Pantheon Report

Generated at 2019-03-18 22:11:35 (UTC).

Data path: GCE London on ens4 (*remote*) →GCE Tokyo on ens4 (*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.google.com` and have been applied to correct the timestamps in logs.
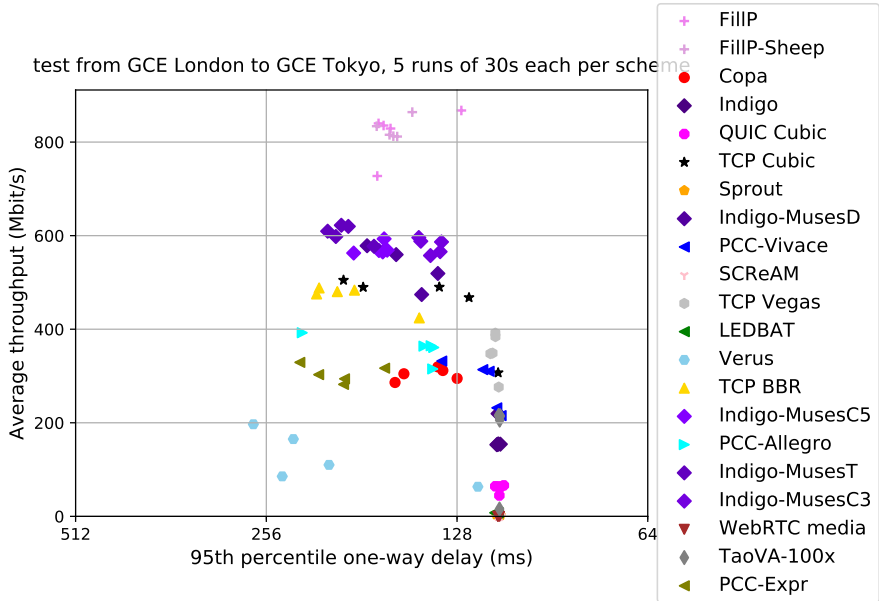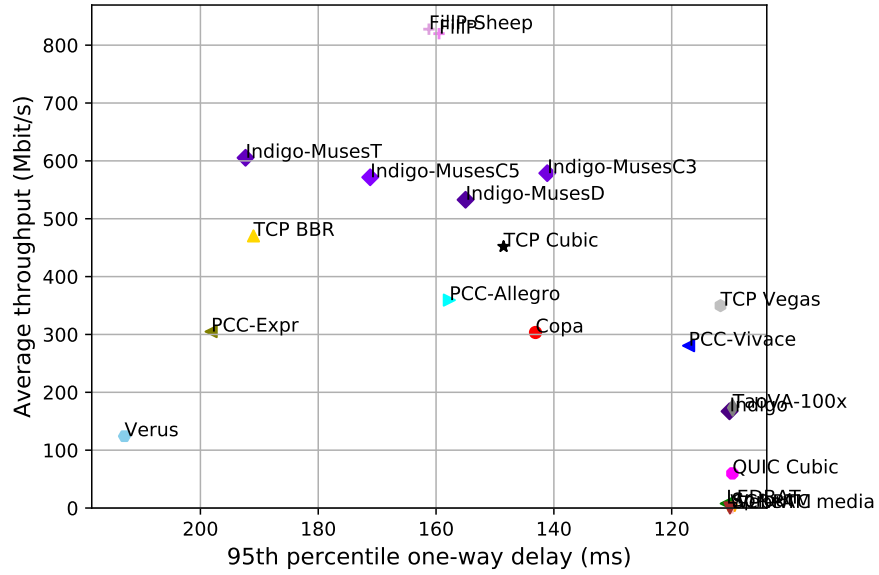
```
System info:
Linux 4.15.0-1028-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
```

third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from GCE London to GCE Tokyo, 5 runs of 30s each per scheme
(mean of all runs by scheme)

test from GCE London to GCE Tokyo, 5 runs of 30s each per scheme

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scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	470.36	190.99	1.27
Copa	5	303.40	143.12	0.77
TCP Cubic	5	451.89	148.54	0.75
FillP	5	819.88	159.50	1.43
FillP-Sheep	5	827.60	161.21	1.60
Indigo	5	167.13	110.19	0.78
Indigo-MusesC3	5	578.74	141.13	0.82
Indigo-MusesC5	5	571.65	171.18	1.16
Indigo-MusesD	4	532.79	155.00	0.89
Indigo-MusesT	5	605.37	192.34	1.10
LEDBAT	5	7.66	110.75	1.47
PCC-Allegro	5	359.38	157.74	1.78
PCC-Expr	5	304.94	198.18	4.79
QUIC Cubic	5	59.86	109.70	1.19
SCReAM	5	0.22	109.72	0.72
Sprout	5	2.83	109.83	1.07
TaoVA-100x	5	173.26	109.65	0.78
TCP Vegas	5	349.76	111.72	0.79
Verus	5	124.16	212.89	4.70
PCC-Vivace	5	280.58	117.13	0.86
WebRTC media	3	0.05	110.12	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2019-03-18 17:51:17
End at: 2019-03-18 17:51:47
Local clock offset: 7.081 ms
Remote clock offset: 5.486 ms

# Below is generated by plot.py at 2019-03-18 20:48:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 475.43 Mbit/s
95th percentile per-packet one-way delay: 213.248 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 475.43 Mbit/s
95th percentile per-packet one-way delay: 213.248 ms
Loss rate: 1.52%
```
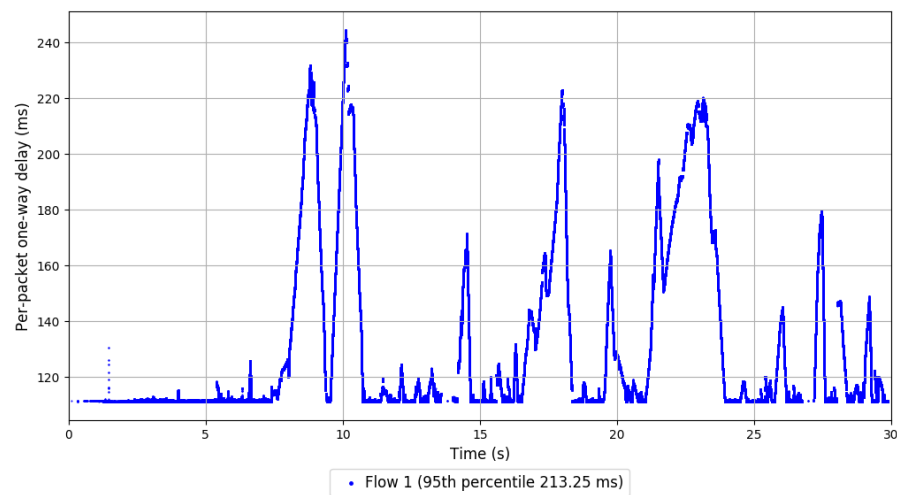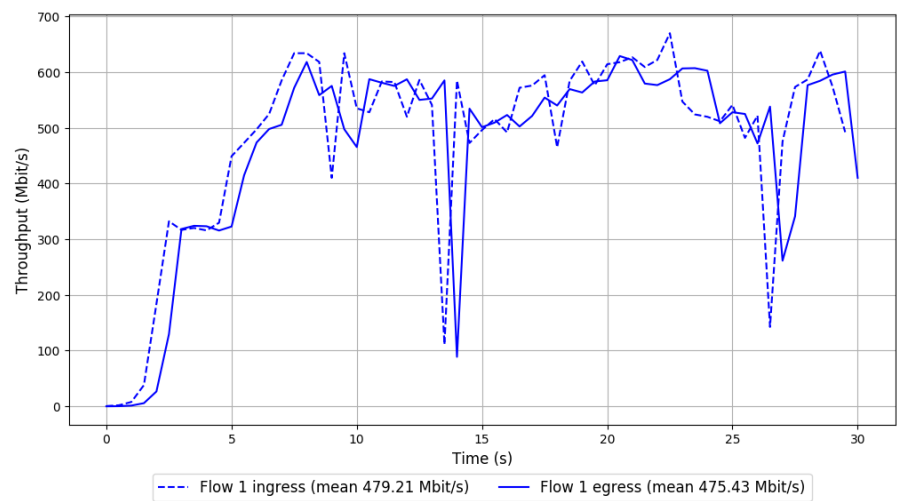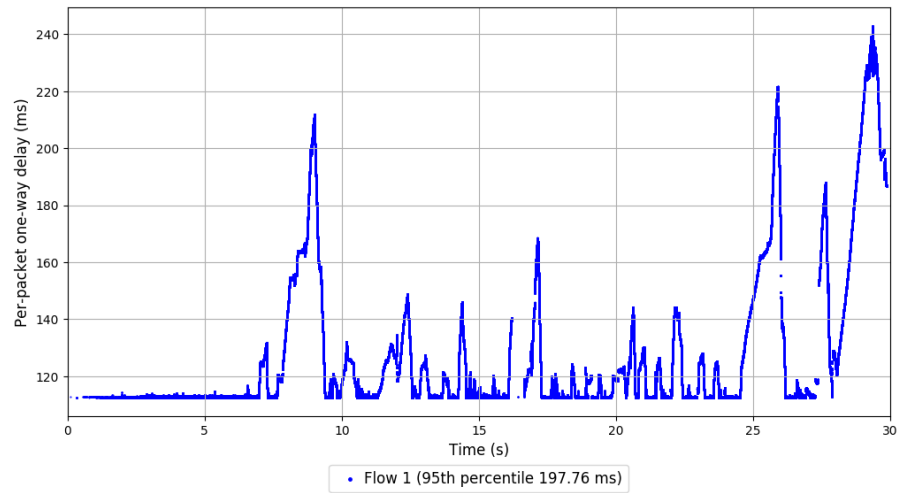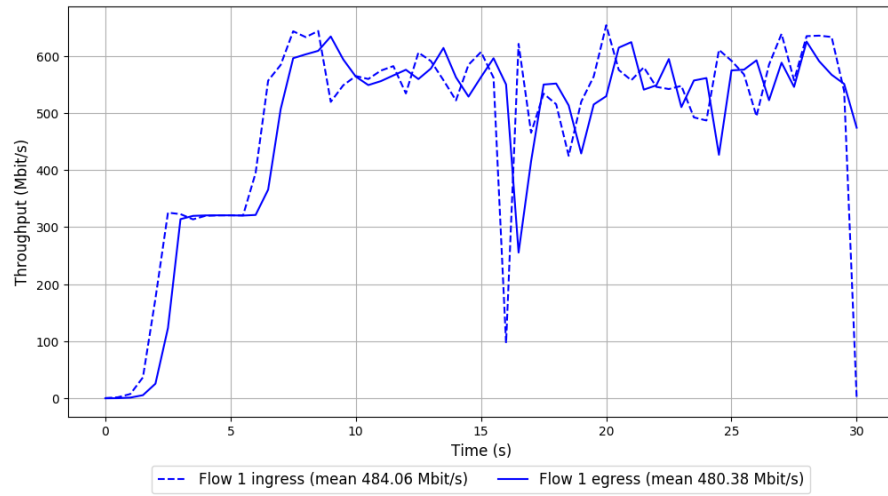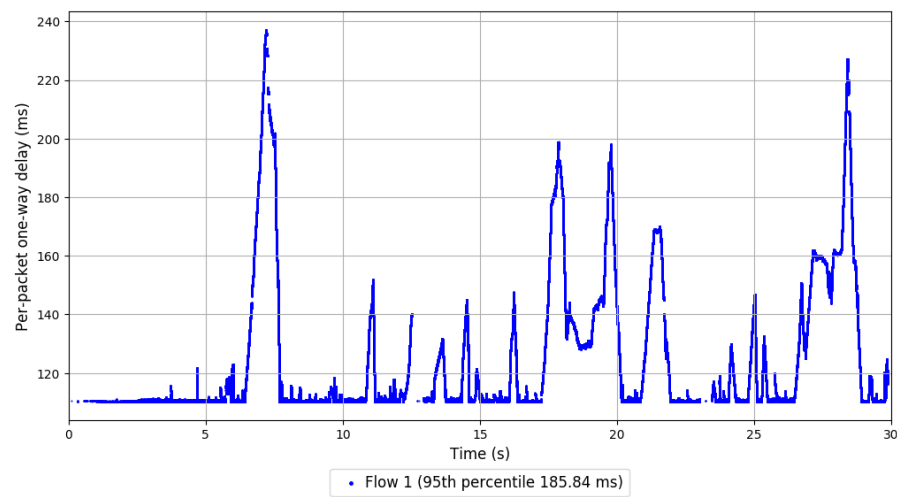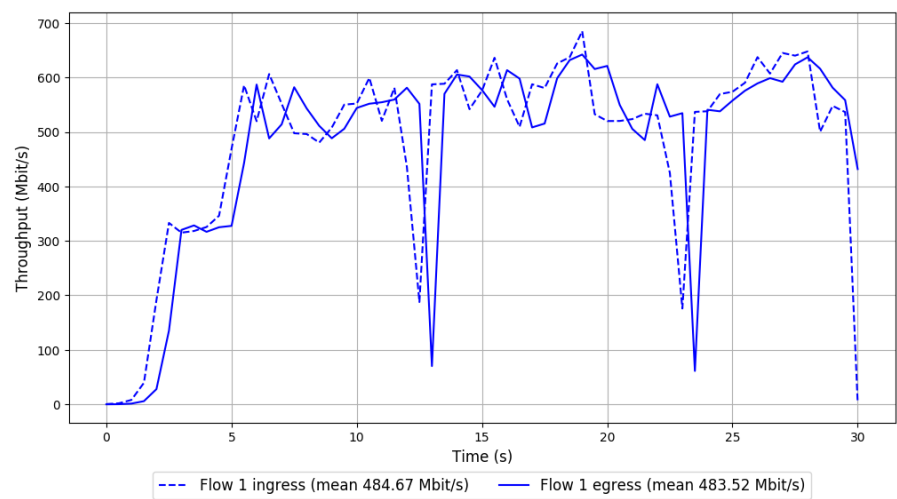
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 479.21 Mbit/s)   Flow 1 egress (mean 475.43 Mbit/s)

• Flow 1 (95th percentile 213.25 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2019-03-18 18:24:02
End at: 2019-03-18 18:24:32
Local clock offset: 23.083 ms
Remote clock offset: 21.655 ms


# Below is generated by plot.py at 2019-03-18 20:48:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 480.38 Mbit/s
95th percentile per-packet one-way delay: 197.762 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 480.38 Mbit/s
95th percentile per-packet one-way delay: 197.762 ms
Loss rate: 1.50%
```
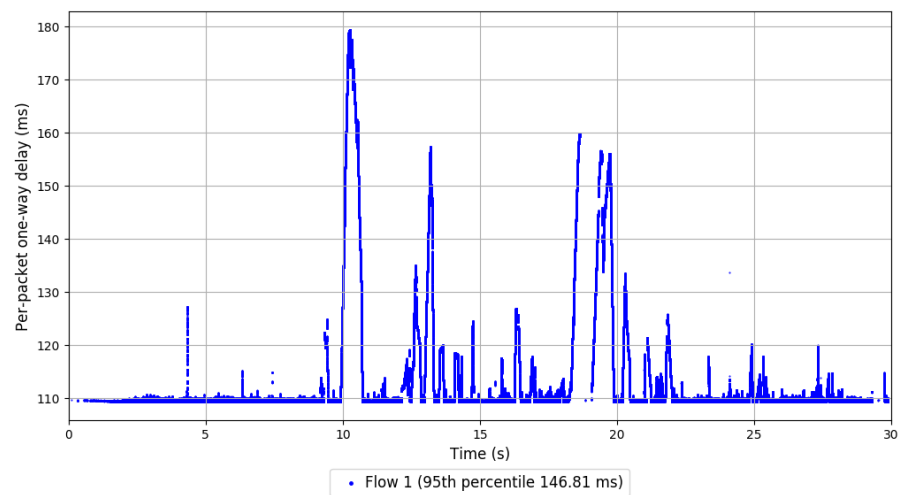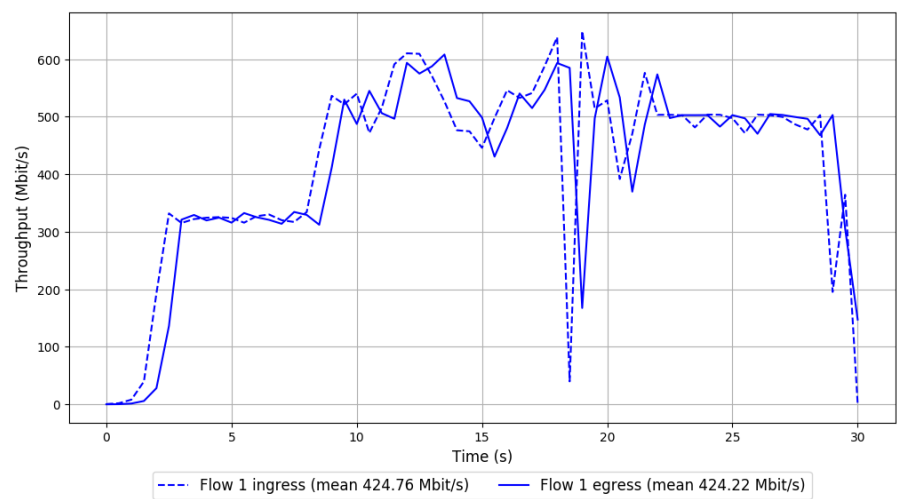
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2019-03-18 18:58:41
End at: 2019-03-18 18:59:11
Local clock offset: 28.016 ms
Remote clock offset: 26.175 ms


# Below is generated by plot.py at 2019-03-18 20:48:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 483.52 Mbit/s
95th percentile per-packet one-way delay: 185.843 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 483.52 Mbit/s
95th percentile per-packet one-way delay: 185.843 ms
Loss rate: 0.97%
```
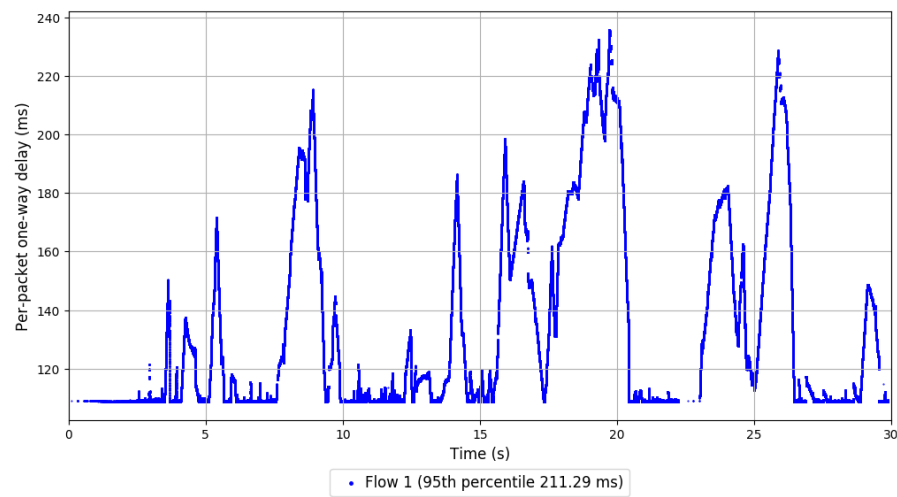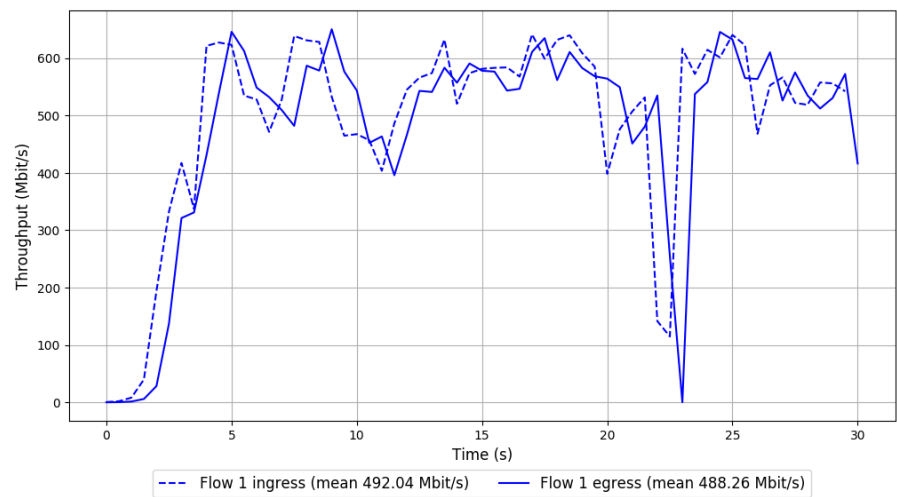
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 484.67 Mbit/s)   Flow 1 egress (mean 483.52 Mbit/s)

• Flow 1 (95th percentile 185.84 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2019-03-18 19:30:41
End at: 2019-03-18 19:31:11
Local clock offset: 16.836 ms
Remote clock offset: 15.73 ms


# Below is generated by plot.py at 2019-03-18 20:48:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 424.22 Mbit/s
95th percentile per-packet one-way delay: 146.811 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 424.22 Mbit/s
95th percentile per-packet one-way delay: 146.811 ms
Loss rate: 0.86%
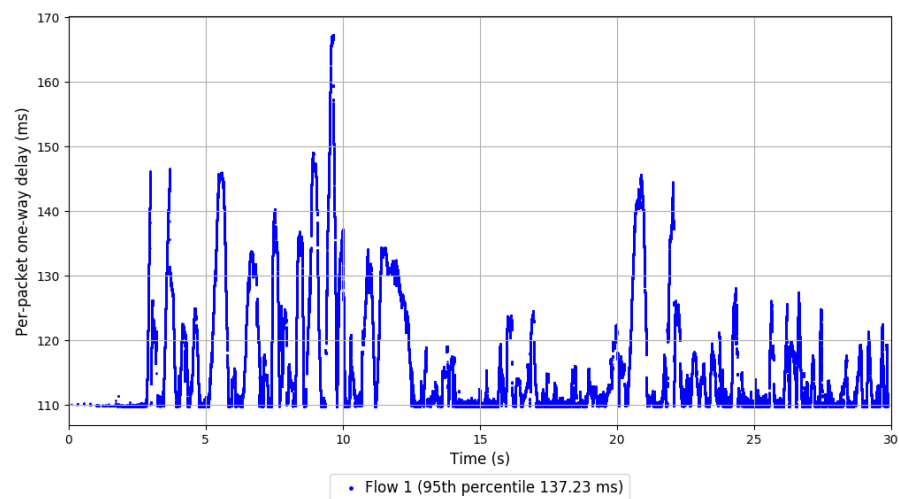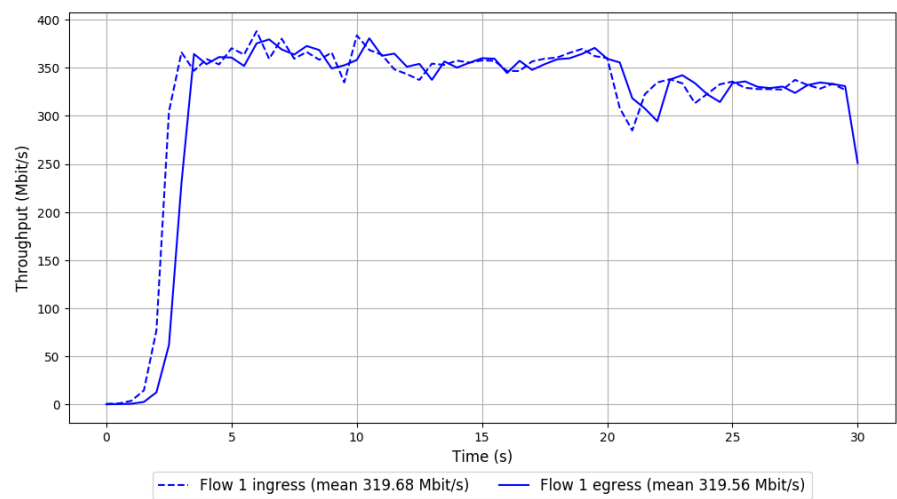```

## Run 4: Report of TCP BBR — Data Link



Flow 1 ingress (mean 424.76 Mbit/s)    Flow 1 egress (mean 424.22 Mbit/s)



Flow 1 (95th percentile 146.81 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2019-03-18 20:02:18
End at: 2019-03-18 20:02:48
Local clock offset: 4.649 ms
Remote clock offset: 4.775 ms


# Below is generated by plot.py at 2019-03-18 20:48:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 488.26 Mbit/s
95th percentile per-packet one-way delay: 211.288 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 488.26 Mbit/s
95th percentile per-packet one-way delay: 211.288 ms
Loss rate: 1.50%
```

Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 492.04 Mbit/s) --- Flow 1 egress (mean 488.26 Mbit/s)

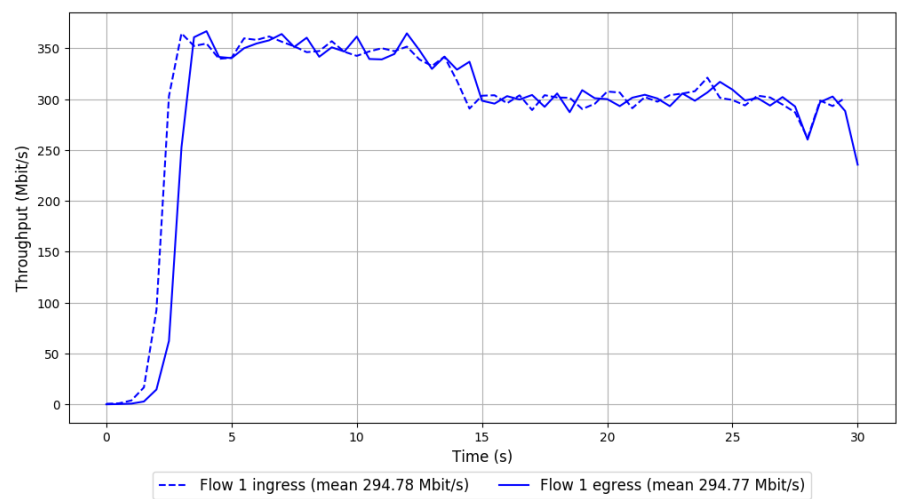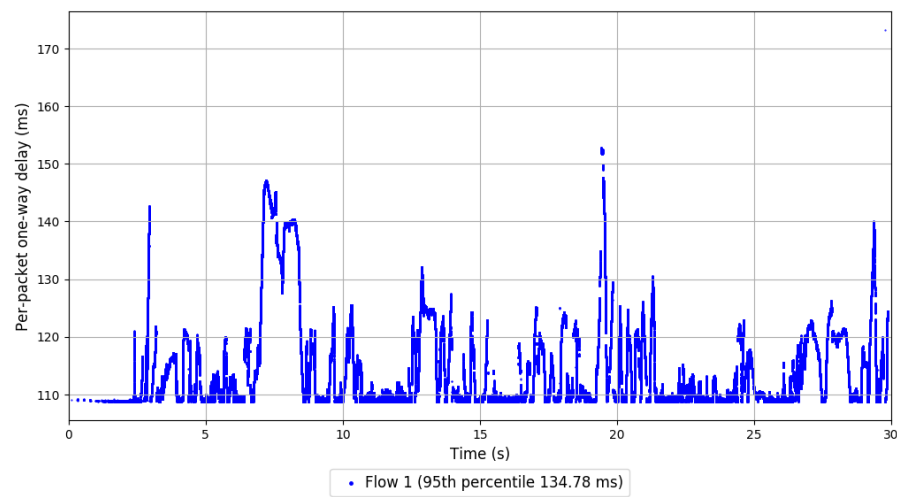
• Flow 1 (95th percentile 211.29 ms)

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```
Run 1: Statistics of Copa

Start at: 2019-03-18 18:15:22
End at: 2019-03-18 18:15:52
Local clock offset: 20.499 ms
Remote clock offset: 20.116 ms


# Below is generated by plot.py at 2019-03-18 20:49:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 319.56 Mbit/s
95th percentile per-packet one-way delay: 137.227 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 319.56 Mbit/s
95th percentile per-packet one-way delay: 137.227 ms
Loss rate: 0.77%
```
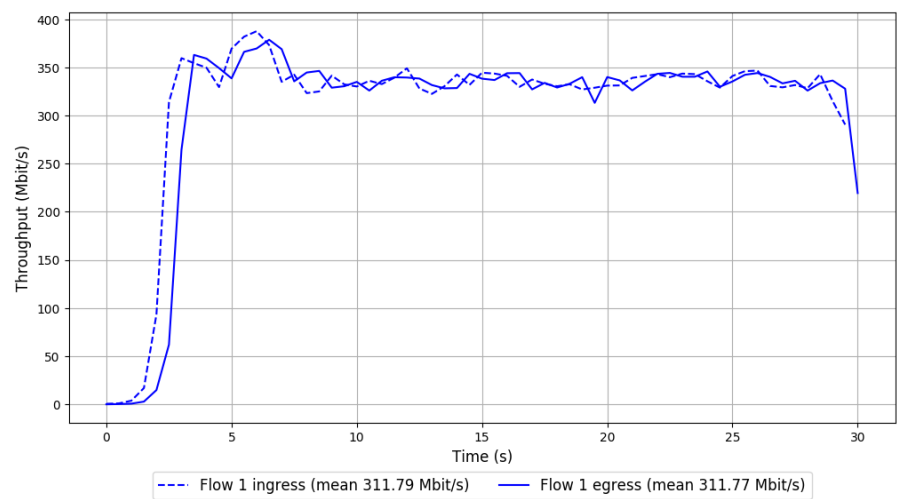
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2019-03-18 18:51:20
End at: 2019-03-18 18:51:50
Local clock offset: 37.908 ms
Remote clock offset: 36.855 ms


# Below is generated by plot.py at 2019-03-18 20:49:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 294.77 Mbit/s
95th percentile per-packet one-way delay: 127.963 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 294.77 Mbit/s
95th percentile per-packet one-way delay: 127.963 ms
Loss rate: 0.73%
```
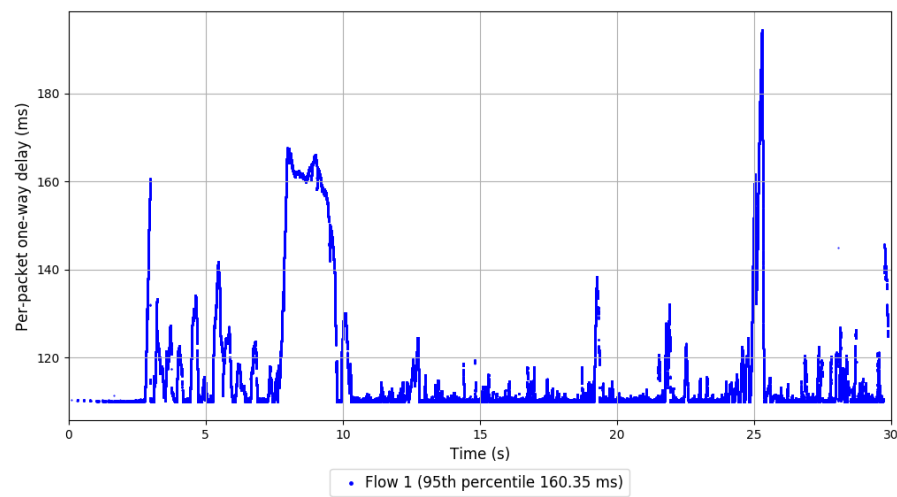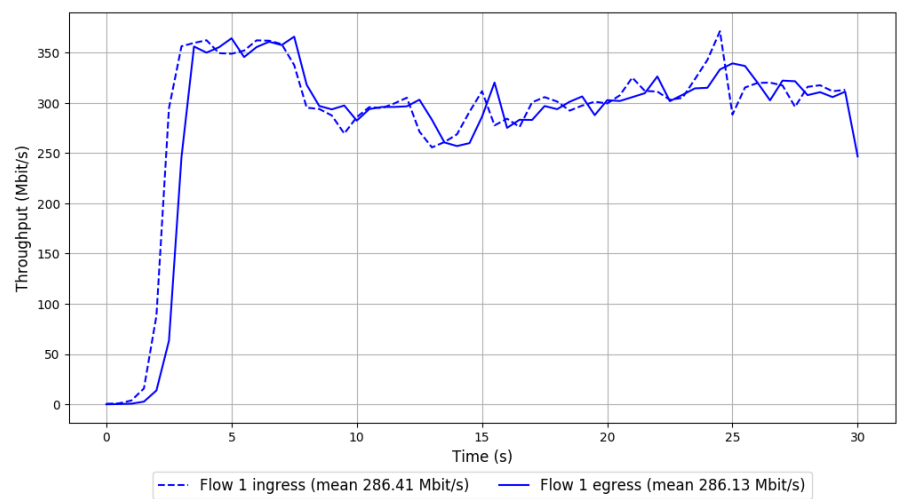
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2019-03-18 19:23:07
End at: 2019-03-18 19:23:37
Local clock offset: 18.314 ms
Remote clock offset: 17.844 ms


# Below is generated by plot.py at 2019-03-18 20:49:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 311.77 Mbit/s
95th percentile per-packet one-way delay: 134.782 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 311.77 Mbit/s
95th percentile per-packet one-way delay: 134.782 ms
Loss rate: 0.74%
```
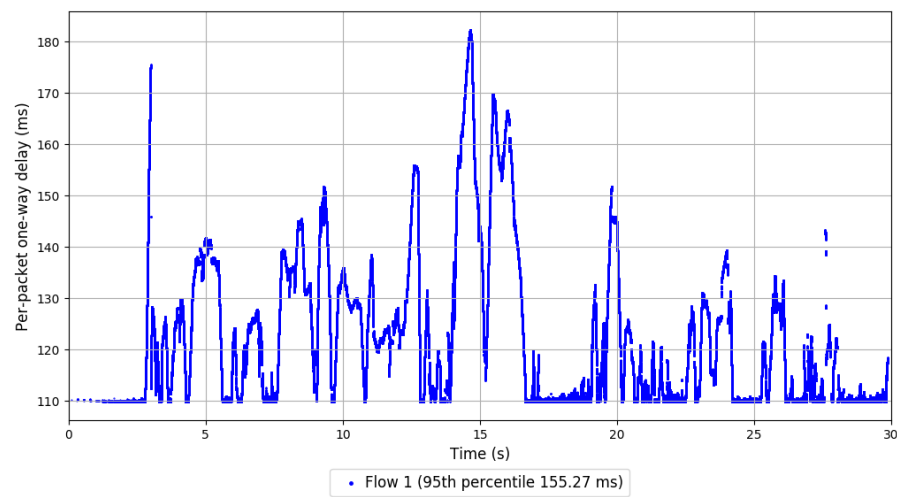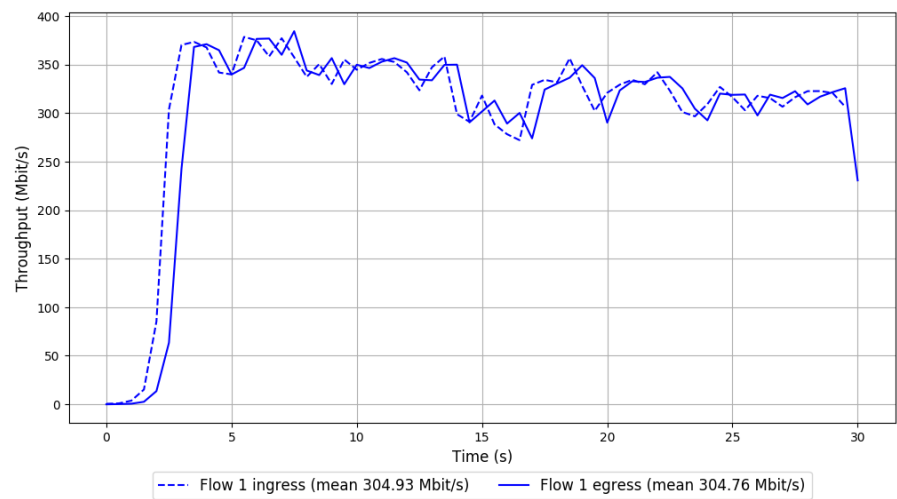
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2019-03-18 19:55:02
End at: 2019-03-18 19:55:32
Local clock offset: 4.395 ms
Remote clock offset: 3.956 ms


# Below is generated by plot.py at 2019-03-18 20:56:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 286.13 Mbit/s
95th percentile per-packet one-way delay: 160.354 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 286.13 Mbit/s
95th percentile per-packet one-way delay: 160.354 ms
Loss rate: 0.83%
```

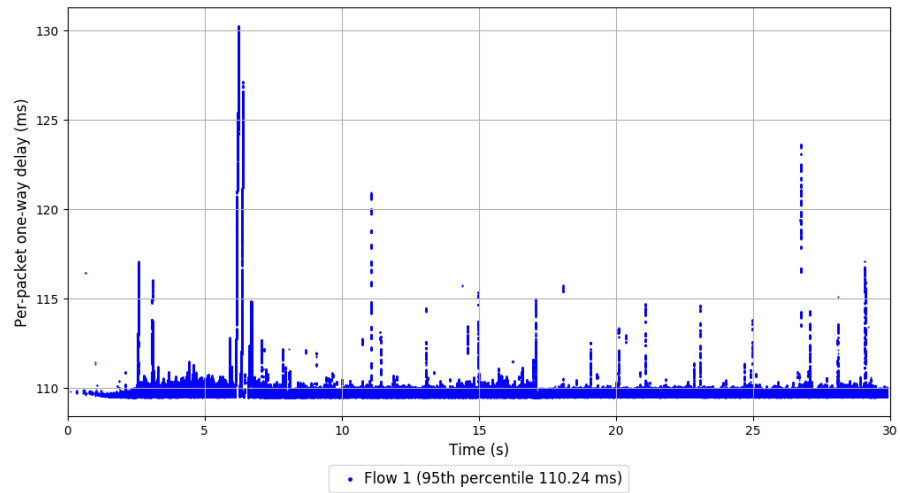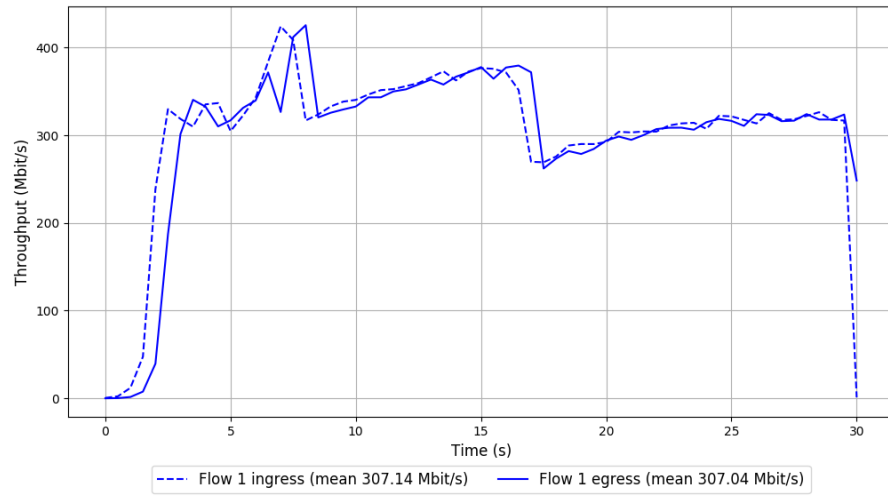Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2019-03-18 20:26:22
End at: 2019-03-18 20:26:52
Local clock offset: 1.497 ms
Remote clock offset: 1.565 ms

# Below is generated by plot.py at 2019-03-18 20:57:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 304.76 Mbit/s
95th percentile per-packet one-way delay: 155.266 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 304.76 Mbit/s
95th percentile per-packet one-way delay: 155.266 ms
Loss rate: 0.79%
```
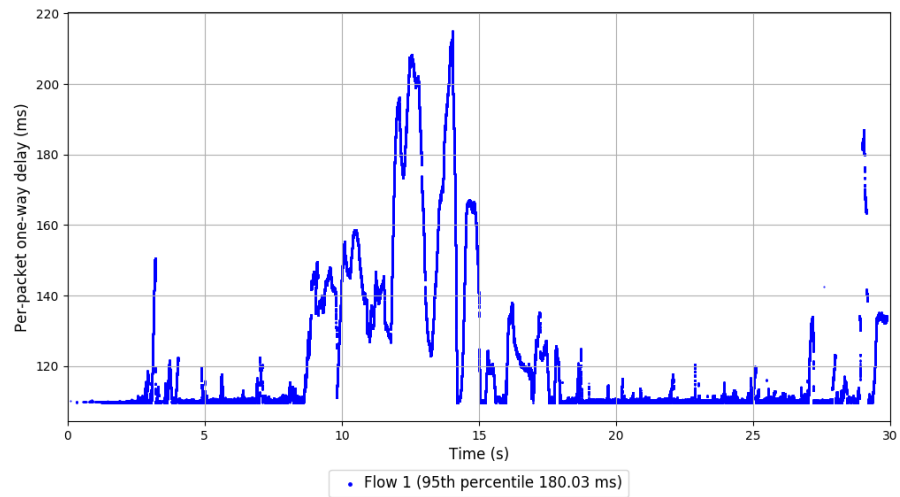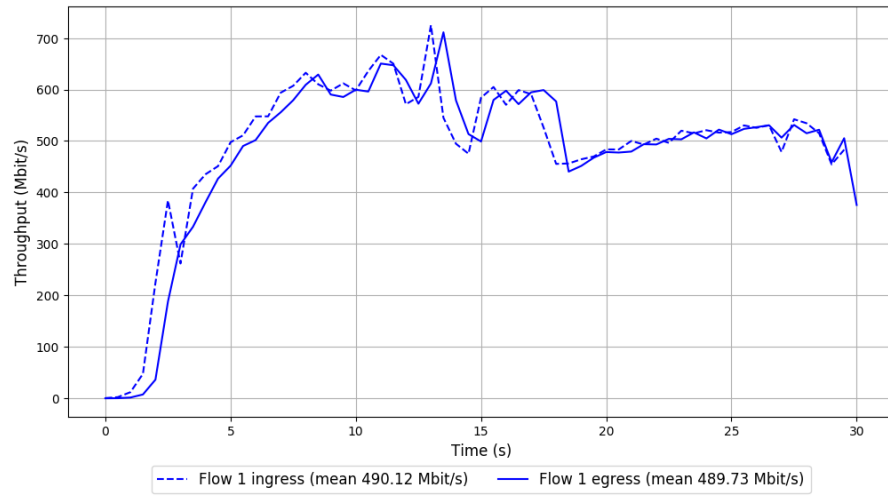
Run 5: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2019-03-18 18:03:31
End at: 2019-03-18 18:04:01
Local clock offset: 17.311 ms
Remote clock offset: 17.184 ms


# Below is generated by plot.py at 2019-03-18 20:57:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 307.04 Mbit/s
95th percentile per-packet one-way delay: 110.241 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 307.04 Mbit/s
95th percentile per-packet one-way delay: 110.241 ms
Loss rate: 0.77%
```
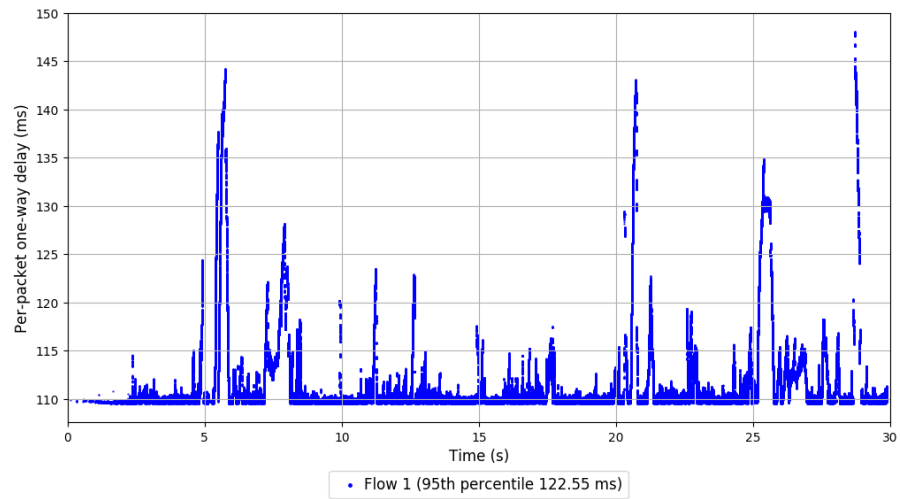
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 307.14 Mbit/s)   Flow 1 egress (mean 307.04 Mbit/s)

Flow 1 (95th percentile 110.24 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2019-03-18 18:39:22
End at: 2019-03-18 18:39:52
Local clock offset: 25.572 ms
Remote clock offset: 25.053 ms


# Below is generated by plot.py at 2019-03-18 20:57:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 489.73 Mbit/s
95th percentile per-packet one-way delay: 180.026 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 489.73 Mbit/s
95th percentile per-packet one-way delay: 180.026 ms
Loss rate: 0.81%
```
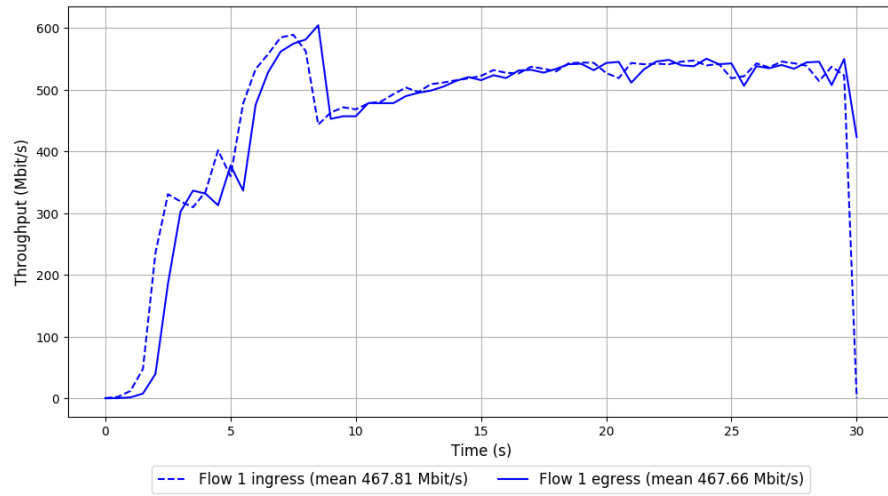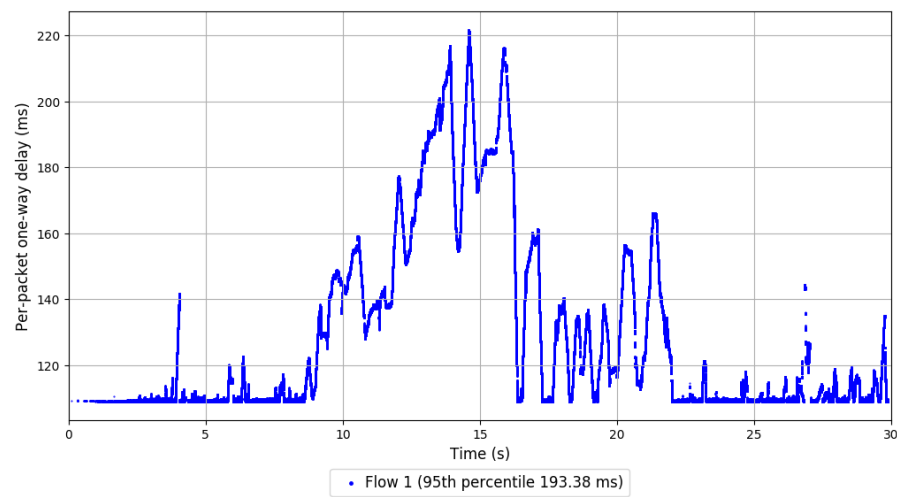
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 490.12 Mbit/s)   Flow 1 egress (mean 489.73 Mbit/s)

Flow 1 (95th percentile 180.03 ms)

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```
Run 3: Statistics of TCP Cubic

Start at: 2019-03-18 19:11:01
End at: 2019-03-18 19:11:31
Local clock offset: 15.61 ms
Remote clock offset: 15.13 ms


# Below is generated by plot.py at 2019-03-18 20:57:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 467.66 Mbit/s
95th percentile per-packet one-way delay: 122.548 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 467.66 Mbit/s
95th percentile per-packet one-way delay: 122.548 ms
Loss rate: 0.77%
```
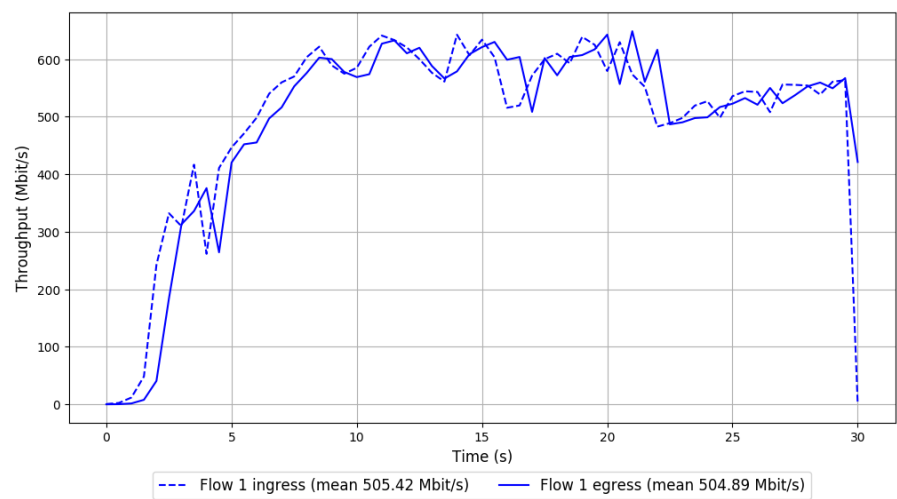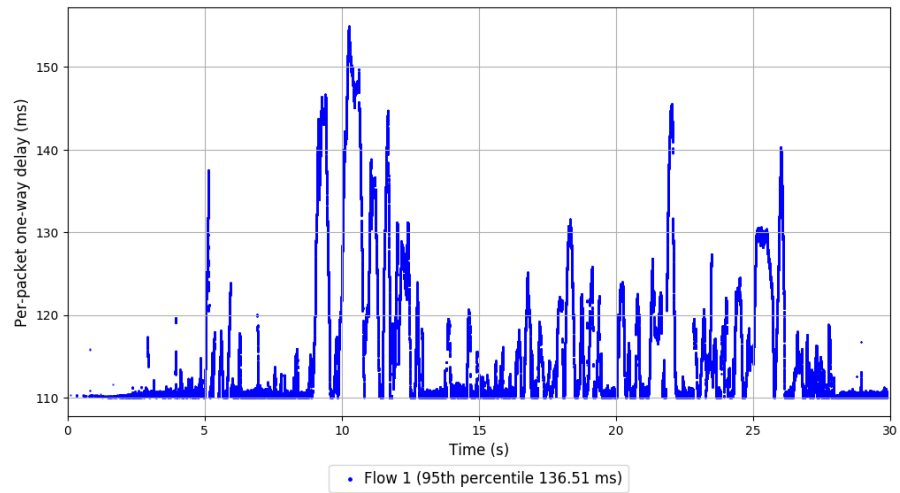
Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2019-03-18 19:43:02
End at: 2019-03-18 19:43:32
Local clock offset: 5.826 ms
Remote clock offset: 5.565 ms


# Below is generated by plot.py at 2019-03-18 20:57:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 504.89 Mbit/s
95th percentile per-packet one-way delay: 193.381 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 504.89 Mbit/s
95th percentile per-packet one-way delay: 193.381 ms
Loss rate: 0.84%
```
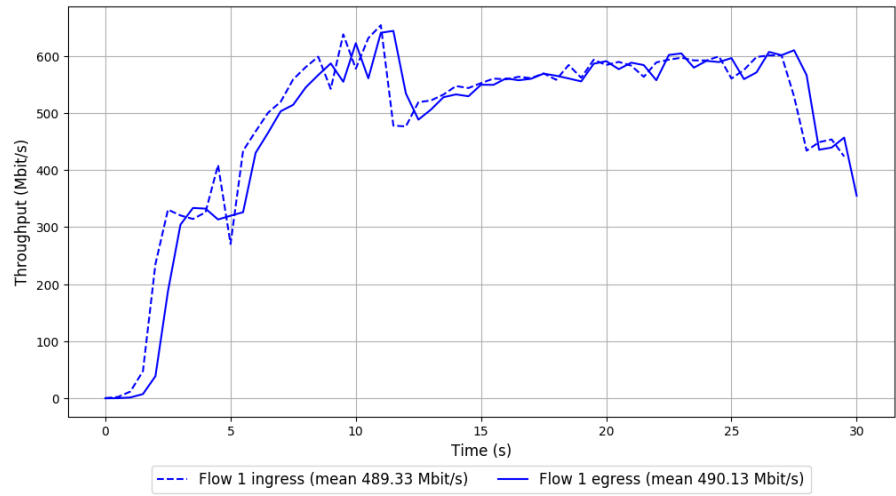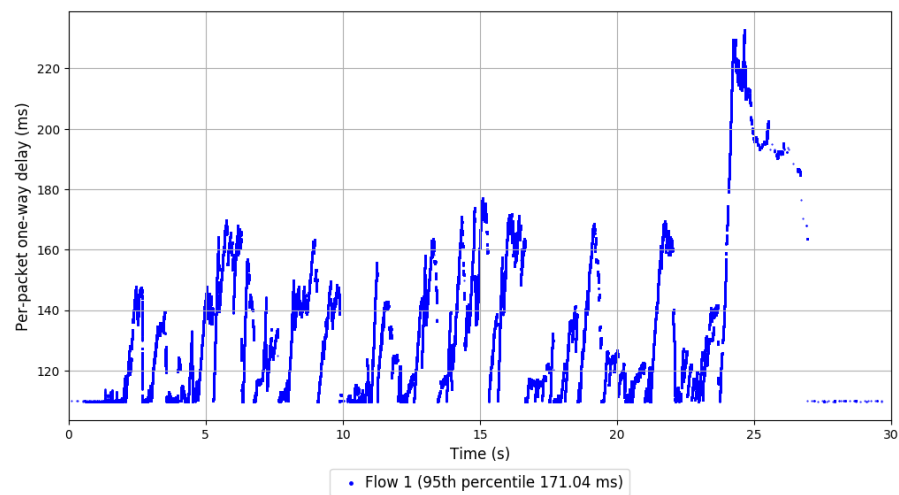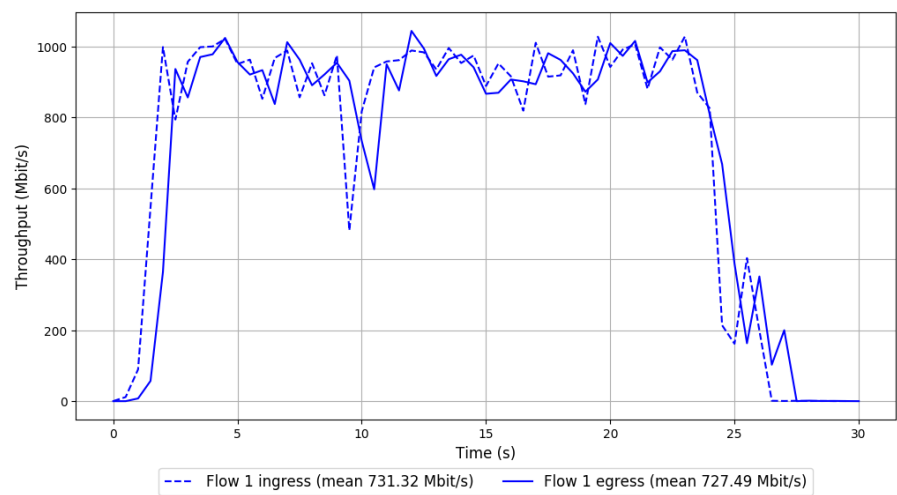
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 505.42 Mbit/s) —— Flow 1 egress (mean 504.89 Mbit/s)

• Flow 1 (95th percentile 193.38 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2019-03-18 20:14:25
End at: 2019-03-18 20:14:55
Local clock offset: 1.978 ms
Remote clock offset: 1.804 ms


# Below is generated by plot.py at 2019-03-18 20:57:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 490.13 Mbit/s
95th percentile per-packet one-way delay: 136.507 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 490.13 Mbit/s
95th percentile per-packet one-way delay: 136.507 ms
Loss rate: 0.57%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 489.33 Mbit/s) Flow 1 egress (mean 490.13 Mbit/s)
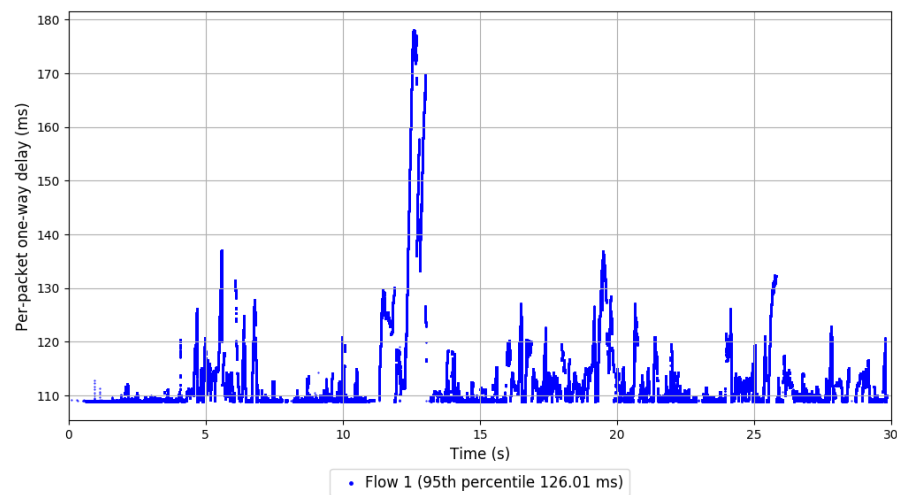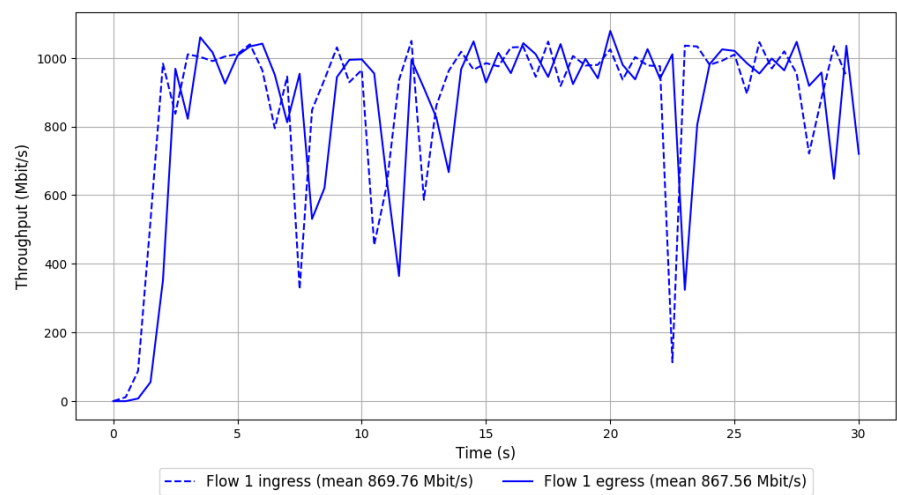

Flow 1 (95th percentile 136.51 ms)

```
Run 1: Statistics of FillP

Start at: 2019-03-18 18:08:07
End at: 2019-03-18 18:08:37
Local clock offset: 14.415 ms
Remote clock offset: 13.423 ms


# Below is generated by plot.py at 2019-03-18 21:03:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 727.49 Mbit/s
95th percentile per-packet one-way delay: 171.040 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 727.49 Mbit/s
95th percentile per-packet one-way delay: 171.040 ms
Loss rate: 1.20%
```
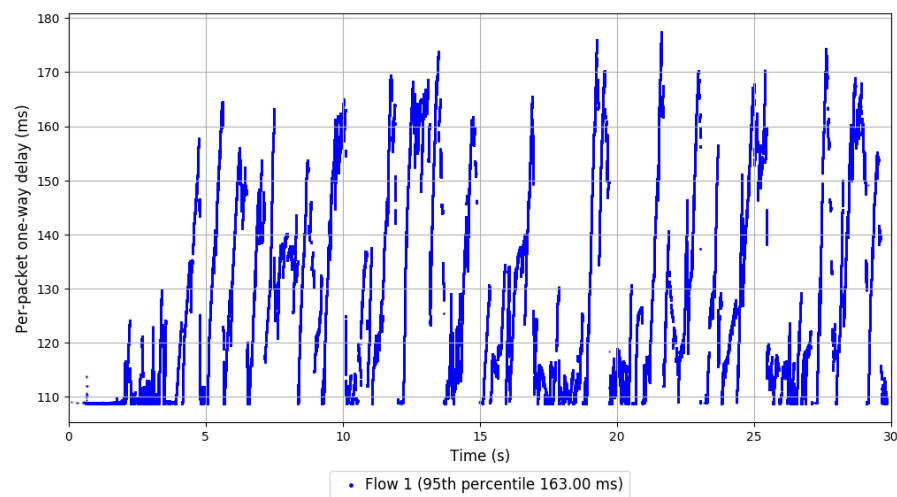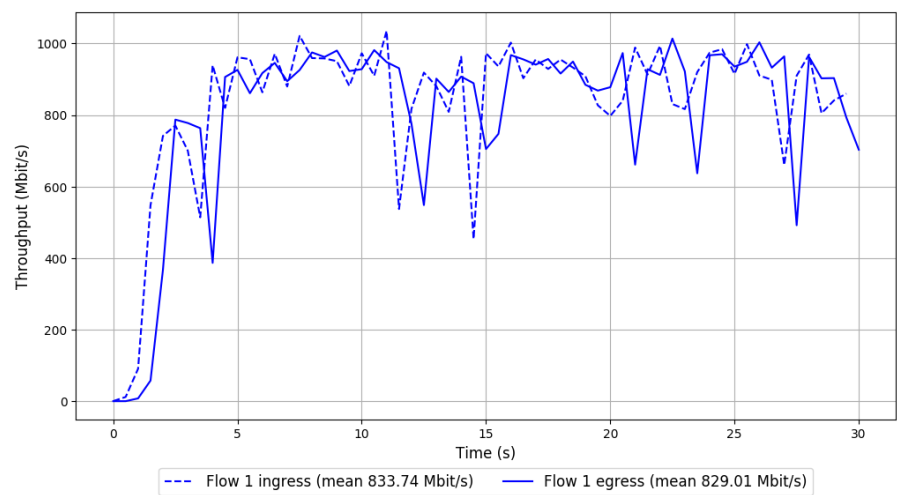
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2019-03-18 18:44:08
End at: 2019-03-18 18:44:39
Local clock offset: 30.146 ms
Remote clock offset: 29.856 ms


# Below is generated by plot.py at 2019-03-18 21:11:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 867.56 Mbit/s
95th percentile per-packet one-way delay: 126.010 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 867.56 Mbit/s
95th percentile per-packet one-way delay: 126.010 ms
Loss rate: 1.01%
```
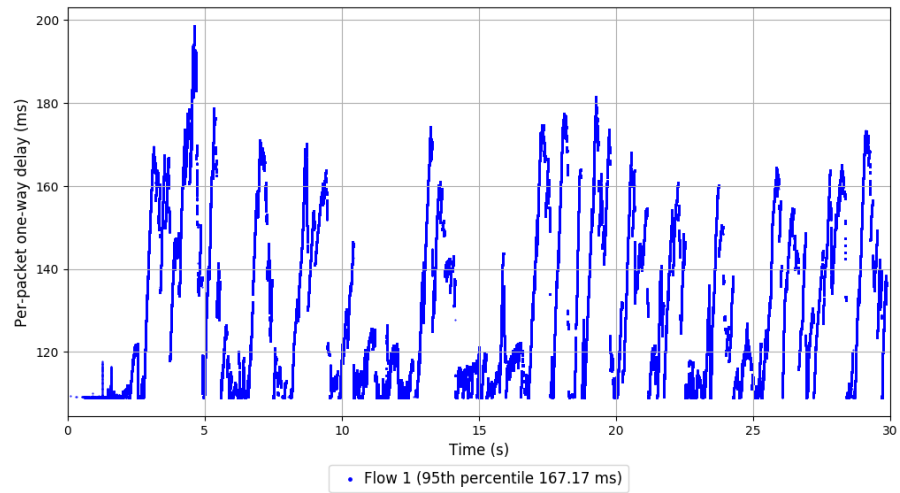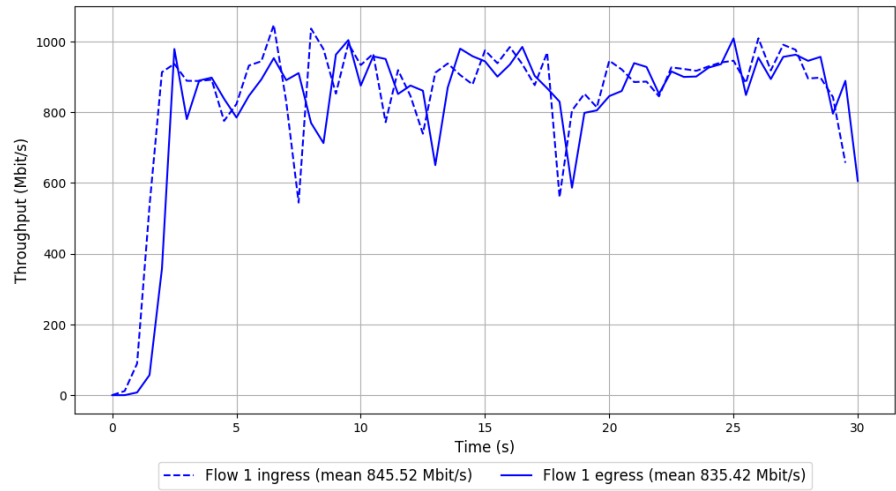
Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 869.76 Mbit/s)   Flow 1 egress (mean 867.56 Mbit/s)

• Flow 1 (95th percentile 126.01 ms)

```
Run 3: Statistics of FillP

Start at: 2019-03-18 19:15:48
End at: 2019-03-18 19:16:18
Local clock offset: 16.086 ms
Remote clock offset: 15.474 ms


# Below is generated by plot.py at 2019-03-18 21:12:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 829.01 Mbit/s
95th percentile per-packet one-way delay: 163.003 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 829.01 Mbit/s
95th percentile per-packet one-way delay: 163.003 ms
Loss rate: 1.30%
```
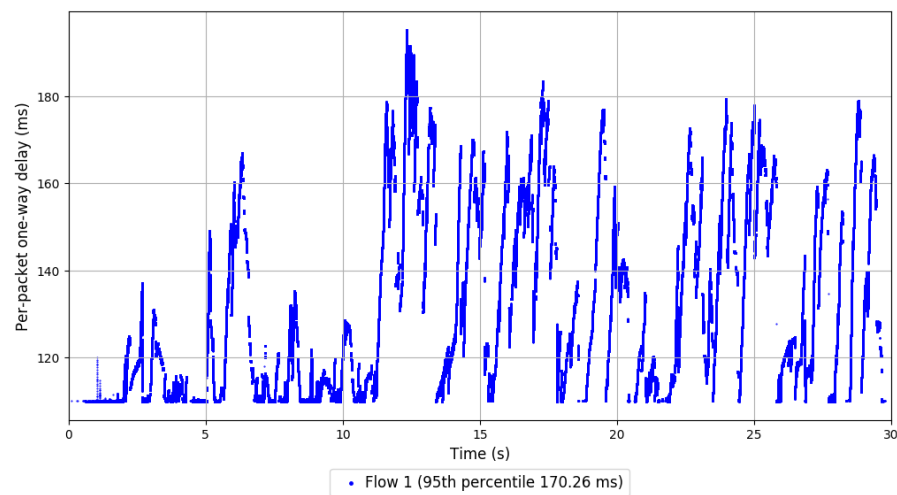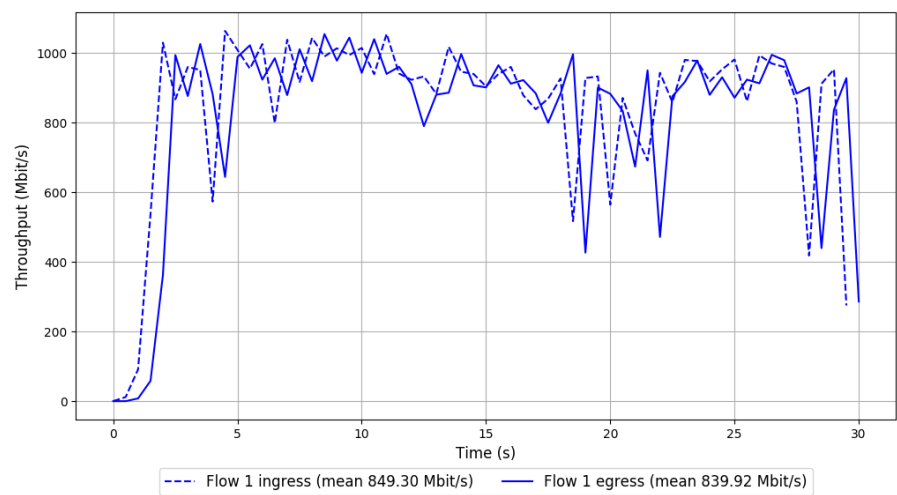
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2019-03-18 19:47:59
End at: 2019-03-18 19:48:29
Local clock offset: 4.786 ms
Remote clock offset: 4.61 ms


# Below is generated by plot.py at 2019-03-18 21:13:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 835.42 Mbit/s
95th percentile per-packet one-way delay: 167.170 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 835.42 Mbit/s
95th percentile per-packet one-way delay: 167.170 ms
Loss rate: 1.64%
```

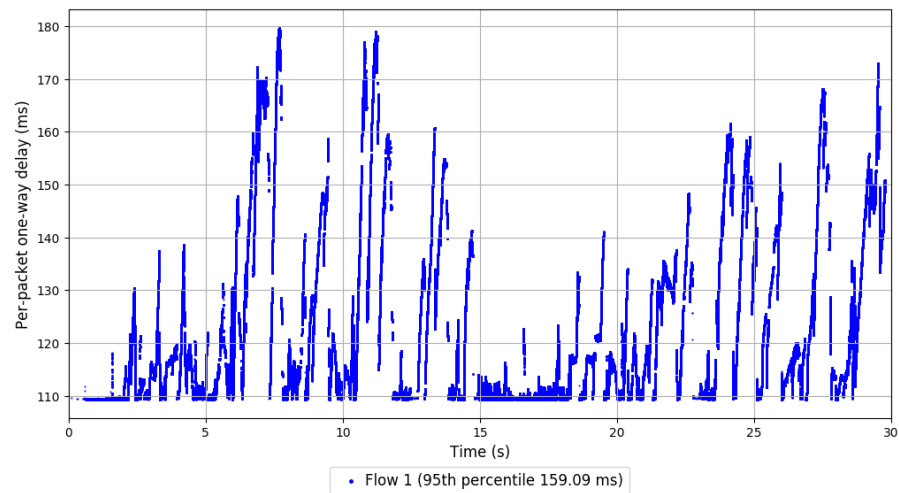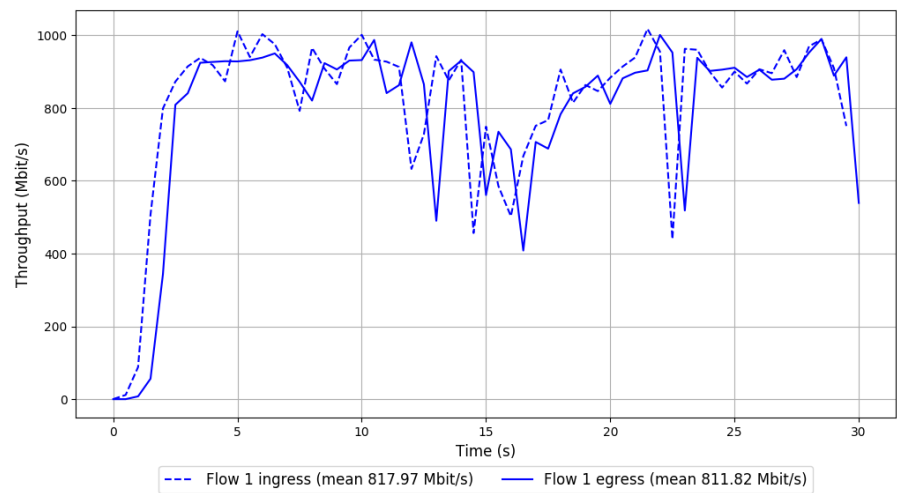# Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 845.52 Mbit/s)   Flow 1 egress (mean 835.42 Mbit/s)

• Flow 1 (95th percentile 167.17 ms)

```
Run 5: Statistics of FillP

Start at: 2019-03-18 20:19:20
End at: 2019-03-18 20:19:50
Local clock offset: 1.544 ms
Remote clock offset: 1.549 ms


# Below is generated by plot.py at 2019-03-18 21:13:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 839.92 Mbit/s
95th percentile per-packet one-way delay: 170.256 ms
Loss rate: 1.99%
-- Flow 1:
Average throughput: 839.92 Mbit/s
95th percentile per-packet one-way delay: 170.256 ms
Loss rate: 1.99%
```
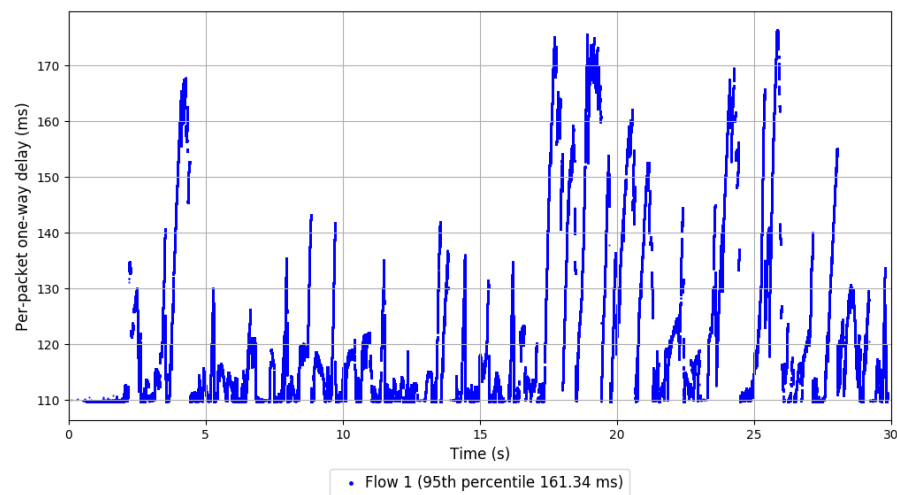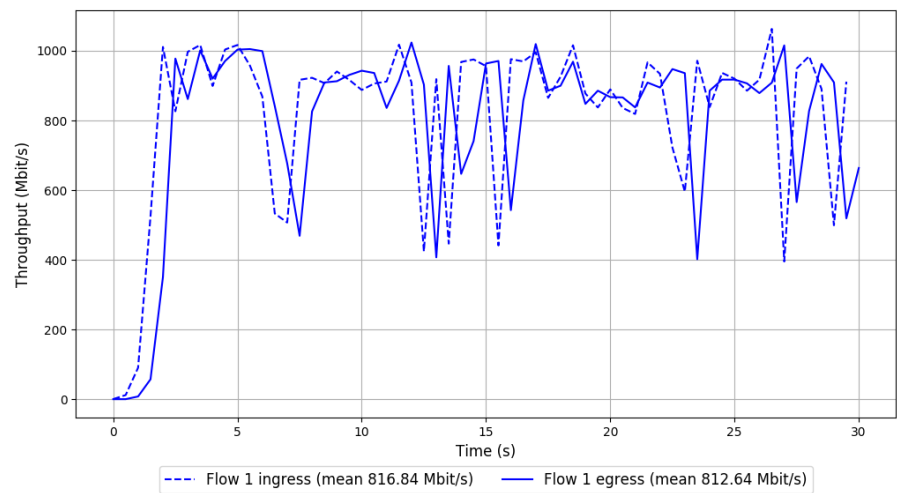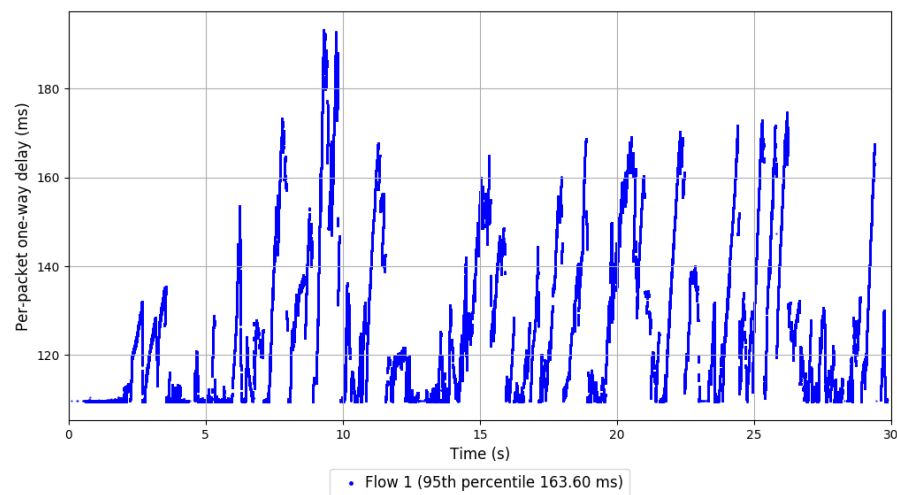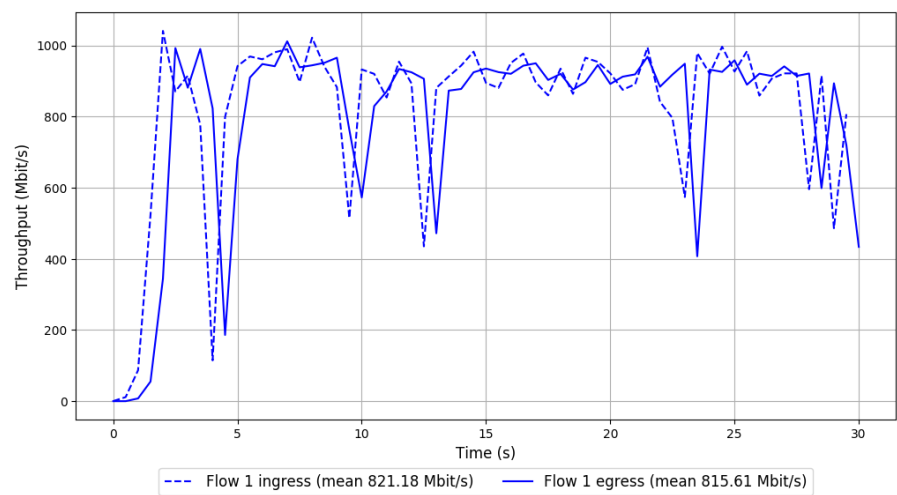
Run 5: Report of FillP — Data Link

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-03-18 18:04:57
End at: 2019-03-18 18:05:27
Local clock offset: 14.549 ms
Remote clock offset: 14.496 ms


# Below is generated by plot.py at 2019-03-18 21:13:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 811.82 Mbit/s
95th percentile per-packet one-way delay: 159.095 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 811.82 Mbit/s
95th percentile per-packet one-way delay: 159.095 ms
Loss rate: 1.49%
```

Run 1: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 817.97 Mbit/s)   Flow 1 egress (mean 811.82 Mbit/s)

• Flow 1 (95th percentile 159.09 ms)

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-03-18 18:40:58
End at: 2019-03-18 18:41:28
Local clock offset: 27.137 ms
Remote clock offset: 26.509 ms


# Below is generated by plot.py at 2019-03-18 21:13:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 812.64 Mbit/s
95th percentile per-packet one-way delay: 161.342 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 812.64 Mbit/s
95th percentile per-packet one-way delay: 161.342 ms
Loss rate: 1.25%
```
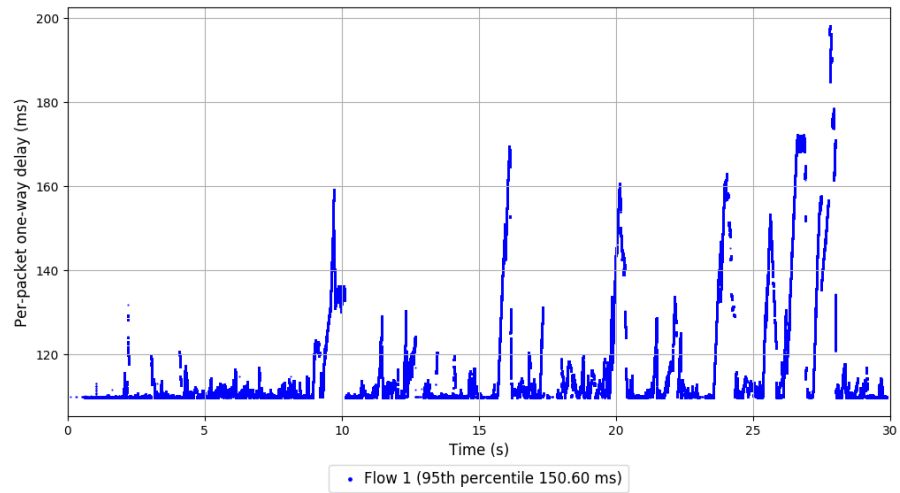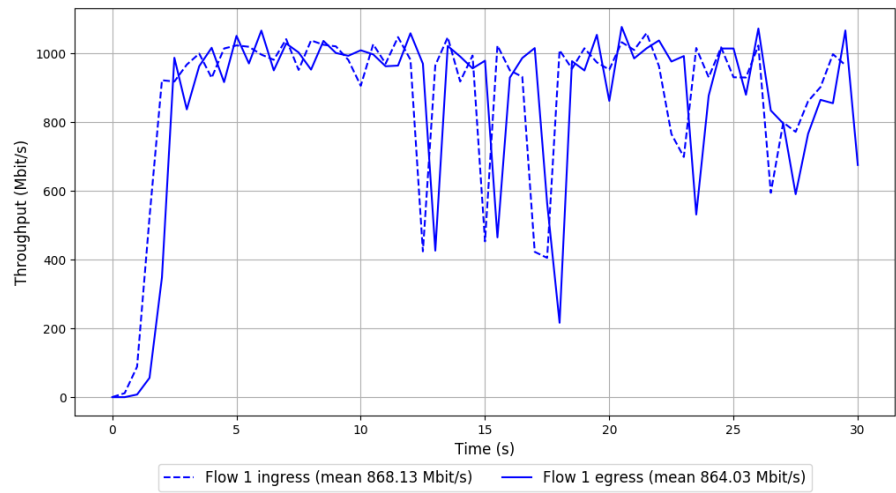
Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-03-18 19:12:37
End at: 2019-03-18 19:13:07
Local clock offset: 15.504 ms
Remote clock offset: 15.075 ms


# Below is generated by plot.py at 2019-03-18 21:14:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 815.61 Mbit/s
95th percentile per-packet one-way delay: 163.596 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 815.61 Mbit/s
95th percentile per-packet one-way delay: 163.596 ms
Loss rate: 1.41%
```
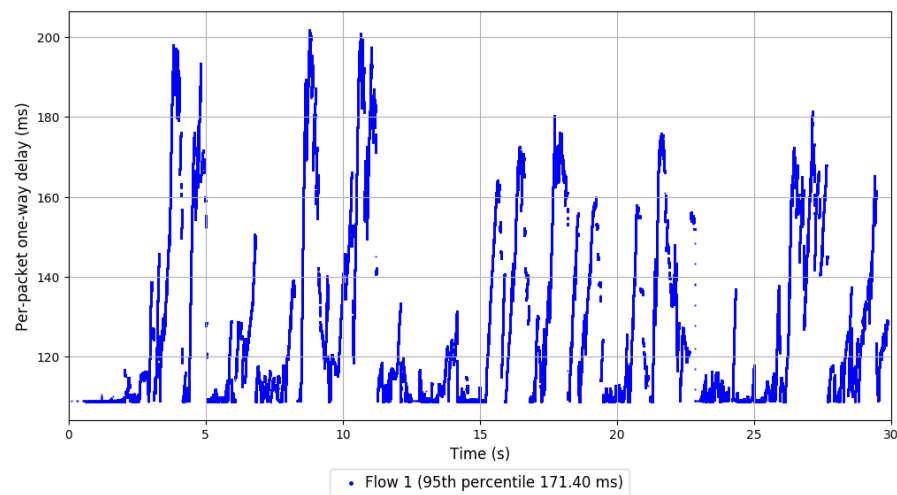
Run 3: Report of FillP-Sheep — Data Link

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-03-18 19:44:39
End at: 2019-03-18 19:45:09
Local clock offset: 5.317 ms
Remote clock offset: 5.097 ms


# Below is generated by plot.py at 2019-03-18 21:23:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 864.03 Mbit/s
95th percentile per-packet one-way delay: 150.605 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 864.03 Mbit/s
95th percentile per-packet one-way delay: 150.605 ms
Loss rate: 1.21%
```
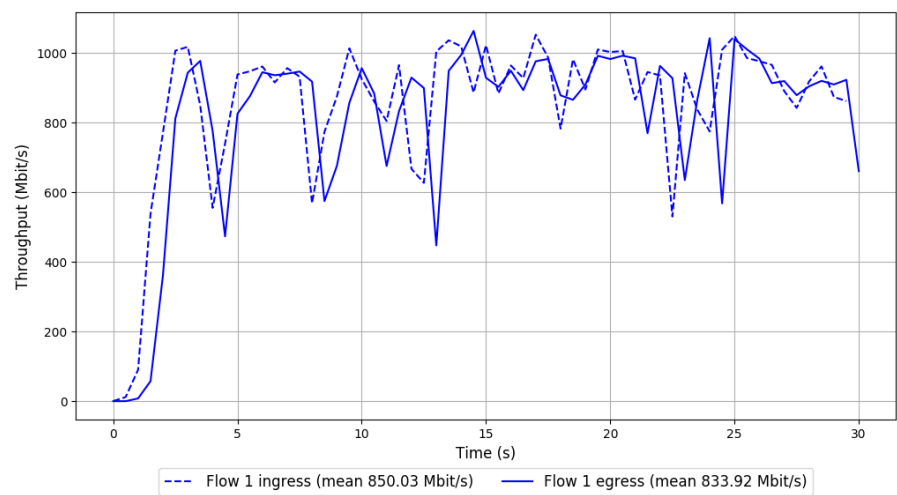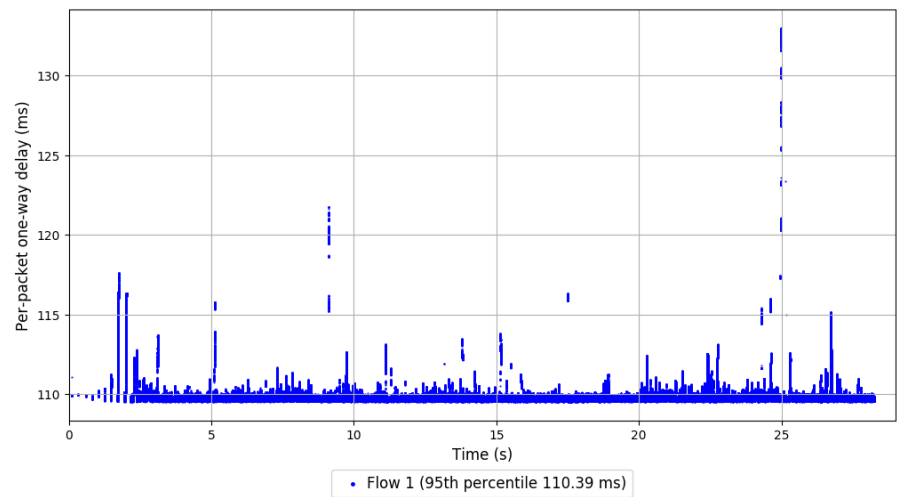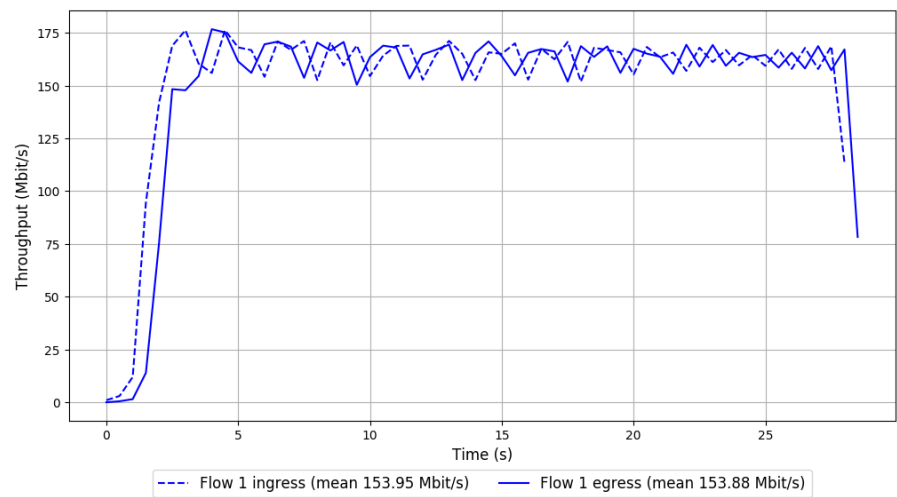
Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 868.13 Mbit/s)   Flow 1 egress (mean 864.03 Mbit/s)

• Flow 1 (95th percentile 150.60 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-03-18 20:16:01
End at: 2019-03-18 20:16:31
Local clock offset: 1.655 ms
Remote clock offset: 1.707 ms


# Below is generated by plot.py at 2019-03-18 21:28:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 833.92 Mbit/s
95th percentile per-packet one-way delay: 171.404 ms
Loss rate: 2.62%
-- Flow 1:
Average throughput: 833.92 Mbit/s
95th percentile per-packet one-way delay: 171.404 ms
Loss rate: 2.62%
```
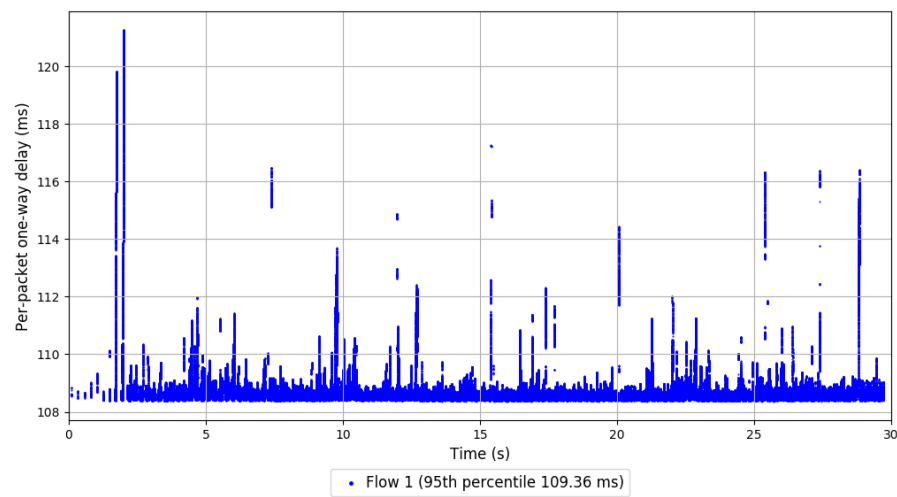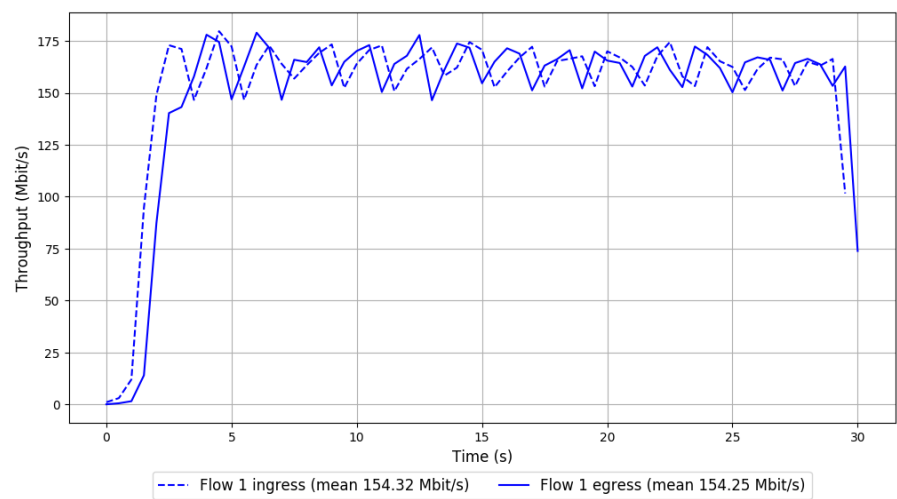
Run 5: Report of FillP-Sheep — Data Link

```
Run 1: Statistics of Indigo

Start at: 2019-03-18 18:06:42
End at: 2019-03-18 18:07:12
Local clock offset: 13.619 ms
Remote clock offset: 13.346 ms


# Below is generated by plot.py at 2019-03-18 21:28:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 153.88 Mbit/s
95th percentile per-packet one-way delay: 110.394 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 153.88 Mbit/s
95th percentile per-packet one-way delay: 110.394 ms
Loss rate: 0.83%
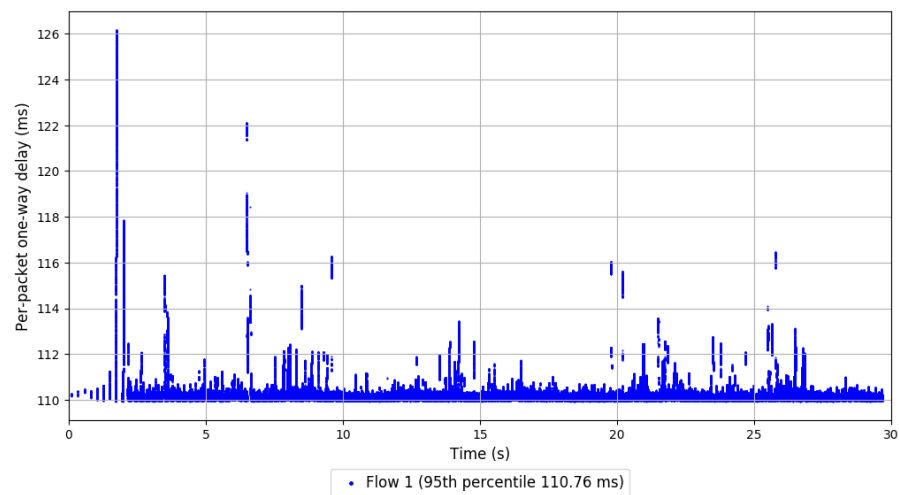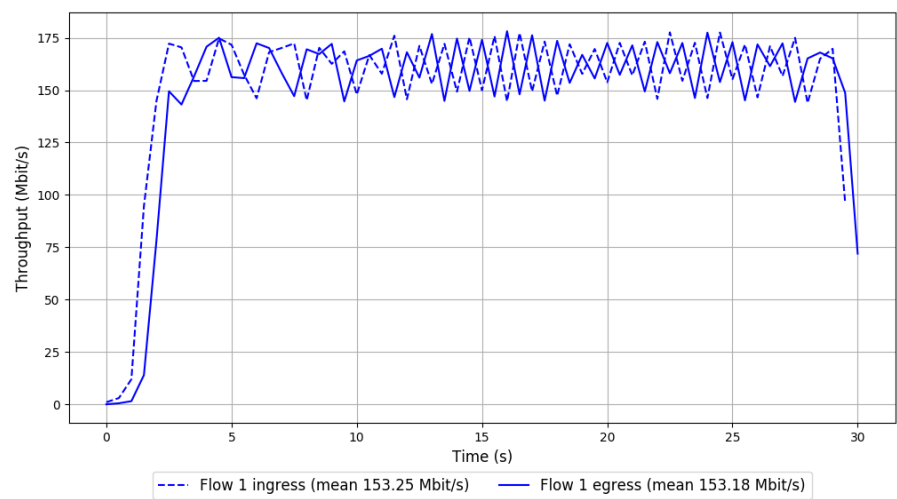```

Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-03-18 18:42:43
End at: 2019-03-18 18:43:13
Local clock offset: 28.919 ms
Remote clock offset: 28.158 ms

Below is generated by plot.py at 2019-03-18 21:28:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 154.25 Mbit/s
95th percentile per-packet one-way delay: 109.359 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 154.25 Mbit/s
95th percentile per-packet one-way delay: 109.359 ms
Loss rate: 0.78%
```
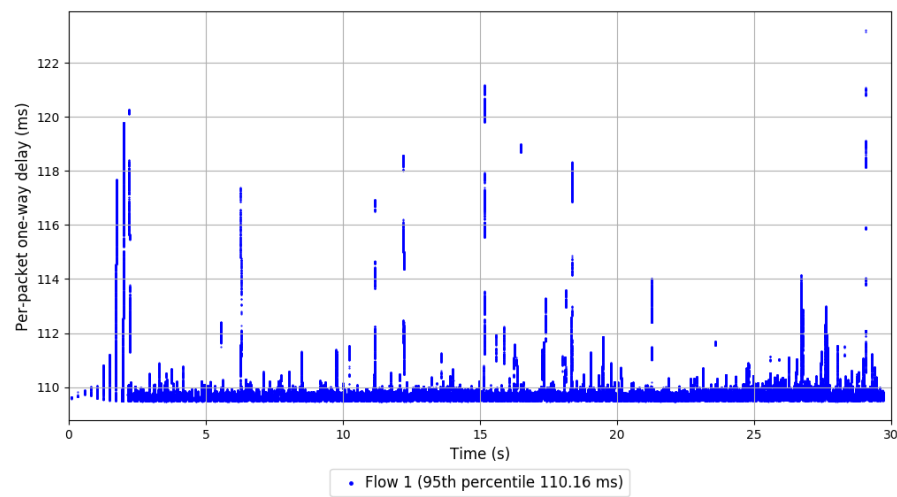
Run 2: Report of Indigo — Data Link



Flow 1 ingress (mean 154.32 Mbit/s)   Flow 1 egress (mean 154.25 Mbit/s)



Flow 1 (95th percentile 109.36 ms)

```
Run 3: Statistics of Indigo

Start at: 2019-03-18 19:14:22
End at: 2019-03-18 19:14:52
Local clock offset: 16.015 ms
Remote clock offset: 15.262 ms

Below is generated by plot.py at 2019-03-18 21:28:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 153.18 Mbit/s
95th percentile per-packet one-way delay: 110.762 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 153.18 Mbit/s
95th percentile per-packet one-way delay: 110.762 ms
Loss rate: 0.79%
```
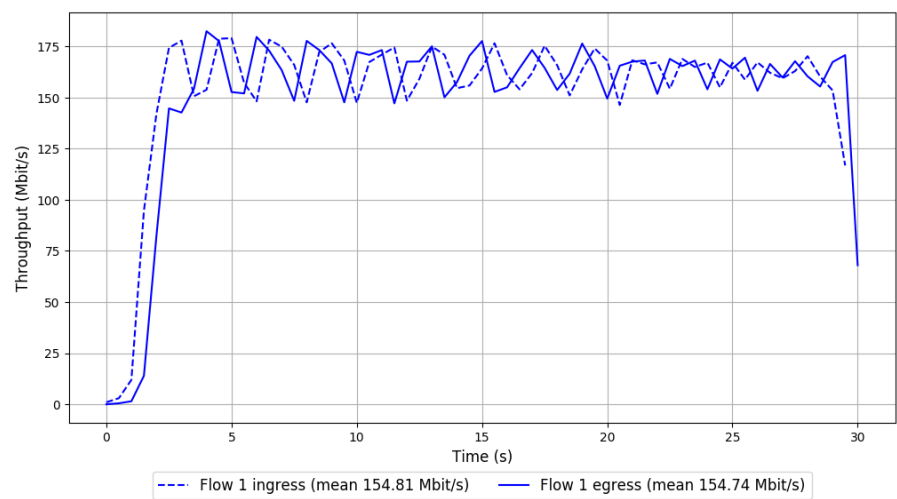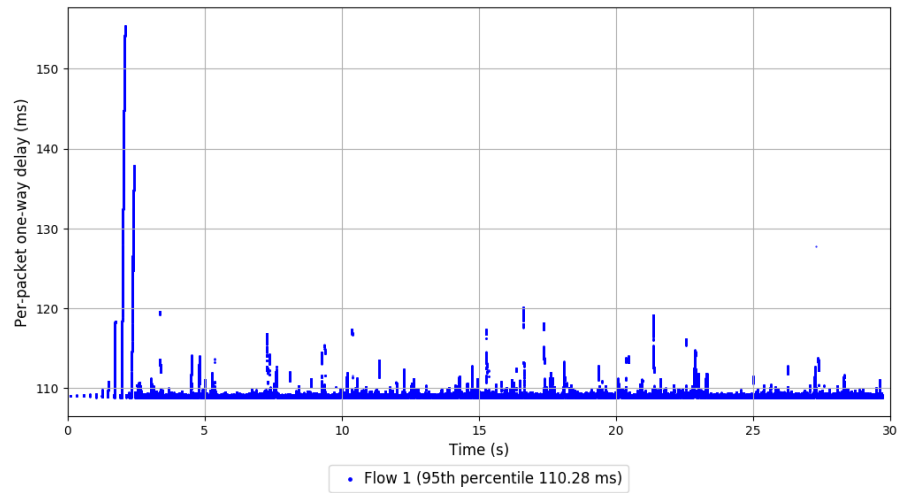
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2019-03-18 19:46:32
End at: 2019-03-18 19:47:02
Local clock offset: 4.663 ms
Remote clock offset: 4.825 ms

Below is generated by plot.py at 2019-03-18 21:28:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 154.74 Mbit/s
95th percentile per-packet one-way delay: 110.163 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 154.74 Mbit/s
95th percentile per-packet one-way delay: 110.163 ms
Loss rate: 0.77%
```
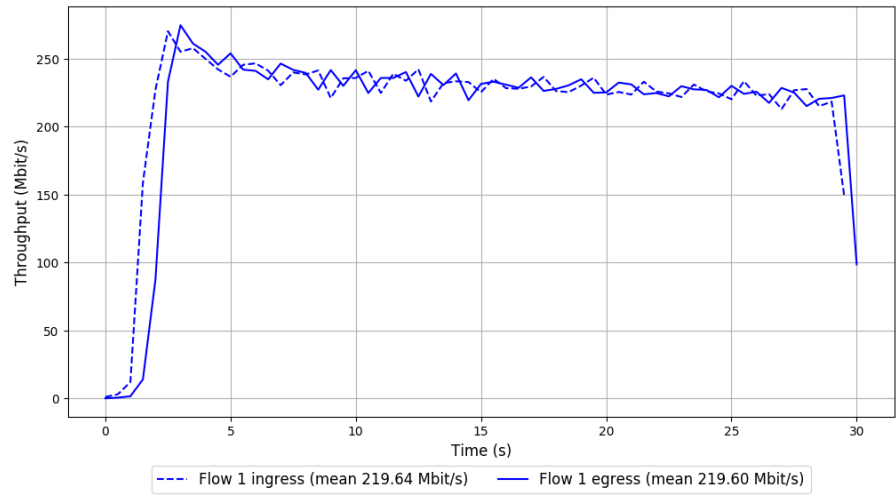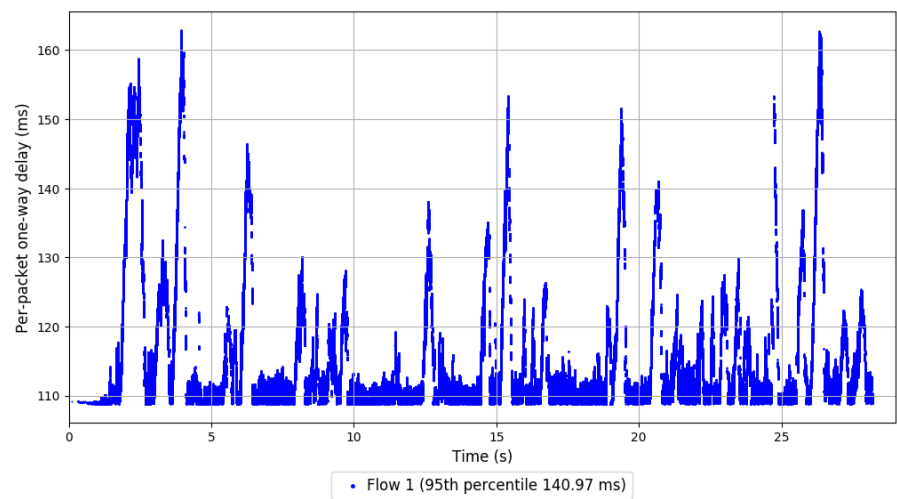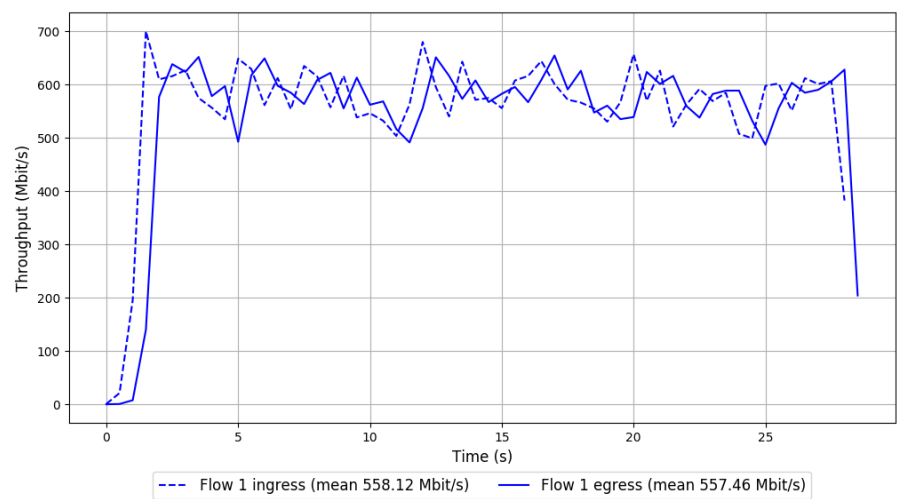
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2019-03-18 20:17:48
End at: 2019-03-18 20:18:18
Local clock offset: 1.659 ms
Remote clock offset: 1.608 ms

Below is generated by plot.py at 2019-03-18 21:28:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 219.60 Mbit/s
95th percentile per-packet one-way delay: 110.277 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 219.60 Mbit/s
95th percentile per-packet one-way delay: 110.277 ms
Loss rate: 0.75%
```
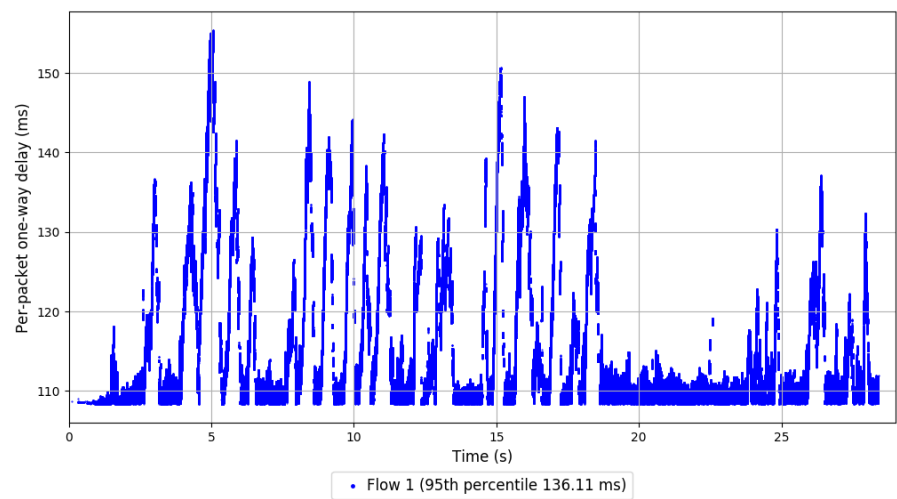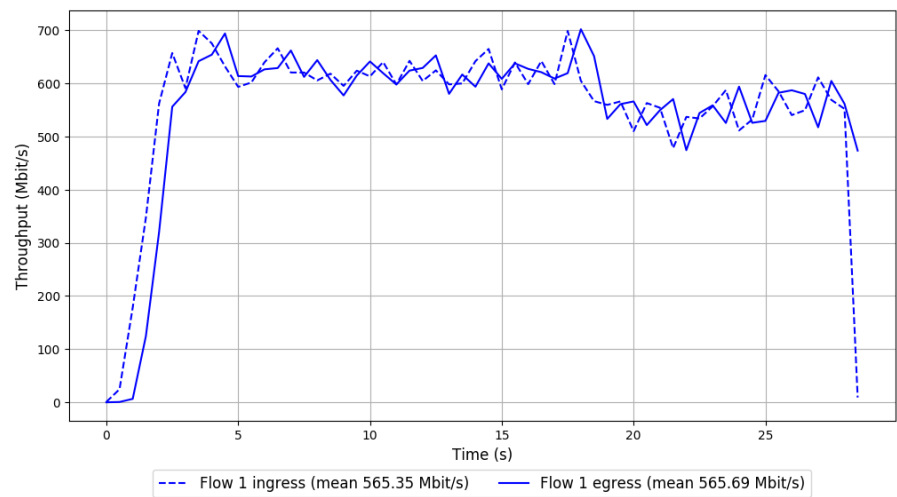
Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-03-18 18:01:52
End at: 2019-03-18 18:02:22
Local clock offset: 15.426 ms
Remote clock offset: 15.788 ms

Below is generated by plot.py at 2019-03-18 21:28:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 557.46 Mbit/s
95th percentile per-packet one-way delay: 140.973 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 557.46 Mbit/s
95th percentile per-packet one-way delay: 140.973 ms
Loss rate: 0.90%
```
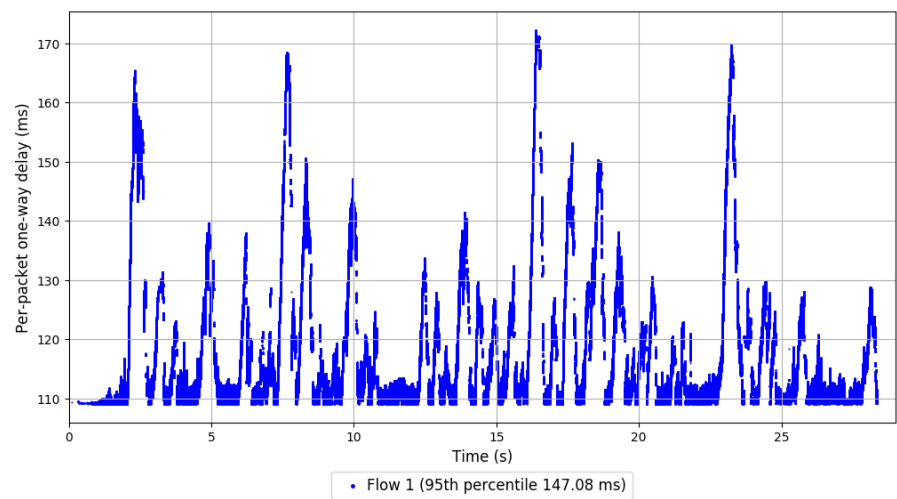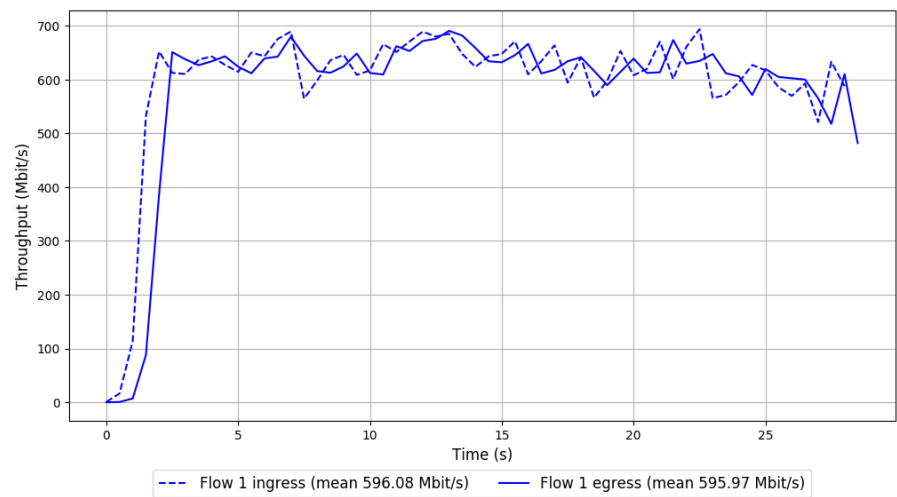
Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-03-18 18:37:37
End at: 2019-03-18 18:38:07
Local clock offset: 24.145 ms
Remote clock offset: 23.806 ms


# Below is generated by plot.py at 2019-03-18 21:28:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 565.69 Mbit/s
95th percentile per-packet one-way delay: 136.114 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 565.69 Mbit/s
95th percentile per-packet one-way delay: 136.114 ms
Loss rate: 0.71%
```

Run 2: Report of Indigo-MusesC3 — Data Link

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-03-18 19:09:20
End at: 2019-03-18 19:09:50
Local clock offset: 16.029 ms
Remote clock offset: 15.38 ms


# Below is generated by plot.py at 2019-03-18 21:28:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 595.97 Mbit/s
95th percentile per-packet one-way delay: 147.080 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 595.97 Mbit/s
95th percentile per-packet one-way delay: 147.080 ms
Loss rate: 0.79%
```

Run 3: Report of Indigo-MusesC3 — Data Link

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-03-18 19:41:22
End at: 2019-03-18 19:41:52
Local clock offset: 6.355 ms
Remote clock offset: 6.095 ms


# Below is generated by plot.py at 2019-03-18 21:28:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 586.55 Mbit/s
95th percentile per-packet one-way delay: 135.438 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 586.55 Mbit/s
95th percentile per-packet one-way delay: 135.438 ms
Loss rate: 0.85%
```
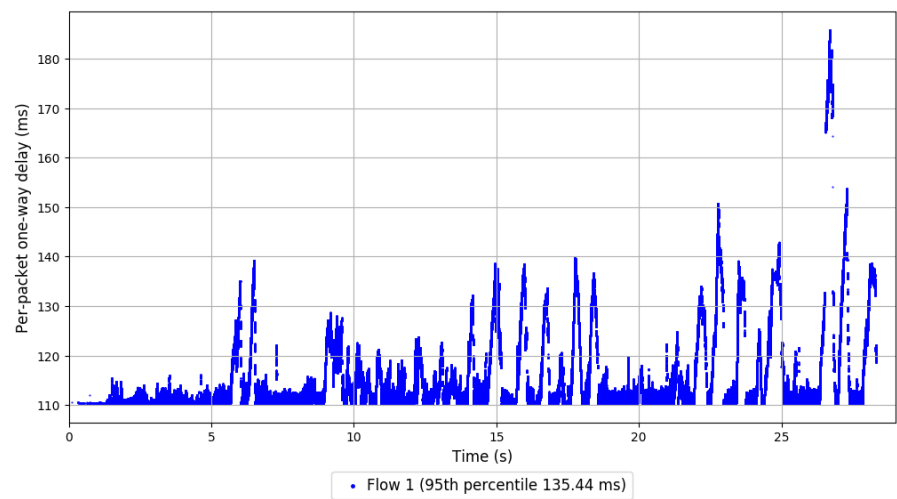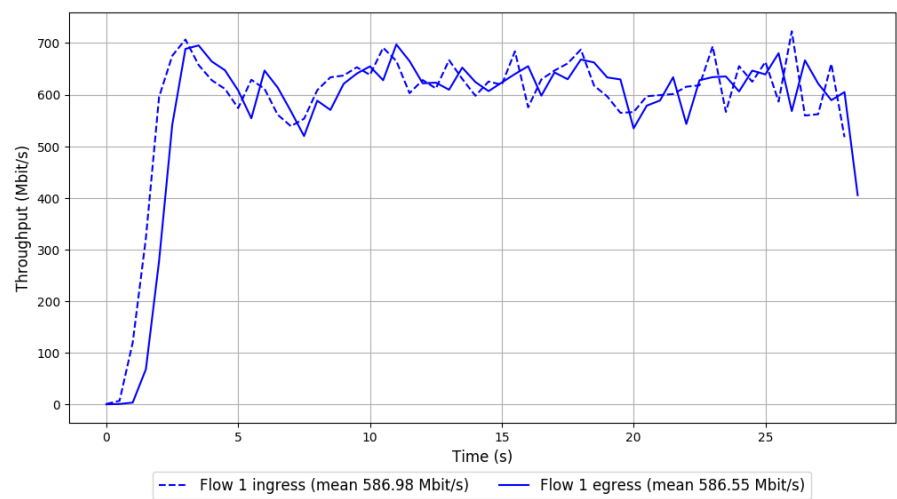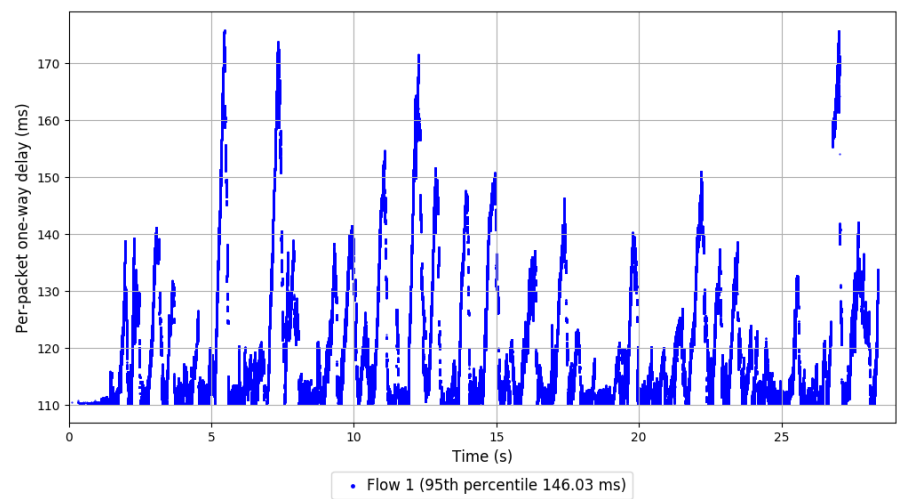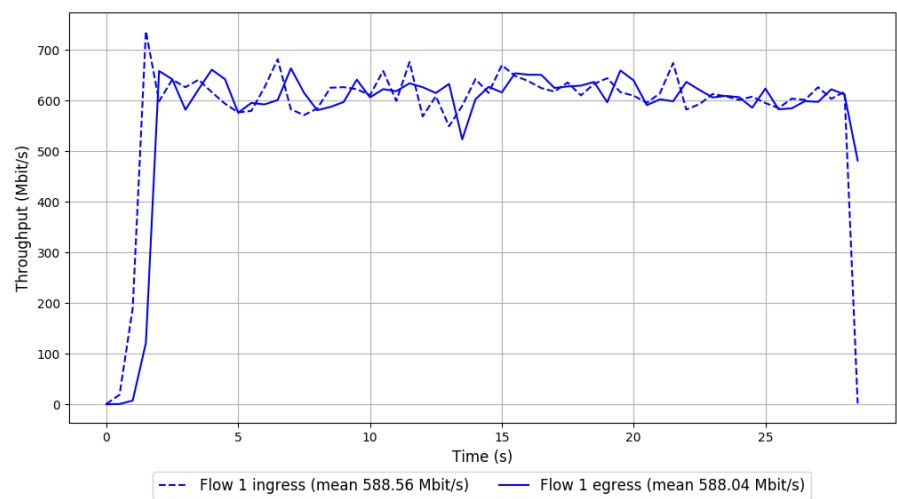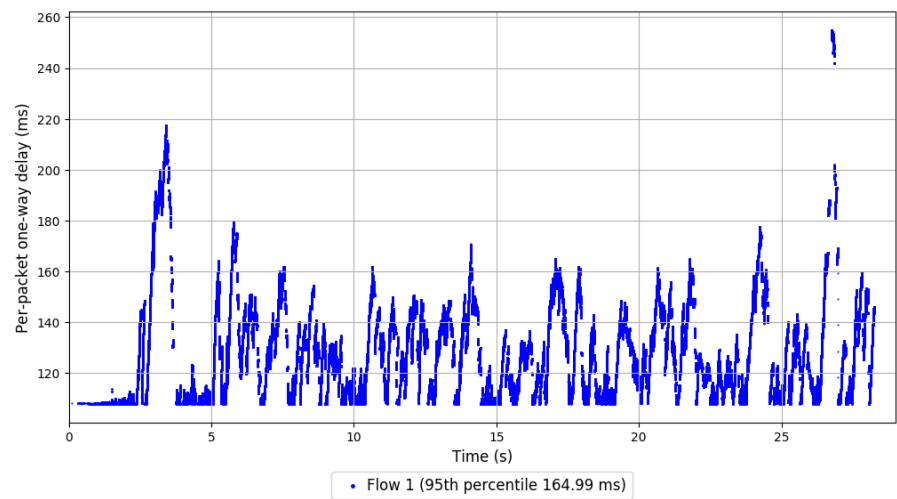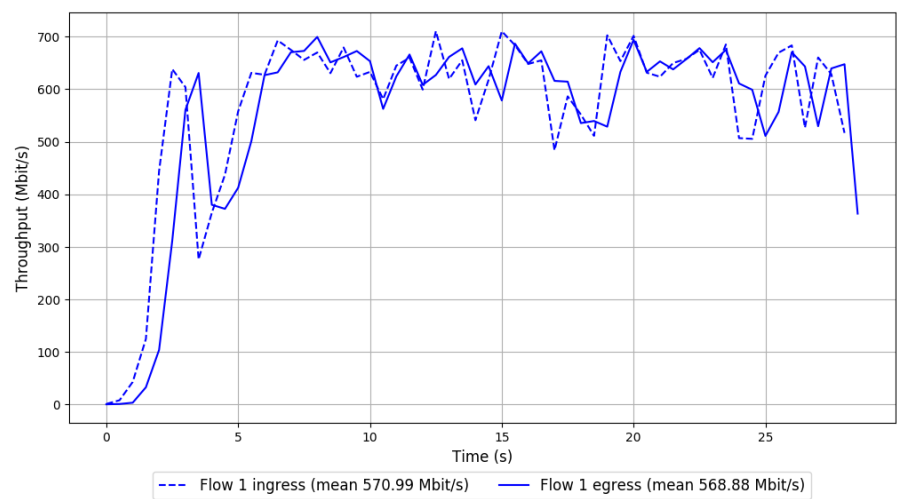
Run 4: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 586.98 Mbit/s)   Flow 1 egress (mean 586.55 Mbit/s)

Flow 1 (95th percentile 135.44 ms)

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-03-18 20:12:45
End at: 2019-03-18 20:13:15
Local clock offset: 2.173 ms
Remote clock offset: 1.978 ms


# Below is generated by plot.py at 2019-03-18 21:28:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 588.04 Mbit/s
95th percentile per-packet one-way delay: 146.025 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 588.04 Mbit/s
95th percentile per-packet one-way delay: 146.025 ms
Loss rate: 0.86%
```

Run 5: Report of Indigo-MusesC3 — Data Link

- - - Flow 1 ingress (mean 588.56 Mbit/s) —— Flow 1 egress (mean 588.04 Mbit/s)
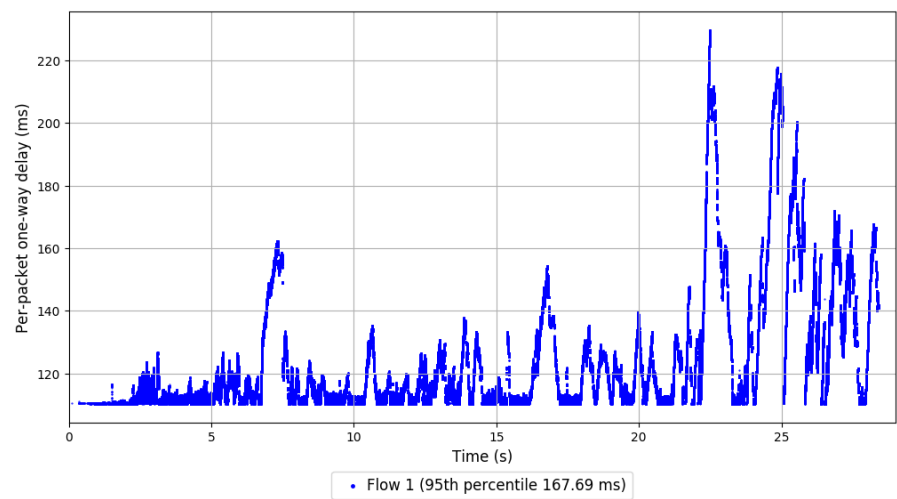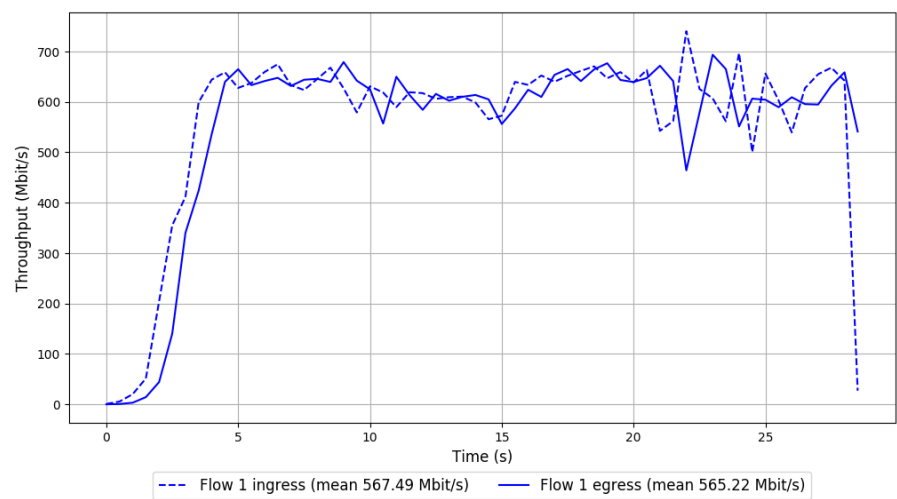

· Flow 1 (95th percentile 146.03 ms)

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-03-18 18:17:29
End at: 2019-03-18 18:17:59
Local clock offset: 22.945 ms
Remote clock offset: 23.162 ms


# Below is generated by plot.py at 2019-03-18 21:31:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 568.88 Mbit/s
95th percentile per-packet one-way delay: 164.987 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 568.88 Mbit/s
95th percentile per-packet one-way delay: 164.987 ms
Loss rate: 1.14%
```
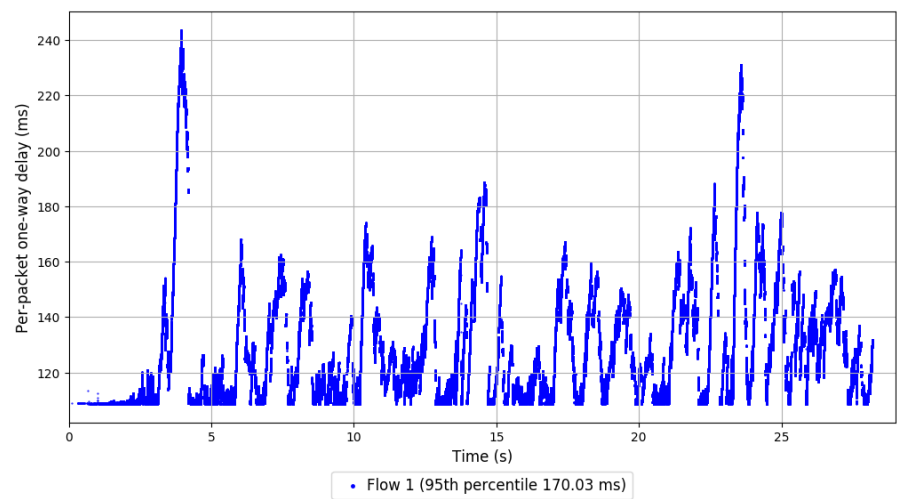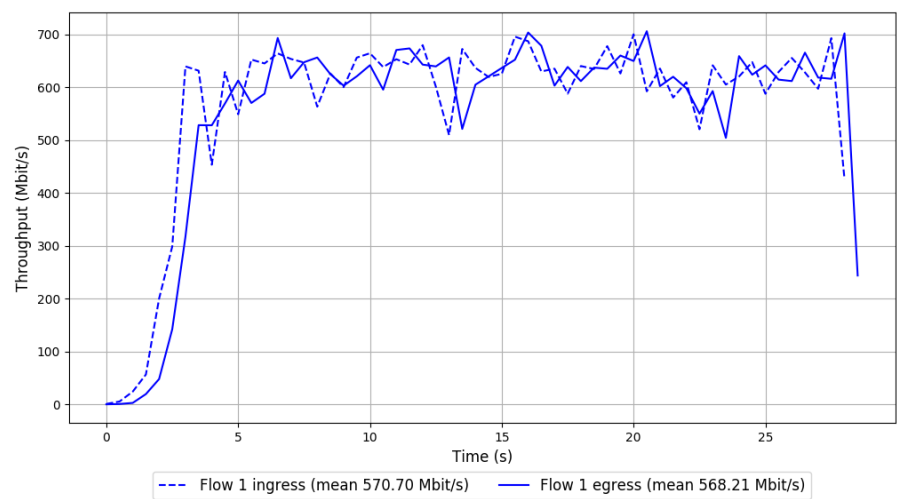
Run 1: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 570.99 Mbit/s)   Flow 1 egress (mean 568.88 Mbit/s)

Flow 1 (95th percentile 164.99 ms)

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-03-18 18:53:00
End at: 2019-03-18 18:53:30
Local clock offset: 40.471 ms
Remote clock offset: 38.843 ms


# Below is generated by plot.py at 2019-03-18 21:32:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 565.22 Mbit/s
95th percentile per-packet one-way delay: 167.690 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 565.22 Mbit/s
95th percentile per-packet one-way delay: 167.690 ms
Loss rate: 1.18%
```

Run 2: Report of Indigo-MusesC5 — Data Link

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-03-18 19:24:49
End at: 2019-03-18 19:25:19
Local clock offset: 18.992 ms
Remote clock offset: 18.584 ms


# Below is generated by plot.py at 2019-03-18 21:33:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 568.21 Mbit/s
95th percentile per-packet one-way delay: 170.025 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 568.21 Mbit/s
95th percentile per-packet one-way delay: 170.025 ms
Loss rate: 1.21%
```

Run 3: Report of Indigo-MusesC5 — Data Link

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-03-18 19:56:41
End at: 2019-03-18 19:57:11
Local clock offset: 4.211 ms
Remote clock offset: 4.412 ms


# Below is generated by plot.py at 2019-03-18 21:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 562.80 Mbit/s
95th percentile per-packet one-way delay: 186.364 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 562.80 Mbit/s
95th percentile per-packet one-way delay: 186.364 ms
Loss rate: 1.29%
```
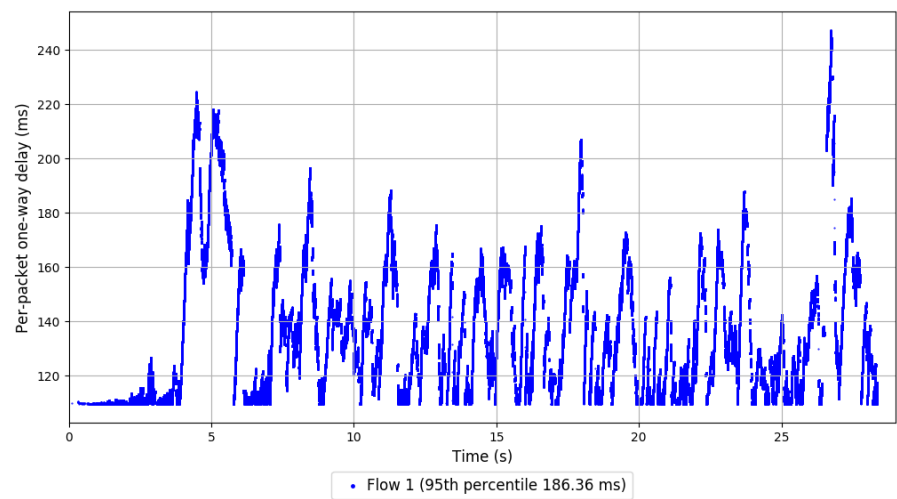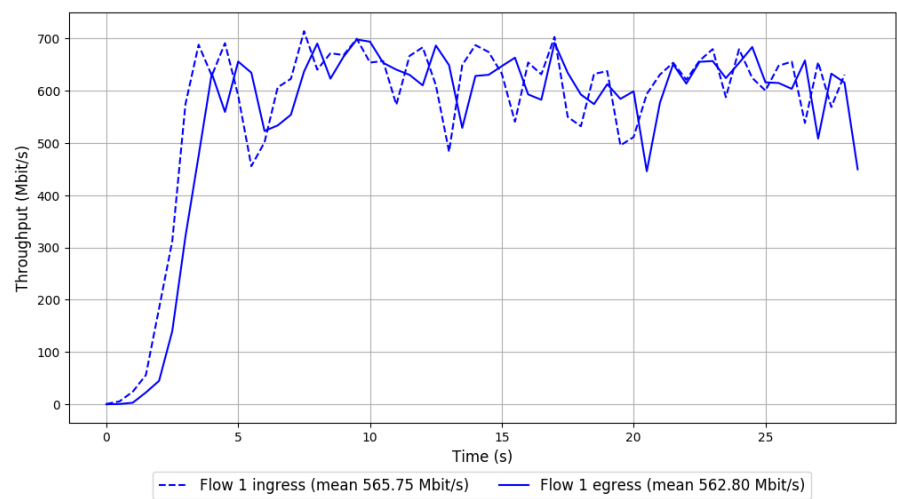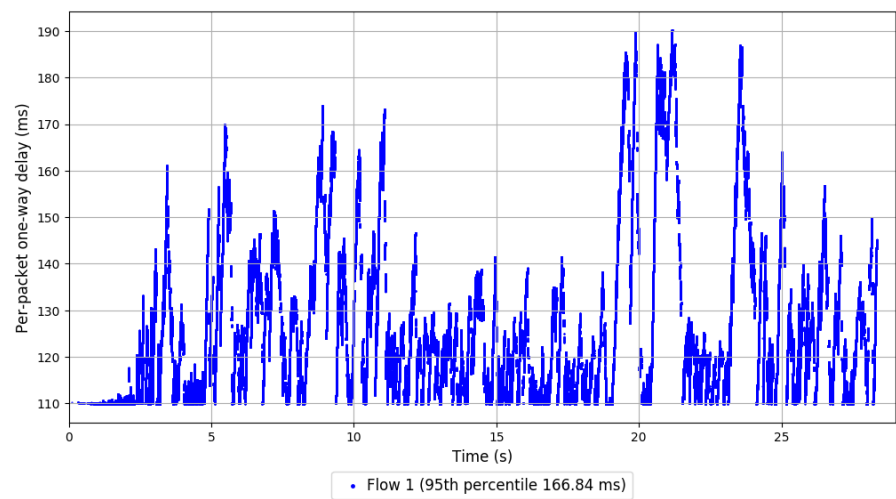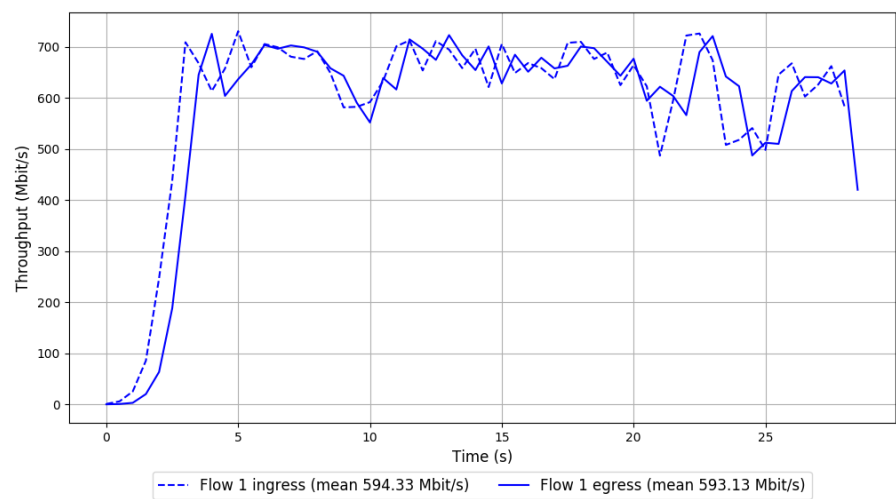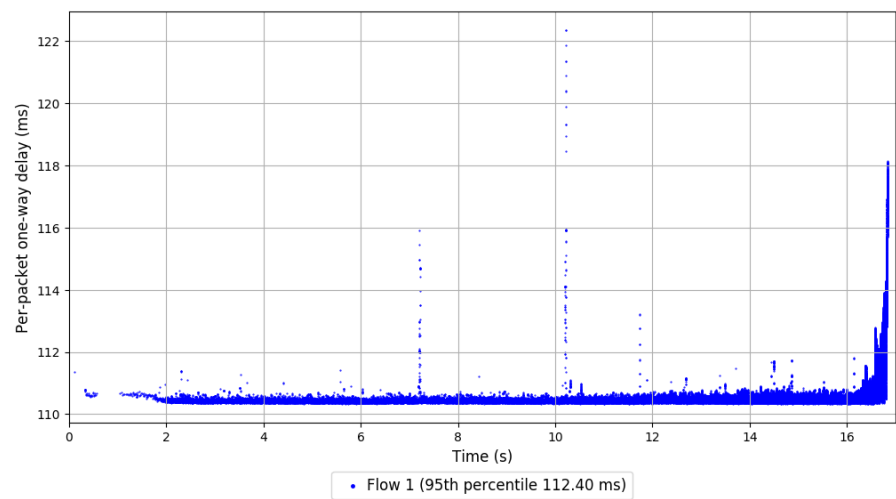
Run 4: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 565.75 Mbit/s) — — — Flow 1 egress (mean 562.80 Mbit/s)

• Flow 1 (95th percentile 186.36 ms)

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-03-18 20:28:03
End at: 2019-03-18 20:28:33
Local clock offset: 1.565 ms
Remote clock offset: 1.625 ms


# Below is generated by plot.py at 2019-03-18 21:37:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 593.13 Mbit/s
95th percentile per-packet one-way delay: 166.836 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 593.13 Mbit/s
95th percentile per-packet one-way delay: 166.836 ms
Loss rate: 0.98%
```
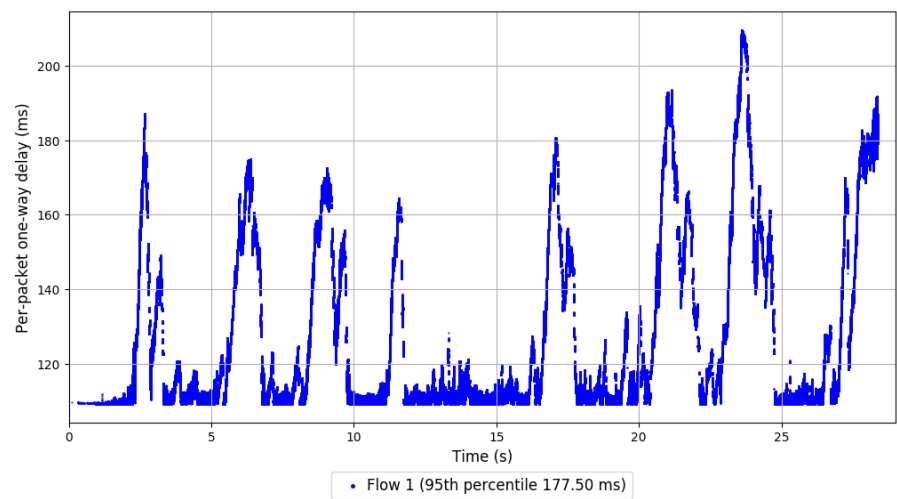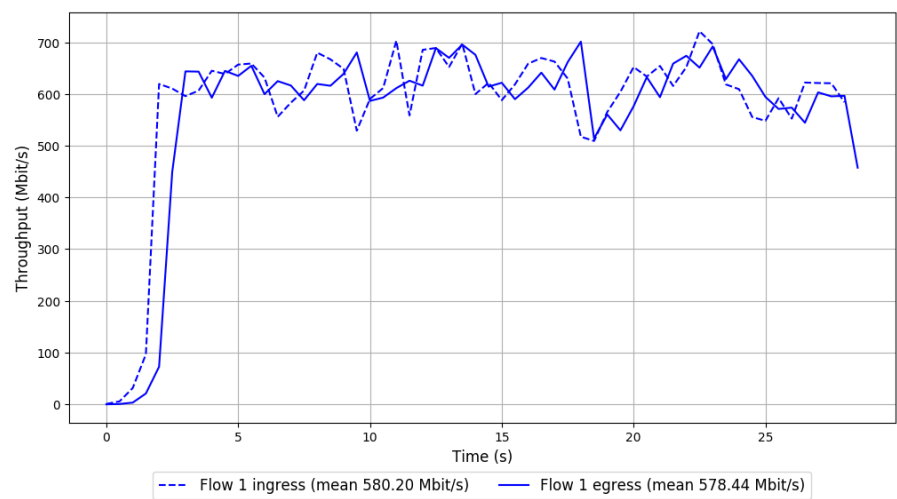
Run 5: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 594.33 Mbit/s) — — — — Flow 1 egress (mean 593.13 Mbit/s)
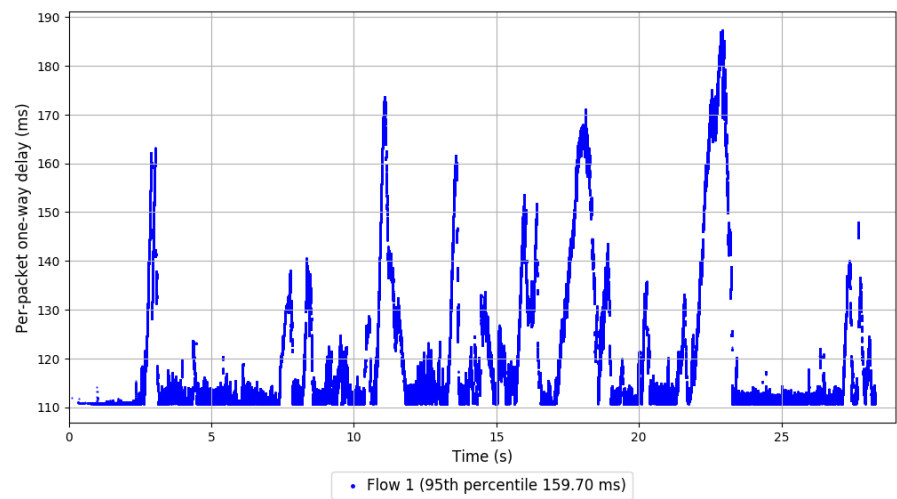

• Flow 1 (95th percentile 166.84 ms)

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-03-18 17:48:55
End at: 2019-03-18 17:49:25
Local clock offset: 4.466 ms
Remote clock offset: 4.009 ms
```
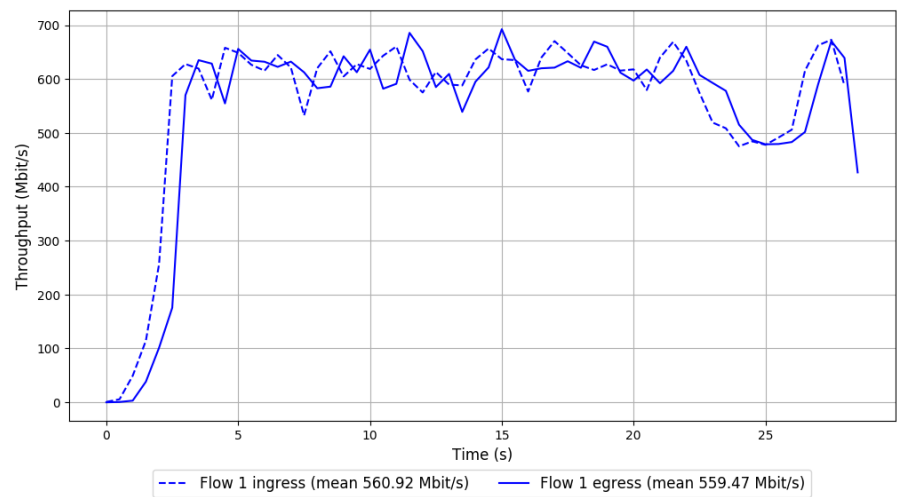
Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-03-18 18:20:48
End at: 2019-03-18 18:21:18
Local clock offset: 26.728 ms
Remote clock offset: 25.54 ms


# Below is generated by plot.py at 2019-03-18 21:38:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 578.44 Mbit/s
95th percentile per-packet one-way delay: 177.497 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 578.44 Mbit/s
95th percentile per-packet one-way delay: 177.497 ms
Loss rate: 1.03%
```
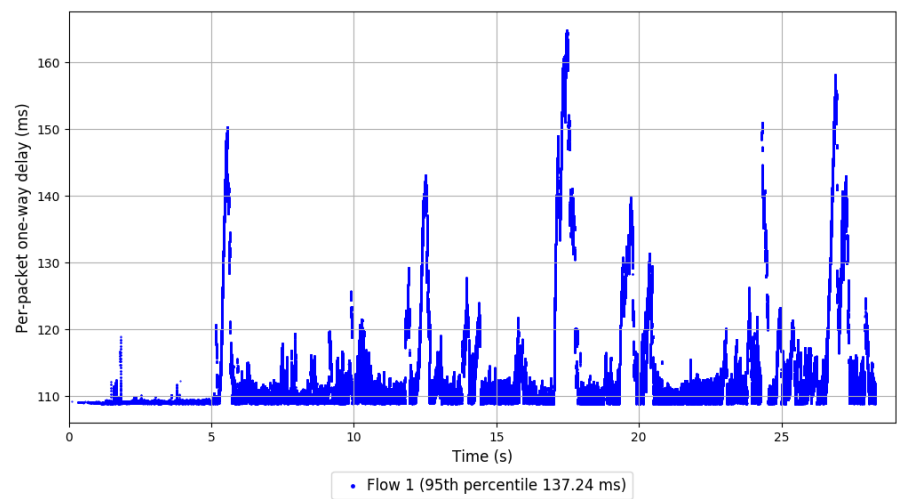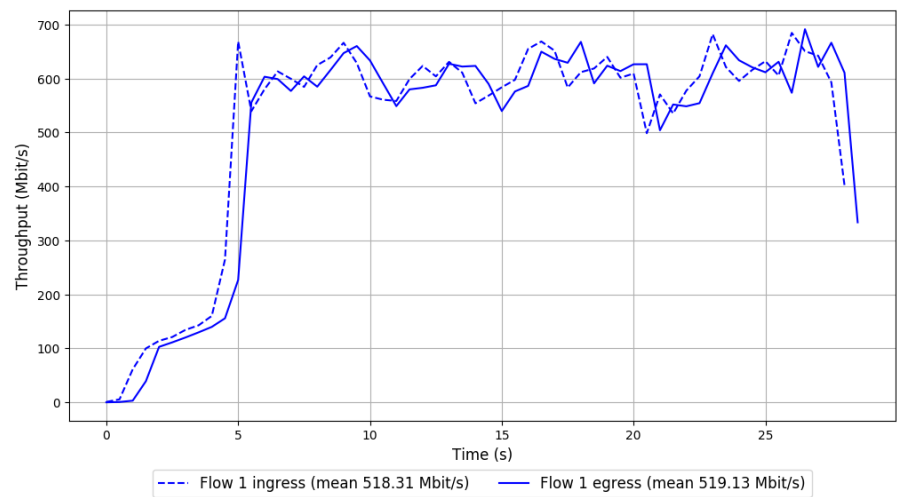
Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-03-18 18:55:53
End at: 2019-03-18 18:56:23
Local clock offset: 36.299 ms
Remote clock offset: 34.323 ms


# Below is generated by plot.py at 2019-03-18 21:38:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 559.47 Mbit/s
95th percentile per-packet one-way delay: 159.699 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 559.47 Mbit/s
95th percentile per-packet one-way delay: 159.699 ms
Loss rate: 1.04%
```

Run 3: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 560.92 Mbit/s)   Flow 1 egress (mean 559.47 Mbit/s)

Flow 1 (95th percentile 159.70 ms)

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-03-18 19:27:55
End at: 2019-03-18 19:28:25
Local clock offset: 20.659 ms
Remote clock offset: 19.982 ms


# Below is generated by plot.py at 2019-03-18 21:38:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 519.13 Mbit/s
95th percentile per-packet one-way delay: 137.236 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 519.13 Mbit/s
95th percentile per-packet one-way delay: 137.236 ms
Loss rate: 0.69%
```

Run 4: Report of Indigo-MusesD — Data Link

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-03-18 19:59:34
End at: 2019-03-18 20:00:05
Local clock offset: 4.681 ms
Remote clock offset: 4.574 ms


# Below is generated by plot.py at 2019-03-18 21:38:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 474.11 Mbit/s
95th percentile per-packet one-way delay: 145.557 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 474.11 Mbit/s
95th percentile per-packet one-way delay: 145.557 ms
Loss rate: 0.78%
```
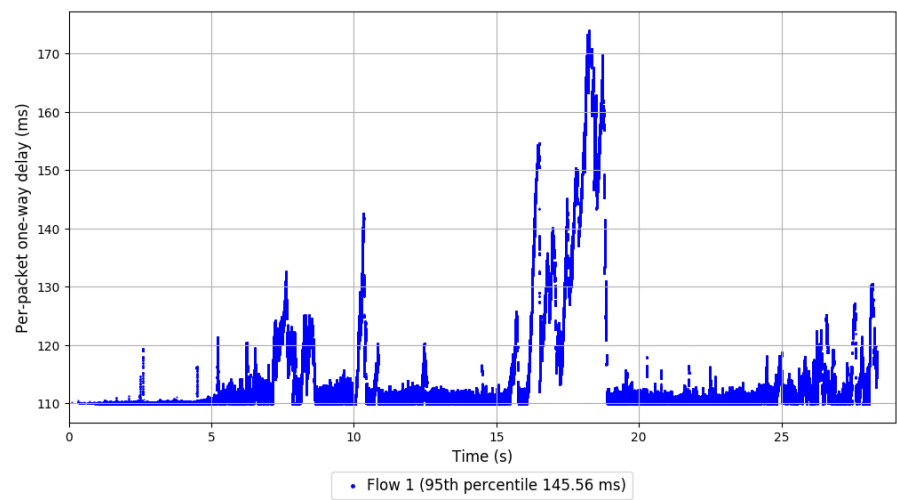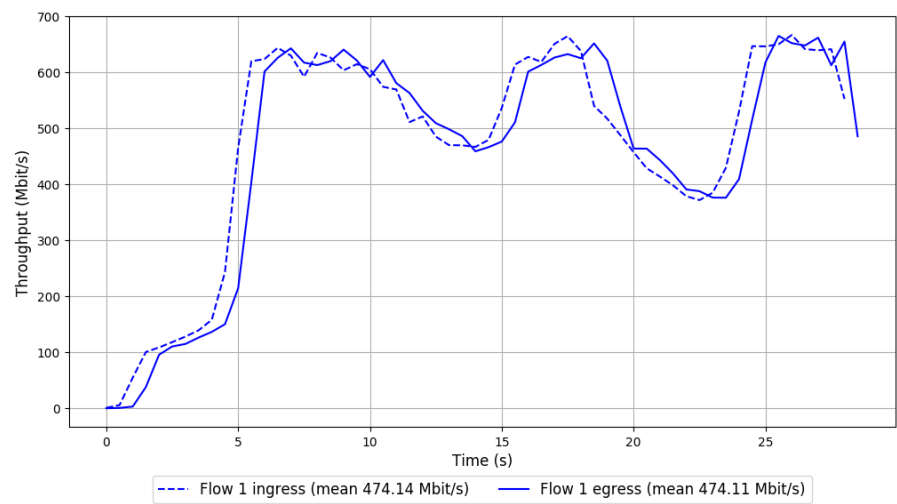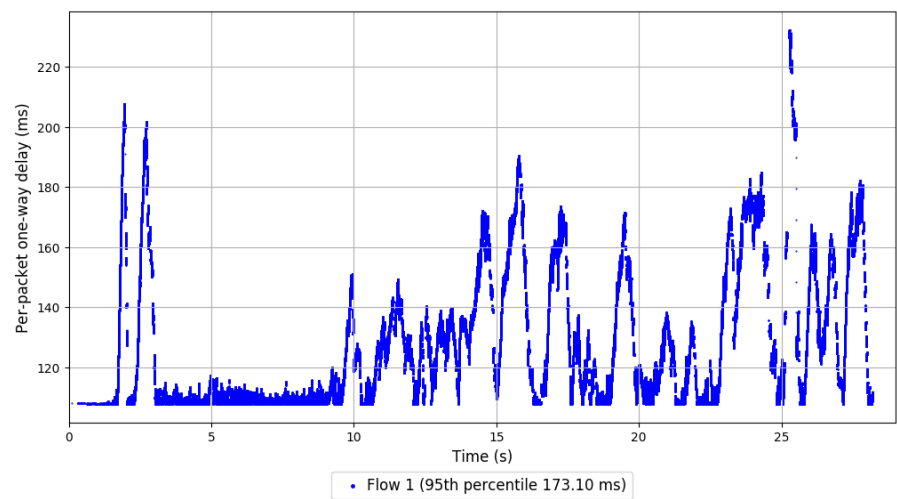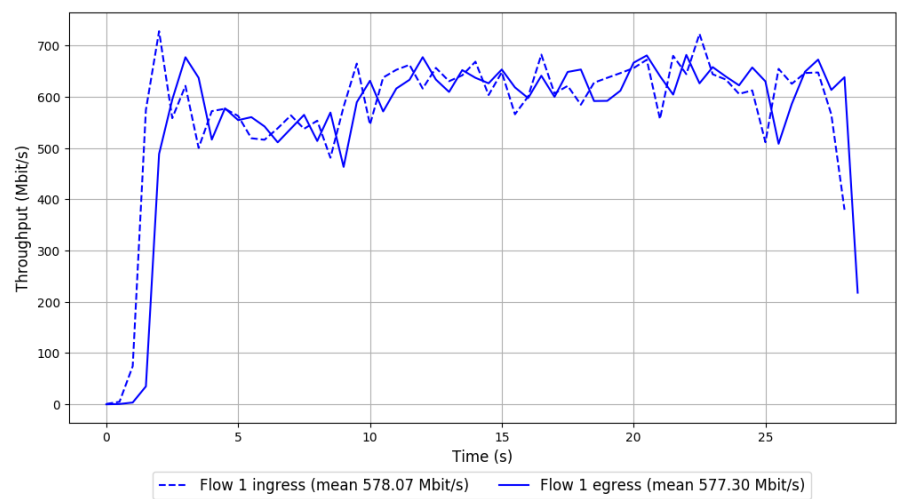
Run 5: Report of Indigo-MusesD — Data Link

- - - Flow 1 ingress (mean 474.14 Mbit/s) —— Flow 1 egress (mean 474.11 Mbit/s)

• Flow 1 (95th percentile 145.56 ms)

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-03-18 17:52:56
End at: 2019-03-18 17:53:26
Local clock offset: 7.063 ms
Remote clock offset: 7.72 ms


# Below is generated by plot.py at 2019-03-18 21:42:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 577.30 Mbit/s
95th percentile per-packet one-way delay: 173.097 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 577.30 Mbit/s
95th percentile per-packet one-way delay: 173.097 ms
Loss rate: 0.91%
```
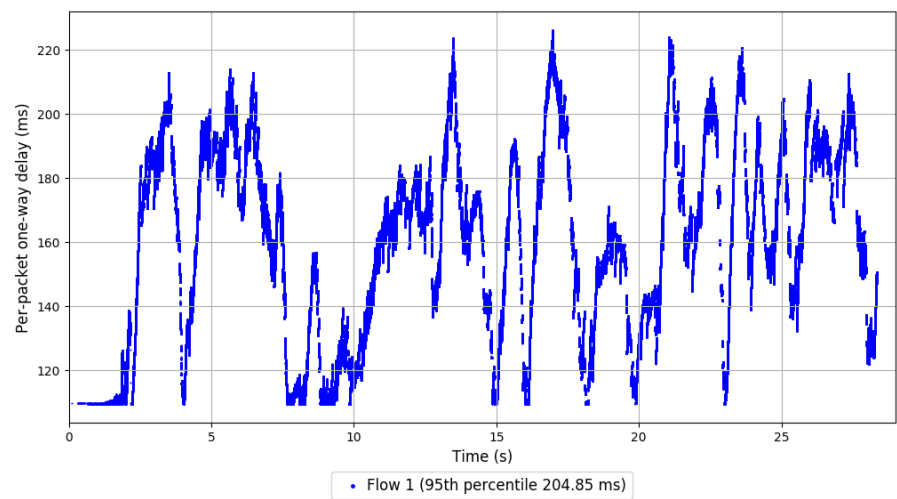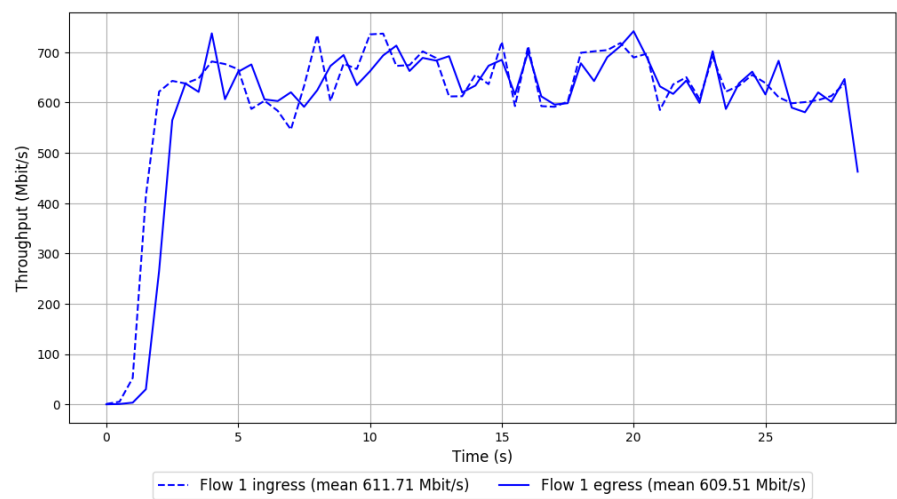
Run 1: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 578.07 Mbit/s) — — — Flow 1 egress (mean 577.30 Mbit/s)
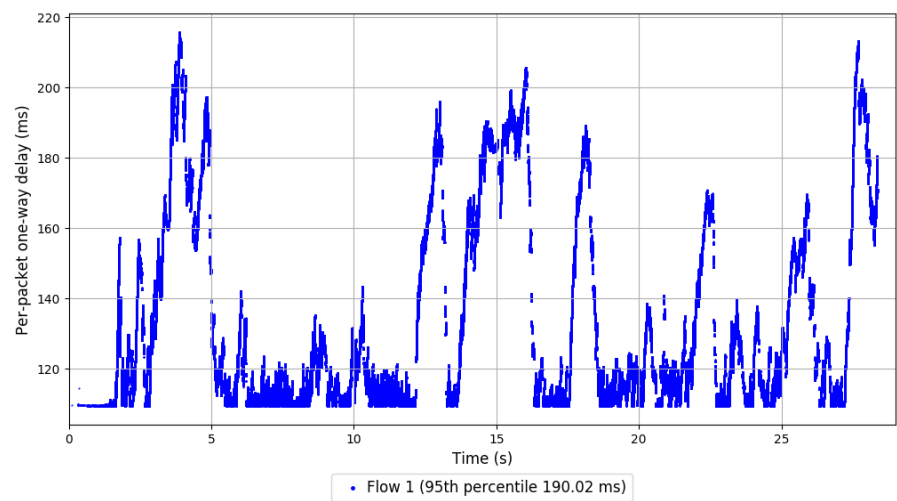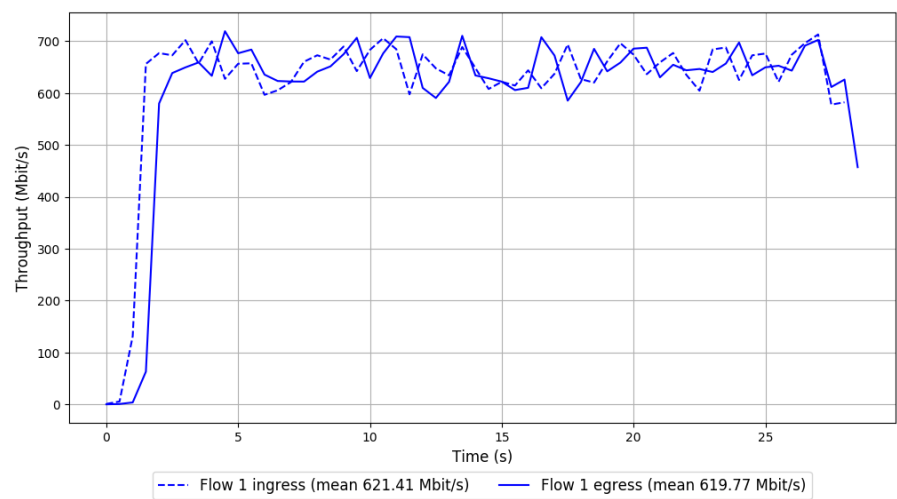

Flow 1 (95th percentile 173.10 ms)

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-03-18 18:26:14
End at: 2019-03-18 18:26:44
Local clock offset: 20.857 ms
Remote clock offset: 20.261 ms


# Below is generated by plot.py at 2019-03-18 21:43:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 609.51 Mbit/s
95th percentile per-packet one-way delay: 204.848 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 609.51 Mbit/s
95th percentile per-packet one-way delay: 204.848 ms
Loss rate: 1.13%
```

Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-03-18 19:00:21
End at: 2019-03-18 19:00:51
Local clock offset: 24.122 ms
Remote clock offset: 22.926 ms


# Below is generated by plot.py at 2019-03-18 21:46:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 619.77 Mbit/s
95th percentile per-packet one-way delay: 190.020 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 619.77 Mbit/s
95th percentile per-packet one-way delay: 190.020 ms
Loss rate: 1.04%
```
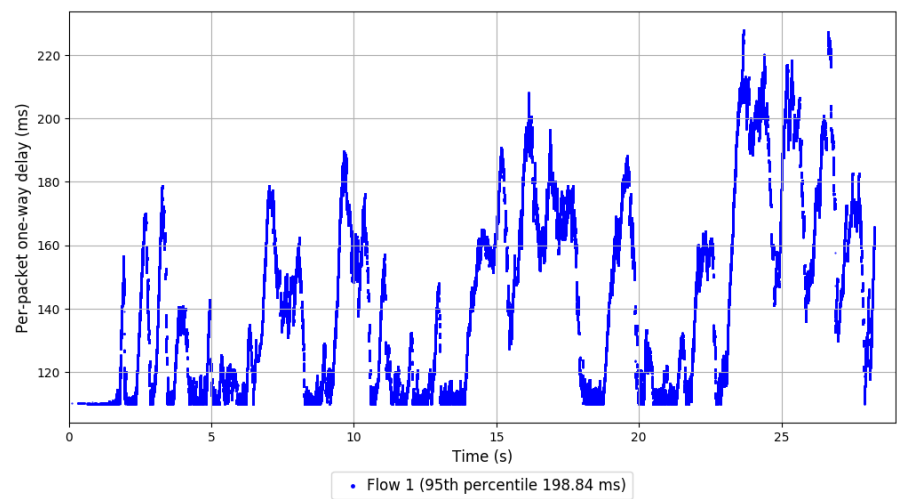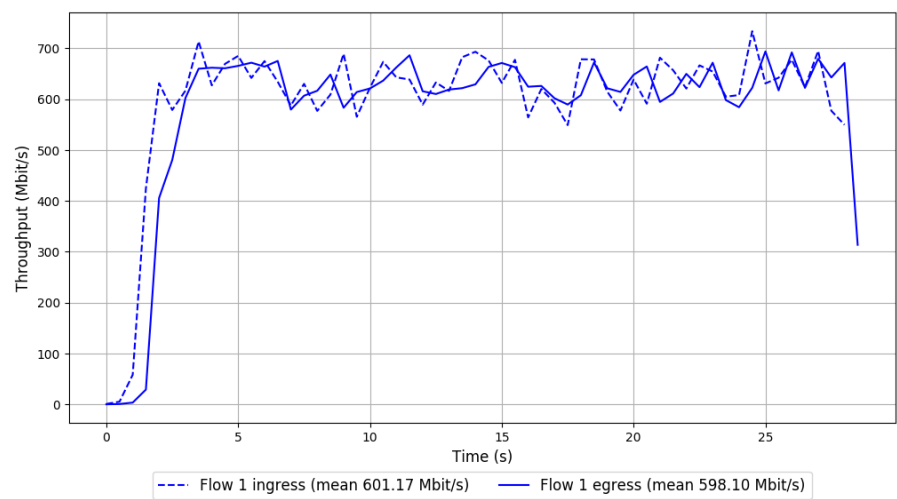
Run 3: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 621.41 Mbit/s) --- Flow 1 egress (mean 619.77 Mbit/s)

Flow 1 (95th percentile 190.02 ms)

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-03-18 19:32:16
End at: 2019-03-18 19:32:46
Local clock offset: 14.027 ms
Remote clock offset: 13.495 ms


# Below is generated by plot.py at 2019-03-18 21:47:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 598.10 Mbit/s
95th percentile per-packet one-way delay: 198.837 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 598.10 Mbit/s
95th percentile per-packet one-way delay: 198.837 ms
Loss rate: 1.29%
```
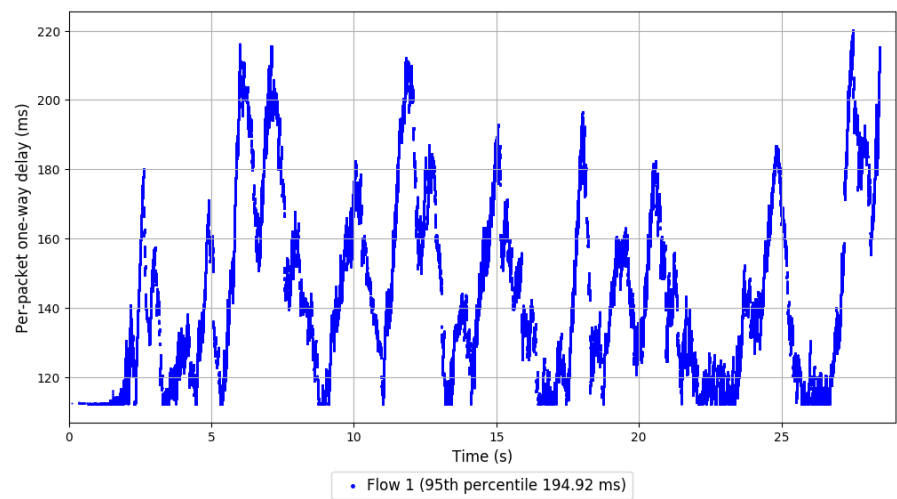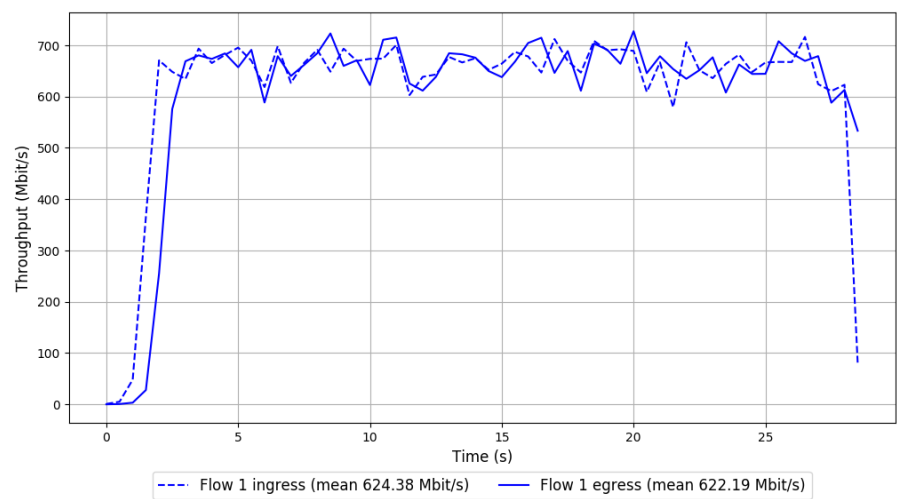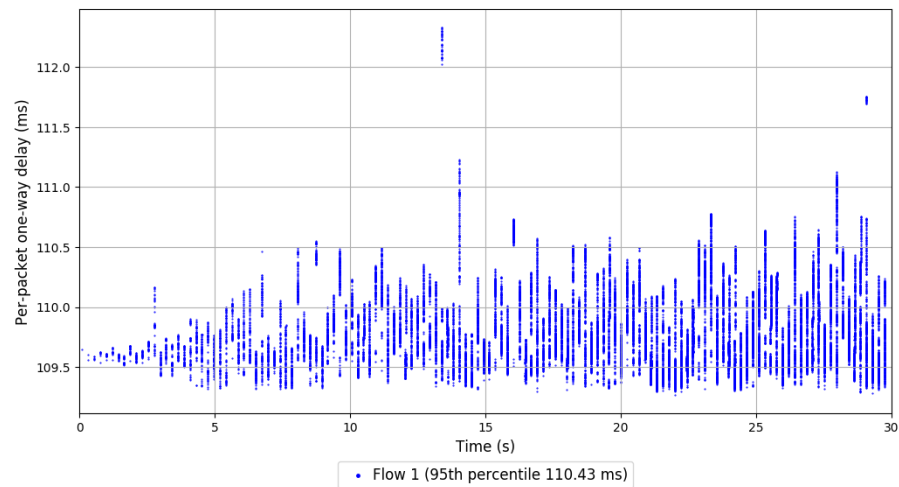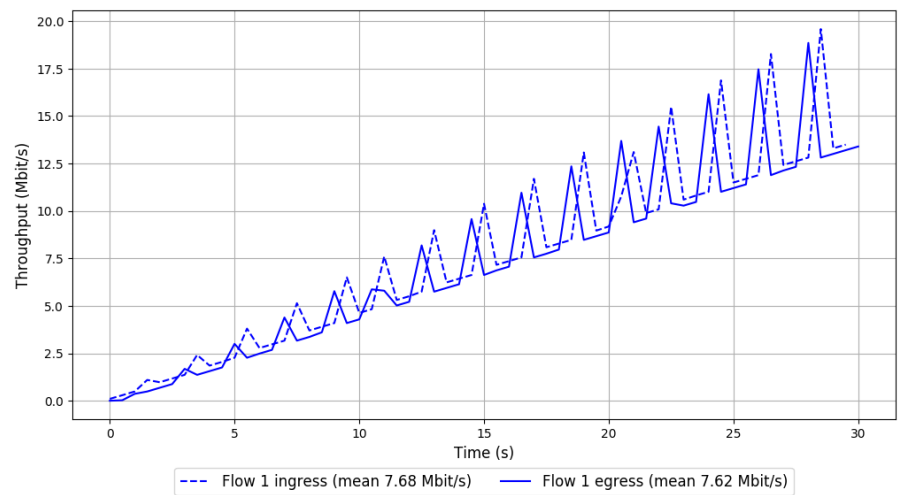
Run 4: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 601.17 Mbit/s)   Flow 1 egress (mean 598.10 Mbit/s)

• Flow 1 (95th percentile 198.84 ms)

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-03-18 20:03:59
End at: 2019-03-18 20:04:29
Local clock offset: 4.303 ms
Remote clock offset: 4.075 ms


# Below is generated by plot.py at 2019-03-18 21:48:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 622.19 Mbit/s
95th percentile per-packet one-way delay: 194.920 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 622.19 Mbit/s
95th percentile per-packet one-way delay: 194.920 ms
Loss rate: 1.13%
```
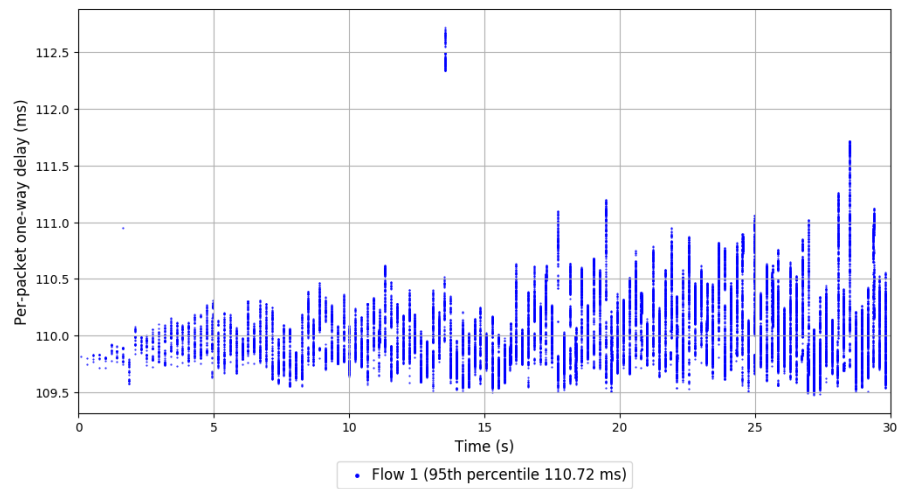
Run 5: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 624.38 Mbit/s) — — — Flow 1 egress (mean 622.19 Mbit/s)
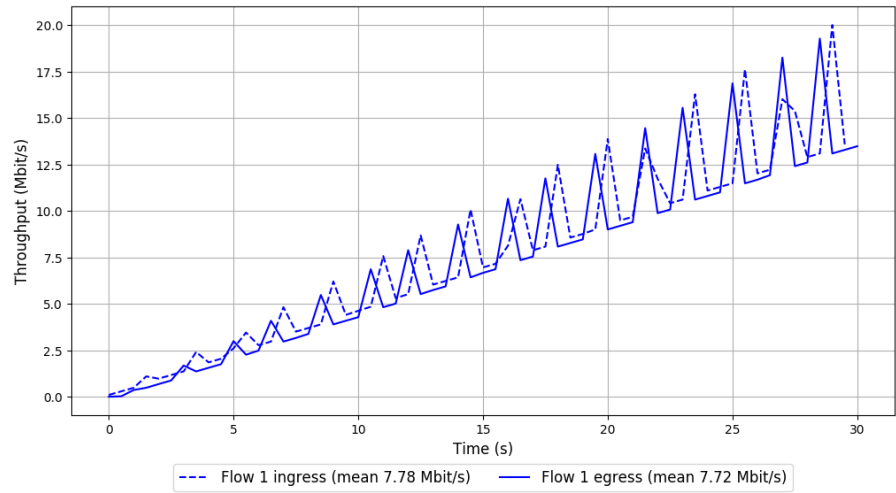

Flow 1 (95th percentile 194.92 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2019-03-18 18:14:11
End at: 2019-03-18 18:14:41
Local clock offset: 18.705 ms
Remote clock offset: 18.767 ms


# Below is generated by plot.py at 2019-03-18 21:48:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.62 Mbit/s
95th percentile per-packet one-way delay: 110.428 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 7.62 Mbit/s
95th percentile per-packet one-way delay: 110.428 ms
Loss rate: 1.48%
```

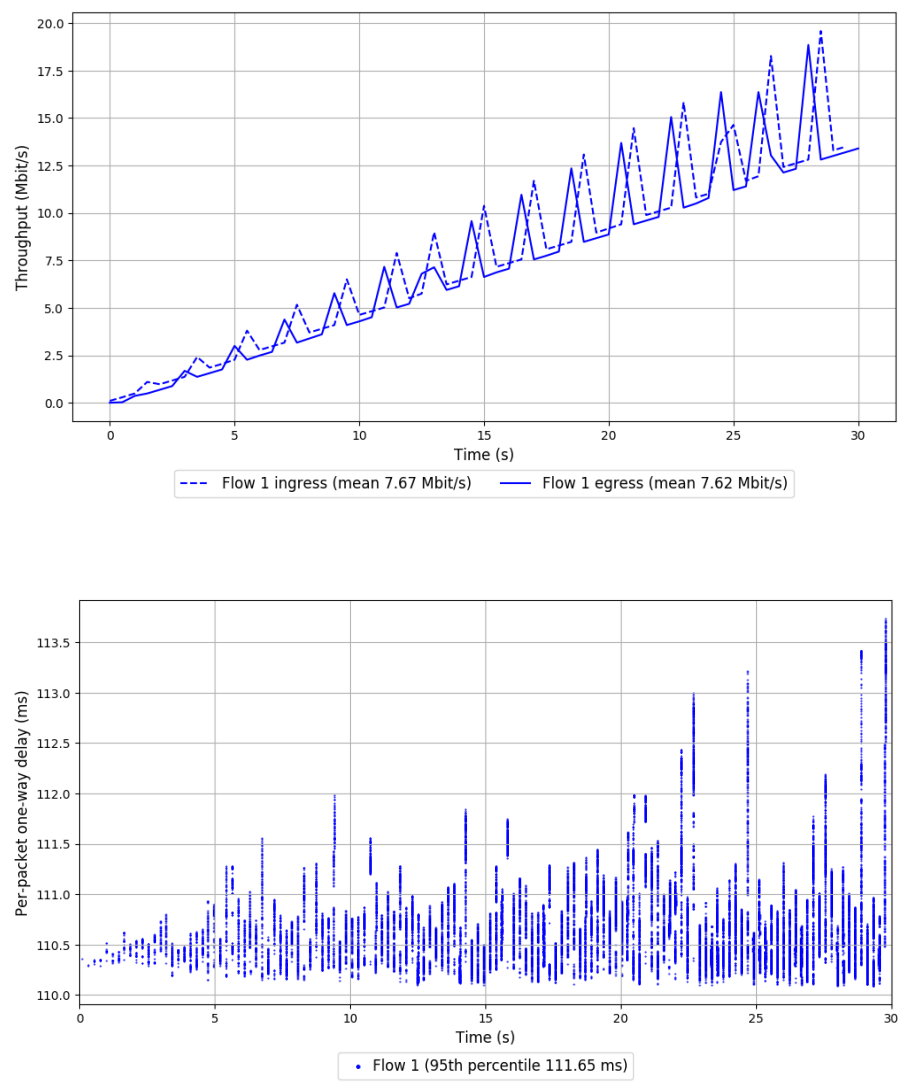Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2019-03-18 18:50:09
End at: 2019-03-18 18:50:39
Local clock offset: 36.316 ms
Remote clock offset: 35.535 ms


# Below is generated by plot.py at 2019-03-18 21:48:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 110.724 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 110.724 ms
Loss rate: 1.46%
```
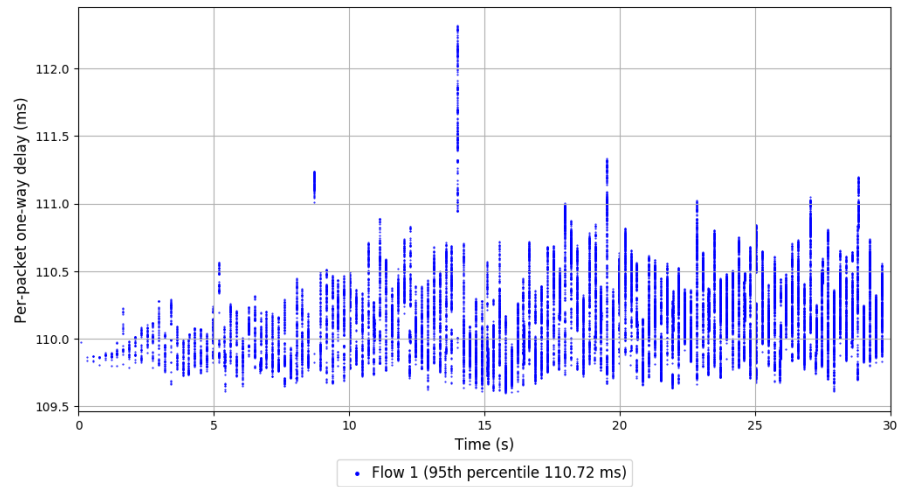
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2019-03-18 19:21:56
End at: 2019-03-18 19:22:26
Local clock offset: 17.954 ms
Remote clock offset: 17.353 ms


# Below is generated by plot.py at 2019-03-18 21:48:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.62 Mbit/s
95th percentile per-packet one-way delay: 111.647 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 7.62 Mbit/s
95th percentile per-packet one-way delay: 111.647 ms
Loss rate: 1.48%
```
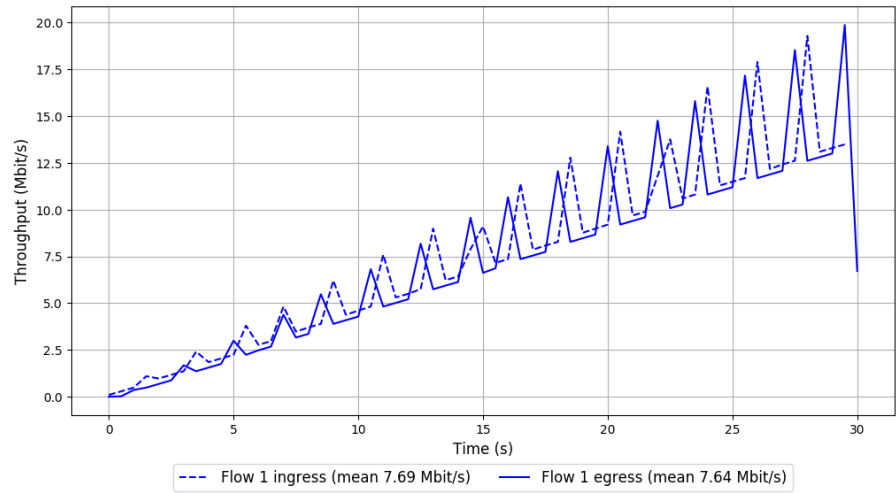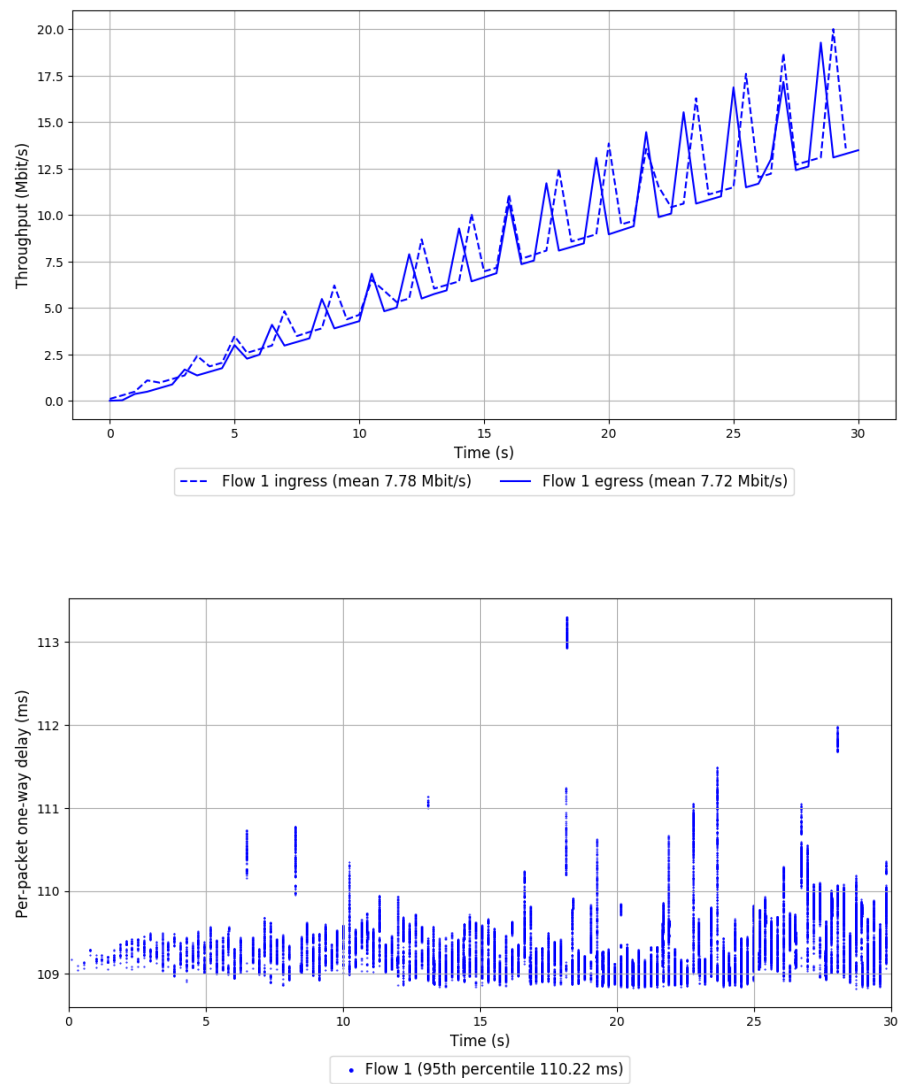
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2019-03-18 19:53:50
End at: 2019-03-18 19:54:21
Local clock offset: 4.486 ms
Remote clock offset: 4.348 ms

# Below is generated by plot.py at 2019-03-18 21:48:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 110.725 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 110.725 ms
Loss rate: 1.48%
```
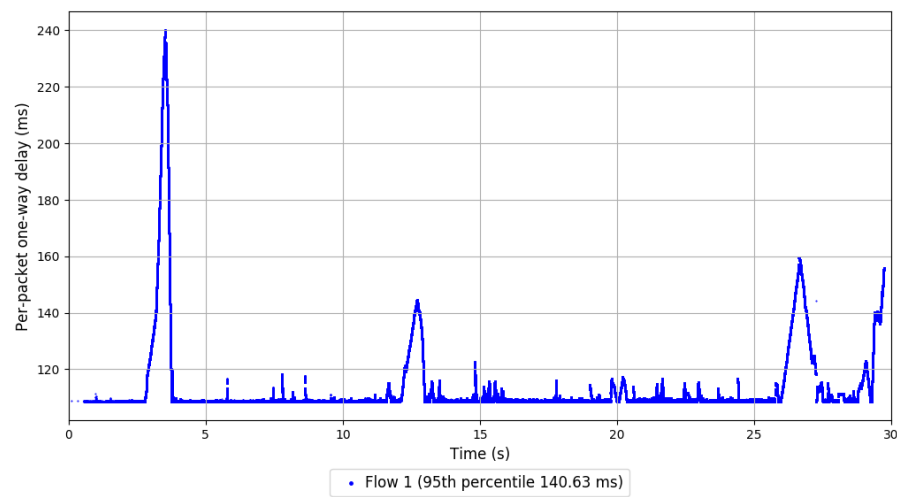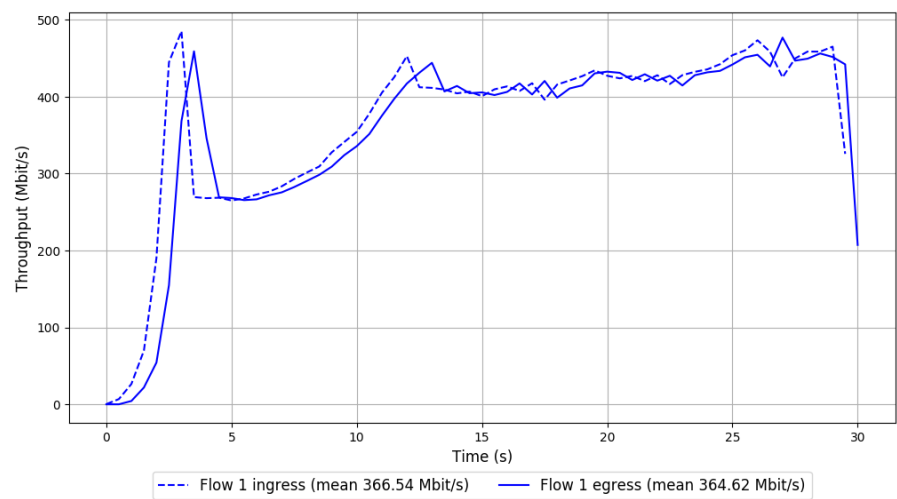
Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 7.69 Mbit/s) --- Flow 1 egress (mean 7.64 Mbit/s)

• Flow 1 (95th percentile 110.72 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2019-03-18 20:25:10
End at: 2019-03-18 20:25:40
Local clock offset: 1.542 ms
Remote clock offset: 1.521 ms


# Below is generated by plot.py at 2019-03-18 21:48:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 110.217 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 110.217 ms
Loss rate: 1.47%
```
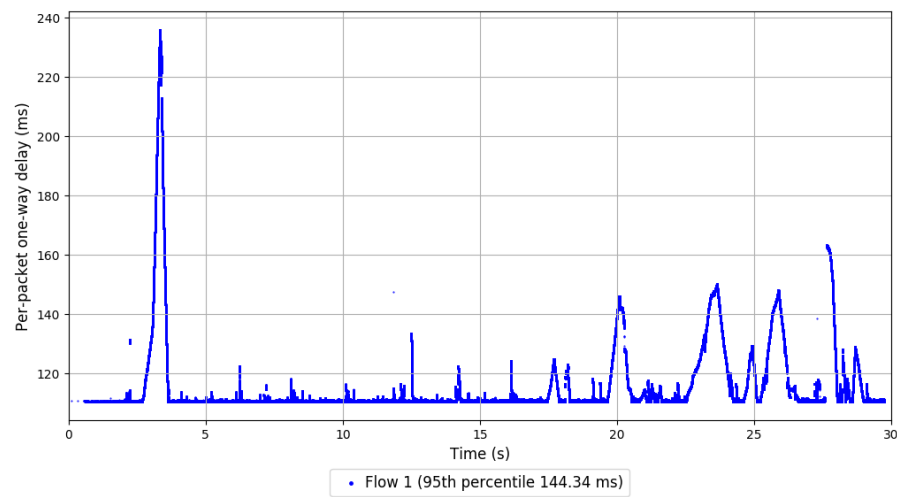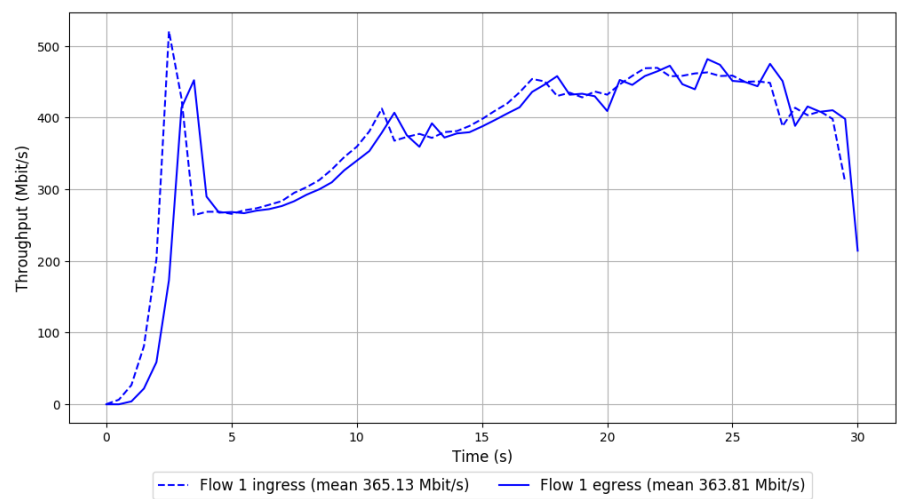
Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-03-18 18:09:49
End at: 2019-03-18 18:10:19
Local clock offset: 14.266 ms
Remote clock offset: 14.21 ms


# Below is generated by plot.py at 2019-03-18 21:50:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 364.62 Mbit/s
95th percentile per-packet one-way delay: 140.629 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 364.62 Mbit/s
95th percentile per-packet one-way delay: 140.629 ms
Loss rate: 1.26%
```
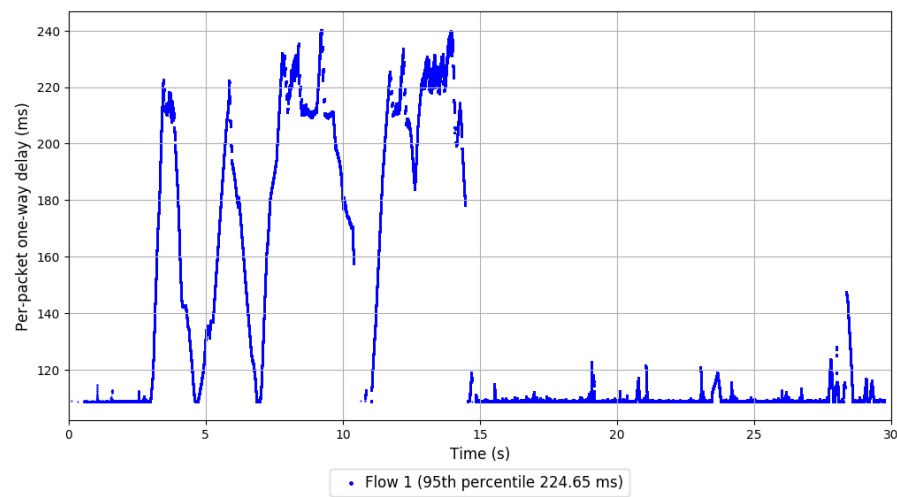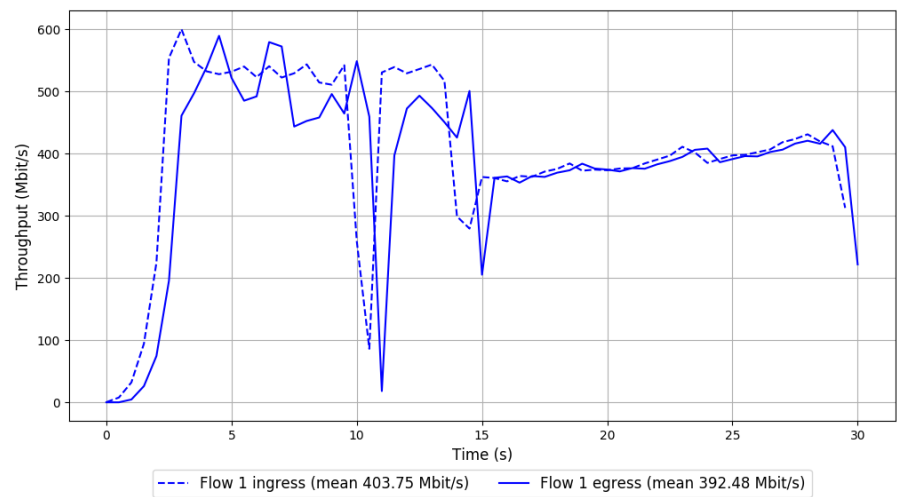
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-03-18 18:45:56
End at: 2019-03-18 18:46:26
Local clock offset: 32.739 ms
Remote clock offset: 31.146 ms


# Below is generated by plot.py at 2019-03-18 21:50:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 363.81 Mbit/s
95th percentile per-packet one-way delay: 144.340 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 363.81 Mbit/s
95th percentile per-packet one-way delay: 144.340 ms
Loss rate: 1.10%
```

Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-03-18 19:17:34
End at: 2019-03-18 19:18:04
Local clock offset: 16.311 ms
Remote clock offset: 15.856 ms


# Below is generated by plot.py at 2019-03-18 21:51:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 392.48 Mbit/s
95th percentile per-packet one-way delay: 224.646 ms
Loss rate: 3.51%
-- Flow 1:
Average throughput: 392.48 Mbit/s
95th percentile per-packet one-way delay: 224.646 ms
Loss rate: 3.51%
```
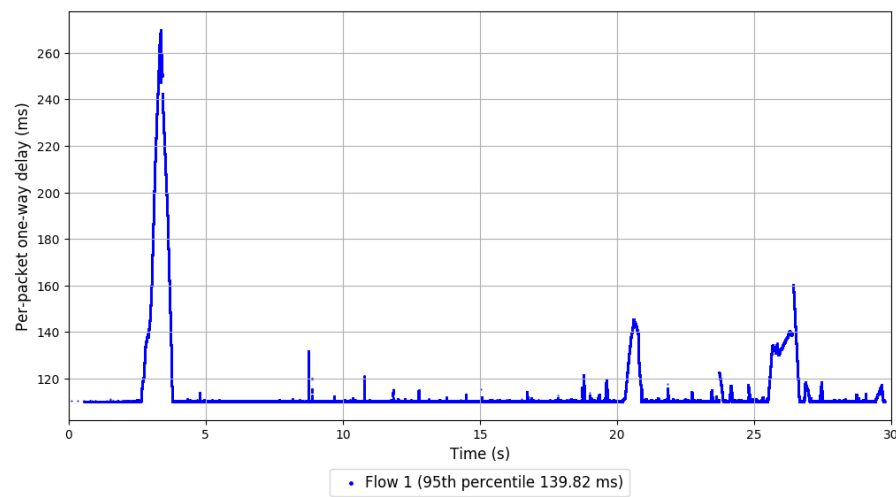
Run 3: Report of PCC-Allegro — Data Link

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-03-18 19:49:47
End at: 2019-03-18 19:50:17
Local clock offset: 4.615 ms
Remote clock offset: 4.439 ms


# Below is generated by plot.py at 2019-03-18 21:53:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 315.04 Mbit/s
95th percentile per-packet one-way delay: 139.817 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 315.04 Mbit/s
95th percentile per-packet one-way delay: 139.817 ms
Loss rate: 1.30%
```
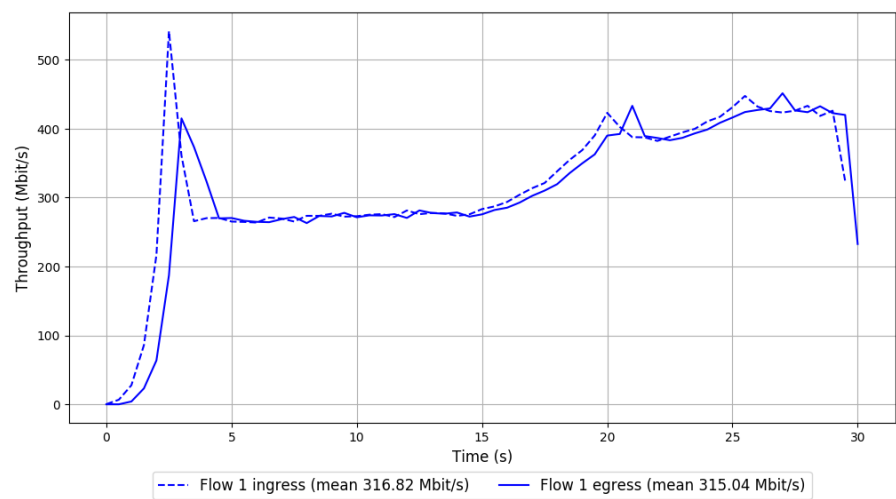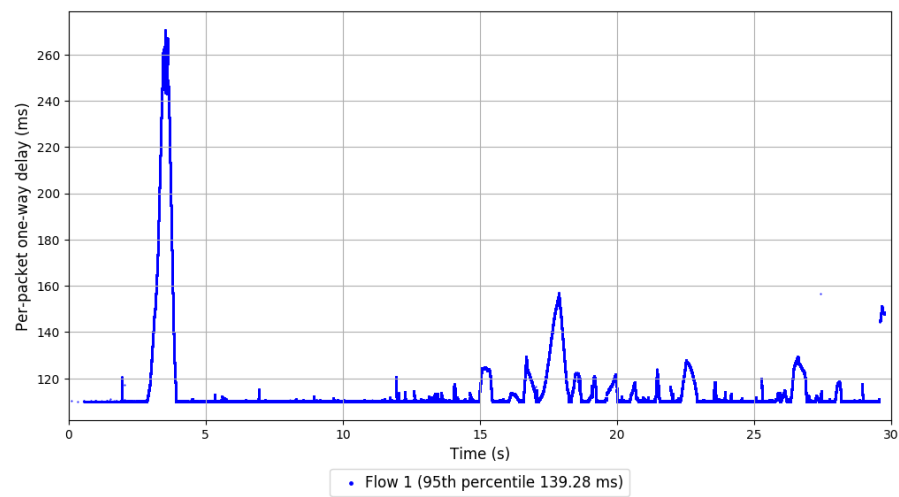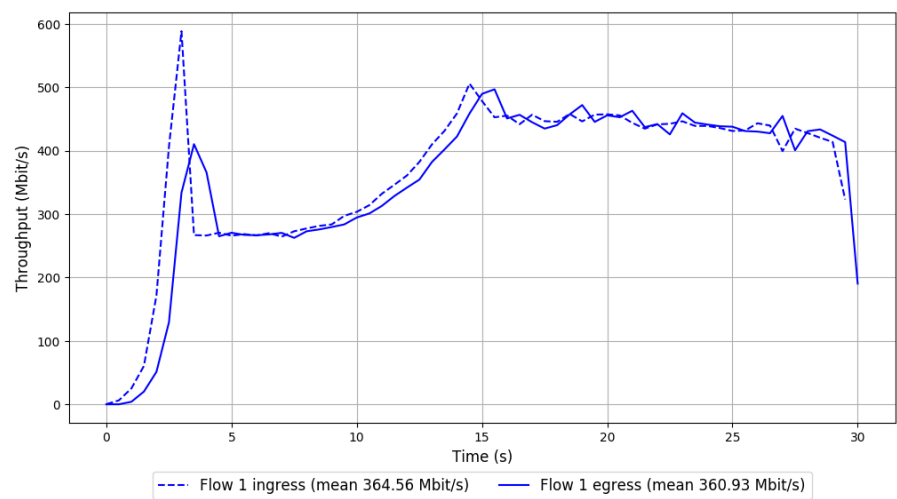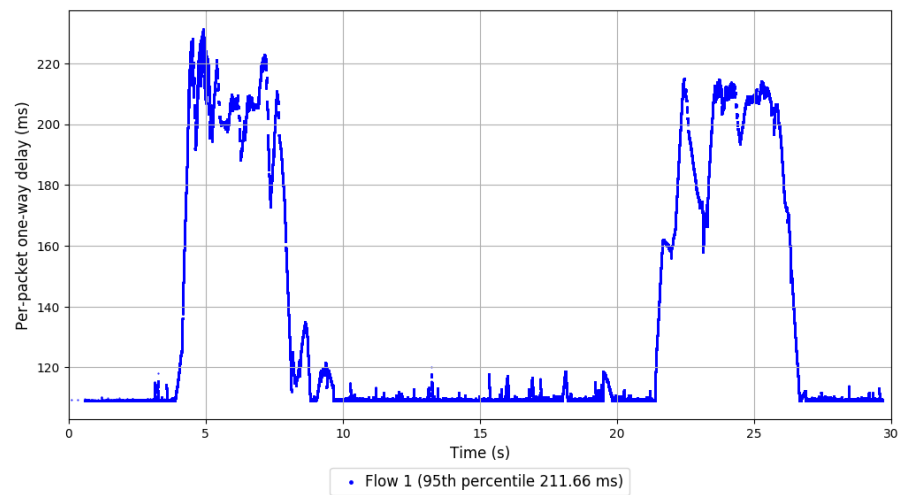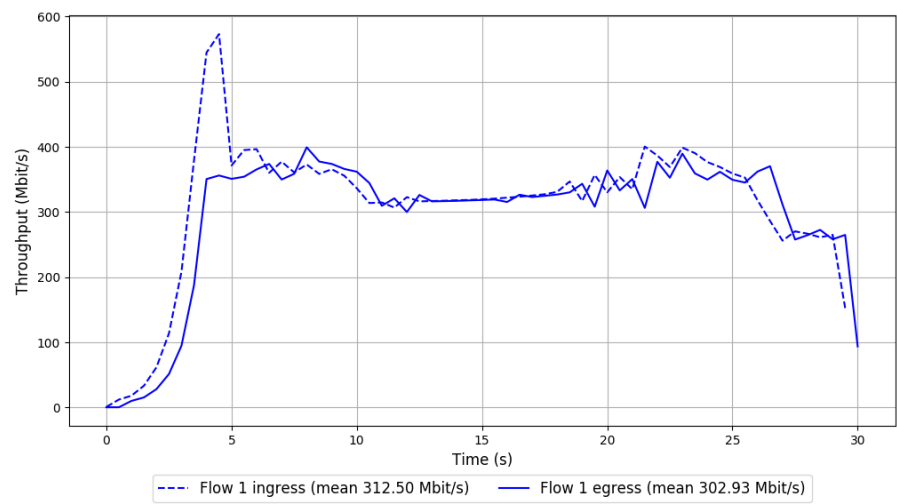
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 316.82 Mbit/s)   Flow 1 egress (mean 315.04 Mbit/s)

Flow 1 (95th percentile 139.82 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-03-18 20:21:06
End at: 2019-03-18 20:21:36
Local clock offset: 1.698 ms
Remote clock offset: 1.511 ms


# Below is generated by plot.py at 2019-03-18 21:56:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 360.93 Mbit/s
95th percentile per-packet one-way delay: 139.285 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 360.93 Mbit/s
95th percentile per-packet one-way delay: 139.285 ms
Loss rate: 1.73%
```
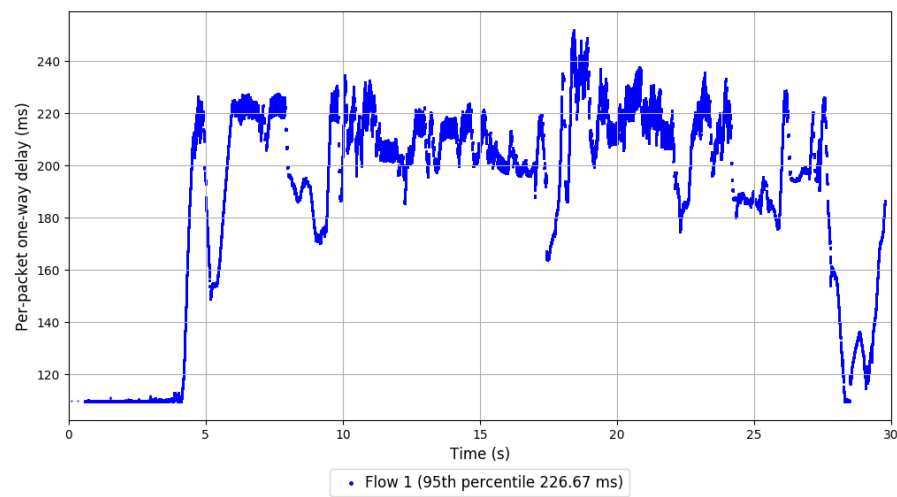
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 364.56 Mbit/s) --- Flow 1 egress (mean 360.93 Mbit/s)
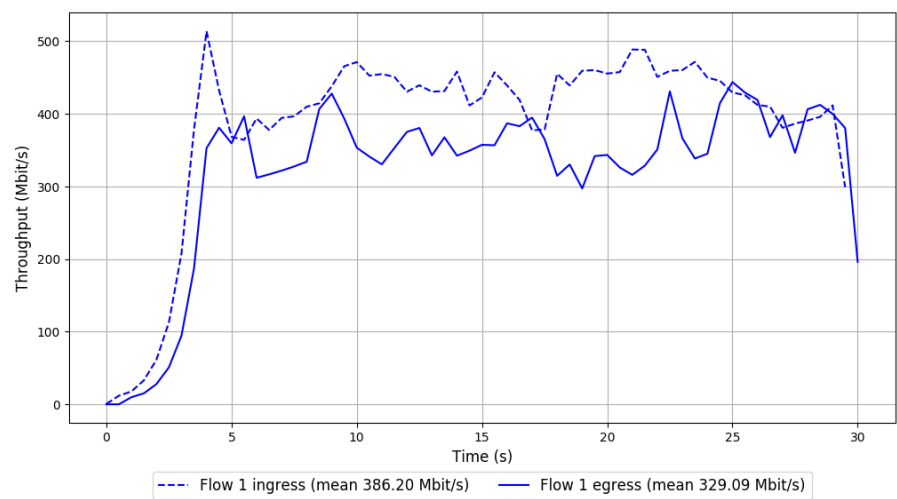

• Flow 1 (95th percentile 139.28 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2019-03-18 17:54:35
End at: 2019-03-18 17:55:05
Local clock offset: 12.075 ms
Remote clock offset: 11.997 ms


# Below is generated by plot.py at 2019-03-18 21:56:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 302.93 Mbit/s
95th percentile per-packet one-way delay: 211.662 ms
Loss rate: 3.78%
-- Flow 1:
Average throughput: 302.93 Mbit/s
95th percentile per-packet one-way delay: 211.662 ms
Loss rate: 3.78%
```
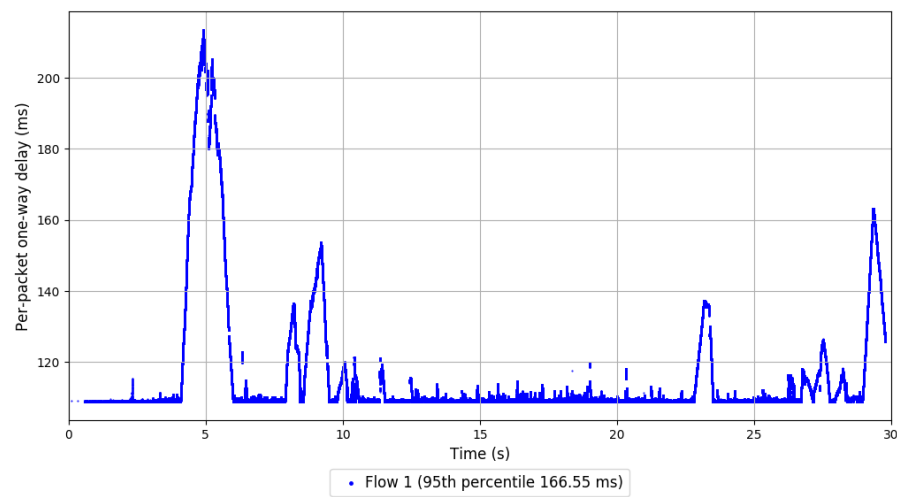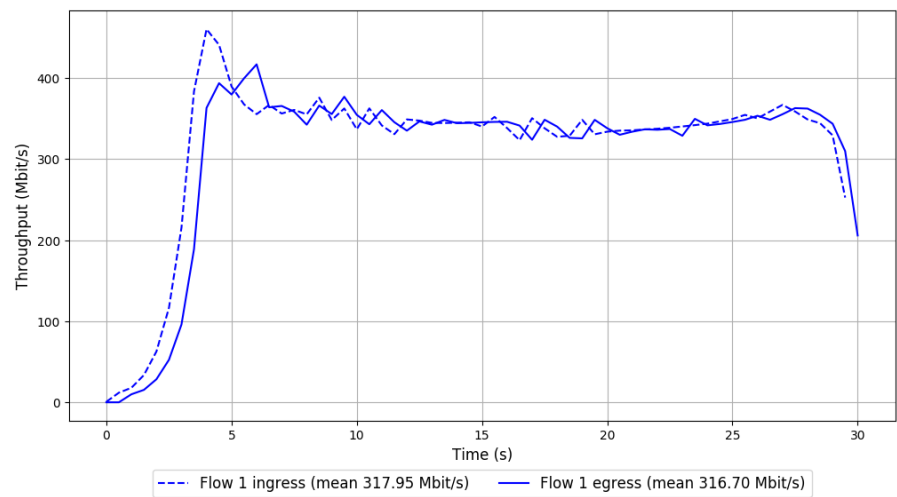
Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2019-03-18 18:28:18
End at: 2019-03-18 18:28:48
Local clock offset: 20.397 ms
Remote clock offset: 19.783 ms


# Below is generated by plot.py at 2019-03-18 21:58:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 329.09 Mbit/s
95th percentile per-packet one-way delay: 226.666 ms
Loss rate: 15.42%
-- Flow 1:
Average throughput: 329.09 Mbit/s
95th percentile per-packet one-way delay: 226.666 ms
Loss rate: 15.42%
```
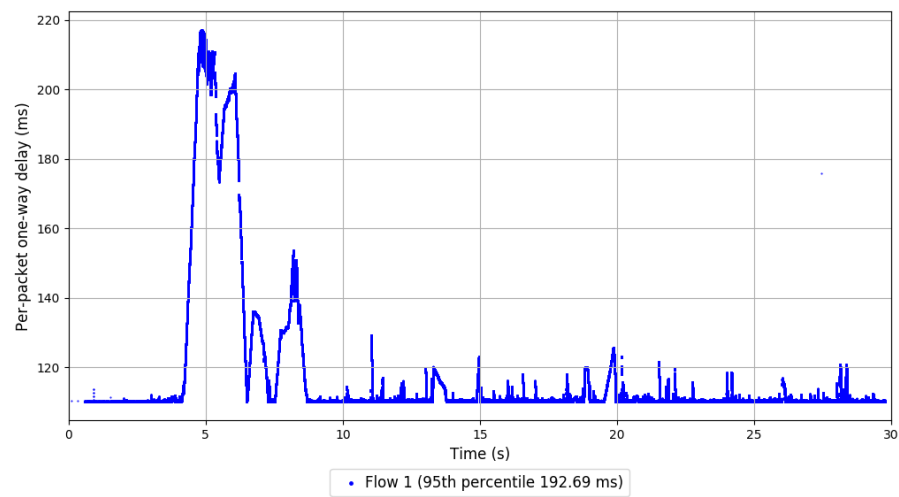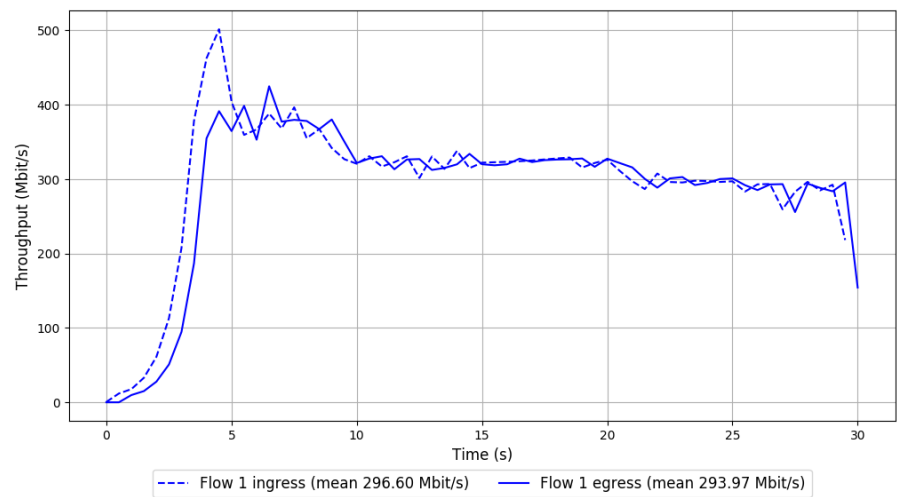
Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2019-03-18 19:02:02
End at: 2019-03-18 19:02:32
Local clock offset: 21.761 ms
Remote clock offset: 20.877 ms


# Below is generated by plot.py at 2019-03-18 21:58:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 316.70 Mbit/s
95th percentile per-packet one-way delay: 166.549 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 316.70 Mbit/s
95th percentile per-packet one-way delay: 166.549 ms
Loss rate: 1.13%
```

Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 317.95 Mbit/s) --- Flow 1 egress (mean 316.70 Mbit/s)

• Flow 1 (95th percentile 166.55 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2019-03-18 19:33:56
End at: 2019-03-18 19:34:26
Local clock offset: 12.099 ms
Remote clock offset: 11.403 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 293.97 Mbit/s
95th percentile per-packet one-way delay: 192.685 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 293.97 Mbit/s
95th percentile per-packet one-way delay: 192.685 ms
Loss rate: 1.62%
```
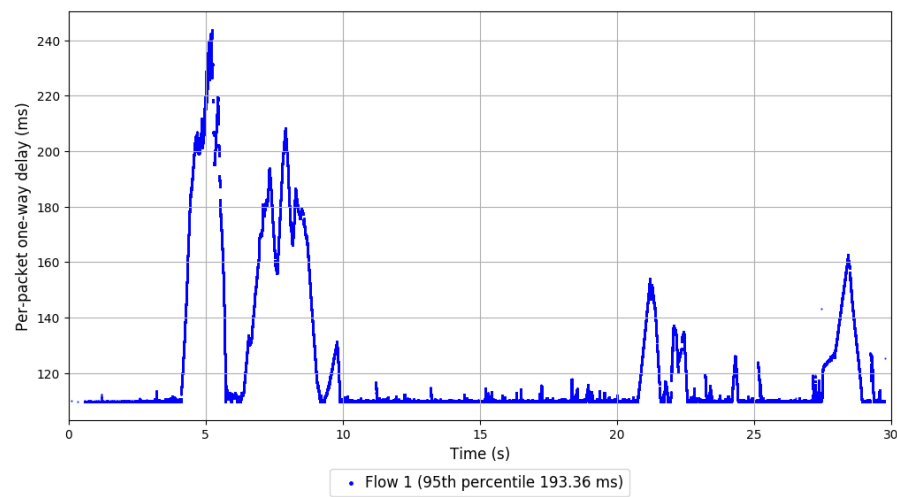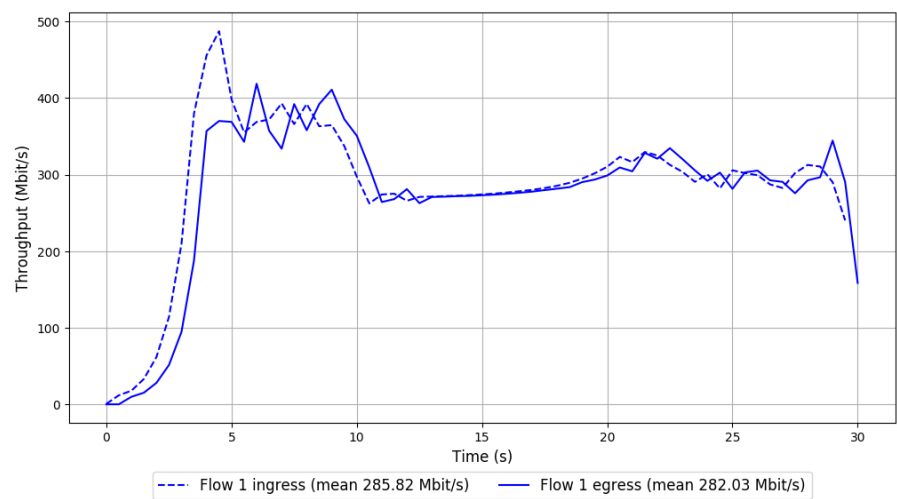
Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2019-03-18 20:05:41
End at: 2019-03-18 20:06:11
Local clock offset: 3.457 ms
Remote clock offset: 3.443 ms

# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 282.03 Mbit/s
95th percentile per-packet one-way delay: 193.361 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 282.03 Mbit/s
95th percentile per-packet one-way delay: 193.361 ms
Loss rate: 2.02%
```
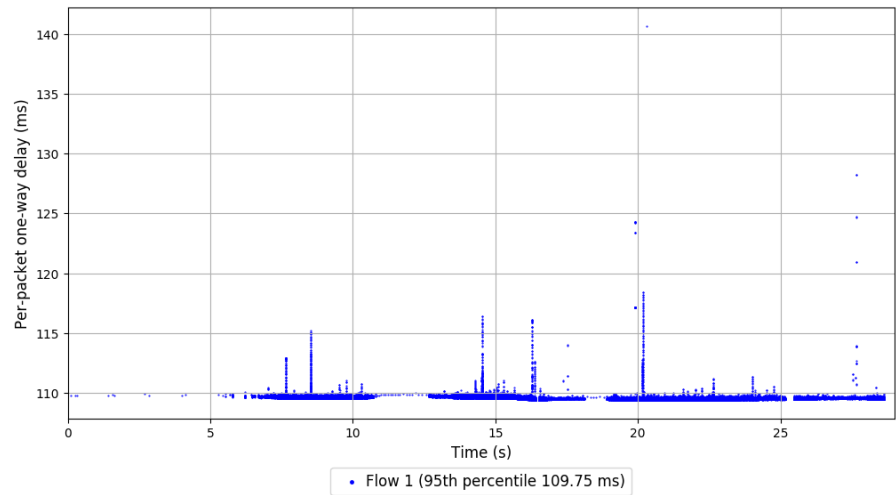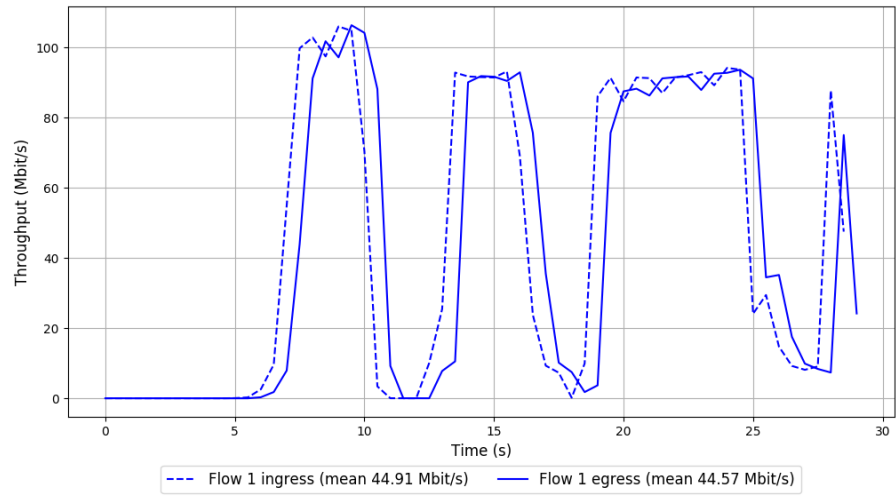
Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 285.82 Mbit/s)   Flow 1 egress (mean 282.03 Mbit/s)
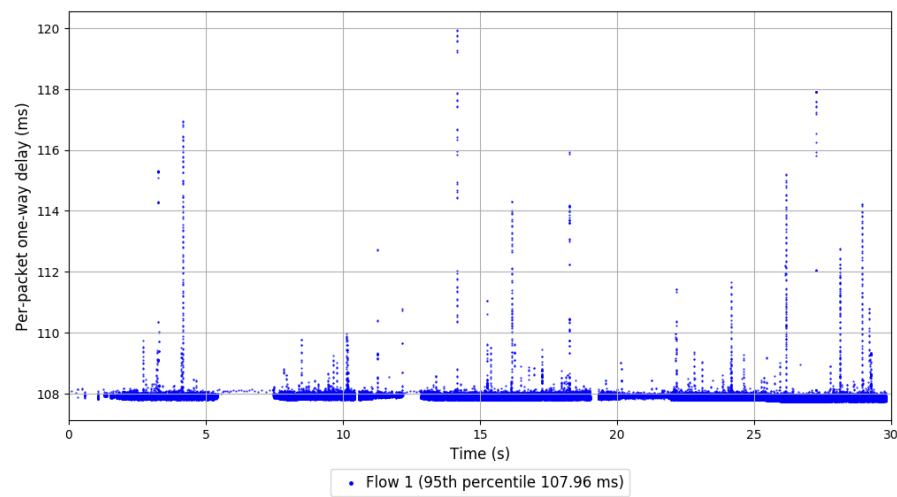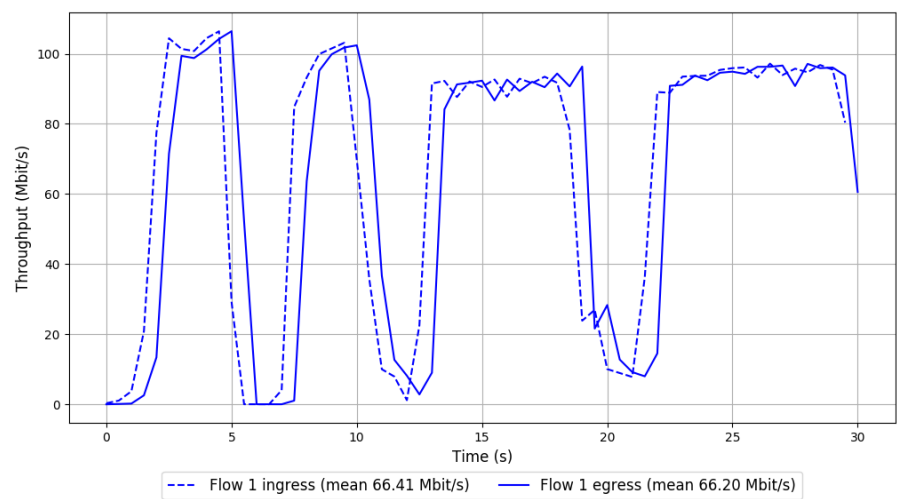

Flow 1 (95th percentile 193.36 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-03-18 17:47:40
End at: 2019-03-18 17:48:10
Local clock offset: 1.989 ms
Remote clock offset: 3.034 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.57 Mbit/s
95th percentile per-packet one-way delay: 109.752 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 44.57 Mbit/s
95th percentile per-packet one-way delay: 109.752 ms
Loss rate: 1.53%
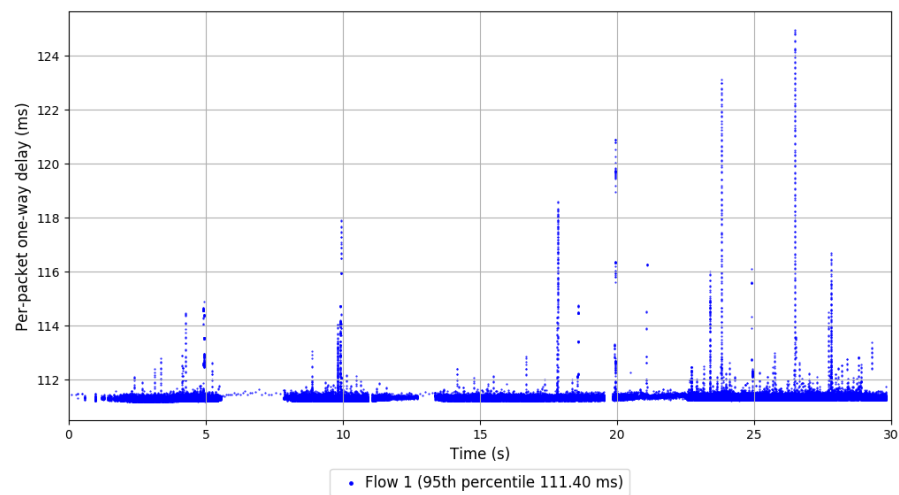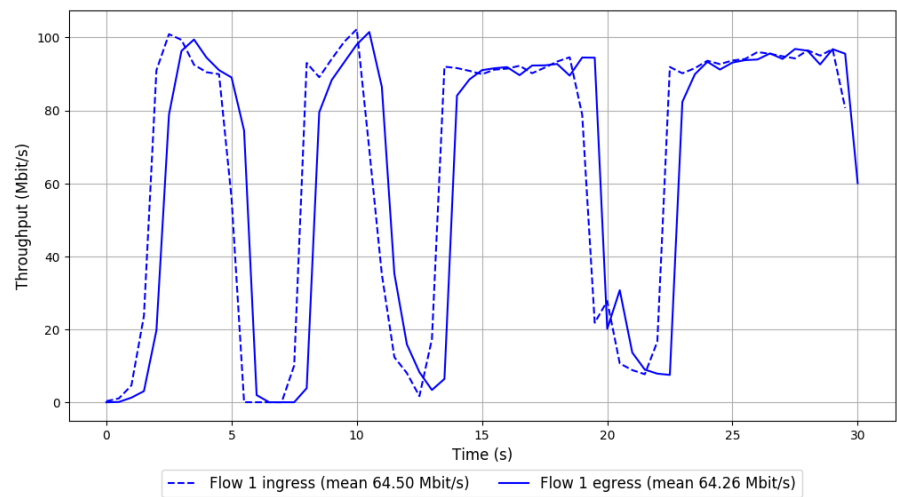```

Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-03-18 18:19:32
End at: 2019-03-18 18:20:02
Local clock offset: 25.314 ms
Remote clock offset: 26.093 ms

Below is generated by plot.py at 2019-03-18 22:00:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 66.20 Mbit/s
95th percentile per-packet one-way delay: 107.964 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 66.20 Mbit/s
95th percentile per-packet one-way delay: 107.964 ms
Loss rate: 1.05%
```
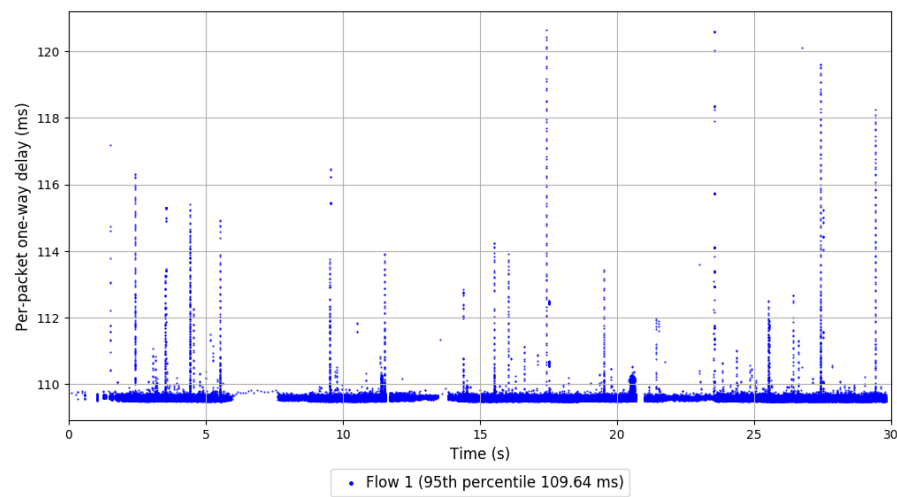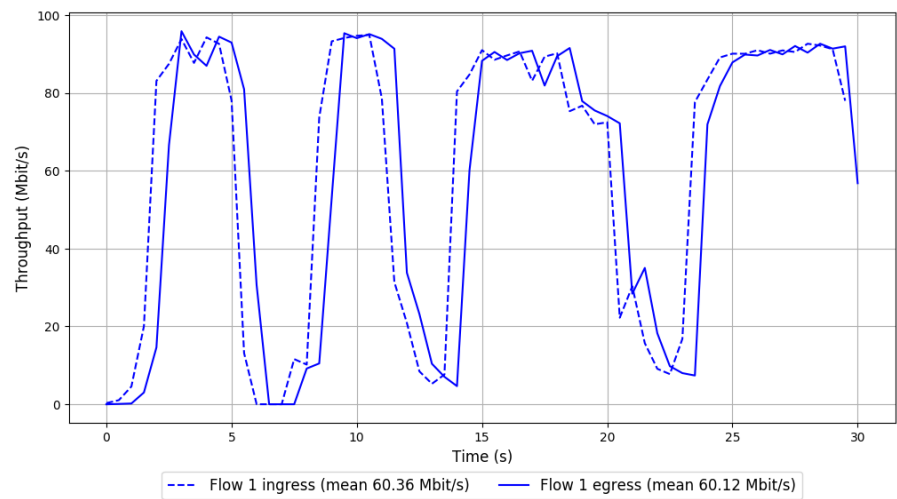
# Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-03-18 18:54:39
End at: 2019-03-18 18:55:09
Local clock offset: 41.355 ms
Remote clock offset: 38.219 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.26 Mbit/s
95th percentile per-packet one-way delay: 111.402 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 64.26 Mbit/s
95th percentile per-packet one-way delay: 111.402 ms
Loss rate: 1.10%
```

Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 64.50 Mbit/s) — — —   Flow 1 egress (mean 64.26 Mbit/s) ———

• Flow 1 (95th percentile 111.40 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-03-18 19:26:41
End at: 2019-03-18 19:27:11
Local clock offset: 20.056 ms
Remote clock offset: 19.358 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.12 Mbit/s
95th percentile per-packet one-way delay: 109.643 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 60.12 Mbit/s
95th percentile per-packet one-way delay: 109.643 ms
Loss rate: 1.13%
```
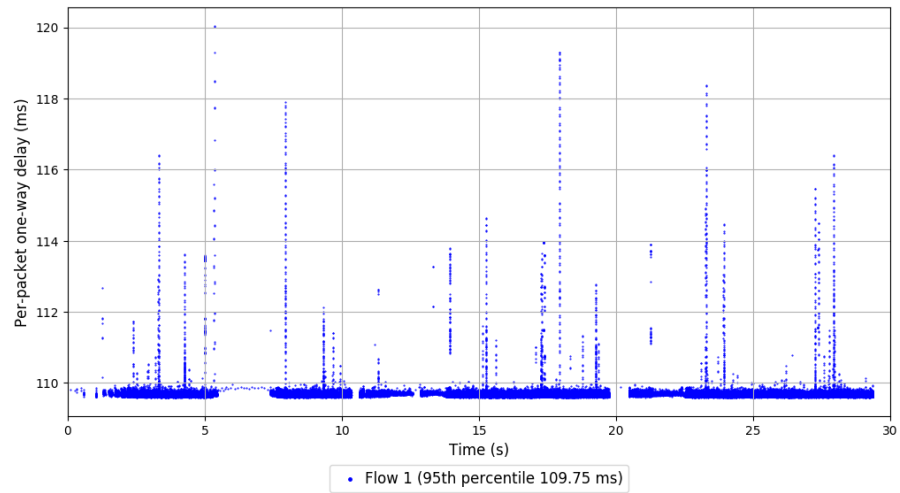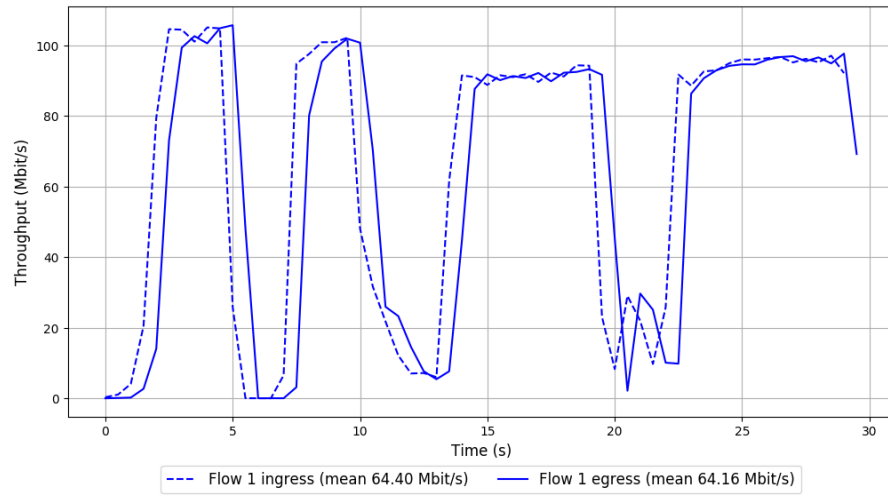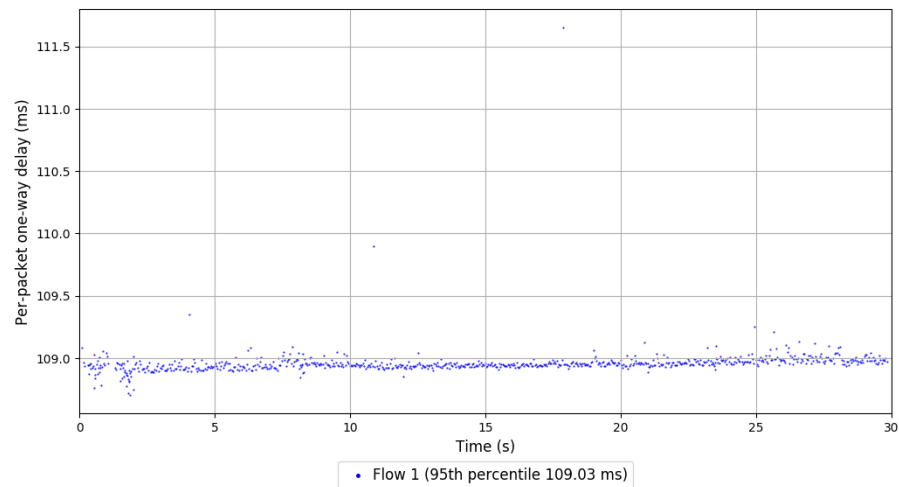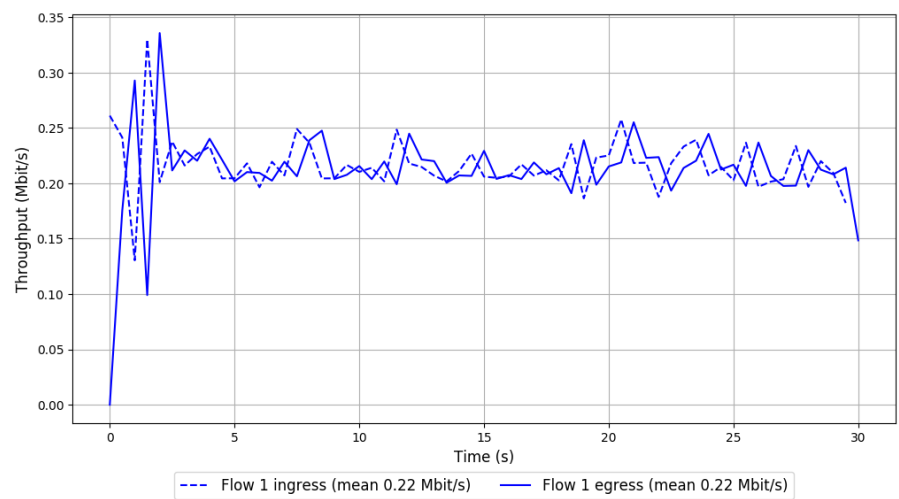
Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-03-18 19:58:21
End at: 2019-03-18 19:58:51
Local clock offset: 4.576 ms
Remote clock offset: 4.492 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.16 Mbit/s
95th percentile per-packet one-way delay: 109.750 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 64.16 Mbit/s
95th percentile per-packet one-way delay: 109.750 ms
Loss rate: 1.13%
```

Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 64.40 Mbit/s)   Flow 1 egress (mean 64.16 Mbit/s)
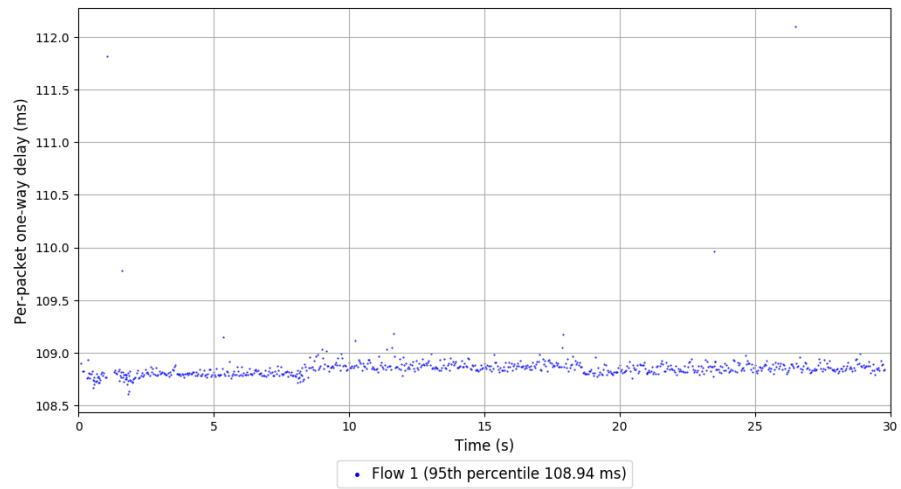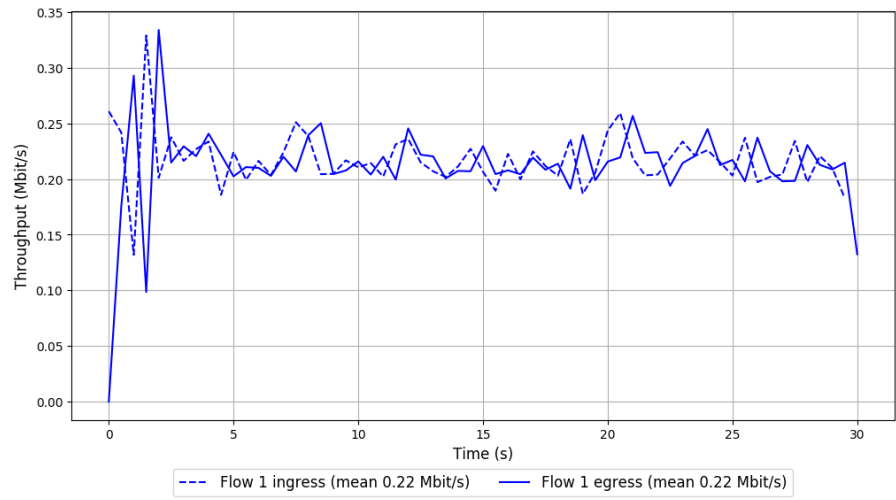

Flow 1 (95th percentile 109.75 ms)

```
Run 1: Statistics of SCReAM

Start at: 2019-03-18 17:50:08
End at: 2019-03-18 17:50:38
Local clock offset: 7.177 ms
Remote clock offset: 7.908 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.032 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.032 ms
Loss rate: 0.64%
```

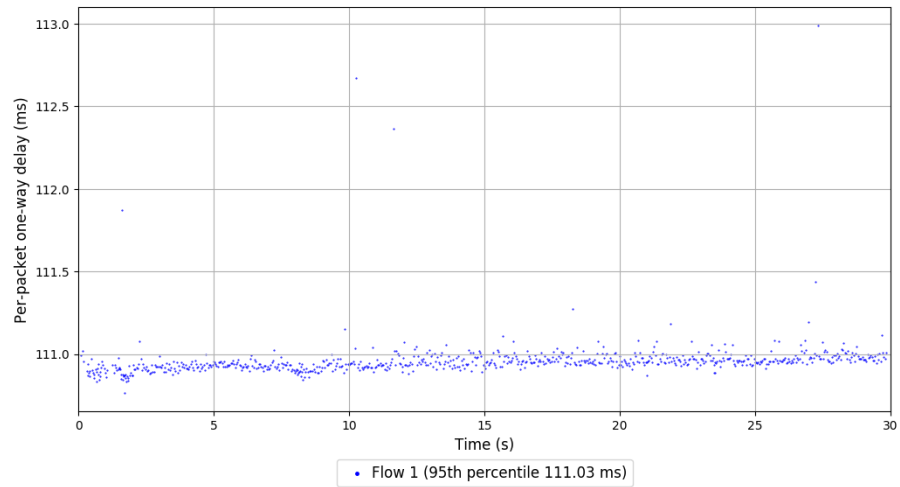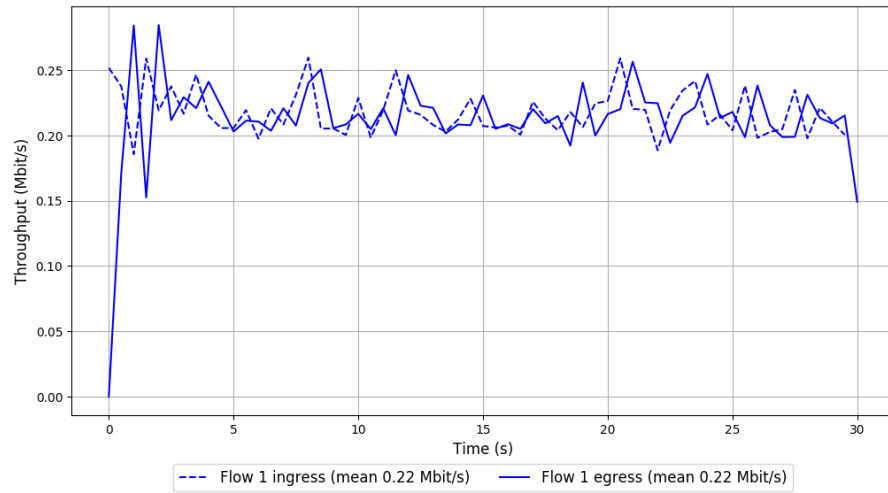Run 1: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.22 Mbit/s)   Flow 1 egress (mean 0.22 Mbit/s)

Flow 1 (95th percentile 109.03 ms)

```
Run 2: Statistics of SCReAM

Start at: 2019-03-18 18:22:52
End at: 2019-03-18 18:23:22
Local clock offset: 23.164 ms
Remote clock offset: 22.621 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.939 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.939 ms
Loss rate: 0.77%
```

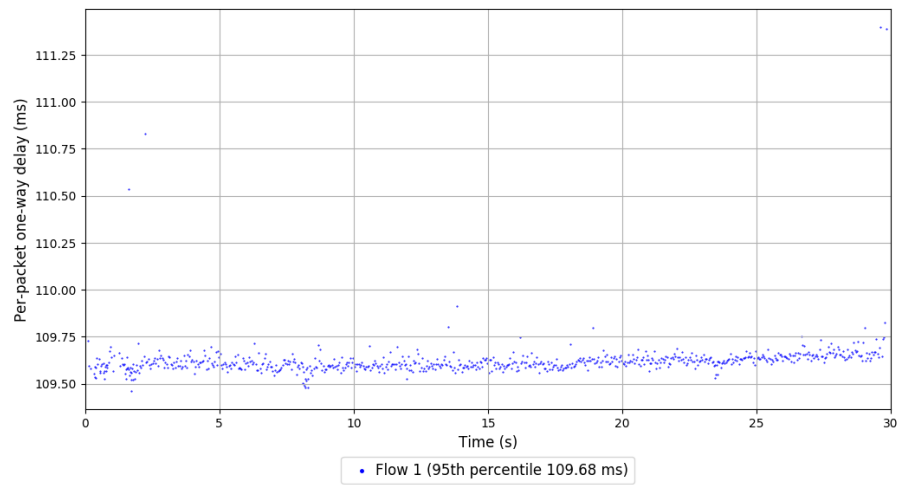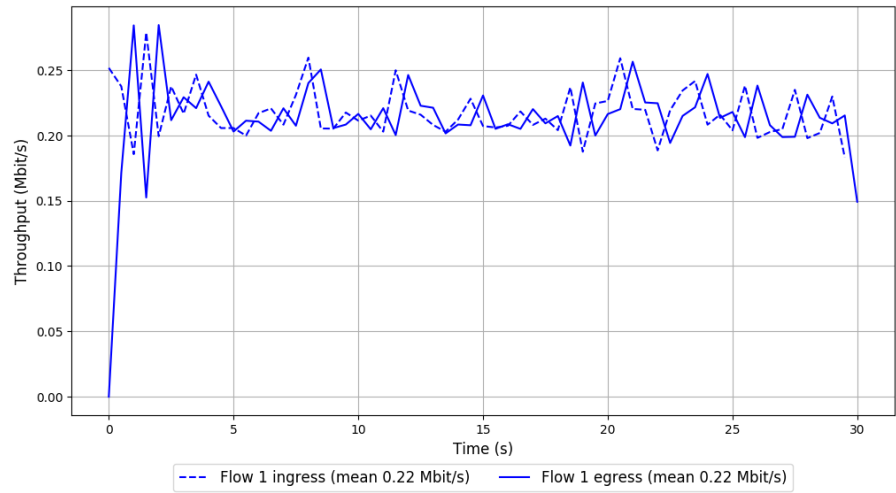# Run 2: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.22 Mbit/s) --- Flow 1 egress (mean 0.22 Mbit/s)

Flow 1 (95th percentile 108.94 ms)

```
Run 3: Statistics of SCReAM

Start at: 2019-03-18 18:57:31
End at: 2019-03-18 18:58:01
Local clock offset: 31.365 ms
Remote clock offset: 28.979 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.027 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.027 ms
Loss rate: 0.77%
```
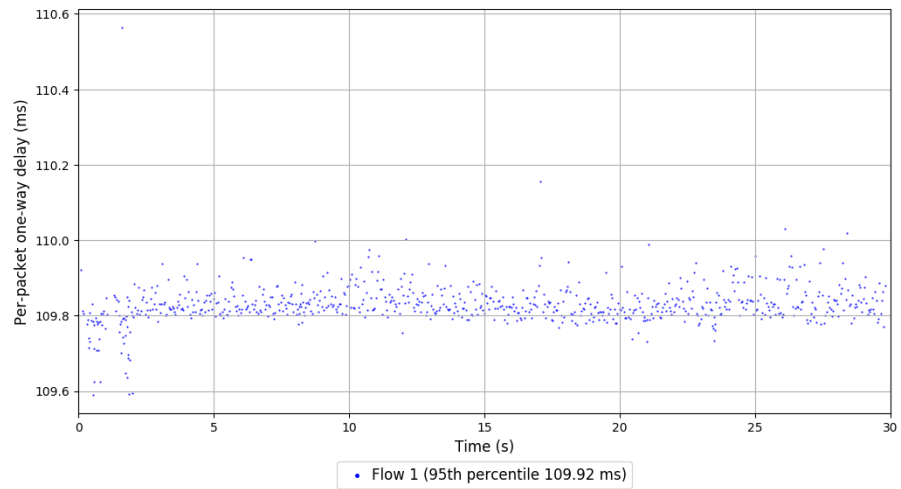
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-03-18 19:29:32
End at: 2019-03-18 19:30:02
Local clock offset: 18.925 ms
Remote clock offset: 17.742 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.681 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.681 ms
Loss rate: 0.64%
```
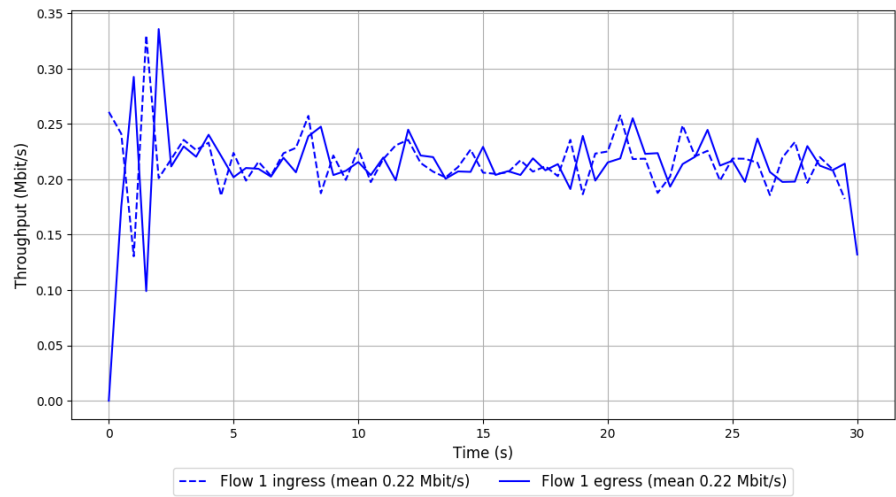
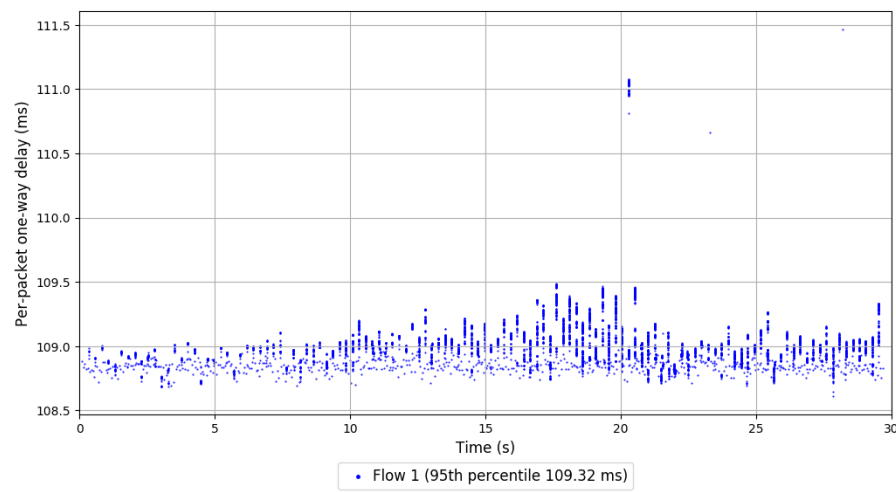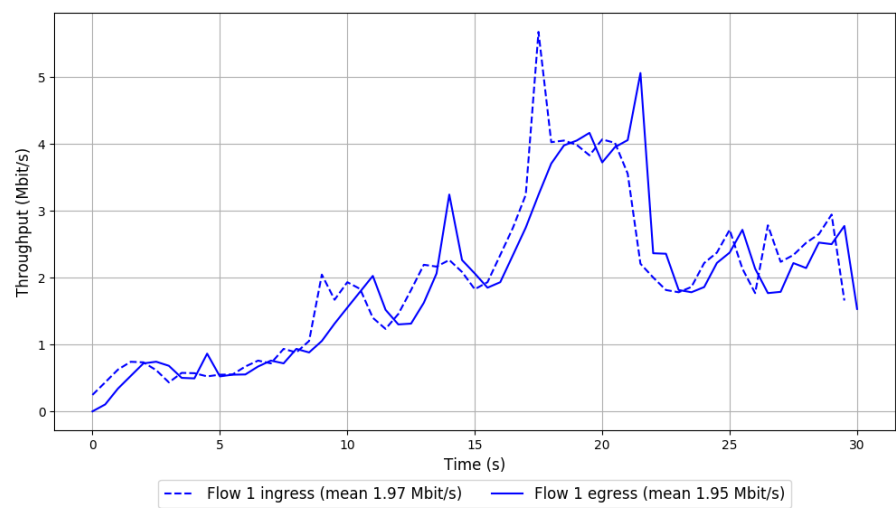# Run 4: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.22 Mbit/s)   Flow 1 egress (mean 0.22 Mbit/s)

Flow 1 (95th percentile 109.68 ms)

```
Run 5: Statistics of SCReAM

Start at: 2019-03-18 20:01:08
End at: 2019-03-18 20:01:38
Local clock offset: 4.728 ms
Remote clock offset: 4.727 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.917 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.917 ms
Loss rate: 0.77%
```

Run 5: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.22 Mbit/s)   Flow 1 egress (mean 0.22 Mbit/s)

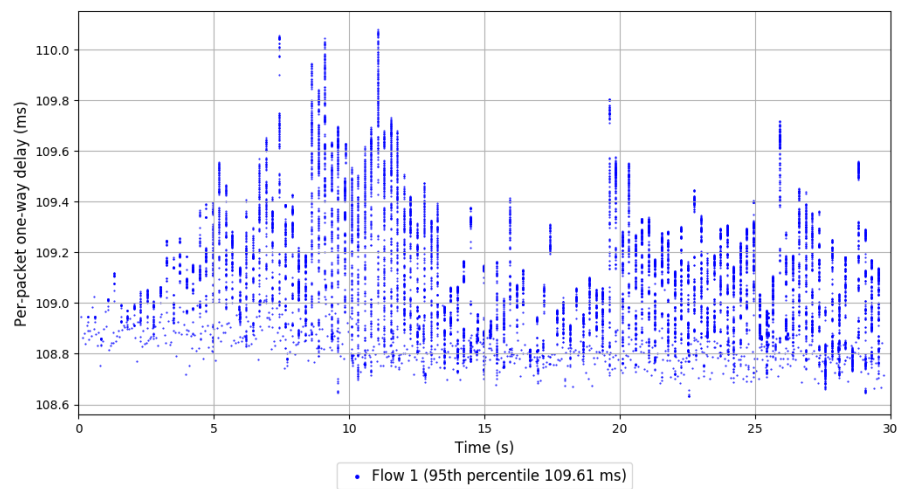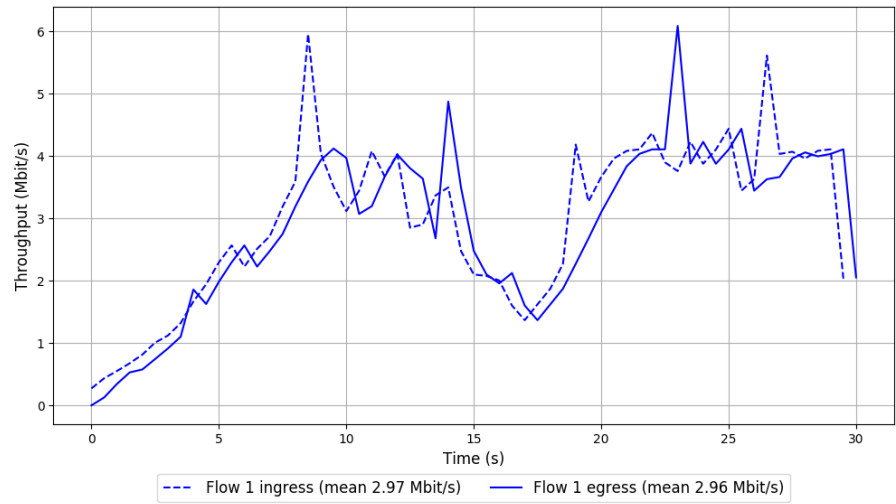• Flow 1 (95th percentile 109.92 ms)

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```
Run 1: Statistics of Sprout

Start at: 2019-03-18 18:13:00
End at: 2019-03-18 18:13:30
Local clock offset: 16.717 ms
Remote clock offset: 17.247 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 109.322 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 109.322 ms
Loss rate: 1.41%
```

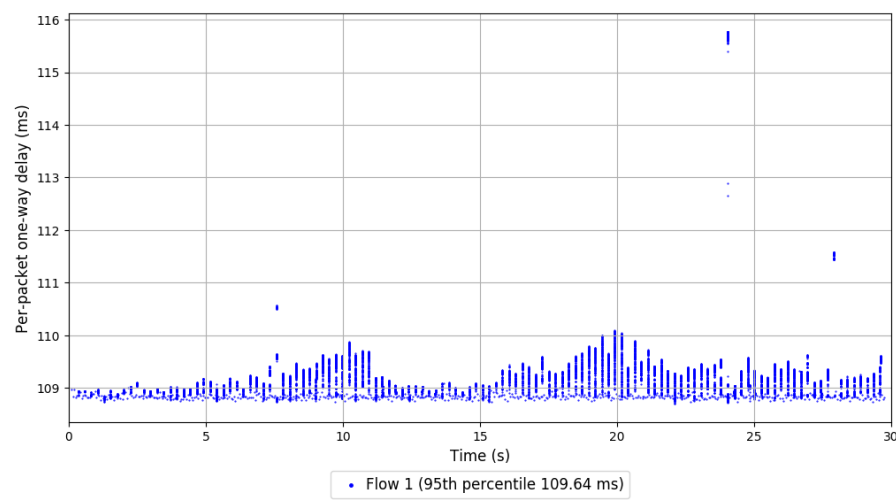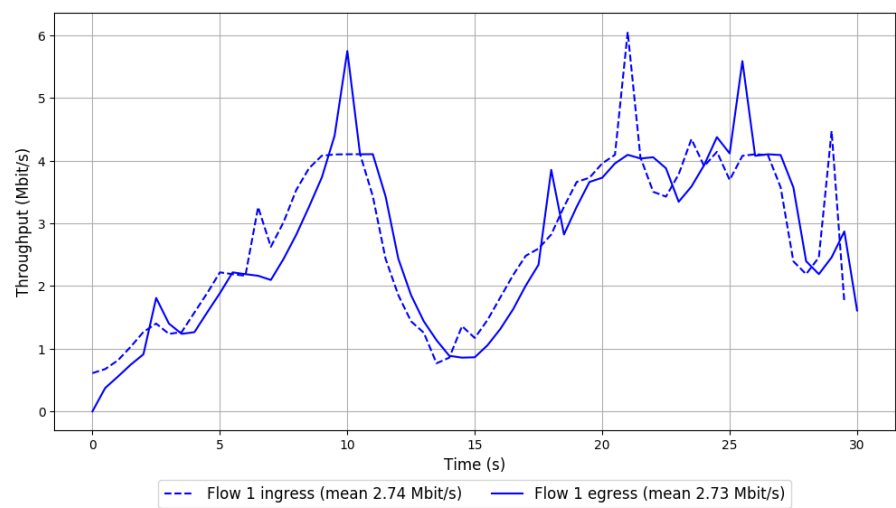## Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-03-18 18:48:59
End at: 2019-03-18 18:49:29
Local clock offset: 35.395 ms
Remote clock offset: 34.463 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 109.612 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 109.612 ms
Loss rate: 1.14%
```
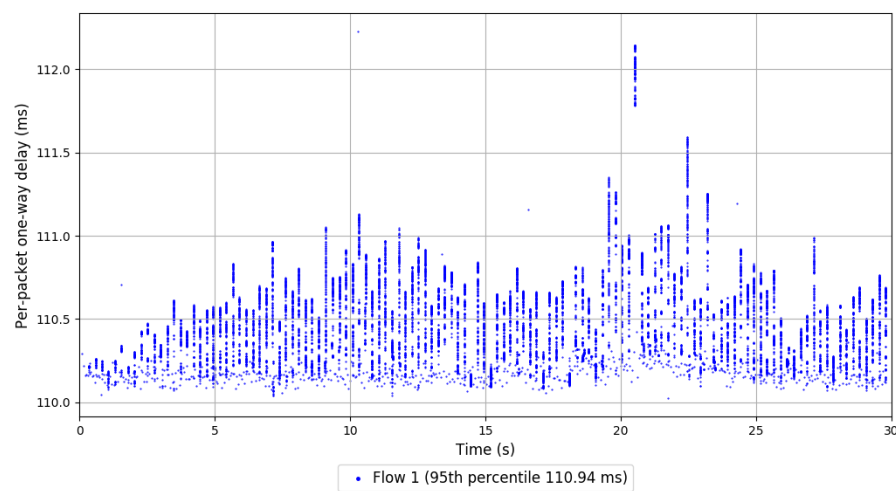
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-03-18 19:20:46
End at: 2019-03-18 19:21:16
Local clock offset: 17.377 ms
Remote clock offset: 16.955 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 109.642 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 109.642 ms
Loss rate: 1.06%
```

Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-03-18 19:52:40
End at: 2019-03-18 19:53:10
Local clock offset: 4.303 ms
Remote clock offset: 4.337 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.56 Mbit/s
95th percentile per-packet one-way delay: 110.944 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 3.56 Mbit/s
95th percentile per-packet one-way delay: 110.944 ms
Loss rate: 0.96%
```
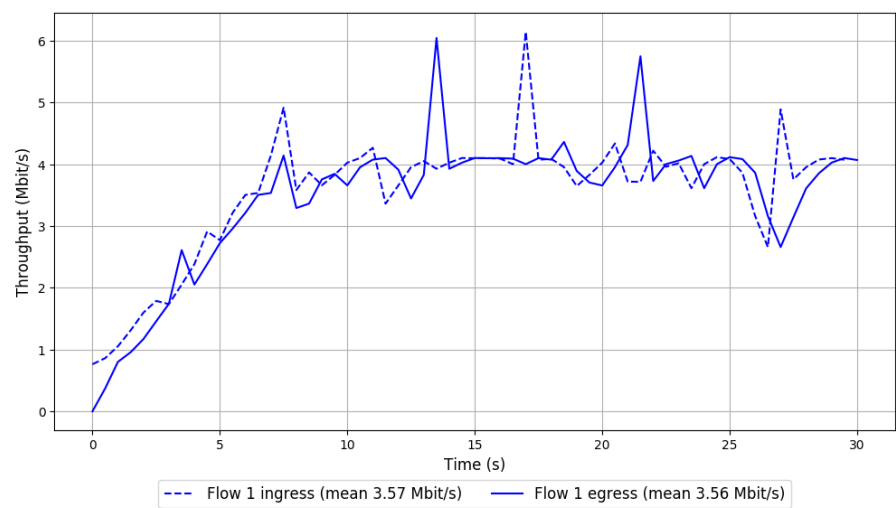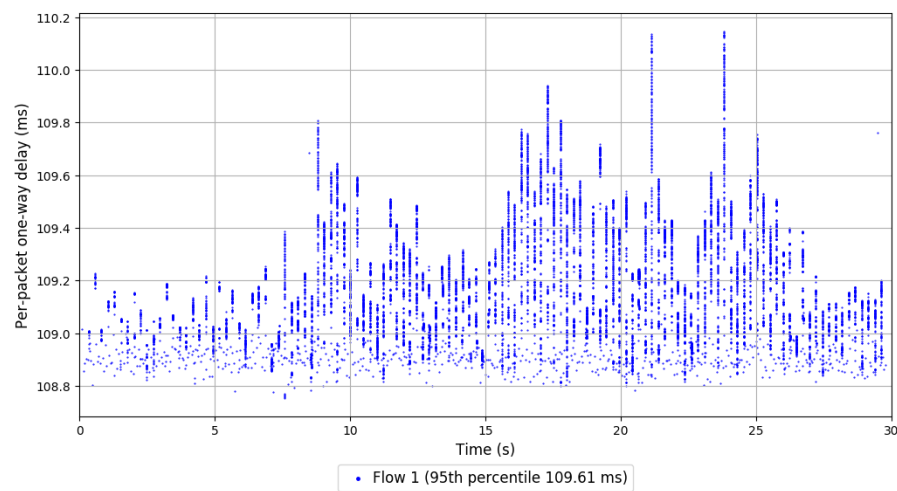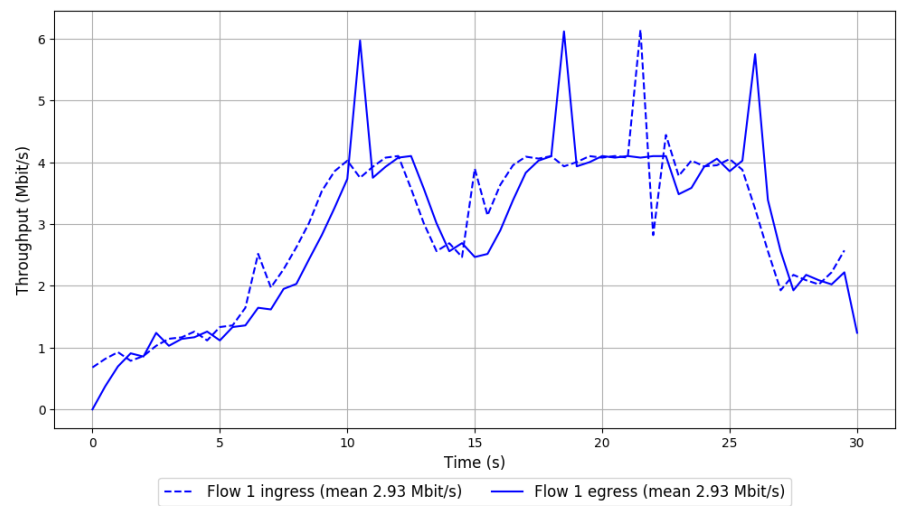
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2019-03-18 20:24:00
End at: 2019-03-18 20:24:30
Local clock offset: 1.447 ms
Remote clock offset: 1.552 ms


# Below is generated by plot.py at 2019-03-18 22:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 109.609 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 109.609 ms
Loss rate: 0.76%
```

Run 5: Report of Sprout — Data Link

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

Start at: 2019-03-18 18:00:22
End at: 2019-03-18 18:00:52
Local clock offset: 12.398 ms
Remote clock offset: 13.023 ms


# Below is generated by plot.py at 2019-03-18 22:02:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 205.73 Mbit/s
95th percentile per-packet one-way delay: 109.633 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 205.73 Mbit/s
95th percentile per-packet one-way delay: 109.633 ms
Loss rate: 0.85%
```
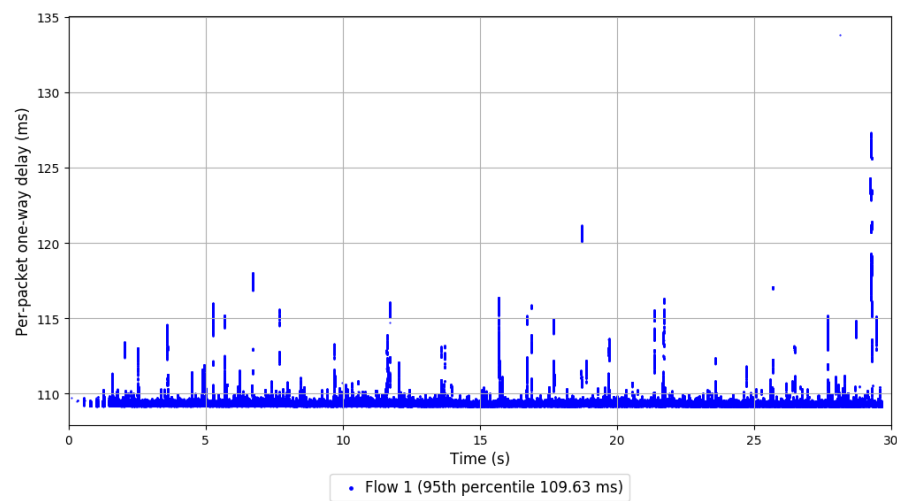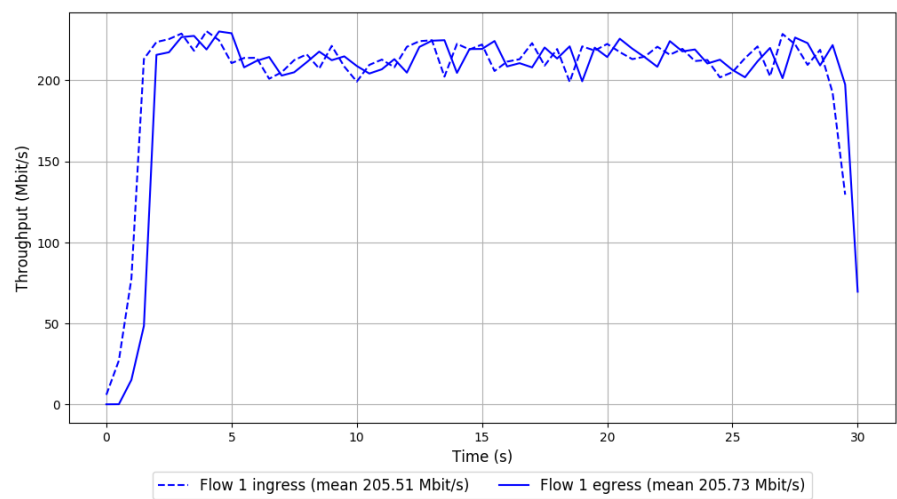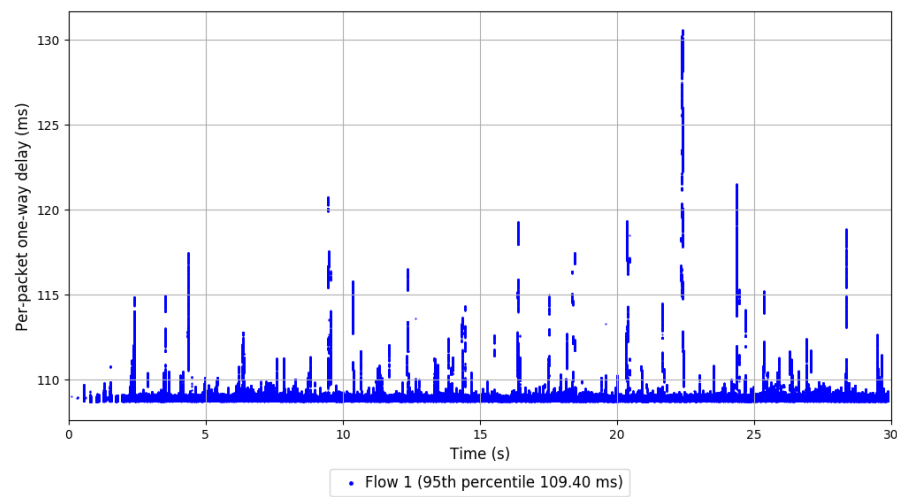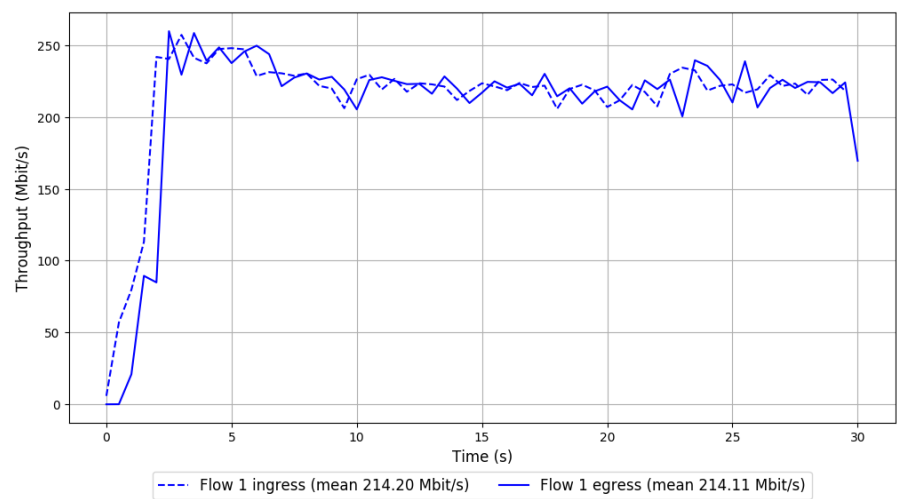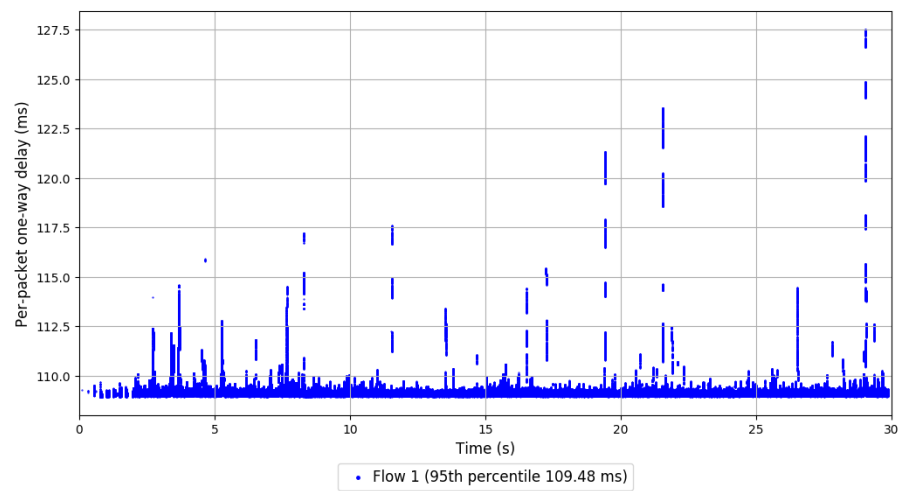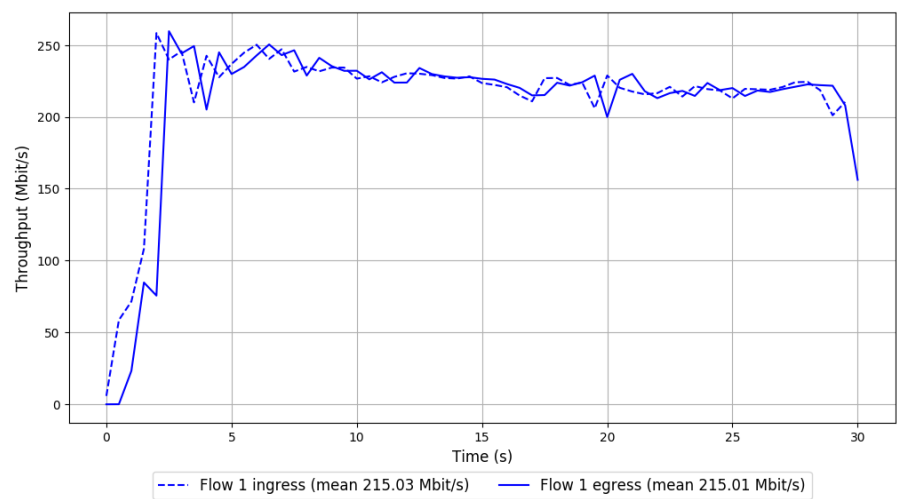
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2019-03-18 18:35:34
End at: 2019-03-18 18:36:04
Local clock offset: 22.831 ms
Remote clock offset: 22.334 ms


# Below is generated by plot.py at 2019-03-18 22:03:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.11 Mbit/s
95th percentile per-packet one-way delay: 109.400 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 214.11 Mbit/s
95th percentile per-packet one-way delay: 109.400 ms
Loss rate: 0.78%
```

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

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

Start at: 2019-03-18 19:07:49
End at: 2019-03-18 19:08:19
Local clock offset: 16.438 ms
Remote clock offset: 15.883 ms


# Below is generated by plot.py at 2019-03-18 22:03:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.01 Mbit/s
95th percentile per-packet one-way delay: 109.480 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 215.01 Mbit/s
95th percentile per-packet one-way delay: 109.480 ms
Loss rate: 0.74%
```

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

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

Start at: 2019-03-18 19:39:51
End at: 2019-03-18 19:40:21
Local clock offset: 7.129 ms
Remote clock offset: 6.79 ms


# Below is generated by plot.py at 2019-03-18 22:04:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.75 Mbit/s
95th percentile per-packet one-way delay: 110.068 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 215.75 Mbit/s
95th percentile per-packet one-way delay: 110.068 ms
Loss rate: 0.76%
```
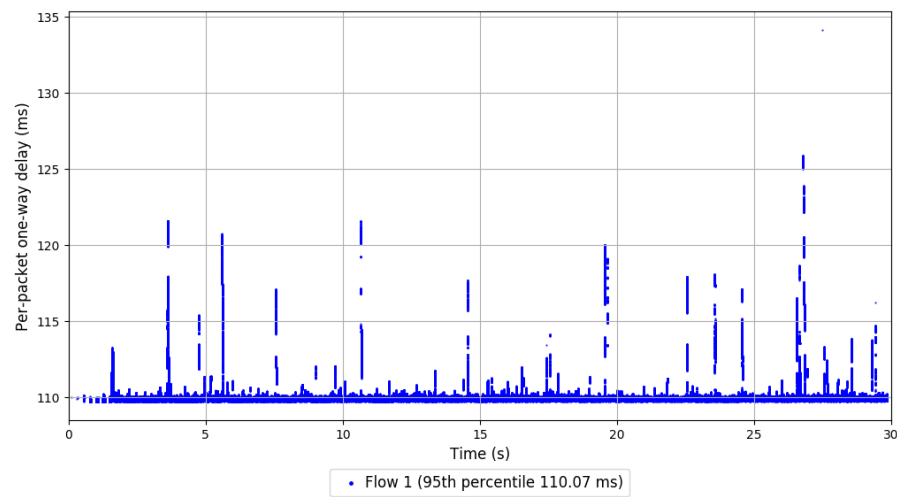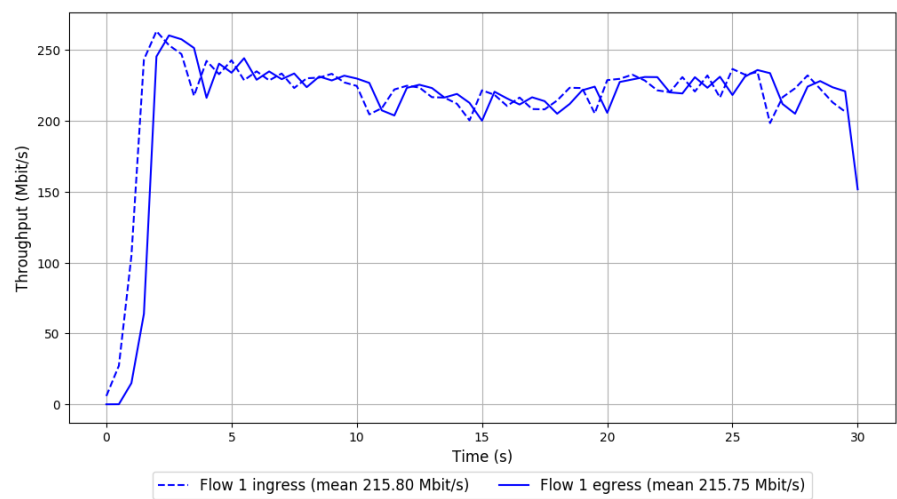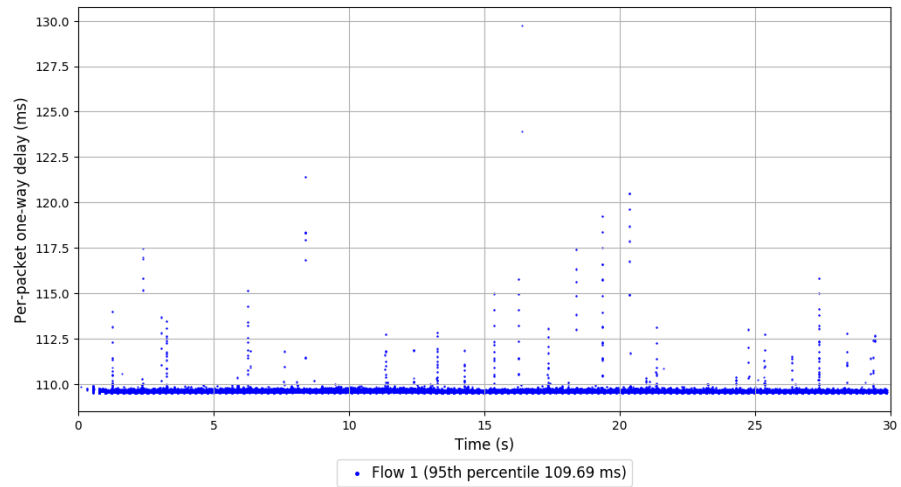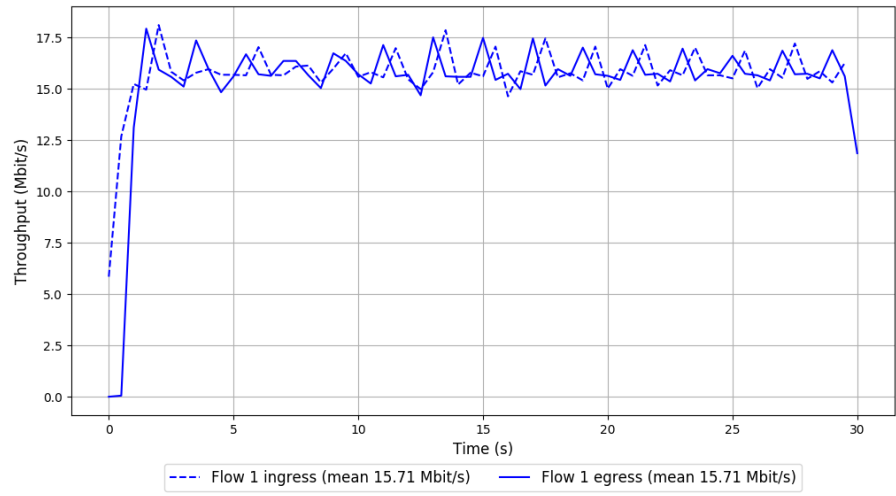
Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2019-03-18 20:11:32
End at: 2019-03-18 20:12:02
Local clock offset: 1.955 ms
Remote clock offset: 2.152 ms


# Below is generated by plot.py at 2019-03-18 22:04:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 15.71 Mbit/s
95th percentile per-packet one-way delay: 109.692 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 15.71 Mbit/s
95th percentile per-packet one-way delay: 109.692 ms
Loss rate: 0.75%
```

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

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```
Run 1: Statistics of TCP Vegas

Start at: 2019-03-18 17:56:15
End at: 2019-03-18 17:56:45
Local clock offset: 8.933 ms
Remote clock offset: 8.98 ms


# Below is generated by plot.py at 2019-03-18 22:06:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 391.66 Mbit/s
95th percentile per-packet one-way delay: 111.361 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 391.66 Mbit/s
95th percentile per-packet one-way delay: 111.361 ms
Loss rate: 0.81%
```
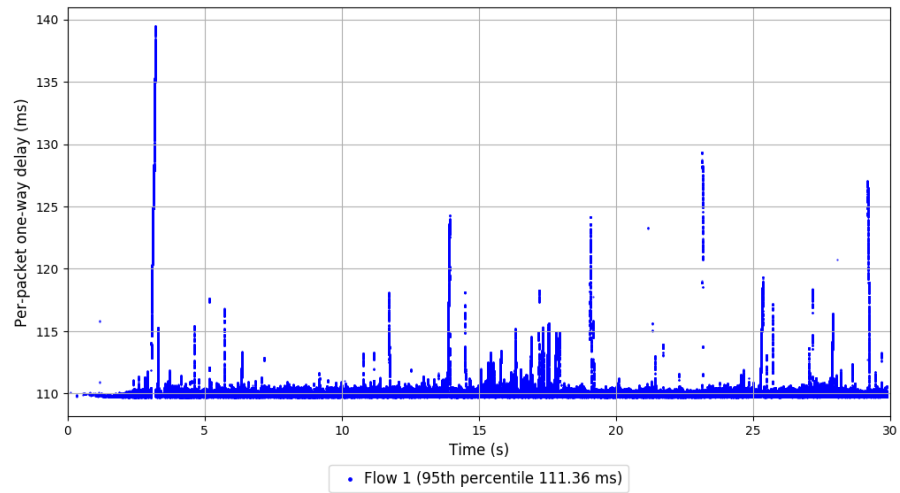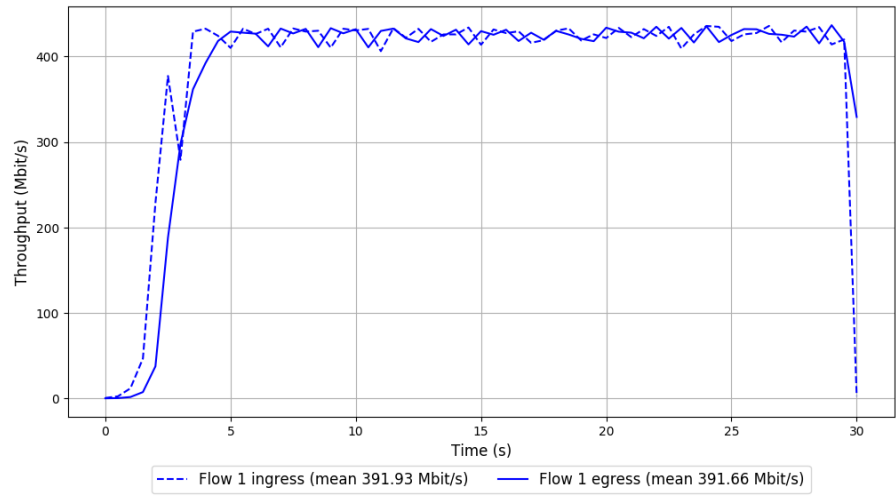
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-03-18 18:30:38
End at: 2019-03-18 18:31:08
Local clock offset: 20.492 ms
Remote clock offset: 20.04 ms


# Below is generated by plot.py at 2019-03-18 22:06:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 347.76 Mbit/s
95th percentile per-packet one-way delay: 113.387 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 347.76 Mbit/s
95th percentile per-packet one-way delay: 113.387 ms
Loss rate: 0.75%
```
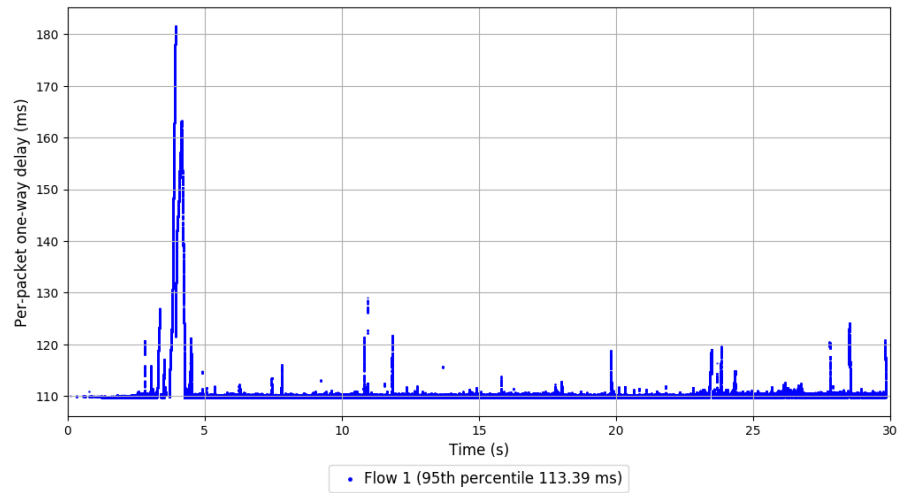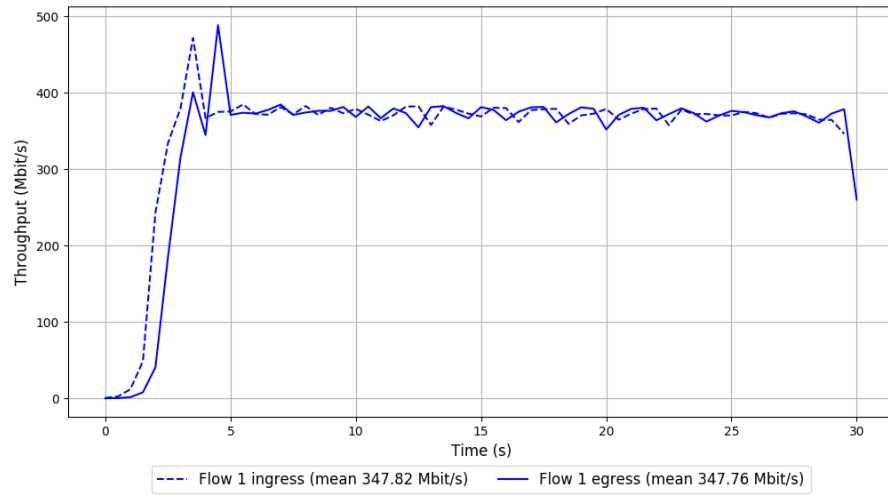
Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 347.82 Mbit/s)   Flow 1 egress (mean 347.76 Mbit/s)
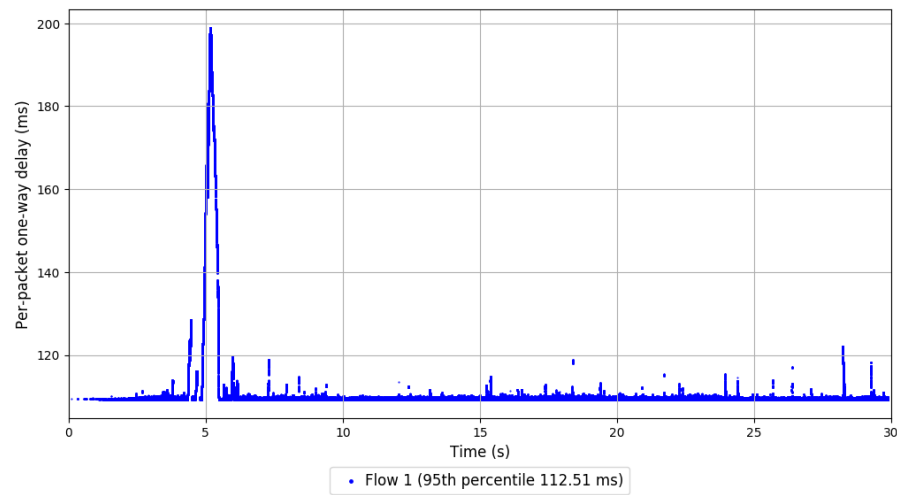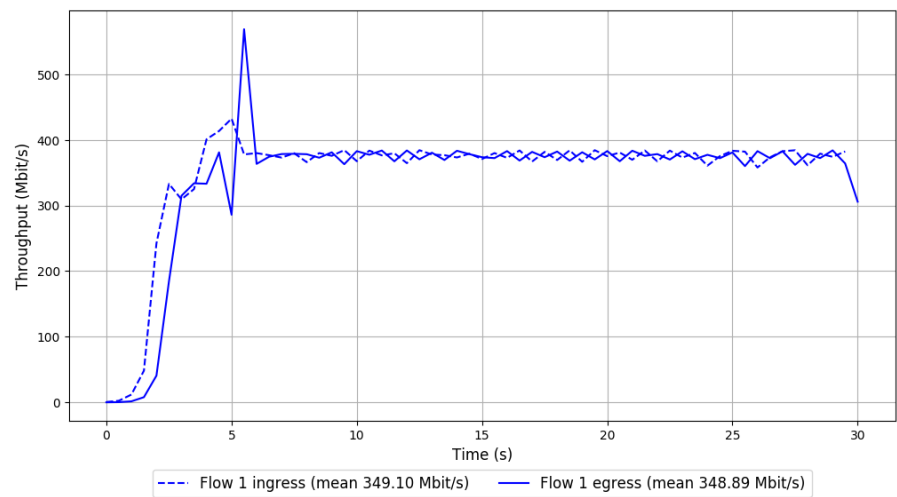

Flow 1 (95th percentile 113.39 ms)

```
Run 3: Statistics of TCP Vegas

Start at: 2019-03-18 19:03:43
End at: 2019-03-18 19:04:13
Local clock offset: 19.593 ms
Remote clock offset: 18.597 ms


# Below is generated by plot.py at 2019-03-18 22:06:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 348.89 Mbit/s
95th percentile per-packet one-way delay: 112.508 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 348.89 Mbit/s
95th percentile per-packet one-way delay: 112.508 ms
Loss rate: 0.79%
```
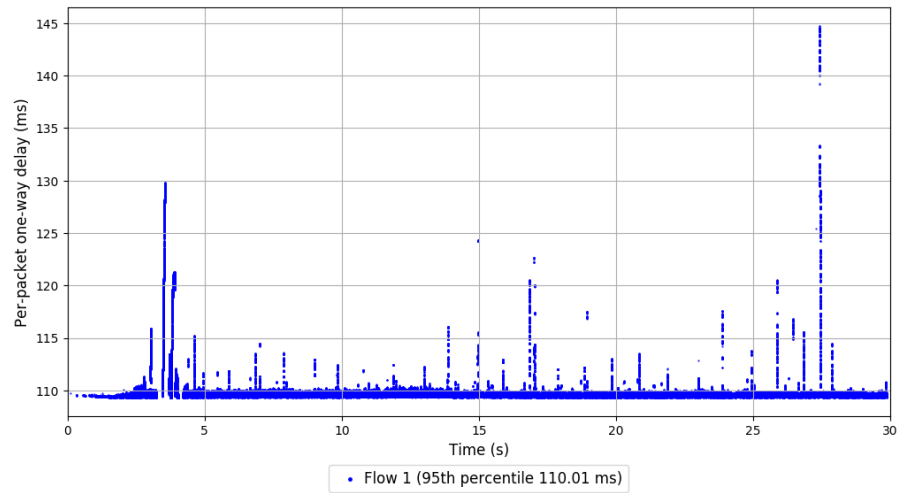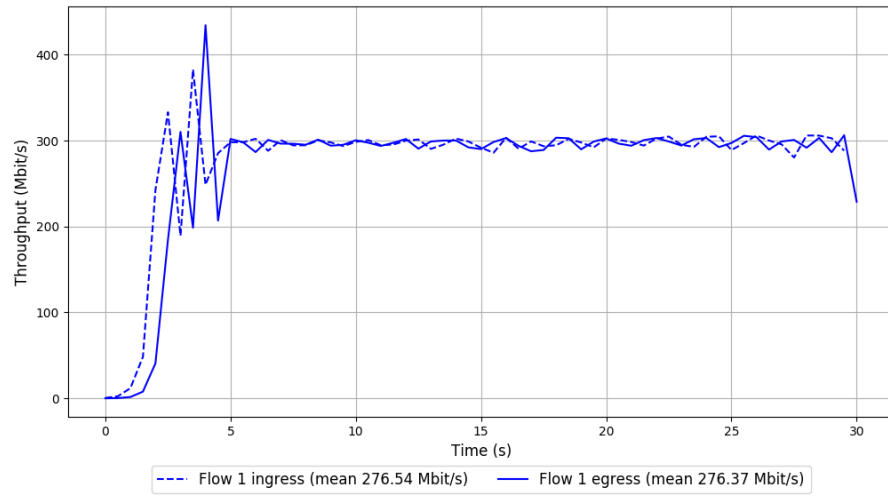
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2019-03-18 19:35:39
End at: 2019-03-18 19:36:09
Local clock offset: 10.221 ms
Remote clock offset: 9.497 ms


# Below is generated by plot.py at 2019-03-18 22:06:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 276.37 Mbit/s
95th percentile per-packet one-way delay: 110.009 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 276.37 Mbit/s
95th percentile per-packet one-way delay: 110.009 ms
Loss rate: 0.79%
```

Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2019-03-18 20:07:19
End at: 2019-03-18 20:07:49
Local clock offset: 2.889 ms
Remote clock offset: 2.65 ms


# Below is generated by plot.py at 2019-03-18 22:10:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 384.13 Mbit/s
95th percentile per-packet one-way delay: 111.327 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 384.13 Mbit/s
95th percentile per-packet one-way delay: 111.327 ms
Loss rate: 0.80%
```
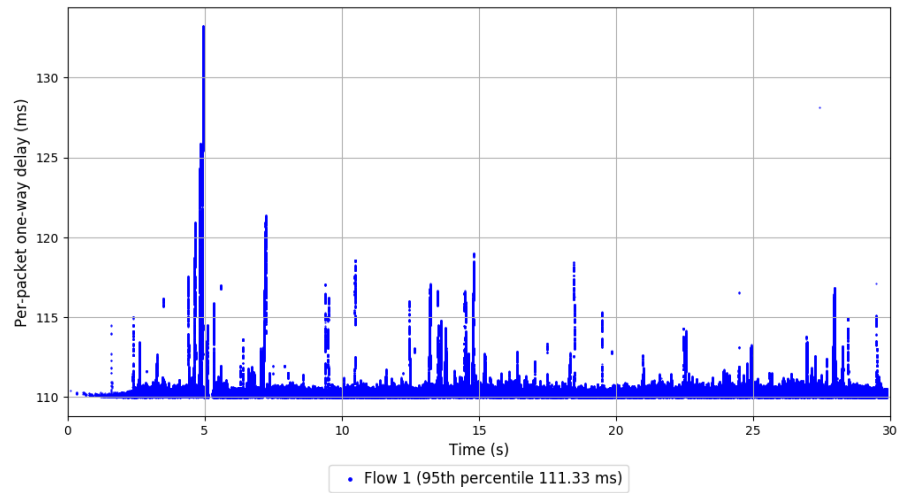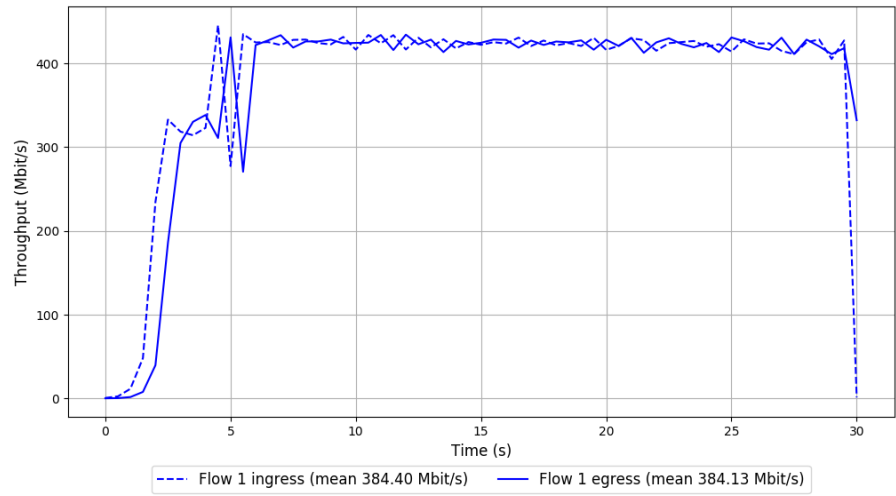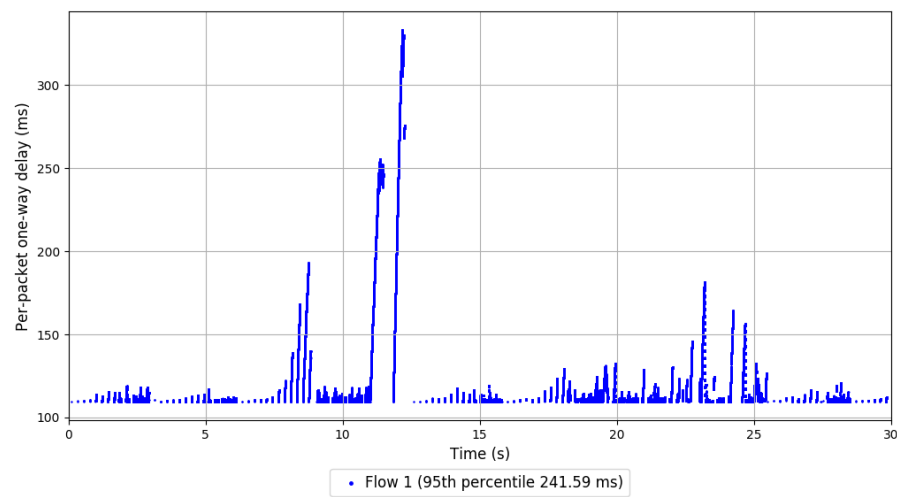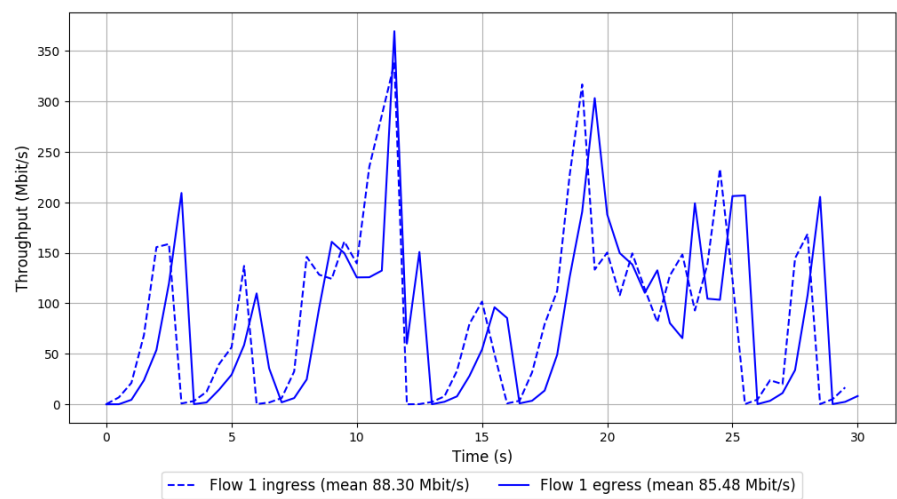
Run 5: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2019-03-18 18:11:35
End at: 2019-03-18 18:12:05
Local clock offset: 15.818 ms
Remote clock offset: 15.819 ms


# Below is generated by plot.py at 2019-03-18 22:10:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.48 Mbit/s
95th percentile per-packet one-way delay: 241.595 ms
Loss rate: 3.91%
-- Flow 1:
Average throughput: 85.48 Mbit/s
95th percentile per-packet one-way delay: 241.595 ms
Loss rate: 3.91%
```
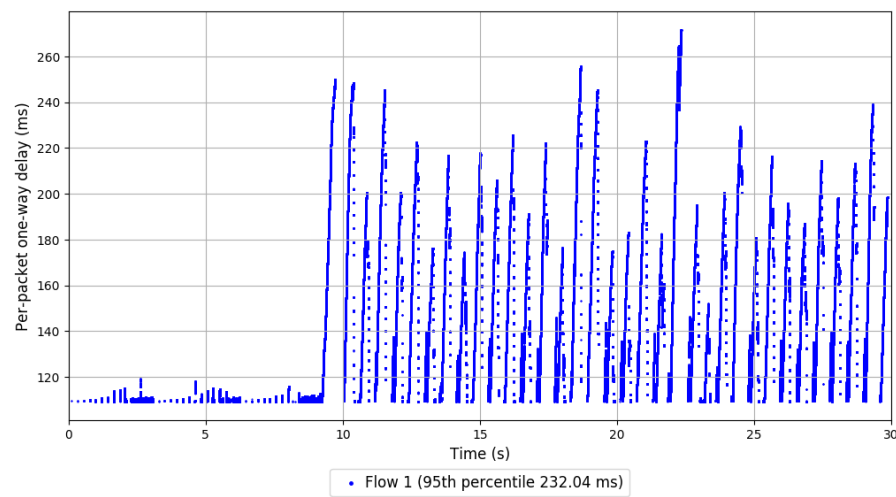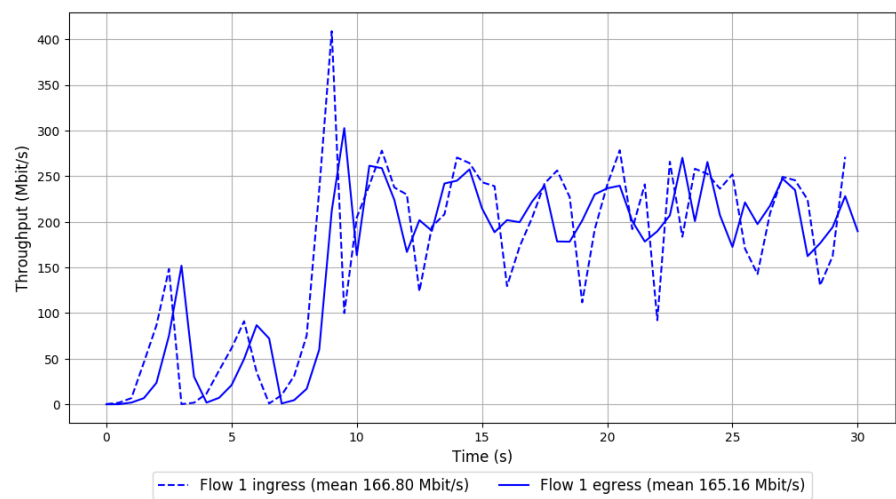
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-03-18 18:47:32
End at: 2019-03-18 18:48:02
Local clock offset: 33.754 ms
Remote clock offset: 33.066 ms


# Below is generated by plot.py at 2019-03-18 22:10:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 165.16 Mbit/s
95th percentile per-packet one-way delay: 232.041 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 165.16 Mbit/s
95th percentile per-packet one-way delay: 232.041 ms
Loss rate: 1.30%
```

Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-03-18 19:19:14
End at: 2019-03-18 19:19:44
Local clock offset: 16.554 ms
Remote clock offset: 16.42 ms


# Below is generated by plot.py at 2019-03-18 22:10:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 196.86 Mbit/s
95th percentile per-packet one-way delay: 268.329 ms
Loss rate: 12.13%
-- Flow 1:
Average throughput: 196.86 Mbit/s
95th percentile per-packet one-way delay: 268.329 ms
Loss rate: 12.13%
```
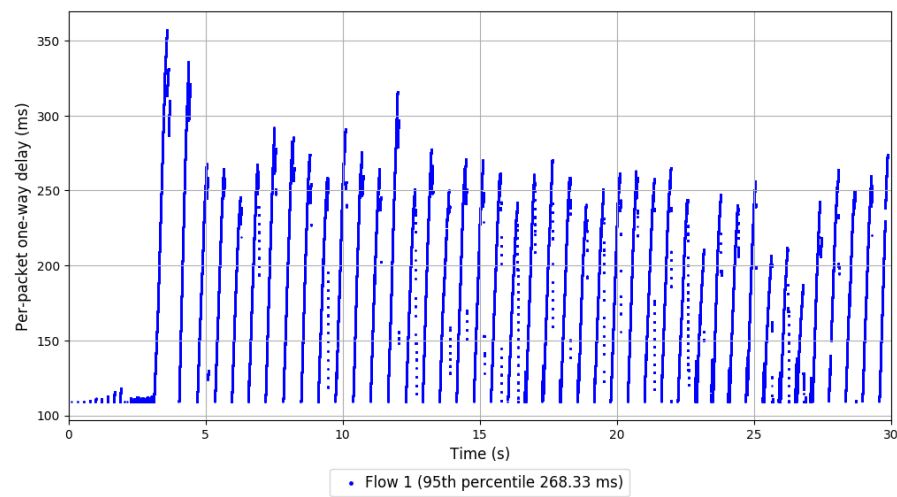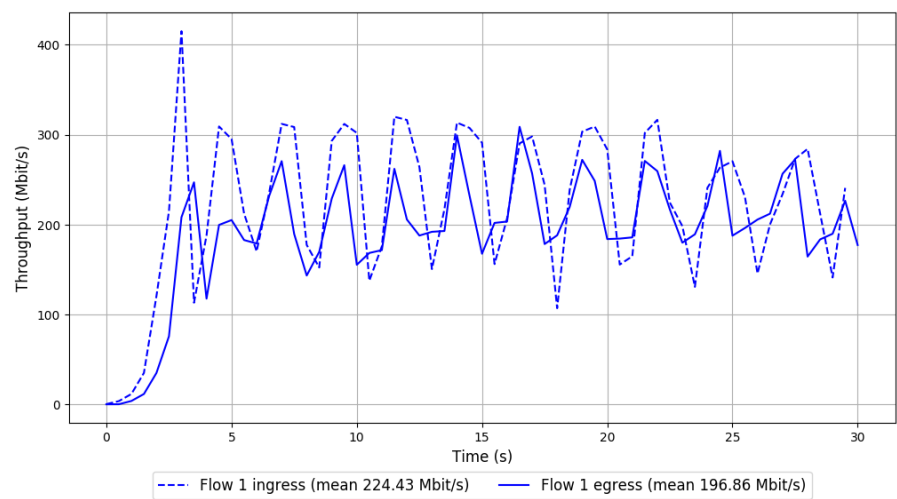
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2019-03-18 19:51:19
End at: 2019-03-18 19:51:49
Local clock offset: 4.217 ms
Remote clock offset: 4.33 ms


# Below is generated by plot.py at 2019-03-18 22:10:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 110.03 Mbit/s
95th percentile per-packet one-way delay: 203.828 ms
Loss rate: 2.99%
-- Flow 1:
Average throughput: 110.03 Mbit/s
95th percentile per-packet one-way delay: 203.828 ms
Loss rate: 2.99%
```
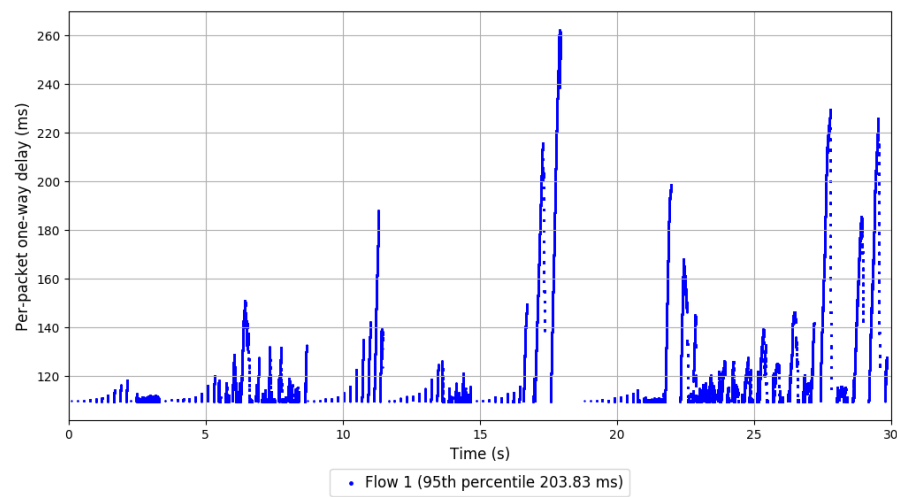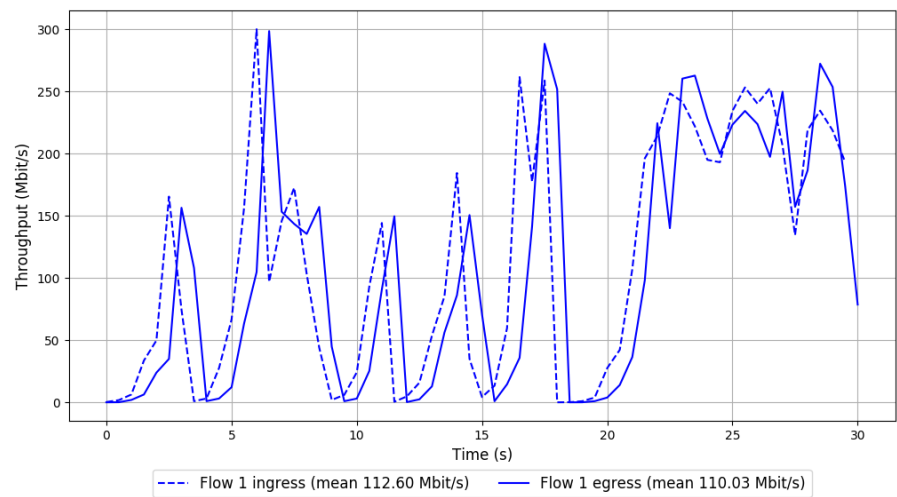
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-03-18 20:22:43
End at: 2019-03-18 20:23:13
Local clock offset: 1.9 ms
Remote clock offset: 1.509 ms


# Below is generated by plot.py at 2019-03-18 22:10:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.29 Mbit/s
95th percentile per-packet one-way delay: 118.664 ms
Loss rate: 3.19%
-- Flow 1:
Average throughput: 63.29 Mbit/s
95th percentile per-packet one-way delay: 118.664 ms
Loss rate: 3.19%
```
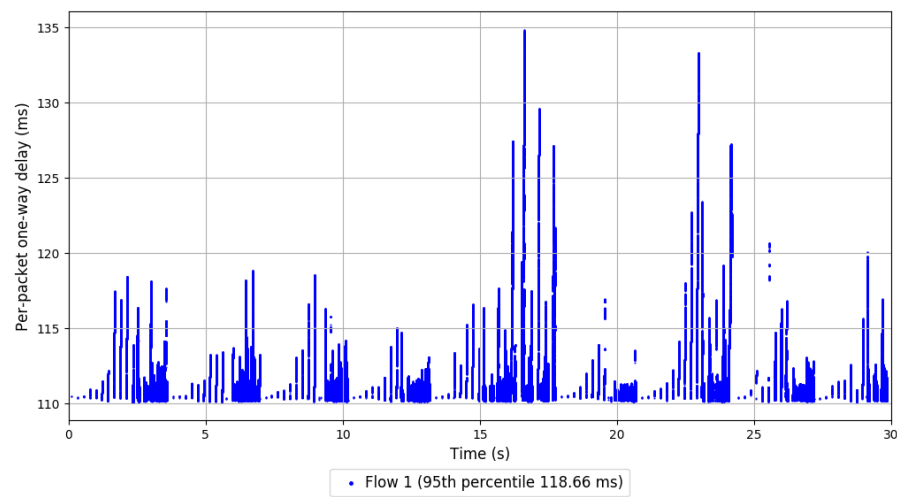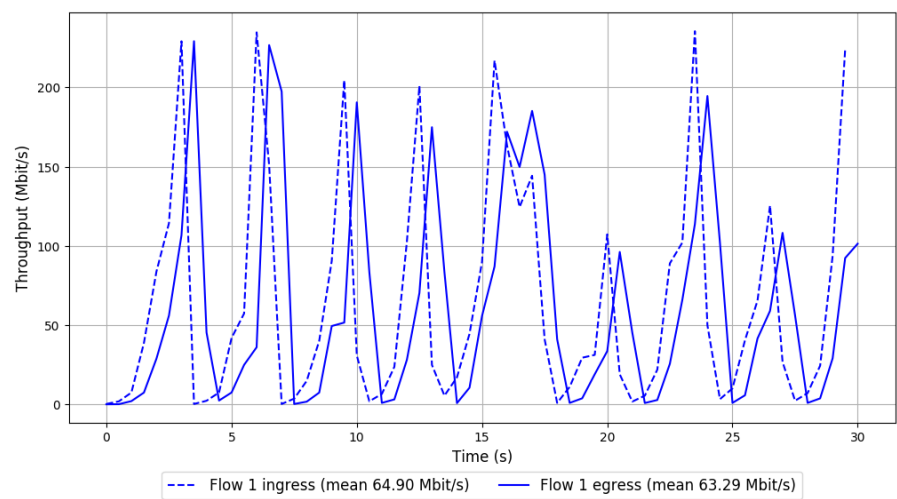
Run 5: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-03-18 17:57:46
End at: 2019-03-18 17:58:16
Local clock offset: 9.507 ms
Remote clock offset: 9.471 ms


# Below is generated by plot.py at 2019-03-18 22:10:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.28 Mbit/s
95th percentile per-packet one-way delay: 109.069 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 215.28 Mbit/s
95th percentile per-packet one-way delay: 109.069 ms
Loss rate: 0.86%
```
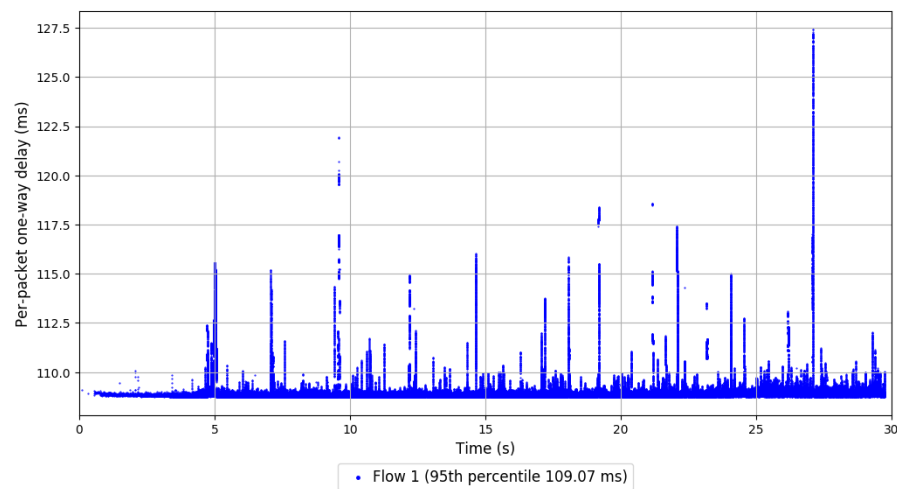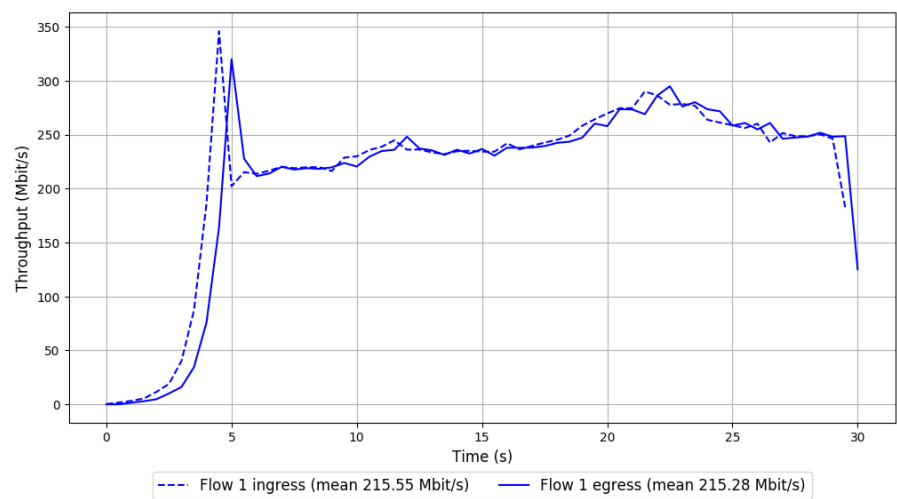
Run 1: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 215.55 Mbit/s) ----- Flow 1 egress (mean 215.28 Mbit/s)

Flow 1 (95th percentile 109.07 ms)

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-03-18 18:32:27
End at: 2019-03-18 18:32:57
Local clock offset: 21.241 ms
Remote clock offset: 20.58 ms


# Below is generated by plot.py at 2019-03-18 22:10:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 310.09 Mbit/s
95th percentile per-packet one-way delay: 113.917 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 310.09 Mbit/s
95th percentile per-packet one-way delay: 113.917 ms
Loss rate: 0.80%
```
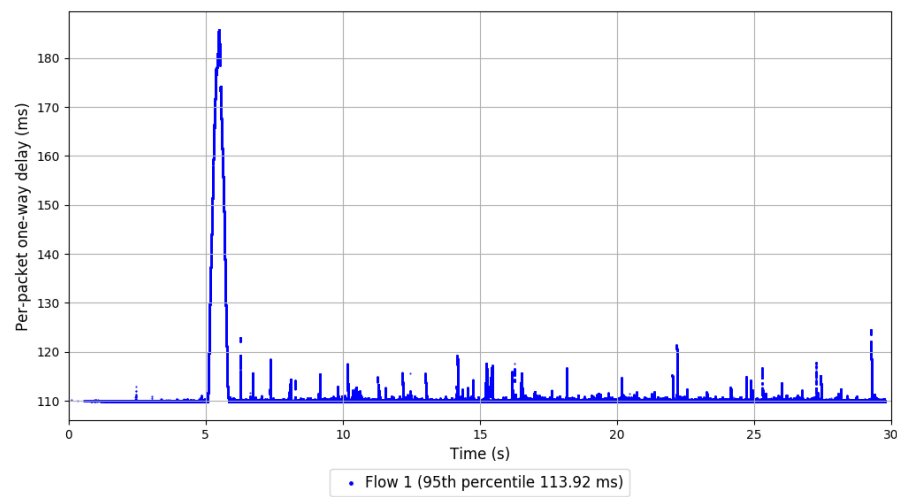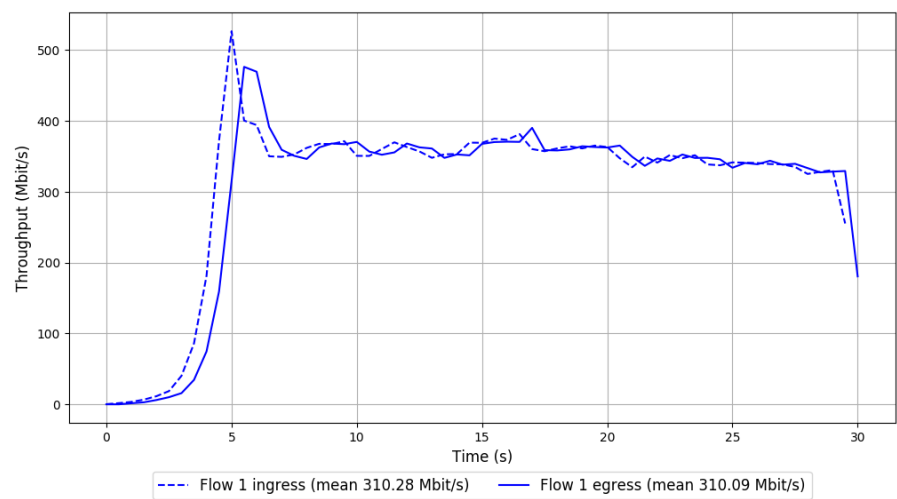
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 310.28 Mbit/s)   Flow 1 egress (mean 310.09 Mbit/s)
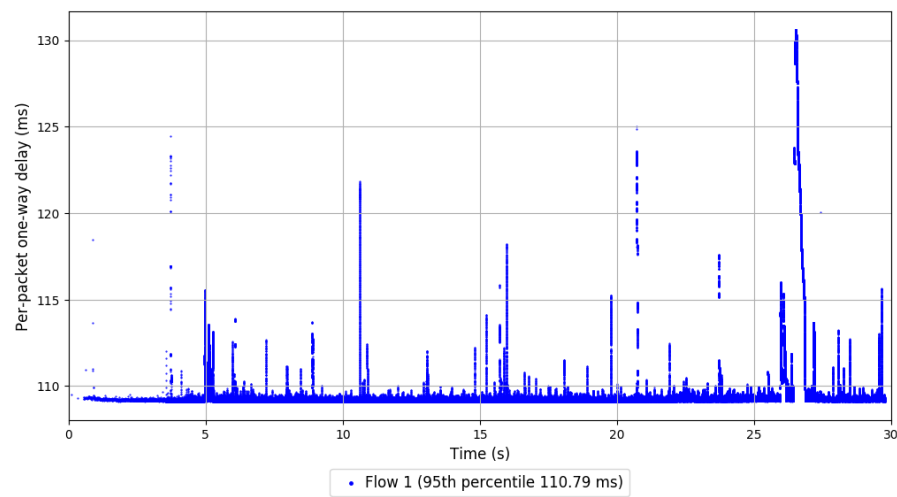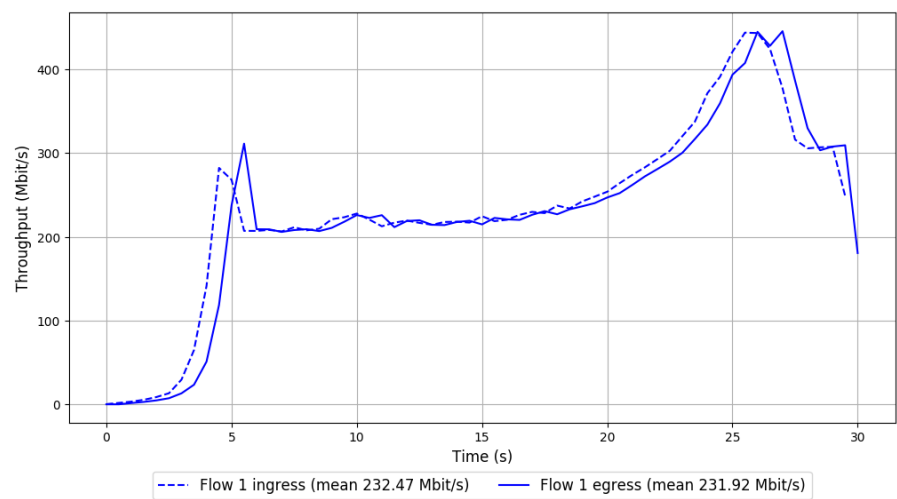

• Flow 1 (95th percentile 113.92 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-03-18 19:05:12
End at: 2019-03-18 19:05:42
Local clock offset: 17.948 ms
Remote clock offset: 17.239 ms


# Below is generated by plot.py at 2019-03-18 22:10:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 231.92 Mbit/s
95th percentile per-packet one-way delay: 110.787 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 231.92 Mbit/s
95th percentile per-packet one-way delay: 110.787 ms
Loss rate: 0.97%
```

Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-03-18 19:37:05
End at: 2019-03-18 19:37:35
Local clock offset: 8.998 ms
Remote clock offset: 8.391 ms


# Below is generated by plot.py at 2019-03-18 22:11:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 331.94 Mbit/s
95th percentile per-packet one-way delay: 135.314 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 331.94 Mbit/s
95th percentile per-packet one-way delay: 135.314 ms
Loss rate: 0.92%
```
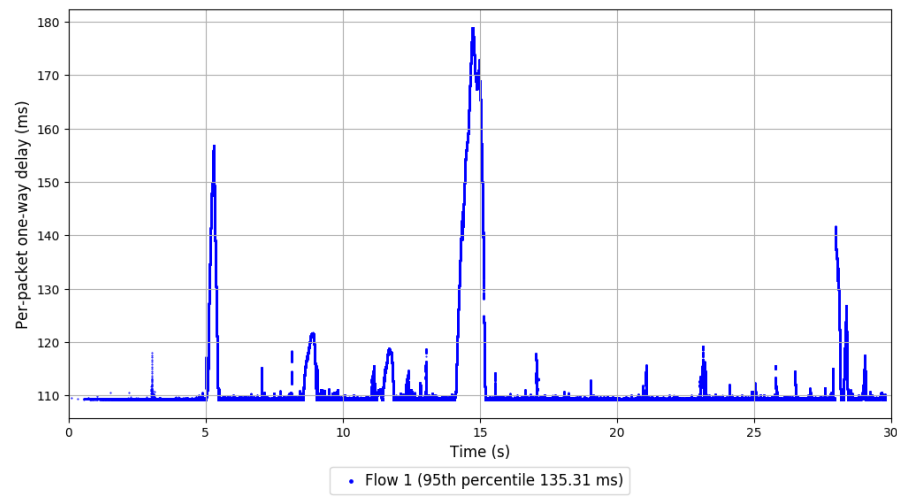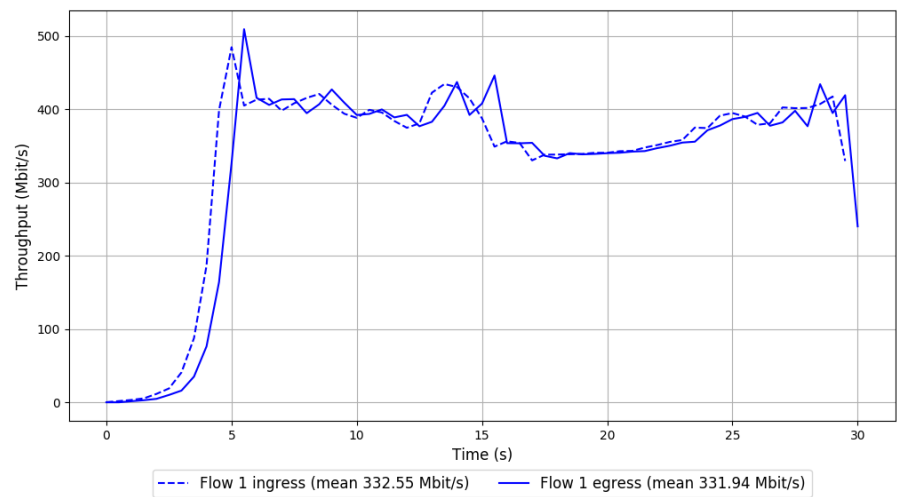
Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 332.55 Mbit/s)   Flow 1 egress (mean 331.94 Mbit/s)

• Flow 1 (95th percentile 135.31 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-03-18 20:08:50
End at: 2019-03-18 20:09:20
Local clock offset: 2.11 ms
Remote clock offset: 2.577 ms


# Below is generated by plot.py at 2019-03-18 22:11:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 313.65 Mbit/s
95th percentile per-packet one-way delay: 116.571 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 313.65 Mbit/s
95th percentile per-packet one-way delay: 116.571 ms
Loss rate: 0.73%
```
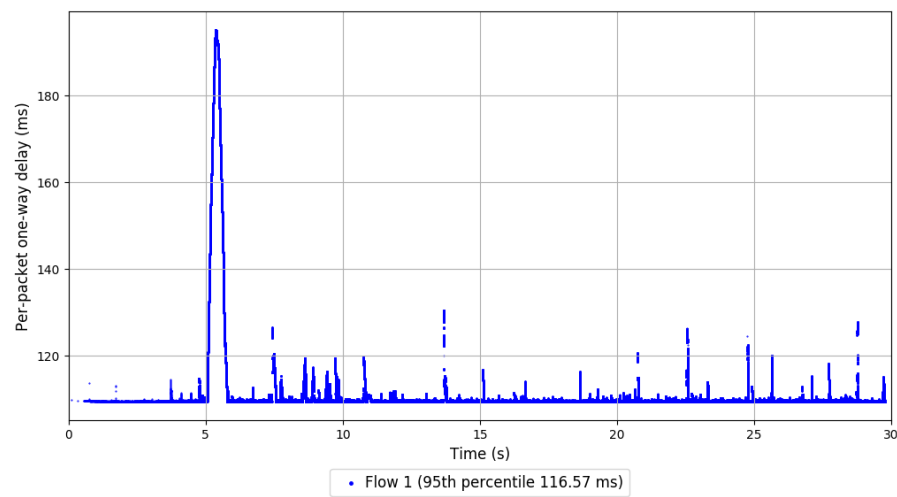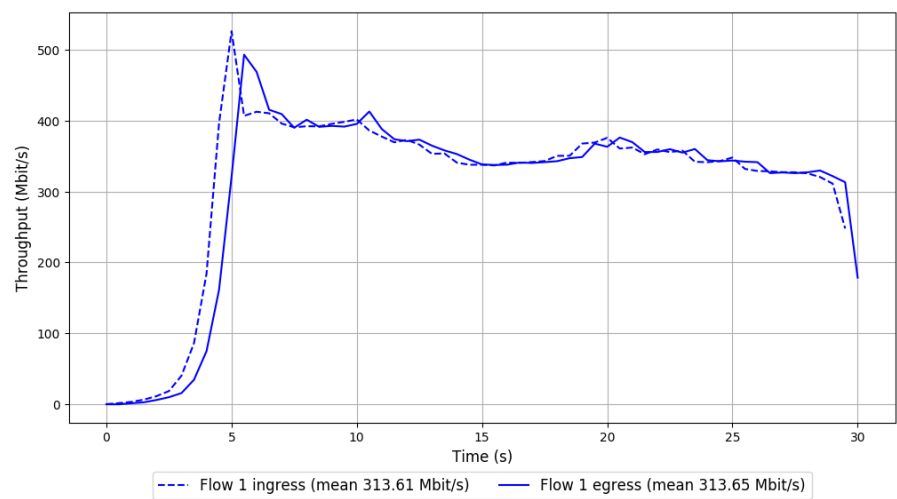
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 313.61 Mbit/s) — — — Flow 1 egress (mean 313.65 Mbit/s)

• Flow 1 (95th percentile 116.57 ms)
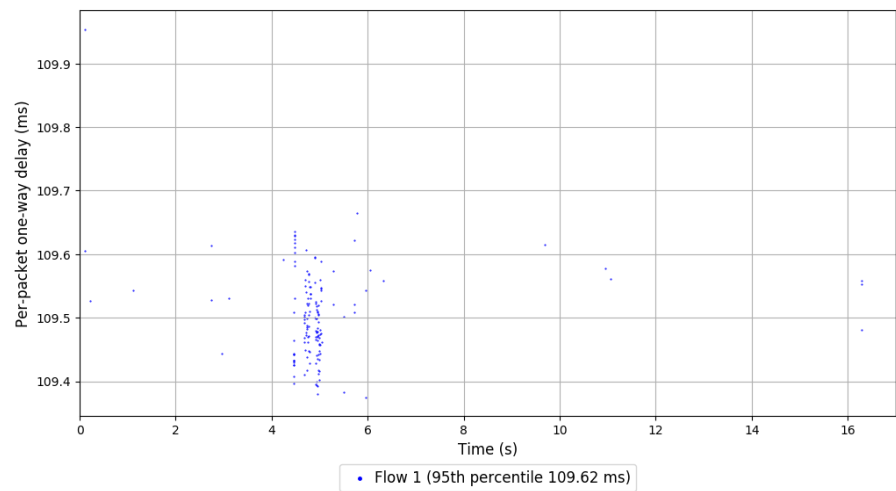
```
Run 1: Statistics of WebRTC media

Start at: 2019-03-18 17:59:12
End at: 2019-03-18 17:59:42
Local clock offset: 10.899 ms
Remote clock offset: 11.308 ms
```
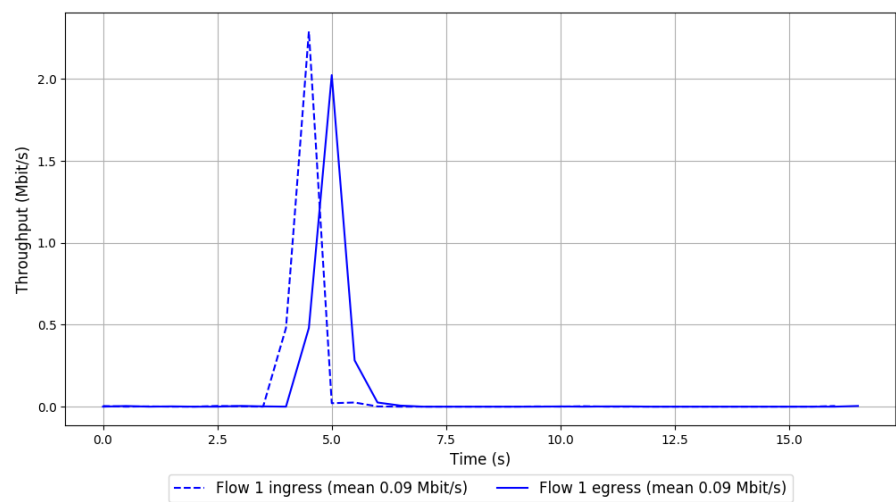
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-03-18 18:34:25
End at: 2019-03-18 18:34:55
Local clock offset: 22.159 ms
Remote clock offset: 21.54 ms


# Below is generated by plot.py at 2019-03-18 22:11:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.298 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.298 ms
Loss rate: 0.00%
```
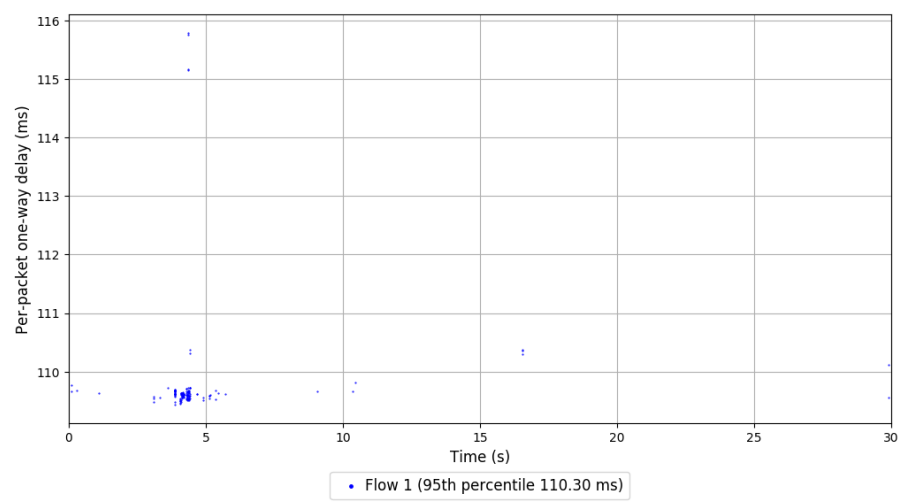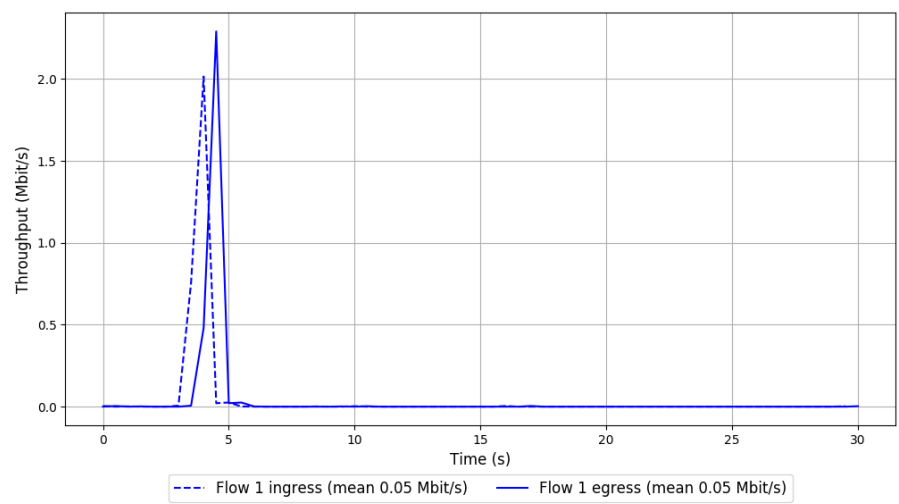
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-03-18 19:06:40
End at: 2019-03-18 19:07:10
Local clock offset: 17.046 ms
Remote clock offset: 16.38 ms


# Below is generated by plot.py at 2019-03-18 22:11:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.352 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.352 ms
Loss rate: 0.00%
```
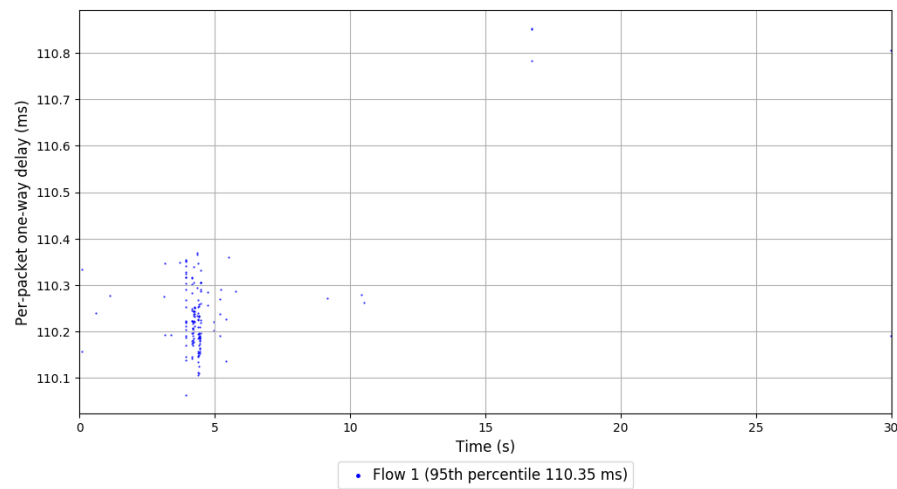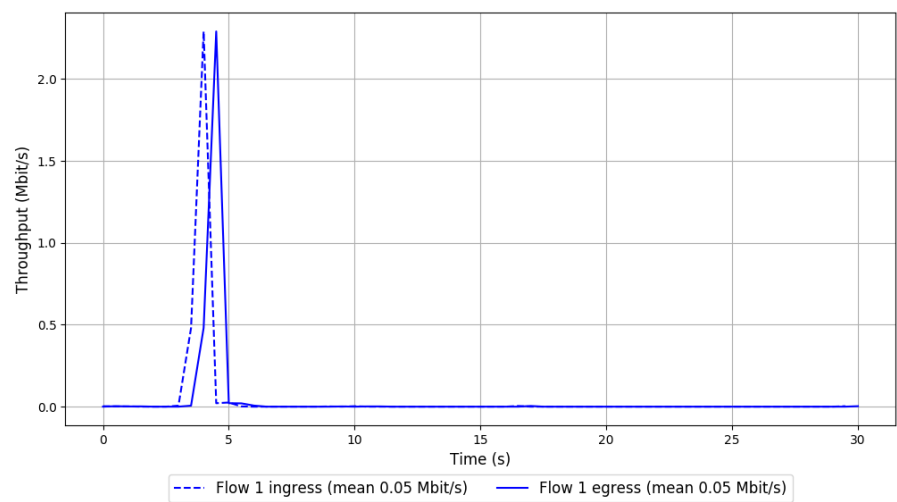
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-03-18 19:38:42
End at: 2019-03-18 19:39:12
Local clock offset: 8.07 ms
Remote clock offset: 7.454 ms


# Below is generated by plot.py at 2019-03-18 22:11:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.699 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.699 ms
Loss rate: 0.00%
```
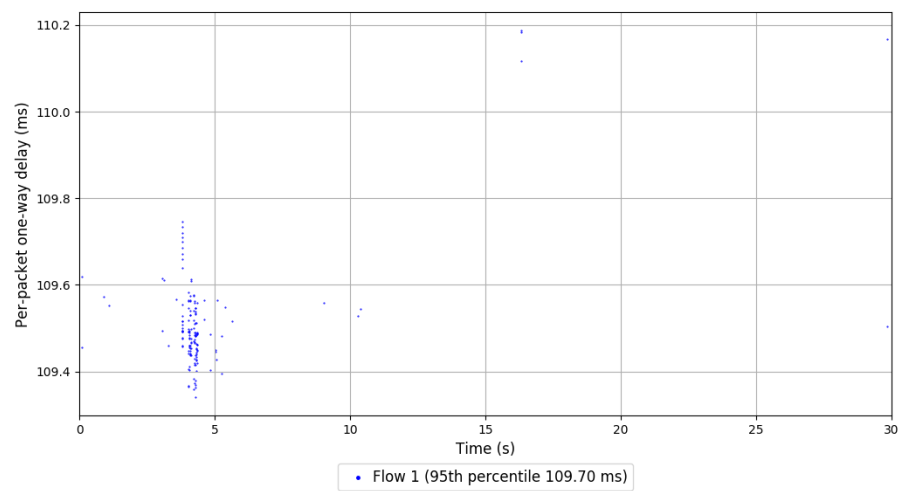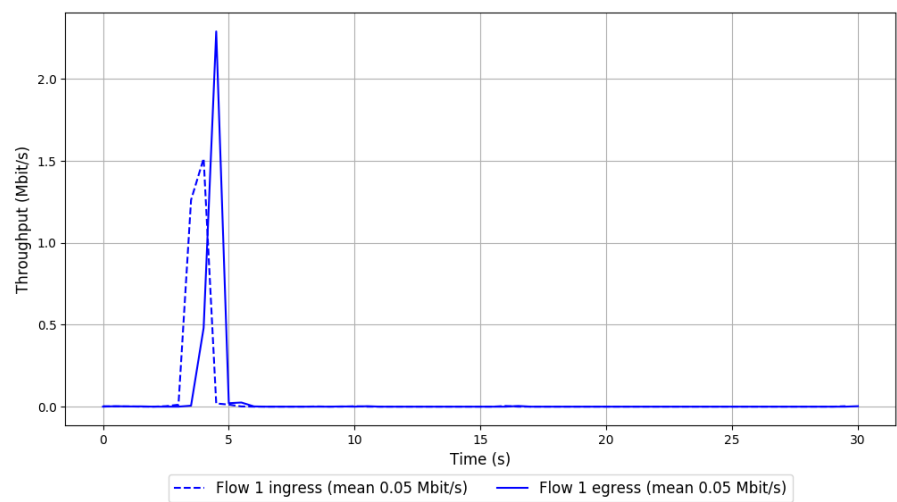
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-03-18 20:10:23
End at: 2019-03-18 20:10:53
Local clock offset: 2.441 ms
Remote clock offset: 2.325 ms
```

Run 5: Report of WebRTC media — Data Link