Pantheon Report

Generated at 2019-01-19 04:46:57 (UTC).

Data path: Colombia cellular on `ppp0` (*remote*) →AWS Brazil 2 on `ens5` (*local*).

Repeated the test of 21 congestion control schemes 3 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.

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

Git summary:
branch: muses @ c80a283586bf7b0cc1fe08c69c8f60d56498f81c
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ c3eee875824760ec5b2fd207fefe166e1afe2170
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
```
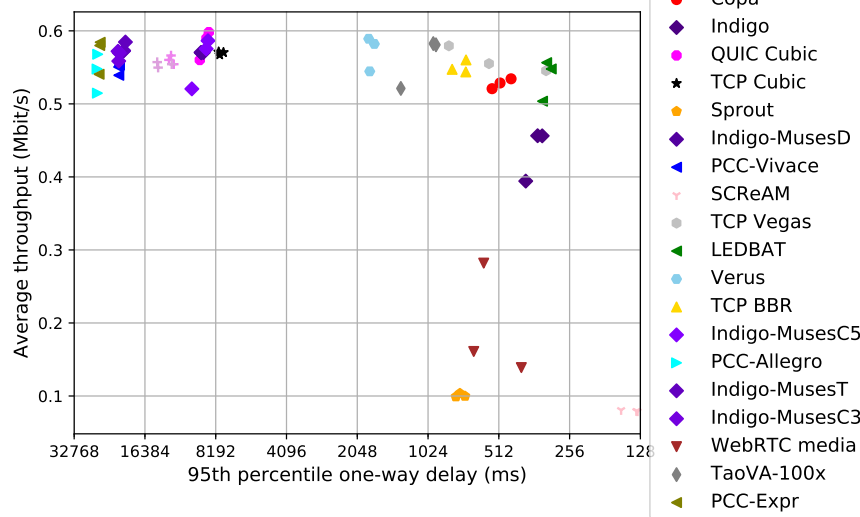
```
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from Colombia cellular to AWS Brazil 2, 3 runs of 30s each per scheme
(mean of all runs by scheme)

test from Colombia cellular to AWS Brazil 2, 3 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	3	0.55	740.83	2.14
Copa	3	0.53	502.35	0.93
TCP Cubic	3	0.57	7812.32	30.91
FillP	3	0.56	12665.57	19.42
FillP-Sheep	3	0.55	13844.48	13.35
Indigo	3	0.44	359.44	0.81
Indigo-MusesC3	3	0.57	21187.12	82.17
Indigo-MusesC5	3	0.56	9393.26	35.95
Indigo-MusesD	3	0.57	9377.04	35.49
Indigo-MusesT	3	0.57	20074.62	54.68
LEDBAT	3	0.54	320.29	1.32
PCC-Allegro	3	0.54	26100.20	98.41
PCC-Expr	3	0.57	25531.50	90.40
QUIC Cubic	3	0.58	9103.24	32.76
SCReAM	3	0.08	139.80	0.70
Sprout	3	0.10	747.42	0.66
TaoVA-100x	3	0.56	1085.63	5.49
TCP Vegas	3	0.56	573.80	1.00
Verus	3	0.57	1792.08	4.69
PCC-Vivace	3	0.55	21140.88	72.31
WebRTC media	3	0.19	553.01	1.52

```
Run 1: Statistics of TCP BBR

Start at: 2019-01-19 03:41:51
End at: 2019-01-19 03:42:21
Local clock offset: 0.034 ms
Remote clock offset: 8.274 ms


# Below is generated by plot.py at 2019-01-19 04:46:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 706.048 ms
Loss rate: 2.19%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 706.048 ms
Loss rate: 2.19%
```
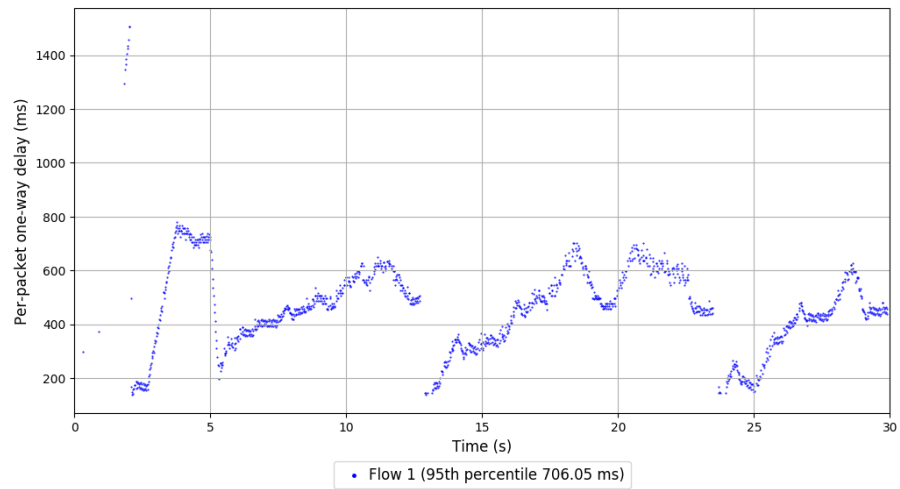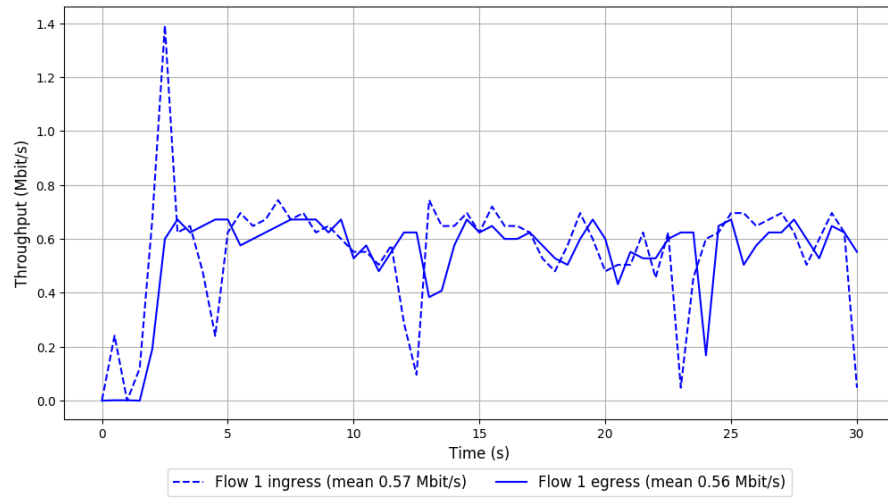
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2019-01-19 04:05:48
End at: 2019-01-19 04:06:18
Local clock offset: -1.016 ms
Remote clock offset: 7.91 ms


# Below is generated by plot.py at 2019-01-19 04:46:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 808.772 ms
Loss rate: 2.18%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 808.772 ms
Loss rate: 2.18%
```
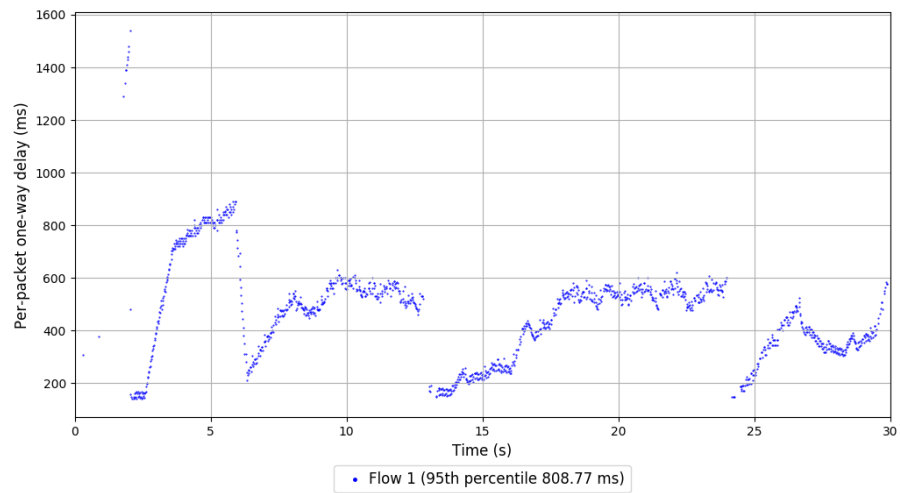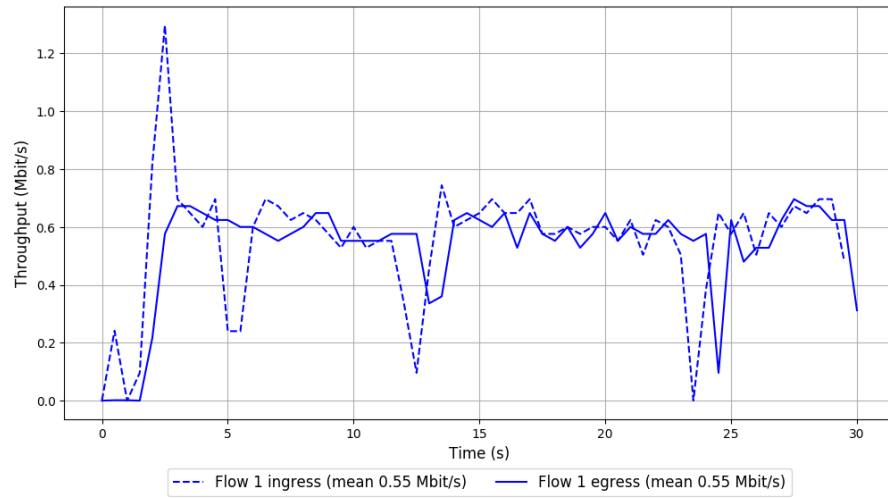
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2019-01-19 04:29:45
End at: 2019-01-19 04:30:15
Local clock offset: -2.178 ms
Remote clock offset: 7.463 ms


# Below is generated by plot.py at 2019-01-19 04:46:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 707.657 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 707.657 ms
Loss rate: 2.05%
```
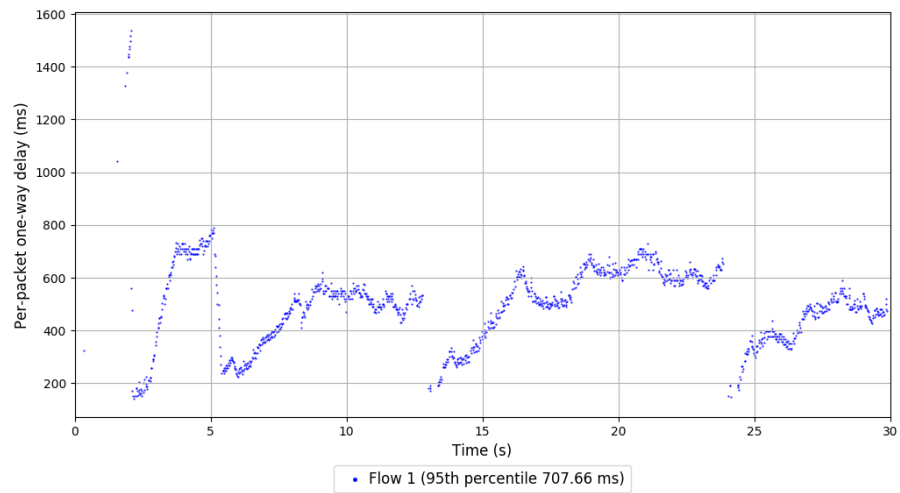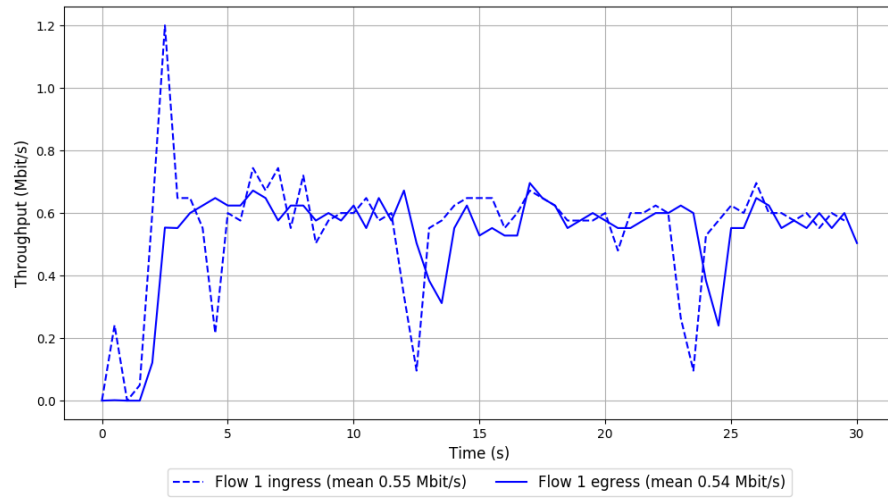
Run 3: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2019-01-19 03:52:06
End at: 2019-01-19 03:52:36
Local clock offset: -1.133 ms
Remote clock offset: 4.63 ms


# Below is generated by plot.py at 2019-01-19 04:46:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 546.955 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 546.955 ms
Loss rate: 0.88%
```
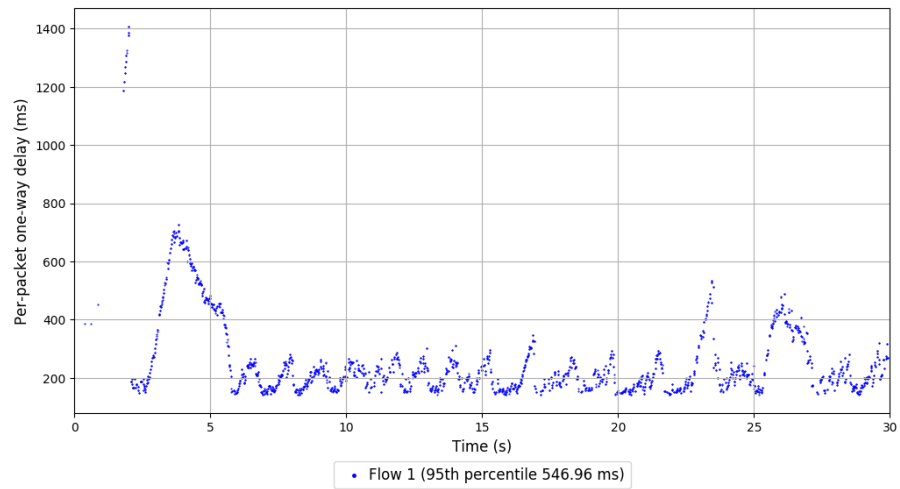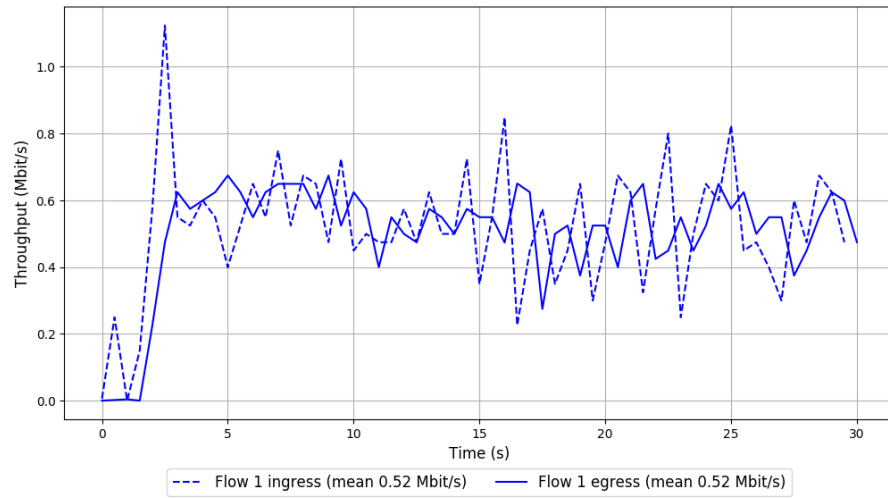
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 0.52 Mbit/s)   Flow 1 egress (mean 0.52 Mbit/s)

Flow 1 (95th percentile 546.96 ms)

```
Run 2: Statistics of Copa

Start at: 2019-01-19 04:16:03
End at: 2019-01-19 04:16:33
Local clock offset: -0.951 ms
Remote clock offset: 2.469 ms


# Below is generated by plot.py at 2019-01-19 04:46:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 454.149 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 454.149 ms
Loss rate: 1.10%
```
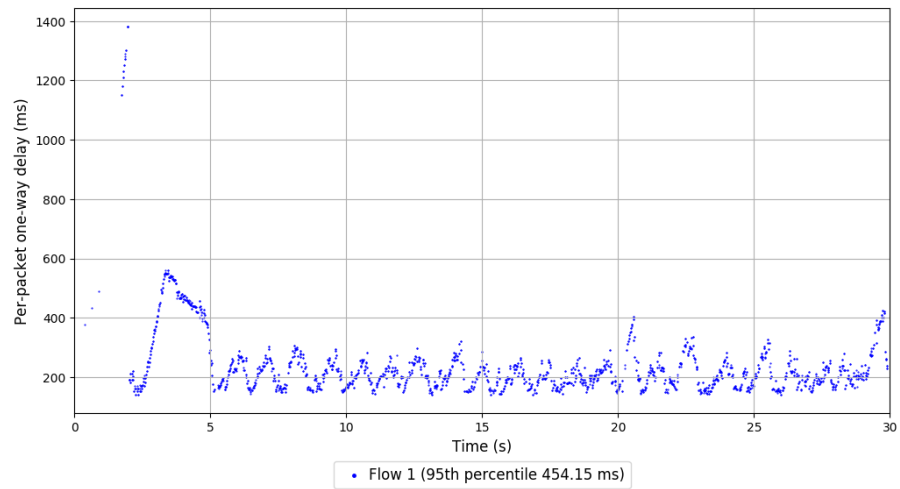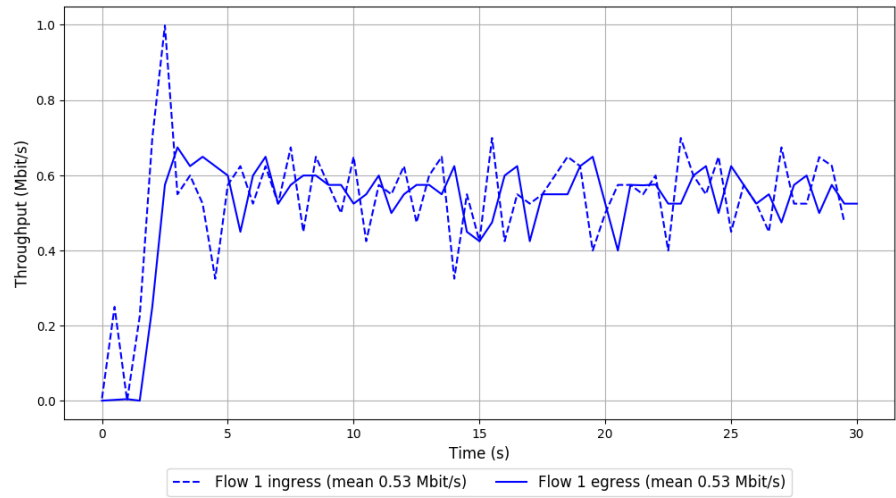
Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 0.53 Mbit/s)   Flow 1 egress (mean 0.53 Mbit/s)

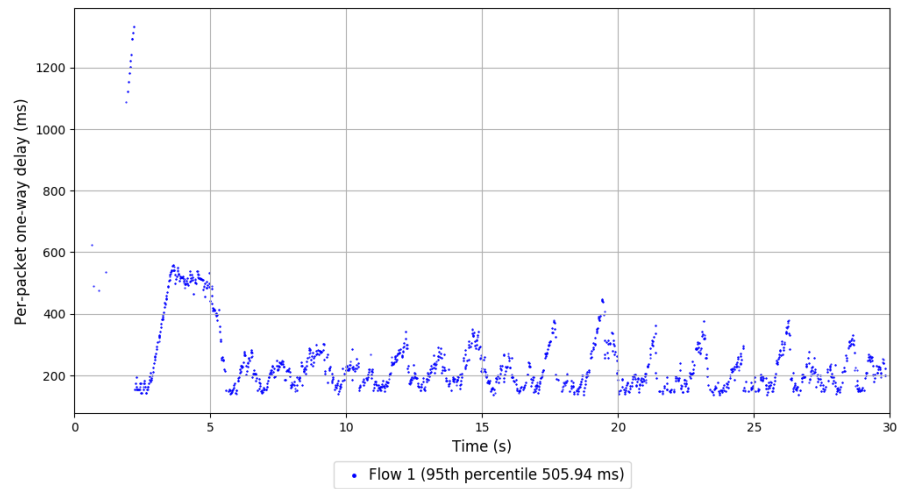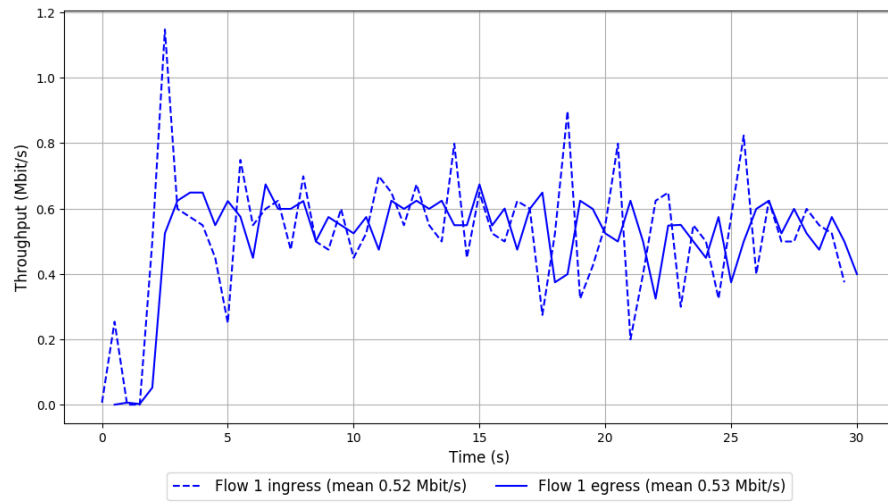Flow 1 (95th percentile 454.15 ms)

14

```
Run 3: Statistics of Copa

Start at: 2019-01-19 04:39:59
End at: 2019-01-19 04:40:29
Local clock offset: -1.416 ms
Remote clock offset: 6.368 ms


# Below is generated by plot.py at 2019-01-19 04:46:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 505.944 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 505.944 ms
Loss rate: 0.80%
```

Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 0.52 Mbit/s)   Flow 1 egress (mean 0.53 Mbit/s)

Flow 1 (95th percentile 505.94 ms)

16

```
Run 1: Statistics of TCP Cubic

Start at: 2019-01-19 03:42:59
End at: 2019-01-19 03:43:29
Local clock offset: -0.537 ms
Remote clock offset: 3.346 ms


# Below is generated by plot.py at 2019-01-19 04:46:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 7882.736 ms
Loss rate: 30.66%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 7882.736 ms
Loss rate: 30.66%
```
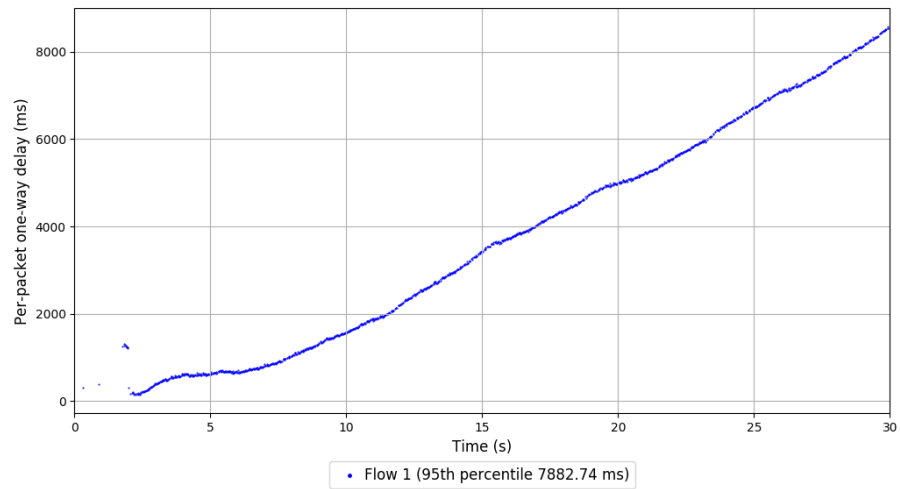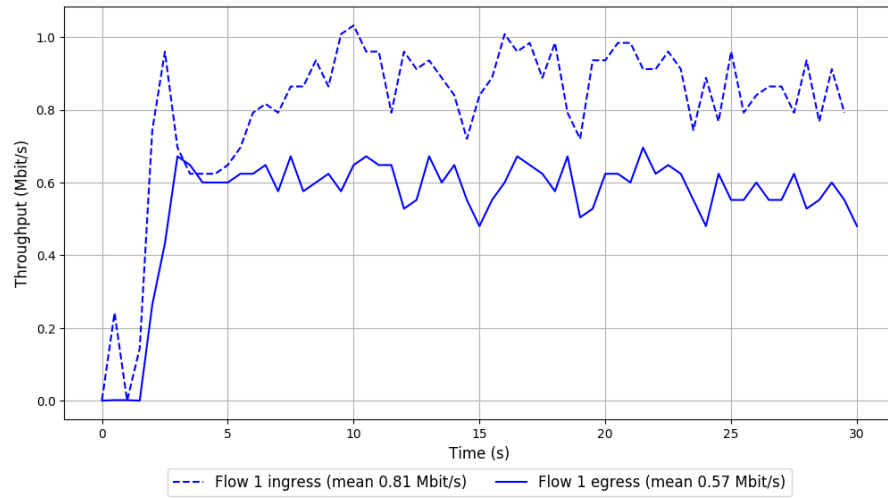
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 0.81 Mbit/s) --- Flow 1 egress (mean 0.57 Mbit/s)

Flow 1 (95th percentile 7882.74 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2019-01-19 04:06:56
End at: 2019-01-19 04:07:26
Local clock offset: -1.066 ms
Remote clock offset: 3.025 ms


# Below is generated by plot.py at 2019-01-19 04:46:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 7593.111 ms
Loss rate: 31.08%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 7593.111 ms
Loss rate: 31.08%
```
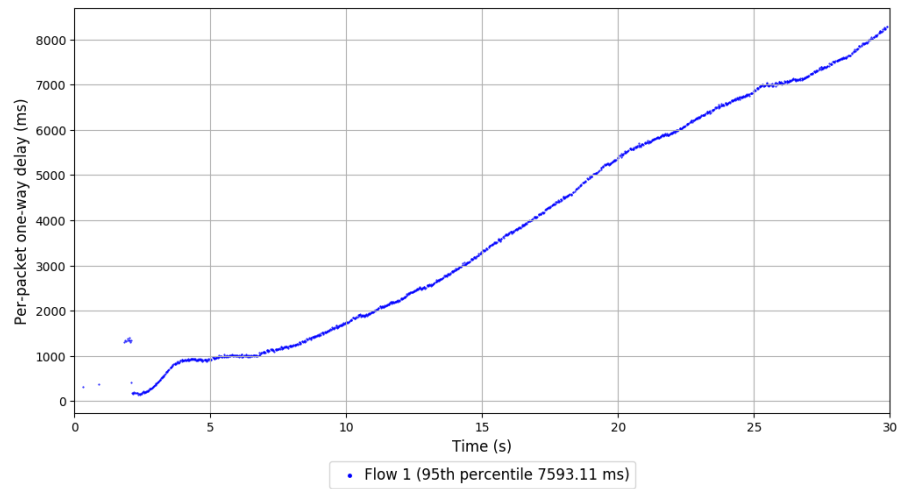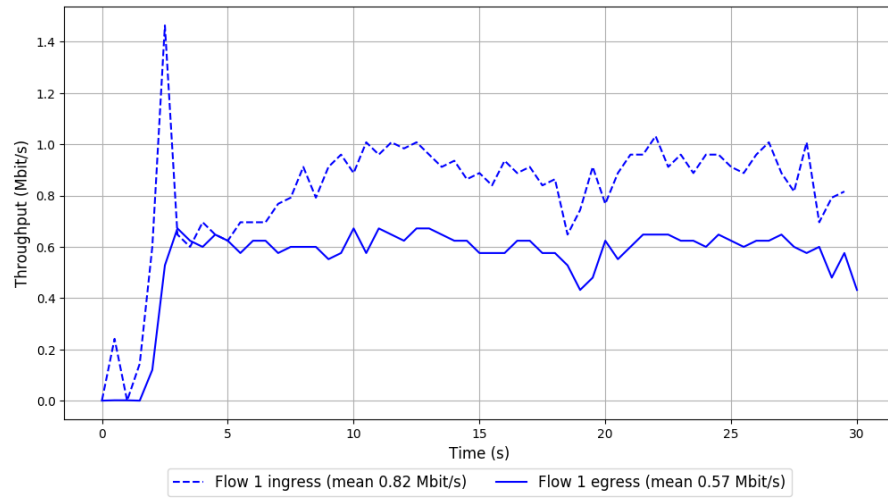
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2019-01-19 04:30:53
End at: 2019-01-19 04:31:23
Local clock offset: -1.479 ms
Remote clock offset: 3.757 ms


# Below is generated by plot.py at 2019-01-19 04:46:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 7961.102 ms
Loss rate: 30.98%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 7961.102 ms
Loss rate: 30.98%
```
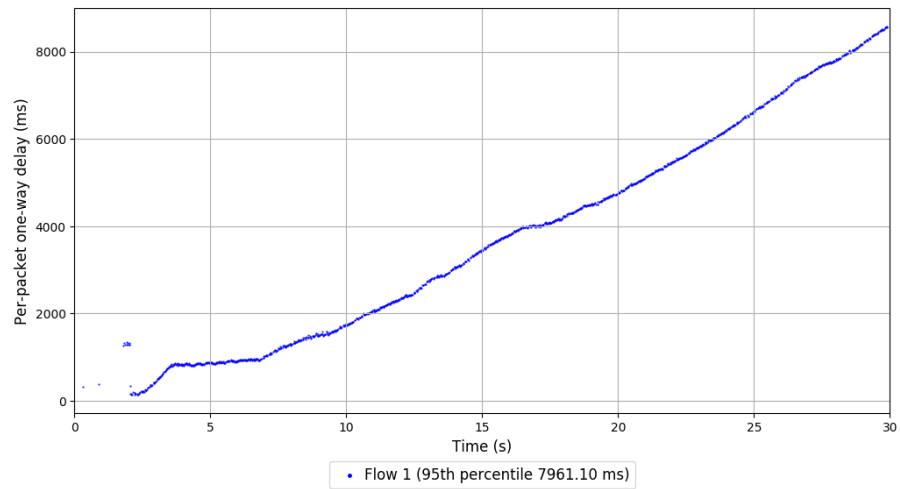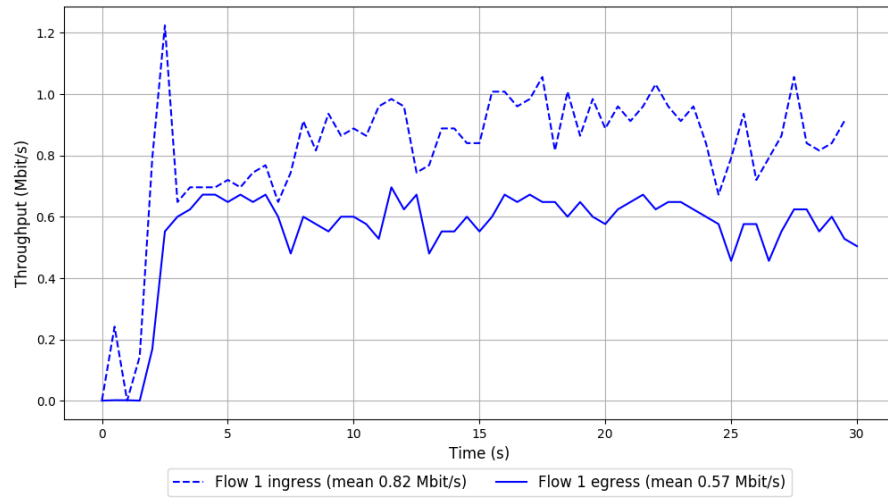
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 0.82 Mbit/s) — — — Flow 1 egress (mean 0.57 Mbit/s)

• Flow 1 (95th percentile 7961.10 ms)

```
Run 1: Statistics of FillP

Start at: 2019-01-19 03:49:49
End at: 2019-01-19 03:50:19
Local clock offset: 0.058 ms
Remote clock offset: 8.408 ms


# Below is generated by plot.py at 2019-01-19 04:46:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 12353.051 ms
Loss rate: 19.04%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 12353.051 ms
Loss rate: 19.04%
```
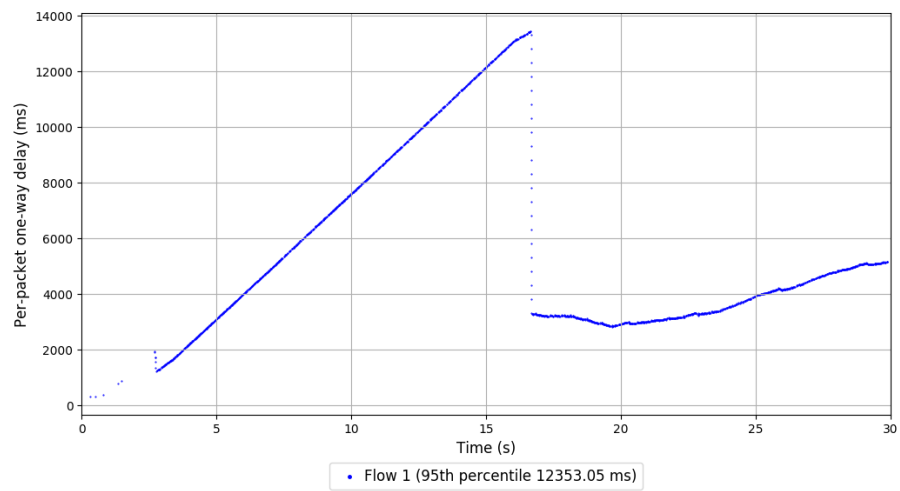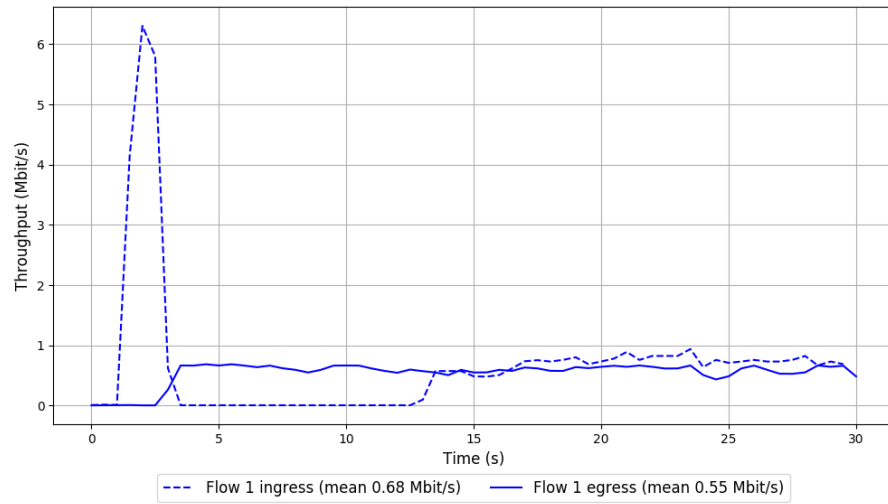
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2019-01-19 04:13:47
End at: 2019-01-19 04:14:17
Local clock offset: -0.947 ms
Remote clock offset: 7.68 ms


# Below is generated by plot.py at 2019-01-19 04:46:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 12953.816 ms
Loss rate: 20.01%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 12953.816 ms
Loss rate: 20.01%
```
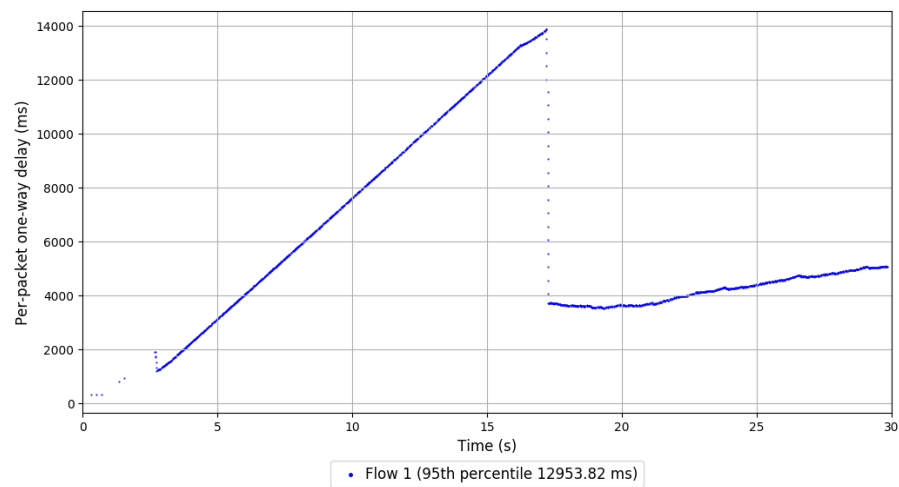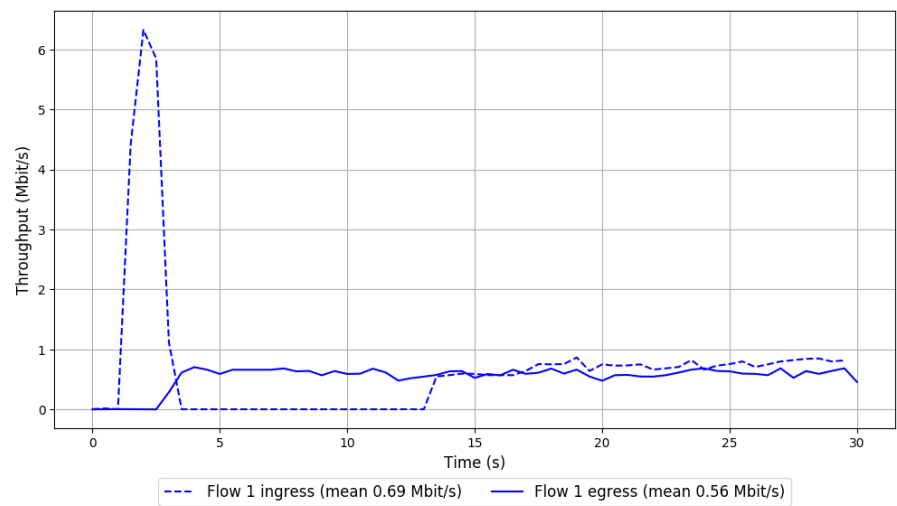
Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 0.69 Mbit/s)   Flow 1 egress (mean 0.56 Mbit/s)

Flow 1 (95th percentile 12953.82 ms)

```
Run 3: Statistics of FillP

Start at: 2019-01-19 04:37:43
End at: 2019-01-19 04:38:13
Local clock offset: -1.43 ms
Remote clock offset: 6.315 ms


# Below is generated by plot.py at 2019-01-19 04:46:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 12689.849 ms
Loss rate: 19.20%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 12689.849 ms
Loss rate: 19.20%
```
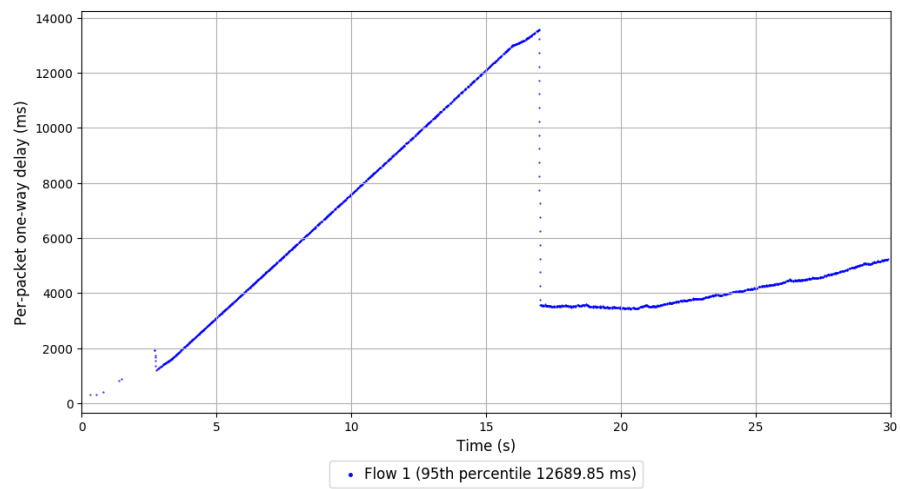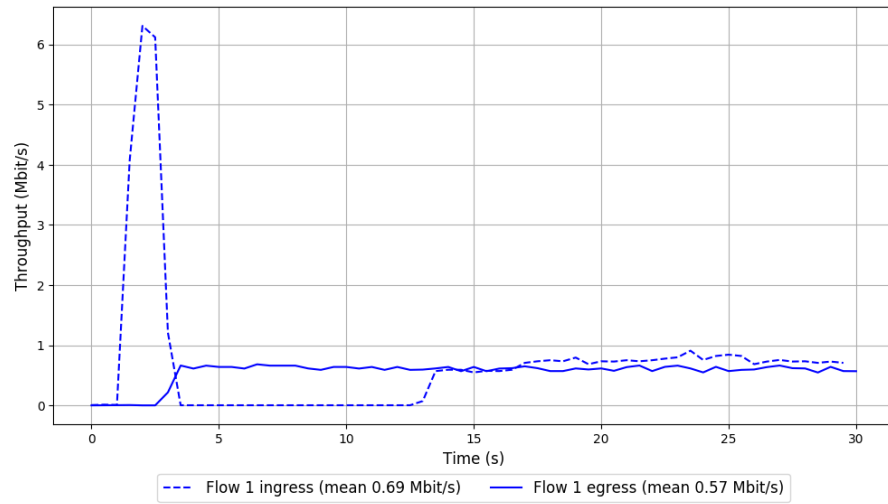
Run 3: Report of FillP — Data Link

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-01-19 03:46:25
End at: 2019-01-19 03:46:55
Local clock offset: -0.223 ms
Remote clock offset: 3.517 ms


# Below is generated by plot.py at 2019-01-19 04:46:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 14528.360 ms
Loss rate: 12.05%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 14528.360 ms
Loss rate: 12.05%
```
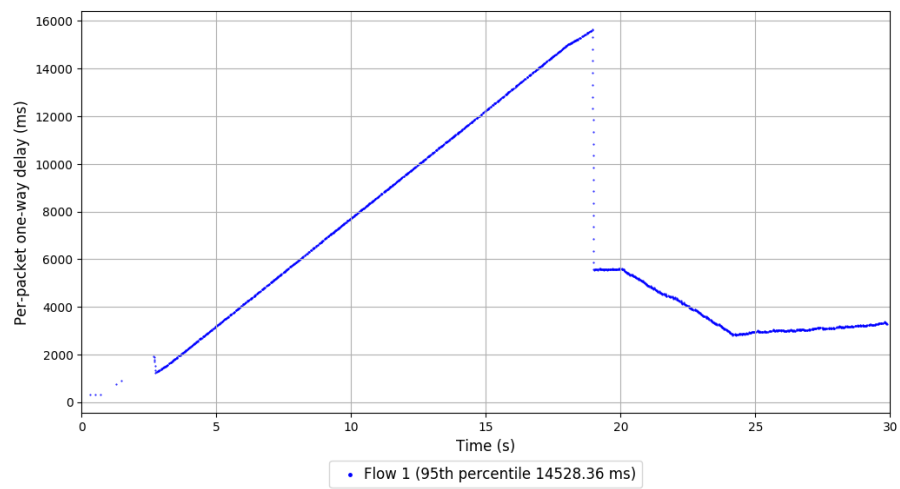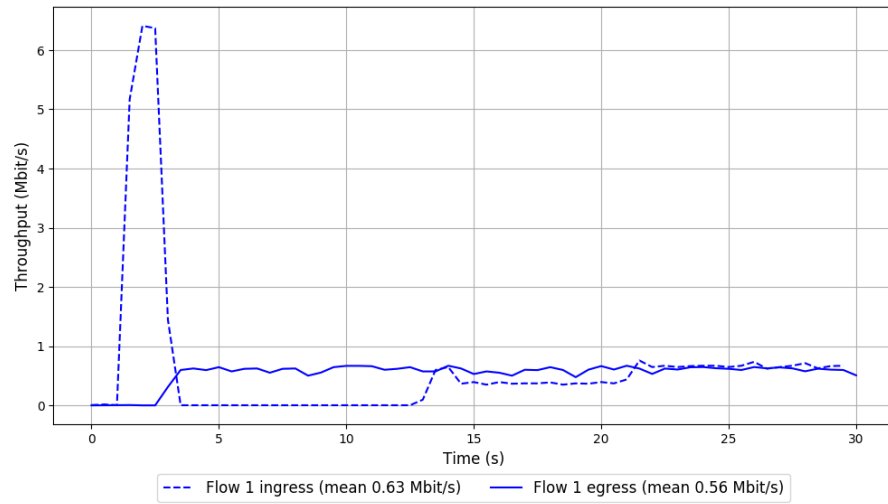
Run 1: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 0.63 Mbit/s) --- Flow 1 egress (mean 0.56 Mbit/s)

Flow 1 (95th percentile 14528.36 ms)

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-01-19 04:10:22
End at: 2019-01-19 04:10:52
Local clock offset: -1.739 ms
Remote clock offset: 4.008 ms


# Below is generated by plot.py at 2019-01-19 04:46:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 14401.148 ms
Loss rate: 13.46%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 14401.148 ms
Loss rate: 13.46%
```
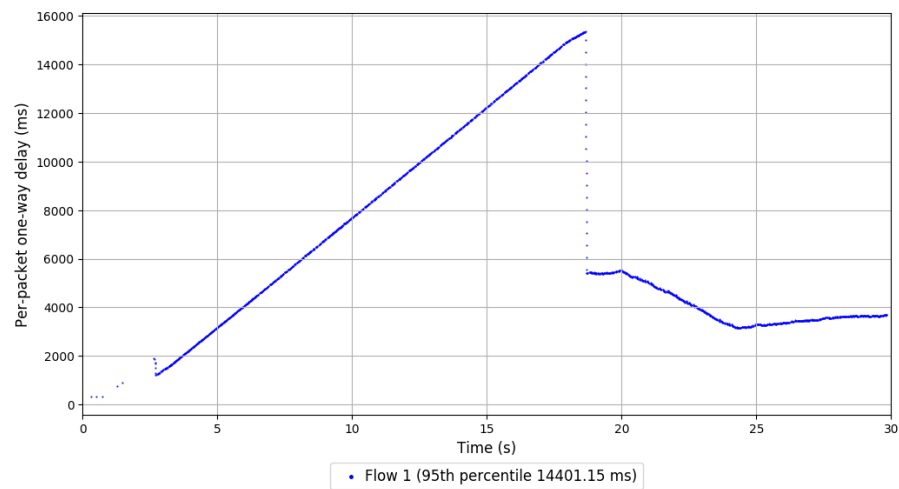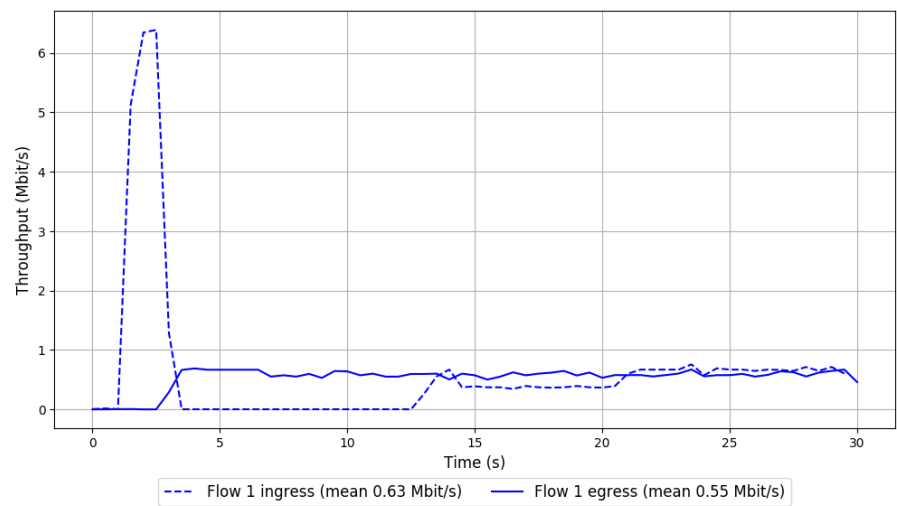
Run 2: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 0.63 Mbit/s) ——— Flow 1 egress (mean 0.55 Mbit/s)

• Flow 1 (95th percentile 14401.15 ms)

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-01-19 04:34:18
End at: 2019-01-19 04:34:48
Local clock offset: -2.19 ms
Remote clock offset: 2.575 ms


# Below is generated by plot.py at 2019-01-19 04:46:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 12603.919 ms
Loss rate: 14.55%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 12603.919 ms
Loss rate: 14.55%
```
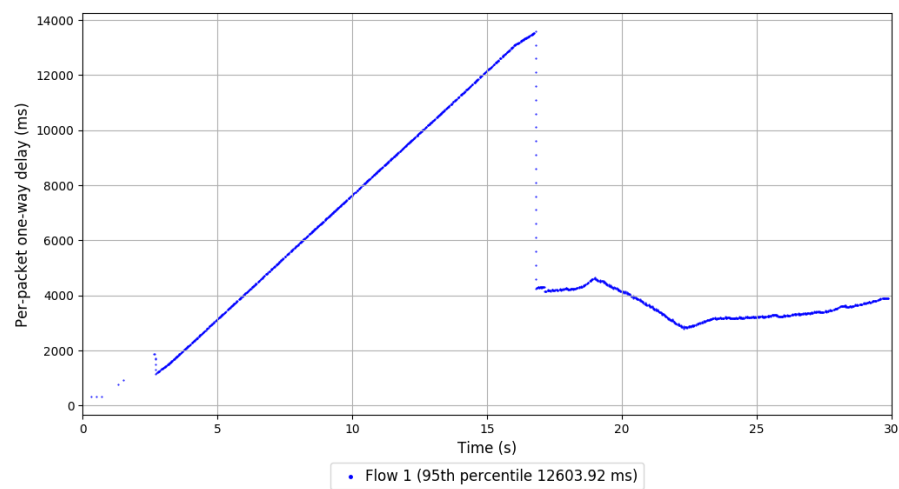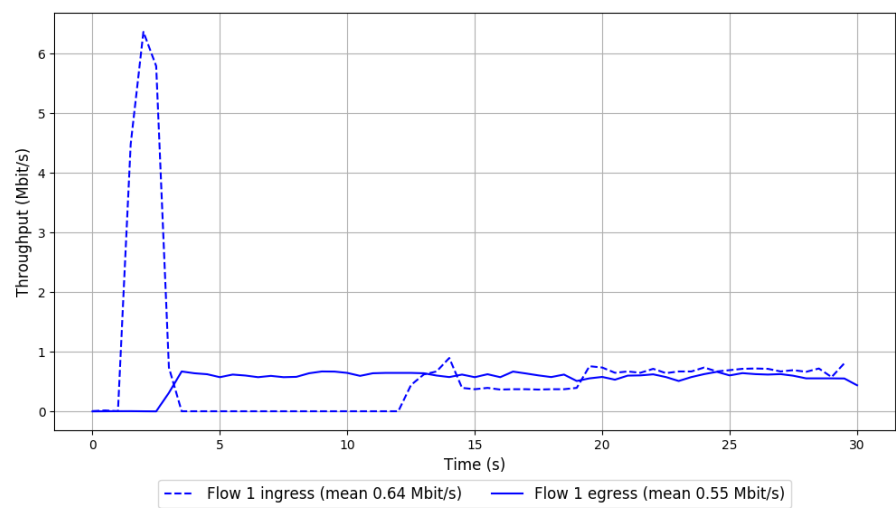
Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 0.64 Mbit/s) --- Flow 1 egress (mean 0.55 Mbit/s)
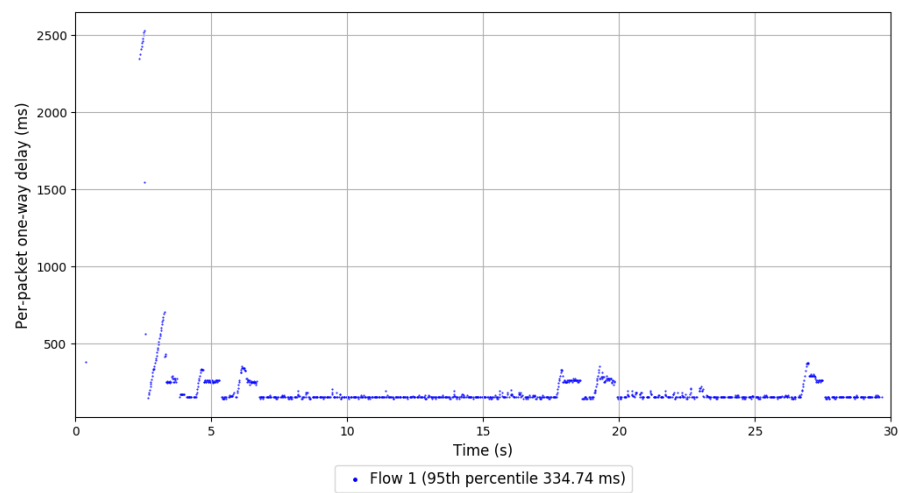

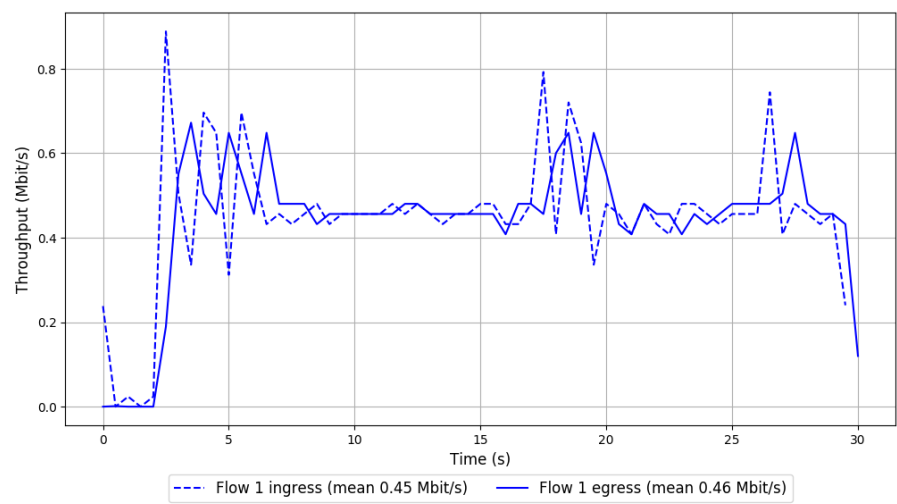
Flow 1 (95th percentile 12603.92 ms)

```
Run 1: Statistics of Indigo

Start at: 2019-01-19 03:57:49
End at: 2019-01-19 03:58:19
Local clock offset: -0.871 ms
Remote clock offset: 7.686 ms


# Below is generated by plot.py at 2019-01-19 04:46:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 334.743 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 334.743 ms
Loss rate: 0.80%
```

Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-01-19 04:21:45
End at: 2019-01-19 04:22:15
Local clock offset: -1.253 ms
Remote clock offset: 2.639 ms


# Below is generated by plot.py at 2019-01-19 04:46:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 393.399 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 393.399 ms
Loss rate: 0.82%
```
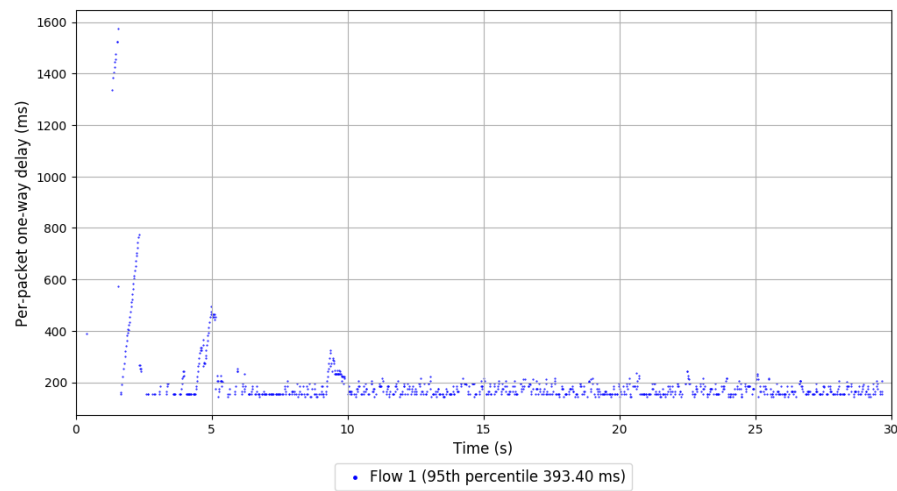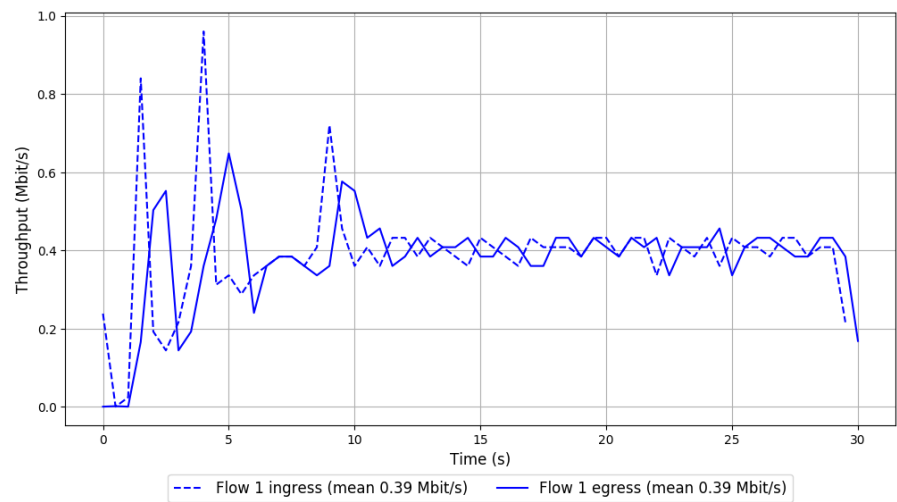
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2019-01-19 04:45:41
End at: 2019-01-19 04:46:11
Local clock offset: -2.125 ms
Remote clock offset: 2.45 ms


# Below is generated by plot.py at 2019-01-19 04:46:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 350.172 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 350.172 ms
Loss rate: 0.80%
```
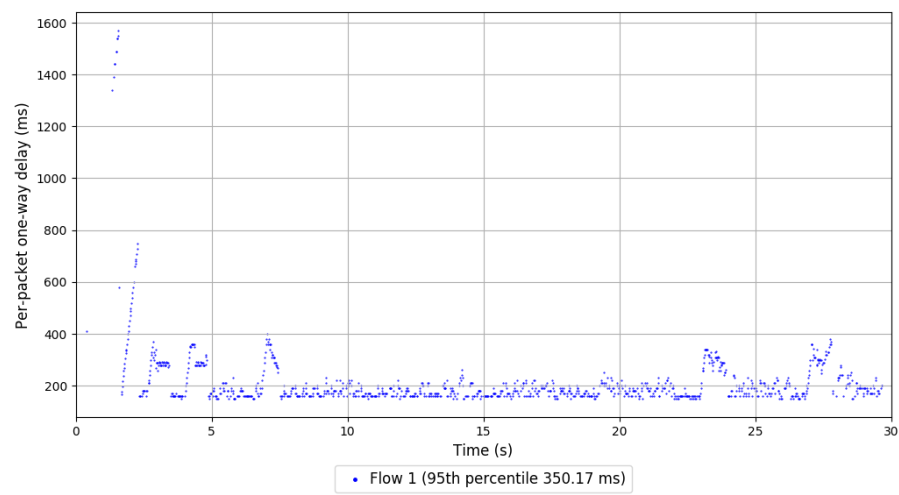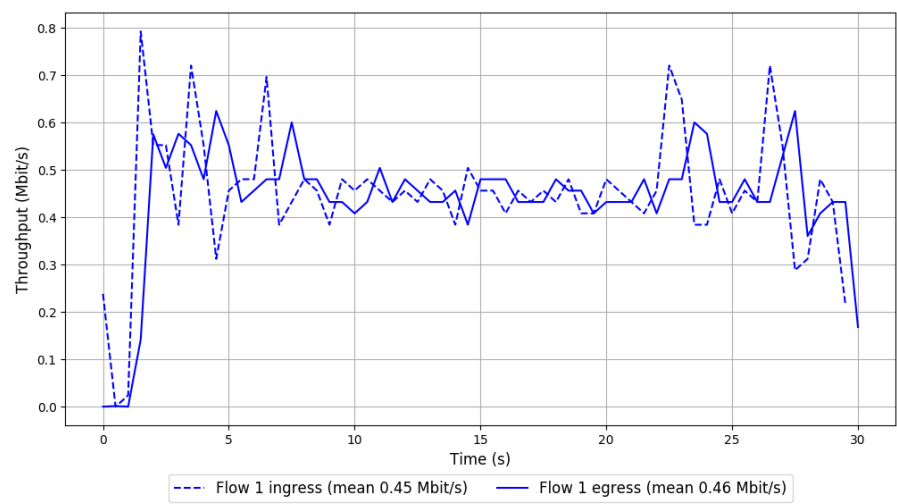
Run 3: Report of Indigo — Data Link

Flow 1 ingress (mean 0.45 Mbit/s) —— Flow 1 egress (mean 0.46 Mbit/s)

• Flow 1 (95th percentile 350.17 ms)

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-19 03:53:14
End at: 2019-01-19 03:53:44
Local clock offset: -1.204 ms
Remote clock offset: 3.677 ms


# Below is generated by plot.py at 2019-01-19 04:46:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21053.634 ms
Loss rate: 77.57%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21053.634 ms
Loss rate: 77.57%
```
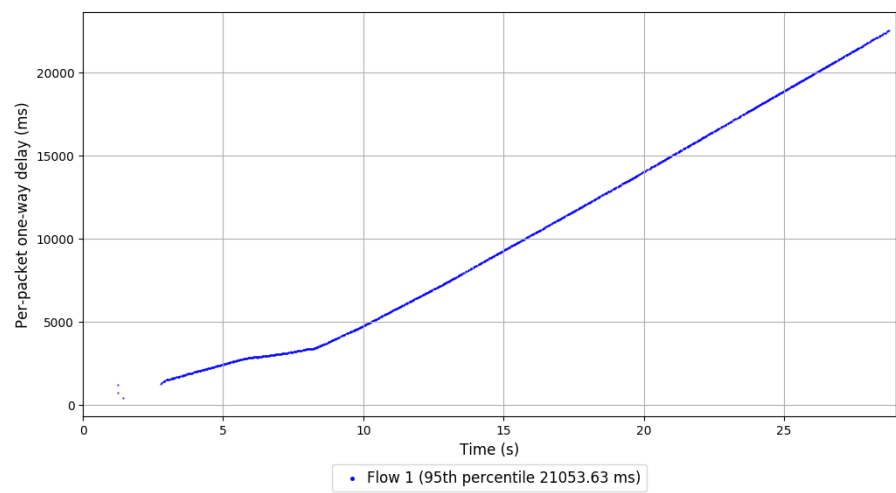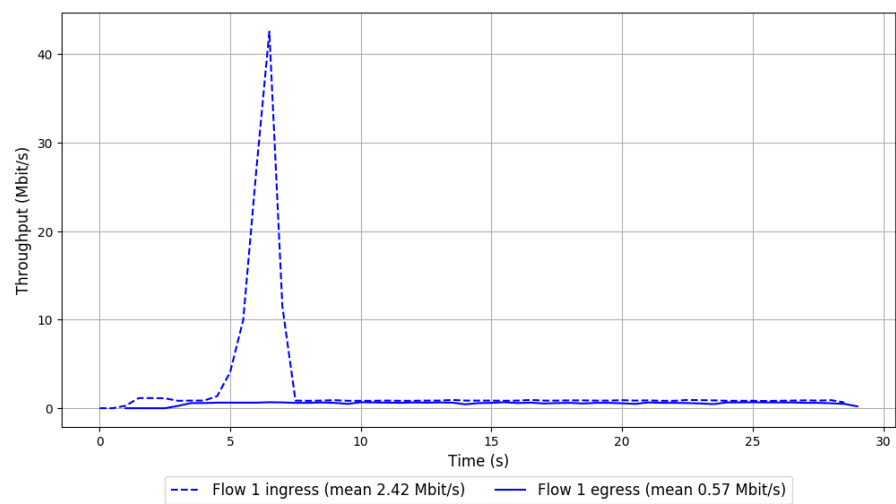
Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-19 04:17:11
End at: 2019-01-19 04:17:41
Local clock offset: -0.949 ms
Remote clock offset: 2.704 ms


# Below is generated by plot.py at 2019-01-19 04:46:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21330.080 ms
Loss rate: 86.94%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 21330.080 ms
Loss rate: 86.94%
```
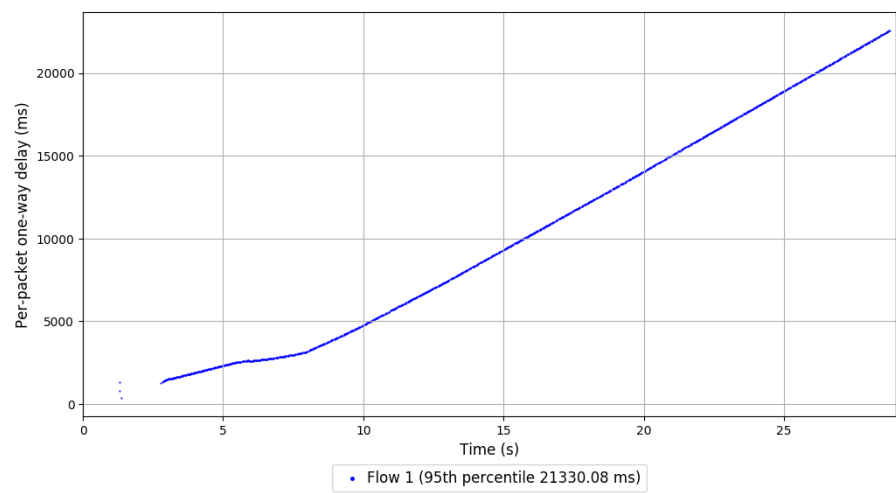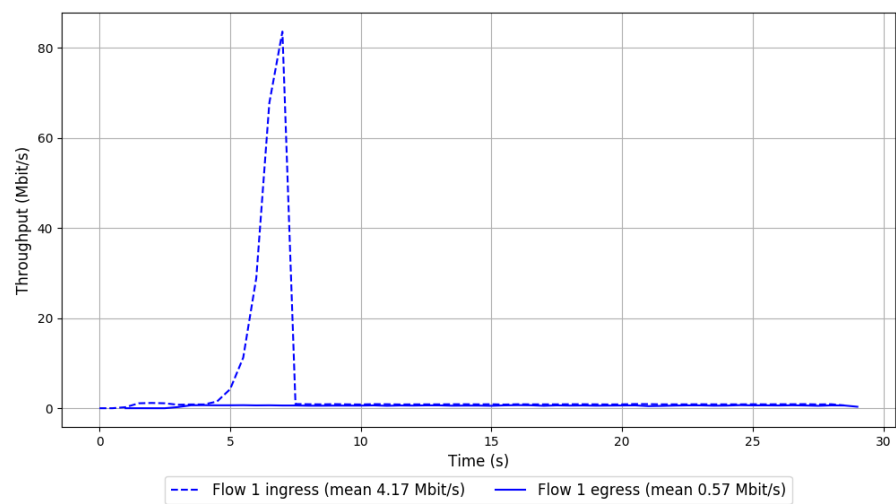
Run 2: Report of Indigo-MusesC3 — Data Link

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-19 04:41:07
End at: 2019-01-19 04:41:38
Local clock offset: -1.39 ms
Remote clock offset: 2.598 ms


# Below is generated by plot.py at 2019-01-19 04:46:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 21177.658 ms
Loss rate: 82.00%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 21177.658 ms
Loss rate: 82.00%
```
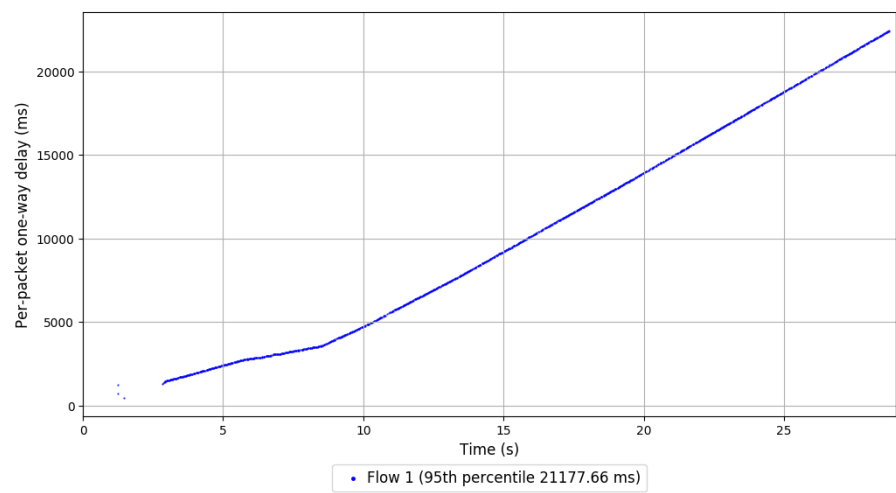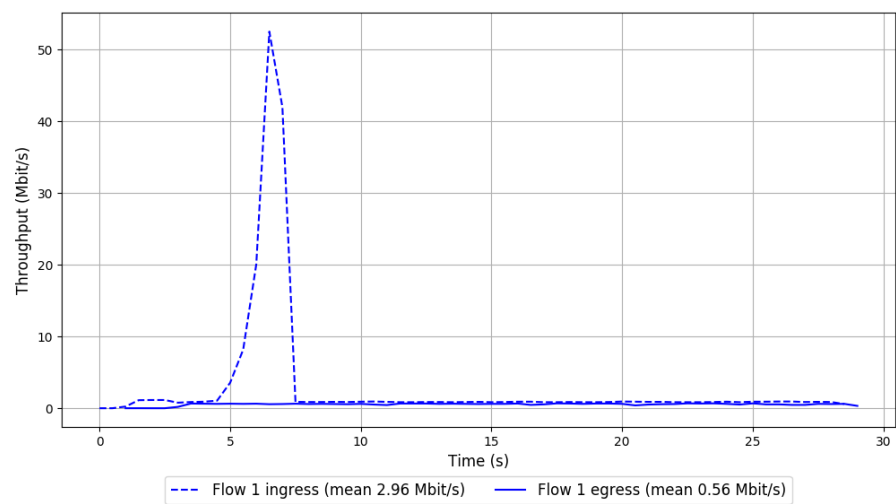
Run 3: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 2.96 Mbit/s) --- Flow 1 egress (mean 0.56 Mbit/s)

• Flow 1 (95th percentile 21177.66 ms)

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-19 03:36:06
End at: 2019-01-19 03:36:36
Local clock offset: -1.392 ms
Remote clock offset: 3.113 ms


# Below is generated by plot.py at 2019-01-19 04:46:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 8834.855 ms
Loss rate: 33.11%
-- Flow 1:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 8834.855 ms
Loss rate: 33.11%
```
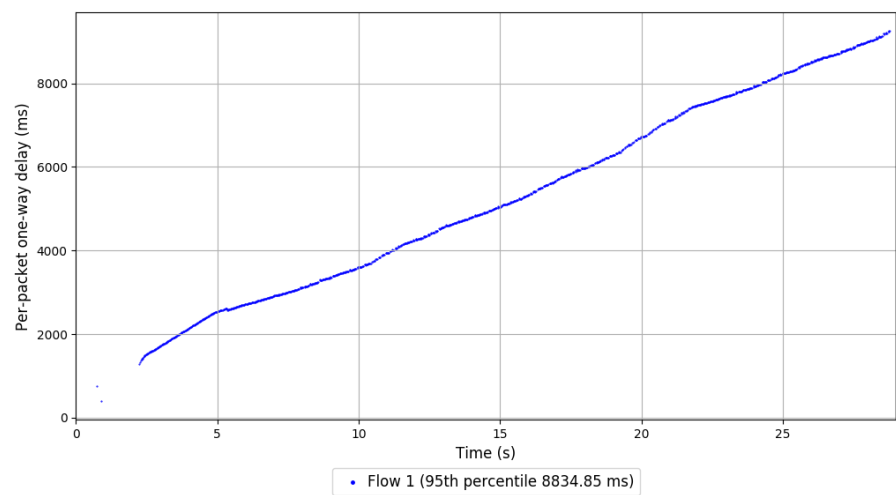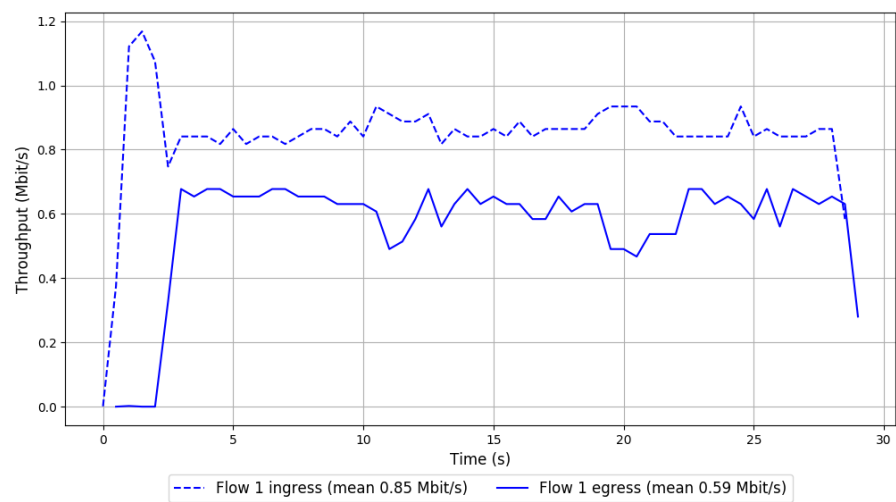
Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-19 04:00:05
End at: 2019-01-19 04:00:35
Local clock offset: -1.734 ms
Remote clock offset: 3.517 ms


# Below is generated by plot.py at 2019-01-19 04:46:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 10350.441 ms
Loss rate: 40.01%
-- Flow 1:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 10350.441 ms
Loss rate: 40.01%
```
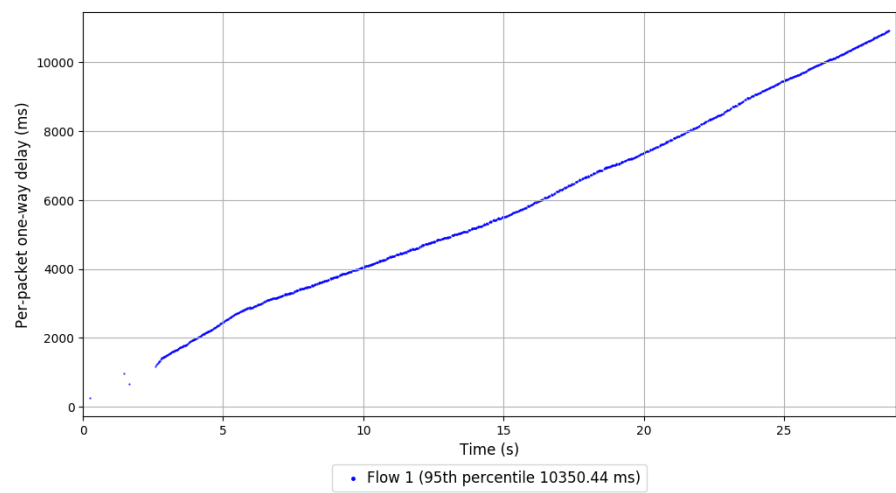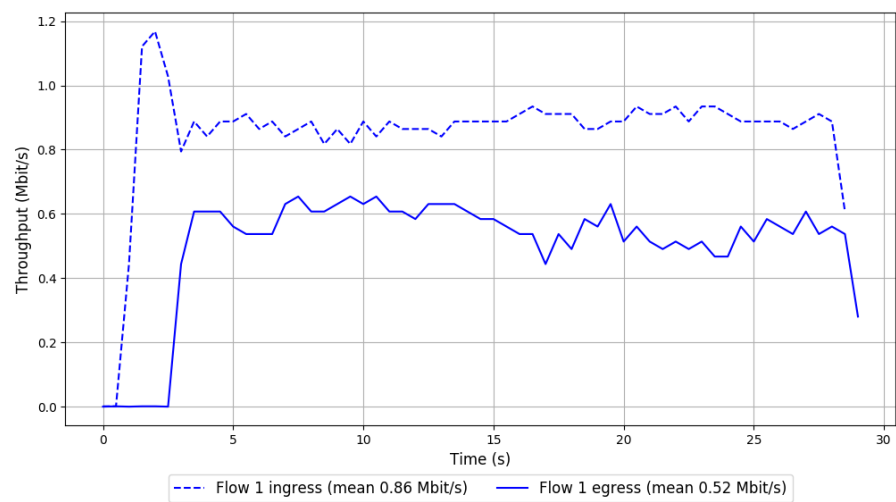
Run 2: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 0.86 Mbit/s)   Flow 1 egress (mean 0.52 Mbit/s)

Flow 1 (95th percentile 10350.44 ms)

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-19 04:24:01
End at: 2019-01-19 04:24:31
Local clock offset: -1.279 ms
Remote clock offset: 7.52 ms


# Below is generated by plot.py at 2019-01-19 04:46:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 8994.480 ms
Loss rate: 34.73%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 8994.480 ms
Loss rate: 34.73%
```
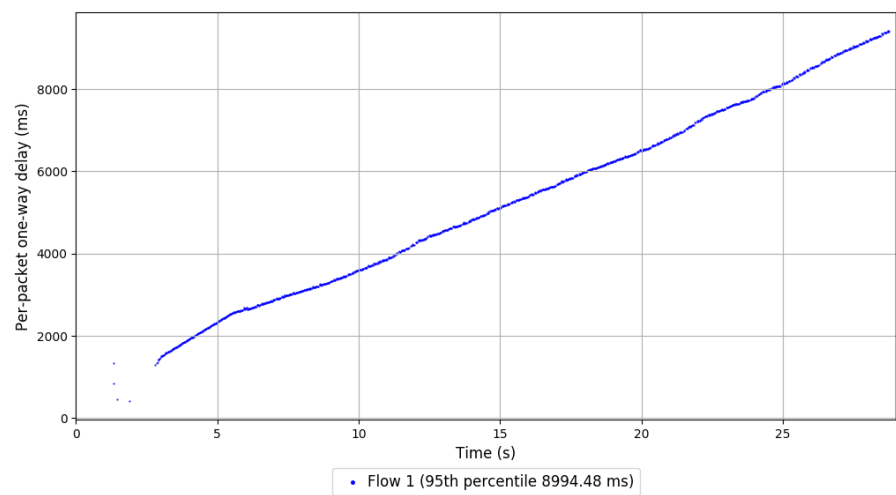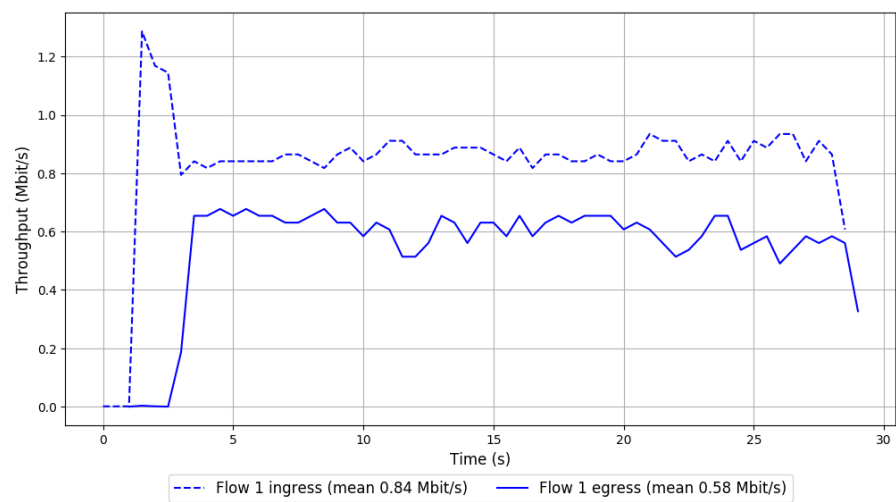
Run 3: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 0.84 Mbit/s)   Flow 1 egress (mean 0.58 Mbit/s)

Flow 1 (95th percentile 8994.48 ms)

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-19 03:40:43
End at: 2019-01-19 03:41:13
Local clock offset: -0.814 ms
Remote clock offset: 9.295 ms


# Below is generated by plot.py at 2019-01-19 04:46:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 9425.166 ms
Loss rate: 35.55%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 9425.166 ms
Loss rate: 35.55%
```
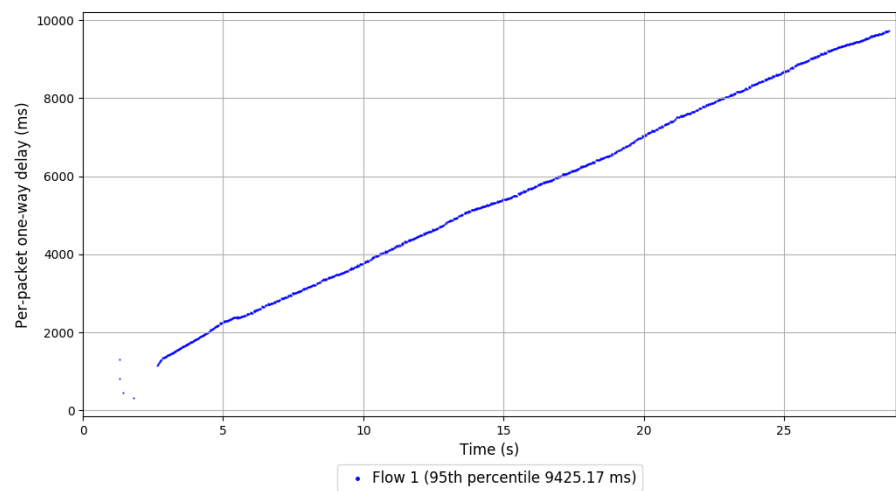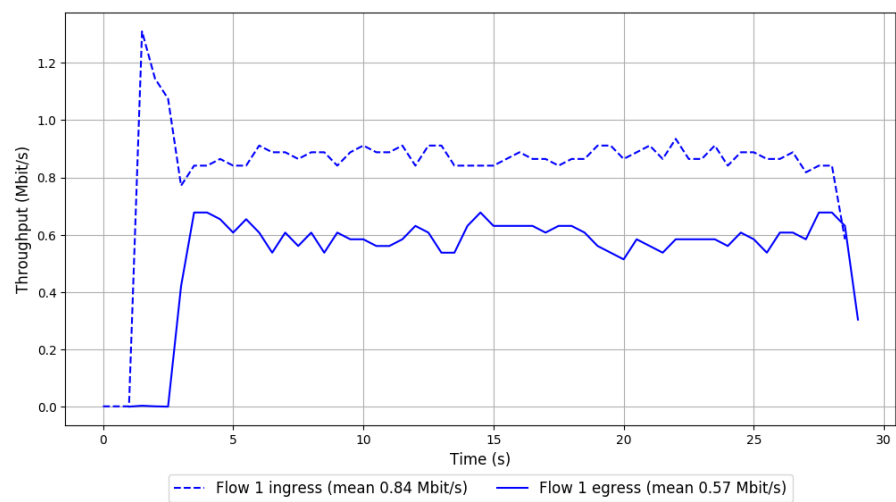
Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-19 04:04:39
End at: 2019-01-19 04:05:09
Local clock offset: -1.77 ms
Remote clock offset: 3.104 ms


# Below is generated by plot.py at 2019-01-19 04:46:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 9460.420 ms
Loss rate: 35.43%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 9460.420 ms
Loss rate: 35.43%
```
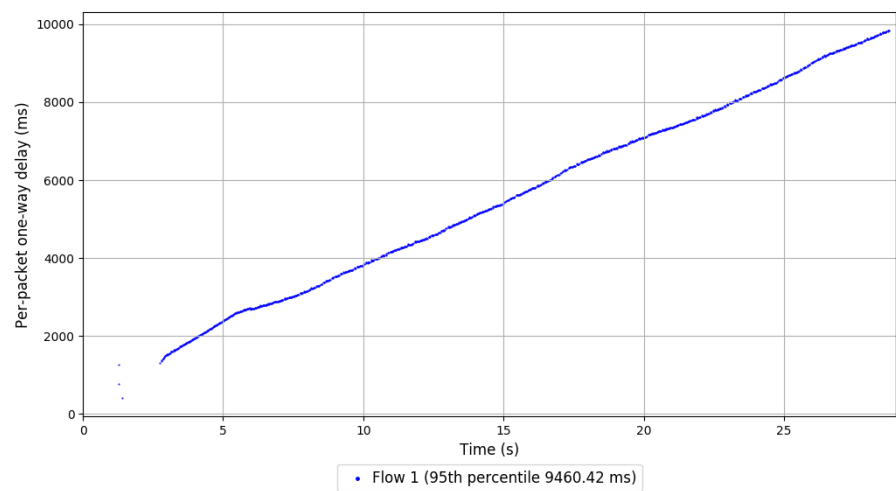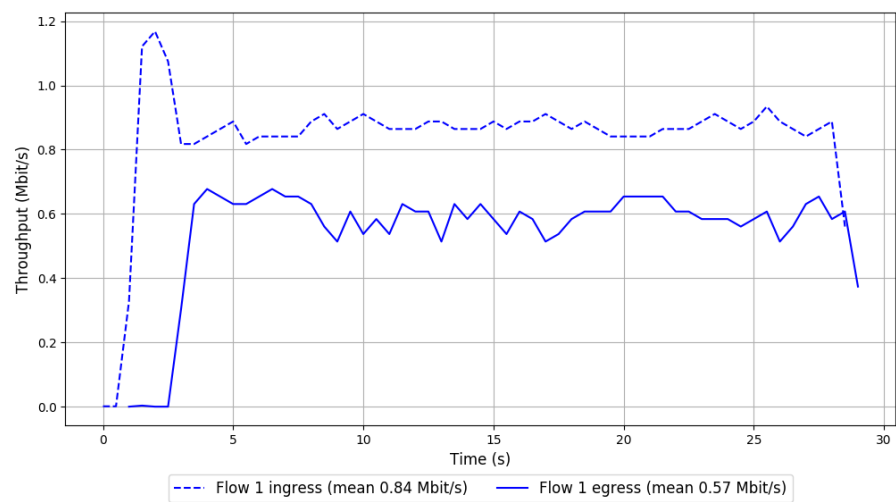
Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-19 04:28:36
End at: 2019-01-19 04:29:06
Local clock offset: -2.163 ms
Remote clock offset: 3.787 ms


# Below is generated by plot.py at 2019-01-19 04:46:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 9245.528 ms
Loss rate: 35.49%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 9245.528 ms
Loss rate: 35.49%
```
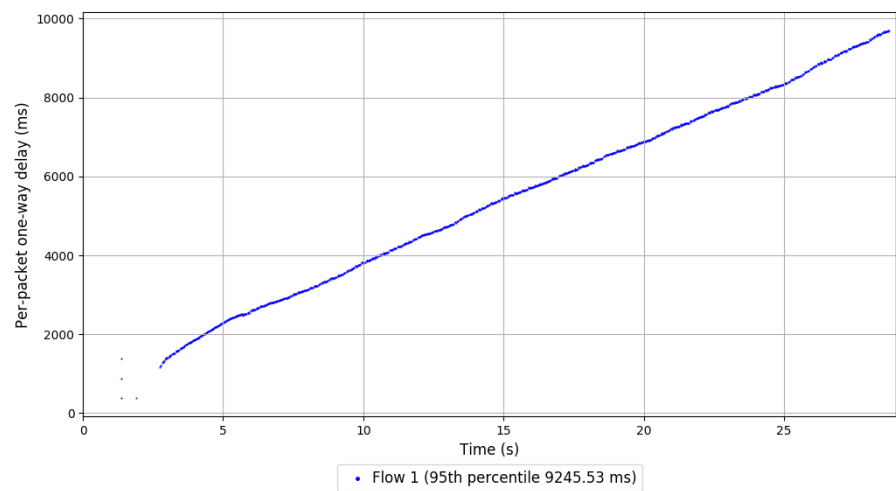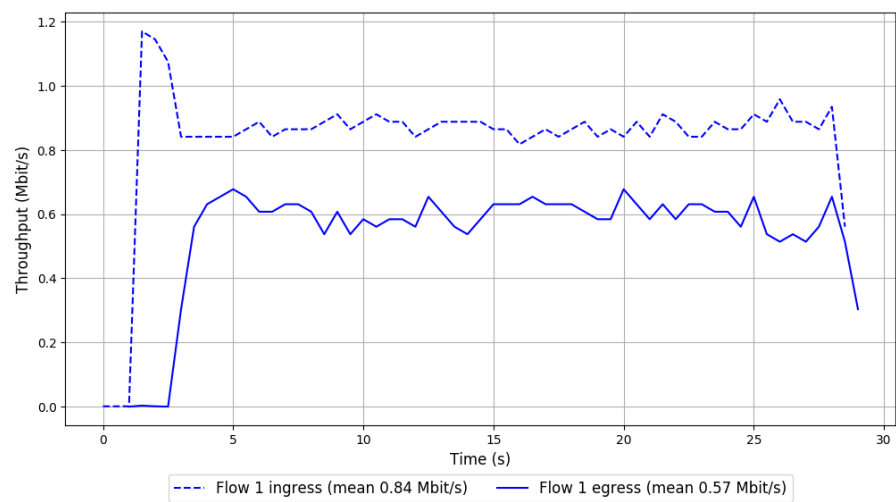
Run 3: Report of Indigo-MusesD — Data Link

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-19 03:34:58
End at: 2019-01-19 03:35:28
Local clock offset: -0.852 ms
Remote clock offset: 2.927 ms


# Below is generated by plot.py at 2019-01-19 04:46:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 20187.655 ms
Loss rate: 54.99%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 20187.655 ms
Loss rate: 54.99%
```
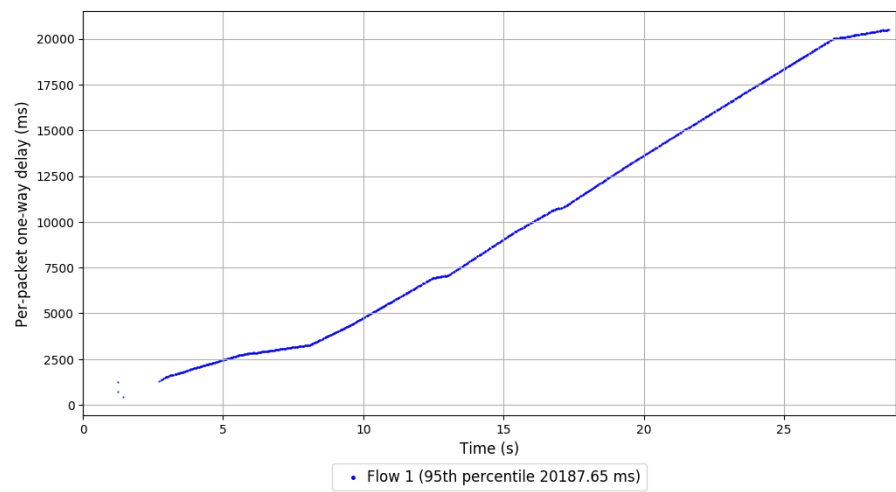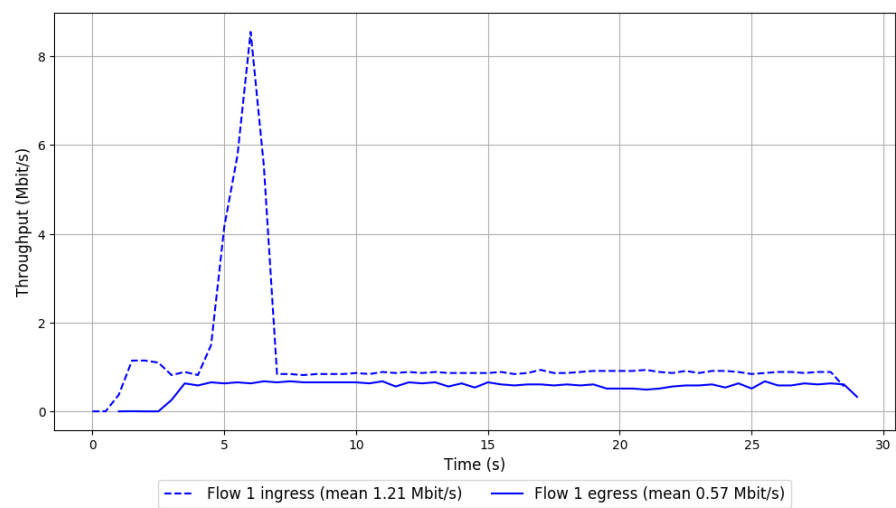
Run 1: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 1.21 Mbit/s) --- Flow 1 egress (mean 0.57 Mbit/s)

Flow 1 (95th percentile 20187.65 ms)

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-19 03:58:57
End at: 2019-01-19 03:59:27
Local clock offset: -0.848 ms
Remote clock offset: 7.772 ms


# Below is generated by plot.py at 2019-01-19 04:46:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 19833.757 ms
Loss rate: 54.31%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 19833.757 ms
Loss rate: 54.31%
```
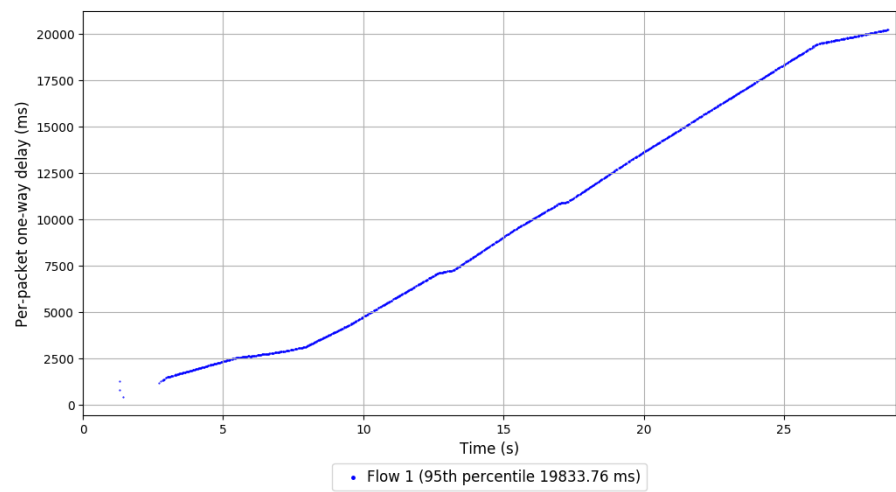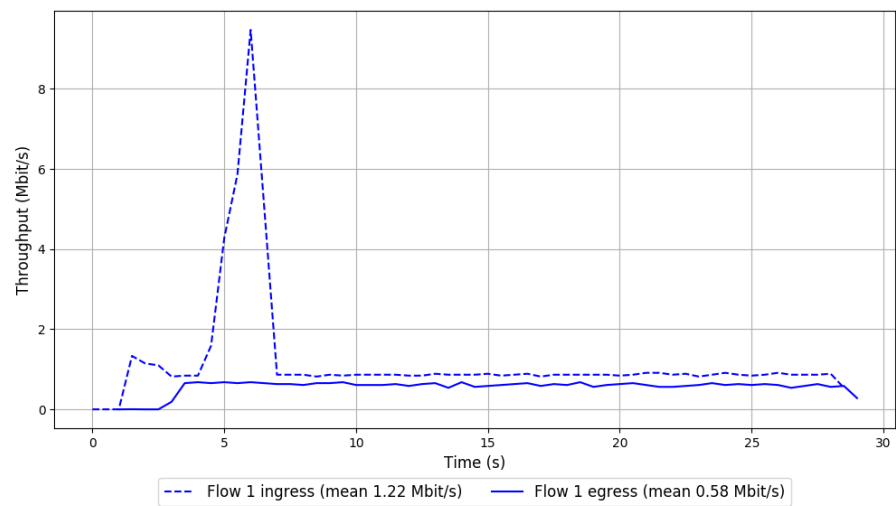
Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-19 04:22:53
End at: 2019-01-19 04:23:23
Local clock offset: -2.001 ms
Remote clock offset: 7.453 ms


# Below is generated by plot.py at 2019-01-19 04:46:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 20202.447 ms
Loss rate: 54.74%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 20202.447 ms
Loss rate: 54.74%
```
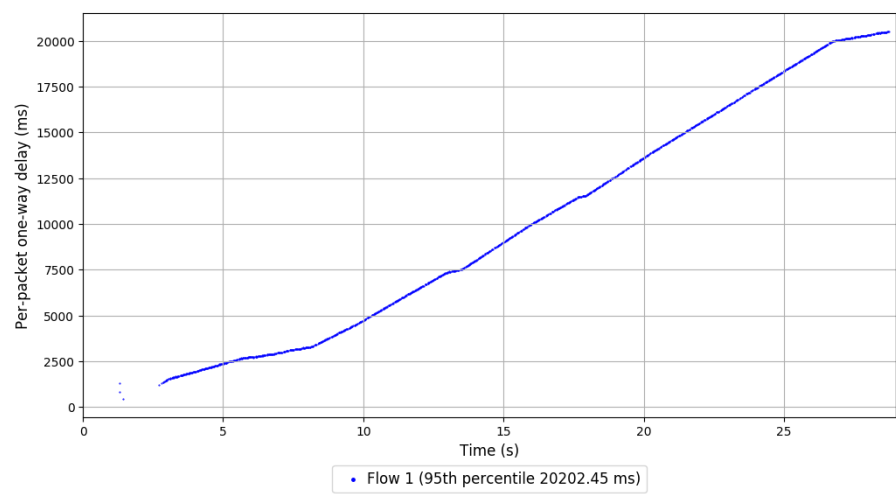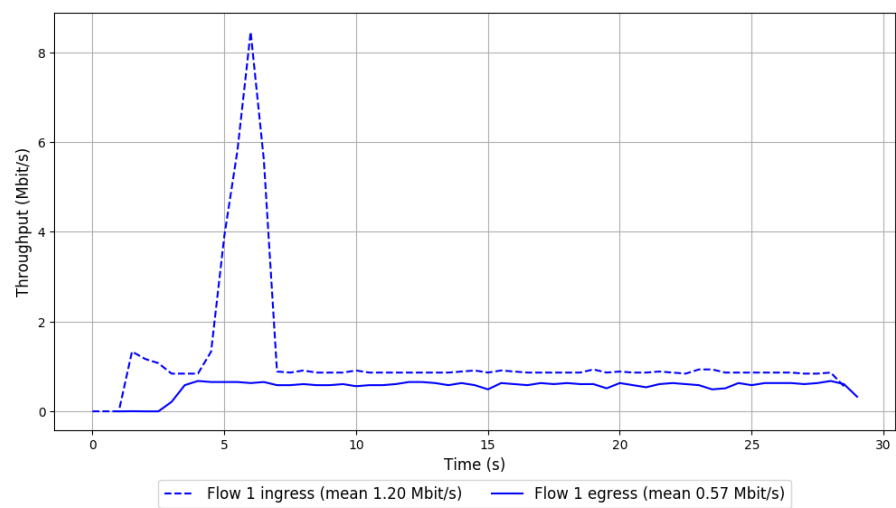
Run 3: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 1.20 Mbit/s)   —— Flow 1 egress (mean 0.57 Mbit/s)

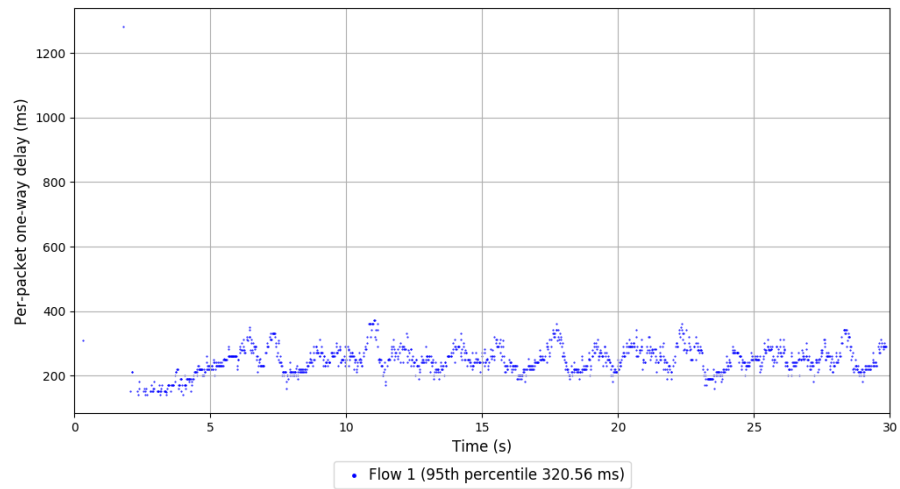• Flow 1 (95th percentile 20202.45 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2019-01-19 03:47:33
End at: 2019-01-19 03:48:03
Local clock offset: -0.278 ms
Remote clock offset: 3.505 ms

# Below is generated by plot.py at 2019-01-19 04:46:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 320.558 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 320.558 ms
Loss rate: 1.27%
```

Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.56 Mbit/s)   Flow 1 egress (mean 0.56 Mbit/s)

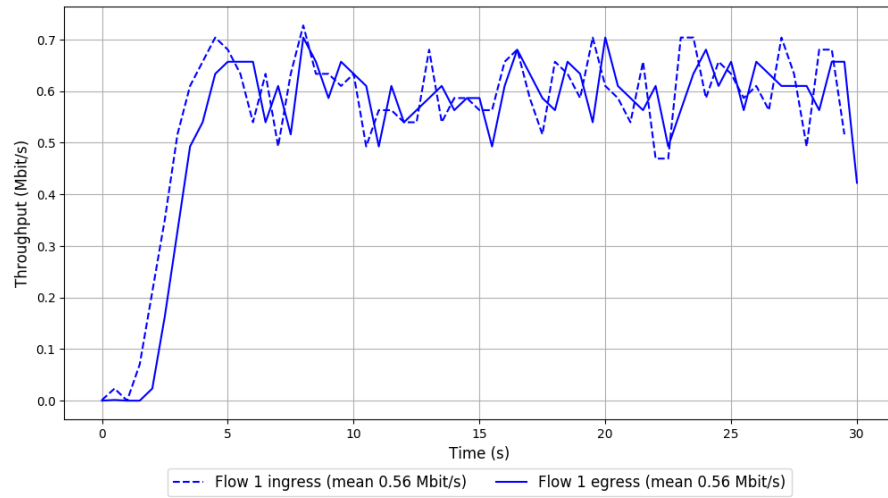

Flow 1 (95th percentile 320.56 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2019-01-19 04:11:31
End at: 2019-01-19 04:12:01
Local clock offset: -1.723 ms
Remote clock offset: 8.854 ms

# Below is generated by plot.py at 2019-01-19 04:46:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 306.509 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 306.509 ms
Loss rate: 1.29%
```
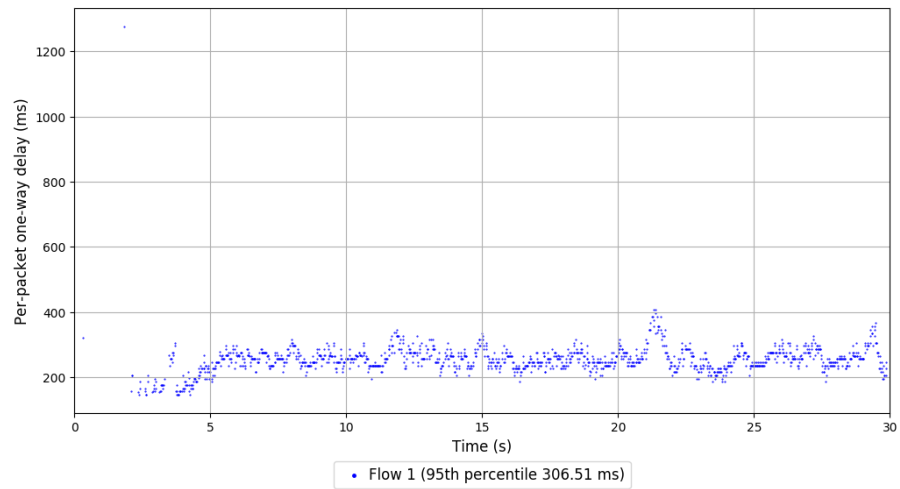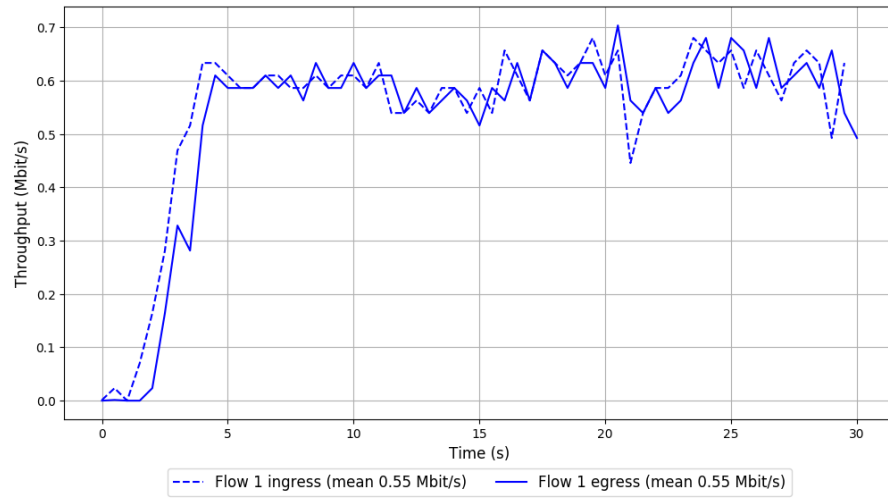
Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.55 Mbit/s)   Flow 1 egress (mean 0.55 Mbit/s)

Flow 1 (95th percentile 306.51 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2019-01-19 04:35:27
End at: 2019-01-19 04:35:57
Local clock offset: -1.439 ms
Remote clock offset: 6.079 ms


# Below is generated by plot.py at 2019-01-19 04:46:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 333.796 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 333.796 ms
Loss rate: 1.40%
```
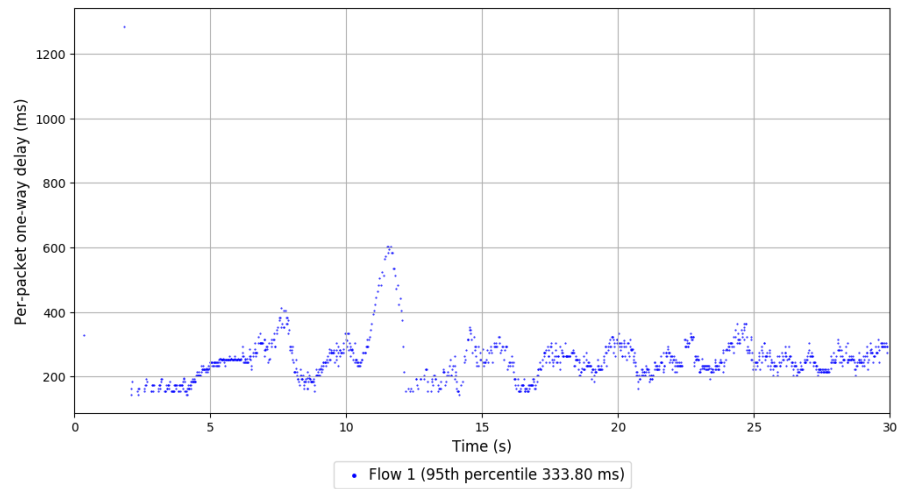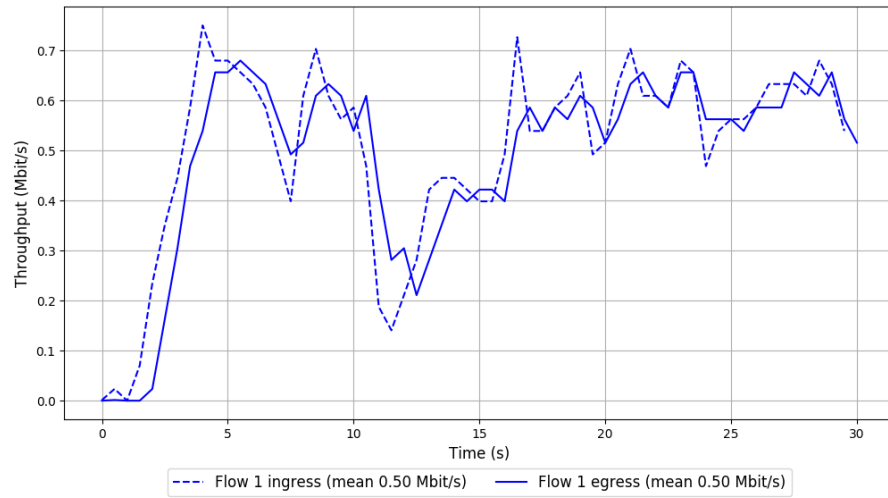
Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.50 Mbit/s)   Flow 1 egress (mean 0.50 Mbit/s)

Flow 1 (95th percentile 333.80 ms)

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-01-19 03:45:15
End at: 2019-01-19 03:45:45
Local clock offset: 0.432 ms
Remote clock offset: 8.375 ms


# Below is generated by plot.py at 2019-01-19 04:46:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 26097.557 ms
Loss rate: 98.62%
-- Flow 1:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 26097.557 ms
Loss rate: 98.62%
```
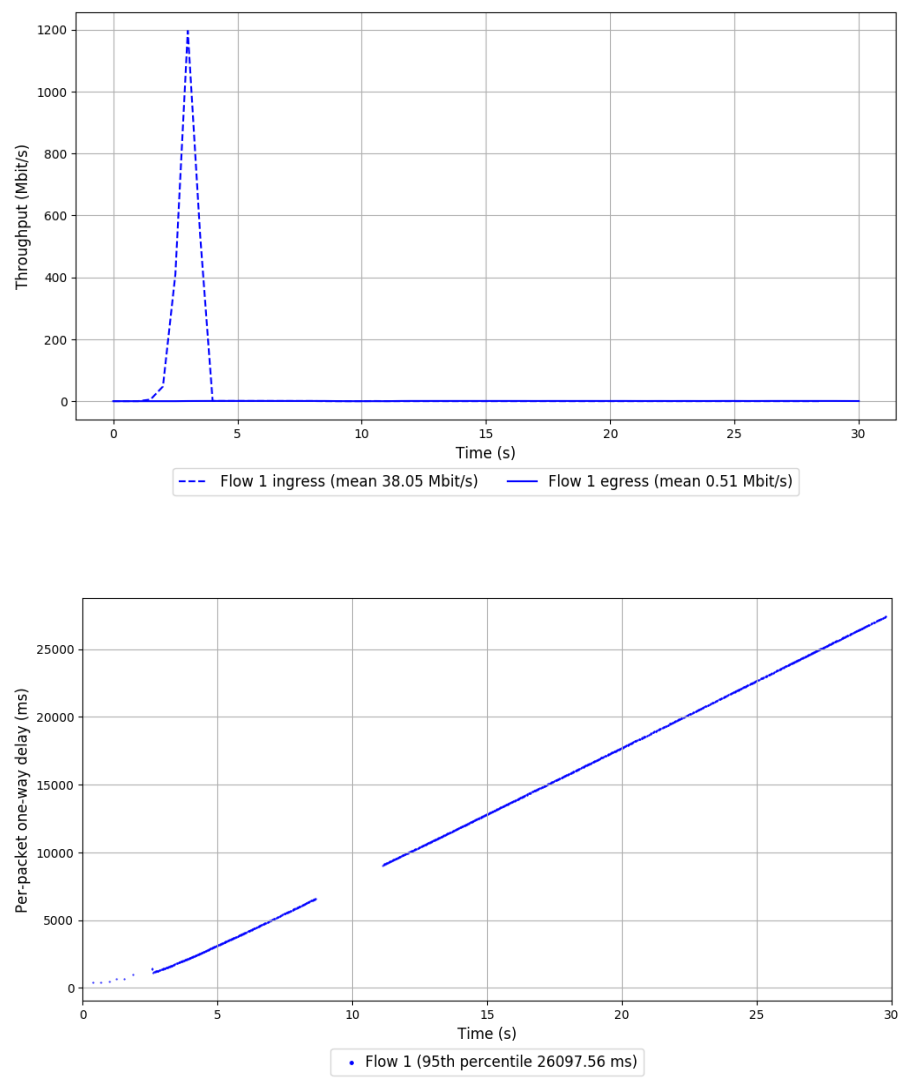
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-01-19 04:09:12
End at: 2019-01-19 04:09:42
Local clock offset: -1.813 ms
Remote clock offset: 2.617 ms


# Below is generated by plot.py at 2019-01-19 04:46:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 26183.179 ms
Loss rate: 98.10%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 26183.179 ms
Loss rate: 98.10%
```
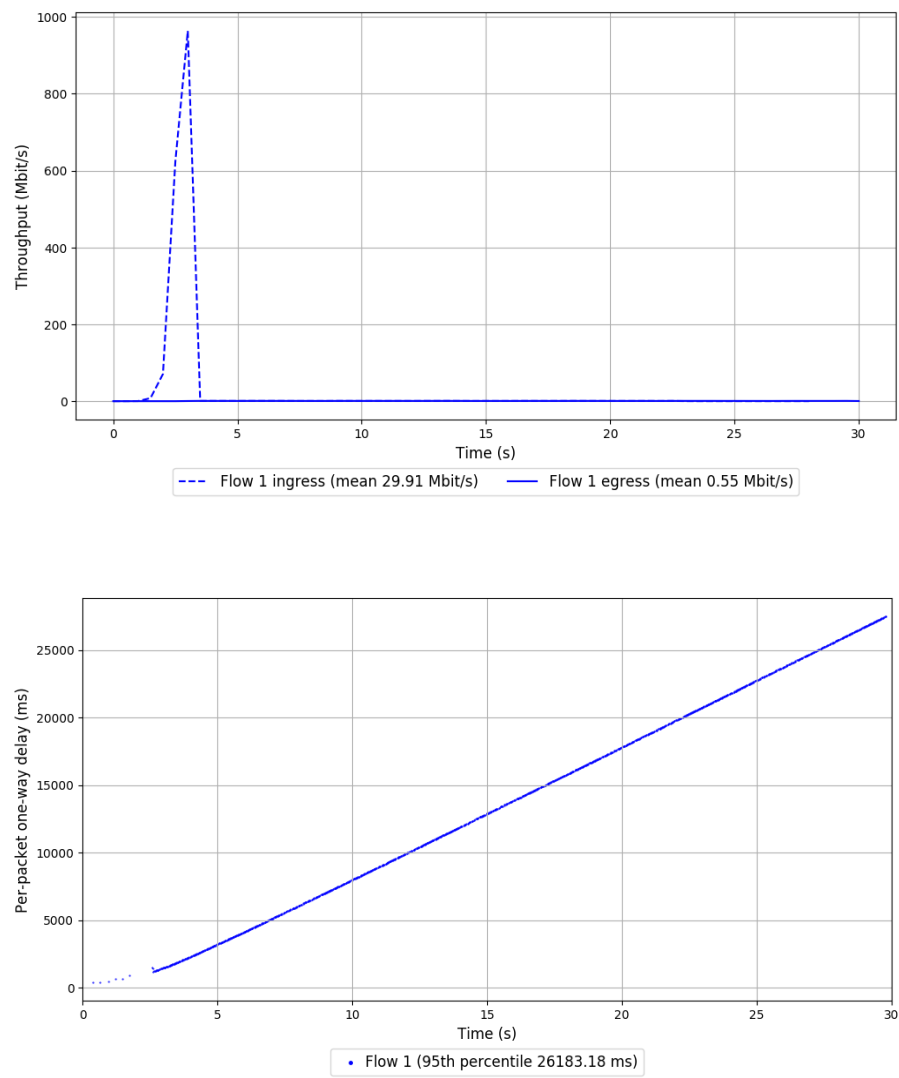
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 29.91 Mbit/s) ----   Flow 1 egress (mean 0.55 Mbit/s) ——

• Flow 1 (95th percentile 26183.18 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-01-19 04:33:09
End at: 2019-01-19 04:33:39
Local clock offset: -1.423 ms
Remote clock offset: 7.271 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26019.860 ms
Loss rate: 98.51%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 26019.860 ms
Loss rate: 98.51%
```
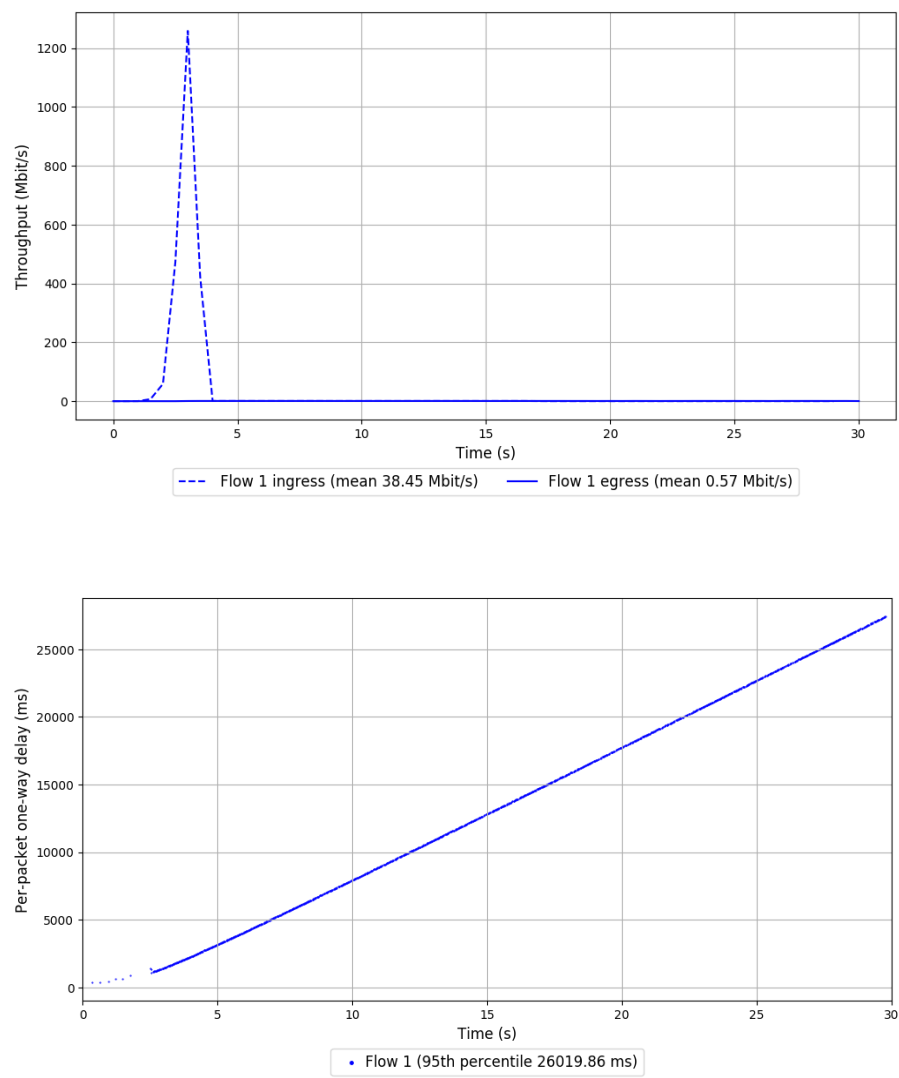
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 38.45 Mbit/s) — Flow 1 egress (mean 0.57 Mbit/s)

• Flow 1 (95th percentile 26019.86 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2019-01-19 03:38:25
End at: 2019-01-19 03:38:55
Local clock offset: -1.06 ms
Remote clock offset: 8.126 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 25672.910 ms
Loss rate: 90.86%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 25672.910 ms
Loss rate: 90.86%
```
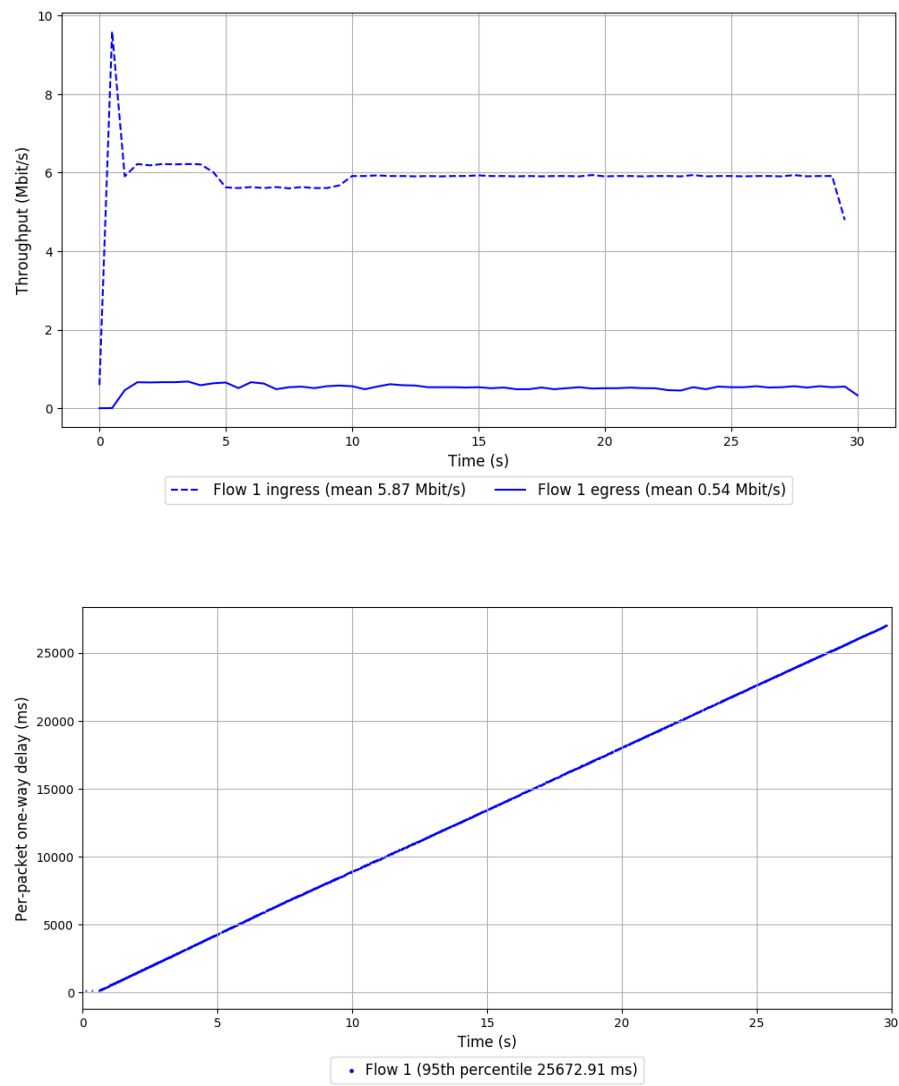
Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2019-01-19 04:02:23
End at: 2019-01-19 04:02:53
Local clock offset: -1.022 ms
Remote clock offset: 9.337 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 25516.854 ms
Loss rate: 90.27%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 25516.854 ms
Loss rate: 90.27%
```
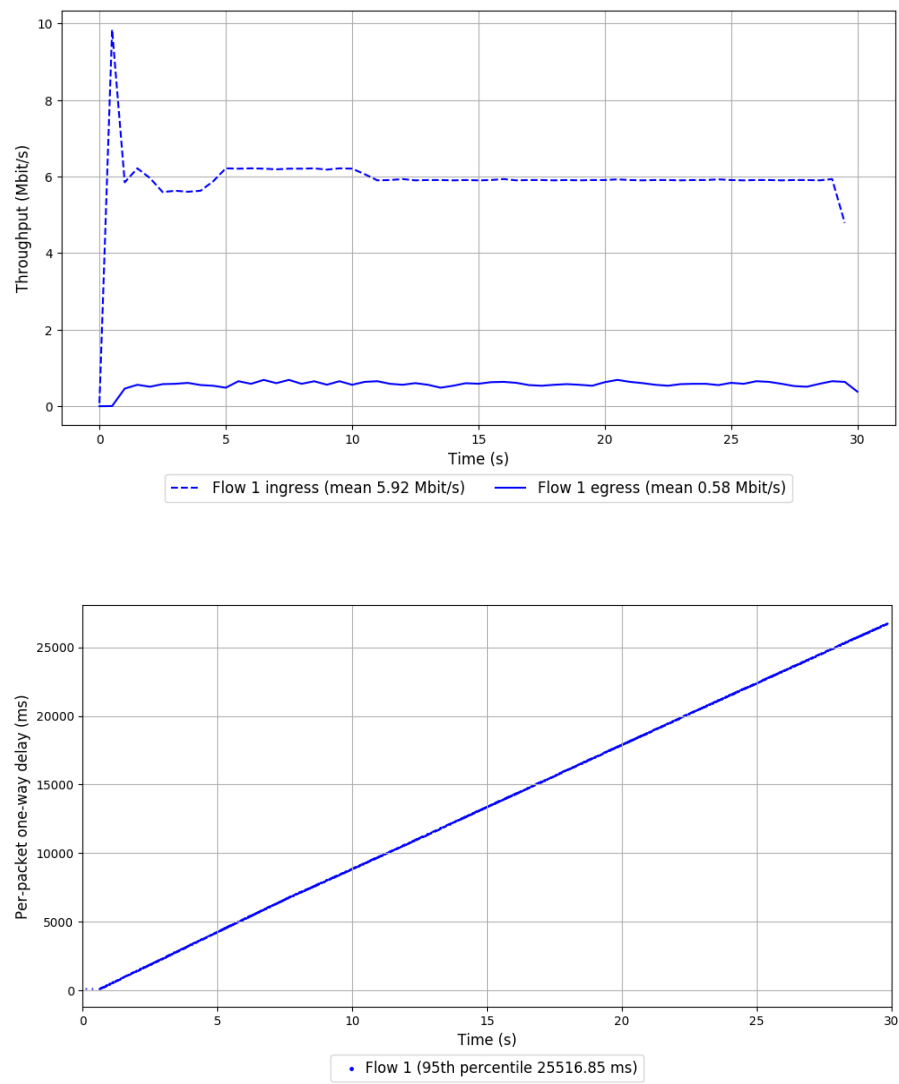
Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 5.92 Mbit/s)   Flow 1 egress (mean 0.58 Mbit/s)

• Flow 1 (95th percentile 25516.85 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2019-01-19 04:26:20
End at: 2019-01-19 04:26:50
Local clock offset: -2.111 ms
Remote clock offset: 7.455 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 25404.740 ms
Loss rate: 90.08%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 25404.740 ms
Loss rate: 90.08%
```
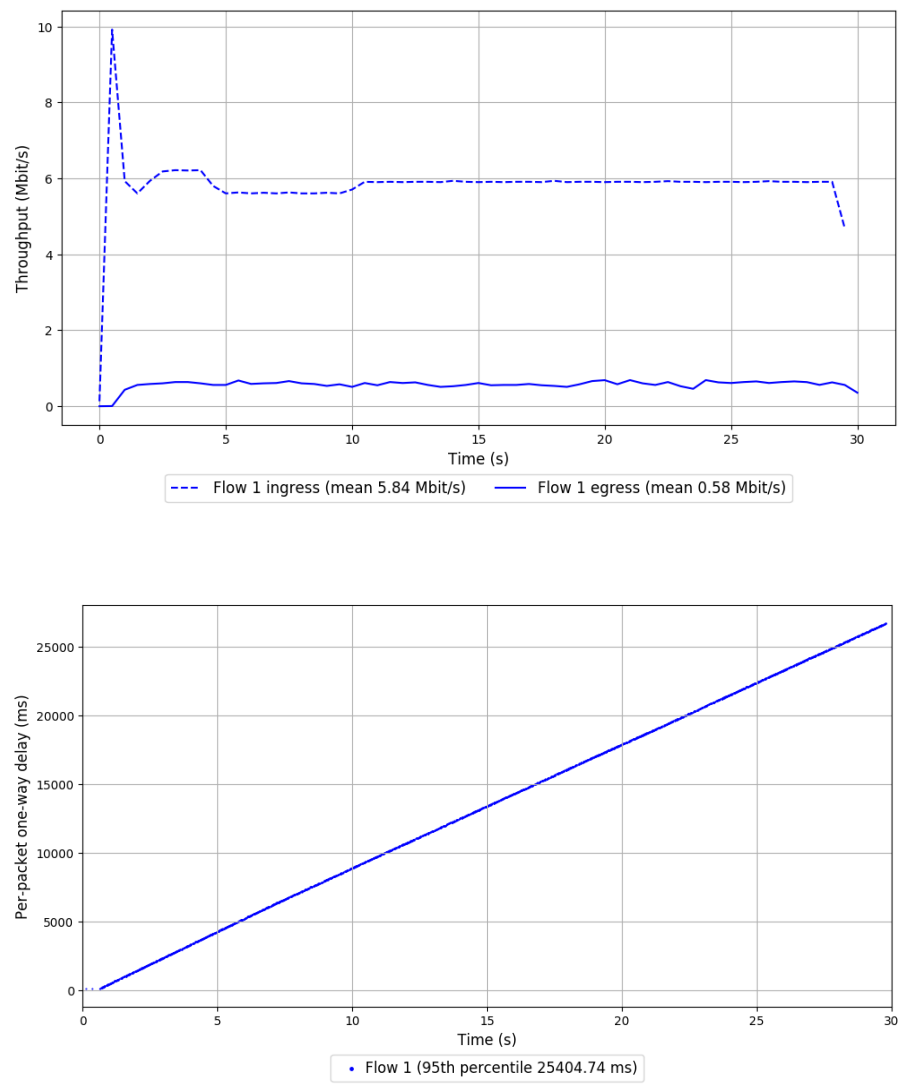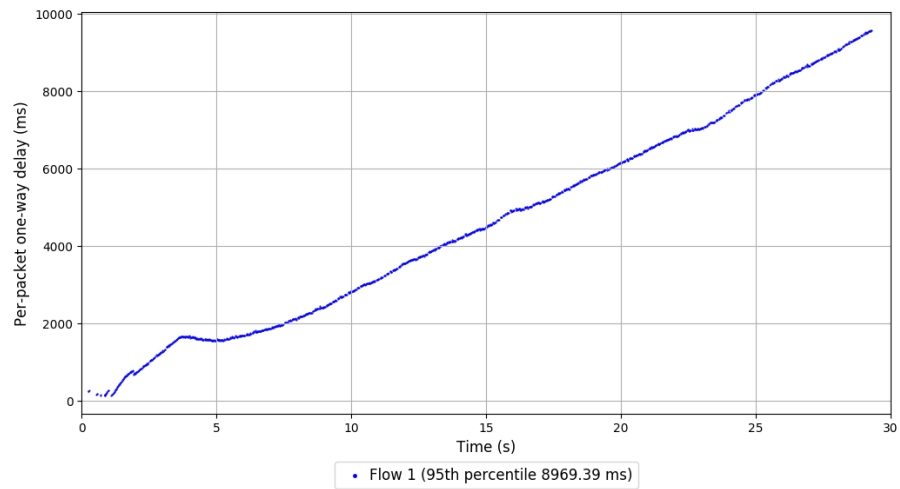
Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 5.84 Mbit/s) --- Flow 1 egress (mean 0.58 Mbit/s)

• Flow 1 (95th percentile 25404.74 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-19 03:50:57
End at: 2019-01-19 03:51:27
Local clock offset: -0.208 ms
Remote clock offset: 7.26 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 8969.385 ms
Loss rate: 32.81%
-- Flow 1:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 8969.385 ms
Loss rate: 32.81%
```
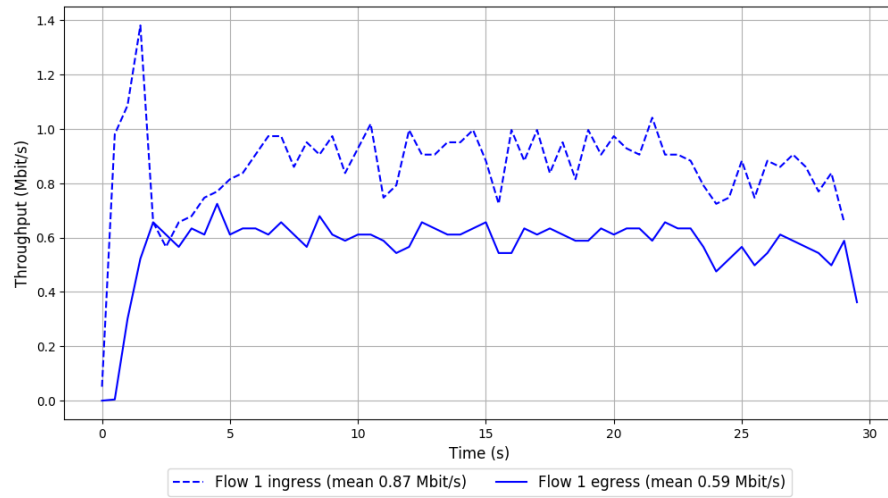
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-01-19 04:14:55
End at: 2019-01-19 04:15:25
Local clock offset: -1.735 ms
Remote clock offset: 2.602 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 8766.428 ms
Loss rate: 32.75%
-- Flow 1:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 8766.428 ms
Loss rate: 32.75%
```
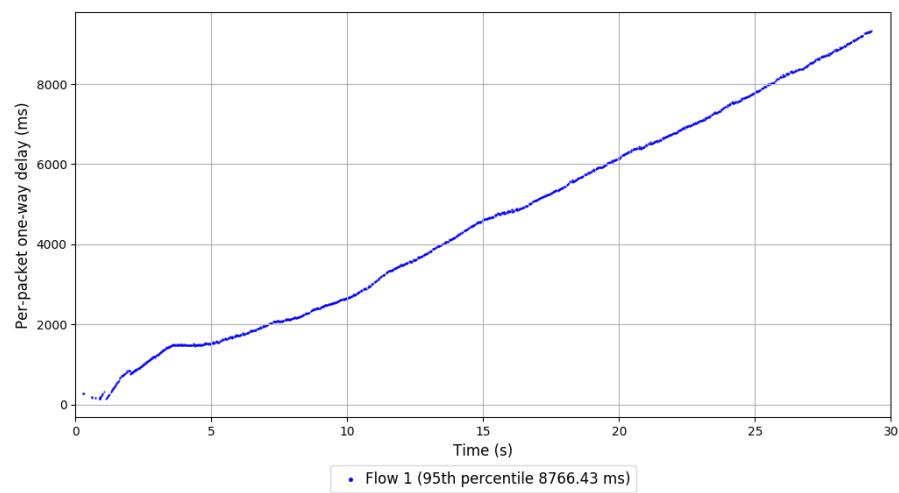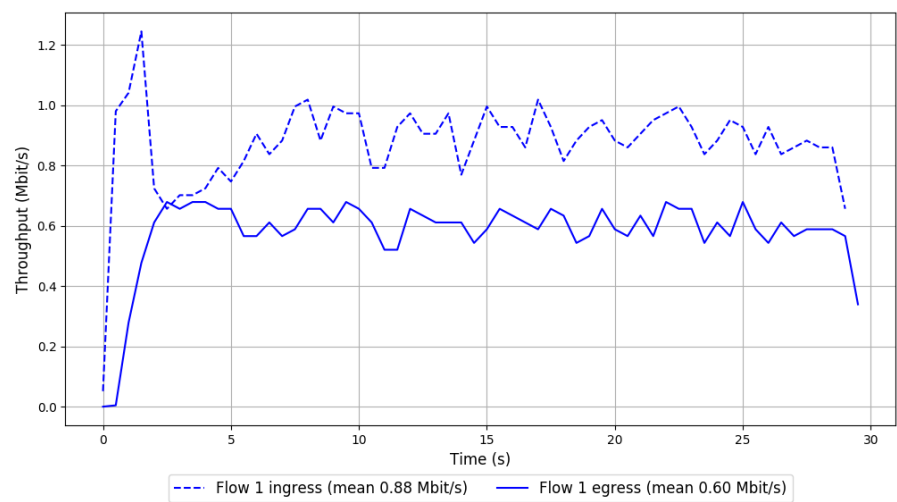
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-01-19 04:38:51
End at: 2019-01-19 04:39:21
Local clock offset: -1.416 ms
Remote clock offset: 2.395 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 9573.901 ms
Loss rate: 32.73%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 9573.901 ms
Loss rate: 32.73%
```
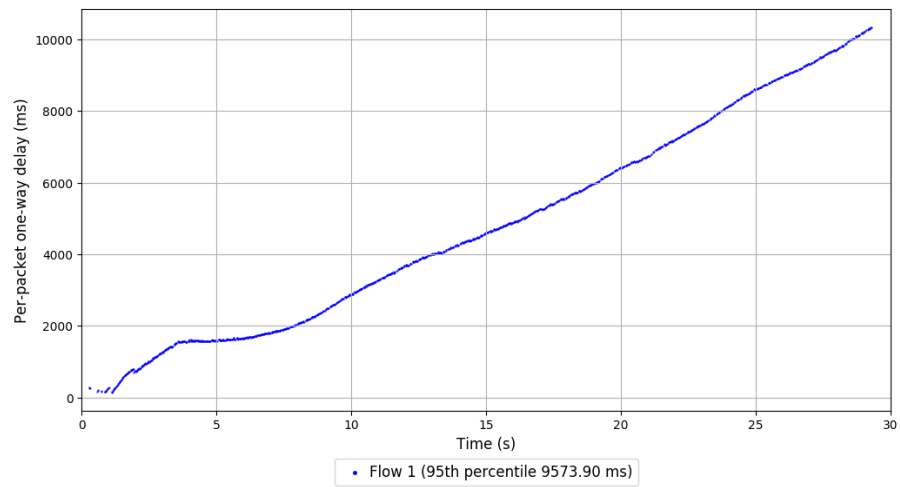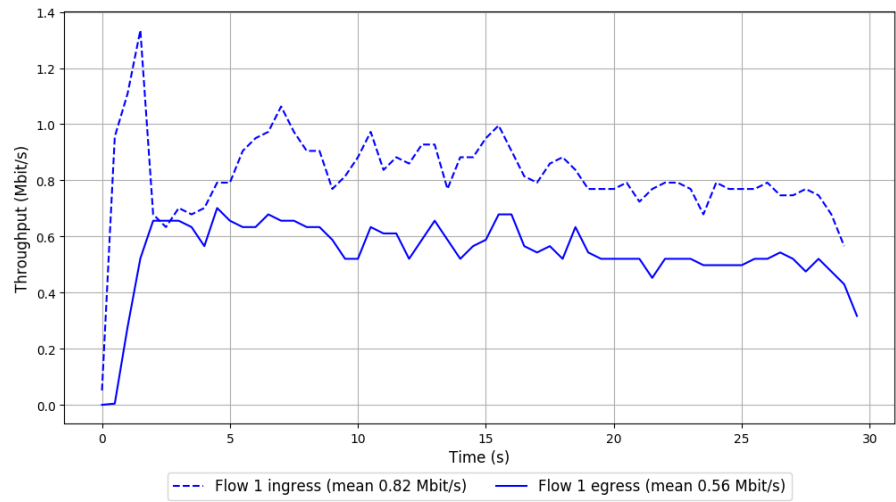
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 0.82 Mbit/s)   Flow 1 egress (mean 0.56 Mbit/s)

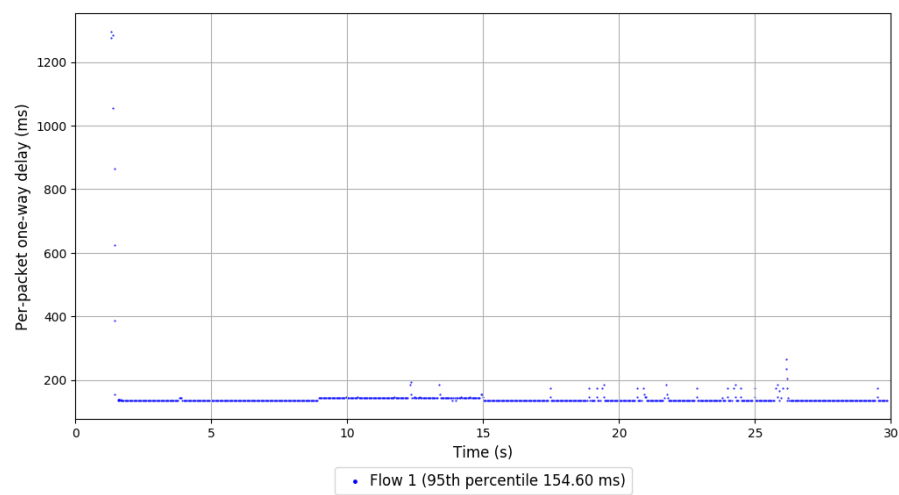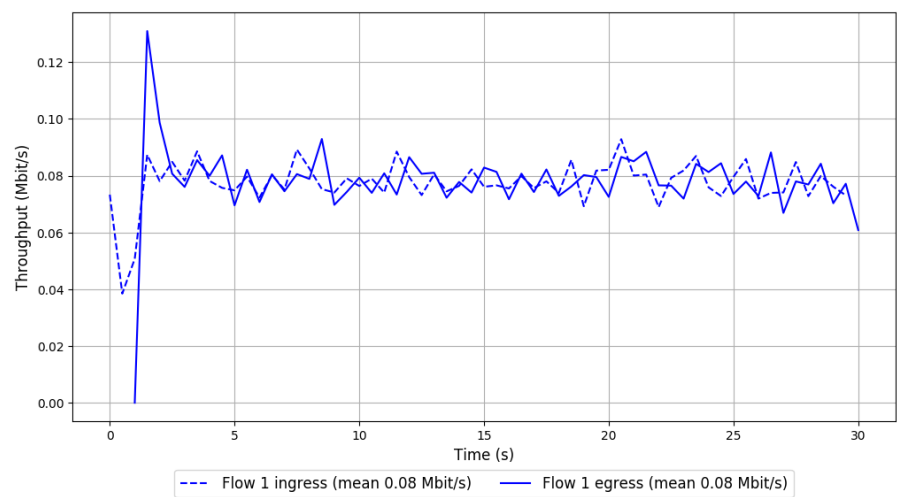

Flow 1 (95th percentile 9573.90 ms)

```
Run 1: Statistics of SCReAM

Start at: 2019-01-19 03:48:41
End at: 2019-01-19 03:49:11
Local clock offset: 0.251 ms
Remote clock offset: 8.38 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 154.598 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 154.598 ms
Loss rate: 0.79%
```

Run 1: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.08 Mbit/s)   Flow 1 egress (mean 0.08 Mbit/s)

Flow 1 (95th percentile 154.60 ms)

```
Run 2: Statistics of SCReAM

Start at: 2019-01-19 04:12:39
End at: 2019-01-19 04:13:09
Local clock offset: -1.716 ms
Remote clock offset: 7.856 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 131.638 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 131.638 ms
Loss rate: 0.66%
```
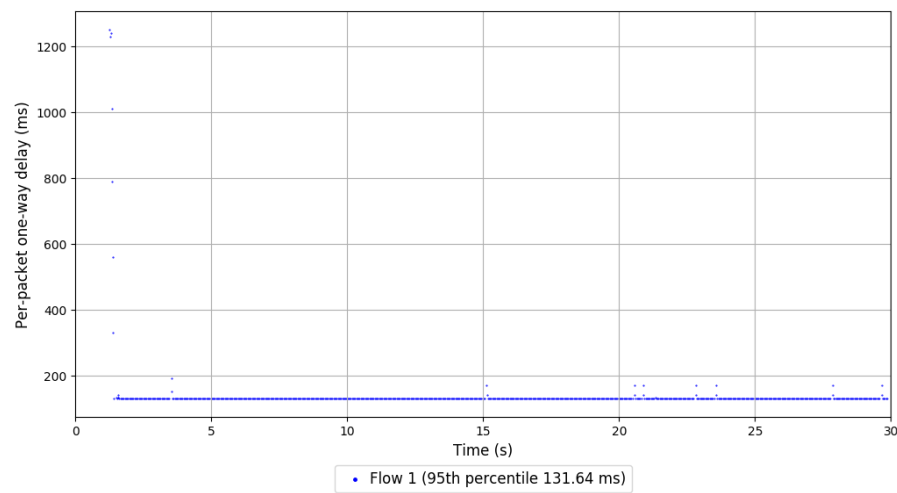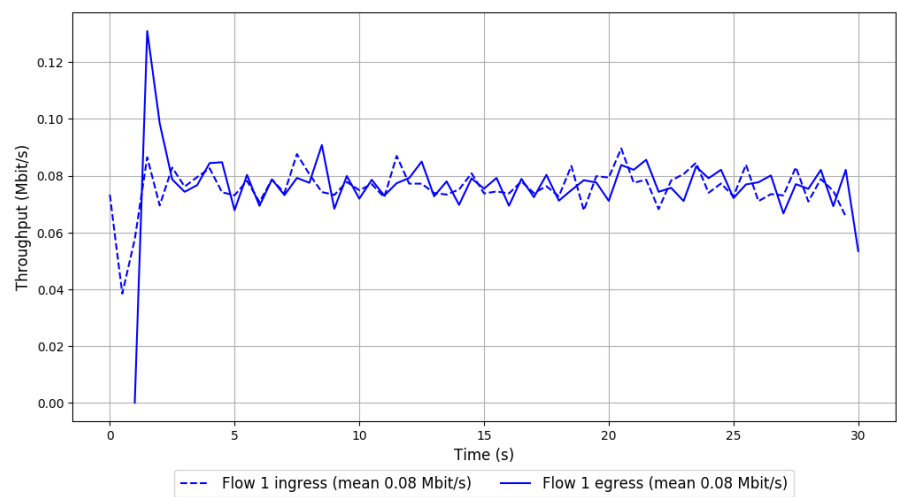
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-01-19 04:36:35
End at: 2019-01-19 04:37:05
Local clock offset: -2.204 ms
Remote clock offset: 2.589 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 133.168 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 133.168 ms
Loss rate: 0.66%
```
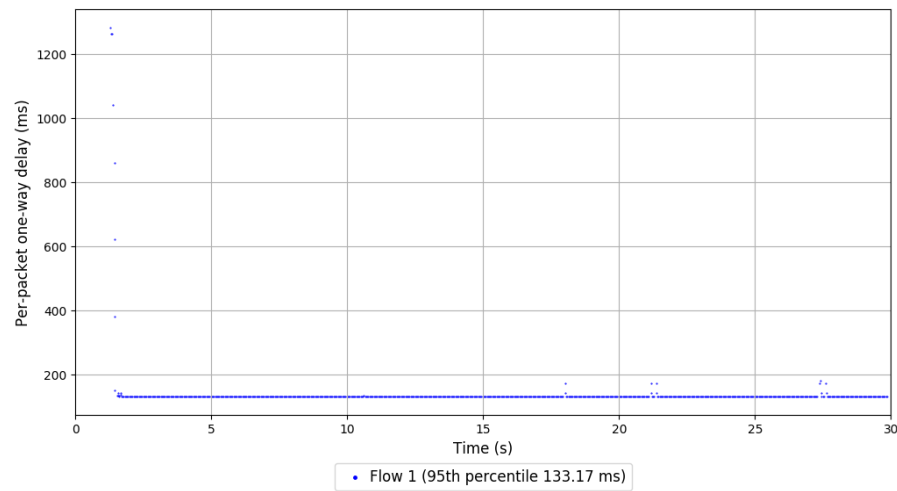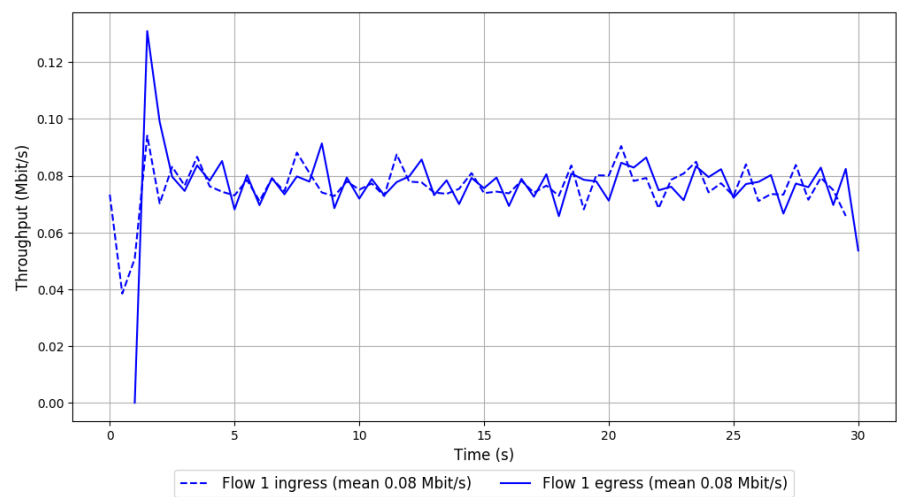
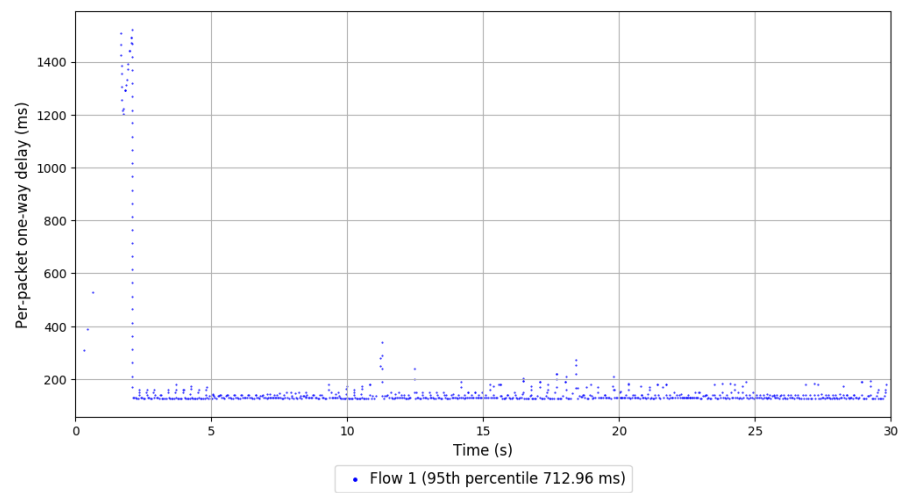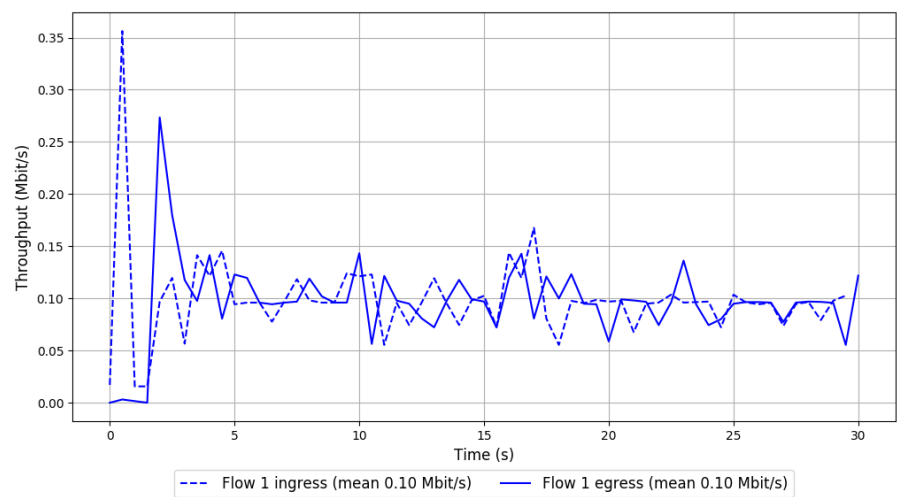Run 3: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2019-01-19 03:56:40
End at: 2019-01-19 03:57:10
Local clock offset: -1.509 ms
Remote clock offset: 4.86 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 712.959 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 712.959 ms
Loss rate: 0.45%
```

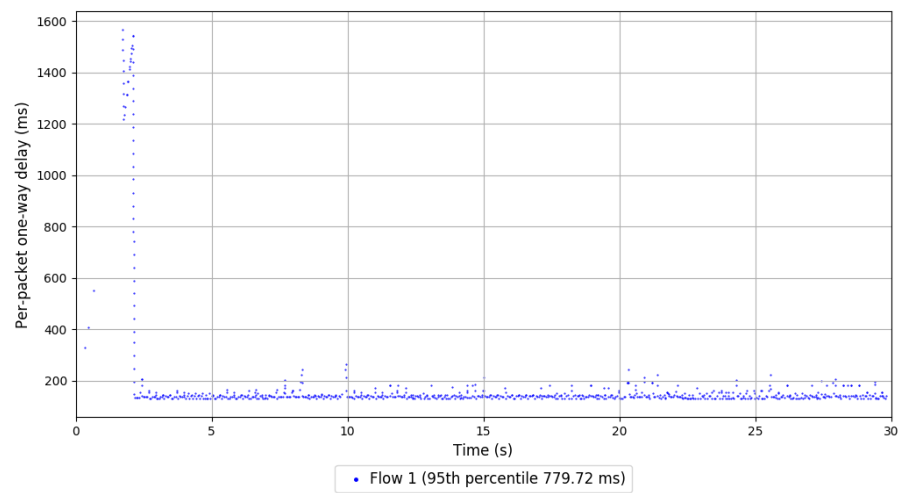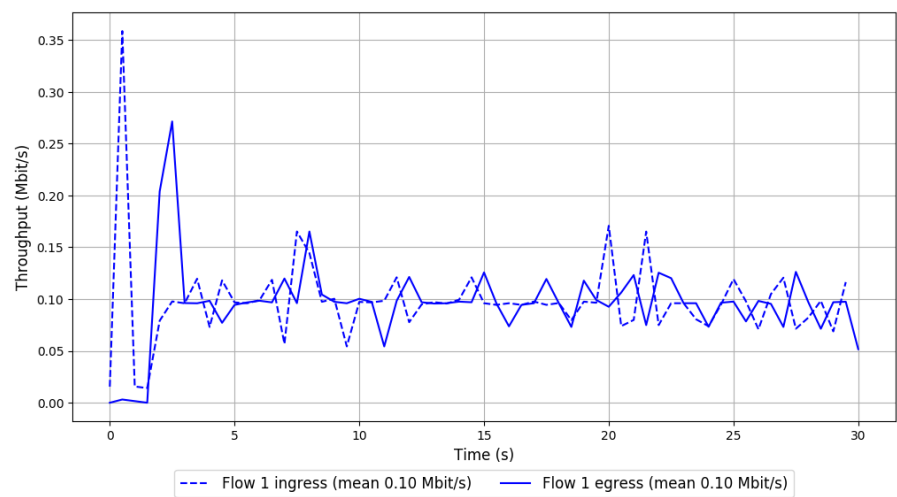Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-01-19 04:20:37
End at: 2019-01-19 04:21:07
Local clock offset: -1.148 ms
Remote clock offset: 2.607 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 779.723 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 779.723 ms
Loss rate: 1.15%
```

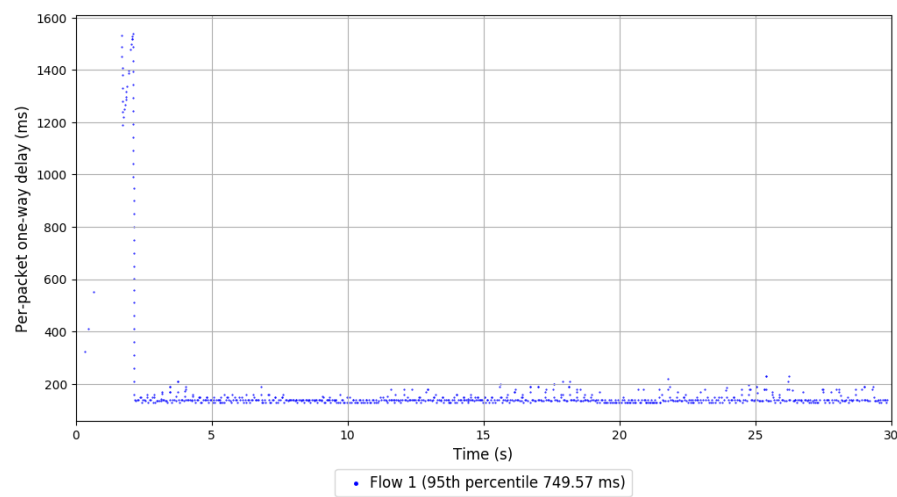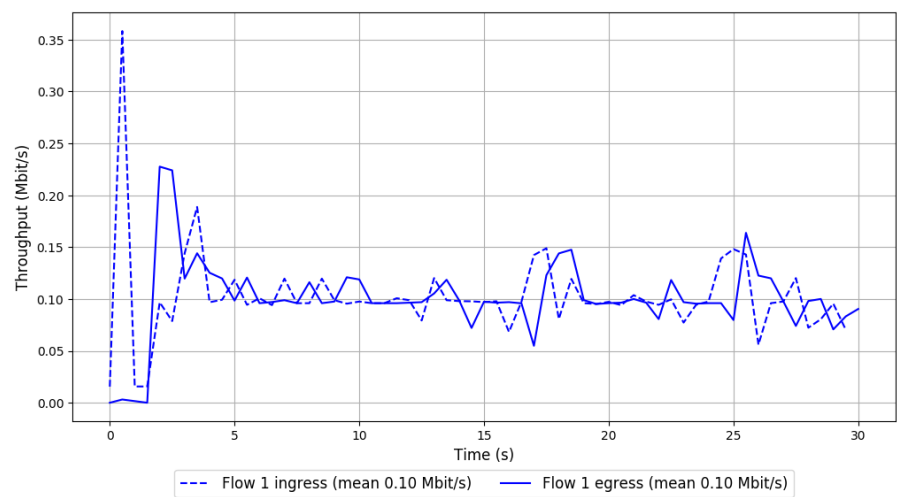Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-01-19 04:44:32
End at: 2019-01-19 04:45:02
Local clock offset: -1.381 ms
Remote clock offset: 3.92 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 749.574 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 749.574 ms
Loss rate: 0.38%
```

Run 3: Report of Sprout — Data Link

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

Start at: 2019-01-19 03:54:24
End at: 2019-01-19 03:54:54
Local clock offset: -0.637 ms
Remote clock offset: 10.02 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 972.770 ms
Loss rate: 2.32%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 972.770 ms
Loss rate: 2.32%
```
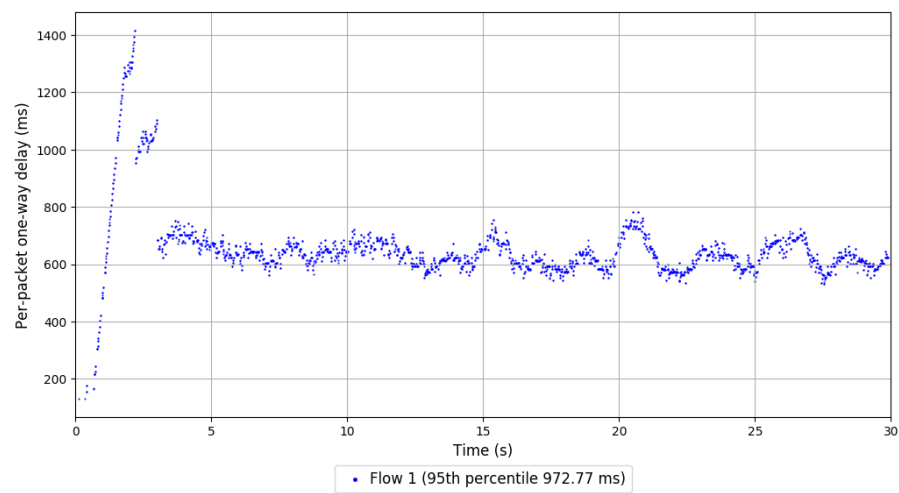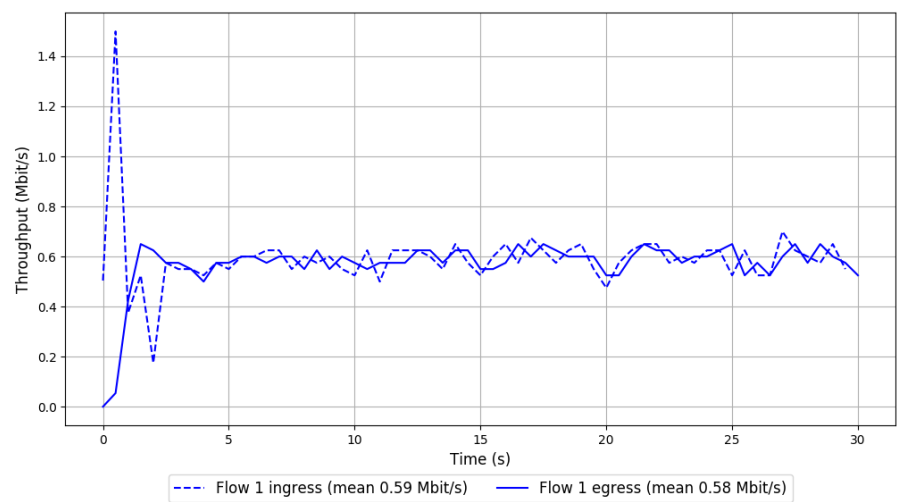
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2019-01-19 04:18:20
End at: 2019-01-19 04:18:50
Local clock offset: -1.79 ms
Remote clock offset: 2.69 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 947.644 ms
Loss rate: 2.39%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 947.644 ms
Loss rate: 2.39%
```
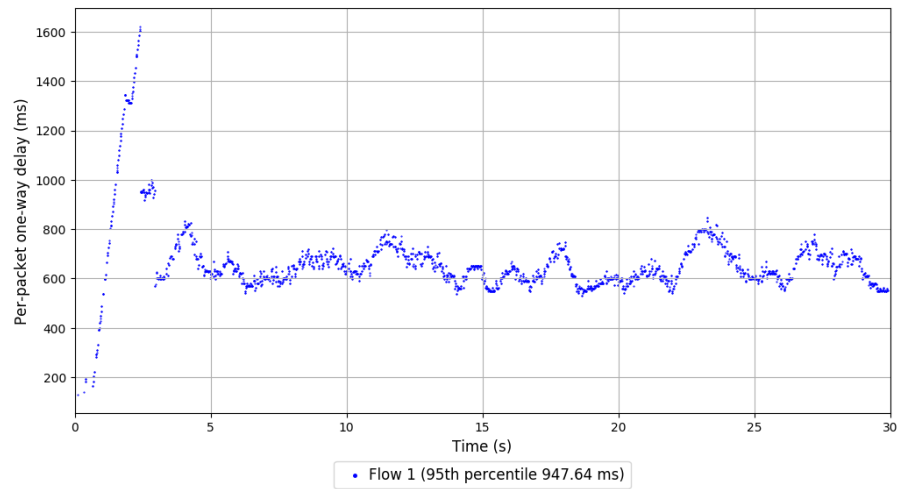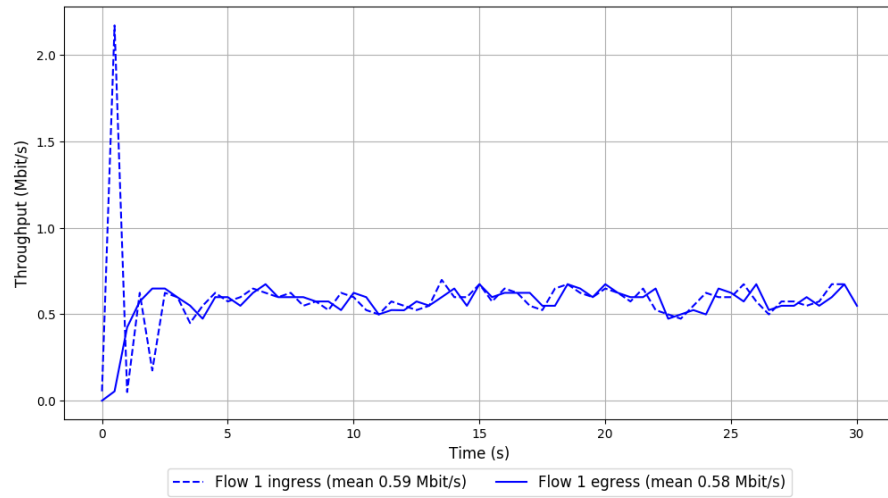
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 0.59 Mbit/s) ----- Flow 1 egress (mean 0.58 Mbit/s) ——

Flow 1 (95th percentile 947.64 ms)

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

Start at: 2019-01-19 04:42:16
End at: 2019-01-19 04:42:46
Local clock offset: -1.402 ms
Remote clock offset: 3.841 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 1336.476 ms
Loss rate: 11.75%
-- Flow 1:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 1336.476 ms
Loss rate: 11.75%
```
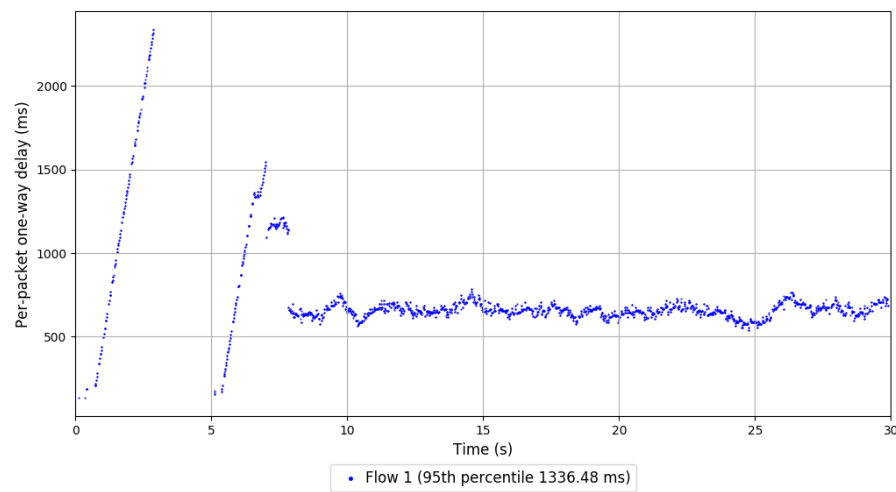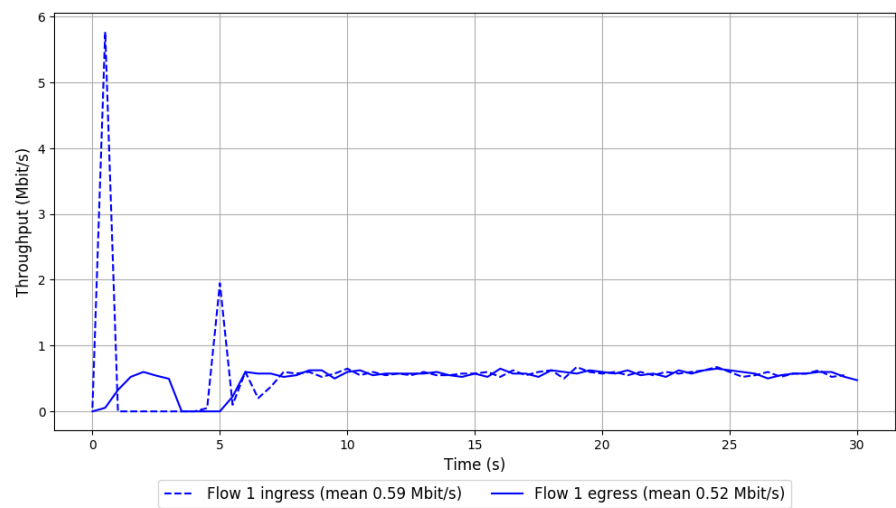
Run 3: Report of TaoVA-100x — Data Link

```
Run 1: Statistics of TCP Vegas

Start at: 2019-01-19 03:39:35
End at: 2019-01-19 03:40:05
Local clock offset: -0.144 ms
Remote clock offset: 9.209 ms

# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 563.845 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 563.845 ms
Loss rate: 0.94%
```
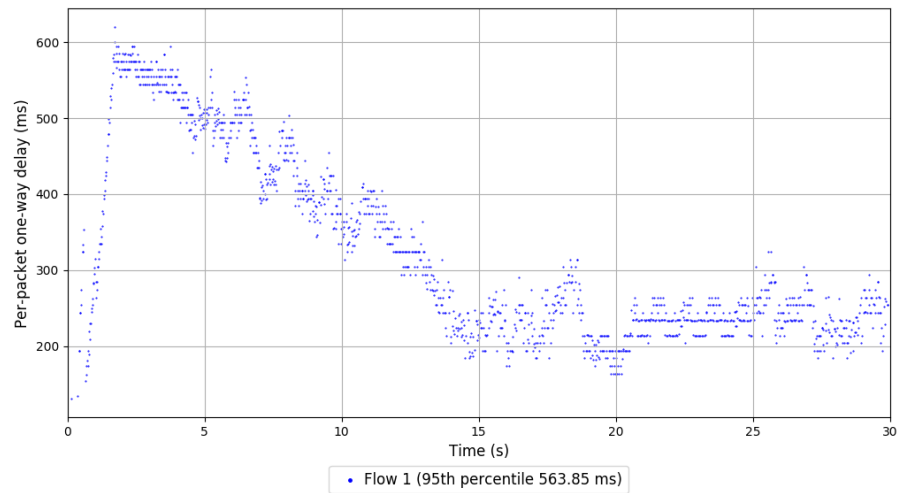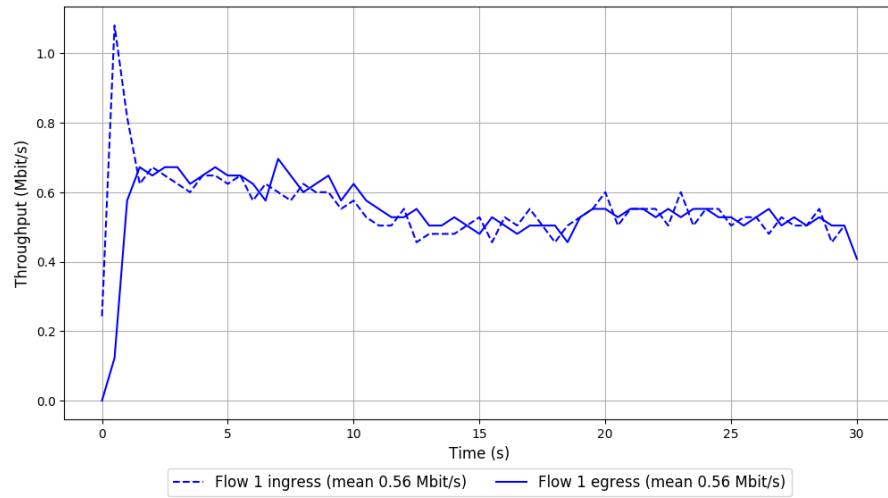
Run 1: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 0.56 Mbit/s)   Flow 1 egress (mean 0.56 Mbit/s)

Flow 1 (95th percentile 563.85 ms)

```
Run 2: Statistics of TCP Vegas

Start at: 2019-01-19 04:03:31
End at: 2019-01-19 04:04:01
Local clock offset: -0.988 ms
Remote clock offset: 6.852 ms

# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 322.338 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 322.338 ms
Loss rate: 1.17%
```
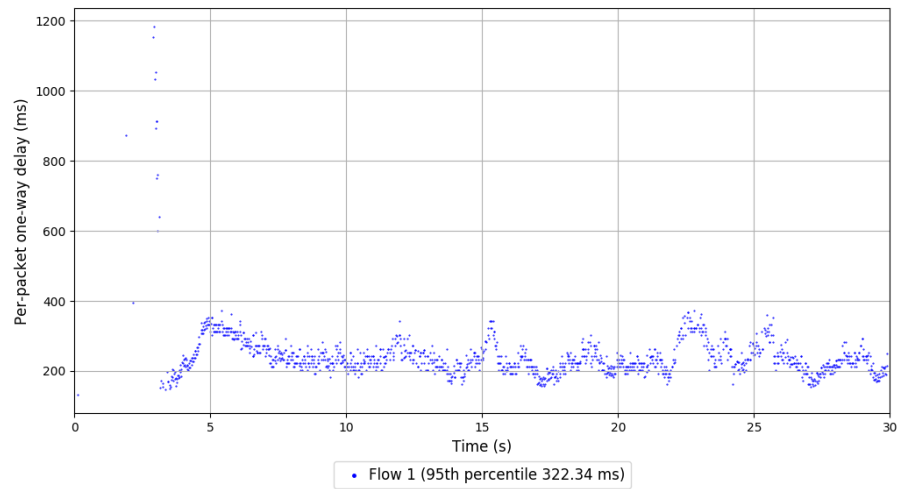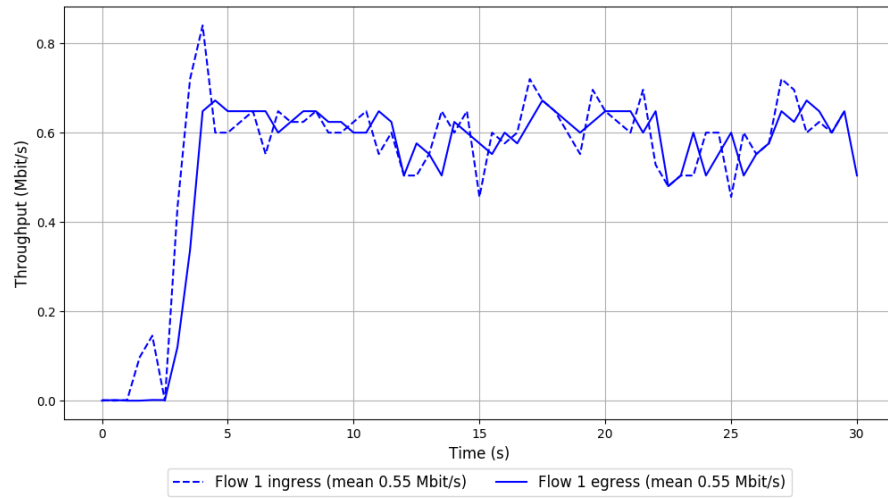
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-01-19 04:27:28
End at: 2019-01-19 04:27:58
Local clock offset: -2.197 ms
Remote clock offset: 2.482 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 835.203 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 835.203 ms
Loss rate: 0.90%
```
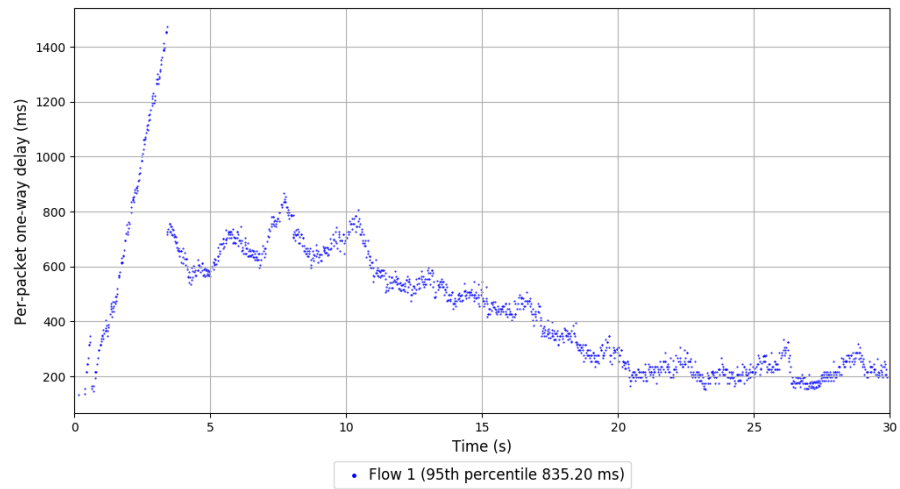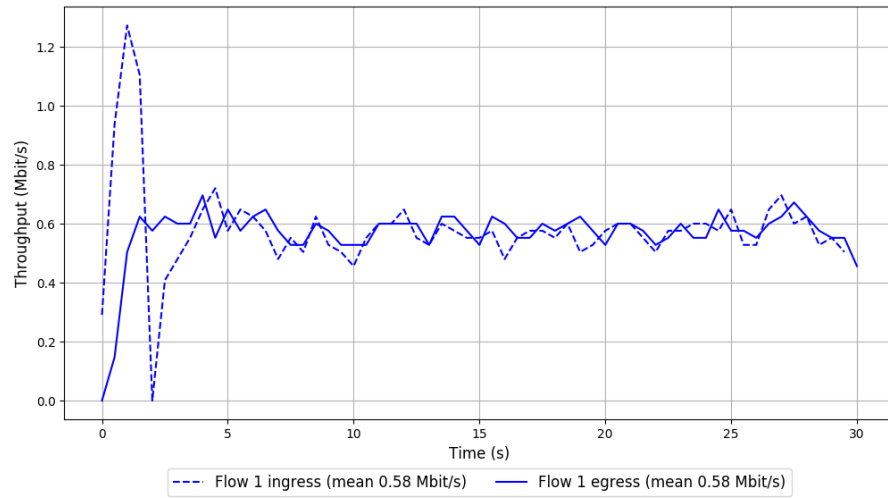
Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 0.58 Mbit/s)   Flow 1 egress (mean 0.58 Mbit/s)

Flow 1 (95th percentile 835.20 ms)

```
Run 1: Statistics of Verus

Start at: 2019-01-19 03:44:07
End at: 2019-01-19 03:44:37
Local clock offset: 0.322 ms
Remote clock offset: 8.393 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 1812.562 ms
Loss rate: 4.51%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 1812.562 ms
Loss rate: 4.51%
```
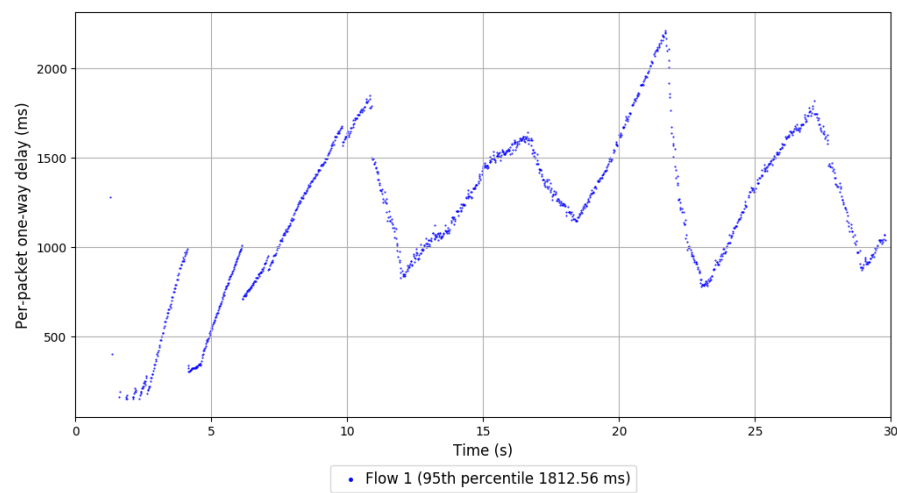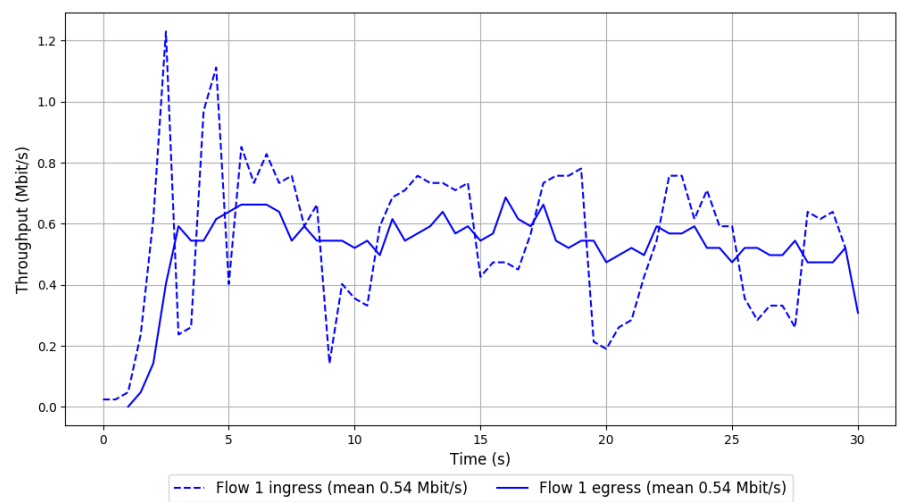
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-01-19 04:08:04
End at: 2019-01-19 04:08:34
Local clock offset: -1.827 ms
Remote clock offset: 4.024 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 1831.123 ms
Loss rate: 3.53%
-- Flow 1:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 1831.123 ms
Loss rate: 3.53%
```
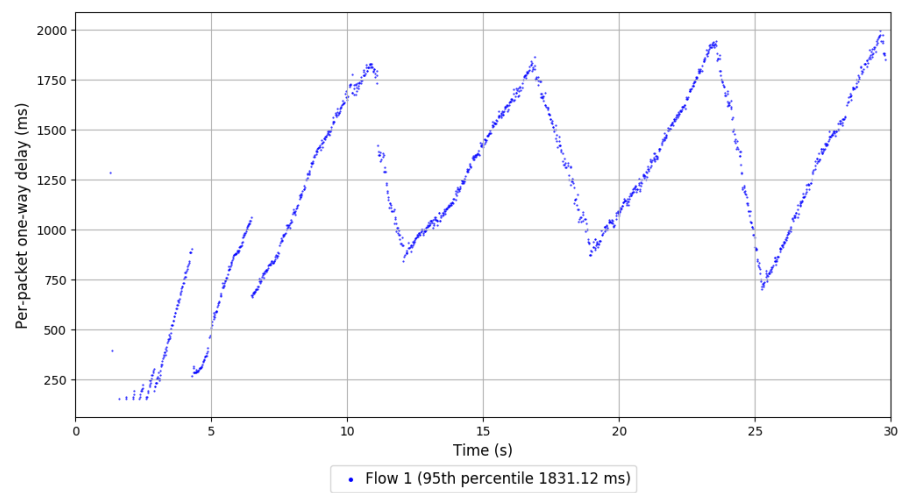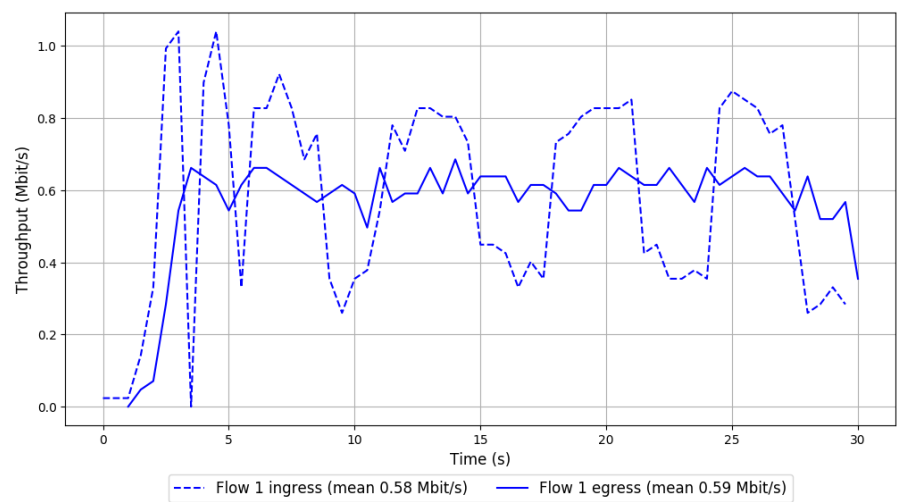
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-01-19 04:32:01
End at: 2019-01-19 04:32:31
Local clock offset: -2.191 ms
Remote clock offset: 3.644 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 1732.568 ms
Loss rate: 6.02%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 1732.568 ms
Loss rate: 6.02%
```
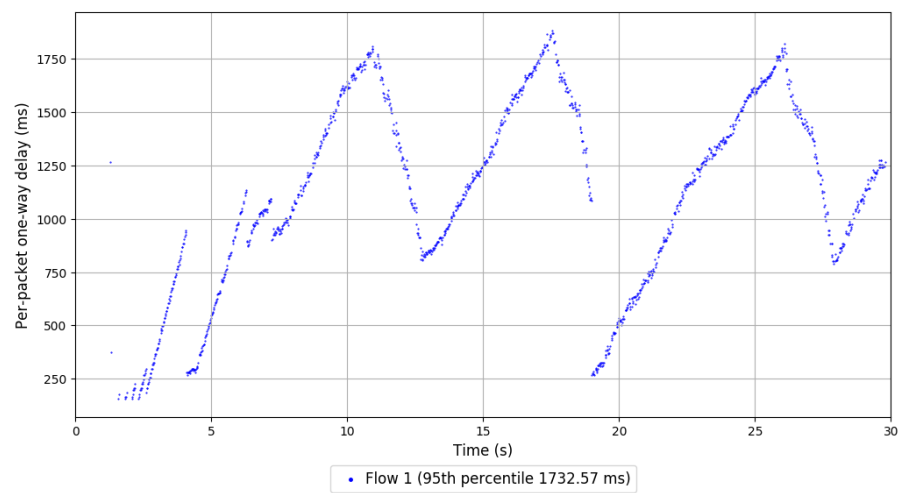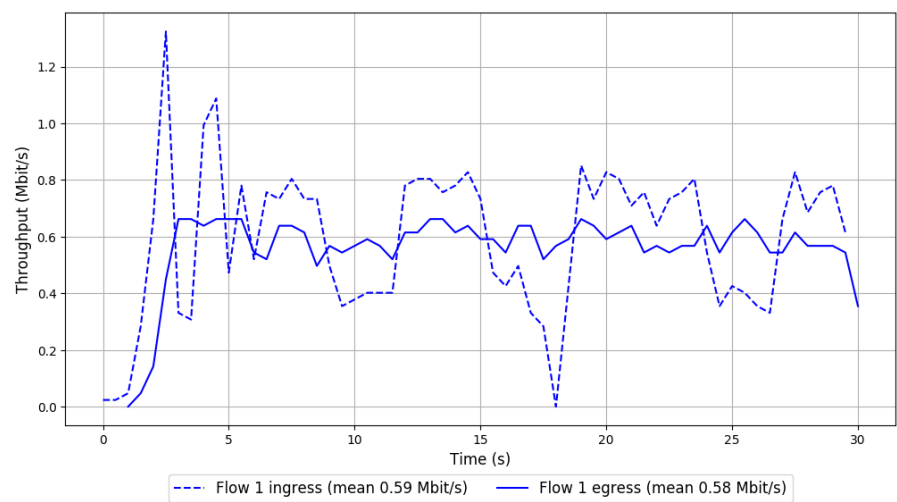
Run 3: Report of Verus — Data Link

118

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-01-19 03:37:14
End at: 2019-01-19 03:37:44
Local clock offset: -0.458 ms
Remote clock offset: 4.197 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 21167.639 ms
Loss rate: 72.72%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 21167.639 ms
Loss rate: 72.72%
```
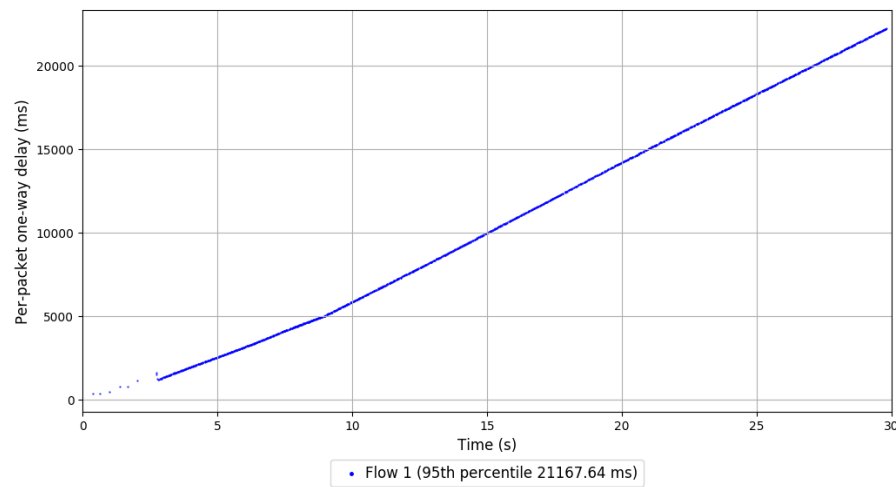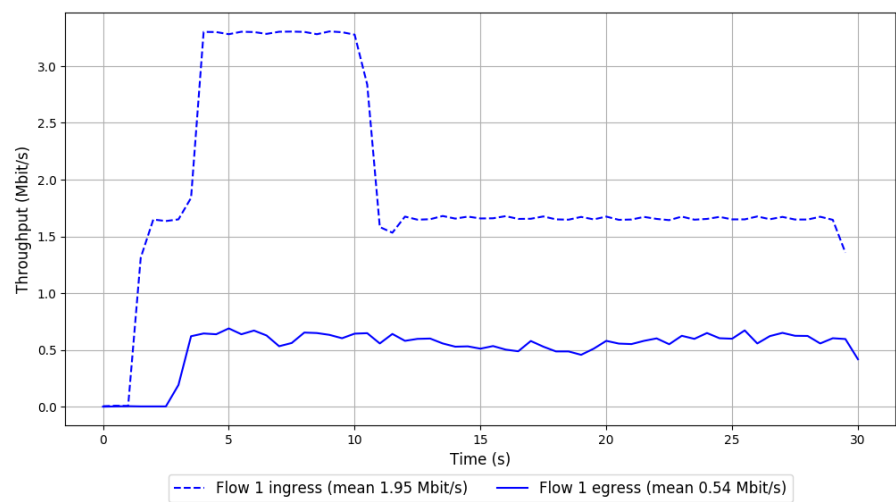
Run 1: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 1.95 Mbit/s)   Flow 1 egress (mean 0.54 Mbit/s)

Flow 1 (95th percentile 21167.64 ms)

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-01-19 04:01:14
End at: 2019-01-19 04:01:44
Local clock offset: -1.774 ms
Remote clock offset: 7.153 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 21218.376 ms
Loss rate: 72.03%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 21218.376 ms
Loss rate: 72.03%
```
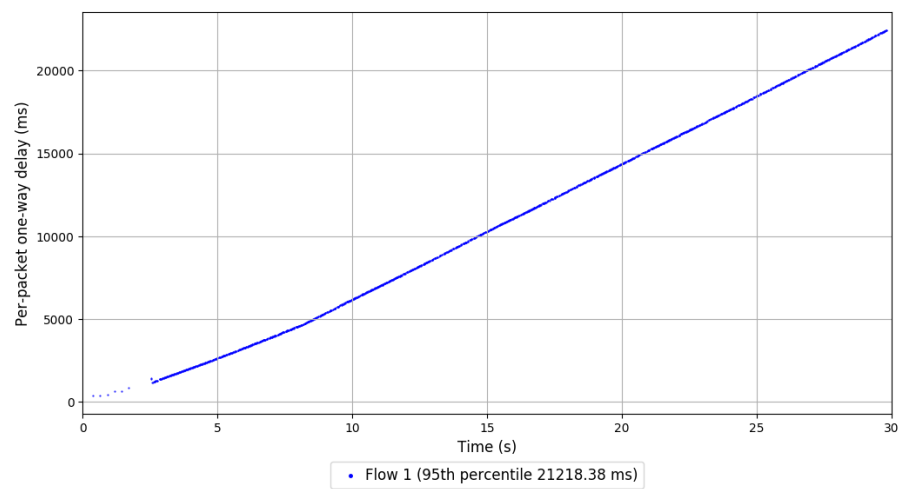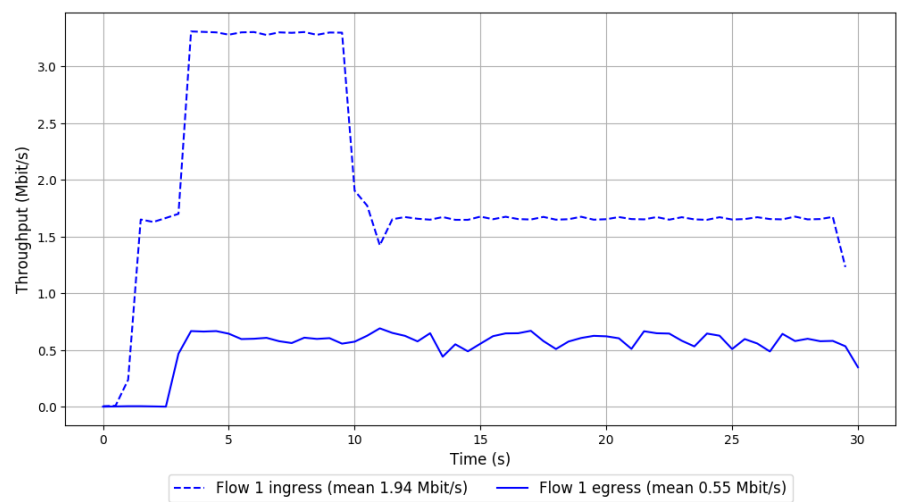
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 1.94 Mbit/s)   Flow 1 egress (mean 0.55 Mbit/s)

Flow 1 (95th percentile 21218.38 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-01-19 04:25:10
End at: 2019-01-19 04:25:40
Local clock offset: -1.324 ms
Remote clock offset: 3.733 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 21036.618 ms
Loss rate: 72.19%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 21036.618 ms
Loss rate: 72.19%
```
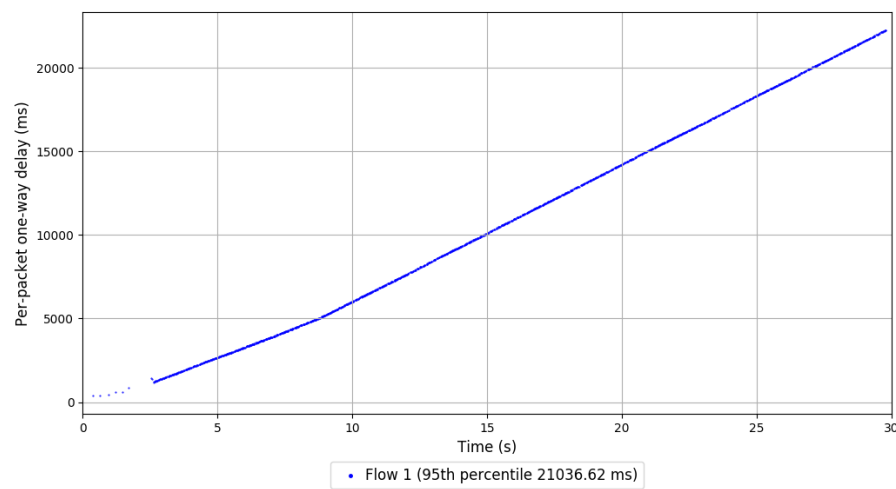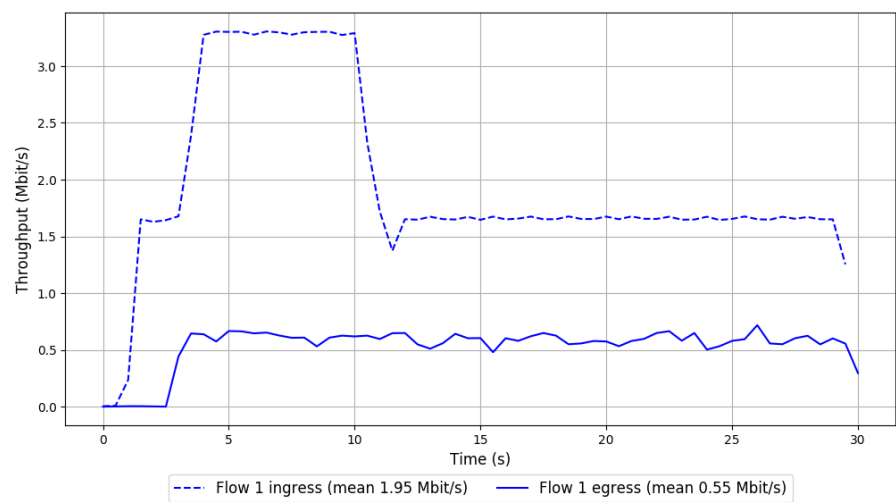
Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 1.95 Mbit/s)   Flow 1 egress (mean 0.55 Mbit/s)

• Flow 1 (95th percentile 21036.62 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2019-01-19 03:55:32
End at: 2019-01-19 03:56:02
Local clock offset: -1.452 ms
Remote clock offset: 7.395 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 654.640 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 654.640 ms
Loss rate: 0.58%
```
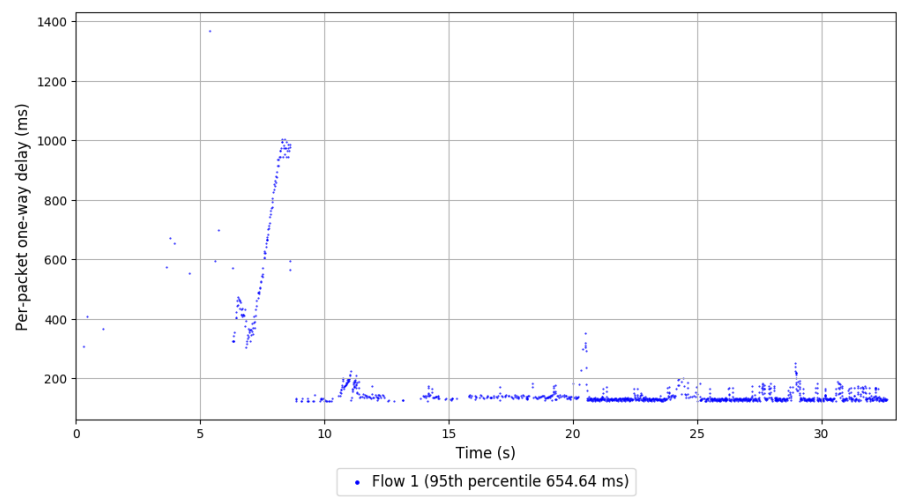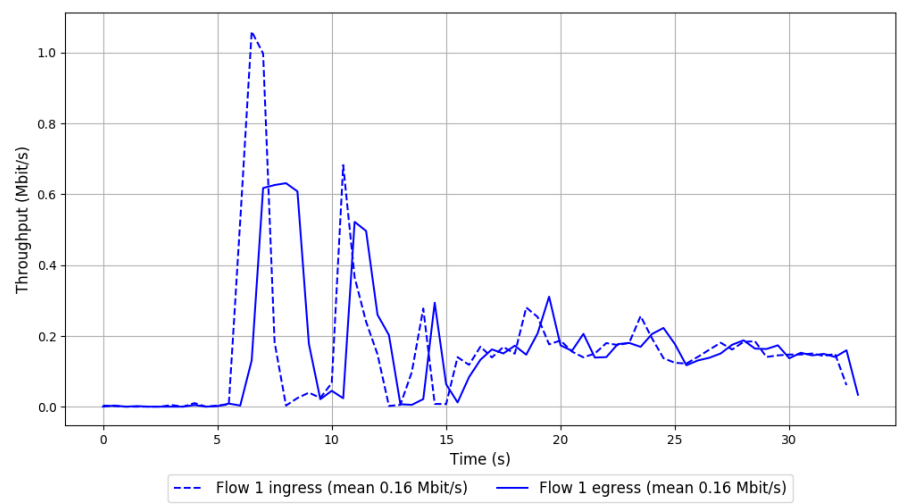
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-01-19 04:19:28
End at: 2019-01-19 04:19:58
Local clock offset: -1.814 ms
Remote clock offset: 3.689 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 593.754 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 593.754 ms
Loss rate: 0.63%
```
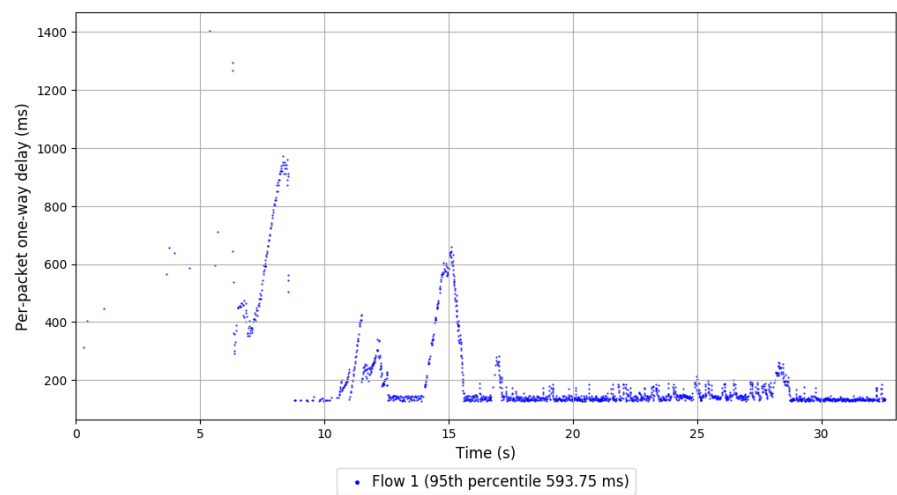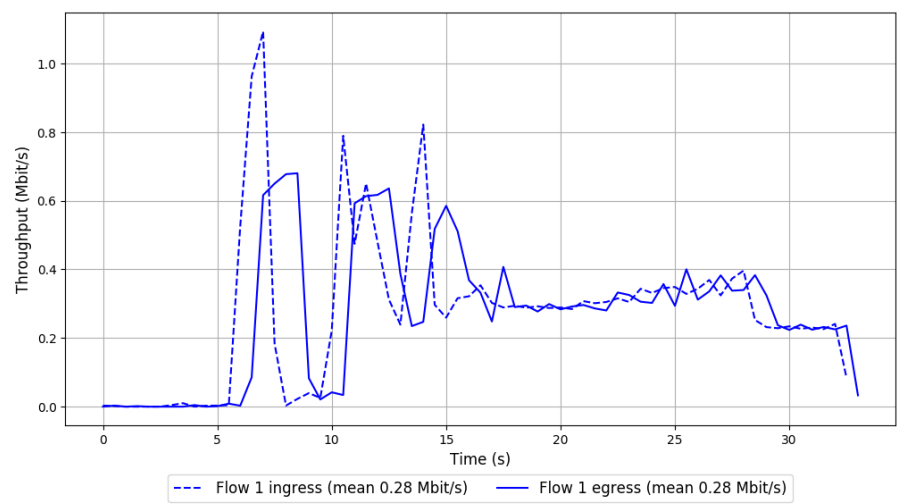
Run 2: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.28 Mbit/s) --- Flow 1 egress (mean 0.28 Mbit/s)

Flow 1 (95th percentile 593.75 ms)

```
Run 3: Statistics of WebRTC media

Start at: 2019-01-19 04:43:24
End at: 2019-01-19 04:43:54
Local clock offset: -1.395 ms
Remote clock offset: 2.558 ms


# Below is generated by plot.py at 2019-01-19 04:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 410.642 ms
Loss rate: 3.34%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 410.642 ms
Loss rate: 3.34%
```

Run 3: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.14 Mbit/s)   Flow 1 egress (mean 0.14 Mbit/s)

Flow 1 (95th percentile 410.64 ms)