

Pantheon Report

Generated at 2019-02-20 07:22:30 (UTC).
Data path: Colombia on p4p1 (*remote*) → AWS Brazil 2 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 gps.ntp.br and have been applied to correct the timestamps in logs.

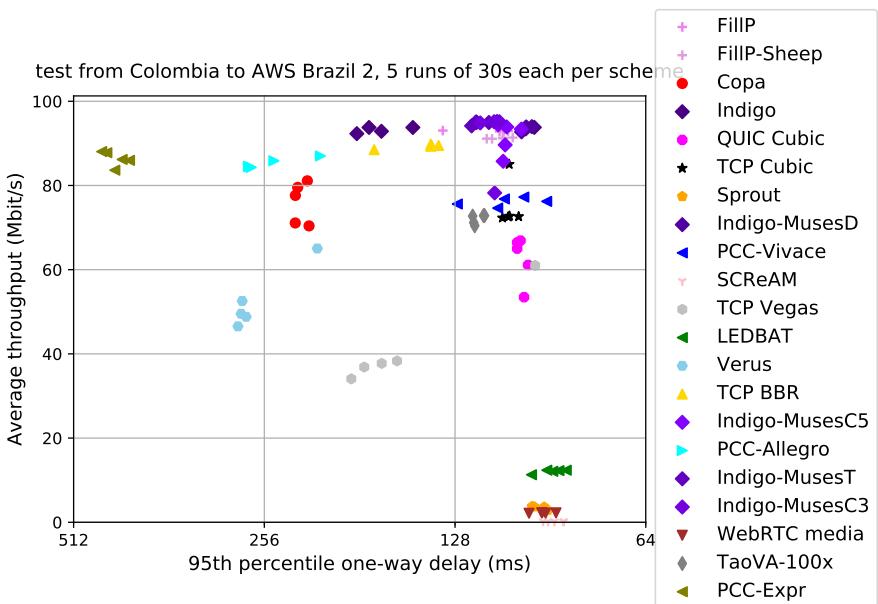
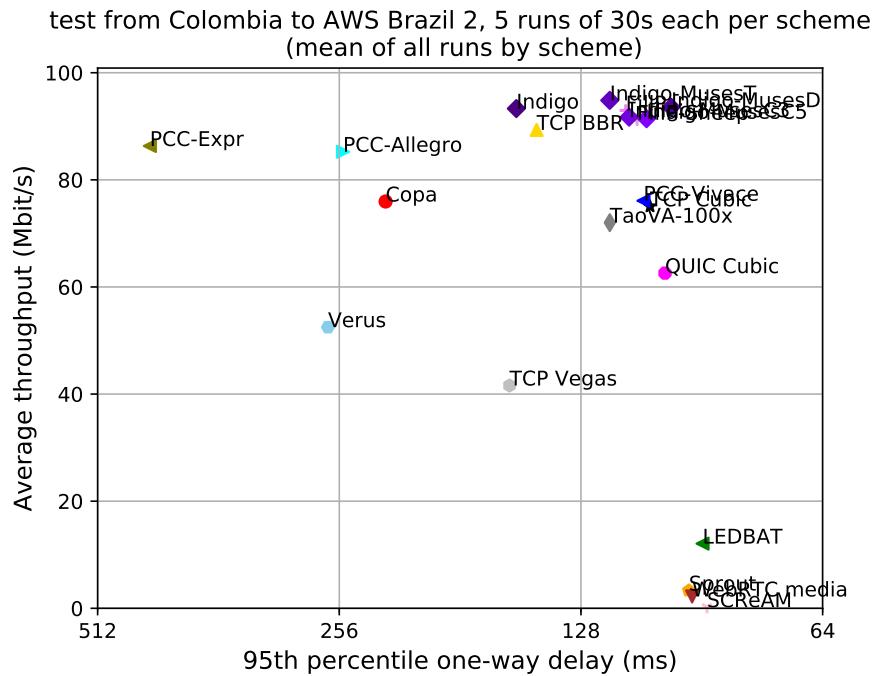
System info:

```
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 @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fce56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fc45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/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



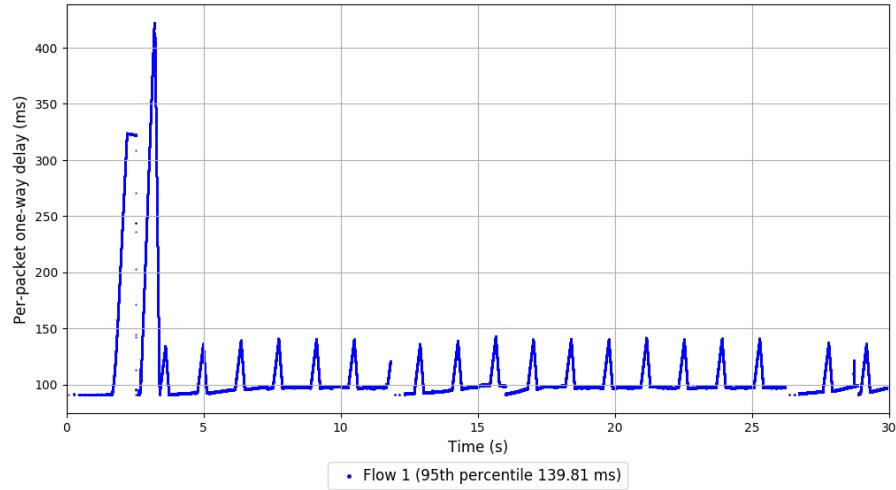
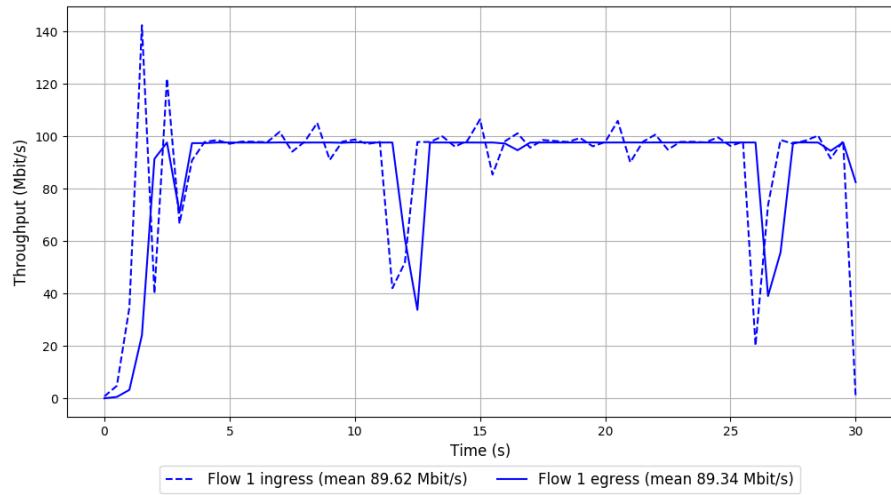
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	89.33	145.34	0.91
Copa	5	75.96	224.15	1.02
TCP Cubic	5	75.05	105.00	0.63
FillP	5	92.96	112.58	0.66
FillP-Sheep	5	91.22	108.97	0.63
Indigo	5	93.31	154.06	1.99
Indigo-MusesC3	5	91.71	111.49	8.79
Indigo-MusesC5	5	91.42	106.05	3.18
Indigo-MusesD	5	93.56	98.83	0.99
Indigo-MusesT	5	94.84	117.86	8.19
LEDBAT	5	12.08	90.32	1.14
PCC-Allegro	5	85.24	253.27	0.77
PCC-Expr	5	86.32	440.81	1.39
QUIC Cubic	5	62.59	100.58	0.86
SCReAM	5	0.22	89.18	0.61
Sprout	5	3.32	93.93	0.86
TaoVA-100x	5	72.01	117.84	0.71
TCP Vegas	5	41.60	157.09	0.65
Verus	5	52.49	264.46	0.82
PCC-Vivace	5	76.10	107.00	0.73
WebRTC media	5	2.21	93.05	0.32

Run 1: Statistics of TCP BBR

```
Start at: 2019-02-20 05:19:51
End at: 2019-02-20 05:20:21
Local clock offset: -6.4 ms
Remote clock offset: 2.249 ms

# Below is generated by plot.py at 2019-02-20 07:11:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.34 Mbit/s
95th percentile per-packet one-way delay: 139.812 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 89.34 Mbit/s
95th percentile per-packet one-way delay: 139.812 ms
Loss rate: 0.89%
```

Run 1: Report of TCP BBR — Data Link

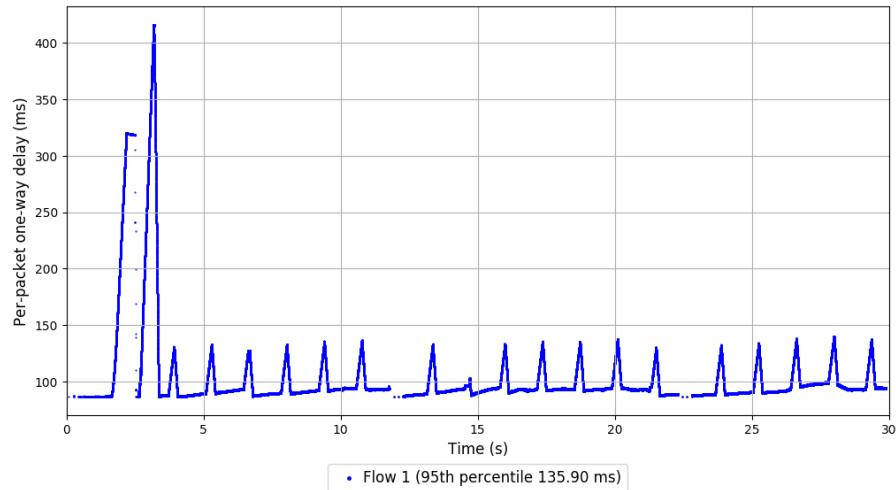
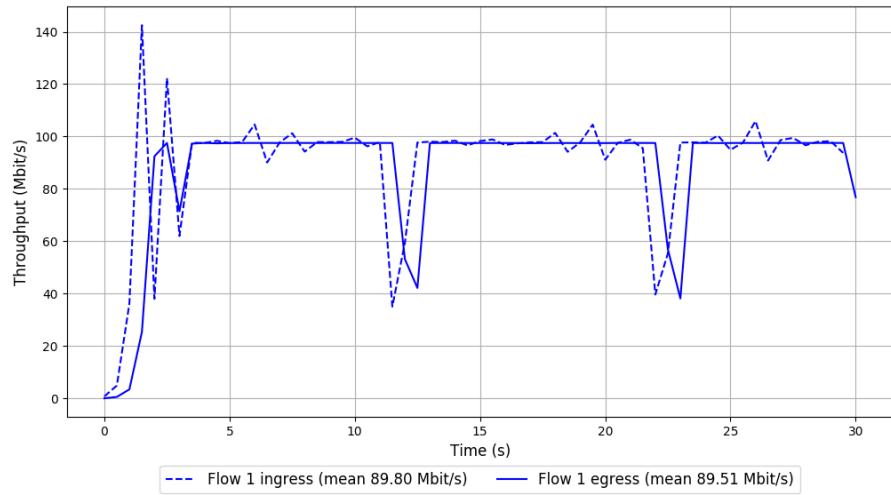


Run 2: Statistics of TCP BBR

```
Start at: 2019-02-20 05:44:47
End at: 2019-02-20 05:45:17
Local clock offset: -6.684 ms
Remote clock offset: 5.834 ms

# Below is generated by plot.py at 2019-02-20 07:11:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.51 Mbit/s
95th percentile per-packet one-way delay: 135.900 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 89.51 Mbit/s
95th percentile per-packet one-way delay: 135.900 ms
Loss rate: 0.89%
```

Run 2: Report of TCP BBR — Data Link

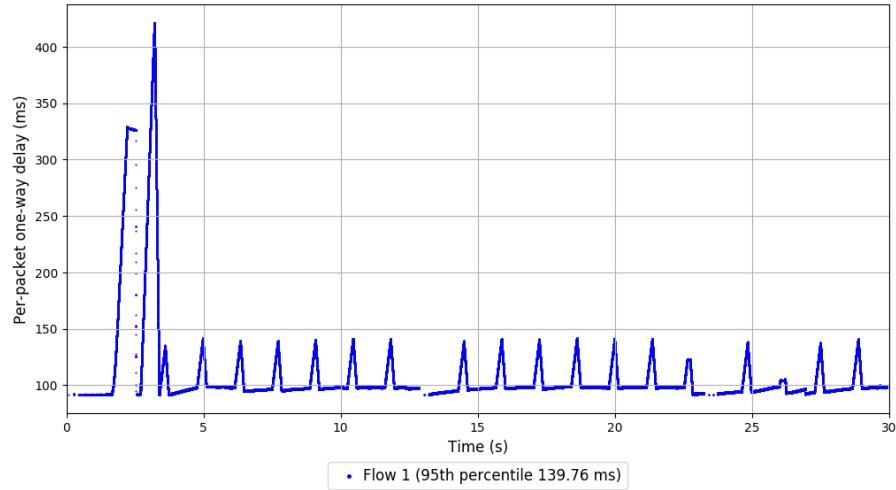
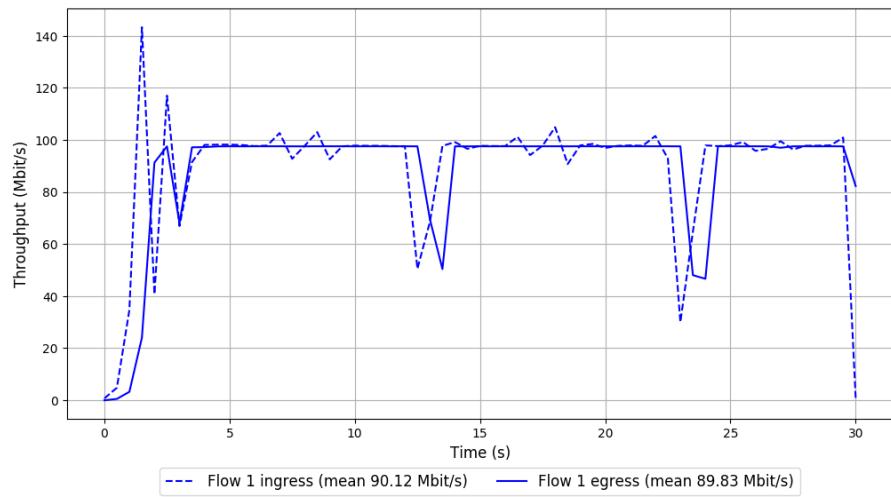


Run 3: Statistics of TCP BBR

```
Start at: 2019-02-20 06:09:41
End at: 2019-02-20 06:10:11
Local clock offset: -6.477 ms
Remote clock offset: 1.404 ms

# Below is generated by plot.py at 2019-02-20 07:11:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.83 Mbit/s
95th percentile per-packet one-way delay: 139.762 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 89.83 Mbit/s
95th percentile per-packet one-way delay: 139.762 ms
Loss rate: 0.89%
```

Run 3: Report of TCP BBR — Data Link

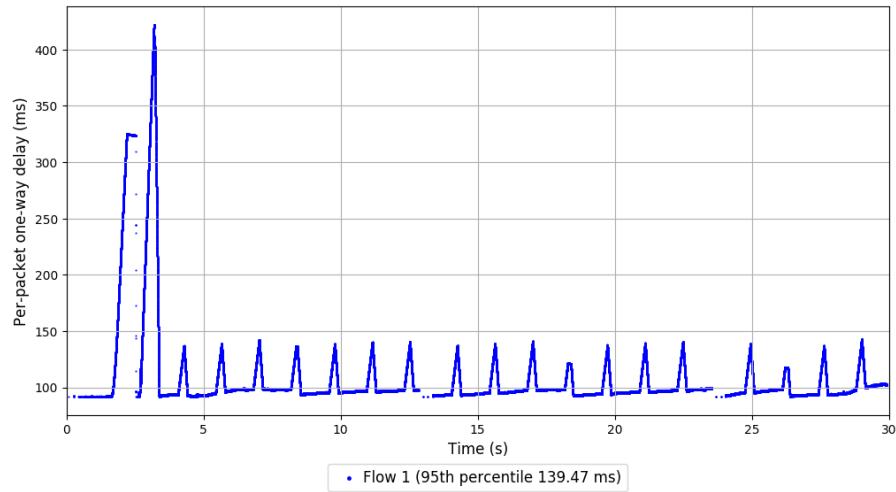
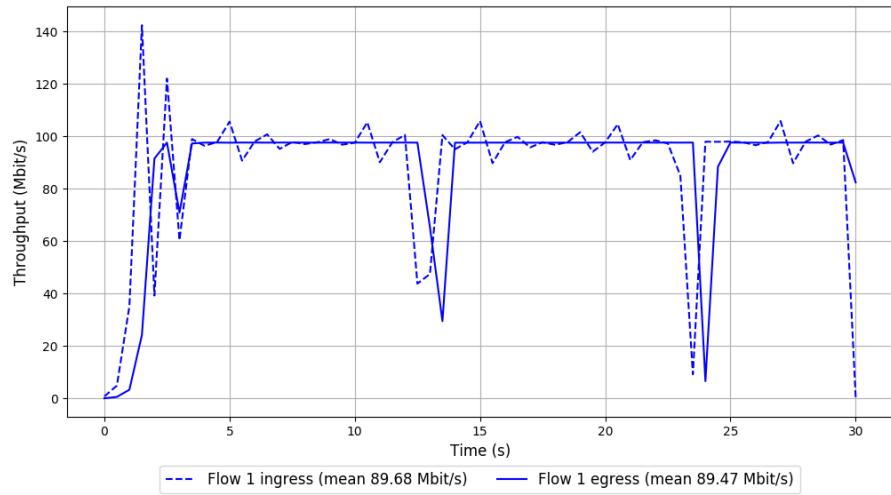


Run 4: Statistics of TCP BBR

```
Start at: 2019-02-20 06:34:38
End at: 2019-02-20 06:35:08
Local clock offset: -6.548 ms
Remote clock offset: 2.801 ms

# Below is generated by plot.py at 2019-02-20 07:11:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.47 Mbit/s
95th percentile per-packet one-way delay: 139.468 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 89.47 Mbit/s
95th percentile per-packet one-way delay: 139.468 ms
Loss rate: 0.81%
```

Run 4: Report of TCP BBR — Data Link

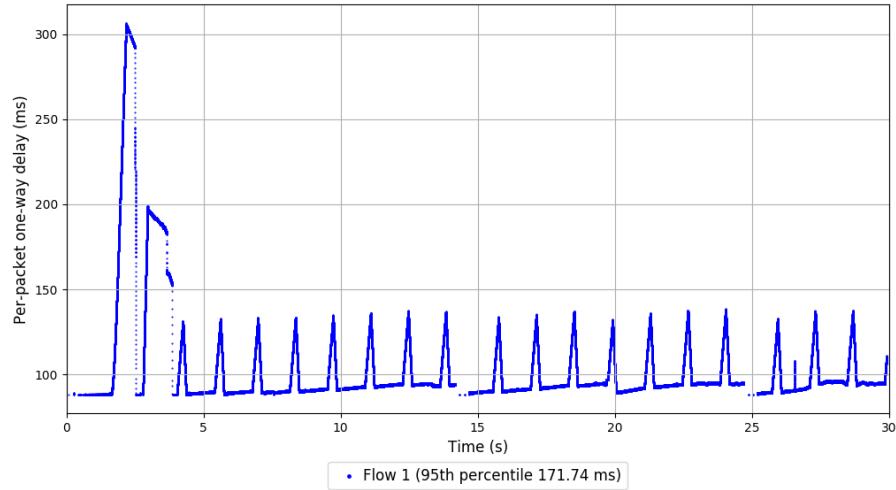
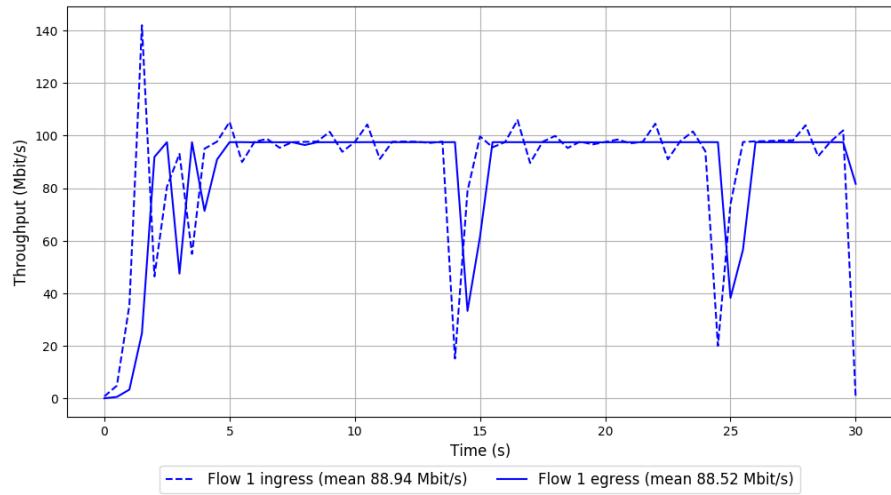


Run 5: Statistics of TCP BBR

```
Start at: 2019-02-20 06:59:36
End at: 2019-02-20 07:00:06
Local clock offset: -6.873 ms
Remote clock offset: 6.245 ms

# Below is generated by plot.py at 2019-02-20 07:11:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.52 Mbit/s
95th percentile per-packet one-way delay: 171.743 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 88.52 Mbit/s
95th percentile per-packet one-way delay: 171.743 ms
Loss rate: 1.05%
```

Run 5: Report of TCP BBR — Data Link

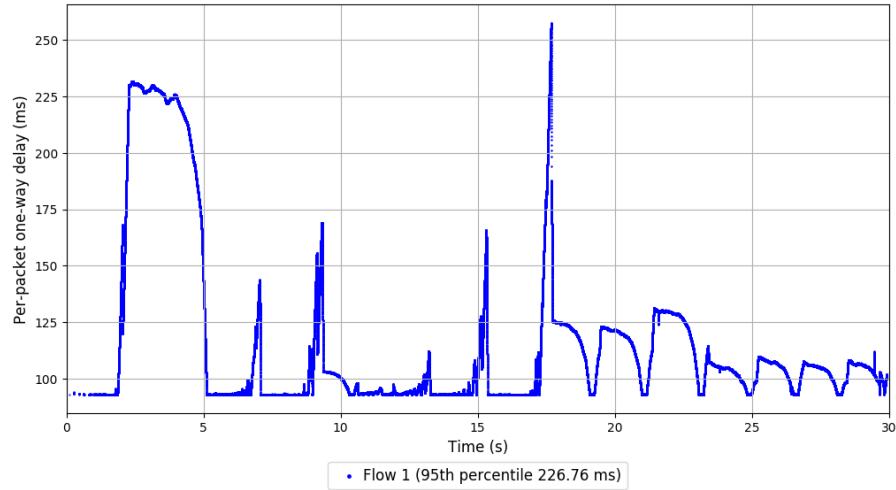
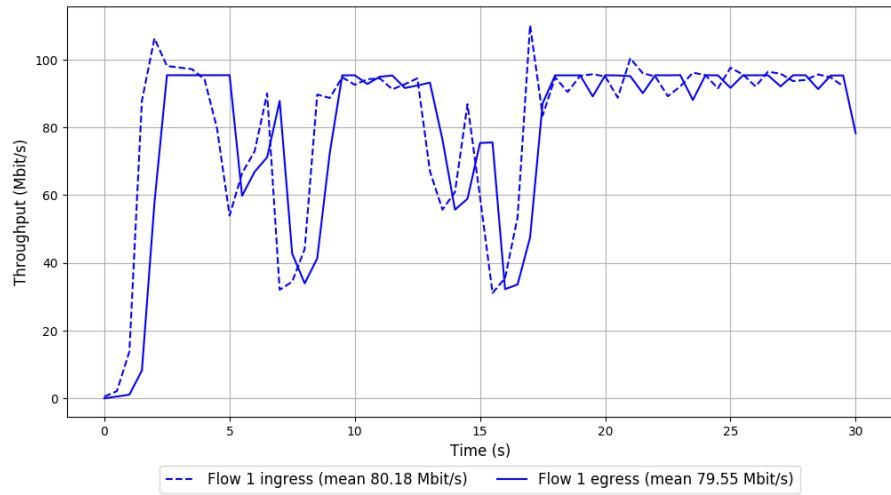


Run 1: Statistics of Copa

```
Start at: 2019-02-20 05:07:57
End at: 2019-02-20 05:08:27
Local clock offset: -6.235 ms
Remote clock offset: 2.045 ms

# Below is generated by plot.py at 2019-02-20 07:12:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.55 Mbit/s
95th percentile per-packet one-way delay: 226.759 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 79.55 Mbit/s
95th percentile per-packet one-way delay: 226.759 ms
Loss rate: 1.35%
```

Run 1: Report of Copa — Data Link

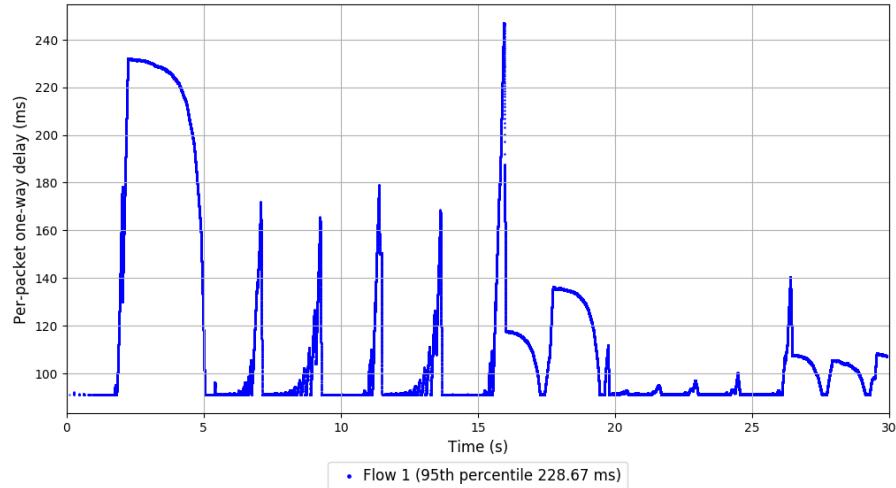
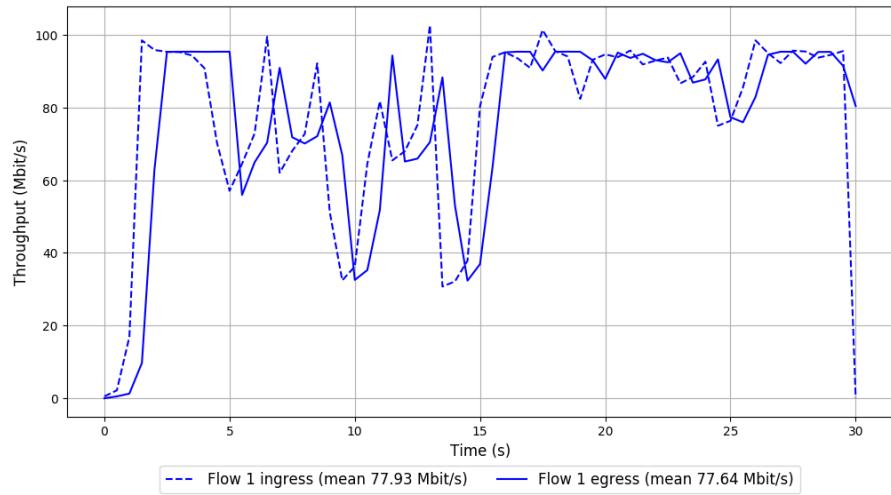


Run 2: Statistics of Copa

```
Start at: 2019-02-20 05:32:54
End at: 2019-02-20 05:33:24
Local clock offset: -6.456 ms
Remote clock offset: 2.22 ms

# Below is generated by plot.py at 2019-02-20 07:12:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.64 Mbit/s
95th percentile per-packet one-way delay: 228.671 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 77.64 Mbit/s
95th percentile per-packet one-way delay: 228.671 ms
Loss rate: 0.94%
```

Run 2: Report of Copa — Data Link

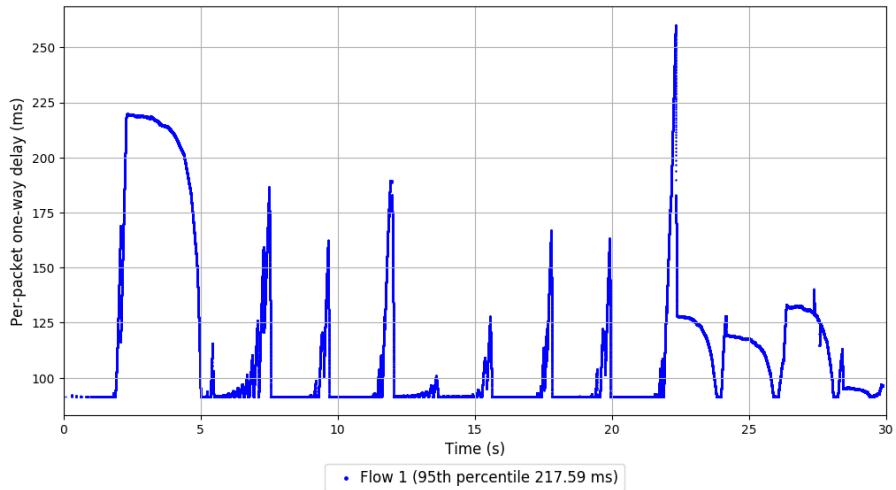
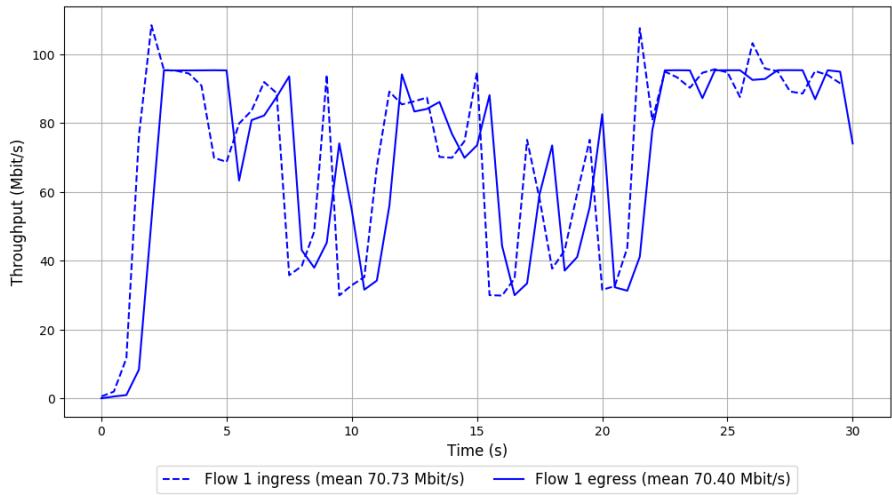


Run 3: Statistics of Copa

```
Start at: 2019-02-20 05:57:48
End at: 2019-02-20 05:58:18
Local clock offset: -6.793 ms
Remote clock offset: 6.644 ms

# Below is generated by plot.py at 2019-02-20 07:12:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.40 Mbit/s
95th percentile per-packet one-way delay: 217.591 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 70.40 Mbit/s
95th percentile per-packet one-way delay: 217.591 ms
Loss rate: 1.06%
```

Run 3: Report of Copa — Data Link

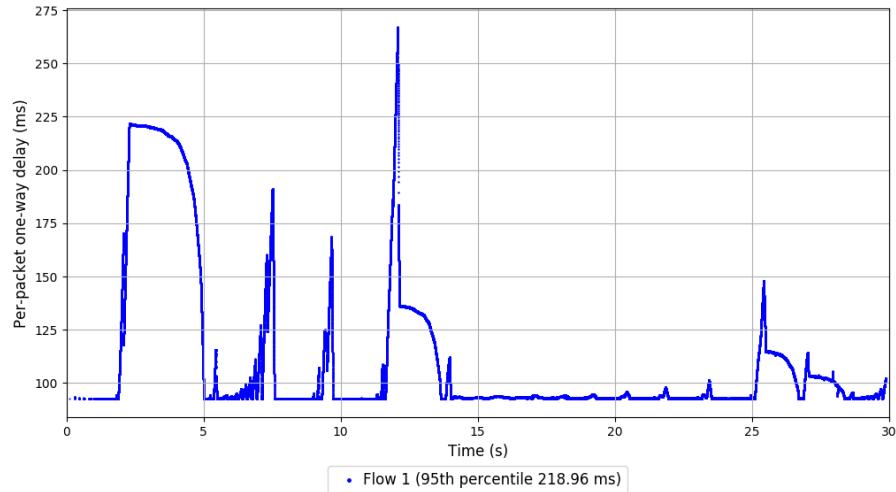
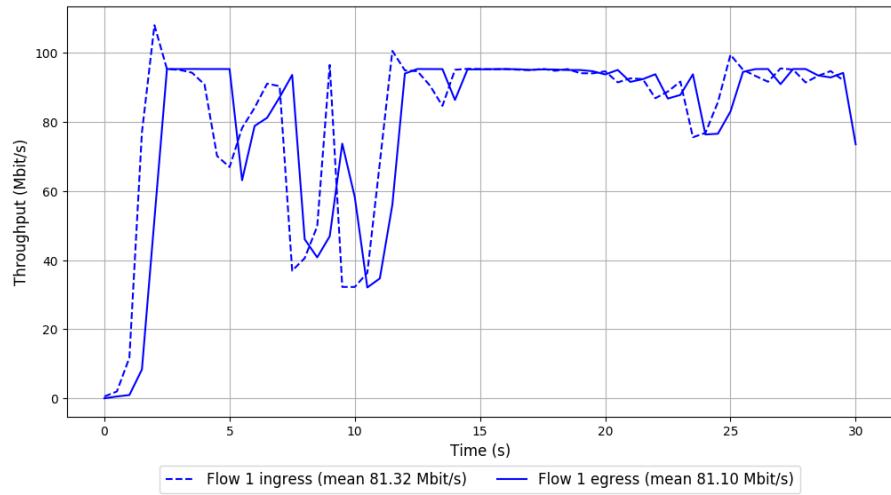


Run 4: Statistics of Copa

```
Start at: 2019-02-20 06:22:43
End at: 2019-02-20 06:23:13
Local clock offset: -6.328 ms
Remote clock offset: 6.074 ms

# Below is generated by plot.py at 2019-02-20 07:12:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.10 Mbit/s
95th percentile per-packet one-way delay: 218.959 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 81.10 Mbit/s
95th percentile per-packet one-way delay: 218.959 ms
Loss rate: 0.85%
```

Run 4: Report of Copa — Data Link

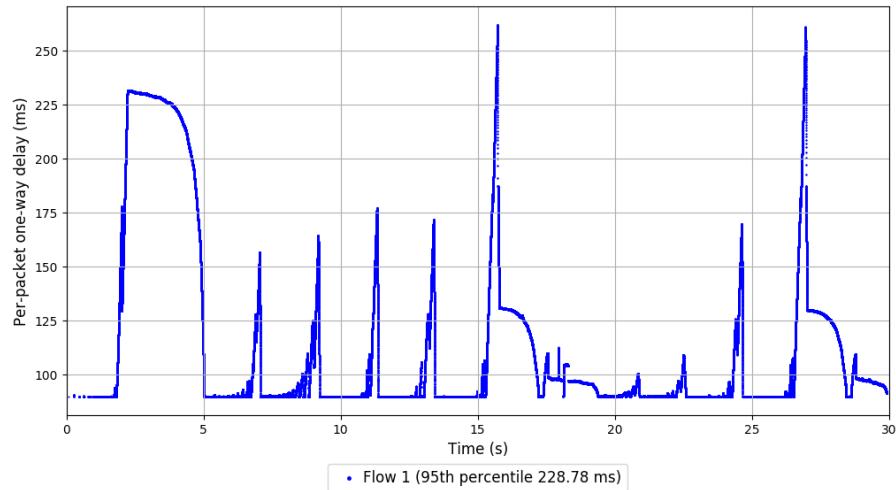
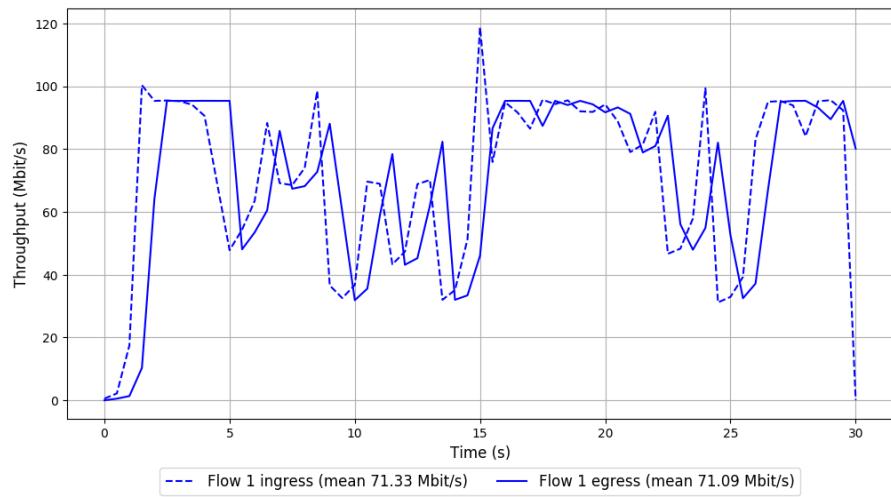


Run 5: Statistics of Copa

```
Start at: 2019-02-20 06:47:44
End at: 2019-02-20 06:48:14
Local clock offset: -6.778 ms
Remote clock offset: 2.959 ms

# Below is generated by plot.py at 2019-02-20 07:12:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.09 Mbit/s
95th percentile per-packet one-way delay: 228.777 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 71.09 Mbit/s
95th percentile per-packet one-way delay: 228.777 ms
Loss rate: 0.90%
```

Run 5: Report of Copa — Data Link

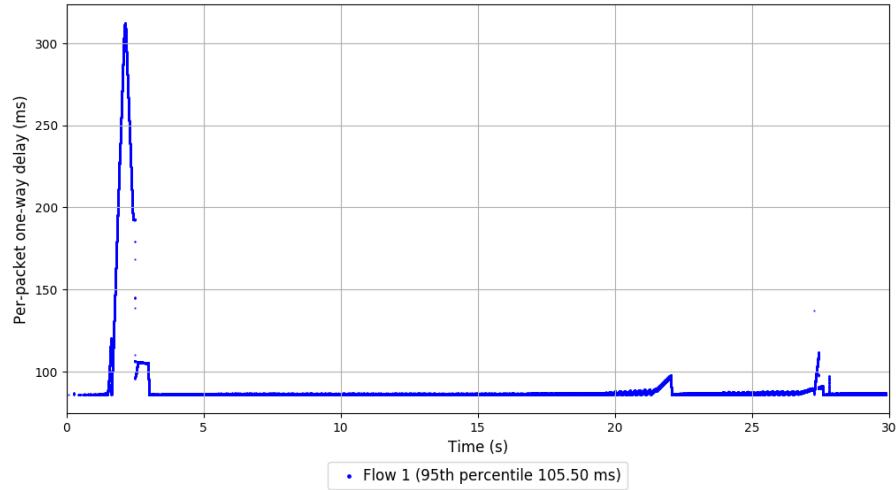
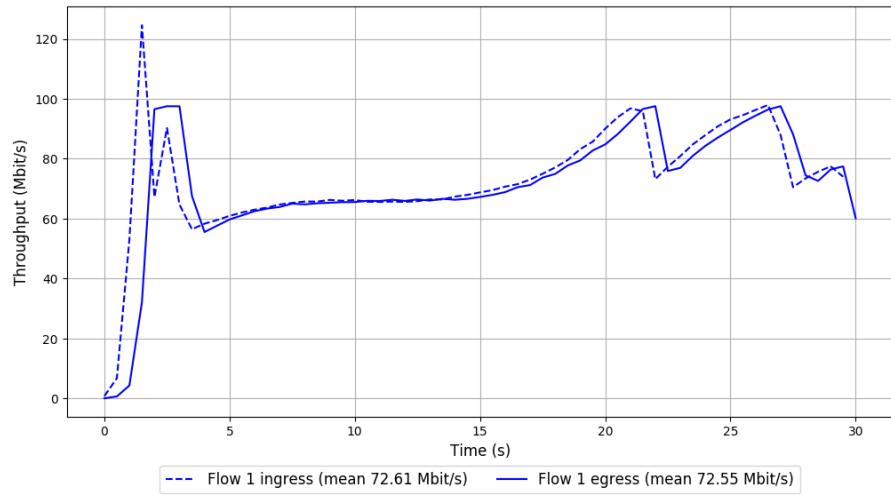


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-02-20 05:21:04
End at: 2019-02-20 05:21:34
Local clock offset: -6.348 ms
Remote clock offset: 6.976 ms

# Below is generated by plot.py at 2019-02-20 07:12:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.55 Mbit/s
95th percentile per-packet one-way delay: 105.501 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 72.55 Mbit/s
95th percentile per-packet one-way delay: 105.501 ms
Loss rate: 0.65%
```

Run 1: Report of TCP Cubic — Data Link

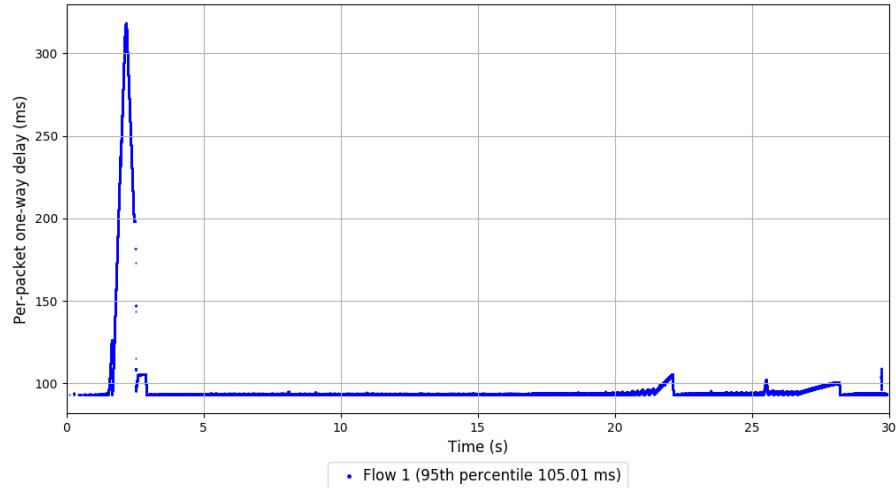
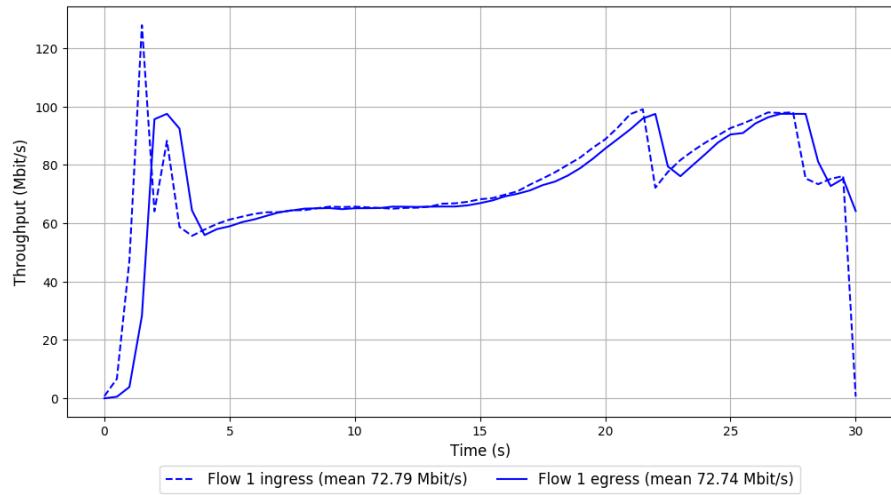


Run 2: Statistics of TCP Cubic

```
Start at: 2019-02-20 05:45:59
End at: 2019-02-20 05:46:29
Local clock offset: -6.696 ms
Remote clock offset: 1.594 ms

# Below is generated by plot.py at 2019-02-20 07:12:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.74 Mbit/s
95th percentile per-packet one-way delay: 105.013 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 72.74 Mbit/s
95th percentile per-packet one-way delay: 105.013 ms
Loss rate: 0.64%
```

Run 2: Report of TCP Cubic — Data Link

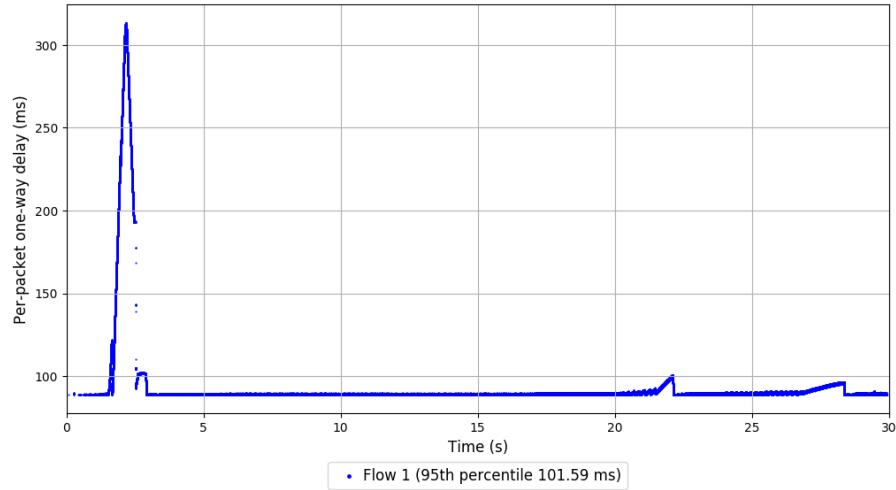
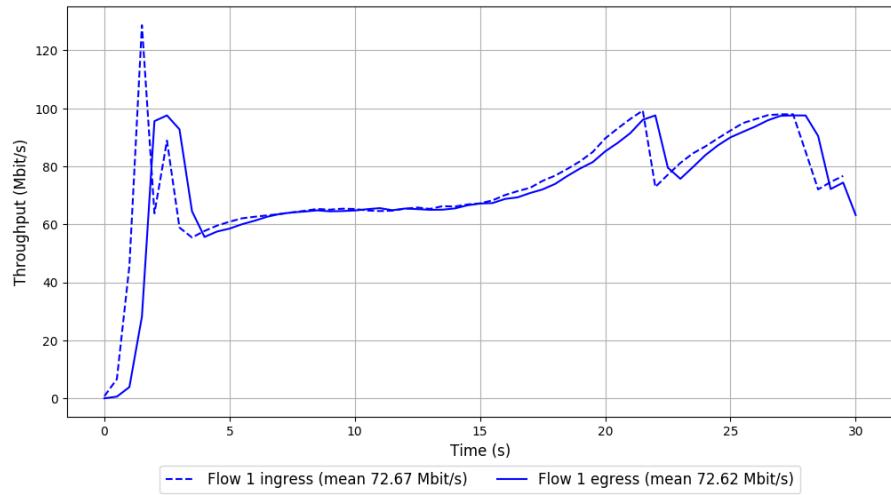


Run 3: Statistics of TCP Cubic

```
Start at: 2019-02-20 06:10:54
End at: 2019-02-20 06:11:24
Local clock offset: -6.499 ms
Remote clock offset: 4.184 ms

# Below is generated by plot.py at 2019-02-20 07:12:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.62 Mbit/s
95th percentile per-packet one-way delay: 101.586 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 72.62 Mbit/s
95th percentile per-packet one-way delay: 101.586 ms
Loss rate: 0.64%
```

Run 3: Report of TCP Cubic — Data Link

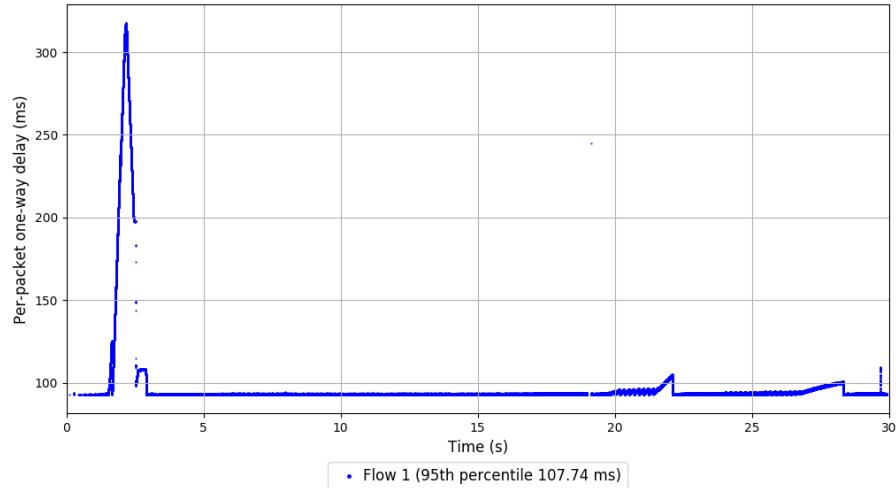
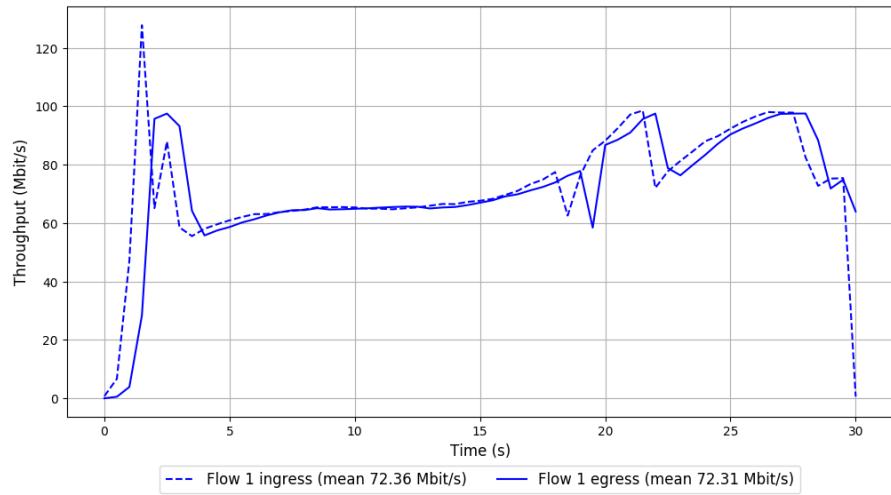


Run 4: Statistics of TCP Cubic

```
Start at: 2019-02-20 06:35:50
End at: 2019-02-20 06:36:20
Local clock offset: -6.574 ms
Remote clock offset: 1.762 ms

# Below is generated by plot.py at 2019-02-20 07:12:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.31 Mbit/s
95th percentile per-packet one-way delay: 107.743 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 72.31 Mbit/s
95th percentile per-packet one-way delay: 107.743 ms
Loss rate: 0.64%
```

Run 4: Report of TCP Cubic — Data Link

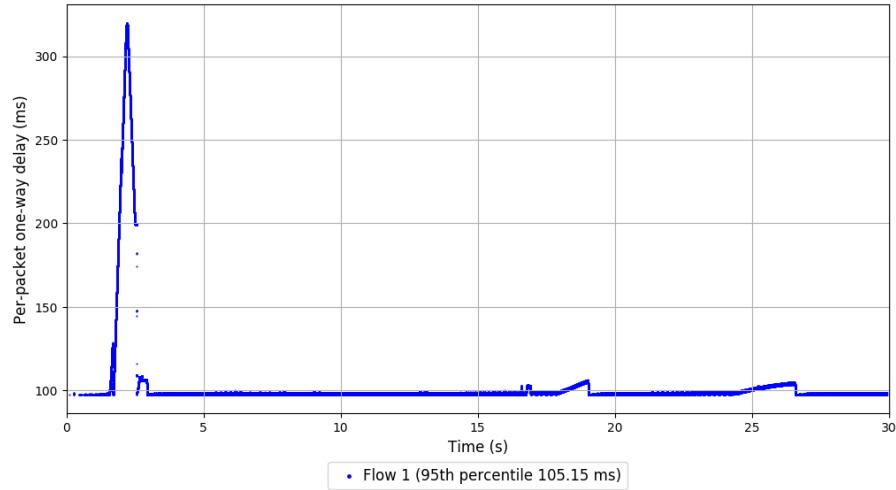
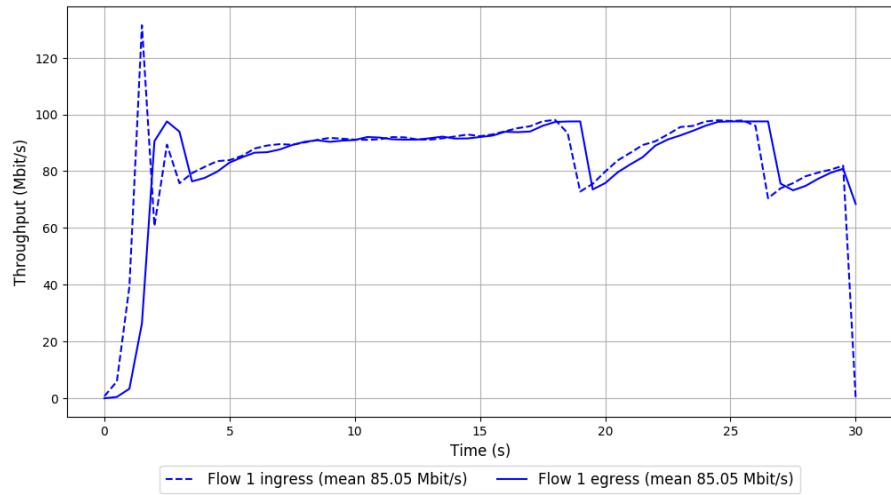


Run 5: Statistics of TCP Cubic

```
Start at: 2019-02-20 07:00:48
End at: 2019-02-20 07:01:18
Local clock offset: -6.78 ms
Remote clock offset: 1.293 ms

# Below is generated by plot.py at 2019-02-20 07:12:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.05 Mbit/s
95th percentile per-packet one-way delay: 105.148 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 85.05 Mbit/s
95th percentile per-packet one-way delay: 105.148 ms
Loss rate: 0.59%
```

Run 5: Report of TCP Cubic — Data Link

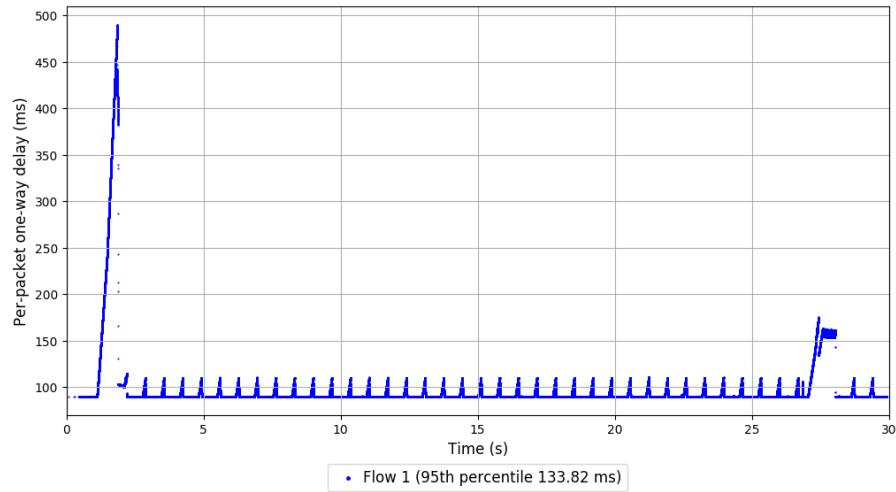
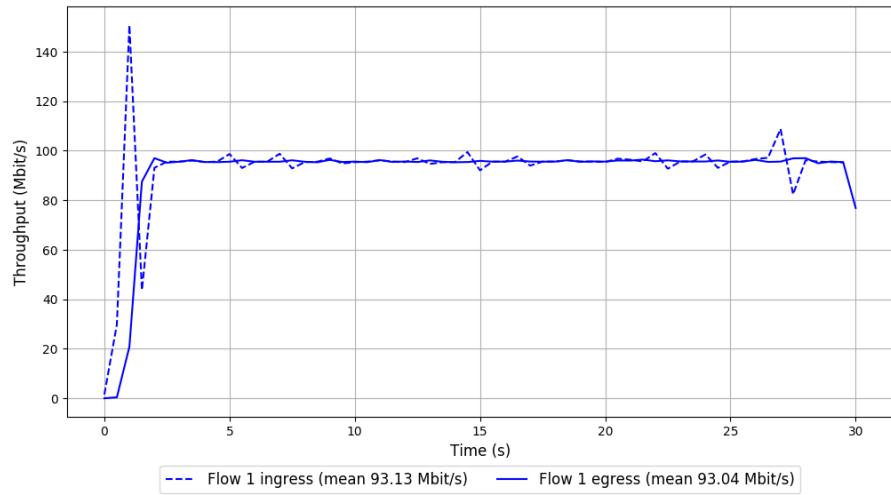


```
Run 1: Statistics of FillP

Start at: 2019-02-20 05:22:15
End at: 2019-02-20 05:22:45
Local clock offset: -6.418 ms
Remote clock offset: 3.033 ms

# Below is generated by plot.py at 2019-02-20 07:13:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.04 Mbit/s
95th percentile per-packet one-way delay: 133.817 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 93.04 Mbit/s
95th percentile per-packet one-way delay: 133.817 ms
Loss rate: 0.66%
```

Run 1: Report of FillP — Data Link

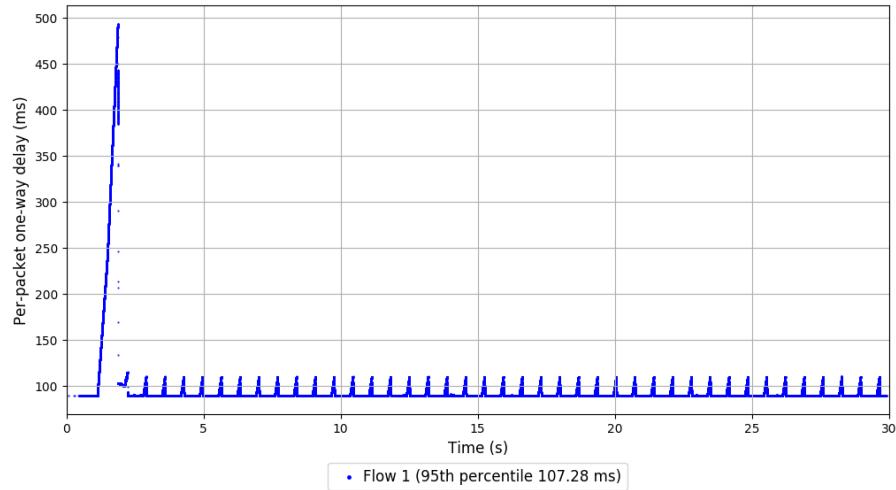
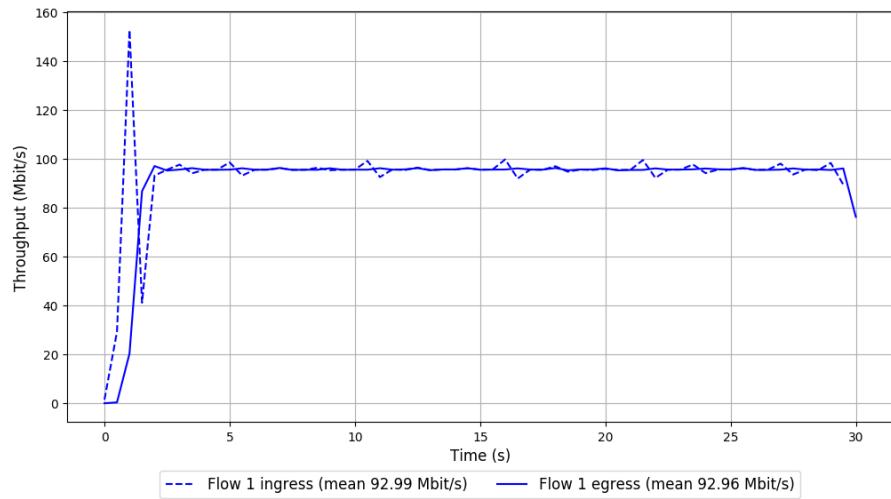


Run 2: Statistics of FillP

```
Start at: 2019-02-20 05:47:10
End at: 2019-02-20 05:47:40
Local clock offset: -6.708 ms
Remote clock offset: 2.468 ms

# Below is generated by plot.py at 2019-02-20 07:13:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.96 Mbit/s
95th percentile per-packet one-way delay: 107.278 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 92.96 Mbit/s
95th percentile per-packet one-way delay: 107.278 ms
Loss rate: 0.60%
```

Run 2: Report of FillP — Data Link

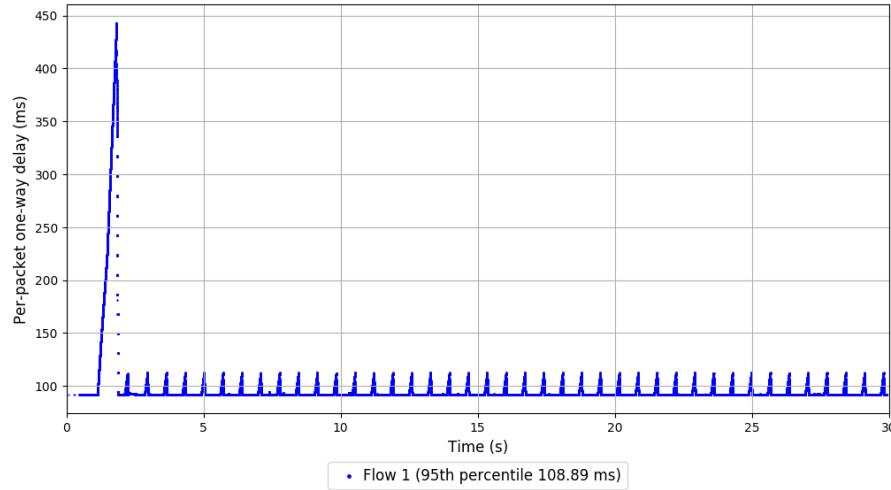
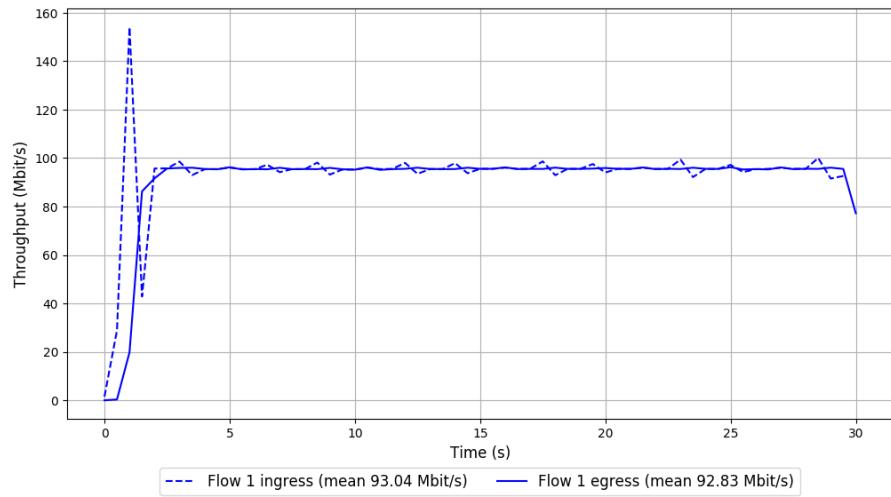


```
Run 3: Statistics of FillP
```

```
Start at: 2019-02-20 06:12:05
End at: 2019-02-20 06:12:35
Local clock offset: -6.431 ms
Remote clock offset: 1.241 ms

# Below is generated by plot.py at 2019-02-20 07:13:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.83 Mbit/s
95th percentile per-packet one-way delay: 108.894 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 92.83 Mbit/s
95th percentile per-packet one-way delay: 108.894 ms
Loss rate: 0.80%
```

Run 3: Report of FillP — Data Link

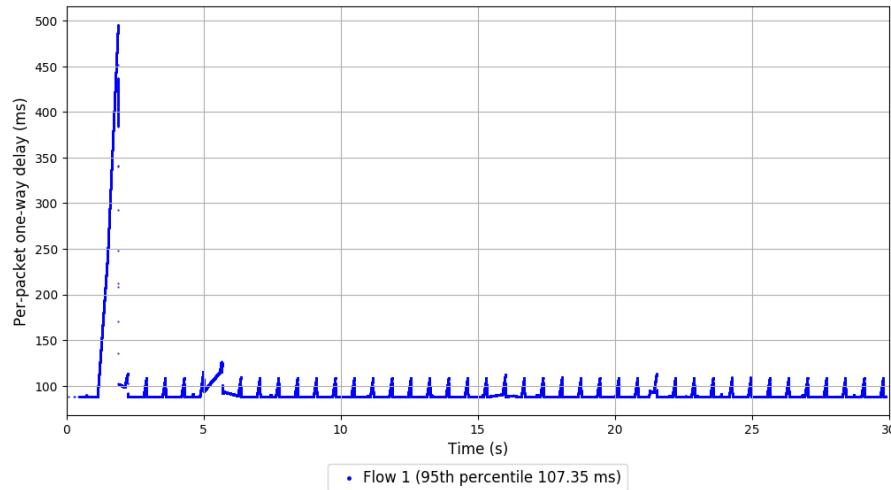
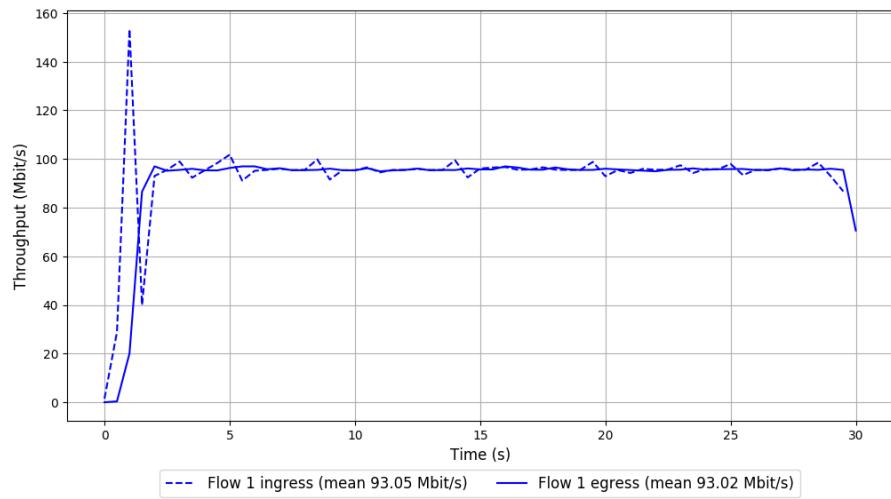


```
Run 4: Statistics of FillP
```

```
Start at: 2019-02-20 06:37:01
End at: 2019-02-20 06:37:31
Local clock offset: -6.543 ms
Remote clock offset: 6.654 ms

# Below is generated by plot.py at 2019-02-20 07:13:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.02 Mbit/s
95th percentile per-packet one-way delay: 107.351 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 93.02 Mbit/s
95th percentile per-packet one-way delay: 107.351 ms
Loss rate: 0.61%
```

Run 4: Report of FillP — Data Link

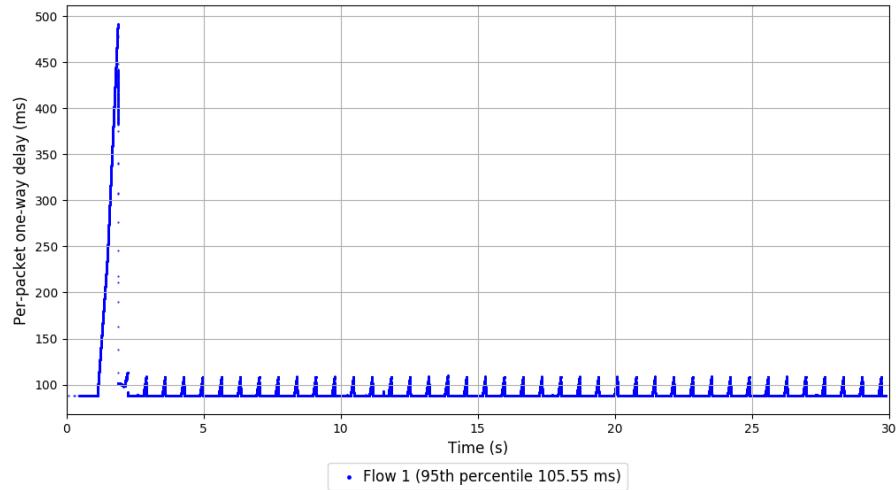
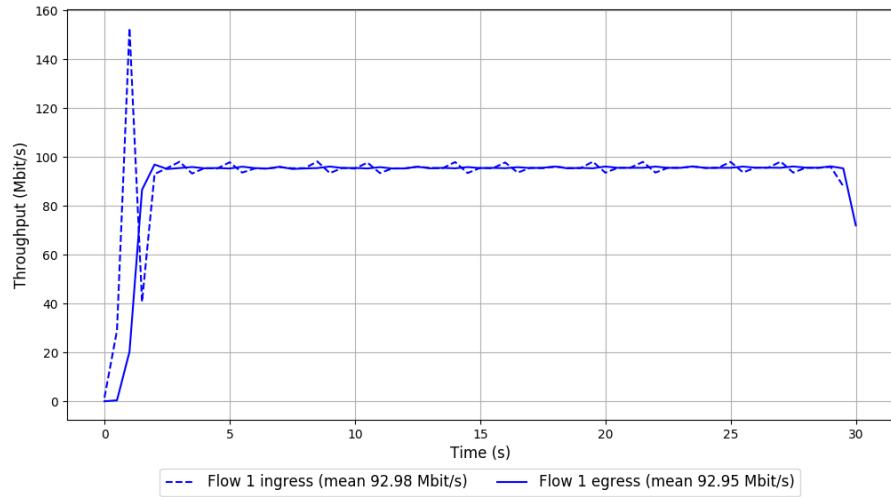


```
Run 5: Statistics of FillP
```

```
Start at: 2019-02-20 07:02:00
End at: 2019-02-20 07:02:30
Local clock offset: -6.771 ms
Remote clock offset: 5.971 ms

# Below is generated by plot.py at 2019-02-20 07:13:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.95 Mbit/s
95th percentile per-packet one-way delay: 105.553 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 92.95 Mbit/s
95th percentile per-packet one-way delay: 105.553 ms
Loss rate: 0.61%
```

Run 5: Report of FillP — Data Link

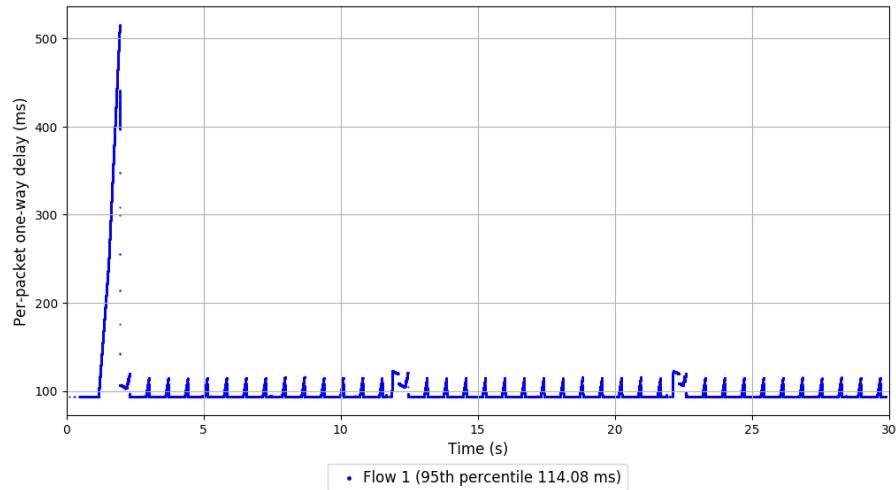
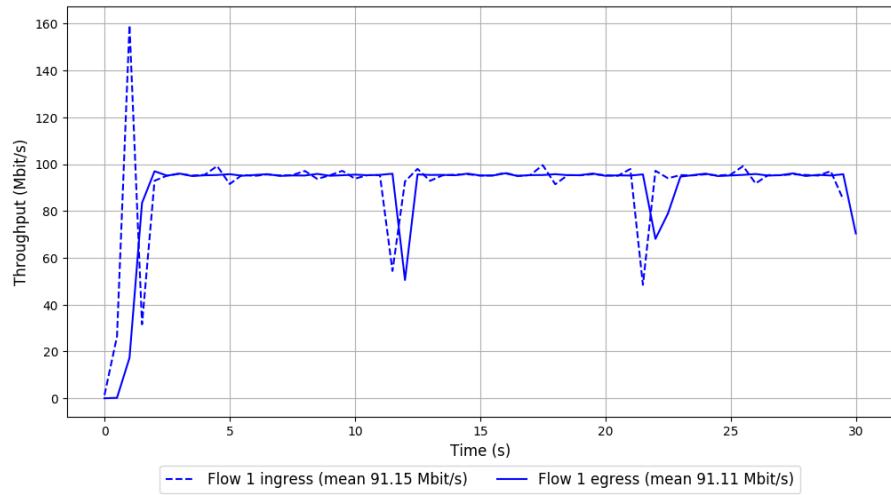


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-02-20 05:17:30
End at: 2019-02-20 05:18:00
Local clock offset: -6.344 ms
Remote clock offset: 5.976 ms

# Below is generated by plot.py at 2019-02-20 07:14:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.11 Mbit/s
95th percentile per-packet one-way delay: 114.081 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 91.11 Mbit/s
95th percentile per-packet one-way delay: 114.081 ms
Loss rate: 0.64%
```

Run 1: Report of FillP-Sheep — Data Link

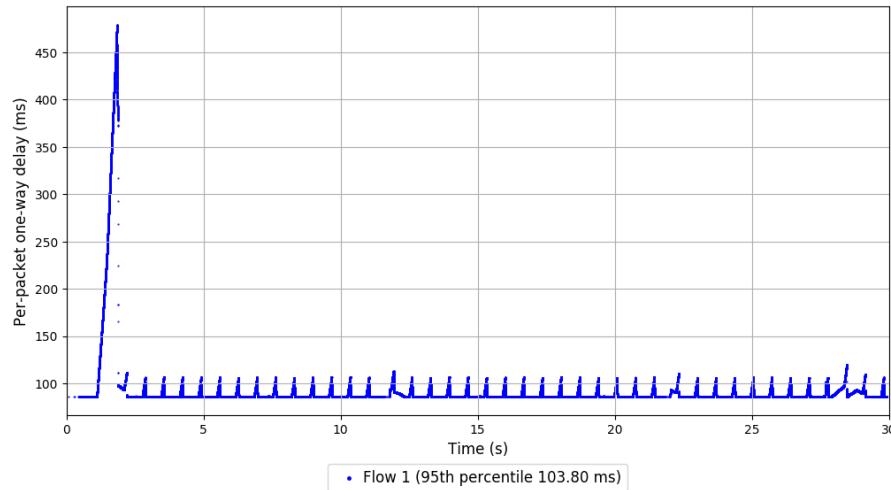
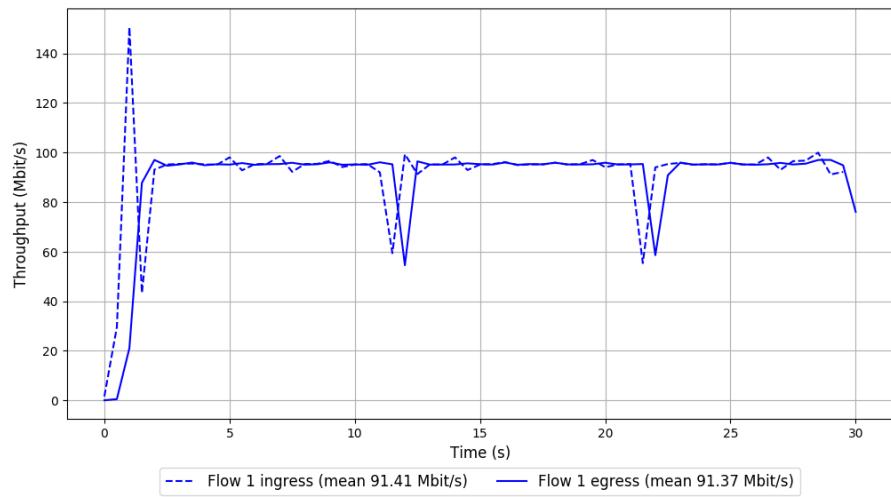


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-02-20 05:42:26
End at: 2019-02-20 05:42:56
Local clock offset: -6.642 ms
Remote clock offset: 7.069 ms

# Below is generated by plot.py at 2019-02-20 07:14:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.37 Mbit/s
95th percentile per-packet one-way delay: 103.797 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 91.37 Mbit/s
95th percentile per-packet one-way delay: 103.797 ms
Loss rate: 0.61%
```

Run 2: Report of FillP-Sheep — Data Link

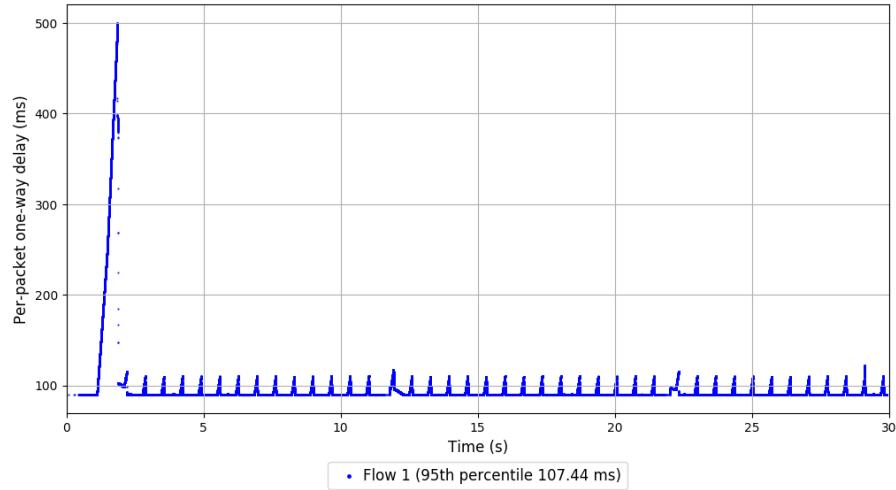
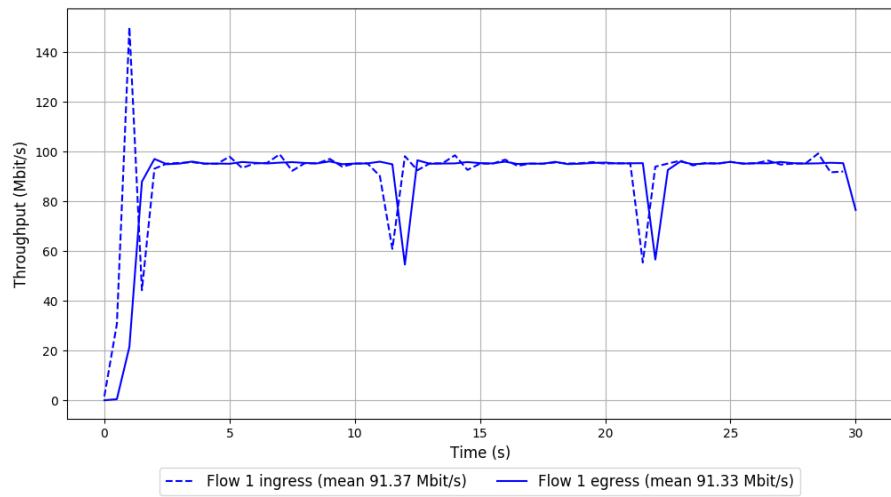


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-02-20 06:07:20
End at: 2019-02-20 06:07:50
Local clock offset: -6.526 ms
Remote clock offset: 1.408 ms

# Below is generated by plot.py at 2019-02-20 07:14:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.33 Mbit/s
95th percentile per-packet one-way delay: 107.437 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 91.33 Mbit/s
95th percentile per-packet one-way delay: 107.437 ms
Loss rate: 0.61%
```

Run 3: Report of FillP-Sheep — Data Link

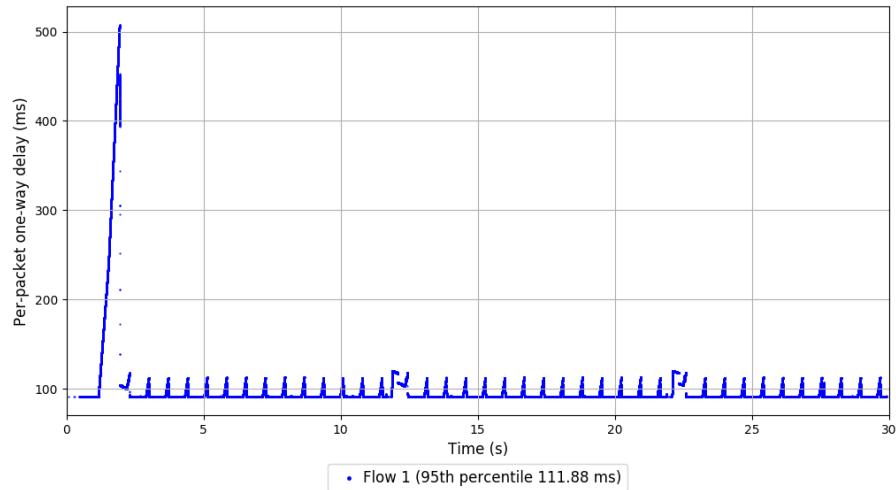
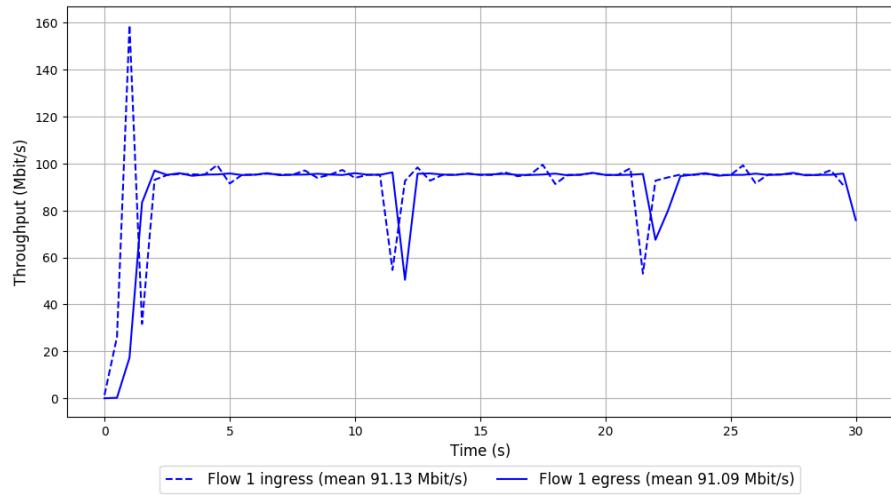


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-02-20 06:32:17
End at: 2019-02-20 06:32:47
Local clock offset: -6.467 ms
Remote clock offset: 7.683 ms

# Below is generated by plot.py at 2019-02-20 07:14:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.09 Mbit/s
95th percentile per-packet one-way delay: 111.879 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 91.09 Mbit/s
95th percentile per-packet one-way delay: 111.879 ms
Loss rate: 0.64%
```

Run 4: Report of FillP-Sheep — Data Link

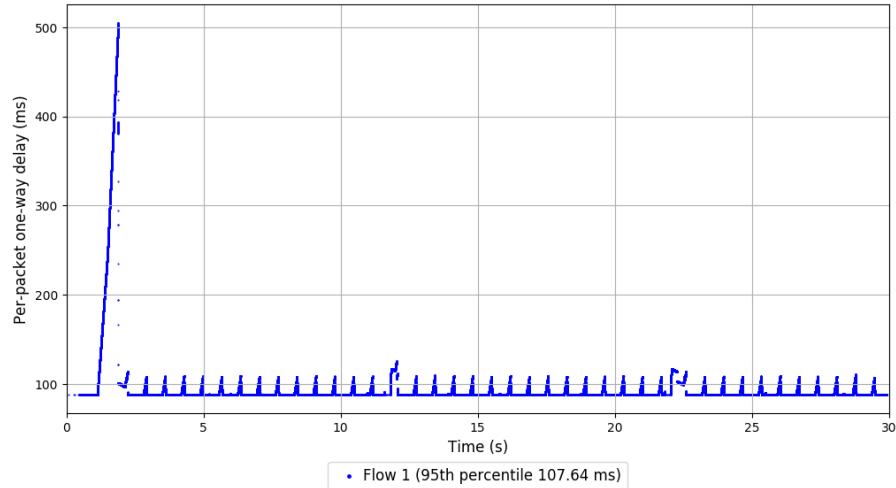
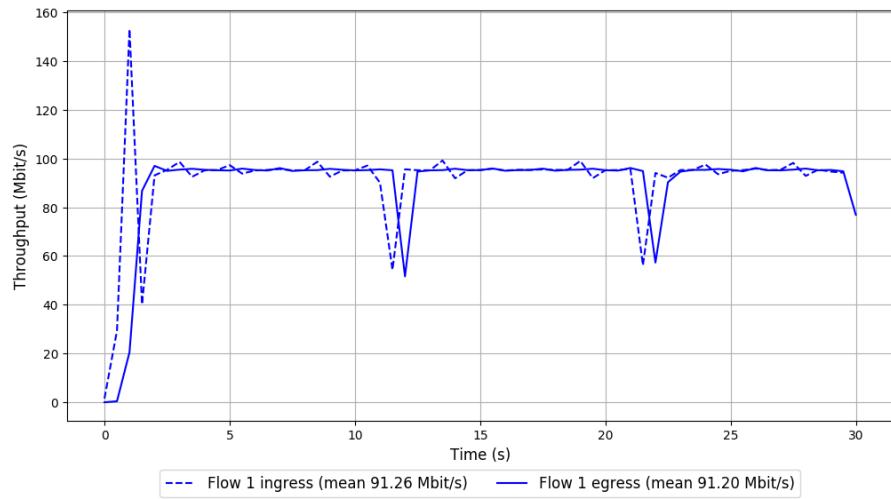


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-02-20 06:57:15
End at: 2019-02-20 06:57:45
Local clock offset: -6.79 ms
Remote clock offset: 6.282 ms

# Below is generated by plot.py at 2019-02-20 07:14:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.20 Mbit/s
95th percentile per-packet one-way delay: 107.636 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 91.20 Mbit/s
95th percentile per-packet one-way delay: 107.636 ms
Loss rate: 0.64%
```

Run 5: Report of FillP-Sheep — Data Link

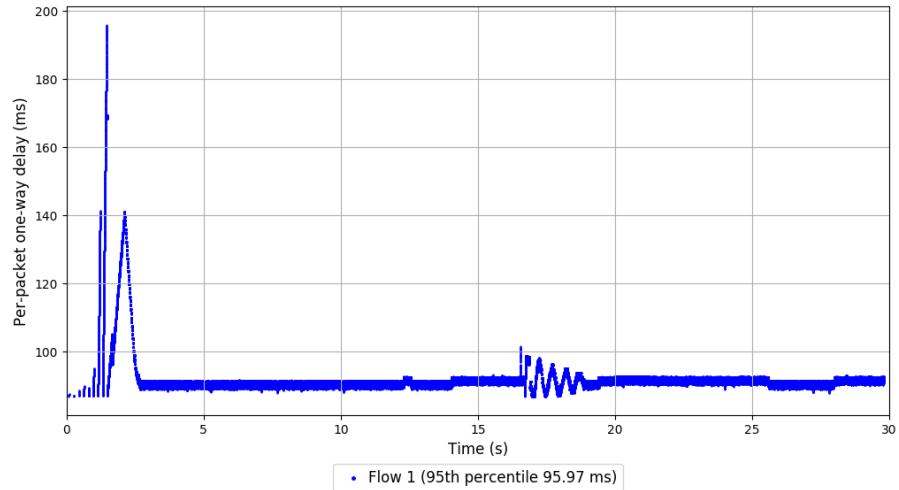
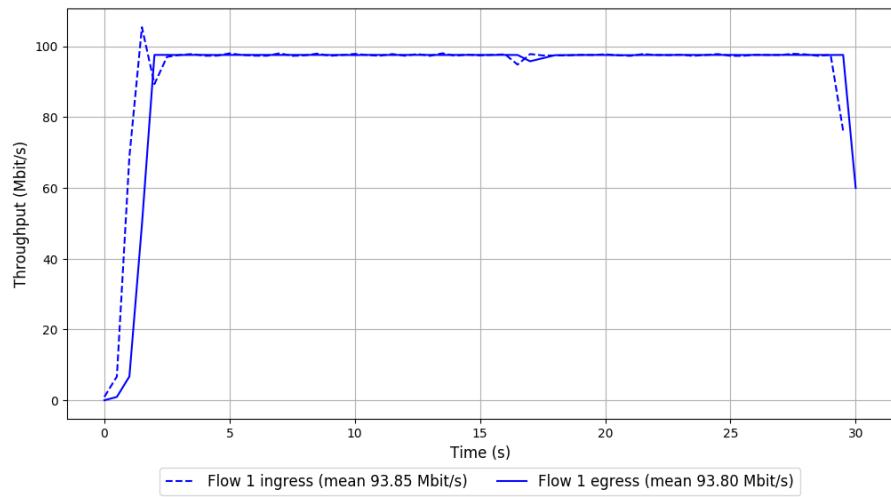


Run 1: Statistics of Indigo

```
Start at: 2019-02-20 05:13:58
End at: 2019-02-20 05:14:28
Local clock offset: -6.312 ms
Remote clock offset: 6.222 ms

# Below is generated by plot.py at 2019-02-20 07:14:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 95.966 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 95.966 ms
Loss rate: 0.62%
```

Run 1: Report of Indigo — Data Link

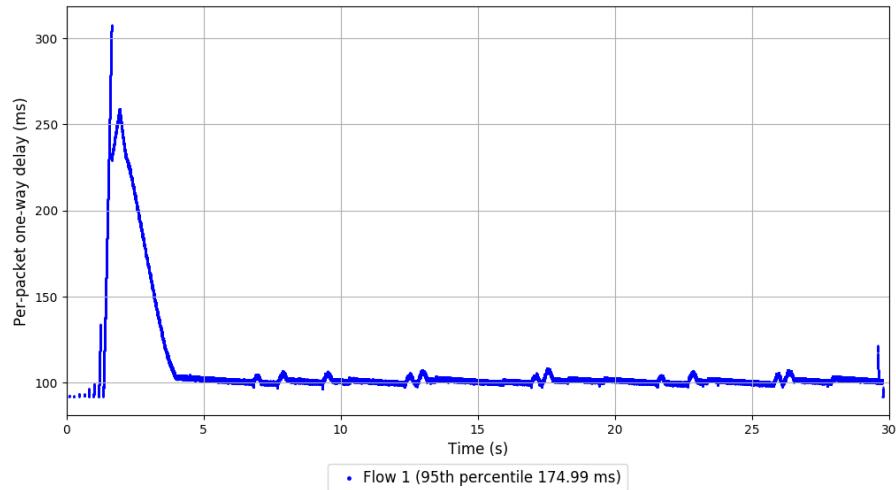
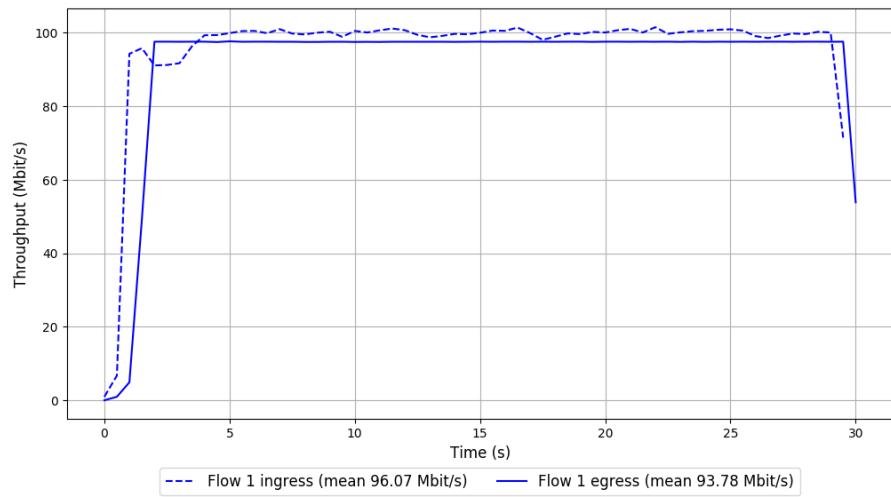


Run 2: Statistics of Indigo

```
Start at: 2019-02-20 05:38:54
End at: 2019-02-20 05:39:24
Local clock offset: -6.59 ms
Remote clock offset: 3.495 ms

# Below is generated by plot.py at 2019-02-20 07:14:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.78 Mbit/s
95th percentile per-packet one-way delay: 174.987 ms
Loss rate: 2.93%
-- Flow 1:
Average throughput: 93.78 Mbit/s
95th percentile per-packet one-way delay: 174.987 ms
Loss rate: 2.93%
```

Run 2: Report of Indigo — Data Link

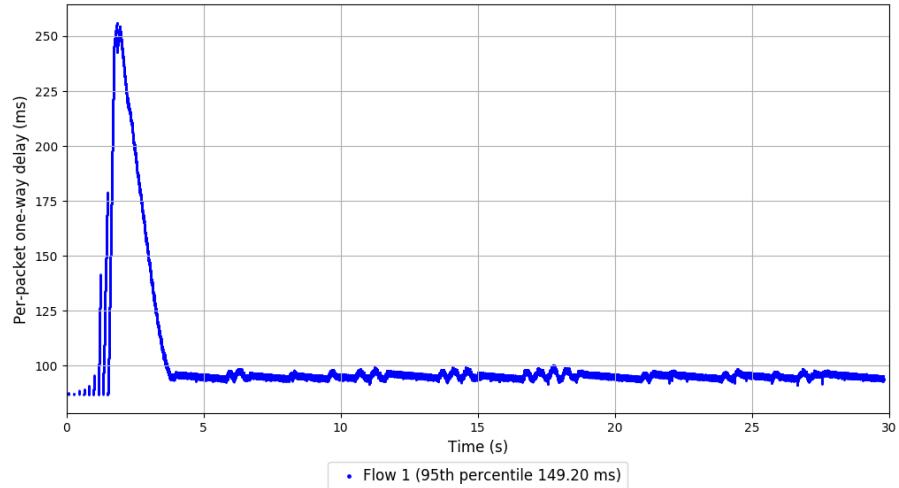
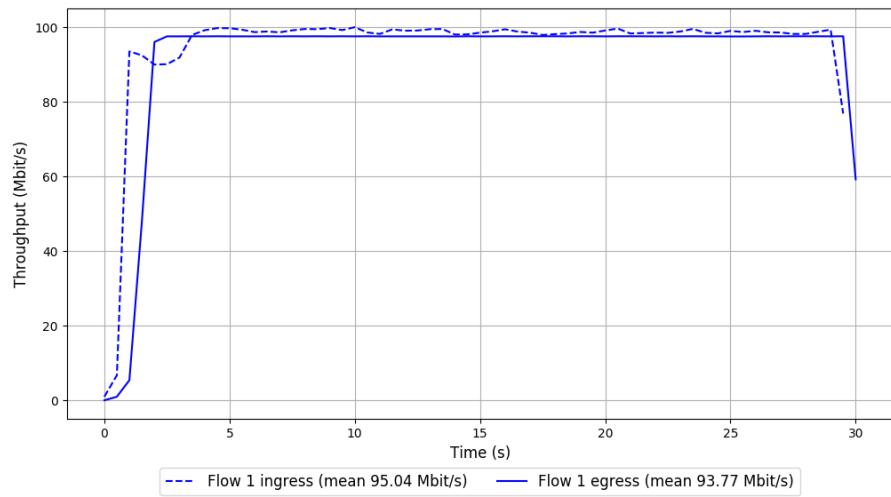


Run 3: Statistics of Indigo

```
Start at: 2019-02-20 06:03:48
End at: 2019-02-20 06:04:18
Local clock offset: -6.626 ms
Remote clock offset: 6.546 ms

# Below is generated by plot.py at 2019-02-20 07:15:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.77 Mbit/s
95th percentile per-packet one-way delay: 149.198 ms
Loss rate: 1.90%
-- Flow 1:
Average throughput: 93.77 Mbit/s
95th percentile per-packet one-way delay: 149.198 ms
Loss rate: 1.90%
```

Run 3: Report of Indigo — Data Link

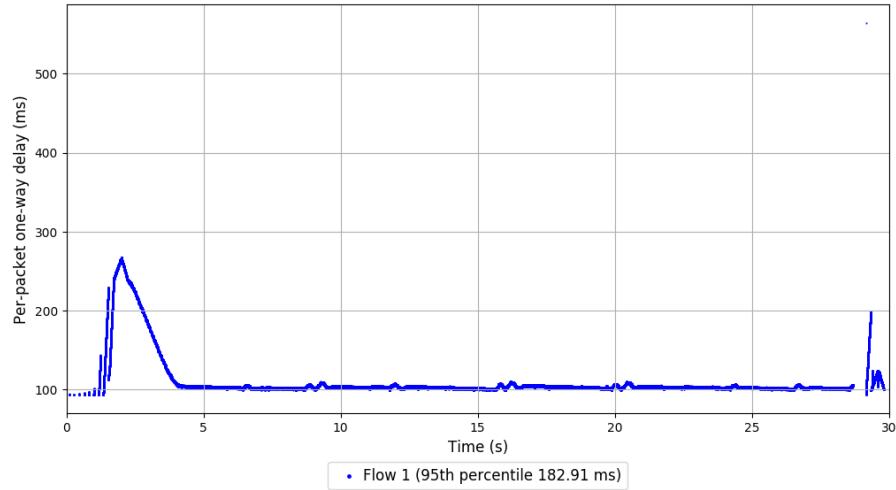
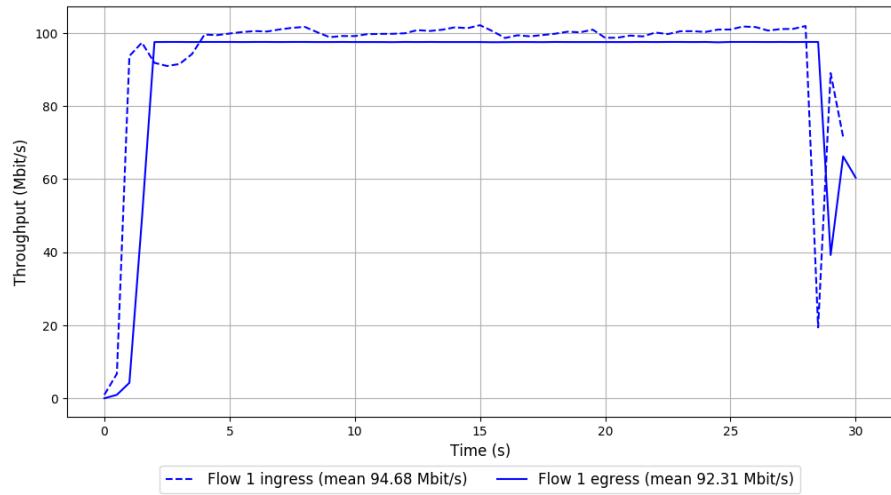


Run 4: Statistics of Indigo

```
Start at: 2019-02-20 06:28:45
End at: 2019-02-20 06:29:15
Local clock offset: -6.306 ms
Remote clock offset: 1.352 ms

# Below is generated by plot.py at 2019-02-20 07:15:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.31 Mbit/s
95th percentile per-packet one-way delay: 182.907 ms
Loss rate: 3.07%
-- Flow 1:
Average throughput: 92.31 Mbit/s
95th percentile per-packet one-way delay: 182.907 ms
Loss rate: 3.07%
```

Run 4: Report of Indigo — Data Link

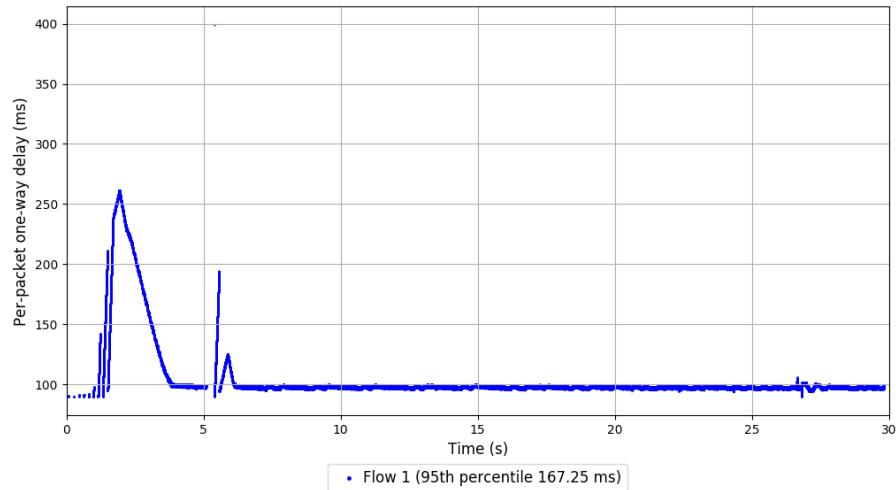
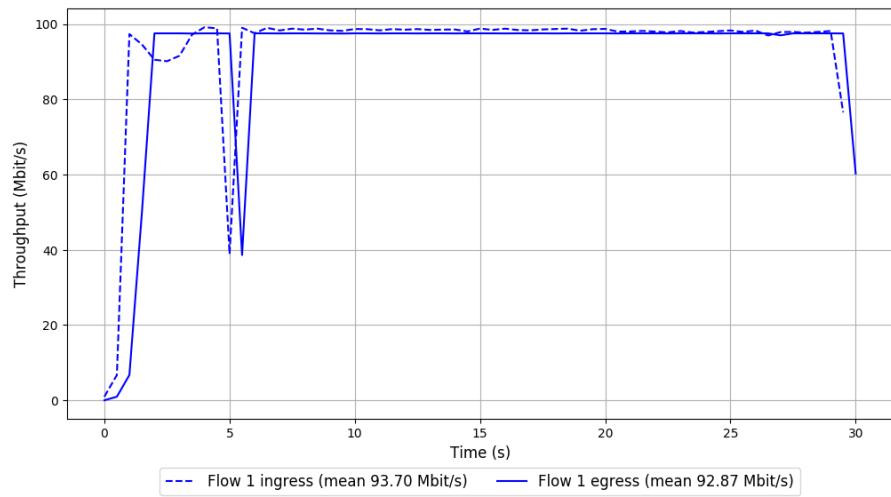


Run 5: Statistics of Indigo

```
Start at: 2019-02-20 06:53:44
End at: 2019-02-20 06:54:14
Local clock offset: -6.783 ms
Remote clock offset: 2.713 ms

# Below is generated by plot.py at 2019-02-20 07:15:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.87 Mbit/s
95th percentile per-packet one-way delay: 167.255 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 92.87 Mbit/s
95th percentile per-packet one-way delay: 167.255 ms
Loss rate: 1.45%
```

Run 5: Report of Indigo — Data Link

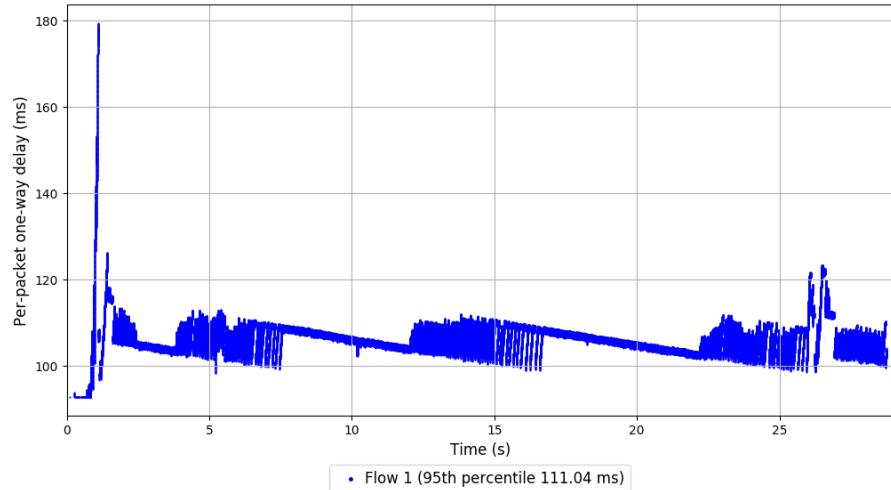
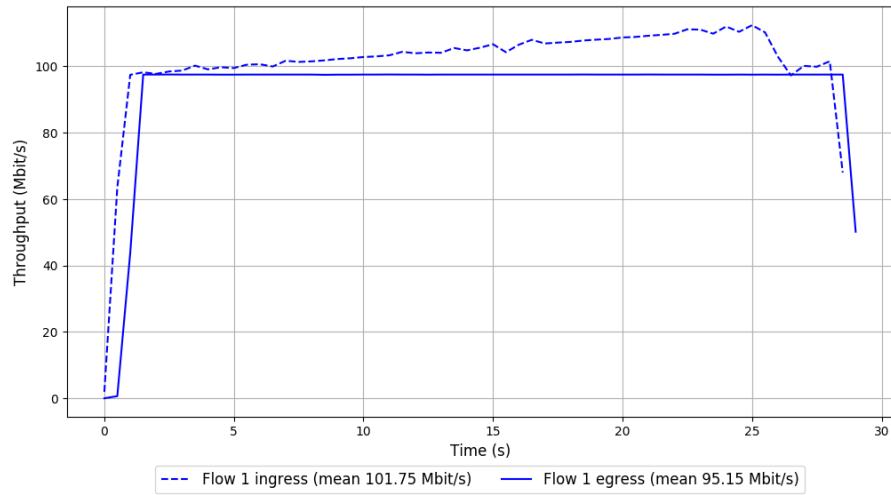


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-02-20 05:28:11
End at: 2019-02-20 05:28:41
Local clock offset: -6.361 ms
Remote clock offset: 2.286 ms

# Below is generated by plot.py at 2019-02-20 07:15:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.15 Mbit/s
95th percentile per-packet one-way delay: 111.040 ms
Loss rate: 7.04%
-- Flow 1:
Average throughput: 95.15 Mbit/s
95th percentile per-packet one-way delay: 111.040 ms
Loss rate: 7.04%
```

Run 1: Report of Indigo-MusesC3 — Data Link

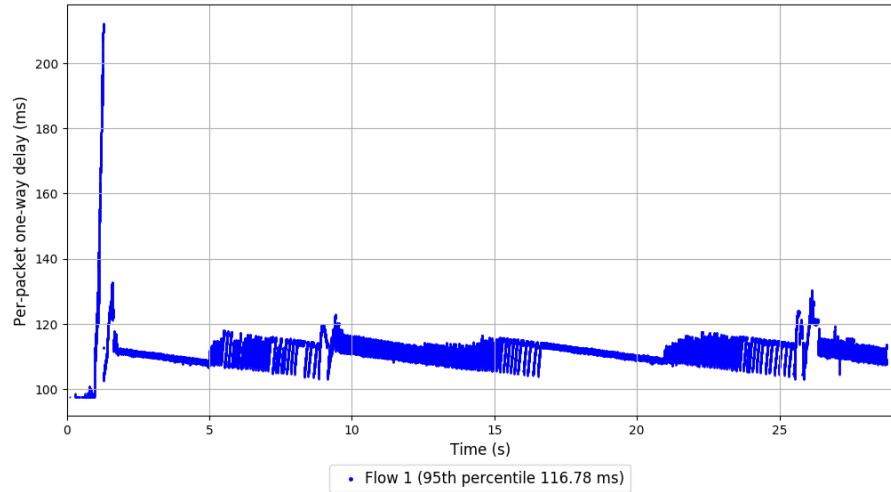
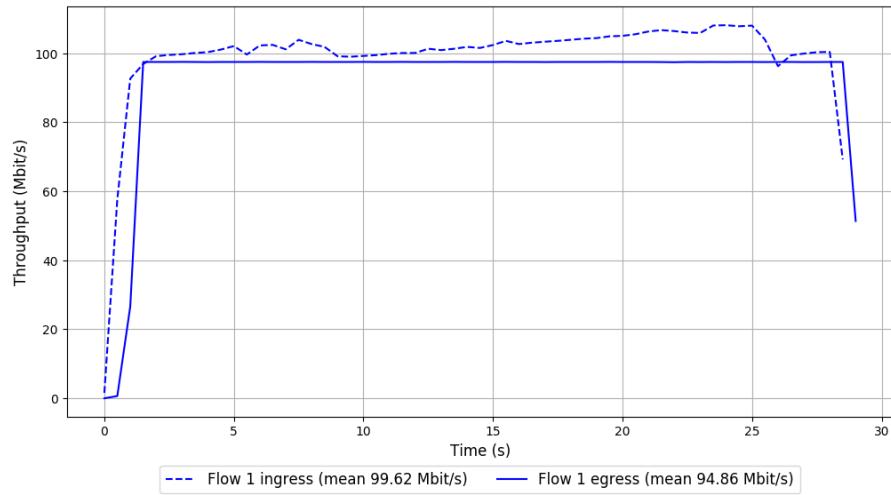


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-02-20 05:53:06
End at: 2019-02-20 05:53:36
Local clock offset: -6.757 ms
Remote clock offset: 0.931 ms

# Below is generated by plot.py at 2019-02-20 07:15:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.86 Mbit/s
95th percentile per-packet one-way delay: 116.776 ms
Loss rate: 5.36%
-- Flow 1:
Average throughput: 94.86 Mbit/s
95th percentile per-packet one-way delay: 116.776 ms
Loss rate: 5.36%
```

Run 2: Report of Indigo-MusesC3 — Data Link

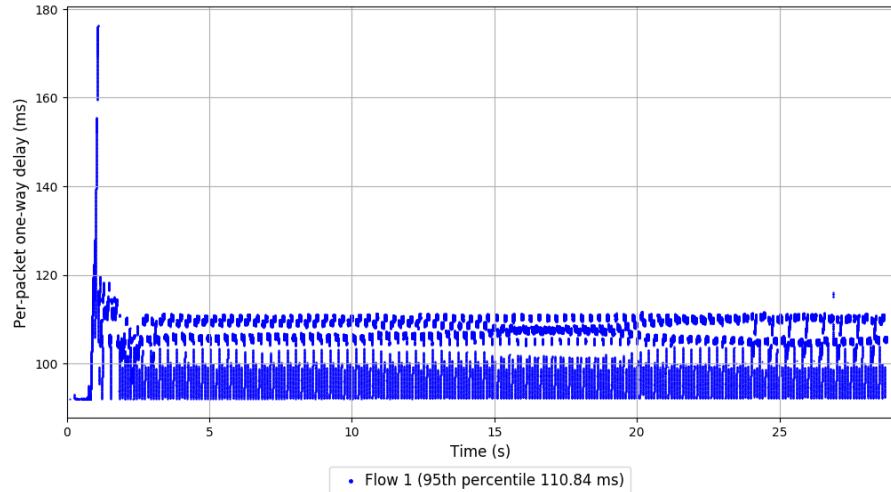
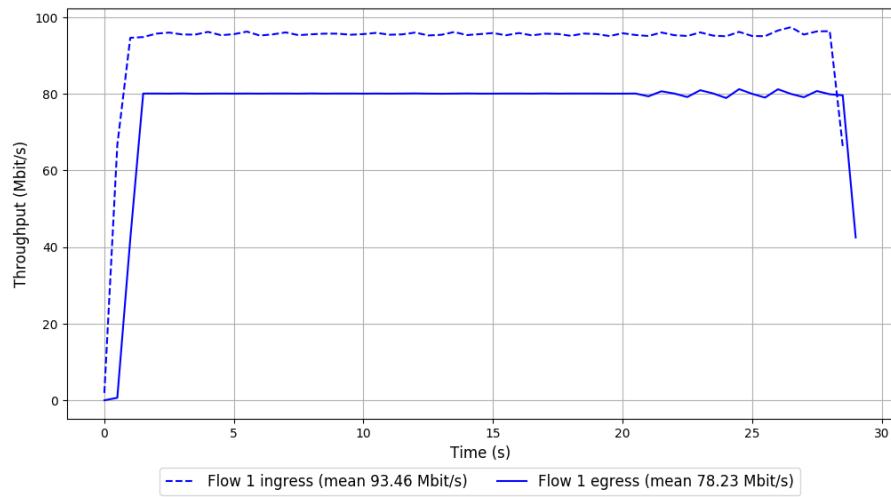


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-02-20 06:18:01
End at: 2019-02-20 06:18:31
Local clock offset: -6.425 ms
Remote clock offset: 1.448 ms

# Below is generated by plot.py at 2019-02-20 07:15:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.23 Mbit/s
95th percentile per-packet one-way delay: 110.840 ms
Loss rate: 16.79%
-- Flow 1:
Average throughput: 78.23 Mbit/s
95th percentile per-packet one-way delay: 110.840 ms
Loss rate: 16.79%
```

Run 3: Report of Indigo-MusesC3 — Data Link

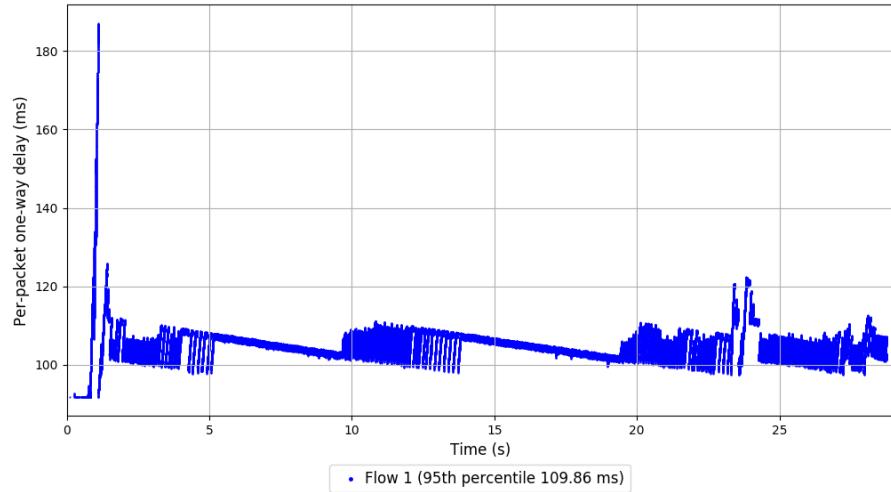
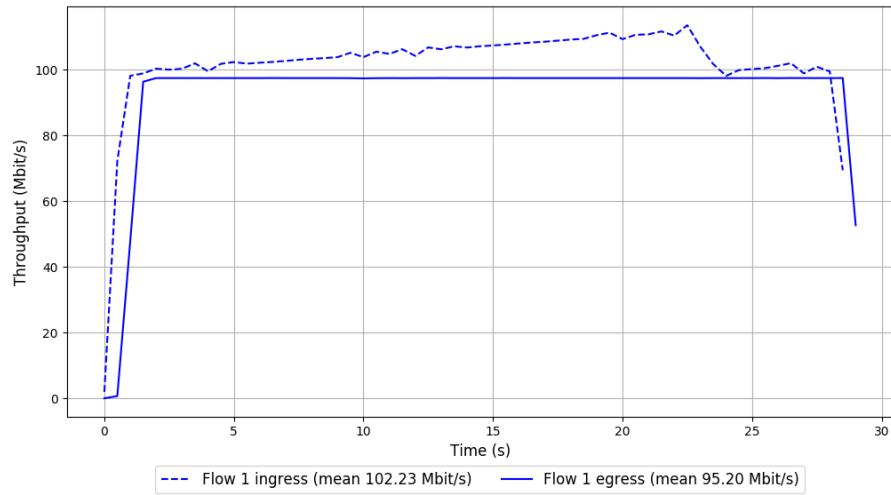


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-02-20 06:43:01
End at: 2019-02-20 06:43:31
Local clock offset: -6.718 ms
Remote clock offset: 2.956 ms

# Below is generated by plot.py at 2019-02-20 07:15:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.20 Mbit/s
95th percentile per-packet one-way delay: 109.865 ms
Loss rate: 7.44%
-- Flow 1:
Average throughput: 95.20 Mbit/s
95th percentile per-packet one-way delay: 109.865 ms
Loss rate: 7.44%
```

Run 4: Report of Indigo-MusesC3 — Data Link

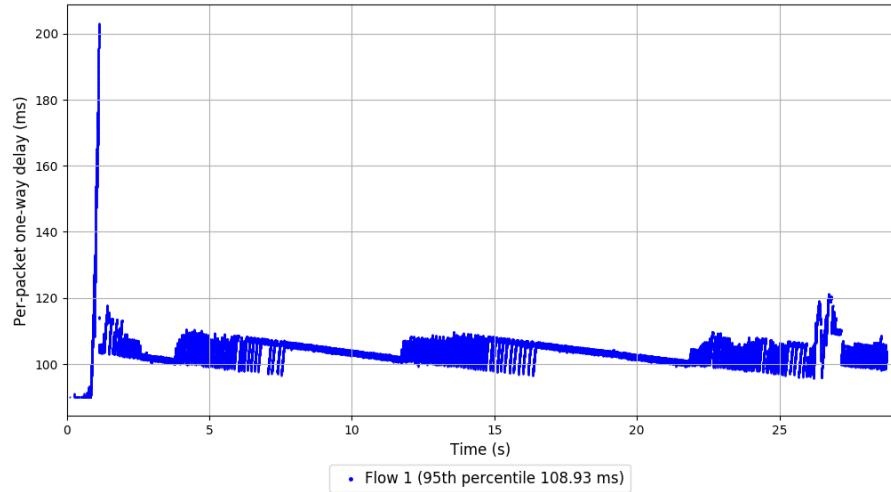
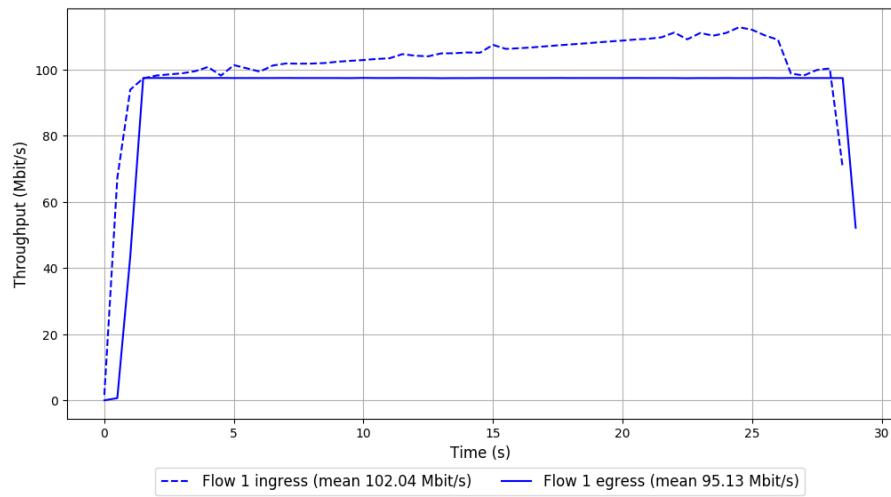


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-02-20 07:07:56
End at: 2019-02-20 07:08:26
Local clock offset: -6.55 ms
Remote clock offset: 2.351 ms

# Below is generated by plot.py at 2019-02-20 07:15:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.13 Mbit/s
95th percentile per-packet one-way delay: 108.931 ms
Loss rate: 7.31%
-- Flow 1:
Average throughput: 95.13 Mbit/s
95th percentile per-packet one-way delay: 108.931 ms
Loss rate: 7.31%
```

Run 5: Report of Indigo-MusesC3 — Data Link

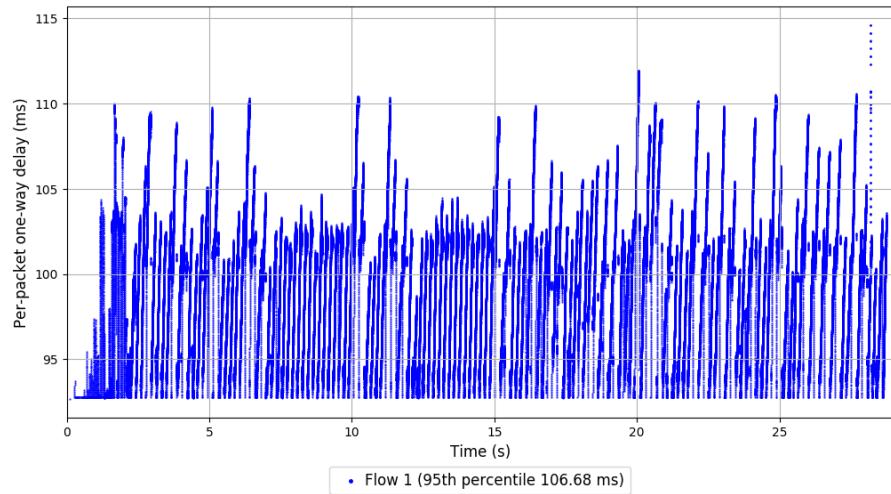
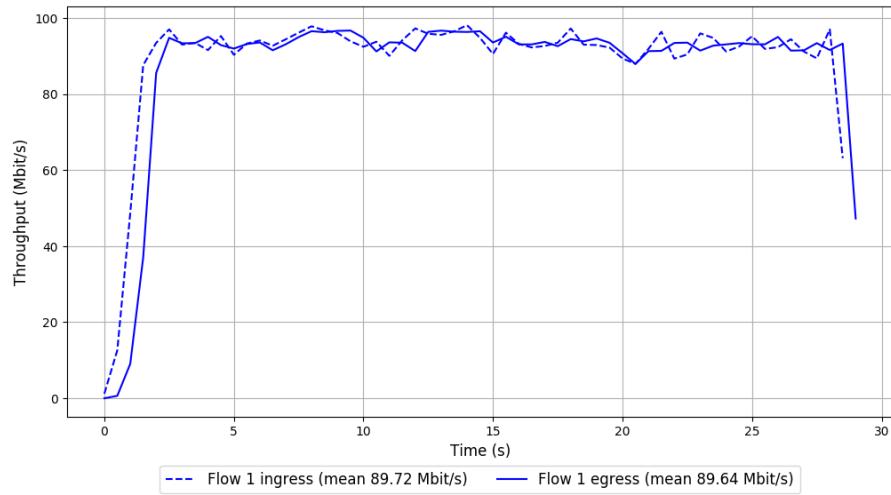


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-02-20 05:24:41
End at: 2019-02-20 05:25:11
Local clock offset: -6.341 ms
Remote clock offset: 6.897 ms

# Below is generated by plot.py at 2019-02-20 07:16:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.64 Mbit/s
95th percentile per-packet one-way delay: 106.683 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 89.64 Mbit/s
95th percentile per-packet one-way delay: 106.683 ms
Loss rate: 0.71%
```

Run 1: Report of Indigo-MusesC5 — Data Link

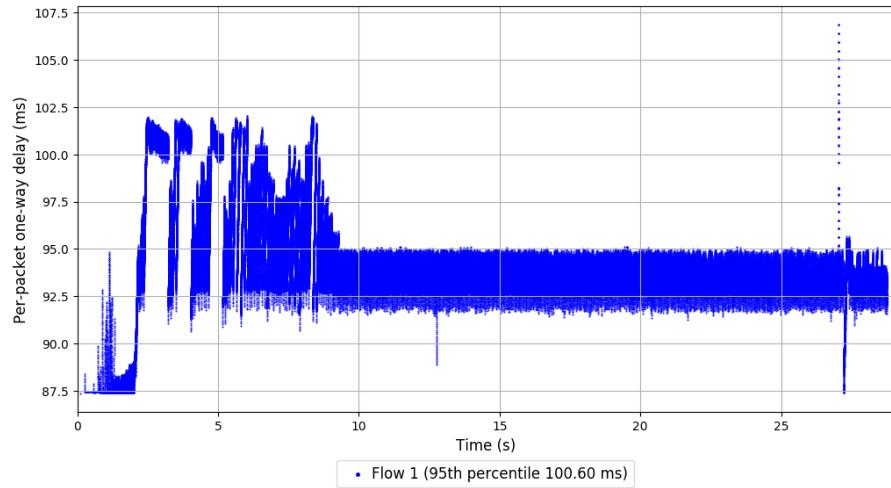
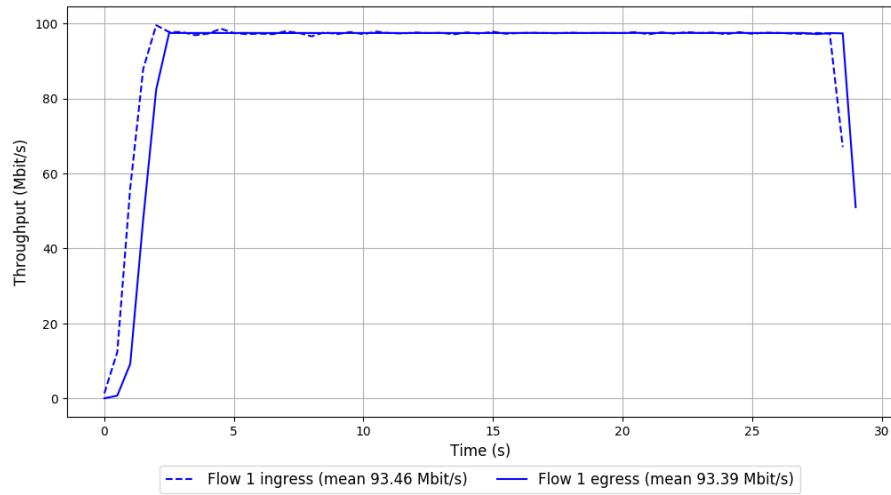


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-02-20 05:49:36
End at: 2019-02-20 05:50:06
Local clock offset: -6.735 ms
Remote clock offset: 4.938 ms

# Below is generated by plot.py at 2019-02-20 07:16:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.39 Mbit/s
95th percentile per-packet one-way delay: 100.596 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 93.39 Mbit/s
95th percentile per-packet one-way delay: 100.596 ms
Loss rate: 0.66%
```

Run 2: Report of Indigo-MusesC5 — Data Link

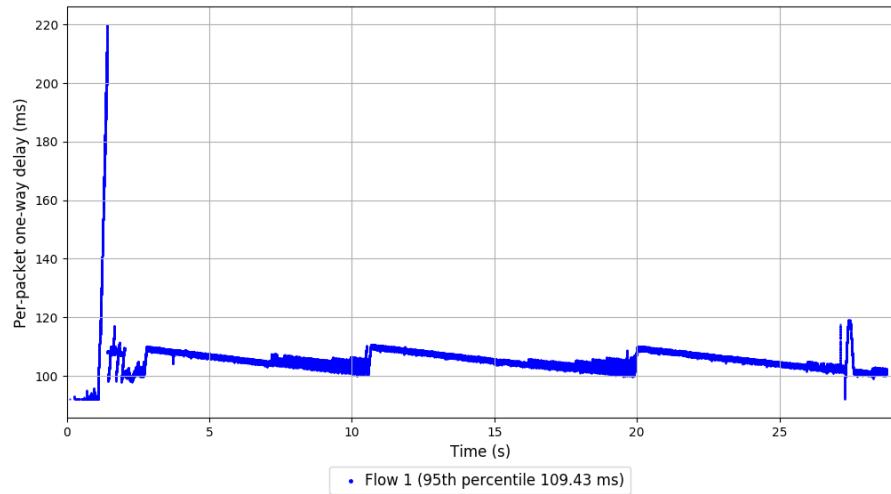
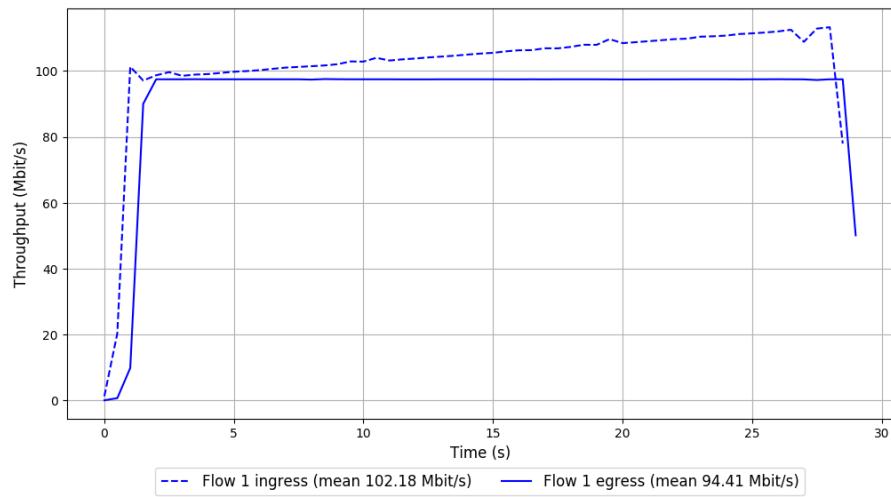


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-02-20 06:14:31
End at: 2019-02-20 06:15:01
Local clock offset: -6.406 ms
Remote clock offset: 5.296 ms

# Below is generated by plot.py at 2019-02-20 07:16:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.41 Mbit/s
95th percentile per-packet one-way delay: 109.431 ms
Loss rate: 8.17%
-- Flow 1:
Average throughput: 94.41 Mbit/s
95th percentile per-packet one-way delay: 109.431 ms
Loss rate: 8.17%
```

Run 3: Report of Indigo-MusesC5 — Data Link

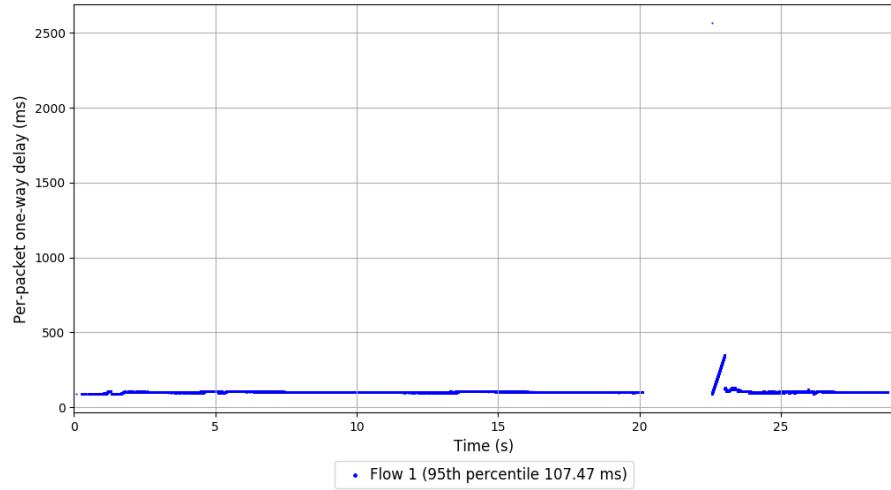
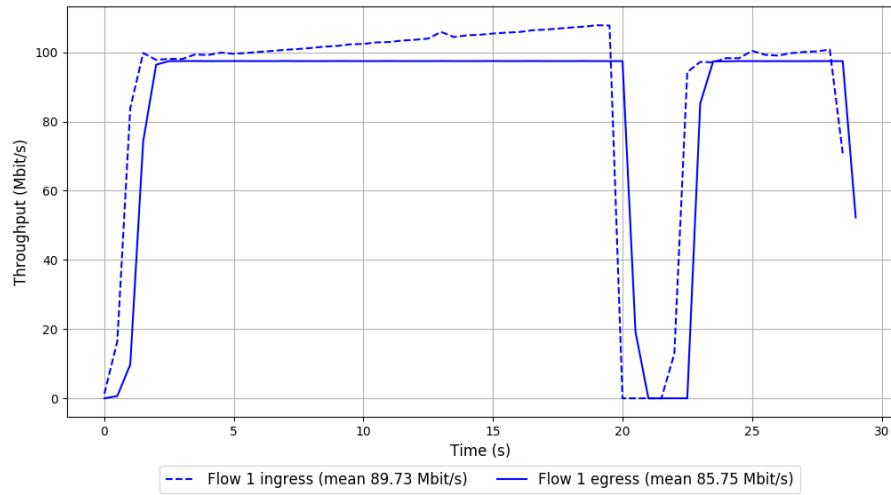


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-02-20 06:39:28
End at: 2019-02-20 06:39:58
Local clock offset: -6.672 ms
Remote clock offset: 5.505 ms

# Below is generated by plot.py at 2019-02-20 07:16:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.75 Mbit/s
95th percentile per-packet one-way delay: 107.467 ms
Loss rate: 5.00%
-- Flow 1:
Average throughput: 85.75 Mbit/s
95th percentile per-packet one-way delay: 107.467 ms
Loss rate: 5.00%
```

Run 4: Report of Indigo-MusesC5 — Data Link

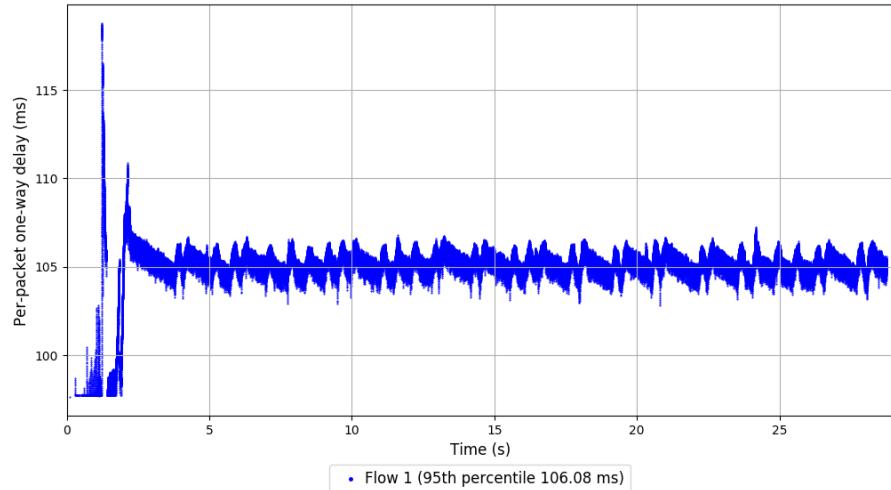
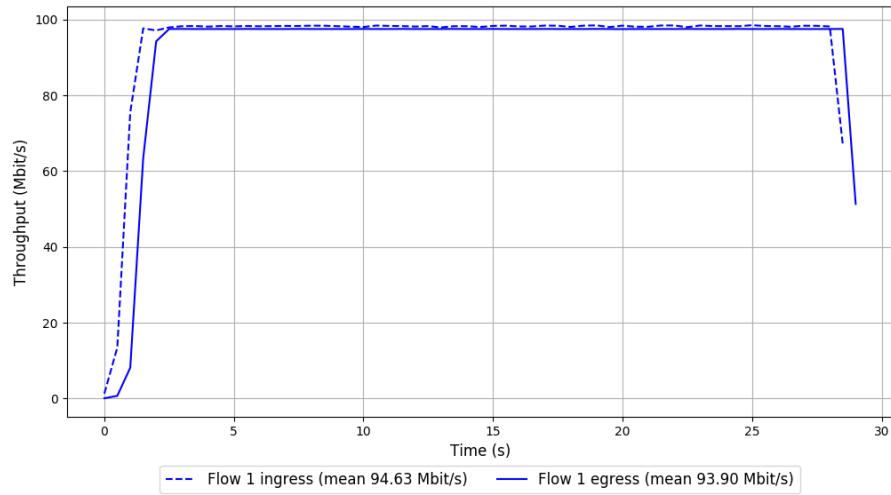


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-02-20 07:04:26
End at: 2019-02-20 07:04:56
Local clock offset: -6.626 ms
Remote clock offset: 0.91 ms

# Below is generated by plot.py at 2019-02-20 07:16:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.90 Mbit/s
95th percentile per-packet one-way delay: 106.081 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 93.90 Mbit/s
95th percentile per-packet one-way delay: 106.081 ms
Loss rate: 1.38%
```

Run 5: Report of Indigo-MusesC5 — Data Link

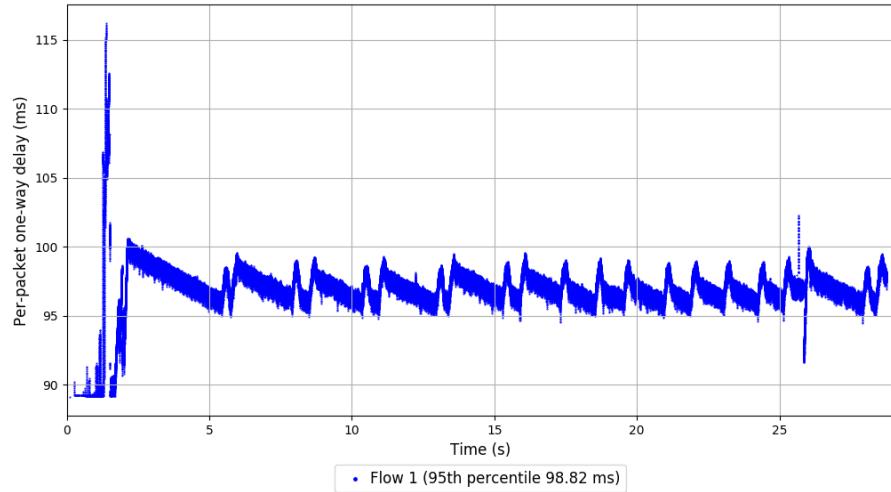
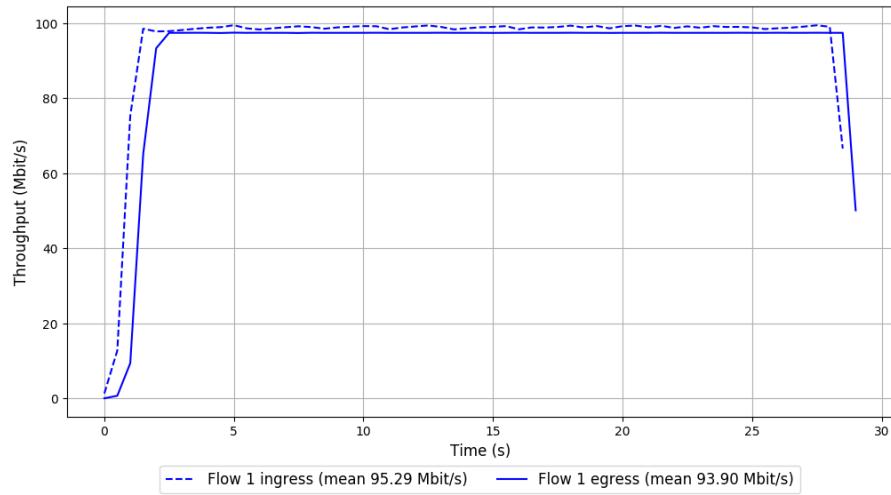


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-02-20 05:12:46
End at: 2019-02-20 05:13:16
Local clock offset: -6.357 ms
Remote clock offset: 5.922 ms

# Below is generated by plot.py at 2019-02-20 07:16:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.90 Mbit/s
95th percentile per-packet one-way delay: 98.819 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 93.90 Mbit/s
95th percentile per-packet one-way delay: 98.819 ms
Loss rate: 2.04%
```

Run 1: Report of Indigo-MusesD — Data Link

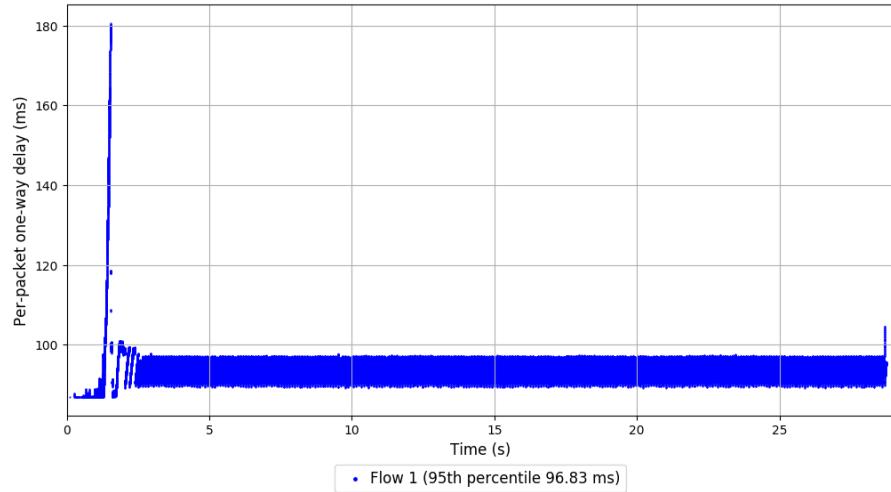
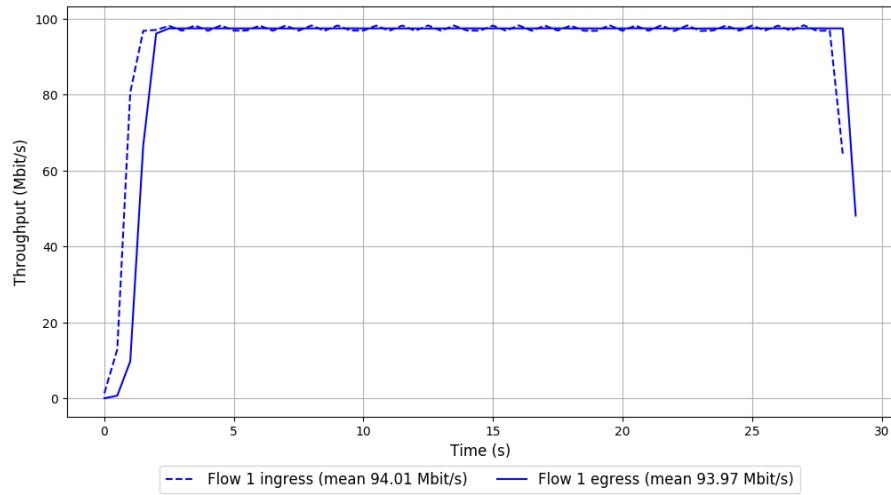


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-02-20 05:37:42
End at: 2019-02-20 05:38:12
Local clock offset: -6.567 ms
Remote clock offset: 8.489 ms

# Below is generated by plot.py at 2019-02-20 07:16:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.97 Mbit/s
95th percentile per-packet one-way delay: 96.831 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 93.97 Mbit/s
95th percentile per-packet one-way delay: 96.831 ms
Loss rate: 0.63%
```

Run 2: Report of Indigo-MusesD — Data Link

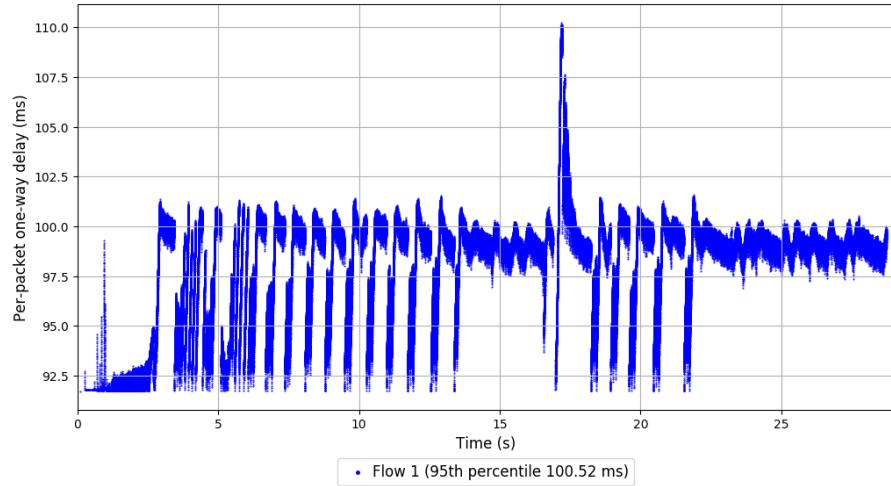
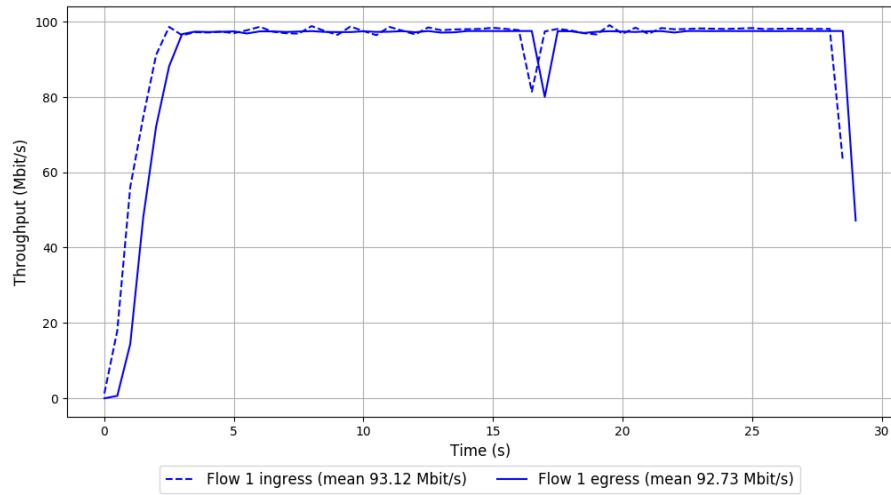


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-02-20 06:02:36
End at: 2019-02-20 06:03:06
Local clock offset: -6.677 ms
Remote clock offset: 1.687 ms

# Below is generated by plot.py at 2019-02-20 07:16:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.73 Mbit/s
95th percentile per-packet one-way delay: 100.518 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 92.73 Mbit/s
95th percentile per-packet one-way delay: 100.518 ms
Loss rate: 1.01%
```

Run 3: Report of Indigo-MusesD — Data Link

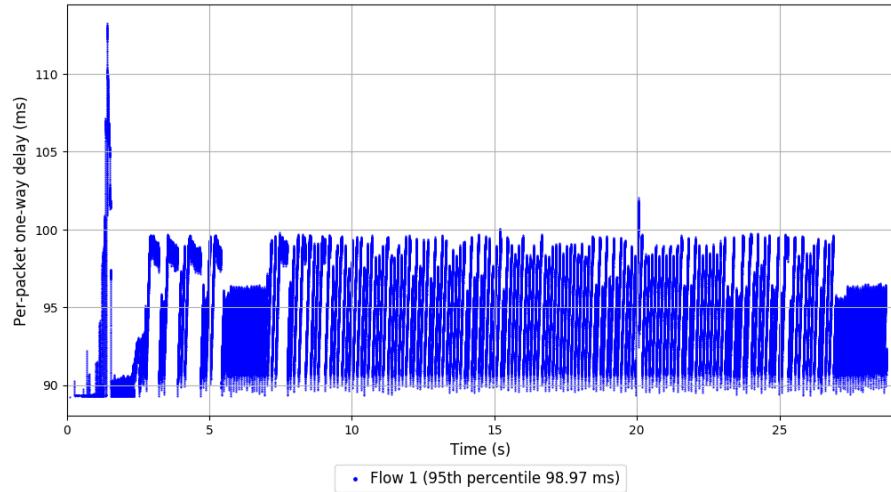
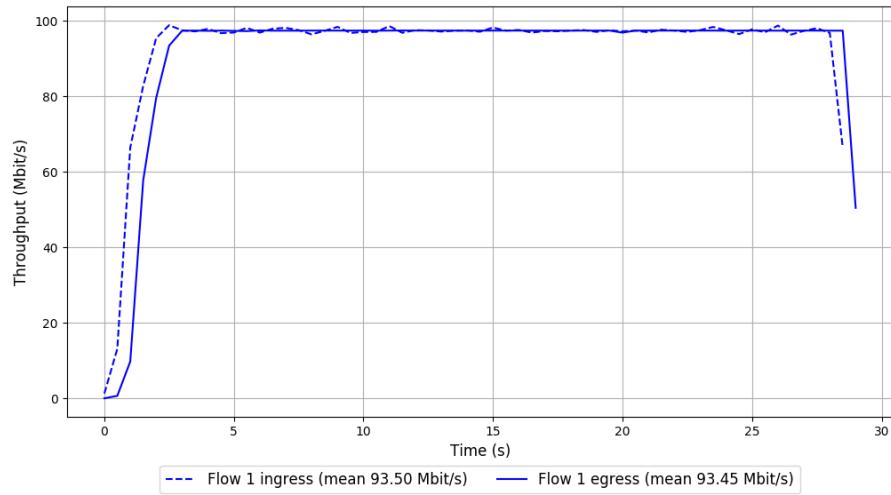


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-02-20 06:27:33
End at: 2019-02-20 06:28:04
Local clock offset: -6.298 ms
Remote clock offset: 5.244 ms

# Below is generated by plot.py at 2019-02-20 07:17:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.45 Mbit/s
95th percentile per-packet one-way delay: 98.966 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 93.45 Mbit/s
95th percentile per-packet one-way delay: 98.966 ms
Loss rate: 0.65%
```

Run 4: Report of Indigo-MusesD — Data Link

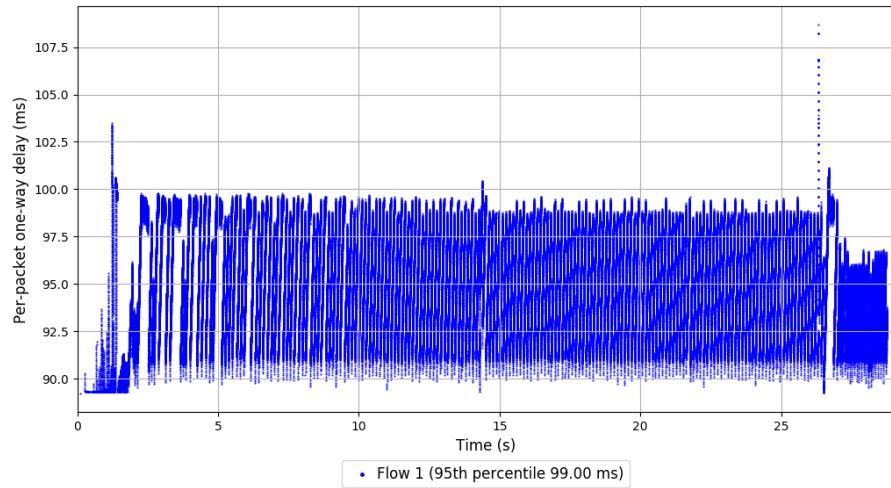
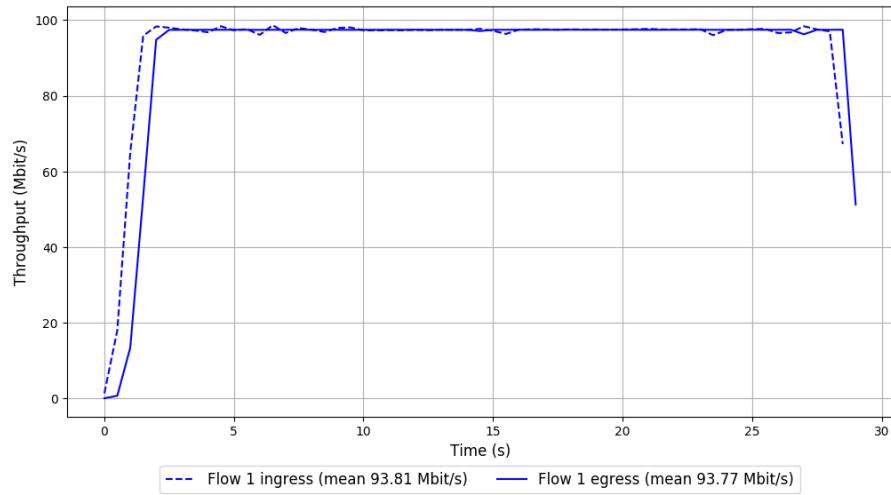


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-02-20 06:52:32
End at: 2019-02-20 06:53:02
Local clock offset: -6.737 ms
Remote clock offset: 5.363 ms

# Below is generated by plot.py at 2019-02-20 07:17:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.77 Mbit/s
95th percentile per-packet one-way delay: 99.005 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 93.77 Mbit/s
95th percentile per-packet one-way delay: 99.005 ms
Loss rate: 0.64%
```

Run 5: Report of Indigo-MusesD — Data Link

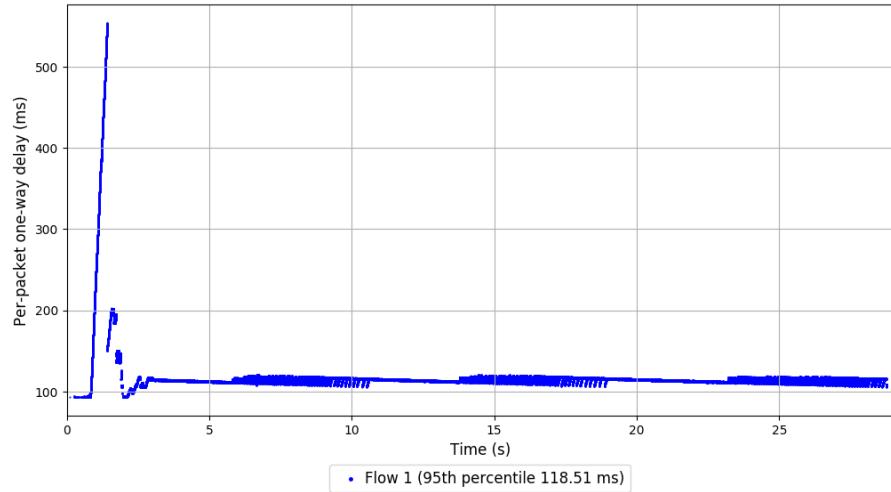
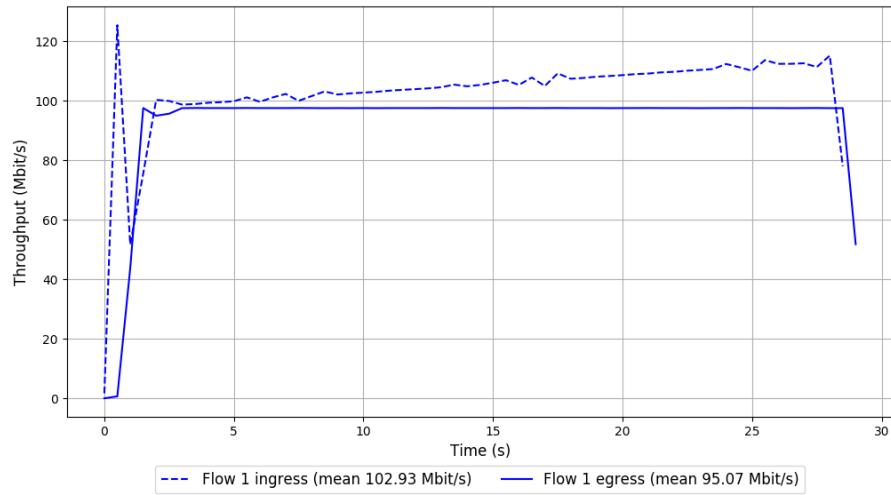


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-02-20 05:04:25
End at: 2019-02-20 05:04:55
Local clock offset: -6.166 ms
Remote clock offset: 2.077 ms

# Below is generated by plot.py at 2019-02-20 07:17:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.07 Mbit/s
95th percentile per-packet one-way delay: 118.514 ms
Loss rate: 8.19%
-- Flow 1:
Average throughput: 95.07 Mbit/s
95th percentile per-packet one-way delay: 118.514 ms
Loss rate: 8.19%
```

Run 1: Report of Indigo-MusesT — Data Link

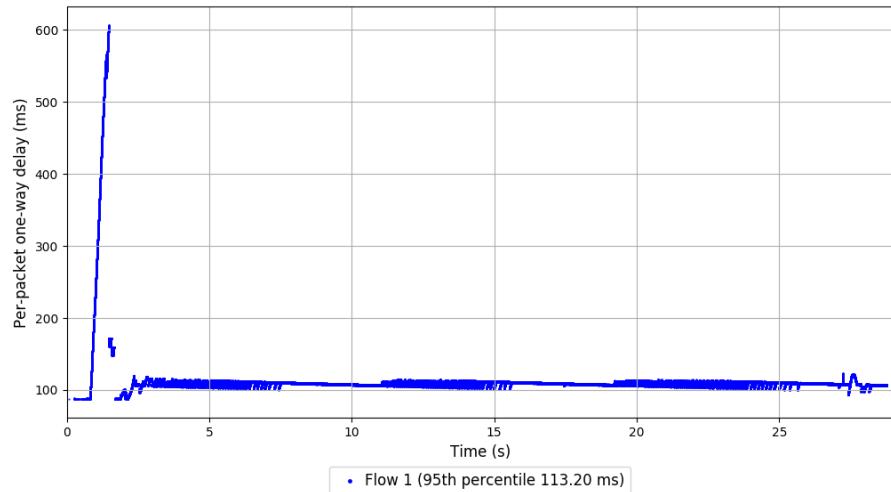
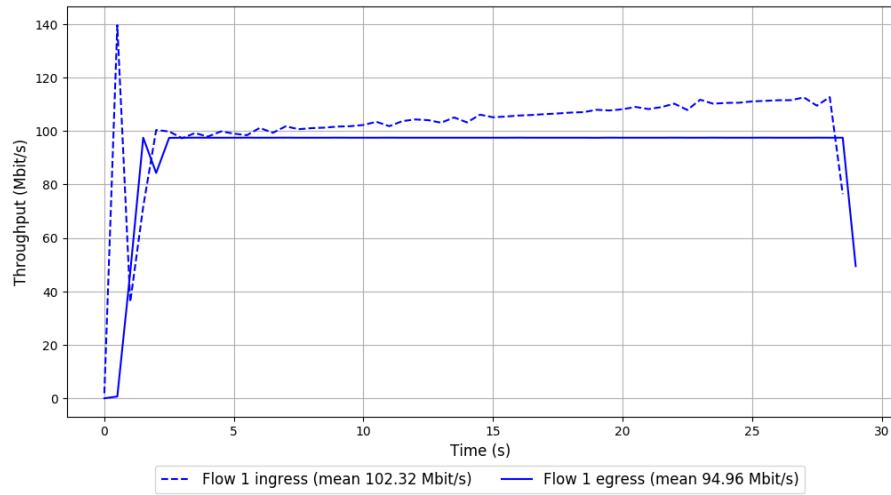


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-02-20 05:29:23
End at: 2019-02-20 05:29:53
Local clock offset: -6.358 ms
Remote clock offset: 8.288 ms

# Below is generated by plot.py at 2019-02-20 07:17:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.96 Mbit/s
95th percentile per-packet one-way delay: 113.200 ms
Loss rate: 7.74%
-- Flow 1:
Average throughput: 94.96 Mbit/s
95th percentile per-packet one-way delay: 113.200 ms
Loss rate: 7.74%
```

Run 2: Report of Indigo-MusesT — Data Link

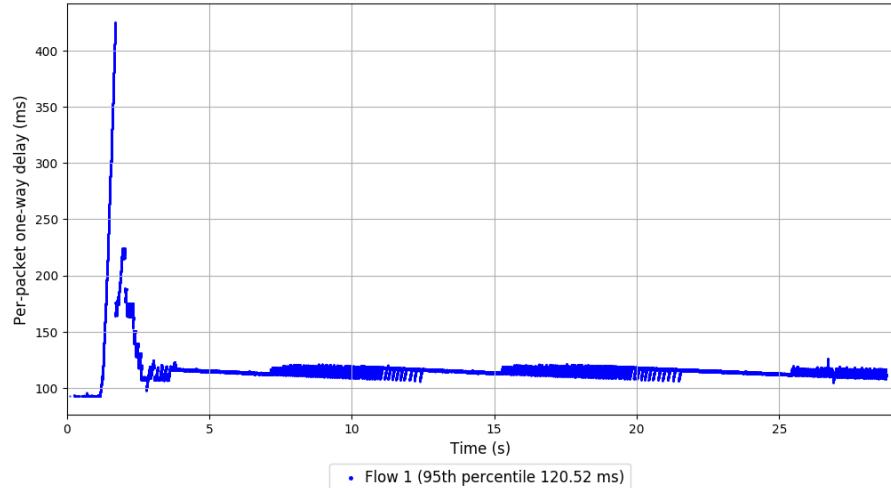
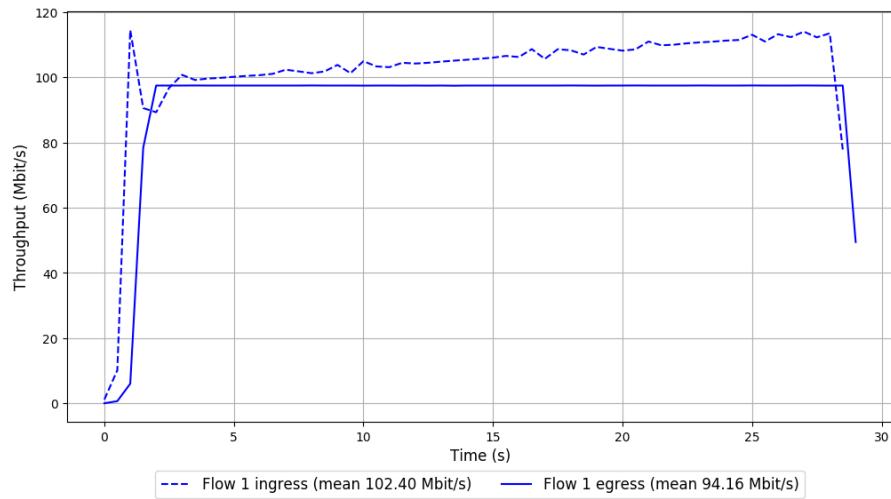


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-02-20 05:54:18
End at: 2019-02-20 05:54:48
Local clock offset: -6.776 ms
Remote clock offset: 5.588 ms

# Below is generated by plot.py at 2019-02-20 07:17:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 120.524 ms
Loss rate: 8.61%
-- Flow 1:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 120.524 ms
Loss rate: 8.61%
```

Run 3: Report of Indigo-MusesT — Data Link

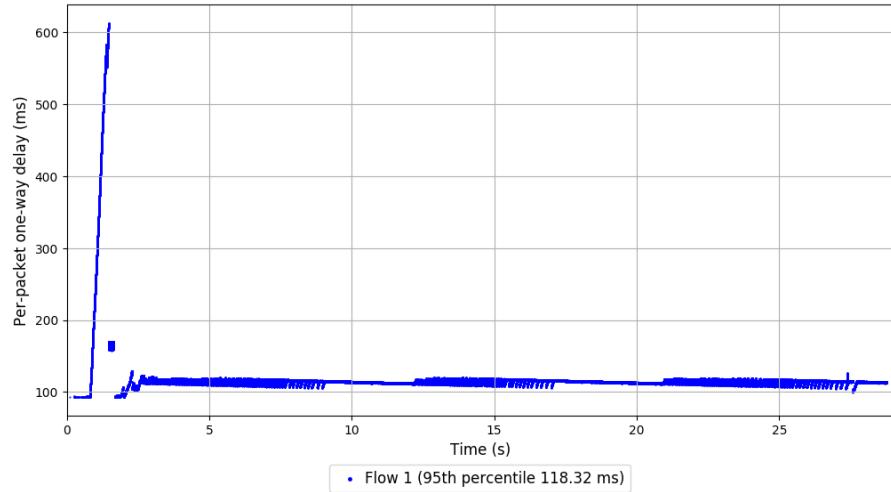
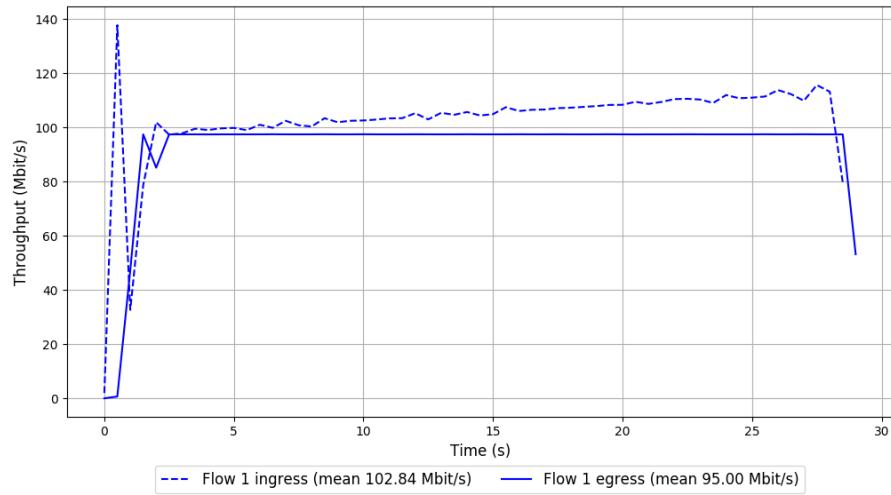


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-02-20 06:19:12
End at: 2019-02-20 06:19:42
Local clock offset: -6.36 ms
Remote clock offset: 0.801 ms

# Below is generated by plot.py at 2019-02-20 07:17:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.00 Mbit/s
95th percentile per-packet one-way delay: 118.323 ms
Loss rate: 8.18%
-- Flow 1:
Average throughput: 95.00 Mbit/s
95th percentile per-packet one-way delay: 118.323 ms
Loss rate: 8.18%
```

Run 4: Report of Indigo-MusesT — Data Link

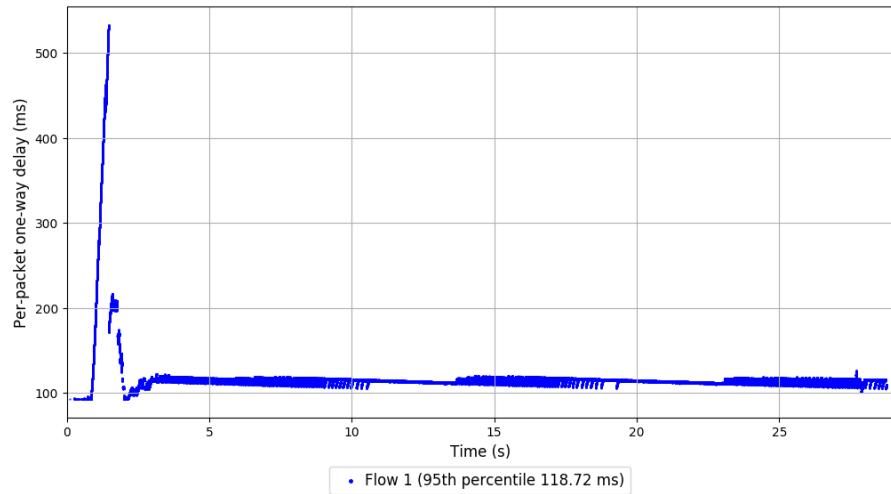
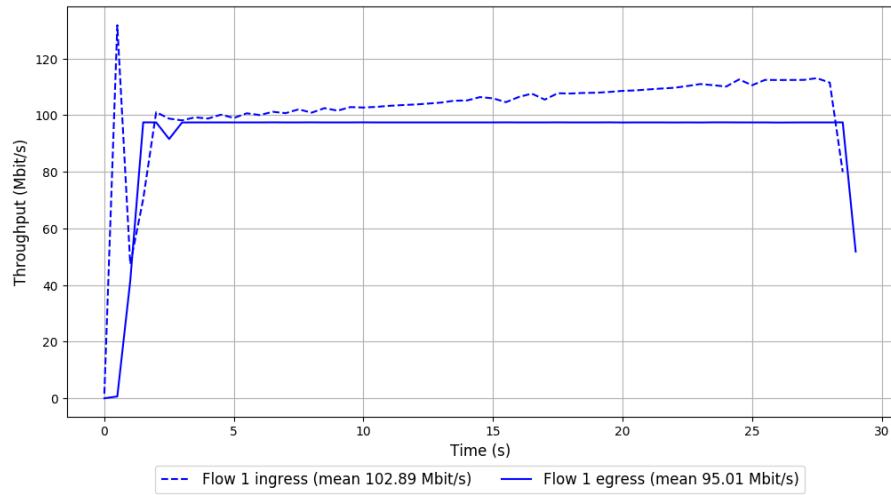


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-02-20 06:44:13
End at: 2019-02-20 06:44:43
Local clock offset: -6.739 ms
Remote clock offset: 1.775 ms

# Below is generated by plot.py at 2019-02-20 07:17:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.01 Mbit/s
95th percentile per-packet one-way delay: 118.716 ms
Loss rate: 8.21%
-- Flow 1:
Average throughput: 95.01 Mbit/s
95th percentile per-packet one-way delay: 118.716 ms
Loss rate: 8.21%
```

Run 5: Report of Indigo-MusesT — Data Link

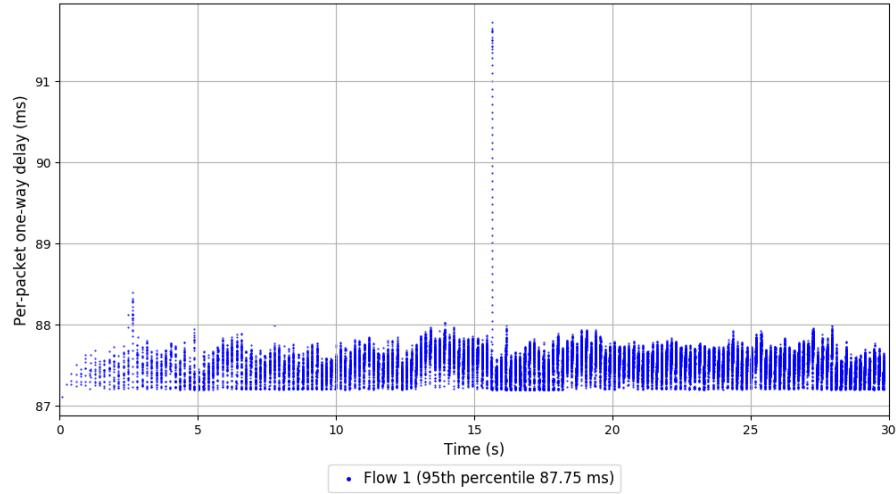
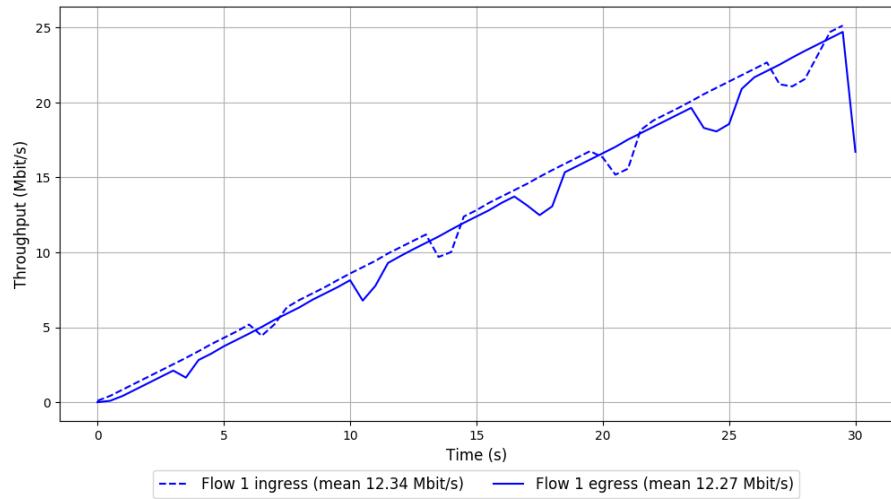


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2019-02-20 05:11:38
End at: 2019-02-20 05:12:08
Local clock offset: -6.284 ms
Remote clock offset: 5.915 ms

# Below is generated by plot.py at 2019-02-20 07:17:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.27 Mbit/s
95th percentile per-packet one-way delay: 87.746 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 12.27 Mbit/s
95th percentile per-packet one-way delay: 87.746 ms
Loss rate: 1.14%
```

Run 1: Report of LEDBAT — Data Link

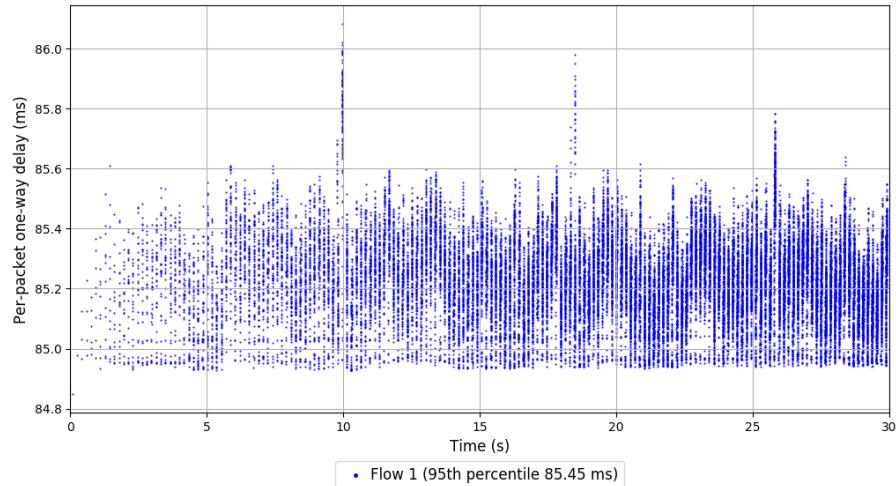
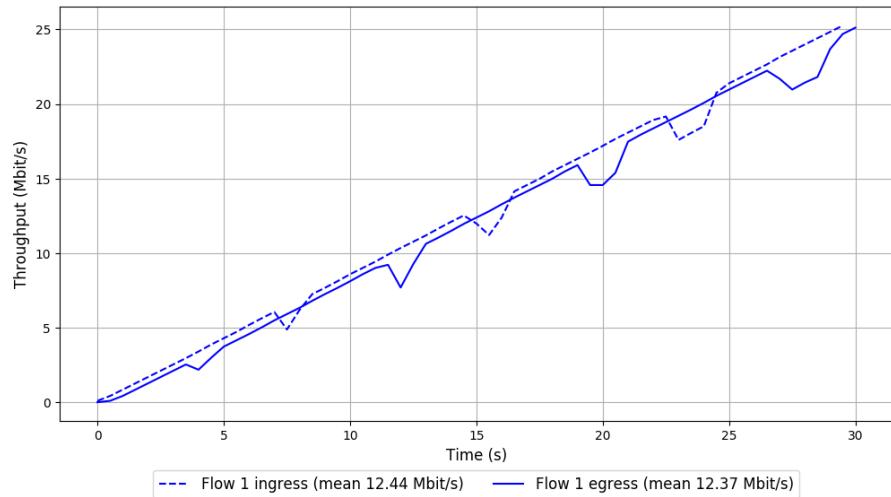


Run 2: Statistics of LEDBAT

```
Start at: 2019-02-20 05:36:34
End at: 2019-02-20 05:37:04
Local clock offset: -6.562 ms
Remote clock offset: 8.459 ms

# Below is generated by plot.py at 2019-02-20 07:17:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.37 Mbit/s
95th percentile per-packet one-way delay: 85.454 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 12.37 Mbit/s
95th percentile per-packet one-way delay: 85.454 ms
Loss rate: 1.13%
```

Run 2: Report of LEDBAT — Data Link

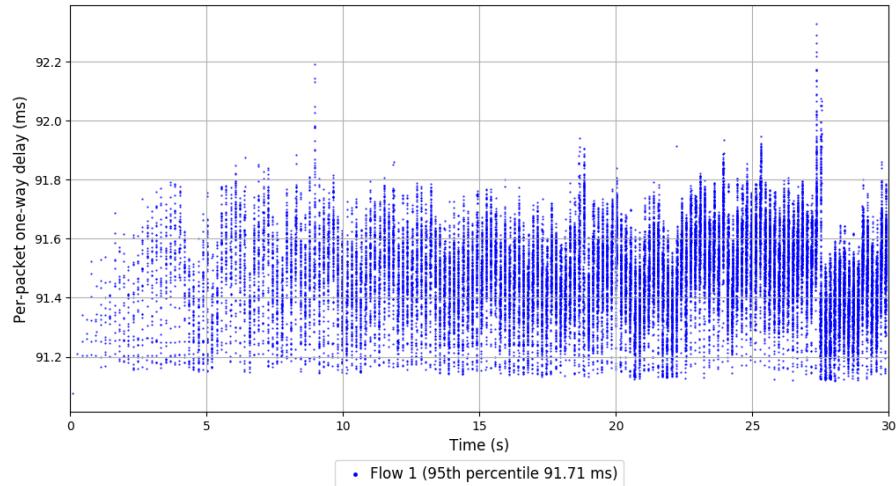
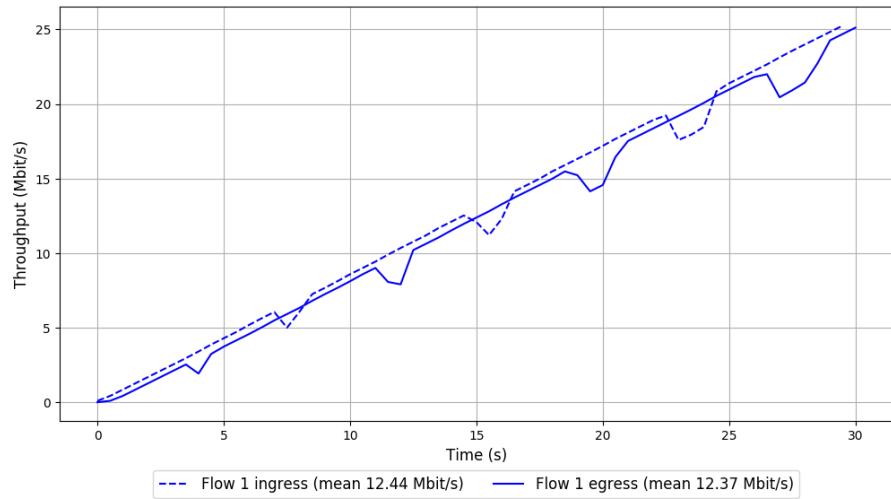


Run 3: Statistics of LEDBAT

```
Start at: 2019-02-20 06:01:27
End at: 2019-02-20 06:01:58
Local clock offset: -6.719 ms
Remote clock offset: 0.568 ms

# Below is generated by plot.py at 2019-02-20 07:17:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.37 Mbit/s
95th percentile per-packet one-way delay: 91.709 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 12.37 Mbit/s
95th percentile per-packet one-way delay: 91.709 ms
Loss rate: 1.13%
```

Run 3: Report of LEDBAT — Data Link

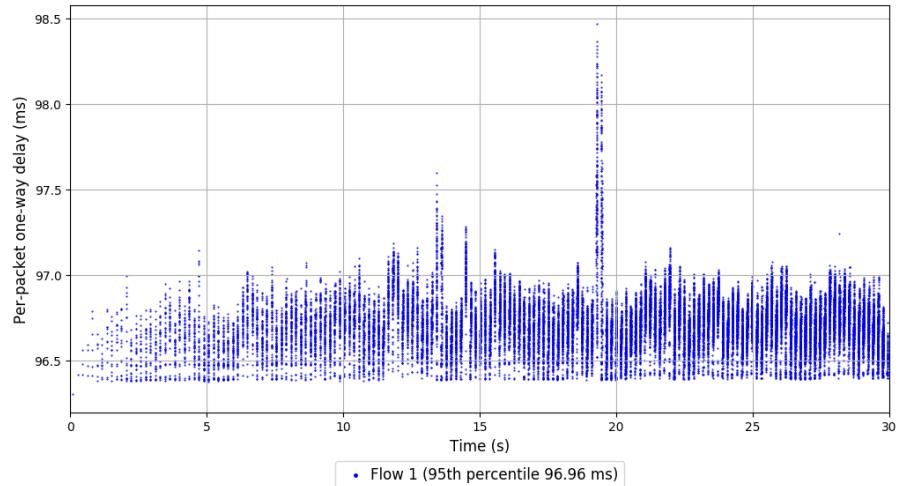
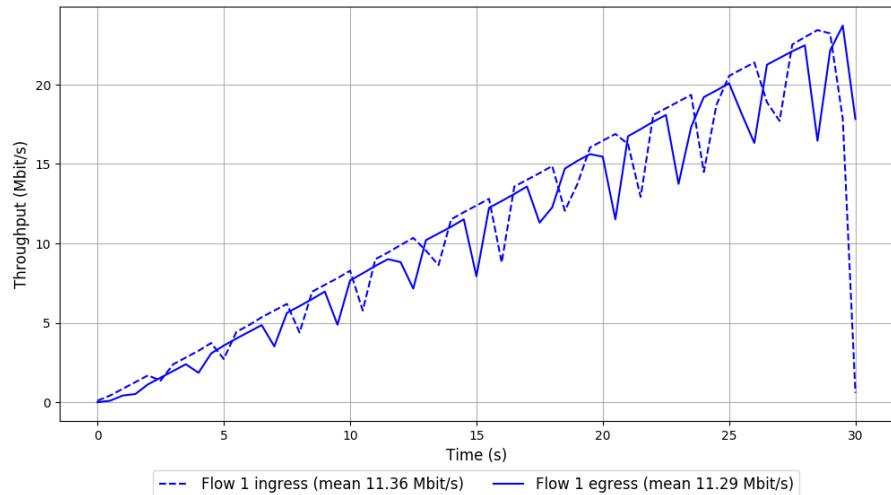


Run 4: Statistics of LEDBAT

```
Start at: 2019-02-20 06:26:25
End at: 2019-02-20 06:26:55
Local clock offset: -6.316 ms
Remote clock offset: 2.486 ms

# Below is generated by plot.py at 2019-02-20 07:17:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.29 Mbit/s
95th percentile per-packet one-way delay: 96.958 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 11.29 Mbit/s
95th percentile per-packet one-way delay: 96.958 ms
Loss rate: 1.17%
```

Run 4: Report of LEDBAT — Data Link

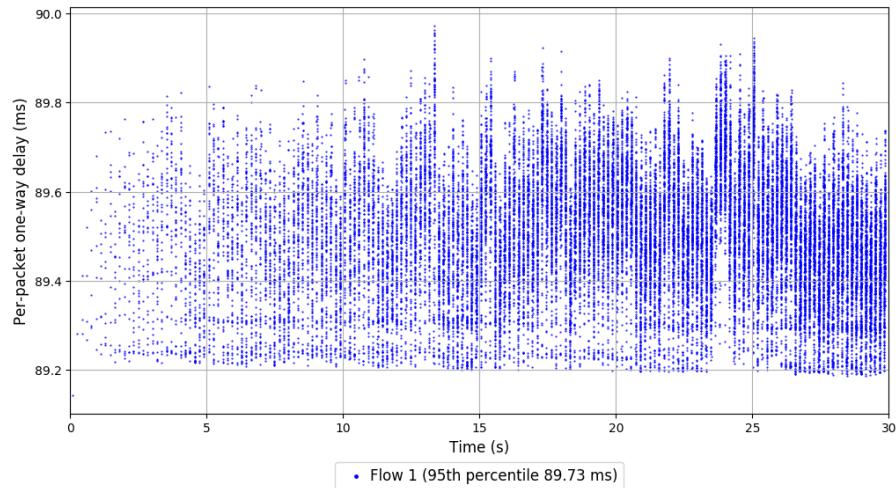
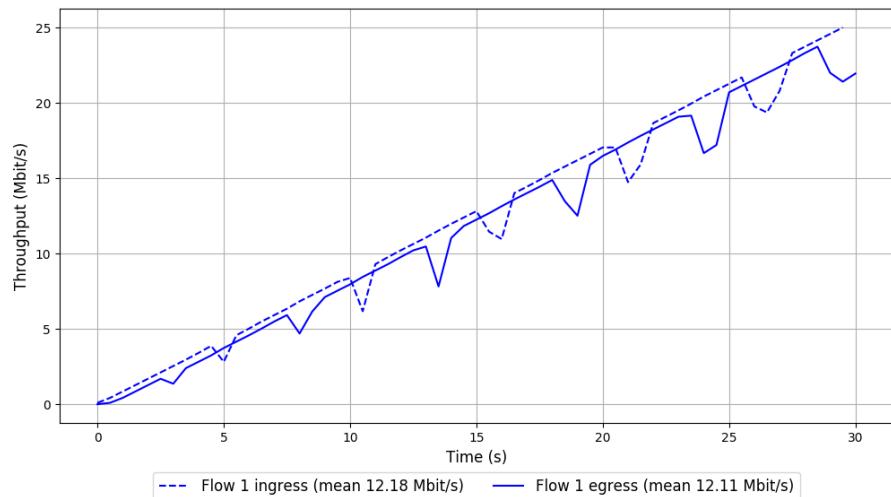


Run 5: Statistics of LEDBAT

```
Start at: 2019-02-20 06:51:23
End at: 2019-02-20 06:51:53
Local clock offset: -6.811 ms
Remote clock offset: 5.486 ms

# Below is generated by plot.py at 2019-02-20 07:17:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.11 Mbit/s
95th percentile per-packet one-way delay: 89.732 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 12.11 Mbit/s
95th percentile per-packet one-way delay: 89.732 ms
Loss rate: 1.15%
```

Run 5: Report of LEDBAT — Data Link

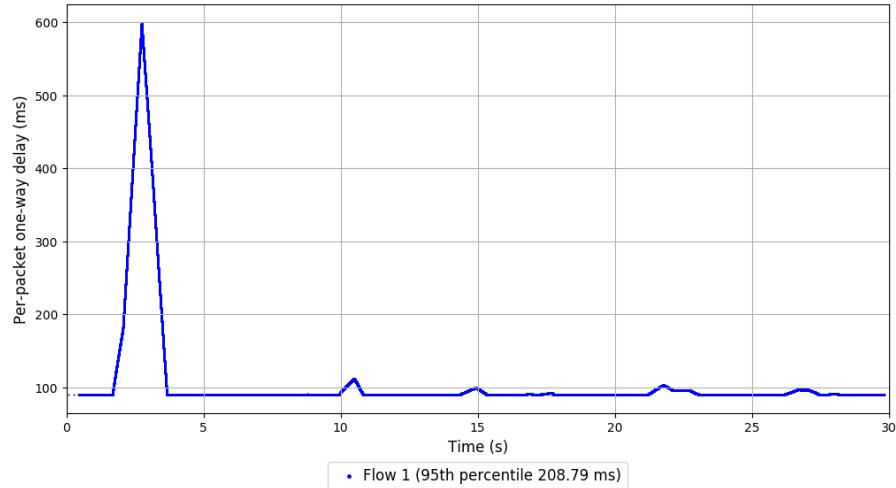
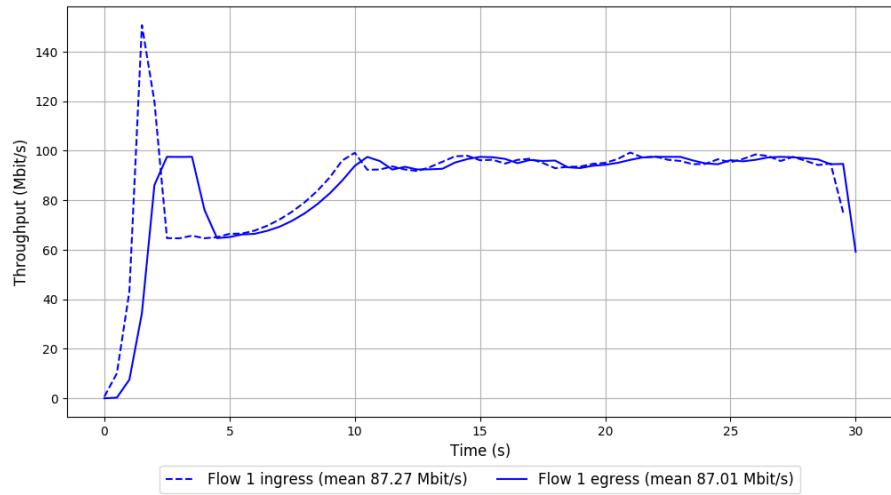


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-02-20 05:05:38
End at: 2019-02-20 05:06:08
Local clock offset: -6.203 ms
Remote clock offset: 3.01 ms

# Below is generated by plot.py at 2019-02-20 07:18:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.01 Mbit/s
95th percentile per-packet one-way delay: 208.791 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 87.01 Mbit/s
95th percentile per-packet one-way delay: 208.791 ms
Loss rate: 0.86%
```

Run 1: Report of PCC-Allegro — Data Link

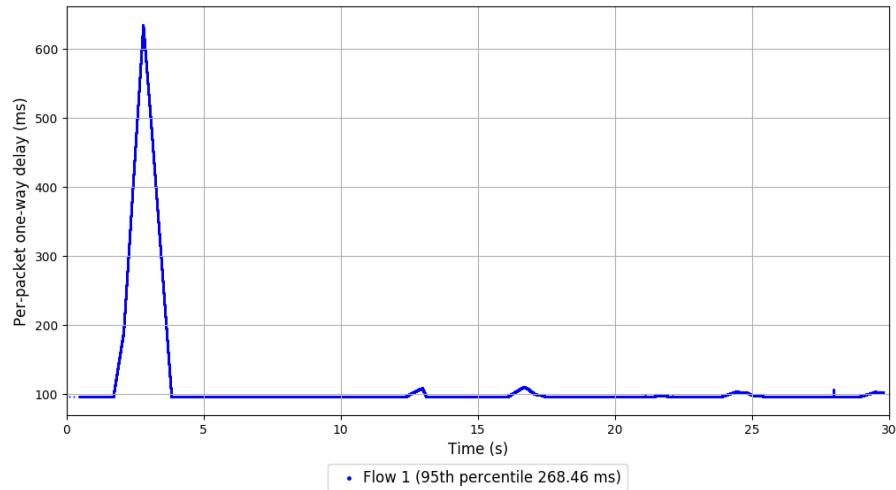
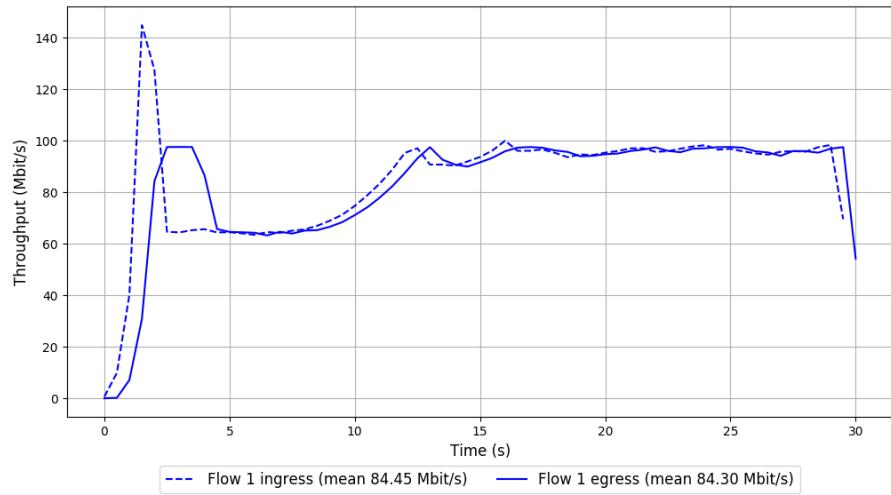


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-02-20 05:30:35
End at: 2019-02-20 05:31:05
Local clock offset: -6.392 ms
Remote clock offset: 3.396 ms

# Below is generated by plot.py at 2019-02-20 07:18:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.30 Mbit/s
95th percentile per-packet one-way delay: 268.456 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 84.30 Mbit/s
95th percentile per-packet one-way delay: 268.456 ms
Loss rate: 0.77%
```

Run 2: Report of PCC-Allegro — Data Link

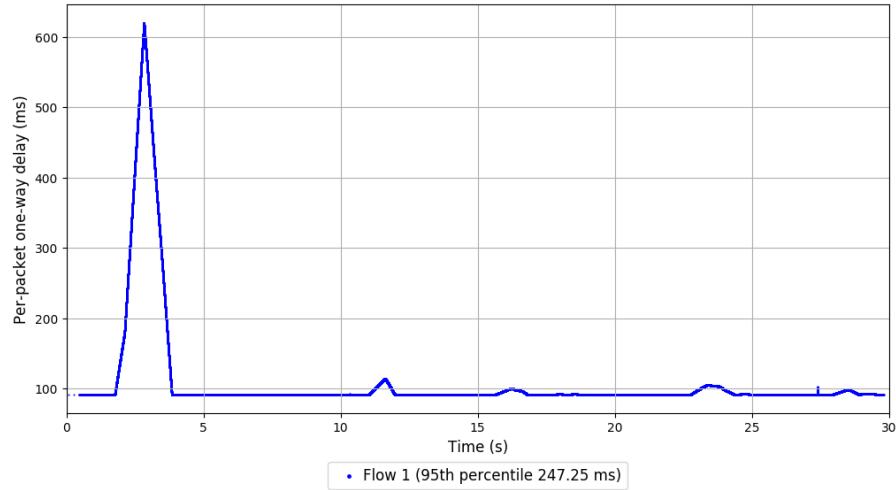
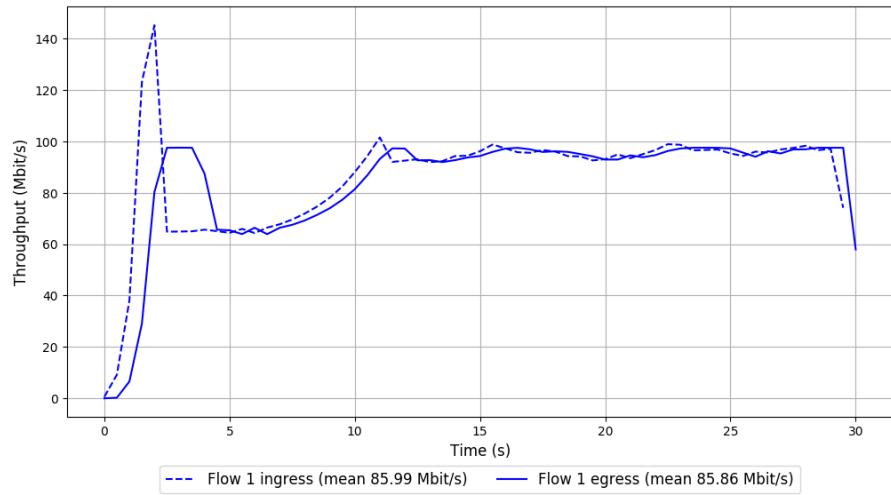


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-02-20 05:55:30
End at: 2019-02-20 05:56:00
Local clock offset: -6.783 ms
Remote clock offset: 6.546 ms

# Below is generated by plot.py at 2019-02-20 07:18:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.86 Mbit/s
95th percentile per-packet one-way delay: 247.246 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 85.86 Mbit/s
95th percentile per-packet one-way delay: 247.246 ms
Loss rate: 0.74%
```

Run 3: Report of PCC-Allegro — Data Link

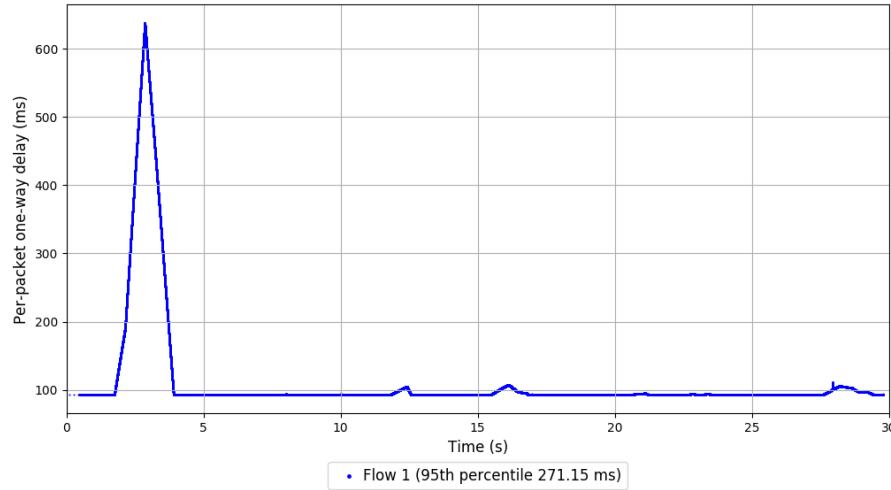
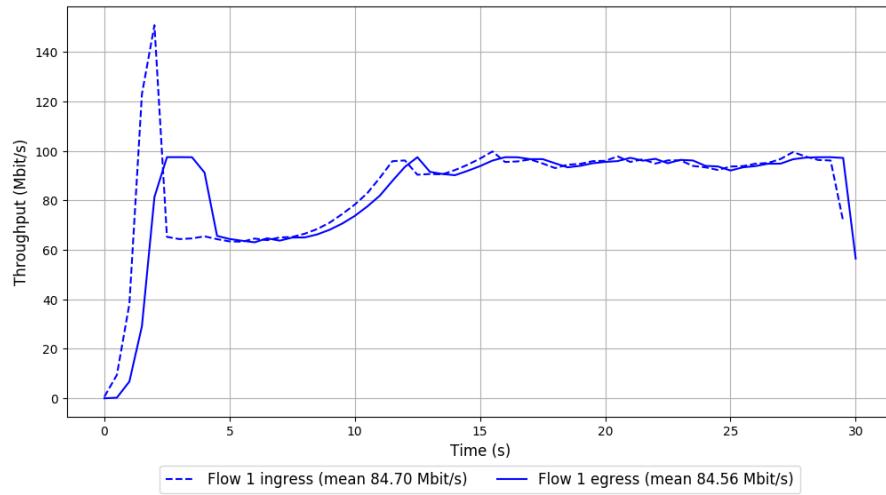


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-02-20 06:20:25
End at: 2019-02-20 06:20:55
Local clock offset: -6.335 ms
Remote clock offset: 0.867 ms

# Below is generated by plot.py at 2019-02-20 07:18:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.56 Mbit/s
95th percentile per-packet one-way delay: 271.146 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 84.56 Mbit/s
95th percentile per-packet one-way delay: 271.146 ms
Loss rate: 0.73%
```

Run 4: Report of PCC-Allegro — Data Link

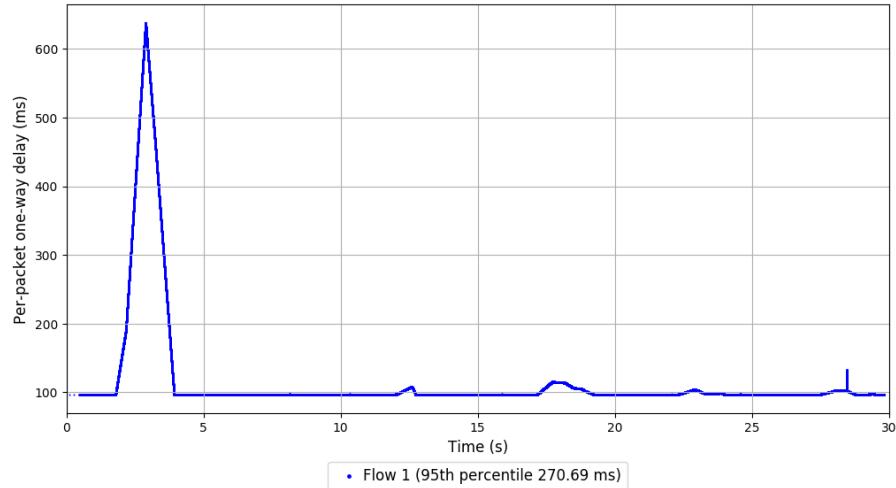
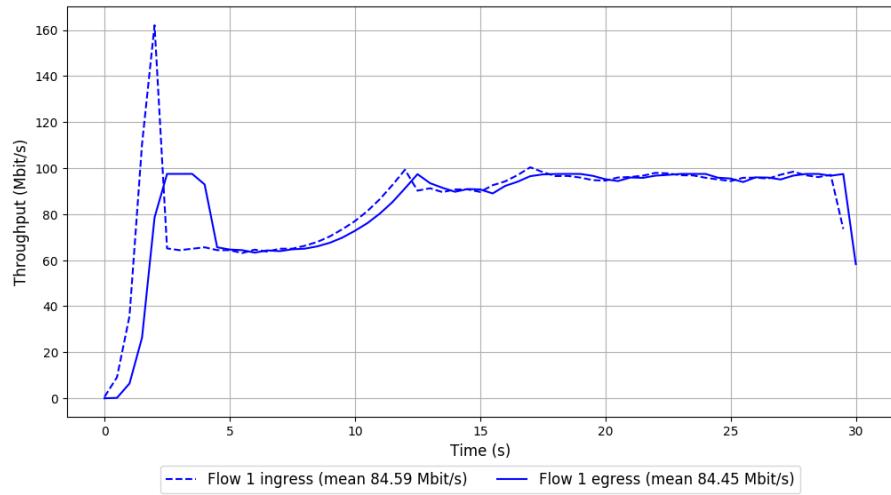


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-02-20 06:45:25
End at: 2019-02-20 06:45:55
Local clock offset: -6.685 ms
Remote clock offset: 2.85 ms

# Below is generated by plot.py at 2019-02-20 07:18:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.45 Mbit/s
95th percentile per-packet one-way delay: 270.688 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 84.45 Mbit/s
95th percentile per-packet one-way delay: 270.688 ms
Loss rate: 0.76%
```

Run 5: Report of PCC-Allegro — Data Link

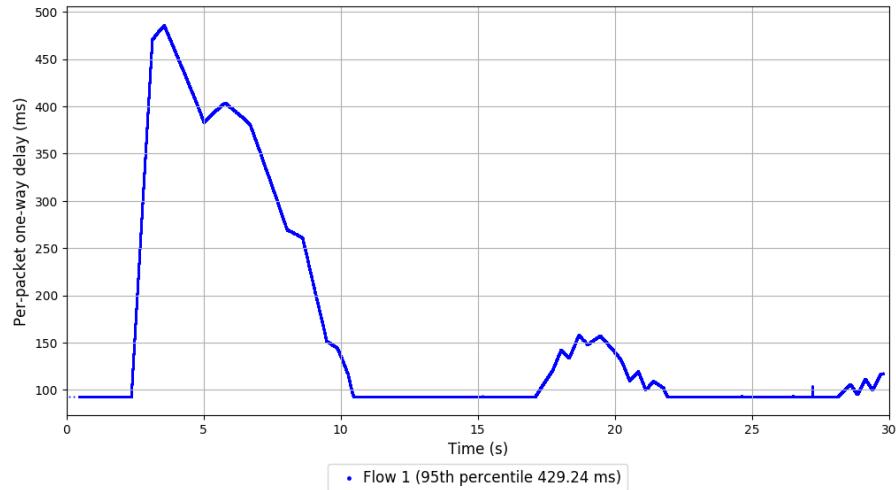
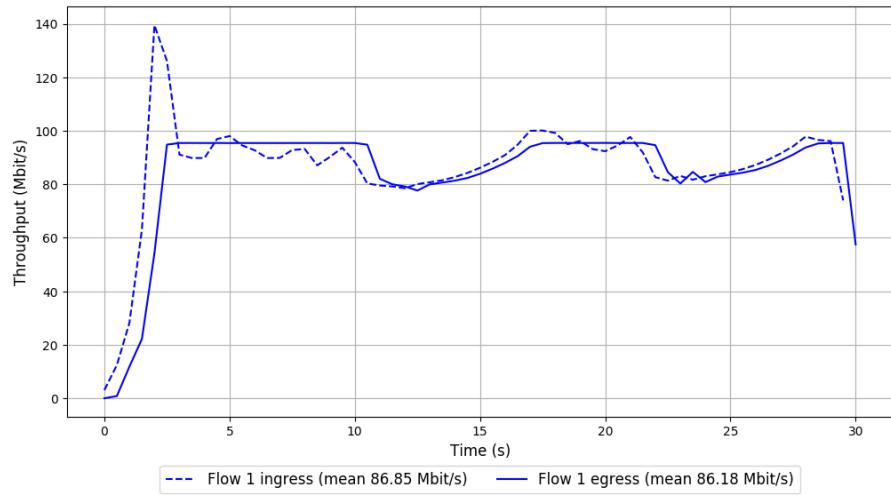


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-02-20 05:23:26
End at: 2019-02-20 05:23:56
Local clock offset: -6.355 ms
Remote clock offset: 2.218 ms

# Below is generated by plot.py at 2019-02-20 07:19:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.18 Mbit/s
95th percentile per-packet one-way delay: 429.243 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 86.18 Mbit/s
95th percentile per-packet one-way delay: 429.243 ms
Loss rate: 1.34%
```

Run 1: Report of PCC-Expr — Data Link

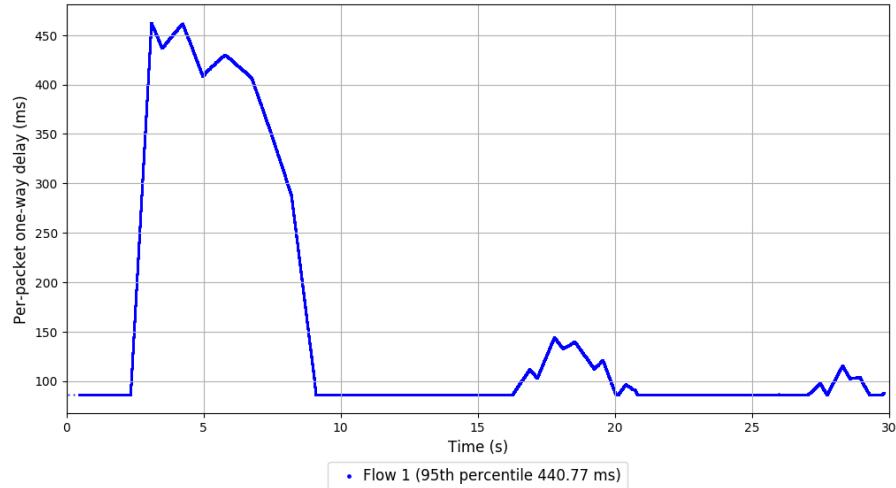
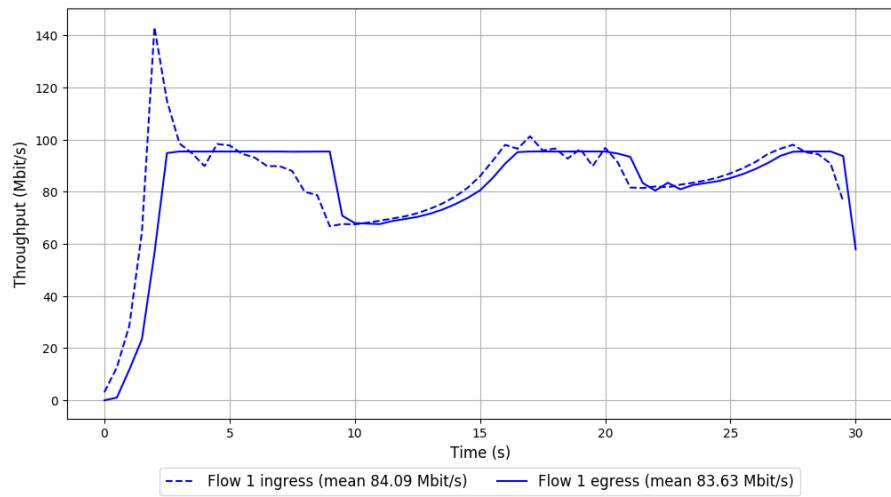


```
Run 2: Statistics of PCC-Expr
```

```
Start at: 2019-02-20 05:48:21
End at: 2019-02-20 05:48:51
Local clock offset: -6.777 ms
Remote clock offset: 6.327 ms

# Below is generated by plot.py at 2019-02-20 07:19:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.63 Mbit/s
95th percentile per-packet one-way delay: 440.774 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 83.63 Mbit/s
95th percentile per-packet one-way delay: 440.774 ms
Loss rate: 1.11%
```

Run 2: Report of PCC-Expr — Data Link

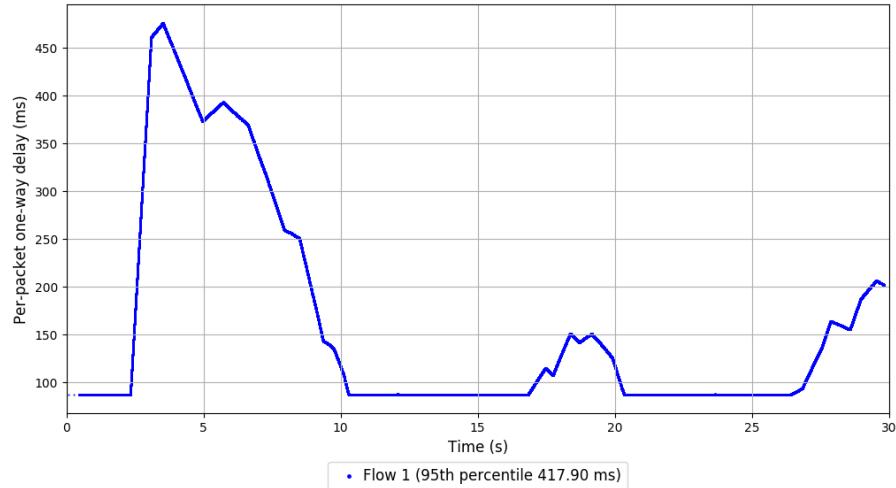
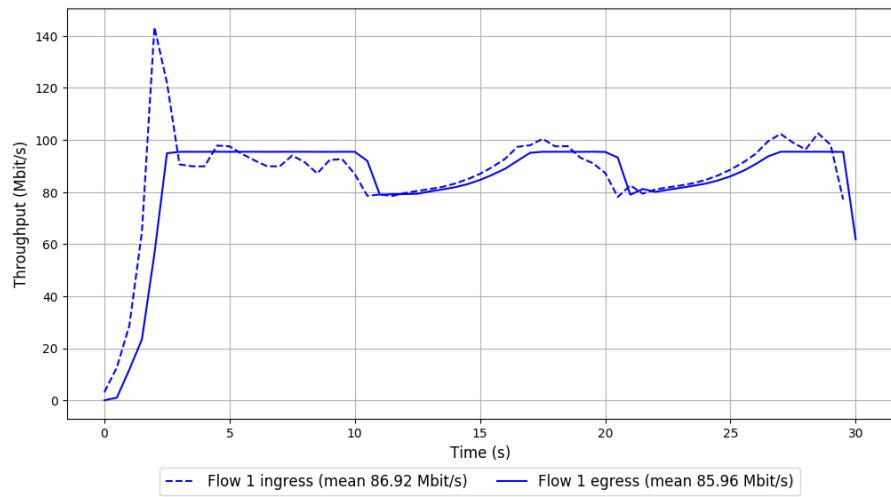


Run 3: Statistics of PCC-Expr

```
Start at: 2019-02-20 06:13:16
End at: 2019-02-20 06:13:46
Local clock offset: -6.41 ms
Remote clock offset: 3.896 ms

# Below is generated by plot.py at 2019-02-20 07:20:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.96 Mbit/s
95th percentile per-packet one-way delay: 417.900 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 85.96 Mbit/s
95th percentile per-packet one-way delay: 417.900 ms
Loss rate: 1.66%
```

Run 3: Report of PCC-Expr — Data Link

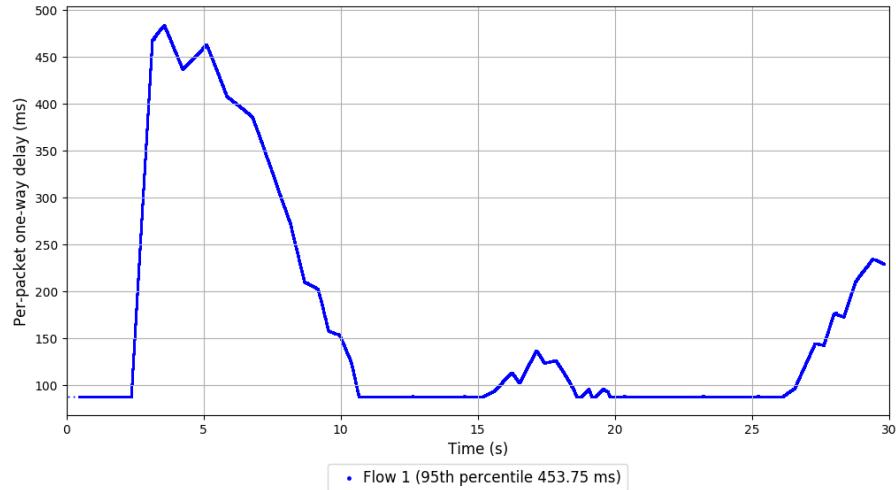
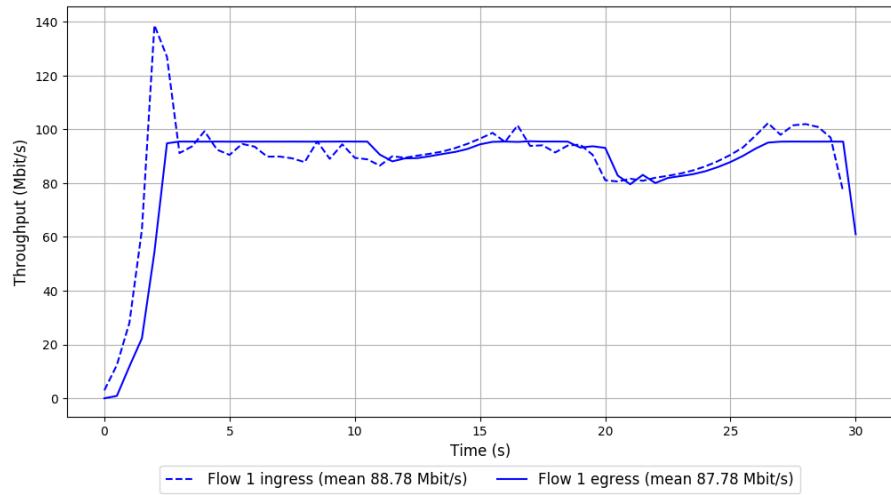


Run 4: Statistics of PCC-Expr

```
Start at: 2019-02-20 06:38:12
End at: 2019-02-20 06:38:42
Local clock offset: -6.567 ms
Remote clock offset: 6.696 ms

# Below is generated by plot.py at 2019-02-20 07:20:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.78 Mbit/s
95th percentile per-packet one-way delay: 453.747 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 87.78 Mbit/s
95th percentile per-packet one-way delay: 453.747 ms
Loss rate: 1.69%
```

Run 4: Report of PCC-Expr — Data Link

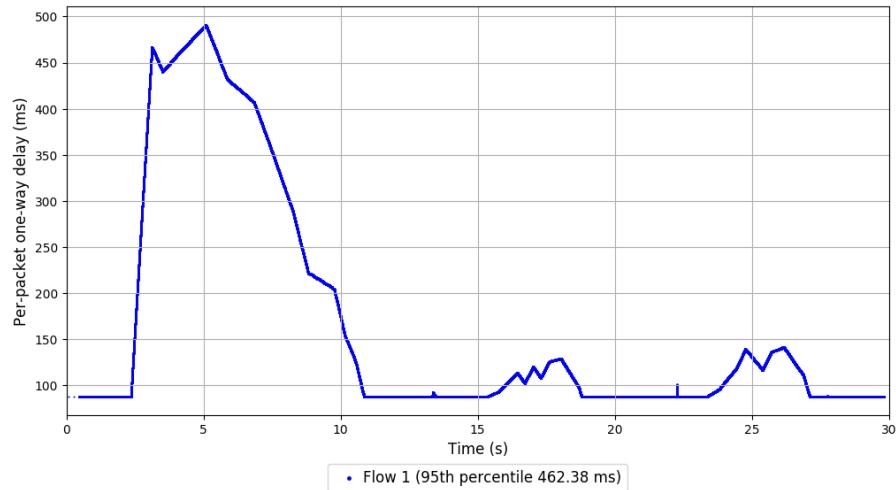
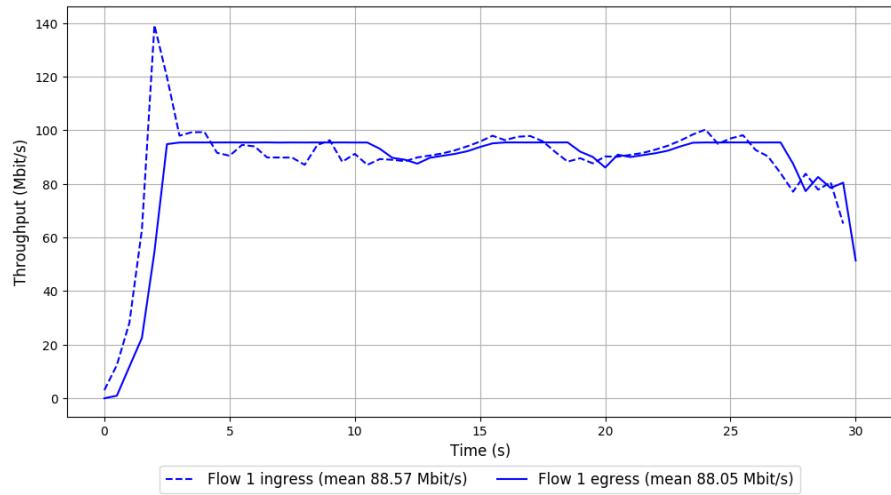


Run 5: Statistics of PCC-Expr

```
Start at: 2019-02-20 07:03:11
End at: 2019-02-20 07:03:41
Local clock offset: -6.672 ms
Remote clock offset: 6.408 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.05 Mbit/s
95th percentile per-packet one-way delay: 462.381 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 88.05 Mbit/s
95th percentile per-packet one-way delay: 462.381 ms
Loss rate: 1.16%
```

Run 5: Report of PCC-Expr — Data Link

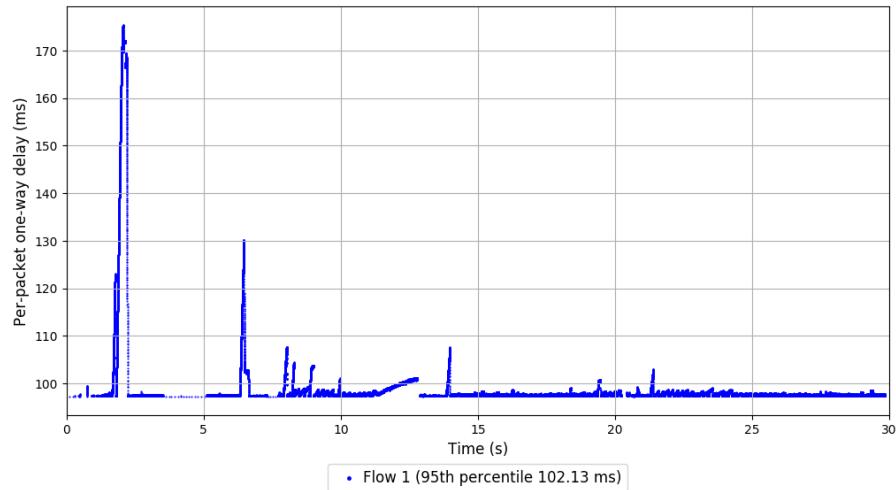
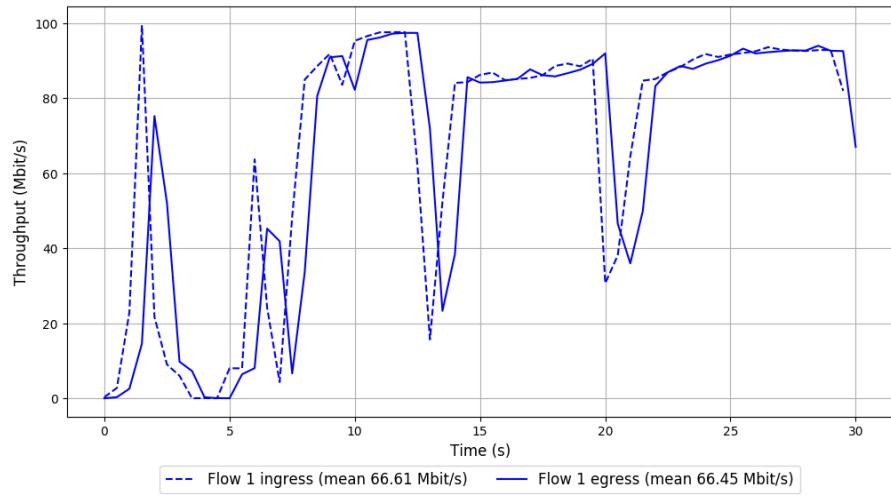


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-02-20 05:16:19
End at: 2019-02-20 05:16:49
Local clock offset: -6.317 ms
Remote clock offset: 2.182 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.45 Mbit/s
95th percentile per-packet one-way delay: 102.134 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 66.45 Mbit/s
95th percentile per-packet one-way delay: 102.134 ms
Loss rate: 0.83%
```

Run 1: Report of QUIC Cubic — Data Link

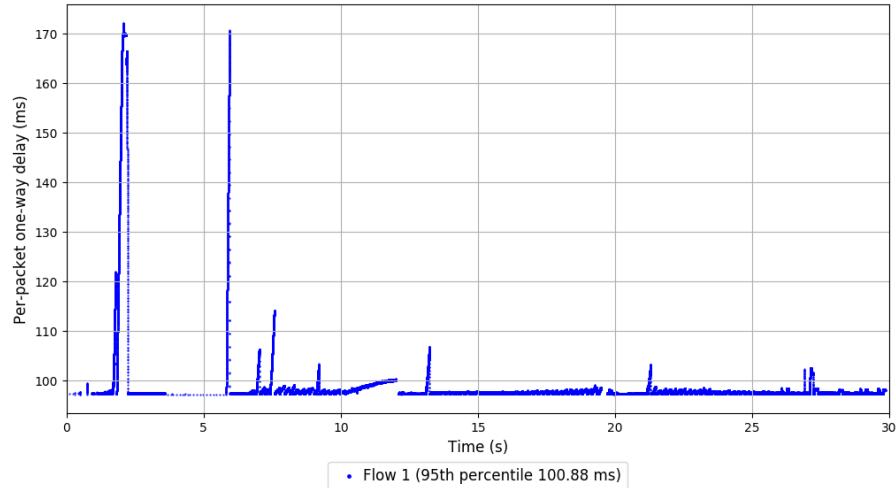
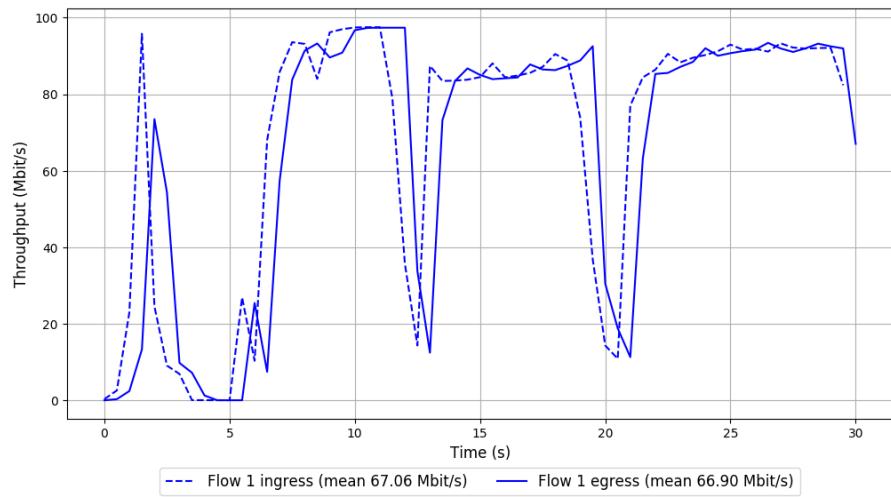


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-02-20 05:41:15
End at: 2019-02-20 05:41:45
Local clock offset: -6.639 ms
Remote clock offset: 2.441 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.90 Mbit/s
95th percentile per-packet one-way delay: 100.884 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 66.90 Mbit/s
95th percentile per-packet one-way delay: 100.884 ms
Loss rate: 0.82%
```

Run 2: Report of QUIC Cubic — Data Link

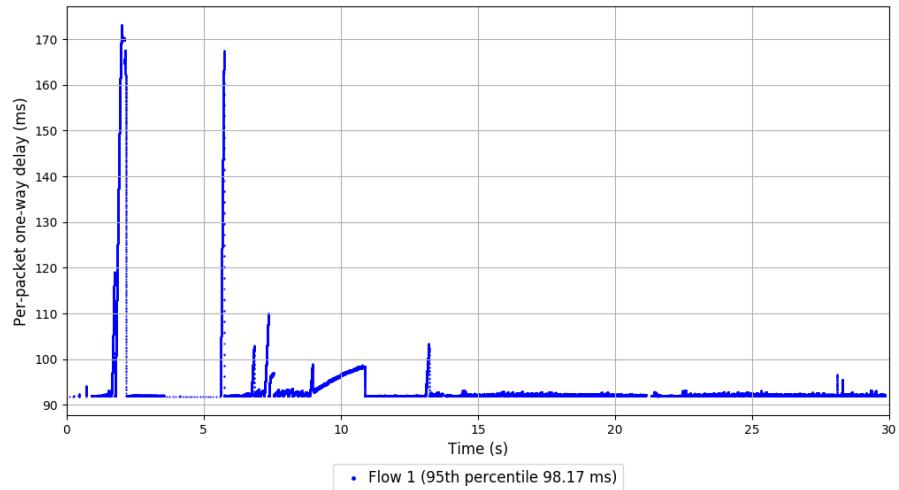
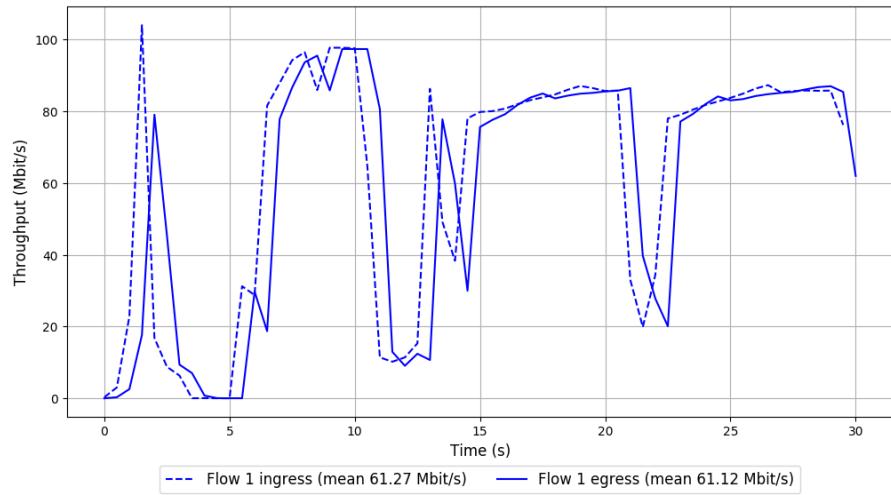


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-02-20 06:06:09
End at: 2019-02-20 06:06:39
Local clock offset: -6.552 ms
Remote clock offset: 1.377 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.12 Mbit/s
95th percentile per-packet one-way delay: 98.171 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 61.12 Mbit/s
95th percentile per-packet one-way delay: 98.171 ms
Loss rate: 0.82%
```

Run 3: Report of QUIC Cubic — Data Link

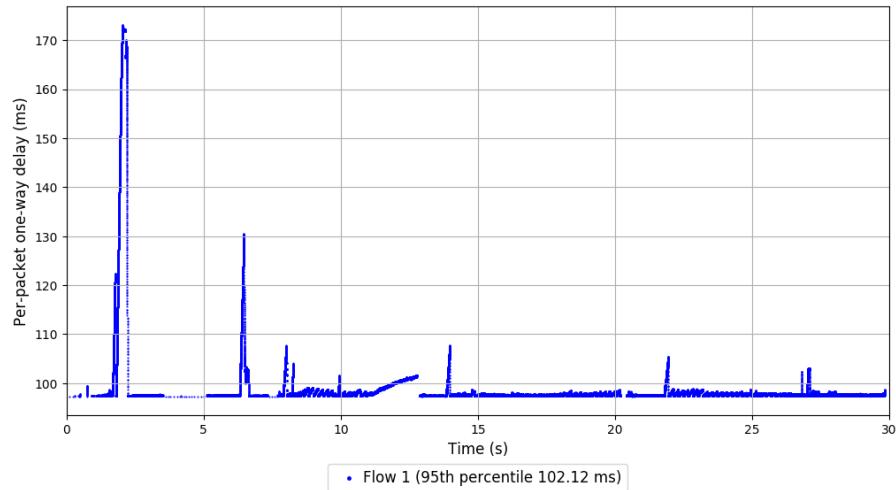
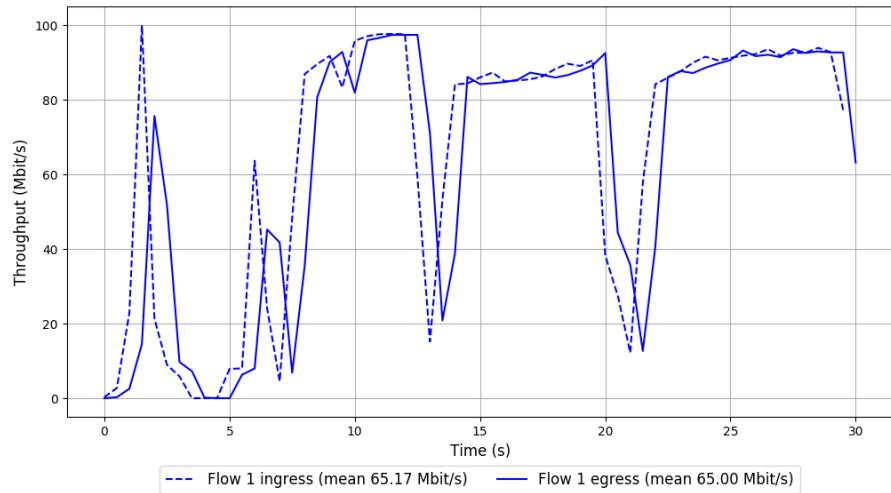


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-02-20 06:31:06
End at: 2019-02-20 06:31:36
Local clock offset: -6.347 ms
Remote clock offset: 1.654 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.00 Mbit/s
95th percentile per-packet one-way delay: 102.124 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 65.00 Mbit/s
95th percentile per-packet one-way delay: 102.124 ms
Loss rate: 0.84%
```

Run 4: Report of QUIC Cubic — Data Link

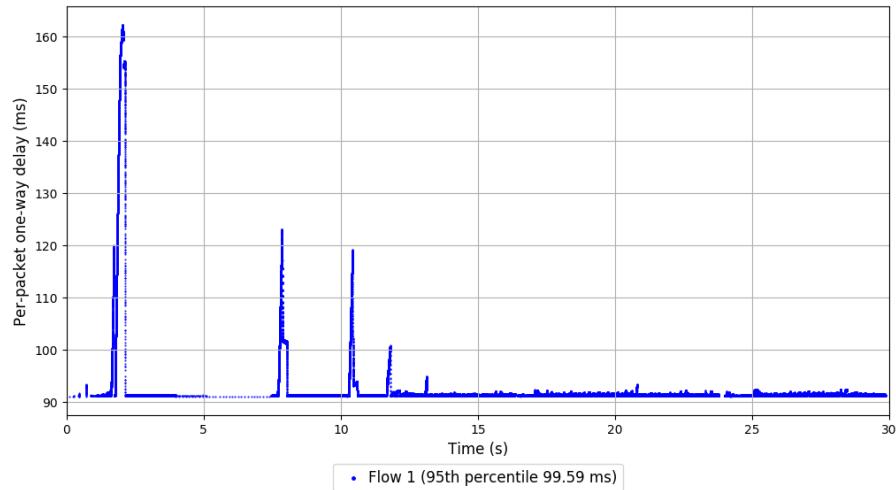
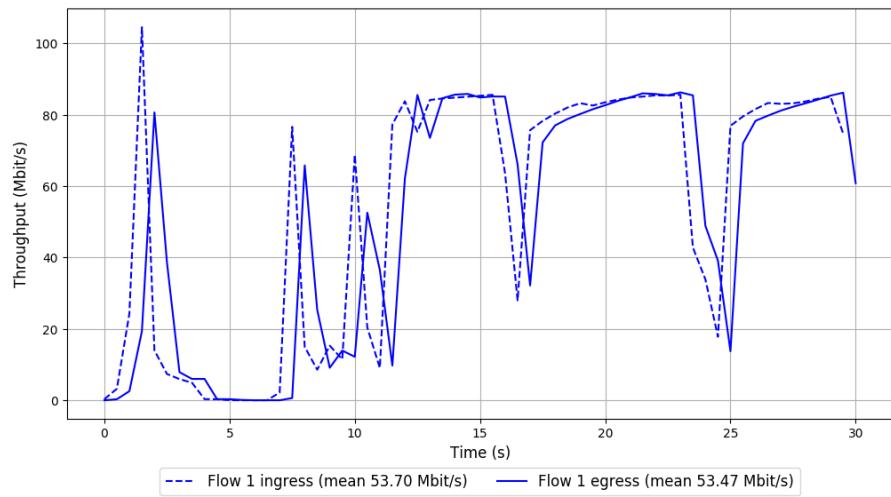


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-02-20 06:56:05
End at: 2019-02-20 06:56:35
Local clock offset: -6.847 ms
Remote clock offset: 1.456 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.47 Mbit/s
95th percentile per-packet one-way delay: 99.594 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 53.47 Mbit/s
95th percentile per-packet one-way delay: 99.594 ms
Loss rate: 1.01%
```

Run 5: Report of QUIC Cubic — Data Link

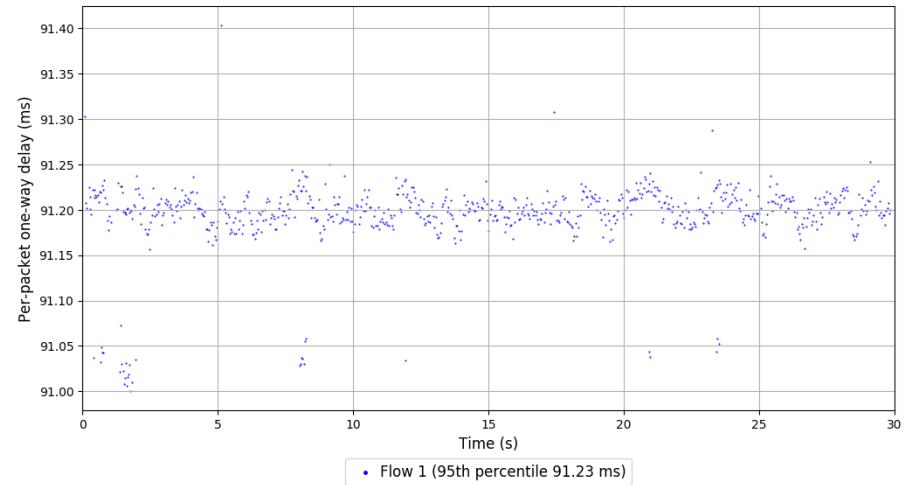
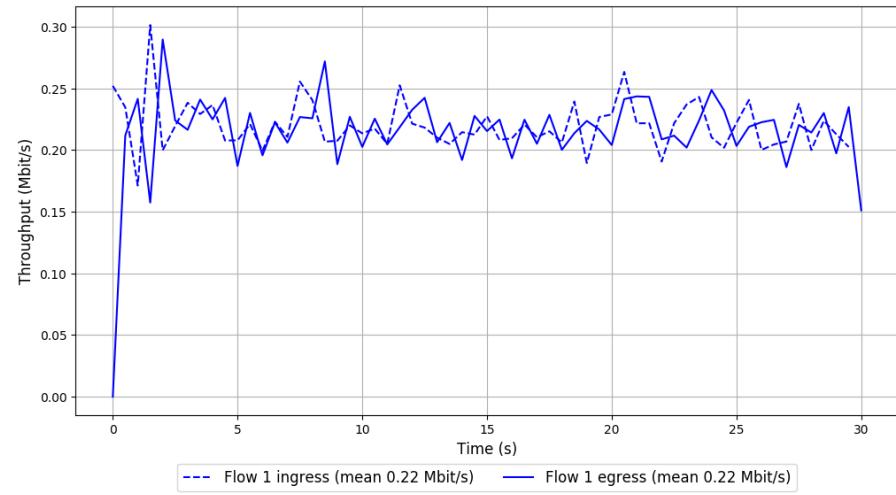


```
Run 1: Statistics of SCReAM
```

```
Start at: 2019-02-20 05:27:04
End at: 2019-02-20 05:27:34
Local clock offset: -6.36 ms
Remote clock offset: 2.205 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.227 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.227 ms
Loss rate: 0.64%
```

Run 1: Report of SCReAM — Data Link

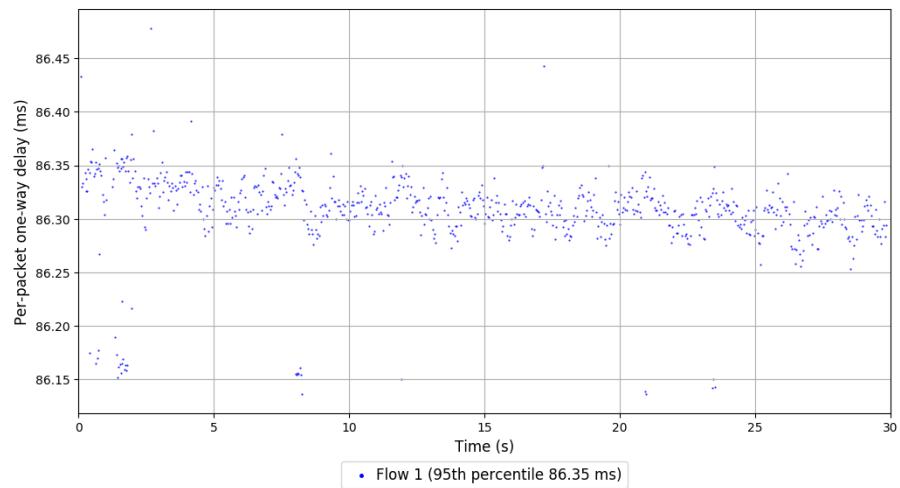
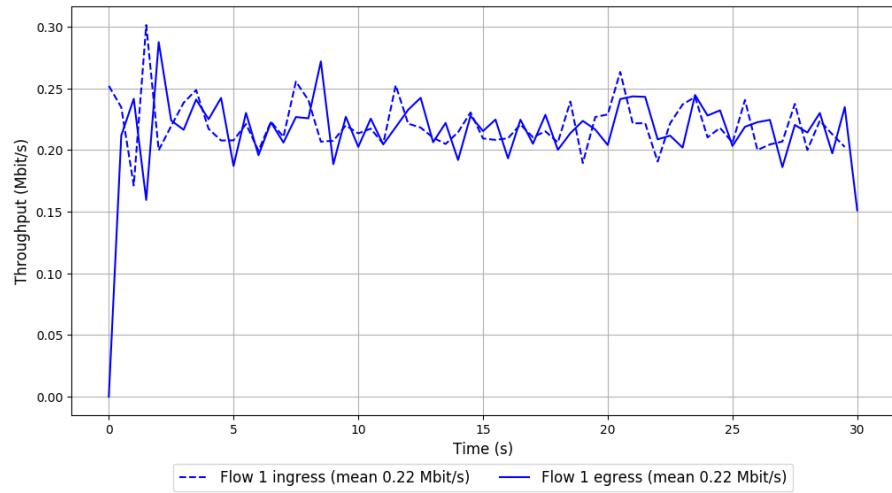


Run 2: Statistics of SCReAM

```
Start at: 2019-02-20 05:51:58
End at: 2019-02-20 05:52:28
Local clock offset: -6.749 ms
Remote clock offset: 5.902 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.346 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.346 ms
Loss rate: 0.64%
```

Run 2: Report of SCReAM — Data Link

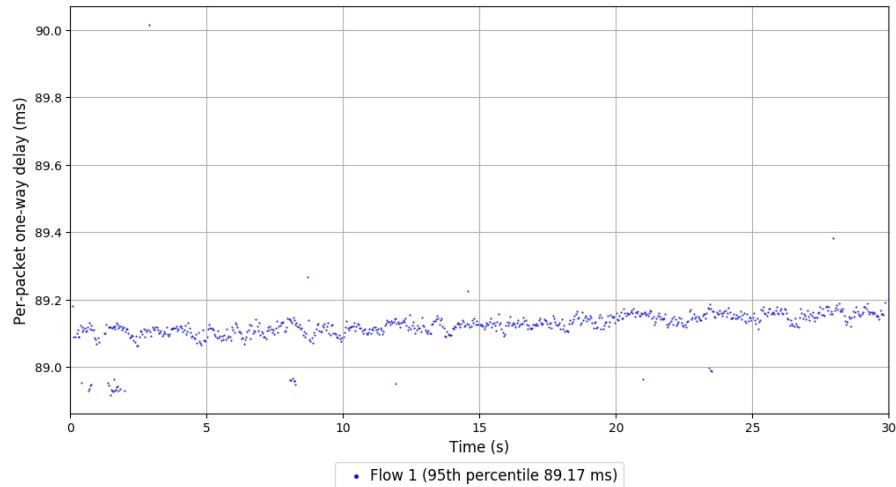
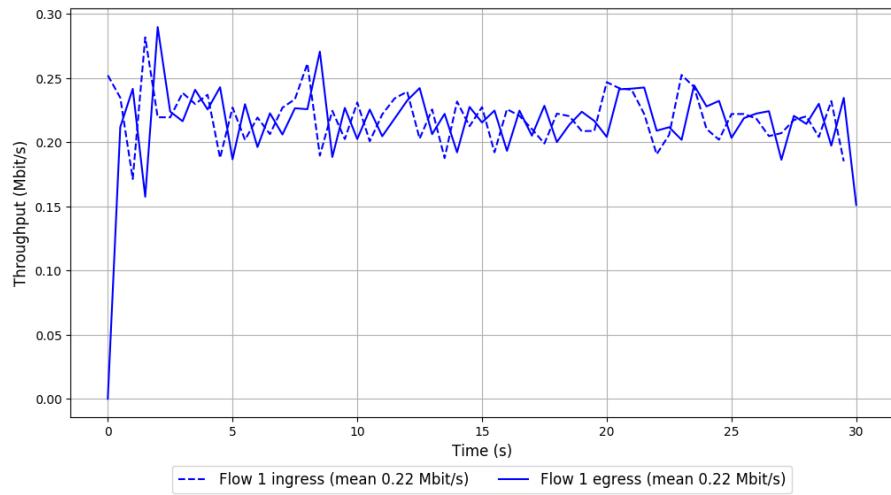


Run 3: Statistics of SCReAM

```
Start at: 2019-02-20 06:16:53
End at: 2019-02-20 06:17:23
Local clock offset: -6.439 ms
Remote clock offset: 4.196 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.170 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.170 ms
Loss rate: 0.51%
```

Run 3: Report of SCReAM — Data Link

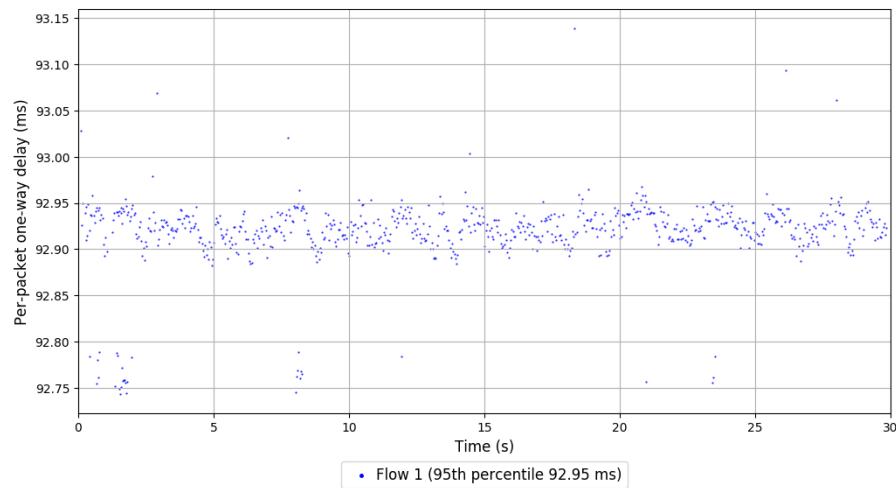
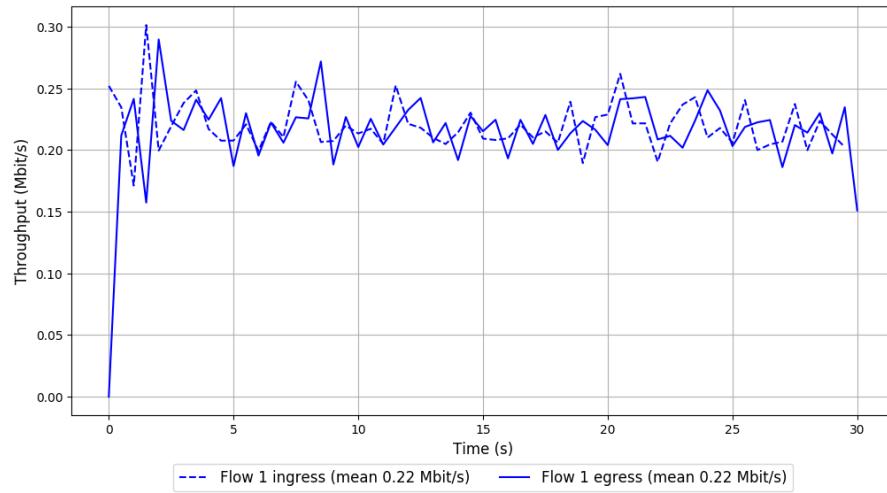


Run 4: Statistics of SCReAM

```
Start at: 2019-02-20 06:41:54
End at: 2019-02-20 06:42:24
Local clock offset: -6.647 ms
Remote clock offset: 1.83 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.950 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.950 ms
Loss rate: 0.64%
```

Run 4: Report of SCReAM — Data Link

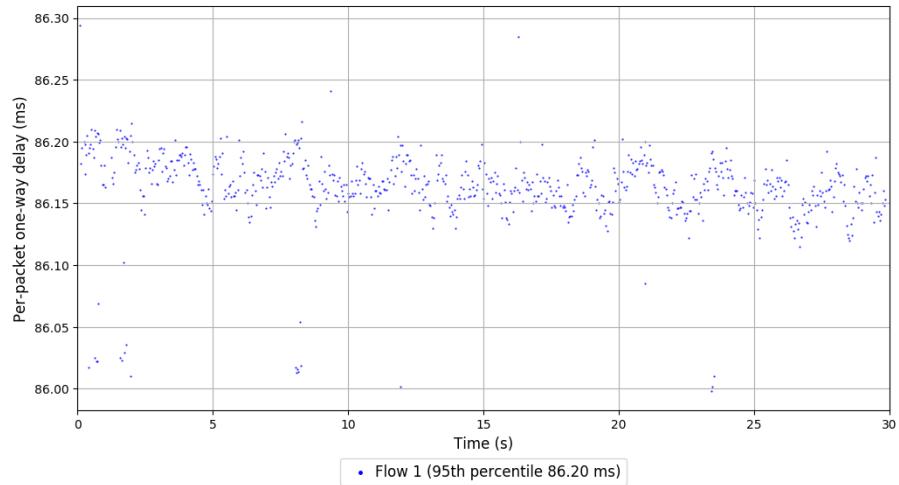
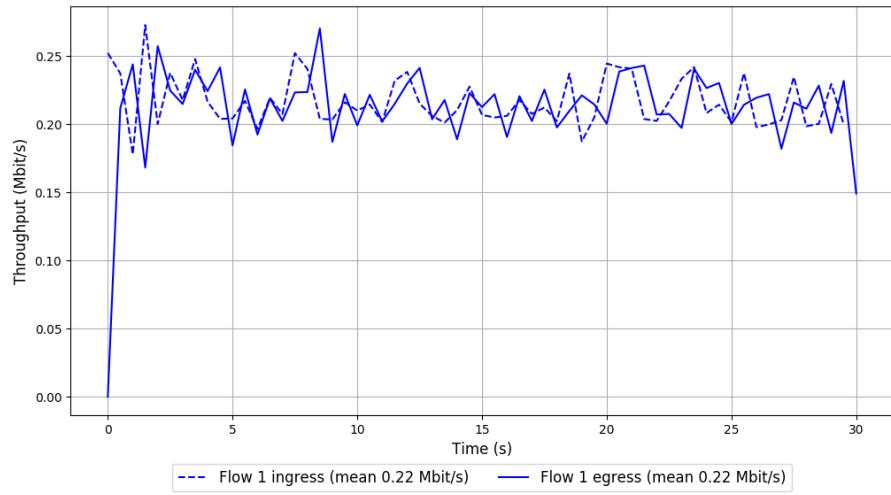


Run 5: Statistics of SCReAM

```
Start at: 2019-02-20 07:06:48
End at: 2019-02-20 07:07:18
Local clock offset: -6.573 ms
Remote clock offset: 6.121 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.199 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.199 ms
Loss rate: 0.64%
```

Run 5: Report of SCReAM — Data Link

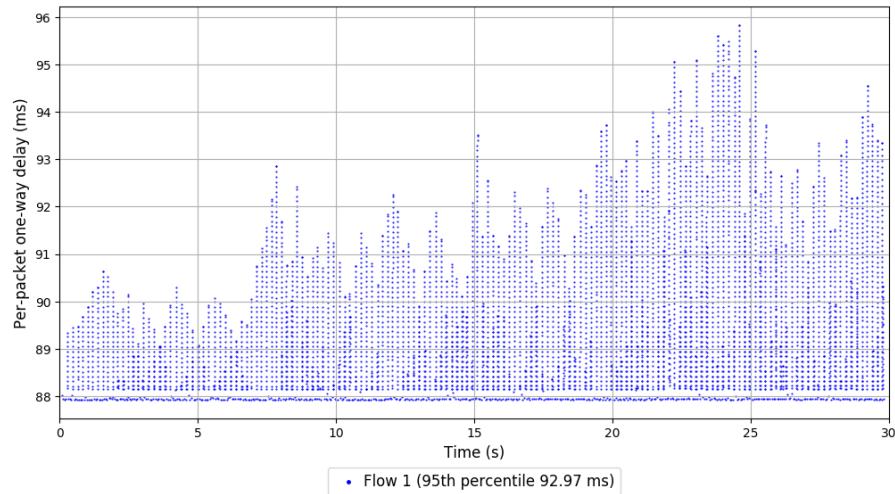
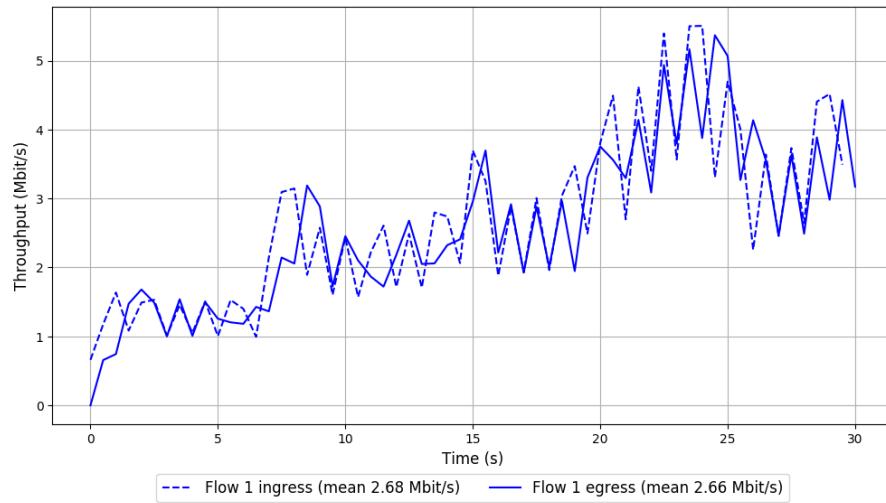


Run 1: Statistics of Sprout

```
Start at: 2019-02-20 05:15:11
End at: 2019-02-20 05:15:41
Local clock offset: -6.332 ms
Remote clock offset: 7.065 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 92.966 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 92.966 ms
Loss rate: 1.14%
```

Run 1: Report of Sprout — Data Link

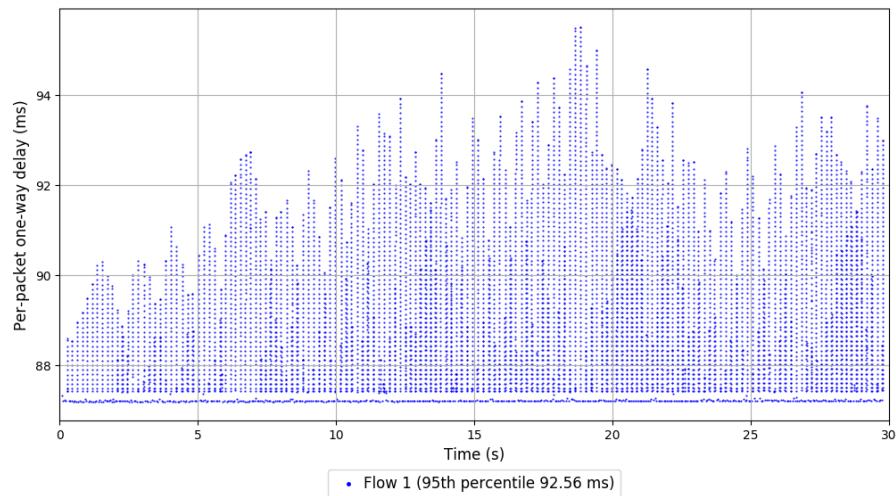
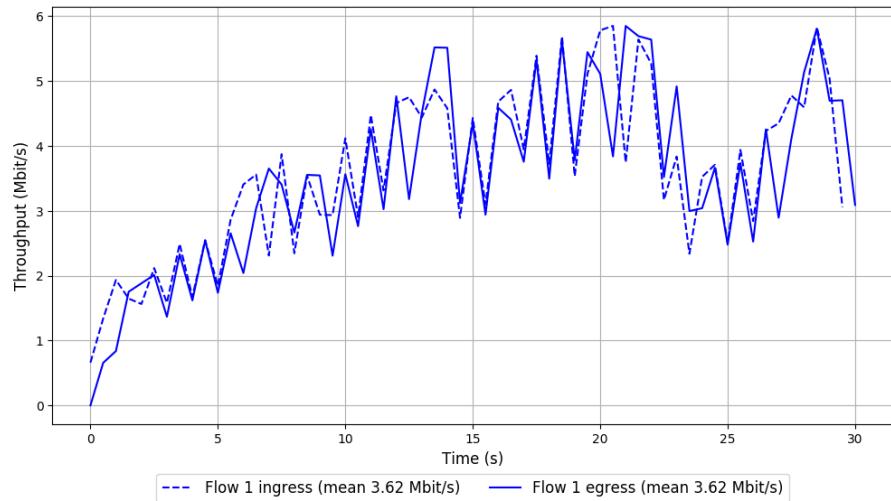


Run 2: Statistics of Sprout

```
Start at: 2019-02-20 05:40:07
End at: 2019-02-20 05:40:37
Local clock offset: -6.688 ms
Remote clock offset: 6.228 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.62 Mbit/s
95th percentile per-packet one-way delay: 92.558 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 3.62 Mbit/s
95th percentile per-packet one-way delay: 92.558 ms
Loss rate: 0.66%
```

Run 2: Report of Sprout — Data Link

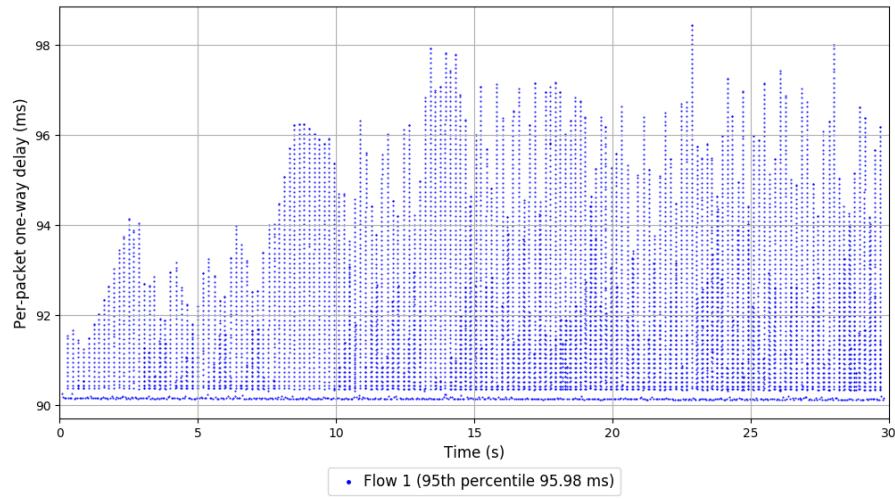
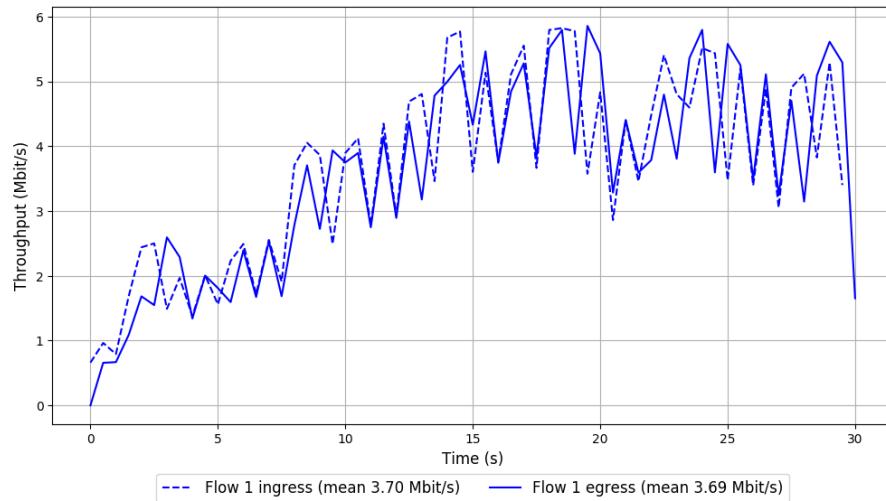


Run 3: Statistics of Sprout

```
Start at: 2019-02-20 06:05:01
End at: 2019-02-20 06:05:31
Local clock offset: -6.592 ms
Remote clock offset: 1.247 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.69 Mbit/s
95th percentile per-packet one-way delay: 95.979 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 3.69 Mbit/s
95th percentile per-packet one-way delay: 95.979 ms
Loss rate: 0.79%
```

Run 3: Report of Sprout — Data Link

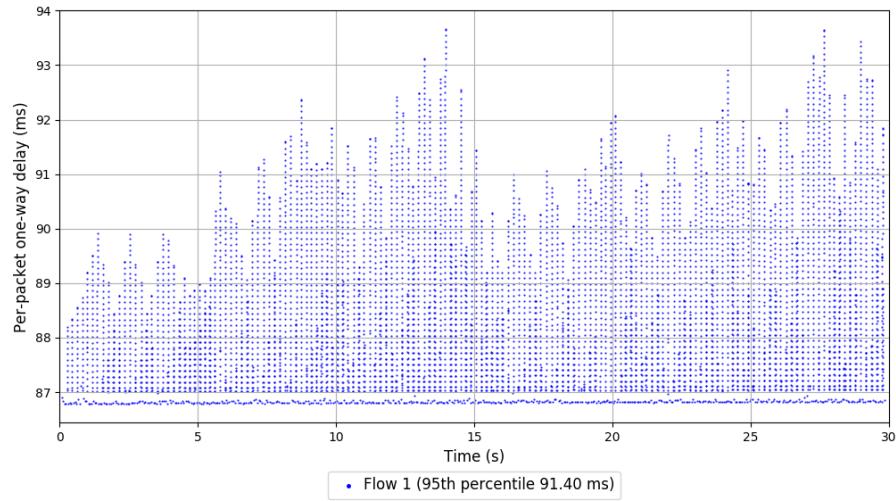
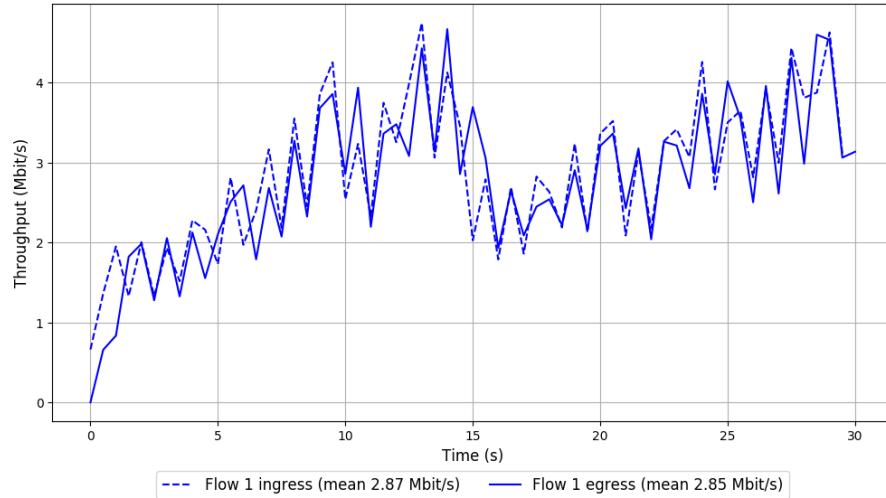


Run 4: Statistics of Sprout

```
Start at: 2019-02-20 06:29:59
End at: 2019-02-20 06:30:29
Local clock offset: -6.288 ms
Remote clock offset: 7.698 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 91.403 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 91.403 ms
Loss rate: 0.90%
```

Run 4: Report of Sprout — Data Link

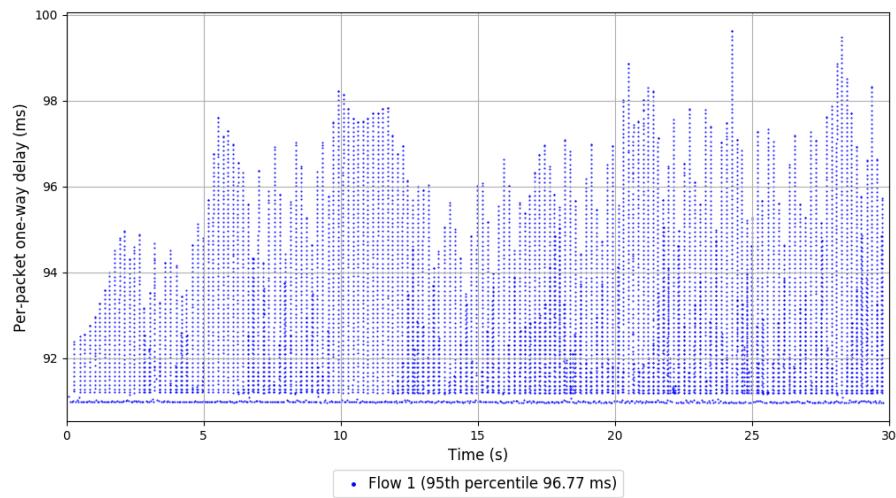
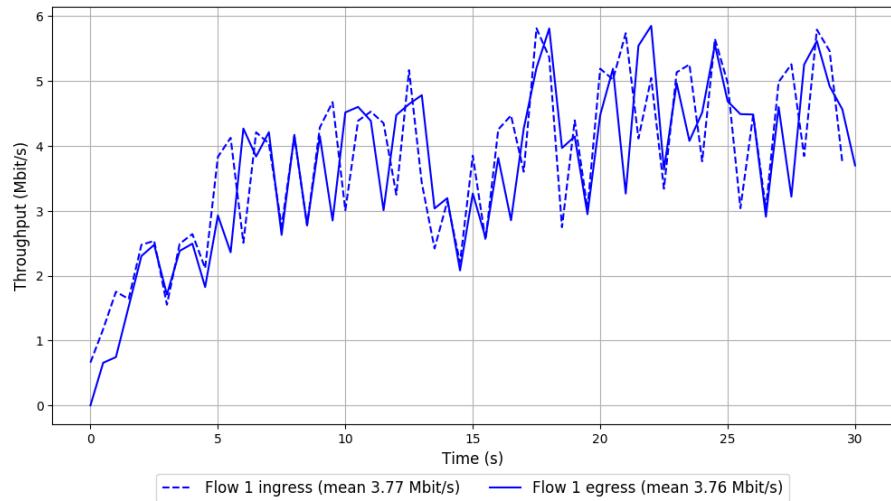


Run 5: Statistics of Sprout

```
Start at: 2019-02-20 06:54:57
End at: 2019-02-20 06:55:27
Local clock offset: -6.769 ms
Remote clock offset: 1.376 ms

# Below is generated by plot.py at 2019-02-20 07:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 96.768 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 96.768 ms
Loss rate: 0.81%
```

Run 5: Report of Sprout — Data Link

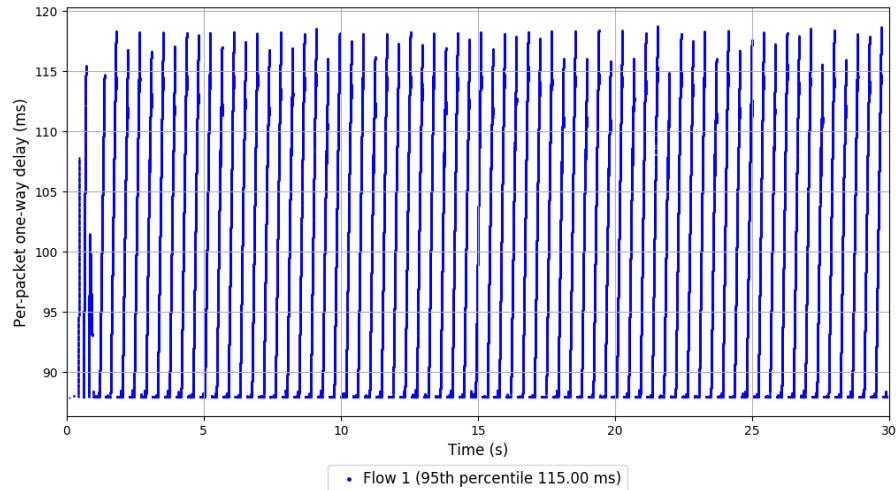
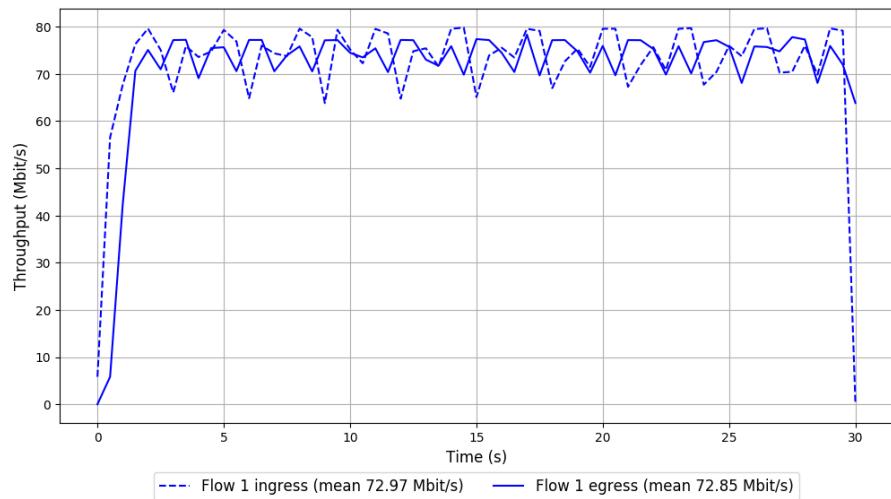


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-02-20 05:10:24
End at: 2019-02-20 05:10:54
Local clock offset: -6.329 ms
Remote clock offset: 7.151 ms

# Below is generated by plot.py at 2019-02-20 07:21:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.85 Mbit/s
95th percentile per-packet one-way delay: 115.004 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 72.85 Mbit/s
95th percentile per-packet one-way delay: 115.004 ms
Loss rate: 0.76%
```

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

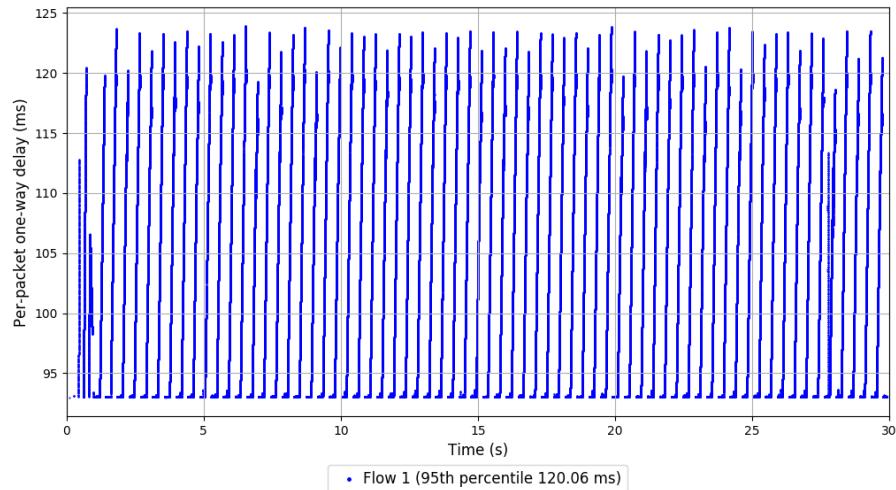
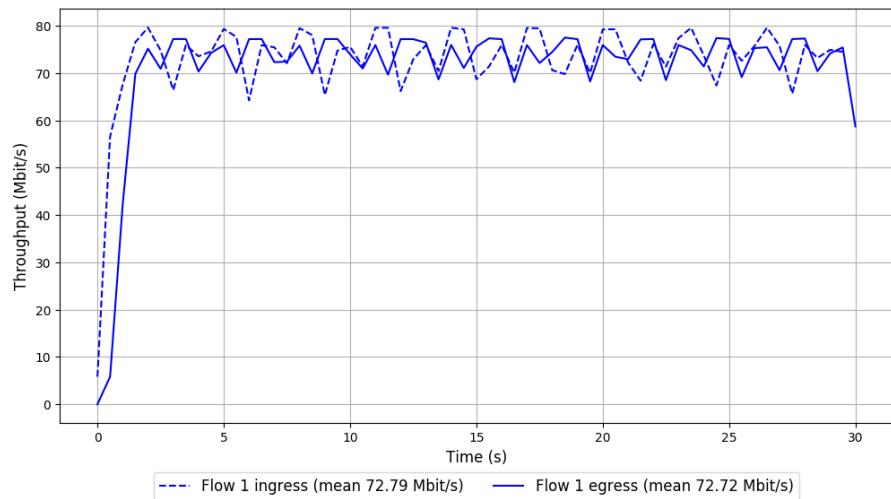


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-02-20 05:35:20
End at: 2019-02-20 05:35:50
Local clock offset: -6.599 ms
Remote clock offset: 2.293 ms

# Below is generated by plot.py at 2019-02-20 07:21:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.72 Mbit/s
95th percentile per-packet one-way delay: 120.055 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 72.72 Mbit/s
95th percentile per-packet one-way delay: 120.055 ms
Loss rate: 0.68%
```

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

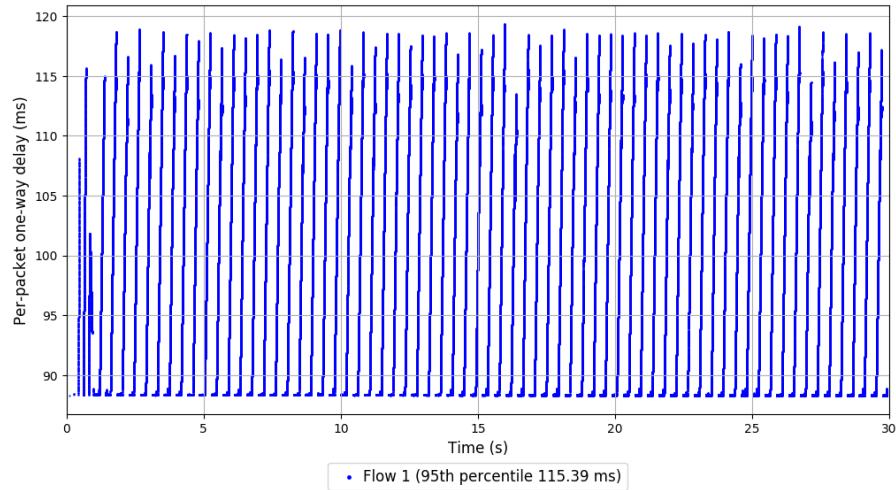
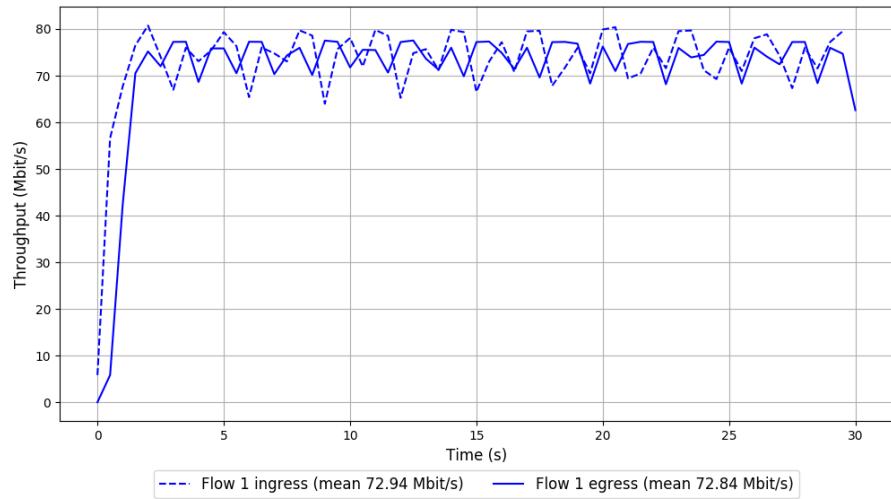


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-02-20 06:00:14
End at: 2019-02-20 06:00:44
Local clock offset: -6.812 ms
Remote clock offset: 5.212 ms

# Below is generated by plot.py at 2019-02-20 07:21:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.84 Mbit/s
95th percentile per-packet one-way delay: 115.386 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 72.84 Mbit/s
95th percentile per-packet one-way delay: 115.386 ms
Loss rate: 0.71%
```

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

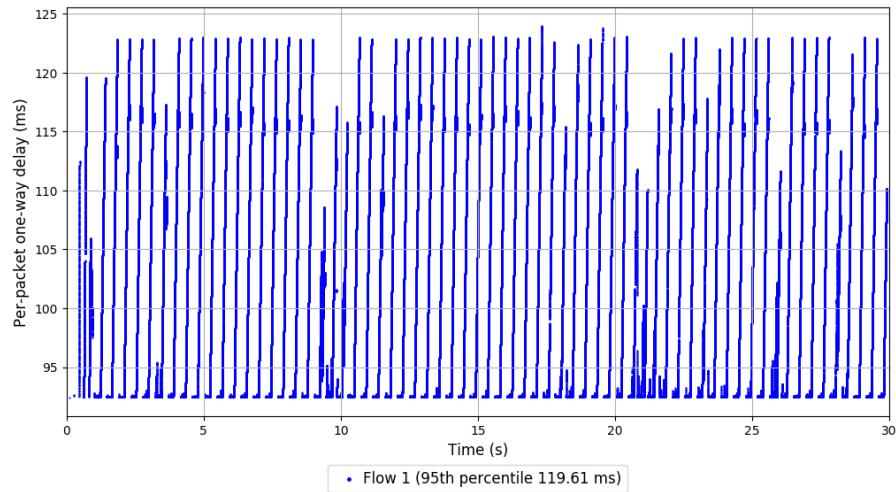
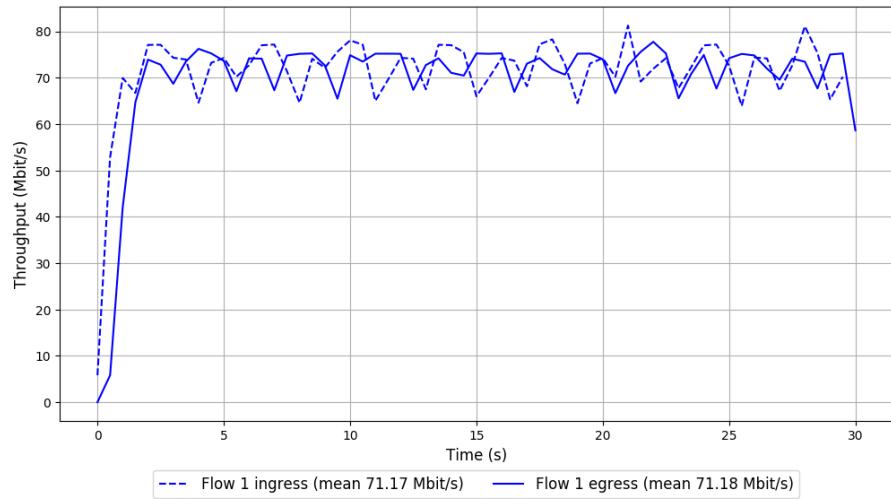


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-02-20 06:25:11
End at: 2019-02-20 06:25:41
Local clock offset: -6.314 ms
Remote clock offset: 6.289 ms

# Below is generated by plot.py at 2019-02-20 07:21:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.18 Mbit/s
95th percentile per-packet one-way delay: 119.615 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 71.18 Mbit/s
95th percentile per-packet one-way delay: 119.615 ms
Loss rate: 0.57%
```

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

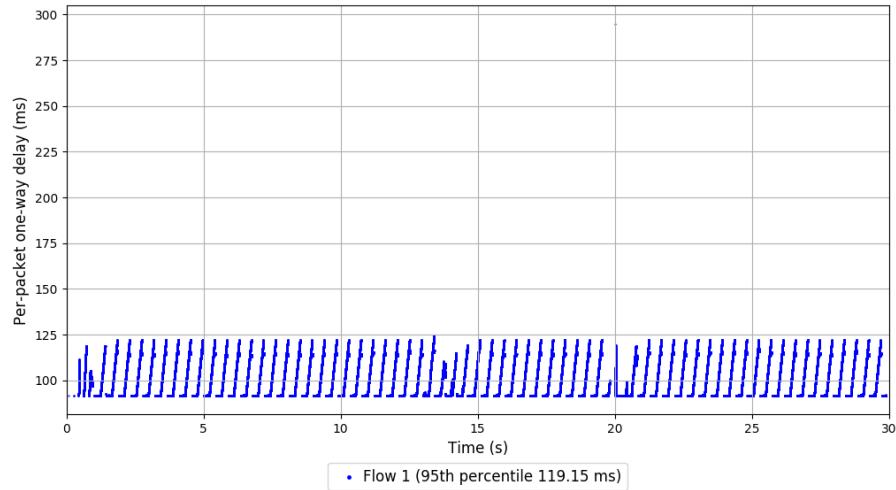
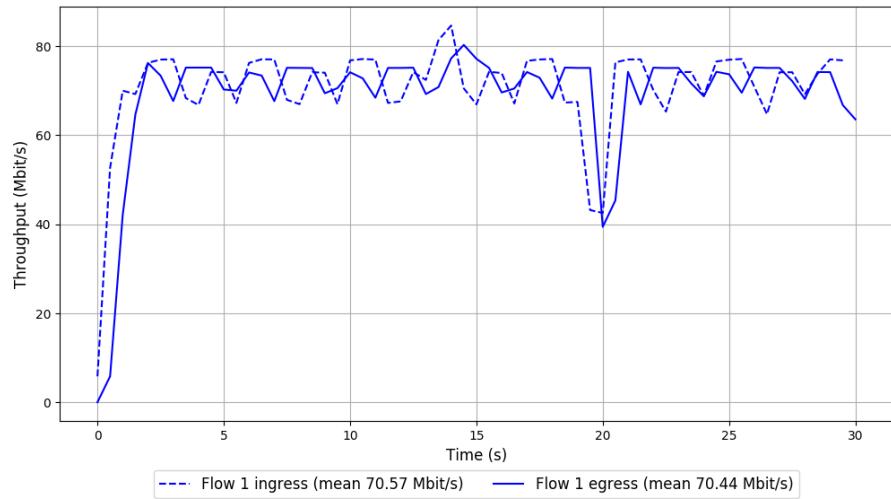


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-02-20 06:50:10
End at: 2019-02-20 06:50:40
Local clock offset: -6.746 ms
Remote clock offset: 7.795 ms

# Below is generated by plot.py at 2019-02-20 07:21:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.44 Mbit/s
95th percentile per-packet one-way delay: 119.148 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 70.44 Mbit/s
95th percentile per-packet one-way delay: 119.148 ms
Loss rate: 0.82%
```

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

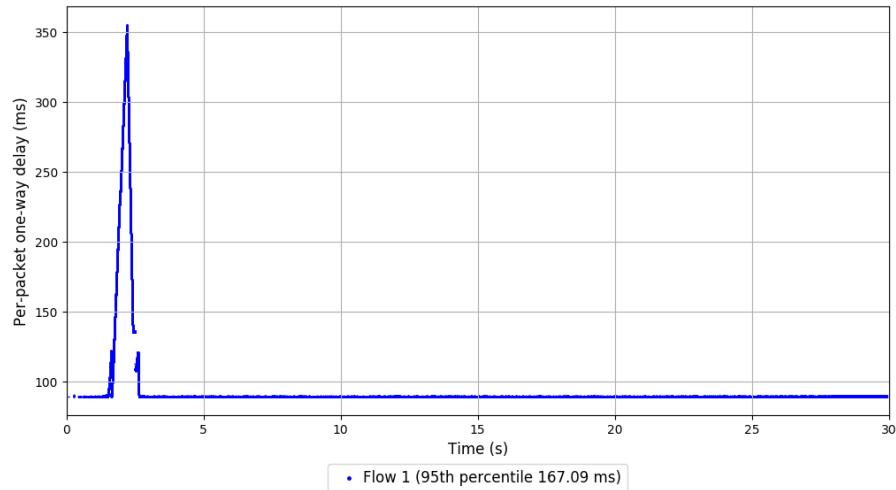
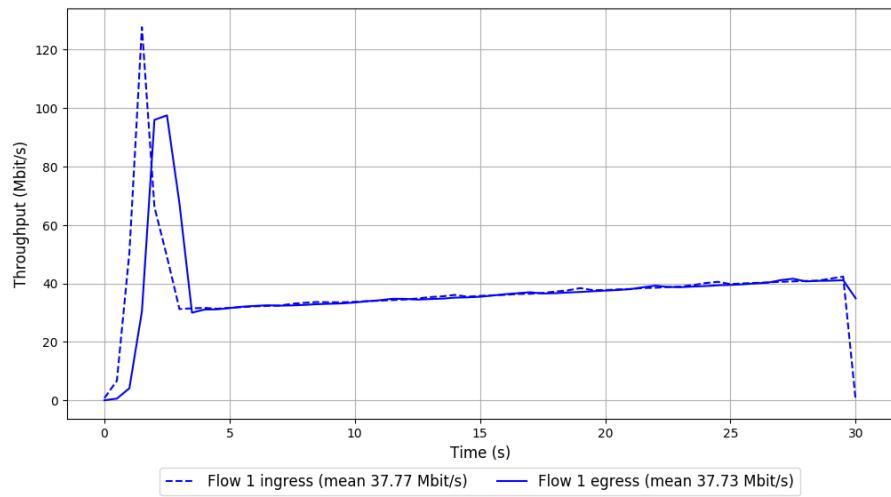


Run 1: Statistics of TCP Vegas

```
Start at: 2019-02-20 05:18:41
End at: 2019-02-20 05:19:11
Local clock offset: -6.318 ms
Remote clock offset: 5.849 ms

# Below is generated by plot.py at 2019-02-20 07:21:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.73 Mbit/s
95th percentile per-packet one-way delay: 167.088 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 37.73 Mbit/s
95th percentile per-packet one-way delay: 167.088 ms
Loss rate: 0.66%
```

Run 1: Report of TCP Vegas — Data Link

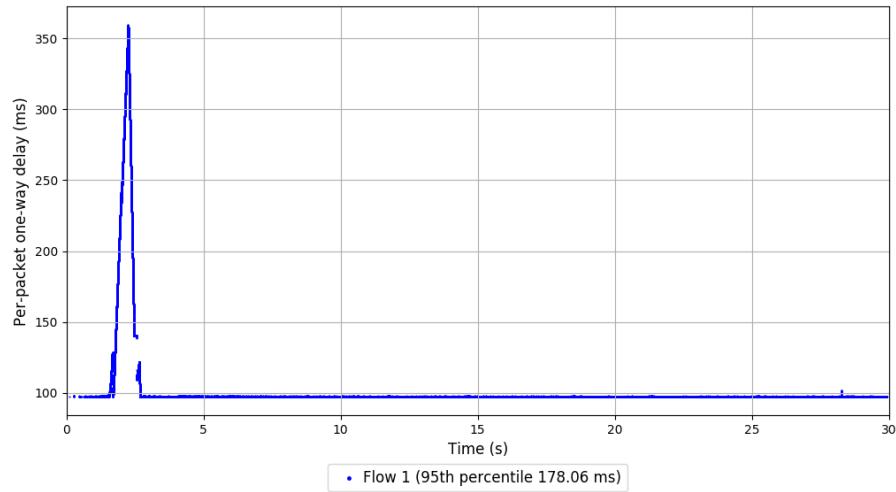
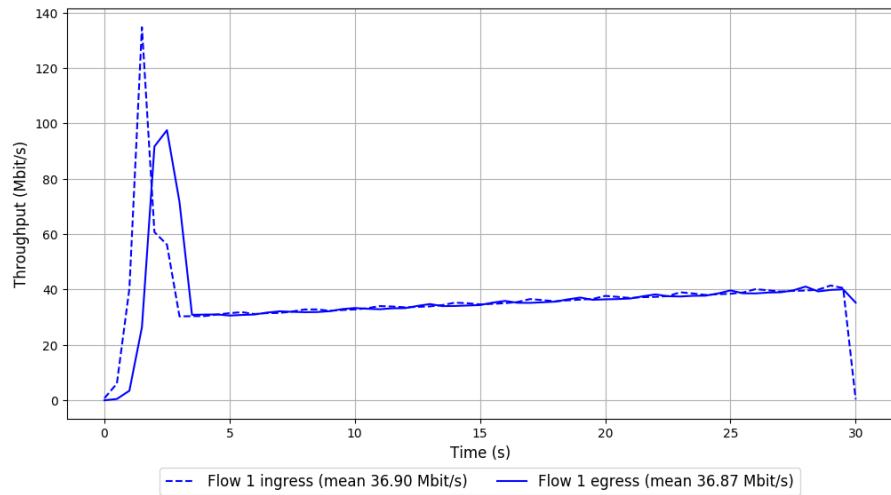


Run 2: Statistics of TCP Vegas

```
Start at: 2019-02-20 05:43:37
End at: 2019-02-20 05:44:07
Local clock offset: -6.724 ms
Remote clock offset: 2.009 ms

# Below is generated by plot.py at 2019-02-20 07:21:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.87 Mbit/s
95th percentile per-packet one-way delay: 178.061 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 36.87 Mbit/s
95th percentile per-packet one-way delay: 178.061 ms
Loss rate: 0.68%
```

Run 2: Report of TCP Vegas — Data Link

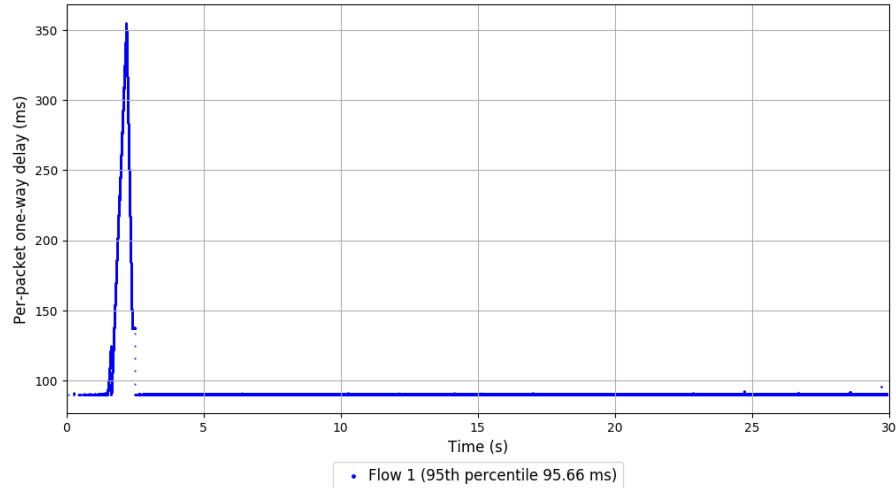
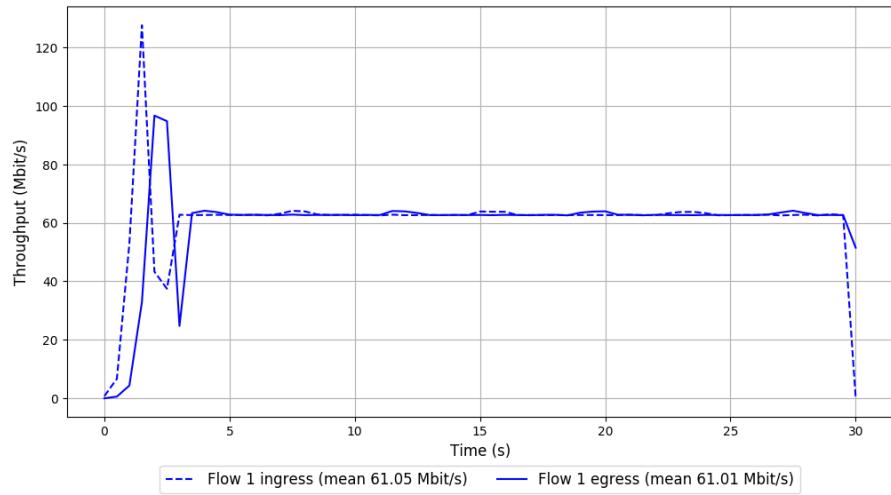


Run 3: Statistics of TCP Vegas

```
Start at: 2019-02-20 06:08:31
End at: 2019-02-20 06:09:01
Local clock offset: -6.506 ms
Remote clock offset: 1.365 ms

# Below is generated by plot.py at 2019-02-20 07:21:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.01 Mbit/s
95th percentile per-packet one-way delay: 95.657 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 61.01 Mbit/s
95th percentile per-packet one-way delay: 95.657 ms
Loss rate: 0.63%
```

Run 3: Report of TCP Vegas — Data Link

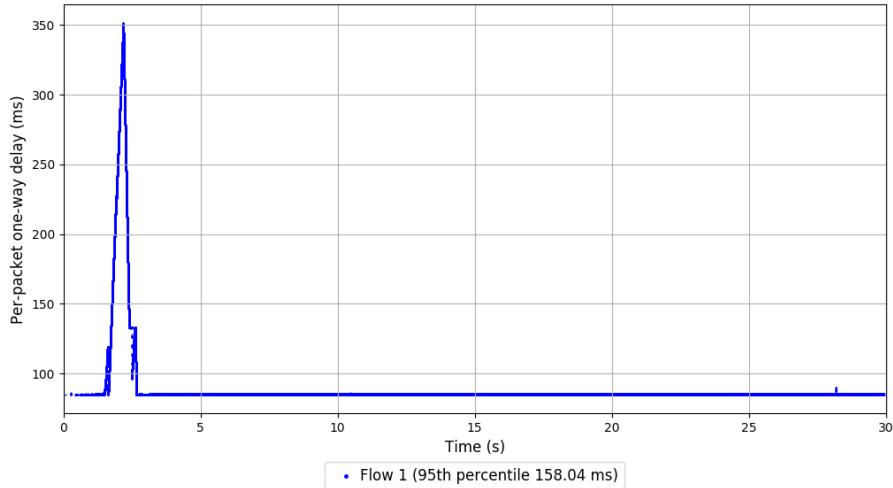
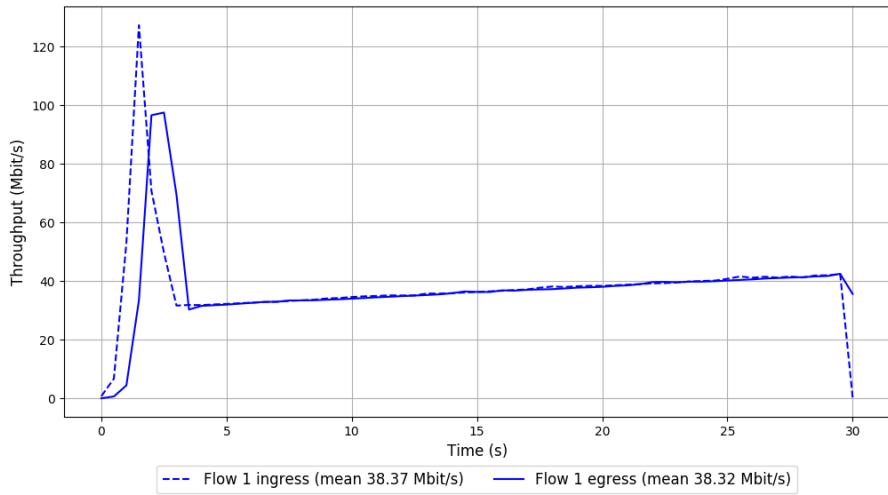


Run 4: Statistics of TCP Vegas

```
Start at: 2019-02-20 06:33:28
End at: 2019-02-20 06:33:58
Local clock offset: -6.446 ms
Remote clock offset: 7.762 ms

# Below is generated by plot.py at 2019-02-20 07:21:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 38.32 Mbit/s
95th percentile per-packet one-way delay: 158.037 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 38.32 Mbit/s
95th percentile per-packet one-way delay: 158.037 ms
Loss rate: 0.70%
```

Run 4: Report of TCP Vegas — Data Link

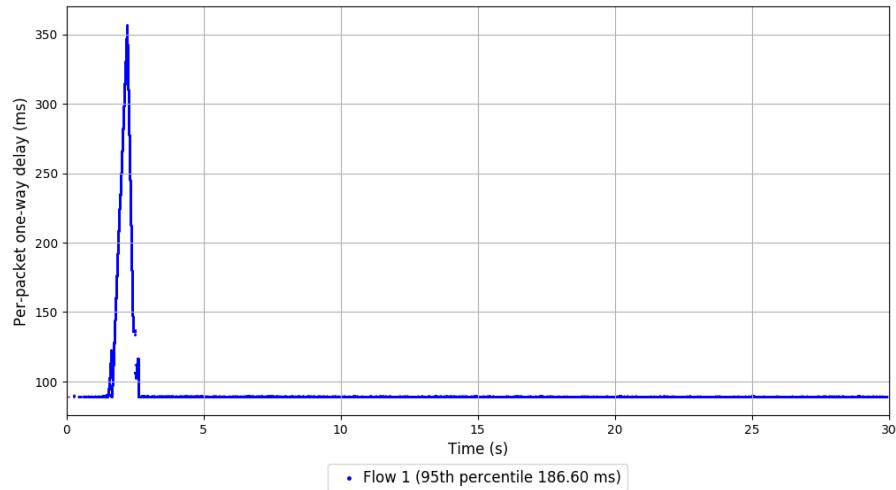
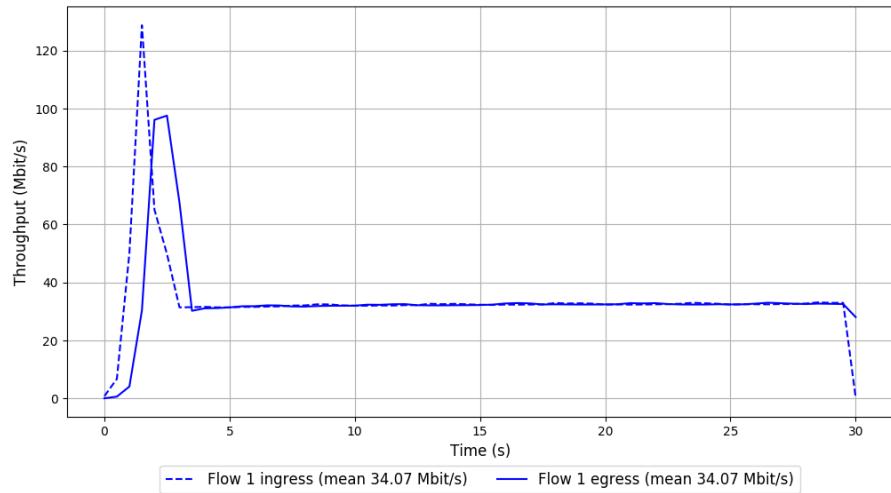


Run 5: Statistics of TCP Vegas

```
Start at: 2019-02-20 06:58:26
End at: 2019-02-20 06:58:56
Local clock offset: -6.794 ms
Remote clock offset: 5.156 ms

# Below is generated by plot.py at 2019-02-20 07:21:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.07 Mbit/s
95th percentile per-packet one-way delay: 186.605 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 34.07 Mbit/s
95th percentile per-packet one-way delay: 186.605 ms
Loss rate: 0.58%
```

Run 5: Report of TCP Vegas — Data Link

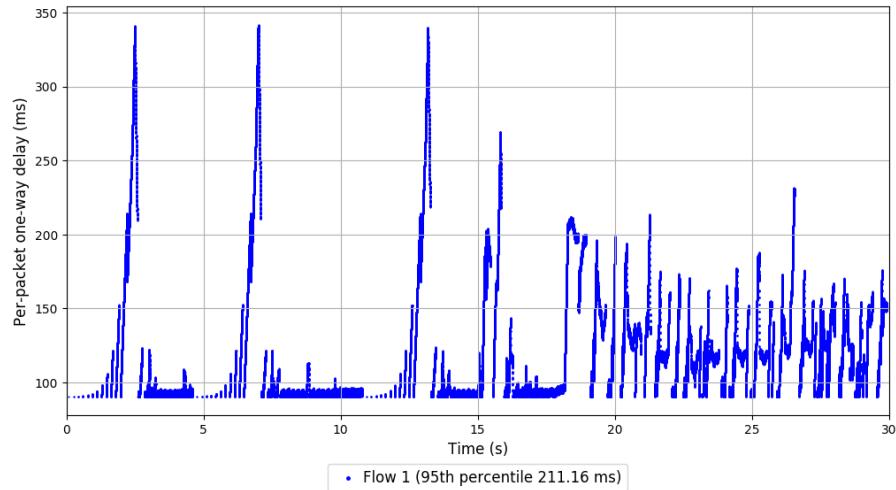
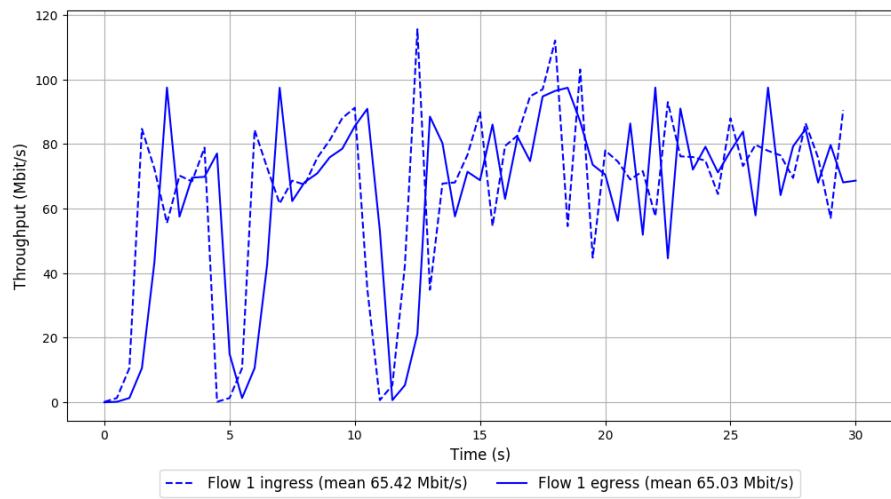


Run 1: Statistics of Verus

```
Start at: 2019-02-20 05:25:52
End at: 2019-02-20 05:26:22
Local clock offset: -6.356 ms
Remote clock offset: 3.091 ms

# Below is generated by plot.py at 2019-02-20 07:21:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.03 Mbit/s
95th percentile per-packet one-way delay: 211.158 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 65.03 Mbit/s
95th percentile per-packet one-way delay: 211.158 ms
Loss rate: 0.91%
```

Run 1: Report of Verus — Data Link

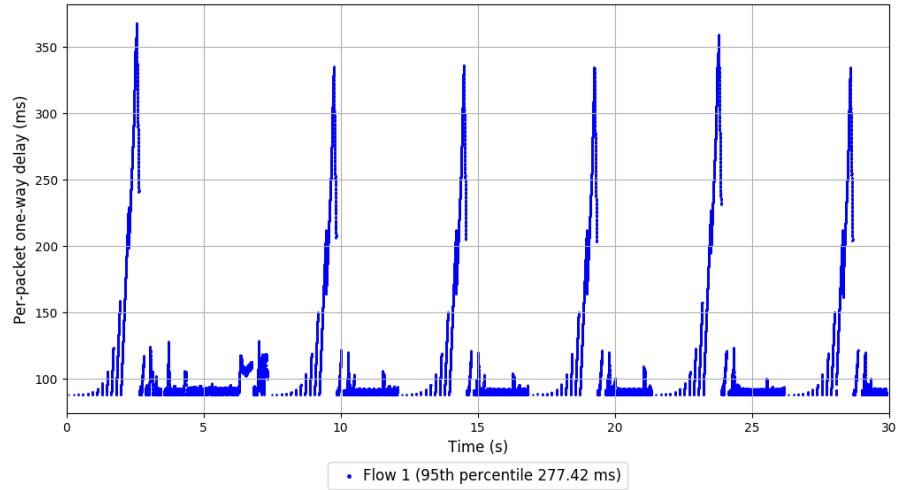
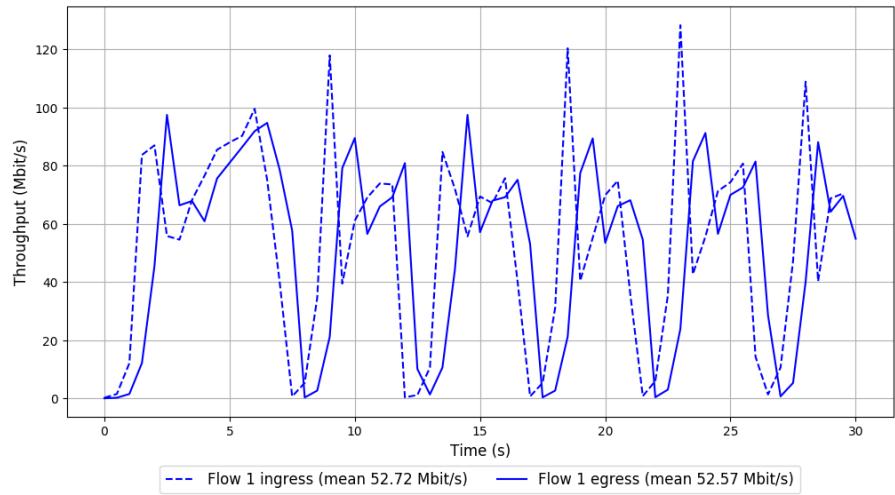


Run 2: Statistics of Verus

```
Start at: 2019-02-20 05:50:47
End at: 2019-02-20 05:51:17
Local clock offset: -6.826 ms
Remote clock offset: 5.983 ms

# Below is generated by plot.py at 2019-02-20 07:21:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.57 Mbit/s
95th percentile per-packet one-way delay: 277.416 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 52.57 Mbit/s
95th percentile per-packet one-way delay: 277.416 ms
Loss rate: 0.84%
```

Run 2: Report of Verus — Data Link

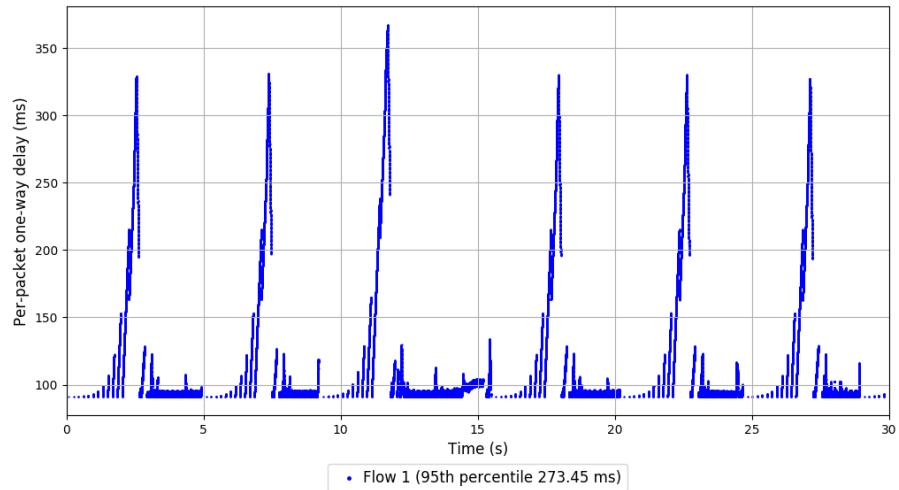
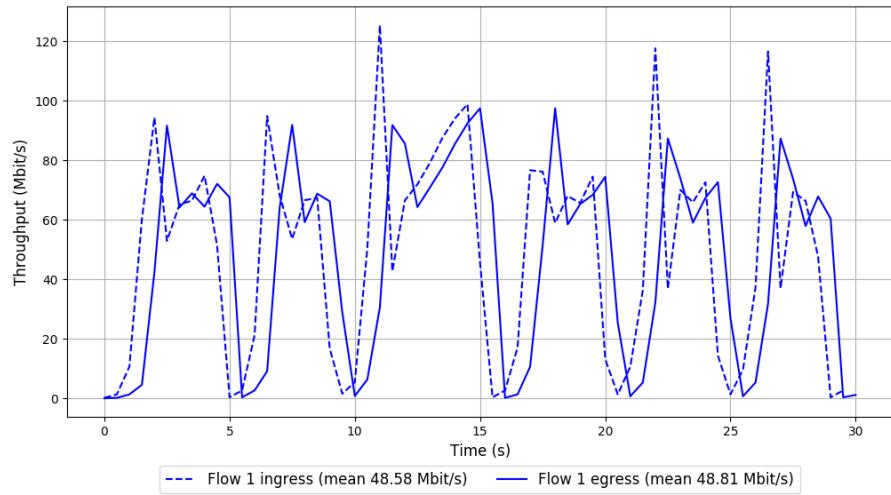


Run 3: Statistics of Verus

```
Start at: 2019-02-20 06:15:43
End at: 2019-02-20 06:16:13
Local clock offset: -6.447 ms
Remote clock offset: 6.508 ms

# Below is generated by plot.py at 2019-02-20 07:21:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.81 Mbit/s
95th percentile per-packet one-way delay: 273.450 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 48.81 Mbit/s
95th percentile per-packet one-way delay: 273.450 ms
Loss rate: 0.12%
```

Run 3: Report of Verus — Data Link

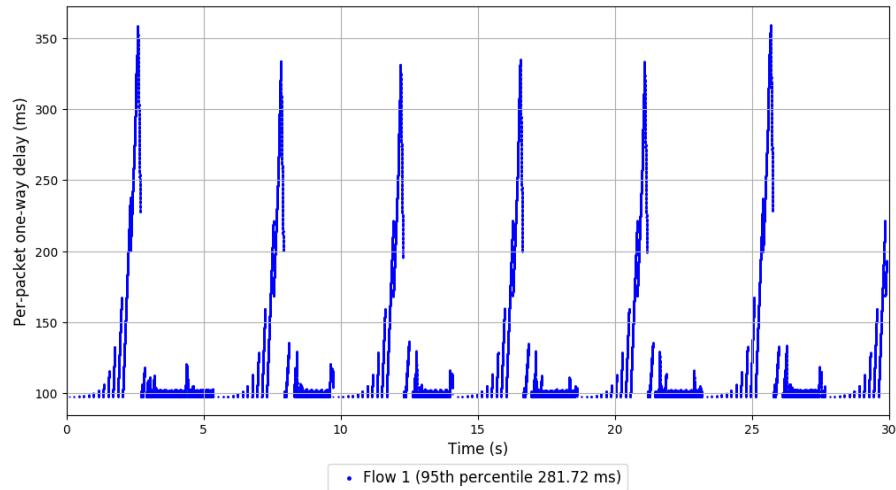
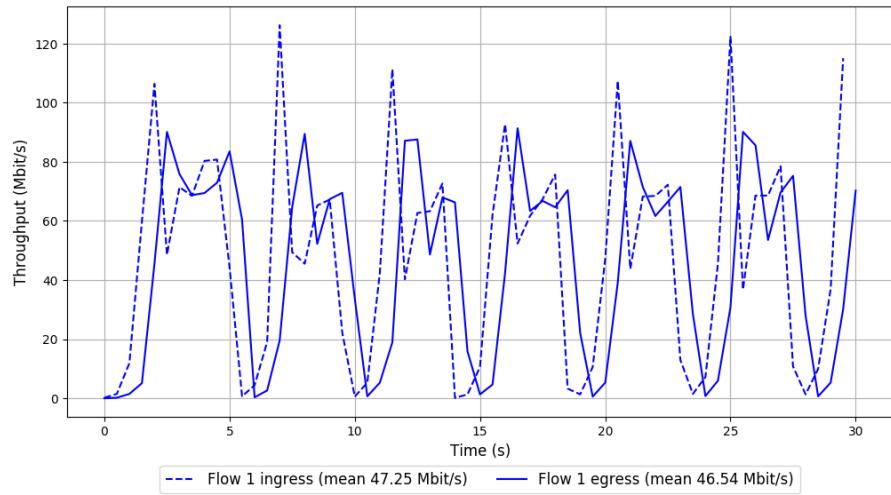


Run 4: Statistics of Verus

```
Start at: 2019-02-20 06:40:43
End at: 2019-02-20 06:41:13
Local clock offset: -6.634 ms
Remote clock offset: 1.635 ms

# Below is generated by plot.py at 2019-02-20 07:21:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.54 Mbit/s
95th percentile per-packet one-way delay: 281.724 ms
Loss rate: 2.08%
-- Flow 1:
Average throughput: 46.54 Mbit/s
95th percentile per-packet one-way delay: 281.724 ms
Loss rate: 2.08%
```

Run 4: Report of Verus — Data Link

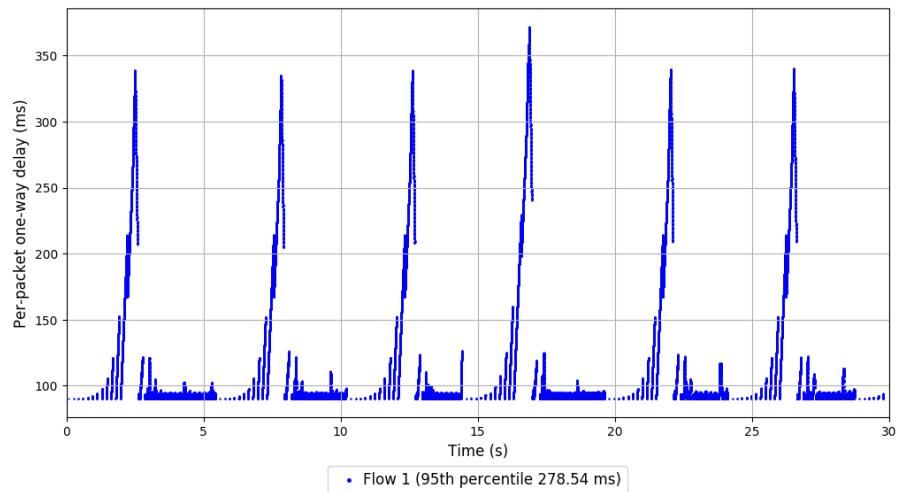
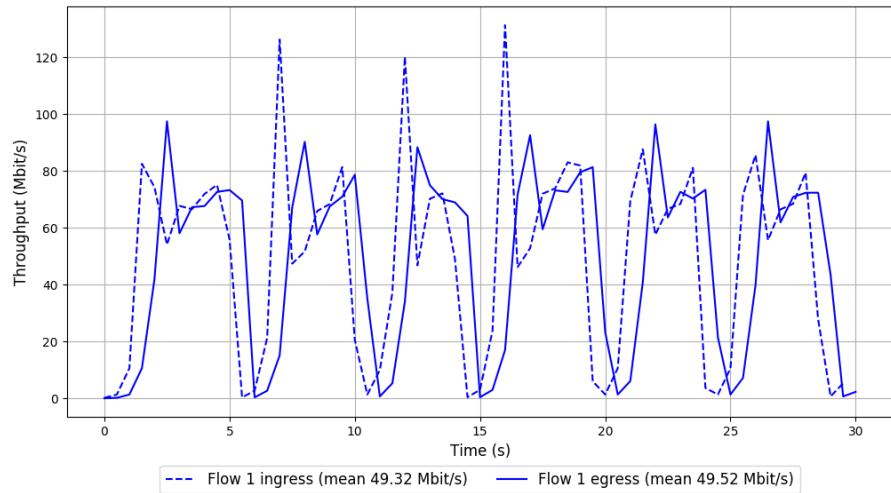


Run 5: Statistics of Verus

```
Start at: 2019-02-20 07:05:38
End at: 2019-02-20 07:06:08
Local clock offset: -6.602 ms
Remote clock offset: 2.243 ms

# Below is generated by plot.py at 2019-02-20 07:21:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.52 Mbit/s
95th percentile per-packet one-way delay: 278.538 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 49.52 Mbit/s
95th percentile per-packet one-way delay: 278.538 ms
Loss rate: 0.16%
```

Run 5: Report of Verus — Data Link

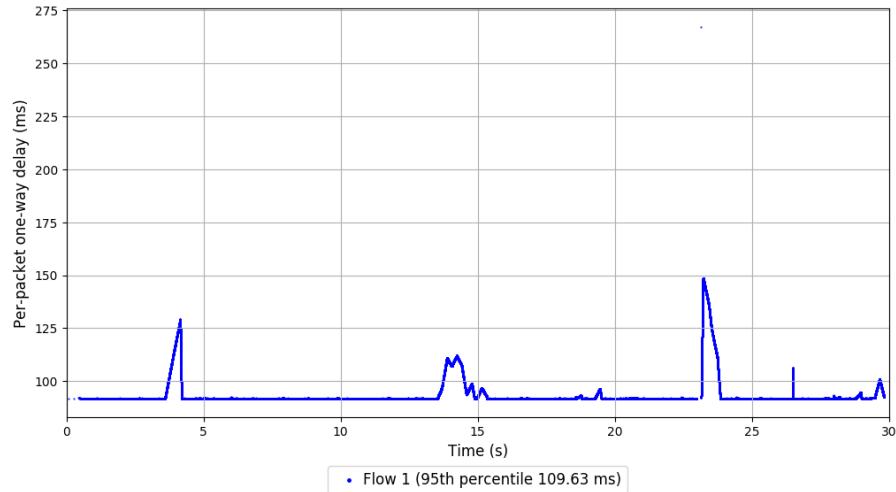
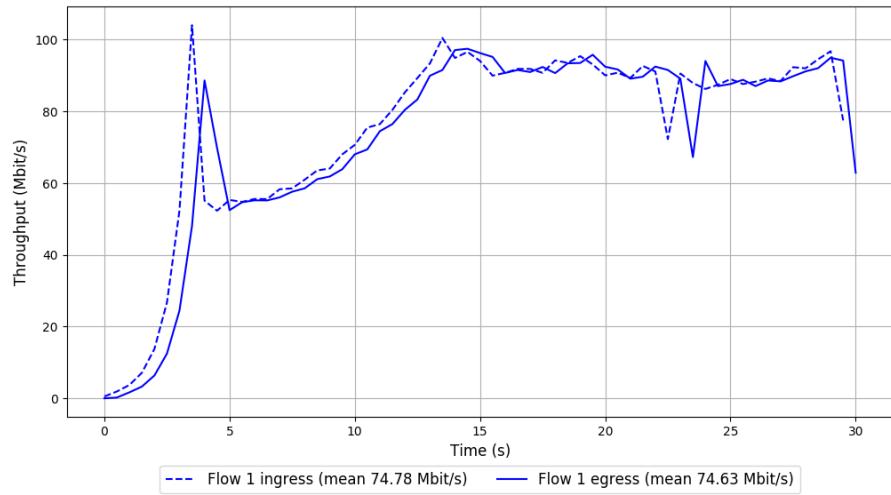


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-02-20 05:09:11
End at: 2019-02-20 05:09:41
Local clock offset: -6.259 ms
Remote clock offset: 3.193 ms

# Below is generated by plot.py at 2019-02-20 07:22:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.63 Mbit/s
95th percentile per-packet one-way delay: 109.629 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 74.63 Mbit/s
95th percentile per-packet one-way delay: 109.629 ms
Loss rate: 0.77%
```

Run 1: Report of PCC-Vivace — Data Link

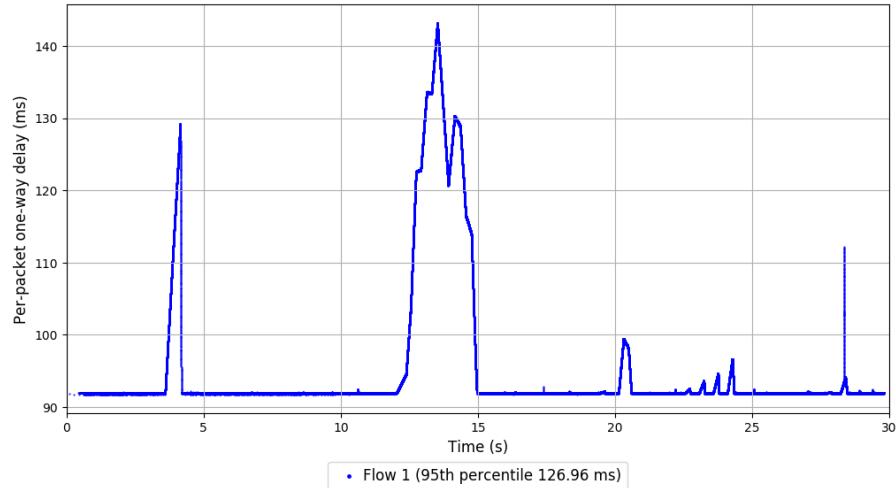
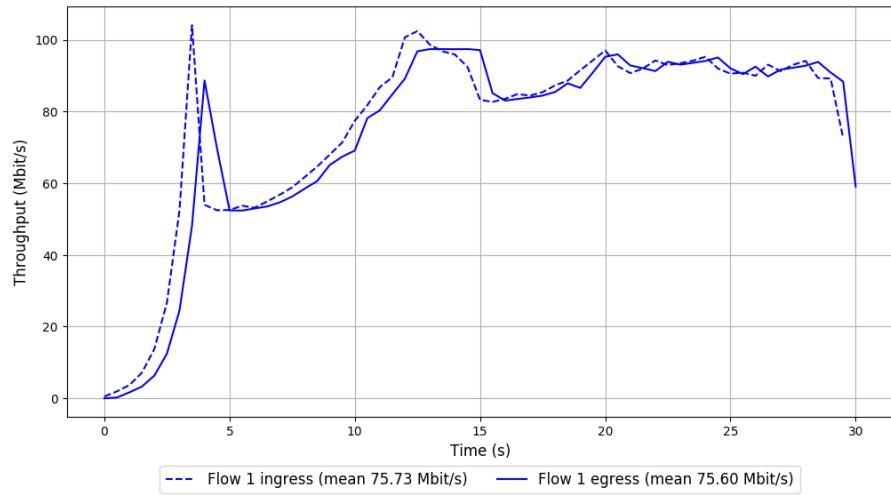


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-02-20 05:34:08
End at: 2019-02-20 05:34:38
Local clock offset: -6.492 ms
Remote clock offset: 3.492 ms

# Below is generated by plot.py at 2019-02-20 07:22:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.60 Mbit/s
95th percentile per-packet one-way delay: 126.958 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 75.60 Mbit/s
95th percentile per-packet one-way delay: 126.958 ms
Loss rate: 0.75%
```

Run 2: Report of PCC-Vivace — Data Link

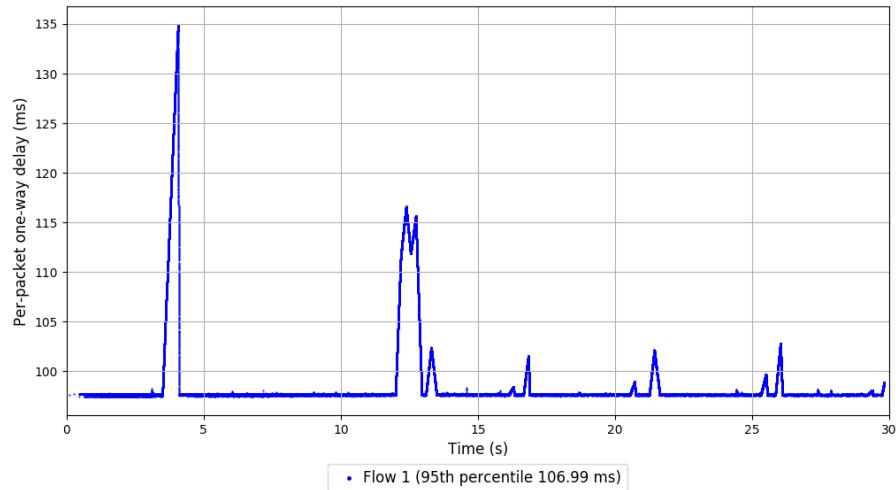
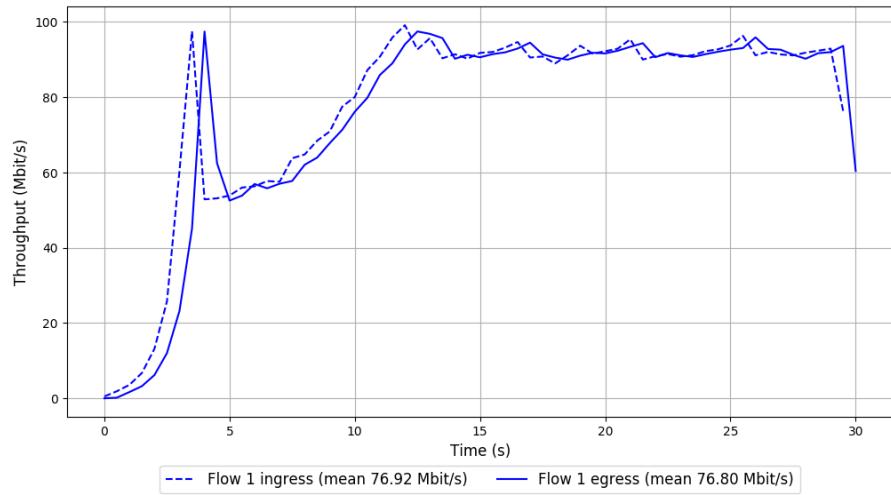


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-02-20 05:59:01
End at: 2019-02-20 05:59:31
Local clock offset: -6.807 ms
Remote clock offset: 0.528 ms

# Below is generated by plot.py at 2019-02-20 07:22:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.80 Mbit/s
95th percentile per-packet one-way delay: 106.994 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 76.80 Mbit/s
95th percentile per-packet one-way delay: 106.994 ms
Loss rate: 0.74%
```

Run 3: Report of PCC-Vivace — Data Link

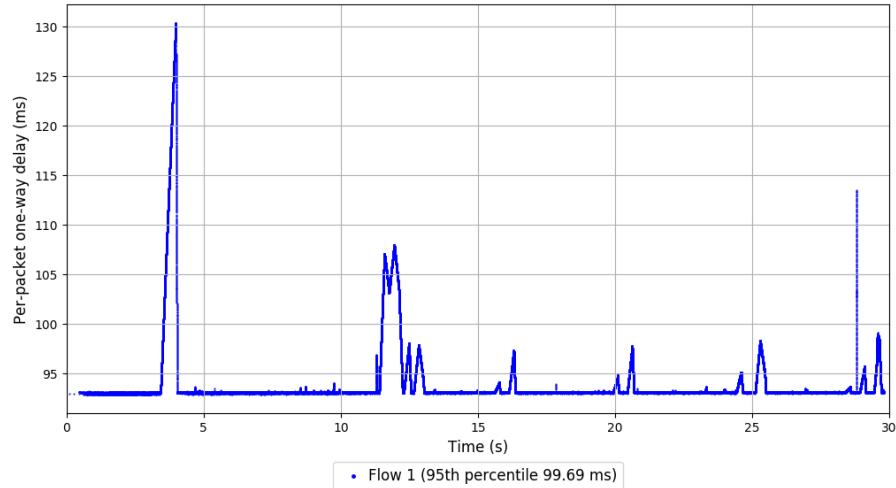
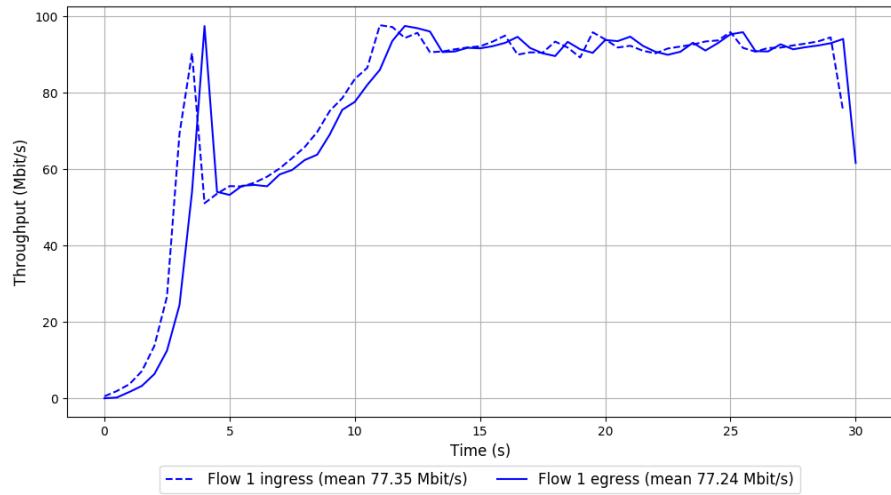


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-02-20 06:23:59
End at: 2019-02-20 06:24:29
Local clock offset: -6.369 ms
Remote clock offset: 1.166 ms

# Below is generated by plot.py at 2019-02-20 07:22:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.24 Mbit/s
95th percentile per-packet one-way delay: 99.695 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 77.24 Mbit/s
95th percentile per-packet one-way delay: 99.695 ms
Loss rate: 0.71%
```

Run 4: Report of PCC-Vivace — Data Link

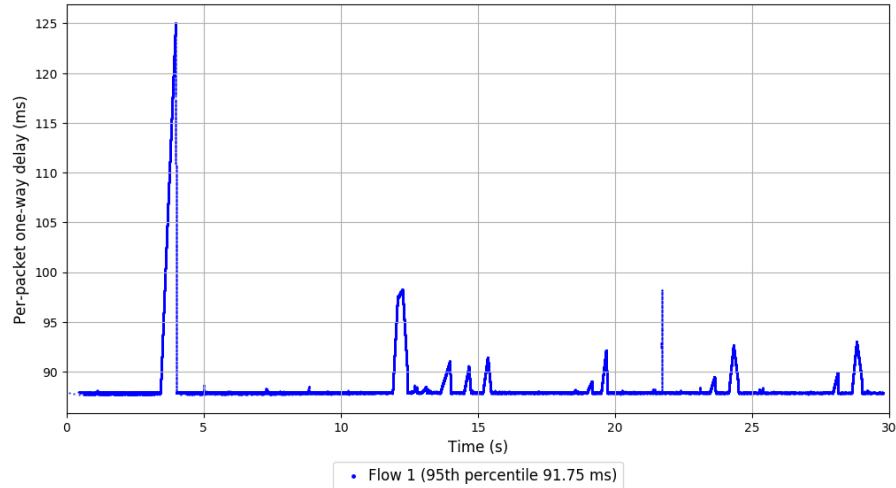
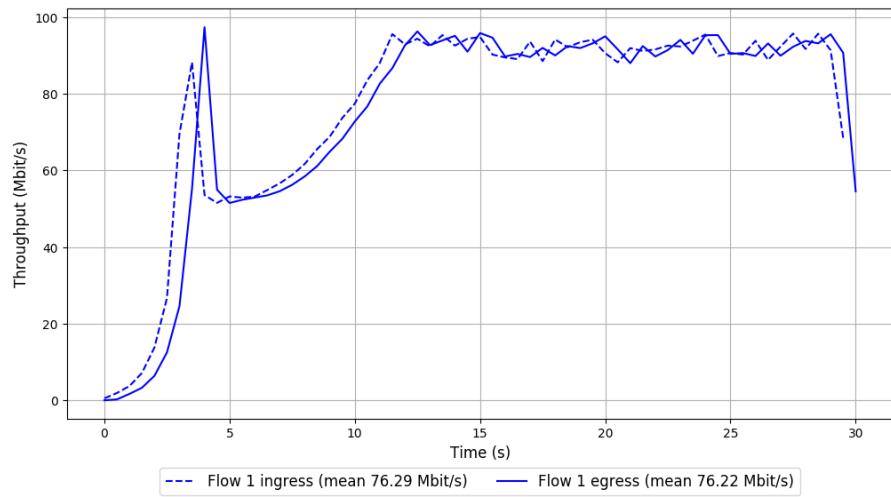


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-02-20 06:48:57
End at: 2019-02-20 06:49:27
Local clock offset: -6.789 ms
Remote clock offset: 6.9 ms

# Below is generated by plot.py at 2019-02-20 07:22:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.22 Mbit/s
95th percentile per-packet one-way delay: 91.748 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 76.22 Mbit/s
95th percentile per-packet one-way delay: 91.748 ms
Loss rate: 0.68%
```

Run 5: Report of PCC-Vivace — Data Link

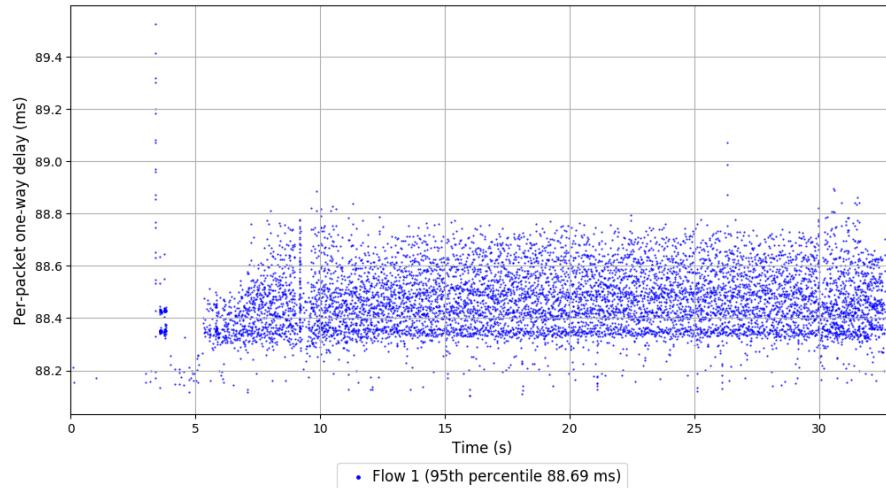
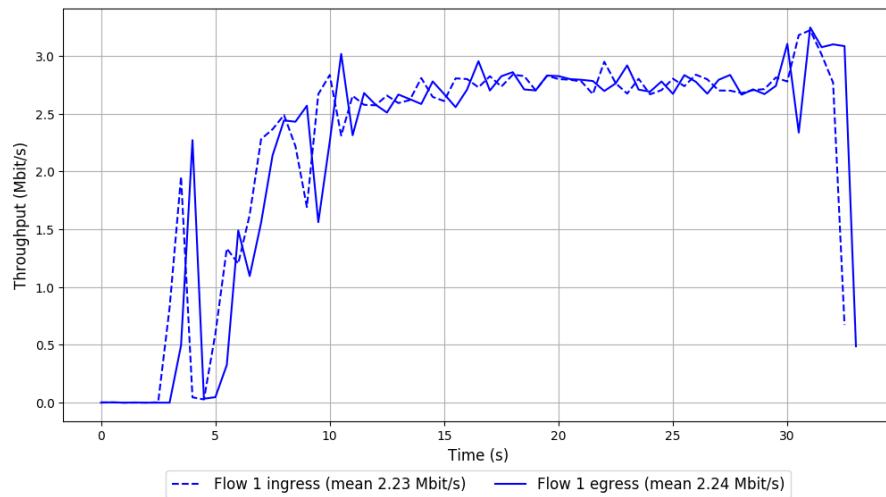


```
Run 1: Statistics of WebRTC media

Start at: 2019-02-20 05:06:49
End at: 2019-02-20 05:07:19
Local clock offset: -6.217 ms
Remote clock offset: 6.785 ms

# Below is generated by plot.py at 2019-02-20 07:22:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 88.685 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 88.685 ms
Loss rate: 0.32%
```

Run 1: Report of WebRTC media — Data Link

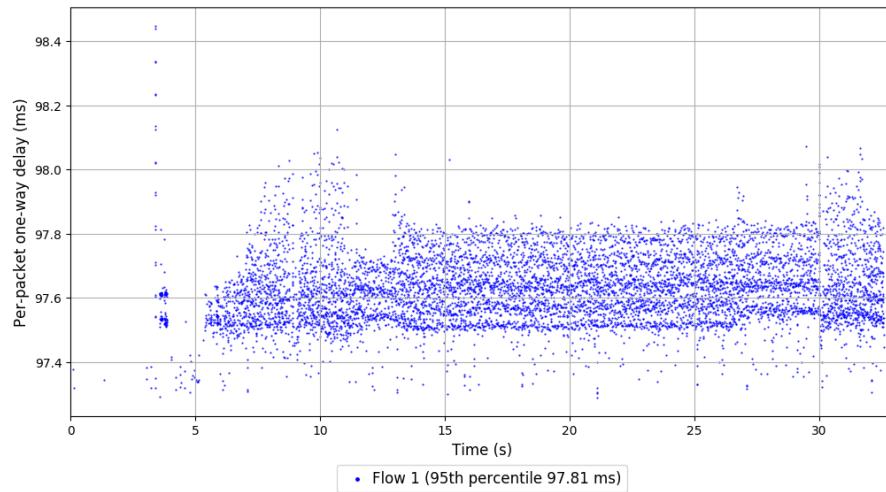
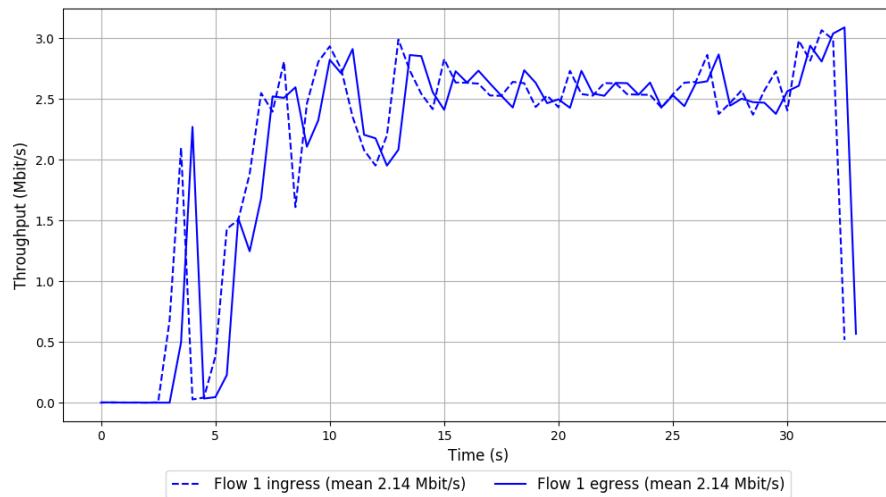


Run 2: Statistics of WebRTC media

```
Start at: 2019-02-20 05:31:46
End at: 2019-02-20 05:32:16
Local clock offset: -6.427 ms
Remote clock offset: 2.244 ms

# Below is generated by plot.py at 2019-02-20 07:22:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 97.813 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 97.813 ms
Loss rate: 0.34%
```

Run 2: Report of WebRTC media — Data Link

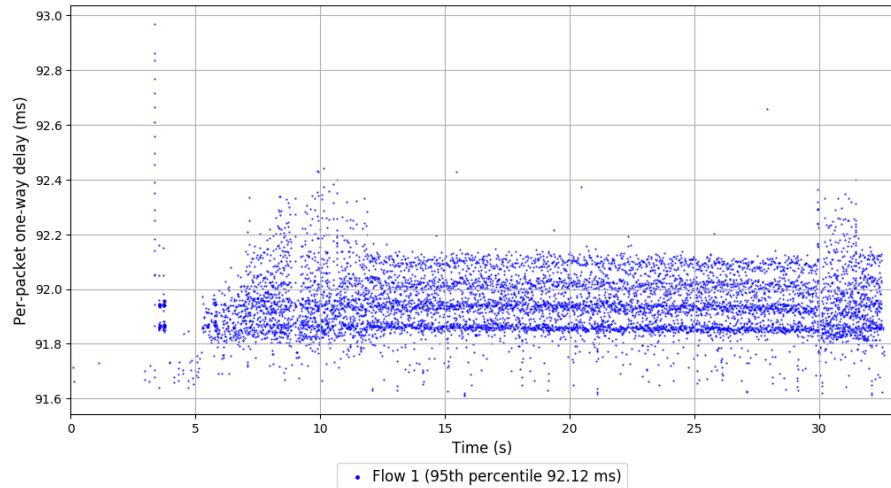
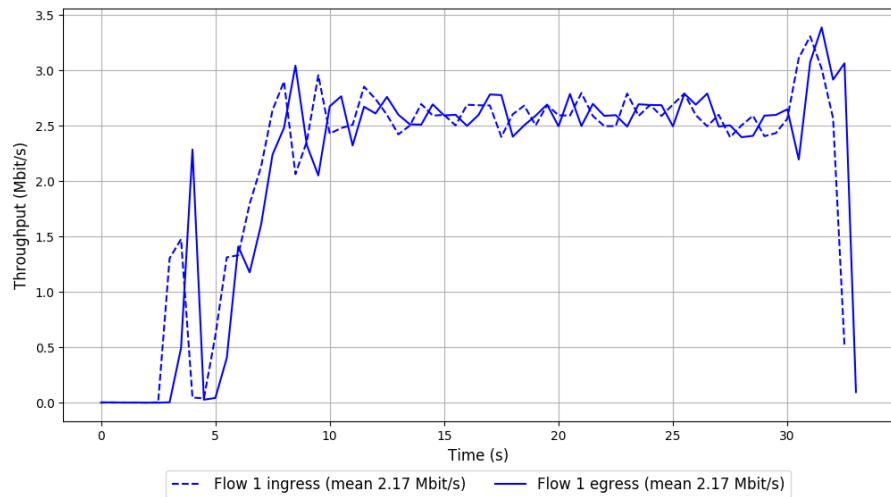


Run 3: Statistics of WebRTC media

```
Start at: 2019-02-20 05:56:40
End at: 2019-02-20 05:57:10
Local clock offset: -6.786 ms
Remote clock offset: 1.871 ms

# Below is generated by plot.py at 2019-02-20 07:22:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 92.119 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 92.119 ms
Loss rate: 0.36%
```

Run 3: Report of WebRTC media — Data Link

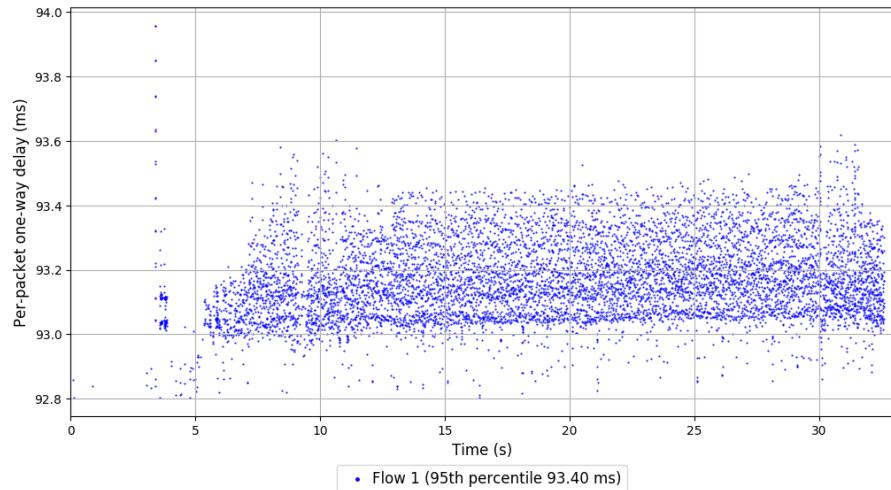
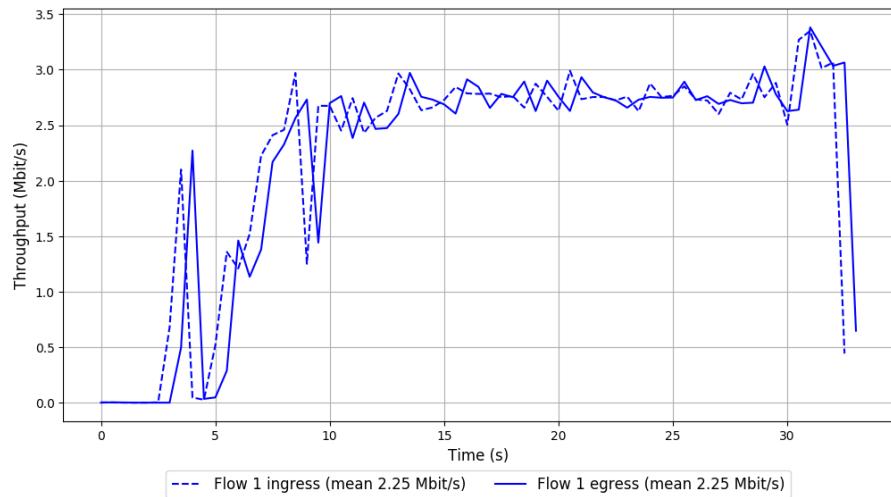


Run 4: Statistics of WebRTC media

```
Start at: 2019-02-20 06:21:35
End at: 2019-02-20 06:22:05
Local clock offset: -6.342 ms
Remote clock offset: 0.986 ms

# Below is generated by plot.py at 2019-02-20 07:22:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 93.396 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 93.396 ms
Loss rate: 0.27%
```

Run 4: Report of WebRTC media — Data Link



```
Run 5: Statistics of WebRTC media

Start at: 2019-02-20 06:46:36
End at: 2019-02-20 06:47:06
Local clock offset: -6.776 ms
Remote clock offset: 6.45 ms

# Below is generated by plot.py at 2019-02-20 07:22:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 93.262 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 93.262 ms
Loss rate: 0.29%
```

Run 5: Report of WebRTC media — Data Link

