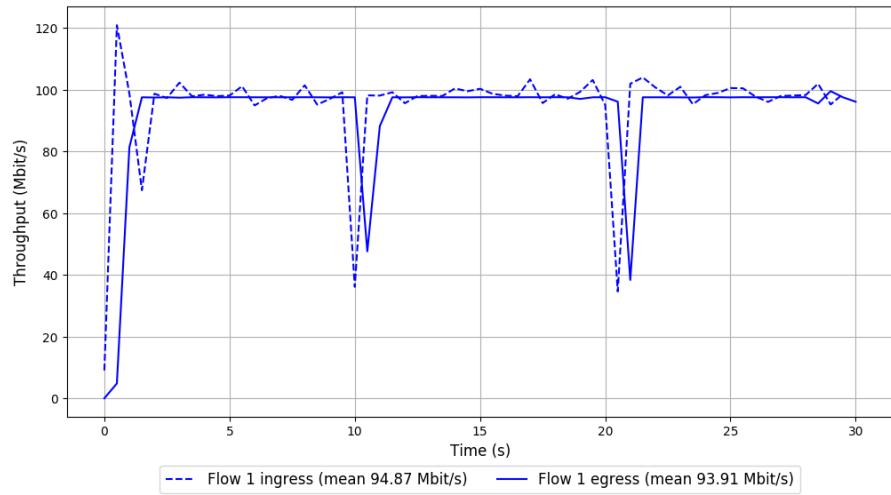


Run 4: Statistics of TCP BBR

```
Start at: 2019-01-21 22:31:00
End at: 2019-01-21 22:31:30
Local clock offset: 2.41 ms
Remote clock offset: -4.025 ms

# Below is generated by plot.py at 2019-01-21 23:13:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.91 Mbit/s
95th percentile per-packet one-way delay: 134.214 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 93.91 Mbit/s
95th percentile per-packet one-way delay: 134.214 ms
Loss rate: 1.26%
```

Run 4: Report of TCP BBR — Data Link

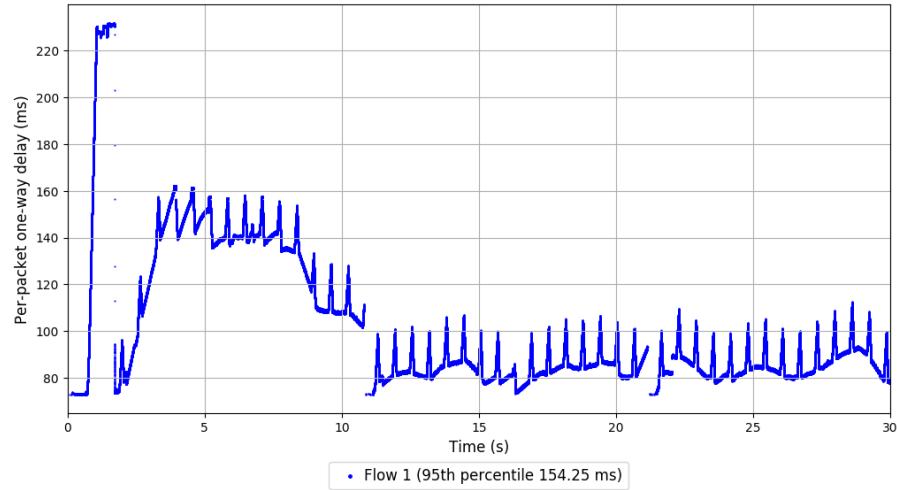
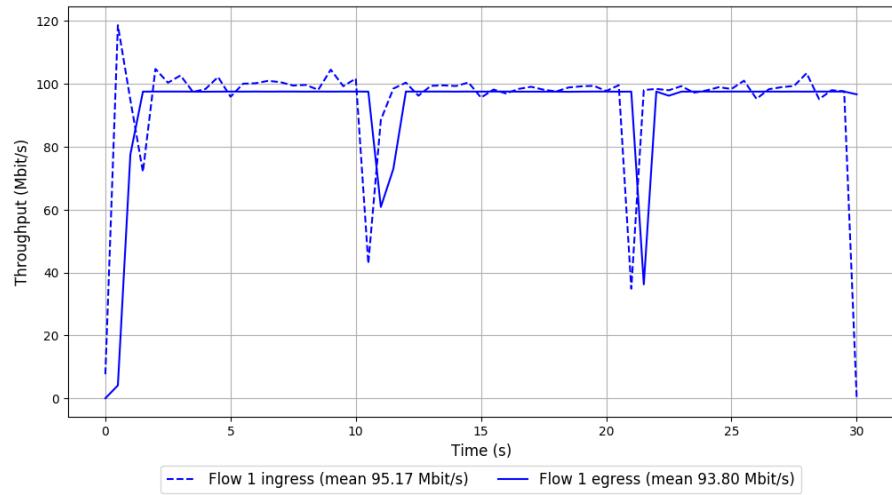


Run 5: Statistics of TCP BBR

```
Start at: 2019-01-21 22:57:25
End at: 2019-01-21 22:57:55
Local clock offset: 0.841 ms
Remote clock offset: -4.33 ms

# Below is generated by plot.py at 2019-01-21 23:13:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 154.250 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 154.250 ms
Loss rate: 1.70%
```

Run 5: Report of TCP BBR — Data Link

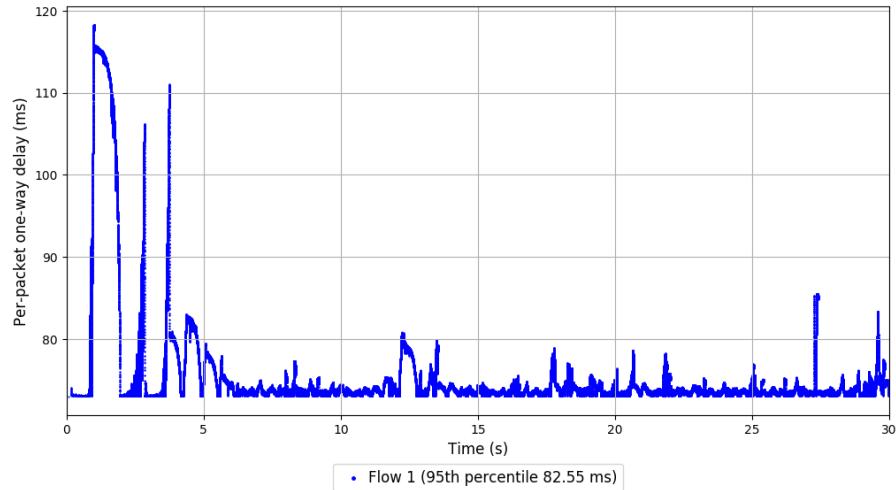
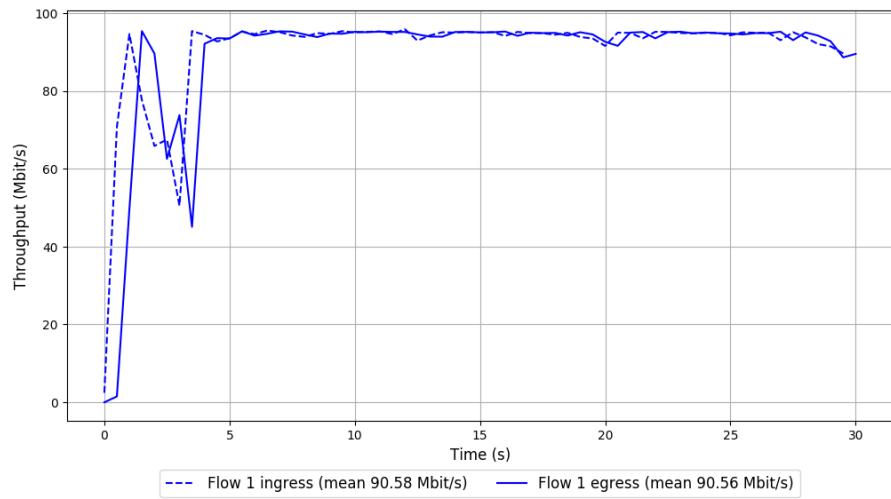


Run 1: Statistics of Copa

```
Start at: 2019-01-21 21:21:01
End at: 2019-01-21 21:21:31
Local clock offset: 0.671 ms
Remote clock offset: -3.666 ms

# Below is generated by plot.py at 2019-01-21 23:14:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.56 Mbit/s
95th percentile per-packet one-way delay: 82.545 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 90.56 Mbit/s
95th percentile per-packet one-way delay: 82.545 ms
Loss rate: 0.30%
```

Run 1: Report of Copa — Data Link

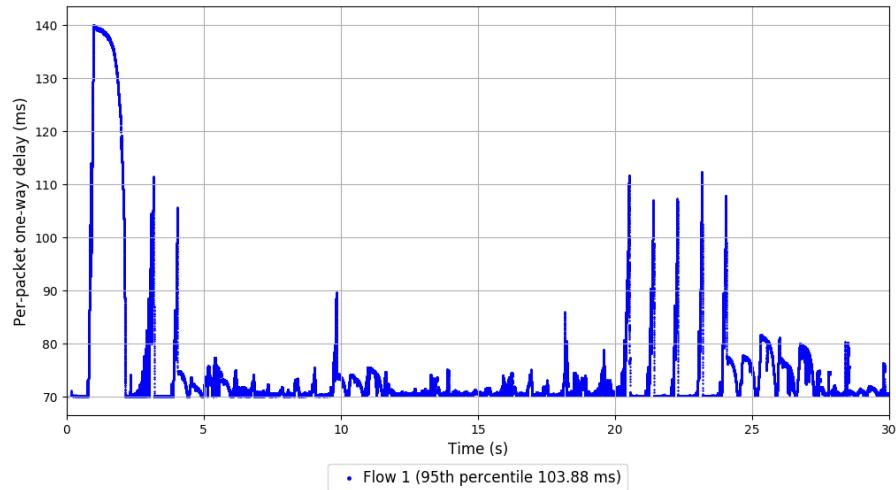
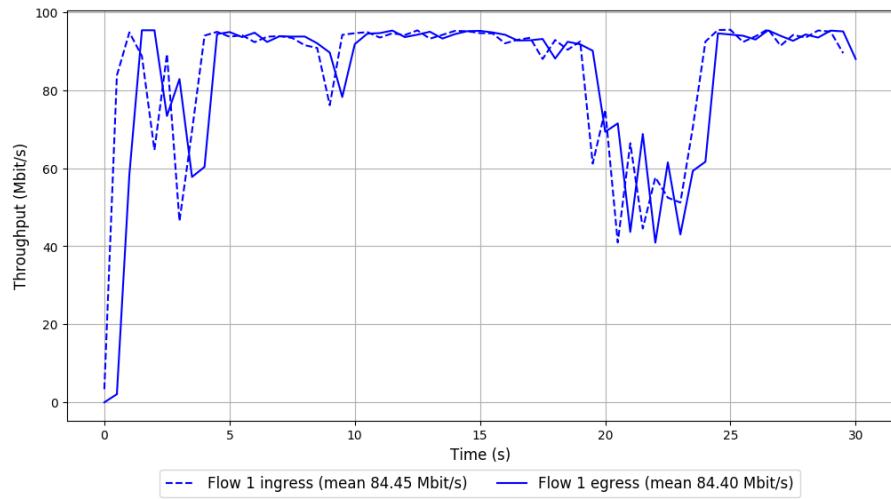


Run 2: Statistics of Copa

```
Start at: 2019-01-21 21:46:51
End at: 2019-01-21 21:47:21
Local clock offset: -1.501 ms
Remote clock offset: -4.896 ms

# Below is generated by plot.py at 2019-01-21 23:14:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.40 Mbit/s
95th percentile per-packet one-way delay: 103.884 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 84.40 Mbit/s
95th percentile per-packet one-way delay: 103.884 ms
Loss rate: 0.31%
```

Run 2: Report of Copa — Data Link

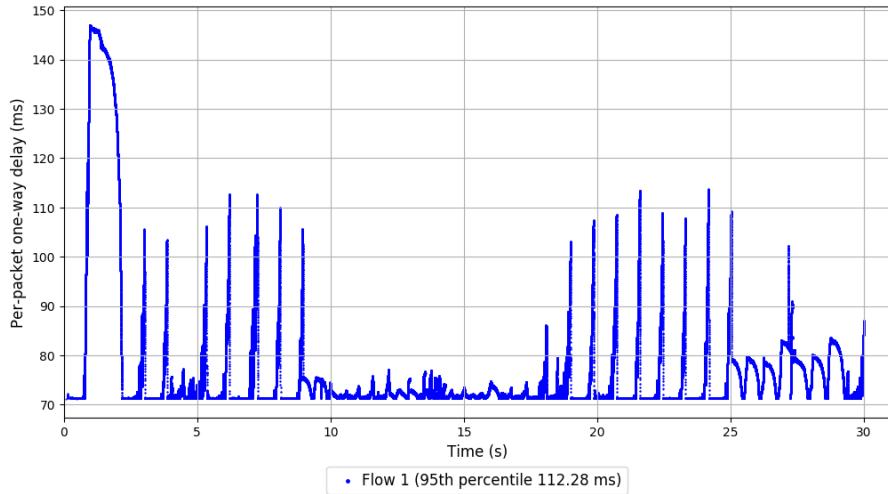
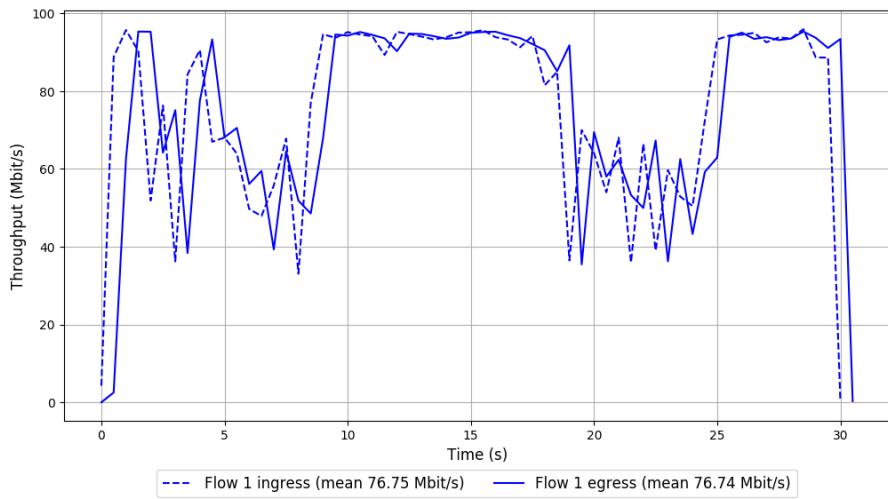


Run 3: Statistics of Copa

```
Start at: 2019-01-21 22:11:44
End at: 2019-01-21 22:12:14
Local clock offset: 0.722 ms
Remote clock offset: -4.699 ms

# Below is generated by plot.py at 2019-01-21 23:14:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.74 Mbit/s
95th percentile per-packet one-way delay: 112.281 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 76.74 Mbit/s
95th percentile per-packet one-way delay: 112.281 ms
Loss rate: 0.27%
```

Run 3: Report of Copa — Data Link

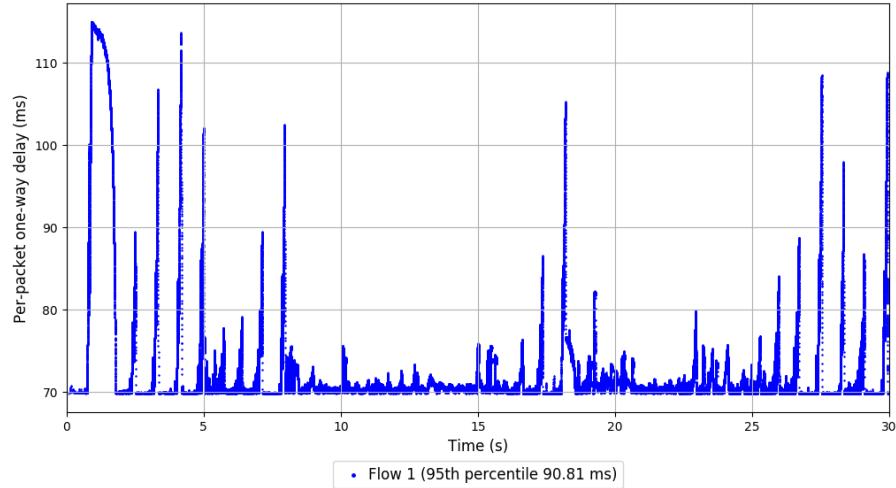
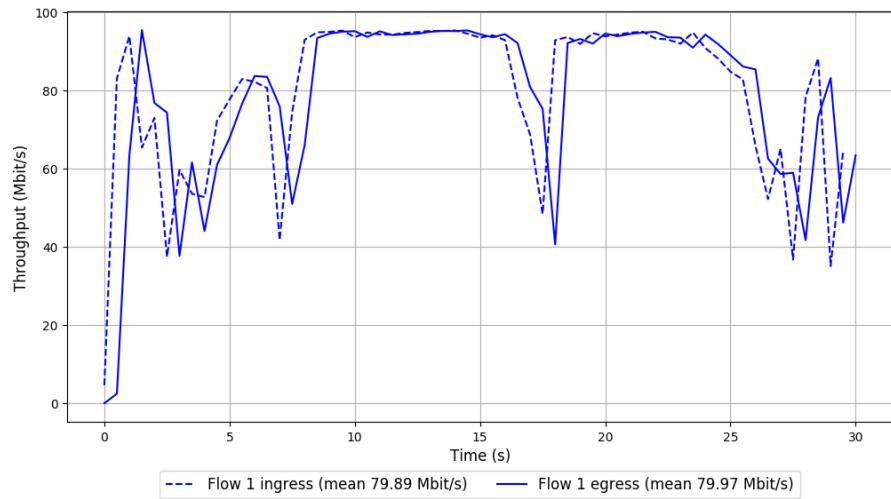


Run 4: Statistics of Copa

```
Start at: 2019-01-21 22:37:07
End at: 2019-01-21 22:37:37
Local clock offset: 2.302 ms
Remote clock offset: -5.227 ms

# Below is generated by plot.py at 2019-01-21 23:14:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.97 Mbit/s
95th percentile per-packet one-way delay: 90.814 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 79.97 Mbit/s
95th percentile per-packet one-way delay: 90.814 ms
Loss rate: 0.14%
```

Run 4: Report of Copa — Data Link

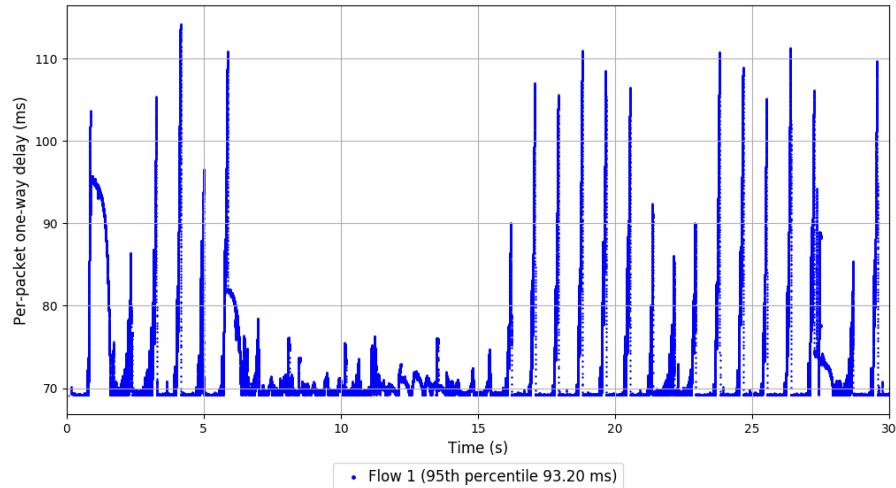
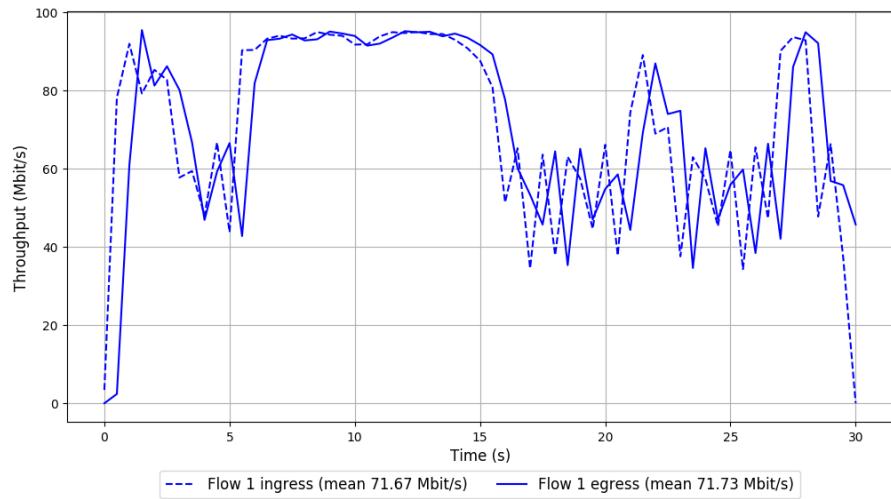


Run 5: Statistics of Copa

```
Start at: 2019-01-21 23:03:14
End at: 2019-01-21 23:03:44
Local clock offset: -0.205 ms
Remote clock offset: -3.927 ms

# Below is generated by plot.py at 2019-01-21 23:14:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.73 Mbit/s
95th percentile per-packet one-way delay: 93.198 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 71.73 Mbit/s
95th percentile per-packet one-way delay: 93.198 ms
Loss rate: 0.18%
```

Run 5: Report of Copa — Data Link

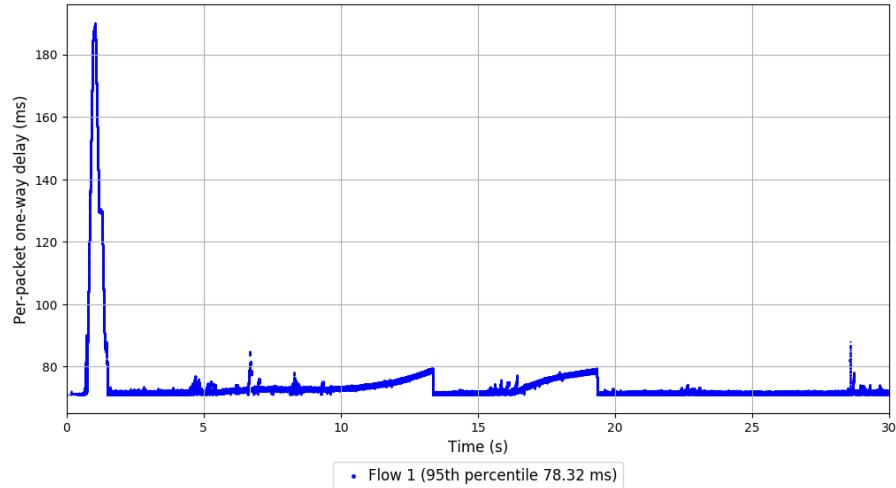
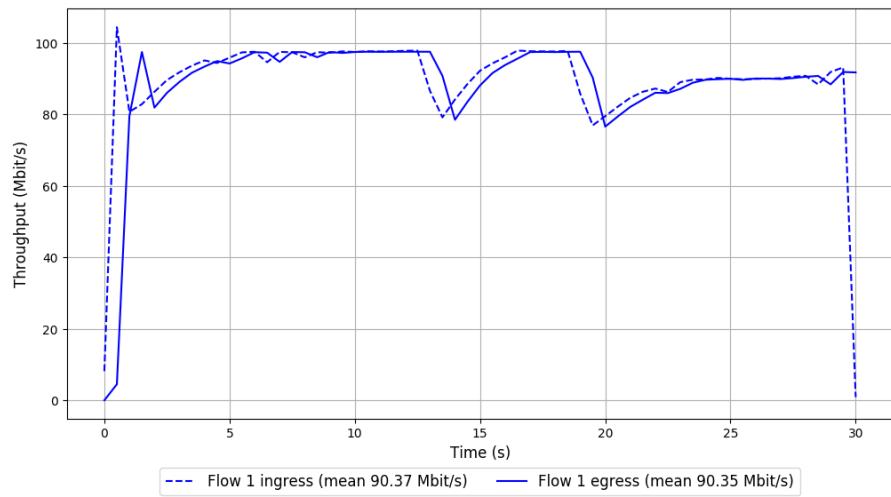


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-01-21 21:08:32
End at: 2019-01-21 21:09:02
Local clock offset: 0.276 ms
Remote clock offset: -2.773 ms

# Below is generated by plot.py at 2019-01-21 23:14:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.35 Mbit/s
95th percentile per-packet one-way delay: 78.318 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 90.35 Mbit/s
95th percentile per-packet one-way delay: 78.318 ms
Loss rate: 0.29%
```

Run 1: Report of TCP Cubic — Data Link

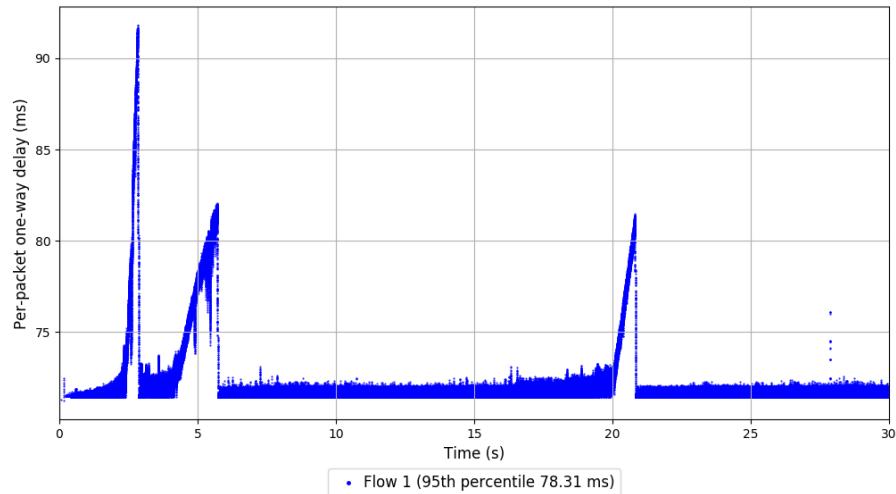
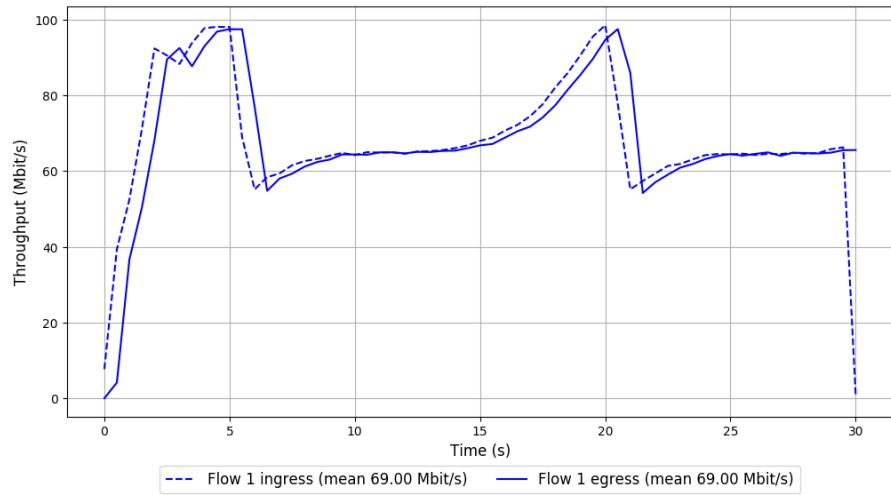


Run 2: Statistics of TCP Cubic

```
Start at: 2019-01-21 21:34:39
End at: 2019-01-21 21:35:09
Local clock offset: 0.249 ms
Remote clock offset: -1.752 ms

# Below is generated by plot.py at 2019-01-21 23:14:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.00 Mbit/s
95th percentile per-packet one-way delay: 78.307 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 69.00 Mbit/s
95th percentile per-packet one-way delay: 78.307 ms
Loss rate: 0.27%
```

Run 2: Report of TCP Cubic — Data Link

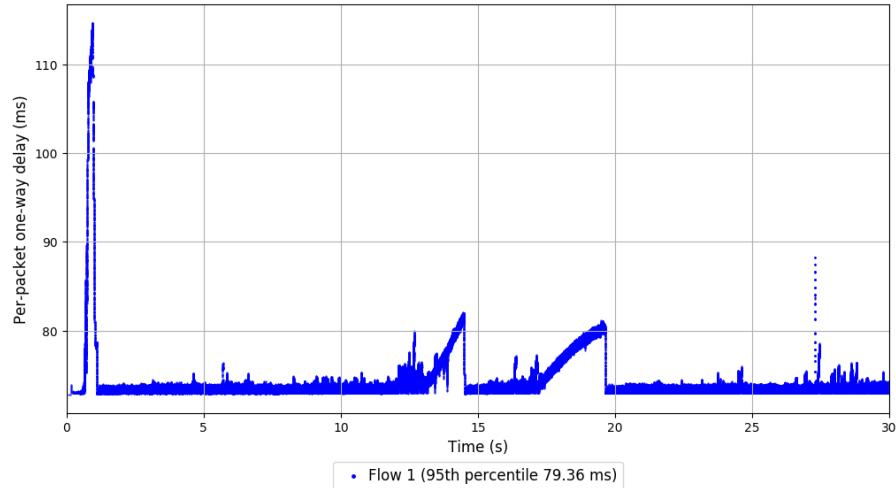
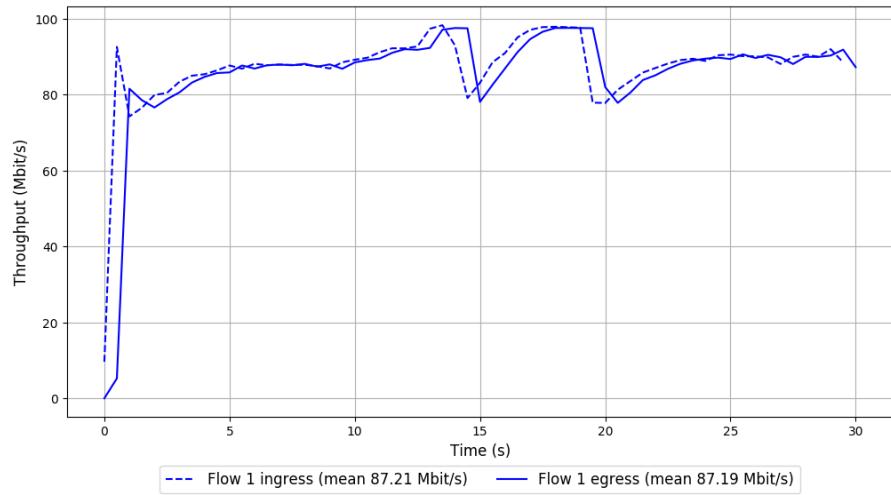


Run 3: Statistics of TCP Cubic

```
Start at: 2019-01-21 22:00:02
End at: 2019-01-21 22:00:32
Local clock offset: -0.551 ms
Remote clock offset: -5.01 ms

# Below is generated by plot.py at 2019-01-21 23:14:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.19 Mbit/s
95th percentile per-packet one-way delay: 79.356 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 87.19 Mbit/s
95th percentile per-packet one-way delay: 79.356 ms
Loss rate: 0.29%
```

Run 3: Report of TCP Cubic — Data Link

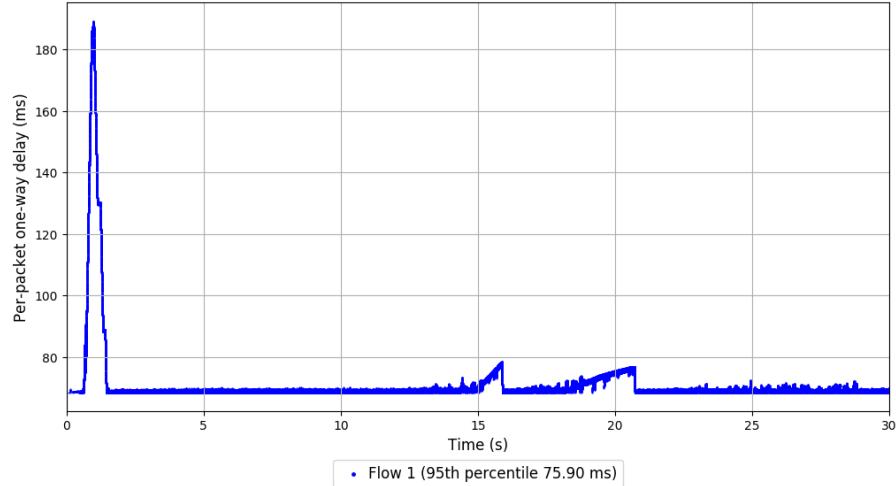
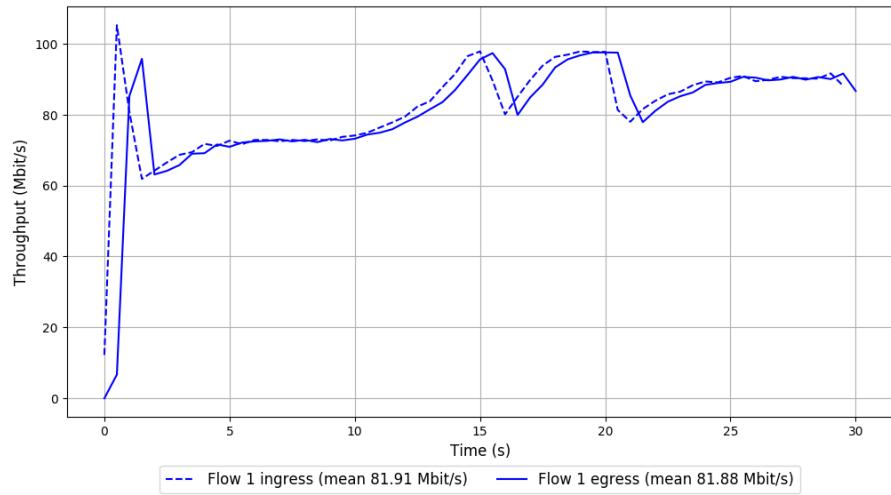


Run 4: Statistics of TCP Cubic

```
Start at: 2019-01-21 22:24:48
End at: 2019-01-21 22:25:18
Local clock offset: -0.544 ms
Remote clock offset: -3.915 ms

# Below is generated by plot.py at 2019-01-21 23:14:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.88 Mbit/s
95th percentile per-packet one-way delay: 75.901 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 81.88 Mbit/s
95th percentile per-packet one-way delay: 75.901 ms
Loss rate: 0.30%
```

Run 4: Report of TCP Cubic — Data Link

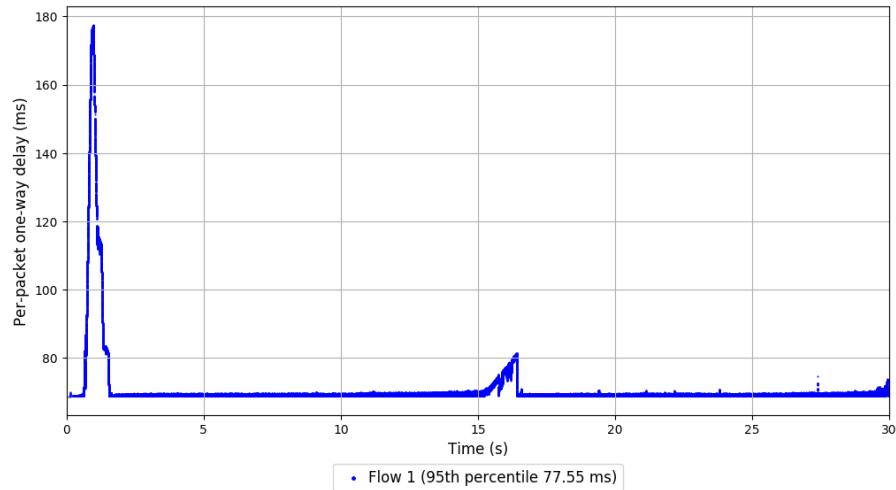
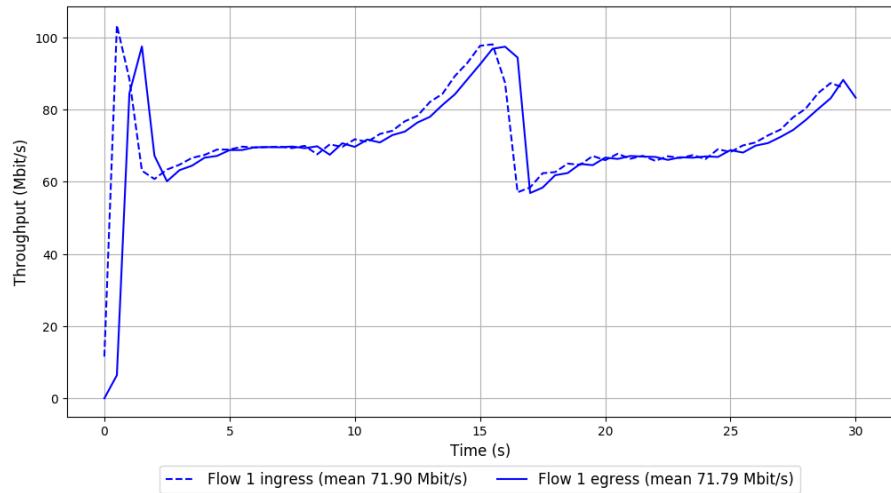


Run 5: Statistics of TCP Cubic

```
Start at: 2019-01-21 22:51:26
End at: 2019-01-21 22:51:56
Local clock offset: 1.02 ms
Remote clock offset: -2.666 ms

# Below is generated by plot.py at 2019-01-21 23:14:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.79 Mbit/s
95th percentile per-packet one-way delay: 77.547 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 71.79 Mbit/s
95th percentile per-packet one-way delay: 77.547 ms
Loss rate: 0.40%
```

Run 5: Report of TCP Cubic — Data Link

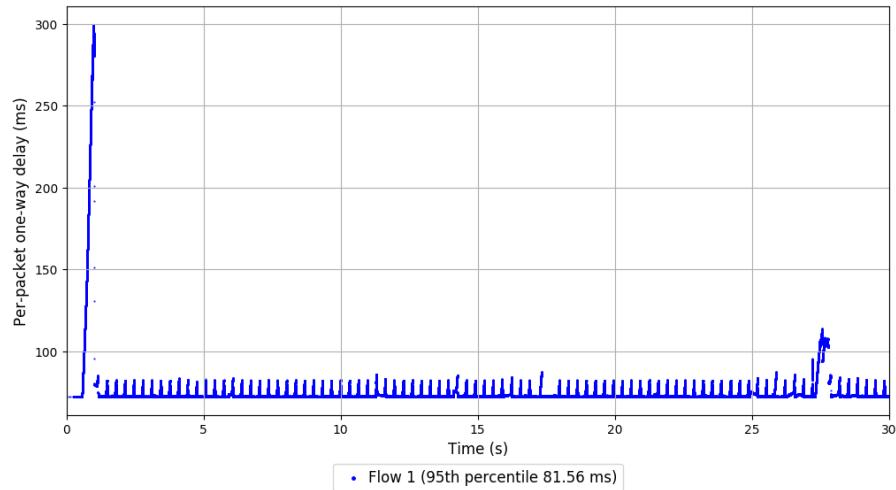
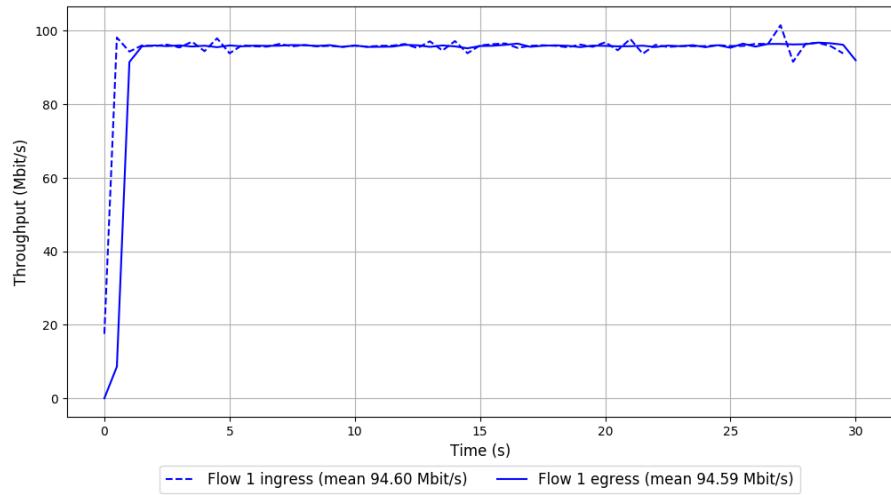


```
Run 1: Statistics of FillP

Start at: 2019-01-21 21:07:21
End at: 2019-01-21 21:07:51
Local clock offset: -0.859 ms
Remote clock offset: -5.28 ms

# Below is generated by plot.py at 2019-01-21 23:15:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.59 Mbit/s
95th percentile per-packet one-way delay: 81.562 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 94.59 Mbit/s
95th percentile per-packet one-way delay: 81.562 ms
Loss rate: 0.28%
```

Run 1: Report of FillP — Data Link

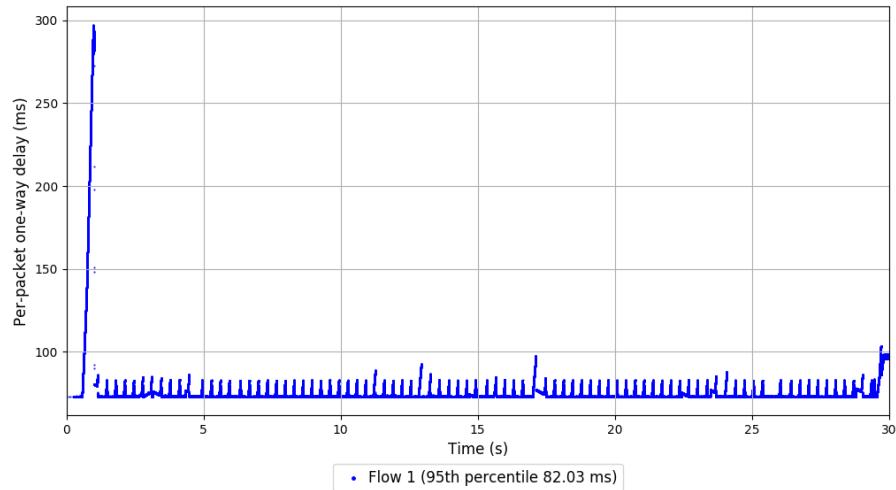
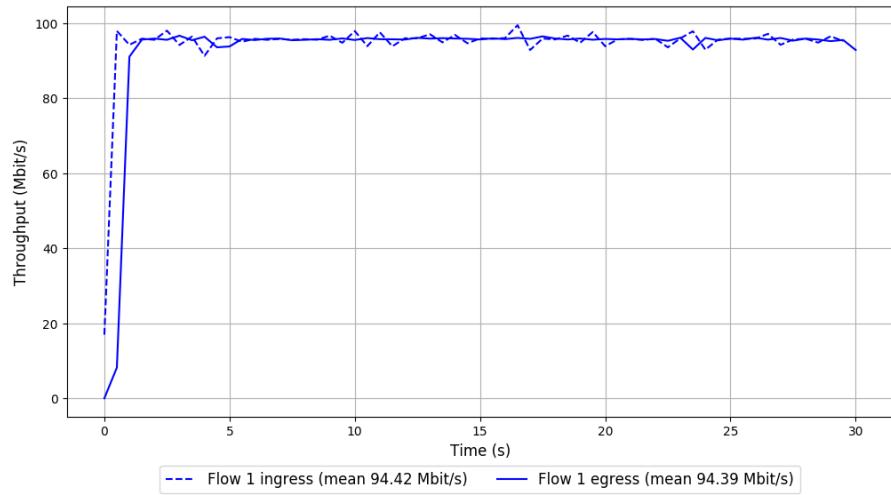


Run 2: Statistics of FillP

```
Start at: 2019-01-21 21:33:26
End at: 2019-01-21 21:38:56
Local clock offset: 0.409 ms
Remote clock offset: -3.25 ms

# Below is generated by plot.py at 2019-01-21 23:15:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.39 Mbit/s
95th percentile per-packet one-way delay: 82.033 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 94.39 Mbit/s
95th percentile per-packet one-way delay: 82.033 ms
Loss rate: 0.30%
```

Run 2: Report of FillP — Data Link

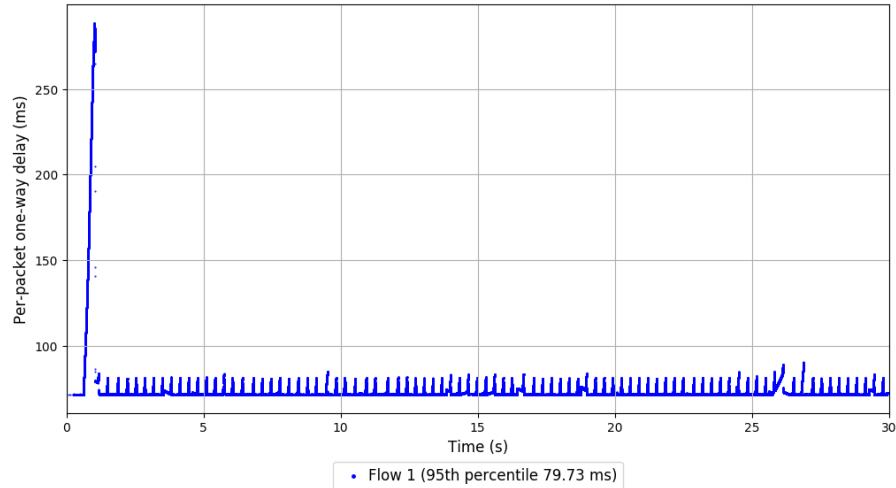
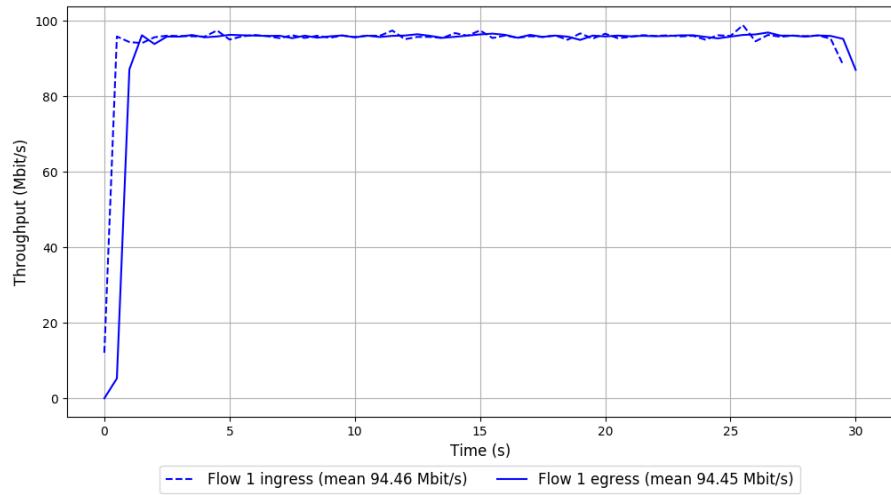


Run 3: Statistics of FillP

```
Start at: 2019-01-21 21:58:52
End at: 2019-01-21 21:59:22
Local clock offset: -0.739 ms
Remote clock offset: -4.417 ms

# Below is generated by plot.py at 2019-01-21 23:15:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.45 Mbit/s
95th percentile per-packet one-way delay: 79.729 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 94.45 Mbit/s
95th percentile per-packet one-way delay: 79.729 ms
Loss rate: 0.27%
```

Run 3: Report of FillP — Data Link

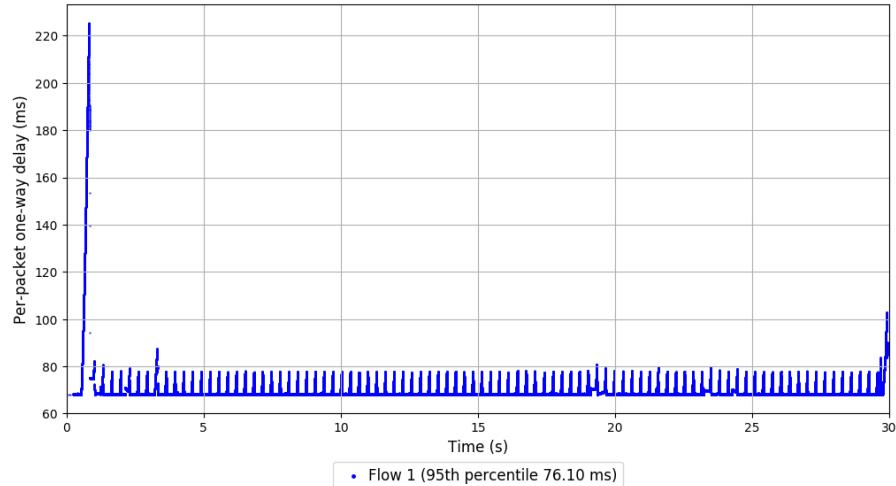
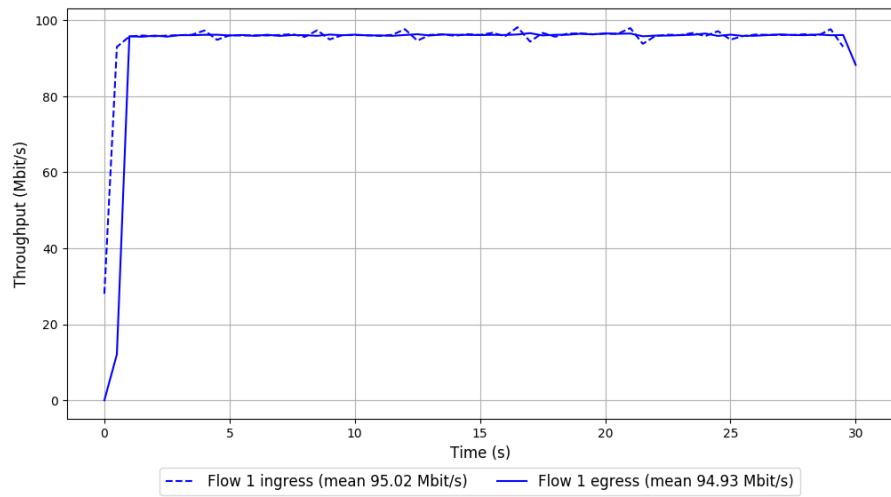


Run 4: Statistics of FillP

```
Start at: 2019-01-21 22:23:38
End at: 2019-01-21 22:24:08
Local clock offset: -0.033 ms
Remote clock offset: -5.506 ms

# Below is generated by plot.py at 2019-01-21 23:15:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.93 Mbit/s
95th percentile per-packet one-way delay: 76.100 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 94.93 Mbit/s
95th percentile per-packet one-way delay: 76.100 ms
Loss rate: 0.34%
```

Run 4: Report of FillP — Data Link

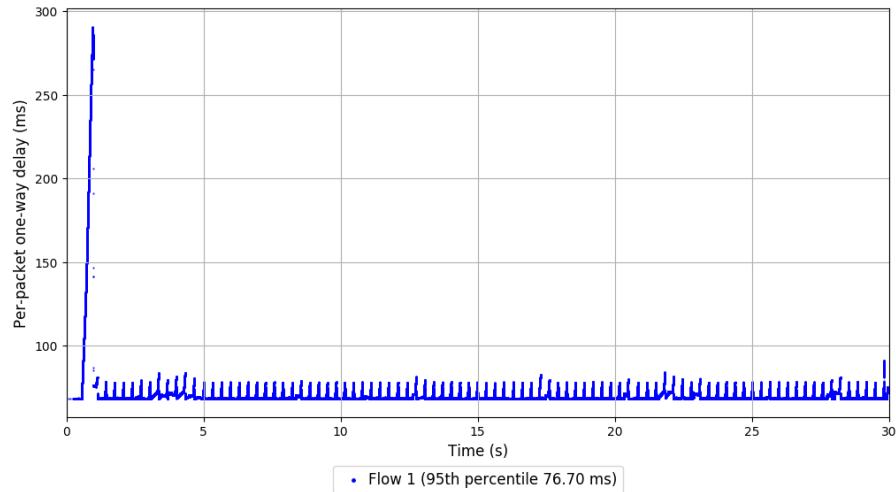
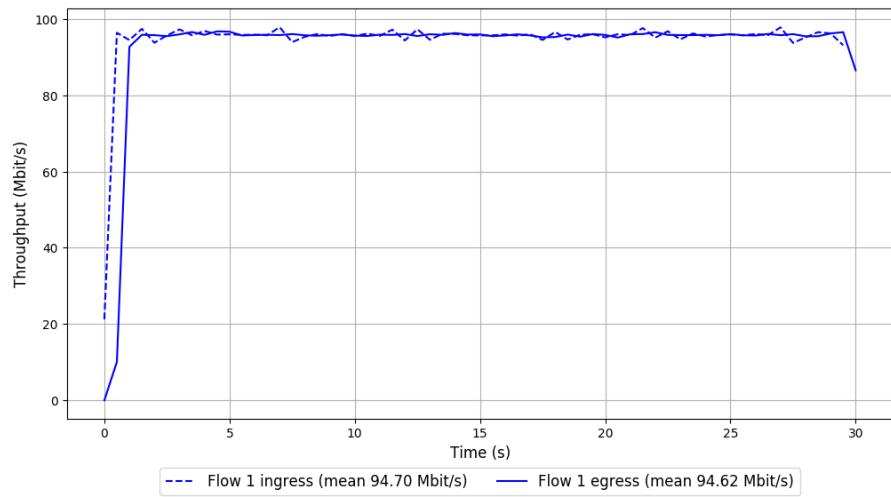


Run 5: Statistics of FillP

```
Start at: 2019-01-21 22:50:11
End at: 2019-01-21 22:50:41
Local clock offset: -6.356 ms
Remote clock offset: -7.456 ms

# Below is generated by plot.py at 2019-01-21 23:15:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.62 Mbit/s
95th percentile per-packet one-way delay: 76.699 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 94.62 Mbit/s
95th percentile per-packet one-way delay: 76.699 ms
Loss rate: 0.35%
```

Run 5: Report of FillP — Data Link

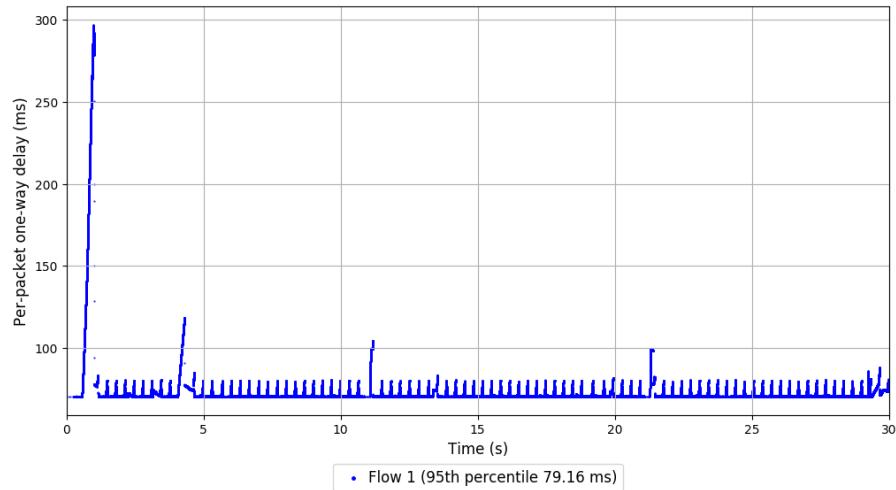
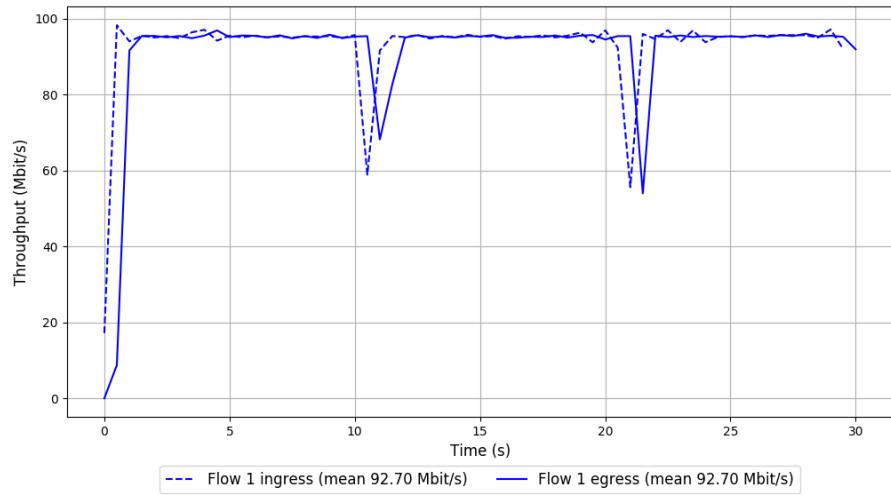


Run 1: Statistics of FillP-Sheep

```
Start at: 2019-01-21 21:09:43
End at: 2019-01-21 21:10:13
Local clock offset: 0.004 ms
Remote clock offset: -2.3 ms

# Below is generated by plot.py at 2019-01-21 23:15:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.70 Mbit/s
95th percentile per-packet one-way delay: 79.155 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 92.70 Mbit/s
95th percentile per-packet one-way delay: 79.155 ms
Loss rate: 0.27%
```

Run 1: Report of FillP-Sheep — Data Link

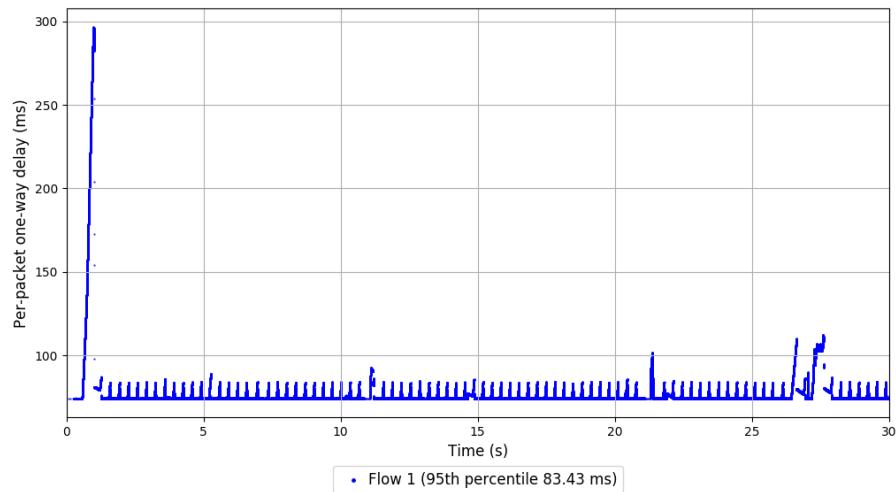
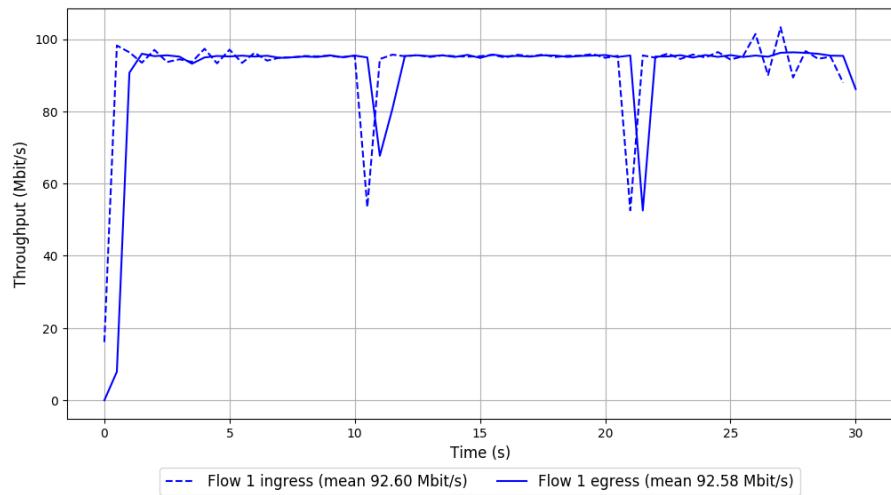


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-01-21 21:35:52
End at: 2019-01-21 21:36:22
Local clock offset: -3.362 ms
Remote clock offset: -7.474 ms

# Below is generated by plot.py at 2019-01-21 23:15:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.58 Mbit/s
95th percentile per-packet one-way delay: 83.428 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 92.58 Mbit/s
95th percentile per-packet one-way delay: 83.428 ms
Loss rate: 0.29%
```

Run 2: Report of FillP-Sheep — Data Link

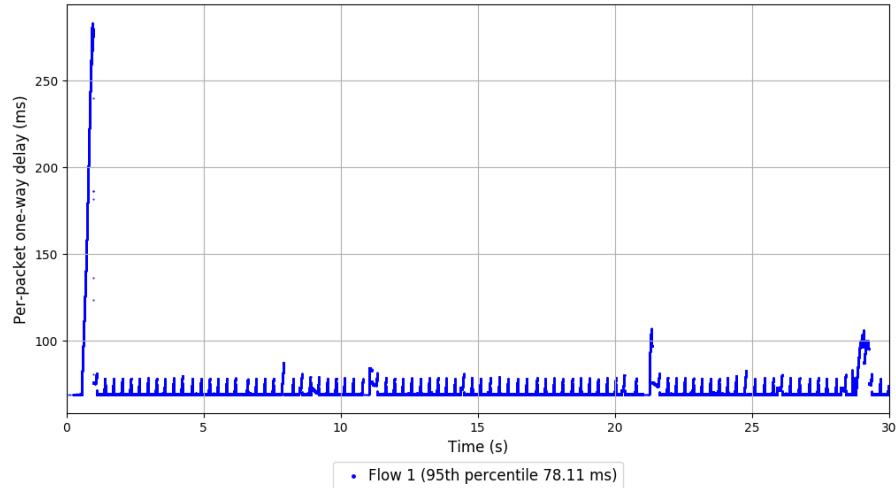
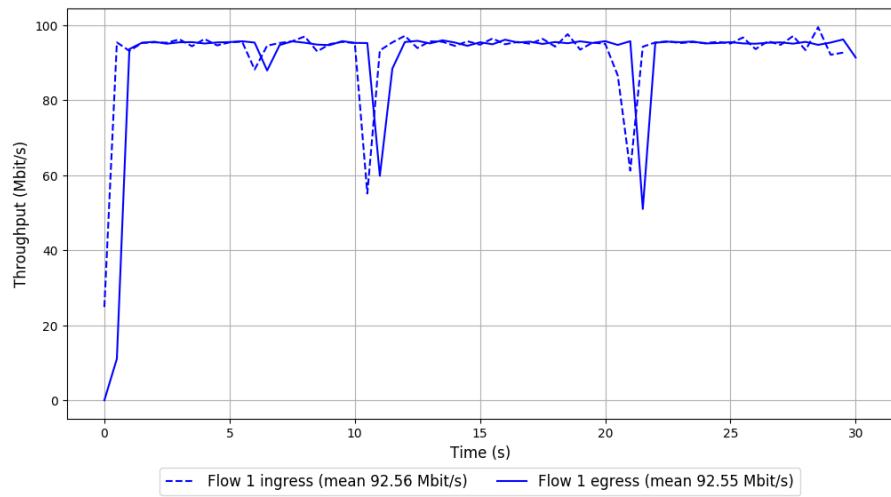


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-01-21 22:01:13
End at: 2019-01-21 22:01:43
Local clock offset: -1.041 ms
Remote clock offset: -2.282 ms

# Below is generated by plot.py at 2019-01-21 23:16:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.55 Mbit/s
95th percentile per-packet one-way delay: 78.111 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 92.55 Mbit/s
95th percentile per-packet one-way delay: 78.111 ms
Loss rate: 0.27%
```

Run 3: Report of FillP-Sheep — Data Link

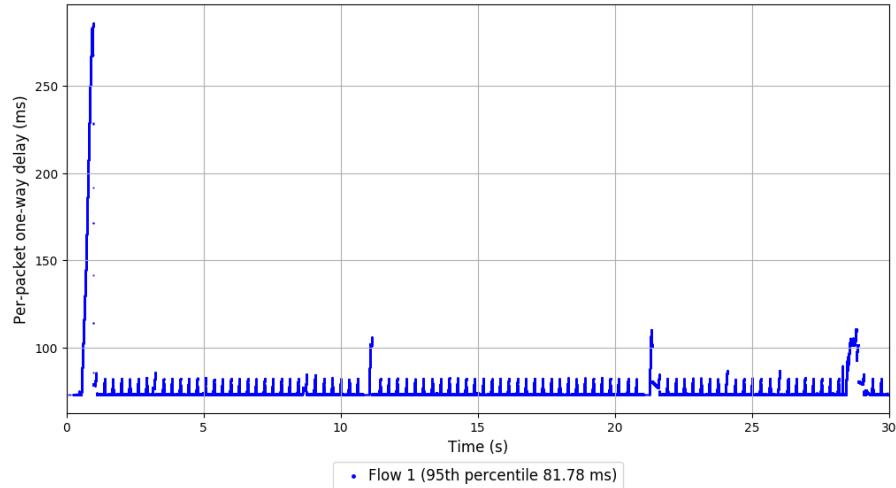
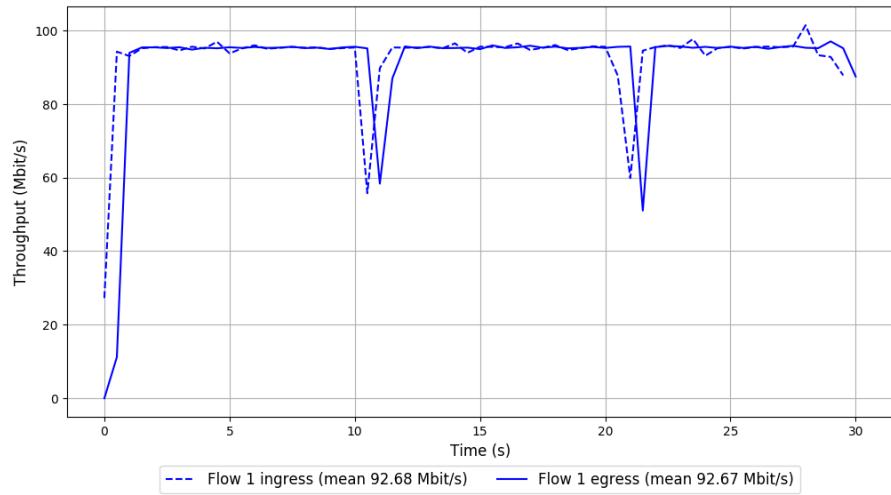


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-01-21 22:25:58
End at: 2019-01-21 22:26:28
Local clock offset: 4.027 ms
Remote clock offset: -4.119 ms

# Below is generated by plot.py at 2019-01-21 23:16:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.67 Mbit/s
95th percentile per-packet one-way delay: 81.783 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 92.67 Mbit/s
95th percentile per-packet one-way delay: 81.783 ms
Loss rate: 0.26%
```

Run 4: Report of FillP-Sheep — Data Link

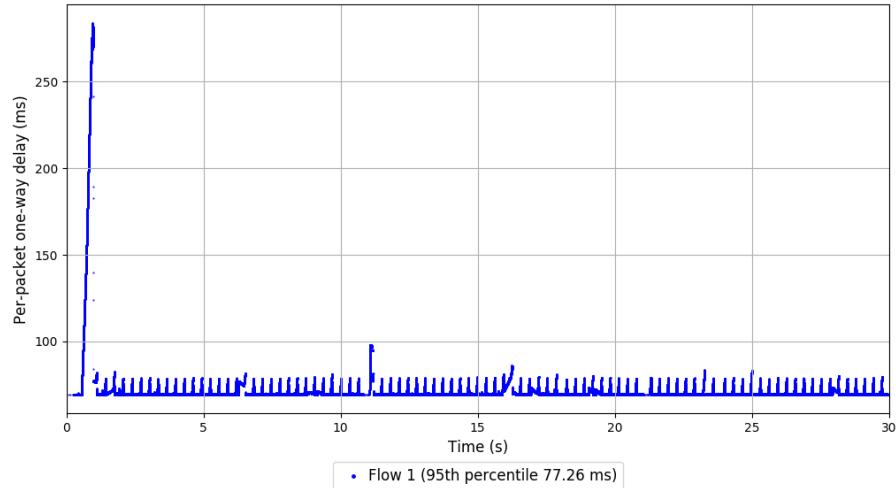
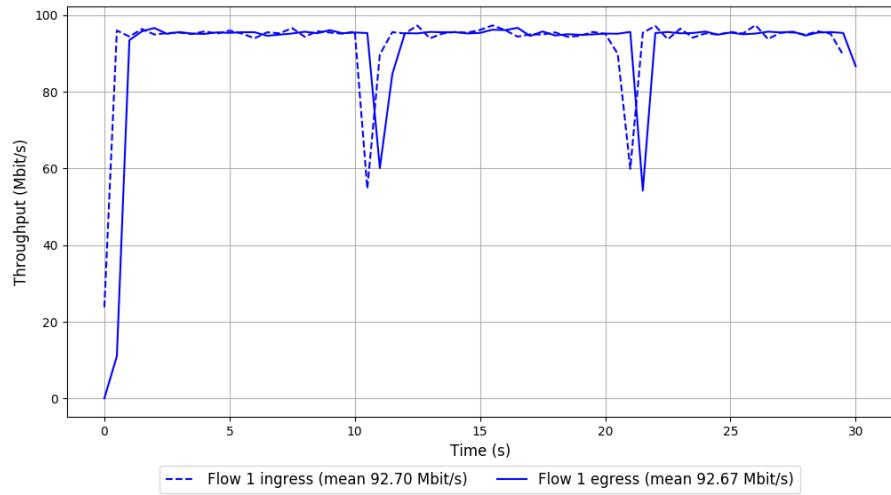


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-01-21 22:52:40
End at: 2019-01-21 22:53:10
Local clock offset: -0.798 ms
Remote clock offset: -2.376 ms

# Below is generated by plot.py at 2019-01-21 23:16:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.67 Mbit/s
95th percentile per-packet one-way delay: 77.264 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 92.67 Mbit/s
95th percentile per-packet one-way delay: 77.264 ms
Loss rate: 0.30%
```

Run 5: Report of FillP-Sheep — Data Link

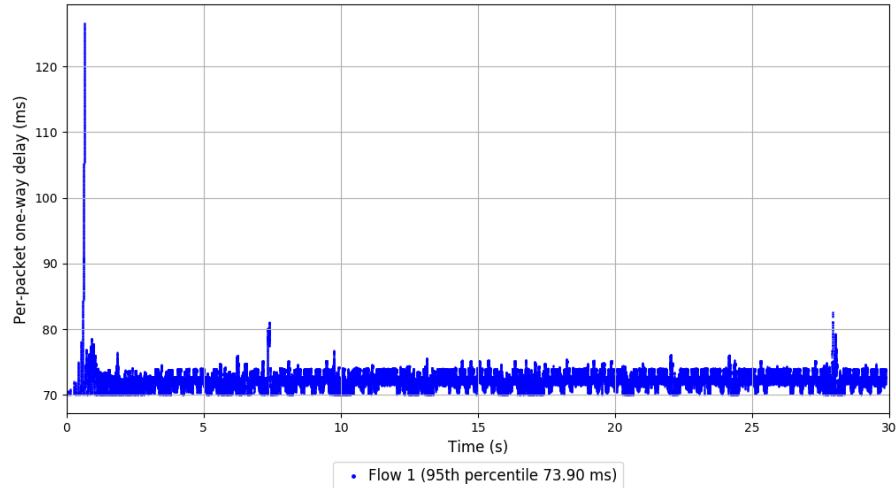
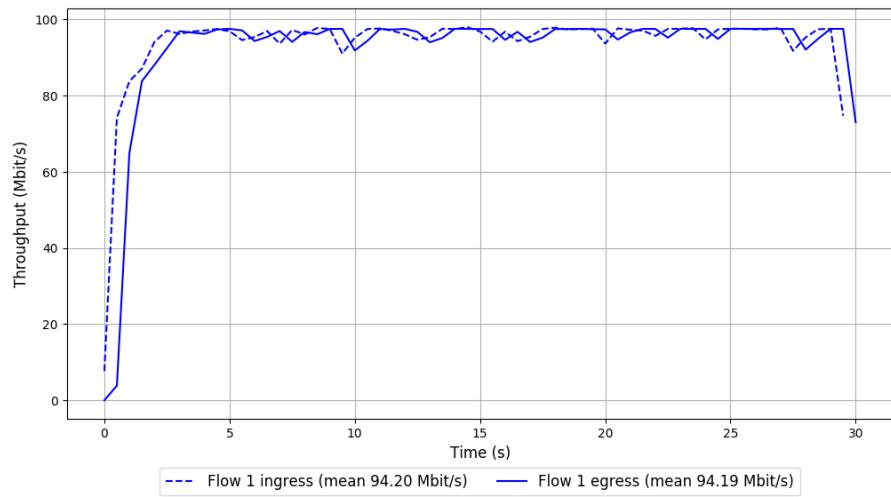


Run 1: Statistics of Indigo

```
Start at: 2019-01-21 21:06:08
End at: 2019-01-21 21:06:38
Local clock offset: -0.806 ms
Remote clock offset: -5.169 ms

# Below is generated by plot.py at 2019-01-21 23:16:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.19 Mbit/s
95th percentile per-packet one-way delay: 73.896 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 94.19 Mbit/s
95th percentile per-packet one-way delay: 73.896 ms
Loss rate: 0.28%
```

Run 1: Report of Indigo — Data Link

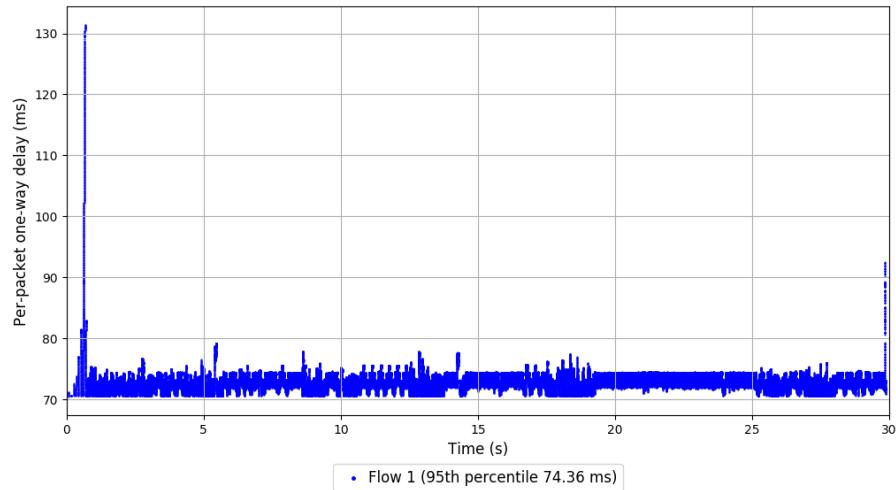
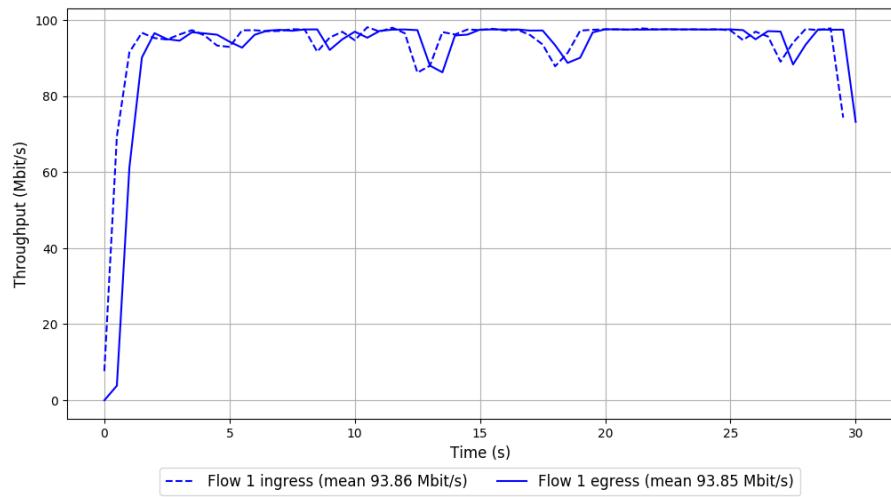


Run 2: Statistics of Indigo

```
Start at: 2019-01-21 21:31:58
End at: 2019-01-21 21:32:28
Local clock offset: -0.357 ms
Remote clock offset: -1.516 ms

# Below is generated by plot.py at 2019-01-21 23:16:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.85 Mbit/s
95th percentile per-packet one-way delay: 74.361 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 93.85 Mbit/s
95th percentile per-packet one-way delay: 74.361 ms
Loss rate: 0.28%
```

Run 2: Report of Indigo — Data Link

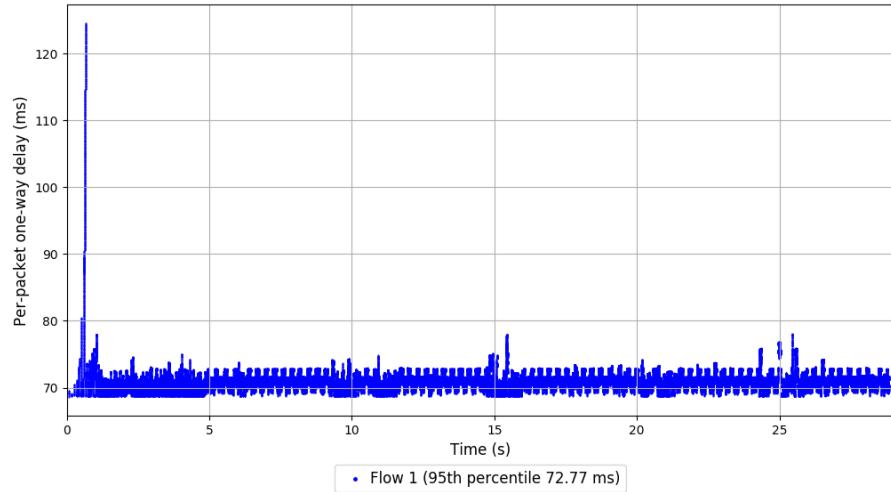
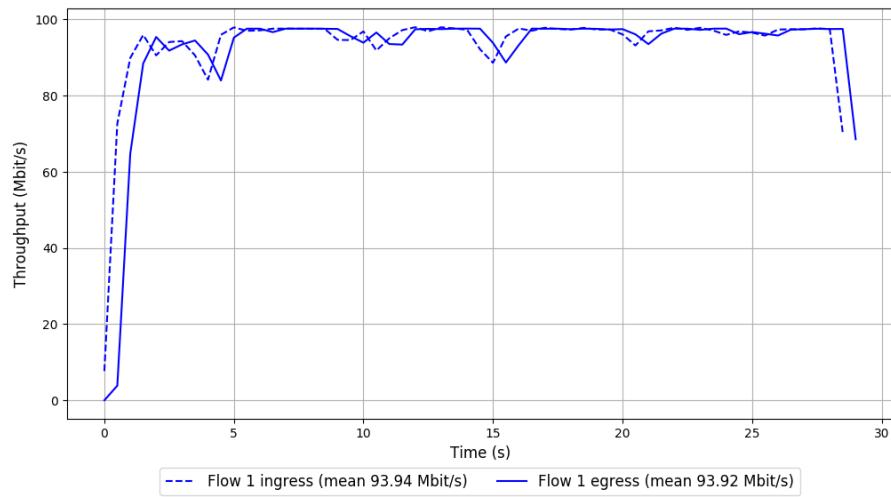


Run 3: Statistics of Indigo

```
Start at: 2019-01-21 21:57:41
End at: 2019-01-21 21:58:11
Local clock offset: -1.933 ms
Remote clock offset: -2.791 ms

# Below is generated by plot.py at 2019-01-21 23:17:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.92 Mbit/s
95th percentile per-packet one-way delay: 72.774 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 93.92 Mbit/s
95th percentile per-packet one-way delay: 72.774 ms
Loss rate: 0.29%
```

Run 3: Report of Indigo — Data Link

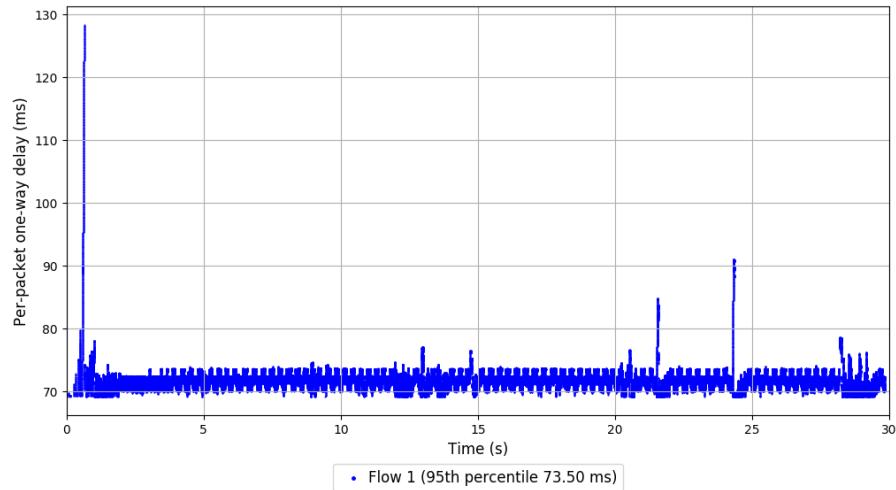
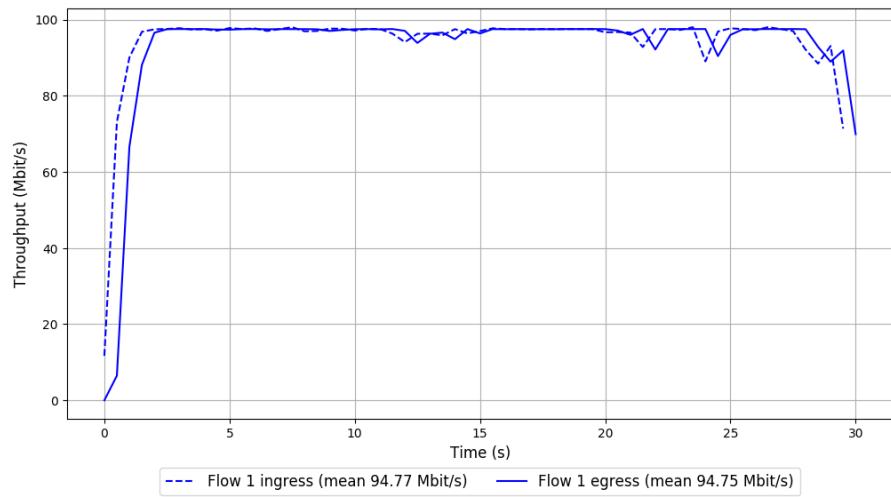


Run 4: Statistics of Indigo

```
Start at: 2019-01-21 22:22:25
End at: 2019-01-21 22:22:55
Local clock offset: 0.117 ms
Remote clock offset: -3.691 ms

# Below is generated by plot.py at 2019-01-21 23:17:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.75 Mbit/s
95th percentile per-packet one-way delay: 73.504 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 94.75 Mbit/s
95th percentile per-packet one-way delay: 73.504 ms
Loss rate: 0.27%
```

Run 4: Report of Indigo — Data Link

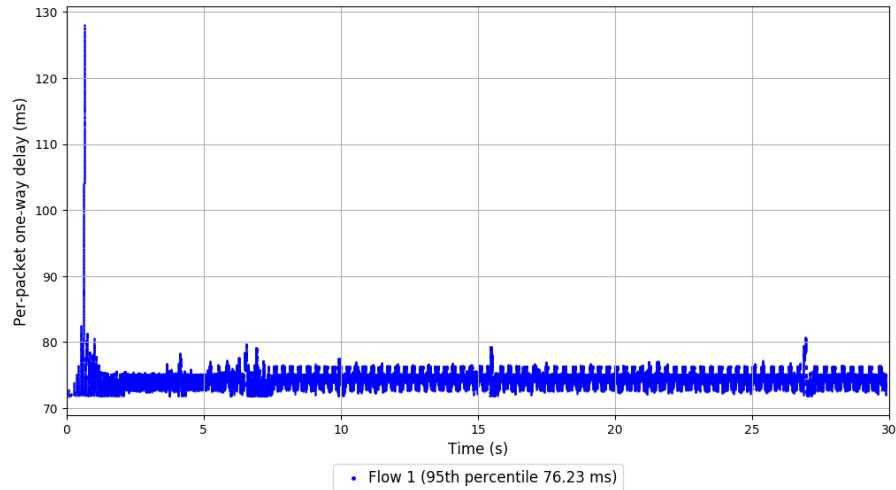
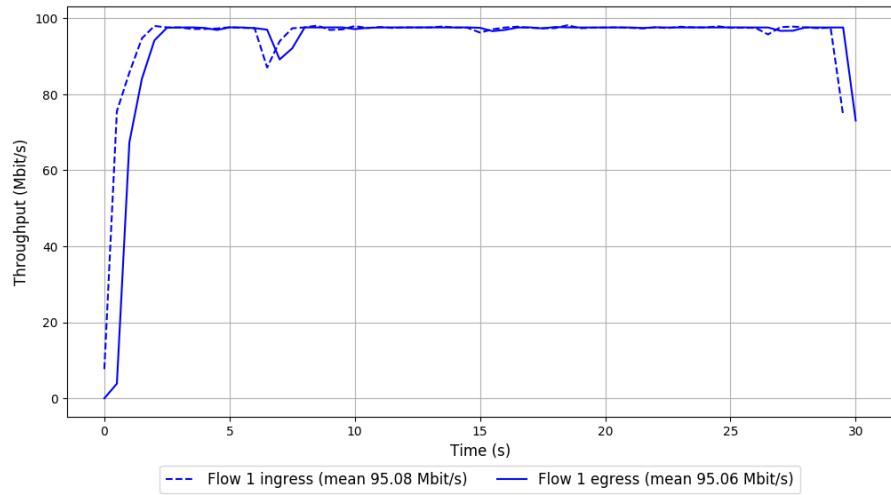


Run 5: Statistics of Indigo

```
Start at: 2019-01-21 22:48:43
End at: 2019-01-21 22:49:13
Local clock offset: -0.011 ms
Remote clock offset: -3.934 ms

# Below is generated by plot.py at 2019-01-21 23:17:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.06 Mbit/s
95th percentile per-packet one-way delay: 76.235 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 95.06 Mbit/s
95th percentile per-packet one-way delay: 76.235 ms
Loss rate: 0.28%
```

Run 5: Report of Indigo — Data Link

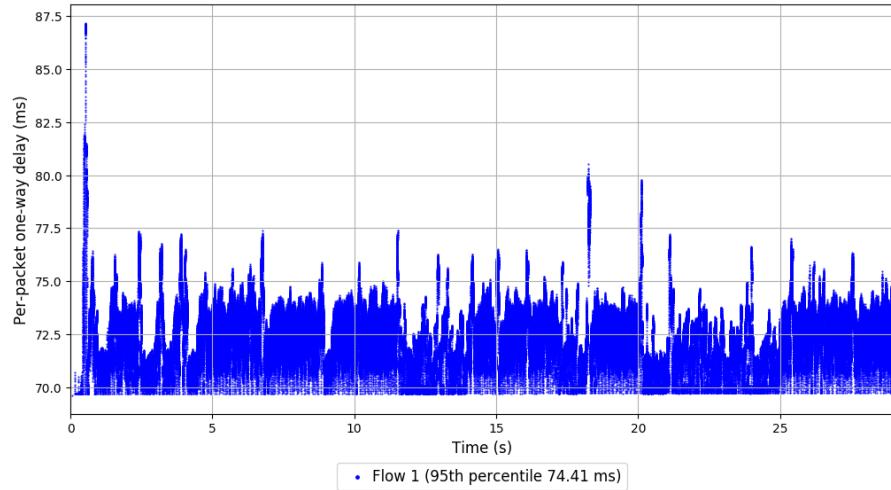
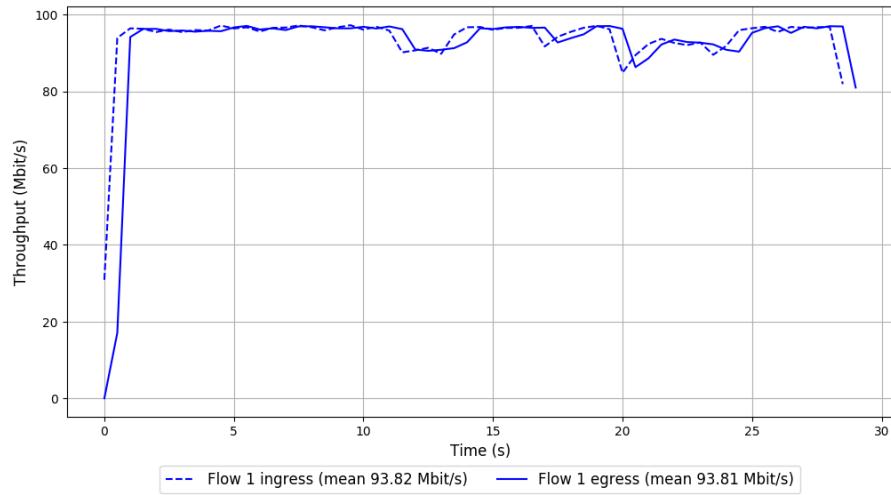


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 21:17:28
End at: 2019-01-21 21:17:58
Local clock offset: 1.061 ms
Remote clock offset: -2.666 ms

# Below is generated by plot.py at 2019-01-21 23:17:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.81 Mbit/s
95th percentile per-packet one-way delay: 74.411 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 93.81 Mbit/s
95th percentile per-packet one-way delay: 74.411 ms
Loss rate: 0.27%
```

Run 1: Report of Indigo-MusesC3 — Data Link

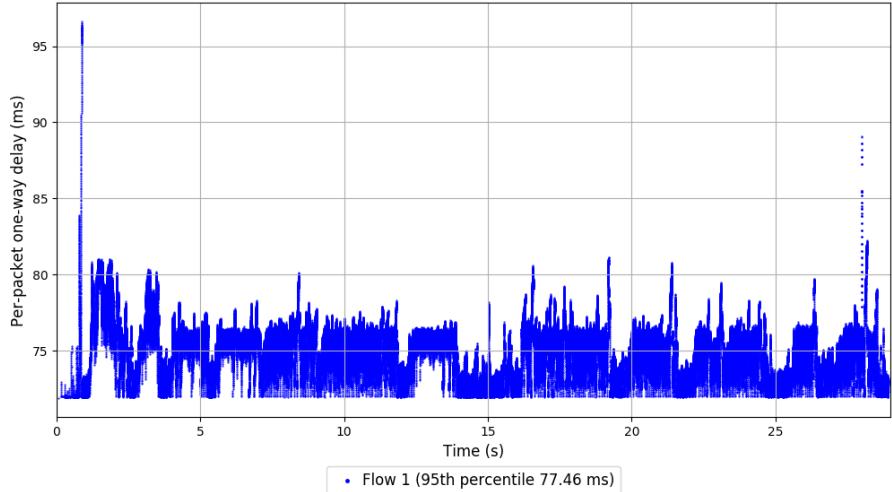
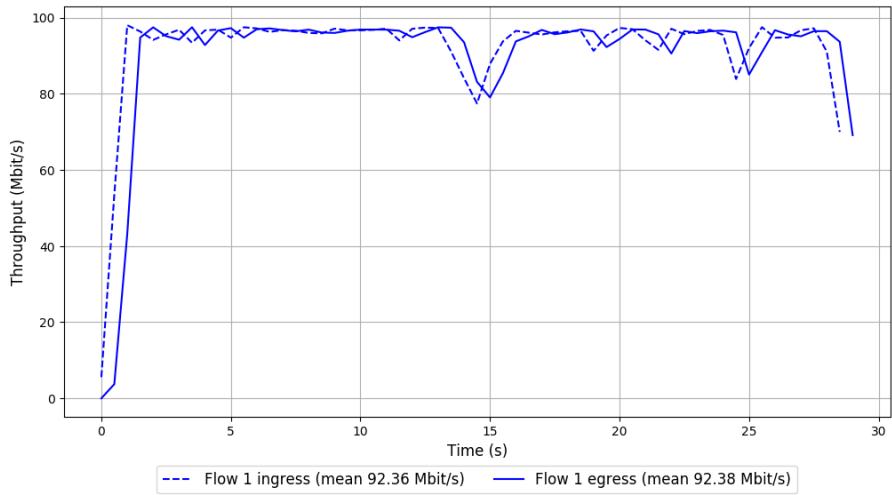


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 21:43:25
End at: 2019-01-21 21:43:55
Local clock offset: 1.33 ms
Remote clock offset: -4.106 ms

# Below is generated by plot.py at 2019-01-21 23:17:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.38 Mbit/s
95th percentile per-packet one-way delay: 77.461 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 92.38 Mbit/s
95th percentile per-packet one-way delay: 77.461 ms
Loss rate: 0.24%
```

Run 2: Report of Indigo-MusesC3 — Data Link

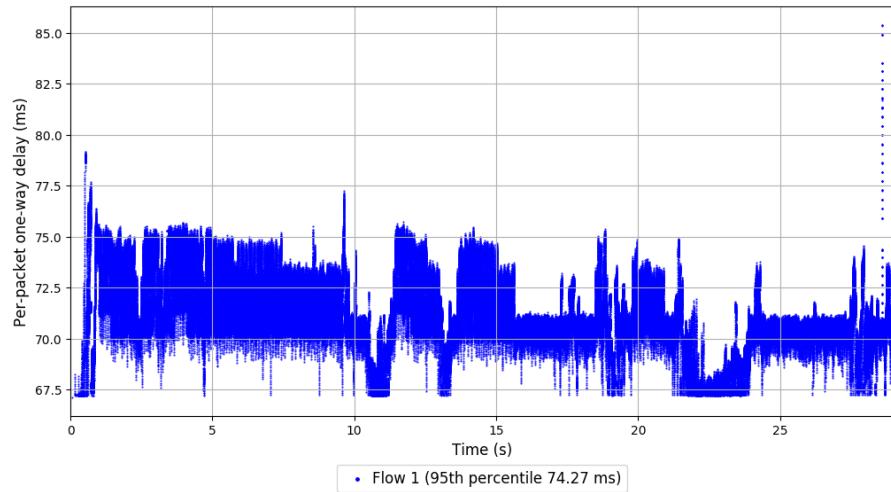
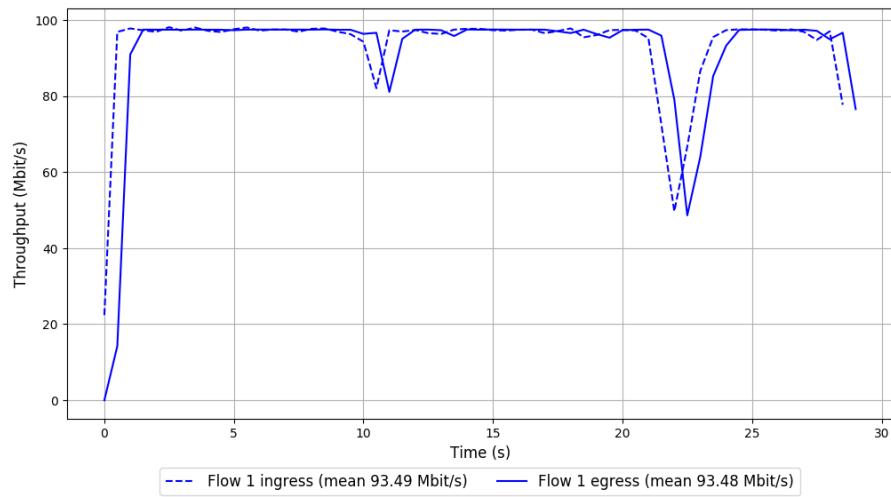


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 22:08:22
End at: 2019-01-21 22:08:52
Local clock offset: -1.507 ms
Remote clock offset: -3.011 ms

# Below is generated by plot.py at 2019-01-21 23:17:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.48 Mbit/s
95th percentile per-packet one-way delay: 74.267 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 93.48 Mbit/s
95th percentile per-packet one-way delay: 74.267 ms
Loss rate: 0.28%
```

Run 3: Report of Indigo-MusesC3 — Data Link

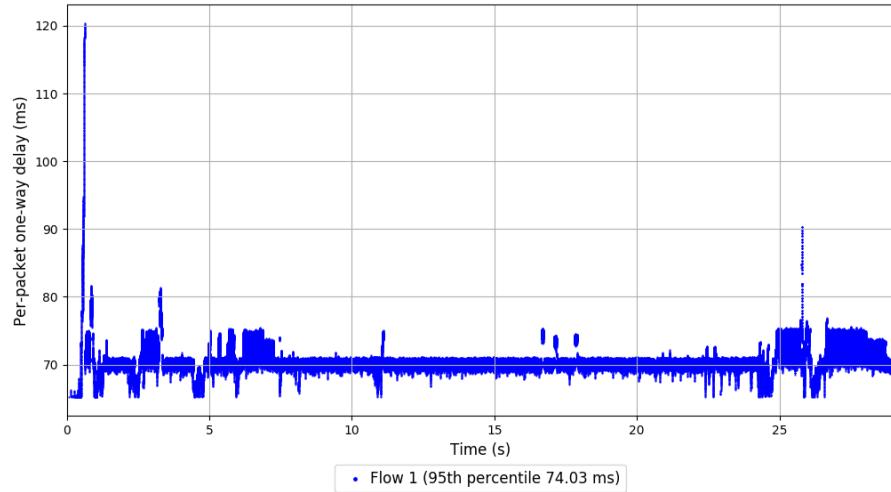
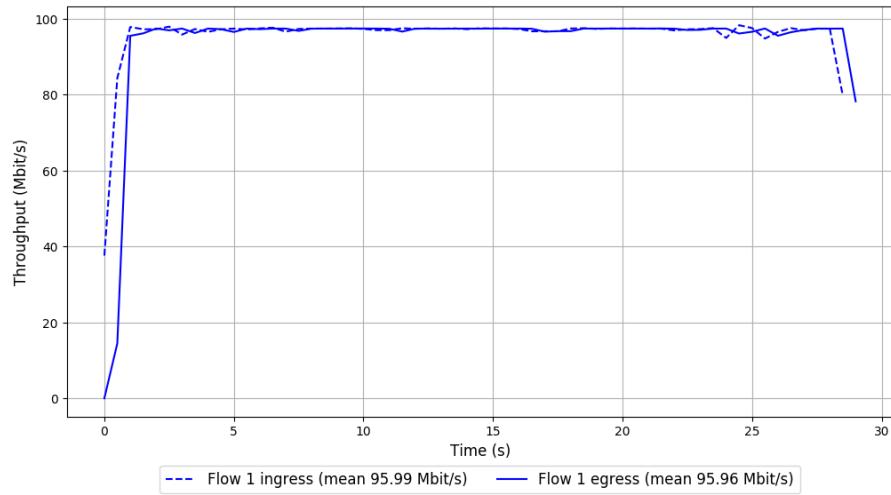


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 22:33:35
End at: 2019-01-21 22:34:05
Local clock offset: -0.941 ms
Remote clock offset: -3.368 ms

# Below is generated by plot.py at 2019-01-21 23:17:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.96 Mbit/s
95th percentile per-packet one-way delay: 74.025 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 95.96 Mbit/s
95th percentile per-packet one-way delay: 74.025 ms
Loss rate: 0.28%
```

Run 4: Report of Indigo-MusesC3 — Data Link

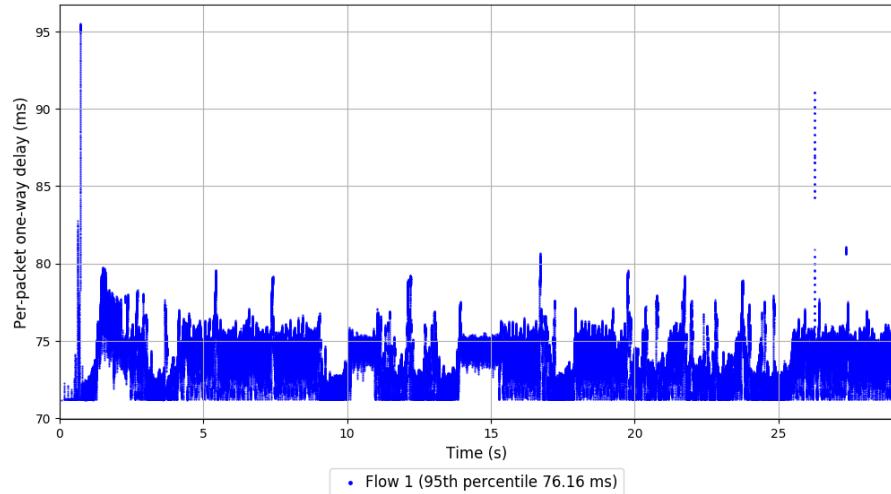
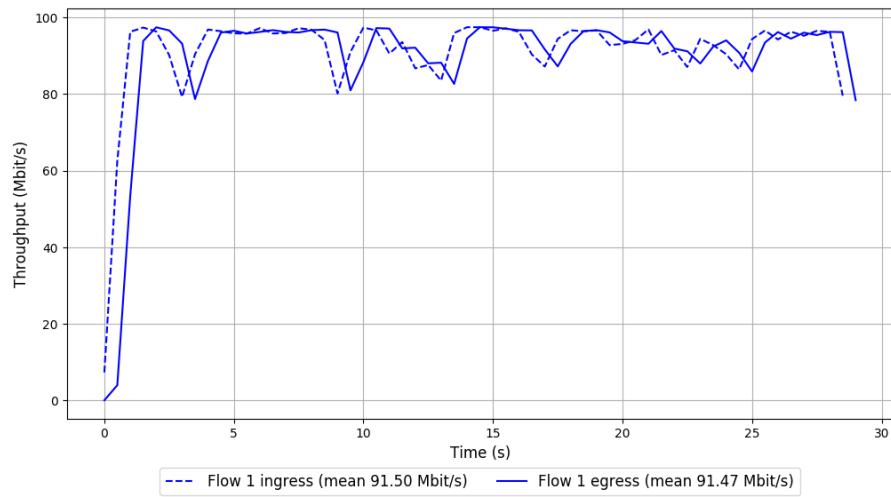


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 22:59:48
End at: 2019-01-21 23:00:19
Local clock offset: -0.342 ms
Remote clock offset: -3.678 ms

# Below is generated by plot.py at 2019-01-21 23:17:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.47 Mbit/s
95th percentile per-packet one-way delay: 76.155 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 91.47 Mbit/s
95th percentile per-packet one-way delay: 76.155 ms
Loss rate: 0.30%
```

Run 5: Report of Indigo-MusesC3 — Data Link

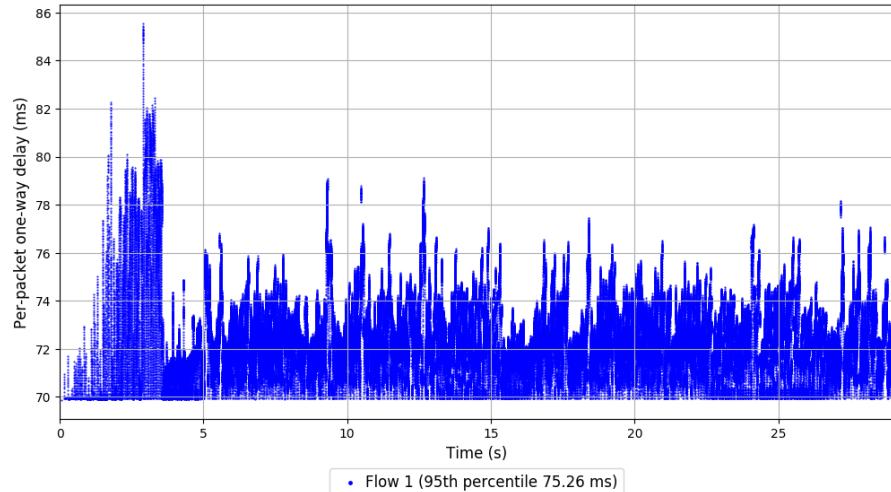
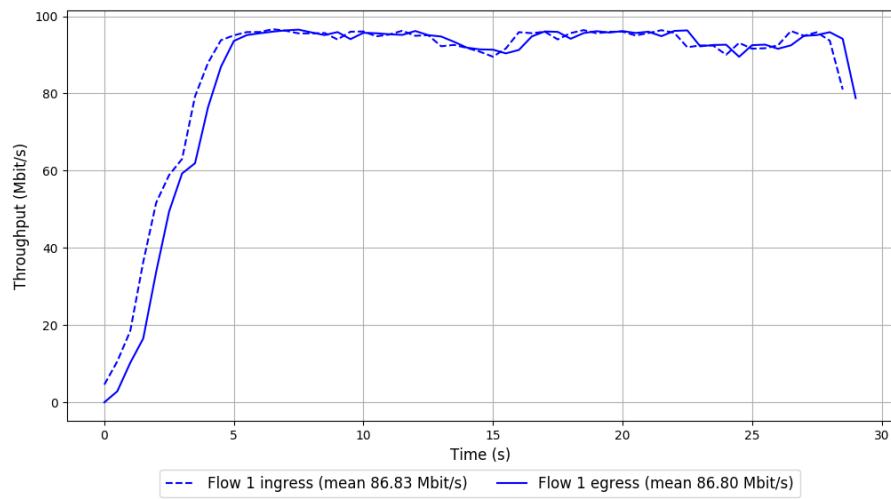


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 21:25:58
End at: 2019-01-21 21:26:28
Local clock offset: -1.477 ms
Remote clock offset: -2.353 ms

# Below is generated by plot.py at 2019-01-21 23:18:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.80 Mbit/s
95th percentile per-packet one-way delay: 75.258 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 86.80 Mbit/s
95th percentile per-packet one-way delay: 75.258 ms
Loss rate: 0.31%
```

Run 1: Report of Indigo-MusesC5 — Data Link

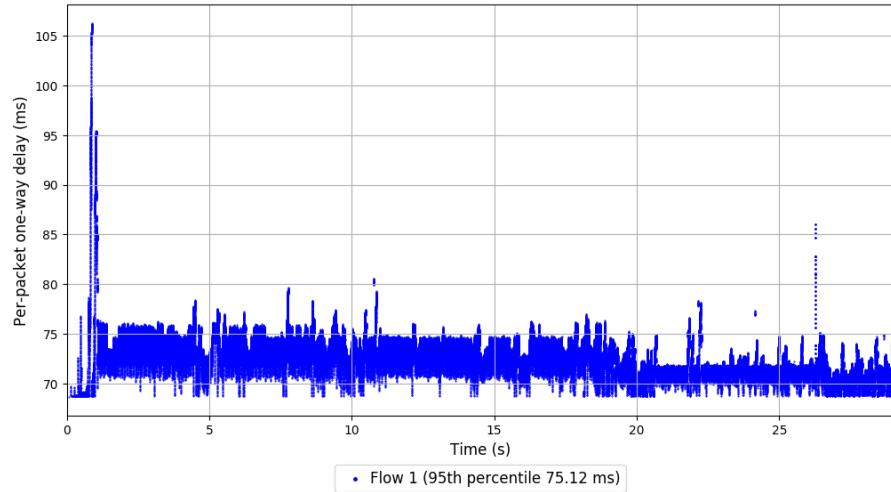
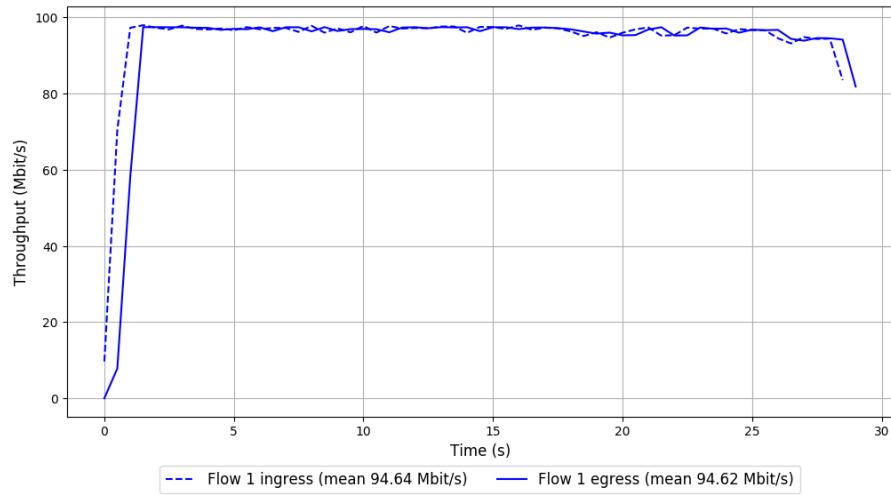


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 21:51:51
End at: 2019-01-21 21:52:21
Local clock offset: -0.367 ms
Remote clock offset: -4.177 ms

# Below is generated by plot.py at 2019-01-21 23:18:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.62 Mbit/s
95th percentile per-packet one-way delay: 75.125 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 94.62 Mbit/s
95th percentile per-packet one-way delay: 75.125 ms
Loss rate: 0.28%
```

Run 2: Report of Indigo-MusesC5 — Data Link

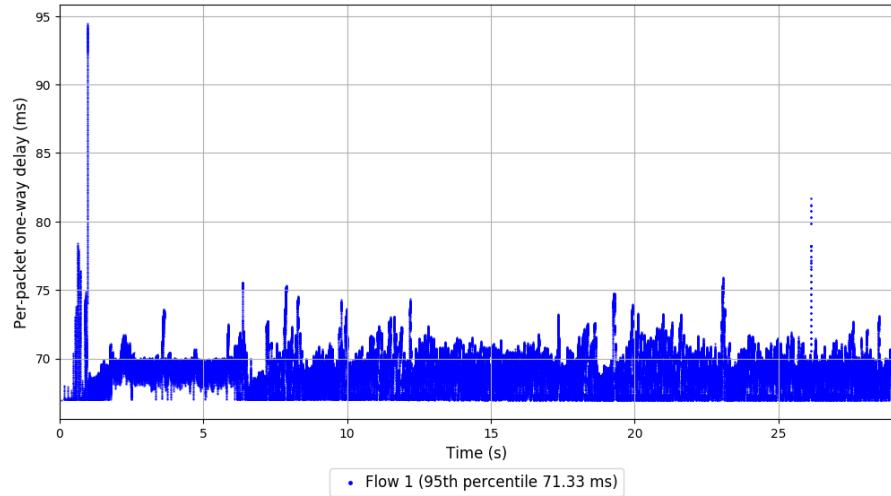
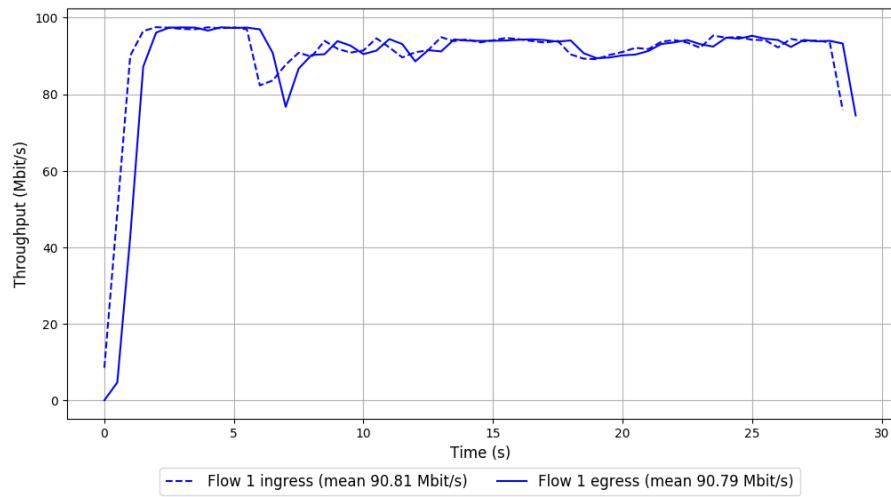


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 22:16:31
End at: 2019-01-21 22:17:01
Local clock offset: -1.751 ms
Remote clock offset: -2.46 ms

# Below is generated by plot.py at 2019-01-21 23:18:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.79 Mbit/s
95th percentile per-packet one-way delay: 71.325 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 90.79 Mbit/s
95th percentile per-packet one-way delay: 71.325 ms
Loss rate: 0.28%
```

Run 3: Report of Indigo-MusesC5 — Data Link

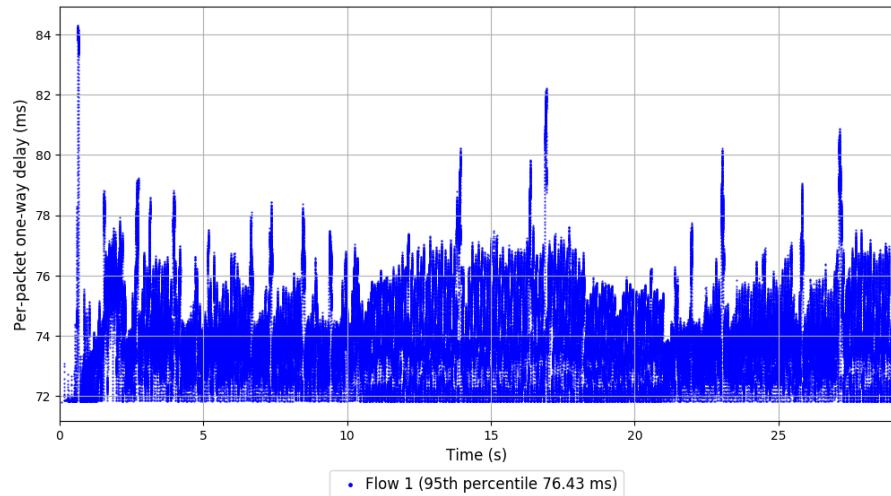
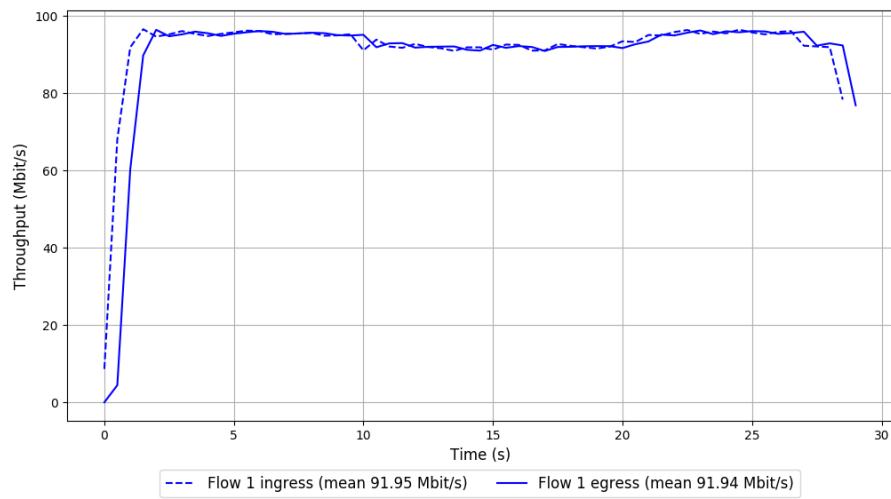


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 22:42:15
End at: 2019-01-21 22:42:45
Local clock offset: 0.449 ms
Remote clock offset: -3.994 ms

# Below is generated by plot.py at 2019-01-21 23:18:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.94 Mbit/s
95th percentile per-packet one-way delay: 76.429 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 91.94 Mbit/s
95th percentile per-packet one-way delay: 76.429 ms
Loss rate: 0.27%
```

Run 4: Report of Indigo-MusesC5 — Data Link

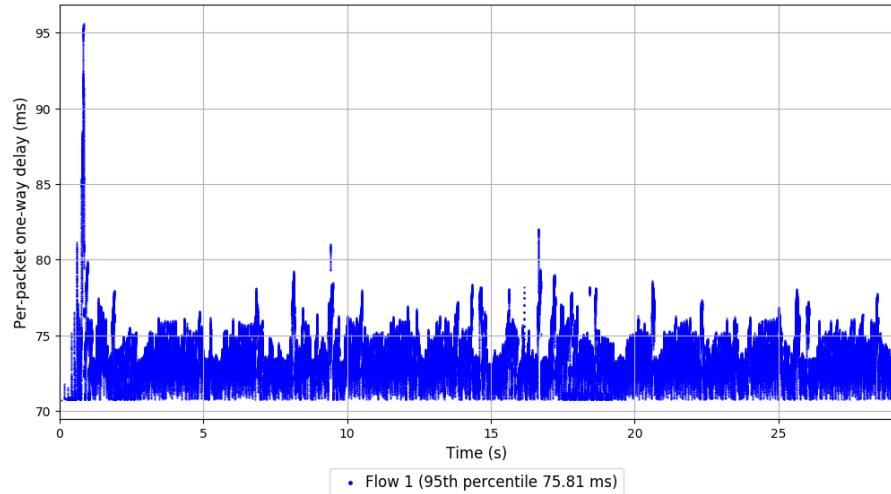
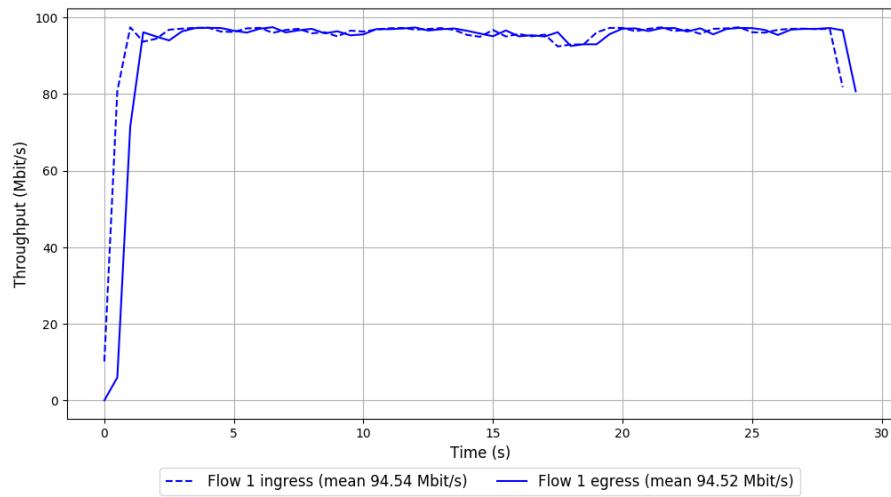


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 23:08:11
End at: 2019-01-21 23:08:41
Local clock offset: 1.26 ms
Remote clock offset: -1.604 ms

# Below is generated by plot.py at 2019-01-21 23:18:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.52 Mbit/s
95th percentile per-packet one-way delay: 75.814 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 94.52 Mbit/s
95th percentile per-packet one-way delay: 75.814 ms
Loss rate: 0.28%
```

Run 5: Report of Indigo-MusesC5 — Data Link

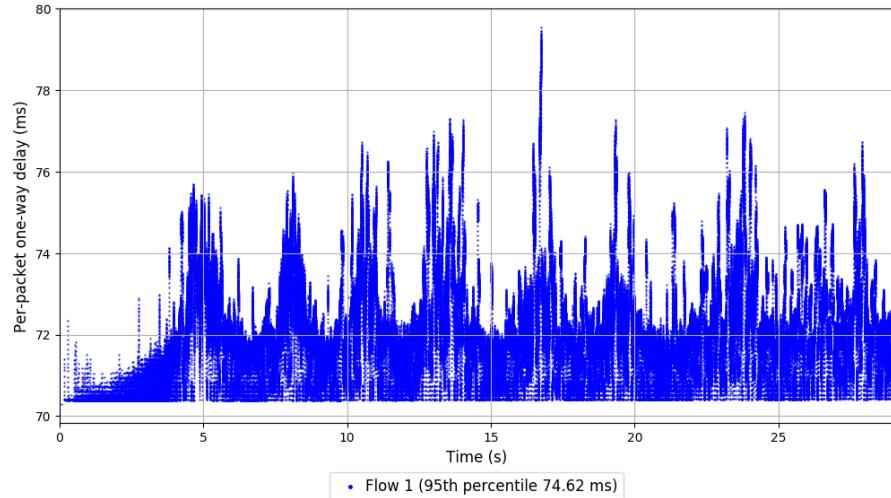
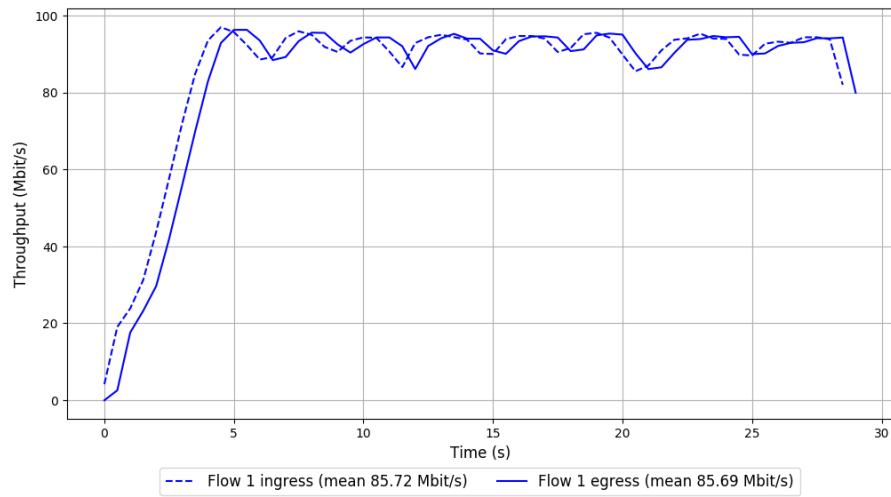


```
Run 1: Statistics of Indigo-MusesD
```

```
Start at: 2019-01-21 21:24:48
End at: 2019-01-21 21:25:18
Local clock offset: -1.193 ms
Remote clock offset: -2.129 ms

# Below is generated by plot.py at 2019-01-21 23:18:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.69 Mbit/s
95th percentile per-packet one-way delay: 74.625 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 85.69 Mbit/s
95th percentile per-packet one-way delay: 74.625 ms
Loss rate: 0.32%
```

Run 1: Report of Indigo-MusesD — Data Link

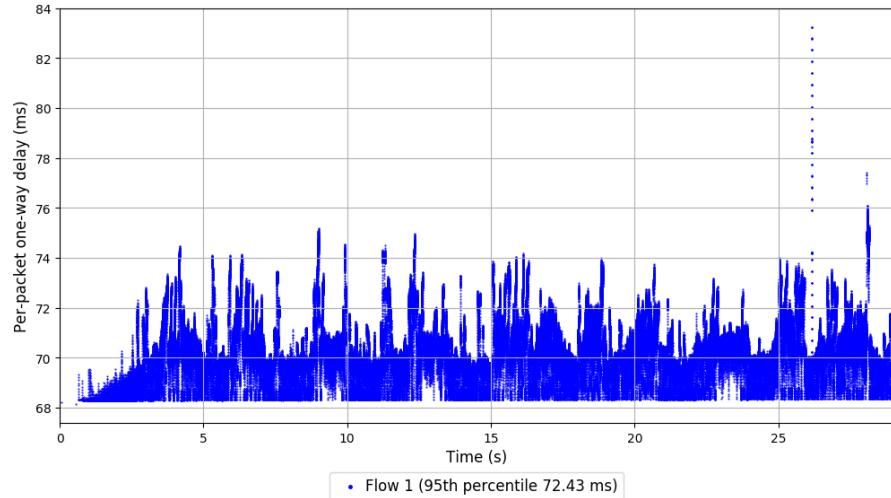
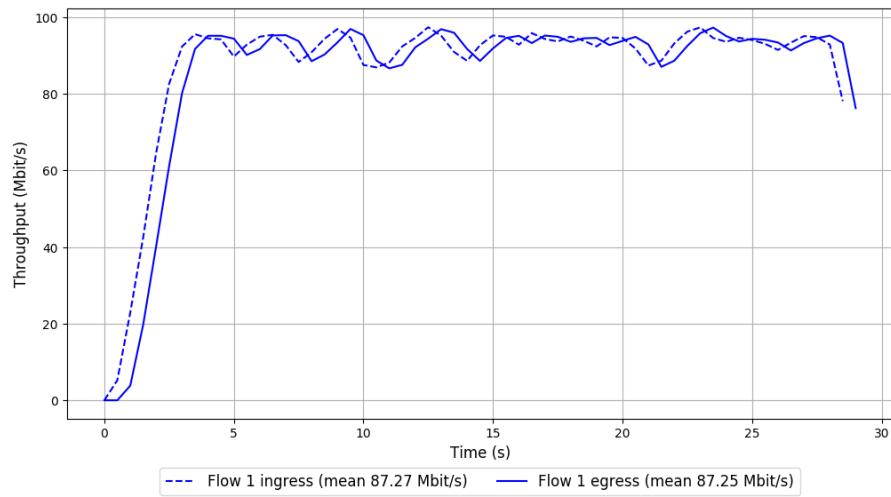


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-01-21 21:50:39
End at: 2019-01-21 21:51:09
Local clock offset: -1.663 ms
Remote clock offset: -2.643 ms

# Below is generated by plot.py at 2019-01-21 23:18:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.25 Mbit/s
95th percentile per-packet one-way delay: 72.429 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 87.25 Mbit/s
95th percentile per-packet one-way delay: 72.429 ms
Loss rate: 0.29%
```

Run 2: Report of Indigo-MusesD — Data Link

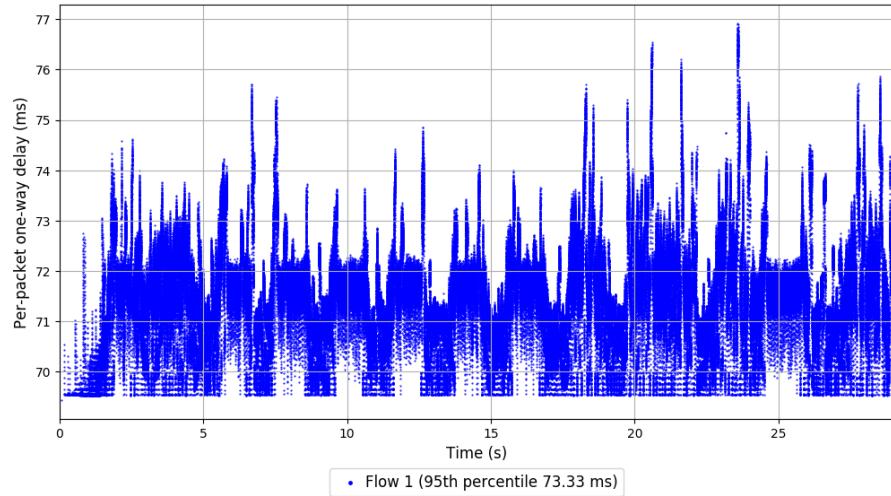
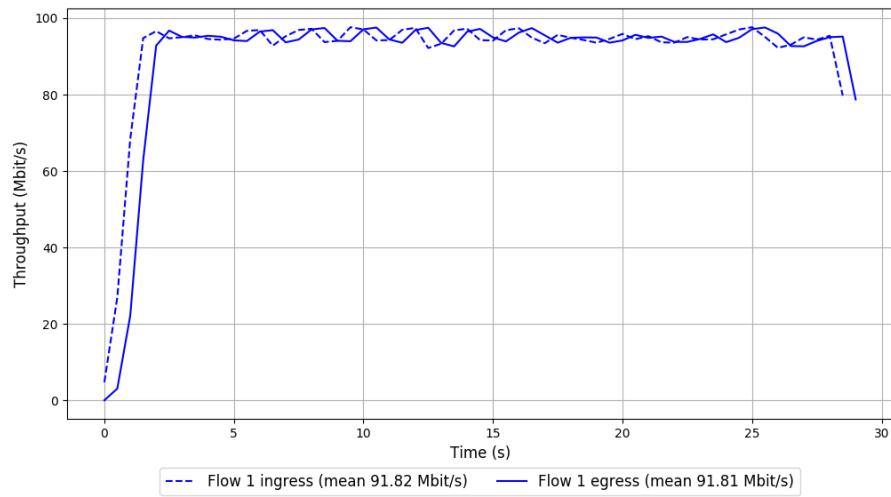


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-01-21 22:15:21
End at: 2019-01-21 22:15:51
Local clock offset: -3.228 ms
Remote clock offset: -4.343 ms

# Below is generated by plot.py at 2019-01-21 23:18:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.81 Mbit/s
95th percentile per-packet one-way delay: 73.326 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 91.81 Mbit/s
95th percentile per-packet one-way delay: 73.326 ms
Loss rate: 0.28%
```

Run 3: Report of Indigo-MusesD — Data Link

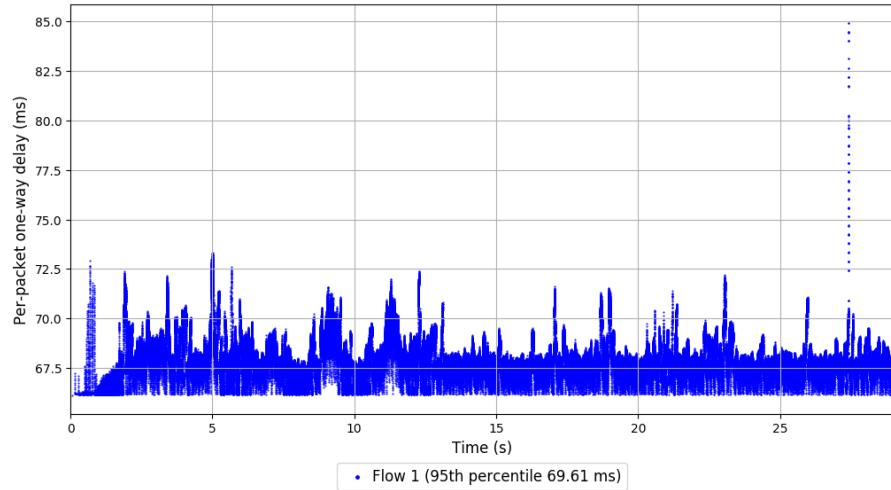
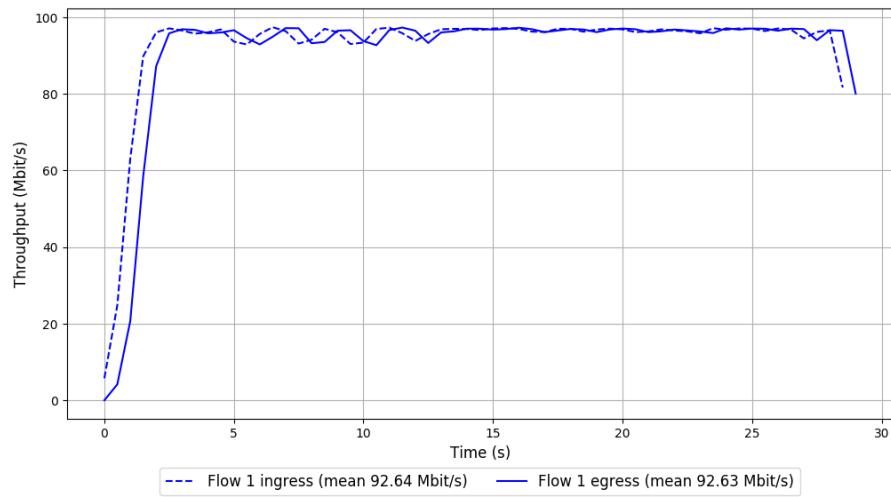


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-01-21 22:40:59
End at: 2019-01-21 22:41:29
Local clock offset: -1.056 ms
Remote clock offset: -2.286 ms

# Below is generated by plot.py at 2019-01-21 23:19:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.63 Mbit/s
95th percentile per-packet one-way delay: 69.614 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 92.63 Mbit/s
95th percentile per-packet one-way delay: 69.614 ms
Loss rate: 0.27%
```

Run 4: Report of Indigo-MusesD — Data Link

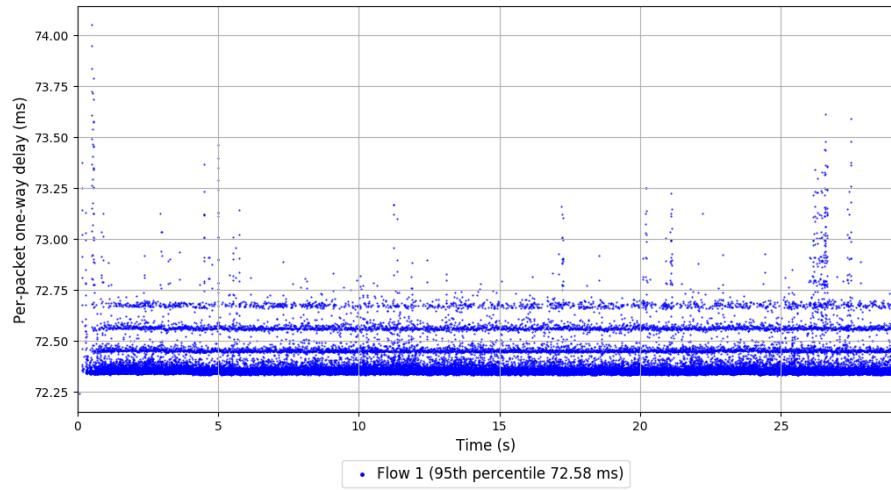
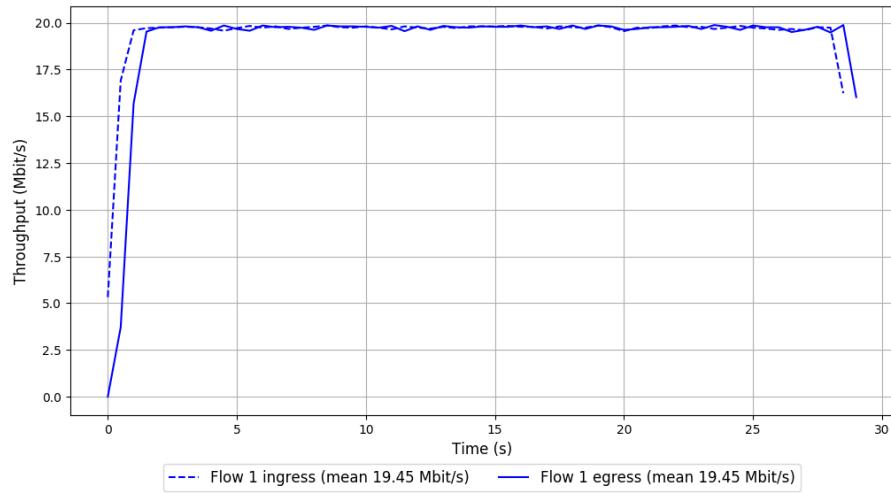


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-01-21 23:07:04
End at: 2019-01-21 23:07:34
Local clock offset: 0.356 ms
Remote clock offset: -4.034 ms

# Below is generated by plot.py at 2019-01-21 23:19:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.45 Mbit/s
95th percentile per-packet one-way delay: 72.575 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 19.45 Mbit/s
95th percentile per-packet one-way delay: 72.575 ms
Loss rate: 0.27%
```

Run 5: Report of Indigo-MusesD — Data Link

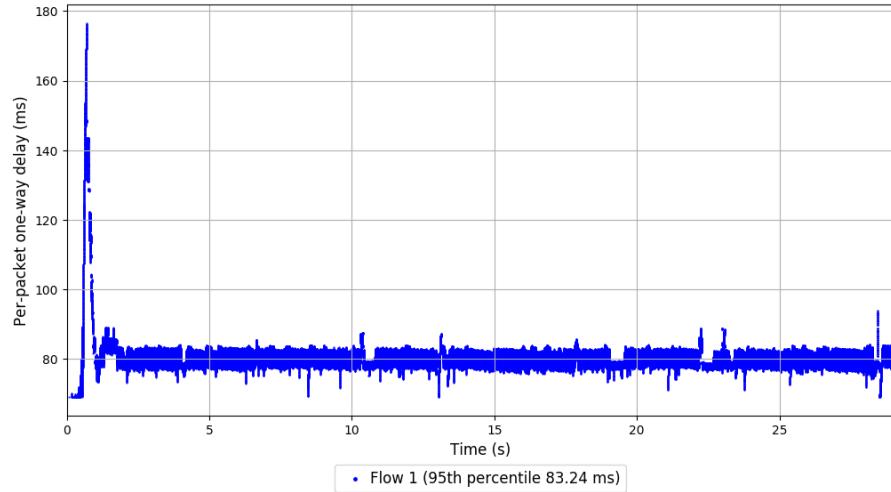
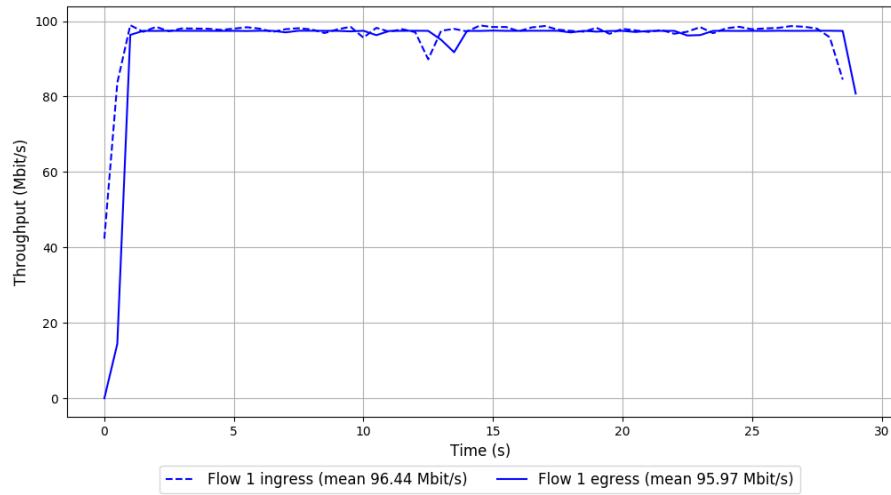


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 21:13:38
End at: 2019-01-21 21:14:08
Local clock offset: -0.859 ms
Remote clock offset: -4.285 ms

# Below is generated by plot.py at 2019-01-21 23:19:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.97 Mbit/s
95th percentile per-packet one-way delay: 83.237 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 95.97 Mbit/s
95th percentile per-packet one-way delay: 83.237 ms
Loss rate: 0.76%
```

Run 1: Report of Indigo-MusesT — Data Link

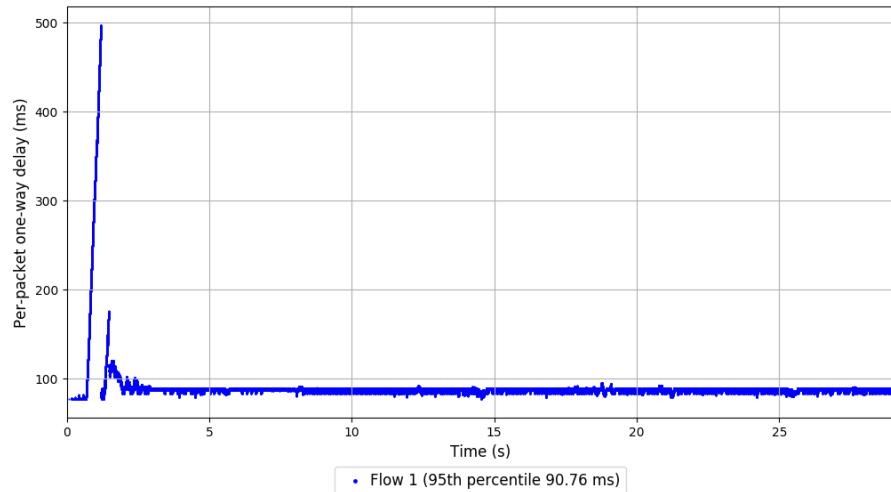
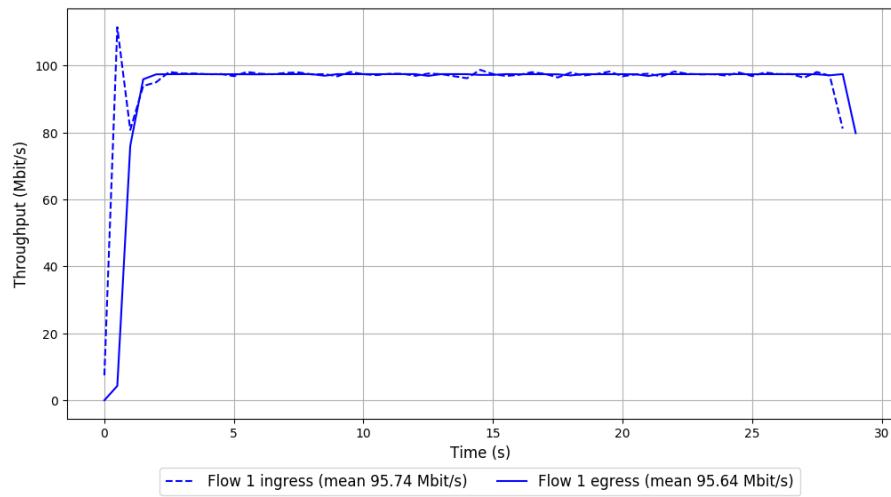


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 21:39:33
End at: 2019-01-21 21:40:03
Local clock offset: 3.642 ms
Remote clock offset: -2.959 ms

# Below is generated by plot.py at 2019-01-21 23:19:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.64 Mbit/s
95th percentile per-packet one-way delay: 90.756 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 95.64 Mbit/s
95th percentile per-packet one-way delay: 90.756 ms
Loss rate: 0.39%
```

Run 2: Report of Indigo-MusesT — Data Link

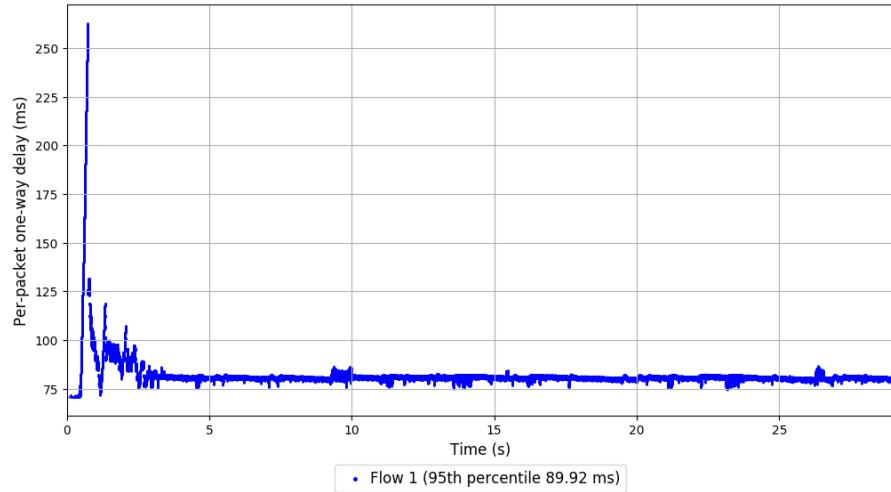
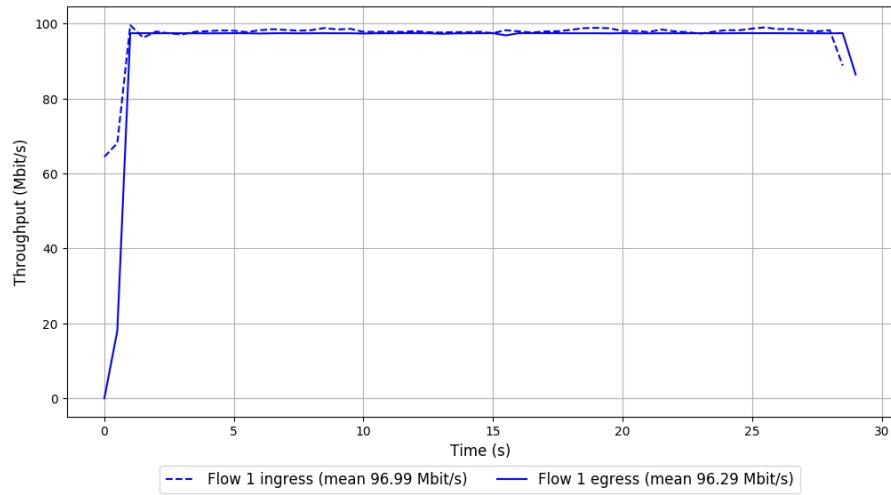


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 22:04:46
End at: 2019-01-21 22:05:16
Local clock offset: -1.303 ms
Remote clock offset: -3.995 ms

# Below is generated by plot.py at 2019-01-21 23:19:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.29 Mbit/s
95th percentile per-packet one-way delay: 89.919 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 96.29 Mbit/s
95th percentile per-packet one-way delay: 89.919 ms
Loss rate: 0.99%
```

Run 3: Report of Indigo-MusesT — Data Link

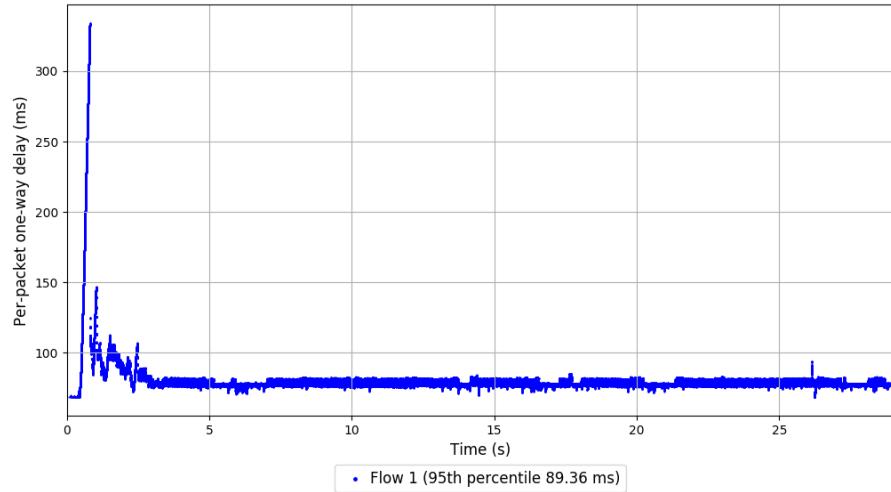
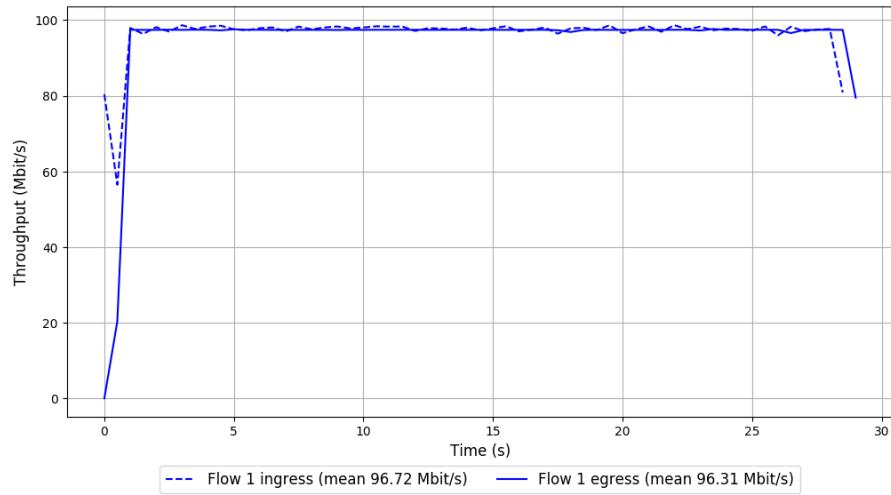


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 22:29:44
End at: 2019-01-21 22:30:14
Local clock offset: -0.344 ms
Remote clock offset: -3.868 ms

# Below is generated by plot.py at 2019-01-21 23:19:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.31 Mbit/s
95th percentile per-packet one-way delay: 89.360 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 96.31 Mbit/s
95th percentile per-packet one-way delay: 89.360 ms
Loss rate: 0.68%
```

Run 4: Report of Indigo-MusesT — Data Link

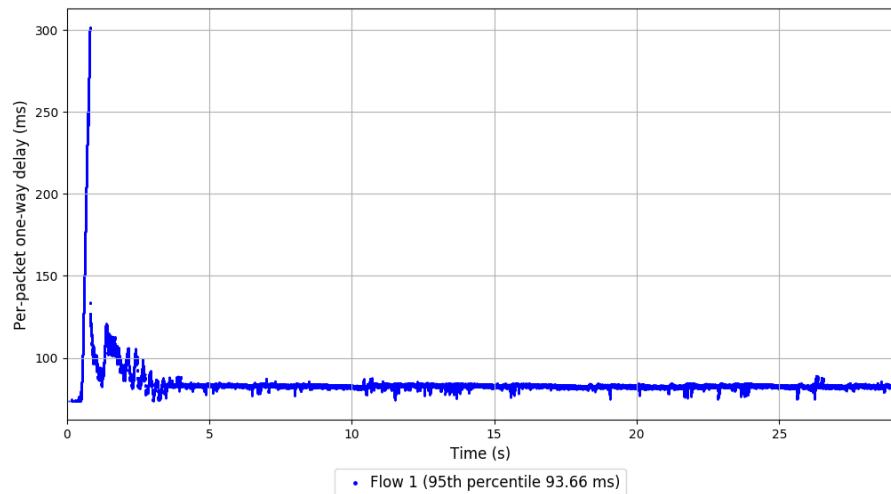
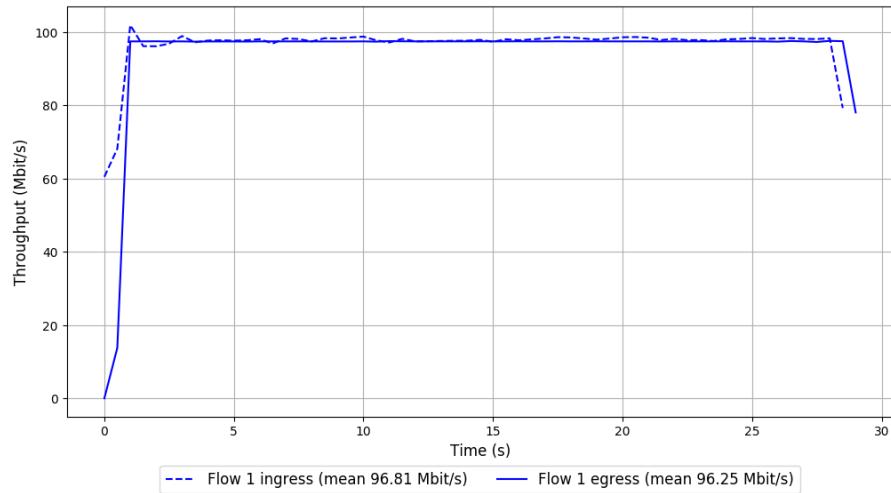


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 22:56:14
End at: 2019-01-21 22:56:44
Local clock offset: 1.946 ms
Remote clock offset: -4.074 ms

# Below is generated by plot.py at 2019-01-21 23:19:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.25 Mbit/s
95th percentile per-packet one-way delay: 93.664 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 96.25 Mbit/s
95th percentile per-packet one-way delay: 93.664 ms
Loss rate: 0.85%
```

Run 5: Report of Indigo-MusesT — Data Link

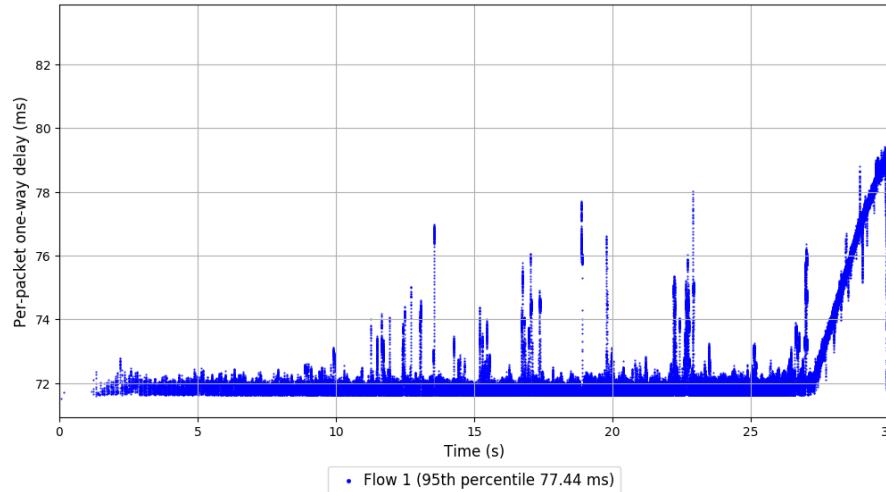
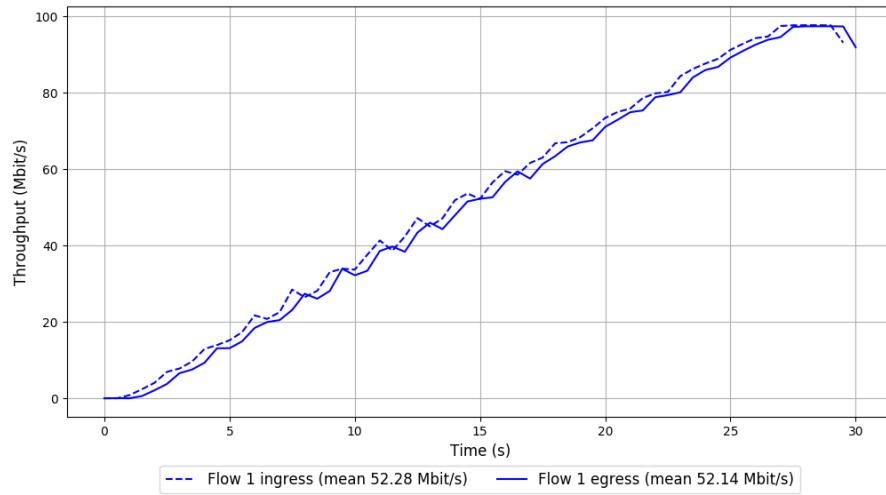


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2019-01-21 21:02:35
End at: 2019-01-21 21:03:05
Local clock offset: 2.083 ms
Remote clock offset: -4.01 ms

# Below is generated by plot.py at 2019-01-21 23:19:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.14 Mbit/s
95th percentile per-packet one-way delay: 77.436 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 52.14 Mbit/s
95th percentile per-packet one-way delay: 77.436 ms
Loss rate: 0.53%
```

Run 1: Report of LEDBAT — Data Link

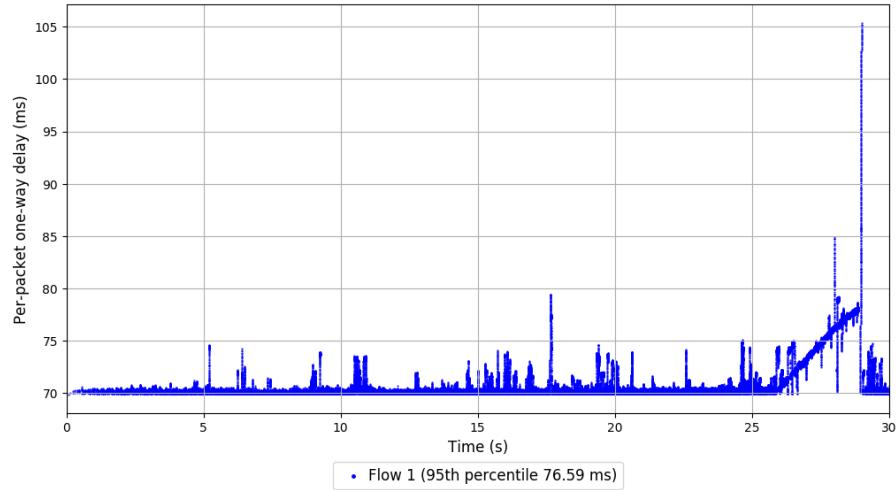
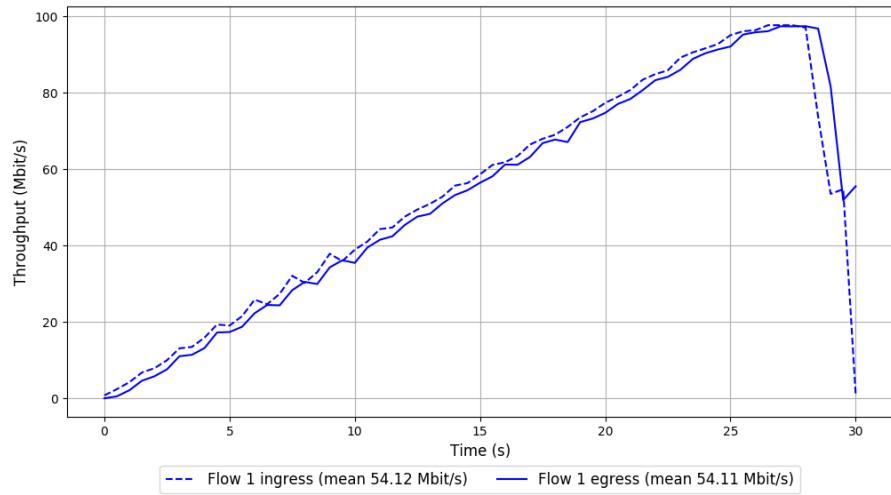


Run 2: Statistics of LEDBAT

```
Start at: 2019-01-21 21:28:25
End at: 2019-01-21 21:28:55
Local clock offset: -0.503 ms
Remote clock offset: -3.814 ms

# Below is generated by plot.py at 2019-01-21 23:19:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.11 Mbit/s
95th percentile per-packet one-way delay: 76.587 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 54.11 Mbit/s
95th percentile per-packet one-way delay: 76.587 ms
Loss rate: 0.28%
```

Run 2: Report of LEDBAT — Data Link

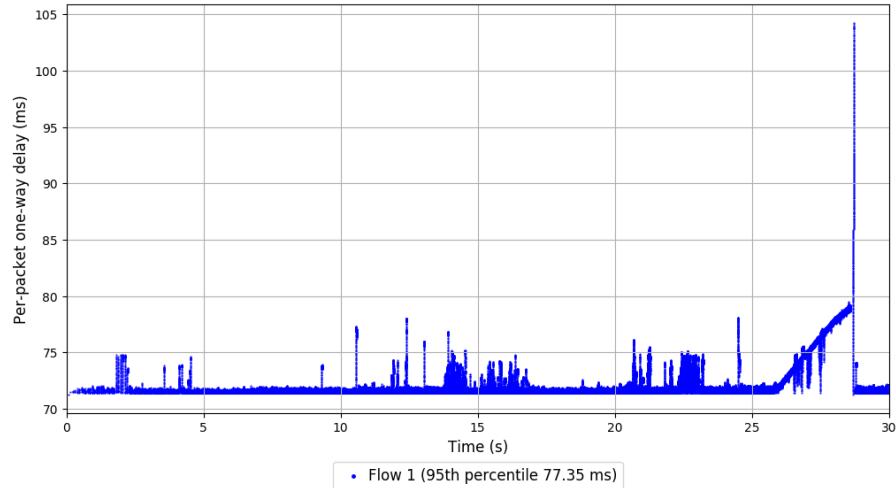
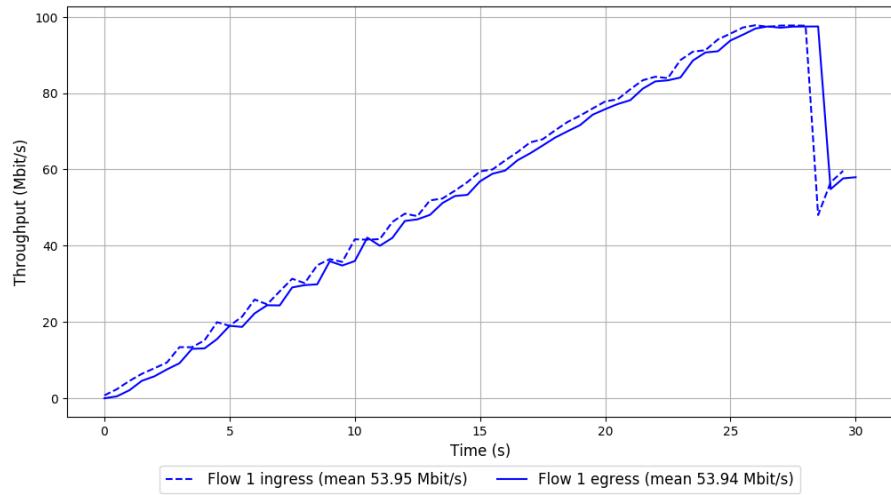


Run 3: Statistics of LEDBAT

```
Start at: 2019-01-21 21:54:15
End at: 2019-01-21 21:54:45
Local clock offset: -0.895 ms
Remote clock offset: -4.639 ms

# Below is generated by plot.py at 2019-01-21 23:19:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.94 Mbit/s
95th percentile per-packet one-way delay: 77.353 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 53.94 Mbit/s
95th percentile per-packet one-way delay: 77.353 ms
Loss rate: 0.29%
```

Run 3: Report of LEDBAT — Data Link

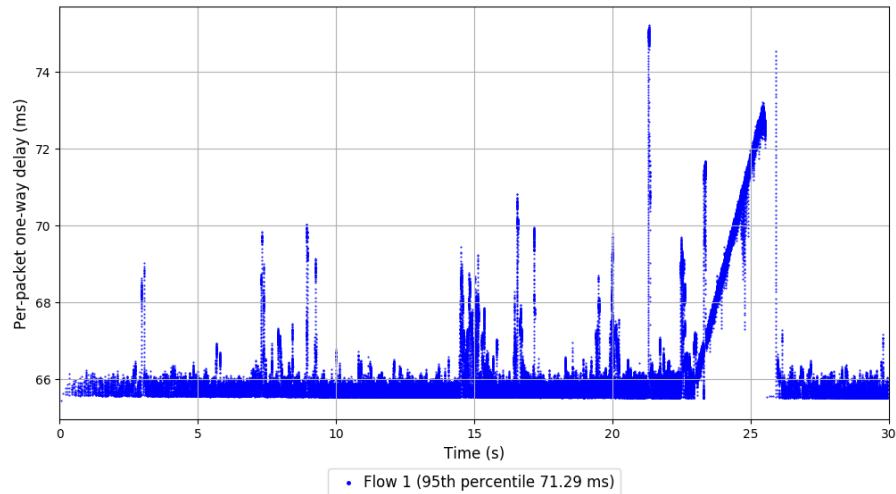
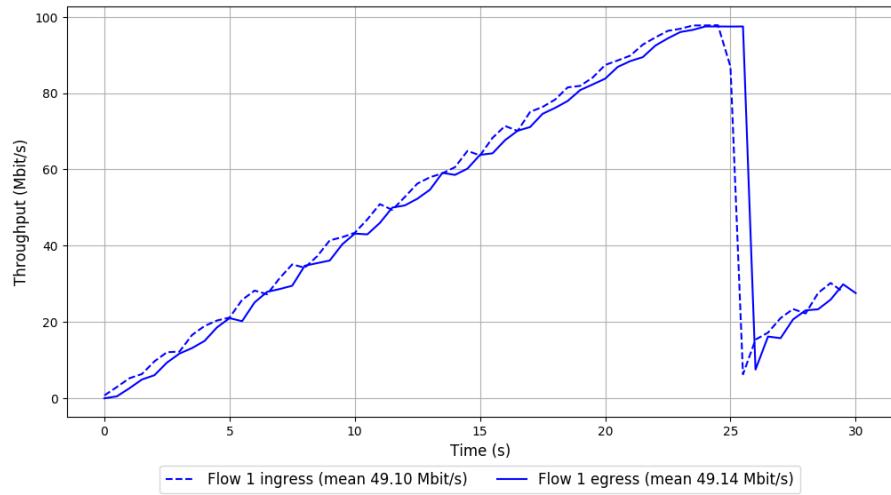


Run 4: Statistics of LEDBAT

```
Start at: 2019-01-21 22:18:56
End at: 2019-01-21 22:19:26
Local clock offset: -1.693 ms
Remote clock offset: -3.573 ms

# Below is generated by plot.py at 2019-01-21 23:19:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.14 Mbit/s
95th percentile per-packet one-way delay: 71.292 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 49.14 Mbit/s
95th percentile per-packet one-way delay: 71.292 ms
Loss rate: 0.17%
```

Run 4: Report of LEDBAT — Data Link

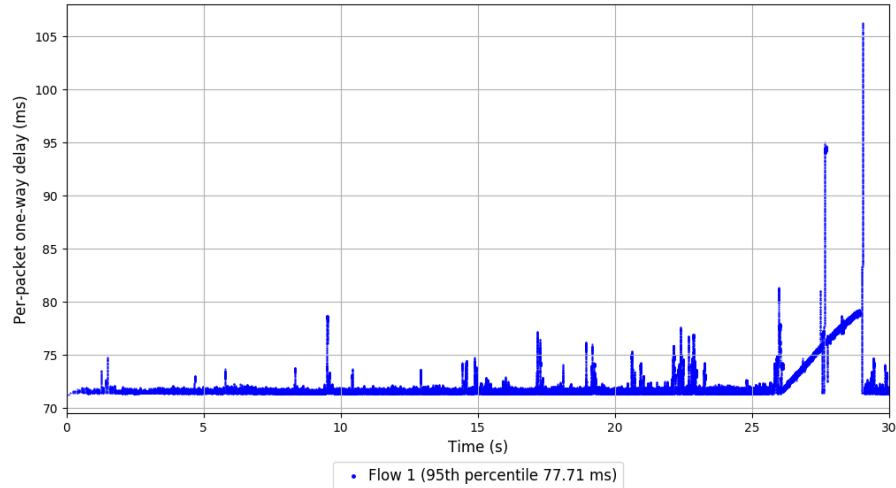
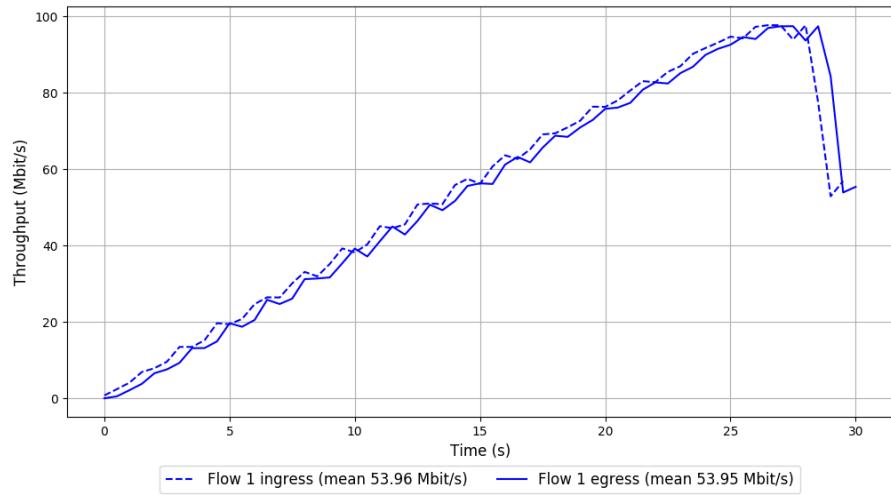


Run 5: Statistics of LEDBAT

```
Start at: 2019-01-21 22:44:56
End at: 2019-01-21 22:45:26
Local clock offset: 0.086 ms
Remote clock offset: -3.928 ms

# Below is generated by plot.py at 2019-01-21 23:19:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.95 Mbit/s
95th percentile per-packet one-way delay: 77.706 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 53.95 Mbit/s
95th percentile per-packet one-way delay: 77.706 ms
Loss rate: 0.28%
```

Run 5: Report of LEDBAT — Data Link

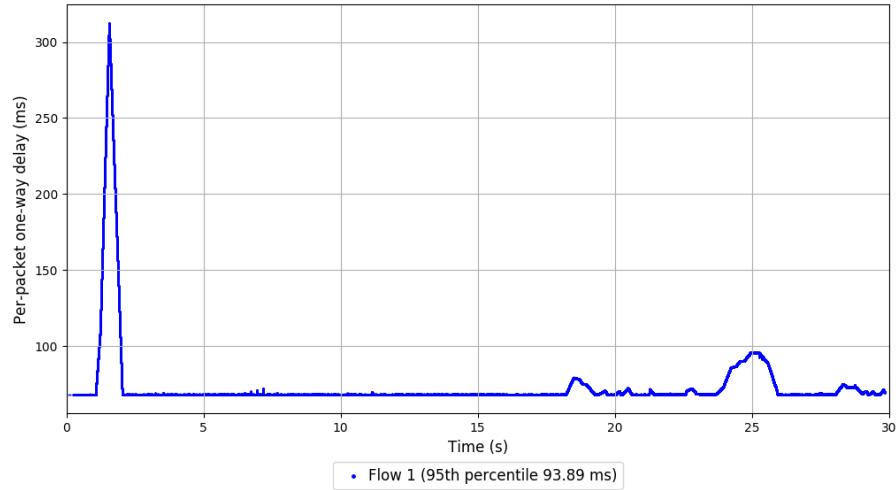
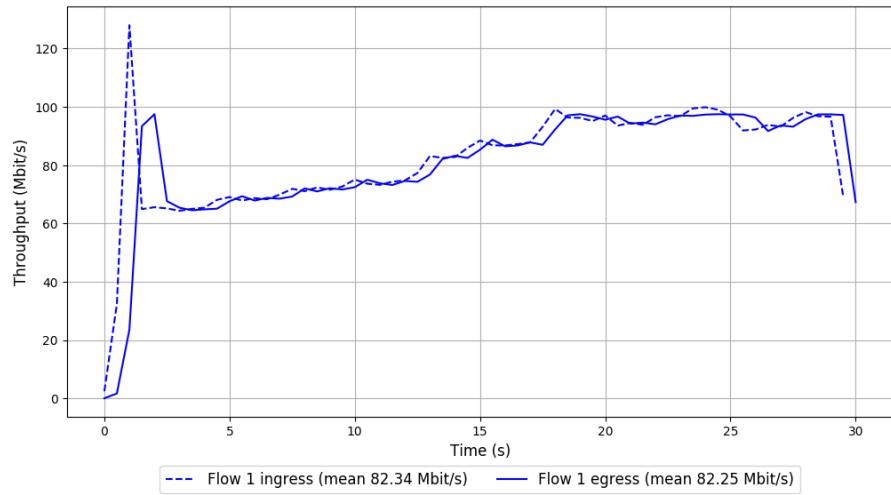


Run 1: Statistics of PCC-Allegro

```
Start at: 2019-01-21 21:16:16
End at: 2019-01-21 21:16:46
Local clock offset: -0.441 ms
Remote clock offset: -2.57 ms

# Below is generated by plot.py at 2019-01-21 23:20:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.25 Mbit/s
95th percentile per-packet one-way delay: 93.887 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 82.25 Mbit/s
95th percentile per-packet one-way delay: 93.887 ms
Loss rate: 0.36%
```

Run 1: Report of PCC-Allegro — Data Link

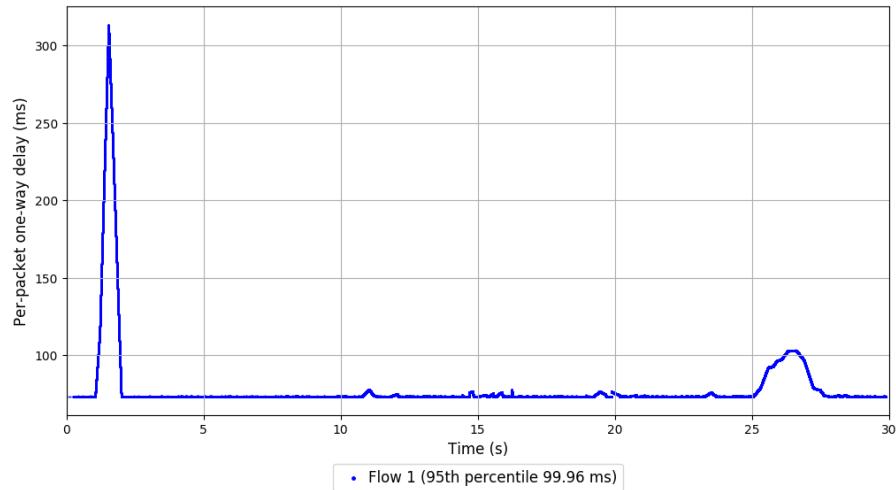
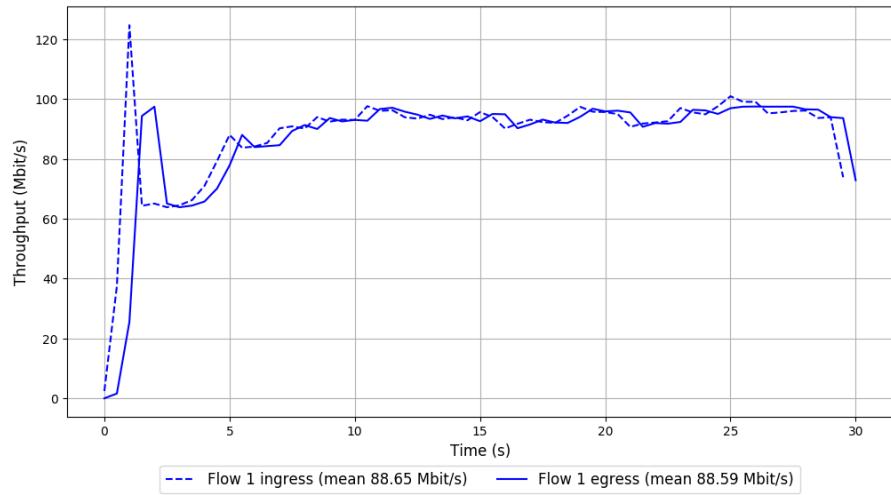


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-01-21 21:42:13
End at: 2019-01-21 21:42:43
Local clock offset: 2.002 ms
Remote clock offset: -4.828 ms

# Below is generated by plot.py at 2019-01-21 23:20:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.59 Mbit/s
95th percentile per-packet one-way delay: 99.960 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 88.59 Mbit/s
95th percentile per-packet one-way delay: 99.960 ms
Loss rate: 0.33%
```

Run 2: Report of PCC-Allegro — Data Link

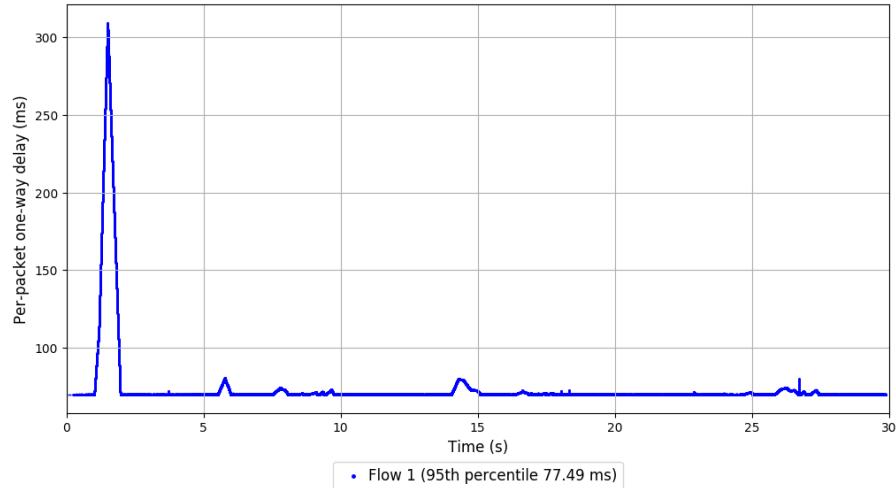
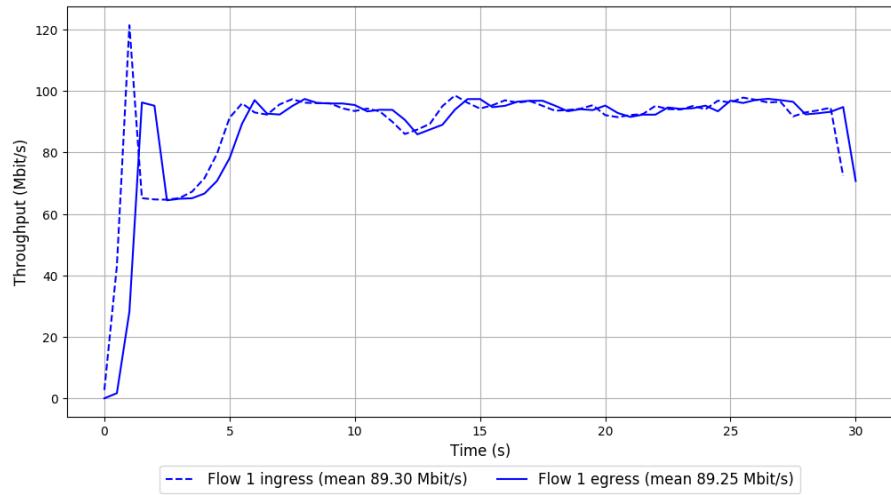


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-01-21 22:07:13
End at: 2019-01-21 22:07:43
Local clock offset: -2.674 ms
Remote clock offset: -4.163 ms

# Below is generated by plot.py at 2019-01-21 23:20:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.25 Mbit/s
95th percentile per-packet one-way delay: 77.491 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 89.25 Mbit/s
95th percentile per-packet one-way delay: 77.491 ms
Loss rate: 0.32%
```

Run 3: Report of PCC-Allegro — Data Link

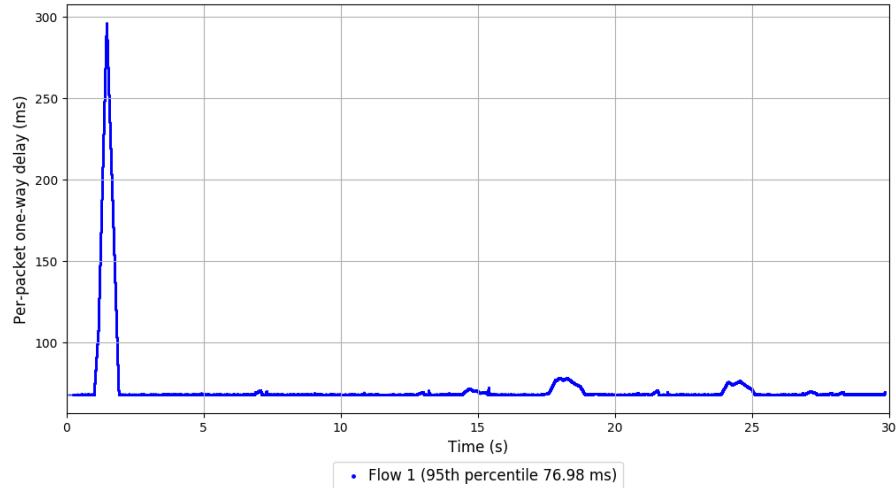
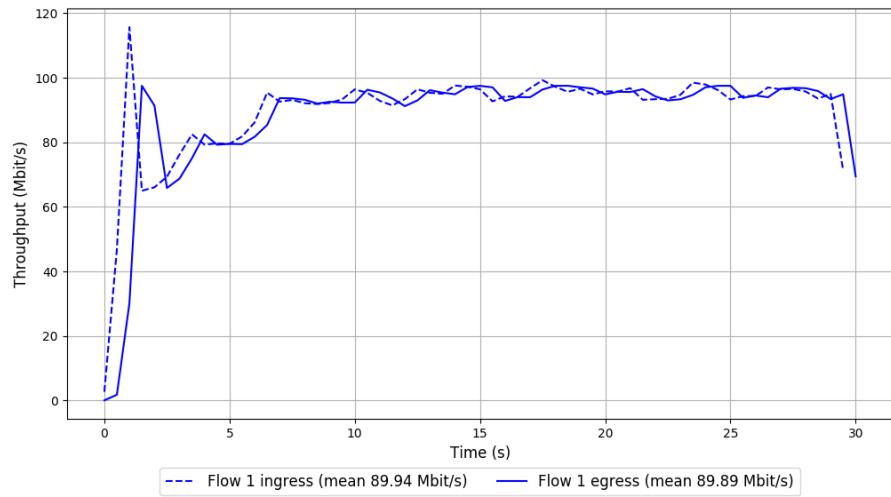


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-01-21 22:32:20
End at: 2019-01-21 22:32:50
Local clock offset: 1.254 ms
Remote clock offset: -4.611 ms

# Below is generated by plot.py at 2019-01-21 23:20:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 76.980 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 76.980 ms
Loss rate: 0.30%
```

Run 4: Report of PCC-Allegro — Data Link

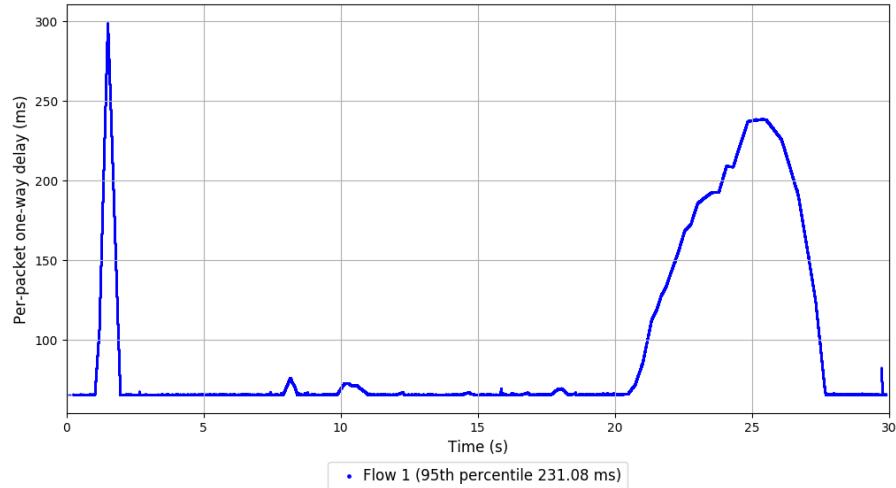
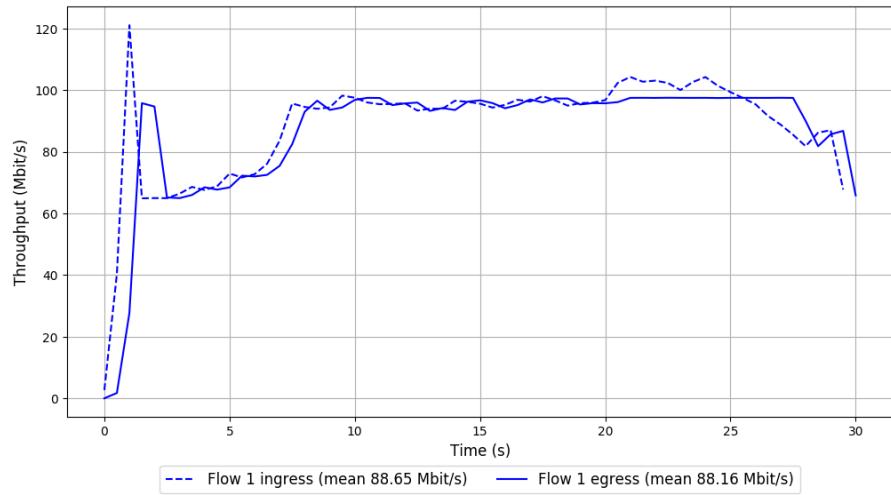


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-01-21 22:58:38
End at: 2019-01-21 22:59:08
Local clock offset: -1.588 ms
Remote clock offset: -1.686 ms

# Below is generated by plot.py at 2019-01-21 23:20:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.16 Mbit/s
95th percentile per-packet one-way delay: 231.076 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 88.16 Mbit/s
95th percentile per-packet one-way delay: 231.076 ms
Loss rate: 0.81%
```

Run 5: Report of PCC-Allegro — Data Link

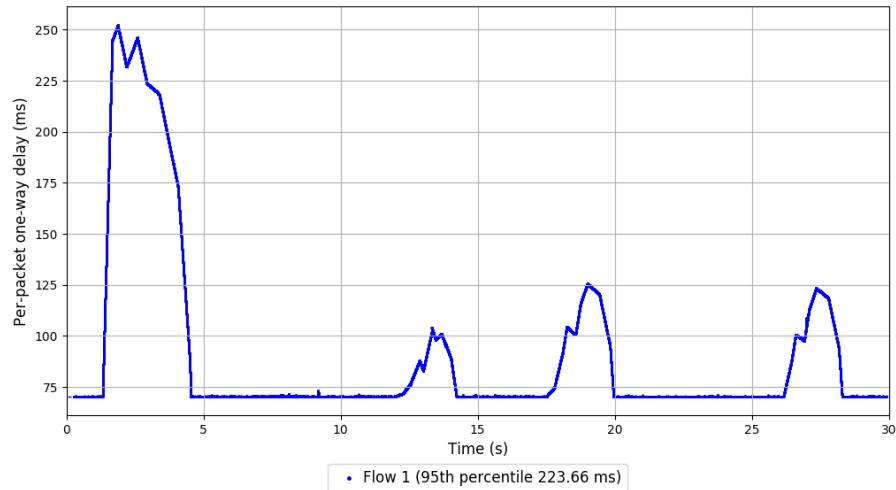
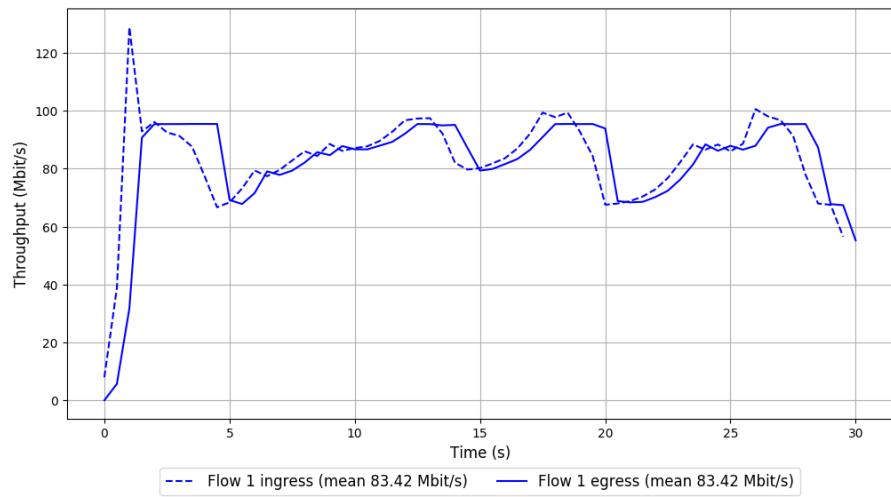


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-01-21 21:12:18
End at: 2019-01-21 21:12:48
Local clock offset: 1.195 ms
Remote clock offset: -3.36 ms

# Below is generated by plot.py at 2019-01-21 23:21:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.42 Mbit/s
95th percentile per-packet one-way delay: 223.660 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 83.42 Mbit/s
95th percentile per-packet one-way delay: 223.660 ms
Loss rate: 0.27%
```

Run 1: Report of PCC-Expr — Data Link

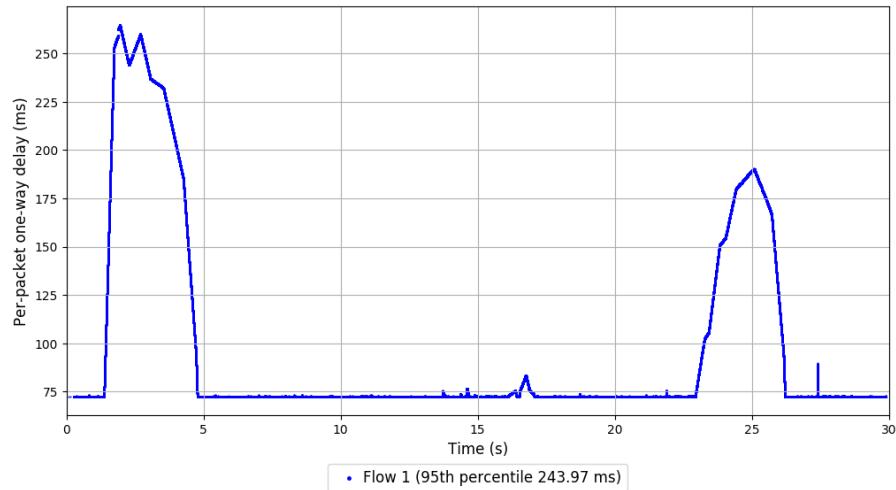
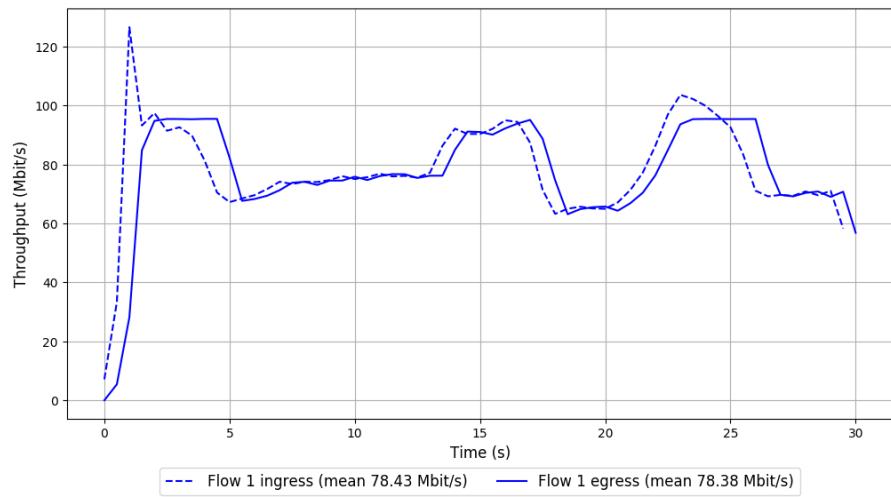


Run 2: Statistics of PCC-Expr

```
Start at: 2019-01-21 21:38:15
End at: 2019-01-21 21:38:45
Local clock offset: 1.06 ms
Remote clock offset: -1.423 ms

# Below is generated by plot.py at 2019-01-21 23:21:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.38 Mbit/s
95th percentile per-packet one-way delay: 243.974 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 78.38 Mbit/s
95th percentile per-packet one-way delay: 243.974 ms
Loss rate: 0.33%
```

Run 2: Report of PCC-Expr — Data Link

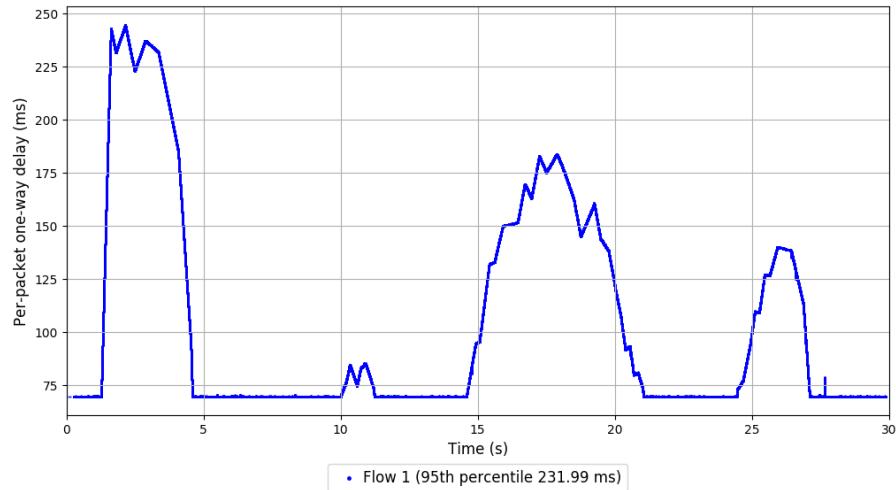
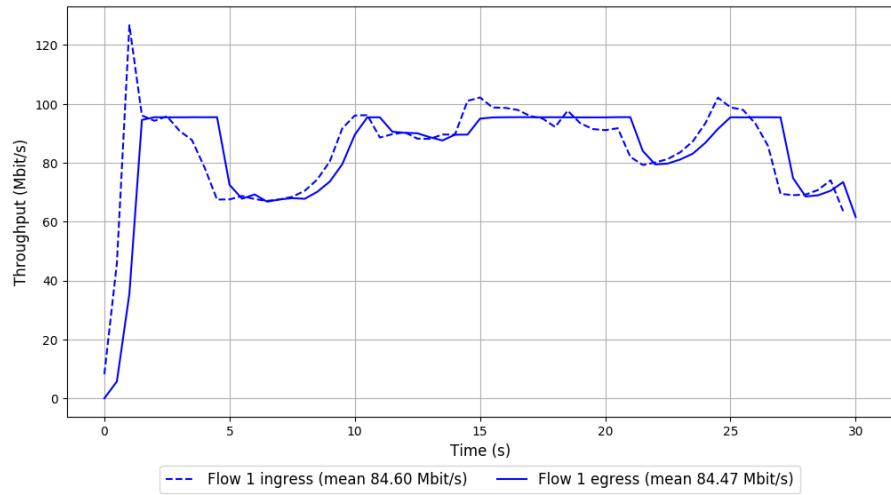


Run 3: Statistics of PCC-Expr

```
Start at: 2019-01-21 22:03:32
End at: 2019-01-21 22:04:02
Local clock offset: -2.692 ms
Remote clock offset: -4.183 ms

# Below is generated by plot.py at 2019-01-21 23:21:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.47 Mbit/s
95th percentile per-packet one-way delay: 231.986 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 84.47 Mbit/s
95th percentile per-packet one-way delay: 231.986 ms
Loss rate: 0.41%
```

Run 3: Report of PCC-Expr — Data Link

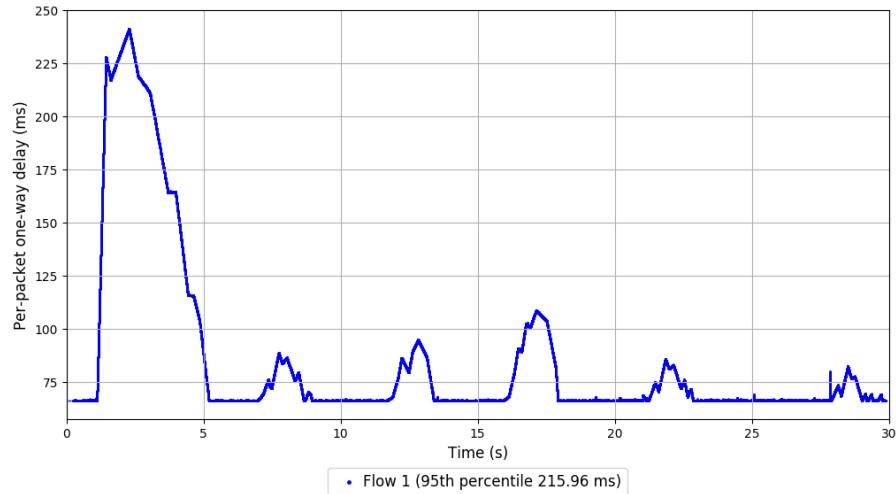
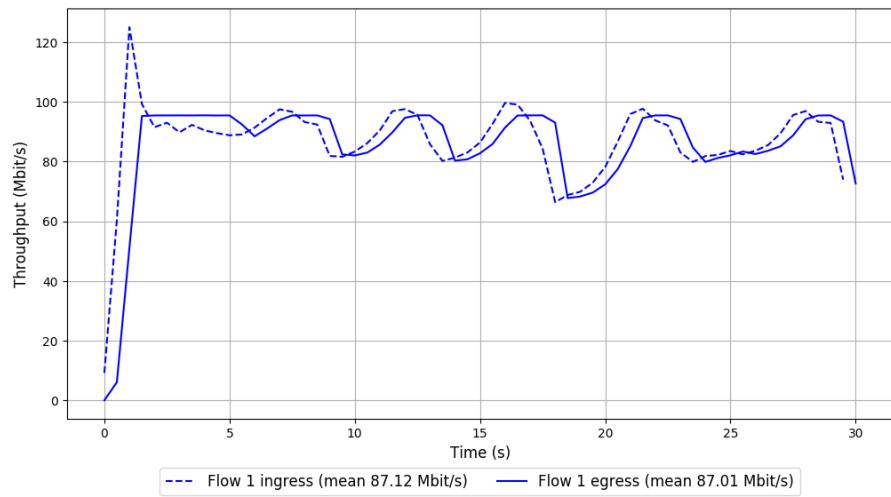


Run 4: Statistics of PCC-Expr

```
Start at: 2019-01-21 22:28:17
End at: 2019-01-21 22:28:47
Local clock offset: -0.605 ms
Remote clock offset: -4.496 ms

# Below is generated by plot.py at 2019-01-21 23:22:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.01 Mbit/s
95th percentile per-packet one-way delay: 215.961 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 87.01 Mbit/s
95th percentile per-packet one-way delay: 215.961 ms
Loss rate: 0.38%
```

Run 4: Report of PCC-Expr — Data Link

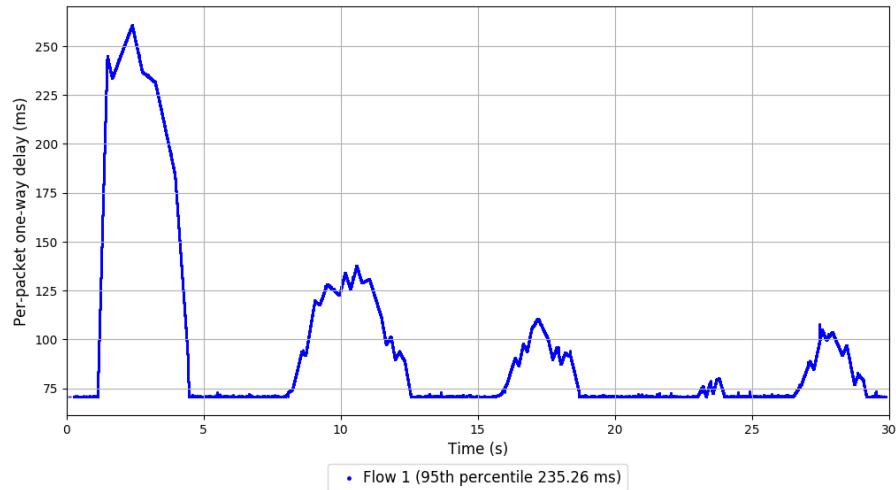
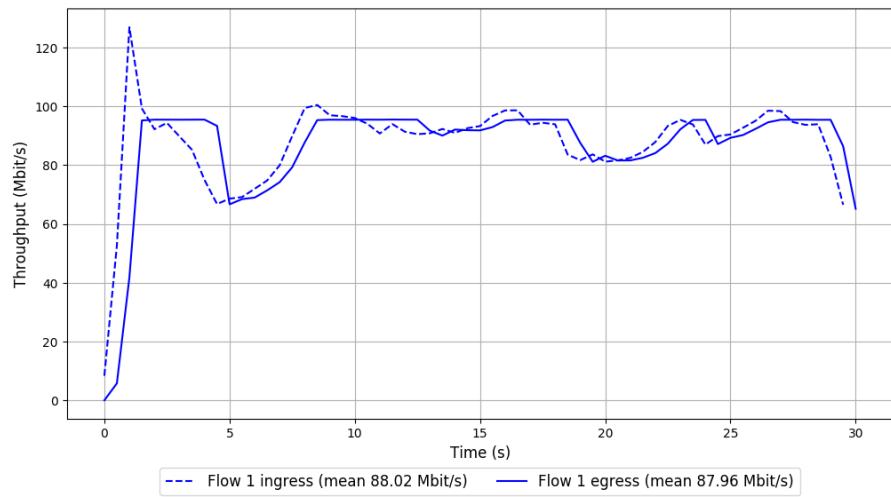


Run 5: Statistics of PCC-Expr

```
Start at: 2019-01-21 22:55:01
End at: 2019-01-21 22:55:31
Local clock offset: 0.096 ms
Remote clock offset: -3.024 ms

# Below is generated by plot.py at 2019-01-21 23:22:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.96 Mbit/s
95th percentile per-packet one-way delay: 235.258 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 87.96 Mbit/s
95th percentile per-packet one-way delay: 235.258 ms
Loss rate: 0.33%
```

Run 5: Report of PCC-Expr — Data Link

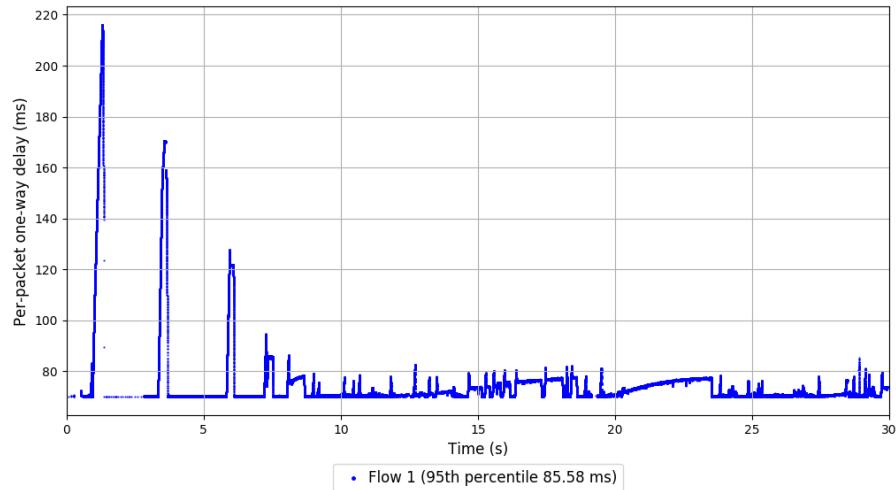
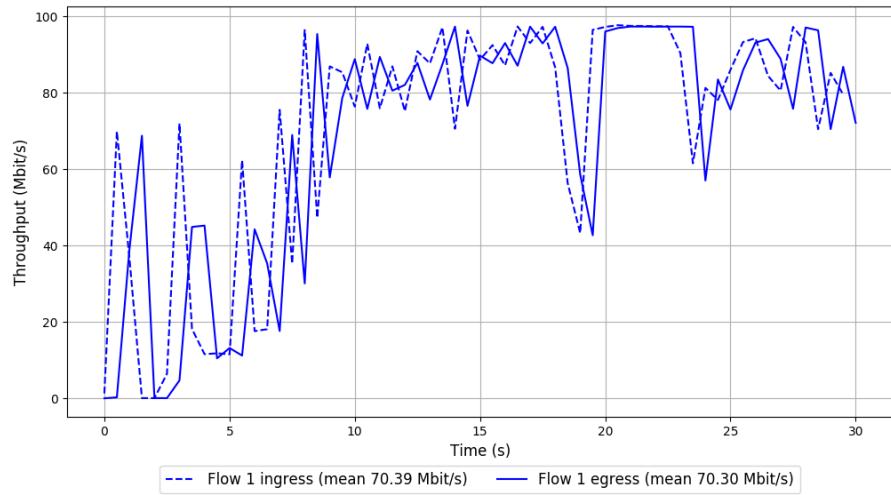


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-21 21:23:38
End at: 2019-01-21 21:24:08
Local clock offset: -0.998 ms
Remote clock offset: -2.222 ms

# Below is generated by plot.py at 2019-01-21 23:22:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.30 Mbit/s
95th percentile per-packet one-way delay: 85.585 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 70.30 Mbit/s
95th percentile per-packet one-way delay: 85.585 ms
Loss rate: 0.40%
```

Run 1: Report of QUIC Cubic — Data Link

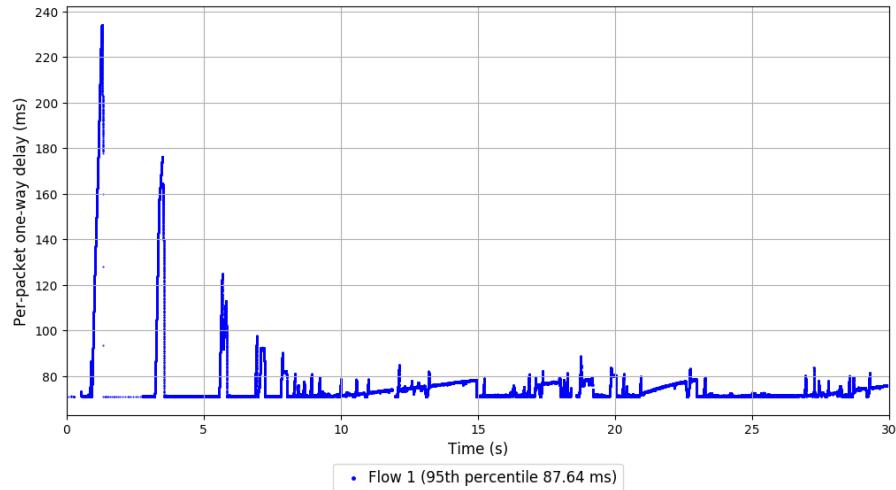
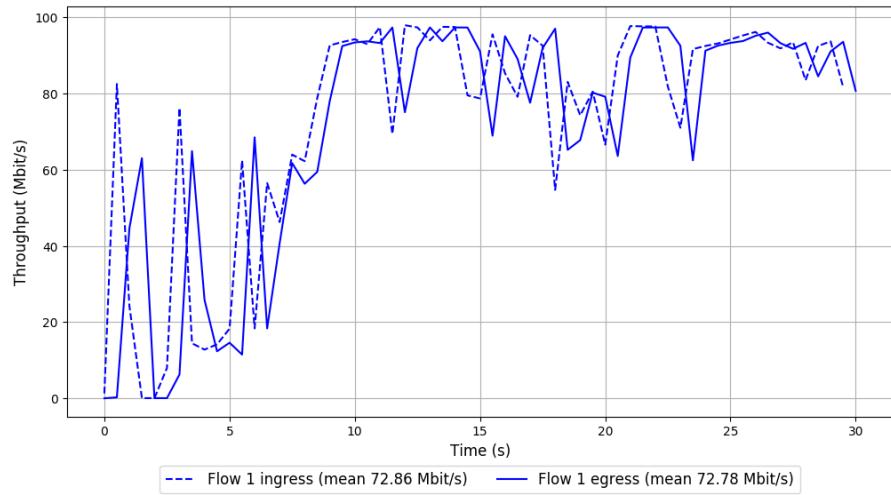


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-01-21 21:49:22
End at: 2019-01-21 21:49:52
Local clock offset: 1.854 ms
Remote clock offset: -4.663 ms

# Below is generated by plot.py at 2019-01-21 23:22:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.78 Mbit/s
95th percentile per-packet one-way delay: 87.642 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 72.78 Mbit/s
95th percentile per-packet one-way delay: 87.642 ms
Loss rate: 0.37%
```

Run 2: Report of QUIC Cubic — Data Link

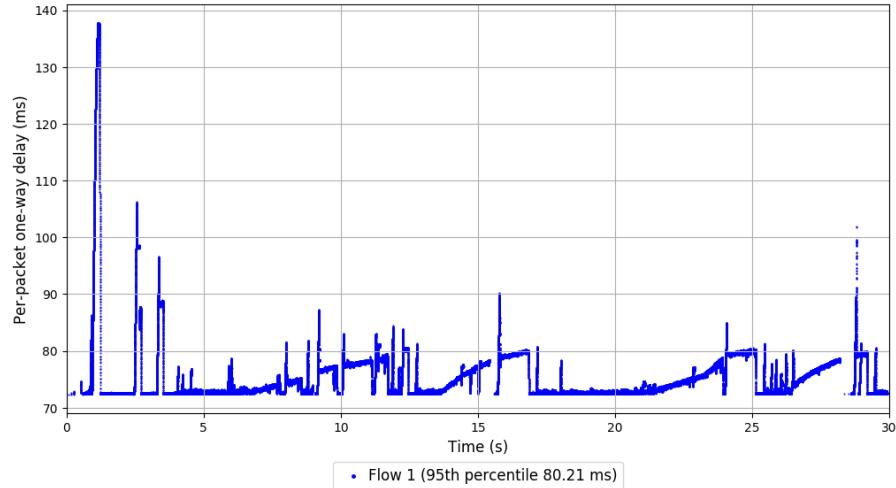
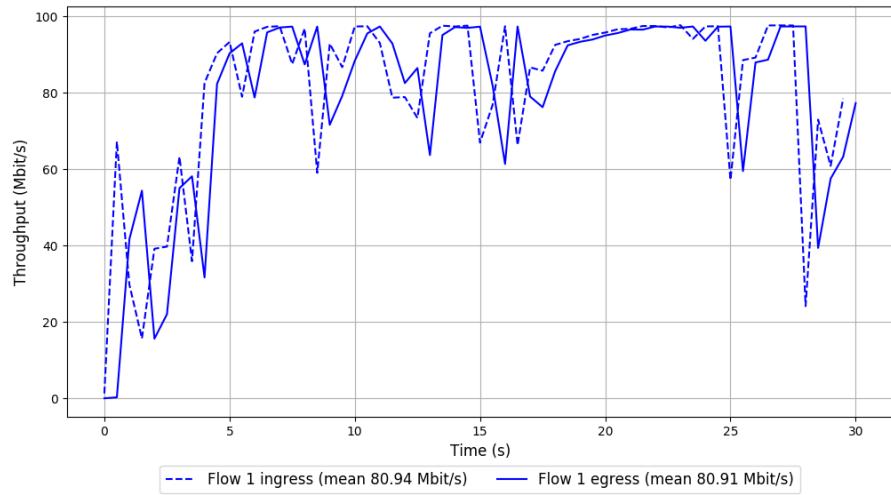


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-01-21 22:14:11
End at: 2019-01-21 22:14:41
Local clock offset: -0.131 ms
Remote clock offset: -3.705 ms

# Below is generated by plot.py at 2019-01-21 23:22:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.91 Mbit/s
95th percentile per-packet one-way delay: 80.211 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 80.91 Mbit/s
95th percentile per-packet one-way delay: 80.211 ms
Loss rate: 0.30%
```

Run 3: Report of QUIC Cubic — Data Link

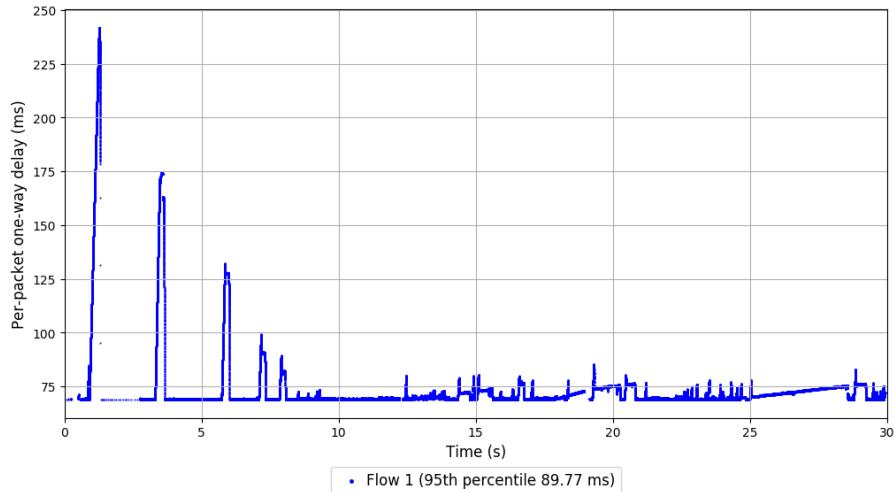
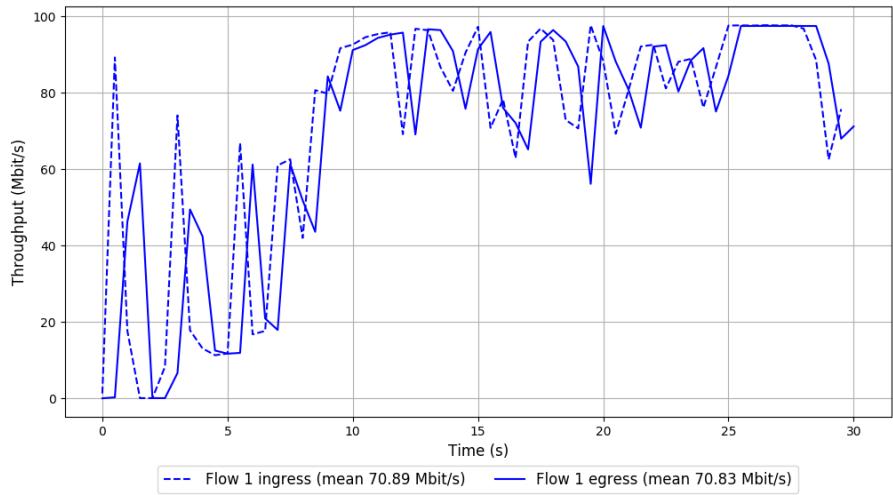


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-01-21 22:39:45
End at: 2019-01-21 22:40:15
Local clock offset: -1.103 ms
Remote clock offset: -5.38 ms

# Below is generated by plot.py at 2019-01-21 23:22:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.83 Mbit/s
95th percentile per-packet one-way delay: 89.769 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 70.83 Mbit/s
95th percentile per-packet one-way delay: 89.769 ms
Loss rate: 0.34%
```

Run 4: Report of QUIC Cubic — Data Link

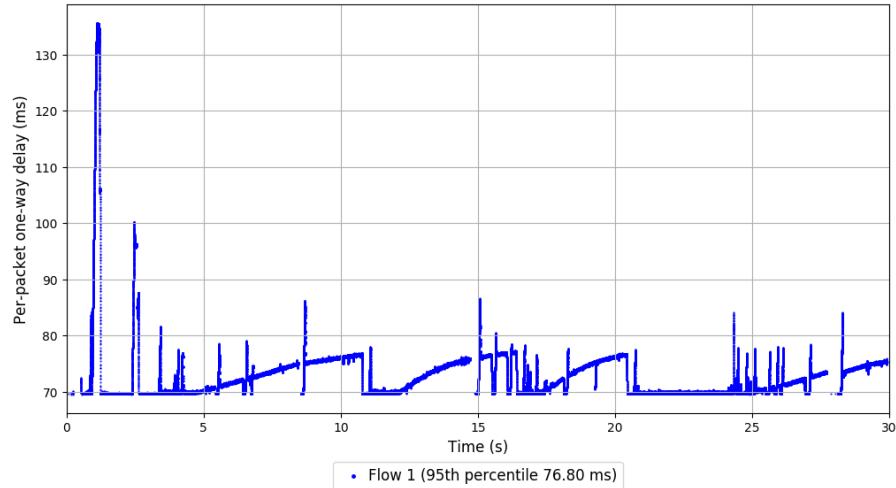
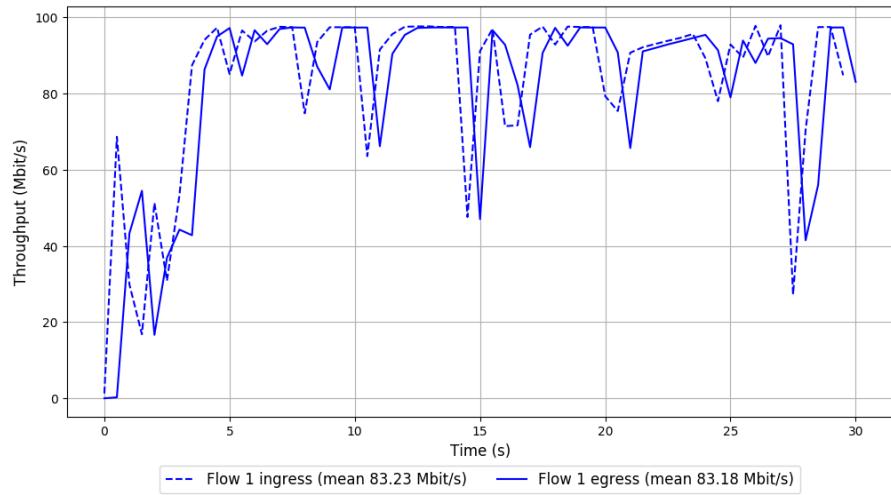


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-01-21 23:05:51
End at: 2019-01-21 23:06:21
Local clock offset: -1.74 ms
Remote clock offset: -3.498 ms

# Below is generated by plot.py at 2019-01-21 23:22:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.18 Mbit/s
95th percentile per-packet one-way delay: 76.795 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 83.18 Mbit/s
95th percentile per-packet one-way delay: 76.795 ms
Loss rate: 0.33%
```

Run 5: Report of QUIC Cubic — Data Link

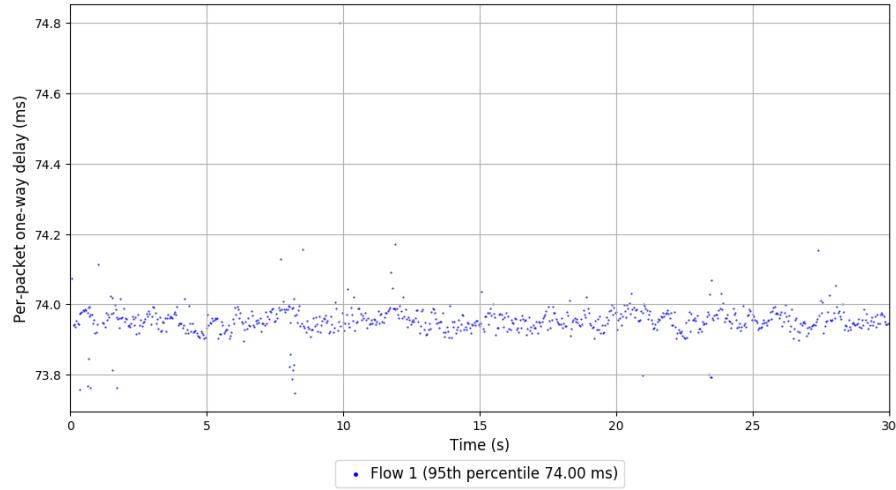
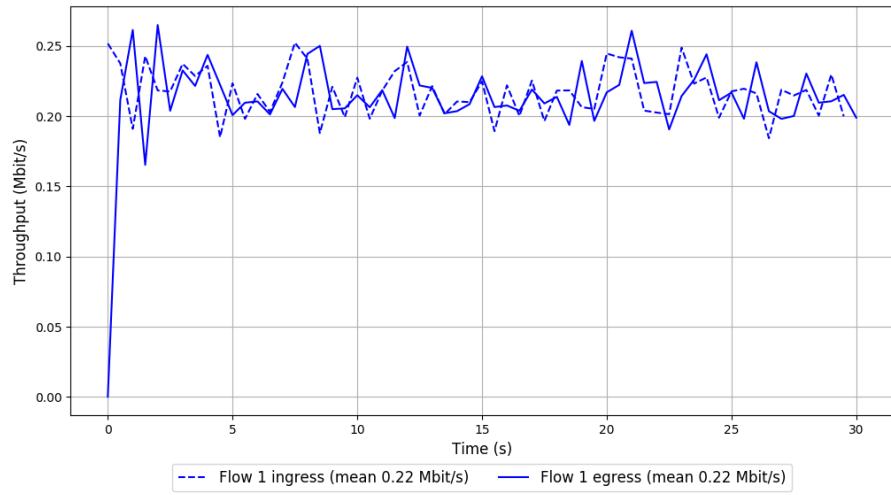


```
Run 1: Statistics of SCReAM

Start at: 2019-01-21 21:05:03
End at: 2019-01-21 21:05:33
Local clock offset: 0.682 ms
Remote clock offset: -5.181 ms

# Below is generated by plot.py at 2019-01-21 23:22:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 73.998 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 73.998 ms
Loss rate: 0.26%
```

Run 1: Report of SCReAM — Data Link

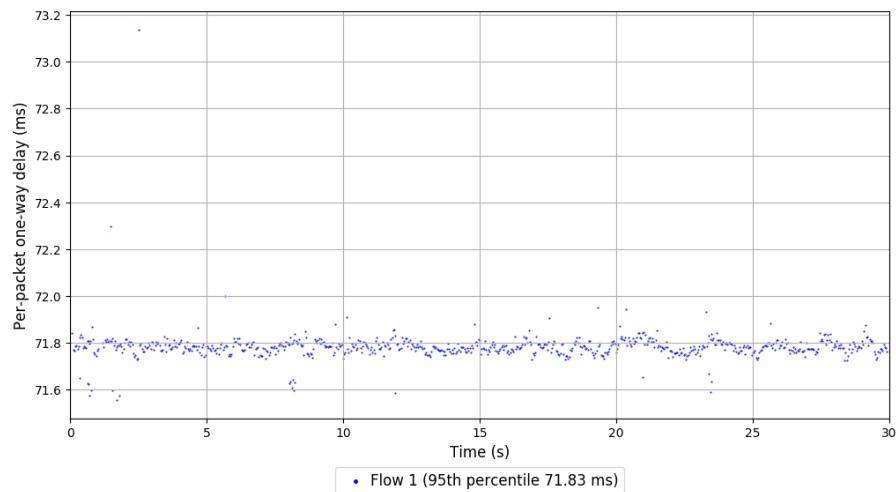
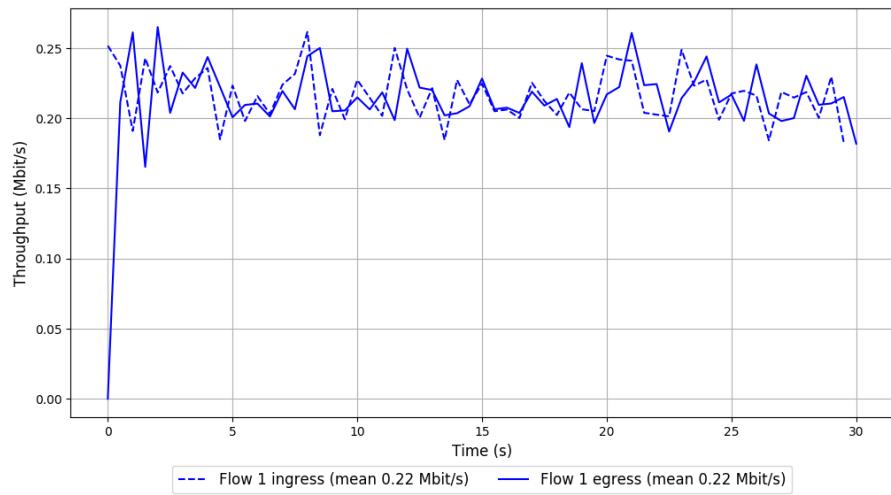


Run 2: Statistics of SCReAM

```
Start at: 2019-01-21 21:30:52
End at: 2019-01-21 21:31:22
Local clock offset: -0.77 ms
Remote clock offset: -3.255 ms

# Below is generated by plot.py at 2019-01-21 23:22:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 71.827 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 71.827 ms
Loss rate: 0.26%
```

Run 2: Report of SCReAM — Data Link

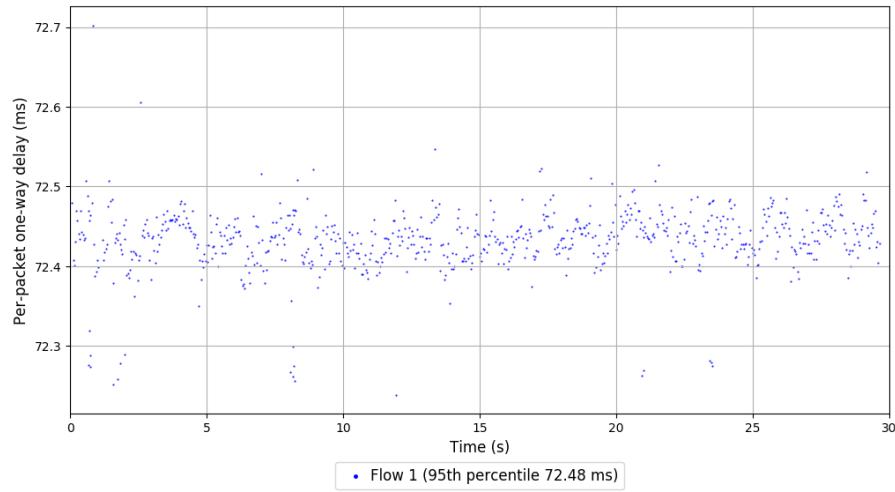
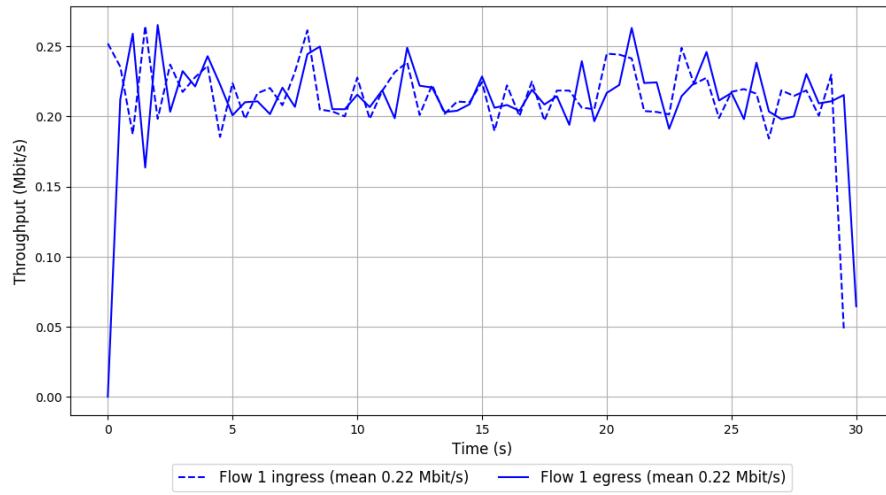


Run 3: Statistics of SCReAM

```
Start at: 2019-01-21 21:56:35
End at: 2019-01-21 21:57:05
Local clock offset: 0.18 ms
Remote clock offset: -4.415 ms

# Below is generated by plot.py at 2019-01-21 23:22:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 72.483 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 72.483 ms
Loss rate: 0.13%
```

Run 3: Report of SCReAM — Data Link

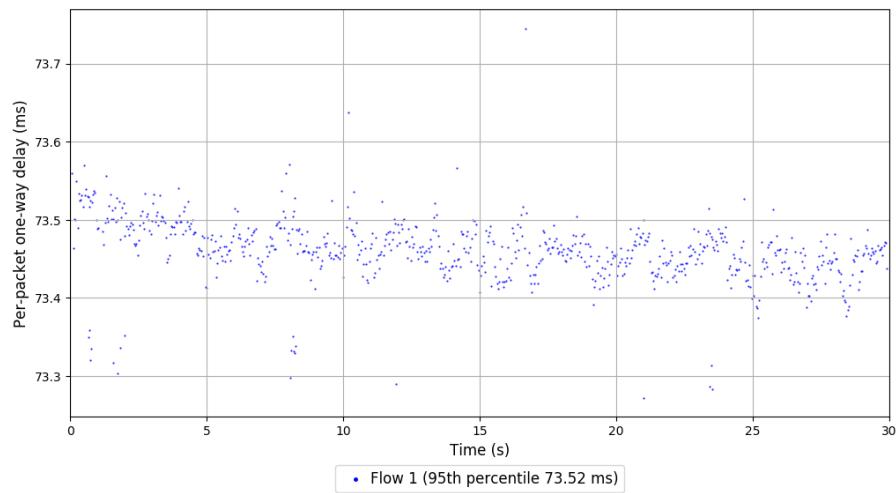
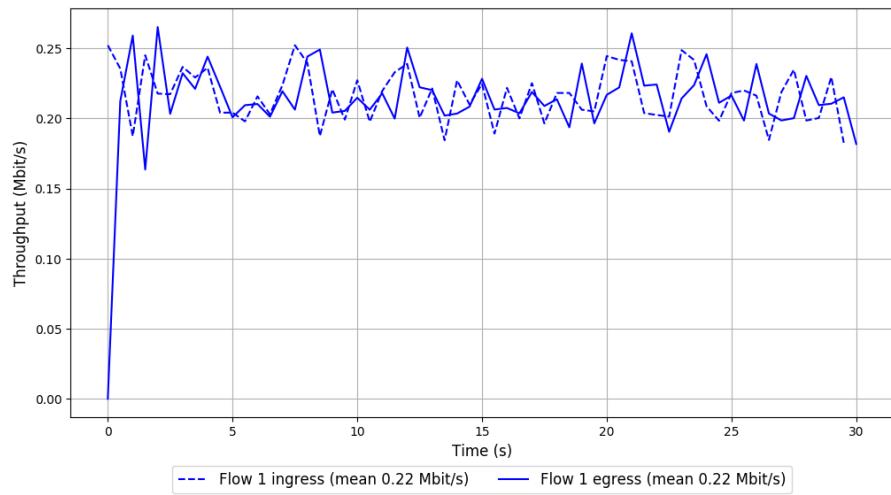


Run 4: Statistics of SCReAM

```
Start at: 2019-01-21 22:21:19
End at: 2019-01-21 22:21:49
Local clock offset: 1.948 ms
Remote clock offset: -5.558 ms

# Below is generated by plot.py at 2019-01-21 23:22:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 73.521 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 73.521 ms
Loss rate: 0.26%
```

Run 4: Report of SCReAM — Data Link

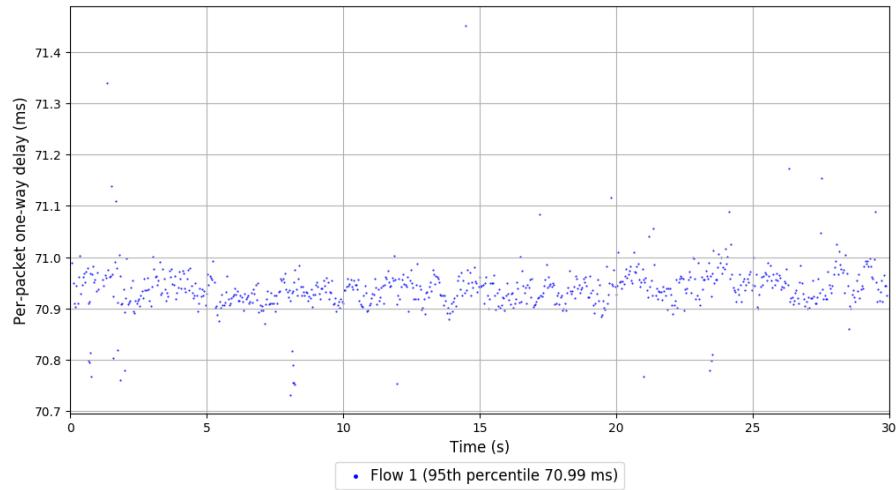
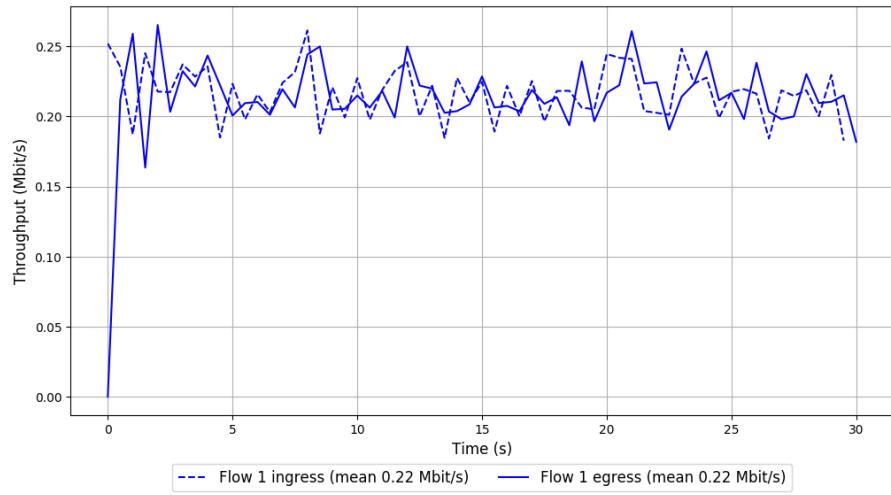


Run 5: Statistics of SCReAM

```
Start at: 2019-01-21 22:47:37
End at: 2019-01-21 22:48:07
Local clock offset: 0.57 ms
Remote clock offset: -2.901 ms

# Below is generated by plot.py at 2019-01-21 23:22:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 70.992 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 70.992 ms
Loss rate: 0.26%
```

Run 5: Report of SCReAM — Data Link

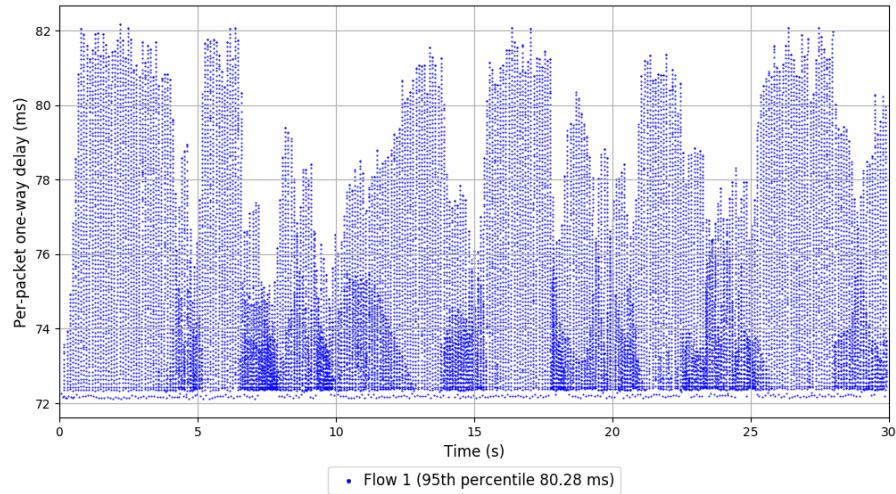
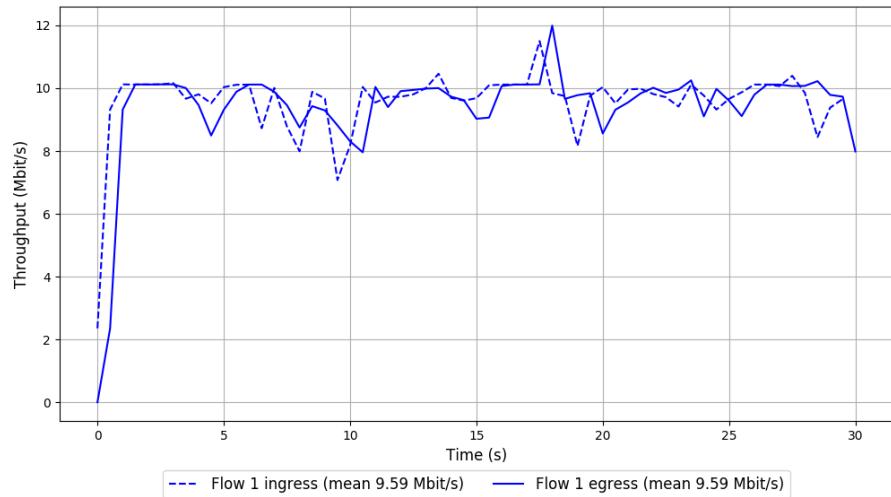


Run 1: Statistics of Sprout

```
Start at: 2019-01-21 21:19:54
End at: 2019-01-21 21:20:24
Local clock offset: 0.233 ms
Remote clock offset: -3.44 ms

# Below is generated by plot.py at 2019-01-21 23:22:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.59 Mbit/s
95th percentile per-packet one-way delay: 80.275 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 9.59 Mbit/s
95th percentile per-packet one-way delay: 80.275 ms
Loss rate: 0.34%
```

Run 1: Report of Sprout — Data Link

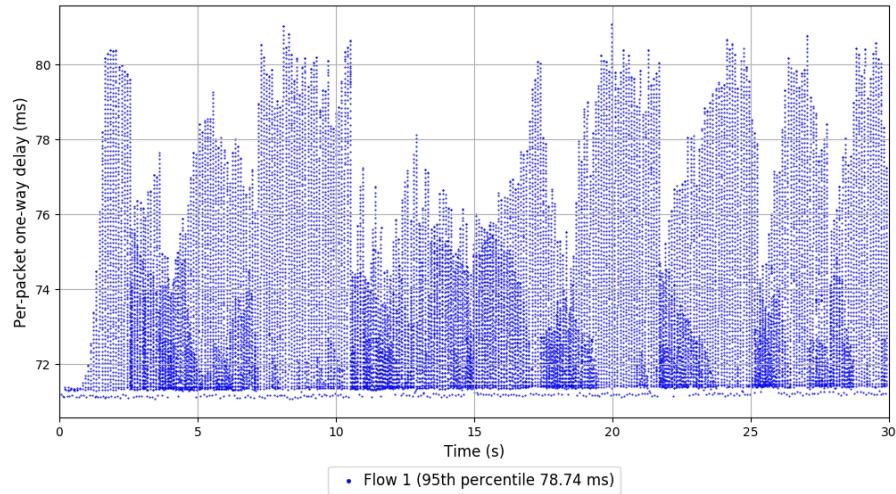
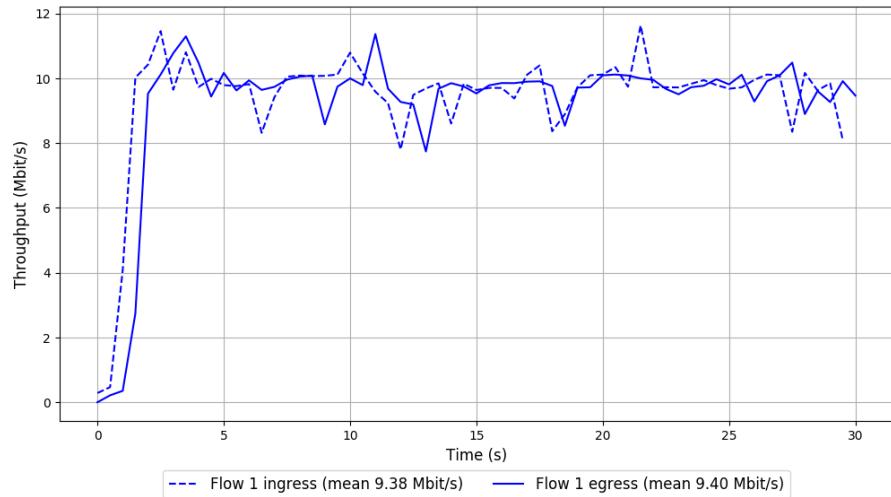


Run 2: Statistics of Sprout

```
Start at: 2019-01-21 21:45:44
End at: 2019-01-21 21:46:14
Local clock offset: 2.045 ms
Remote clock offset: -2.216 ms

# Below is generated by plot.py at 2019-01-21 23:22:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 78.736 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 78.736 ms
Loss rate: 0.10%
```

Run 2: Report of Sprout — Data Link

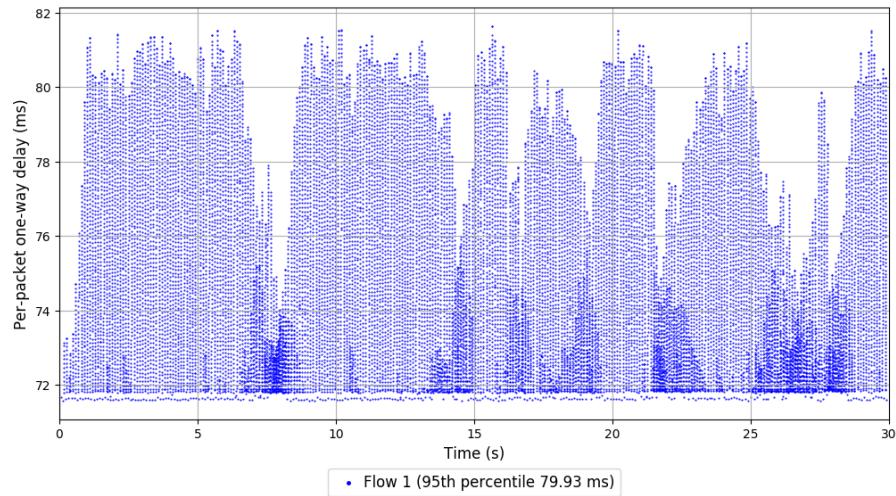
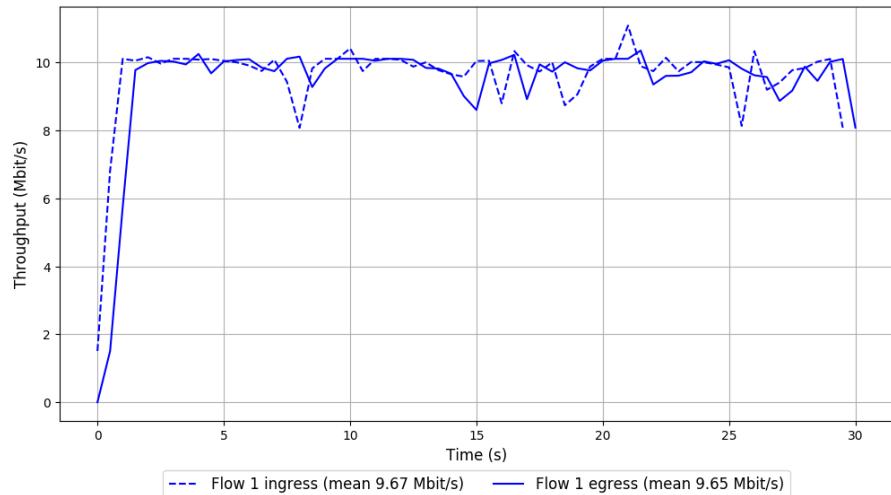


Run 3: Statistics of Sprout

```
Start at: 2019-01-21 22:10:38
End at: 2019-01-21 22:11:08
Local clock offset: -1.243 ms
Remote clock offset: -4.678 ms

# Below is generated by plot.py at 2019-01-21 23:22:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.65 Mbit/s
95th percentile per-packet one-way delay: 79.933 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 9.65 Mbit/s
95th percentile per-packet one-way delay: 79.933 ms
Loss rate: 0.35%
```

Run 3: Report of Sprout — Data Link

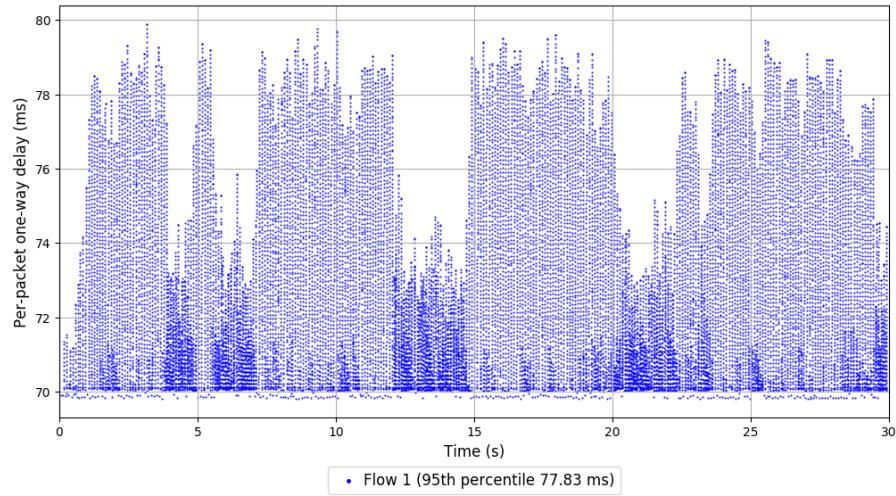
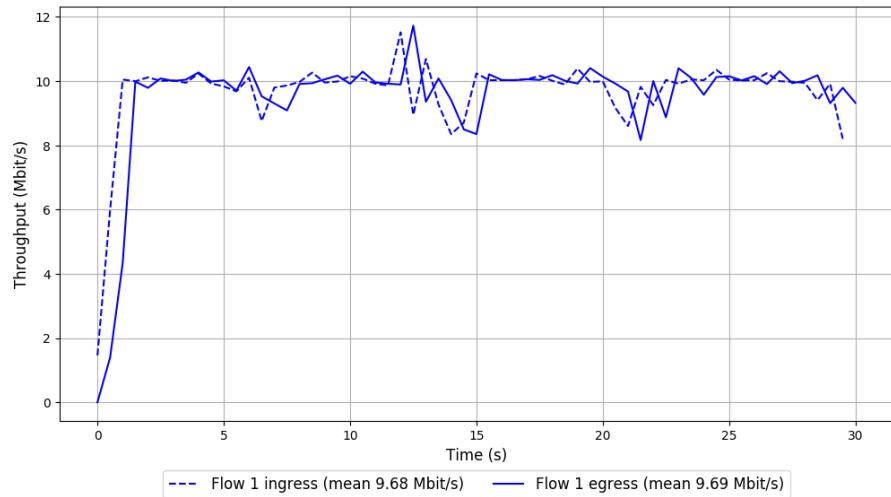


Run 4: Statistics of Sprout

```
Start at: 2019-01-21 22:36:00
End at: 2019-01-21 22:36:30
Local clock offset: 0.042 ms
Remote clock offset: -4.635 ms

# Below is generated by plot.py at 2019-01-21 23:22:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.69 Mbit/s
95th percentile per-packet one-way delay: 77.829 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 9.69 Mbit/s
95th percentile per-packet one-way delay: 77.829 ms
Loss rate: 0.15%
```

Run 4: Report of Sprout — Data Link

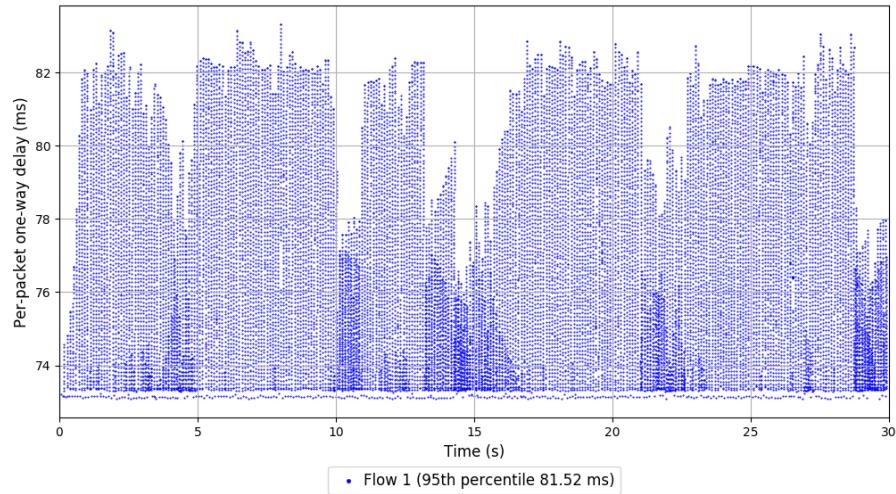
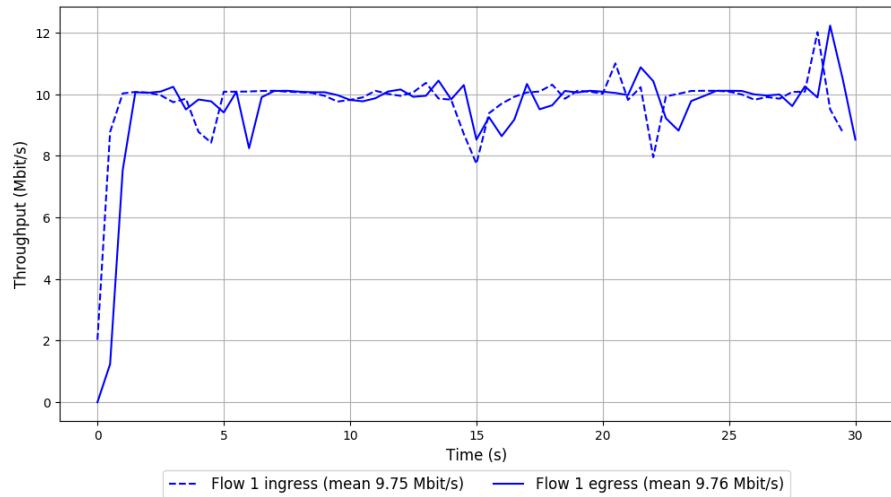


Run 5: Statistics of Sprout

```
Start at: 2019-01-21 23:02:07
End at: 2019-01-21 23:02:37
Local clock offset: 1.813 ms
Remote clock offset: -3.546 ms

# Below is generated by plot.py at 2019-01-21 23:22:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.76 Mbit/s
95th percentile per-packet one-way delay: 81.524 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 9.76 Mbit/s
95th percentile per-packet one-way delay: 81.524 ms
Loss rate: 0.18%
```

Run 5: Report of Sprout — Data Link

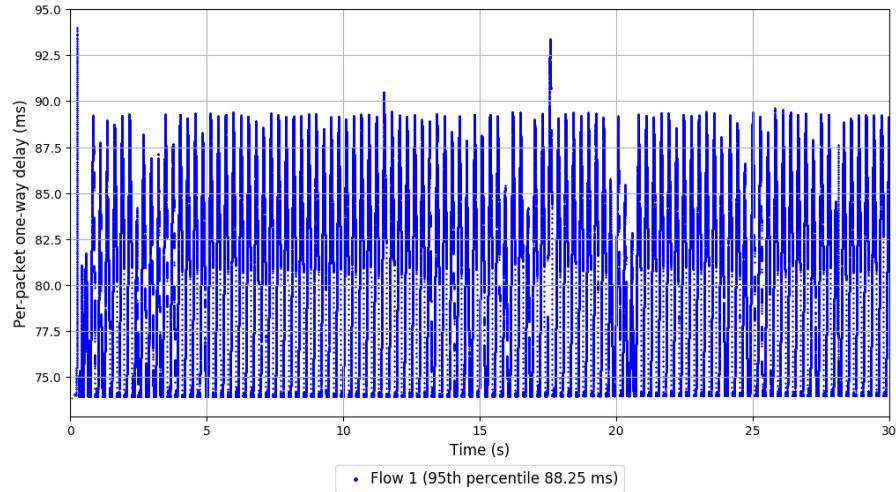
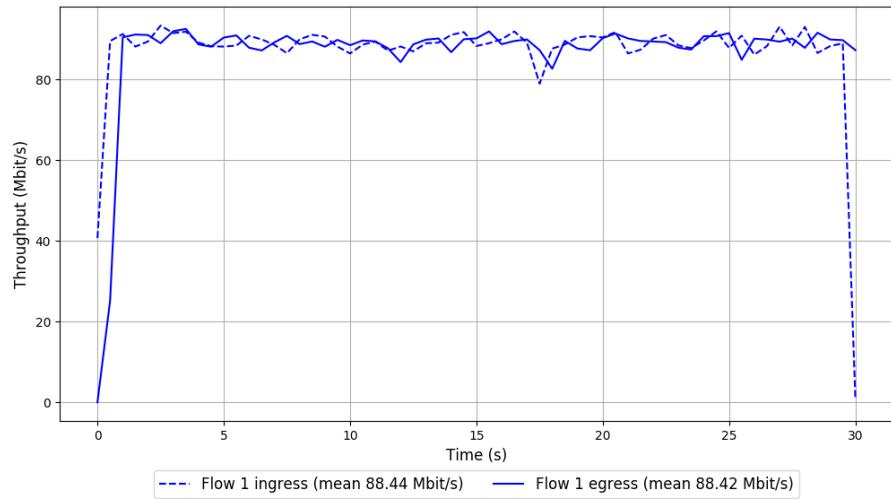


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-01-21 21:27:08
End at: 2019-01-21 21:27:38
Local clock offset: 1.914 ms
Remote clock offset: -2.471 ms

# Below is generated by plot.py at 2019-01-21 23:23:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.42 Mbit/s
95th percentile per-packet one-way delay: 88.255 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 88.42 Mbit/s
95th percentile per-packet one-way delay: 88.255 ms
Loss rate: 0.29%
```

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

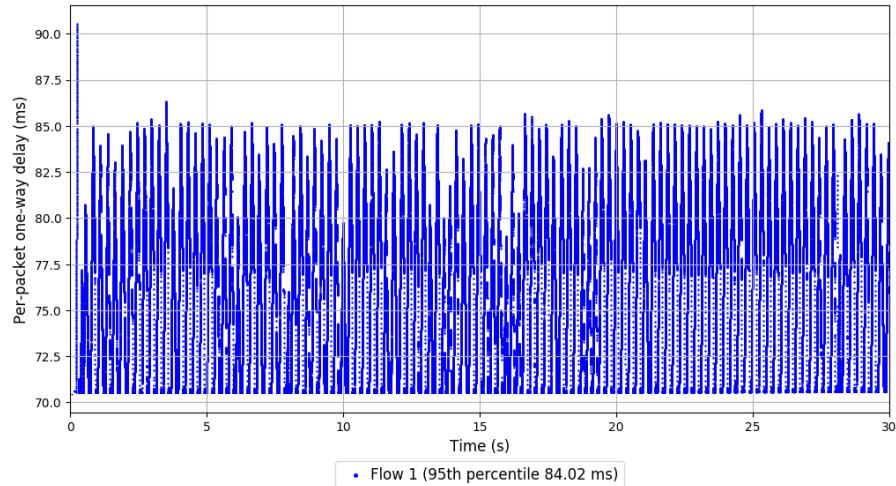
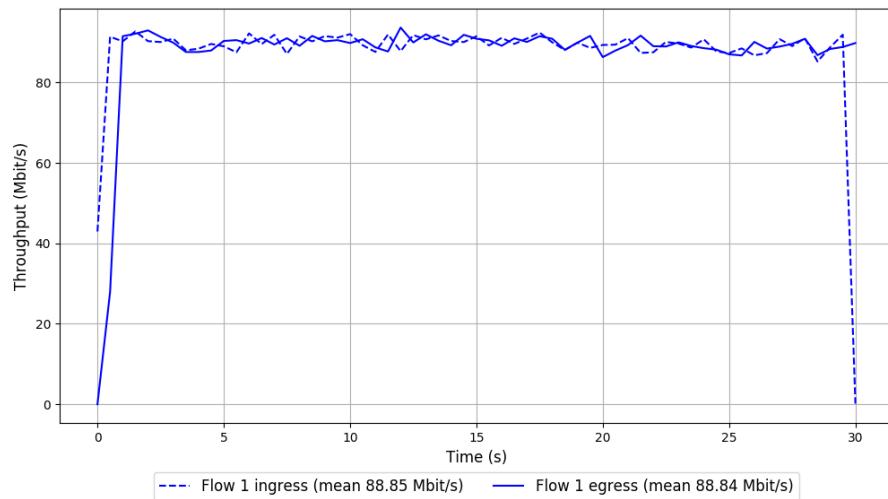


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-01-21 21:53:02
End at: 2019-01-21 21:53:32
Local clock offset: 0.011 ms
Remote clock offset: -2.968 ms

# Below is generated by plot.py at 2019-01-21 23:23:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.84 Mbit/s
95th percentile per-packet one-way delay: 84.019 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 88.84 Mbit/s
95th percentile per-packet one-way delay: 84.019 ms
Loss rate: 0.27%
```

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

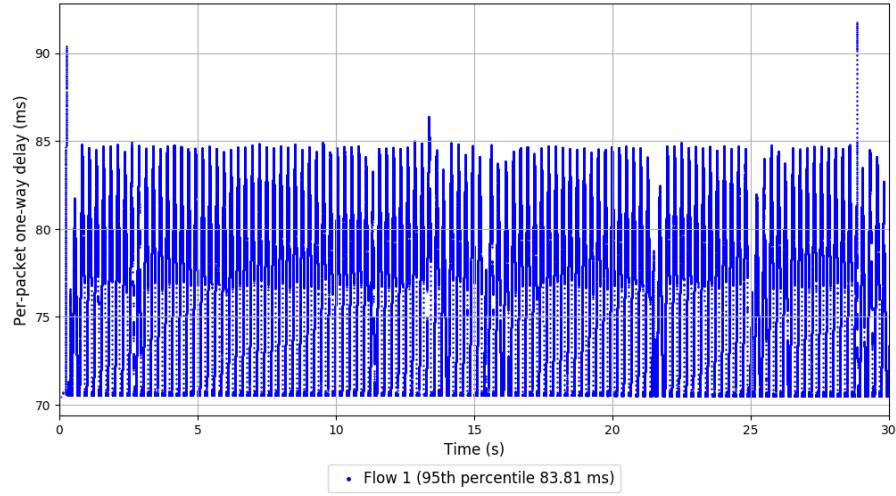
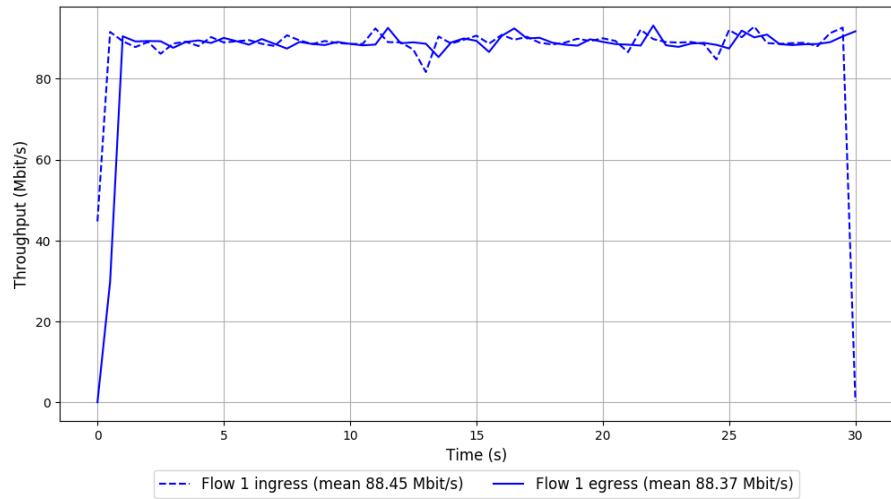


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-01-21 22:17:41
End at: 2019-01-21 22:18:11
Local clock offset: -1.08 ms
Remote clock offset: -5.779 ms

# Below is generated by plot.py at 2019-01-21 23:23:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.37 Mbit/s
95th percentile per-packet one-way delay: 83.807 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 88.37 Mbit/s
95th percentile per-packet one-way delay: 83.807 ms
Loss rate: 0.34%
```

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

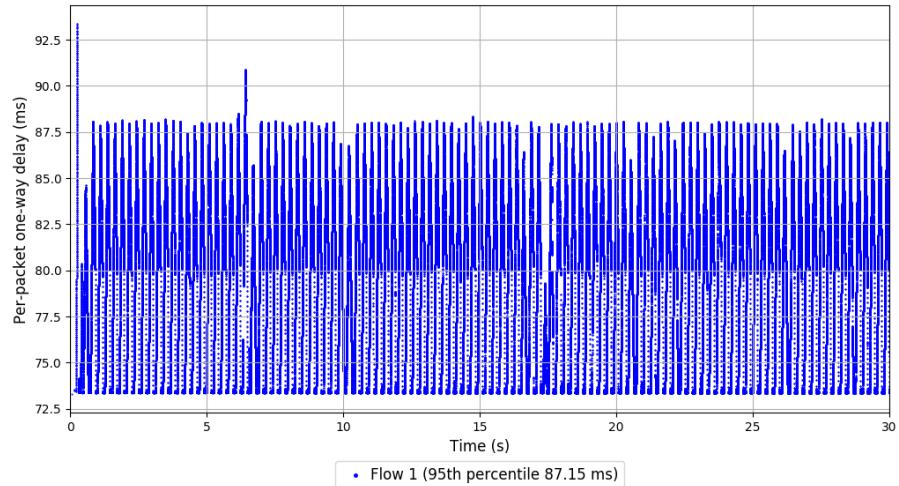
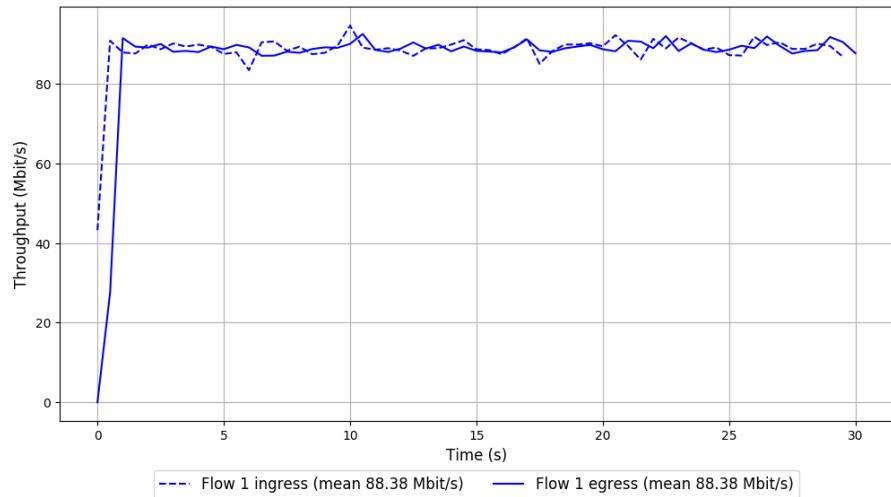


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-01-21 22:43:31
End at: 2019-01-21 22:44:01
Local clock offset: 1.405 ms
Remote clock offset: -4.567 ms

# Below is generated by plot.py at 2019-01-21 23:23:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.38 Mbit/s
95th percentile per-packet one-way delay: 87.152 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 88.38 Mbit/s
95th percentile per-packet one-way delay: 87.152 ms
Loss rate: 0.26%
```

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

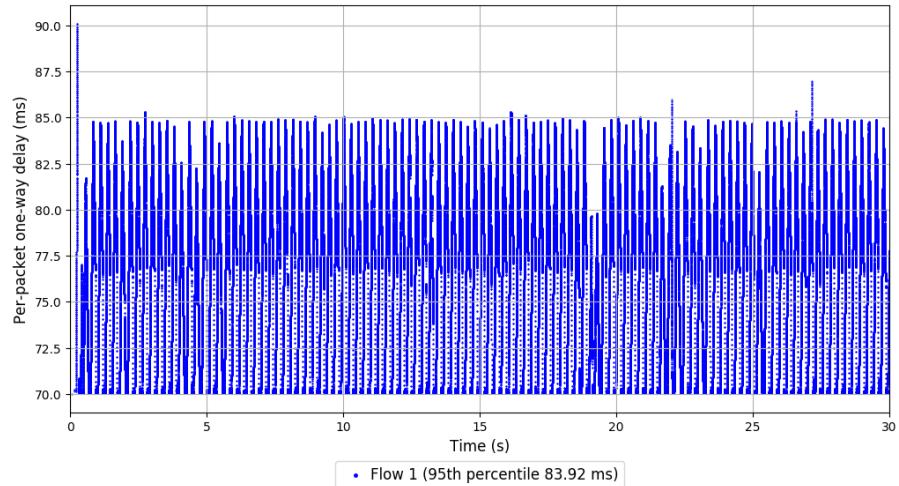
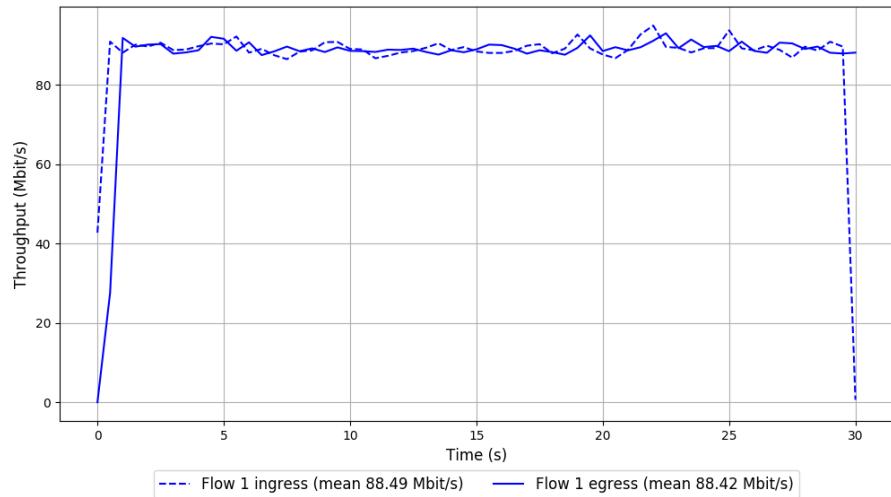


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-01-21 23:09:24
End at: 2019-01-21 23:09:54
Local clock offset: -0.299 ms
Remote clock offset: -1.961 ms

# Below is generated by plot.py at 2019-01-21 23:24:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.42 Mbit/s
95th percentile per-packet one-way delay: 83.925 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 88.42 Mbit/s
95th percentile per-packet one-way delay: 83.925 ms
Loss rate: 0.34%
```

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

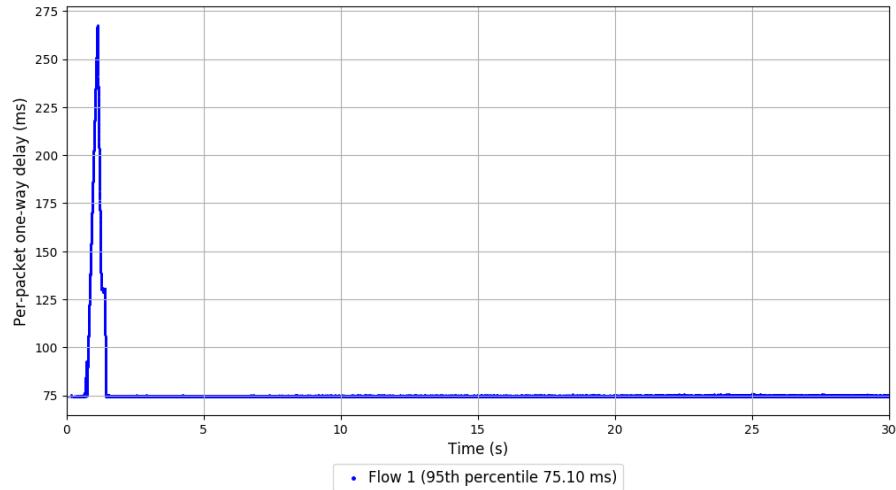
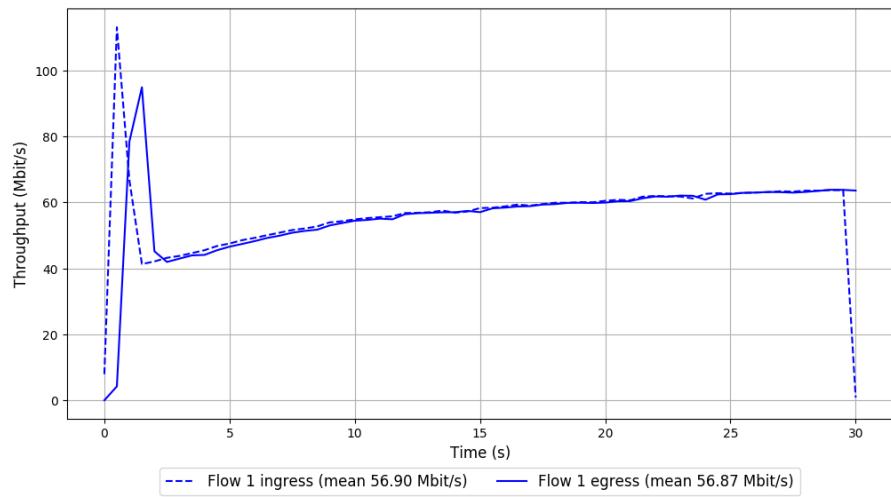


Run 1: Statistics of TCP Vegas

```
Start at: 2019-01-21 21:11:03
End at: 2019-01-21 21:11:33
Local clock offset: 1.272 ms
Remote clock offset: -4.982 ms

# Below is generated by plot.py at 2019-01-21 23:24:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.87 Mbit/s
95th percentile per-packet one-way delay: 75.104 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 56.87 Mbit/s
95th percentile per-packet one-way delay: 75.104 ms
Loss rate: 0.31%
```

Run 1: Report of TCP Vegas — Data Link

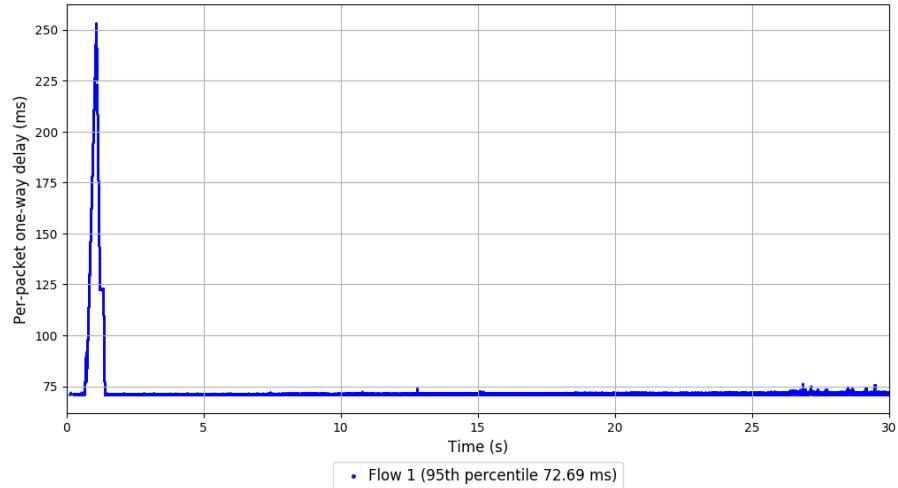
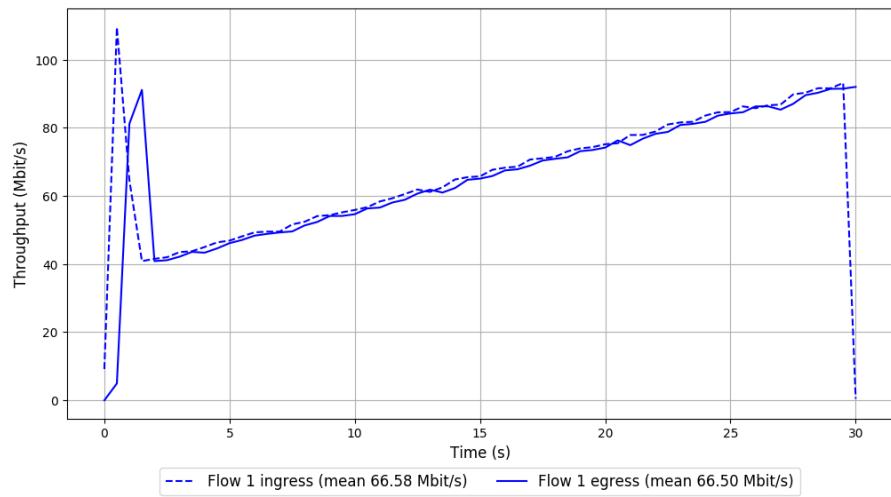


Run 2: Statistics of TCP Vegas

```
Start at: 2019-01-21 21:37:04
End at: 2019-01-21 21:37:34
Local clock offset: 0.677 ms
Remote clock offset: -3.416 ms

# Below is generated by plot.py at 2019-01-21 23:24:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.50 Mbit/s
95th percentile per-packet one-way delay: 72.694 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 66.50 Mbit/s
95th percentile per-packet one-way delay: 72.694 ms
Loss rate: 0.38%
```

Run 2: Report of TCP Vegas — Data Link

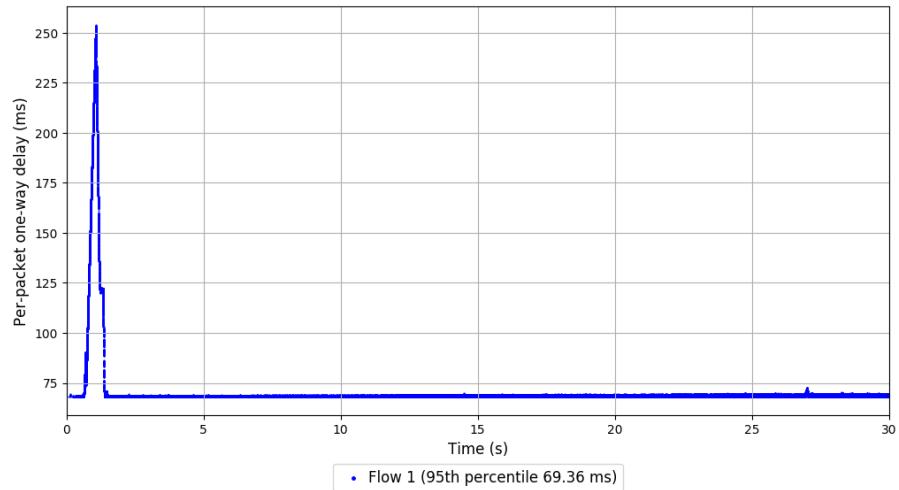
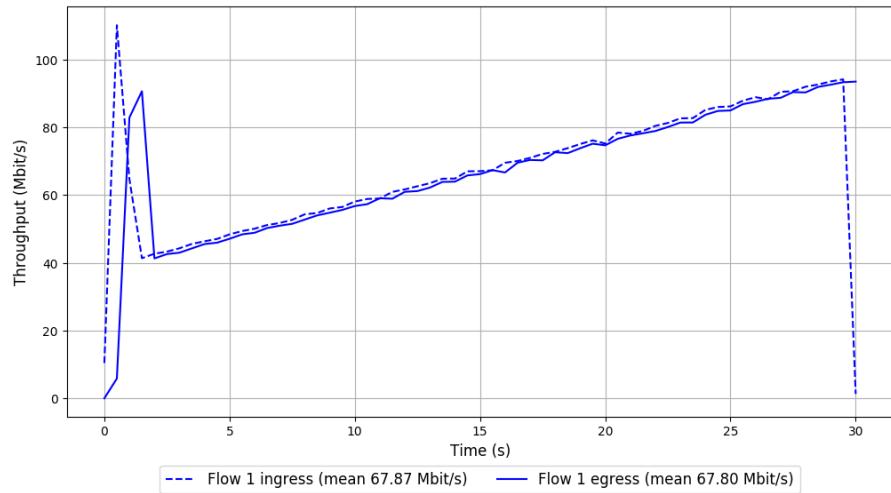


Run 3: Statistics of TCP Vegas

```
Start at: 2019-01-21 22:02:23
End at: 2019-01-21 22:02:53
Local clock offset: -2.365 ms
Remote clock offset: -2.549 ms

# Below is generated by plot.py at 2019-01-21 23:24:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.80 Mbit/s
95th percentile per-packet one-way delay: 69.358 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 67.80 Mbit/s
95th percentile per-packet one-way delay: 69.358 ms
Loss rate: 0.38%
```

Run 3: Report of TCP Vegas — Data Link

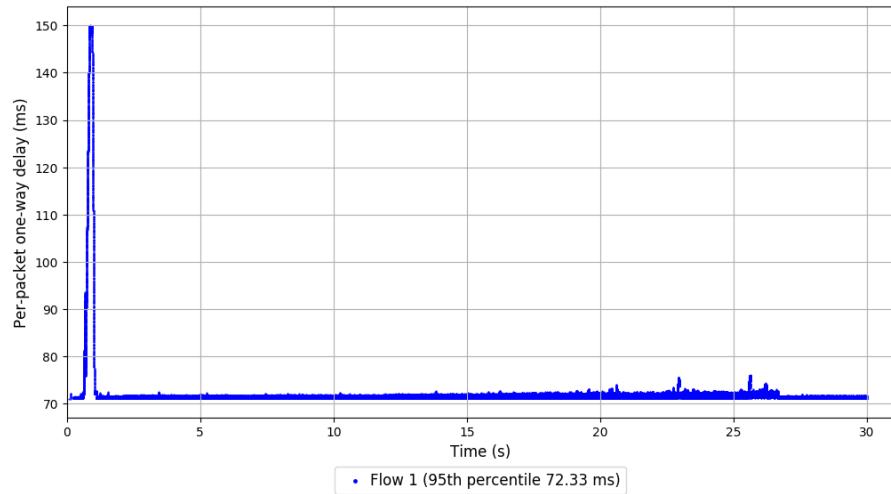
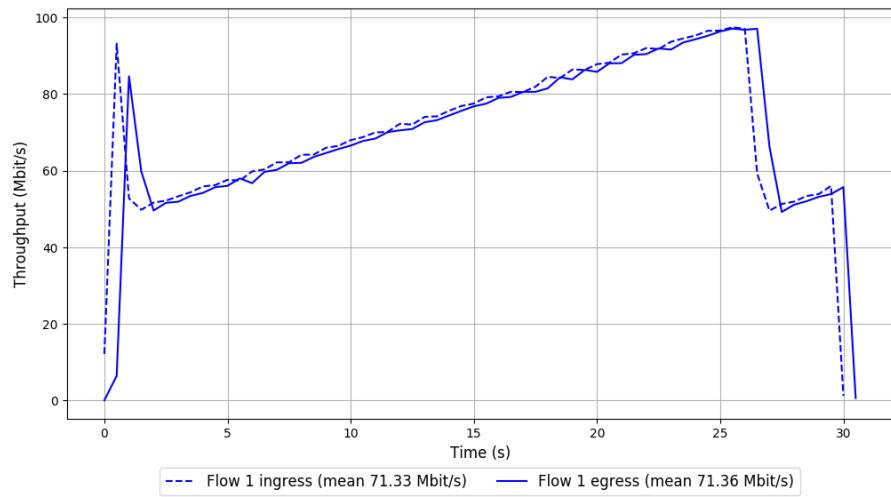


Run 4: Statistics of TCP Vegas

```
Start at: 2019-01-21 22:27:08
End at: 2019-01-21 22:27:38
Local clock offset: 1.888 ms
Remote clock offset: -4.184 ms

# Below is generated by plot.py at 2019-01-21 23:24:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.36 Mbit/s
95th percentile per-packet one-way delay: 72.334 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 71.36 Mbit/s
95th percentile per-packet one-way delay: 72.334 ms
Loss rate: 0.20%
```

Run 4: Report of TCP Vegas — Data Link

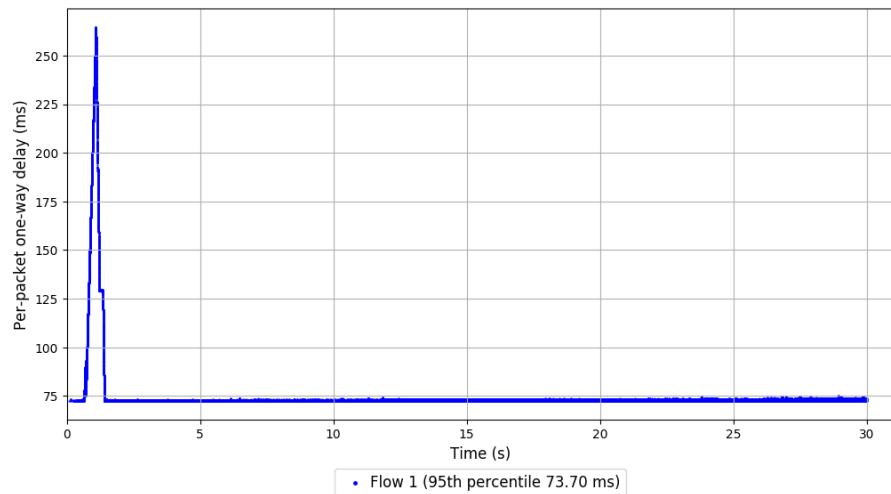
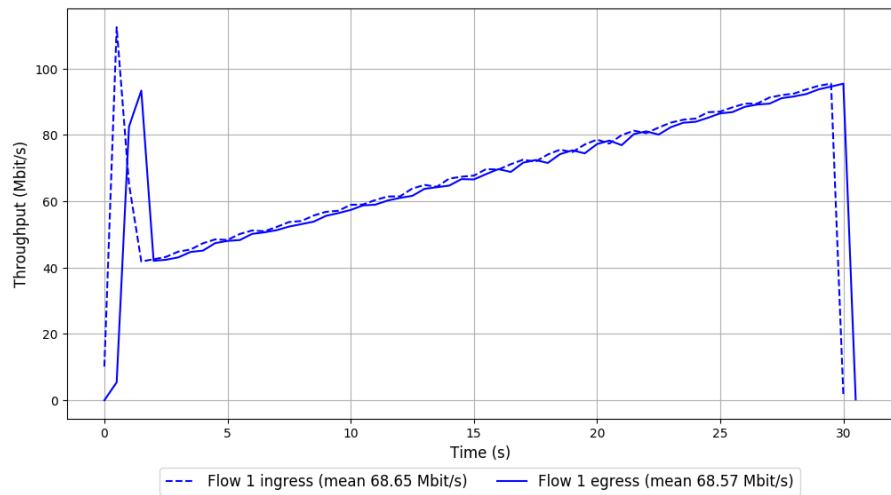


Run 5: Statistics of TCP Vegas

```
Start at: 2019-01-21 22:53:51
End at: 2019-01-21 22:54:21
Local clock offset: 0.896 ms
Remote clock offset: -3.973 ms

# Below is generated by plot.py at 2019-01-21 23:24:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.57 Mbit/s
95th percentile per-packet one-way delay: 73.704 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 68.57 Mbit/s
95th percentile per-packet one-way delay: 73.704 ms
Loss rate: 0.38%
```

Run 5: Report of TCP Vegas — Data Link

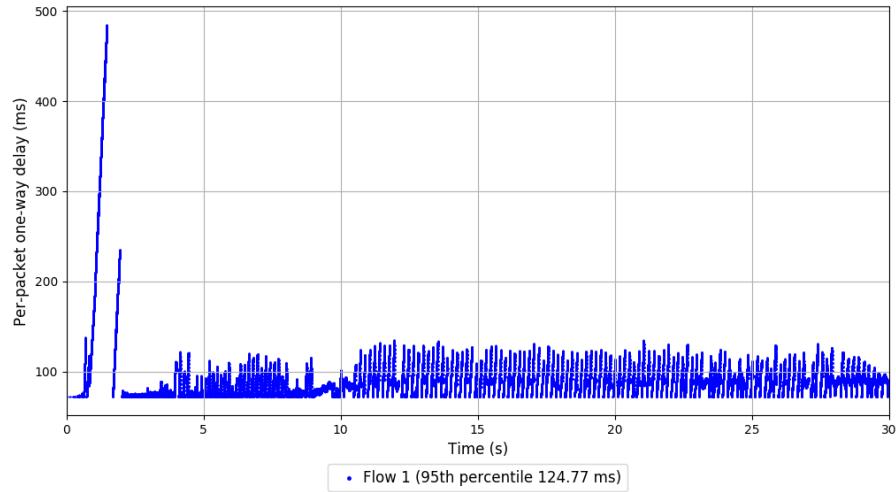
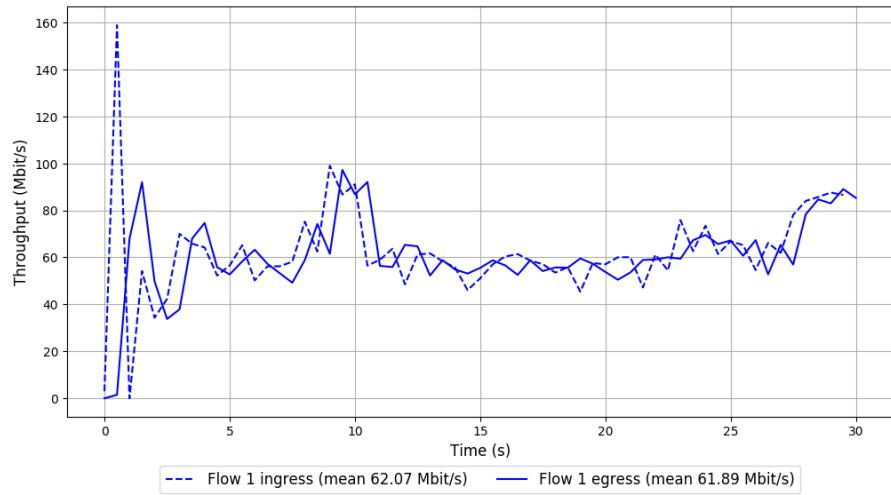


Run 1: Statistics of Verus

```
Start at: 2019-01-21 21:22:25
End at: 2019-01-21 21:22:55
Local clock offset: 1.44 ms
Remote clock offset: -4.136 ms

# Below is generated by plot.py at 2019-01-21 23:24:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.89 Mbit/s
95th percentile per-packet one-way delay: 124.769 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 61.89 Mbit/s
95th percentile per-packet one-way delay: 124.769 ms
Loss rate: 0.54%
```

Run 1: Report of Verus — Data Link

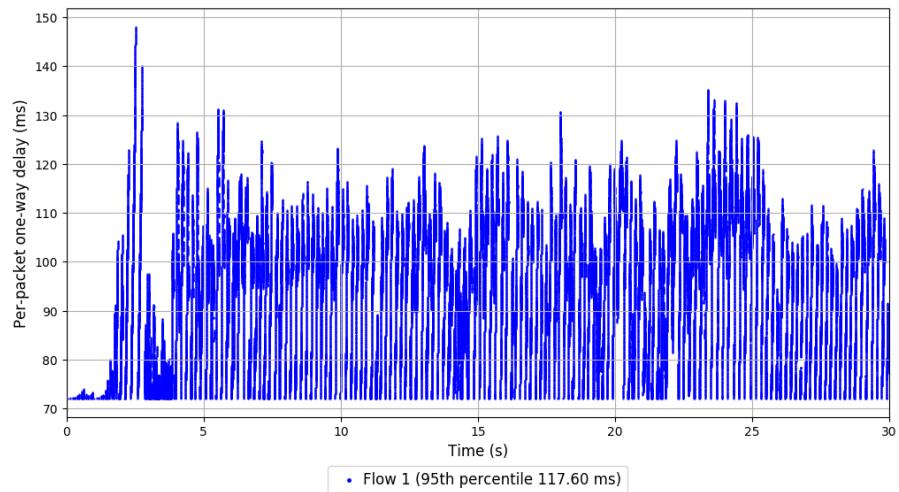
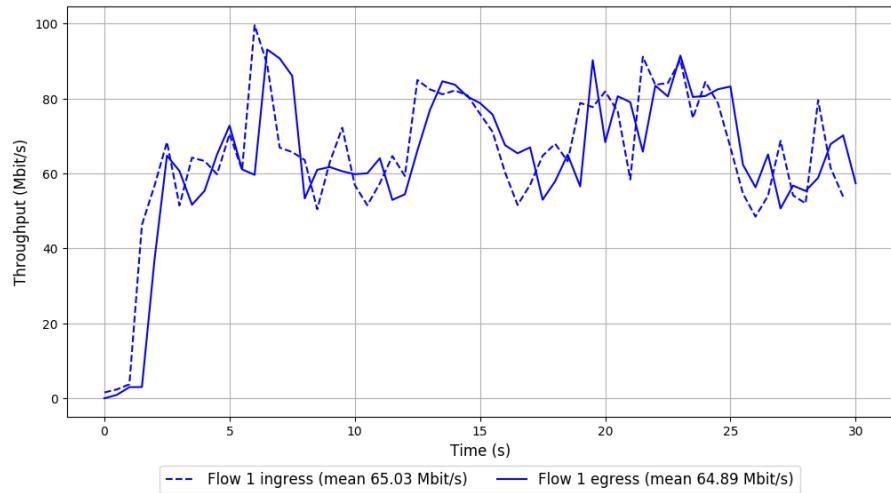


Run 2: Statistics of Verus

```
Start at: 2019-01-21 21:48:10
End at: 2019-01-21 21:48:40
Local clock offset: 0.202 ms
Remote clock offset: -4.348 ms

# Below is generated by plot.py at 2019-01-21 23:24:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.89 Mbit/s
95th percentile per-packet one-way delay: 117.601 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 64.89 Mbit/s
95th percentile per-packet one-way delay: 117.601 ms
Loss rate: 0.24%
```

Run 2: Report of Verus — Data Link

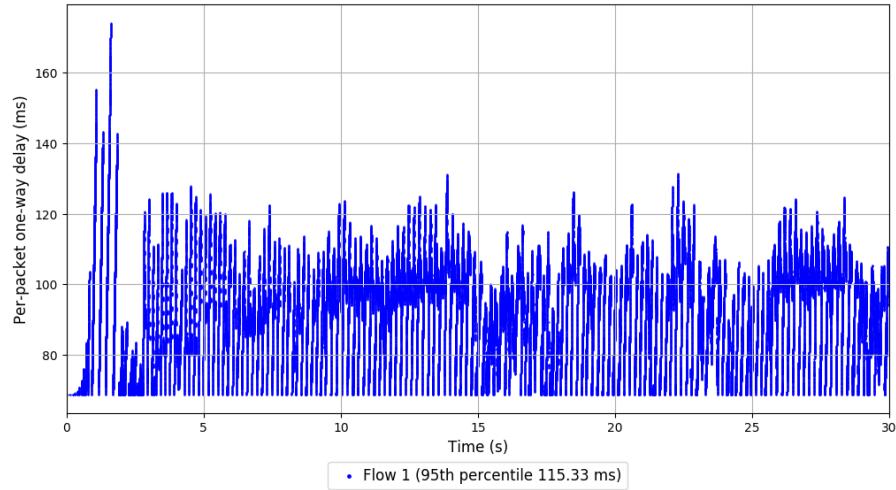
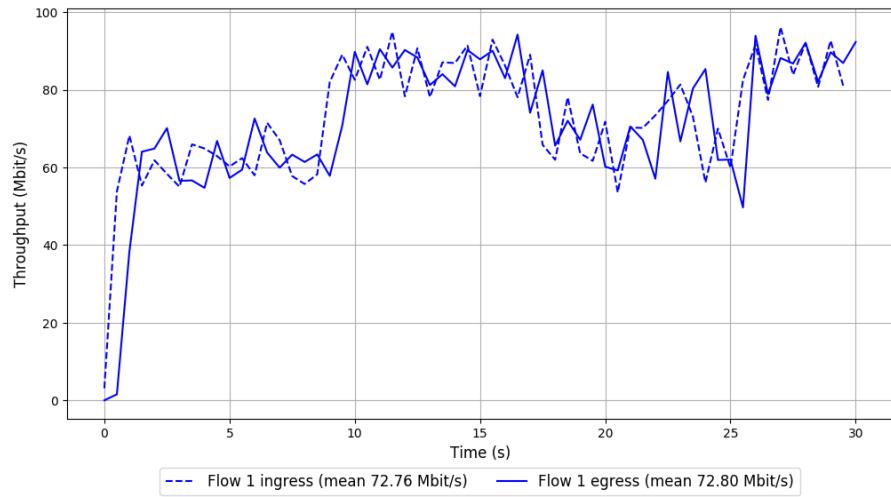


Run 3: Statistics of Verus

```
Start at: 2019-01-21 22:13:01
End at: 2019-01-21 22:13:31
Local clock offset: -2.233 ms
Remote clock offset: -2.568 ms

# Below is generated by plot.py at 2019-01-21 23:24:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.80 Mbit/s
95th percentile per-packet one-way delay: 115.330 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 72.80 Mbit/s
95th percentile per-packet one-way delay: 115.330 ms
Loss rate: 0.21%
```

Run 3: Report of Verus — Data Link

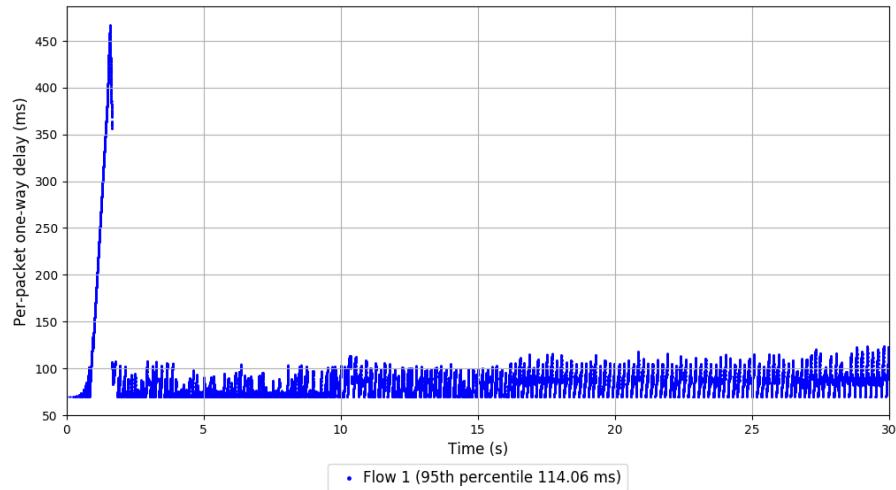
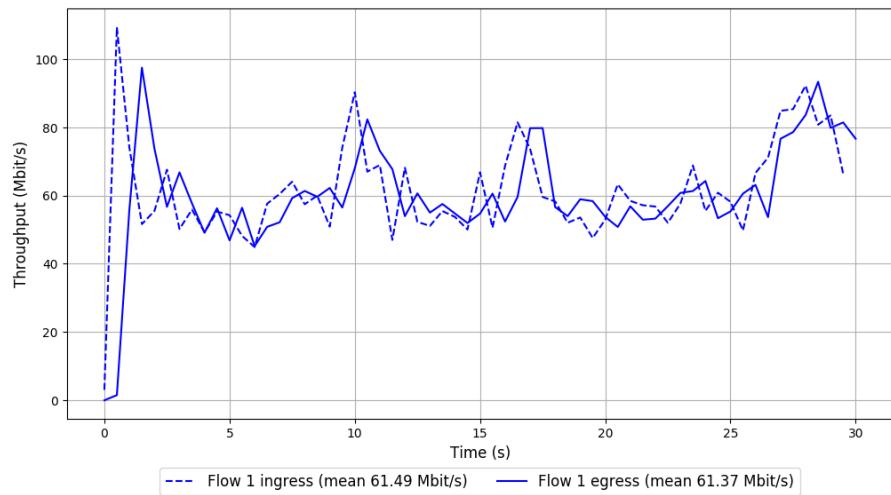


Run 4: Statistics of Verus

```
Start at: 2019-01-21 22:38:27
End at: 2019-01-21 22:38:57
Local clock offset: 1.116 ms
Remote clock offset: -4.03 ms

# Below is generated by plot.py at 2019-01-21 23:24:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.37 Mbit/s
95th percentile per-packet one-way delay: 114.060 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 61.37 Mbit/s
95th percentile per-packet one-way delay: 114.060 ms
Loss rate: 0.26%
```

Run 4: Report of Verus — Data Link

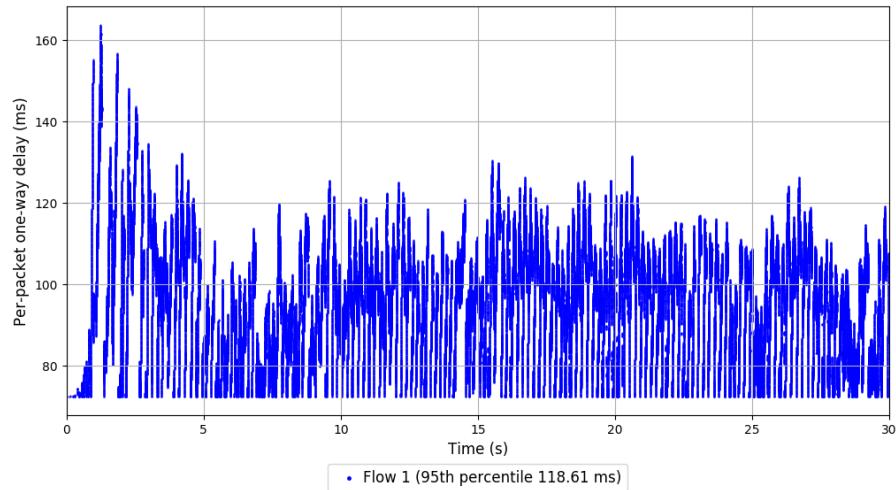
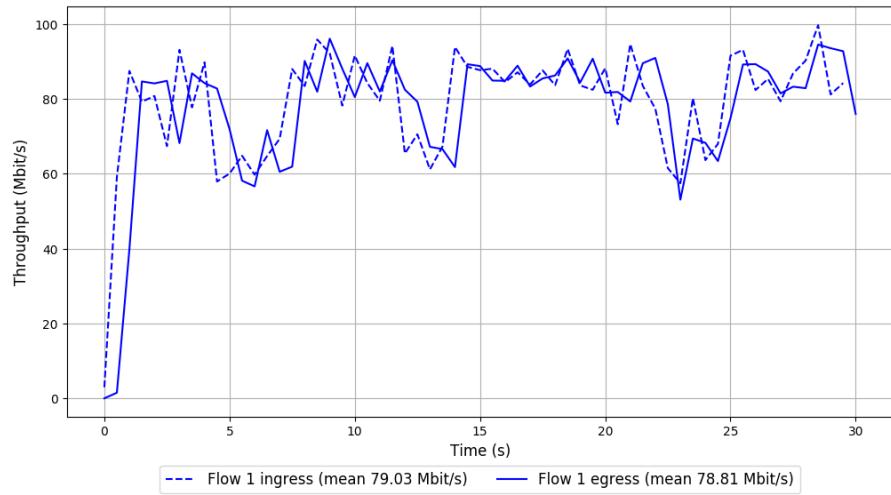


Run 5: Statistics of Verus

```
Start at: 2019-01-21 23:04:34
End at: 2019-01-21 23:05:04
Local clock offset: 0.204 ms
Remote clock offset: -3.838 ms

# Below is generated by plot.py at 2019-01-21 23:24:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.81 Mbit/s
95th percentile per-packet one-way delay: 118.607 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 78.81 Mbit/s
95th percentile per-packet one-way delay: 118.607 ms
Loss rate: 0.41%
```

Run 5: Report of Verus — Data Link

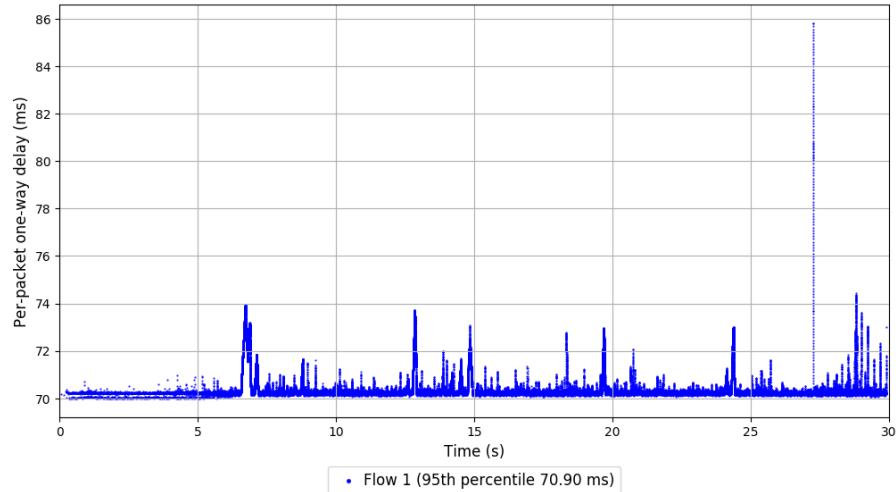
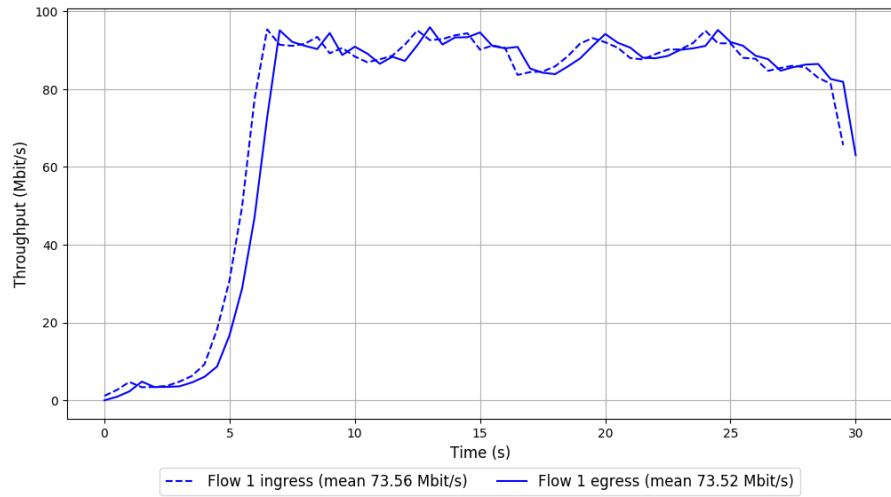


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-01-21 21:03:51
End at: 2019-01-21 21:04:21
Local clock offset: 1.021 ms
Remote clock offset: -3.593 ms

# Below is generated by plot.py at 2019-01-21 23:24:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.52 Mbit/s
95th percentile per-packet one-way delay: 70.902 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 73.52 Mbit/s
95th percentile per-packet one-way delay: 70.902 ms
Loss rate: 0.31%
```

Run 1: Report of PCC-Vivace — Data Link

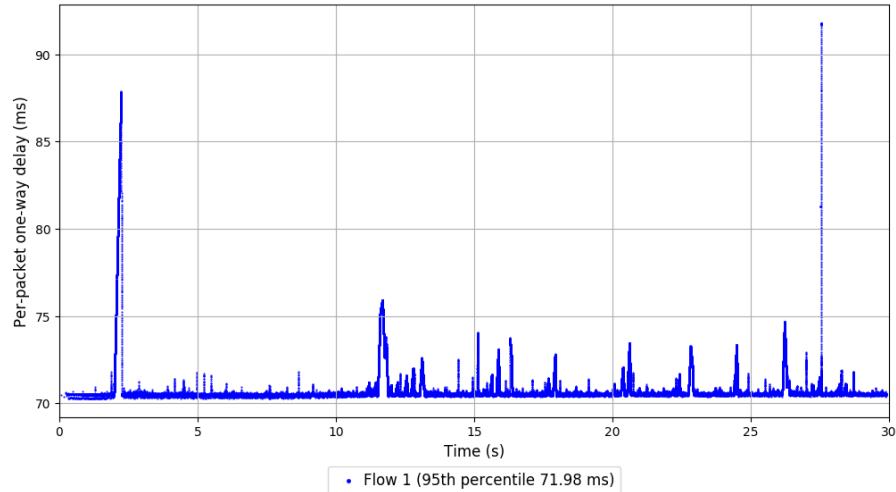
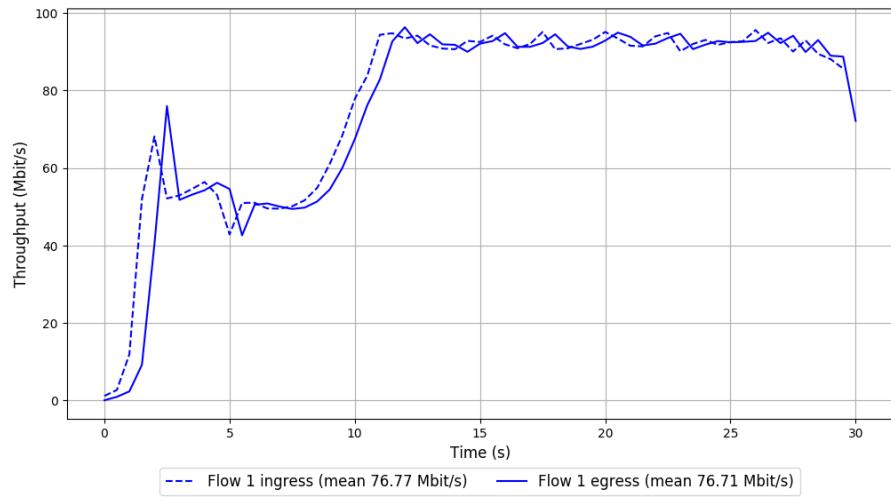


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-01-21 21:29:37
End at: 2019-01-21 21:30:07
Local clock offset: 1.456 ms
Remote clock offset: -2.304 ms

# Below is generated by plot.py at 2019-01-21 23:24:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.71 Mbit/s
95th percentile per-packet one-way delay: 71.979 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 76.71 Mbit/s
95th percentile per-packet one-way delay: 71.979 ms
Loss rate: 0.57%
```

Run 2: Report of PCC-Vivace — Data Link

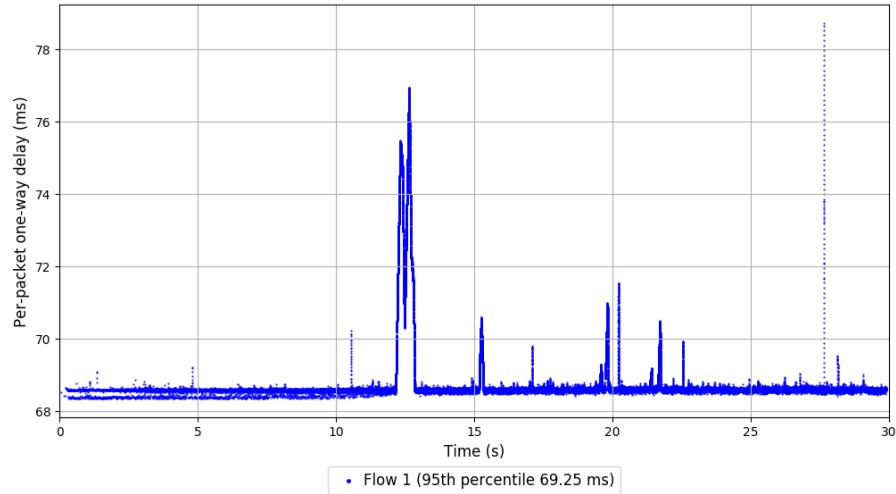
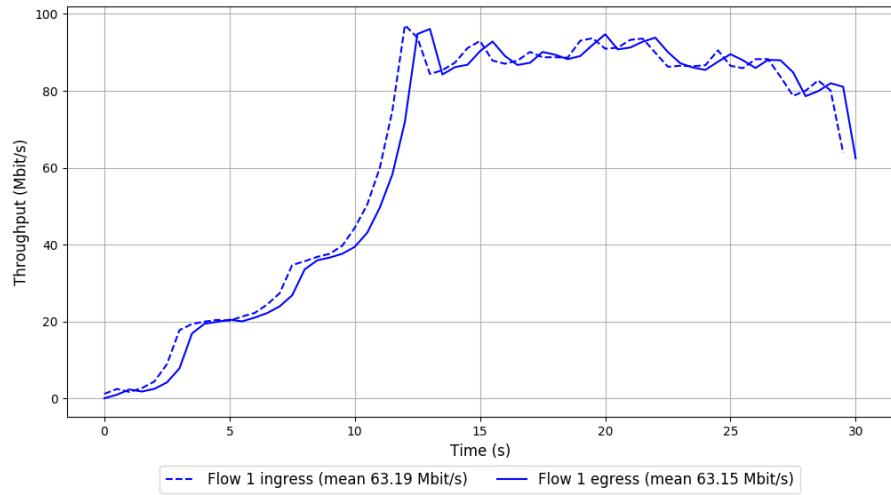


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-01-21 21:55:25
End at: 2019-01-21 21:55:55
Local clock offset: -1.403 ms
Remote clock offset: -4.7 ms

# Below is generated by plot.py at 2019-01-21 23:24:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.15 Mbit/s
95th percentile per-packet one-way delay: 69.248 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 63.15 Mbit/s
95th percentile per-packet one-way delay: 69.248 ms
Loss rate: 0.32%
```

Run 3: Report of PCC-Vivace — Data Link

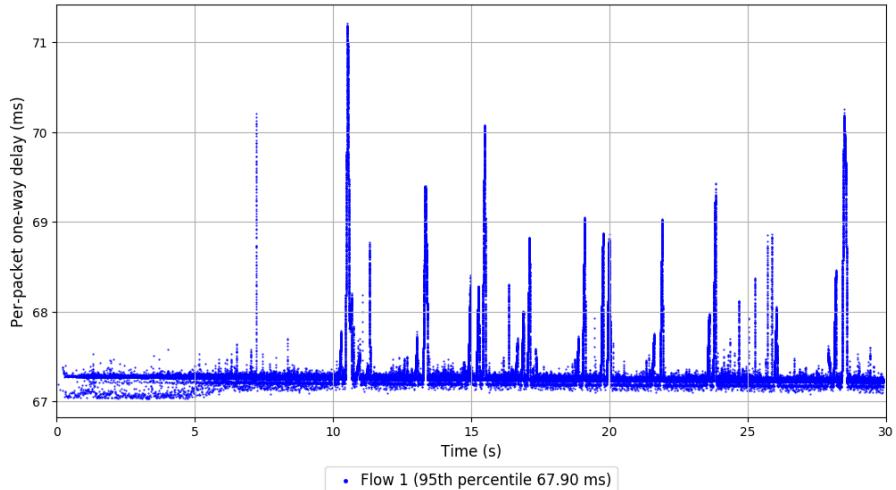
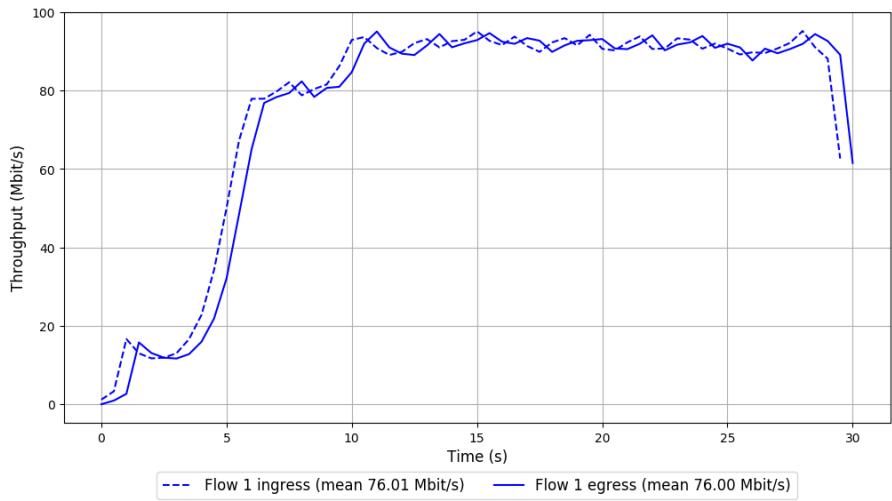


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-01-21 22:20:07
End at: 2019-01-21 22:20:37
Local clock offset: -0.784 ms
Remote clock offset: -5.016 ms

# Below is generated by plot.py at 2019-01-21 23:24:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.00 Mbit/s
95th percentile per-packet one-way delay: 67.897 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 76.00 Mbit/s
95th percentile per-packet one-way delay: 67.897 ms
Loss rate: 0.26%
```

Run 4: Report of PCC-Vivace — Data Link

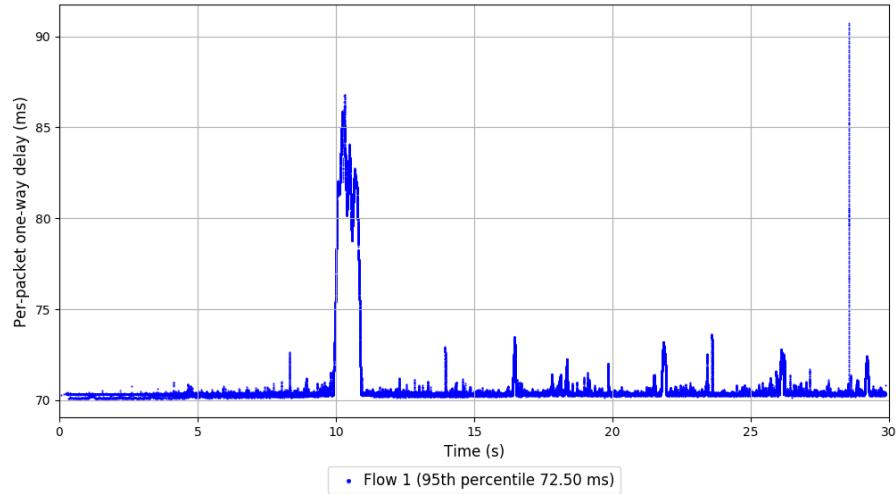
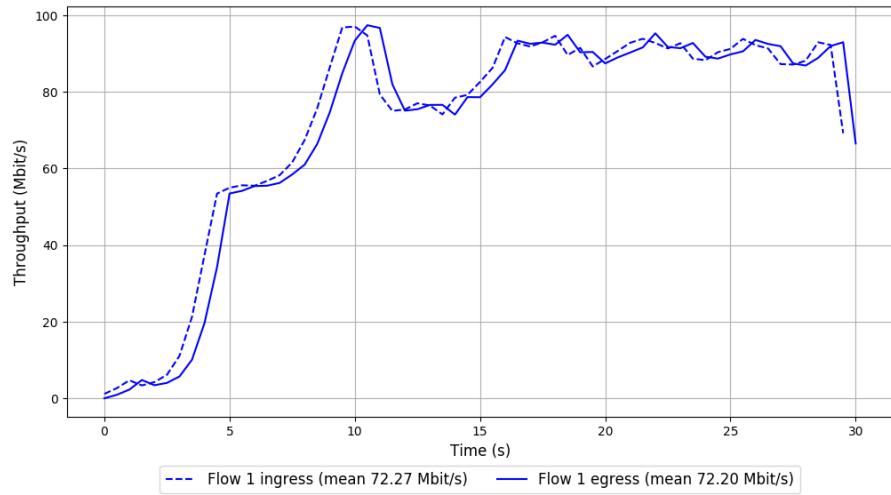


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-01-21 22:46:12
End at: 2019-01-21 22:46:42
Local clock offset: 0.972 ms
Remote clock offset: -1.926 ms

# Below is generated by plot.py at 2019-01-21 23:24:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.20 Mbit/s
95th percentile per-packet one-way delay: 72.498 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 72.20 Mbit/s
95th percentile per-packet one-way delay: 72.498 ms
Loss rate: 0.36%
```

Run 5: Report of PCC-Vivace — Data Link

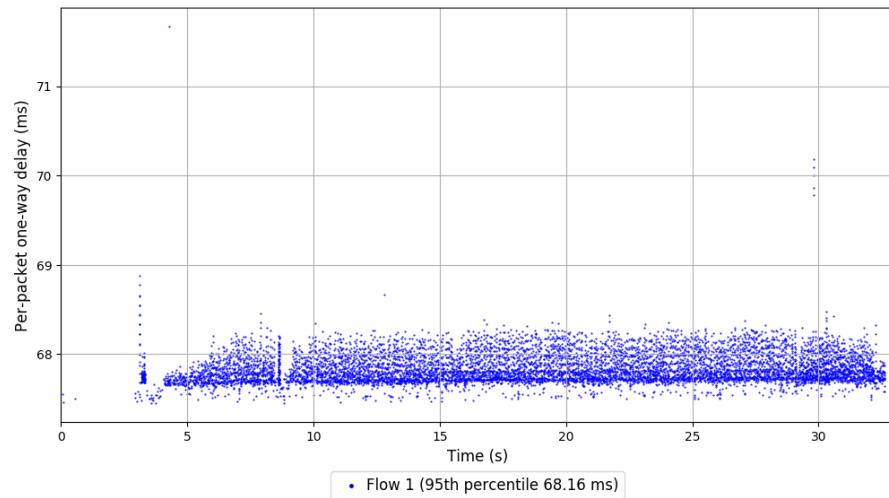
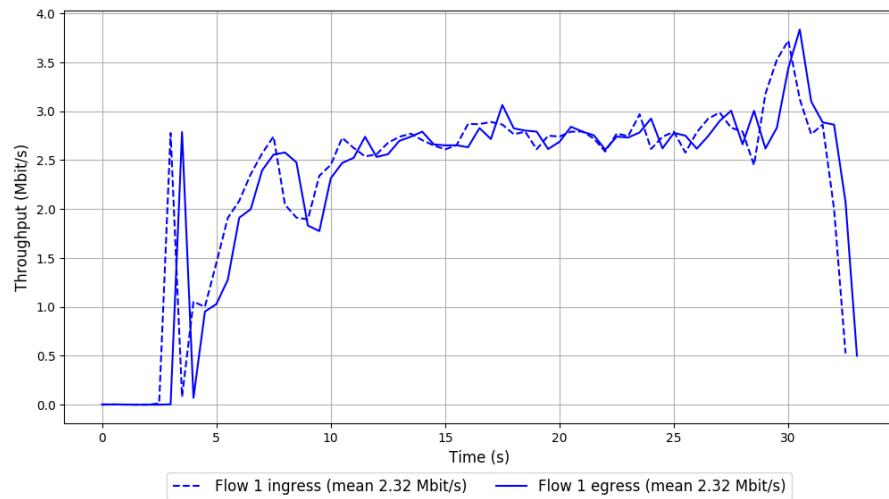


Run 1: Statistics of WebRTC media

```
Start at: 2019-01-21 21:18:47
End at: 2019-01-21 21:19:17
Local clock offset: -0.924 ms
Remote clock offset: -2.013 ms

# Below is generated by plot.py at 2019-01-21 23:24:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 68.156 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 68.156 ms
Loss rate: 0.20%
```

Run 1: Report of WebRTC media — Data Link

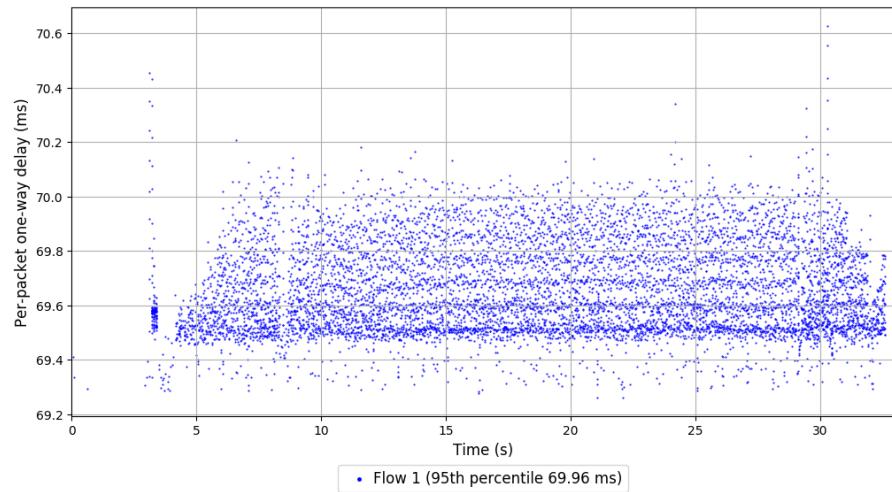
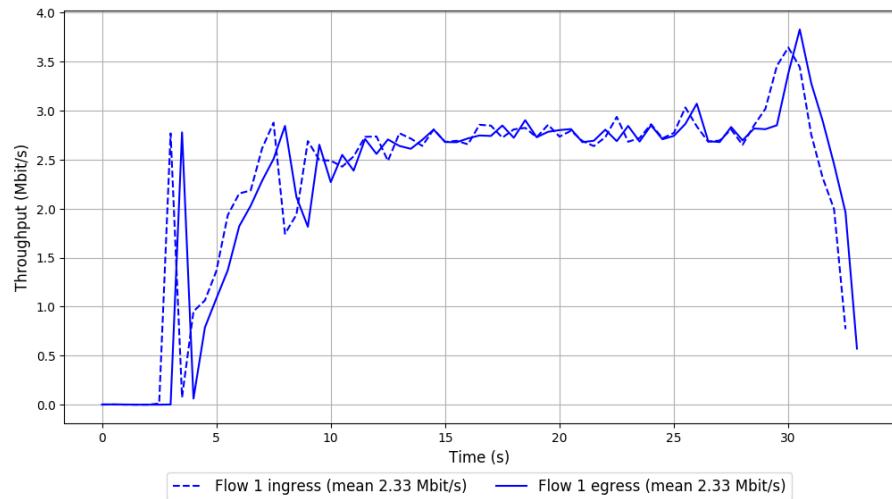


Run 2: Statistics of WebRTC media

```
Start at: 2019-01-21 21:44:38
End at: 2019-01-21 21:45:08
Local clock offset: -0.569 ms
Remote clock offset: -3.497 ms

# Below is generated by plot.py at 2019-01-21 23:24:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 69.957 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 69.957 ms
Loss rate: 0.32%
```

Run 2: Report of WebRTC media — Data Link

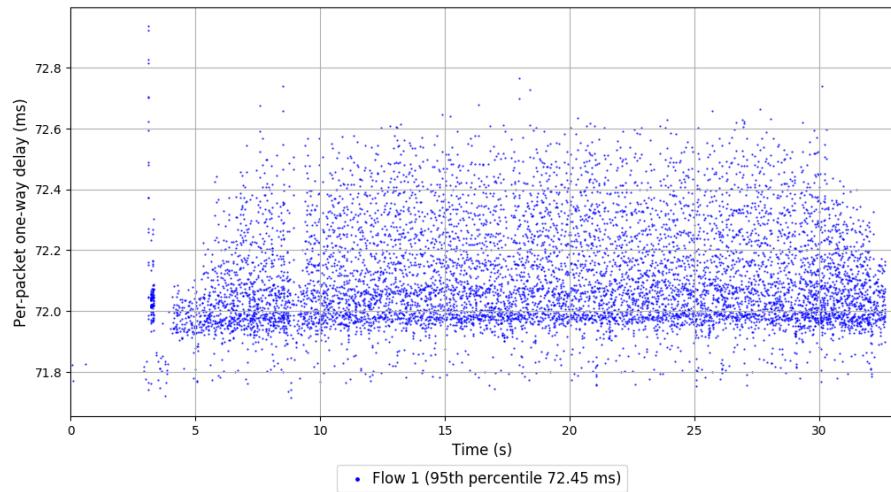
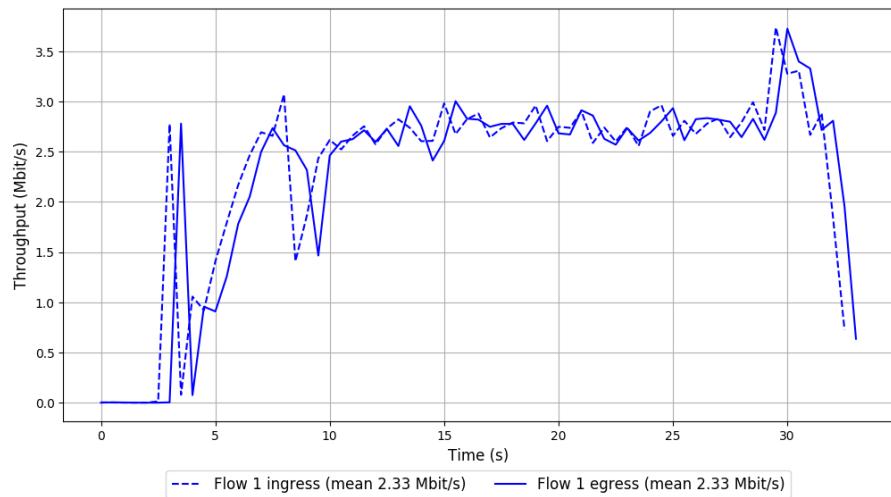


Run 3: Statistics of WebRTC media

```
Start at: 2019-01-21 22:09:32
End at: 2019-01-21 22:10:02
Local clock offset: -1.102 ms
Remote clock offset: -4.25 ms

# Below is generated by plot.py at 2019-01-21 23:24:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 72.448 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 72.448 ms
Loss rate: 0.25%
```

Run 3: Report of WebRTC media — Data Link

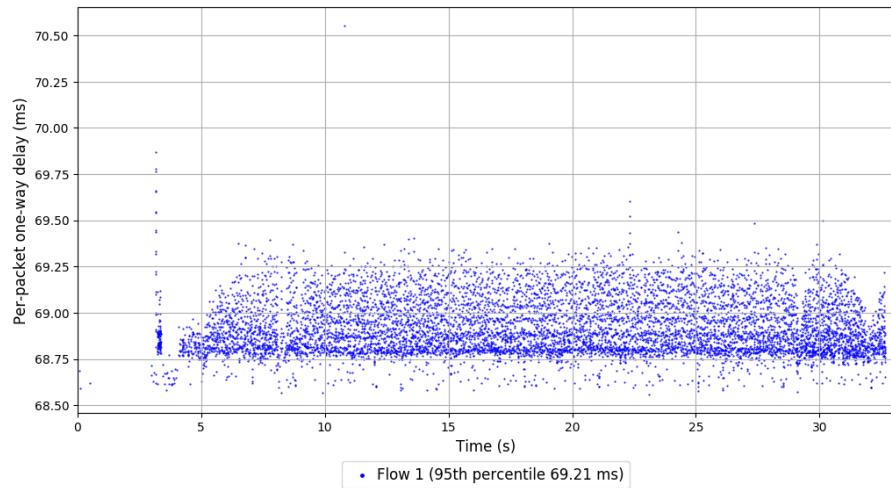
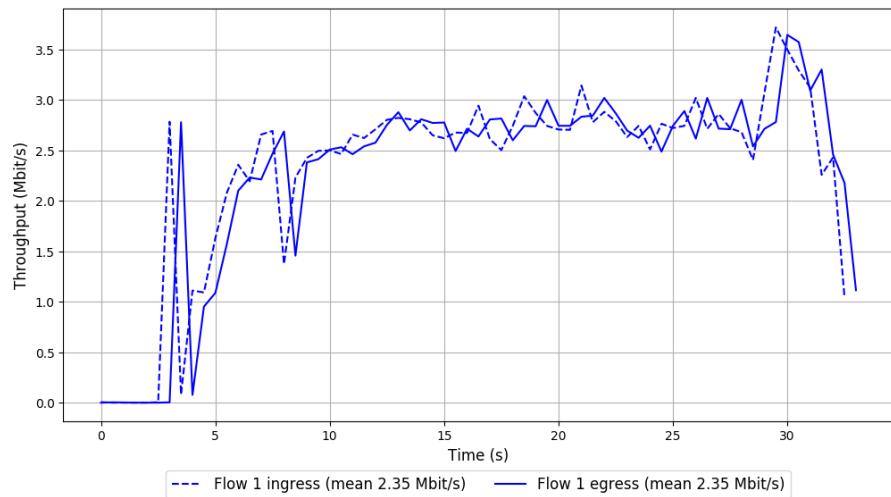


Run 4: Statistics of WebRTC media

```
Start at: 2019-01-21 22:34:54
End at: 2019-01-21 22:35:24
Local clock offset: 0.107 ms
Remote clock offset: -3.805 ms

# Below is generated by plot.py at 2019-01-21 23:24:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 69.207 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 69.207 ms
Loss rate: 0.27%
```

Run 4: Report of WebRTC media — Data Link



```
Run 5: Statistics of WebRTC media

Start at: 2019-01-21 23:01:01
End at: 2019-01-21 23:01:31
Local clock offset: 1.793 ms
Remote clock offset: -3.089 ms

# Below is generated by plot.py at 2019-01-21 23:24:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 70.726 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 70.726 ms
Loss rate: 0.20%
```

Run 5: Report of WebRTC media — Data Link

