Pantheon Report

Generated at 2019-03-19 10:54:48 (UTC).

Data path: Mexico on `em1` (*remote*) →AWS California 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 `time.stanford.edu` and have been applied to correct the timestamps in logs.
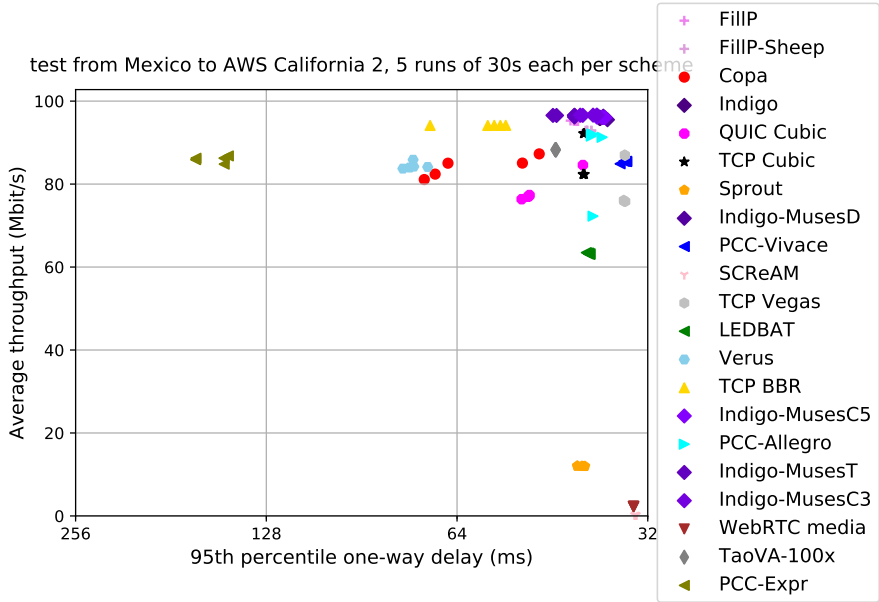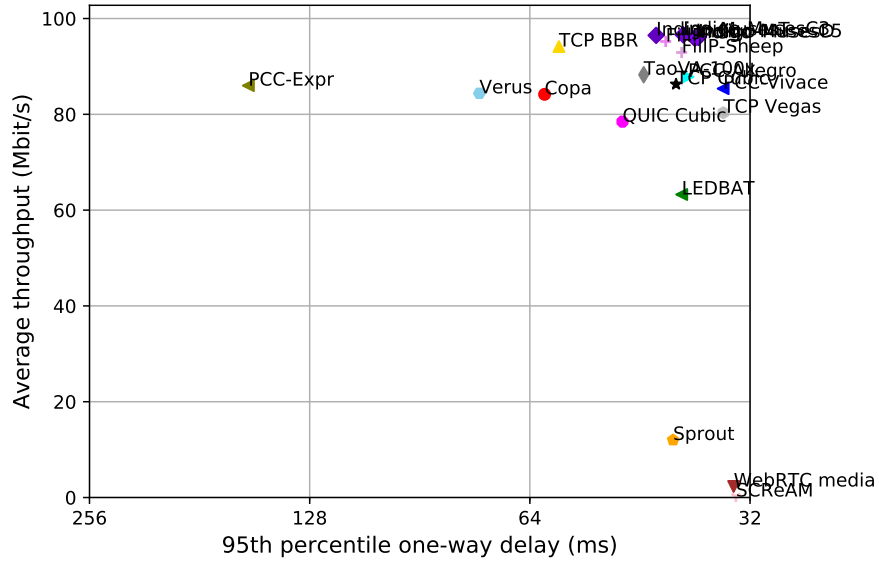
```
System info:
Linux 4.15.0-1033-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
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

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

test from Mexico to AWS California 2, 5 runs of 30s each per scheme

3

scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	94.16	58.40	0.48
Copa	5	84.18	61.10	0.28
TCP Cubic	5	86.29	40.39	0.31
FillP	5	95.21	41.73	0.26
FillP-Sheep	5	92.91	39.69	0.23
Indigo	5	95.89	38.07	0.22
Indigo-MusesC3	5	96.60	39.49	0.25
Indigo-MusesC5	5	96.11	37.97	0.24
Indigo-MusesD	5	96.06	37.67	0.24
Indigo-MusesT	5	96.48	43.01	1.01
LEDBAT	5	63.26	39.68	0.20
PCC-Allegro	5	87.83	38.90	0.24
PCC-Expr	5	85.99	155.26	0.31
QUIC Cubic	5	78.47	47.81	0.25
SCReAM	5	0.21	33.46	0.26
Sprout	5	12.01	40.77	0.26
TaoVA-100x	5	88.27	44.73	0.22
TCP Vegas	5	80.33	34.81	0.27
Verus	5	84.38	75.03	0.49
PCC-Vivace	5	85.36	34.83	0.23
WebRTC media	5	2.30	33.70	0.26

4

```
Run 1: Statistics of TCP BBR

Start at: 2019-03-19 08:45:28
End at: 2019-03-19 08:45:58
Local clock offset: 0.056 ms
Remote clock offset: -2.692 ms


# Below is generated by plot.py at 2019-03-19 10:41:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 54.676 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 54.676 ms
Loss rate: 0.44%
```
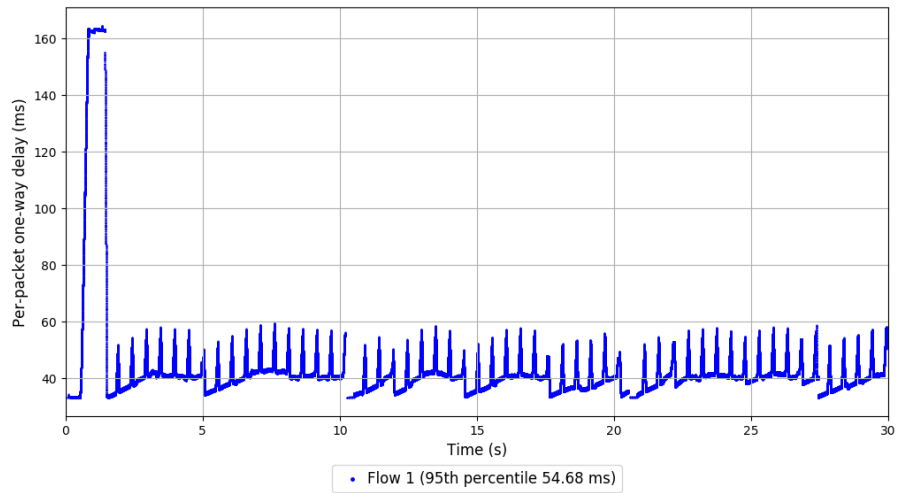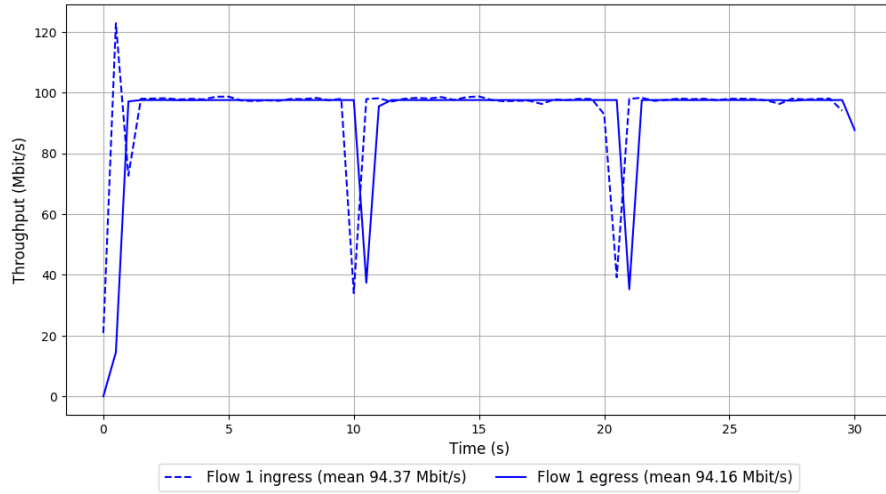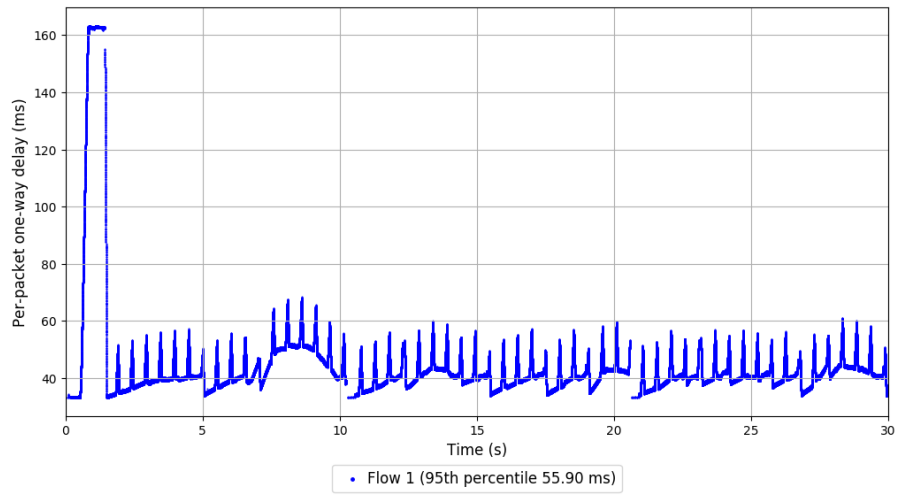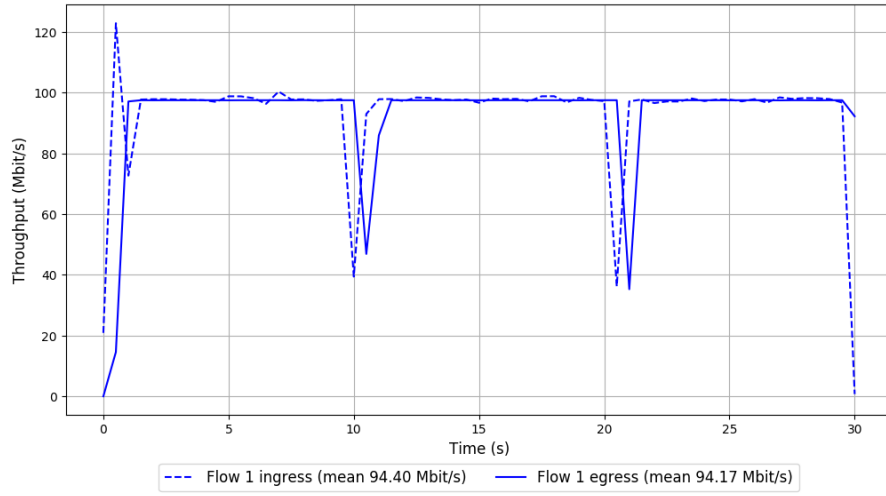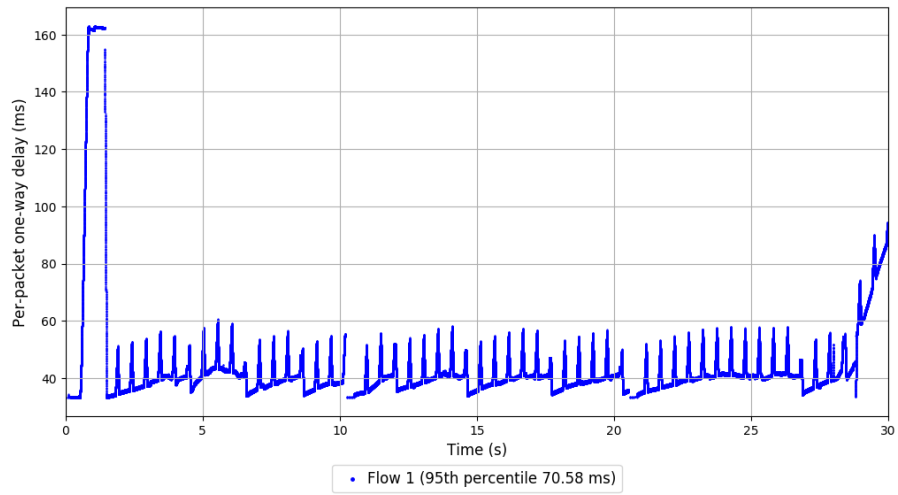
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2019-03-19 09:09:59
End at: 2019-03-19 09:10:29
Local clock offset: 0.847 ms
Remote clock offset: -1.626 ms


# Below is generated by plot.py at 2019-03-19 10:41:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 55.900 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 55.900 ms
Loss rate: 0.46%
```
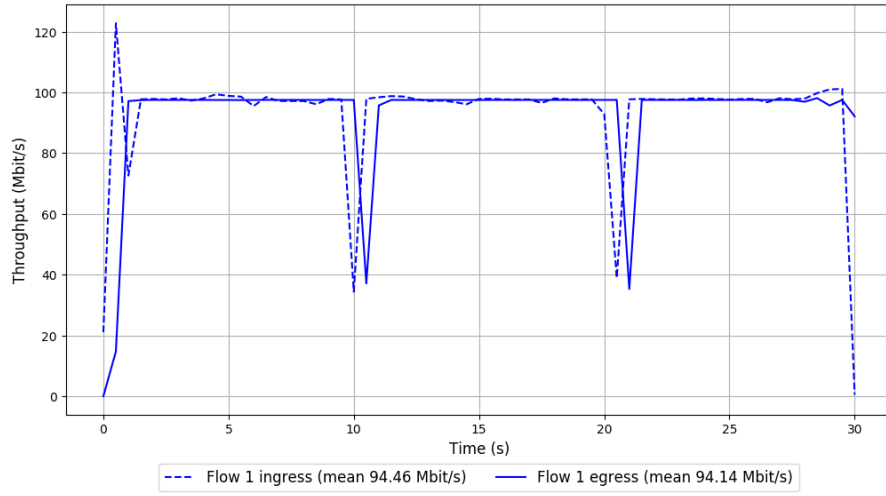
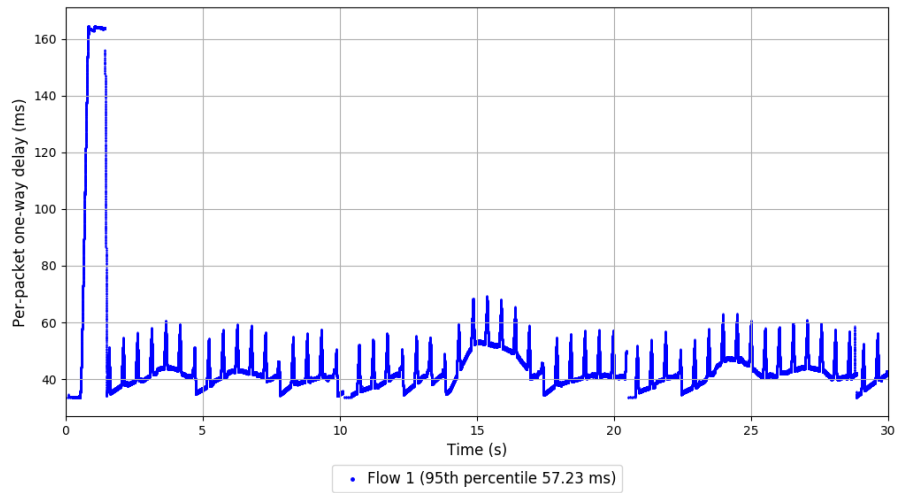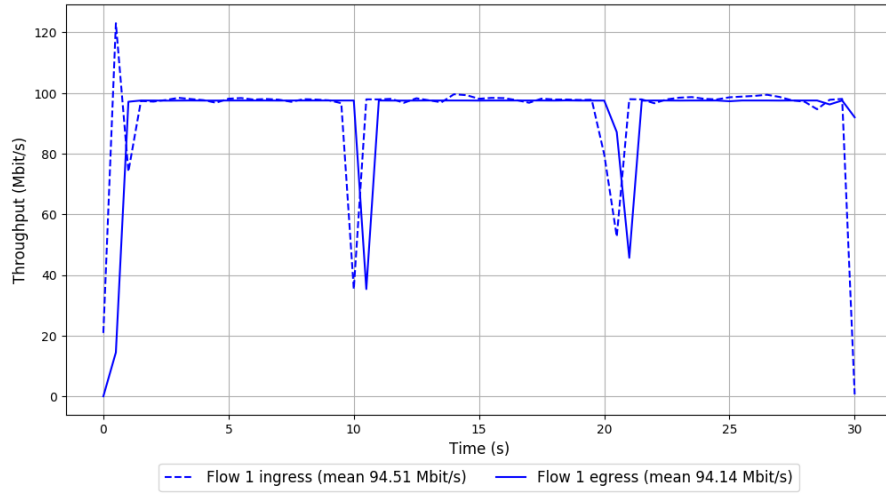Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 94.40 Mbit/s)   Flow 1 egress (mean 94.17 Mbit/s)

Flow 1 (95th percentile 55.90 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2019-03-19 09:34:31
End at: 2019-03-19 09:35:01
Local clock offset: 0.177 ms
Remote clock offset: -1.547 ms


# Below is generated by plot.py at 2019-03-19 10:41:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 70.583 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 70.583 ms
Loss rate: 0.56%
```
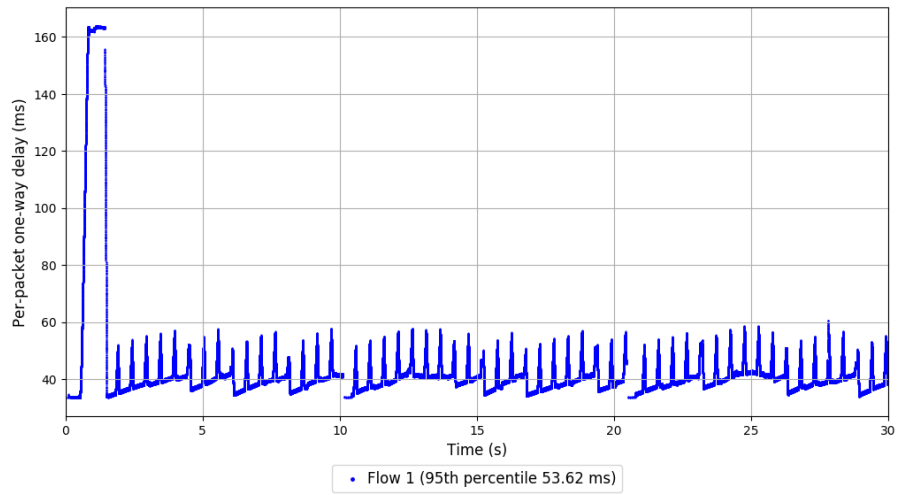
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2019-03-19 09:59:02
End at: 2019-03-19 09:59:32
Local clock offset: -0.108 ms
Remote clock offset: -0.951 ms


# Below is generated by plot.py at 2019-03-19 10:41:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 57.233 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 57.233 ms
Loss rate: 0.61%
```
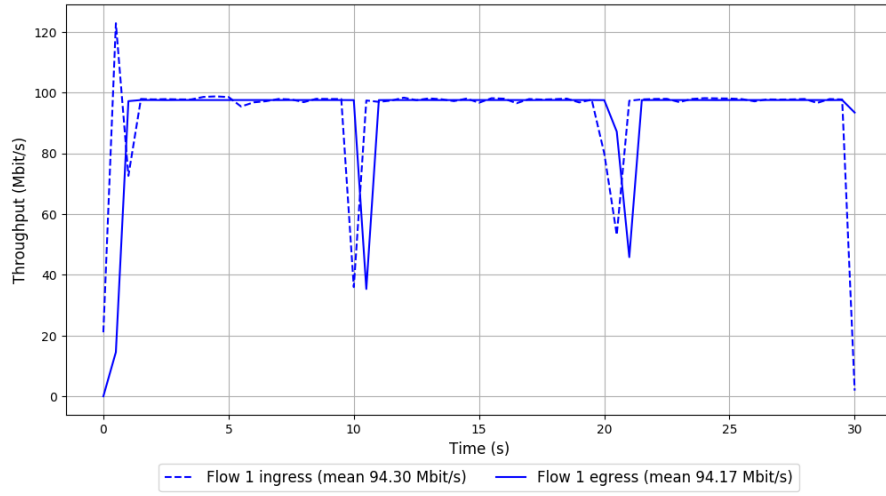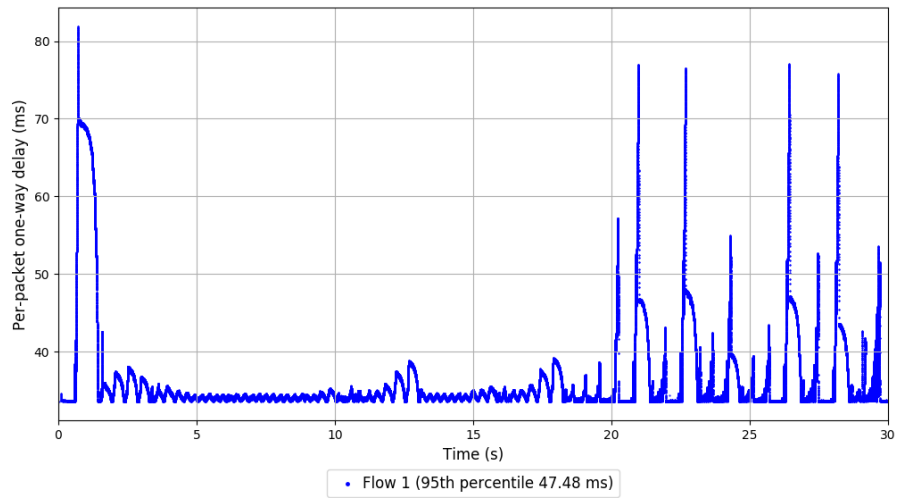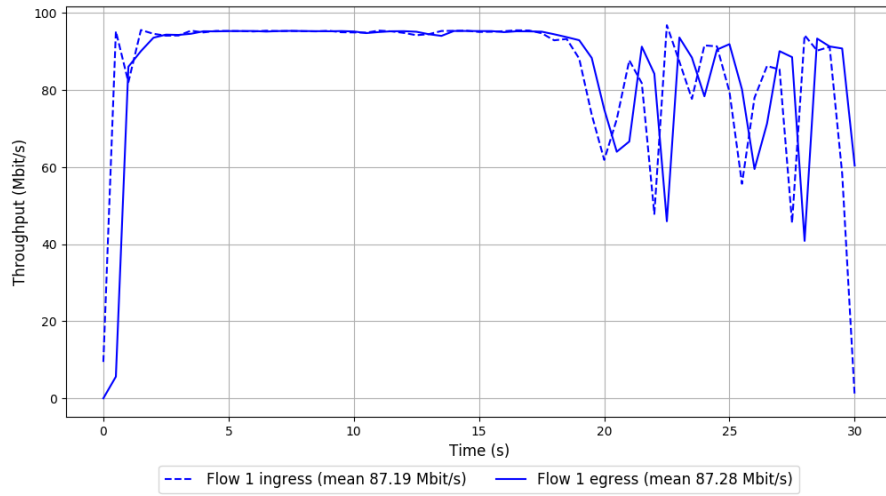
Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2019-03-19 10:23:34
End at: 2019-03-19 10:24:04
Local clock offset: 0.089 ms
Remote clock offset: -0.661 ms


# Below is generated by plot.py at 2019-03-19 10:41:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 53.623 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 53.623 ms
Loss rate: 0.34%
```

Run 5: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2019-03-19 08:51:15
End at: 2019-03-19 08:51:45
Local clock offset: 0.399 ms
Remote clock offset: -2.775 ms


# Below is generated by plot.py at 2019-03-19 10:42:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.28 Mbit/s
95th percentile per-packet one-way delay: 47.476 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 87.28 Mbit/s
95th percentile per-packet one-way delay: 47.476 ms
Loss rate: 0.11%
```
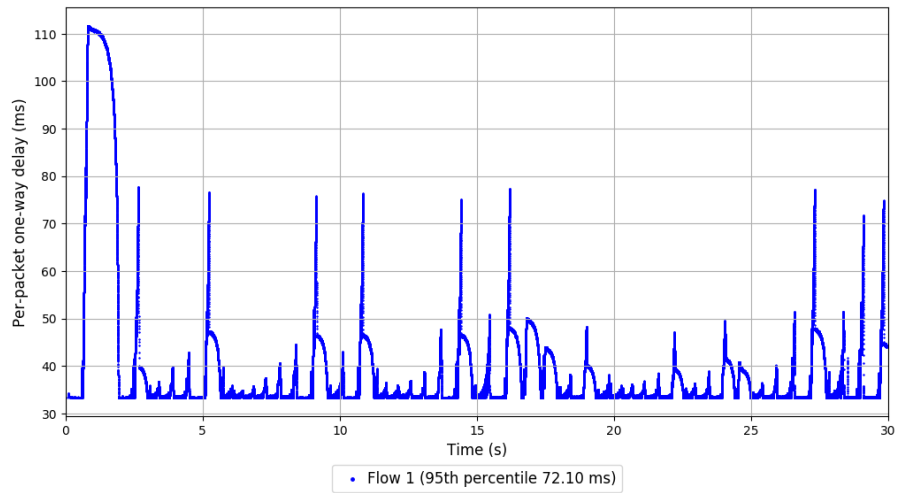
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2019-03-19 09:15:46
End at: 2019-03-19 09:16:16
Local clock offset: 0.925 ms
Remote clock offset: -1.453 ms


# Below is generated by plot.py at 2019-03-19 10:42:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.10 Mbit/s
95th percentile per-packet one-way delay: 72.098 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 81.10 Mbit/s
95th percentile per-packet one-way delay: 72.098 ms
Loss rate: 0.32%
```
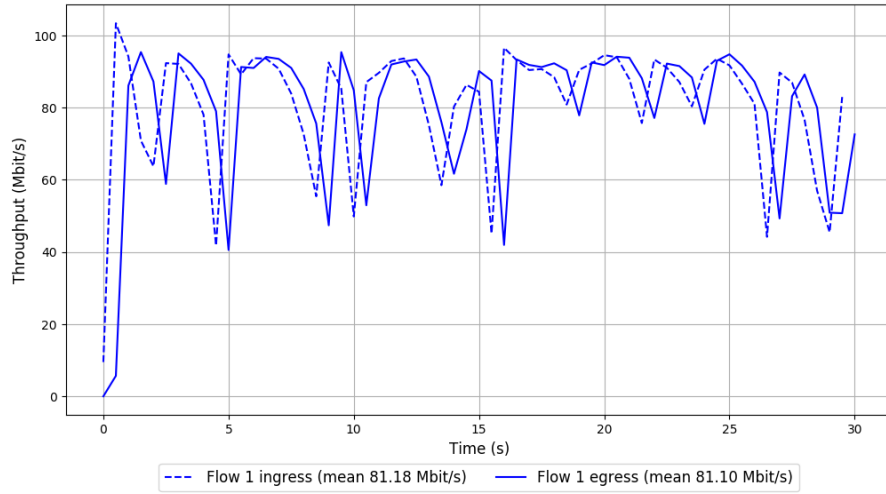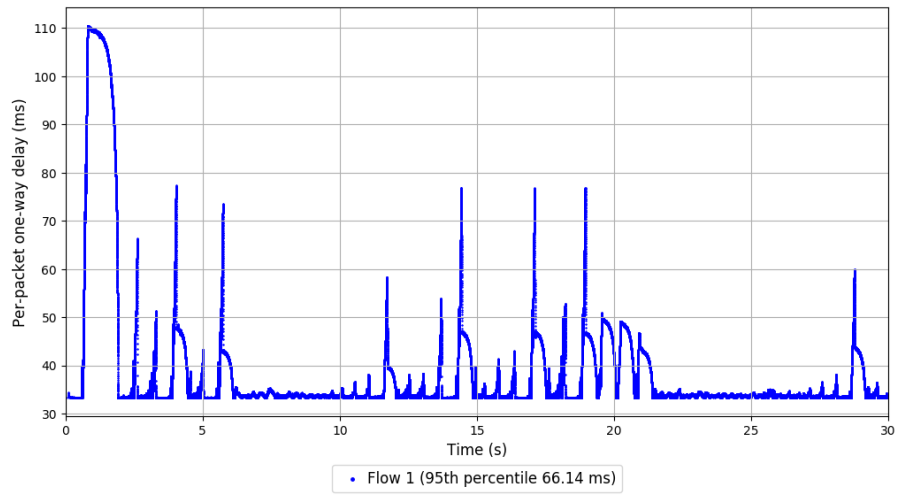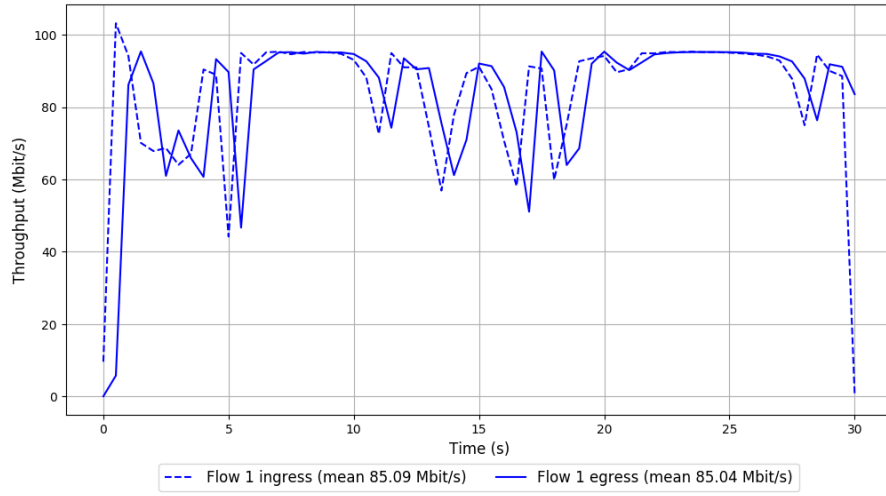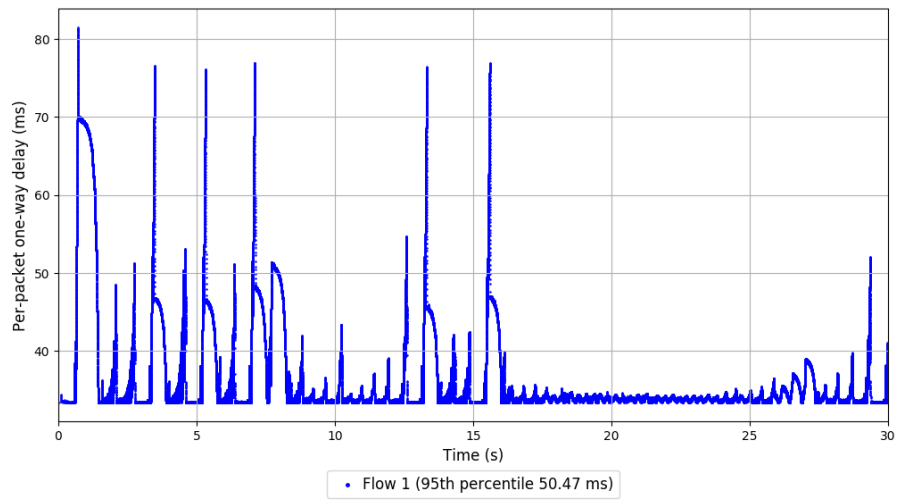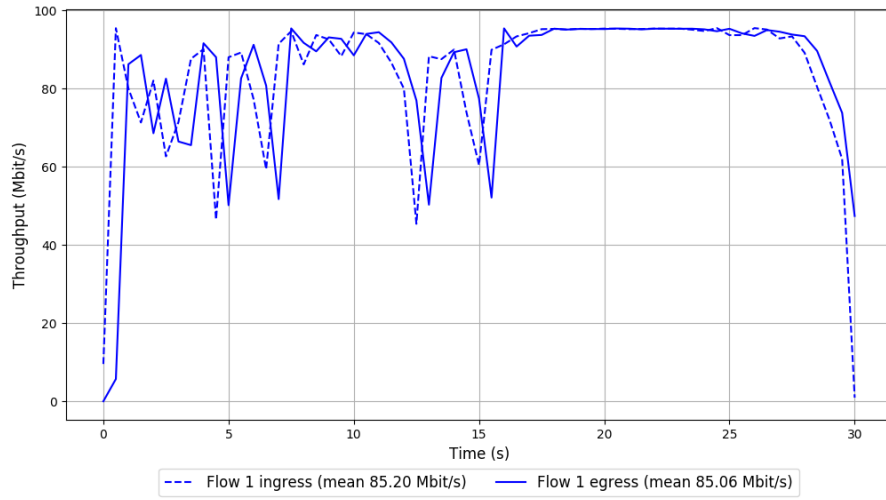
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2019-03-19 09:40:17
End at: 2019-03-19 09:40:47
Local clock offset: 0.123 ms
Remote clock offset: -1.371 ms


# Below is generated by plot.py at 2019-03-19 10:42:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.04 Mbit/s
95th percentile per-packet one-way delay: 66.142 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 85.04 Mbit/s
95th percentile per-packet one-way delay: 66.142 ms
Loss rate: 0.27%
```

Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 85.09 Mbit/s)   Flow 1 egress (mean 85.04 Mbit/s)

Flow 1 (95th percentile 66.14 ms)

```
Run 4: Statistics of Copa

Start at: 2019-03-19 10:04:49
End at: 2019-03-19 10:05:19
Local clock offset: -0.164 ms
Remote clock offset: -0.761 ms


# Below is generated by plot.py at 2019-03-19 10:43:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.06 Mbit/s
95th percentile per-packet one-way delay: 50.466 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 85.06 Mbit/s
95th percentile per-packet one-way delay: 50.466 ms
Loss rate: 0.38%
```
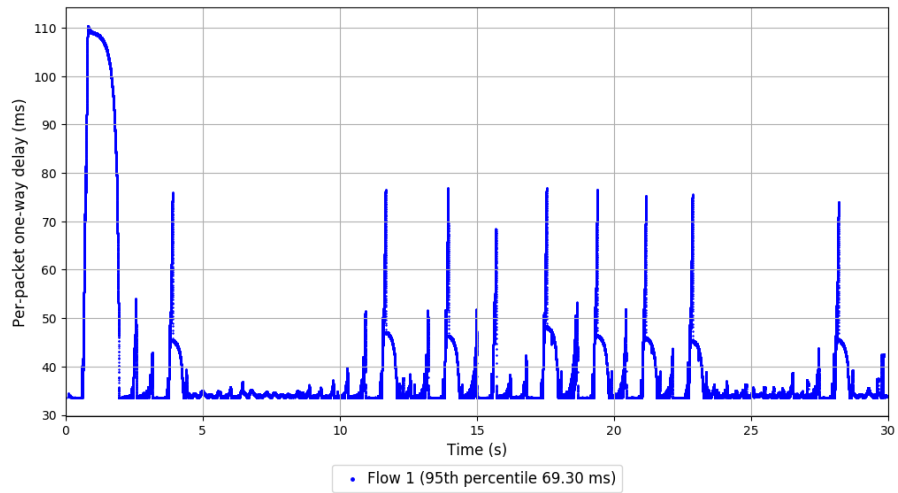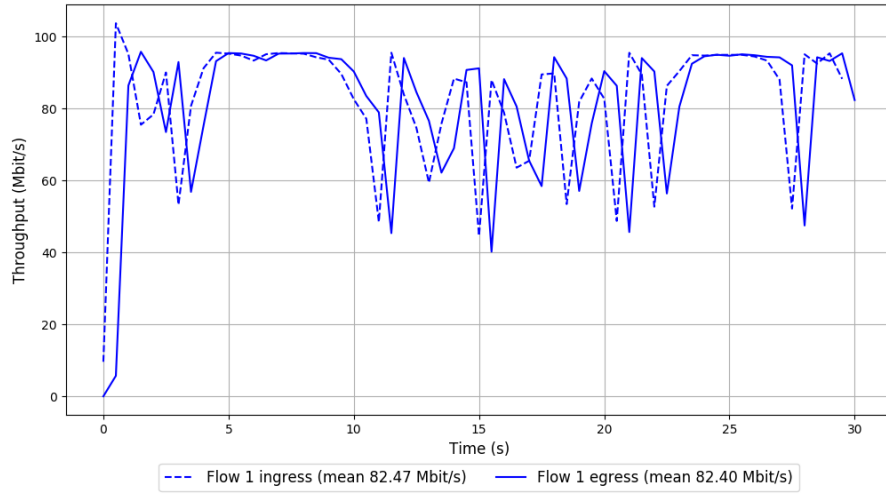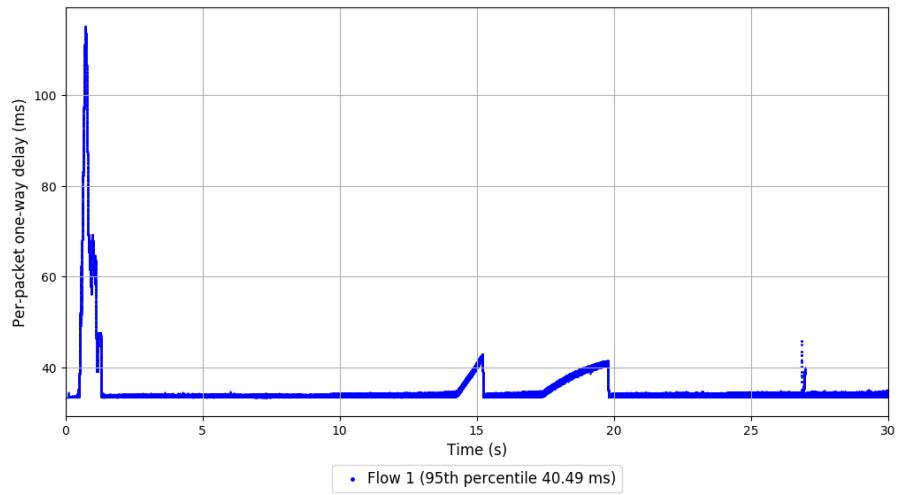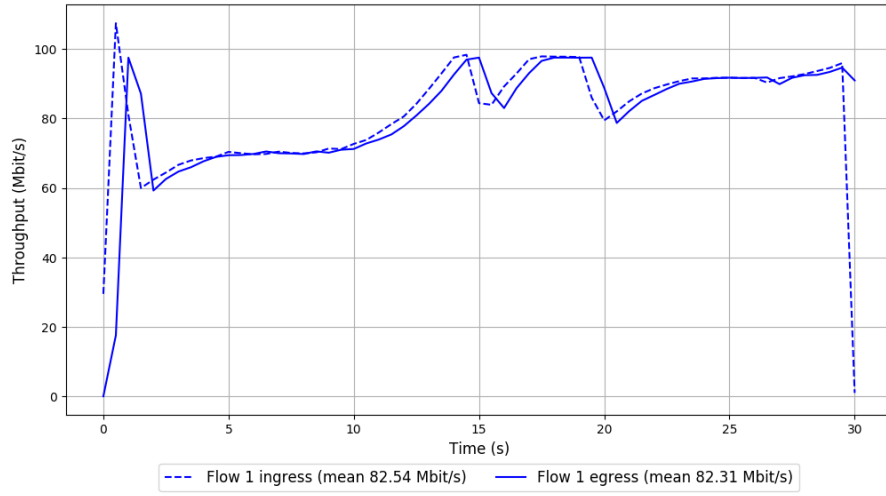
Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 85.20 Mbit/s)   Flow 1 egress (mean 85.06 Mbit/s)

Flow 1 (95th percentile 50.47 ms)

```
Run 5: Statistics of Copa

Start at: 2019-03-19 10:29:20
End at: 2019-03-19 10:29:50
Local clock offset: 0.214 ms
Remote clock offset: -0.75 ms


# Below is generated by plot.py at 2019-03-19 10:43:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.40 Mbit/s
95th percentile per-packet one-way delay: 69.300 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 82.40 Mbit/s
95th percentile per-packet one-way delay: 69.300 ms
Loss rate: 0.30%
```

Run 5: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2019-03-19 08:41:58
End at: 2019-03-19 08:42:28
Local clock offset: 0.063 ms
Remote clock offset: -2.803 ms


# Below is generated by plot.py at 2019-03-19 10:43:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.31 Mbit/s
95th percentile per-packet one-way delay: 40.490 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 82.31 Mbit/s
95th percentile per-packet one-way delay: 40.490 ms
Loss rate: 0.50%
```
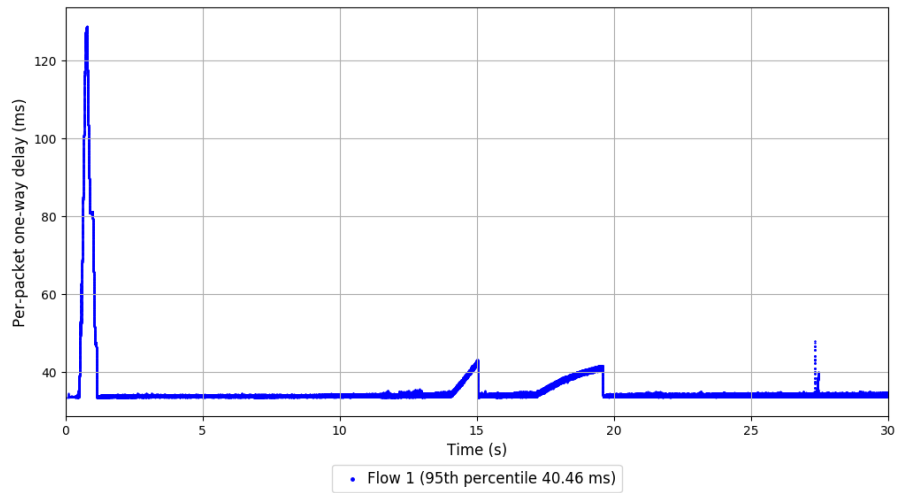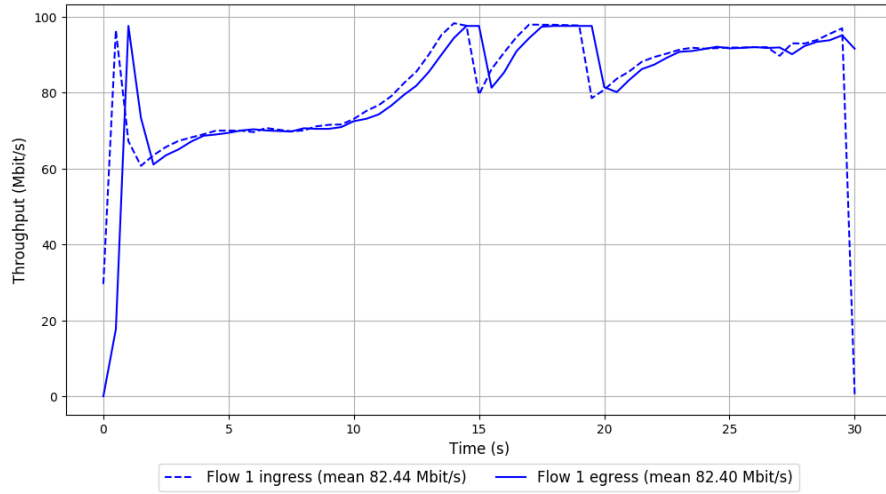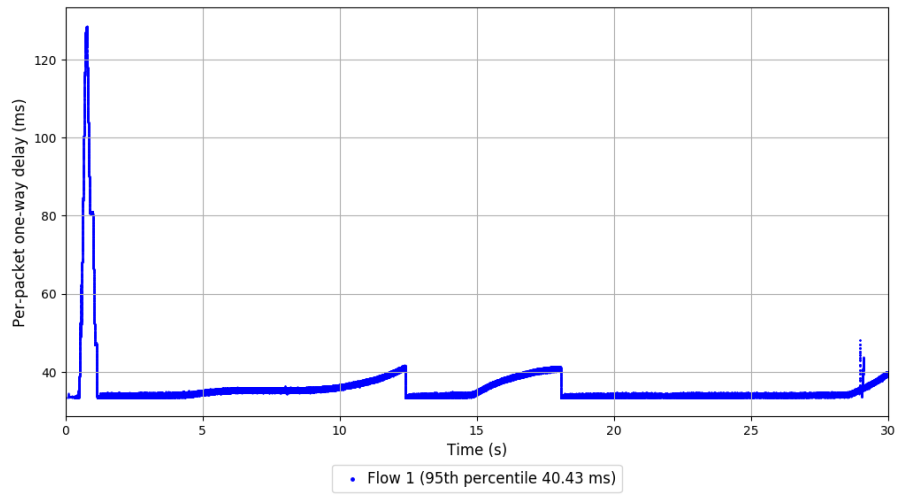
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2019-03-19 09:06:29
End at: 2019-03-19 09:06:59
Local clock offset: 0.817 ms
Remote clock offset: -1.996 ms


# Below is generated by plot.py at 2019-03-19 10:43:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.40 Mbit/s
95th percentile per-packet one-way delay: 40.463 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 82.40 Mbit/s
95th percentile per-packet one-way delay: 40.463 ms
Loss rate: 0.26%
```
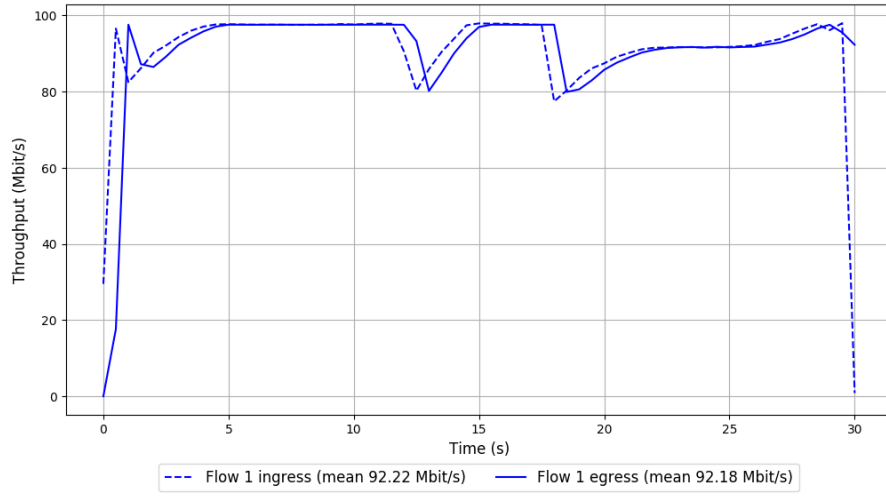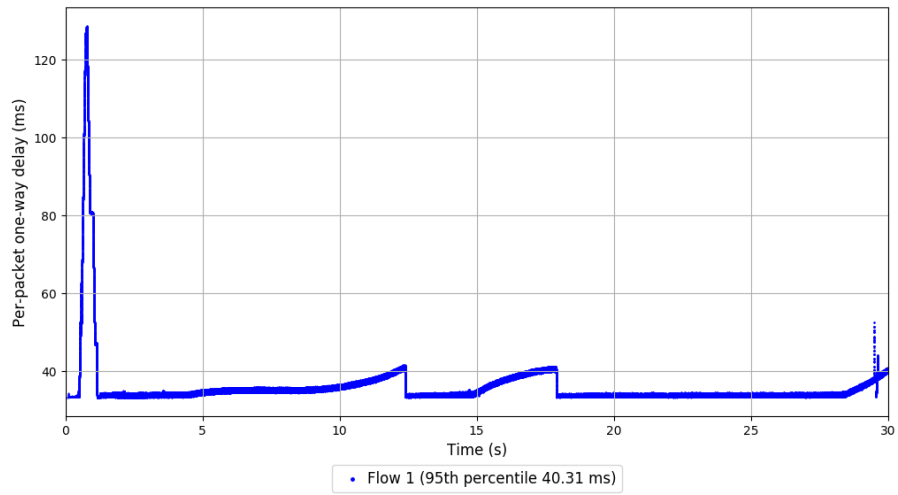
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2019-03-19 09:31:00
End at: 2019-03-19 09:31:30
Local clock offset: 0.259 ms
Remote clock offset: -1.647 ms


# Below is generated by plot.py at 2019-03-19 10:43:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.18 Mbit/s
95th percentile per-packet one-way delay: 40.432 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 92.18 Mbit/s
95th percentile per-packet one-way delay: 40.432 ms
Loss rate: 0.26%
```

Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 92.22 Mbit/s) --- Flow 1 egress (mean 92.18 Mbit/s)

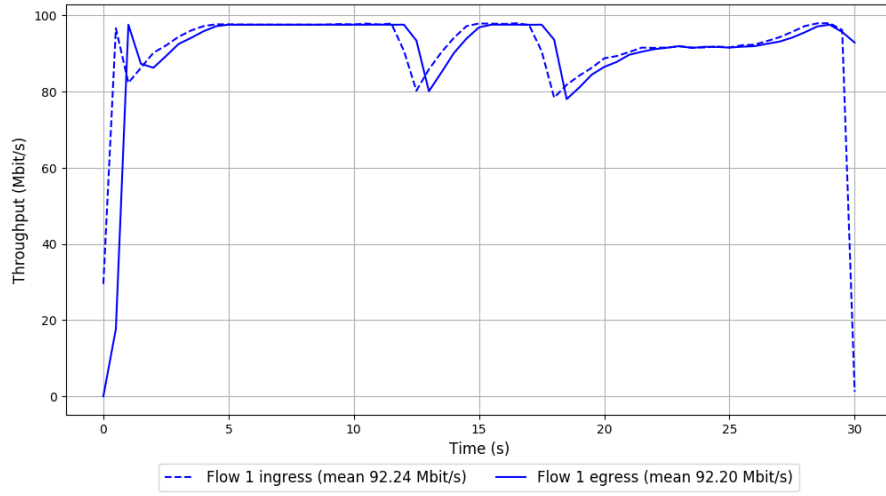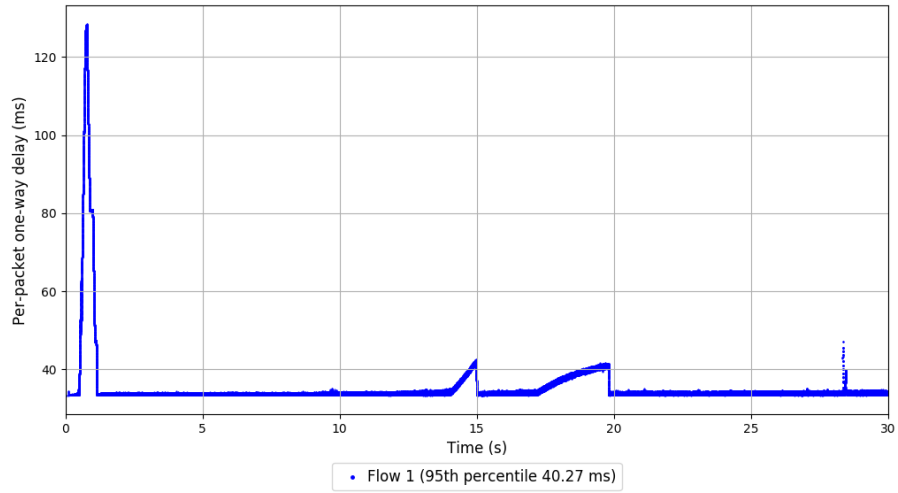

Flow 1 (95th percentile 40.43 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2019-03-19 09:55:31
End at: 2019-03-19 09:56:01
Local clock offset: -0.076 ms
Remote clock offset: -1.004 ms


# Below is generated by plot.py at 2019-03-19 10:43:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.20 Mbit/s
95th percentile per-packet one-way delay: 40.312 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 92.20 Mbit/s
95th percentile per-packet one-way delay: 40.312 ms
Loss rate: 0.26%
```
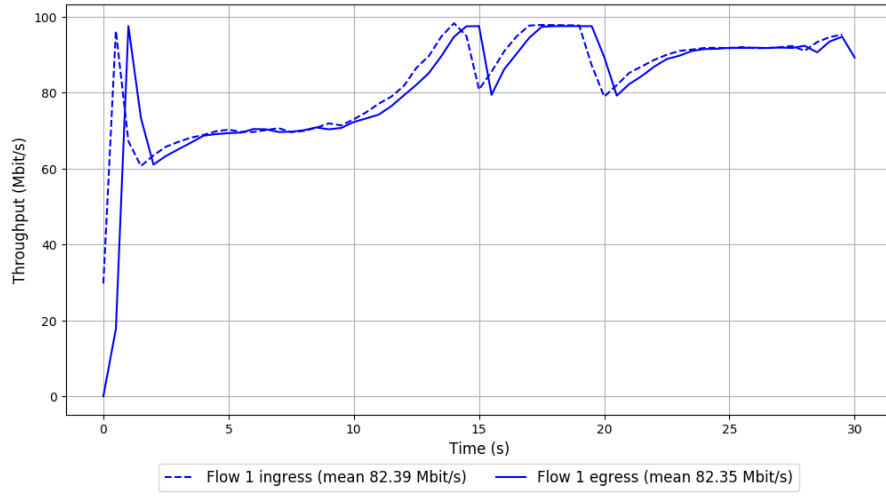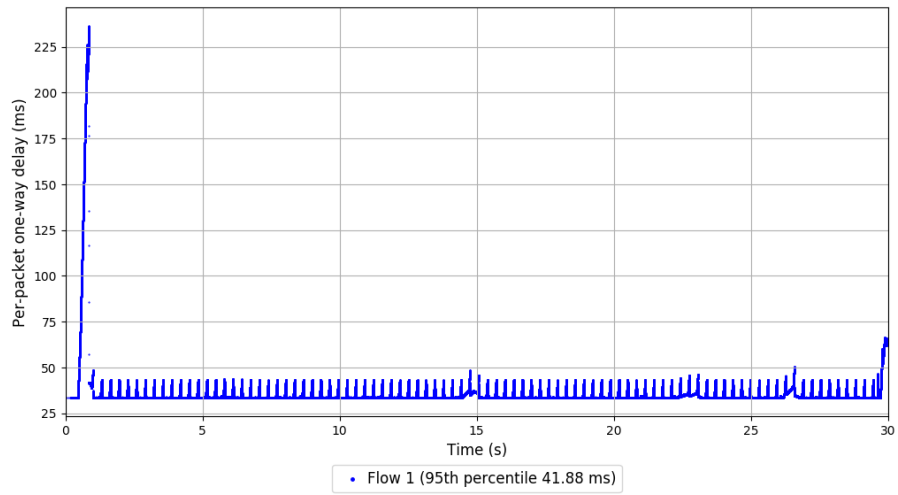
Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2019-03-19 10:20:03
End at: 2019-03-19 10:20:33
Local clock offset: -0.041 ms
Remote clock offset: -0.363 ms


# Below is generated by plot.py at 2019-03-19 10:43:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.35 Mbit/s
95th percentile per-packet one-way delay: 40.268 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 82.35 Mbit/s
95th percentile per-packet one-way delay: 40.268 ms
Loss rate: 0.26%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 82.39 Mbit/s) --- Flow 1 egress (mean 82.35 Mbit/s)
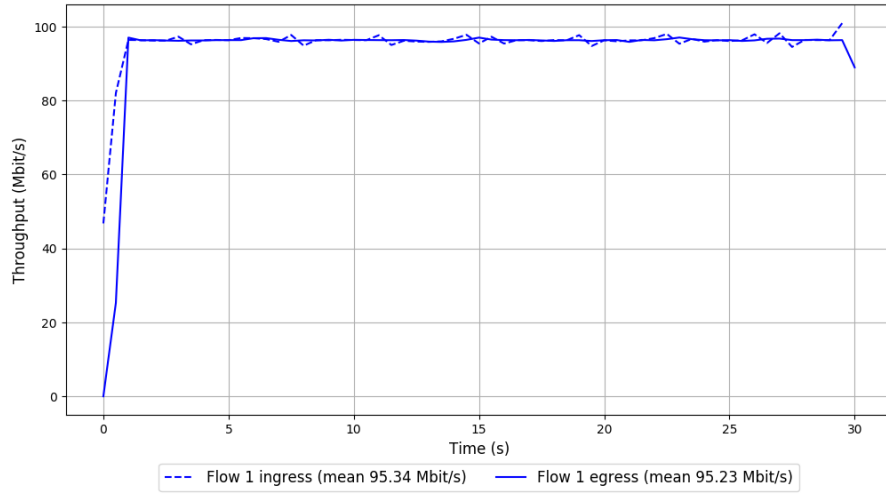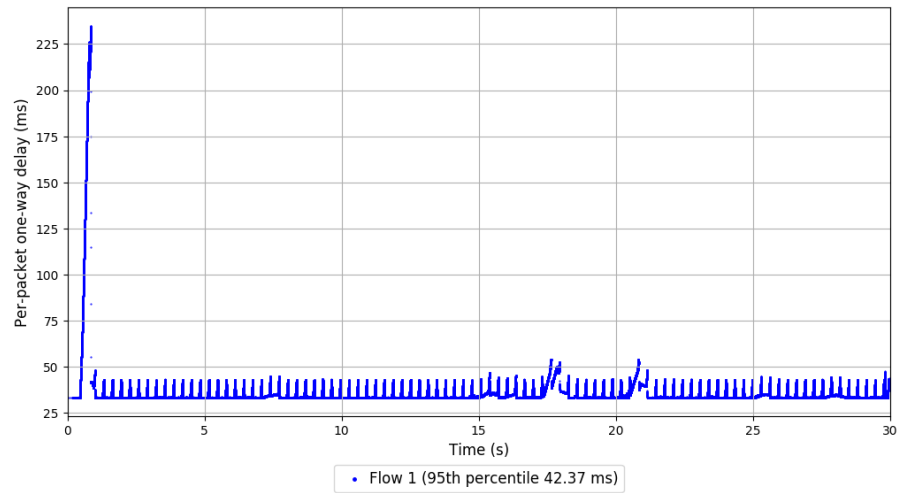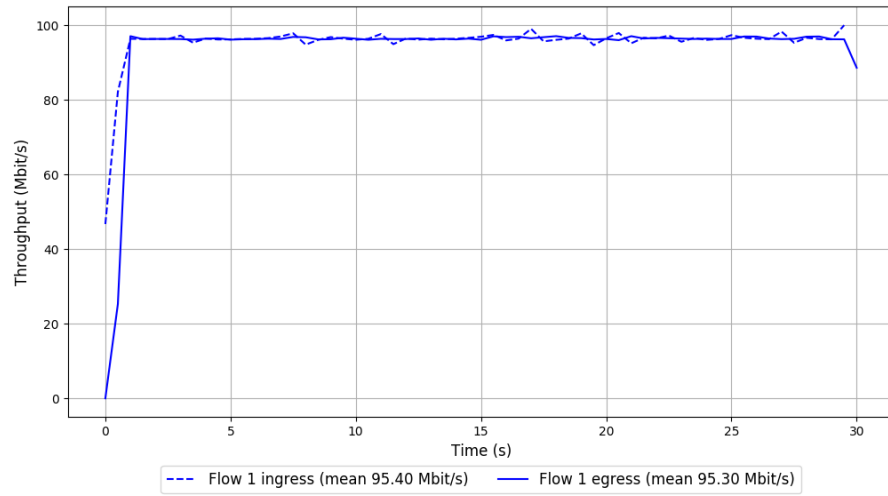

Flow 1 (95th percentile 40.27 ms)

```
Run 1: Statistics of FillP

Start at: 2019-03-19 08:44:18
End at: 2019-03-19 08:44:48
Local clock offset: 0.067 ms
Remote clock offset: -2.906 ms


# Below is generated by plot.py at 2019-03-19 10:43:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.23 Mbit/s
95th percentile per-packet one-way delay: 41.881 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 95.23 Mbit/s
95th percentile per-packet one-way delay: 41.881 ms
Loss rate: 0.32%
```
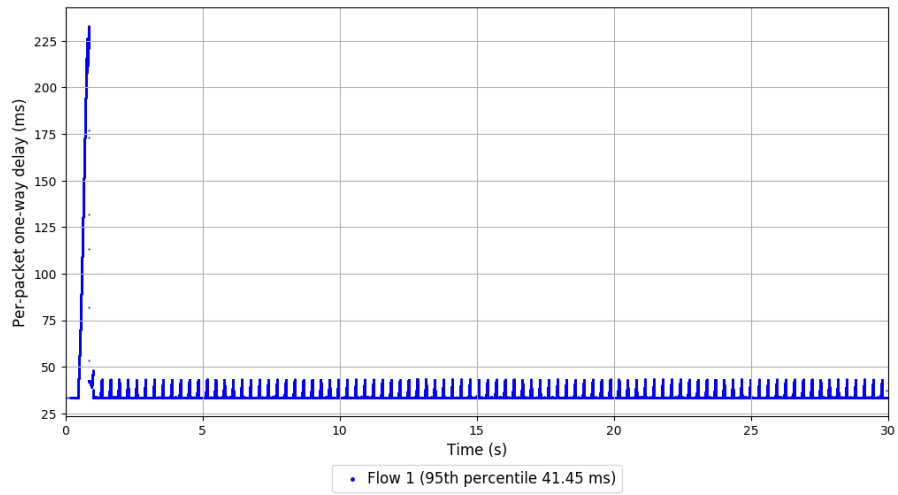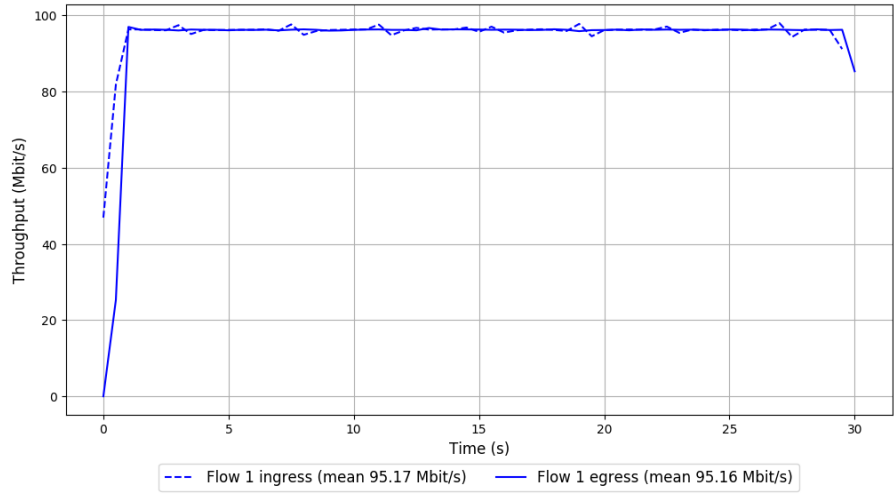
Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 95.34 Mbit/s)   Flow 1 egress (mean 95.23 Mbit/s)

Flow 1 (95th percentile 41.88 ms)

```
Run 2: Statistics of FillP

Start at: 2019-03-19 09:08:50
End at: 2019-03-19 09:09:20
Local clock offset: 0.853 ms
Remote clock offset: -1.703 ms


# Below is generated by plot.py at 2019-03-19 10:43:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.30 Mbit/s
95th percentile per-packet one-way delay: 42.372 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 95.30 Mbit/s
95th percentile per-packet one-way delay: 42.372 ms
Loss rate: 0.32%
```

Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 95.40 Mbit/s) — — — — Flow 1 egress (mean 95.30 Mbit/s)

Flow 1 (95th percentile 42.37 ms)

```
Run 3: Statistics of FillP

Start at: 2019-03-19 09:33:21
End at: 2019-03-19 09:33:51
Local clock offset: 0.208 ms
Remote clock offset: -1.787 ms


# Below is generated by plot.py at 2019-03-19 10:43:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.16 Mbit/s
95th percentile per-packet one-way delay: 41.452 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 95.16 Mbit/s
95th percentile per-packet one-way delay: 41.452 ms
Loss rate: 0.22%
```
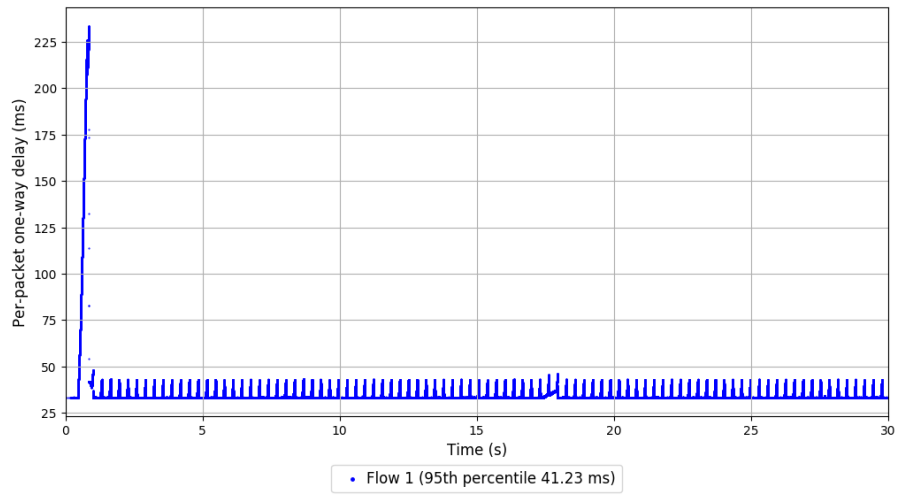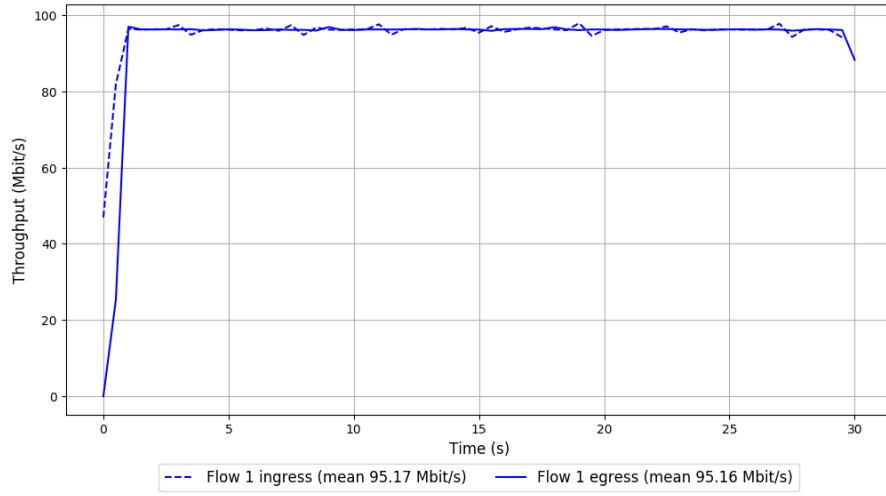
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2019-03-19 09:57:52
End at: 2019-03-19 09:58:22
Local clock offset: -0.092 ms
Remote clock offset: -0.93 ms


# Below is generated by plot.py at 2019-03-19 10:43:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.16 Mbit/s
95th percentile per-packet one-way delay: 41.232 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 95.16 Mbit/s
95th percentile per-packet one-way delay: 41.232 ms
Loss rate: 0.22%
```
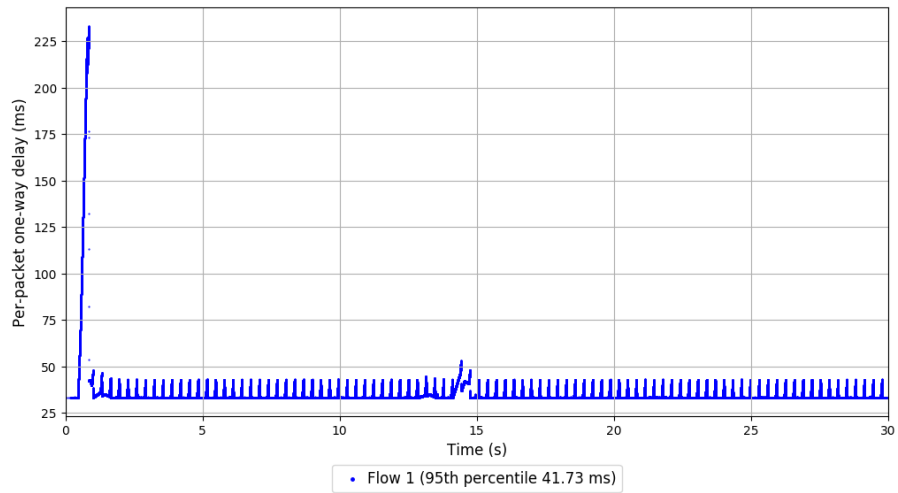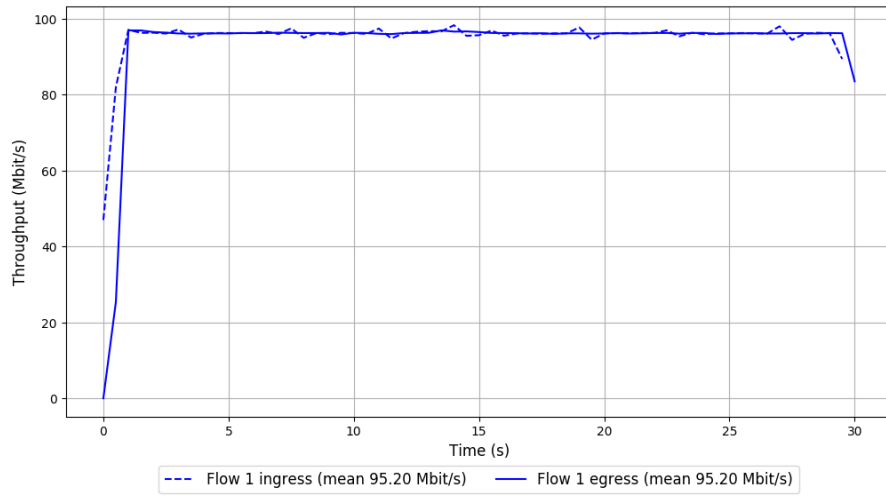
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 95.17 Mbit/s)   Flow 1 egress (mean 95.16 Mbit/s)

Flow 1 (95th percentile 41.23 ms)

```
Run 5: Statistics of FillP

Start at: 2019-03-19 10:22:24
End at: 2019-03-19 10:22:54
Local clock offset: 0.047 ms
Remote clock offset: -0.443 ms


# Below is generated by plot.py at 2019-03-19 10:44:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.20 Mbit/s
95th percentile per-packet one-way delay: 41.730 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 95.20 Mbit/s
95th percentile per-packet one-way delay: 41.730 ms
Loss rate: 0.22%
```

Run 5: Report of FillP — Data Link

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-03-19 08:52:28
End at: 2019-03-19 08:52:58
Local clock offset: 0.434 ms
Remote clock offset: -2.471 ms


# Below is generated by plot.py at 2019-03-19 10:44:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.89 Mbit/s
95th percentile per-packet one-way delay: 39.881 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 92.89 Mbit/s
95th percentile per-packet one-way delay: 39.881 ms
Loss rate: 0.22%
```
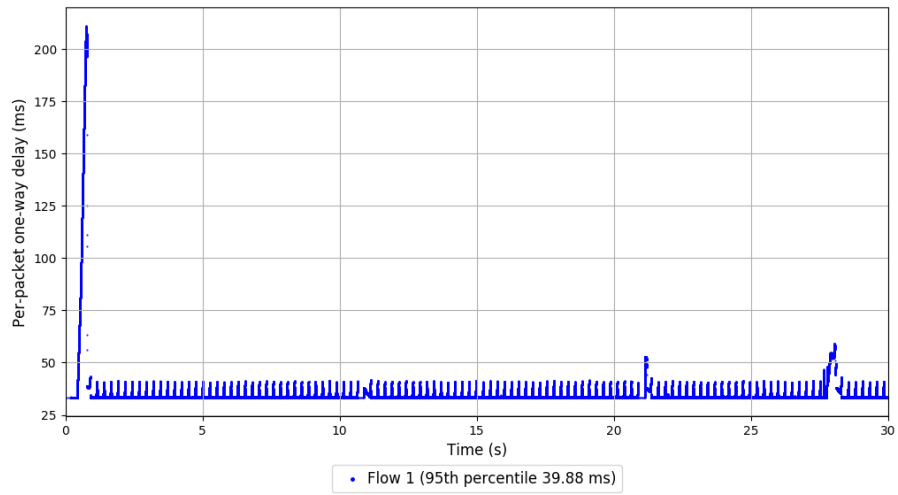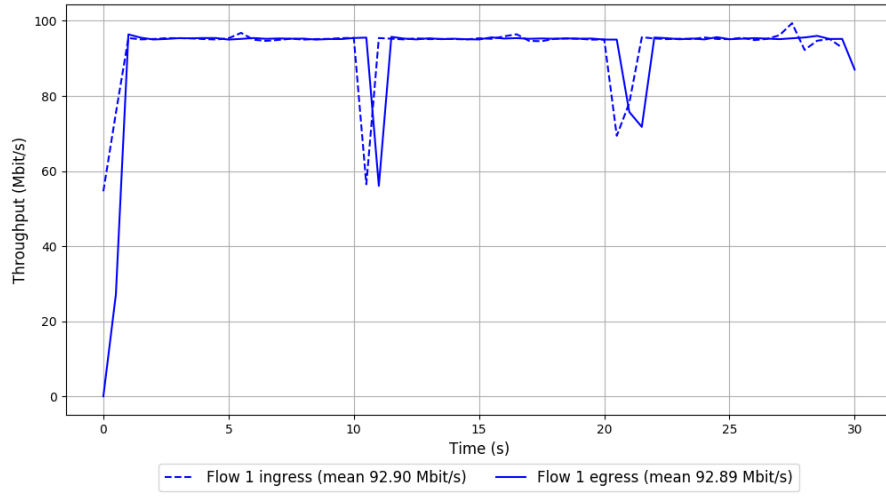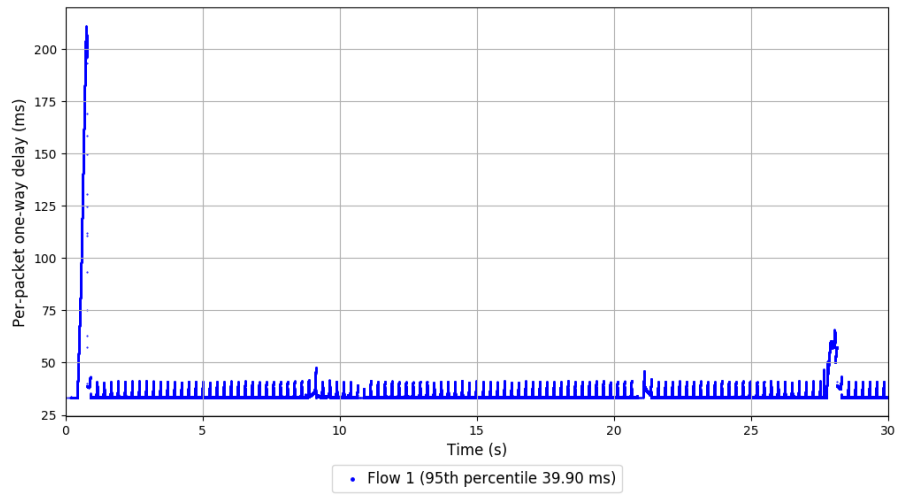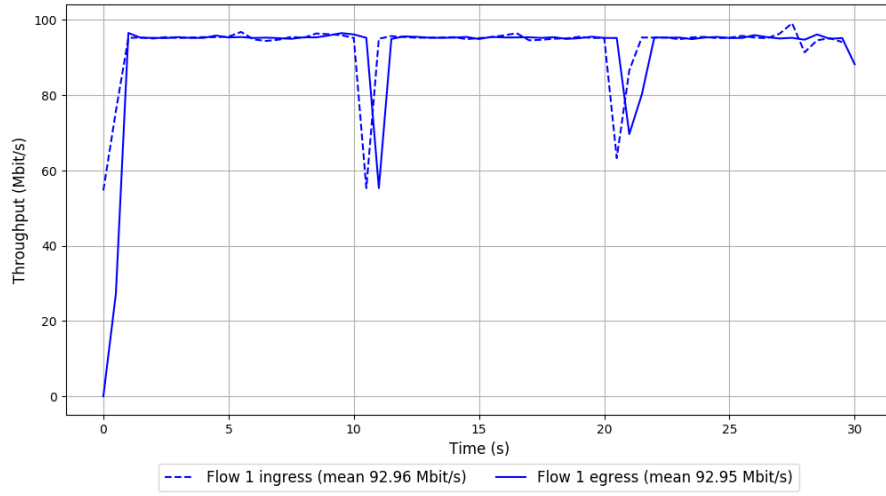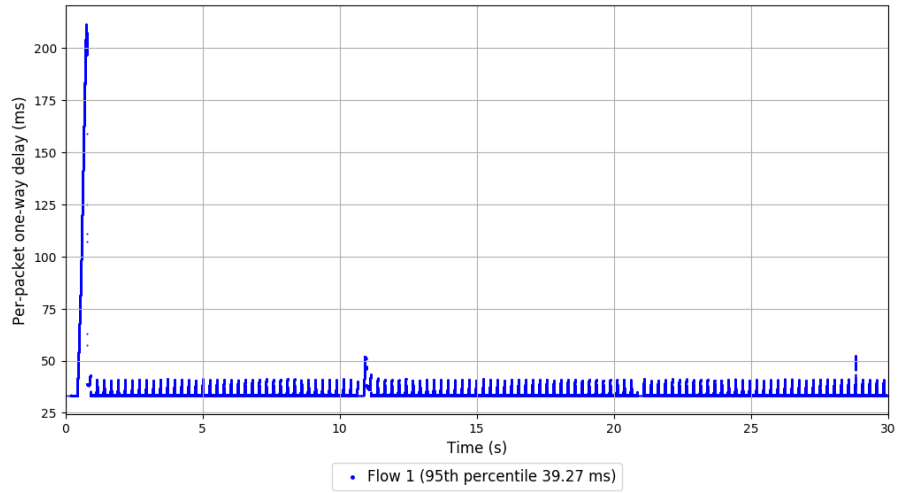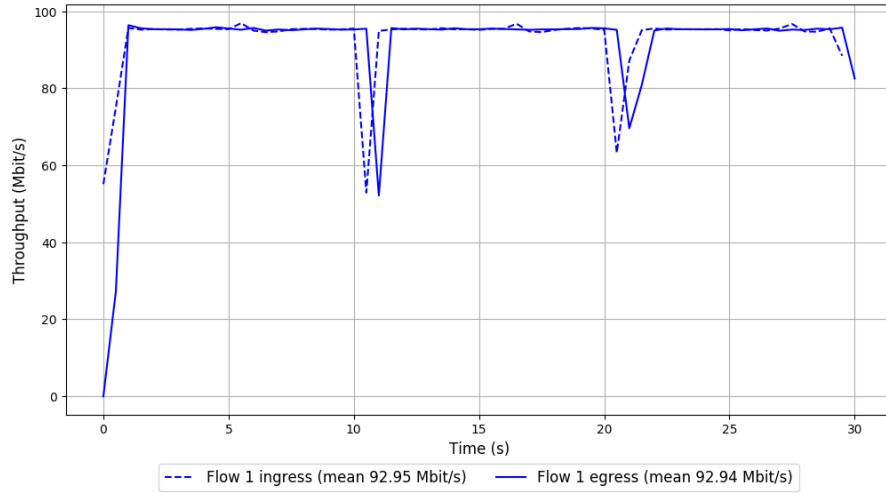
Run 1: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 92.90 Mbit/s)   Flow 1 egress (mean 92.89 Mbit/s)

Flow 1 (95th percentile 39.88 ms)

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-03-19 09:16:59
End at: 2019-03-19 09:17:29
Local clock offset: 0.848 ms
Remote clock offset: -1.475 ms


# Below is generated by plot.py at 2019-03-19 10:44:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.95 Mbit/s
95th percentile per-packet one-way delay: 39.896 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 92.95 Mbit/s
95th percentile per-packet one-way delay: 39.896 ms
Loss rate: 0.23%
```

Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-03-19 09:41:30
End at: 2019-03-19 09:42:00
Local clock offset: 0.127 ms
Remote clock offset: -1.349 ms


# Below is generated by plot.py at 2019-03-19 10:44:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.94 Mbit/s
95th percentile per-packet one-way delay: 39.275 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 92.94 Mbit/s
95th percentile per-packet one-way delay: 39.275 ms
Loss rate: 0.22%
```
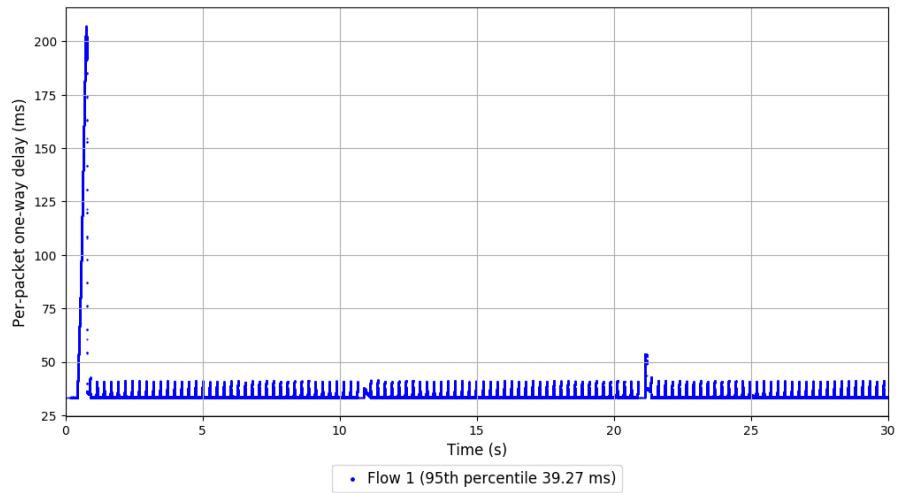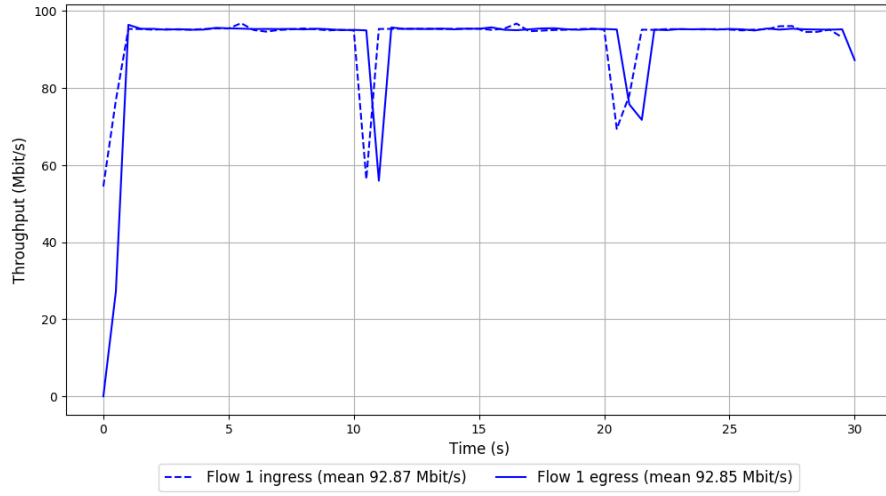
Run 3: Report of FillP-Sheep — Data Link

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-03-19 10:06:02
End at: 2019-03-19 10:06:32
Local clock offset: -0.183 ms
Remote clock offset: -0.724 ms


# Below is generated by plot.py at 2019-03-19 10:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.85 Mbit/s
95th percentile per-packet one-way delay: 39.271 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 92.85 Mbit/s
95th percentile per-packet one-way delay: 39.271 ms
Loss rate: 0.24%
```
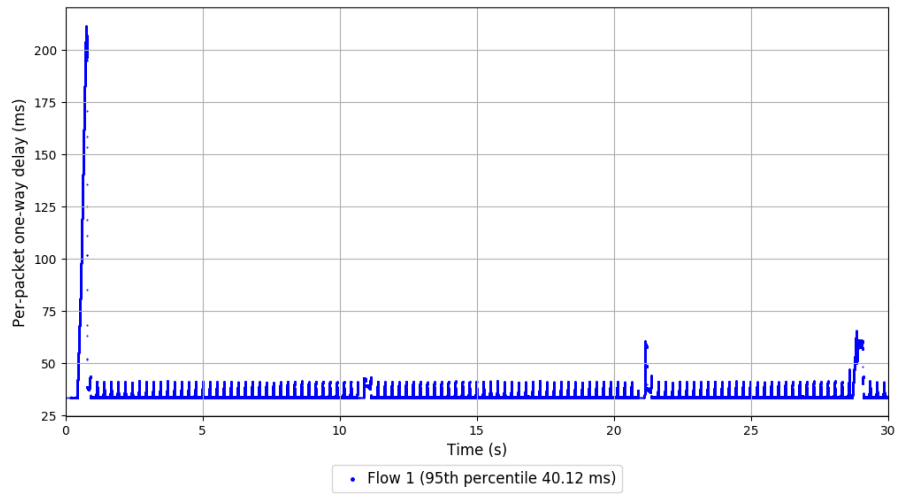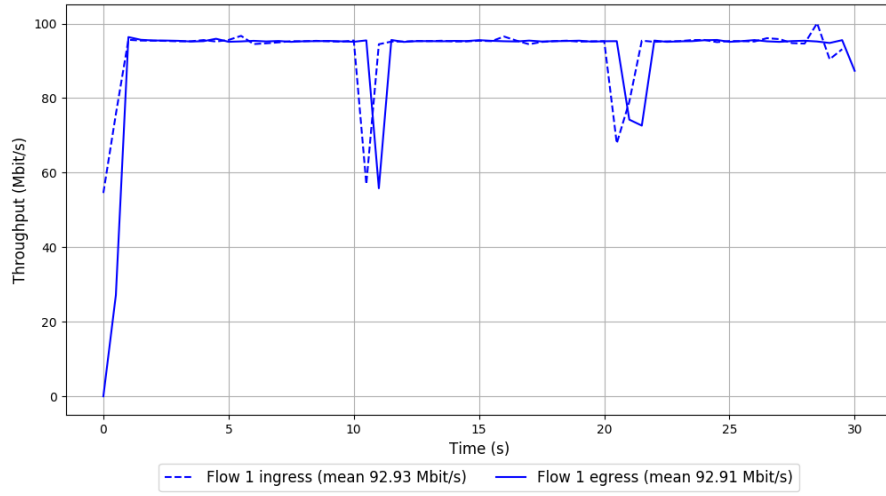
Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 92.87 Mbit/s) ----   Flow 1 egress (mean 92.85 Mbit/s) ——

• Flow 1 (95th percentile 39.27 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-03-19 10:30:33
End at: 2019-03-19 10:31:03
Local clock offset: 0.238 ms
Remote clock offset: -0.589 ms


# Below is generated by plot.py at 2019-03-19 10:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.91 Mbit/s
95th percentile per-packet one-way delay: 40.117 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 92.91 Mbit/s
95th percentile per-packet one-way delay: 40.117 ms
Loss rate: 0.23%
```
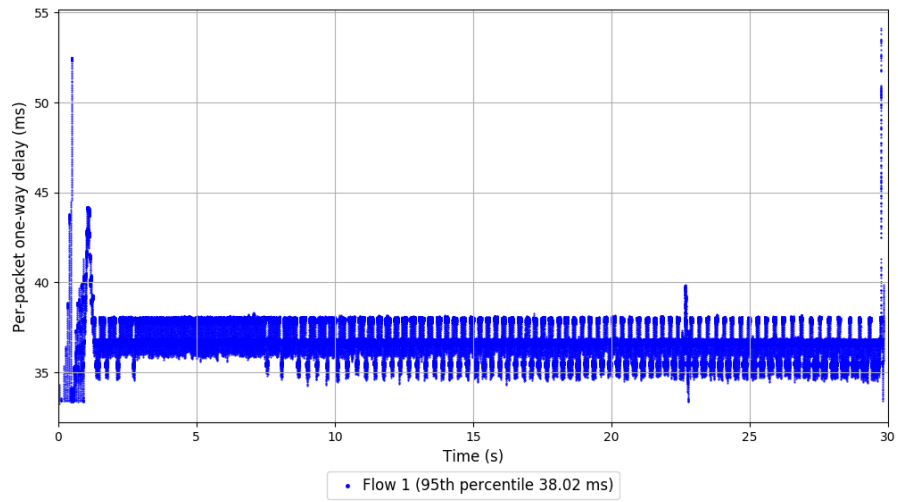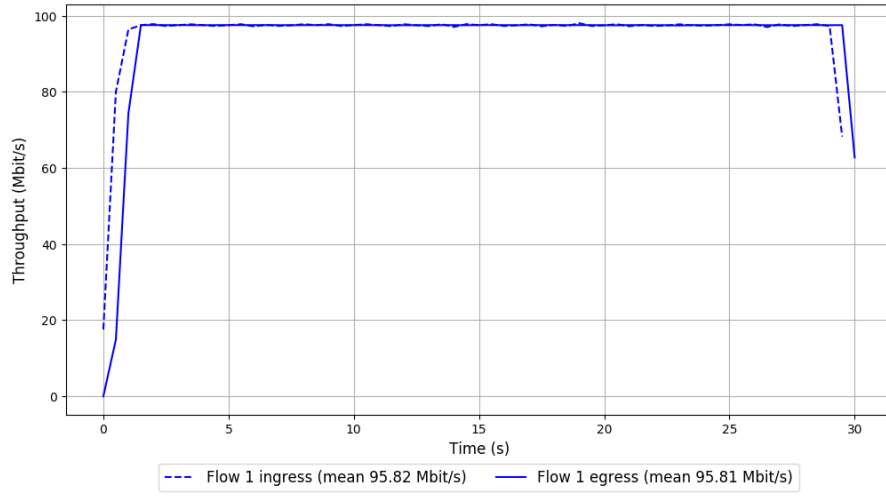
Run 5: Report of FillP-Sheep — Data Link

```
Run 1: Statistics of Indigo

Start at: 2019-03-19 08:53:37
End at: 2019-03-19 08:54:07
Local clock offset: 0.491 ms
Remote clock offset: -2.4 ms


# Below is generated by plot.py at 2019-03-19 10:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 38.018 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 38.018 ms
Loss rate: 0.22%
```
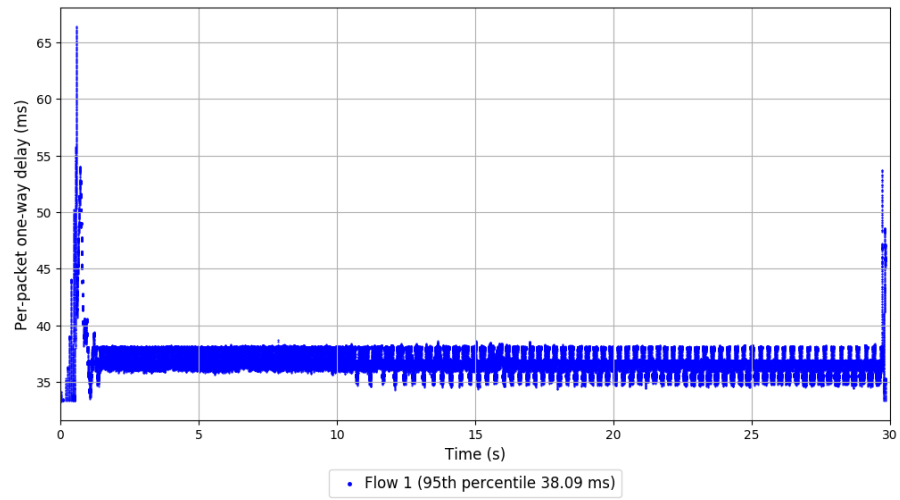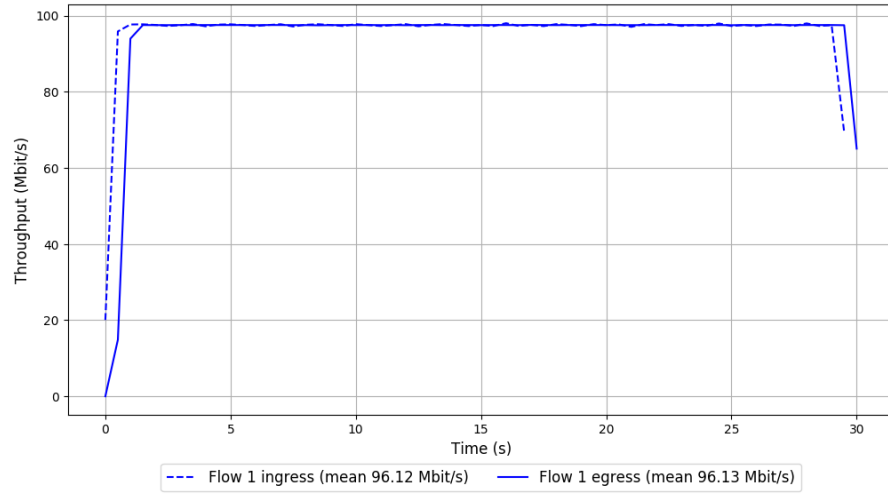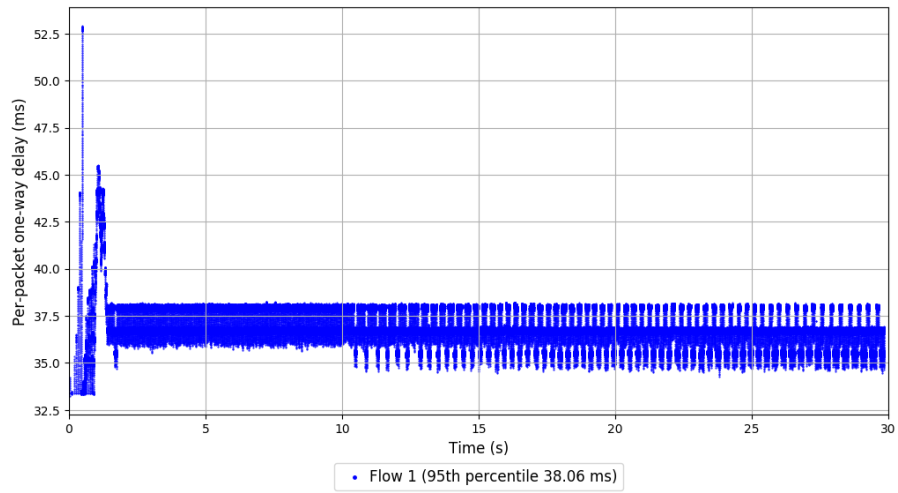
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-03-19 09:18:08
End at: 2019-03-19 09:18:38
Local clock offset: 0.742 ms
Remote clock offset: -1.463 ms


# Below is generated by plot.py at 2019-03-19 10:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.13 Mbit/s
95th percentile per-packet one-way delay: 38.087 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 96.13 Mbit/s
95th percentile per-packet one-way delay: 38.087 ms
Loss rate: 0.20%
```

Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 96.12 Mbit/s)   ——— Flow 1 egress (mean 96.13 Mbit/s)

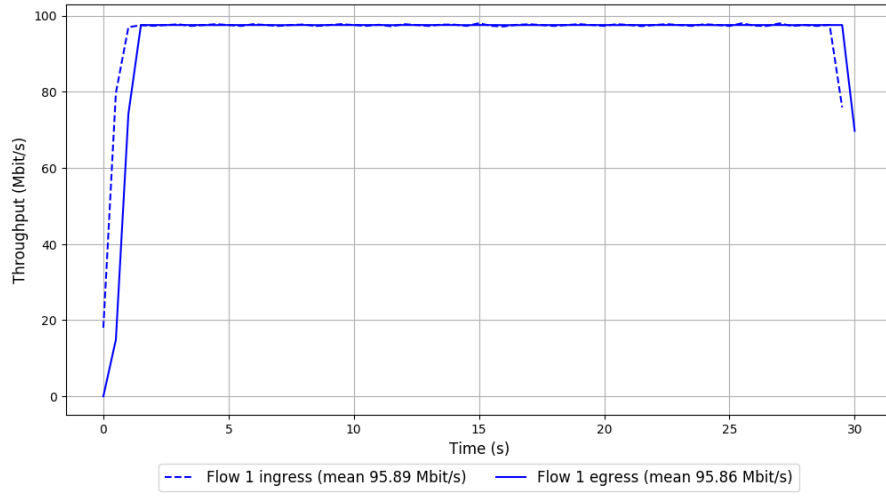• Flow 1 (95th percentile 38.09 ms)

```
Run 3: Statistics of Indigo

Start at: 2019-03-19 09:42:40
End at: 2019-03-19 09:43:10
Local clock offset: 0.113 ms
Remote clock offset: -1.322 ms


# Below is generated by plot.py at 2019-03-19 10:45:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.86 Mbit/s
95th percentile per-packet one-way delay: 38.064 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.86 Mbit/s
95th percentile per-packet one-way delay: 38.064 ms
Loss rate: 0.24%
```
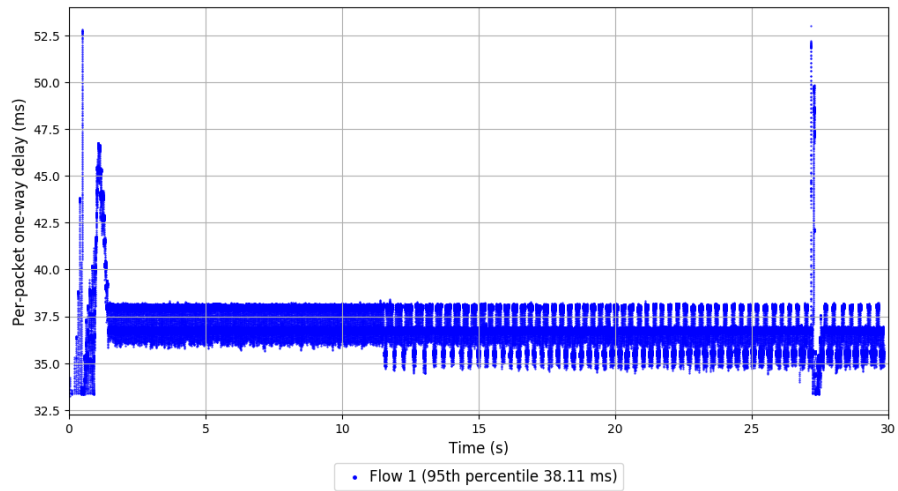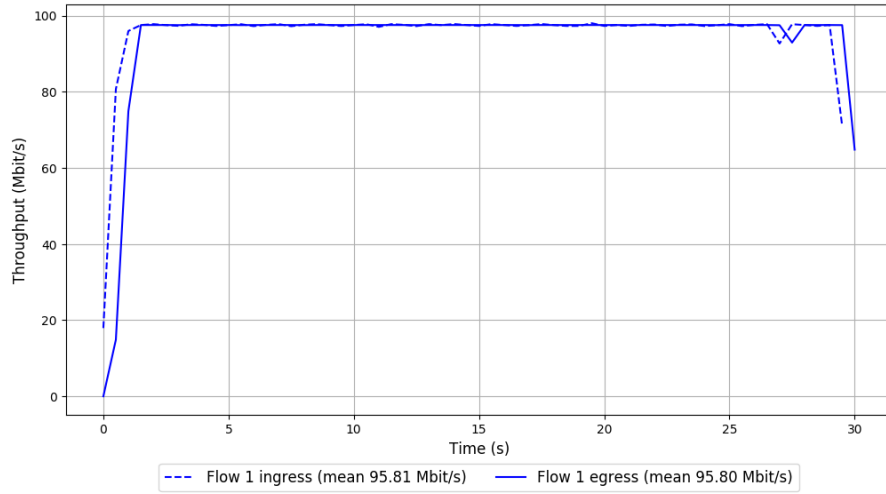
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2019-03-19 10:07:11
End at: 2019-03-19 10:07:41
Local clock offset: -0.18 ms
Remote clock offset: -0.728 ms


# Below is generated by plot.py at 2019-03-19 10:45:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.80 Mbit/s
95th percentile per-packet one-way delay: 38.108 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.80 Mbit/s
95th percentile per-packet one-way delay: 38.108 ms
Loss rate: 0.23%
```
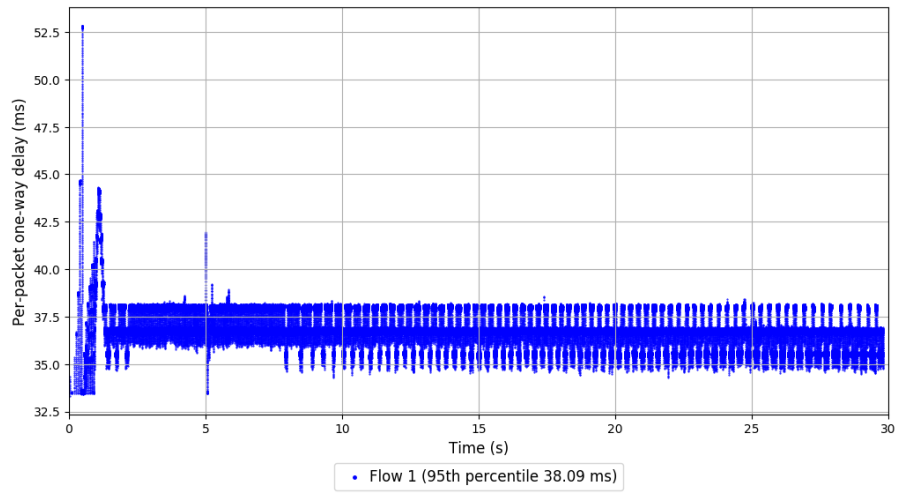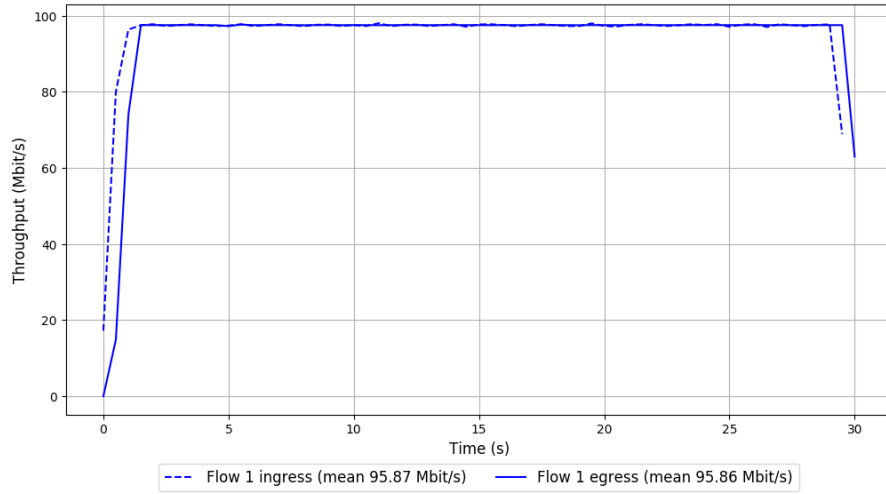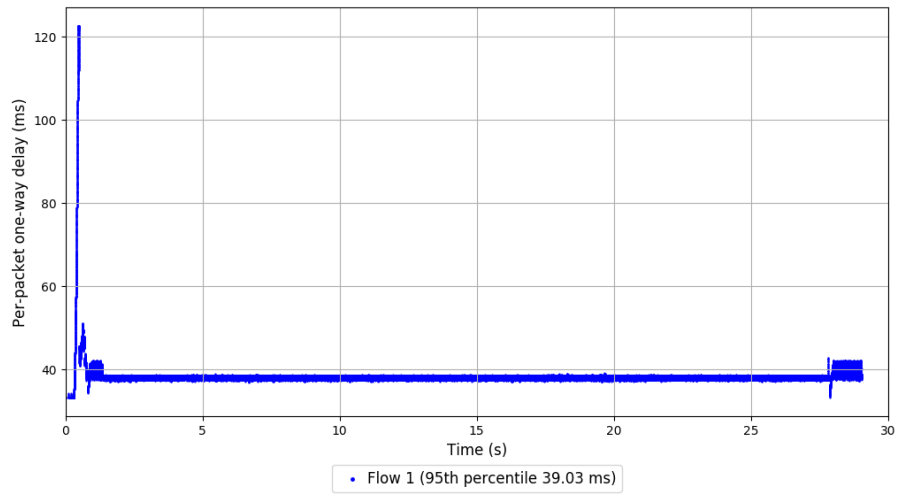
Run 4: Report of Indigo — Data Link

Flow 1 ingress (mean 95.81 Mbit/s)   Flow 1 egress (mean 95.80 Mbit/s)

Flow 1 (95th percentile 38.11 ms)

```
Run 5: Statistics of Indigo

Start at: 2019-03-19 10:31:42
End at: 2019-03-19 10:32:12
Local clock offset: 0.255 ms
Remote clock offset: -0.536 ms


# Below is generated by plot.py at 2019-03-19 10:45:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.86 Mbit/s
95th percentile per-packet one-way delay: 38.092 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.86 Mbit/s
95th percentile per-packet one-way delay: 38.092 ms
Loss rate: 0.23%
```

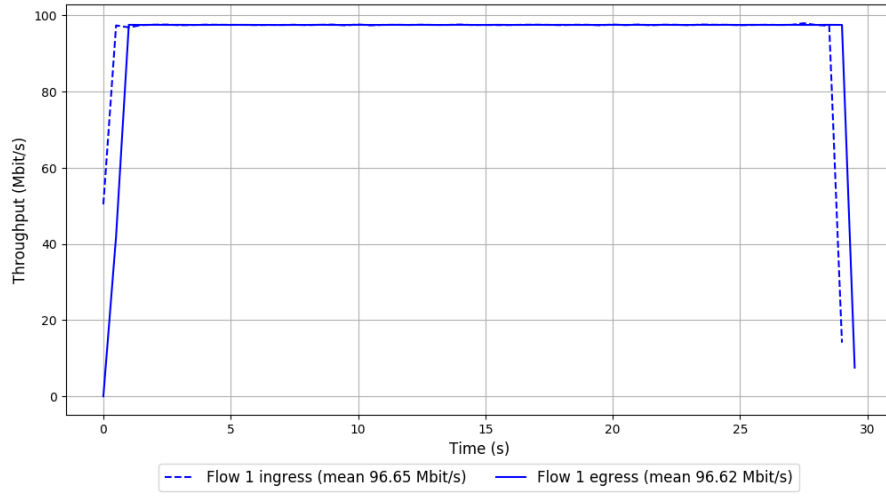Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-03-19 08:36:08
End at: 2019-03-19 08:36:38
Local clock offset: 0.084 ms
Remote clock offset: -2.864 ms


# Below is generated by plot.py at 2019-03-19 10:45:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.62 Mbit/s
95th percentile per-packet one-way delay: 39.034 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 96.62 Mbit/s
95th percentile per-packet one-way delay: 39.034 ms
Loss rate: 0.25%
```
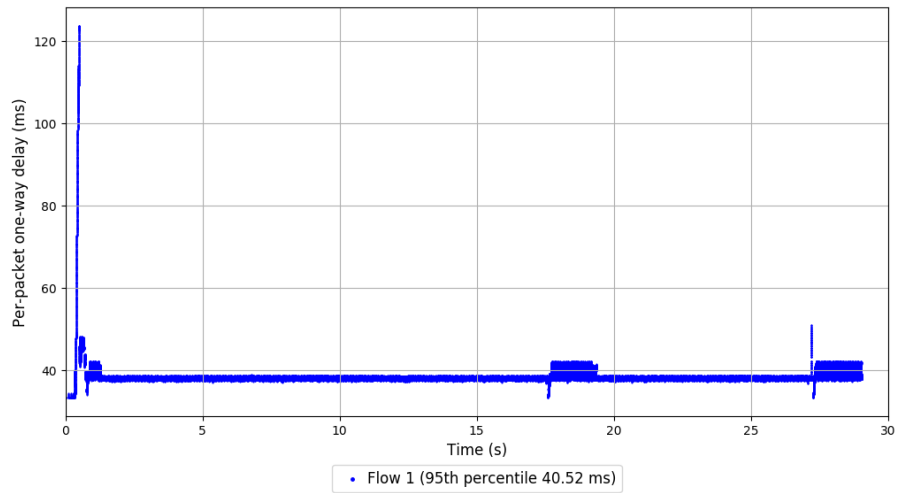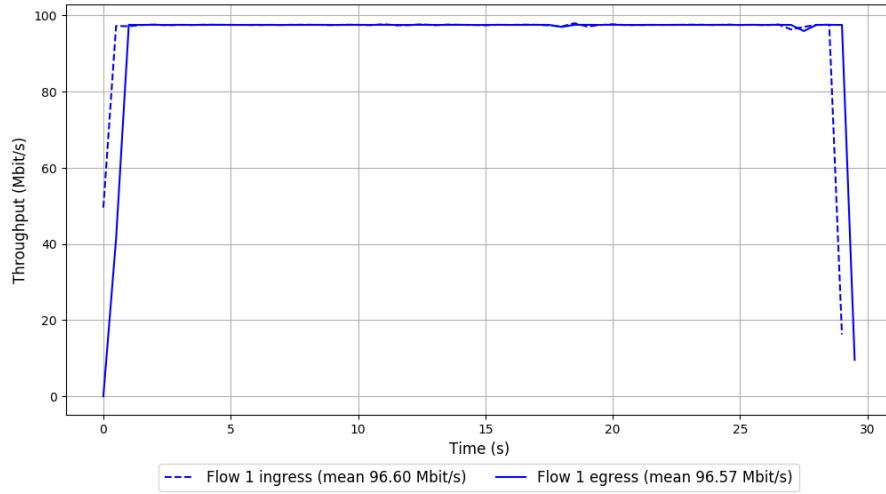
Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-03-19 09:00:39
End at: 2019-03-19 09:01:09
Local clock offset: 0.691 ms
Remote clock offset: -2.175 ms


# Below is generated by plot.py at 2019-03-19 10:46:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.57 Mbit/s
95th percentile per-packet one-way delay: 40.524 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 96.57 Mbit/s
95th percentile per-packet one-way delay: 40.524 ms
Loss rate: 0.25%
```
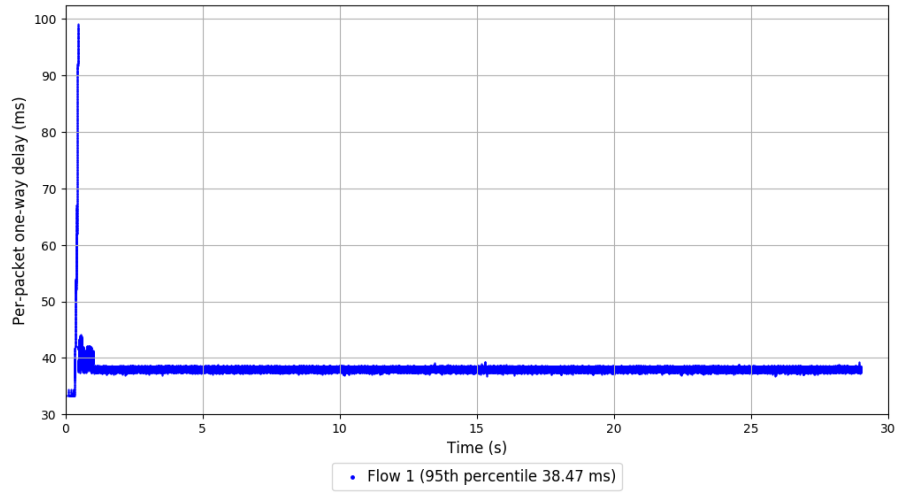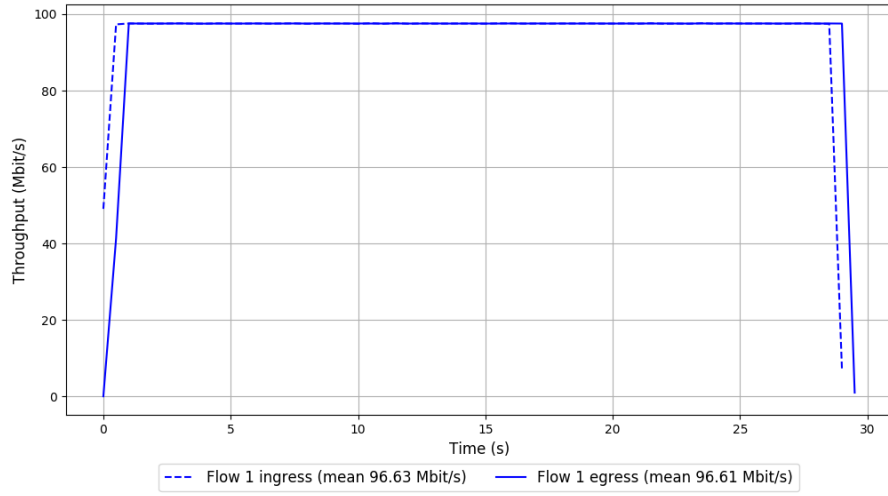
Run 2: Report of Indigo-MusesC3 — Data Link

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-03-19 09:25:10
End at: 2019-03-19 09:25:40
Local clock offset: 0.402 ms
Remote clock offset: -1.592 ms


# Below is generated by plot.py at 2019-03-19 10:46:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.61 Mbit/s
95th percentile per-packet one-way delay: 38.472 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.61 Mbit/s
95th percentile per-packet one-way delay: 38.472 ms
Loss rate: 0.24%
```
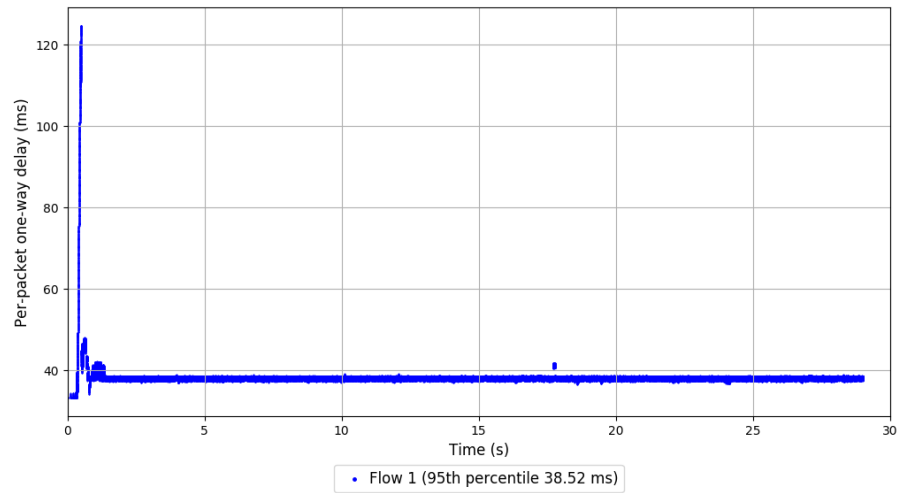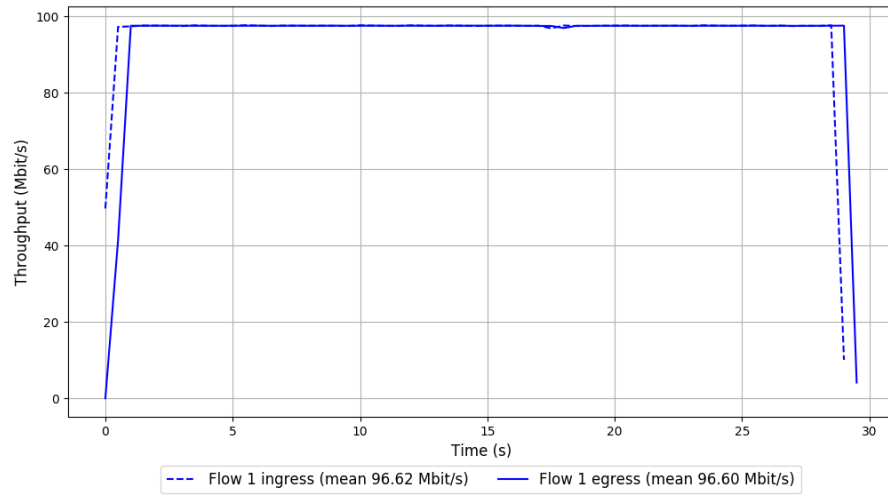
Run 3: Report of Indigo-MusesC3 — Data Link

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-03-19 09:49:41
End at: 2019-03-19 09:50:11
Local clock offset: 0.011 ms
Remote clock offset: -1.096 ms


# Below is generated by plot.py at 2019-03-19 10:46:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.60 Mbit/s
95th percentile per-packet one-way delay: 38.525 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 96.60 Mbit/s
95th percentile per-packet one-way delay: 38.525 ms
Loss rate: 0.25%
```
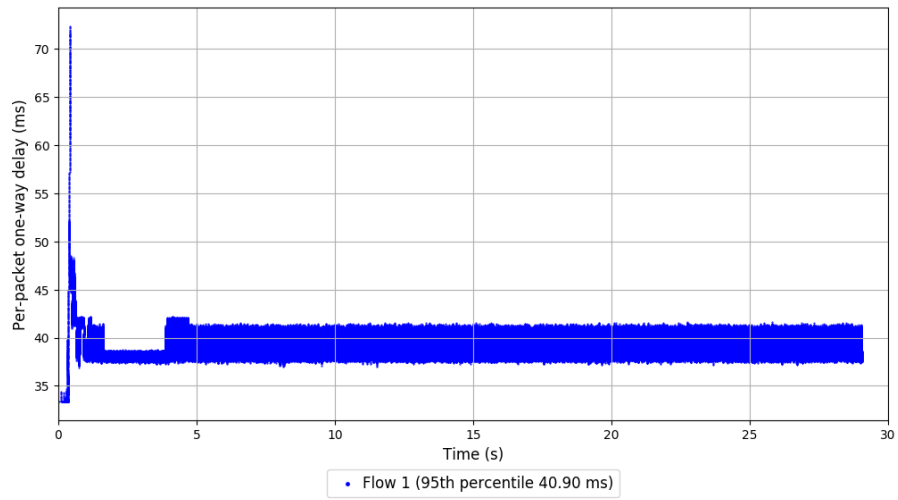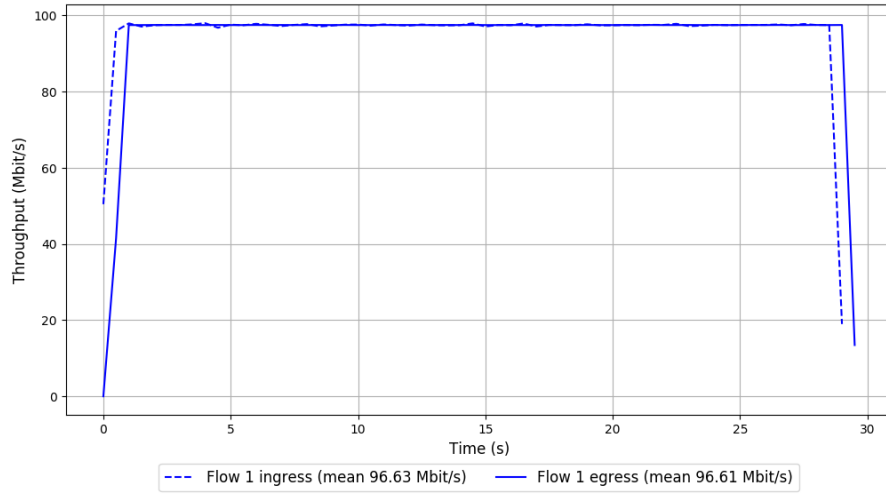
Run 4: Report of Indigo-MusesC3 — Data Link

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-03-19 10:14:13
End at: 2019-03-19 10:14:43
Local clock offset: -0.228 ms
Remote clock offset: -0.514 ms


# Below is generated by plot.py at 2019-03-19 10:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.61 Mbit/s
95th percentile per-packet one-way delay: 40.901 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.61 Mbit/s
95th percentile per-packet one-way delay: 40.901 ms
Loss rate: 0.24%
```

Run 5: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 96.63 Mbit/s)   Flow 1 egress (mean 96.61 Mbit/s)
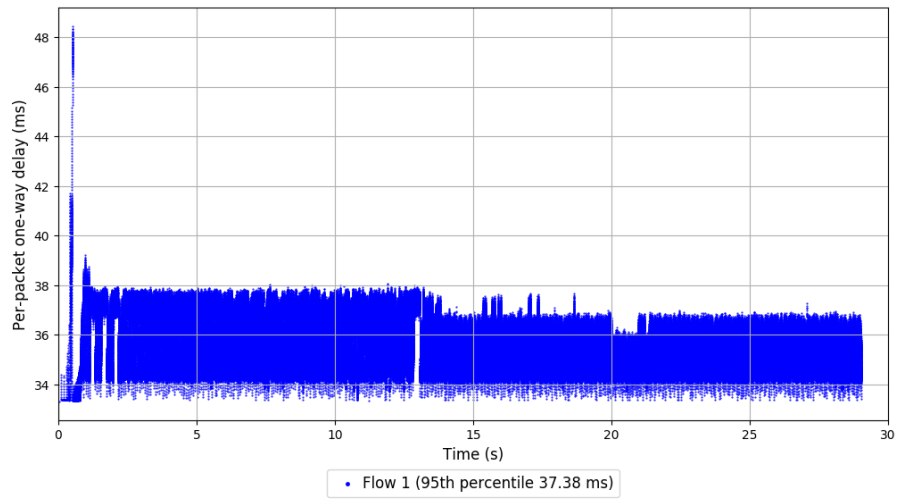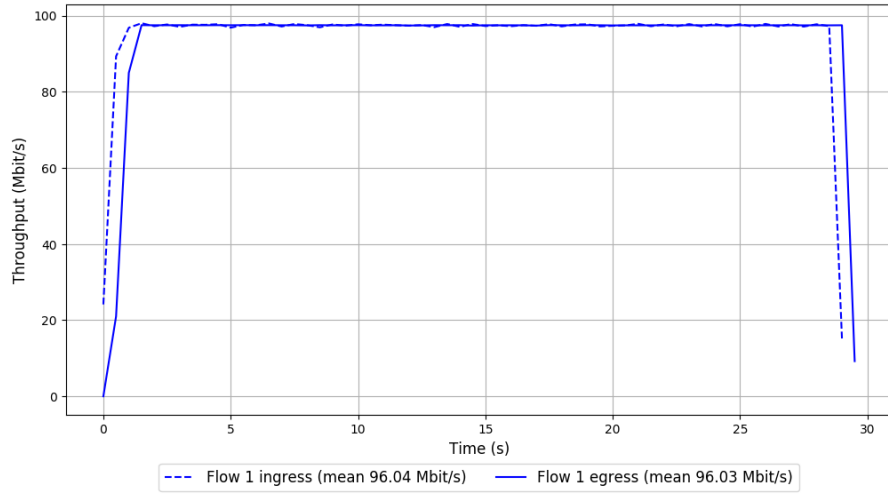

• Flow 1 (95th percentile 40.90 ms)

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-03-19 08:54:49
End at: 2019-03-19 08:55:19
Local clock offset: 0.55 ms
Remote clock offset: -2.318 ms


# Below is generated by plot.py at 2019-03-19 10:46:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.03 Mbit/s
95th percentile per-packet one-way delay: 37.383 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 96.03 Mbit/s
95th percentile per-packet one-way delay: 37.383 ms
Loss rate: 0.23%
```
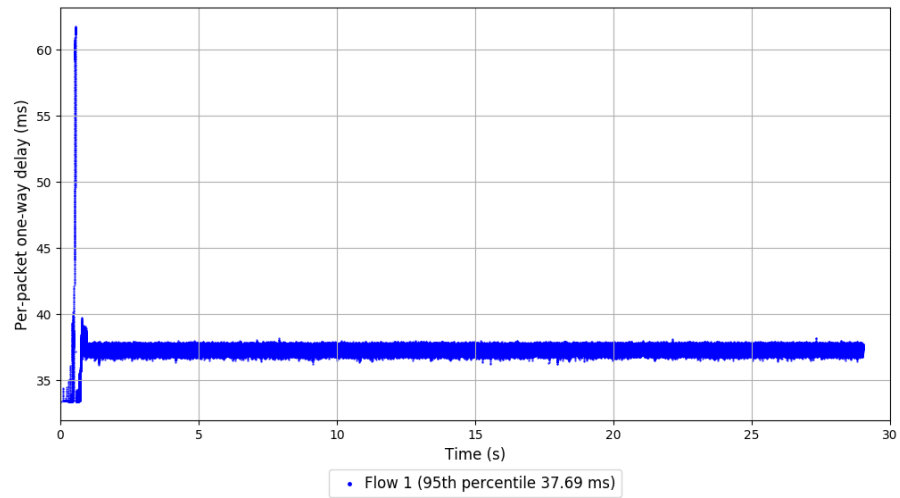
Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-03-19 09:19:20
End at: 2019-03-19 09:19:50
Local clock offset: 0.684 ms
Remote clock offset: -1.481 ms


# Below is generated by plot.py at 2019-03-19 10:46:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.06 Mbit/s
95th percentile per-packet one-way delay: 37.693 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.06 Mbit/s
95th percentile per-packet one-way delay: 37.693 ms
Loss rate: 0.24%
```
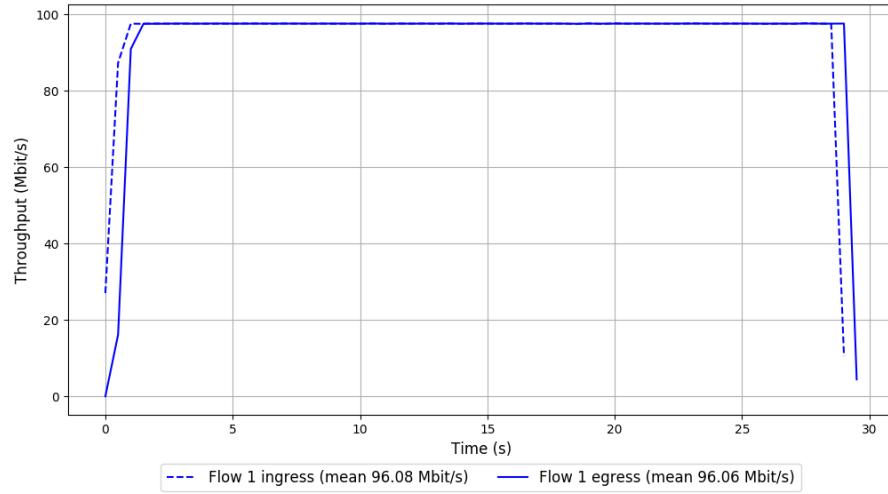
Run 2: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 96.08 Mbit/s)   Flow 1 egress (mean 96.06 Mbit/s)
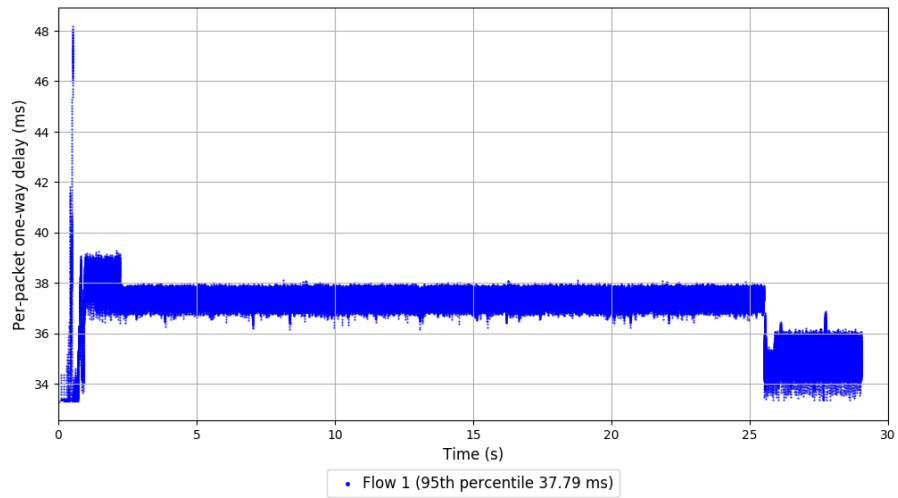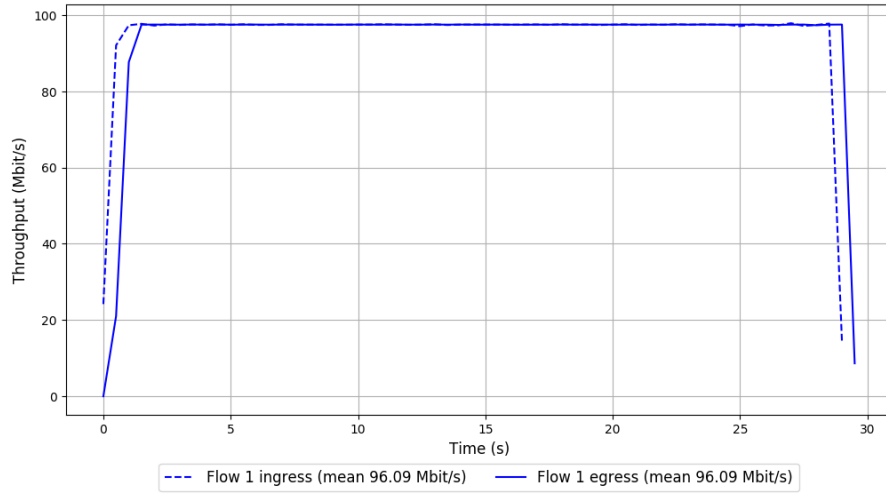

Flow 1 (95th percentile 37.69 ms)

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-03-19 09:43:51
End at: 2019-03-19 09:44:21
Local clock offset: 0.097 ms
Remote clock offset: -1.333 ms


# Below is generated by plot.py at 2019-03-19 10:46:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.09 Mbit/s
95th percentile per-packet one-way delay: 37.789 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 96.09 Mbit/s
95th percentile per-packet one-way delay: 37.789 ms
Loss rate: 0.23%
```
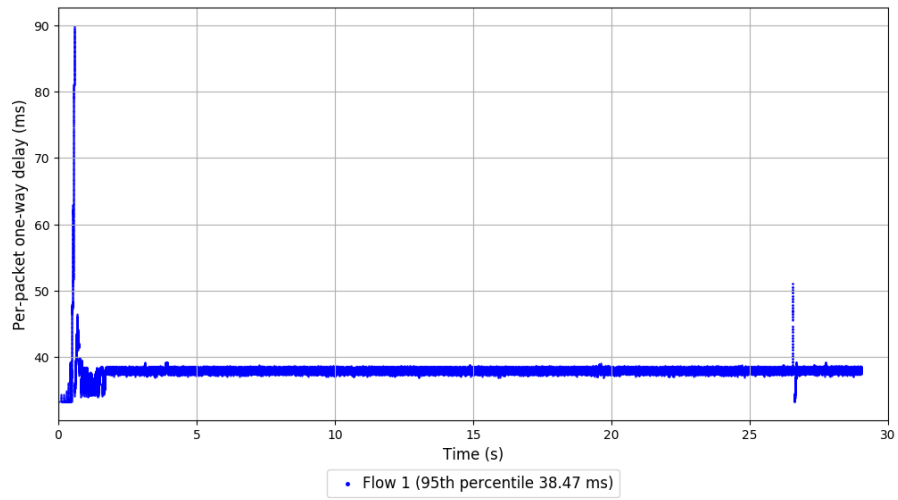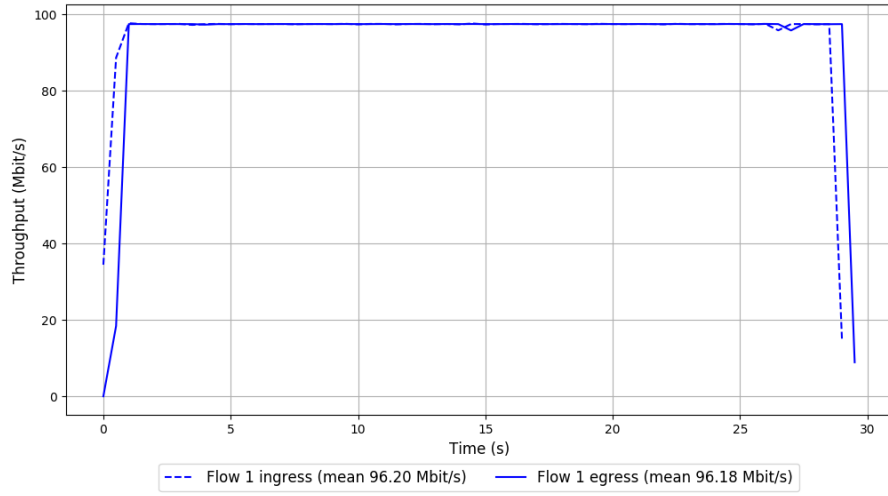
Run 3: Report of Indigo-MusesC5 — Data Link

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-03-19 10:08:23
End at: 2019-03-19 10:08:53
Local clock offset: -0.197 ms
Remote clock offset: -0.662 ms


# Below is generated by plot.py at 2019-03-19 10:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.18 Mbit/s
95th percentile per-packet one-way delay: 38.465 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.18 Mbit/s
95th percentile per-packet one-way delay: 38.465 ms
Loss rate: 0.24%
```
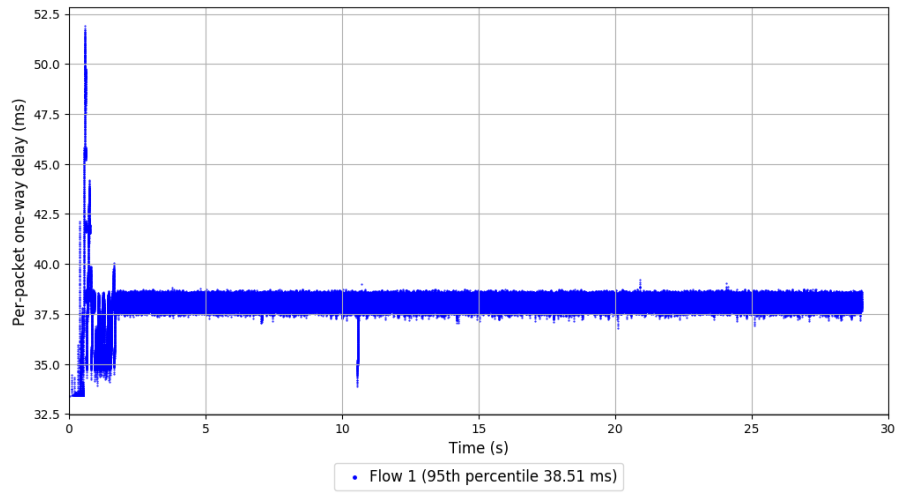
Run 4: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 96.20 Mbit/s) ---- Flow 1 egress (mean 96.18 Mbit/s) ——

• Flow 1 (95th percentile 38.47 ms)

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-03-19 10:32:54
End at: 2019-03-19 10:33:24
Local clock offset: 0.279 ms
Remote clock offset: -0.507 ms


# Below is generated by plot.py at 2019-03-19 10:47:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.21 Mbit/s
95th percentile per-packet one-way delay: 38.507 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.21 Mbit/s
95th percentile per-packet one-way delay: 38.507 ms
Loss rate: 0.24%
```
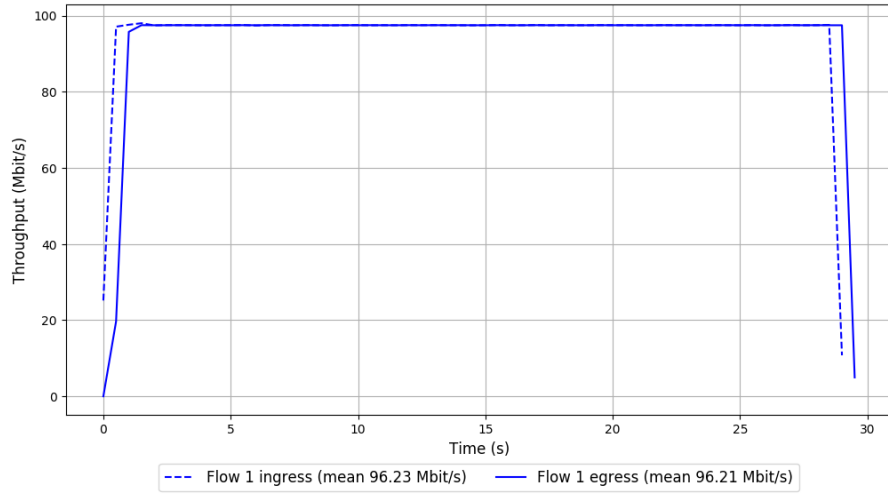
Run 5: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 96.23 Mbit/s) --- Flow 1 egress (mean 96.21 Mbit/s)
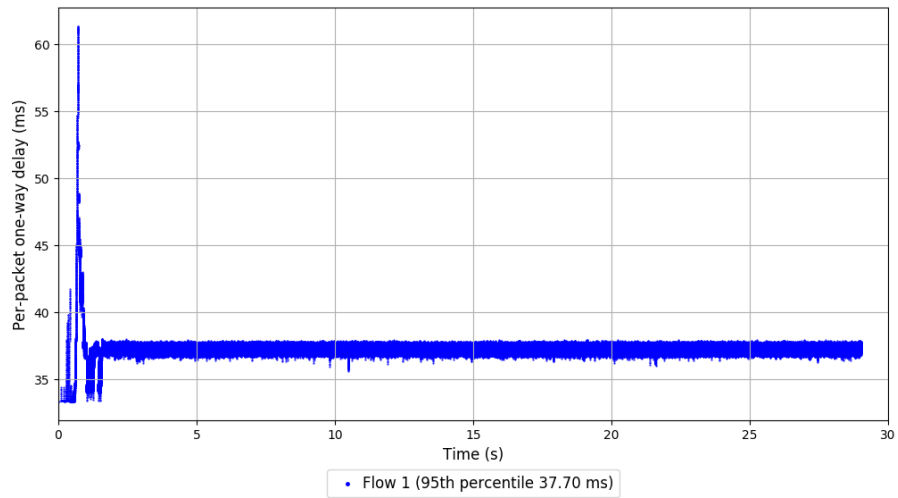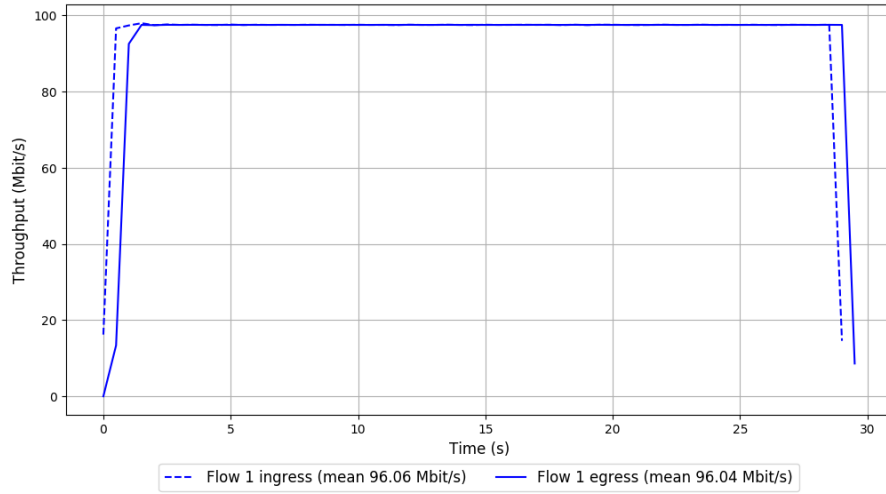

Flow 1 (95th percentile 38.51 ms)

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-03-19 08:40:47
End at: 2019-03-19 08:41:17
Local clock offset: 0.067 ms
Remote clock offset: -2.808 ms


# Below is generated by plot.py at 2019-03-19 10:47:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.04 Mbit/s
95th percentile per-packet one-way delay: 37.698 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.04 Mbit/s
95th percentile per-packet one-way delay: 37.698 ms
Loss rate: 0.24%
```
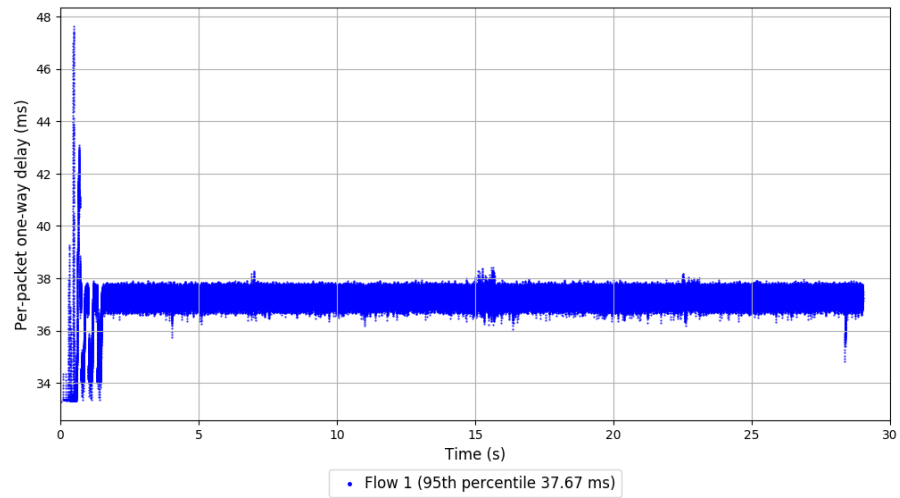
Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-03-19 09:05:19
End at: 2019-03-19 09:05:49
Local clock offset: 0.787 ms
Remote clock offset: -1.852 ms


# Below is generated by plot.py at 2019-03-19 10:47:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.14 Mbit/s
95th percentile per-packet one-way delay: 37.675 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.14 Mbit/s
95th percentile per-packet one-way delay: 37.675 ms
Loss rate: 0.24%
```
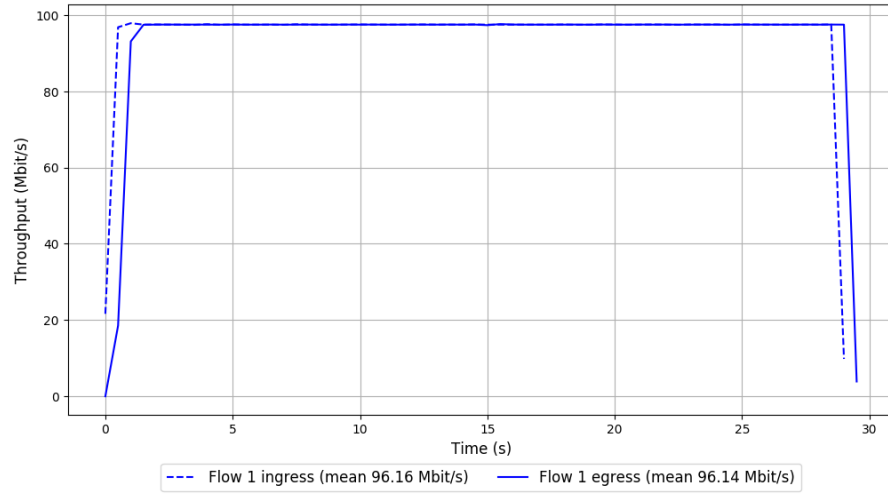
Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-03-19 09:29:50
End at: 2019-03-19 09:30:20
Local clock offset: 0.273 ms
Remote clock offset: -1.674 ms


# Below is generated by plot.py at 2019-03-19 10:47:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.23 Mbit/s
95th percentile per-packet one-way delay: 38.313 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.23 Mbit/s
95th percentile per-packet one-way delay: 38.313 ms
Loss rate: 0.24%
```
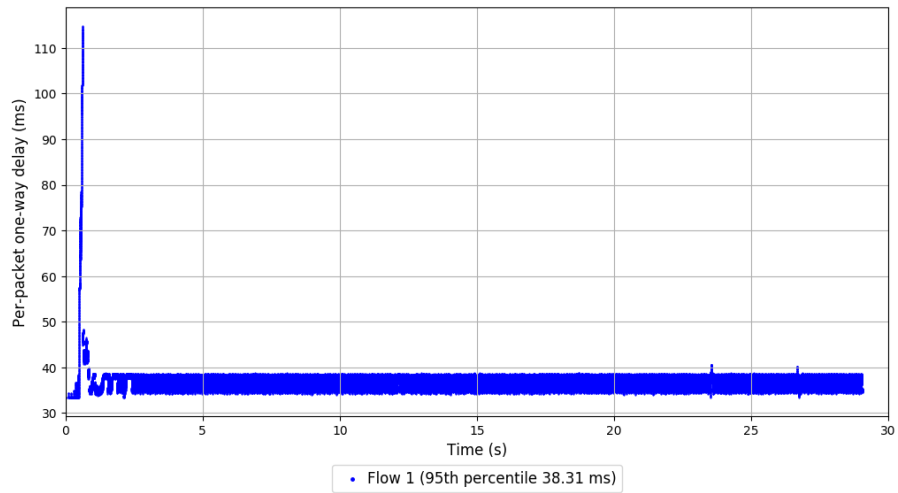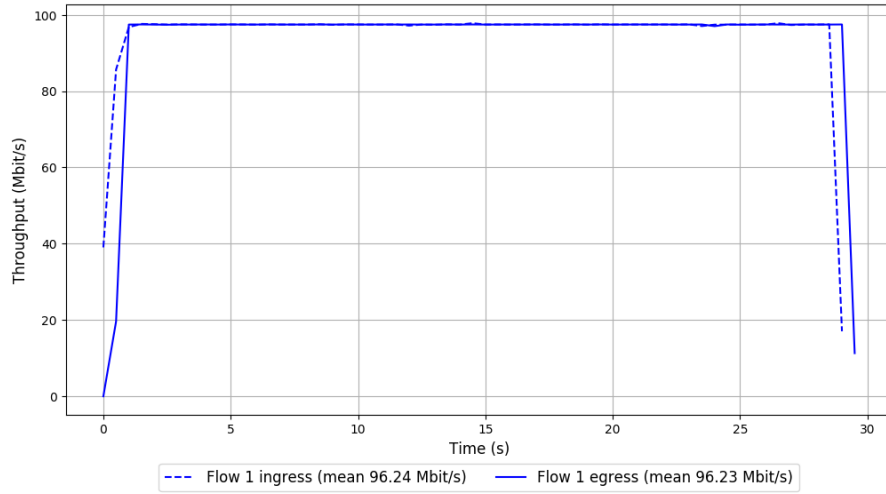
Run 3: Report of Indigo-MusesD — Data Link

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-03-19 09:54:21
End at: 2019-03-19 09:54:51
Local clock offset: -0.053 ms
Remote clock offset: -1.08 ms


# Below is generated by plot.py at 2019-03-19 10:47:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.52 Mbit/s
95th percentile per-packet one-way delay: 37.049 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.52 Mbit/s
95th percentile per-packet one-way delay: 37.049 ms
Loss rate: 0.24%
```
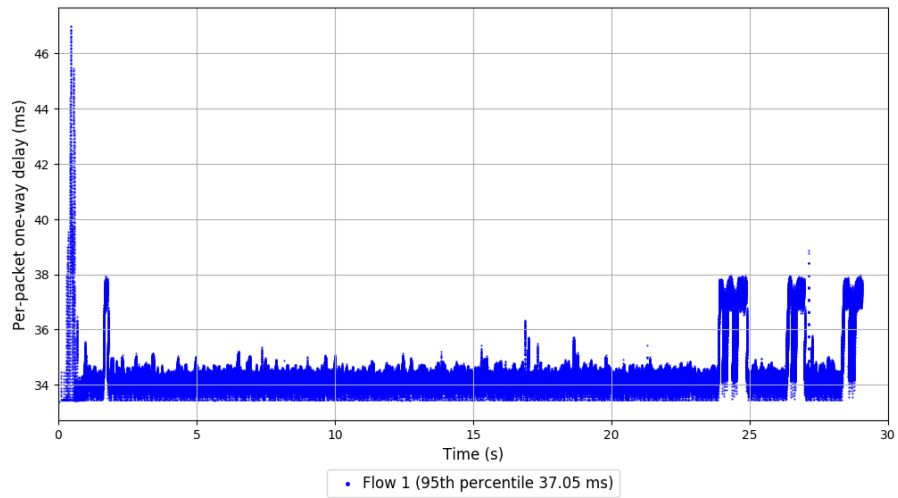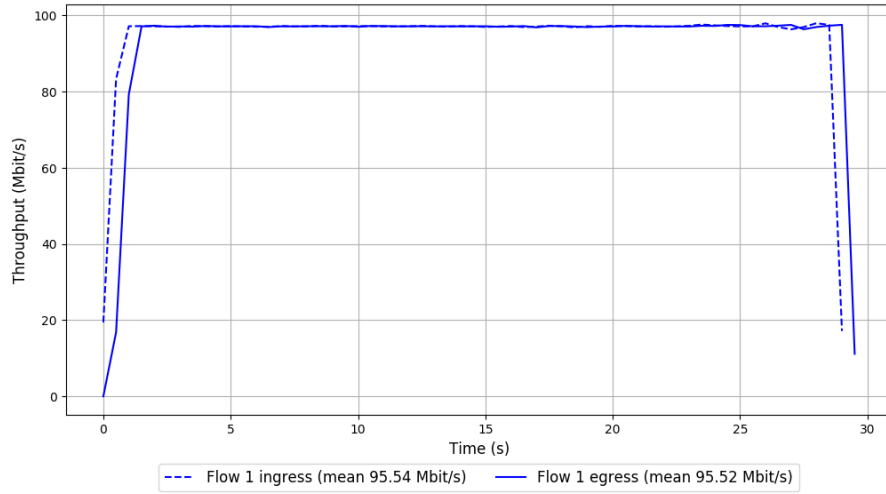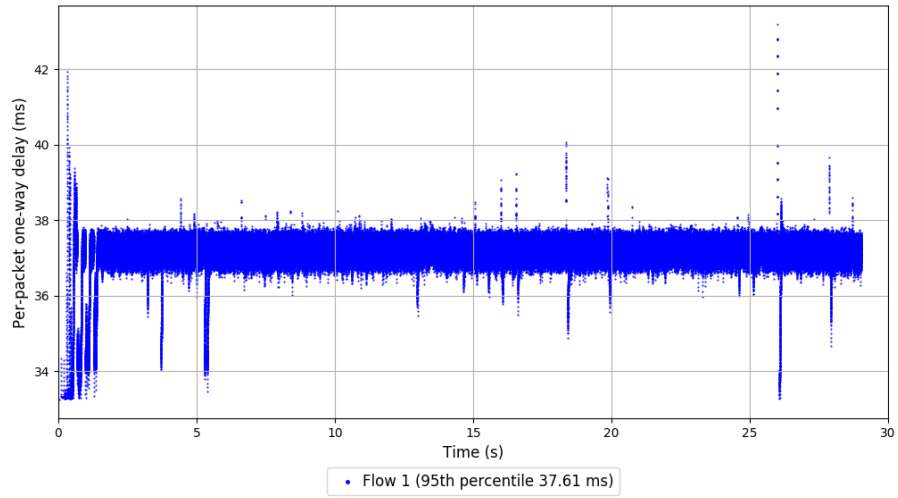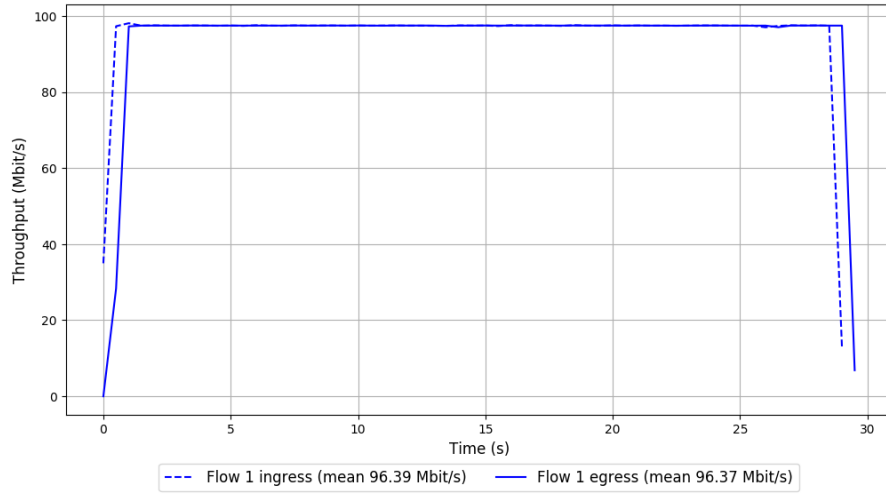
Run 4: Report of Indigo-MusesD — Data Link

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-03-19 10:18:53
End at: 2019-03-19 10:19:23
Local clock offset: -0.097 ms
Remote clock offset: -0.348 ms


# Below is generated by plot.py at 2019-03-19 10:48:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.37 Mbit/s
95th percentile per-packet one-way delay: 37.606 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.37 Mbit/s
95th percentile per-packet one-way delay: 37.606 ms
Loss rate: 0.24%
```

Run 5: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 96.39 Mbit/s)   Flow 1 egress (mean 96.37 Mbit/s)

• Flow 1 (95th percentile 37.61 ms)

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-03-19 08:48:55
End at: 2019-03-19 08:49:25
Local clock offset: 0.261 ms
Remote clock offset: -2.706 ms


# Below is generated by plot.py at 2019-03-19 10:48:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.57 Mbit/s
95th percentile per-packet one-way delay: 41.740 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 96.57 Mbit/s
95th percentile per-packet one-way delay: 41.740 ms
Loss rate: 0.84%
```
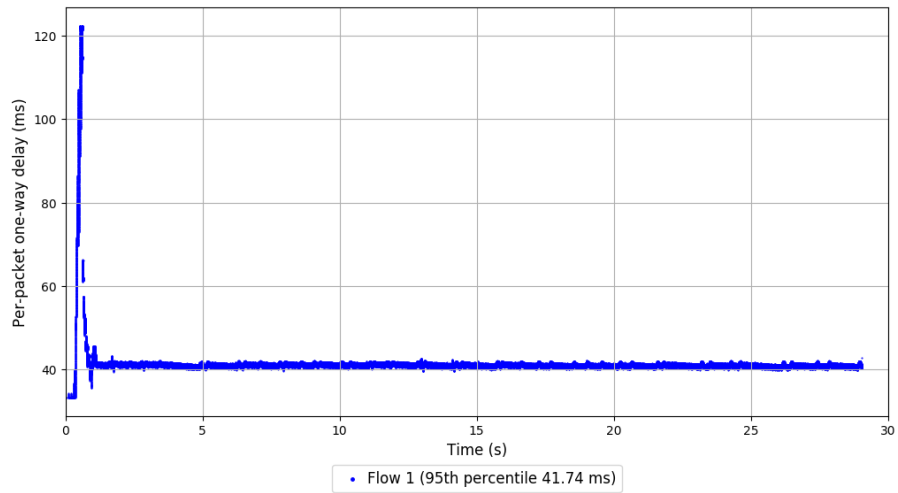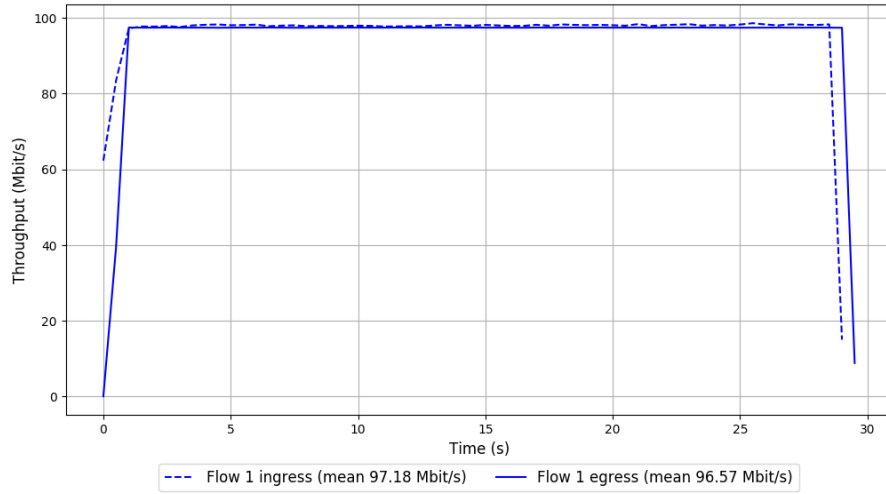
Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-03-19 09:13:27
End at: 2019-03-19 09:13:57
Local clock offset: 0.912 ms
Remote clock offset: -1.575 ms


# Below is generated by plot.py at 2019-03-19 10:48:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.56 Mbit/s
95th percentile per-packet one-way delay: 45.162 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 96.56 Mbit/s
95th percentile per-packet one-way delay: 45.162 ms
Loss rate: 0.88%
```
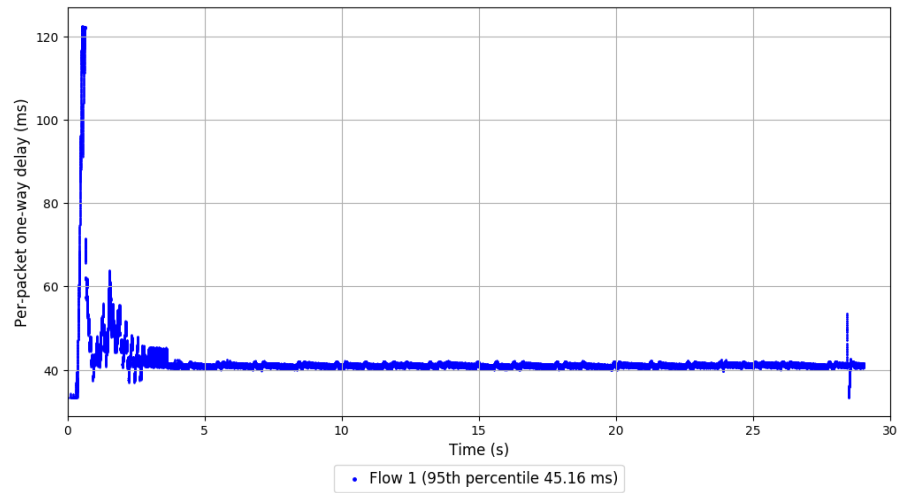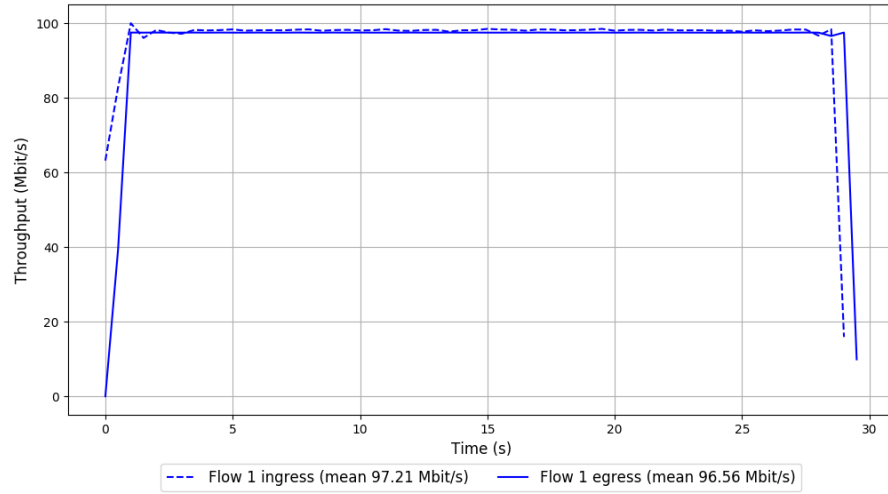
Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-03-19 09:37:58
End at: 2019-03-19 09:38:28
Local clock offset: 0.144 ms
Remote clock offset: -1.38 ms


# Below is generated by plot.py at 2019-03-19 10:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.17 Mbit/s
95th percentile per-packet one-way delay: 41.762 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 96.17 Mbit/s
95th percentile per-packet one-way delay: 41.762 ms
Loss rate: 1.10%
```
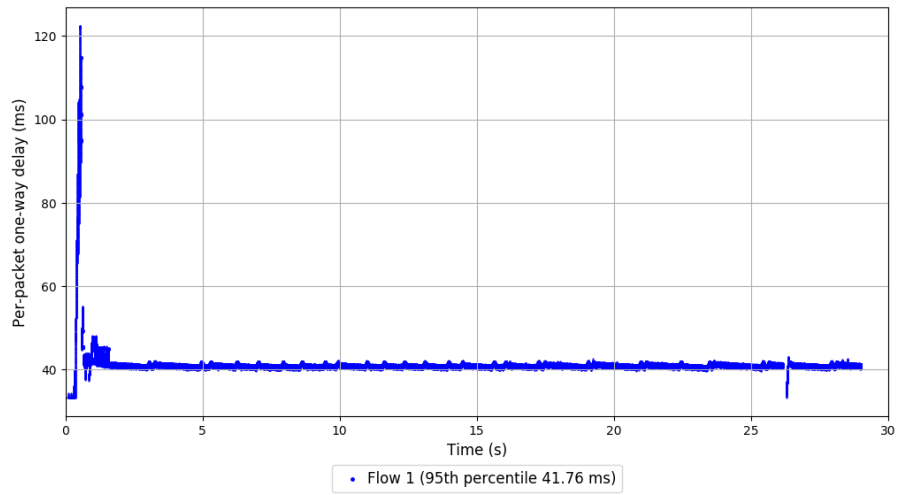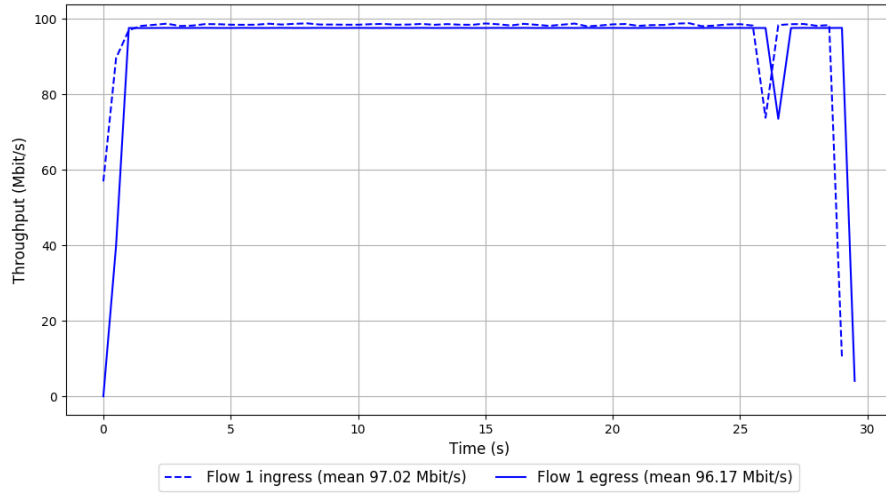
Run 3: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 97.02 Mbit/s)   Flow 1 egress (mean 96.17 Mbit/s)
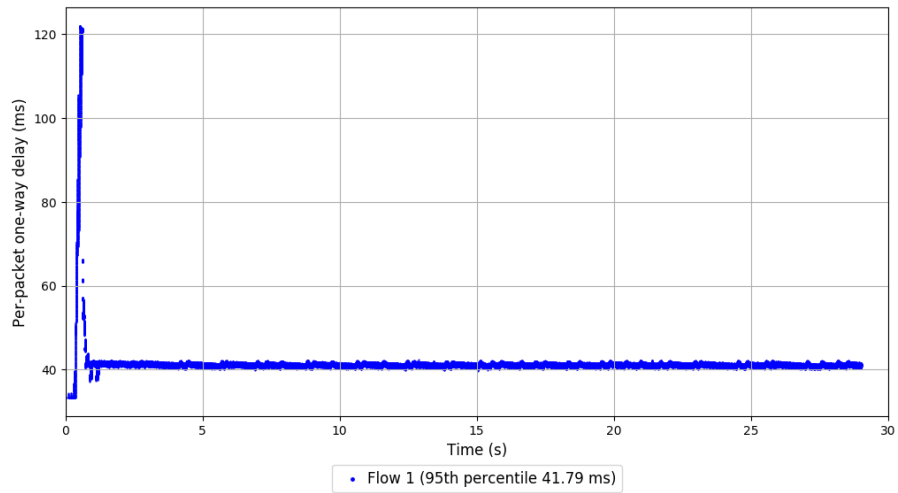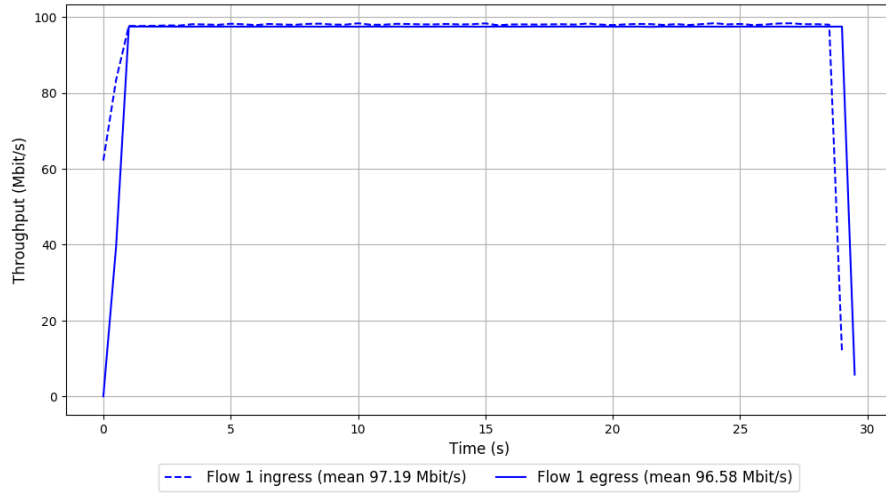

Flow 1 (95th percentile 41.76 ms)

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-03-19 10:02:29
End at: 2019-03-19 10:02:59
Local clock offset: -0.145 ms
Remote clock offset: -0.789 ms


# Below is generated by plot.py at 2019-03-19 10:48:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.58 Mbit/s
95th percentile per-packet one-way delay: 41.787 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 96.58 Mbit/s
95th percentile per-packet one-way delay: 41.787 ms
Loss rate: 0.85%
```

Run 4: Report of Indigo-MusesT — Data Link

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-03-19 10:27:01
End at: 2019-03-19 10:27:31
Local clock offset: 0.176 ms
Remote clock offset: -0.58 ms


# Below is generated by plot.py at 2019-03-19 10:48:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.54 Mbit/s
95th percentile per-packet one-way delay: 44.576 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 96.54 Mbit/s
95th percentile per-packet one-way delay: 44.576 ms
Loss rate: 1.36%
```
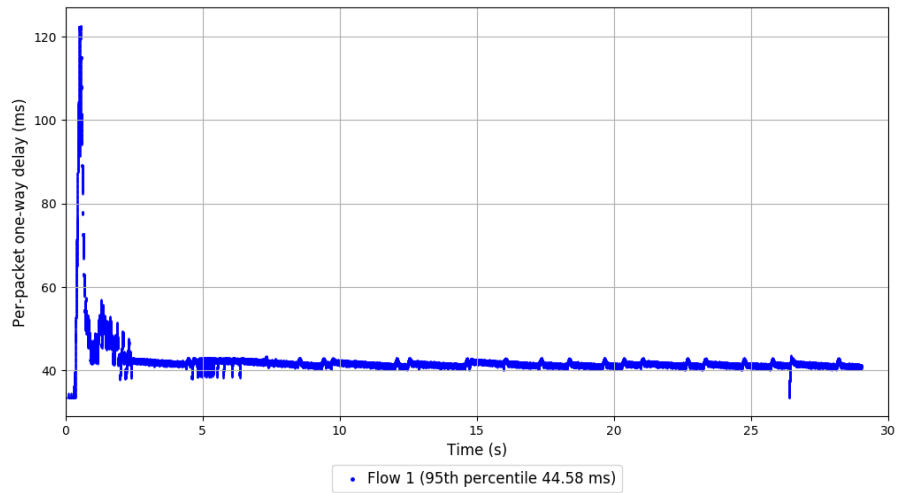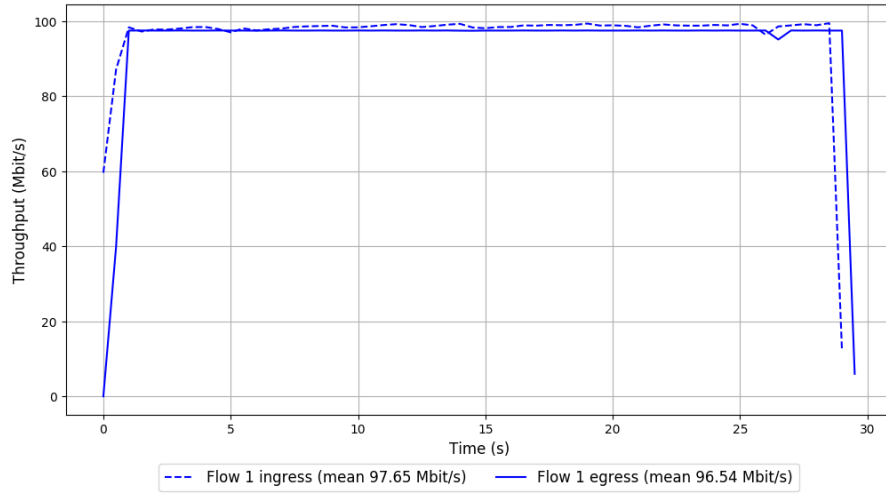
Run 5: Report of Indigo-MusesT — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2019-03-19 08:47:45
End at: 2019-03-19 08:48:15
Local clock offset: 0.177 ms
Remote clock offset: -2.874 ms


# Below is generated by plot.py at 2019-03-19 10:48:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.18 Mbit/s
95th percentile per-packet one-way delay: 39.719 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.18 Mbit/s
95th percentile per-packet one-way delay: 39.719 ms
Loss rate: 0.20%
```
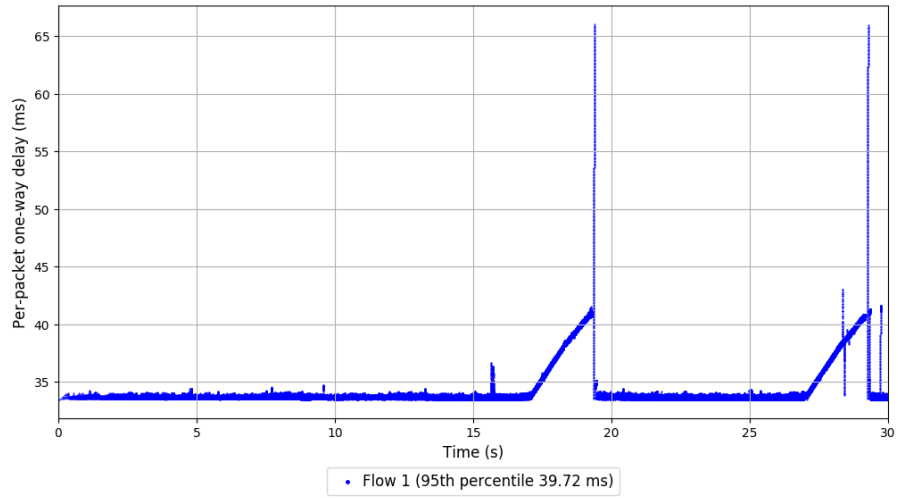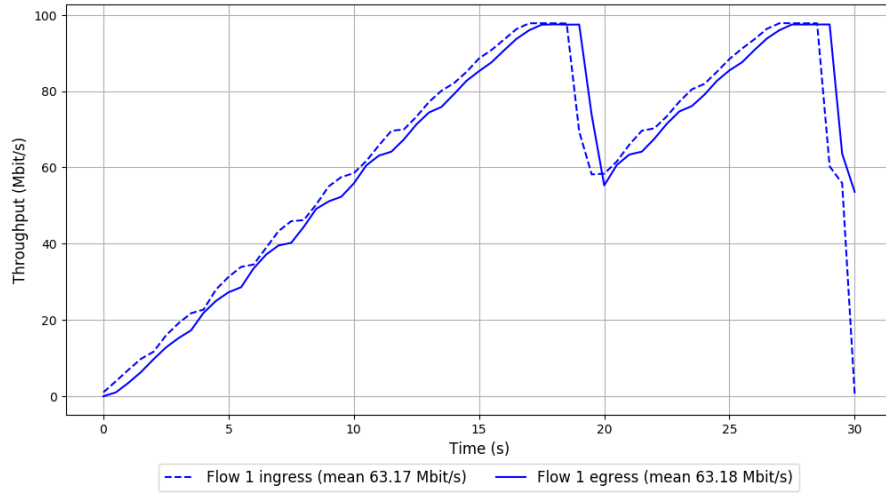
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2019-03-19 09:12:17
End at: 2019-03-19 09:12:47
Local clock offset: 0.903 ms
Remote clock offset: -1.797 ms


# Below is generated by plot.py at 2019-03-19 10:48:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.48 Mbit/s
95th percentile per-packet one-way delay: 40.008 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.48 Mbit/s
95th percentile per-packet one-way delay: 40.008 ms
Loss rate: 0.20%
```
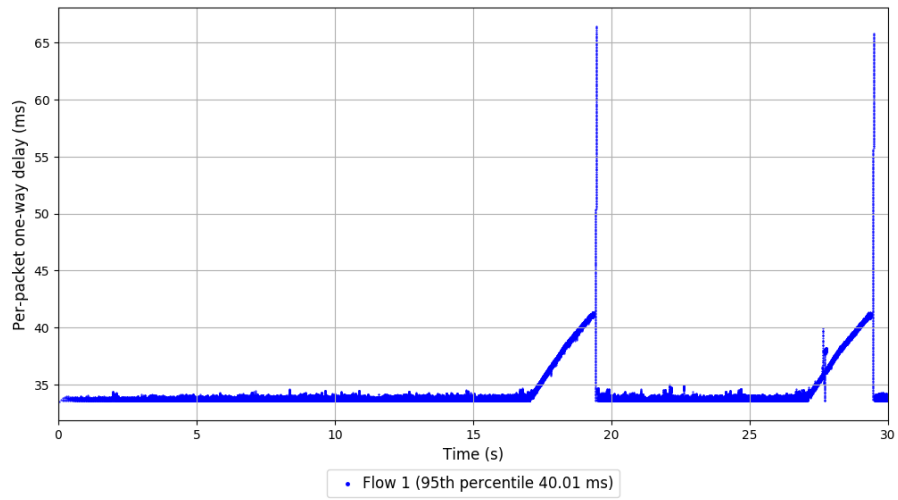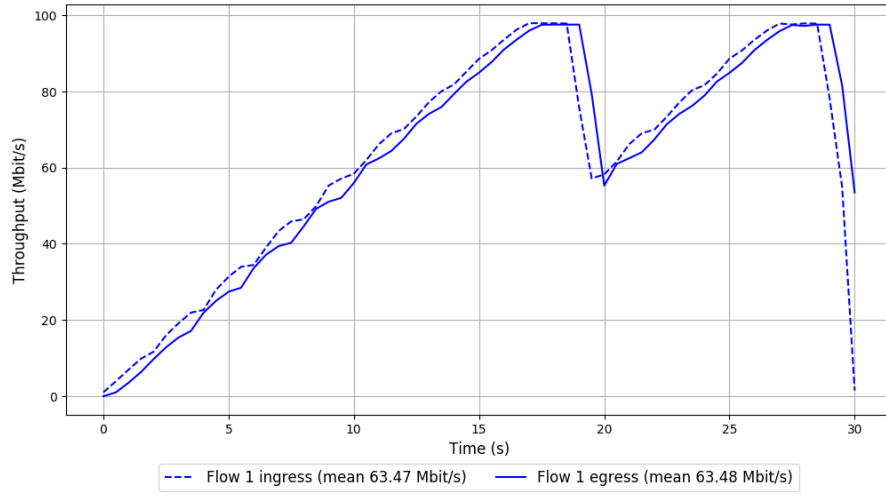
Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 63.47 Mbit/s) — Flow 1 egress (mean 63.48 Mbit/s)

• Flow 1 (95th percentile 40.01 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2019-03-19 09:36:48
End at: 2019-03-19 09:37:18
Local clock offset: 0.169 ms
Remote clock offset: -1.453 ms


# Below is generated by plot.py at 2019-03-19 10:48:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.21 Mbit/s
95th percentile per-packet one-way delay: 39.485 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.21 Mbit/s
95th percentile per-packet one-way delay: 39.485 ms
Loss rate: 0.20%
```
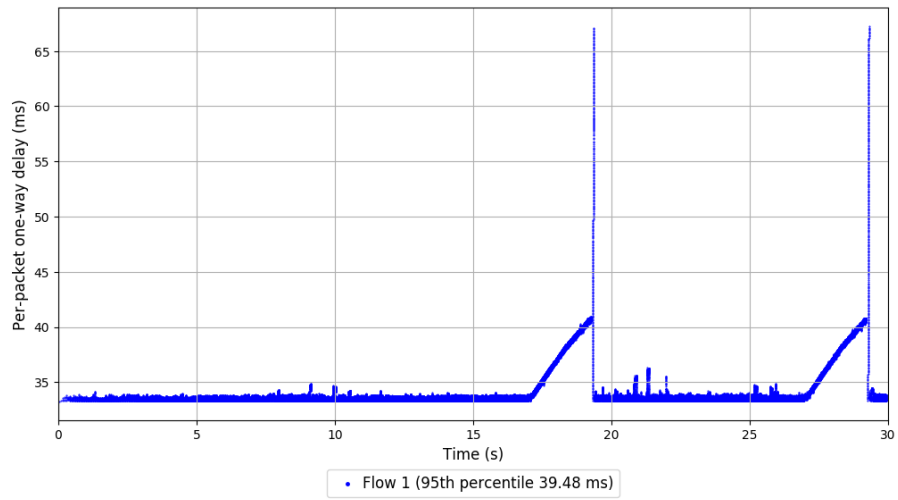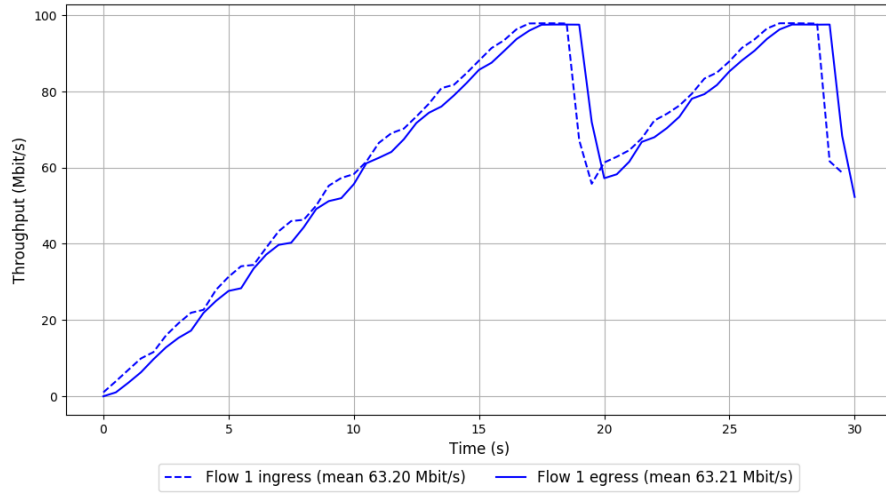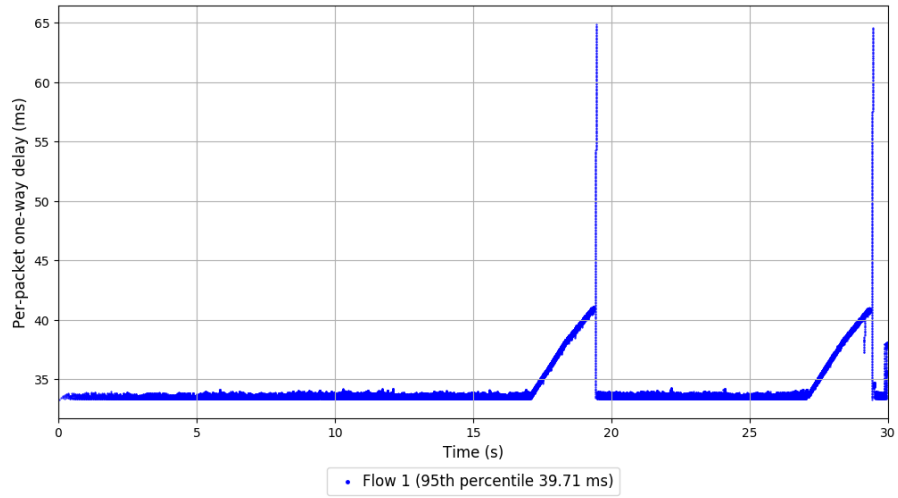
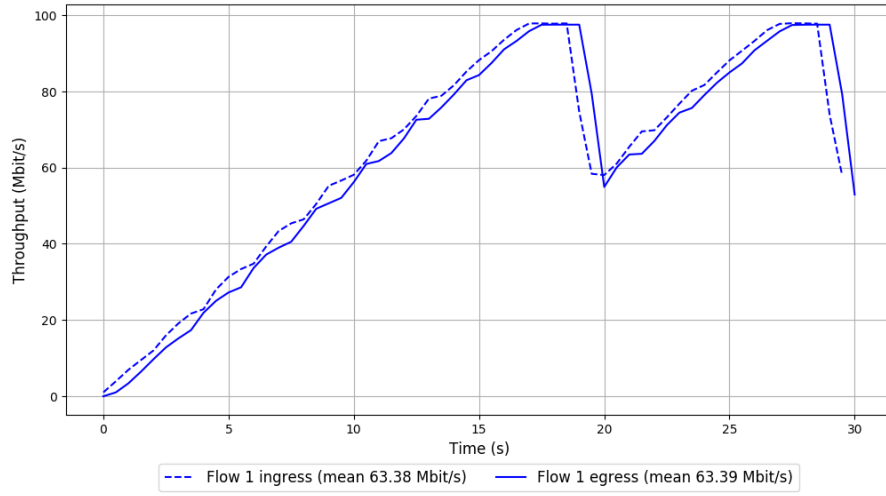## Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2019-03-19 10:01:19
End at: 2019-03-19 10:01:49
Local clock offset: -0.136 ms
Remote clock offset: -0.834 ms


# Below is generated by plot.py at 2019-03-19 10:48:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.39 Mbit/s
95th percentile per-packet one-way delay: 39.714 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.39 Mbit/s
95th percentile per-packet one-way delay: 39.714 ms
Loss rate: 0.20%
```

Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 63.38 Mbit/s)   Flow 1 egress (mean 63.39 Mbit/s)
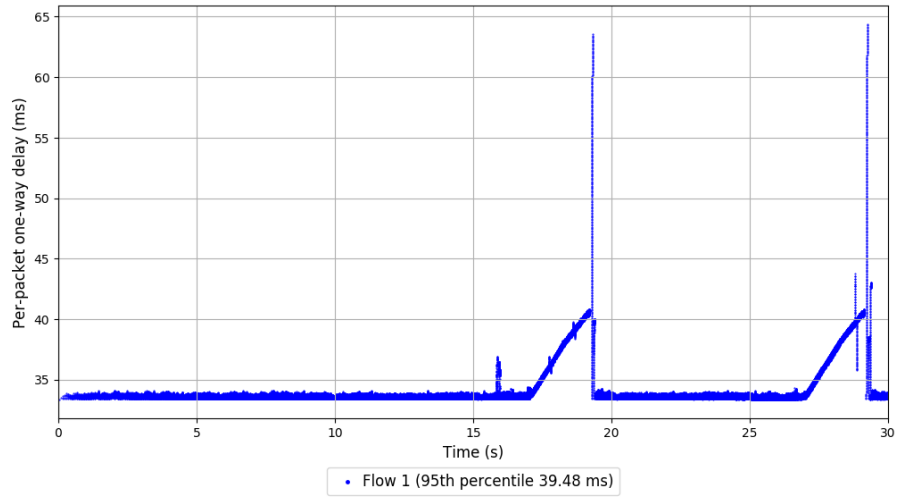
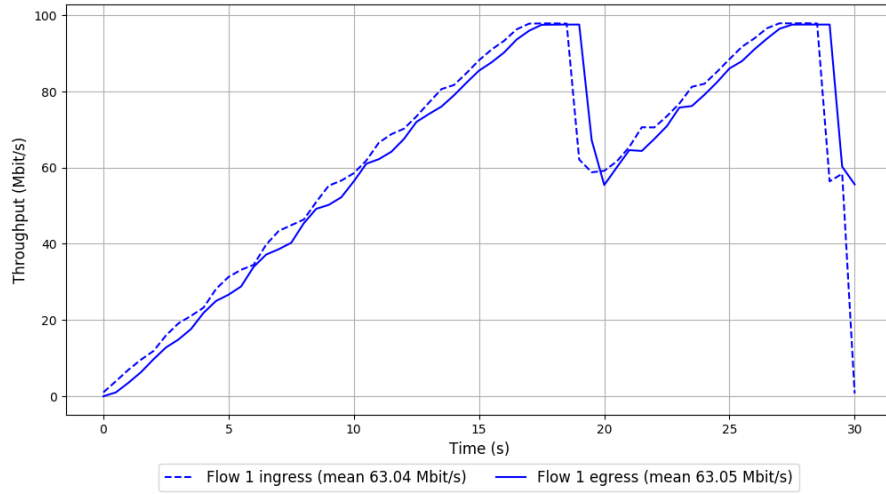

• Flow 1 (95th percentile 39.71 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2019-03-19 10:25:51
End at: 2019-03-19 10:26:21
Local clock offset: 0.158 ms
Remote clock offset: -0.573 ms


# Below is generated by plot.py at 2019-03-19 10:48:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.05 Mbit/s
95th percentile per-packet one-way delay: 39.485 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.05 Mbit/s
95th percentile per-packet one-way delay: 39.485 ms
Loss rate: 0.20%
```

Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 63.04 Mbit/s)   Flow 1 egress (mean 63.05 Mbit/s)

Flow 1 (95th percentile 39.48 ms)

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-03-19 08:50:06
End at: 2019-03-19 08:50:36
Local clock offset: 0.344 ms
Remote clock offset: -2.61 ms


# Below is generated by plot.py at 2019-03-19 10:49:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.98 Mbit/s
95th percentile per-packet one-way delay: 39.189 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 91.98 Mbit/s
95th percentile per-packet one-way delay: 39.189 ms
Loss rate: 0.23%
```
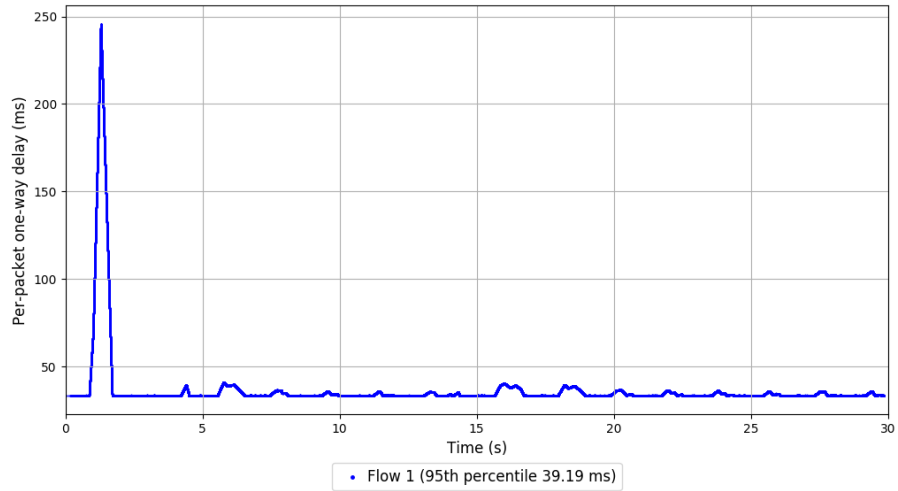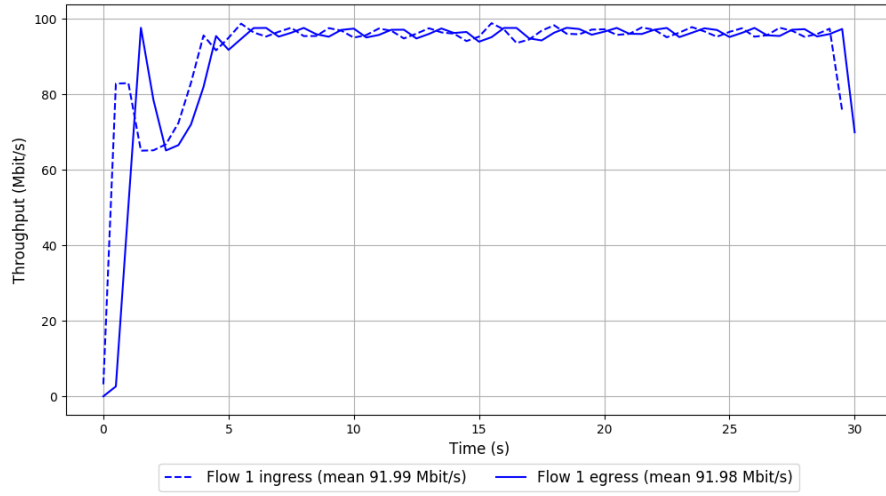
Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 91.99 Mbit/s)   Flow 1 egress (mean 91.98 Mbit/s)

Flow 1 (95th percentile 39.19 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-03-19 09:14:37
End at: 2019-03-19 09:15:07
Local clock offset: 0.908 ms
Remote clock offset: -1.72 ms


# Below is generated by plot.py at 2019-03-19 10:49:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.04 Mbit/s
95th percentile per-packet one-way delay: 39.176 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 92.04 Mbit/s
95th percentile per-packet one-way delay: 39.176 ms
Loss rate: 0.23%
```
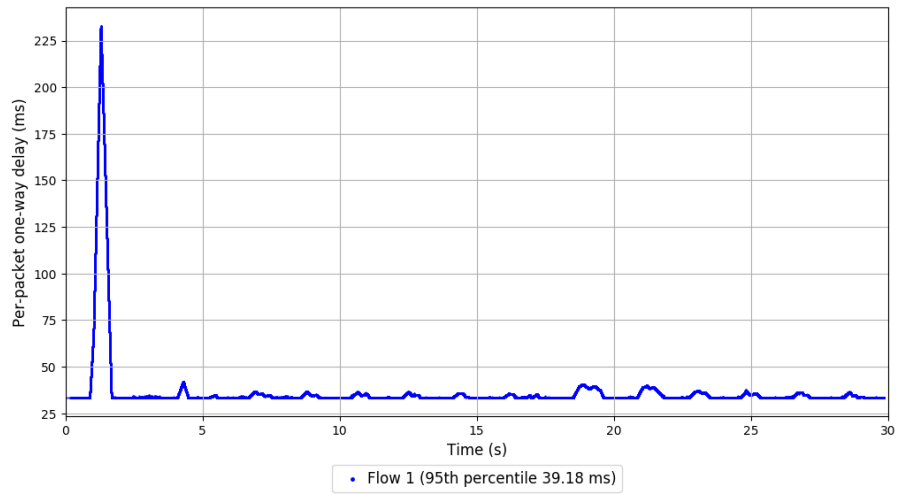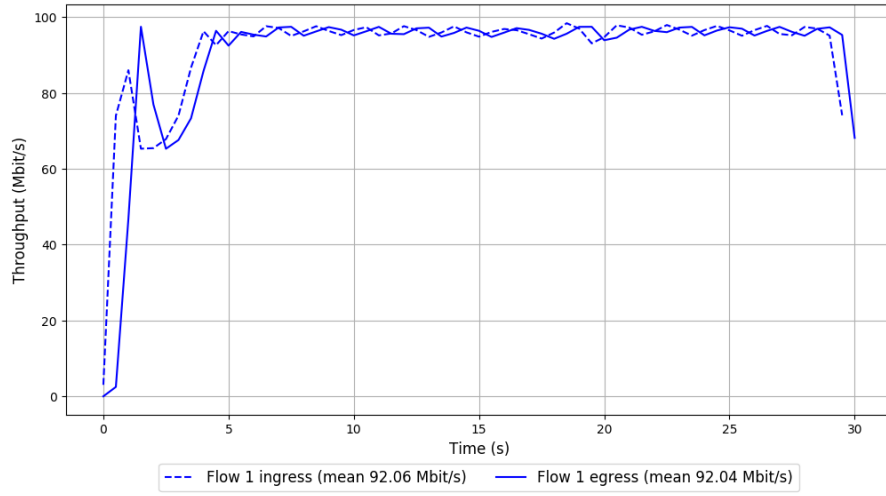
Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-03-19 09:39:08
End at: 2019-03-19 09:39:38
Local clock offset: 0.149 ms
Remote clock offset: -1.392 ms


# Below is generated by plot.py at 2019-03-19 10:49:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.56 Mbit/s
95th percentile per-packet one-way delay: 39.298 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 91.56 Mbit/s
95th percentile per-packet one-way delay: 39.298 ms
Loss rate: 0.24%
```
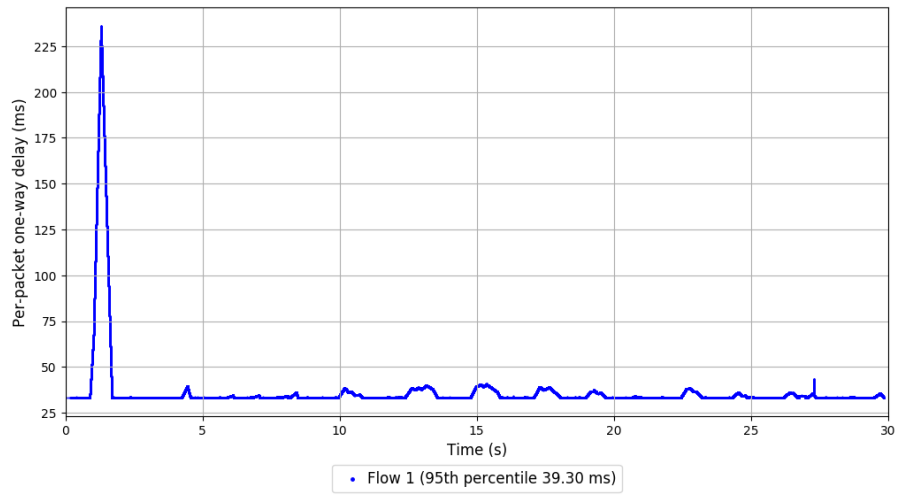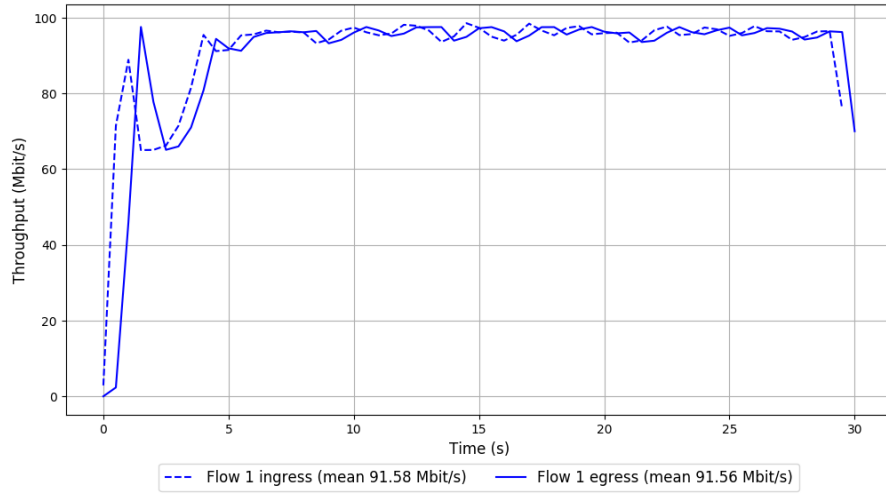
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 91.58 Mbit/s)   Flow 1 egress (mean 91.56 Mbit/s)

Flow 1 (95th percentile 39.30 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-03-19 10:03:39
End at: 2019-03-19 10:04:09
Local clock offset: -0.134 ms
Remote clock offset: -0.744 ms


# Below is generated by plot.py at 2019-03-19 10:49:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.28 Mbit/s
95th percentile per-packet one-way delay: 37.775 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 91.28 Mbit/s
95th percentile per-packet one-way delay: 37.775 ms
Loss rate: 0.24%
```
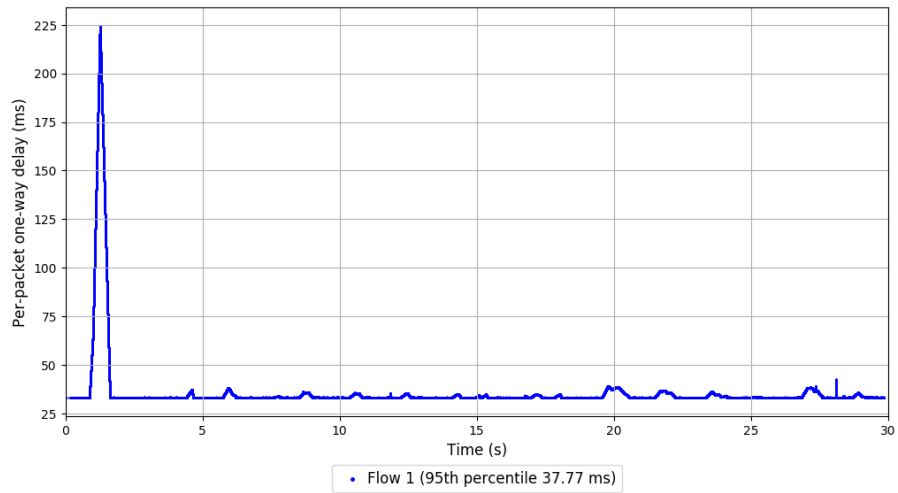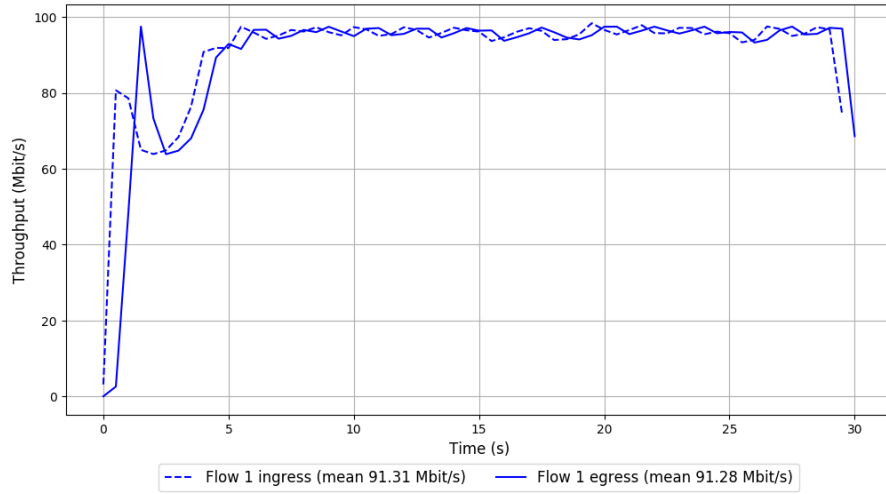
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 91.31 Mbit/s) — Flow 1 egress (mean 91.28 Mbit/s)

Flow 1 (95th percentile 37.77 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-03-19 10:28:11
End at: 2019-03-19 10:28:41
Local clock offset: 0.201 ms
Remote clock offset: -0.808 ms


# Below is generated by plot.py at 2019-03-19 10:49:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.27 Mbit/s
95th percentile per-packet one-way delay: 39.044 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 72.27 Mbit/s
95th percentile per-packet one-way delay: 39.044 ms
Loss rate: 0.28%
```
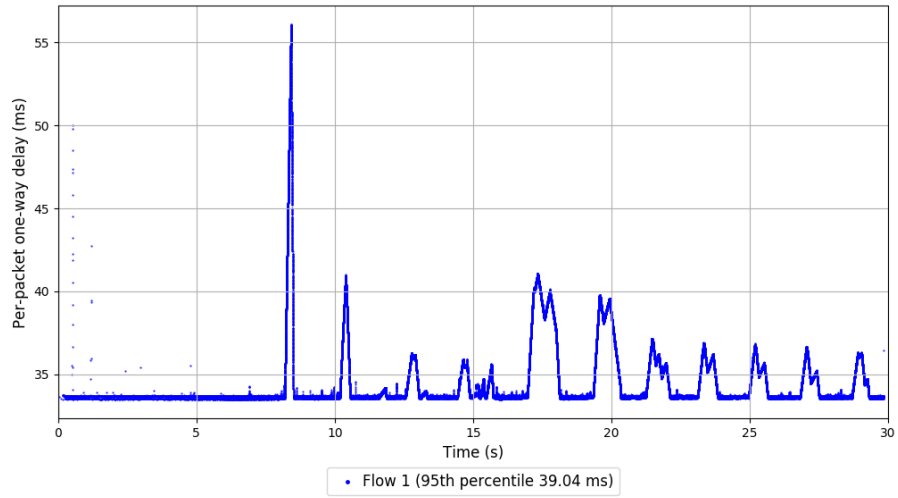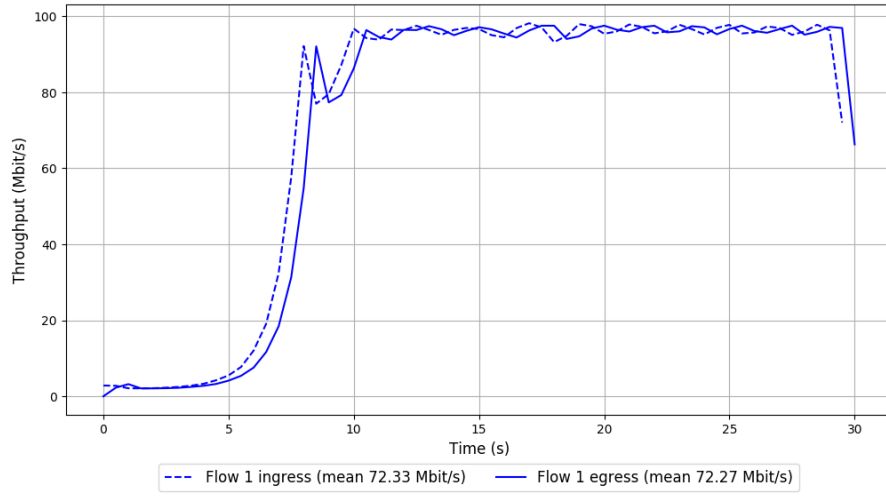
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 72.33 Mbit/s)   —— Flow 1 egress (mean 72.27 Mbit/s)

· Flow 1 (95th percentile 39.04 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2019-03-19 08:37:18
End at: 2019-03-19 08:37:48
Local clock offset: 0.072 ms
Remote clock offset: -2.841 ms


# Below is generated by plot.py at 2019-03-19 10:50:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.79 Mbit/s
95th percentile per-packet one-way delay: 146.947 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 86.79 Mbit/s
95th percentile per-packet one-way delay: 146.947 ms
Loss rate: 0.36%
```
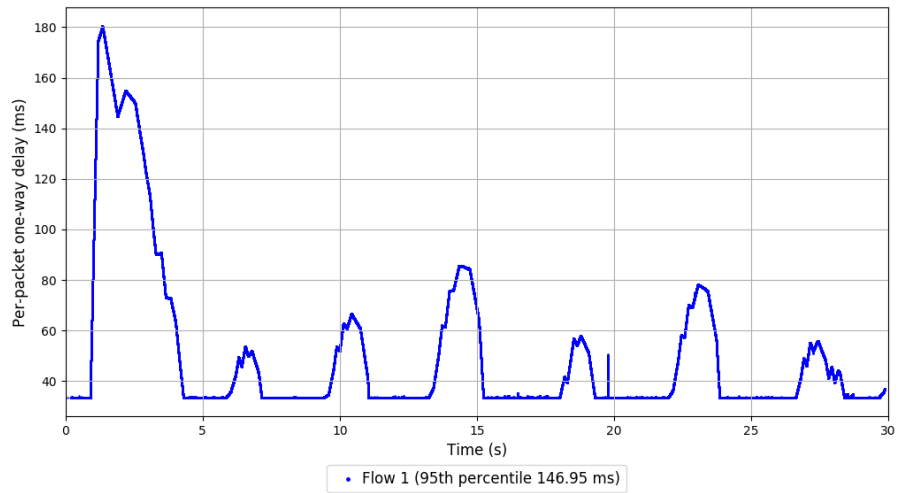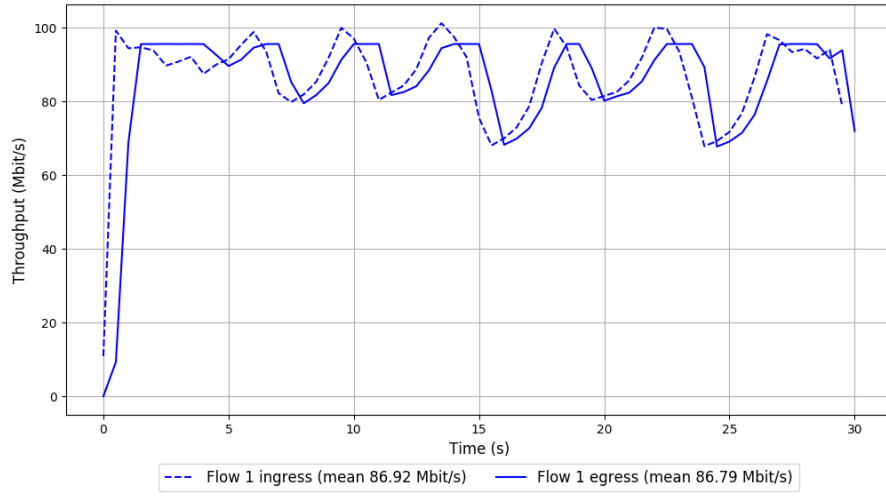
Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 86.92 Mbit/s)   Flow 1 egress (mean 86.79 Mbit/s)

• Flow 1 (95th percentile 146.95 ms)

```
Run 2: Statistics of PCC-Expr

Start at: 2019-03-19 09:01:49
End at: 2019-03-19 09:02:19
Local clock offset: 0.731 ms
Remote clock offset: -2.26 ms


# Below is generated by plot.py at 2019-03-19 10:50:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.80 Mbit/s
95th percentile per-packet one-way delay: 149.197 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 84.80 Mbit/s
95th percentile per-packet one-way delay: 149.197 ms
Loss rate: 0.30%
```
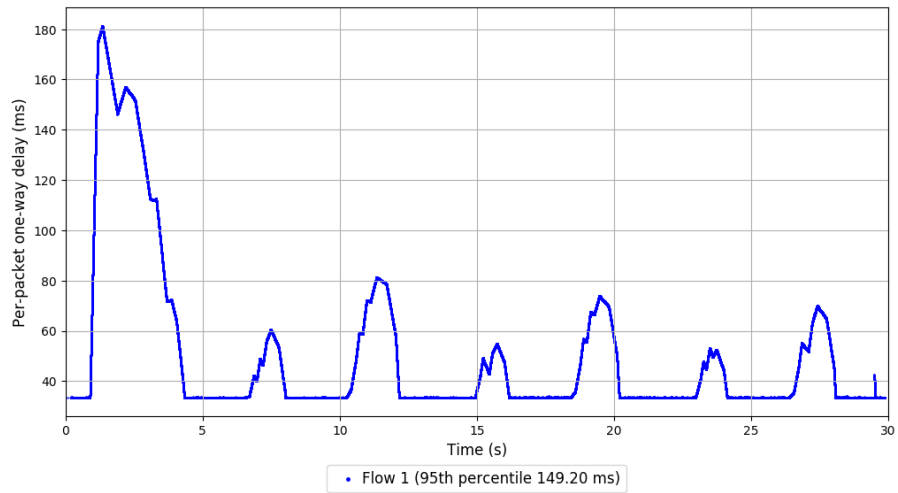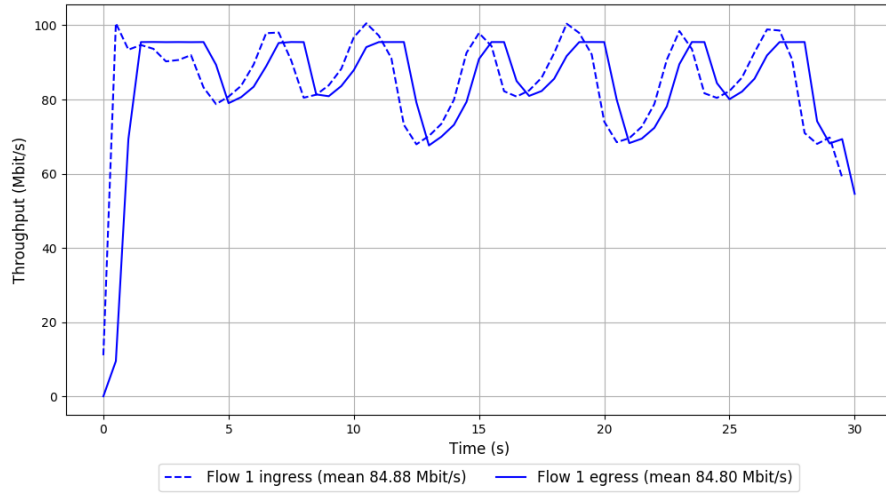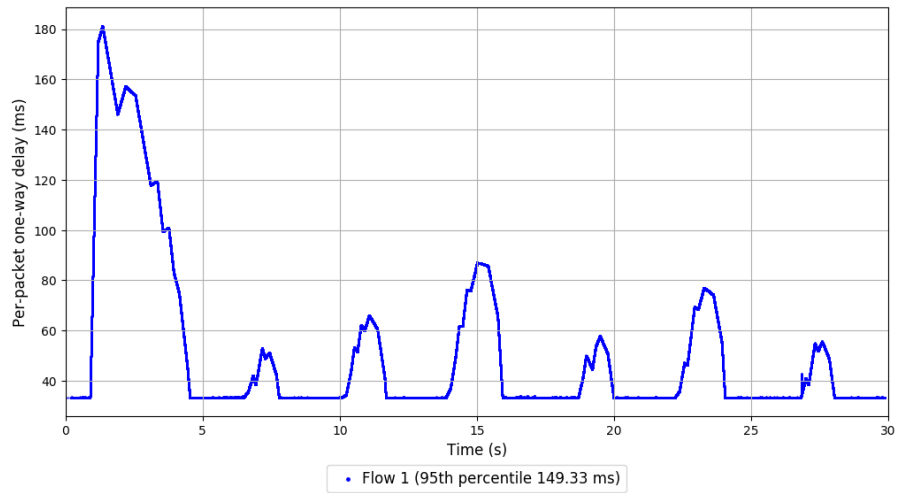
Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 84.88 Mbit/s)   Flow 1 egress (mean 84.80 Mbit/s)

Flow 1 (95th percentile 149.20 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2019-03-19 09:26:20
End at: 2019-03-19 09:26:51
Local clock offset: 0.361 ms
Remote clock offset: -1.637 ms


# Below is generated by plot.py at 2019-03-19 10:50:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.25 Mbit/s
95th percentile per-packet one-way delay: 149.328 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 86.25 Mbit/s
95th percentile per-packet one-way delay: 149.328 ms
Loss rate: 0.26%
```
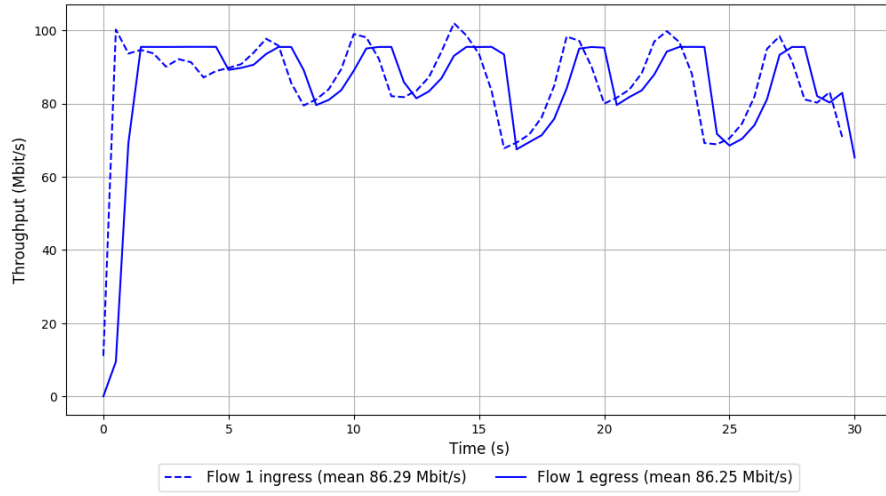
Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 86.29 Mbit/s)   Flow 1 egress (mean 86.25 Mbit/s)

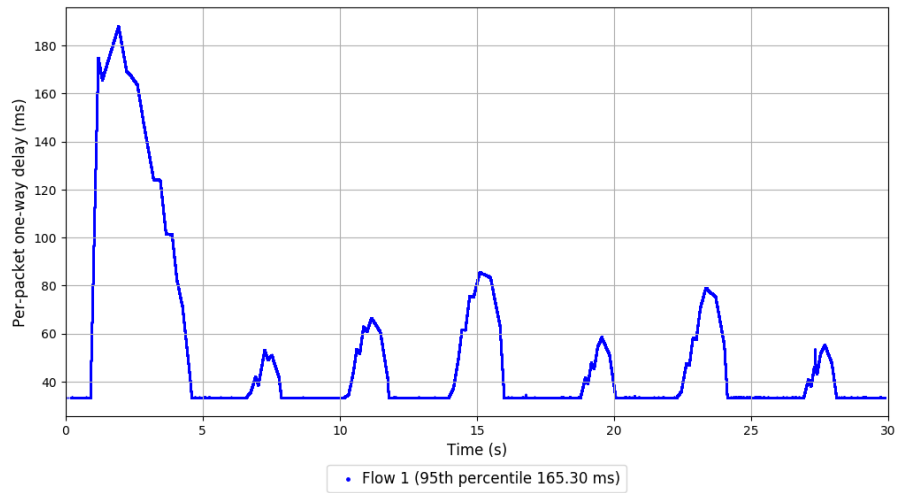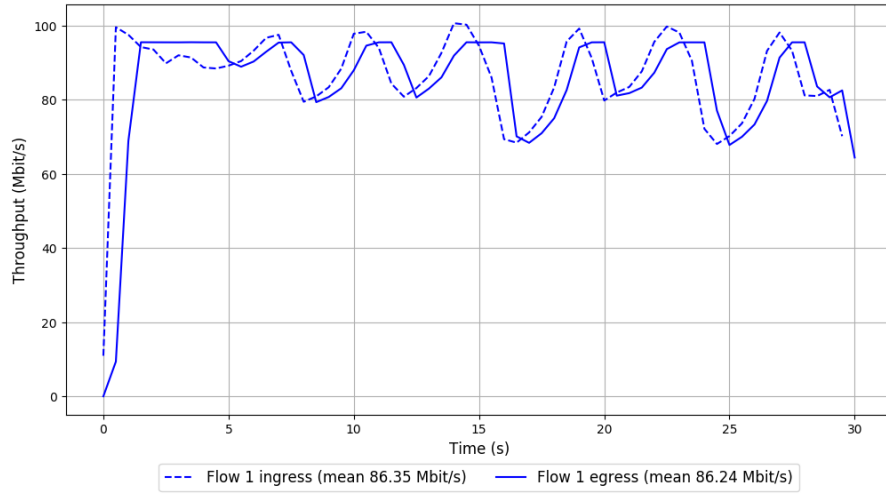• Flow 1 (95th percentile 149.33 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2019-03-19 09:50:52
End at: 2019-03-19 09:51:22
Local clock offset: -0.012 ms
Remote clock offset: -1.072 ms


# Below is generated by plot.py at 2019-03-19 10:51:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.24 Mbit/s
95th percentile per-packet one-way delay: 165.301 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 86.24 Mbit/s
95th percentile per-packet one-way delay: 165.301 ms
Loss rate: 0.34%
```
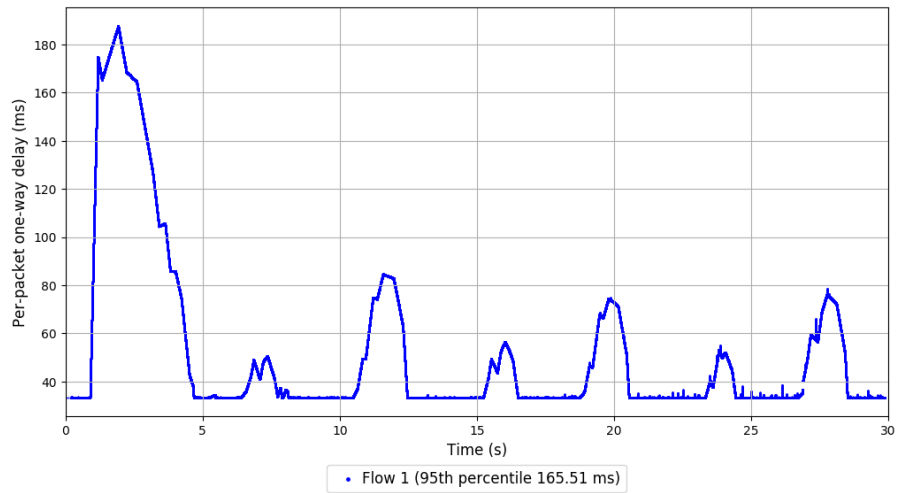
Run 4: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 86.35 Mbit/s) — — — Flow 1 egress (mean 86.24 Mbit/s)

Flow 1 (95th percentile 165.30 ms)

```
Run 5: Statistics of PCC-Expr

Start at: 2019-03-19 10:15:23
End at: 2019-03-19 10:15:53
Local clock offset: -0.247 ms
Remote clock offset: -0.522 ms


# Below is generated by plot.py at 2019-03-19 10:51:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.89 Mbit/s
95th percentile per-packet one-way delay: 165.509 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 85.89 Mbit/s
95th percentile per-packet one-way delay: 165.509 ms
Loss rate: 0.27%
```
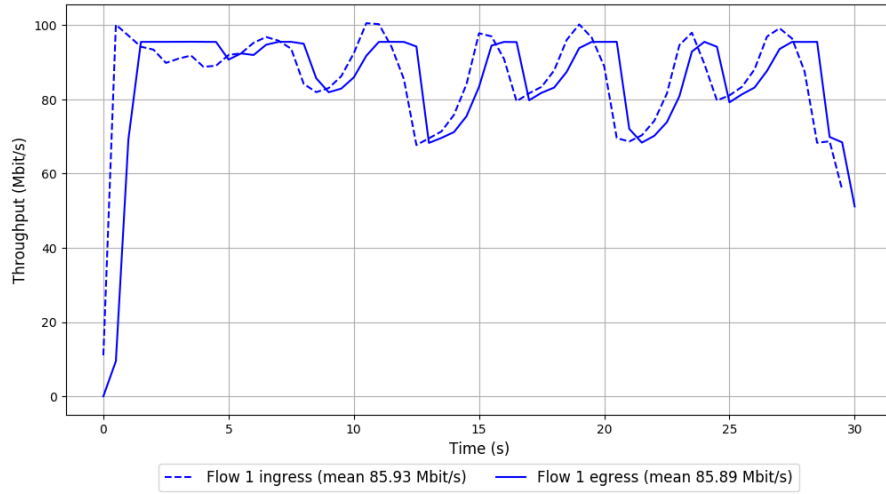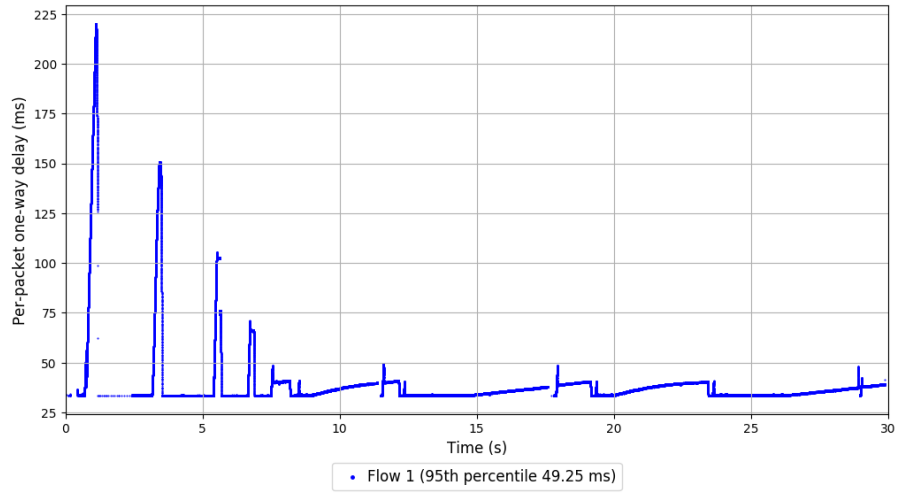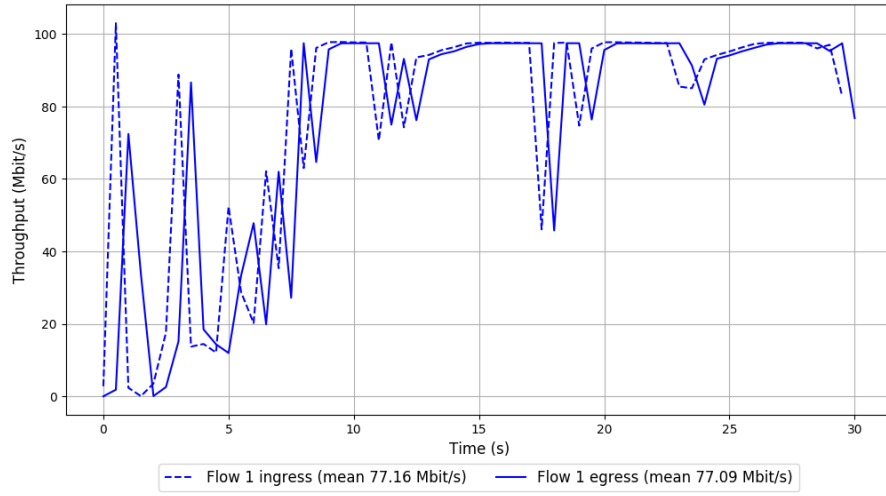
Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 85.93 Mbit/s)   Flow 1 egress (mean 85.89 Mbit/s)

Flow 1 (95th percentile 165.51 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-03-19 08:38:31
End at: 2019-03-19 08:39:01
Local clock offset: 0.069 ms
Remote clock offset: -3.036 ms


# Below is generated by plot.py at 2019-03-19 10:51:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.09 Mbit/s
95th percentile per-packet one-way delay: 49.249 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 77.09 Mbit/s
95th percentile per-packet one-way delay: 49.249 ms
Loss rate: 0.30%
```

Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-03-19 09:03:02
End at: 2019-03-19 09:03:32
Local clock offset: 0.747 ms
Remote clock offset: -2.176 ms


# Below is generated by plot.py at 2019-03-19 10:51:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.36 Mbit/s
95th percentile per-packet one-way delay: 50.601 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 76.36 Mbit/s
95th percentile per-packet one-way delay: 50.601 ms
Loss rate: 0.28%
```
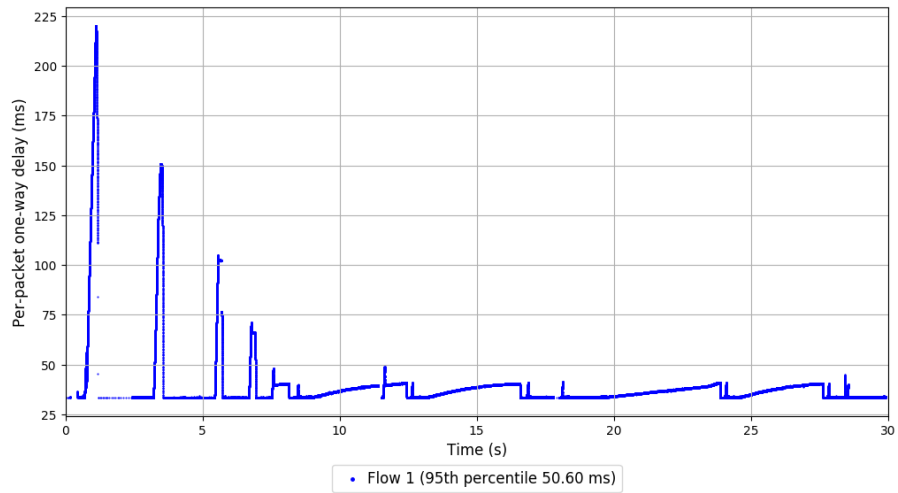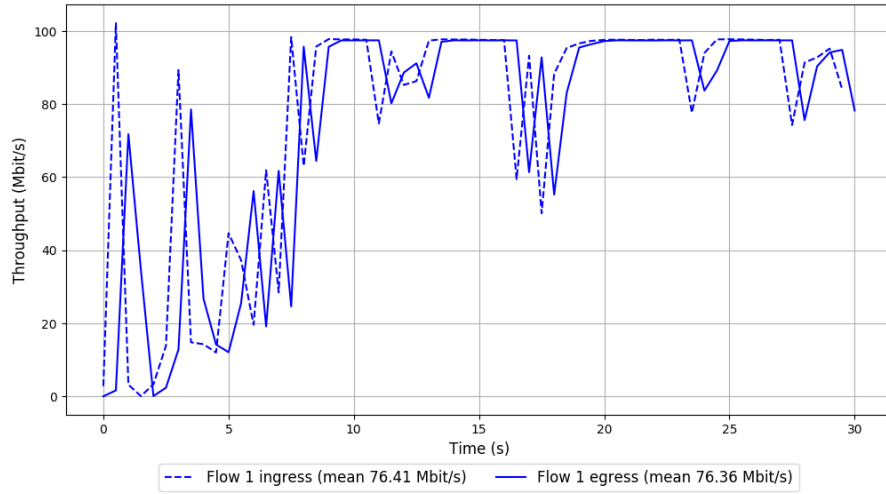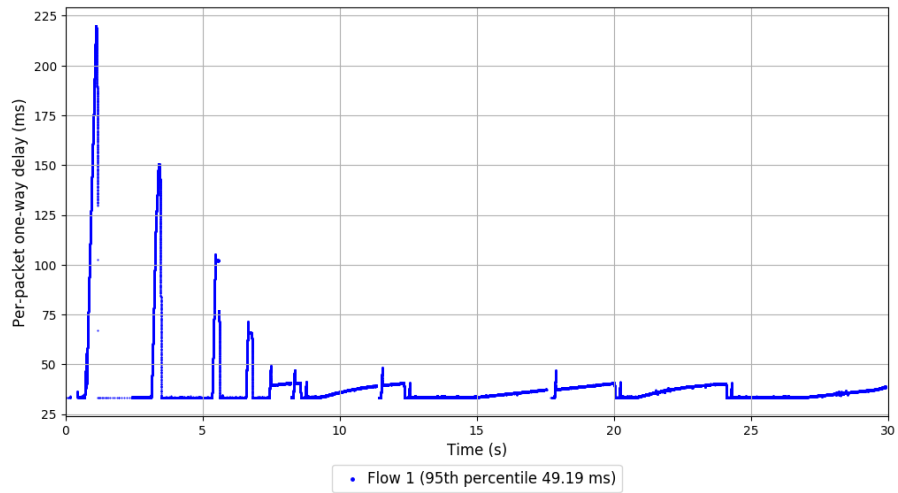
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-03-19 09:27:33
End at: 2019-03-19 09:28:03
Local clock offset: 0.326 ms
Remote clock offset: -1.64 ms


# Below is generated by plot.py at 2019-03-19 10:51:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.36 Mbit/s
95th percentile per-packet one-way delay: 49.188 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 77.36 Mbit/s
95th percentile per-packet one-way delay: 49.188 ms
Loss rate: 0.13%
```
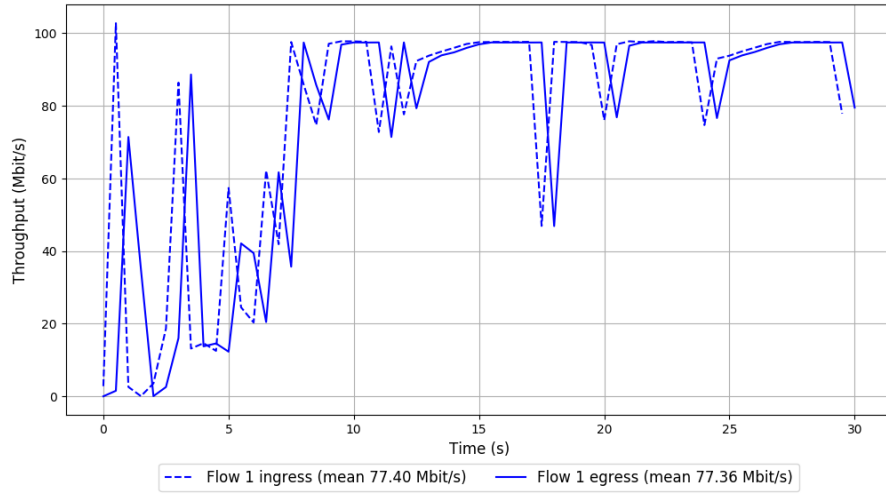
Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-03-19 09:52:05
End at: 2019-03-19 09:52:35
Local clock offset: -0.01 ms
Remote clock offset: -1.065 ms


# Below is generated by plot.py at 2019-03-19 10:51:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.94 Mbit/s
95th percentile per-packet one-way delay: 49.505 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 76.94 Mbit/s
95th percentile per-packet one-way delay: 49.505 ms
Loss rate: 0.31%
```
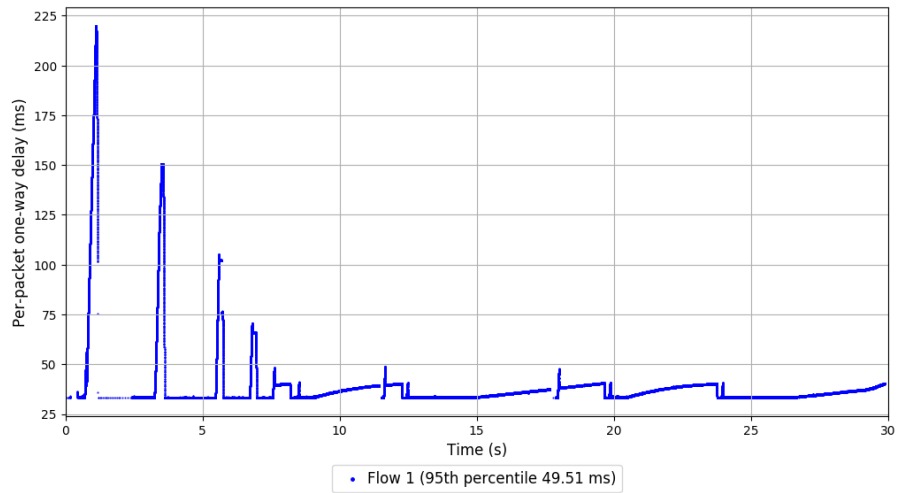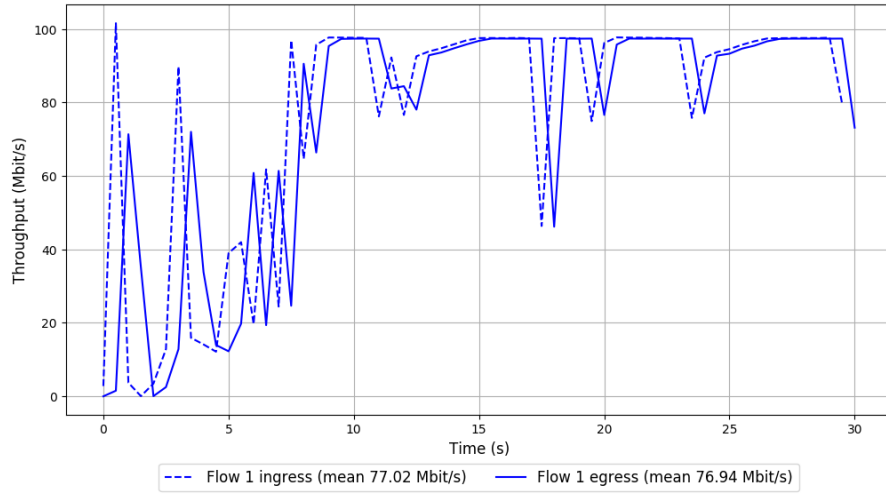
Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-03-19 10:16:36
End at: 2019-03-19 10:17:06
Local clock offset: -0.204 ms
Remote clock offset: -0.497 ms


# Below is generated by plot.py at 2019-03-19 10:51:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.59 Mbit/s
95th percentile per-packet one-way delay: 40.504 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 84.59 Mbit/s
95th percentile per-packet one-way delay: 40.504 ms
Loss rate: 0.25%
```
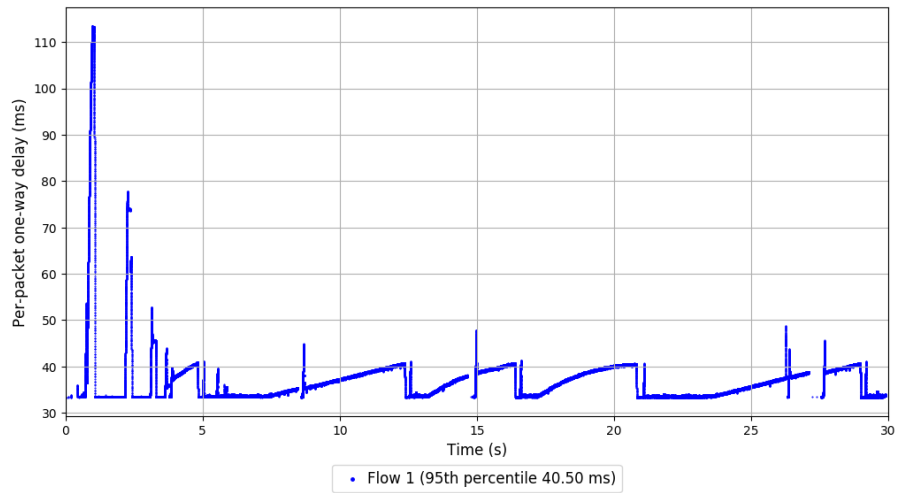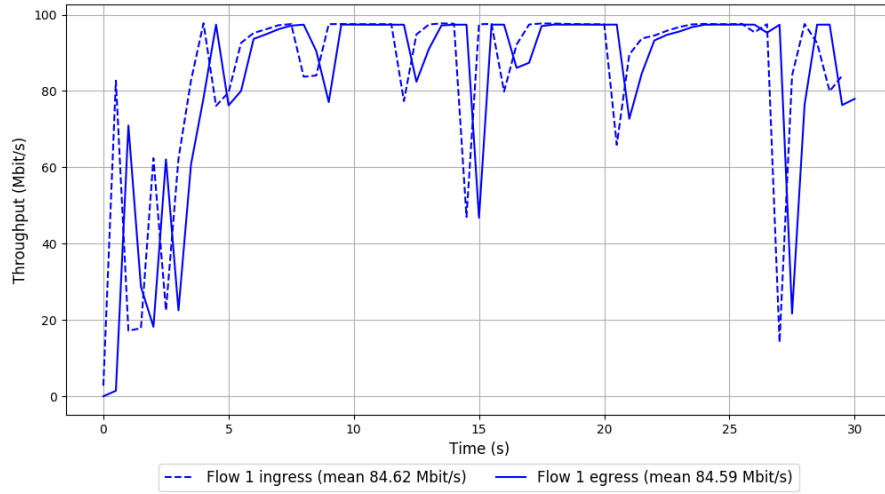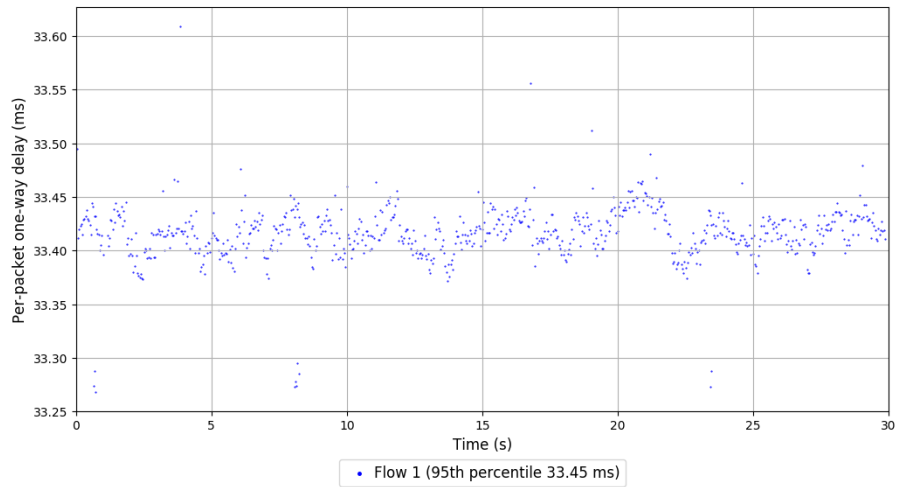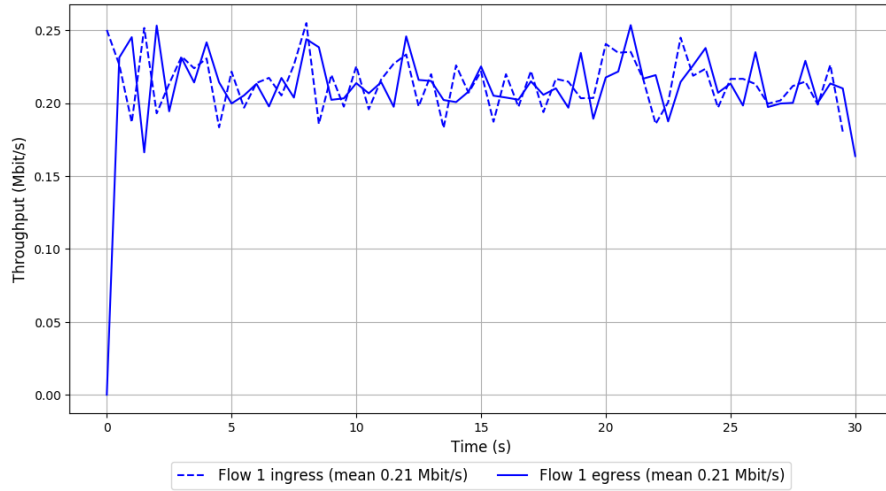
Run 5: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2019-03-19 08:57:12
End at: 2019-03-19 08:57:42
Local clock offset: 0.618 ms
Remote clock offset: -2.283 ms


# Below is generated by plot.py at 2019-03-19 10:51:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.449 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.449 ms
Loss rate: 0.26%
```

Run 1: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.21 Mbit/s) --- Flow 1 egress (mean 0.21 Mbit/s)

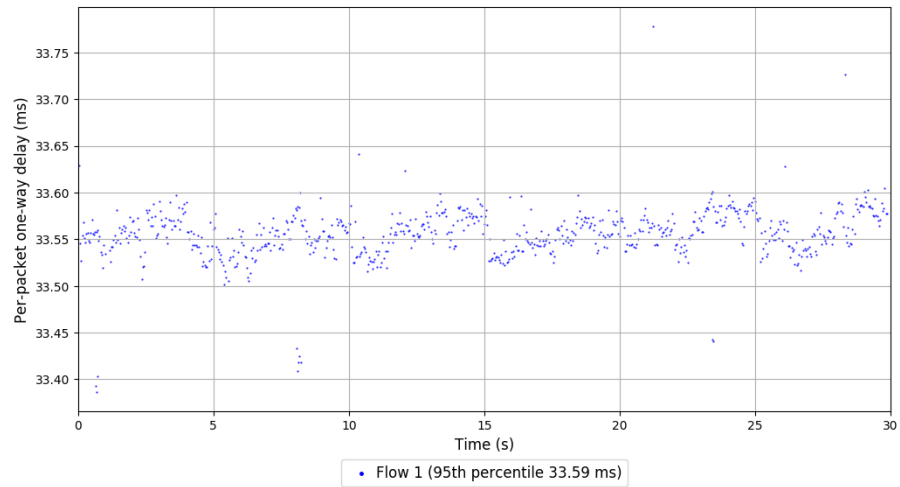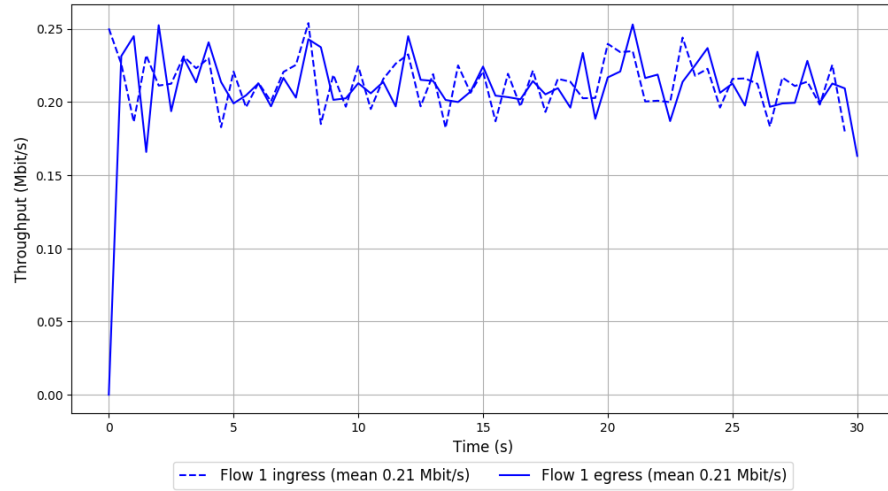Flow 1 (95th percentile 33.45 ms)

```
Run 2: Statistics of SCReAM

Start at: 2019-03-19 09:21:43
End at: 2019-03-19 09:22:13
Local clock offset: 0.539 ms
Remote clock offset: -1.734 ms


# Below is generated by plot.py at 2019-03-19 10:51:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.588 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.588 ms
Loss rate: 0.26%
```

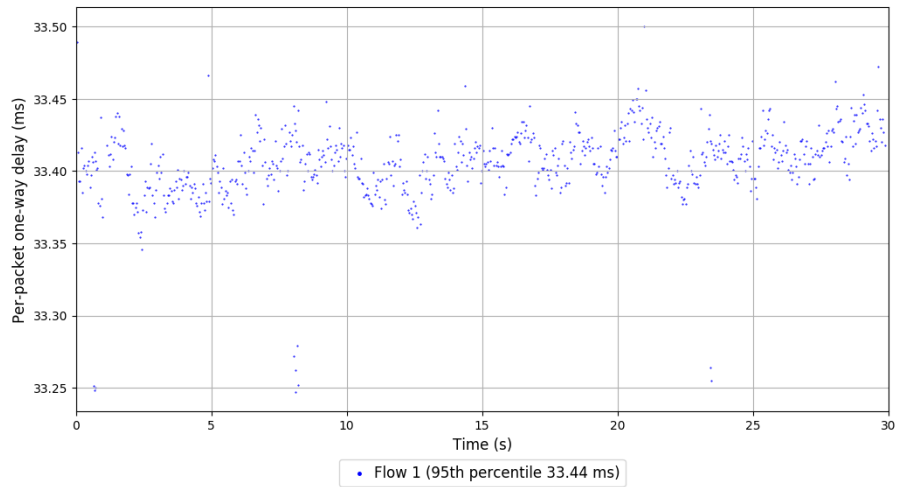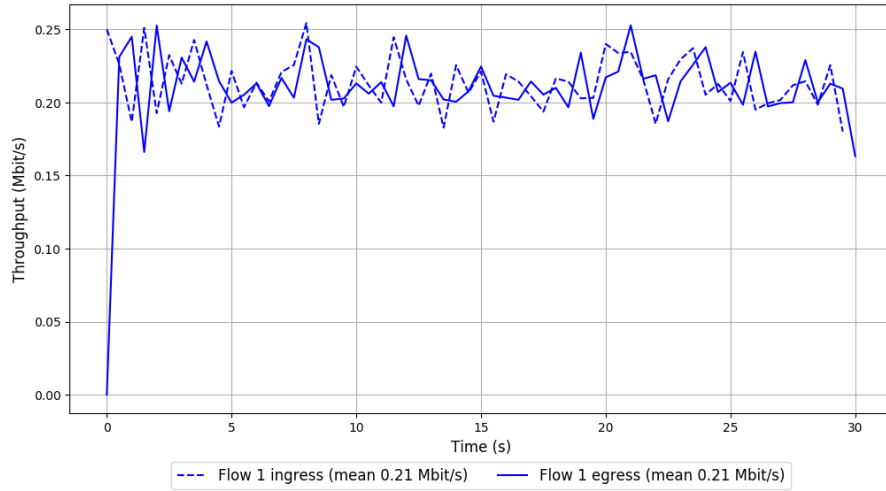Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-03-19 09:46:14
End at: 2019-03-19 09:46:44
Local clock offset: 0.098 ms
Remote clock offset: -1.207 ms


# Below is generated by plot.py at 2019-03-19 10:51:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.439 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.439 ms
Loss rate: 0.26%
```

Run 3: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.21 Mbit/s) —— Flow 1 egress (mean 0.21 Mbit/s)

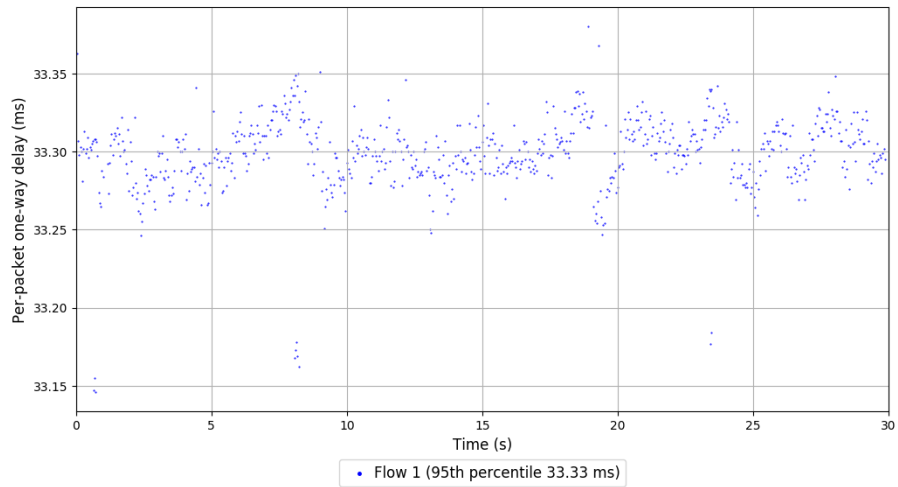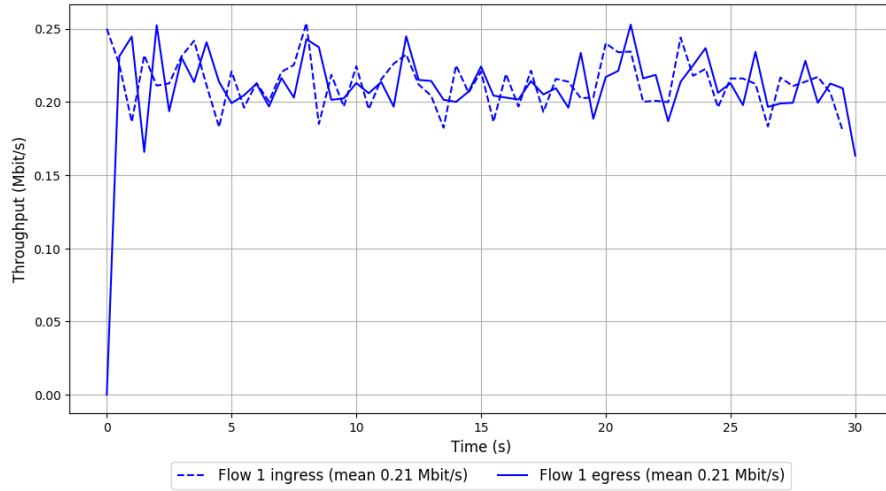• Flow 1 (95th percentile 33.44 ms)

```
Run 4: Statistics of SCReAM

Start at: 2019-03-19 10:10:46
End at: 2019-03-19 10:11:16
Local clock offset: -0.211 ms
Remote clock offset: -0.579 ms


# Below is generated by plot.py at 2019-03-19 10:51:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.329 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.329 ms
Loss rate: 0.26%
```

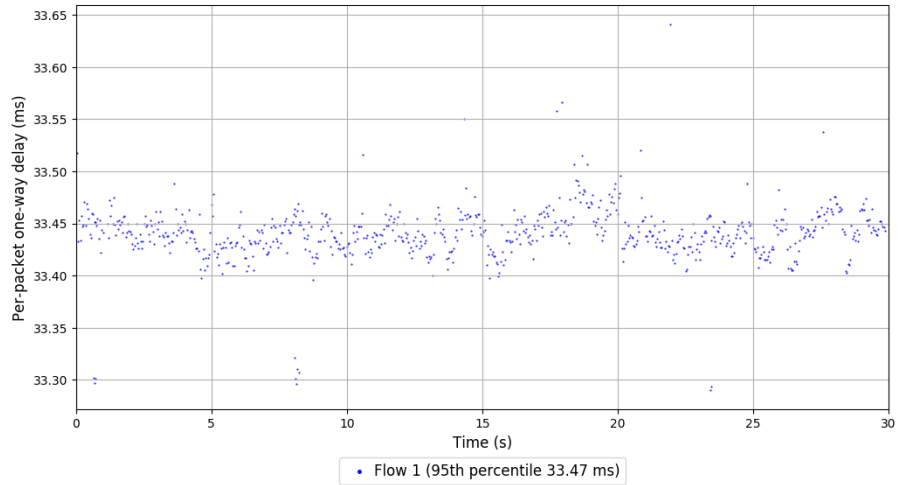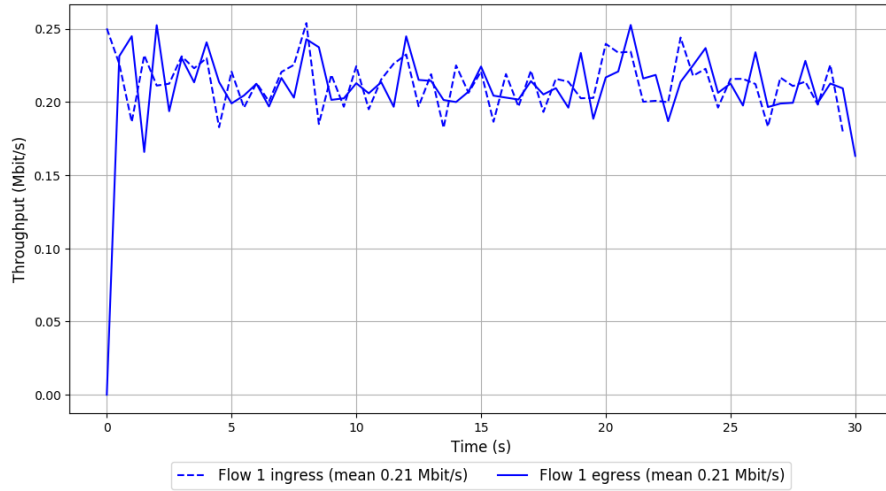# Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-03-19 10:35:17
End at: 2019-03-19 10:35:47
Local clock offset: 0.288 ms
Remote clock offset: -0.574 ms


# Below is generated by plot.py at 2019-03-19 10:51:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.474 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.474 ms
Loss rate: 0.26%
```

Run 5: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.21 Mbit/s) — — — Flow 1 egress (mean 0.21 Mbit/s)

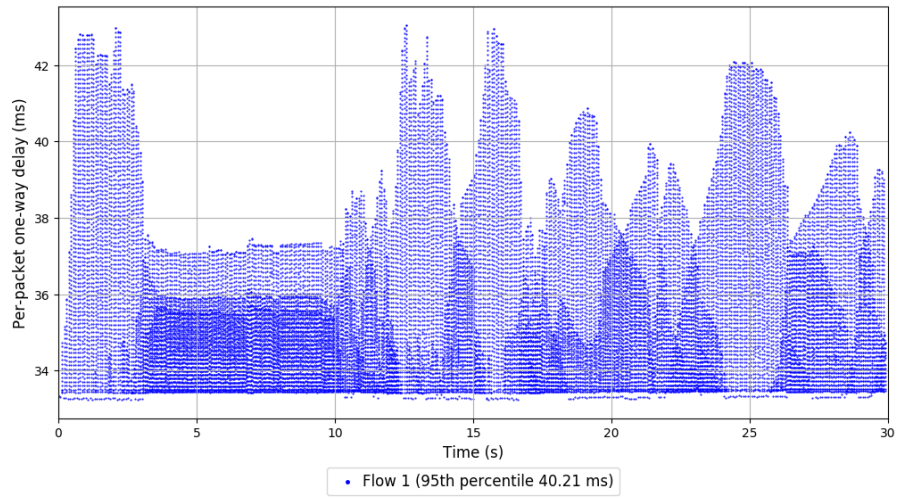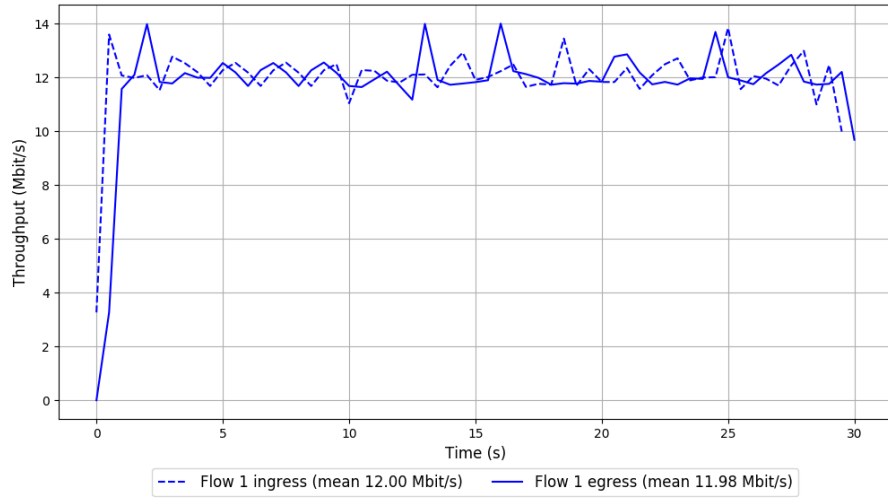Flow 1 (95th percentile 33.47 ms)

```
Run 1: Statistics of Sprout

Start at: 2019-03-19 08:39:40
End at: 2019-03-19 08:40:10
Local clock offset: 0.071 ms
Remote clock offset: -2.862 ms


# Below is generated by plot.py at 2019-03-19 10:51:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.98 Mbit/s
95th percentile per-packet one-way delay: 40.209 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 11.98 Mbit/s
95th percentile per-packet one-way delay: 40.209 ms
Loss rate: 0.23%
```

Run 1: Report of Sprout — Data Link

Flow 1 ingress (mean 12.00 Mbit/s) ---- Flow 1 egress (mean 11.98 Mbit/s)

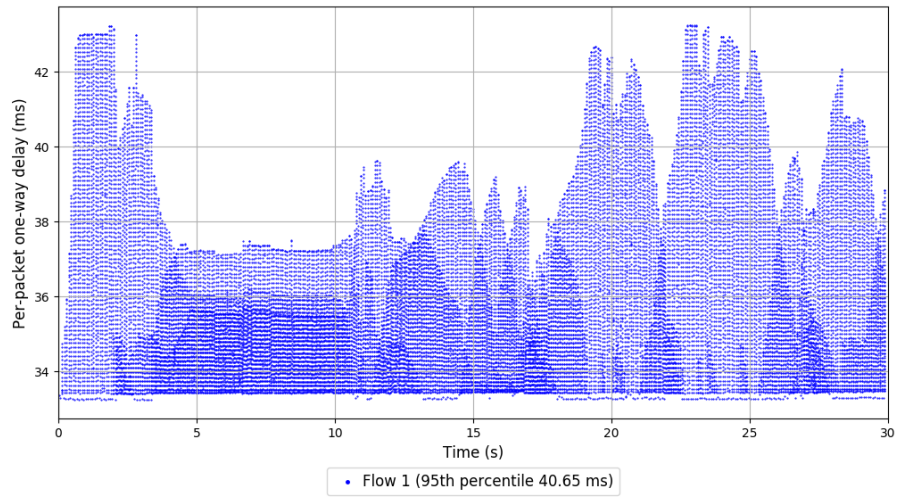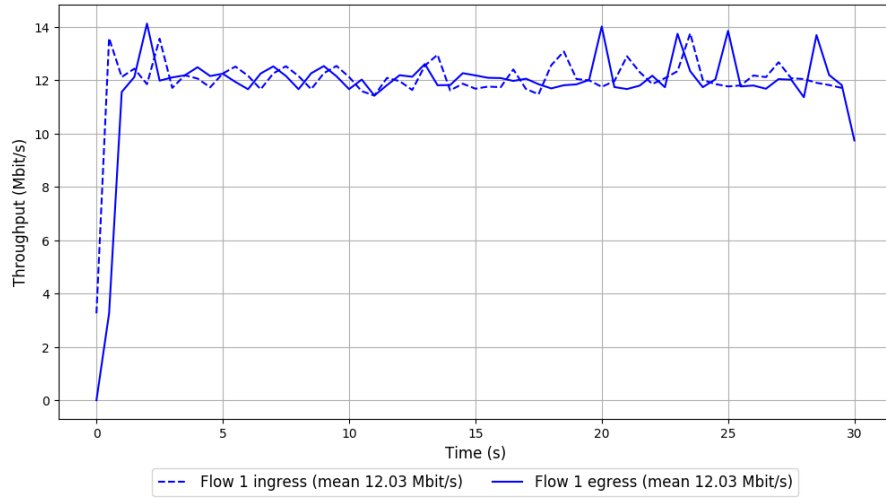Flow 1 (95th percentile 40.21 ms)

```
Run 2: Statistics of Sprout

Start at: 2019-03-19 09:04:12
End at: 2019-03-19 09:04:42
Local clock offset: 0.775 ms
Remote clock offset: -1.962 ms


# Below is generated by plot.py at 2019-03-19 10:51:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 40.647 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 40.647 ms
Loss rate: 0.27%
```

Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-03-19 09:28:43
End at: 2019-03-19 09:29:13
Local clock offset: 0.302 ms
Remote clock offset: -1.814 ms


# Below is generated by plot.py at 2019-03-19 10:51:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.06 Mbit/s
95th percentile per-packet one-way delay: 41.328 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 12.06 Mbit/s
95th percentile per-packet one-way delay: 41.328 ms
Loss rate: 0.27%
```
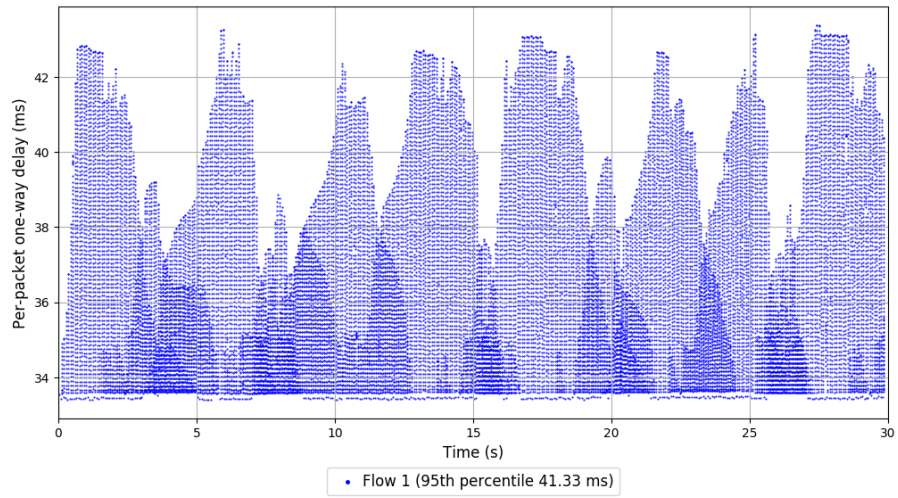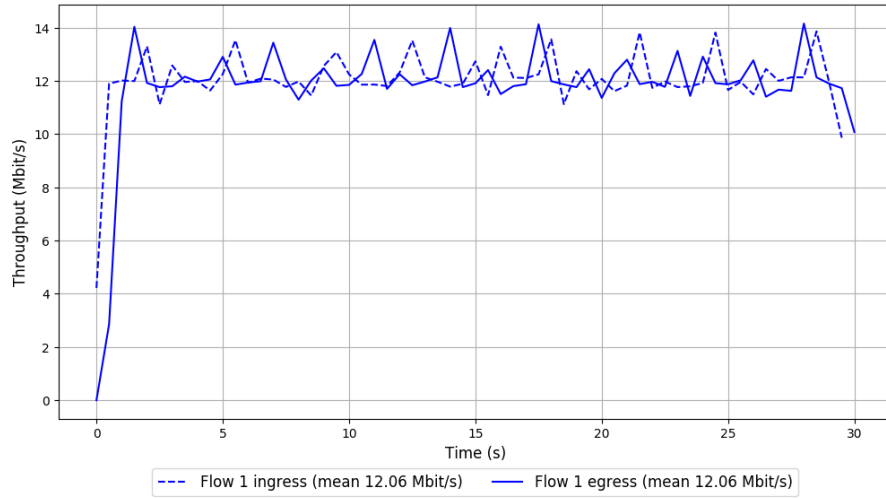
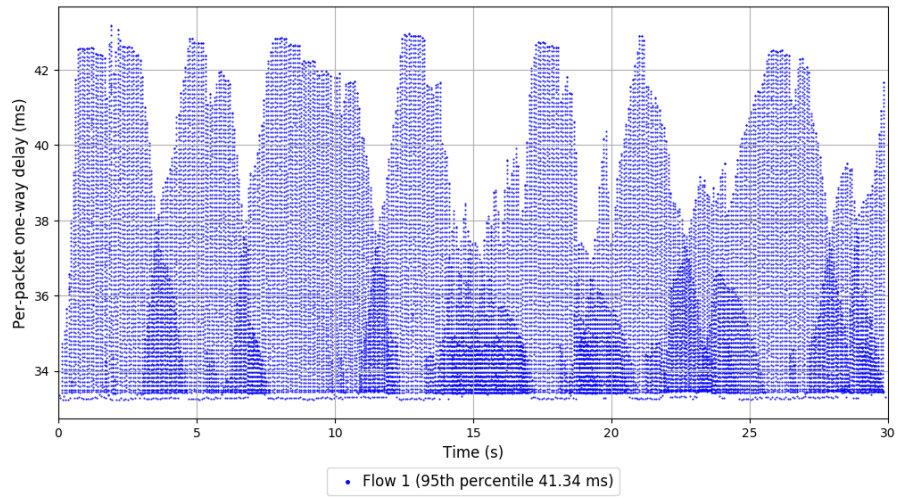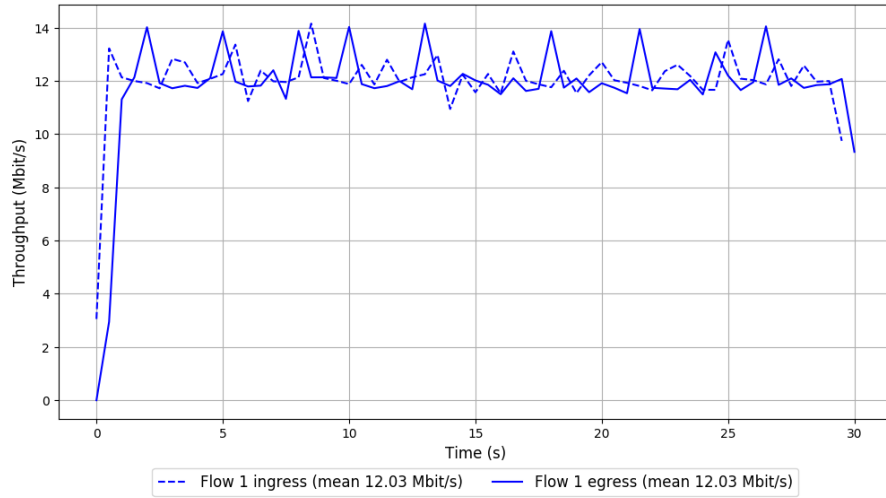Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-03-19 09:53:14
End at: 2019-03-19 09:53:44
Local clock offset: -0.033 ms
Remote clock offset: -1.061 ms


# Below is generated by plot.py at 2019-03-19 10:51:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 41.343 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 41.343 ms
Loss rate: 0.27%
```

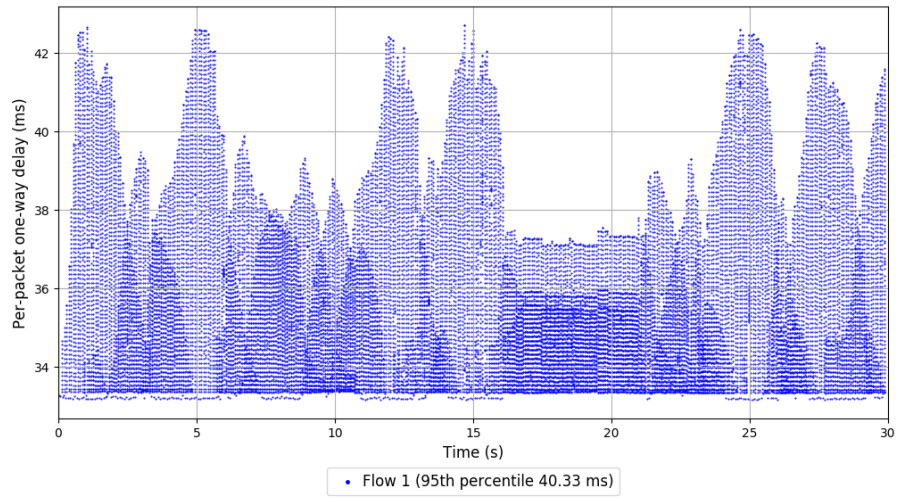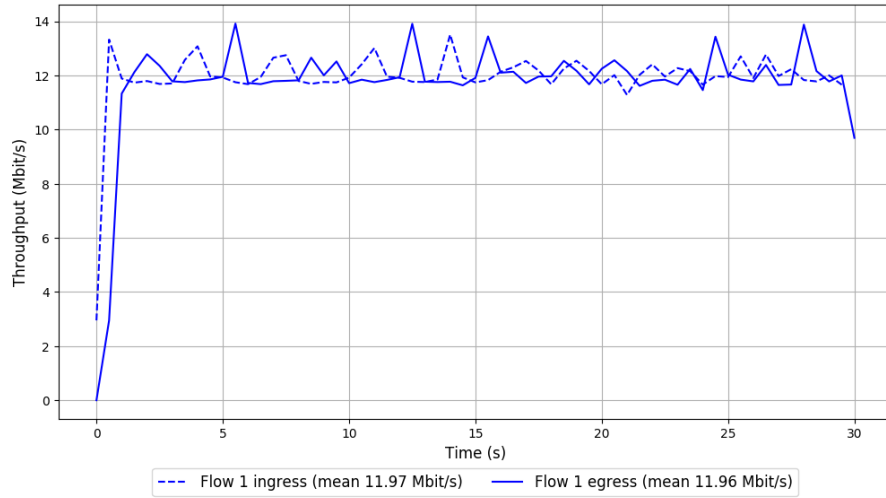Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2019-03-19 10:17:46
End at: 2019-03-19 10:18:16
Local clock offset: -0.151 ms
Remote clock offset: -0.438 ms


# Below is generated by plot.py at 2019-03-19 10:51:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.96 Mbit/s
95th percentile per-packet one-way delay: 40.326 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 11.96 Mbit/s
95th percentile per-packet one-way delay: 40.326 ms
Loss rate: 0.27%
```

Run 5: Report of Sprout — Data Link

Flow 1 ingress (mean 11.97 Mbit/s) --- Flow 1 egress (mean 11.96 Mbit/s)

• Flow 1 (95th percentile 40.33 ms)

```
Run 1: Statistics of TaoVA-100x

Start at: 2019-03-19 08:55:59
End at: 2019-03-19 08:56:29
Local clock offset: 0.577 ms
Remote clock offset: -2.257 ms


# Below is generated by plot.py at 2019-03-19 10:53:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.21 Mbit/s
95th percentile per-packet one-way delay: 44.649 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 88.21 Mbit/s
95th percentile per-packet one-way delay: 44.649 ms
Loss rate: 0.20%
```
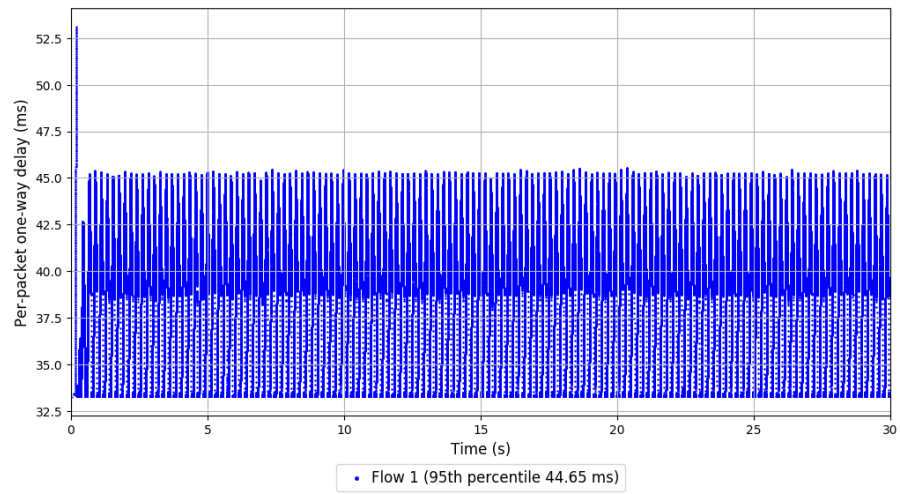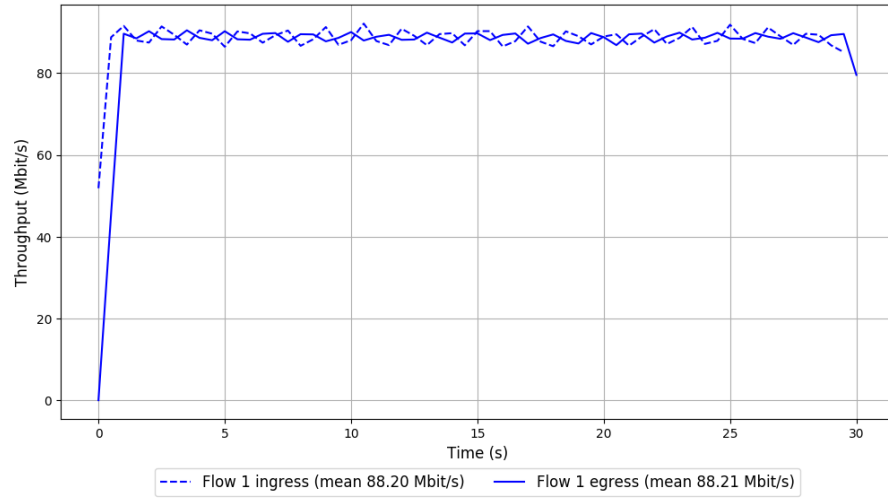
Run 1: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 88.20 Mbit/s)   Flow 1 egress (mean 88.21 Mbit/s)

Flow 1 (95th percentile 44.65 ms)

```
Run 2: Statistics of TaoVA-100x

Start at: 2019-03-19 09:20:30
End at: 2019-03-19 09:21:00
Local clock offset: 0.615 ms
Remote clock offset: -1.517 ms


# Below is generated by plot.py at 2019-03-19 10:53:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.35 Mbit/s
95th percentile per-packet one-way delay: 44.659 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 88.35 Mbit/s
95th percentile per-packet one-way delay: 44.659 ms
Loss rate: 0.24%
```
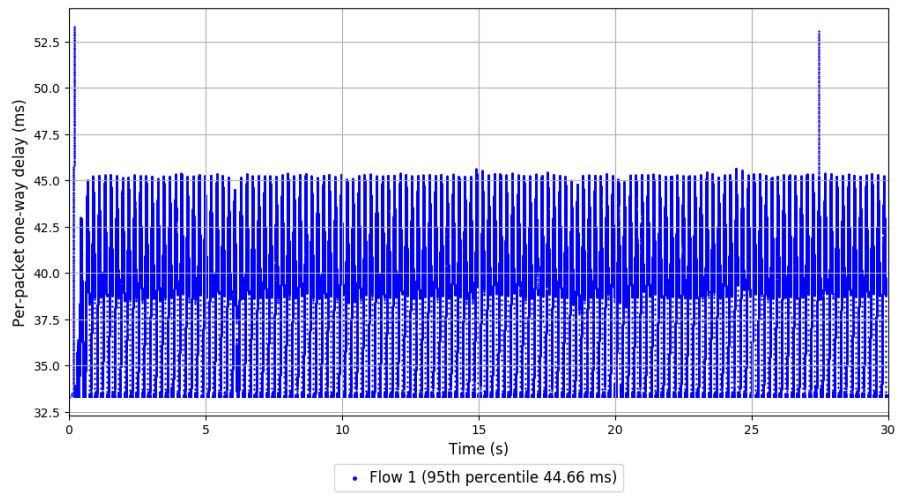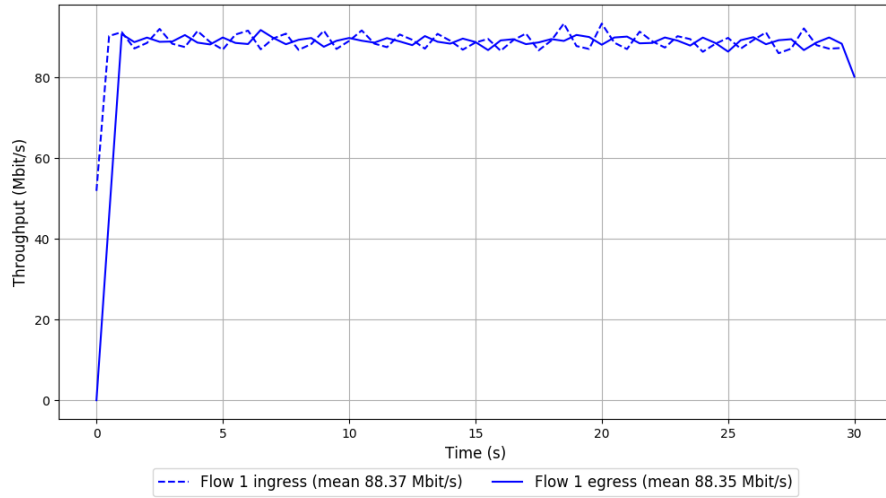
Run 2: Report of TaoVA-100x — Data Link

```
Run 3: Statistics of TaoVA-100x

Start at: 2019-03-19 09:45:01
End at: 2019-03-19 09:45:31
Local clock offset: 0.098 ms
Remote clock offset: -1.295 ms


# Below is generated by plot.py at 2019-03-19 10:53:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.27 Mbit/s
95th percentile per-packet one-way delay: 44.772 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 88.27 Mbit/s
95th percentile per-packet one-way delay: 44.772 ms
Loss rate: 0.21%
```
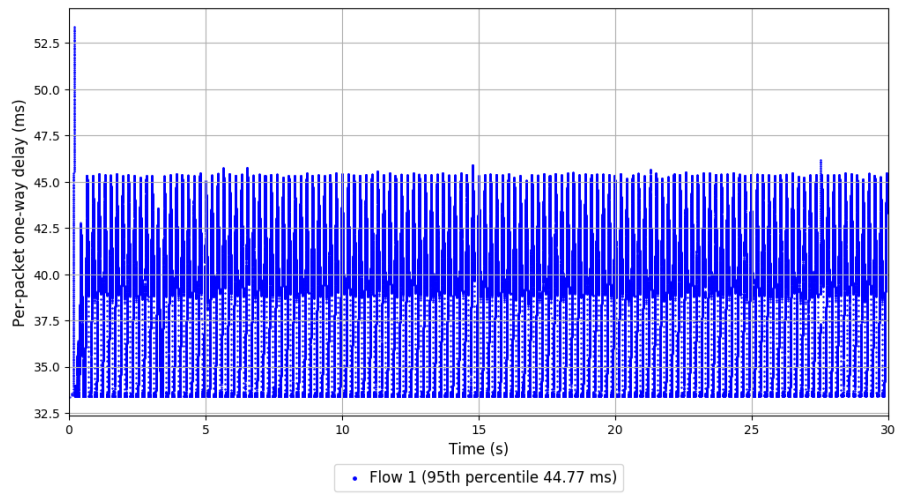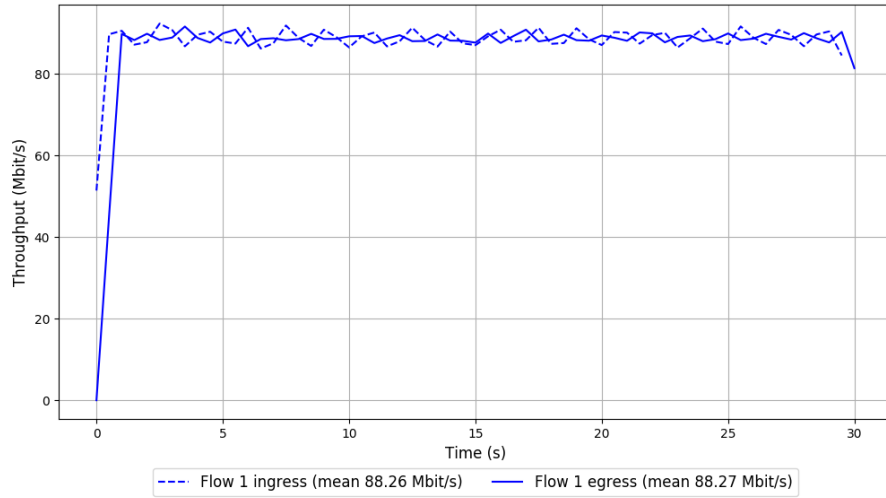
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 88.26 Mbit/s)   Flow 1 egress (mean 88.27 Mbit/s)

Flow 1 (95th percentile 44.77 ms)

```
Run 4: Statistics of TaoVA-100x

Start at: 2019-03-19 10:09:33
End at: 2019-03-19 10:10:03
Local clock offset: -0.202 ms
Remote clock offset: -0.824 ms


# Below is generated by plot.py at 2019-03-19 10:53:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.31 Mbit/s
95th percentile per-packet one-way delay: 44.805 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 88.31 Mbit/s
95th percentile per-packet one-way delay: 44.805 ms
Loss rate: 0.27%
```
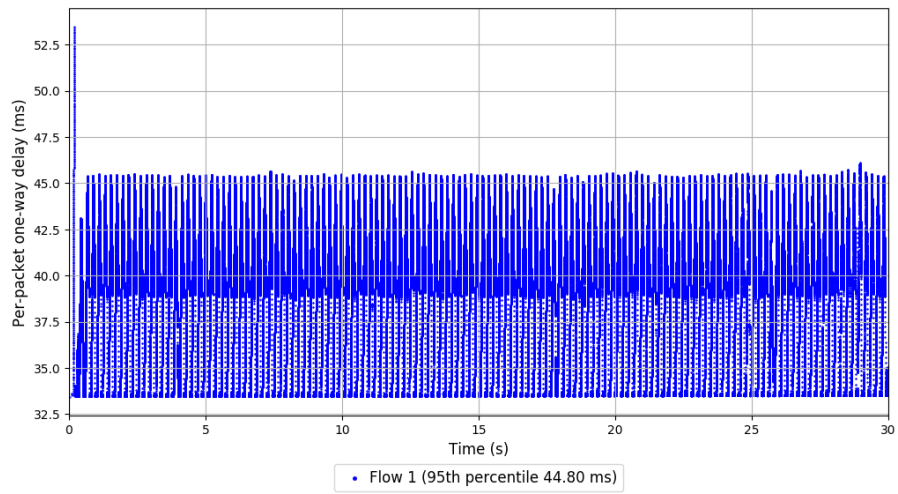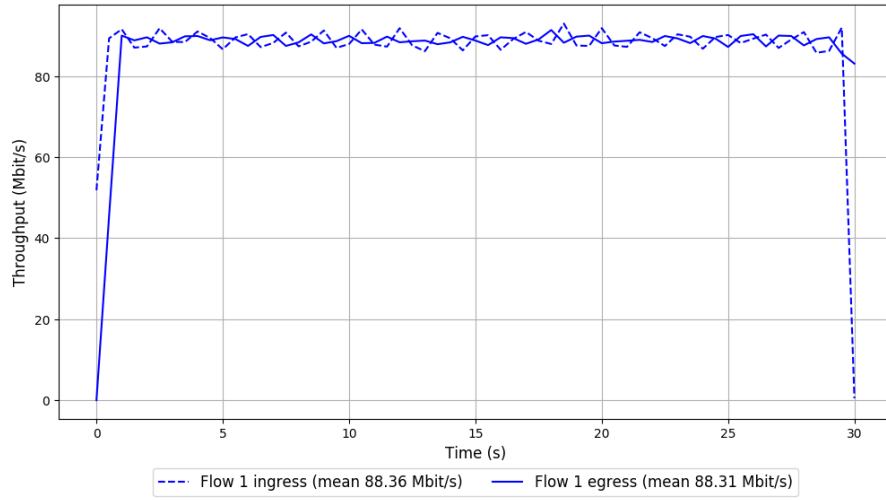
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 88.36 Mbit/s)   Flow 1 egress (mean 88.31 Mbit/s)

Flow 1 (95th percentile 44.80 ms)

```
Run 5: Statistics of TaoVA-100x

Start at: 2019-03-19 10:34:04
End at: 2019-03-19 10:34:34
Local clock offset: 0.277 ms
Remote clock offset: -0.517 ms


# Below is generated by plot.py at 2019-03-19 10:53:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.20 Mbit/s
95th percentile per-packet one-way delay: 44.742 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 88.20 Mbit/s
95th percentile per-packet one-way delay: 44.742 ms
Loss rate: 0.20%
```
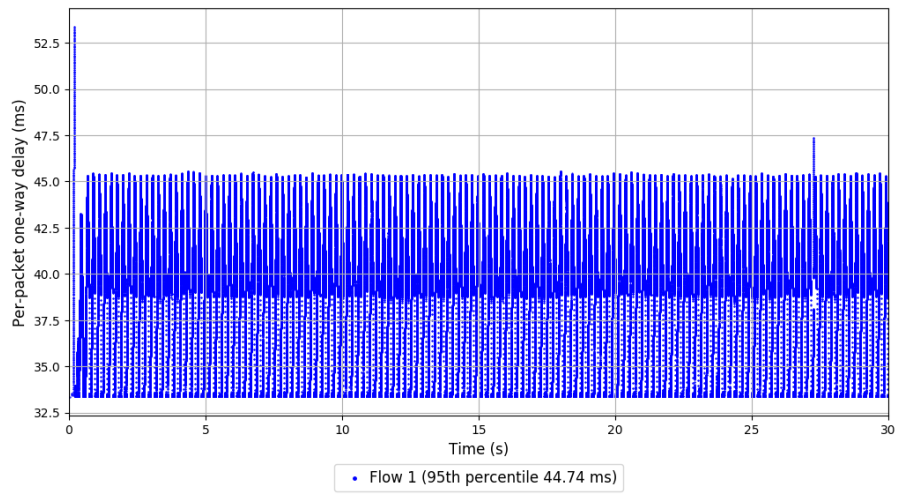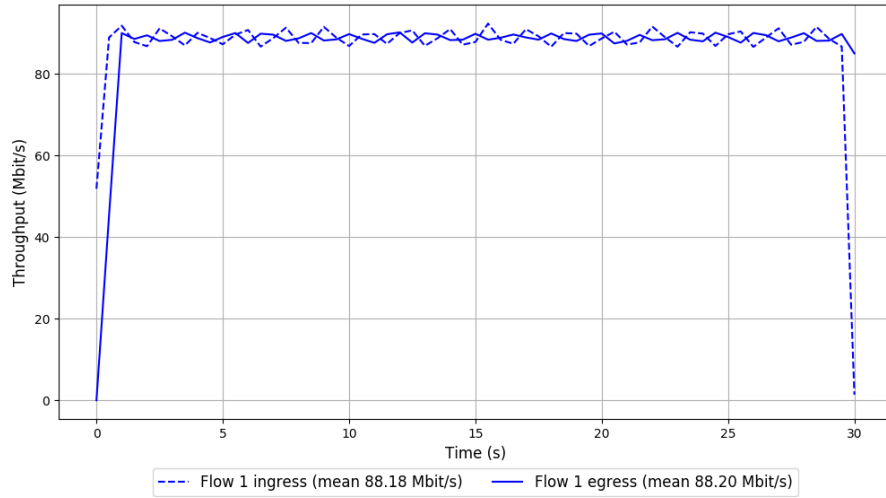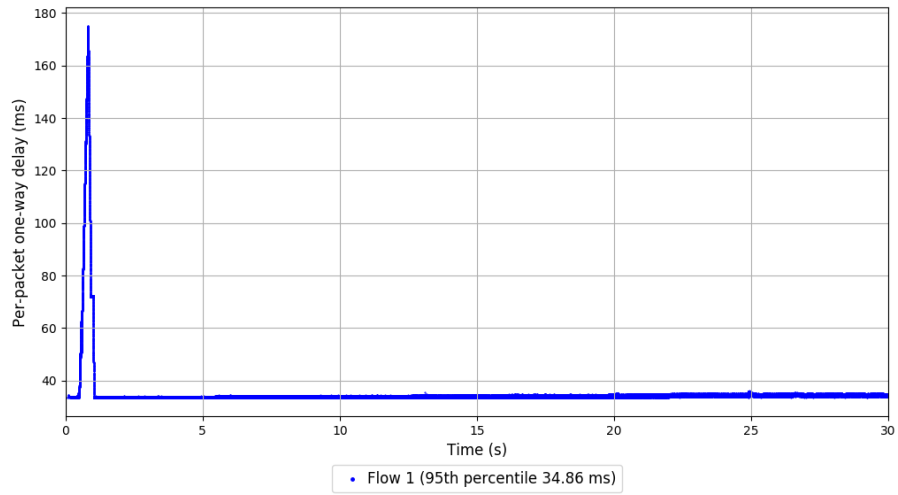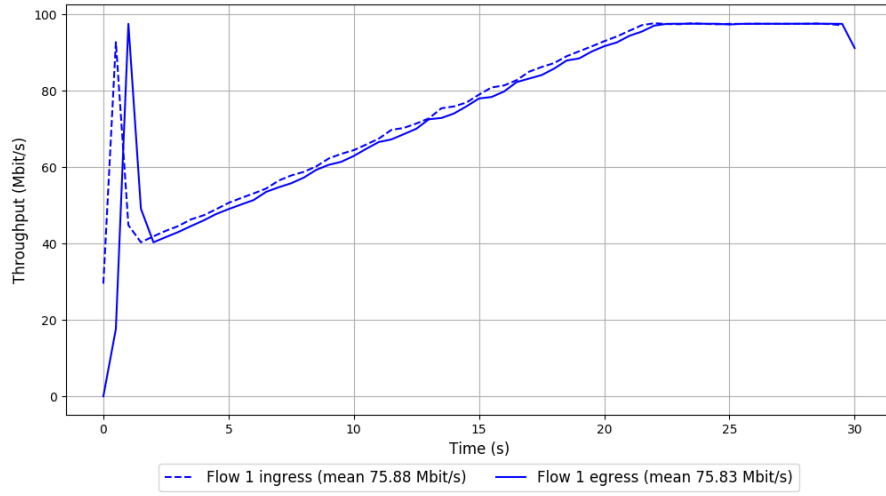
Run 5: Report of TaoVA-100x — Data Link

```
Run 1: Statistics of TCP Vegas

Start at: 2019-03-19 08:59:30
End at: 2019-03-19 09:00:00
Local clock offset: 0.674 ms
Remote clock offset: -2.355 ms


# Below is generated by plot.py at 2019-03-19 10:53:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.83 Mbit/s
95th percentile per-packet one-way delay: 34.862 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 75.83 Mbit/s
95th percentile per-packet one-way delay: 34.862 ms
Loss rate: 0.28%
```

Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-03-19 09:24:00
End at: 2019-03-19 09:24:30
Local clock offset: 0.433 ms
Remote clock offset: -1.571 ms


# Below is generated by plot.py at 2019-03-19 10:53:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.89 Mbit/s
95th percentile per-packet one-way delay: 34.747 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 86.89 Mbit/s
95th percentile per-packet one-way delay: 34.747 ms
Loss rate: 0.25%
```
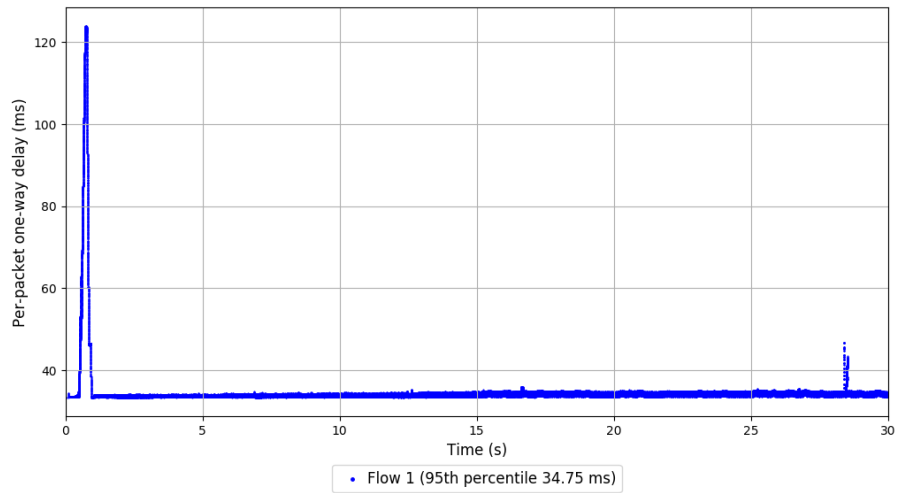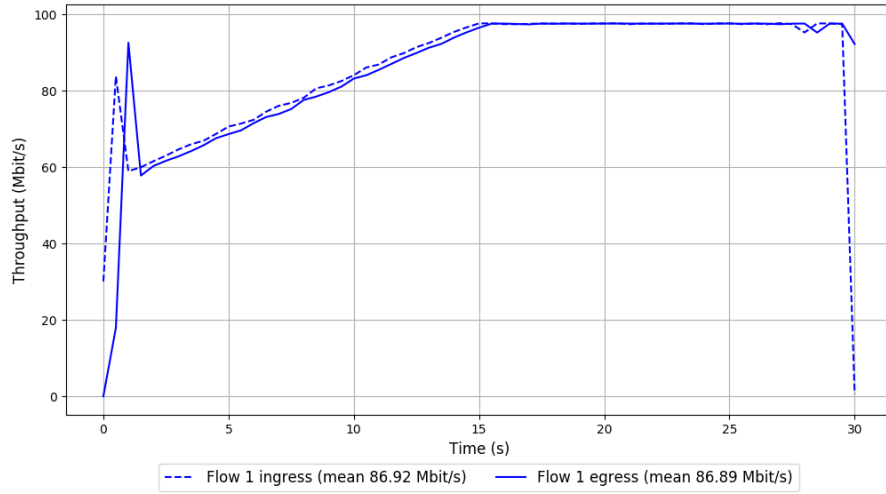
Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 86.92 Mbit/s)   Flow 1 egress (mean 86.89 Mbit/s)

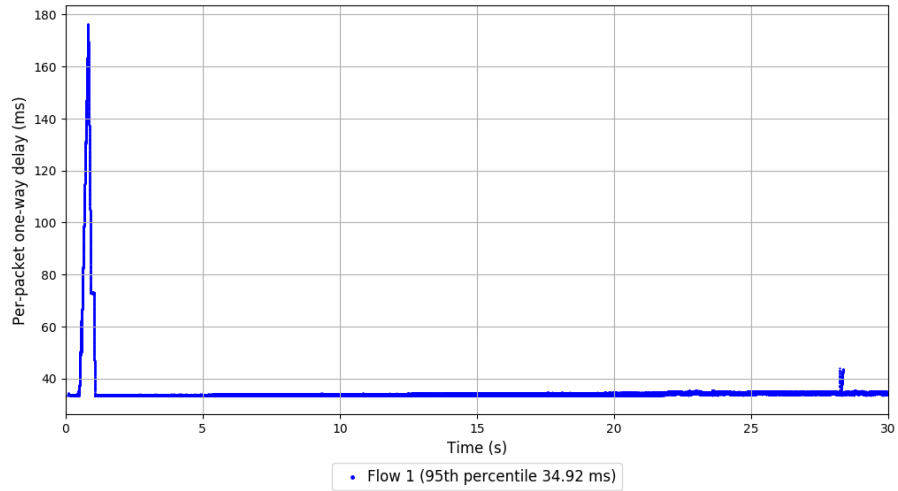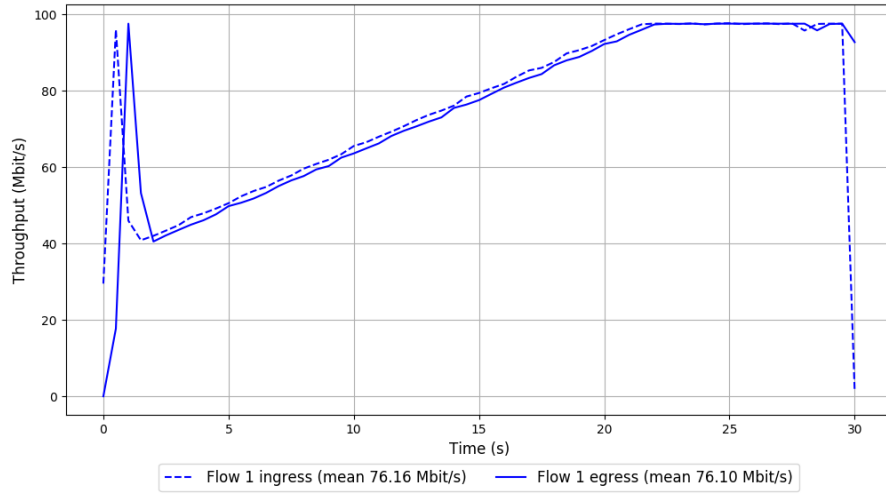Flow 1 (95th percentile 34.75 ms)

```
Run 3: Statistics of TCP Vegas

Start at: 2019-03-19 09:48:32
End at: 2019-03-19 09:49:02
Local clock offset: 0.029 ms
Remote clock offset: -1.238 ms


# Below is generated by plot.py at 2019-03-19 10:53:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.10 Mbit/s
95th percentile per-packet one-way delay: 34.917 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 76.10 Mbit/s
95th percentile per-packet one-way delay: 34.917 ms
Loss rate: 0.28%
```
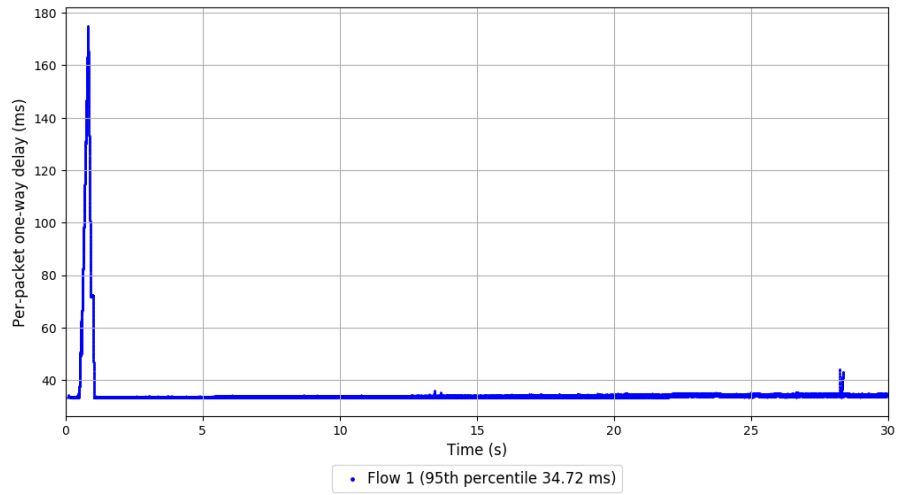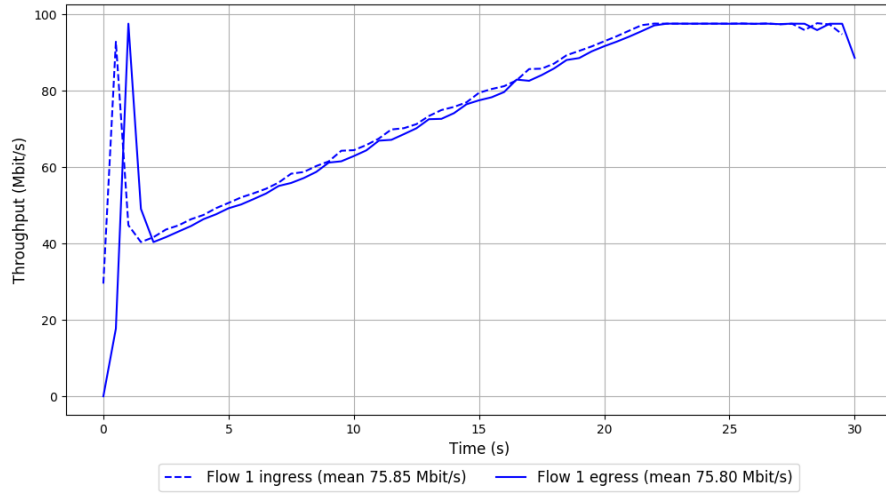
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2019-03-19 10:13:03
End at: 2019-03-19 10:13:33
Local clock offset: -0.22 ms
Remote clock offset: -0.581 ms


# Below is generated by plot.py at 2019-03-19 10:53:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.80 Mbit/s
95th percentile per-packet one-way delay: 34.716 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 75.80 Mbit/s
95th percentile per-packet one-way delay: 34.716 ms
Loss rate: 0.28%
```
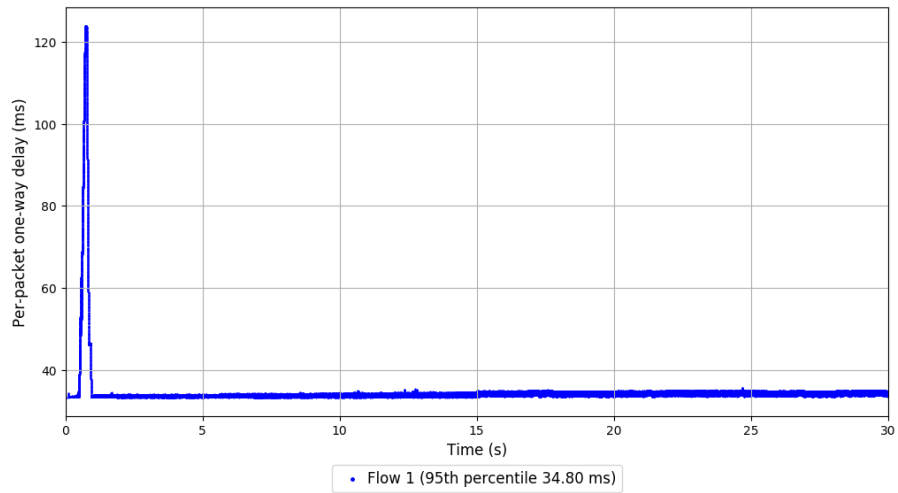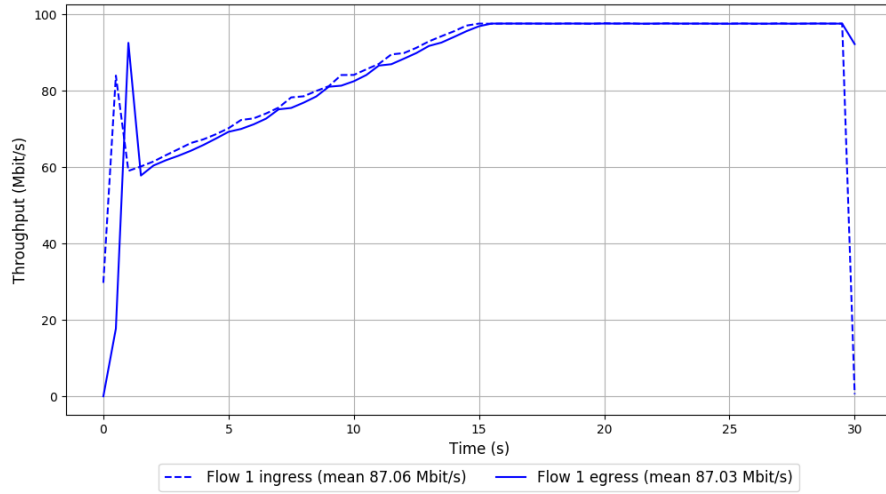
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2019-03-19 10:37:35
End at: 2019-03-19 10:38:05
Local clock offset: 0.31 ms
Remote clock offset: -0.532 ms


# Below is generated by plot.py at 2019-03-19 10:53:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.03 Mbit/s
95th percentile per-packet one-way delay: 34.802 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 87.03 Mbit/s
95th percentile per-packet one-way delay: 34.802 ms
Loss rate: 0.24%
```
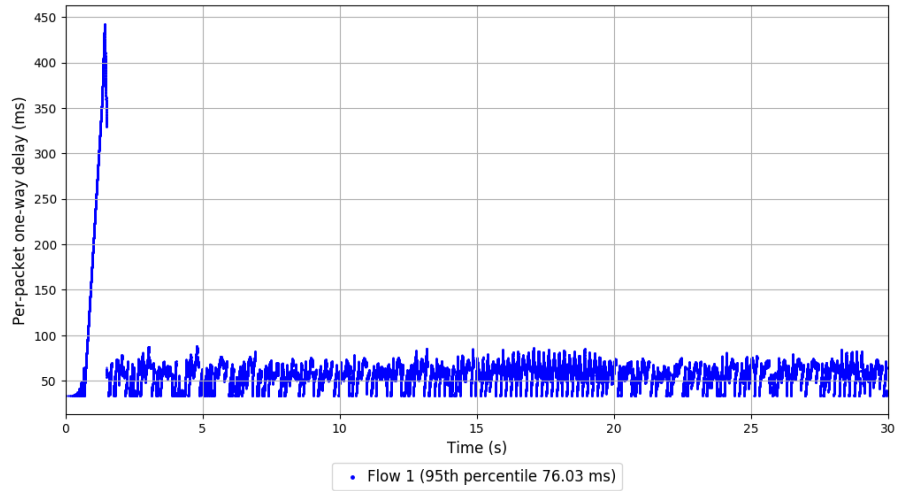
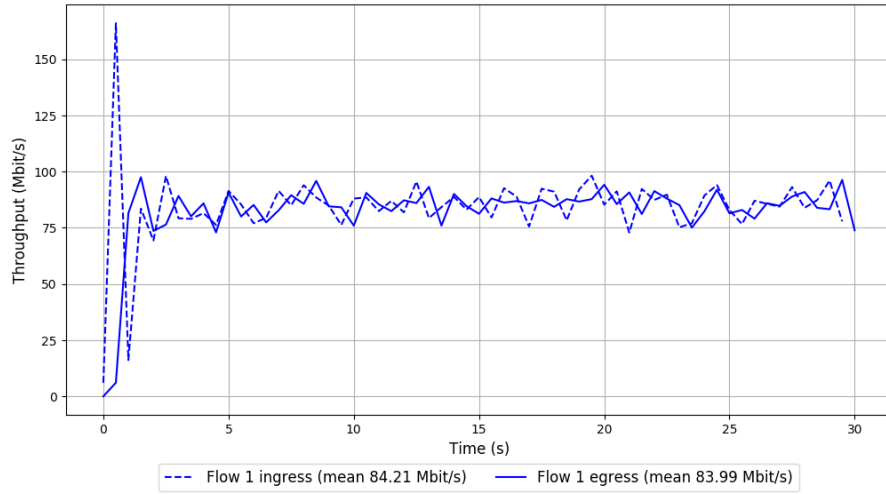Run 5: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2019-03-19 08:43:07
End at: 2019-03-19 08:43:37
Local clock offset: 0.075 ms
Remote clock offset: -2.753 ms


# Below is generated by plot.py at 2019-03-19 10:53:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.99 Mbit/s
95th percentile per-packet one-way delay: 76.031 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 83.99 Mbit/s
95th percentile per-packet one-way delay: 76.031 ms
Loss rate: 0.48%
```

Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-03-19 09:07:39
End at: 2019-03-19 09:08:09
Local clock offset: 0.827 ms
Remote clock offset: -1.772 ms


# Below is generated by plot.py at 2019-03-19 10:54:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.87 Mbit/s
95th percentile per-packet one-way delay: 75.078 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 85.87 Mbit/s
95th percentile per-packet one-way delay: 75.078 ms
Loss rate: 0.25%
```
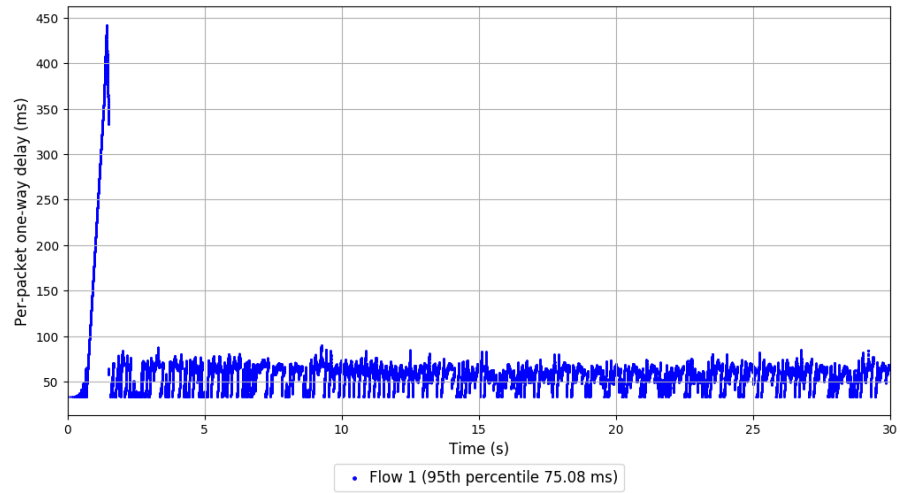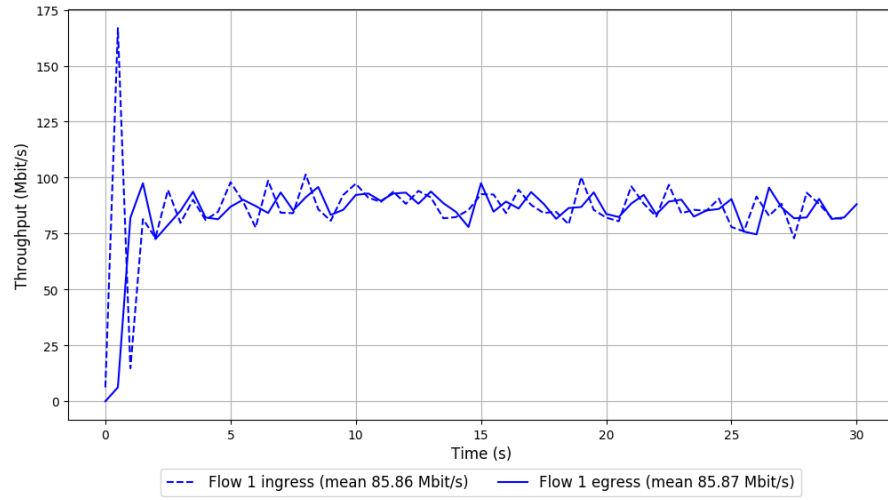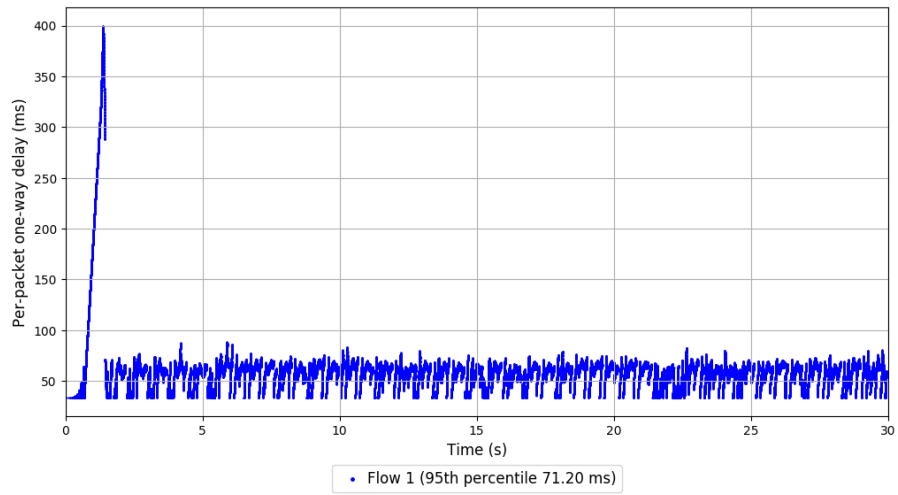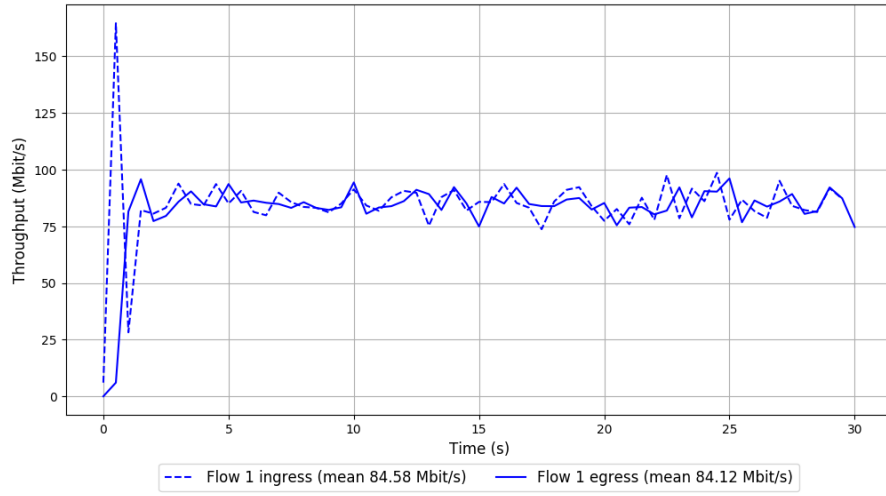
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-03-19 09:32:10
End at: 2019-03-19 09:32:40
Local clock offset: 0.22 ms
Remote clock offset: -1.642 ms


# Below is generated by plot.py at 2019-03-19 10:54:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.12 Mbit/s
95th percentile per-packet one-way delay: 71.203 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 84.12 Mbit/s
95th percentile per-packet one-way delay: 71.203 ms
Loss rate: 0.74%
```

Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 84.58 Mbit/s)　　Flow 1 egress (mean 84.12 Mbit/s)

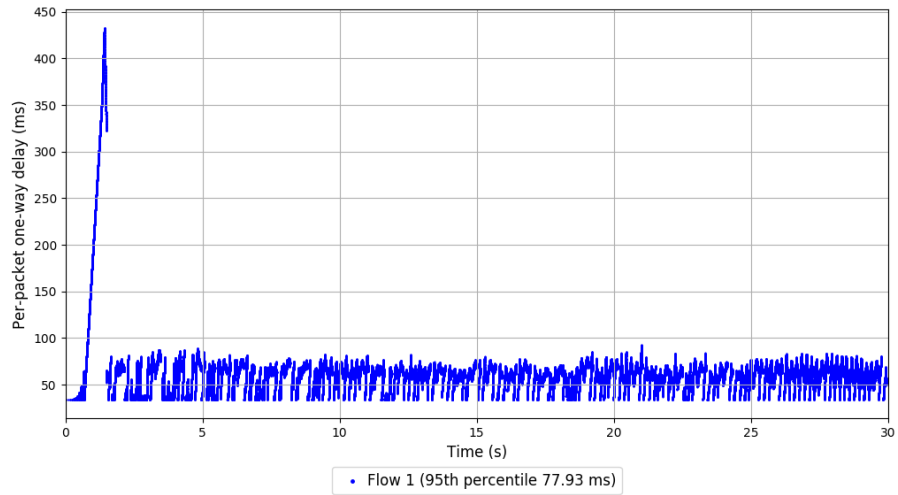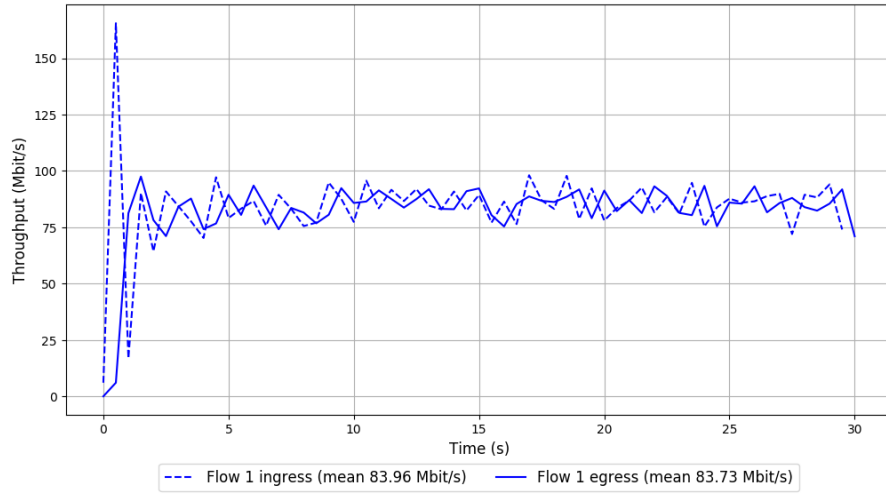Flow 1 (95th percentile 71.20 ms)

```
Run 4: Statistics of Verus

Start at: 2019-03-19 09:56:41
End at: 2019-03-19 09:57:11
Local clock offset: -0.081 ms
Remote clock offset: -1.177 ms


# Below is generated by plot.py at 2019-03-19 10:54:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.73 Mbit/s
95th percentile per-packet one-way delay: 77.928 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 83.73 Mbit/s
95th percentile per-packet one-way delay: 77.928 ms
Loss rate: 0.48%
```
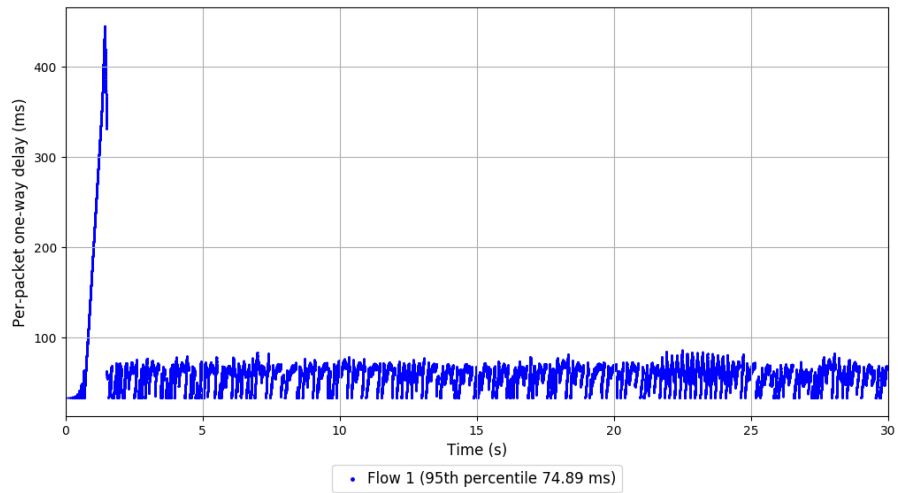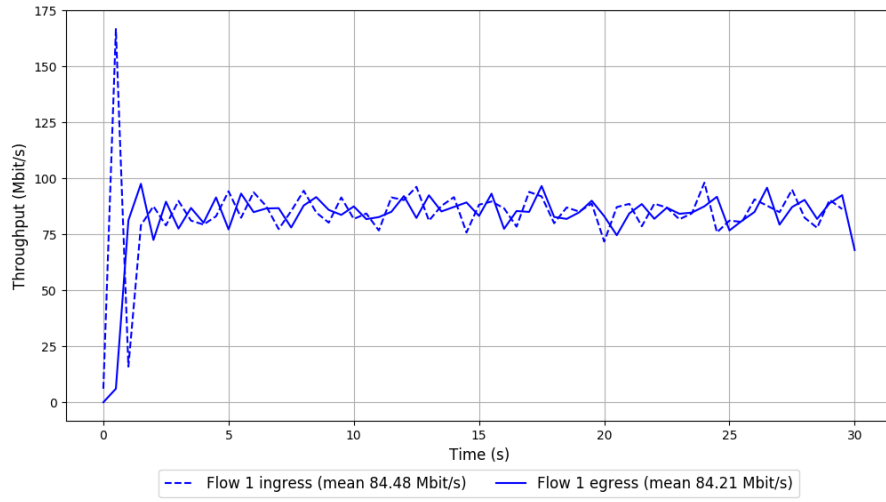
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-03-19 10:21:13
End at: 2019-03-19 10:21:43
Local clock offset: 0.013 ms
Remote clock offset: -0.454 ms


# Below is generated by plot.py at 2019-03-19 10:54:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.21 Mbit/s
95th percentile per-packet one-way delay: 74.889 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 84.21 Mbit/s
95th percentile per-packet one-way delay: 74.889 ms
Loss rate: 0.52%
```

Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 84.48 Mbit/s) ----- Flow 1 egress (mean 84.21 Mbit/s)

Flow 1 (95th percentile 74.89 ms)

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-03-19 08:58:18
End at: 2019-03-19 08:58:48
Local clock offset: 0.638 ms
Remote clock offset: -2.231 ms


# Below is generated by plot.py at 2019-03-19 10:54:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.43 Mbit/s
95th percentile per-packet one-way delay: 34.549 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 85.43 Mbit/s
95th percentile per-packet one-way delay: 34.549 ms
Loss rate: 0.22%
```
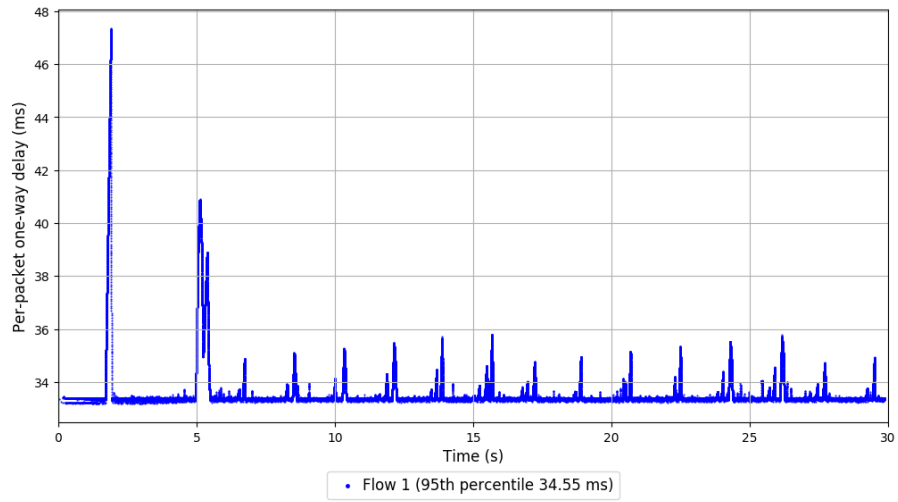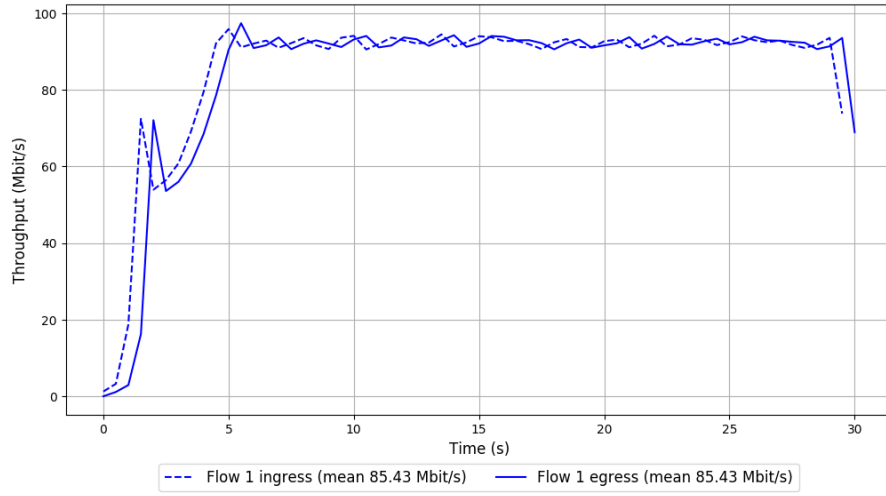
Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-03-19 09:22:49
End at: 2019-03-19 09:23:19
Local clock offset: 0.487 ms
Remote clock offset: -1.546 ms


# Below is generated by plot.py at 2019-03-19 10:54:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.52 Mbit/s
95th percentile per-packet one-way delay: 34.913 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 85.52 Mbit/s
95th percentile per-packet one-way delay: 34.913 ms
Loss rate: 0.23%
```
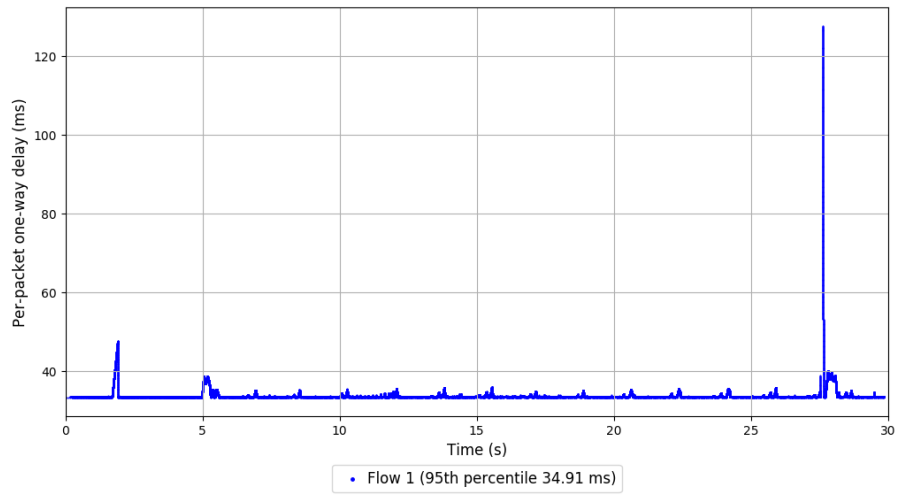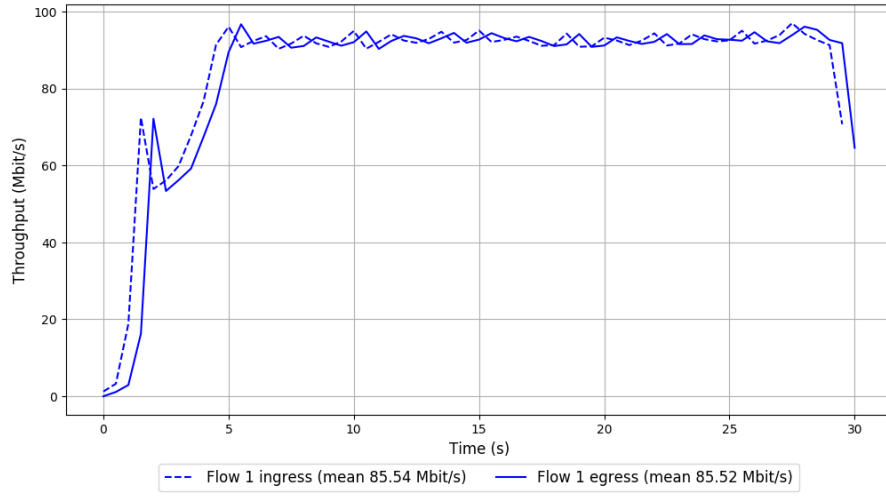
Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-03-19 09:47:21
End at: 2019-03-19 09:47:51
Local clock offset: 0.052 ms
Remote clock offset: -1.178 ms


# Below is generated by plot.py at 2019-03-19 10:54:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.50 Mbit/s
95th percentile per-packet one-way delay: 34.554 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 85.50 Mbit/s
95th percentile per-packet one-way delay: 34.554 ms
Loss rate: 0.23%
```
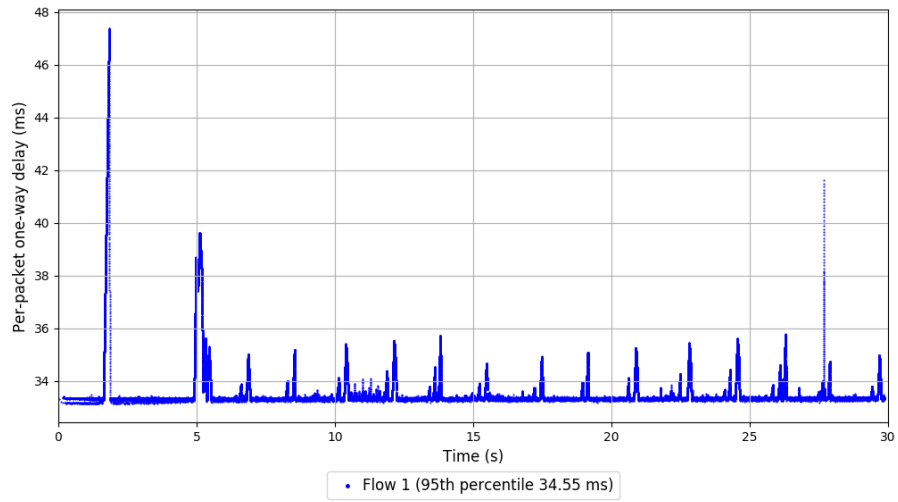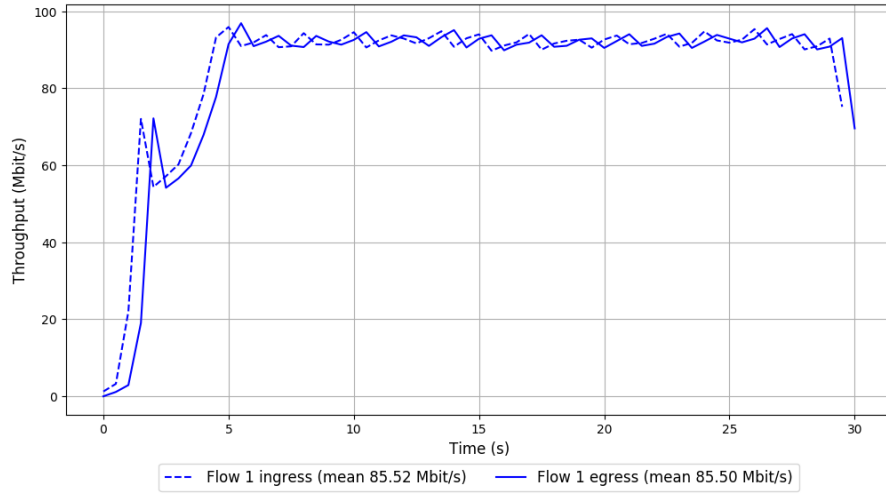
Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 85.52 Mbit/s)   Flow 1 egress (mean 85.50 Mbit/s)

Flow 1 (95th percentile 34.55 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-03-19 10:11:52
End at: 2019-03-19 10:12:22
Local clock offset: -0.22 ms
Remote clock offset: -0.622 ms


# Below is generated by plot.py at 2019-03-19 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.89 Mbit/s
95th percentile per-packet one-way delay: 35.386 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 84.89 Mbit/s
95th percentile per-packet one-way delay: 35.386 ms
Loss rate: 0.23%
```
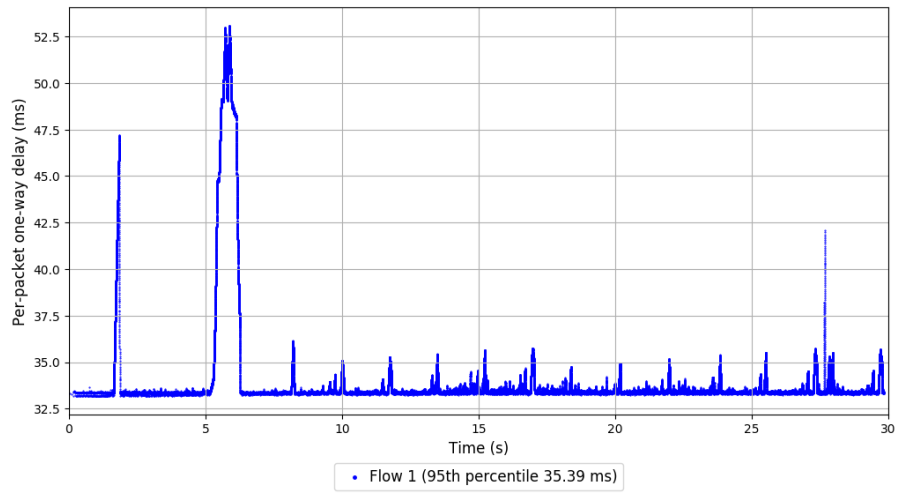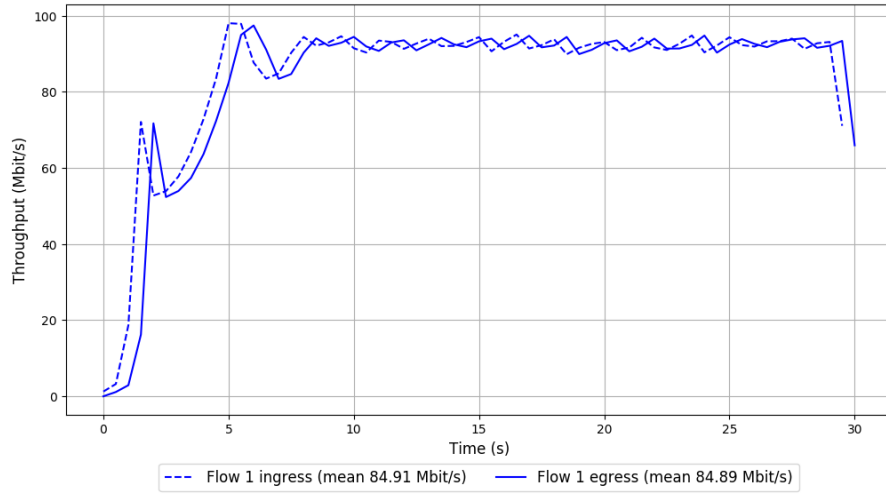
Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-03-19 10:36:24
End at: 2019-03-19 10:36:54
Local clock offset: 0.3 ms
Remote clock offset: -0.565 ms


# Below is generated by plot.py at 2019-03-19 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.48 Mbit/s
95th percentile per-packet one-way delay: 34.752 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 85.48 Mbit/s
95th percentile per-packet one-way delay: 34.752 ms
Loss rate: 0.22%
```
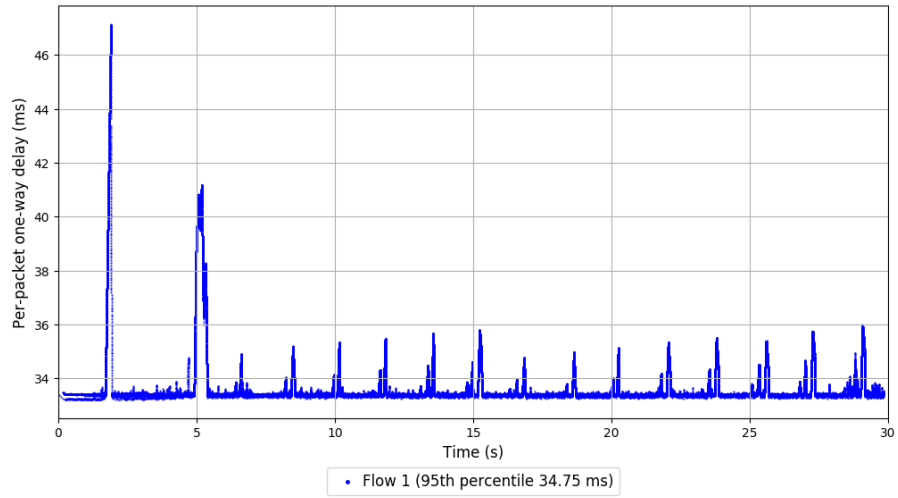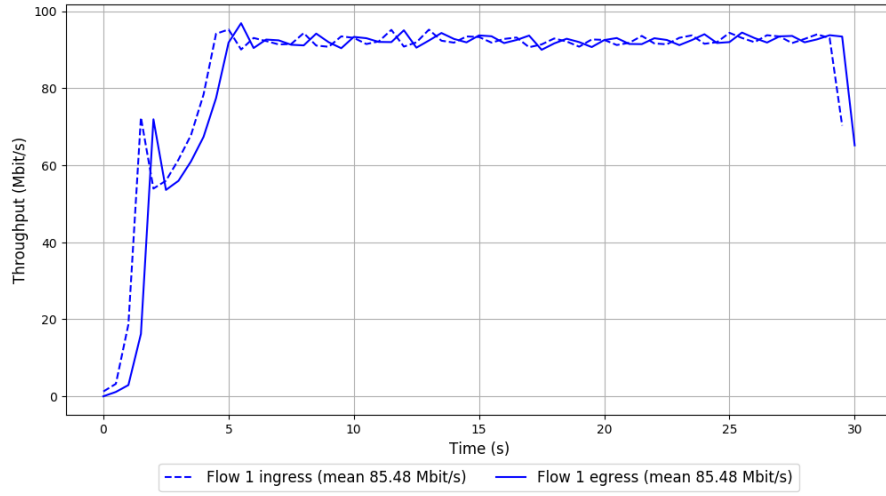
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 85.48 Mbit/s) ---- Flow 1 egress (mean 85.48 Mbit/s)

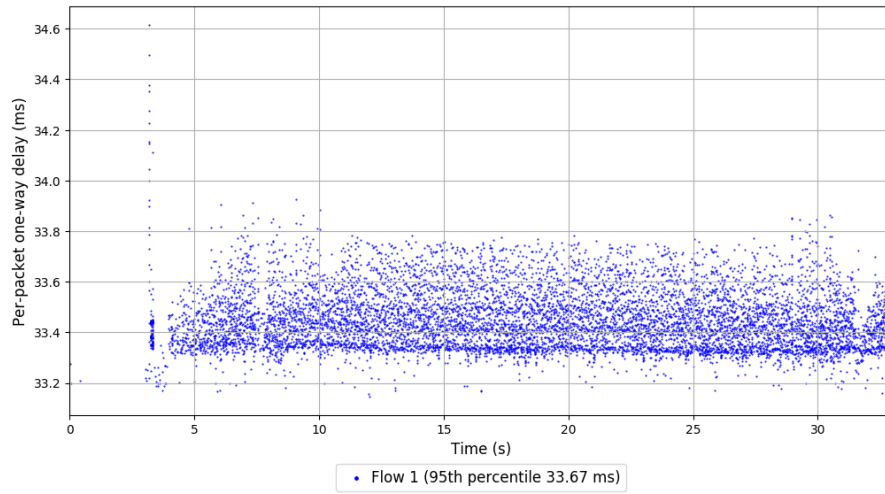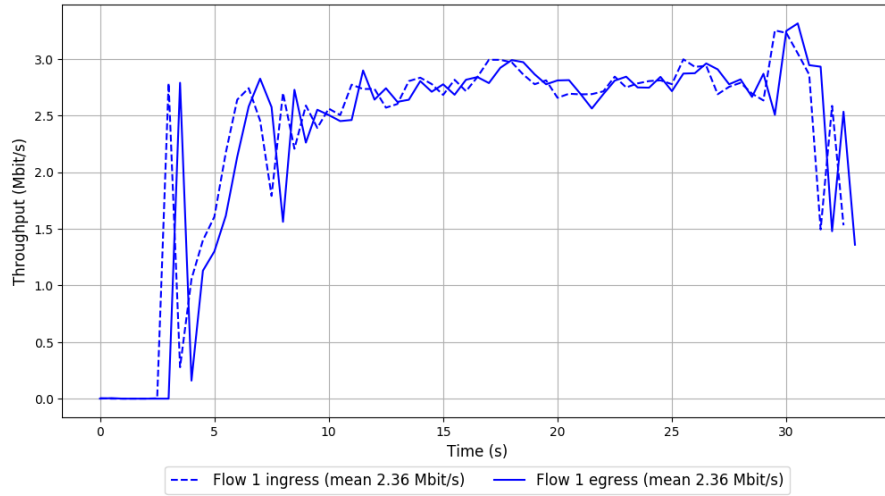

• Flow 1 (95th percentile 34.75 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2019-03-19 08:46:39
End at: 2019-03-19 08:47:09
Local clock offset: 0.1 ms
Remote clock offset: -2.714 ms


# Below is generated by plot.py at 2019-03-19 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 33.675 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 33.675 ms
Loss rate: 0.24%
```

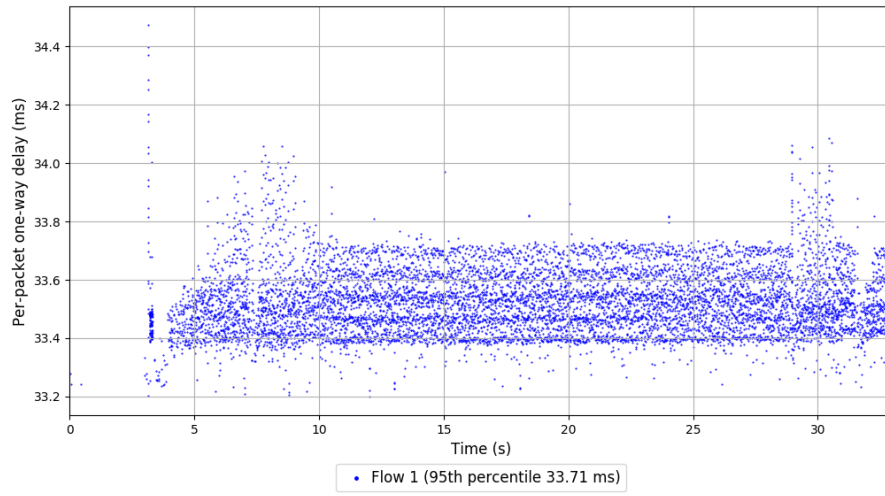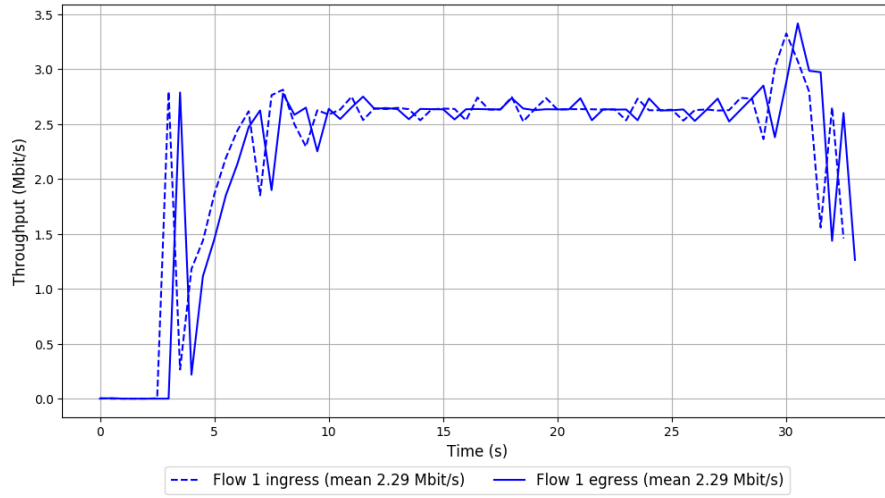Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-03-19 09:11:10
End at: 2019-03-19 09:11:40
Local clock offset: 0.873 ms
Remote clock offset: -1.644 ms


# Below is generated by plot.py at 2019-03-19 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 33.710 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 33.710 ms
Loss rate: 0.26%
```

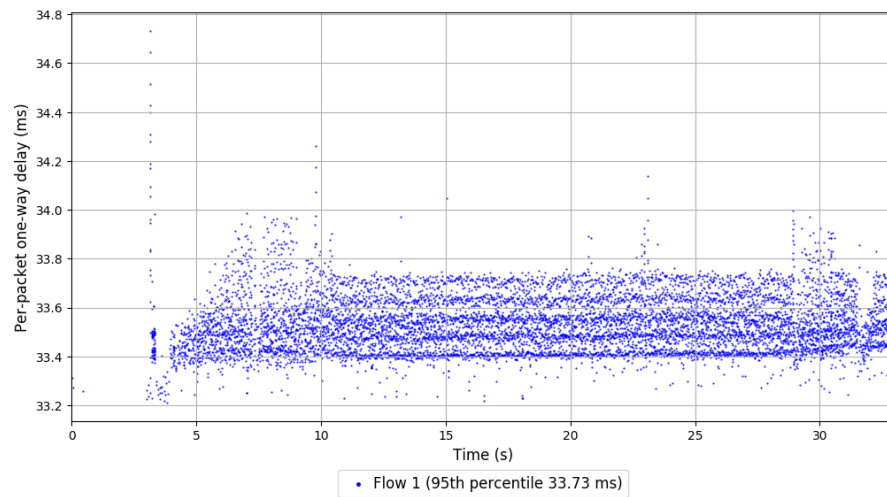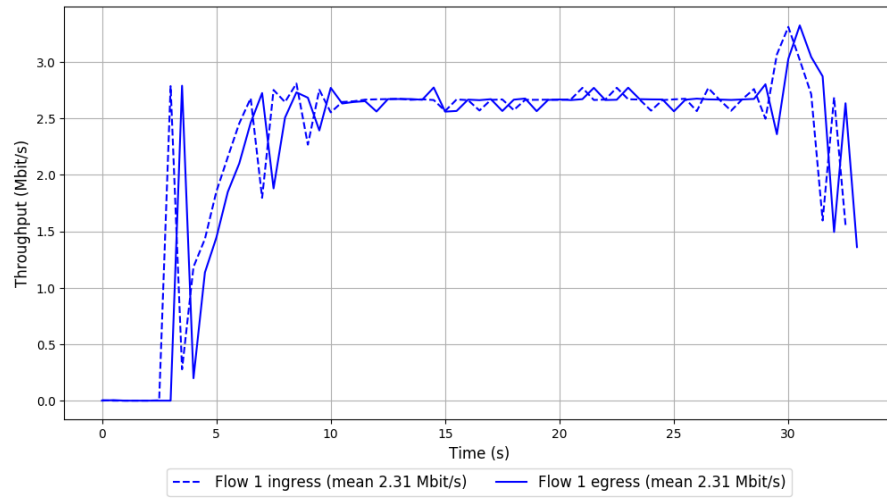Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-03-19 09:35:42
End at: 2019-03-19 09:36:12
Local clock offset: 0.185 ms
Remote clock offset: -1.516 ms


# Below is generated by plot.py at 2019-03-19 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 33.725 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 33.725 ms
Loss rate: 0.26%
```

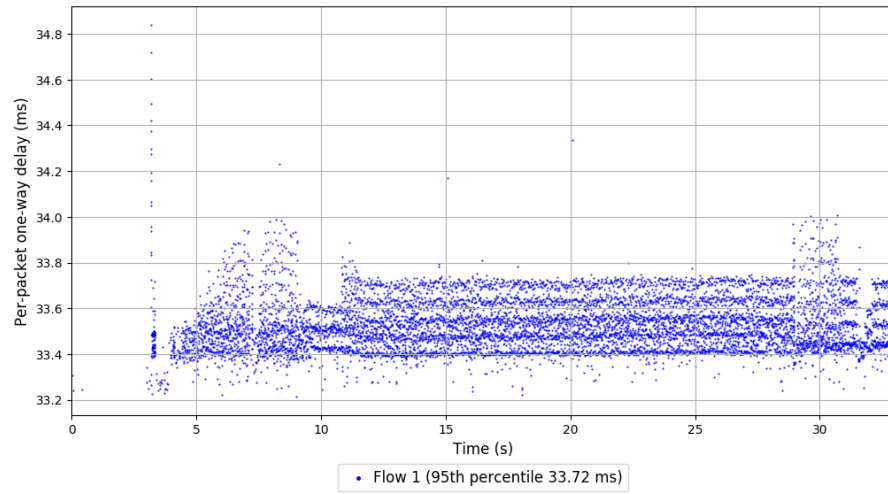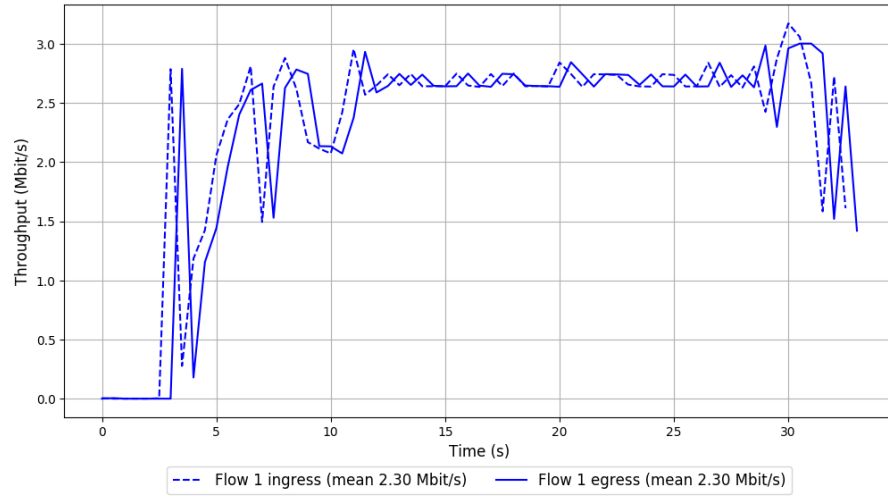Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-03-19 10:00:13
End at: 2019-03-19 10:00:43
Local clock offset: -0.123 ms
Remote clock offset: -0.868 ms


# Below is generated by plot.py at 2019-03-19 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 33.720 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 33.720 ms
Loss rate: 0.25%
```

Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-03-19 10:24:44
End at: 2019-03-19 10:25:14
Local clock offset: 0.121 ms
Remote clock offset: -0.489 ms


# Below is generated by plot.py at 2019-03-19 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 33.656 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 33.656 ms
Loss rate: 0.27%
```

Run 5: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.25 Mbit/s) --- Flow 1 egress (mean 2.25 Mbit/s)

Flow 1 (95th percentile 33.66 ms)