Pantheon Report

Generated at 2019-06-27 15:40:27 (UTC).

Data path: GCE Tokyo on `ens4` (*remote*) →GCE Iowa on `ens4` (*local*).

Repeated the test of 22 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 4.15.0-1032-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 @ c3953d08f32ec7ebbdede2d2f0cbdeed262571ef
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 11c9498ecb1596b02ccd896791a02d03172af7ed
 M helpers/__init__.pyc
 M helpers/context.pyc
 M helpers/utils.pyc
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 Tokyo to GCE Iowa, 5 runs of 30s each per scheme
(mean of all runs by scheme)

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

3
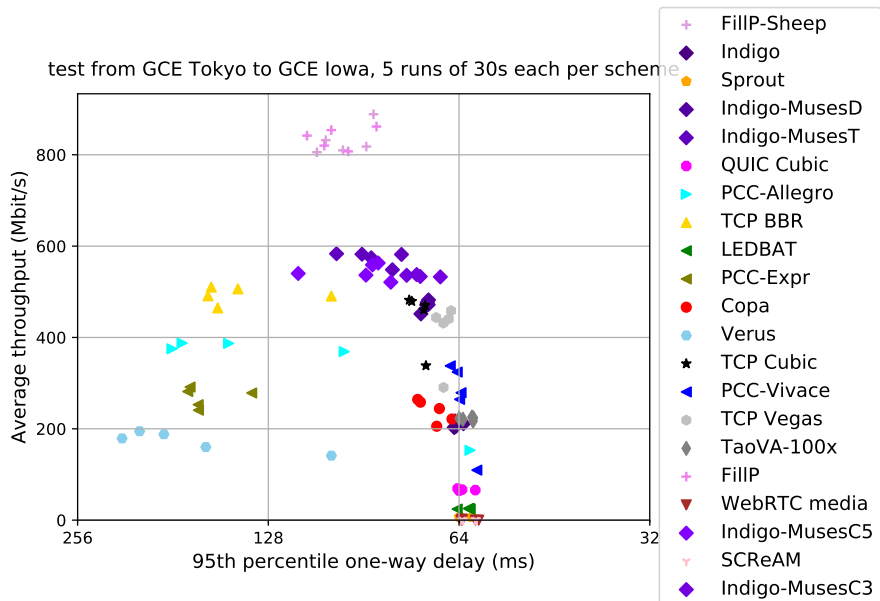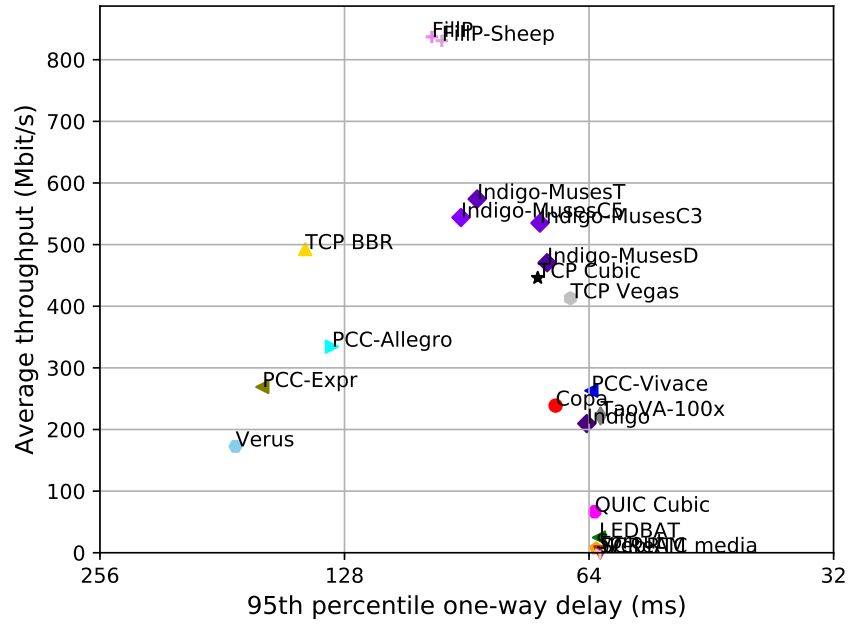
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	492.68	143.10	0.69
Copa	5	238.75	70.37	0.42
TCP Cubic	5	446.01	74.01	0.51
FillP	5	837.06	99.92	0.71
FillP-Sheep	5	830.81	97.15	0.57
Indigo	5	209.60	64.42	0.46
Indigo-MusesC3	4	534.93	73.57	0.49
Indigo-MusesC5	5	543.91	92.02	0.53
Indigo-MusesD	5	470.69	72.08	0.49
Indigo-MusesT	5	574.02	87.89	0.49
LEDBAT	5	24.67	62.21	0.82
Muses_DecisionTree	0	N/A	N/A	N/A
PCC-Allegro	5	334.36	132.64	1.11
PCC-Expr	5	269.00	161.58	1.97
QUIC Cubic	4	66.59	62.99	0.64
SCReAM	5	0.22	62.05	0.46
Sprout	5	6.89	62.72	0.41
TaoVA-100x	5	222.05	61.94	0.46
TCP Vegas	5	412.92	67.47	0.38
Verus	5	172.58	174.32	1.34
PCC-Vivace	5	262.99	63.59	0.57
WebRTC media	5	0.51	61.99	0.13

```
Run 1: Statistics of TCP BBR

Start at: 2019-06-27 11:35:16
End at: 2019-06-27 11:35:46
Local clock offset: 0.055 ms
Remote clock offset: -0.914 ms


# Below is generated by plot.py at 2019-06-27 14:10:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 491.22 Mbit/s
95th percentile per-packet one-way delay: 159.383 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 491.22 Mbit/s
95th percentile per-packet one-way delay: 159.383 ms
Loss rate: 0.68%
```
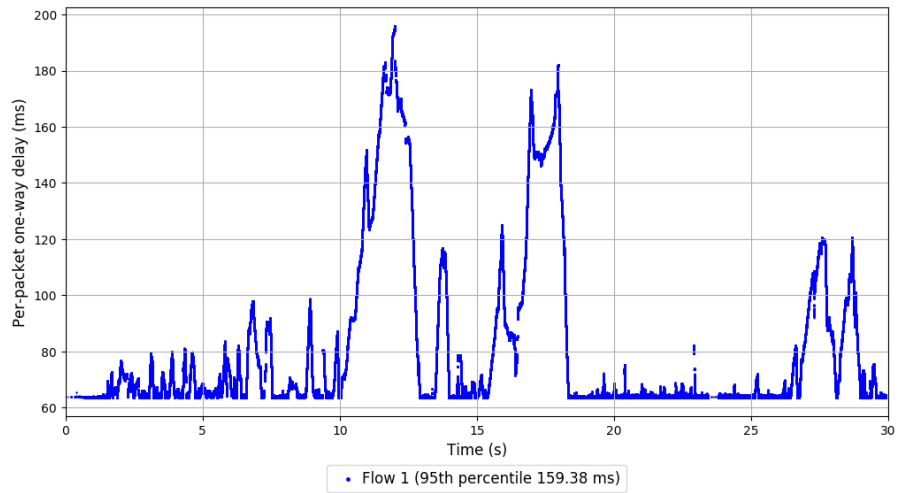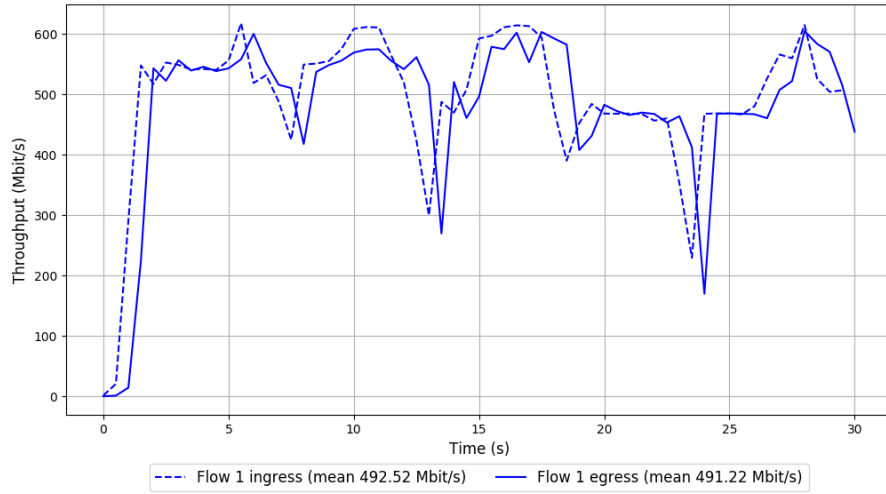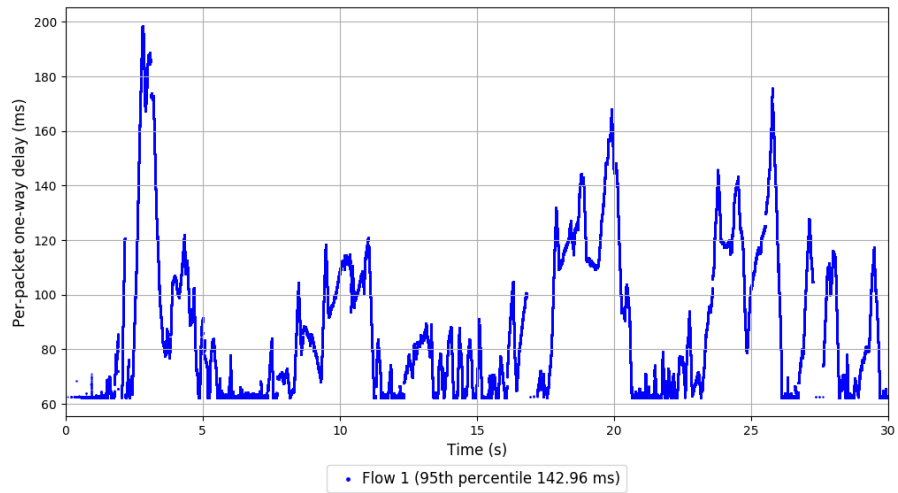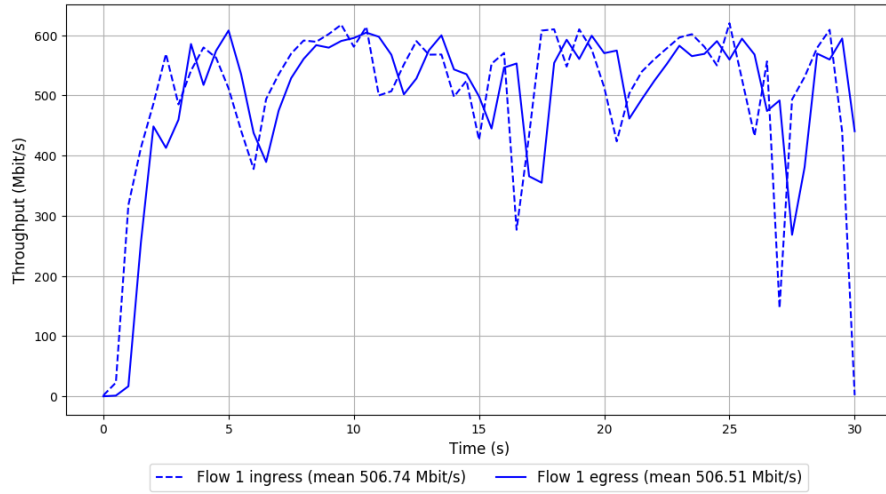
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 492.52 Mbit/s)   Flow 1 egress (mean 491.22 Mbit/s)

• Flow 1 (95th percentile 159.38 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2019-06-27 12:06:50
End at: 2019-06-27 12:07:20
Local clock offset: -0.142 ms
Remote clock offset: -0.013 ms


# Below is generated by plot.py at 2019-06-27 14:10:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 510.29 Mbit/s
95th percentile per-packet one-way delay: 157.505 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 510.29 Mbit/s
95th percentile per-packet one-way delay: 157.505 ms
Loss rate: 0.71%
```
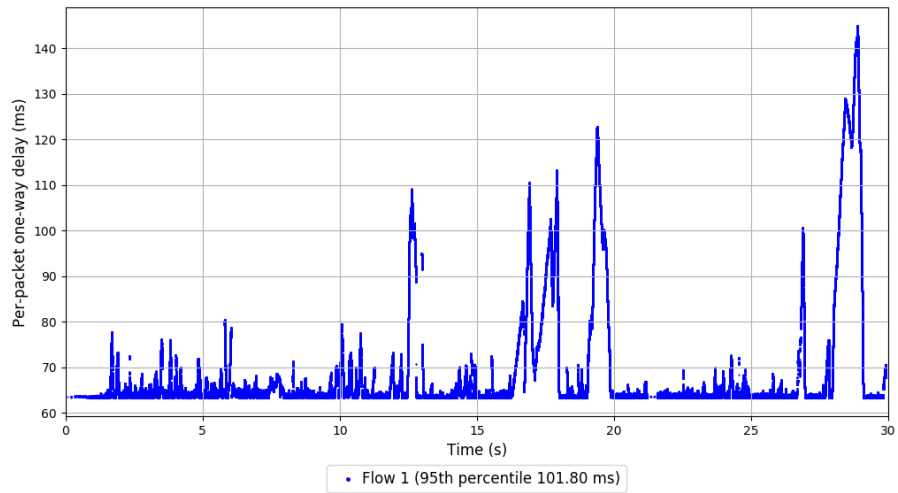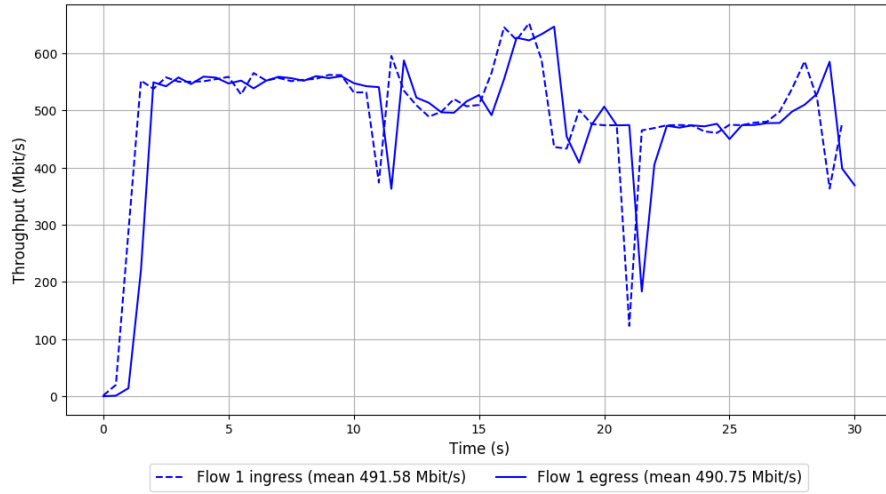
Run 2: Report of TCP BBR — Data Link
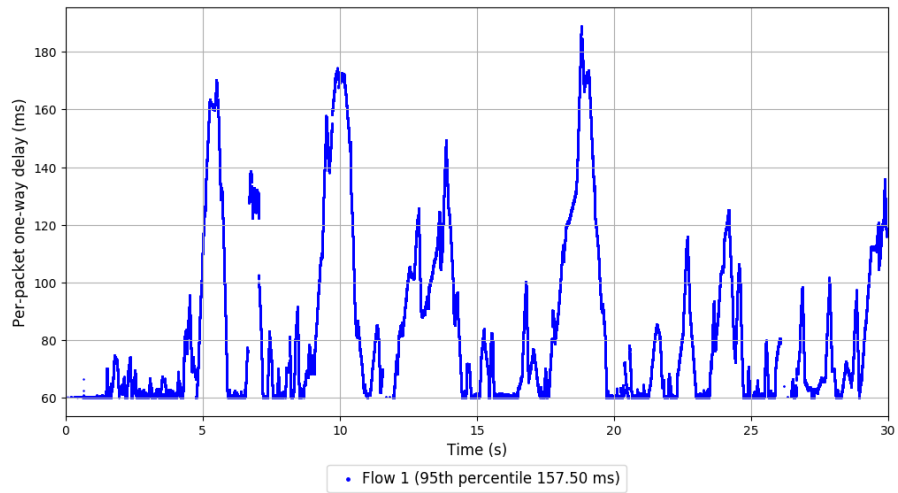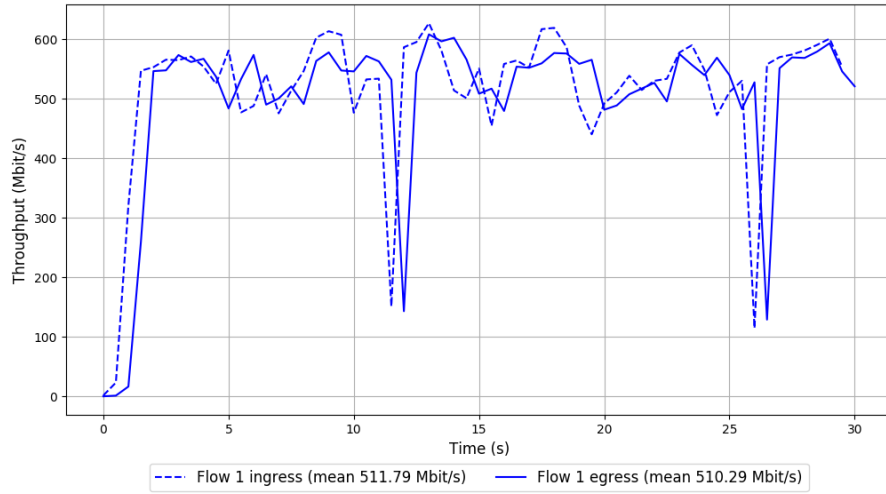
```
Run 3: Statistics of TCP BBR

Start at: 2019-06-27 12:38:03
End at: 2019-06-27 12:38:33
Local clock offset: -0.031 ms
Remote clock offset: 0.536 ms


# Below is generated by plot.py at 2019-06-27 14:10:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 506.51 Mbit/s
95th percentile per-packet one-way delay: 142.960 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 506.51 Mbit/s
95th percentile per-packet one-way delay: 142.960 ms
Loss rate: 0.47%
```
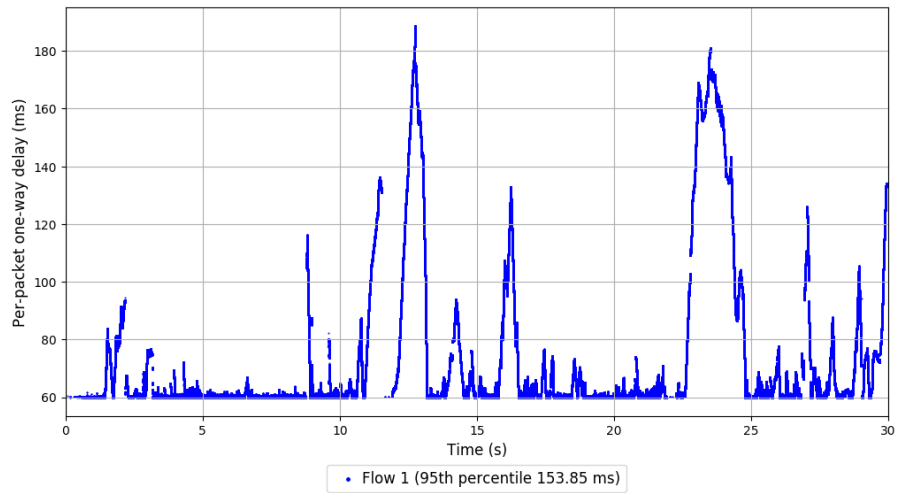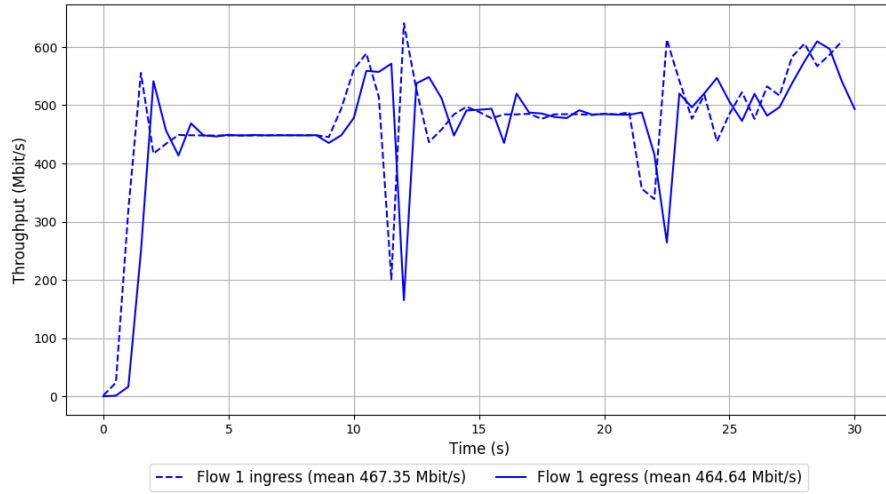
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 506.74 Mbit/s)   Flow 1 egress (mean 506.51 Mbit/s)

Flow 1 (95th percentile 142.96 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2019-06-27 13:09:14
End at: 2019-06-27 13:09:44
Local clock offset: -0.02 ms
Remote clock offset: -0.151 ms


# Below is generated by plot.py at 2019-06-27 14:10:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 490.75 Mbit/s
95th percentile per-packet one-way delay: 101.804 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 490.75 Mbit/s
95th percentile per-packet one-way delay: 101.804 ms
Loss rate: 0.59%
```

Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 491.58 Mbit/s) — Flow 1 egress (mean 490.75 Mbit/s)

· Flow 1 (95th percentile 101.80 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2019-06-27 13:40:48
End at: 2019-06-27 13:41:18
Local clock offset: -0.005 ms
Remote clock offset: -0.016 ms


# Below is generated by plot.py at 2019-06-27 14:10:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 464.64 Mbit/s
95th percentile per-packet one-way delay: 153.847 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 464.64 Mbit/s
95th percentile per-packet one-way delay: 153.847 ms
Loss rate: 0.99%
```

Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 467.35 Mbit/s) ----   Flow 1 egress (mean 464.64 Mbit/s) ——

• Flow 1 (95th percentile 153.85 ms)

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```
Run 1: Statistics of Copa

Start at: 2019-06-27 11:26:23
End at: 2019-06-27 11:26:53
Local clock offset: 0.053 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2019-06-27 14:10:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 244.25 Mbit/s
95th percentile per-packet one-way delay: 68.736 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 244.25 Mbit/s
95th percentile per-packet one-way delay: 68.736 ms
Loss rate: 0.41%
```
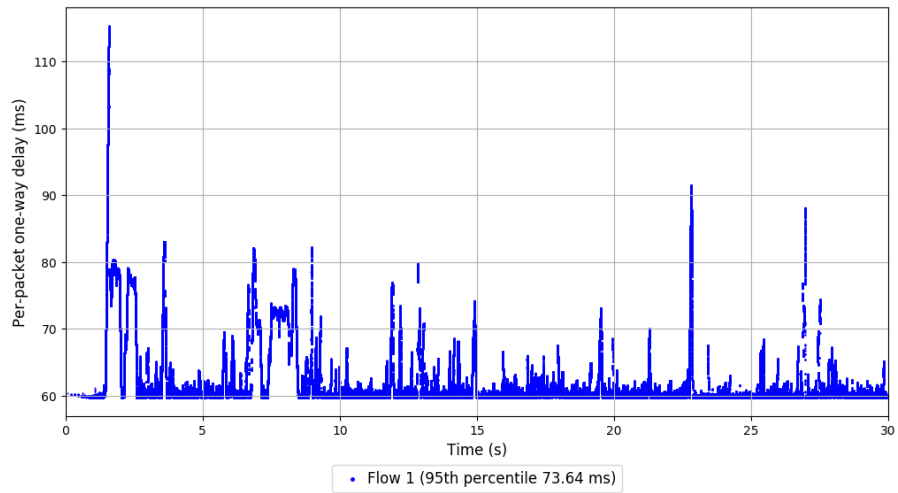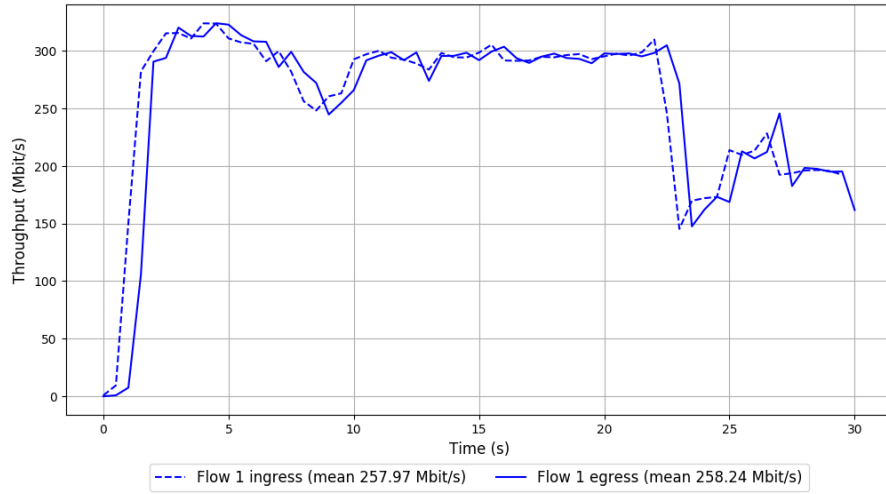
Run 1: Report of Copa — Data Link
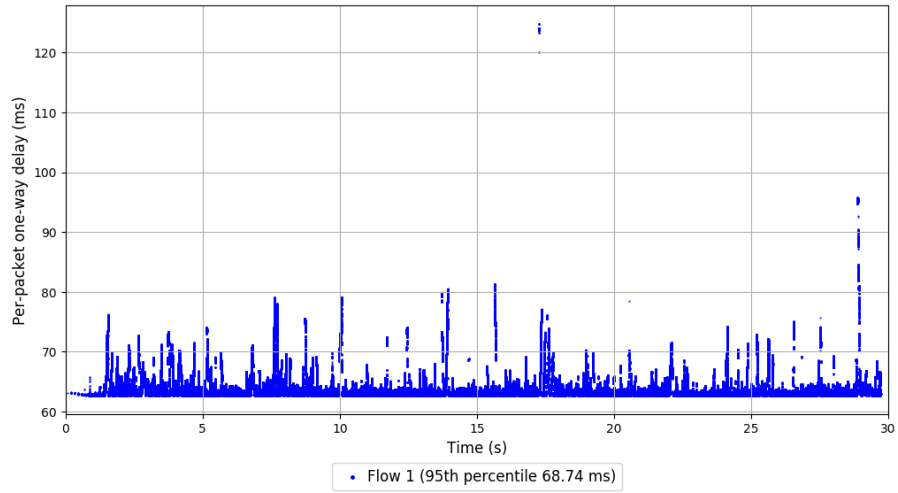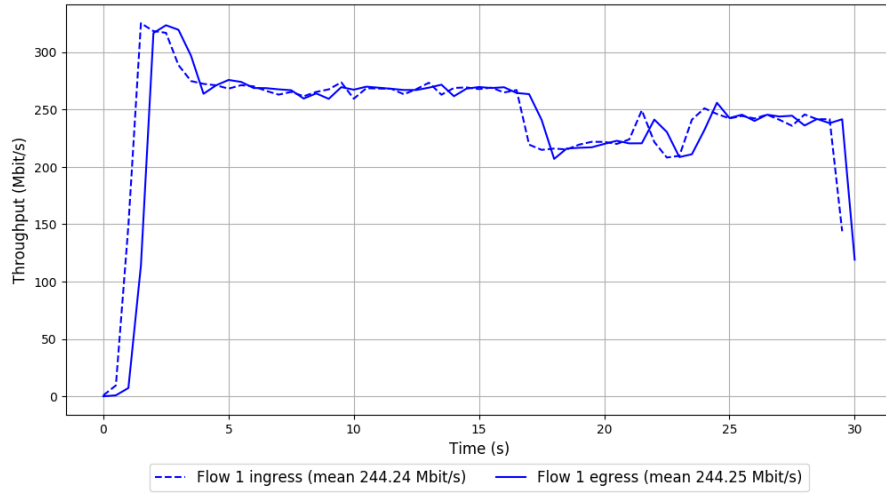
```
Run 2: Statistics of Copa

Start at: 2019-06-27 11:57:54
End at: 2019-06-27 11:58:24
Local clock offset: -0.105 ms
Remote clock offset: 0.106 ms


# Below is generated by plot.py at 2019-06-27 14:10:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.41 Mbit/s
95th percentile per-packet one-way delay: 65.663 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 221.41 Mbit/s
95th percentile per-packet one-way delay: 65.663 ms
Loss rate: 0.45%
```
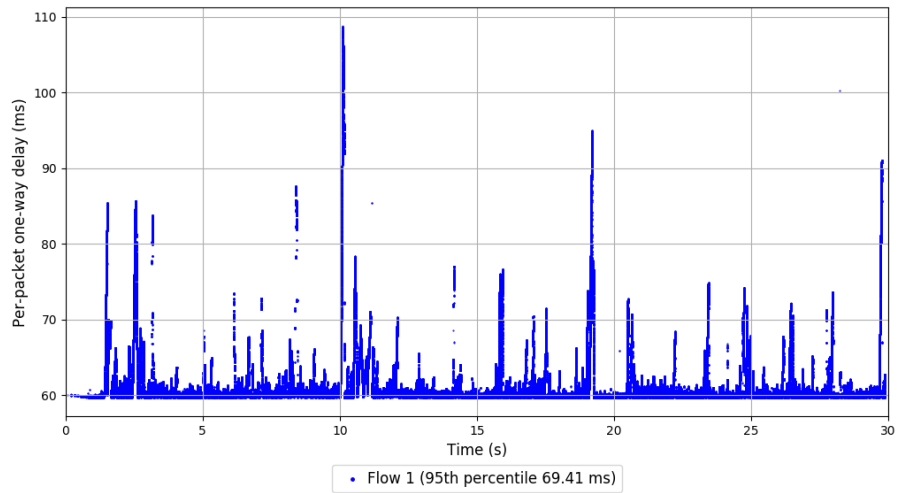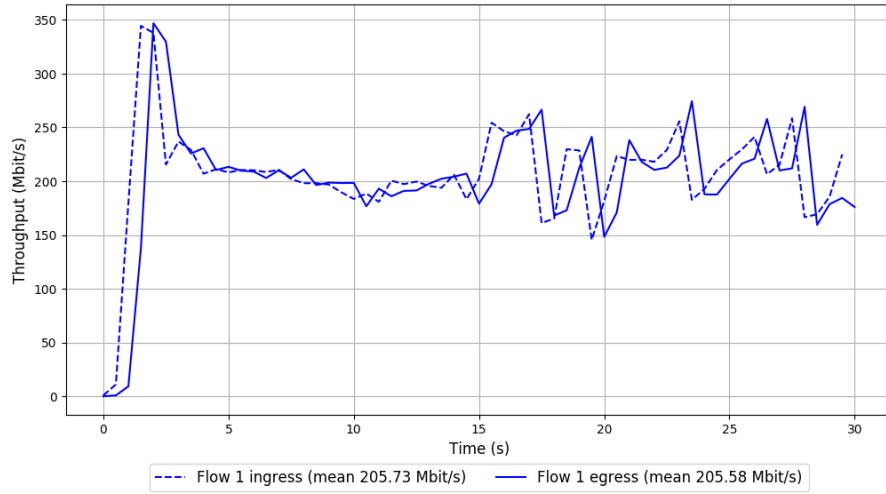
Run 2: Report of Copa — Data Link
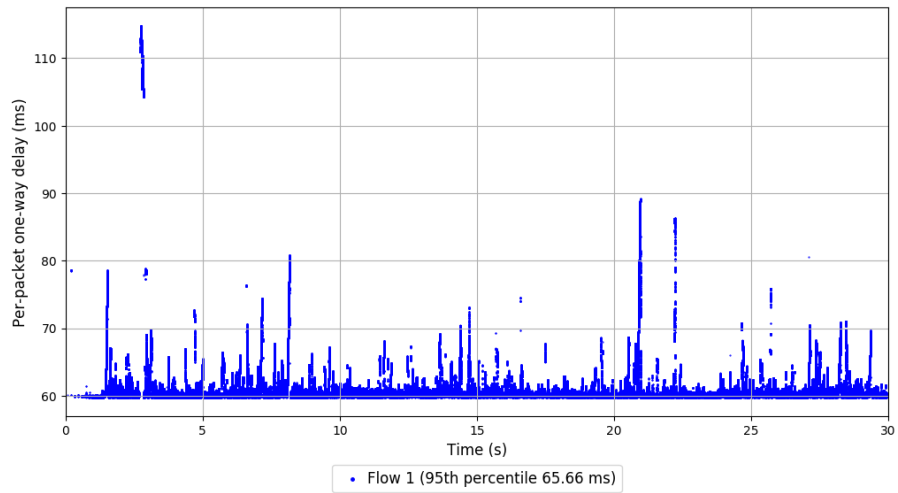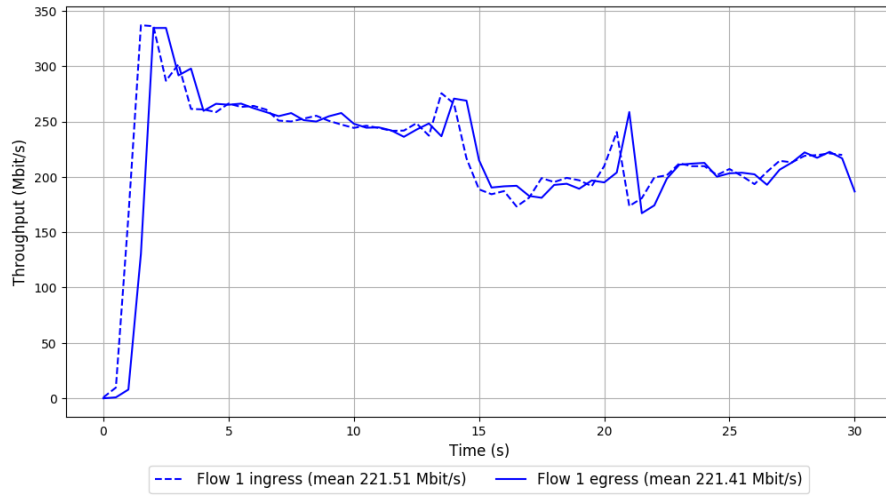
```
Run 3: Statistics of Copa

Start at: 2019-06-27 12:29:11
End at: 2019-06-27 12:29:41
Local clock offset: -0.057 ms
Remote clock offset: -0.061 ms


# Below is generated by plot.py at 2019-06-27 14:10:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 258.24 Mbit/s
95th percentile per-packet one-way delay: 73.640 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 258.24 Mbit/s
95th percentile per-packet one-way delay: 73.640 ms
Loss rate: 0.31%
```

Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 257.97 Mbit/s)   Flow 1 egress (mean 258.24 Mbit/s)

Flow 1 (95th percentile 73.64 ms)

```
Run 4: Statistics of Copa

Start at: 2019-06-27 13:00:46
End at: 2019-06-27 13:01:16
Local clock offset: -0.021 ms
Remote clock offset: 0.0 ms

# Below is generated by plot.py at 2019-06-27 14:15:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 205.58 Mbit/s
95th percentile per-packet one-way delay: 69.410 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 205.58 Mbit/s
95th percentile per-packet one-way delay: 69.410 ms
Loss rate: 0.47%
```

Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2019-06-27 13:31:52
End at: 2019-06-27 13:32:22
Local clock offset: -0.019 ms
Remote clock offset: -0.222 ms


# Below is generated by plot.py at 2019-06-27 14:18:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 264.28 Mbit/s
95th percentile per-packet one-way delay: 74.381 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 264.28 Mbit/s
95th percentile per-packet one-way delay: 74.381 ms
Loss rate: 0.48%
```
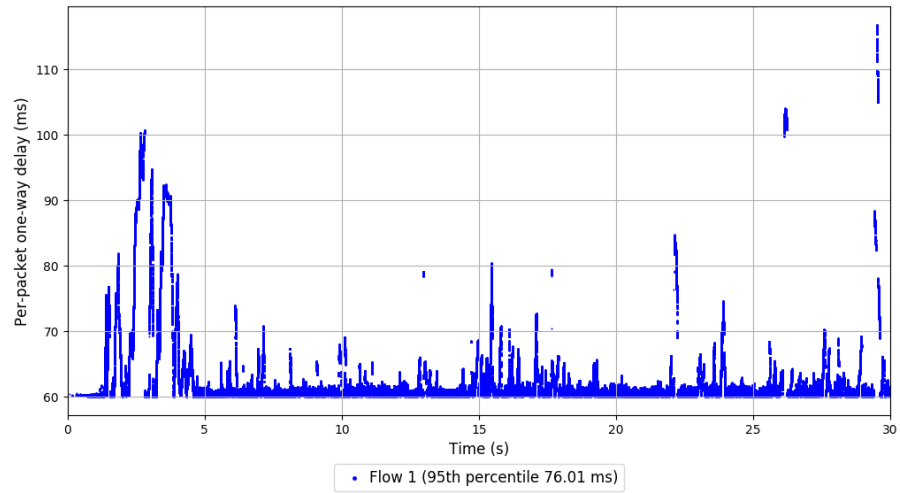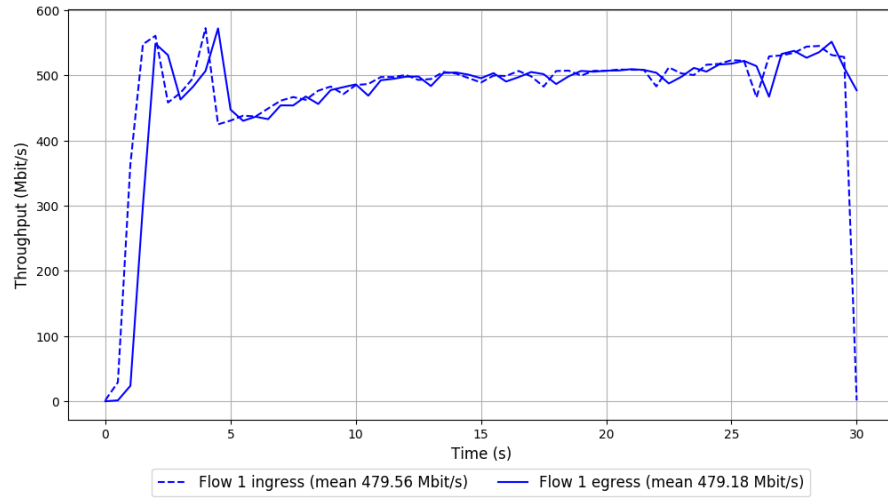
Run 5: Report of Copa — Data Link
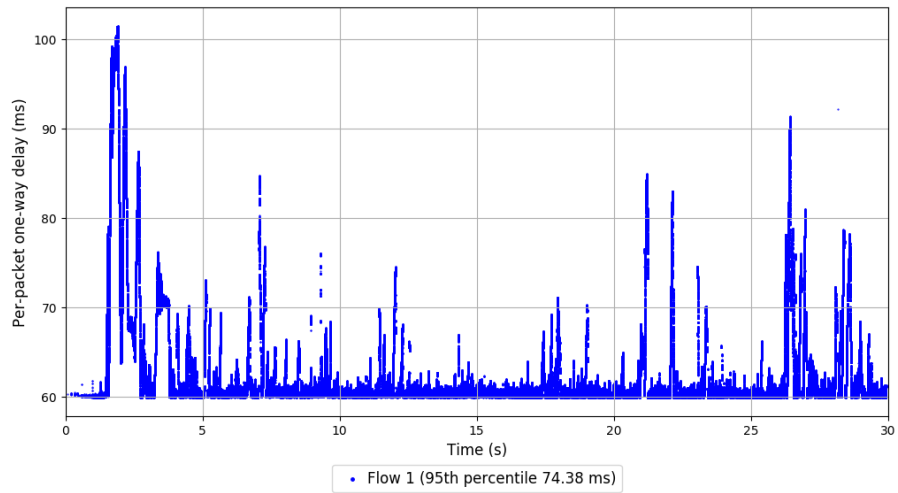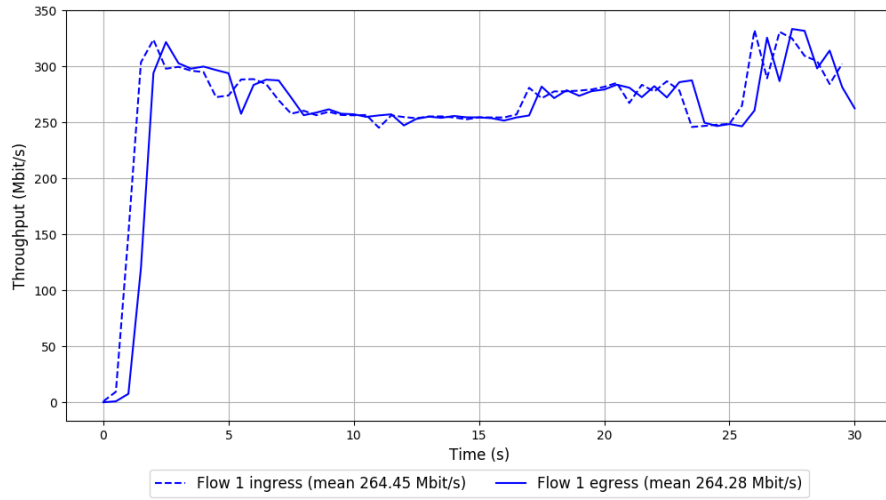
```
Run 1: Statistics of TCP Cubic

Start at: 2019-06-27 11:19:36
End at: 2019-06-27 11:20:06
Local clock offset: 0.019 ms
Remote clock offset: -0.121 ms


# Below is generated by plot.py at 2019-06-27 14:18:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 460.62 Mbit/s
95th percentile per-packet one-way delay: 72.753 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 460.62 Mbit/s
95th percentile per-packet one-way delay: 72.753 ms
Loss rate: 0.50%
```
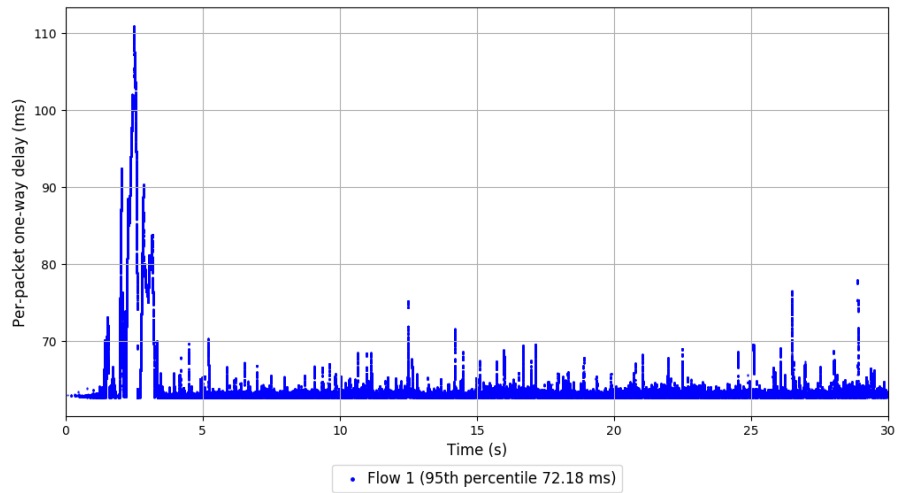
Run 1: Report of TCP Cubic — Data Link
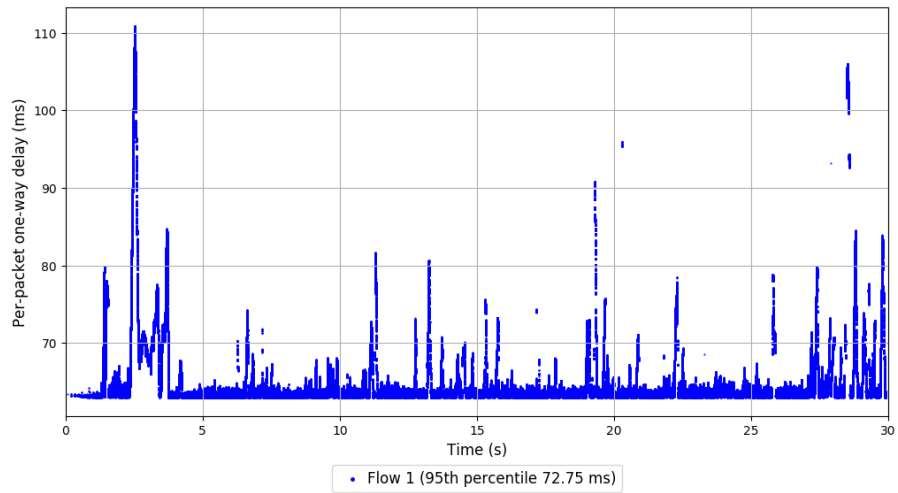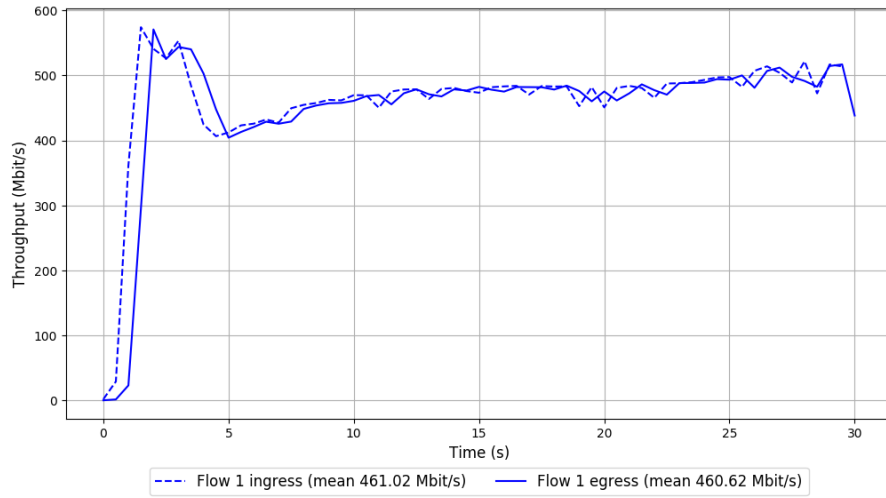
```
Run 2: Statistics of TCP Cubic

Start at: 2019-06-27 11:51:01
End at: 2019-06-27 11:51:31
Local clock offset: -0.094 ms
Remote clock offset: -0.111 ms


# Below is generated by plot.py at 2019-06-27 14:18:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 479.18 Mbit/s
95th percentile per-packet one-way delay: 76.011 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 479.18 Mbit/s
95th percentile per-packet one-way delay: 76.011 ms
Loss rate: 0.48%
```
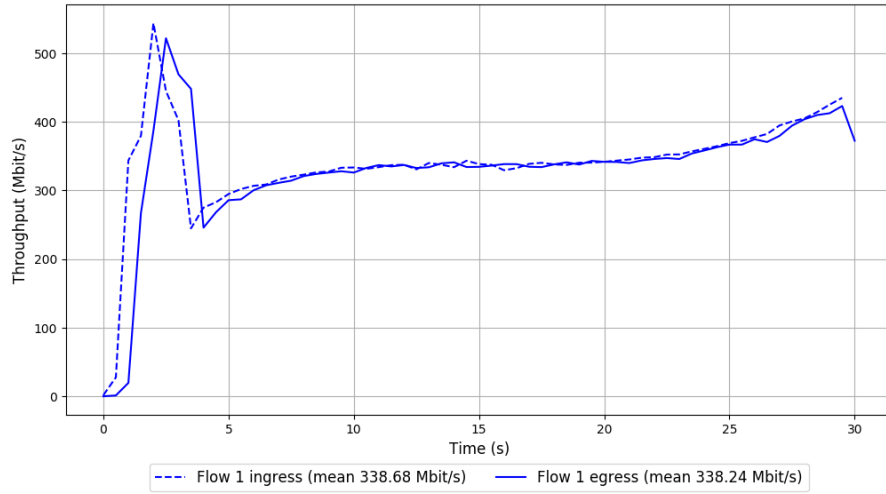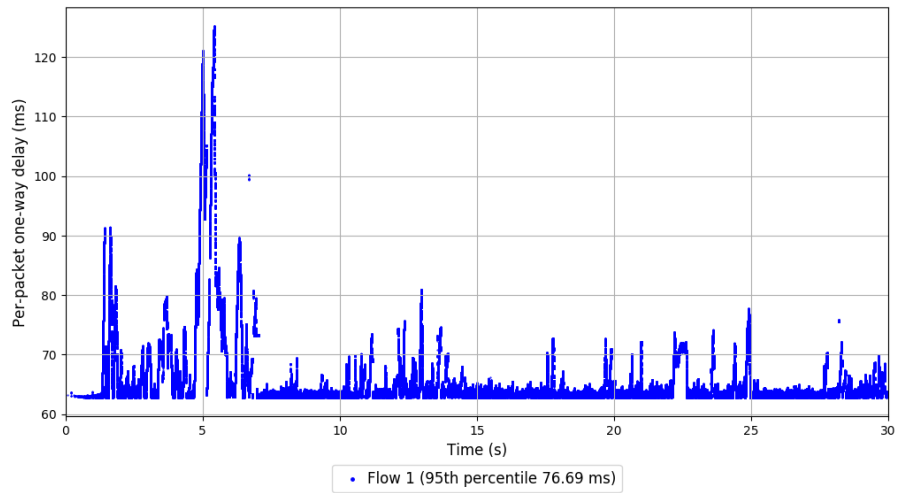
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2019-06-27 12:22:22
End at: 2019-06-27 12:22:52
Local clock offset: -0.049 ms
Remote clock offset: 0.134 ms


# Below is generated by plot.py at 2019-06-27 14:18:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 338.24 Mbit/s
95th percentile per-packet one-way delay: 72.182 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 338.24 Mbit/s
95th percentile per-packet one-way delay: 72.182 ms
Loss rate: 0.55%
```
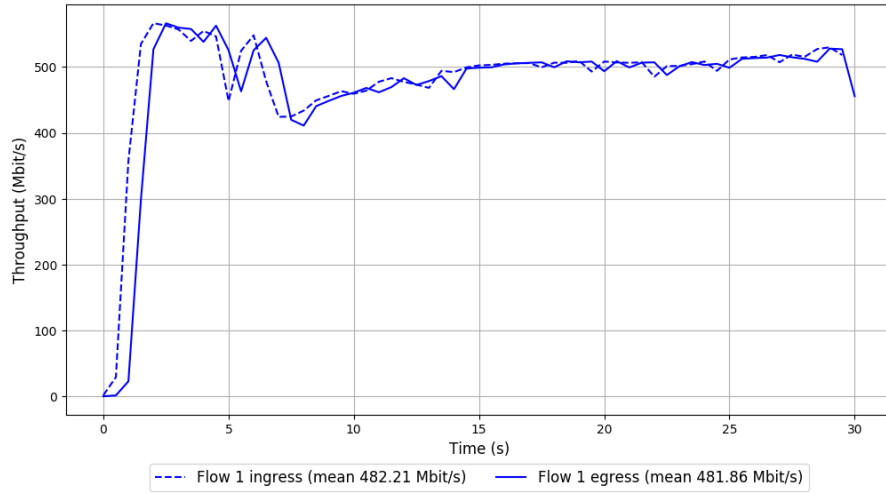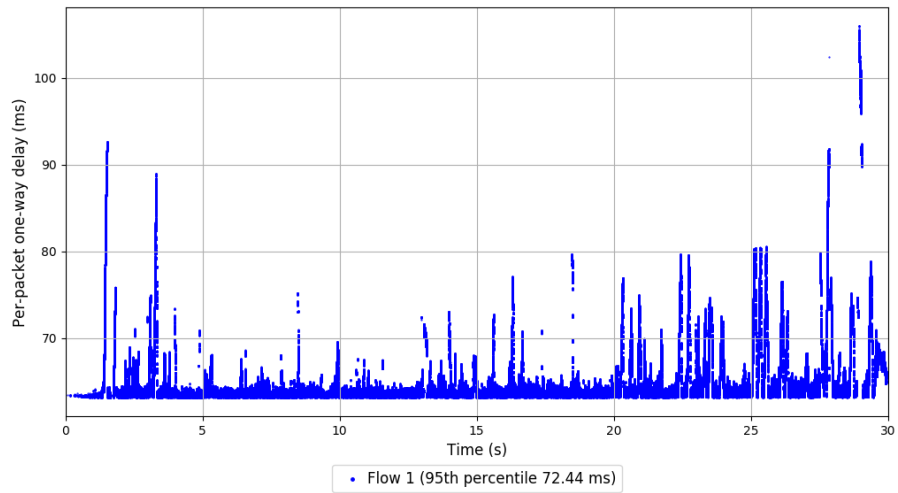
Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2019-06-27 12:53:50
End at: 2019-06-27 12:54:20
Local clock offset: -0.013 ms
Remote clock offset: 0.227 ms


# Below is generated by plot.py at 2019-06-27 14:18:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 481.86 Mbit/s
95th percentile per-packet one-way delay: 76.689 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 481.86 Mbit/s
95th percentile per-packet one-way delay: 76.689 ms
Loss rate: 0.48%
```
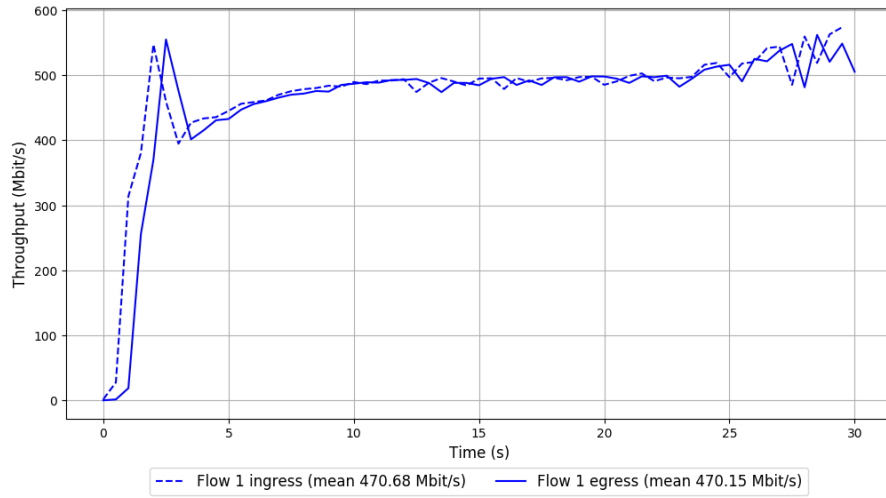
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 482.21 Mbit/s)   Flow 1 egress (mean 481.86 Mbit/s)

Flow 1 (95th percentile 76.69 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2019-06-27 13:24:56
End at: 2019-06-27 13:25:26
Local clock offset: -0.004 ms
Remote clock offset: -0.242 ms


# Below is generated by plot.py at 2019-06-27 14:19:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 470.15 Mbit/s
95th percentile per-packet one-way delay: 72.436 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 470.15 Mbit/s
95th percentile per-packet one-way delay: 72.436 ms
Loss rate: 0.53%
```
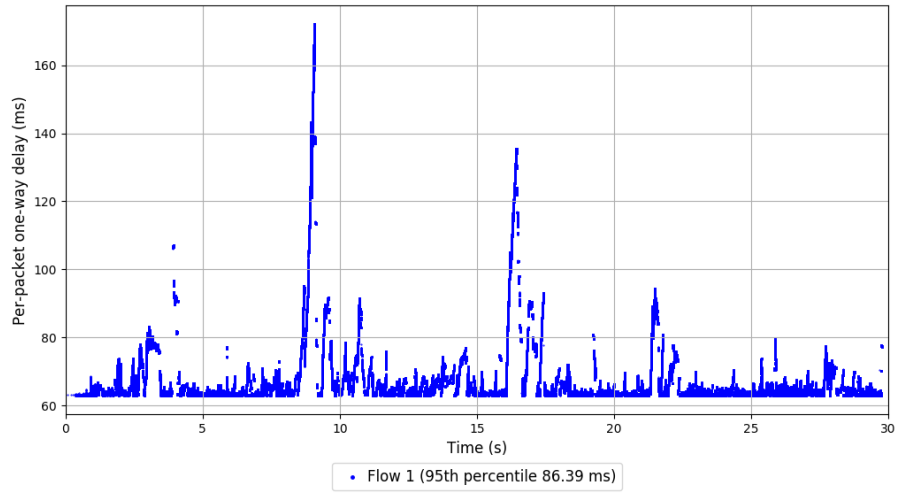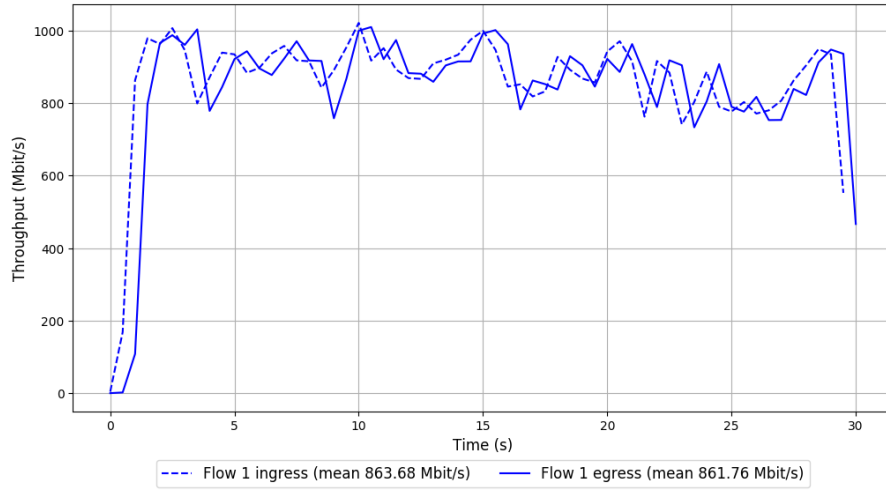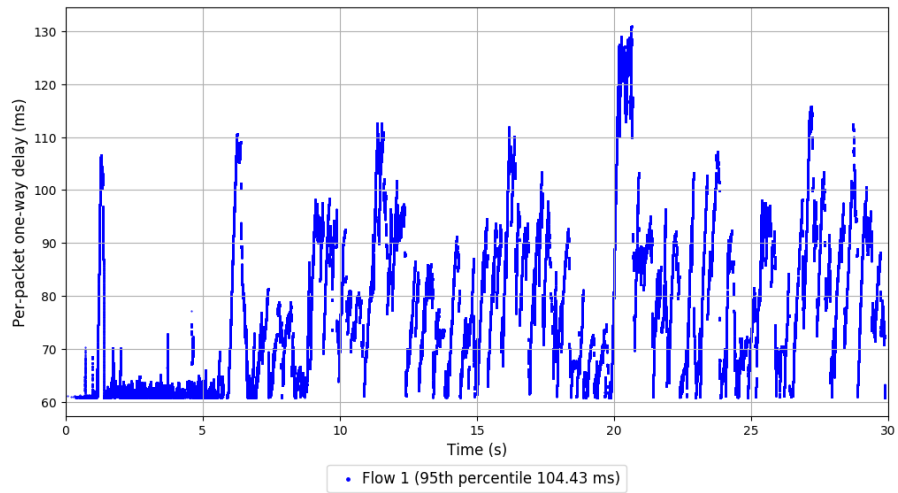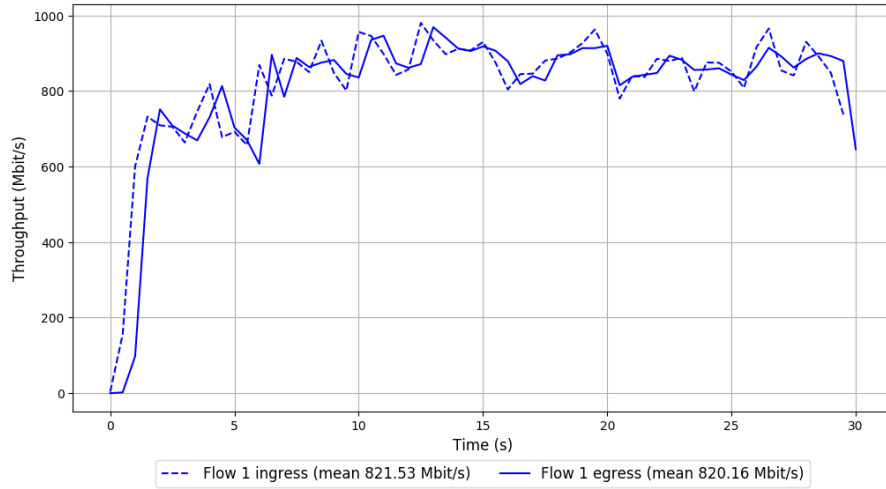
Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 470.68 Mbit/s)　　Flow 1 egress (mean 470.15 Mbit/s)
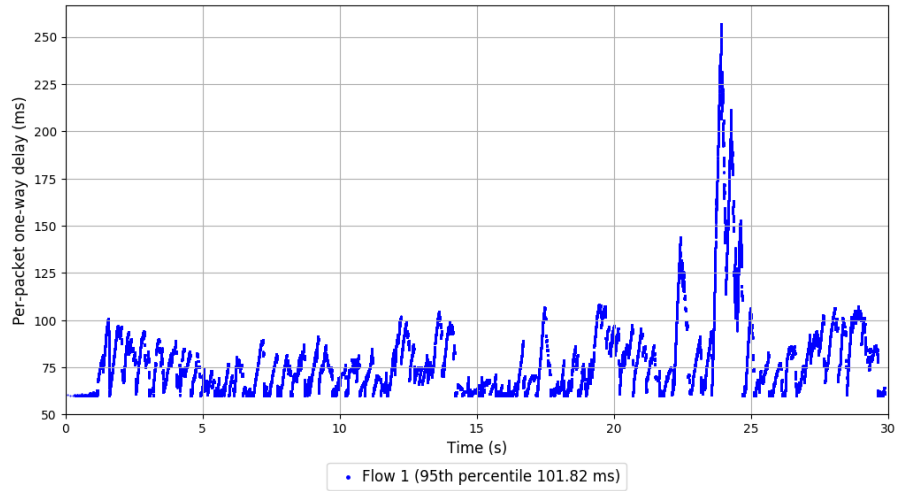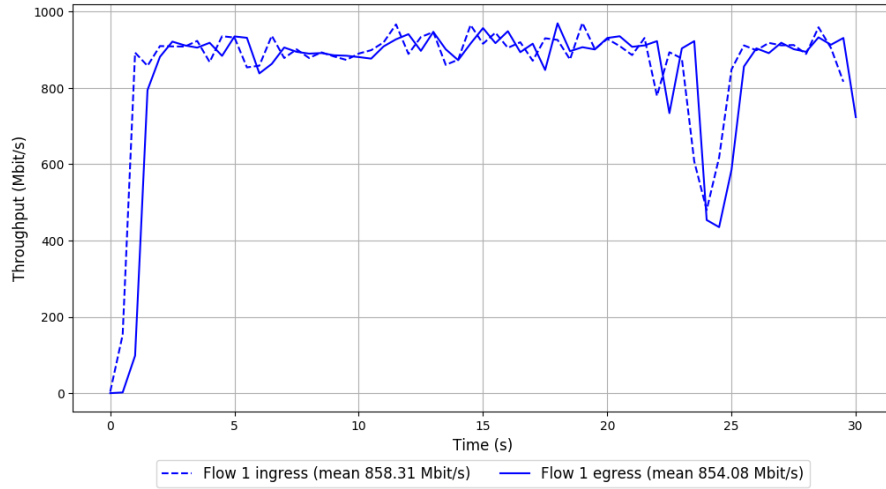

Flow 1 (95th percentile 72.44 ms)

```
Run 1: Statistics of FillP

Start at: 2019-06-27 11:17:53
End at: 2019-06-27 11:18:23
Local clock offset: 0.027 ms
Remote clock offset: 0.046 ms


# Below is generated by plot.py at 2019-06-27 14:28:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 861.76 Mbit/s
95th percentile per-packet one-way delay: 86.388 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 861.76 Mbit/s
95th percentile per-packet one-way delay: 86.388 ms
Loss rate: 0.64%
```

Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 863.68 Mbit/s)   Flow 1 egress (mean 861.76 Mbit/s)

Flow 1 (95th percentile 86.39 ms)

```
Run 2: Statistics of FillP

Start at: 2019-06-27 11:49:19
End at: 2019-06-27 11:49:49
Local clock offset: -0.083 ms
Remote clock offset: -0.726 ms


# Below is generated by plot.py at 2019-06-27 14:35:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 820.16 Mbit/s
95th percentile per-packet one-way delay: 104.429 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 820.16 Mbit/s
95th percentile per-packet one-way delay: 104.429 ms
Loss rate: 0.57%
```
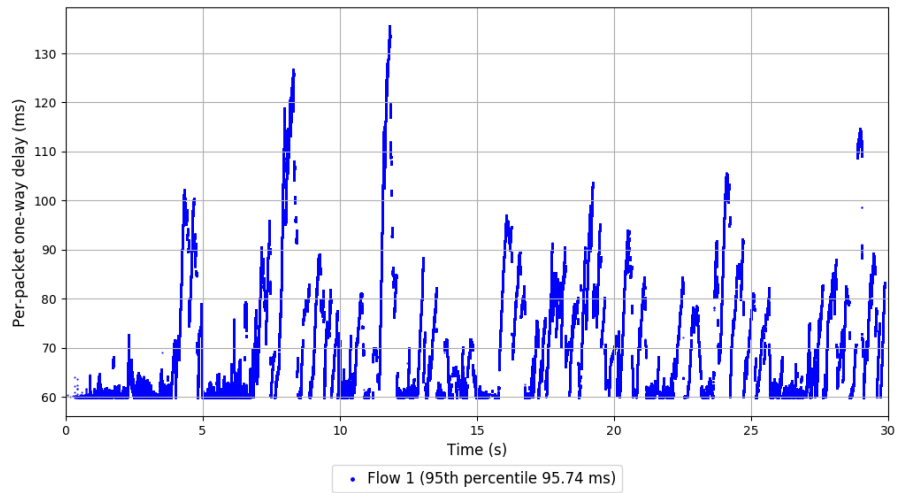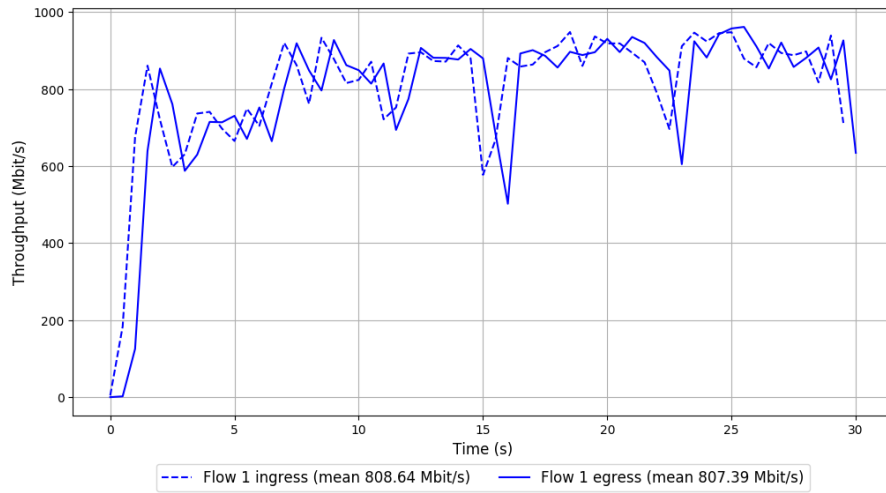
Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 821.53 Mbit/s)   Flow 1 egress (mean 820.16 Mbit/s)

Flow 1 (95th percentile 104.43 ms)

```
Run 3: Statistics of FillP

Start at: 2019-06-27 12:20:39
End at: 2019-06-27 12:21:09
Local clock offset: -0.042 ms
Remote clock offset: -0.137 ms


# Below is generated by plot.py at 2019-06-27 14:35:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 854.08 Mbit/s
95th percentile per-packet one-way delay: 101.822 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 854.08 Mbit/s
95th percentile per-packet one-way delay: 101.822 ms
Loss rate: 0.90%
```
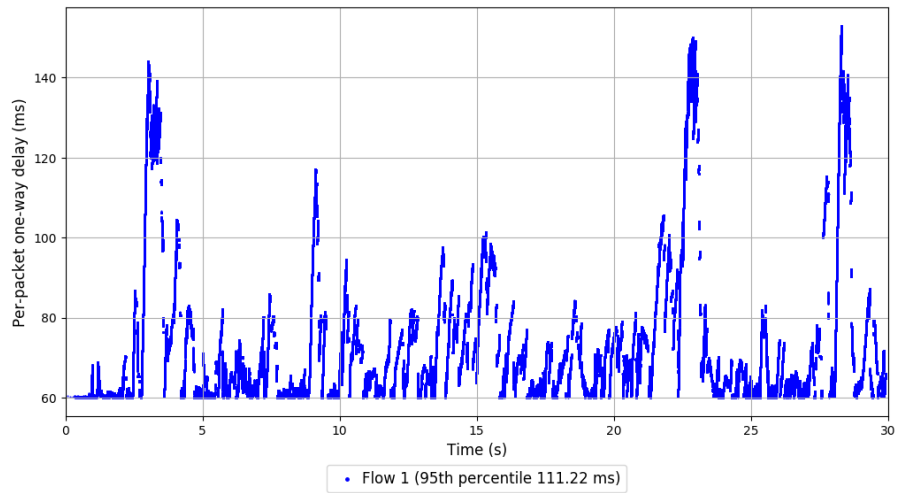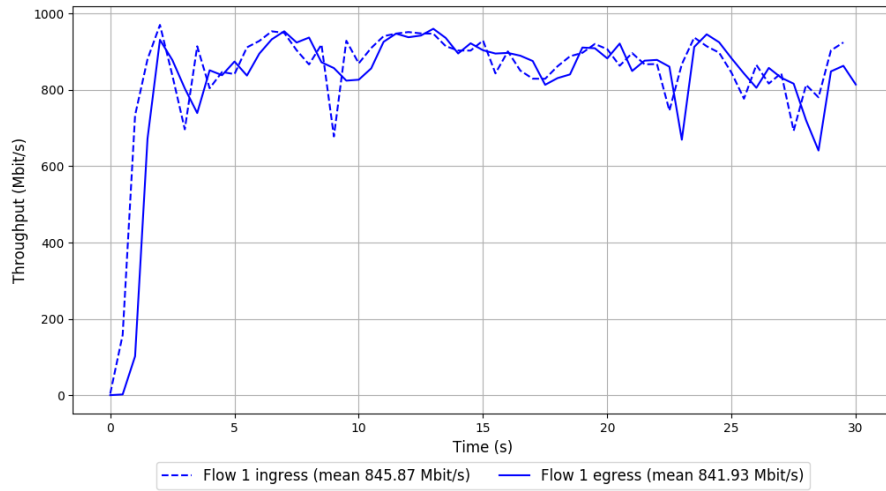
Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 858.31 Mbit/s) —— Flow 1 egress (mean 854.08 Mbit/s)

• Flow 1 (95th percentile 101.82 ms)

```
Run 4: Statistics of FillP

Start at: 2019-06-27 12:52:08
End at: 2019-06-27 12:52:38
Local clock offset: -0.045 ms
Remote clock offset: 0.121 ms


# Below is generated by plot.py at 2019-06-27 14:36:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 807.39 Mbit/s
95th percentile per-packet one-way delay: 95.742 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 807.39 Mbit/s
95th percentile per-packet one-way delay: 95.742 ms
Loss rate: 0.57%
```
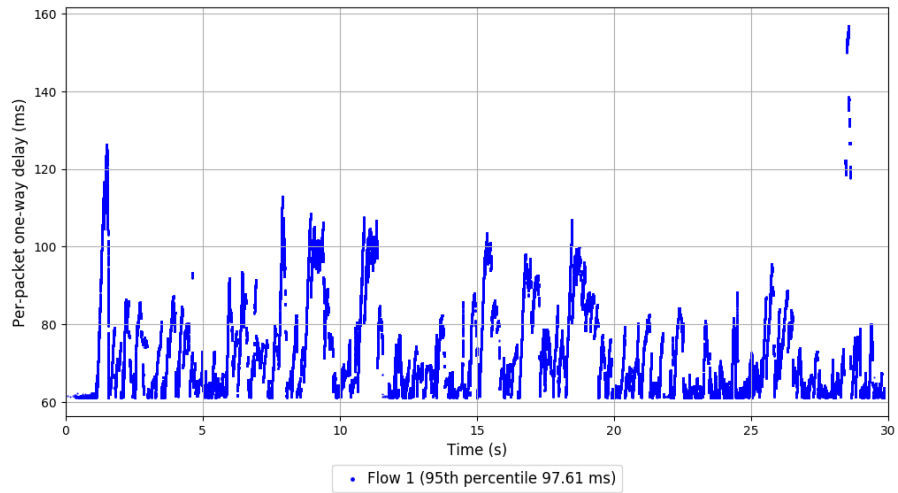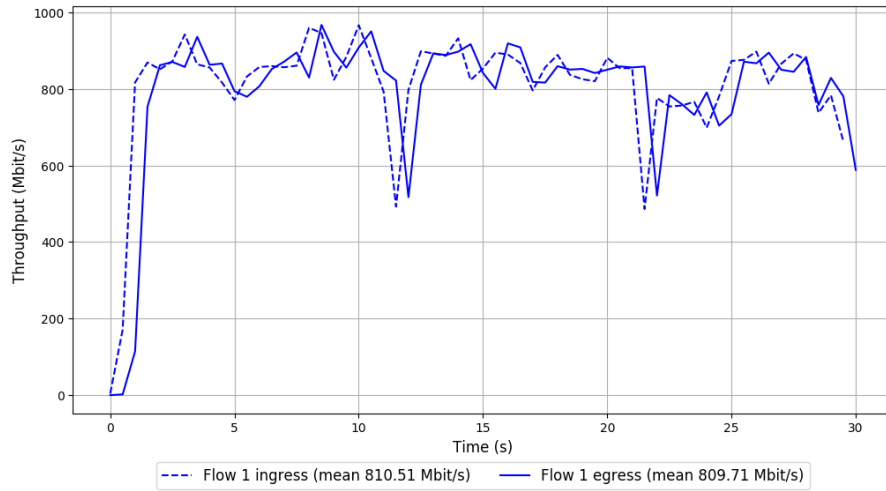
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 808.64 Mbit/s)   Flow 1 egress (mean 807.39 Mbit/s)

Flow 1 (95th percentile 95.74 ms)

```
Run 5: Statistics of FillP

Start at: 2019-06-27 13:23:13
End at: 2019-06-27 13:23:43
Local clock offset: -0.03 ms
Remote clock offset: -0.161 ms


# Below is generated by plot.py at 2019-06-27 14:37:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 841.93 Mbit/s
95th percentile per-packet one-way delay: 111.215 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 841.93 Mbit/s
95th percentile per-packet one-way delay: 111.215 ms
Loss rate: 0.88%
```

Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 845.87 Mbit/s) —— Flow 1 egress (mean 841.93 Mbit/s)
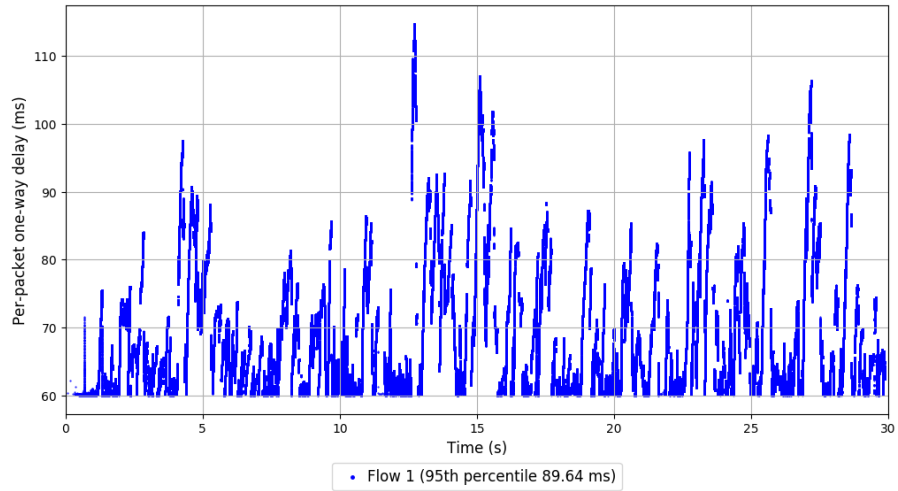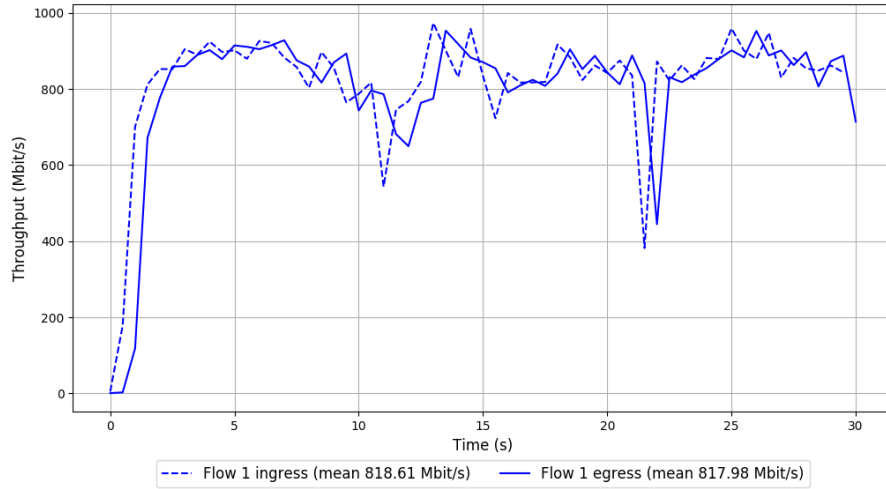

• Flow 1 (95th percentile 111.22 ms)

44

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-06-27 11:32:26
End at: 2019-06-27 11:32:56
Local clock offset: 0.068 ms
Remote clock offset: -0.829 ms


# Below is generated by plot.py at 2019-06-27 14:37:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 809.71 Mbit/s
95th percentile per-packet one-way delay: 97.615 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 809.71 Mbit/s
95th percentile per-packet one-way delay: 97.615 ms
Loss rate: 0.50%
```

Run 1: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 810.51 Mbit/s) ----   Flow 1 egress (mean 809.71 Mbit/s) ——

• Flow 1 (95th percentile 97.61 ms)

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-06-27 12:03:58
End at: 2019-06-27 12:04:28
Local clock offset: -0.12 ms
Remote clock offset: -0.23 ms


# Below is generated by plot.py at 2019-06-27 14:37:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 832.07 Mbit/s
95th percentile per-packet one-way delay: 103.890 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 832.07 Mbit/s
95th percentile per-packet one-way delay: 103.890 ms
Loss rate: 0.58%
```
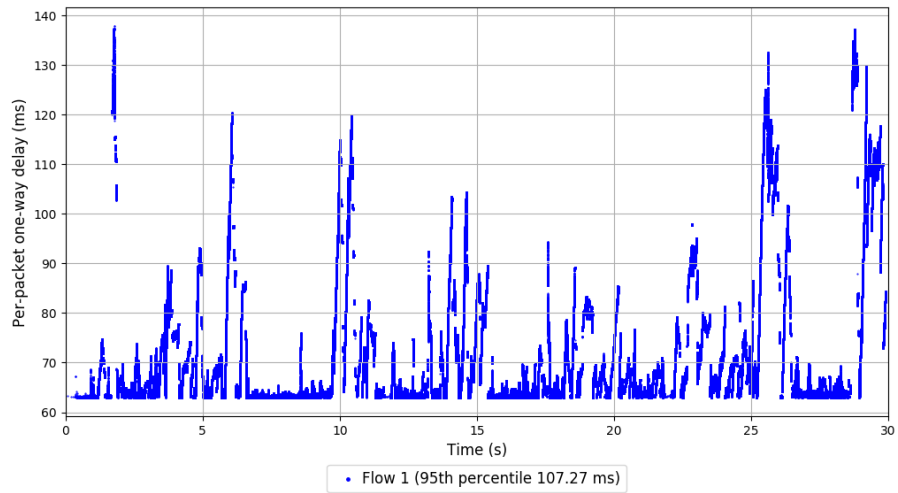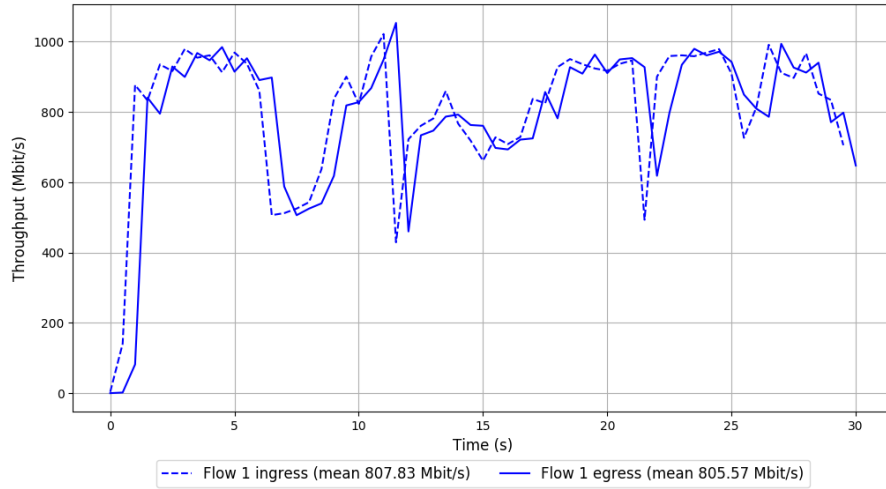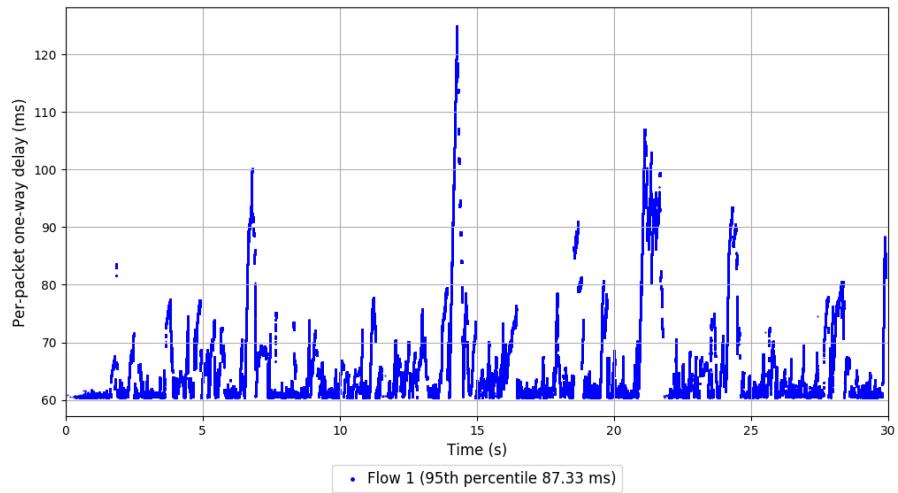
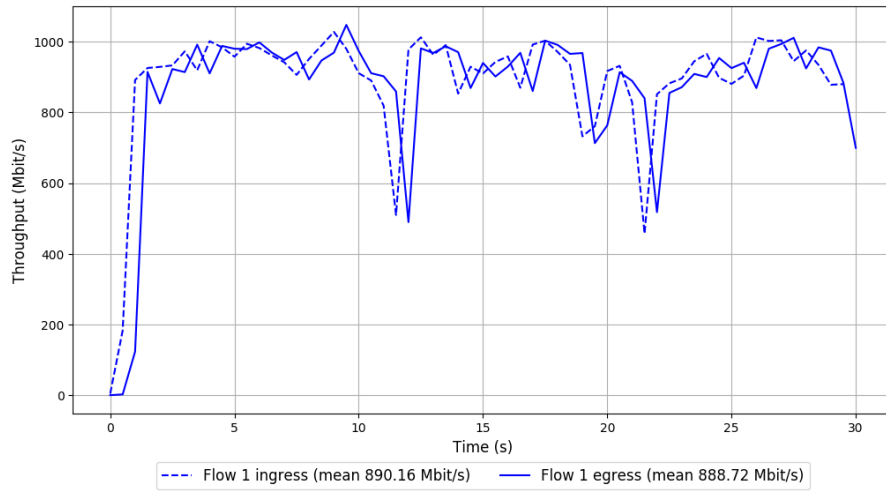Run 2: Report of FillP-Sheep — Data Link
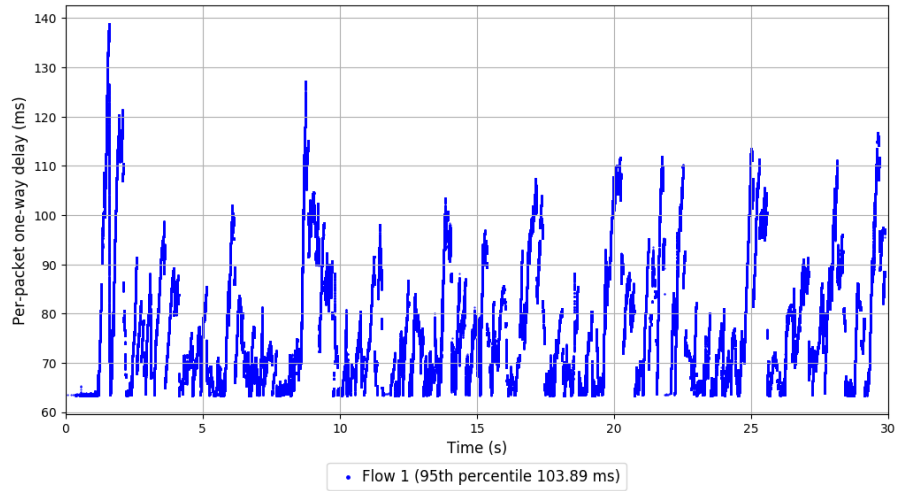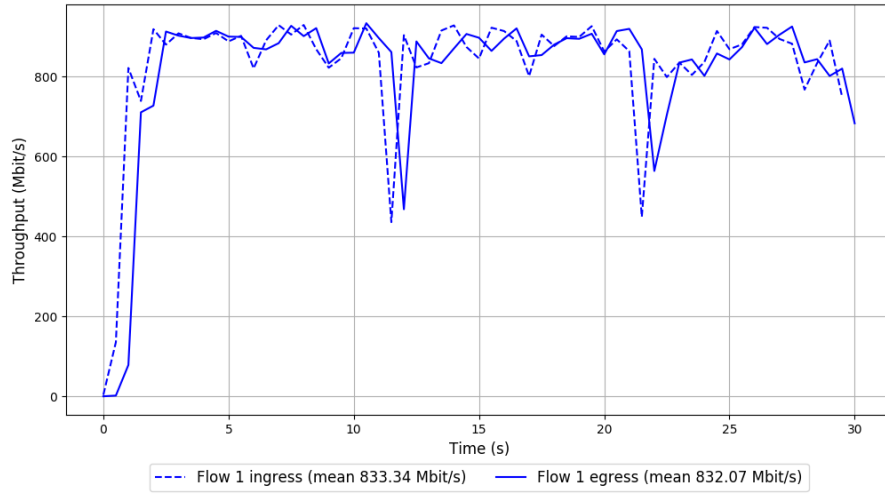
```
Run 3: Statistics of FillP-Sheep

Start at: 2019-06-27 12:35:14
End at: 2019-06-27 12:35:44
Local clock offset: -0.018 ms
Remote clock offset: -0.007 ms


# Below is generated by plot.py at 2019-06-27 14:37:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 817.98 Mbit/s
95th percentile per-packet one-way delay: 89.639 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 817.98 Mbit/s
95th percentile per-packet one-way delay: 89.639 ms
Loss rate: 0.49%
```

Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 818.61 Mbit/s)   Flow 1 egress (mean 817.98 Mbit/s)

Flow 1 (95th percentile 89.64 ms)

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-06-27 13:06:25
End at: 2019-06-27 13:06:55
Local clock offset: -0.021 ms
Remote clock offset: 0.013 ms


# Below is generated by plot.py at 2019-06-27 14:48:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 805.57 Mbit/s
95th percentile per-packet one-way delay: 107.273 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 805.57 Mbit/s
95th percentile per-packet one-way delay: 107.273 ms
Loss rate: 0.70%
```

Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 807.83 Mbit/s) ----   Flow 1 egress (mean 805.57 Mbit/s) ——

• Flow 1 (95th percentile 107.27 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-06-27 13:37:55
End at: 2019-06-27 13:38:25
Local clock offset: -0.003 ms
Remote clock offset: -0.309 ms


# Below is generated by plot.py at 2019-06-27 14:54:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 888.72 Mbit/s
95th percentile per-packet one-way delay: 87.332 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 888.72 Mbit/s
95th percentile per-packet one-way delay: 87.332 ms
Loss rate: 0.58%
```

Run 5: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 890.16 Mbit/s) Flow 1 egress (mean 888.72 Mbit/s)
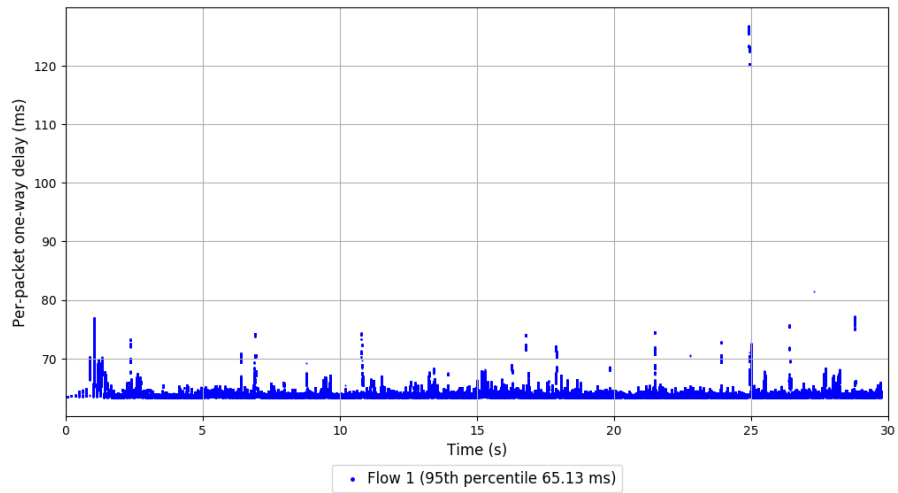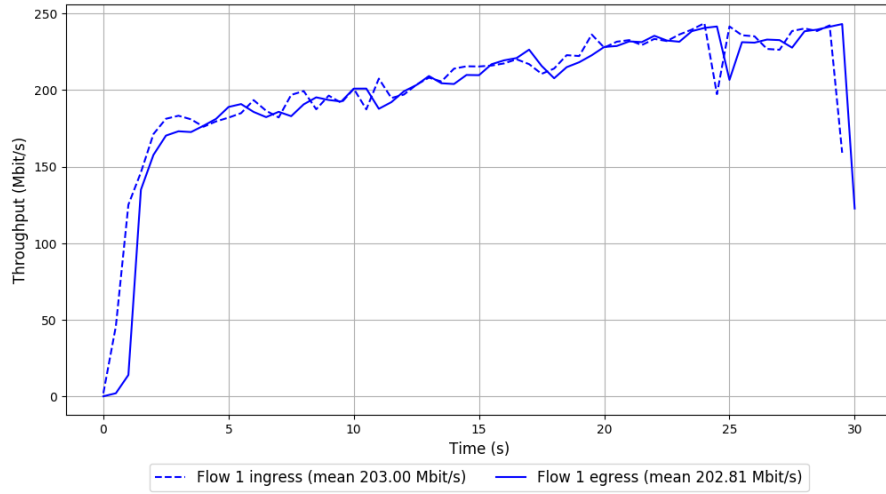

Flow 1 (95th percentile 87.33 ms)

```
Run 1: Statistics of Indigo

Start at: 2019-06-27 11:23:48
End at: 2019-06-27 11:24:18
Local clock offset: 0.049 ms
Remote clock offset: -0.215 ms


# Below is generated by plot.py at 2019-06-27 14:54:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.41 Mbit/s
95th percentile per-packet one-way delay: 64.343 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 211.41 Mbit/s
95th percentile per-packet one-way delay: 64.343 ms
Loss rate: 0.46%
```

Run 1: Report of Indigo — Data Link
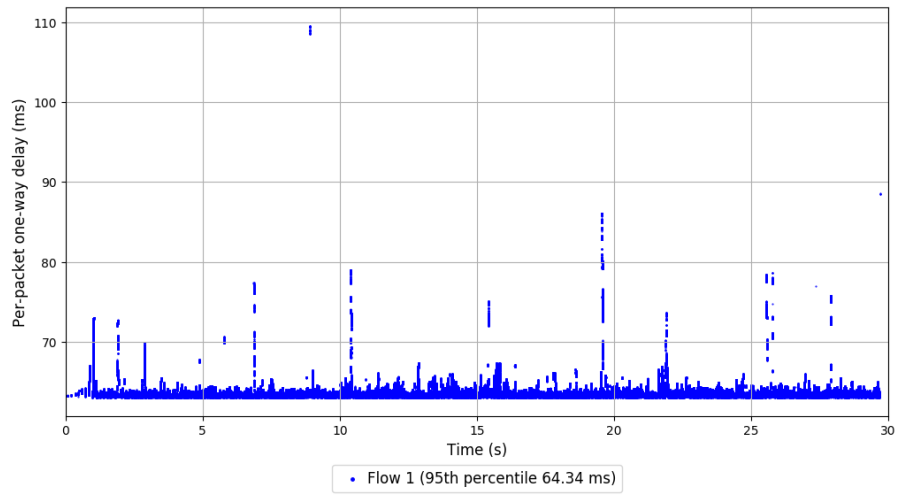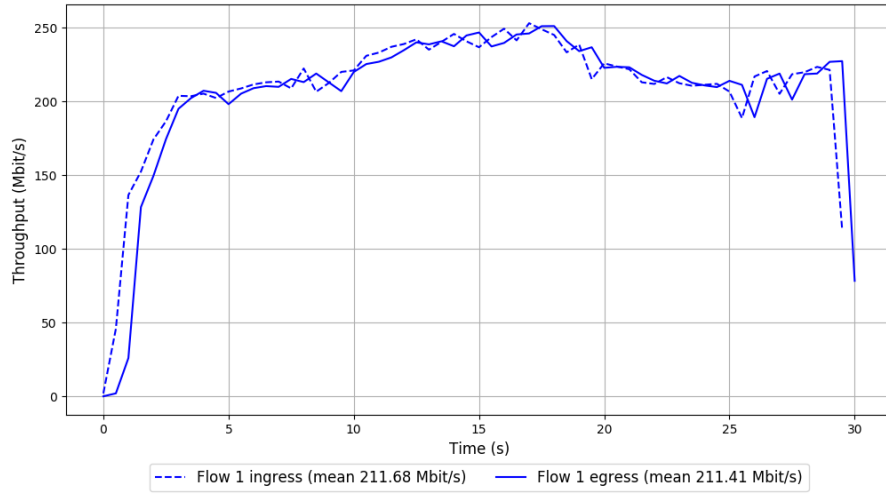
Run 2: Statistics of Indigo

Start at: 2019-06-27 11:55:15
End at: 2019-06-27 11:55:45
Local clock offset: -0.105 ms
Remote clock offset: -0.027 ms

Below is generated by plot.py at 2019-06-27 14:54:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 205.59 Mbit/s
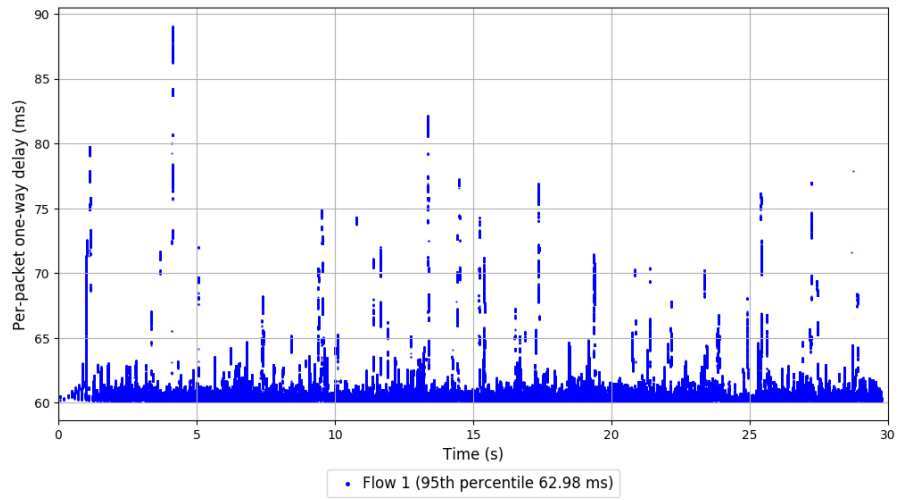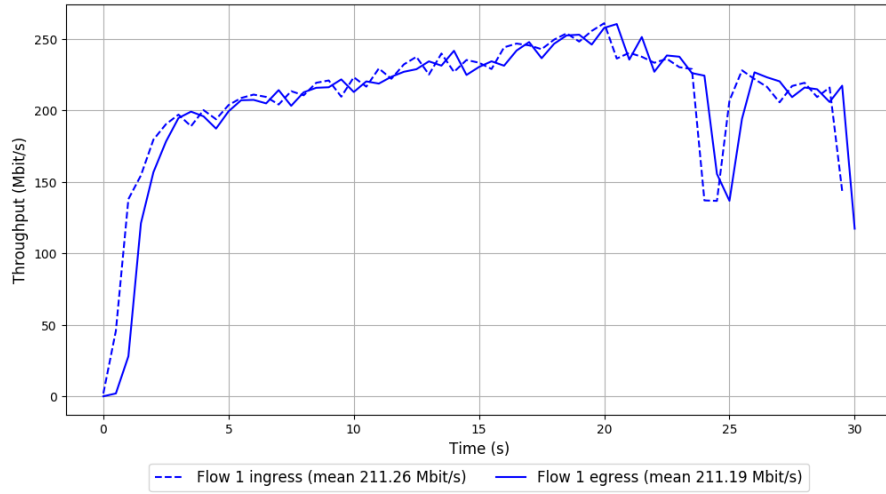95th percentile per-packet one-way delay: 64.742 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 205.59 Mbit/s
95th percentile per-packet one-way delay: 64.742 ms
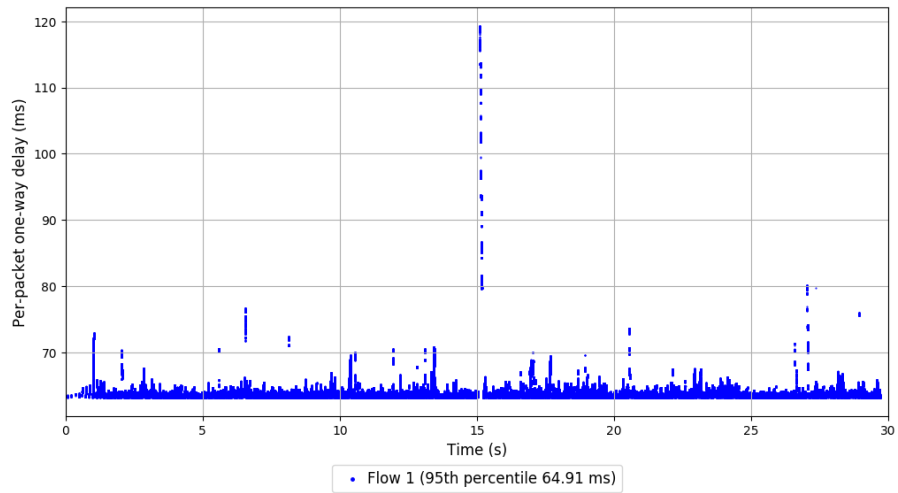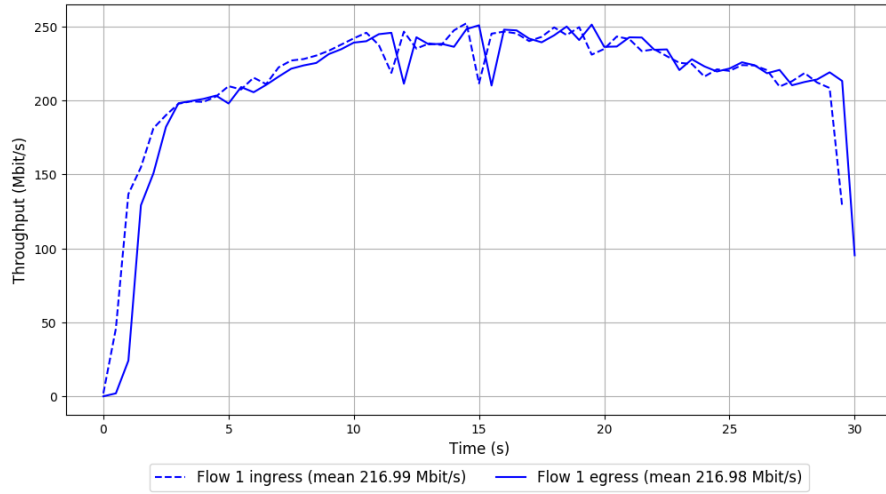Loss rate: 0.44%

Run 2: Report of Indigo — Data Link
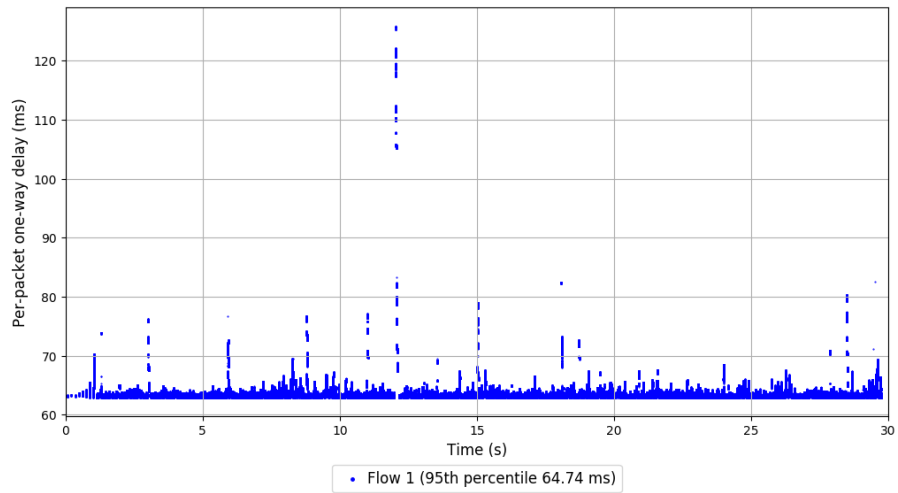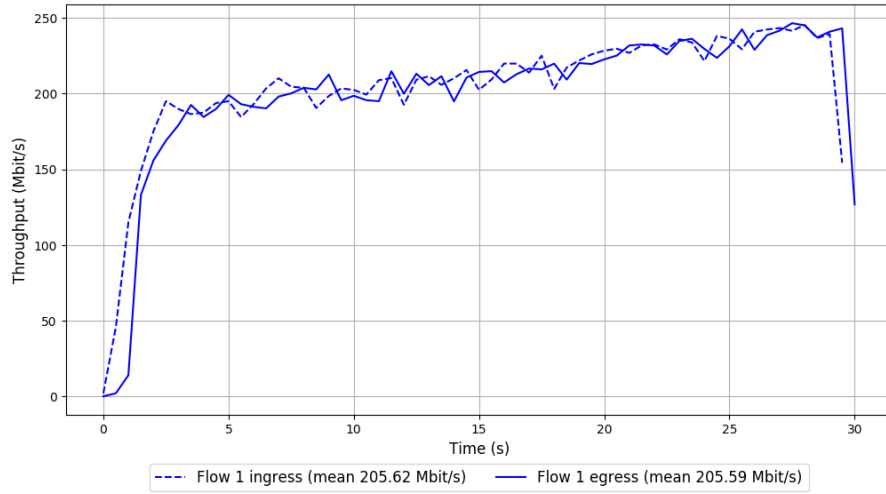
```
Run 3: Statistics of Indigo

Start at: 2019-06-27 12:26:32
End at: 2019-06-27 12:27:02
Local clock offset: -0.009 ms
Remote clock offset: -0.318 ms


# Below is generated by plot.py at 2019-06-27 14:54:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.81 Mbit/s
95th percentile per-packet one-way delay: 65.131 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 202.81 Mbit/s
95th percentile per-packet one-way delay: 65.131 ms
Loss rate: 0.52%
```

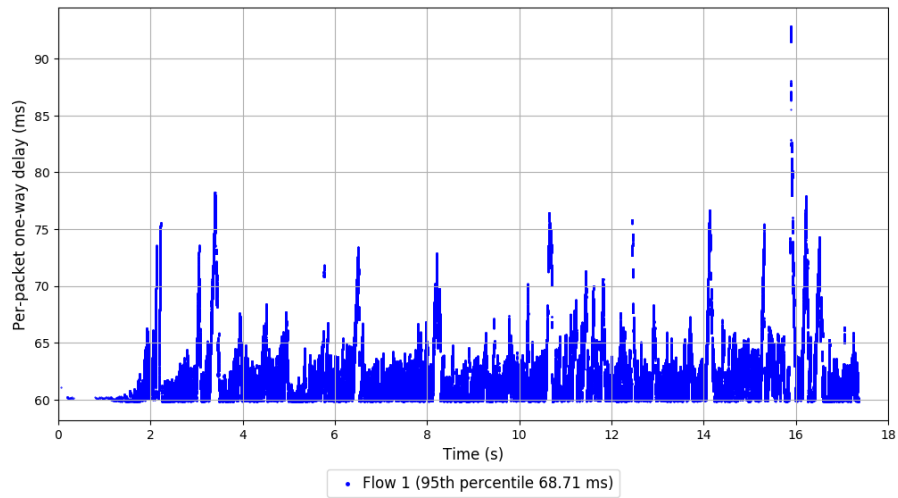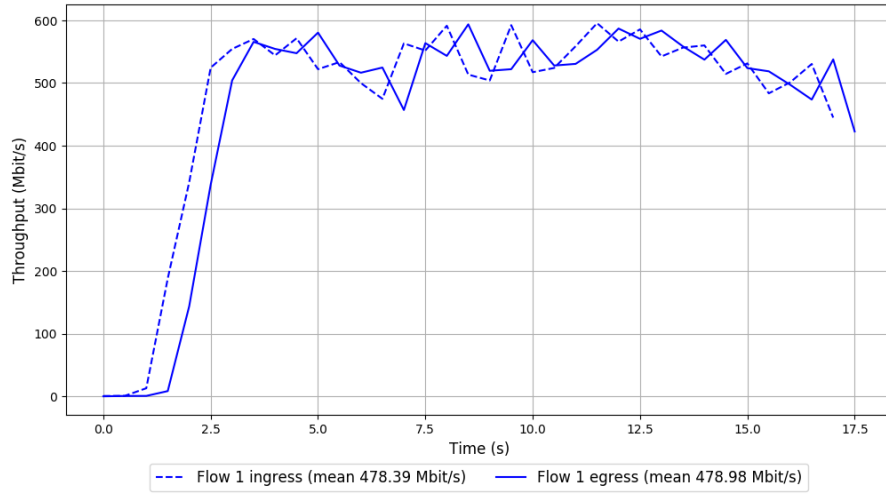Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2019-06-27 12:58:06
End at: 2019-06-27 12:58:36
Local clock offset: 0.005 ms
Remote clock offset: -0.183 ms


# Below is generated by plot.py at 2019-06-27 14:54:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.19 Mbit/s
95th percentile per-packet one-way delay: 62.980 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 211.19 Mbit/s
95th percentile per-packet one-way delay: 62.980 ms
Loss rate: 0.43%
```

Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2019-06-27 13:29:11
End at: 2019-06-27 13:29:41
Local clock offset: -0.027 ms
Remote clock offset: -0.236 ms


# Below is generated by plot.py at 2019-06-27 14:54:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.98 Mbit/s
95th percentile per-packet one-way delay: 64.910 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 216.98 Mbit/s
95th percentile per-packet one-way delay: 64.910 ms
Loss rate: 0.43%
```
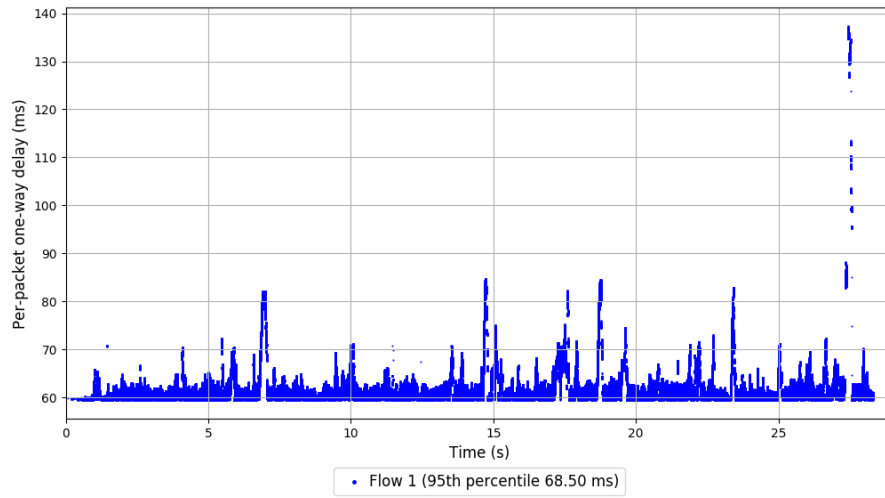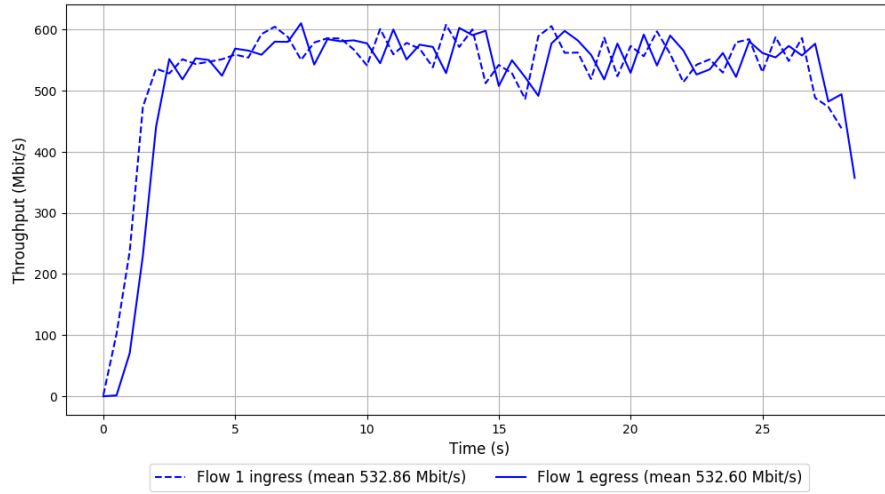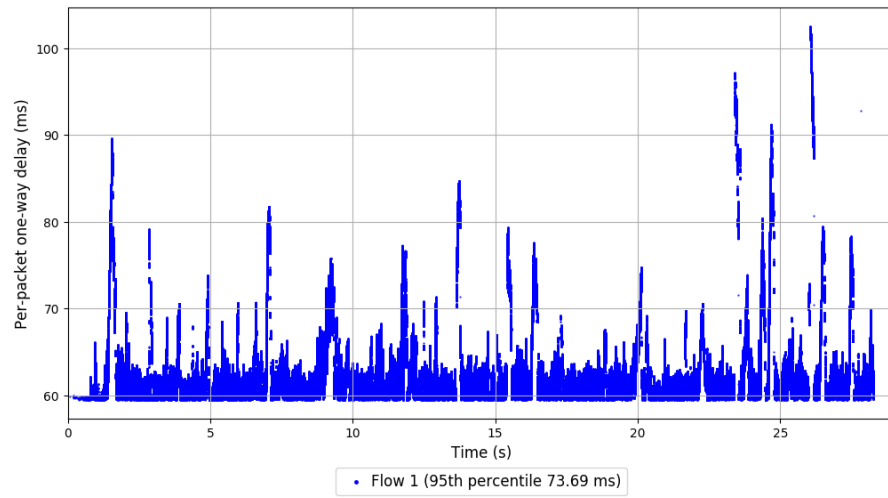
Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-06-27 11:14:57
End at: 2019-06-27 11:15:27
Local clock offset: -0.029 ms
Remote clock offset: -0.074 ms
```

Run 1: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 478.39 Mbit/s)   Flow 1 egress (mean 478.98 Mbit/s)

Flow 1 (95th percentile 68.71 ms)

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-06-27 11:46:11
End at: 2019-06-27 11:46:41
Local clock offset: -0.082 ms
Remote clock offset: 0.164 ms


# Below is generated by plot.py at 2019-06-27 14:54:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 532.60 Mbit/s
95th percentile per-packet one-way delay: 68.498 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 532.60 Mbit/s
95th percentile per-packet one-way delay: 68.498 ms
Loss rate: 0.47%
```
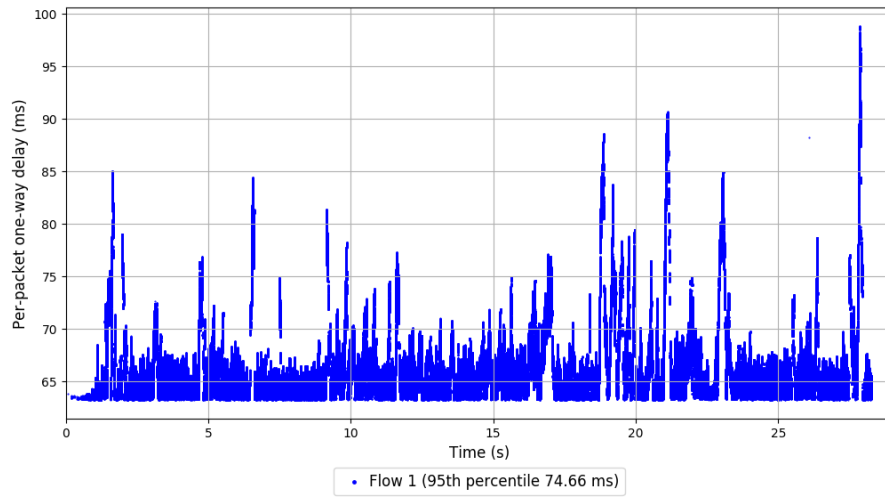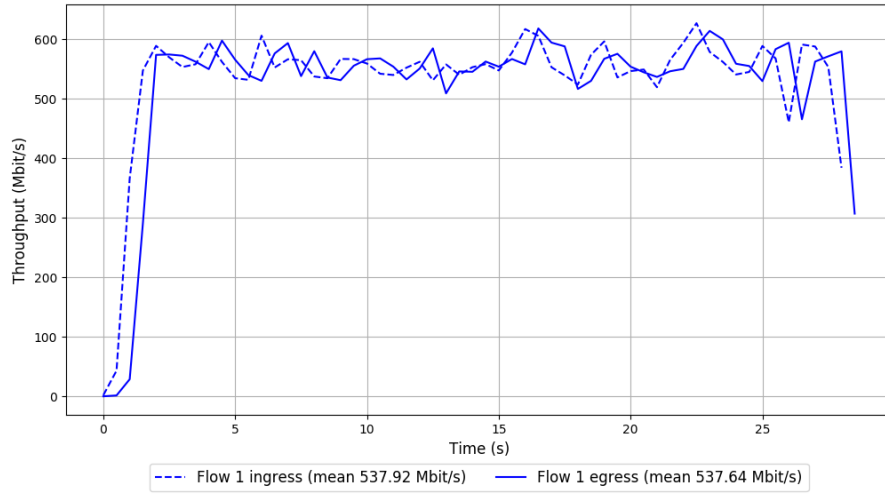
Run 2: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 532.86 Mbit/s)   Flow 1 egress (mean 532.60 Mbit/s)

Flow 1 (95th percentile 68.50 ms)

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-06-27 12:17:32
End at: 2019-06-27 12:18:02
Local clock offset: -0.074 ms
Remote clock offset: 0.183 ms


# Below is generated by plot.py at 2019-06-27 14:54:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 533.39 Mbit/s
95th percentile per-packet one-way delay: 73.687 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 533.39 Mbit/s
95th percentile per-packet one-way delay: 73.687 ms
Loss rate: 0.49%
```
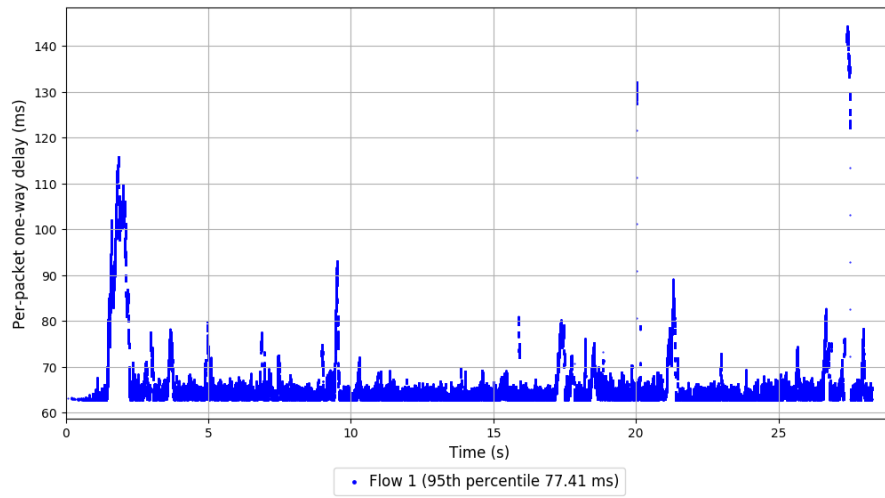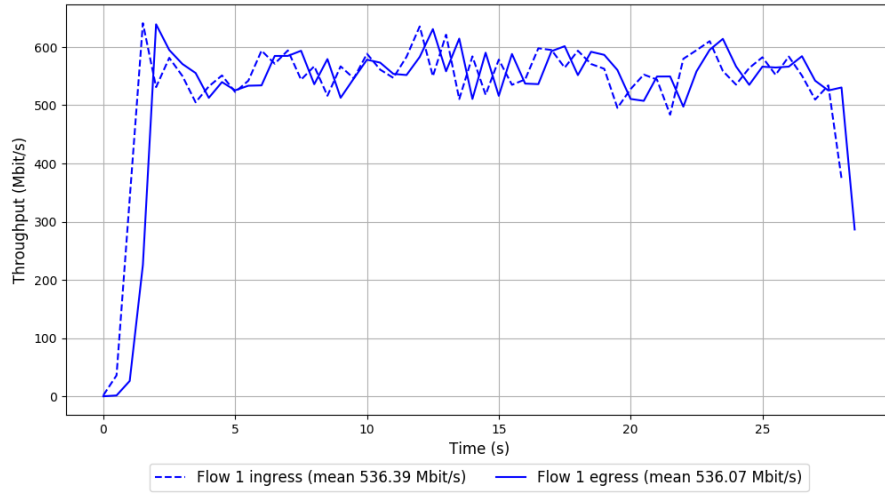
Run 3: Report of Indigo-MusesC3 — Data Link
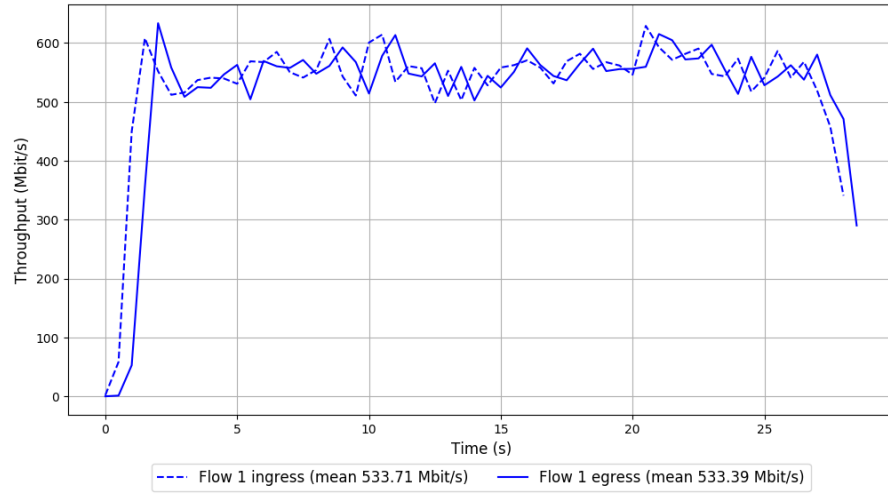
```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-06-27 12:49:01
End at: 2019-06-27 12:49:31
Local clock offset: -0.03 ms
Remote clock offset: 0.066 ms


# Below is generated by plot.py at 2019-06-27 14:54:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 537.64 Mbit/s
95th percentile per-packet one-way delay: 74.664 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 537.64 Mbit/s
95th percentile per-packet one-way delay: 74.664 ms
Loss rate: 0.49%
```

Run 4: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 537.92 Mbit/s) — Flow 1 egress (mean 537.64 Mbit/s)

Flow 1 (95th percentile 74.66 ms)

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-06-27 13:20:05
End at: 2019-06-27 13:20:35
Local clock offset: -0.032 ms
Remote clock offset: 0.129 ms


# Below is generated by plot.py at 2019-06-27 14:54:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 536.07 Mbit/s
95th percentile per-packet one-way delay: 77.412 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 536.07 Mbit/s
95th percentile per-packet one-way delay: 77.412 ms
Loss rate: 0.51%
```
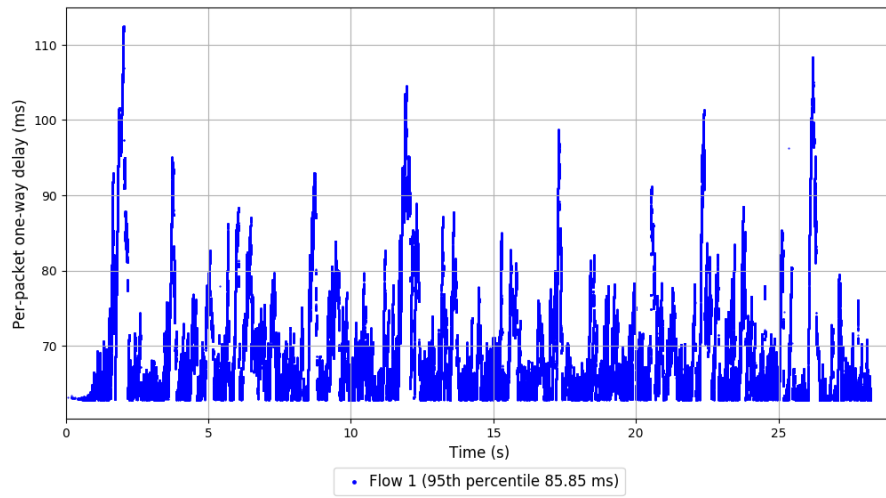
Run 5: Report of Indigo-MusesC3 — Data Link

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-06-27 11:39:25
End at: 2019-06-27 11:39:55
Local clock offset: 0.025 ms
Remote clock offset: -0.123 ms


# Below is generated by plot.py at 2019-06-27 14:54:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 558.97 Mbit/s
95th percentile per-packet one-way delay: 87.670 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 558.97 Mbit/s
95th percentile per-packet one-way delay: 87.670 ms
Loss rate: 0.50%
```
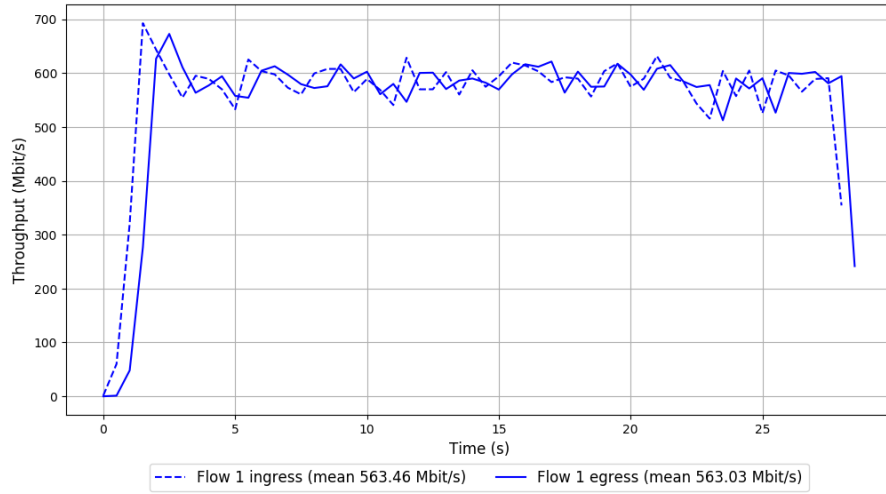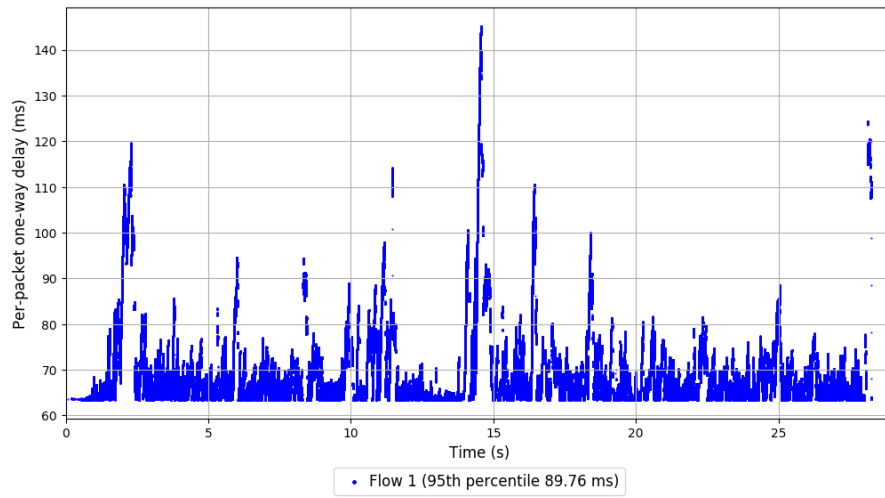
Run 1: Report of Indigo-MusesC5 — Data Link
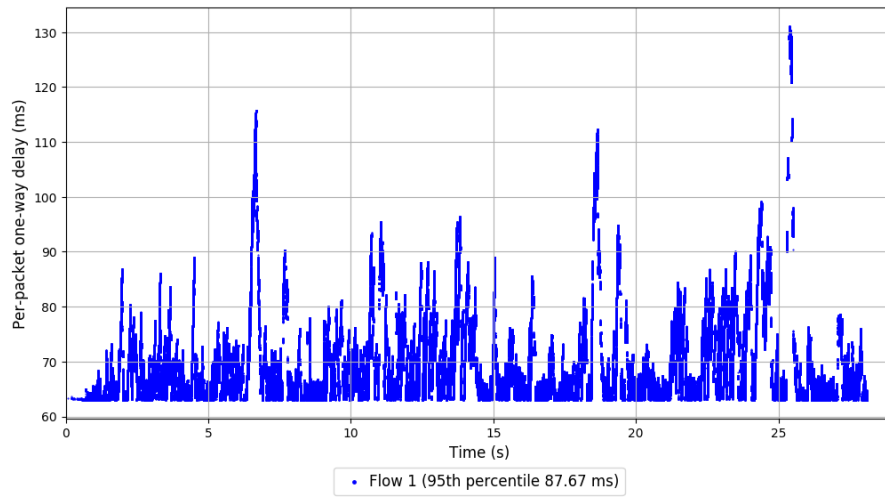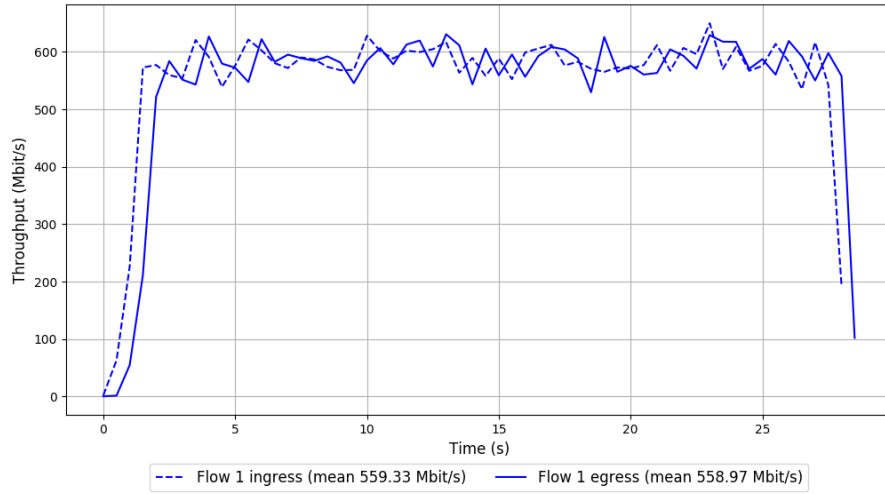
```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-06-27 12:10:57
End at: 2019-06-27 12:11:27
Local clock offset: -0.142 ms
Remote clock offset: 0.066 ms


# Below is generated by plot.py at 2019-06-27 14:54:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 563.03 Mbit/s
95th percentile per-packet one-way delay: 85.854 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 563.03 Mbit/s
95th percentile per-packet one-way delay: 85.854 ms
Loss rate: 0.52%
```
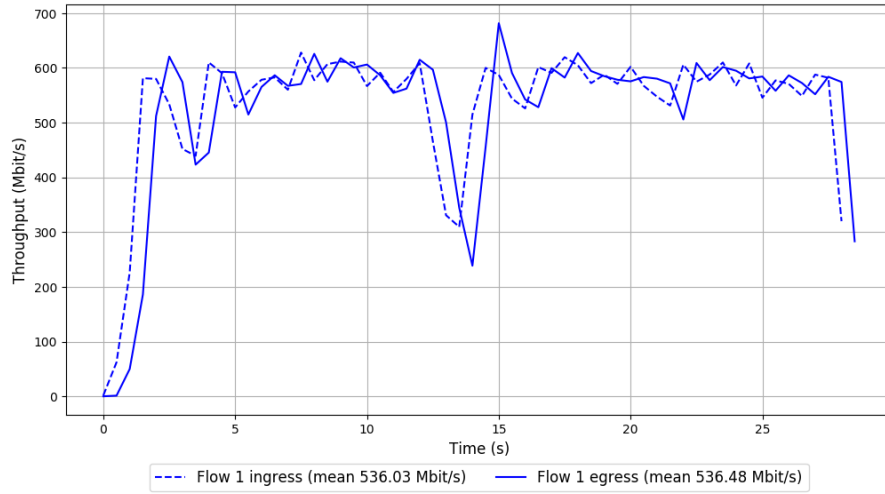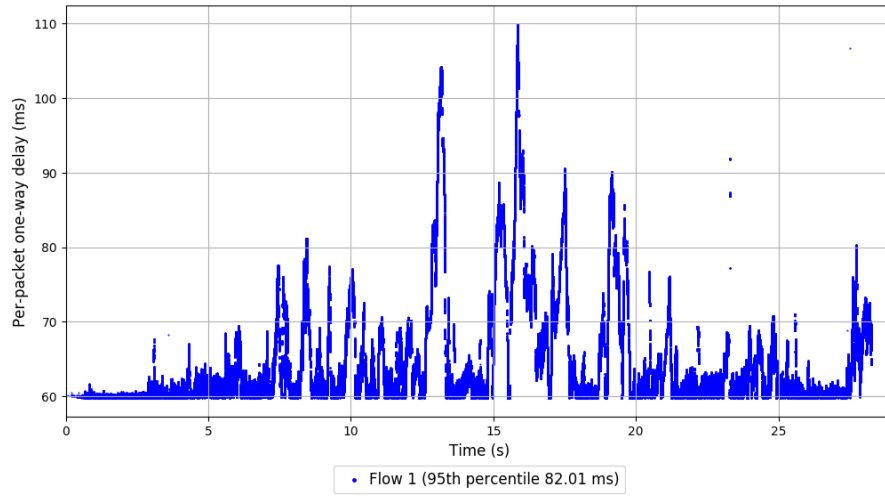
Run 2: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 563.46 Mbit/s)   Flow 1 egress (mean 563.03 Mbit/s)
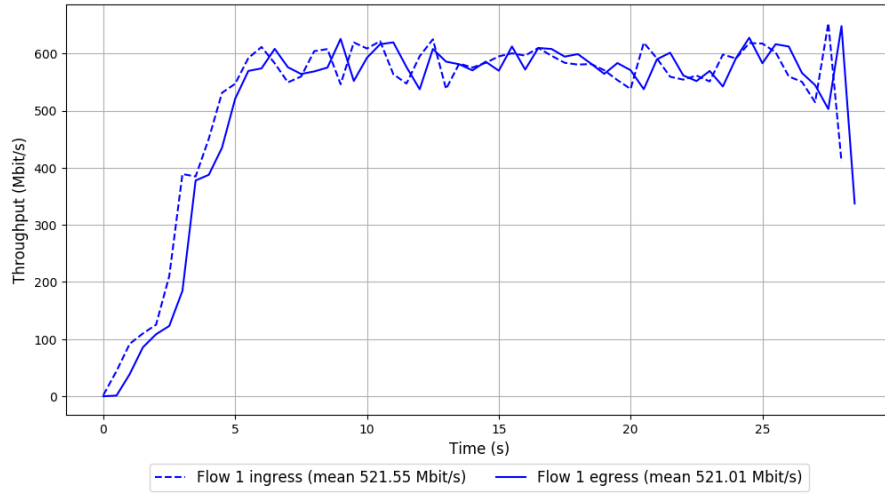

Flow 1 (95th percentile 85.85 ms)

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-06-27 12:42:14
End at: 2019-06-27 12:42:44
Local clock offset: -0.024 ms
Remote clock offset: -0.1 ms


# Below is generated by plot.py at 2019-06-27 14:57:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 536.48 Mbit/s
95th percentile per-packet one-way delay: 89.762 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 536.48 Mbit/s
95th percentile per-packet one-way delay: 89.762 ms
Loss rate: 0.38%
```
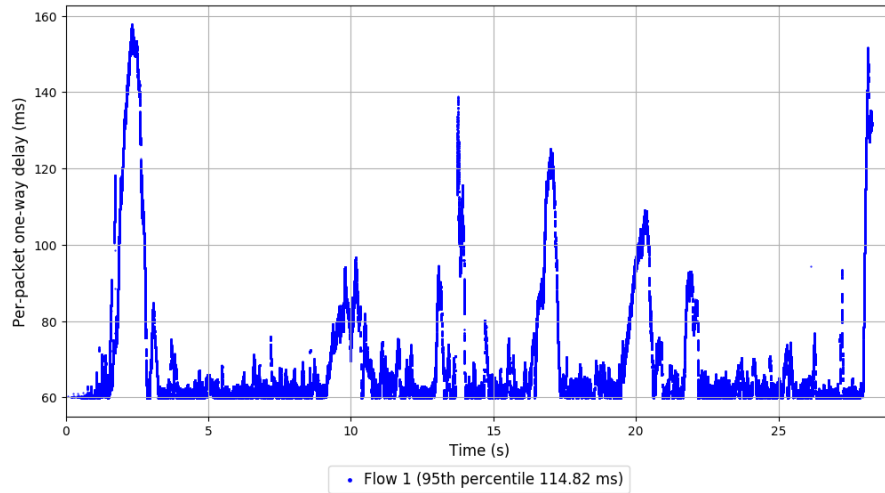
Run 3: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 536.03 Mbit/s)   Flow 1 egress (mean 536.48 Mbit/s)

Flow 1 (95th percentile 89.76 ms)

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-06-27 13:13:21
End at: 2019-06-27 13:13:52
Local clock offset: -0.023 ms
Remote clock offset: -0.169 ms


# Below is generated by plot.py at 2019-06-27 15:01:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 521.01 Mbit/s
95th percentile per-packet one-way delay: 82.009 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 521.01 Mbit/s
95th percentile per-packet one-way delay: 82.009 ms
Loss rate: 0.54%
```
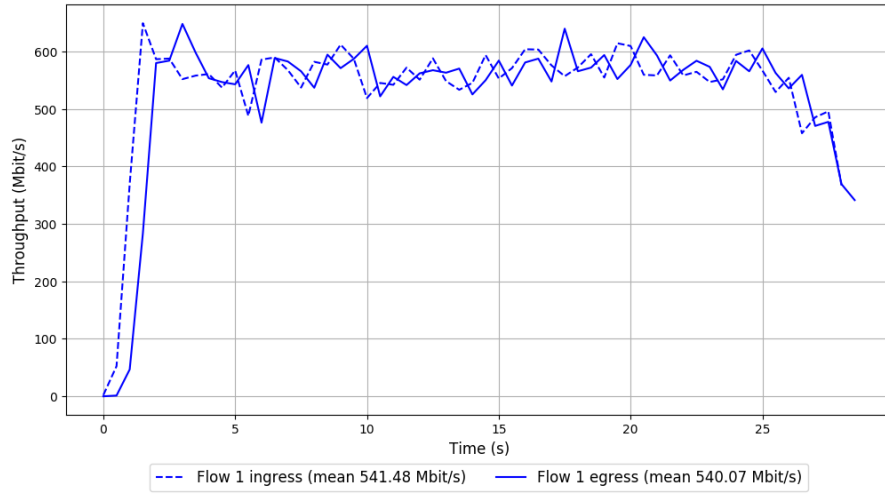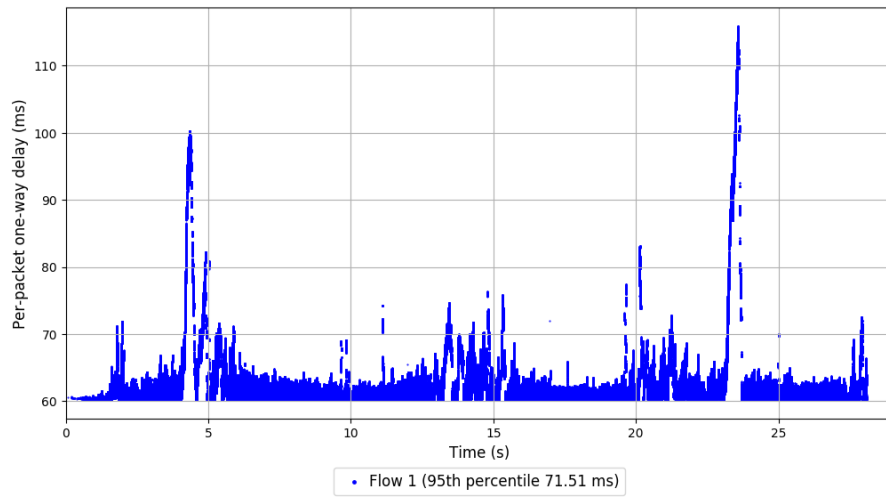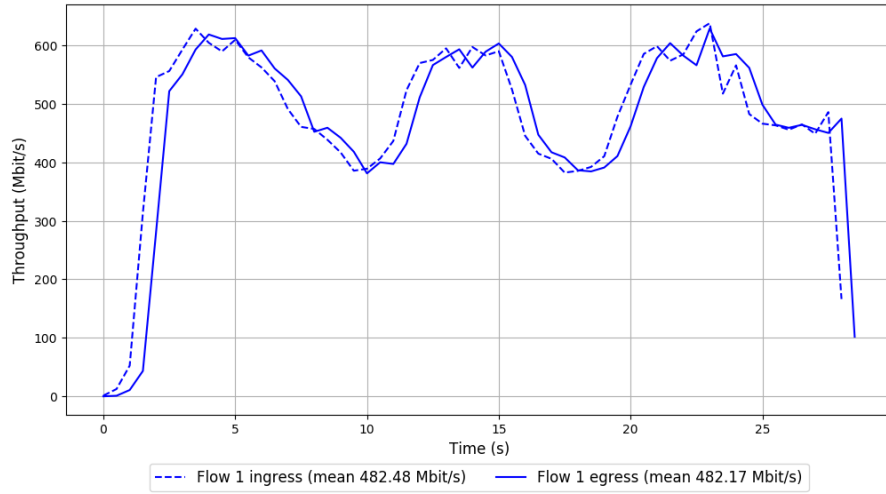
Run 4: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 521.55 Mbit/s)   Flow 1 egress (mean 521.01 Mbit/s)

Flow 1 (95th percentile 82.01 ms)

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-06-27 13:44:53
End at: 2019-06-27 13:45:23
Local clock offset: -0.029 ms
Remote clock offset: 0.05 ms


# Below is generated by plot.py at 2019-06-27 15:02:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 540.07 Mbit/s
95th percentile per-packet one-way delay: 114.820 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 540.07 Mbit/s
95th percentile per-packet one-way delay: 114.820 ms
Loss rate: 0.70%
```

Run 5: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 541.48 Mbit/s) — Flow 1 egress (mean 540.07 Mbit/s)

• Flow 1 (95th percentile 114.82 ms)

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-06-27 11:29:27
End at: 2019-06-27 11:29:57
Local clock offset: 0.064 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2019-06-27 15:02:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 482.17 Mbit/s
95th percentile per-packet one-way delay: 71.509 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 482.17 Mbit/s
95th percentile per-packet one-way delay: 71.509 ms
Loss rate: 0.49%
```

Run 1: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 482.48 Mbit/s)   Flow 1 egress (mean 482.17 Mbit/s)

Flow 1 (95th percentile 71.51 ms)

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-06-27 12:00:57
End at: 2019-06-27 12:01:27
Local clock offset: -0.15 ms
Remote clock offset: -0.136 ms


# Below is generated by plot.py at 2019-06-27 15:02:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 471.80 Mbit/s
95th percentile per-packet one-way delay: 71.594 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 471.80 Mbit/s
95th percentile per-packet one-way delay: 71.594 ms
Loss rate: 0.57%
```
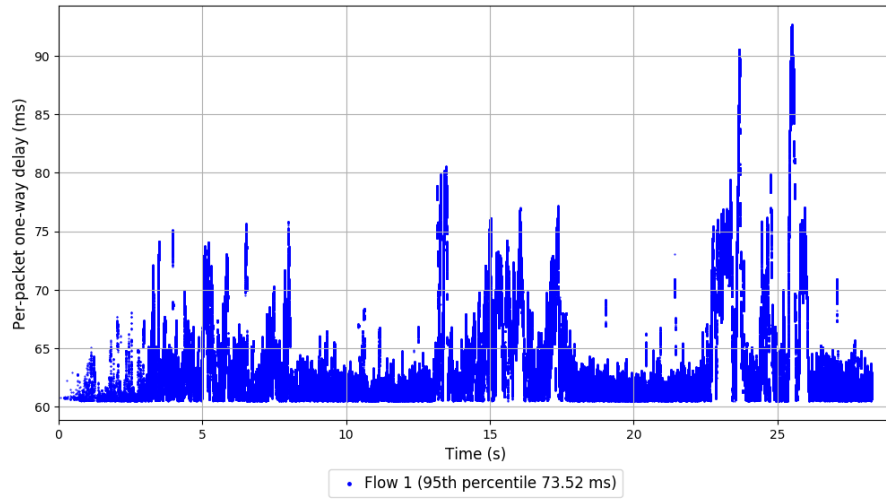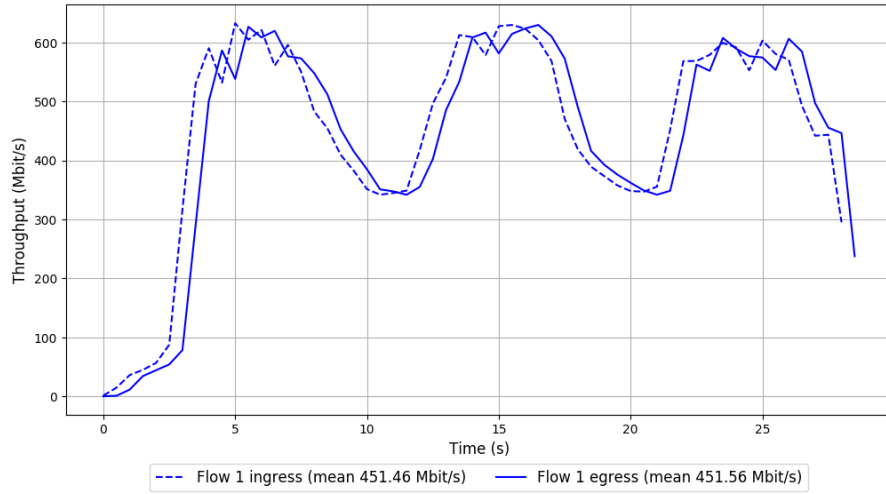
Run 2: Report of Indigo-MusesD — Data Link
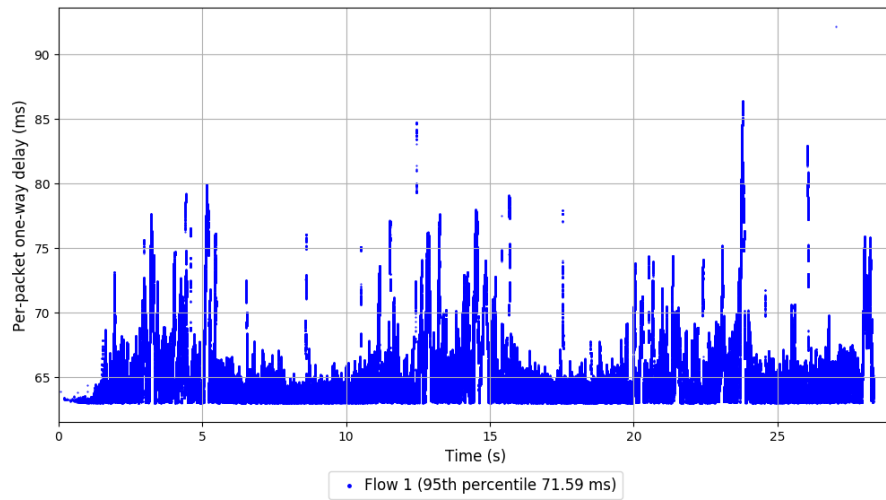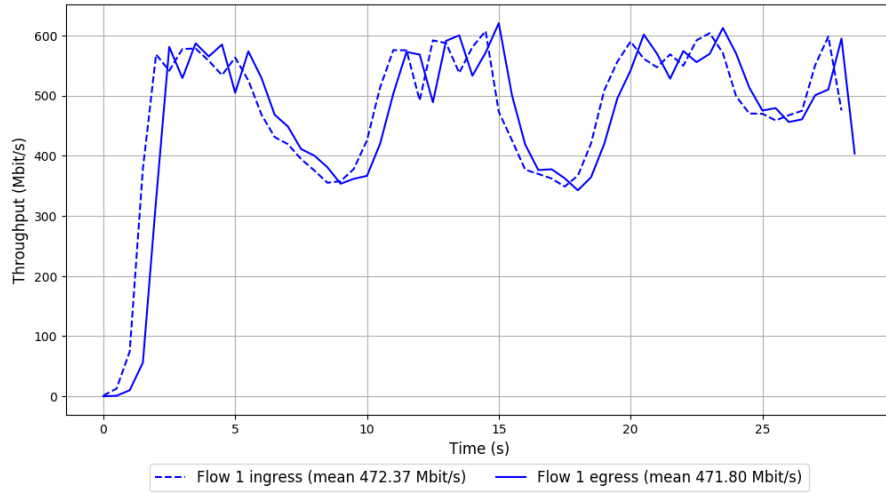
```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-06-27 12:32:14
End at: 2019-06-27 12:32:44
Local clock offset: -0.029 ms
Remote clock offset: 0.153 ms


# Below is generated by plot.py at 2019-06-27 15:03:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 476.90 Mbit/s
95th percentile per-packet one-way delay: 71.818 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 476.90 Mbit/s
95th percentile per-packet one-way delay: 71.818 ms
Loss rate: 0.58%
```
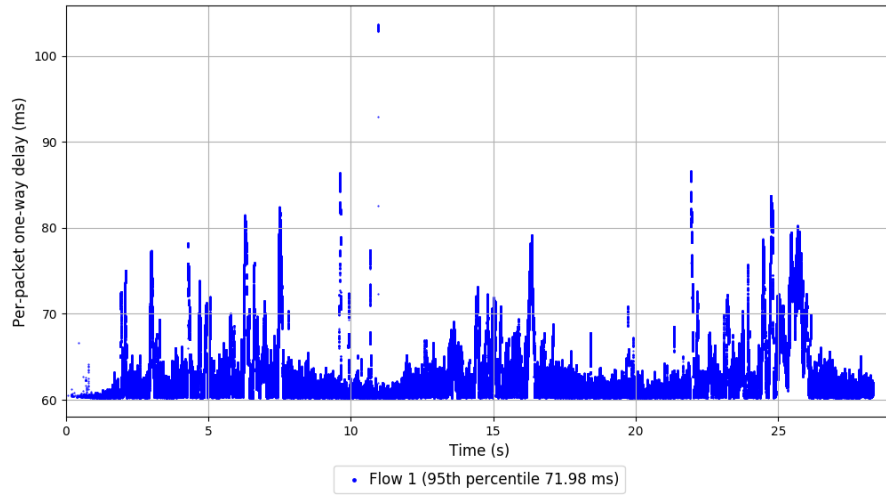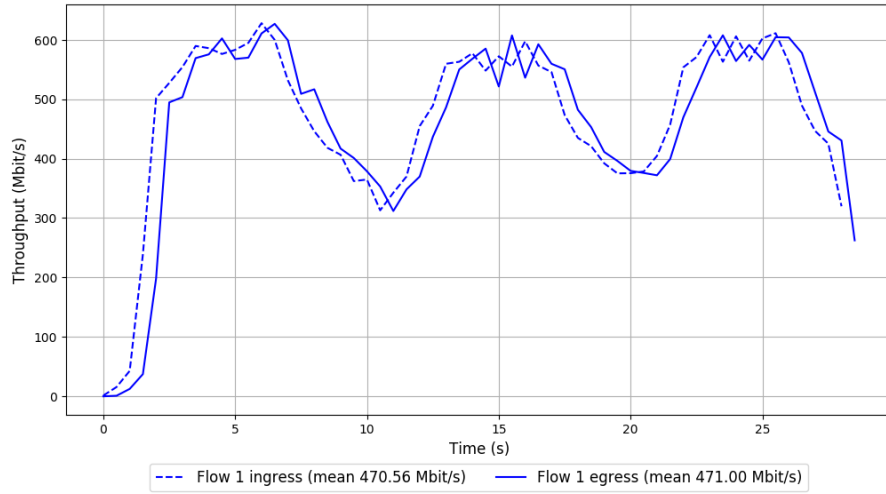
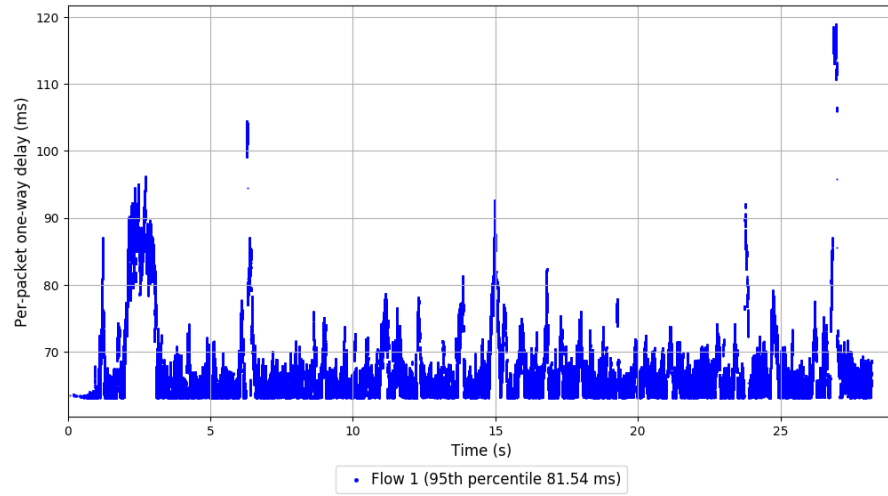Run 3: Report of Indigo-MusesD — Data Link
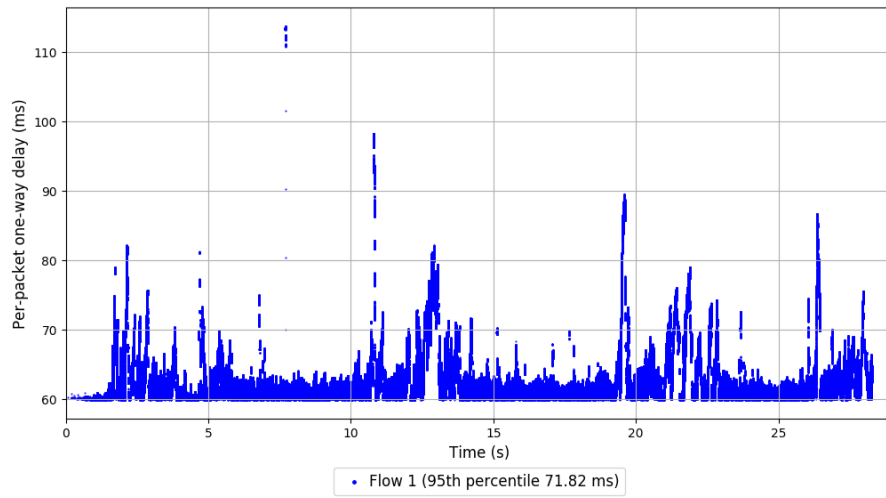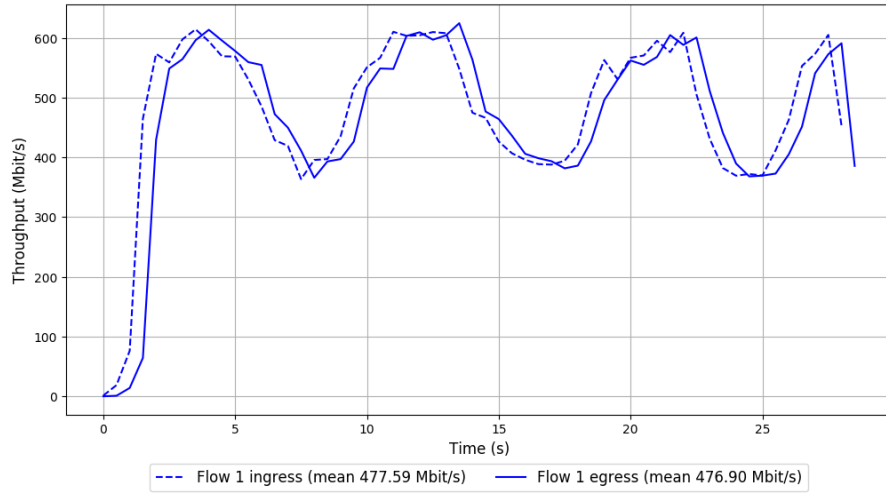
```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-06-27 13:03:32
End at: 2019-06-27 13:04:02
Local clock offset: 0.019 ms
Remote clock offset: -0.33 ms


# Below is generated by plot.py at 2019-06-27 15:03:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 451.56 Mbit/s
95th percentile per-packet one-way delay: 73.516 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 451.56 Mbit/s
95th percentile per-packet one-way delay: 73.516 ms
Loss rate: 0.42%
```
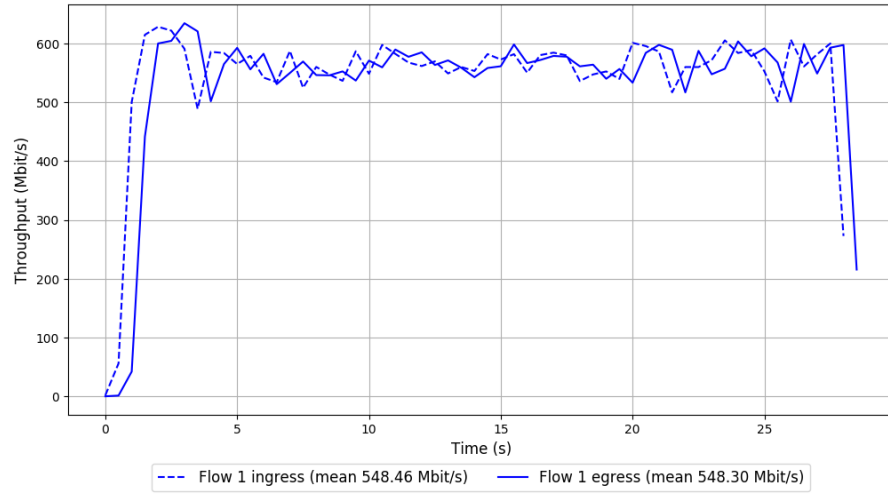
Run 4: Report of Indigo-MusesD — Data Link

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-06-27 13:34:56
End at: 2019-06-27 13:35:26
Local clock offset: -0.009 ms
Remote clock offset: -0.111 ms


# Below is generated by plot.py at 2019-06-27 15:03:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 471.00 Mbit/s
95th percentile per-packet one-way delay: 71.978 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 471.00 Mbit/s
95th percentile per-packet one-way delay: 71.978 ms
Loss rate: 0.40%
```

Run 5: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 470.56 Mbit/s) — — — Flow 1 egress (mean 471.00 Mbit/s) ———

Flow 1 (95th percentile 71.98 ms)

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-06-27 11:16:19
End at: 2019-06-27 11:16:49
Local clock offset: -0.007 ms
Remote clock offset: -0.197 ms


# Below is generated by plot.py at 2019-06-27 15:07:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 548.30 Mbit/s
95th percentile per-packet one-way delay: 81.542 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 548.30 Mbit/s
95th percentile per-packet one-way delay: 81.542 ms
Loss rate: 0.46%
```
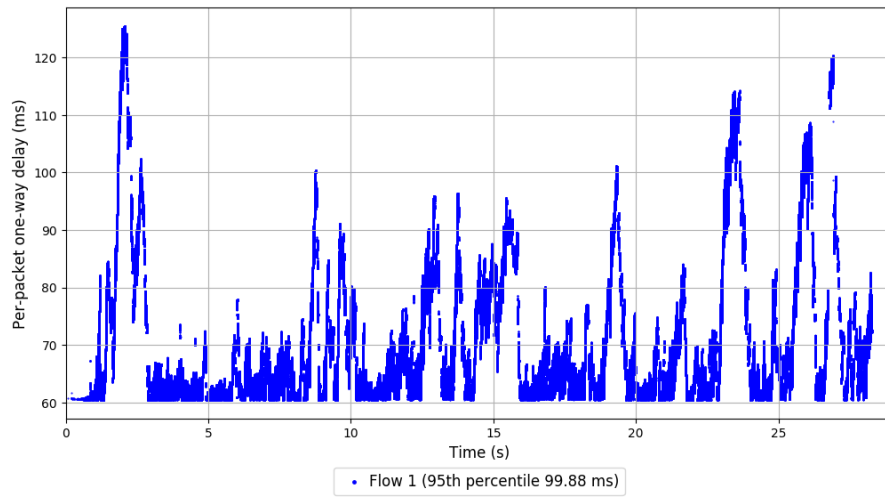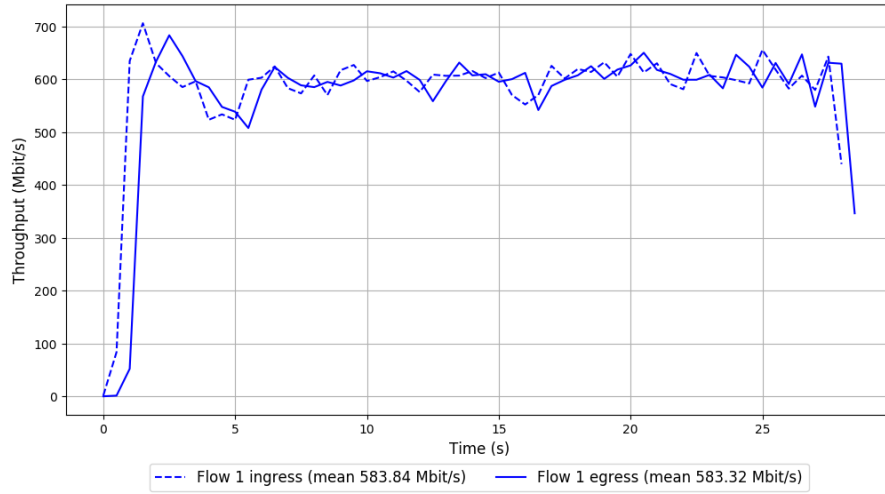
Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-06-27 11:47:43
End at: 2019-06-27 11:48:14
Local clock offset: -0.054 ms
Remote clock offset: -0.08 ms


# Below is generated by plot.py at 2019-06-27 15:11:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 582.29 Mbit/s
95th percentile per-packet one-way delay: 91.065 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 582.29 Mbit/s
95th percentile per-packet one-way delay: 91.065 ms
Loss rate: 0.46%
```
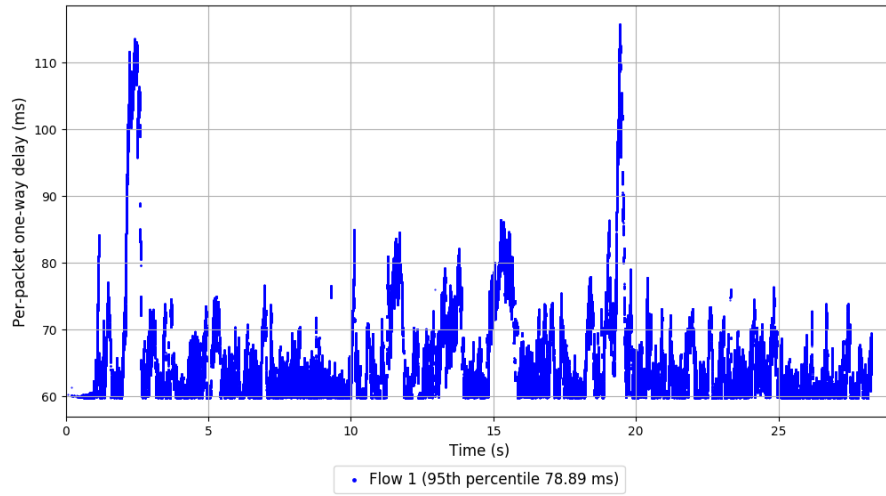
Run 2: Report of Indigo-MusesT — Data Link
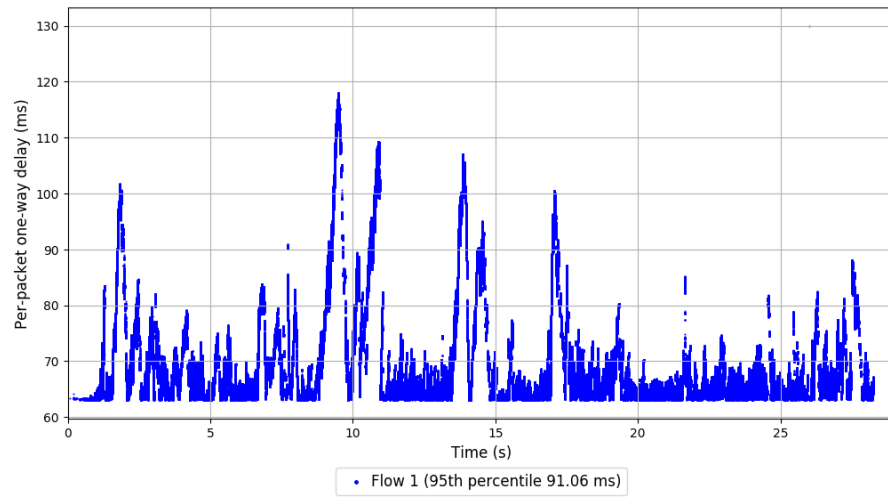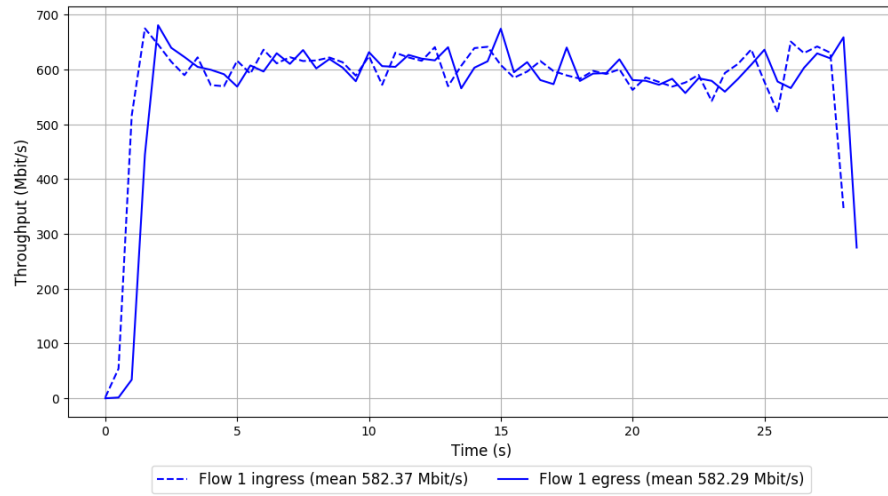
```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-06-27 12:19:04
End at: 2019-06-27 12:19:34
Local clock offset: -0.046 ms
Remote clock offset: -0.733 ms


# Below is generated by plot.py at 2019-06-27 15:11:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 583.32 Mbit/s
95th percentile per-packet one-way delay: 99.884 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 583.32 Mbit/s
95th percentile per-packet one-way delay: 99.884 ms
Loss rate: 0.52%
```
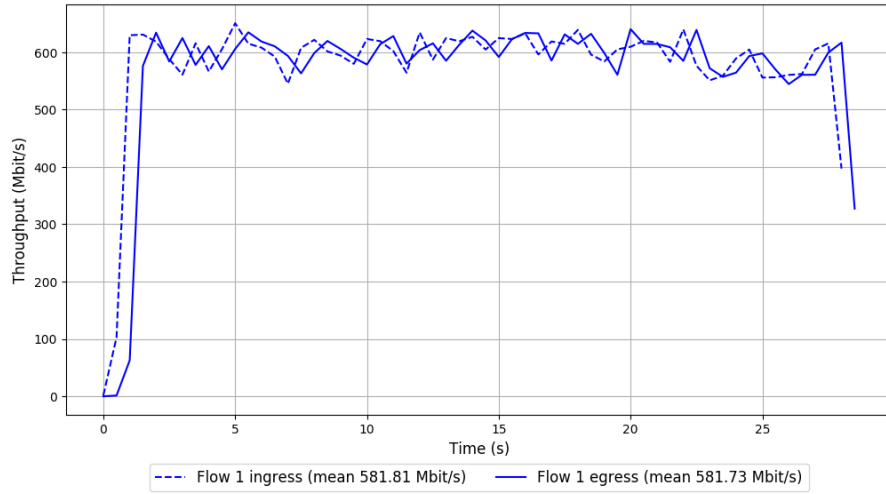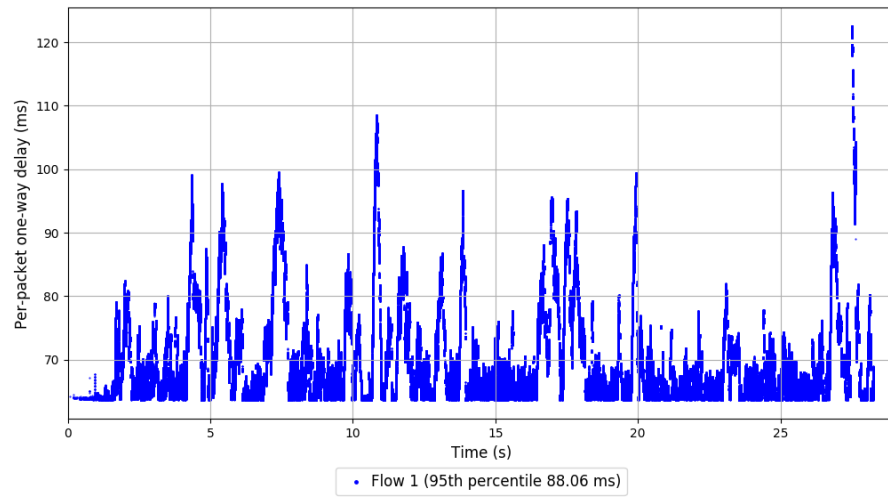
Run 3: Report of Indigo-MusesT — Data Link

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-06-27 12:50:33
End at: 2019-06-27 12:51:03
Local clock offset: -0.049 ms
Remote clock offset: 0.001 ms


# Below is generated by plot.py at 2019-06-27 15:11:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 581.73 Mbit/s
95th percentile per-packet one-way delay: 78.888 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 581.73 Mbit/s
95th percentile per-packet one-way delay: 78.888 ms
Loss rate: 0.45%
```
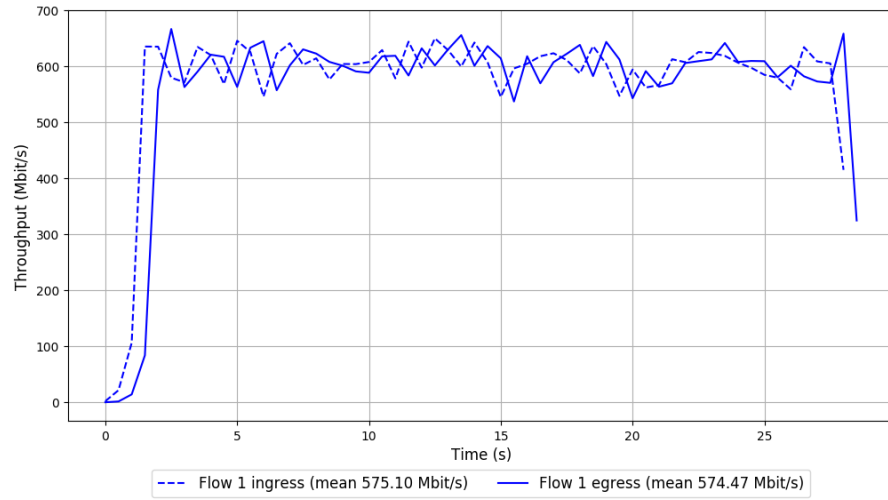
Run 4: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 581.81 Mbit/s)   Flow 1 egress (mean 581.73 Mbit/s)

Flow 1 (95th percentile 78.89 ms)

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-06-27 13:21:38
End at: 2019-06-27 13:22:08
Local clock offset: -0.021 ms
Remote clock offset: -0.465 ms


# Below is generated by plot.py at 2019-06-27 15:11:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 574.47 Mbit/s
95th percentile per-packet one-way delay: 88.062 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 574.47 Mbit/s
95th percentile per-packet one-way delay: 88.062 ms
Loss rate: 0.56%
```

Run 5: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 575.10 Mbit/s)   Flow 1 egress (mean 574.47 Mbit/s)
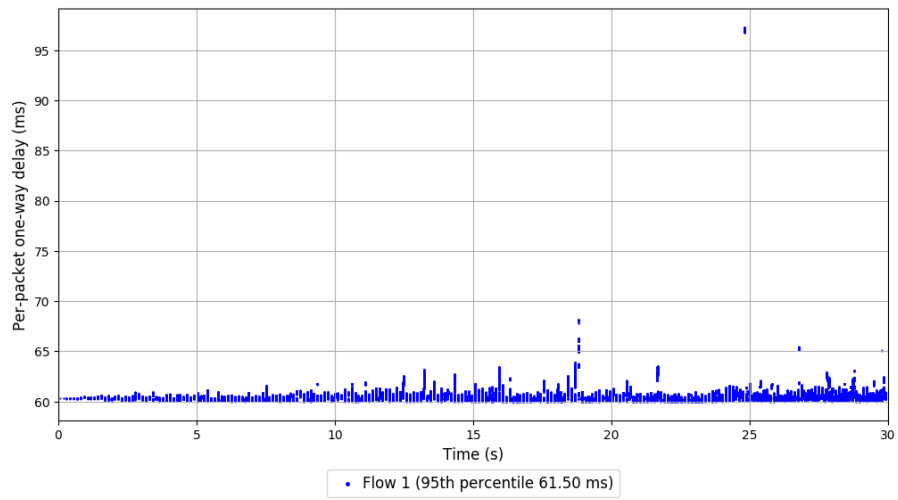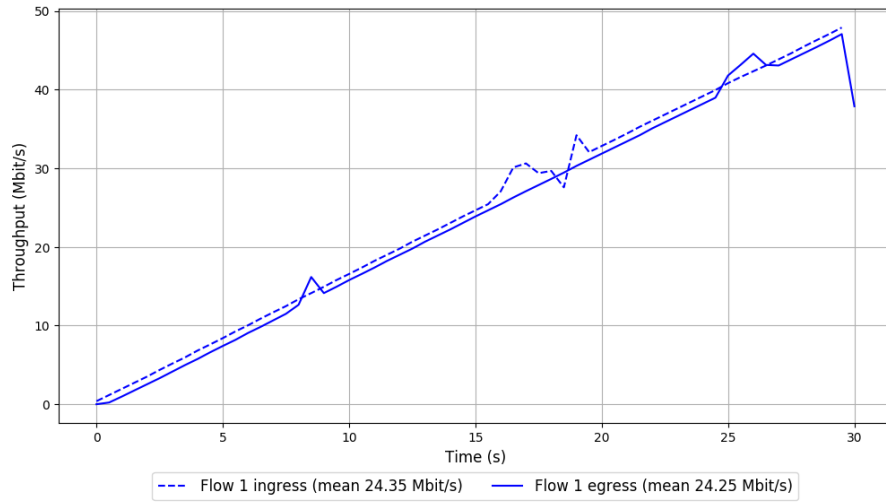

Flow 1 (95th percentile 88.06 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2019-06-27 11:21:07
End at: 2019-06-27 11:21:37
Local clock offset: 0.013 ms
Remote clock offset: -0.002 ms


# Below is generated by plot.py at 2019-06-27 15:11:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.14 Mbit/s
95th percentile per-packet one-way delay: 61.722 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 25.14 Mbit/s
95th percentile per-packet one-way delay: 61.722 ms
Loss rate: 0.81%
```

Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 25.25 Mbit/s)   Flow 1 egress (mean 25.14 Mbit/s)

Flow 1 (95th percentile 61.72 ms)
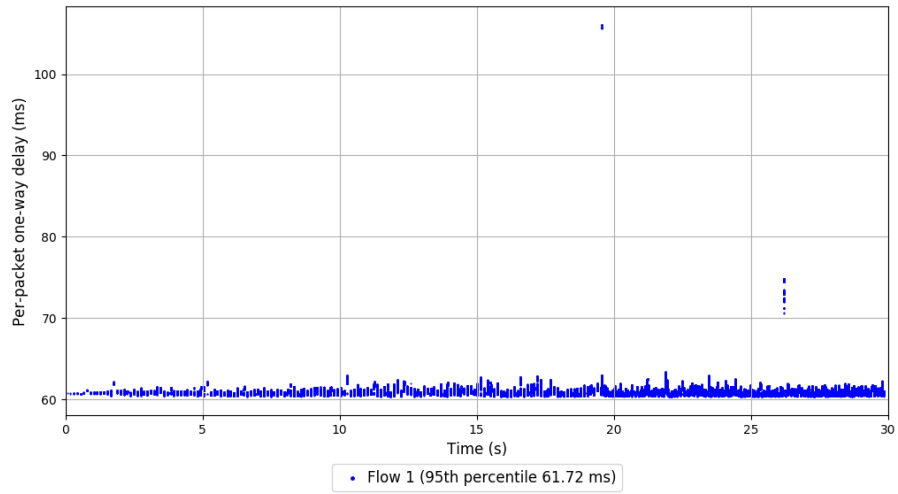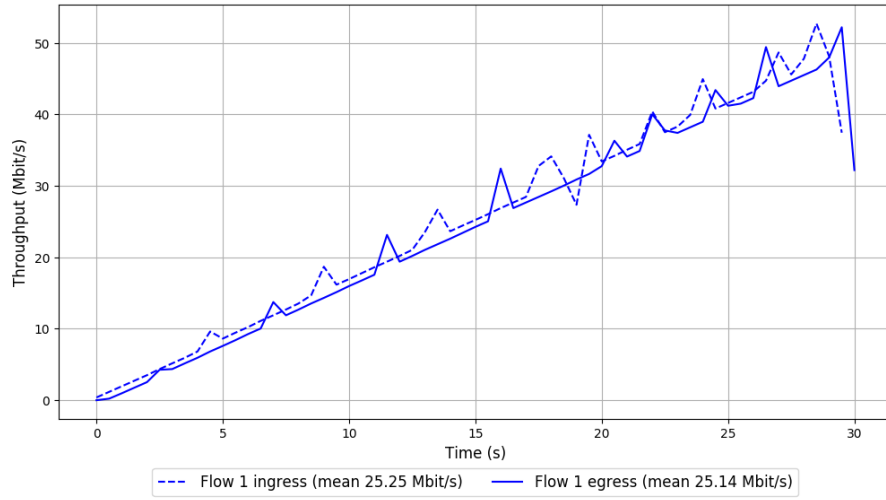
```
Run 2: Statistics of LEDBAT

Start at: 2019-06-27 11:52:32
End at: 2019-06-27 11:53:02
Local clock offset: -0.078 ms
Remote clock offset: -0.085 ms

# Below is generated by plot.py at 2019-06-27 15:11:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.25 Mbit/s
95th percentile per-packet one-way delay: 61.499 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 24.25 Mbit/s
95th percentile per-packet one-way delay: 61.499 ms
Loss rate: 0.83%
```
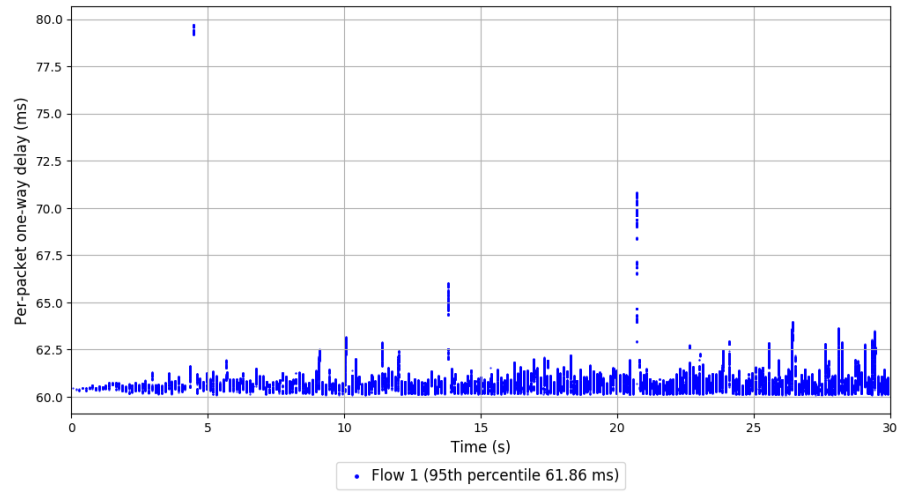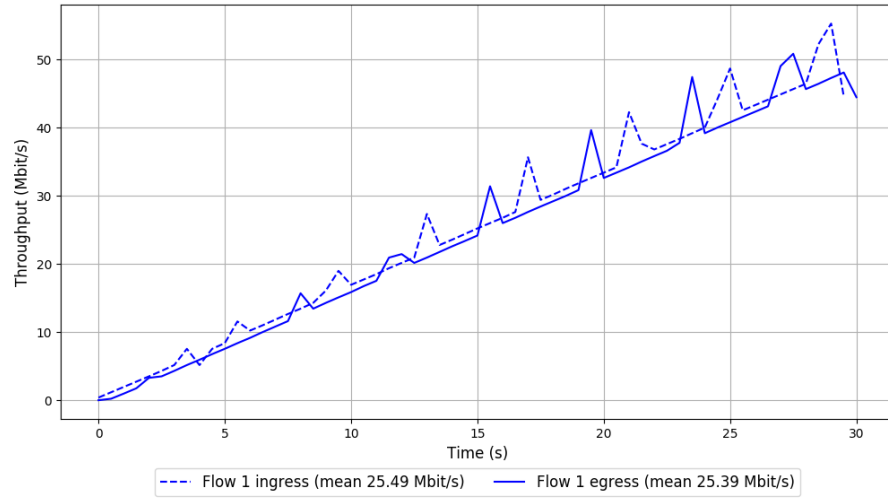
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2019-06-27 12:23:47
End at: 2019-06-27 12:24:17
Local clock offset: -0.068 ms
Remote clock offset: 0.075 ms


# Below is generated by plot.py at 2019-06-27 15:11:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.25 Mbit/s
95th percentile per-packet one-way delay: 64.438 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 24.25 Mbit/s
95th percentile per-packet one-way delay: 64.438 ms
Loss rate: 0.82%
```

Run 3: Report of LEDBAT — Data Link
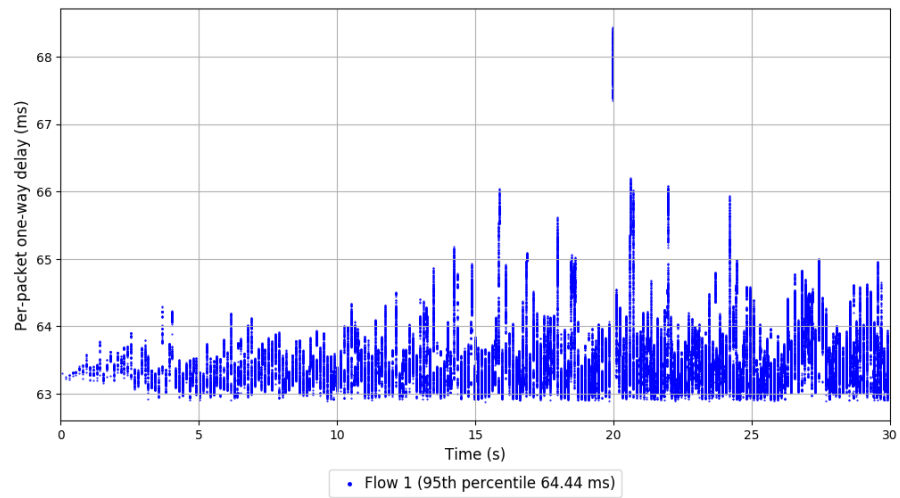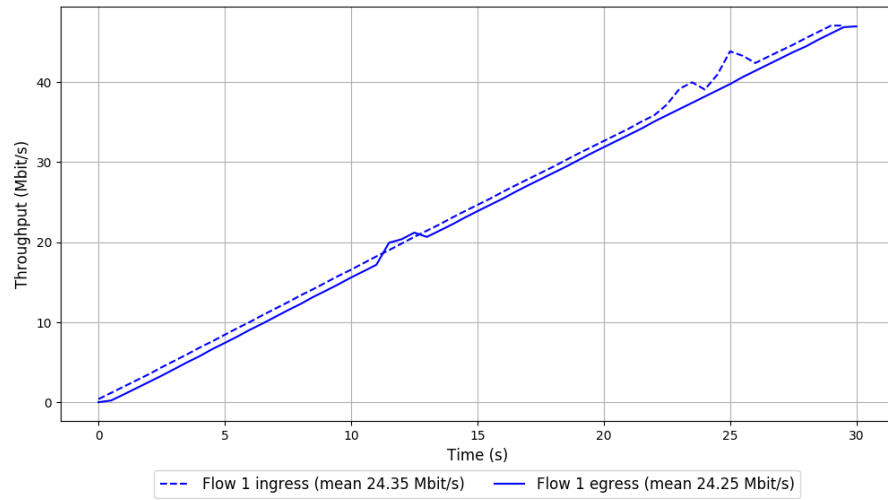
```
Run 4: Statistics of LEDBAT

Start at: 2019-06-27 12:55:22
End at: 2019-06-27 12:55:52
Local clock offset: -0.009 ms
Remote clock offset: 0.074 ms


# Below is generated by plot.py at 2019-06-27 15:11:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.39 Mbit/s
95th percentile per-packet one-way delay: 61.857 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 25.39 Mbit/s
95th percentile per-packet one-way delay: 61.857 ms
Loss rate: 0.80%
```

Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2019-06-27 13:26:27
End at: 2019-06-27 13:26:57
Local clock offset: -0.012 ms
Remote clock offset: 0.1 ms

# Below is generated by plot.py at 2019-06-27 15:11:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.31 Mbit/s
95th percentile per-packet one-way delay: 61.559 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 24.31 Mbit/s
95th percentile per-packet one-way delay: 61.559 ms
Loss rate: 0.83%
```

Run 5: Report of LEDBAT — Data Link
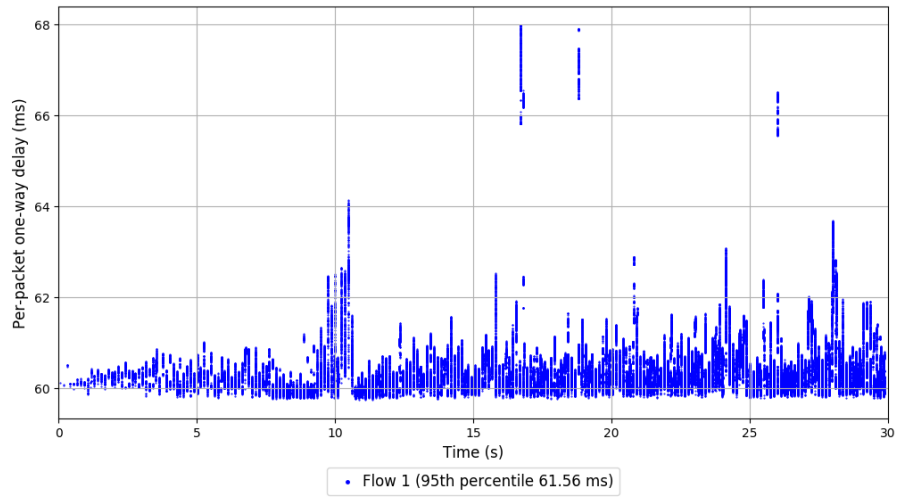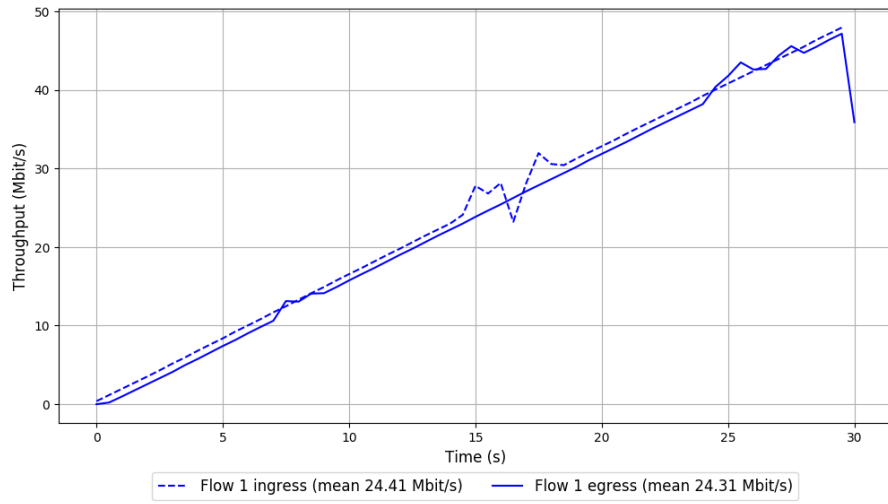
Run 1: Statistics of Muses_DecisionTree

Start at: 2019-06-27 11:13:47
End at: 2019-06-27 11:14:17
Local clock offset: 0.009 ms
Remote clock offset: -0.131 ms

Run 1: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

```
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-06-27 11:45:03
End at: 2019-06-27 11:45:33
Local clock offset: -0.069 ms
Remote clock offset: -0.061 ms
```

Run 2: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of Muses_DecisionTree

Start at: 2019-06-27 12:16:24
End at: 2019-06-27 12:16:54
Local clock offset: -0.067 ms
Remote clock offset: -0.044 ms

Run 3: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

```
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-06-27 12:47:53
End at: 2019-06-27 12:48:23
Local clock offset: -0.057 ms
Remote clock offset: 0.056 ms
```

Run 4: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

```
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-06-27 13:18:57
End at: 2019-06-27 13:19:27
Local clock offset: 0.048 ms
Remote clock offset: 0.274 ms
```

Run 5: Report of Muses_DecisionTree — Data Link

Figure is missing

Figure is missing

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-06-27 11:27:53
End at: 2019-06-27 11:28:23
Local clock offset: 0.011 ms
Remote clock offset: 0.005 ms


# Below is generated by plot.py at 2019-06-27 15:18:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 387.01 Mbit/s
95th percentile per-packet one-way delay: 147.848 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 387.01 Mbit/s
95th percentile per-packet one-way delay: 147.848 ms
Loss rate: 0.89%
```
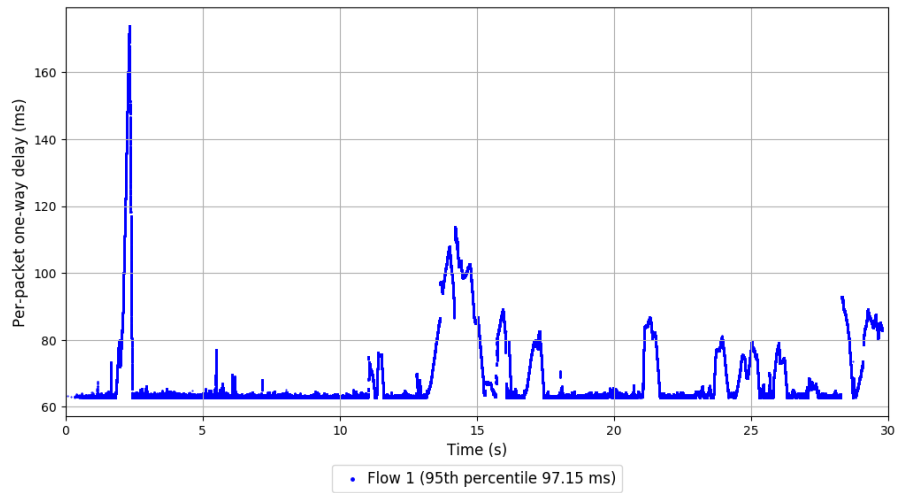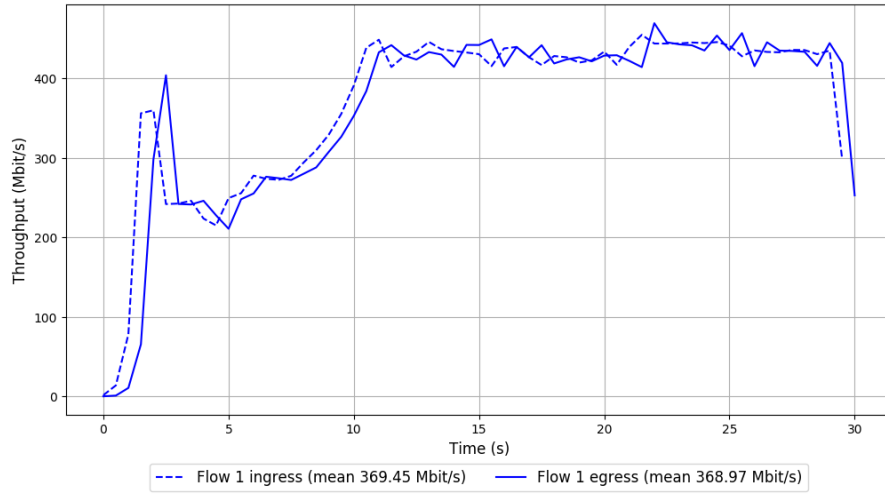
Run 1: Report of PCC-Allegro — Data Link
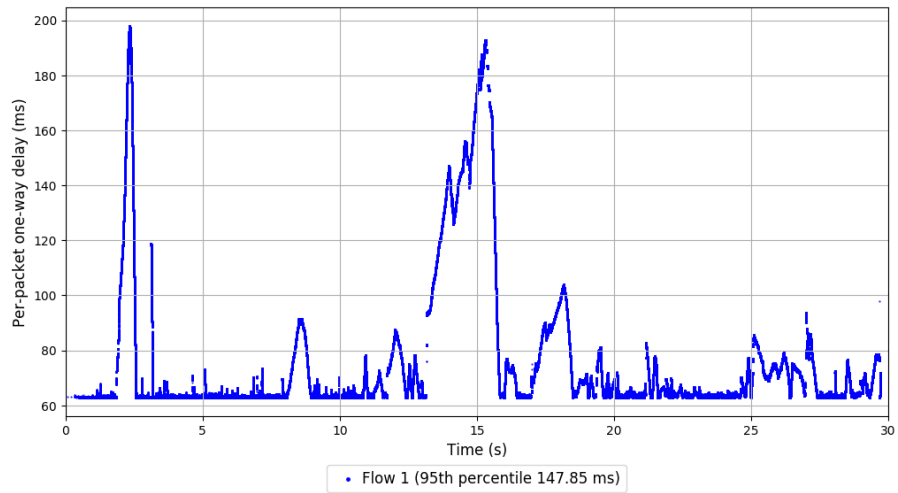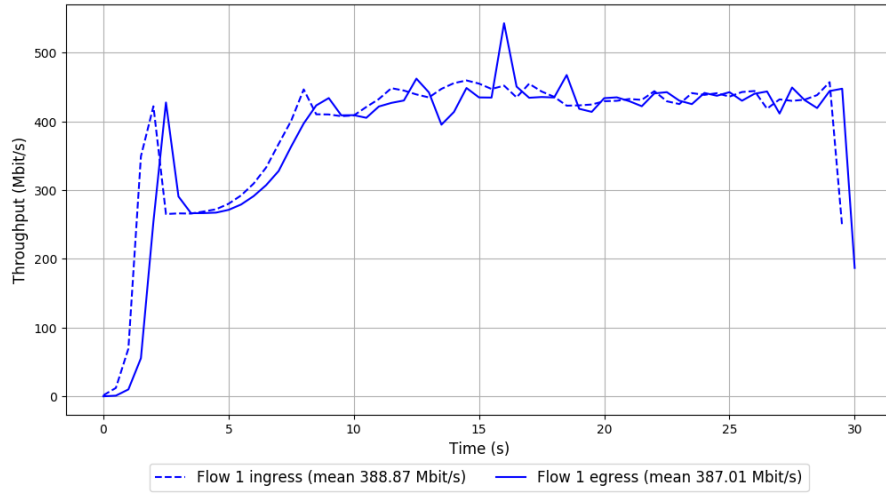
```
Run 2: Statistics of PCC-Allegro

Start at: 2019-06-27 11:59:23
End at: 2019-06-27 11:59:53
Local clock offset: -0.084 ms
Remote clock offset: 0.028 ms


# Below is generated by plot.py at 2019-06-27 15:18:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 387.71 Mbit/s
95th percentile per-packet one-way delay: 175.077 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 387.71 Mbit/s
95th percentile per-packet one-way delay: 175.077 ms
Loss rate: 1.37%
```
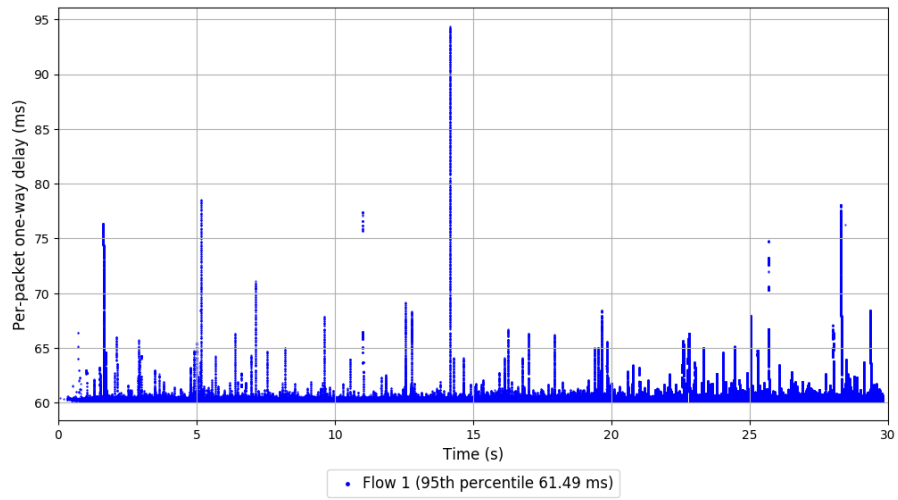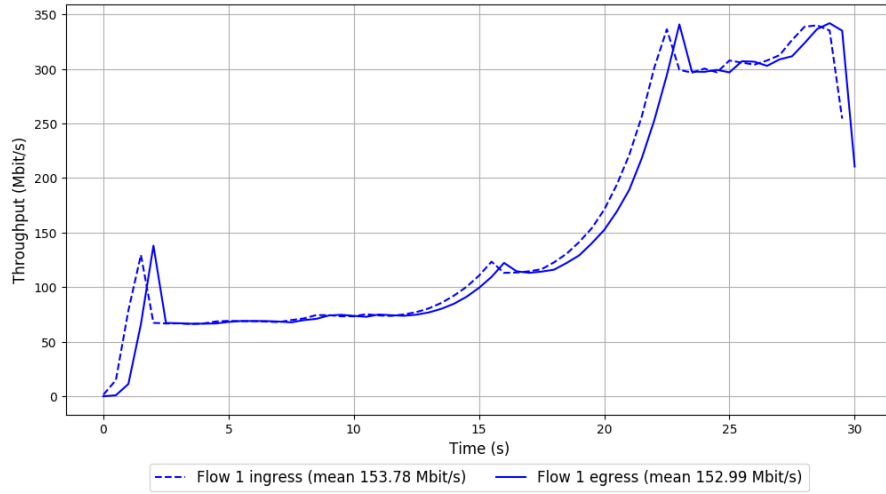
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 391.46 Mbit/s)   Flow 1 egress (mean 387.71 Mbit/s)

• Flow 1 (95th percentile 175.08 ms)
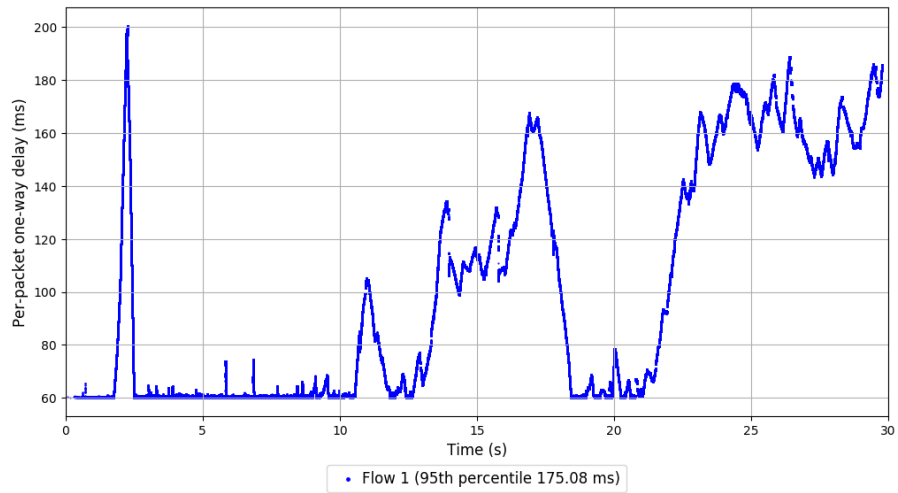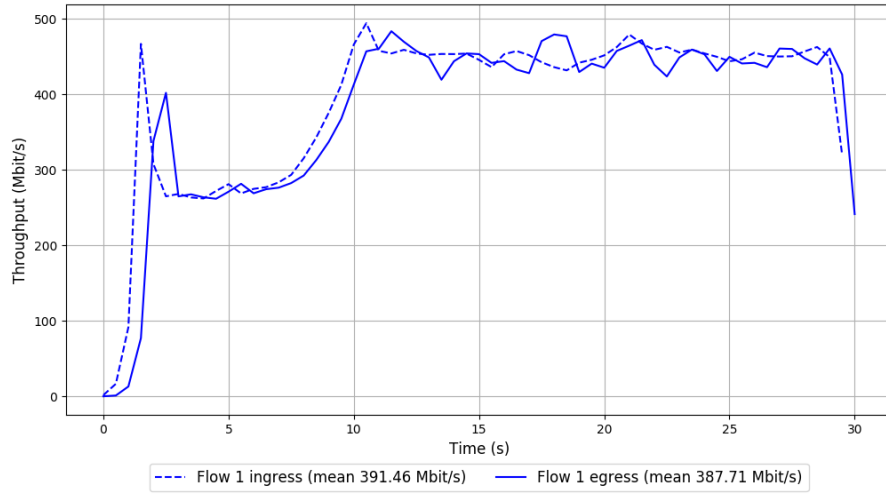
```
Run 3: Statistics of PCC-Allegro

Start at: 2019-06-27 12:30:42
End at: 2019-06-27 12:31:12
Local clock offset: -0.041 ms
Remote clock offset: 0.02 ms


# Below is generated by plot.py at 2019-06-27 15:18:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 368.97 Mbit/s
95th percentile per-packet one-way delay: 97.147 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 368.97 Mbit/s
95th percentile per-packet one-way delay: 97.147 ms
Loss rate: 0.56%
```

Run 3: Report of PCC-Allegro — Data Link

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-06-27 13:02:12
End at: 2019-06-27 13:02:42
Local clock offset: -0.031 ms
Remote clock offset: -0.463 ms


# Below is generated by plot.py at 2019-06-27 15:18:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 152.99 Mbit/s
95th percentile per-packet one-way delay: 61.490 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 152.99 Mbit/s
95th percentile per-packet one-way delay: 61.490 ms
Loss rate: 0.92%
```

Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 153.78 Mbit/s)   Flow 1 egress (mean 152.99 Mbit/s)


Flow 1 (95th percentile 61.49 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-06-27 13:33:24
End at: 2019-06-27 13:33:54
Local clock offset: -0.015 ms
Remote clock offset: -0.097 ms


# Below is generated by plot.py at 2019-06-27 15:25:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 375.13 Mbit/s
95th percentile per-packet one-way delay: 181.644 ms
Loss rate: 1.82%
-- Flow 1:
Average throughput: 375.13 Mbit/s
95th percentile per-packet one-way delay: 181.644 ms
Loss rate: 1.82%
```
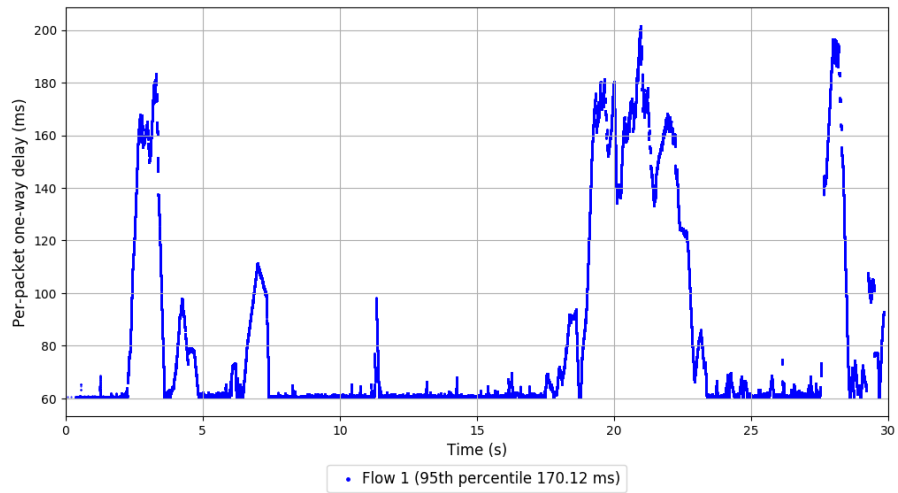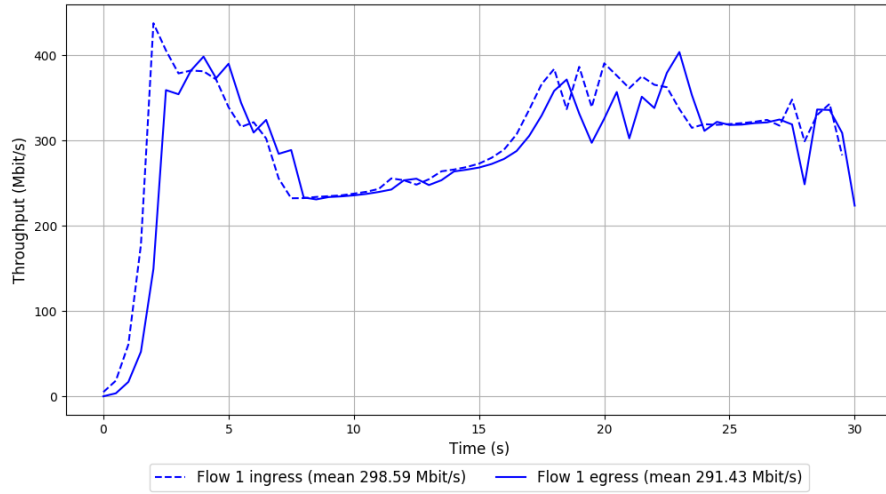
Run 5: Report of PCC-Allegro — Data Link
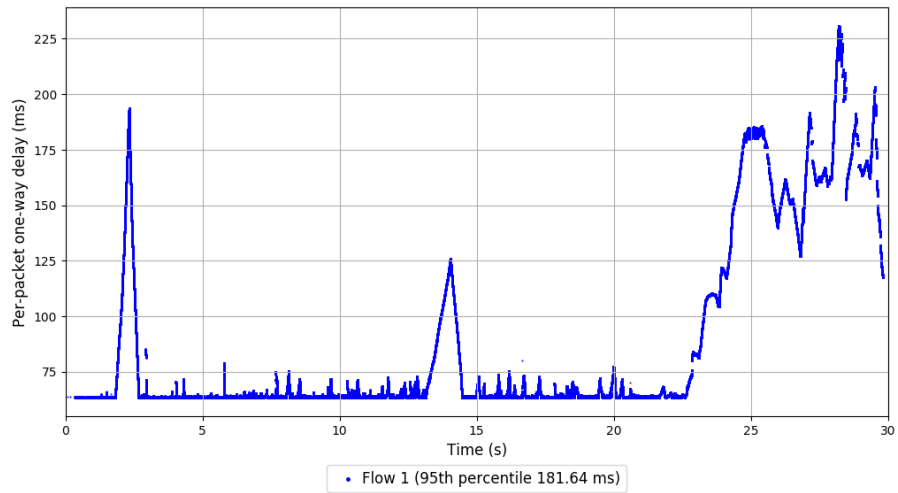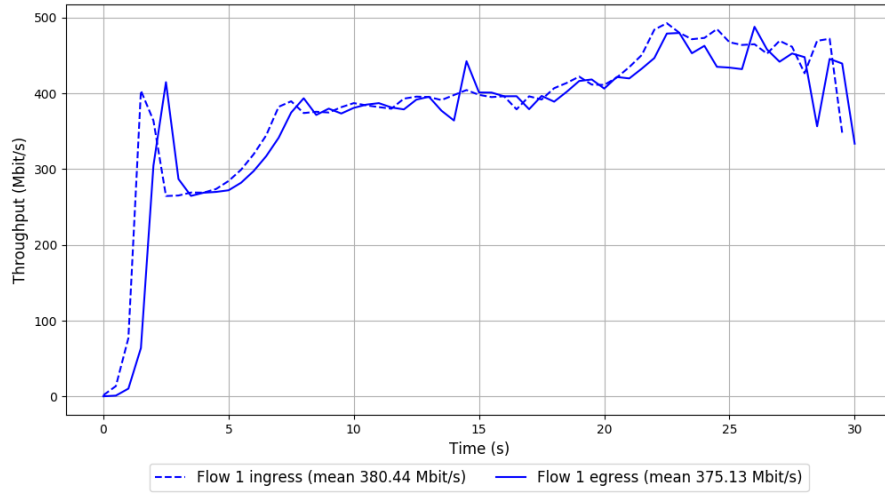
```
Run 1: Statistics of PCC-Expr

Start at: 2019-06-27 11:22:18
End at: 2019-06-27 11:22:48
Local clock offset: -0.02 ms
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2019-06-27 15:25:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 240.76 Mbit/s
95th percentile per-packet one-way delay: 165.016 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 240.76 Mbit/s
95th percentile per-packet one-way delay: 165.016 ms
Loss rate: 1.01%
```

Run 1: Report of PCC-Expr — Data Link
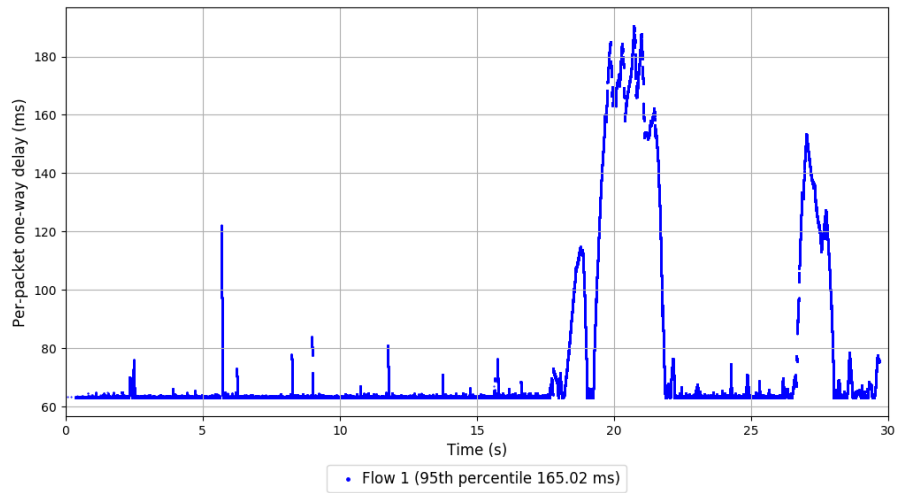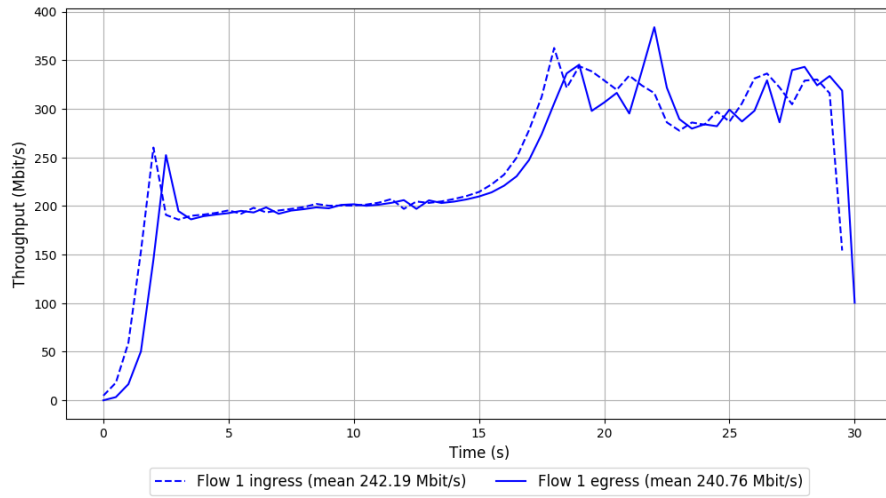
```
Run 2: Statistics of PCC-Expr

Start at: 2019-06-27 11:53:43
End at: 2019-06-27 11:54:13
Local clock offset: -0.094 ms
Remote clock offset: -0.145 ms


# Below is generated by plot.py at 2019-06-27 15:25:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 252.82 Mbit/s
95th percentile per-packet one-way delay: 165.192 ms
Loss rate: 1.93%
-- Flow 1:
Average throughput: 252.82 Mbit/s
95th percentile per-packet one-way delay: 165.192 ms
Loss rate: 1.93%
```
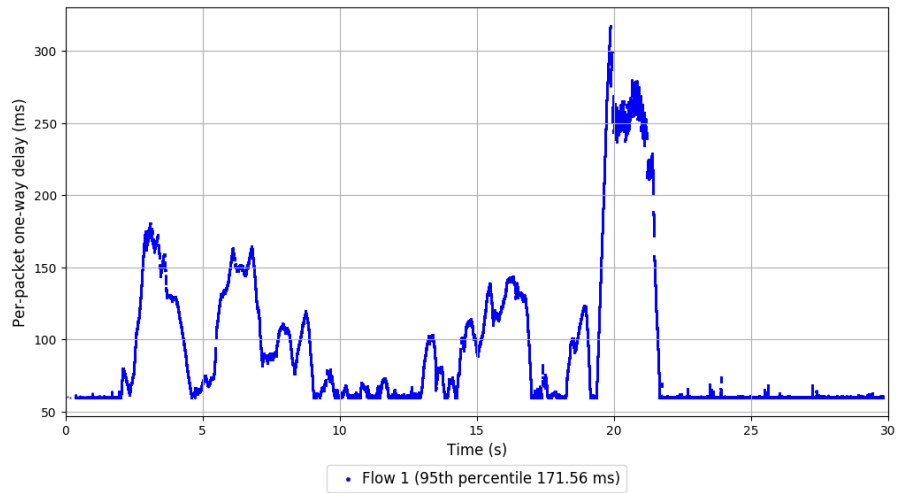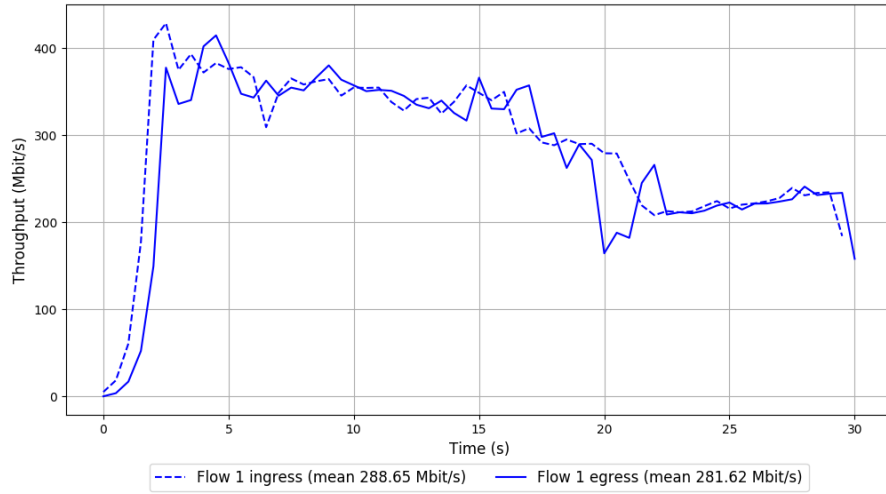
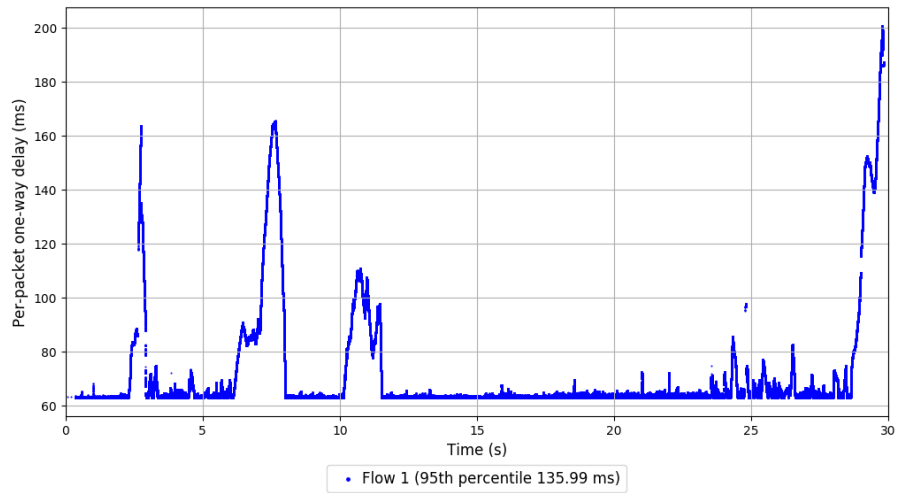# Run 2: Report of PCC-Expr — Data Link
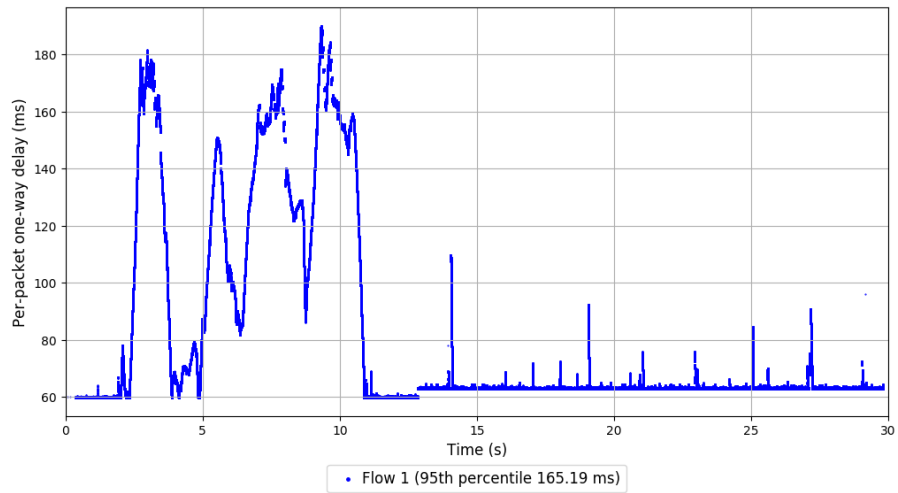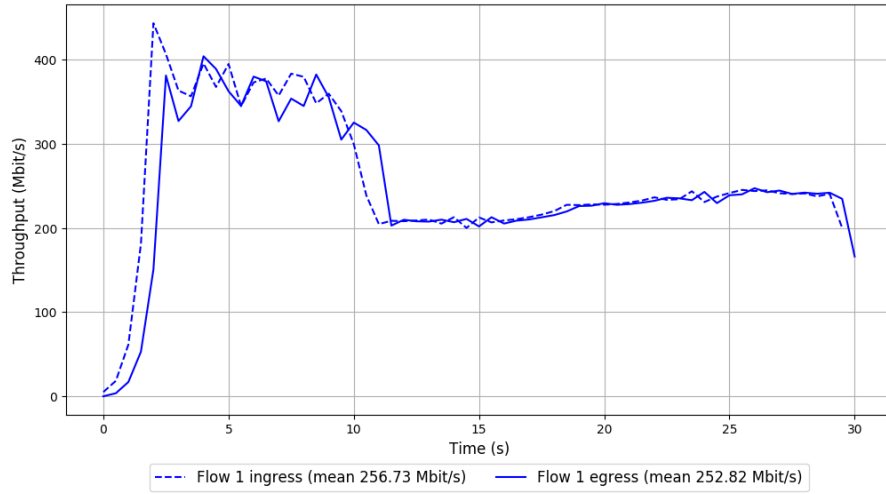
```
Run 3: Statistics of PCC-Expr

Start at: 2019-06-27 12:24:57
End at: 2019-06-27 12:25:27
Local clock offset: -0.015 ms
Remote clock offset: -0.309 ms


# Below is generated by plot.py at 2019-06-27 15:25:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 291.43 Mbit/s
95th percentile per-packet one-way delay: 170.121 ms
Loss rate: 2.80%
-- Flow 1:
Average throughput: 291.43 Mbit/s
95th percentile per-packet one-way delay: 170.121 ms
Loss rate: 2.80%
```
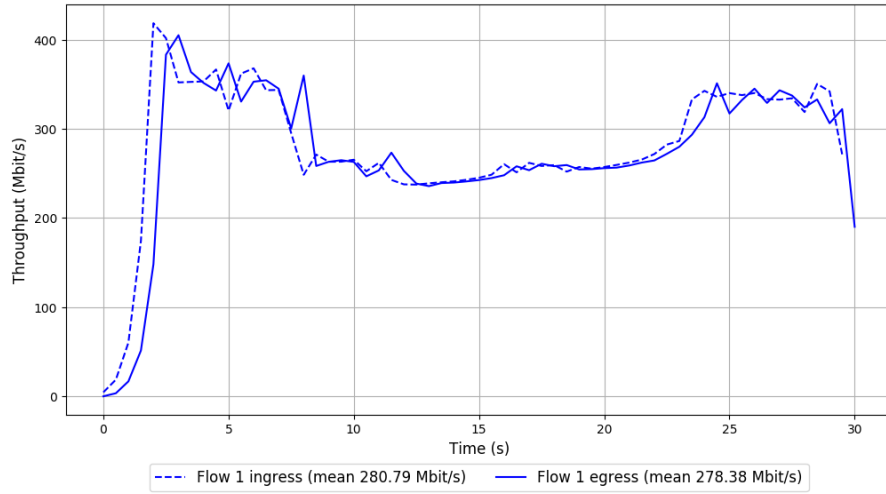
Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 298.59 Mbit/s)   Flow 1 egress (mean 291.43 Mbit/s)

Flow 1 (95th percentile 170.12 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2019-06-27 12:56:33
End at: 2019-06-27 12:57:03
Local clock offset: 0.006 ms
Remote clock offset: -0.0 ms


# Below is generated by plot.py at 2019-06-27 15:25:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 281.62 Mbit/s
95th percentile per-packet one-way delay: 171.563 ms
Loss rate: 2.84%
-- Flow 1:
Average throughput: 281.62 Mbit/s
95th percentile per-packet one-way delay: 171.563 ms
Loss rate: 2.84%
```

Run 4: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 288.65 Mbit/s) — Flow 1 egress (mean 281.62 Mbit/s)

Flow 1 (95th percentile 171.56 ms)

```
Run 5: Statistics of PCC-Expr

Start at: 2019-06-27 13:27:38
End at: 2019-06-27 13:28:08
Local clock offset: -0.027 ms
Remote clock offset: -0.192 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 278.38 Mbit/s
95th percentile per-packet one-way delay: 135.990 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 278.38 Mbit/s
95th percentile per-packet one-way delay: 135.990 ms
Loss rate: 1.28%
```
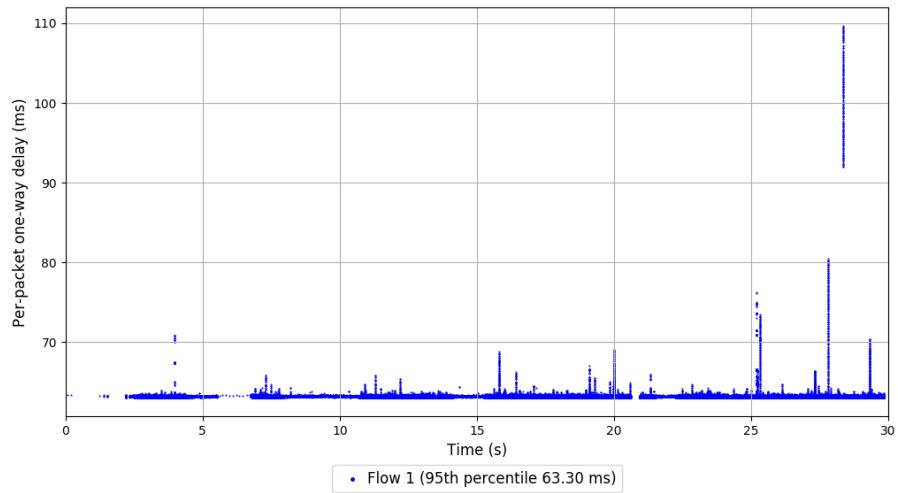
Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 280.79 Mbit/s)   Flow 1 egress (mean 278.38 Mbit/s)

Flow 1 (95th percentile 135.99 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-06-27 11:25:15
End at: 2019-06-27 11:25:45
Local clock offset: 0.012 ms
Remote clock offset: -0.115 ms
```

Run 1: Report of QUIC Cubic — Data Link
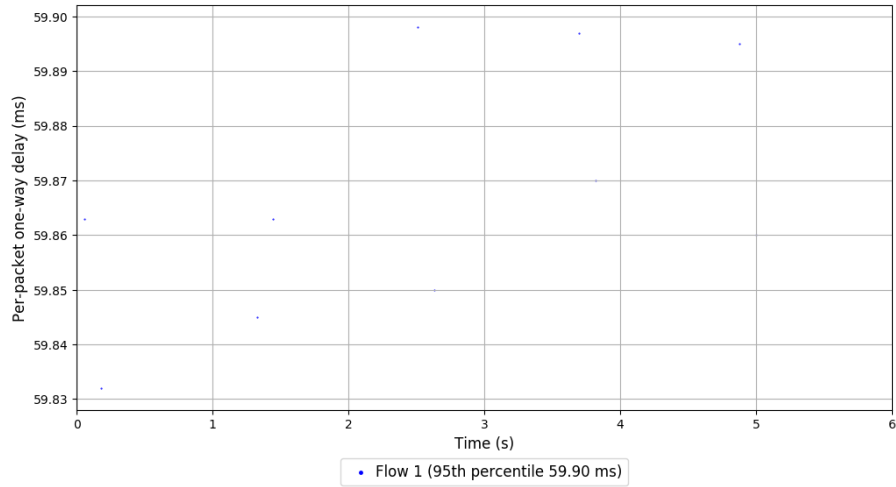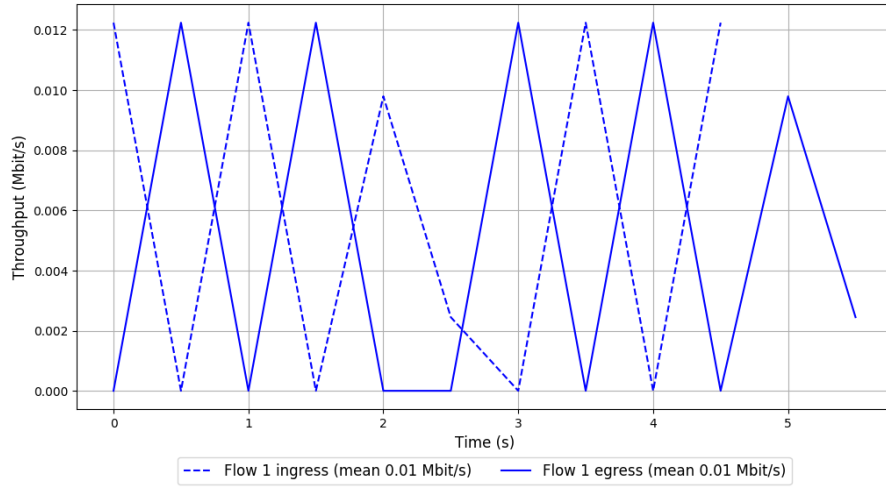
```
Run 2: Statistics of QUIC Cubic

Start at: 2019-06-27 11:56:42
End at: 2019-06-27 11:57:12
Local clock offset: -0.117 ms
Remote clock offset: -0.81 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.37 Mbit/s
95th percentile per-packet one-way delay: 64.337 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 69.37 Mbit/s
95th percentile per-packet one-way delay: 64.337 ms
Loss rate: 0.63%
```
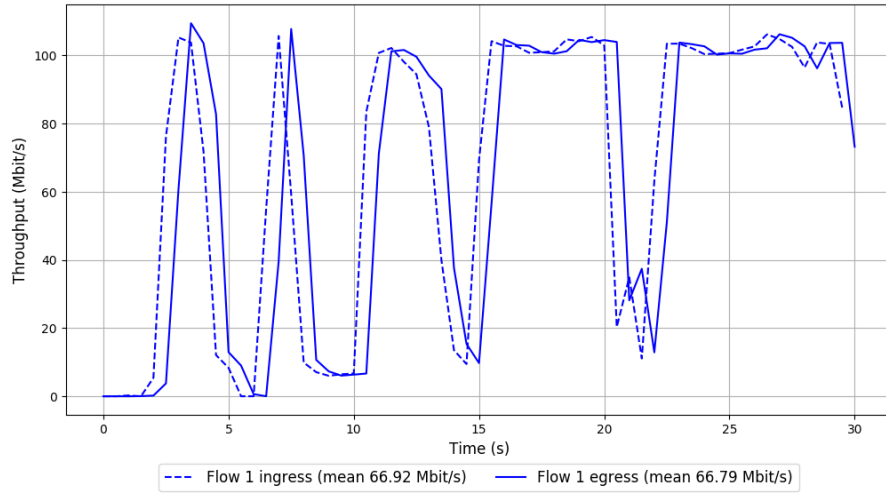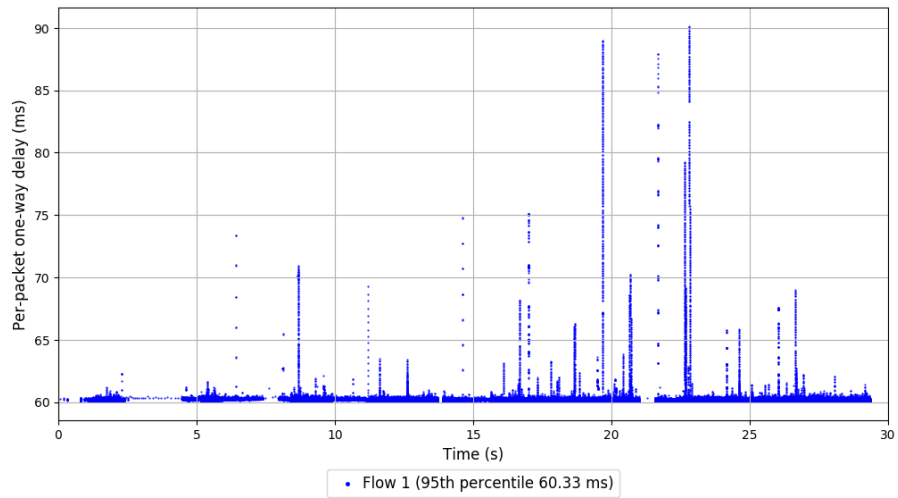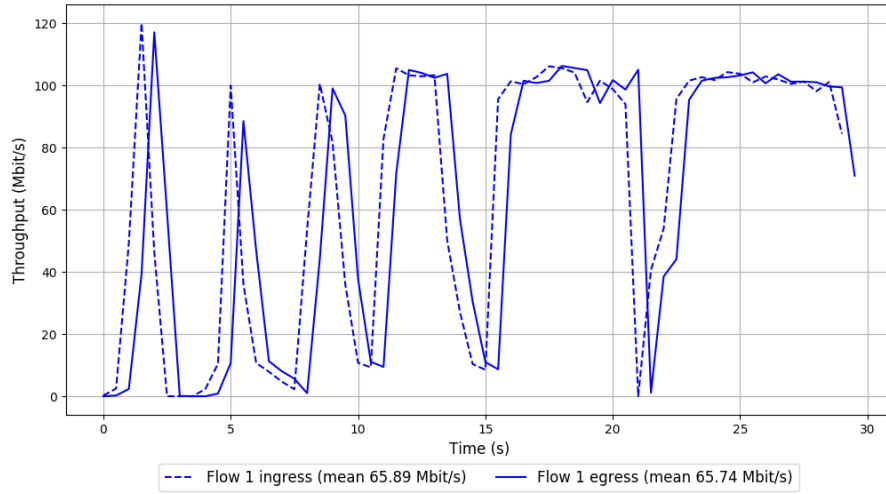
Run 2: Report of QUIC Cubic — Data Link
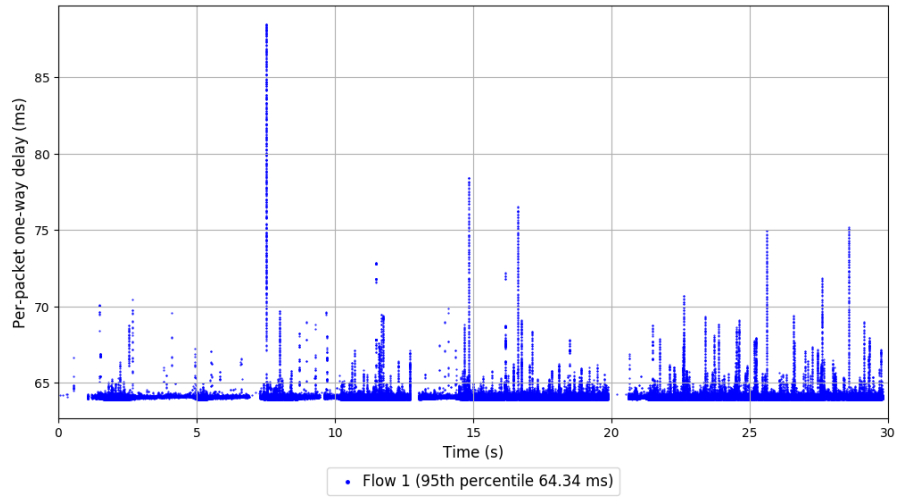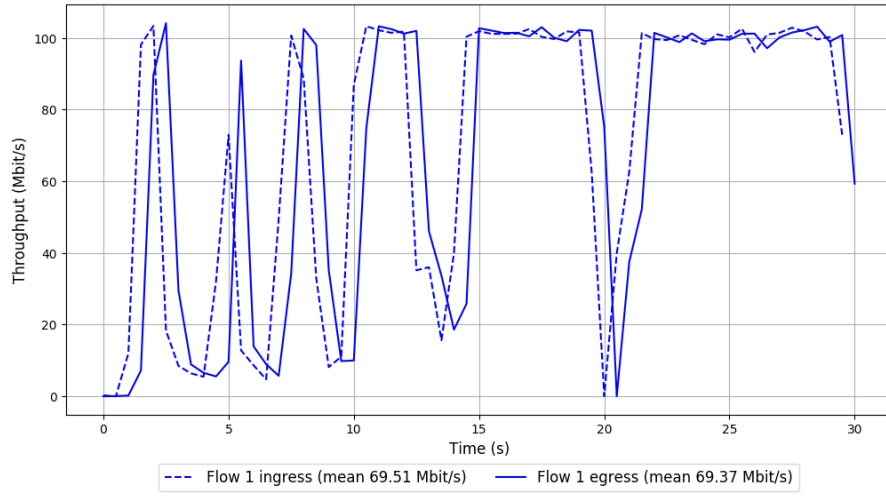
```
Run 3: Statistics of QUIC Cubic

Start at: 2019-06-27 12:27:58
End at: 2019-06-27 12:28:28
Local clock offset: -0.016 ms
Remote clock offset: -0.062 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.79 Mbit/s
95th percentile per-packet one-way delay: 63.305 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 66.79 Mbit/s
95th percentile per-packet one-way delay: 63.305 ms
Loss rate: 0.61%
```
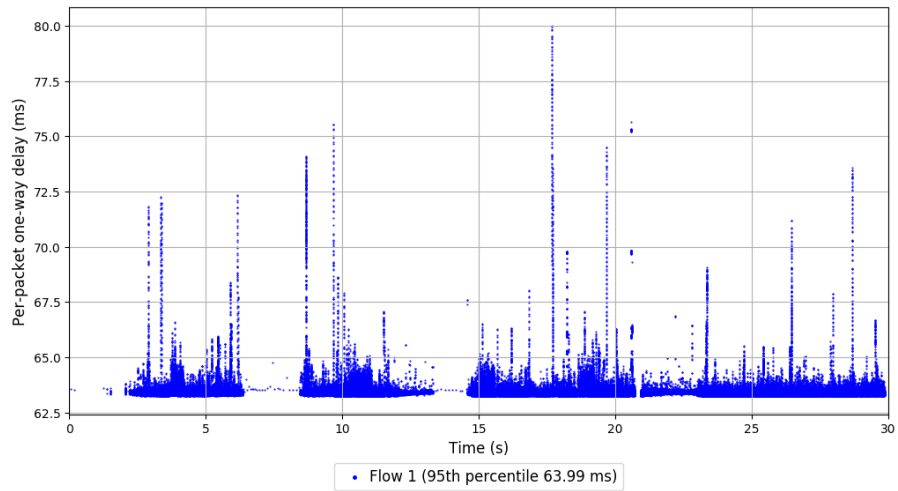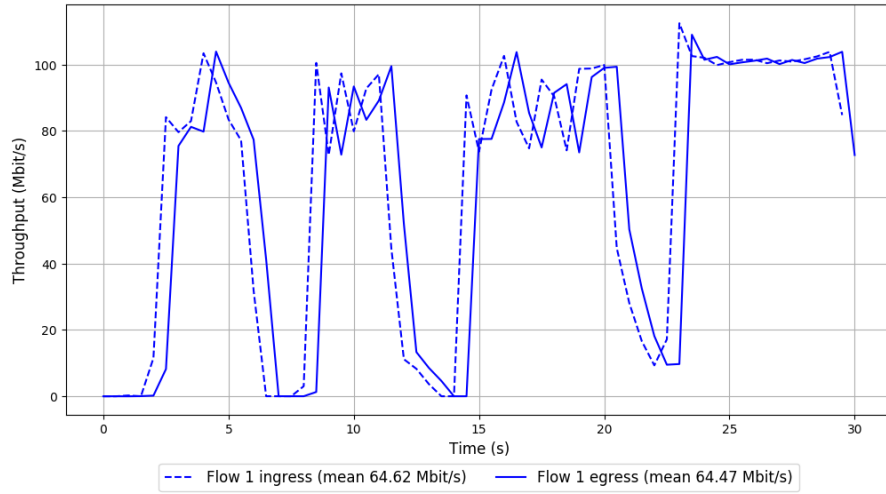
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 66.92 Mbit/s) ----   Flow 1 egress (mean 66.79 Mbit/s) ——

Flow 1 (95th percentile 63.30 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-06-27 12:59:34
End at: 2019-06-27 13:00:04
Local clock offset: 0.002 ms
Remote clock offset: -0.118 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.74 Mbit/s
95th percentile per-packet one-way delay: 60.326 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 65.74 Mbit/s
95th percentile per-packet one-way delay: 60.326 ms
Loss rate: 0.66%
```

Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-06-27 13:30:40
End at: 2019-06-27 13:31:10
Local clock offset: -0.015 ms
Remote clock offset: -0.081 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.47 Mbit/s
95th percentile per-packet one-way delay: 63.987 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 64.47 Mbit/s
95th percentile per-packet one-way delay: 63.987 ms
Loss rate: 0.65%
```

Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 64.62 Mbit/s) ---- Flow 1 egress (mean 64.47 Mbit/s)

Flow 1 (95th percentile 63.99 ms)

```
Run 1: Statistics of SCReAM

Start at: 2019-06-27 11:34:08
End at: 2019-06-27 11:34:38
Local clock offset: 0.046 ms
Remote clock offset: -0.098 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.330 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.330 ms
Loss rate: 0.38%
```
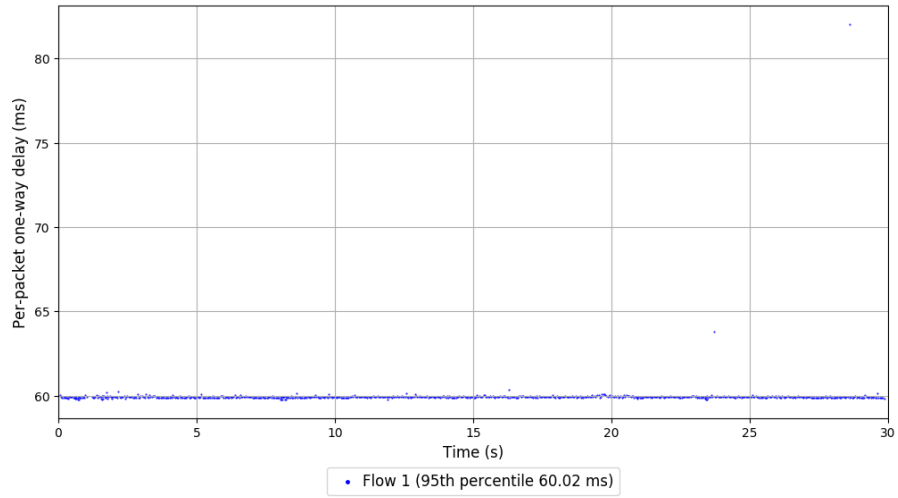
Run 1: Report of SCReAM — Data Link
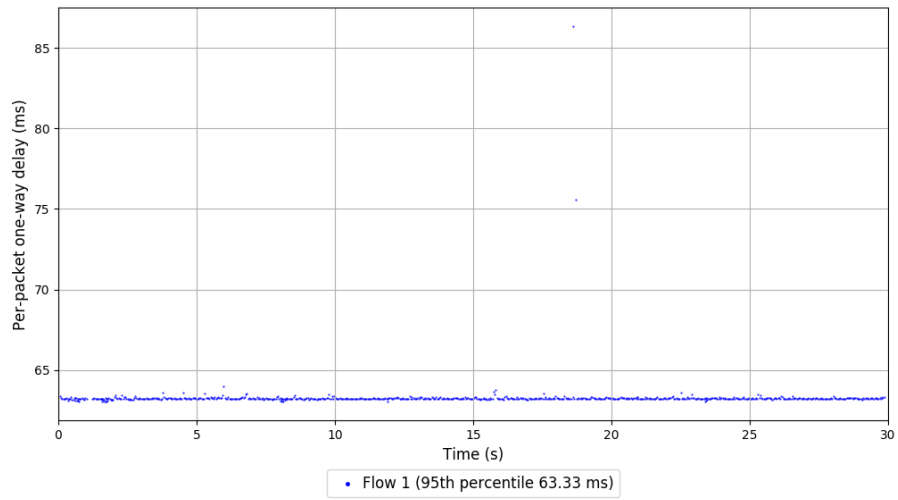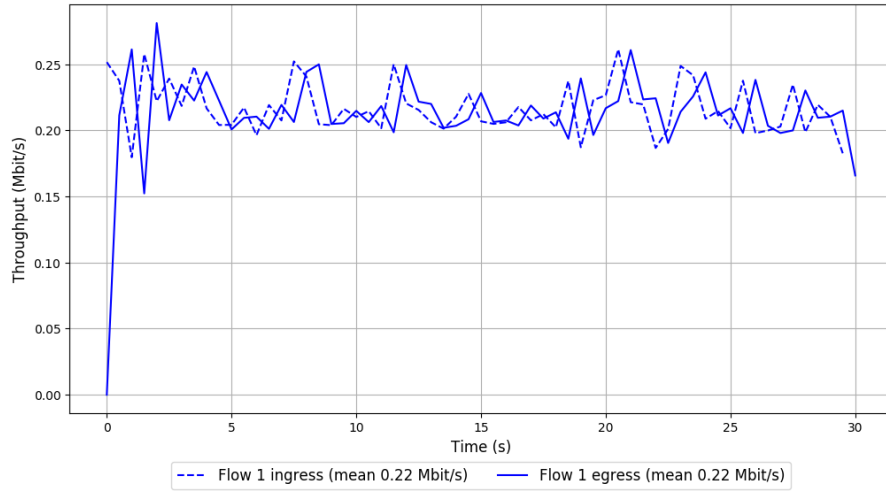
```
Run 2: Statistics of SCReAM

Start at: 2019-06-27 12:05:42
End at: 2019-06-27 12:06:12
Local clock offset: -0.135 ms
Remote clock offset: -0.107 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.408 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.408 ms
Loss rate: 0.51%
```
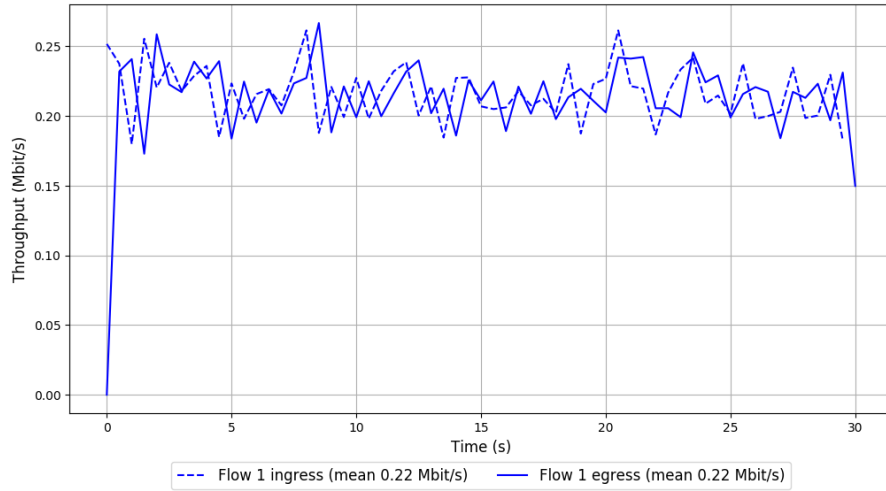
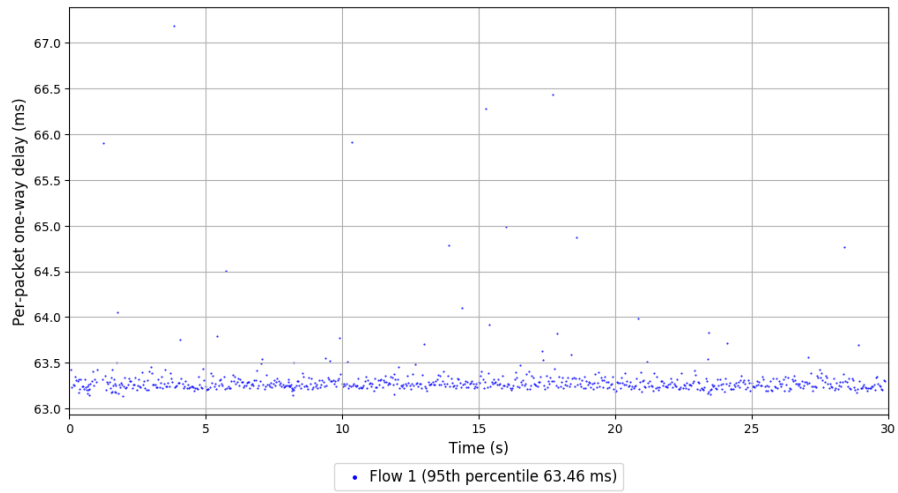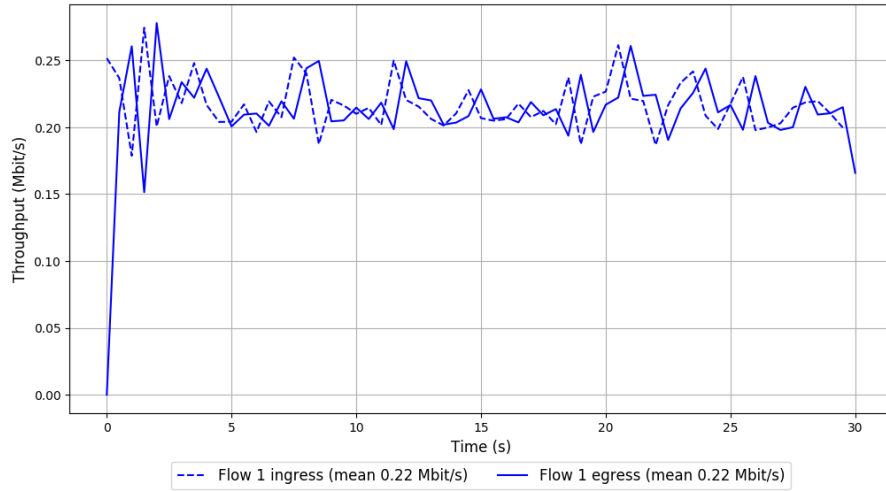# Run 2: Report of SCReAM — Data Link
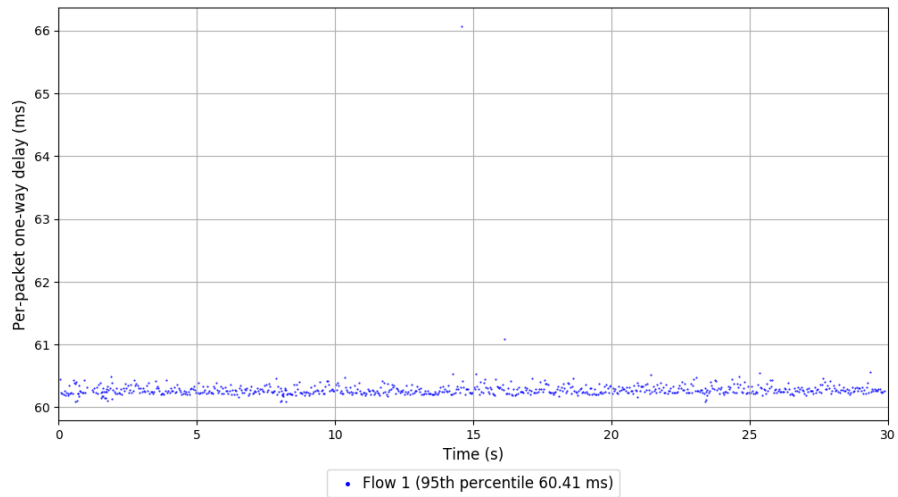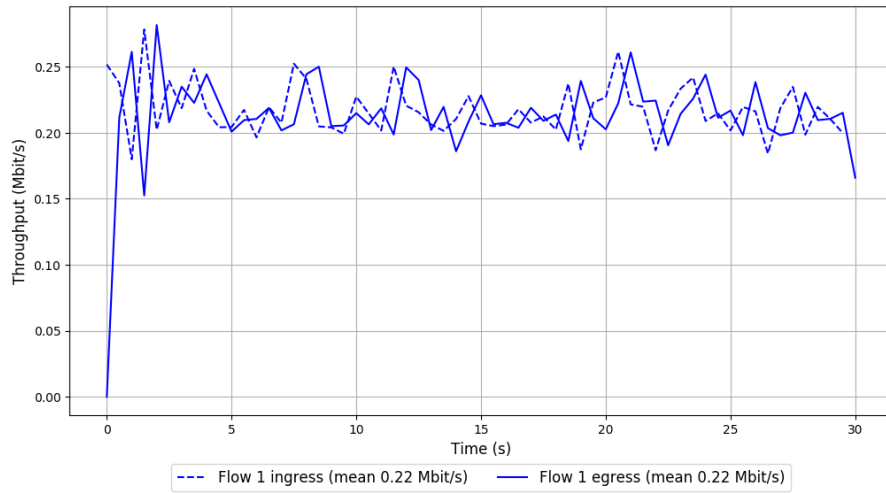
```
Run 3: Statistics of SCReAM

Start at: 2019-06-27 12:36:55
End at: 2019-06-27 12:37:25
Local clock offset: -0.015 ms
Remote clock offset: 0.087 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.017 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.017 ms
Loss rate: 0.38%
```

Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-06-27 13:08:06
End at: 2019-06-27 13:08:36
Local clock offset: -0.033 ms
Remote clock offset: -0.017 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.457 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.457 ms
Loss rate: 0.51%
```

# Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-06-27 13:39:40
End at: 2019-06-27 13:40:10
Local clock offset: -0.02 ms
Remote clock offset: 0.485 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.037 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.037 ms
Loss rate: 0.51%
```

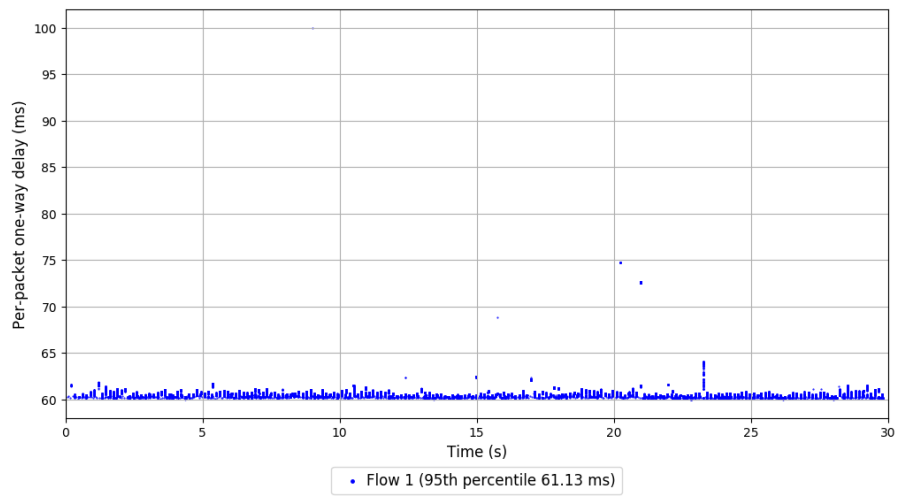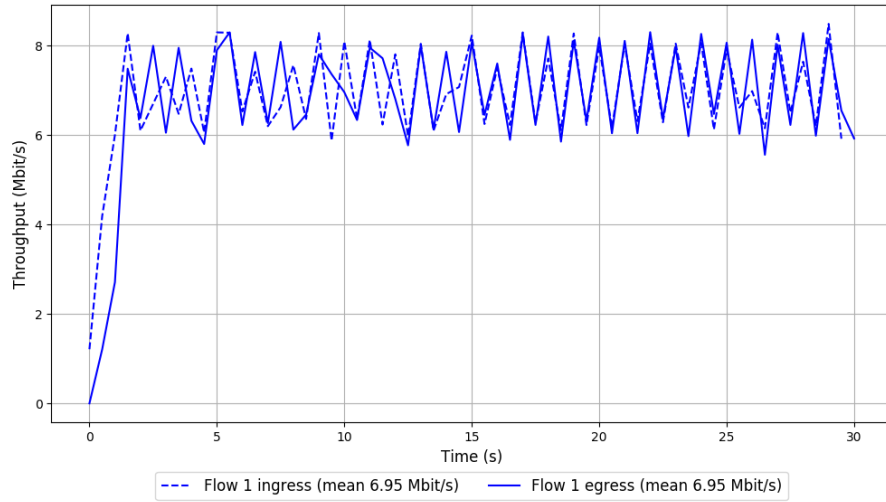Run 5: Report of SCReAM — Data Link
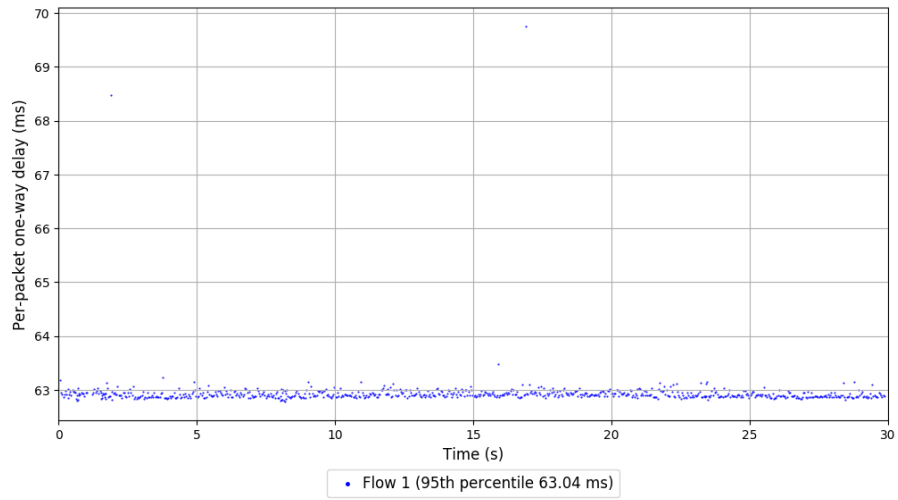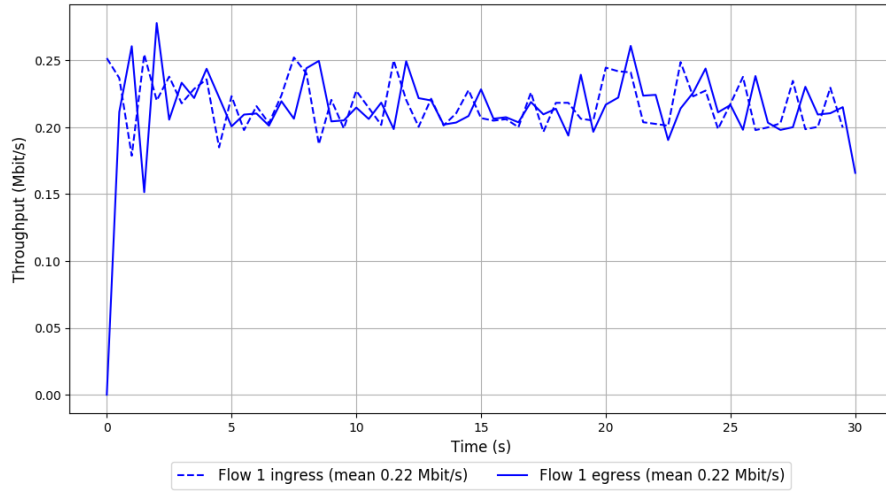
```
Run 1: Statistics of Sprout

Start at: 2019-06-27 11:38:16
End at: 2019-06-27 11:38:46
Local clock offset: 0.008 ms
Remote clock offset: -0.119 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 63.658 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 63.658 ms
Loss rate: 0.15%
```
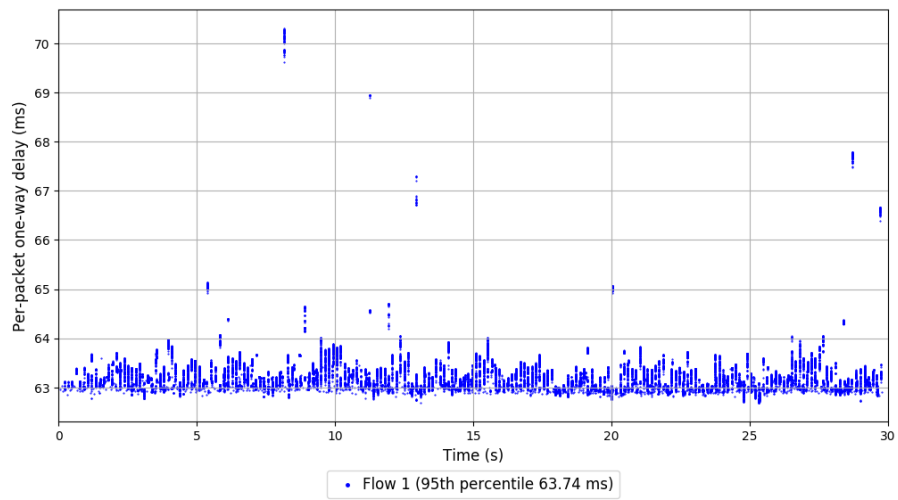
Run 1: Report of Sprout — Data Link
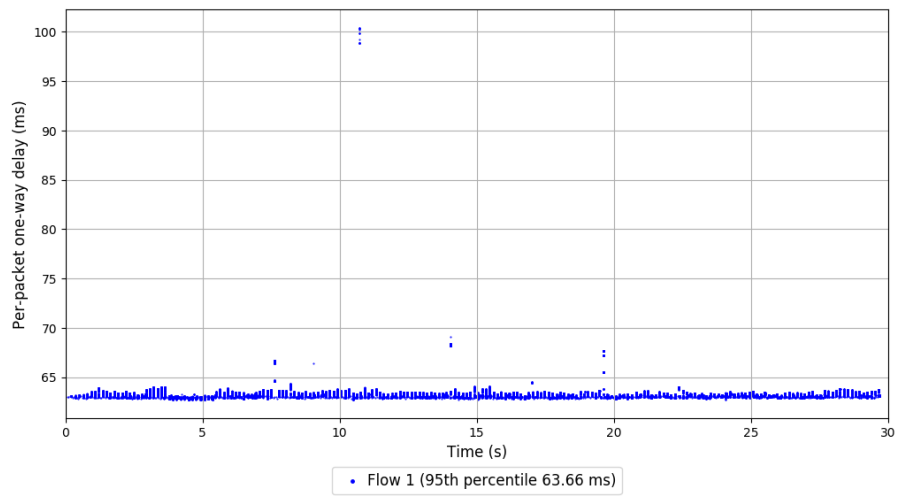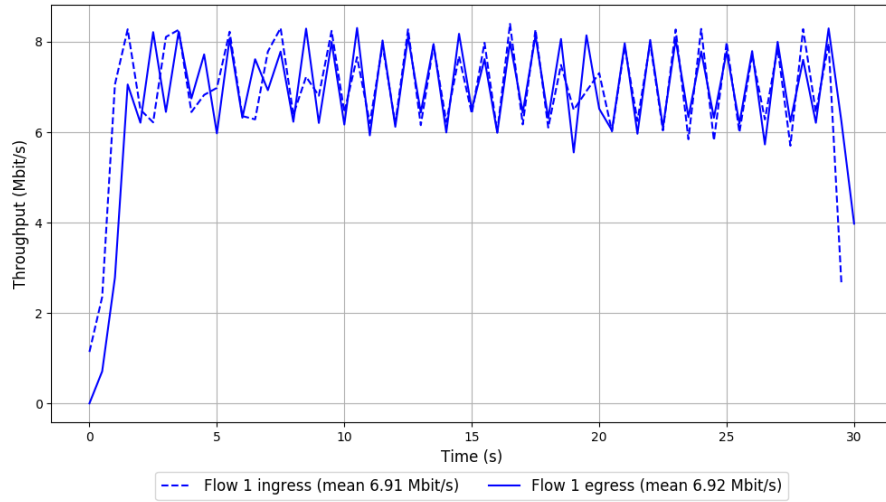
```
Run 2: Statistics of Sprout

Start at: 2019-06-27 12:09:48
End at: 2019-06-27 12:10:18
Local clock offset: -0.126 ms
Remote clock offset: -0.074 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.95 Mbit/s
95th percentile per-packet one-way delay: 61.134 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 6.95 Mbit/s
95th percentile per-packet one-way delay: 61.134 ms
Loss rate: 0.47%
```

Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-06-27 12:41:05
End at: 2019-06-27 12:41:35
Local clock offset: -0.034 ms
Remote clock offset: 0.37 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.80 Mbit/s
95th percentile per-packet one-way delay: 63.744 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 6.80 Mbit/s
95th percentile per-packet one-way delay: 63.744 ms
Loss rate: 0.50%
```
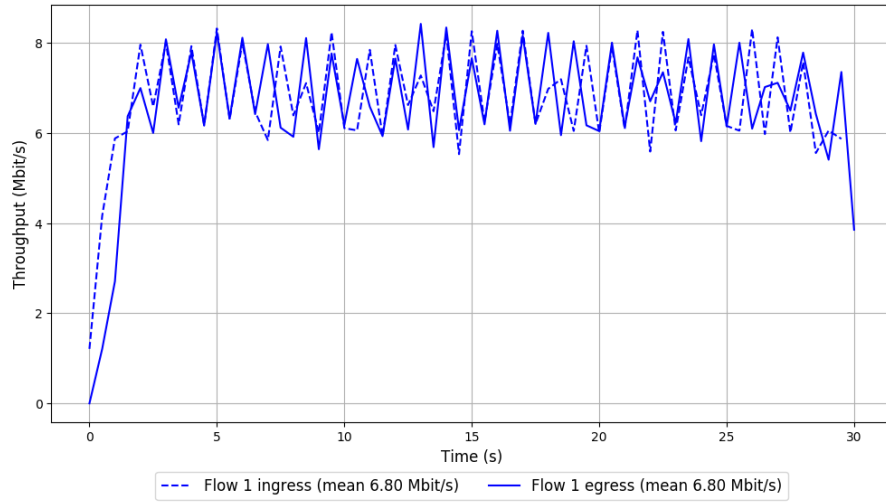
Run 3: Report of Sprout — Data Link

Flow 1 ingress (mean 6.80 Mbit/s)   Flow 1 egress (mean 6.80 Mbit/s)

Flow 1 (95th percentile 63.74 ms)

```
Run 4: Statistics of Sprout

Start at: 2019-06-27 13:12:13
End at: 2019-06-27 13:12:43
Local clock offset: -0.004 ms
Remote clock offset: -0.02 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.79 Mbit/s
95th percentile per-packet one-way delay: 63.985 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 6.79 Mbit/s
95th percentile per-packet one-way delay: 63.985 ms
Loss rate: 0.45%
```

Run 4: Report of Sprout — Data Link
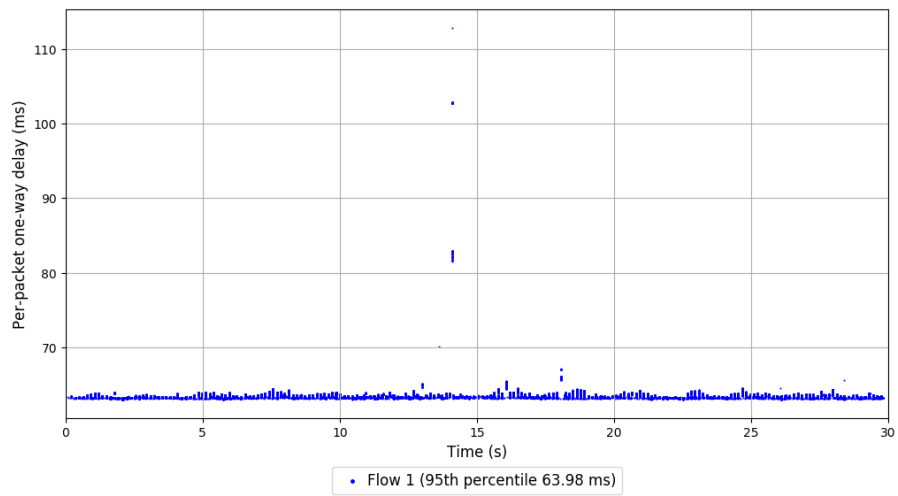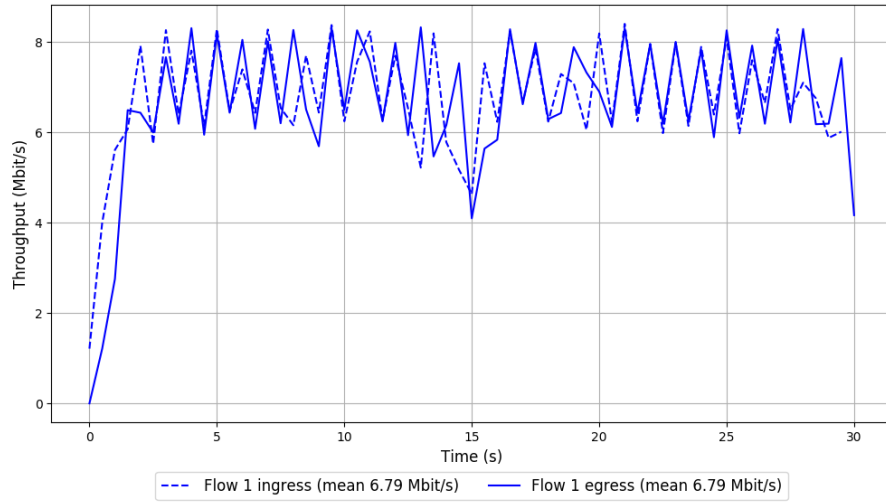
```
Run 5: Statistics of Sprout

Start at: 2019-06-27 13:43:44
End at: 2019-06-27 13:44:14
Local clock offset: -0.047 ms
Remote clock offset: -0.258 ms


# Below is generated by plot.py at 2019-06-27 15:28:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.01 Mbit/s
95th percentile per-packet one-way delay: 61.103 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 7.01 Mbit/s
95th percentile per-packet one-way delay: 61.103 ms
Loss rate: 0.48%
```

Run 5: Report of Sprout — Data Link
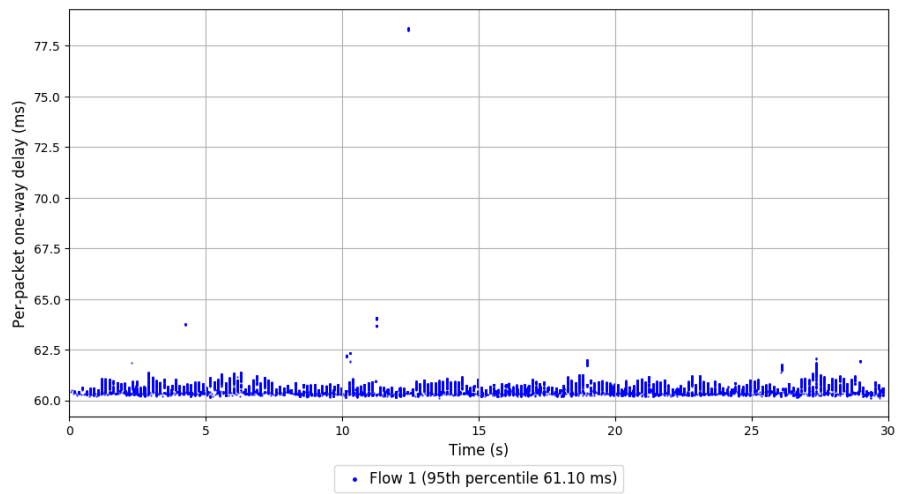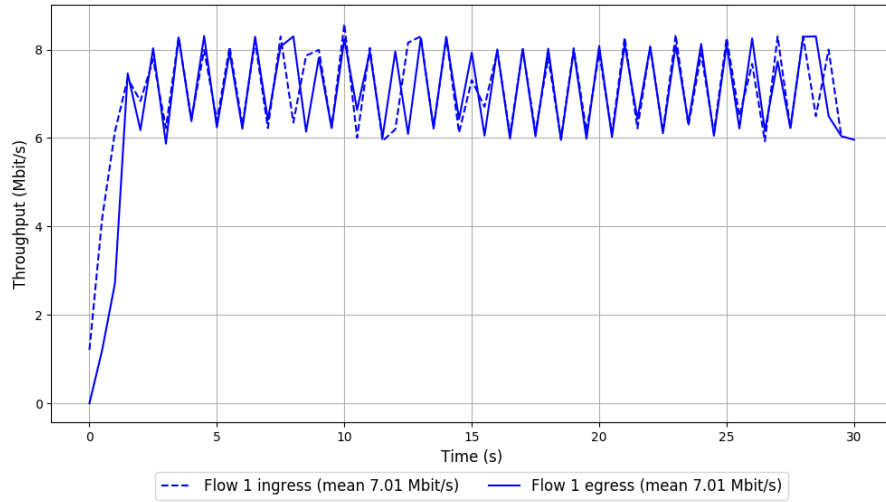
```
Run 1: Statistics of TaoVA-100x

Start at: 2019-06-27 11:40:59
End at: 2019-06-27 11:41:29
Local clock offset: -0.003 ms
Remote clock offset: 0.699 ms


# Below is generated by plot.py at 2019-06-27 15:29:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.91 Mbit/s
95th percentile per-packet one-way delay: 63.112 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 220.91 Mbit/s
95th percentile per-packet one-way delay: 63.112 ms
Loss rate: 0.42%
```
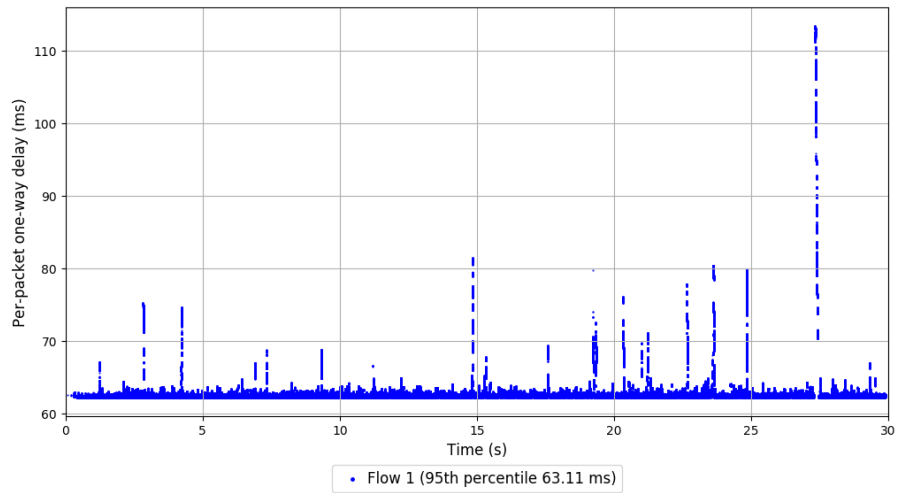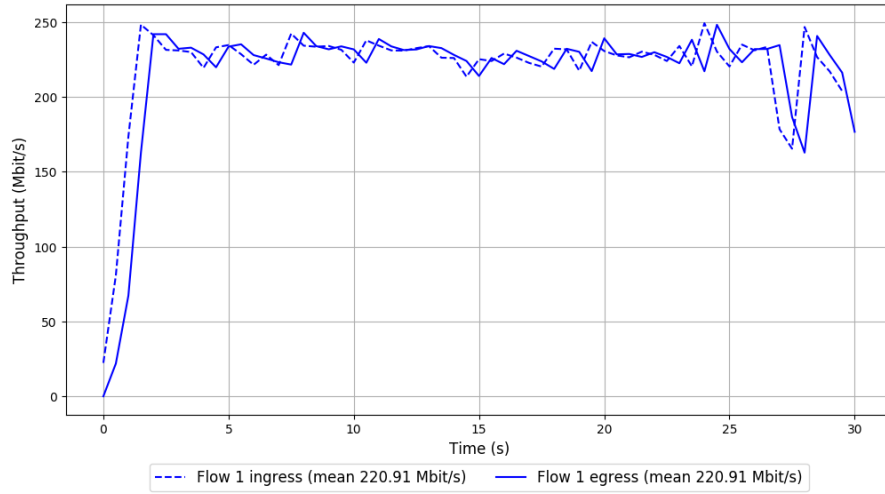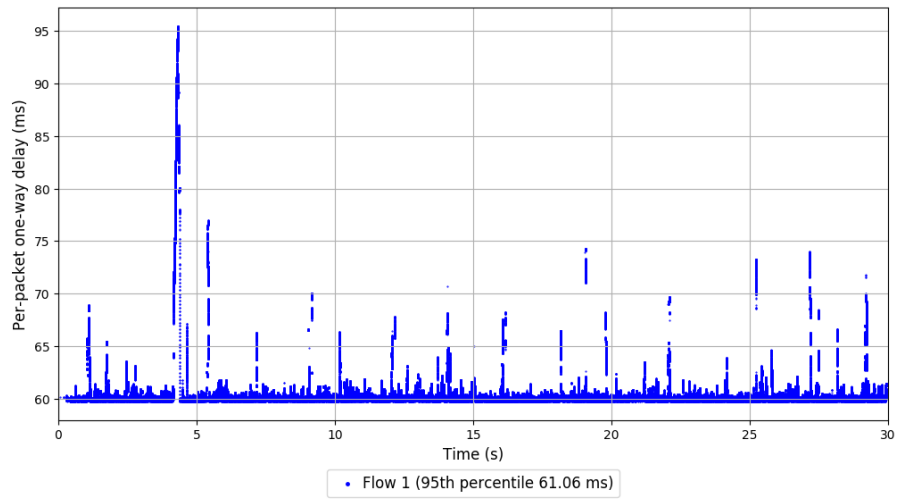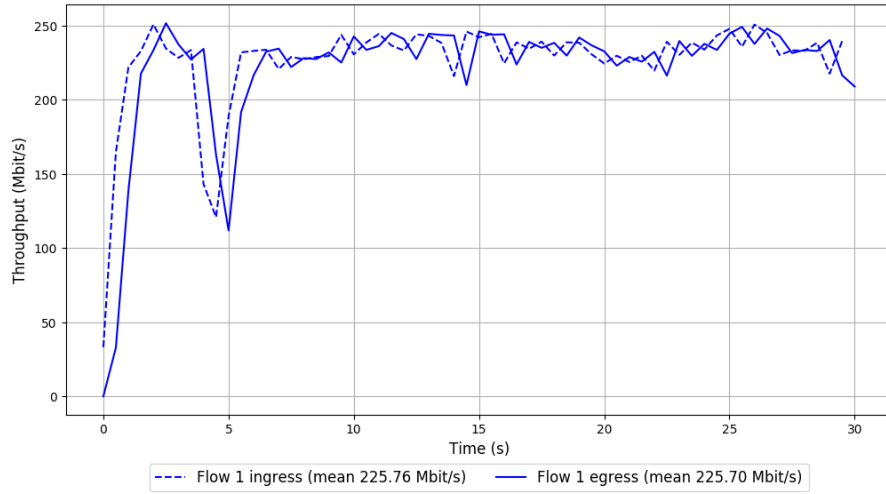
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2019-06-27 12:12:32
End at: 2019-06-27 12:13:02
Local clock offset: -0.137 ms
Remote clock offset: -0.147 ms


# Below is generated by plot.py at 2019-06-27 15:29:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.70 Mbit/s
95th percentile per-packet one-way delay: 61.060 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 225.70 Mbit/s
95th percentile per-packet one-way delay: 61.060 ms
Loss rate: 0.44%
```

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

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

Start at: 2019-06-27 12:43:47
End at: 2019-06-27 12:44:17
Local clock offset: -0.014 ms
Remote clock offset: 0.149 ms


# Below is generated by plot.py at 2019-06-27 15:29:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.89 Mbit/s
95th percentile per-packet one-way delay: 63.975 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 222.89 Mbit/s
95th percentile per-packet one-way delay: 63.975 ms
Loss rate: 0.47%
```
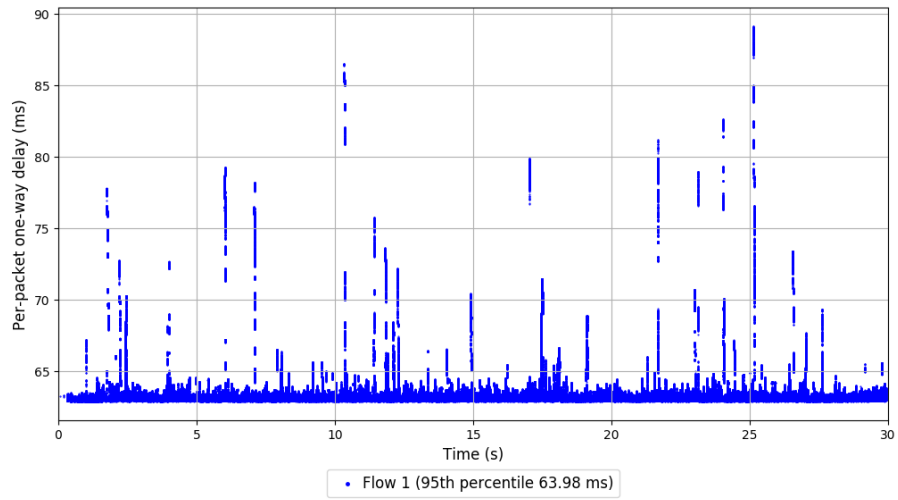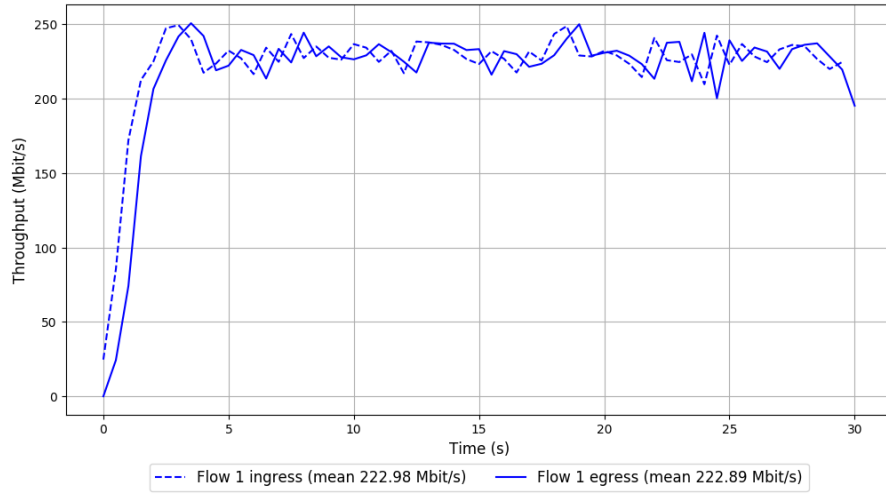
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 222.98 Mbit/s) — — — Flow 1 egress (mean 222.89 Mbit/s)

• Flow 1 (95th percentile 63.98 ms)

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

Start at: 2019-06-27 13:14:54
End at: 2019-06-27 13:15:24
Local clock offset: -0.005 ms
Remote clock offset: 0.095 ms

# Below is generated by plot.py at 2019-06-27 15:29:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.04 Mbit/s
95th percentile per-packet one-way delay: 60.822 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 217.04 Mbit/s
95th percentile per-packet one-way delay: 60.822 ms
Loss rate: 0.47%
```
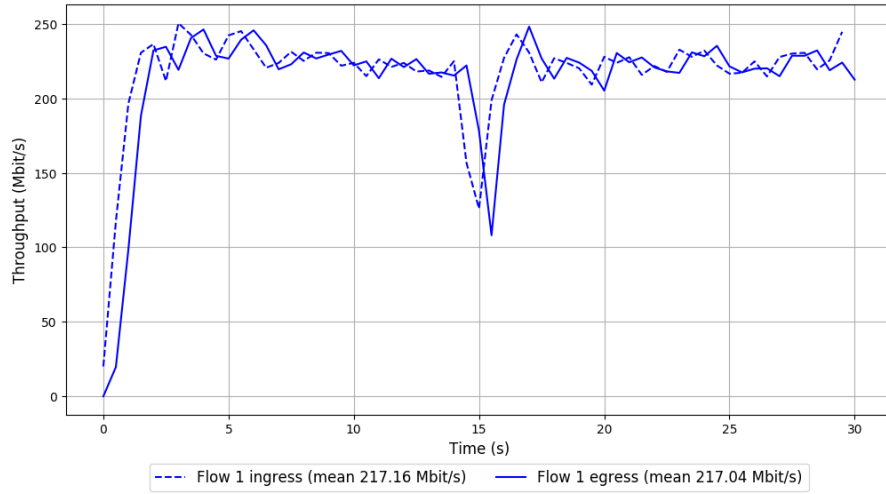
Run 4: Report of TaoVA-100x — Data Link
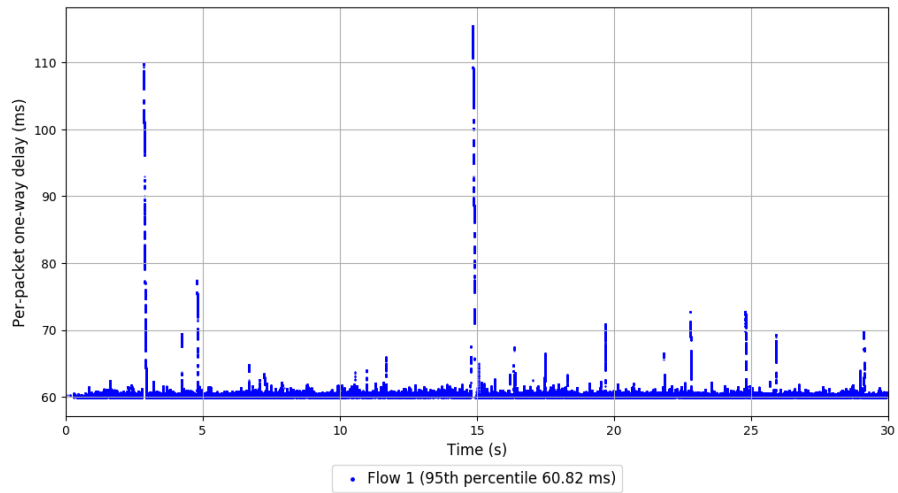
```
Run 5: Statistics of TaoVA-100x

Start at: 2019-06-27 13:46:27
End at: 2019-06-27 13:46:57
Local clock offset: -0.034 ms
Remote clock offset: -0.182 ms


# Below is generated by plot.py at 2019-06-27 15:30:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.69 Mbit/s
95th percentile per-packet one-way delay: 60.744 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 223.69 Mbit/s
95th percentile per-packet one-way delay: 60.744 ms
Loss rate: 0.48%
```

Run 5: Report of TaoVA-100x — Data Link
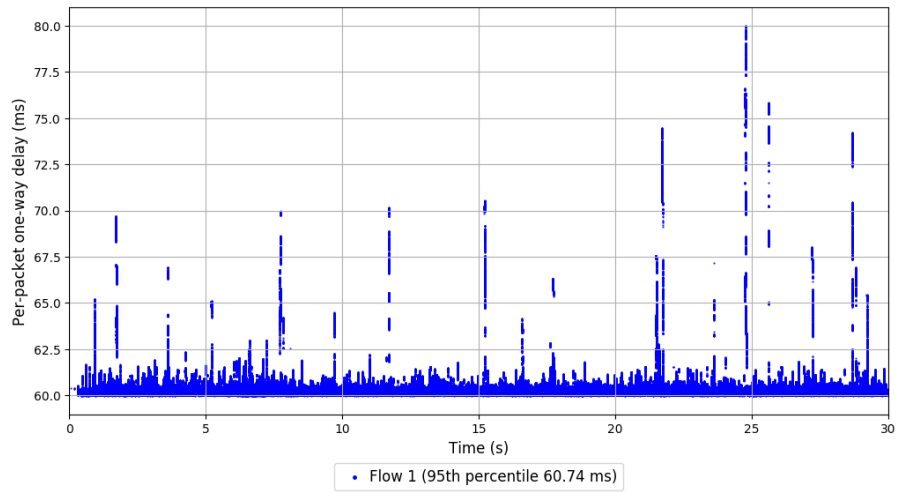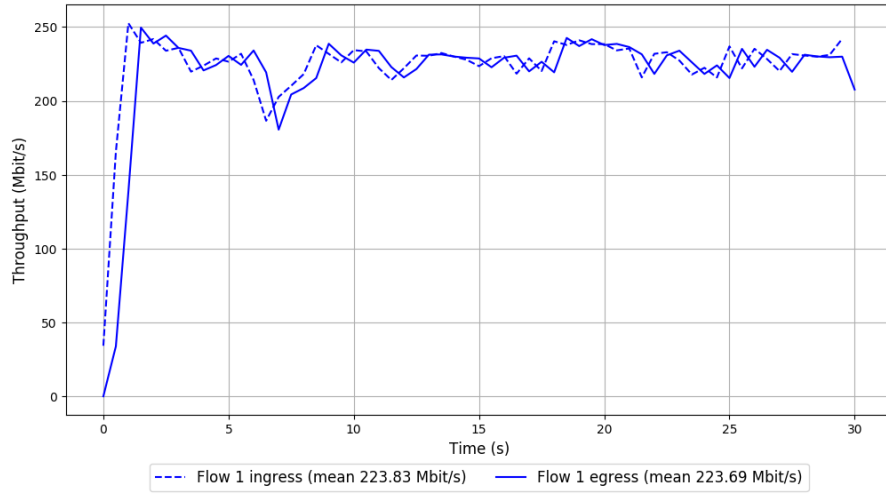
```
Run 1: Statistics of TCP Vegas

Start at: 2019-06-27 11:30:57
End at: 2019-06-27 11:31:27
Local clock offset: 0.051 ms
Remote clock offset: -0.492 ms


# Below is generated by plot.py at 2019-06-27 15:32:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 440.38 Mbit/s
95th percentile per-packet one-way delay: 66.437 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 440.38 Mbit/s
95th percentile per-packet one-way delay: 66.437 ms
Loss rate: 0.27%
```
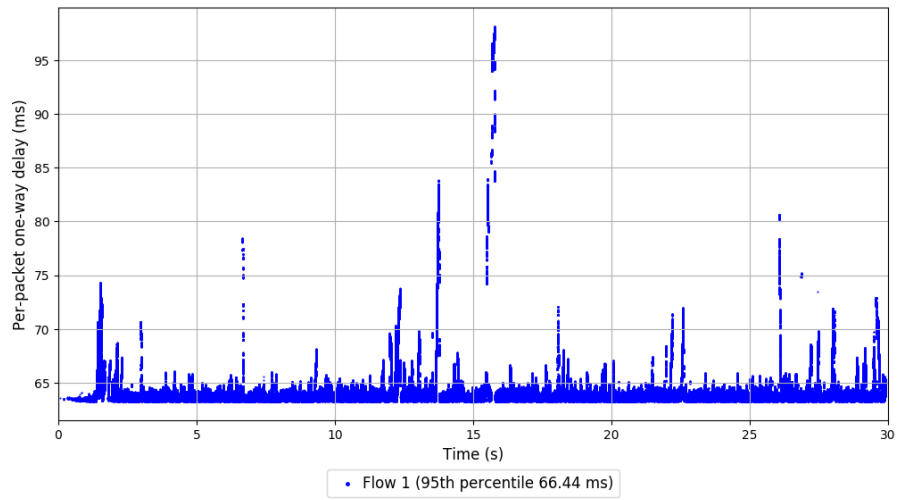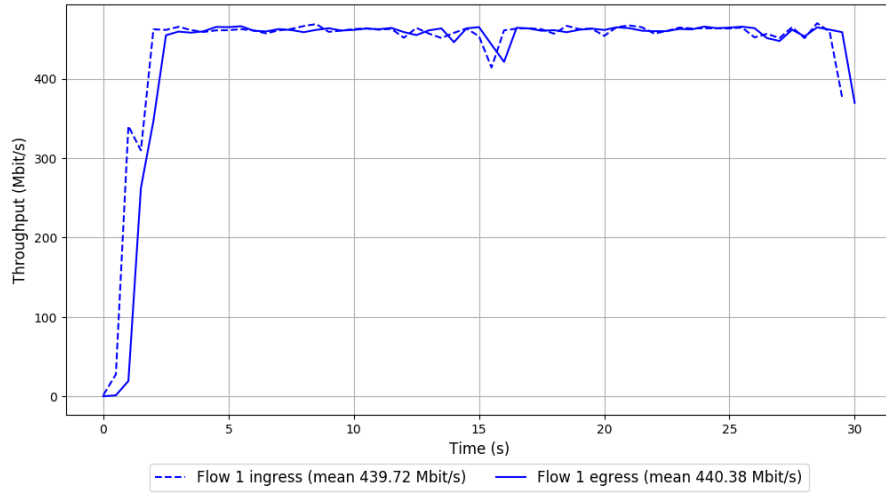
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-06-27 12:02:27
End at: 2019-06-27 12:02:57
Local clock offset: -0.145 ms
Remote clock offset: -0.196 ms


# Below is generated by plot.py at 2019-06-27 15:34:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 458.61 Mbit/s
95th percentile per-packet one-way delay: 65.871 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 458.61 Mbit/s
95th percentile per-packet one-way delay: 65.871 ms
Loss rate: 0.42%
```
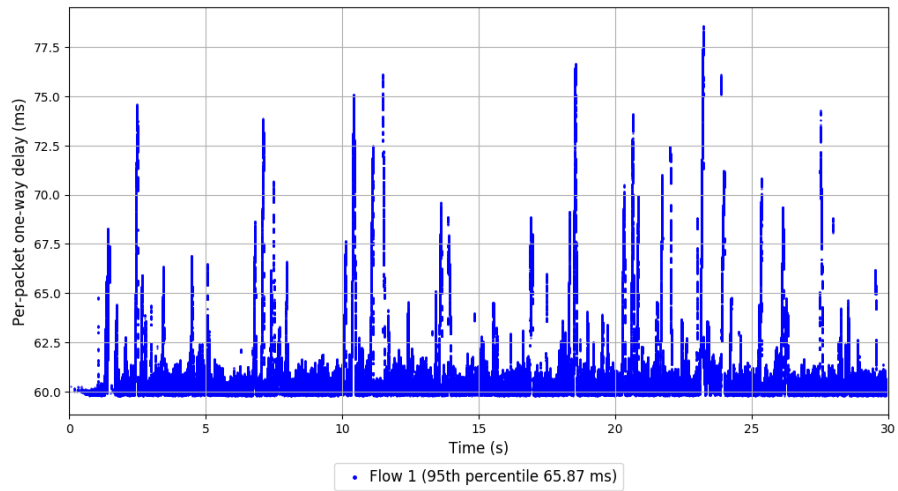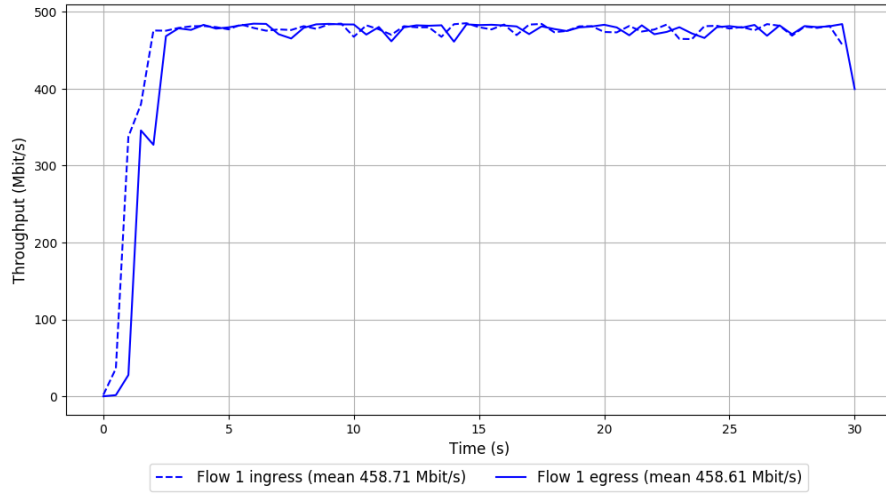
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-06-27 12:33:44
End at: 2019-06-27 12:34:14
Local clock offset: -0.022 ms
Remote clock offset: -0.01 ms


# Below is generated by plot.py at 2019-06-27 15:36:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 443.64 Mbit/s
95th percentile per-packet one-way delay: 69.558 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 443.64 Mbit/s
95th percentile per-packet one-way delay: 69.558 ms
Loss rate: 0.42%
```
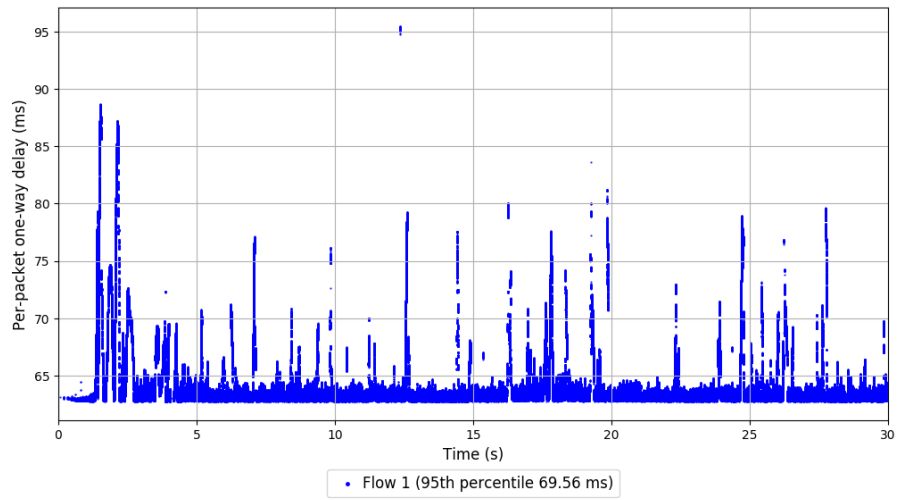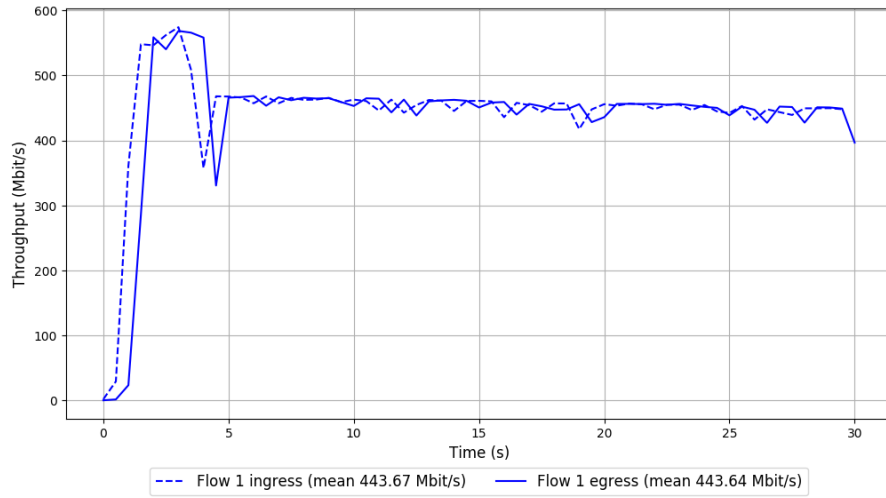
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2019-06-27 13:05:02
End at: 2019-06-27 13:05:32
Local clock offset: 0.029 ms
Remote clock offset: 0.013 ms


# Below is generated by plot.py at 2019-06-27 15:36:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 290.51 Mbit/s
95th percentile per-packet one-way delay: 67.706 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 290.51 Mbit/s
95th percentile per-packet one-way delay: 67.706 ms
Loss rate: 0.34%
```
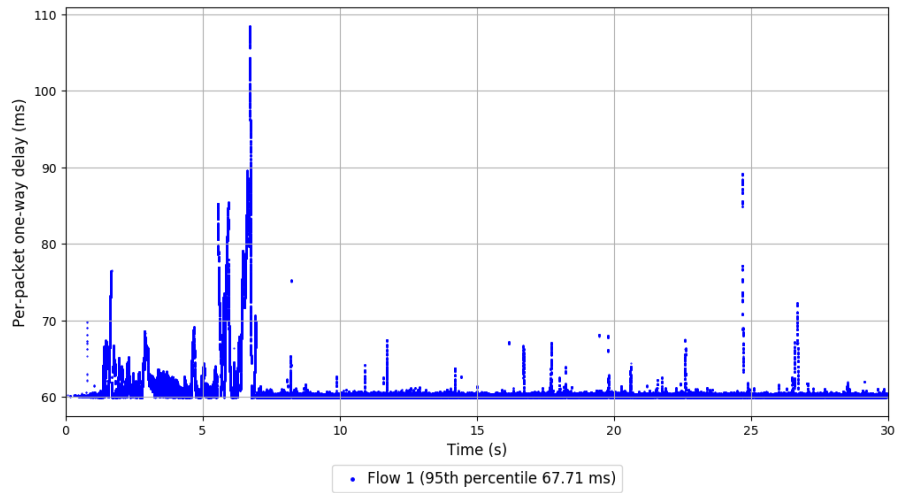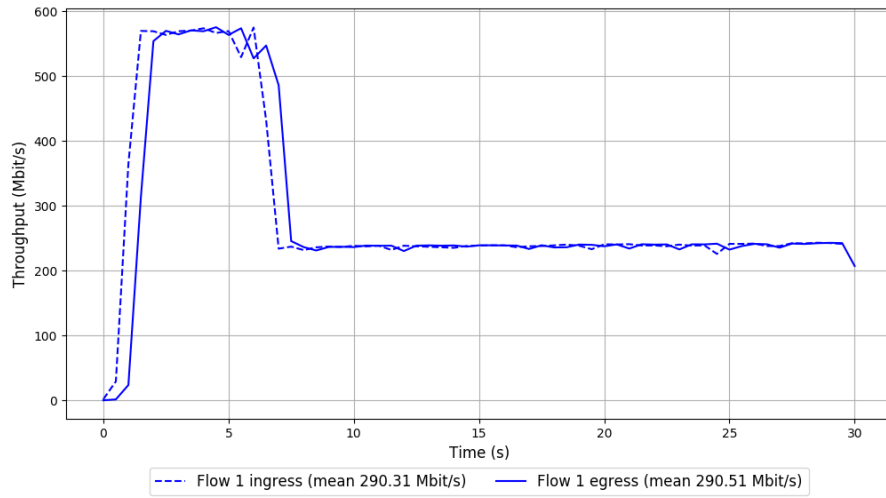
Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 290.31 Mbit/s)   Flow 1 egress (mean 290.51 Mbit/s)

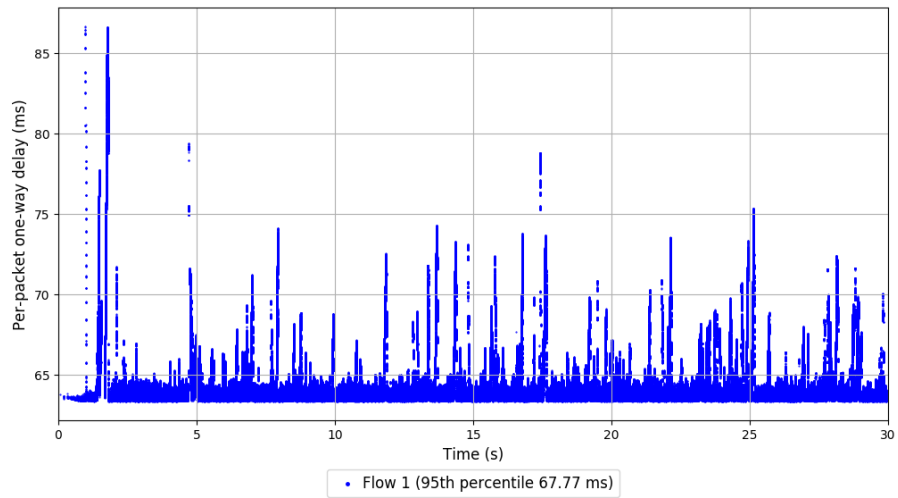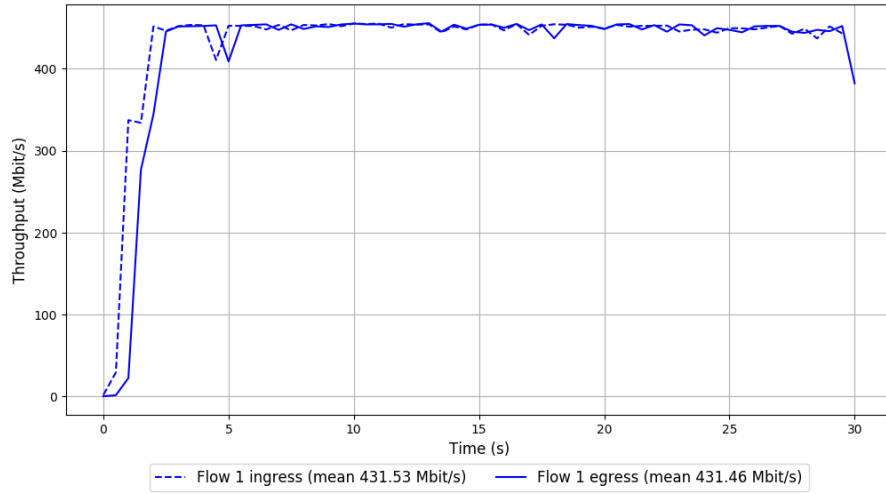

Flow 1 (95th percentile 67.71 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2019-06-27 13:36:26
End at: 2019-06-27 13:36:56
Local clock offset: -0.03 ms
Remote clock offset: -0.239 ms


# Below is generated by plot.py at 2019-06-27 15:37:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 431.46 Mbit/s
95th percentile per-packet one-way delay: 67.774 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 431.46 Mbit/s
95th percentile per-packet one-way delay: 67.774 ms
Loss rate: 0.43%
```

Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 431.53 Mbit/s) ----- Flow 1 egress (mean 431.46 Mbit/s)
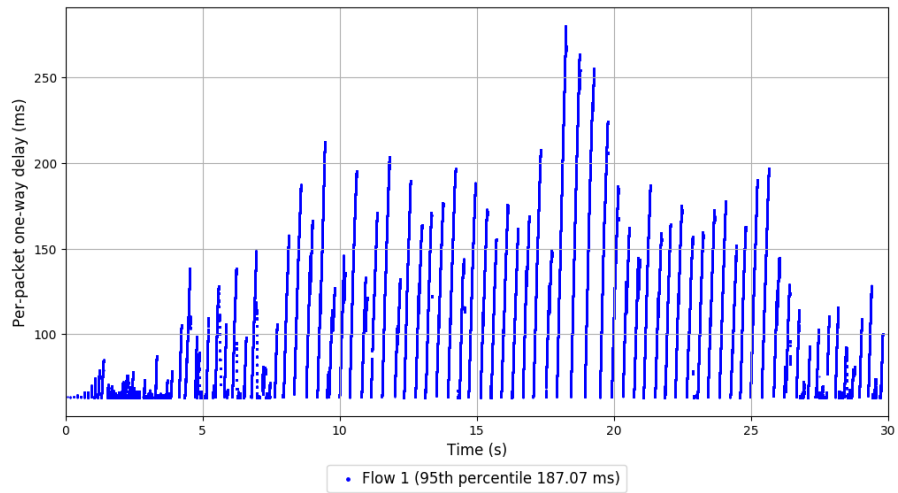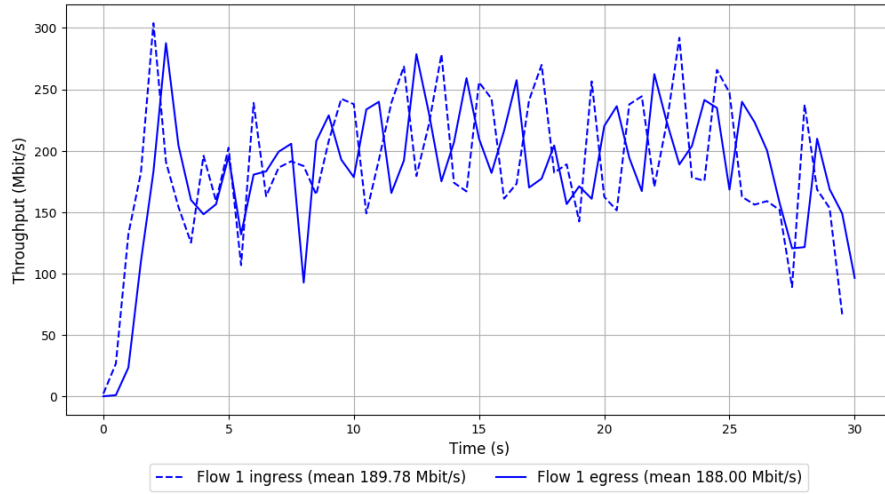

Flow 1 (95th percentile 67.77 ms)

```
Run 1: Statistics of Verus

Start at: 2019-06-27 11:36:50
End at: 2019-06-27 11:37:20
Local clock offset: 0.038 ms
Remote clock offset: -0.098 ms

# Below is generated by plot.py at 2019-06-27 15:37:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 188.00 Mbit/s
95th percentile per-packet one-way delay: 187.072 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 188.00 Mbit/s
95th percentile per-packet one-way delay: 187.072 ms
Loss rate: 0.82%
```
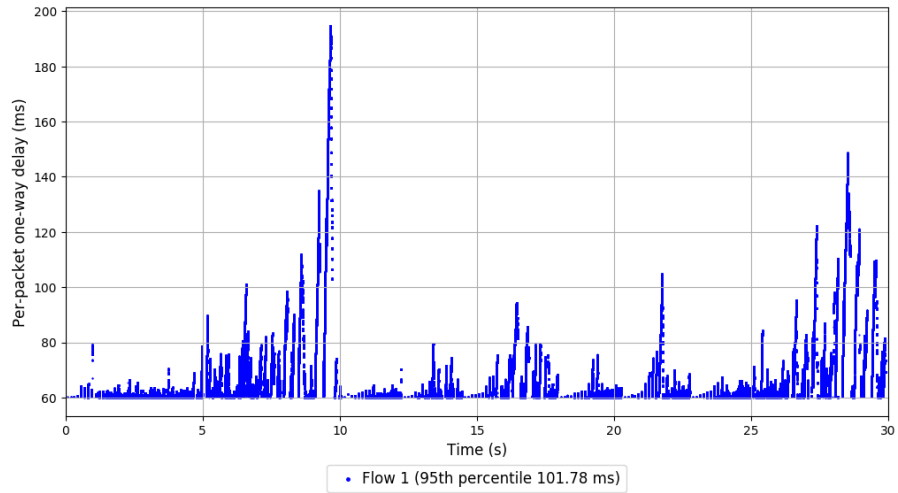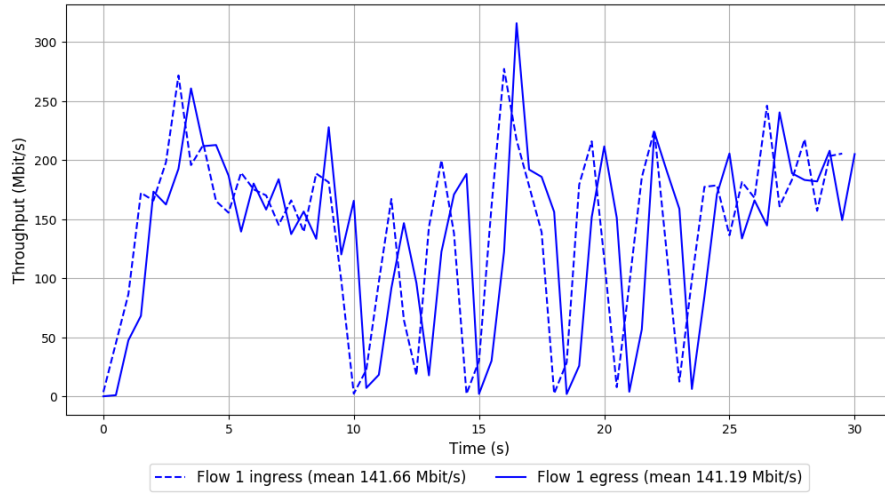
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-06-27 12:08:26
End at: 2019-06-27 12:08:56
Local clock offset: -0.141 ms
Remote clock offset: -0.129 ms


# Below is generated by plot.py at 2019-06-27 15:37:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 141.19 Mbit/s
95th percentile per-packet one-way delay: 101.783 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 141.19 Mbit/s
95th percentile per-packet one-way delay: 101.783 ms
Loss rate: 0.70%
```

Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-06-27 12:39:39
End at: 2019-06-27 12:40:09
Local clock offset: -0.021 ms
Remote clock offset: 0.082 ms


# Below is generated by plot.py at 2019-06-27 15:37:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 194.69 Mbit/s
95th percentile per-packet one-way delay: 204.348 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 194.69 Mbit/s
95th percentile per-packet one-way delay: 204.348 ms
Loss rate: 0.75%
```
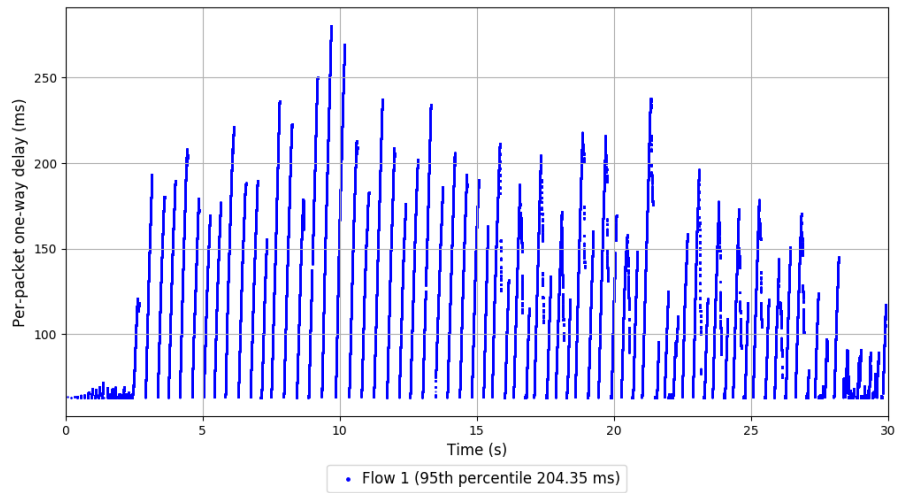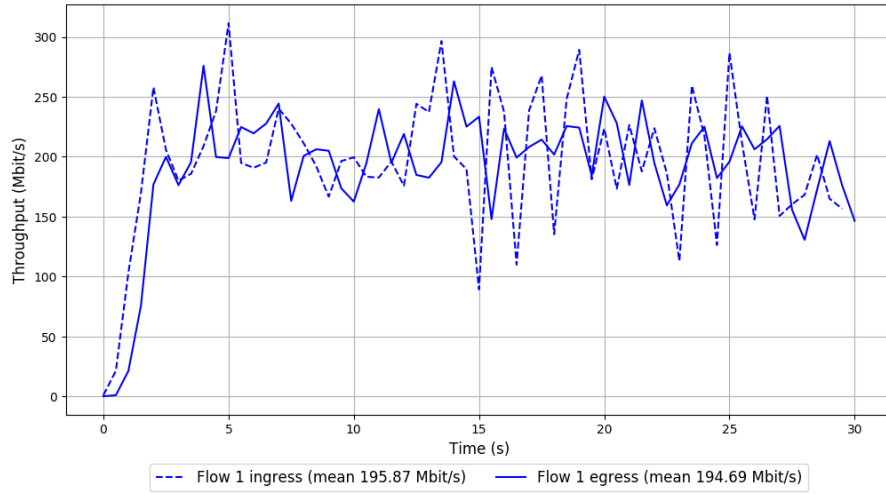
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2019-06-27 13:10:47
End at: 2019-06-27 13:11:17
Local clock offset: 0.009 ms
Remote clock offset: 0.01 ms


# Below is generated by plot.py at 2019-06-27 15:39:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 178.98 Mbit/s
95th percentile per-packet one-way delay: 217.770 ms
Loss rate: 3.71%
-- Flow 1:
Average throughput: 178.98 Mbit/s
95th percentile per-packet one-way delay: 217.770 ms
Loss rate: 3.71%
```
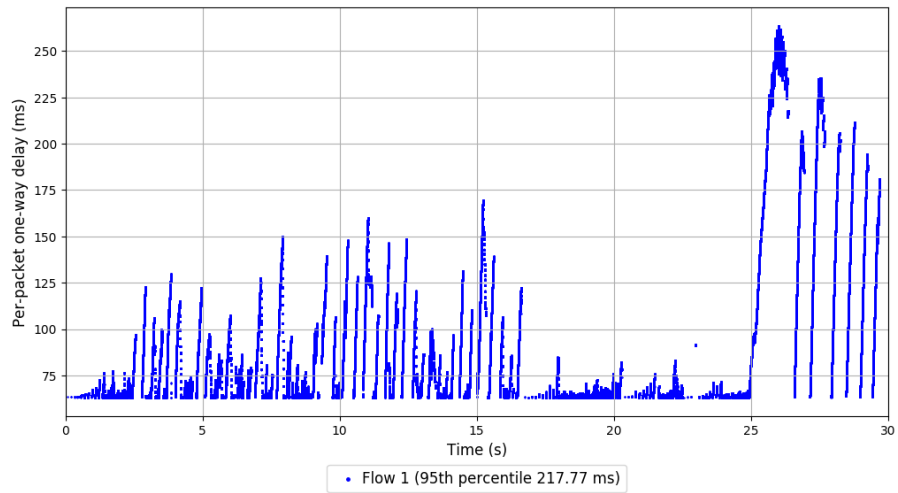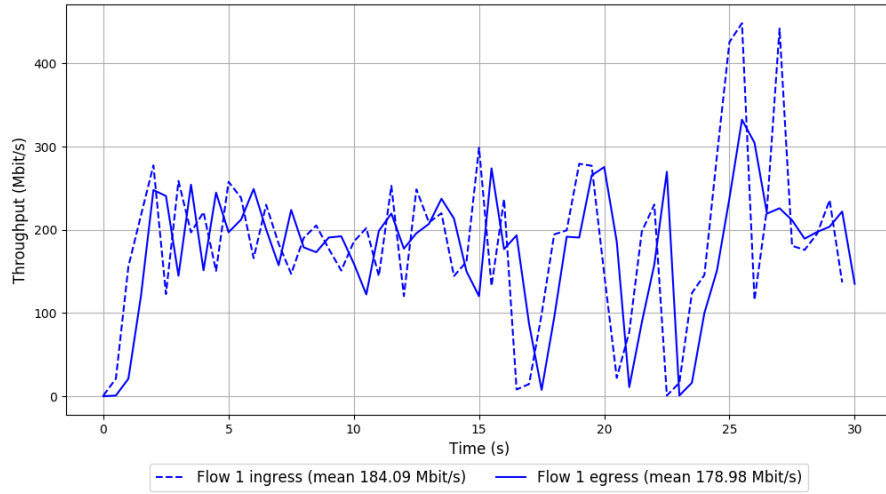
Run 4: Report of Verus — Data Link

Flow 1 ingress (mean 184.09 Mbit/s) —— Flow 1 egress (mean 178.98 Mbit/s)



• Flow 1 (95th percentile 217.77 ms)

```
Run 5: Statistics of Verus

Start at: 2019-06-27 13:42:21
End at: 2019-06-27 13:42:51
Local clock offset: -0.034 ms
Remote clock offset: -0.103 ms


# Below is generated by plot.py at 2019-06-27 15:39:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 160.04 Mbit/s
95th percentile per-packet one-way delay: 160.628 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 160.04 Mbit/s
95th percentile per-packet one-way delay: 160.628 ms
Loss rate: 0.74%
```

Run 5: Report of Verus — Data Link
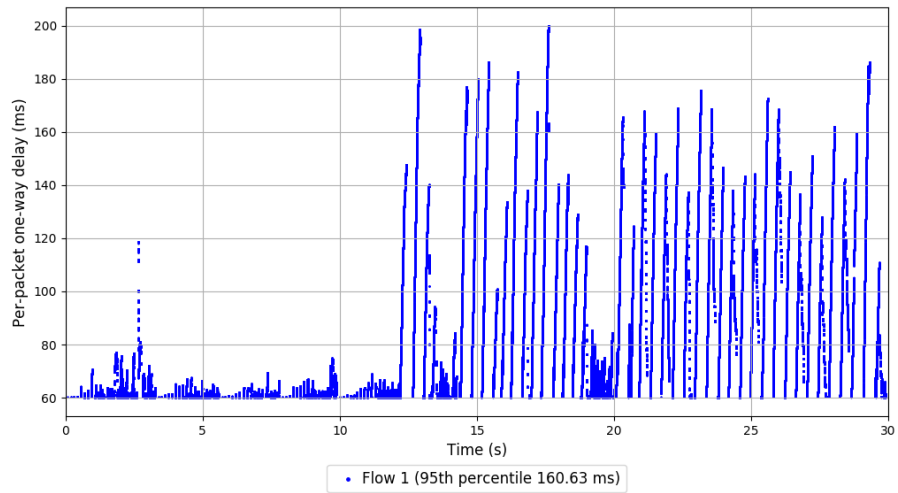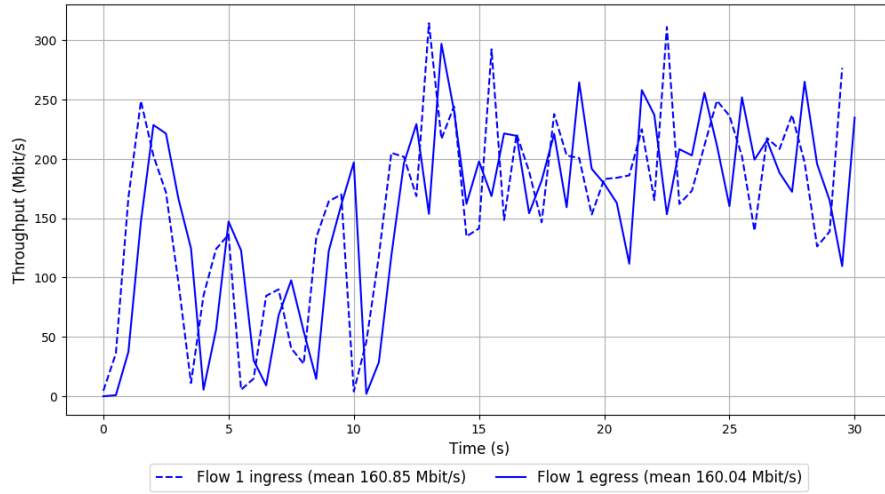
```
Run 1: Statistics of PCC-Vivace

Start at: 2019-06-27 11:43:36
End at: 2019-06-27 11:44:06
Local clock offset: -0.055 ms
Remote clock offset: -0.171 ms


# Below is generated by plot.py at 2019-06-27 15:39:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 264.43 Mbit/s
95th percentile per-packet one-way delay: 63.879 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 264.43 Mbit/s
95th percentile per-packet one-way delay: 63.879 ms
Loss rate: 0.58%
```
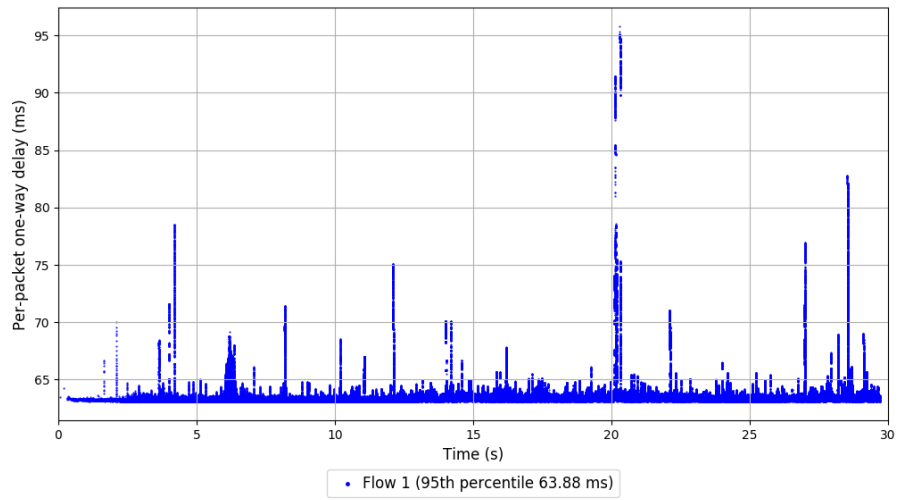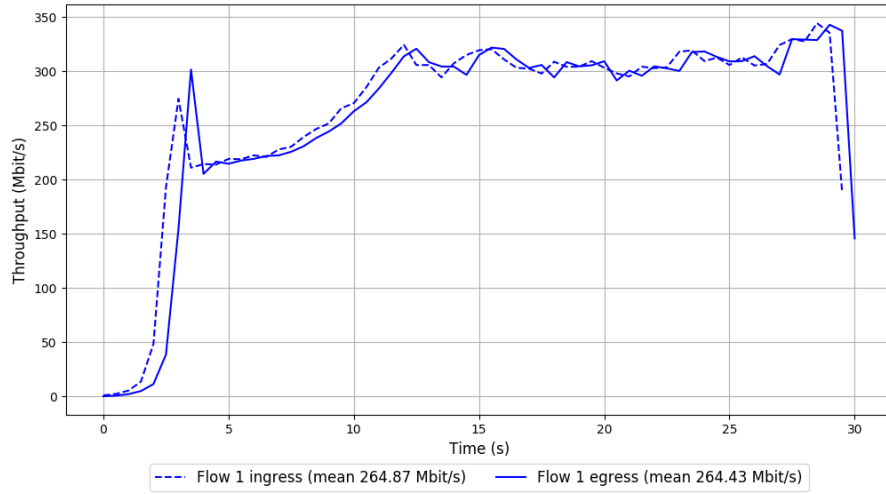
Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-06-27 12:15:08
End at: 2019-06-27 12:15:38
Local clock offset: -0.106 ms
Remote clock offset: -0.012 ms


# Below is generated by plot.py at 2019-06-27 15:39:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 109.49 Mbit/s
95th percentile per-packet one-way delay: 59.999 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 109.49 Mbit/s
95th percentile per-packet one-way delay: 59.999 ms
Loss rate: 0.75%
```
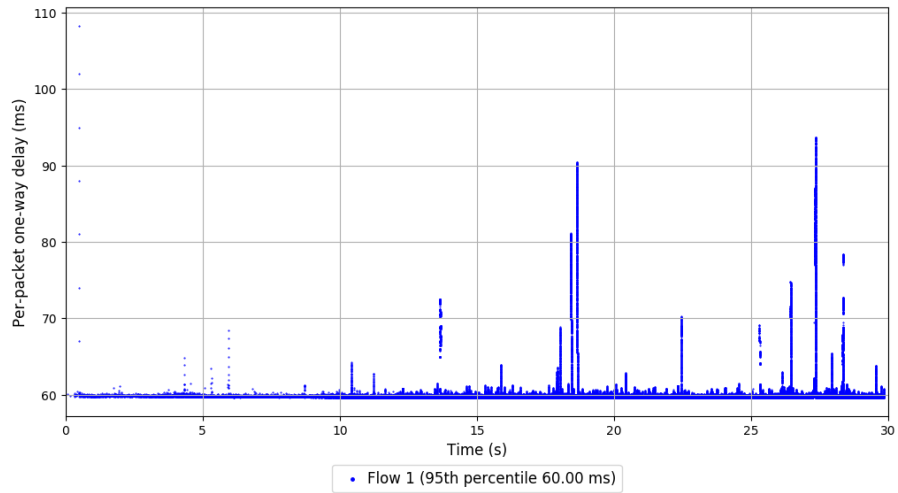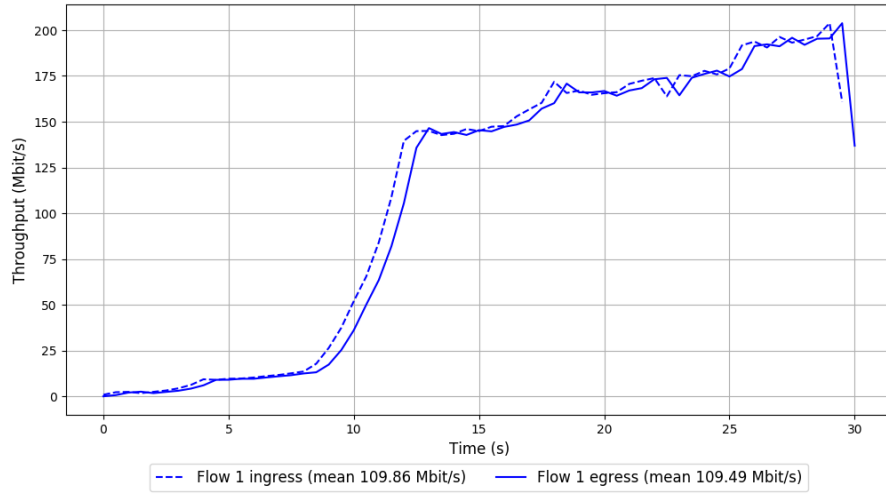
Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-06-27 12:46:23
End at: 2019-06-27 12:46:53
Local clock offset: -0.039 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2019-06-27 15:40:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 324.23 Mbit/s
95th percentile per-packet one-way delay: 64.435 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 324.23 Mbit/s
95th percentile per-packet one-way delay: 64.435 ms
Loss rate: 0.57%
```
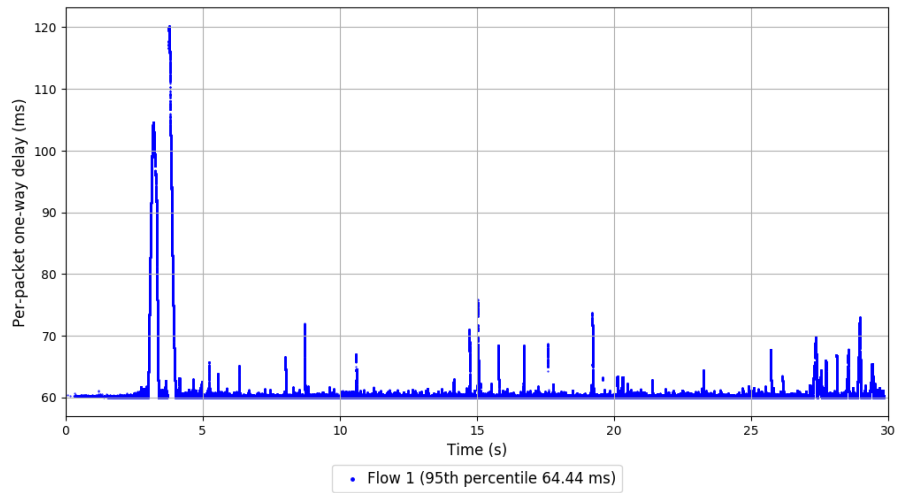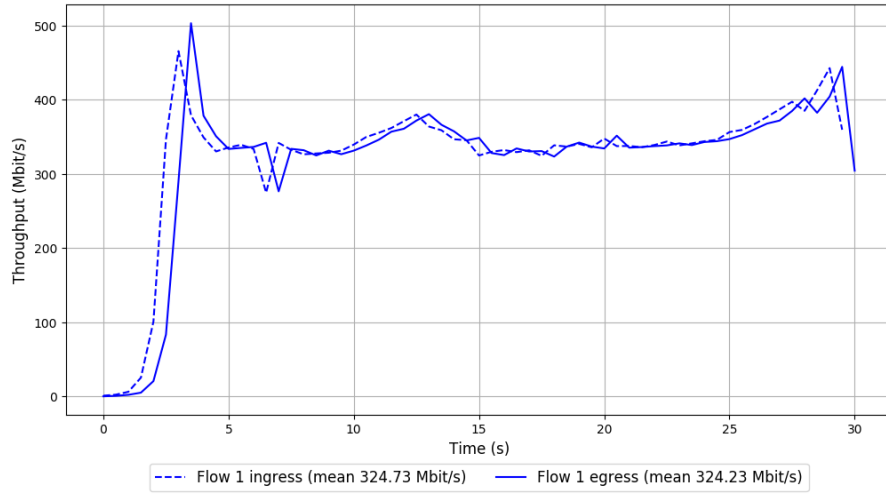
Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 324.73 Mbit/s)   Flow 1 egress (mean 324.23 Mbit/s)

Flow 1 (95th percentile 64.44 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-06-27 13:17:30
End at: 2019-06-27 13:18:00
Local clock offset: 0.006 ms
Remote clock offset: 0.457 ms


# Below is generated by plot.py at 2019-06-27 15:40:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 278.97 Mbit/s
95th percentile per-packet one-way delay: 63.545 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 278.97 Mbit/s
95th percentile per-packet one-way delay: 63.545 ms
Loss rate: 0.56%
```
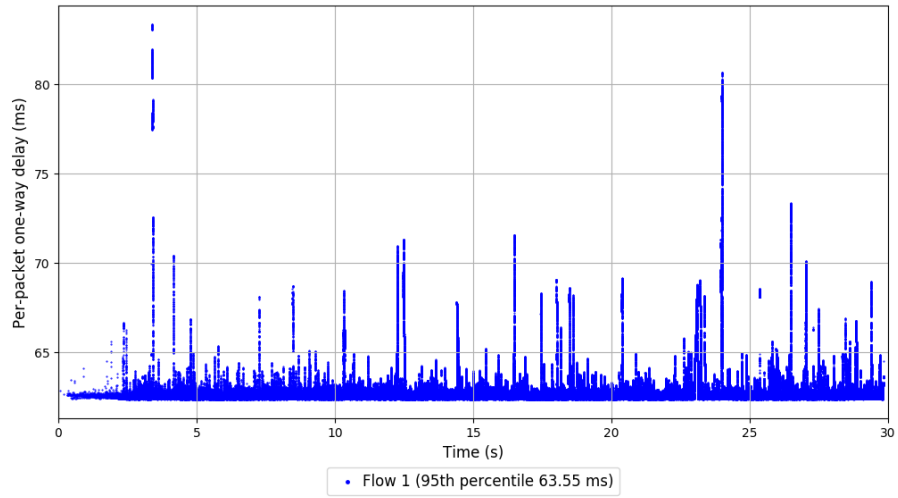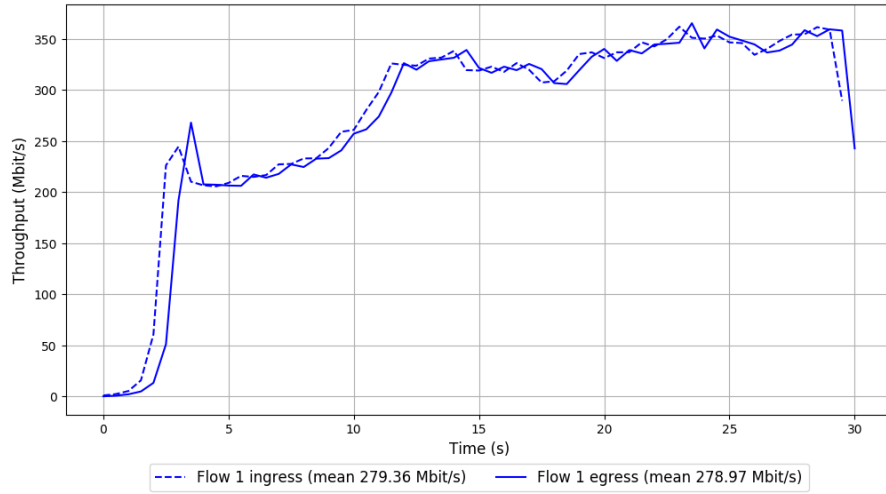
Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 279.36 Mbit/s) ---- Flow 1 egress (mean 278.97 Mbit/s)

• Flow 1 (95th percentile 63.55 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-06-27 13:49:04
End at: 2019-06-27 13:49:34
Local clock offset: -0.042 ms
Remote clock offset: -0.185 ms


# Below is generated by plot.py at 2019-06-27 15:40:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 337.81 Mbit/s
95th percentile per-packet one-way delay: 66.083 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 337.81 Mbit/s
95th percentile per-packet one-way delay: 66.083 ms
Loss rate: 0.39%
```
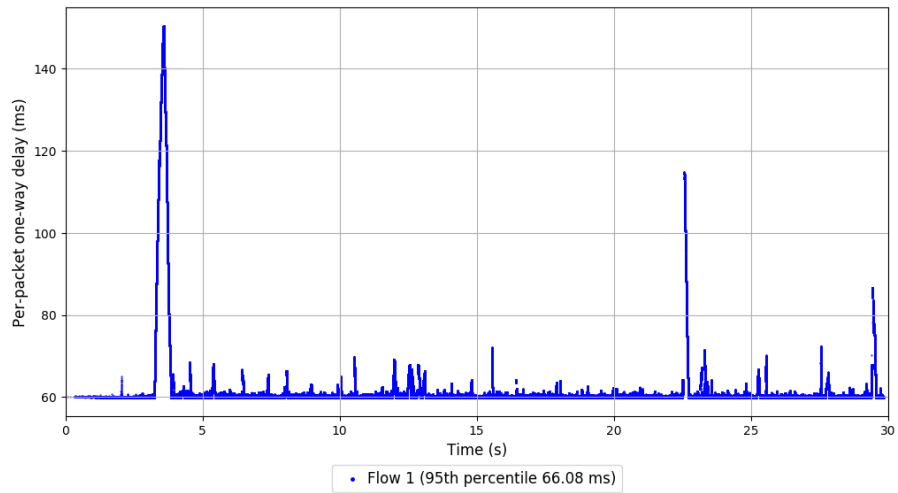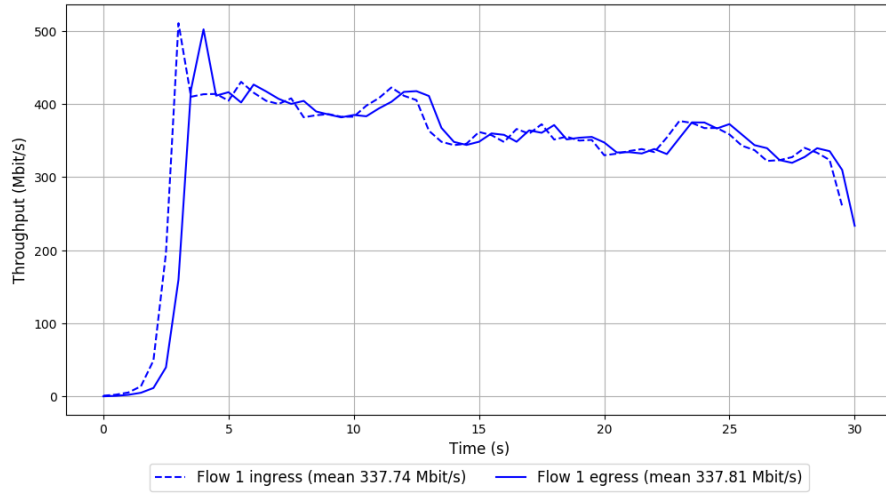
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 337.74 Mbit/s)   Flow 1 egress (mean 337.81 Mbit/s)

Flow 1 (95th percentile 66.08 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2019-06-27 11:42:28
End at: 2019-06-27 11:42:58
Local clock offset: -0.046 ms
Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2019-06-27 15:40:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 63.281 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 63.281 ms
Loss rate: 0.66%
```
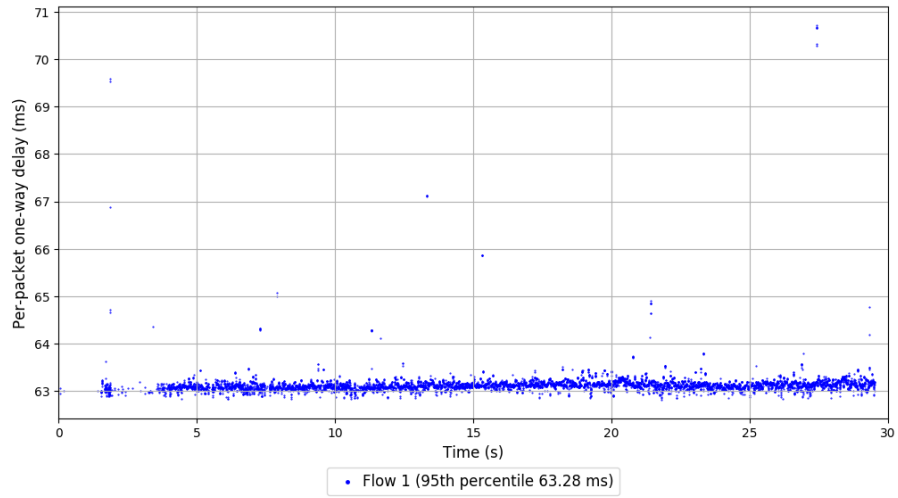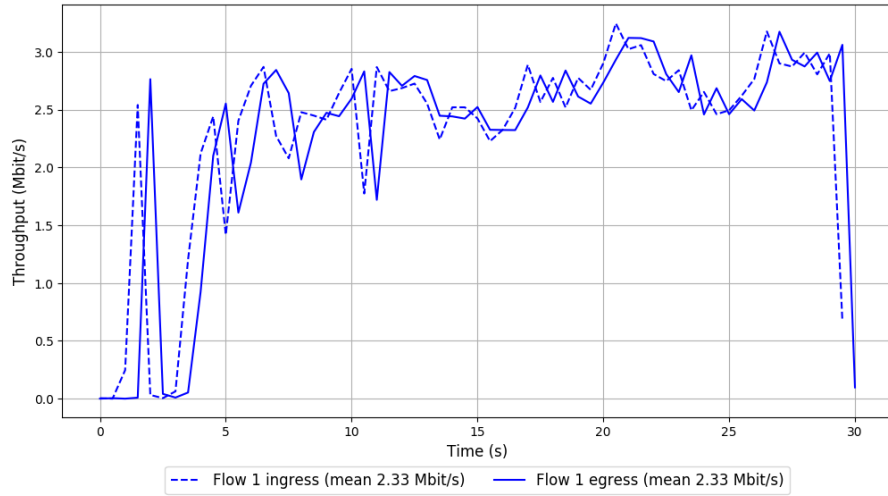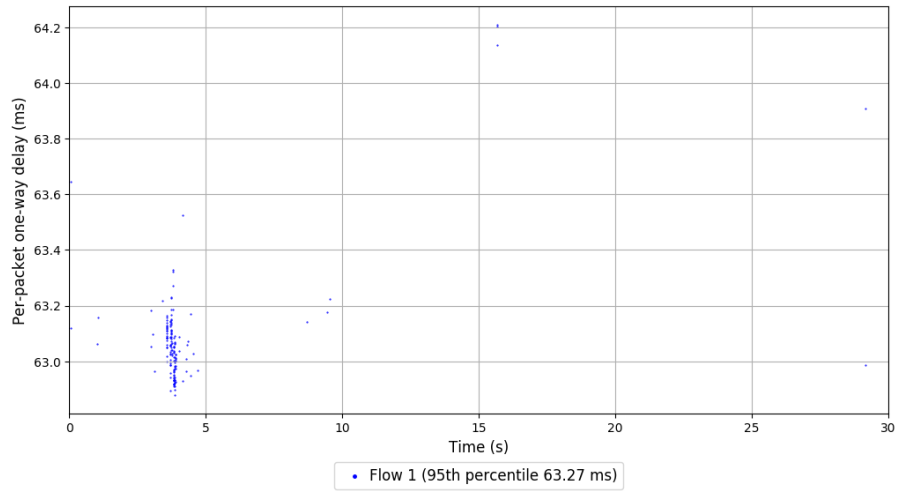
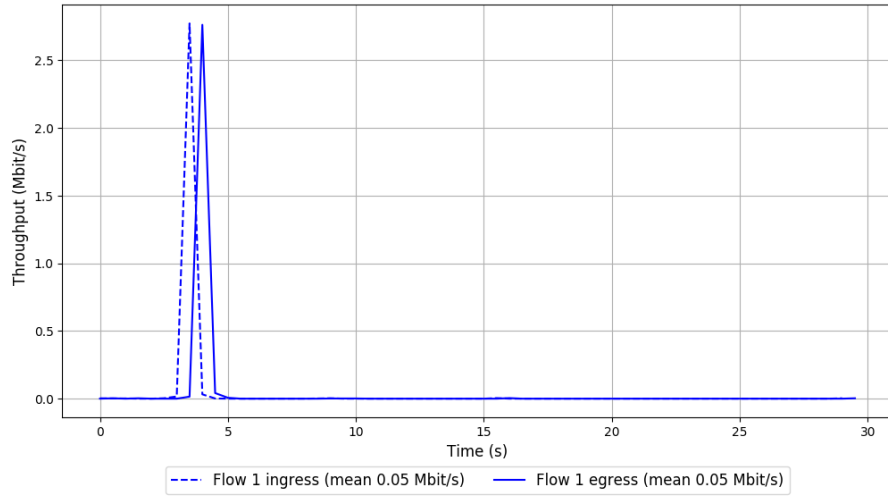Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-06-27 12:14:00
End at: 2019-06-27 12:14:30
Local clock offset: -0.119 ms
Remote clock offset: -0.141 ms


# Below is generated by plot.py at 2019-06-27 15:40:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.270 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.270 ms
Loss rate: 0.00%
```

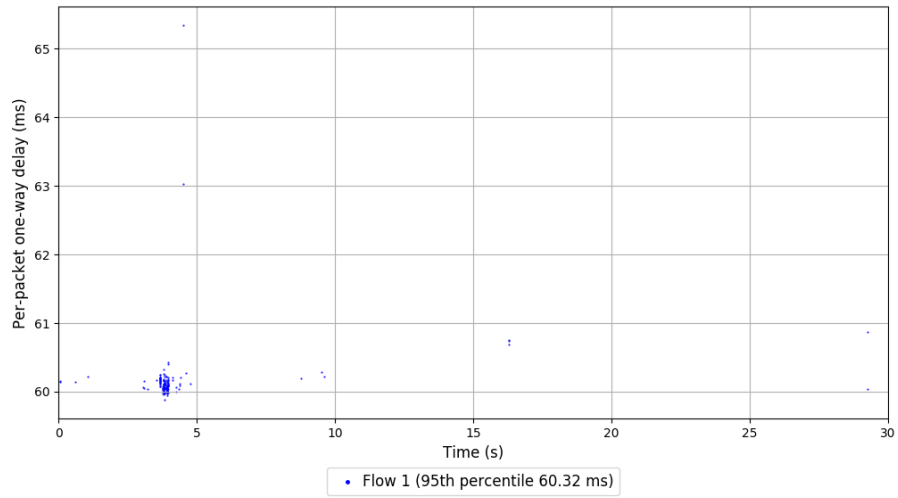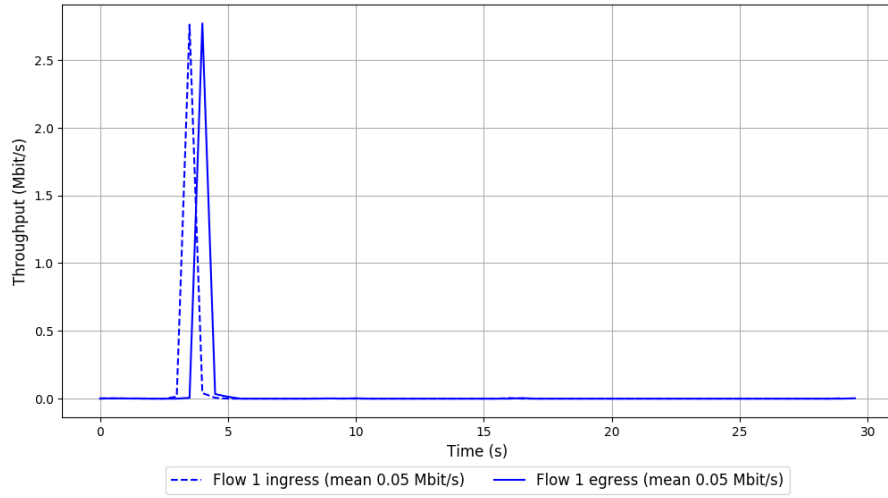Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-06-27 12:45:15
End at: 2019-06-27 12:45:45
Local clock offset: -0.031 ms
Remote clock offset: -0.103 ms


# Below is generated by plot.py at 2019-06-27 15:40:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.319 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.319 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-06-27 13:16:22
End at: 2019-06-27 13:16:52
Local clock offset: -0.013 ms
Remote clock offset: 0.444 ms


# Below is generated by plot.py at 2019-06-27 15:40:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 59.591 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 59.591 ms
Loss rate: 0.00%
```
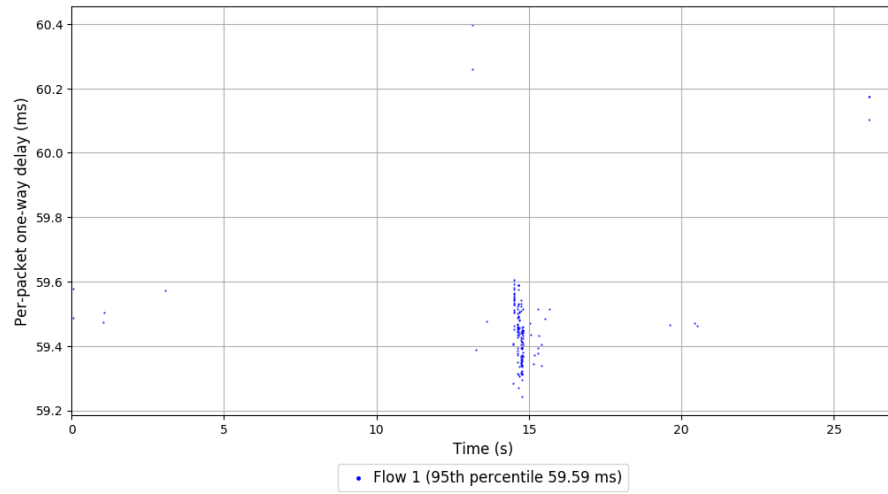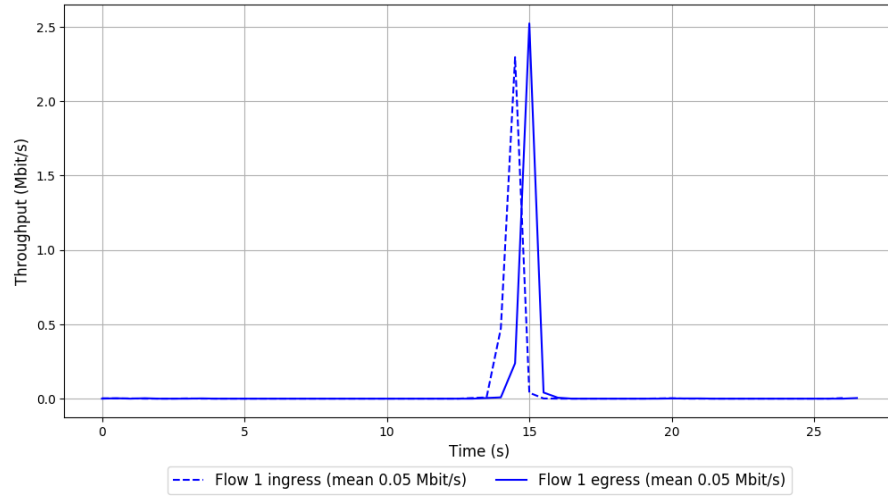
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-06-27 13:47:56
End at: 2019-06-27 13:48:26
Local clock offset: -0.054 ms
Remote clock offset: -0.268 ms


# Below is generated by plot.py at 2019-06-27 15:40:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.495 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.495 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link