Pantheon Report

Generated at 2019-10-03 10:47:53 (UTC).

Data path: Mexico on `em1` (*remote*) →AWS California 2 on `ens5` (*local*).

Repeated the test of 24 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.
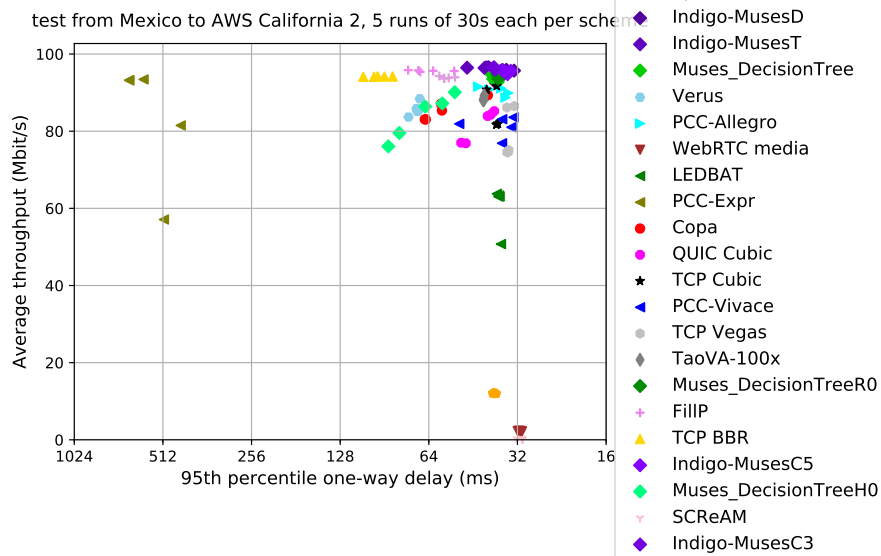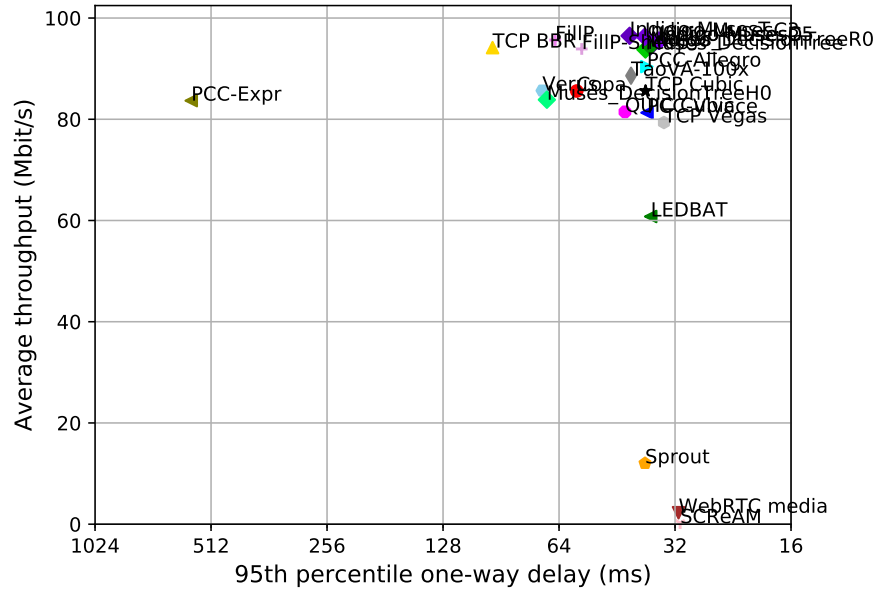
```
System info:
Linux 4.15.0-1050-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ de42328552b3776a75a932a94dfafd722537b0ec
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/muses_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
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

Legend:
- FillP-Sheep
- Indigo
- Sprout
- Indigo-MusesD
- Indigo-MusesT
- Muses_DecisionTree
- Verus
- PCC-Allegro
- WebRTC media
- LEDBAT
- PCC-Expr
- Copa
- QUIC Cubic
- TCP Cubic
- PCC-Vivace
- TCP Vegas
- TaoVA-100x
- Muses_DecisionTreeR0
- FillP
- TCP BBR
- Indigo-MusesC5
- Muses_DecisionTreeH0
- SCReAM
- Indigo-MusesC3

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	94.15	95.21	2.18
Copa	5	85.58	57.58	0.25
TCP Cubic	5	85.60	38.17	0.25
FillP	5	95.65	65.51	0.59
FillP-Sheep	5	93.89	55.88	0.30
Indigo	5	94.38	37.08	0.23
Indigo-MusesC3	5	96.30	38.33	0.24
Indigo-MusesC5	5	95.53	35.18	0.24
Indigo-MusesD	5	95.49	35.30	0.23
Indigo-MusesT	5	96.49	41.99	0.47
LEDBAT	5	60.79	37.01	0.21
Muses_DecisionTree	5	93.78	38.19	0.21
Muses_DecisionTreeH0	5	83.86	68.83	0.32
Muses_DecisionTreeR0	5	94.52	37.14	0.24
PCC-Allegro	5	90.40	37.86	0.25
PCC-Expr	5	83.68	576.45	12.12
QUIC Cubic	5	81.46	43.17	0.24
SCReAM	5	0.21	31.04	0.23
Sprout	5	12.04	38.29	0.24
TaoVA-100x	5	88.60	41.63	0.23
TCP Vegas	5	79.36	34.19	0.27
Verus	5	85.67	70.76	0.37
PCC-Vivace	5	81.30	37.84	0.25
WebRTC media	5	2.26	31.34	0.24

```
Run 1: Statistics of TCP BBR

Start at: 2019-10-03 07:17:37
End at: 2019-10-03 07:18:07
Local clock offset: 0.271 ms
Remote clock offset: 7.818 ms


# Below is generated by plot.py at 2019-10-03 10:32:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.10 Mbit/s
95th percentile per-packet one-way delay: 106.813 ms
Loss rate: 3.04%
-- Flow 1:
Average throughput: 94.10 Mbit/s
95th percentile per-packet one-way delay: 106.813 ms
Loss rate: 3.04%
```
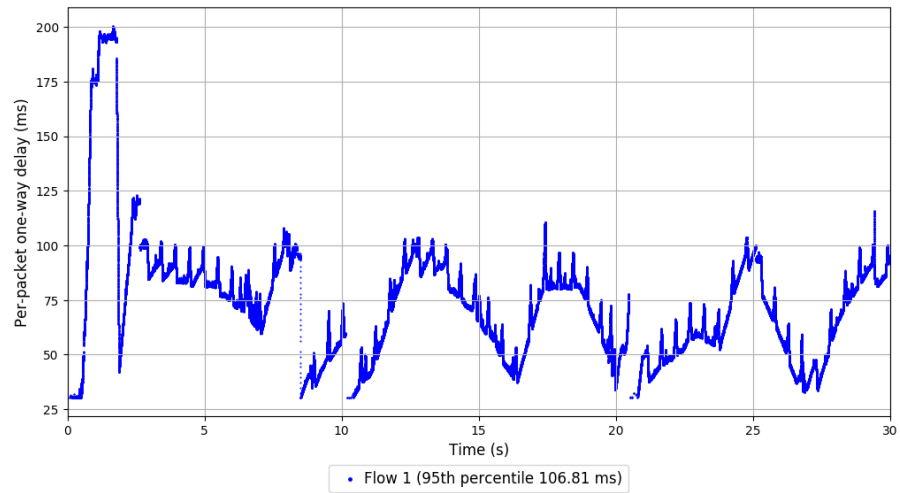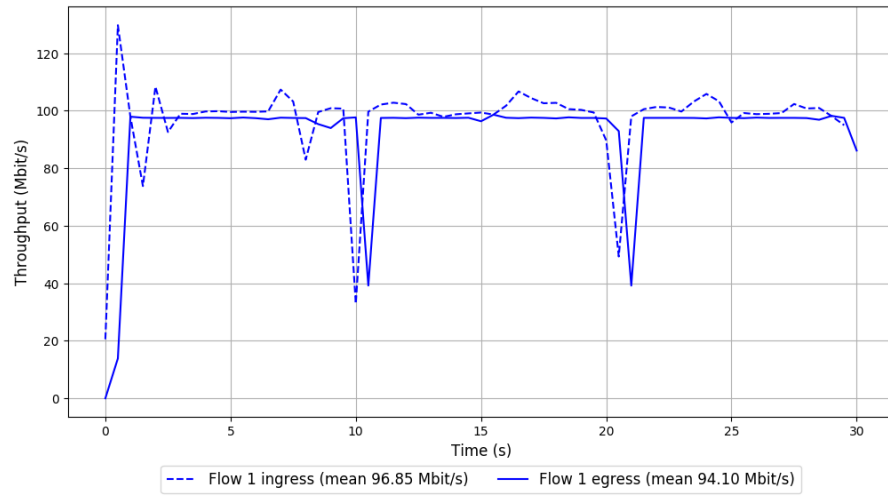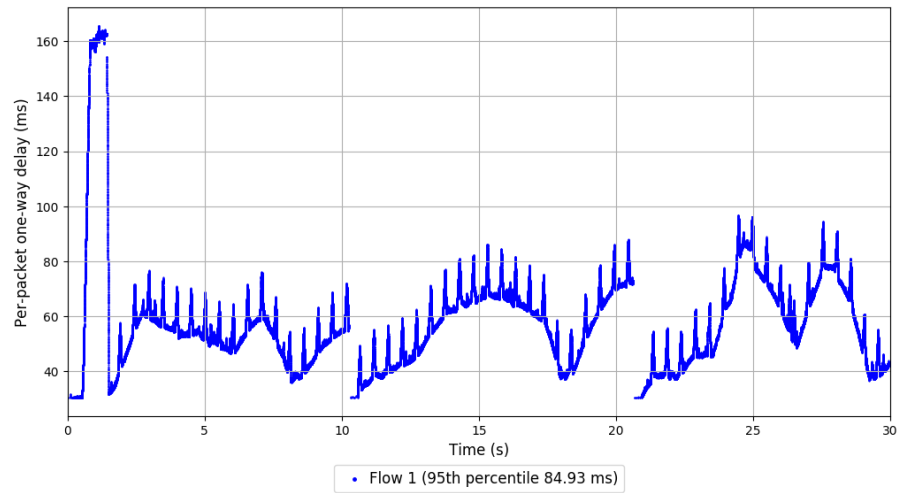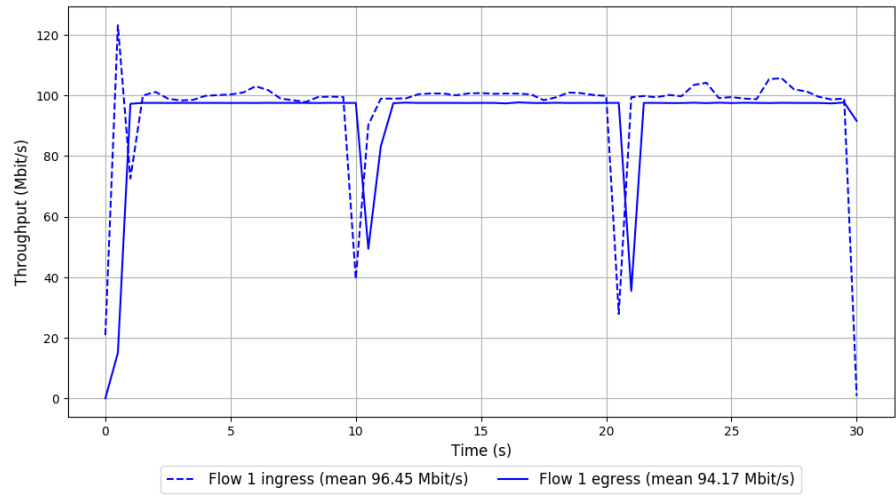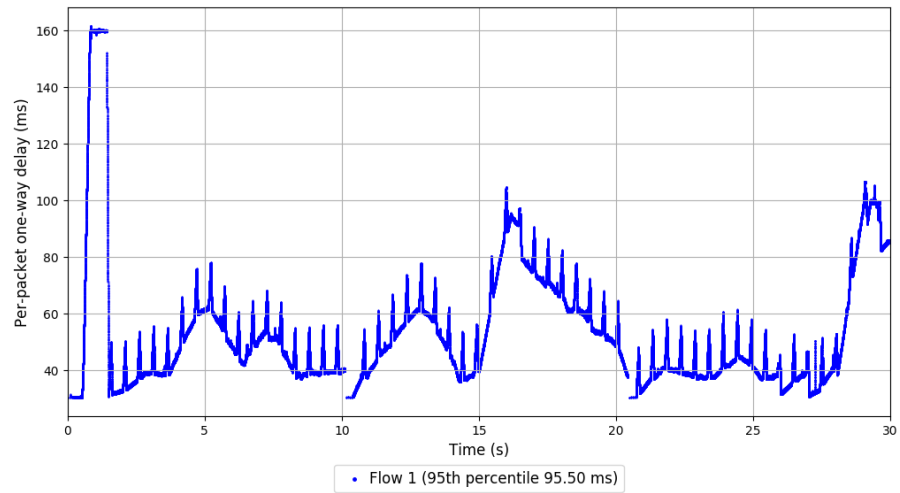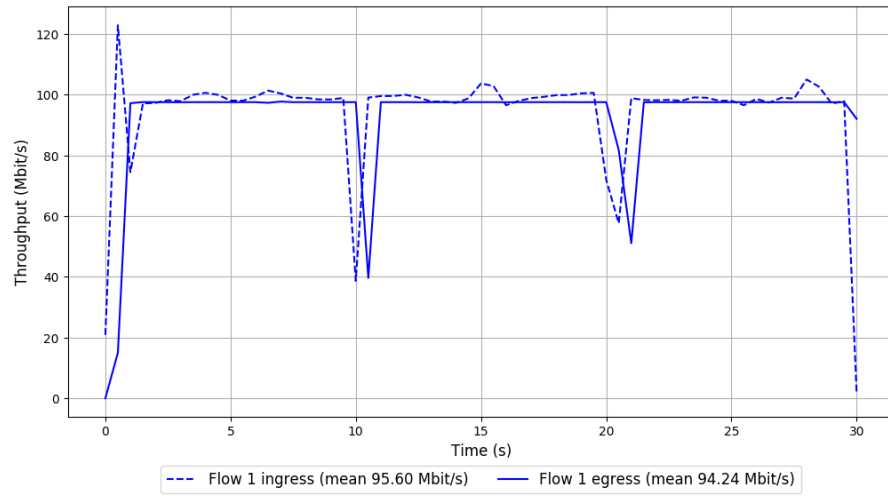
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2019-10-03 08:06:24
End at: 2019-10-03 08:06:54
Local clock offset: 0.151 ms
Remote clock offset: 7.659 ms


# Below is generated by plot.py at 2019-10-03 10:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 84.933 ms
Loss rate: 2.57%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 84.933 ms
Loss rate: 2.57%
```
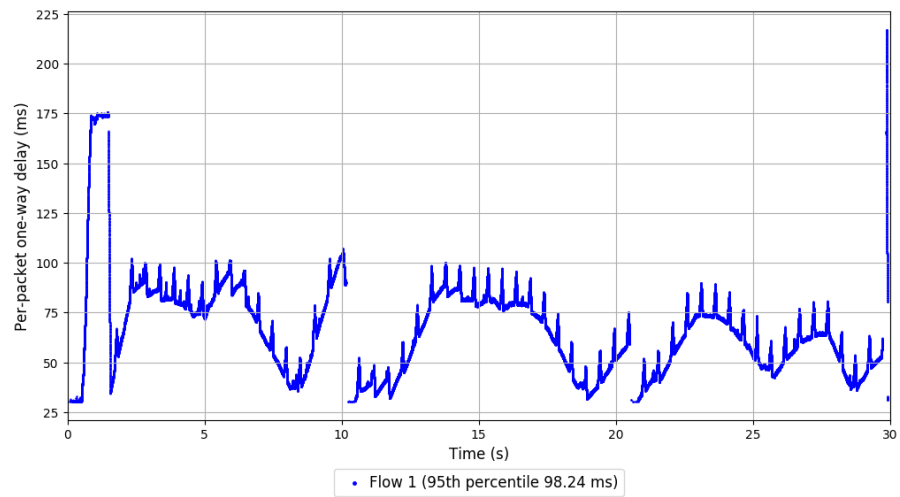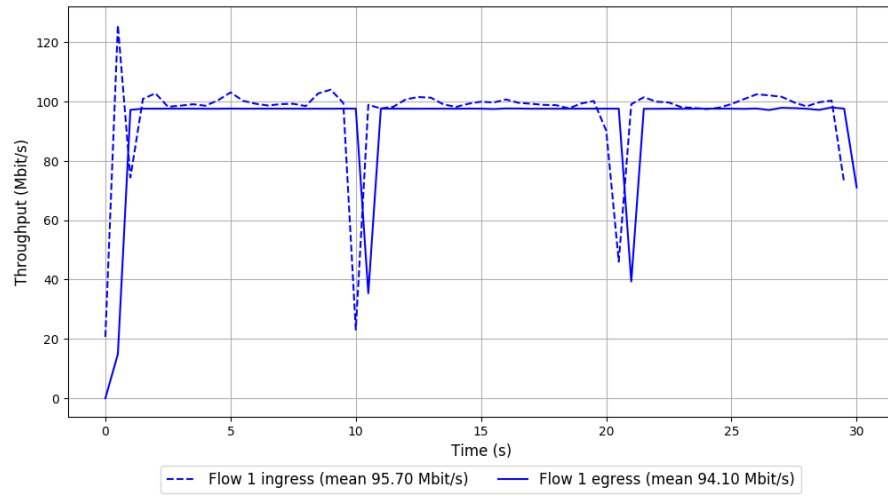
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2019-10-03 08:50:12
End at: 2019-10-03 08:50:42
Local clock offset: 0.176 ms
Remote clock offset: 7.237 ms


# Below is generated by plot.py at 2019-10-03 10:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.24 Mbit/s
95th percentile per-packet one-way delay: 95.504 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 94.24 Mbit/s
95th percentile per-packet one-way delay: 95.504 ms
Loss rate: 1.63%
```
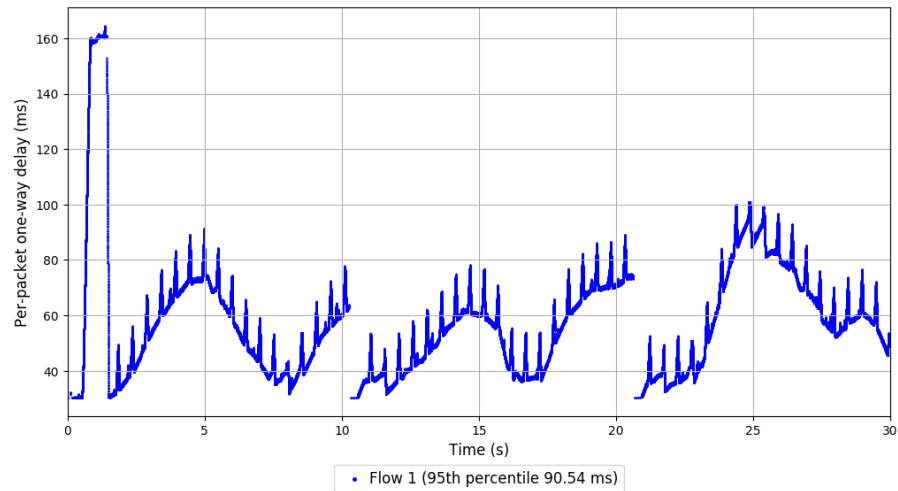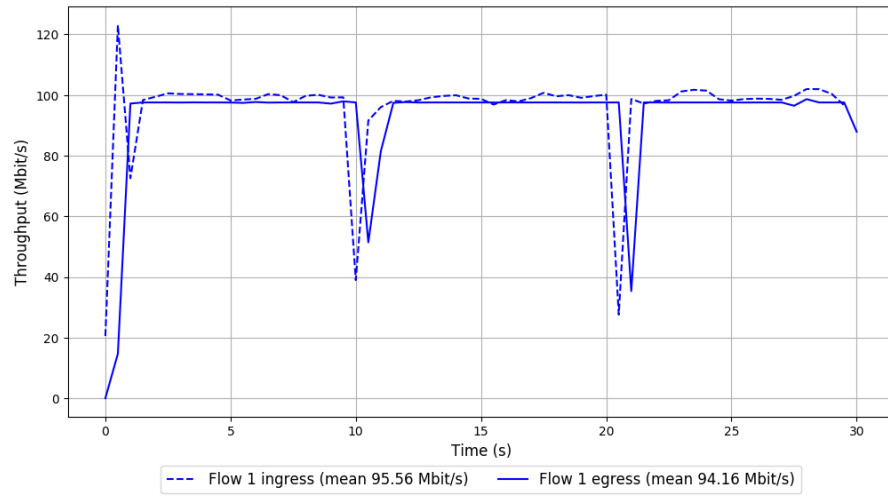
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2019-10-03 09:28:30
End at: 2019-10-03 09:29:00
Local clock offset: 0.093 ms
Remote clock offset: 7.283 ms


# Below is generated by plot.py at 2019-10-03 10:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.10 Mbit/s
95th percentile per-packet one-way delay: 98.243 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 94.10 Mbit/s
95th percentile per-packet one-way delay: 98.243 ms
Loss rate: 2.00%
```
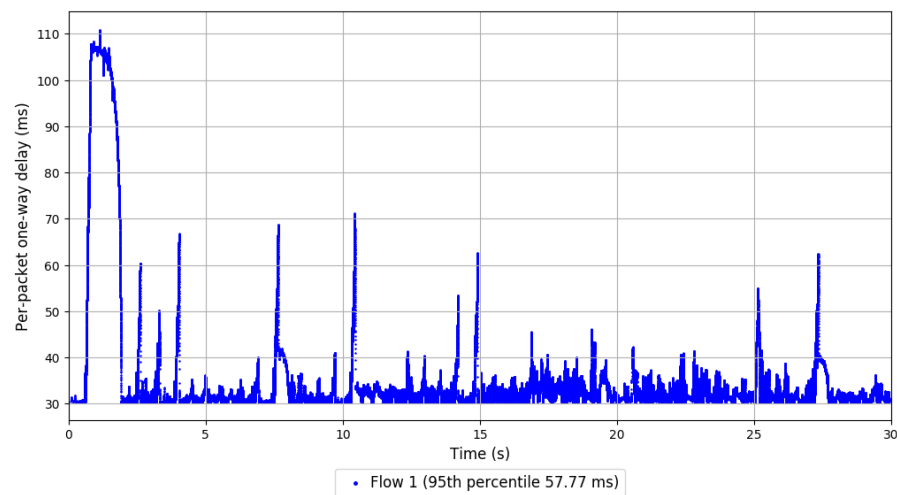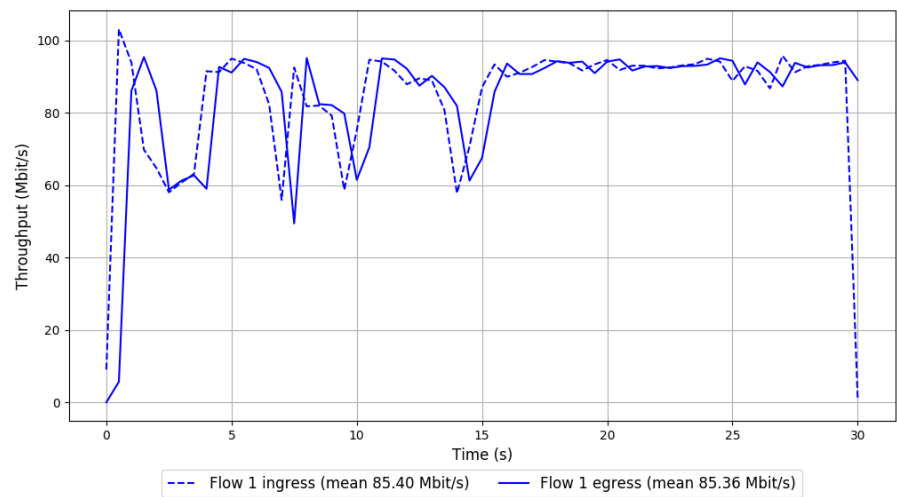
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 95.70 Mbit/s) —— Flow 1 egress (mean 94.10 Mbit/s)

• Flow 1 (95th percentile 98.24 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2019-10-03 10:07:55
End at: 2019-10-03 10:08:25
Local clock offset: 0.196 ms
Remote clock offset: 8.017 ms


# Below is generated by plot.py at 2019-10-03 10:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 90.539 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 90.539 ms
Loss rate: 1.67%
```
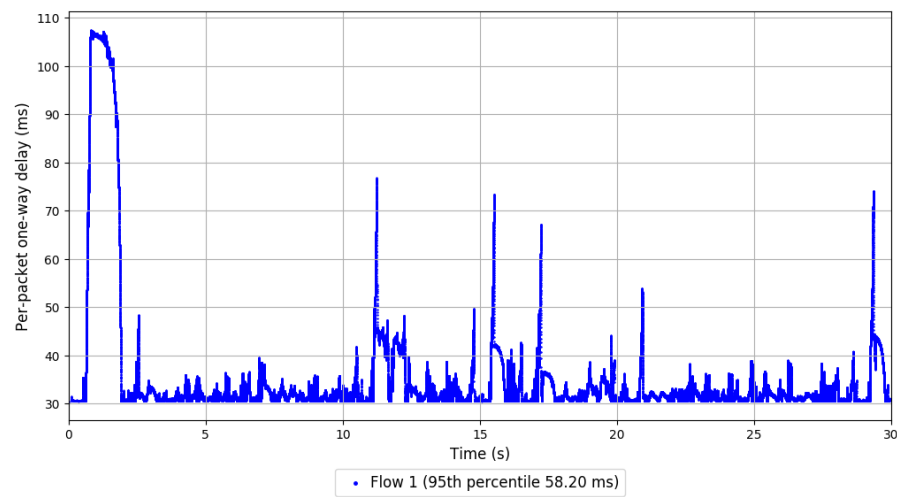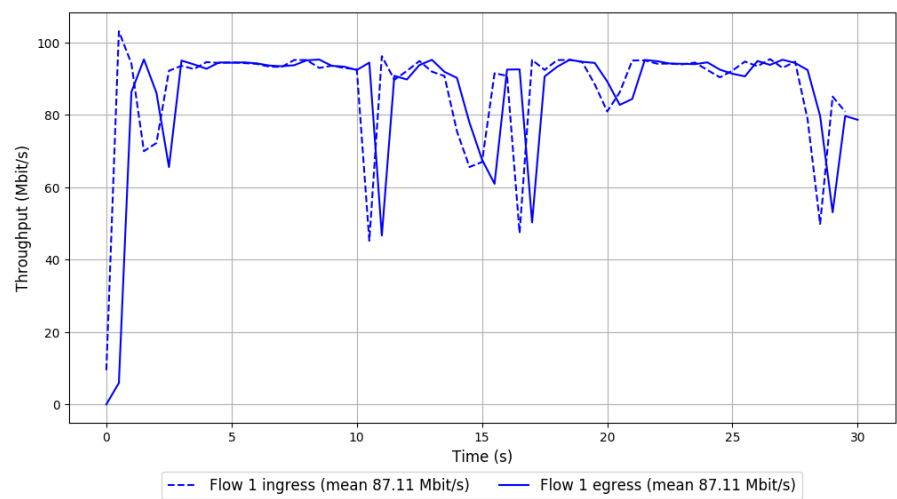
Run 5: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2019-10-03 06:57:43
End at: 2019-10-03 06:58:13
Local clock offset: 0.175 ms
Remote clock offset: 7.691 ms


# Below is generated by plot.py at 2019-10-03 10:33:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.36 Mbit/s
95th percentile per-packet one-way delay: 57.769 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 85.36 Mbit/s
95th percentile per-packet one-way delay: 57.769 ms
Loss rate: 0.25%
```
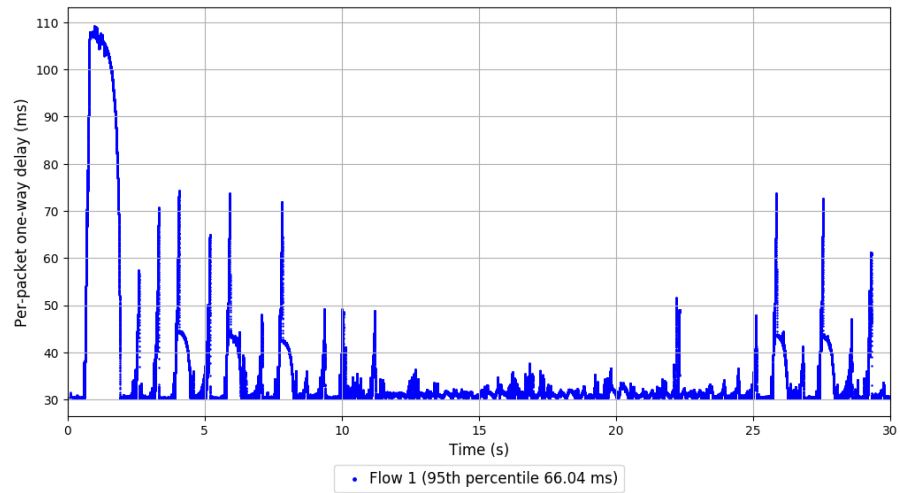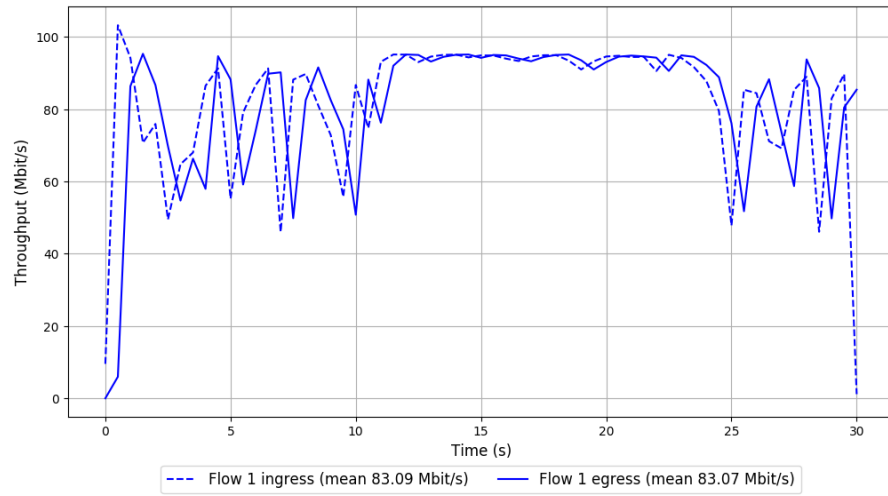
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2019-10-03 07:47:12
End at: 2019-10-03 07:47:42
Local clock offset: 0.277 ms
Remote clock offset: 7.562 ms


# Below is generated by plot.py at 2019-10-03 10:33:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.11 Mbit/s
95th percentile per-packet one-way delay: 58.197 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 87.11 Mbit/s
95th percentile per-packet one-way delay: 58.197 ms
Loss rate: 0.22%
```
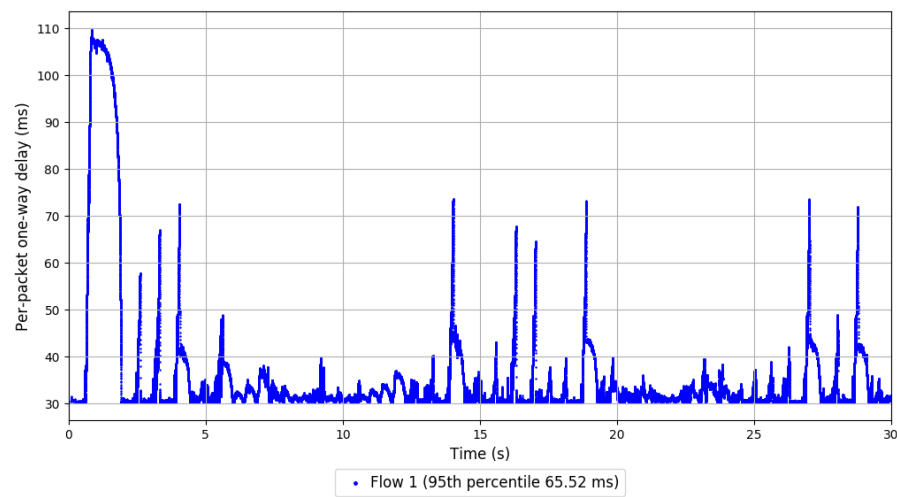
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2019-10-03 08:35:29
End at: 2019-10-03 08:35:59
Local clock offset: 0.172 ms
Remote clock offset: 7.291 ms


# Below is generated by plot.py at 2019-10-03 10:33:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.07 Mbit/s
95th percentile per-packet one-way delay: 66.043 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 83.07 Mbit/s
95th percentile per-packet one-way delay: 66.043 ms
Loss rate: 0.24%
```
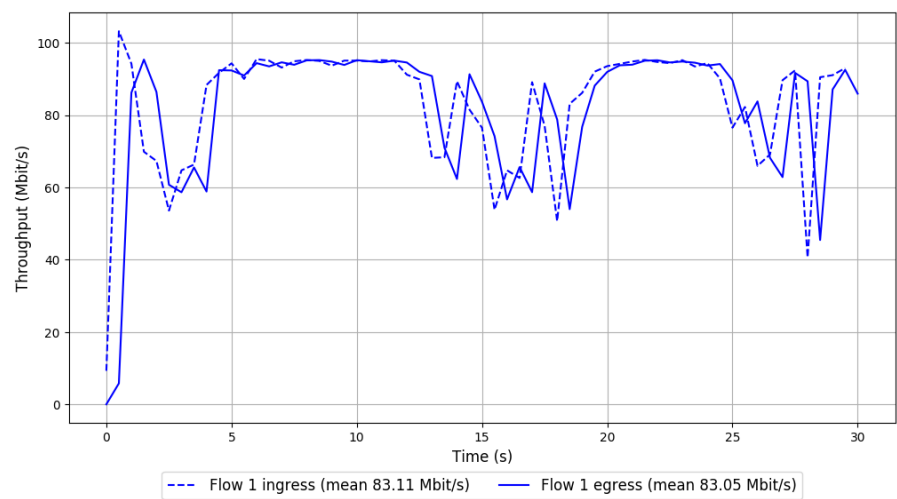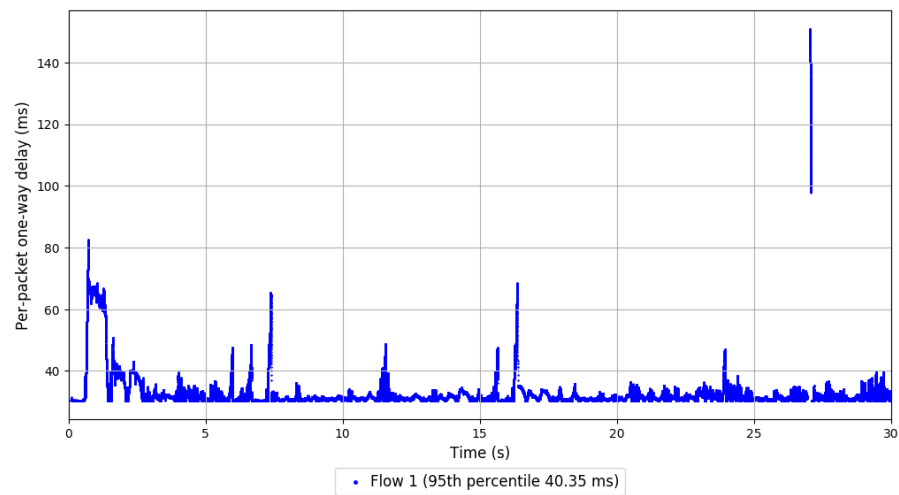
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 83.09 Mbit/s)   Flow 1 egress (mean 83.07 Mbit/s)

• Flow 1 (95th percentile 66.04 ms)

```
Run 4: Statistics of Copa

Start at: 2019-10-03 09:13:52
End at: 2019-10-03 09:14:22
Local clock offset: 0.142 ms
Remote clock offset: 7.197 ms


# Below is generated by plot.py at 2019-10-03 10:34:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.05 Mbit/s
95th percentile per-packet one-way delay: 65.516 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 83.05 Mbit/s
95th percentile per-packet one-way delay: 65.516 ms
Loss rate: 0.29%
```
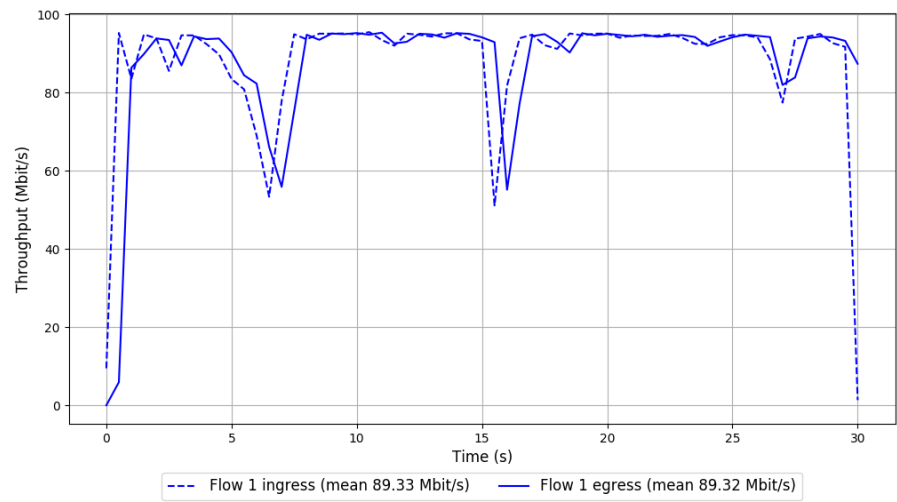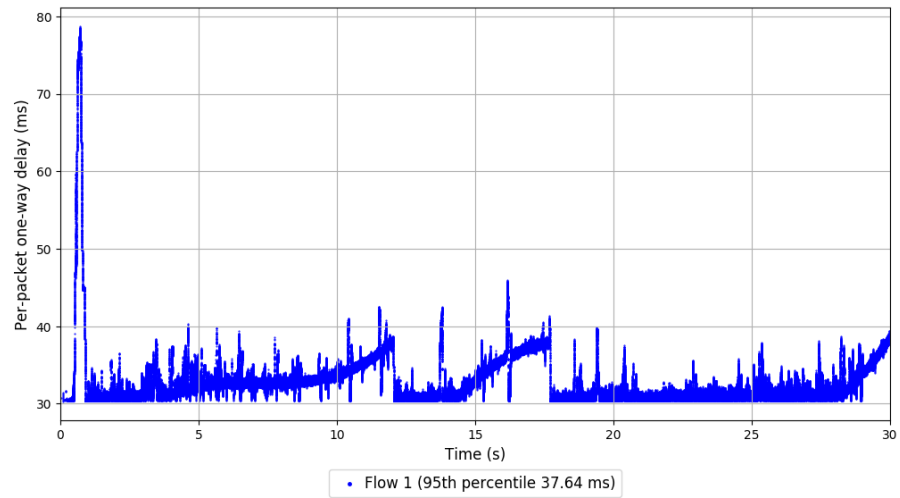
Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 83.11 Mbit/s)   Flow 1 egress (mean 83.05 Mbit/s)

Flow 1 (95th percentile 65.52 ms)

```
Run 5: Statistics of Copa

Start at: 2019-10-03 09:53:35
End at: 2019-10-03 09:54:05
Local clock offset: 0.065 ms
Remote clock offset: 7.773 ms


# Below is generated by plot.py at 2019-10-03 10:34:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.32 Mbit/s
95th percentile per-packet one-way delay: 40.351 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 89.32 Mbit/s
95th percentile per-packet one-way delay: 40.351 ms
Loss rate: 0.23%
```
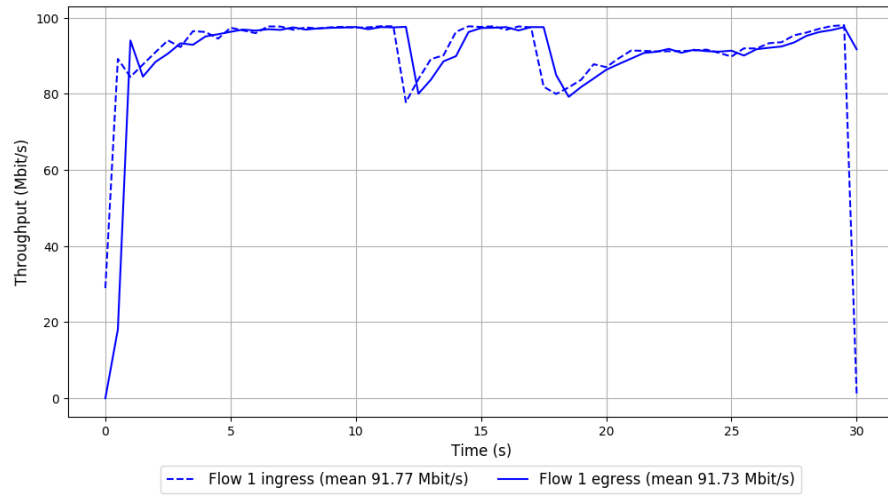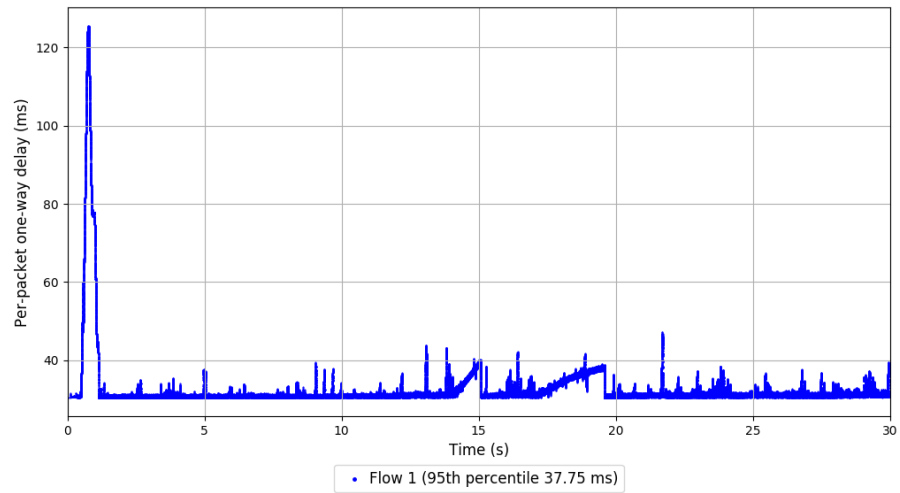
Run 5: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2019-10-03 07:06:44
End at: 2019-10-03 07:07:14
Local clock offset: 0.241 ms
Remote clock offset: 7.714 ms


# Below is generated by plot.py at 2019-10-03 10:34:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.73 Mbit/s
95th percentile per-packet one-way delay: 37.643 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 91.73 Mbit/s
95th percentile per-packet one-way delay: 37.643 ms
Loss rate: 0.26%
```
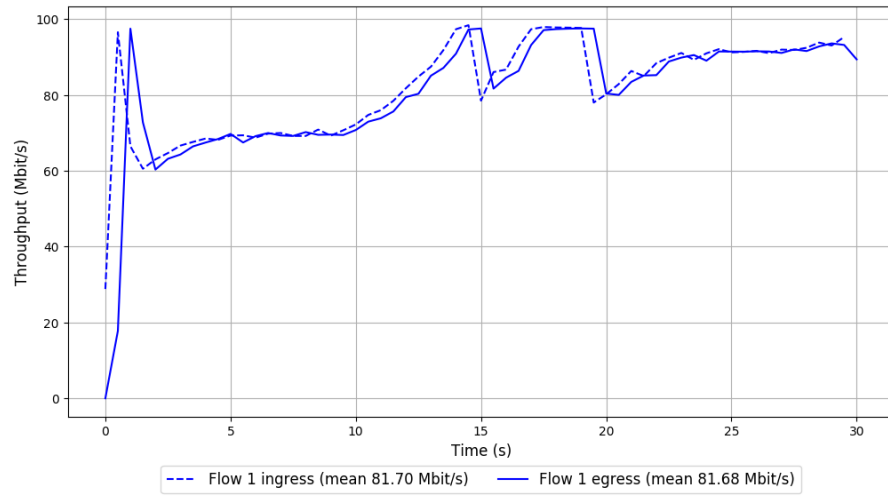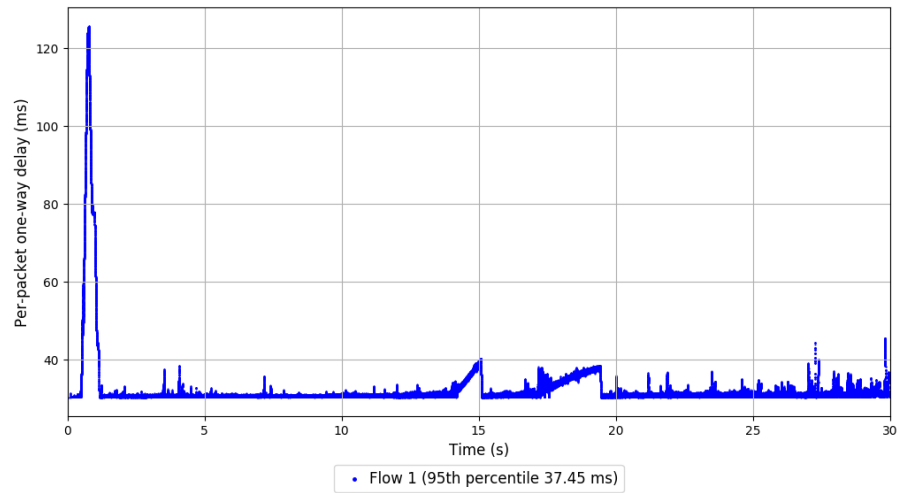
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 91.77 Mbit/s)   Flow 1 egress (mean 91.73 Mbit/s)

Flow 1 (95th percentile 37.64 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2019-10-03 07:57:11
End at: 2019-10-03 07:57:41
Local clock offset: 0.235 ms
Remote clock offset: 7.633 ms


# Below is generated by plot.py at 2019-10-03 10:34:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.68 Mbit/s
95th percentile per-packet one-way delay: 37.751 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 81.68 Mbit/s
95th percentile per-packet one-way delay: 37.751 ms
Loss rate: 0.25%
```
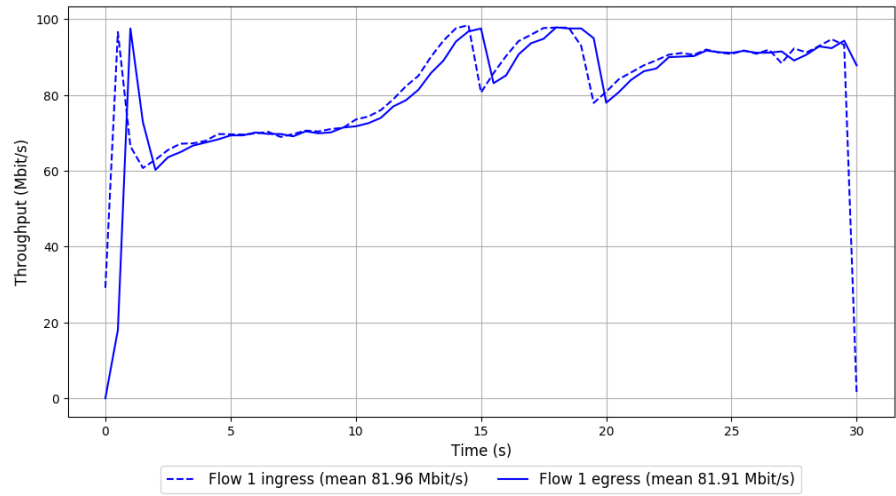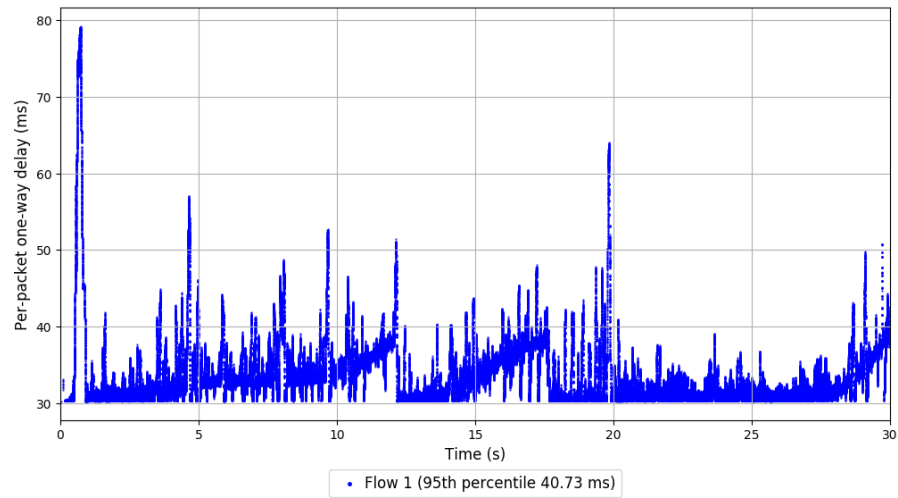
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 81.70 Mbit/s)   Flow 1 egress (mean 81.68 Mbit/s)

Flow 1 (95th percentile 37.75 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2019-10-03 08:42:24
End at: 2019-10-03 08:42:54
Local clock offset: 0.203 ms
Remote clock offset: 7.31 ms


# Below is generated by plot.py at 2019-10-03 10:34:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.91 Mbit/s
95th percentile per-packet one-way delay: 37.453 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 81.91 Mbit/s
95th percentile per-packet one-way delay: 37.453 ms
Loss rate: 0.26%
```
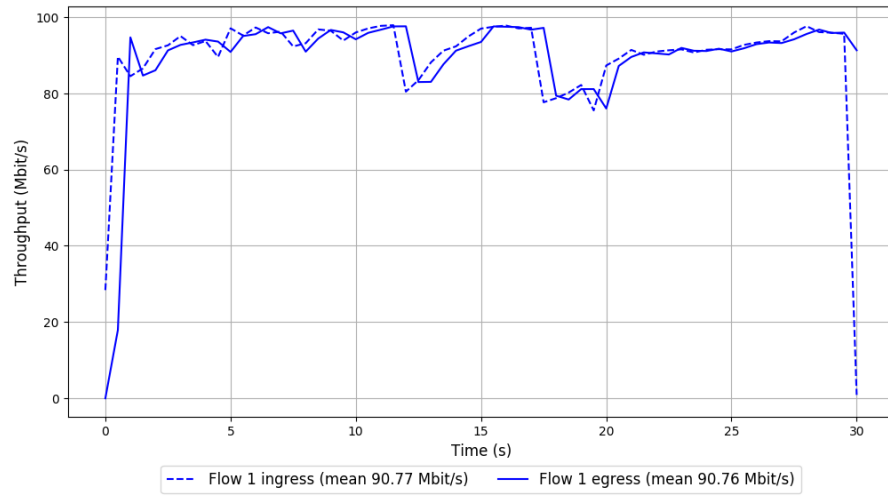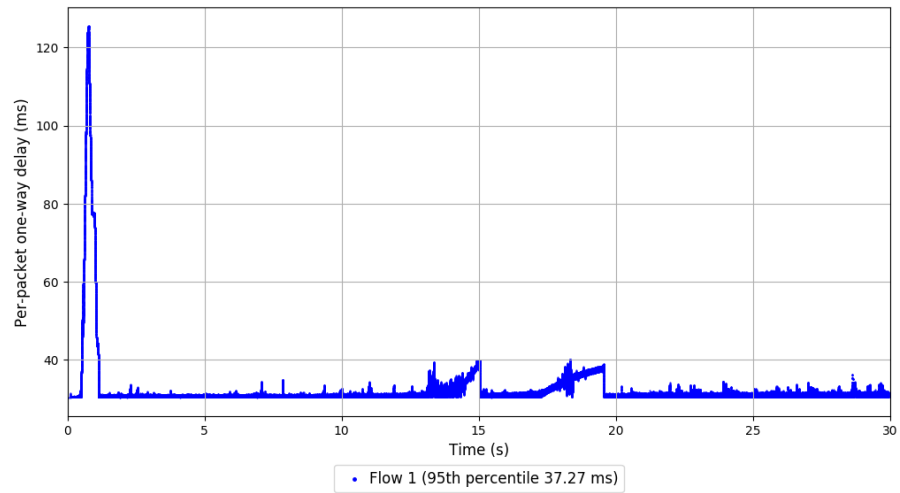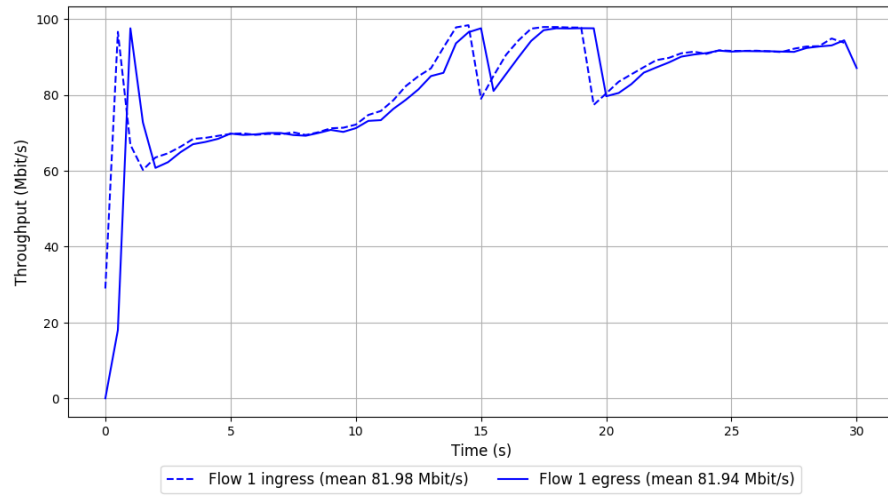
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 81.96 Mbit/s)   Flow 1 egress (mean 81.91 Mbit/s)

Flow 1 (95th percentile 37.45 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2019-10-03 09:20:33
End at: 2019-10-03 09:21:03
Local clock offset: 0.097 ms
Remote clock offset: 7.321 ms


# Below is generated by plot.py at 2019-10-03 10:34:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.76 Mbit/s
95th percentile per-packet one-way delay: 40.725 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 90.76 Mbit/s
95th percentile per-packet one-way delay: 40.725 ms
Loss rate: 0.23%
```
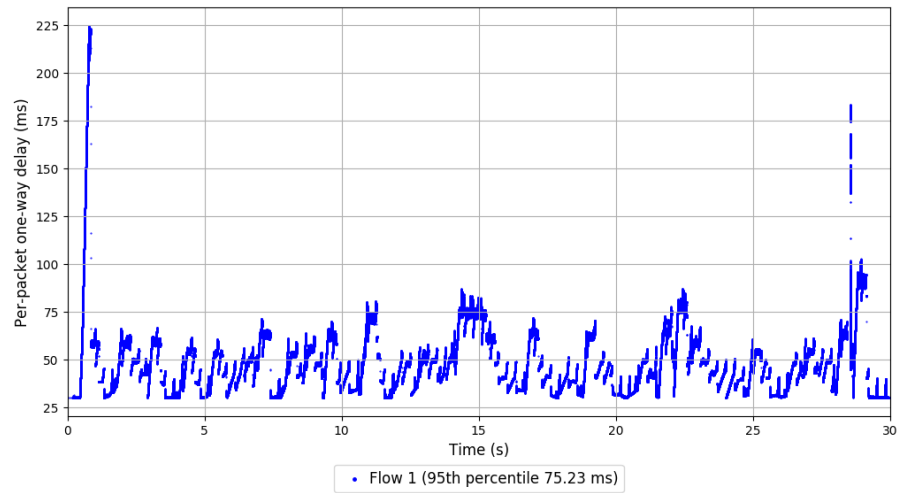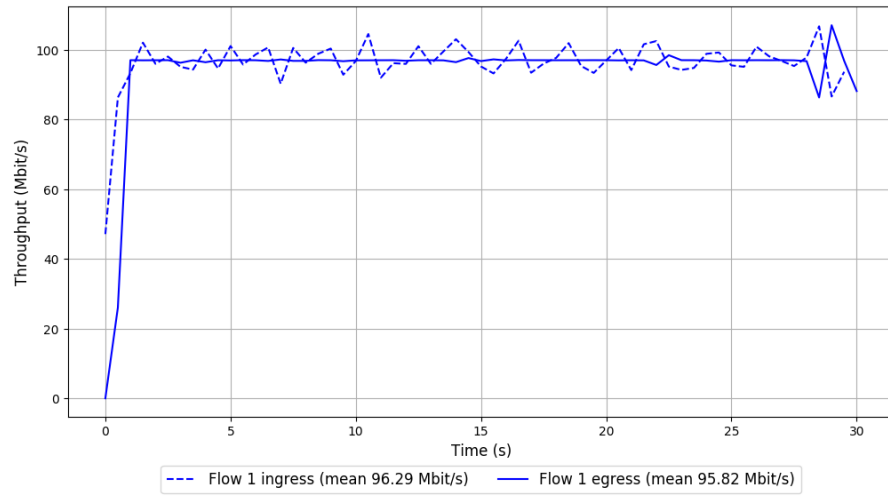
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 90.77 Mbit/s) ---- Flow 1 egress (mean 90.76 Mbit/s) ——

Flow 1 (95th percentile 40.73 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2019-10-03 10:00:05
End at: 2019-10-03 10:00:35
Local clock offset: 0.144 ms
Remote clock offset: 7.827 ms


# Below is generated by plot.py at 2019-10-03 10:34:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.94 Mbit/s
95th percentile per-packet one-way delay: 37.273 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 81.94 Mbit/s
95th percentile per-packet one-way delay: 37.273 ms
Loss rate: 0.27%
```
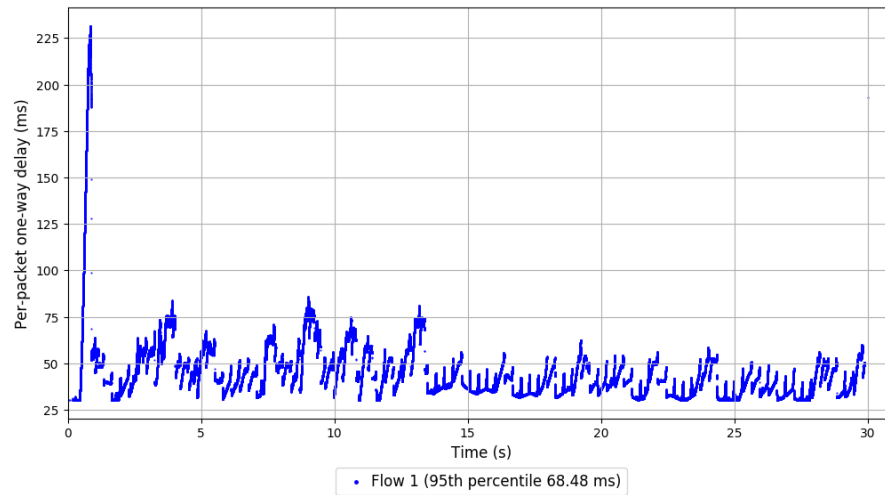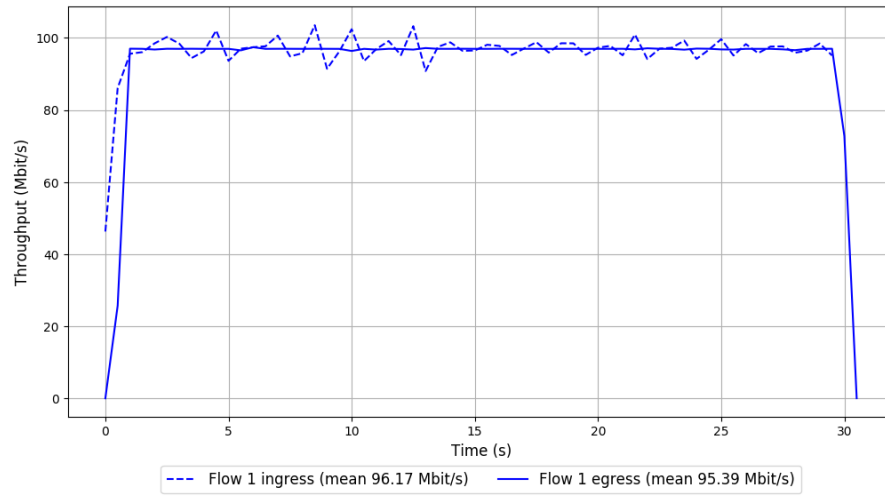
Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 81.98 Mbit/s) --- Flow 1 egress (mean 81.94 Mbit/s)

• Flow 1 (95th percentile 37.27 ms)

```
Run 1: Statistics of FillP

Start at: 2019-10-03 07:38:00
End at: 2019-10-03 07:38:30
Local clock offset: 0.259 ms
Remote clock offset: 7.573 ms


# Below is generated by plot.py at 2019-10-03 10:35:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.82 Mbit/s
95th percentile per-packet one-way delay: 75.234 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 95.82 Mbit/s
95th percentile per-packet one-way delay: 75.234 ms
Loss rate: 0.70%
```
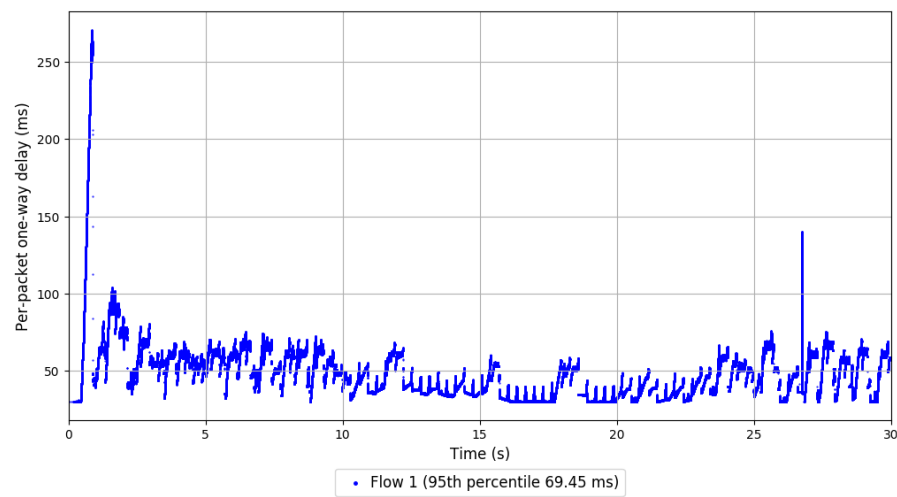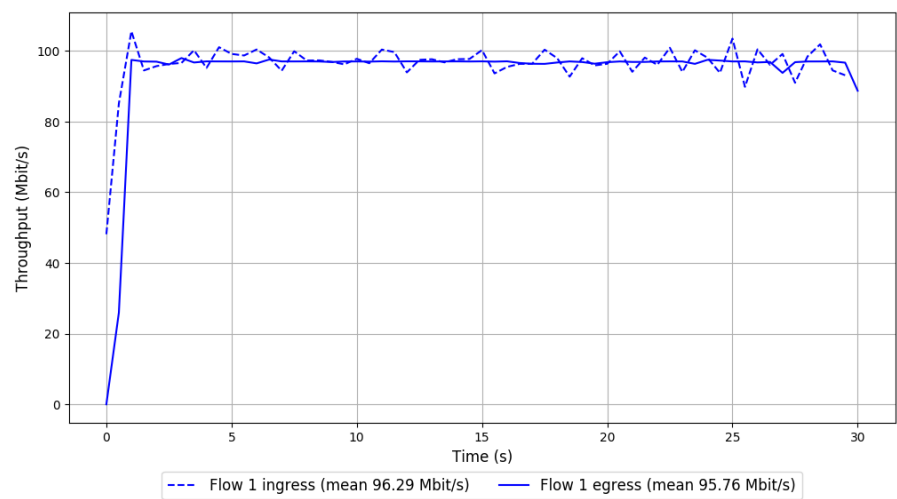
Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 96.29 Mbit/s) ---- Flow 1 egress (mean 95.82 Mbit/s) ——

Flow 1 (95th percentile 75.23 ms)

```
Run 2: Statistics of FillP

Start at: 2019-10-03 08:26:16
End at: 2019-10-03 08:26:46
Local clock offset: 0.121 ms
Remote clock offset: 7.976 ms


# Below is generated by plot.py at 2019-10-03 10:35:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.39 Mbit/s
95th percentile per-packet one-way delay: 68.480 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 95.39 Mbit/s
95th percentile per-packet one-way delay: 68.480 ms
Loss rate: 0.81%
```
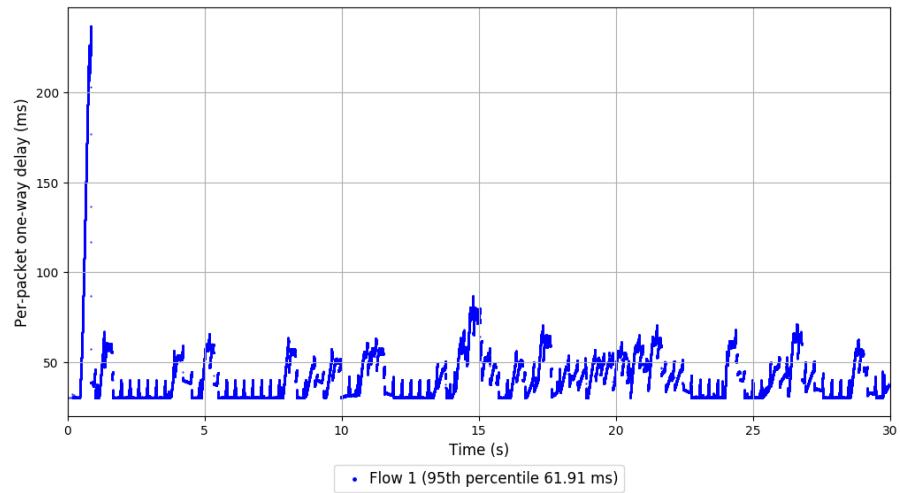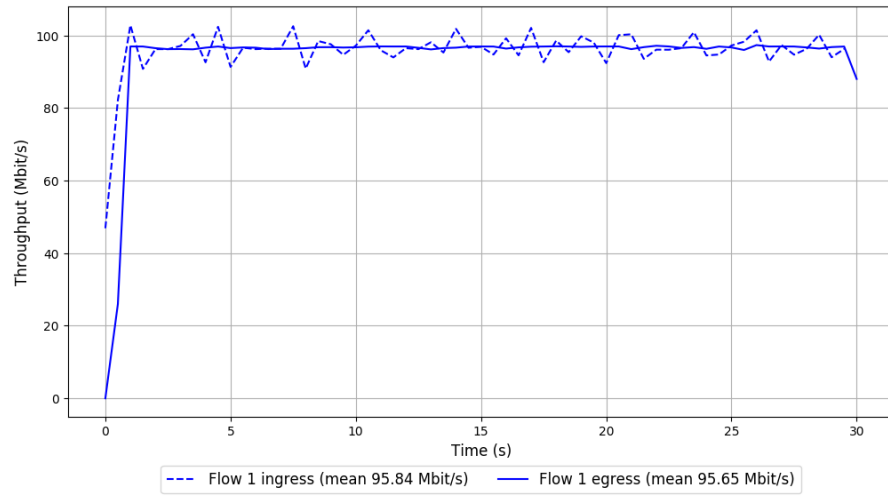
Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 96.17 Mbit/s)   Flow 1 egress (mean 95.39 Mbit/s)

Flow 1 (95th percentile 68.48 ms)

```
Run 3: Statistics of FillP

Start at: 2019-10-03 09:05:10
End at: 2019-10-03 09:05:40
Local clock offset: 0.142 ms
Remote clock offset: 7.298 ms


# Below is generated by plot.py at 2019-10-03 10:35:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.76 Mbit/s
95th percentile per-packet one-way delay: 69.449 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 95.76 Mbit/s
95th percentile per-packet one-way delay: 69.449 ms
Loss rate: 0.76%
```
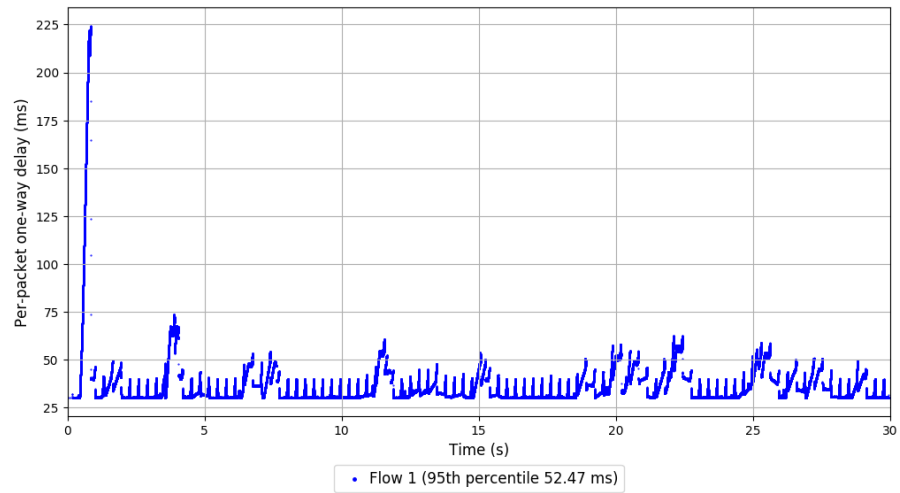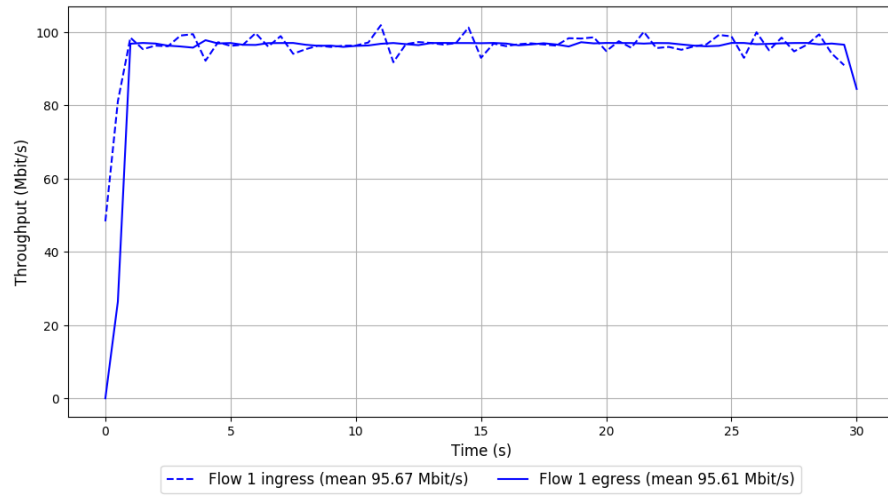
Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 96.29 Mbit/s)   Flow 1 egress (mean 95.76 Mbit/s)

Flow 1 (95th percentile 69.45 ms)

```
Run 4: Statistics of FillP

Start at: 2019-10-03 09:45:06
End at: 2019-10-03 09:45:36
Local clock offset: 0.098 ms
Remote clock offset: 7.587 ms


# Below is generated by plot.py at 2019-10-03 10:35:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.65 Mbit/s
95th percentile per-packet one-way delay: 61.909 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 95.65 Mbit/s
95th percentile per-packet one-way delay: 61.909 ms
Loss rate: 0.41%
```
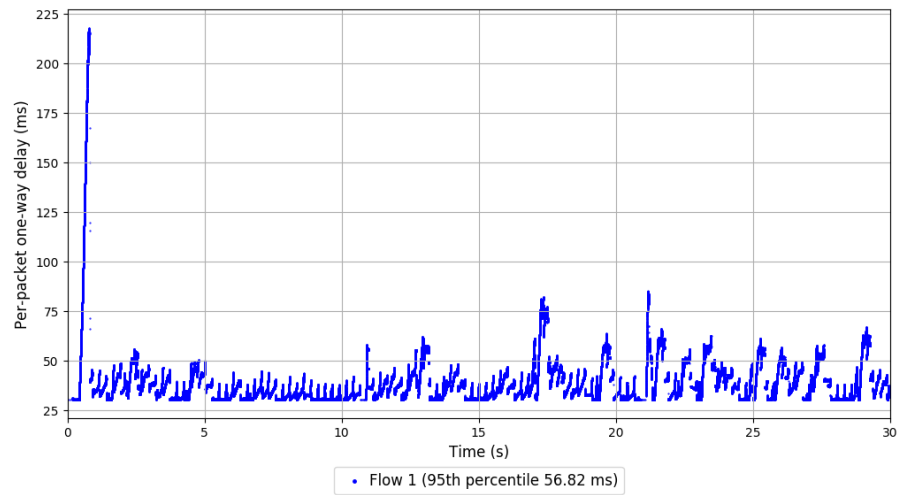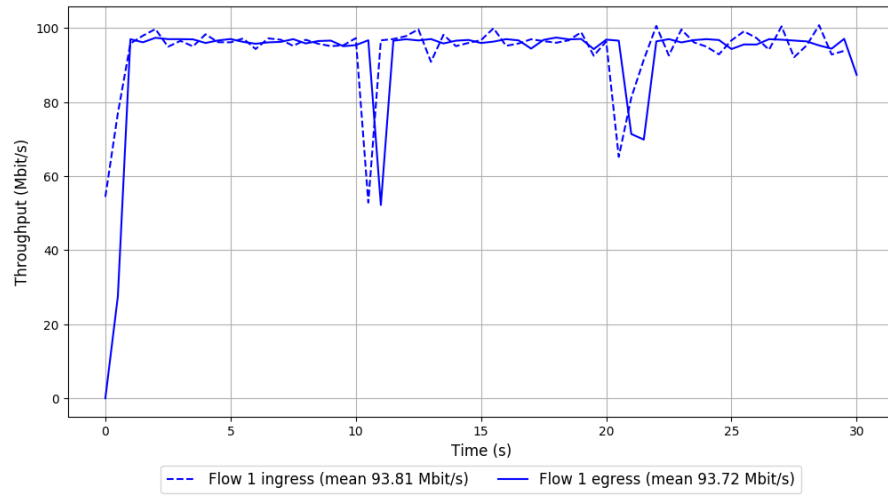
Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2019-10-03 10:23:21
End at: 2019-10-03 10:23:51
Local clock offset: 0.295 ms
Remote clock offset: 7.51 ms


# Below is generated by plot.py at 2019-10-03 10:35:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.61 Mbit/s
95th percentile per-packet one-way delay: 52.472 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 95.61 Mbit/s
95th percentile per-packet one-way delay: 52.472 ms
Loss rate: 0.28%
```
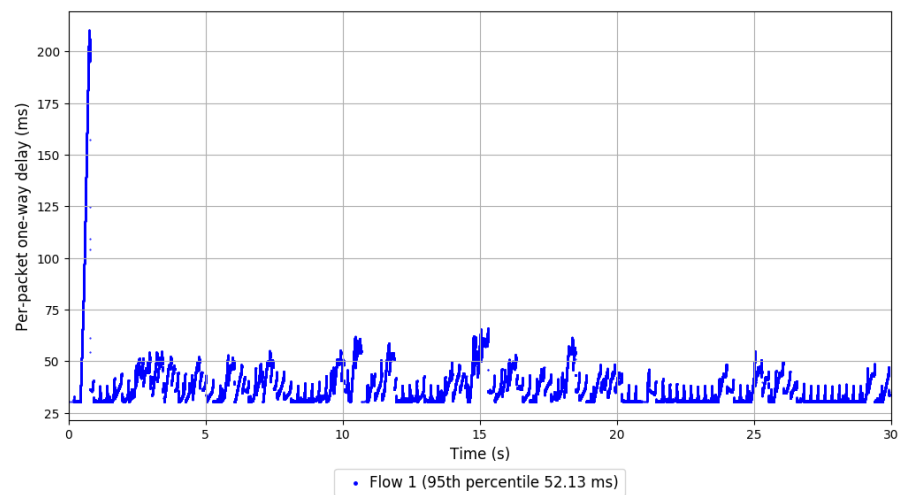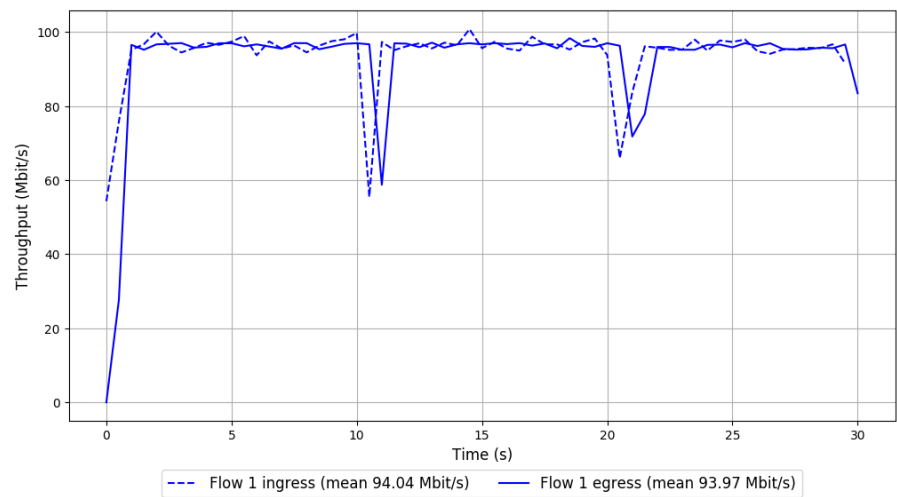
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 95.67 Mbit/s)   Flow 1 egress (mean 95.61 Mbit/s)

Flow 1 (95th percentile 52.47 ms)

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-10-03 06:55:57
End at: 2019-10-03 06:56:27
Local clock offset: 0.126 ms
Remote clock offset: 7.726 ms


# Below is generated by plot.py at 2019-10-03 10:35:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.72 Mbit/s
95th percentile per-packet one-way delay: 56.816 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 93.72 Mbit/s
95th percentile per-packet one-way delay: 56.816 ms
Loss rate: 0.30%
```
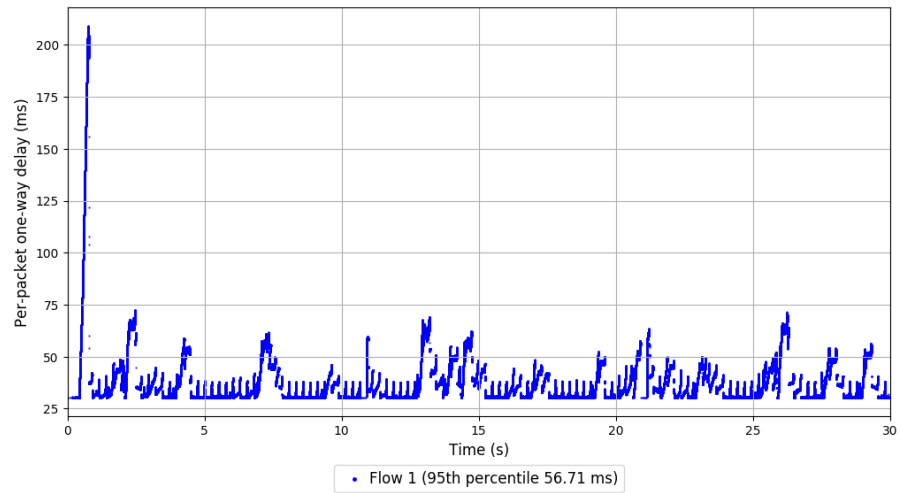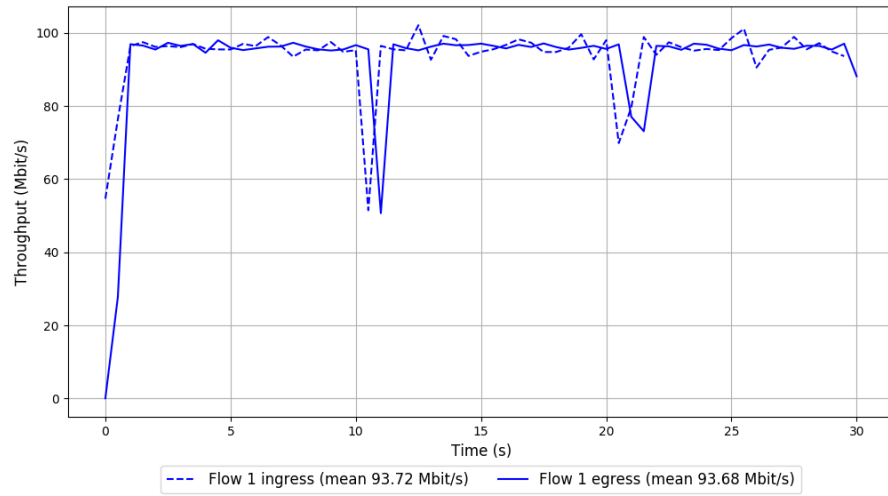
Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-10-03 07:45:30
End at: 2019-10-03 07:46:00
Local clock offset: 0.271 ms
Remote clock offset: 7.548 ms


# Below is generated by plot.py at 2019-10-03 10:36:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.97 Mbit/s
95th percentile per-packet one-way delay: 52.130 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 93.97 Mbit/s
95th percentile per-packet one-way delay: 52.130 ms
Loss rate: 0.29%
```
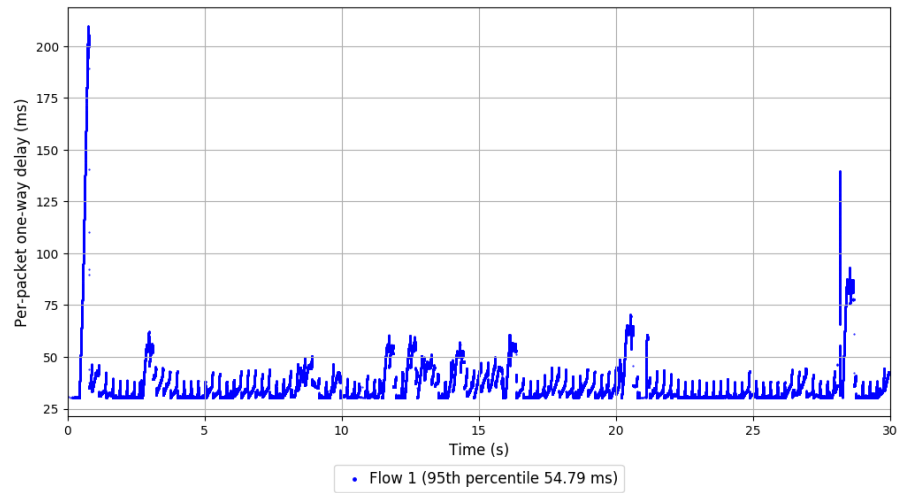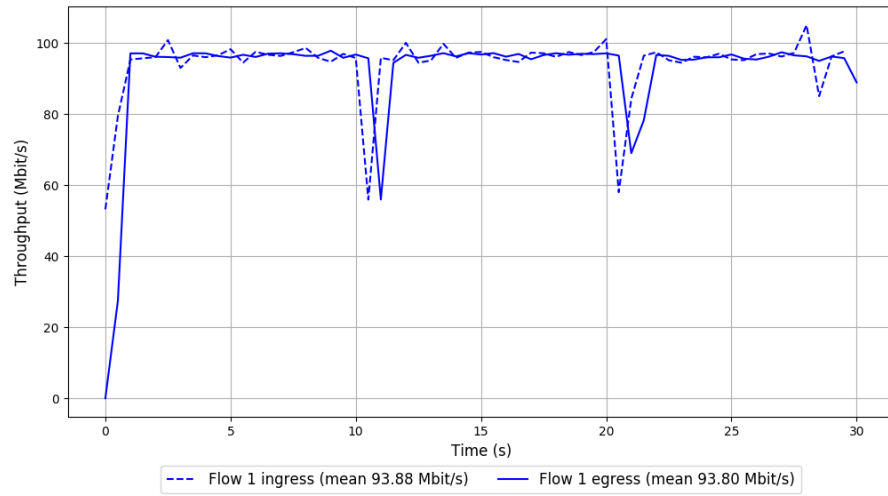
Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-10-03 08:33:35
End at: 2019-10-03 08:34:05
Local clock offset: 0.213 ms
Remote clock offset: 7.417 ms


# Below is generated by plot.py at 2019-10-03 10:36:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.68 Mbit/s
95th percentile per-packet one-way delay: 56.707 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 93.68 Mbit/s
95th percentile per-packet one-way delay: 56.707 ms
Loss rate: 0.25%
```
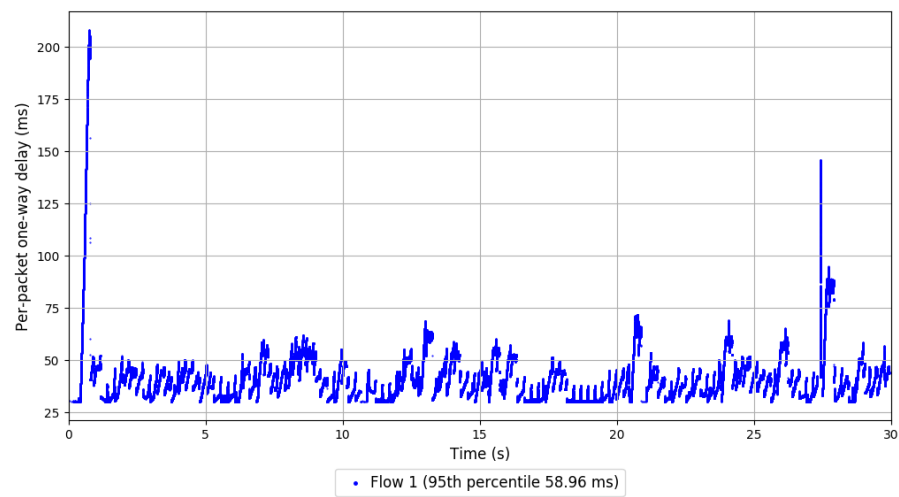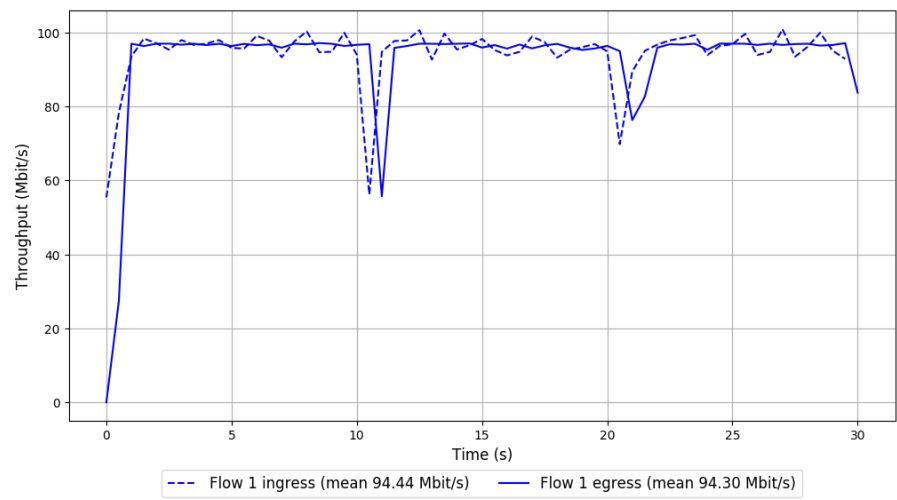
Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 93.72 Mbit/s) --- Flow 1 egress (mean 93.68 Mbit/s)

• Flow 1 (95th percentile 56.71 ms)

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-10-03 09:12:28
End at: 2019-10-03 09:12:58
Local clock offset: 0.122 ms
Remote clock offset: 7.186 ms


# Below is generated by plot.py at 2019-10-03 10:36:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 54.790 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 54.790 ms
Loss rate: 0.29%
```
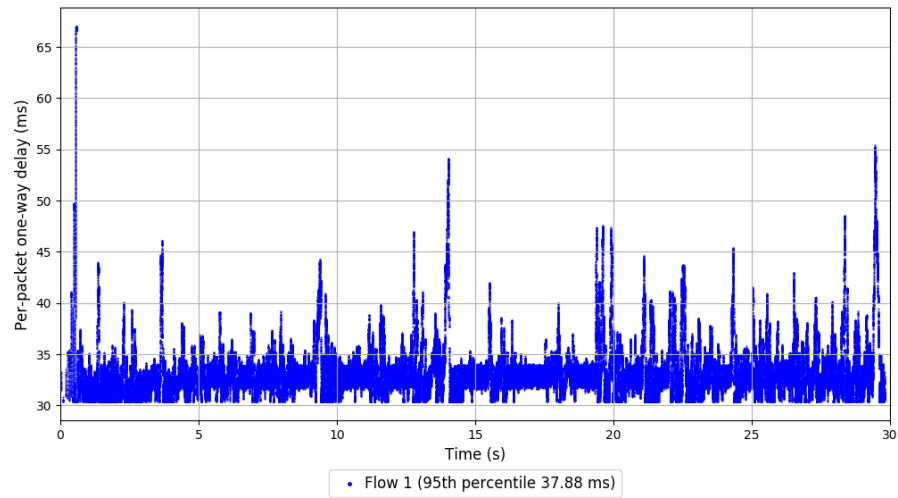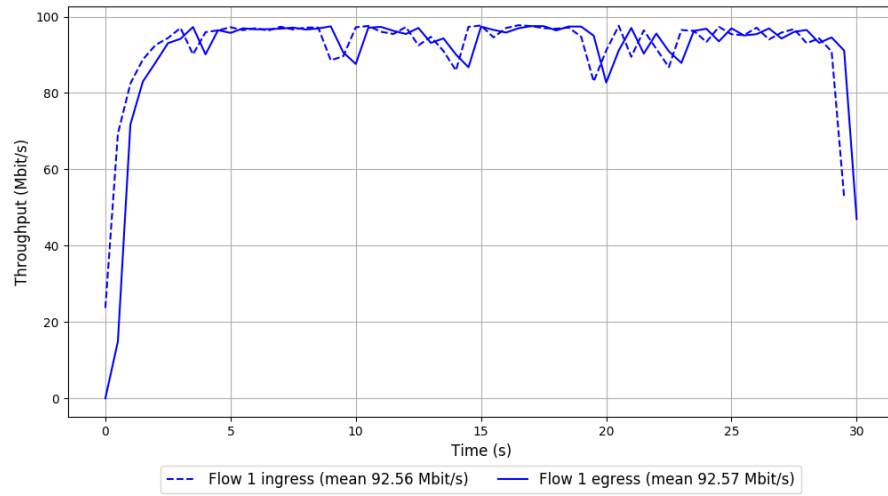
Run 4: Report of FillP-Sheep — Data Link

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-10-03 09:52:12
End at: 2019-10-03 09:52:42
Local clock offset: 0.061 ms
Remote clock offset: 7.782 ms


# Below is generated by plot.py at 2019-10-03 10:36:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.30 Mbit/s
95th percentile per-packet one-way delay: 58.959 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 94.30 Mbit/s
95th percentile per-packet one-way delay: 58.959 ms
Loss rate: 0.36%
```
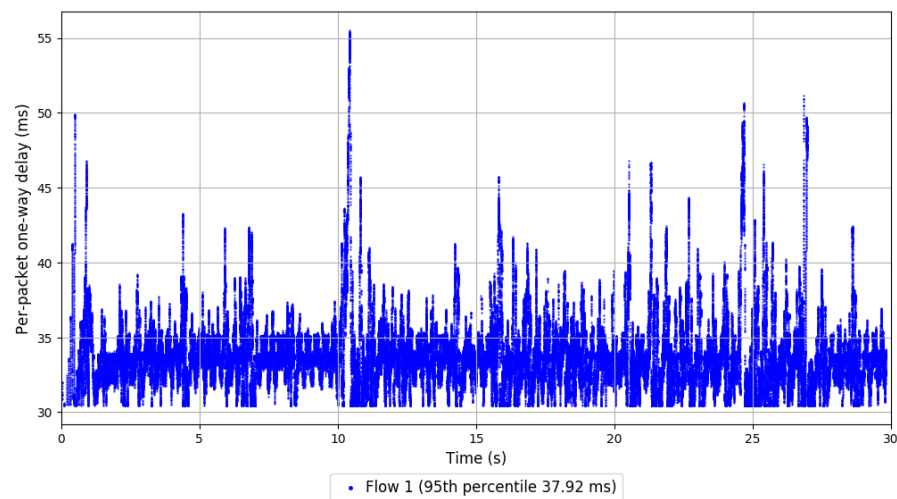
Run 5: Report of FillP-Sheep — Data Link

```
Run 1: Statistics of Indigo

Start at: 2019-10-03 07:00:26
End at: 2019-10-03 07:00:56
Local clock offset: 0.217 ms
Remote clock offset: 7.653 ms


# Below is generated by plot.py at 2019-10-03 10:36:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.57 Mbit/s
95th percentile per-packet one-way delay: 37.884 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 92.57 Mbit/s
95th percentile per-packet one-way delay: 37.884 ms
Loss rate: 0.21%
```
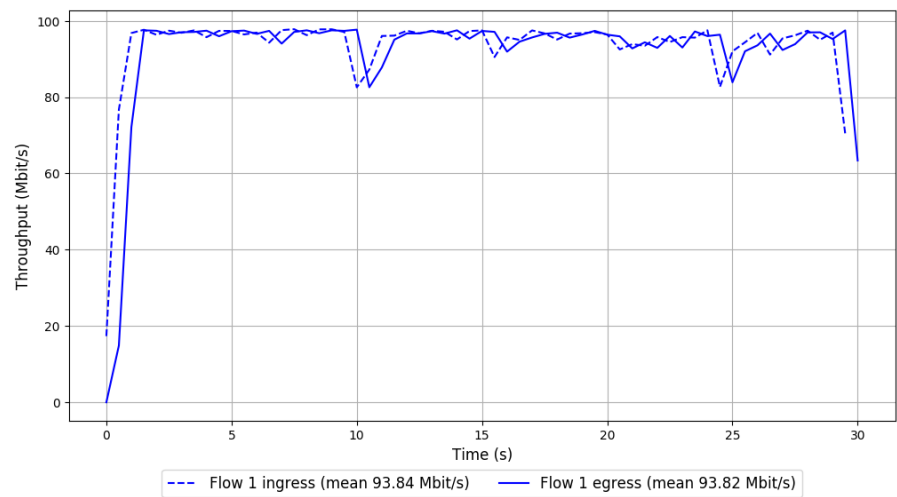
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-10-03 07:50:01
End at: 2019-10-03 07:50:31
Local clock offset: 0.244 ms
Remote clock offset: 7.636 ms


# Below is generated by plot.py at 2019-10-03 10:36:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.82 Mbit/s
95th percentile per-packet one-way delay: 37.922 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 93.82 Mbit/s
95th percentile per-packet one-way delay: 37.922 ms
Loss rate: 0.23%
```
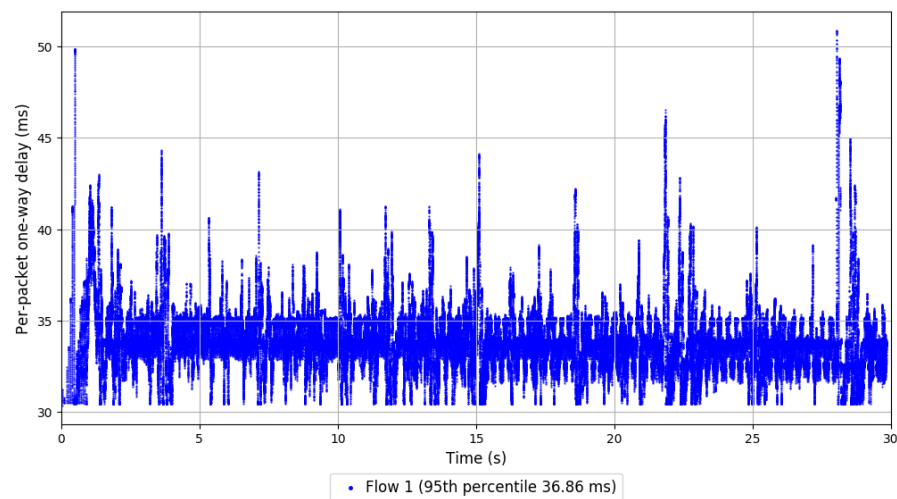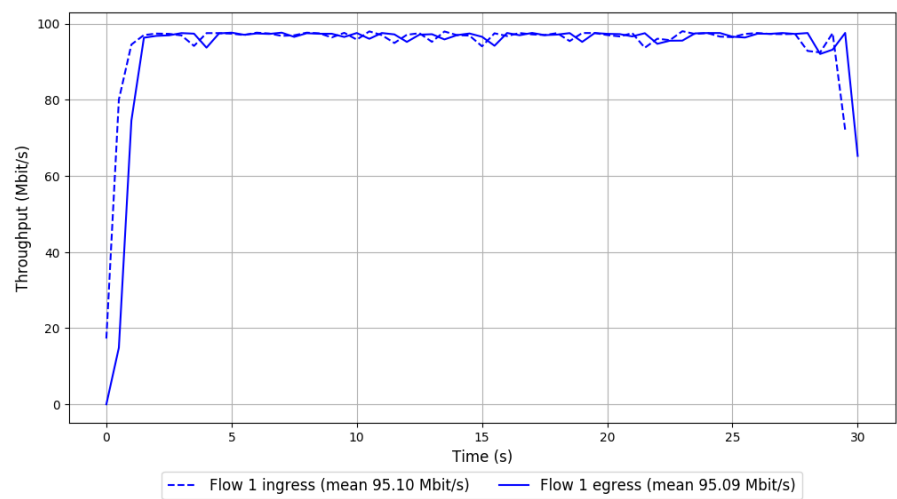
Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 93.84 Mbit/s)   Flow 1 egress (mean 93.82 Mbit/s)

Flow 1 (95th percentile 37.92 ms)

```
Run 3: Statistics of Indigo

Start at: 2019-10-03 08:37:21
End at: 2019-10-03 08:37:51
Local clock offset: 0.195 ms
Remote clock offset: 7.281 ms


# Below is generated by plot.py at 2019-10-03 10:37:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.09 Mbit/s
95th percentile per-packet one-way delay: 36.856 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.09 Mbit/s
95th percentile per-packet one-way delay: 36.856 ms
Loss rate: 0.23%
```
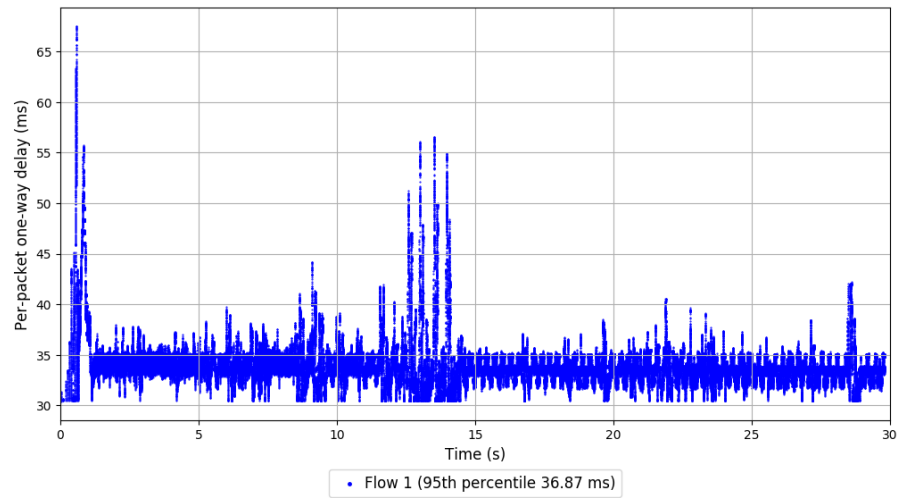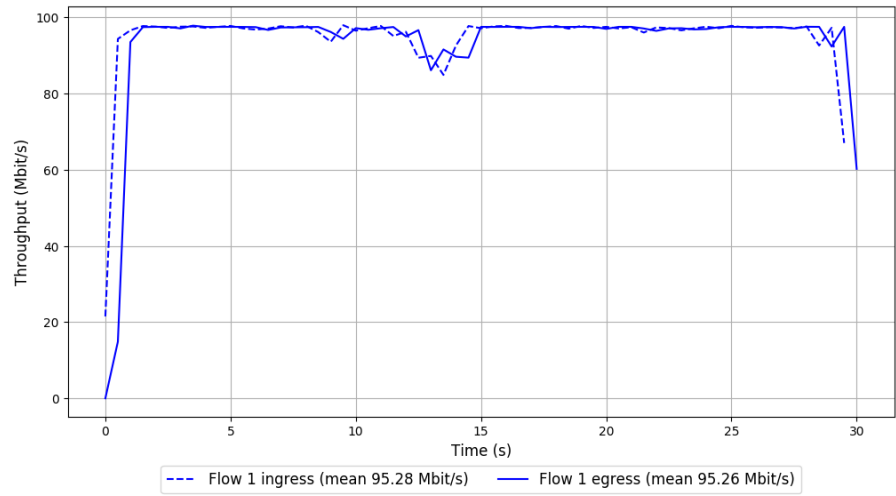
Run 3: Report of Indigo — Data Link

Flow 1 ingress (mean 95.10 Mbit/s)   Flow 1 egress (mean 95.09 Mbit/s)

Flow 1 (95th percentile 36.86 ms)

```
Run 4: Statistics of Indigo

Start at: 2019-10-03 09:15:27
End at: 2019-10-03 09:15:57
Local clock offset: 0.123 ms
Remote clock offset: 7.174 ms


# Below is generated by plot.py at 2019-10-03 10:37:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.26 Mbit/s
95th percentile per-packet one-way delay: 36.874 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.26 Mbit/s
95th percentile per-packet one-way delay: 36.874 ms
Loss rate: 0.23%
```
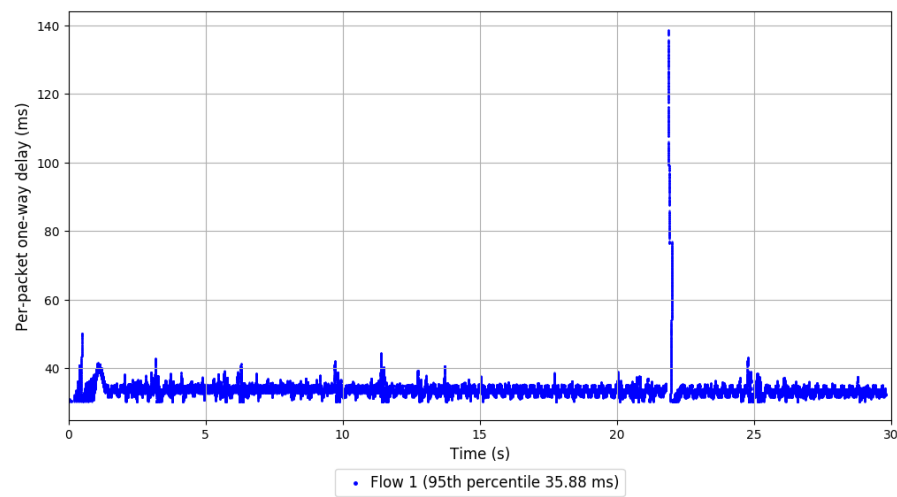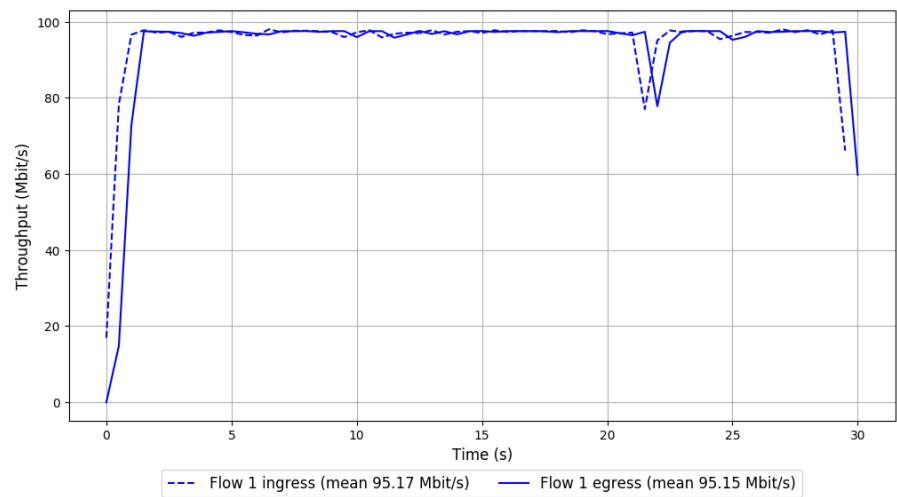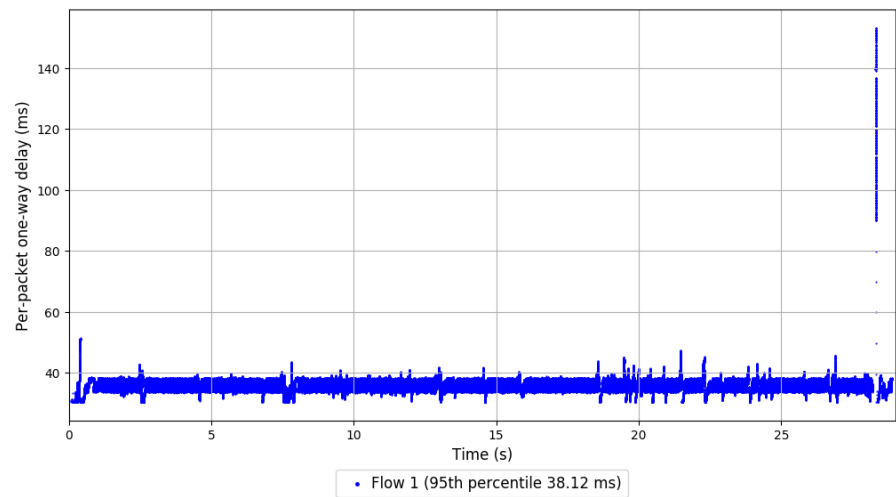
Run 4: Report of Indigo — Data Link

Flow 1 ingress (mean 95.28 Mbit/s)   Flow 1 egress (mean 95.26 Mbit/s)

Flow 1 (95th percentile 36.87 ms)

```
Run 5: Statistics of Indigo

Start at: 2019-10-03 09:55:44
End at: 2019-10-03 09:56:14
Local clock offset: 0.11 ms
Remote clock offset: 7.88 ms


# Below is generated by plot.py at 2019-10-03 10:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.15 Mbit/s
95th percentile per-packet one-way delay: 35.883 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.15 Mbit/s
95th percentile per-packet one-way delay: 35.883 ms
Loss rate: 0.23%
```
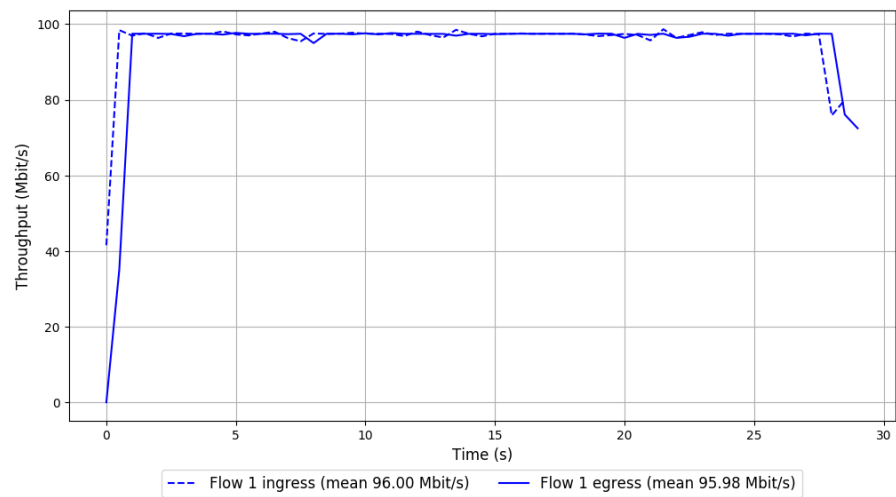
Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-10-03 07:40:58
End at: 2019-10-03 07:41:28
Local clock offset: 0.253 ms
Remote clock offset: 7.557 ms


# Below is generated by plot.py at 2019-10-03 10:37:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.98 Mbit/s
95th percentile per-packet one-way delay: 38.118 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 95.98 Mbit/s
95th percentile per-packet one-way delay: 38.118 ms
Loss rate: 0.25%
```
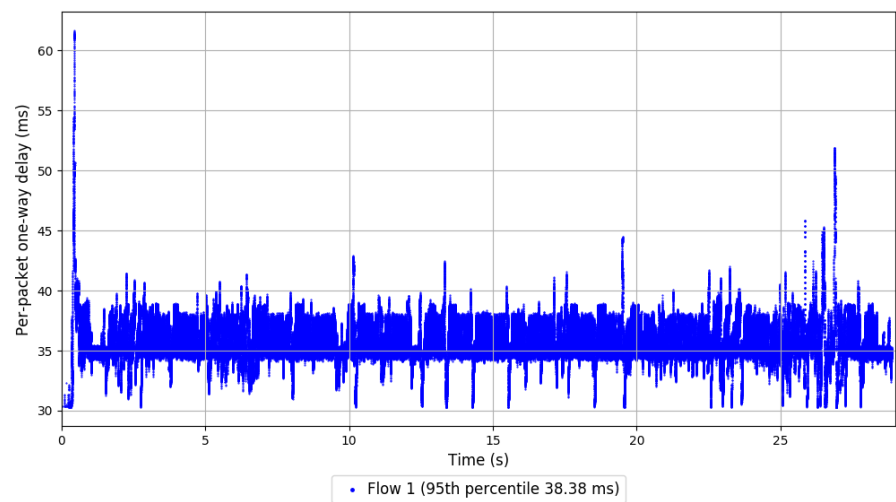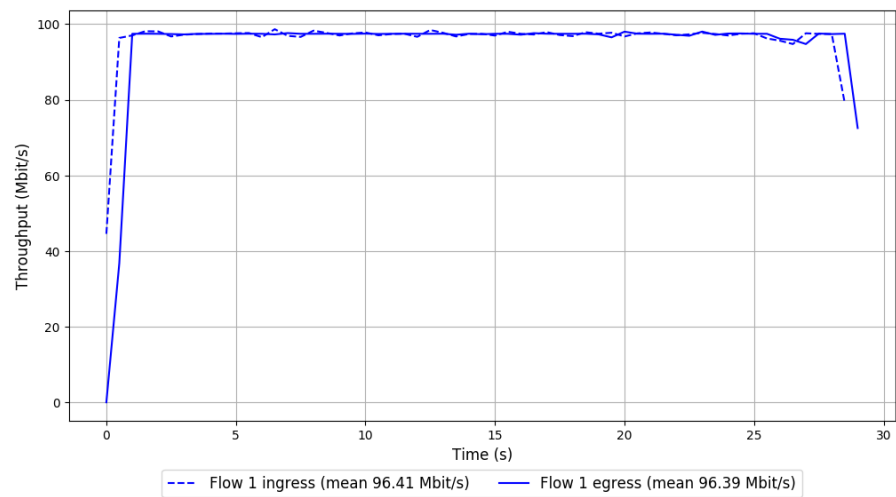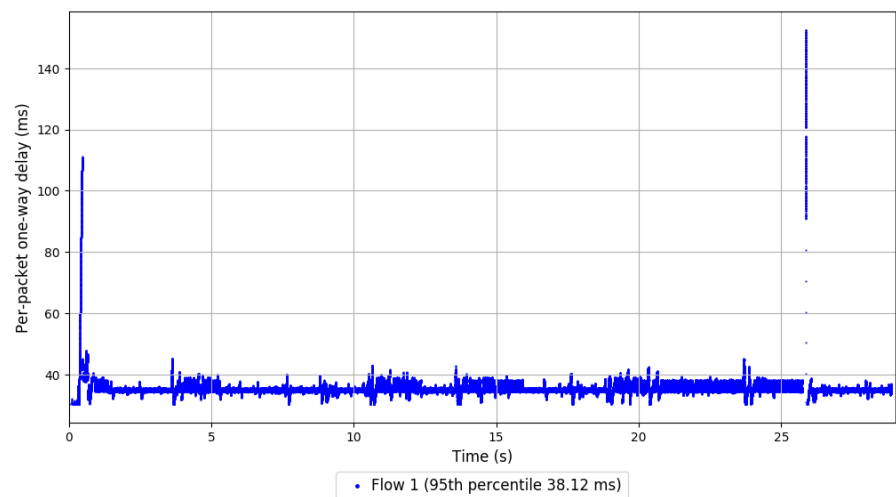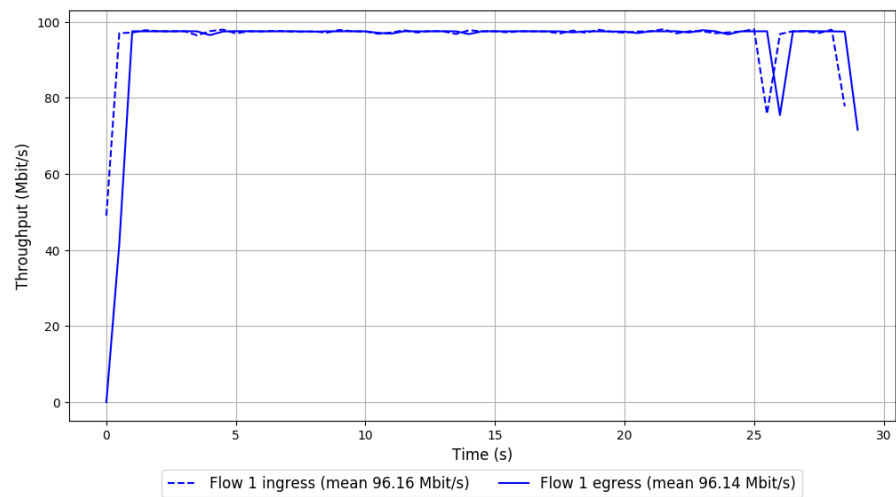
Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-10-03 08:29:35
End at: 2019-10-03 08:30:05
Local clock offset: 0.128 ms
Remote clock offset: 7.773 ms


# Below is generated by plot.py at 2019-10-03 10:37:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.39 Mbit/s
95th percentile per-packet one-way delay: 38.378 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.39 Mbit/s
95th percentile per-packet one-way delay: 38.378 ms
Loss rate: 0.24%
```

Run 2: Report of Indigo-MusesC3 — Data Link

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```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-10-03 09:08:07
End at: 2019-10-03 09:08:37
Local clock offset: 0.166 ms
Remote clock offset: 7.158 ms


# Below is generated by plot.py at 2019-10-03 10:37:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.14 Mbit/s
95th percentile per-packet one-way delay: 38.122 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.14 Mbit/s
95th percentile per-packet one-way delay: 38.122 ms
Loss rate: 0.24%
```
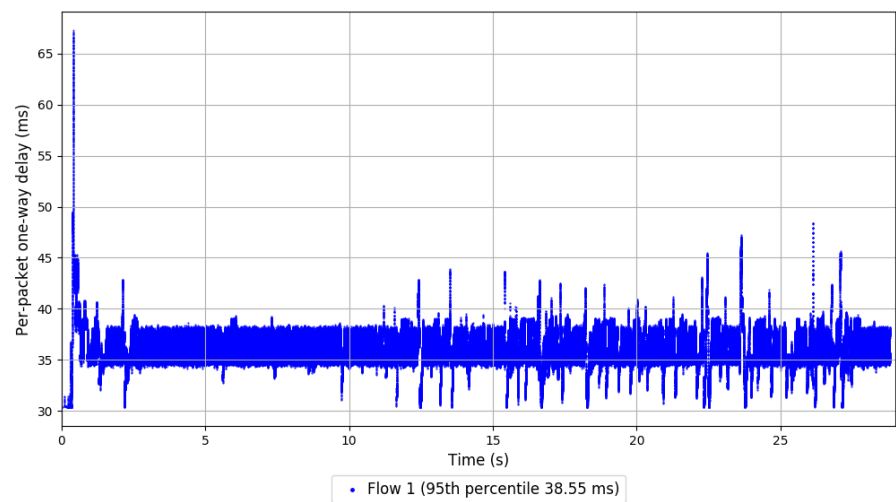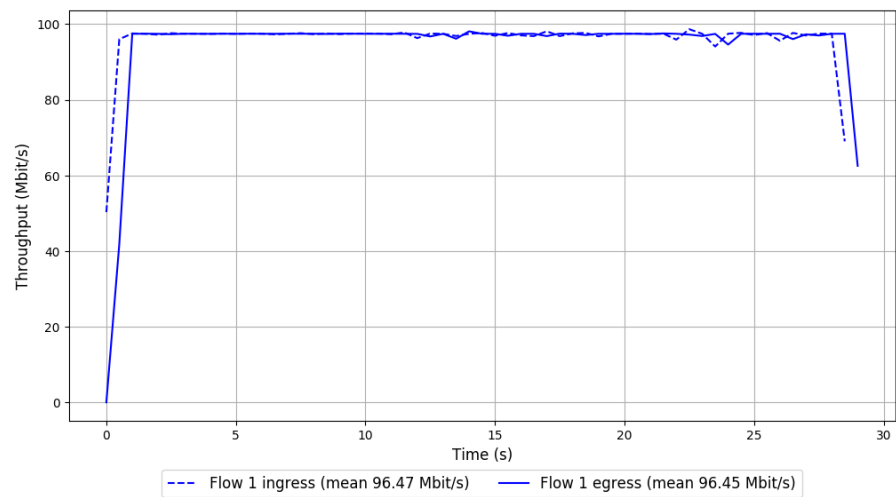
Run 3: Report of Indigo-MusesC3 — Data Link

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-10-03 09:47:37
End at: 2019-10-03 09:48:07
Local clock offset: 0.077 ms
Remote clock offset: 7.652 ms


# Below is generated by plot.py at 2019-10-03 10:37:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.45 Mbit/s
95th percentile per-packet one-way delay: 38.555 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.45 Mbit/s
95th percentile per-packet one-way delay: 38.555 ms
Loss rate: 0.24%
```
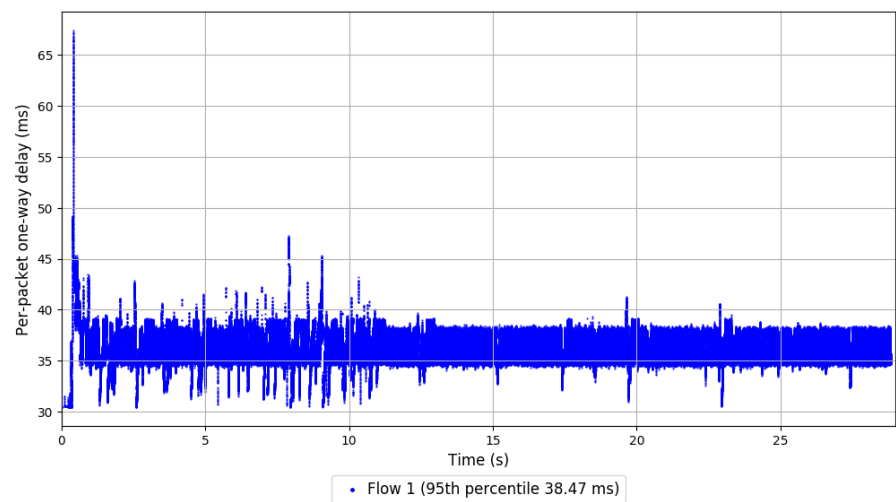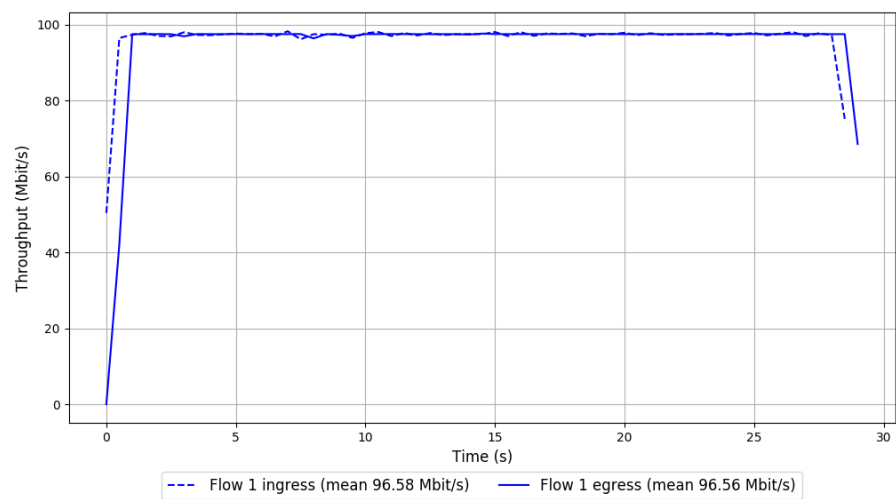
Run 4: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 96.47 Mbit/s) ---- Flow 1 egress (mean 96.45 Mbit/s) ——

· Flow 1 (95th percentile 38.55 ms)

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-10-03 10:26:05
End at: 2019-10-03 10:26:35
Local clock offset: 0.31 ms
Remote clock offset: 7.408 ms


# Below is generated by plot.py at 2019-10-03 10:37:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.56 Mbit/s
95th percentile per-packet one-way delay: 38.465 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.56 Mbit/s
95th percentile per-packet one-way delay: 38.465 ms
Loss rate: 0.24%
```

Run 5: Report of Indigo-MusesC3 — Data Link

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```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-10-03 07:13:09
End at: 2019-10-03 07:13:39
Local clock offset: 0.268 ms
Remote clock offset: 7.833 ms


# Below is generated by plot.py at 2019-10-03 10:38:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.73 Mbit/s
95th percentile per-packet one-way delay: 35.943 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.73 Mbit/s
95th percentile per-packet one-way delay: 35.943 ms
Loss rate: 0.24%
```
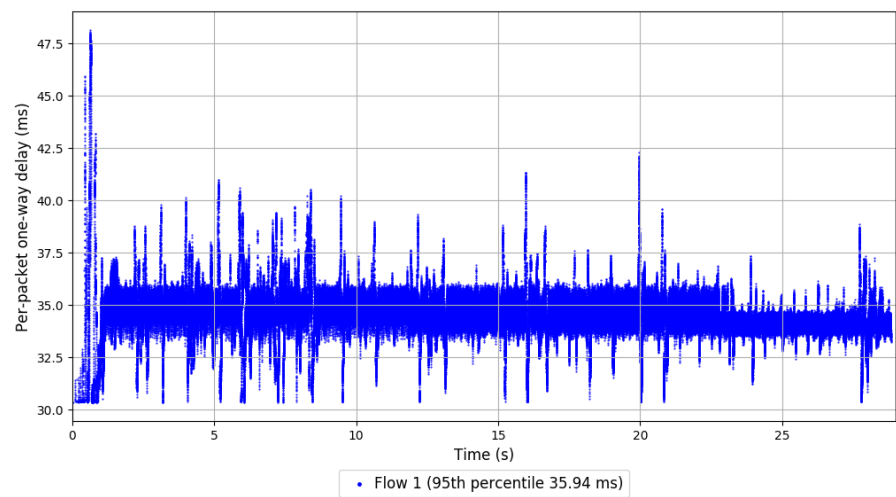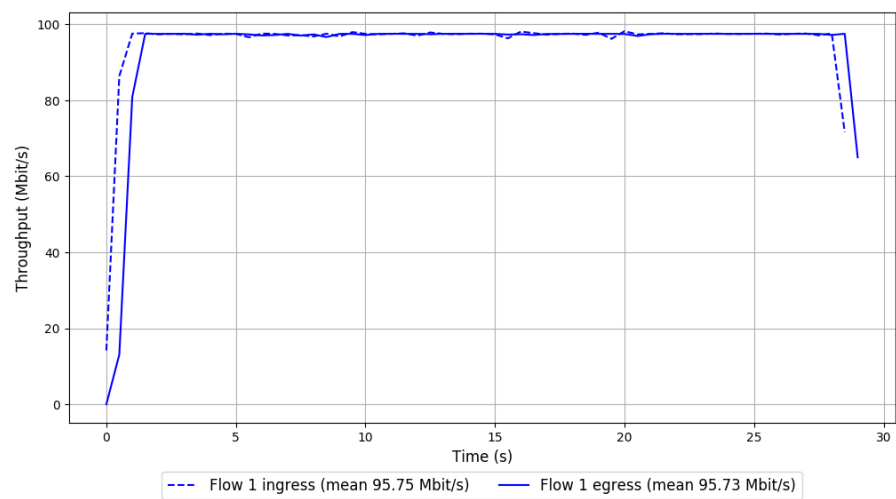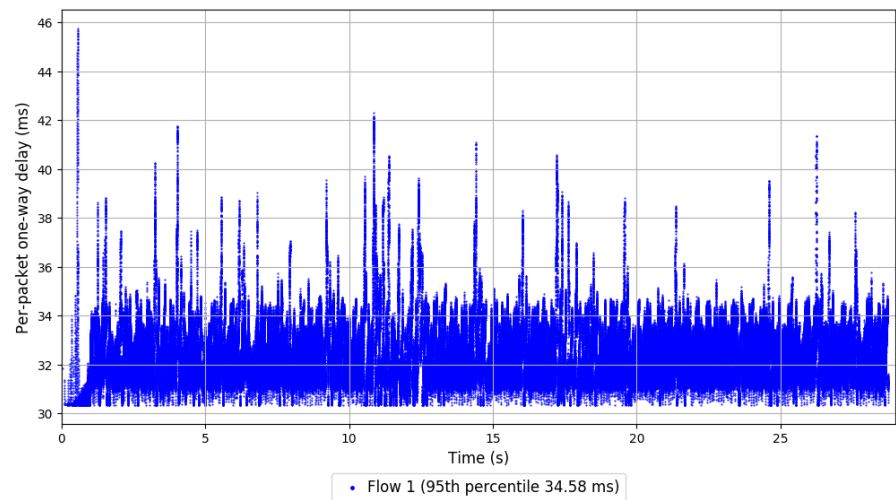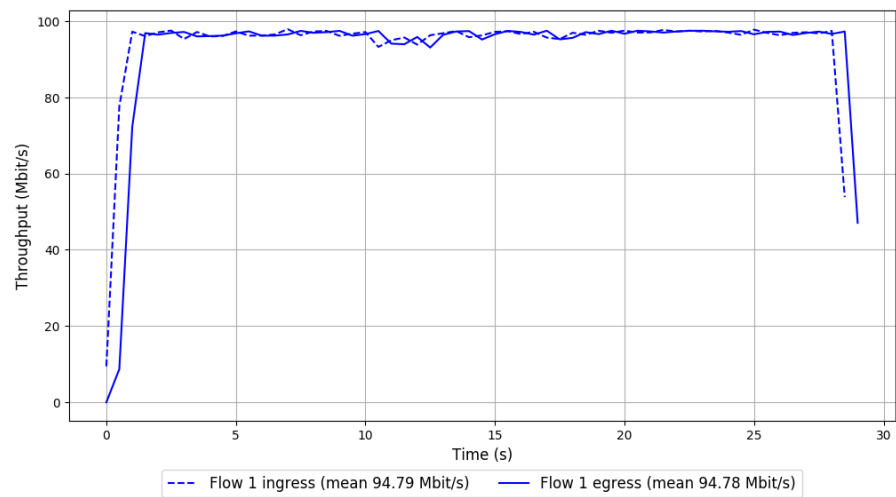
Run 1: Report of Indigo-MusesC5 — Data Link

- - - Flow 1 ingress (mean 95.75 Mbit/s) —— Flow 1 egress (mean 95.73 Mbit/s)

• Flow 1 (95th percentile 35.94 ms)

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-10-03 08:02:23
End at: 2019-10-03 08:02:53
Local clock offset: 0.213 ms
Remote clock offset: 7.772 ms


# Below is generated by plot.py at 2019-10-03 10:38:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.78 Mbit/s
95th percentile per-packet one-way delay: 34.584 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 94.78 Mbit/s
95th percentile per-packet one-way delay: 34.584 ms
Loss rate: 0.24%
```
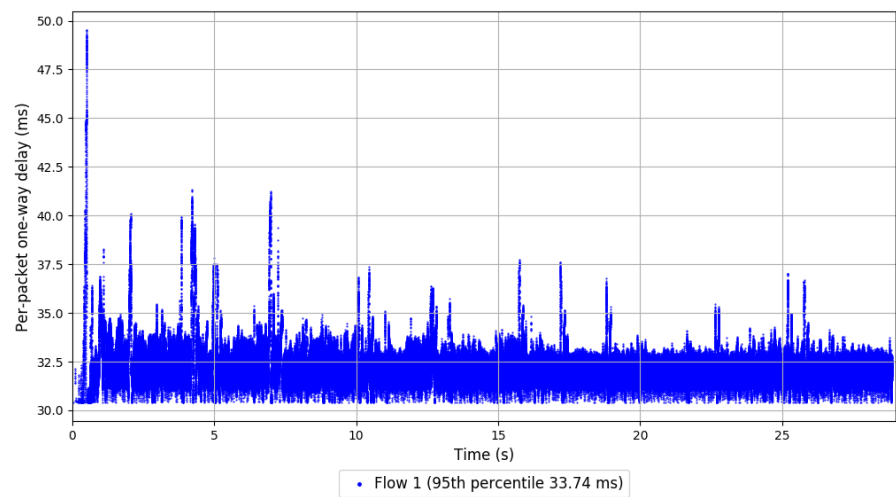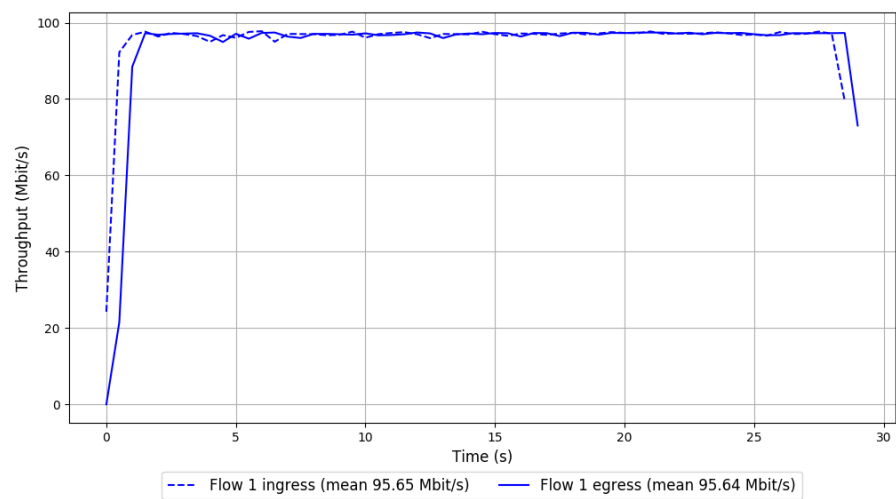
Run 2: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 94.79 Mbit/s)   Flow 1 egress (mean 94.78 Mbit/s)

• Flow 1 (95th percentile 34.58 ms)

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-10-03 08:46:47
End at: 2019-10-03 08:47:17
Local clock offset: 0.221 ms
Remote clock offset: 7.202 ms


# Below is generated by plot.py at 2019-10-03 10:38:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.64 Mbit/s
95th percentile per-packet one-way delay: 33.741 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.64 Mbit/s
95th percentile per-packet one-way delay: 33.741 ms
Loss rate: 0.23%
```
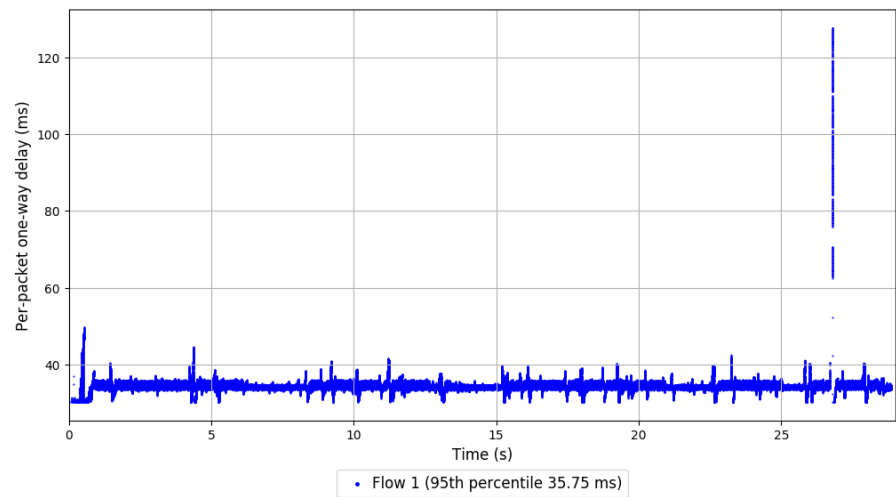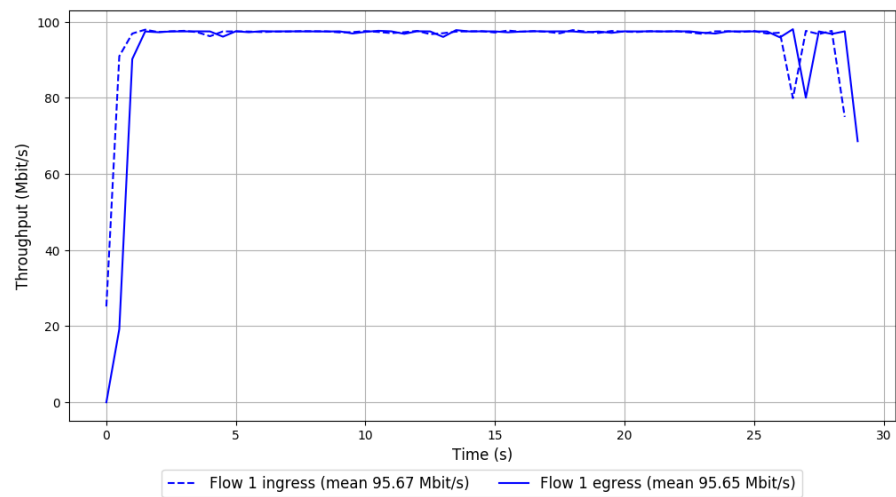
Run 3: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 95.65 Mbit/s)   Flow 1 egress (mean 95.64 Mbit/s)

Flow 1 (95th percentile 33.74 ms)

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-10-03 09:24:56
End at: 2019-10-03 09:25:26
Local clock offset: 0.088 ms
Remote clock offset: 7.392 ms


# Below is generated by plot.py at 2019-10-03 10:38:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.65 Mbit/s
95th percentile per-packet one-way delay: 35.746 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.65 Mbit/s
95th percentile per-packet one-way delay: 35.746 ms
Loss rate: 0.24%
```
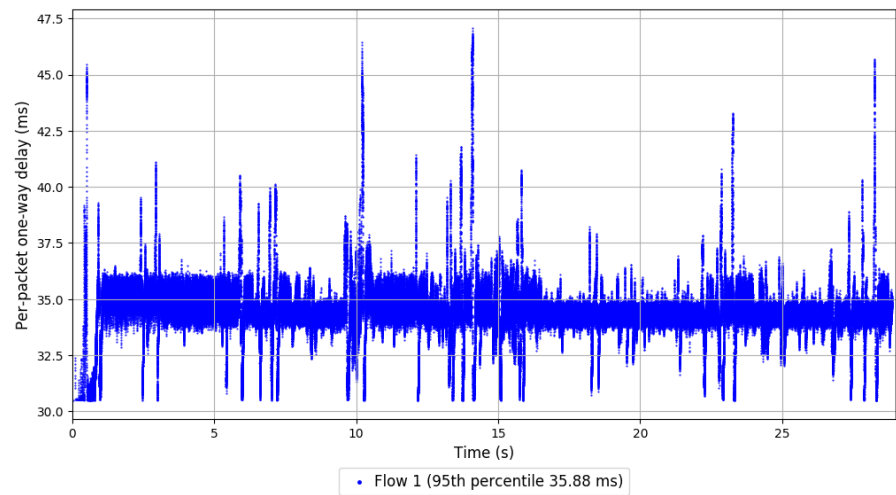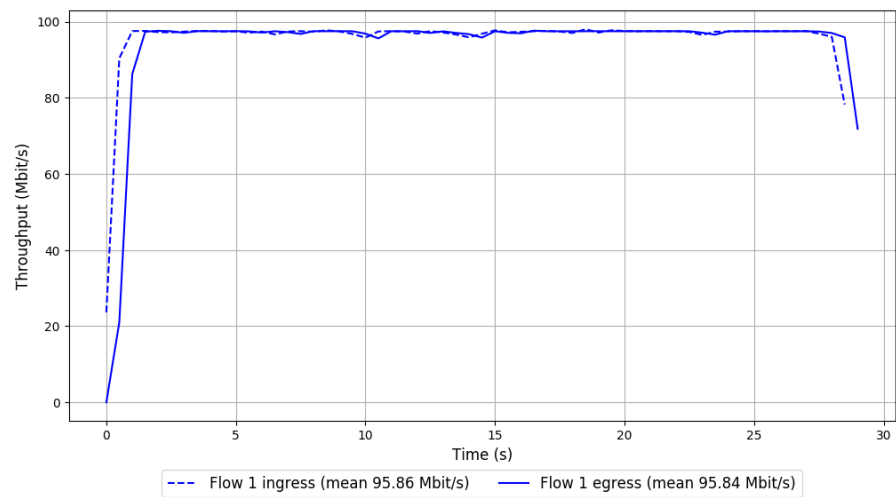
Run 4: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 95.67 Mbit/s) ---- Flow 1 egress (mean 95.65 Mbit/s)

Flow 1 (95th percentile 35.75 ms)

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-10-03 10:04:24
End at: 2019-10-03 10:04:54
Local clock offset: 0.208 ms
Remote clock offset: 7.895 ms


# Below is generated by plot.py at 2019-10-03 10:38:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.84 Mbit/s
95th percentile per-packet one-way delay: 35.883 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.84 Mbit/s
95th percentile per-packet one-way delay: 35.883 ms
Loss rate: 0.24%
```
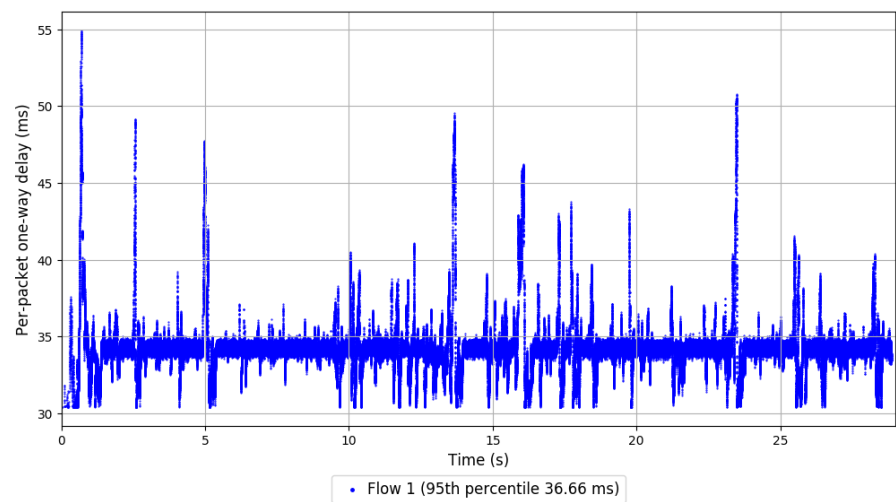
Run 5: Report of Indigo-MusesC5 — Data Link

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```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-10-03 07:02:44
End at: 2019-10-03 07:03:14
Local clock offset: 0.19 ms
Remote clock offset: 7.565 ms


# Below is generated by plot.py at 2019-10-03 10:38:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.50 Mbit/s
95th percentile per-packet one-way delay: 36.660 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.50 Mbit/s
95th percentile per-packet one-way delay: 36.660 ms
Loss rate: 0.24%
```
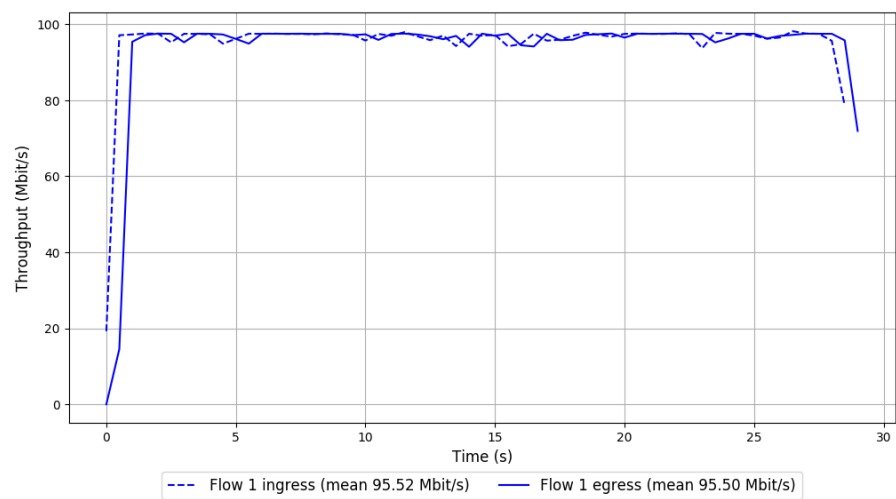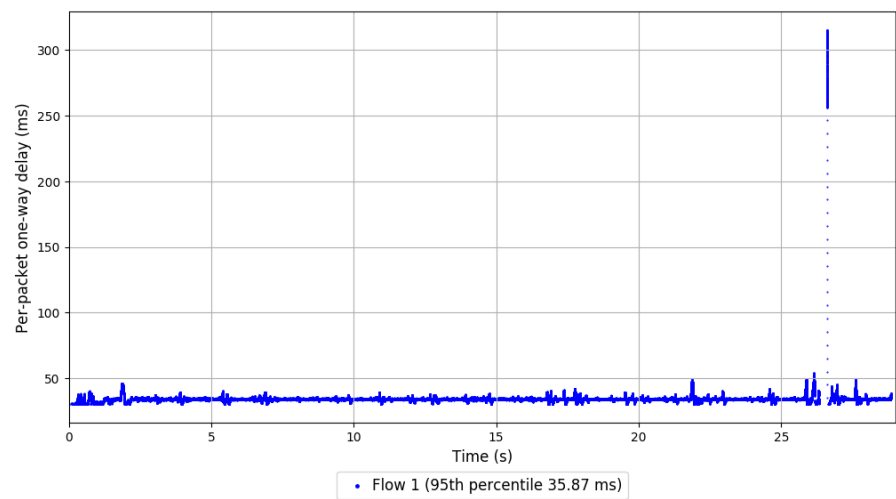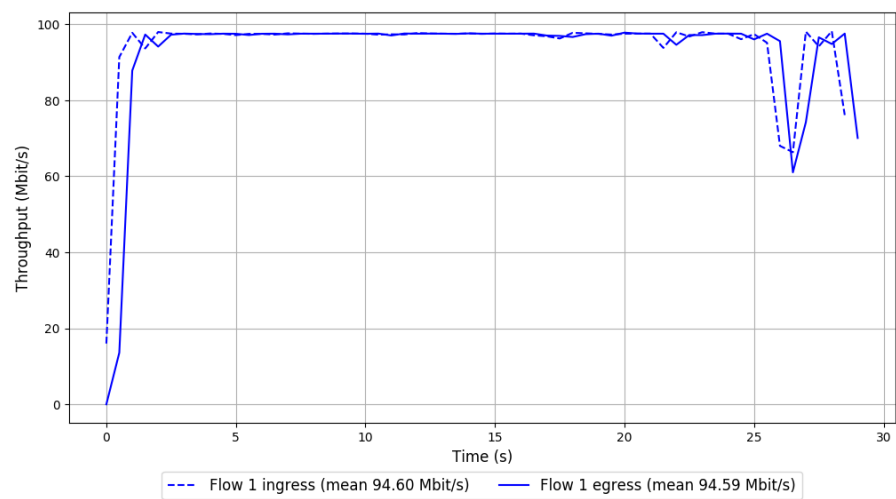
Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-10-03 07:53:12
End at: 2019-10-03 07:53:42
Local clock offset: 0.298 ms
Remote clock offset: 7.743 ms


# Below is generated by plot.py at 2019-10-03 10:38:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.59 Mbit/s
95th percentile per-packet one-way delay: 35.866 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 94.59 Mbit/s
95th percentile per-packet one-way delay: 35.866 ms
Loss rate: 0.23%
```
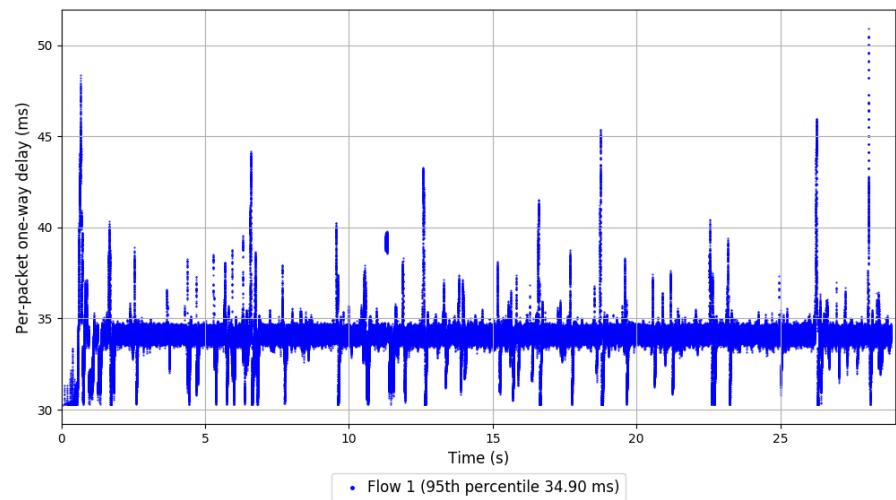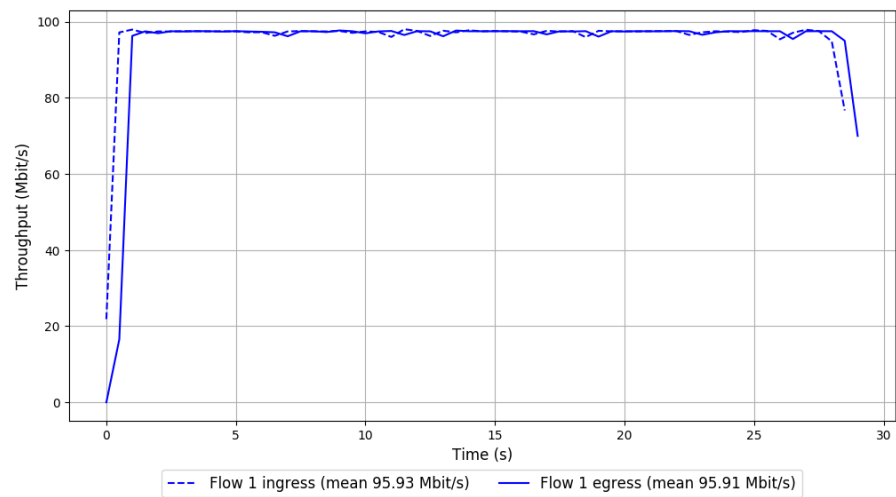
Run 2: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 94.60 Mbit/s) — — — Flow 1 egress (mean 94.59 Mbit/s)

· Flow 1 (95th percentile 35.87 ms)

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-10-03 08:39:13
End at: 2019-10-03 08:39:43
Local clock offset: 0.218 ms
Remote clock offset: 7.421 ms


# Below is generated by plot.py at 2019-10-03 10:38:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.91 Mbit/s
95th percentile per-packet one-way delay: 34.904 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.91 Mbit/s
95th percentile per-packet one-way delay: 34.904 ms
Loss rate: 0.24%
```
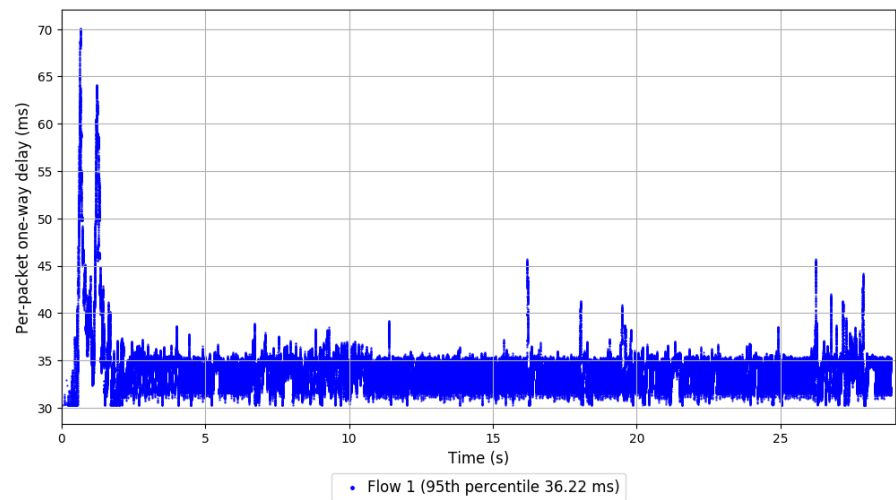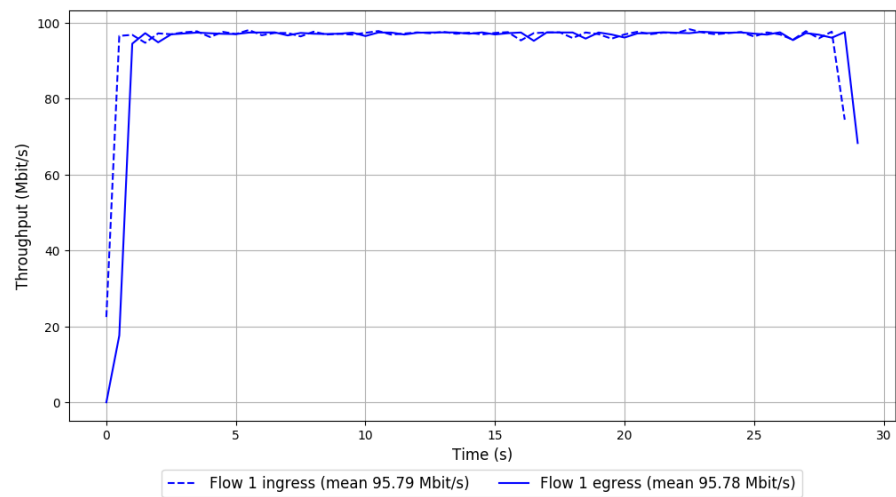
Run 3: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 95.93 Mbit/s)   Flow 1 egress (mean 95.91 Mbit/s)

Flow 1 (95th percentile 34.90 ms)

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-10-03 09:17:13
End at: 2019-10-03 09:17:43
Local clock offset: 0.134 ms
Remote clock offset: 7.299 ms


# Below is generated by plot.py at 2019-10-03 10:39:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.78 Mbit/s
95th percentile per-packet one-way delay: 36.219 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.78 Mbit/s
95th percentile per-packet one-way delay: 36.219 ms
Loss rate: 0.24%
```
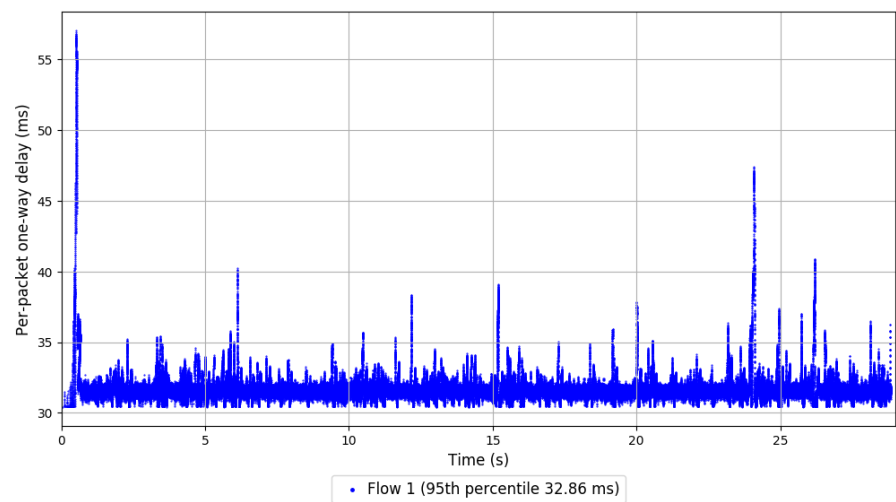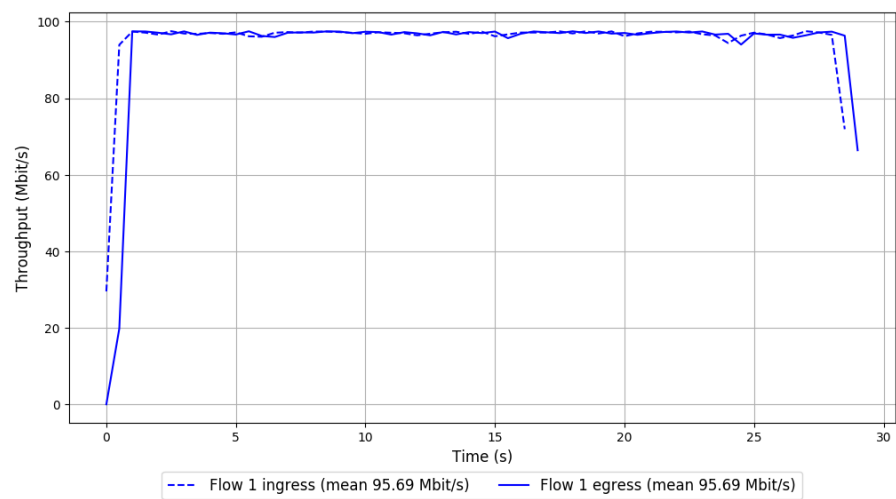
Run 4: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 95.79 Mbit/s)   Flow 1 egress (mean 95.78 Mbit/s)

• Flow 1 (95th percentile 36.22 ms)

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-10-03 09:57:04
End at: 2019-10-03 09:57:34
Local clock offset: 0.103 ms
Remote clock offset: 7.767 ms


# Below is generated by plot.py at 2019-10-03 10:39:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 32.862 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 32.862 ms
Loss rate: 0.22%
```
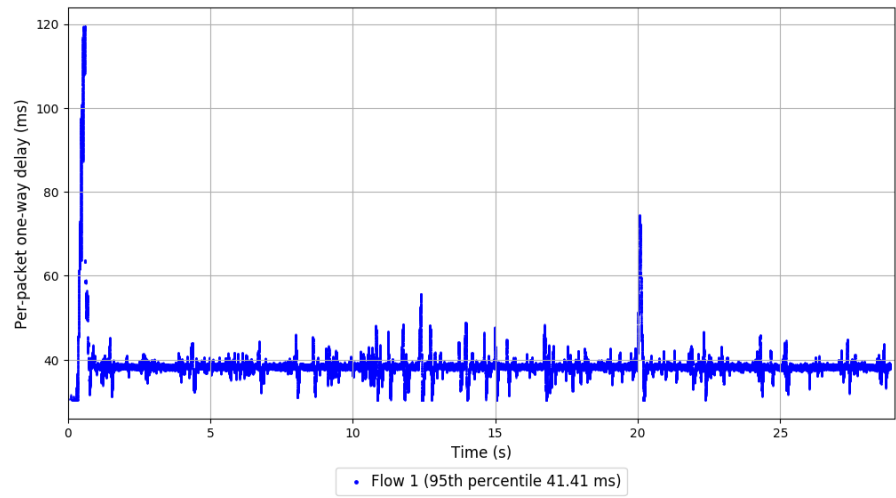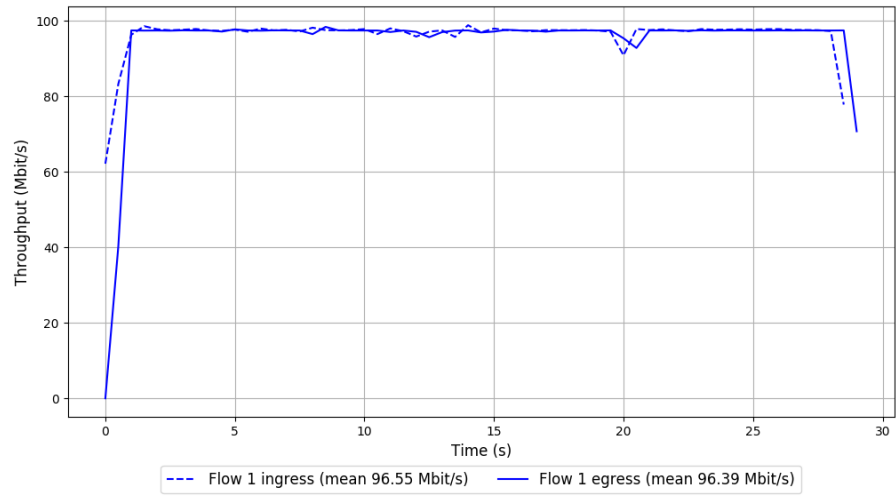
Run 5: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 95.69 Mbit/s)   Flow 1 egress (mean 95.69 Mbit/s)

Flow 1 (95th percentile 32.86 ms)

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-10-03 07:30:16
End at: 2019-10-03 07:30:46
Local clock offset: 0.26 ms
Remote clock offset: 7.553 ms


# Below is generated by plot.py at 2019-10-03 10:39:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.39 Mbit/s
95th percentile per-packet one-way delay: 41.406 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 96.39 Mbit/s
95th percentile per-packet one-way delay: 41.406 ms
Loss rate: 0.39%
```
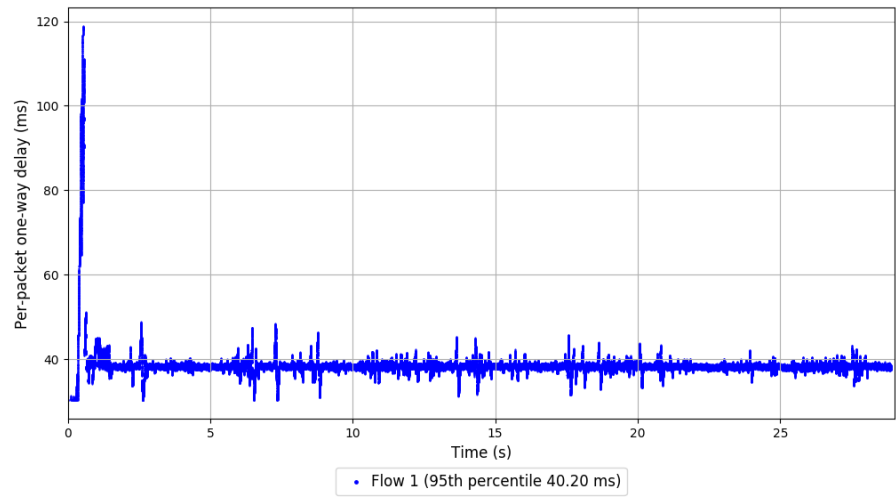
Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-10-03 08:18:41
End at: 2019-10-03 08:19:11
Local clock offset: 0.134 ms
Remote clock offset: 7.82 ms


# Below is generated by plot.py at 2019-10-03 10:39:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.56 Mbit/s
95th percentile per-packet one-way delay: 40.196 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 96.56 Mbit/s
95th percentile per-packet one-way delay: 40.196 ms
Loss rate: 0.42%
```
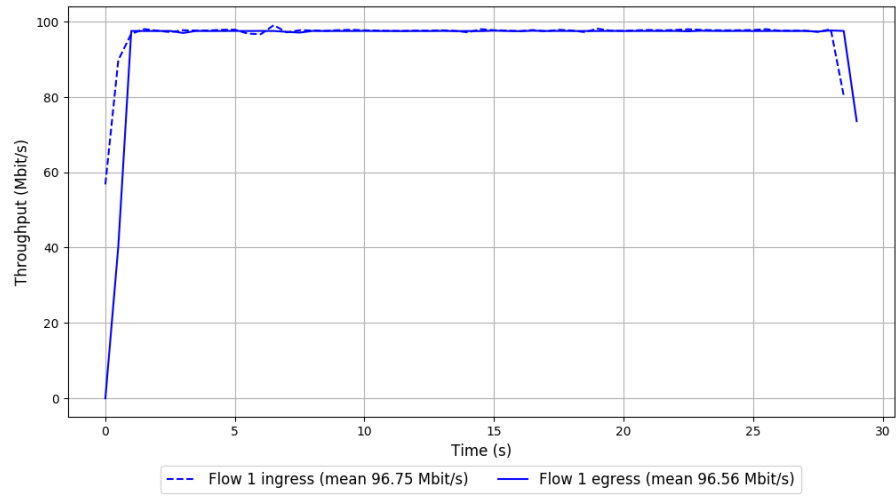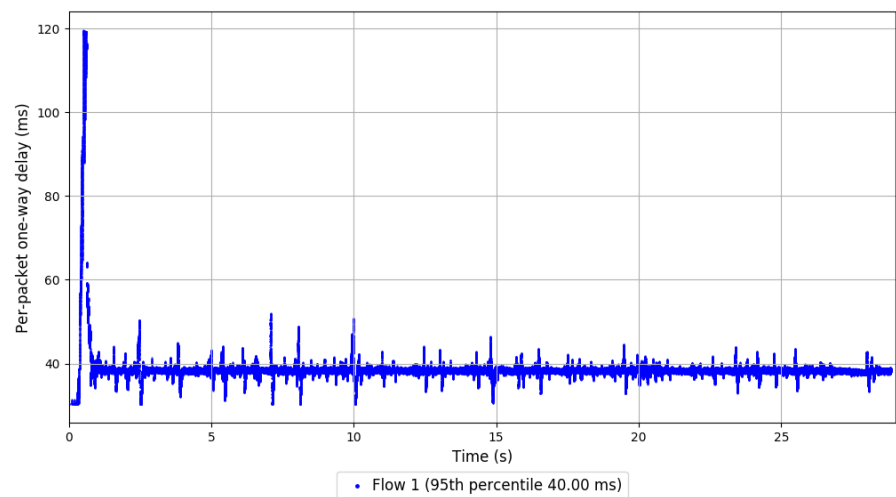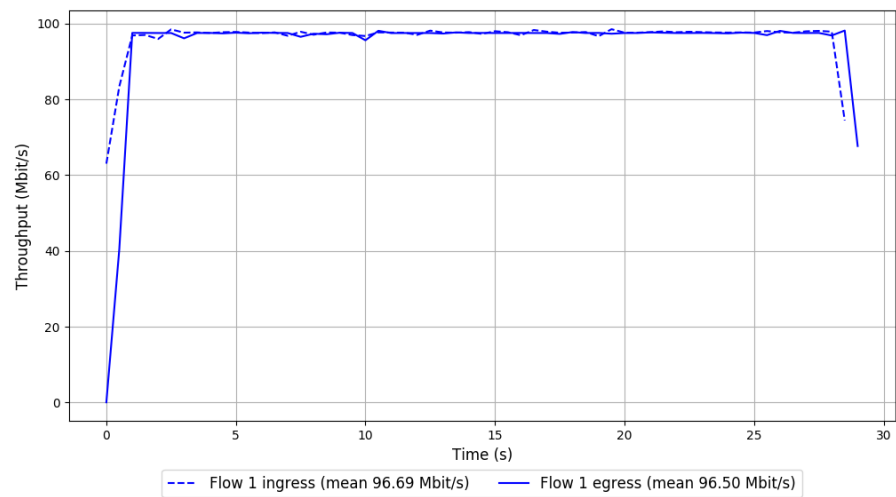
Run 2: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 96.75 Mbit/s) ---- Flow 1 egress (mean 96.56 Mbit/s) ——

• Flow 1 (95th percentile 40.20 ms)

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-10-03 08:59:01
End at: 2019-10-03 08:59:31
Local clock offset: 0.181 ms
Remote clock offset: 7.235 ms

# Below is generated by plot.py at 2019-10-03 10:39:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 40.001 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 40.001 ms
Loss rate: 0.41%
```

Run 3: Report of Indigo-MusesT — Data Link

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-10-03 09:38:47
End at: 2019-10-03 09:39:17
Local clock offset: 0.123 ms
Remote clock offset: 7.511 ms


# Below is generated by plot.py at 2019-10-03 10:39:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.46 Mbit/s
95th percentile per-packet one-way delay: 47.455 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 96.46 Mbit/s
95th percentile per-packet one-way delay: 47.455 ms
Loss rate: 0.67%
```
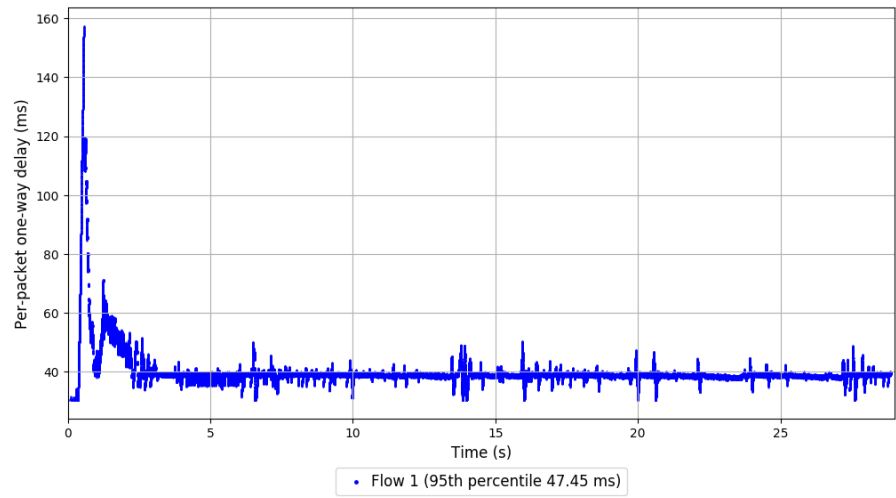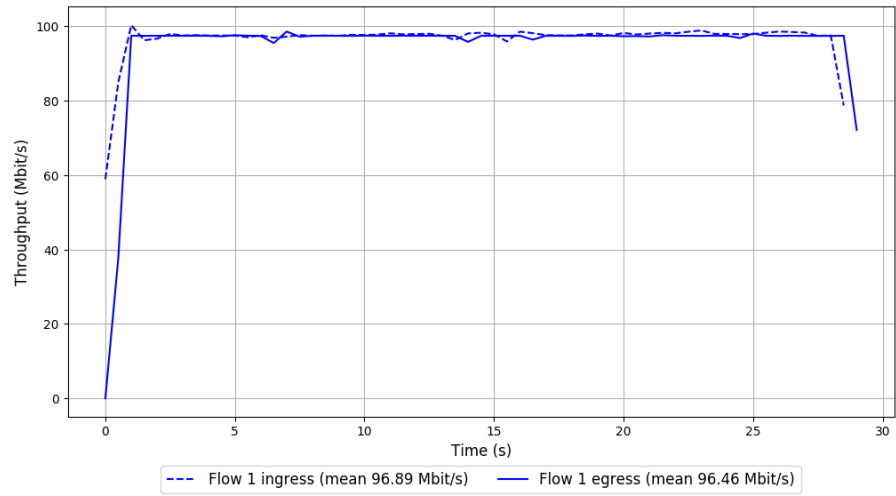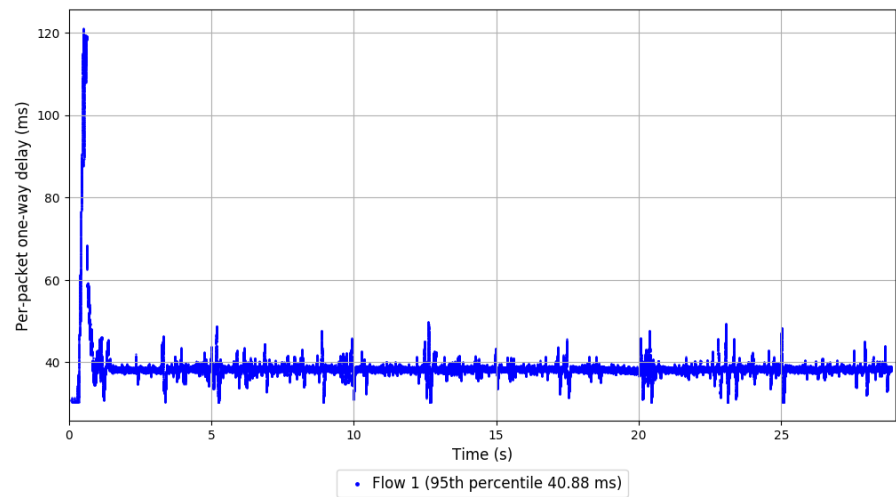
Run 4: Report of Indigo-MusesT — Data Link

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-10-03 10:16:39
End at: 2019-10-03 10:17:09
Local clock offset: 0.26 ms
Remote clock offset: 7.69 ms


# Below is generated by plot.py at 2019-10-03 10:39:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.53 Mbit/s
95th percentile per-packet one-way delay: 40.876 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 96.53 Mbit/s
95th percentile per-packet one-way delay: 40.876 ms
Loss rate: 0.44%
```
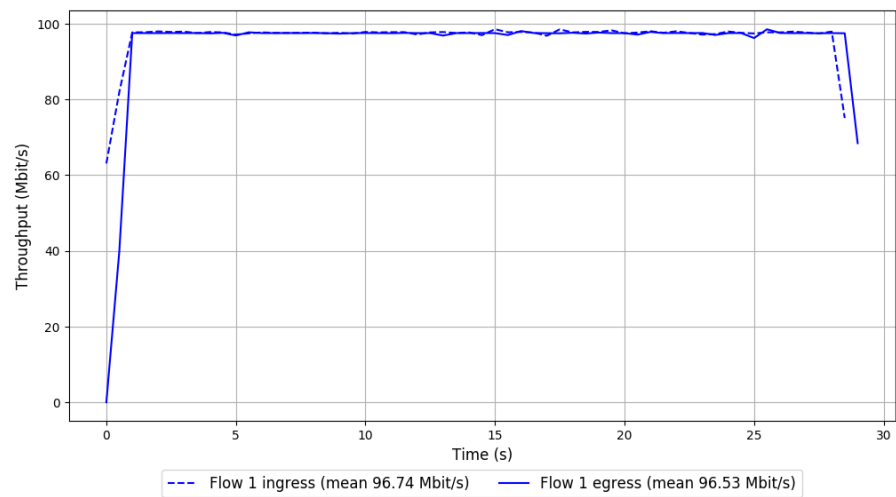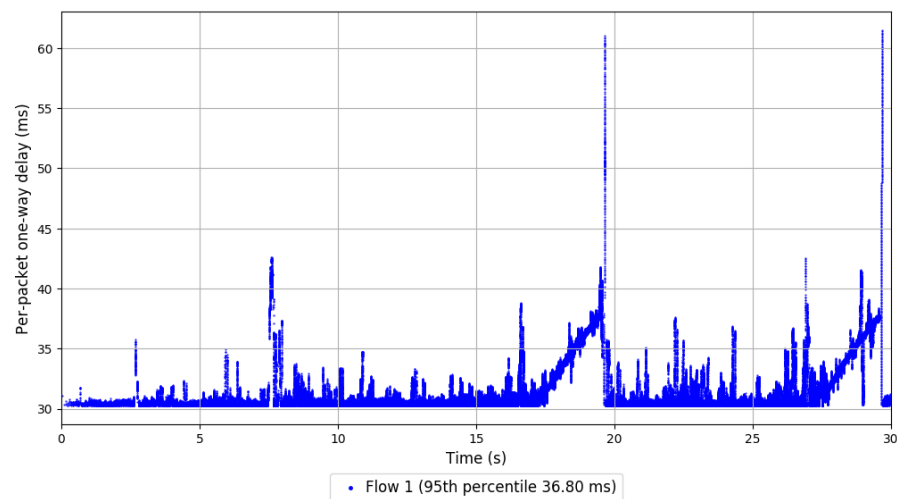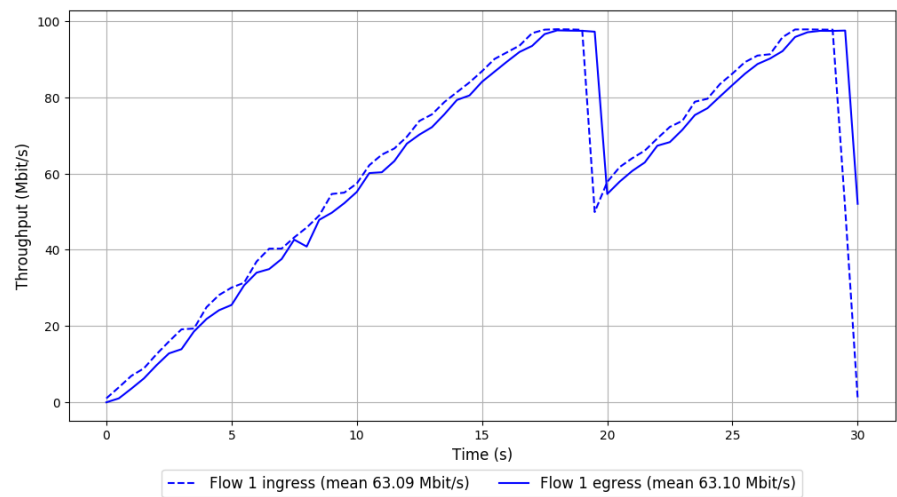
Run 5: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 96.74 Mbit/s)   Flow 1 egress (mean 96.53 Mbit/s)

Flow 1 (95th percentile 40.88 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2019-10-03 07:10:49
End at: 2019-10-03 07:11:19
Local clock offset: 0.279 ms
Remote clock offset: 7.855 ms


# Below is generated by plot.py at 2019-10-03 10:39:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.10 Mbit/s
95th percentile per-packet one-way delay: 36.798 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 63.10 Mbit/s
95th percentile per-packet one-way delay: 36.798 ms
Loss rate: 0.19%
```

Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2019-10-03 08:00:21
End at: 2019-10-03 08:00:51
Local clock offset: 0.268 ms
Remote clock offset: 7.658 ms


# Below is generated by plot.py at 2019-10-03 10:40:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.78 Mbit/s
95th percentile per-packet one-way delay: 37.609 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 63.78 Mbit/s
95th percentile per-packet one-way delay: 37.609 ms
Loss rate: 0.19%
```
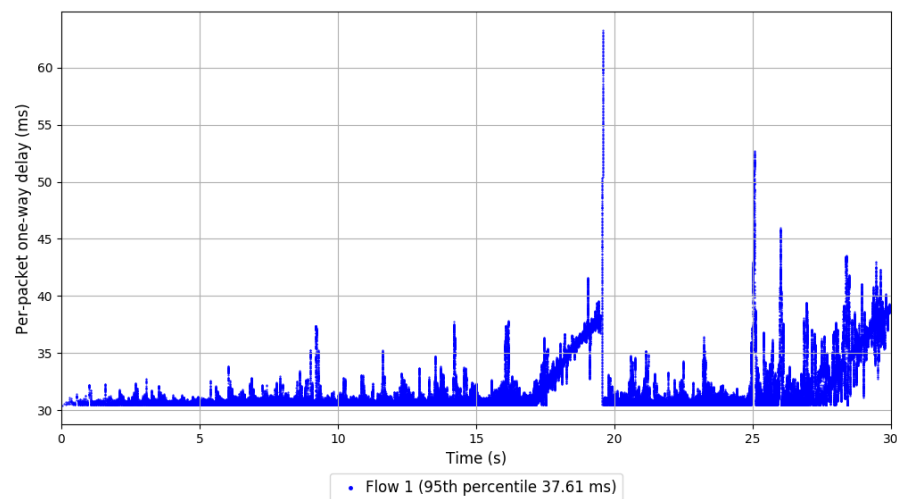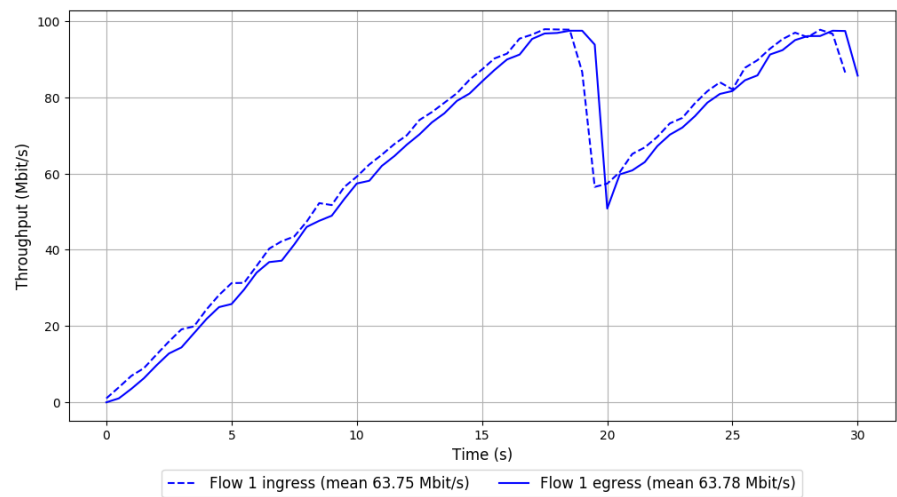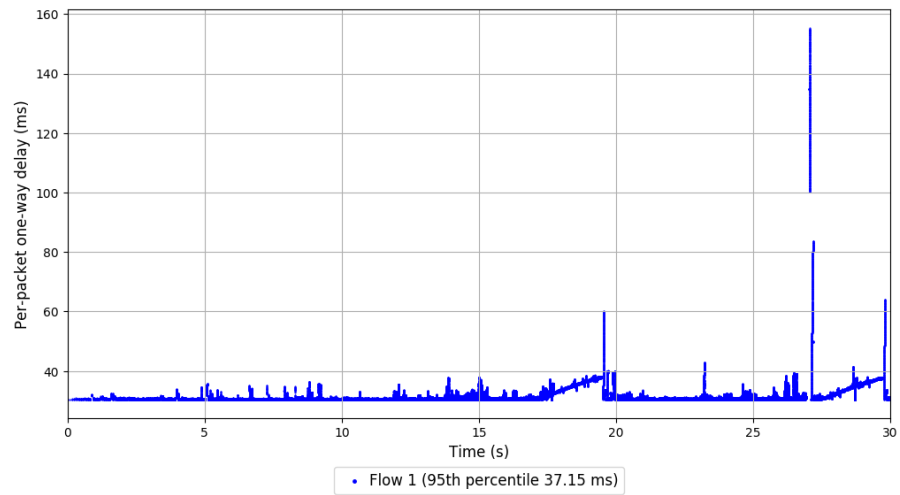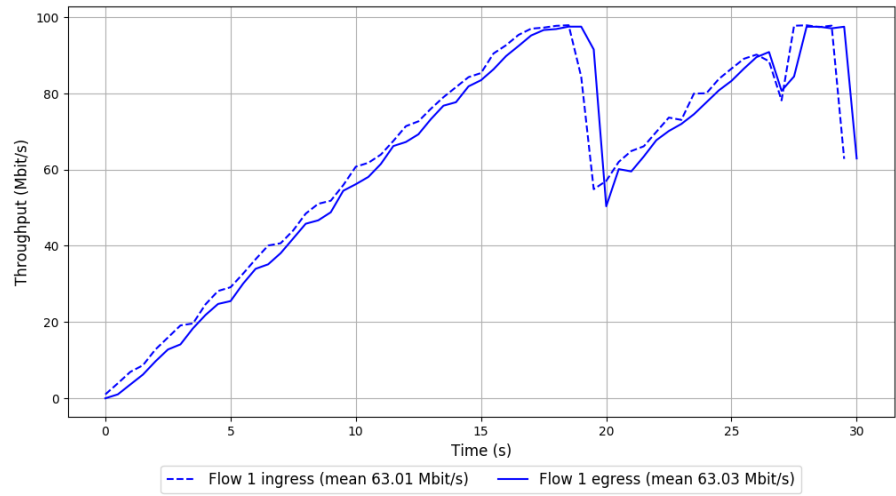
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2019-10-03 08:45:14
End at: 2019-10-03 08:45:44
Local clock offset: 0.208 ms
Remote clock offset: 7.208 ms


# Below is generated by plot.py at 2019-10-03 10:40:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.03 Mbit/s
95th percentile per-packet one-way delay: 37.151 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 63.03 Mbit/s
95th percentile per-packet one-way delay: 37.151 ms
Loss rate: 0.19%
```

Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2019-10-03 09:23:18
End at: 2019-10-03 09:23:48
Local clock offset: 0.135 ms
Remote clock offset: 7.353 ms


# Below is generated by plot.py at 2019-10-03 10:40:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.74 Mbit/s
95th percentile per-packet one-way delay: 36.416 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 50.74 Mbit/s
95th percentile per-packet one-way delay: 36.416 ms
Loss rate: 0.31%
```
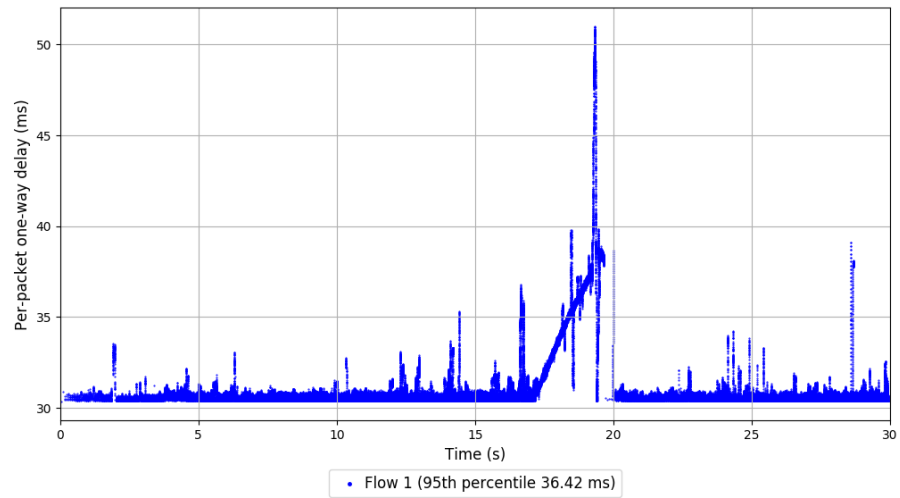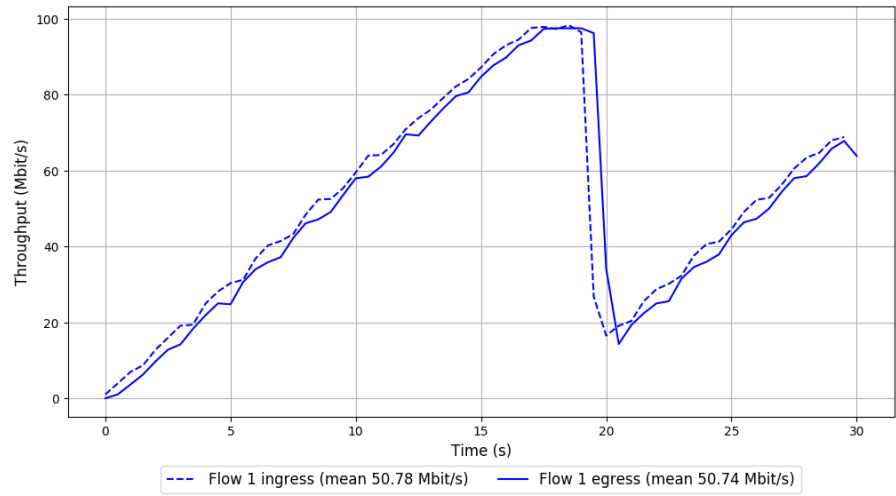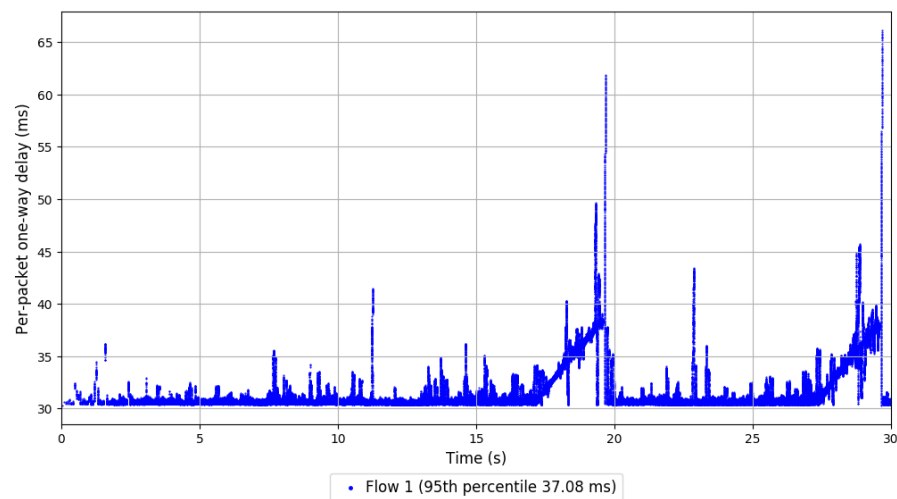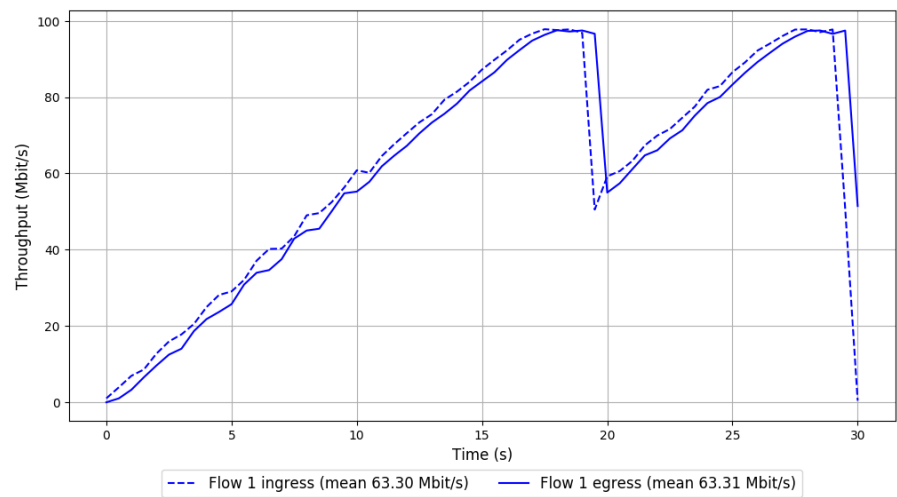
Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 50.78 Mbit/s)   Flow 1 egress (mean 50.74 Mbit/s)

• Flow 1 (95th percentile 36.42 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2019-10-03 10:02:49
End at: 2019-10-03 10:03:19
Local clock offset: 0.177 ms
Remote clock offset: 7.874 ms


# Below is generated by plot.py at 2019-10-03 10:40:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.31 Mbit/s
95th percentile per-packet one-way delay: 37.080 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 63.31 Mbit/s
95th percentile per-packet one-way delay: 37.080 ms
Loss rate: 0.19%
```

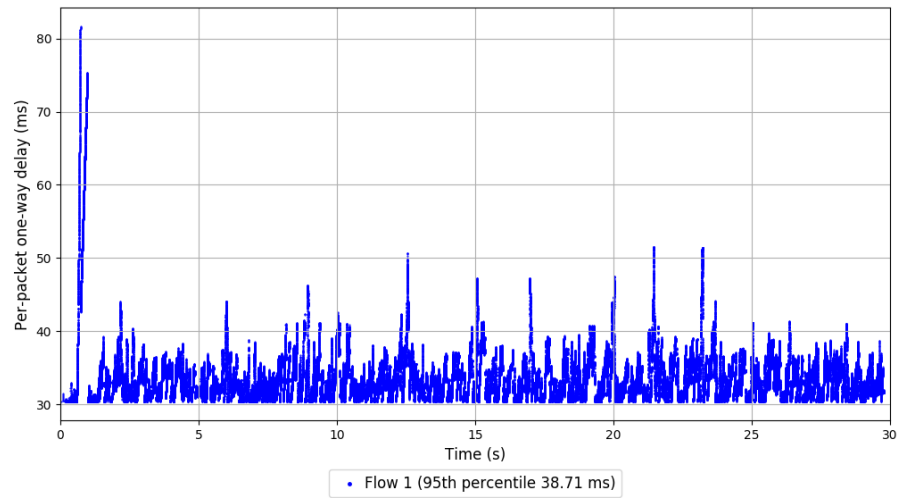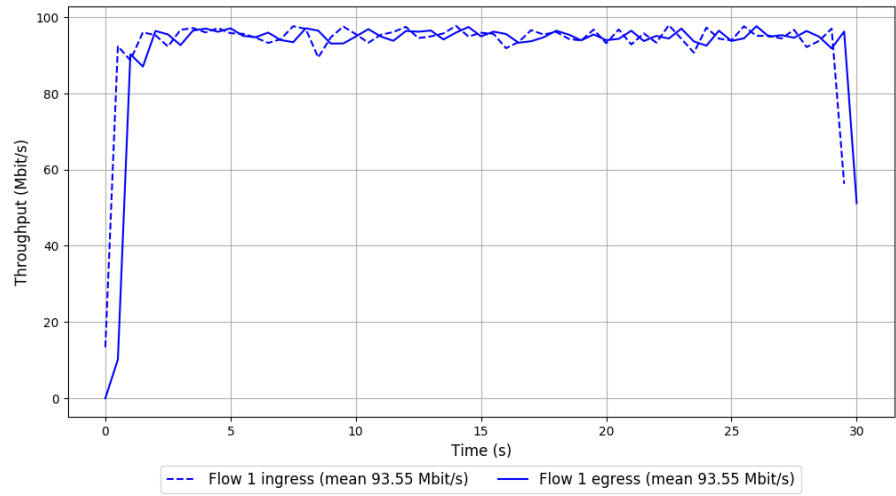# Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 07:27:18
End at: 2019-10-03 07:27:48
Local clock offset: 0.243 ms
Remote clock offset: 7.459 ms


# Below is generated by plot.py at 2019-10-03 10:40:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.55 Mbit/s
95th percentile per-packet one-way delay: 38.713 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 93.55 Mbit/s
95th percentile per-packet one-way delay: 38.713 ms
Loss rate: 0.21%
```

Run 1: Report of Muses_DecisionTree — Data Link

```
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 08:15:46
End at: 2019-10-03 08:16:16
Local clock offset: 0.153 ms
Remote clock offset: 7.797 ms


# Below is generated by plot.py at 2019-10-03 10:40:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.79 Mbit/s
95th percentile per-packet one-way delay: 37.336 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 92.79 Mbit/s
95th percentile per-packet one-way delay: 37.336 ms
Loss rate: 0.22%
```
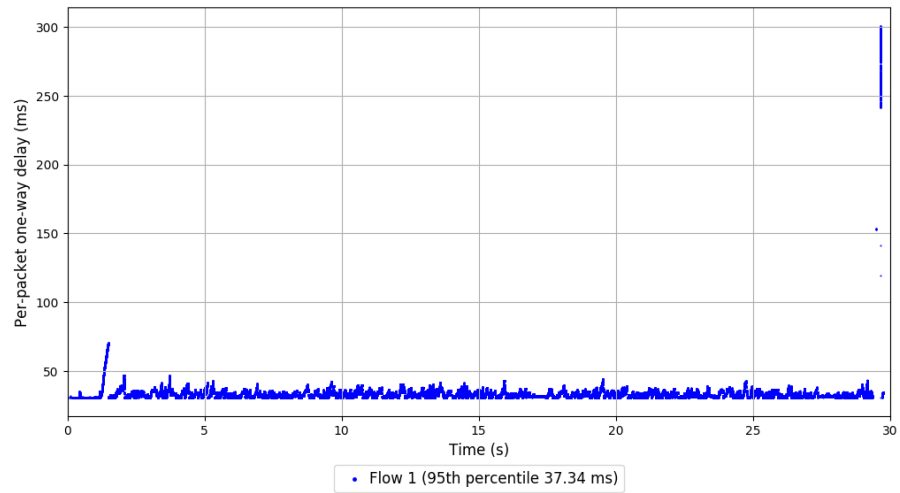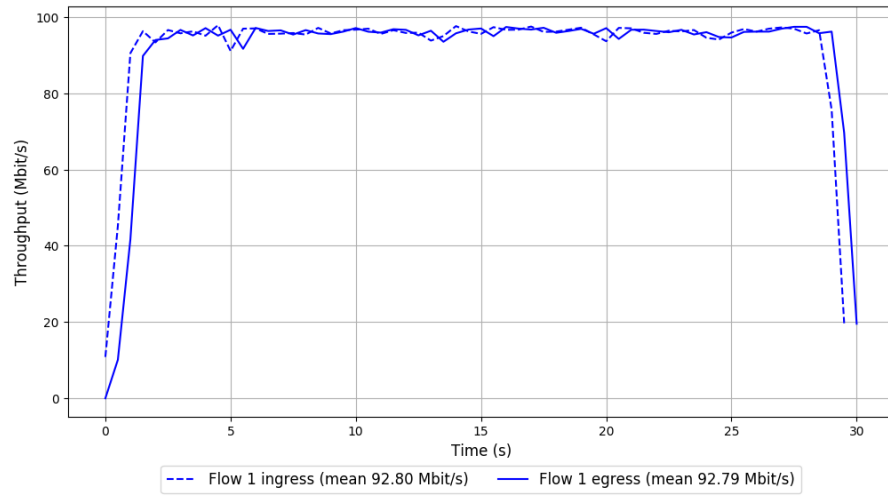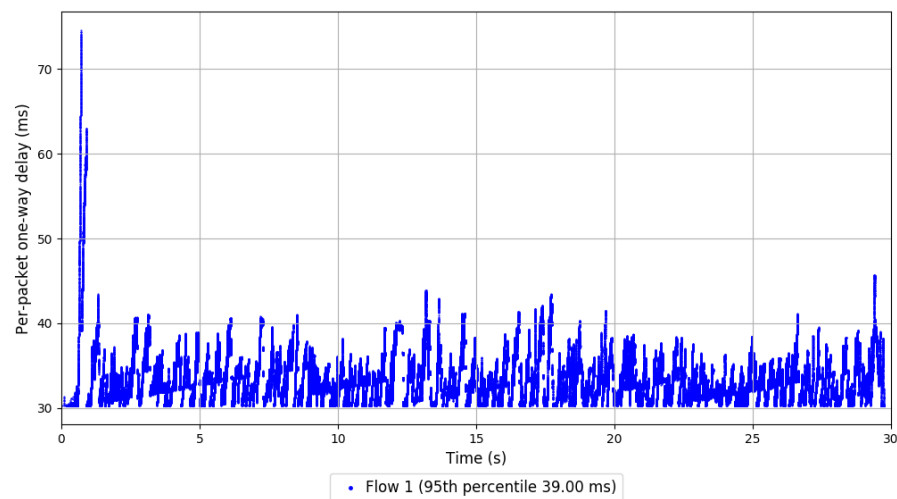
Run 2: Report of Muses_DecisionTree — Data Link

Flow 1 ingress (mean 92.80 Mbit/s) ---- Flow 1 egress (mean 92.79 Mbit/s) ——

• Flow 1 (95th percentile 37.34 ms)

```
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 08:56:16
End at: 2019-10-03 08:56:46
Local clock offset: 0.173 ms
Remote clock offset: 7.287 ms


# Below is generated by plot.py at 2019-10-03 10:40:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.59 Mbit/s
95th percentile per-packet one-way delay: 38.999 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 94.59 Mbit/s
95th percentile per-packet one-way delay: 38.999 ms
Loss rate: 0.17%
```
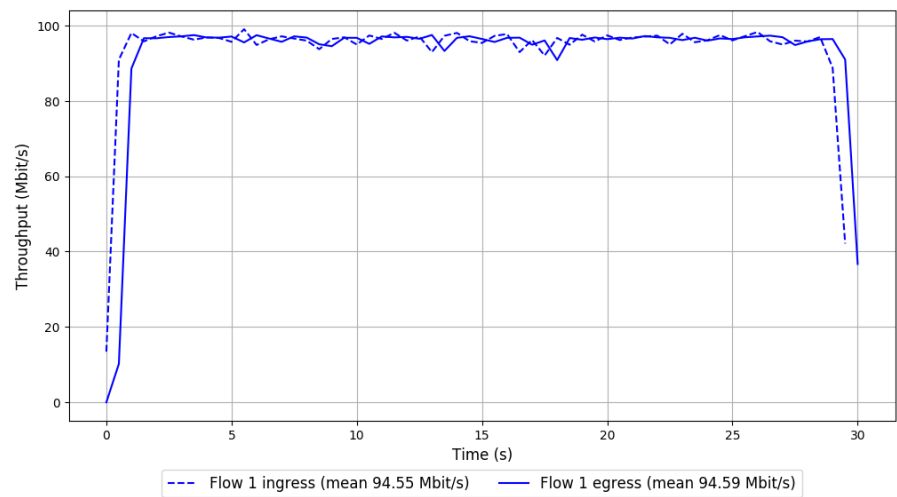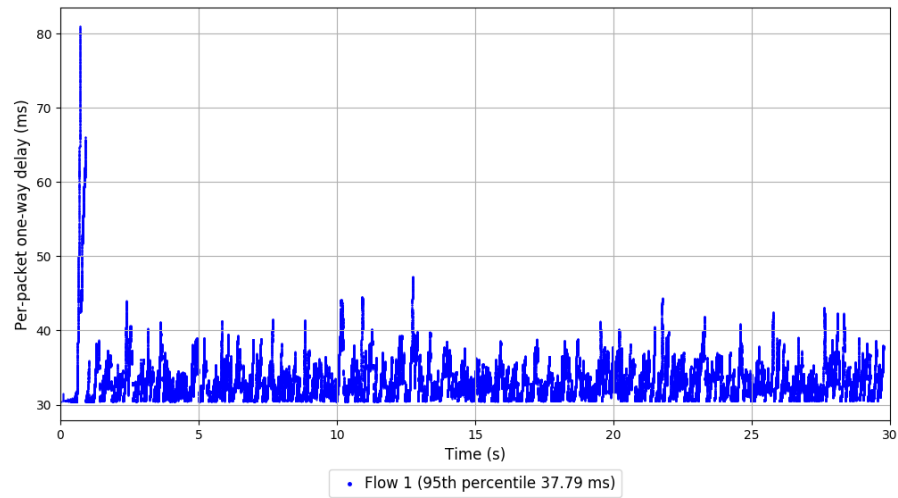
Run 3: Report of Muses_DecisionTree — Data Link

Flow 1 ingress (mean 94.55 Mbit/s)   Flow 1 egress (mean 94.59 Mbit/s)

Flow 1 (95th percentile 39.00 ms)

```
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 09:36:01
End at: 2019-10-03 09:36:31
Local clock offset: 0.141 ms
Remote clock offset: 7.356 ms


# Below is generated by plot.py at 2019-10-03 10:40:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.34 Mbit/s
95th percentile per-packet one-way delay: 37.792 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 94.34 Mbit/s
95th percentile per-packet one-way delay: 37.792 ms
Loss rate: 0.24%
```
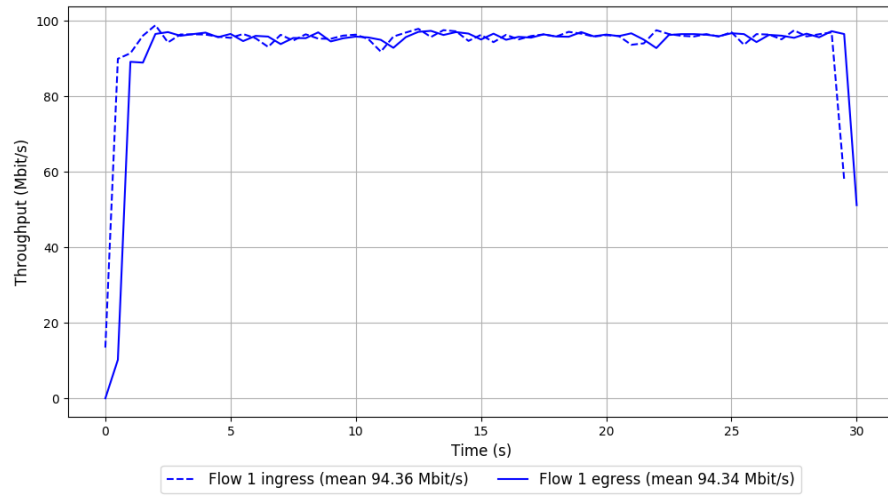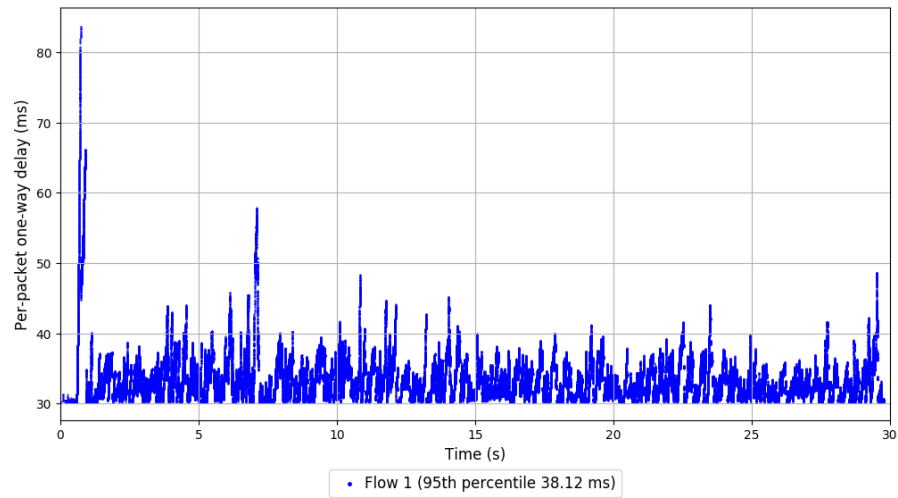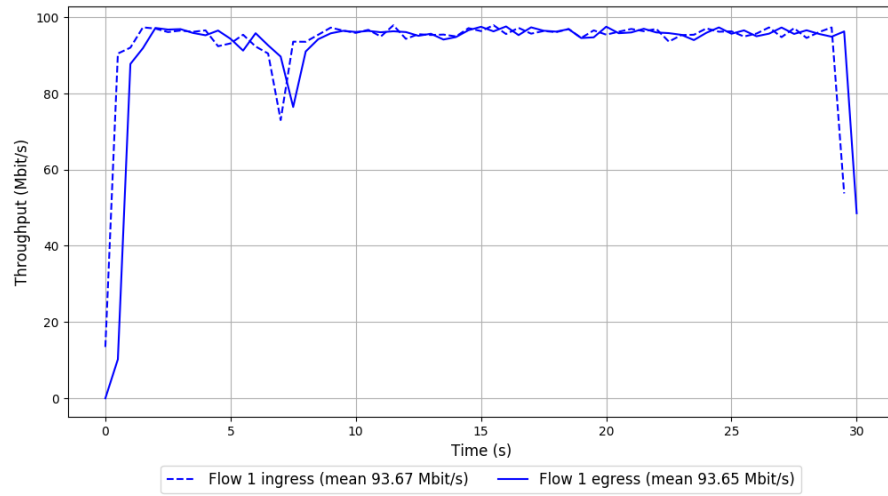
Run 4: Report of Muses_DecisionTree — Data Link

Flow 1 ingress (mean 94.36 Mbit/s)   Flow 1 egress (mean 94.34 Mbit/s)

Flow 1 (95th percentile 37.79 ms)

```
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 10:14:05
End at: 2019-10-03 10:14:35
Local clock offset: 0.257 ms
Remote clock offset: 7.788 ms


# Below is generated by plot.py at 2019-10-03 10:41:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.65 Mbit/s
95th percentile per-packet one-way delay: 38.123 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 93.65 Mbit/s
95th percentile per-packet one-way delay: 38.123 ms
Loss rate: 0.23%
```
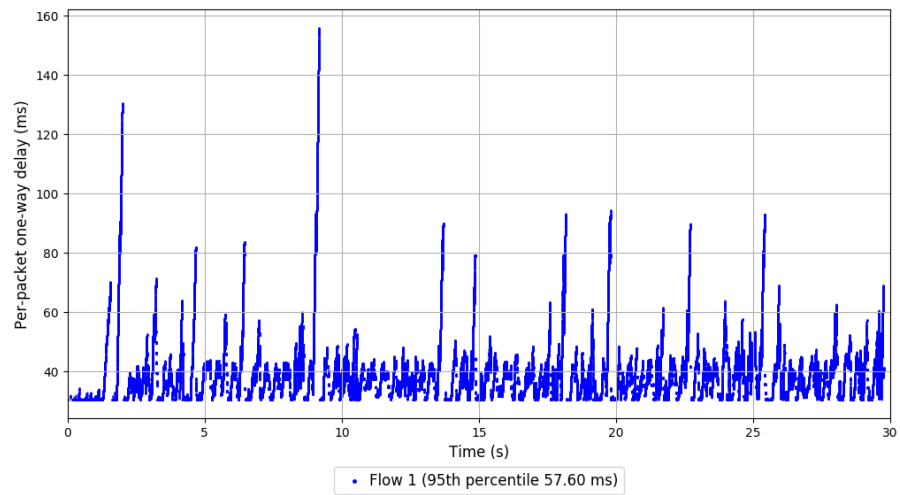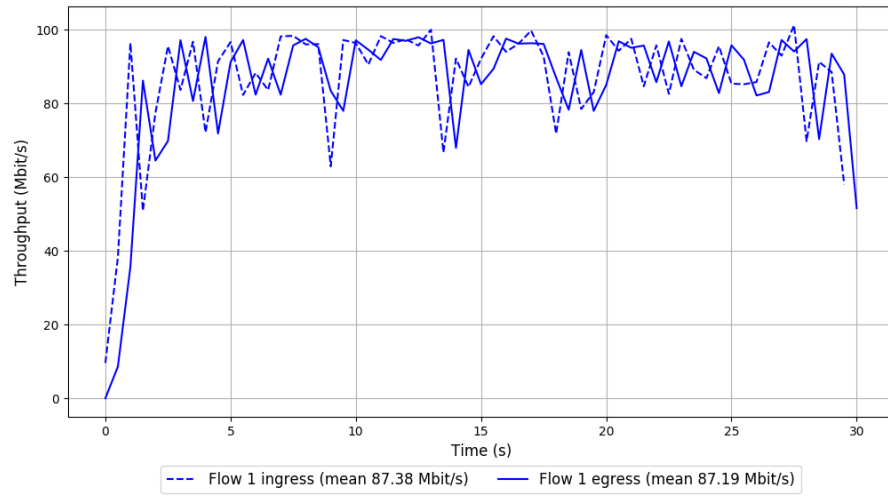
Run 5: Report of Muses_DecisionTree — Data Link

Flow 1 ingress (mean 93.67 Mbit/s)   Flow 1 egress (mean 93.65 Mbit/s)

Flow 1 (95th percentile 38.12 ms)

```
Run 1: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 07:04:44
End at: 2019-10-03 07:05:14
Local clock offset: 0.217 ms
Remote clock offset: 7.658 ms


# Below is generated by plot.py at 2019-10-03 10:41:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.19 Mbit/s
95th percentile per-packet one-way delay: 57.596 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 87.19 Mbit/s
95th percentile per-packet one-way delay: 57.596 ms
Loss rate: 0.29%
```

Run 1: Report of Muses_DecisionTreeH0 — Data Link

```
Run 2: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 07:55:17
End at: 2019-10-03 07:55:47
Local clock offset: 0.278 ms
Remote clock offset: 7.695 ms


# Below is generated by plot.py at 2019-10-03 10:41:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.54 Mbit/s
95th percentile per-packet one-way delay: 80.599 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 79.54 Mbit/s
95th percentile per-packet one-way delay: 80.599 ms
Loss rate: 0.50%
```
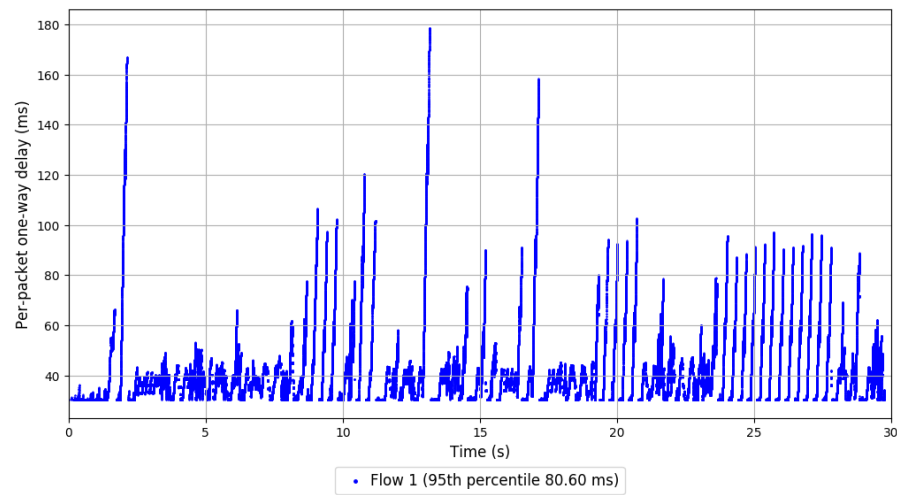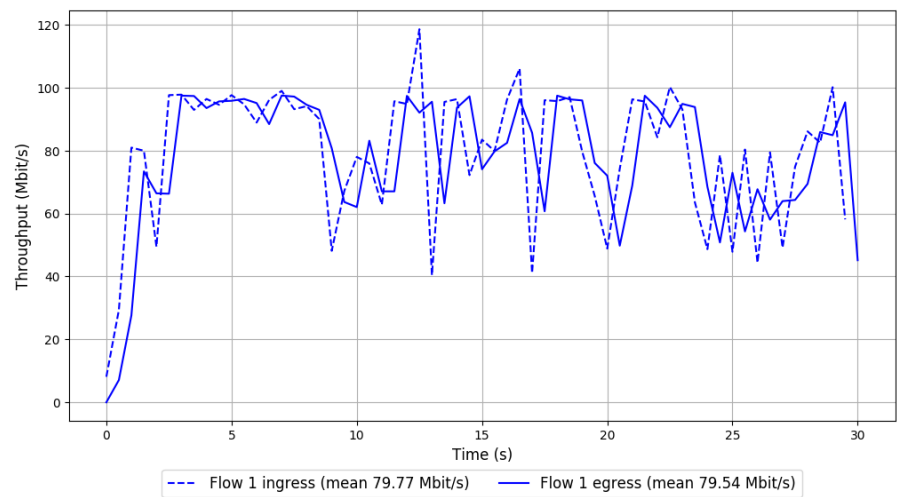
Run 2: Report of Muses_DecisionTreeH0 — Data Link

Run 3: Statistics of Muses_DecisionTreeH0

Start at: 2019-10-03 08:40:43
End at: 2019-10-03 08:41:13
Local clock offset: 0.207 ms
Remote clock offset: 7.347 ms

Below is generated by plot.py at 2019-10-03 10:41:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 86.39 Mbit/s
95th percentile per-packet one-way delay: 65.839 ms
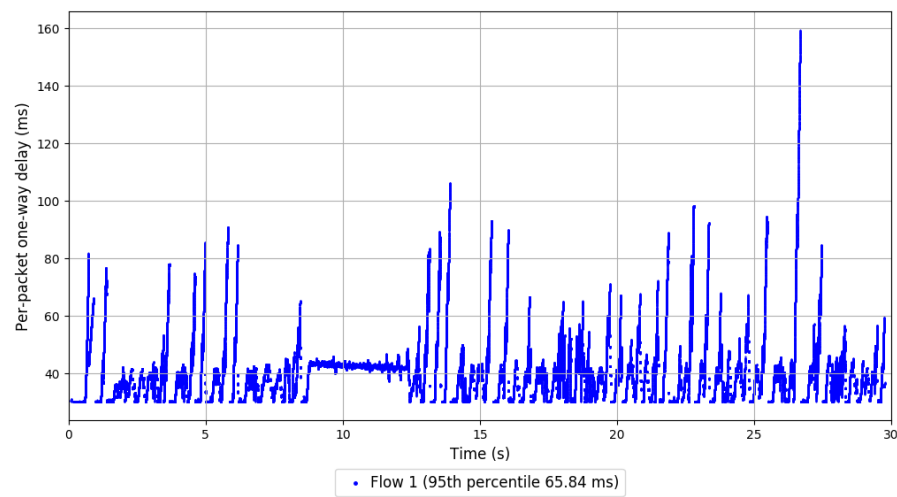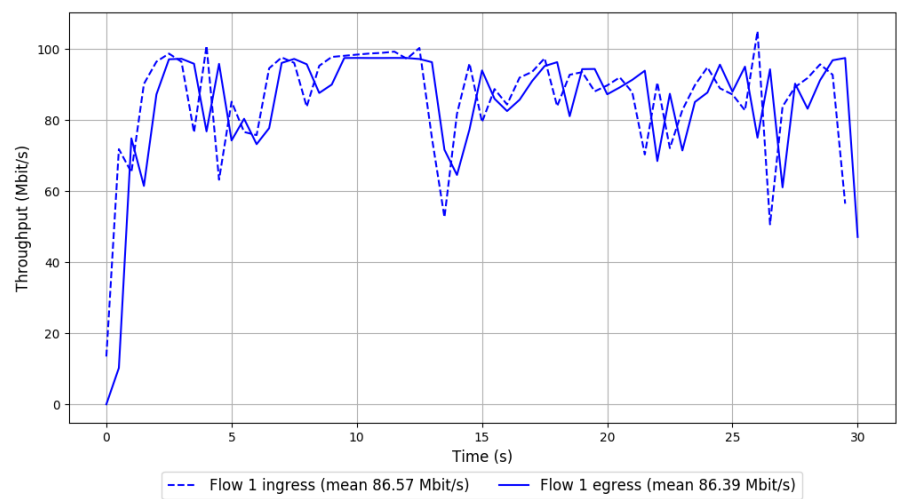Loss rate: 0.42%
-- Flow 1:
Average throughput: 86.39 Mbit/s
95th percentile per-packet one-way delay: 65.839 ms
Loss rate: 0.42%

Run 3: Report of Muses_DecisionTreeH0 — Data Link

```
Run 4: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 09:19:04
End at: 2019-10-03 09:19:34
Local clock offset: 0.118 ms
Remote clock offset: 7.257 ms


# Below is generated by plot.py at 2019-10-03 10:41:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.07 Mbit/s
95th percentile per-packet one-way delay: 87.855 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 76.07 Mbit/s
95th percentile per-packet one-way delay: 87.855 ms
Loss rate: 0.10%
```
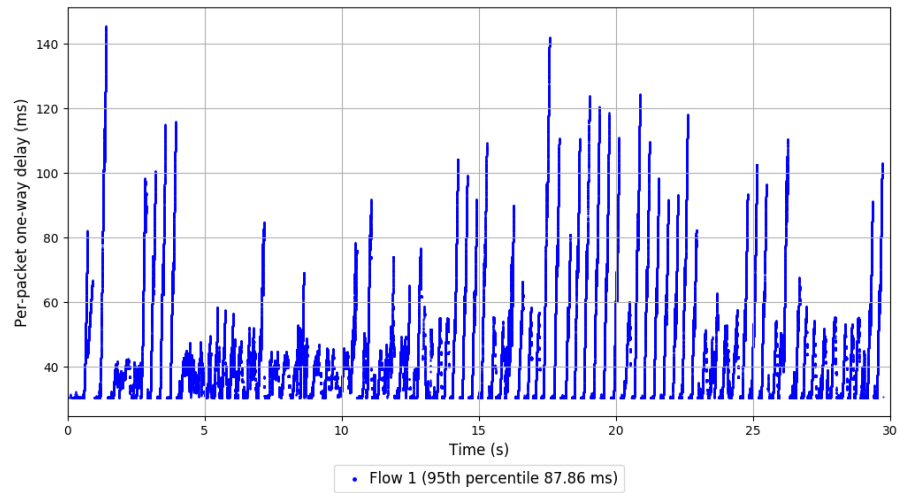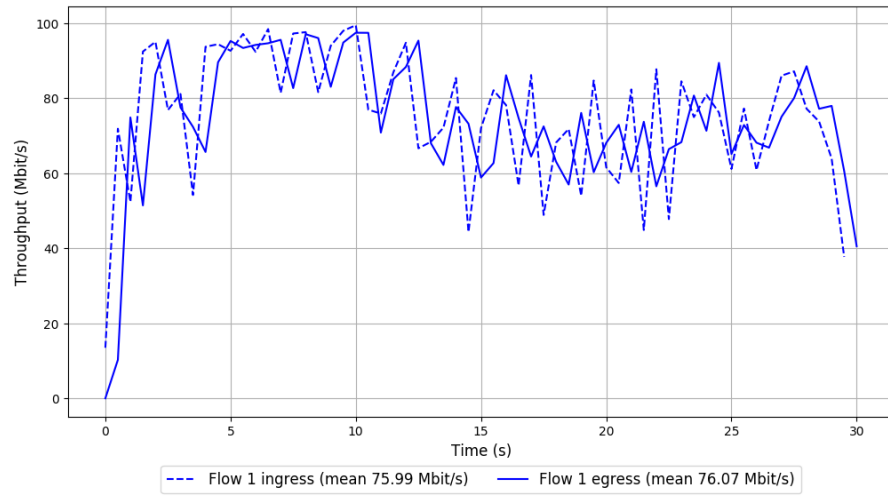
Run 4: Report of Muses_DecisionTreeH0 — Data Link

```
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 09:58:26
End at: 2019-10-03 09:58:56
Local clock offset: 0.144 ms
Remote clock offset: 7.9 ms


# Below is generated by plot.py at 2019-10-03 10:41:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.10 Mbit/s
95th percentile per-packet one-way delay: 52.247 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 90.10 Mbit/s
95th percentile per-packet one-way delay: 52.247 ms
Loss rate: 0.27%
```
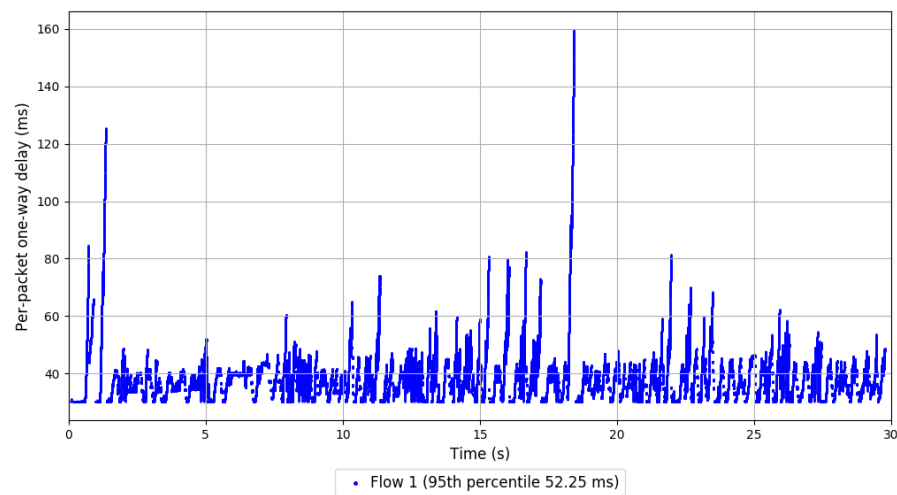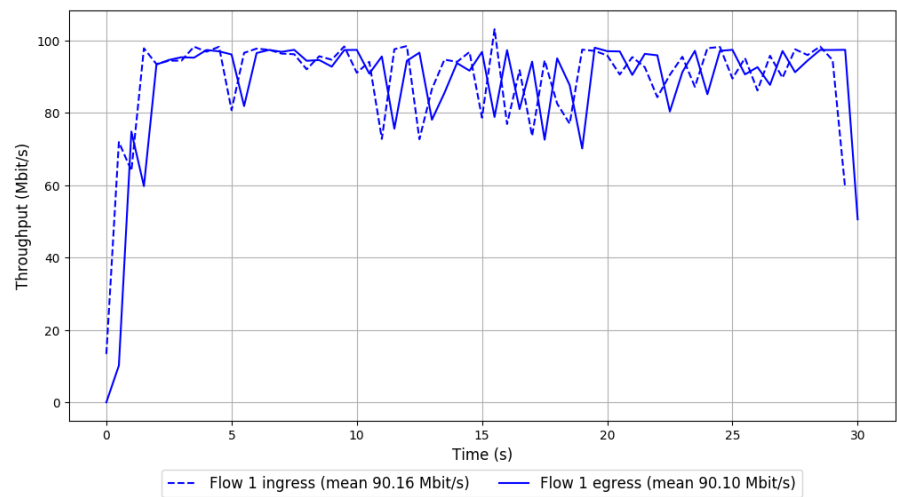
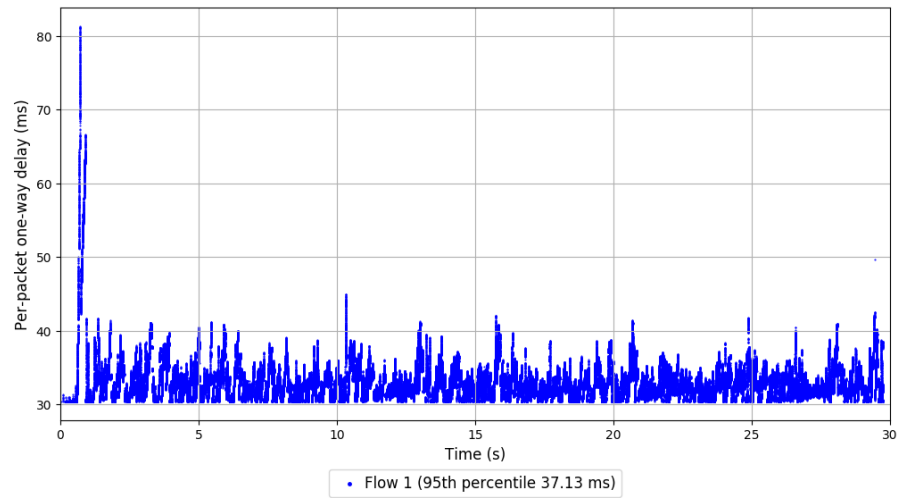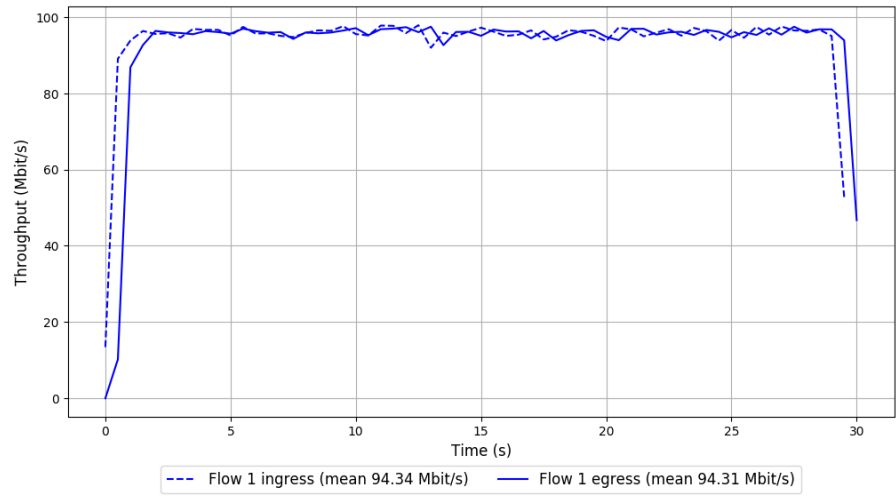Run 5: Report of Muses_DecisionTreeH0 — Data Link

```
Run 1: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 07:32:21
End at: 2019-10-03 07:32:51
Local clock offset: 0.288 ms
Remote clock offset: 7.542 ms


# Below is generated by plot.py at 2019-10-03 10:42:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.31 Mbit/s
95th percentile per-packet one-way delay: 37.133 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 94.31 Mbit/s
95th percentile per-packet one-way delay: 37.133 ms
Loss rate: 0.24%
```

Run 1: Report of Muses_DecisionTreeR0 — Data Link

```
Run 2: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 08:20:47
End at: 2019-10-03 08:21:17
Local clock offset: 0.124 ms
Remote clock offset: 7.854 ms


# Below is generated by plot.py at 2019-10-03 10:42:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.62 Mbit/s
95th percentile per-packet one-way delay: 37.190 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 93.62 Mbit/s
95th percentile per-packet one-way delay: 37.190 ms
Loss rate: 0.23%
```
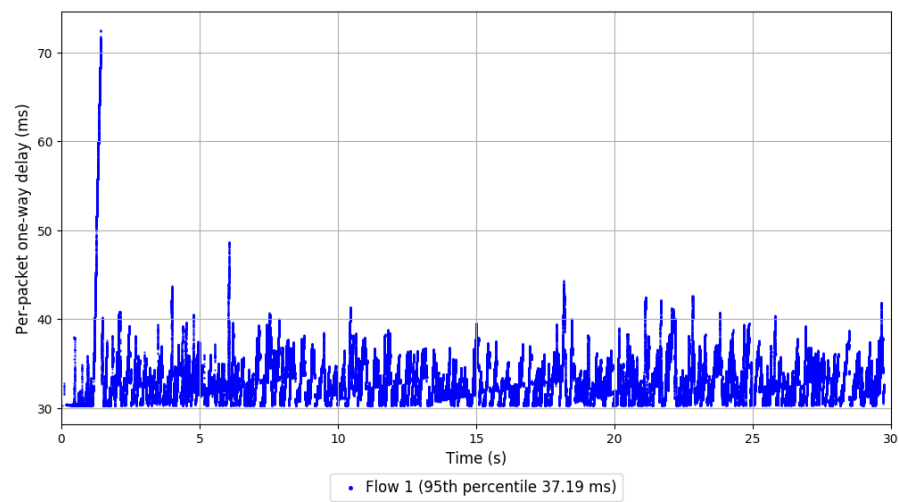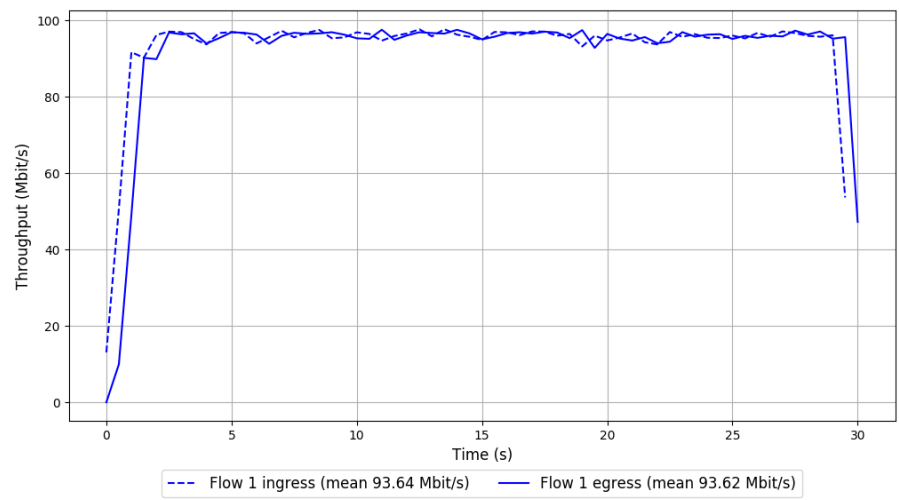
Run 2: Report of Muses_DecisionTreeR0 — Data Link

```
Run 3: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 09:00:51
End at: 2019-10-03 09:01:21
Local clock offset: 0.169 ms
Remote clock offset: 7.102 ms


# Below is generated by plot.py at 2019-10-03 10:42:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.76 Mbit/s
95th percentile per-packet one-way delay: 37.536 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 94.76 Mbit/s
95th percentile per-packet one-way delay: 37.536 ms
Loss rate: 0.21%
```
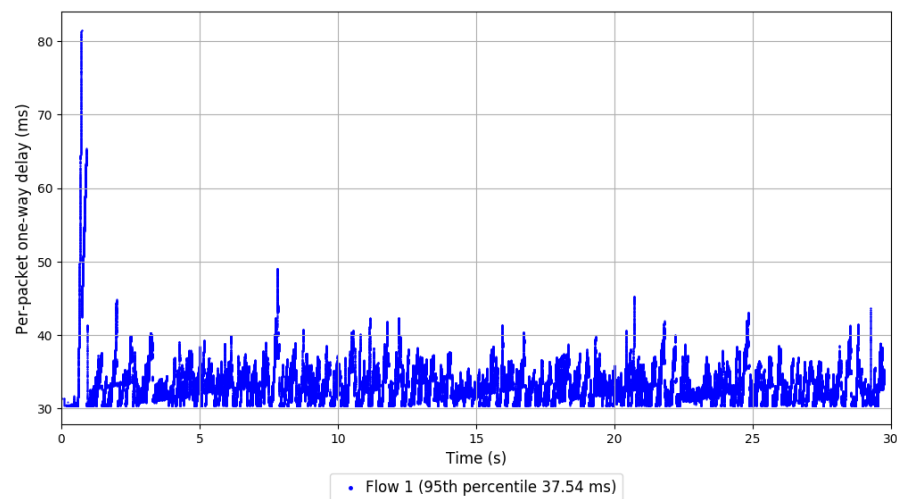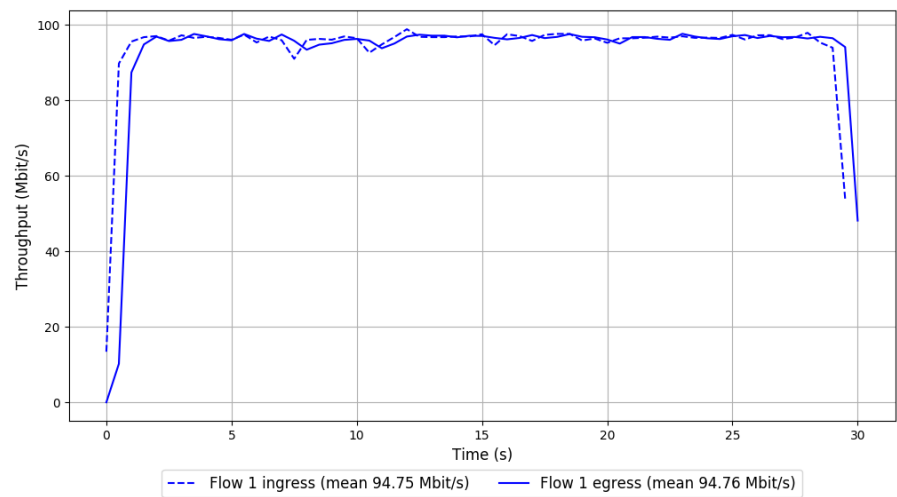
Run 3: Report of Muses_DecisionTreeR0 — Data Link

```
Run 4: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 09:40:35
End at: 2019-10-03 09:41:05
Local clock offset: 0.097 ms
Remote clock offset: 7.409 ms


# Below is generated by plot.py at 2019-10-03 10:42:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.04 Mbit/s
95th percentile per-packet one-way delay: 36.810 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 95.04 Mbit/s
95th percentile per-packet one-way delay: 36.810 ms
Loss rate: 0.29%
```
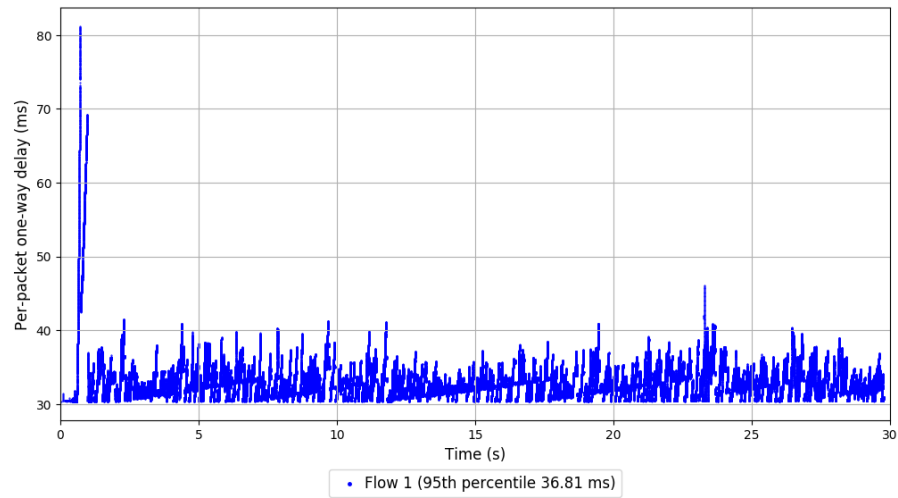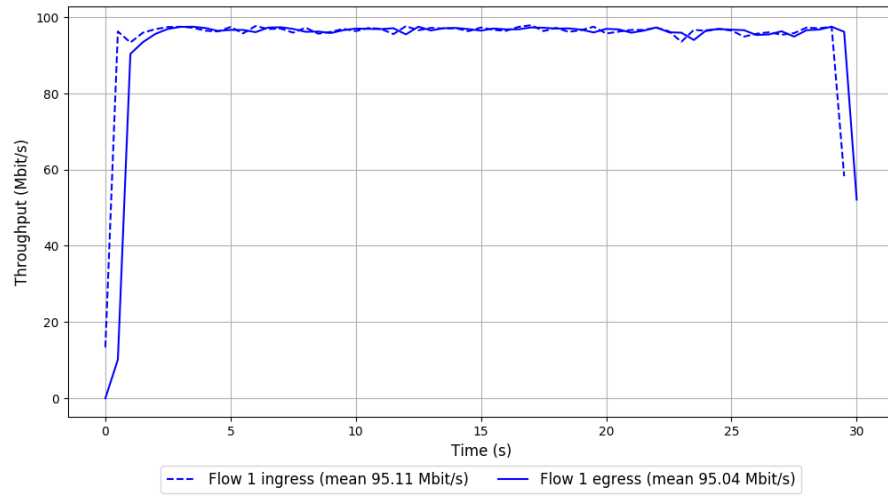
Run 4: Report of Muses_DecisionTreeR0 — Data Link

```
Run 5: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 10:18:30
End at: 2019-10-03 10:19:00
Local clock offset: 0.276 ms
Remote clock offset: 7.518 ms


# Below is generated by plot.py at 2019-10-03 10:42:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.85 Mbit/s
95th percentile per-packet one-way delay: 37.014 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 94.85 Mbit/s
95th percentile per-packet one-way delay: 37.014 ms
Loss rate: 0.24%
```
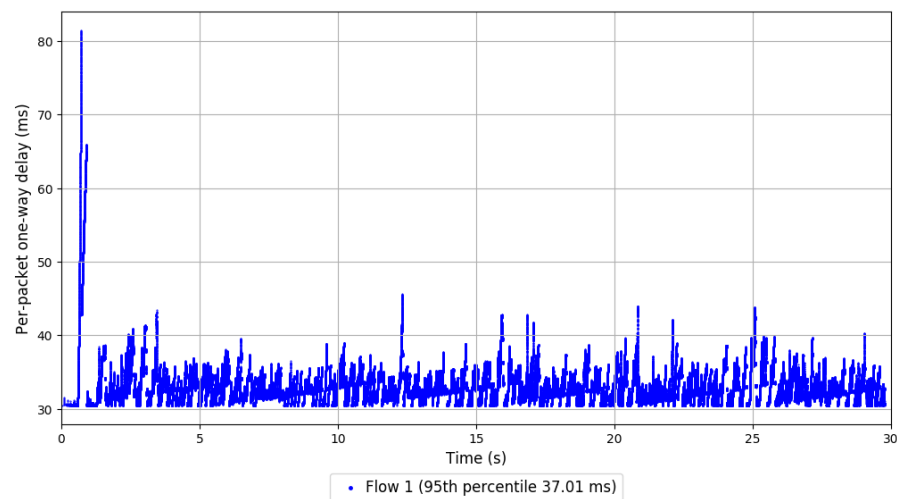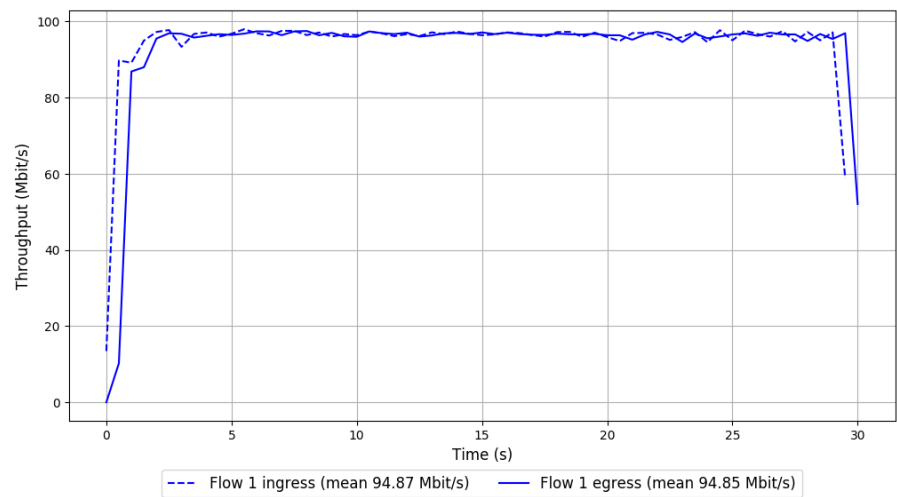
Run 5: Report of Muses_DecisionTreeR0 — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-10-03 07:36:21
End at: 2019-10-03 07:36:51
Local clock offset: 0.291 ms
Remote clock offset: 7.559 ms


# Below is generated by plot.py at 2019-10-03 10:42:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.80 Mbit/s
95th percentile per-packet one-way delay: 39.923 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 90.80 Mbit/s
95th percentile per-packet one-way delay: 39.923 ms
Loss rate: 0.24%
```
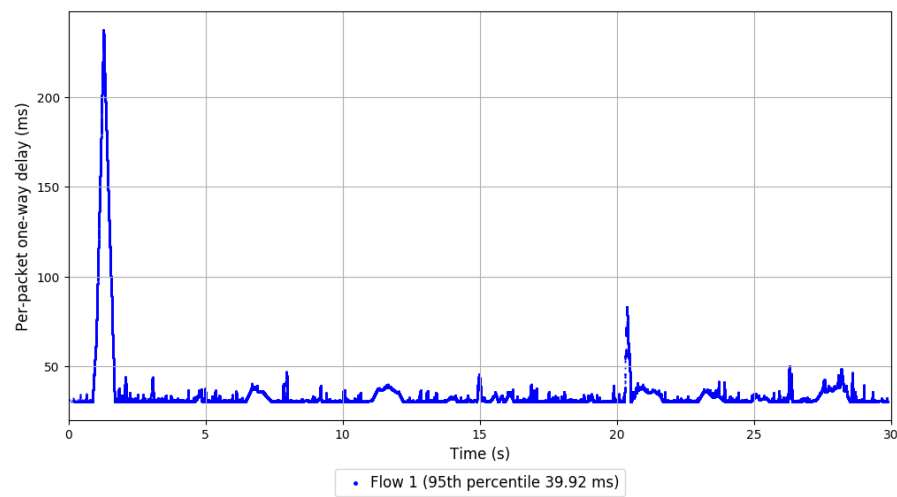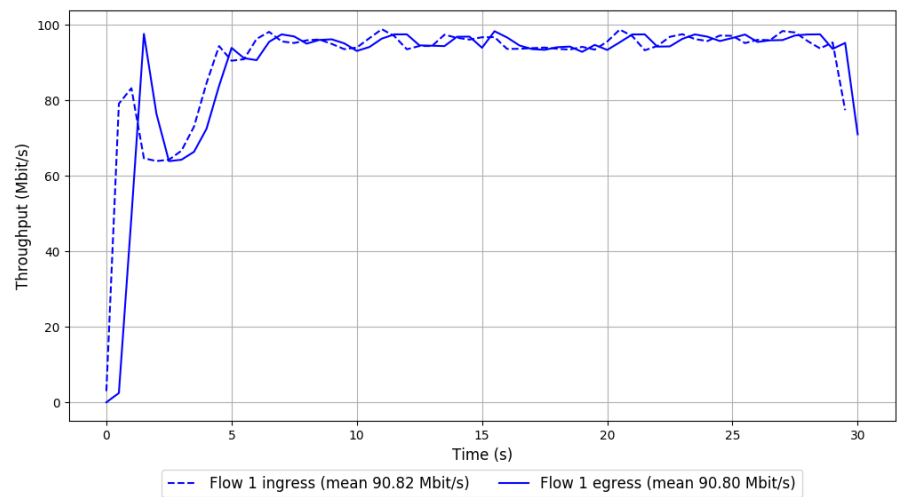
Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 90.82 Mbit/s) — — — Flow 1 egress (mean 90.80 Mbit/s)

• Flow 1 (95th percentile 39.92 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-10-03 08:24:42
End at: 2019-10-03 08:25:12
Local clock offset: 0.123 ms
Remote clock offset: 7.861 ms


# Below is generated by plot.py at 2019-10-03 10:42:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.71 Mbit/s
95th percentile per-packet one-way delay: 35.140 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 88.71 Mbit/s
95th percentile per-packet one-way delay: 35.140 ms
Loss rate: 0.24%
```
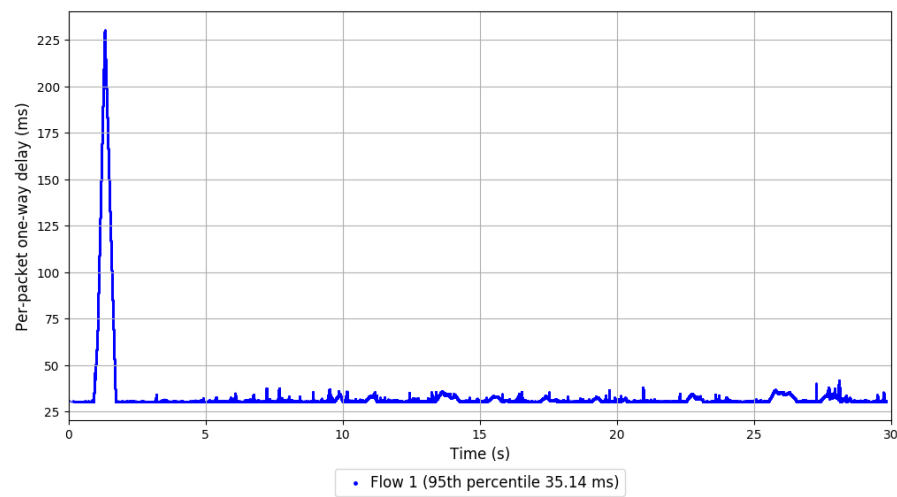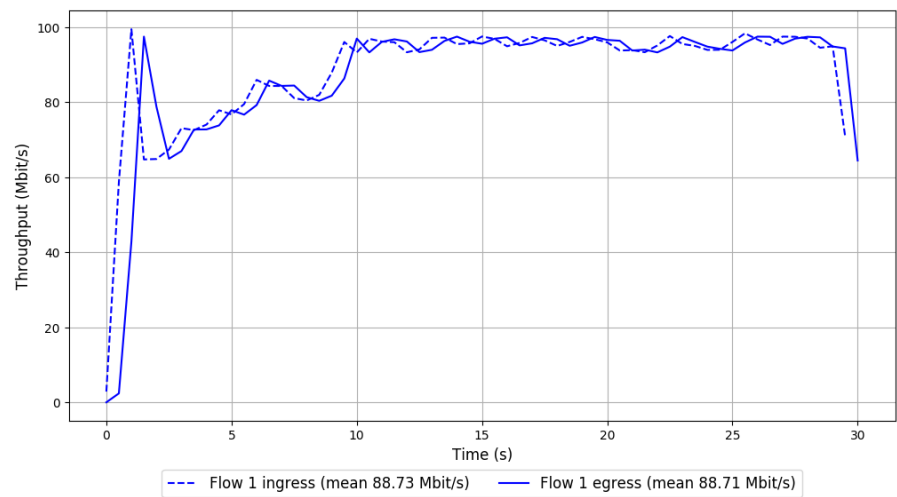
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 88.73 Mbit/s)   Flow 1 egress (mean 88.71 Mbit/s)

Flow 1 (95th percentile 35.14 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-10-03 09:03:45
End at: 2019-10-03 09:04:15
Local clock offset: 0.139 ms
Remote clock offset: 7.212 ms


# Below is generated by plot.py at 2019-10-03 10:42:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 34.404 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 34.404 ms
Loss rate: 0.24%
```
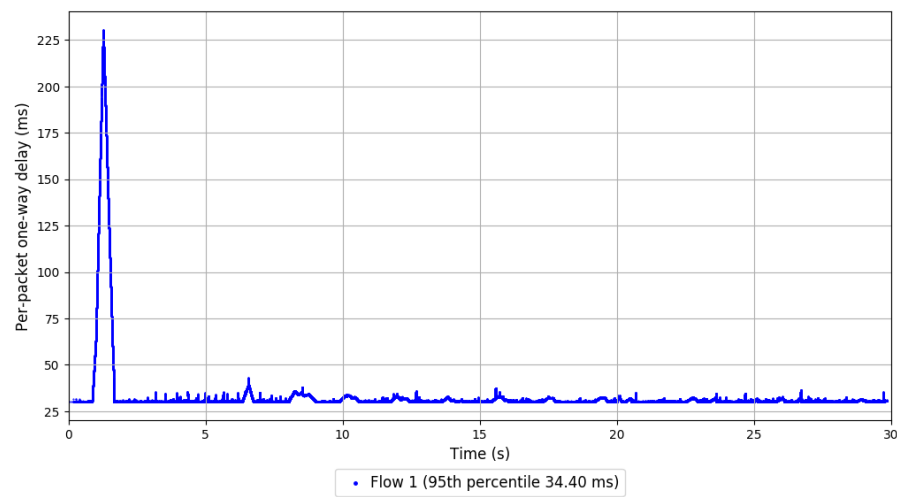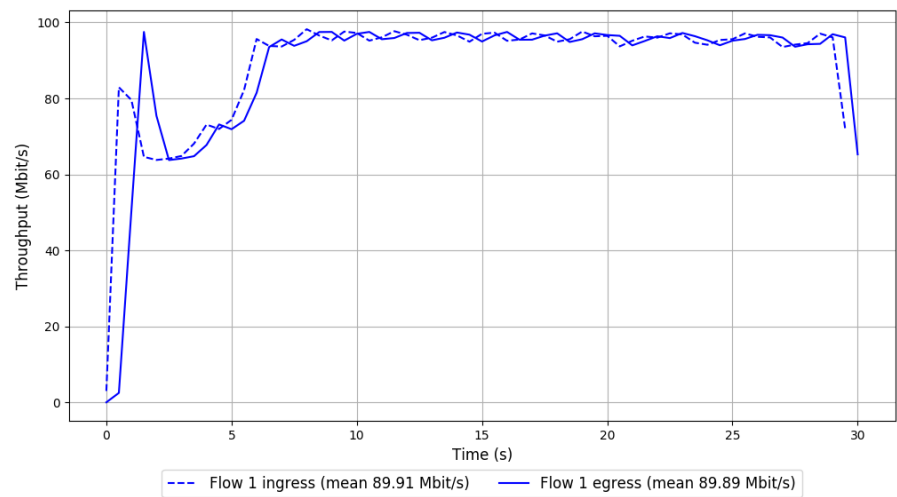
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 89.91 Mbit/s)   Flow 1 egress (mean 89.89 Mbit/s)

Flow 1 (95th percentile 34.40 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-10-03 09:43:45
End at: 2019-10-03 09:44:15
Local clock offset: 0.098 ms
Remote clock offset: 7.532 ms


# Below is generated by plot.py at 2019-10-03 10:43:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.08 Mbit/s
95th percentile per-packet one-way delay: 36.342 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 91.08 Mbit/s
95th percentile per-packet one-way delay: 36.342 ms
Loss rate: 0.23%
```
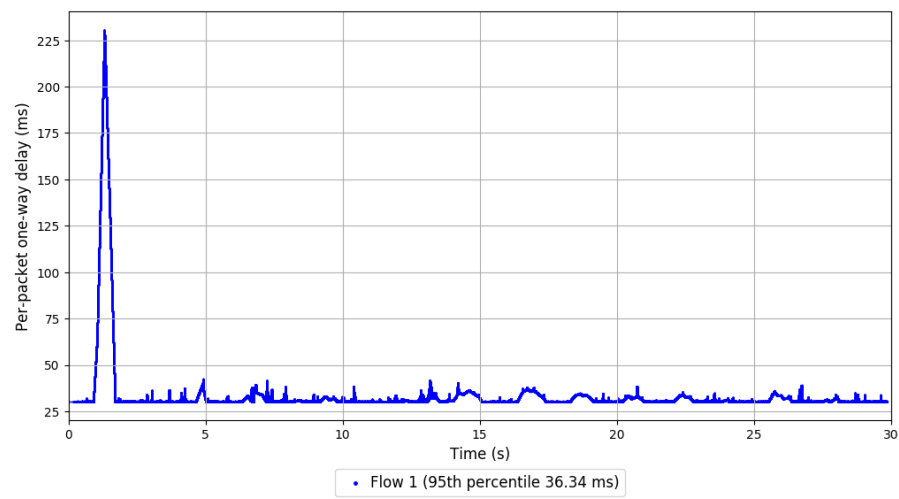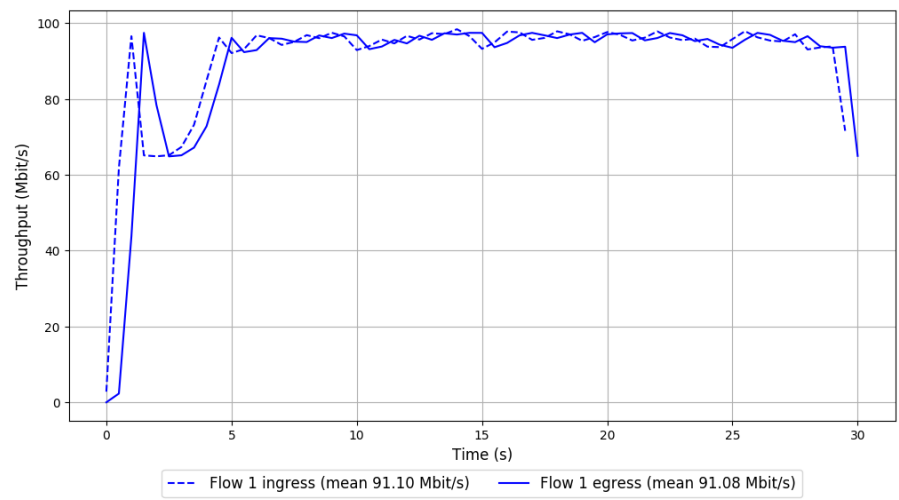
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 91.10 Mbit/s)   Flow 1 egress (mean 91.08 Mbit/s)

Flow 1 (95th percentile 36.34 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-10-03 10:21:57
End at: 2019-10-03 10:22:27
Local clock offset: 0.294 ms
Remote clock offset: 7.538 ms


# Below is generated by plot.py at 2019-10-03 10:43:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.54 Mbit/s
95th percentile per-packet one-way delay: 43.513 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 91.54 Mbit/s
95th percentile per-packet one-way delay: 43.513 ms
Loss rate: 0.28%
```
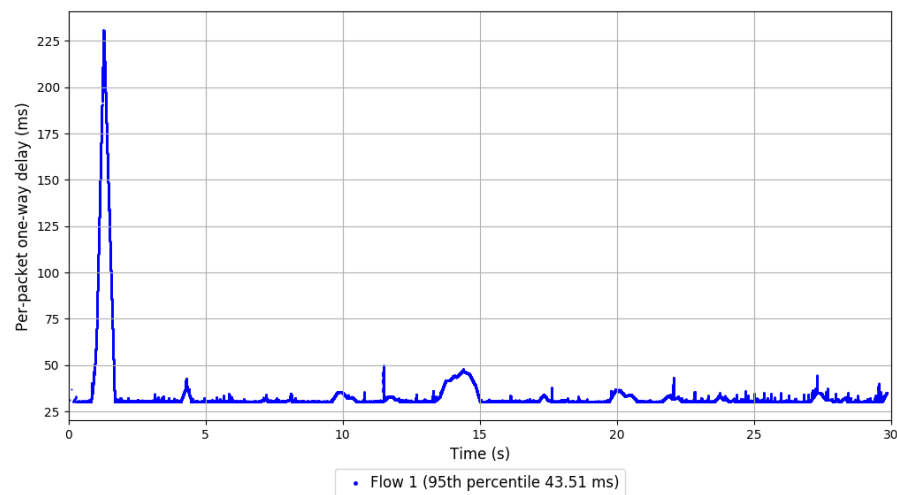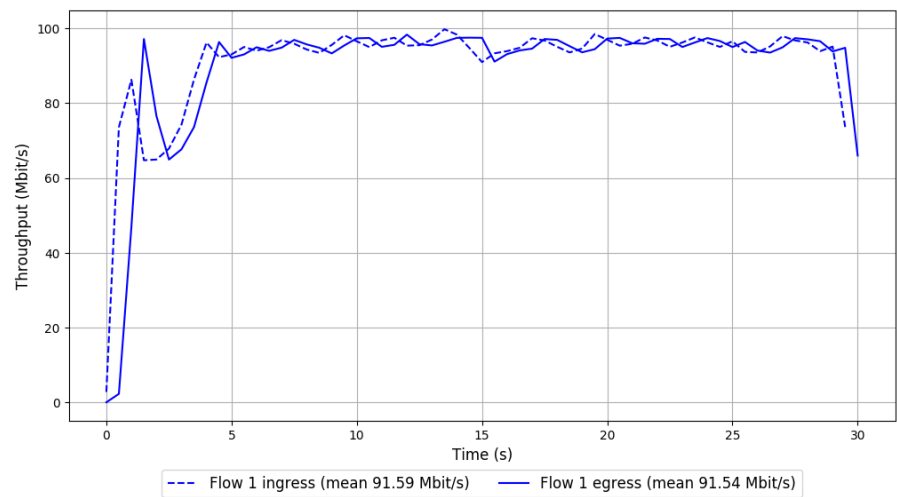
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 91.59 Mbit/s)   Flow 1 egress (mean 91.54 Mbit/s)
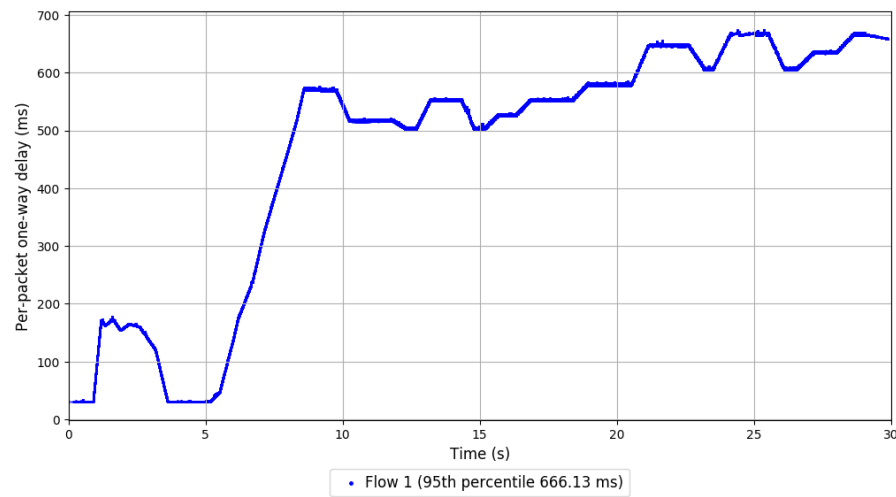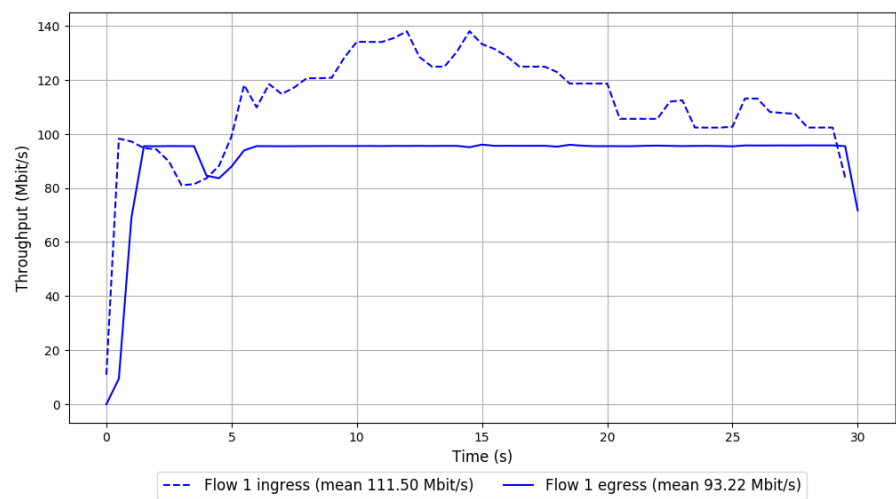

Flow 1 (95th percentile 43.51 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2019-10-03 07:14:55
End at: 2019-10-03 07:15:26
Local clock offset: 0.269 ms
Remote clock offset: 7.802 ms


# Below is generated by plot.py at 2019-10-03 10:44:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.22 Mbit/s
95th percentile per-packet one-way delay: 666.134 ms
Loss rate: 16.58%
-- Flow 1:
Average throughput: 93.22 Mbit/s
95th percentile per-packet one-way delay: 666.134 ms
Loss rate: 16.58%
```

Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 111.50 Mbit/s) --- Flow 1 egress (mean 93.22 Mbit/s)

Flow 1 (95th percentile 666.13 ms)

```
Run 2: Statistics of PCC-Expr

Start at: 2019-10-03 08:04:33
End at: 2019-10-03 08:05:03
Local clock offset: 0.216 ms
Remote clock offset: 7.72 ms


# Below is generated by plot.py at 2019-10-03 10:44:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.18 Mbit/s
95th percentile per-packet one-way delay: 666.846 ms
Loss rate: 10.32%
-- Flow 1:
Average throughput: 93.18 Mbit/s
95th percentile per-packet one-way delay: 666.846 ms
Loss rate: 10.32%
```
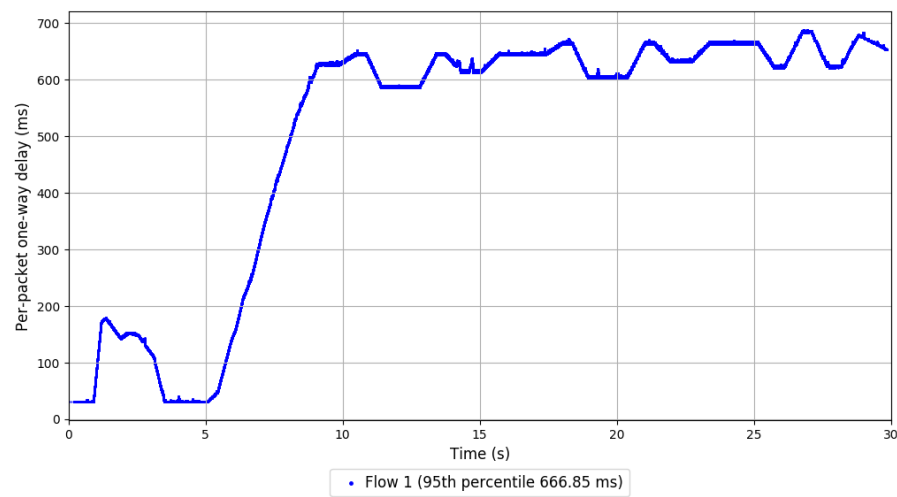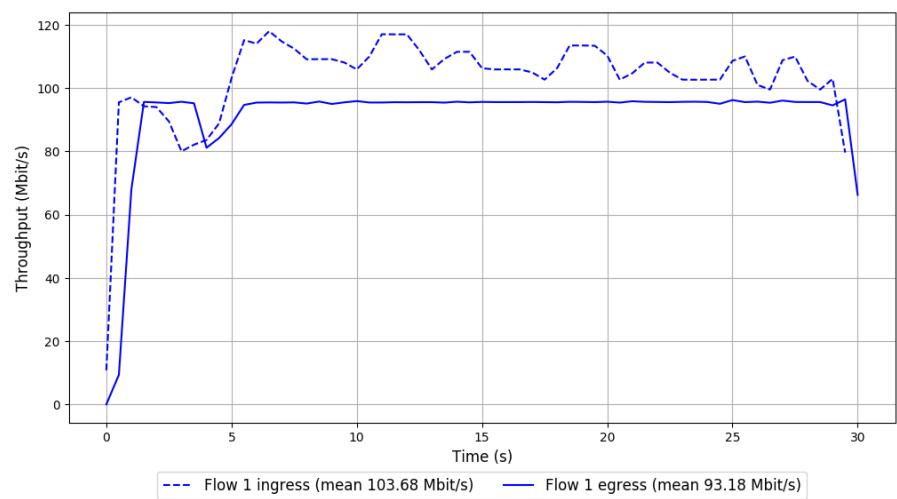
Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2019-10-03 08:48:37
End at: 2019-10-03 08:49:07
Local clock offset: 0.204 ms
Remote clock offset: 7.145 ms


# Below is generated by plot.py at 2019-10-03 10:44:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.48 Mbit/s
95th percentile per-packet one-way delay: 445.570 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 81.48 Mbit/s
95th percentile per-packet one-way delay: 445.570 ms
Loss rate: 0.95%
```
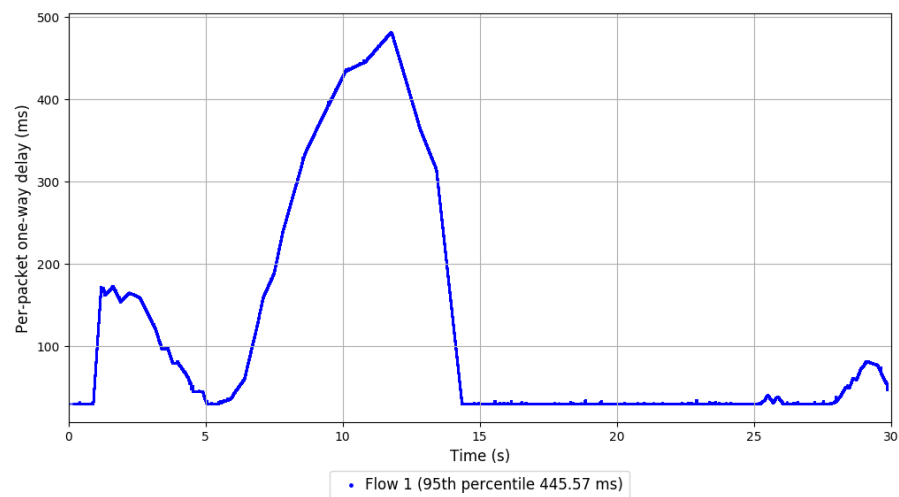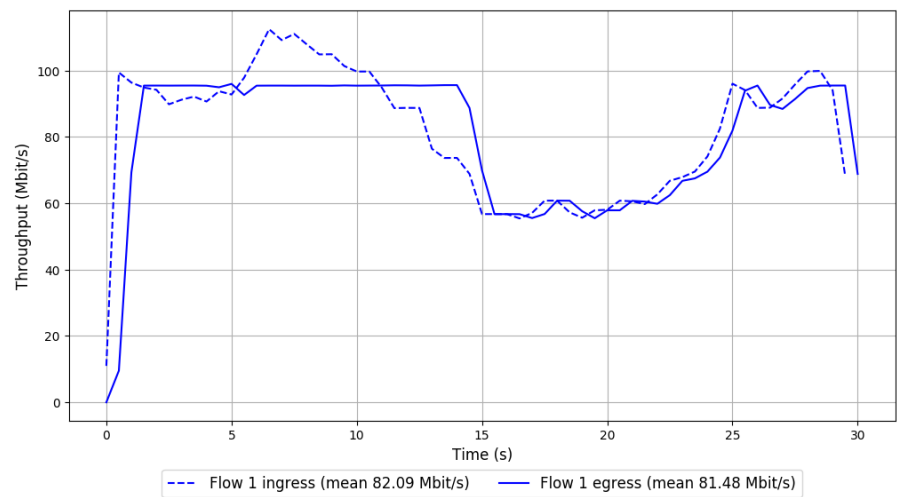
Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 82.09 Mbit/s) —— Flow 1 egress (mean 81.48 Mbit/s)

• Flow 1 (95th percentile 445.57 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2019-10-03 09:26:42
End at: 2019-10-03 09:27:12
Local clock offset: 0.126 ms
Remote clock offset: 7.383 ms


# Below is generated by plot.py at 2019-10-03 10:44:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.10 Mbit/s
95th percentile per-packet one-way delay: 507.965 ms
Loss rate: 14.75%
-- Flow 1:
Average throughput: 57.10 Mbit/s
95th percentile per-packet one-way delay: 507.965 ms
Loss rate: 14.75%
```
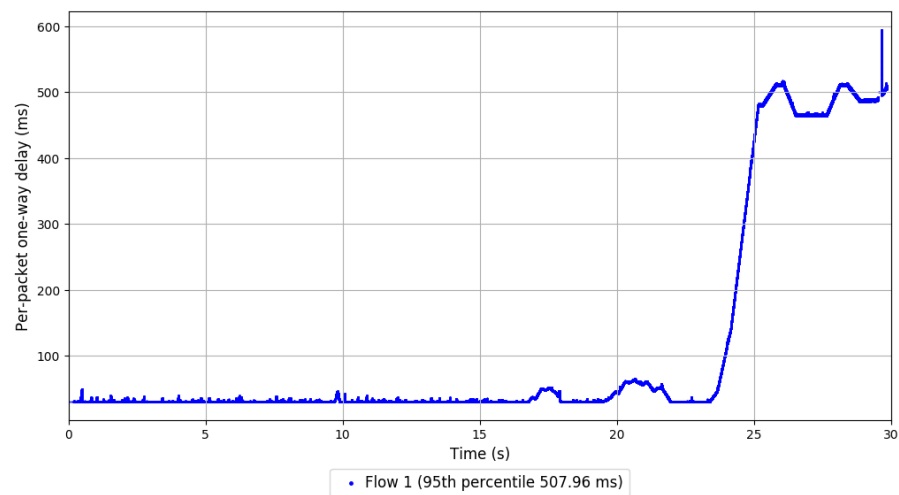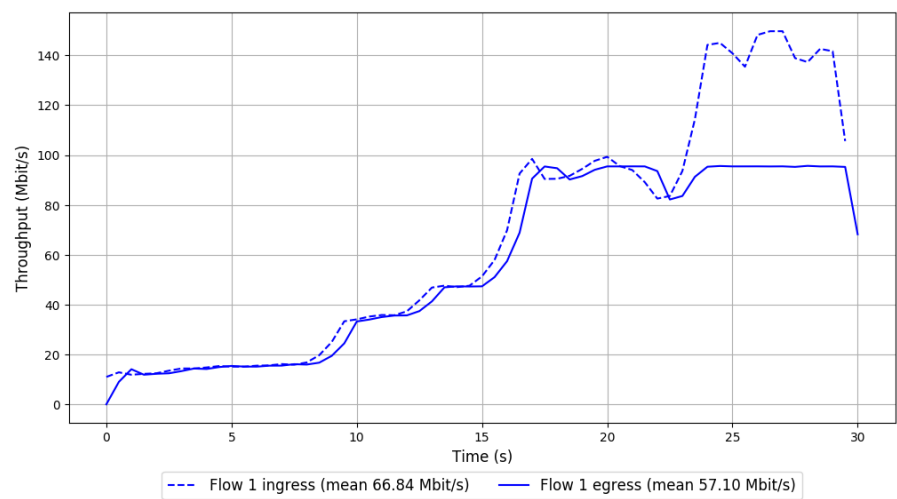
Run 4: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 66.84 Mbit/s) ---- Flow 1 egress (mean 57.10 Mbit/s) ——

· Flow 1 (95th percentile 507.96 ms)

```
Run 5: Statistics of PCC-Expr

Start at: 2019-10-03 10:06:02
End at: 2019-10-03 10:06:32
Local clock offset: 0.204 ms
Remote clock offset: 7.898 ms


# Below is generated by plot.py at 2019-10-03 10:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.42 Mbit/s
95th percentile per-packet one-way delay: 595.749 ms
Loss rate: 17.99%
-- Flow 1:
Average throughput: 93.42 Mbit/s
95th percentile per-packet one-way delay: 595.749 ms
Loss rate: 17.99%
```
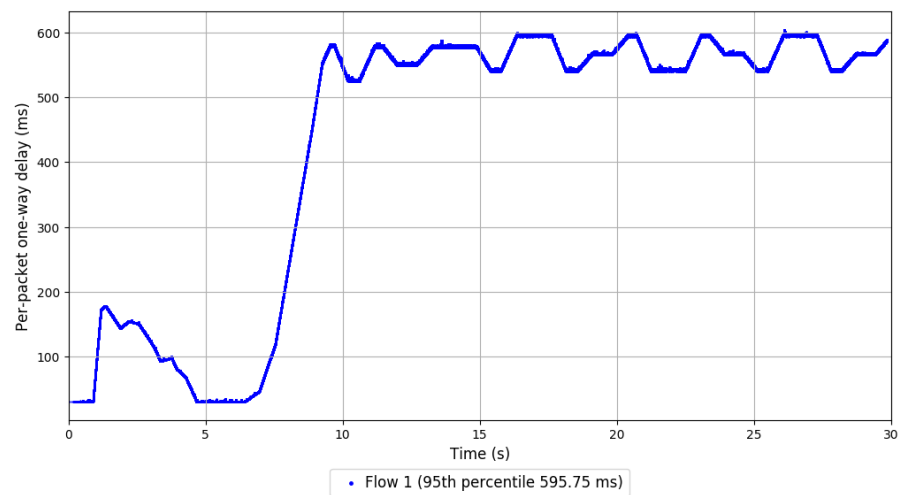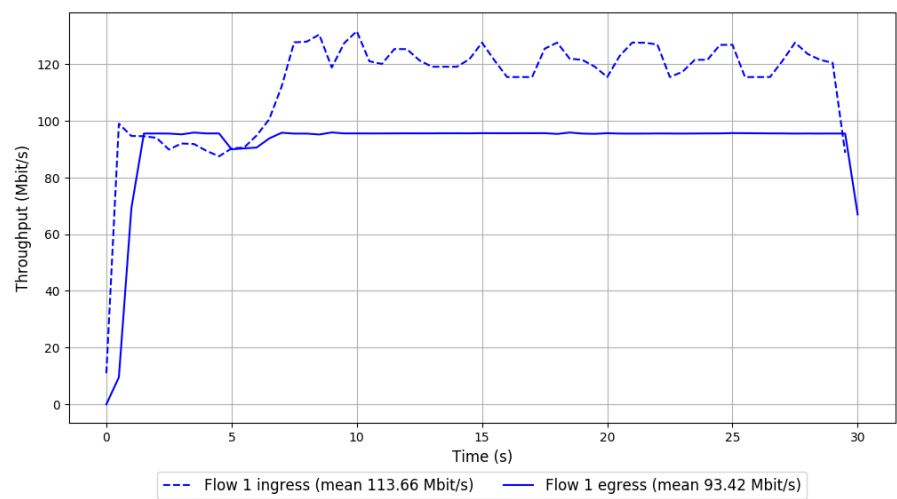
Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 113.66 Mbit/s) --- Flow 1 egress (mean 93.42 Mbit/s)

• Flow 1 (95th percentile 595.75 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-10-03 07:34:19
End at: 2019-10-03 07:34:50
Local clock offset: 0.3 ms
Remote clock offset: 7.585 ms


# Below is generated by plot.py at 2019-10-03 10:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.93 Mbit/s
95th percentile per-packet one-way delay: 40.397 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 83.93 Mbit/s
95th percentile per-packet one-way delay: 40.397 ms
Loss rate: 0.28%
```
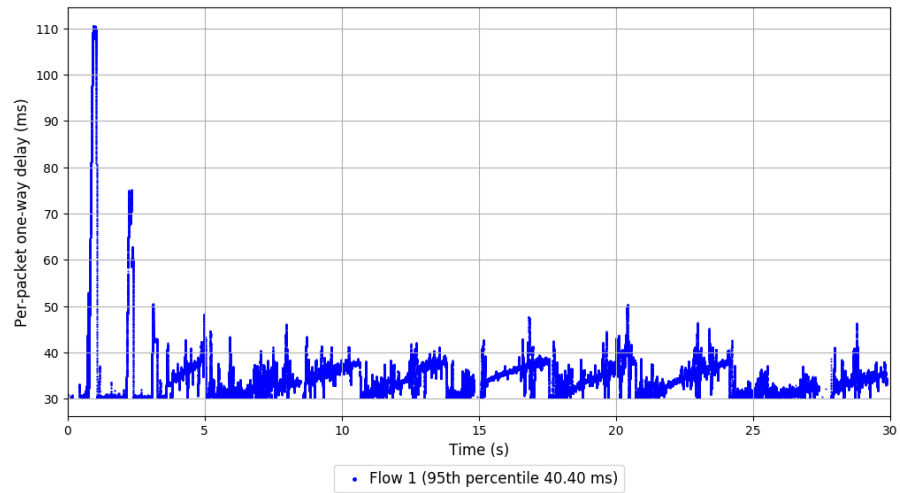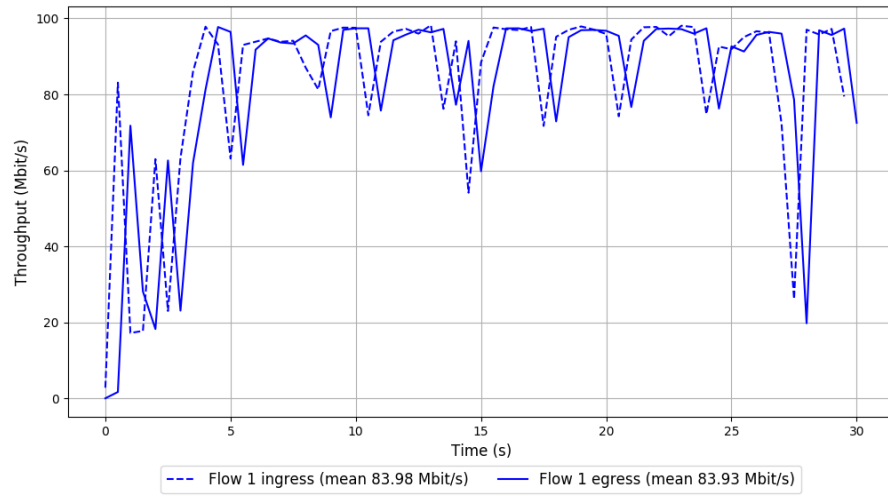
Run 1: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 83.98 Mbit/s) --- Flow 1 egress (mean 83.93 Mbit/s)

Flow 1 (95th percentile 40.40 ms)

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-10-03 08:22:33
End at: 2019-10-03 08:23:03
Local clock offset: 0.124 ms
Remote clock offset: 7.812 ms


# Below is generated by plot.py at 2019-10-03 10:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.20 Mbit/s
95th percentile per-packet one-way delay: 38.373 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 85.20 Mbit/s
95th percentile per-packet one-way delay: 38.373 ms
Loss rate: 0.10%
```
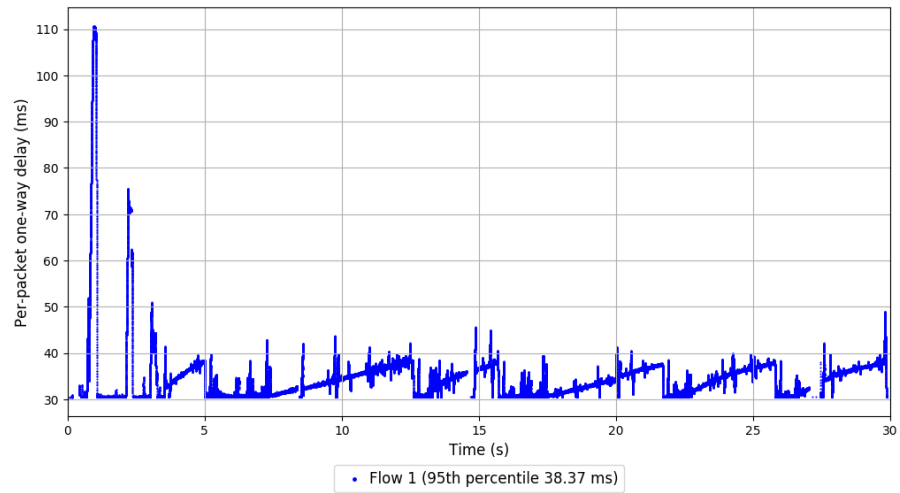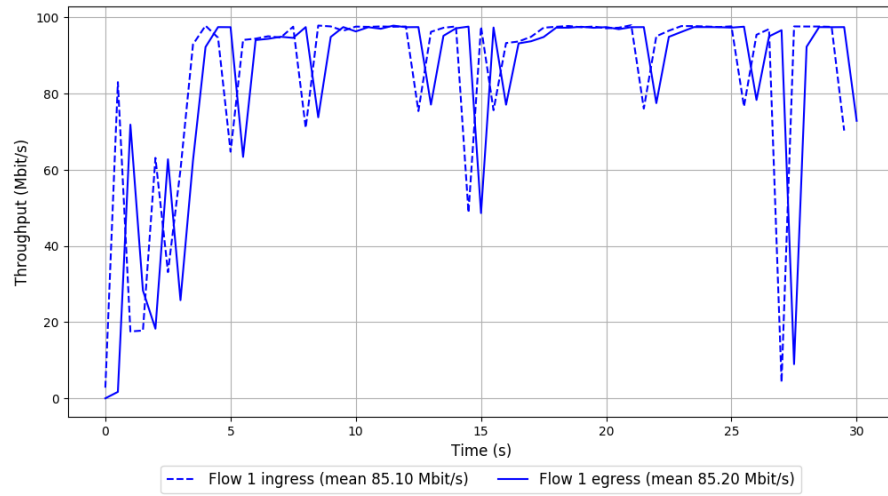
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-10-03 09:02:19
End at: 2019-10-03 09:02:49
Local clock offset: 0.165 ms
Remote clock offset: 7.197 ms


# Below is generated by plot.py at 2019-10-03 10:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.01 Mbit/s
95th percentile per-packet one-way delay: 49.715 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 77.01 Mbit/s
95th percentile per-packet one-way delay: 49.715 ms
Loss rate: 0.28%
```
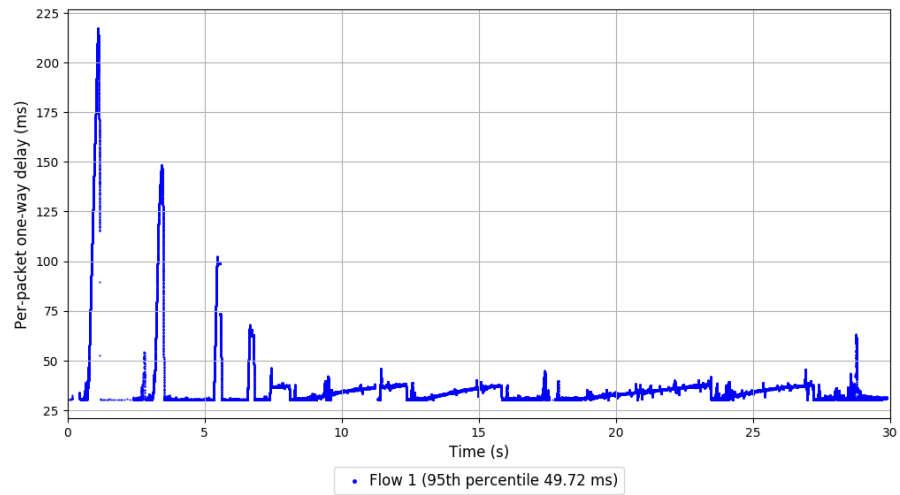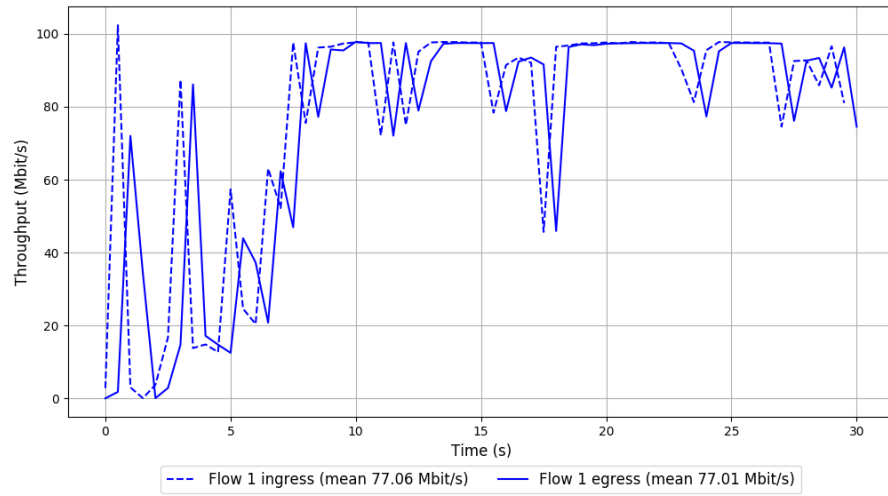
Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-10-03 09:42:07
End at: 2019-10-03 09:42:37
Local clock offset: 0.133 ms
Remote clock offset: 7.436 ms


# Below is generated by plot.py at 2019-10-03 10:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.87 Mbit/s
95th percentile per-packet one-way delay: 47.921 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 76.87 Mbit/s
95th percentile per-packet one-way delay: 47.921 ms
Loss rate: 0.29%
```
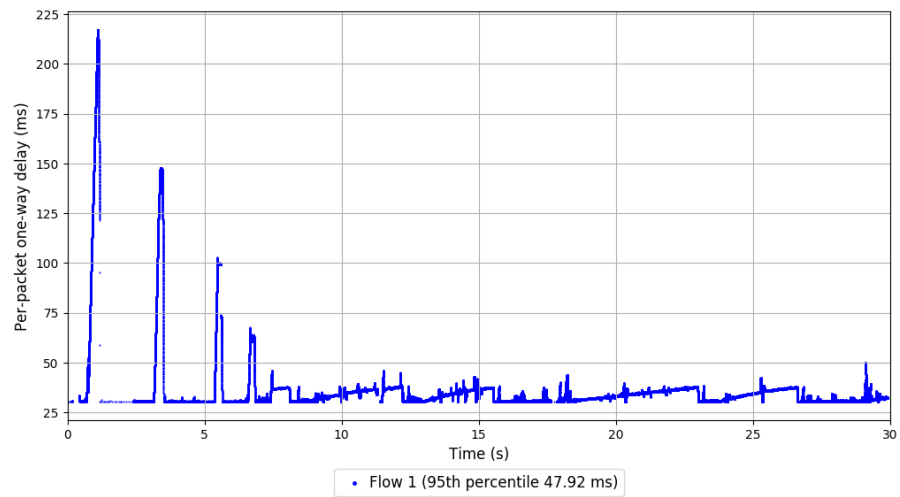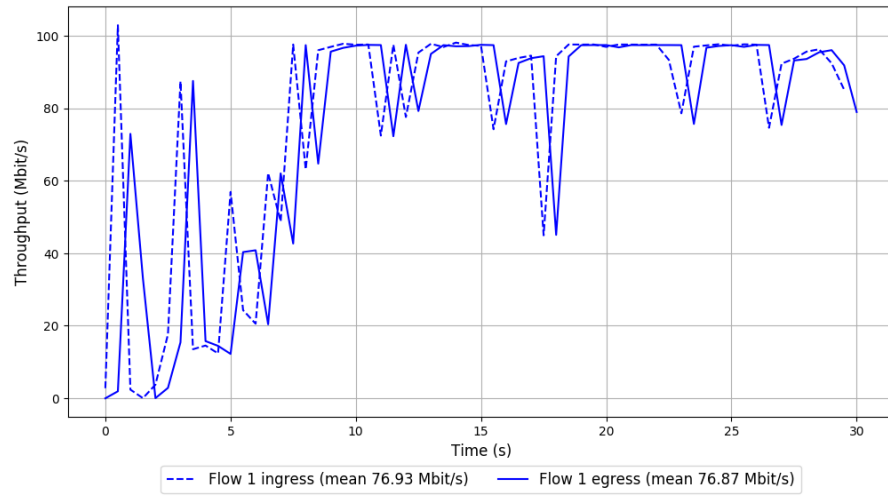
Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-10-03 10:20:06
End at: 2019-10-03 10:20:36
Local clock offset: 0.271 ms
Remote clock offset: 7.493 ms


# Below is generated by plot.py at 2019-10-03 10:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.29 Mbit/s
95th percentile per-packet one-way delay: 39.425 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 84.29 Mbit/s
95th percentile per-packet one-way delay: 39.425 ms
Loss rate: 0.25%
```
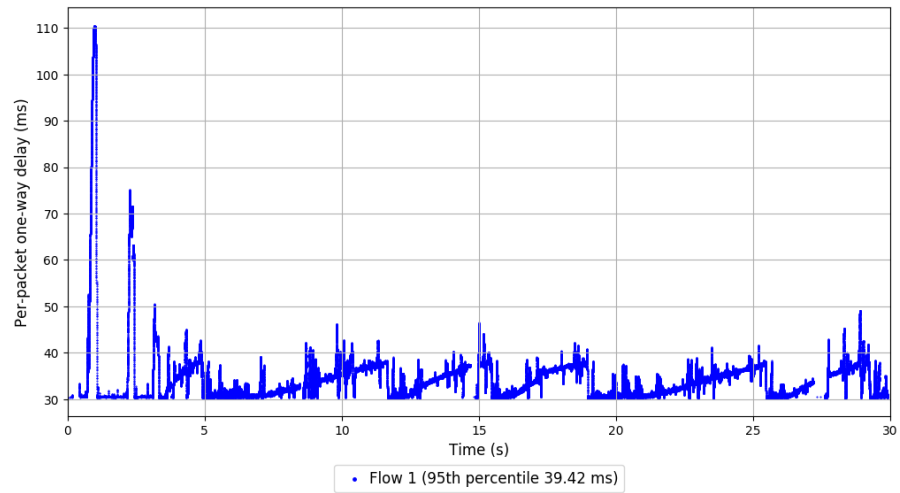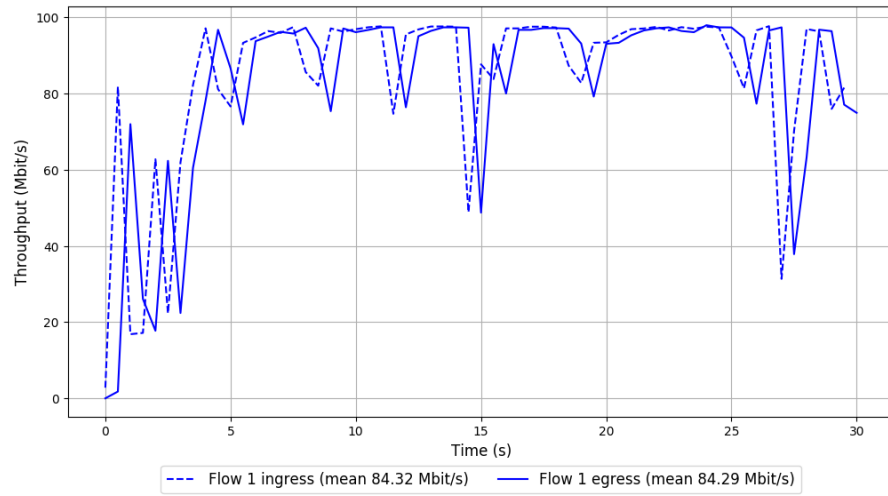
Run 5: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2019-10-03 07:29:10
End at: 2019-10-03 07:29:40
Local clock offset: 0.251 ms
Remote clock offset: 7.551 ms


# Below is generated by plot.py at 2019-10-03 10:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.709 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.709 ms
Loss rate: 0.13%
```
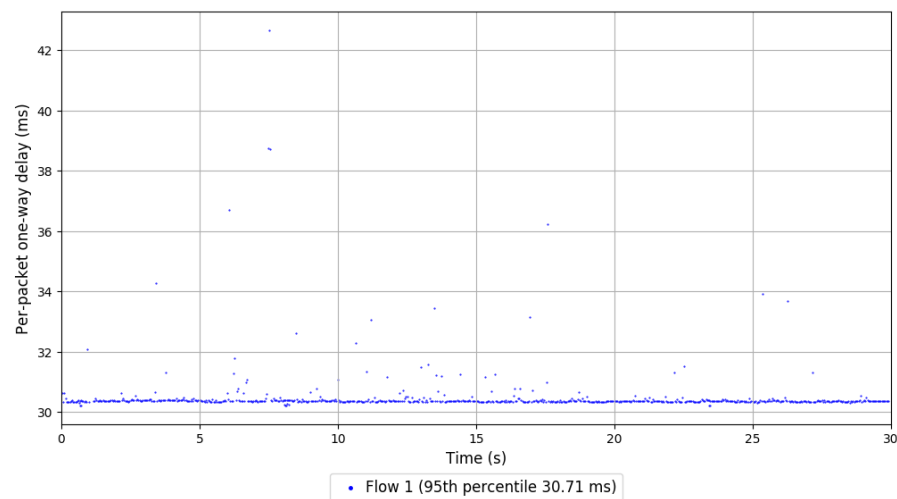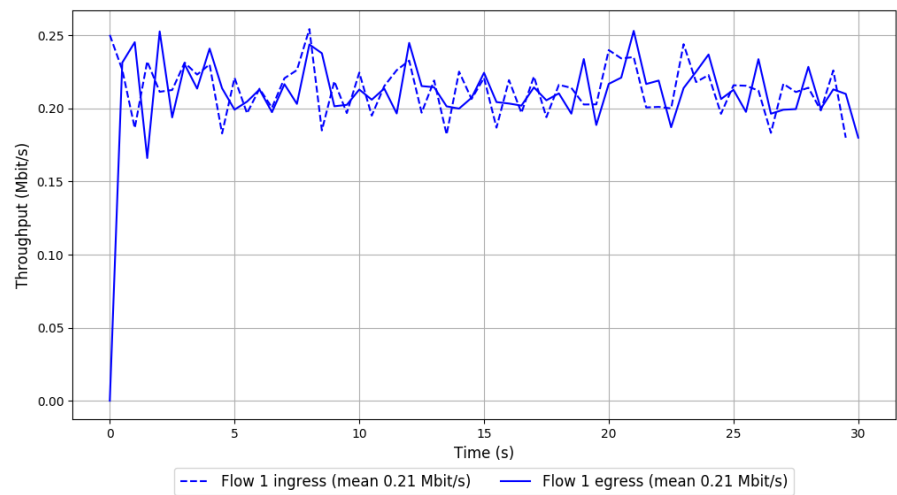
Run 1: Report of SCReAM — Data Link

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

• Flow 1 (95th percentile 30.71 ms)

```
Run 2: Statistics of SCReAM

Start at: 2019-10-03 08:17:34
End at: 2019-10-03 08:18:04
Local clock offset: 0.131 ms
Remote clock offset: 7.852 ms


# Below is generated by plot.py at 2019-10-03 10:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 32.183 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 32.183 ms
Loss rate: 0.26%
```
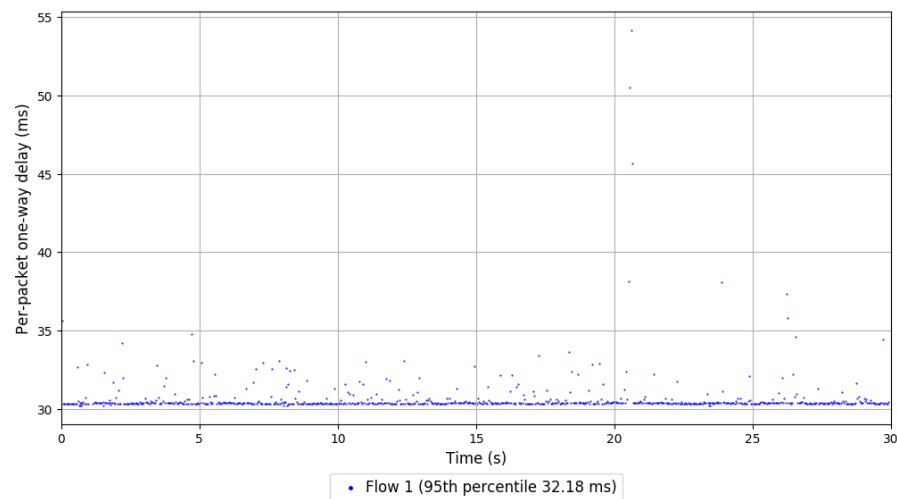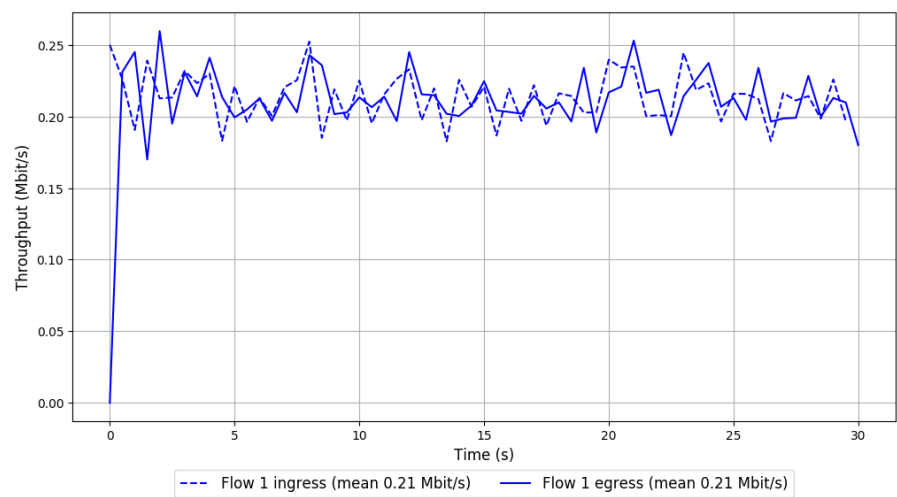
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-10-03 08:57:54
End at: 2019-10-03 08:58:24
Local clock offset: 0.191 ms
Remote clock offset: 7.16 ms


# Below is generated by plot.py at 2019-10-03 10:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.762 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.762 ms
Loss rate: 0.26%
```
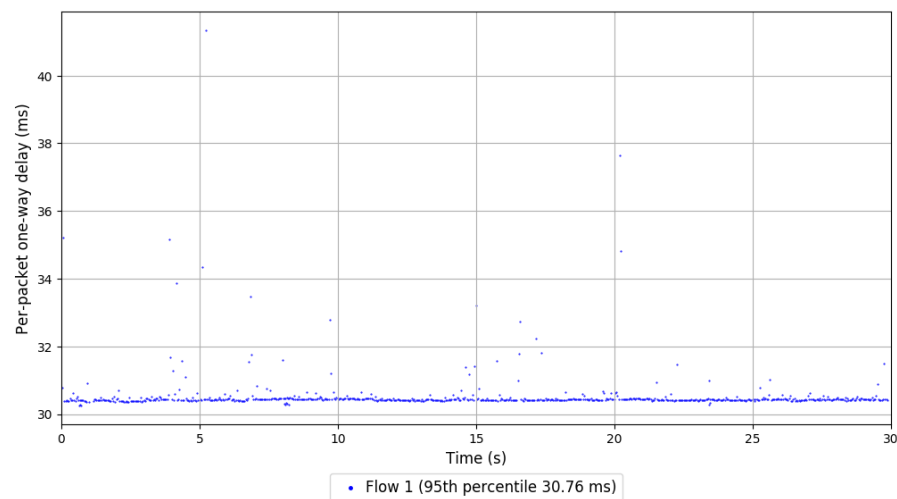
Run 3: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 30.76 ms)

```
Run 4: Statistics of SCReAM

Start at: 2019-10-03 09:37:41
End at: 2019-10-03 09:38:11
Local clock offset: 0.111 ms
Remote clock offset: 7.415 ms


# Below is generated by plot.py at 2019-10-03 10:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.711 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.711 ms
Loss rate: 0.26%
```
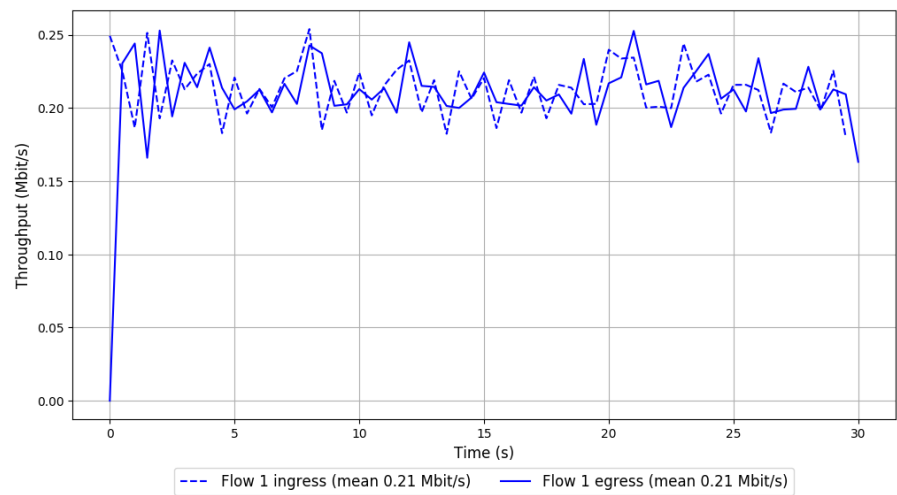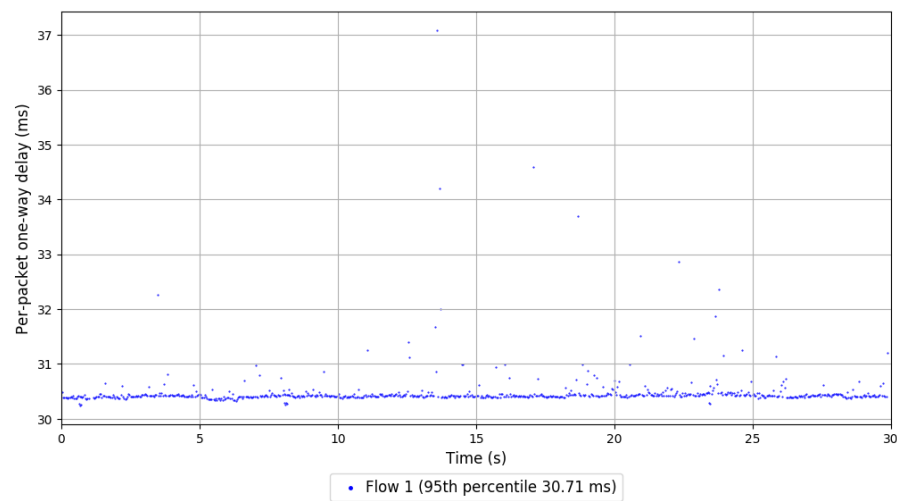
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-10-03 10:15:32
End at: 2019-10-03 10:16:02
Local clock offset: 0.252 ms
Remote clock offset: 7.736 ms


# Below is generated by plot.py at 2019-10-03 10:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.833 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.833 ms
Loss rate: 0.26%
```
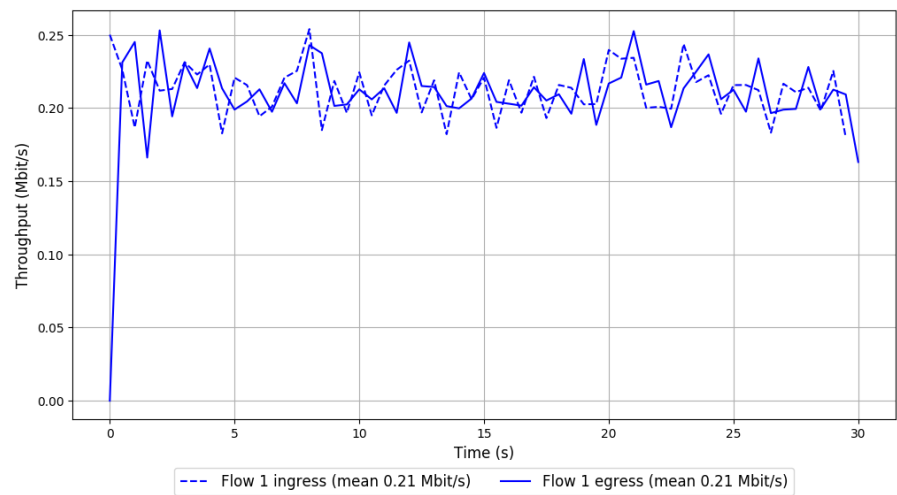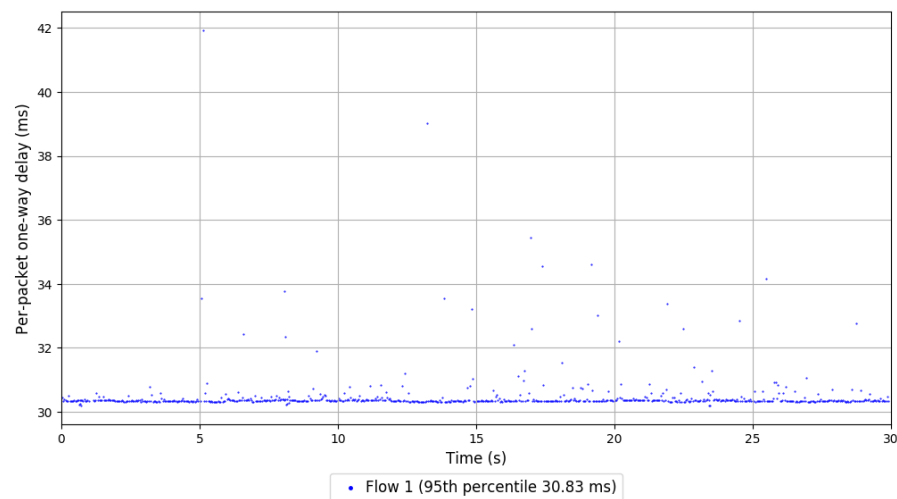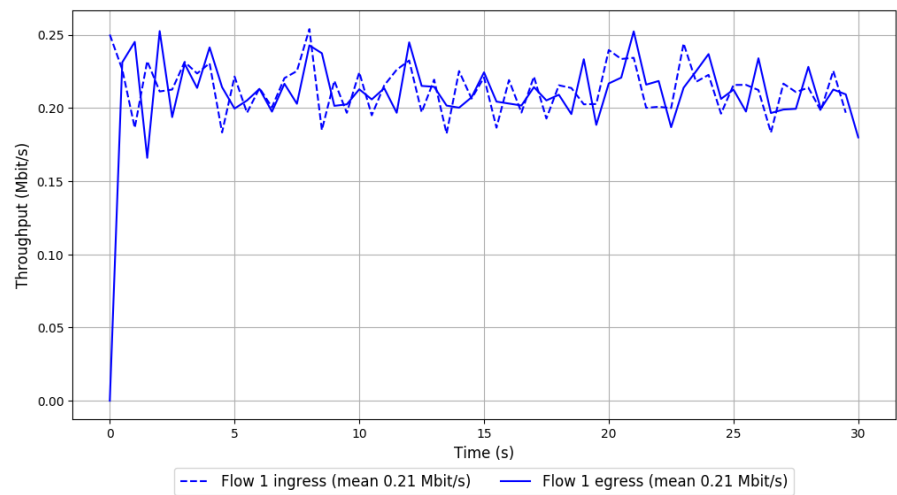
Run 5: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 30.83 ms)

```
Run 1: Statistics of Sprout

Start at: 2019-10-03 07:39:46
End at: 2019-10-03 07:40:16
Local clock offset: 0.285 ms
Remote clock offset: 7.564 ms


# Below is generated by plot.py at 2019-10-03 10:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.05 Mbit/s
95th percentile per-packet one-way delay: 38.232 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 12.05 Mbit/s
95th percentile per-packet one-way delay: 38.232 ms
Loss rate: 0.19%
```
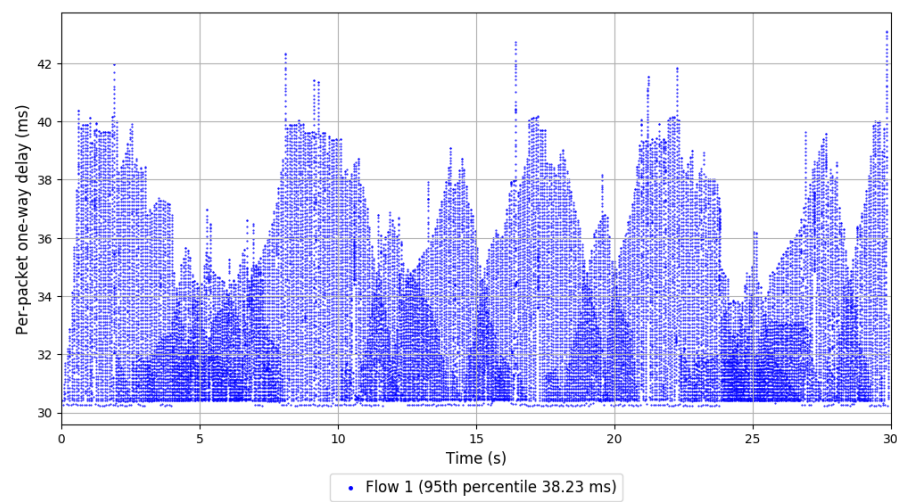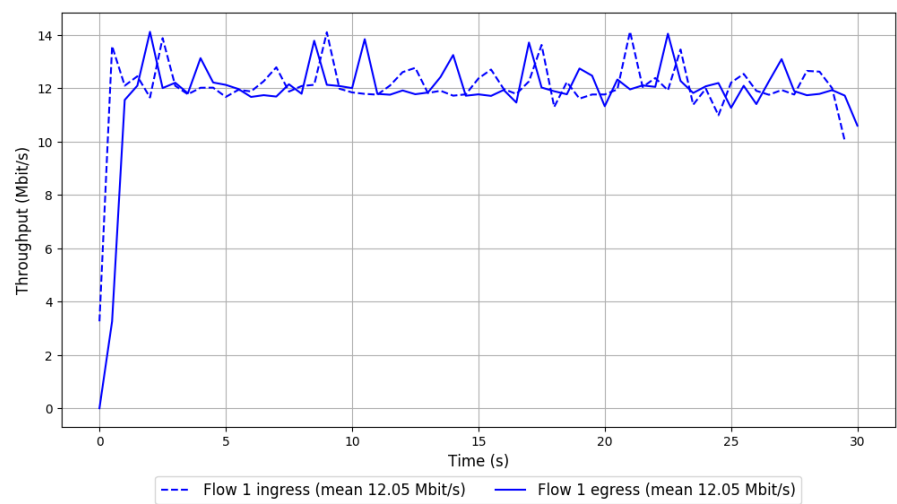
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-10-03 08:28:26
End at: 2019-10-03 08:28:56
Local clock offset: 0.165 ms
Remote clock offset: 7.693 ms


# Below is generated by plot.py at 2019-10-03 10:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.13 Mbit/s
95th percentile per-packet one-way delay: 38.542 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 12.13 Mbit/s
95th percentile per-packet one-way delay: 38.542 ms
Loss rate: 0.28%
```
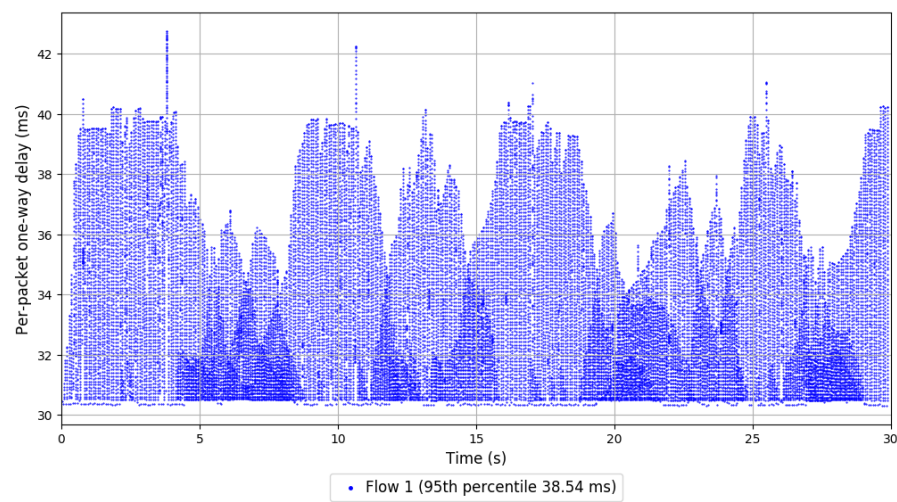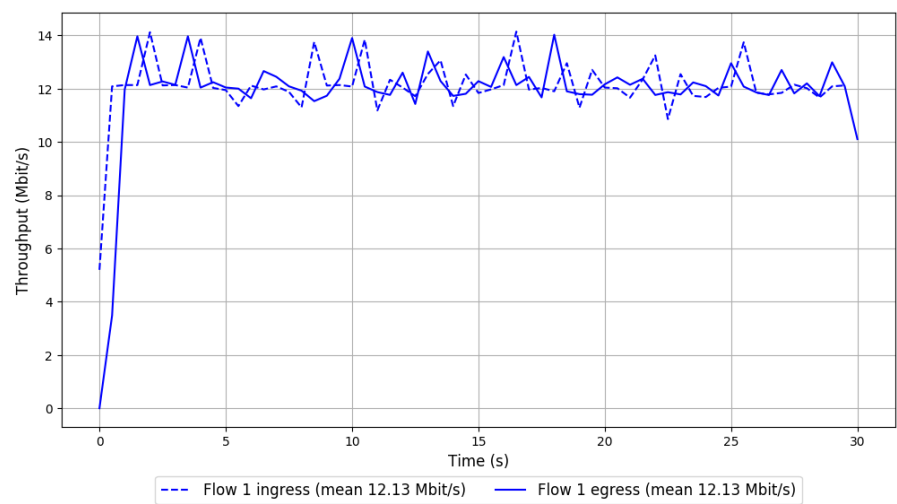
Run 2: Report of Sprout — Data Link

Flow 1 ingress (mean 12.13 Mbit/s)   Flow 1 egress (mean 12.13 Mbit/s)

• Flow 1 (95th percentile 38.54 ms)

```
Run 3: Statistics of Sprout

Start at: 2019-10-03 09:06:56
End at: 2019-10-03 09:07:26
Local clock offset: 0.192 ms
Remote clock offset: 7.224 ms


# Below is generated by plot.py at 2019-10-03 10:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 38.028 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 38.028 ms
Loss rate: 0.28%
```
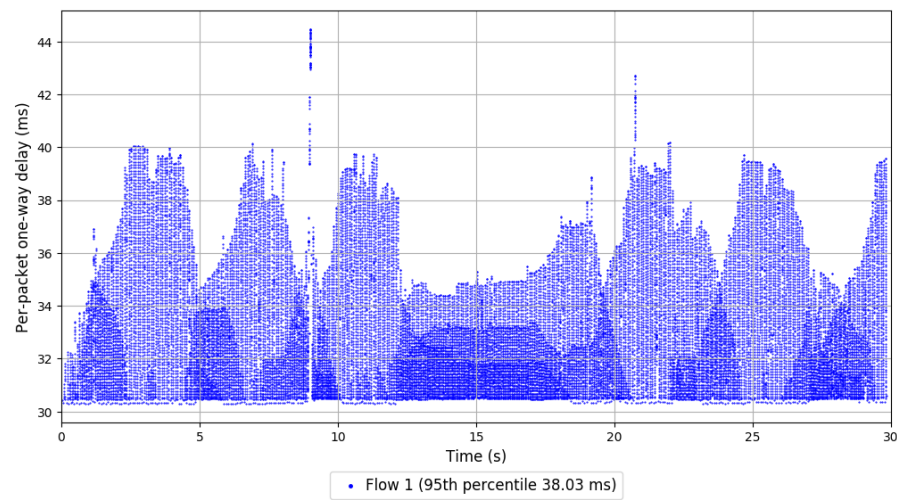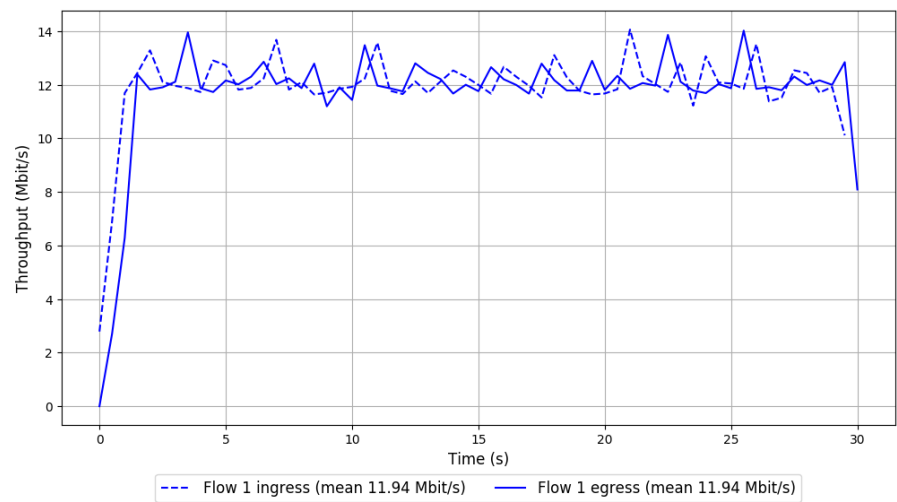
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-10-03 09:46:26
End at: 2019-10-03 09:46:56
Local clock offset: 0.081 ms
Remote clock offset: 7.745 ms


# Below is generated by plot.py at 2019-10-03 10:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 37.796 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 37.796 ms
Loss rate: 0.24%
```
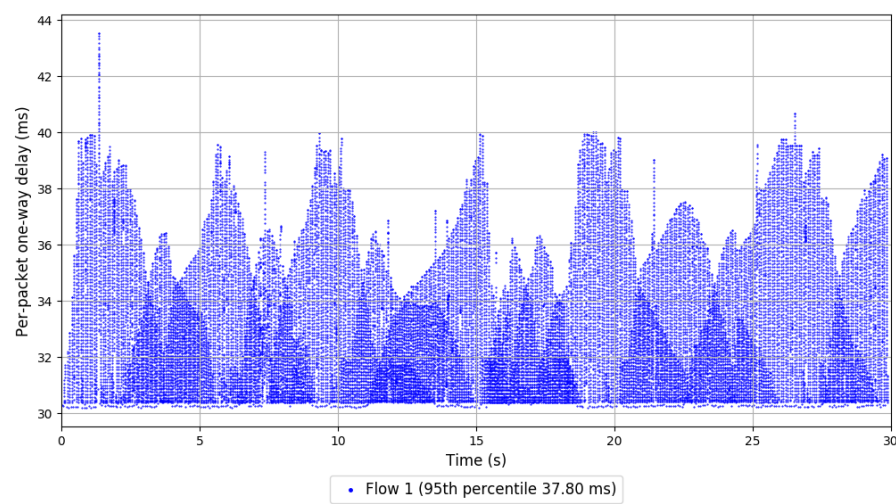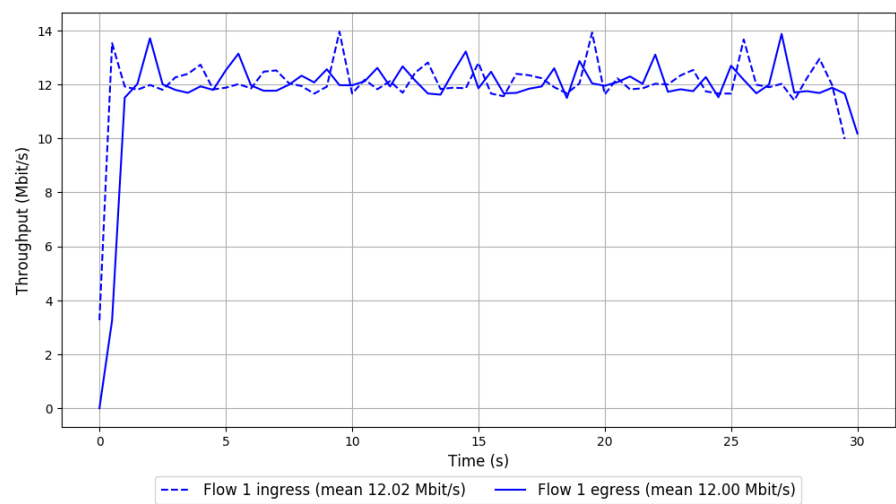
Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 12.02 Mbit/s) ----   Flow 1 egress (mean 12.00 Mbit/s) ——

• Flow 1 (95th percentile 37.80 ms)

```
Run 5: Statistics of Sprout

Start at: 2019-10-03 10:24:56
End at: 2019-10-03 10:25:26
Local clock offset: 0.301 ms
Remote clock offset: 7.447 ms


# Below is generated by plot.py at 2019-10-03 10:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.06 Mbit/s
95th percentile per-packet one-way delay: 38.828 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 12.06 Mbit/s
95th percentile per-packet one-way delay: 38.828 ms
Loss rate: 0.20%
```
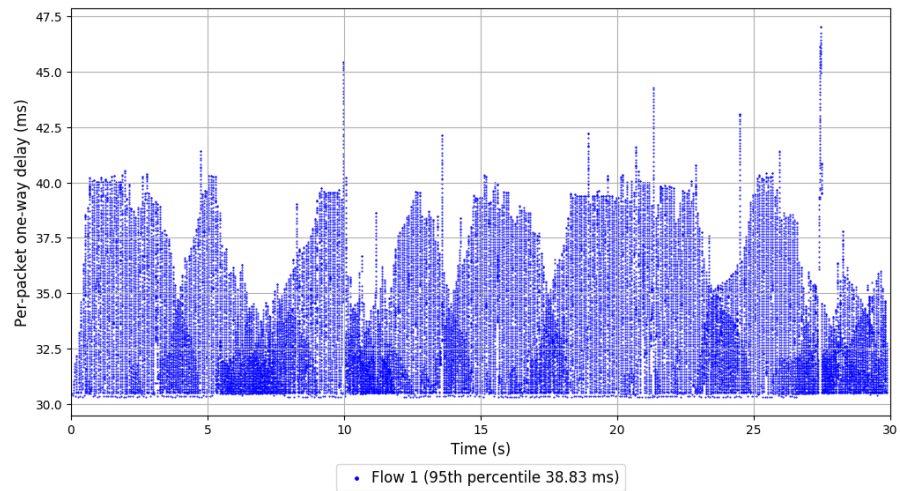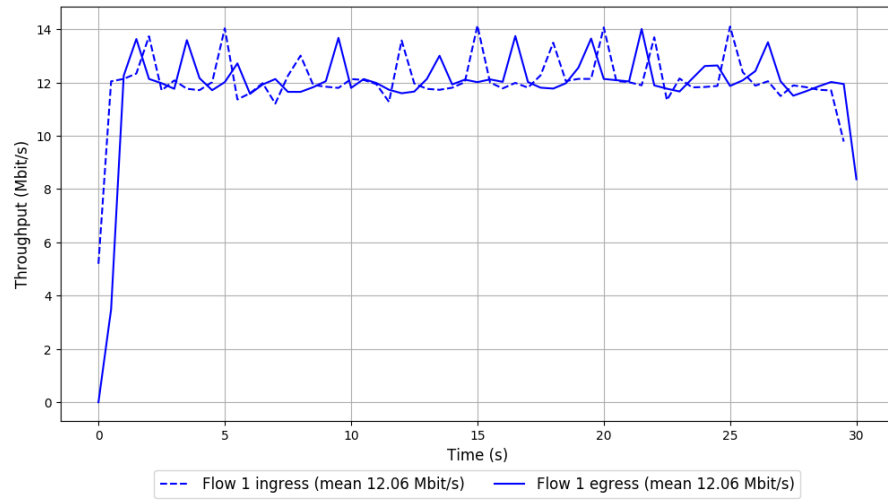
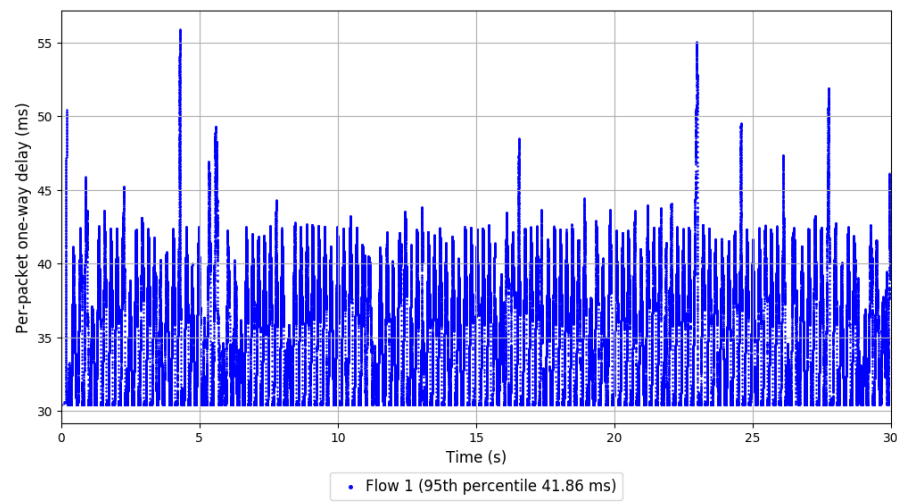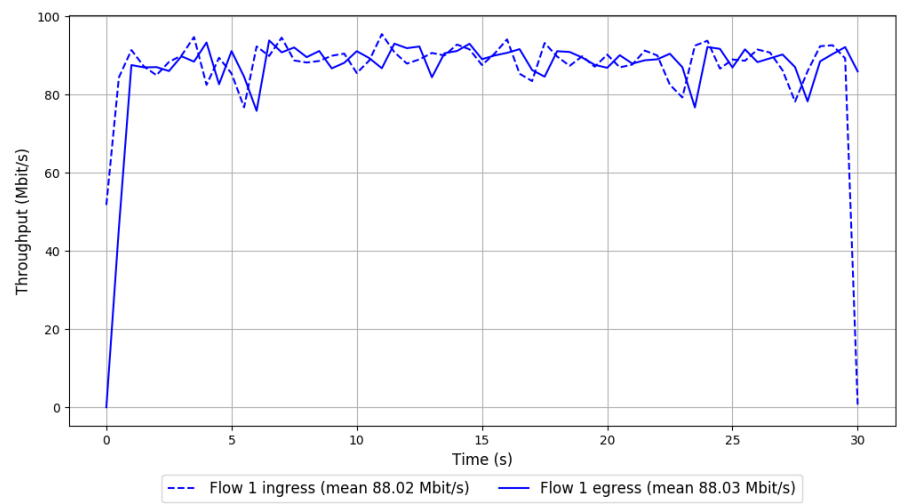## Run 5: Report of Sprout — Data Link

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

Start at: 2019-10-03 07:42:49
End at: 2019-10-03 07:43:19
Local clock offset: 0.286 ms
Remote clock offset: 7.497 ms

# Below is generated by plot.py at 2019-10-03 10:46:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.03 Mbit/s
95th percentile per-packet one-way delay: 41.860 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 88.03 Mbit/s
95th percentile per-packet one-way delay: 41.860 ms
Loss rate: 0.21%
```

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

Flow 1 ingress (mean 88.02 Mbit/s)   Flow 1 egress (mean 88.03 Mbit/s)

Flow 1 (95th percentile 41.86 ms)

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

Start at: 2019-10-03 08:31:33
End at: 2019-10-03 08:32:03
Local clock offset: 0.174 ms
Remote clock offset: 7.619 ms


# Below is generated by plot.py at 2019-10-03 10:46:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.11 Mbit/s
95th percentile per-packet one-way delay: 41.581 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 88.11 Mbit/s
95th percentile per-packet one-way delay: 41.581 ms
Loss rate: 0.24%
```
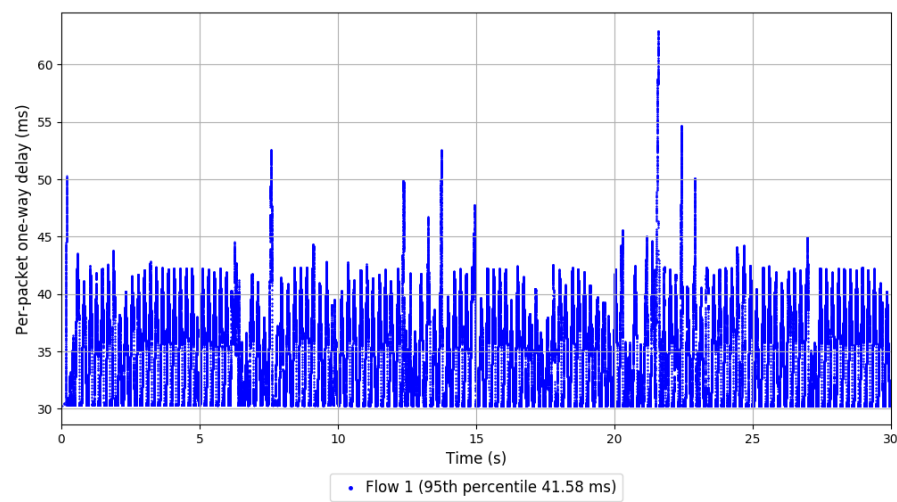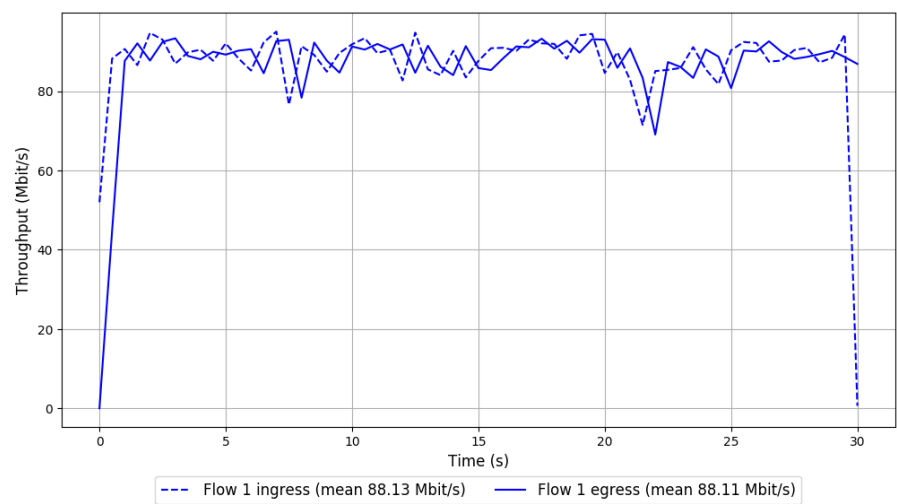
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2019-10-03 09:10:10
End at: 2019-10-03 09:10:40
Local clock offset: 0.113 ms
Remote clock offset: 7.264 ms


# Below is generated by plot.py at 2019-10-03 10:46:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.13 Mbit/s
95th percentile per-packet one-way delay: 41.490 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 89.13 Mbit/s
95th percentile per-packet one-way delay: 41.490 ms
Loss rate: 0.25%
```
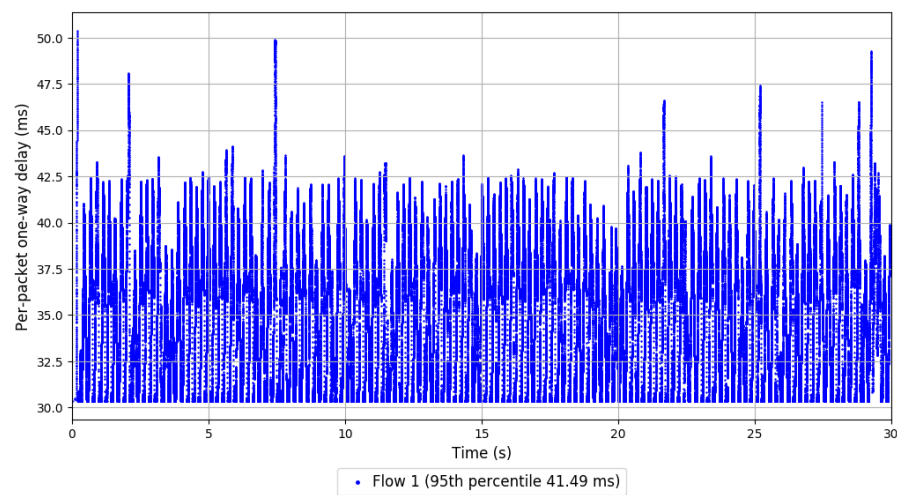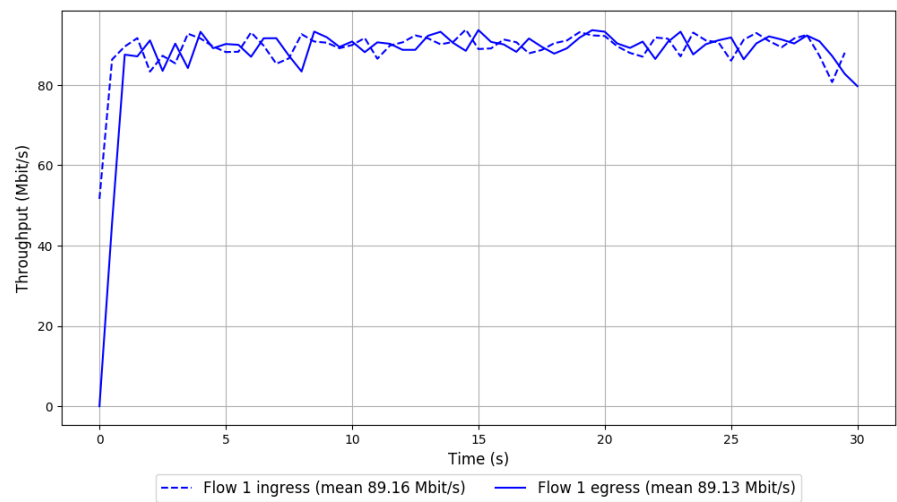
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 89.16 Mbit/s)   Flow 1 egress (mean 89.13 Mbit/s)

Flow 1 (95th percentile 41.49 ms)

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

Start at: 2019-10-03 09:49:12
End at: 2019-10-03 09:49:42
Local clock offset: 0.092 ms
Remote clock offset: 7.753 ms


# Below is generated by plot.py at 2019-10-03 10:46:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.49 Mbit/s
95th percentile per-packet one-way delay: 41.701 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 88.49 Mbit/s
95th percentile per-packet one-way delay: 41.701 ms
Loss rate: 0.25%
```
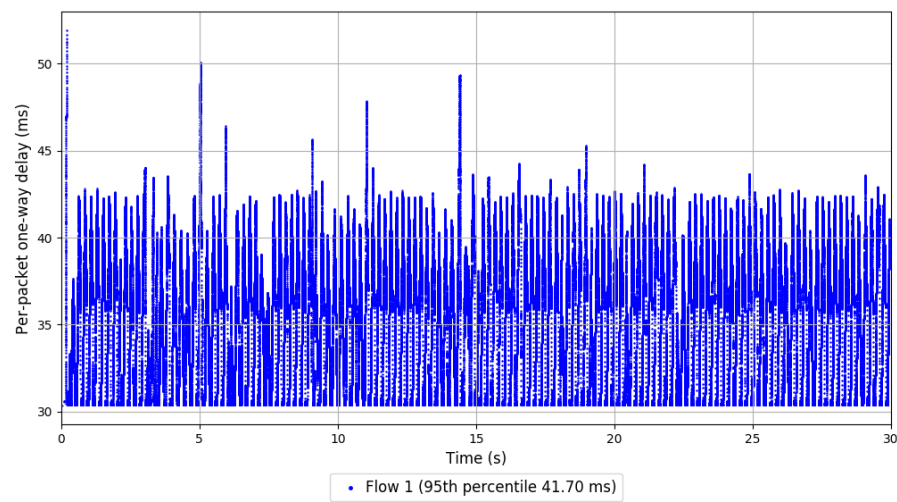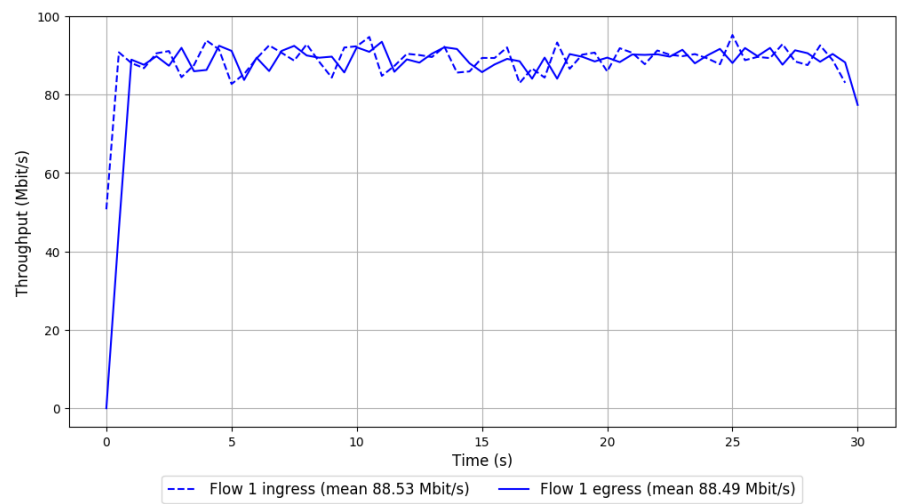
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 88.53 Mbit/s) ---- Flow 1 egress (mean 88.49 Mbit/s)

• Flow 1 (95th percentile 41.70 ms)

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

Start at: 2019-10-03 10:27:45
End at: 2019-10-03 10:28:15
Local clock offset: 0.318 ms
Remote clock offset: 7.476 ms


# Below is generated by plot.py at 2019-10-03 10:46:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.25 Mbit/s
95th percentile per-packet one-way delay: 41.522 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 89.25 Mbit/s
95th percentile per-packet one-way delay: 41.522 ms
Loss rate: 0.22%
```
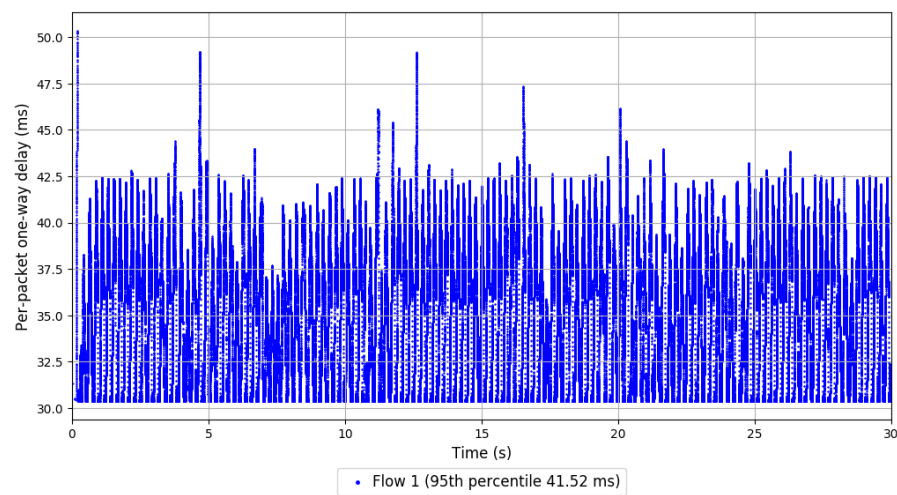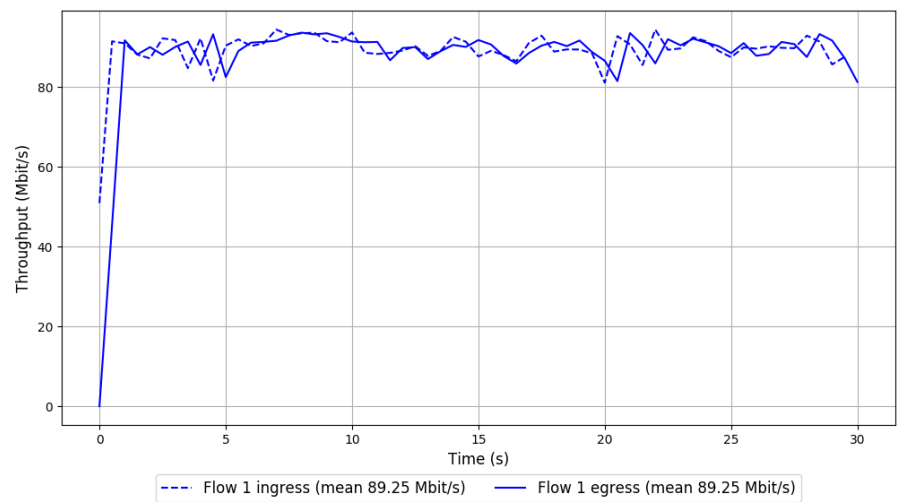
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 89.25 Mbit/s)   Flow 1 egress (mean 89.25 Mbit/s)

• Flow 1 (95th percentile 41.52 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2019-10-03 07:21:00
End at: 2019-10-03 07:21:30
Local clock offset: 0.297 ms
Remote clock offset: 7.75 ms


# Below is generated by plot.py at 2019-10-03 10:46:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.08 Mbit/s
95th percentile per-packet one-way delay: 34.238 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 75.08 Mbit/s
95th percentile per-packet one-way delay: 34.238 ms
Loss rate: 0.29%
```
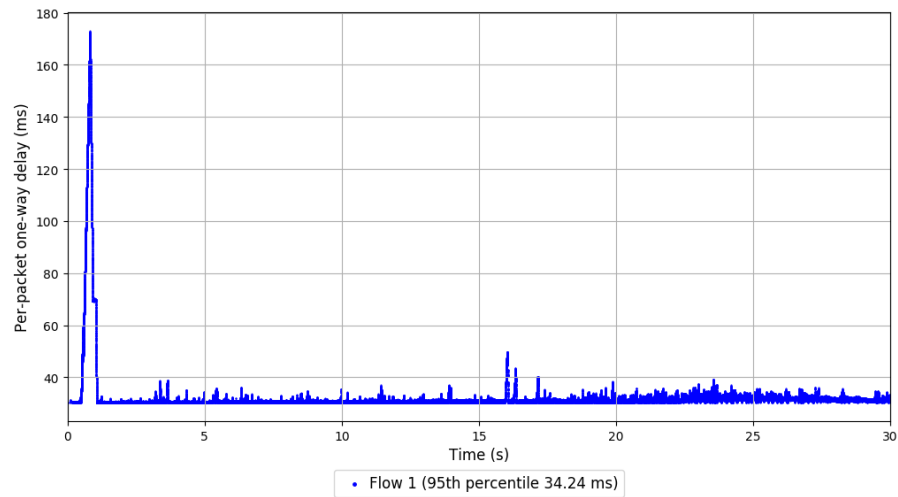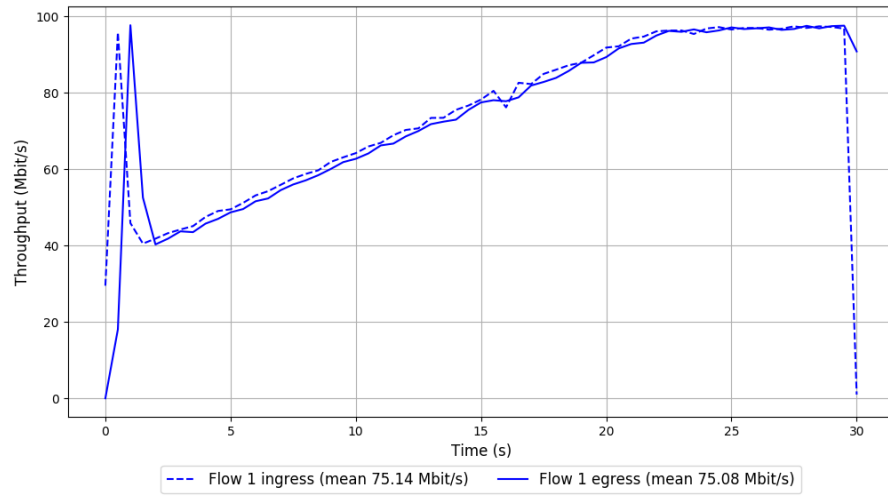
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-10-03 08:09:21
End at: 2019-10-03 08:09:51
Local clock offset: 0.182 ms
Remote clock offset: 7.837 ms


# Below is generated by plot.py at 2019-10-03 10:46:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.54 Mbit/s
95th percentile per-packet one-way delay: 34.730 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 74.54 Mbit/s
95th percentile per-packet one-way delay: 34.730 ms
Loss rate: 0.29%
```
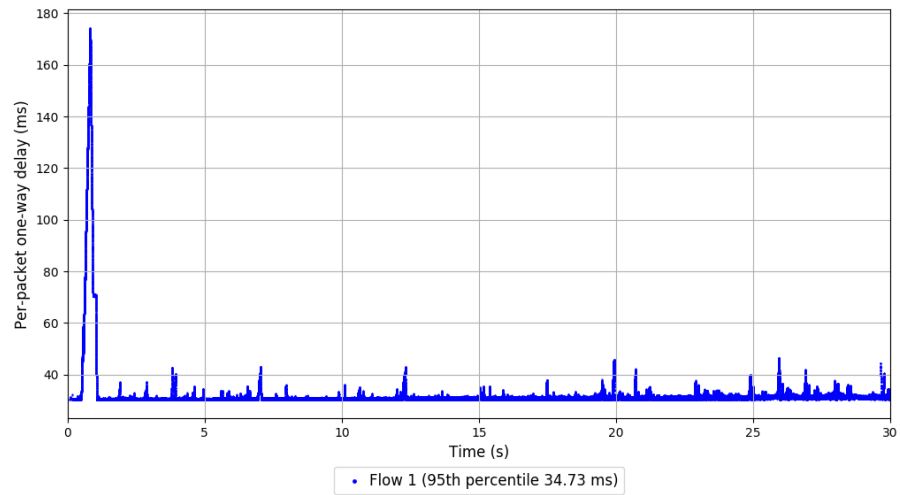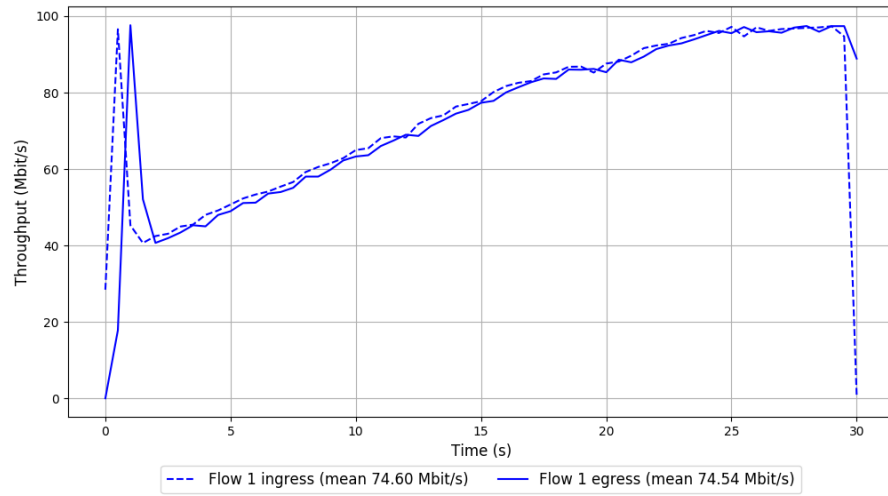
Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 74.60 Mbit/s) ---- Flow 1 egress (mean 74.54 Mbit/s)

Flow 1 (95th percentile 34.73 ms)

```
Run 3: Statistics of TCP Vegas

Start at: 2019-10-03 08:51:40
End at: 2019-10-03 08:52:10
Local clock offset: 0.212 ms
Remote clock offset: 7.223 ms


# Below is generated by plot.py at 2019-10-03 10:46:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.51 Mbit/s
95th percentile per-packet one-way delay: 32.808 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 86.51 Mbit/s
95th percentile per-packet one-way delay: 32.808 ms
Loss rate: 0.25%
```
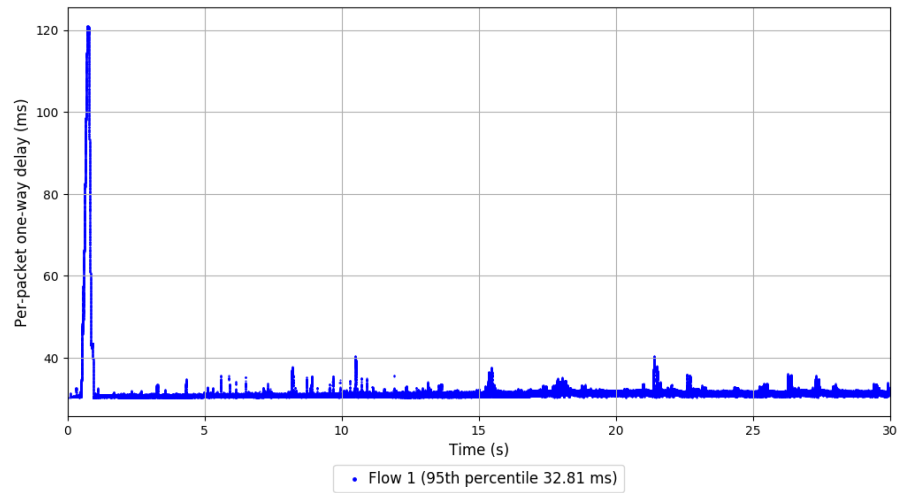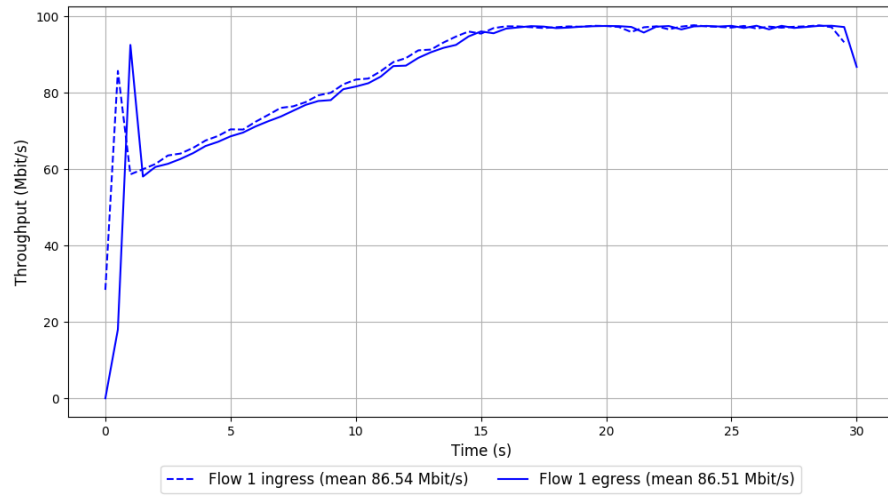
Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 86.54 Mbit/s) — Flow 1 egress (mean 86.51 Mbit/s)

• Flow 1 (95th percentile 32.81 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2019-10-03 09:30:23
End at: 2019-10-03 09:30:53
Local clock offset: 0.128 ms
Remote clock offset: 7.389 ms


# Below is generated by plot.py at 2019-10-03 10:46:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.13 Mbit/s
95th percentile per-packet one-way delay: 34.744 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 86.13 Mbit/s
95th percentile per-packet one-way delay: 34.744 ms
Loss rate: 0.25%
```
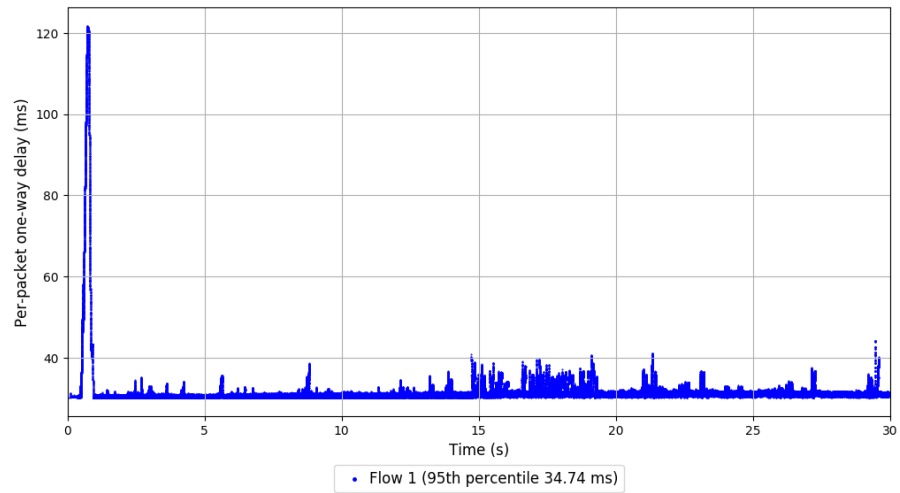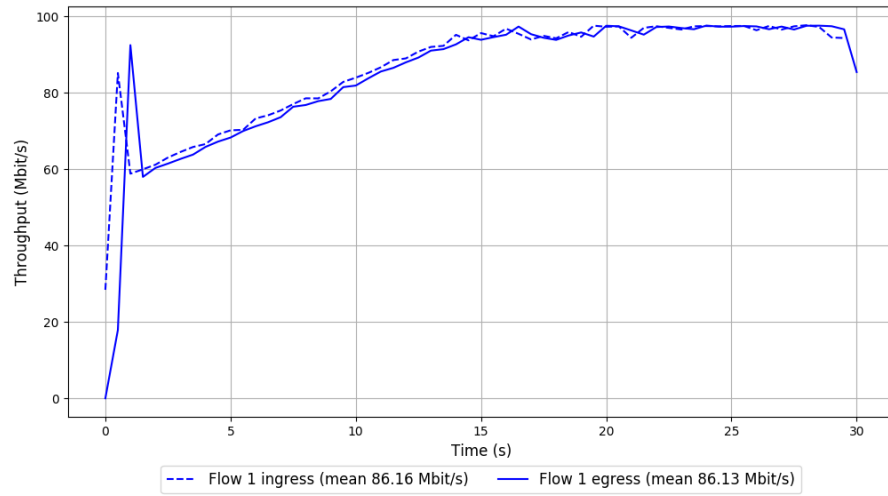
Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 86.16 Mbit/s) --- Flow 1 egress (mean 86.13 Mbit/s)

Flow 1 (95th percentile 34.74 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2019-10-03 10:09:29
End at: 2019-10-03 10:09:59
Local clock offset: 0.249 ms
Remote clock offset: 7.946 ms


# Below is generated by plot.py at 2019-10-03 10:46:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.54 Mbit/s
95th percentile per-packet one-way delay: 34.451 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 74.54 Mbit/s
95th percentile per-packet one-way delay: 34.451 ms
Loss rate: 0.29%
```
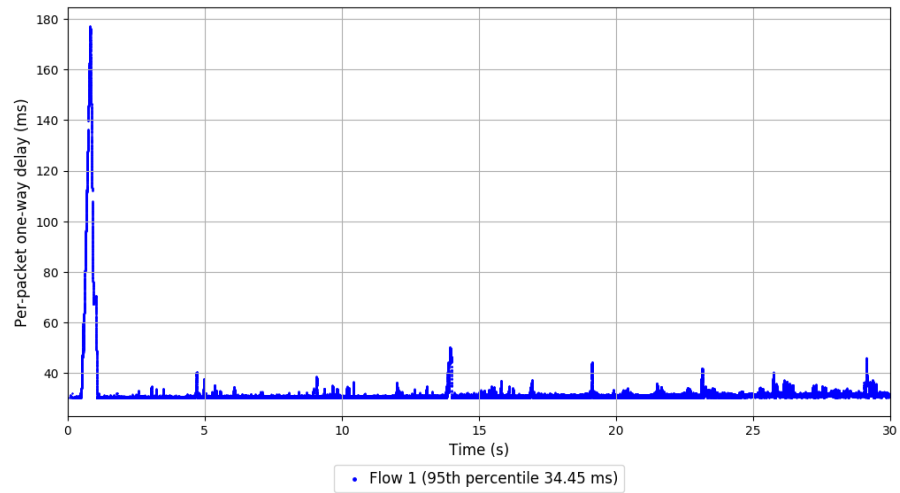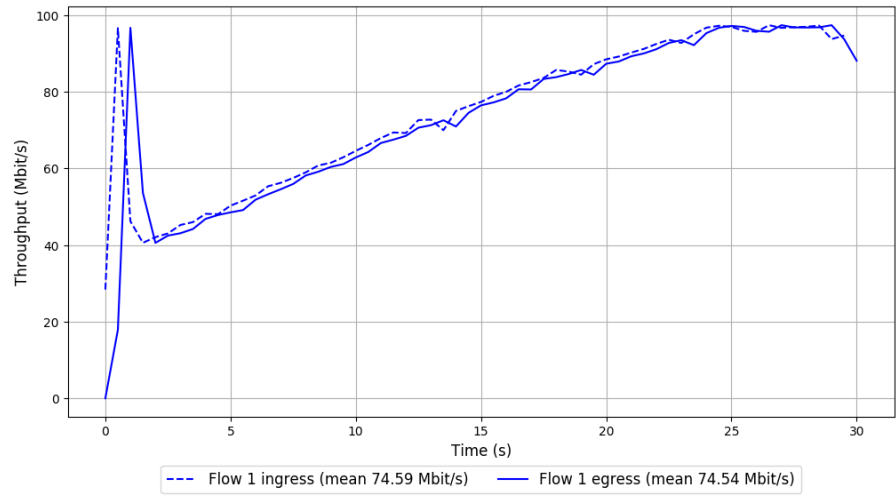
Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 74.59 Mbit/s)   Flow 1 egress (mean 74.54 Mbit/s)

Flow 1 (95th percentile 34.45 ms)

```
Run 1: Statistics of Verus

Start at: 2019-10-03 07:22:44
End at: 2019-10-03 07:23:14
Local clock offset: 0.315 ms
Remote clock offset: 7.738 ms


# Below is generated by plot.py at 2019-10-03 10:47:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.66 Mbit/s
95th percentile per-packet one-way delay: 75.019 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 83.66 Mbit/s
95th percentile per-packet one-way delay: 75.019 ms
Loss rate: 0.37%
```
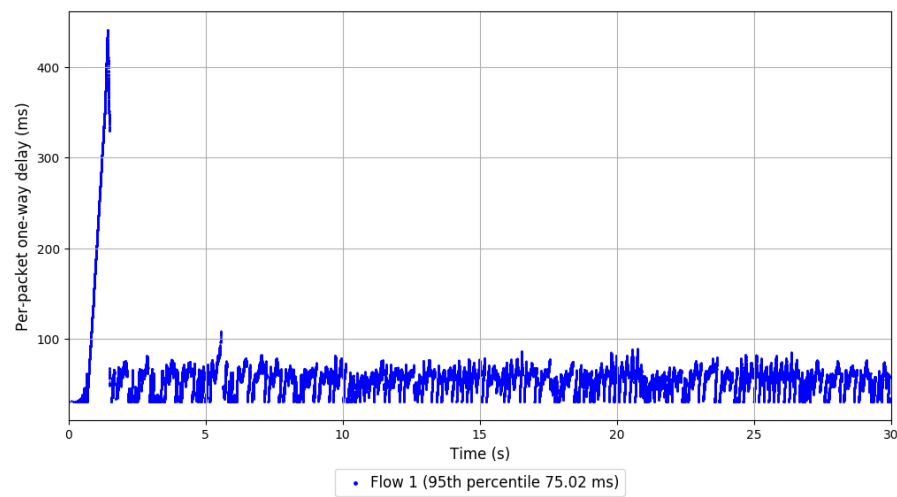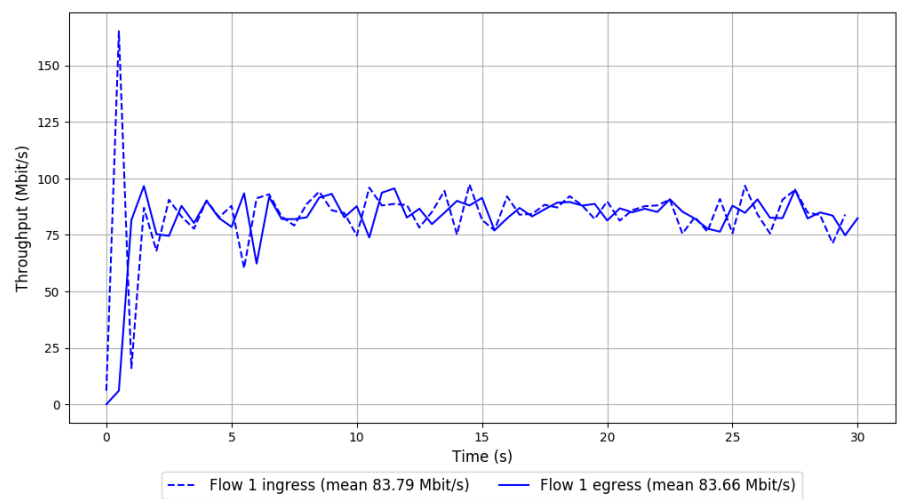
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-10-03 08:11:22
End at: 2019-10-03 08:11:52
Local clock offset: 0.177 ms
Remote clock offset: 7.762 ms


# Below is generated by plot.py at 2019-10-03 10:47:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.40 Mbit/s
95th percentile per-packet one-way delay: 68.705 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 88.40 Mbit/s
95th percentile per-packet one-way delay: 68.705 ms
Loss rate: 0.32%
```
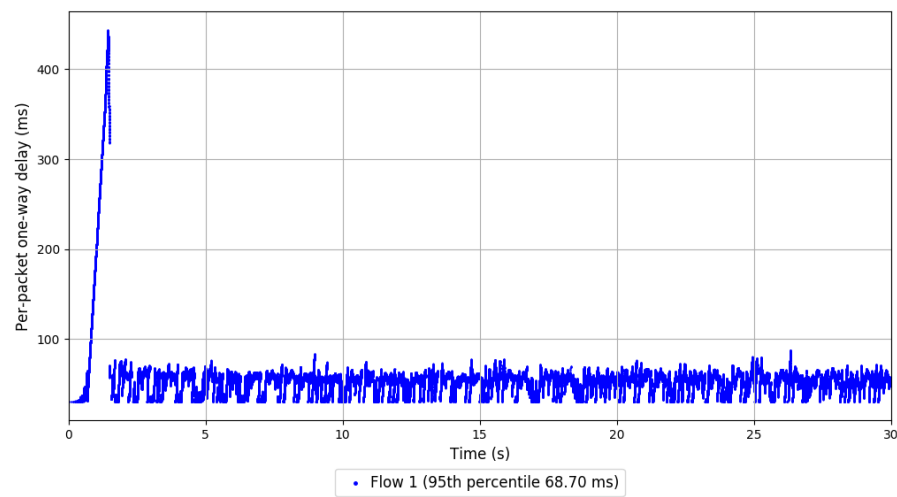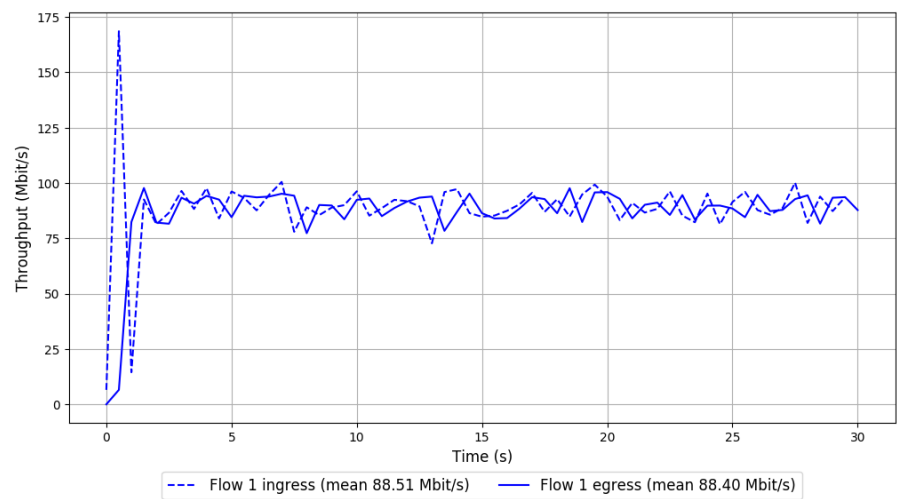
Run 2: Report of Verus — Data Link

Flow 1 ingress (mean 88.51 Mbit/s)   Flow 1 egress (mean 88.40 Mbit/s)

Flow 1 (95th percentile 68.70 ms)

```
Run 3: Statistics of Verus

Start at: 2019-10-03 08:53:16
End at: 2019-10-03 08:53:46
Local clock offset: 0.164 ms
Remote clock offset: 7.189 ms


# Below is generated by plot.py at 2019-10-03 10:47:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.27 Mbit/s
95th percentile per-packet one-way delay: 69.475 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 85.27 Mbit/s
95th percentile per-packet one-way delay: 69.475 ms
Loss rate: 0.37%
```
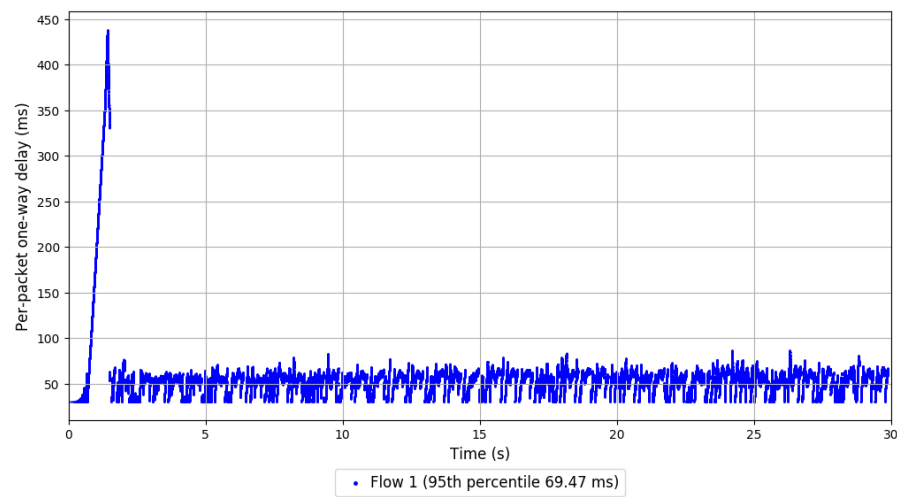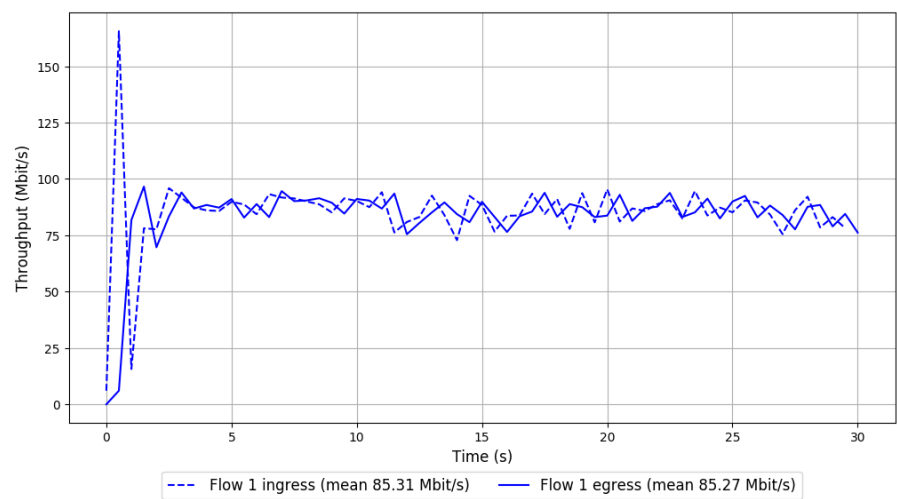
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2019-10-03 09:31:58
End at: 2019-10-03 09:32:28
Local clock offset: 0.132 ms
Remote clock offset: 7.307 ms


# Below is generated by plot.py at 2019-10-03 10:47:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.13 Mbit/s
95th percentile per-packet one-way delay: 70.086 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 85.13 Mbit/s
95th percentile per-packet one-way delay: 70.086 ms
Loss rate: 0.35%
```
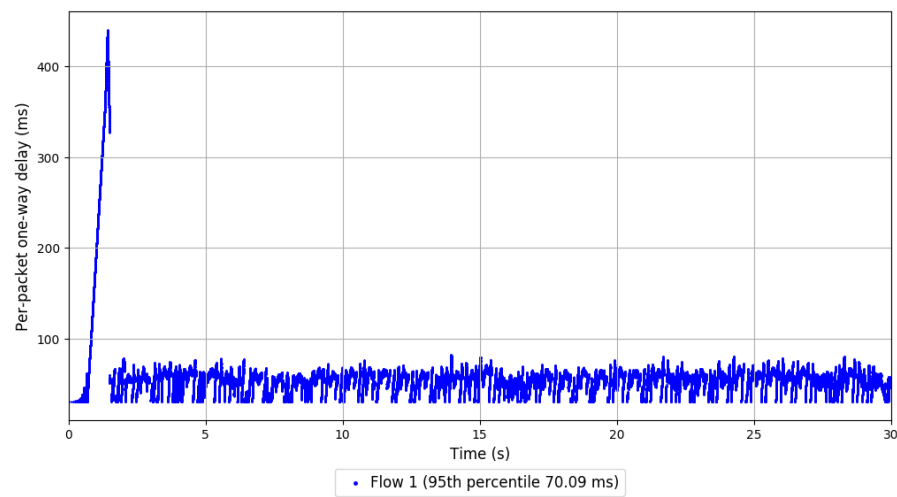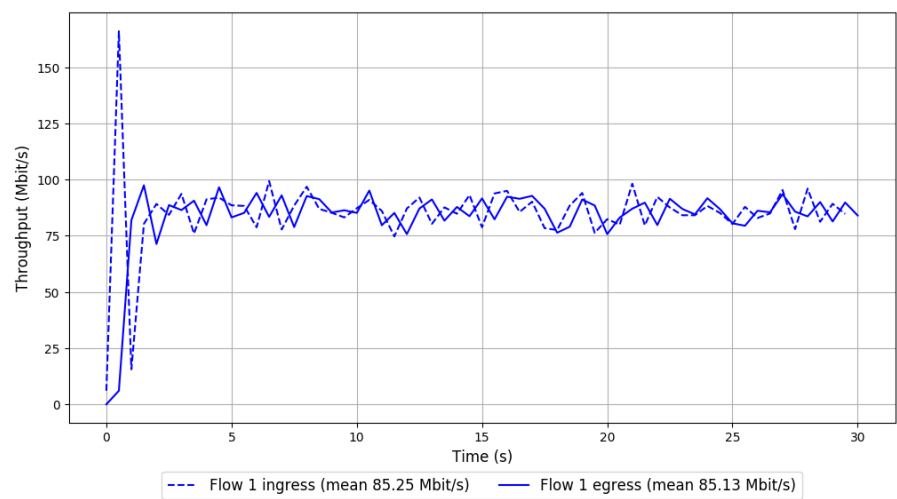
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-10-03 10:11:00
End at: 2019-10-03 10:11:30
Local clock offset: 0.266 ms
Remote clock offset: 7.859 ms


# Below is generated by plot.py at 2019-10-03 10:47:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.87 Mbit/s
95th percentile per-packet one-way delay: 70.511 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 85.87 Mbit/s
95th percentile per-packet one-way delay: 70.511 ms
Loss rate: 0.46%
```
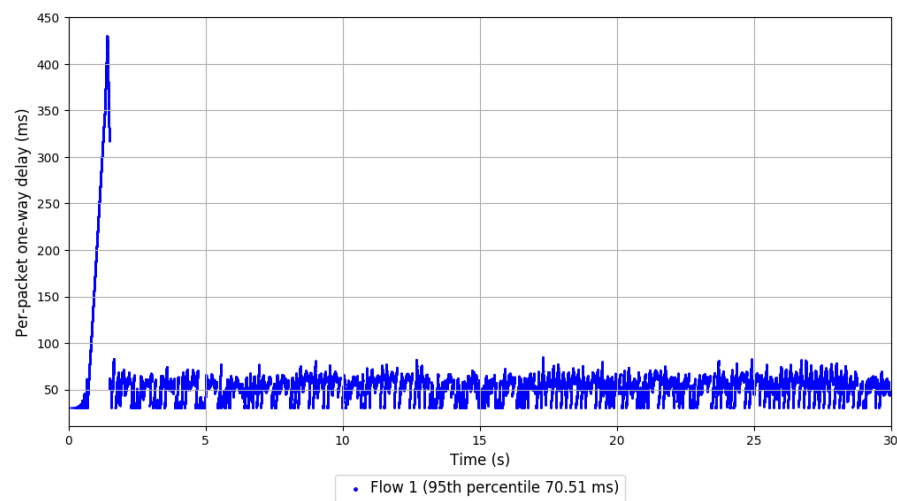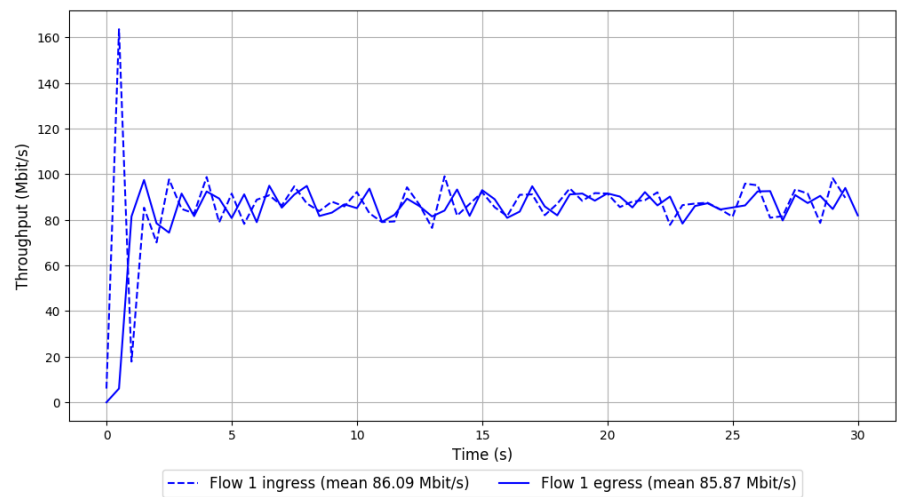
Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 86.09 Mbit/s)   Flow 1 egress (mean 85.87 Mbit/s)

• Flow 1 (95th percentile 70.51 ms)

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-10-03 07:25:00
End at: 2019-10-03 07:25:30
Local clock offset: 0.293 ms
Remote clock offset: 7.666 ms


# Below is generated by plot.py at 2019-10-03 10:47:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.11 Mbit/s
95th percentile per-packet one-way delay: 36.057 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 83.11 Mbit/s
95th percentile per-packet one-way delay: 36.057 ms
Loss rate: 0.23%
```
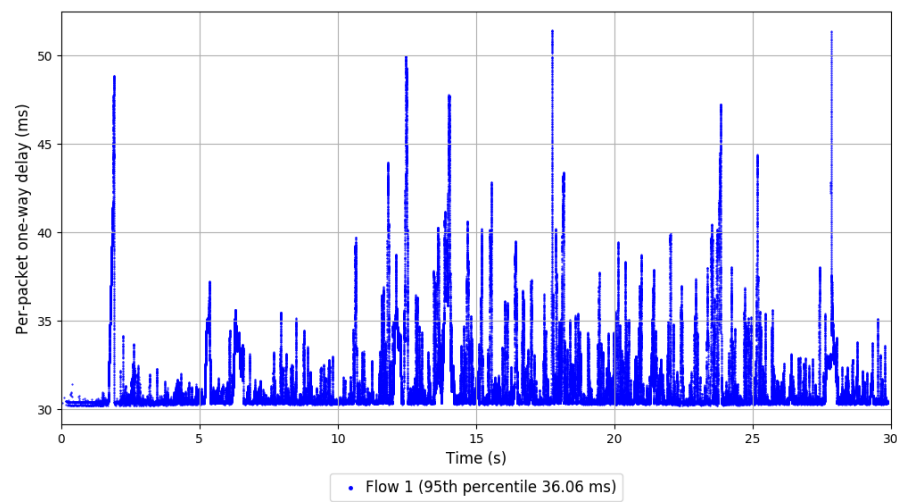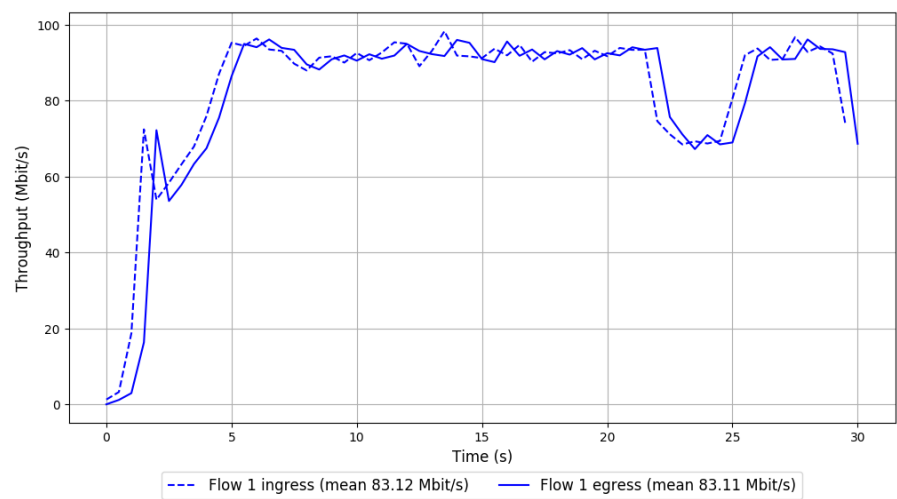
Run 1: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 83.12 Mbit/s)   Flow 1 egress (mean 83.11 Mbit/s)

Flow 1 (95th percentile 36.06 ms)

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-10-03 08:13:43
End at: 2019-10-03 08:14:13
Local clock offset: 0.17 ms
Remote clock offset: 7.883 ms


# Below is generated by plot.py at 2019-10-03 10:47:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.90 Mbit/s
95th percentile per-packet one-way delay: 50.460 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 81.90 Mbit/s
95th percentile per-packet one-way delay: 50.460 ms
Loss rate: 0.27%
```
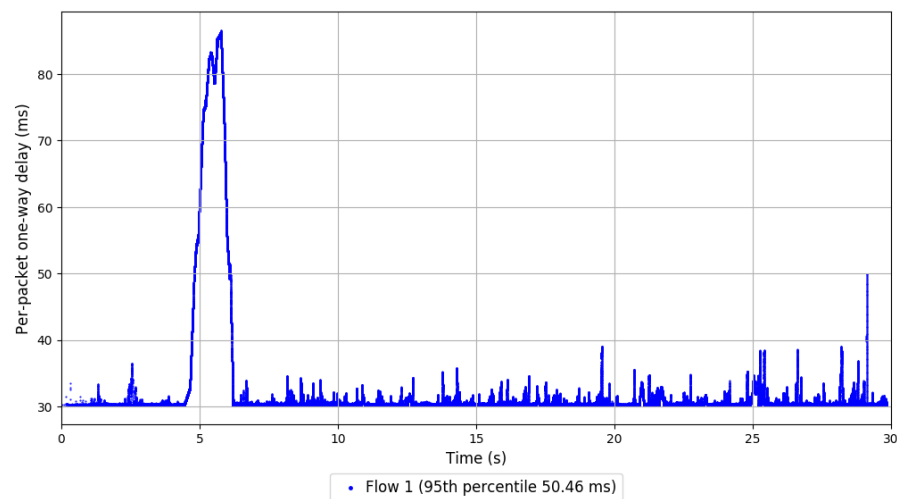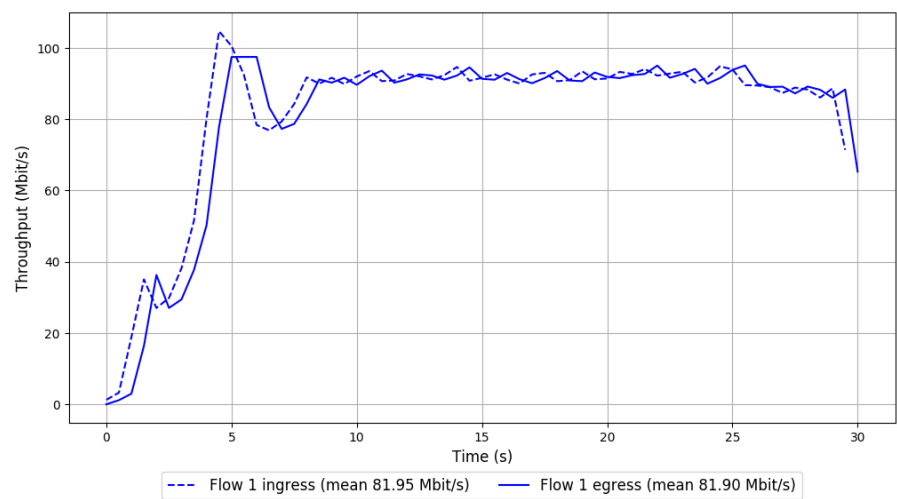
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 81.95 Mbit/s)   Flow 1 egress (mean 81.90 Mbit/s)

• Flow 1 (95th percentile 50.46 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-10-03 08:54:47
End at: 2019-10-03 08:55:17
Local clock offset: 0.173 ms
Remote clock offset: 7.284 ms


# Below is generated by plot.py at 2019-10-03 10:47:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.59 Mbit/s
95th percentile per-packet one-way delay: 33.026 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 83.59 Mbit/s
95th percentile per-packet one-way delay: 33.026 ms
Loss rate: 0.23%
```
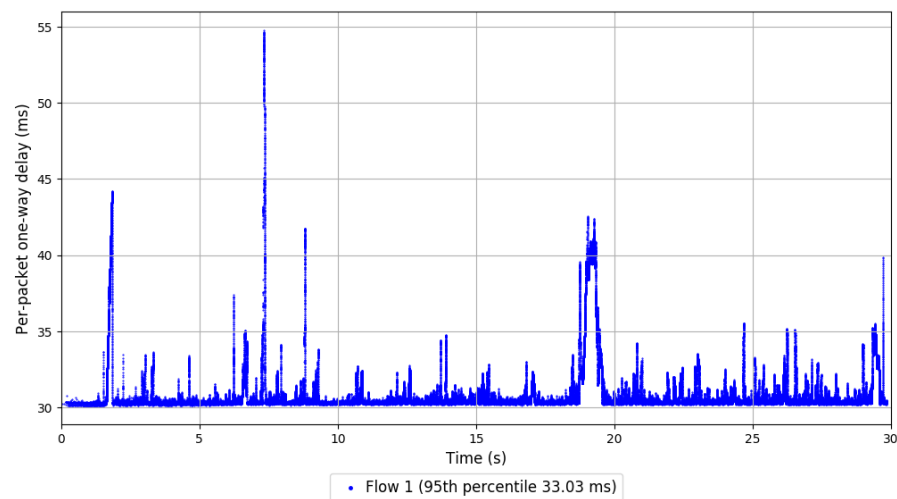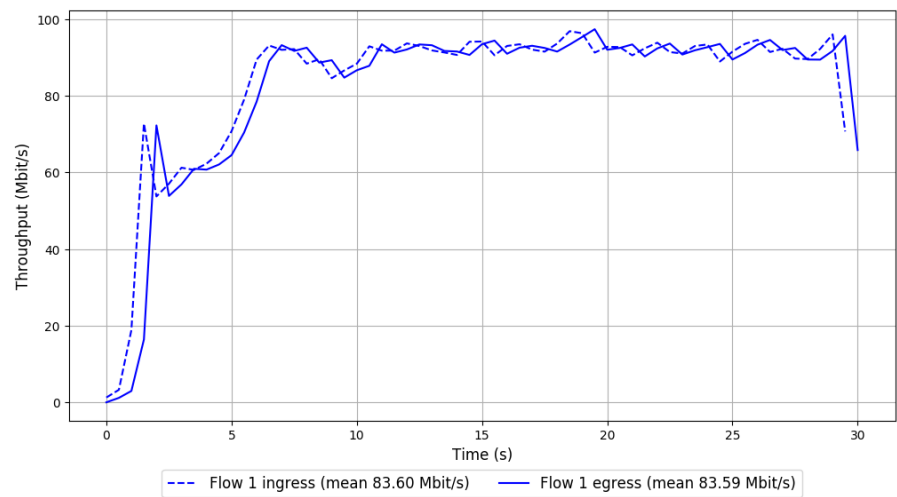
Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 83.60 Mbit/s)　　　Flow 1 egress (mean 83.59 Mbit/s)

Flow 1 (95th percentile 33.03 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-10-03 09:34:13
End at: 2019-10-03 09:34:43
Local clock offset: 0.151 ms
Remote clock offset: 7.261 ms


# Below is generated by plot.py at 2019-10-03 10:47:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.87 Mbit/s
95th percentile per-packet one-way delay: 36.108 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 76.87 Mbit/s
95th percentile per-packet one-way delay: 36.108 ms
Loss rate: 0.28%
```
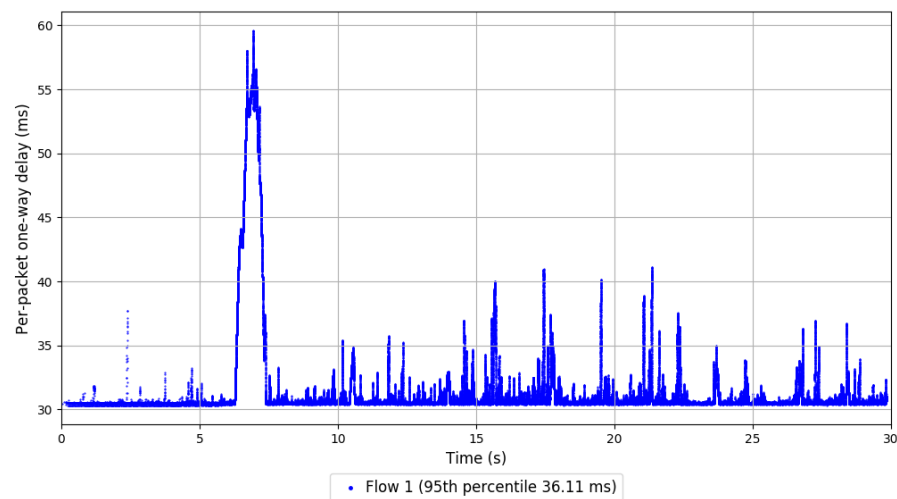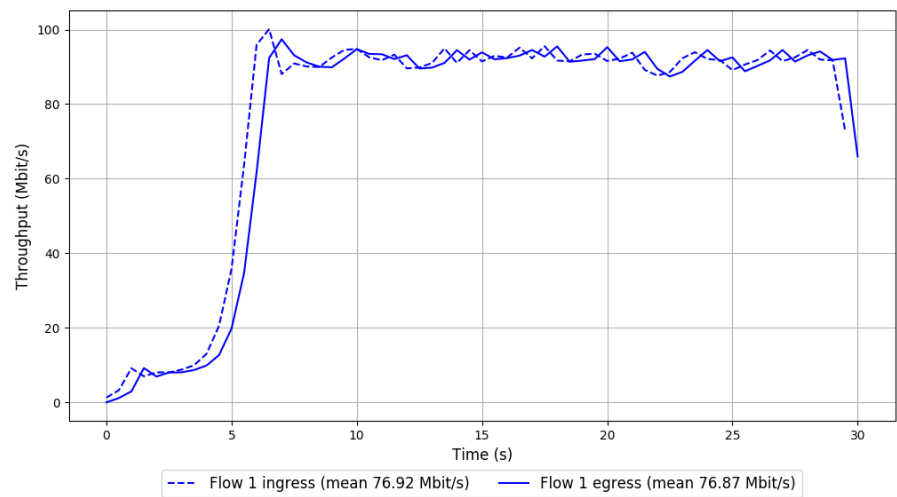
Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 76.92 Mbit/s) Flow 1 egress (mean 76.87 Mbit/s)

Flow 1 (95th percentile 36.11 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-10-03 10:12:32
End at: 2019-10-03 10:13:02
Local clock offset: 0.268 ms
Remote clock offset: 7.761 ms


# Below is generated by plot.py at 2019-10-03 10:47:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.02 Mbit/s
95th percentile per-packet one-way delay: 33.558 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 81.02 Mbit/s
95th percentile per-packet one-way delay: 33.558 ms
Loss rate: 0.26%
```
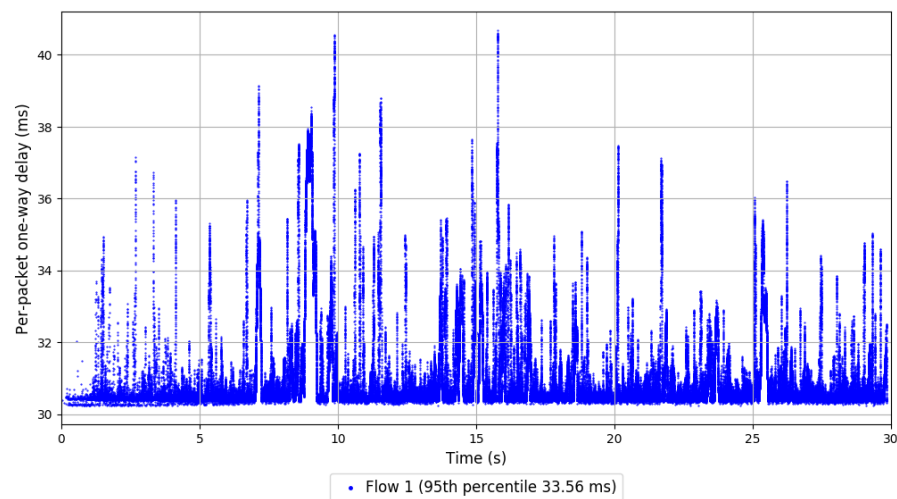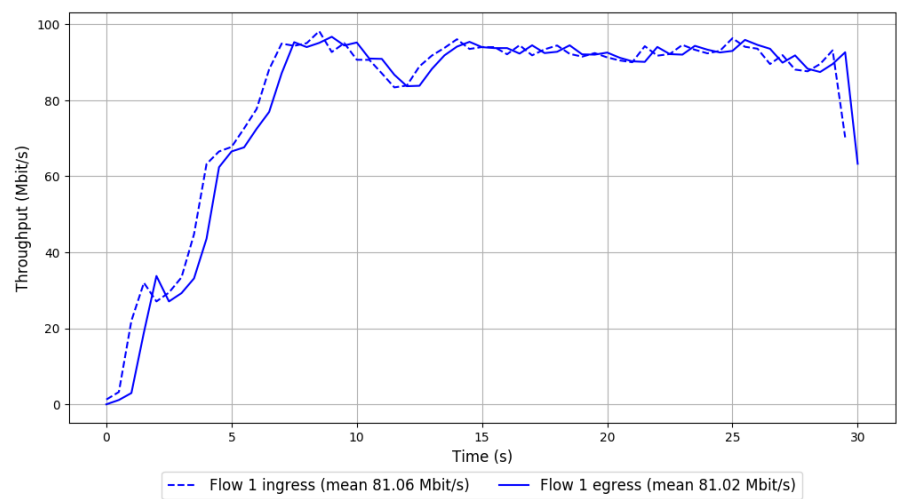
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 81.06 Mbit/s)   Flow 1 egress (mean 81.02 Mbit/s)

Flow 1 (95th percentile 33.56 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2019-10-03 07:09:38
End at: 2019-10-03 07:10:08
Local clock offset: 0.236 ms
Remote clock offset: 7.662 ms


# Below is generated by plot.py at 2019-10-03 10:47:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 31.487 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 31.487 ms
Loss rate: 0.21%
```
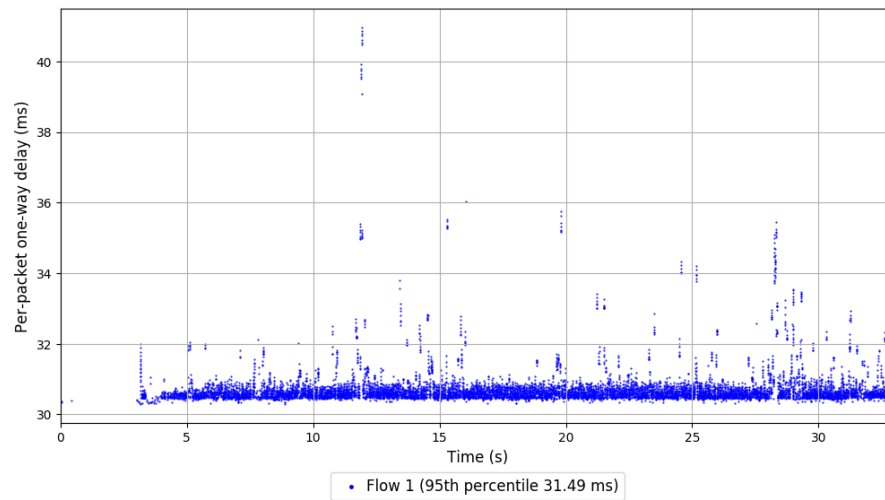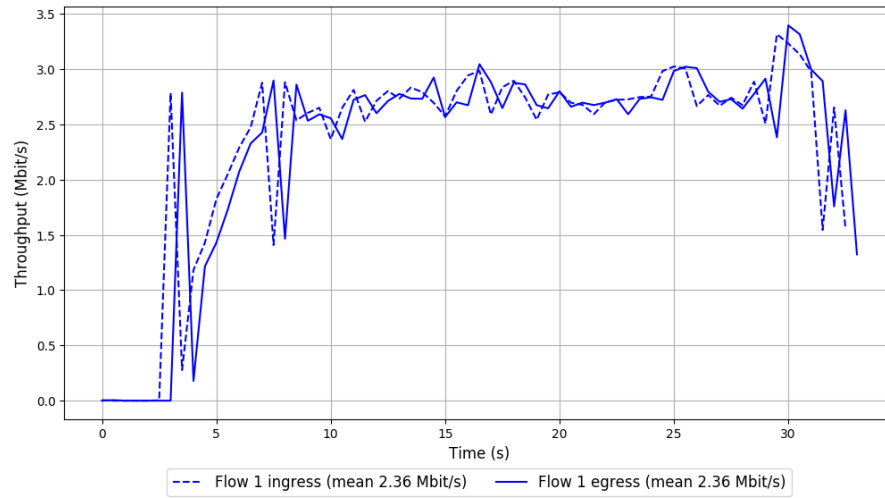
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-10-03 07:59:13
End at: 2019-10-03 07:59:43
Local clock offset: 0.24 ms
Remote clock offset: 7.743 ms


# Below is generated by plot.py at 2019-10-03 10:47:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 31.287 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 31.287 ms
Loss rate: 0.27%
```
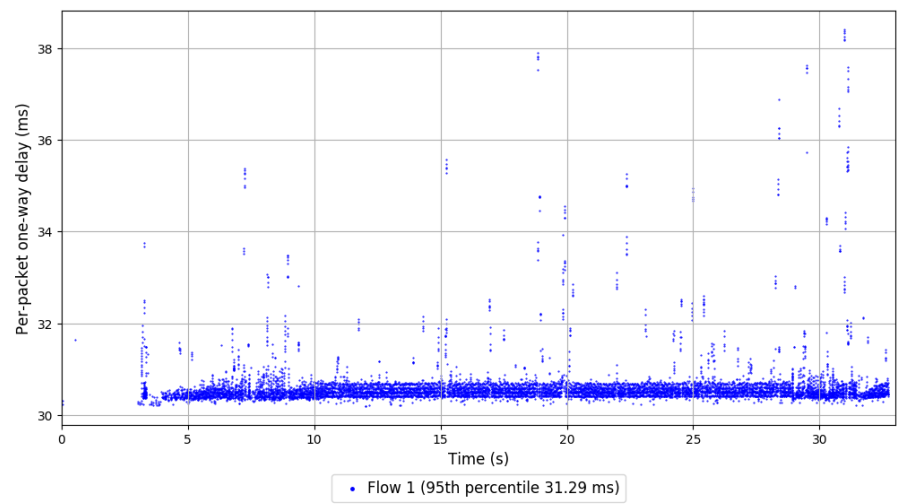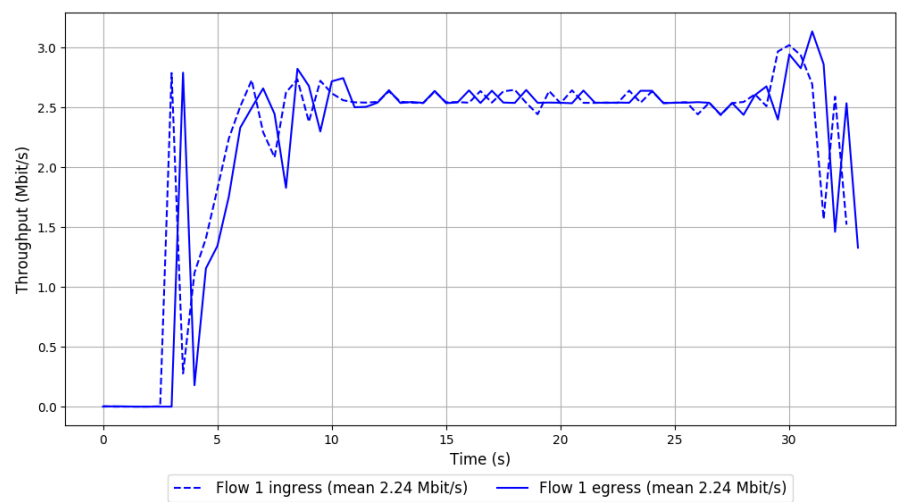
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-10-03 08:44:07
End at: 2019-10-03 08:44:37
Local clock offset: 0.208 ms
Remote clock offset: 7.232 ms


# Below is generated by plot.py at 2019-10-03 10:47:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 30.894 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 30.894 ms
Loss rate: 0.28%
```
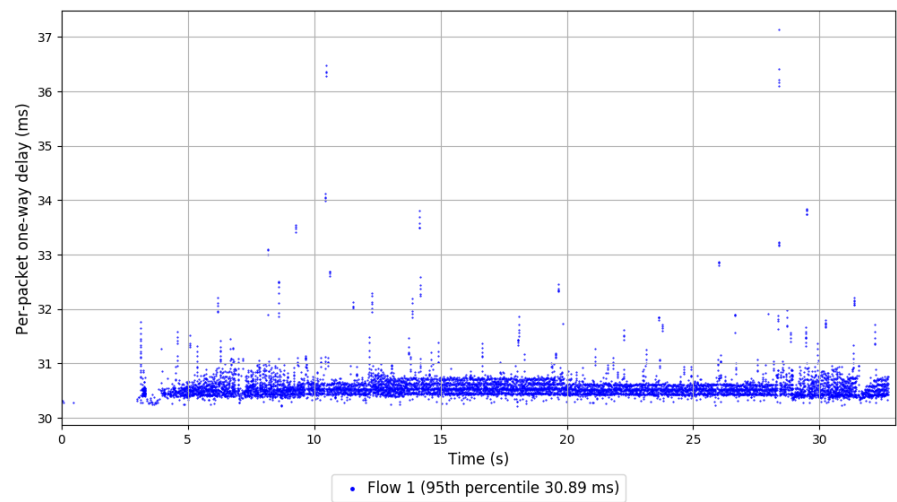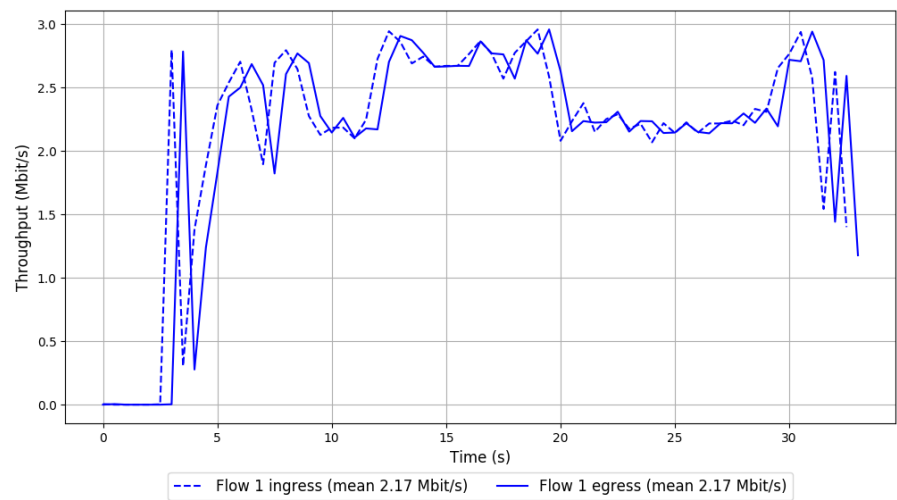
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-10-03 09:22:10
End at: 2019-10-03 09:22:41
Local clock offset: 0.129 ms
Remote clock offset: 7.309 ms


# Below is generated by plot.py at 2019-10-03 10:47:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 31.931 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 31.931 ms
Loss rate: 0.26%
```

Run 4: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.28 Mbit/s) --- Flow 1 egress (mean 2.28 Mbit/s)

Flow 1 (95th percentile 31.93 ms)

```
Run 5: Statistics of WebRTC media

Start at: 2019-10-03 10:01:42
End at: 2019-10-03 10:02:12
Local clock offset: 0.177 ms
Remote clock offset: 7.865 ms


# Below is generated by plot.py at 2019-10-03 10:47:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 31.103 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 31.103 ms
Loss rate: 0.19%
```
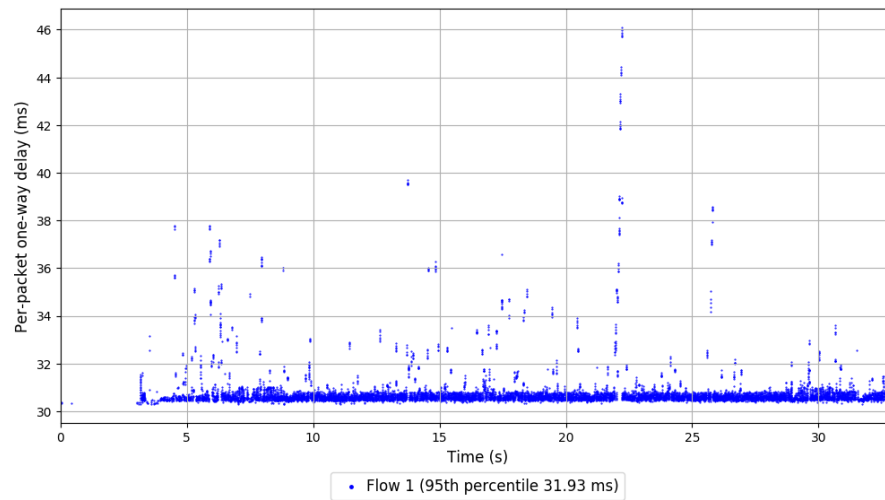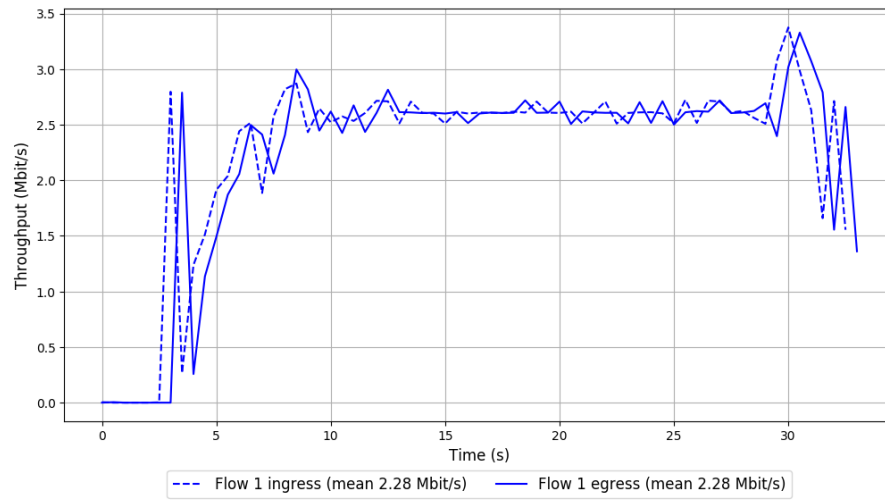
Run 5: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.26 Mbit/s) --- Flow 1 egress (mean 2.26 Mbit/s)

• Flow 1 (95th percentile 31.10 ms)