Pantheon Report

Generated at 2019-10-03 22:35:12 (UTC).

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

Repeated the test of 24 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.
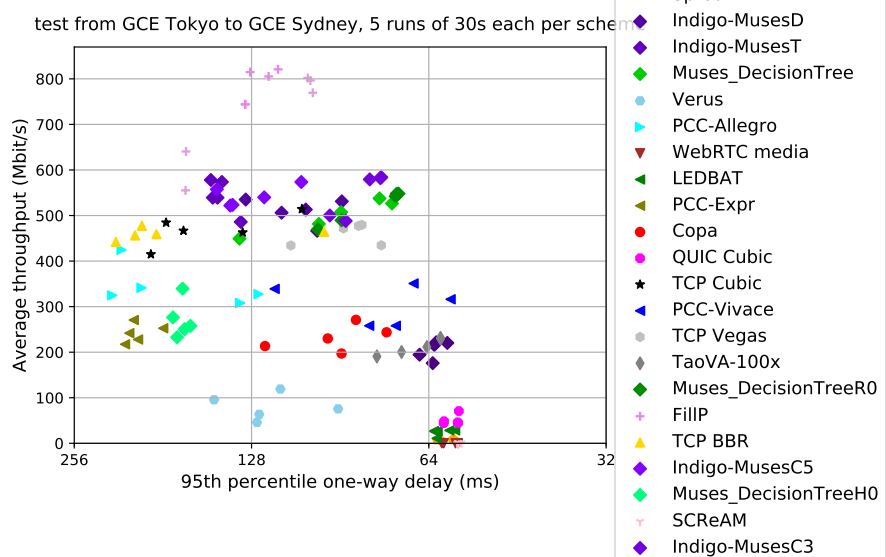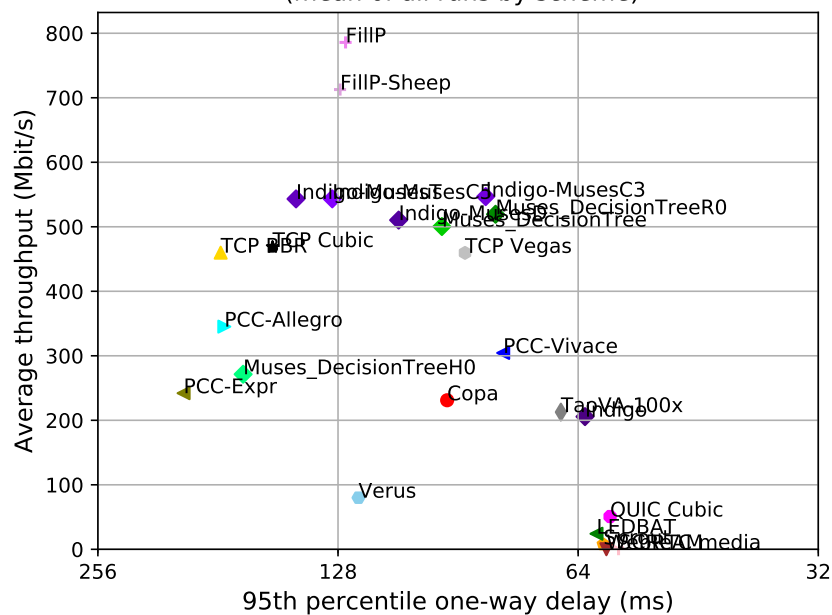
```
System info:
Linux 4.15.0-1044-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ de42328552b3776a75a932a94dfafd722537b0ec
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 @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
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 Sydney, 5 runs of 30s each per scheme
(mean of all runs by scheme)

test from GCE Tokyo to GCE Sydney, 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	459.88	179.60	1.43
Copa	5	231.06	93.41	0.38
TCP Cubic	5	468.59	154.63	0.64
FillP	5	785.81	125.24	3.34
FillP-Sheep	5	712.72	127.25	2.28
Indigo	5	205.69	62.75	0.46
Indigo-MusesC3	5	546.75	83.58	0.40
Indigo-MusesC5	5	543.25	130.14	0.63
Indigo-MusesD	5	510.39	107.45	0.45
Indigo-MusesT	5	543.20	144.50	0.57
LEDBAT	5	24.16	60.70	0.72
Muses_DecisionTree	5	500.38	94.84	0.38
Muses_DecisionTreeH0	5	271.39	168.33	7.50
Muses_DecisionTreeR0	5	519.38	81.24	0.44
PCC-Allegro	5	345.19	177.72	3.47
PCC-Expr	5	242.00	199.91	4.69
QUIC Cubic	5	50.82	58.37	0.67
SCReAM	5	0.22	56.96	0.38
Sprout	5	7.67	59.51	0.35
TaoVA-100x	5	212.70	67.27	0.45
TCP Vegas	5	459.51	88.72	0.42
Verus	5	80.00	120.66	0.45
PCC-Vivace	5	304.41	79.47	0.45
WebRTC media	4	0.05	58.99	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2019-10-03 17:53:28
End at: 2019-10-03 17:53:58
Local clock offset: 0.137 ms
Remote clock offset: 0.233 ms

# Below is generated by plot.py at 2019-10-03 20:32:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 477.51 Mbit/s
95th percentile per-packet one-way delay: 196.527 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 477.51 Mbit/s
95th percentile per-packet one-way delay: 196.527 ms
Loss rate: 2.05%
```
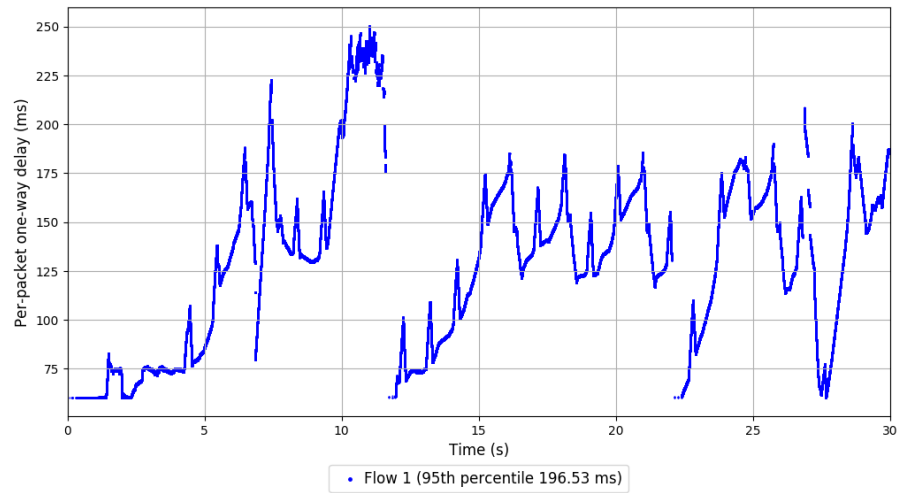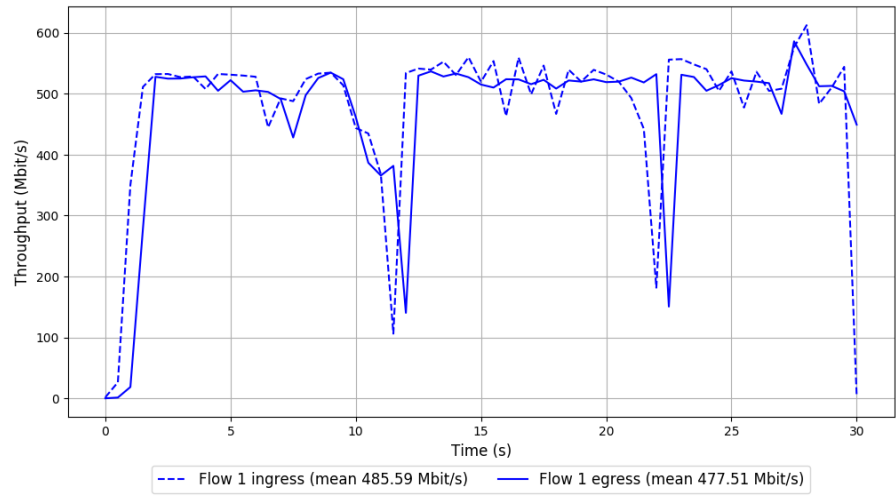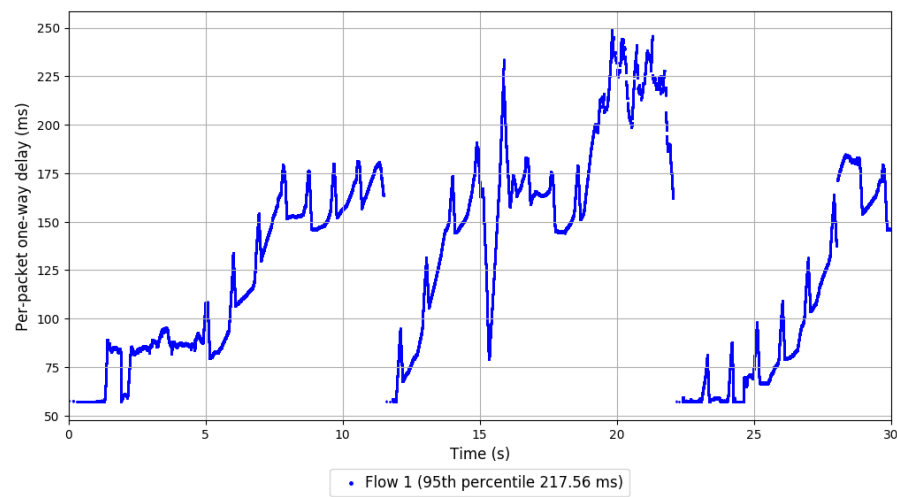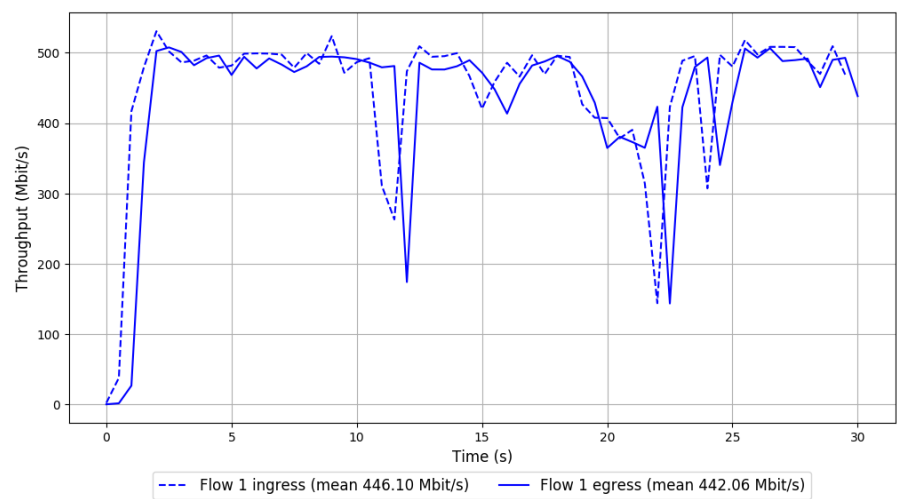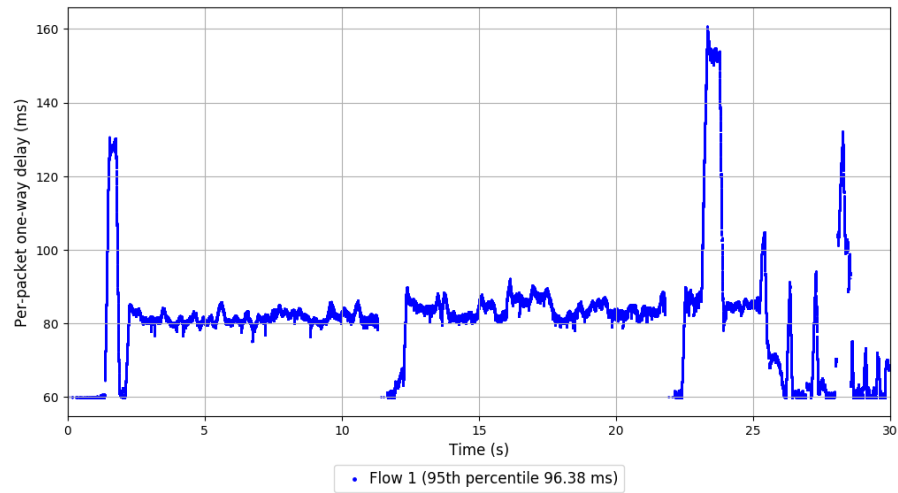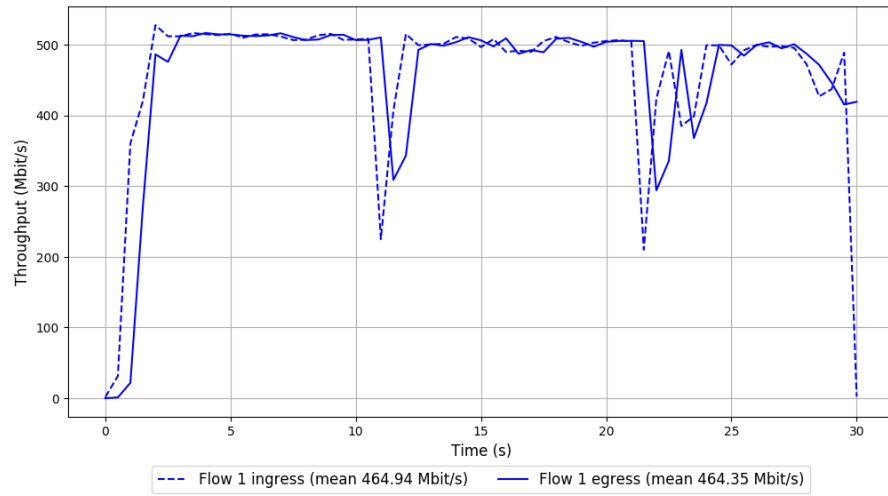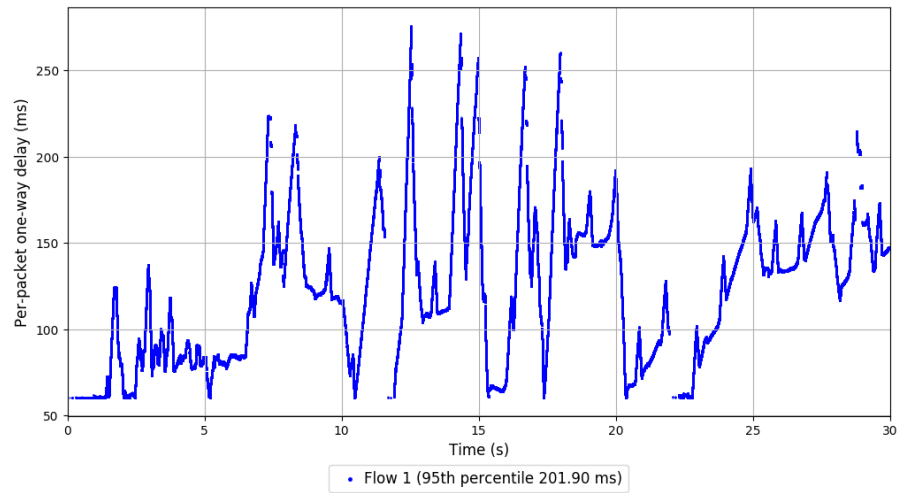
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2019-10-03 18:27:55
End at: 2019-10-03 18:28:25
Local clock offset: 0.202 ms
Remote clock offset: -0.016 ms


# Below is generated by plot.py at 2019-10-03 20:32:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 442.06 Mbit/s
95th percentile per-packet one-way delay: 217.556 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 442.06 Mbit/s
95th percentile per-packet one-way delay: 217.556 ms
Loss rate: 1.28%
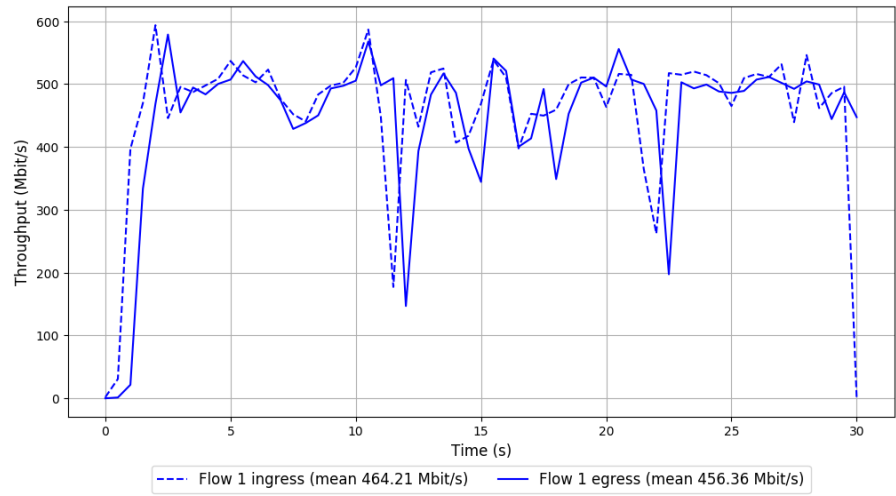```

Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2019-10-03 19:02:20
End at: 2019-10-03 19:02:50
Local clock offset: -0.289 ms
Remote clock offset: -0.109 ms

Below is generated by plot.py at 2019-10-03 20:32:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 464.35 Mbit/s
95th percentile per-packet one-way delay: 96.384 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 464.35 Mbit/s
95th percentile per-packet one-way delay: 96.384 ms
Loss rate: 0.52%
```
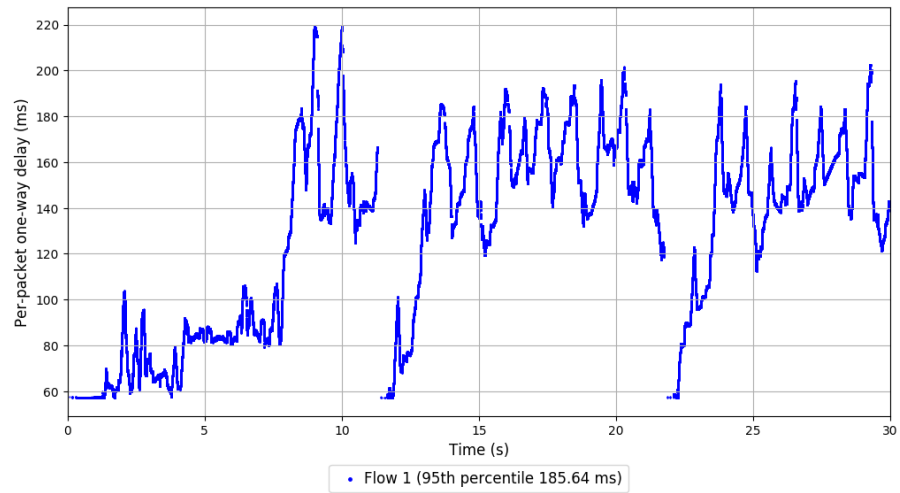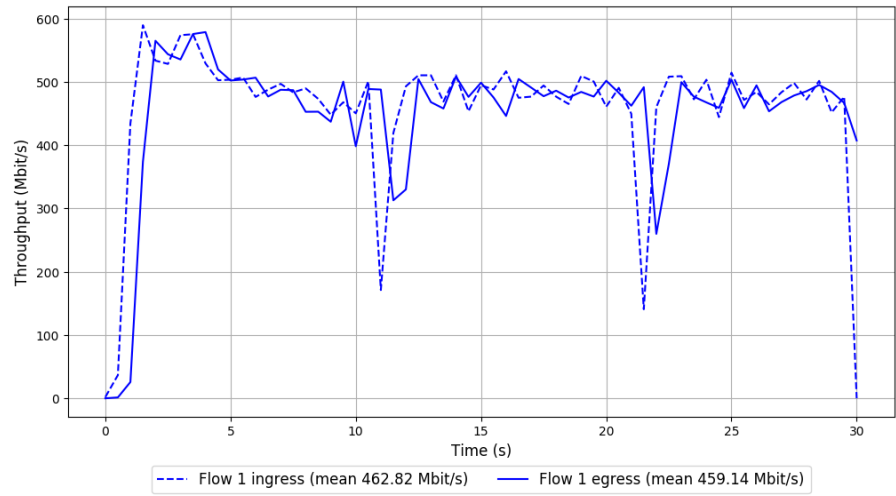
Run 3: Report of TCP BBR — Data Link



Flow 1 ingress (mean 464.94 Mbit/s)    Flow 1 egress (mean 464.35 Mbit/s)



Flow 1 (95th percentile 96.38 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2019-10-03 19:36:18
End at: 2019-10-03 19:36:48
Local clock offset: -0.038 ms
Remote clock offset: -0.257 ms

Below is generated by plot.py at 2019-10-03 20:32:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 456.36 Mbit/s
95th percentile per-packet one-way delay: 201.897 ms
Loss rate: 2.08%
-- Flow 1:
Average throughput: 456.36 Mbit/s
95th percentile per-packet one-way delay: 201.897 ms
Loss rate: 2.08%
```
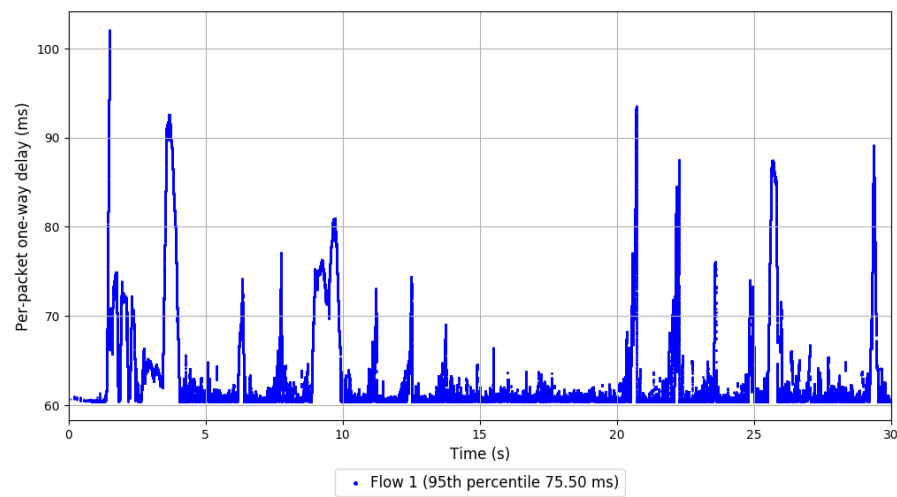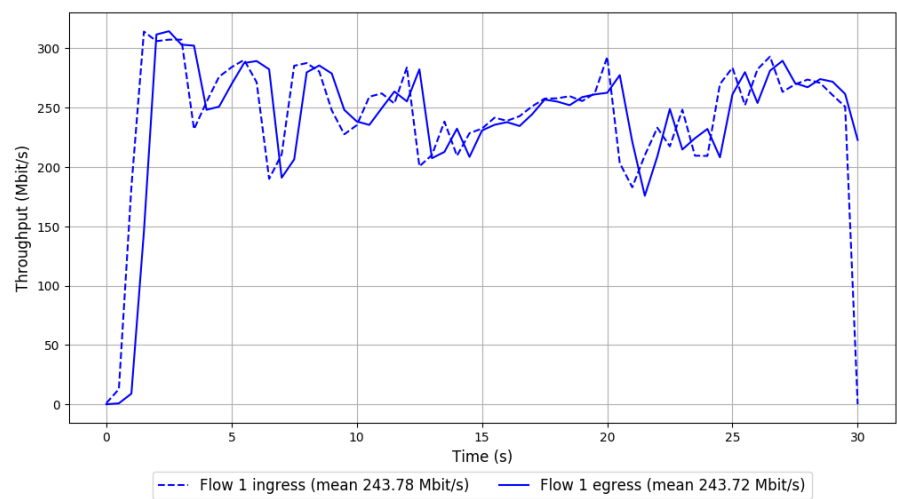
Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2019-10-03 20:10:37
End at: 2019-10-03 20:11:07
Local clock offset: -0.242 ms
Remote clock offset: -0.226 ms

Below is generated by plot.py at 2019-10-03 20:32:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 459.14 Mbit/s
95th percentile per-packet one-way delay: 185.641 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 459.14 Mbit/s
95th percentile per-packet one-way delay: 185.641 ms
Loss rate: 1.23%
```
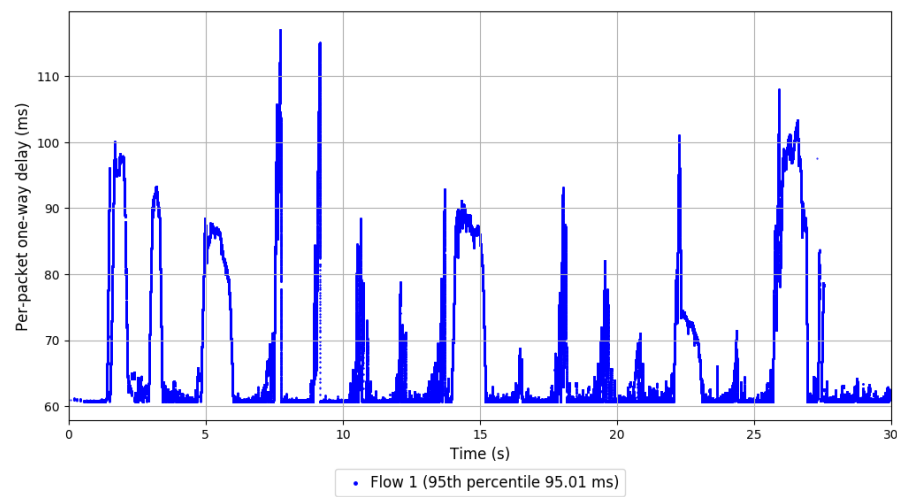
Run 5: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2019-10-03 17:36:21
End at: 2019-10-03 17:36:51
Local clock offset: 0.191 ms
Remote clock offset: -0.079 ms

Below is generated by plot.py at 2019-10-03 20:32:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 243.72 Mbit/s
95th percentile per-packet one-way delay: 75.499 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 243.72 Mbit/s
95th percentile per-packet one-way delay: 75.499 ms
Loss rate: 0.42%
```
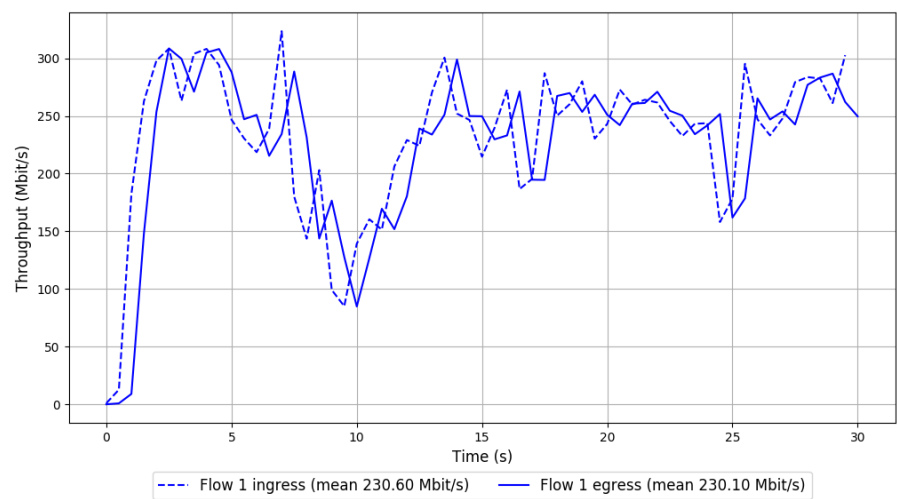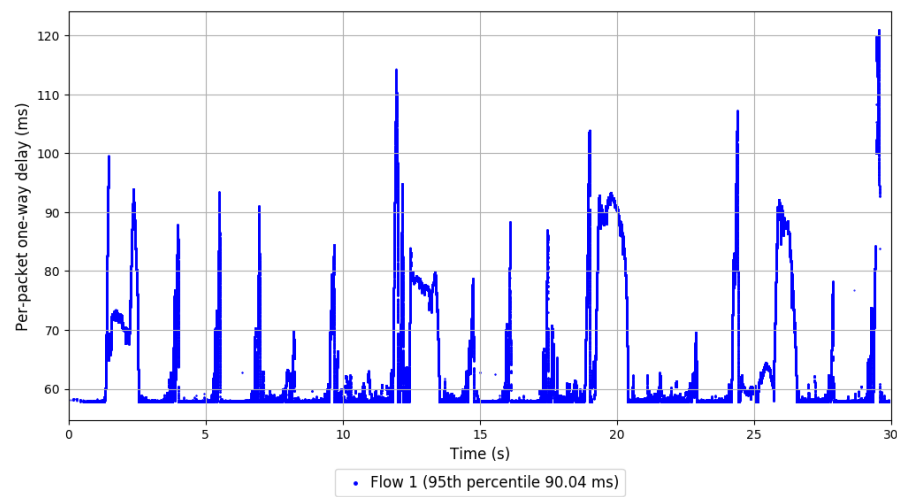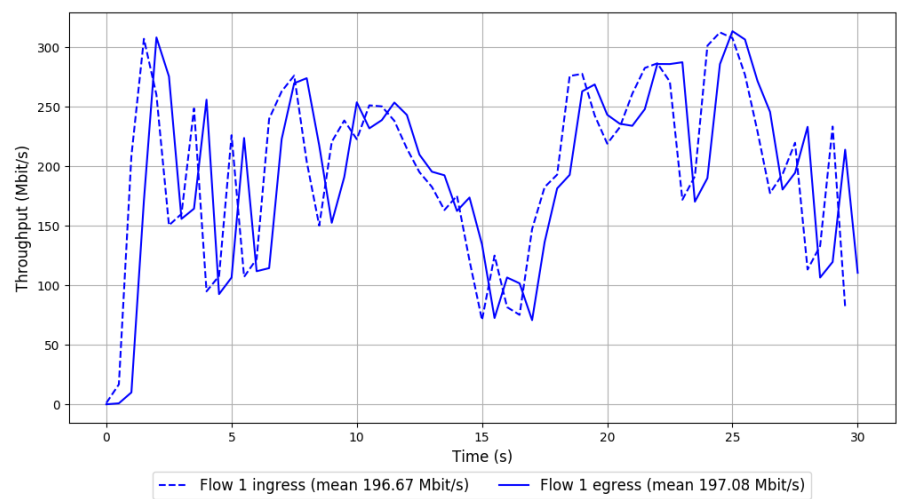
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2019-10-03 18:10:42
End at: 2019-10-03 18:11:12
Local clock offset: 0.121 ms
Remote clock offset: 0.048 ms

Below is generated by plot.py at 2019-10-03 20:32:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 230.10 Mbit/s
95th percentile per-packet one-way delay: 95.006 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 230.10 Mbit/s
95th percentile per-packet one-way delay: 95.006 ms
Loss rate: 0.61%
```
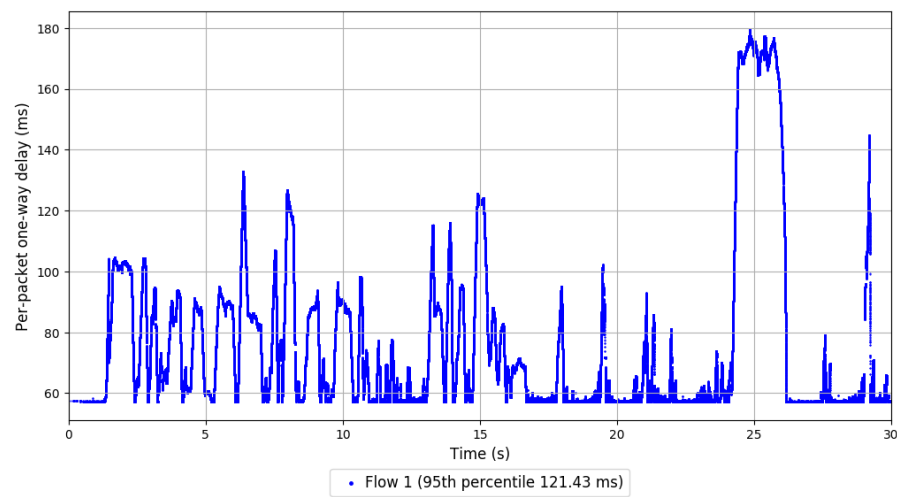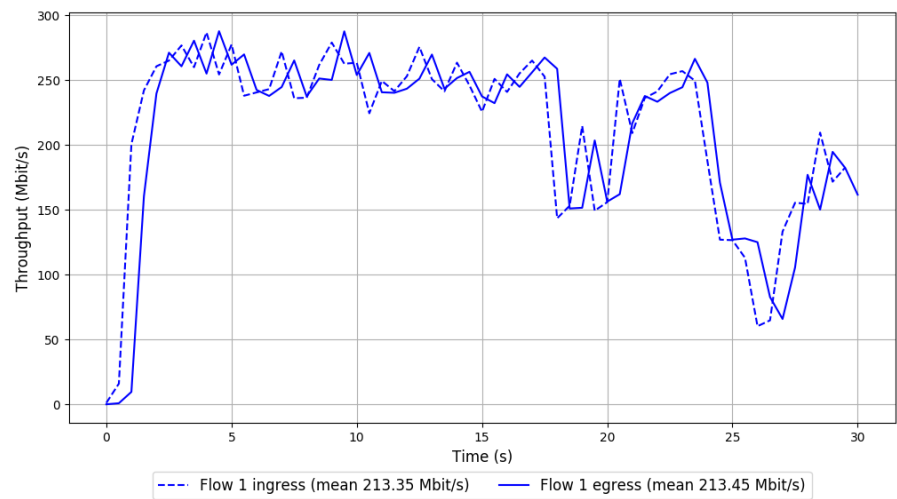
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2019-10-03 18:45:12
End at: 2019-10-03 18:45:42
Local clock offset: 0.246 ms
Remote clock offset: -0.664 ms


# Below is generated by plot.py at 2019-10-03 20:32:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 197.08 Mbit/s
95th percentile per-packet one-way delay: 90.038 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 197.08 Mbit/s
95th percentile per-packet one-way delay: 90.038 ms
Loss rate: 0.17%
```

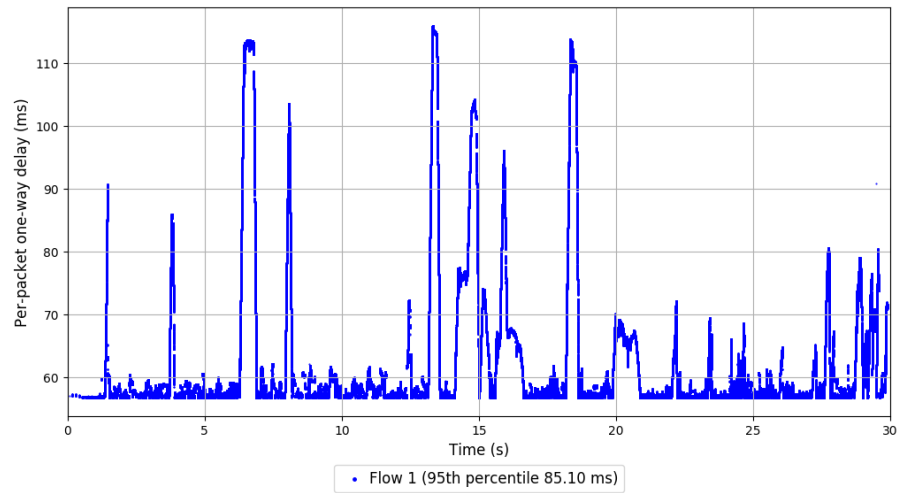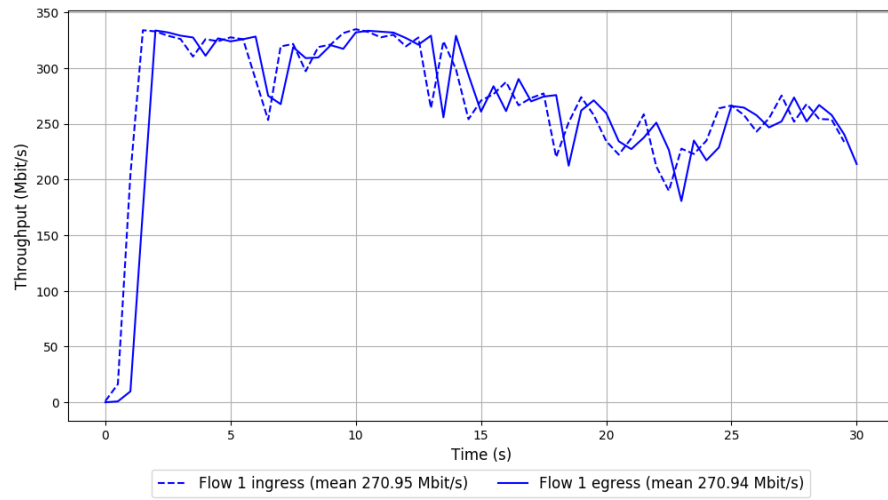Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2019-10-03 19:19:26
End at: 2019-10-03 19:19:56
Local clock offset: -0.181 ms
Remote clock offset: -0.387 ms


# Below is generated by plot.py at 2019-10-03 20:38:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.45 Mbit/s
95th percentile per-packet one-way delay: 121.431 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 213.45 Mbit/s
95th percentile per-packet one-way delay: 121.431 ms
Loss rate: 0.33%
```
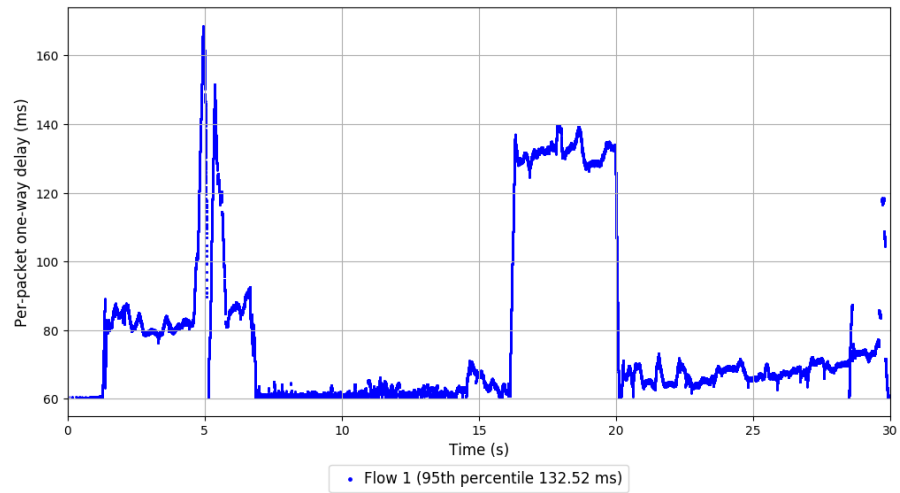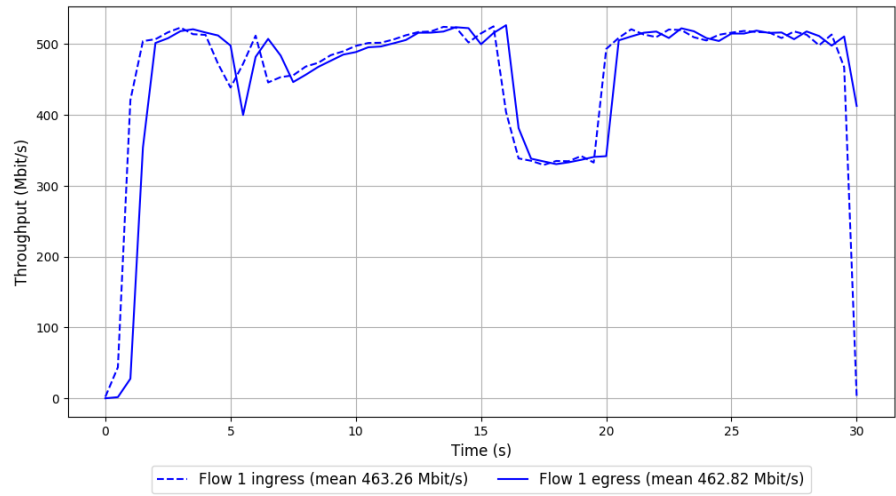
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2019-10-03 19:53:35
End at: 2019-10-03 19:54:05
Local clock offset: -0.41 ms
Remote clock offset: -0.189 ms


# Below is generated by plot.py at 2019-10-03 20:42:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 270.94 Mbit/s
95th percentile per-packet one-way delay: 85.101 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 270.94 Mbit/s
95th percentile per-packet one-way delay: 85.101 ms
Loss rate: 0.38%
```

Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 270.95 Mbit/s)   Flow 1 egress (mean 270.94 Mbit/s)

Flow 1 (95th percentile 85.10 ms)

```
Run 1: Statistics of TCP Cubic

Start at: 2019-10-03 17:42:54
End at: 2019-10-03 17:43:24
Local clock offset: -0.032 ms
Remote clock offset: -0.274 ms


# Below is generated by plot.py at 2019-10-03 20:42:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 462.82 Mbit/s
95th percentile per-packet one-way delay: 132.519 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 462.82 Mbit/s
95th percentile per-packet one-way delay: 132.519 ms
Loss rate: 0.49%
```

Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2019-10-03 18:17:16
End at: 2019-10-03 18:17:46
Local clock offset: -0.029 ms
Remote clock offset: -0.03 ms


# Below is generated by plot.py at 2019-10-03 20:42:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 484.45 Mbit/s
95th percentile per-packet one-way delay: 178.779 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 484.45 Mbit/s
95th percentile per-packet one-way delay: 178.779 ms
Loss rate: 0.54%
```
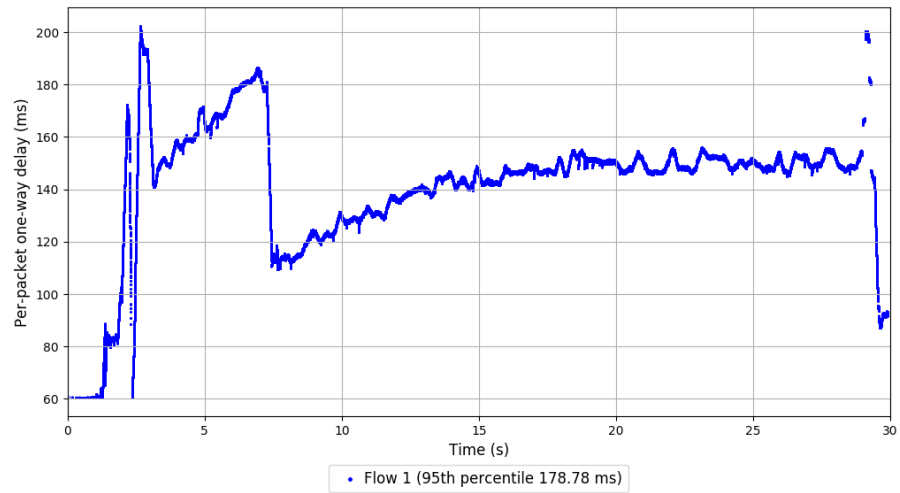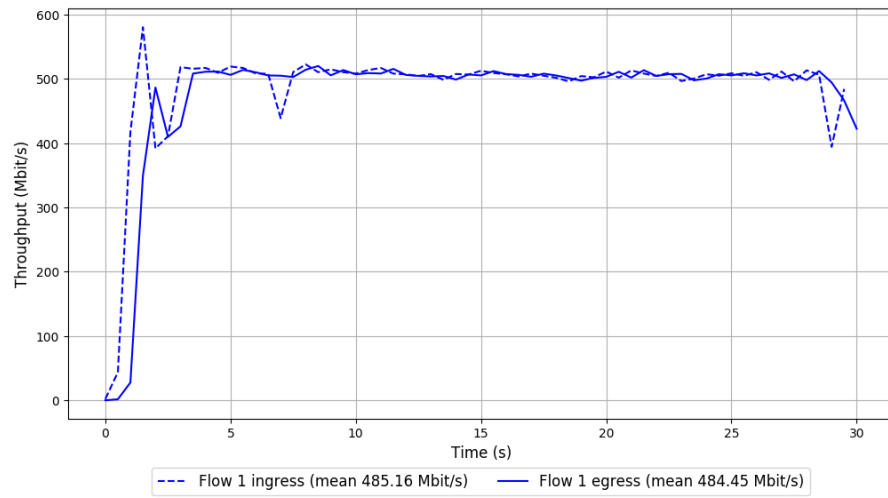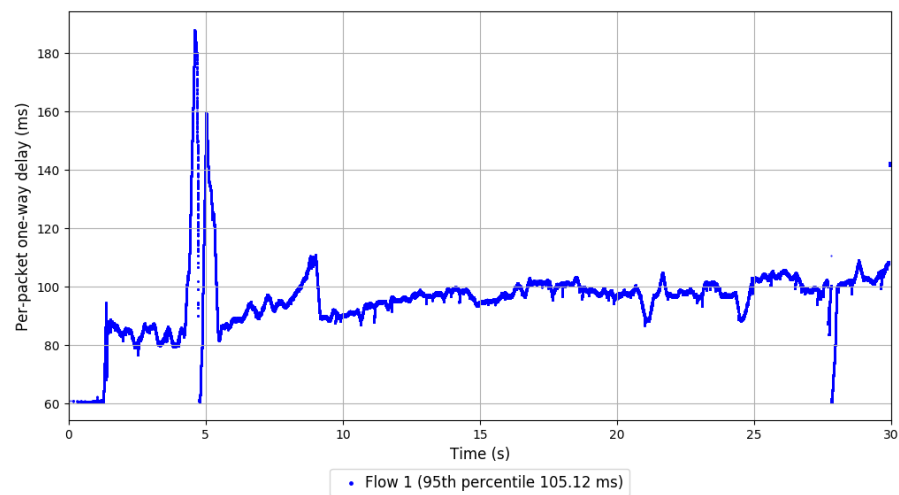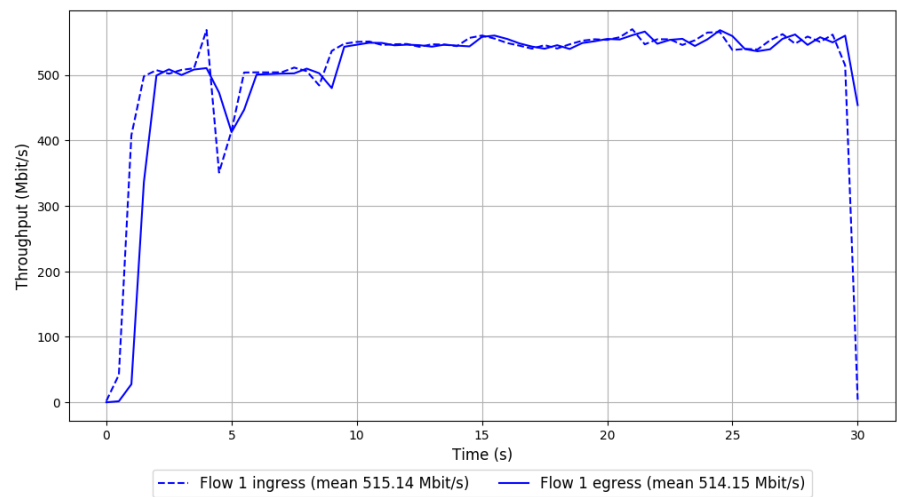
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 485.16 Mbit/s) —— Flow 1 egress (mean 484.45 Mbit/s)
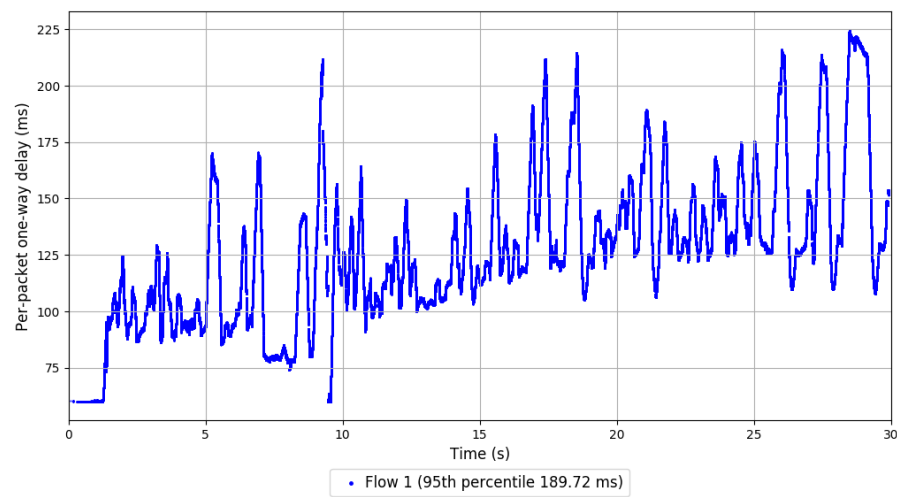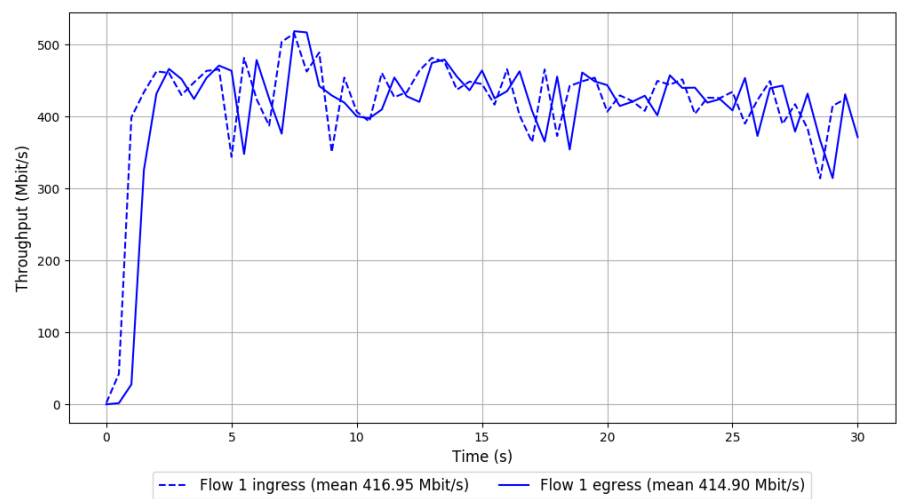

• Flow 1 (95th percentile 178.78 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2019-10-03 18:51:48
End at: 2019-10-03 18:52:18
Local clock offset: -0.015 ms
Remote clock offset: -0.027 ms


# Below is generated by plot.py at 2019-10-03 20:43:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 514.15 Mbit/s
95th percentile per-packet one-way delay: 105.118 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 514.15 Mbit/s
95th percentile per-packet one-way delay: 105.118 ms
Loss rate: 0.59%
```
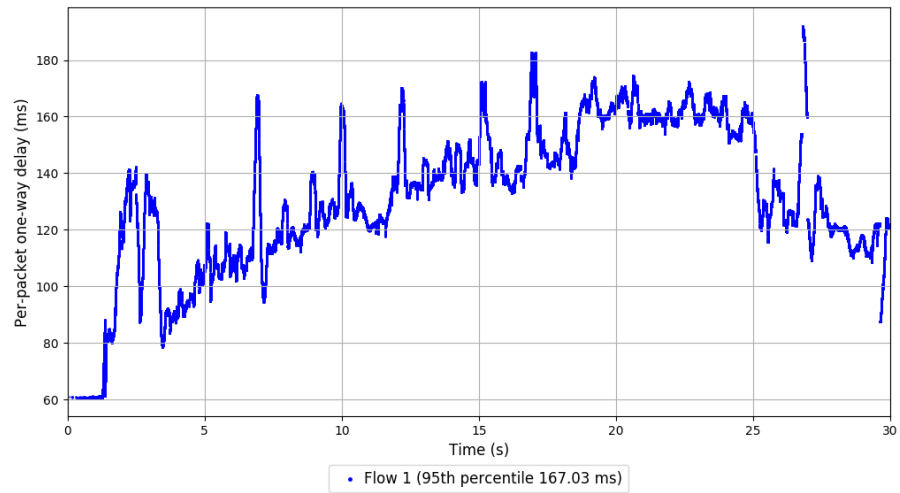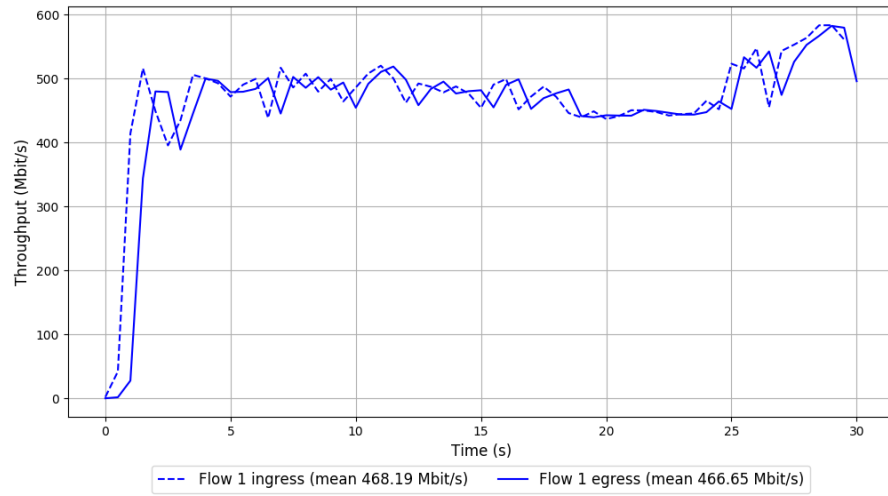
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 515.14 Mbit/s) — Flow 1 egress (mean 514.15 Mbit/s)

• Flow 1 (95th percentile 105.12 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2019-10-03 19:25:52
End at: 2019-10-03 19:26:22
Local clock offset: -0.26 ms
Remote clock offset: -0.035 ms


# Below is generated by plot.py at 2019-10-03 20:43:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 414.90 Mbit/s
95th percentile per-packet one-way delay: 189.719 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 414.90 Mbit/s
95th percentile per-packet one-way delay: 189.719 ms
Loss rate: 0.88%
```

Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2019-10-03 20:00:11
End at: 2019-10-03 20:00:41
Local clock offset: 0.364 ms
Remote clock offset: -0.072 ms


# Below is generated by plot.py at 2019-10-03 20:43:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 466.65 Mbit/s
95th percentile per-packet one-way delay: 167.027 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 466.65 Mbit/s
95th percentile per-packet one-way delay: 167.027 ms
Loss rate: 0.72%
```
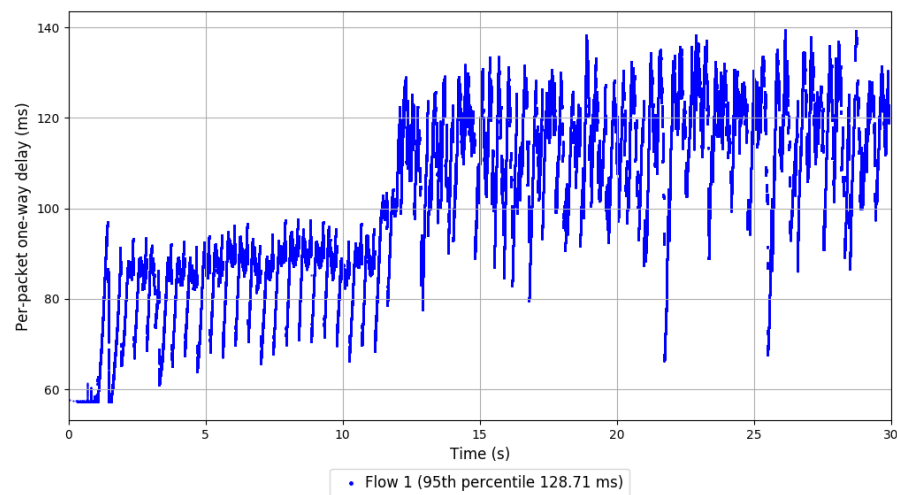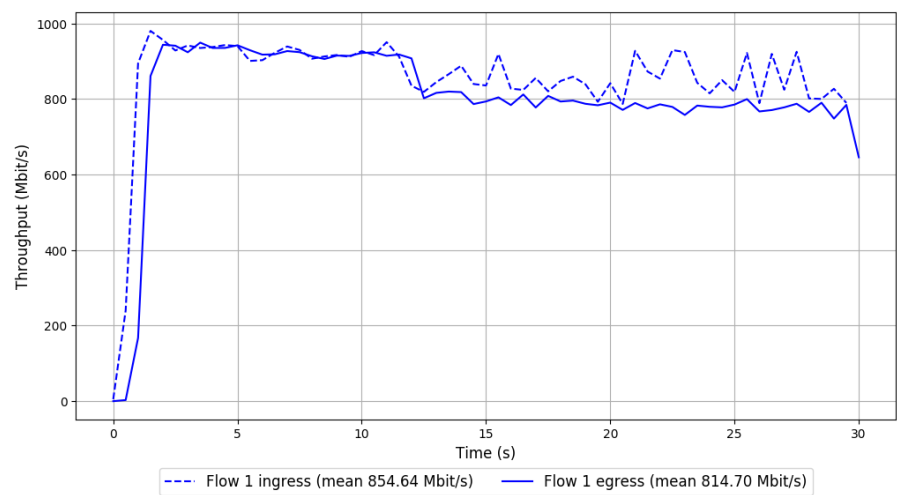
Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 468.19 Mbit/s) ———— Flow 1 egress (mean 466.65 Mbit/s)
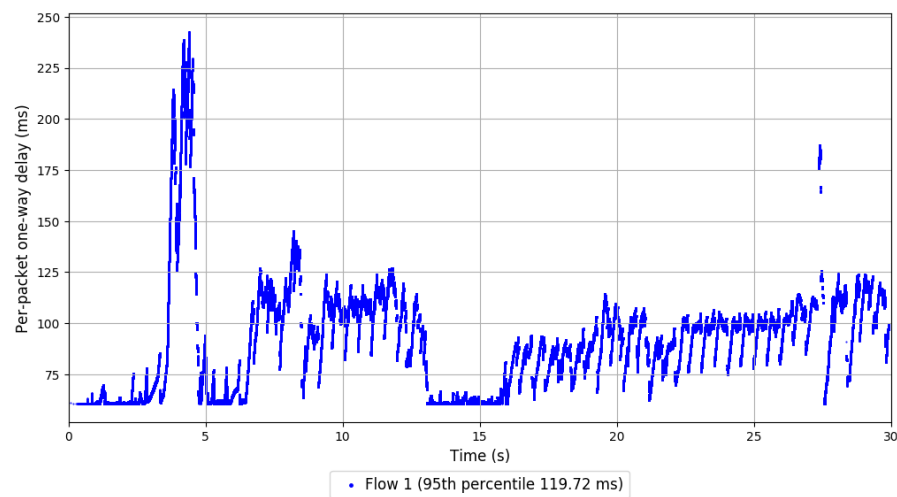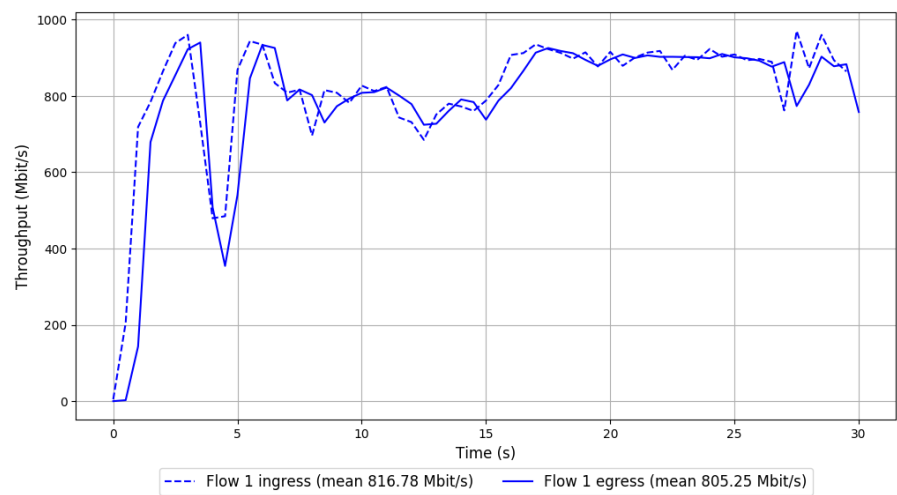

• Flow 1 (95th percentile 167.03 ms)

```
Run 1: Statistics of FillP

Start at: 2019-10-03 17:33:06
End at: 2019-10-03 17:33:36
Local clock offset: -0.021 ms
Remote clock offset: 0.034 ms


# Below is generated by plot.py at 2019-10-03 20:53:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 814.70 Mbit/s
95th percentile per-packet one-way delay: 128.714 ms
Loss rate: 5.04%
-- Flow 1:
Average throughput: 814.70 Mbit/s
95th percentile per-packet one-way delay: 128.714 ms
Loss rate: 5.04%
```

Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 854.64 Mbit/s)   Flow 1 egress (mean 814.70 Mbit/s)

Flow 1 (95th percentile 128.71 ms)

```
Run 2: Statistics of FillP

Start at: 2019-10-03 18:07:29
End at: 2019-10-03 18:08:00
Local clock offset: 0.203 ms
Remote clock offset: -0.017 ms


# Below is generated by plot.py at 2019-10-03 21:00:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 805.25 Mbit/s
95th percentile per-packet one-way delay: 119.718 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 805.25 Mbit/s
95th percentile per-packet one-way delay: 119.718 ms
Loss rate: 1.80%
```
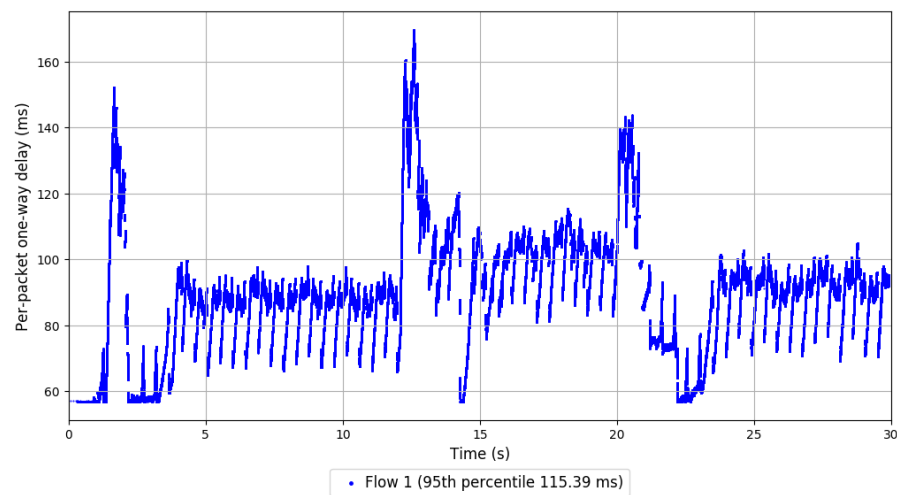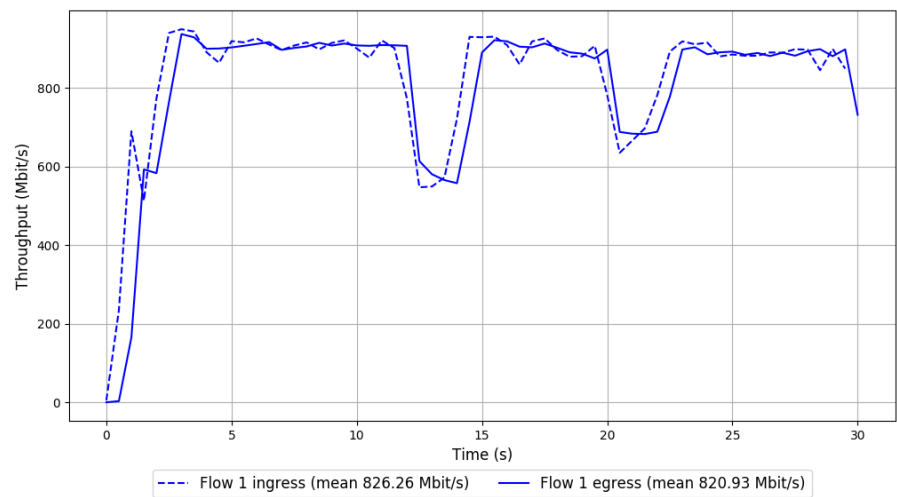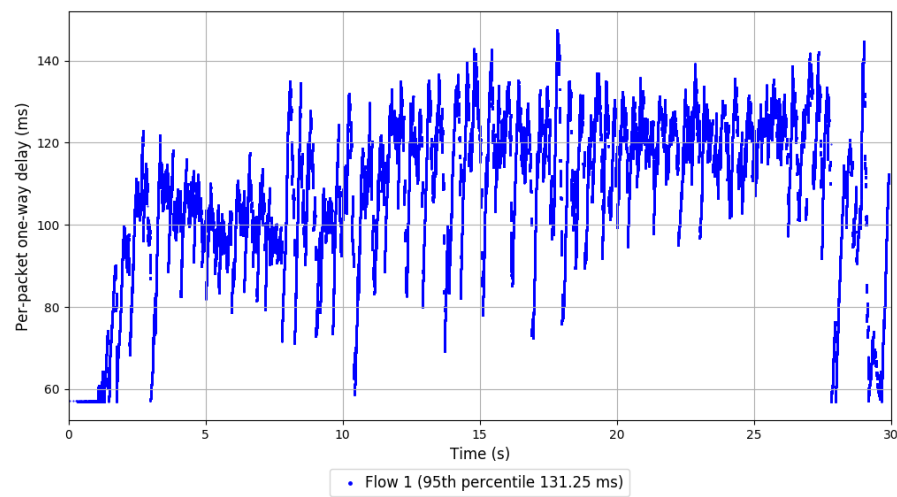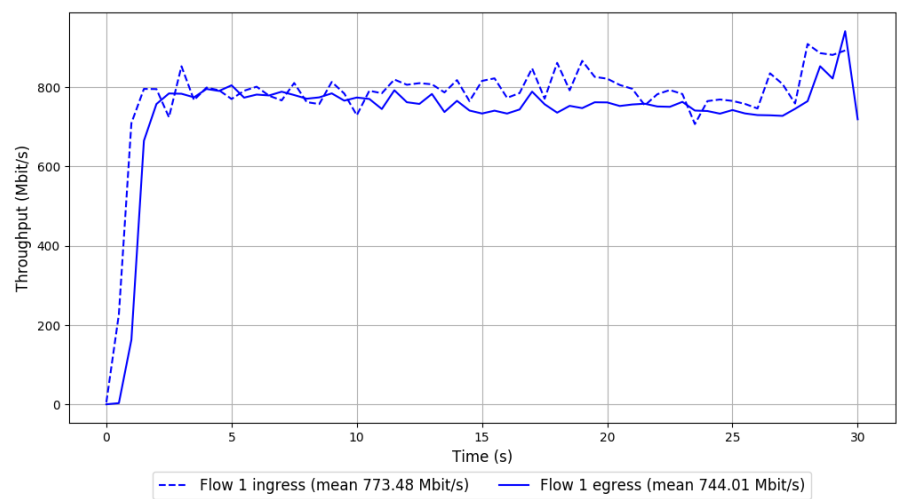
Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 816.78 Mbit/s)   Flow 1 egress (mean 805.25 Mbit/s)
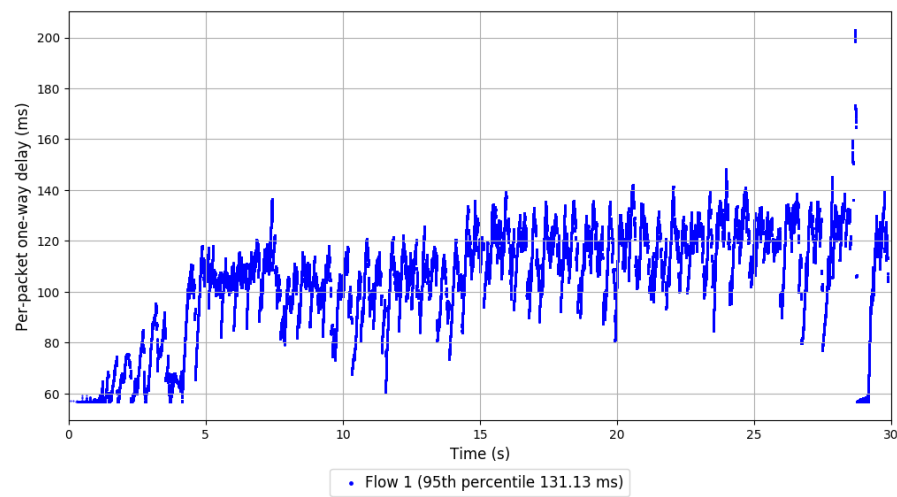

• Flow 1 (95th percentile 119.72 ms)

```
Run 3: Statistics of FillP

Start at: 2019-10-03 18:42:00
End at: 2019-10-03 18:42:30
Local clock offset: -0.094 ms
Remote clock offset: 0.099 ms


# Below is generated by plot.py at 2019-10-03 21:03:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 820.93 Mbit/s
95th percentile per-packet one-way delay: 115.387 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 820.93 Mbit/s
95th percentile per-packet one-way delay: 115.387 ms
Loss rate: 1.03%
```

Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 826.26 Mbit/s) — — — Flow 1 egress (mean 820.93 Mbit/s)

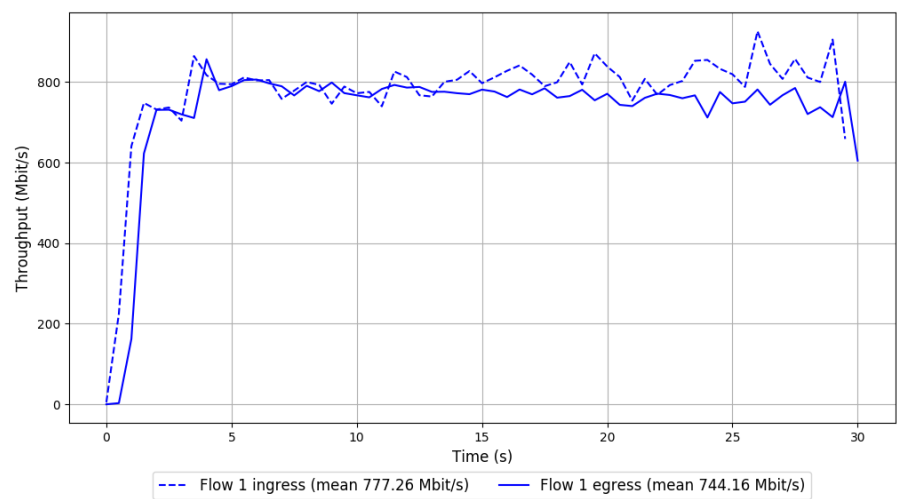• Flow 1 (95th percentile 115.39 ms)

```
Run 4: Statistics of FillP

Start at: 2019-10-03 19:16:16
End at: 2019-10-03 19:16:46
Local clock offset: -0.389 ms
Remote clock offset: -0.055 ms


# Below is generated by plot.py at 2019-10-03 21:03:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 744.01 Mbit/s
95th percentile per-packet one-way delay: 131.251 ms
Loss rate: 4.18%
-- Flow 1:
Average throughput: 744.01 Mbit/s
95th percentile per-packet one-way delay: 131.251 ms
Loss rate: 4.18%
```
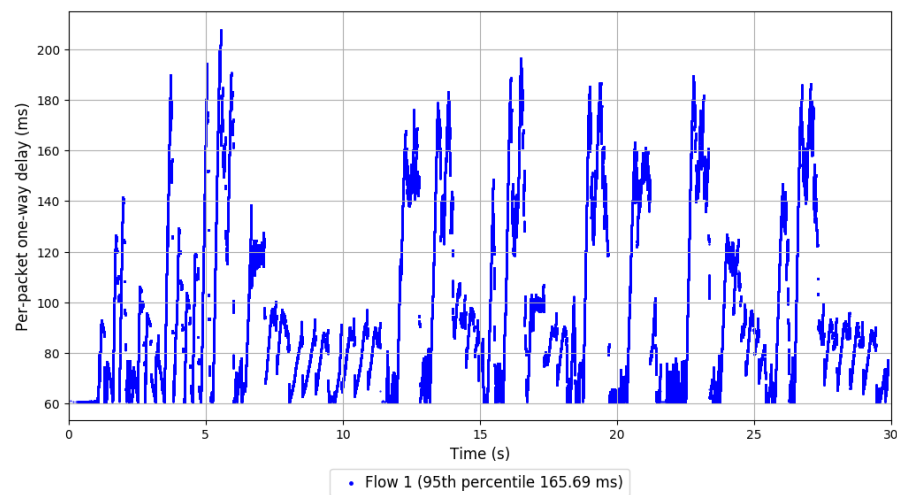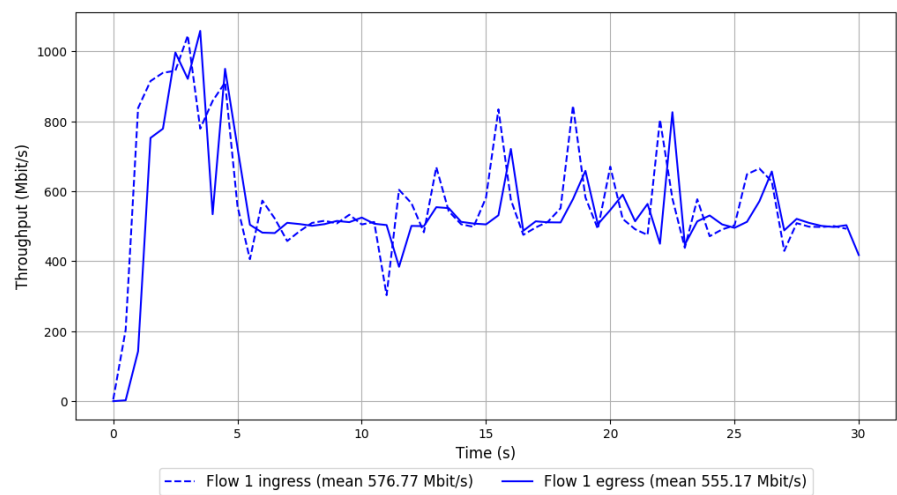
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 773.48 Mbit/s) — — — Flow 1 egress (mean 744.01 Mbit/s)

Flow 1 (95th percentile 131.25 ms)

```
Run 5: Statistics of FillP

Start at: 2019-10-03 19:50:26
End at: 2019-10-03 19:50:56
Local clock offset: -0.466 ms
Remote clock offset: -0.163 ms


# Below is generated by plot.py at 2019-10-03 21:03:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 744.16 Mbit/s
95th percentile per-packet one-way delay: 131.131 ms
Loss rate: 4.63%
-- Flow 1:
Average throughput: 744.16 Mbit/s
95th percentile per-packet one-way delay: 131.131 ms
Loss rate: 4.63%
```
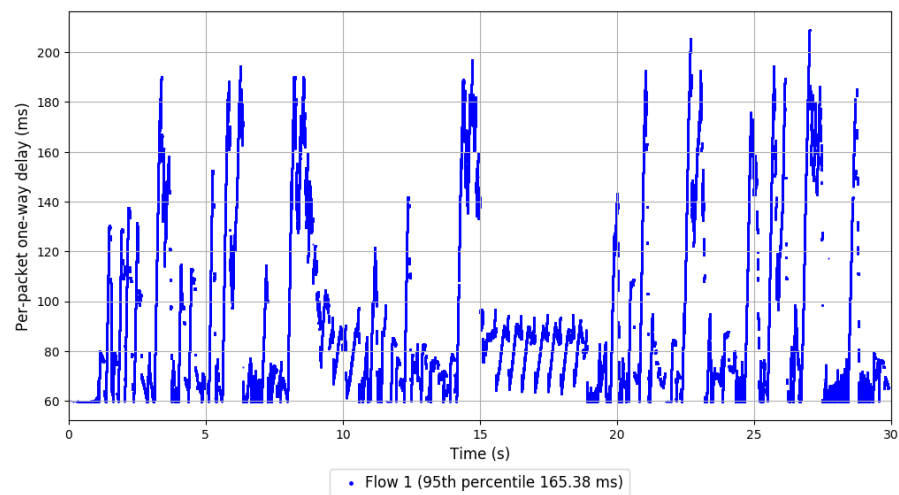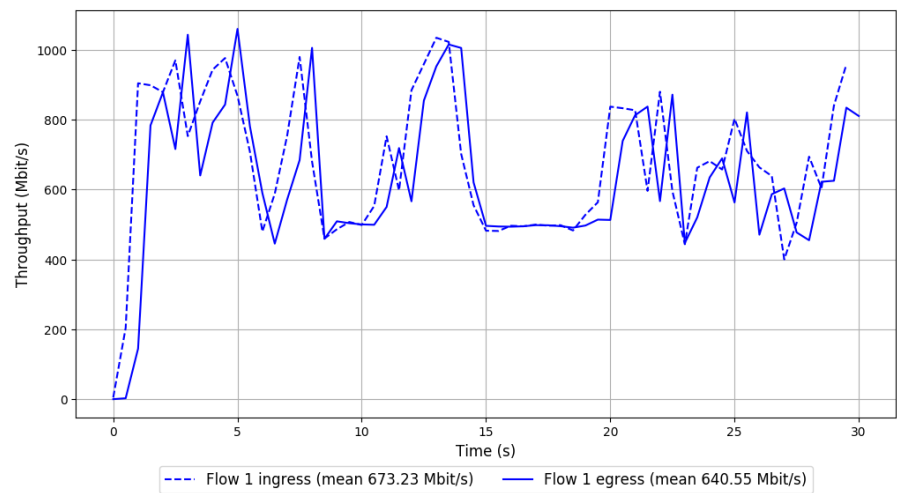
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 777.26 Mbit/s) --- Flow 1 egress (mean 744.16 Mbit/s)

Flow 1 (95th percentile 131.13 ms)

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-10-03 17:26:16
End at: 2019-10-03 17:26:46
Local clock offset: -0.222 ms
Remote clock offset: -0.642 ms


# Below is generated by plot.py at 2019-10-03 21:03:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 555.17 Mbit/s
95th percentile per-packet one-way delay: 165.695 ms
Loss rate: 4.12%
-- Flow 1:
Average throughput: 555.17 Mbit/s
95th percentile per-packet one-way delay: 165.695 ms
Loss rate: 4.12%
```
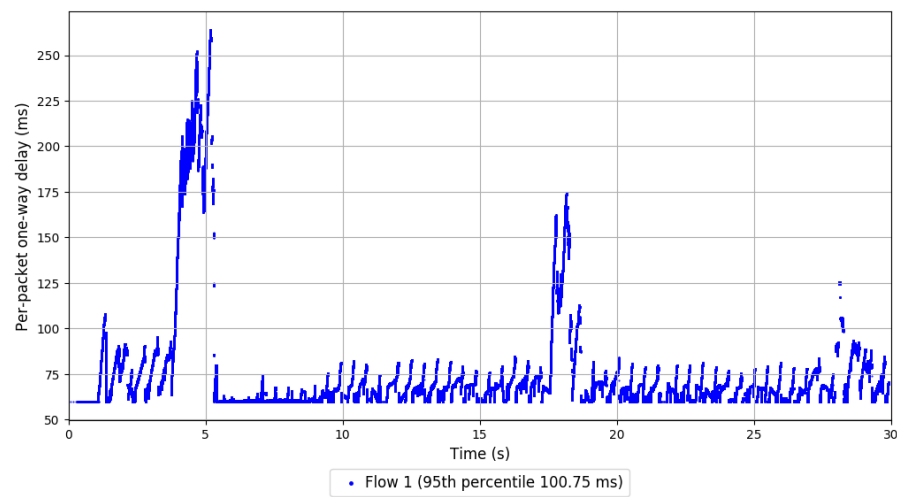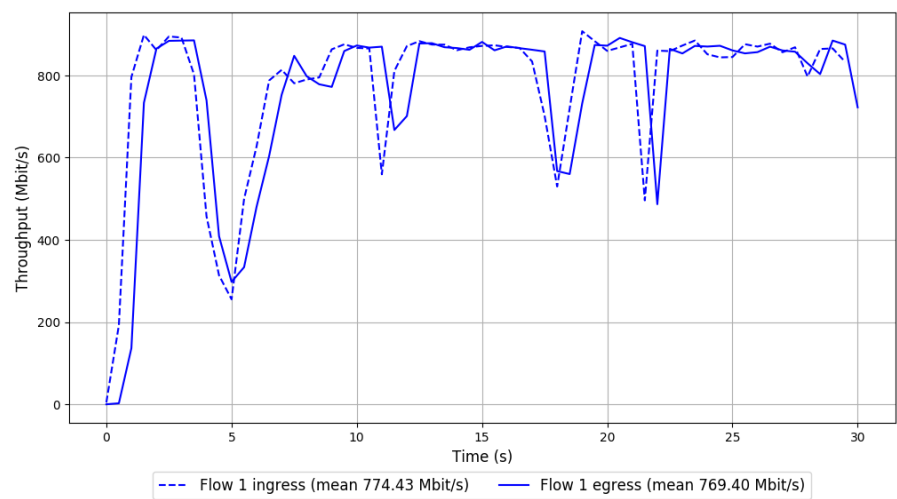
Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-10-03 18:00:35
End at: 2019-10-03 18:01:05
Local clock offset: -0.312 ms
Remote clock offset: 0.072 ms


# Below is generated by plot.py at 2019-10-03 21:03:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 640.55 Mbit/s
95th percentile per-packet one-way delay: 165.379 ms
Loss rate: 5.21%
-- Flow 1:
Average throughput: 640.55 Mbit/s
95th percentile per-packet one-way delay: 165.379 ms
Loss rate: 5.21%
```
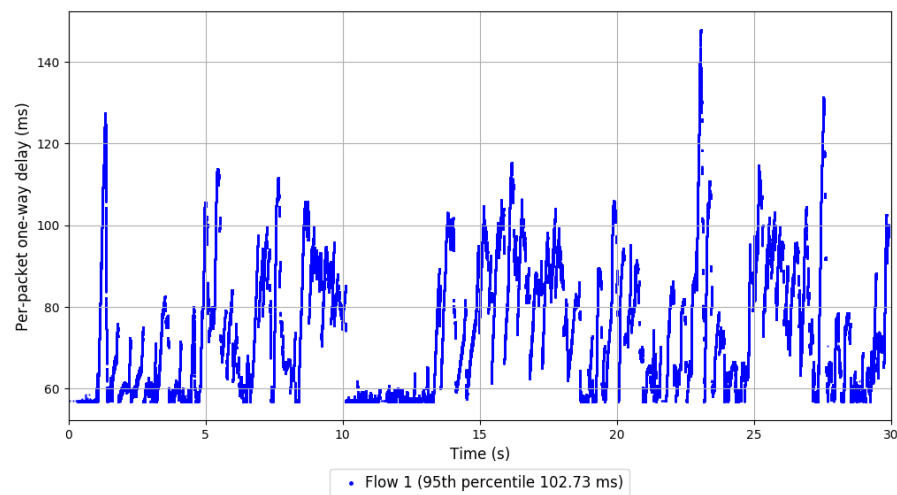
Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-10-03 18:35:03
End at: 2019-10-03 18:35:33
Local clock offset: -0.444 ms
Remote clock offset: 0.046 ms


# Below is generated by plot.py at 2019-10-03 21:03:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 769.40 Mbit/s
95th percentile per-packet one-way delay: 100.754 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 769.40 Mbit/s
95th percentile per-packet one-way delay: 100.754 ms
Loss rate: 1.04%
```
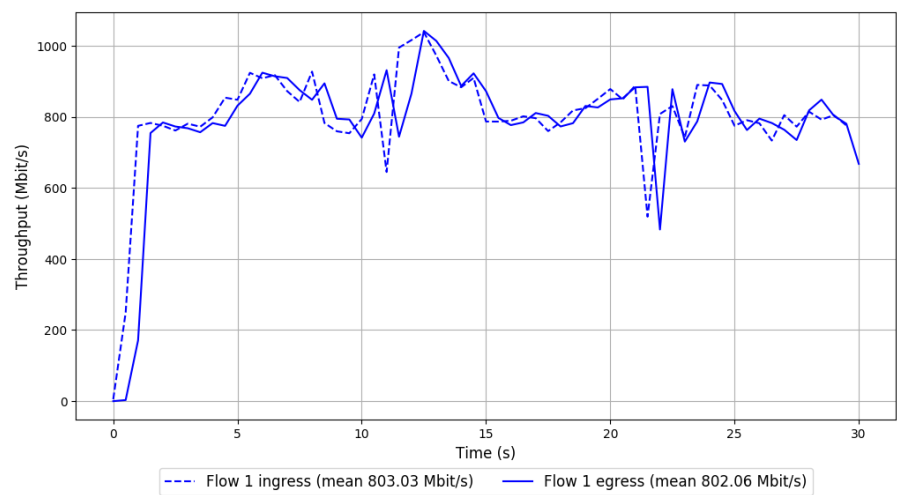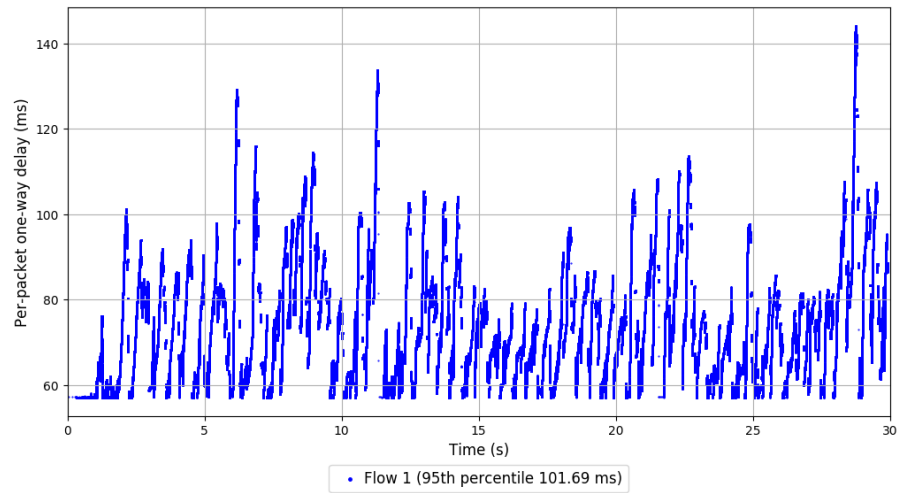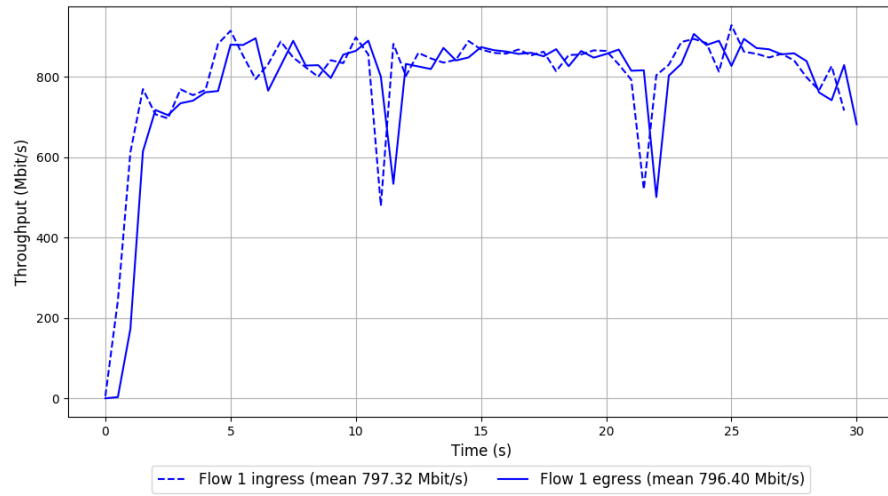
Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 774.43 Mbit/s)   Flow 1 egress (mean 769.40 Mbit/s)

Flow 1 (95th percentile 100.75 ms)

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-10-03 19:09:22
End at: 2019-10-03 19:09:52
Local clock offset: -0.035 ms
Remote clock offset: -0.08 ms


# Below is generated by plot.py at 2019-10-03 21:15:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 802.06 Mbit/s
95th percentile per-packet one-way delay: 102.731 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 802.06 Mbit/s
95th percentile per-packet one-way delay: 102.731 ms
Loss rate: 0.50%
```
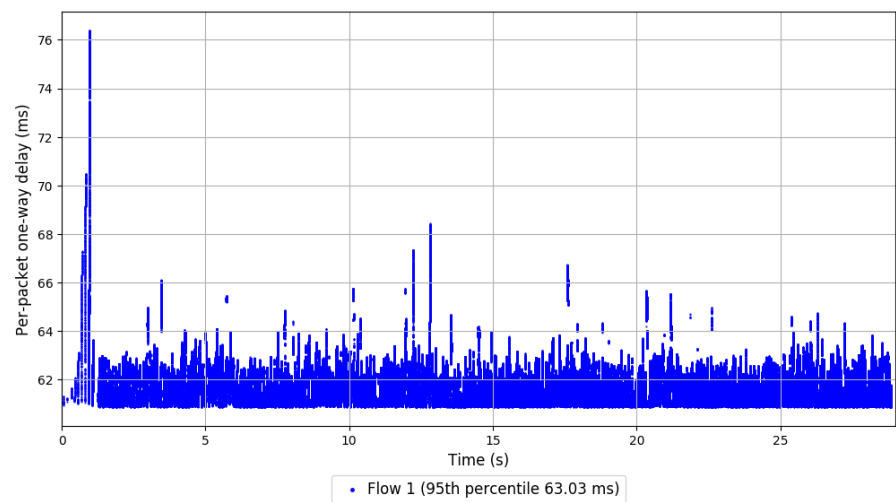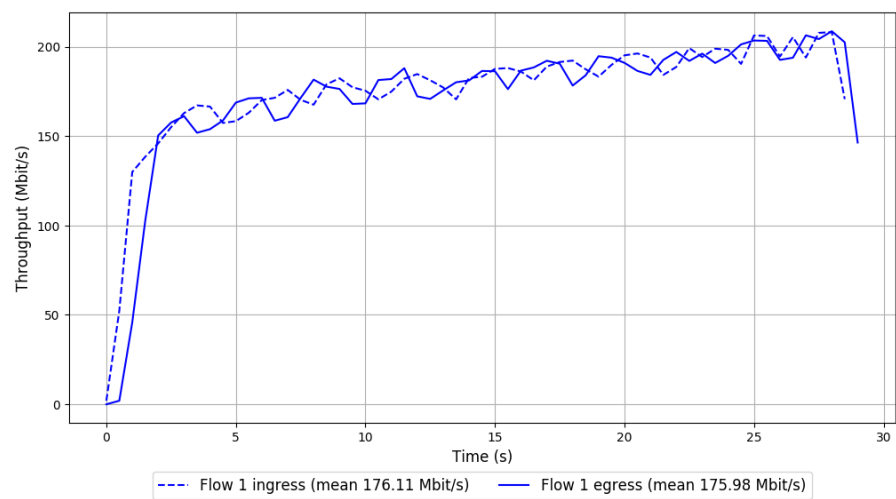
Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 803.03 Mbit/s) —— Flow 1 egress (mean 802.06 Mbit/s)
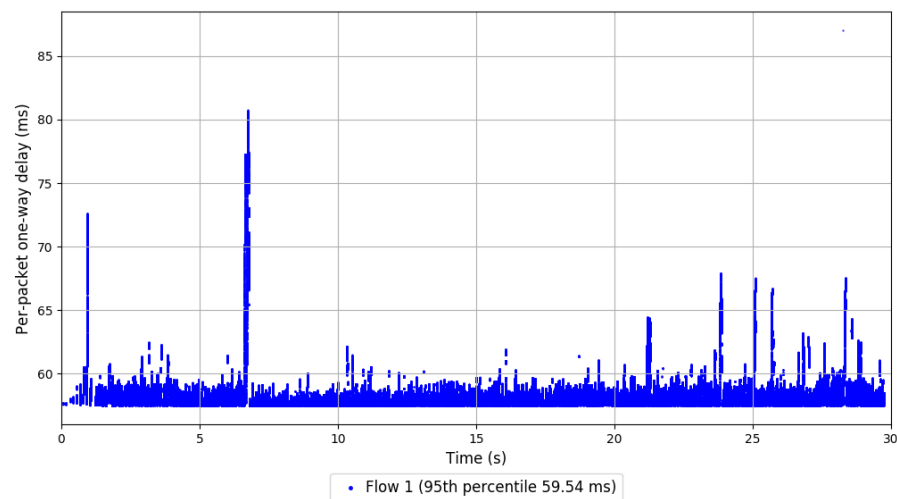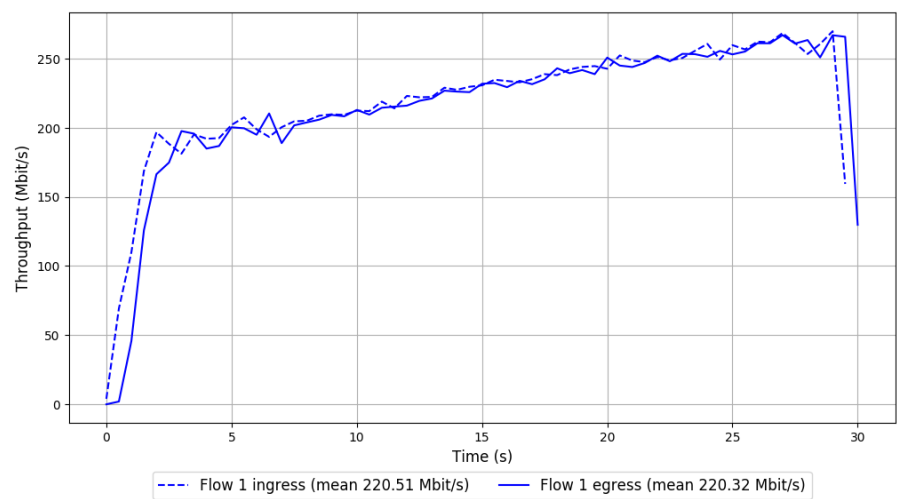

• Flow 1 (95th percentile 102.73 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-10-03 19:43:26
End at: 2019-10-03 19:43:56
Local clock offset: 0.175 ms
Remote clock offset: -0.202 ms


# Below is generated by plot.py at 2019-10-03 21:18:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 796.40 Mbit/s
95th percentile per-packet one-way delay: 101.694 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 796.40 Mbit/s
95th percentile per-packet one-way delay: 101.694 ms
Loss rate: 0.51%
```
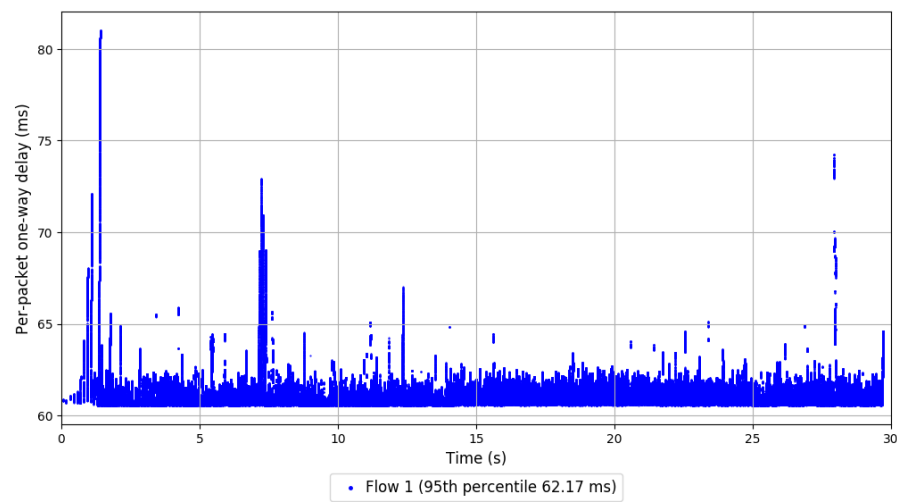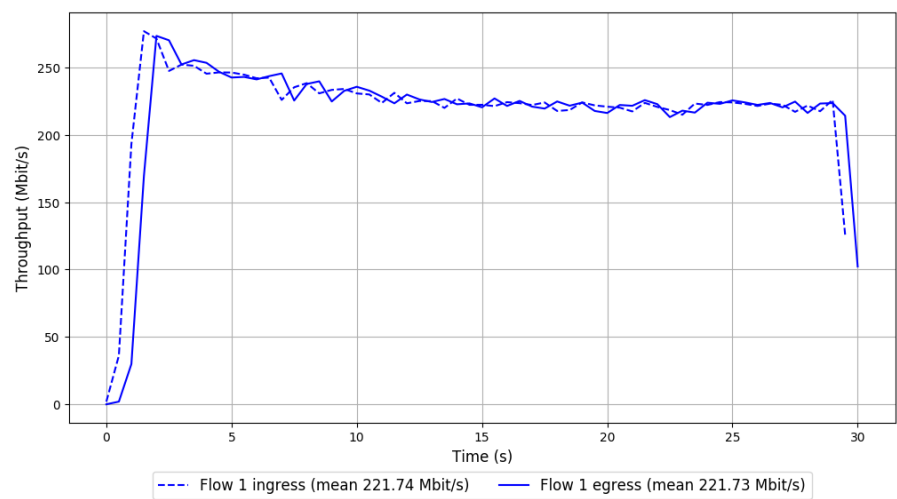
Run 5: Report of FillP-Sheep — Data Link

```
Run 1: Statistics of Indigo

Start at: 2019-10-03 17:45:59
End at: 2019-10-03 17:46:29
Local clock offset: 0.352 ms
Remote clock offset: -0.148 ms


# Below is generated by plot.py at 2019-10-03 21:18:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 175.98 Mbit/s
95th percentile per-packet one-way delay: 63.031 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 175.98 Mbit/s
95th percentile per-packet one-way delay: 63.031 ms
Loss rate: 0.48%
```

Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-10-03 18:20:23
End at: 2019-10-03 18:20:53
Local clock offset: -0.015 ms
Remote clock offset: -0.707 ms


# Below is generated by plot.py at 2019-10-03 21:18:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.32 Mbit/s
95th percentile per-packet one-way delay: 59.538 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 220.32 Mbit/s
95th percentile per-packet one-way delay: 59.538 ms
Loss rate: 0.46%
```
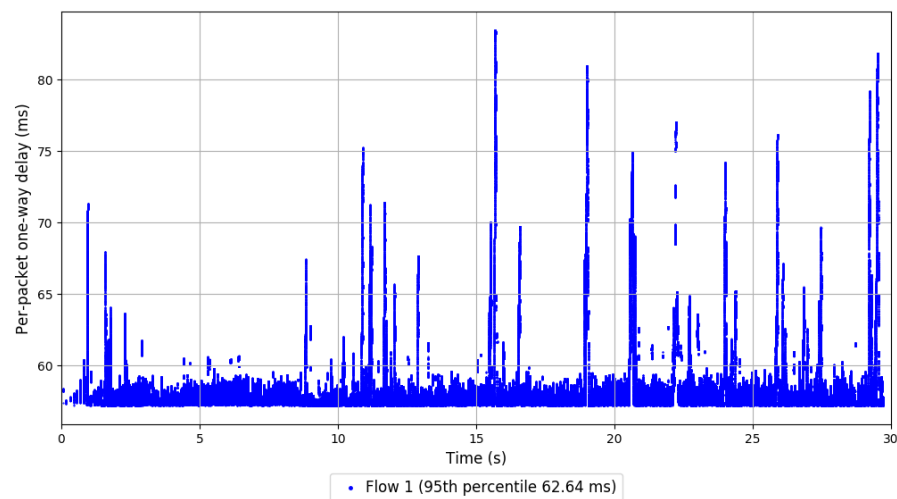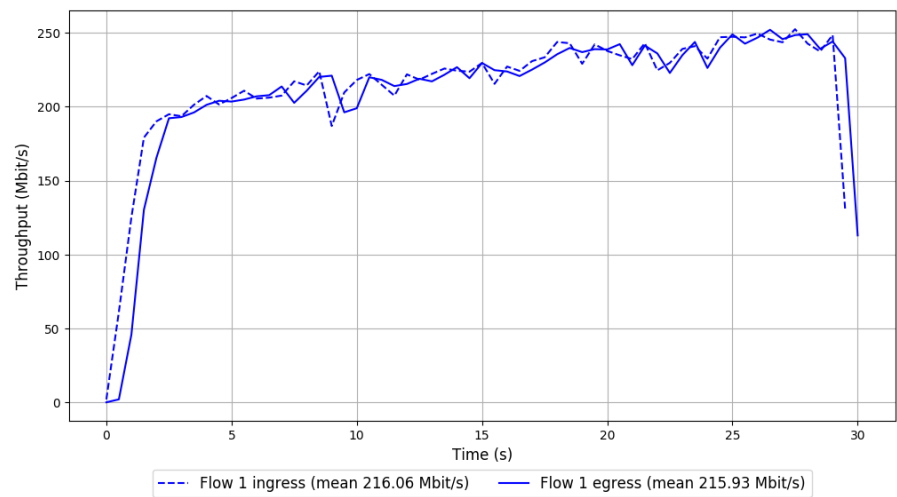
Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 220.51 Mbit/s)   Flow 1 egress (mean 220.32 Mbit/s)

Flow 1 (95th percentile 59.54 ms)

```
Run 3: Statistics of Indigo

Start at: 2019-10-03 18:54:55
End at: 2019-10-03 18:55:25
Local clock offset: -0.048 ms
Remote clock offset: -0.168 ms


# Below is generated by plot.py at 2019-10-03 21:18:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.73 Mbit/s
95th percentile per-packet one-way delay: 62.174 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 221.73 Mbit/s
95th percentile per-packet one-way delay: 62.174 ms
Loss rate: 0.40%
```
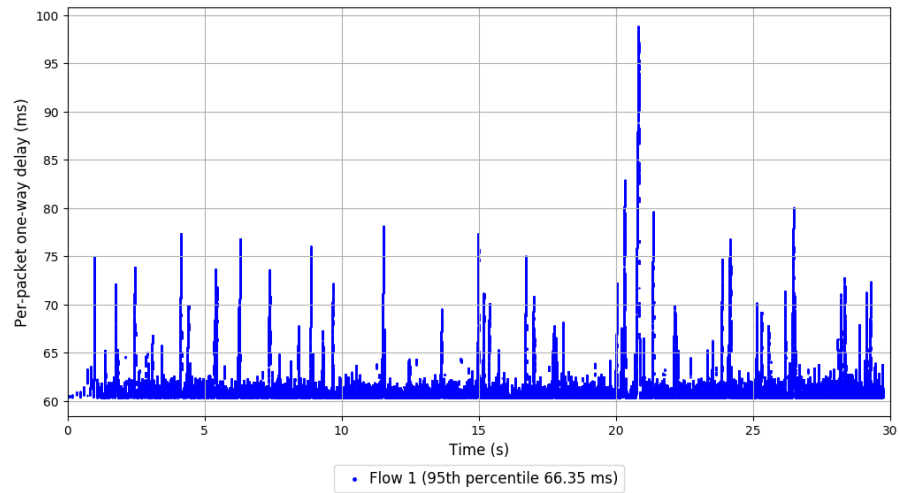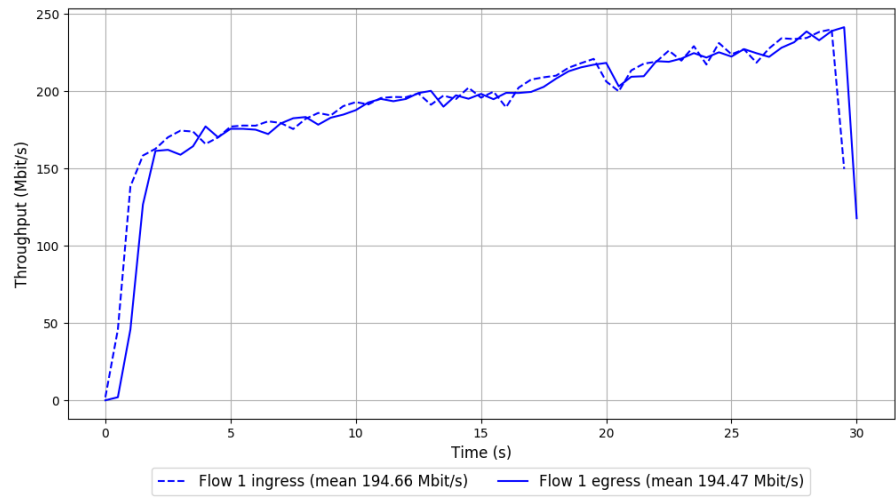
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2019-10-03 19:28:51
End at: 2019-10-03 19:29:21
Local clock offset: 0.027 ms
Remote clock offset: -0.016 ms


# Below is generated by plot.py at 2019-10-03 21:18:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.93 Mbit/s
95th percentile per-packet one-way delay: 62.644 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 215.93 Mbit/s
95th percentile per-packet one-way delay: 62.644 ms
Loss rate: 0.45%
```
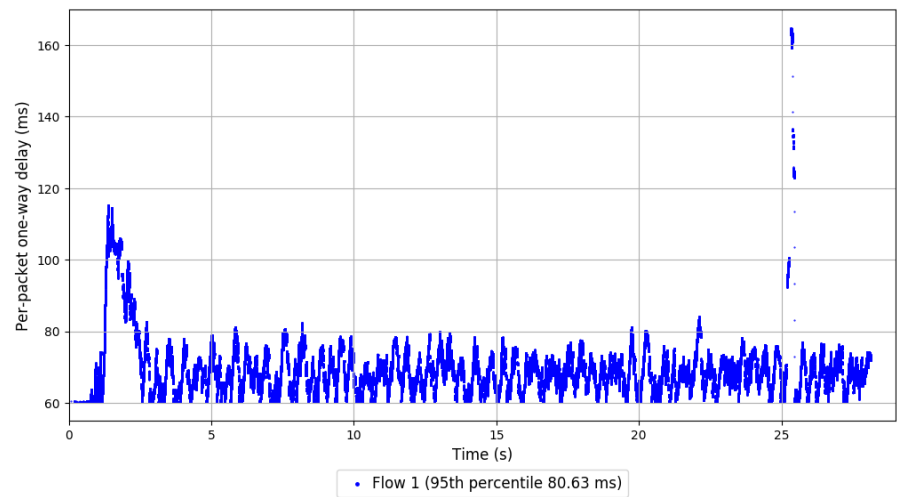
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2019-10-03 20:03:11
End at: 2019-10-03 20:03:41
Local clock offset: 0.325 ms
Remote clock offset: 0.019 ms


# Below is generated by plot.py at 2019-10-03 21:18:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 194.47 Mbit/s
95th percentile per-packet one-way delay: 66.351 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 194.47 Mbit/s
95th percentile per-packet one-way delay: 66.351 ms
Loss rate: 0.49%
```
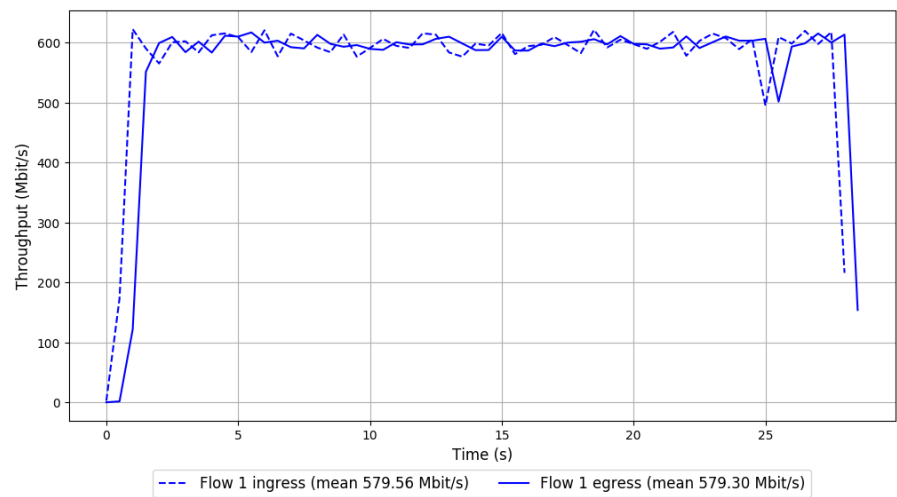
Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-10-03 17:44:24
End at: 2019-10-03 17:44:54
Local clock offset: -0.251 ms
Remote clock offset: -0.07 ms


# Below is generated by plot.py at 2019-10-03 21:18:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 579.30 Mbit/s
95th percentile per-packet one-way delay: 80.626 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 579.30 Mbit/s
95th percentile per-packet one-way delay: 80.626 ms
Loss rate: 0.47%
```
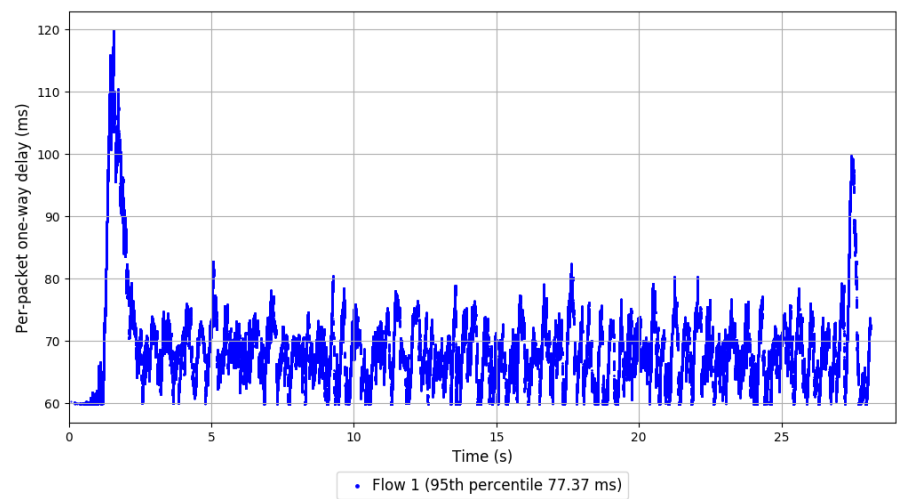
Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-10-03 18:18:48
End at: 2019-10-03 18:19:18
Local clock offset: -0.457 ms
Remote clock offset: 0.01 ms


# Below is generated by plot.py at 2019-10-03 21:19:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 582.17 Mbit/s
95th percentile per-packet one-way delay: 77.369 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 582.17 Mbit/s
95th percentile per-packet one-way delay: 77.369 ms
Loss rate: 0.48%
```
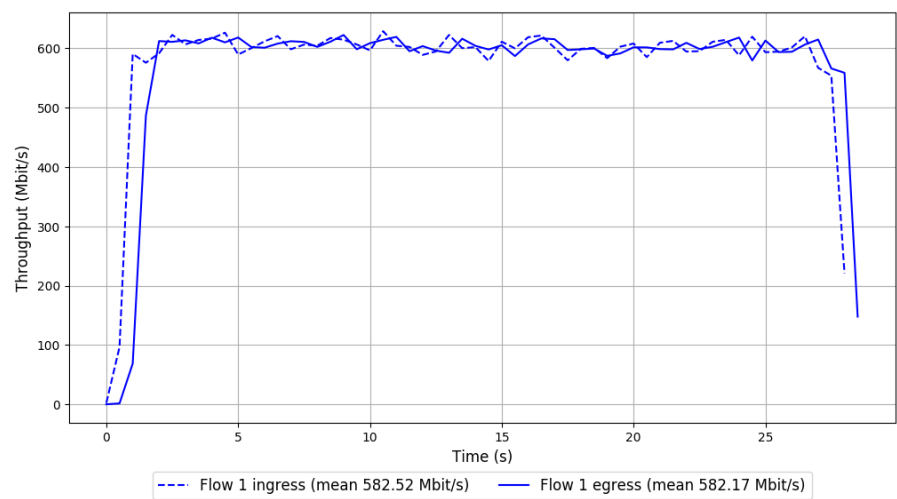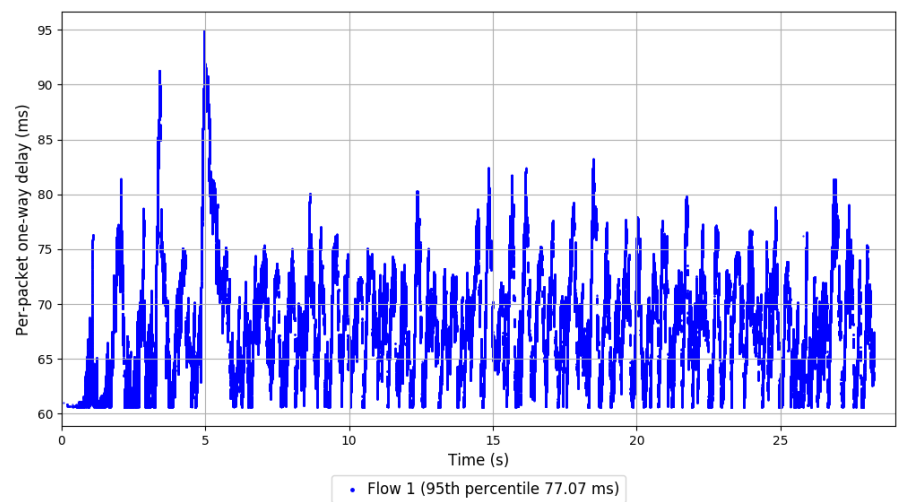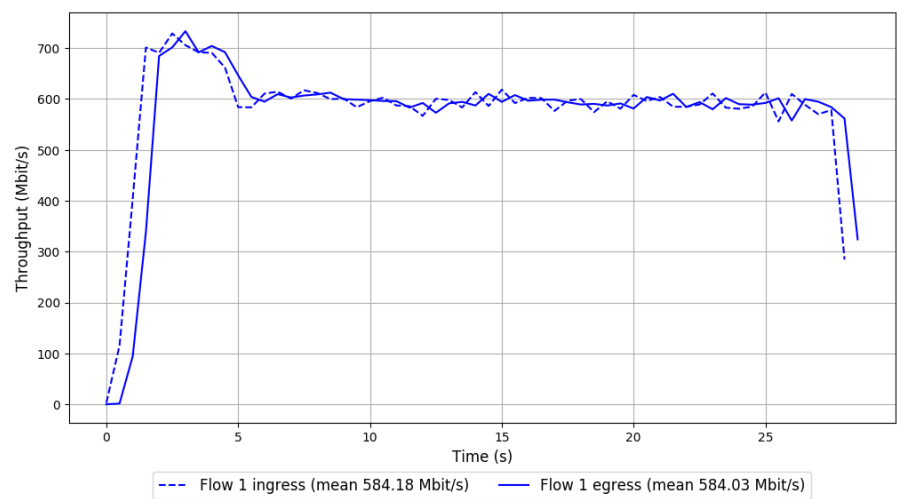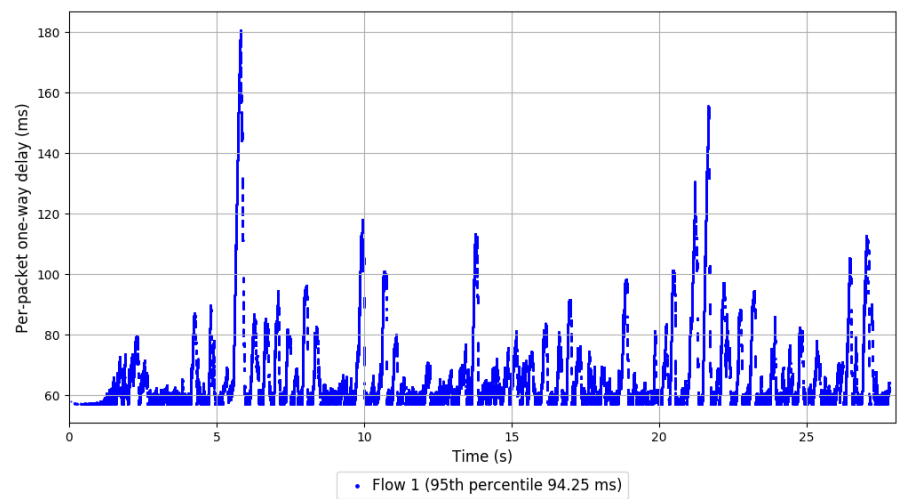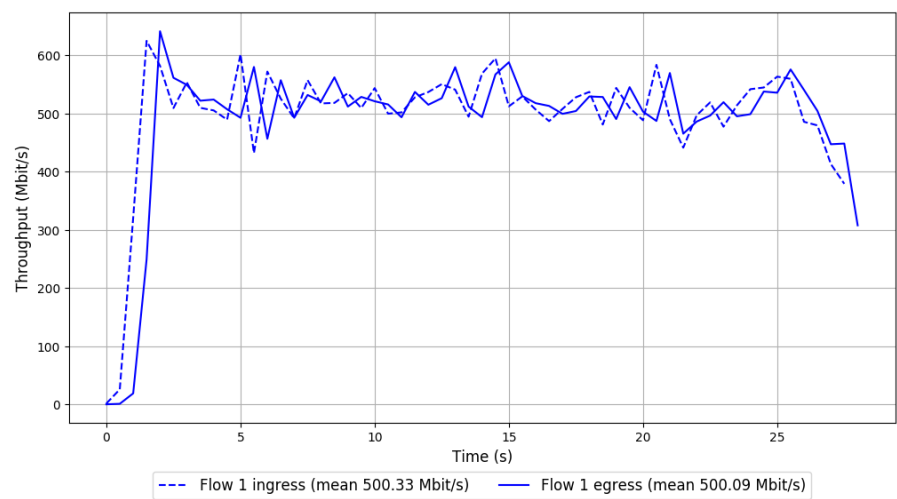
Run 2: Report of Indigo-MusesC3 — Data Link

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```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-10-03 18:53:21
End at: 2019-10-03 18:53:51
Local clock offset: -0.032 ms
Remote clock offset: -0.055 ms


# Below is generated by plot.py at 2019-10-03 21:22:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 584.03 Mbit/s
95th percentile per-packet one-way delay: 77.074 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 584.03 Mbit/s
95th percentile per-packet one-way delay: 77.074 ms
Loss rate: 0.13%
```

Run 3: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 584.18 Mbit/s) --- Flow 1 egress (mean 584.03 Mbit/s)
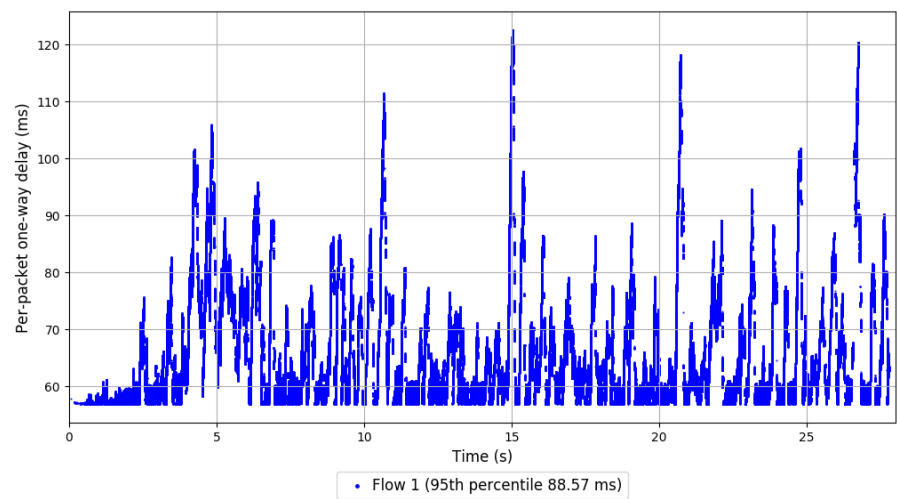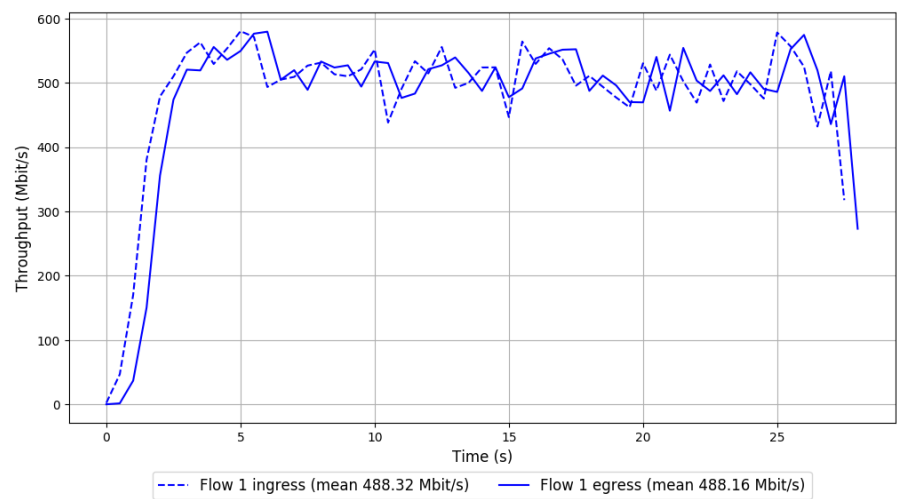

Flow 1 (95th percentile 77.07 ms)

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-10-03 19:27:20
End at: 2019-10-03 19:27:50
Local clock offset: 0.242 ms
Remote clock offset: -0.131 ms


# Below is generated by plot.py at 2019-10-03 21:22:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 500.09 Mbit/s
95th percentile per-packet one-way delay: 94.246 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 500.09 Mbit/s
95th percentile per-packet one-way delay: 94.246 ms
Loss rate: 0.46%
```

Run 4: Report of Indigo-MusesC3 — Data Link

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```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-10-03 20:01:41
End at: 2019-10-03 20:02:11
Local clock offset: -0.032 ms
Remote clock offset: -0.144 ms


# Below is generated by plot.py at 2019-10-03 21:22:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 488.16 Mbit/s
95th percentile per-packet one-way delay: 88.573 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 488.16 Mbit/s
95th percentile per-packet one-way delay: 88.573 ms
Loss rate: 0.45%
```
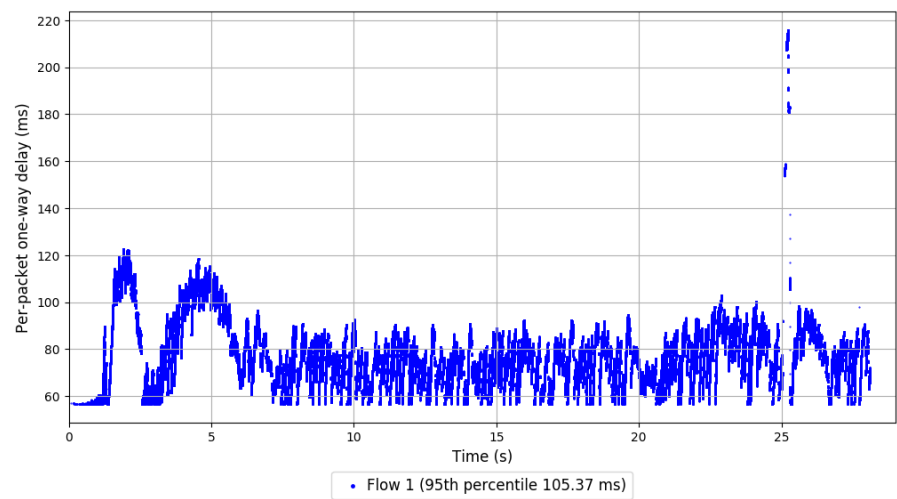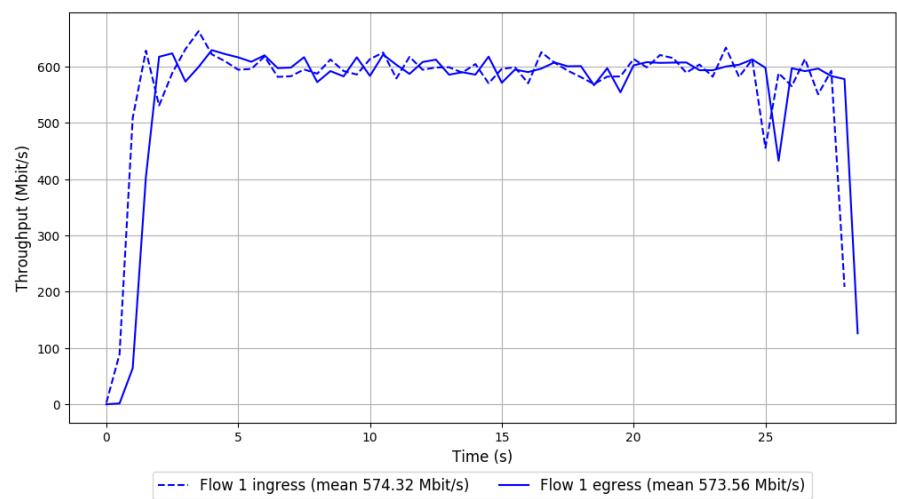
Run 5: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 488.32 Mbit/s)   Flow 1 egress (mean 488.16 Mbit/s)

Flow 1 (95th percentile 88.57 ms)

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-10-03 17:34:47
End at: 2019-10-03 17:35:17
Local clock offset: -0.031 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2019-10-03 21:23:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 573.56 Mbit/s
95th percentile per-packet one-way delay: 105.368 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 573.56 Mbit/s
95th percentile per-packet one-way delay: 105.368 ms
Loss rate: 0.53%
```
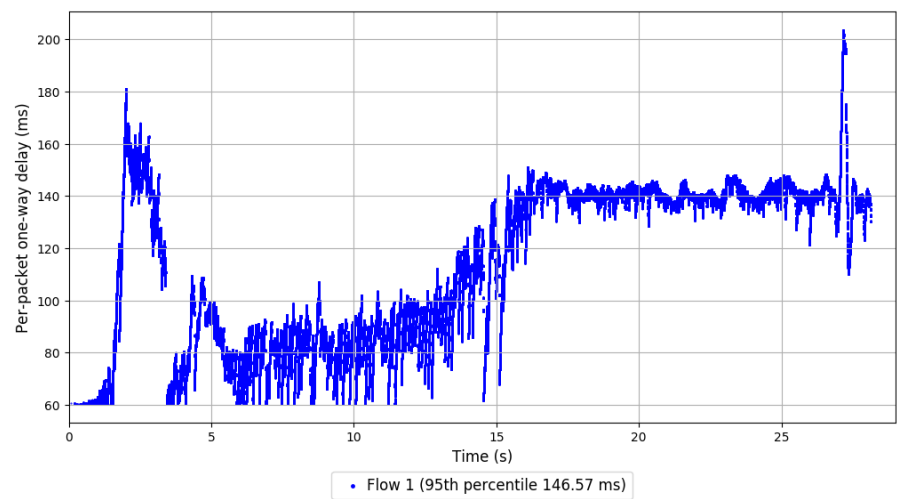
Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-10-03 18:09:09
End at: 2019-10-03 18:09:39
Local clock offset: -0.046 ms
Remote clock offset: 0.023 ms


# Below is generated by plot.py at 2019-10-03 21:28:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 557.48 Mbit/s
95th percentile per-packet one-way delay: 146.574 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 557.48 Mbit/s
95th percentile per-packet one-way delay: 146.574 ms
Loss rate: 0.81%
```
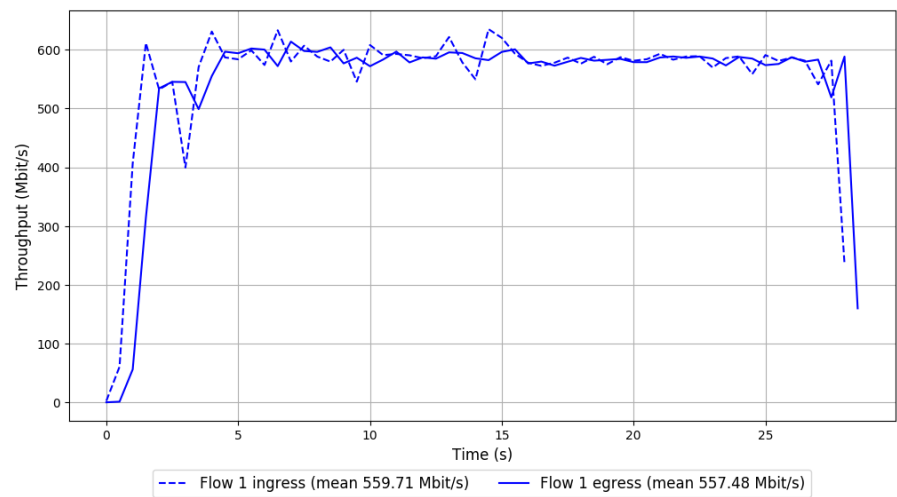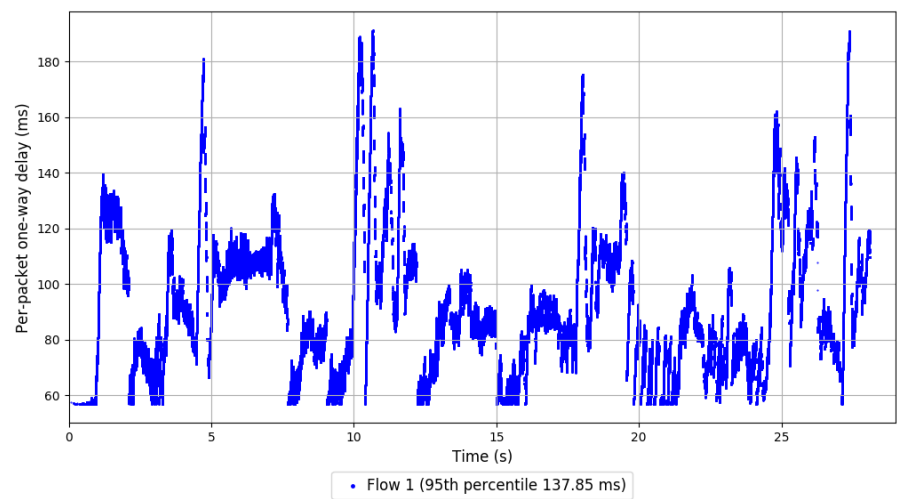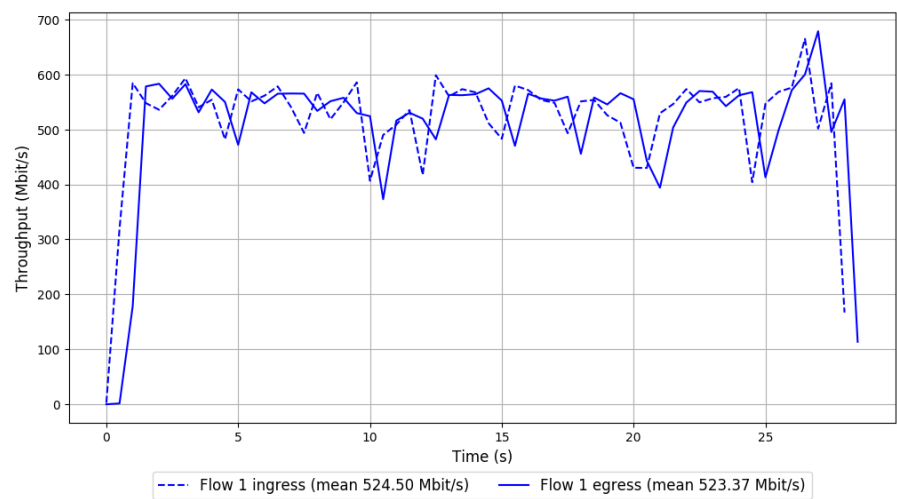
Run 2: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 559.71 Mbit/s)   Flow 1 egress (mean 557.48 Mbit/s)
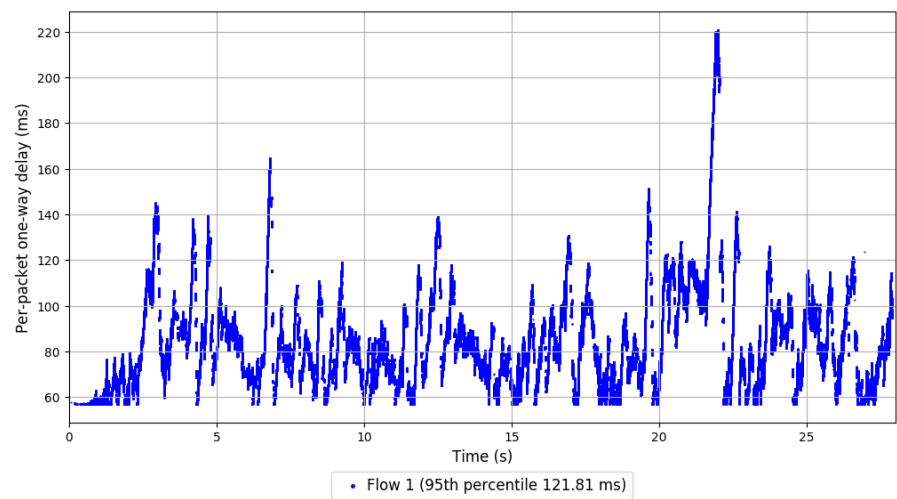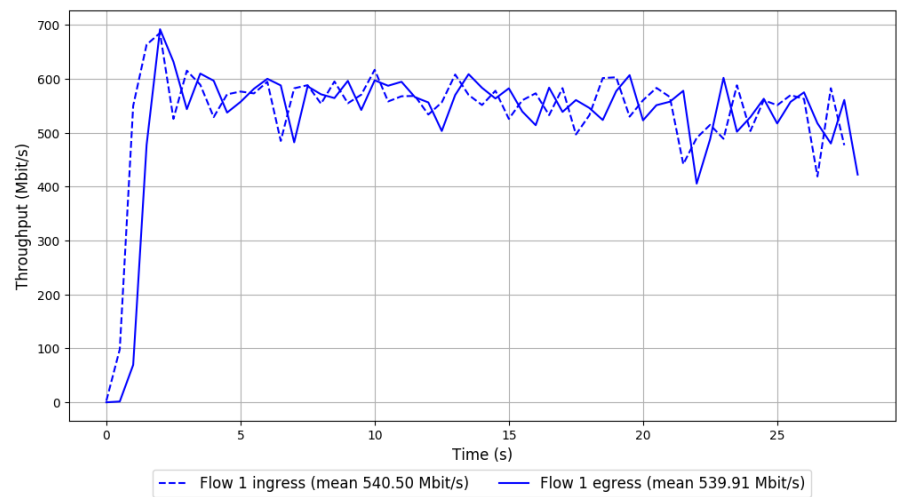

Flow 1 (95th percentile 146.57 ms)

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-10-03 18:43:40
End at: 2019-10-03 18:44:10
Local clock offset: 0.176 ms
Remote clock offset: 0.071 ms


# Below is generated by plot.py at 2019-10-03 21:28:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 523.37 Mbit/s
95th percentile per-packet one-way delay: 137.855 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 523.37 Mbit/s
95th percentile per-packet one-way delay: 137.855 ms
Loss rate: 0.62%
```

Run 3: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 524.50 Mbit/s)   Flow 1 egress (mean 523.37 Mbit/s)

Flow 1 (95th percentile 137.85 ms)

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-10-03 19:17:54
End at: 2019-10-03 19:18:24
Local clock offset: 0.12 ms
Remote clock offset: -0.196 ms


# Below is generated by plot.py at 2019-10-03 21:30:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 539.91 Mbit/s
95th percentile per-packet one-way delay: 121.812 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 539.91 Mbit/s
95th percentile per-packet one-way delay: 121.812 ms
Loss rate: 0.49%
```
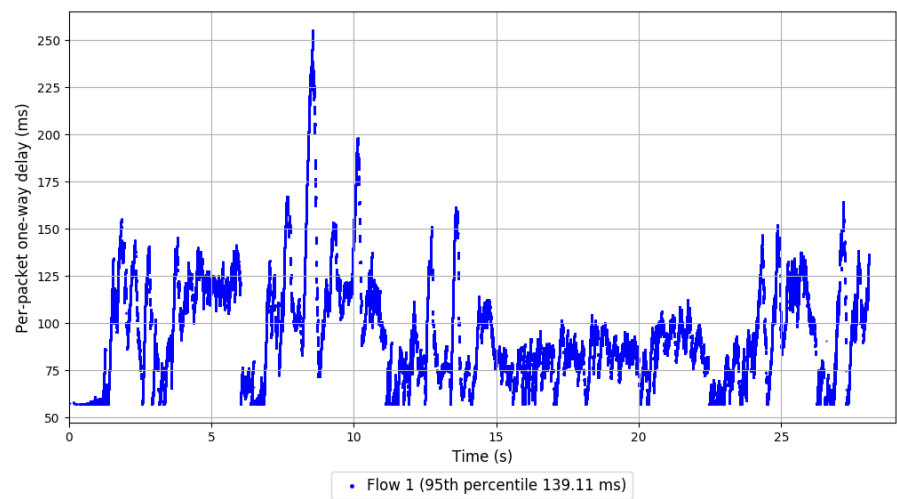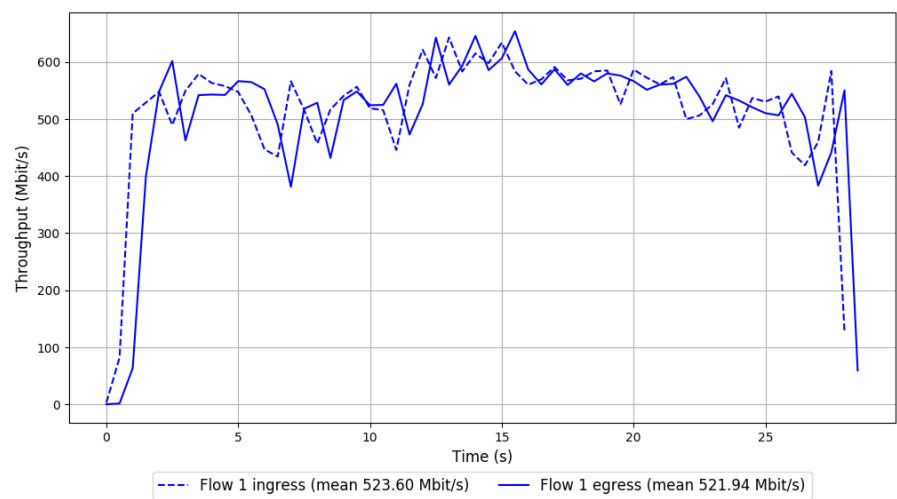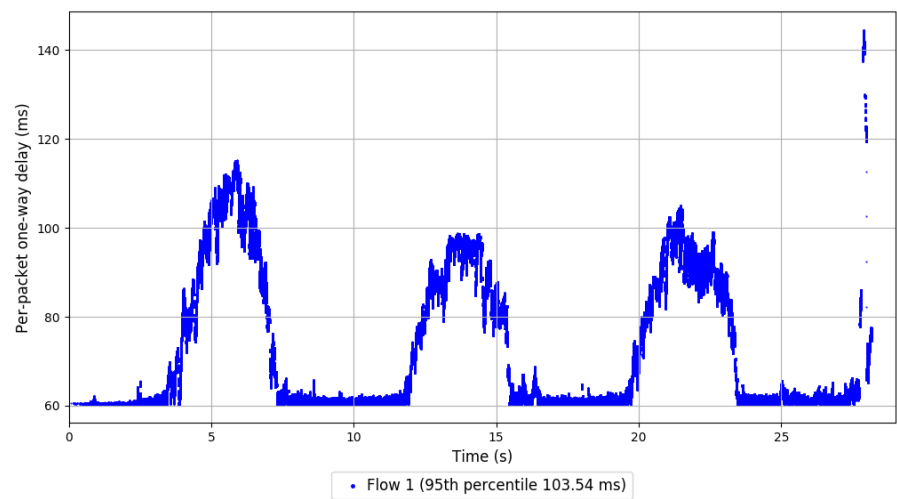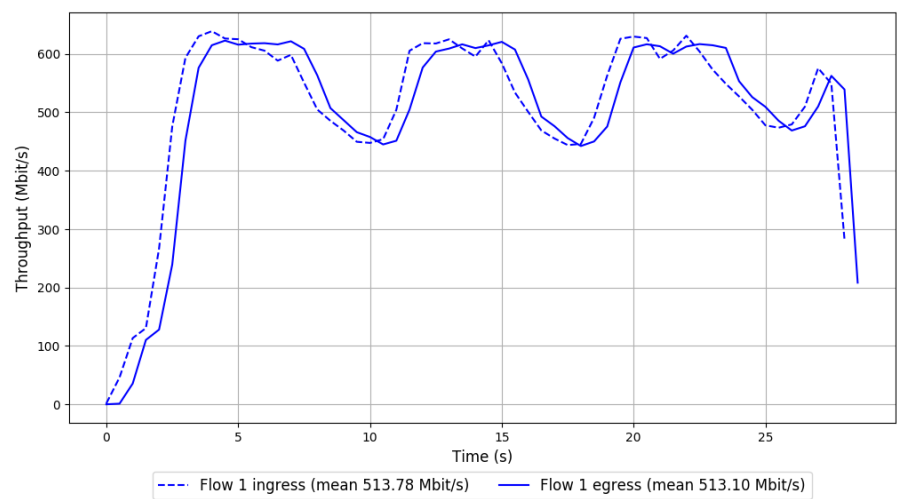
Run 4: Report of Indigo-MusesC5 — Data Link

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-10-03 19:52:04
End at: 2019-10-03 19:52:34
Local clock offset: 0.39 ms
Remote clock offset: -0.043 ms


# Below is generated by plot.py at 2019-10-03 21:31:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 521.94 Mbit/s
95th percentile per-packet one-way delay: 139.106 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 521.94 Mbit/s
95th percentile per-packet one-way delay: 139.106 ms
Loss rate: 0.70%
```

Run 5: Report of Indigo-MusesC5 — Data Link

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-10-03 17:47:23
End at: 2019-10-03 17:47:53
Local clock offset: 0.16 ms
Remote clock offset: -0.064 ms


# Below is generated by plot.py at 2019-10-03 21:33:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 513.10 Mbit/s
95th percentile per-packet one-way delay: 103.541 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 513.10 Mbit/s
95th percentile per-packet one-way delay: 103.541 ms
Loss rate: 0.55%
```
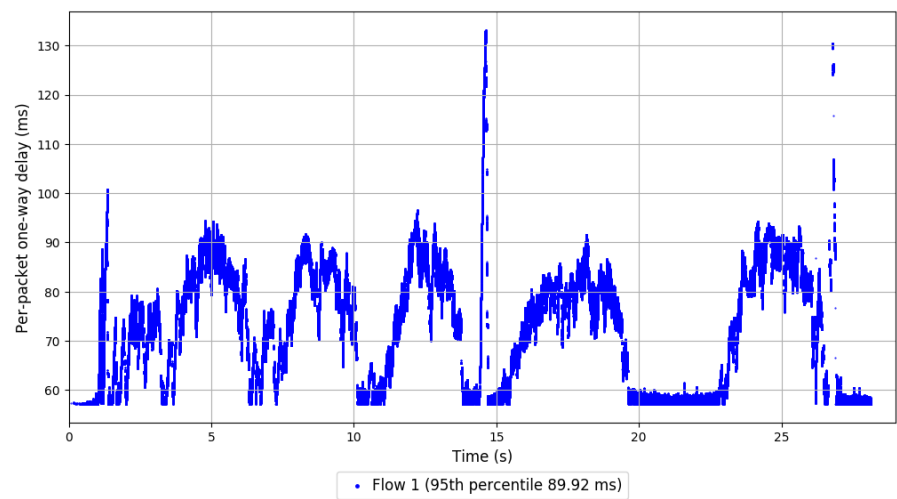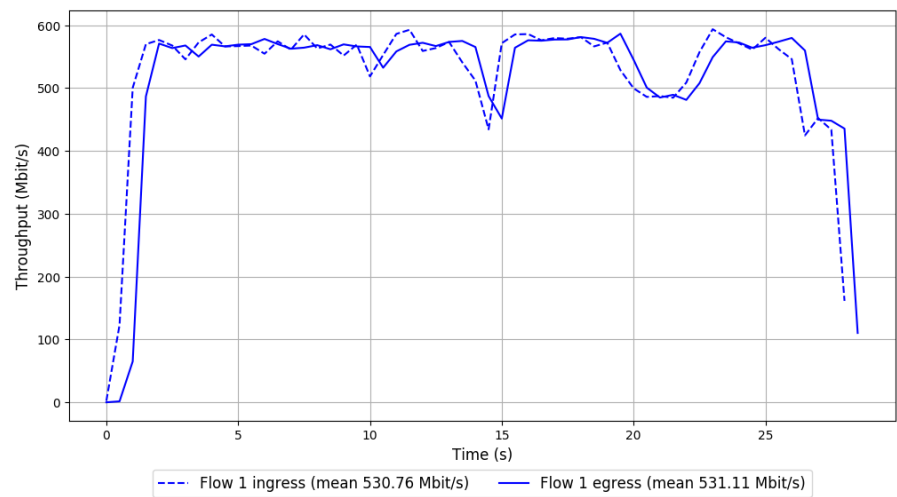
Run 1: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 513.78 Mbit/s)   Flow 1 egress (mean 513.10 Mbit/s)

Flow 1 (95th percentile 103.54 ms)

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-10-03 18:21:51
End at: 2019-10-03 18:22:21
Local clock offset: 0.007 ms
Remote clock offset: 0.01 ms


# Below is generated by plot.py at 2019-10-03 21:33:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 531.11 Mbit/s
95th percentile per-packet one-way delay: 89.925 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 531.11 Mbit/s
95th percentile per-packet one-way delay: 89.925 ms
Loss rate: 0.34%
```
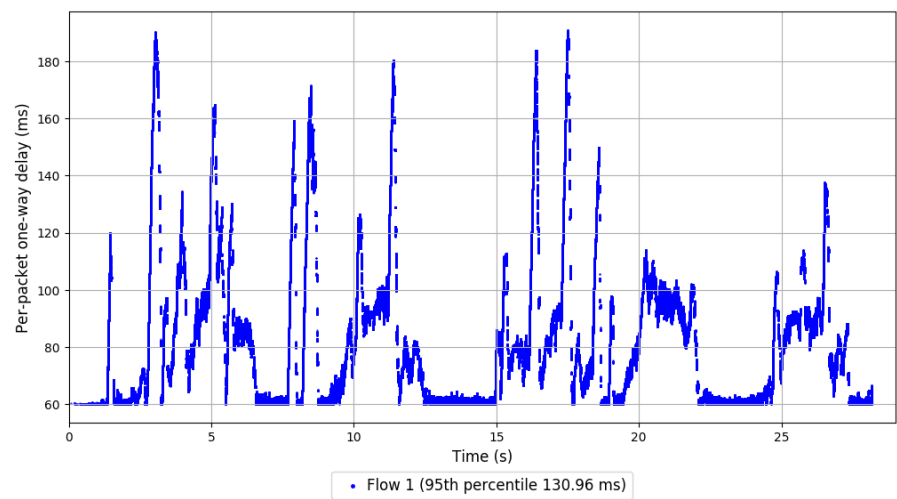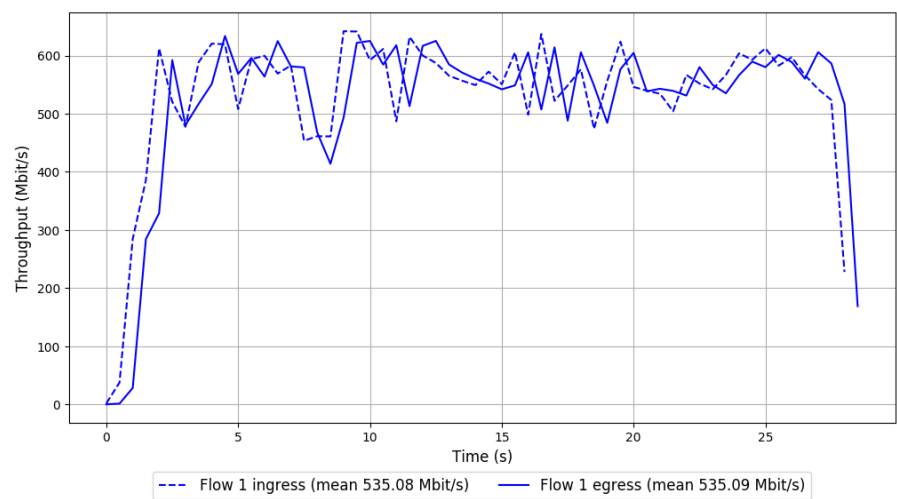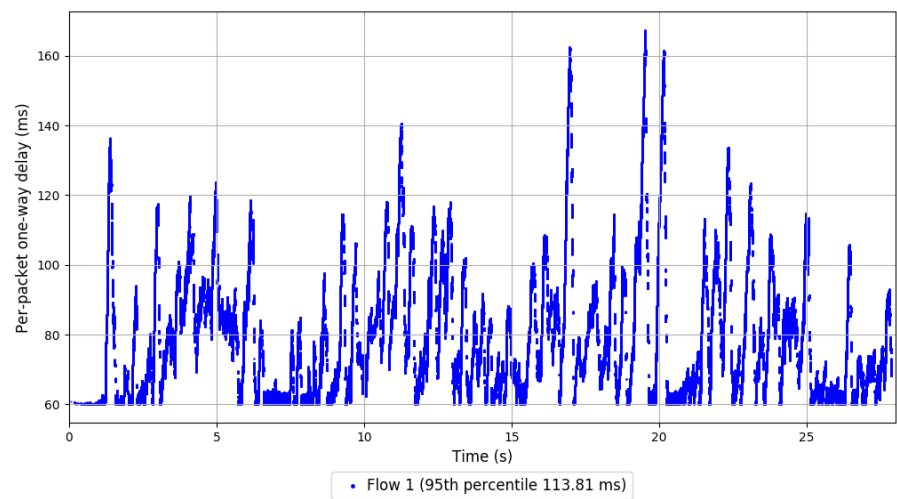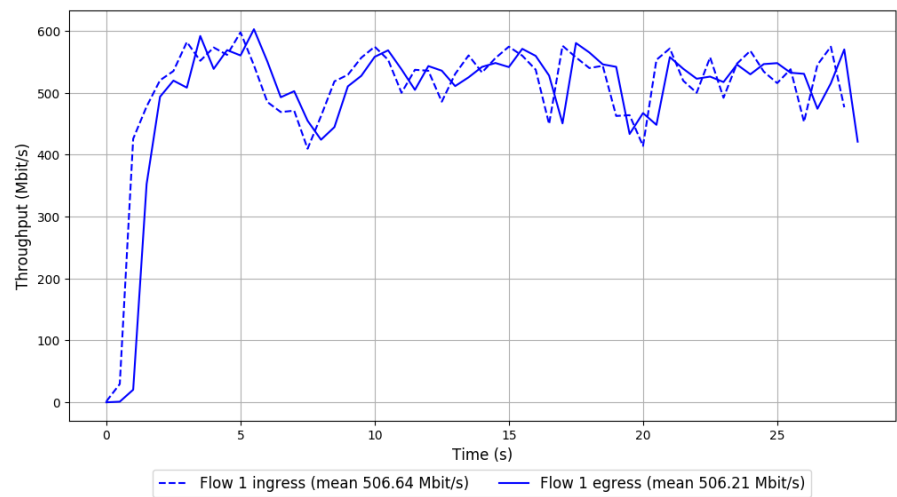
Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-10-03 18:56:24
End at: 2019-10-03 18:56:54
Local clock offset: -0.002 ms
Remote clock offset: 0.109 ms


# Below is generated by plot.py at 2019-10-03 21:33:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 535.09 Mbit/s
95th percentile per-packet one-way delay: 130.959 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 535.09 Mbit/s
95th percentile per-packet one-way delay: 130.959 ms
Loss rate: 0.41%
```

Run 3: Report of Indigo-MusesD — Data Link

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-10-03 19:30:19
End at: 2019-10-03 19:30:49
Local clock offset: -0.04 ms
Remote clock offset: -0.118 ms


# Below is generated by plot.py at 2019-10-03 21:35:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 506.21 Mbit/s
95th percentile per-packet one-way delay: 113.813 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 506.21 Mbit/s
95th percentile per-packet one-way delay: 113.813 ms
Loss rate: 0.51%
```
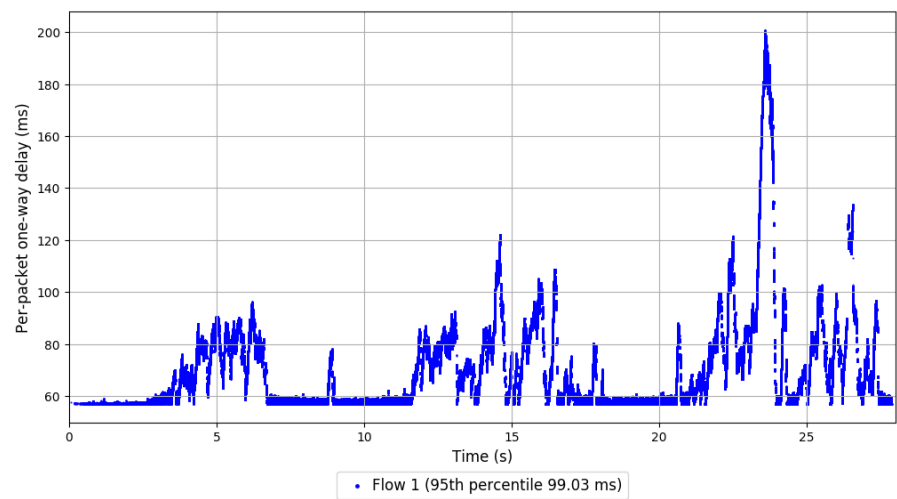
Run 4: Report of Indigo-MusesD — Data Link

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-10-03 20:04:37
End at: 2019-10-03 20:05:07
Local clock offset: 0.182 ms
Remote clock offset: 0.013 ms


# Below is generated by plot.py at 2019-10-03 21:37:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 466.42 Mbit/s
95th percentile per-packet one-way delay: 99.035 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 466.42 Mbit/s
95th percentile per-packet one-way delay: 99.035 ms
Loss rate: 0.42%
```
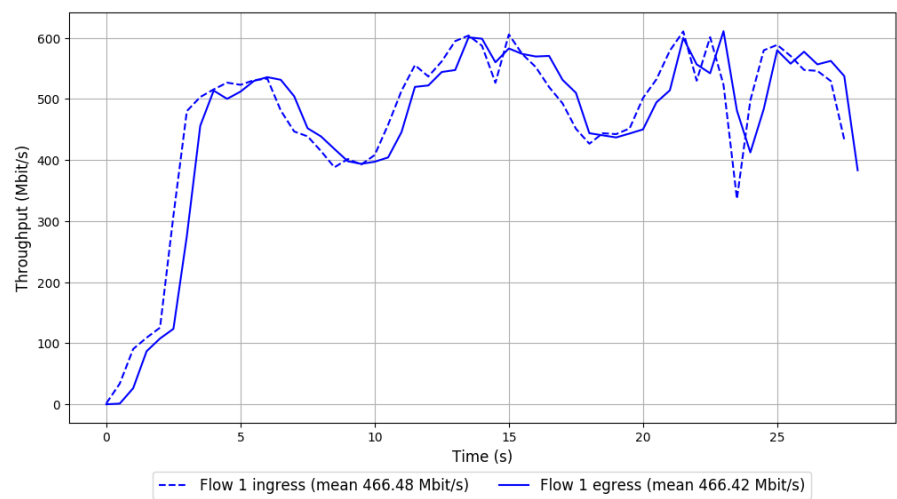
Run 5: Report of Indigo-MusesD — Data Link

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-10-03 17:24:42
End at: 2019-10-03 17:25:12
Local clock offset: -0.459 ms
Remote clock offset: 0.061 ms


# Below is generated by plot.py at 2019-10-03 21:40:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 573.66 Mbit/s
95th percentile per-packet one-way delay: 143.733 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 573.66 Mbit/s
95th percentile per-packet one-way delay: 143.733 ms
Loss rate: 0.55%
```
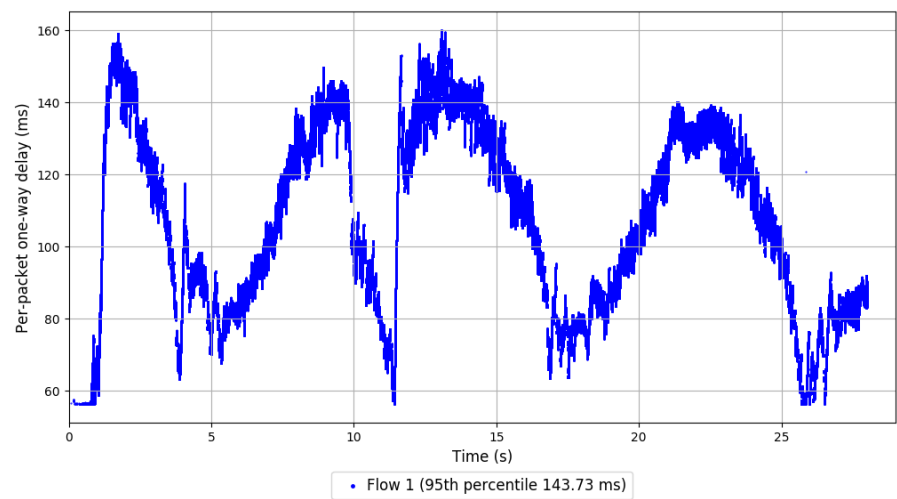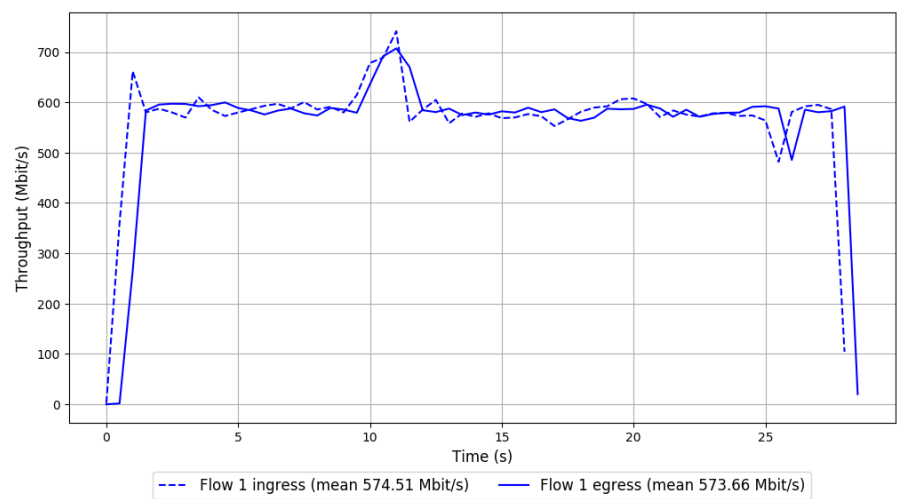
Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-10-03 17:59:02
End at: 2019-10-03 17:59:32
Local clock offset: 0.401 ms
Remote clock offset: -0.184 ms


# Below is generated by plot.py at 2019-10-03 21:42:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 539.11 Mbit/s
95th percentile per-packet one-way delay: 146.218 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 539.11 Mbit/s
95th percentile per-packet one-way delay: 146.218 ms
Loss rate: 0.60%
```
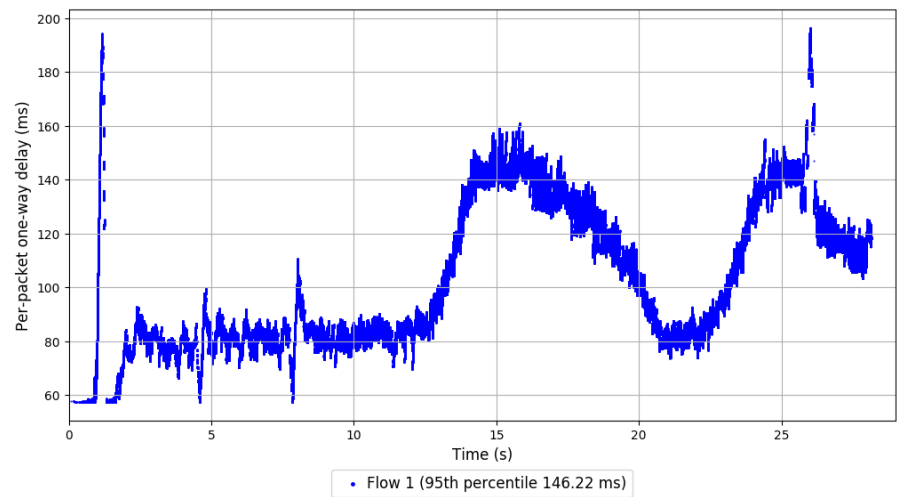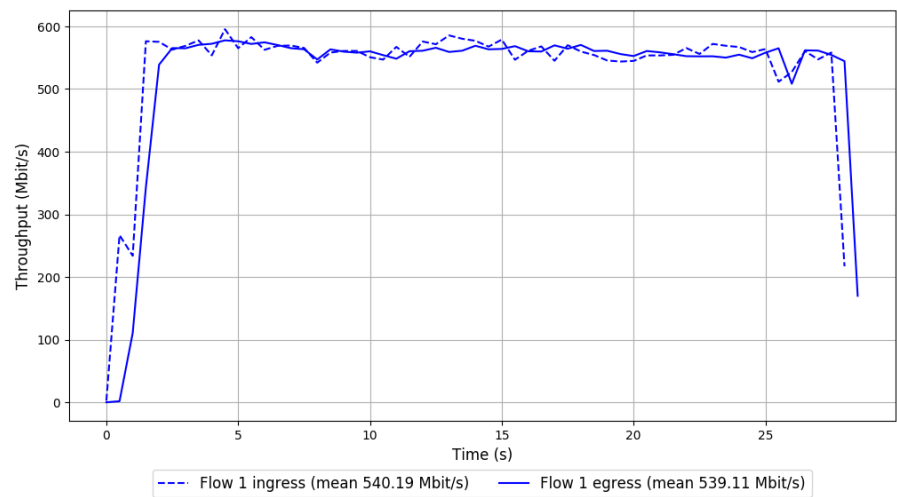
Run 2: Report of Indigo-MusesT — Data Link

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```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-10-03 18:33:28
End at: 2019-10-03 18:33:58
Local clock offset: -0.485 ms
Remote clock offset: 0.058 ms


# Below is generated by plot.py at 2019-10-03 21:43:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 578.02 Mbit/s
95th percentile per-packet one-way delay: 150.078 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 578.02 Mbit/s
95th percentile per-packet one-way delay: 150.078 ms
Loss rate: 0.73%
```
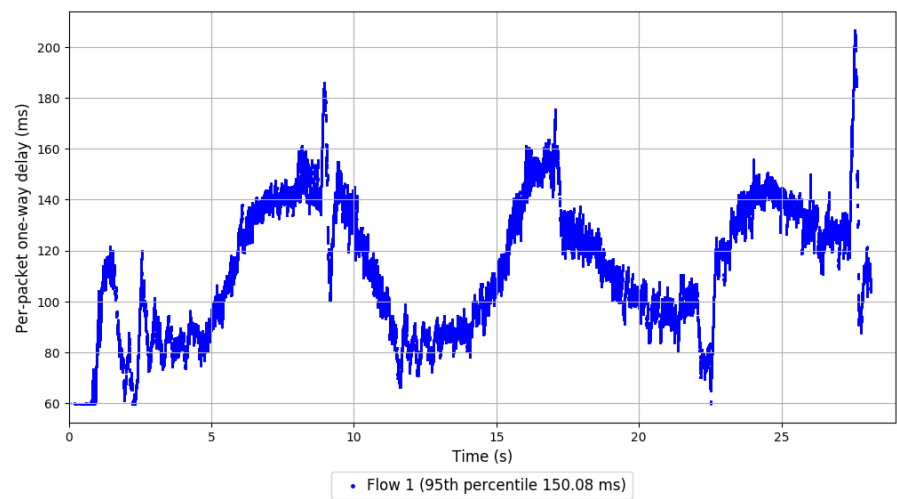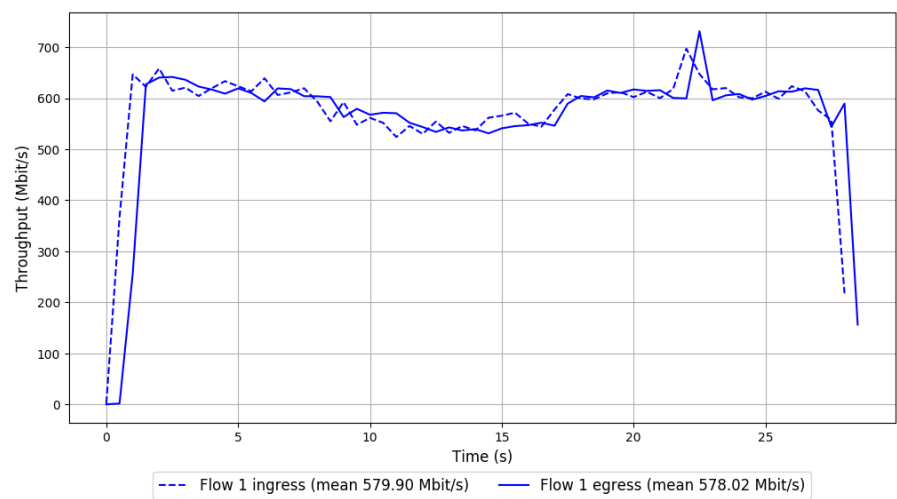
Run 3: Report of Indigo-MusesT — Data Link

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-10-03 19:07:52
End at: 2019-10-03 19:08:22
Local clock offset: 0.424 ms
Remote clock offset: -0.151 ms


# Below is generated by plot.py at 2019-10-03 21:43:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 486.00 Mbit/s
95th percentile per-packet one-way delay: 133.518 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 486.00 Mbit/s
95th percentile per-packet one-way delay: 133.518 ms
Loss rate: 0.22%
```
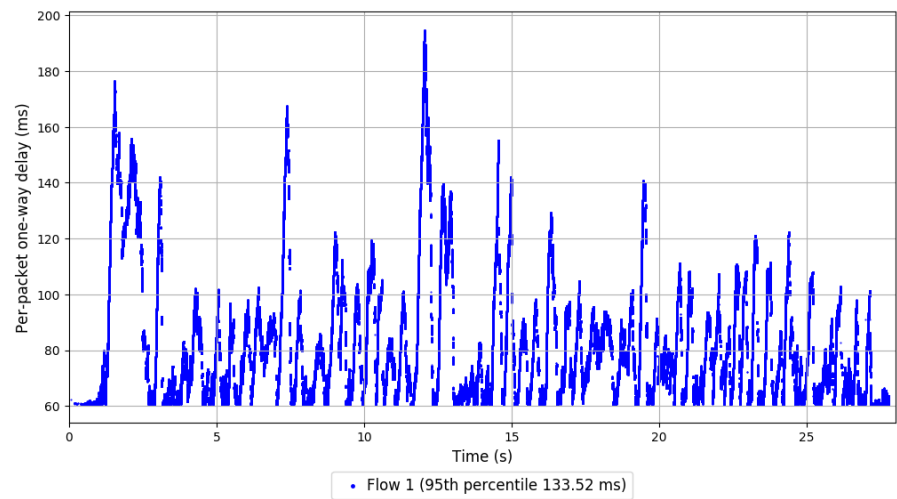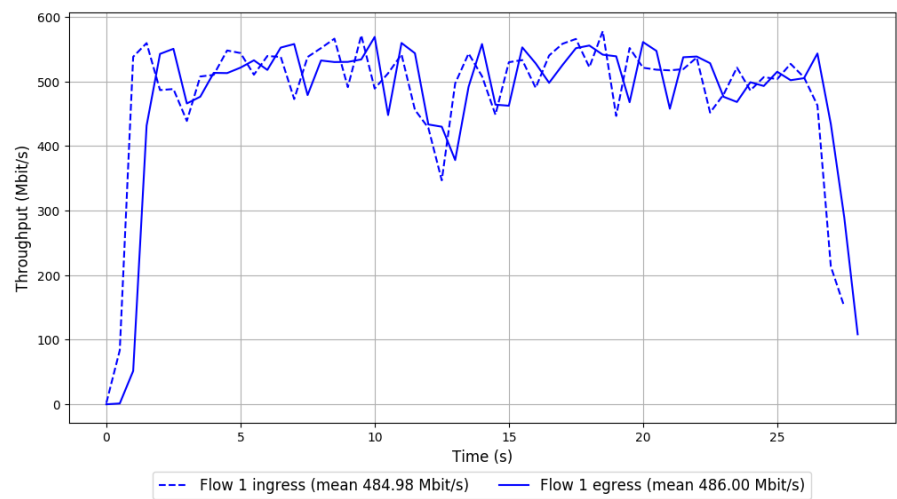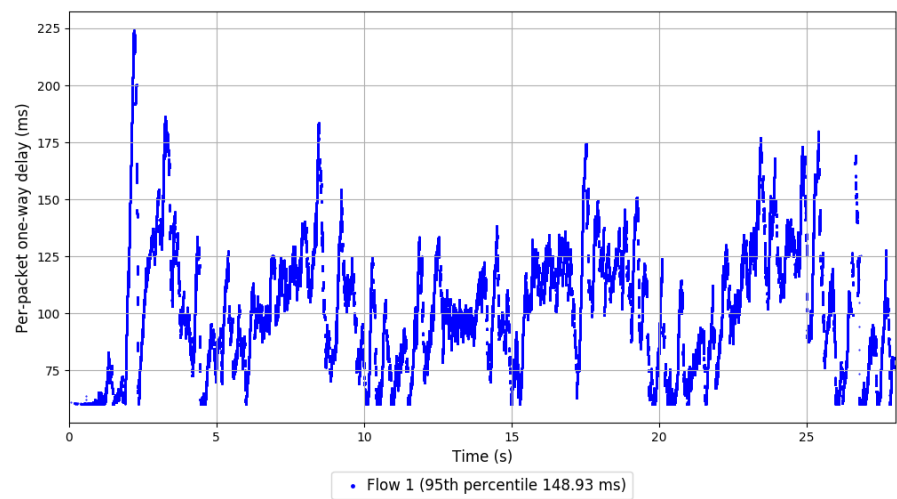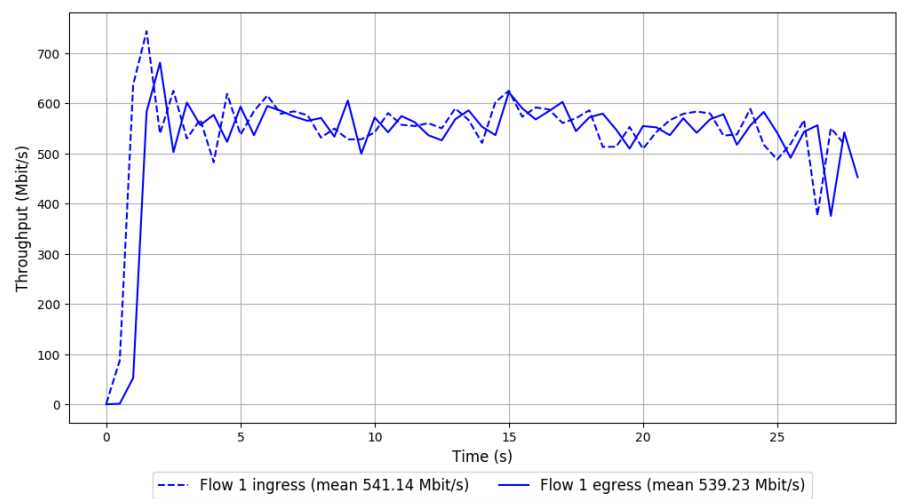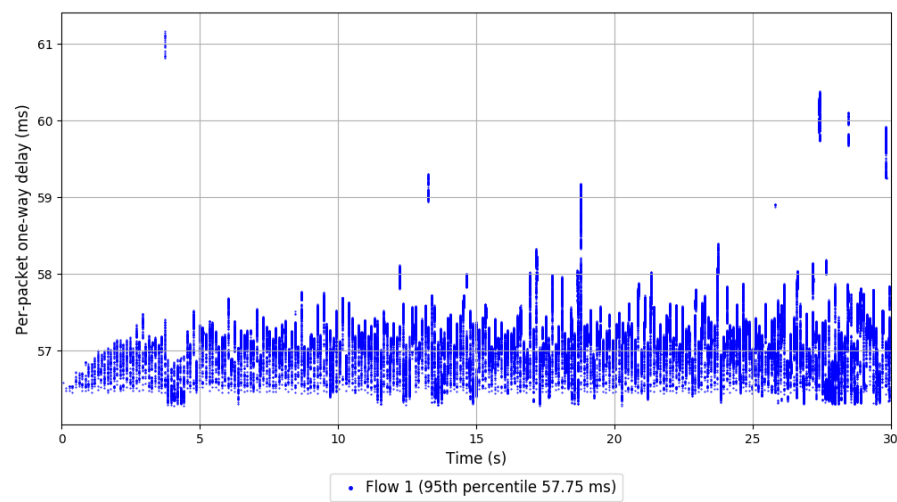
Run 4: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 484.98 Mbit/s)   Flow 1 egress (mean 486.00 Mbit/s)

Flow 1 (95th percentile 133.52 ms)

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-10-03 19:41:54
End at: 2019-10-03 19:42:24
Local clock offset: -0.26 ms
Remote clock offset: -0.122 ms


# Below is generated by plot.py at 2019-10-03 21:45:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 539.23 Mbit/s
95th percentile per-packet one-way delay: 148.930 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 539.23 Mbit/s
95th percentile per-packet one-way delay: 148.930 ms
Loss rate: 0.77%
```

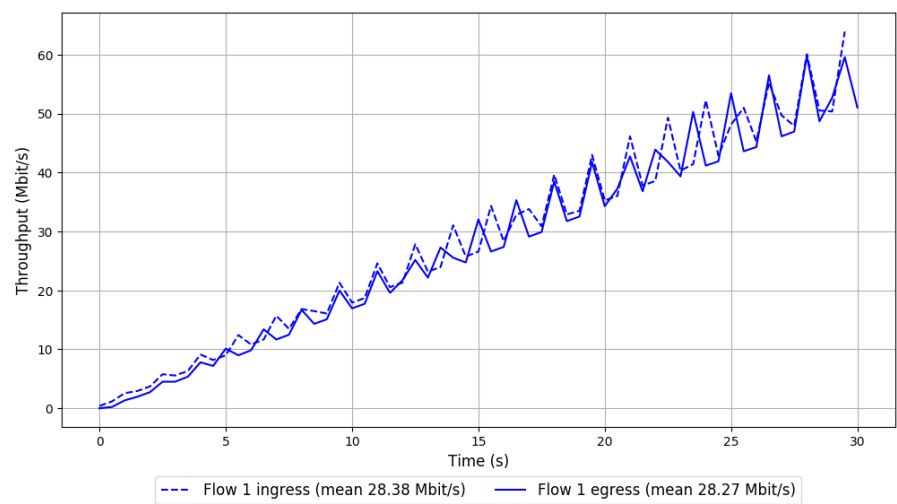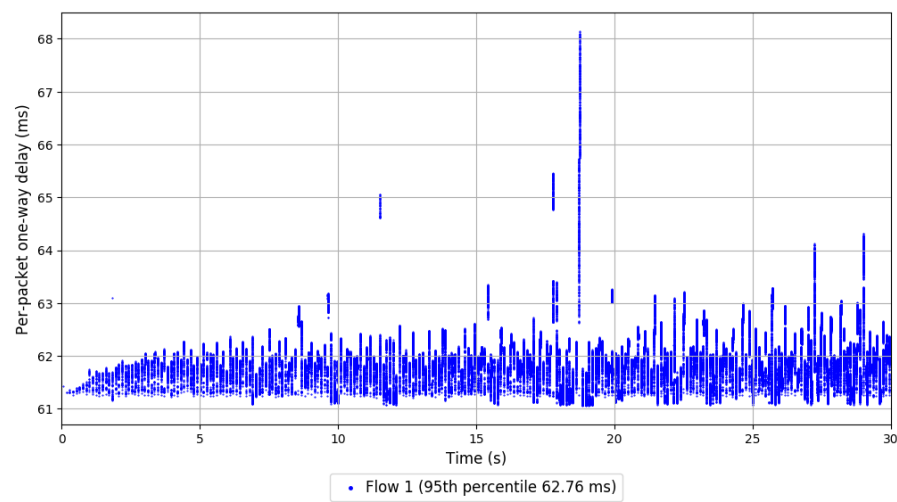Run 5: Report of Indigo-MusesT — Data Link

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```
Run 1: Statistics of LEDBAT

Start at: 2019-10-03 17:30:26
End at: 2019-10-03 17:30:56
Local clock offset: 0.182 ms
Remote clock offset: 0.564 ms


# Below is generated by plot.py at 2019-10-03 21:45:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.27 Mbit/s
95th percentile per-packet one-way delay: 57.750 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 28.27 Mbit/s
95th percentile per-packet one-way delay: 57.750 ms
Loss rate: 0.76%
```

Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 28.38 Mbit/s) — Flow 1 egress (mean 28.27 Mbit/s)

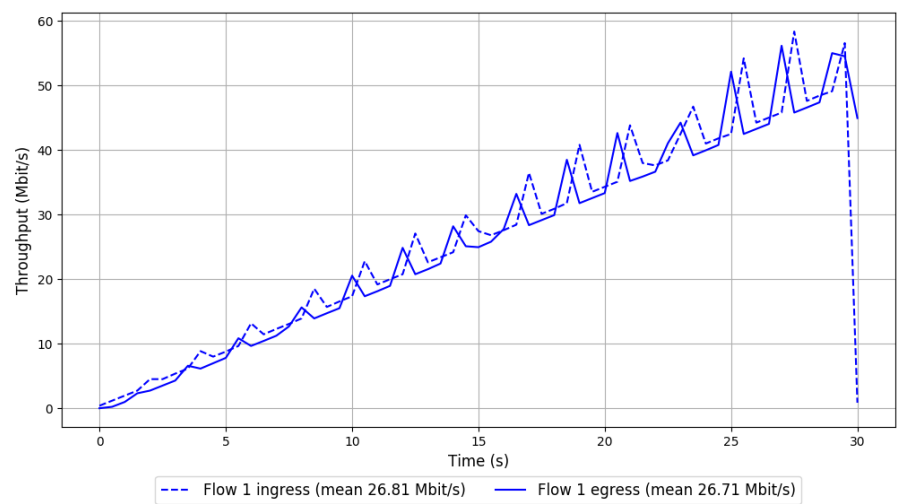• Flow 1 (95th percentile 57.75 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2019-10-03 18:04:47
End at: 2019-10-03 18:05:17
Local clock offset: 0.344 ms
Remote clock offset: -0.517 ms


# Below is generated by plot.py at 2019-10-03 21:45:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.71 Mbit/s
95th percentile per-packet one-way delay: 62.761 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 26.71 Mbit/s
95th percentile per-packet one-way delay: 62.761 ms
Loss rate: 0.78%
```
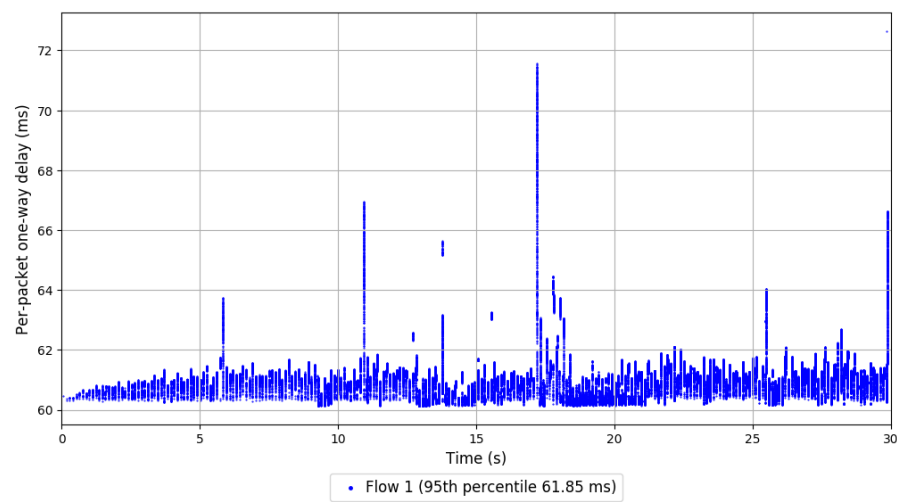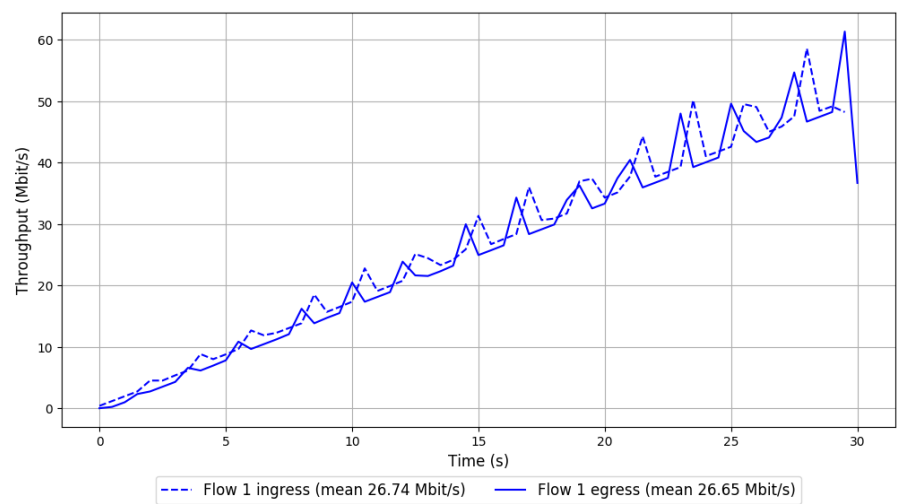
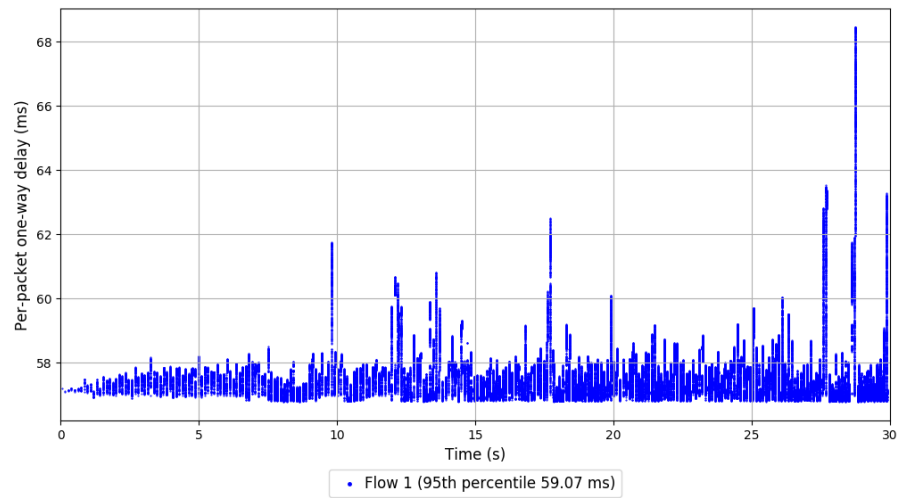Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2019-10-03 18:39:18
End at: 2019-10-03 18:39:48
Local clock offset: -0.212 ms
Remote clock offset: 0.066 ms


# Below is generated by plot.py at 2019-10-03 21:45:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.65 Mbit/s
95th percentile per-packet one-way delay: 61.846 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 26.65 Mbit/s
95th percentile per-packet one-way delay: 61.846 ms
Loss rate: 0.72%
```

Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 26.74 Mbit/s)   Flow 1 egress (mean 26.65 Mbit/s)

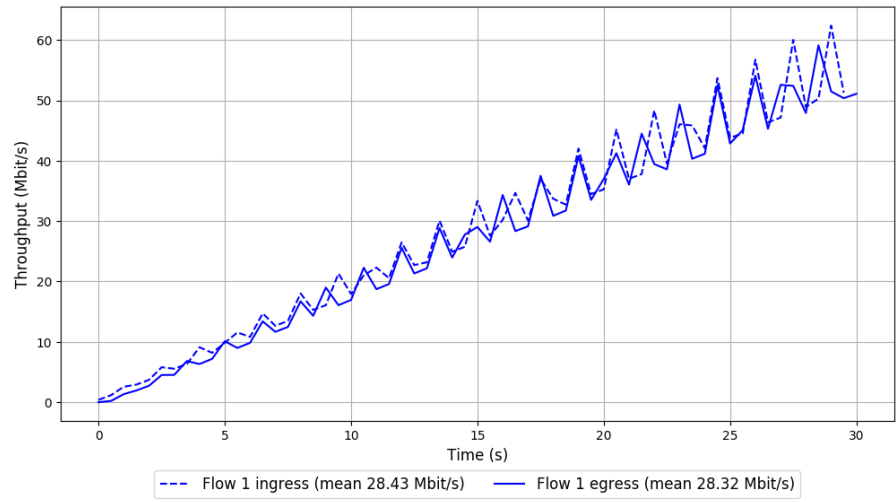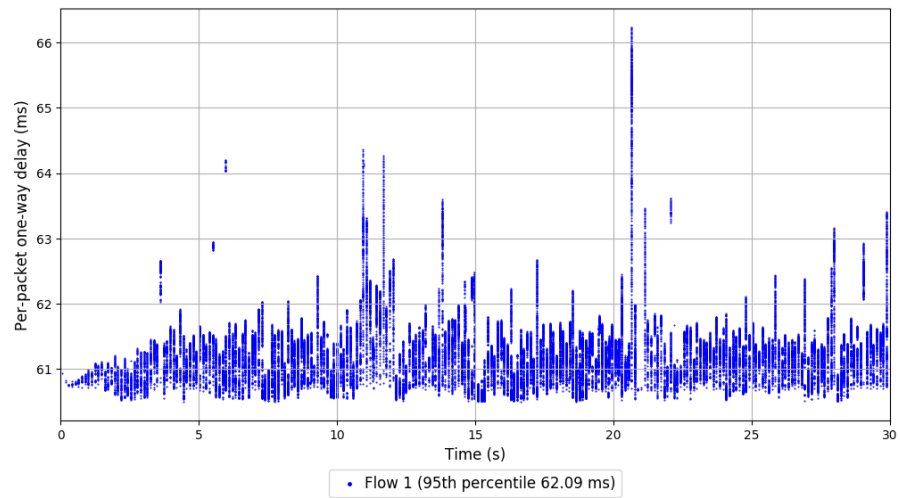Flow 1 (95th percentile 61.85 ms)

```
Run 4: Statistics of LEDBAT

Start at: 2019-10-03 19:13:40
End at: 2019-10-03 19:14:10
Local clock offset: 0.01 ms
Remote clock offset: -0.101 ms

# Below is generated by plot.py at 2019-10-03 21:45:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.32 Mbit/s
95th percentile per-packet one-way delay: 59.074 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 28.32 Mbit/s
95th percentile per-packet one-way delay: 59.074 ms
Loss rate: 0.76%
```

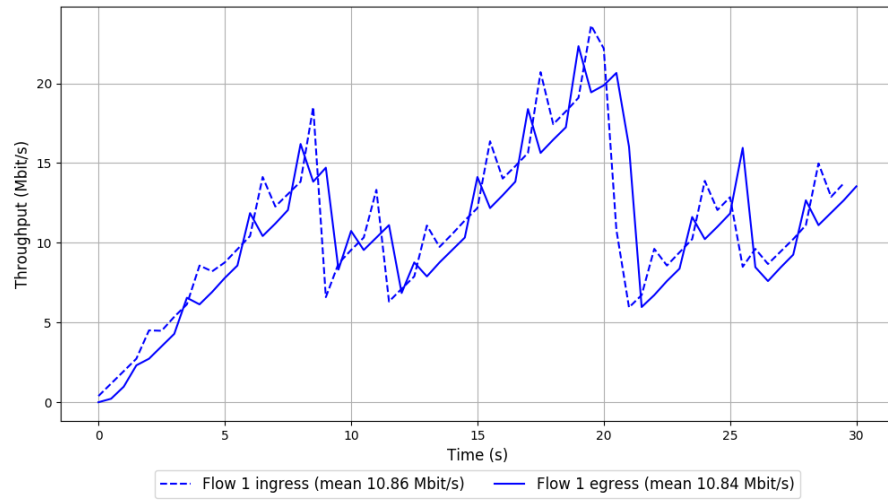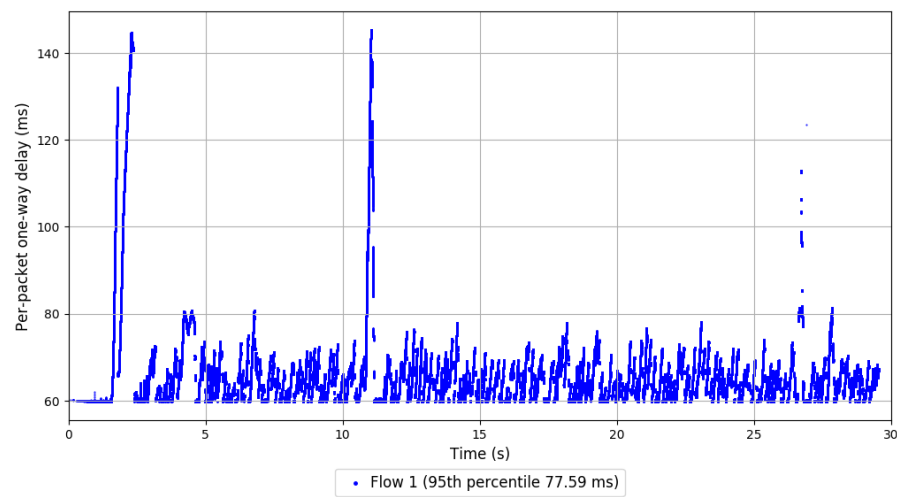Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2019-10-03 19:47:51
End at: 2019-10-03 19:48:21
Local clock offset: 0.137 ms
Remote clock offset: -0.138 ms


# Below is generated by plot.py at 2019-10-03 21:45:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.84 Mbit/s
95th percentile per-packet one-way delay: 62.088 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 10.84 Mbit/s
95th percentile per-packet one-way delay: 62.088 ms
Loss rate: 0.56%
```
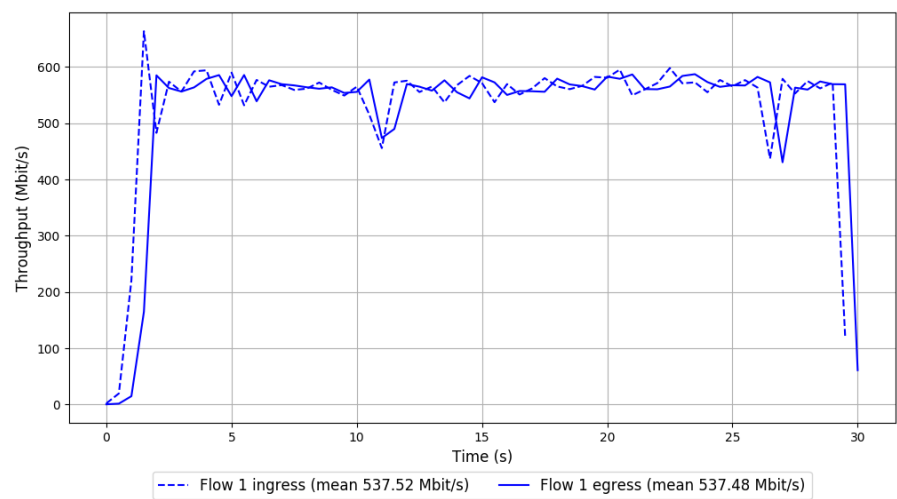
Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 17:51:55
End at: 2019-10-03 17:52:25
Local clock offset: -0.375 ms
Remote clock offset: -0.102 ms


# Below is generated by plot.py at 2019-10-03 21:49:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 537.48 Mbit/s
95th percentile per-packet one-way delay: 77.592 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 537.48 Mbit/s
95th percentile per-packet one-way delay: 77.592 ms
Loss rate: 0.40%
```

Run 1: Report of Muses_DecisionTree — Data Link

```
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 18:26:21
End at: 2019-10-03 18:26:51
Local clock offset: -0.234 ms
Remote clock offset: 0.064 ms


# Below is generated by plot.py at 2019-10-03 21:49:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 526.45 Mbit/s
95th percentile per-packet one-way delay: 73.911 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 526.45 Mbit/s
95th percentile per-packet one-way delay: 73.911 ms
Loss rate: 0.42%
```
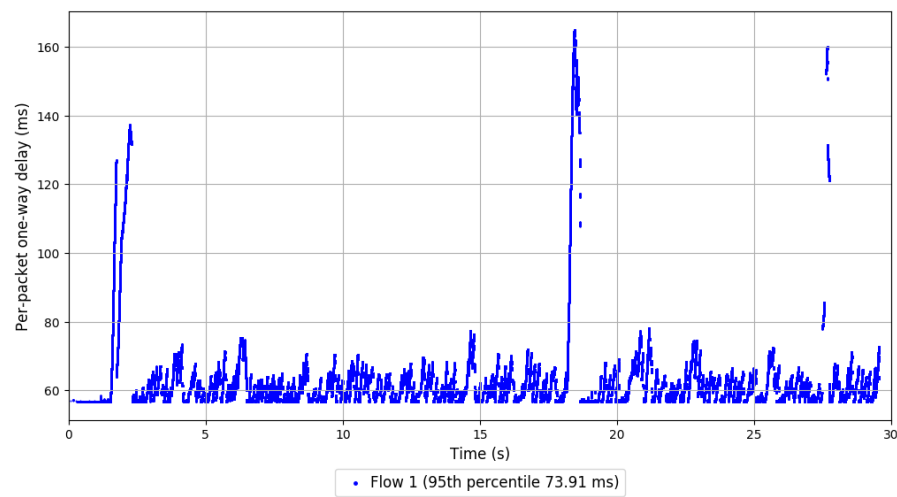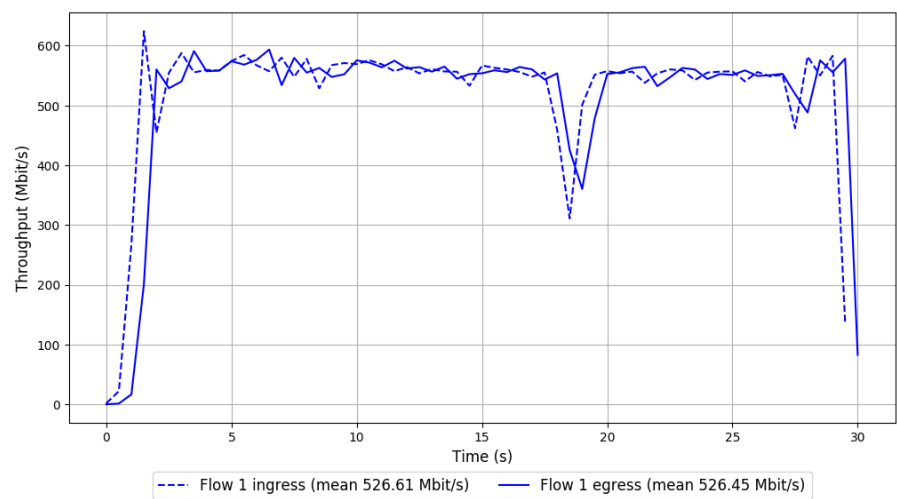
Run 2: Report of Muses_DecisionTree — Data Link

Run 3: Statistics of Muses_DecisionTree

Start at: 2019-10-03 19:00:50
End at: 2019-10-03 19:01:20
Local clock offset: 0.088 ms
Remote clock offset: 0.064 ms

Below is generated by plot.py at 2019-10-03 21:49:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 449.16 Mbit/s
95th percentile per-packet one-way delay: 134.163 ms
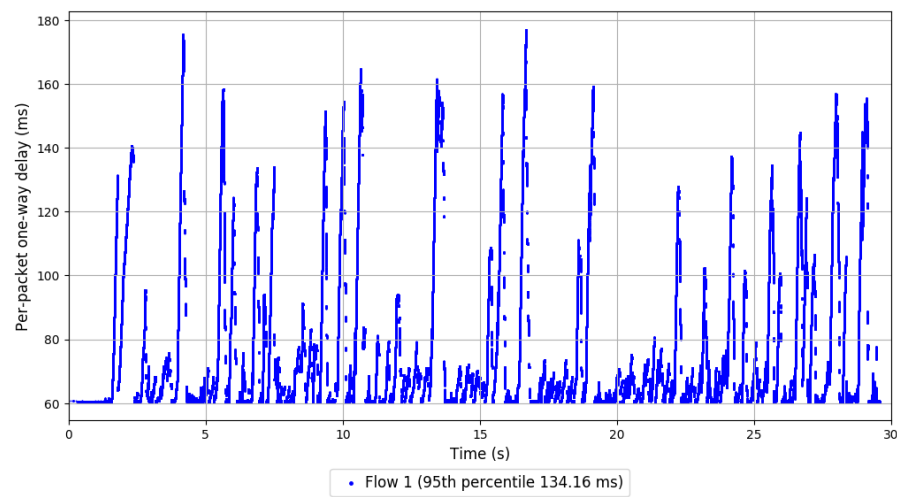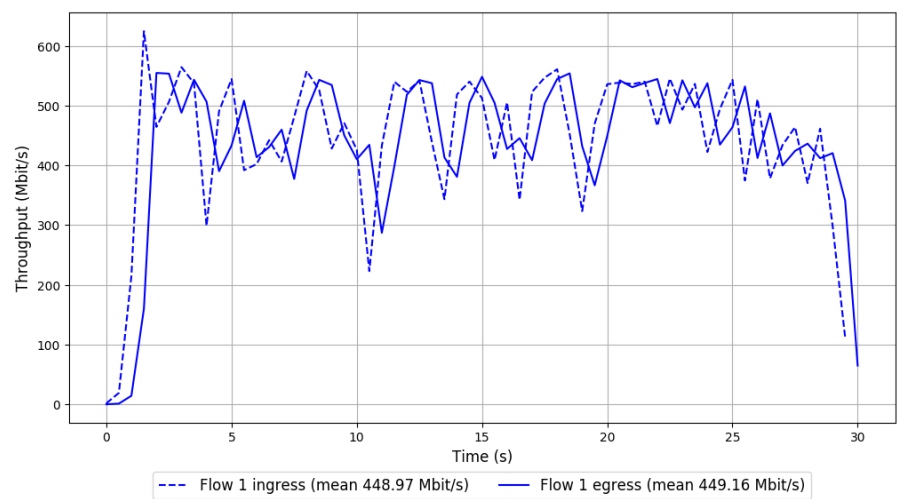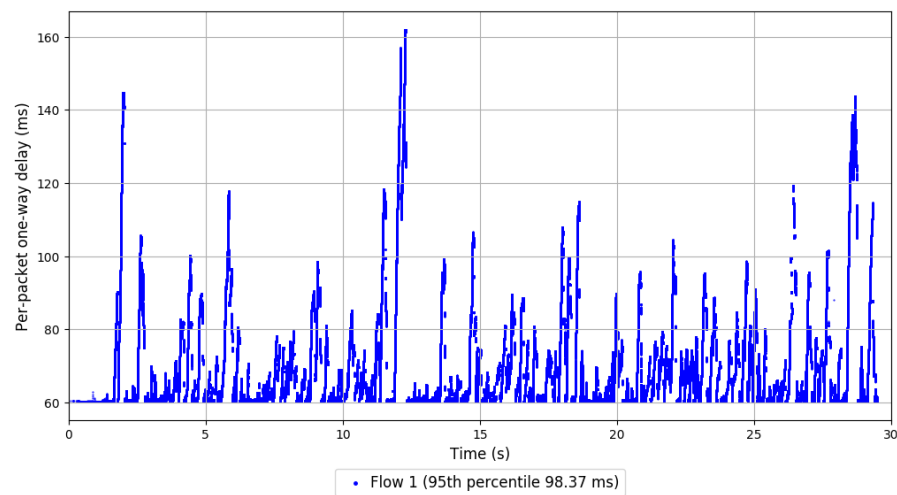Loss rate: 0.39%
-- Flow 1:
Average throughput: 449.16 Mbit/s
95th percentile per-packet one-way delay: 134.163 ms
Loss rate: 0.39%

Run 3: Report of Muses_DecisionTree — Data Link

Flow 1 ingress (mean 448.97 Mbit/s)   Flow 1 egress (mean 449.16 Mbit/s)

Flow 1 (95th percentile 134.16 ms)

```
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 19:34:47
End at: 2019-10-03 19:35:17
Local clock offset: 0.396 ms
Remote clock offset: 0.191 ms


# Below is generated by plot.py at 2019-10-03 21:51:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 481.42 Mbit/s
95th percentile per-packet one-way delay: 98.369 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 481.42 Mbit/s
95th percentile per-packet one-way delay: 98.369 ms
Loss rate: 0.33%
```
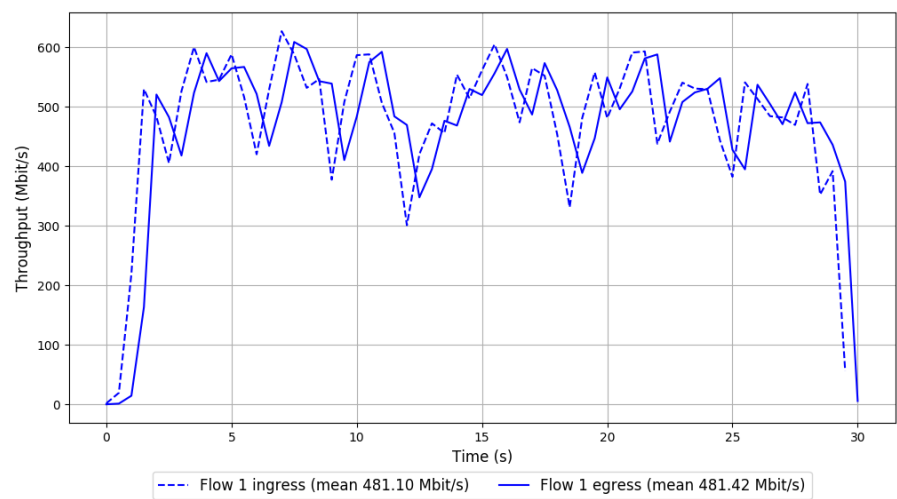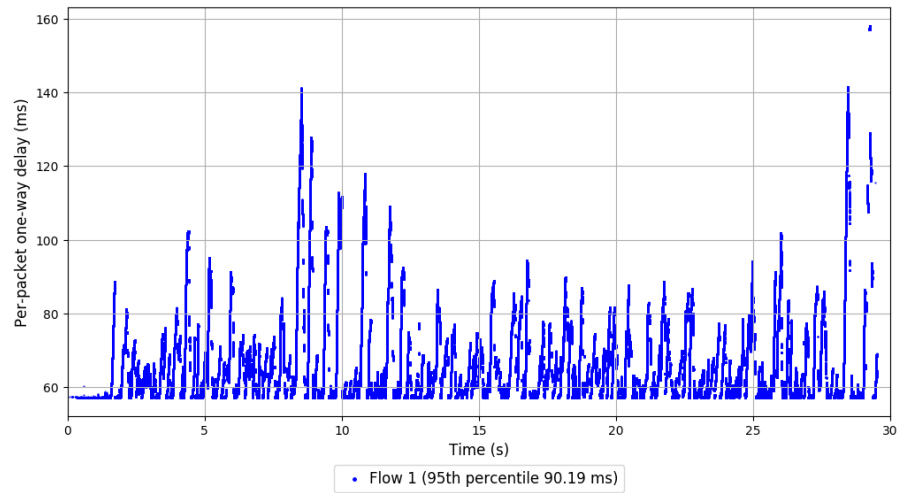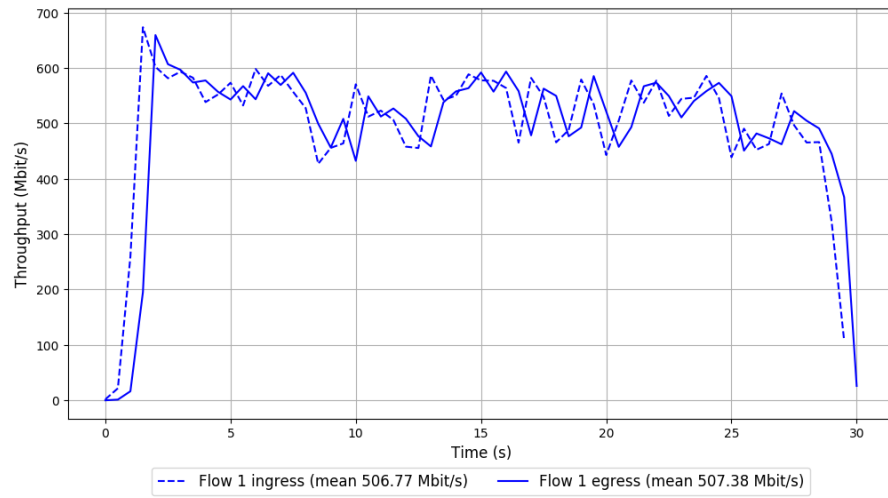
Run 4: Report of Muses_DecisionTree — Data Link

```
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 20:09:05
End at: 2019-10-03 20:09:35
Local clock offset: -0.008 ms
Remote clock offset: -0.127 ms


# Below is generated by plot.py at 2019-10-03 21:53:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 507.38 Mbit/s
95th percentile per-packet one-way delay: 90.188 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 507.38 Mbit/s
95th percentile per-packet one-way delay: 90.188 ms
Loss rate: 0.36%
```
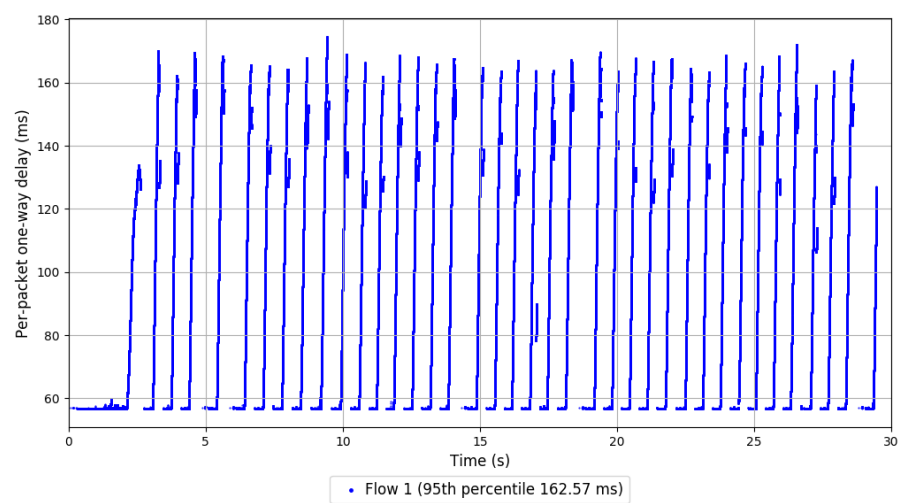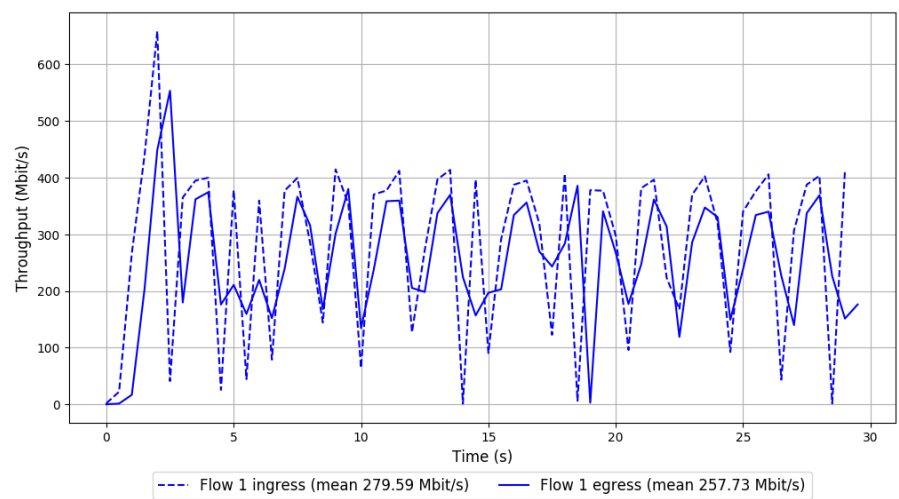
Run 5: Report of Muses_DecisionTree — Data Link

```
Run 1: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 17:22:11
End at: 2019-10-03 17:22:41
Local clock offset: -0.298 ms
Remote clock offset: -0.119 ms


# Below is generated by plot.py at 2019-10-03 21:53:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 257.73 Mbit/s
95th percentile per-packet one-way delay: 162.575 ms
Loss rate: 7.98%
-- Flow 1:
Average throughput: 257.73 Mbit/s
95th percentile per-packet one-way delay: 162.575 ms
Loss rate: 7.98%
```

Run 1: Report of Muses_DecisionTreeH0 — Data Link

Flow 1 ingress (mean 279.59 Mbit/s)   Flow 1 egress (mean 257.73 Mbit/s)
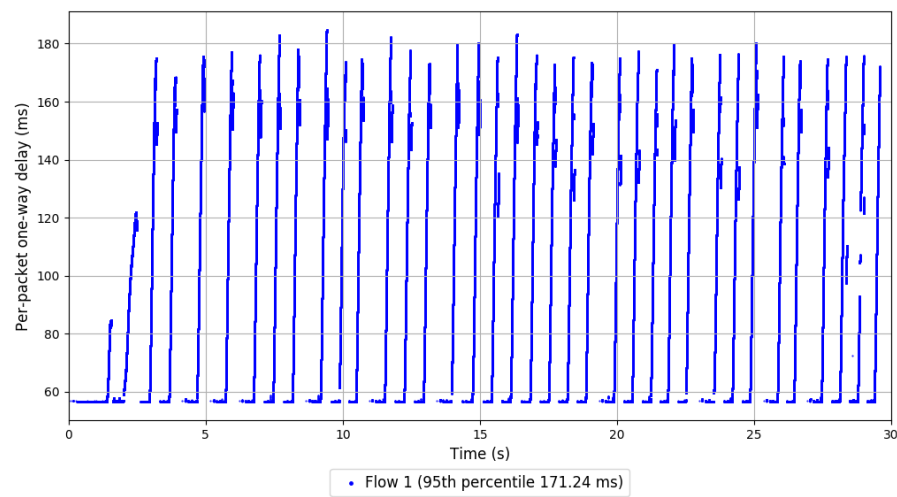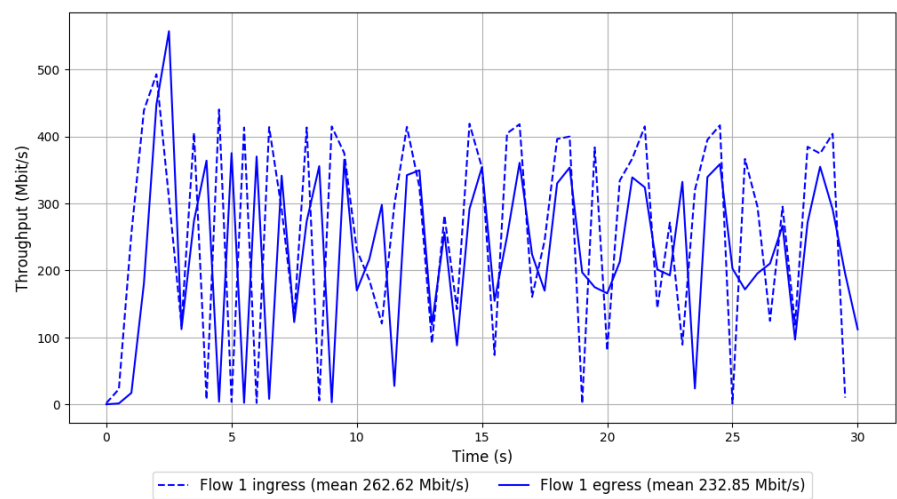

• Flow 1 (95th percentile 162.57 ms)

```
Run 2: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 17:56:32
End at: 2019-10-03 17:57:02
Local clock offset: -0.442 ms
Remote clock offset: -0.098 ms


# Below is generated by plot.py at 2019-10-03 21:53:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 232.85 Mbit/s
95th percentile per-packet one-way delay: 171.241 ms
Loss rate: 11.24%
-- Flow 1:
Average throughput: 232.85 Mbit/s
95th percentile per-packet one-way delay: 171.241 ms
Loss rate: 11.24%
```
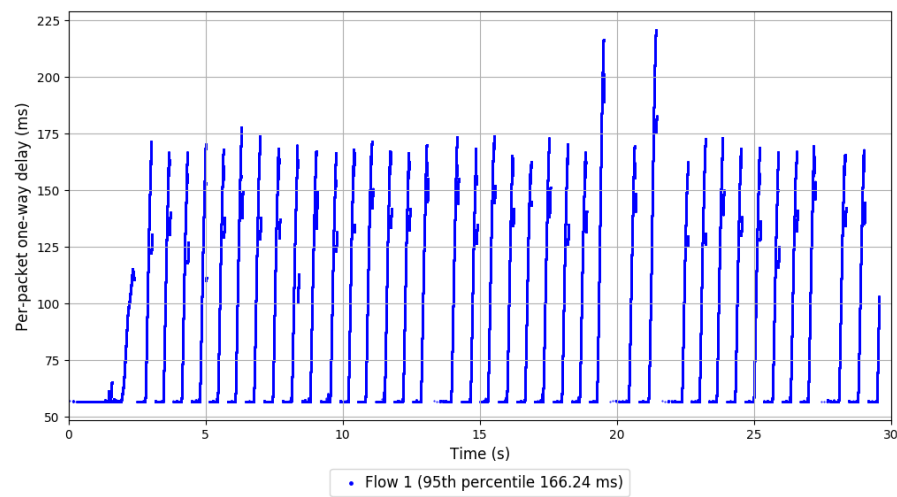
Run 2: Report of Muses_DecisionTreeH0 — Data Link

- - - Flow 1 ingress (mean 262.62 Mbit/s) —— Flow 1 egress (mean 232.85 Mbit/s)

• Flow 1 (95th percentile 171.24 ms)

```
Run 3: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 18:30:56
End at: 2019-10-03 18:31:26
Local clock offset: -0.477 ms
Remote clock offset: 0.162 ms


# Below is generated by plot.py at 2019-10-03 21:53:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 250.59 Mbit/s
95th percentile per-packet one-way delay: 166.235 ms
Loss rate: 9.18%
-- Flow 1:
Average throughput: 250.59 Mbit/s
95th percentile per-packet one-way delay: 166.235 ms
Loss rate: 9.18%
```
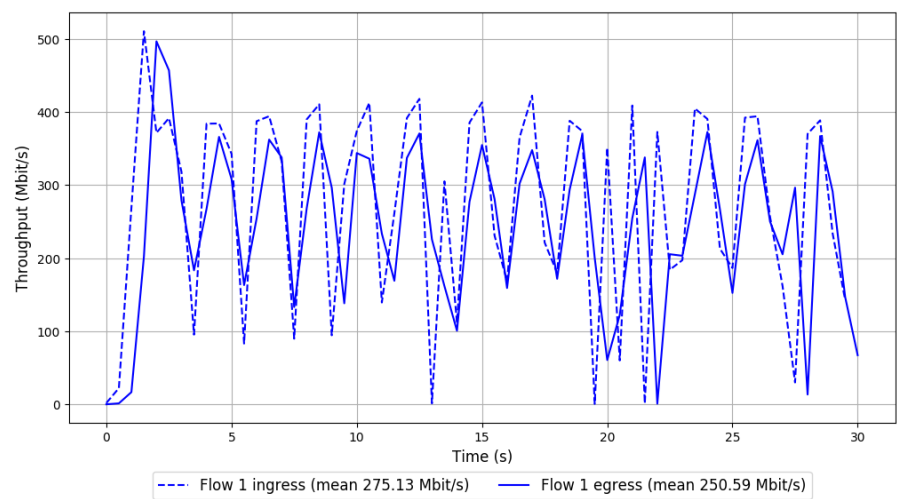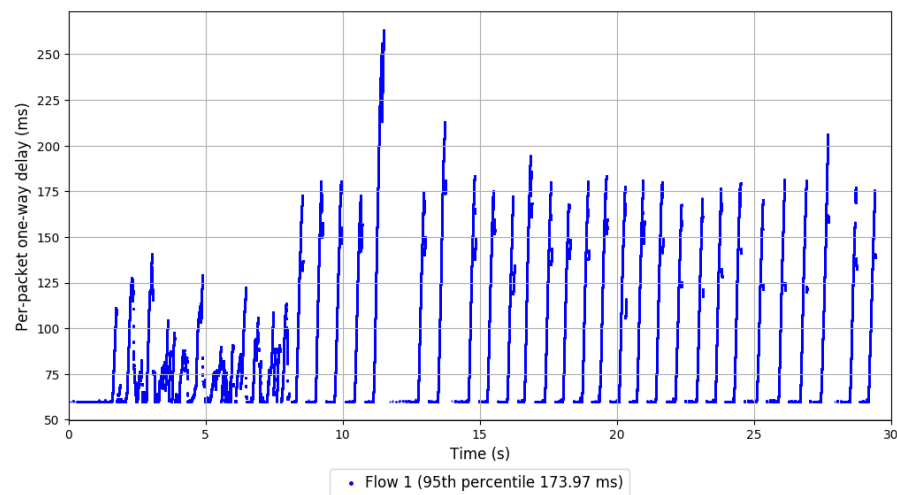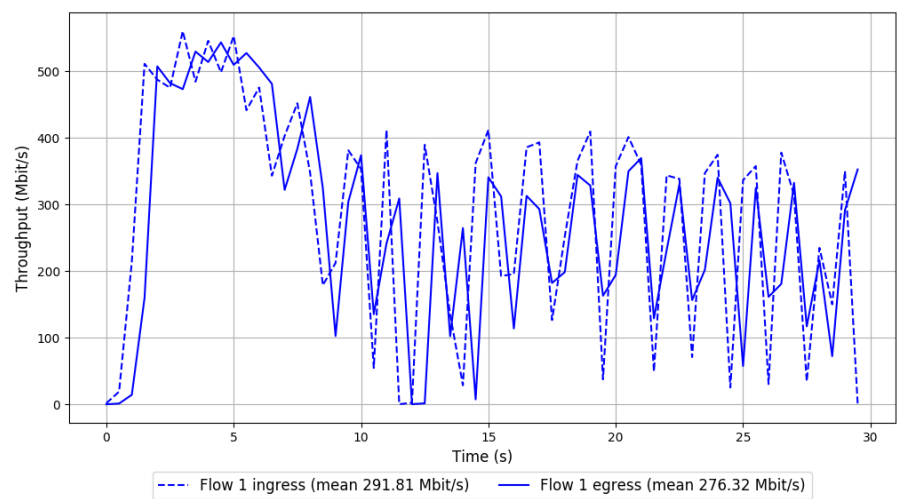
Run 3: Report of Muses_DecisionTreeH0 — Data Link

Flow 1 ingress (mean 275.13 Mbit/s)   Flow 1 egress (mean 250.59 Mbit/s)
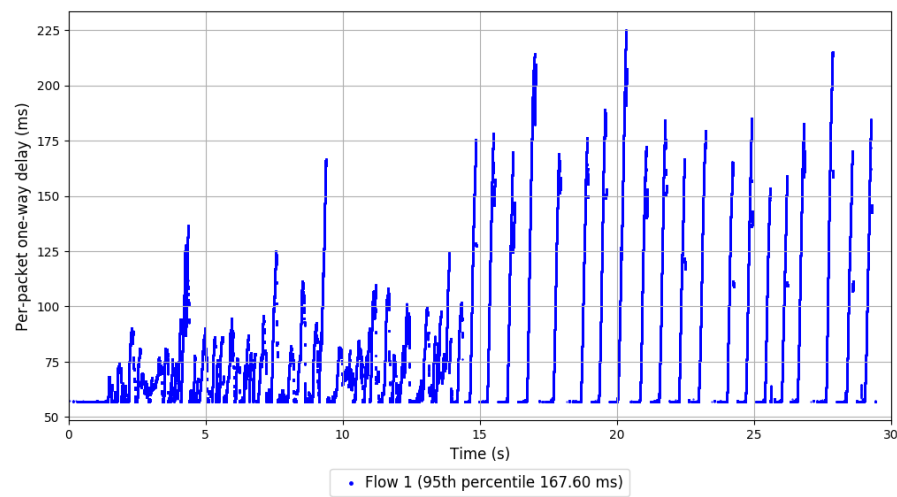

• Flow 1 (95th percentile 166.24 ms)

```
Run 4: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 19:05:20
End at: 2019-10-03 19:05:50
Local clock offset: 0.401 ms
Remote clock offset: 0.592 ms


# Below is generated by plot.py at 2019-10-03 21:53:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 276.32 Mbit/s
95th percentile per-packet one-way delay: 173.975 ms
Loss rate: 5.75%
-- Flow 1:
Average throughput: 276.32 Mbit/s
95th percentile per-packet one-way delay: 173.975 ms
Loss rate: 5.75%
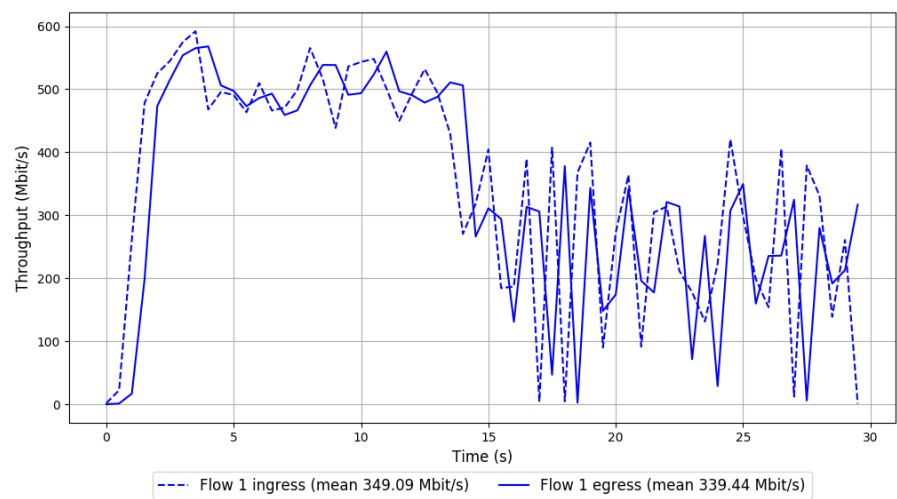```

Run 4: Report of Muses_DecisionTreeH0 — Data Link

```
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 19:39:19
End at: 2019-10-03 19:39:49
Local clock offset: 0.162 ms
Remote clock offset: -0.135 ms


# Below is generated by plot.py at 2019-10-03 21:56:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 339.44 Mbit/s
95th percentile per-packet one-way delay: 167.601 ms
Loss rate: 3.37%
-- Flow 1:
Average throughput: 339.44 Mbit/s
95th percentile per-packet one-way delay: 167.601 ms
Loss rate: 3.37%
```

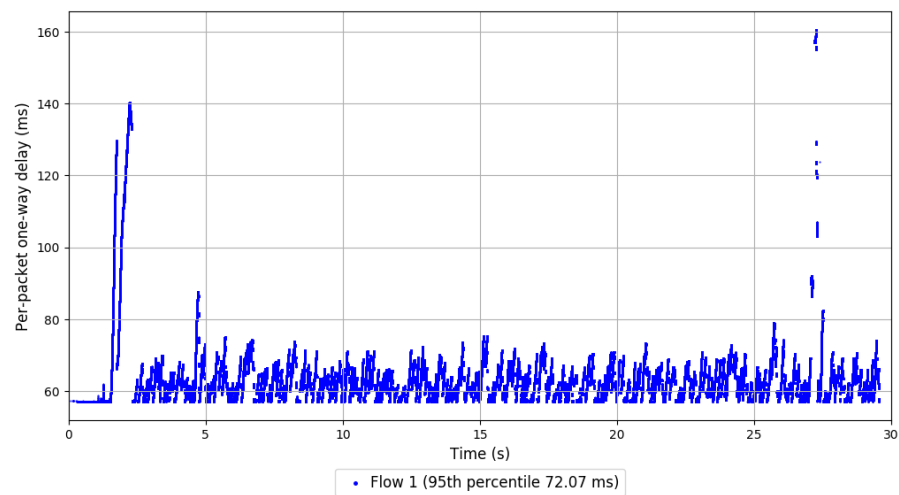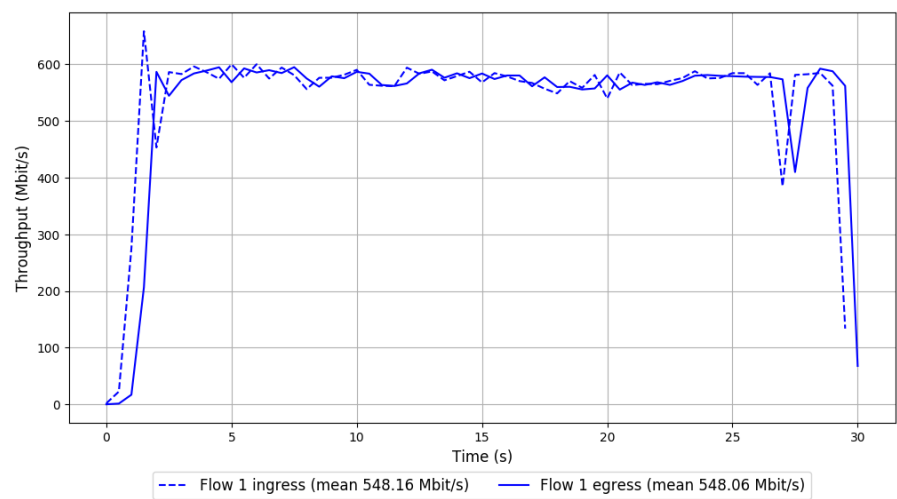## Run 5: Report of Muses_DecisionTreeH0 — Data Link

```
Run 1: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 17:38:59
End at: 2019-10-03 17:39:29
Local clock offset: 0.226 ms
Remote clock offset: -0.066 ms


# Below is generated by plot.py at 2019-10-03 22:01:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 548.06 Mbit/s
95th percentile per-packet one-way delay: 72.067 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 548.06 Mbit/s
95th percentile per-packet one-way delay: 72.067 ms
Loss rate: 0.40%
```
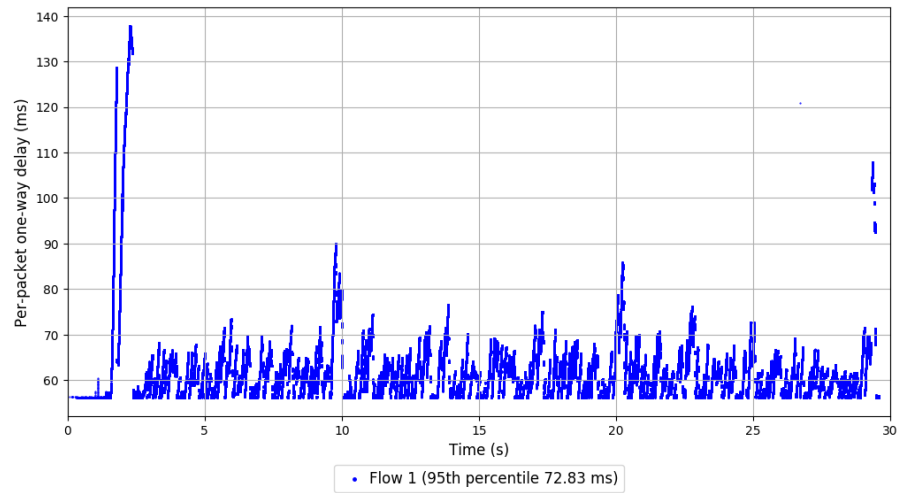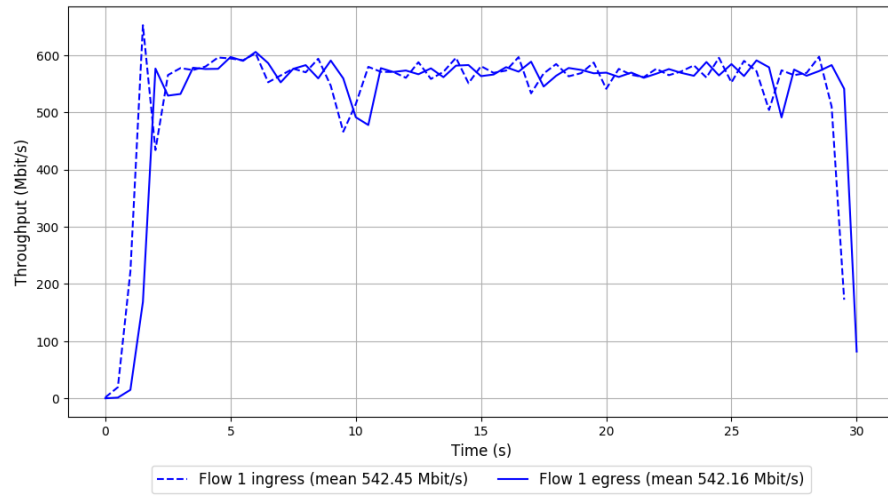
Run 1: Report of Muses_DecisionTreeR0 — Data Link

Flow 1 ingress (mean 548.16 Mbit/s)   Flow 1 egress (mean 548.06 Mbit/s)

• Flow 1 (95th percentile 72.07 ms)

```
Run 2: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 18:13:19
End at: 2019-10-03 18:13:49
Local clock offset: -0.467 ms
Remote clock offset: 0.212 ms


# Below is generated by plot.py at 2019-10-03 22:01:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 542.16 Mbit/s
95th percentile per-packet one-way delay: 72.833 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 542.16 Mbit/s
95th percentile per-packet one-way delay: 72.833 ms
Loss rate: 0.44%
```

Run 2: Report of Muses_DecisionTreeR0 — Data Link

Flow 1 ingress (mean 542.45 Mbit/s)   Flow 1 egress (mean 542.16 Mbit/s)
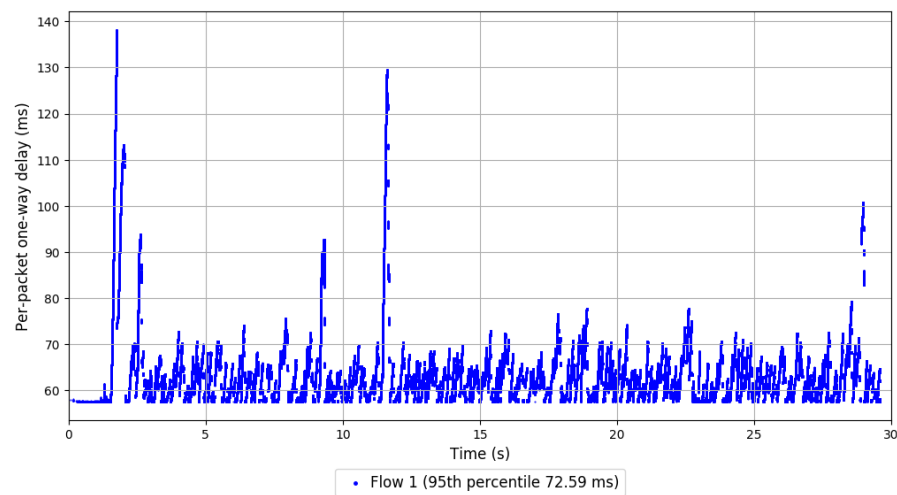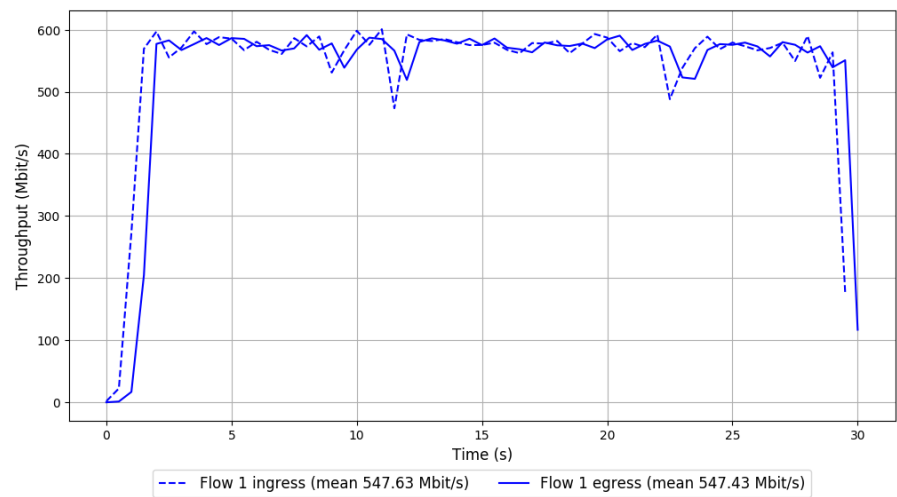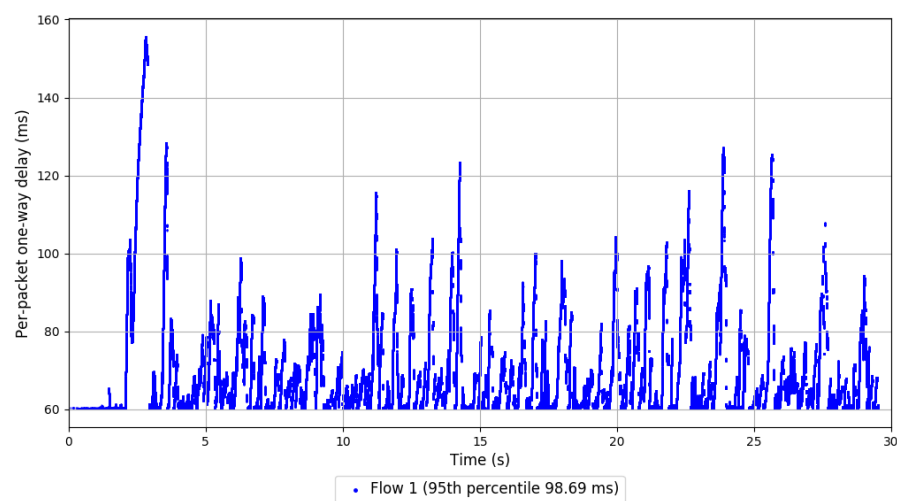

Flow 1 (95th percentile 72.83 ms)

```
Run 3: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 18:47:46
End at: 2019-10-03 18:48:16
Local clock offset: 0.168 ms
Remote clock offset: -0.676 ms


# Below is generated by plot.py at 2019-10-03 22:01:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 547.43 Mbit/s
95th percentile per-packet one-way delay: 72.590 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 547.43 Mbit/s
95th percentile per-packet one-way delay: 72.590 ms
Loss rate: 0.42%
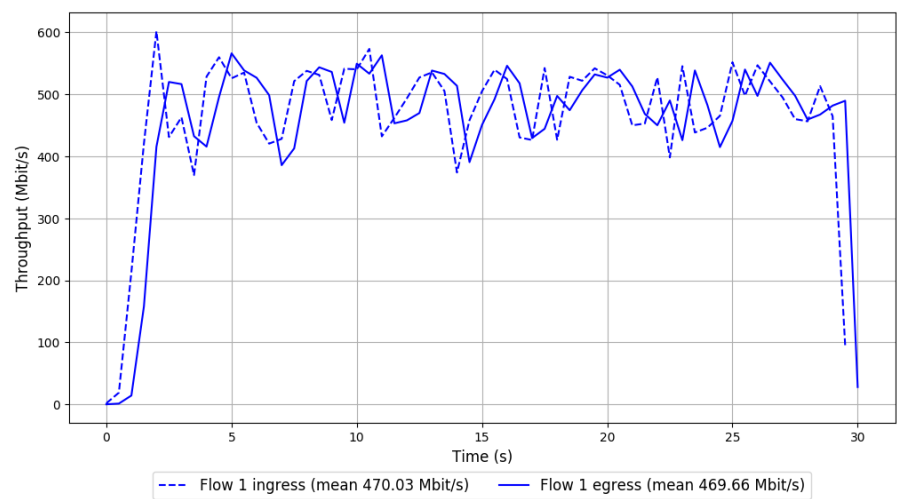```

Run 3: Report of Muses_DecisionTreeR0 — Data Link

```
Run 4: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 19:22:02
End at: 2019-10-03 19:22:32
Local clock offset: -0.055 ms
Remote clock offset: -0.231 ms


# Below is generated by plot.py at 2019-10-03 22:01:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 469.66 Mbit/s
95th percentile per-packet one-way delay: 98.685 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 469.66 Mbit/s
95th percentile per-packet one-way delay: 98.685 ms
Loss rate: 0.48%
```

Run 4: Report of Muses_DecisionTreeR0 — Data Link

Flow 1 ingress (mean 470.03 Mbit/s) ---- Flow 1 egress (mean 469.66 Mbit/s)
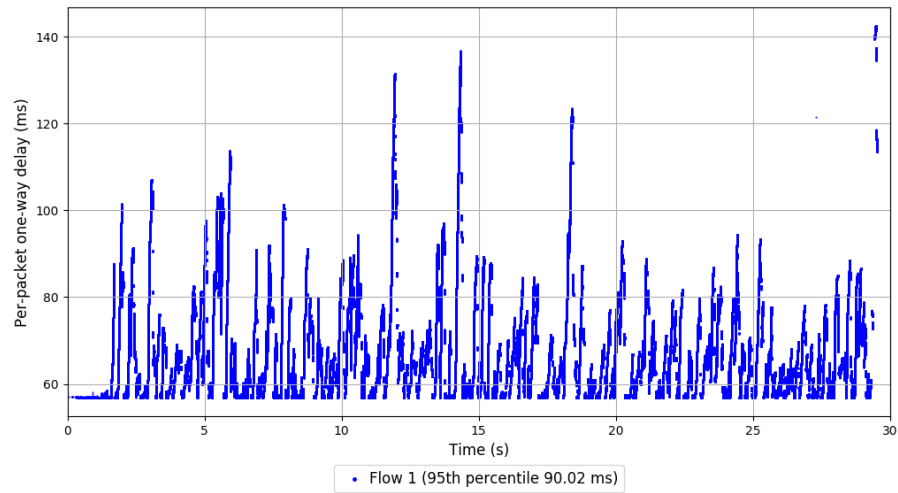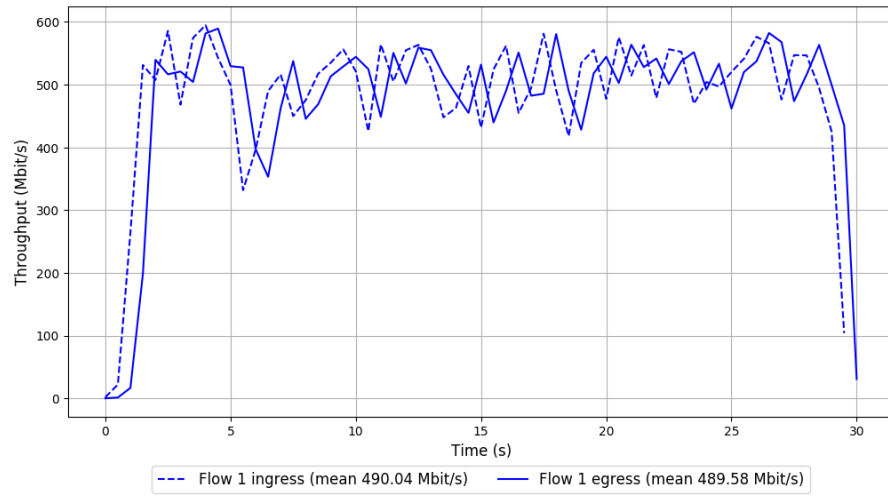

Flow 1 (95th percentile 98.69 ms)

```
Run 5: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 19:56:16
End at: 2019-10-03 19:56:46
Local clock offset: 0.006 ms
Remote clock offset: -0.116 ms


# Below is generated by plot.py at 2019-10-03 22:02:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 489.58 Mbit/s
95th percentile per-packet one-way delay: 90.015 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 489.58 Mbit/s
95th percentile per-packet one-way delay: 90.015 ms
Loss rate: 0.48%
```
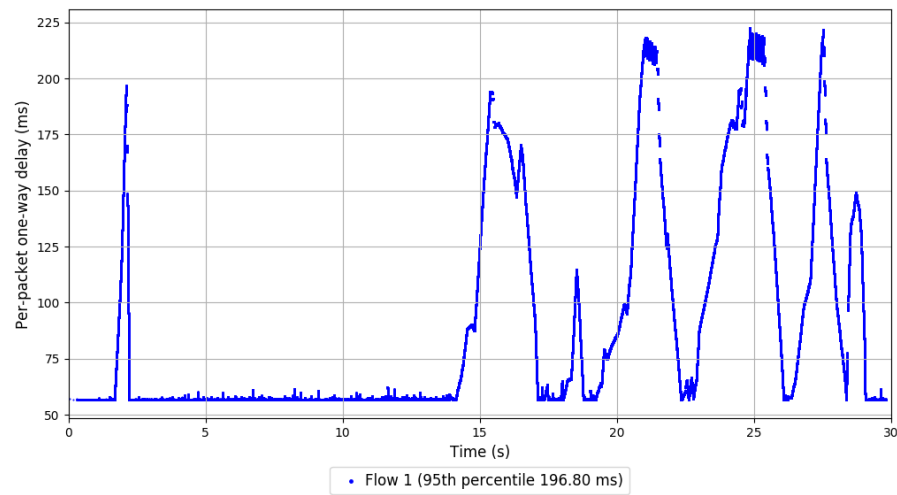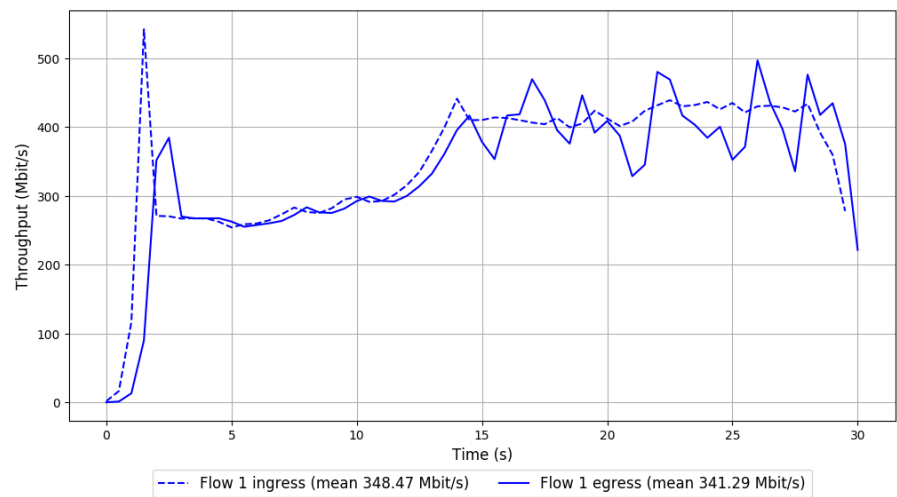
Run 5: Report of Muses_DecisionTreeR0 — Data Link

Flow 1 ingress (mean 490.04 Mbit/s)   Flow 1 egress (mean 489.58 Mbit/s)

Flow 1 (95th percentile 90.02 ms)

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-10-03 17:27:47
End at: 2019-10-03 17:28:17
Local clock offset: 0.32 ms
Remote clock offset: 0.424 ms

# Below is generated by plot.py at 2019-10-03 22:07:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 341.29 Mbit/s
95th percentile per-packet one-way delay: 196.796 ms
Loss rate: 2.43%
-- Flow 1:
Average throughput: 341.29 Mbit/s
95th percentile per-packet one-way delay: 196.796 ms
Loss rate: 2.43%
```

Run 1: Report of PCC-Allegro — Data Link

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```
Run 2: Statistics of PCC-Allegro

Start at: 2019-10-03 18:02:09
End at: 2019-10-03 18:02:39
Local clock offset: 0.136 ms
Remote clock offset: -0.127 ms


# Below is generated by plot.py at 2019-10-03 22:07:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 327.35 Mbit/s
95th percentile per-packet one-way delay: 124.558 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 327.35 Mbit/s
95th percentile per-packet one-way delay: 124.558 ms
Loss rate: 0.85%
```
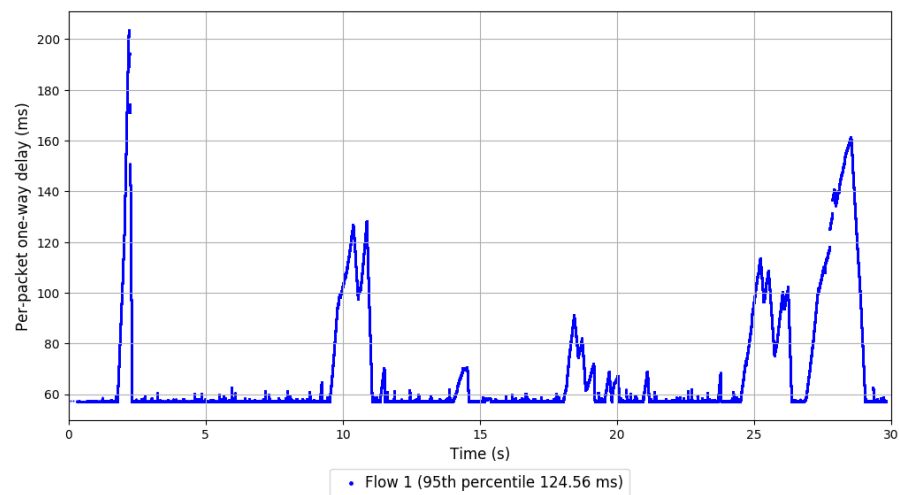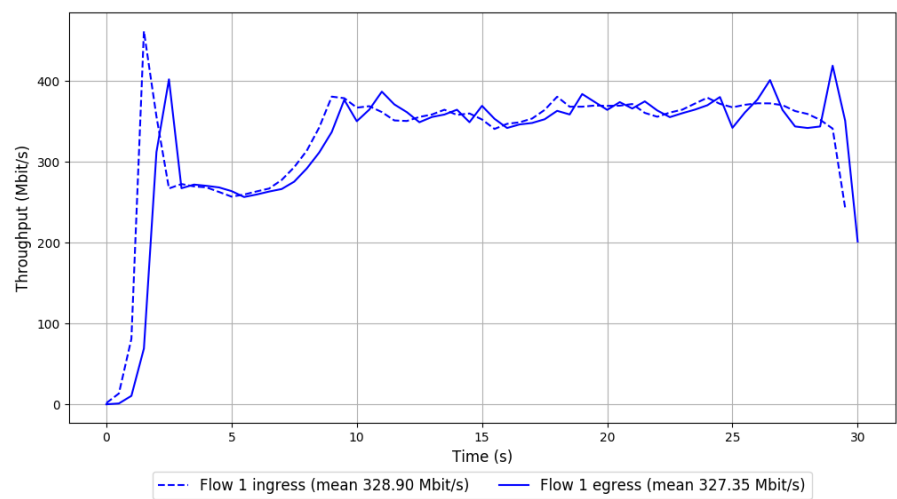
Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-10-03 18:36:42
End at: 2019-10-03 18:37:12
Local clock offset: -0.045 ms
Remote clock offset: 0.143 ms


# Below is generated by plot.py at 2019-10-03 22:09:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 307.93 Mbit/s
95th percentile per-packet one-way delay: 133.852 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 307.93 Mbit/s
95th percentile per-packet one-way delay: 133.852 ms
Loss rate: 1.08%
```
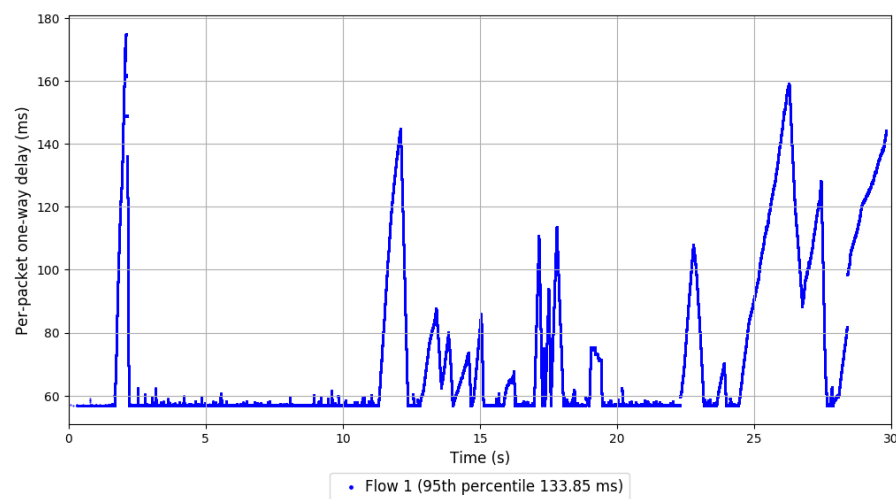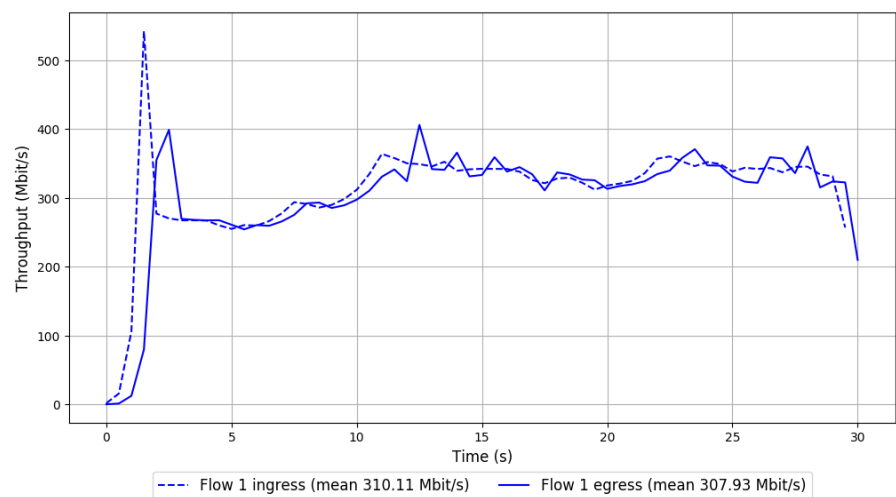
Run 3: Report of PCC-Allegro — Data Link

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-10-03 19:11:02
End at: 2019-10-03 19:11:32
Local clock offset: -0.248 ms
Remote clock offset: 0.017 ms


# Below is generated by plot.py at 2019-10-03 22:15:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 324.71 Mbit/s
95th percentile per-packet one-way delay: 220.604 ms
Loss rate: 4.69%
-- Flow 1:
Average throughput: 324.71 Mbit/s
95th percentile per-packet one-way delay: 220.604 ms
Loss rate: 4.69%
```
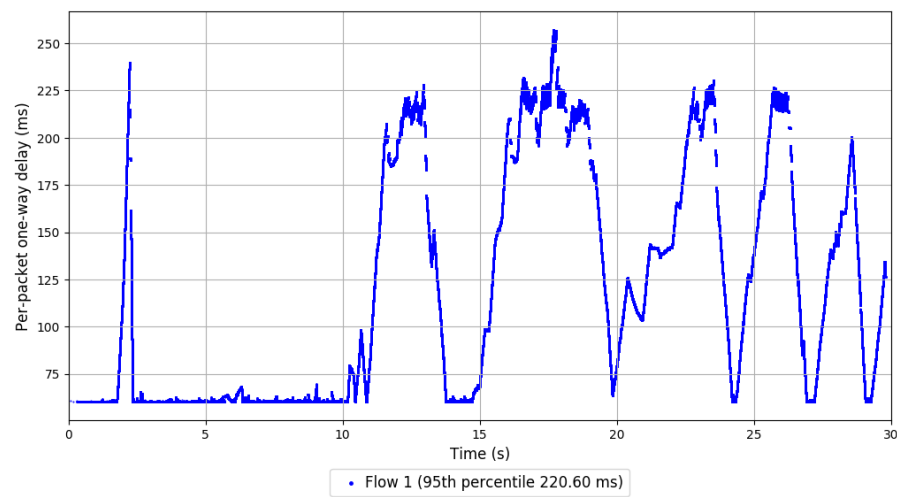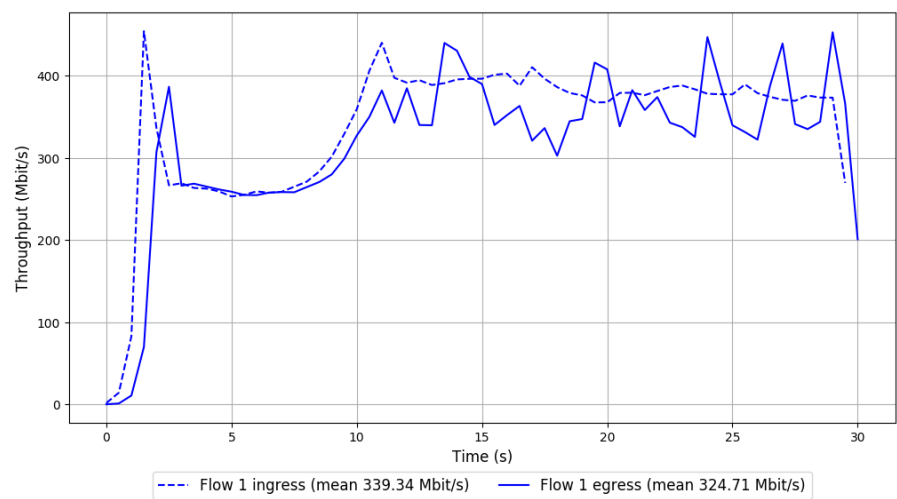
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 339.34 Mbit/s) —— Flow 1 egress (mean 324.71 Mbit/s)
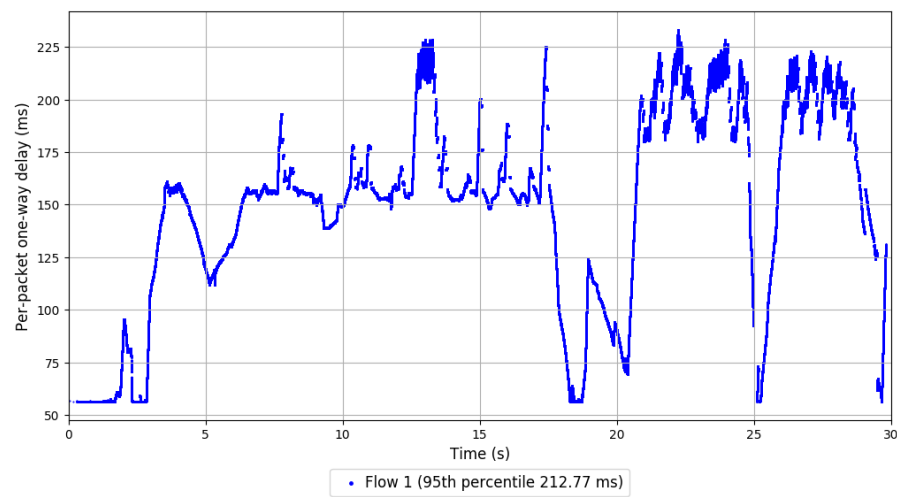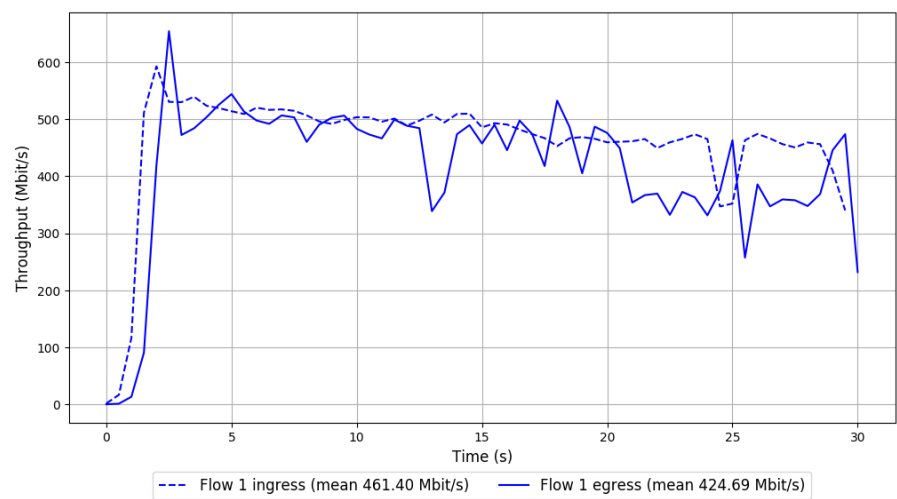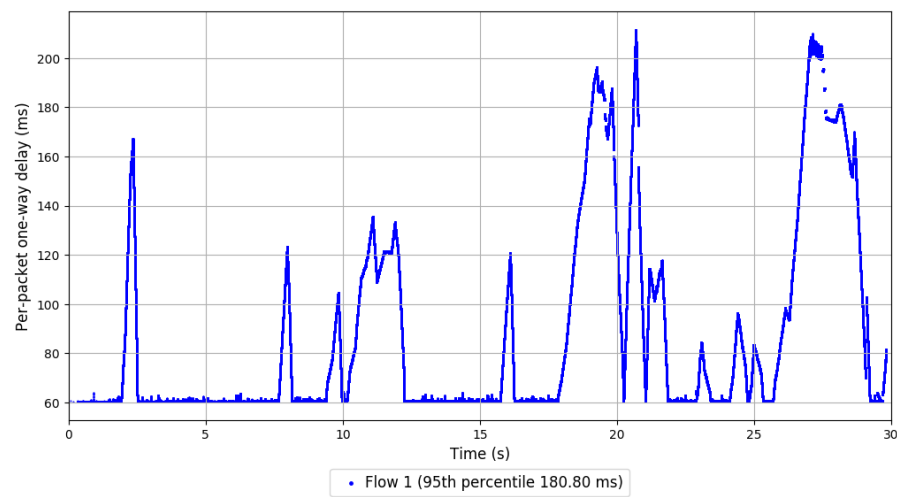

• Flow 1 (95th percentile 220.60 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-10-03 19:45:05
End at: 2019-10-03 19:45:35
Local clock offset: -0.416 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 424.69 Mbit/s
95th percentile per-packet one-way delay: 212.773 ms
Loss rate: 8.31%
-- Flow 1:
Average throughput: 424.69 Mbit/s
95th percentile per-packet one-way delay: 212.773 ms
Loss rate: 8.31%
```

Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 461.40 Mbit/s)   Flow 1 egress (mean 424.69 Mbit/s)
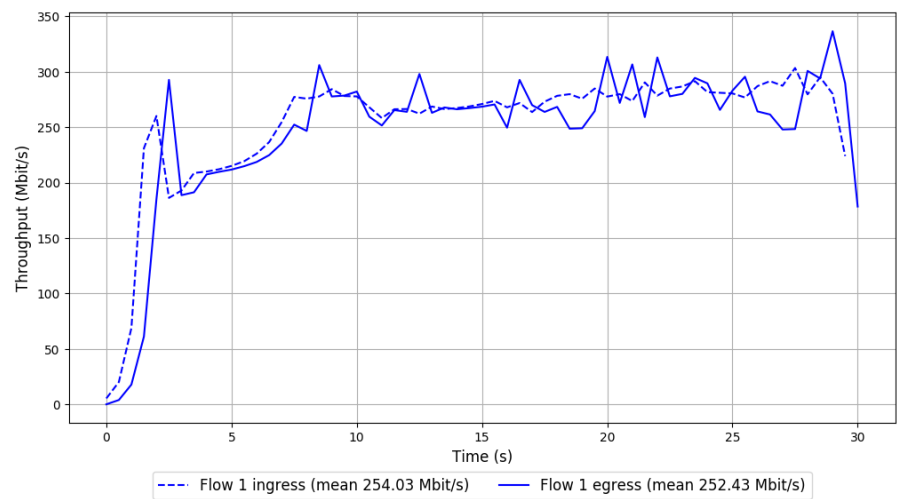

Flow 1 (95th percentile 212.77 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2019-10-03 17:50:24
End at: 2019-10-03 17:50:54
Local clock offset: -0.046 ms
Remote clock offset: -0.276 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 252.43 Mbit/s
95th percentile per-packet one-way delay: 180.802 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 252.43 Mbit/s
95th percentile per-packet one-way delay: 180.802 ms
Loss rate: 1.02%
```
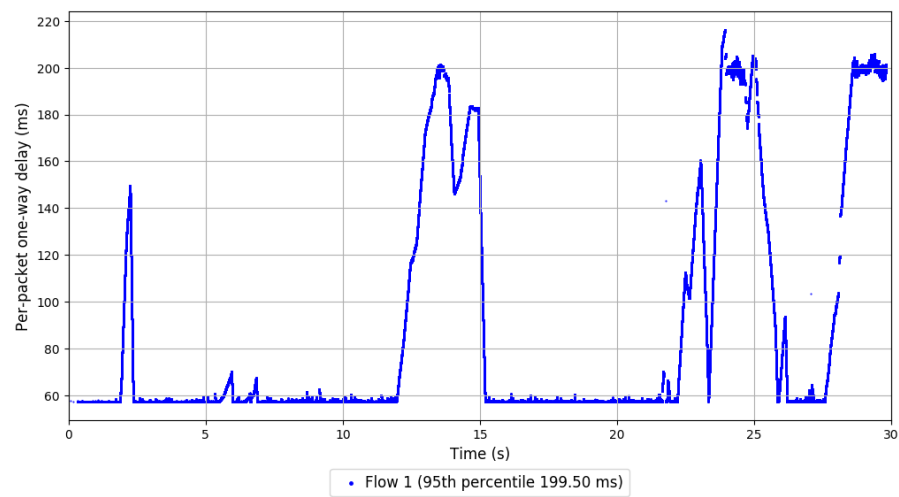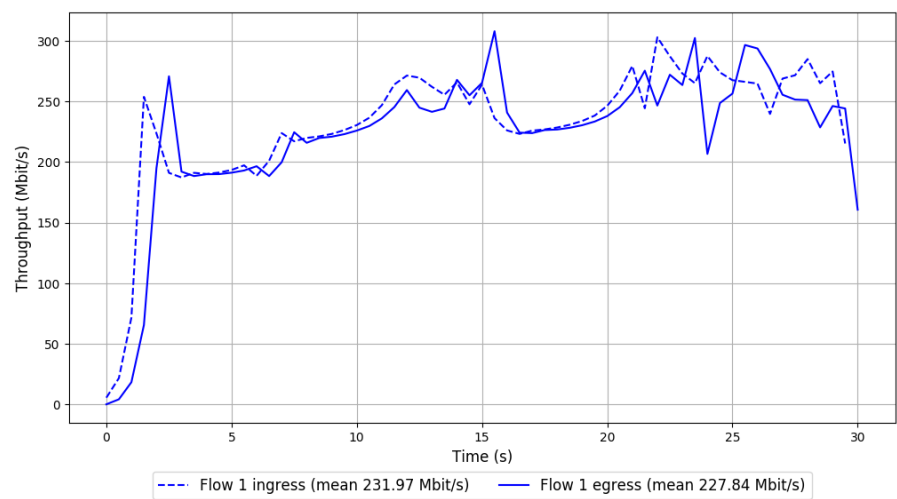
Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 254.03 Mbit/s)   Flow 1 egress (mean 252.43 Mbit/s)
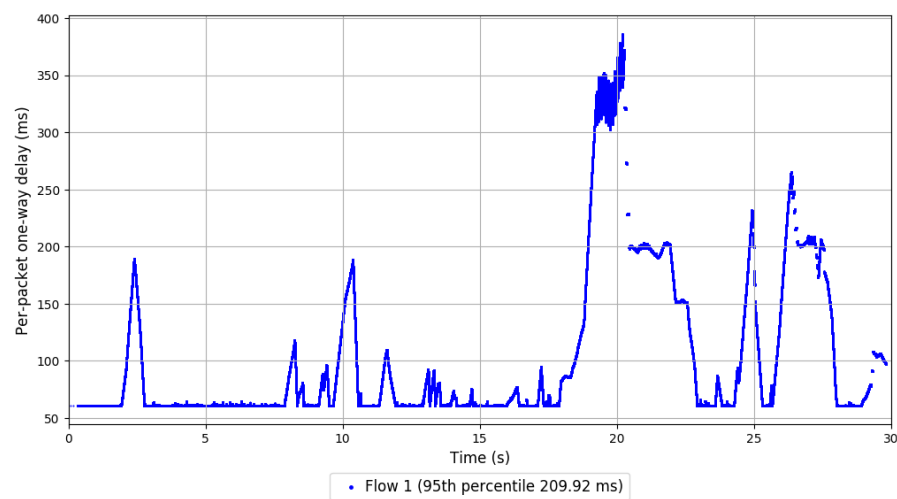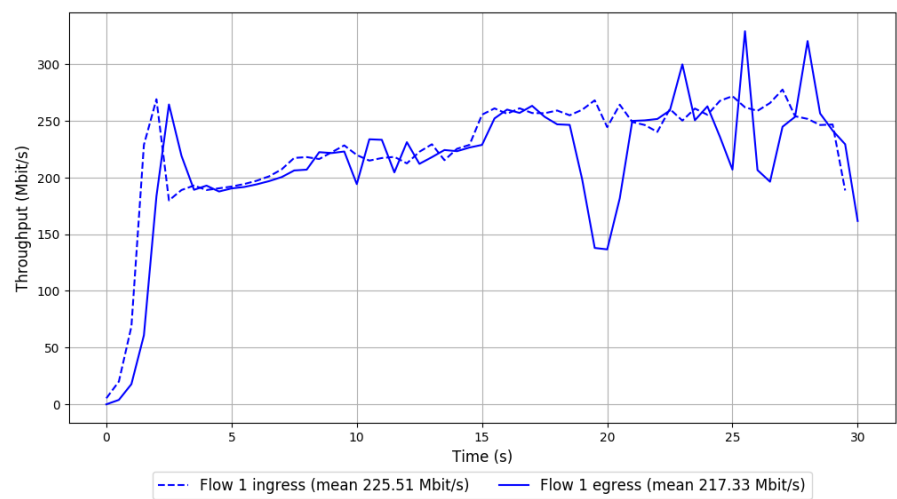

• Flow 1 (95th percentile 180.80 ms)

```
Run 2: Statistics of PCC-Expr

Start at: 2019-10-03 18:24:53
End at: 2019-10-03 18:25:23
Local clock offset: 0.116 ms
Remote clock offset: 0.048 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 227.84 Mbit/s
95th percentile per-packet one-way delay: 199.502 ms
Loss rate: 2.16%
-- Flow 1:
Average throughput: 227.84 Mbit/s
95th percentile per-packet one-way delay: 199.502 ms
Loss rate: 2.16%
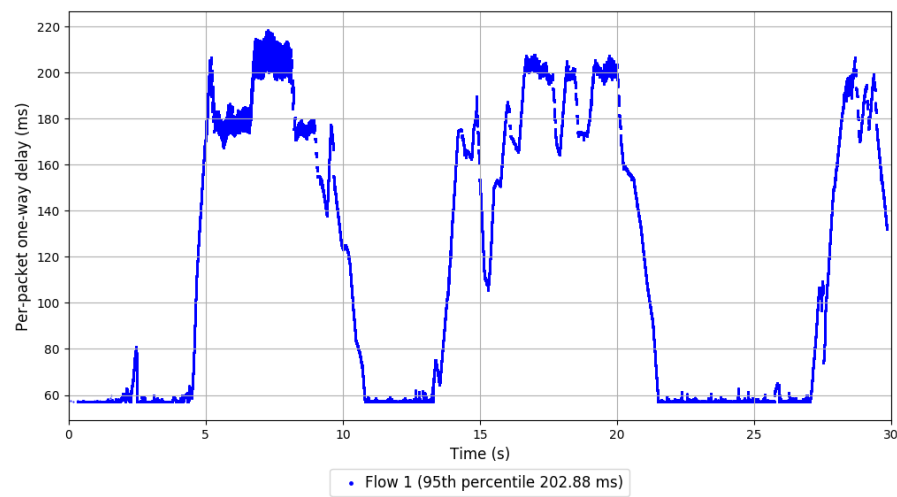```
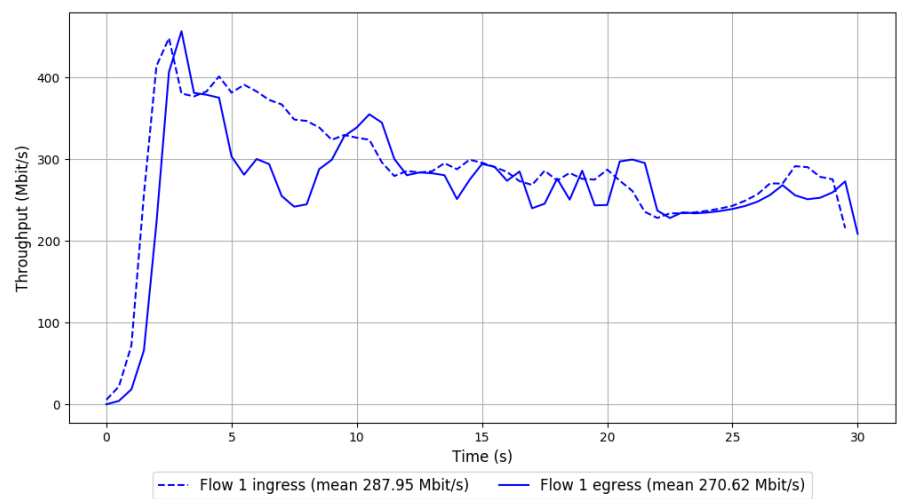
Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2019-10-03 18:59:23
End at: 2019-10-03 18:59:53
Local clock offset: 0.198 ms
Remote clock offset: -0.155 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.33 Mbit/s
95th percentile per-packet one-way delay: 209.918 ms
Loss rate: 4.00%
-- Flow 1:
Average throughput: 217.33 Mbit/s
95th percentile per-packet one-way delay: 209.918 ms
Loss rate: 4.00%
```

Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 225.51 Mbit/s)   Flow 1 egress (mean 217.33 Mbit/s)

Flow 1 (95th percentile 209.92 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2019-10-03 19:33:15
End at: 2019-10-03 19:33:45
Local clock offset: 0.136 ms
Remote clock offset: -0.352 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 270.62 Mbit/s
95th percentile per-packet one-way delay: 202.882 ms
Loss rate: 6.38%
-- Flow 1:
Average throughput: 270.62 Mbit/s
95th percentile per-packet one-way delay: 202.882 ms
Loss rate: 6.38%
```
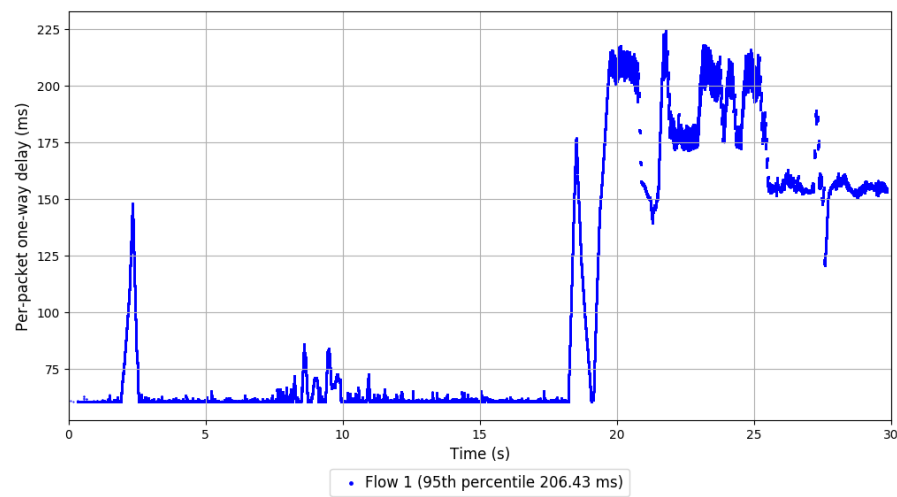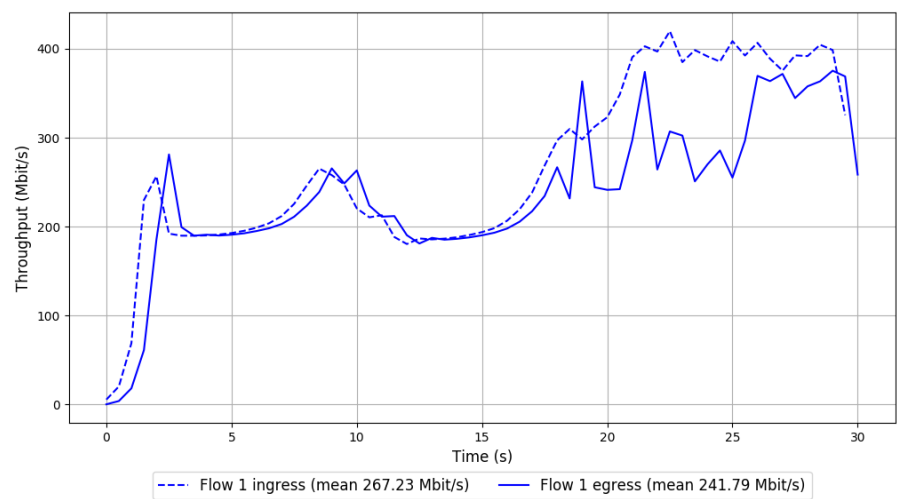
Run 4: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 287.95 Mbit/s) --- Flow 1 egress (mean 270.62 Mbit/s)

Flow 1 (95th percentile 202.88 ms)

```
Run 5: Statistics of PCC-Expr

Start at: 2019-10-03 20:07:34
End at: 2019-10-03 20:08:04
Local clock offset: 0.389 ms
Remote clock offset: -0.163 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 241.79 Mbit/s
95th percentile per-packet one-way delay: 206.433 ms
Loss rate: 9.88%
-- Flow 1:
Average throughput: 241.79 Mbit/s
95th percentile per-packet one-way delay: 206.433 ms
Loss rate: 9.88%
```

Run 5: Report of PCC-Expr — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-10-03 17:23:32
End at: 2019-10-03 17:24:02
Local clock offset: -0.052 ms
Remote clock offset: -0.146 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.53 Mbit/s
95th percentile per-packet one-way delay: 60.300 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 48.53 Mbit/s
95th percentile per-packet one-way delay: 60.300 ms
Loss rate: 0.74%
```
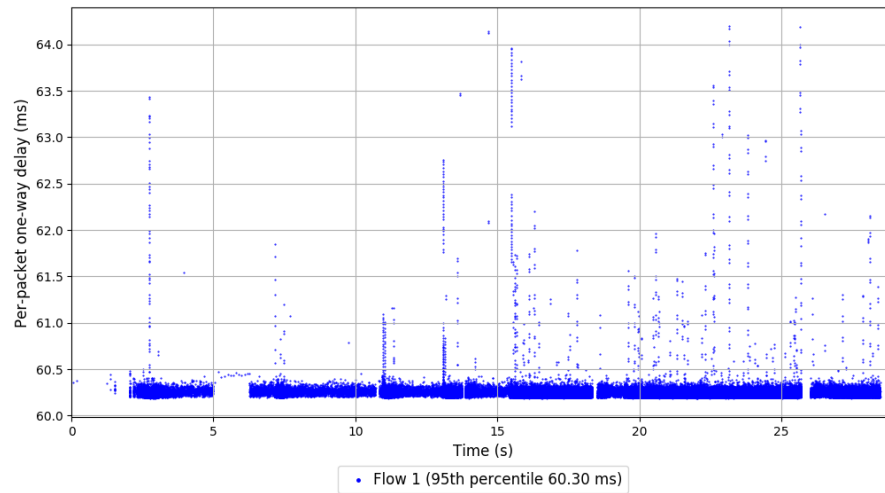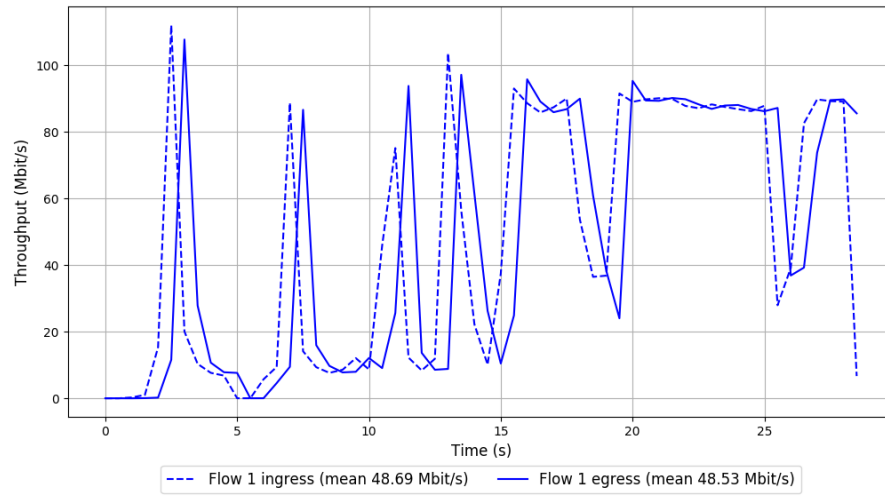
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-10-03 17:57:52
End at: 2019-10-03 17:58:22
Local clock offset: -0.025 ms
Remote clock offset: -0.054 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.05 Mbit/s
95th percentile per-packet one-way delay: 57.155 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 46.05 Mbit/s
95th percentile per-packet one-way delay: 57.155 ms
Loss rate: 0.74%
```
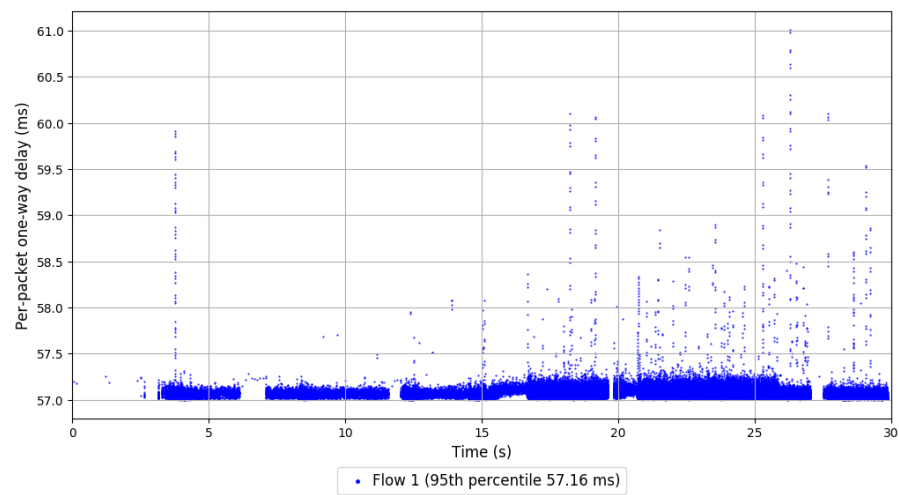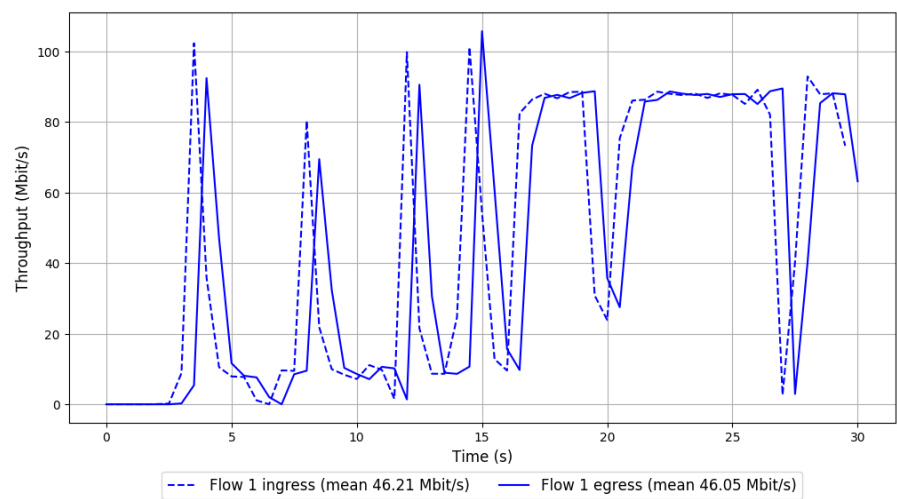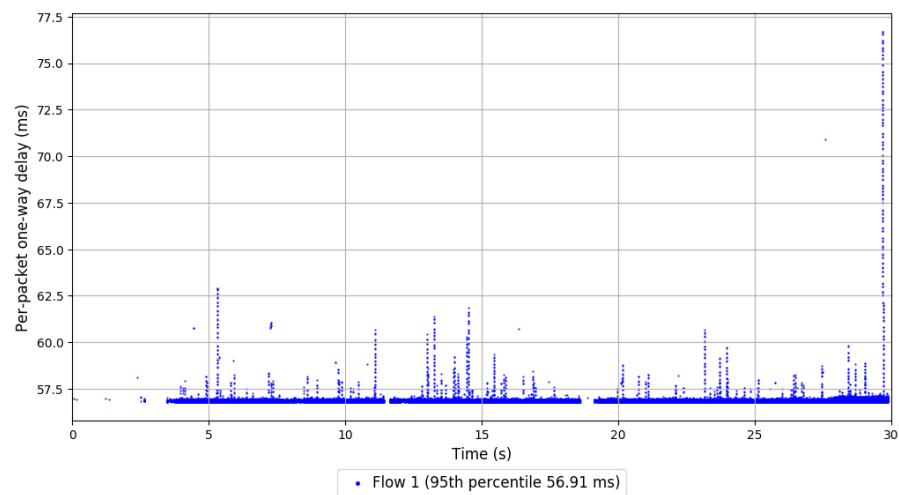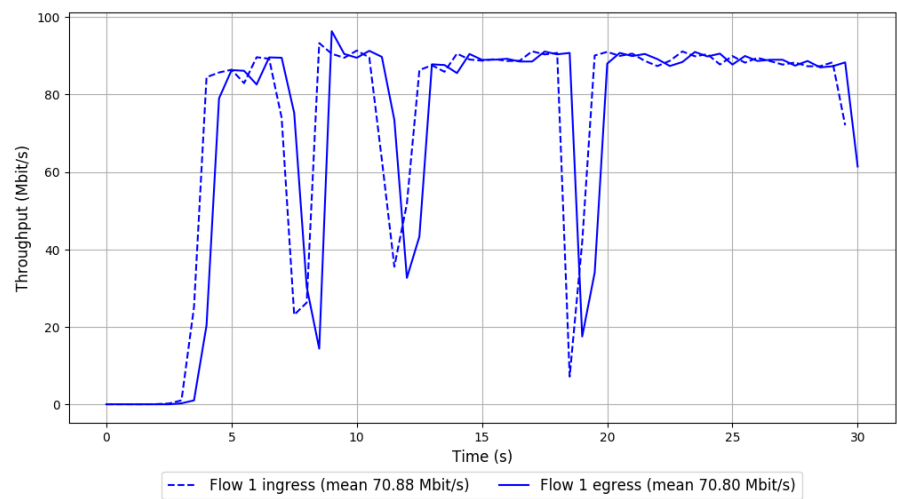
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-10-03 18:32:17
End at: 2019-10-03 18:32:47
Local clock offset: -0.319 ms
Remote clock offset: -0.057 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.80 Mbit/s
95th percentile per-packet one-way delay: 56.909 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 70.80 Mbit/s
95th percentile per-packet one-way delay: 56.909 ms
Loss rate: 0.49%
```

Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-10-03 19:06:41
End at: 2019-10-03 19:07:12
Local clock offset: 0.008 ms
Remote clock offset: 0.019 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.47 Mbit/s
95th percentile per-packet one-way delay: 57.079 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 44.47 Mbit/s
95th percentile per-packet one-way delay: 57.079 ms
Loss rate: 0.75%
```
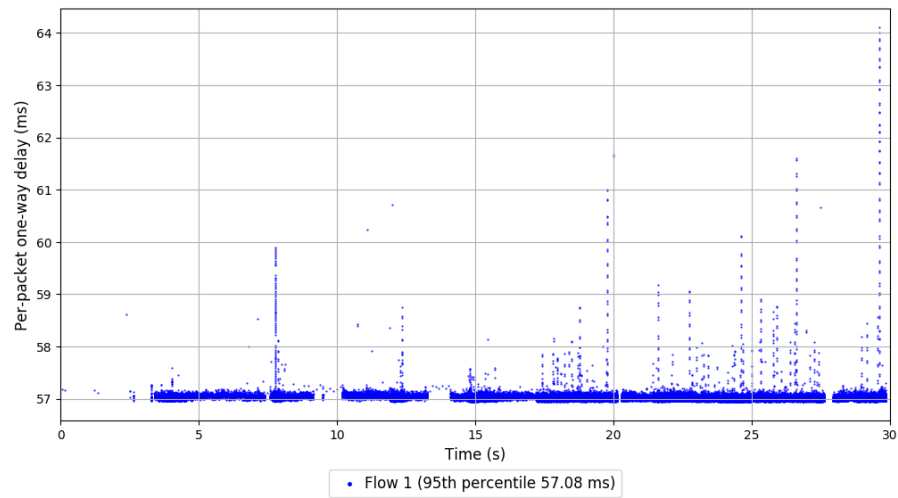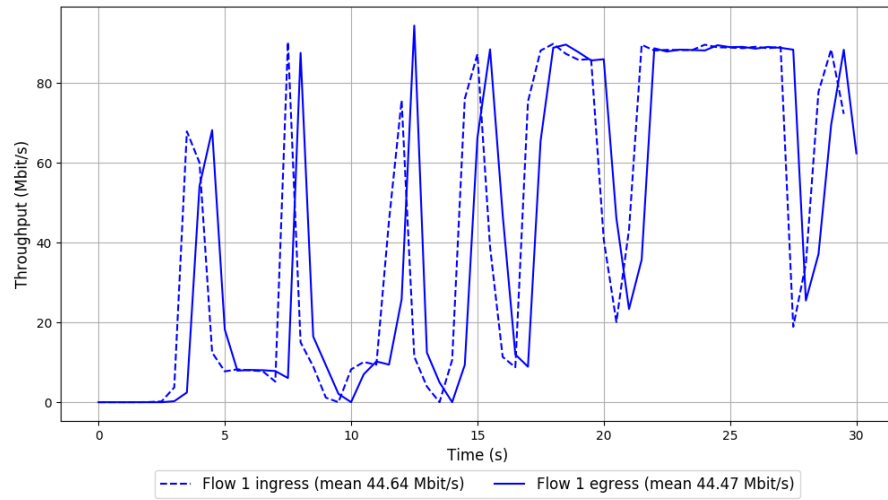
Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-10-03 19:40:43
End at: 2019-10-03 19:41:13
Local clock offset: 0.048 ms
Remote clock offset: -0.159 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.24 Mbit/s
95th percentile per-packet one-way delay: 60.398 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 44.24 Mbit/s
95th percentile per-packet one-way delay: 60.398 ms
Loss rate: 0.63%
```
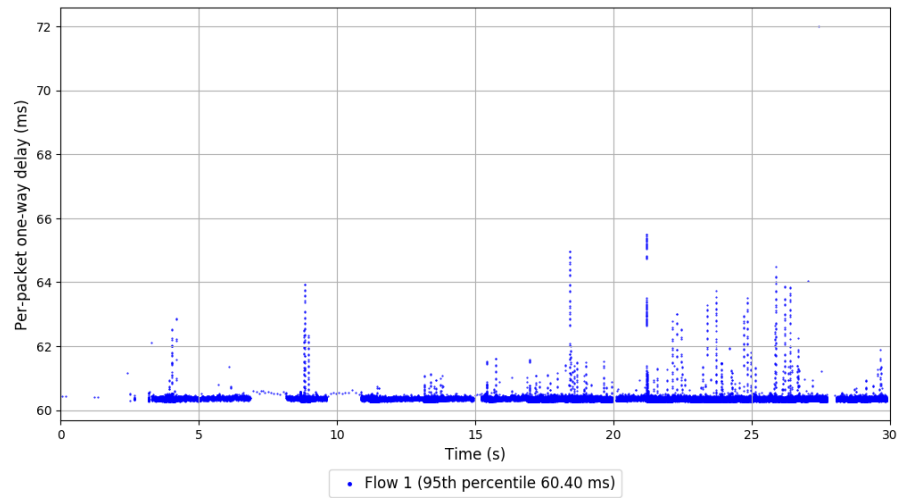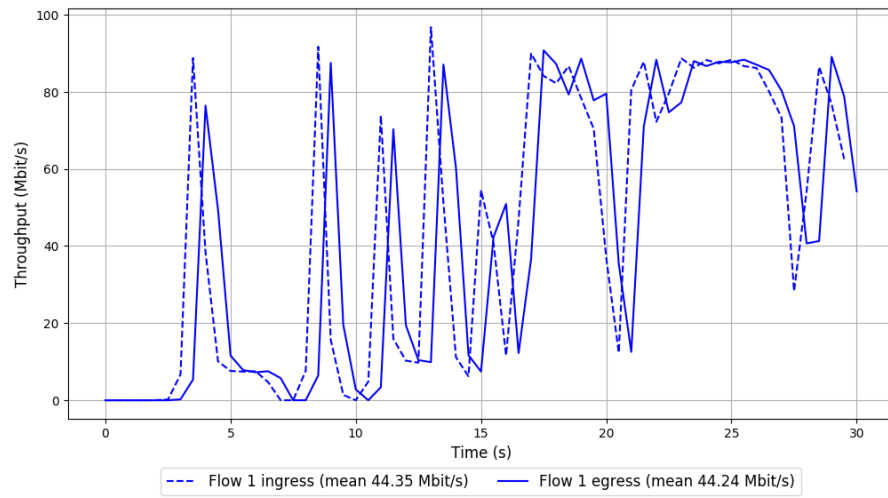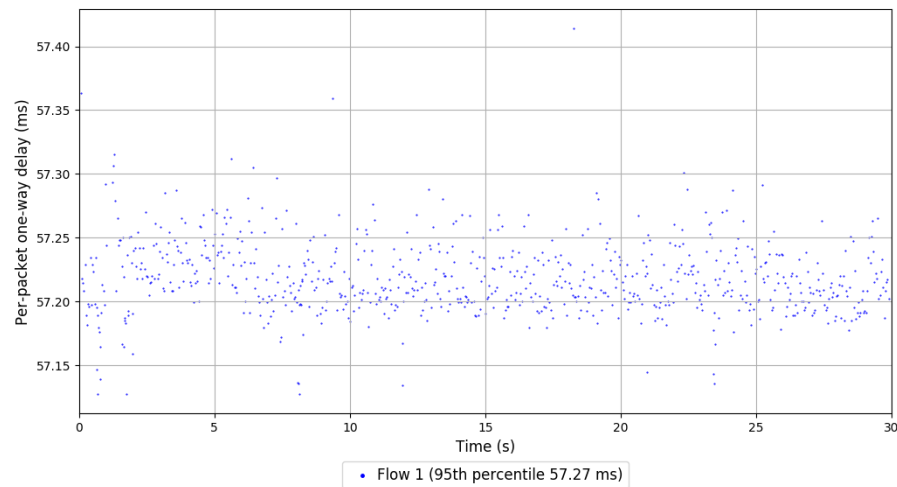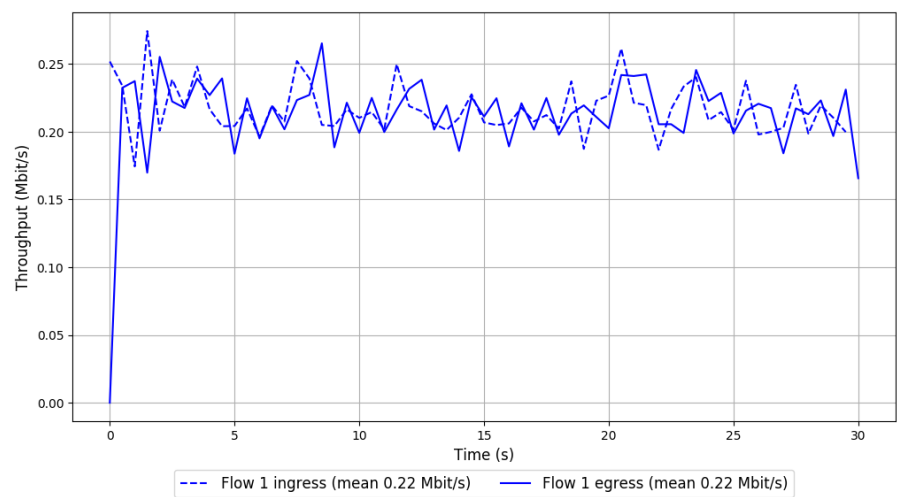
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 44.35 Mbit/s) — Flow 1 egress (mean 44.24 Mbit/s)

Flow 1 (95th percentile 60.40 ms)

```
Run 1: Statistics of SCReAM

Start at: 2019-10-03 17:37:51
End at: 2019-10-03 17:38:21
Local clock offset: 0.379 ms
Remote clock offset: -0.0 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.267 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.267 ms
Loss rate: 0.39%
```
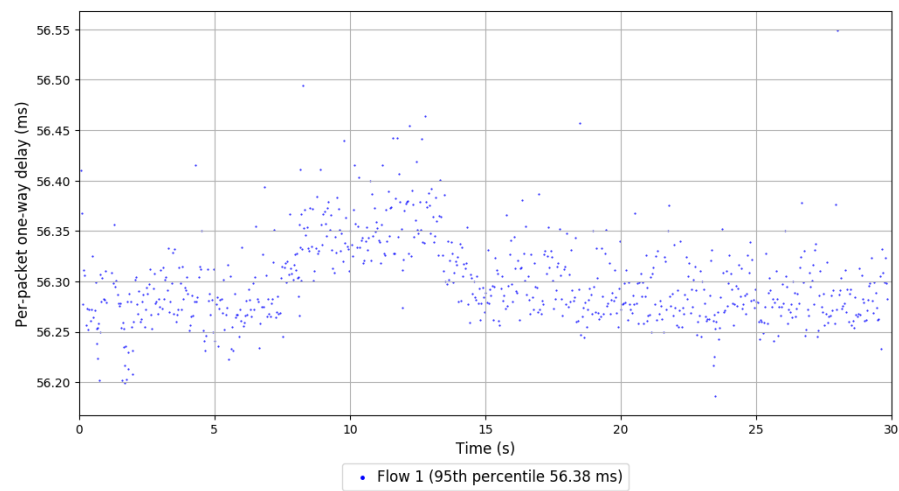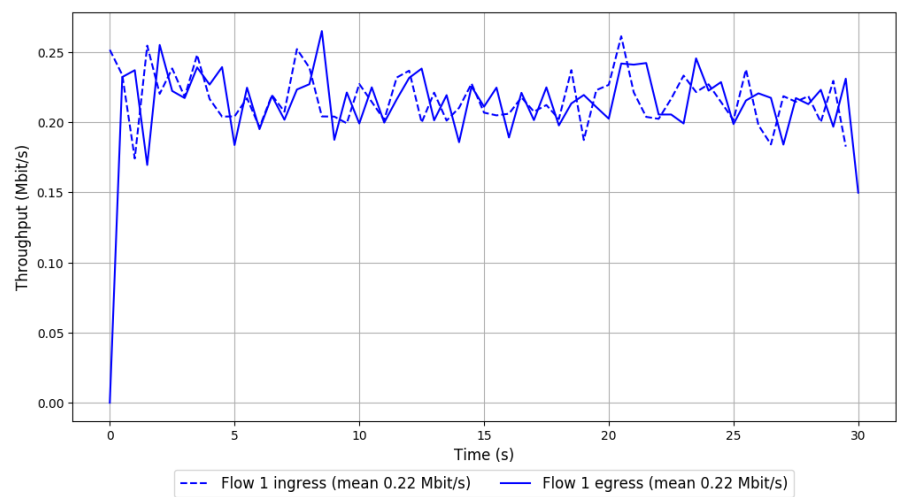
Run 1: Report of SCReAM — Data Link

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

• Flow 1 (95th percentile 57.27 ms)

```
Run 2: Statistics of SCReAM

Start at: 2019-10-03 18:12:11
End at: 2019-10-03 18:12:41
Local clock offset: -0.02 ms
Remote clock offset: 0.711 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.379 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.379 ms
Loss rate: 0.38%
```
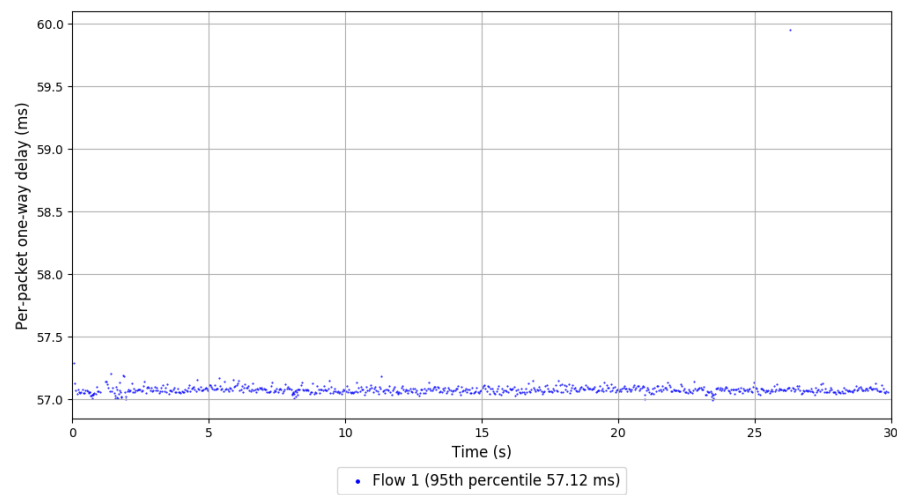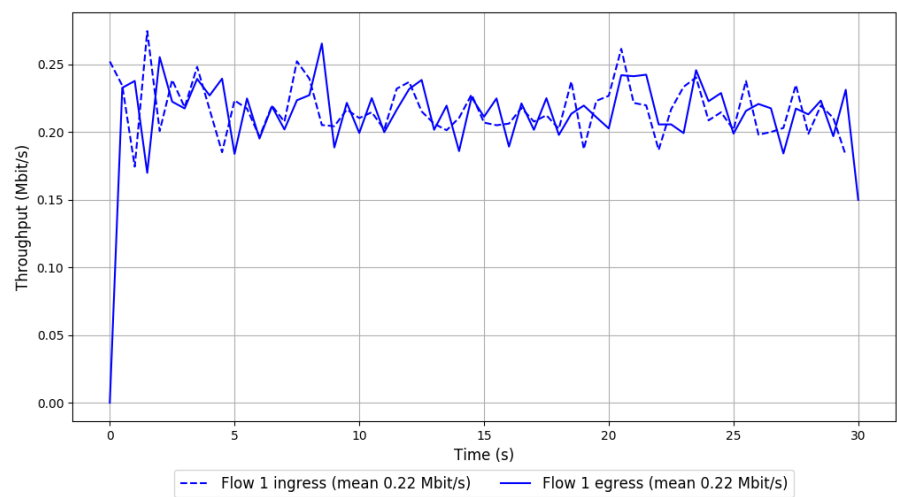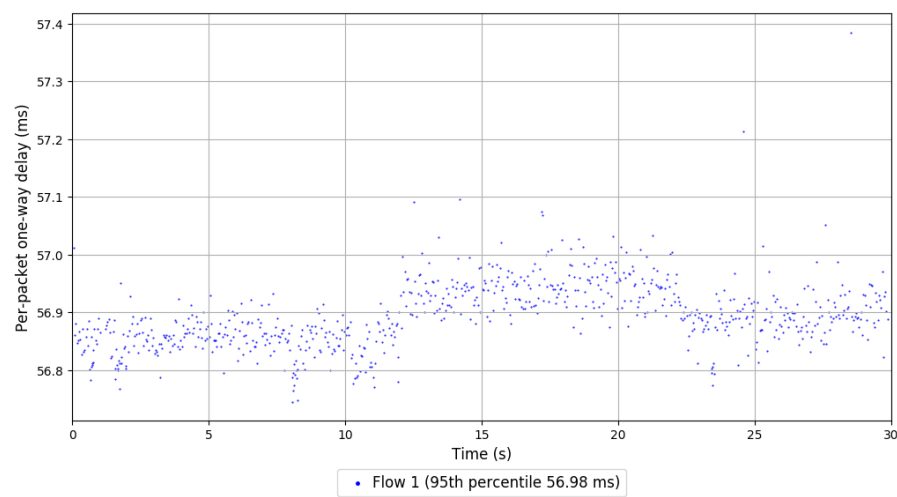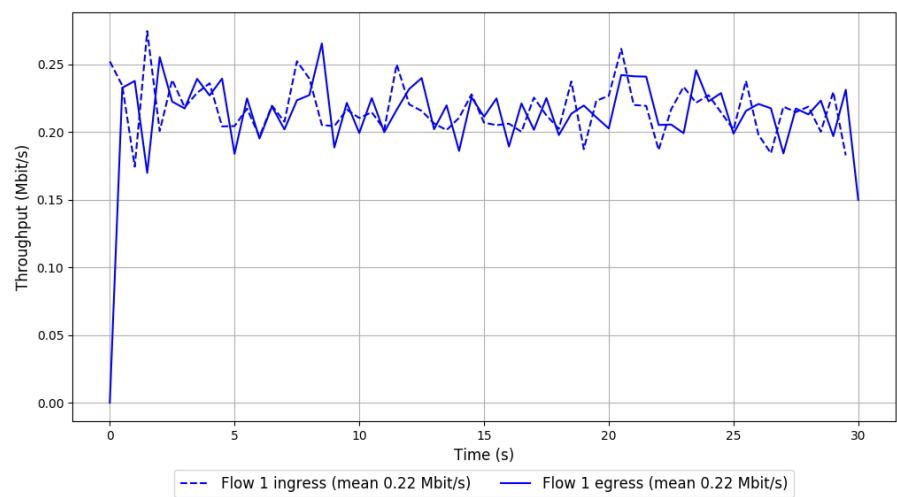
Run 2: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 56.38 ms)

```
Run 3: Statistics of SCReAM

Start at: 2019-10-03 18:46:38
End at: 2019-10-03 18:47:08
Local clock offset: 0.155 ms
Remote clock offset: 0.061 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.122 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.122 ms
Loss rate: 0.38%
```

Run 3: Report of SCReAM — Data Link

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

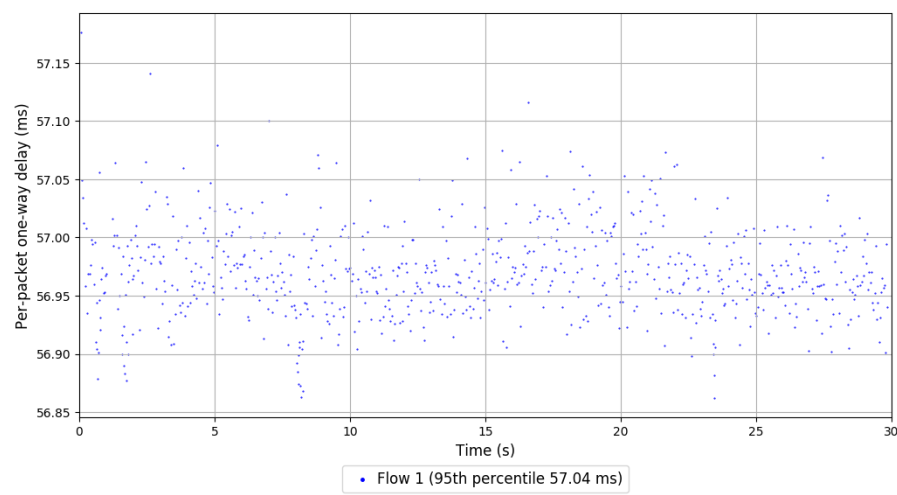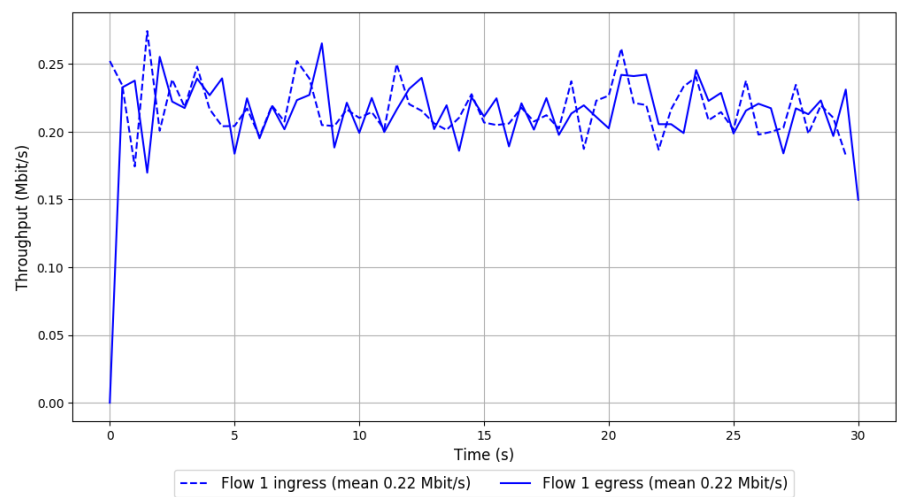Flow 1 (95th percentile 57.12 ms)

```
Run 4: Statistics of SCReAM

Start at: 2019-10-03 19:20:54
End at: 2019-10-03 19:21:24
Local clock offset: -0.042 ms
Remote clock offset: -0.091 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.984 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 56.984 ms
Loss rate: 0.38%
```

Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-10-03 19:55:08
End at: 2019-10-03 19:55:38
Local clock offset: -0.038 ms
Remote clock offset: -0.133 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.039 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.039 ms
Loss rate: 0.38%
```

Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2019-10-03 17:29:17
End at: 2019-10-03 17:29:47
Local clock offset: 0.365 ms
Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.53 Mbit/s
95th percentile per-packet one-way delay: 61.114 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 7.53 Mbit/s
95th percentile per-packet one-way delay: 61.114 ms
Loss rate: 0.46%
```
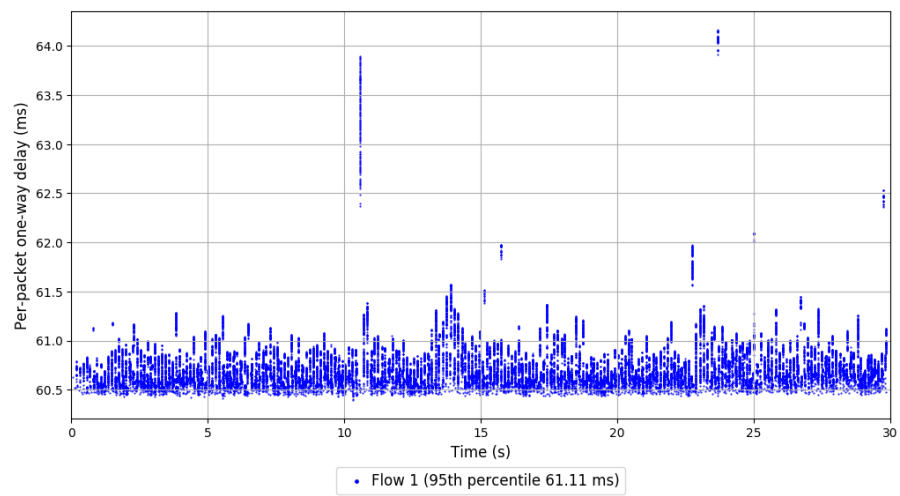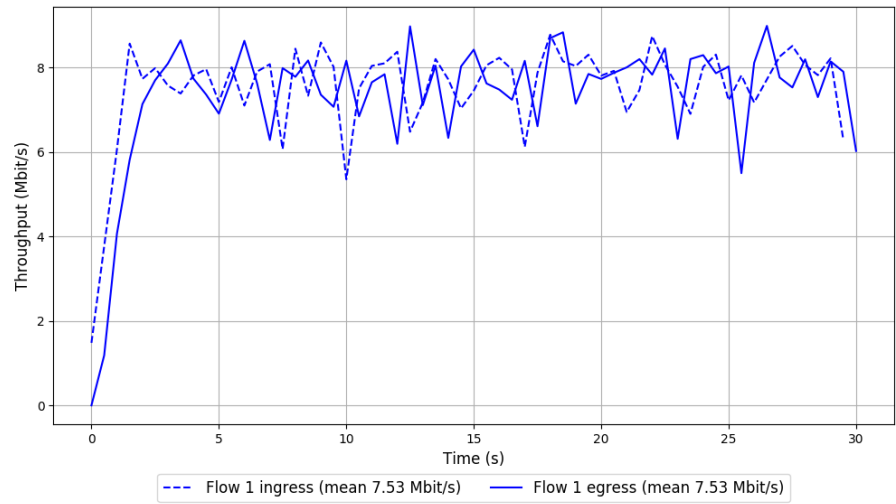
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-10-03 18:03:38
End at: 2019-10-03 18:04:08
Local clock offset: 0.225 ms
Remote clock offset: -0.11 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.91 Mbit/s
95th percentile per-packet one-way delay: 58.306 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 7.91 Mbit/s
95th percentile per-packet one-way delay: 58.306 ms
Loss rate: 0.43%
```
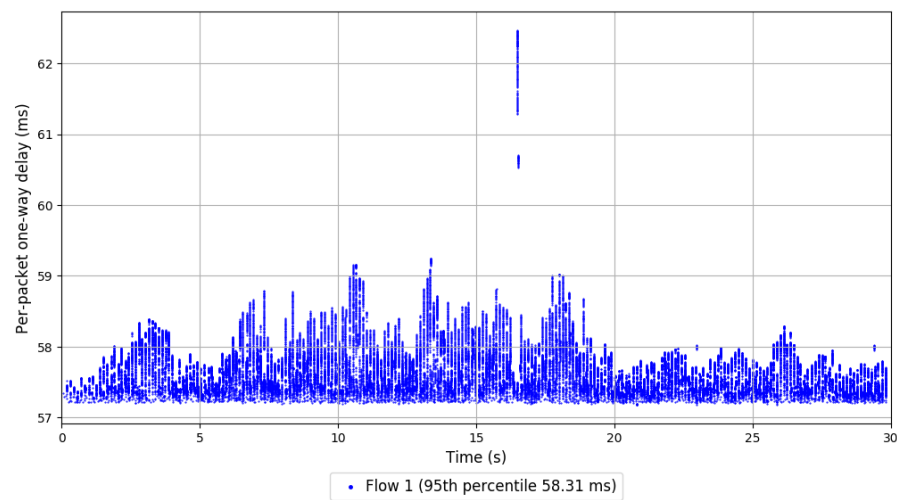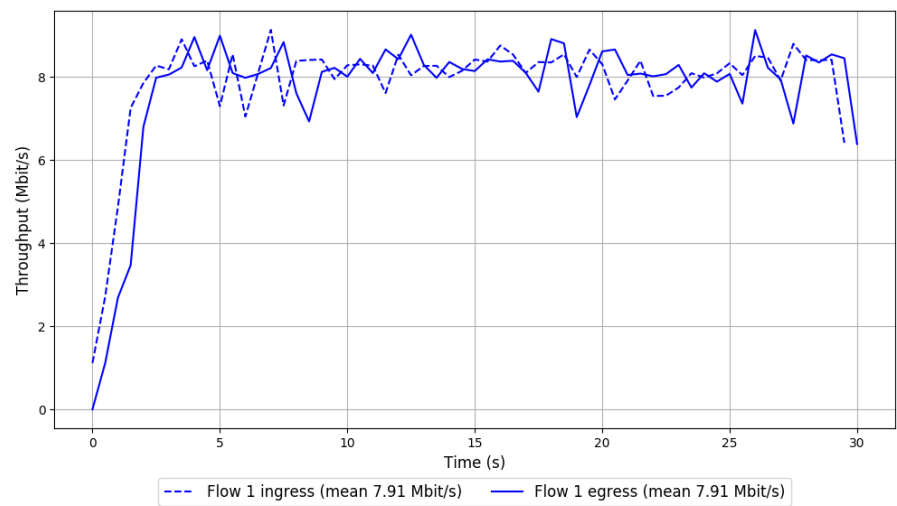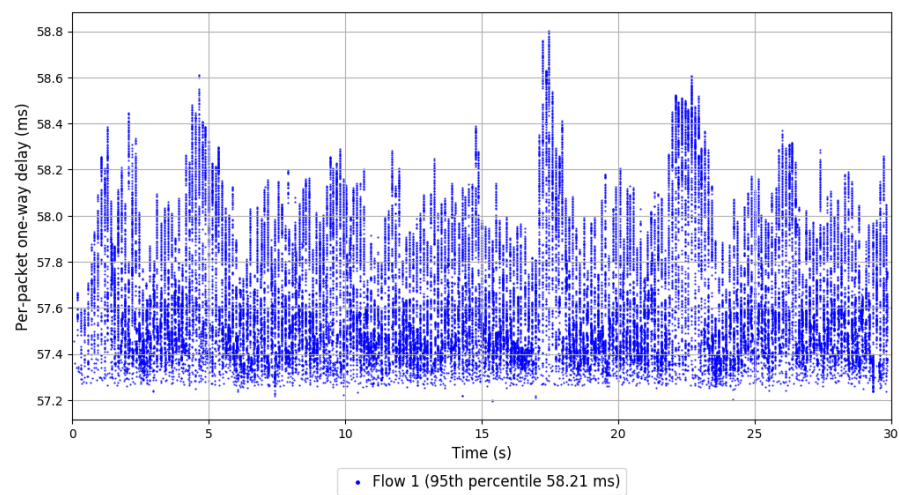
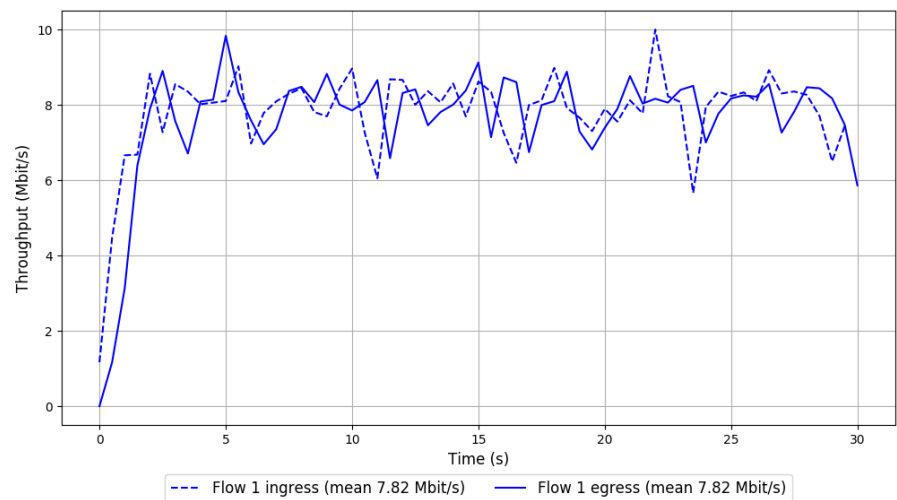# Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-10-03 18:38:09
End at: 2019-10-03 18:38:39
Local clock offset: 0.212 ms
Remote clock offset: -0.103 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 58.208 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 58.208 ms
Loss rate: 0.43%
```

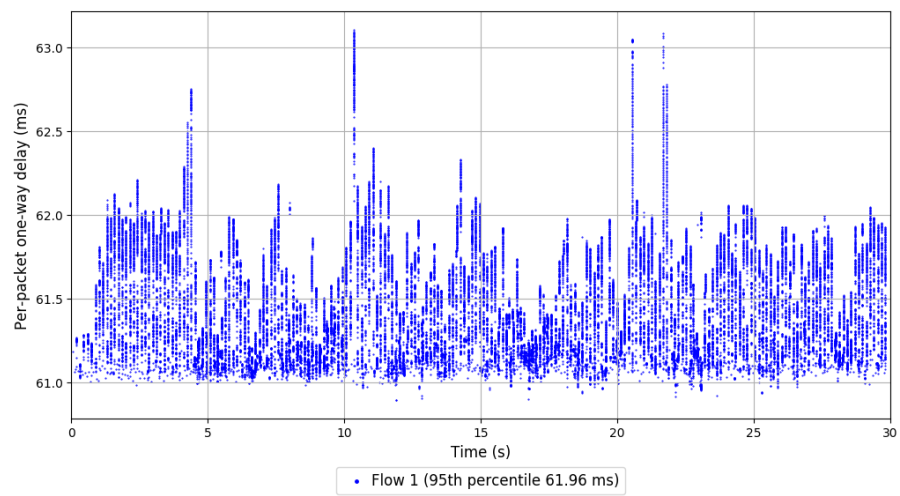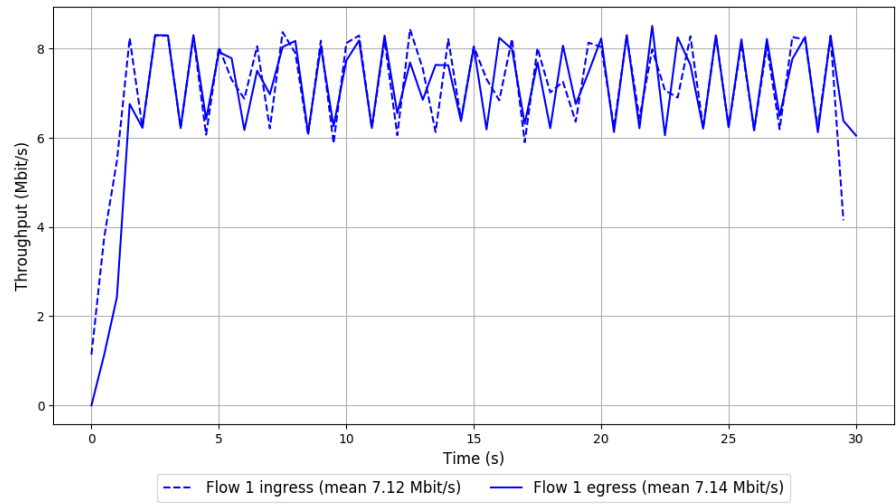## Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-10-03 19:12:31
End at: 2019-10-03 19:13:01
Local clock offset: 0.195 ms
Remote clock offset: -0.198 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.14 Mbit/s
95th percentile per-packet one-way delay: 61.964 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.14 Mbit/s
95th percentile per-packet one-way delay: 61.964 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 7.12 Mbit/s) —— Flow 1 egress (mean 7.14 Mbit/s)

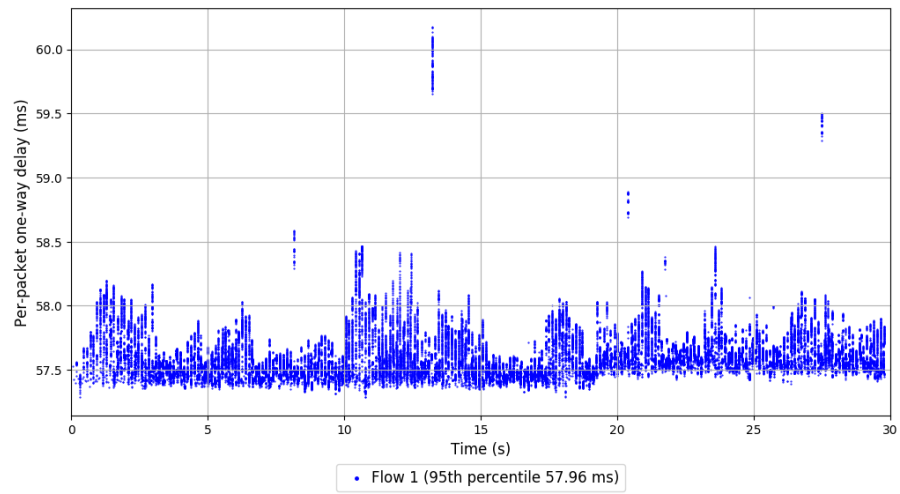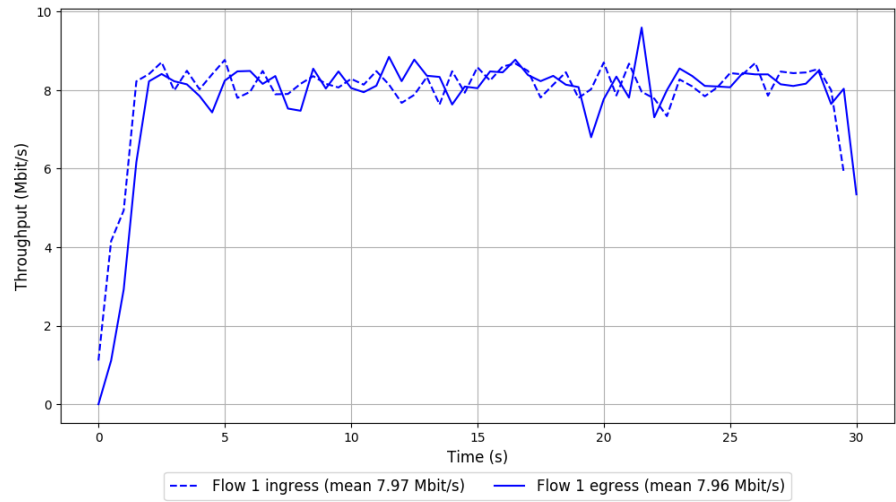• Flow 1 (95th percentile 61.96 ms)

```
Run 5: Statistics of Sprout

Start at: 2019-10-03 19:46:42
End at: 2019-10-03 19:47:12
Local clock offset: 0.367 ms
Remote clock offset: -0.288 ms


# Below is generated by plot.py at 2019-10-03 22:21:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 57.958 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 57.958 ms
Loss rate: 0.42%
```

Run 5: Report of Sprout — Data Link

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

Start at: 2019-10-03 17:48:55
End at: 2019-10-03 17:49:25
Local clock offset: 0.152 ms
Remote clock offset: -0.072 ms


# Below is generated by plot.py at 2019-10-03 22:23:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 231.25 Mbit/s
95th percentile per-packet one-way delay: 61.156 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 231.25 Mbit/s
95th percentile per-packet one-way delay: 61.156 ms
Loss rate: 0.39%
```
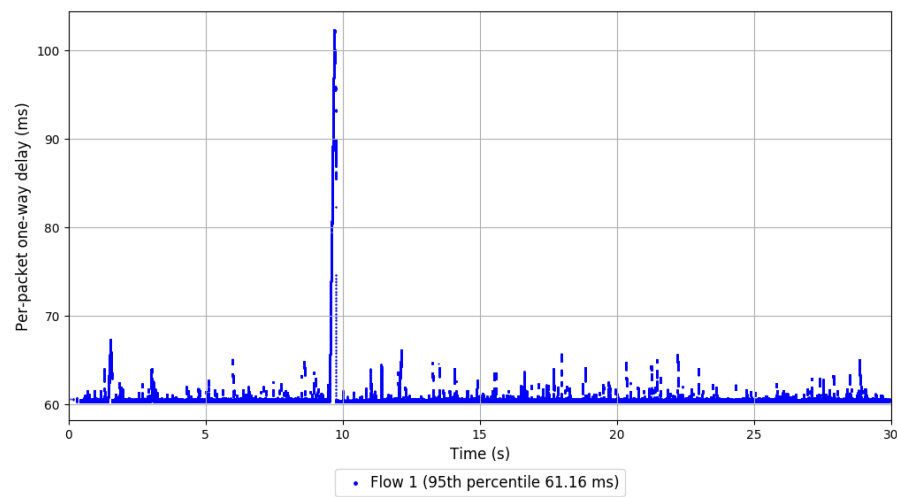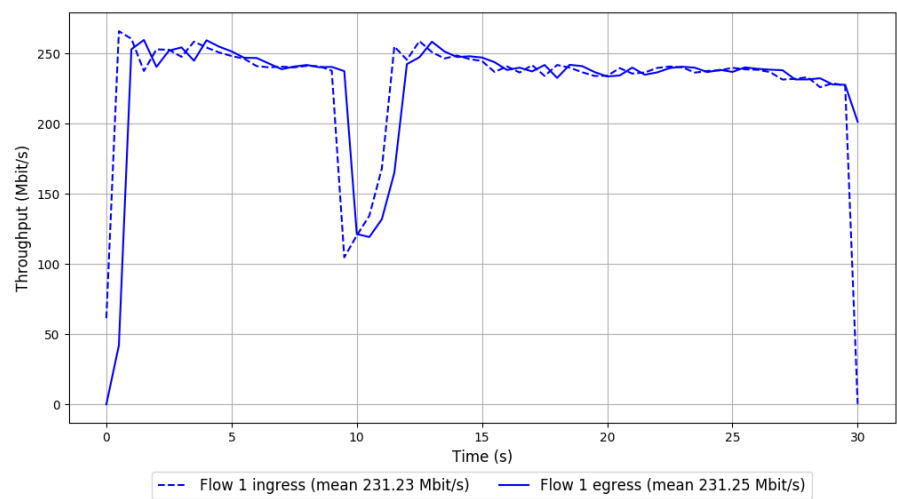
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2019-10-03 18:23:24
End at: 2019-10-03 18:23:54
Local clock offset: -0.284 ms
Remote clock offset: 0.007 ms


# Below is generated by plot.py at 2019-10-03 22:23:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 229.68 Mbit/s
95th percentile per-packet one-way delay: 61.118 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 229.68 Mbit/s
95th percentile per-packet one-way delay: 61.118 ms
Loss rate: 0.45%
```
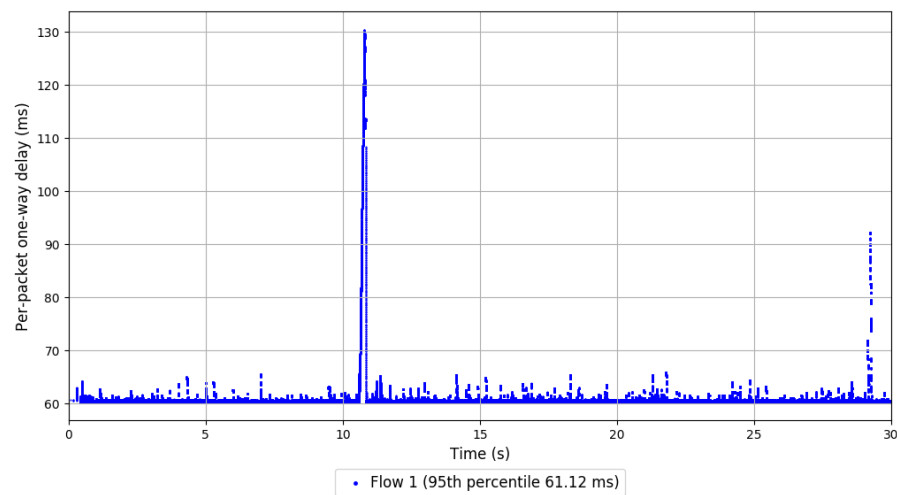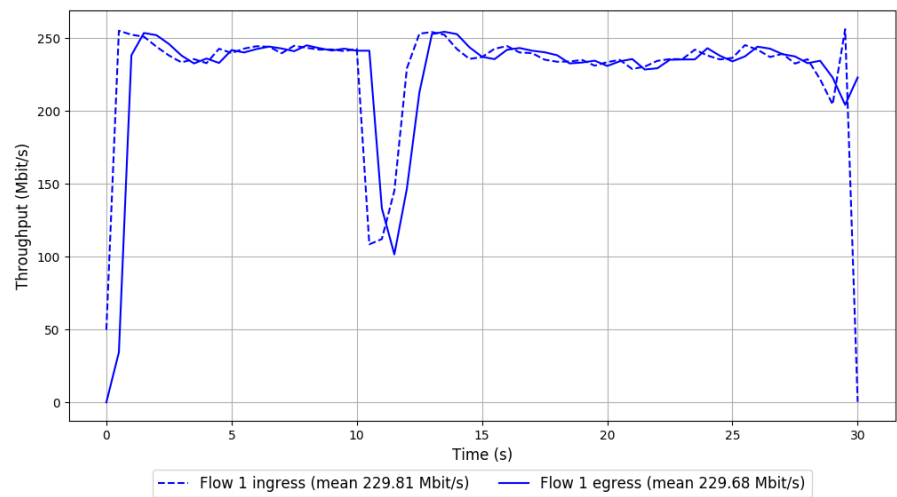
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2019-10-03 18:57:57
End at: 2019-10-03 18:58:27
Local clock offset: -0.013 ms
Remote clock offset: 0.023 ms


# Below is generated by plot.py at 2019-10-03 22:23:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 200.49 Mbit/s
95th percentile per-packet one-way delay: 71.195 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 200.49 Mbit/s
95th percentile per-packet one-way delay: 71.195 ms
Loss rate: 0.45%
```
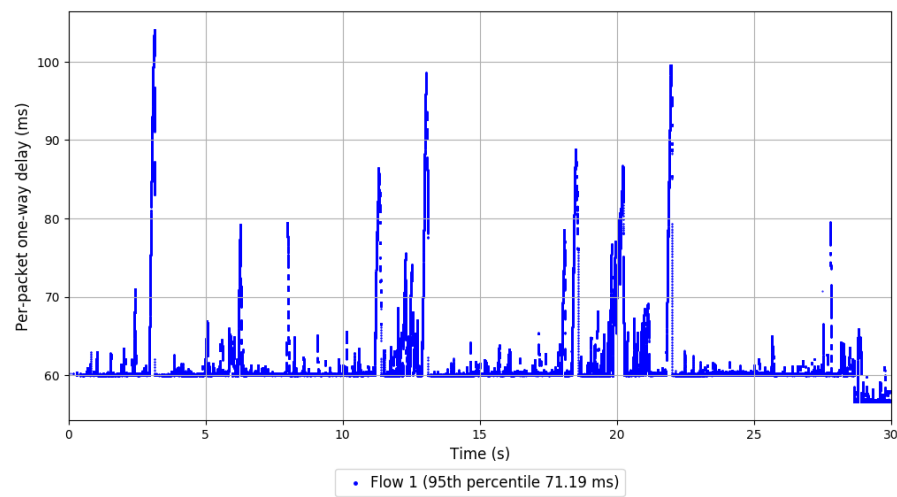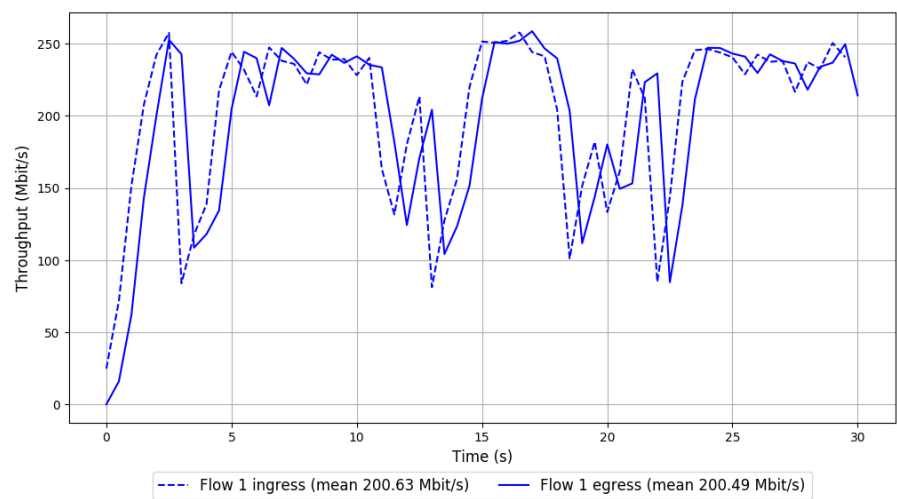
Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2019-10-03 19:31:50
End at: 2019-10-03 19:32:20
Local clock offset: -0.398 ms
Remote clock offset: -0.23 ms


# Below is generated by plot.py at 2019-10-03 22:23:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.73 Mbit/s
95th percentile per-packet one-way delay: 78.408 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 190.73 Mbit/s
95th percentile per-packet one-way delay: 78.408 ms
Loss rate: 0.50%
```
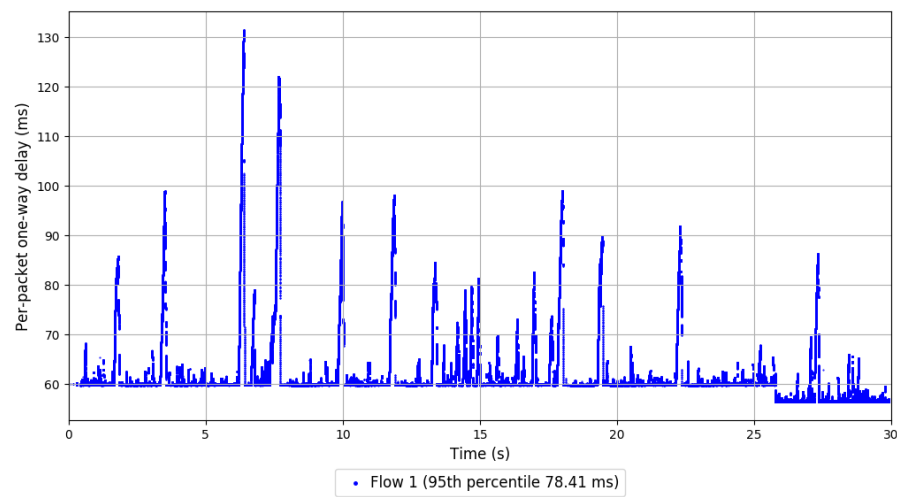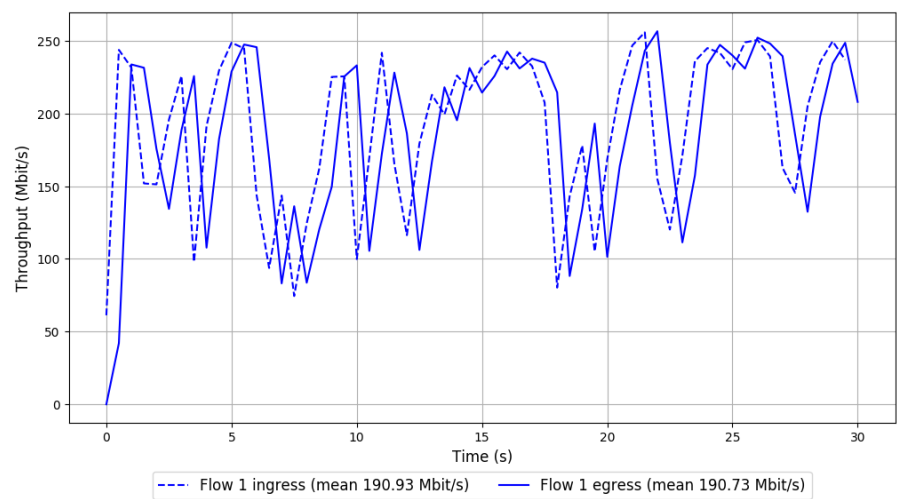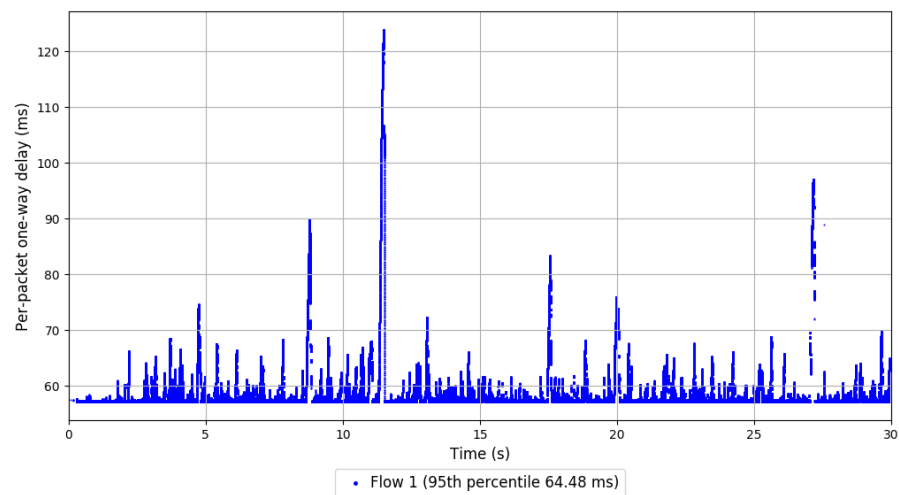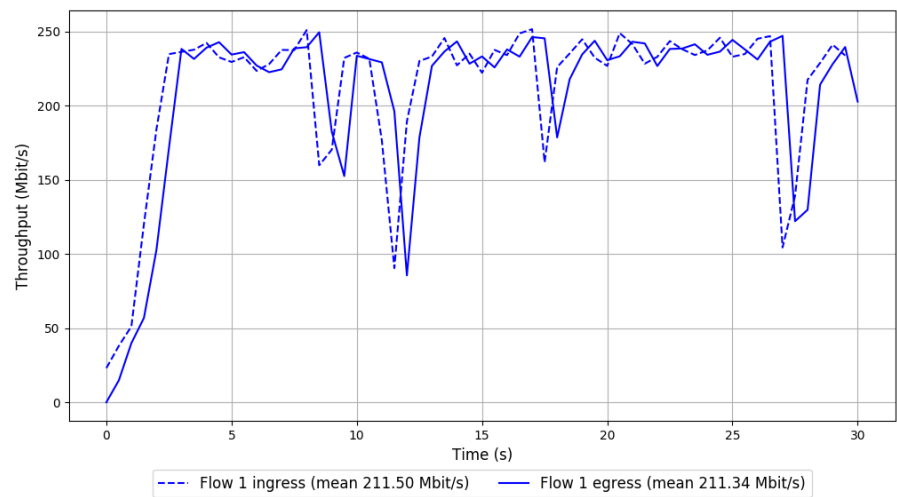
Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2019-10-03 20:06:07
End at: 2019-10-03 20:06:37
Local clock offset: -0.039 ms
Remote clock offset: -0.238 ms


# Below is generated by plot.py at 2019-10-03 22:24:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.34 Mbit/s
95th percentile per-packet one-way delay: 64.483 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 211.34 Mbit/s
95th percentile per-packet one-way delay: 64.483 ms
Loss rate: 0.46%
```
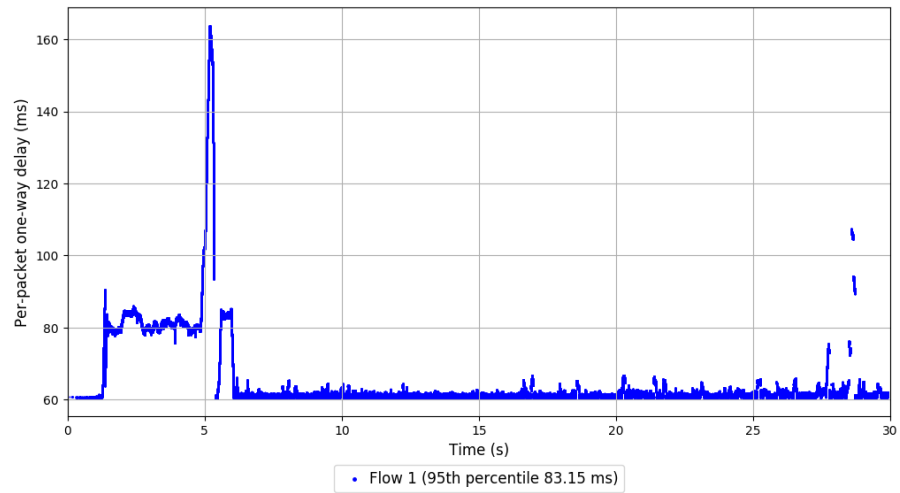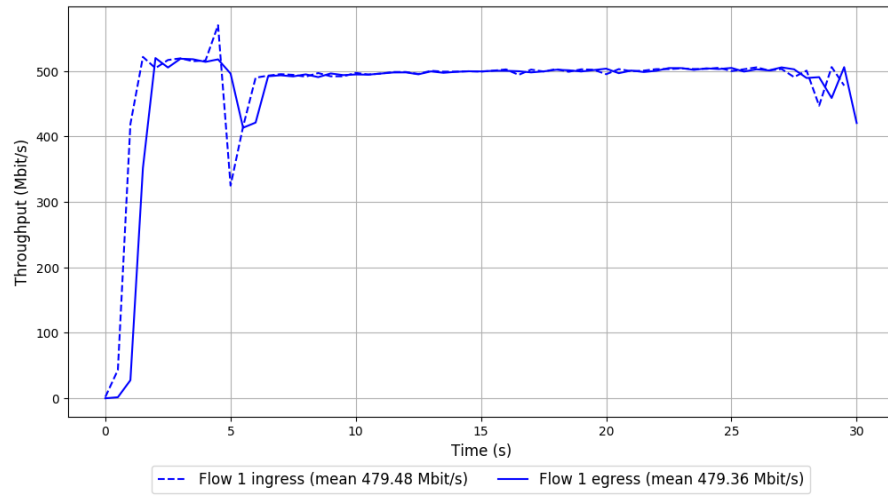
Run 5: Report of TaoVA-100x — Data Link

```
Run 1: Statistics of TCP Vegas

Start at: 2019-10-03 17:20:38
End at: 2019-10-03 17:21:08
Local clock offset: 0.389 ms
Remote clock offset: -0.054 ms


# Below is generated by plot.py at 2019-10-03 22:30:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 479.36 Mbit/s
95th percentile per-packet one-way delay: 83.150 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 479.36 Mbit/s
95th percentile per-packet one-way delay: 83.150 ms
Loss rate: 0.42%
```

Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-10-03 17:55:01
End at: 2019-10-03 17:55:31
Local clock offset: -0.433 ms
Remote clock offset: 0.051 ms


# Below is generated by plot.py at 2019-10-03 22:31:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 477.38 Mbit/s
95th percentile per-packet one-way delay: 84.238 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 477.38 Mbit/s
95th percentile per-packet one-way delay: 84.238 ms
Loss rate: 0.41%
```
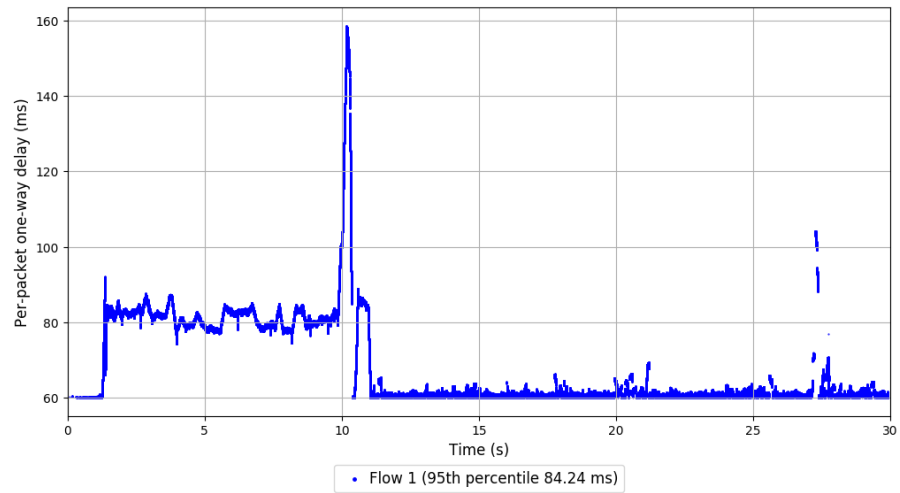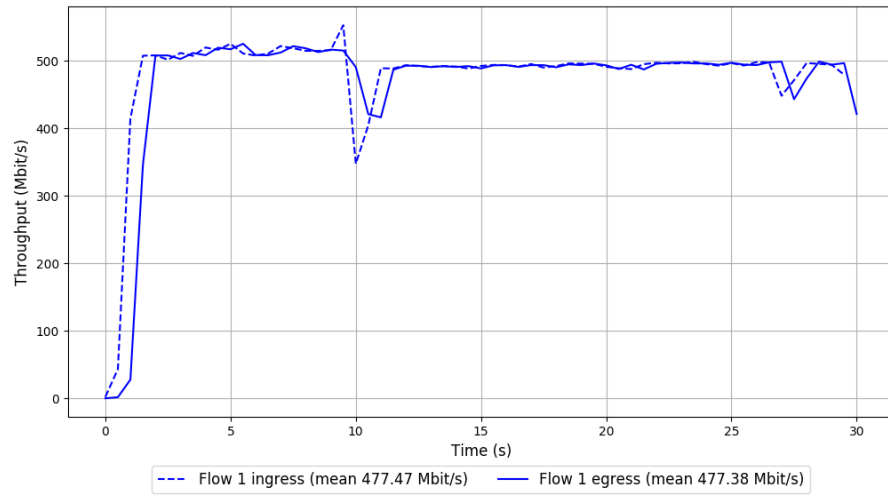
Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 477.47 Mbit/s)   Flow 1 egress (mean 477.38 Mbit/s)

Flow 1 (95th percentile 84.24 ms)

```
Run 3: Statistics of TCP Vegas

Start at: 2019-10-03 18:29:25
End at: 2019-10-03 18:29:55
Local clock offset: -0.098 ms
Remote clock offset: 0.034 ms


# Below is generated by plot.py at 2019-10-03 22:31:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 471.82 Mbit/s
95th percentile per-packet one-way delay: 89.370 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 471.82 Mbit/s
95th percentile per-packet one-way delay: 89.370 ms
Loss rate: 0.42%
```
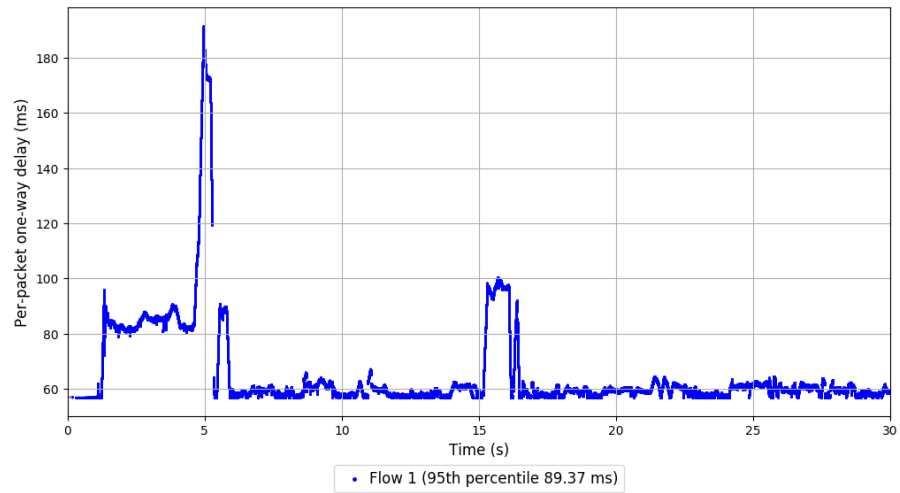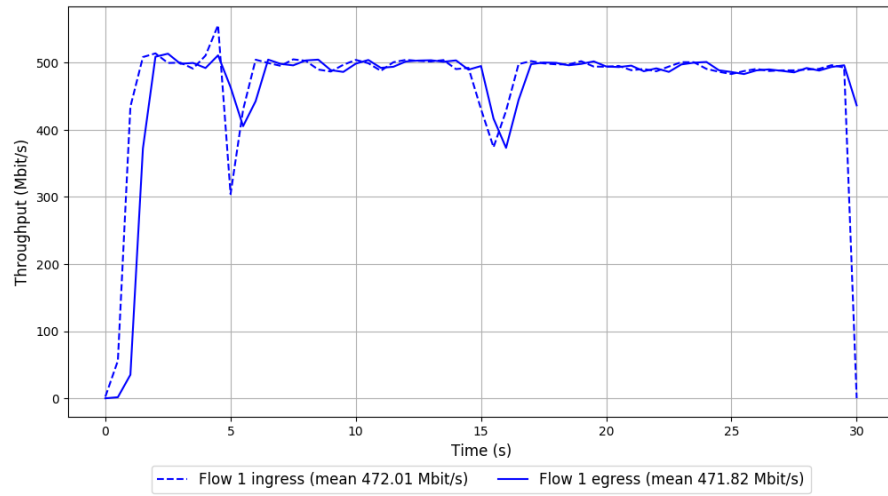
Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 472.01 Mbit/s)   Flow 1 egress (mean 471.82 Mbit/s)
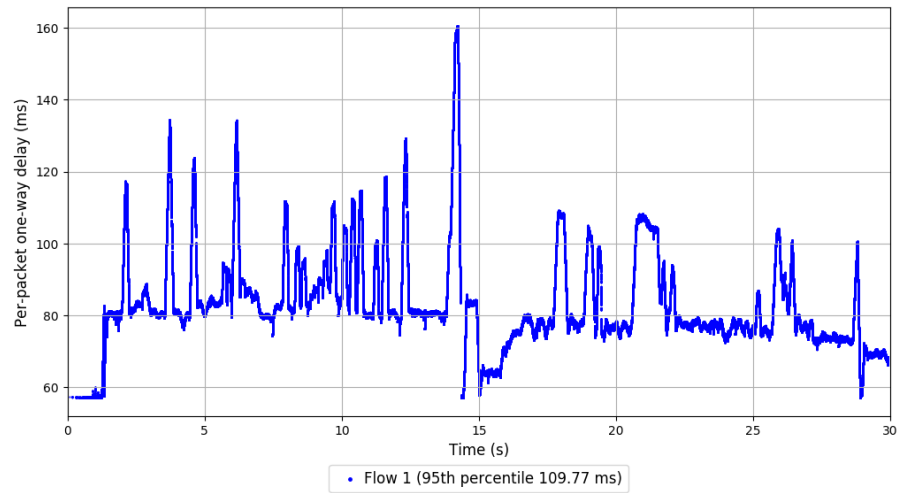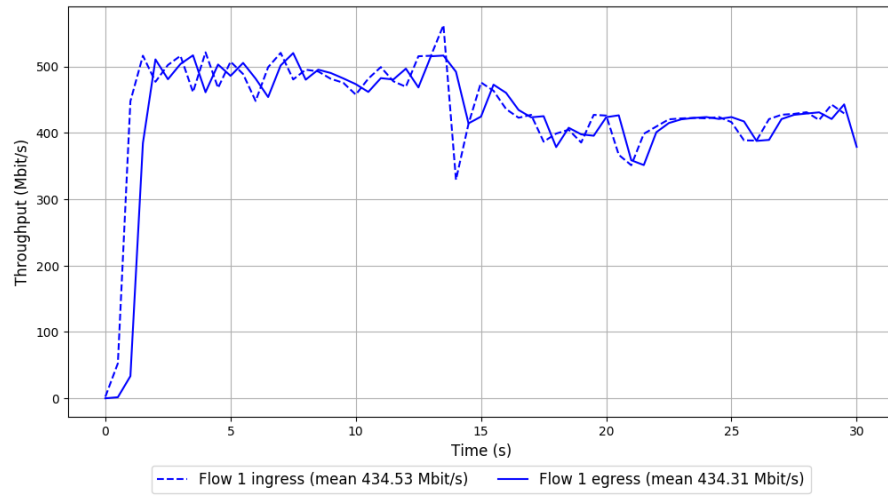

• Flow 1 (95th percentile 89.37 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2019-10-03 19:03:50
End at: 2019-10-03 19:04:21
Local clock offset: -0.441 ms
Remote clock offset: -0.817 ms


# Below is generated by plot.py at 2019-10-03 22:32:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 434.31 Mbit/s
95th percentile per-packet one-way delay: 109.765 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 434.31 Mbit/s
95th percentile per-packet one-way delay: 109.765 ms
Loss rate: 0.43%
```
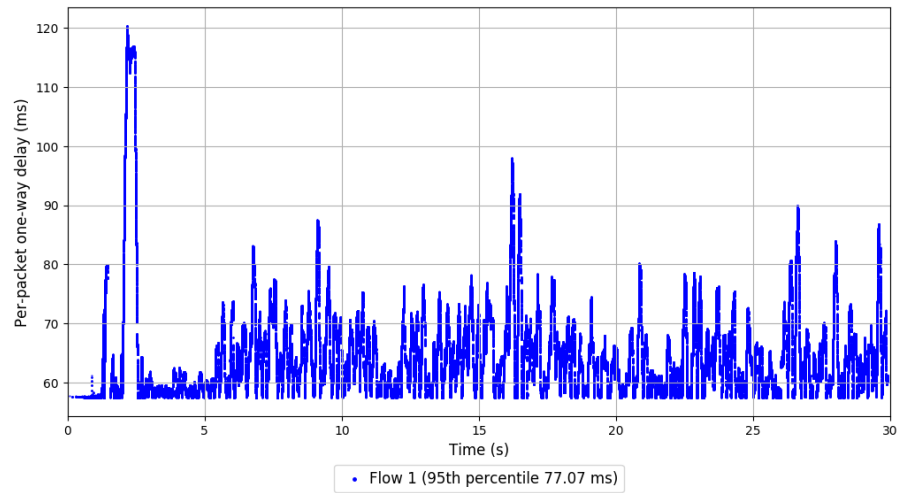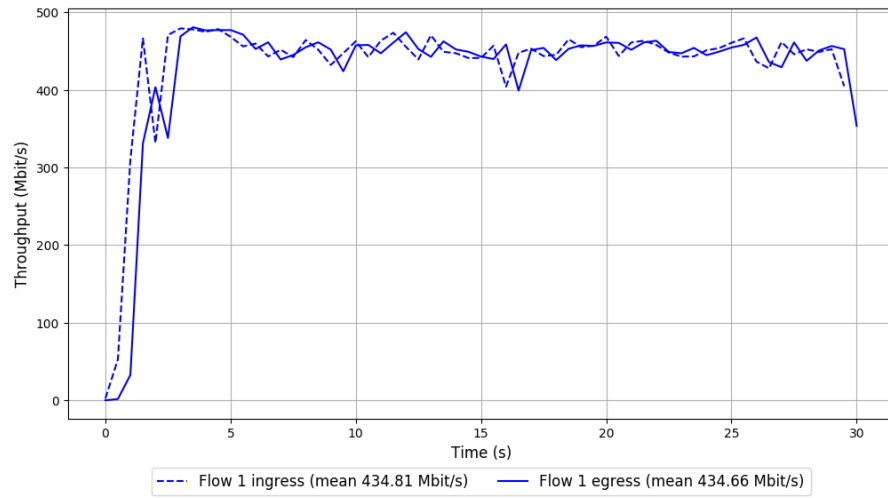
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2019-10-03 19:37:50
End at: 2019-10-03 19:38:20
Local clock offset: 0.202 ms
Remote clock offset: -0.193 ms


# Below is generated by plot.py at 2019-10-03 22:32:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 434.66 Mbit/s
95th percentile per-packet one-way delay: 77.073 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 434.66 Mbit/s
95th percentile per-packet one-way delay: 77.073 ms
Loss rate: 0.42%
```

Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 434.81 Mbit/s)   Flow 1 egress (mean 434.66 Mbit/s)

Flow 1 (95th percentile 77.07 ms)

```
Run 1: Statistics of Verus

Start at: 2019-10-03 17:41:41
End at: 2019-10-03 17:42:11
Local clock offset: -0.197 ms
Remote clock offset: 0.077 ms


# Below is generated by plot.py at 2019-10-03 22:32:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.65 Mbit/s
95th percentile per-packet one-way delay: 124.207 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.65 Mbit/s
95th percentile per-packet one-way delay: 124.207 ms
Loss rate: 0.00%
```
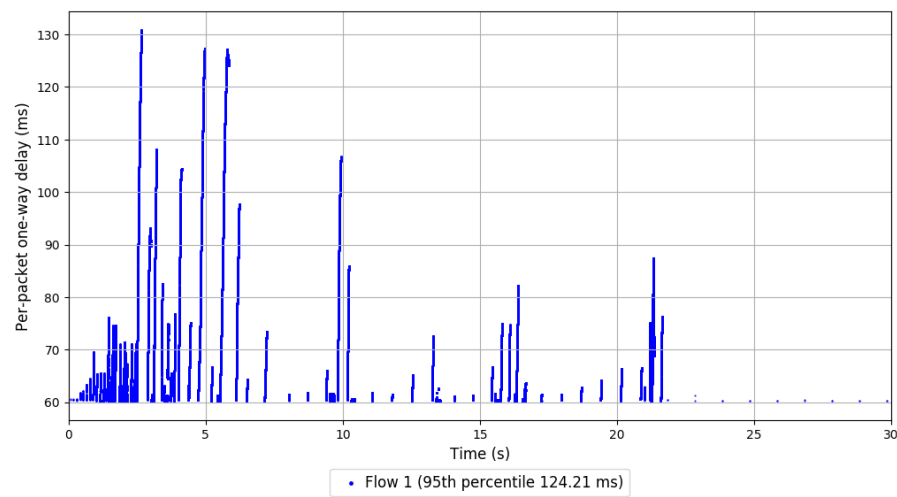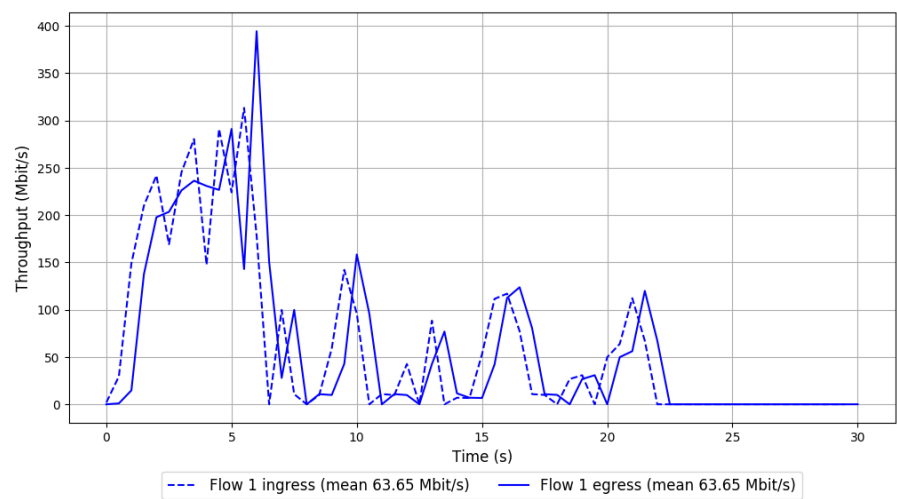
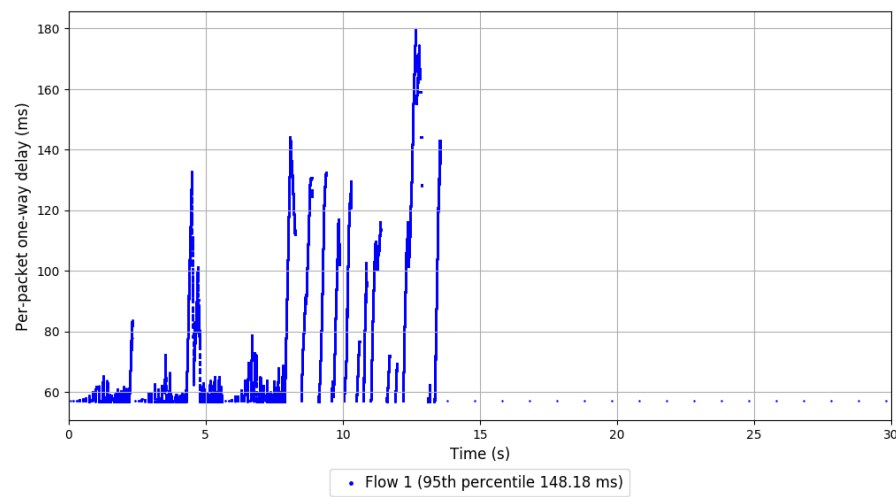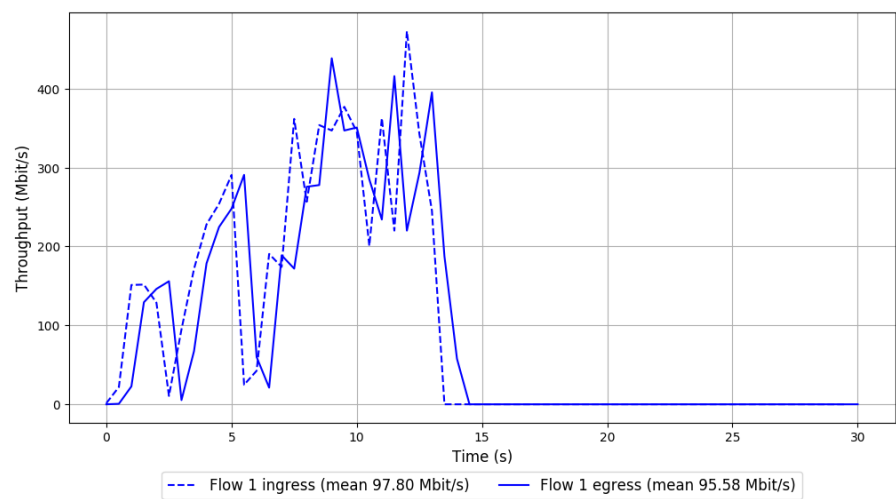# Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-10-03 18:16:01
End at: 2019-10-03 18:16:31
Local clock offset: -0.118 ms
Remote clock offset: -0.031 ms


# Below is generated by plot.py at 2019-10-03 22:32:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.58 Mbit/s
95th percentile per-packet one-way delay: 148.180 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 95.58 Mbit/s
95th percentile per-packet one-way delay: 148.180 ms
Loss rate: 2.27%
```

Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-10-03 18:50:29
End at: 2019-10-03 18:50:59
Local clock offset: -0.016 ms
Remote clock offset: 0.093 ms


# Below is generated by plot.py at 2019-10-03 22:32:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 119.23 Mbit/s
95th percentile per-packet one-way delay: 114.352 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 119.23 Mbit/s
95th percentile per-packet one-way delay: 114.352 ms
Loss rate: 0.00%
```
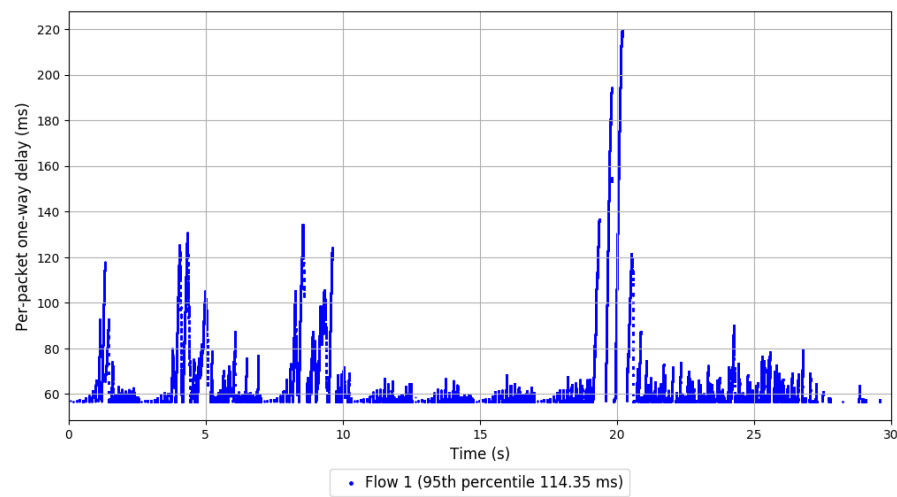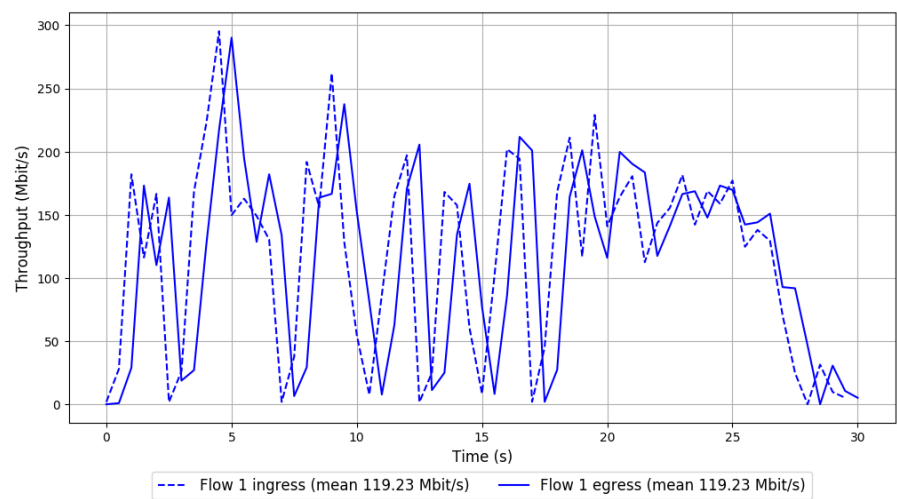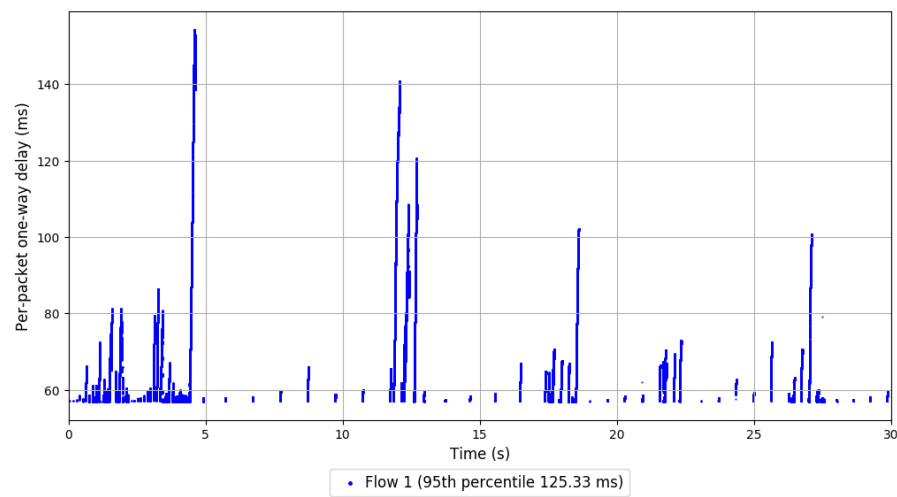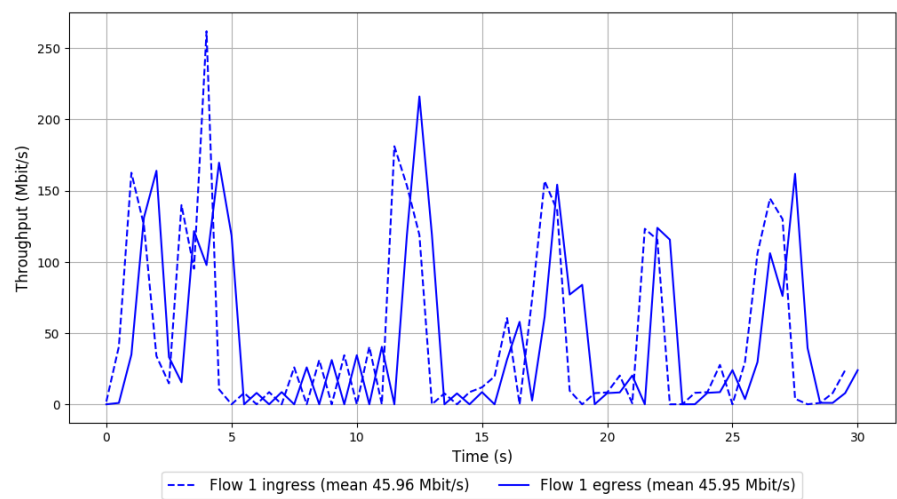
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2019-10-03 19:24:40
End at: 2019-10-03 19:25:10
Local clock offset: -0.387 ms
Remote clock offset: -0.124 ms


# Below is generated by plot.py at 2019-10-03 22:32:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.95 Mbit/s
95th percentile per-packet one-way delay: 125.327 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.95 Mbit/s
95th percentile per-packet one-way delay: 125.327 ms
Loss rate: 0.00%
```
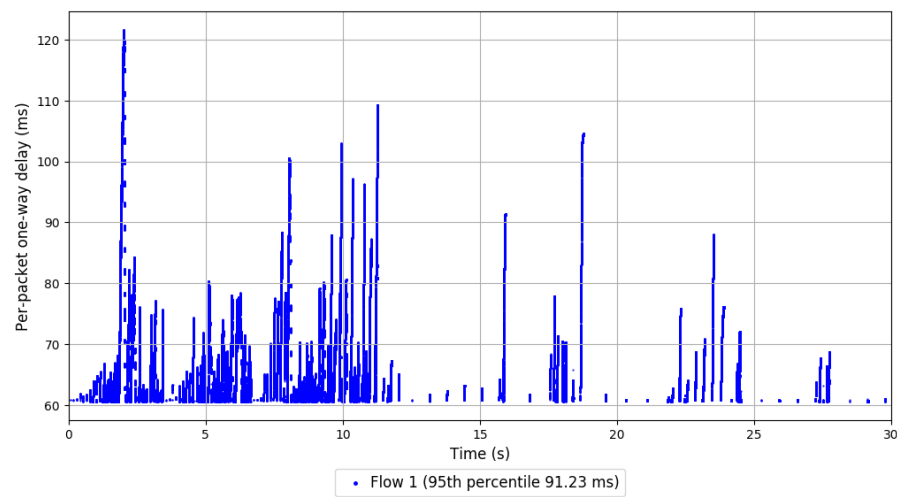
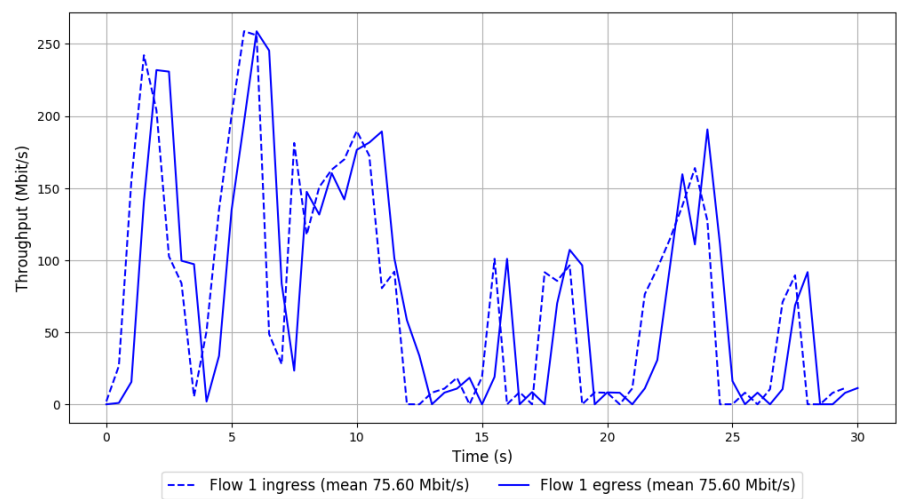## Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-10-03 19:58:56
End at: 2019-10-03 19:59:26
Local clock offset: 0.206 ms
Remote clock offset: -0.262 ms


# Below is generated by plot.py at 2019-10-03 22:32:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.60 Mbit/s
95th percentile per-packet one-way delay: 91.235 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 75.60 Mbit/s
95th percentile per-packet one-way delay: 91.235 ms
Loss rate: 0.00%
```

Run 5: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-10-03 17:31:37
End at: 2019-10-03 17:32:07
Local clock offset: 0.134 ms
Remote clock offset: -0.04 ms


# Below is generated by plot.py at 2019-10-03 22:34:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 316.13 Mbit/s
95th percentile per-packet one-way delay: 58.782 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 316.13 Mbit/s
95th percentile per-packet one-way delay: 58.782 ms
Loss rate: 0.41%
```
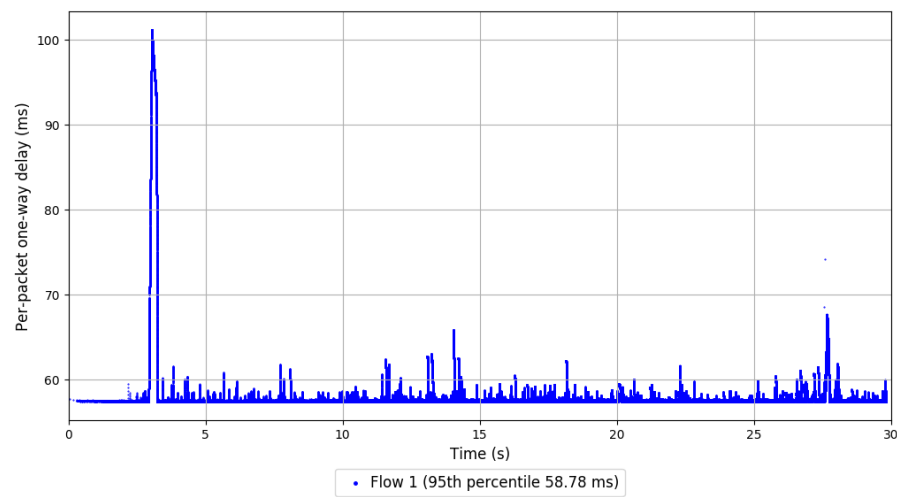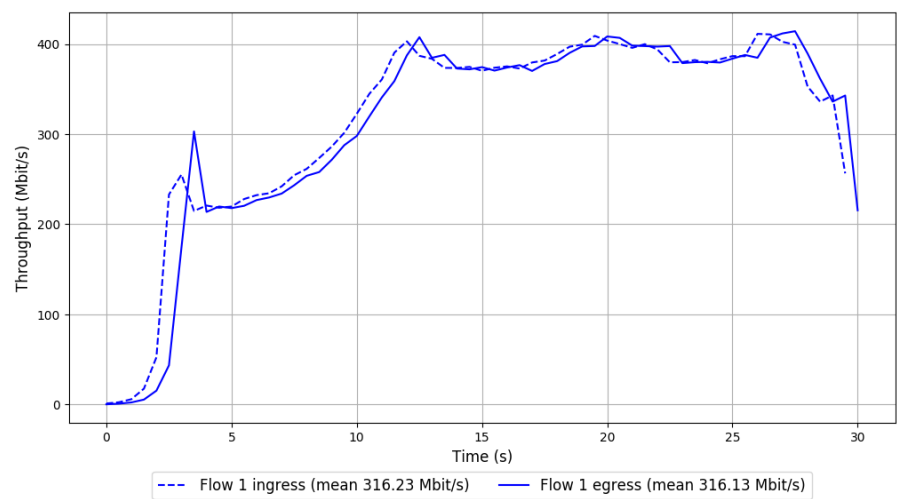
Run 1: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 316.23 Mbit/s) — Flow 1 egress (mean 316.13 Mbit/s)
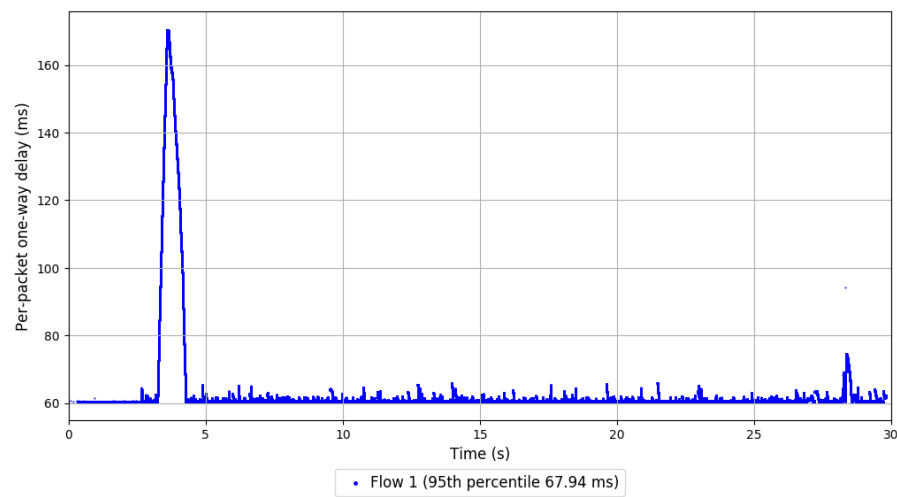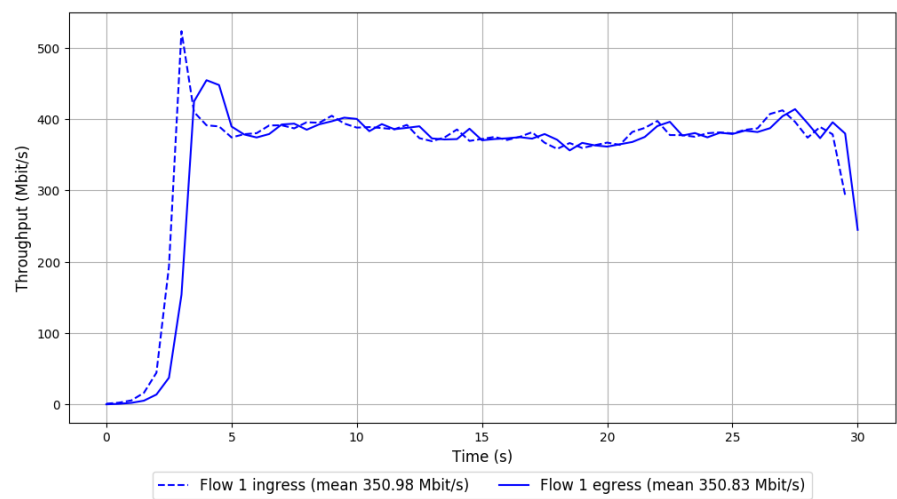

Flow 1 (95th percentile 58.78 ms)

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-10-03 18:05:58
End at: 2019-10-03 18:06:28
Local clock offset: -0.055 ms
Remote clock offset: -0.067 ms


# Below is generated by plot.py at 2019-10-03 22:35:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 350.83 Mbit/s
95th percentile per-packet one-way delay: 67.940 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 350.83 Mbit/s
95th percentile per-packet one-way delay: 67.940 ms
Loss rate: 0.44%
```

Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 350.98 Mbit/s) — — — Flow 1 egress (mean 350.83 Mbit/s)

Flow 1 (95th percentile 67.94 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-10-03 18:40:29
End at: 2019-10-03 18:40:59
Local clock offset: 0.208 ms
Remote clock offset: -0.05 ms


# Below is generated by plot.py at 2019-10-03 22:35:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 339.02 Mbit/s
95th percentile per-packet one-way delay: 116.964 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 339.02 Mbit/s
95th percentile per-packet one-way delay: 116.964 ms
Loss rate: 0.41%
```
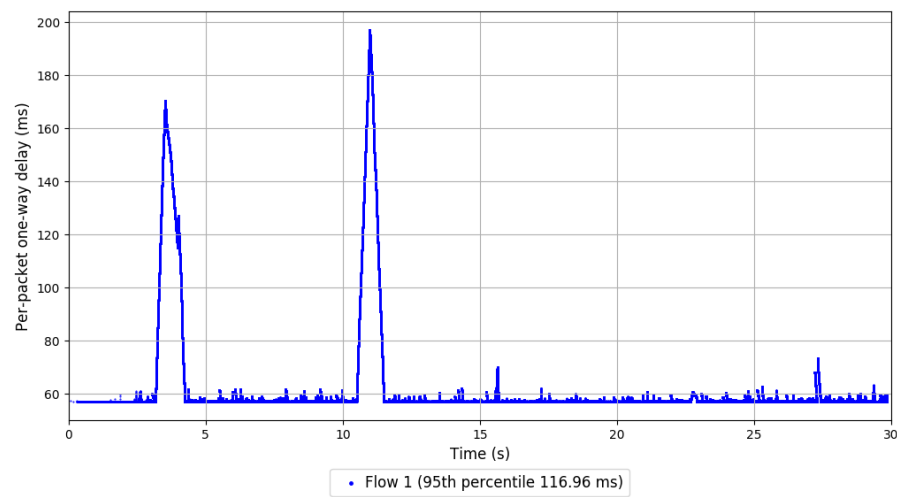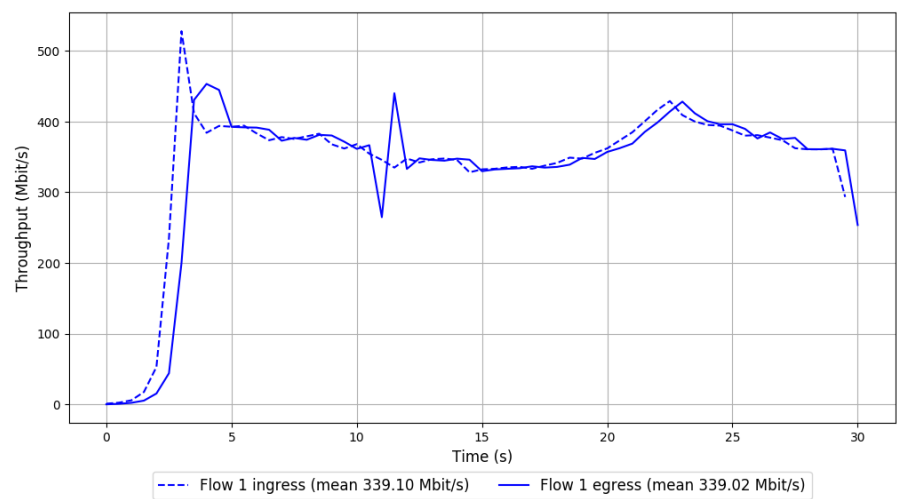
Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 339.10 Mbit/s)   Flow 1 egress (mean 339.02 Mbit/s)

Flow 1 (95th percentile 116.96 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-10-03 19:14:51
End at: 2019-10-03 19:15:21
Local clock offset: -0.179 ms
Remote clock offset: -0.32 ms


# Below is generated by plot.py at 2019-10-03 22:35:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 257.99 Mbit/s
95th percentile per-packet one-way delay: 72.826 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 257.99 Mbit/s
95th percentile per-packet one-way delay: 72.826 ms
Loss rate: 0.49%
```
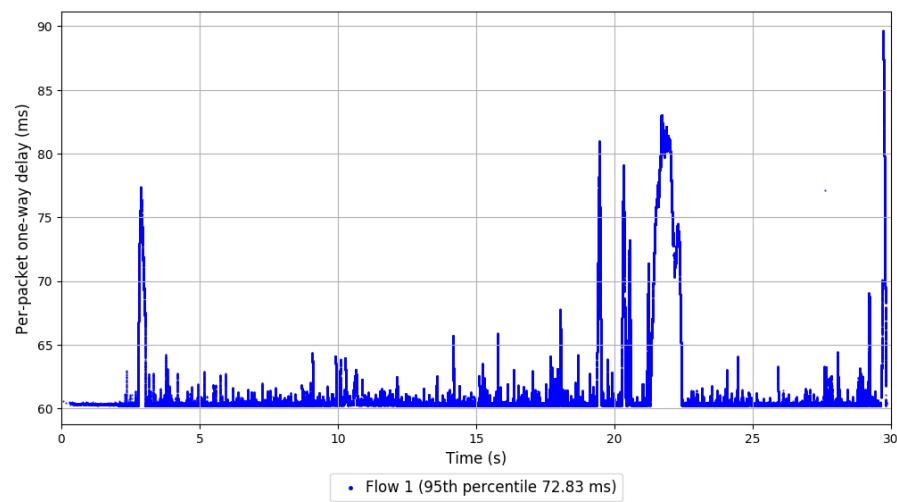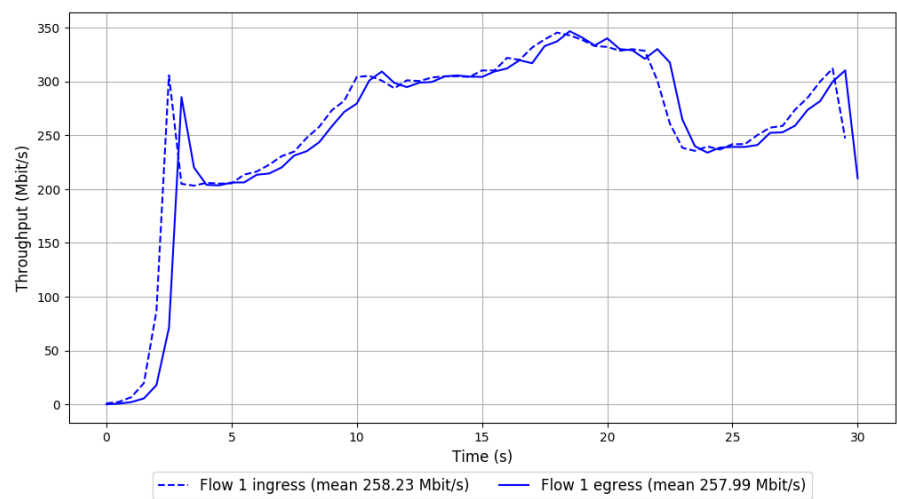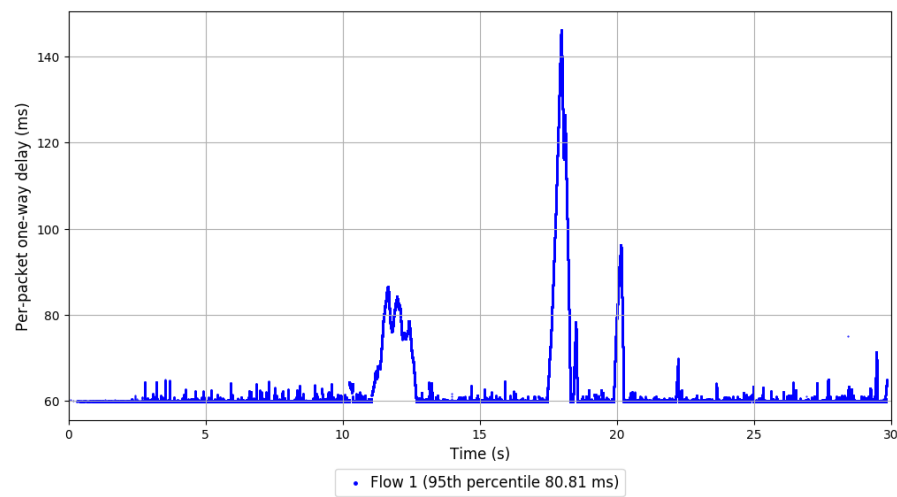
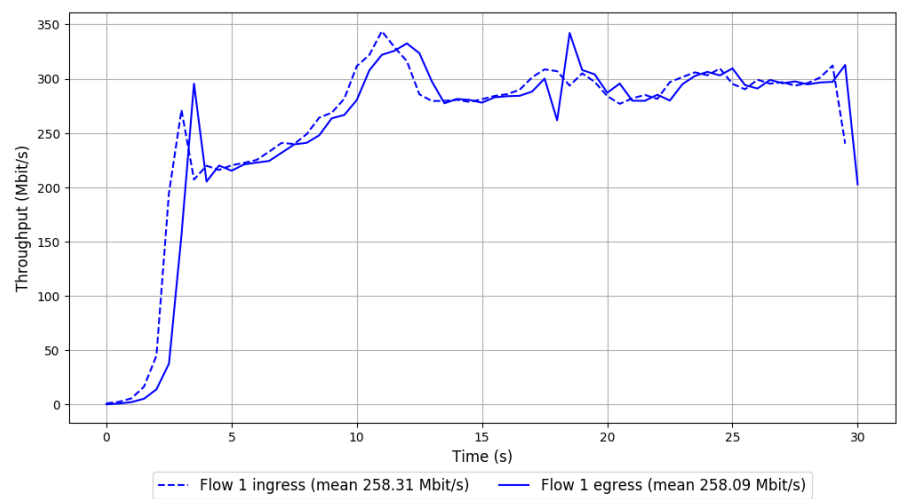# Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-10-03 19:49:00
End at: 2019-10-03 19:49:30
Local clock offset: -0.204 ms
Remote clock offset: -0.047 ms


# Below is generated by plot.py at 2019-10-03 22:35:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 258.09 Mbit/s
95th percentile per-packet one-way delay: 80.815 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 258.09 Mbit/s
95th percentile per-packet one-way delay: 80.815 ms
Loss rate: 0.48%
```

Run 5: Report of PCC-Vivace — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2019-10-03 17:40:33
End at: 2019-10-03 17:41:03
Local clock offset: 0.411 ms
Remote clock offset: 0.054 ms
```
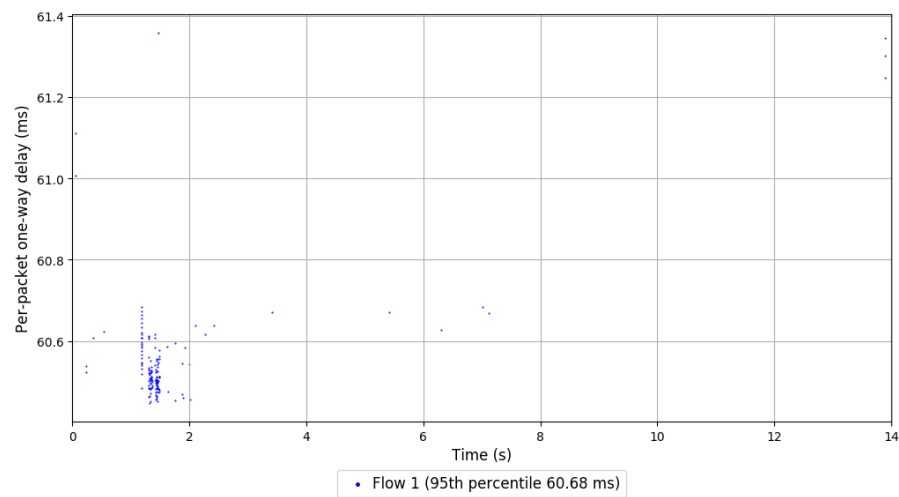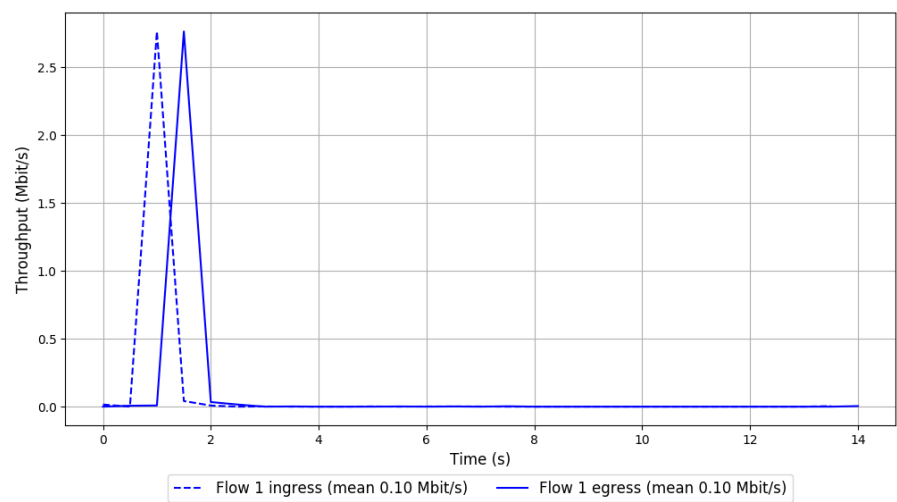
Run 1: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.10 Mbit/s)   Flow 1 egress (mean 0.10 Mbit/s)

Flow 1 (95th percentile 60.68 ms)

```
Run 2: Statistics of WebRTC media

Start at: 2019-10-03 18:14:53
End at: 2019-10-03 18:15:23
Local clock offset: -0.035 ms
Remote clock offset: 0.013 ms


# Below is generated by plot.py at 2019-10-03 22:35:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.098 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.098 ms
Loss rate: 0.00%
```
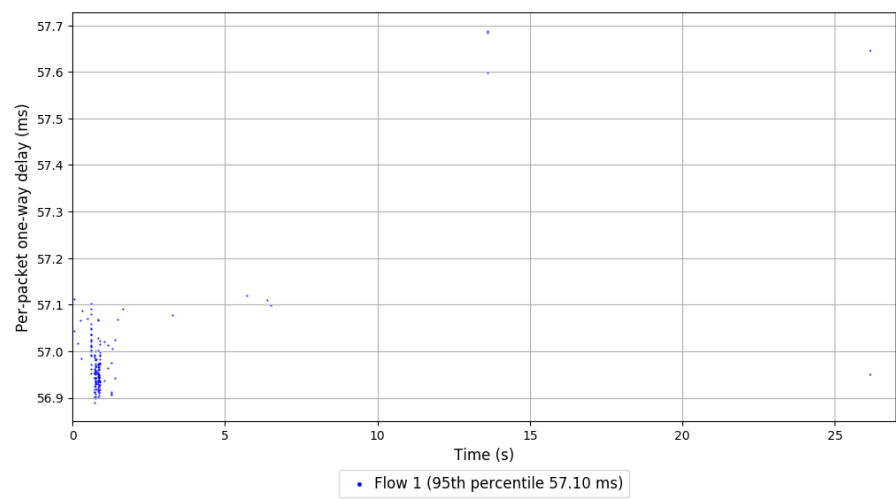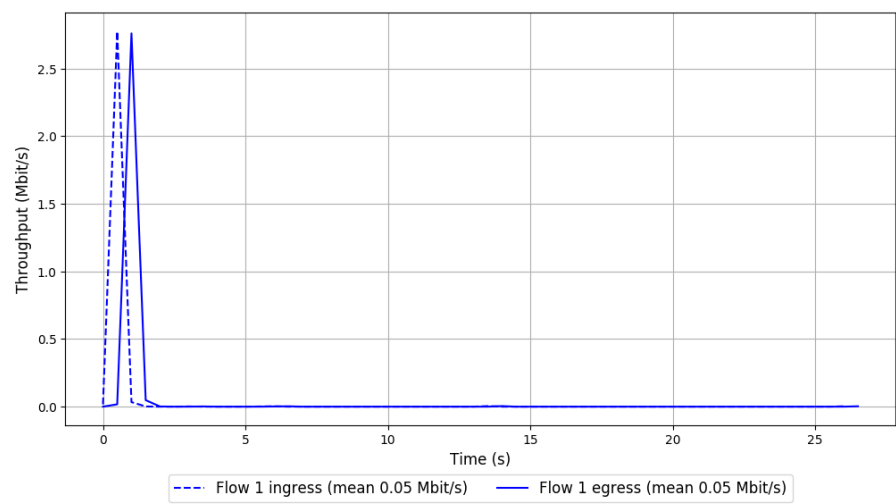
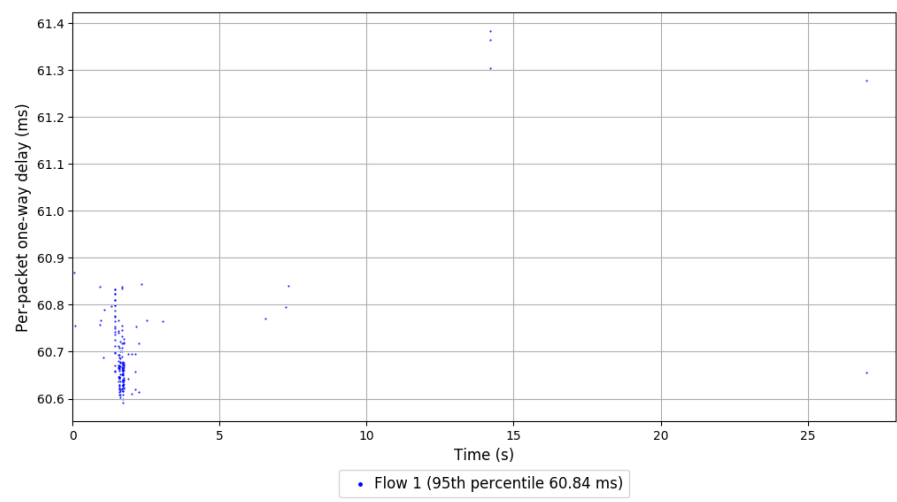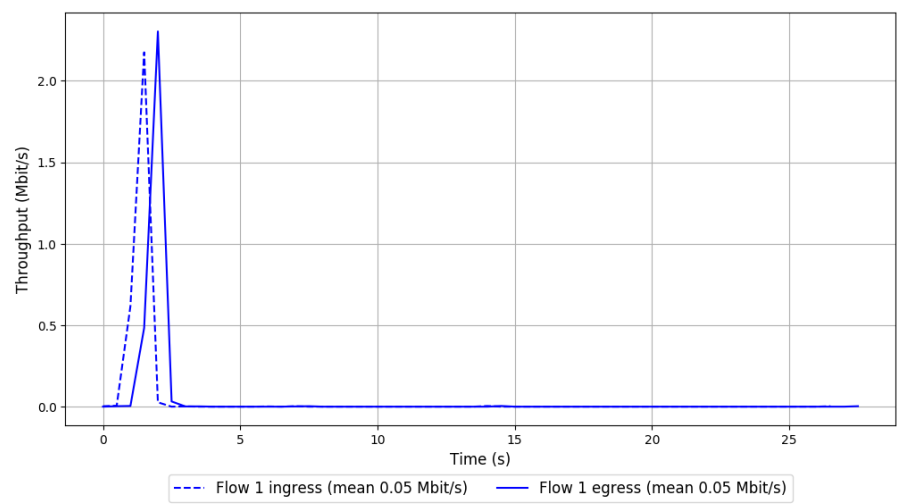Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-10-03 18:49:21
End at: 2019-10-03 18:49:51
Local clock offset: -0.017 ms
Remote clock offset: -0.226 ms


# Below is generated by plot.py at 2019-10-03 22:35:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.838 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.838 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-10-03 19:23:32
End at: 2019-10-03 19:24:02
Local clock offset: -0.027 ms
Remote clock offset: -0.1 ms


# Below is generated by plot.py at 2019-10-03 22:35:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.390 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 60.390 ms
Loss rate: 0.00%
```
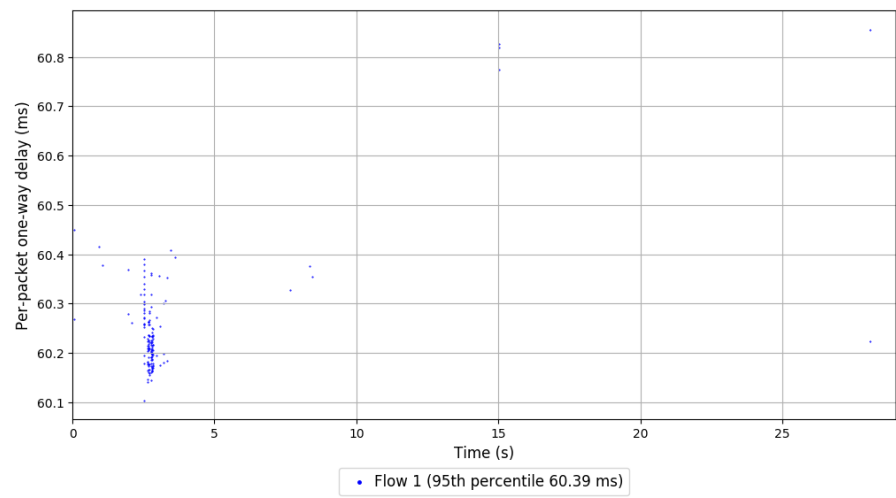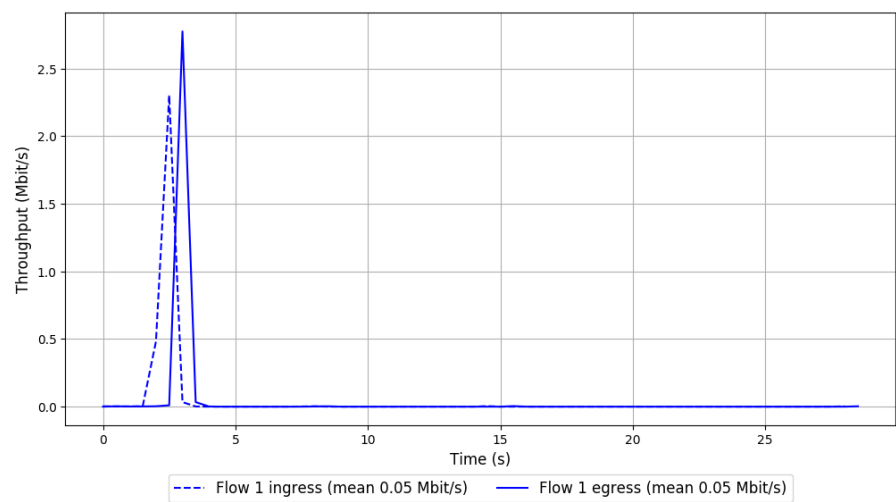
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-10-03 19:57:48
End at: 2019-10-03 19:58:18
Local clock offset: -0.013 ms
Remote clock offset: -0.207 ms


# Below is generated by plot.py at 2019-10-03 22:35:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.651 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.651 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link