Pantheon Report

Generated at 2019-01-25 05:11:53 (UTC).

Data path: GCE Sydney on `ens4` (*local*) →GCE London on `ens4` (*remote*).

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.
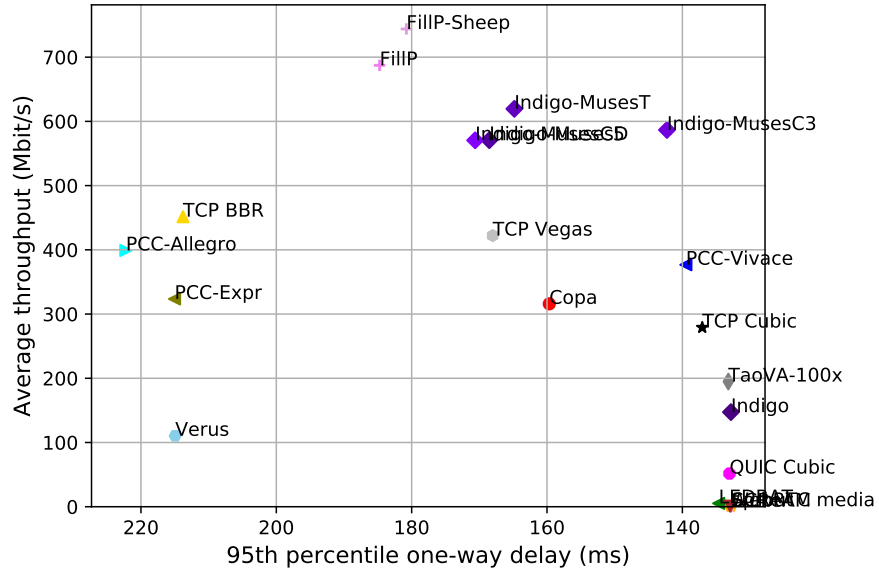
```
System info:
Linux 4.15.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 0b8e9a949603c3842368430acf469eec3b941f9f
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ d9c5ea33091330aca25ecd105ab2db6d34d5c40d
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
```
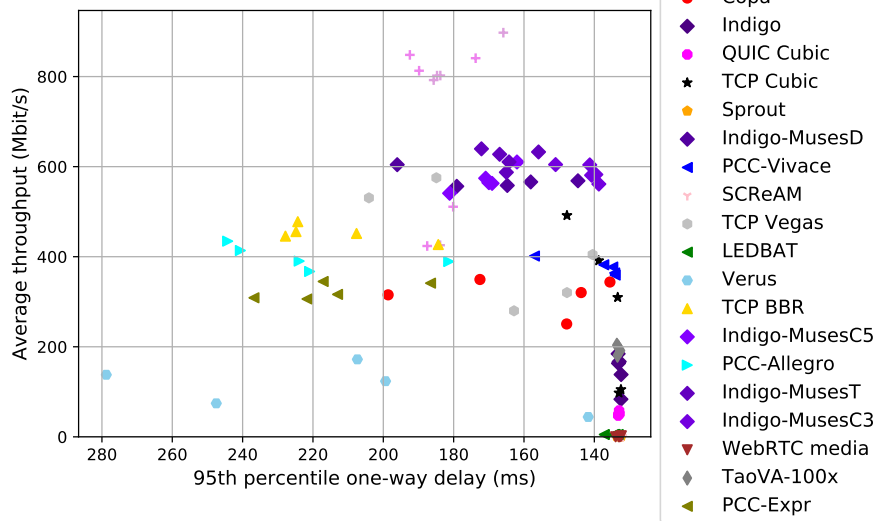
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

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

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

scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	451.62	213.79	0.57
Copa	5	315.91	159.67	0.00
TCP Cubic	5	279.03	137.06	0.00
FillP	5	687.34	184.74	1.28
FillP-Sheep	5	743.93	180.78	0.96
Indigo	5	147.31	132.82	0.00
Indigo-MusesC3	5	586.63	142.28	0.05
Indigo-MusesC5	5	570.54	170.62	0.21
Indigo-MusesD	5	570.71	168.53	0.18
Indigo-MusesT	5	619.50	164.83	0.18
LEDBAT	5	5.25	134.63	0.00
PCC-Allegro	5	399.01	222.23	2.14
PCC-Expr	5	323.49	215.04	1.56
QUIC Cubic	4	51.66	133.04	0.00
SCReAM	5	0.15	132.64	0.00
Sprout	5	0.66	132.85	0.00
TaoVA-100x	5	194.89	133.21	0.00
TCP Vegas	5	422.17	168.02	0.05
Verus	5	110.41	214.94	3.32
PCC-Vivace	5	376.76	139.49	0.05
WebRTC media	5	0.84	132.91	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2019-01-25 00:29:43
End at: 2019-01-25 00:30:13
Local clock offset: -0.283 ms
Remote clock offset: 0.381 ms


# Below is generated by plot.py at 2019-01-25 03:35:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 427.07 Mbit/s
95th percentile per-packet one-way delay: 184.370 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 427.07 Mbit/s
95th percentile per-packet one-way delay: 184.370 ms
Loss rate: 0.34%
```
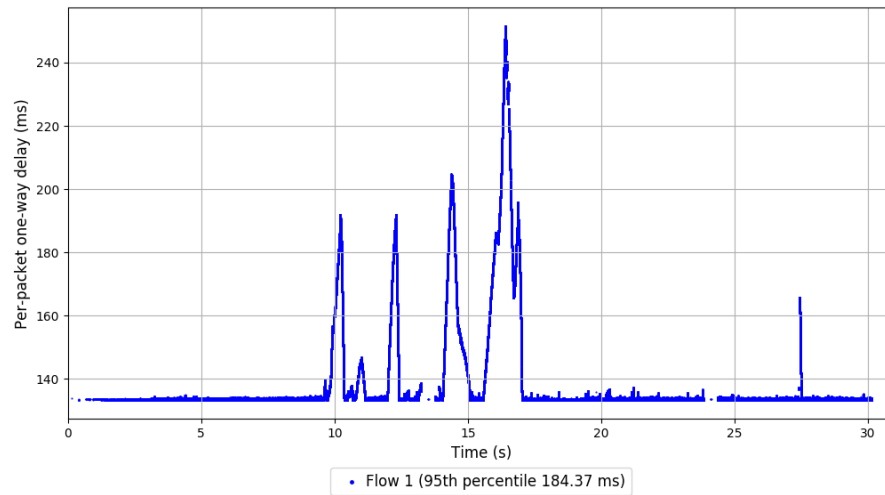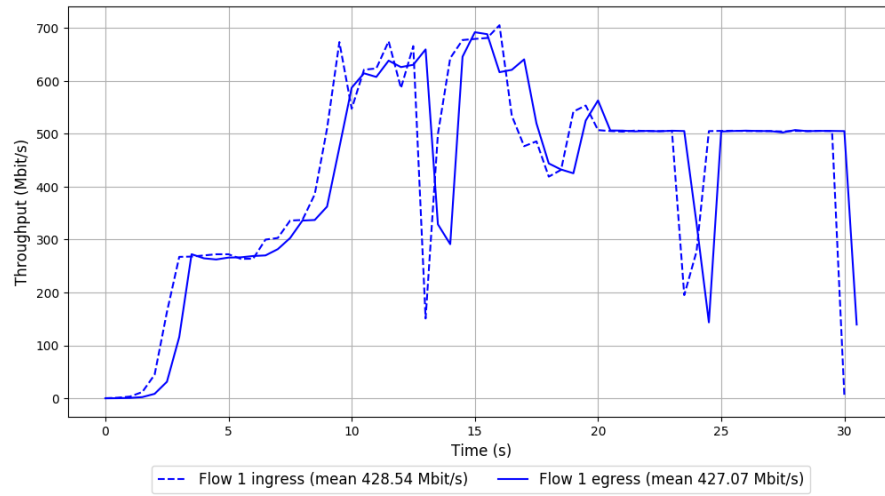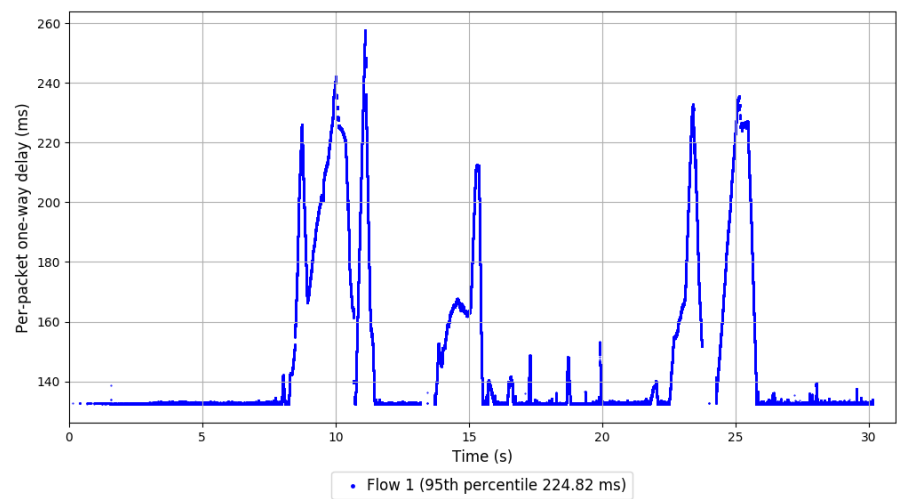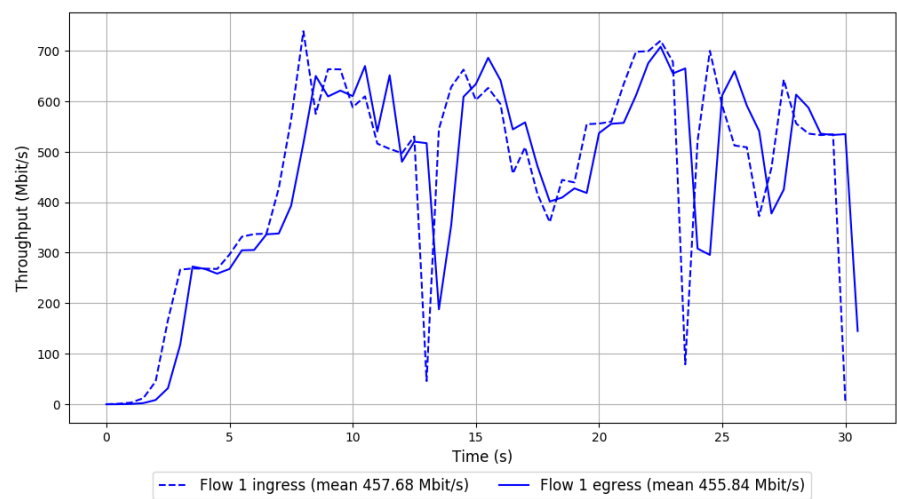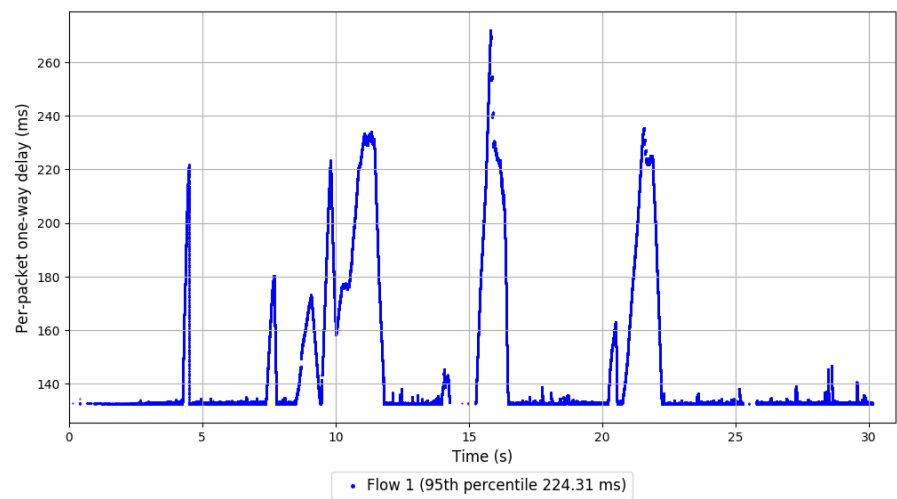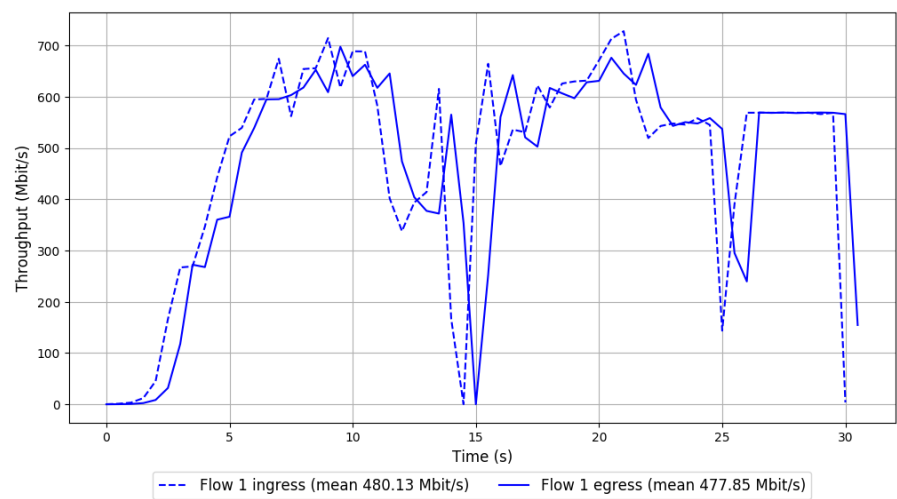
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 428.54 Mbit/s) — — — Flow 1 egress (mean 427.07 Mbit/s)

Flow 1 (95th percentile 184.37 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2019-01-25 01:04:41
End at: 2019-01-25 01:05:11
Local clock offset: 0.152 ms
Remote clock offset: -0.04 ms


# Below is generated by plot.py at 2019-01-25 03:37:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 455.84 Mbit/s
95th percentile per-packet one-way delay: 224.821 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 455.84 Mbit/s
95th percentile per-packet one-way delay: 224.821 ms
Loss rate: 0.40%
```
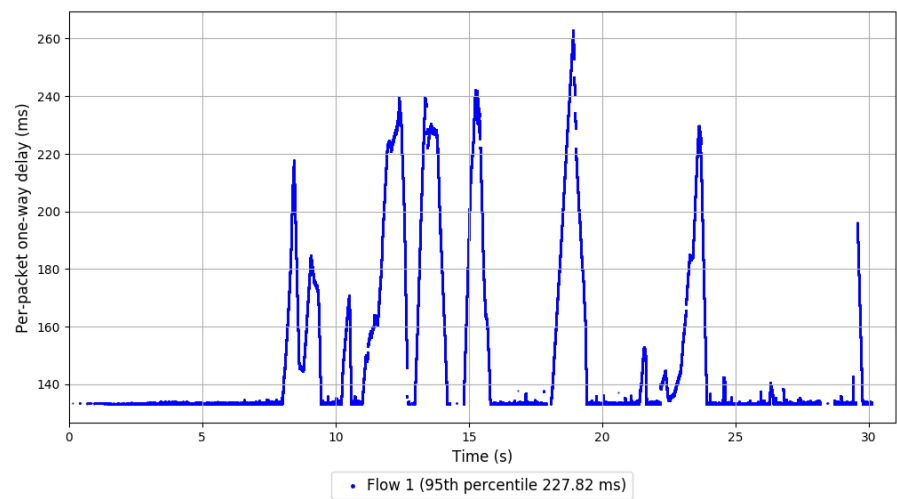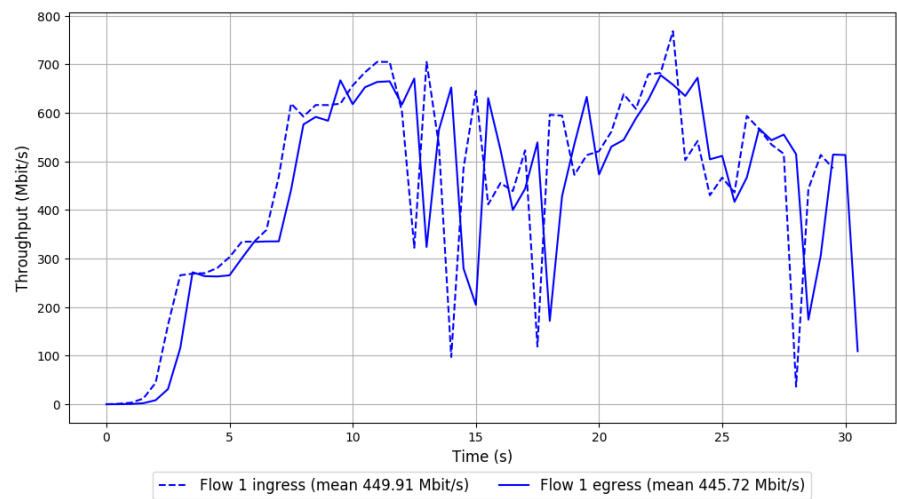
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 457.68 Mbit/s) ----   Flow 1 egress (mean 455.84 Mbit/s) ———

Flow 1 (95th percentile 224.82 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2019-01-25 01:39:59
End at: 2019-01-25 01:40:29
Local clock offset: 0.164 ms
Remote clock offset: -0.029 ms


# Below is generated by plot.py at 2019-01-25 03:37:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 477.85 Mbit/s
95th percentile per-packet one-way delay: 224.314 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 477.85 Mbit/s
95th percentile per-packet one-way delay: 224.314 ms
Loss rate: 0.48%
```
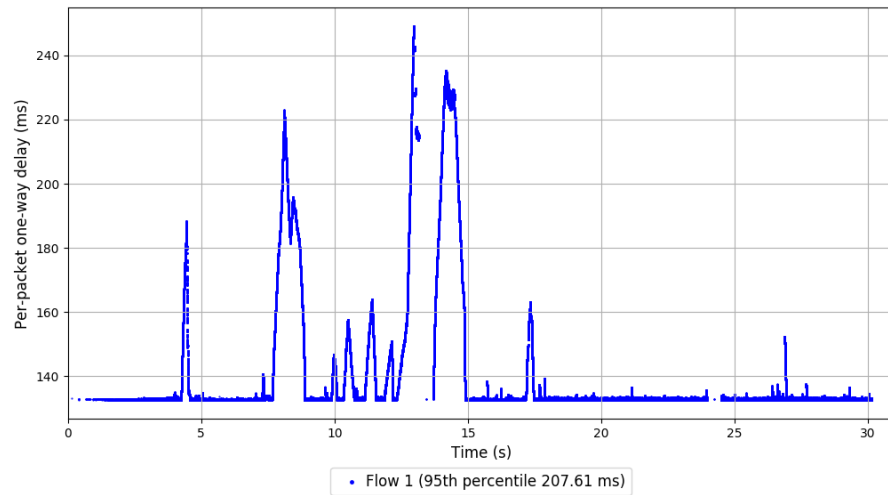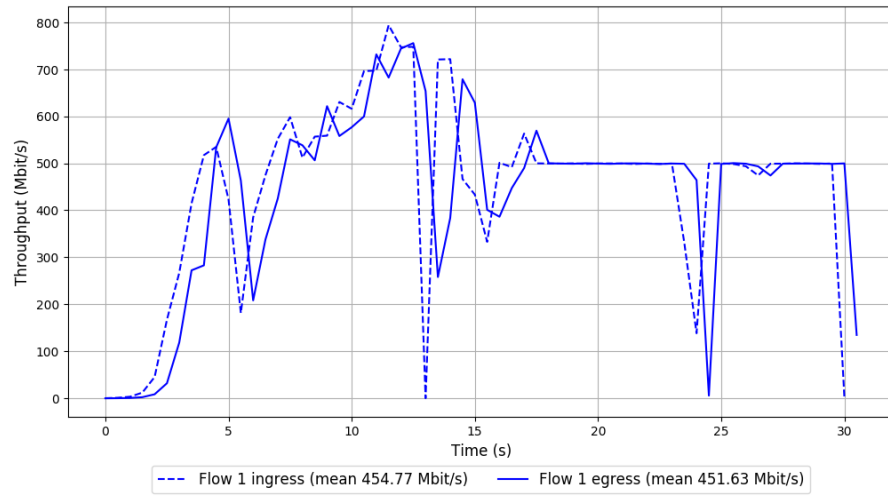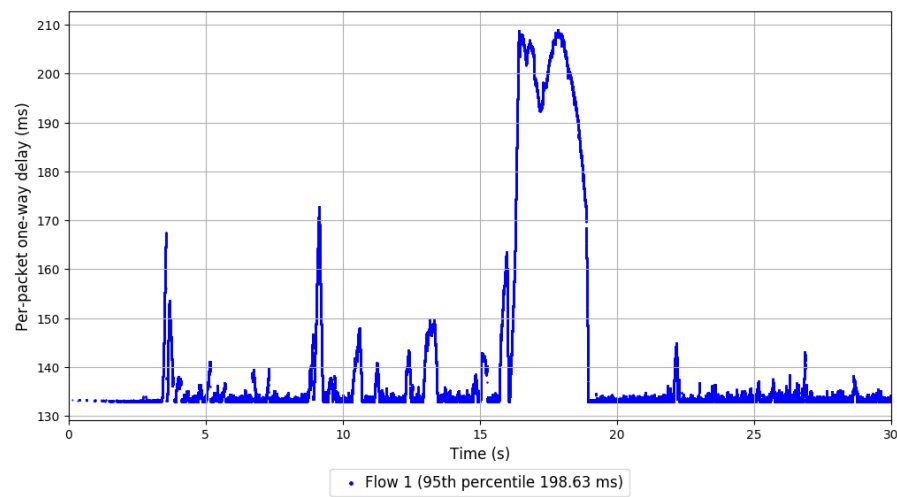
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 480.13 Mbit/s) --- Flow 1 egress (mean 477.85 Mbit/s)

· Flow 1 (95th percentile 224.31 ms)

10

```
Run 4: Statistics of TCP BBR

Start at: 2019-01-25 02:14:25
End at: 2019-01-25 02:14:55
Local clock offset: -0.225 ms
Remote clock offset: -0.067 ms


# Below is generated by plot.py at 2019-01-25 03:37:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 445.72 Mbit/s
95th percentile per-packet one-way delay: 227.823 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 445.72 Mbit/s
95th percentile per-packet one-way delay: 227.823 ms
Loss rate: 0.93%
```
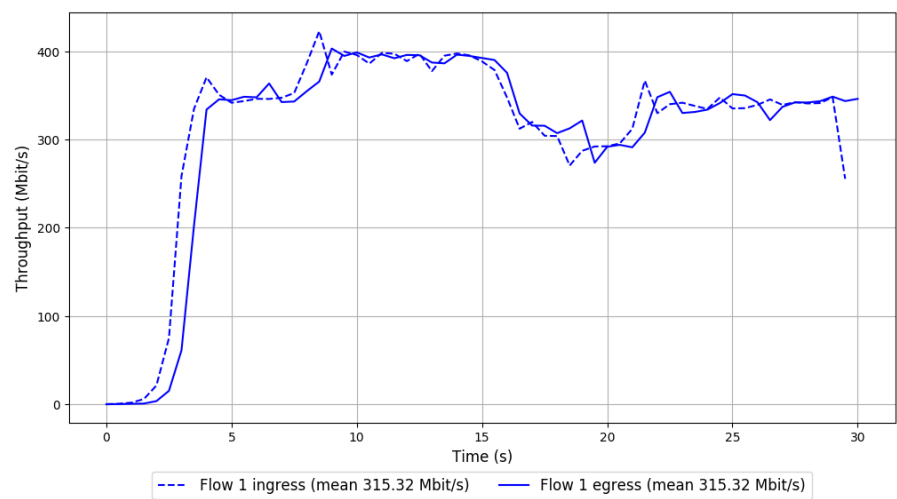
Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2019-01-25 02:49:46
End at: 2019-01-25 02:50:16
Local clock offset: 0.378 ms
Remote clock offset: -0.048 ms


# Below is generated by plot.py at 2019-01-25 03:37:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 451.63 Mbit/s
95th percentile per-packet one-way delay: 207.612 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 451.63 Mbit/s
95th percentile per-packet one-way delay: 207.612 ms
Loss rate: 0.69%
```
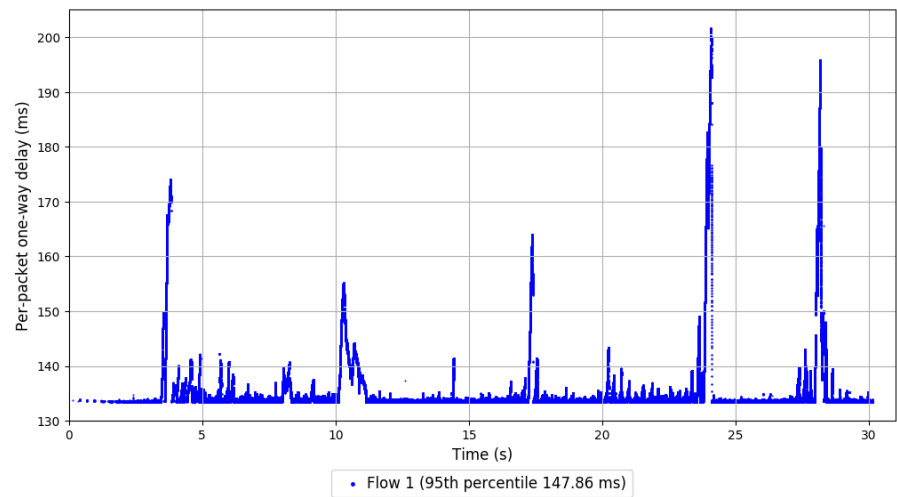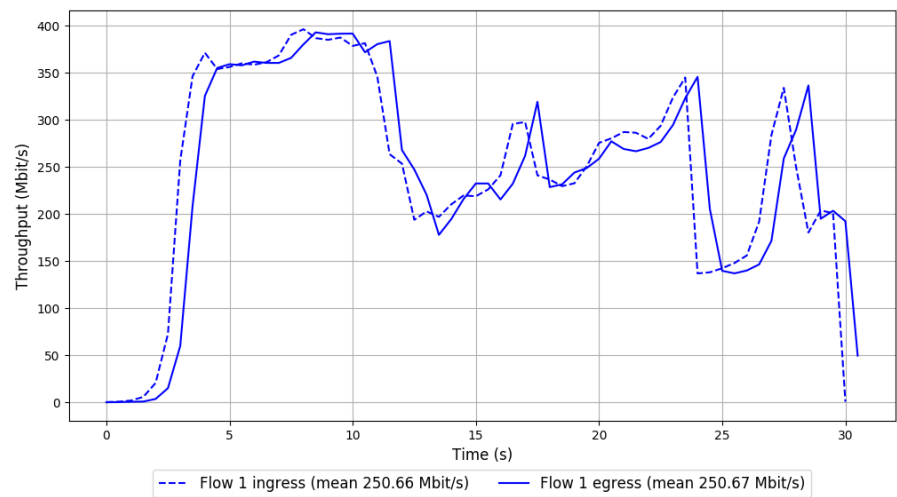
Run 5: Report of TCP BBR — Data Link
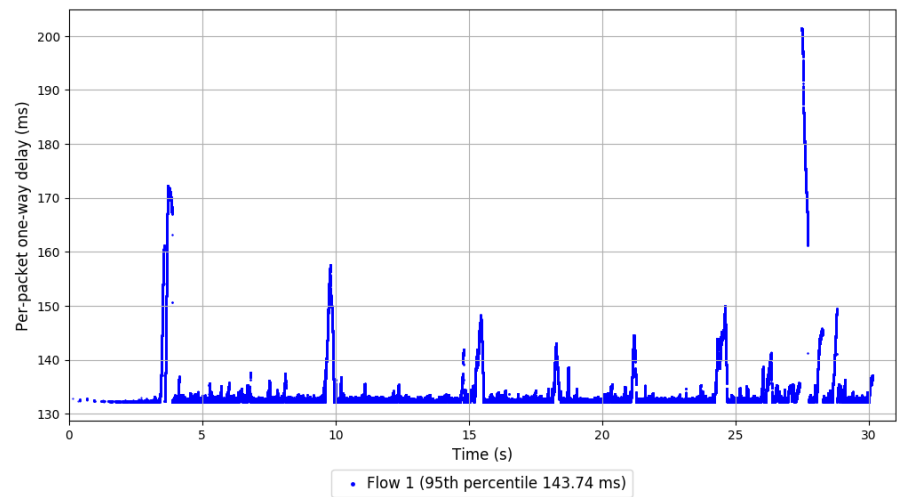

14

```
Run 1: Statistics of Copa

Start at: 2019-01-25 00:22:47
End at: 2019-01-25 00:23:17
Local clock offset: -0.175 ms
Remote clock offset: -0.109 ms


# Below is generated by plot.py at 2019-01-25 03:38:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 315.32 Mbit/s
95th percentile per-packet one-way delay: 198.629 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 315.32 Mbit/s
95th percentile per-packet one-way delay: 198.629 ms
Loss rate: 0.00%
```
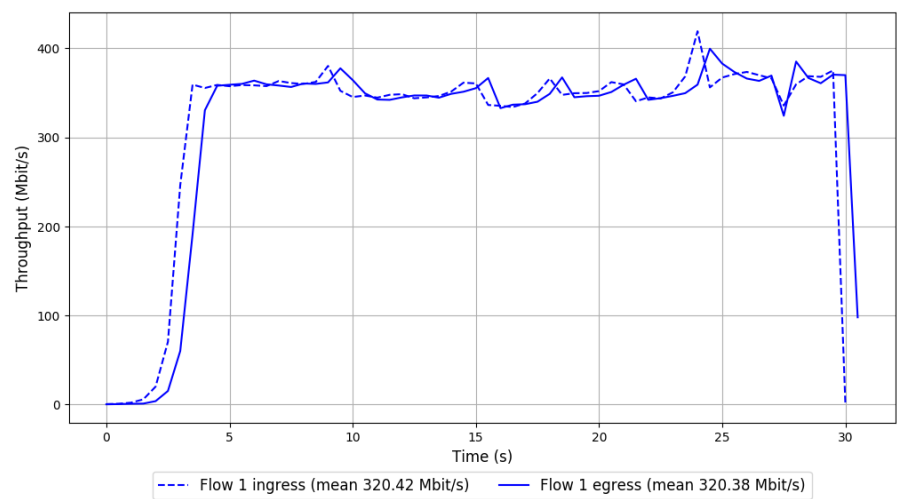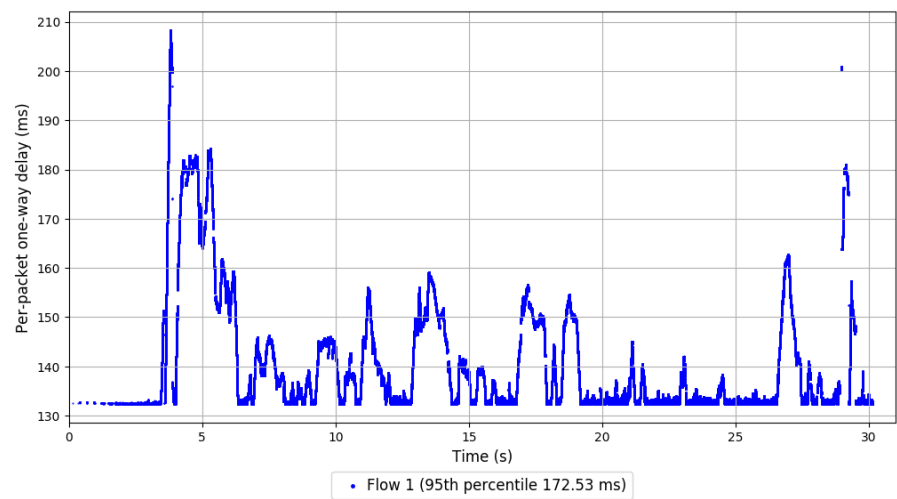
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2019-01-25 00:58:27
End at: 2019-01-25 00:58:57
Local clock offset: -0.615 ms
Remote clock offset: 0.029 ms


# Below is generated by plot.py at 2019-01-25 03:38:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 250.67 Mbit/s
95th percentile per-packet one-way delay: 147.864 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 250.67 Mbit/s
95th percentile per-packet one-way delay: 147.864 ms
Loss rate: 0.00%
```
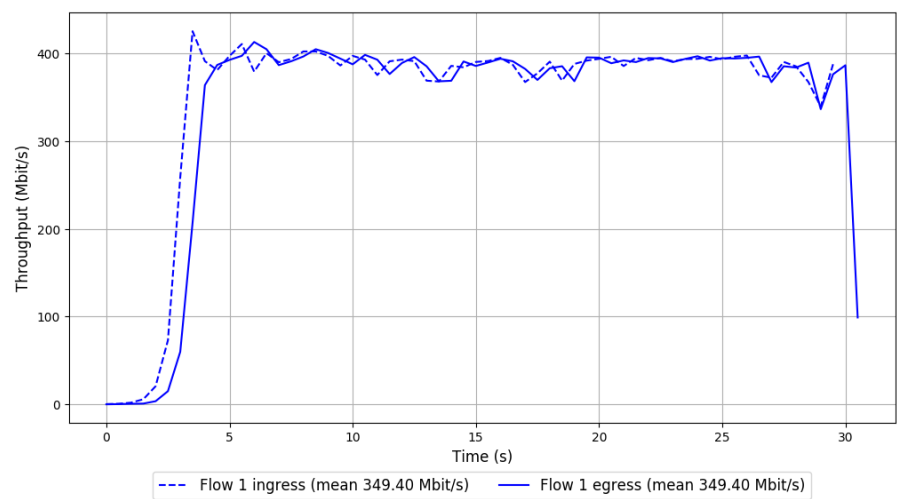
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2019-01-25 01:33:04
End at: 2019-01-25 01:33:34
Local clock offset: 0.192 ms
Remote clock offset: -0.378 ms


# Below is generated by plot.py at 2019-01-25 03:39:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 320.38 Mbit/s
95th percentile per-packet one-way delay: 143.743 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 320.38 Mbit/s
95th percentile per-packet one-way delay: 143.743 ms
Loss rate: 0.01%
```
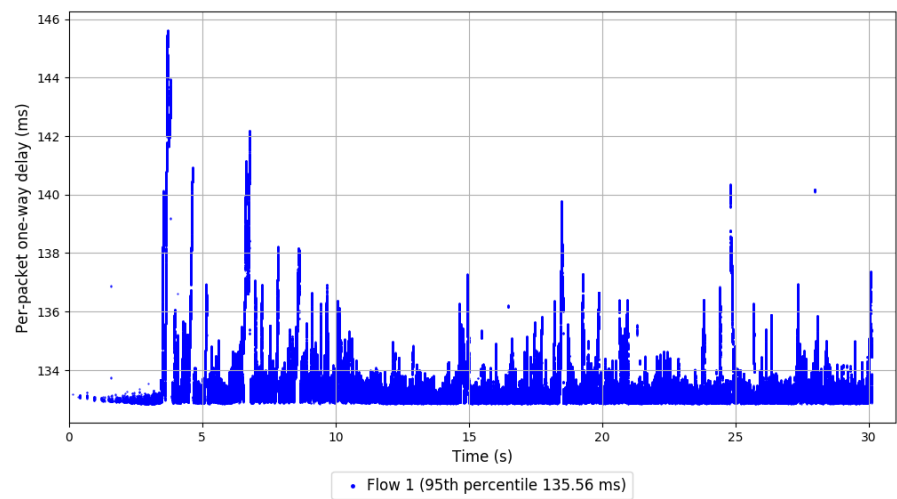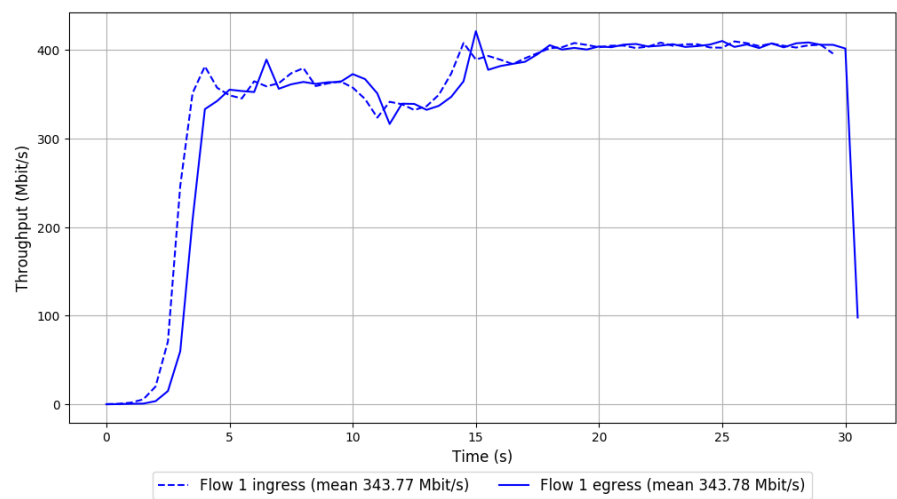
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2019-01-25 02:08:10
End at: 2019-01-25 02:08:40
Local clock offset: -0.135 ms
Remote clock offset: -0.142 ms


# Below is generated by plot.py at 2019-01-25 03:47:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 349.40 Mbit/s
95th percentile per-packet one-way delay: 172.525 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 349.40 Mbit/s
95th percentile per-packet one-way delay: 172.525 ms
Loss rate: 0.00%
```
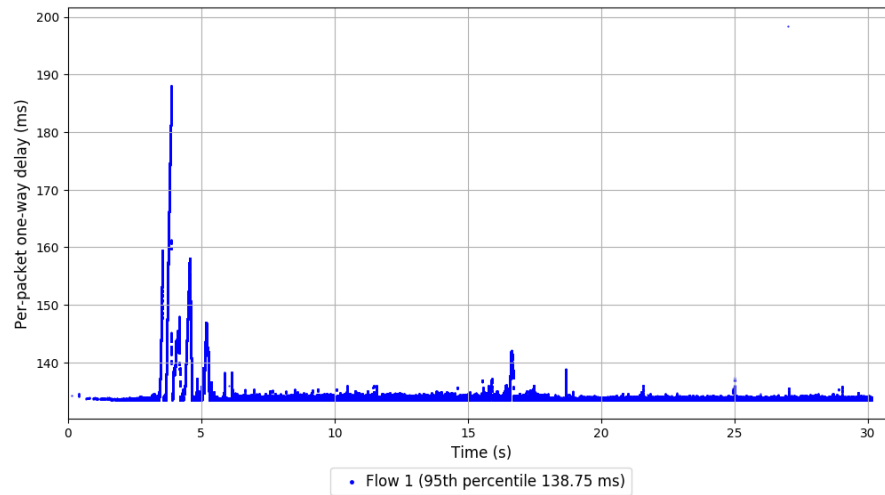
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2019-01-25 02:42:17
End at: 2019-01-25 02:42:47
Local clock offset: 0.047 ms
Remote clock offset: -0.087 ms


# Below is generated by plot.py at 2019-01-25 03:48:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 343.78 Mbit/s
95th percentile per-packet one-way delay: 135.565 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 343.78 Mbit/s
95th percentile per-packet one-way delay: 135.565 ms
Loss rate: 0.00%
```
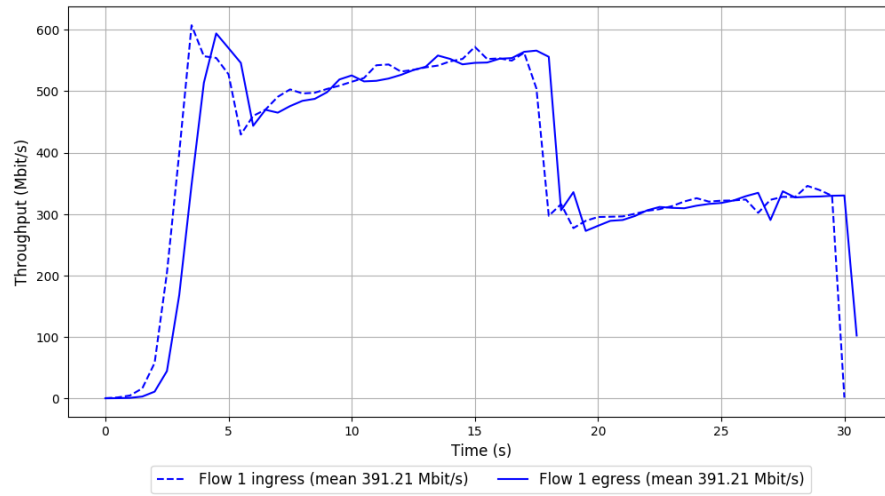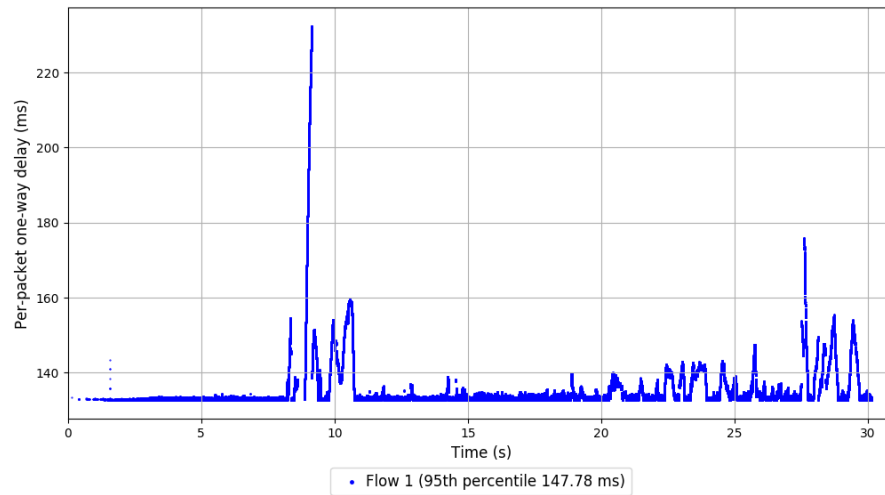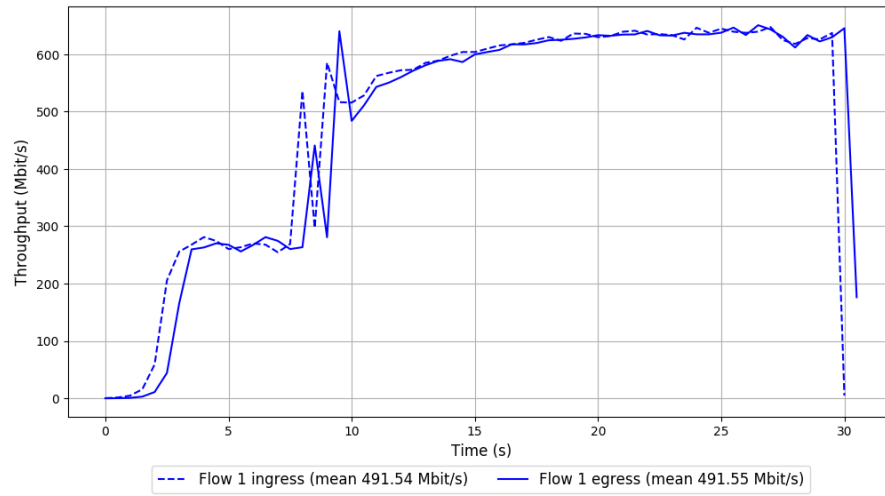
Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 343.77 Mbit/s)   Flow 1 egress (mean 343.78 Mbit/s)

Flow 1 (95th percentile 135.56 ms)

```
Run 1: Statistics of TCP Cubic

Start at: 2019-01-25 00:38:19
End at: 2019-01-25 00:38:49
Local clock offset: -0.191 ms
Remote clock offset: 0.328 ms


# Below is generated by plot.py at 2019-01-25 03:48:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 391.21 Mbit/s
95th percentile per-packet one-way delay: 138.745 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 391.21 Mbit/s
95th percentile per-packet one-way delay: 138.745 ms
Loss rate: 0.00%
```
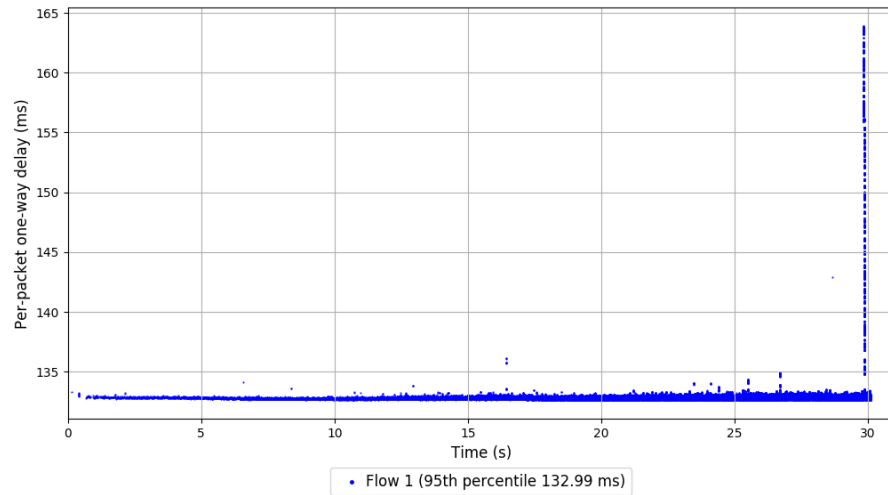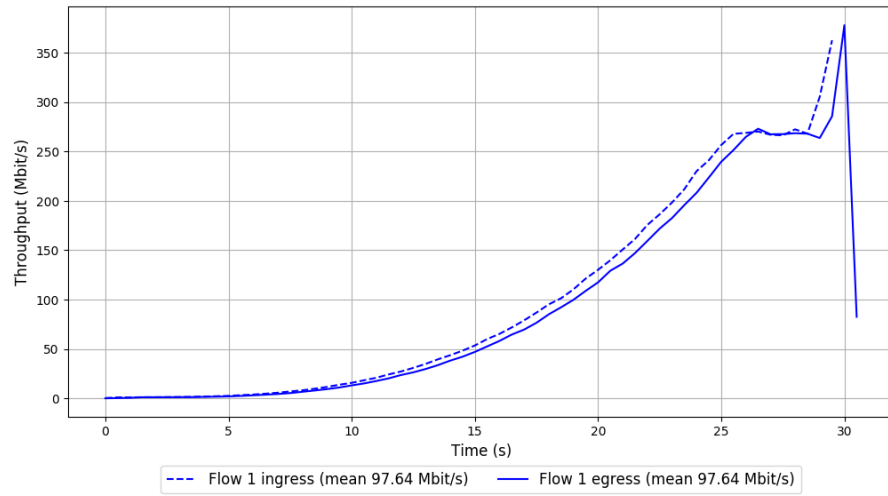
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2019-01-25 01:13:38
End at: 2019-01-25 01:14:08
Local clock offset: -0.065 ms
Remote clock offset: -0.087 ms


# Below is generated by plot.py at 2019-01-25 03:48:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 491.55 Mbit/s
95th percentile per-packet one-way delay: 147.784 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 491.55 Mbit/s
95th percentile per-packet one-way delay: 147.784 ms
Loss rate: 0.00%
```
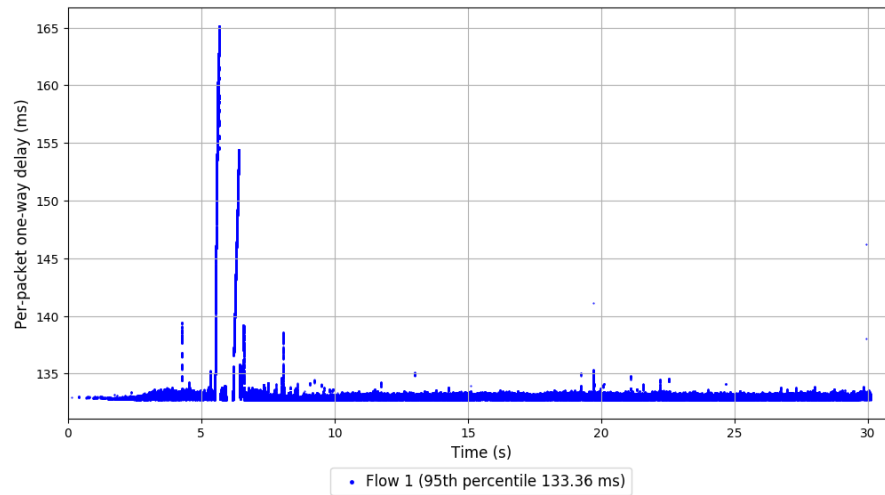
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 491.54 Mbit/s)   Flow 1 egress (mean 491.55 Mbit/s)

Flow 1 (95th percentile 147.78 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2019-01-25 01:49:00
End at: 2019-01-25 01:49:30
Local clock offset: 0.165 ms
Remote clock offset: -0.033 ms


# Below is generated by plot.py at 2019-01-25 03:48:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.64 Mbit/s
95th percentile per-packet one-way delay: 132.990 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 97.64 Mbit/s
95th percentile per-packet one-way delay: 132.990 ms
Loss rate: 0.00%
```
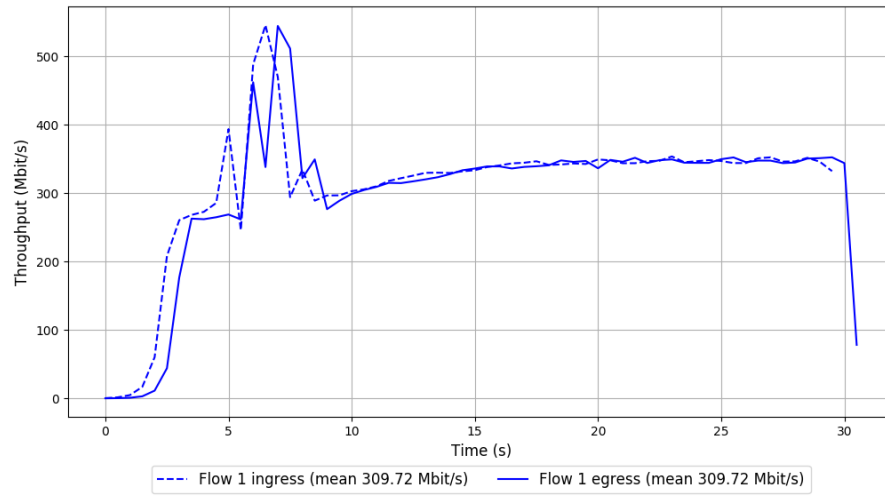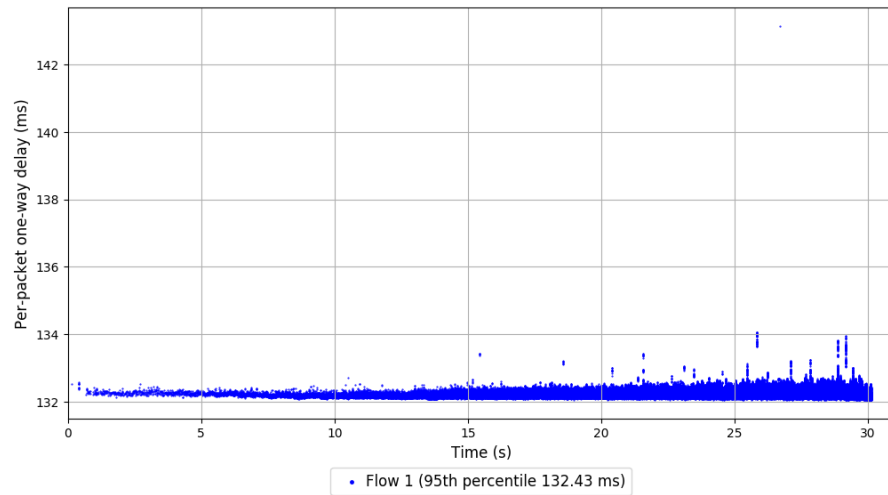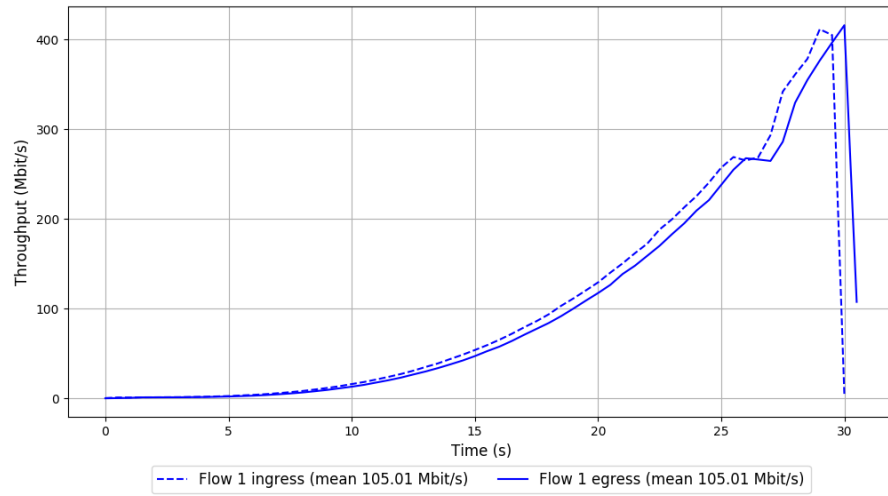
Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2019-01-25 02:22:53
End at: 2019-01-25 02:23:23
Local clock offset: 0.156 ms
Remote clock offset: 0.069 ms


# Below is generated by plot.py at 2019-01-25 03:48:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 309.72 Mbit/s
95th percentile per-packet one-way delay: 133.358 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 309.72 Mbit/s
95th percentile per-packet one-way delay: 133.358 ms
Loss rate: 0.00%
```
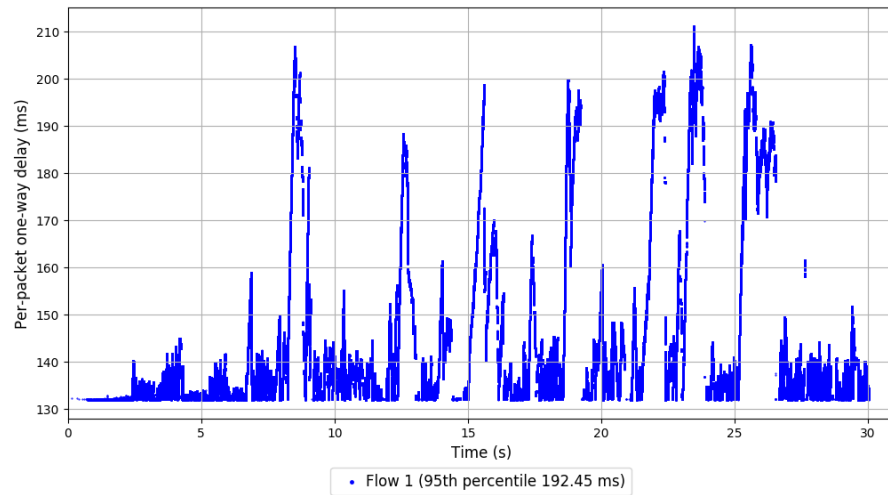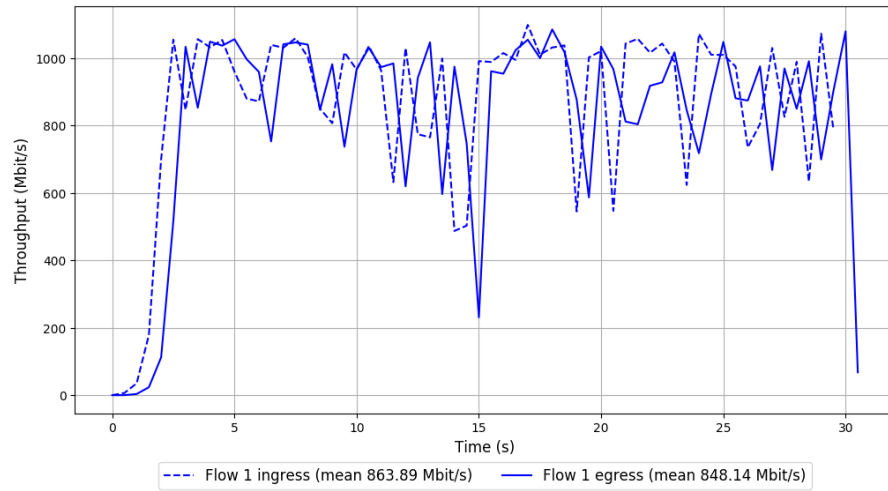
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 309.72 Mbit/s)   Flow 1 egress (mean 309.72 Mbit/s)

Flow 1 (95th percentile 133.36 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2019-01-25 02:58:50
End at: 2019-01-25 02:59:20
Local clock offset: -0.104 ms
Remote clock offset: -0.058 ms


# Below is generated by plot.py at 2019-01-25 03:48:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 105.01 Mbit/s
95th percentile per-packet one-way delay: 132.434 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 105.01 Mbit/s
95th percentile per-packet one-way delay: 132.434 ms
Loss rate: 0.00%
```
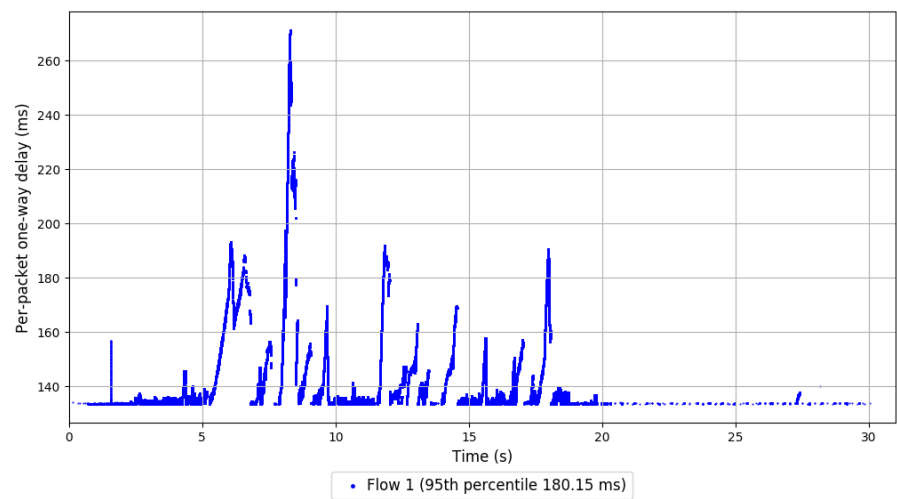
Run 5: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2019-01-25 00:36:18
End at: 2019-01-25 00:36:48
Local clock offset: 0.262 ms
Remote clock offset: -0.465 ms


# Below is generated by plot.py at 2019-01-25 03:58:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 848.14 Mbit/s
95th percentile per-packet one-way delay: 192.449 ms
Loss rate: 1.82%
-- Flow 1:
Average throughput: 848.14 Mbit/s
95th percentile per-packet one-way delay: 192.449 ms
Loss rate: 1.82%
```
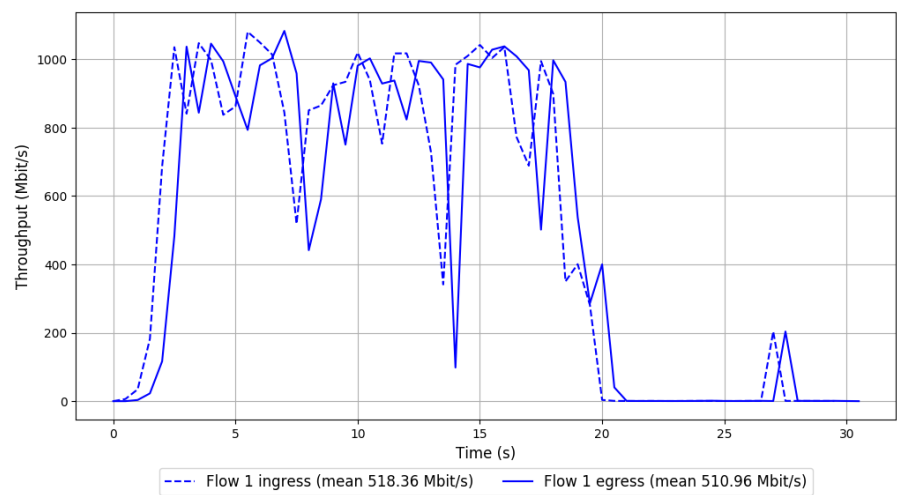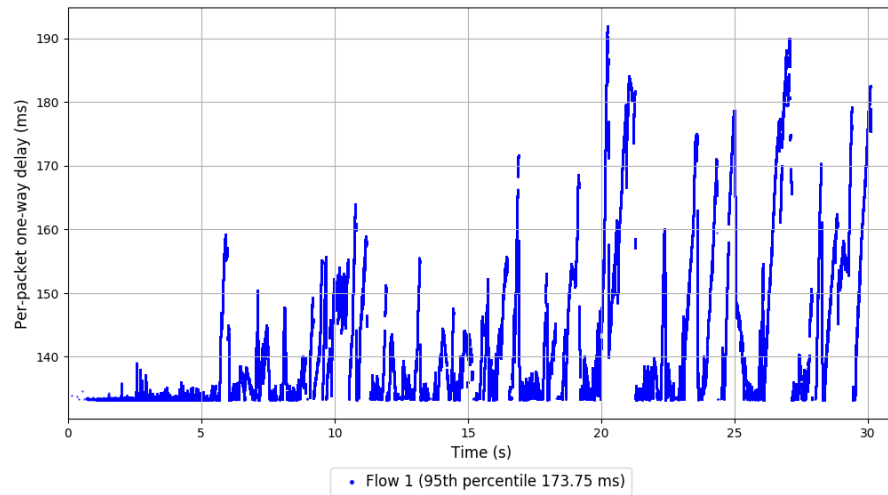
Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 863.89 Mbit/s) ---- Flow 1 egress (mean 848.14 Mbit/s) ——

• Flow 1 (95th percentile 192.45 ms)

```
Run 2: Statistics of FillP

Start at: 2019-01-25 01:11:53
End at: 2019-01-25 01:12:23
Local clock offset: -0.373 ms
Remote clock offset: 0.116 ms


# Below is generated by plot.py at 2019-01-25 03:58:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 510.96 Mbit/s
95th percentile per-packet one-way delay: 180.145 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 510.96 Mbit/s
95th percentile per-packet one-way delay: 180.145 ms
Loss rate: 1.43%
```
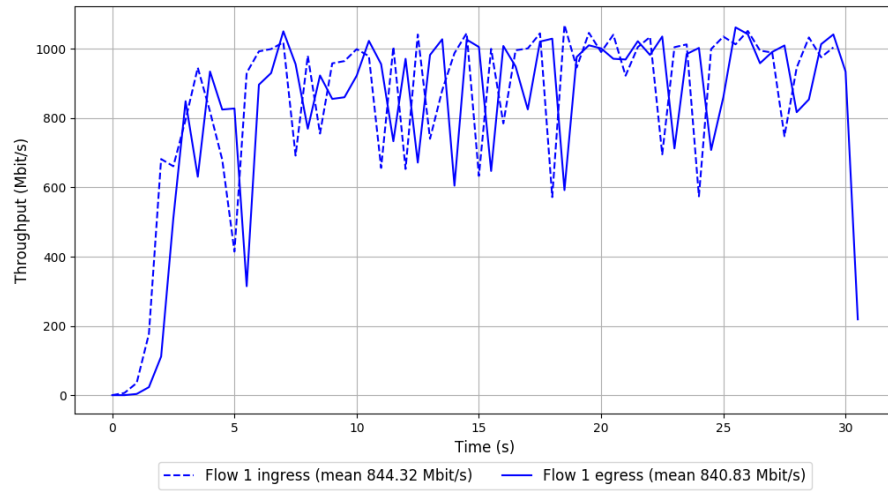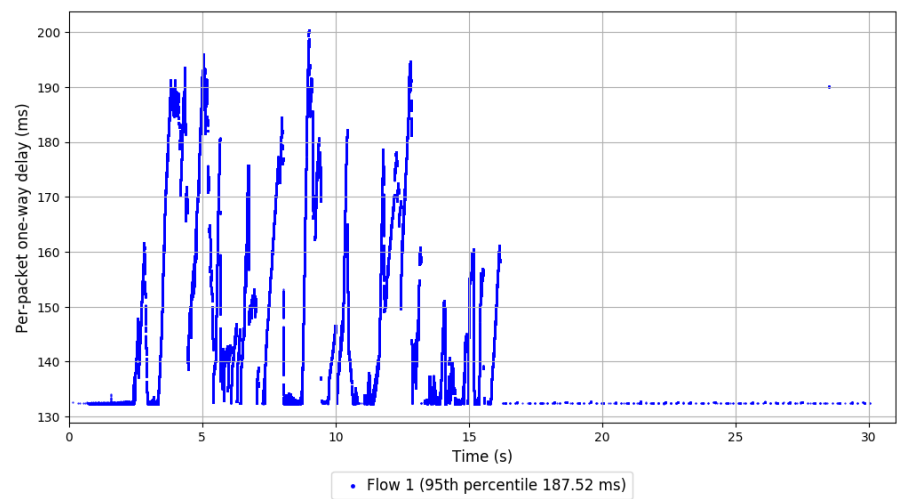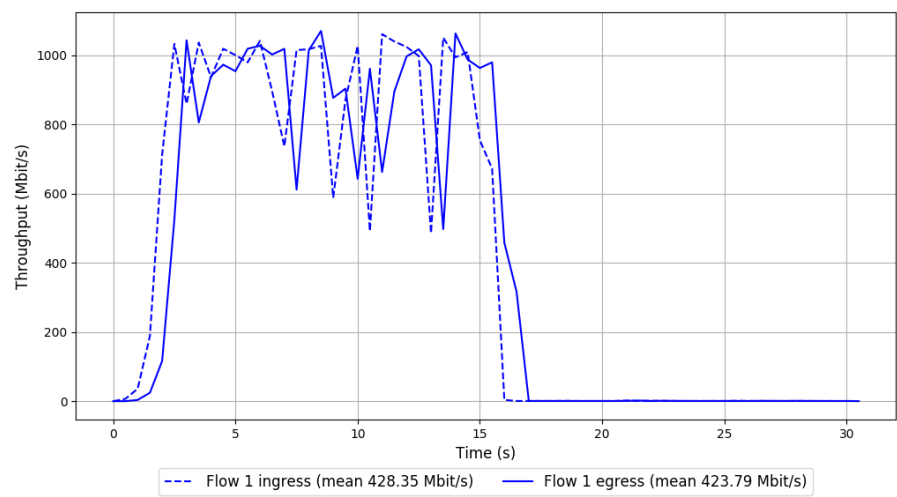
Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2019-01-25 01:46:57
End at: 2019-01-25 01:47:27
Local clock offset: -0.144 ms
Remote clock offset: 0.006 ms


# Below is generated by plot.py at 2019-01-25 03:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 840.83 Mbit/s
95th percentile per-packet one-way delay: 173.749 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 840.83 Mbit/s
95th percentile per-packet one-way delay: 173.749 ms
Loss rate: 0.41%
```
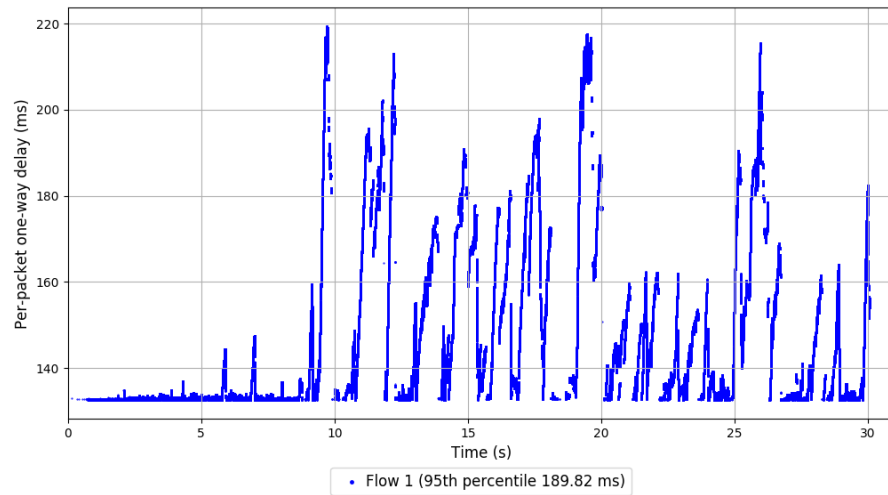
Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 844.32 Mbit/s) ----   Flow 1 egress (mean 840.83 Mbit/s) ——

• Flow 1 (95th percentile 173.75 ms)

```
Run 4: Statistics of FillP

Start at: 2019-01-25 02:21:15
End at: 2019-01-25 02:21:45
Local clock offset: -0.014 ms
Remote clock offset: -0.084 ms


# Below is generated by plot.py at 2019-01-25 03:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 423.79 Mbit/s
95th percentile per-packet one-way delay: 187.518 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 423.79 Mbit/s
95th percentile per-packet one-way delay: 187.518 ms
Loss rate: 1.07%
```
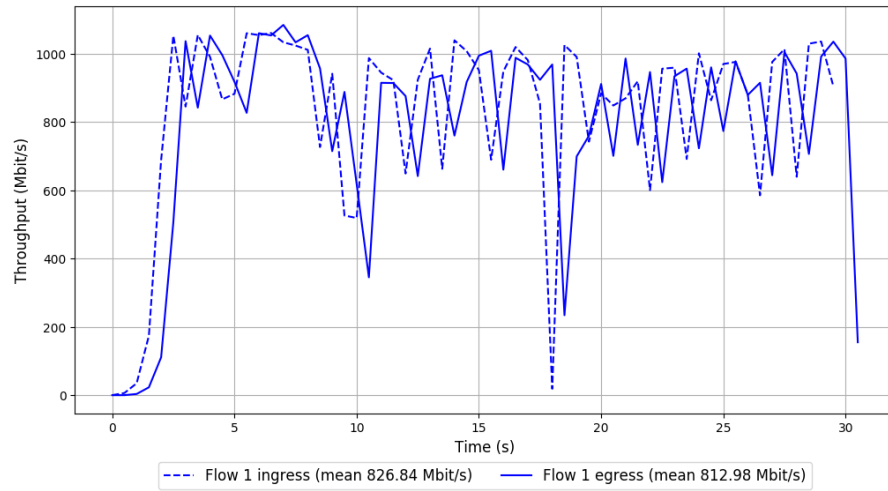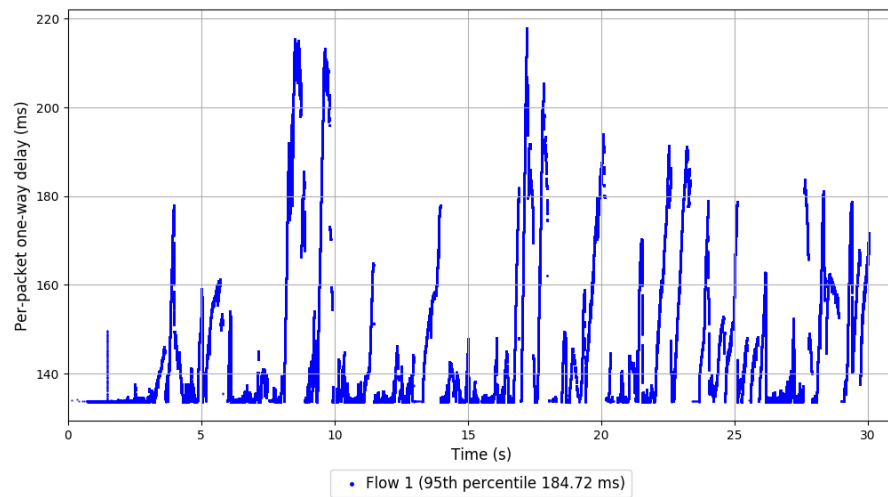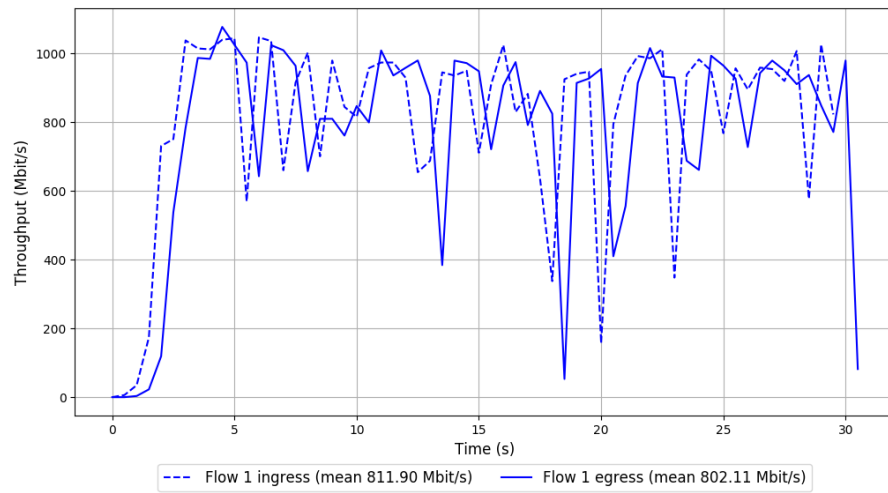
Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2019-01-25 02:56:56
End at: 2019-01-25 02:57:26
Local clock offset: 0.372 ms
Remote clock offset: -0.09 ms


# Below is generated by plot.py at 2019-01-25 04:02:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 812.98 Mbit/s
95th percentile per-packet one-way delay: 189.823 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 812.98 Mbit/s
95th percentile per-packet one-way delay: 189.823 ms
Loss rate: 1.68%
```
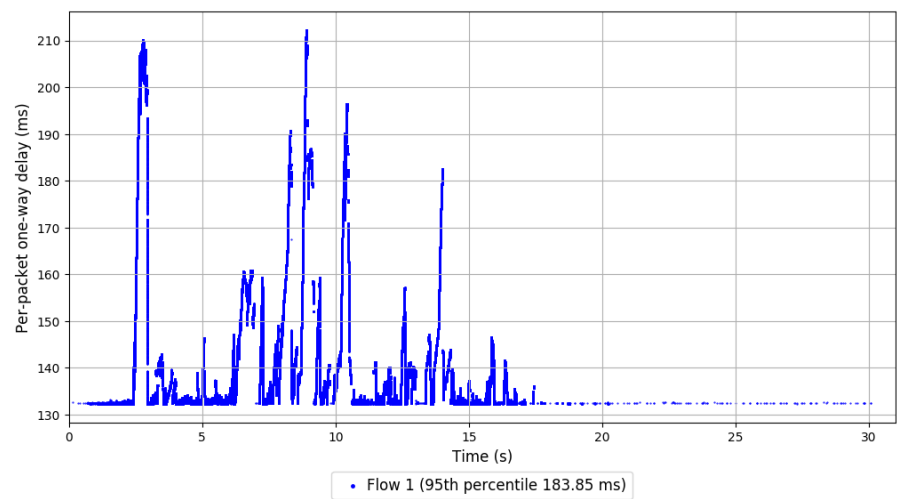
Run 5: Report of FillP — Data Link

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-01-25 00:48:31
End at: 2019-01-25 00:49:01
Local clock offset: -0.326 ms
Remote clock offset: -0.084 ms


# Below is generated by plot.py at 2019-01-25 04:04:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 802.11 Mbit/s
95th percentile per-packet one-way delay: 184.725 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 802.11 Mbit/s
95th percentile per-packet one-way delay: 184.725 ms
Loss rate: 1.21%
```
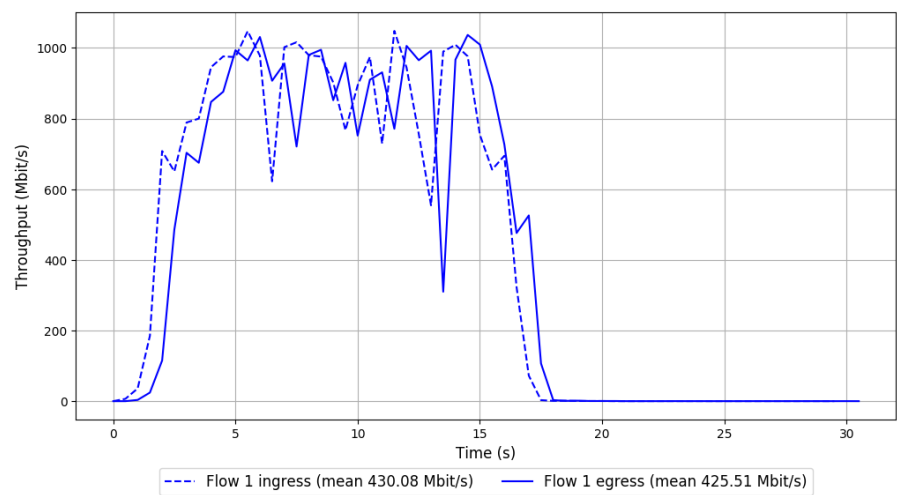
Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-01-25 01:23:53
End at: 2019-01-25 01:24:23
Local clock offset: 0.14 ms
Remote clock offset: 0.096 ms


# Below is generated by plot.py at 2019-01-25 04:04:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 425.51 Mbit/s
95th percentile per-packet one-way delay: 183.846 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 425.51 Mbit/s
95th percentile per-packet one-way delay: 183.846 ms
Loss rate: 1.06%
```
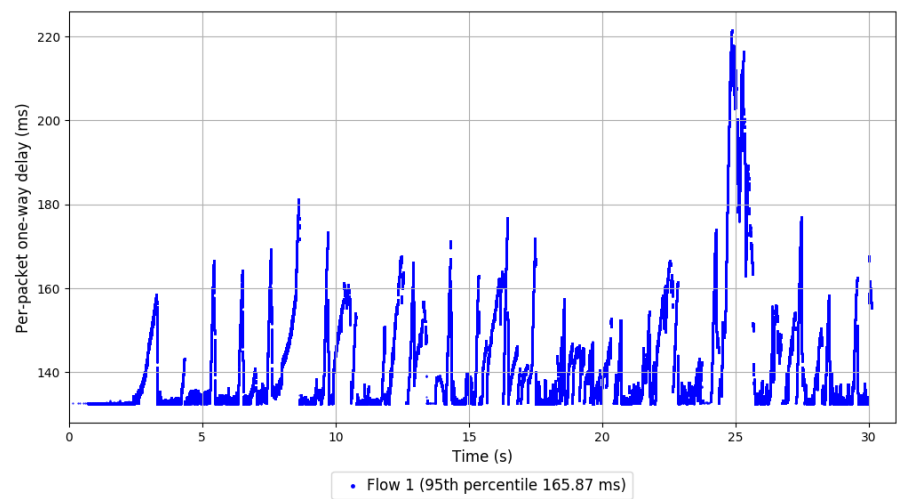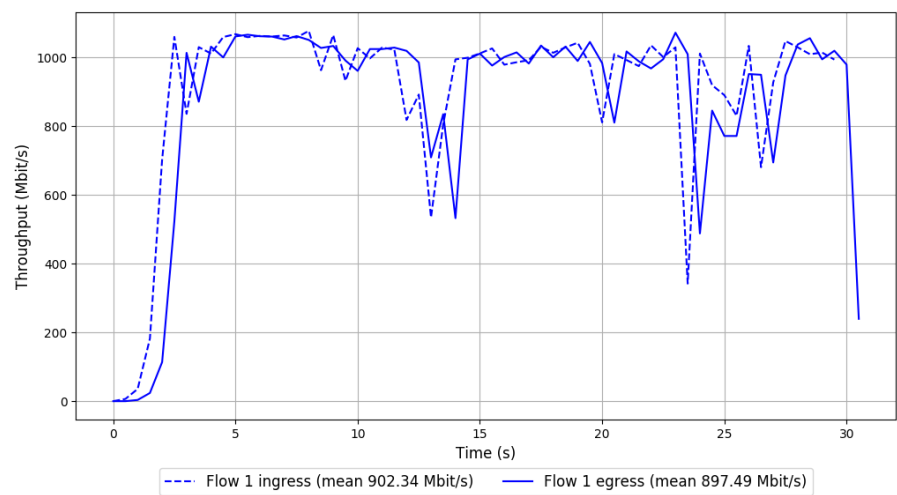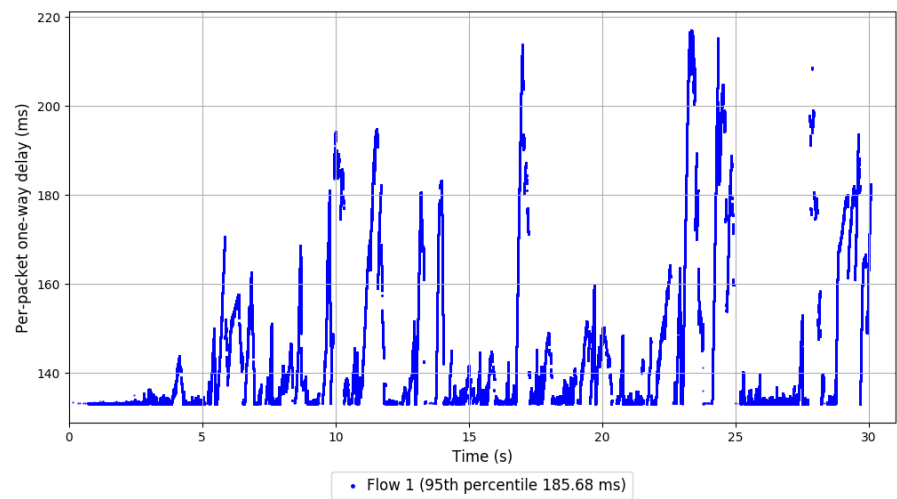
Run 2: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 430.08 Mbit/s)   Flow 1 egress (mean 425.51 Mbit/s)

Flow 1 (95th percentile 183.85 ms)

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-01-25 01:59:05
End at: 2019-01-25 01:59:35
Local clock offset: 0.132 ms
Remote clock offset: -0.42 ms


# Below is generated by plot.py at 2019-01-25 04:09:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 897.49 Mbit/s
95th percentile per-packet one-way delay: 165.873 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 897.49 Mbit/s
95th percentile per-packet one-way delay: 165.873 ms
Loss rate: 0.54%
```
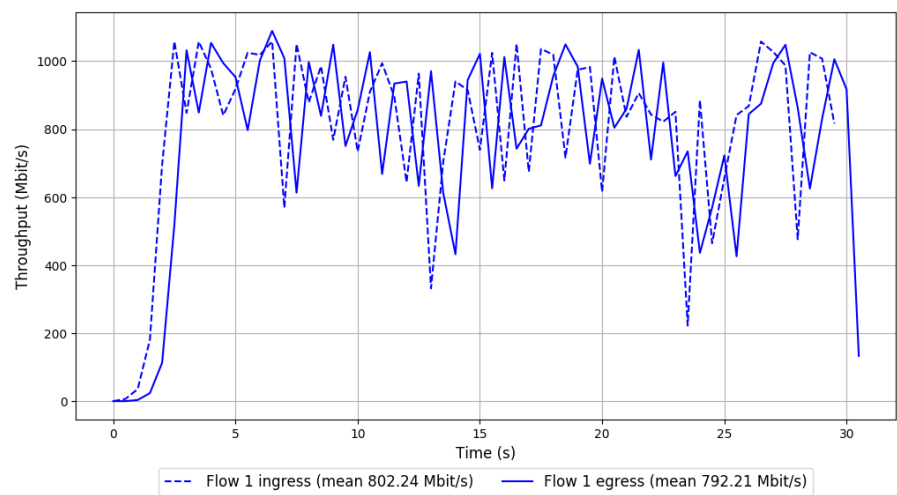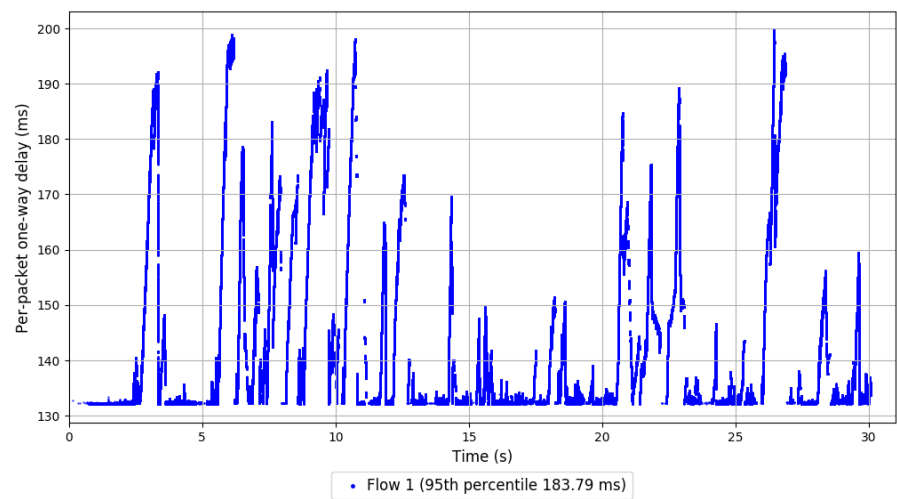
Run 3: Report of FillP-Sheep — Data Link

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-01-25 02:33:35
End at: 2019-01-25 02:34:05
Local clock offset: -0.252 ms
Remote clock offset: 0.323 ms


# Below is generated by plot.py at 2019-01-25 04:09:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 792.21 Mbit/s
95th percentile per-packet one-way delay: 185.684 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 792.21 Mbit/s
95th percentile per-packet one-way delay: 185.684 ms
Loss rate: 1.25%
```

Run 4: Report of FillP-Sheep — Data Link

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-01-25 03:08:38
End at: 2019-01-25 03:09:08
Local clock offset: 0.366 ms
Remote clock offset: 0.03 ms


# Below is generated by plot.py at 2019-01-25 04:11:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 802.33 Mbit/s
95th percentile per-packet one-way delay: 183.788 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 802.33 Mbit/s
95th percentile per-packet one-way delay: 183.788 ms
Loss rate: 0.73%
```
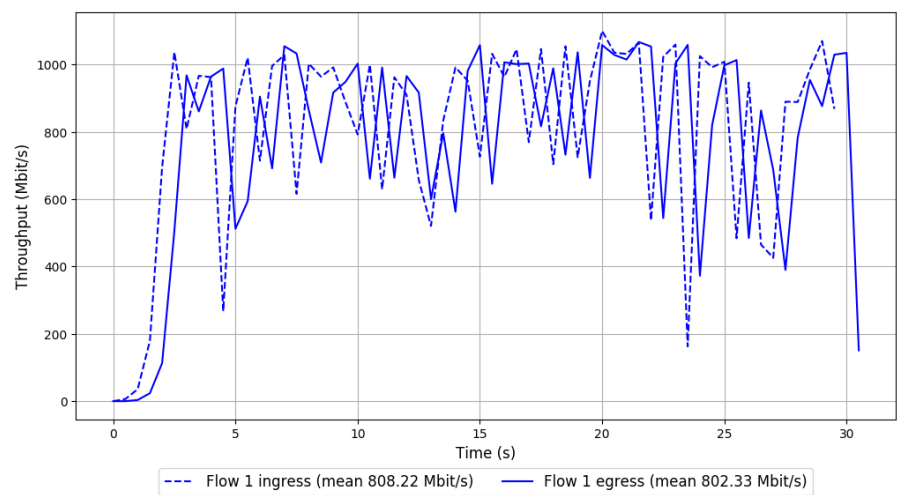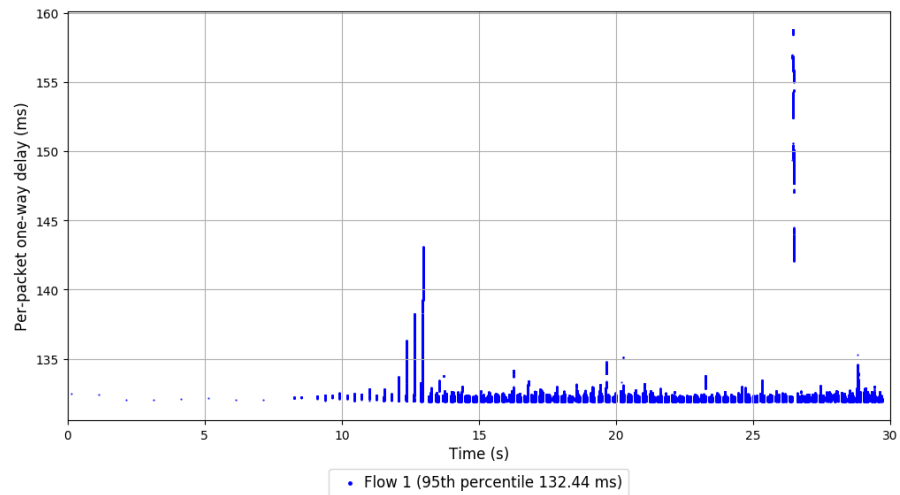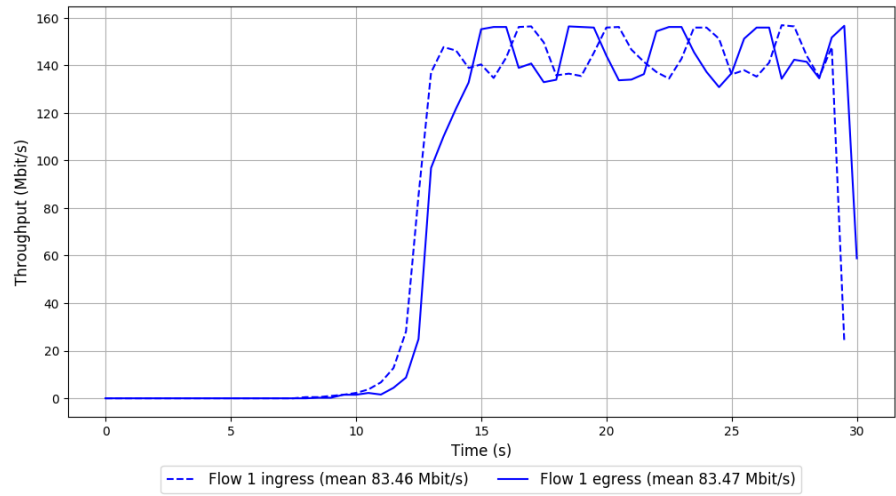
Run 5: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 808.22 Mbit/s)   Flow 1 egress (mean 802.33 Mbit/s)
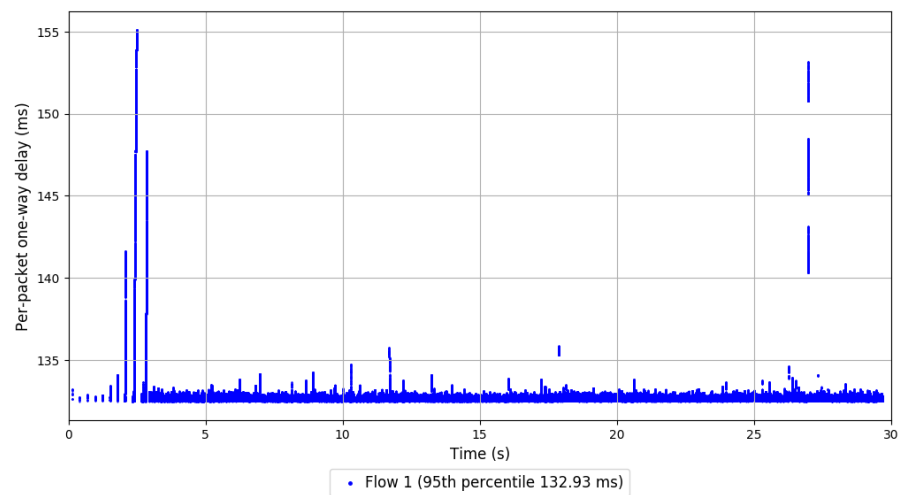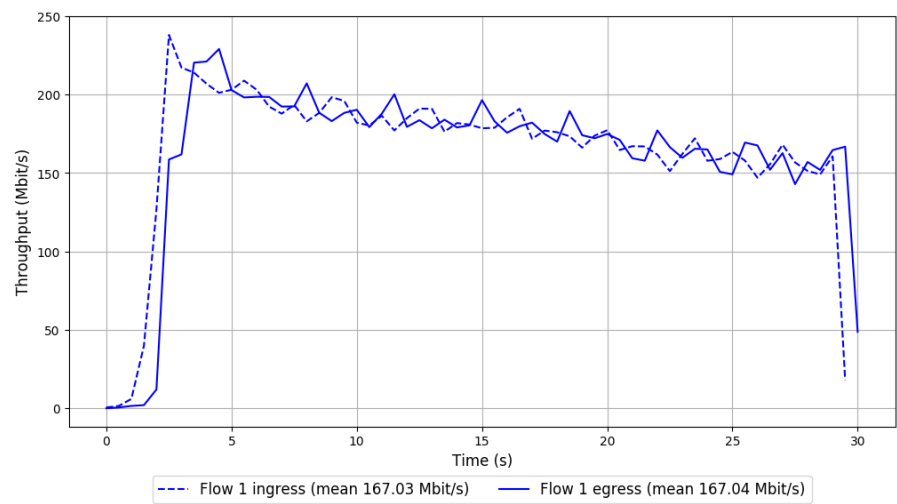

• Flow 1 (95th percentile 183.79 ms)

```
Run 1: Statistics of Indigo

Start at: 2019-01-25 00:31:28
End at: 2019-01-25 00:31:58
Local clock offset: 0.312 ms
Remote clock offset: -0.373 ms


# Below is generated by plot.py at 2019-01-25 04:11:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.47 Mbit/s
95th percentile per-packet one-way delay: 132.437 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 83.47 Mbit/s
95th percentile per-packet one-way delay: 132.437 ms
Loss rate: 0.00%
```
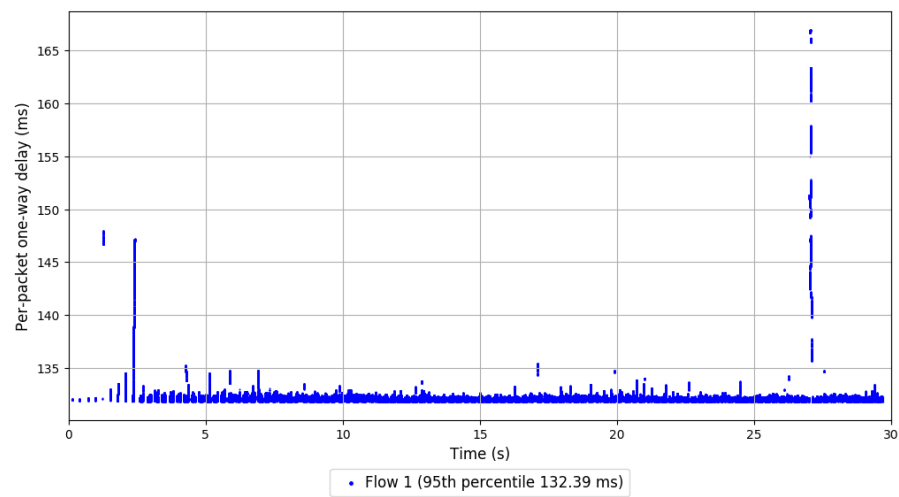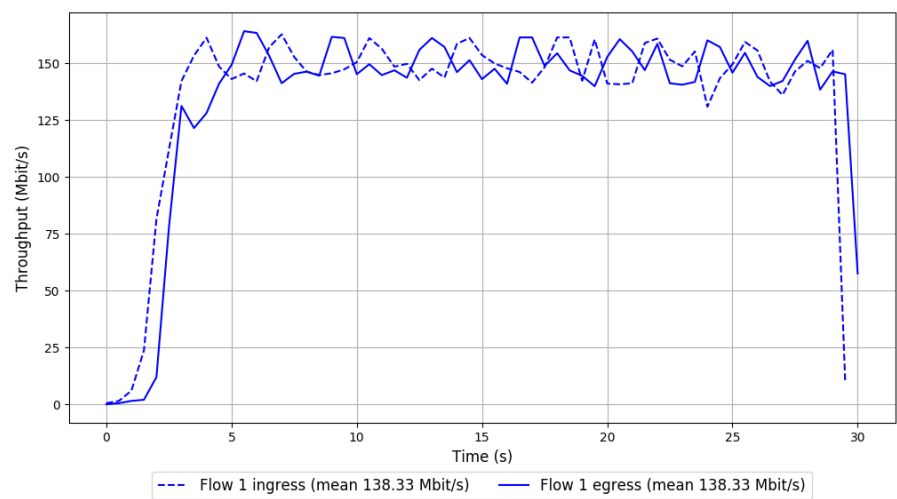
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-01-25 01:06:35
End at: 2019-01-25 01:07:05
Local clock offset: 0.127 ms
Remote clock offset: -0.012 ms


# Below is generated by plot.py at 2019-01-25 04:11:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 167.04 Mbit/s
95th percentile per-packet one-way delay: 132.925 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 167.04 Mbit/s
95th percentile per-packet one-way delay: 132.925 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2019-01-25 01:41:53
End at: 2019-01-25 01:42:23
Local clock offset: 0.016 ms
Remote clock offset: -0.129 ms


# Below is generated by plot.py at 2019-01-25 04:11:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 138.33 Mbit/s
95th percentile per-packet one-way delay: 132.388 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 138.33 Mbit/s
95th percentile per-packet one-way delay: 132.388 ms
Loss rate: 0.00%
```
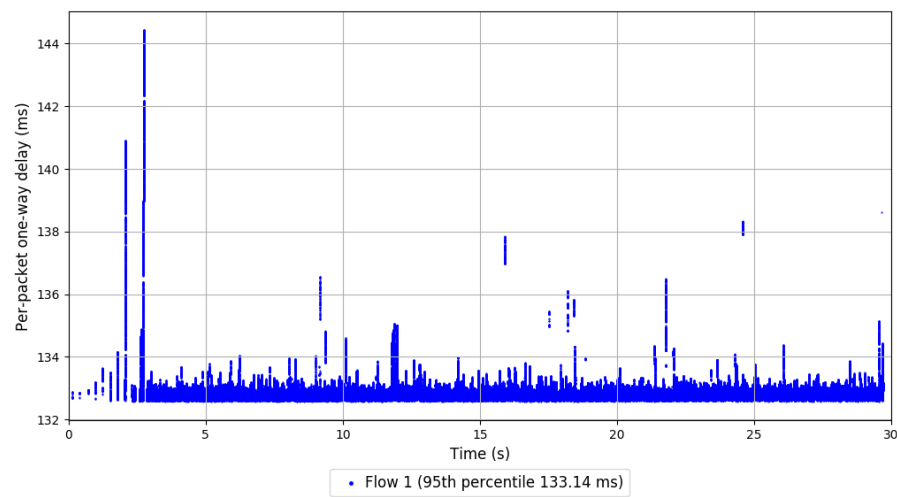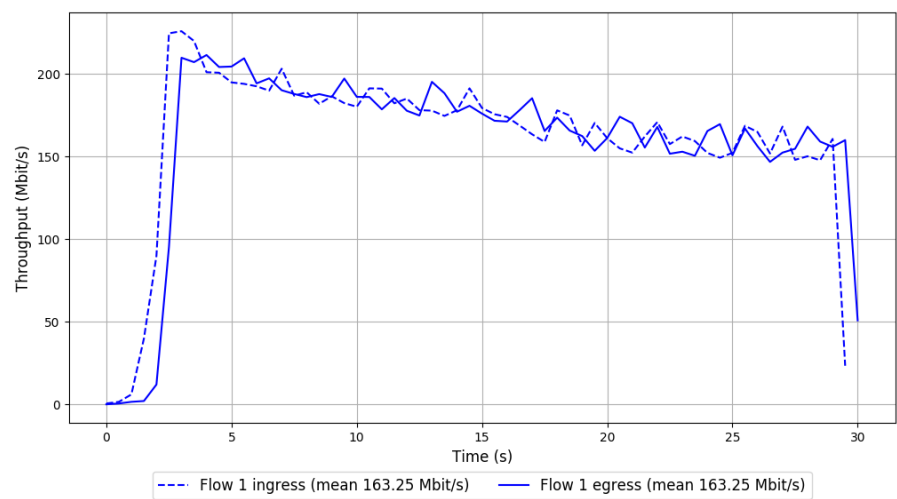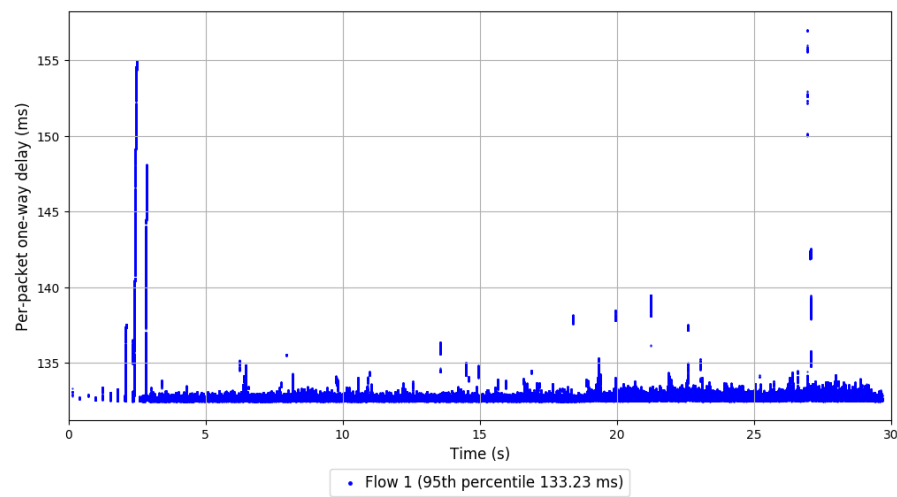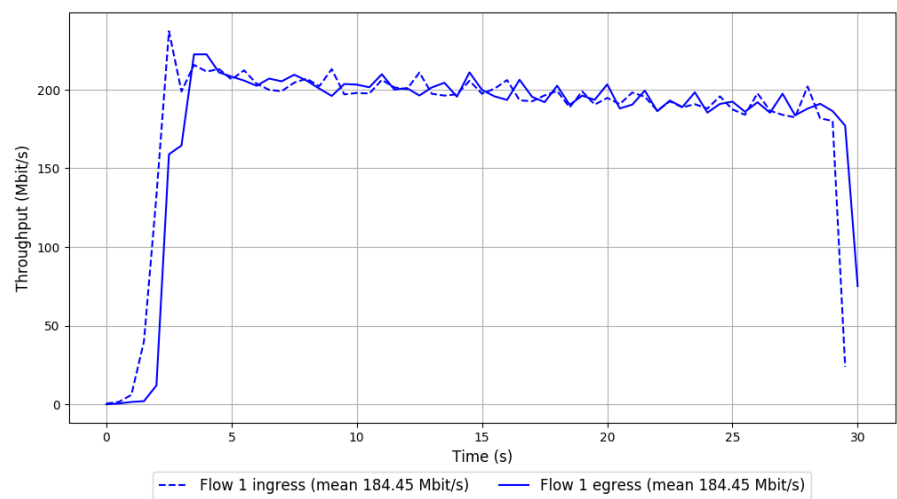
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2019-01-25 02:16:10
End at: 2019-01-25 02:16:40
Local clock offset: 0.046 ms
Remote clock offset: 0.299 ms


# Below is generated by plot.py at 2019-01-25 04:11:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 163.25 Mbit/s
95th percentile per-packet one-way delay: 133.139 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 163.25 Mbit/s
95th percentile per-packet one-way delay: 133.139 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2019-01-25 02:51:36
End at: 2019-01-25 02:52:06
Local clock offset: 0.188 ms
Remote clock offset: -0.081 ms


# Below is generated by plot.py at 2019-01-25 04:11:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.45 Mbit/s
95th percentile per-packet one-way delay: 133.234 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.45 Mbit/s
95th percentile per-packet one-way delay: 133.234 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-25 00:52:50
End at: 2019-01-25 00:53:20
Local clock offset: 0.037 ms
Remote clock offset: 0.302 ms


# Below is generated by plot.py at 2019-01-25 04:14:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 561.33 Mbit/s
95th percentile per-packet one-way delay: 138.720 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 561.33 Mbit/s
95th percentile per-packet one-way delay: 138.720 ms
Loss rate: 0.07%
```
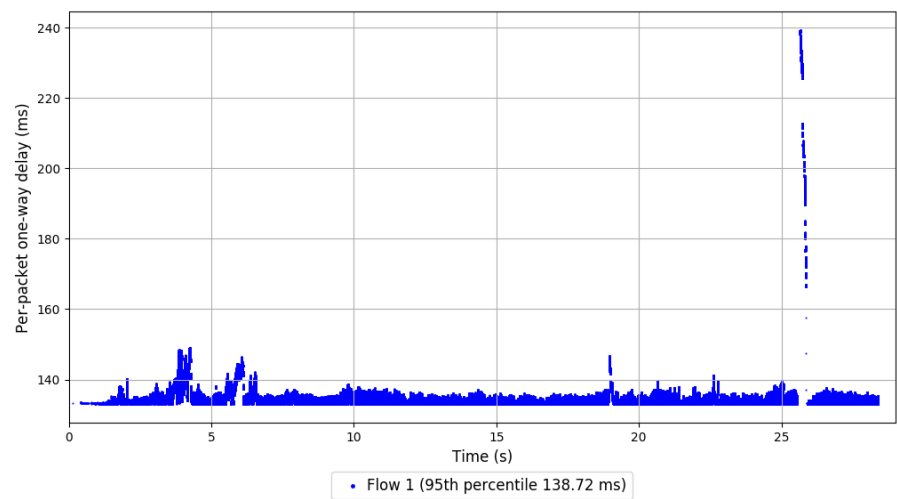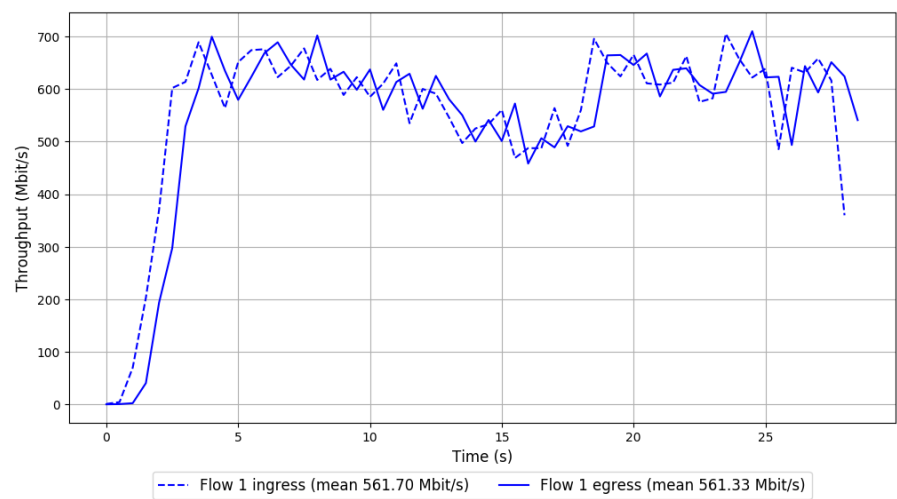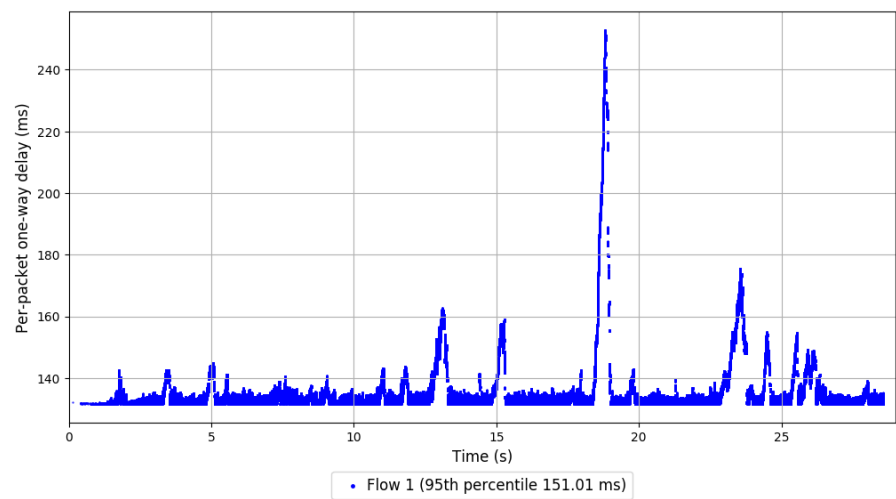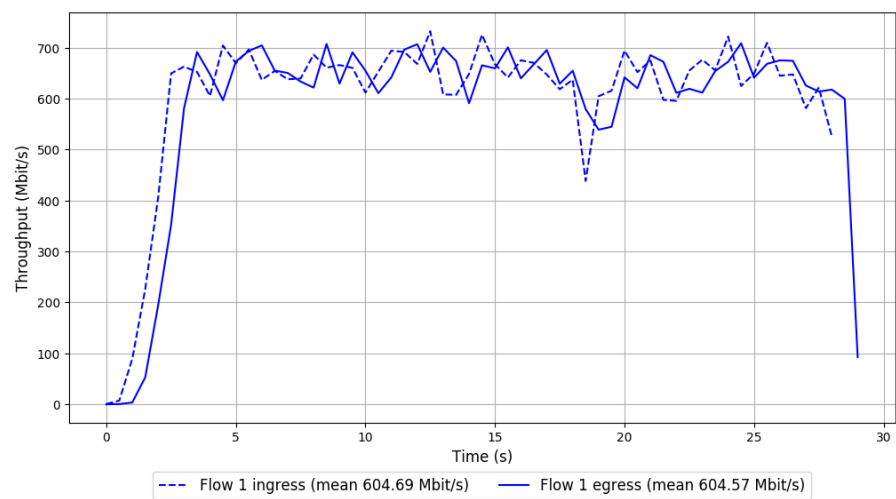
Run 1: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 561.70 Mbit/s)   Flow 1 egress (mean 561.33 Mbit/s)
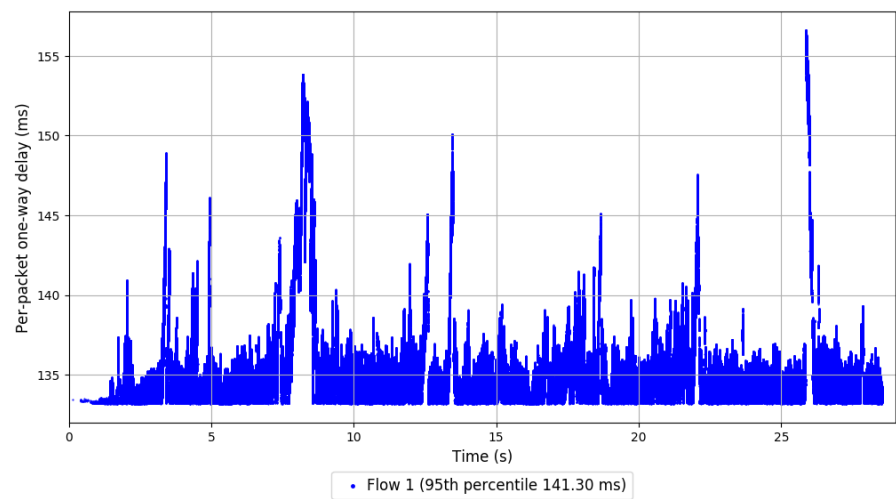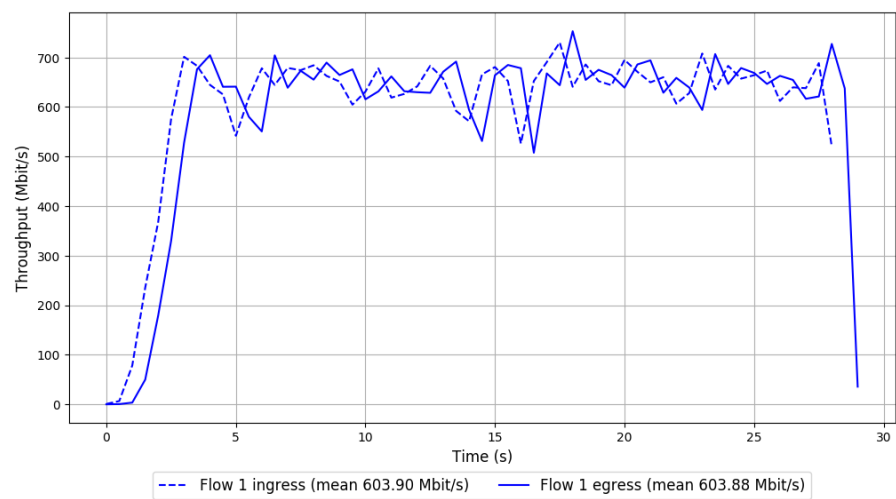

Flow 1 (95th percentile 138.72 ms)

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-25 01:27:42
End at: 2019-01-25 01:28:12
Local clock offset: 0.358 ms
Remote clock offset: -0.426 ms


# Below is generated by plot.py at 2019-01-25 04:16:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 604.57 Mbit/s
95th percentile per-packet one-way delay: 151.015 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 604.57 Mbit/s
95th percentile per-packet one-way delay: 151.015 ms
Loss rate: 0.02%
```
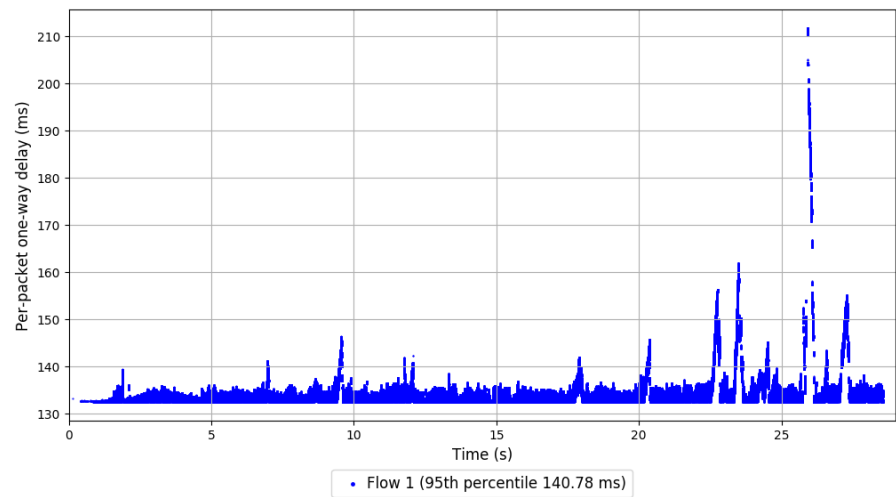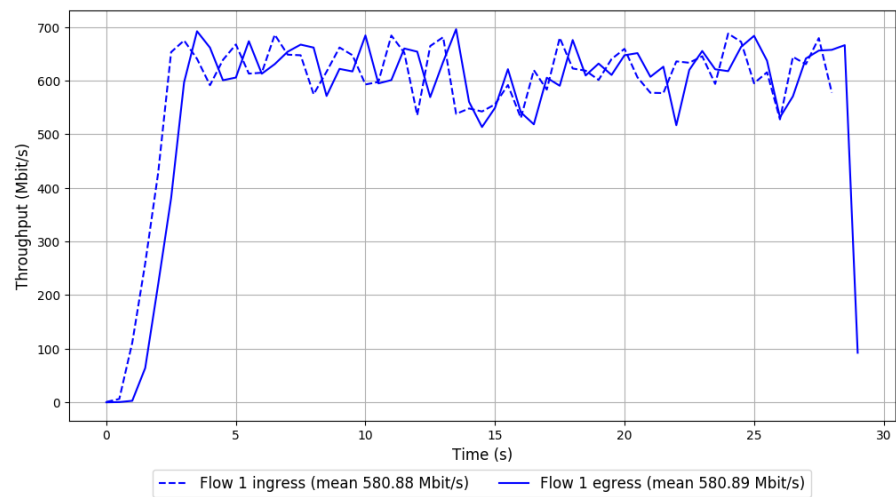
Run 2: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 604.69 Mbit/s)   Flow 1 egress (mean 604.57 Mbit/s)

Flow 1 (95th percentile 151.01 ms)

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-25 02:03:14
End at: 2019-01-25 02:03:44
Local clock offset: -0.57 ms
Remote clock offset: -0.105 ms


# Below is generated by plot.py at 2019-01-25 04:16:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 603.88 Mbit/s
95th percentile per-packet one-way delay: 141.301 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 603.88 Mbit/s
95th percentile per-packet one-way delay: 141.301 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC3 — Data Link

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-25 02:37:22
End at: 2019-01-25 02:37:53
Local clock offset: 0.388 ms
Remote clock offset: -0.047 ms


# Below is generated by plot.py at 2019-01-25 04:19:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 580.89 Mbit/s
95th percentile per-packet one-way delay: 140.776 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 580.89 Mbit/s
95th percentile per-packet one-way delay: 140.776 ms
Loss rate: 0.00%
```
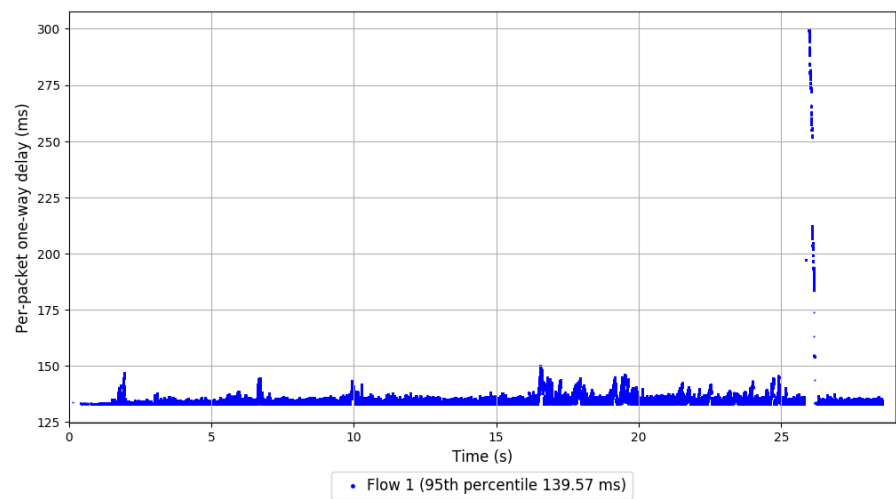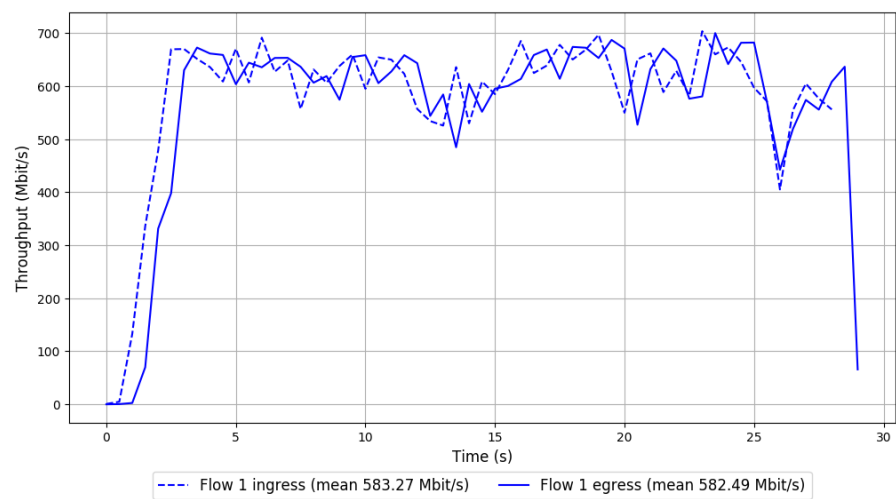
Run 4: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 580.88 Mbit/s) —— Flow 1 egress (mean 580.89 Mbit/s)

• Flow 1 (95th percentile 140.78 ms)

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-25 03:12:21
End at: 2019-01-25 03:12:51
Local clock offset: 0.065 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2019-01-25 04:21:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 582.49 Mbit/s
95th percentile per-packet one-way delay: 139.573 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 582.49 Mbit/s
95th percentile per-packet one-way delay: 139.573 ms
Loss rate: 0.14%
```
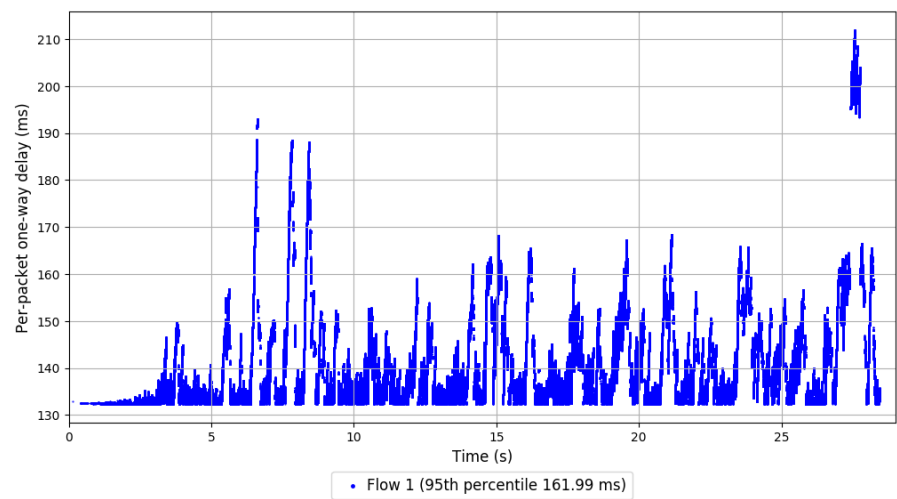
Run 5: Report of Indigo-MusesC3 — Data Link

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-25 00:50:48
End at: 2019-01-25 00:51:18
Local clock offset: -0.161 ms
Remote clock offset: -0.06 ms


# Below is generated by plot.py at 2019-01-25 04:21:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 610.34 Mbit/s
95th percentile per-packet one-way delay: 161.994 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 610.34 Mbit/s
95th percentile per-packet one-way delay: 161.994 ms
Loss rate: 0.00%
```
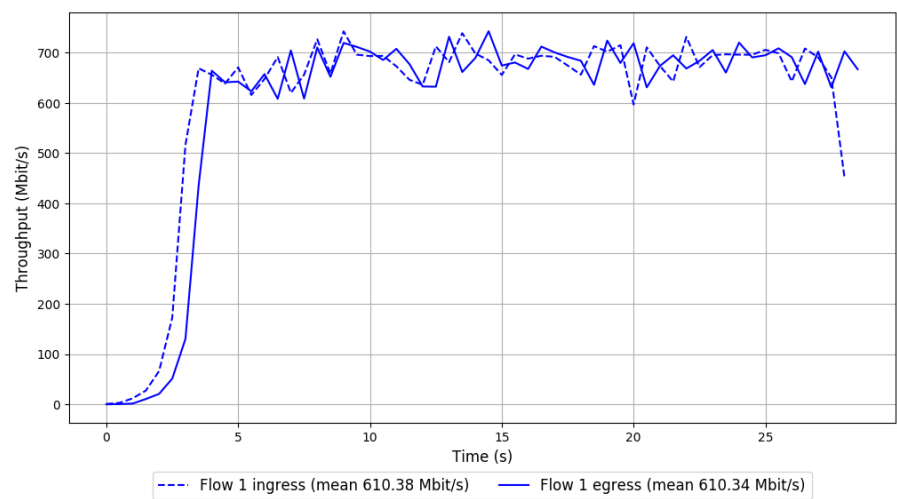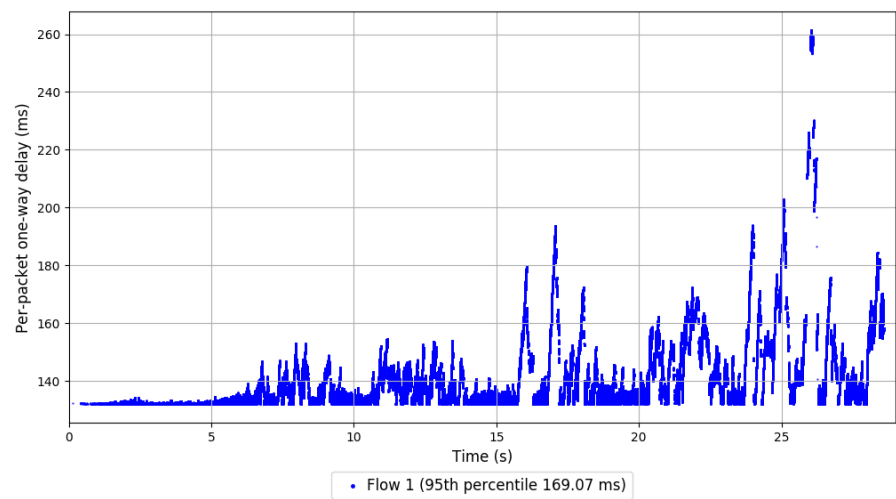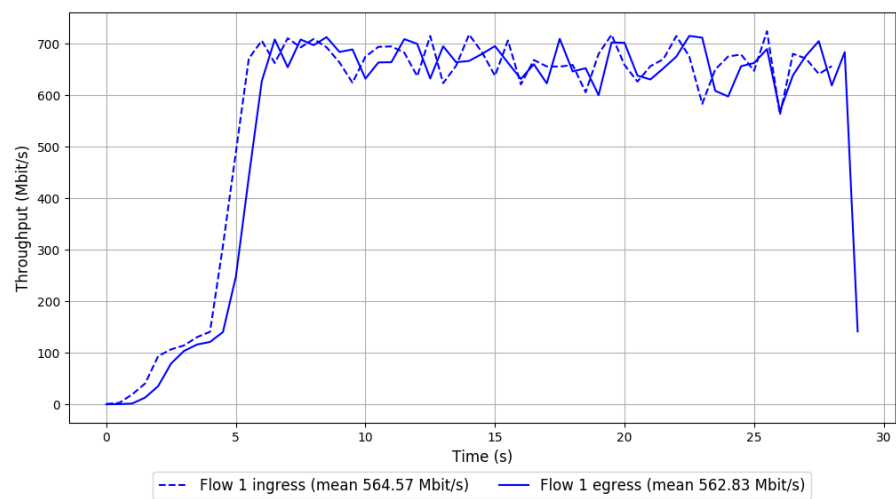
Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-25 01:25:32
End at: 2019-01-25 01:26:02
Local clock offset: 0.354 ms
Remote clock offset: -0.027 ms


# Below is generated by plot.py at 2019-01-25 04:21:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 562.83 Mbit/s
95th percentile per-packet one-way delay: 169.072 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 562.83 Mbit/s
95th percentile per-packet one-way delay: 169.072 ms
Loss rate: 0.30%
```
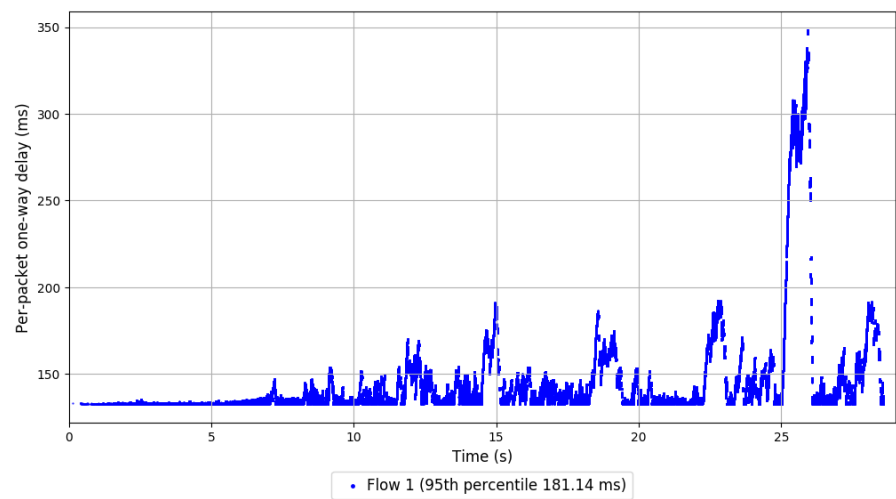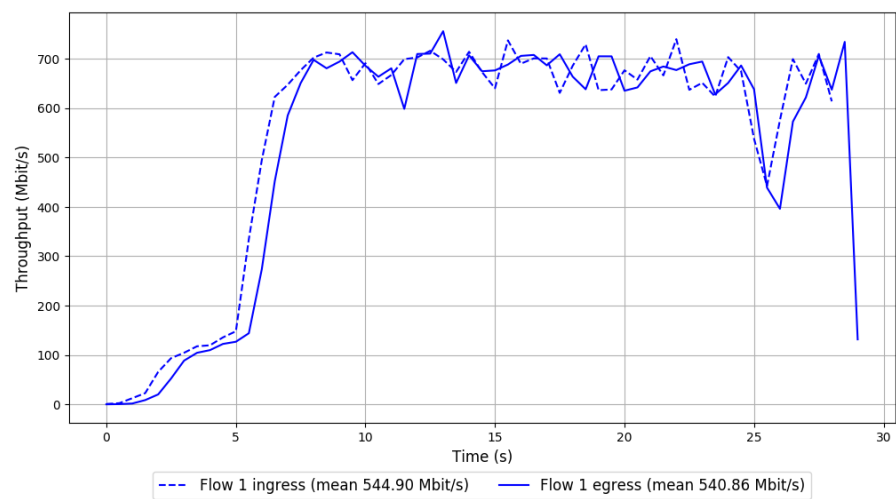
Run 2: Report of Indigo-MusesC5 — Data Link

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-25 02:01:32
End at: 2019-01-25 02:02:03
Local clock offset: 0.314 ms
Remote clock offset: -0.118 ms


# Below is generated by plot.py at 2019-01-25 04:21:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 540.86 Mbit/s
95th percentile per-packet one-way delay: 181.144 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 540.86 Mbit/s
95th percentile per-packet one-way delay: 181.144 ms
Loss rate: 0.74%
```

Run 3: Report of Indigo-MusesC5 — Data Link

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-25 02:35:41
End at: 2019-01-25 02:36:11
Local clock offset: 0.077 ms
Remote clock offset: 0.035 ms


# Below is generated by plot.py at 2019-01-25 04:25:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 564.44 Mbit/s
95th percentile per-packet one-way delay: 169.980 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 564.44 Mbit/s
95th percentile per-packet one-way delay: 169.980 ms
Loss rate: 0.00%
```
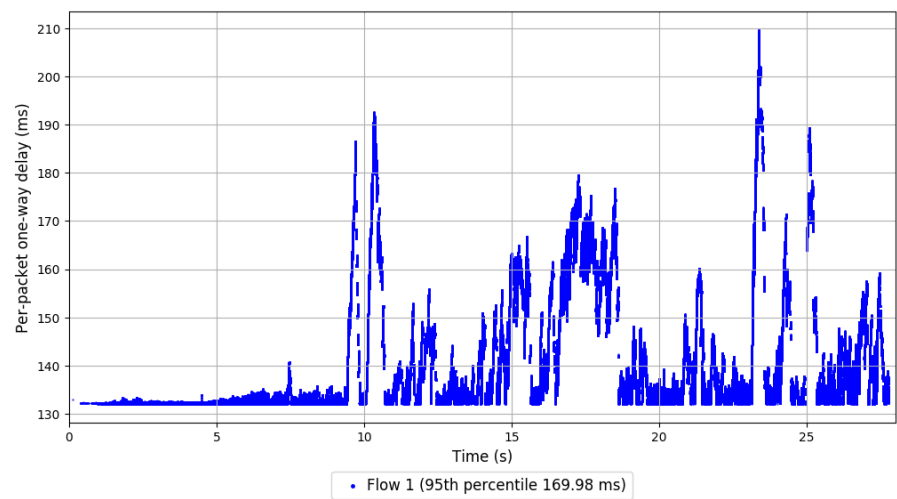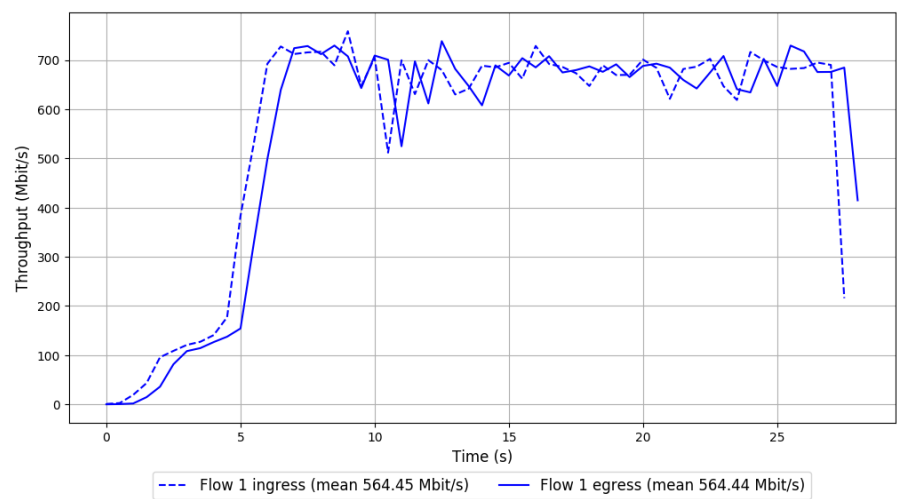
Run 4: Report of Indigo-MusesC5 — Data Link

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-25 03:10:38
End at: 2019-01-25 03:11:08
Local clock offset: -0.062 ms
Remote clock offset: -0.3 ms


# Below is generated by plot.py at 2019-01-25 04:27:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 574.24 Mbit/s
95th percentile per-packet one-way delay: 170.898 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 574.24 Mbit/s
95th percentile per-packet one-way delay: 170.898 ms
Loss rate: 0.00%
```
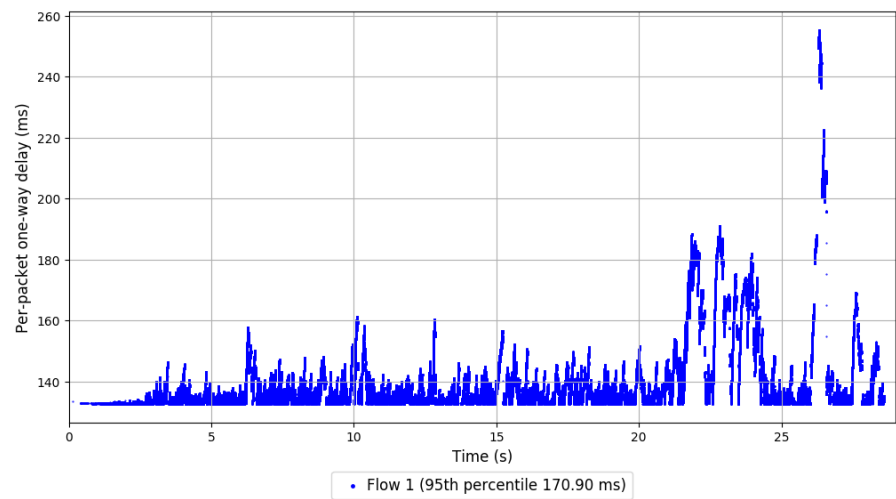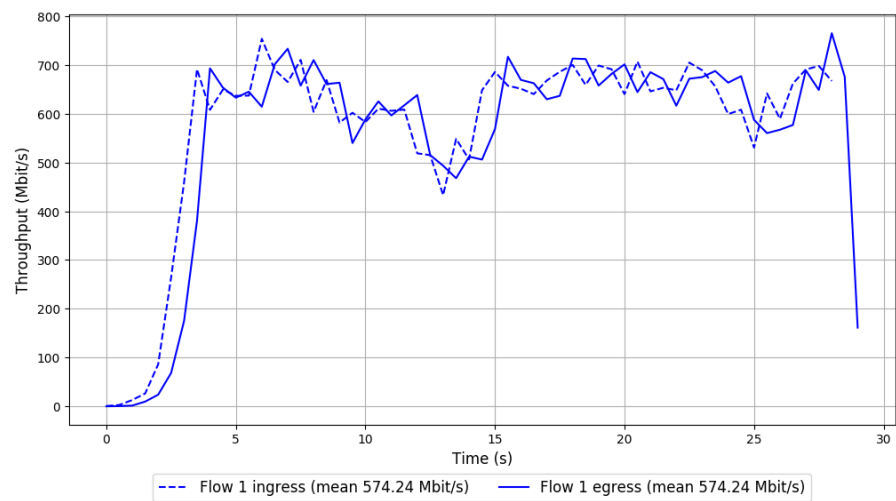
Run 5: Report of Indigo-MusesC5 — Data Link

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-25 00:56:22
End at: 2019-01-25 00:56:52
Local clock offset: -0.191 ms
Remote clock offset: 0.043 ms


# Below is generated by plot.py at 2019-01-25 04:27:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 558.21 Mbit/s
95th percentile per-packet one-way delay: 164.748 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 558.21 Mbit/s
95th percentile per-packet one-way delay: 164.748 ms
Loss rate: 0.05%
```
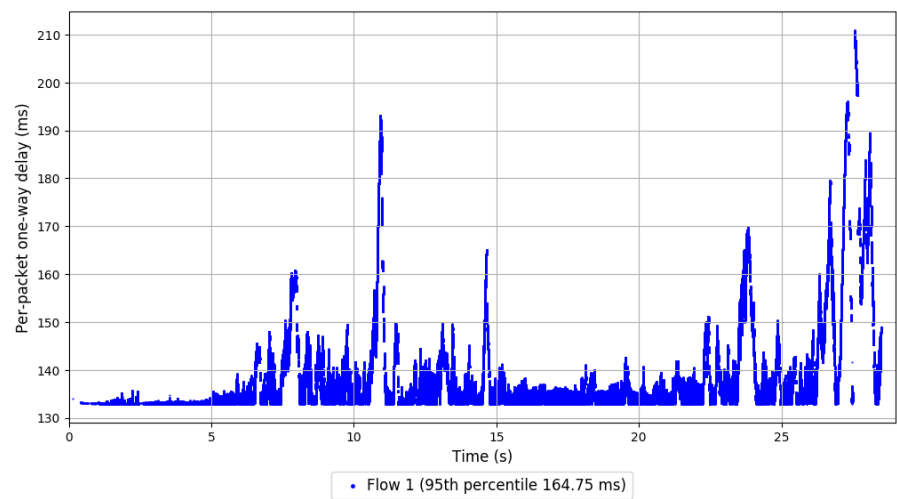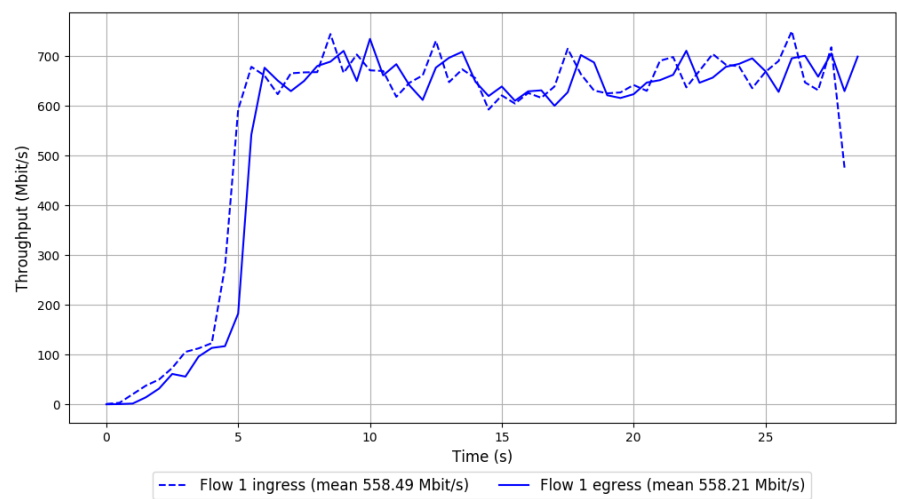
Run 1: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 558.49 Mbit/s)   Flow 1 egress (mean 558.21 Mbit/s)
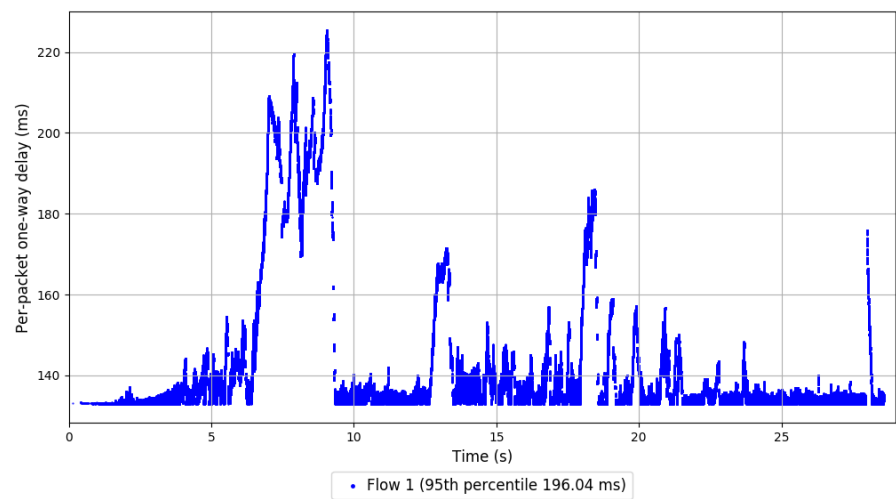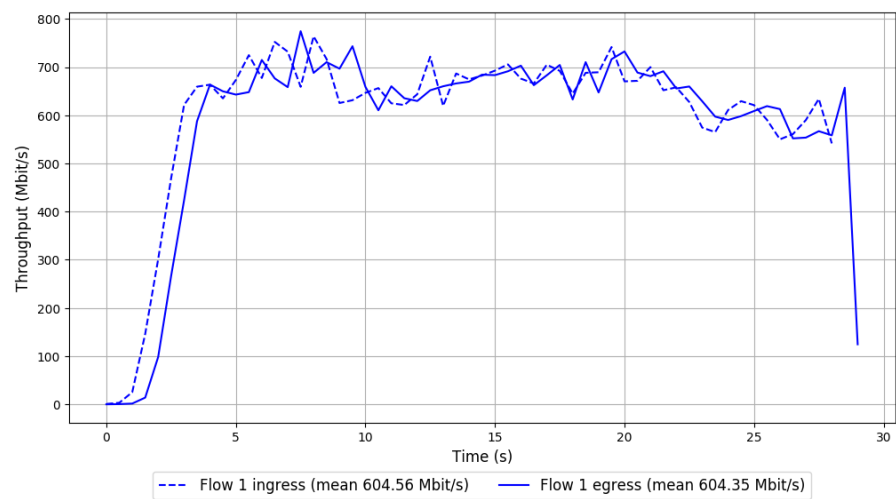

Flow 1 (95th percentile 164.75 ms)

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-25 01:30:55
End at: 2019-01-25 01:31:25
Local clock offset: -0.069 ms
Remote clock offset: -0.035 ms


# Below is generated by plot.py at 2019-01-25 04:30:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 604.35 Mbit/s
95th percentile per-packet one-way delay: 196.042 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 604.35 Mbit/s
95th percentile per-packet one-way delay: 196.042 ms
Loss rate: 0.03%
```

Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-25 02:06:28
End at: 2019-01-25 02:06:58
Local clock offset: -0.113 ms
Remote clock offset: -0.12 ms


# Below is generated by plot.py at 2019-01-25 04:32:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 566.06 Mbit/s
95th percentile per-packet one-way delay: 158.088 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 566.06 Mbit/s
95th percentile per-packet one-way delay: 158.088 ms
Loss rate: 0.22%
```
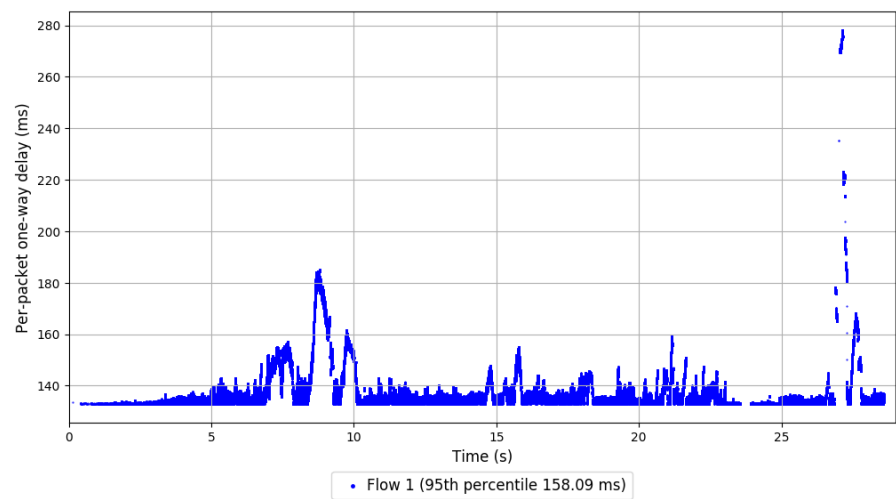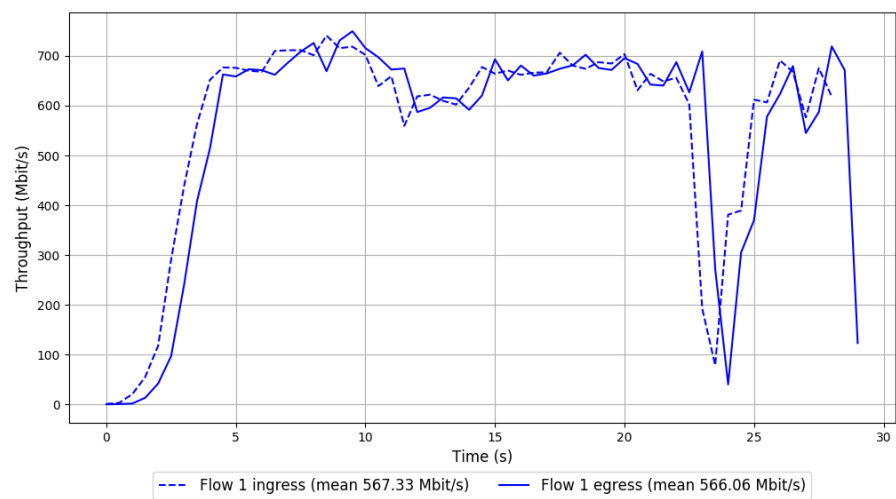
Run 3: Report of Indigo-MusesD — Data Link

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-25 02:40:22
End at: 2019-01-25 02:40:52
Local clock offset: 0.433 ms
Remote clock offset: -0.109 ms


# Below is generated by plot.py at 2019-01-25 04:32:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 568.59 Mbit/s
95th percentile per-packet one-way delay: 144.657 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 568.59 Mbit/s
95th percentile per-packet one-way delay: 144.657 ms
Loss rate: 0.00%
```
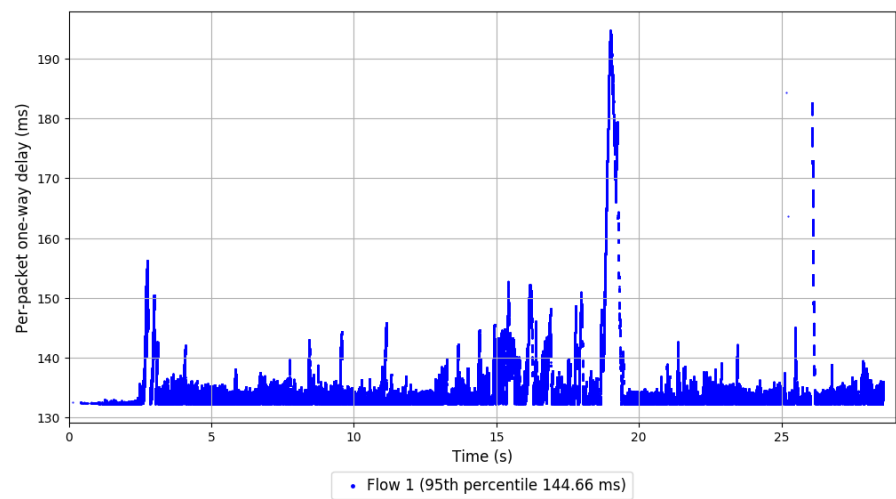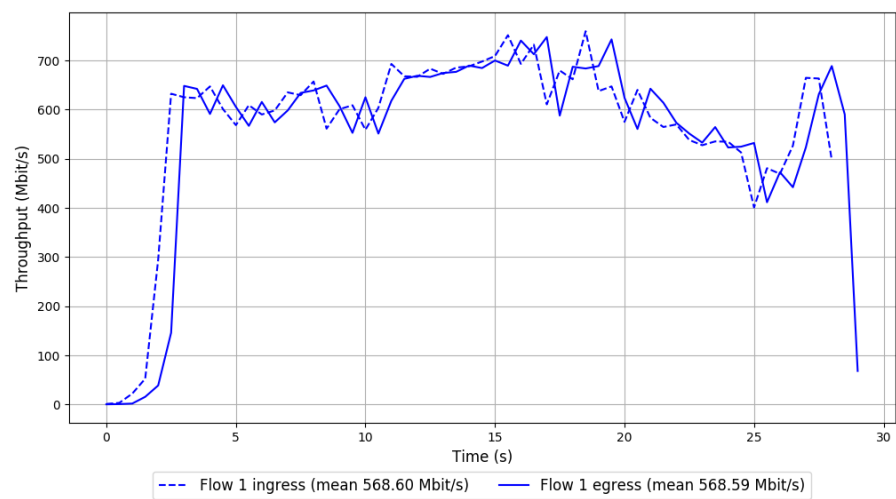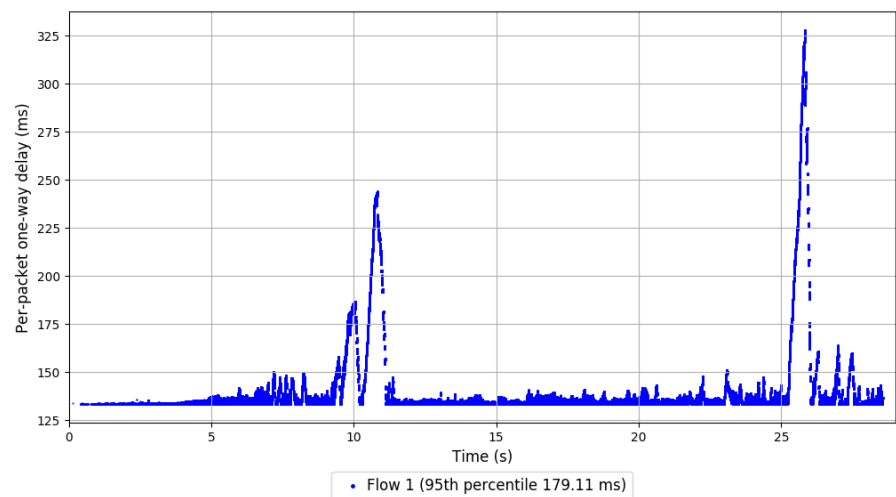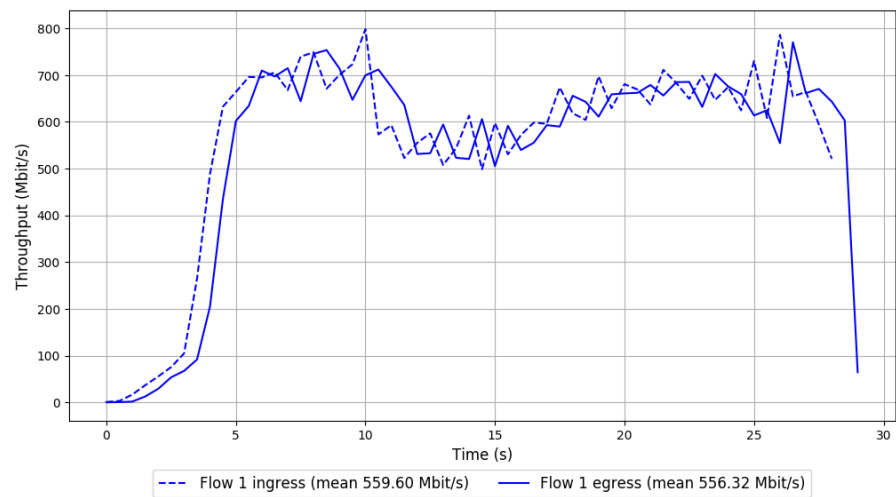
Run 4: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 568.60 Mbit/s)   Flow 1 egress (mean 568.59 Mbit/s)

• Flow 1 (95th percentile 144.66 ms)

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-25 03:15:42
End at: 2019-01-25 03:16:12
Local clock offset: -0.084 ms
Remote clock offset: 0.004 ms


# Below is generated by plot.py at 2019-01-25 04:32:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 556.32 Mbit/s
95th percentile per-packet one-way delay: 179.113 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 556.32 Mbit/s
95th percentile per-packet one-way delay: 179.113 ms
Loss rate: 0.59%
```

Run 5: Report of Indigo-MusesD — Data Link

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-25 00:43:13
End at: 2019-01-25 00:43:44
Local clock offset: -0.23 ms
Remote clock offset: -0.355 ms


# Below is generated by plot.py at 2019-01-25 04:33:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 627.42 Mbit/s
95th percentile per-packet one-way delay: 166.925 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 627.42 Mbit/s
95th percentile per-packet one-way delay: 166.925 ms
Loss rate: 0.10%
```
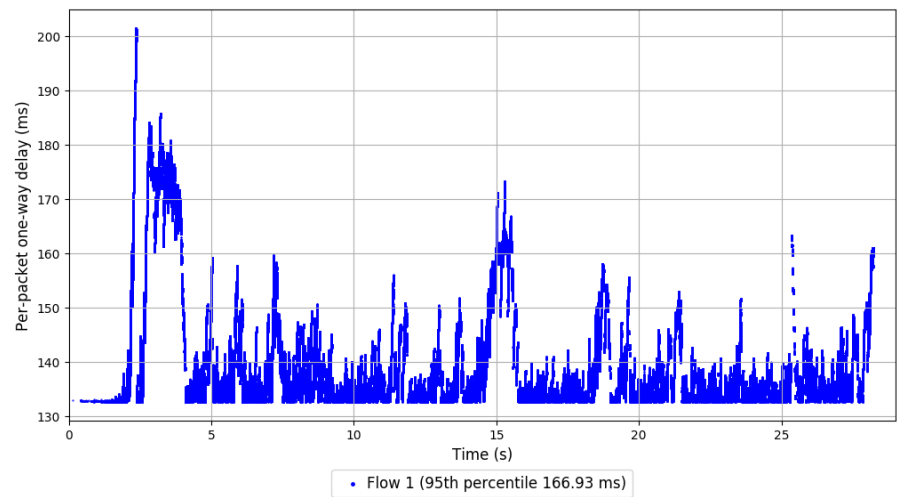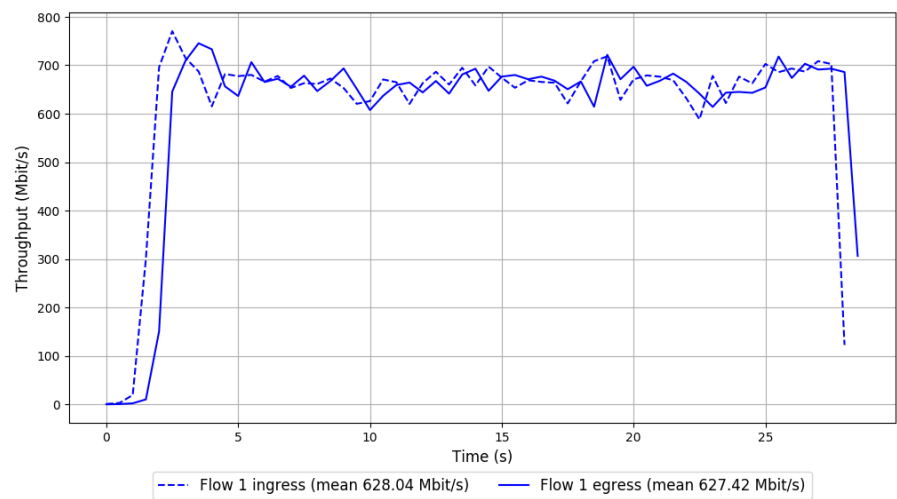
Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-25 01:18:22
End at: 2019-01-25 01:18:52
Local clock offset: -0.293 ms
Remote clock offset: 0.088 ms


# Below is generated by plot.py at 2019-01-25 04:37:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 587.45 Mbit/s
95th percentile per-packet one-way delay: 165.011 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 587.45 Mbit/s
95th percentile per-packet one-way delay: 165.011 ms
Loss rate: 0.21%
```
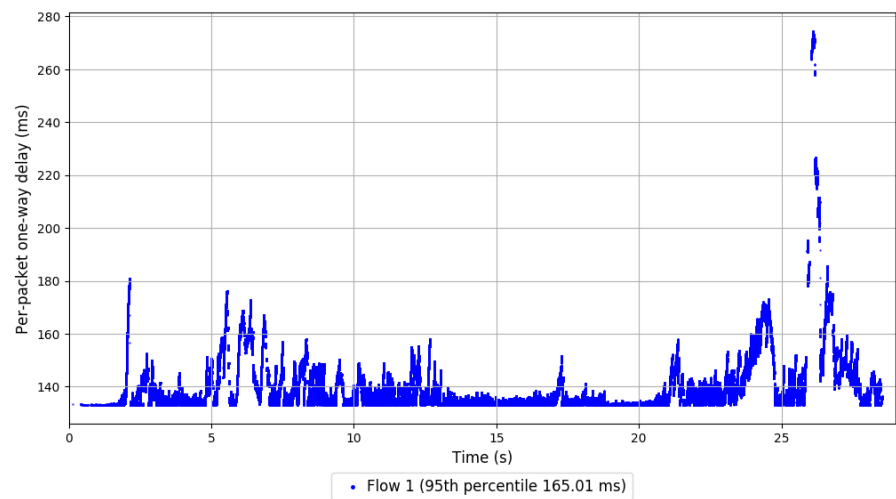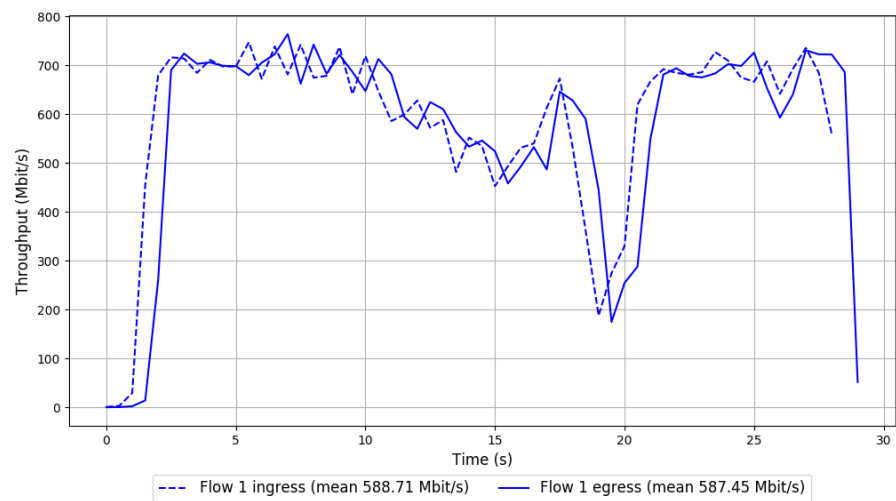
Run 2: Report of Indigo-MusesT — Data Link

98

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-25 01:53:26
End at: 2019-01-25 01:53:56
Local clock offset: -0.197 ms
Remote clock offset: -0.09 ms


# Below is generated by plot.py at 2019-01-25 04:39:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 632.60 Mbit/s
95th percentile per-packet one-way delay: 155.864 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 632.60 Mbit/s
95th percentile per-packet one-way delay: 155.864 ms
Loss rate: 0.00%
```
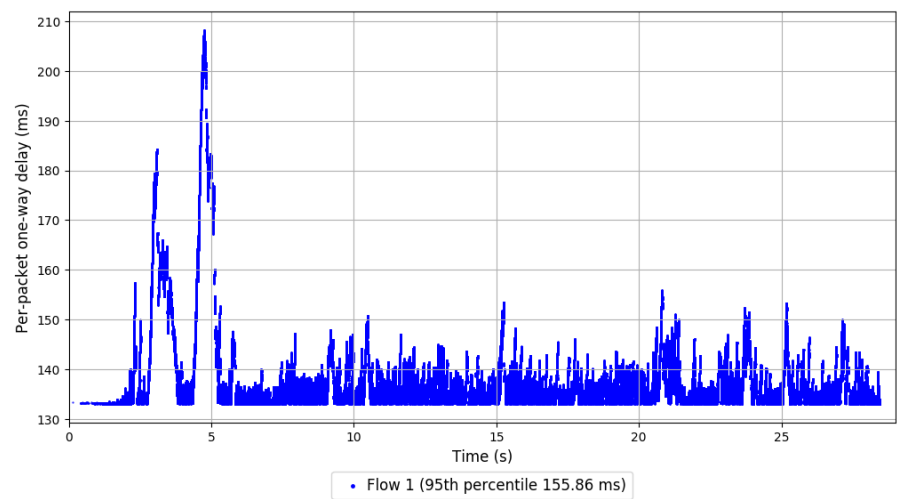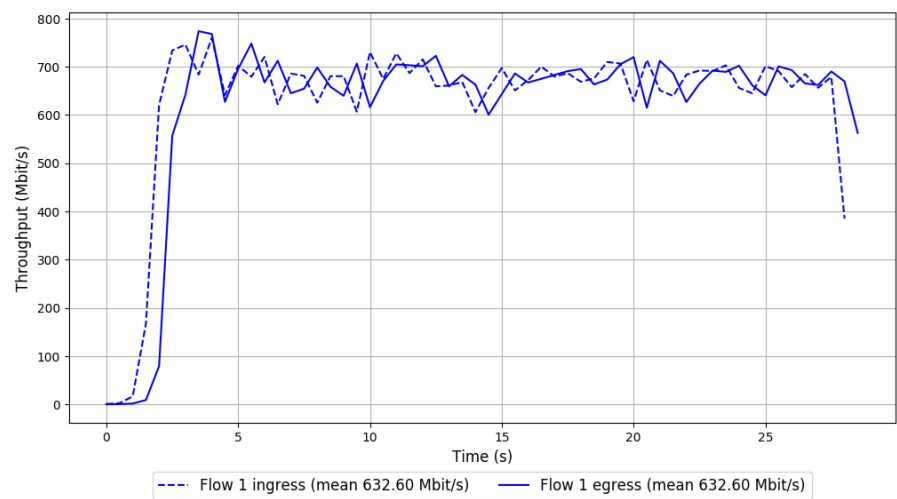
Run 3: Report of Indigo-MusesT — Data Link

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-25 02:27:52
End at: 2019-01-25 02:28:22
Local clock offset: 0.033 ms
Remote clock offset: 0.072 ms


# Below is generated by plot.py at 2019-01-25 04:39:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 639.55 Mbit/s
95th percentile per-packet one-way delay: 172.096 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 639.55 Mbit/s
95th percentile per-packet one-way delay: 172.096 ms
Loss rate: 0.56%
```
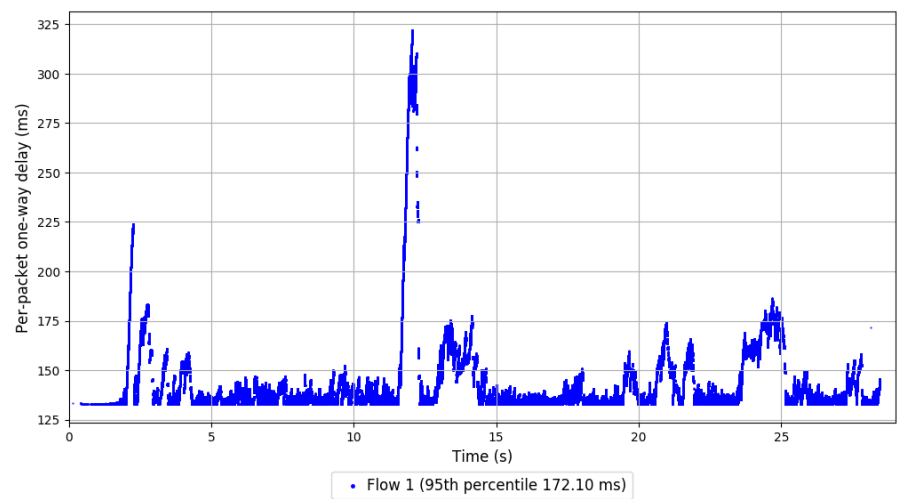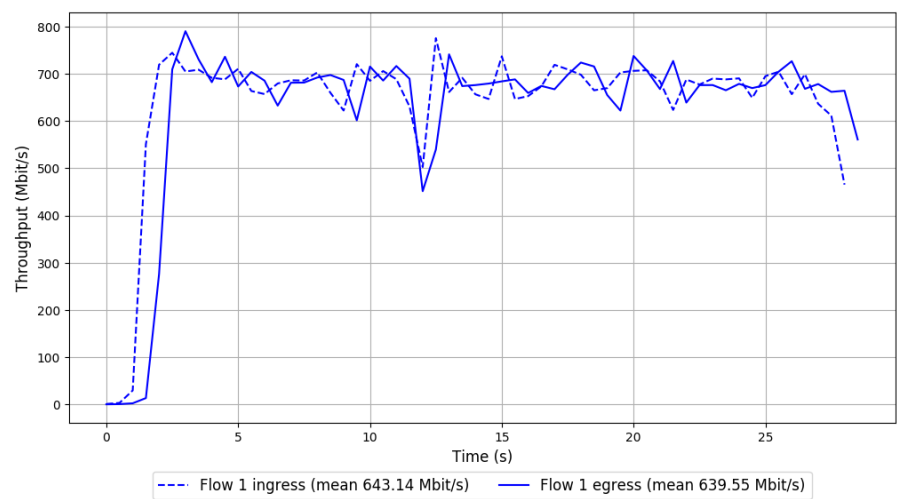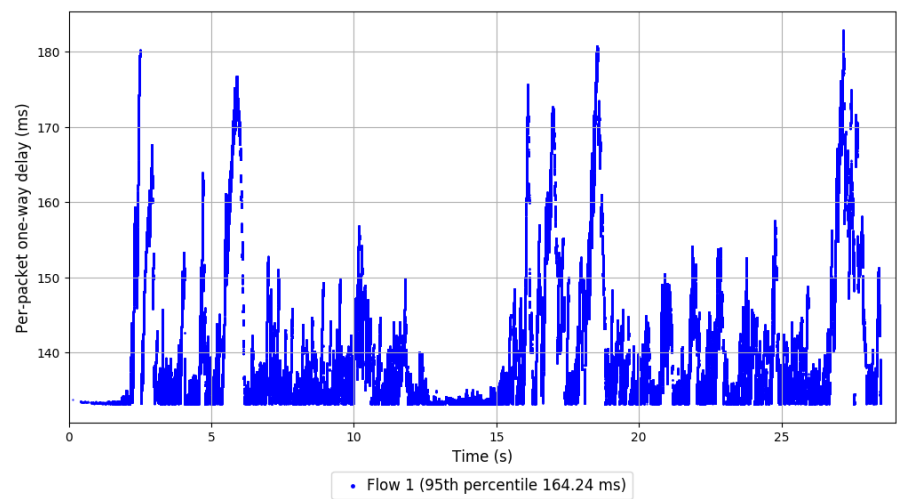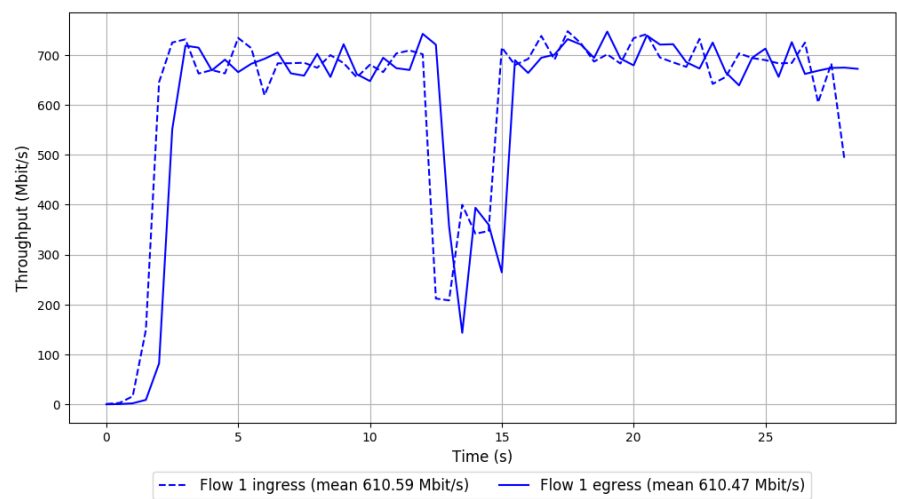
Run 4: Report of Indigo-MusesT — Data Link

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-25 03:03:07
End at: 2019-01-25 03:03:37
Local clock offset: -0.204 ms
Remote clock offset: -0.064 ms


# Below is generated by plot.py at 2019-01-25 04:40:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 610.47 Mbit/s
95th percentile per-packet one-way delay: 164.242 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 610.47 Mbit/s
95th percentile per-packet one-way delay: 164.242 ms
Loss rate: 0.02%
```

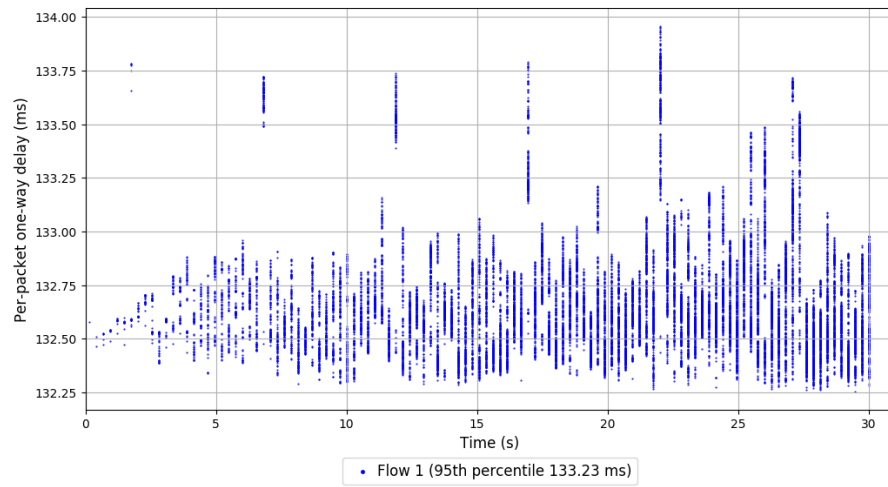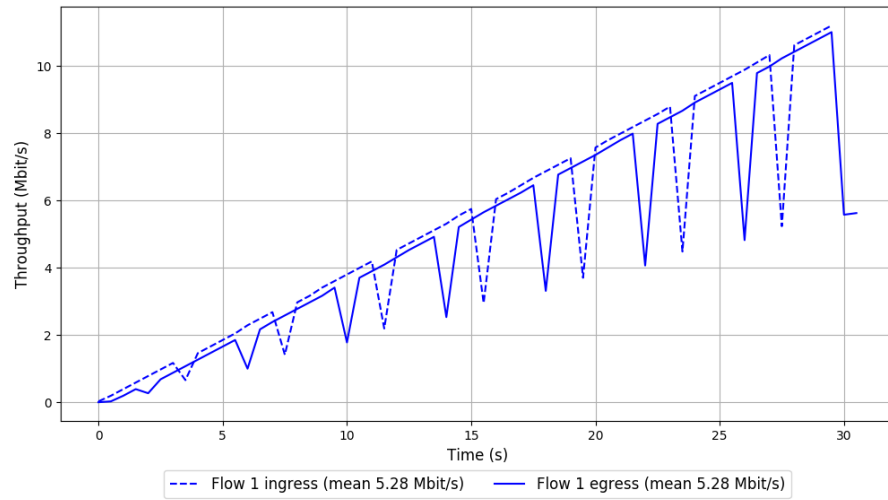Run 5: Report of Indigo-MusesT — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2019-01-25 00:28:31
End at: 2019-01-25 00:29:01
Local clock offset: 0.184 ms
Remote clock offset: -0.456 ms


# Below is generated by plot.py at 2019-01-25 04:40:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.28 Mbit/s
95th percentile per-packet one-way delay: 133.226 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.28 Mbit/s
95th percentile per-packet one-way delay: 133.226 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2019-01-25 01:03:29
End at: 2019-01-25 01:03:59
Local clock offset: -0.452 ms
Remote clock offset: 0.061 ms


# Below is generated by plot.py at 2019-01-25 04:40:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 137.174 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 137.174 ms
Loss rate: 0.00%
```
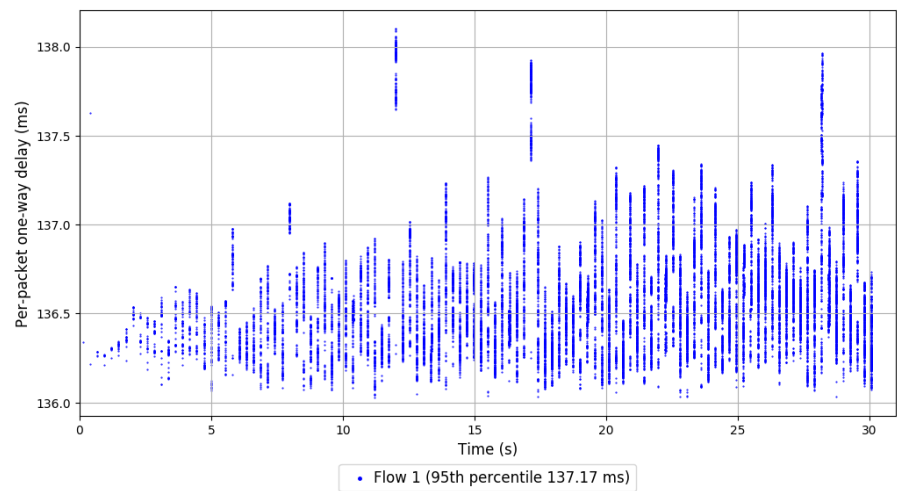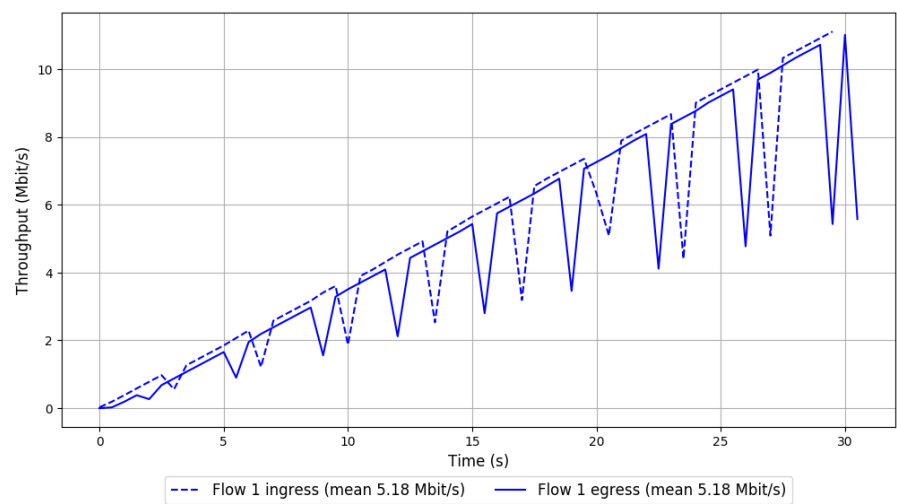
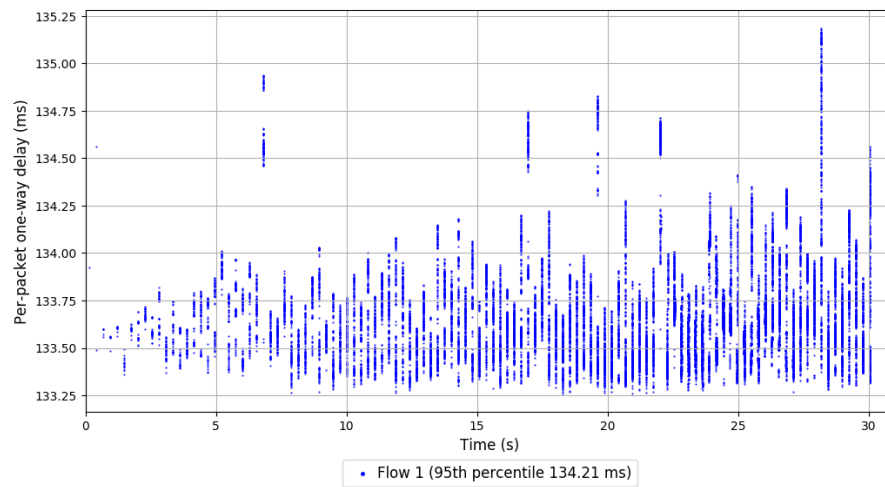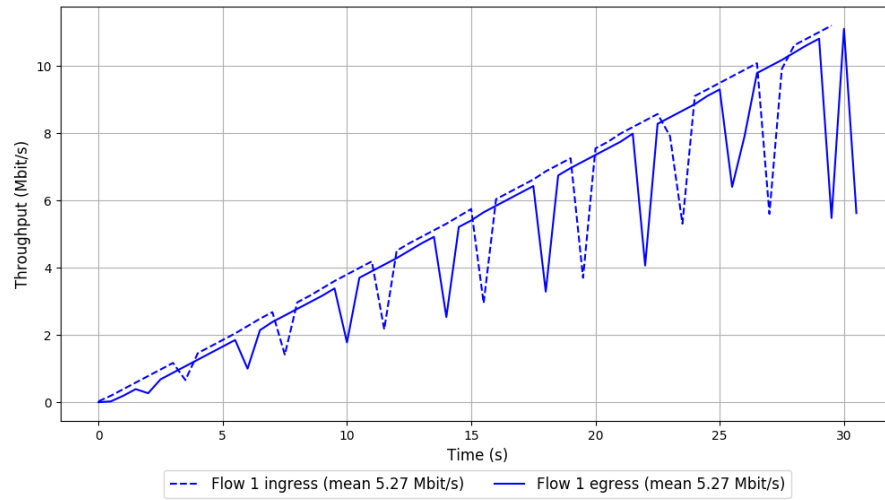Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2019-01-25 01:38:47
End at: 2019-01-25 01:39:17
Local clock offset: -0.475 ms
Remote clock offset: -0.057 ms


# Below is generated by plot.py at 2019-01-25 04:40:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.27 Mbit/s
95th percentile per-packet one-way delay: 134.207 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.27 Mbit/s
95th percentile per-packet one-way delay: 134.207 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 5.27 Mbit/s) --- Flow 1 egress (mean 5.27 Mbit/s)

· Flow 1 (95th percentile 134.21 ms)

```
Run 4: Statistics of LEDBAT

Start at: 2019-01-25 02:13:13
End at: 2019-01-25 02:13:43
Local clock offset: -0.395 ms
Remote clock offset: 0.012 ms


# Below is generated by plot.py at 2019-01-25 04:40:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.28 Mbit/s
95th percentile per-packet one-way delay: 134.123 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.28 Mbit/s
95th percentile per-packet one-way delay: 134.123 ms
Loss rate: 0.00%
```
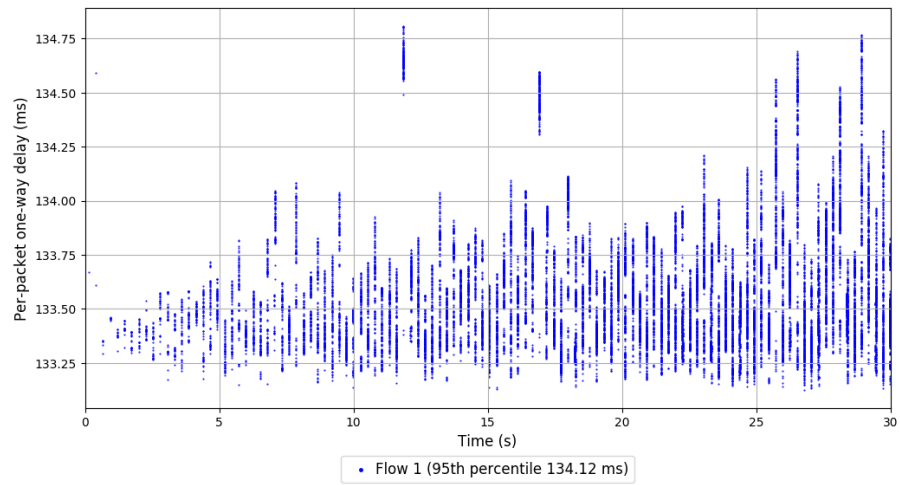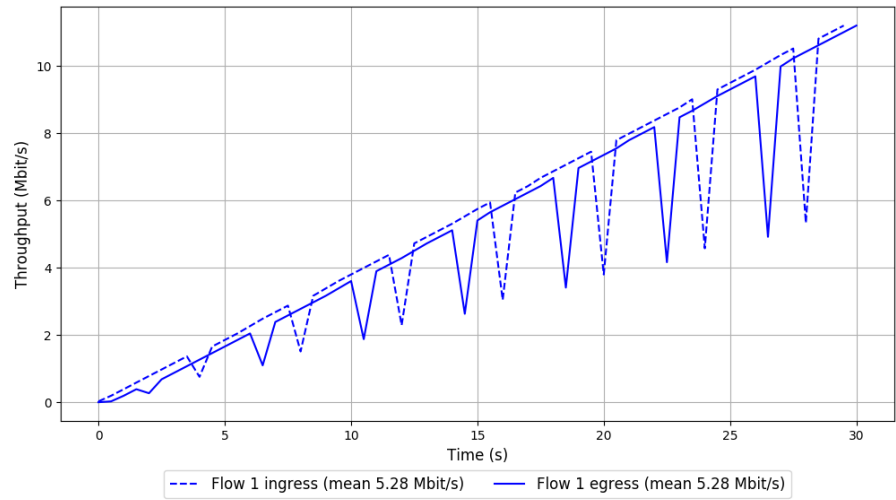
Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 5.28 Mbit/s) --- Flow 1 egress (mean 5.28 Mbit/s)

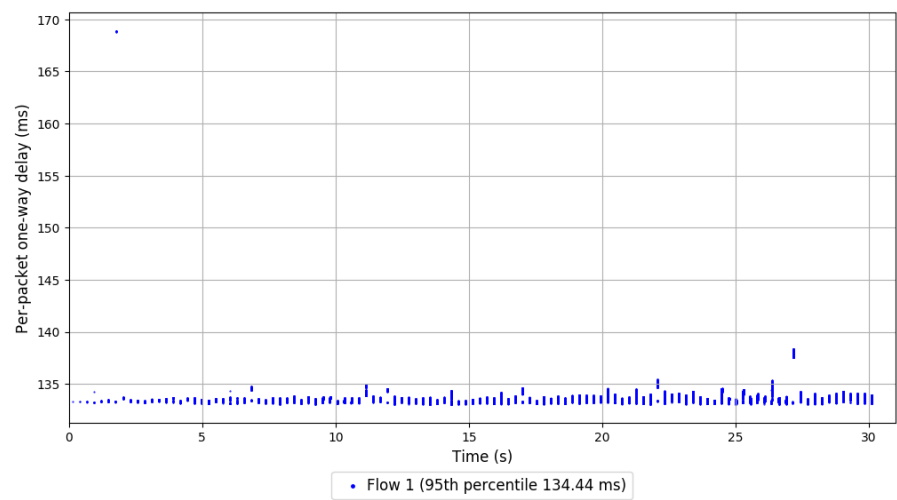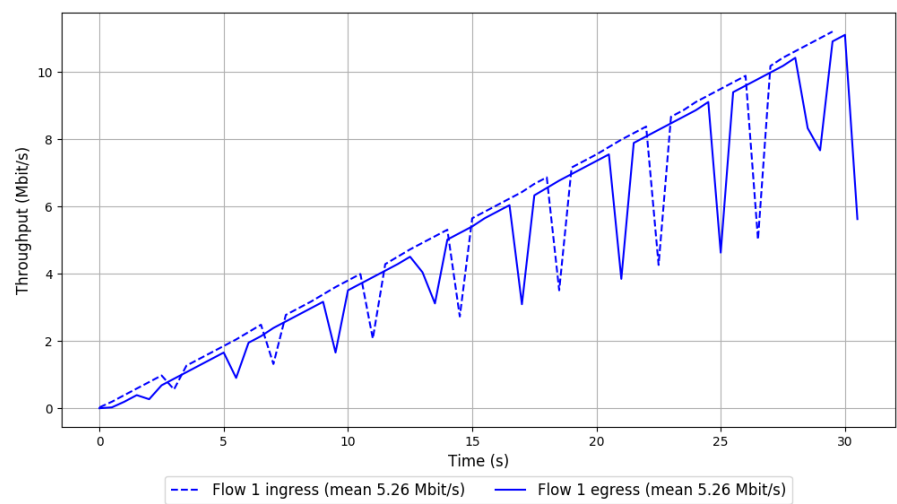Flow 1 (95th percentile 134.12 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2019-01-25 02:48:34
End at: 2019-01-25 02:49:04
Local clock offset: -0.042 ms
Remote clock offset: -0.085 ms


# Below is generated by plot.py at 2019-01-25 04:40:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.26 Mbit/s
95th percentile per-packet one-way delay: 134.443 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.26 Mbit/s
95th percentile per-packet one-way delay: 134.443 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-01-25 00:32:50
End at: 2019-01-25 00:33:20
Local clock offset: 0.115 ms
Remote clock offset: -0.026 ms


# Below is generated by plot.py at 2019-01-25 04:47:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 413.76 Mbit/s
95th percentile per-packet one-way delay: 240.636 ms
Loss rate: 3.80%
-- Flow 1:
Average throughput: 413.76 Mbit/s
95th percentile per-packet one-way delay: 240.636 ms
Loss rate: 3.80%
```
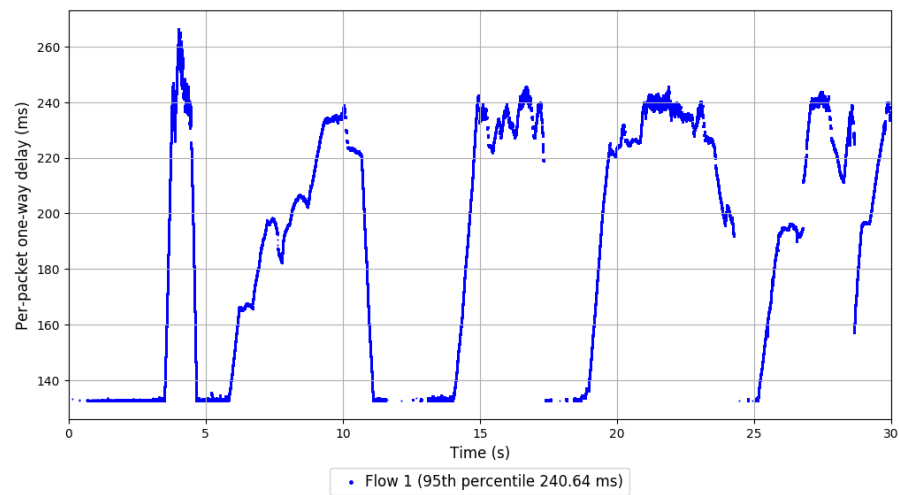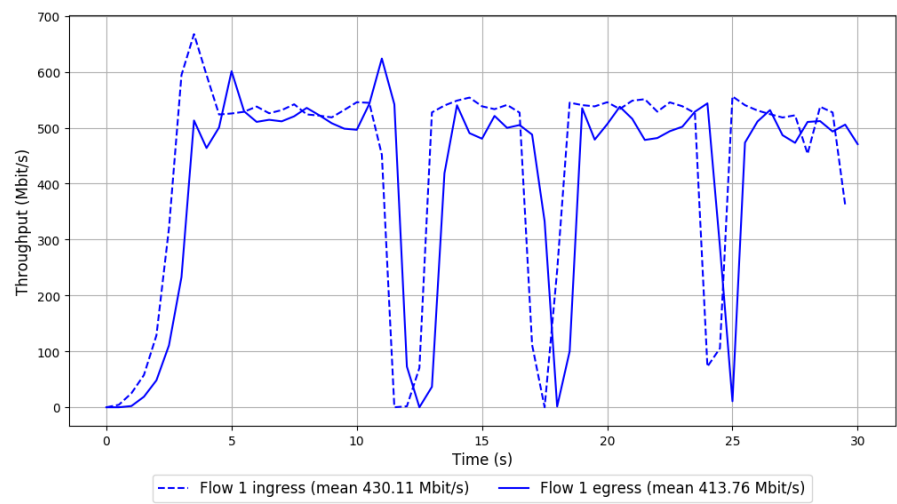
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-01-25 01:08:15
End at: 2019-01-25 01:08:45
Local clock offset: 0.277 ms
Remote clock offset: -0.043 ms


# Below is generated by plot.py at 2019-01-25 04:47:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 389.31 Mbit/s
95th percentile per-packet one-way delay: 181.392 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 389.31 Mbit/s
95th percentile per-packet one-way delay: 181.392 ms
Loss rate: 0.91%
```
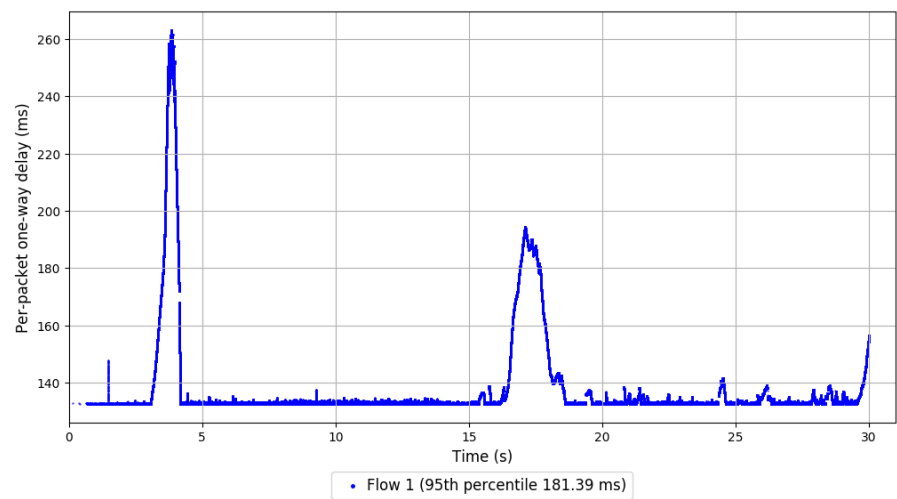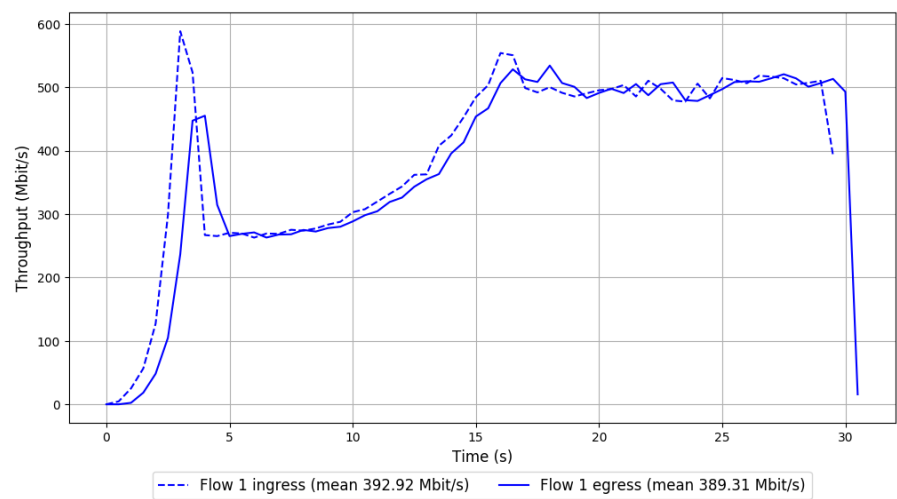
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 392.92 Mbit/s) — Flow 1 egress (mean 389.31 Mbit/s)
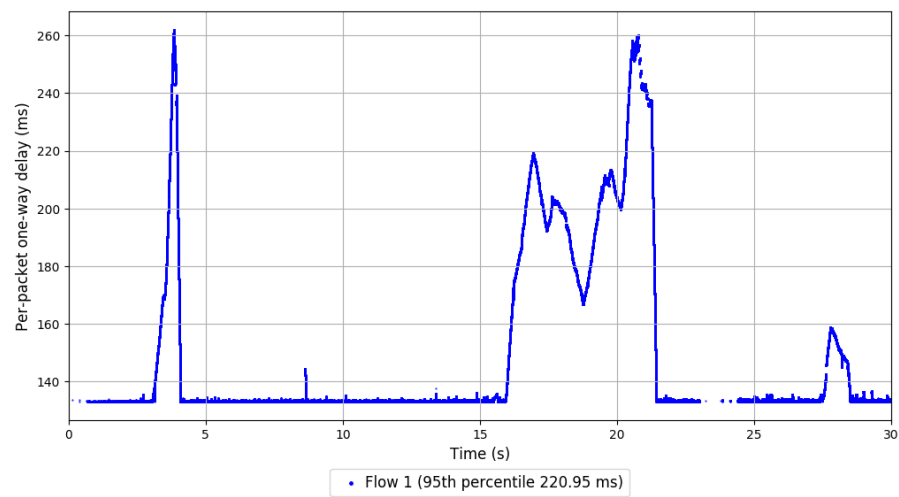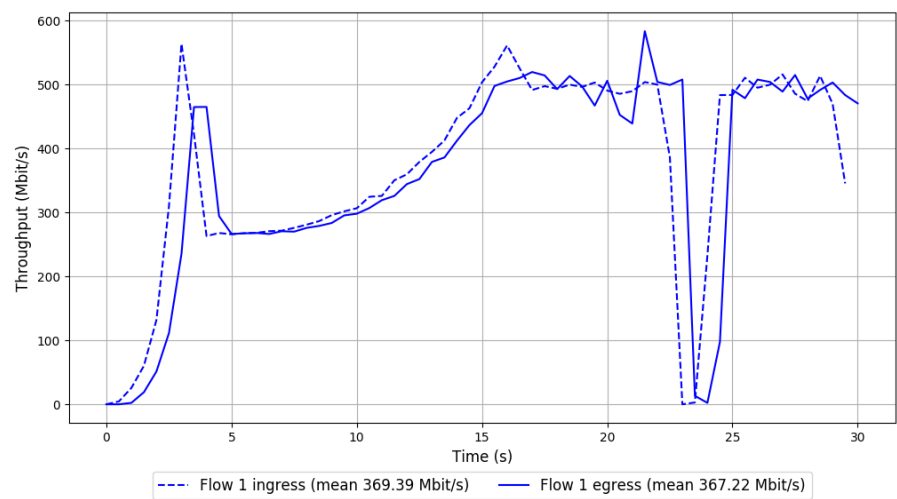

• Flow 1 (95th percentile 181.39 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-01-25 01:43:28
End at: 2019-01-25 01:43:58
Local clock offset: -0.095 ms
Remote clock offset: -0.032 ms


# Below is generated by plot.py at 2019-01-25 04:47:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 367.22 Mbit/s
95th percentile per-packet one-way delay: 220.951 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 367.22 Mbit/s
95th percentile per-packet one-way delay: 220.951 ms
Loss rate: 0.59%
```

Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 369.39 Mbit/s)   Flow 1 egress (mean 367.22 Mbit/s)

Flow 1 (95th percentile 220.95 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-01-25 02:17:41
End at: 2019-01-25 02:18:11
Local clock offset: 0.36 ms
Remote clock offset: -0.417 ms


# Below is generated by plot.py at 2019-01-25 04:48:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 390.26 Mbit/s
95th percentile per-packet one-way delay: 223.923 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 390.26 Mbit/s
95th percentile per-packet one-way delay: 223.923 ms
Loss rate: 1.17%
```
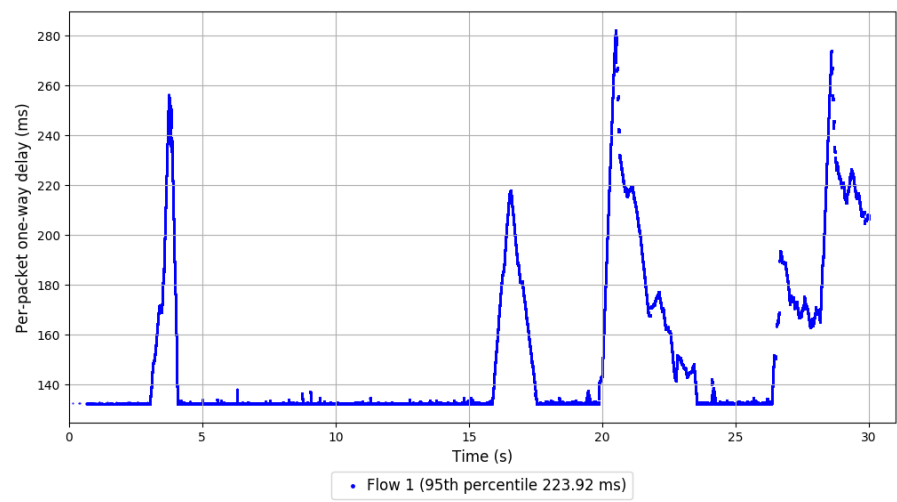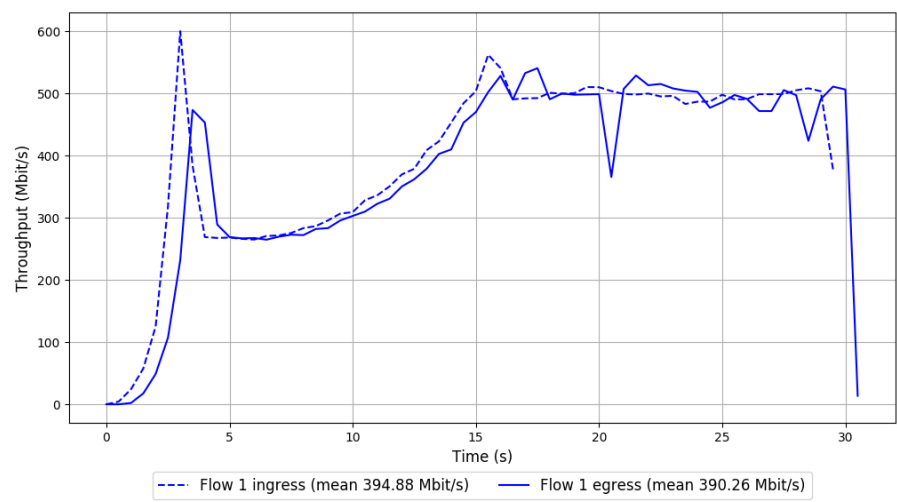
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 394.88 Mbit/s)   Flow 1 egress (mean 390.26 Mbit/s)
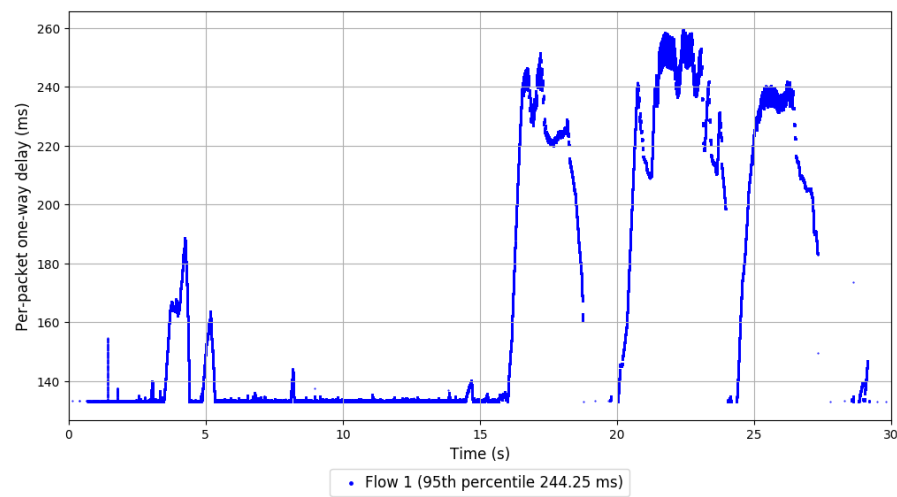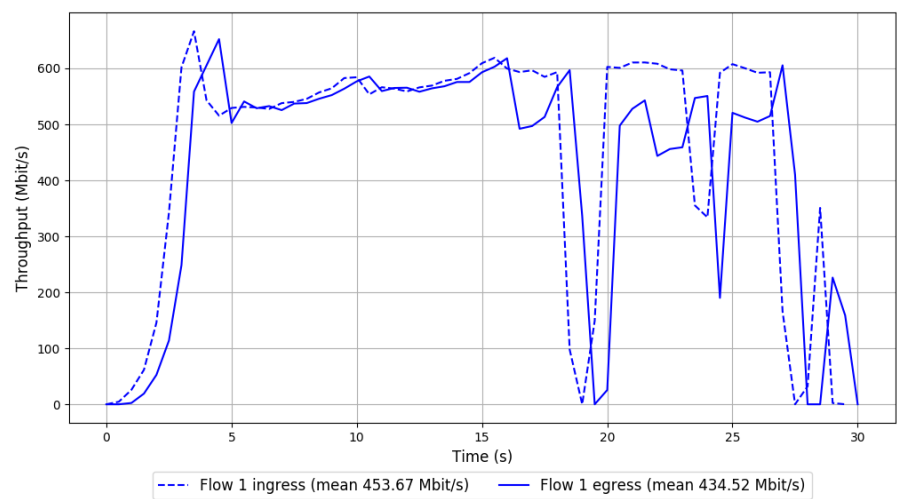

Flow 1 (95th percentile 223.92 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-01-25 02:53:21
End at: 2019-01-25 02:53:51
Local clock offset: -0.266 ms
Remote clock offset: -0.037 ms


# Below is generated by plot.py at 2019-01-25 04:53:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 434.52 Mbit/s
95th percentile per-packet one-way delay: 244.247 ms
Loss rate: 4.22%
-- Flow 1:
Average throughput: 434.52 Mbit/s
95th percentile per-packet one-way delay: 244.247 ms
Loss rate: 4.22%
```

Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 453.67 Mbit/s)   Flow 1 egress (mean 434.52 Mbit/s)
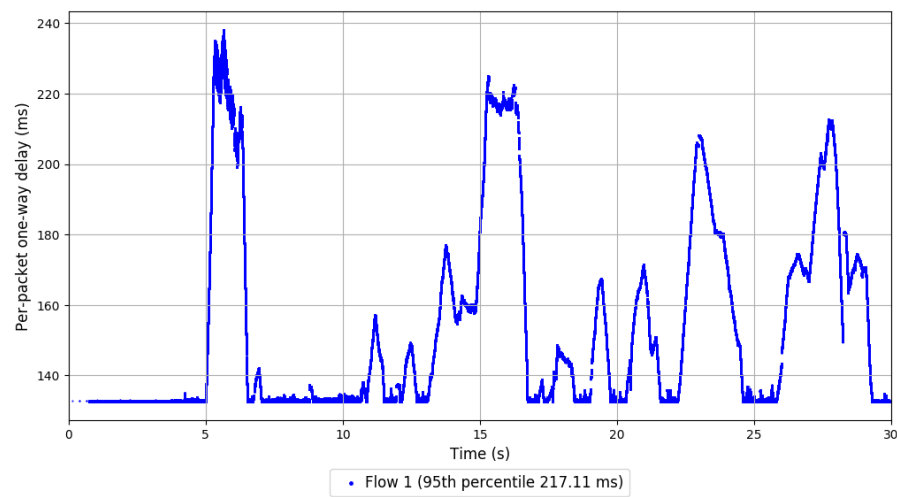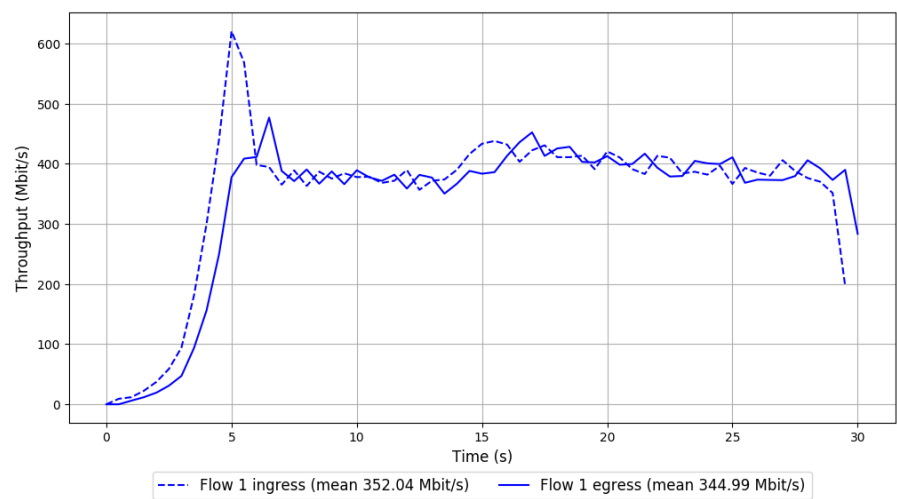

• Flow 1 (95th percentile 244.25 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2019-01-25 00:24:33
End at: 2019-01-25 00:25:03
Local clock offset: 0.393 ms
Remote clock offset: -0.029 ms


# Below is generated by plot.py at 2019-01-25 04:53:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 344.99 Mbit/s
95th percentile per-packet one-way delay: 217.108 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 344.99 Mbit/s
95th percentile per-packet one-way delay: 217.108 ms
Loss rate: 2.00%
```
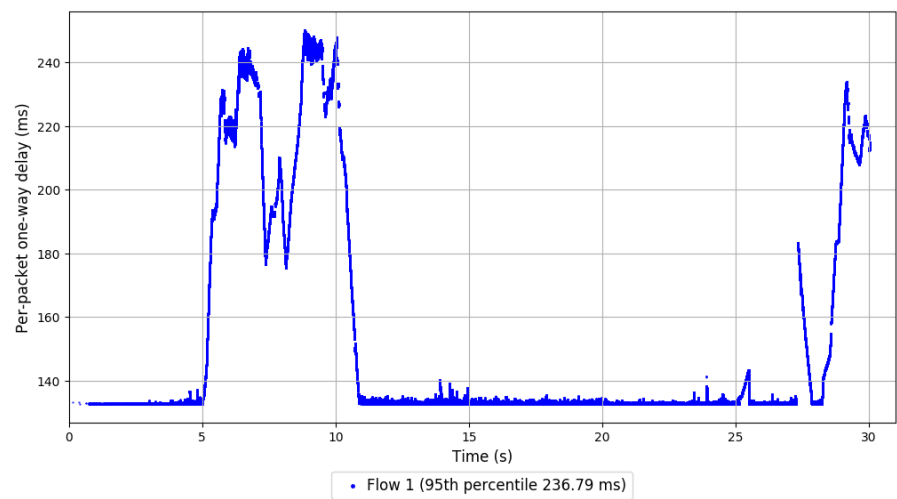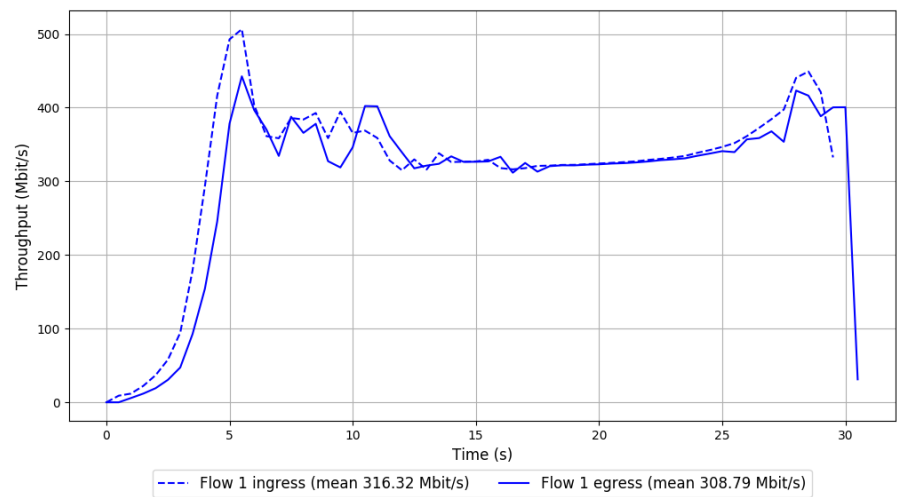
Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2019-01-25 01:00:17
End at: 2019-01-25 01:00:47
Local clock offset: 0.021 ms
Remote clock offset: -0.029 ms


# Below is generated by plot.py at 2019-01-25 04:53:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 308.79 Mbit/s
95th percentile per-packet one-way delay: 236.786 ms
Loss rate: 2.38%
-- Flow 1:
Average throughput: 308.79 Mbit/s
95th percentile per-packet one-way delay: 236.786 ms
Loss rate: 2.38%
```

Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 316.32 Mbit/s) — Flow 1 egress (mean 308.79 Mbit/s)

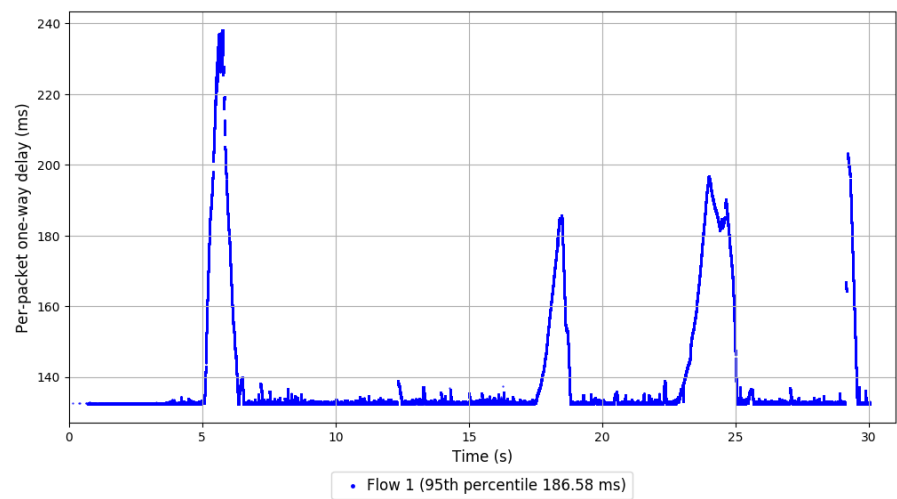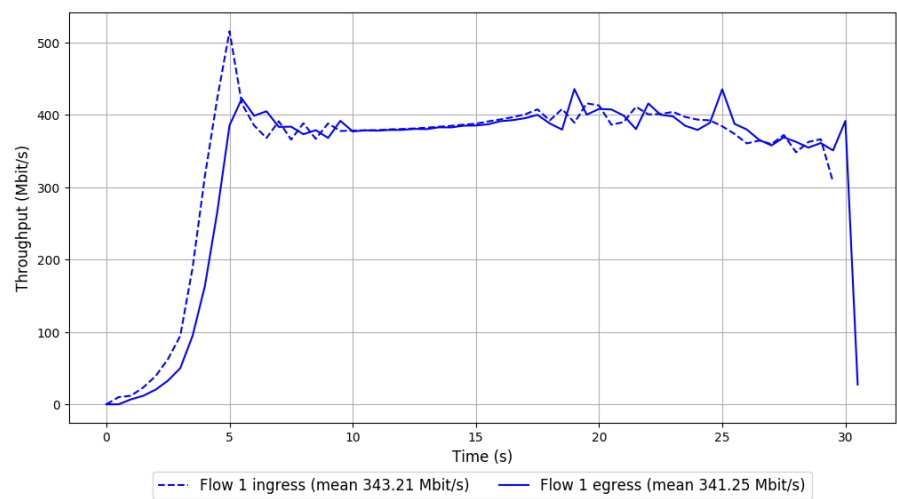

• Flow 1 (95th percentile 236.79 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2019-01-25 01:34:57
End at: 2019-01-25 01:35:27
Local clock offset: -0.036 ms
Remote clock offset: -0.416 ms


# Below is generated by plot.py at 2019-01-25 04:54:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 341.25 Mbit/s
95th percentile per-packet one-way delay: 186.579 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 341.25 Mbit/s
95th percentile per-packet one-way delay: 186.579 ms
Loss rate: 0.57%
```
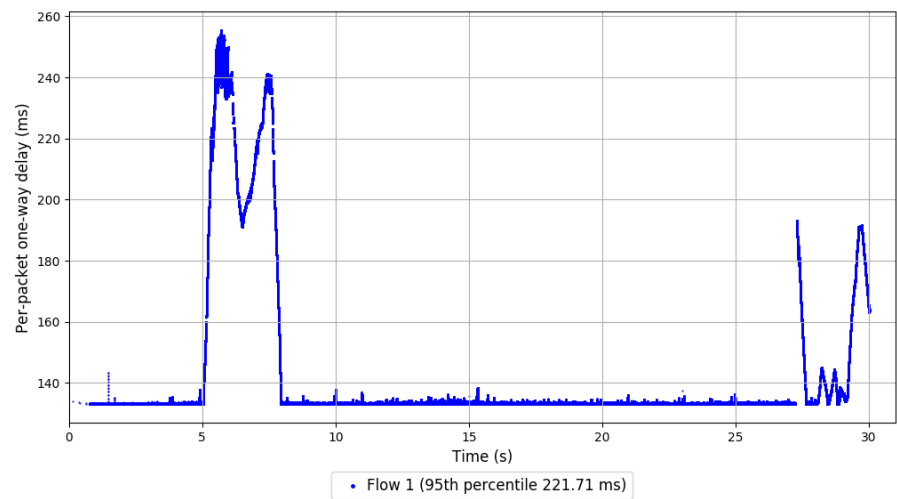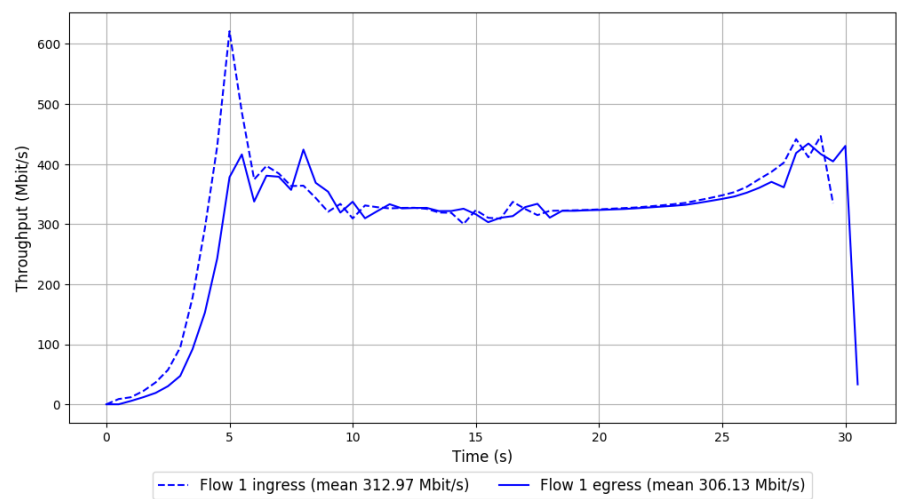
Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 343.21 Mbit/s) --- Flow 1 egress (mean 341.25 Mbit/s)

• Flow 1 (95th percentile 186.58 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2019-01-25 02:09:59
End at: 2019-01-25 02:10:29
Local clock offset: -0.268 ms
Remote clock offset: 0.019 ms


# Below is generated by plot.py at 2019-01-25 04:58:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 306.13 Mbit/s
95th percentile per-packet one-way delay: 221.707 ms
Loss rate: 2.19%
-- Flow 1:
Average throughput: 306.13 Mbit/s
95th percentile per-packet one-way delay: 221.707 ms
Loss rate: 2.19%
```
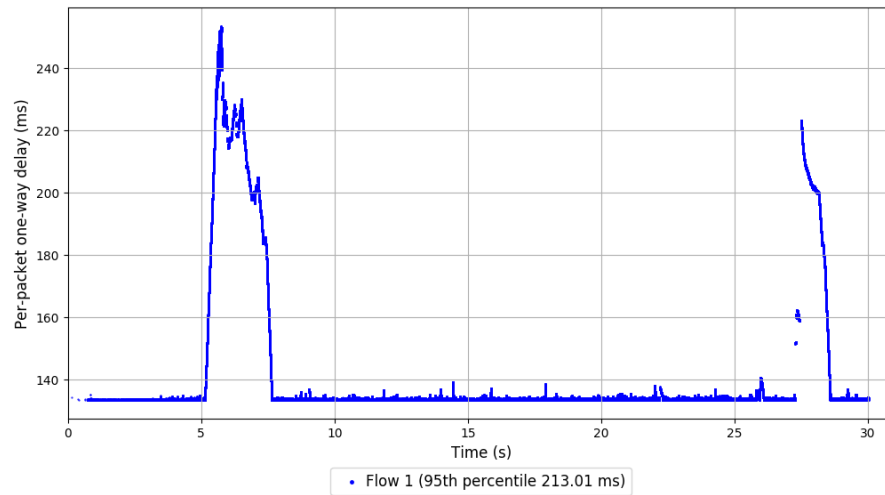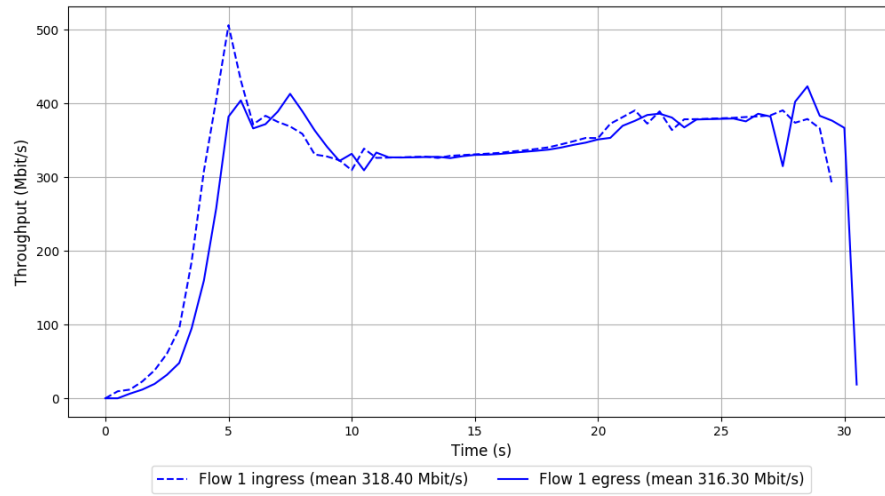
Run 4: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 312.97 Mbit/s)   Flow 1 egress (mean 306.13 Mbit/s)

Flow 1 (95th percentile 221.71 ms)

```
Run 5: Statistics of PCC-Expr

Start at: 2019-01-25 02:44:20
End at: 2019-01-25 02:44:50
Local clock offset: -0.002 ms
Remote clock offset: 0.418 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 316.30 Mbit/s
95th percentile per-packet one-way delay: 213.015 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 316.30 Mbit/s
95th percentile per-packet one-way delay: 213.015 ms
Loss rate: 0.66%
```

Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 318.40 Mbit/s) — — — Flow 1 egress (mean 316.30 Mbit/s)

• Flow 1 (95th percentile 213.01 ms)
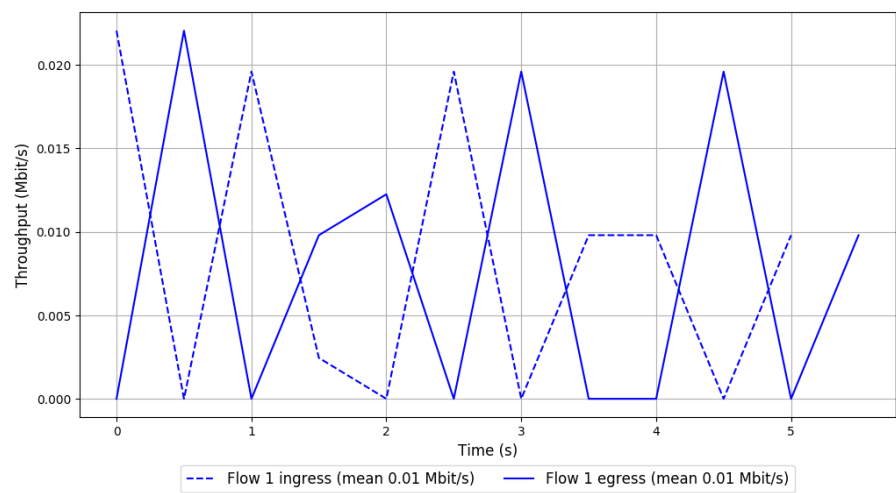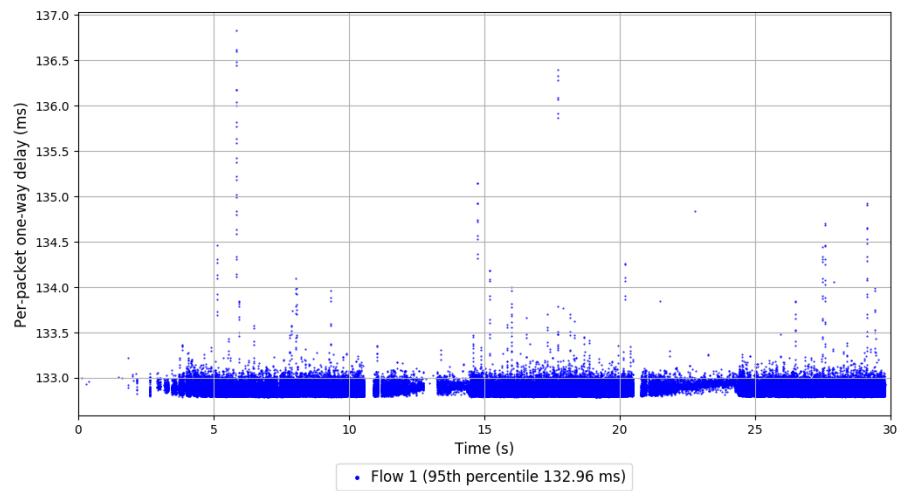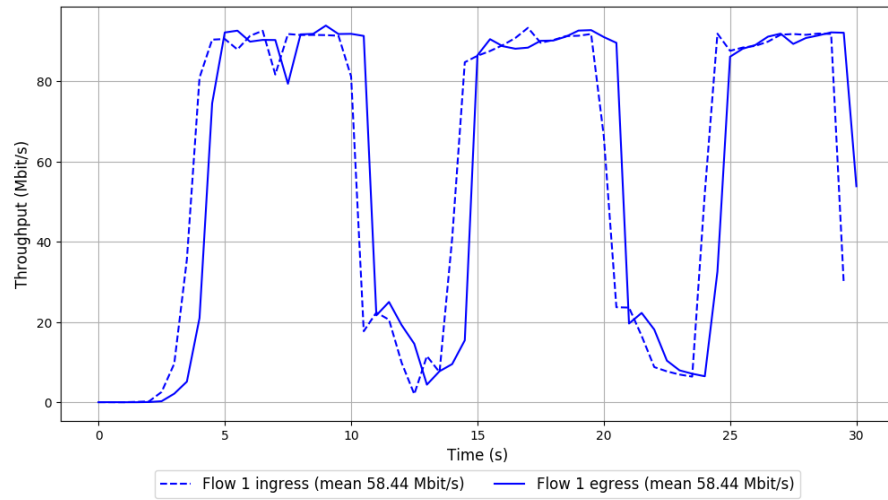
```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-25 00:47:21
End at: 2019-01-25 00:47:51
Local clock offset: 0.069 ms
Remote clock offset: 0.291 ms
```

Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-01-25 01:22:37
End at: 2019-01-25 01:23:07
Local clock offset: 0.025 ms
Remote clock offset: 0.091 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.44 Mbit/s
95th percentile per-packet one-way delay: 132.961 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.44 Mbit/s
95th percentile per-packet one-way delay: 132.961 ms
Loss rate: 0.00%
```
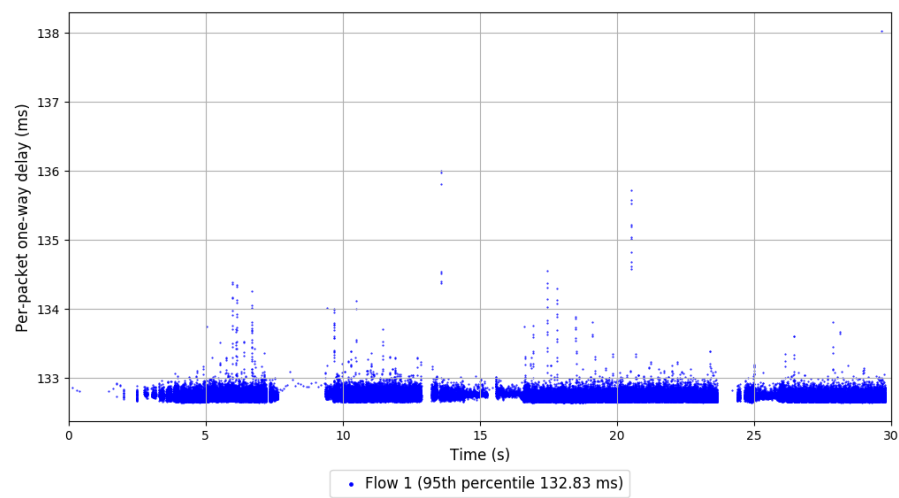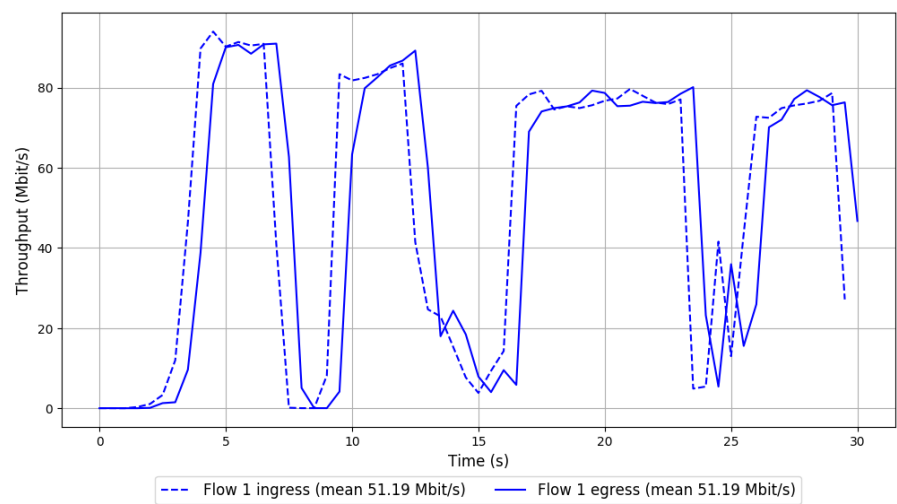
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-01-25 01:57:49
End at: 2019-01-25 01:58:19
Local clock offset: 0.128 ms
Remote clock offset: -0.086 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.19 Mbit/s
95th percentile per-packet one-way delay: 132.834 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.19 Mbit/s
95th percentile per-packet one-way delay: 132.834 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

140

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-01-25 02:32:20
End at: 2019-01-25 02:32:50
Local clock offset: 0.014 ms
Remote clock offset: 0.075 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.22 Mbit/s
95th percentile per-packet one-way delay: 133.204 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 47.22 Mbit/s
95th percentile per-packet one-way delay: 133.204 ms
Loss rate: 0.00%
```
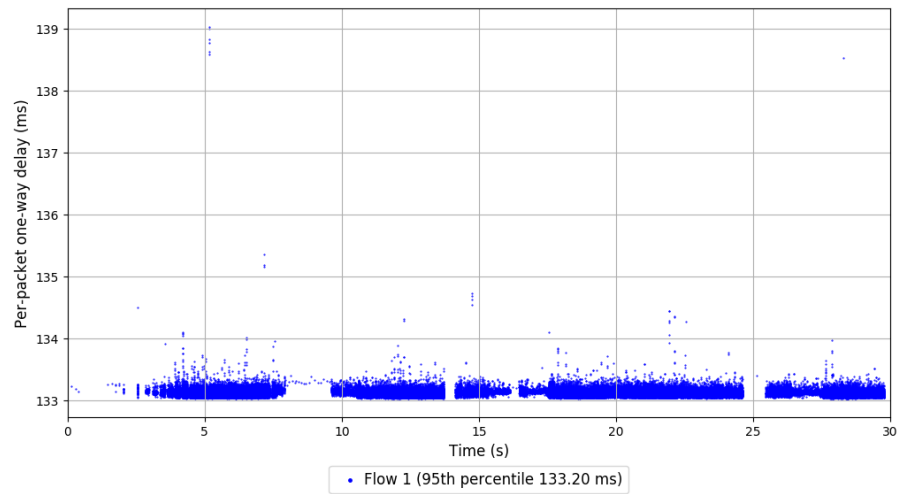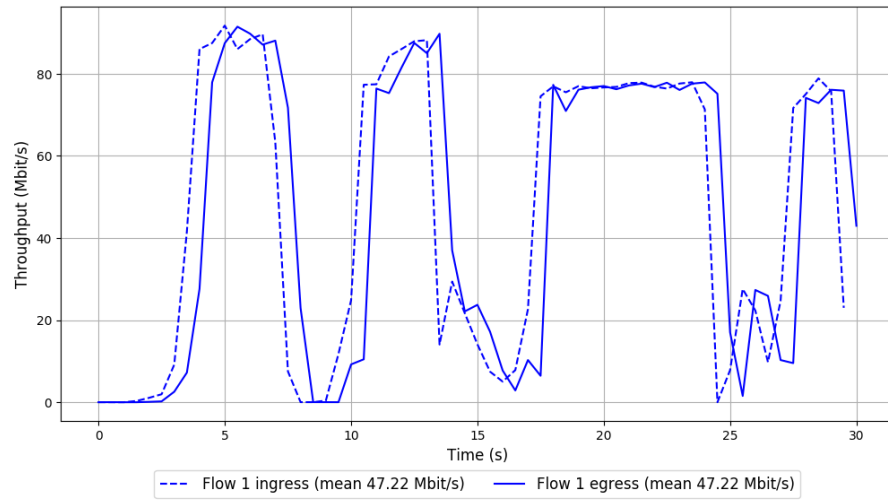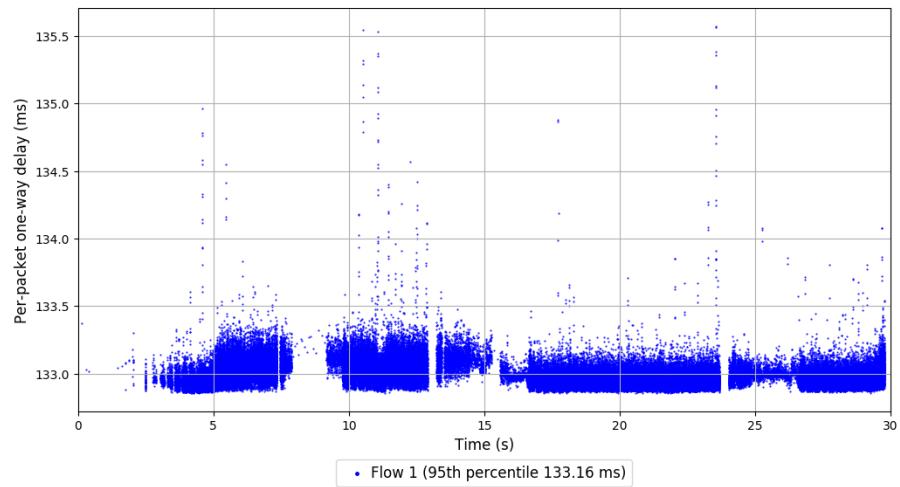
Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-01-25 03:07:22
End at: 2019-01-25 03:07:52
Local clock offset: 0.018 ms
Remote clock offset: 0.004 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.78 Mbit/s
95th percentile per-packet one-way delay: 133.156 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.78 Mbit/s
95th percentile per-packet one-way delay: 133.156 ms
Loss rate: 0.00%
```
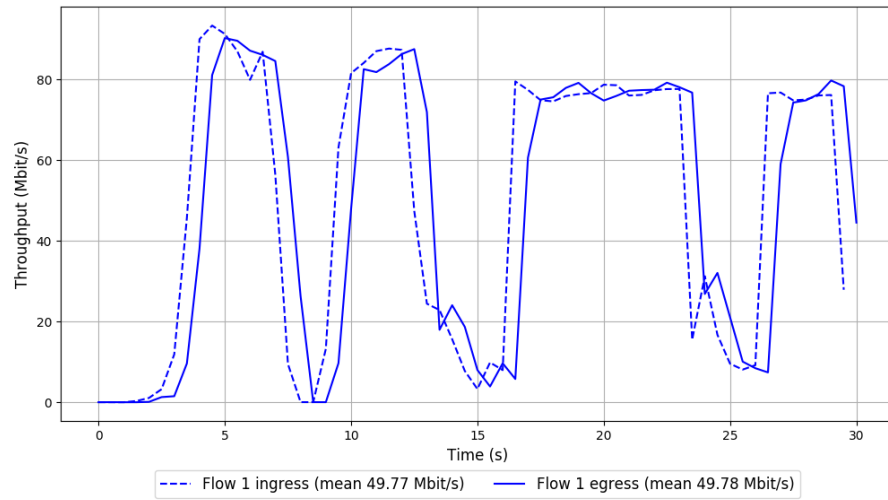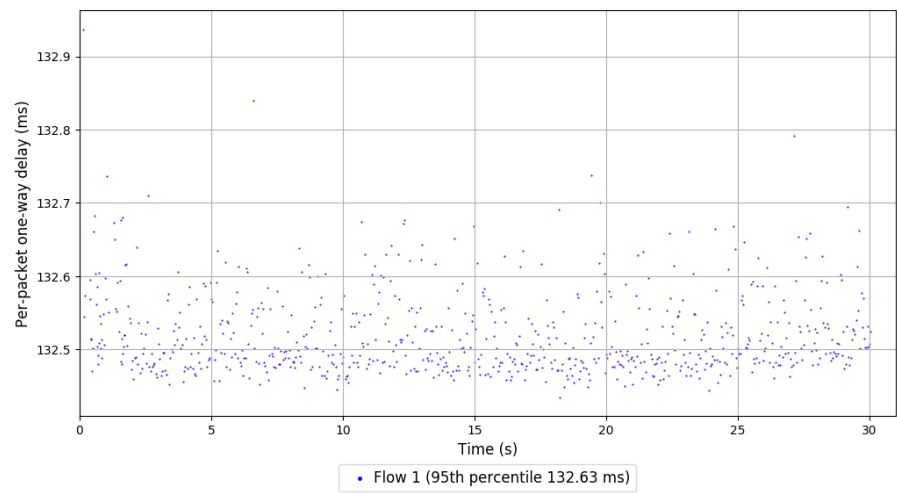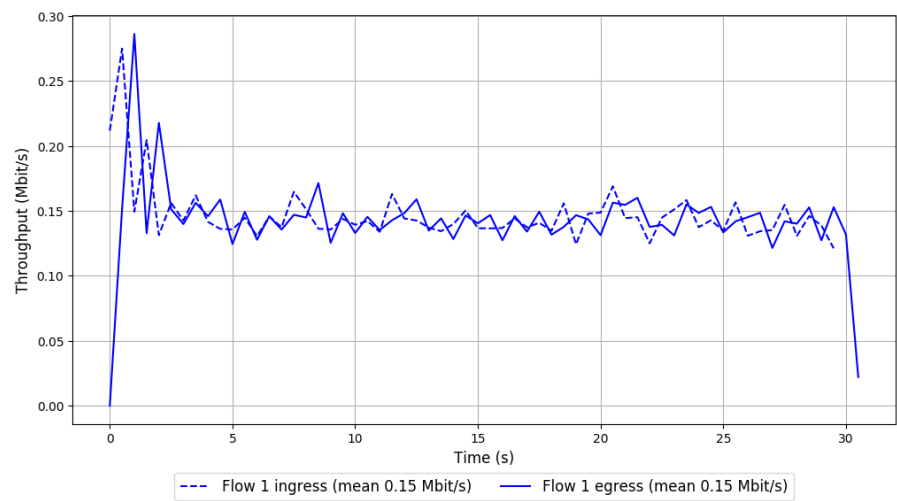
Run 5: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2019-01-25 00:40:04
End at: 2019-01-25 00:40:34
Local clock offset: -0.088 ms
Remote clock offset: -0.106 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.630 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.630 ms
Loss rate: 0.00%
```
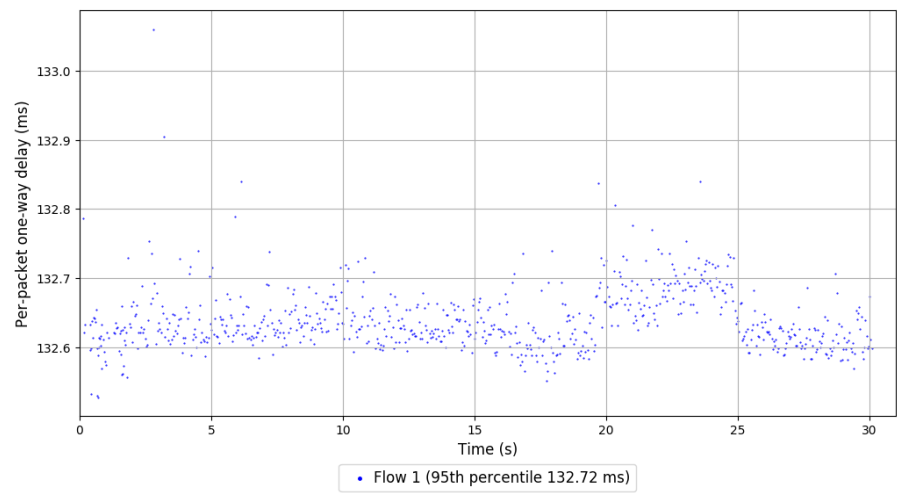
Run 1: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.15 Mbit/s)   Flow 1 egress (mean 0.15 Mbit/s)

Flow 1 (95th percentile 132.63 ms)

```
Run 2: Statistics of SCReAM

Start at: 2019-01-25 01:15:23
End at: 2019-01-25 01:15:53
Local clock offset: 0.327 ms
Remote clock offset: 0.001 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.719 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.719 ms
Loss rate: 0.00%
```
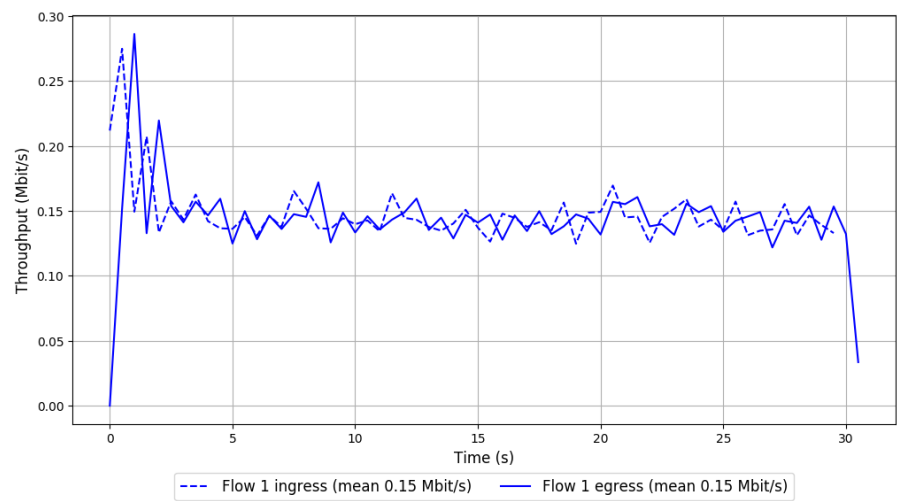
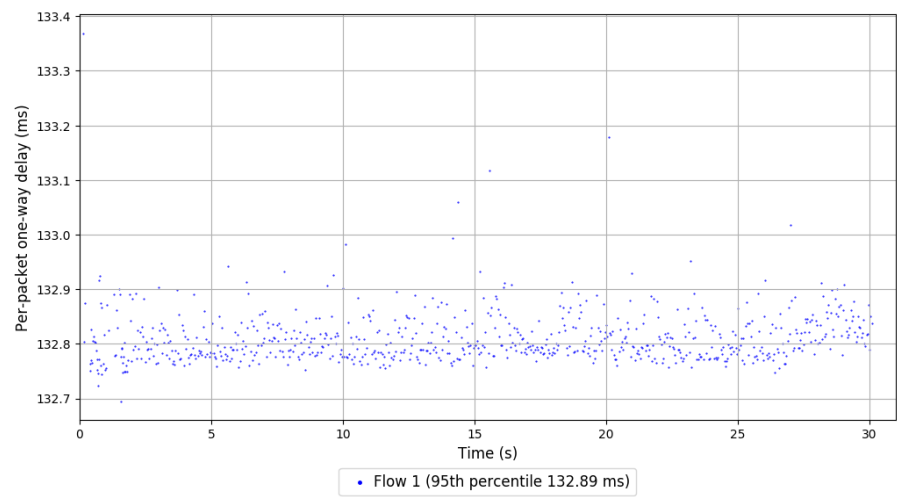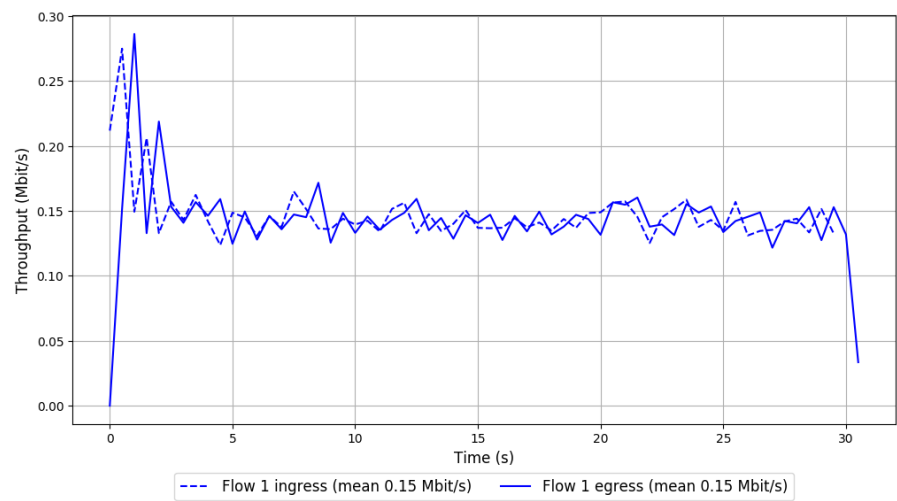Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-01-25 01:50:18
End at: 2019-01-25 01:50:48
Local clock offset: 0.061 ms
Remote clock offset: -0.042 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.890 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.890 ms
Loss rate: 0.00%
```

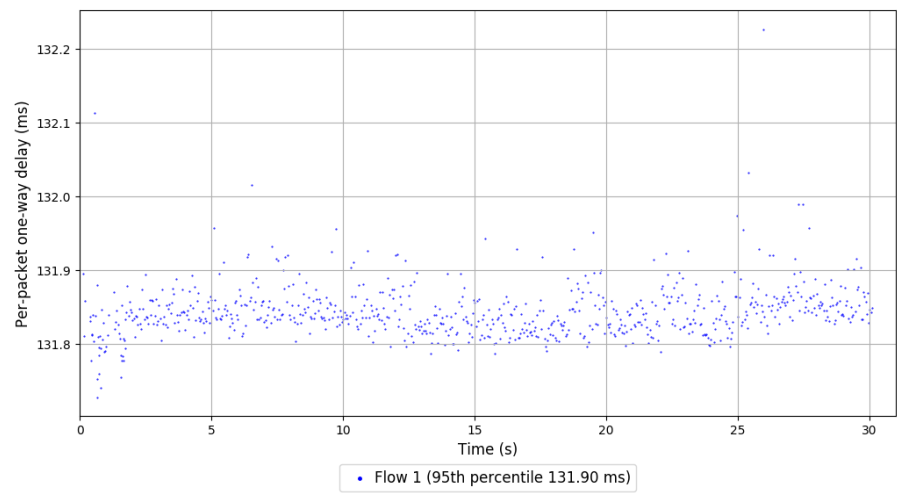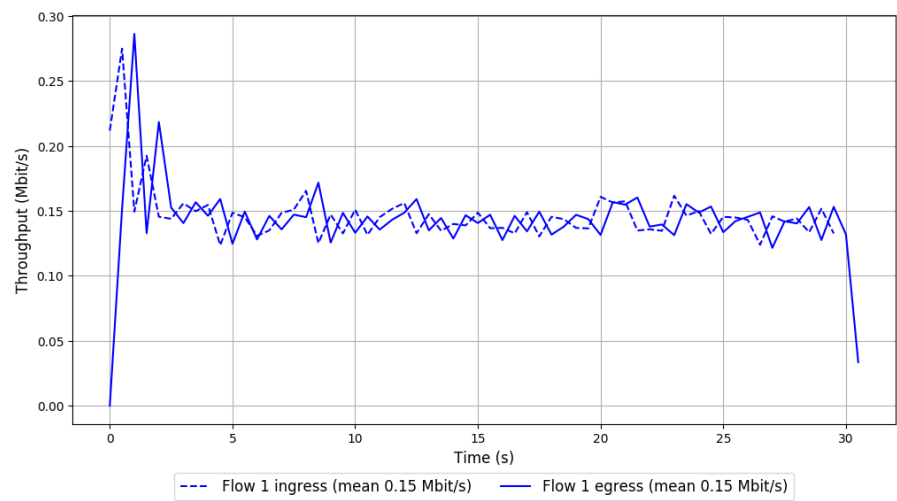# Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-01-25 02:24:29
End at: 2019-01-25 02:24:59
Local clock offset: 0.397 ms
Remote clock offset: -0.031 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 131.904 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 131.904 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-01-25 03:00:08
End at: 2019-01-25 03:00:38
Local clock offset: -0.497 ms
Remote clock offset: 0.25 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.079 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.079 ms
Loss rate: 0.00%
```
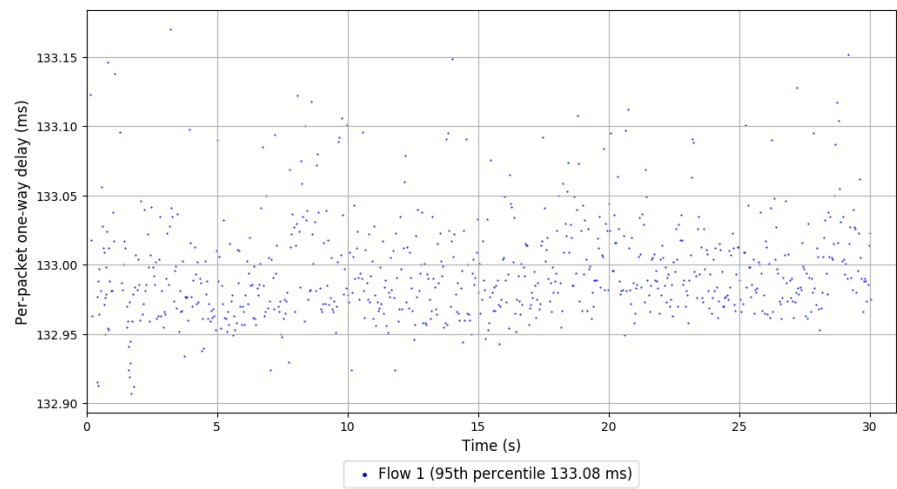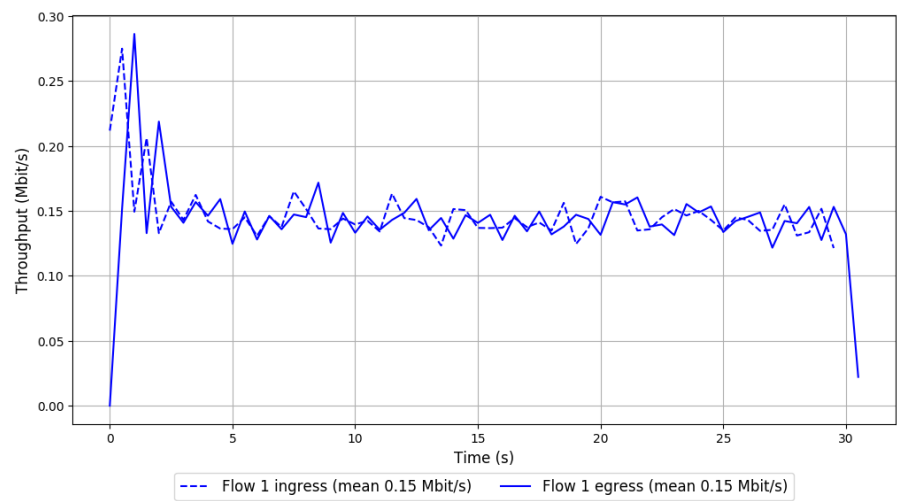
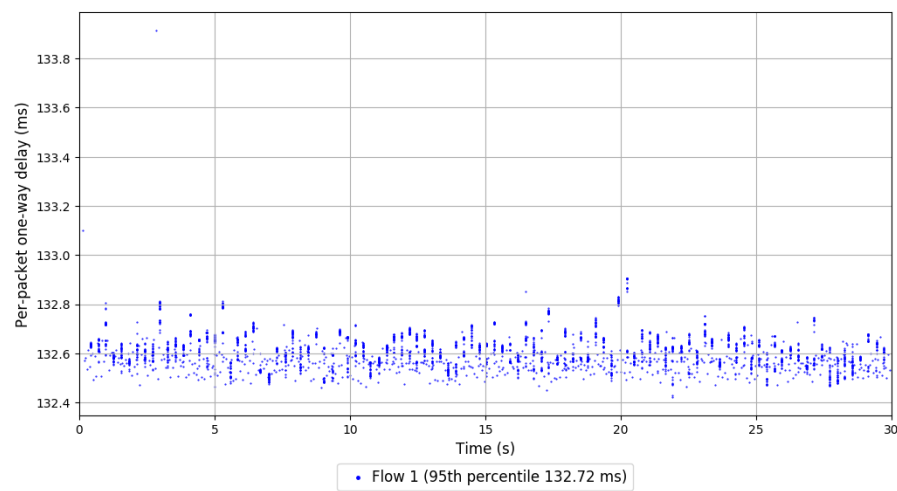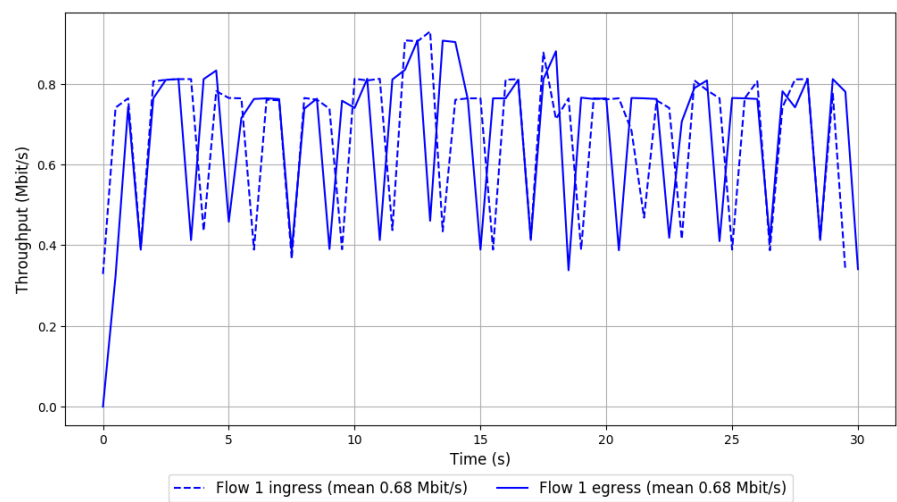Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2019-01-25 00:46:10
End at: 2019-01-25 00:46:40
Local clock offset: 0.294 ms
Remote clock offset: -0.076 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 132.723 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 132.723 ms
Loss rate: 0.00%
```

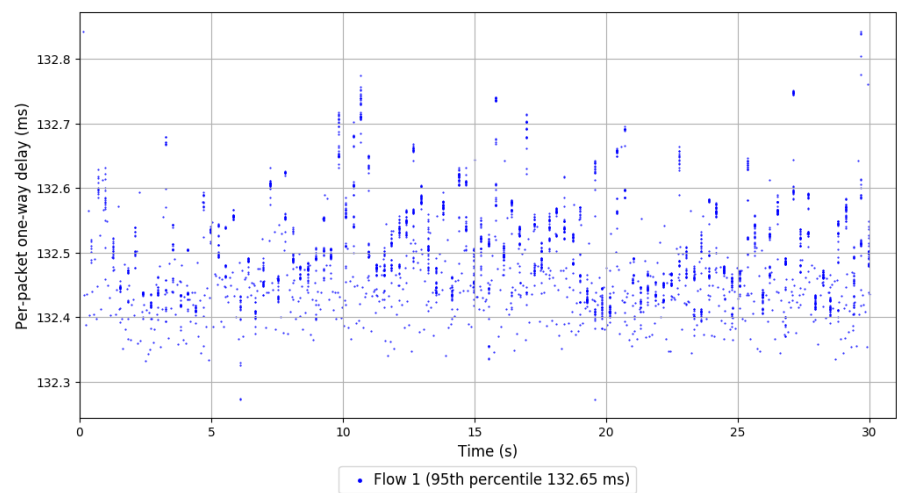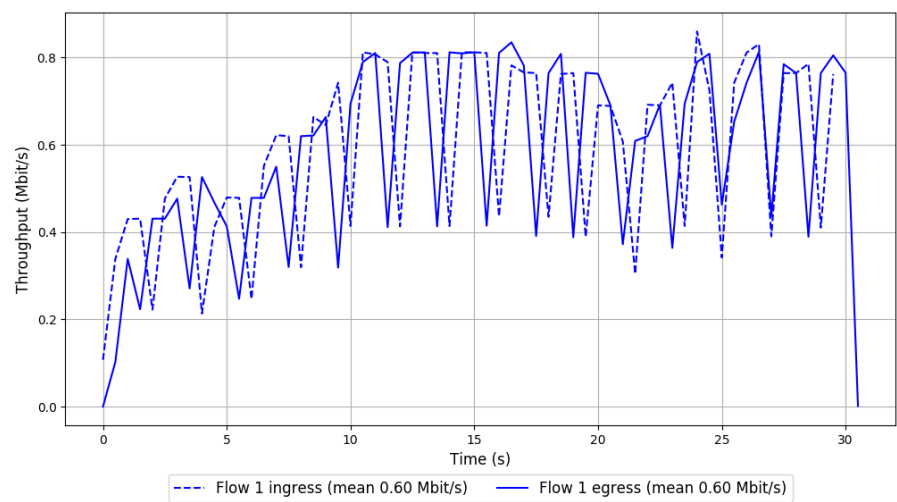Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-01-25 01:21:26
End at: 2019-01-25 01:21:56
Local clock offset: 0.511 ms
Remote clock offset: -0.018 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 132.650 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 132.650 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

Flow 1 ingress (mean 0.60 Mbit/s)   Flow 1 egress (mean 0.60 Mbit/s)

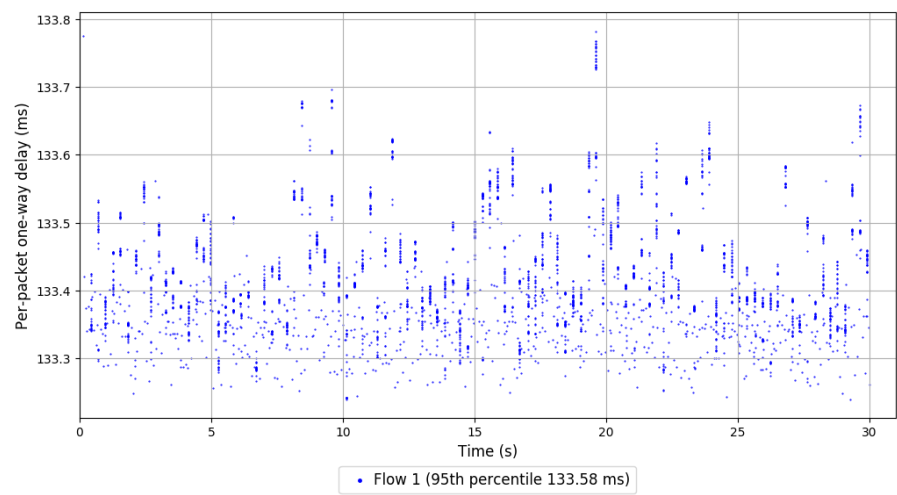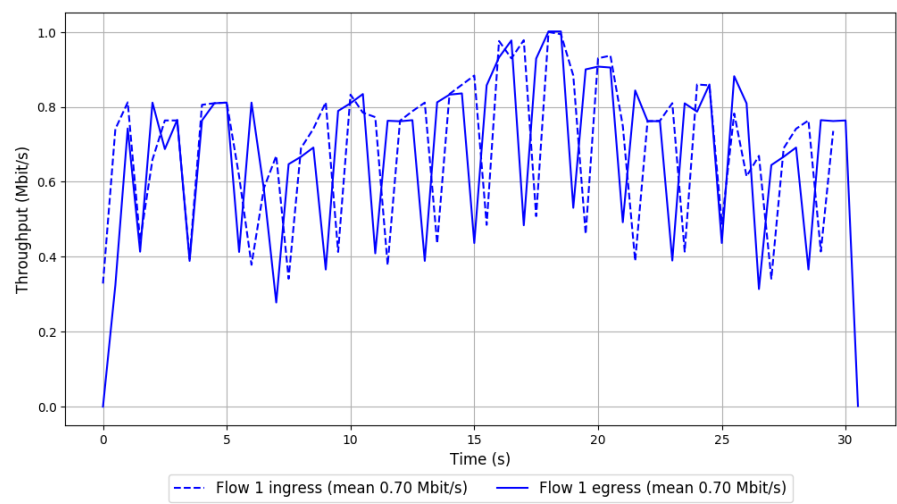Flow 1 (95th percentile 132.65 ms)

```
Run 3: Statistics of Sprout

Start at: 2019-01-25 01:56:38
End at: 2019-01-25 01:57:08
Local clock offset: -0.301 ms
Remote clock offset: 0.029 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 133.582 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 133.582 ms
Loss rate: 0.00%
```

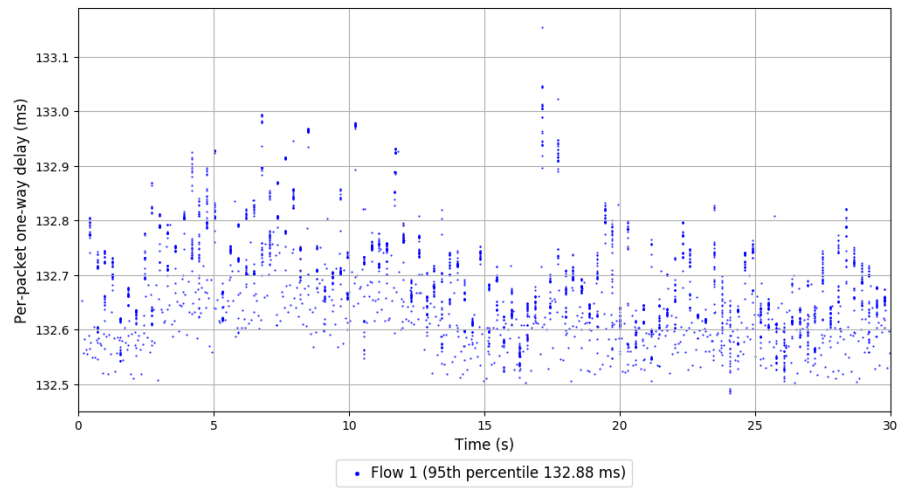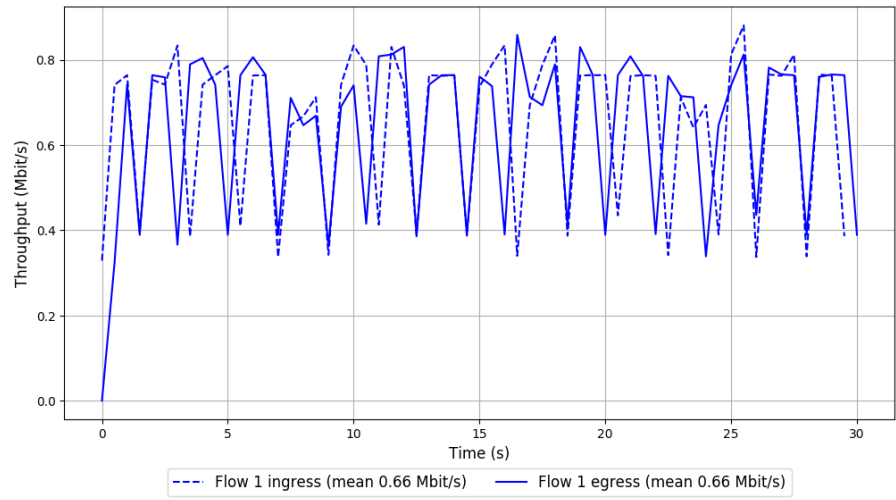Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-01-25 02:31:09
End at: 2019-01-25 02:31:40
Local clock offset: 0.137 ms
Remote clock offset: -0.321 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 132.883 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 132.883 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 0.66 Mbit/s)   Flow 1 egress (mean 0.66 Mbit/s)

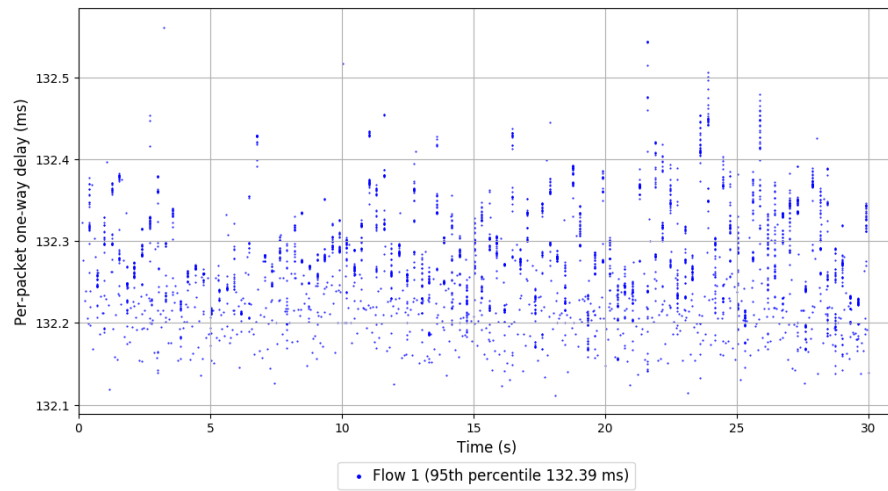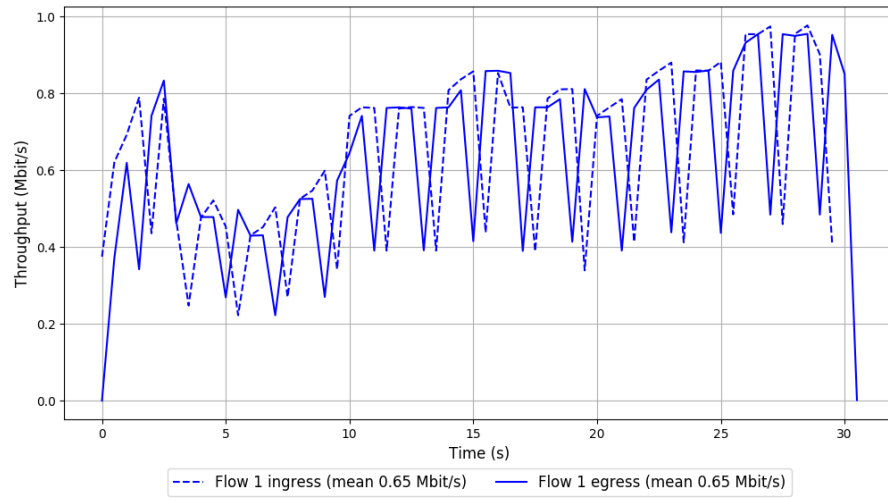Flow 1 (95th percentile 132.88 ms)

```
Run 5: Statistics of Sprout

Start at: 2019-01-25 03:06:12
End at: 2019-01-25 03:06:42
Local clock offset: -0.082 ms
Remote clock offset: -0.073 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 132.389 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 132.389 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

Flow 1 ingress (mean 0.65 Mbit/s) ---- Flow 1 egress (mean 0.65 Mbit/s) ——

Flow 1 (95th percentile 132.39 ms)

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

Start at: 2019-01-25 00:34:46
End at: 2019-01-25 00:35:16
Local clock offset: -0.182 ms
Remote clock offset: 0.253 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.18 Mbit/s
95th percentile per-packet one-way delay: 133.423 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 181.18 Mbit/s
95th percentile per-packet one-way delay: 133.423 ms
Loss rate: 0.00%
```
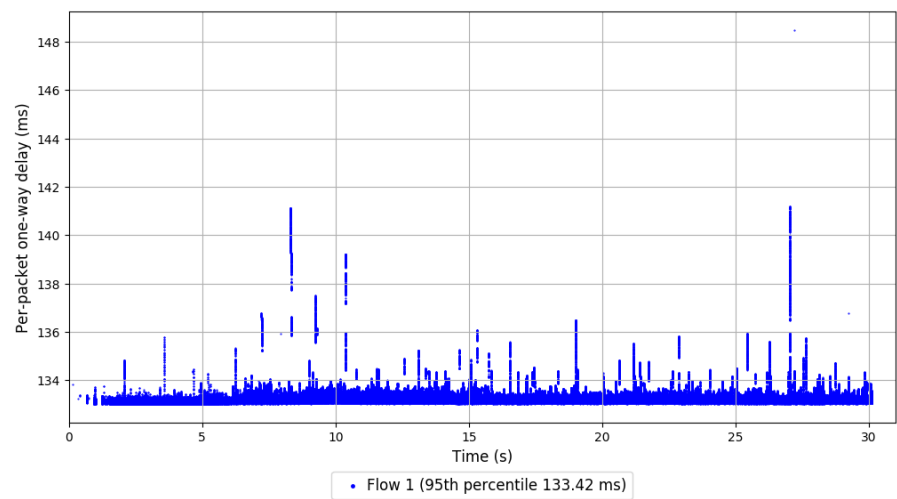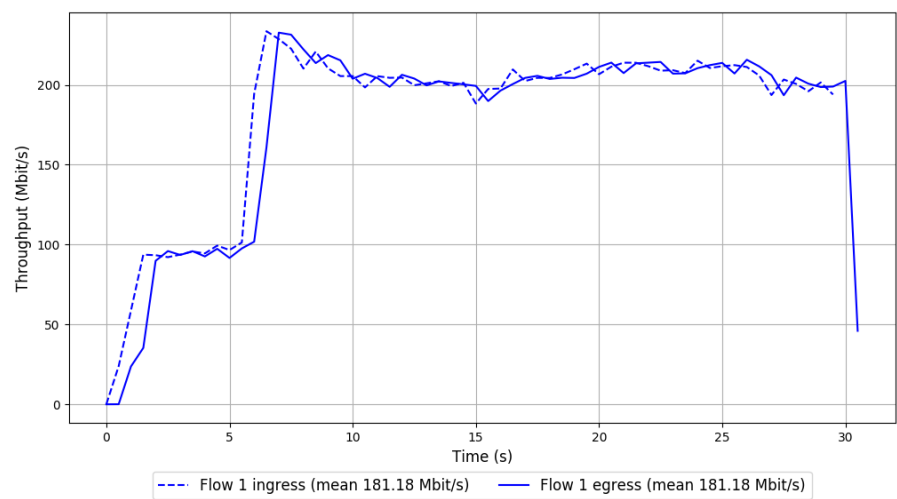
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2019-01-25 01:10:01
End at: 2019-01-25 01:10:31
Local clock offset: -0.238 ms
Remote clock offset: 0.088 ms


# Below is generated by plot.py at 2019-01-25 04:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.50 Mbit/s
95th percentile per-packet one-way delay: 132.570 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 191.50 Mbit/s
95th percentile per-packet one-way delay: 132.570 ms
Loss rate: 0.00%
```
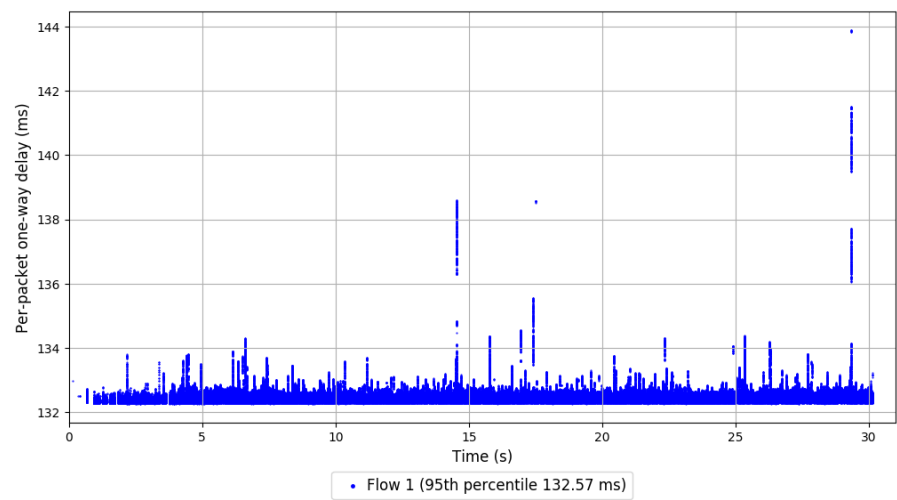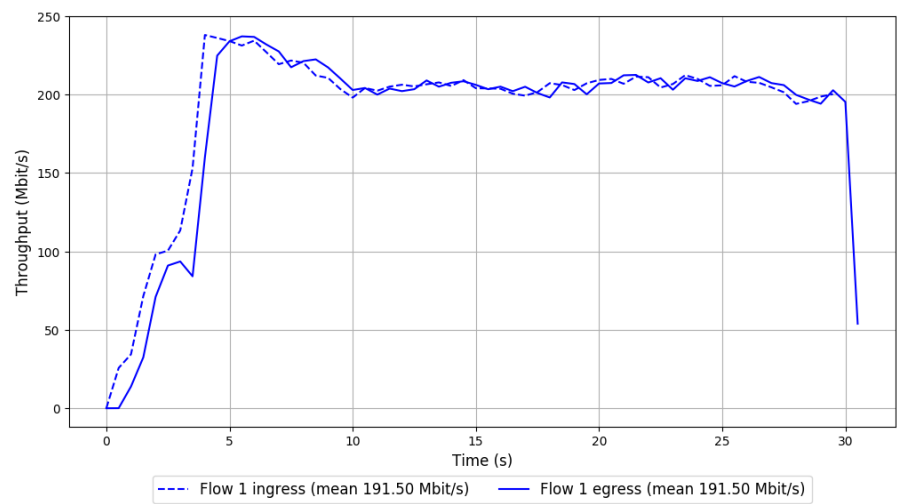
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2019-01-25 01:45:24
End at: 2019-01-25 01:45:54
Local clock offset: -0.484 ms
Remote clock offset: -0.088 ms


# Below is generated by plot.py at 2019-01-25 04:59:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.47 Mbit/s
95th percentile per-packet one-way delay: 133.599 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 203.47 Mbit/s
95th percentile per-packet one-way delay: 133.599 ms
Loss rate: 0.00%
```
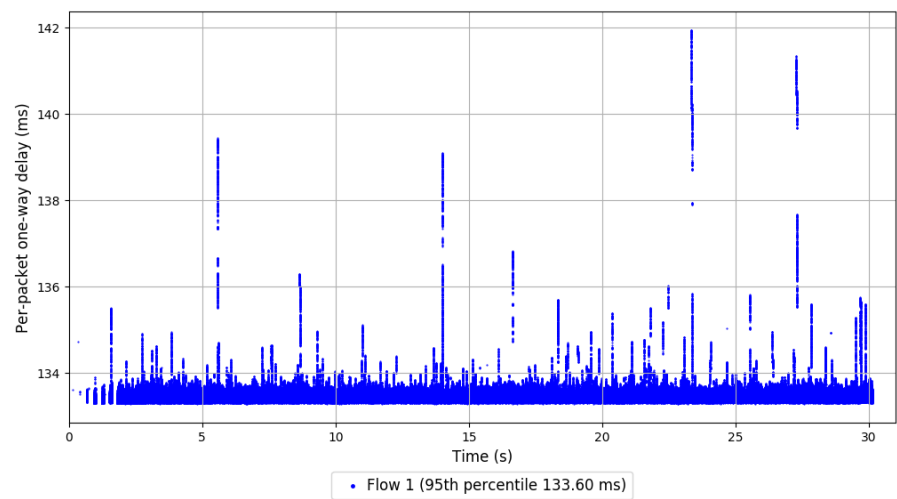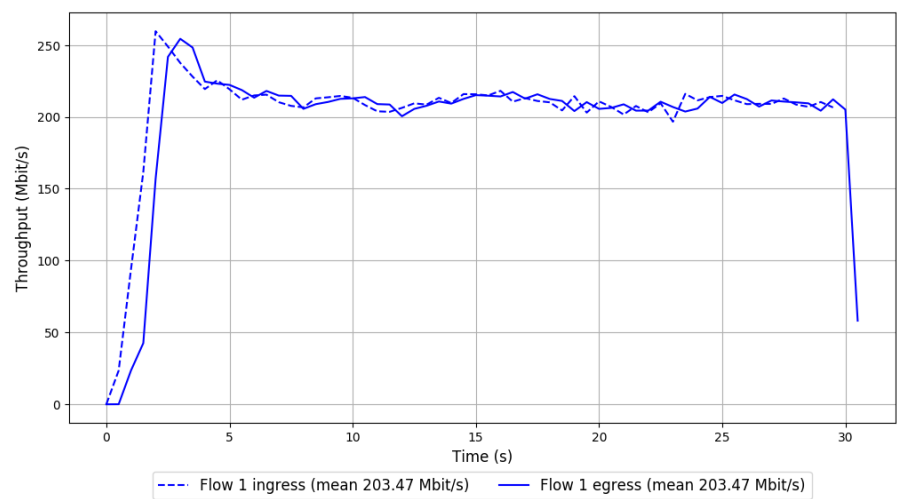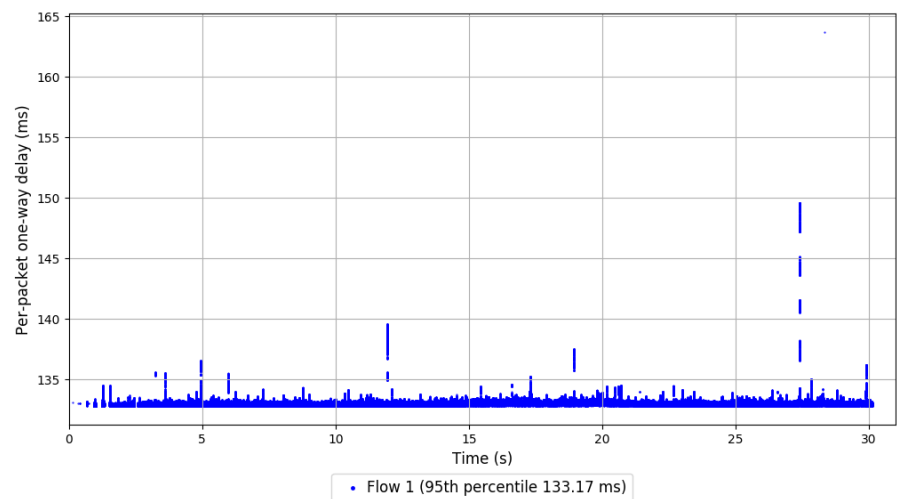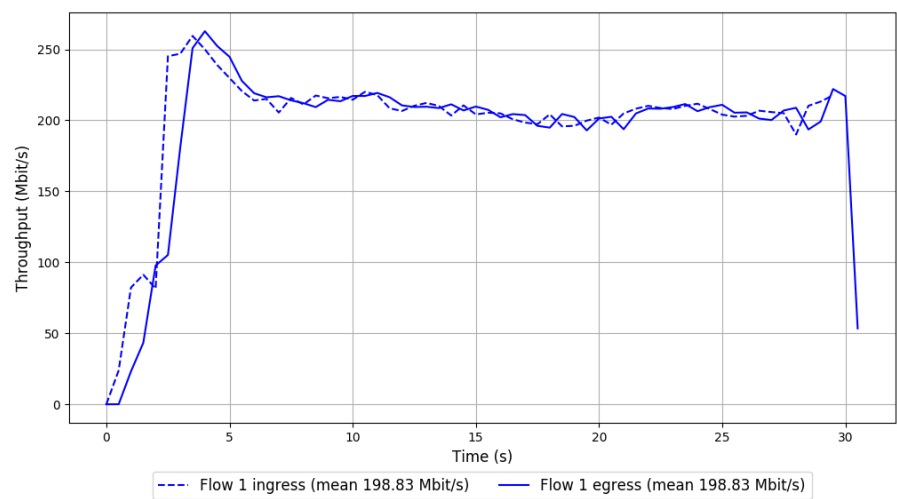
Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2019-01-25 02:19:33
End at: 2019-01-25 02:20:03
Local clock offset: -0.042 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2019-01-25 05:00:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 198.83 Mbit/s
95th percentile per-packet one-way delay: 133.171 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 198.83 Mbit/s
95th percentile per-packet one-way delay: 133.171 ms
Loss rate: 0.00%
```

Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2019-01-25 02:55:22
End at: 2019-01-25 02:55:52
Local clock offset: -0.26 ms
Remote clock offset: -0.07 ms


# Below is generated by plot.py at 2019-01-25 05:01:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 199.47 Mbit/s
95th percentile per-packet one-way delay: 133.286 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 199.47 Mbit/s
95th percentile per-packet one-way delay: 133.286 ms
Loss rate: 0.00%
```
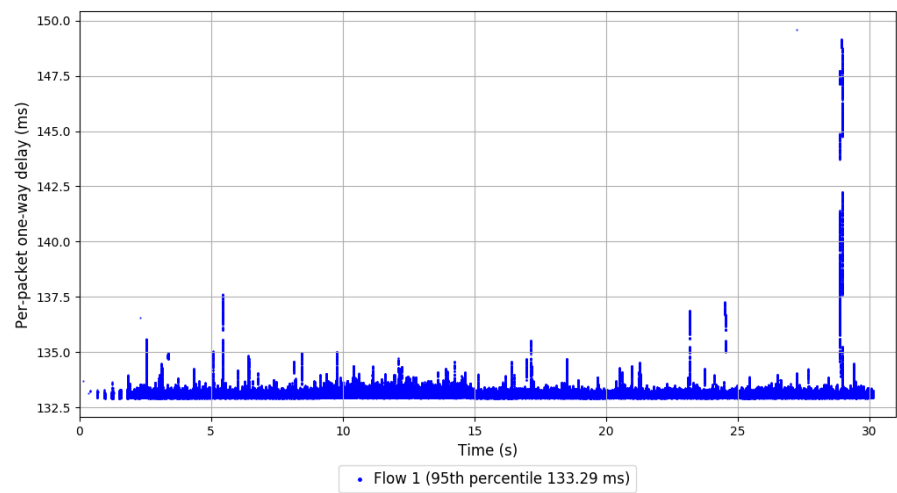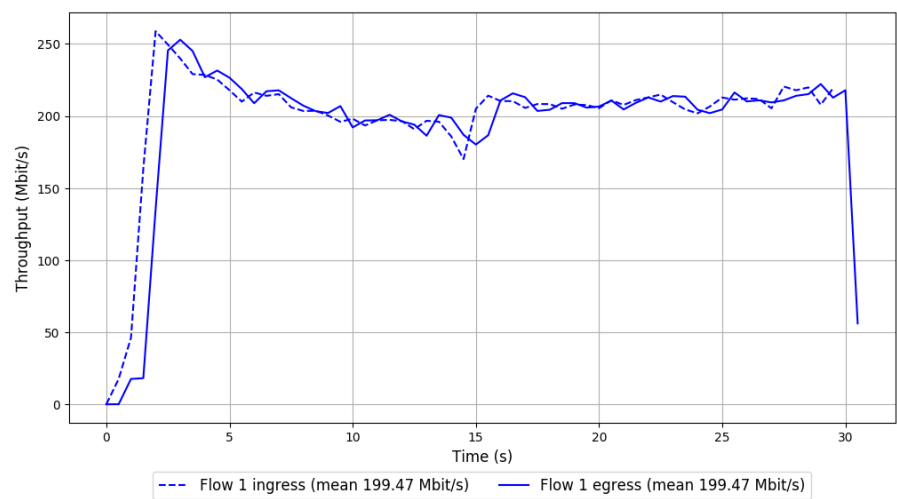
Run 5: Report of TaoVA-100x — Data Link

174

```
Run 1: Statistics of TCP Vegas

Start at: 2019-01-25 00:26:42
End at: 2019-01-25 00:27:12
Local clock offset: -0.25 ms
Remote clock offset: 0.049 ms


# Below is generated by plot.py at 2019-01-25 05:02:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 404.78 Mbit/s
95th percentile per-packet one-way delay: 140.495 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 404.78 Mbit/s
95th percentile per-packet one-way delay: 140.495 ms
Loss rate: 0.00%
```
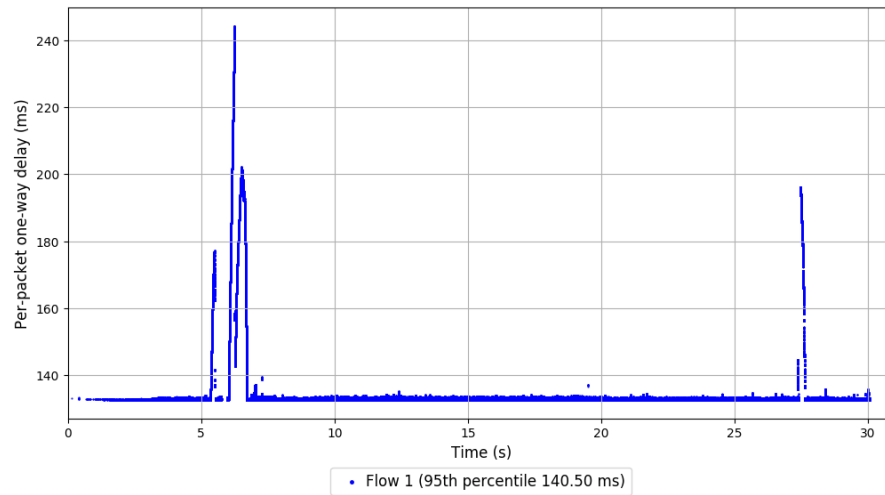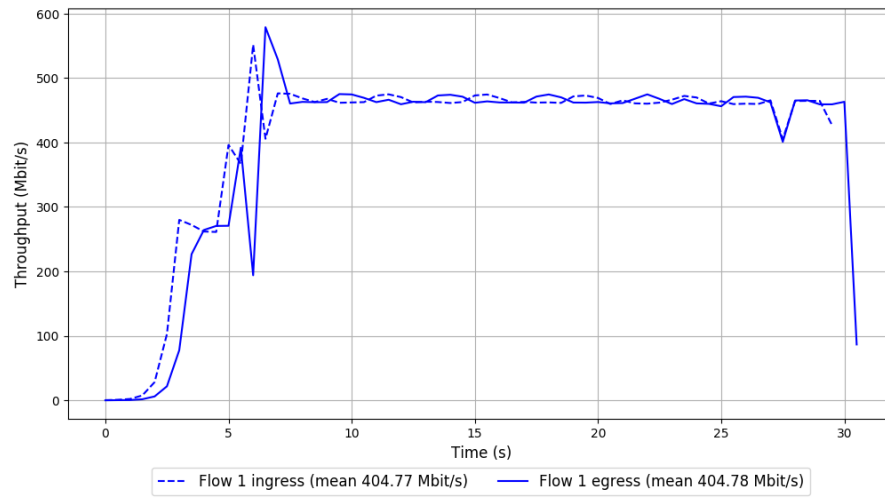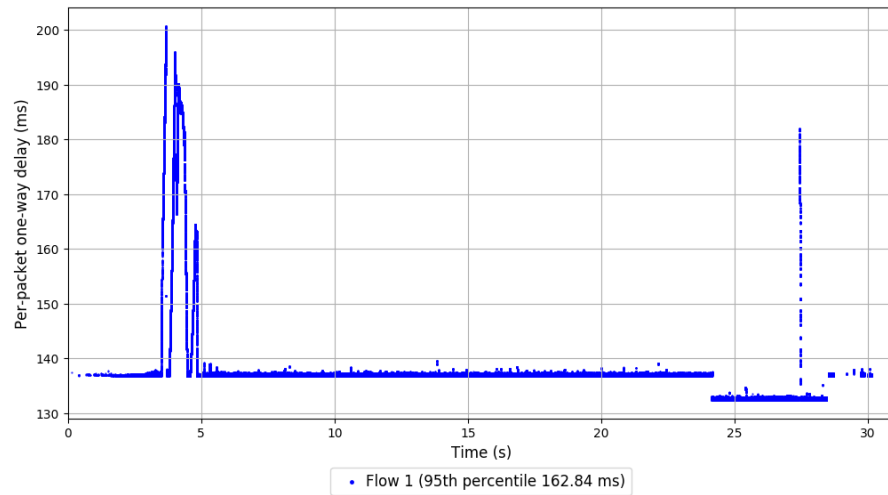
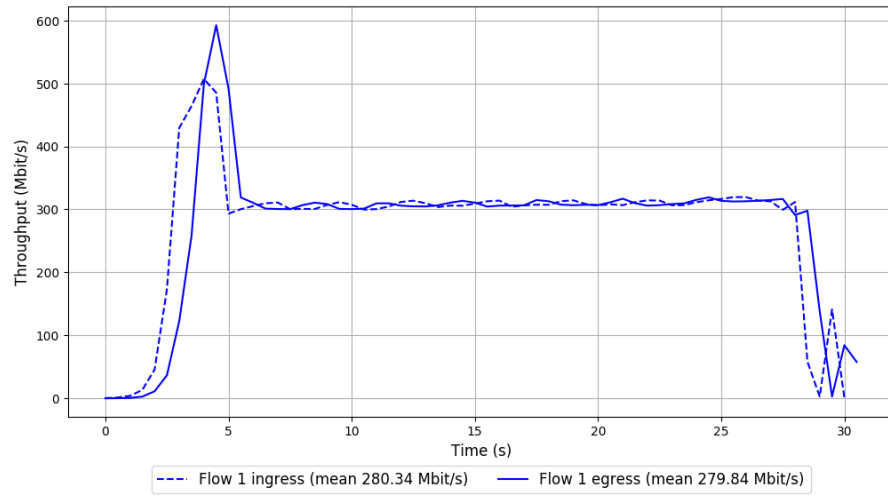Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-01-25 01:02:01
End at: 2019-01-25 01:02:31
Local clock offset: 0.266 ms
Remote clock offset: -0.079 ms


# Below is generated by plot.py at 2019-01-25 05:03:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 279.84 Mbit/s
95th percentile per-packet one-way delay: 162.838 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 279.84 Mbit/s
95th percentile per-packet one-way delay: 162.838 ms
Loss rate: 0.18%
```

Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 280.34 Mbit/s) Flow 1 egress (mean 279.84 Mbit/s)

· Flow 1 (95th percentile 162.84 ms)

```
Run 3: Statistics of TCP Vegas

Start at: 2019-01-25 01:36:57
End at: 2019-01-25 01:37:27
Local clock offset: 0.368 ms
Remote clock offset: 0.057 ms


# Below is generated by plot.py at 2019-01-25 05:09:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 575.27 Mbit/s
95th percentile per-packet one-way delay: 184.916 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 575.27 Mbit/s
95th percentile per-packet one-way delay: 184.916 ms
Loss rate: 0.00%
```
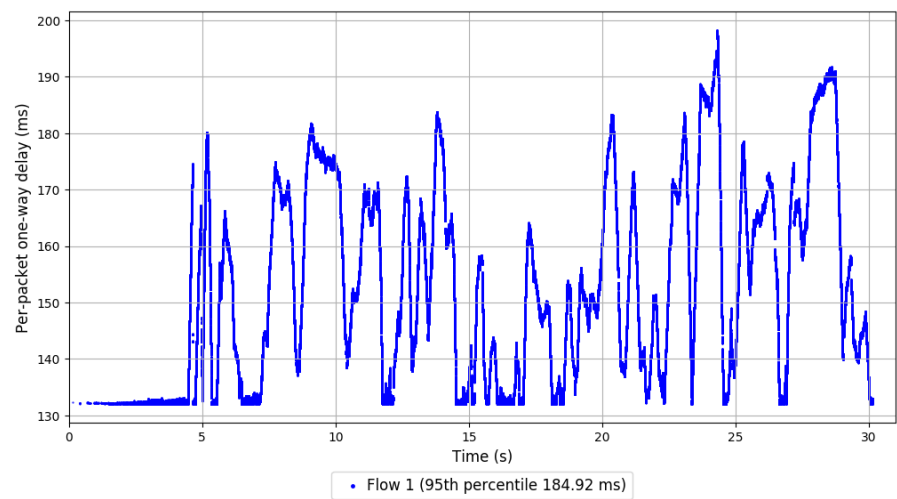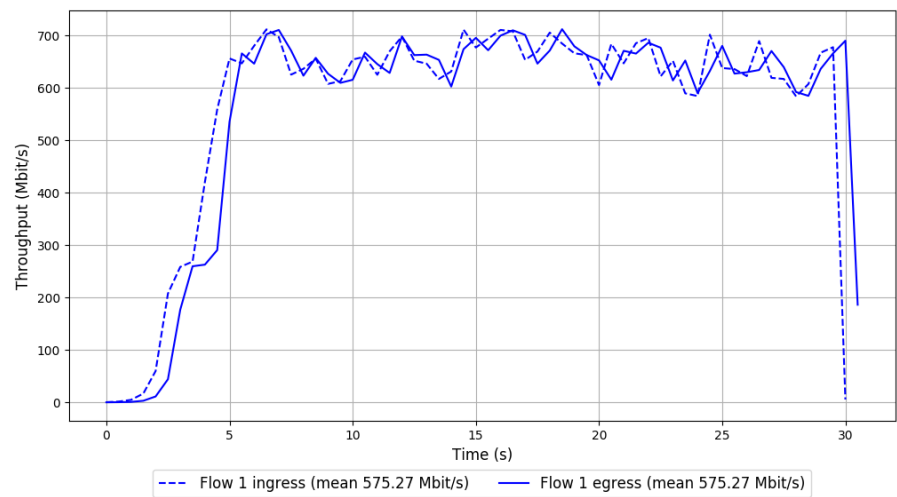
Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 575.27 Mbit/s)   Flow 1 egress (mean 575.27 Mbit/s)
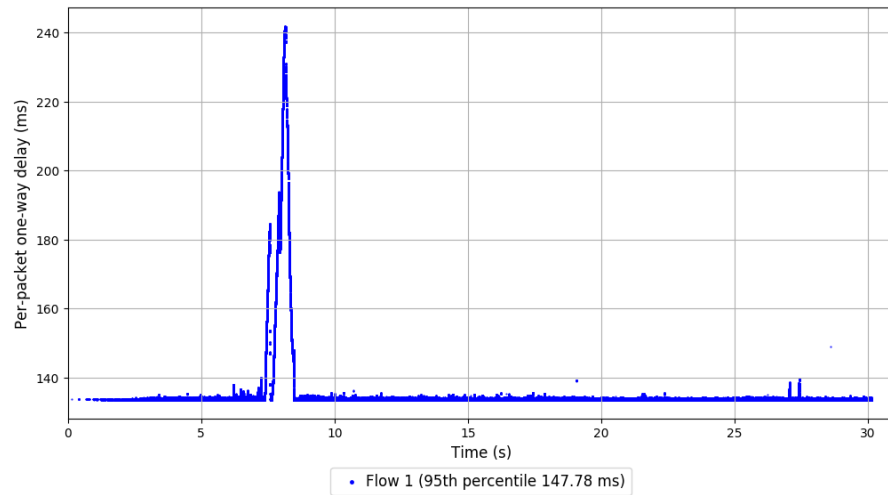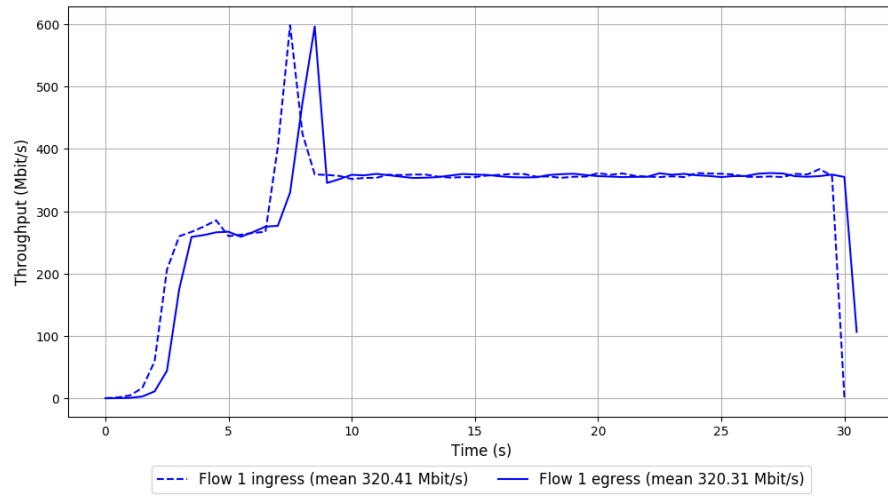

Flow 1 (95th percentile 184.92 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2019-01-25 02:11:43
End at: 2019-01-25 02:12:13
Local clock offset: -0.074 ms
Remote clock offset: 0.267 ms


# Below is generated by plot.py at 2019-01-25 05:09:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 320.31 Mbit/s
95th percentile per-packet one-way delay: 147.780 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 320.31 Mbit/s
95th percentile per-packet one-way delay: 147.780 ms
Loss rate: 0.03%
```

Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 320.41 Mbit/s) — Flow 1 egress (mean 320.31 Mbit/s)
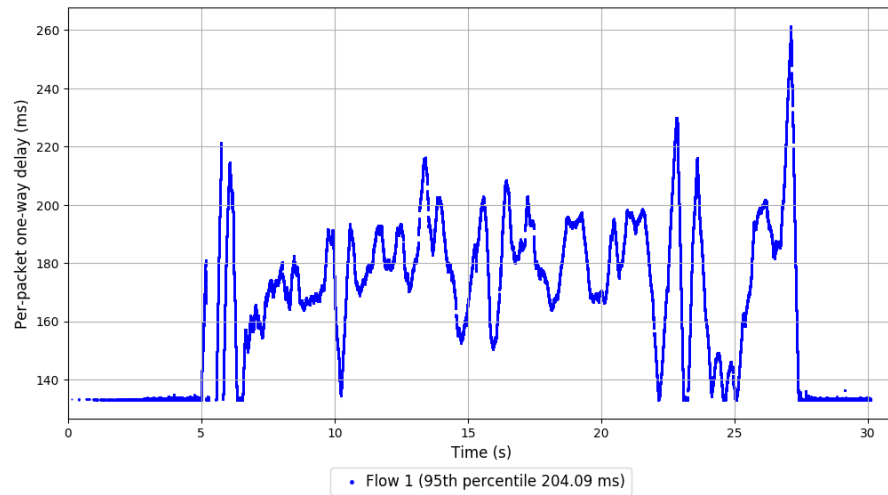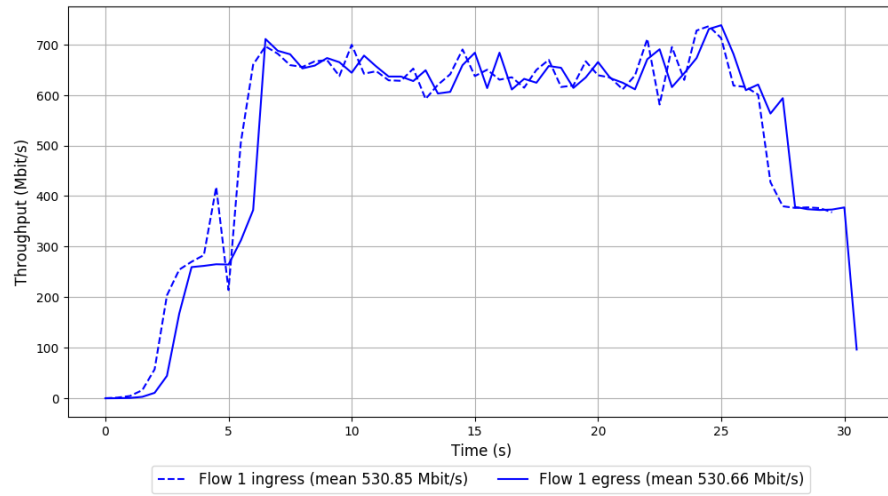

Flow 1 (95th percentile 147.78 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2019-01-25 02:46:37
End at: 2019-01-25 02:47:07
Local clock offset: -0.051 ms
Remote clock offset: -0.063 ms


# Below is generated by plot.py at 2019-01-25 05:09:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 530.66 Mbit/s
95th percentile per-packet one-way delay: 204.088 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 530.66 Mbit/s
95th percentile per-packet one-way delay: 204.088 ms
Loss rate: 0.04%
```

Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 530.85 Mbit/s)   Flow 1 egress (mean 530.66 Mbit/s)

Flow 1 (95th percentile 204.09 ms)

```
Run 1: Statistics of Verus

Start at: 2019-01-25 00:54:44
End at: 2019-01-25 00:55:14
Local clock offset: -0.616 ms
Remote clock offset: 0.038 ms


# Below is generated by plot.py at 2019-01-25 05:09:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 137.86 Mbit/s
95th percentile per-packet one-way delay: 278.756 ms
Loss rate: 13.58%
-- Flow 1:
Average throughput: 137.86 Mbit/s
95th percentile per-packet one-way delay: 278.756 ms
Loss rate: 13.58%
```
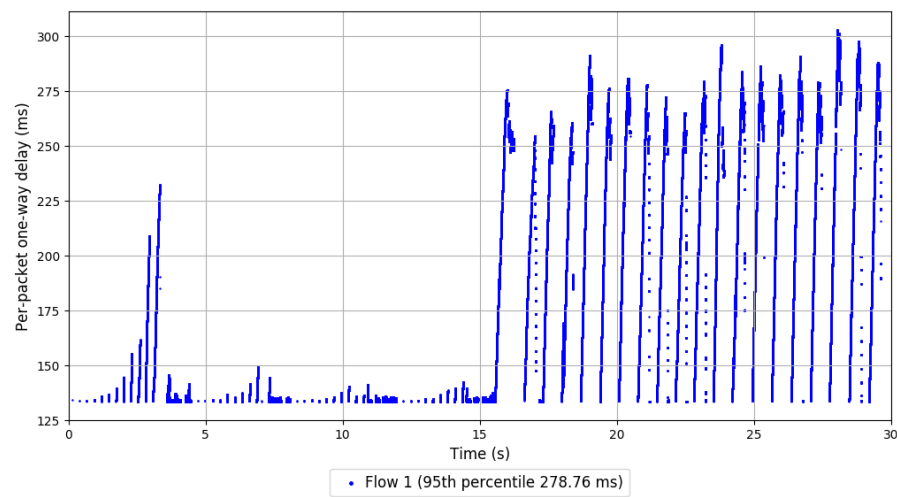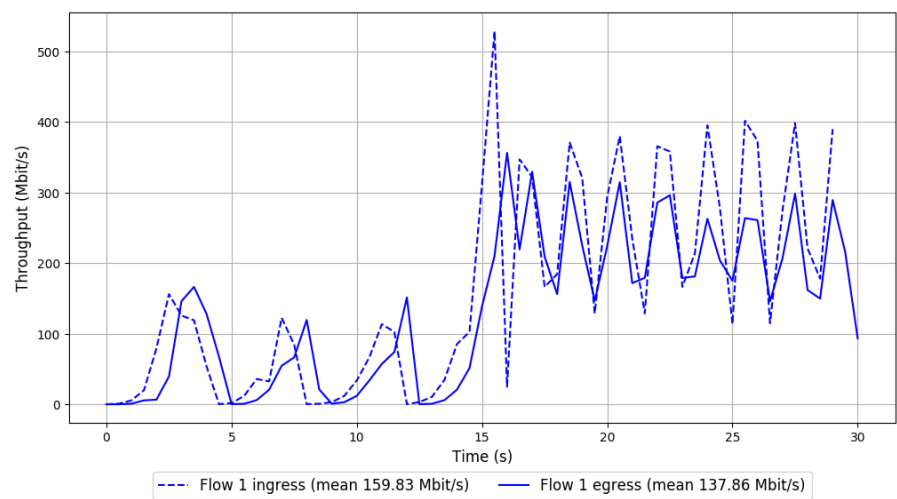
Run 1: Report of Verus — Data Link

Flow 1 ingress (mean 159.83 Mbit/s)   Flow 1 egress (mean 137.86 Mbit/s)

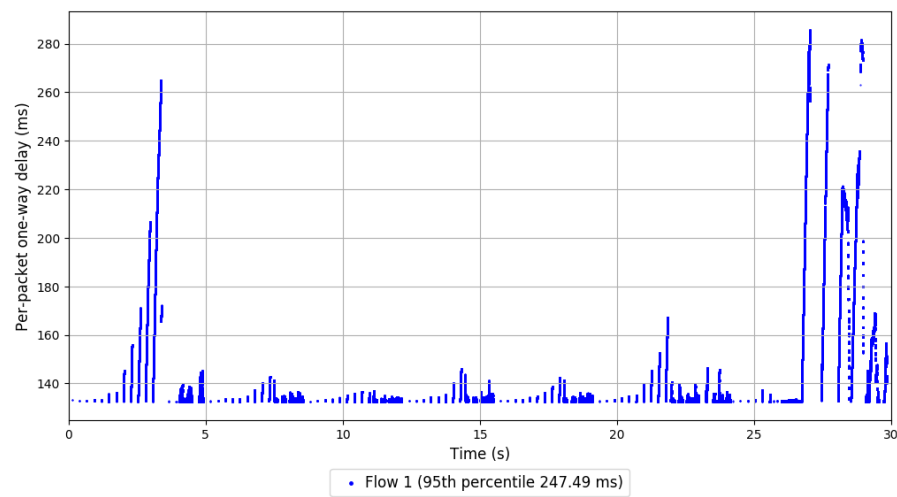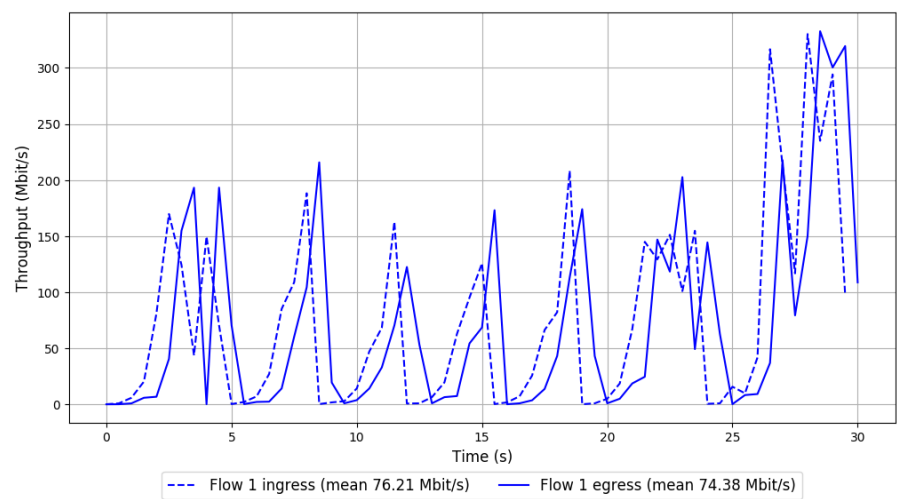
Flow 1 (95th percentile 278.76 ms)

```
Run 2: Statistics of Verus

Start at: 2019-01-25 01:29:33
End at: 2019-01-25 01:30:03
Local clock offset: 0.221 ms
Remote clock offset: -0.024 ms


# Below is generated by plot.py at 2019-01-25 05:09:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.38 Mbit/s
95th percentile per-packet one-way delay: 247.485 ms
Loss rate: 2.40%
-- Flow 1:
Average throughput: 74.38 Mbit/s
95th percentile per-packet one-way delay: 247.485 ms
Loss rate: 2.40%
```

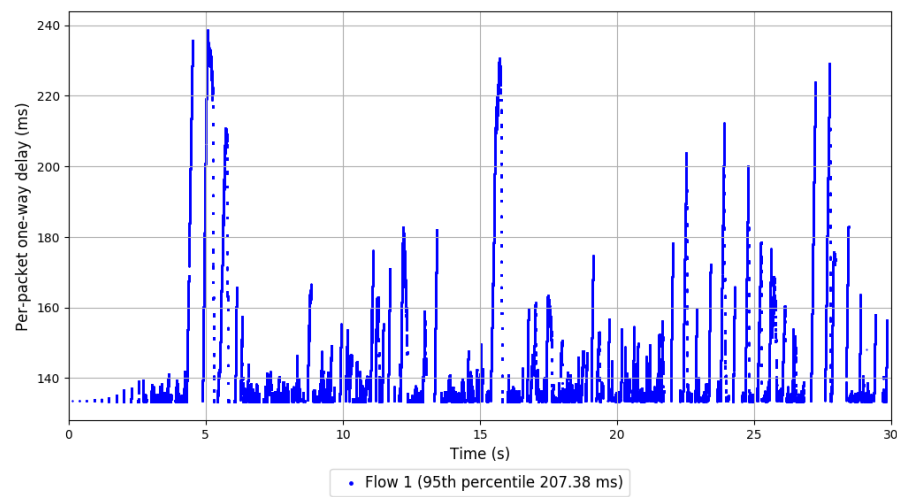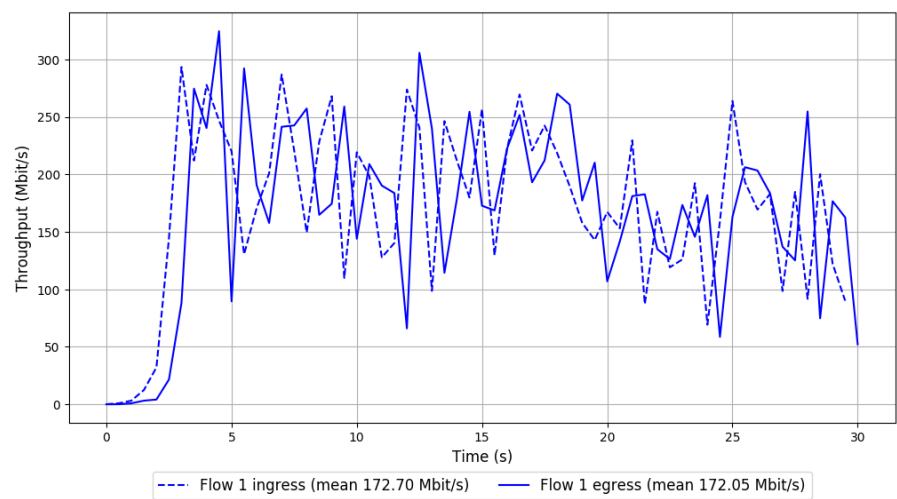Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-01-25 02:04:59
End at: 2019-01-25 02:05:29
Local clock offset: -0.359 ms
Remote clock offset: -0.094 ms


# Below is generated by plot.py at 2019-01-25 05:09:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 172.05 Mbit/s
95th percentile per-packet one-way delay: 207.375 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 172.05 Mbit/s
95th percentile per-packet one-way delay: 207.375 ms
Loss rate: 0.37%
```

Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2019-01-25 02:39:05
End at: 2019-01-25 02:39:35
Local clock offset: -0.184 ms
Remote clock offset: 0.069 ms


# Below is generated by plot.py at 2019-01-25 05:09:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.12 Mbit/s
95th percentile per-packet one-way delay: 141.736 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.12 Mbit/s
95th percentile per-packet one-way delay: 141.736 ms
Loss rate: 0.00%
```
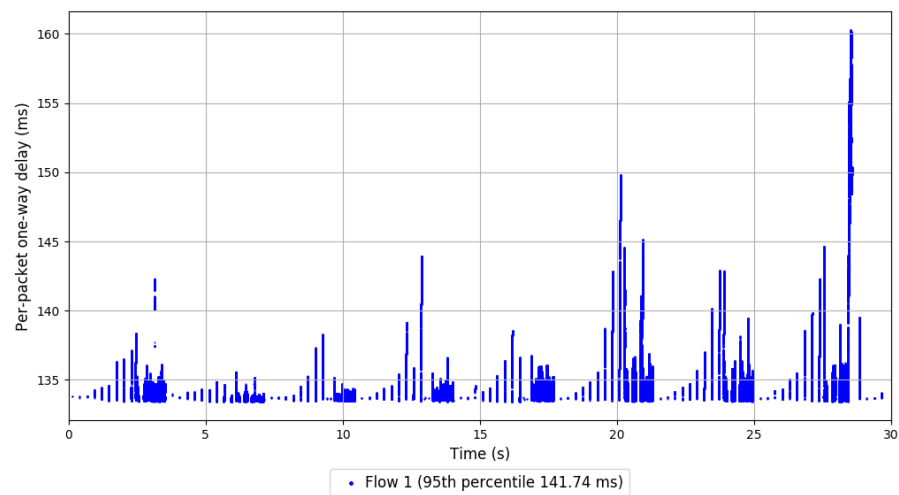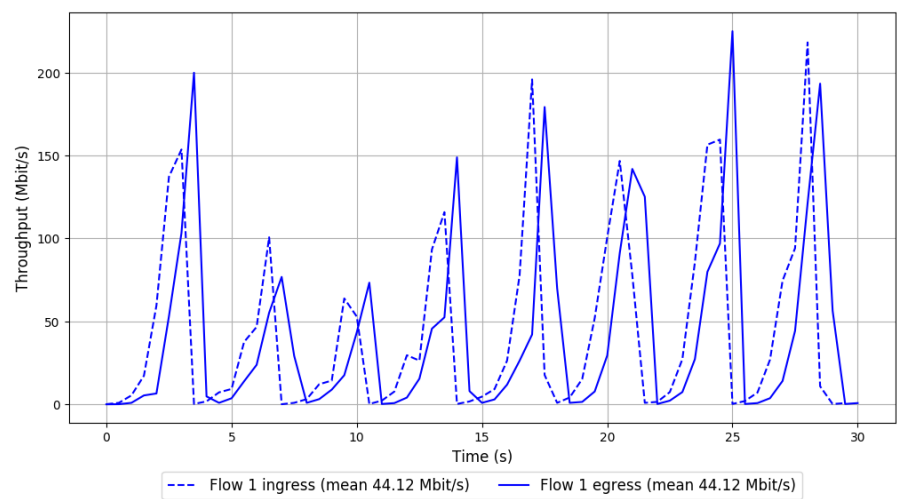
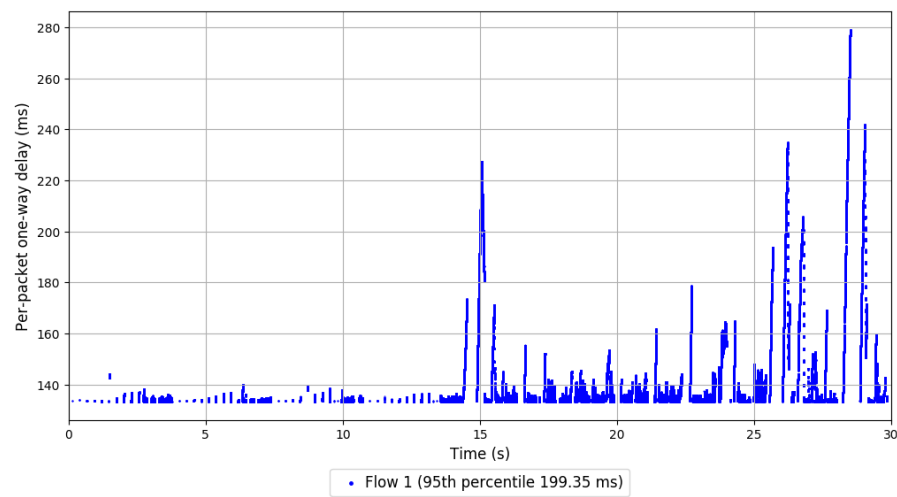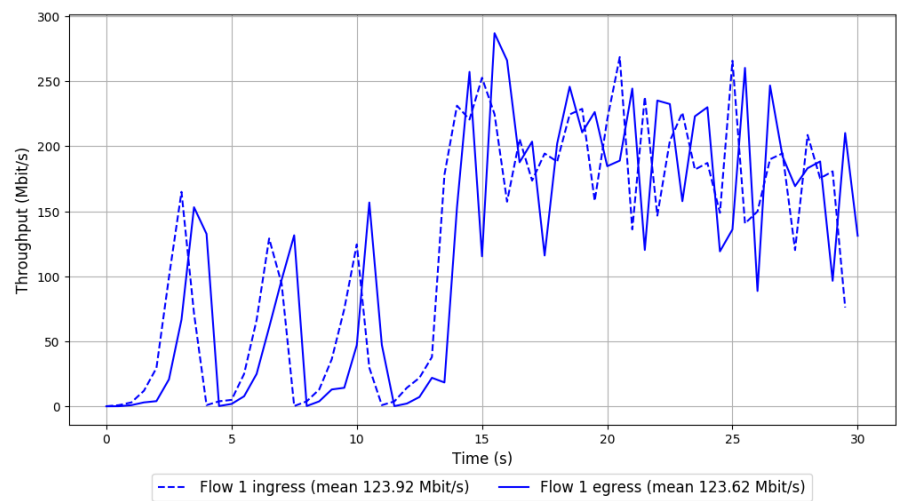# Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-01-25 03:14:13
End at: 2019-01-25 03:14:43
Local clock offset: -0.065 ms
Remote clock offset: 0.366 ms


# Below is generated by plot.py at 2019-01-25 05:09:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 123.62 Mbit/s
95th percentile per-packet one-way delay: 199.353 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 123.62 Mbit/s
95th percentile per-packet one-way delay: 199.353 ms
Loss rate: 0.24%
```

Run 5: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-01-25 00:41:15
End at: 2019-01-25 00:41:45
Local clock offset: -0.118 ms
Remote clock offset: -0.06 ms


# Below is generated by plot.py at 2019-01-25 05:11:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 359.27 Mbit/s
95th percentile per-packet one-way delay: 134.080 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 359.27 Mbit/s
95th percentile per-packet one-way delay: 134.080 ms
Loss rate: 0.00%
```
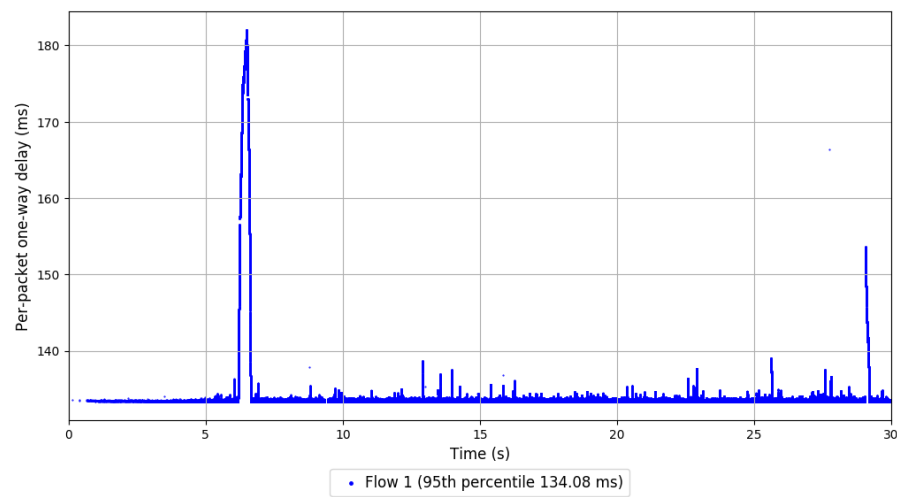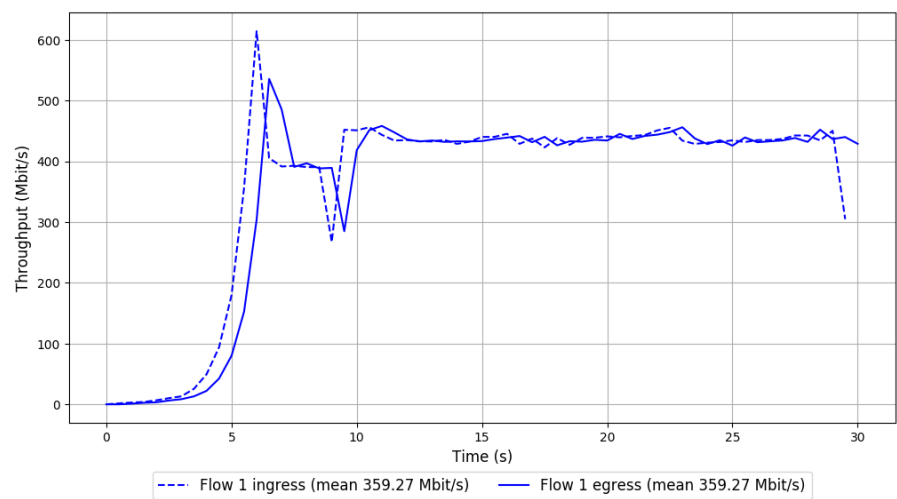
Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-01-25 01:16:33
End at: 2019-01-25 01:17:03
Local clock offset: -0.259 ms
Remote clock offset: -0.4 ms


# Below is generated by plot.py at 2019-01-25 05:11:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 363.91 Mbit/s
95th percentile per-packet one-way delay: 134.224 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 363.91 Mbit/s
95th percentile per-packet one-way delay: 134.224 ms
Loss rate: 0.00%
```
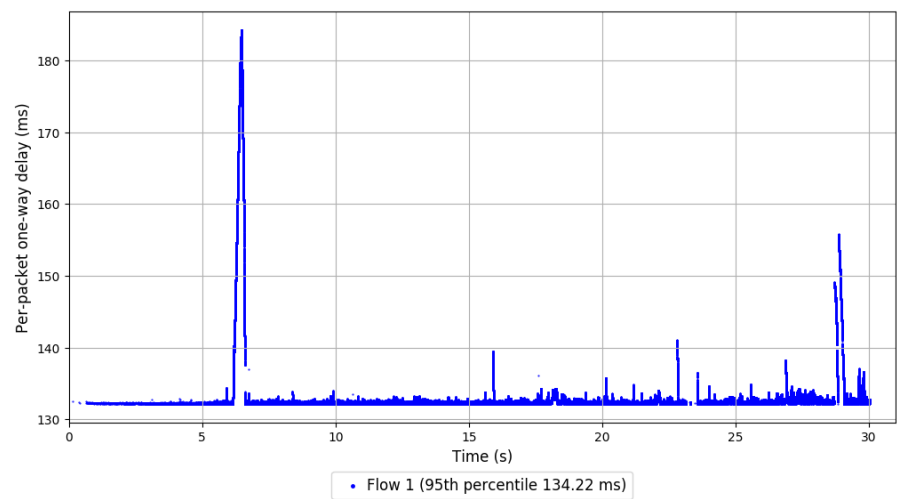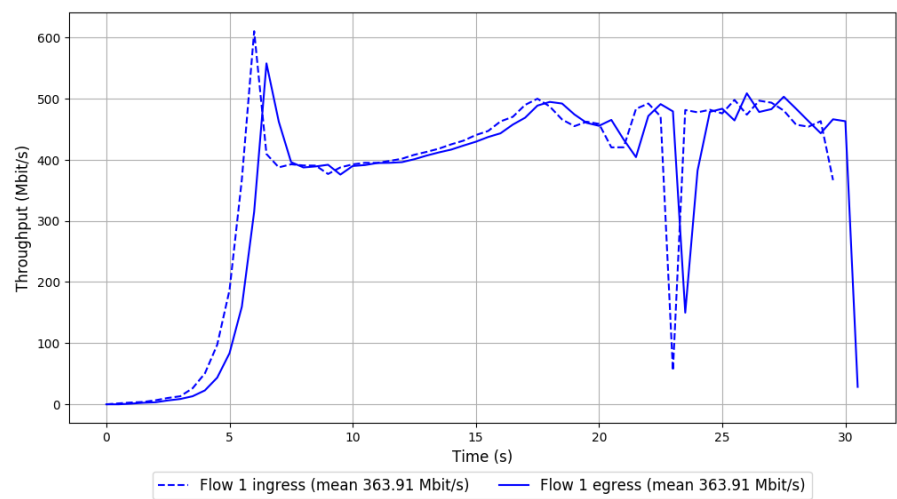
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 363.91 Mbit/s)   Flow 1 egress (mean 363.91 Mbit/s)
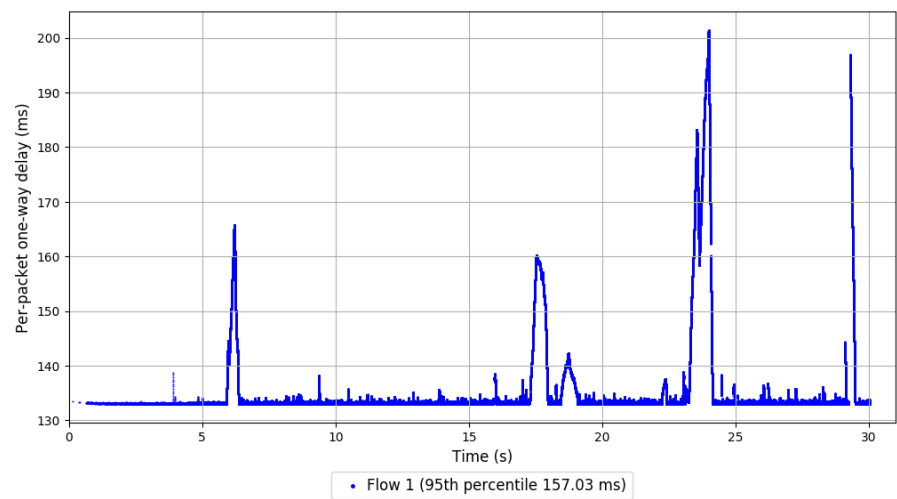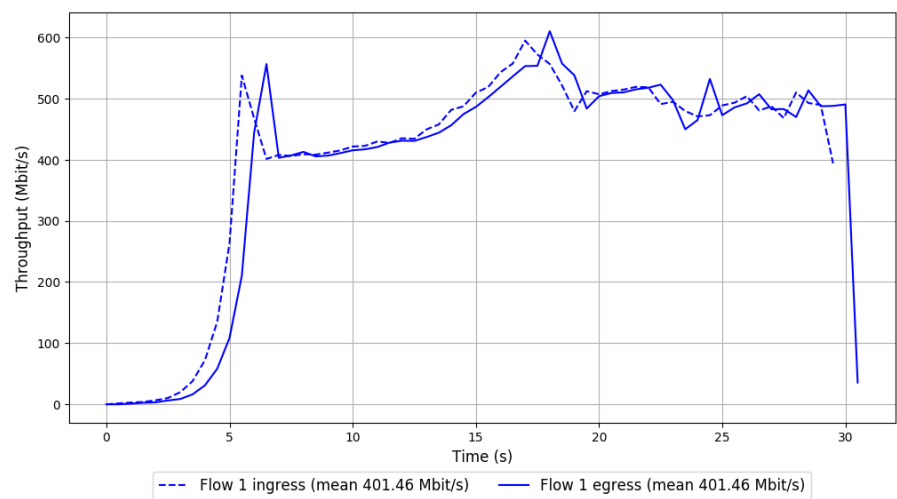

Flow 1 (95th percentile 134.22 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-01-25 01:51:29
End at: 2019-01-25 01:51:59
Local clock offset: -0.172 ms
Remote clock offset: -0.083 ms


# Below is generated by plot.py at 2019-01-25 05:11:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 401.46 Mbit/s
95th percentile per-packet one-way delay: 157.031 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 401.46 Mbit/s
95th percentile per-packet one-way delay: 157.031 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-01-25 02:25:39
End at: 2019-01-25 02:26:10
Local clock offset: 0.22 ms
Remote clock offset: 0.008 ms


# Below is generated by plot.py at 2019-01-25 05:11:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 382.09 Mbit/s
95th percentile per-packet one-way delay: 137.324 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 382.09 Mbit/s
95th percentile per-packet one-way delay: 137.324 ms
Loss rate: 0.26%
```
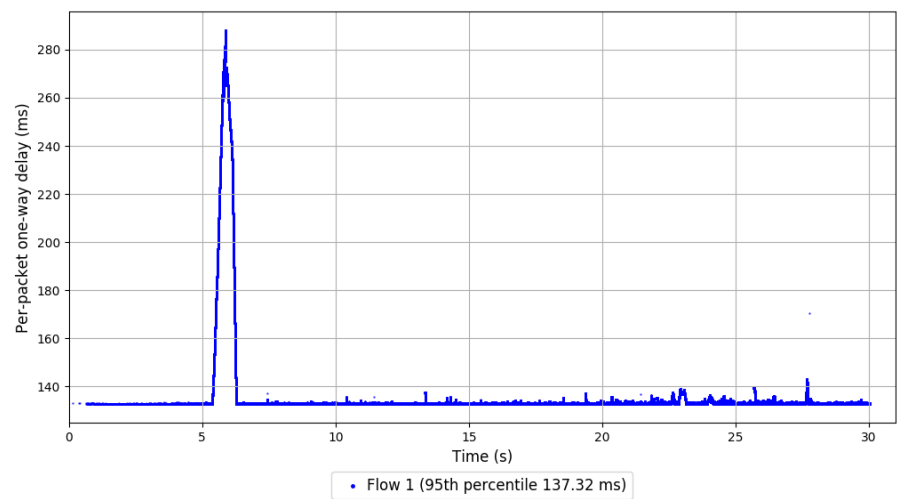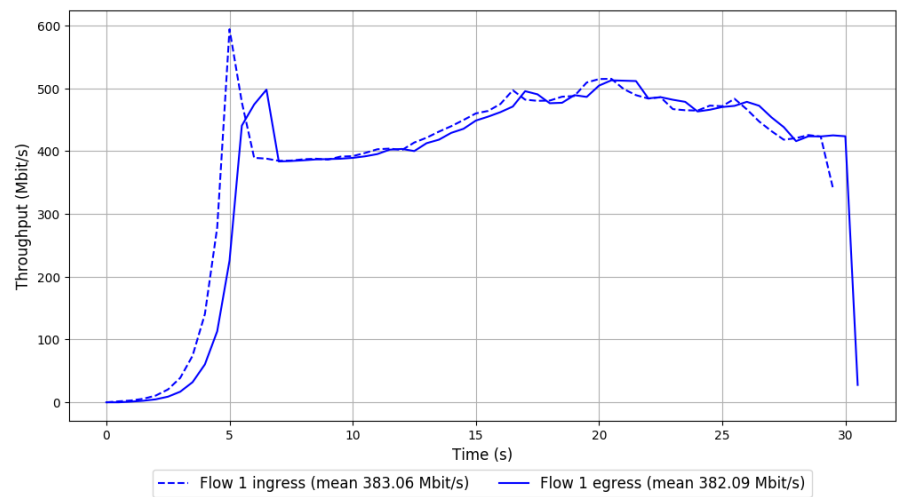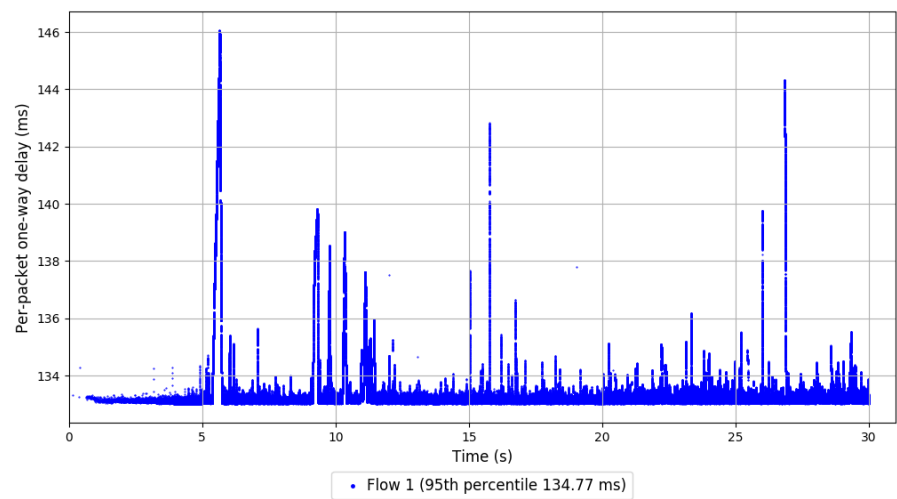
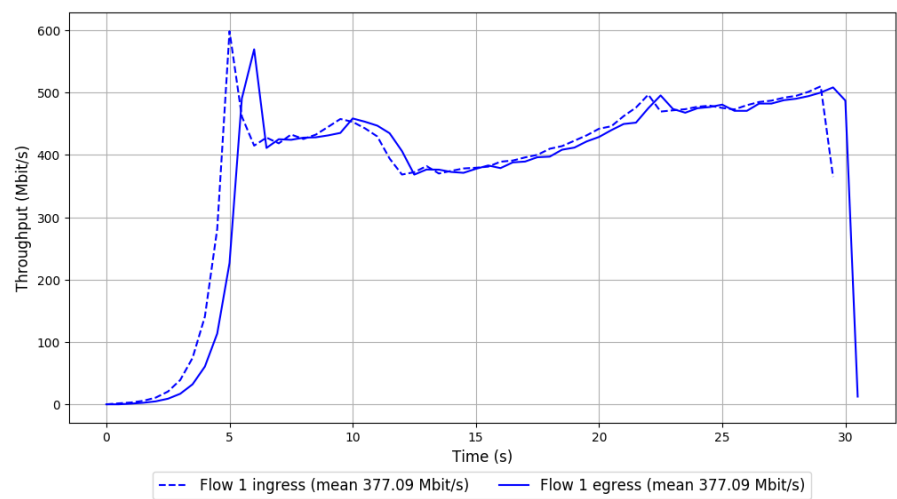# Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-01-25 03:01:19
End at: 2019-01-25 03:01:49
Local clock offset: -0.202 ms
Remote clock offset: -0.056 ms


# Below is generated by plot.py at 2019-01-25 05:11:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 377.09 Mbit/s
95th percentile per-packet one-way delay: 134.767 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 377.09 Mbit/s
95th percentile per-packet one-way delay: 134.767 ms
Loss rate: 0.00%
```
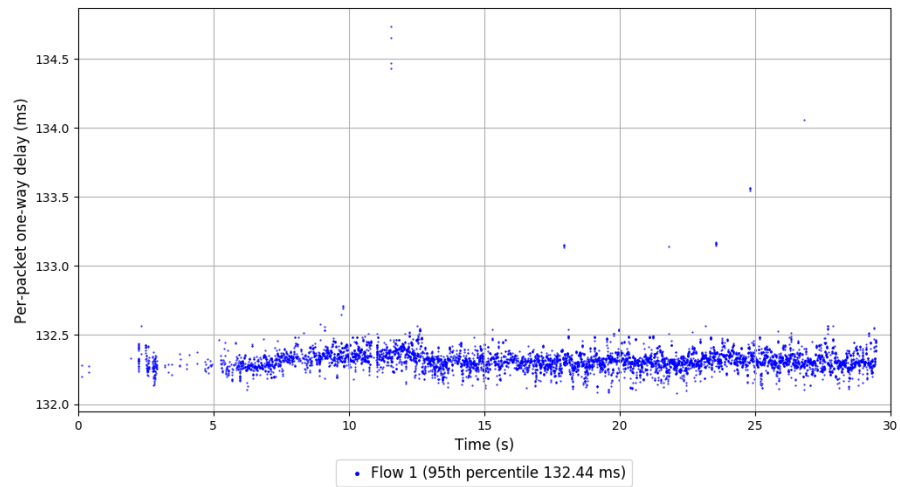
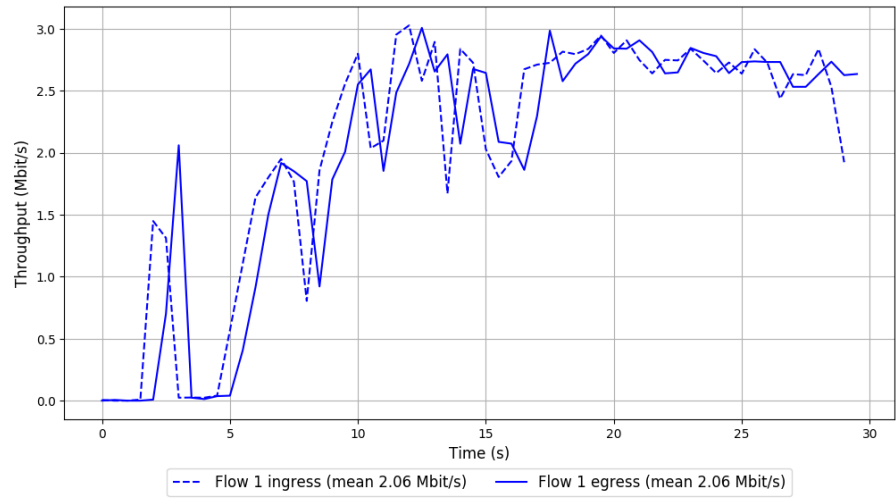# Run 5: Report of PCC-Vivace — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2019-01-25 00:44:59
End at: 2019-01-25 00:45:29
Local clock offset: 0.222 ms
Remote clock offset: -0.466 ms


# Below is generated by plot.py at 2019-01-25 05:11:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 132.438 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 132.438 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-01-25 01:20:16
End at: 2019-01-25 01:20:46
Local clock offset: -0.365 ms
Remote clock offset: 0.425 ms


# Below is generated by plot.py at 2019-01-25 05:11:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.956 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.956 ms
Loss rate: 0.00%
```
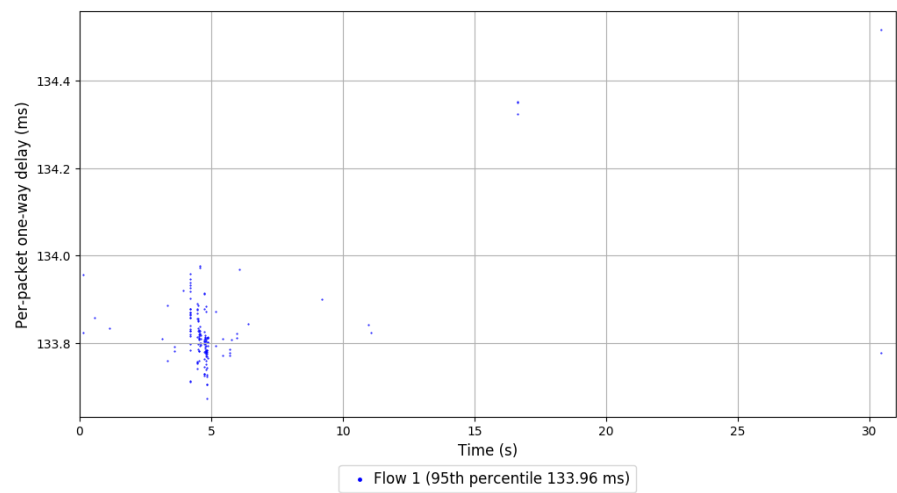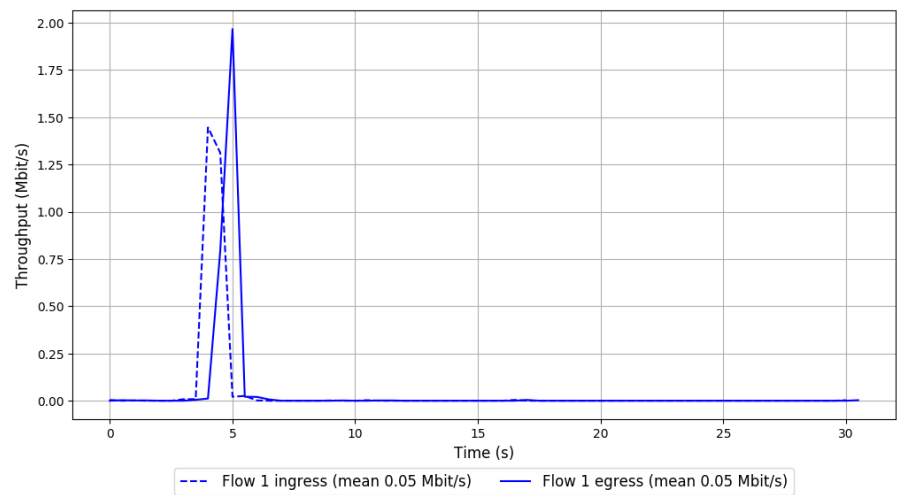
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-01-25 01:55:27
End at: 2019-01-25 01:55:57
Local clock offset: -0.109 ms
Remote clock offset: -0.08 ms


# Below is generated by plot.py at 2019-01-25 05:11:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.068 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.068 ms
Loss rate: 0.00%
```
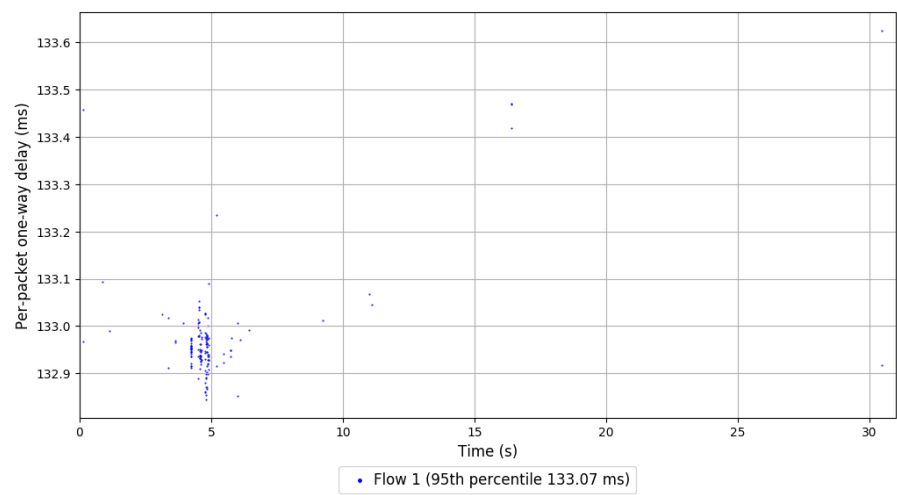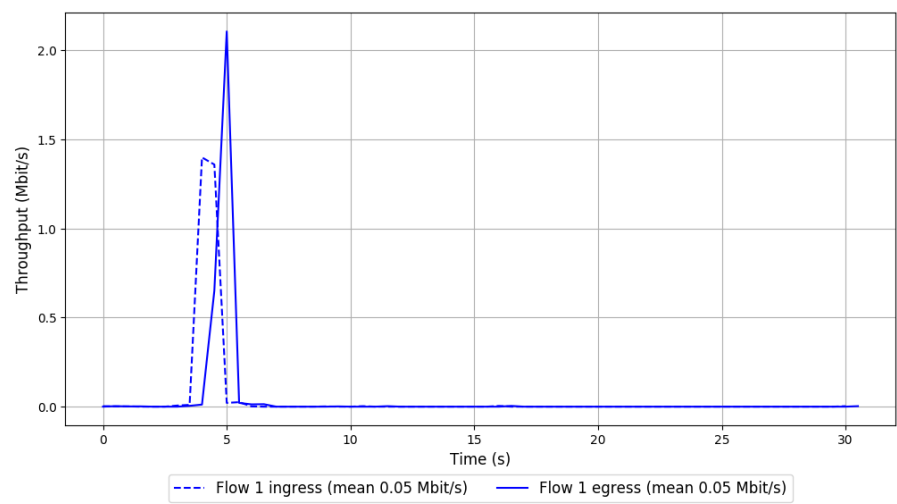
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-01-25 02:29:59
End at: 2019-01-25 02:30:29
Local clock offset: -0.027 ms
Remote clock offset: 0.334 ms


# Below is generated by plot.py at 2019-01-25 05:11:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 132.755 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 132.755 ms
Loss rate: 0.00%
```
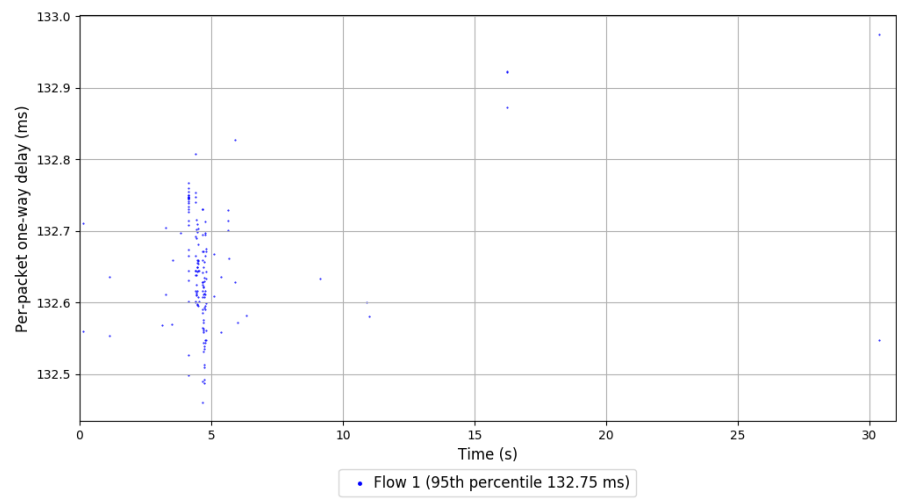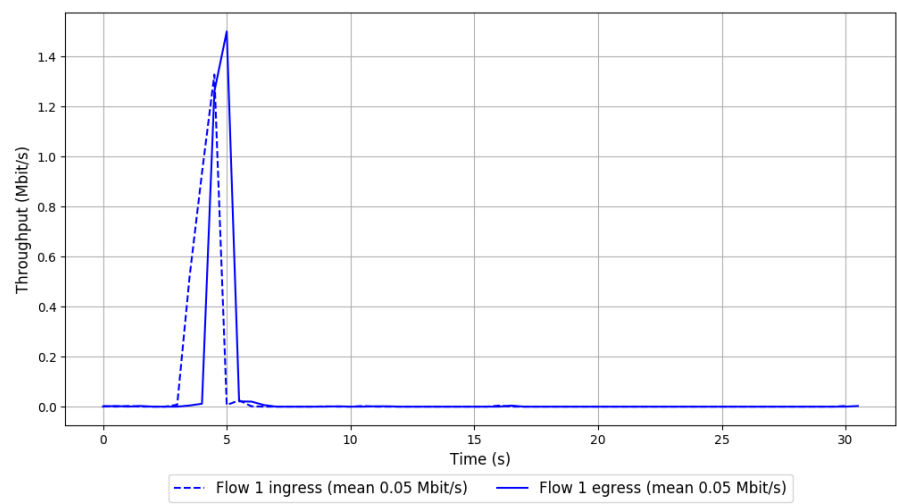
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-01-25 03:05:00
End at: 2019-01-25 03:05:30
Local clock offset: 0.03 ms
Remote clock offset: 0.047 ms


# Below is generated by plot.py at 2019-01-25 05:11:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 132.333 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 132.333 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link