Pantheon Report

Generated at 2019-01-25 13:03:16 (UTC).

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

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.
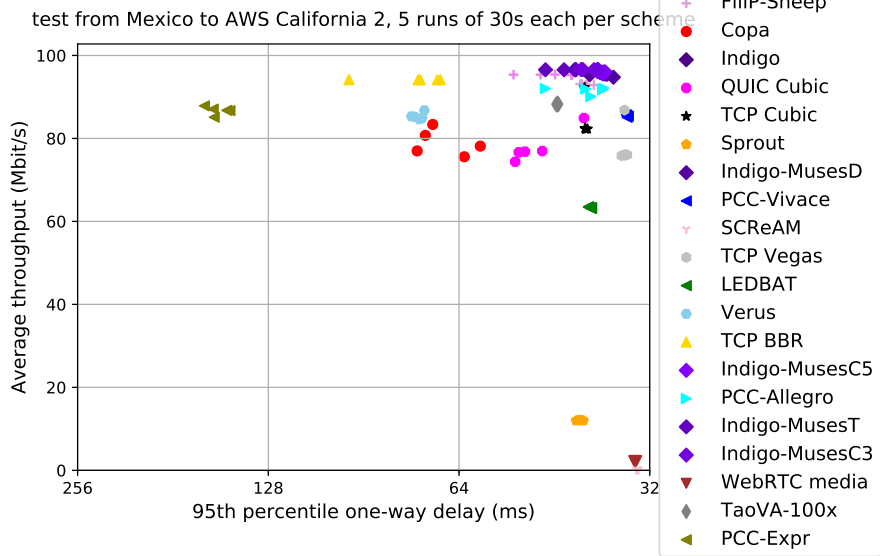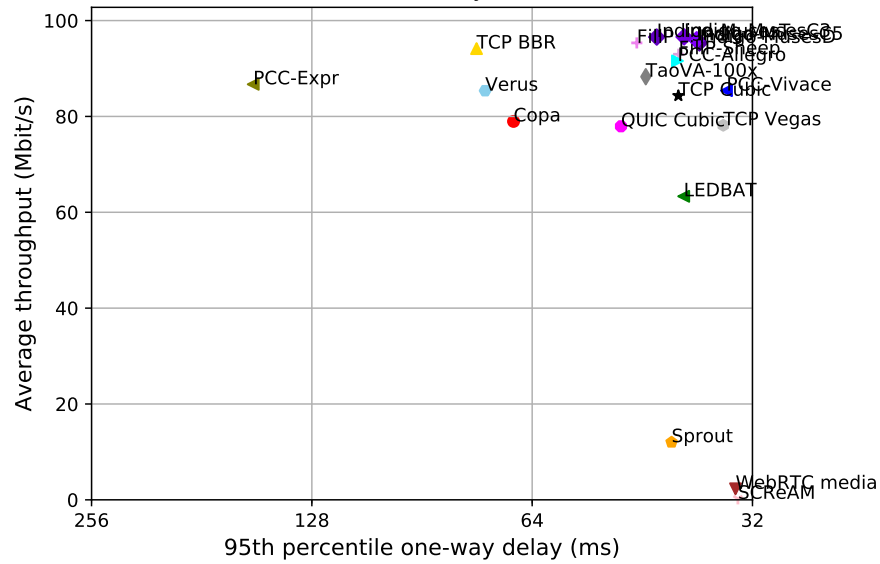
```
System info:
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 0b8e9a949603c3842368430acf469eec3b941f9f
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ d9c5ea33091330aca25ecd105ab2db6d34d5c40d
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

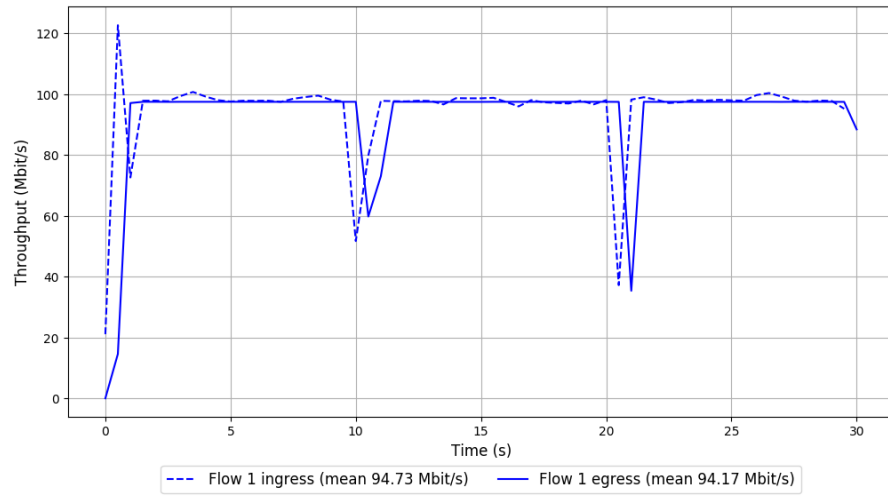| scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	94.16	76.24	1.11
Copa	5	78.96	67.86	0.24
TCP Cubic	5	84.31	40.40	0.26
FillP	5	95.34	46.05	0.24
FillP-Sheep	5	92.97	40.37	0.23
Indigo	5	95.86	38.06	0.23
Indigo-MusesC3	5	96.60	39.68	0.24
Indigo-MusesC5	5	95.99	38.16	0.24
Indigo-MusesD	5	95.34	37.81	0.24
Indigo-MusesT	5	96.56	43.25	0.80
LEDBAT	5	63.33	39.73	0.20
PCC-Allegro	5	91.58	40.51	0.26
PCC-Expr	5	86.70	153.95	0.36
QUIC Cubic	5	77.94	48.40	0.29
SCReAM	5	0.21	33.50	0.26
Sprout	5	12.03	41.28	0.21
TaoVA-100x	5	88.29	44.77	0.22
TCP Vegas	5	78.15	35.08	0.28
Verus	5	85.37	74.21	0.39
PCC-Vivace	5	85.39	34.73	0.23
WebRTC media	5	2.30	33.75	0.25

```
Run 1: Statistics of TCP BBR

Start at: 2019-01-25 10:46:49
End at: 2019-01-25 10:47:19
Local clock offset: -2.97 ms
Remote clock offset: -3.173 ms

# Below is generated by plot.py at 2019-01-25 12:50:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 68.517 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 68.517 ms
Loss rate: 0.81%
```
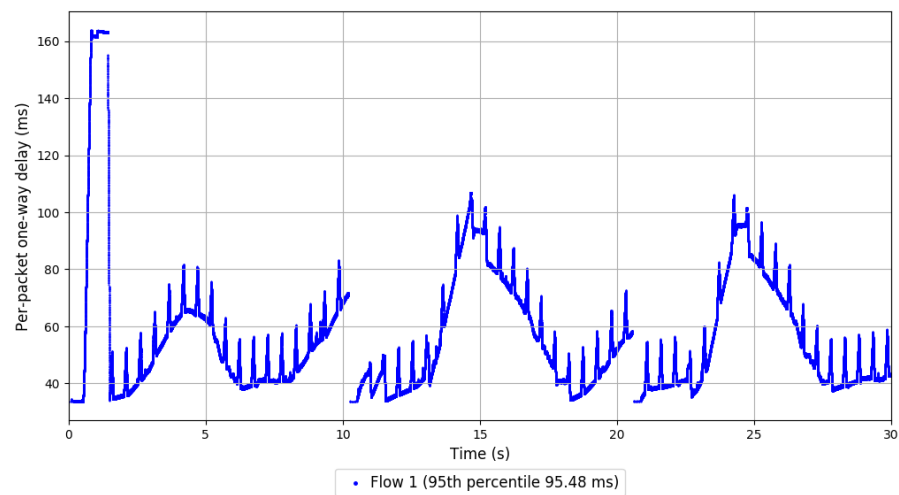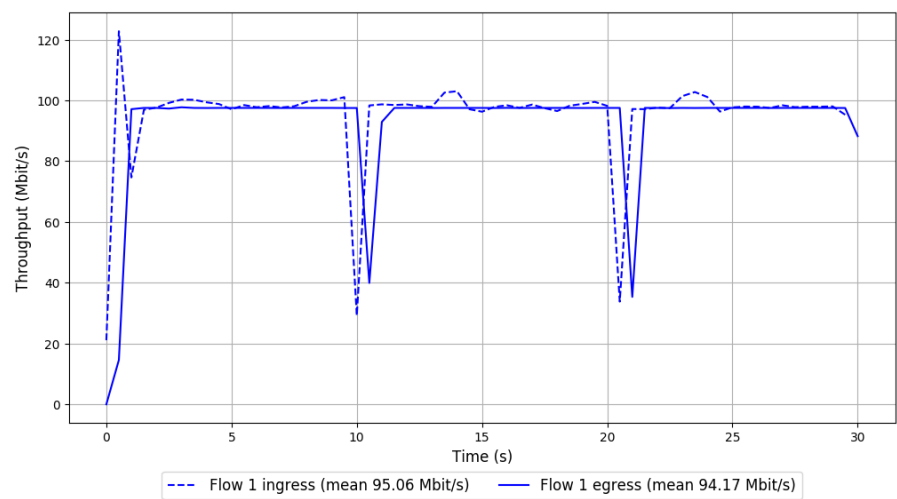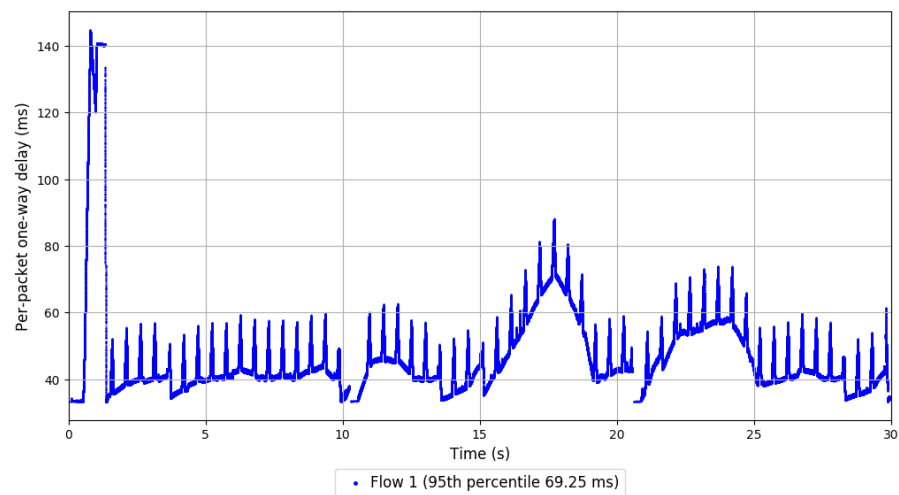
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2019-01-25 11:12:34
End at: 2019-01-25 11:13:04
Local clock offset: -4.401 ms
Remote clock offset: -2.557 ms


# Below is generated by plot.py at 2019-01-25 12:50:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 95.481 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 95.481 ms
Loss rate: 1.15%
```
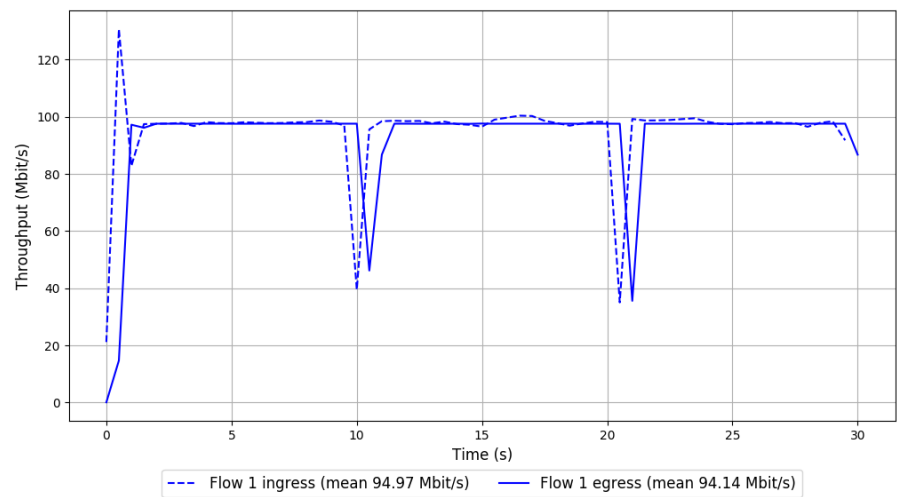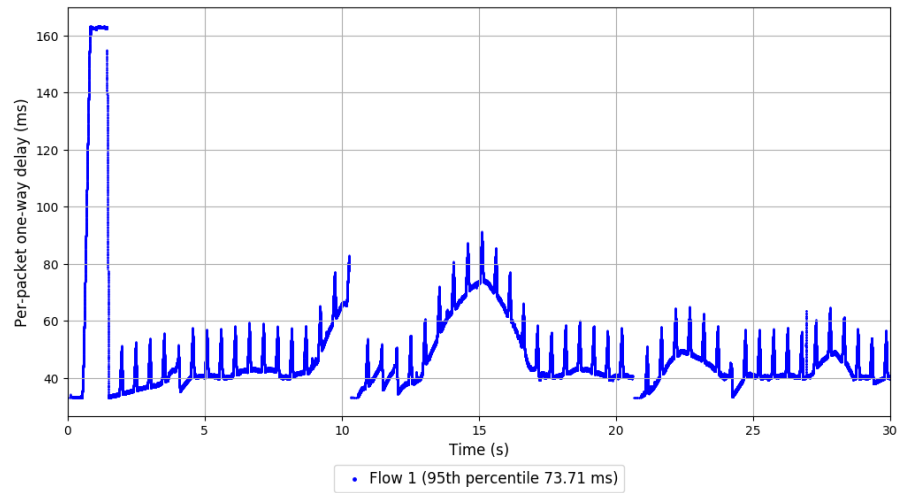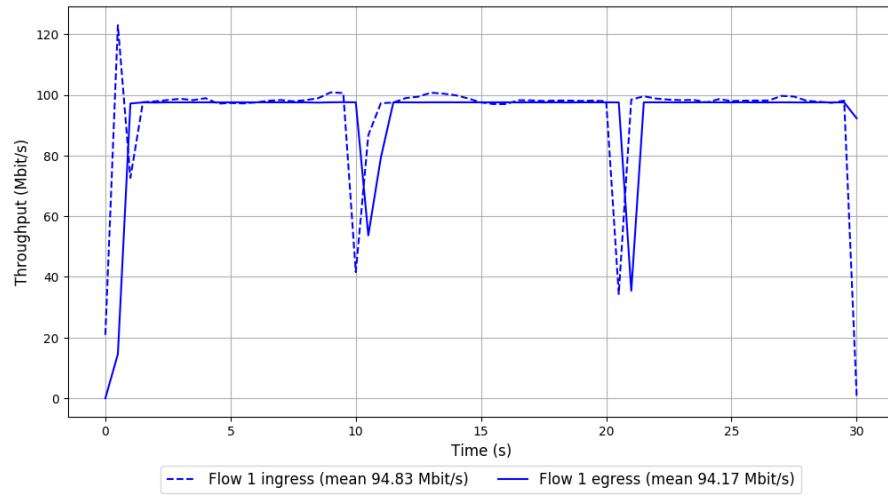
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2019-01-25 11:38:03
End at: 2019-01-25 11:38:33
Local clock offset: -3.345 ms
Remote clock offset: -1.51 ms


# Below is generated by plot.py at 2019-01-25 12:50:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 69.254 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 69.254 ms
Loss rate: 1.08%
```

Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 94.97 Mbit/s)   Flow 1 egress (mean 94.14 Mbit/s)

Flow 1 (95th percentile 69.25 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2019-01-25 12:03:12
End at: 2019-01-25 12:03:42
Local clock offset: -1.241 ms
Remote clock offset: -1.537 ms


# Below is generated by plot.py at 2019-01-25 12:50:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 73.707 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 73.707 ms
Loss rate: 0.91%
```
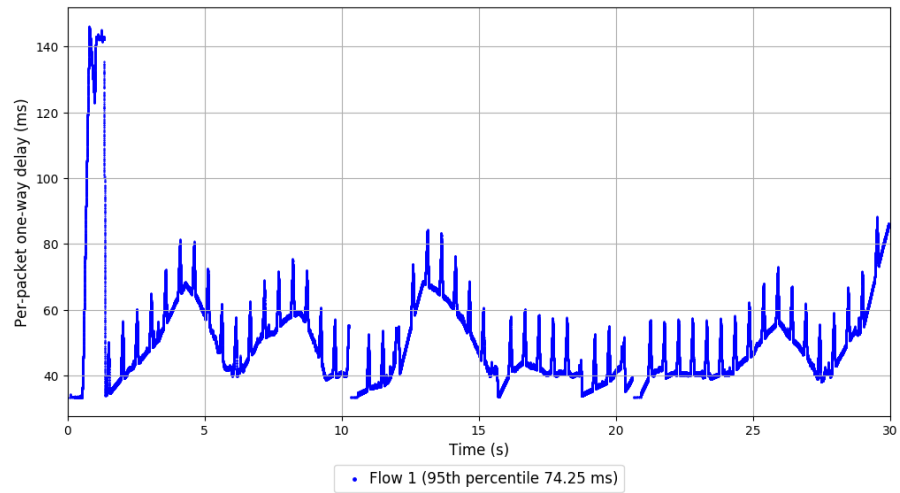
Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2019-01-25 12:28:23
End at: 2019-01-25 12:28:53
Local clock offset: 1.598 ms
Remote clock offset: -1.497 ms


# Below is generated by plot.py at 2019-01-25 12:50:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 74.248 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 74.248 ms
Loss rate: 1.59%
```
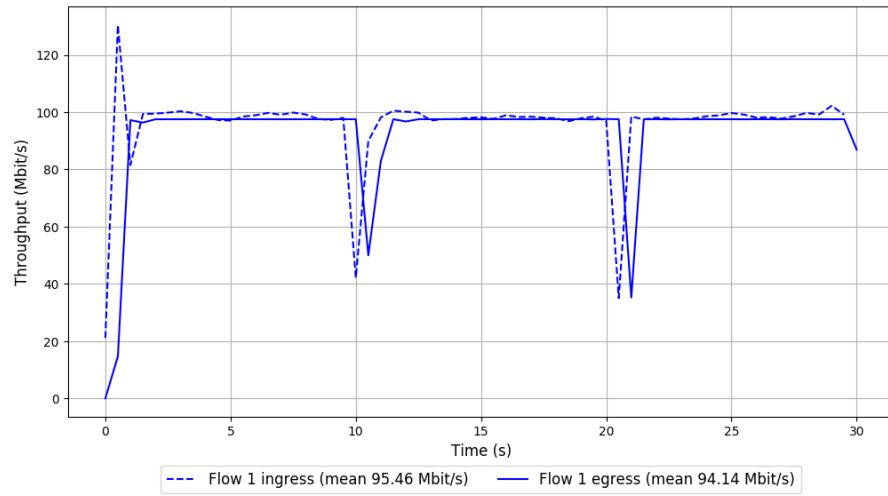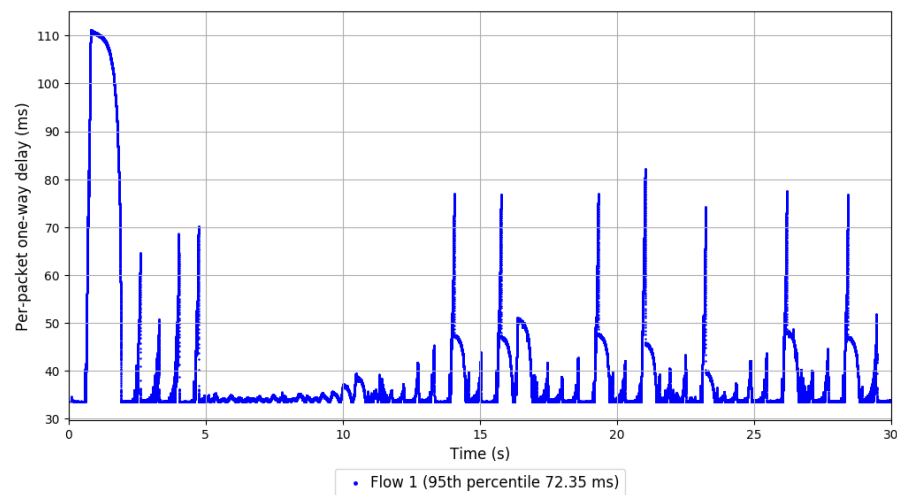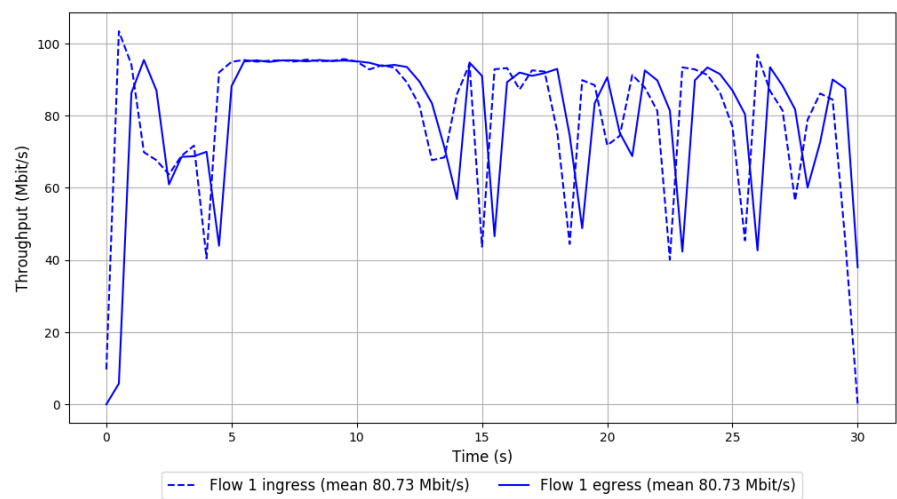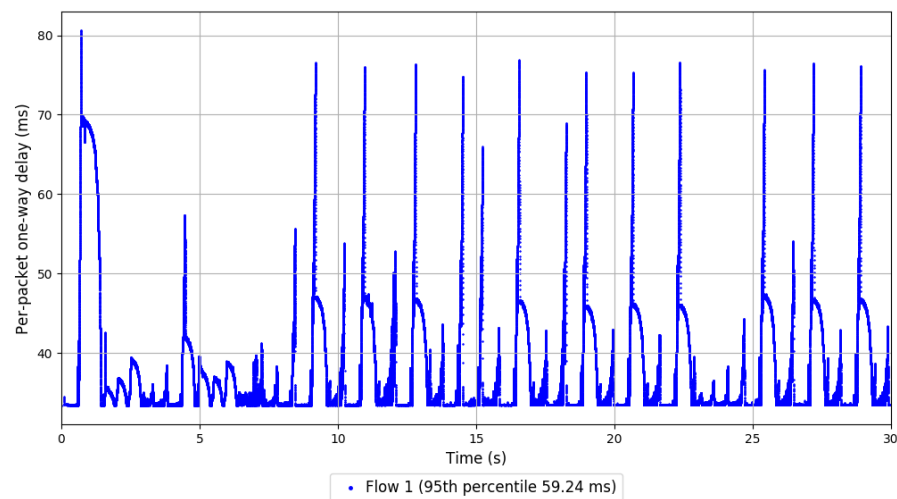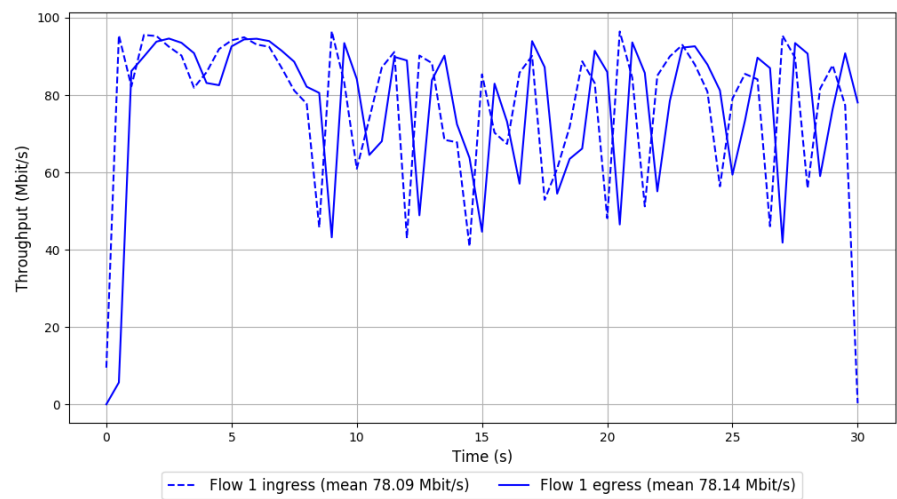
Run 5: Report of TCP BBR — Data Link

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```
Run 1: Statistics of Copa

Start at: 2019-01-25 11:00:07
End at: 2019-01-25 11:00:37
Local clock offset: -3.85 ms
Remote clock offset: -2.949 ms

# Below is generated by plot.py at 2019-01-25 12:51:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.73 Mbit/s
95th percentile per-packet one-way delay: 72.348 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 80.73 Mbit/s
95th percentile per-packet one-way delay: 72.348 ms
Loss rate: 0.22%
```

Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 80.73 Mbit/s)   Flow 1 egress (mean 80.73 Mbit/s)

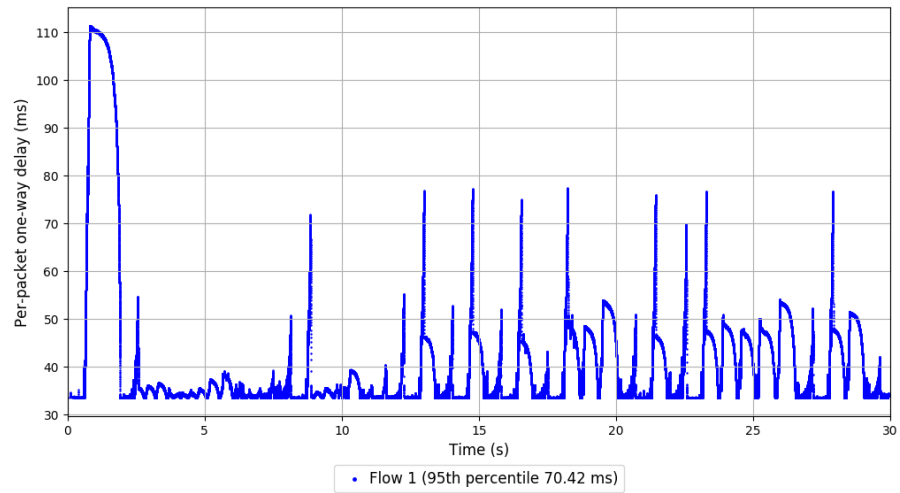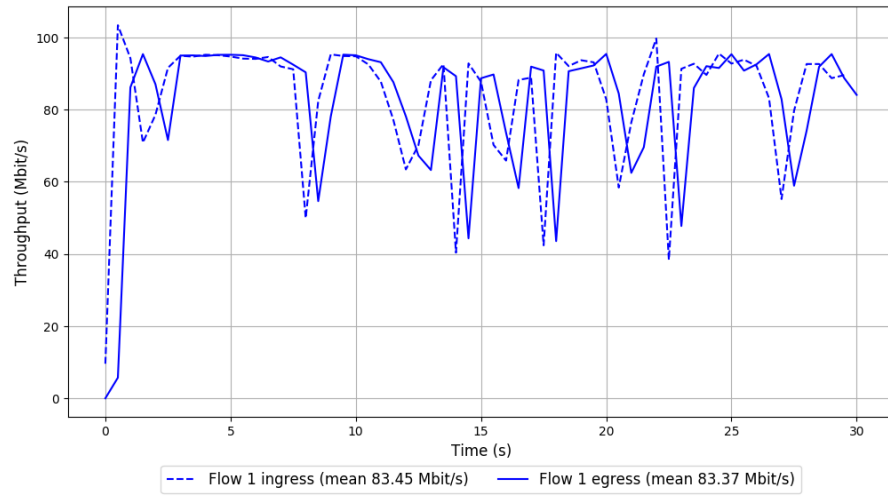Flow 1 (95th percentile 72.35 ms)

```
Run 2: Statistics of Copa

Start at: 2019-01-25 11:25:44
End at: 2019-01-25 11:26:14
Local clock offset: -4.983 ms
Remote clock offset: -1.869 ms


# Below is generated by plot.py at 2019-01-25 12:51:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.14 Mbit/s
95th percentile per-packet one-way delay: 59.239 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 78.14 Mbit/s
95th percentile per-packet one-way delay: 59.239 ms
Loss rate: 0.15%
```

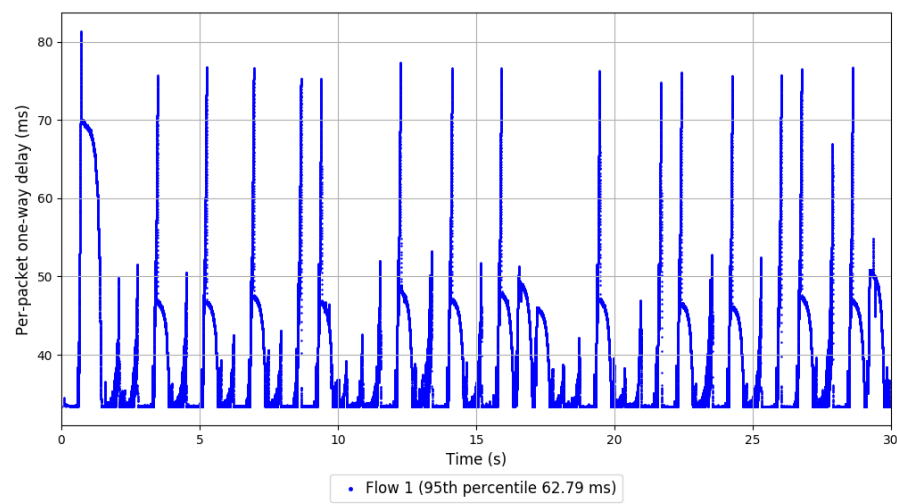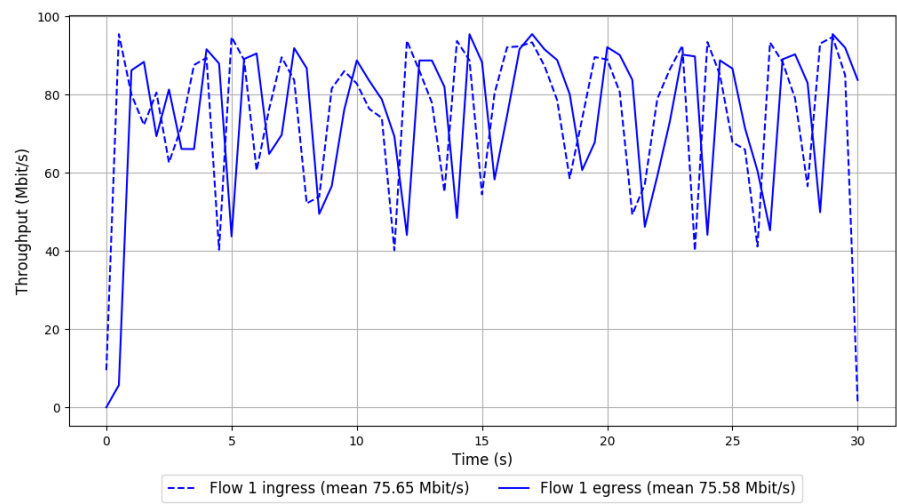Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 78.09 Mbit/s)   Flow 1 egress (mean 78.14 Mbit/s)

Flow 1 (95th percentile 59.24 ms)

```
Run 3: Statistics of Copa

Start at: 2019-01-25 11:50:56
End at: 2019-01-25 11:51:26
Local clock offset: -2.504 ms
Remote clock offset: -1.731 ms


# Below is generated by plot.py at 2019-01-25 12:51:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.37 Mbit/s
95th percentile per-packet one-way delay: 70.416 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 83.37 Mbit/s
95th percentile per-packet one-way delay: 70.416 ms
Loss rate: 0.31%
```

Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 83.45 Mbit/s)   Flow 1 egress (mean 83.37 Mbit/s)

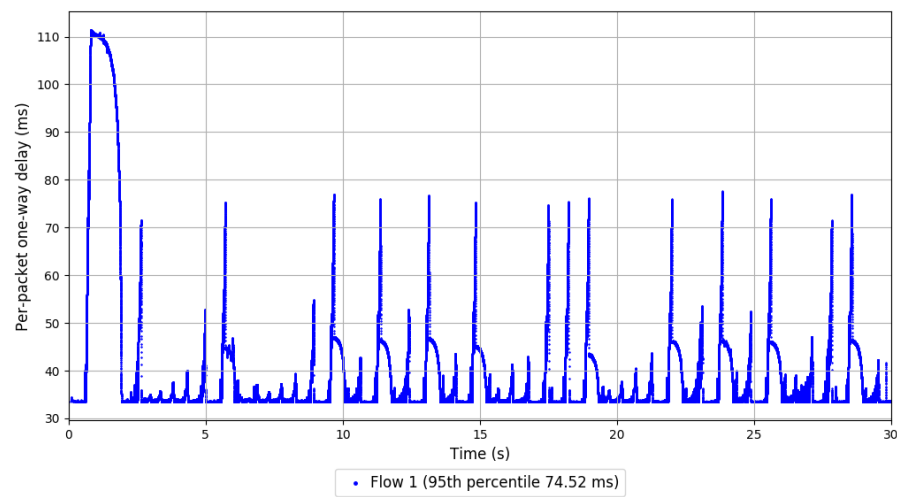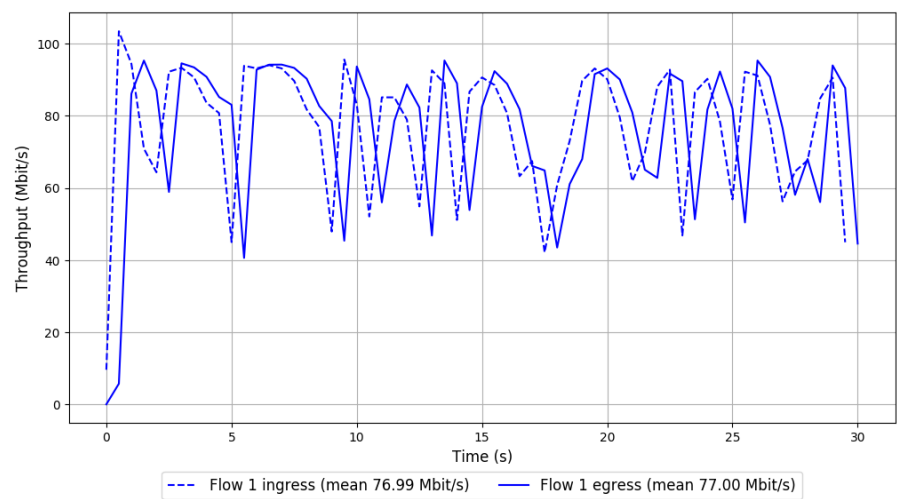Flow 1 (95th percentile 70.42 ms)

```
Run 4: Statistics of Copa

Start at: 2019-01-25 12:16:13
End at: 2019-01-25 12:16:43
Local clock offset: 0.743 ms
Remote clock offset: -1.494 ms


# Below is generated by plot.py at 2019-01-25 12:52:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.58 Mbit/s
95th percentile per-packet one-way delay: 62.792 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 75.58 Mbit/s
95th percentile per-packet one-way delay: 62.792 ms
Loss rate: 0.30%
```
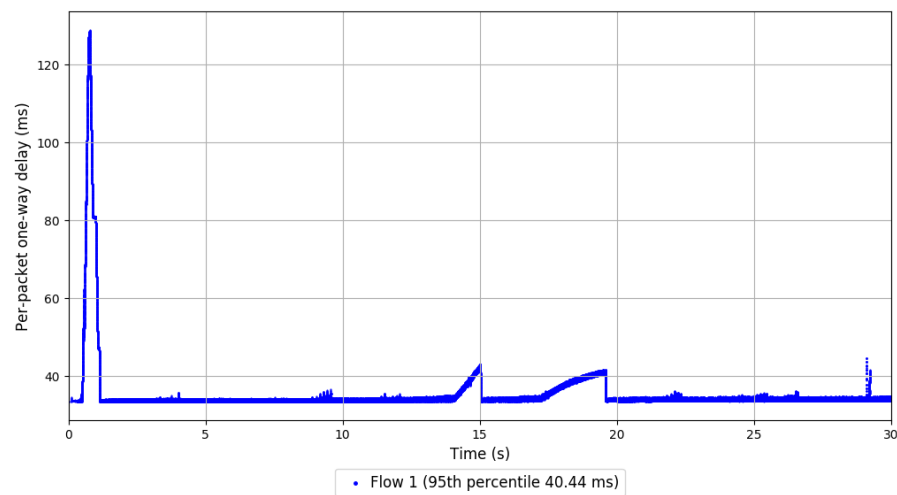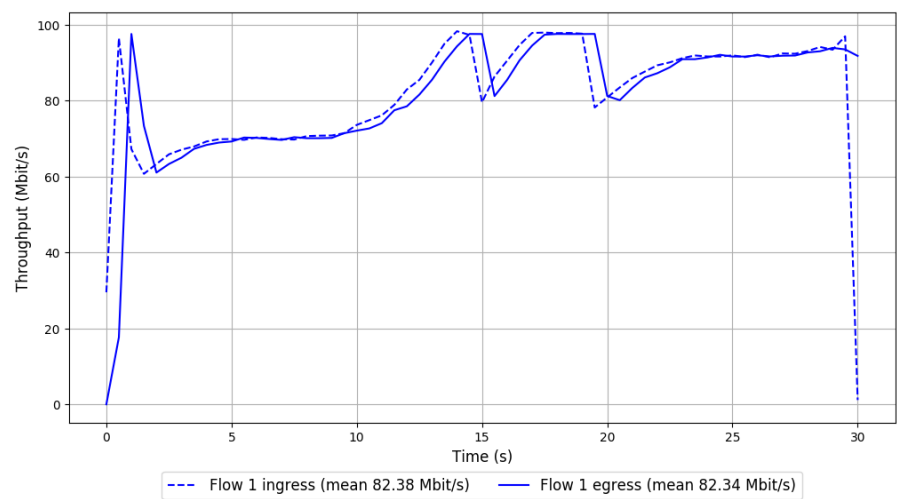
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2019-01-25 12:41:18
End at: 2019-01-25 12:41:48
Local clock offset: 0.899 ms
Remote clock offset: -1.546 ms


# Below is generated by plot.py at 2019-01-25 12:52:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.00 Mbit/s
95th percentile per-packet one-way delay: 74.523 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 77.00 Mbit/s
95th percentile per-packet one-way delay: 74.523 ms
Loss rate: 0.20%
```
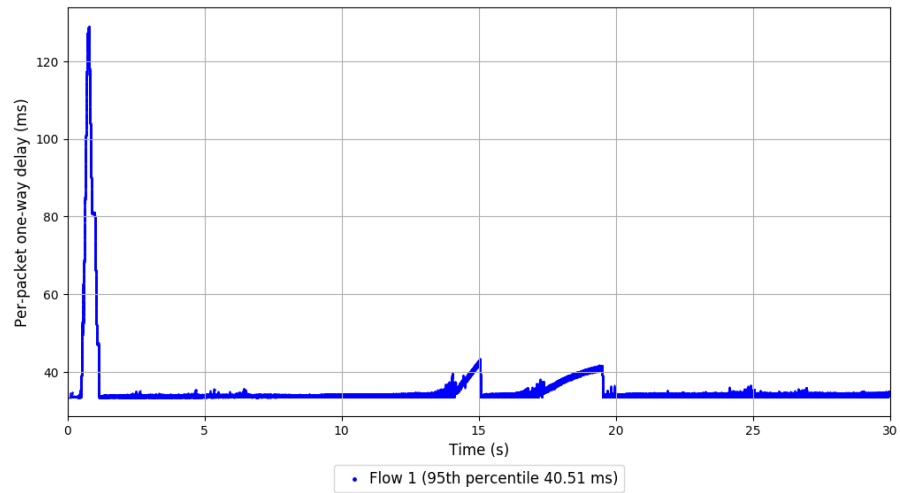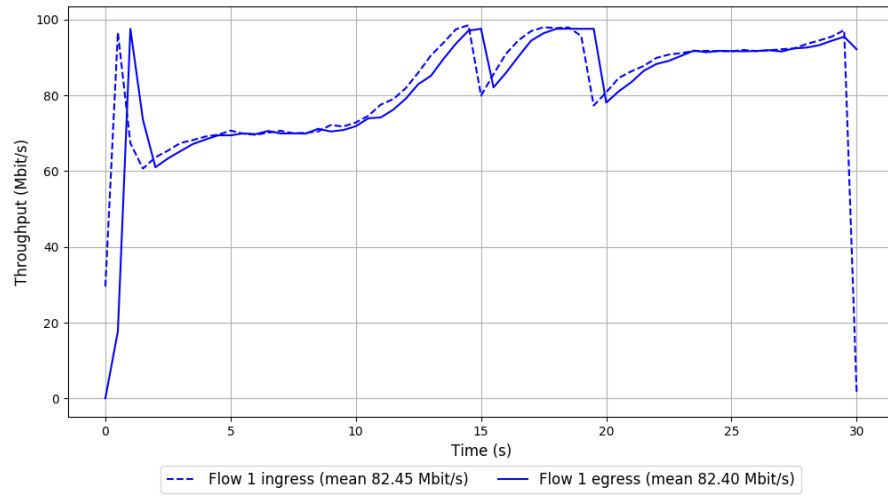
Run 5: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2019-01-25 10:56:36
End at: 2019-01-25 10:57:06
Local clock offset: -3.64 ms
Remote clock offset: -2.872 ms


# Below is generated by plot.py at 2019-01-25 12:52:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.34 Mbit/s
95th percentile per-packet one-way delay: 40.437 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 82.34 Mbit/s
95th percentile per-packet one-way delay: 40.437 ms
Loss rate: 0.26%
```
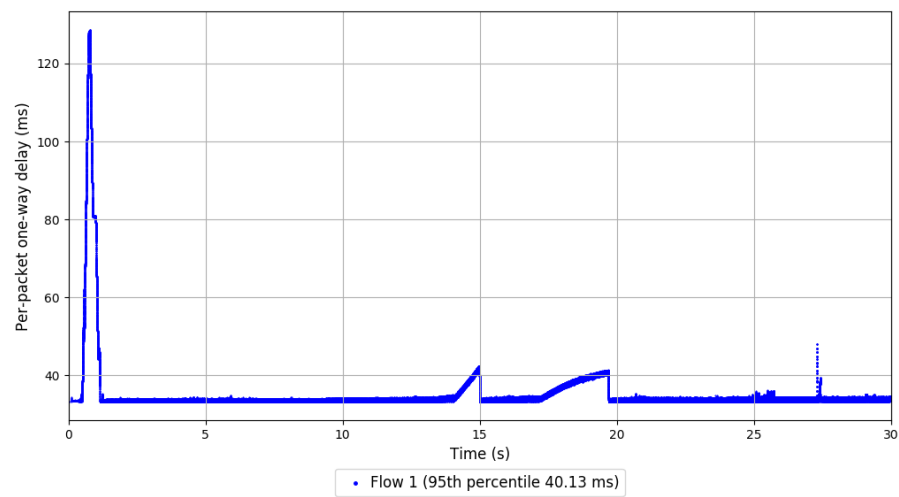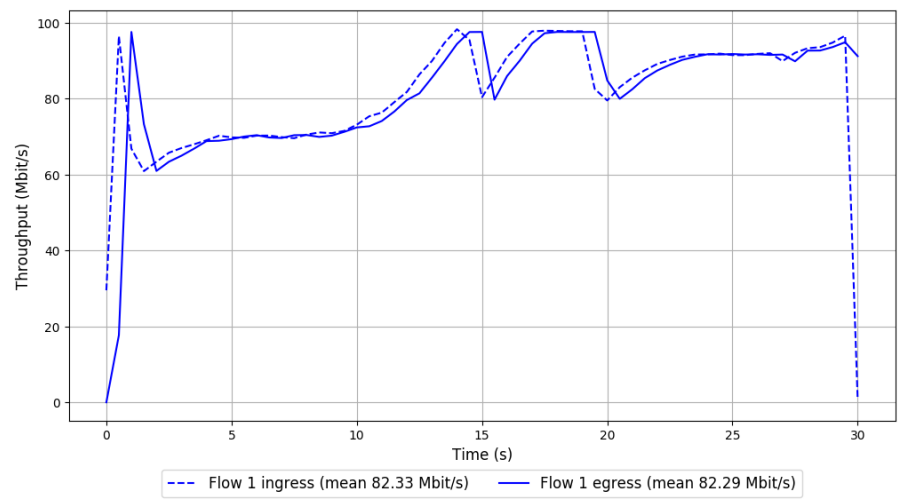
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2019-01-25 11:22:13
End at: 2019-01-25 11:22:44
Local clock offset: -4.833 ms
Remote clock offset: -2.054 ms


# Below is generated by plot.py at 2019-01-25 12:52:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.40 Mbit/s
95th percentile per-packet one-way delay: 40.505 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 82.40 Mbit/s
95th percentile per-packet one-way delay: 40.505 ms
Loss rate: 0.26%
```
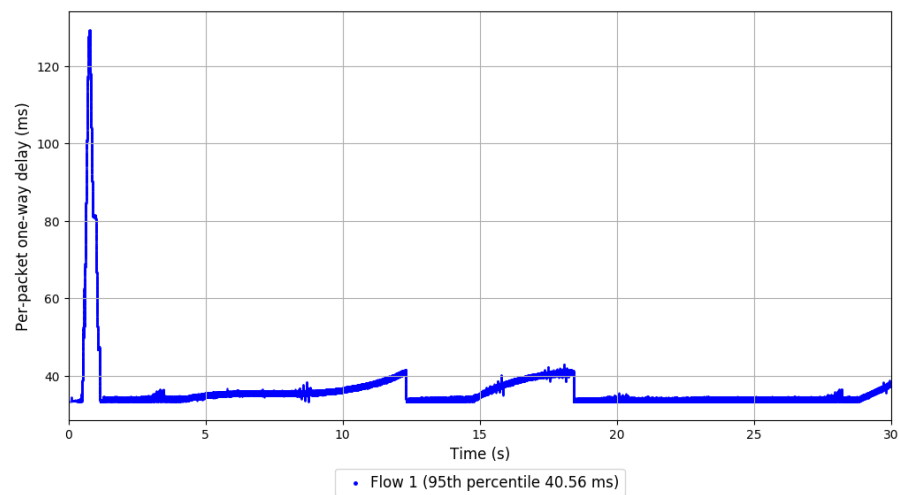
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2019-01-25 11:47:29
End at: 2019-01-25 11:47:59
Local clock offset: -2.625 ms
Remote clock offset: -1.497 ms


# Below is generated by plot.py at 2019-01-25 12:52:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.29 Mbit/s
95th percentile per-packet one-way delay: 40.126 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 82.29 Mbit/s
95th percentile per-packet one-way delay: 40.126 ms
Loss rate: 0.26%
```
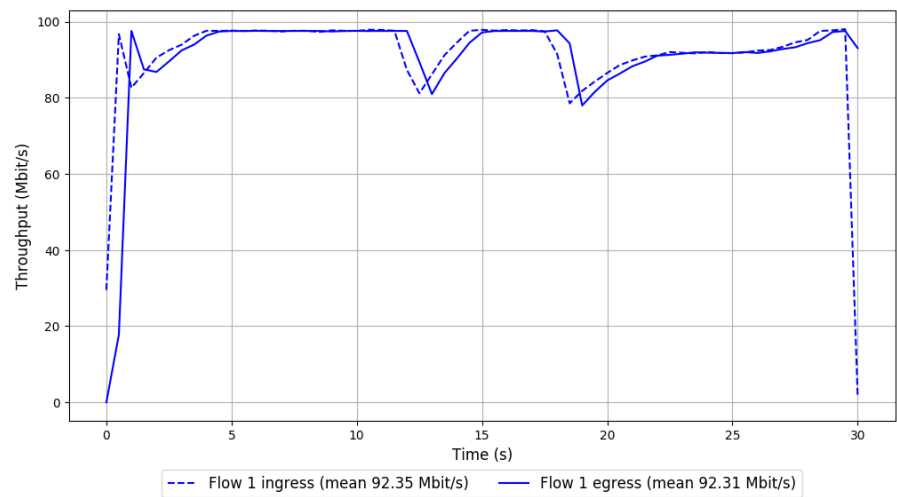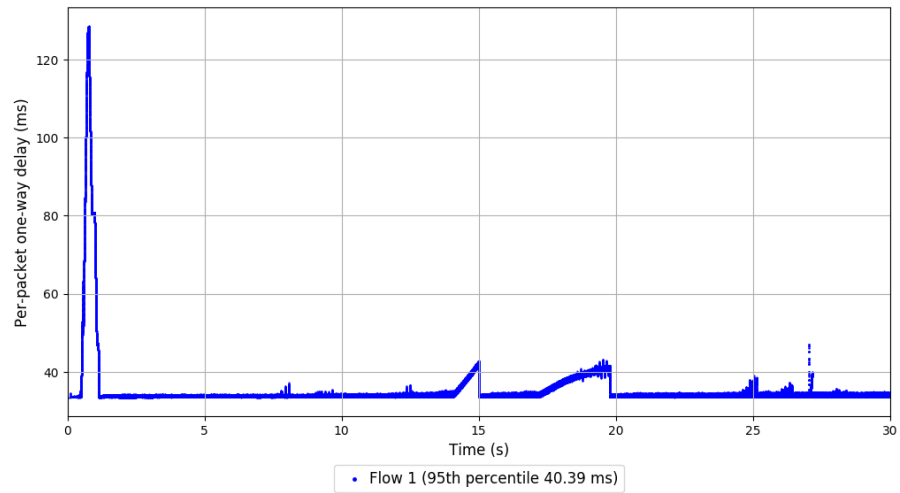
Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2019-01-25 12:12:46
End at: 2019-01-25 12:13:16
Local clock offset: 0.37 ms
Remote clock offset: -1.456 ms


# Below is generated by plot.py at 2019-01-25 12:52:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.31 Mbit/s
95th percentile per-packet one-way delay: 40.559 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 92.31 Mbit/s
95th percentile per-packet one-way delay: 40.559 ms
Loss rate: 0.25%
```

Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 92.35 Mbit/s)   Flow 1 egress (mean 92.31 Mbit/s)

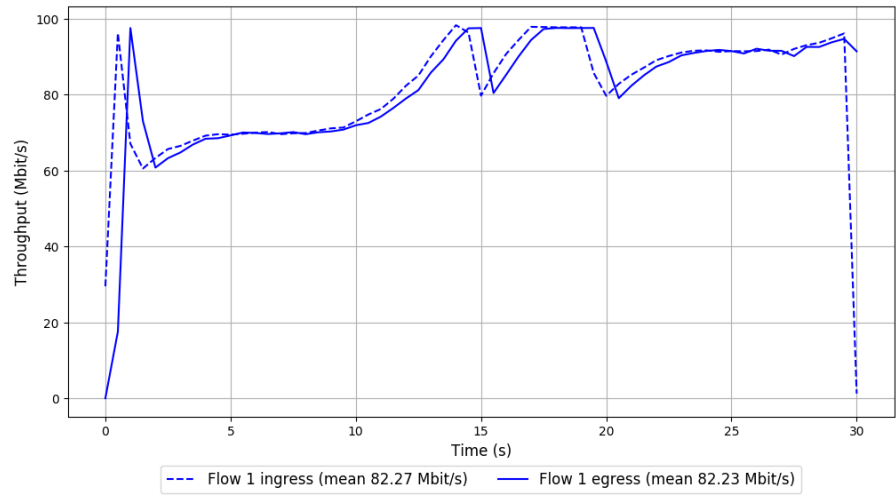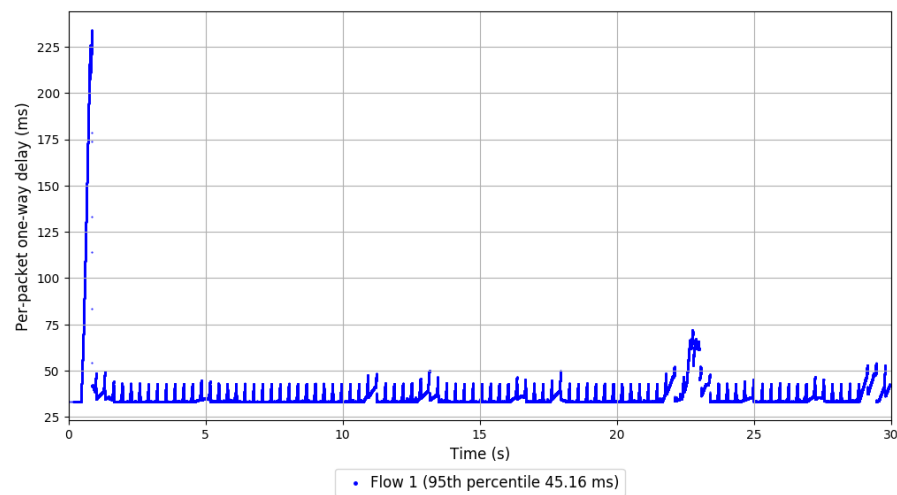Flow 1 (95th percentile 40.56 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2019-01-25 12:37:51
End at: 2019-01-25 12:38:21
Local clock offset: 0.994 ms
Remote clock offset: -1.493 ms


# Below is generated by plot.py at 2019-01-25 12:52:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.23 Mbit/s
95th percentile per-packet one-way delay: 40.388 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 82.23 Mbit/s
95th percentile per-packet one-way delay: 40.388 ms
Loss rate: 0.26%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 82.27 Mbit/s)   Flow 1 egress (mean 82.23 Mbit/s)

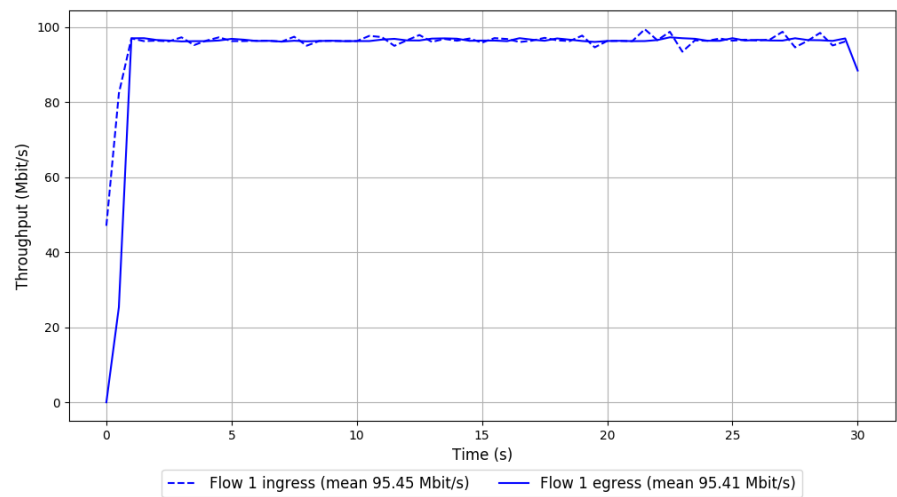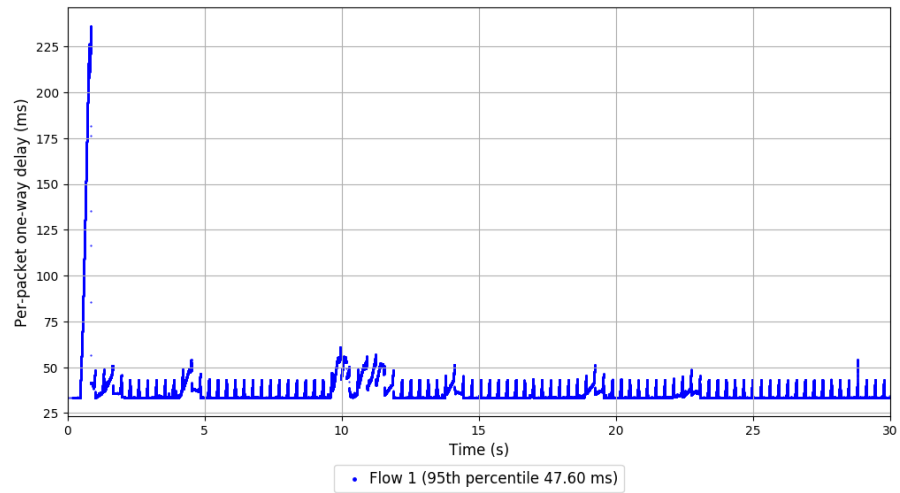

Flow 1 (95th percentile 40.39 ms)

```
Run 1: Statistics of FillP

Start at: 2019-01-25 10:55:22
End at: 2019-01-25 10:55:52
Local clock offset: -3.575 ms
Remote clock offset: -2.938 ms


# Below is generated by plot.py at 2019-01-25 12:52:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.41 Mbit/s
95th percentile per-packet one-way delay: 45.155 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 95.41 Mbit/s
95th percentile per-packet one-way delay: 45.155 ms
Loss rate: 0.26%
```

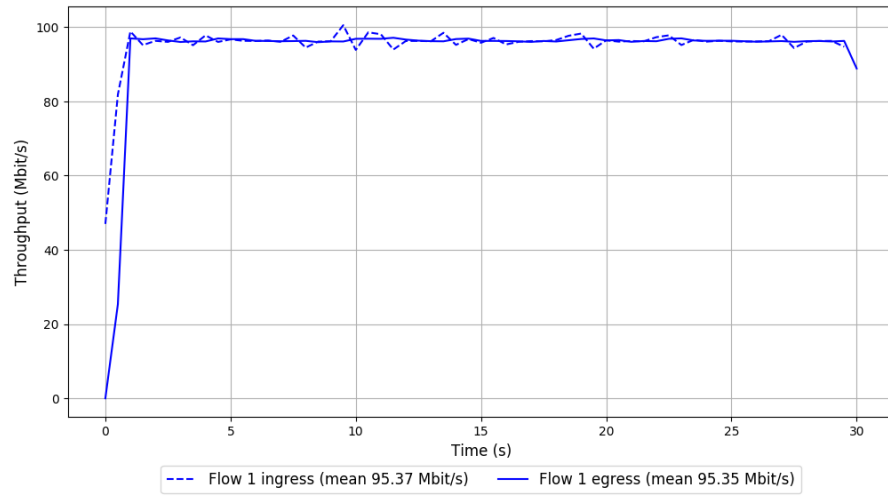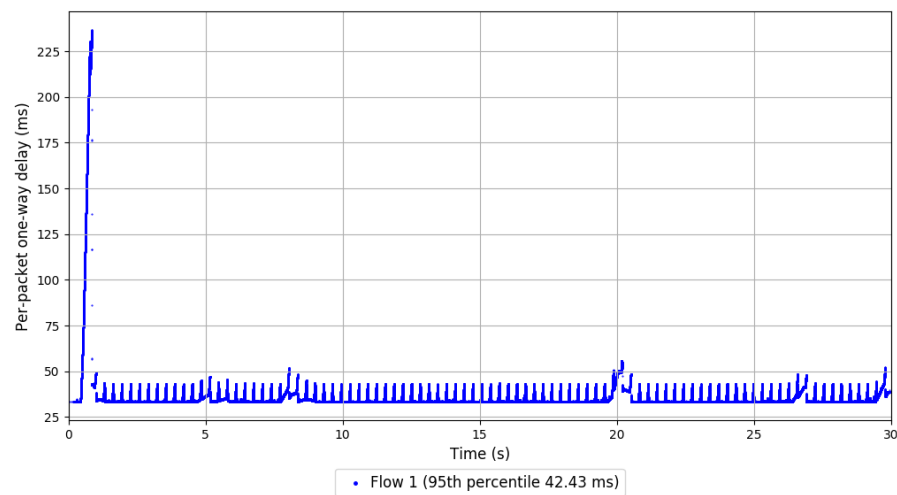Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2019-01-25 11:21:04
End at: 2019-01-25 11:21:34
Local clock offset: -4.785 ms
Remote clock offset: -2.095 ms


# Below is generated by plot.py at 2019-01-25 12:53:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.35 Mbit/s
95th percentile per-packet one-way delay: 47.603 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.35 Mbit/s
95th percentile per-packet one-way delay: 47.603 ms
Loss rate: 0.23%
```

Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 95.37 Mbit/s)   Flow 1 egress (mean 95.35 Mbit/s)

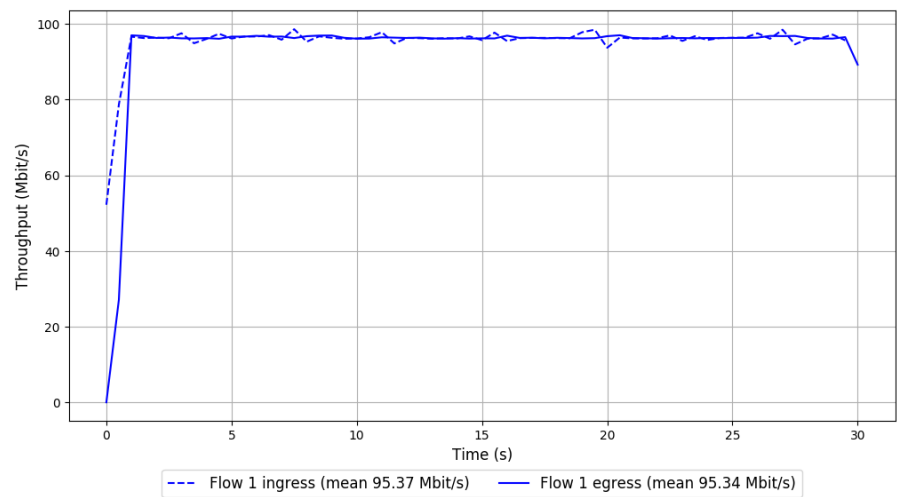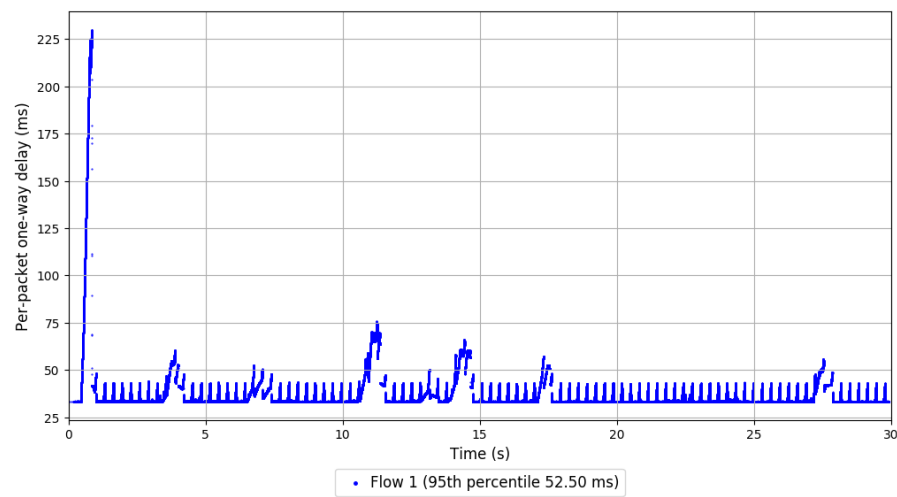Flow 1 (95th percentile 47.60 ms)

```
Run 3: Statistics of FillP

Start at: 2019-01-25 11:46:19
End at: 2019-01-25 11:46:49
Local clock offset: -2.678 ms
Remote clock offset: -1.527 ms


# Below is generated by plot.py at 2019-01-25 12:53:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.34 Mbit/s
95th percentile per-packet one-way delay: 42.432 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.34 Mbit/s
95th percentile per-packet one-way delay: 42.432 ms
Loss rate: 0.24%
```

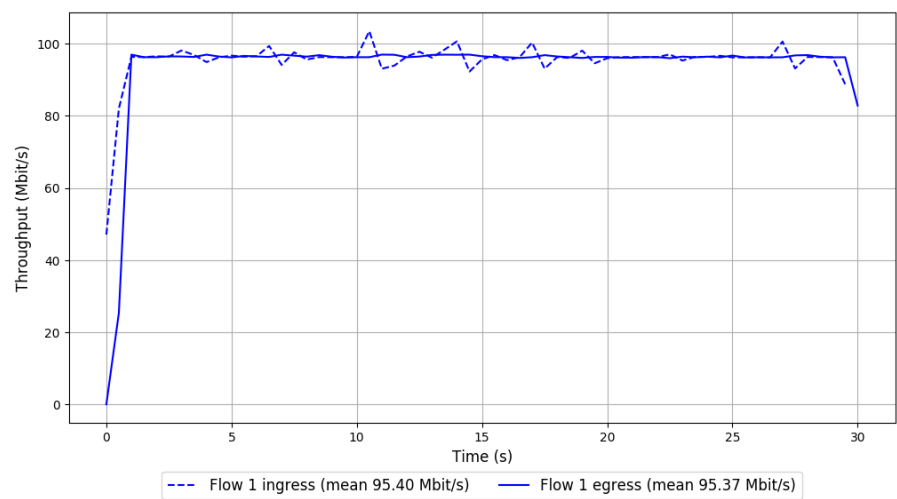Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2019-01-25 12:11:30
End at: 2019-01-25 12:12:00
Local clock offset: 0.236 ms
Remote clock offset: -1.444 ms


# Below is generated by plot.py at 2019-01-25 12:53:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.37 Mbit/s
95th percentile per-packet one-way delay: 52.498 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.37 Mbit/s
95th percentile per-packet one-way delay: 52.498 ms
Loss rate: 0.24%
```

Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2019-01-25 12:36:41
End at: 2019-01-25 12:37:11
Local clock offset: 1.048 ms
Remote clock offset: -1.47 ms


# Below is generated by plot.py at 2019-01-25 12:53:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.22 Mbit/s
95th percentile per-packet one-way delay: 42.546 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 95.22 Mbit/s
95th percentile per-packet one-way delay: 42.546 ms
Loss rate: 0.22%
```
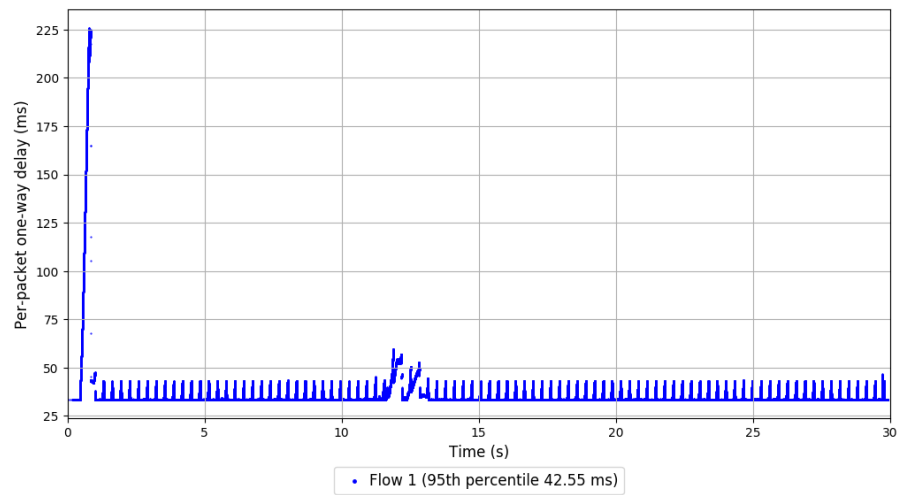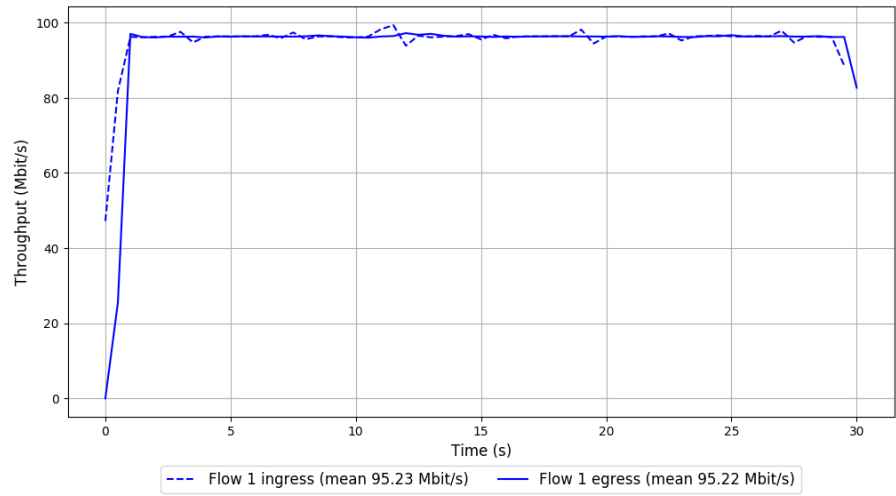
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 95.23 Mbit/s)   Flow 1 egress (mean 95.22 Mbit/s)

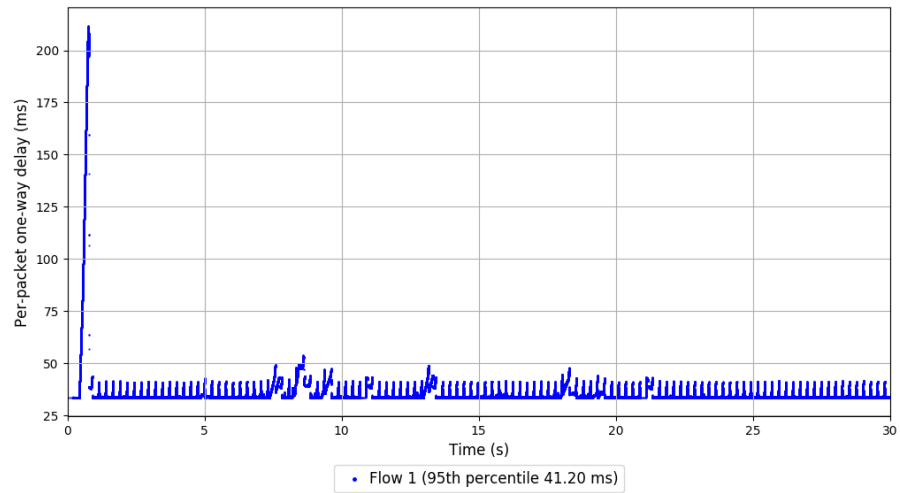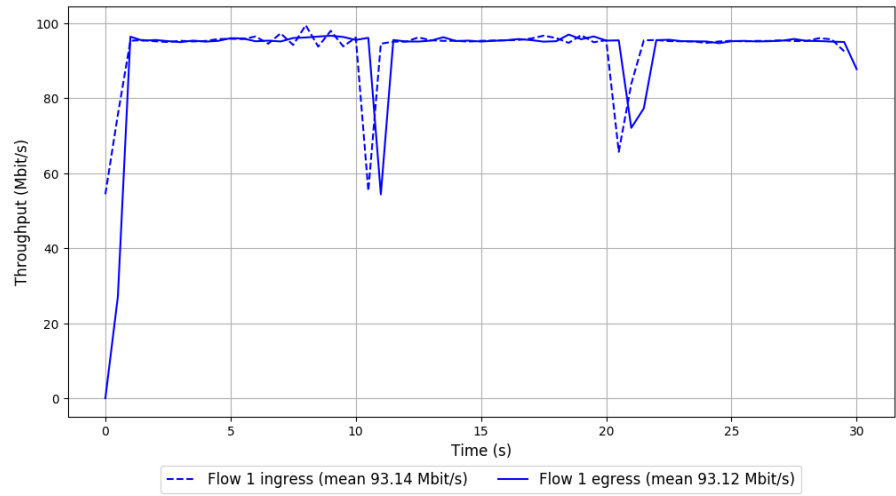Flow 1 (95th percentile 42.55 ms)

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```
Run 1: Statistics of FillP-Sheep

Start at: 2019-01-25 10:48:05
End at: 2019-01-25 10:48:35
Local clock offset: -3.077 ms
Remote clock offset: -3.109 ms


# Below is generated by plot.py at 2019-01-25 12:53:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.12 Mbit/s
95th percentile per-packet one-way delay: 41.199 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 93.12 Mbit/s
95th percentile per-packet one-way delay: 41.199 ms
Loss rate: 0.23%
```
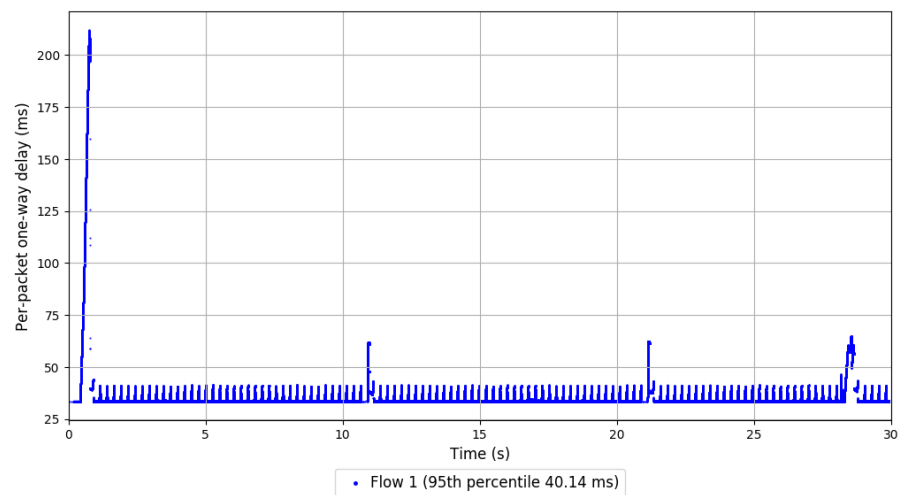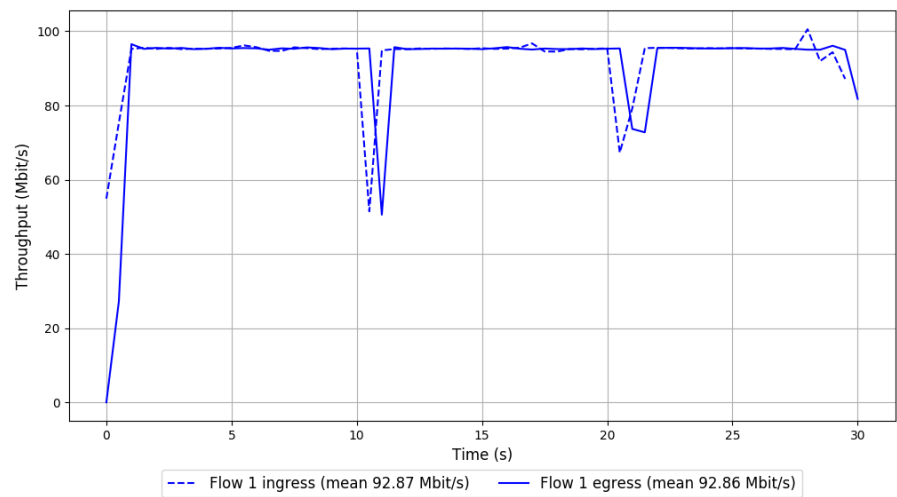
Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-01-25 11:13:50
End at: 2019-01-25 11:14:20
Local clock offset: -4.465 ms
Remote clock offset: -2.309 ms


# Below is generated by plot.py at 2019-01-25 12:53:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.86 Mbit/s
95th percentile per-packet one-way delay: 40.144 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 92.86 Mbit/s
95th percentile per-packet one-way delay: 40.144 ms
Loss rate: 0.22%
```
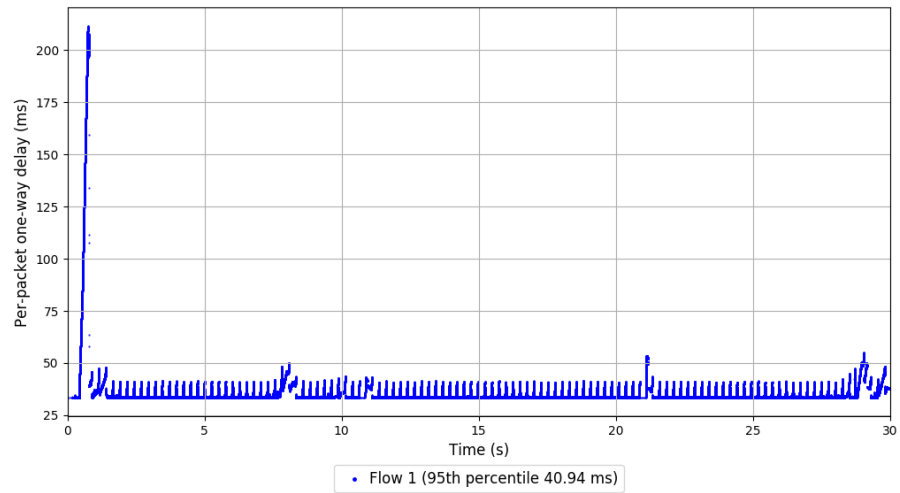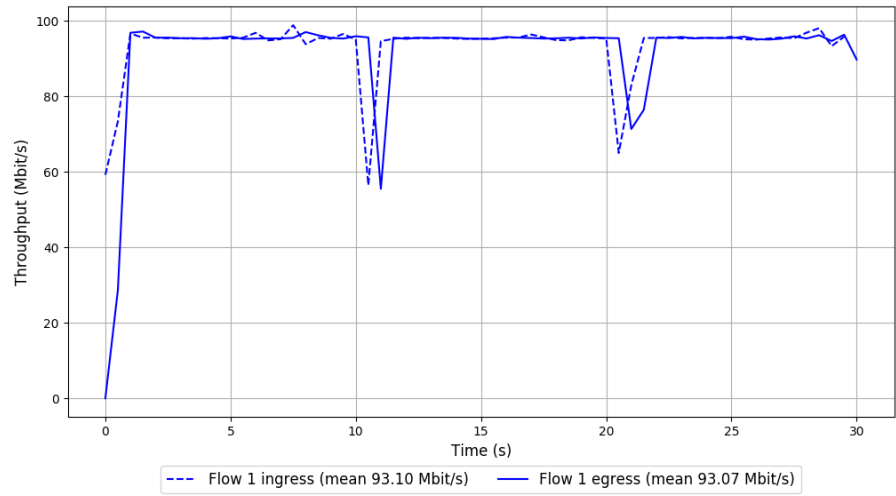
Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-01-25 11:39:16
End at: 2019-01-25 11:39:46
Local clock offset: -3.23 ms
Remote clock offset: -1.544 ms


# Below is generated by plot.py at 2019-01-25 12:53:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.07 Mbit/s
95th percentile per-packet one-way delay: 40.938 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 93.07 Mbit/s
95th percentile per-packet one-way delay: 40.938 ms
Loss rate: 0.24%
```

Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 93.10 Mbit/s)   Flow 1 egress (mean 93.07 Mbit/s)
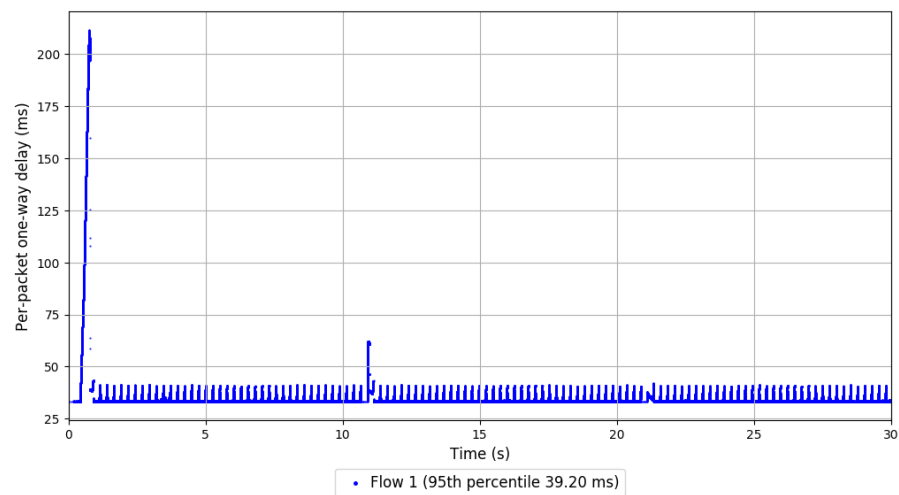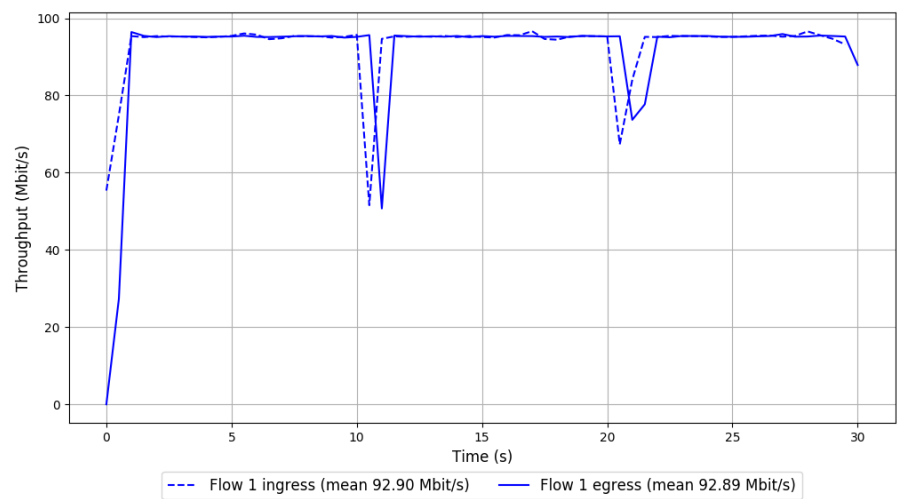

Flow 1 (95th percentile 40.94 ms)

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-01-25 12:04:26
End at: 2019-01-25 12:04:56
Local clock offset: -0.954 ms
Remote clock offset: -1.526 ms


# Below is generated by plot.py at 2019-01-25 12:54:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.89 Mbit/s
95th percentile per-packet one-way delay: 39.199 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 92.89 Mbit/s
95th percentile per-packet one-way delay: 39.199 ms
Loss rate: 0.22%
```
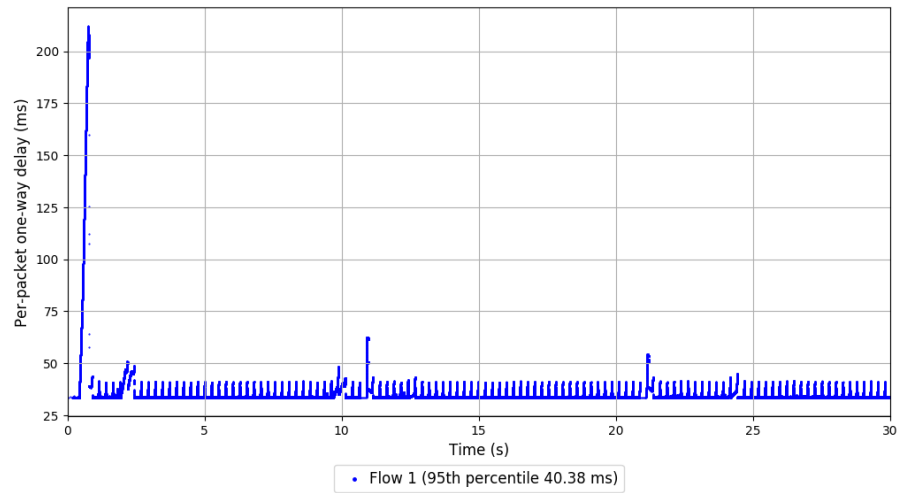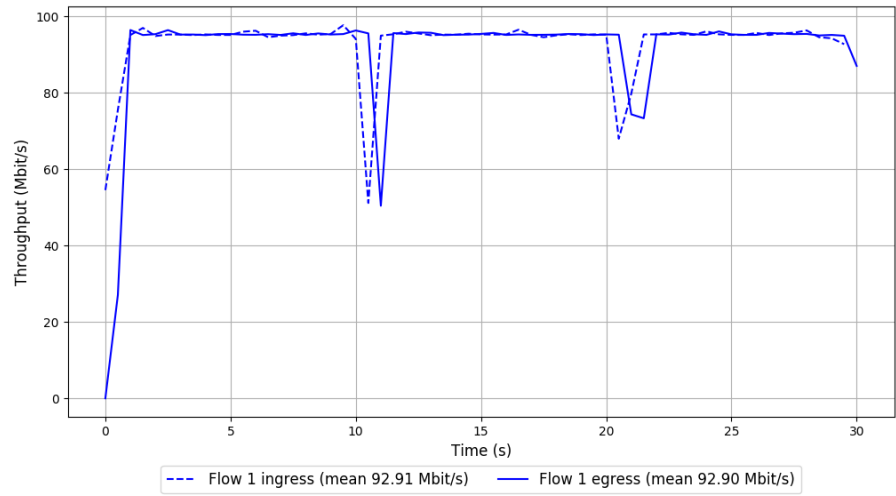
Run 4: Report of FillP-Sheep — Data Link

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-01-25 12:29:40
End at: 2019-01-25 12:30:10
Local clock offset: 1.655 ms
Remote clock offset: -1.554 ms


# Below is generated by plot.py at 2019-01-25 12:54:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.90 Mbit/s
95th percentile per-packet one-way delay: 40.383 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 92.90 Mbit/s
95th percentile per-packet one-way delay: 40.383 ms
Loss rate: 0.22%
```

Run 5: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 92.91 Mbit/s) ----- Flow 1 egress (mean 92.90 Mbit/s) ———
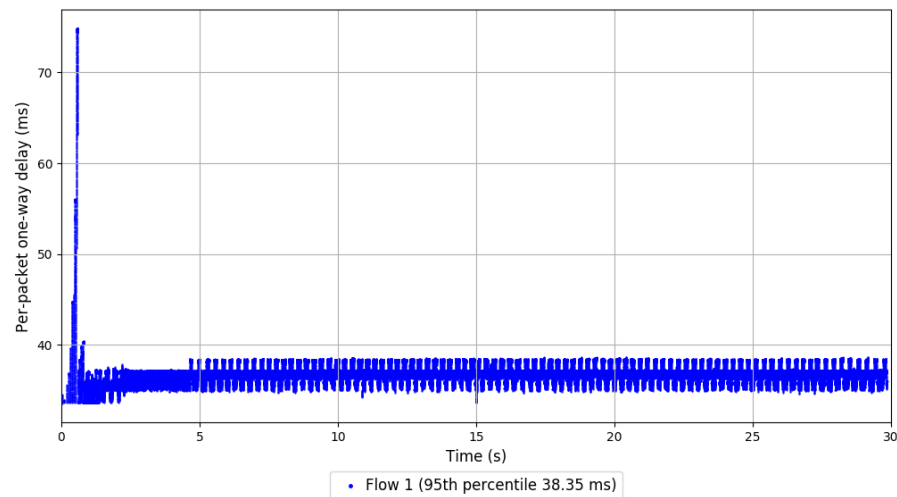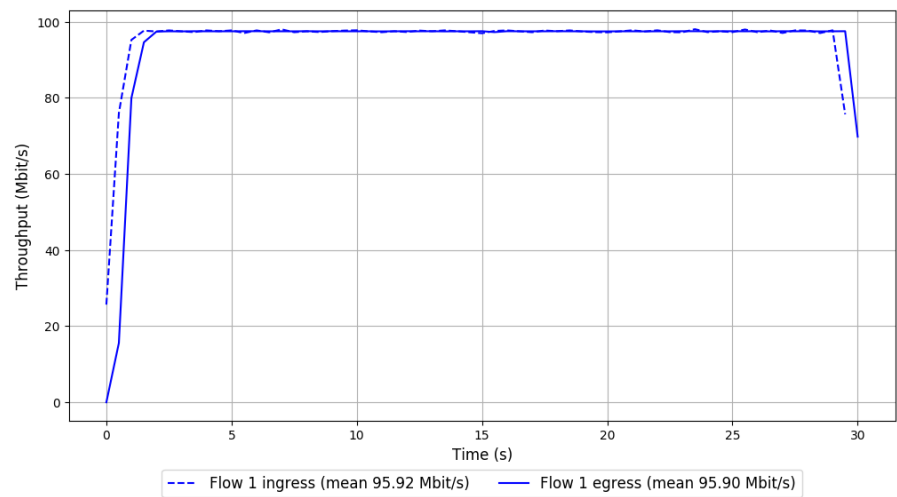

Flow 1 (95th percentile 40.38 ms)

```
Run 1: Statistics of Indigo

Start at: 2019-01-25 11:03:53
End at: 2019-01-25 11:04:23
Local clock offset: -4.024 ms
Remote clock offset: -2.829 ms


# Below is generated by plot.py at 2019-01-25 12:54:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.90 Mbit/s
95th percentile per-packet one-way delay: 38.347 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.90 Mbit/s
95th percentile per-packet one-way delay: 38.347 ms
Loss rate: 0.23%
```

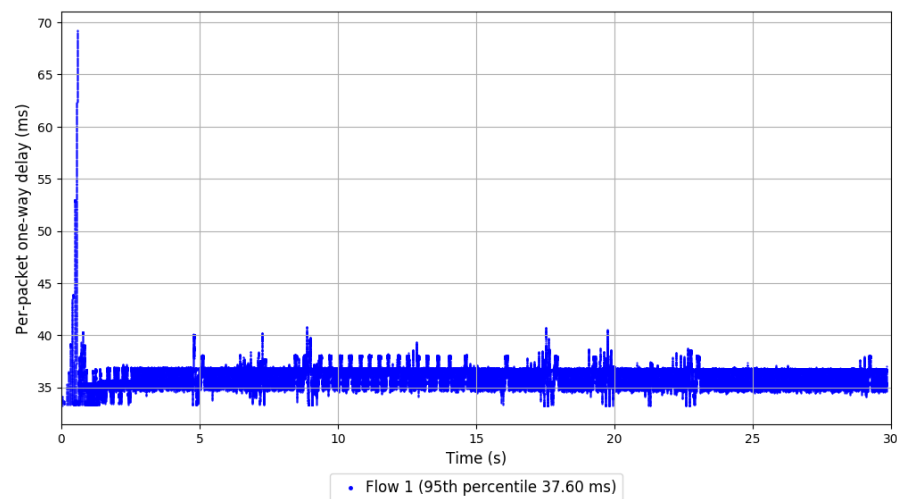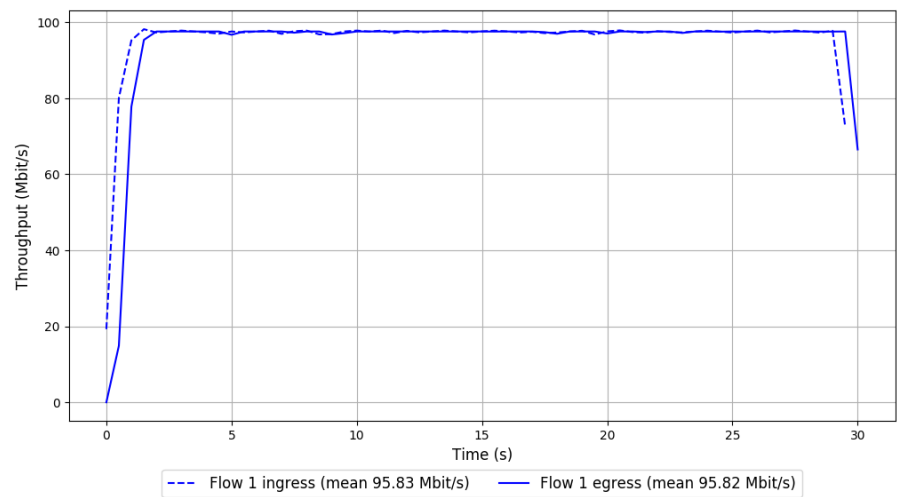Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-01-25 11:29:28
End at: 2019-01-25 11:29:58
Local clock offset: -5.105 ms
Remote clock offset: -1.831 ms


# Below is generated by plot.py at 2019-01-25 12:54:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.82 Mbit/s
95th percentile per-packet one-way delay: 37.599 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.82 Mbit/s
95th percentile per-packet one-way delay: 37.599 ms
Loss rate: 0.23%
```

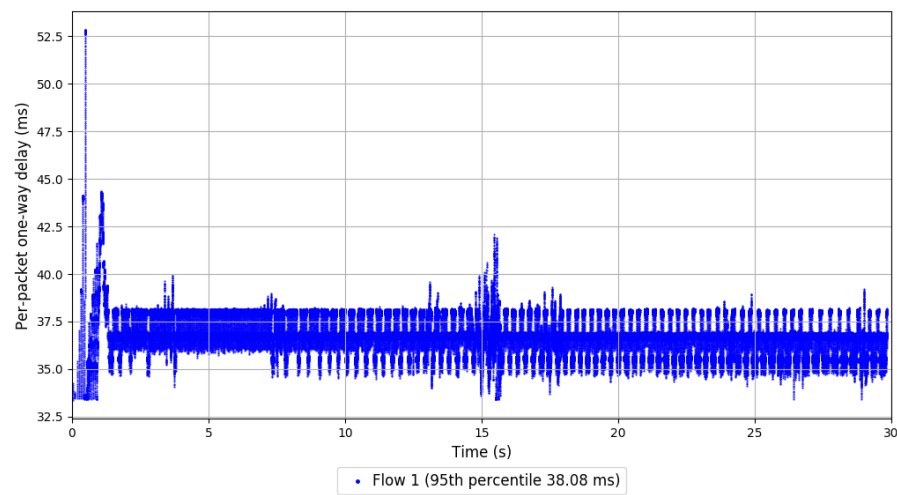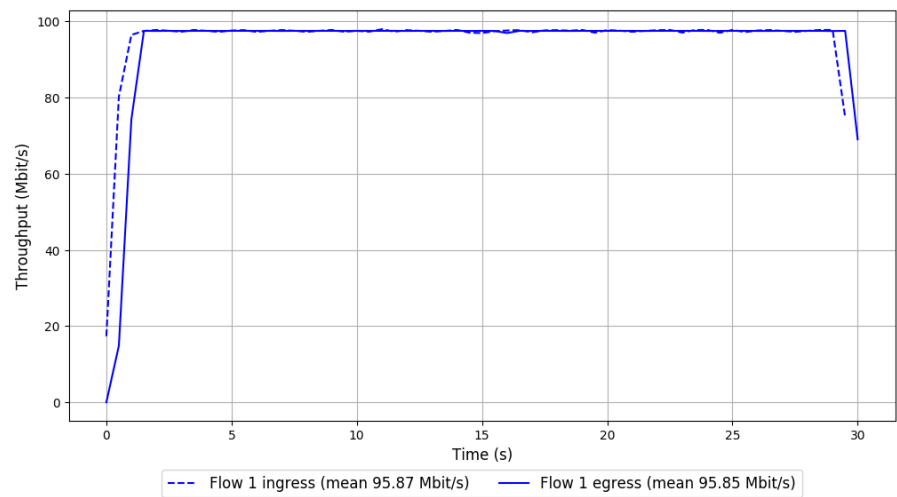Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2019-01-25 11:54:36
End at: 2019-01-25 11:55:06
Local clock offset: -2.415 ms
Remote clock offset: -1.566 ms


# Below is generated by plot.py at 2019-01-25 12:54:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.85 Mbit/s
95th percentile per-packet one-way delay: 38.083 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.85 Mbit/s
95th percentile per-packet one-way delay: 38.083 ms
Loss rate: 0.23%
```

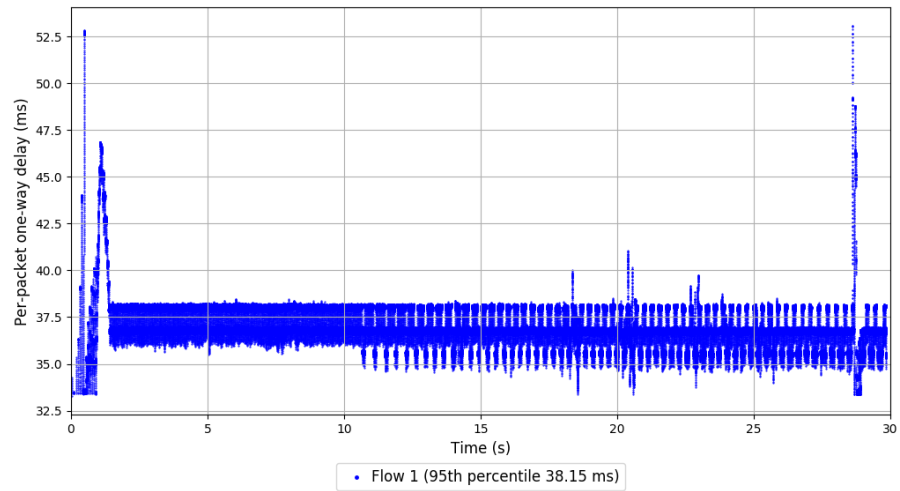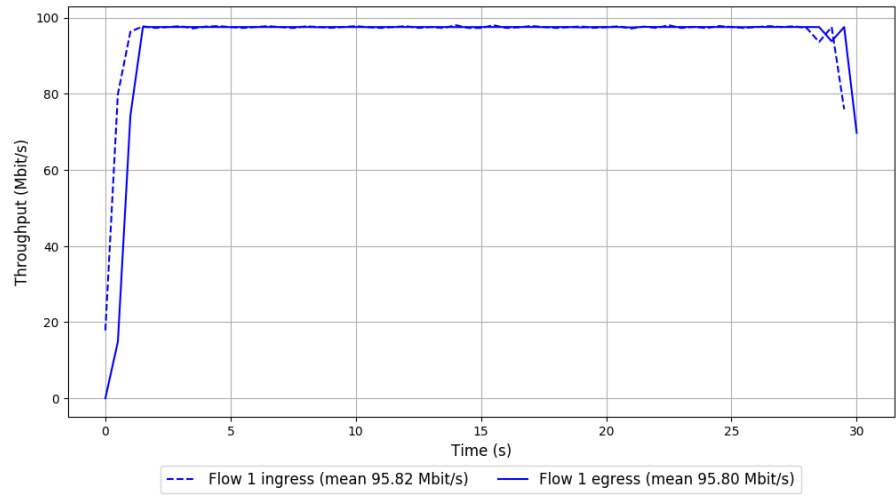## Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2019-01-25 12:19:59
End at: 2019-01-25 12:20:29
Local clock offset: 1.052 ms
Remote clock offset: -1.498 ms


# Below is generated by plot.py at 2019-01-25 12:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.80 Mbit/s
95th percentile per-packet one-way delay: 38.146 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.80 Mbit/s
95th percentile per-packet one-way delay: 38.146 ms
Loss rate: 0.23%
```

Run 4: Report of Indigo — Data Link

Flow 1 ingress (mean 95.82 Mbit/s)   Flow 1 egress (mean 95.80 Mbit/s)

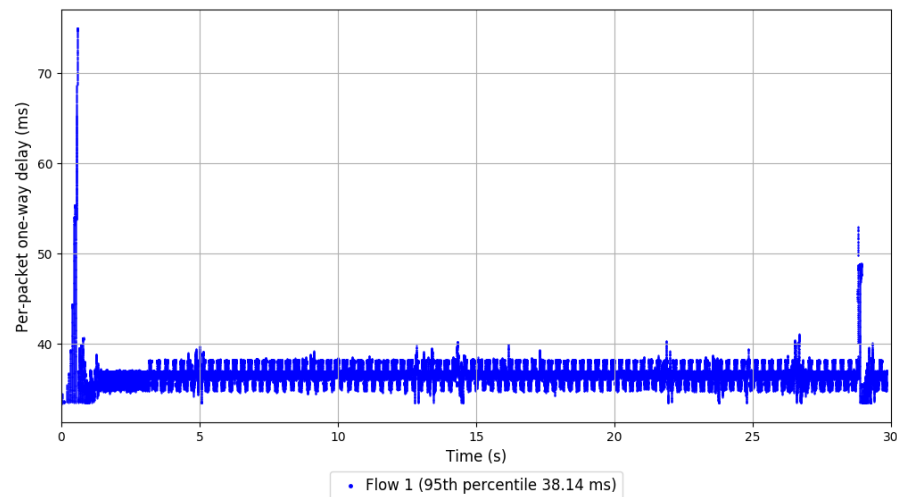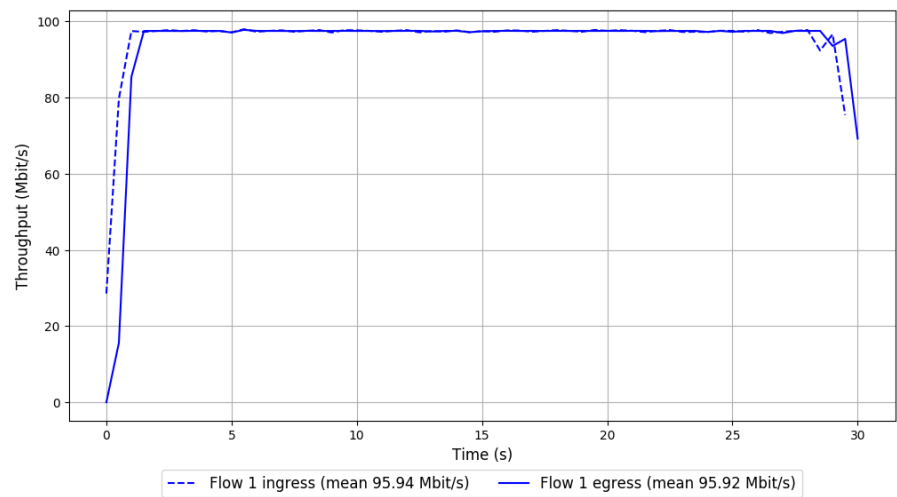Flow 1 (95th percentile 38.15 ms)

```
Run 5: Statistics of Indigo

Start at: 2019-01-25 12:44:54
End at: 2019-01-25 12:45:24
Local clock offset: 0.863 ms
Remote clock offset: -1.579 ms


# Below is generated by plot.py at 2019-01-25 12:54:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.92 Mbit/s
95th percentile per-packet one-way delay: 38.136 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.92 Mbit/s
95th percentile per-packet one-way delay: 38.136 ms
Loss rate: 0.23%
```

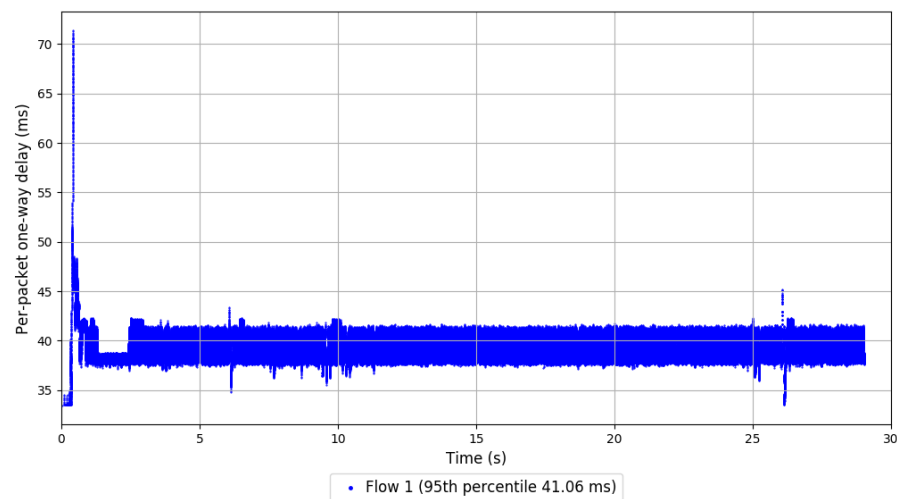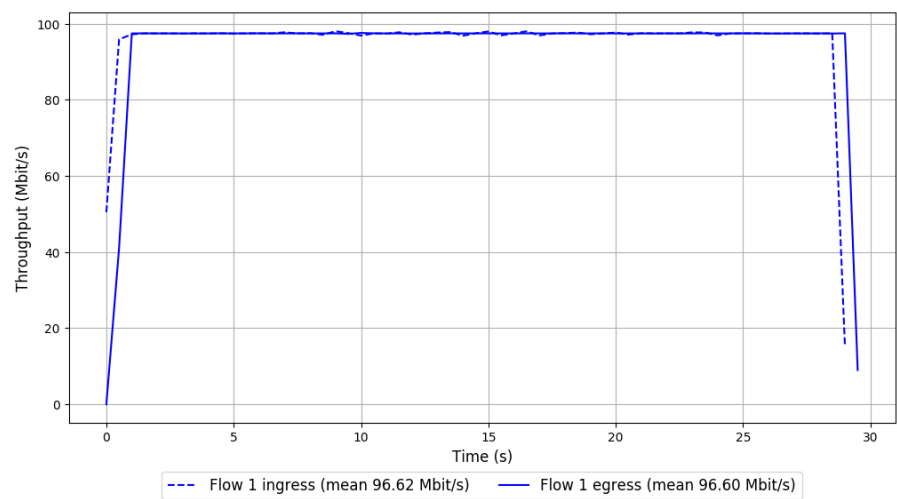Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-25 10:49:17
End at: 2019-01-25 10:49:47
Local clock offset: -3.162 ms
Remote clock offset: -3.037 ms


# Below is generated by plot.py at 2019-01-25 12:54:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.60 Mbit/s
95th percentile per-packet one-way delay: 41.061 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.60 Mbit/s
95th percentile per-packet one-way delay: 41.061 ms
Loss rate: 0.24%
```

Run 1: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 96.62 Mbit/s)   Flow 1 egress (mean 96.60 Mbit/s)
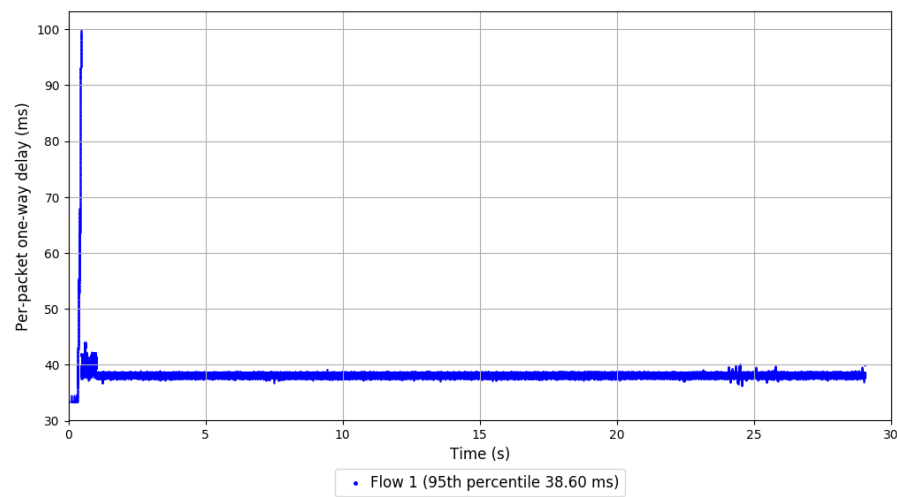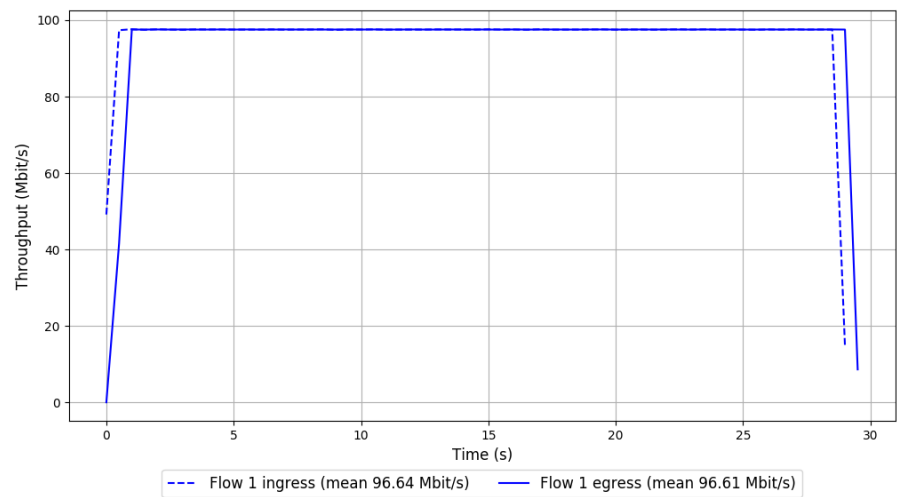

Flow 1 (95th percentile 41.06 ms)

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-25 11:15:04
End at: 2019-01-25 11:15:34
Local clock offset: -4.546 ms
Remote clock offset: -2.272 ms


# Below is generated by plot.py at 2019-01-25 12:55:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.61 Mbit/s
95th percentile per-packet one-way delay: 38.602 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.61 Mbit/s
95th percentile per-packet one-way delay: 38.602 ms
Loss rate: 0.24%
```

Run 2: Report of Indigo-MusesC3 — Data Link
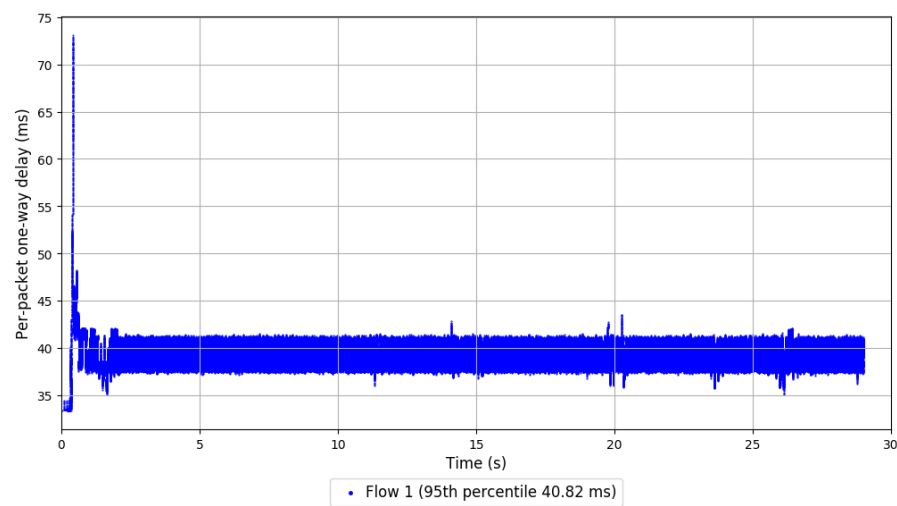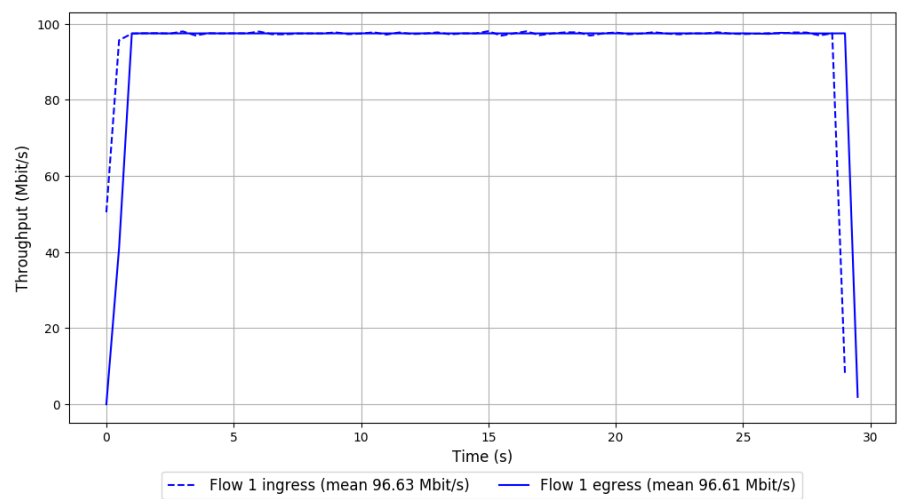

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```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-25 11:40:26
End at: 2019-01-25 11:40:56
Local clock offset: -3.11 ms
Remote clock offset: -1.507 ms


# Below is generated by plot.py at 2019-01-25 12:55:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.61 Mbit/s
95th percentile per-packet one-way delay: 40.819 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.61 Mbit/s
95th percentile per-packet one-way delay: 40.819 ms
Loss rate: 0.24%
```

Run 3: Report of Indigo-MusesC3 — Data Link

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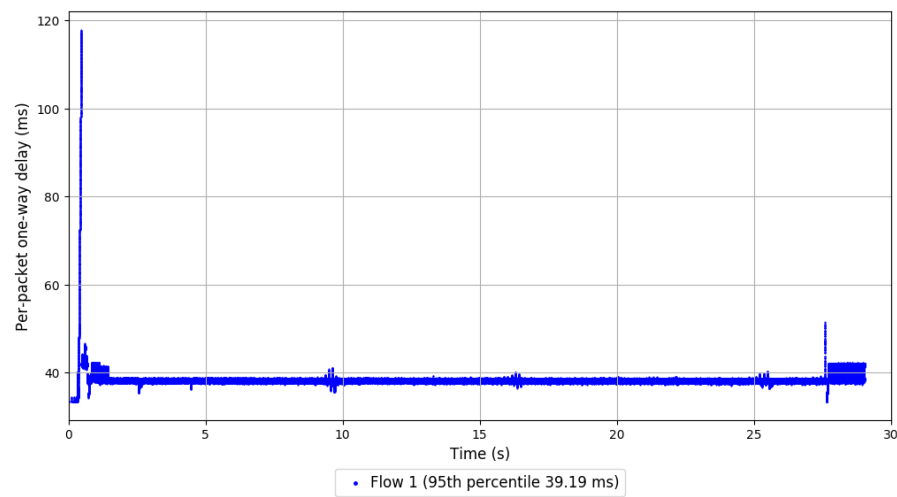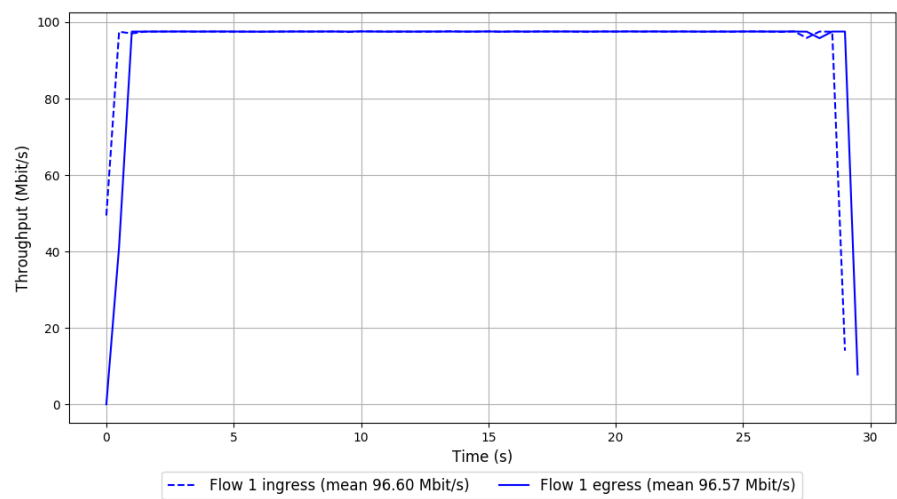

• Flow 1 (95th percentile 40.82 ms)

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-25 12:05:39
End at: 2019-01-25 12:06:09
Local clock offset: -0.667 ms
Remote clock offset: -1.724 ms


# Below is generated by plot.py at 2019-01-25 12:55:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.57 Mbit/s
95th percentile per-packet one-way delay: 39.192 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 96.57 Mbit/s
95th percentile per-packet one-way delay: 39.192 ms
Loss rate: 0.25%
```

Run 4: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 96.60 Mbit/s) --- Flow 1 egress (mean 96.57 Mbit/s)
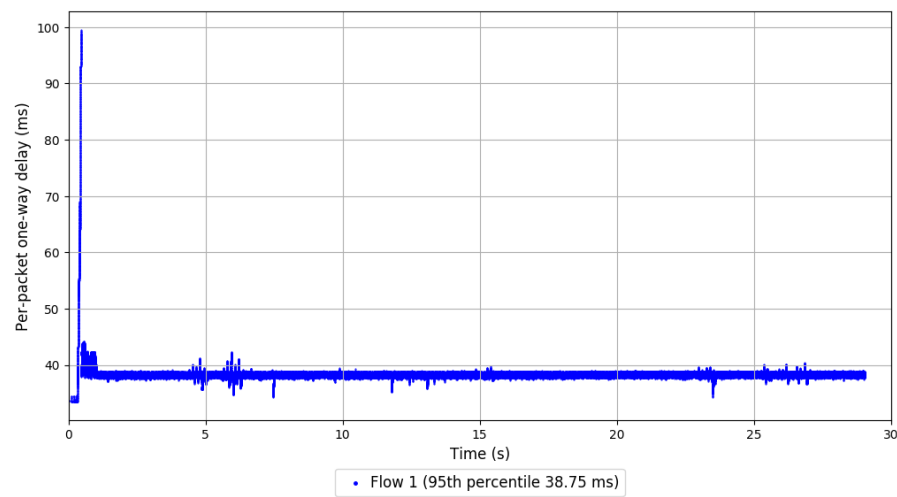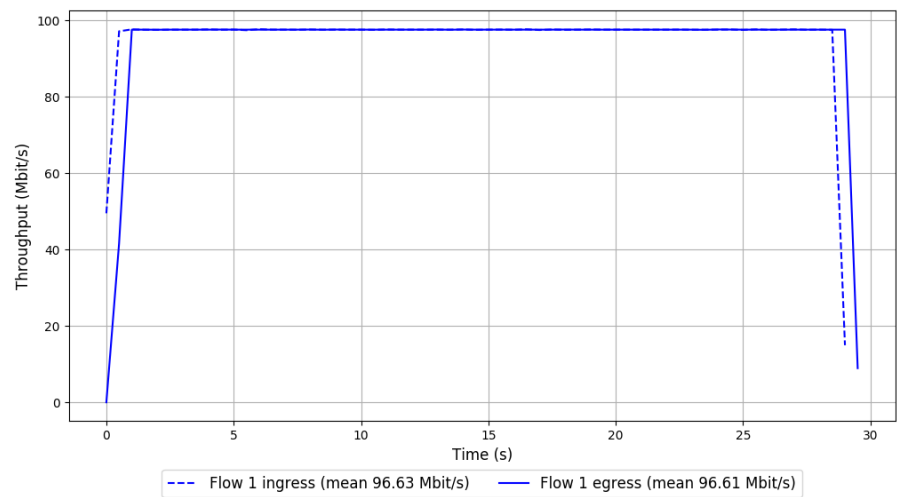

• Flow 1 (95th percentile 39.19 ms)

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-25 12:30:52
End at: 2019-01-25 12:31:22
Local clock offset: 1.482 ms
Remote clock offset: -1.545 ms


# Below is generated by plot.py at 2019-01-25 12:55:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.61 Mbit/s
95th percentile per-packet one-way delay: 38.747 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.61 Mbit/s
95th percentile per-packet one-way delay: 38.747 ms
Loss rate: 0.24%
```
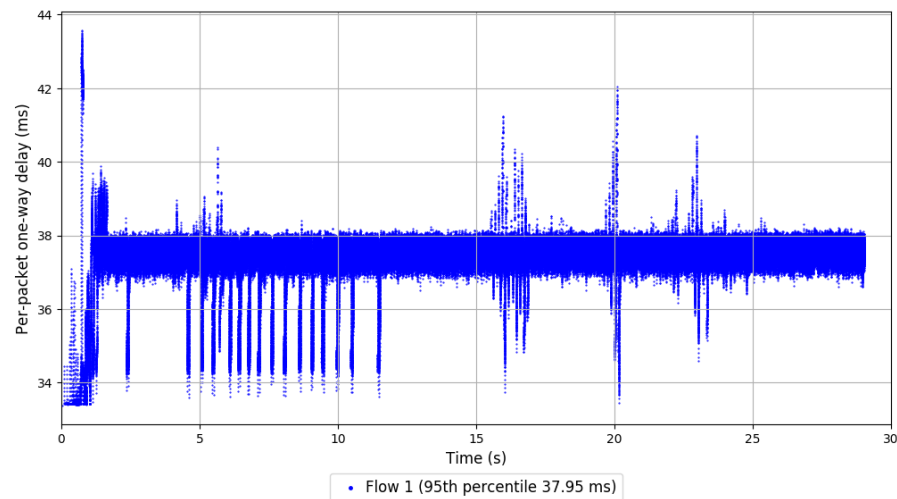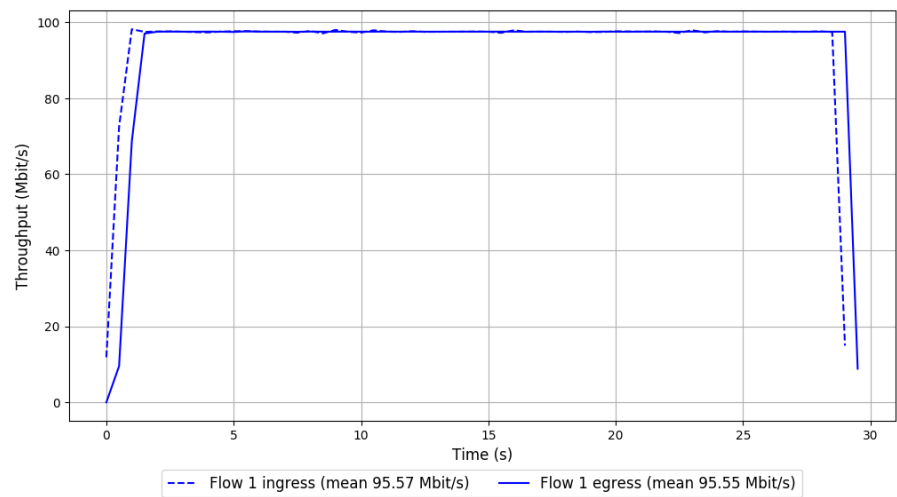
Run 5: Report of Indigo-MusesC3 — Data Link

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-25 10:45:31
End at: 2019-01-25 10:46:01
Local clock offset: -2.856 ms
Remote clock offset: -3.151 ms

# Below is generated by plot.py at 2019-01-25 12:55:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 37.950 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 37.950 ms
Loss rate: 0.24%
```

Run 1: Report of Indigo-MusesC5 — Data Link
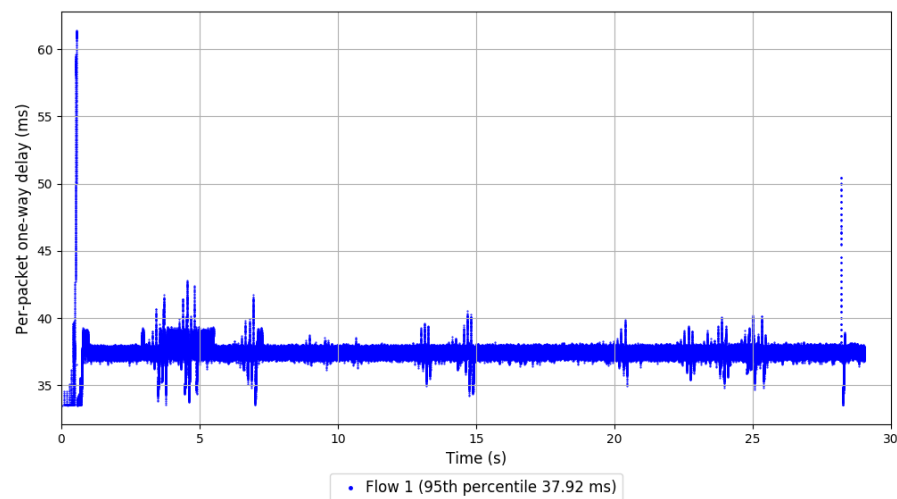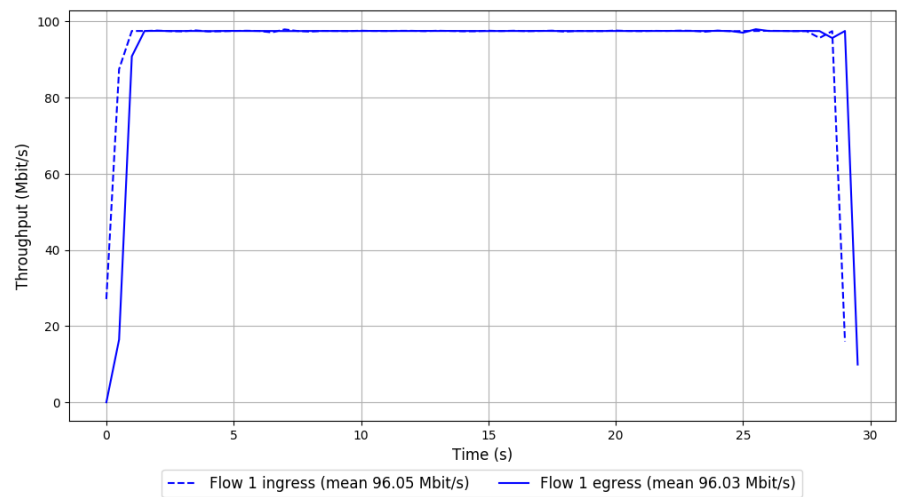

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```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-25 11:11:20
End at: 2019-01-25 11:11:50
Local clock offset: -4.365 ms
Remote clock offset: -2.396 ms


# Below is generated by plot.py at 2019-01-25 12:55:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.03 Mbit/s
95th percentile per-packet one-way delay: 37.919 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.03 Mbit/s
95th percentile per-packet one-way delay: 37.919 ms
Loss rate: 0.24%
```

Run 2: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 96.05 Mbit/s)   Flow 1 egress (mean 96.03 Mbit/s)
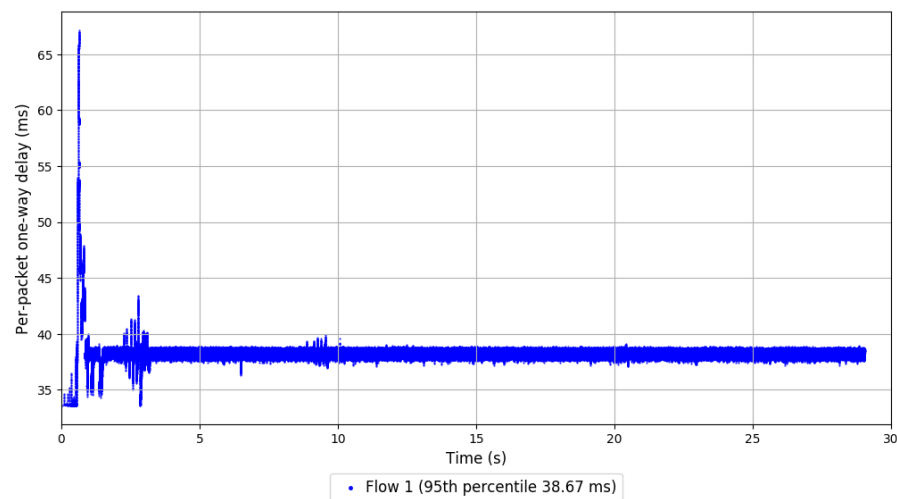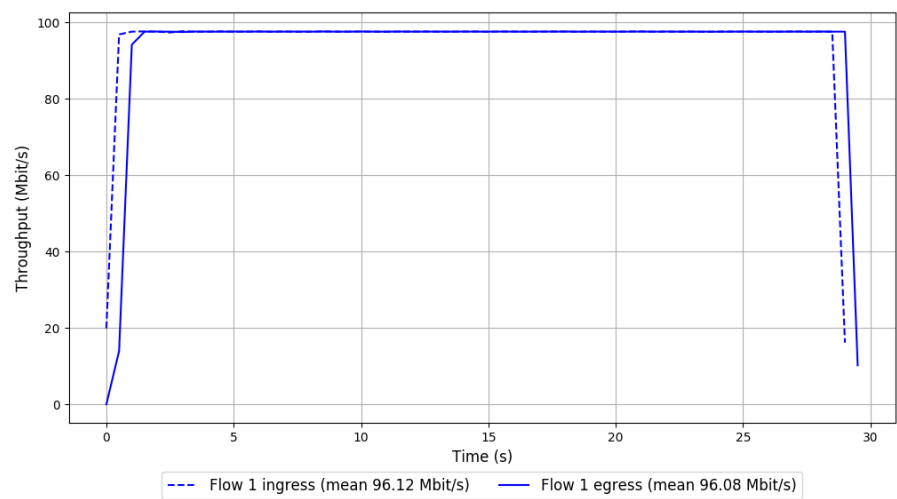

Flow 1 (95th percentile 37.92 ms)

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-25 11:36:51
End at: 2019-01-25 11:37:21
Local clock offset: -3.511 ms
Remote clock offset: -1.762 ms


# Below is generated by plot.py at 2019-01-25 12:55:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.08 Mbit/s
95th percentile per-packet one-way delay: 38.670 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 96.08 Mbit/s
95th percentile per-packet one-way delay: 38.670 ms
Loss rate: 0.26%
```

Run 3: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 96.12 Mbit/s) —— Flow 1 egress (mean 96.08 Mbit/s)

• Flow 1 (95th percentile 38.67 ms)

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-25 12:01:58
End at: 2019-01-25 12:02:28
Local clock offset: -1.547 ms
Remote clock offset: -1.55 ms


# Below is generated by plot.py at 2019-01-25 12:55:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.08 Mbit/s
95th percentile per-packet one-way delay: 37.655 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 96.08 Mbit/s
95th percentile per-packet one-way delay: 37.655 ms
Loss rate: 0.23%
```
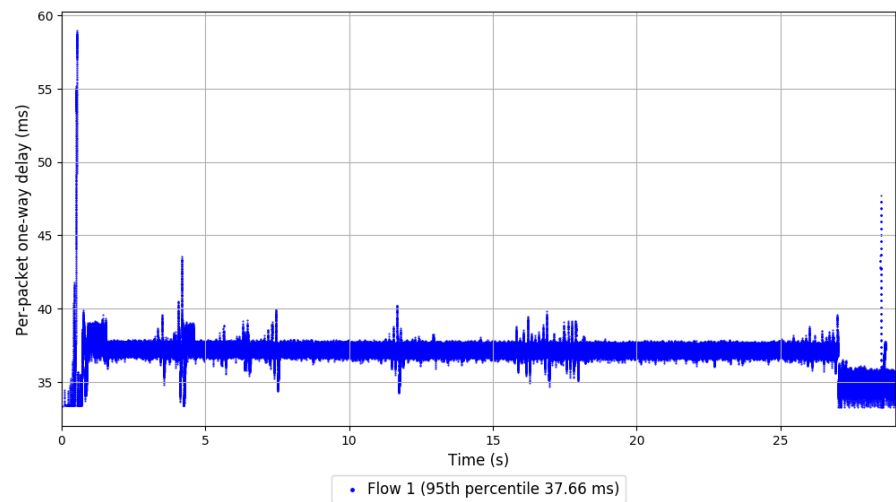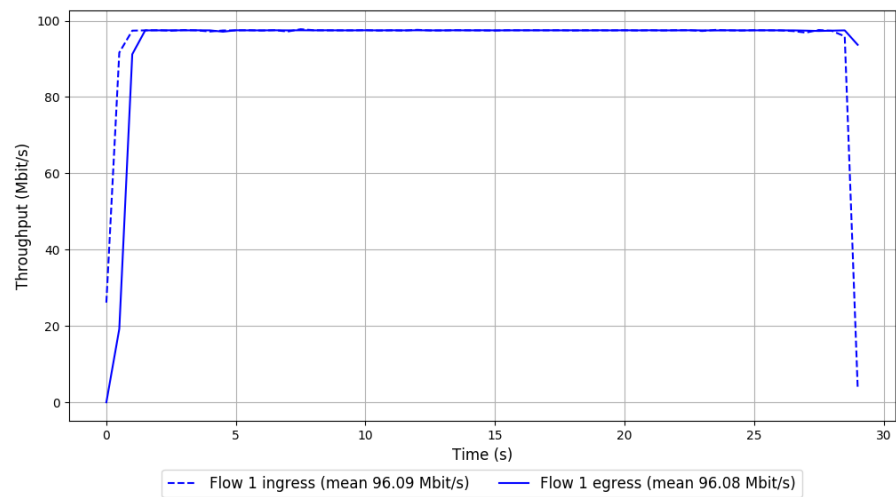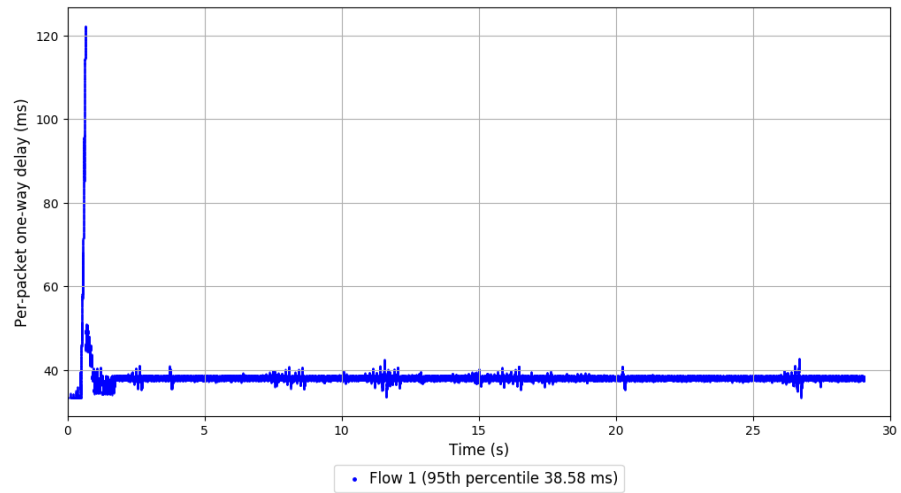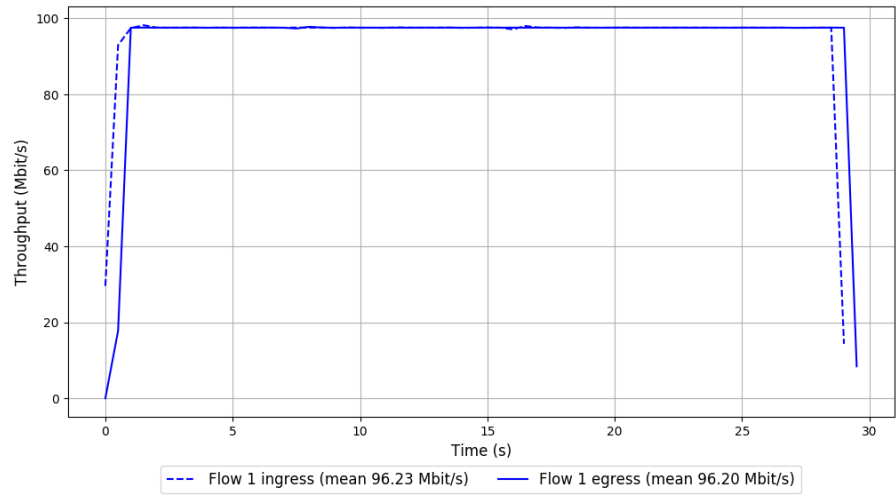
Run 4: Report of Indigo-MusesC5 — Data Link

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-25 12:27:11
End at: 2019-01-25 12:27:41
Local clock offset: 1.538 ms
Remote clock offset: -1.523 ms


# Below is generated by plot.py at 2019-01-25 12:56:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.20 Mbit/s
95th percentile per-packet one-way delay: 38.581 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 96.20 Mbit/s
95th percentile per-packet one-way delay: 38.581 ms
Loss rate: 0.24%
```

Run 5: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 96.23 Mbit/s)   Flow 1 egress (mean 96.20 Mbit/s)
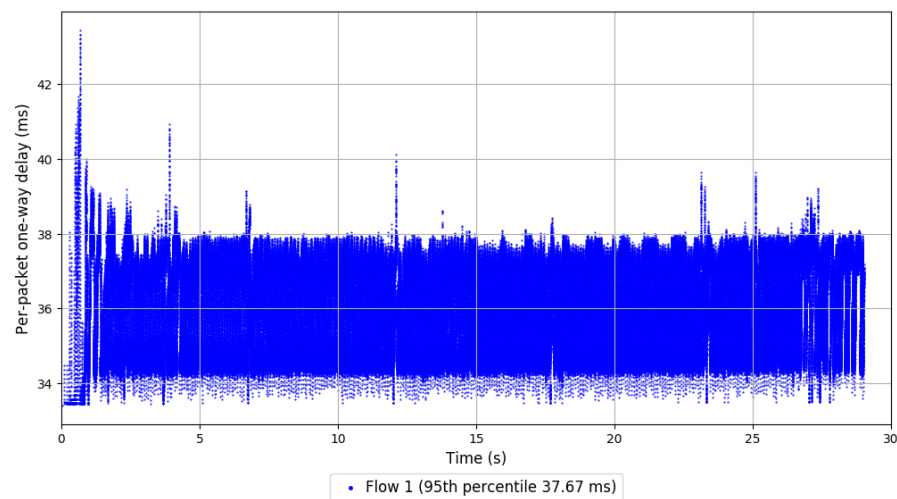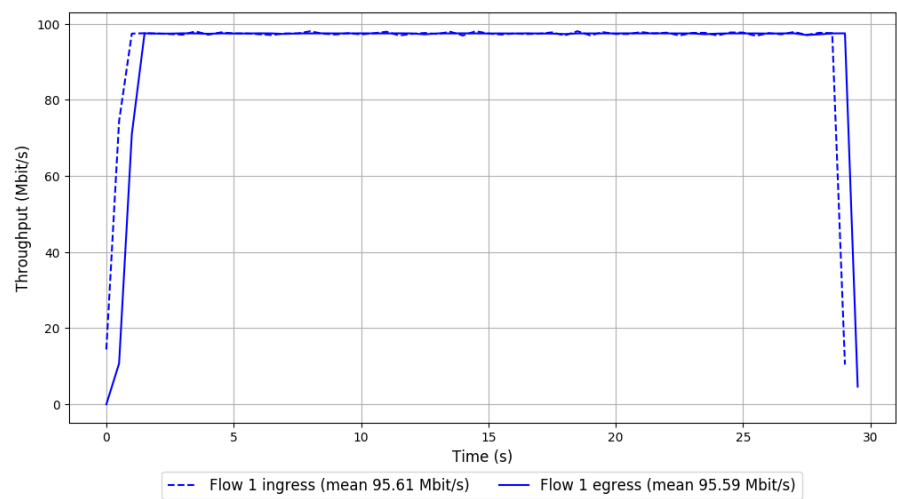

Flow 1 (95th percentile 38.58 ms)

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-25 10:44:01
End at: 2019-01-25 10:44:31
Local clock offset: -2.702 ms
Remote clock offset: -3.167 ms


# Below is generated by plot.py at 2019-01-25 12:56:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.59 Mbit/s
95th percentile per-packet one-way delay: 37.668 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.59 Mbit/s
95th percentile per-packet one-way delay: 37.668 ms
Loss rate: 0.24%
```

Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-25 11:10:06
End at: 2019-01-25 11:10:36
Local clock offset: -4.308 ms
Remote clock offset: -2.467 ms


# Below is generated by plot.py at 2019-01-25 12:56:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.75 Mbit/s
95th percentile per-packet one-way delay: 36.518 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 94.75 Mbit/s
95th percentile per-packet one-way delay: 36.518 ms
Loss rate: 0.23%
```
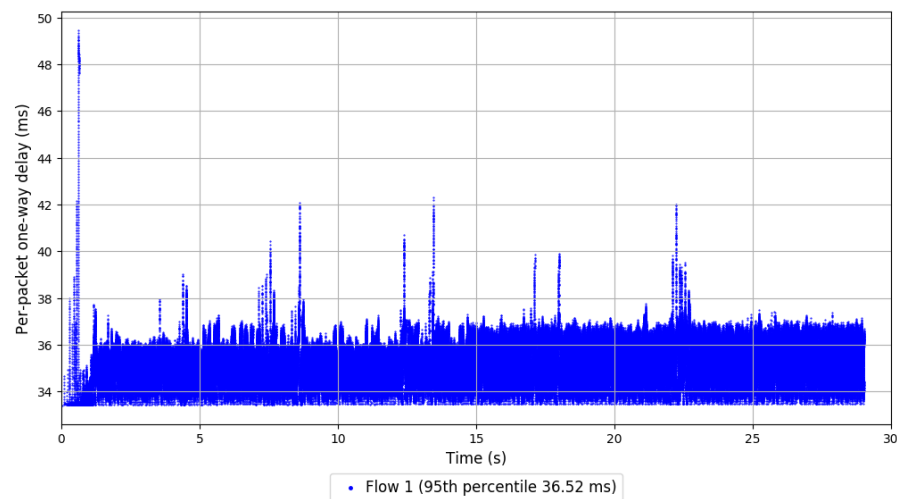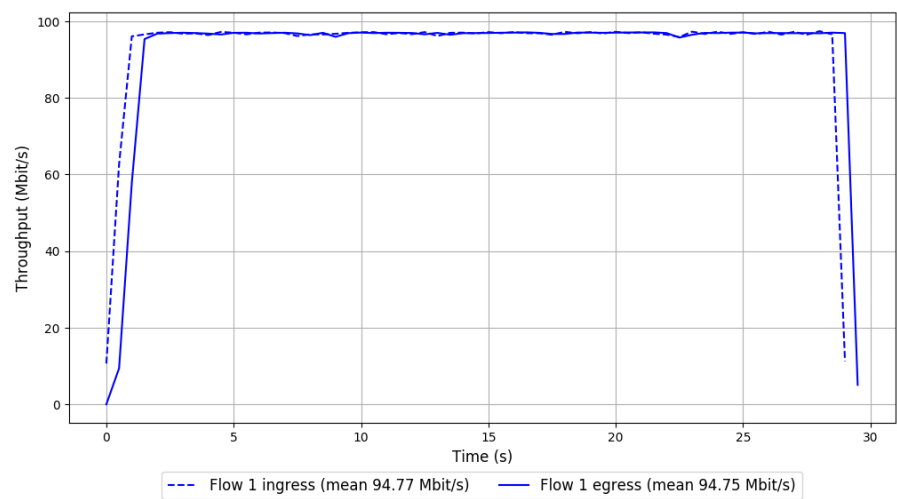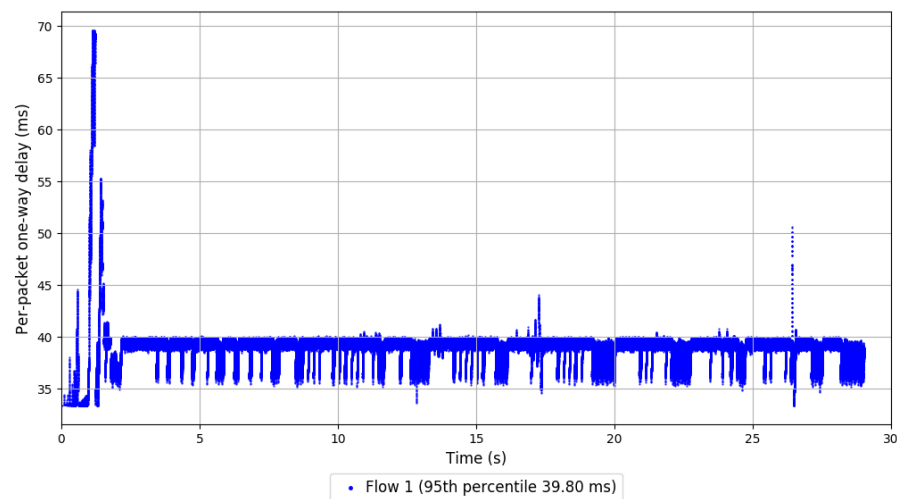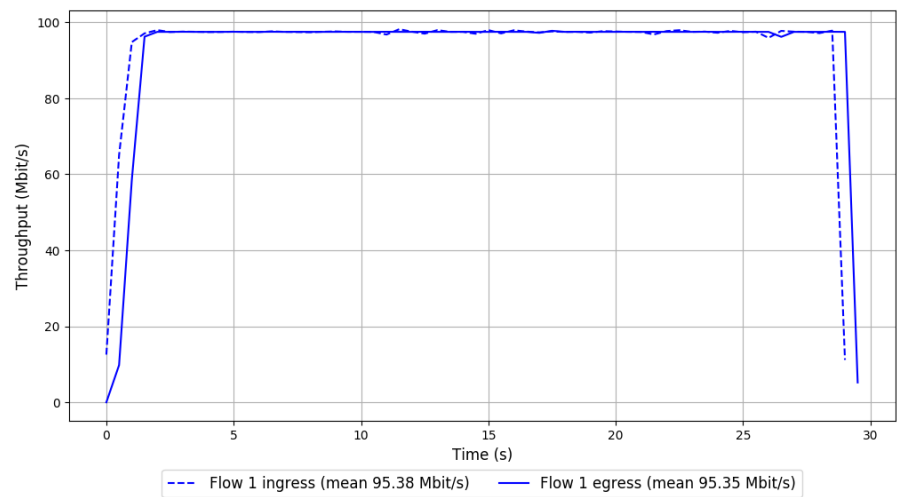
Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-25 11:35:37
End at: 2019-01-25 11:36:07
Local clock offset: -3.705 ms
Remote clock offset: -1.605 ms


# Below is generated by plot.py at 2019-01-25 12:56:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.35 Mbit/s
95th percentile per-packet one-way delay: 39.805 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 95.35 Mbit/s
95th percentile per-packet one-way delay: 39.805 ms
Loss rate: 0.25%
```
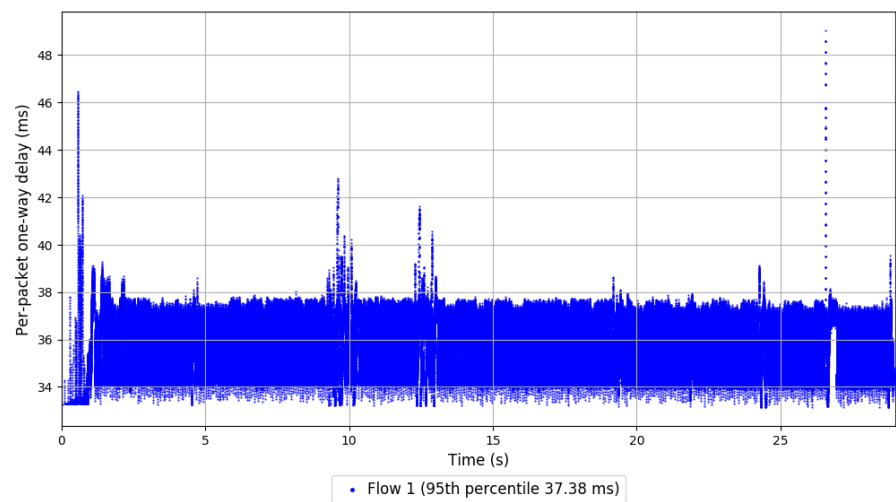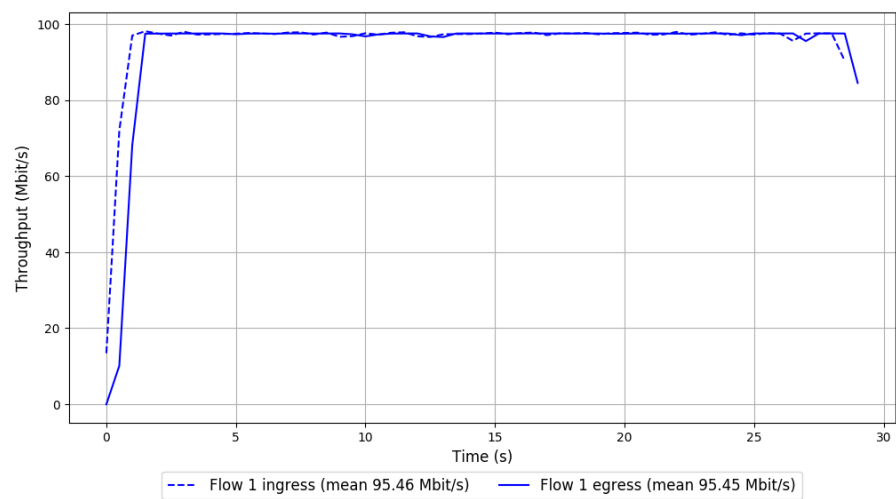
Run 3: Report of Indigo-MusesD — Data Link

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-25 12:00:38
End at: 2019-01-25 12:01:08
Local clock offset: -1.984 ms
Remote clock offset: -1.558 ms


# Below is generated by plot.py at 2019-01-25 12:56:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.45 Mbit/s
95th percentile per-packet one-way delay: 37.383 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.45 Mbit/s
95th percentile per-packet one-way delay: 37.383 ms
Loss rate: 0.23%
```

Run 4: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 95.46 Mbit/s) ----- Flow 1 egress (mean 95.45 Mbit/s)
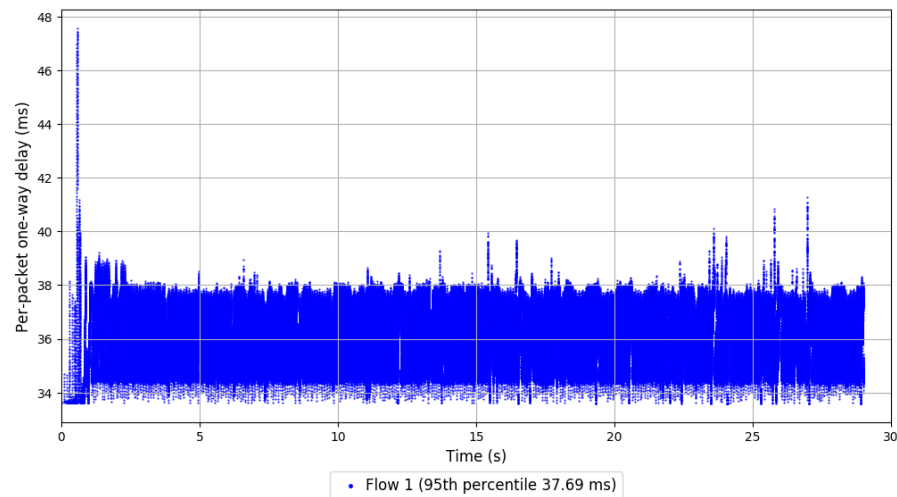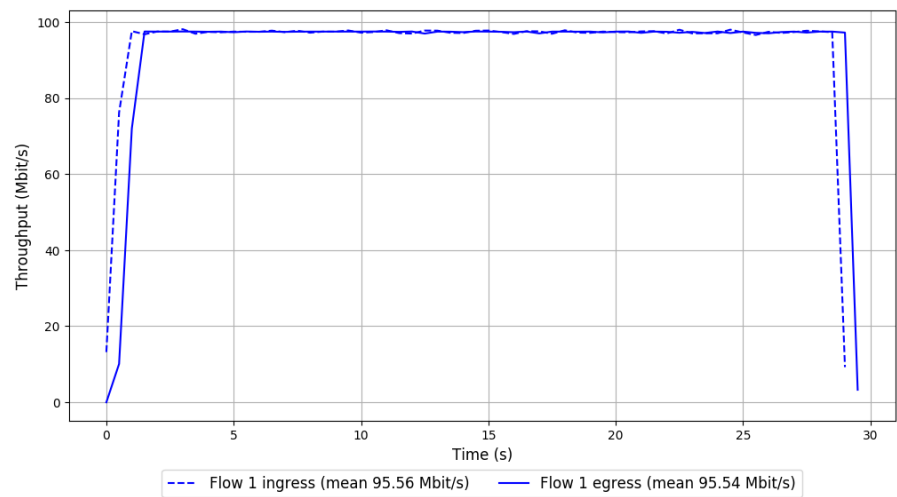

• Flow 1 (95th percentile 37.38 ms)

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-25 12:26:01
End at: 2019-01-25 12:26:31
Local clock offset: 1.446 ms
Remote clock offset: -1.688 ms


# Below is generated by plot.py at 2019-01-25 12:56:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.54 Mbit/s
95th percentile per-packet one-way delay: 37.686 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 95.54 Mbit/s
95th percentile per-packet one-way delay: 37.686 ms
Loss rate: 0.24%
```

Run 5: Report of Indigo-MusesD — Data Link

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-25 11:02:39
End at: 2019-01-25 11:03:09
Local clock offset: -3.957 ms
Remote clock offset: -2.69 ms


# Below is generated by plot.py at 2019-01-25 12:56:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: 46.745 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: 46.745 ms
Loss rate: 0.44%
```
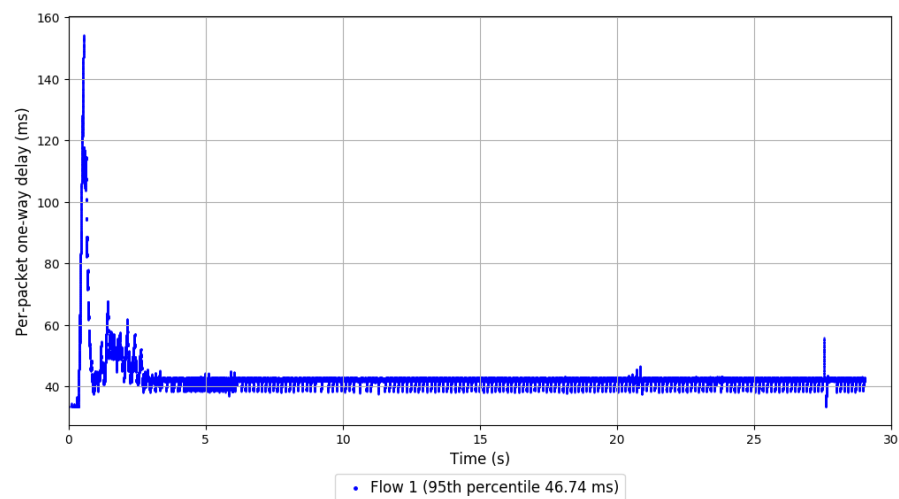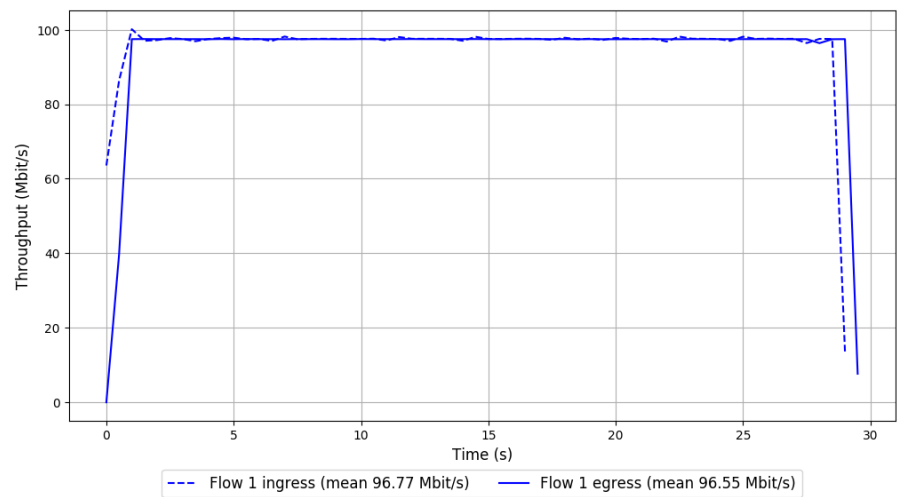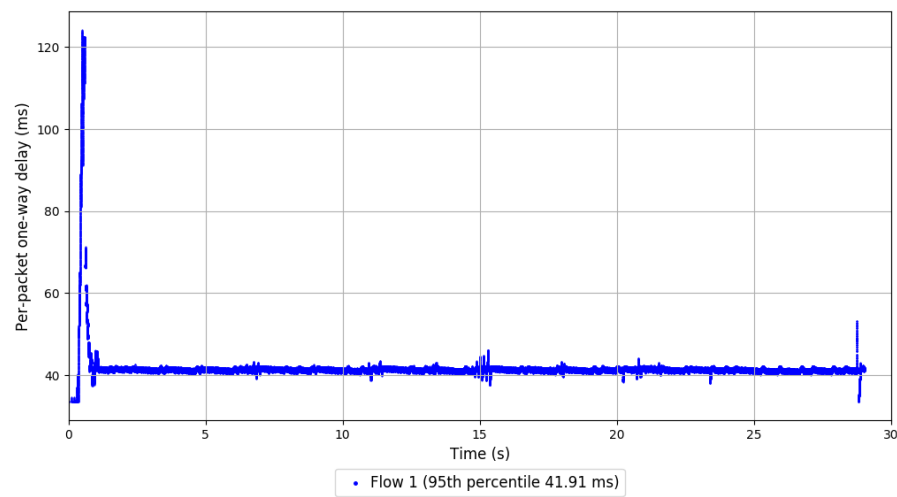
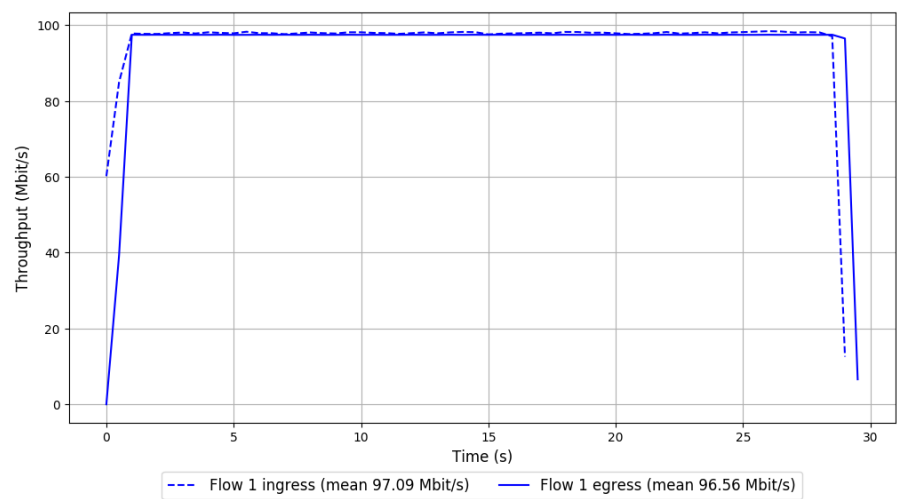Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-25 11:28:13
End at: 2019-01-25 11:28:43
Local clock offset: -5.065 ms
Remote clock offset: -1.865 ms


# Below is generated by plot.py at 2019-01-25 12:56:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.56 Mbit/s
95th percentile per-packet one-way delay: 41.905 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 96.56 Mbit/s
95th percentile per-packet one-way delay: 41.905 ms
Loss rate: 0.76%
```
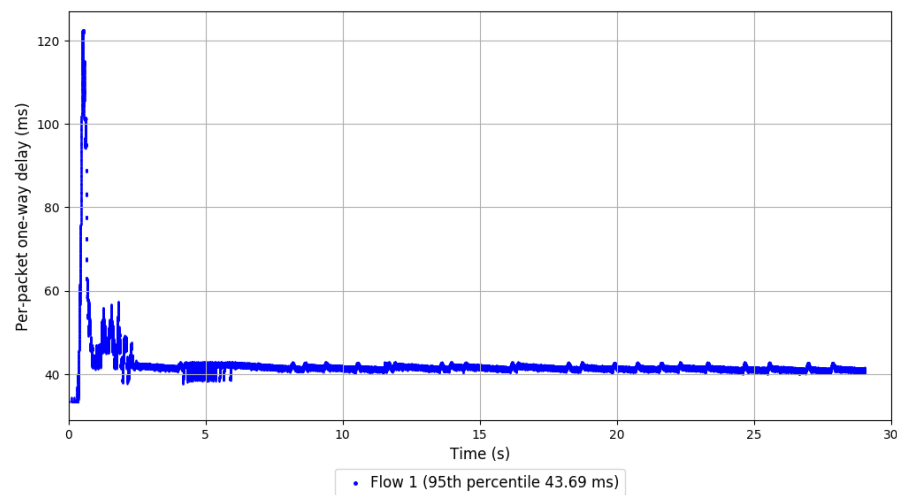
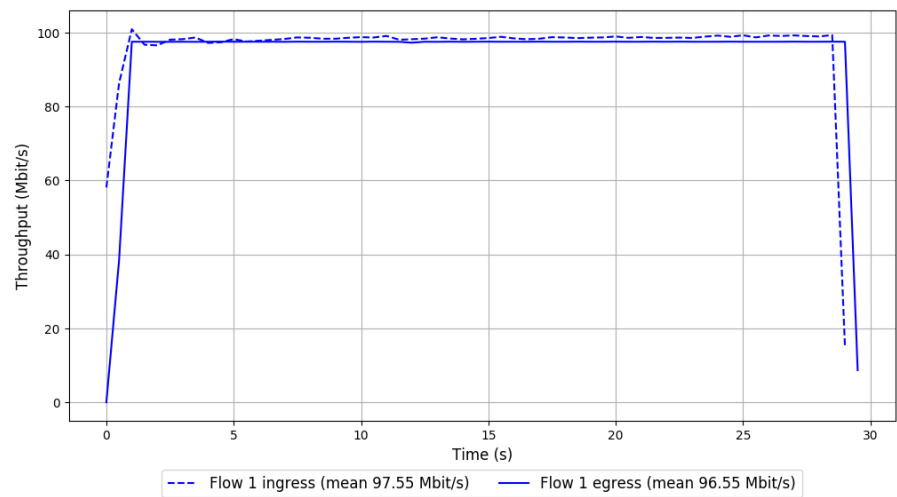Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-25 11:53:25
End at: 2019-01-25 11:53:55
Local clock offset: -2.445 ms
Remote clock offset: -1.545 ms


# Below is generated by plot.py at 2019-01-25 12:57:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: 43.693 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: 43.693 ms
Loss rate: 1.24%
```

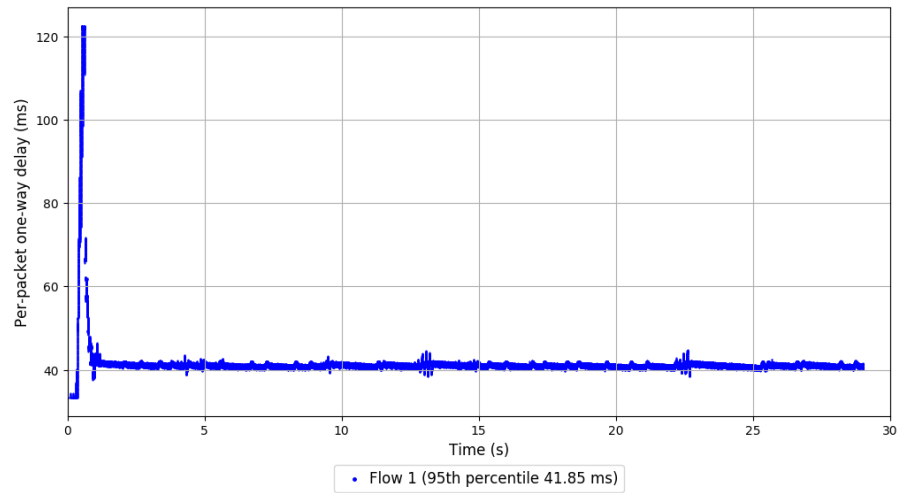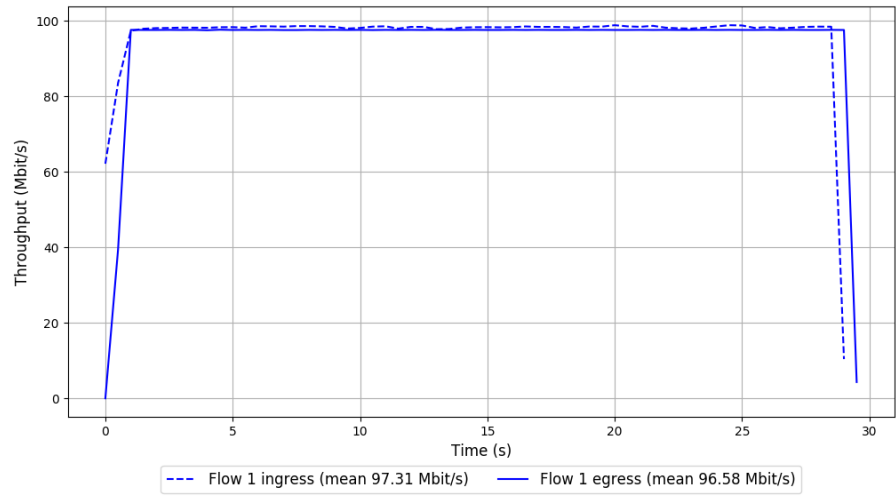Run 3: Report of Indigo-MusesT — Data Link

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-25 12:18:35
End at: 2019-01-25 12:19:05
Local clock offset: 0.943 ms
Remote clock offset: -1.505 ms


# Below is generated by plot.py at 2019-01-25 12:57:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.58 Mbit/s
95th percentile per-packet one-way delay: 41.847 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 96.58 Mbit/s
95th percentile per-packet one-way delay: 41.847 ms
Loss rate: 0.97%
```

Run 4: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 97.31 Mbit/s) —— Flow 1 egress (mean 96.58 Mbit/s)

• Flow 1 (95th percentile 41.85 ms)

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-25 12:43:43
End at: 2019-01-25 12:44:13
Local clock offset: 0.86 ms
Remote clock offset: -1.575 ms


# Below is generated by plot.py at 2019-01-25 12:57:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: 42.042 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: 42.042 ms
Loss rate: 0.61%
```
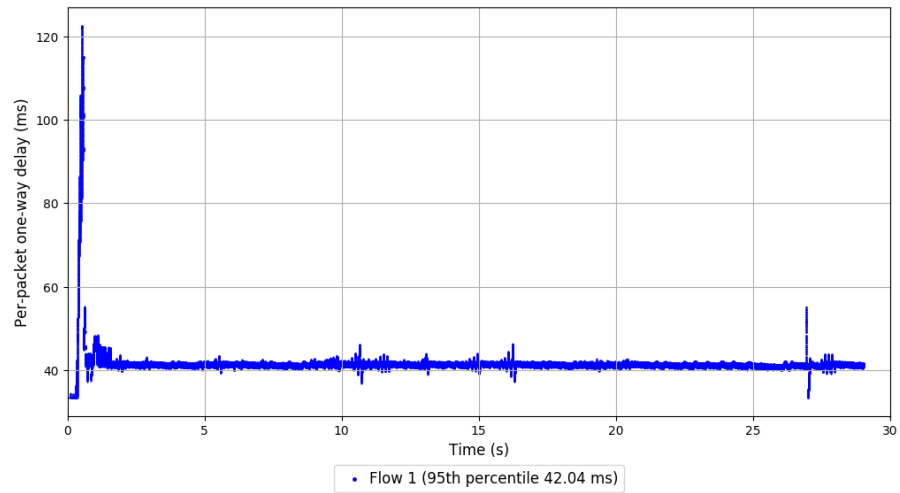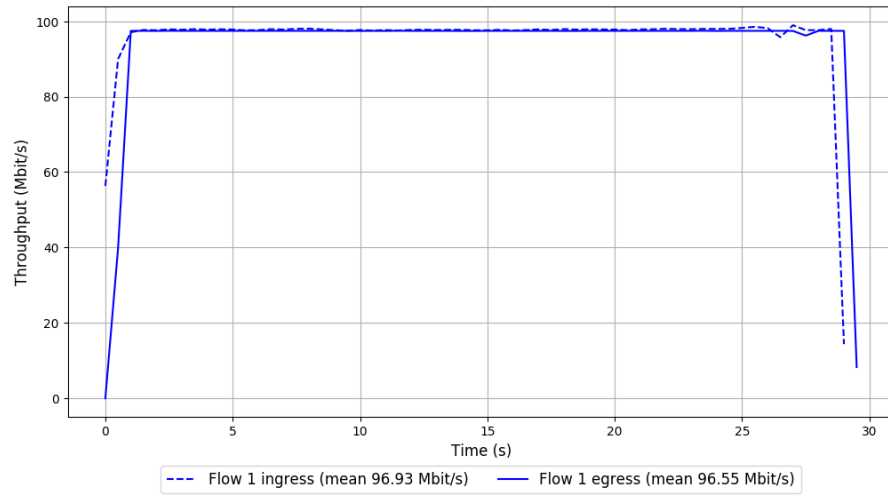
Run 5: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 96.93 Mbit/s) --- Flow 1 egress (mean 96.55 Mbit/s)
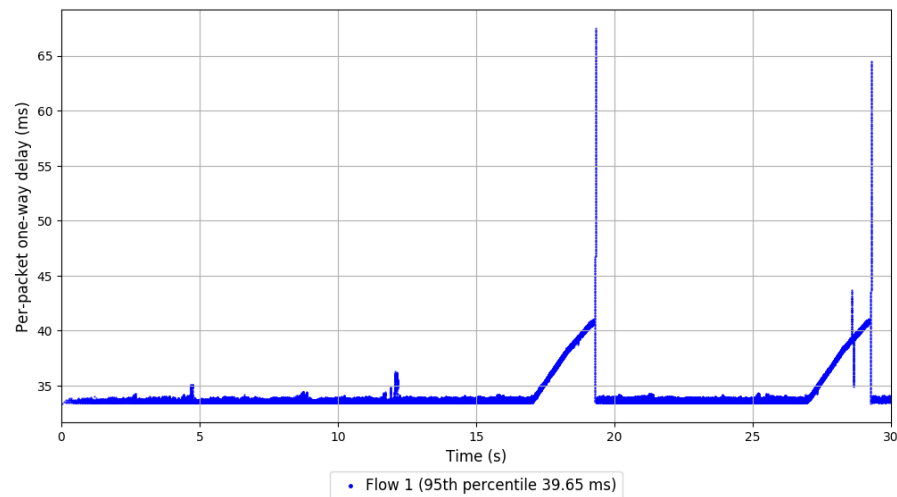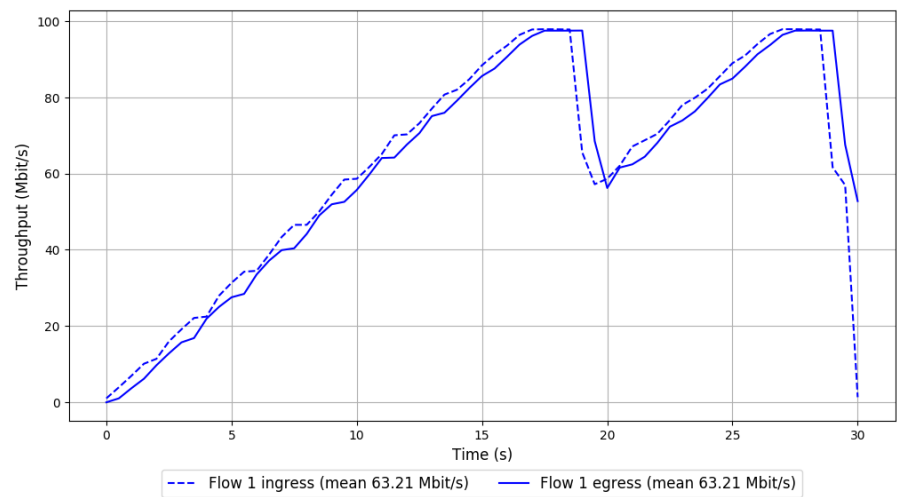

Flow 1 (95th percentile 42.04 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2019-01-25 10:52:46
End at: 2019-01-25 10:53:16
Local clock offset: -3.423 ms
Remote clock offset: -3.004 ms

# Below is generated by plot.py at 2019-01-25 12:57:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.21 Mbit/s
95th percentile per-packet one-way delay: 39.650 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.21 Mbit/s
95th percentile per-packet one-way delay: 39.650 ms
Loss rate: 0.20%
```
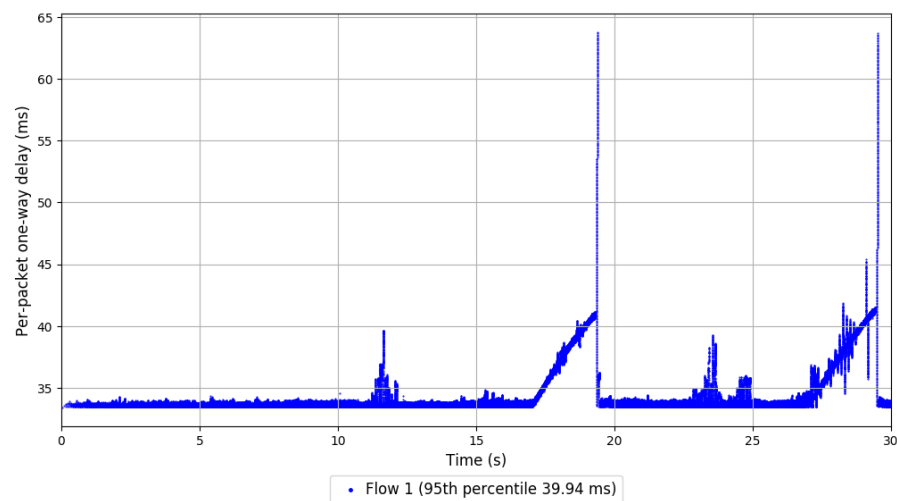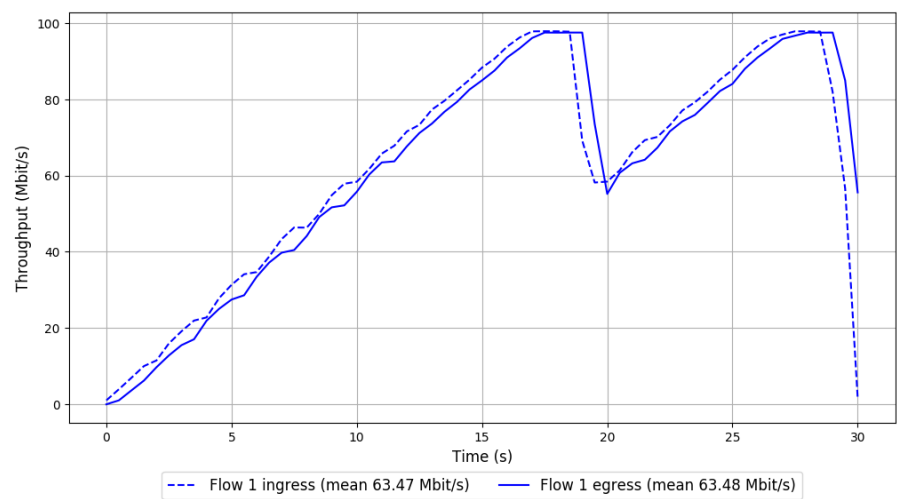
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2019-01-25 11:18:41
End at: 2019-01-25 11:19:11
Local clock offset: -4.669 ms
Remote clock offset: -2.144 ms


# Below is generated by plot.py at 2019-01-25 12:57:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.48 Mbit/s
95th percentile per-packet one-way delay: 39.937 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.48 Mbit/s
95th percentile per-packet one-way delay: 39.937 ms
Loss rate: 0.20%
```

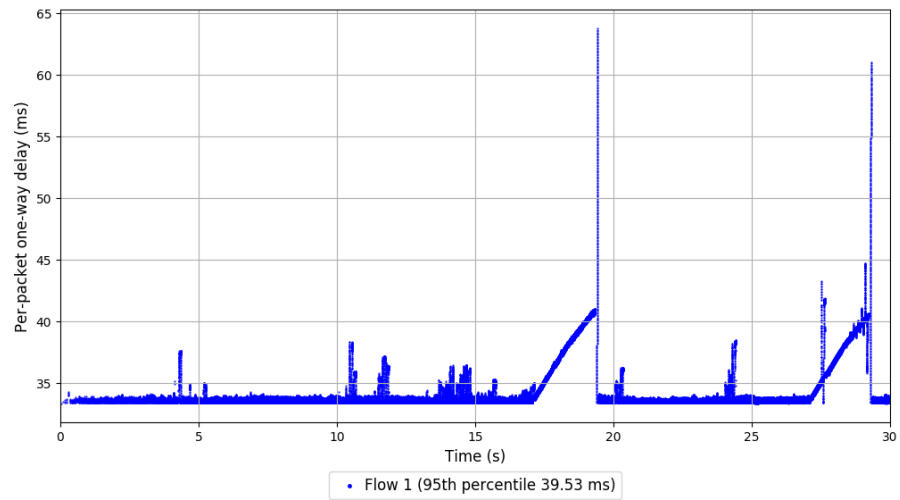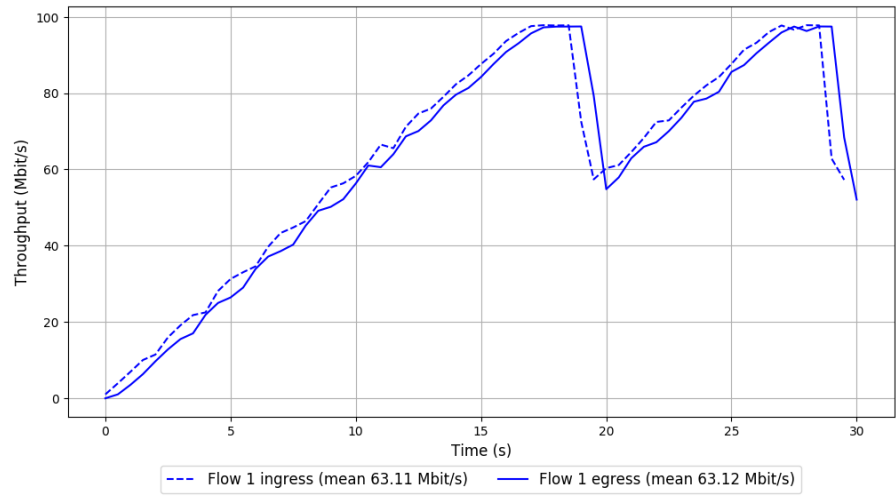# Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2019-01-25 11:43:54
End at: 2019-01-25 11:44:24
Local clock offset: -2.829 ms
Remote clock offset: -1.529 ms


# Below is generated by plot.py at 2019-01-25 12:57:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.12 Mbit/s
95th percentile per-packet one-way delay: 39.528 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.12 Mbit/s
95th percentile per-packet one-way delay: 39.528 ms
Loss rate: 0.20%
```

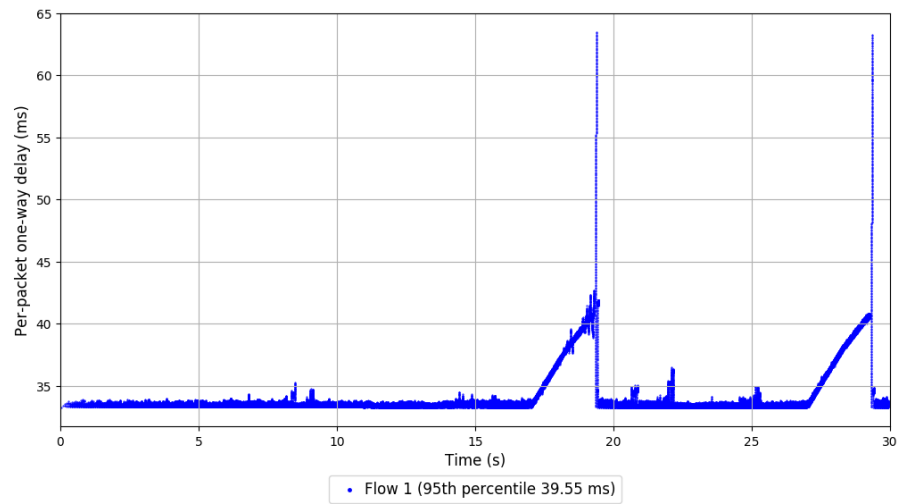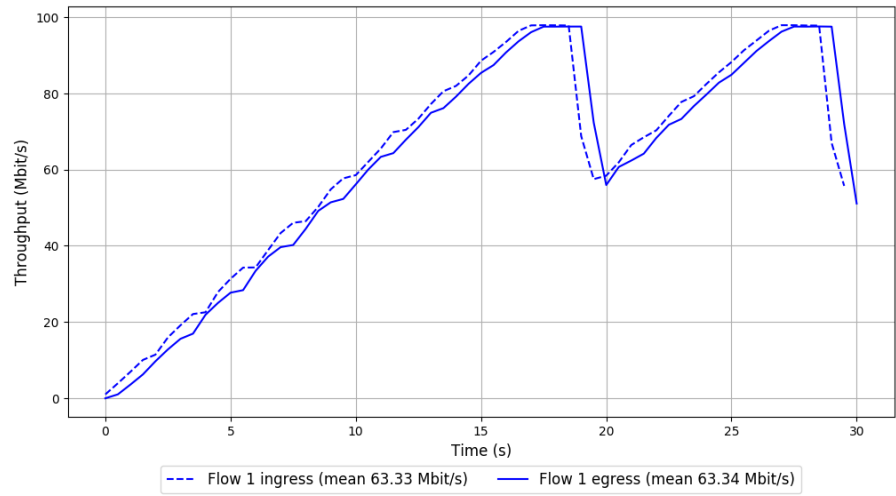# Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2019-01-25 12:09:07
End at: 2019-01-25 12:09:37
Local clock offset: -0.093 ms
Remote clock offset: -1.501 ms


# Below is generated by plot.py at 2019-01-25 12:57:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.34 Mbit/s
95th percentile per-packet one-way delay: 39.550 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.34 Mbit/s
95th percentile per-packet one-way delay: 39.550 ms
Loss rate: 0.20%
```

Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2019-01-25 12:34:19
End at: 2019-01-25 12:34:49
Local clock offset: 1.178 ms
Remote clock offset: -1.48 ms


# Below is generated by plot.py at 2019-01-25 12:57:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.50 Mbit/s
95th percentile per-packet one-way delay: 40.009 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.50 Mbit/s
95th percentile per-packet one-way delay: 40.009 ms
Loss rate: 0.20%
```
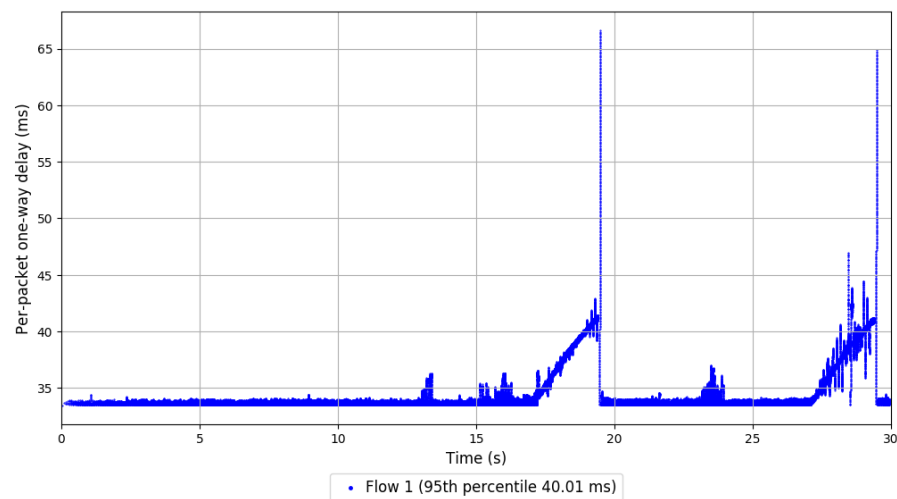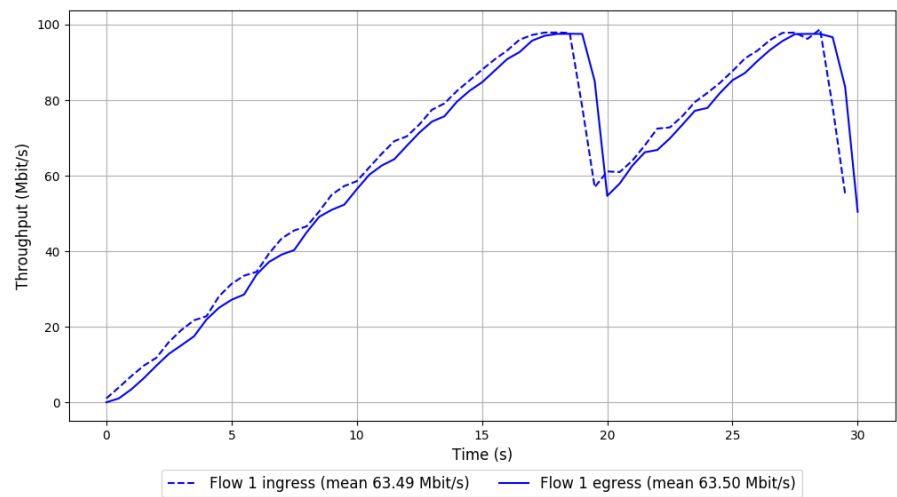
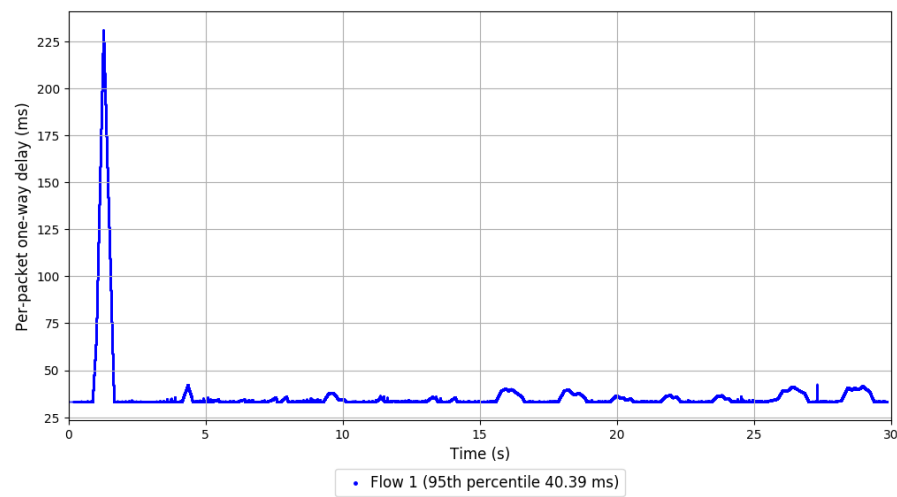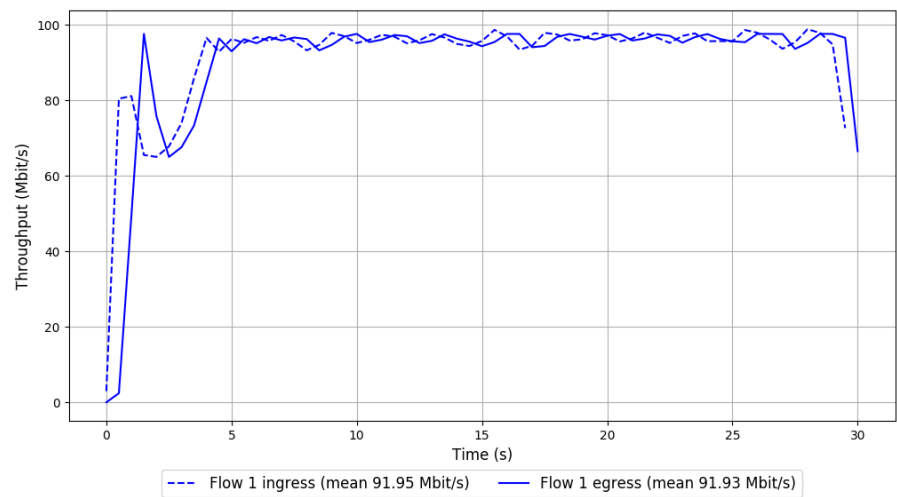# Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-01-25 10:51:35
End at: 2019-01-25 10:52:05
Local clock offset: -3.335 ms
Remote clock offset: -3.018 ms


# Below is generated by plot.py at 2019-01-25 12:58:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.93 Mbit/s
95th percentile per-packet one-way delay: 40.389 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 91.93 Mbit/s
95th percentile per-packet one-way delay: 40.389 ms
Loss rate: 0.23%
```

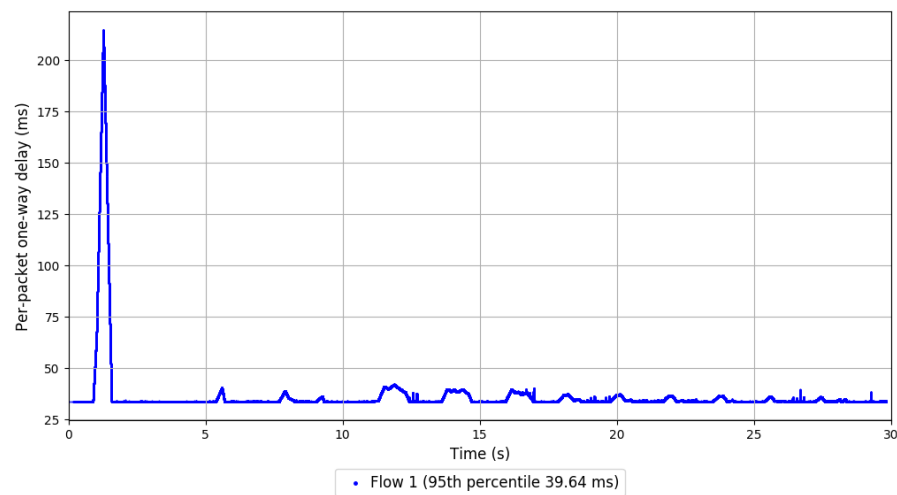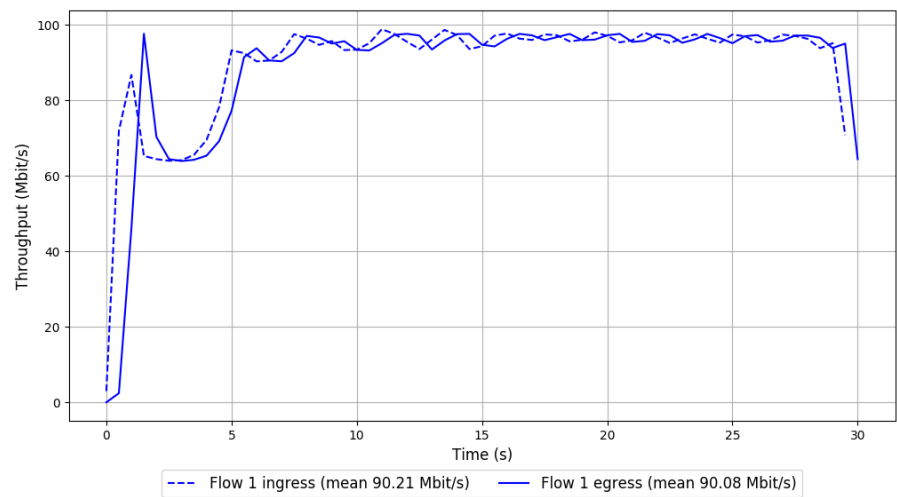Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-01-25 11:17:29
End at: 2019-01-25 11:17:59
Local clock offset: -4.638 ms
Remote clock offset: -2.414 ms


# Below is generated by plot.py at 2019-01-25 12:58:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.08 Mbit/s
95th percentile per-packet one-way delay: 39.636 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 90.08 Mbit/s
95th percentile per-packet one-way delay: 39.636 ms
Loss rate: 0.35%
```

Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 90.21 Mbit/s)   Flow 1 egress (mean 90.08 Mbit/s)

Flow 1 (95th percentile 39.64 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-01-25 11:42:43
End at: 2019-01-25 11:43:13
Local clock offset: -2.911 ms
Remote clock offset: -1.507 ms


# Below is generated by plot.py at 2019-01-25 12:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.10 Mbit/s
95th percentile per-packet one-way delay: 37.784 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 92.10 Mbit/s
95th percentile per-packet one-way delay: 37.784 ms
Loss rate: 0.23%
```

Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 92.12 Mbit/s)   Flow 1 egress (mean 92.10 Mbit/s)

Flow 1 (95th percentile 37.78 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-01-25 12:07:57
End at: 2019-01-25 12:08:27
Local clock offset: -0.273 ms
Remote clock offset: -1.508 ms


# Below is generated by plot.py at 2019-01-25 12:58:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.76 Mbit/s
95th percentile per-packet one-way delay: 37.994 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 91.76 Mbit/s
95th percentile per-packet one-way delay: 37.994 ms
Loss rate: 0.23%
```
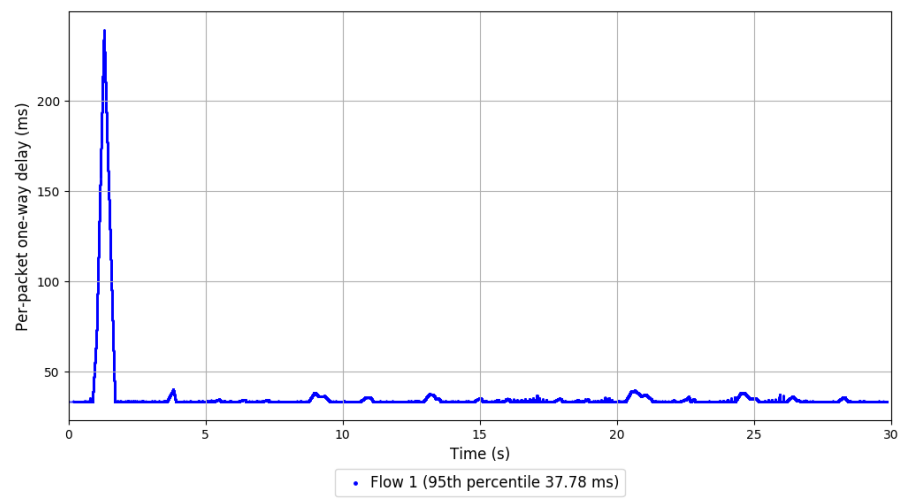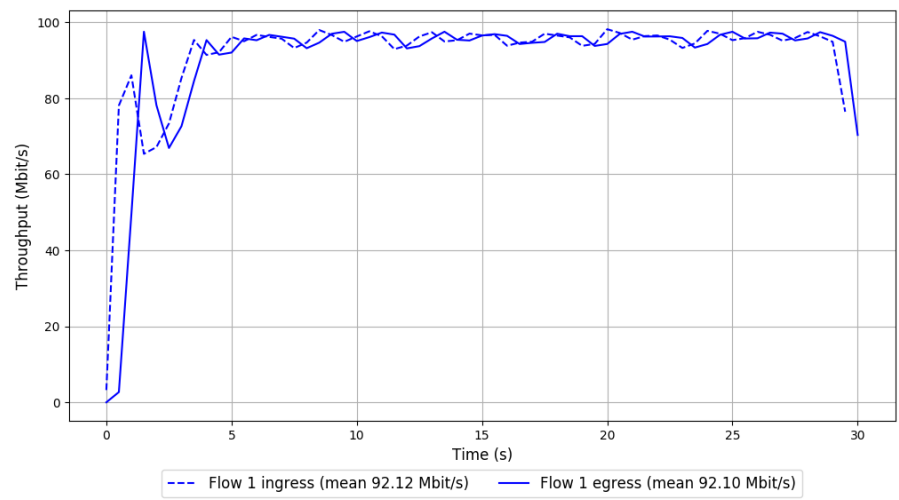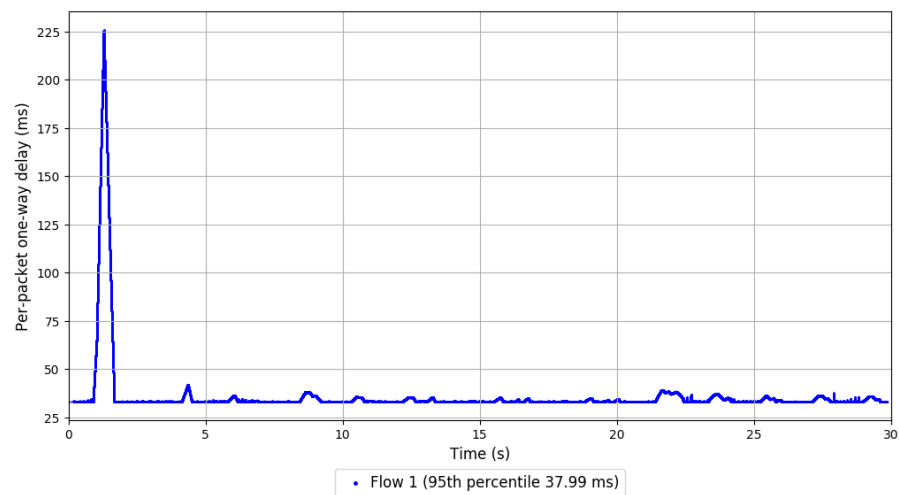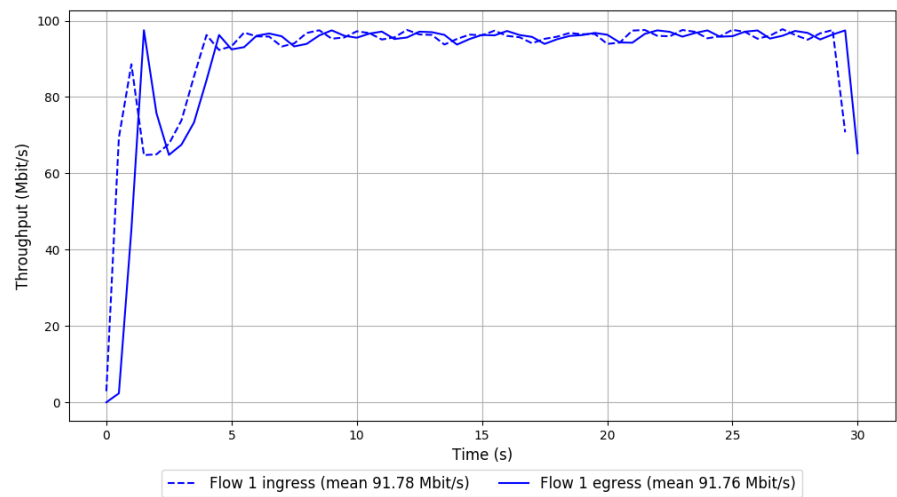
Run 4: Report of PCC-Allegro — Data Link

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-01-25 12:33:10
End at: 2019-01-25 12:33:40
Local clock offset: 1.275 ms
Remote clock offset: -1.521 ms


# Below is generated by plot.py at 2019-01-25 12:58:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.03 Mbit/s
95th percentile per-packet one-way delay: 46.758 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 92.03 Mbit/s
95th percentile per-packet one-way delay: 46.758 ms
Loss rate: 0.25%
```
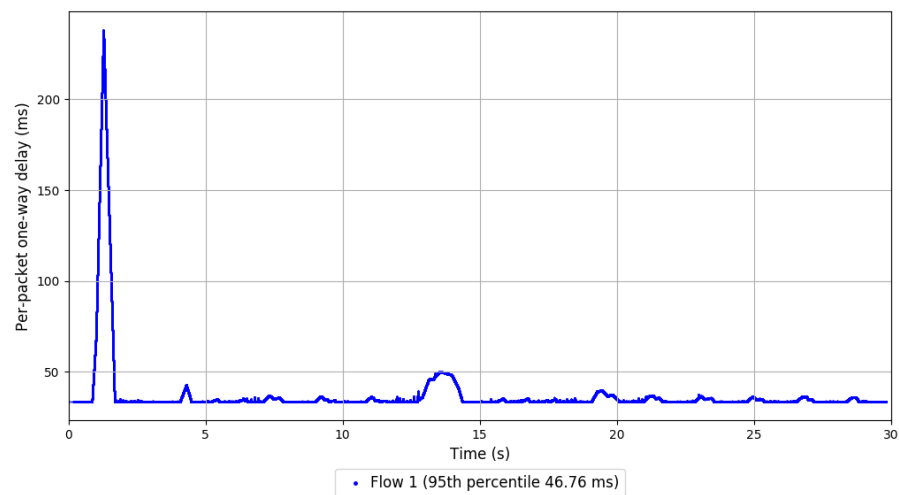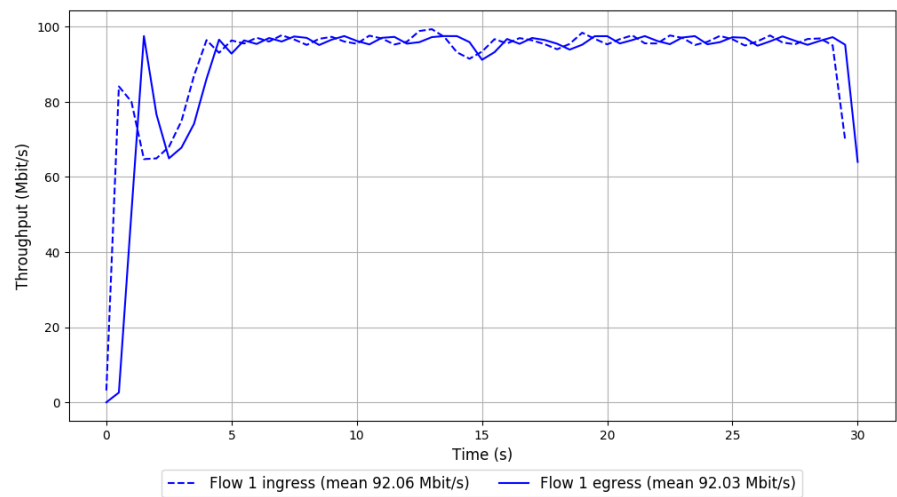
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 92.06 Mbit/s) --- Flow 1 egress (mean 92.03 Mbit/s)
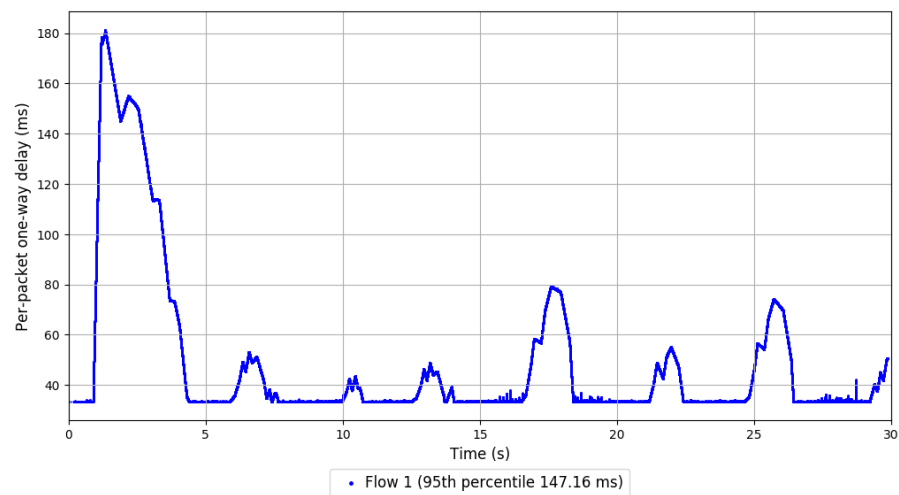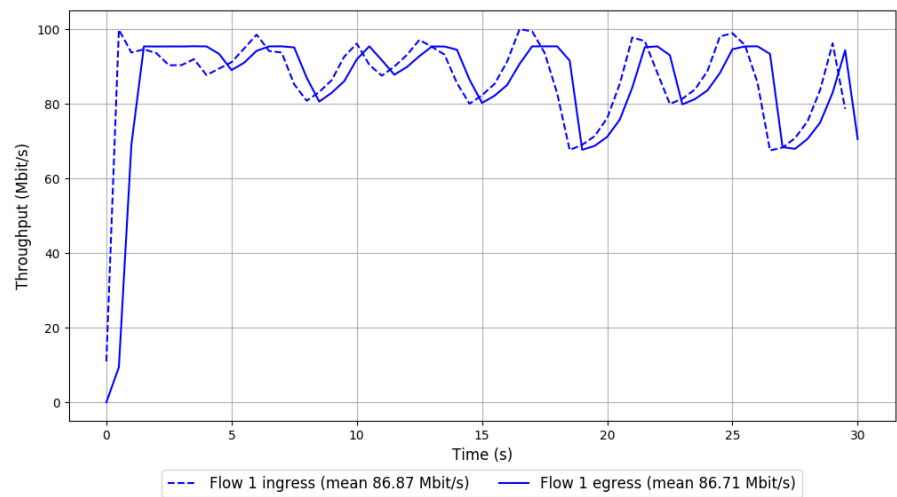

Flow 1 (95th percentile 46.76 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2019-01-25 10:53:57
End at: 2019-01-25 10:54:27
Local clock offset: -3.485 ms
Remote clock offset: -3.02 ms


# Below is generated by plot.py at 2019-01-25 12:59:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.71 Mbit/s
95th percentile per-packet one-way delay: 147.164 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 86.71 Mbit/s
95th percentile per-packet one-way delay: 147.164 ms
Loss rate: 0.40%
```

Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 86.87 Mbit/s) — — —   Flow 1 egress (mean 86.71 Mbit/s) ————

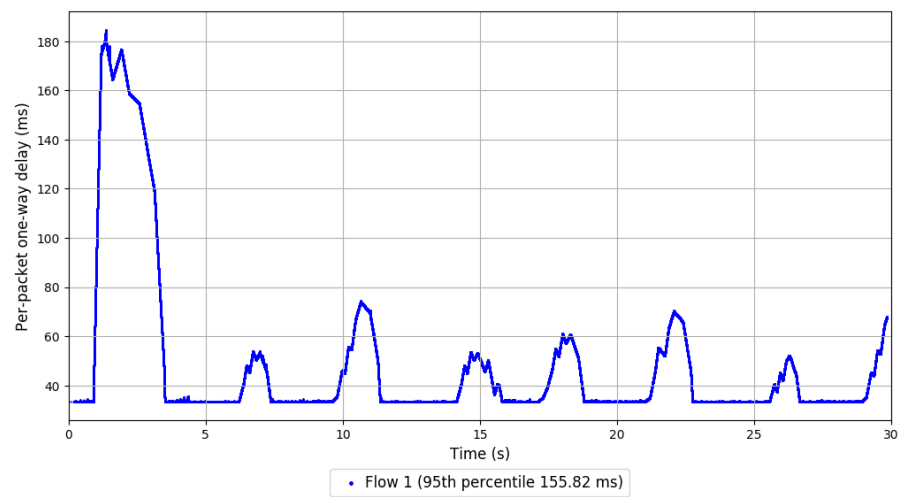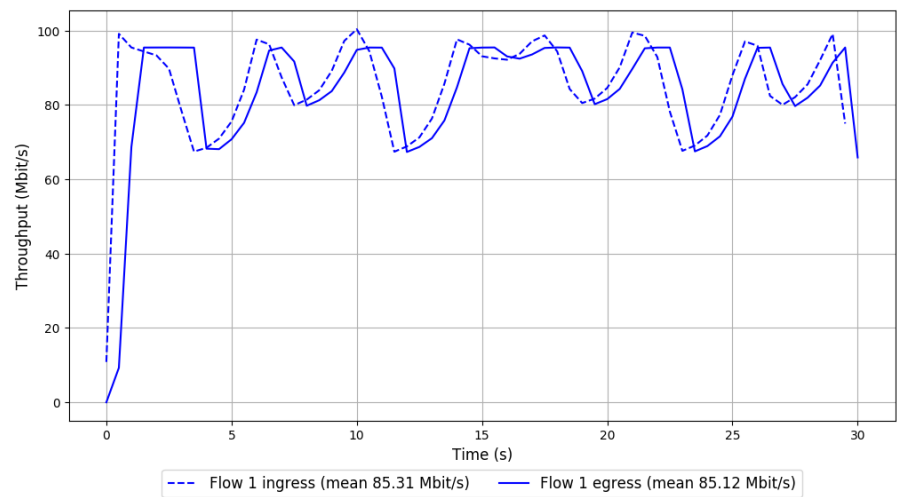
• Flow 1 (95th percentile 147.16 ms)

```
Run 2: Statistics of PCC-Expr

Start at: 2019-01-25 11:19:51
End at: 2019-01-25 11:20:21
Local clock offset: -4.733 ms
Remote clock offset: -2.147 ms


# Below is generated by plot.py at 2019-01-25 12:59:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.12 Mbit/s
95th percentile per-packet one-way delay: 155.820 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 85.12 Mbit/s
95th percentile per-packet one-way delay: 155.820 ms
Loss rate: 0.44%
```

Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 85.31 Mbit/s)   Flow 1 egress (mean 85.12 Mbit/s)
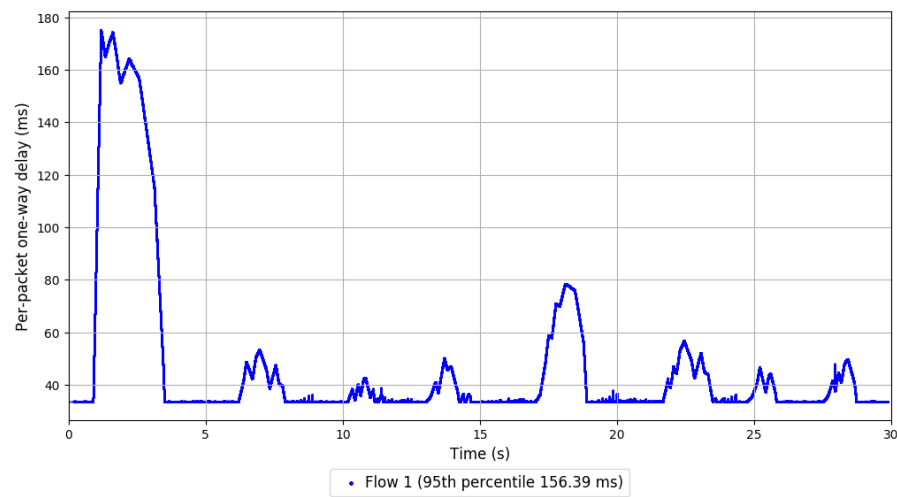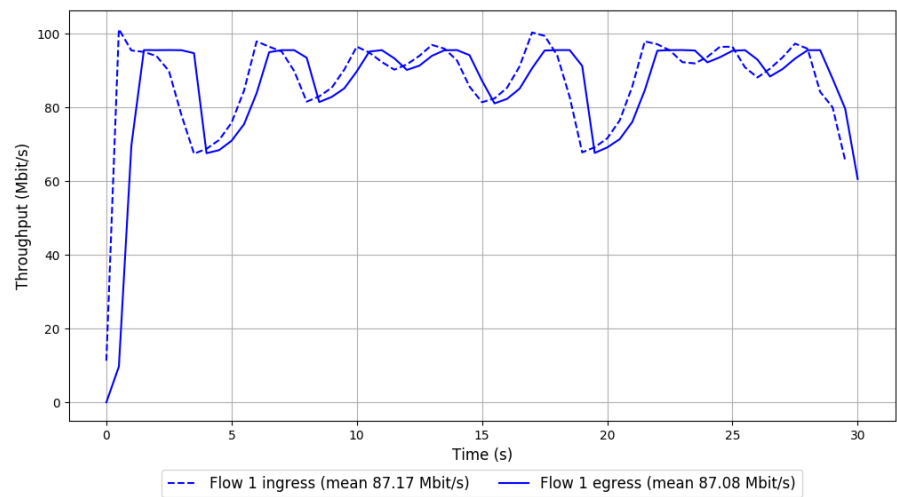

Flow 1 (95th percentile 155.82 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2019-01-25 11:45:05
End at: 2019-01-25 11:45:35
Local clock offset: -2.757 ms
Remote clock offset: -1.757 ms


# Below is generated by plot.py at 2019-01-25 12:59:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.08 Mbit/s
95th percentile per-packet one-way delay: 156.392 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 87.08 Mbit/s
95th percentile per-packet one-way delay: 156.392 ms
Loss rate: 0.32%
```

Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 87.17 Mbit/s) ----   Flow 1 egress (mean 87.08 Mbit/s) ——

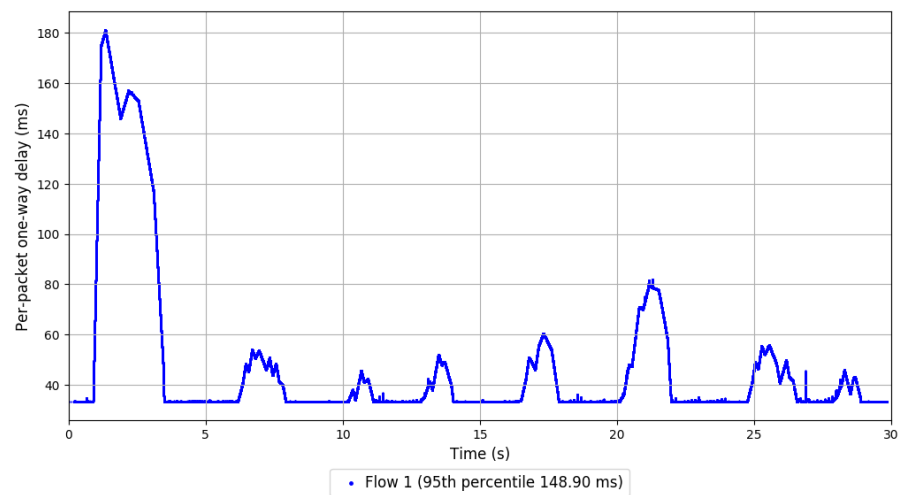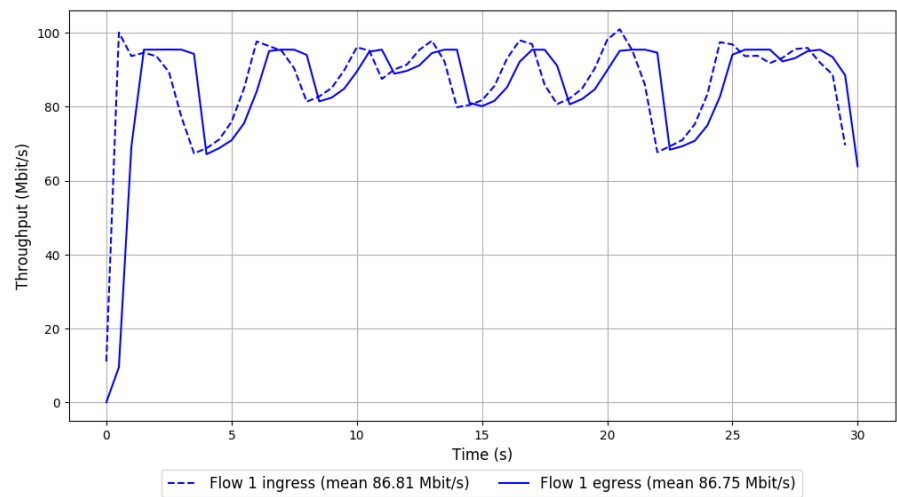
• Flow 1 (95th percentile 156.39 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2019-01-25 12:10:17
End at: 2019-01-25 12:10:47
Local clock offset: 0.071 ms
Remote clock offset: -1.472 ms


# Below is generated by plot.py at 2019-01-25 13:00:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.75 Mbit/s
95th percentile per-packet one-way delay: 148.902 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 86.75 Mbit/s
95th percentile per-packet one-way delay: 148.902 ms
Loss rate: 0.28%
```

Run 4: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 86.81 Mbit/s)   Flow 1 egress (mean 86.75 Mbit/s)
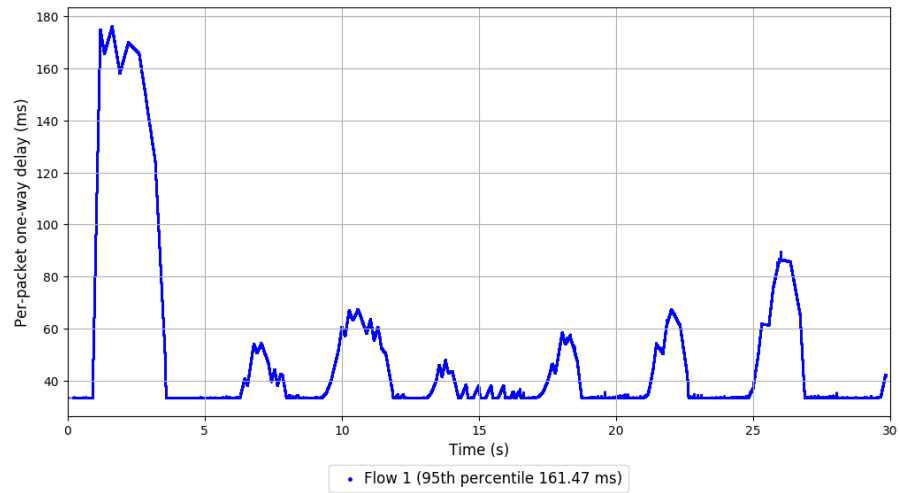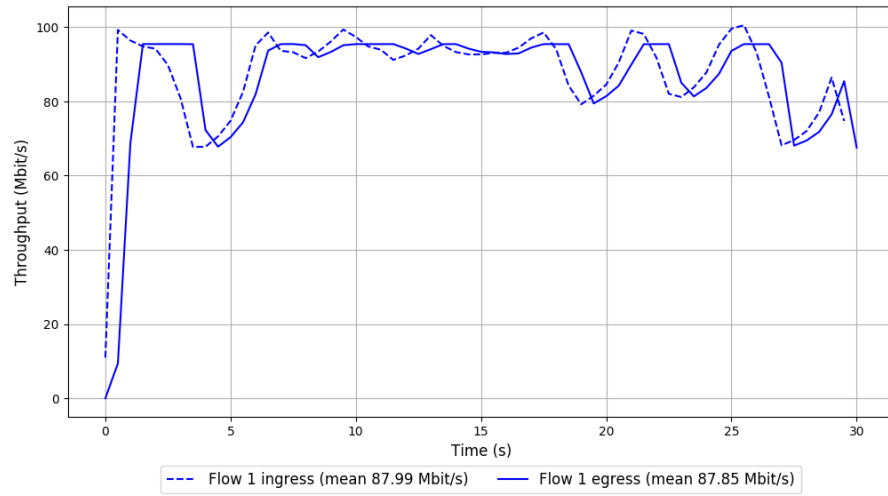

Flow 1 (95th percentile 148.90 ms)

```
Run 5: Statistics of PCC-Expr

Start at: 2019-01-25 12:35:29
End at: 2019-01-25 12:35:59
Local clock offset: 1.105 ms
Remote clock offset: -1.508 ms


# Below is generated by plot.py at 2019-01-25 13:00:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.85 Mbit/s
95th percentile per-packet one-way delay: 161.474 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 87.85 Mbit/s
95th percentile per-packet one-way delay: 161.474 ms
Loss rate: 0.37%
```

Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 87.99 Mbit/s) ----- Flow 1 egress (mean 87.85 Mbit/s) ———

• Flow 1 (95th percentile 161.47 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-25 10:58:55
End at: 2019-01-25 10:59:25
Local clock offset: -3.784 ms
Remote clock offset: -2.827 ms


# Below is generated by plot.py at 2019-01-25 13:00:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.66 Mbit/s
95th percentile per-packet one-way delay: 51.512 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 76.66 Mbit/s
95th percentile per-packet one-way delay: 51.512 ms
Loss rate: 0.31%
```
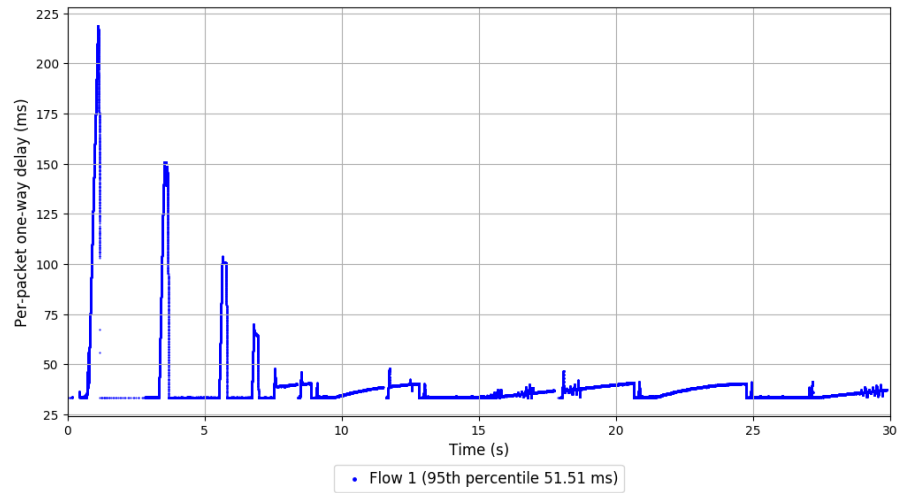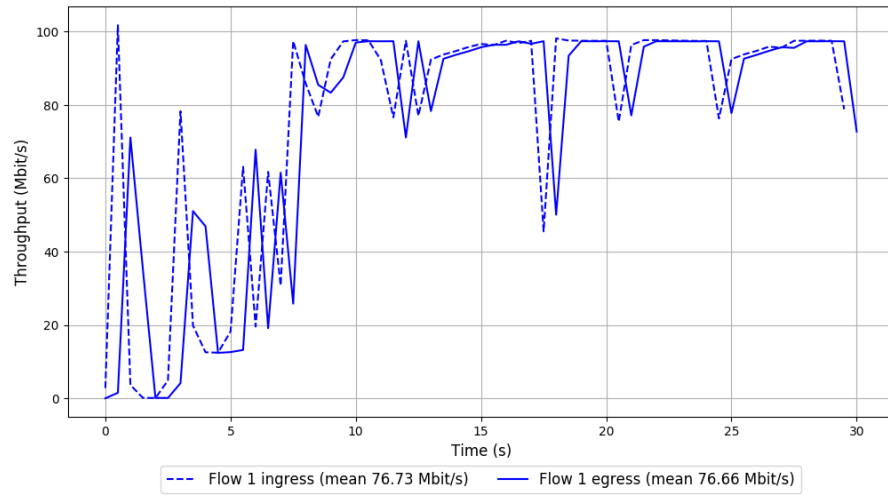
Run 1: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 76.73 Mbit/s)   Flow 1 egress (mean 76.66 Mbit/s)
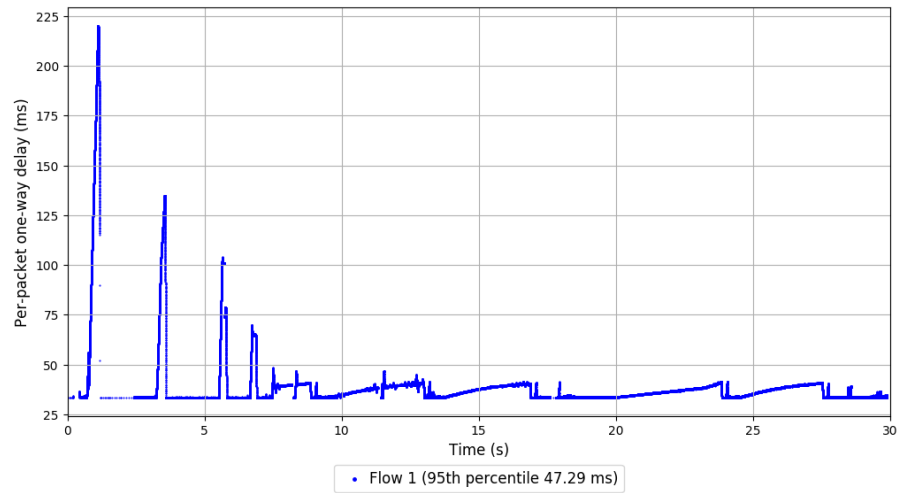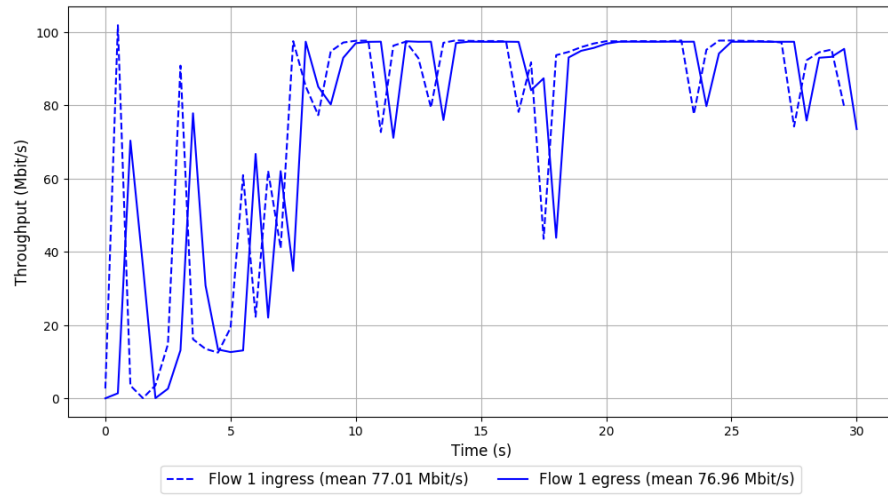

Flow 1 (95th percentile 51.51 ms)

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-01-25 11:24:29
End at: 2019-01-25 11:24:59
Local clock offset: -4.922 ms
Remote clock offset: -1.963 ms


# Below is generated by plot.py at 2019-01-25 13:00:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.96 Mbit/s
95th percentile per-packet one-way delay: 47.290 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 76.96 Mbit/s
95th percentile per-packet one-way delay: 47.290 ms
Loss rate: 0.28%
```

Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 77.01 Mbit/s) ----- Flow 1 egress (mean 76.96 Mbit/s)

Flow 1 (95th percentile 47.29 ms)

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-01-25 11:49:46
End at: 2019-01-25 11:50:16
Local clock offset: -2.544 ms
Remote clock offset: -1.506 ms


# Below is generated by plot.py at 2019-01-25 13:00:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.37 Mbit/s
95th percentile per-packet one-way delay: 52.186 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 74.37 Mbit/s
95th percentile per-packet one-way delay: 52.186 ms
Loss rate: 0.30%
```
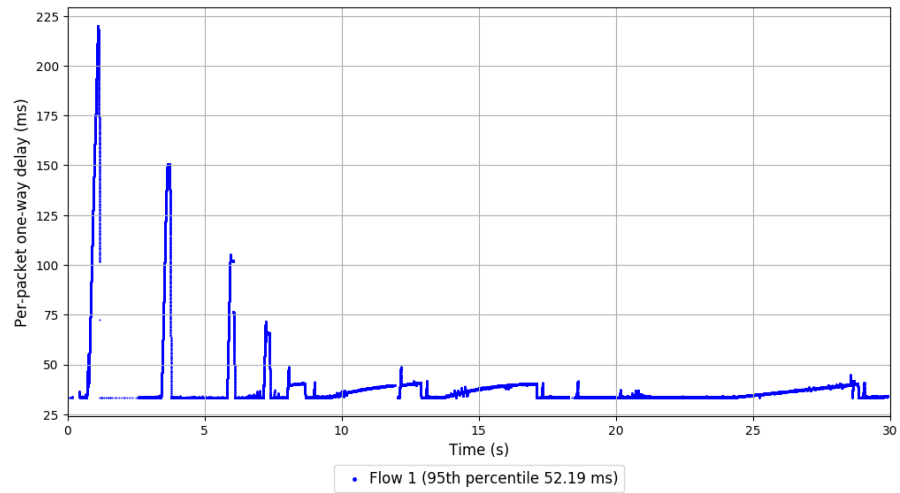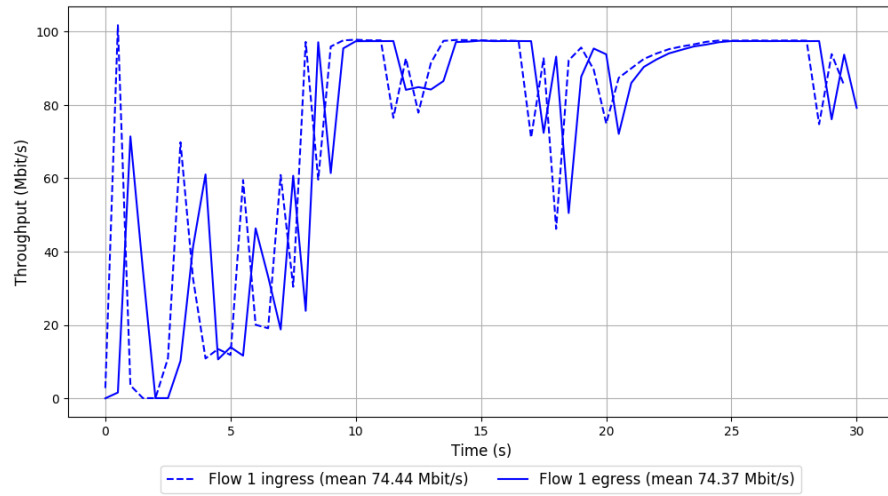
Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-01-25 12:15:03
End at: 2019-01-25 12:15:33
Local clock offset: 0.609 ms
Remote clock offset: -1.492 ms


# Below is generated by plot.py at 2019-01-25 13:00:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.81 Mbit/s
95th percentile per-packet one-way delay: 50.361 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 76.81 Mbit/s
95th percentile per-packet one-way delay: 50.361 ms
Loss rate: 0.28%
```
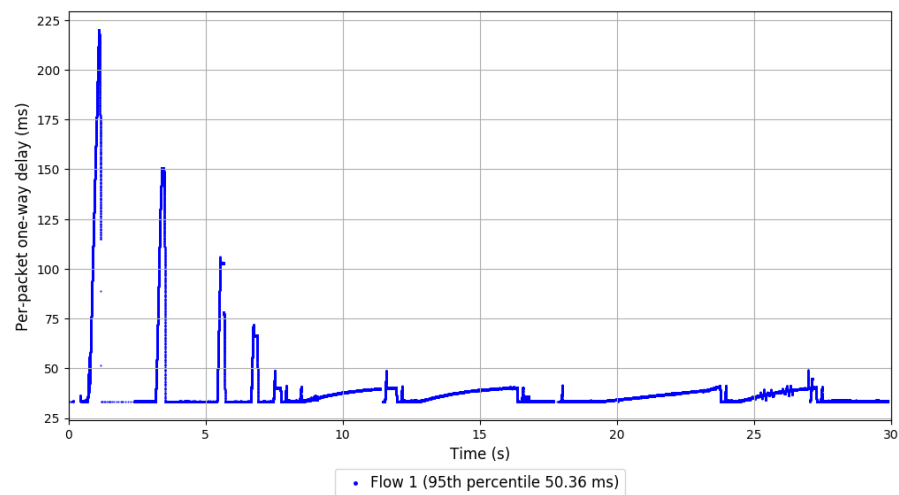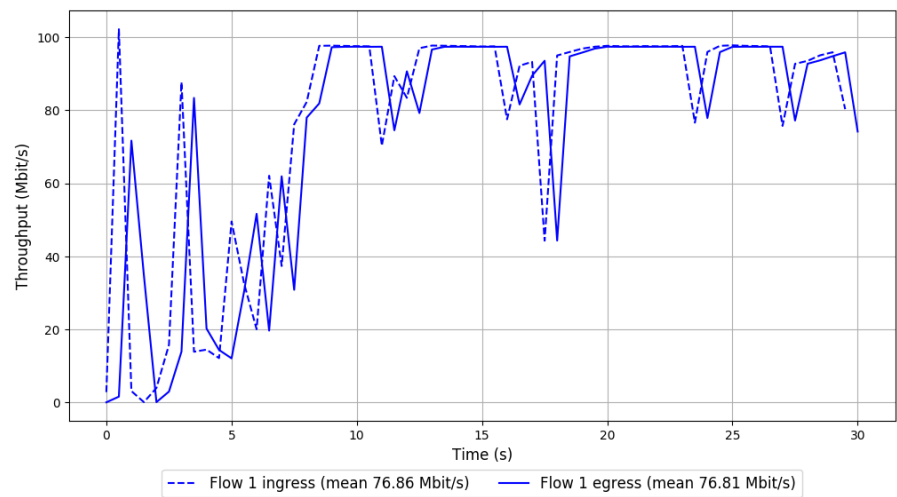
Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 76.86 Mbit/s) ---- Flow 1 egress (mean 76.81 Mbit/s)

Flow 1 (95th percentile 50.36 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-01-25 12:40:07
End at: 2019-01-25 12:40:37
Local clock offset: 0.913 ms
Remote clock offset: -1.686 ms


# Below is generated by plot.py at 2019-01-25 13:00:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.91 Mbit/s
95th percentile per-packet one-way delay: 40.651 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 84.91 Mbit/s
95th percentile per-packet one-way delay: 40.651 ms
Loss rate: 0.26%
```
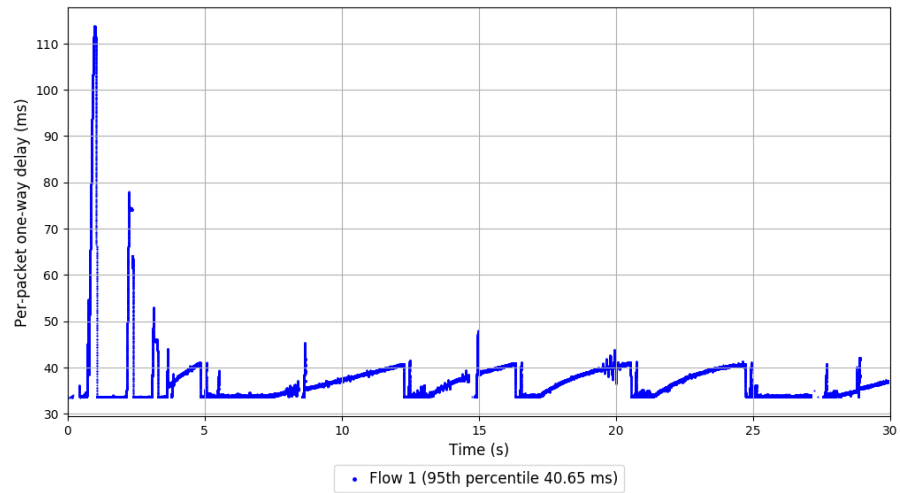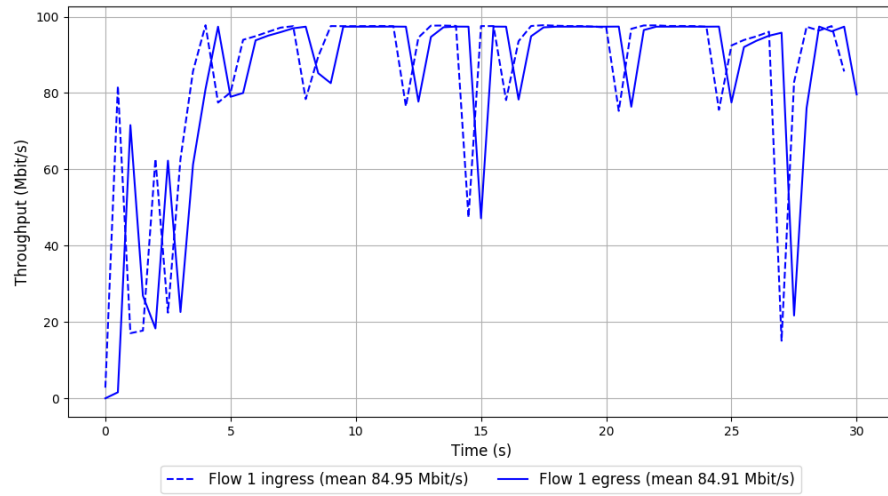
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 84.95 Mbit/s) ----- Flow 1 egress (mean 84.91 Mbit/s)
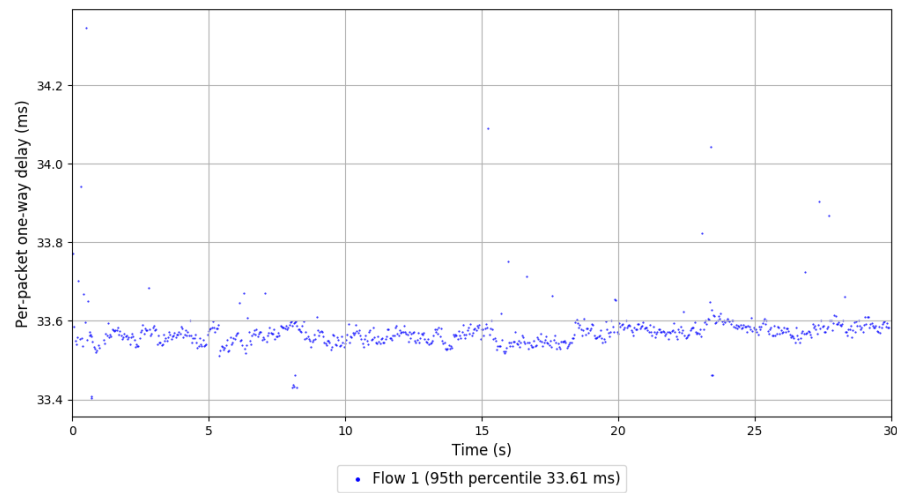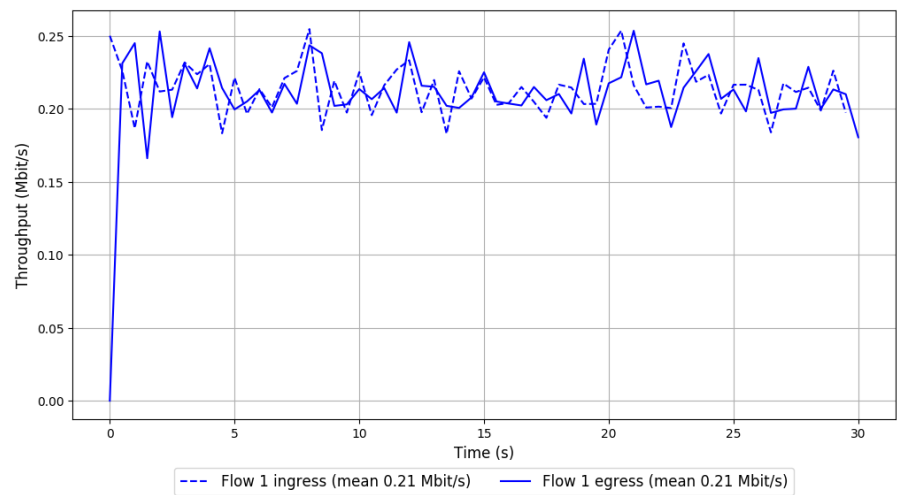

Flow 1 (95th percentile 40.65 ms)

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```
Run 1: Statistics of SCReAM

Start at: 2019-01-25 10:50:29
End at: 2019-01-25 10:50:59
Local clock offset: -3.253 ms
Remote clock offset: -3.077 ms


# Below is generated by plot.py at 2019-01-25 13:00:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.606 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.606 ms
Loss rate: 0.26%
```

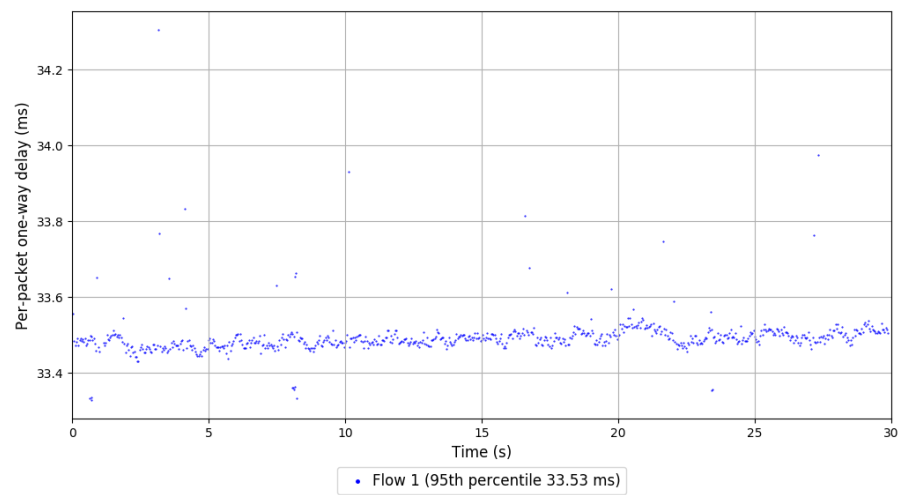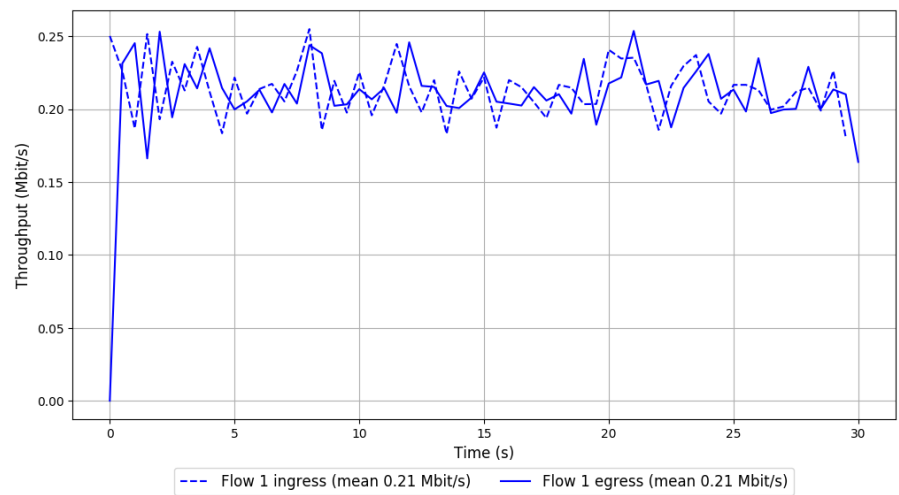# Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2019-01-25 11:16:23
End at: 2019-01-25 11:16:53
Local clock offset: -4.586 ms
Remote clock offset: -2.226 ms


# Below is generated by plot.py at 2019-01-25 13:00:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.527 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.527 ms
Loss rate: 0.26%
```

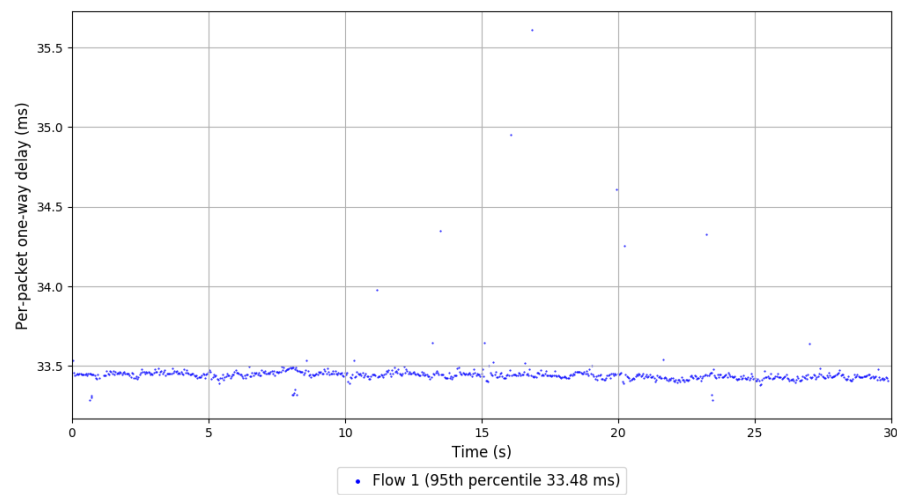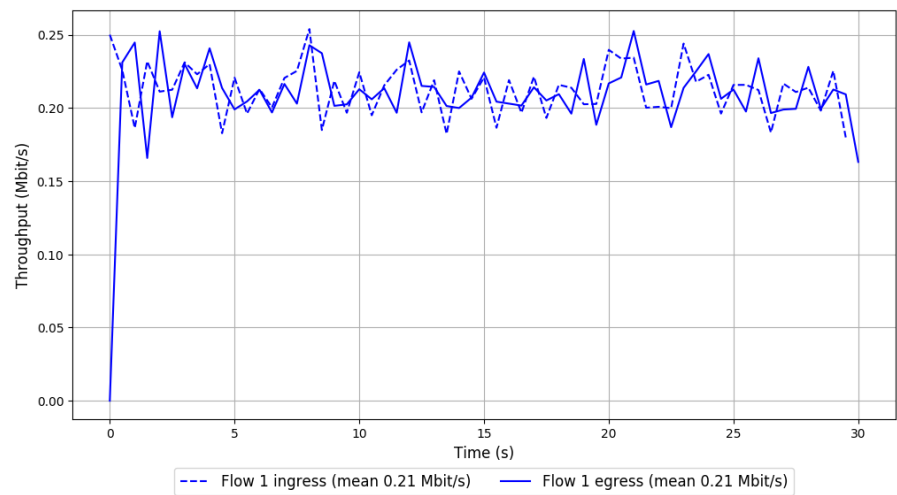Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-01-25 11:41:37
End at: 2019-01-25 11:42:07
Local clock offset: -2.991 ms
Remote clock offset: -1.518 ms


# Below is generated by plot.py at 2019-01-25 13:00:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.480 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.480 ms
Loss rate: 0.26%
```
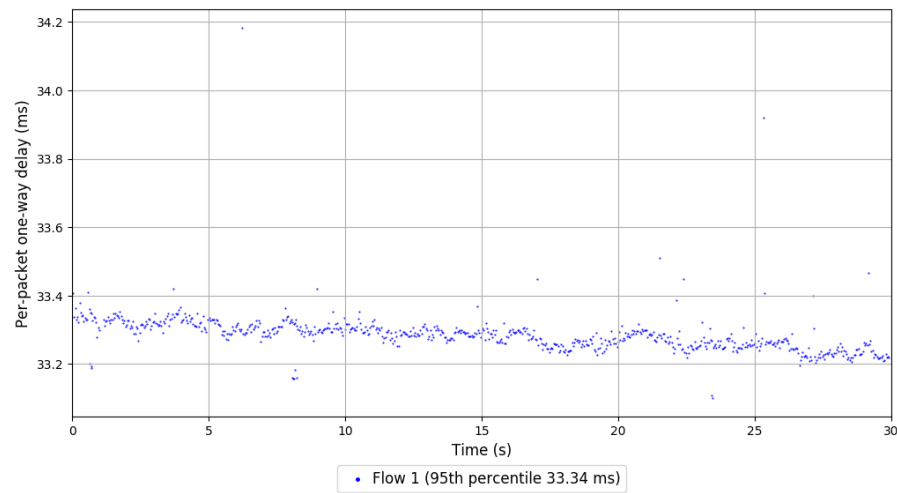
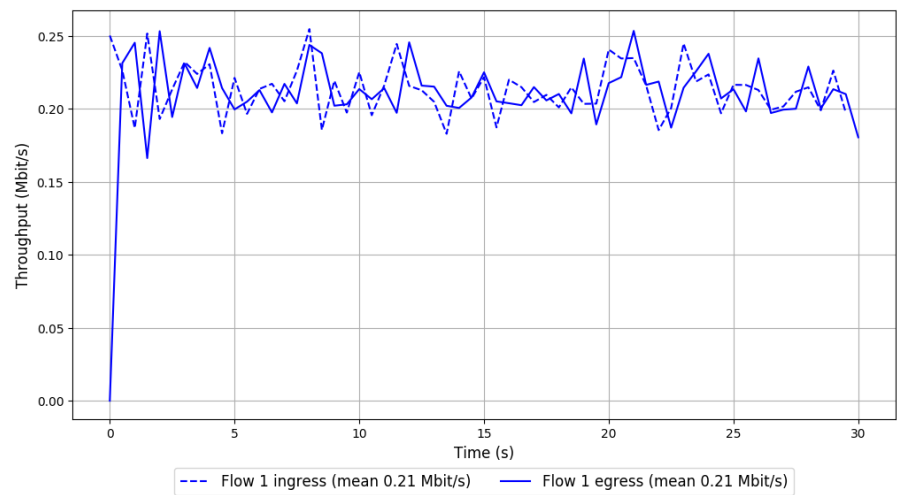# Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-01-25 12:06:52
End at: 2019-01-25 12:07:22
Local clock offset: -0.469 ms
Remote clock offset: -1.501 ms


# Below is generated by plot.py at 2019-01-25 13:00:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.342 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.342 ms
Loss rate: 0.26%
```
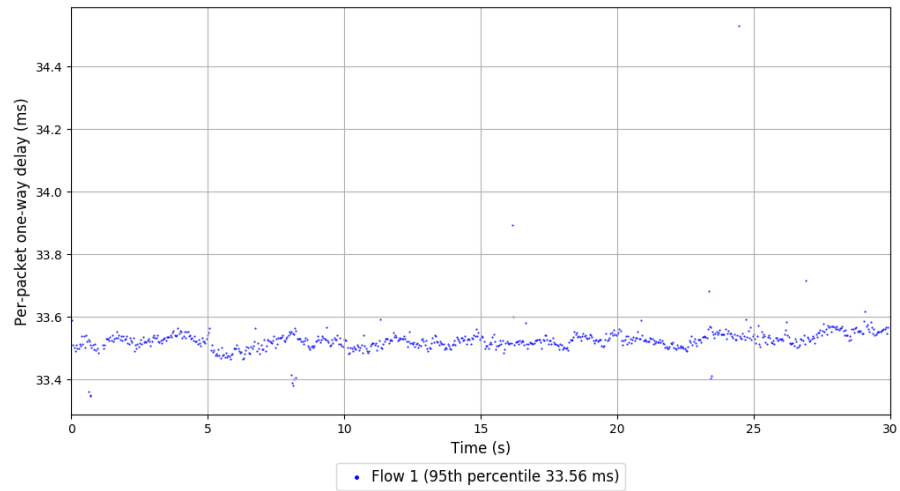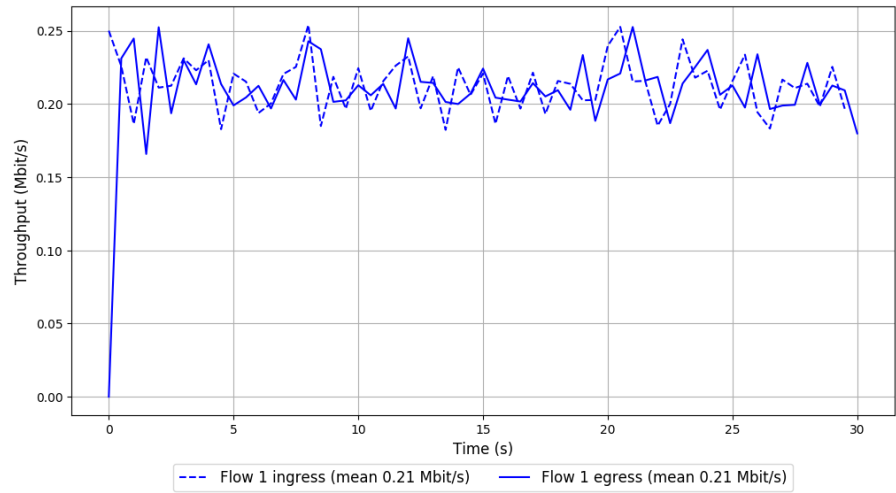
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-01-25 12:32:04
End at: 2019-01-25 12:32:34
Local clock offset: 1.344 ms
Remote clock offset: -1.492 ms


# Below is generated by plot.py at 2019-01-25 13:00:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.562 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.562 ms
Loss rate: 0.26%
```

Run 5: Report of SCReAM — Data Link

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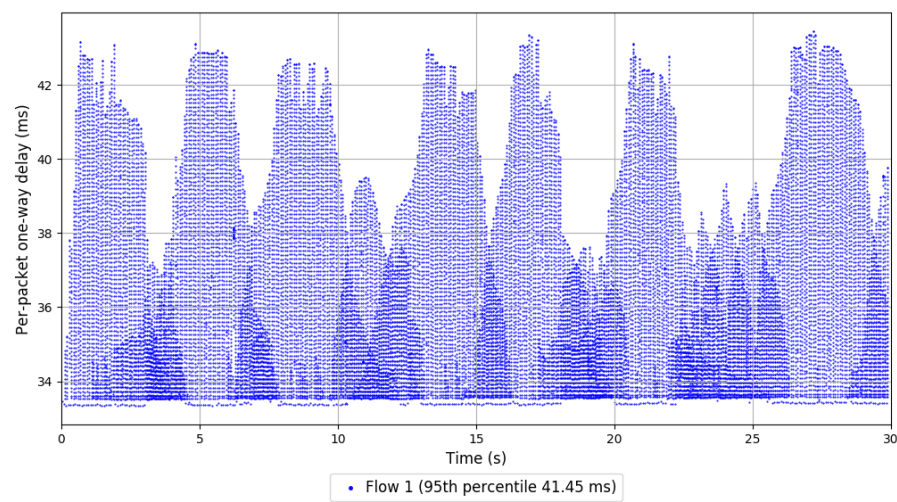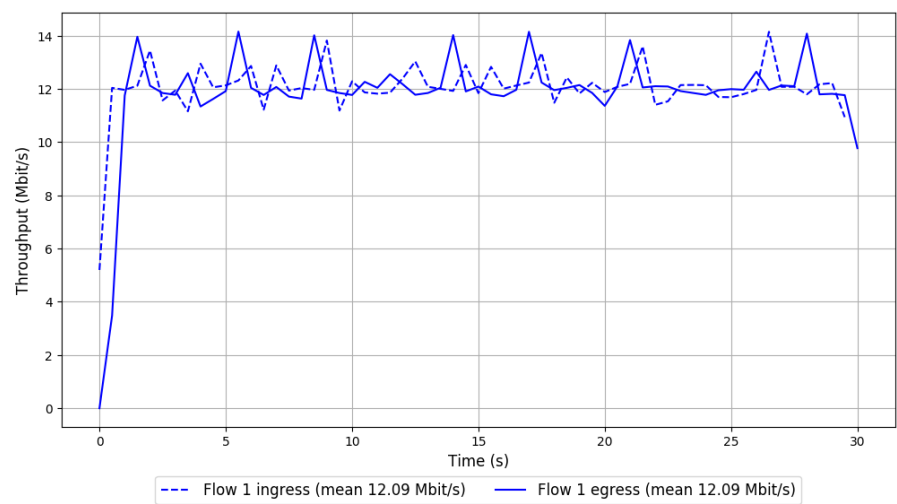

Flow 1 (95th percentile 33.56 ms)

```
Run 1: Statistics of Sprout

Start at: 2019-01-25 10:57:48
End at: 2019-01-25 10:58:18
Local clock offset: -3.695 ms
Remote clock offset: -2.886 ms


# Below is generated by plot.py at 2019-01-25 13:00:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.09 Mbit/s
95th percentile per-packet one-way delay: 41.446 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 12.09 Mbit/s
95th percentile per-packet one-way delay: 41.446 ms
Loss rate: 0.27%
```

Run 1: Report of Sprout — Data Link

Flow 1 ingress (mean 12.09 Mbit/s) ----   Flow 1 egress (mean 12.09 Mbit/s) ——
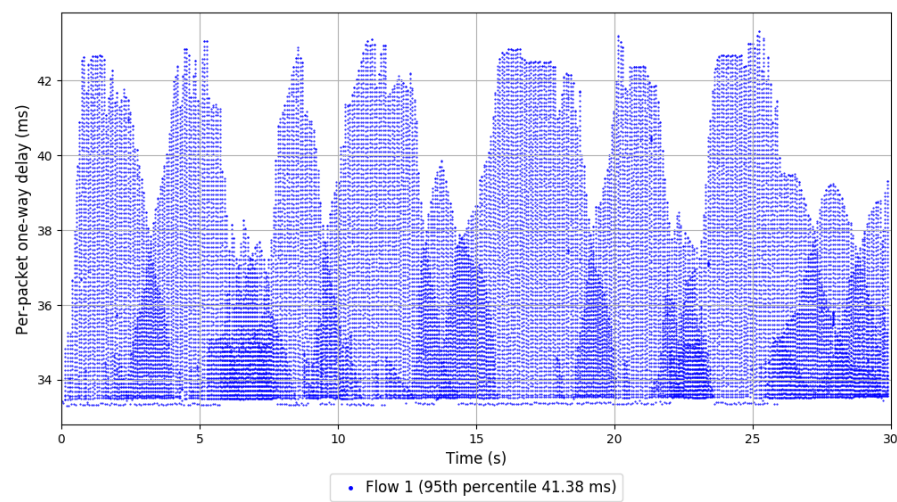
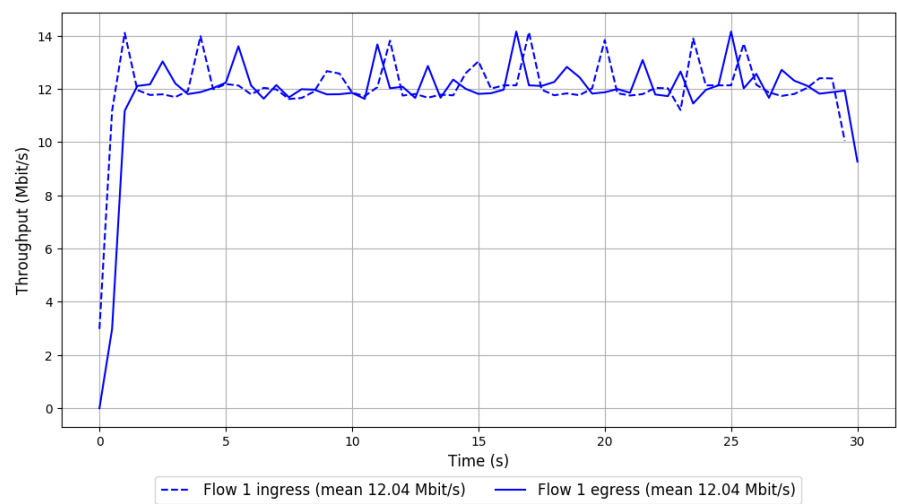

• Flow 1 (95th percentile 41.45 ms)

```
Run 2: Statistics of Sprout

Start at: 2019-01-25 11:23:23
End at: 2019-01-25 11:23:53
Local clock offset: -4.874 ms
Remote clock offset: -1.983 ms


# Below is generated by plot.py at 2019-01-25 13:00:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.04 Mbit/s
95th percentile per-packet one-way delay: 41.385 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 12.04 Mbit/s
95th percentile per-packet one-way delay: 41.385 ms
Loss rate: 0.27%
```

Run 2: Report of Sprout — Data Link

Flow 1 ingress (mean 12.04 Mbit/s) ----   Flow 1 egress (mean 12.04 Mbit/s) ——

• Flow 1 (95th percentile 41.38 ms)
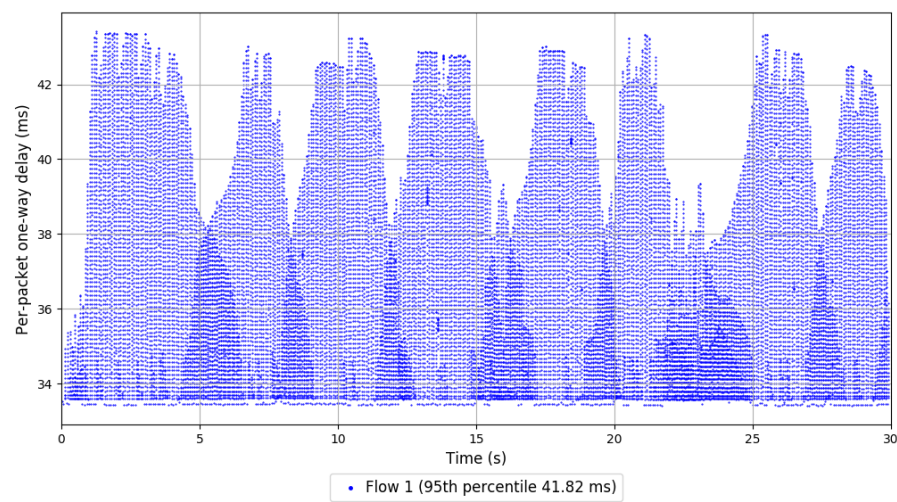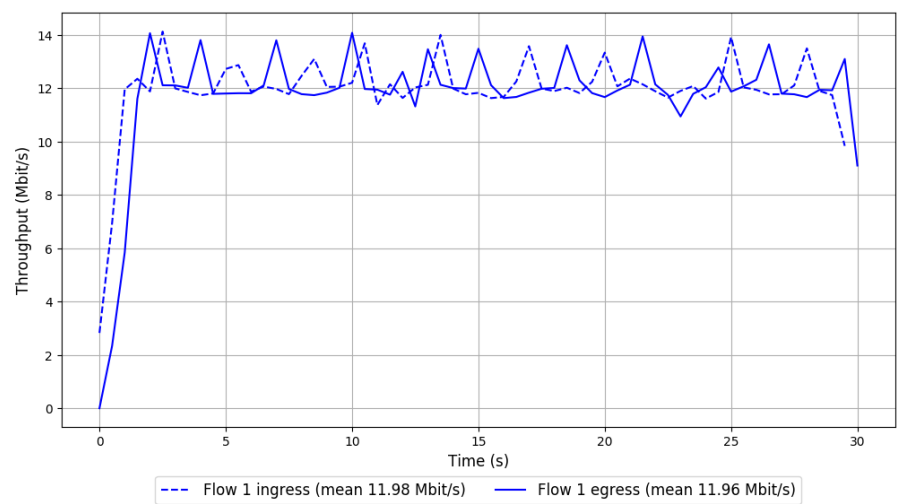
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```
Run 3: Statistics of Sprout

Start at: 2019-01-25 11:48:40
End at: 2019-01-25 11:49:10
Local clock offset: -2.567 ms
Remote clock offset: -1.645 ms


# Below is generated by plot.py at 2019-01-25 13:00:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.96 Mbit/s
95th percentile per-packet one-way delay: 41.819 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 11.96 Mbit/s
95th percentile per-packet one-way delay: 41.819 ms
Loss rate: 0.19%
```

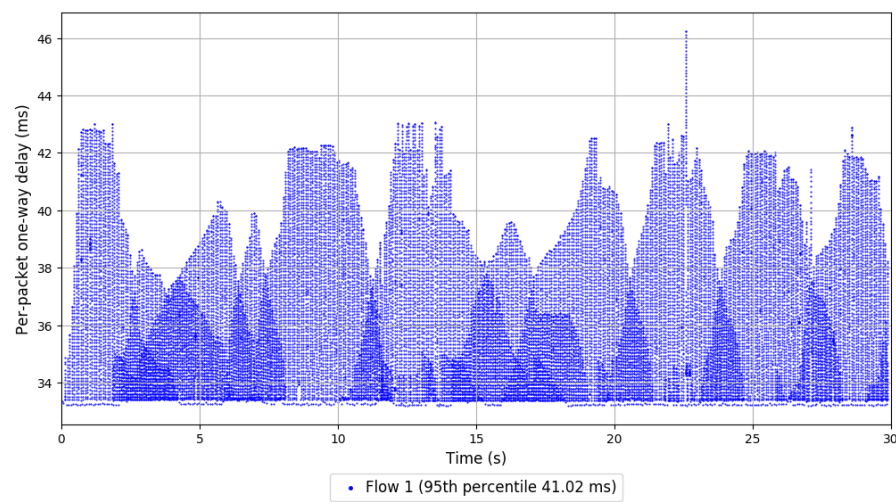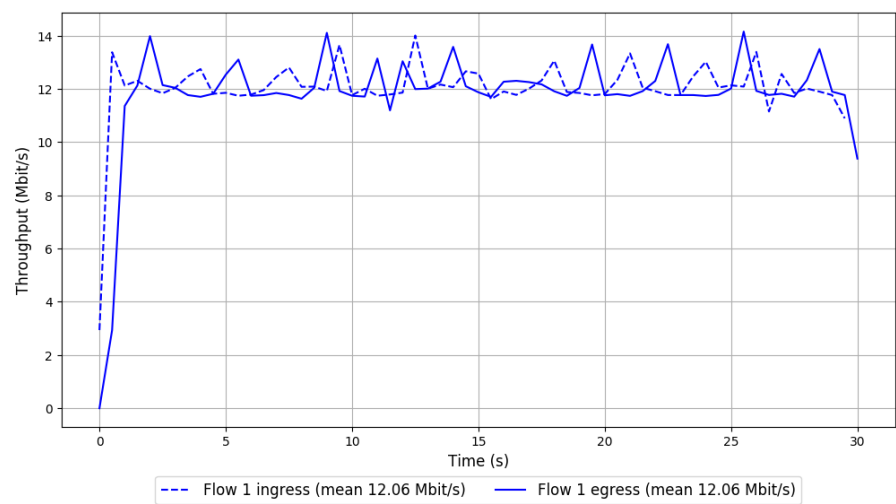Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-01-25 12:13:57
End at: 2019-01-25 12:14:27
Local clock offset: 0.496 ms
Remote clock offset: -1.438 ms


# Below is generated by plot.py at 2019-01-25 13:00:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.06 Mbit/s
95th percentile per-packet one-way delay: 41.020 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 12.06 Mbit/s
95th percentile per-packet one-way delay: 41.020 ms
Loss rate: 0.21%
```
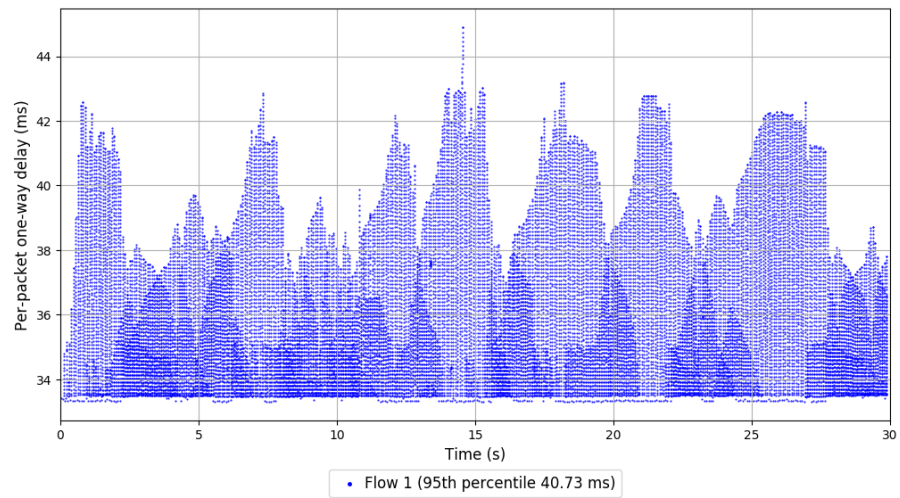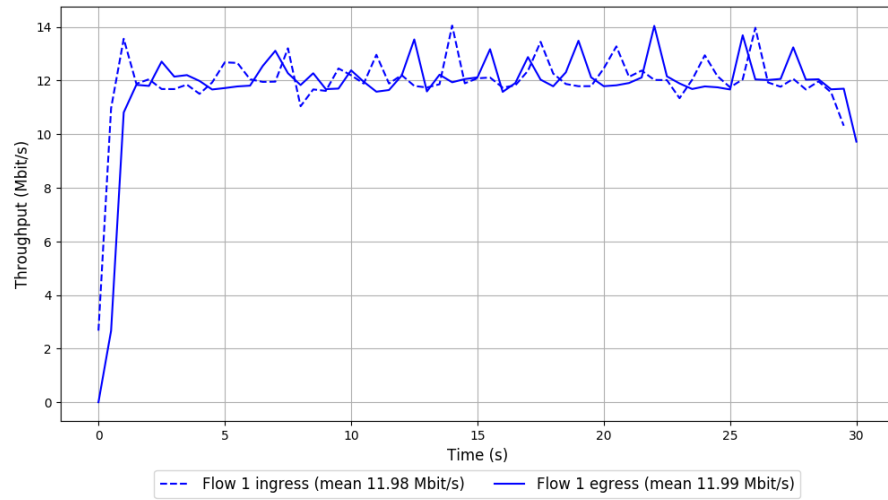
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2019-01-25 12:39:01
End at: 2019-01-25 12:39:31
Local clock offset: 0.939 ms
Remote clock offset: -1.525 ms


# Below is generated by plot.py at 2019-01-25 13:00:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 40.729 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 40.729 ms
Loss rate: 0.10%
```

Run 5: Report of Sprout — Data Link

Flow 1 ingress (mean 11.98 Mbit/s) --- Flow 1 egress (mean 11.99 Mbit/s)
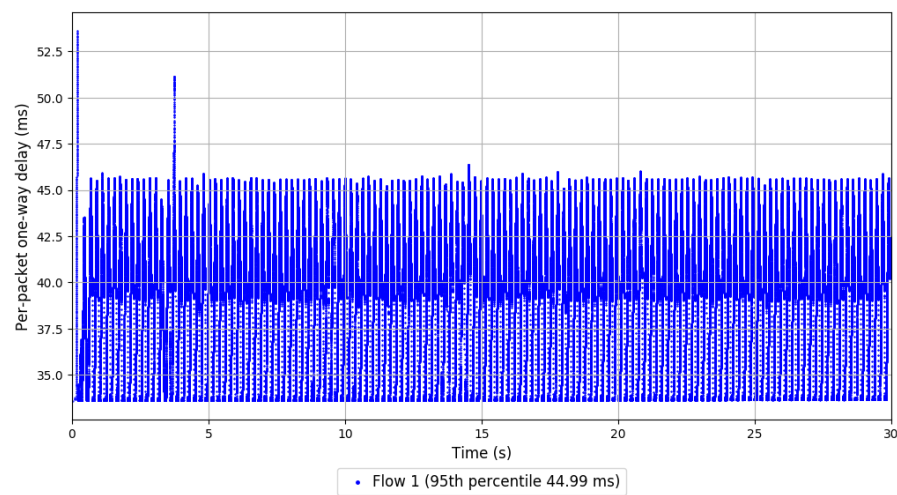
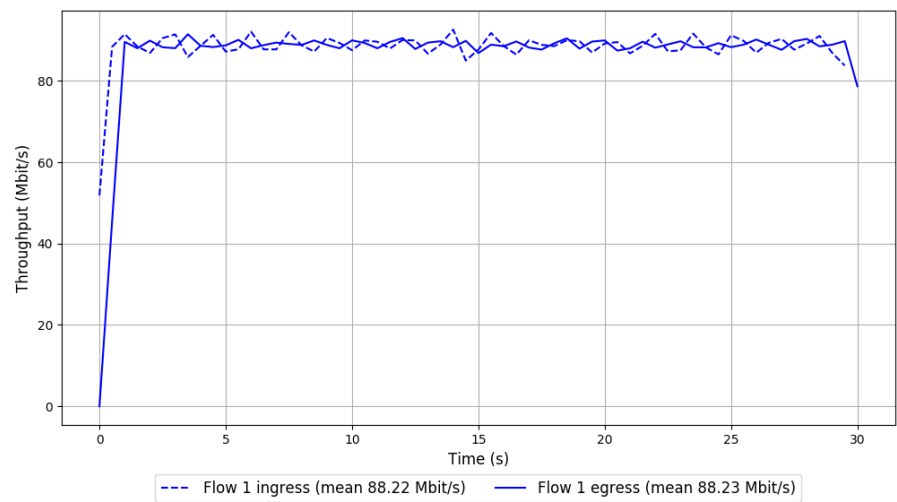

• Flow 1 (95th percentile 40.73 ms)

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

Start at: 2019-01-25 11:05:10
End at: 2019-01-25 11:05:40
Local clock offset: -4.087 ms
Remote clock offset: -2.83 ms

# Below is generated by plot.py at 2019-01-25 13:01:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.23 Mbit/s
95th percentile per-packet one-way delay: 44.990 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 88.23 Mbit/s
95th percentile per-packet one-way delay: 44.990 ms
Loss rate: 0.20%
```

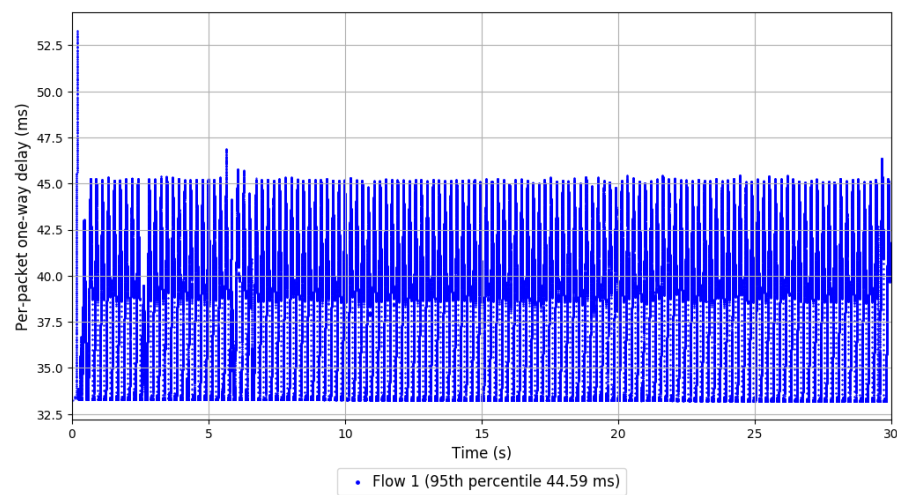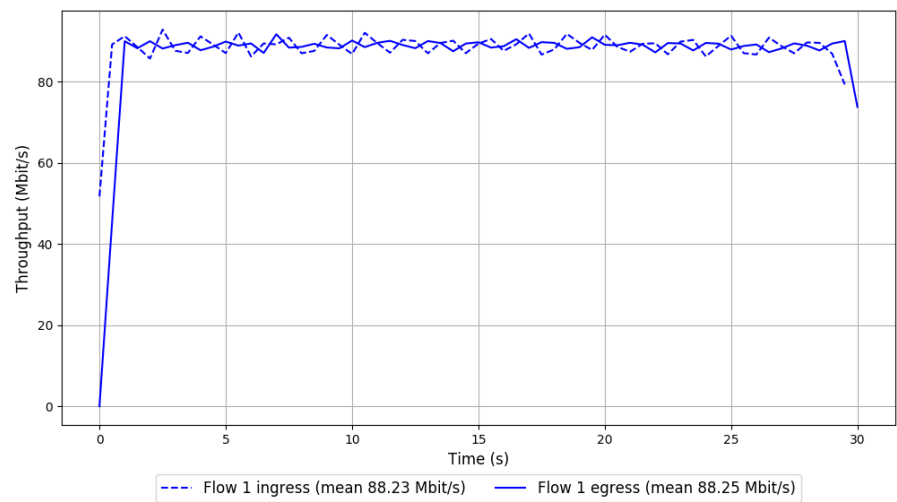Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2019-01-25 11:30:42
End at: 2019-01-25 11:31:12
Local clock offset: -4.776 ms
Remote clock offset: -1.816 ms


# Below is generated by plot.py at 2019-01-25 13:01:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.25 Mbit/s
95th percentile per-packet one-way delay: 44.595 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 88.25 Mbit/s
95th percentile per-packet one-way delay: 44.595 ms
Loss rate: 0.19%
```

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

Flow 1 ingress (mean 88.23 Mbit/s) — Flow 1 egress (mean 88.25 Mbit/s)

• Flow 1 (95th percentile 44.59 ms)

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

Start at: 2019-01-25 11:55:48
End at: 2019-01-25 11:56:18
Local clock offset: -2.38 ms
Remote clock offset: -1.572 ms


# Below is generated by plot.py at 2019-01-25 13:01:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.42 Mbit/s
95th percentile per-packet one-way delay: 44.738 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 88.42 Mbit/s
95th percentile per-packet one-way delay: 44.738 ms
Loss rate: 0.22%
```
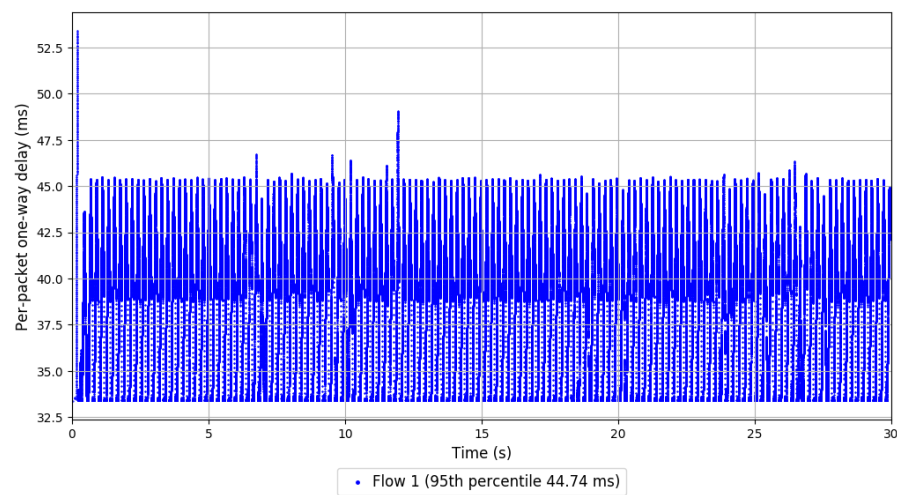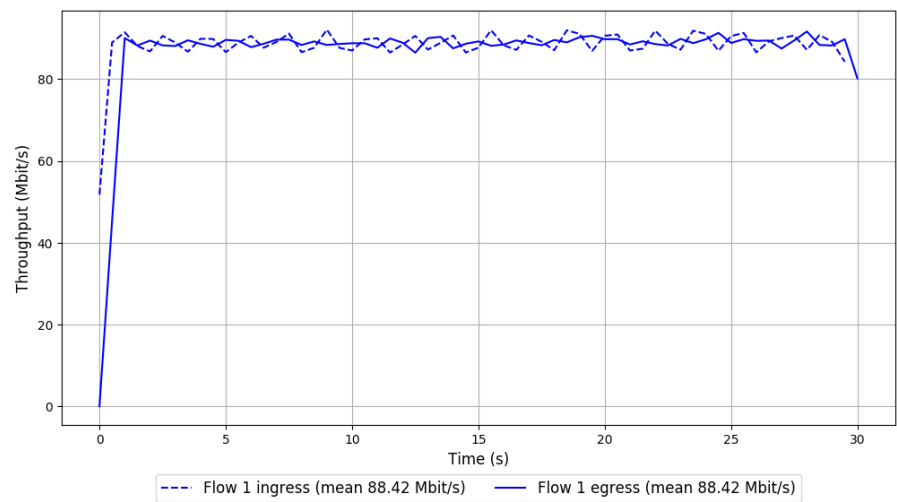
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 88.42 Mbit/s)   Flow 1 egress (mean 88.42 Mbit/s)

Flow 1 (95th percentile 44.74 ms)

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

Start at: 2019-01-25 12:21:17
End at: 2019-01-25 12:21:48
Local clock offset: 1.154 ms
Remote clock offset: -1.508 ms


# Below is generated by plot.py at 2019-01-25 13:01:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.01 Mbit/s
95th percentile per-packet one-way delay: 44.767 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 88.01 Mbit/s
95th percentile per-packet one-way delay: 44.767 ms
Loss rate: 0.20%
```
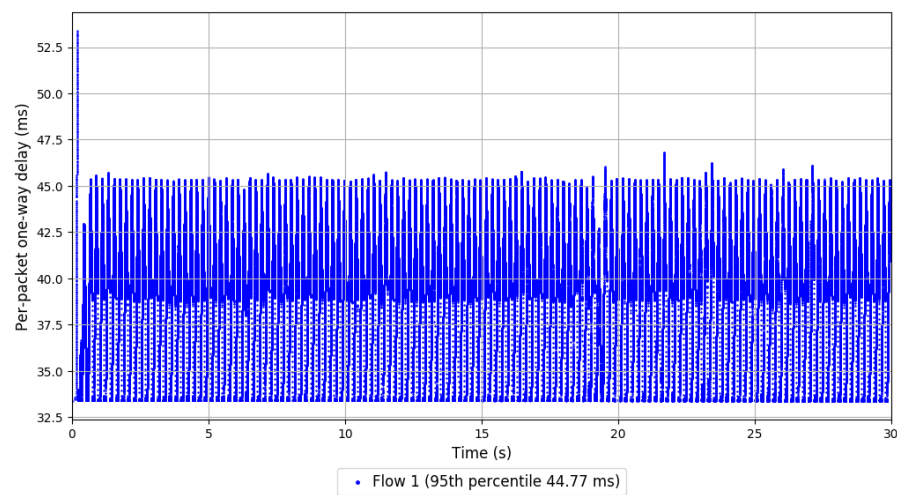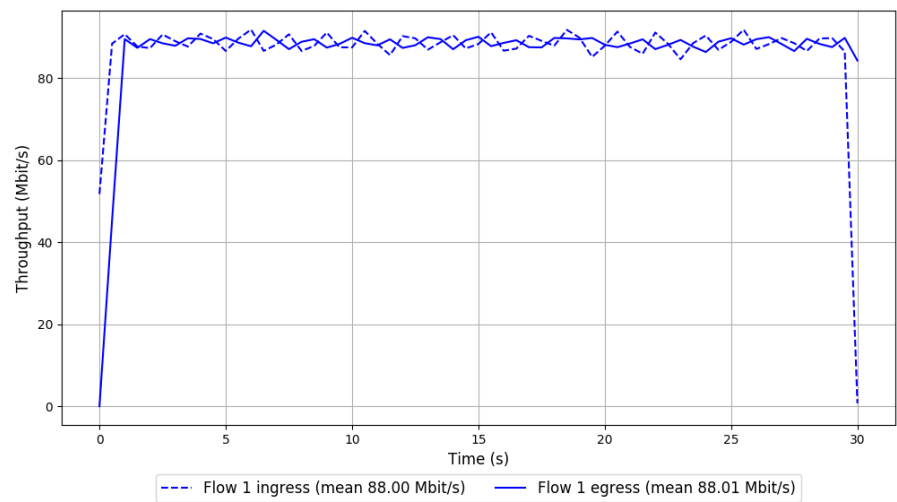
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 88.00 Mbit/s) --- Flow 1 egress (mean 88.01 Mbit/s)
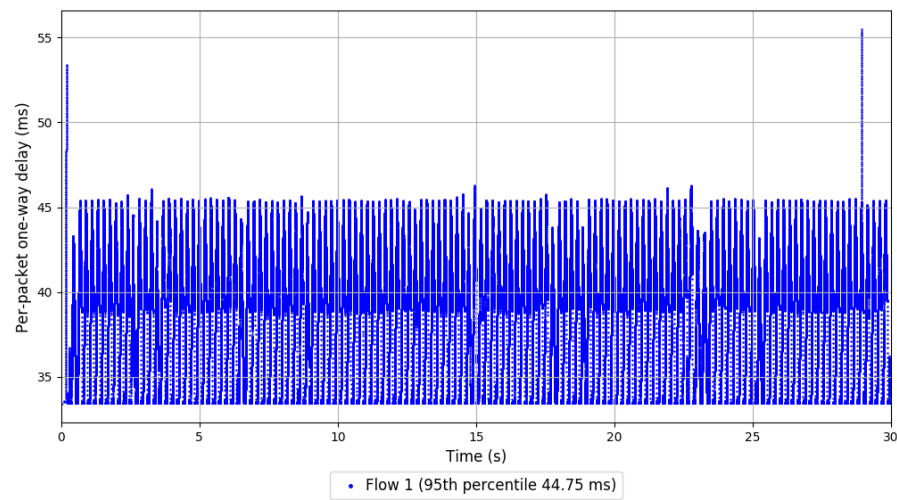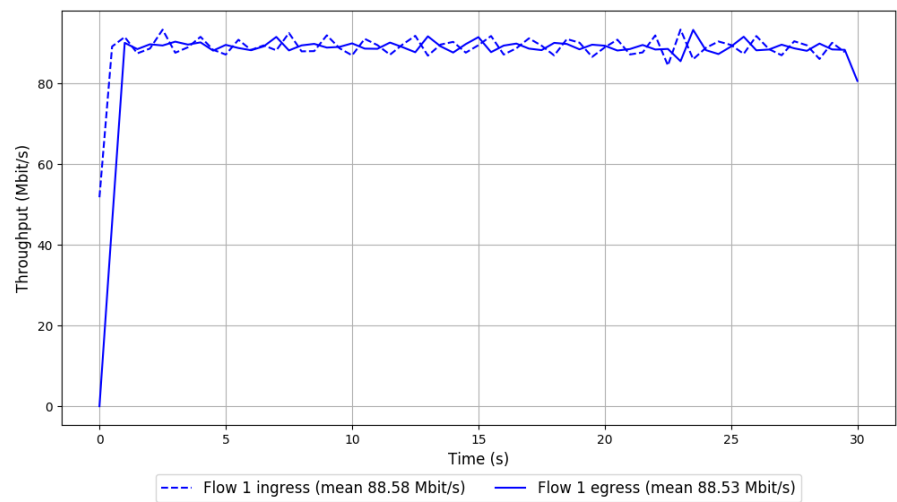

Flow 1 (95th percentile 44.77 ms)

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

Start at: 2019-01-25 12:46:05
End at: 2019-01-25 12:46:35
Local clock offset: 0.839 ms
Remote clock offset: -1.539 ms


# Below is generated by plot.py at 2019-01-25 13:02:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.53 Mbit/s
95th percentile per-packet one-way delay: 44.750 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 88.53 Mbit/s
95th percentile per-packet one-way delay: 44.750 ms
Loss rate: 0.27%
```

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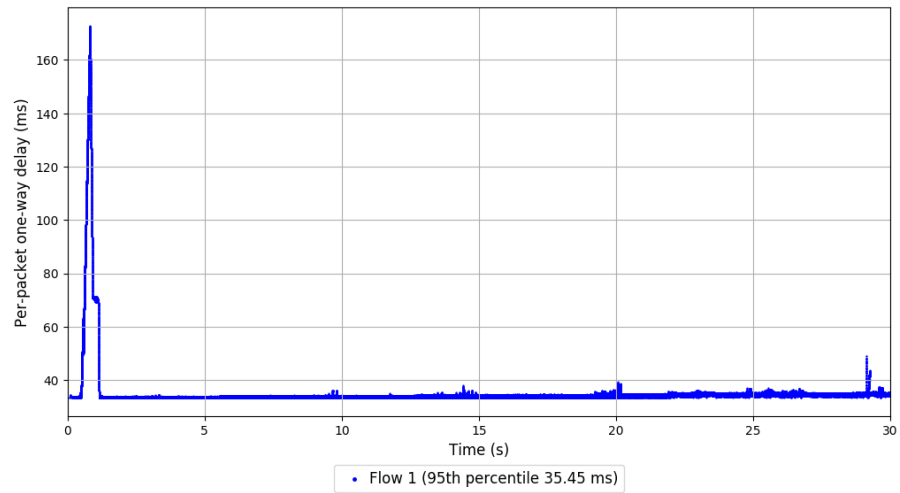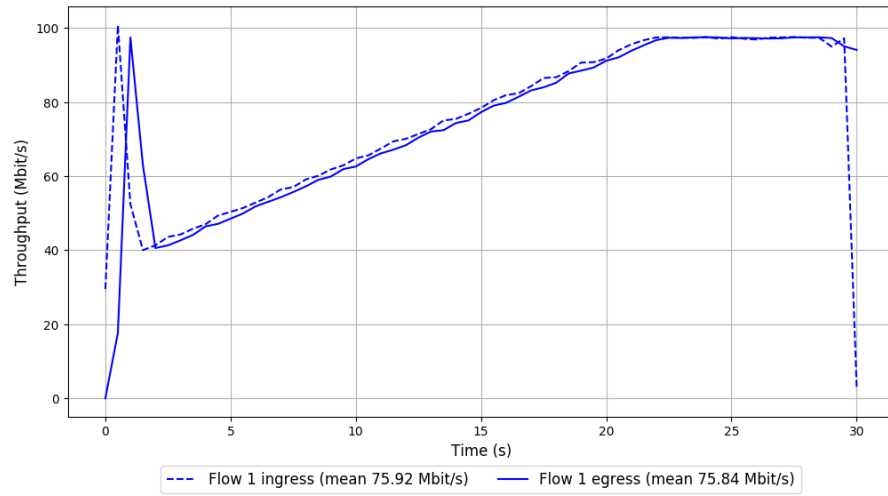

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```
Run 1: Statistics of TCP Vegas

Start at: 2019-01-25 10:41:39
End at: 2019-01-25 10:42:09
Local clock offset: -2.466 ms
Remote clock offset: -3.199 ms


# Below is generated by plot.py at 2019-01-25 13:02:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.84 Mbit/s
95th percentile per-packet one-way delay: 35.454 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 75.84 Mbit/s
95th percentile per-packet one-way delay: 35.454 ms
Loss rate: 0.31%
```

Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-01-25 11:07:35
End at: 2019-01-25 11:08:05
Local clock offset: -4.2 ms
Remote clock offset: -2.57 ms


# Below is generated by plot.py at 2019-01-25 13:02:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.10 Mbit/s
95th percentile per-packet one-way delay: 35.069 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 76.10 Mbit/s
95th percentile per-packet one-way delay: 35.069 ms
Loss rate: 0.28%
```
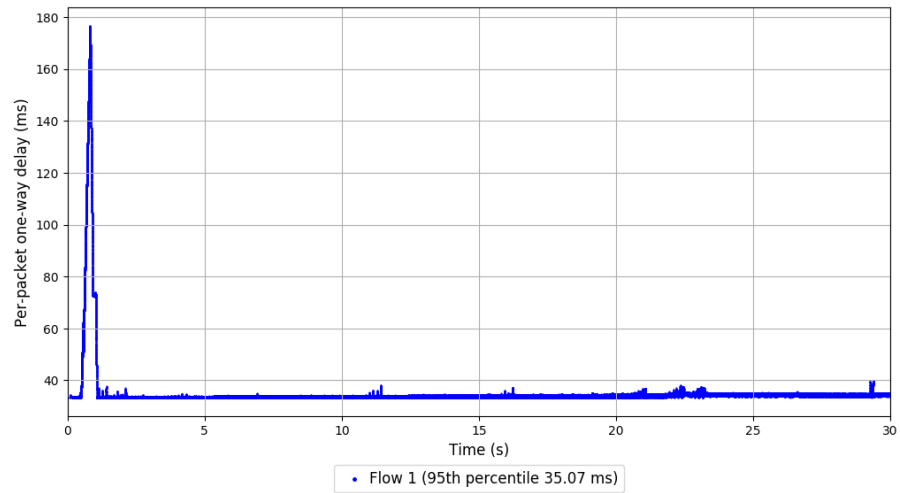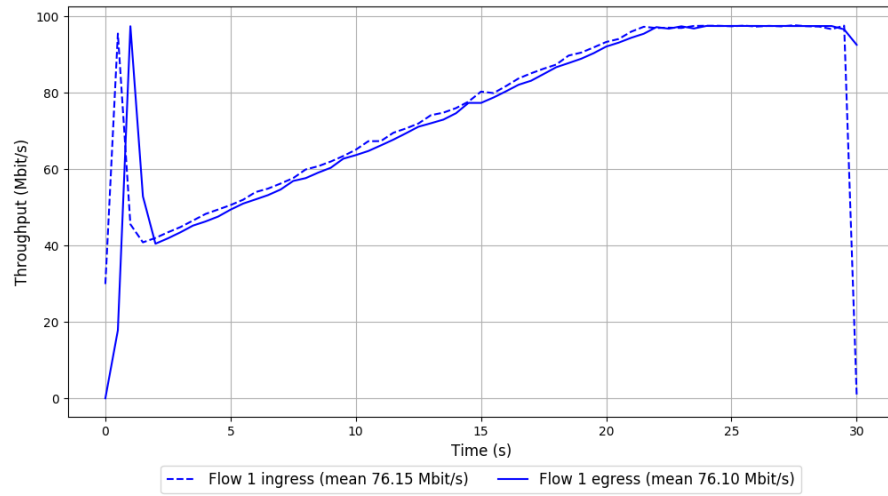
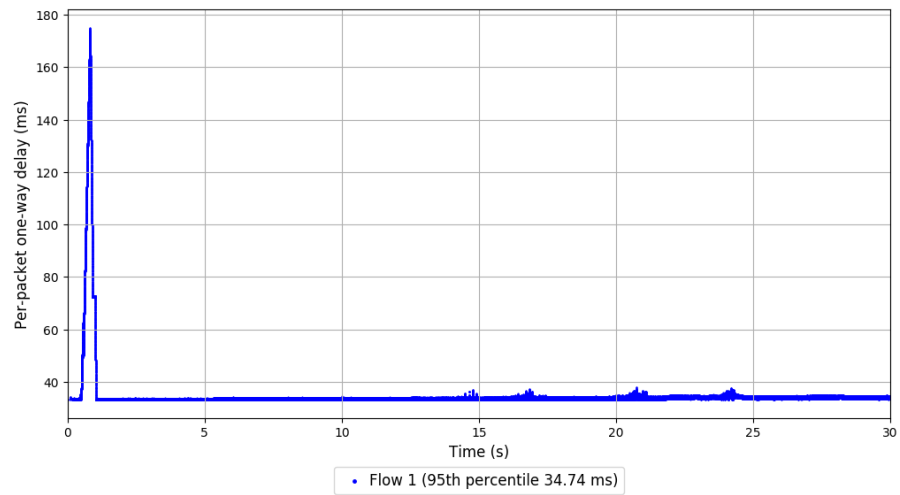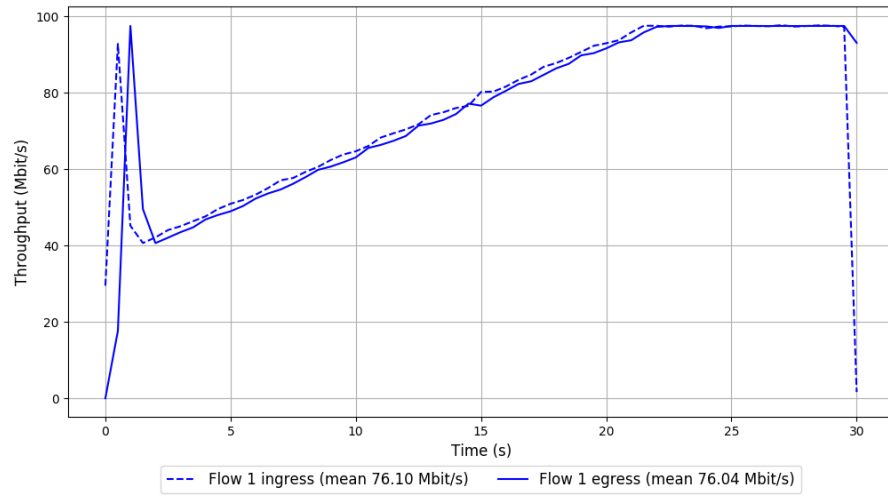Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-01-25 11:33:04
End at: 2019-01-25 11:33:34
Local clock offset: -4.206 ms
Remote clock offset: -1.748 ms


# Below is generated by plot.py at 2019-01-25 13:02:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.04 Mbit/s
95th percentile per-packet one-way delay: 34.744 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 76.04 Mbit/s
95th percentile per-packet one-way delay: 34.744 ms
Loss rate: 0.28%
```

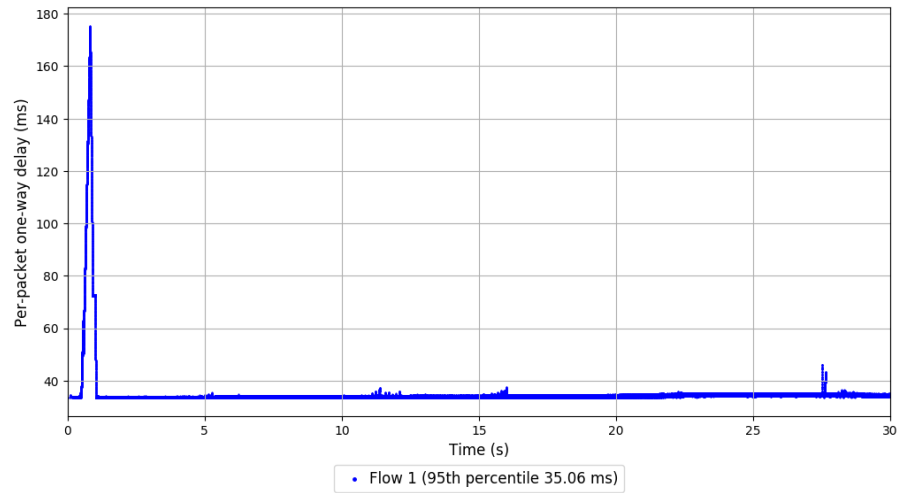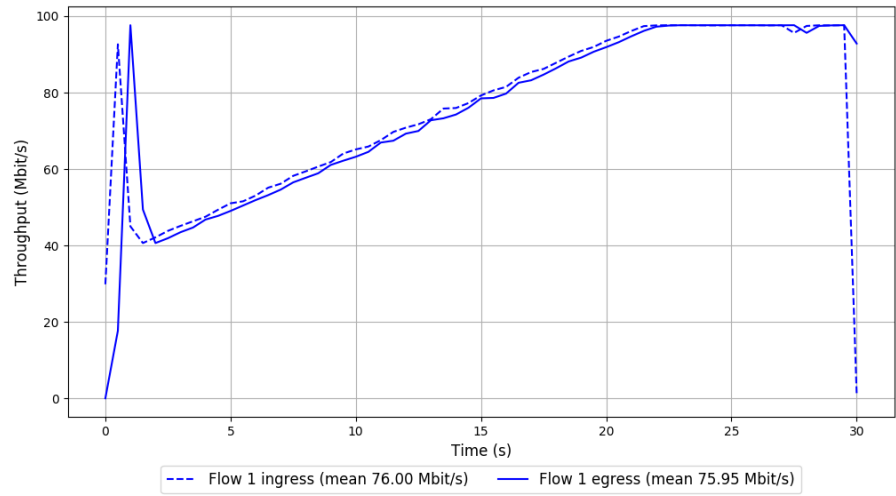## Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2019-01-25 11:58:14
End at: 2019-01-25 11:58:44
Local clock offset: -2.35 ms
Remote clock offset: -1.762 ms


# Below is generated by plot.py at 2019-01-25 13:02:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.95 Mbit/s
95th percentile per-packet one-way delay: 35.059 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 75.95 Mbit/s
95th percentile per-packet one-way delay: 35.059 ms
Loss rate: 0.28%
```

Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 76.00 Mbit/s) — — —   Flow 1 egress (mean 75.95 Mbit/s) ———
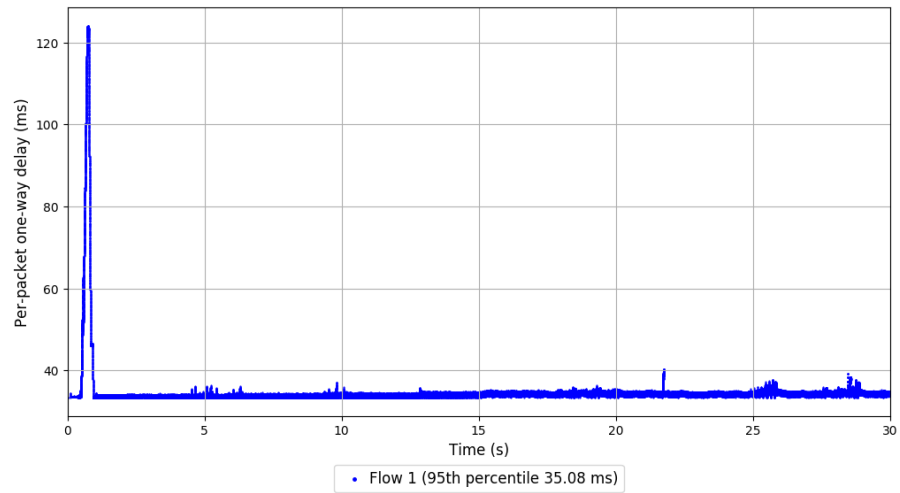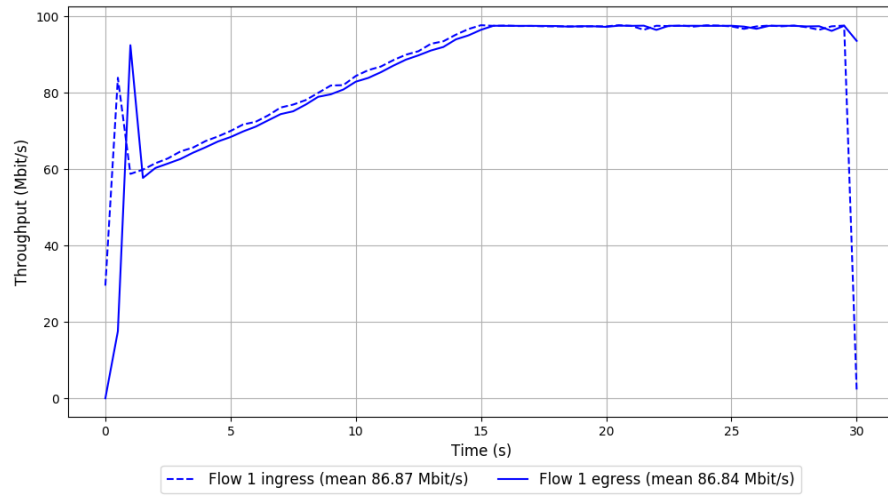

Flow 1 (95th percentile 35.06 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2019-01-25 12:23:39
End at: 2019-01-25 12:24:09
Local clock offset: 1.31 ms
Remote clock offset: -1.509 ms


# Below is generated by plot.py at 2019-01-25 13:02:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.84 Mbit/s
95th percentile per-packet one-way delay: 35.084 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 86.84 Mbit/s
95th percentile per-packet one-way delay: 35.084 ms
Loss rate: 0.25%
```

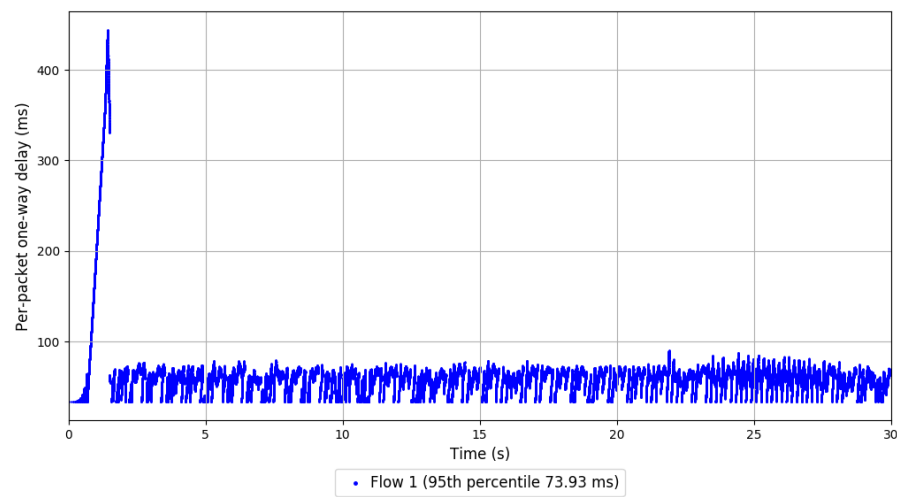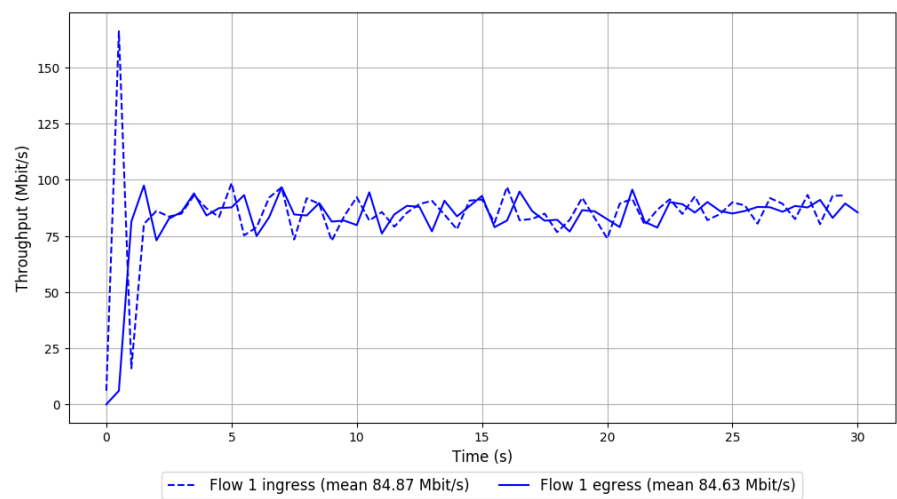Run 5: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2019-01-25 11:01:24
End at: 2019-01-25 11:01:54
Local clock offset: -3.906 ms
Remote clock offset: -2.735 ms


# Below is generated by plot.py at 2019-01-25 13:02:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.63 Mbit/s
95th percentile per-packet one-way delay: 73.929 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 84.63 Mbit/s
95th percentile per-packet one-way delay: 73.929 ms
Loss rate: 0.48%
```

Run 1: Report of Verus — Data Link

Flow 1 ingress (mean 84.87 Mbit/s)   Flow 1 egress (mean 84.63 Mbit/s)

Flow 1 (95th percentile 73.93 ms)

```
Run 2: Statistics of Verus

Start at: 2019-01-25 11:27:00
End at: 2019-01-25 11:27:30
Local clock offset: -5.007 ms
Remote clock offset: -2.03 ms


# Below is generated by plot.py at 2019-01-25 13:02:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.22 Mbit/s
95th percentile per-packet one-way delay: 75.211 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 85.22 Mbit/s
95th percentile per-packet one-way delay: 75.211 ms
Loss rate: 0.41%
```
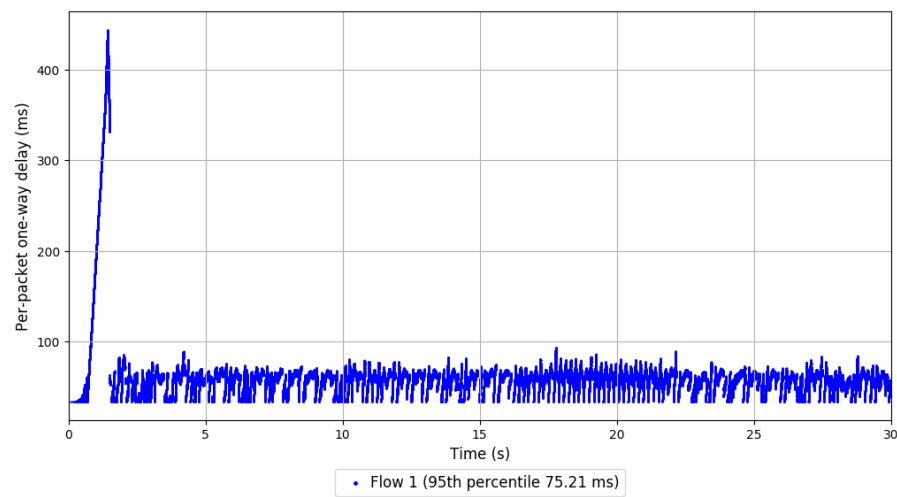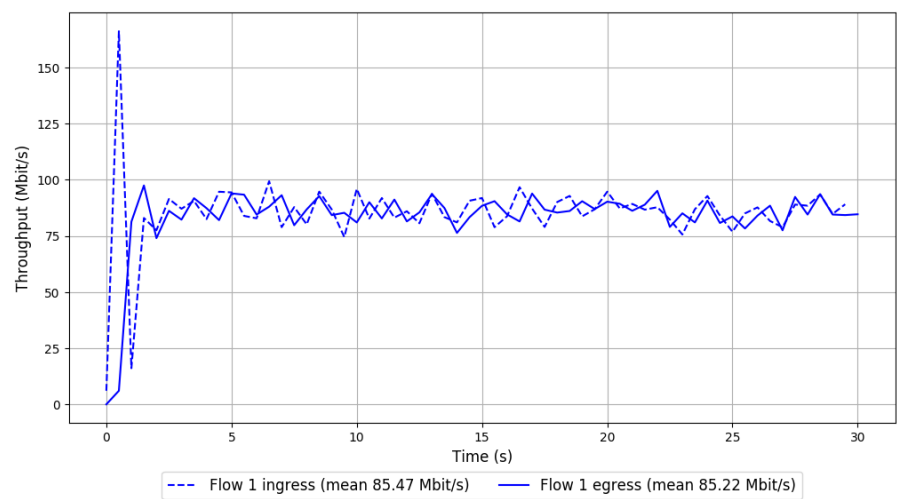
Run 2: Report of Verus — Data Link

Flow 1 ingress (mean 85.47 Mbit/s)   Flow 1 egress (mean 85.22 Mbit/s)
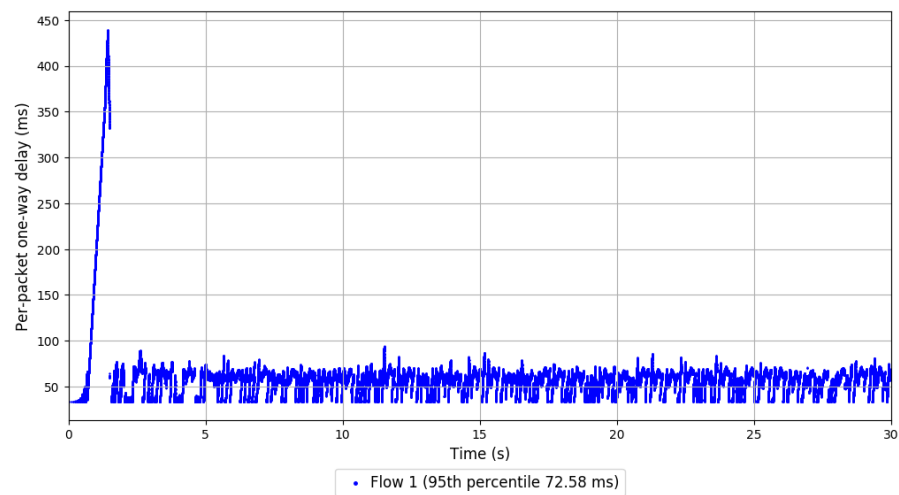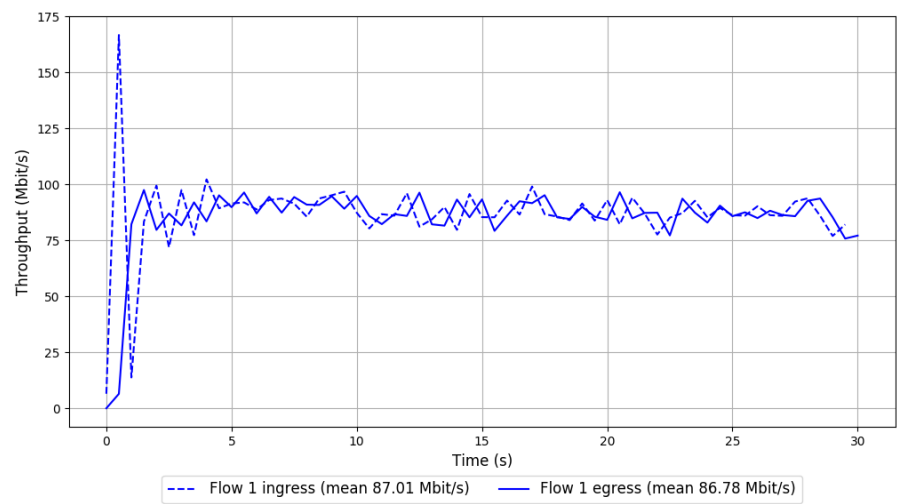

Flow 1 (95th percentile 75.21 ms)

```
Run 3: Statistics of Verus

Start at: 2019-01-25 11:52:11
End at: 2019-01-25 11:52:41
Local clock offset: -2.469 ms
Remote clock offset: -1.542 ms


# Below is generated by plot.py at 2019-01-25 13:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.78 Mbit/s
95th percentile per-packet one-way delay: 72.581 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 86.78 Mbit/s
95th percentile per-packet one-way delay: 72.581 ms
Loss rate: 0.47%
```

Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 87.01 Mbit/s) — Flow 1 egress (mean 86.78 Mbit/s)
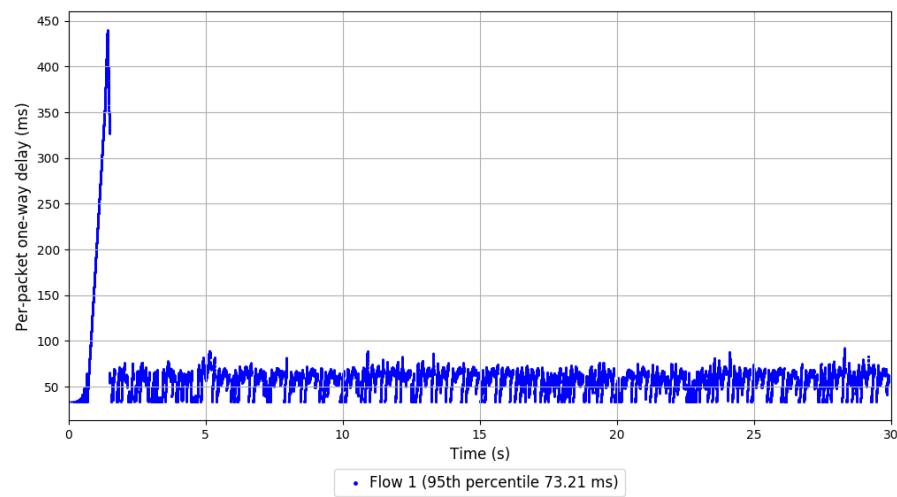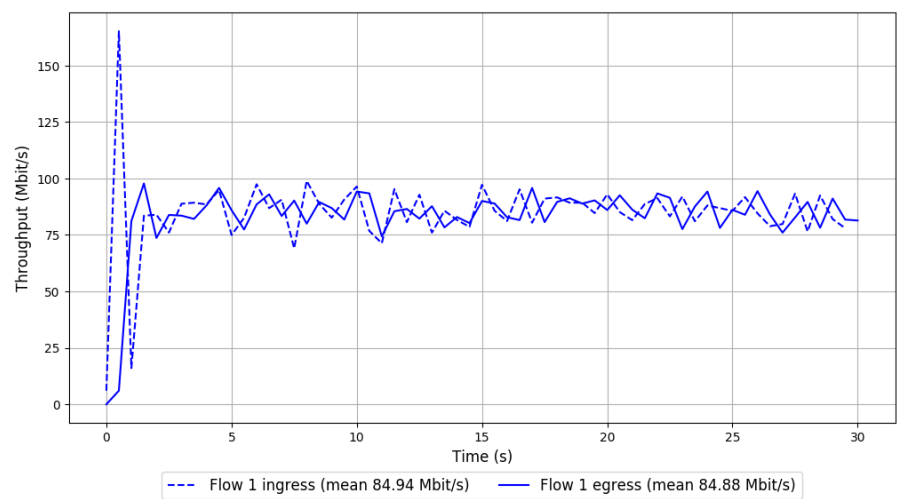

Flow 1 (95th percentile 72.58 ms)

```
Run 4: Statistics of Verus

Start at: 2019-01-25 12:17:24
End at: 2019-01-25 12:17:54
Local clock offset: 0.842 ms
Remote clock offset: -1.524 ms


# Below is generated by plot.py at 2019-01-25 13:02:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.88 Mbit/s
95th percentile per-packet one-way delay: 73.208 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 84.88 Mbit/s
95th percentile per-packet one-way delay: 73.208 ms
Loss rate: 0.33%
```

Run 4: Report of Verus — Data Link

Flow 1 ingress (mean 84.94 Mbit/s)   Flow 1 egress (mean 84.88 Mbit/s)

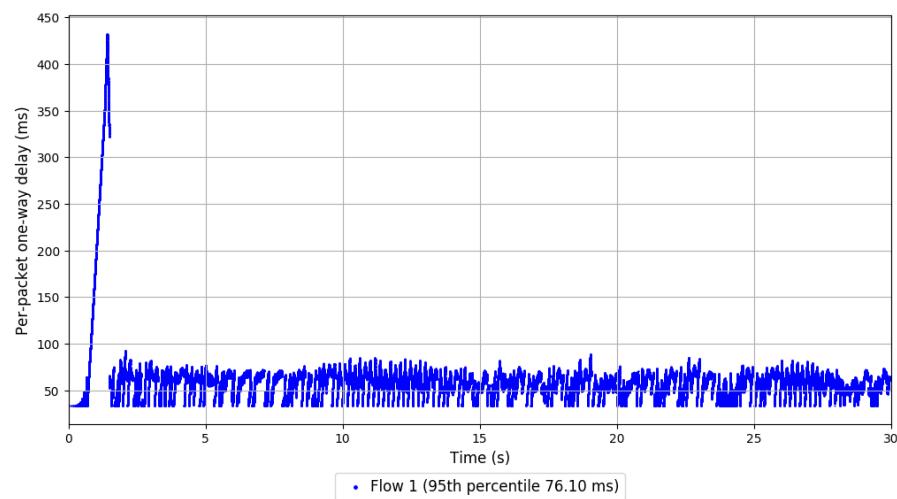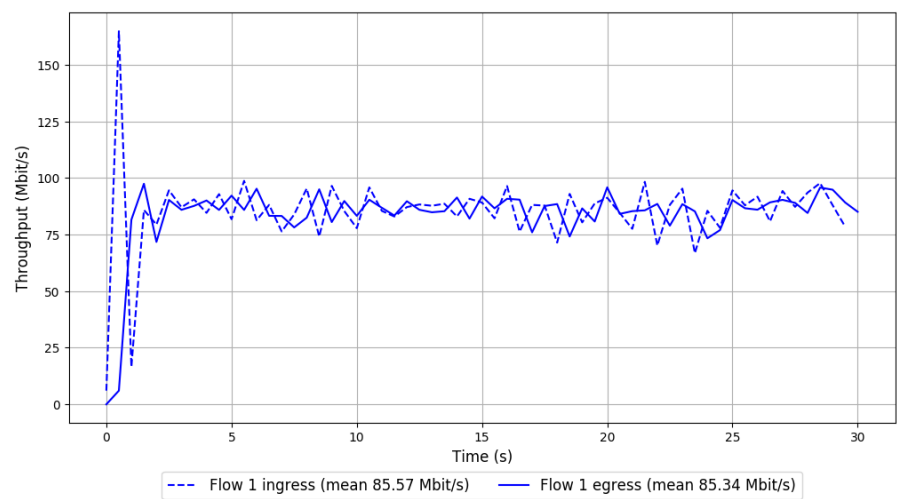

Flow 1 (95th percentile 73.21 ms)

```
Run 5: Statistics of Verus

Start at: 2019-01-25 12:42:31
End at: 2019-01-25 12:43:01
Local clock offset: 0.869 ms
Remote clock offset: -1.577 ms


# Below is generated by plot.py at 2019-01-25 13:02:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.34 Mbit/s
95th percentile per-packet one-way delay: 76.101 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 85.34 Mbit/s
95th percentile per-packet one-way delay: 76.101 ms
Loss rate: 0.25%
```
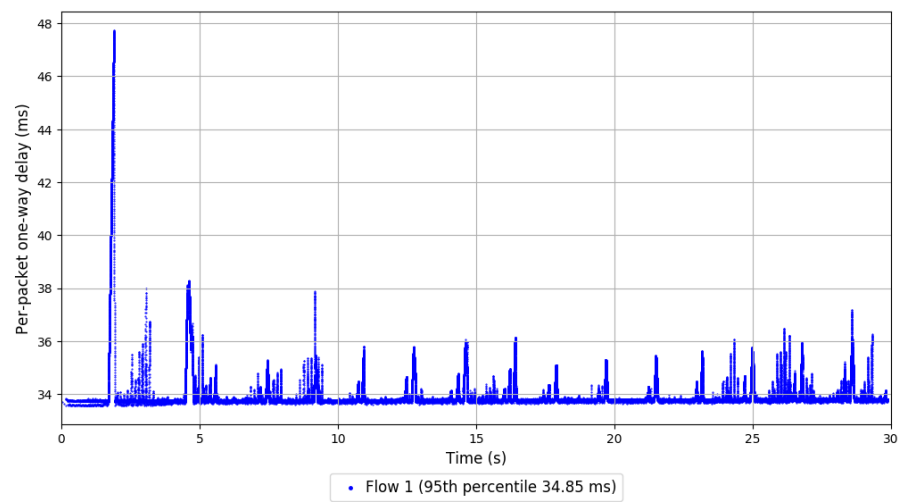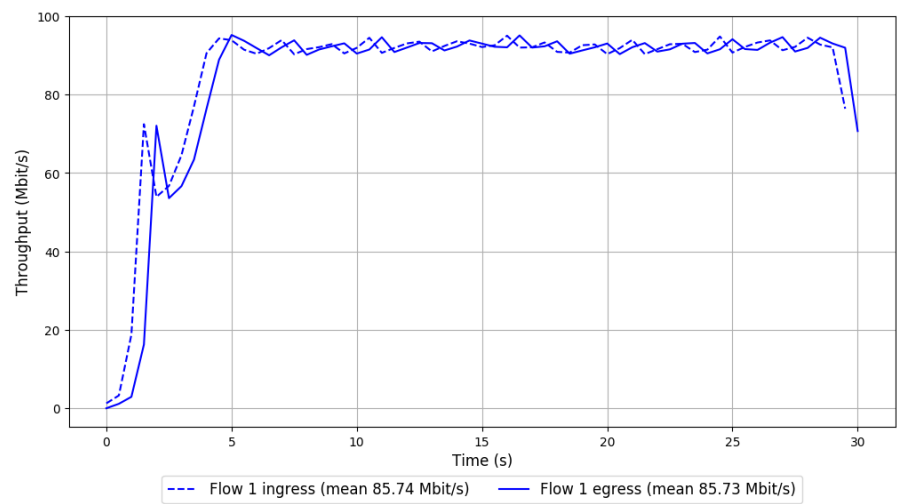
Run 5: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-01-25 10:42:48
End at: 2019-01-25 10:43:18
Local clock offset: -2.577 ms
Remote clock offset: -3.403 ms


# Below is generated by plot.py at 2019-01-25 13:03:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.73 Mbit/s
95th percentile per-packet one-way delay: 34.854 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 85.73 Mbit/s
95th percentile per-packet one-way delay: 34.854 ms
Loss rate: 0.23%
```

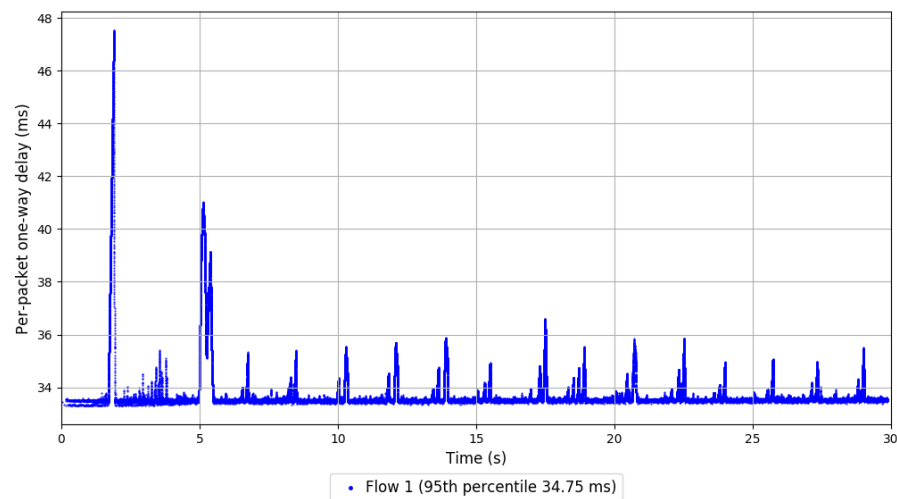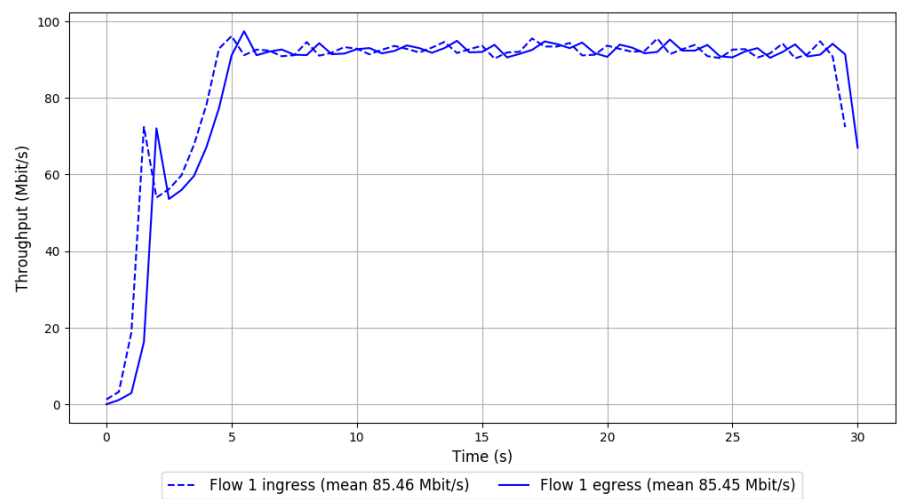# Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-01-25 11:08:51
End at: 2019-01-25 11:09:21
Local clock offset: -4.256 ms
Remote clock offset: -2.498 ms


# Below is generated by plot.py at 2019-01-25 13:03:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.45 Mbit/s
95th percentile per-packet one-way delay: 34.748 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 85.45 Mbit/s
95th percentile per-packet one-way delay: 34.748 ms
Loss rate: 0.22%
```

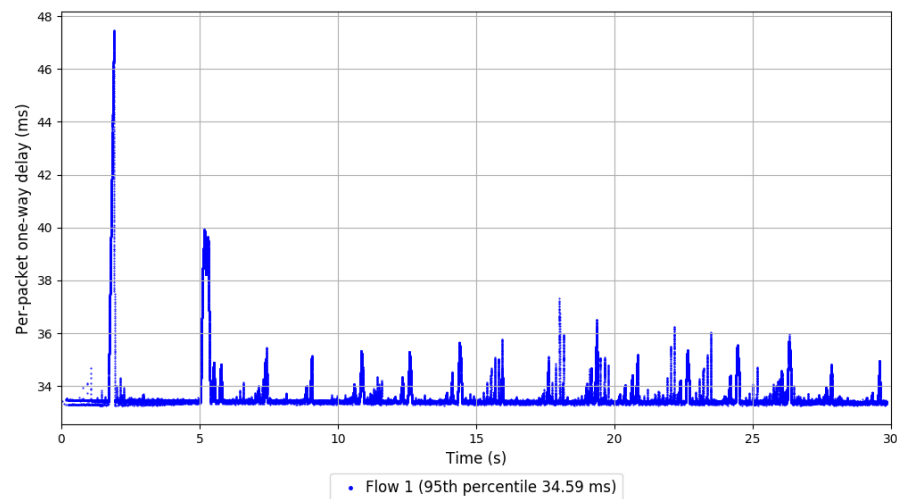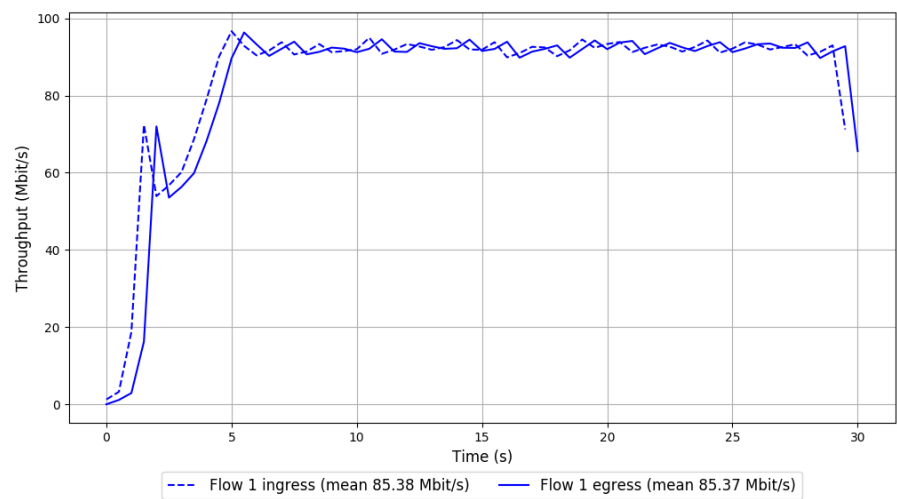## Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-01-25 11:34:20
End at: 2019-01-25 11:34:50
Local clock offset: -3.925 ms
Remote clock offset: -1.691 ms


# Below is generated by plot.py at 2019-01-25 13:03:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.37 Mbit/s
95th percentile per-packet one-way delay: 34.594 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 85.37 Mbit/s
95th percentile per-packet one-way delay: 34.594 ms
Loss rate: 0.24%
```

Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 85.38 Mbit/s) --- Flow 1 egress (mean 85.37 Mbit/s)

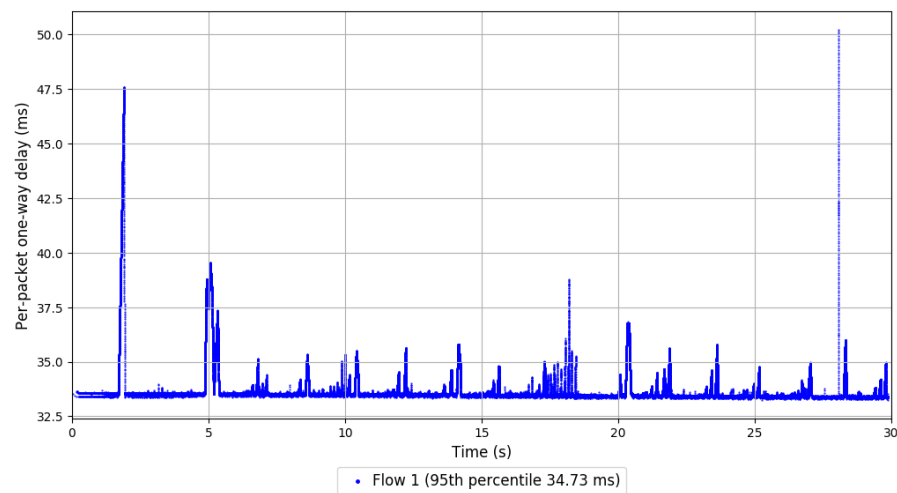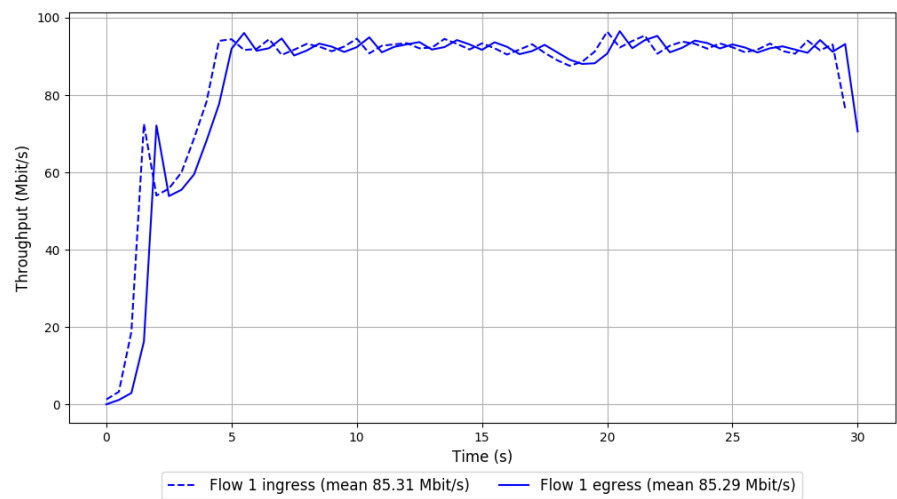

• Flow 1 (95th percentile 34.59 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-01-25 11:59:25
End at: 2019-01-25 11:59:55
Local clock offset: -2.327 ms
Remote clock offset: -1.758 ms


# Below is generated by plot.py at 2019-01-25 13:03:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.29 Mbit/s
95th percentile per-packet one-way delay: 34.729 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 85.29 Mbit/s
95th percentile per-packet one-way delay: 34.729 ms
Loss rate: 0.24%
```

Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 85.31 Mbit/s)   Flow 1 egress (mean 85.29 Mbit/s)

Flow 1 (95th percentile 34.73 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-01-25 12:24:49
End at: 2019-01-25 12:25:19
Local clock offset: 1.375 ms
Remote clock offset: -1.459 ms


# Below is generated by plot.py at 2019-01-25 13:03:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.10 Mbit/s
95th percentile per-packet one-way delay: 34.750 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 85.10 Mbit/s
95th percentile per-packet one-way delay: 34.750 ms
Loss rate: 0.22%
```
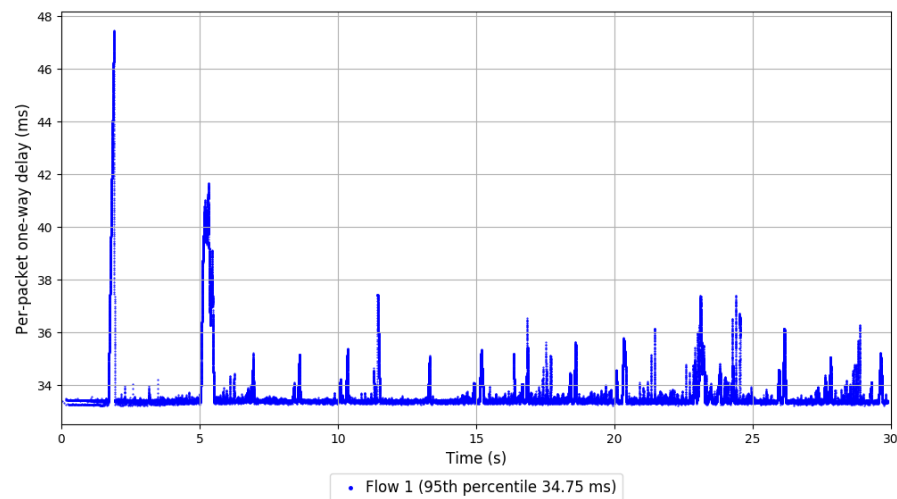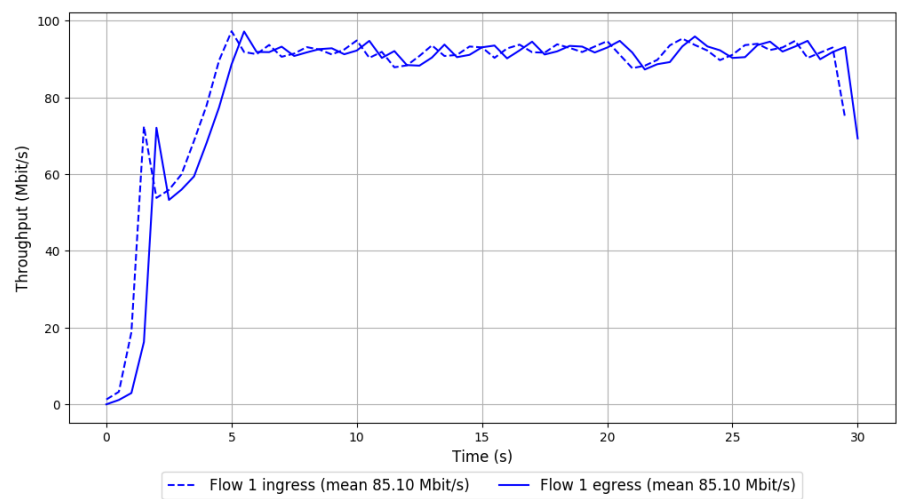
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 85.10 Mbit/s) --- Flow 1 egress (mean 85.10 Mbit/s)
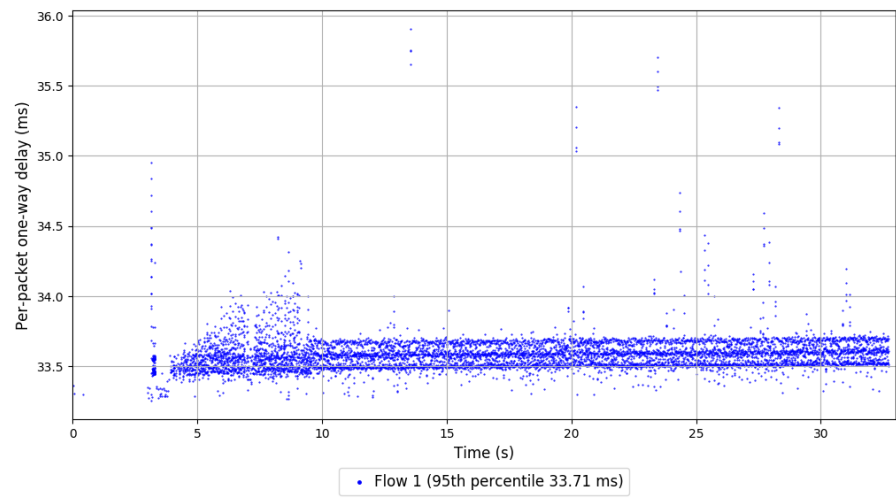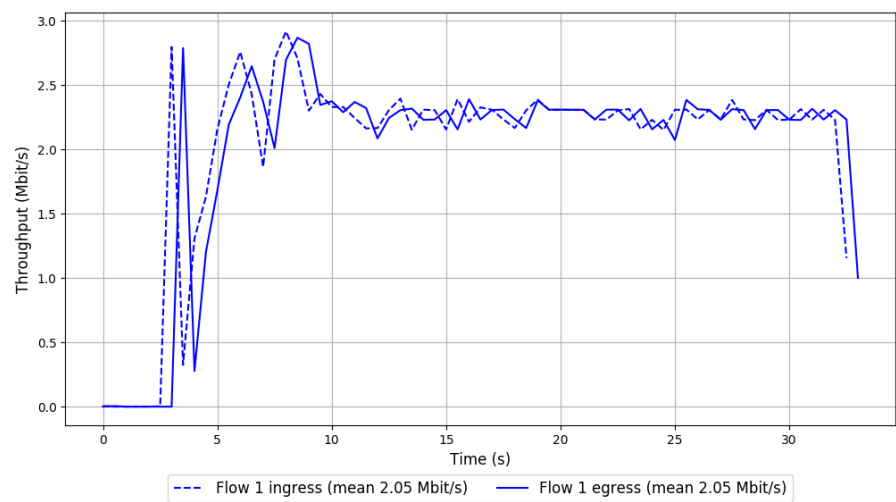

Flow 1 (95th percentile 34.75 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2019-01-25 11:06:29
End at: 2019-01-25 11:06:59
Local clock offset: -4.147 ms
Remote clock offset: -2.605 ms


# Below is generated by plot.py at 2019-01-25 13:03:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 33.710 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 33.710 ms
Loss rate: 0.23%
```

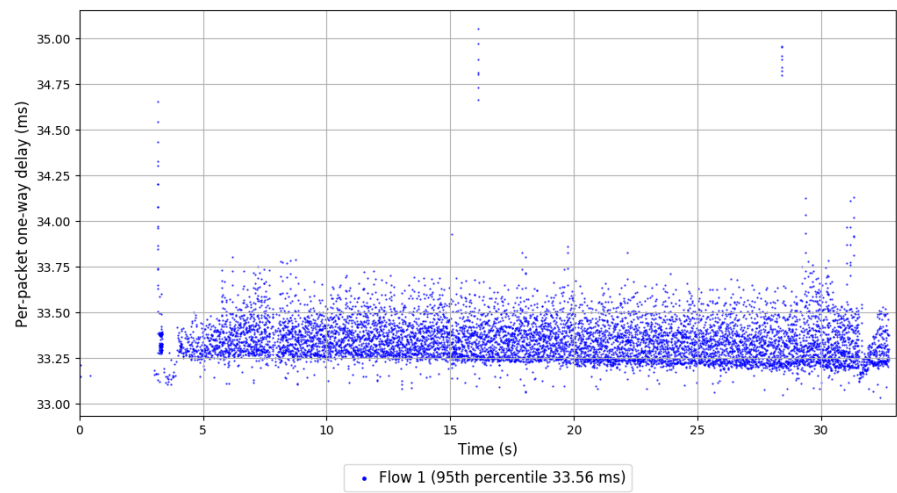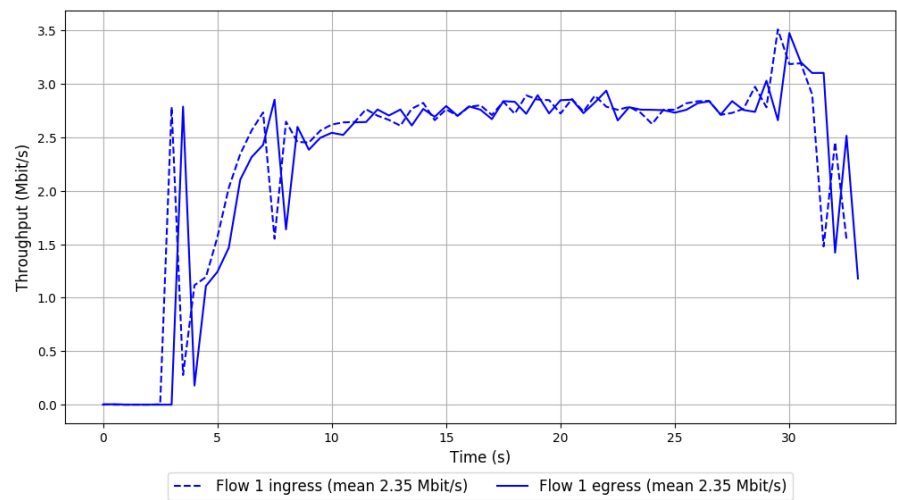Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-01-25 11:31:58
End at: 2019-01-25 11:32:28
Local clock offset: -4.456 ms
Remote clock offset: -1.756 ms


# Below is generated by plot.py at 2019-01-25 13:03:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 33.562 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 33.562 ms
Loss rate: 0.30%
```

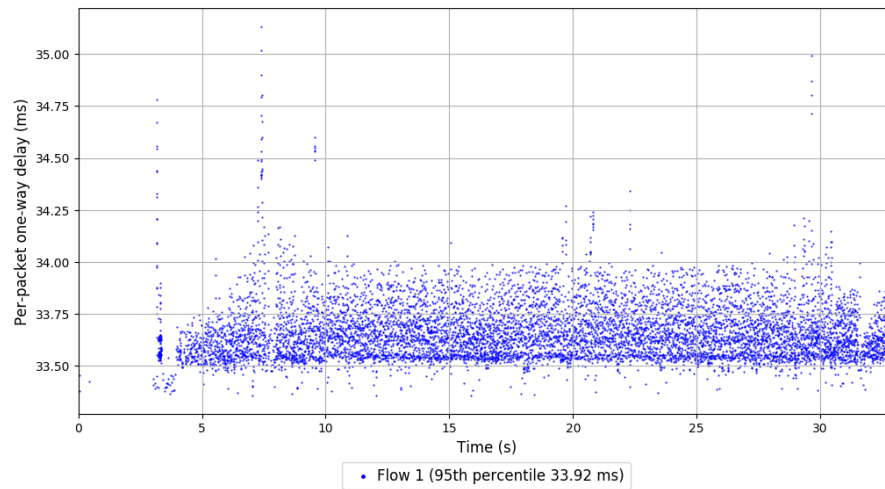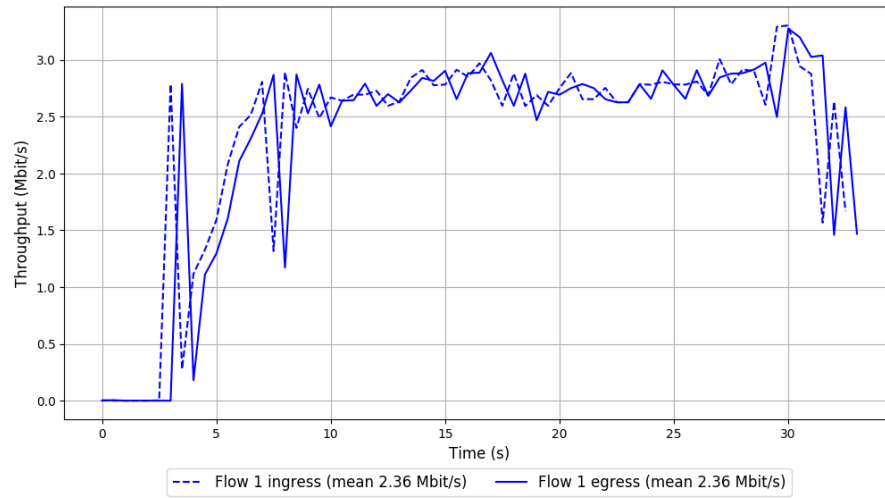Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-01-25 11:57:08
End at: 2019-01-25 11:57:38
Local clock offset: -2.362 ms
Remote clock offset: -1.591 ms


# Below is generated by plot.py at 2019-01-25 13:03:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 33.917 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 33.917 ms
Loss rate: 0.25%
```

Run 3: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.36 Mbit/s) Flow 1 egress (mean 2.36 Mbit/s)
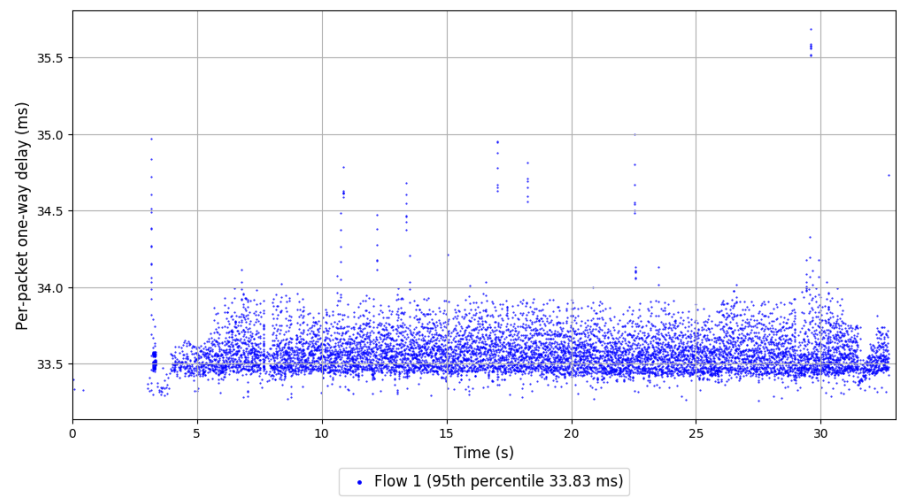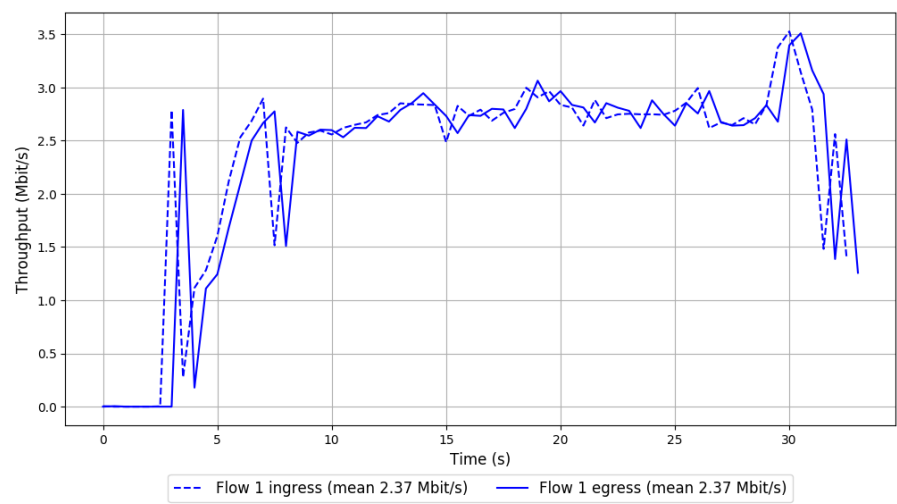

Flow 1 (95th percentile 33.92 ms)

```
Run 4: Statistics of WebRTC media

Start at: 2019-01-25 12:22:33
End at: 2019-01-25 12:23:03
Local clock offset: 1.248 ms
Remote clock offset: -1.491 ms


# Below is generated by plot.py at 2019-01-25 13:03:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 33.830 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 33.830 ms
Loss rate: 0.22%
```

Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-01-25 12:47:18
End at: 2019-01-25 12:47:48
Local clock offset: 0.842 ms
Remote clock offset: -1.513 ms


# Below is generated by plot.py at 2019-01-25 13:03:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 33.751 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 33.751 ms
Loss rate: 0.24%
```

Run 5: Report of WebRTC media — Data Link