Pantheon Report

Generated at 2019-06-27 21:25:50 (UTC).

Data path: AWS India 1 on `ens5` (*local*) →India on `em1` (*remote*).

Repeated the test of 22 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.
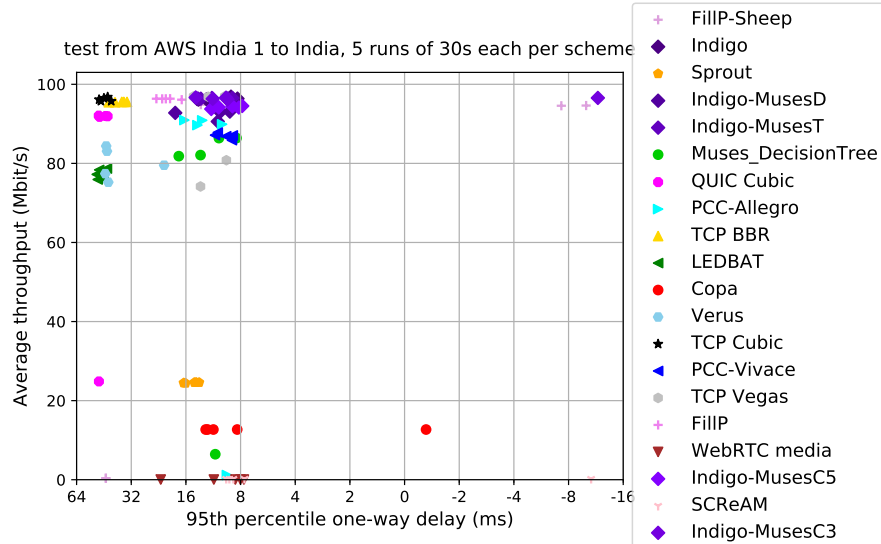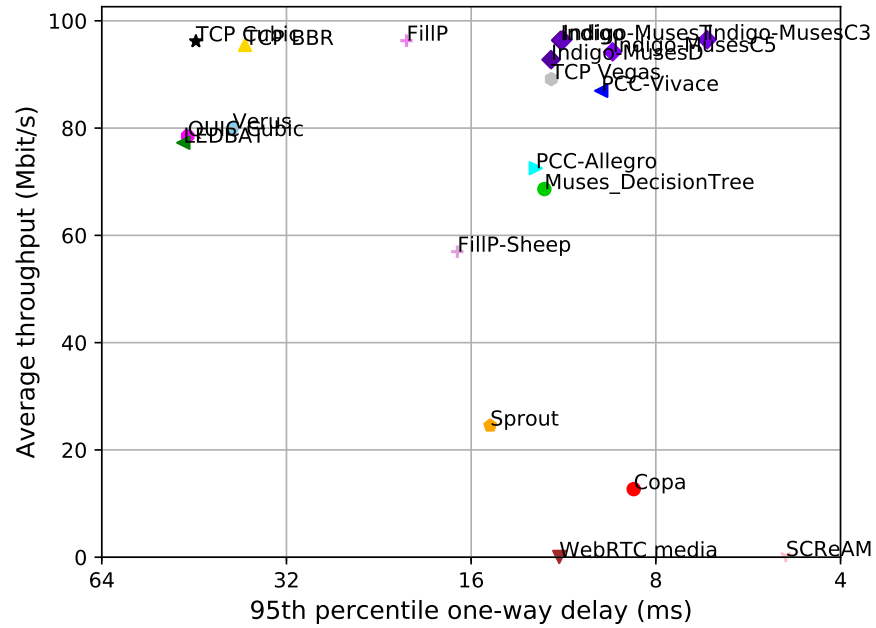
```
System info:
Linux 4.15.0-1039-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ c3953d08f32ec7ebbdede2d2f0cbdeed262571ef
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 11c9498ecb1596b02ccd896791a02d03172af7ed
 M helpers/__init__.pyc
 M helpers/context.pyc
 M helpers/utils.pyc
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
```

```
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS India 1 to India, 5 runs of 30s each per scheme
(mean of all runs by scheme)

test from AWS India 1 to India, 5 runs of 30s each per scheme

+	FillP-Sheep
◆	Indigo
⬟	Sprout
◆	Indigo-MusesD
◆	Indigo-MusesT
●	Muses_DecisionTree
●	QUIC Cubic
▶	PCC-Allegro
▲	TCP BBR
◀	LEDBAT
●	Copa
●	Verus
★	TCP Cubic
◀	PCC-Vivace
●	TCP Vegas
+	FillP
▼	WebRTC media
◆	Indigo-MusesC5
⊥	SCReAM
◆	Indigo-MusesC3

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	95.51	37.38	0.20
Copa	5	12.70	8.69	70.79
TCP Cubic	5	96.18	44.96	0.32
FillP	5	96.29	20.39	0.40
FillP-Sheep	5	56.96	16.85	16.60
Indigo	5	96.37	11.44	0.01
Indigo-MusesC3	5	96.47	6.60	0.01
Indigo-MusesC5	5	94.21	9.41	0.00
Indigo-MusesD	5	92.76	11.86	0.01
Indigo-MusesT	5	96.44	11.35	0.00
LEDBAT	5	77.27	47.12	0.14
Muses_DecisionTree	5	68.63	12.16	9.34
PCC-Allegro	5	72.51	12.55	8.25
PCC-Expr	0	N/A	N/A	N/A
QUIC Cubic	5	78.52	46.35	1.21
SCReAM	5	0.21	4.91	0.00
Sprout	5	24.54	14.90	0.01
TaoVA-100x	0	N/A	N/A	N/A
TCP Vegas	5	89.13	11.84	0.40
Verus	5	79.93	39.18	16.81
PCC-Vivace	5	86.95	9.82	0.00
WebRTC media	5	0.05	11.50	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2019-06-27 19:13:52
End at: 2019-06-27 19:14:22
Local clock offset: -1.787 ms
Remote clock offset: -4.512 ms


# Below is generated by plot.py at 2019-06-27 21:15:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.46 Mbit/s
95th percentile per-packet one-way delay: 42.582 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 95.46 Mbit/s
95th percentile per-packet one-way delay: 42.582 ms
Loss rate: 0.22%
```
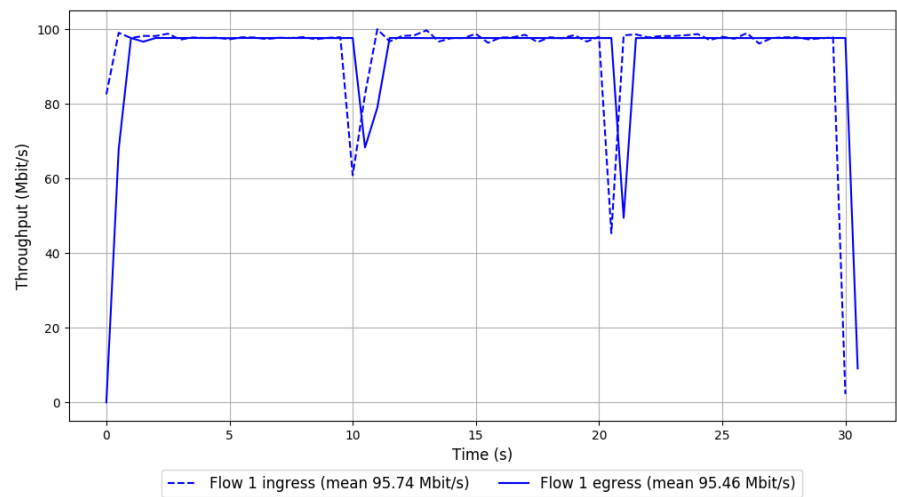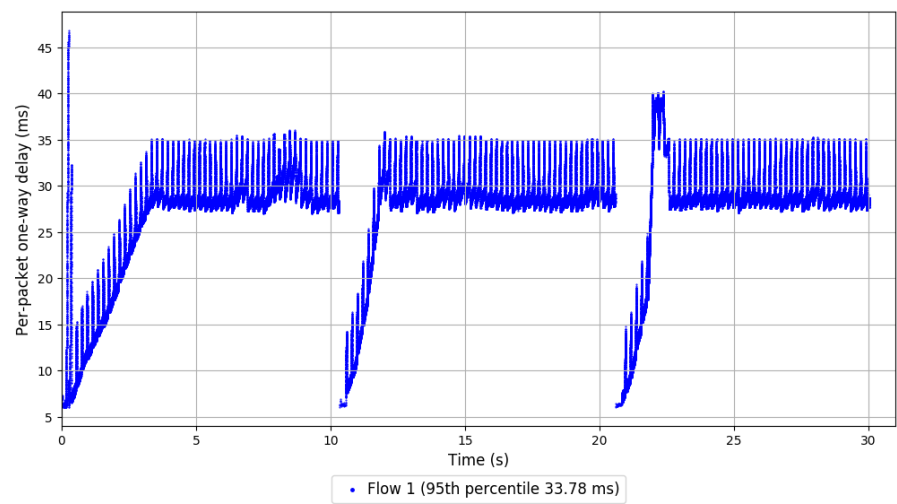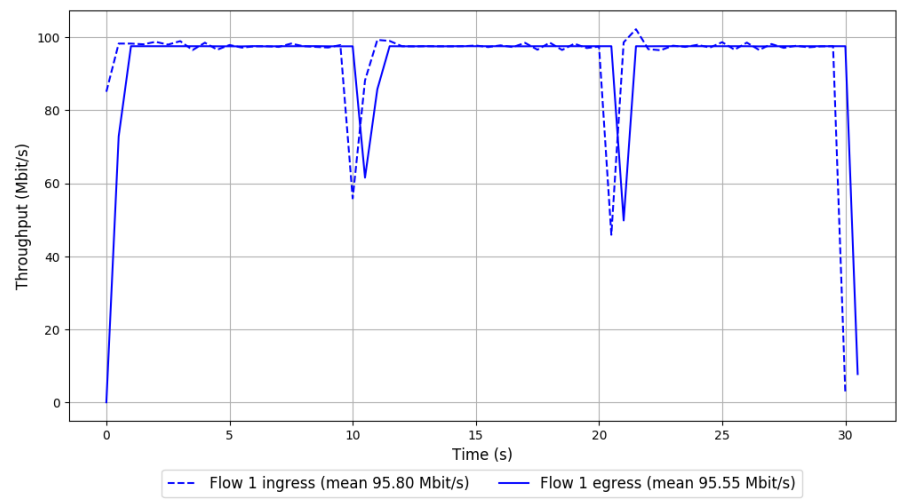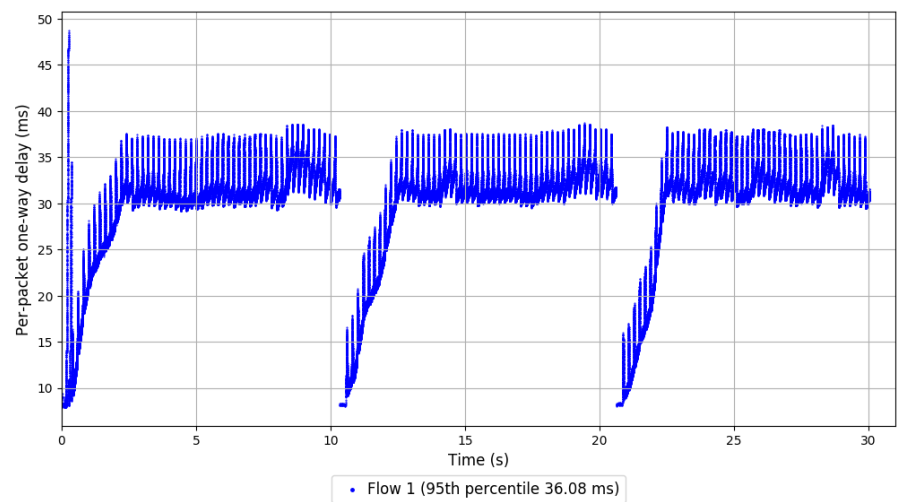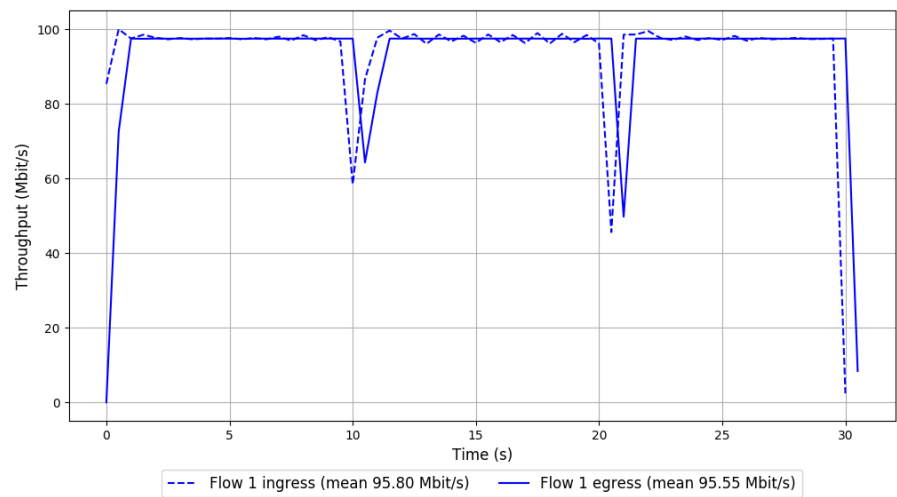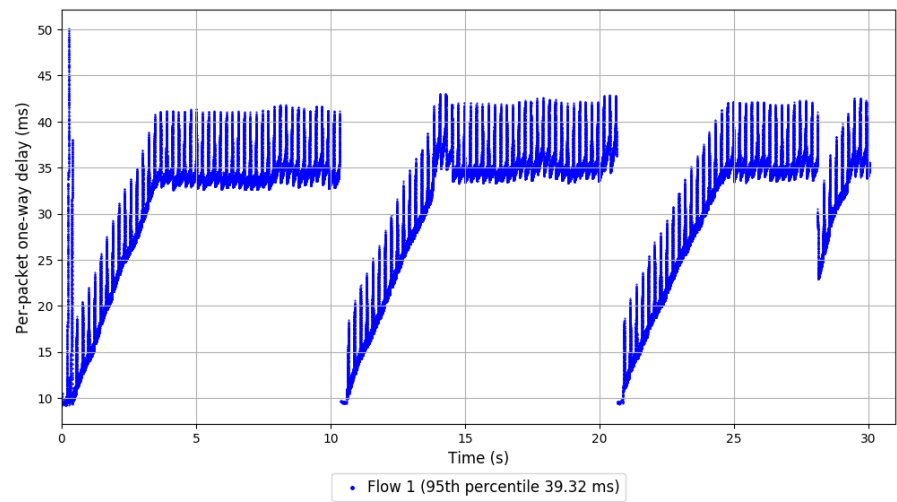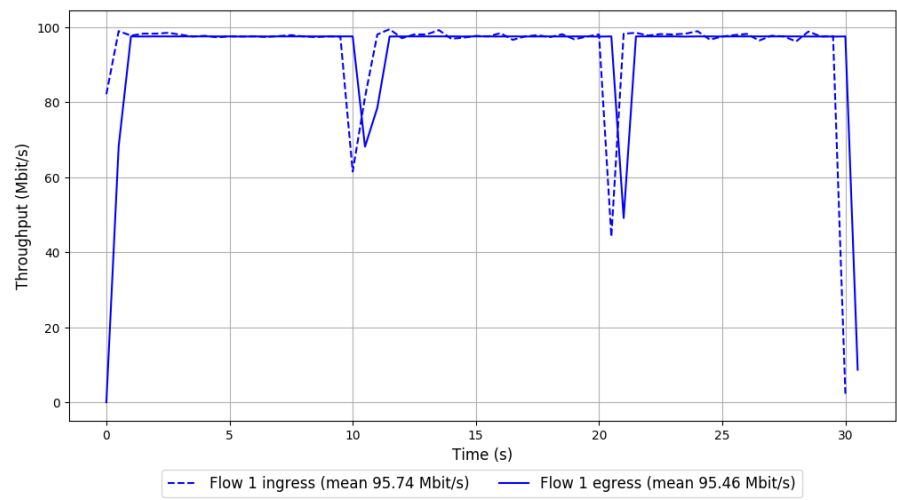
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2019-06-27 19:39:34
End at: 2019-06-27 19:40:04
Local clock offset: -1.081 ms
Remote clock offset: -7.116 ms


# Below is generated by plot.py at 2019-06-27 21:15:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 33.776 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 33.776 ms
Loss rate: 0.19%
```
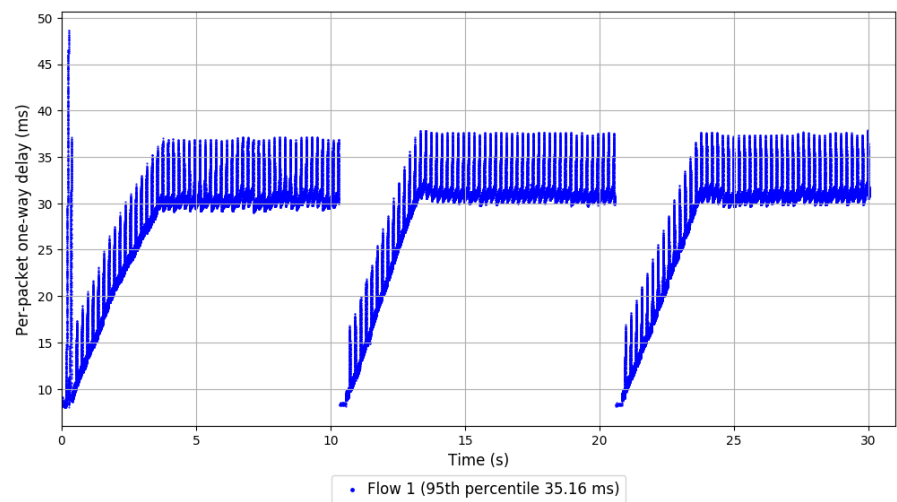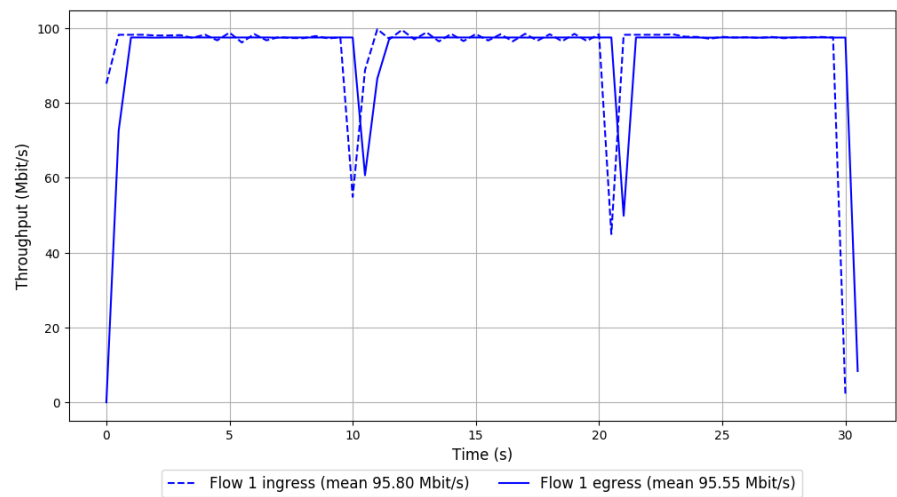
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2019-06-27 20:05:06
End at: 2019-06-27 20:05:36
Local clock offset: -1.617 ms
Remote clock offset: -5.159 ms


# Below is generated by plot.py at 2019-06-27 21:15:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 36.077 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 36.077 ms
Loss rate: 0.18%
```
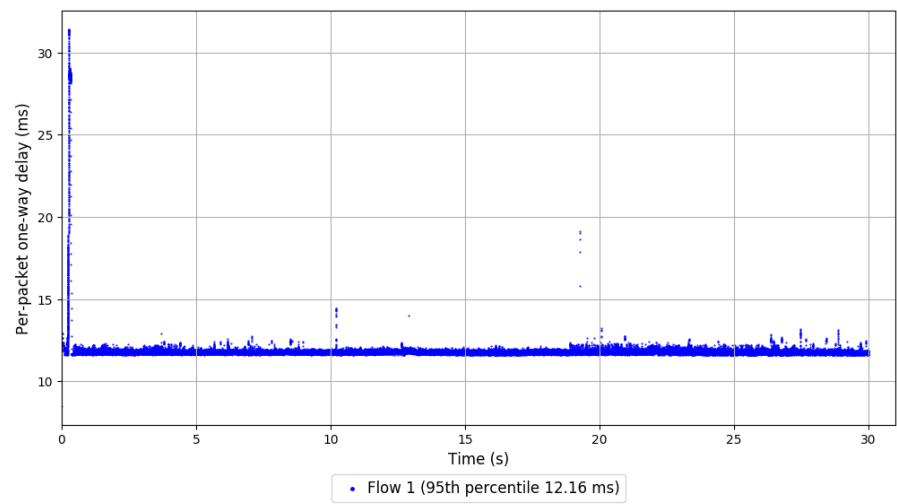
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2019-06-27 20:30:15
End at: 2019-06-27 20:30:45
Local clock offset: -1.038 ms
Remote clock offset: -6.422 ms

# Below is generated by plot.py at 2019-06-27 21:15:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.46 Mbit/s
95th percentile per-packet one-way delay: 39.324 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 95.46 Mbit/s
95th percentile per-packet one-way delay: 39.324 ms
Loss rate: 0.21%
```

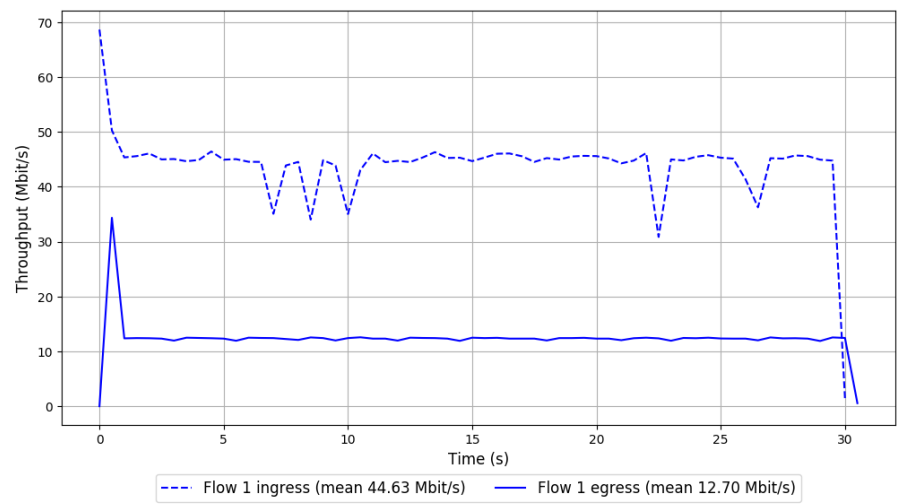Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2019-06-27 20:55:29
End at: 2019-06-27 20:55:59
Local clock offset: -0.833 ms
Remote clock offset: -4.323 ms


# Below is generated by plot.py at 2019-06-27 21:15:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 35.164 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 35.164 ms
Loss rate: 0.18%
```
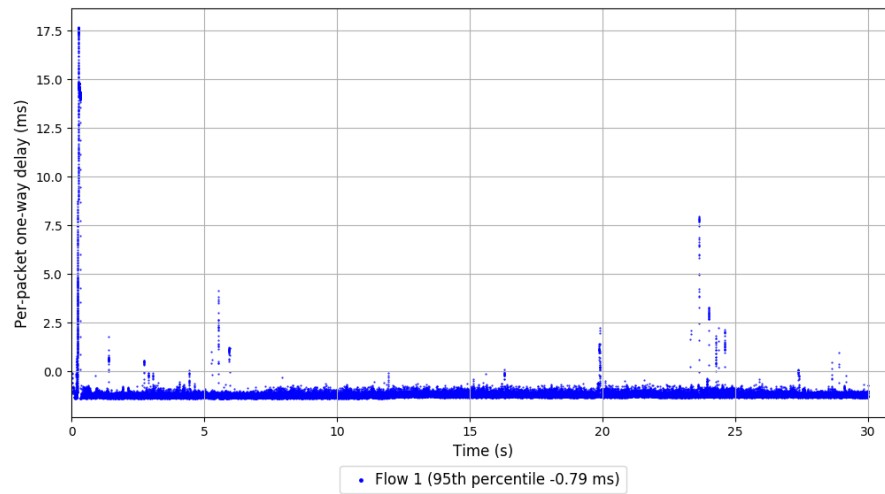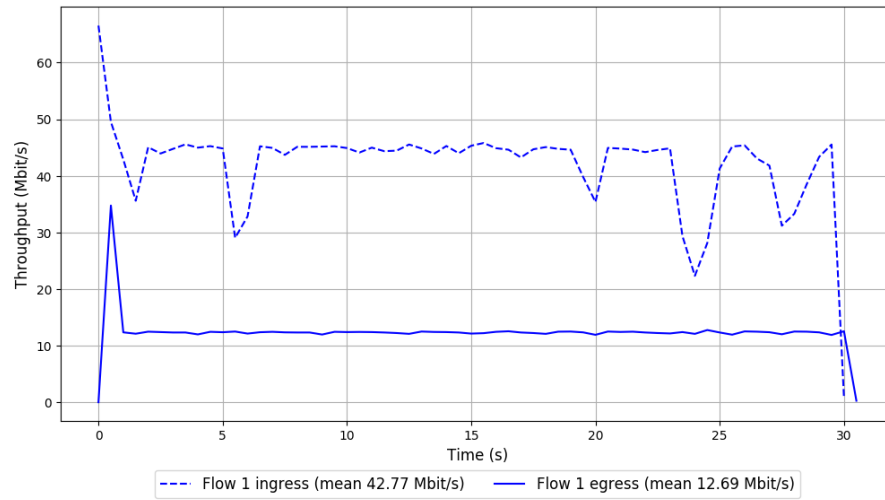
Run 5: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2019-06-27 19:11:34
End at: 2019-06-27 19:12:04
Local clock offset: -1.841 ms
Remote clock offset: -5.948 ms

# Below is generated by plot.py at 2019-06-27 21:15:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 12.158 ms
Loss rate: 71.55%
-- Flow 1:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 12.158 ms
Loss rate: 71.55%
```
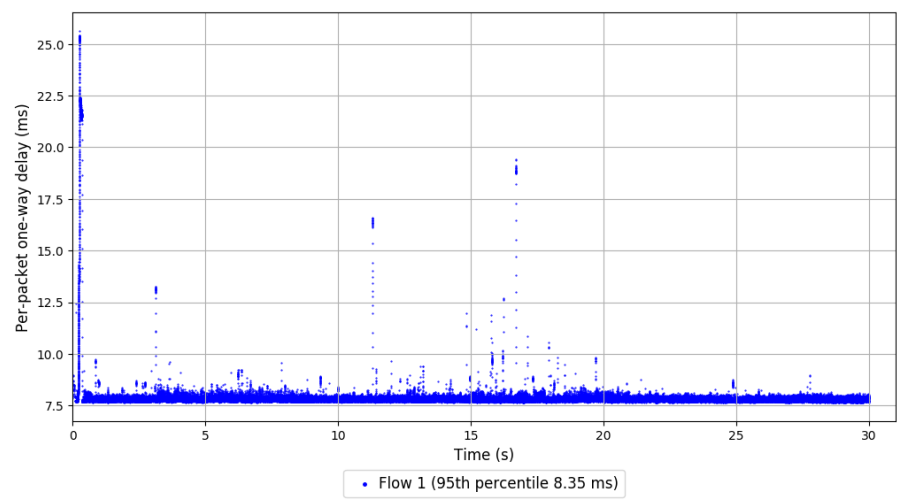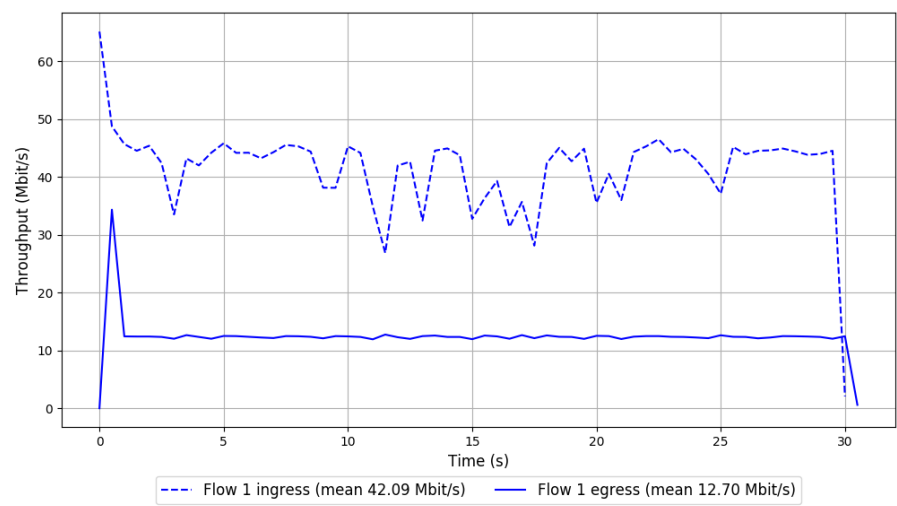
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 44.63 Mbit/s)   Flow 1 egress (mean 12.70 Mbit/s)

Flow 1 (95th percentile 12.16 ms)

```
Run 2: Statistics of Copa

Start at: 2019-06-27 19:37:13
End at: 2019-06-27 19:37:43
Local clock offset: -0.479 ms
Remote clock offset: -17.057 ms


# Below is generated by plot.py at 2019-06-27 21:15:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.69 Mbit/s
95th percentile per-packet one-way delay: -0.787 ms
Loss rate: 70.32%
-- Flow 1:
Average throughput: 12.69 Mbit/s
95th percentile per-packet one-way delay: -0.787 ms
Loss rate: 70.32%
```
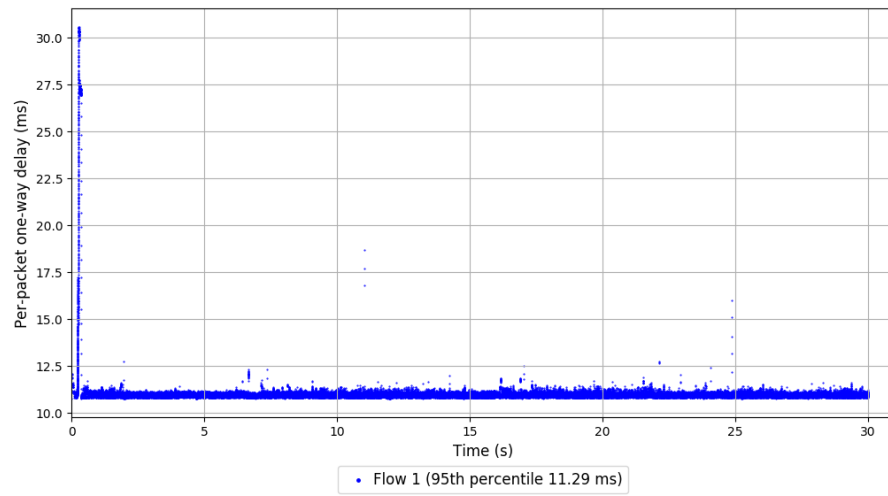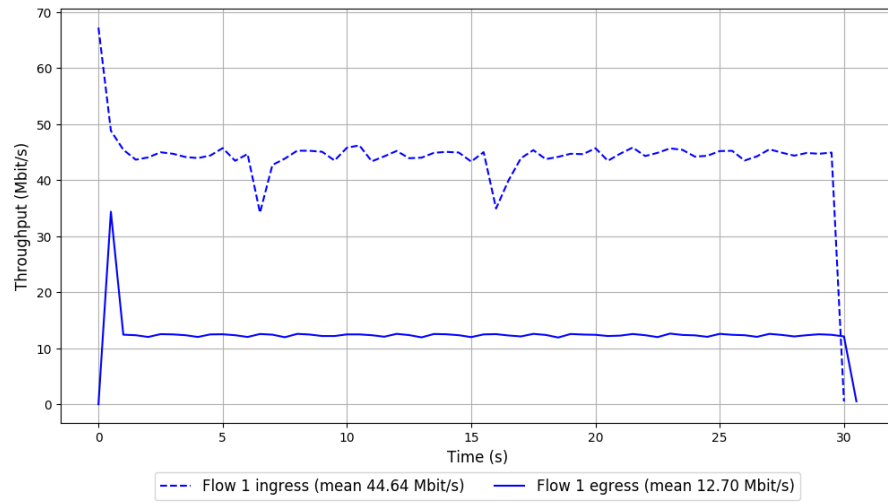
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2019-06-27 20:02:49
End at: 2019-06-27 20:03:19
Local clock offset: -0.068 ms
Remote clock offset: -7.021 ms


# Below is generated by plot.py at 2019-06-27 21:15:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 8.349 ms
Loss rate: 69.84%
-- Flow 1:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 8.349 ms
Loss rate: 69.84%
```
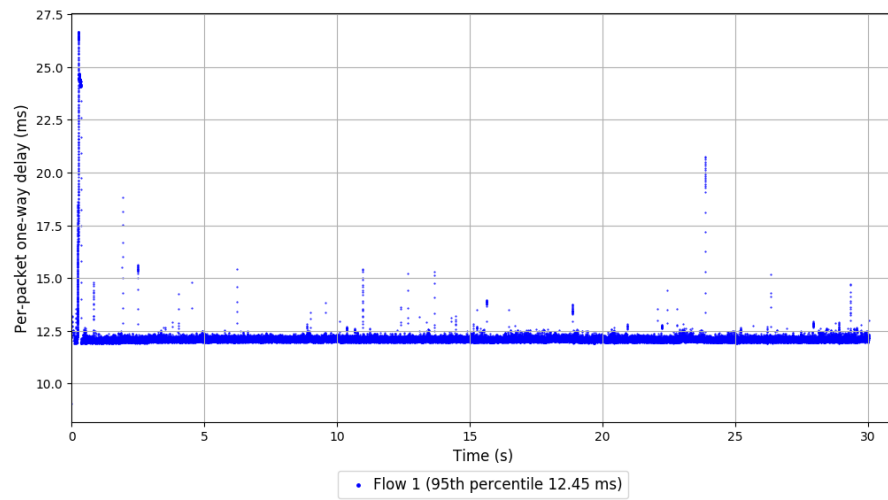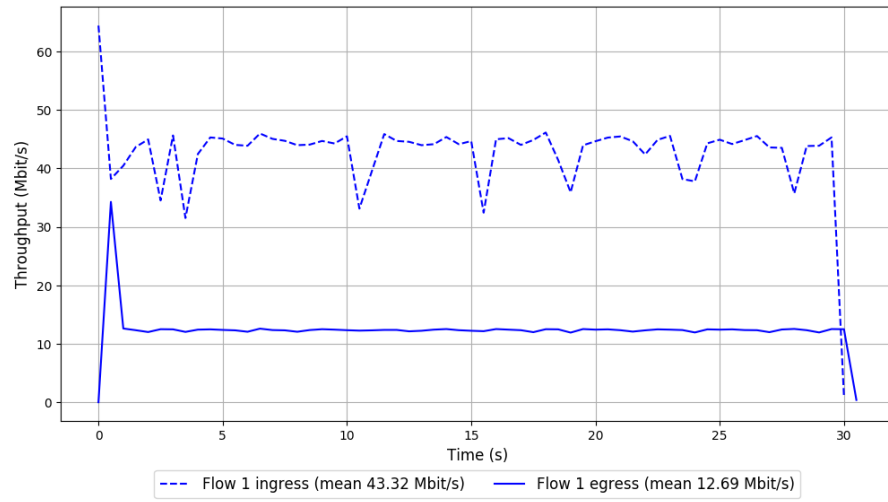
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2019-06-27 20:27:59
End at: 2019-06-27 20:28:29
Local clock offset: -0.882 ms
Remote clock offset: -4.878 ms


# Below is generated by plot.py at 2019-06-27 21:15:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 11.294 ms
Loss rate: 71.56%
-- Flow 1:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 11.294 ms
Loss rate: 71.56%
```

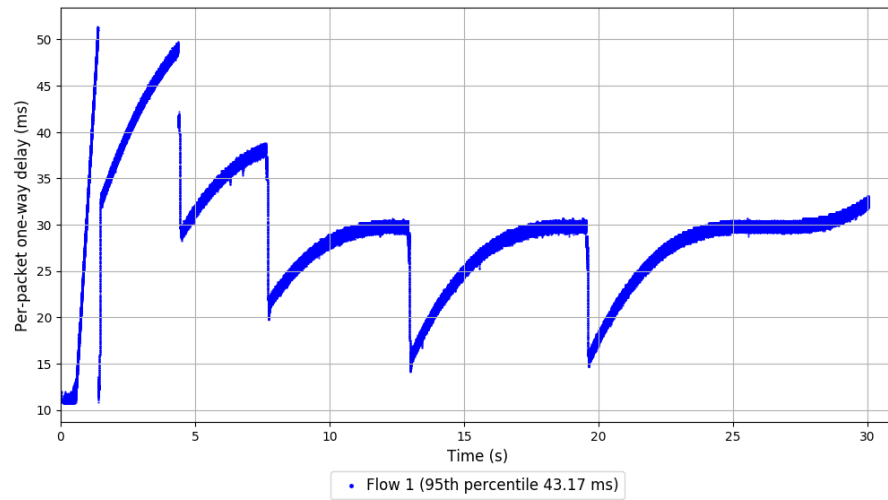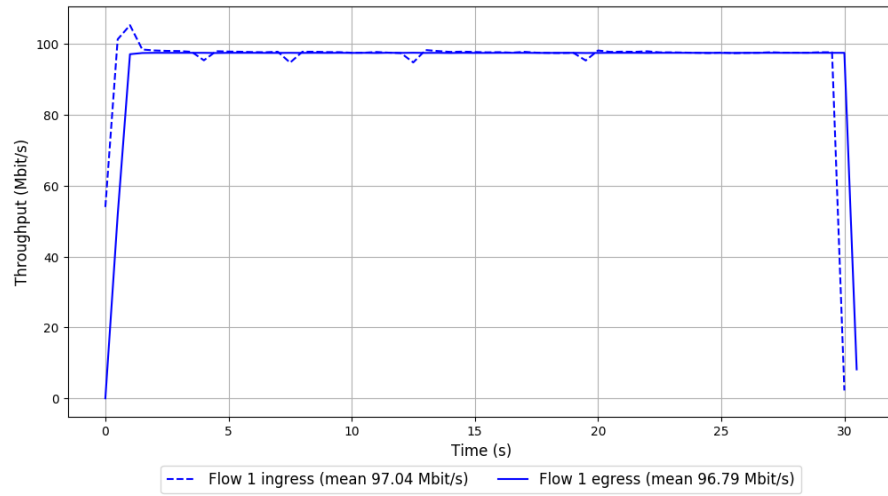Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 44.64 Mbit/s) ----- Flow 1 egress (mean 12.70 Mbit/s) ——

Flow 1 (95th percentile 11.29 ms)

```
Run 5: Statistics of Copa

Start at: 2019-06-27 20:53:13
End at: 2019-06-27 20:53:43
Local clock offset: -1.841 ms
Remote clock offset: -4.523 ms


# Below is generated by plot.py at 2019-06-27 21:15:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.69 Mbit/s
95th percentile per-packet one-way delay: 12.453 ms
Loss rate: 70.70%
-- Flow 1:
Average throughput: 12.69 Mbit/s
95th percentile per-packet one-way delay: 12.453 ms
Loss rate: 70.70%
```

Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 43.32 Mbit/s) --- Flow 1 egress (mean 12.69 Mbit/s)

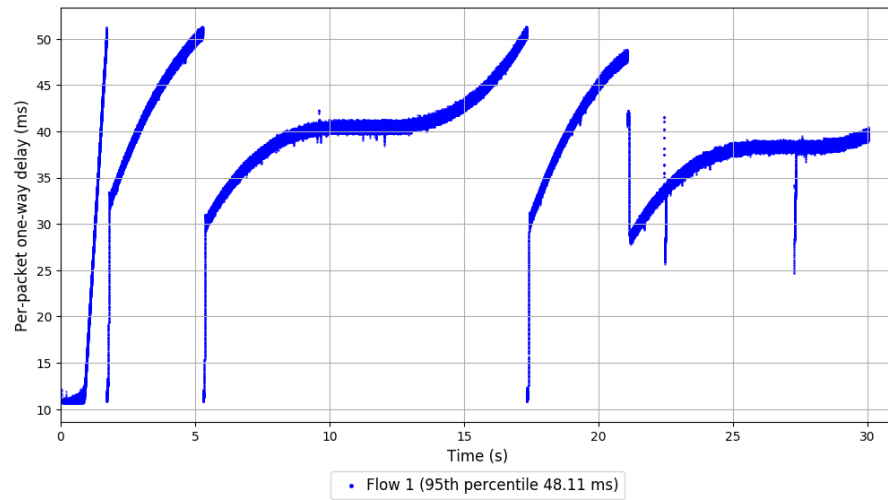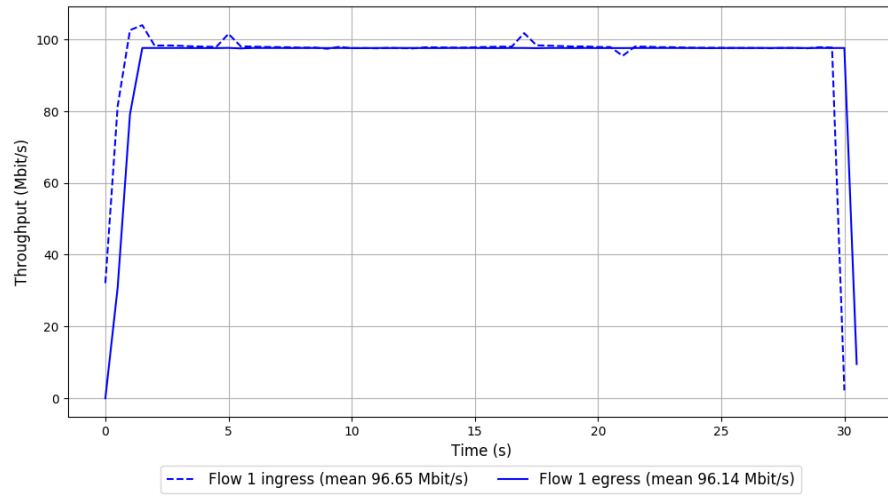Flow 1 (95th percentile 12.45 ms)

```
Run 1: Statistics of TCP Cubic

Start at: 2019-06-27 19:10:23
End at: 2019-06-27 19:10:53
Local clock offset: -1.426 ms
Remote clock offset: -6.316 ms


# Below is generated by plot.py at 2019-06-27 21:15:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.79 Mbit/s
95th percentile per-packet one-way delay: 43.169 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 96.79 Mbit/s
95th percentile per-packet one-way delay: 43.169 ms
Loss rate: 0.19%
```
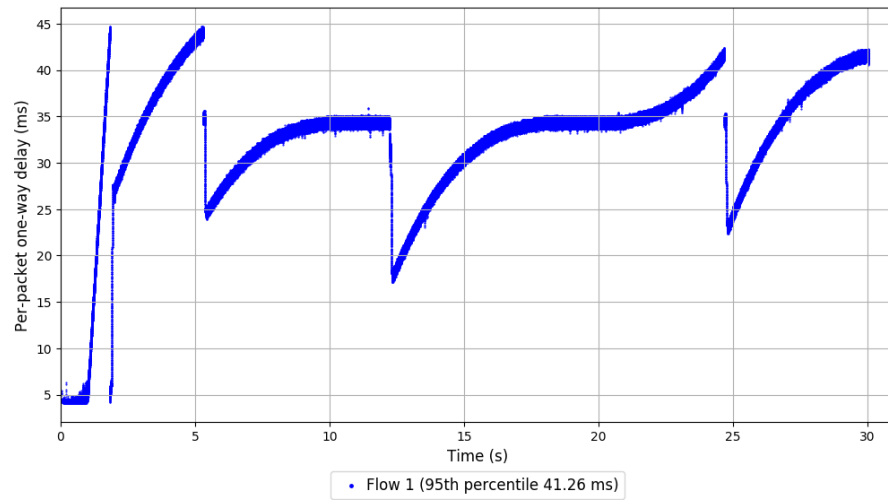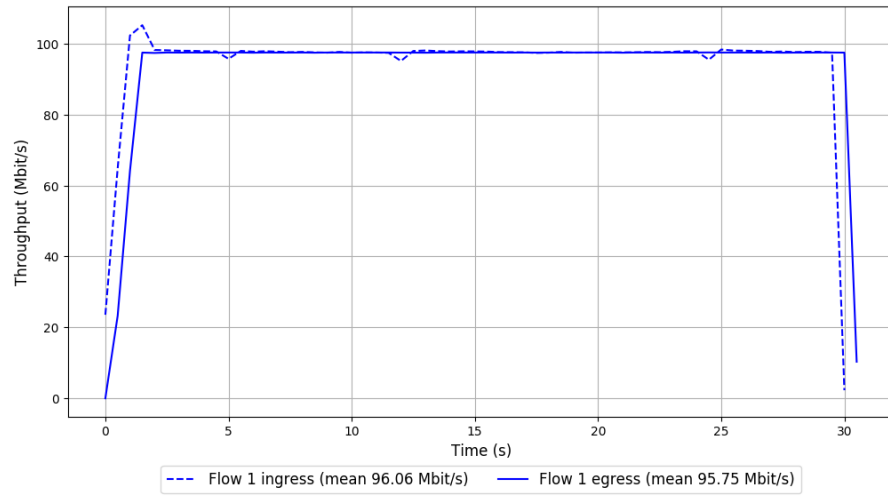
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 97.04 Mbit/s) --- Flow 1 egress (mean 96.79 Mbit/s)

Flow 1 (95th percentile 43.17 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2019-06-27 19:36:02
End at: 2019-06-27 19:36:32
Local clock offset: -0.569 ms
Remote clock offset: -5.137 ms


# Below is generated by plot.py at 2019-06-27 21:15:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.14 Mbit/s
95th percentile per-packet one-way delay: 48.106 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 96.14 Mbit/s
95th percentile per-packet one-way delay: 48.106 ms
Loss rate: 0.44%
```
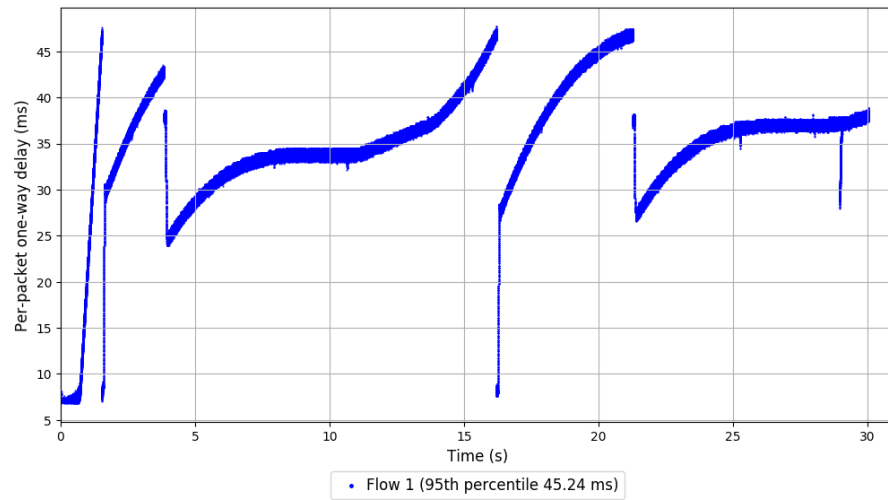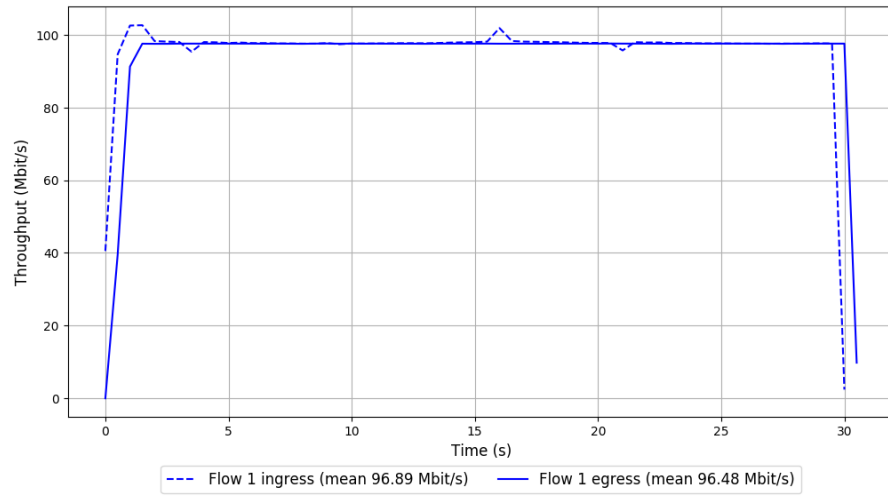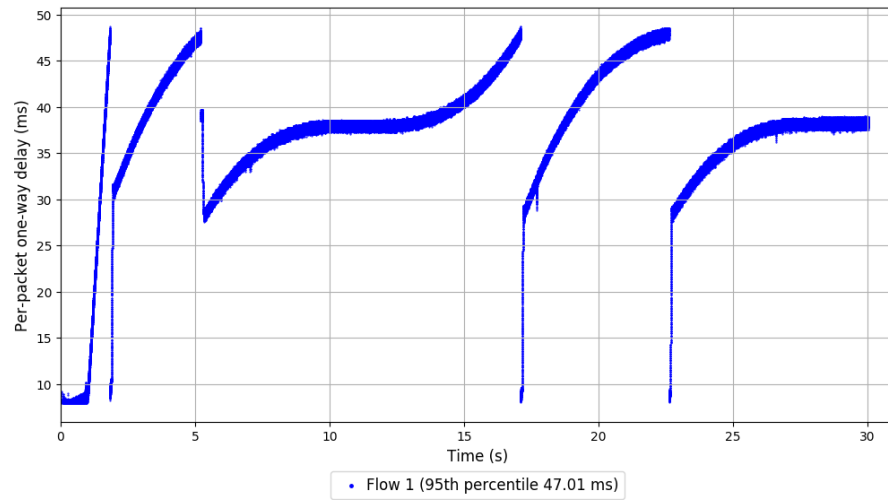
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2019-06-27 20:01:37
End at: 2019-06-27 20:02:07
Local clock offset: 0.104 ms
Remote clock offset: -7.399 ms


# Below is generated by plot.py at 2019-06-27 21:15:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 41.257 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 41.257 ms
Loss rate: 0.21%
```

Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 96.06 Mbit/s) --- Flow 1 egress (mean 95.75 Mbit/s)
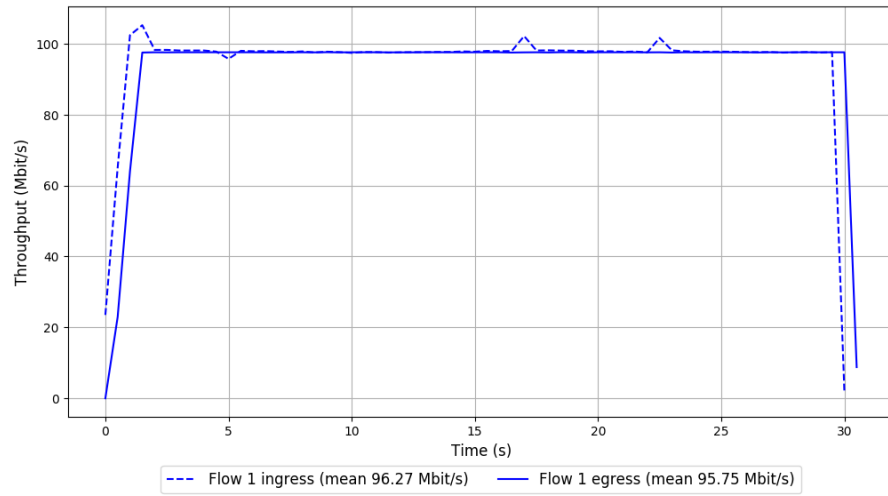

Flow 1 (95th percentile 41.26 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2019-06-27 20:26:49
End at: 2019-06-27 20:27:19
Local clock offset: -1.949 ms
Remote clock offset: -6.595 ms


# Below is generated by plot.py at 2019-06-27 21:16:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.48 Mbit/s
95th percentile per-packet one-way delay: 45.238 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 96.48 Mbit/s
95th percentile per-packet one-way delay: 45.238 ms
Loss rate: 0.32%
```
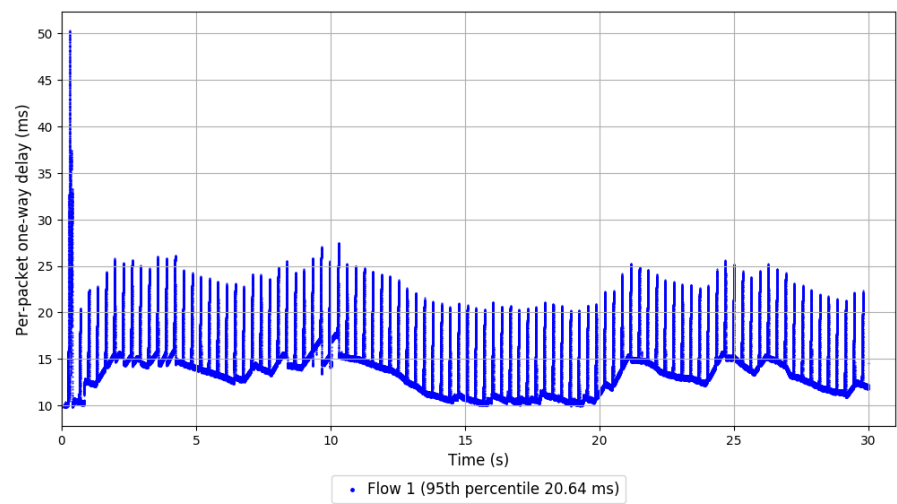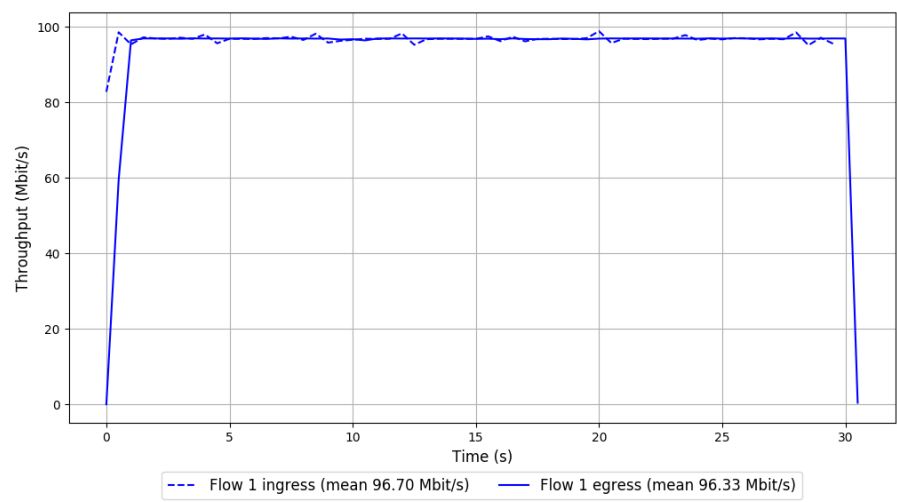
Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2019-06-27 20:52:03
End at: 2019-06-27 20:52:33
Local clock offset: -1.383 ms
Remote clock offset: -4.998 ms

# Below is generated by plot.py at 2019-06-27 21:16:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 47.009 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 47.009 ms
Loss rate: 0.44%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 96.27 Mbit/s) —— Flow 1 egress (mean 95.75 Mbit/s)

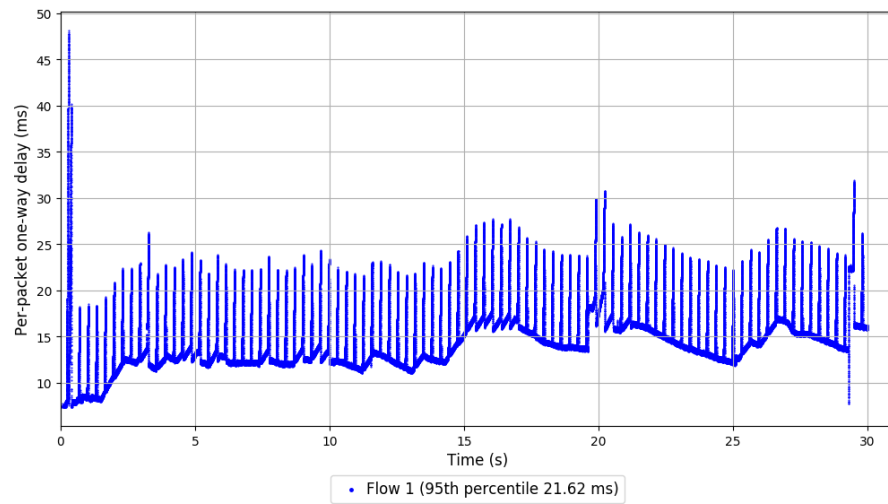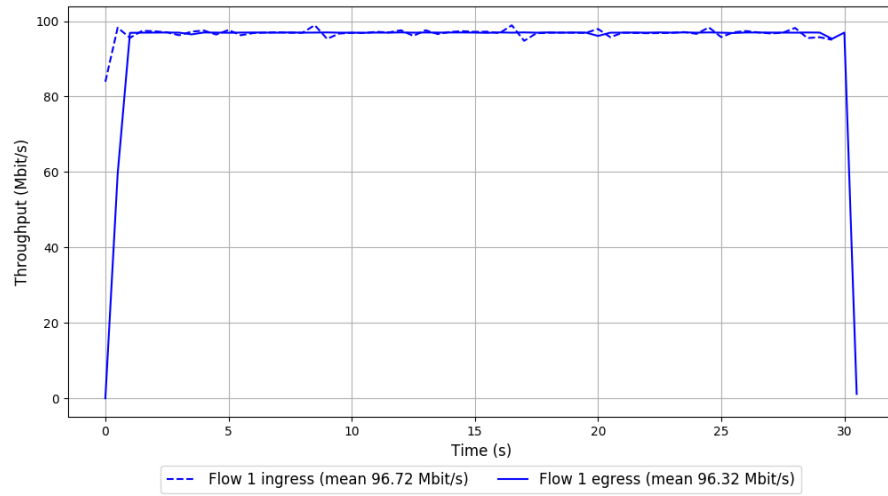

• Flow 1 (95th percentile 47.01 ms)

```
Run 1: Statistics of FillP

Start at: 2019-06-27 19:18:33
End at: 2019-06-27 19:19:03
Local clock offset: -1.646 ms
Remote clock offset: -7.142 ms


# Below is generated by plot.py at 2019-06-27 21:16:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.33 Mbit/s
95th percentile per-packet one-way delay: 20.645 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 96.33 Mbit/s
95th percentile per-packet one-way delay: 20.645 ms
Loss rate: 0.38%
```

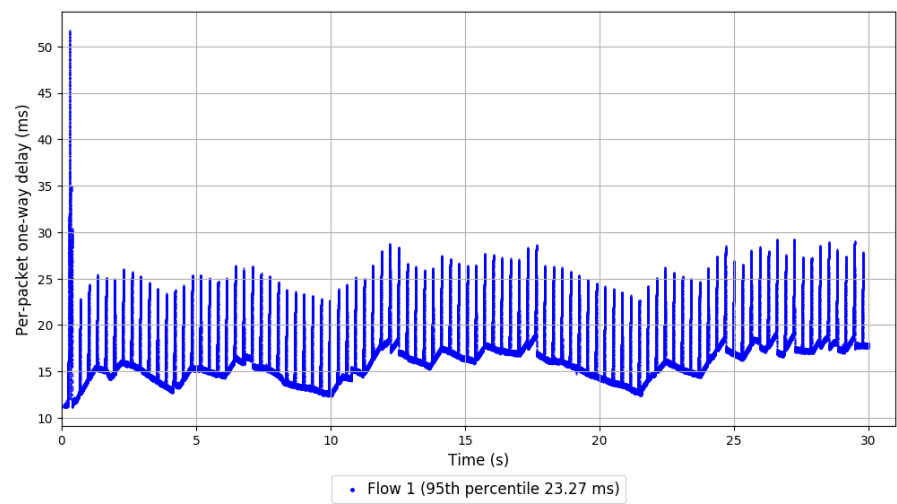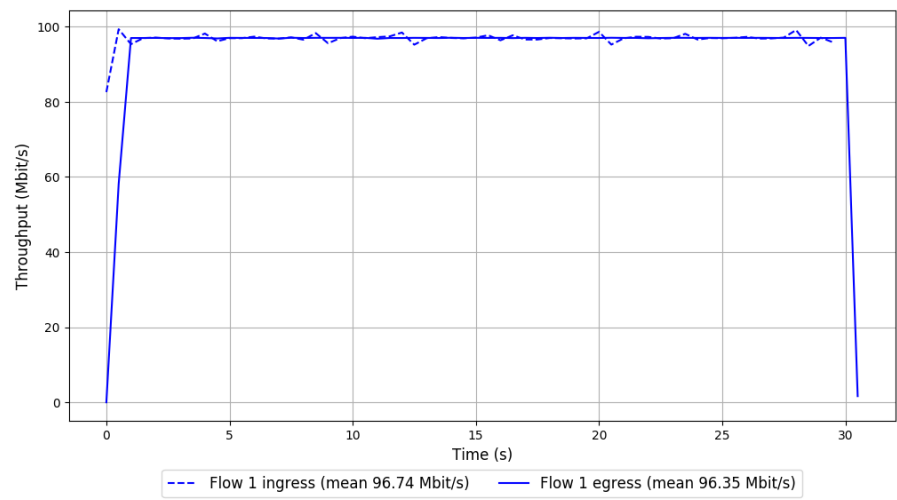Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2019-06-27 19:44:11
End at: 2019-06-27 19:44:41
Local clock offset: -2.367 ms
Remote clock offset: -6.876 ms

# Below is generated by plot.py at 2019-06-27 21:16:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.32 Mbit/s
95th percentile per-packet one-way delay: 21.618 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 96.32 Mbit/s
95th percentile per-packet one-way delay: 21.618 ms
Loss rate: 0.39%
```
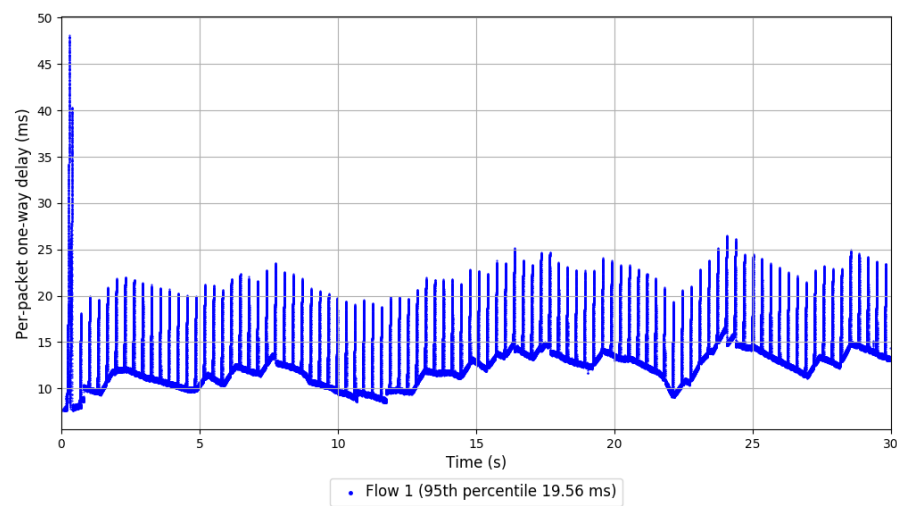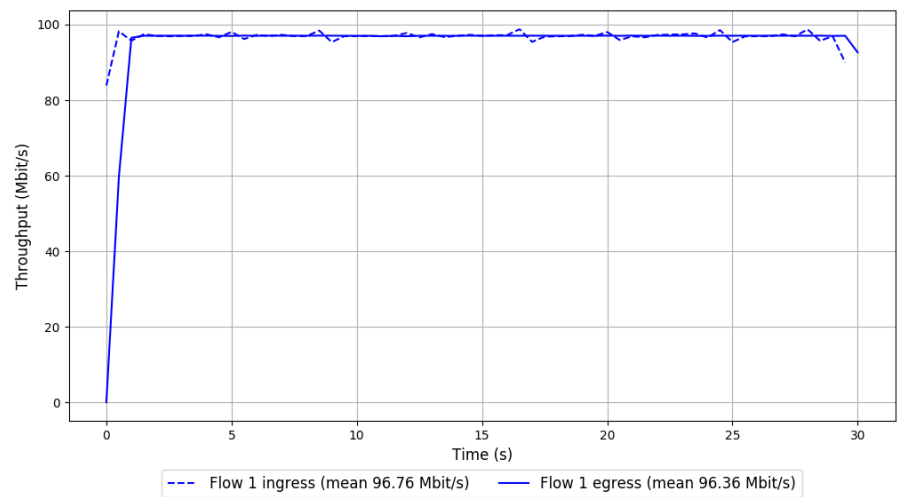
Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2019-06-27 20:09:48
End at: 2019-06-27 20:10:18
Local clock offset: -1.69 ms
Remote clock offset: -5.002 ms


# Below is generated by plot.py at 2019-06-27 21:16:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.35 Mbit/s
95th percentile per-packet one-way delay: 23.265 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 96.35 Mbit/s
95th percentile per-packet one-way delay: 23.265 ms
Loss rate: 0.39%
```
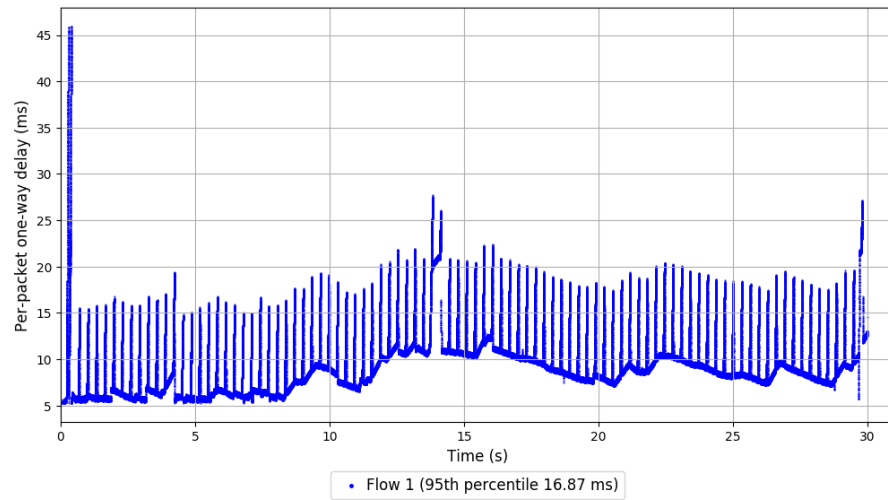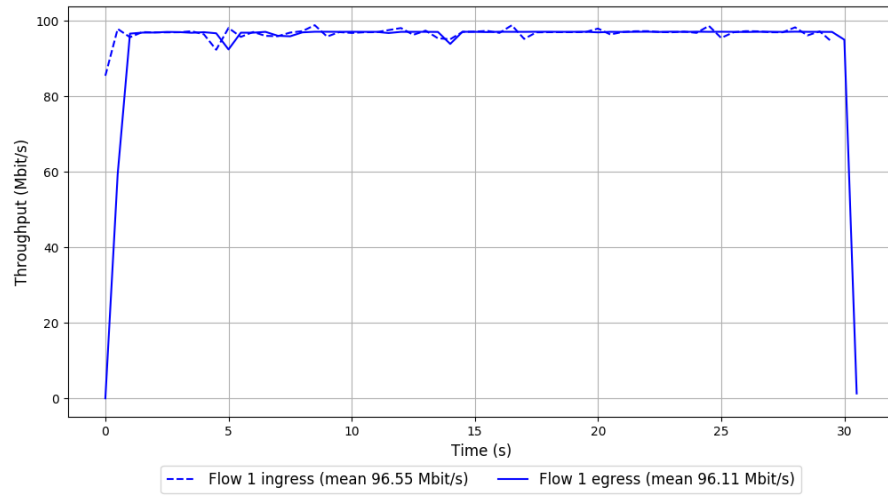
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2019-06-27 20:34:55
End at: 2019-06-27 20:35:25
Local clock offset: -0.974 ms
Remote clock offset: -4.745 ms


# Below is generated by plot.py at 2019-06-27 21:16:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.36 Mbit/s
95th percentile per-packet one-way delay: 19.558 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 96.36 Mbit/s
95th percentile per-packet one-way delay: 19.558 ms
Loss rate: 0.39%
```

Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2019-06-27 21:00:01
End at: 2019-06-27 21:00:31
Local clock offset: -1.338 ms
Remote clock offset: -7.409 ms


# Below is generated by plot.py at 2019-06-27 21:17:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.11 Mbit/s
95th percentile per-packet one-way delay: 16.874 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 96.11 Mbit/s
95th percentile per-packet one-way delay: 16.874 ms
Loss rate: 0.43%
```
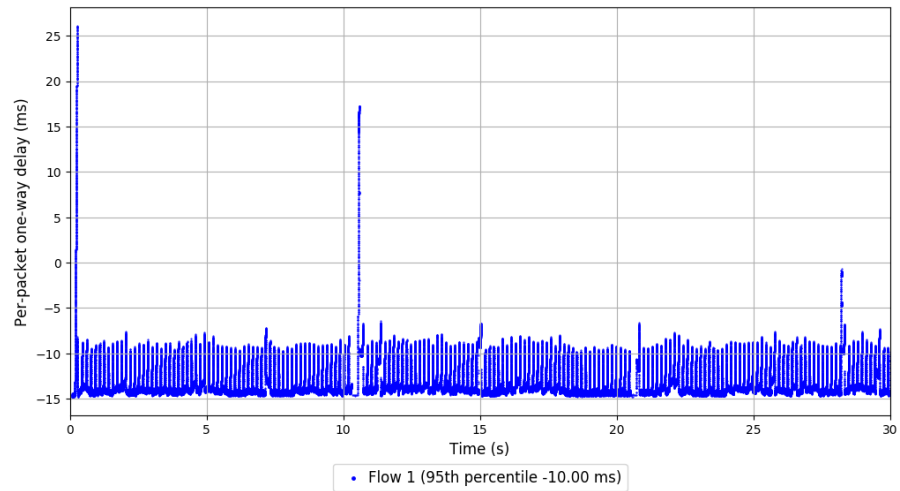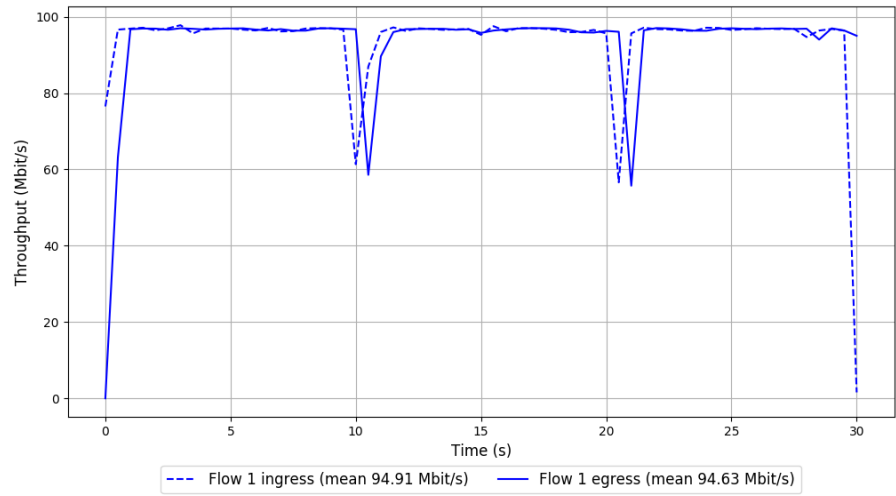
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 96.55 Mbit/s) --- Flow 1 egress (mean 96.11 Mbit/s)
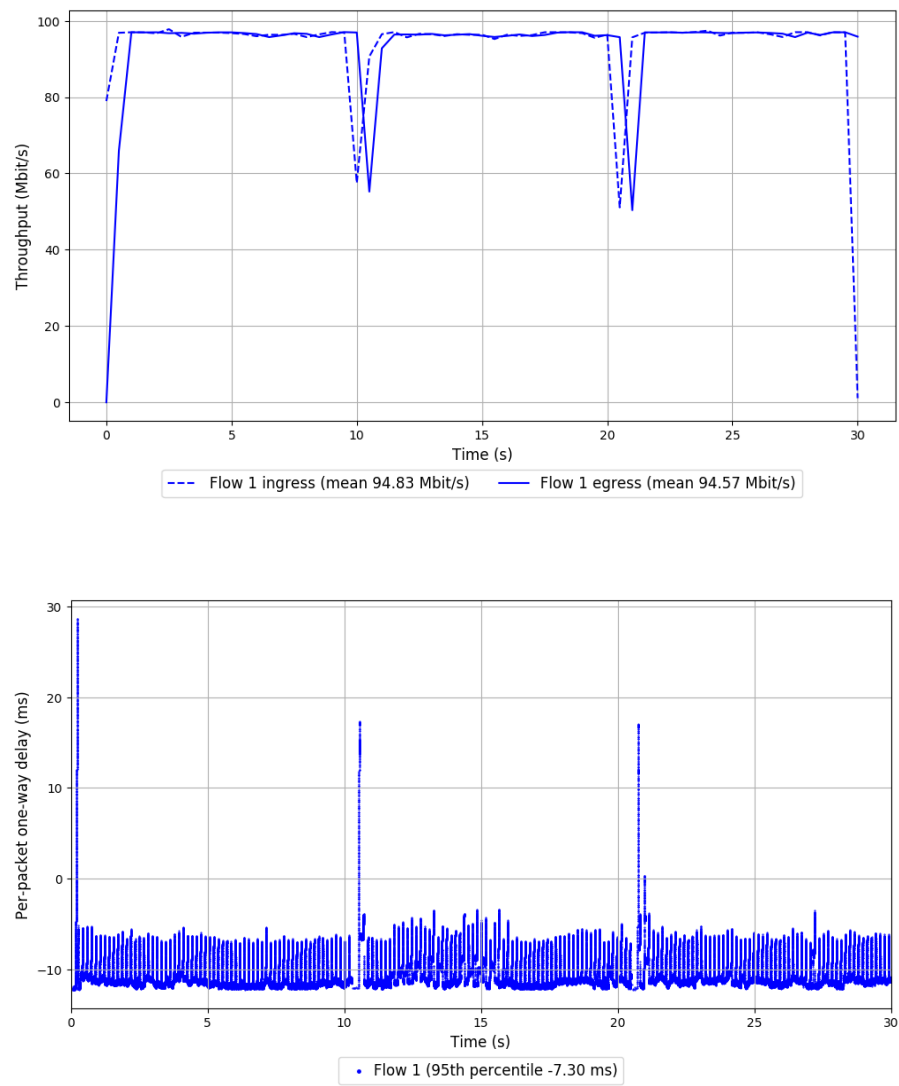

Flow 1 (95th percentile 16.87 ms)

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-06-27 19:09:13
End at: 2019-06-27 19:09:43
Local clock offset: -0.995 ms
Remote clock offset: -31.409 ms


# Below is generated by plot.py at 2019-06-27 21:17:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.63 Mbit/s
95th percentile per-packet one-way delay: -9.998 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 94.63 Mbit/s
95th percentile per-packet one-way delay: -9.998 ms
Loss rate: 0.29%
```
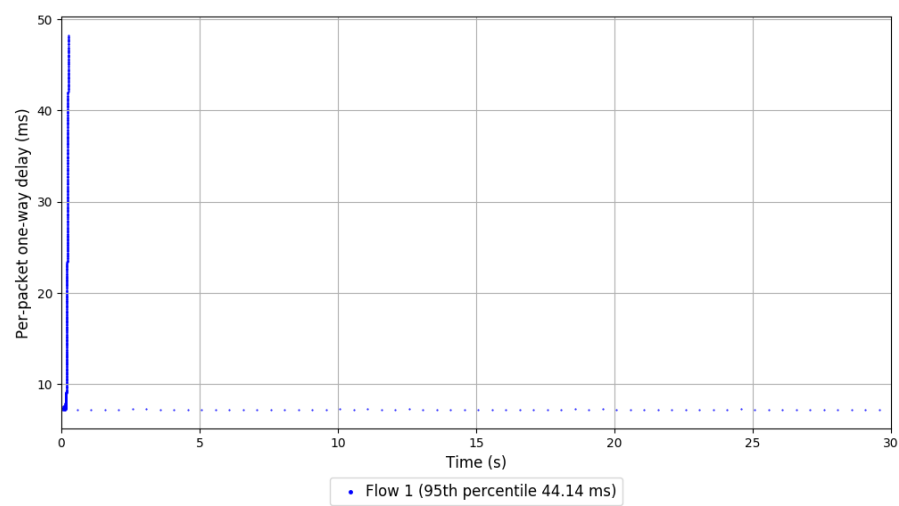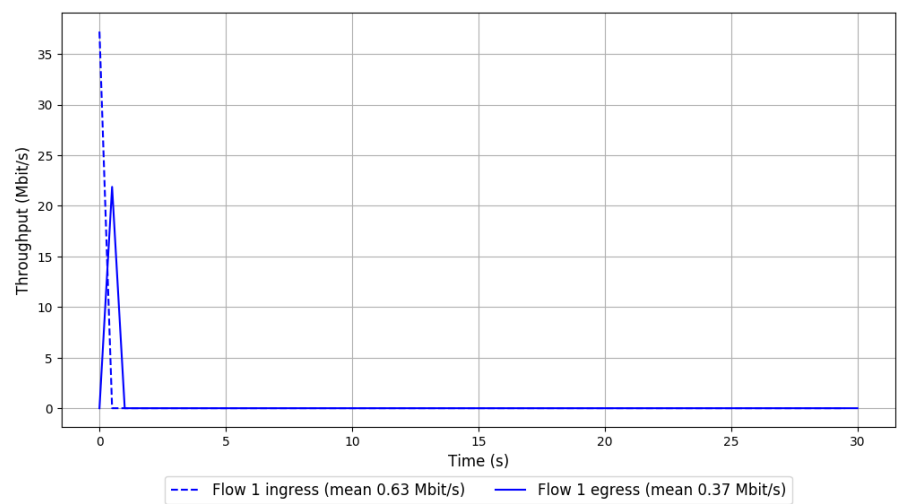
Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-06-27 19:34:53
End at: 2019-06-27 19:35:23
Local clock offset: -1.383 ms
Remote clock offset: -25.591 ms


# Below is generated by plot.py at 2019-06-27 21:17:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.57 Mbit/s
95th percentile per-packet one-way delay: -7.300 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 94.57 Mbit/s
95th percentile per-packet one-way delay: -7.300 ms
Loss rate: 0.27%
```
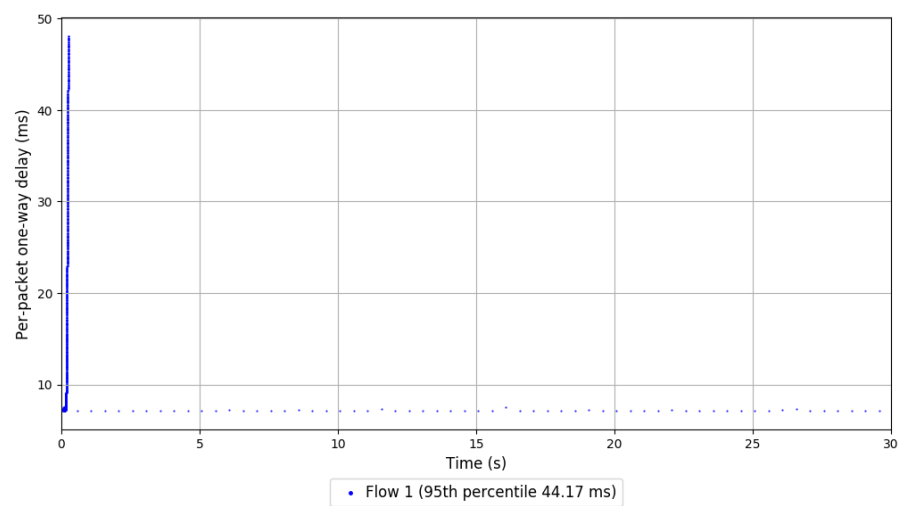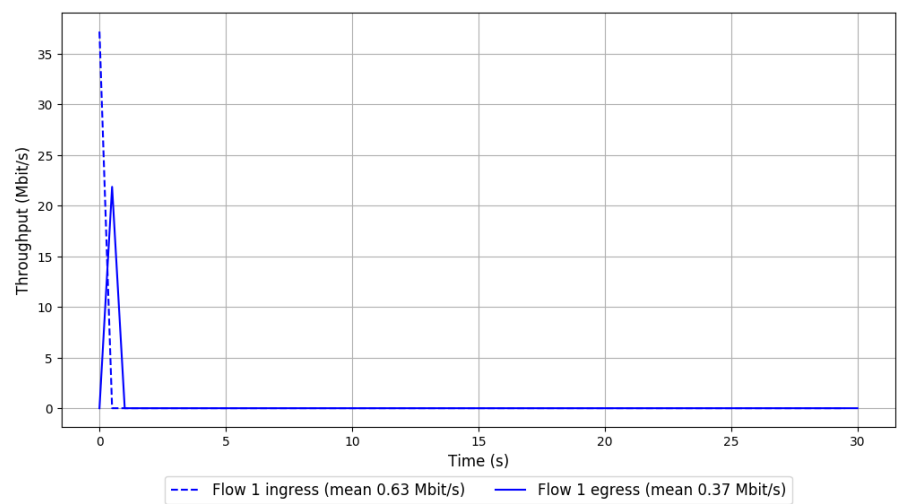
Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-06-27 20:00:32
End at: 2019-06-27 20:01:02
Local clock offset: -2.389 ms
Remote clock offset: -6.583 ms


# Below is generated by plot.py at 2019-06-27 21:17:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 44.142 ms
Loss rate: 41.09%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 44.142 ms
Loss rate: 41.09%
```

Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 0.63 Mbit/s) --- Flow 1 egress (mean 0.37 Mbit/s)

Flow 1 (95th percentile 44.14 ms)

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-06-27 20:25:44
End at: 2019-06-27 20:26:14
Local clock offset: -1.155 ms
Remote clock offset: -5.325 ms


# Below is generated by plot.py at 2019-06-27 21:17:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 44.167 ms
Loss rate: 41.08%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 44.167 ms
Loss rate: 41.08%
```
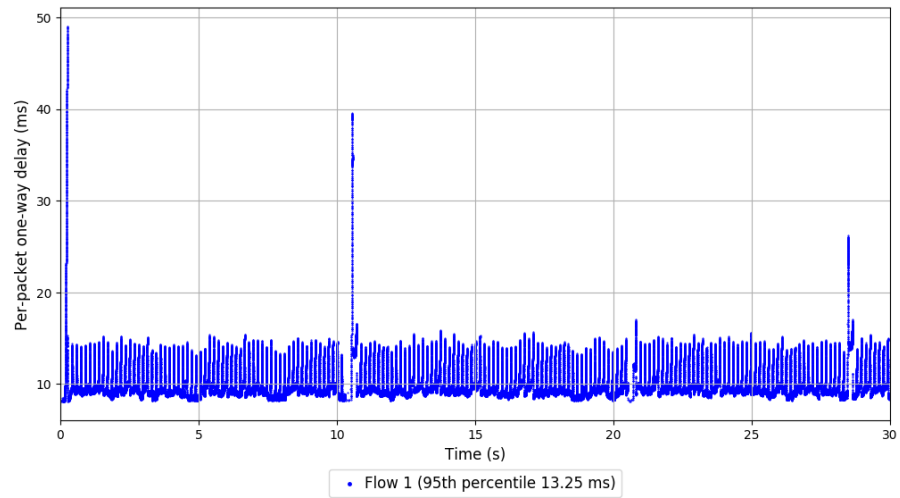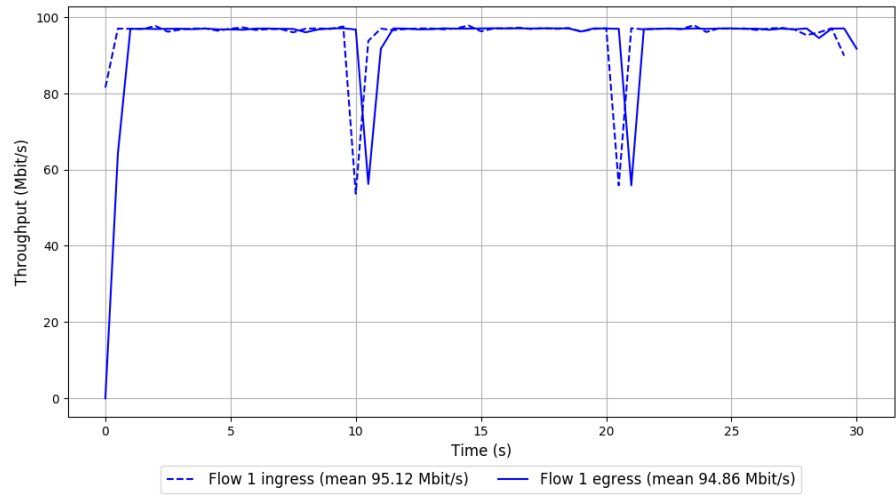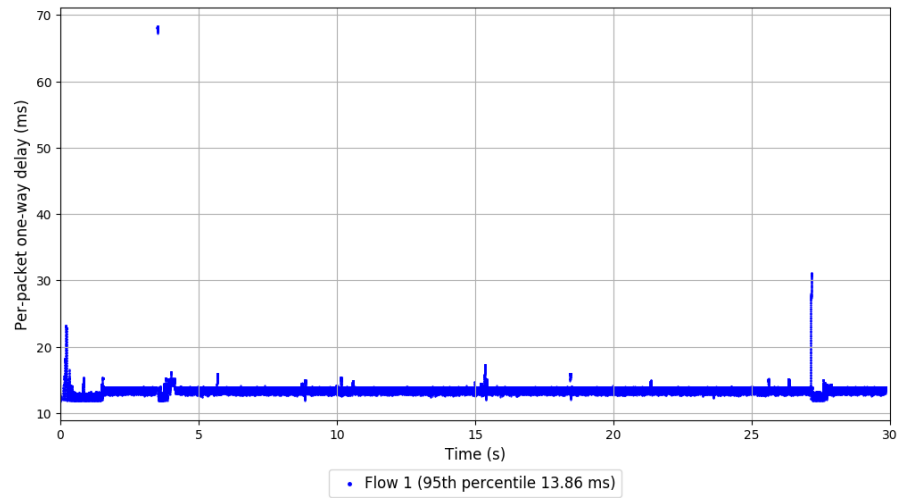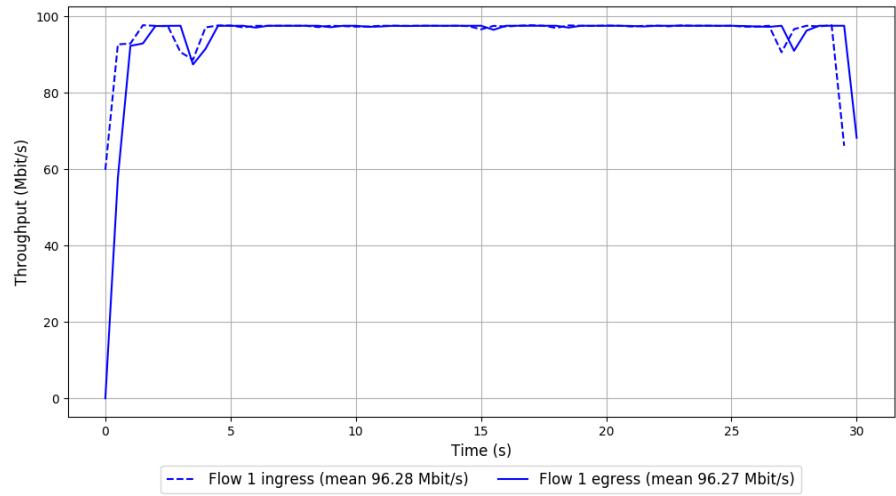
Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 0.63 Mbit/s)   Flow 1 egress (mean 0.37 Mbit/s)

Flow 1 (95th percentile 44.17 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-06-27 20:50:54
End at: 2019-06-27 20:51:24
Local clock offset: -1.846 ms
Remote clock offset: -5.047 ms


# Below is generated by plot.py at 2019-06-27 21:17:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.86 Mbit/s
95th percentile per-packet one-way delay: 13.246 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 94.86 Mbit/s
95th percentile per-packet one-way delay: 13.246 ms
Loss rate: 0.27%
```
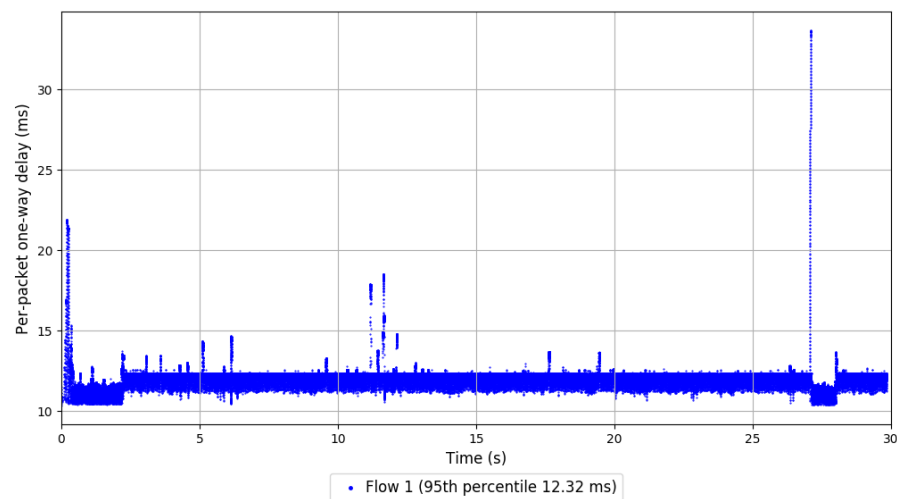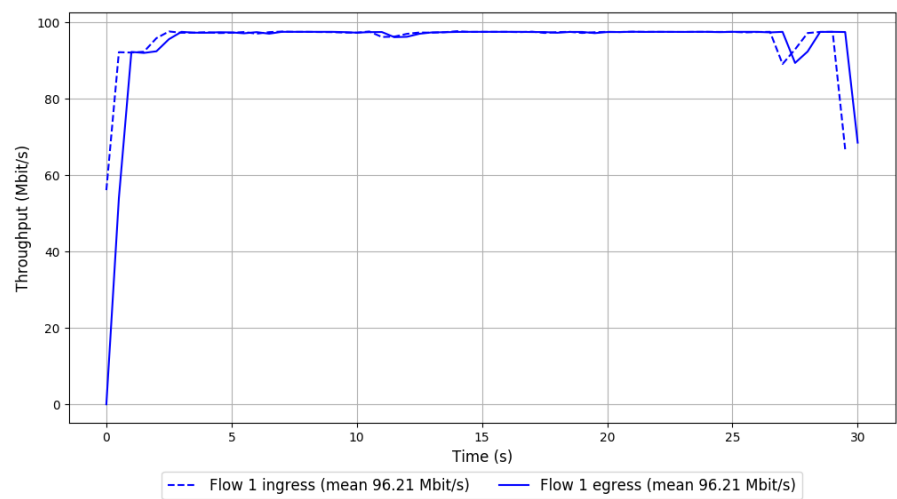
Run 5: Report of FillP-Sheep — Data Link

```
Run 1: Statistics of Indigo

Start at: 2019-06-27 19:24:26
End at: 2019-06-27 19:24:56
Local clock offset: -2.019 ms
Remote clock offset: -5.476 ms


# Below is generated by plot.py at 2019-06-27 21:17:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.27 Mbit/s
95th percentile per-packet one-way delay: 13.861 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 96.27 Mbit/s
95th percentile per-packet one-way delay: 13.861 ms
Loss rate: 0.01%
```

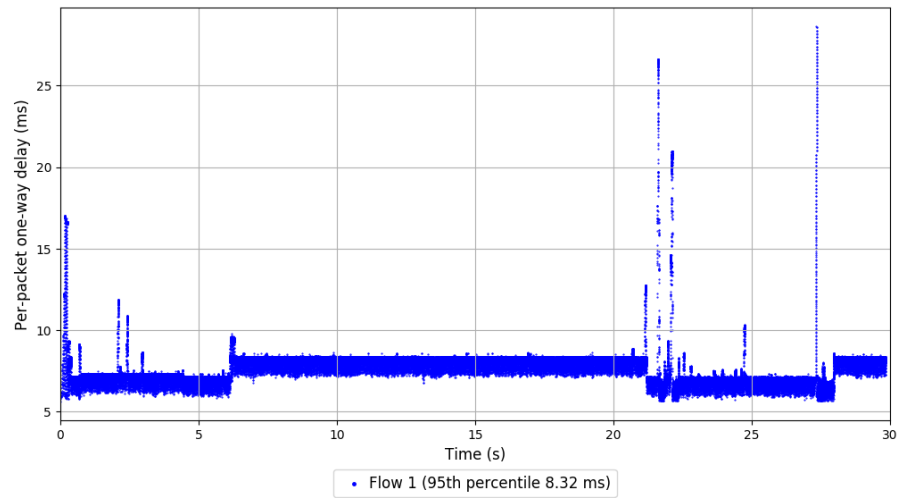Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-06-27 19:50:08
End at: 2019-06-27 19:50:38
Local clock offset: -0.325 ms
Remote clock offset: -4.966 ms


# Below is generated by plot.py at 2019-06-27 21:17:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.21 Mbit/s
95th percentile per-packet one-way delay: 12.318 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 96.21 Mbit/s
95th percentile per-packet one-way delay: 12.318 ms
Loss rate: 0.01%
```

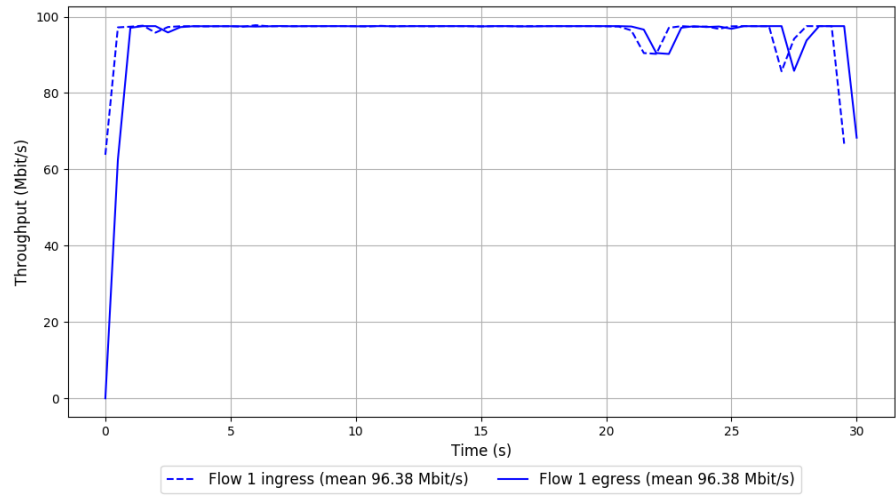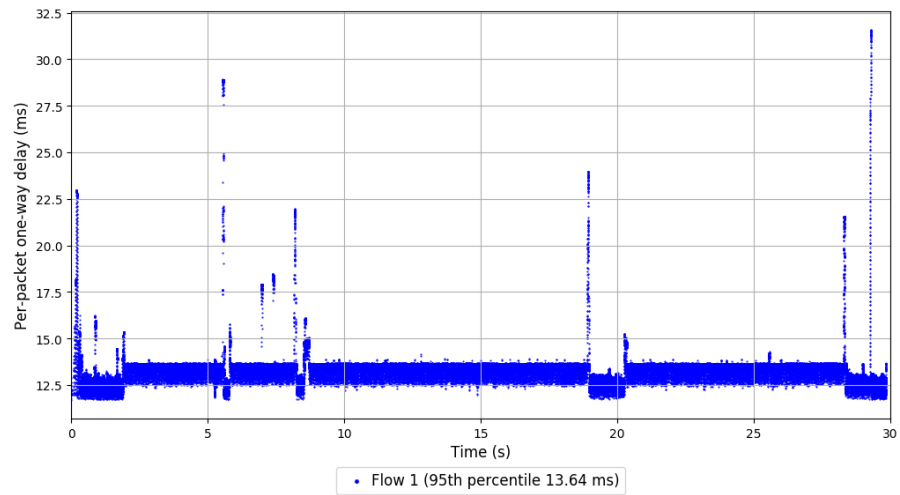Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2019-06-27 20:15:35
End at: 2019-06-27 20:16:05
Local clock offset: -1.06 ms
Remote clock offset: -6.707 ms


# Below is generated by plot.py at 2019-06-27 21:17:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.38 Mbit/s
95th percentile per-packet one-way delay: 8.322 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.38 Mbit/s
95th percentile per-packet one-way delay: 8.322 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo — Data Link

Flow 1 ingress (mean 96.38 Mbit/s)   Flow 1 egress (mean 96.38 Mbit/s)

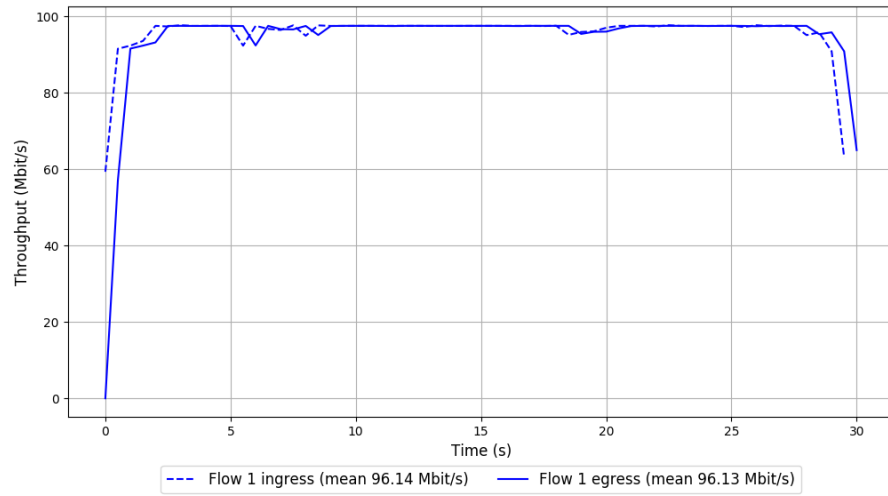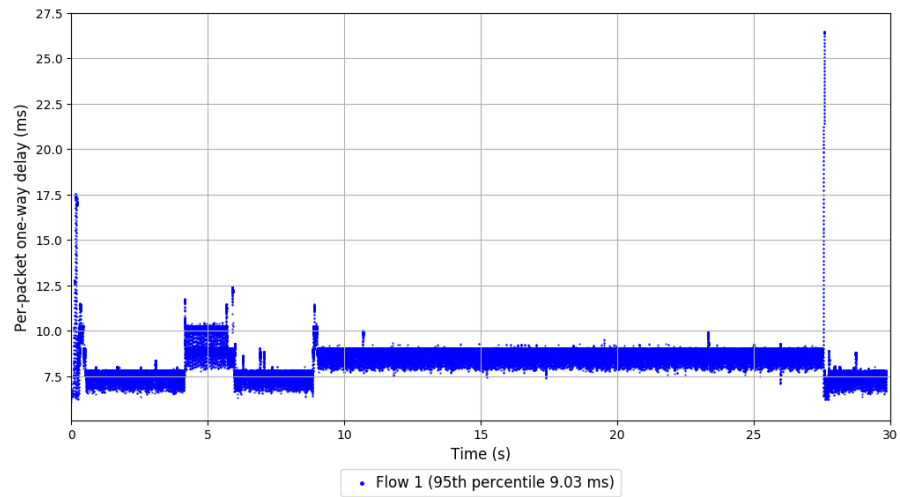Flow 1 (95th percentile 8.32 ms)

```
Run 4: Statistics of Indigo

Start at: 2019-06-27 20:40:39
End at: 2019-06-27 20:41:09
Local clock offset: -1.88 ms
Remote clock offset: -4.642 ms


# Below is generated by plot.py at 2019-06-27 21:18:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.13 Mbit/s
95th percentile per-packet one-way delay: 13.643 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 96.13 Mbit/s
95th percentile per-packet one-way delay: 13.643 ms
Loss rate: 0.01%
```

Run 4: Report of Indigo — Data Link

Flow 1 ingress (mean 96.14 Mbit/s)   —— Flow 1 egress (mean 96.13 Mbit/s)

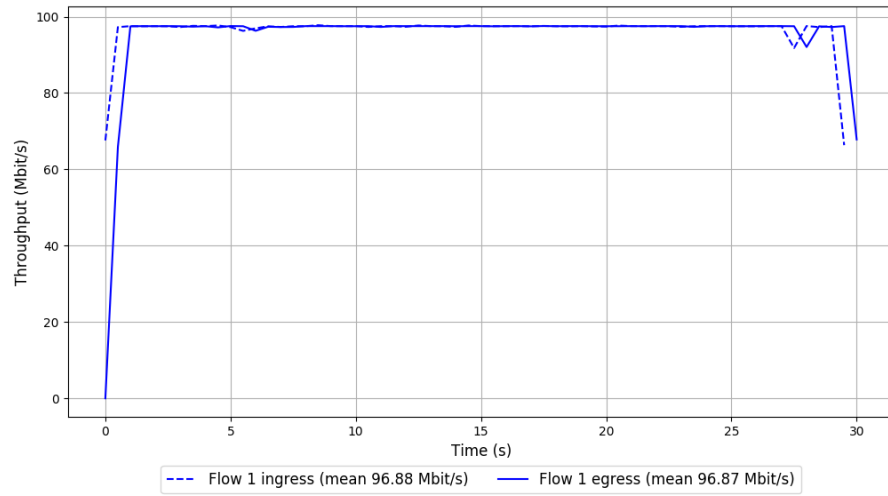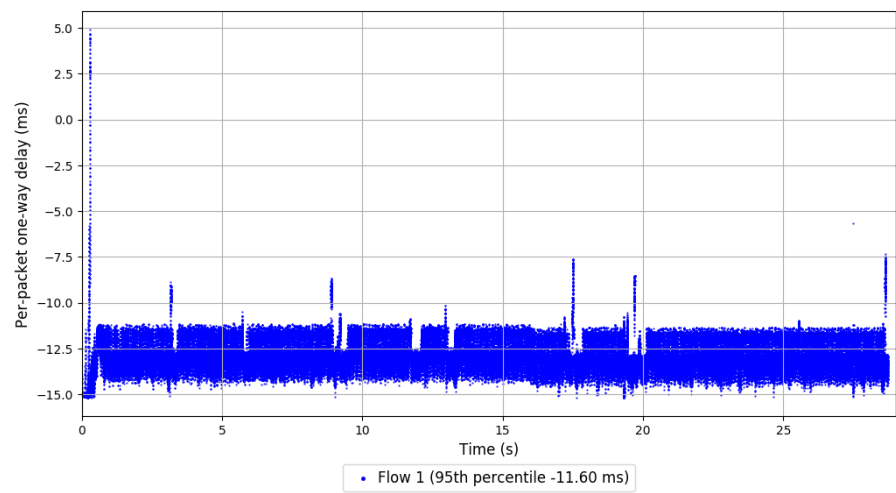Flow 1 (95th percentile 13.64 ms)

```
Run 5: Statistics of Indigo

Start at: 2019-06-27 21:05:51
End at: 2019-06-27 21:06:21
Local clock offset: -1.149 ms
Remote clock offset: -6.256 ms


# Below is generated by plot.py at 2019-06-27 21:18:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.87 Mbit/s
95th percentile per-packet one-way delay: 9.033 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.87 Mbit/s
95th percentile per-packet one-way delay: 9.033 ms
Loss rate: 0.00%
```

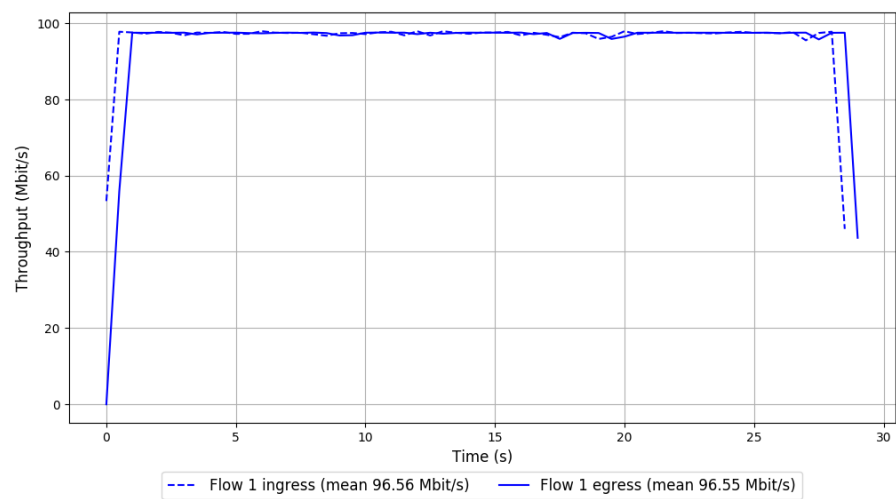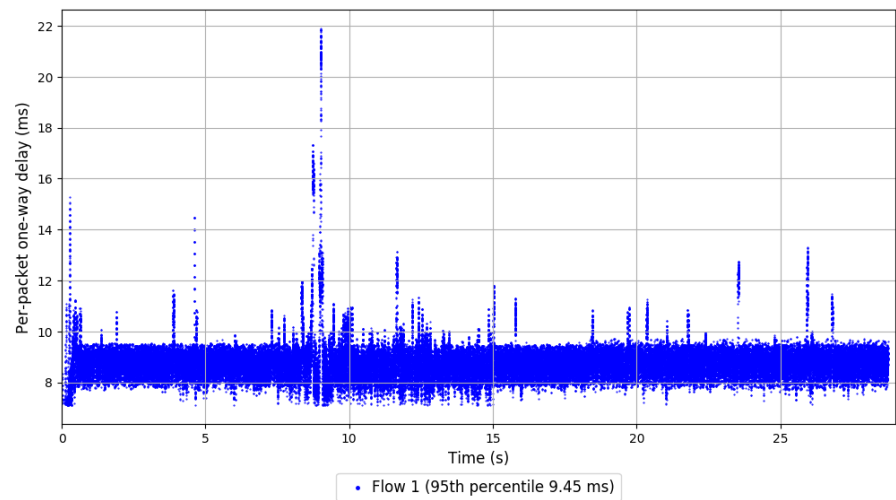## Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-06-27 19:17:19
End at: 2019-06-27 19:17:49
Local clock offset: -2.342 ms
Remote clock offset: -29.89 ms


# Below is generated by plot.py at 2019-06-27 21:18:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: -11.601 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: -11.601 ms
Loss rate: 0.00%
```

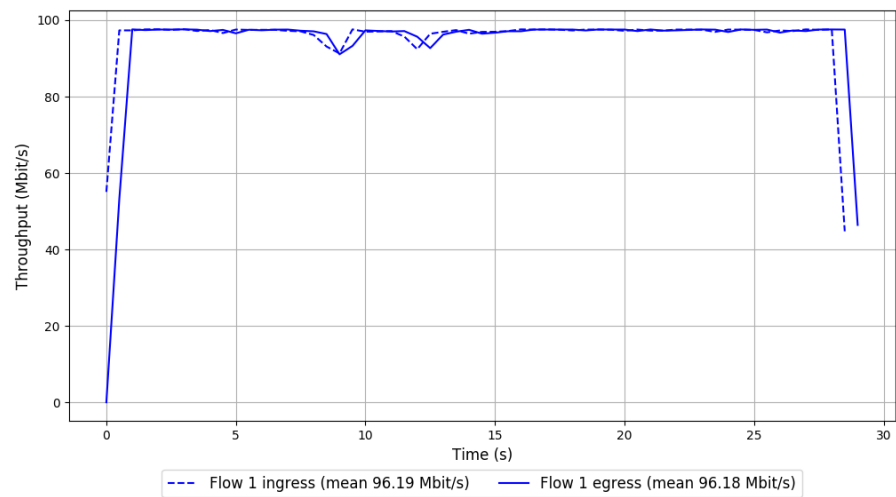Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-06-27 19:42:59
End at: 2019-06-27 19:43:29
Local clock offset: -1.767 ms
Remote clock offset: -6.638 ms


# Below is generated by plot.py at 2019-06-27 21:18:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.18 Mbit/s
95th percentile per-packet one-way delay: 9.453 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.18 Mbit/s
95th percentile per-packet one-way delay: 9.453 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 96.19 Mbit/s)   Flow 1 egress (mean 96.18 Mbit/s)
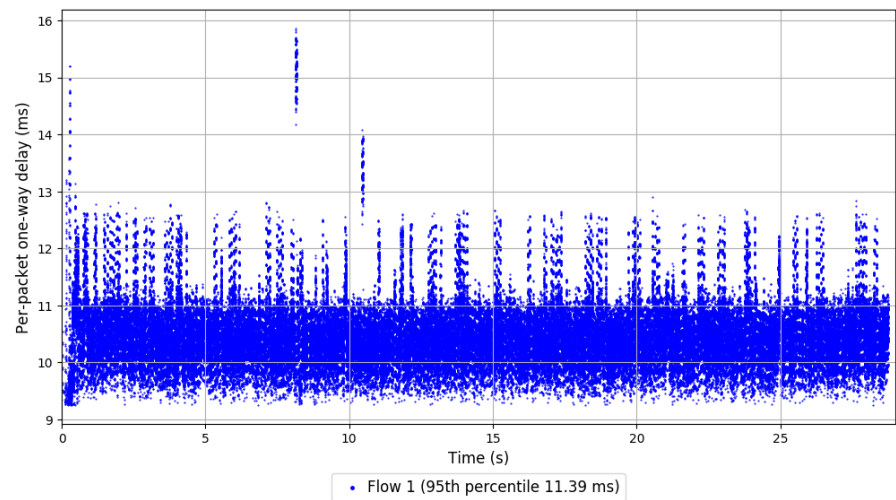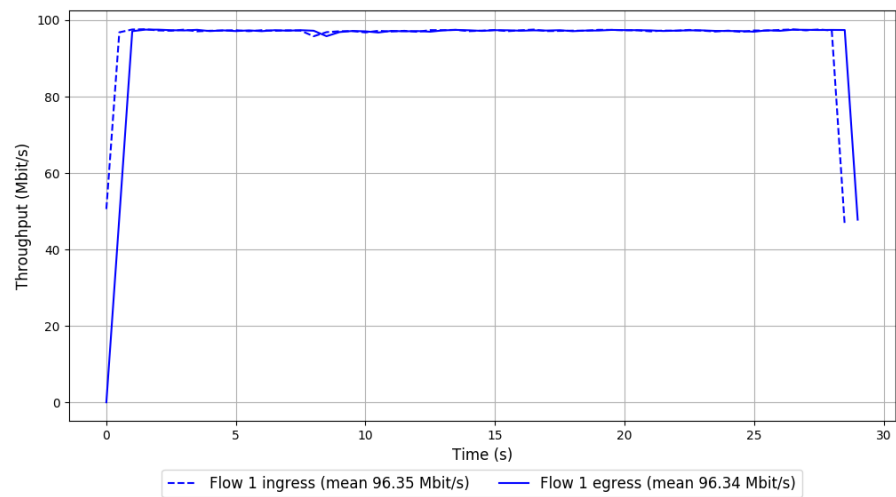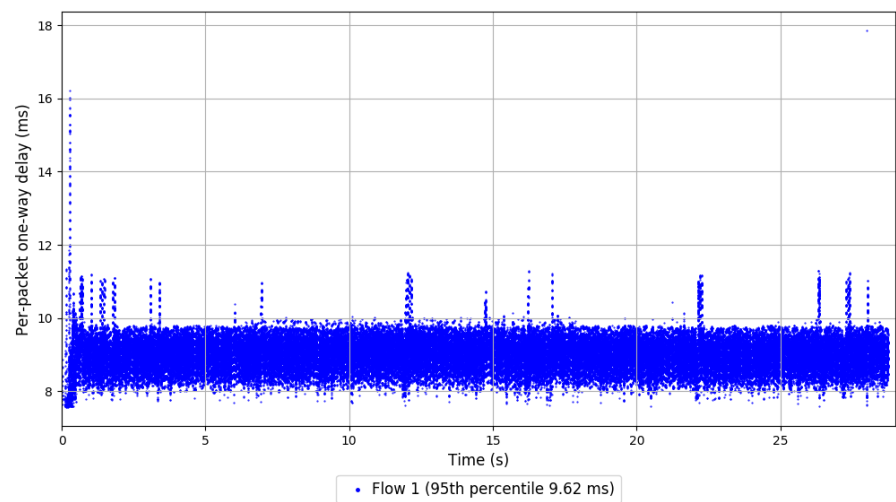

Flow 1 (95th percentile 9.45 ms)

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-06-27 20:08:36
End at: 2019-06-27 20:09:06
Local clock offset: -1.271 ms
Remote clock offset: -6.576 ms


# Below is generated by plot.py at 2019-06-27 21:18:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.34 Mbit/s
95th percentile per-packet one-way delay: 11.392 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 96.34 Mbit/s
95th percentile per-packet one-way delay: 11.392 ms
Loss rate: 0.01%
```

Run 3: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 96.35 Mbit/s)   Flow 1 egress (mean 96.34 Mbit/s)
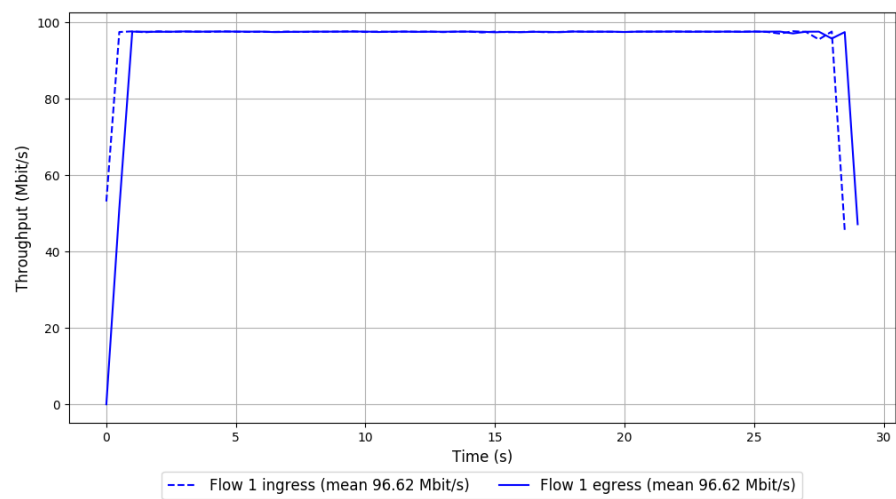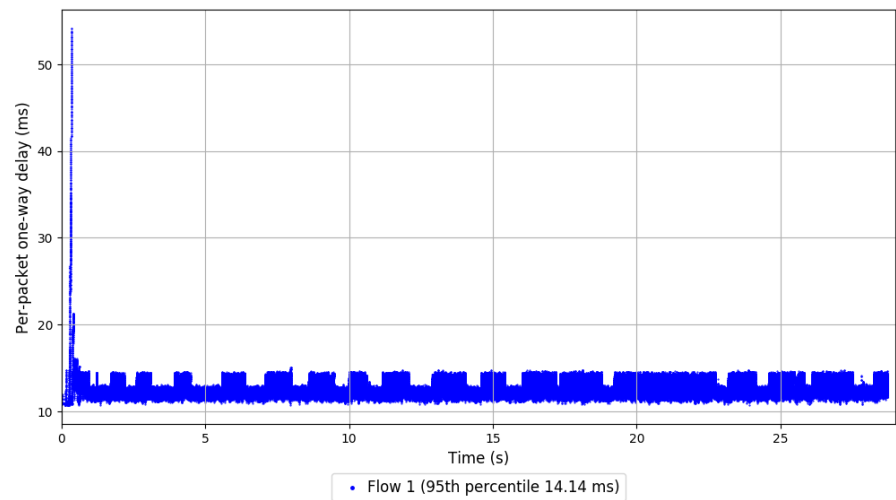

• Flow 1 (95th percentile 11.39 ms)

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-06-27 20:33:44
End at: 2019-06-27 20:34:14
Local clock offset: -0.967 ms
Remote clock offset: -5.067 ms


# Below is generated by plot.py at 2019-06-27 21:18:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.62 Mbit/s
95th percentile per-packet one-way delay: 9.618 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.62 Mbit/s
95th percentile per-packet one-way delay: 9.618 ms
Loss rate: 0.00%
```
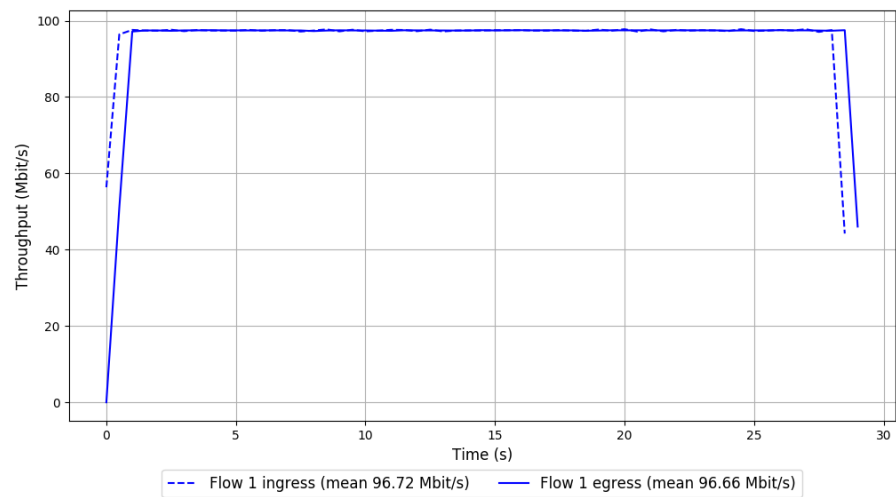
Run 4: Report of Indigo-MusesC3 — Data Link

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-06-27 20:58:48
End at: 2019-06-27 20:59:18
Local clock offset: -1.288 ms
Remote clock offset: -5.135 ms


# Below is generated by plot.py at 2019-06-27 21:18:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.66 Mbit/s
95th percentile per-packet one-way delay: 14.138 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 96.66 Mbit/s
95th percentile per-packet one-way delay: 14.138 ms
Loss rate: 0.05%
```
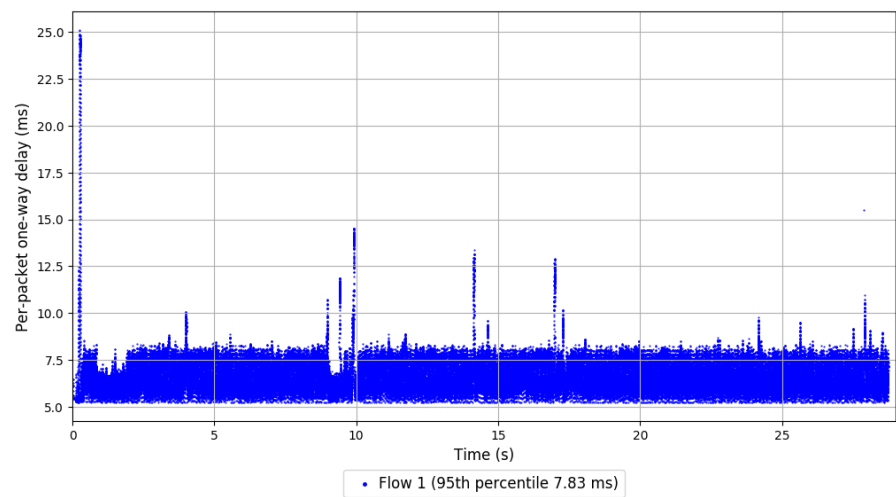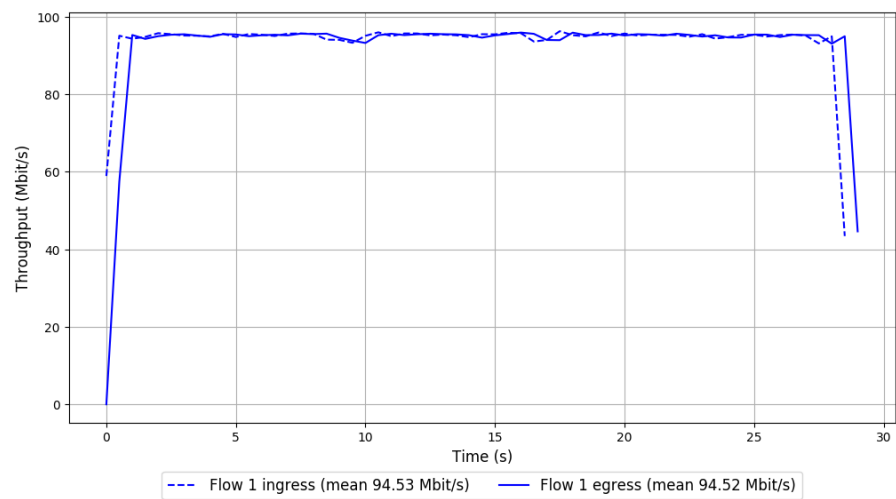
Run 5: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 96.72 Mbit/s)   Flow 1 egress (mean 96.66 Mbit/s)
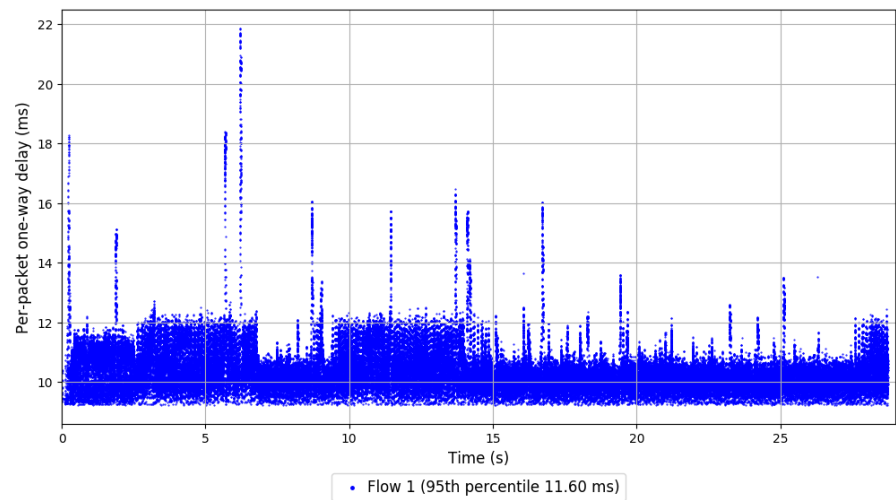

Flow 1 (95th percentile 14.14 ms)

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-06-27 19:30:22
End at: 2019-06-27 19:30:52
Local clock offset: -0.67 ms
Remote clock offset: -7.533 ms


# Below is generated by plot.py at 2019-06-27 21:18:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.52 Mbit/s
95th percentile per-packet one-way delay: 7.833 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 94.52 Mbit/s
95th percentile per-packet one-way delay: 7.833 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 94.53 Mbit/s)   Flow 1 egress (mean 94.52 Mbit/s)
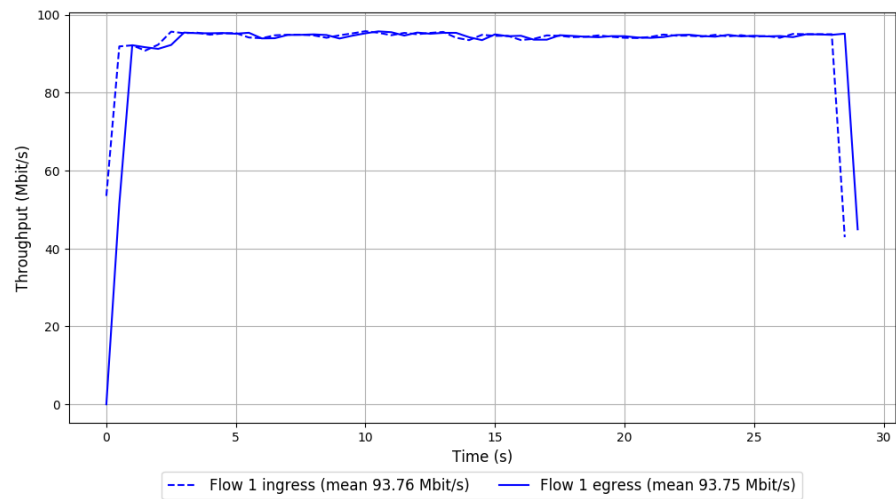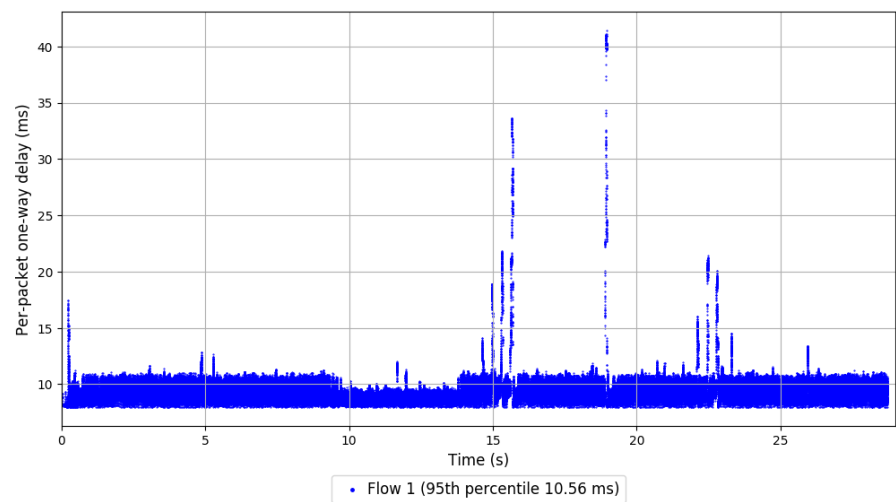

Flow 1 (95th percentile 7.83 ms)

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-06-27 19:56:06
End at: 2019-06-27 19:56:36
Local clock offset: -2.374 ms
Remote clock offset: -4.837 ms


# Below is generated by plot.py at 2019-06-27 21:19:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.75 Mbit/s
95th percentile per-packet one-way delay: 11.602 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 93.75 Mbit/s
95th percentile per-packet one-way delay: 11.602 ms
Loss rate: 0.00%
```
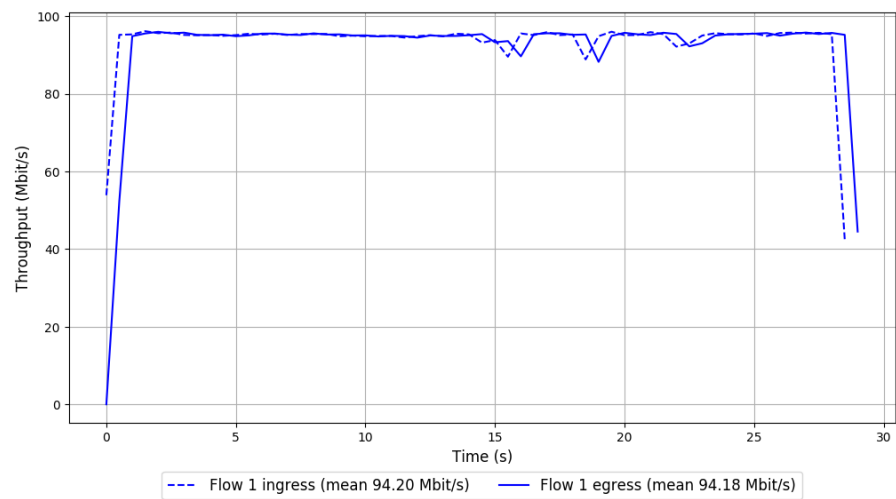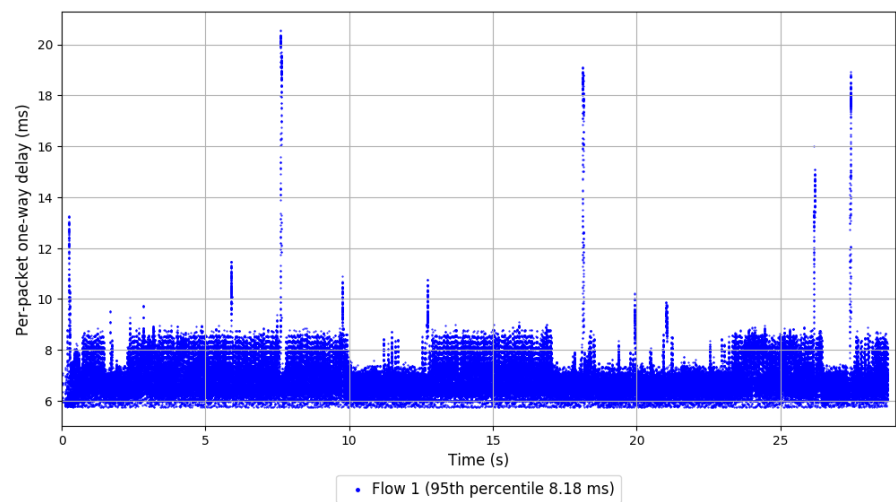
Run 2: Report of Indigo-MusesC5 — Data Link

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-06-27 20:21:19
End at: 2019-06-27 20:21:49
Local clock offset: -1.269 ms
Remote clock offset: -4.659 ms


# Below is generated by plot.py at 2019-06-27 21:19:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.18 Mbit/s
95th percentile per-packet one-way delay: 10.559 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 94.18 Mbit/s
95th percentile per-packet one-way delay: 10.559 ms
Loss rate: 0.01%
```

Run 3: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 94.20 Mbit/s)   Flow 1 egress (mean 94.18 Mbit/s)
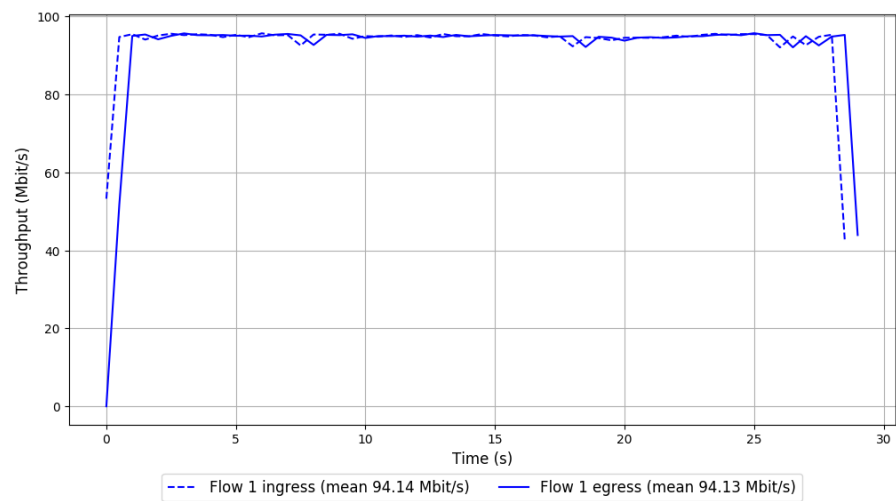

Flow 1 (95th percentile 10.56 ms)

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-06-27 20:46:29
End at: 2019-06-27 20:46:59
Local clock offset: -1.0 ms
Remote clock offset: -6.636 ms


# Below is generated by plot.py at 2019-06-27 21:19:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.13 Mbit/s
95th percentile per-packet one-way delay: 8.179 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 94.13 Mbit/s
95th percentile per-packet one-way delay: 8.179 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC5 — Data Link

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-06-27 21:11:47
End at: 2019-06-27 21:12:17
Local clock offset: -1.399 ms
Remote clock offset: -6.26 ms


# Below is generated by plot.py at 2019-06-27 21:20:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.45 Mbit/s
95th percentile per-packet one-way delay: 8.867 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 94.45 Mbit/s
95th percentile per-packet one-way delay: 8.867 ms
Loss rate: 0.00%
```
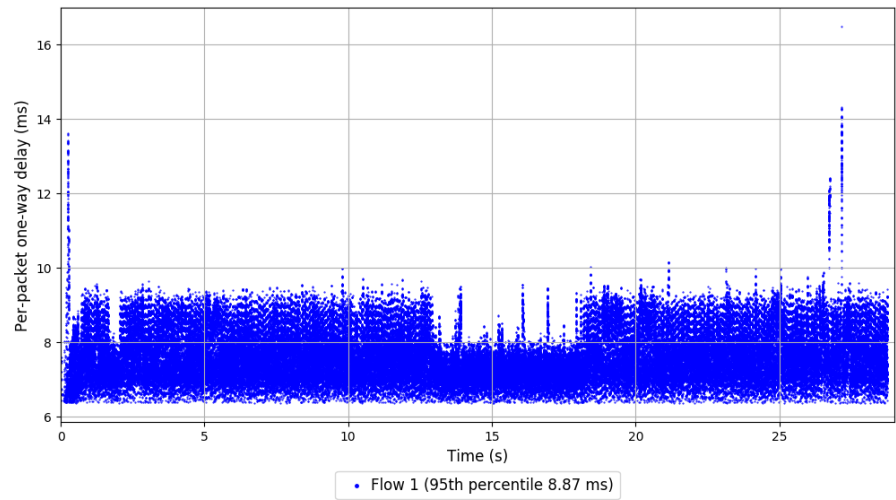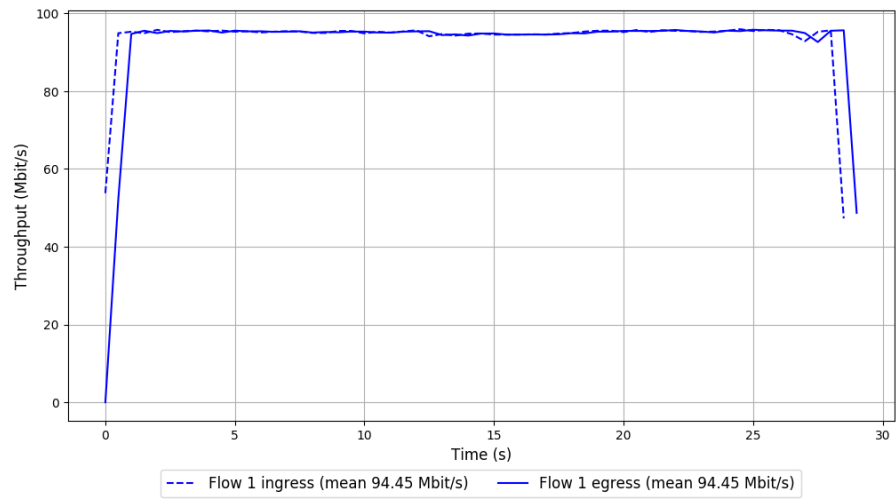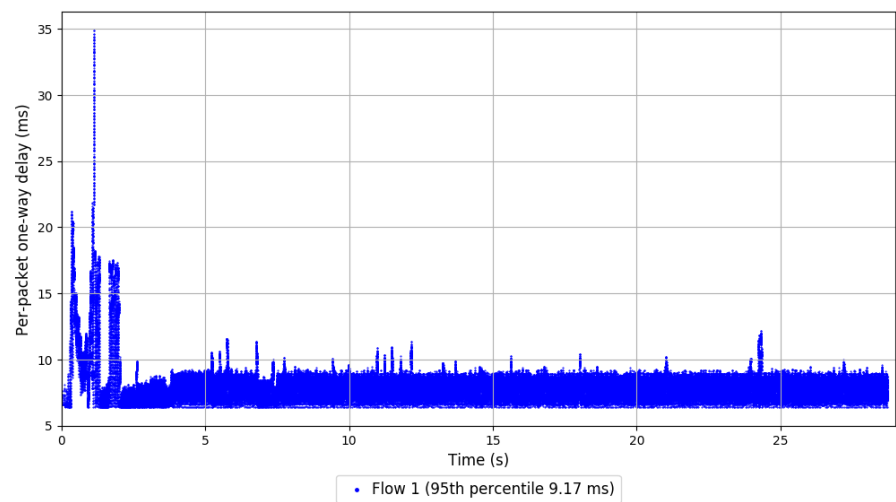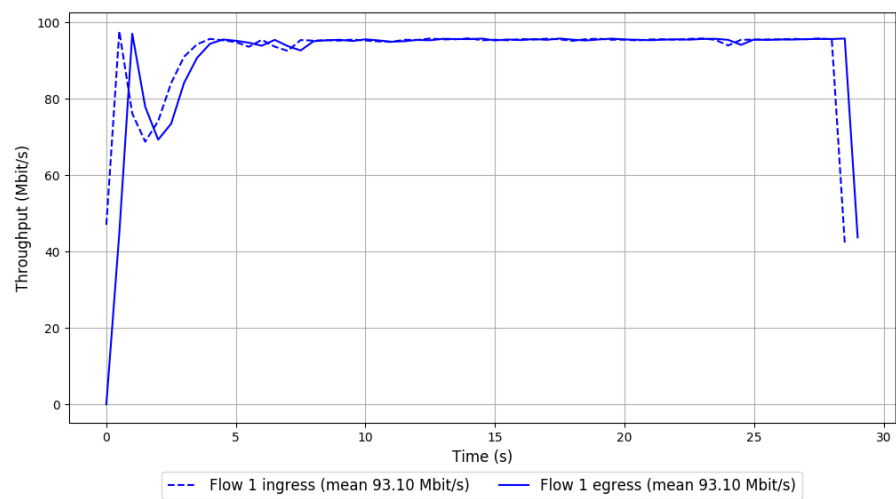
Run 5: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 94.45 Mbit/s)   Flow 1 egress (mean 94.45 Mbit/s)

Flow 1 (95th percentile 8.87 ms)

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-06-27 19:27:58
End at: 2019-06-27 19:28:28
Local clock offset: -0.518 ms
Remote clock offset: -6.341 ms


# Below is generated by plot.py at 2019-06-27 21:20:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.10 Mbit/s
95th percentile per-packet one-way delay: 9.167 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 93.10 Mbit/s
95th percentile per-packet one-way delay: 9.167 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-06-27 19:53:44
End at: 2019-06-27 19:54:14
Local clock offset: -2.168 ms
Remote clock offset: -5.552 ms


# Below is generated by plot.py at 2019-06-27 21:20:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.35 Mbit/s
95th percentile per-packet one-way delay: 10.730 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 94.35 Mbit/s
95th percentile per-packet one-way delay: 10.730 ms
Loss rate: 0.00%
```
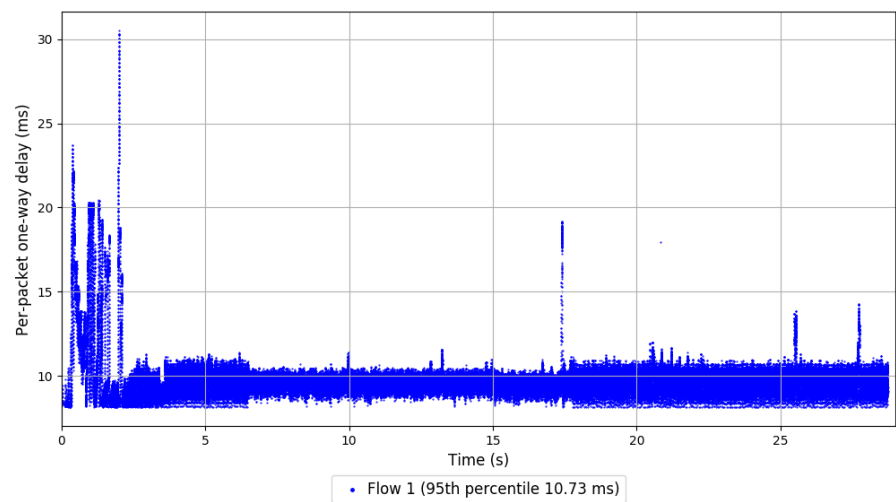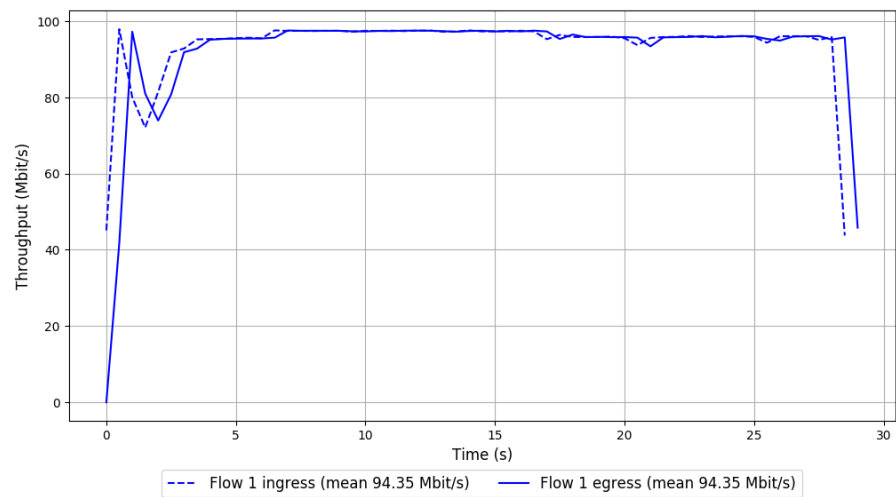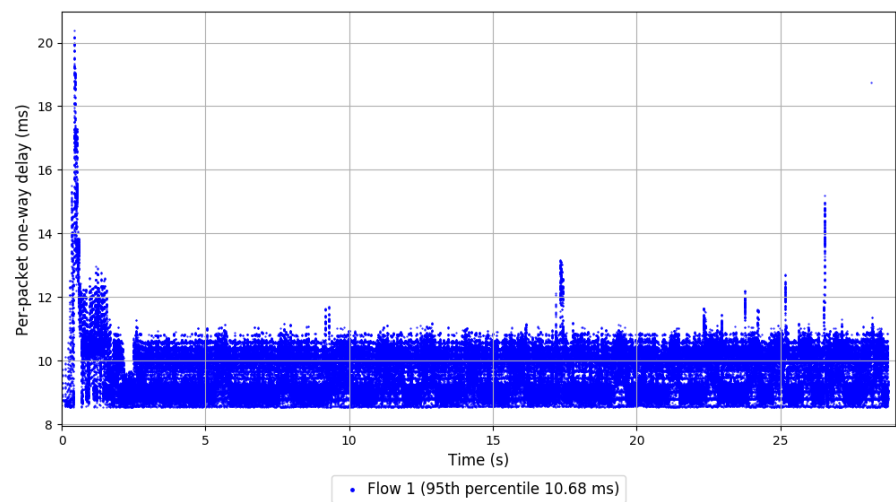
Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-06-27 20:19:03
End at: 2019-06-27 20:19:33
Local clock offset: -1.418 ms
Remote clock offset: -7.409 ms


# Below is generated by plot.py at 2019-06-27 21:20:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.60 Mbit/s
95th percentile per-packet one-way delay: 10.683 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 90.60 Mbit/s
95th percentile per-packet one-way delay: 10.683 ms
Loss rate: 0.01%
```
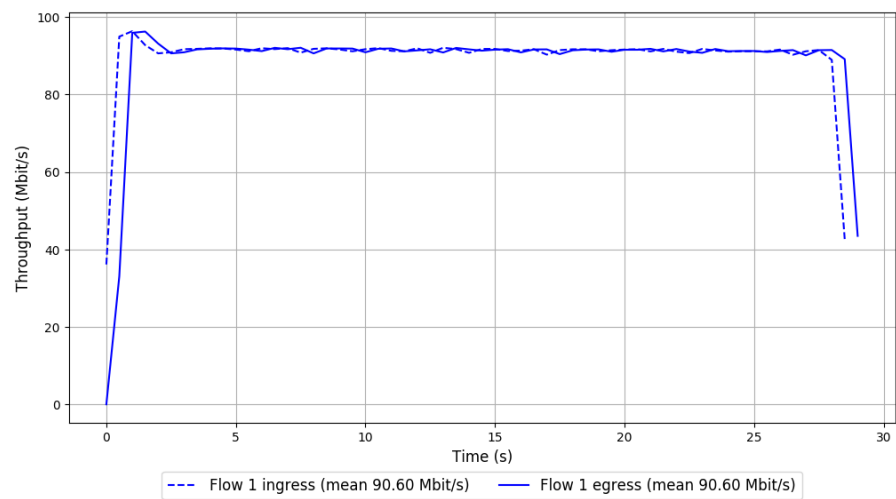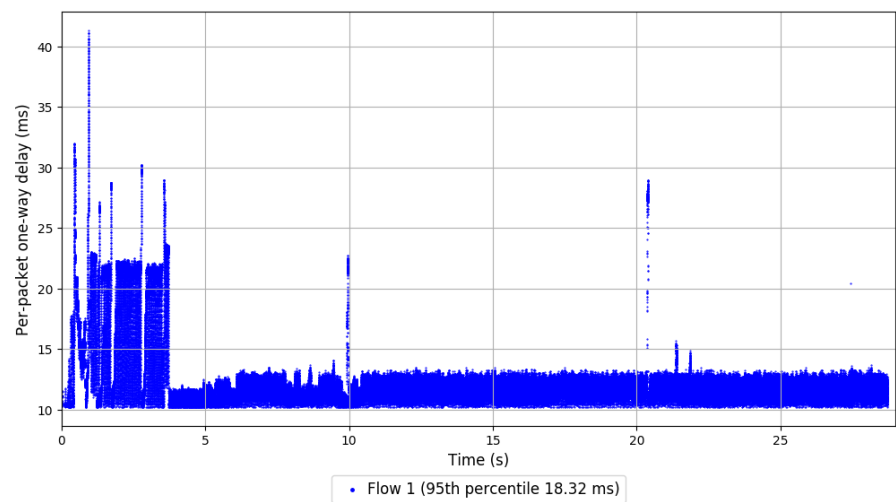
Run 3: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 90.60 Mbit/s) ---- Flow 1 egress (mean 90.60 Mbit/s) ——

• Flow 1 (95th percentile 10.68 ms)

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-06-27 20:44:09
End at: 2019-06-27 20:44:39
Local clock offset: -1.3 ms
Remote clock offset: -5.525 ms


# Below is generated by plot.py at 2019-06-27 21:20:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.77 Mbit/s
95th percentile per-packet one-way delay: 18.318 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 92.77 Mbit/s
95th percentile per-packet one-way delay: 18.318 ms
Loss rate: 0.02%
```
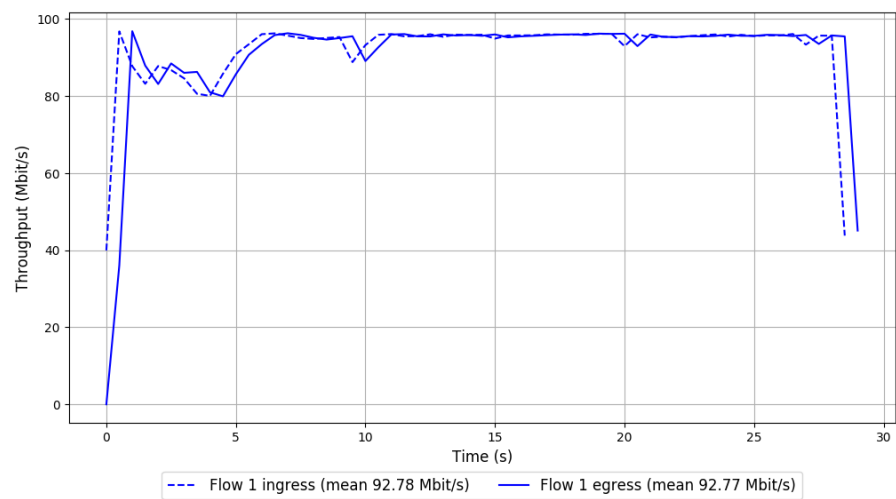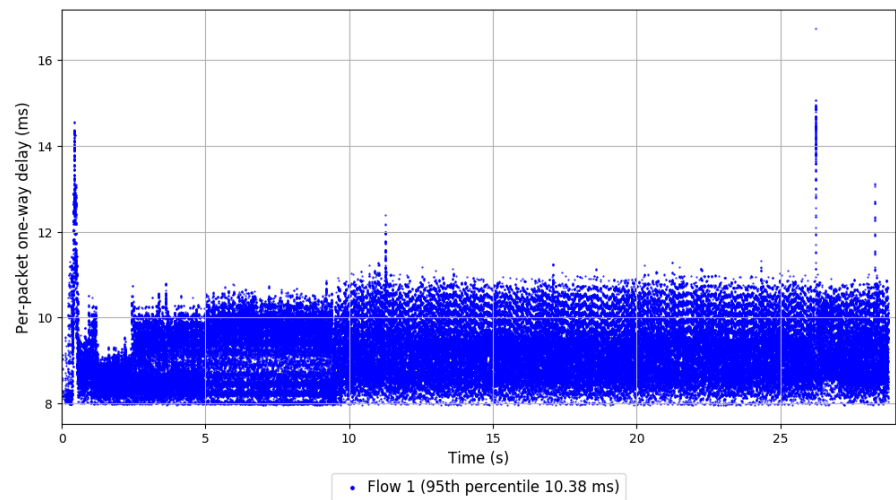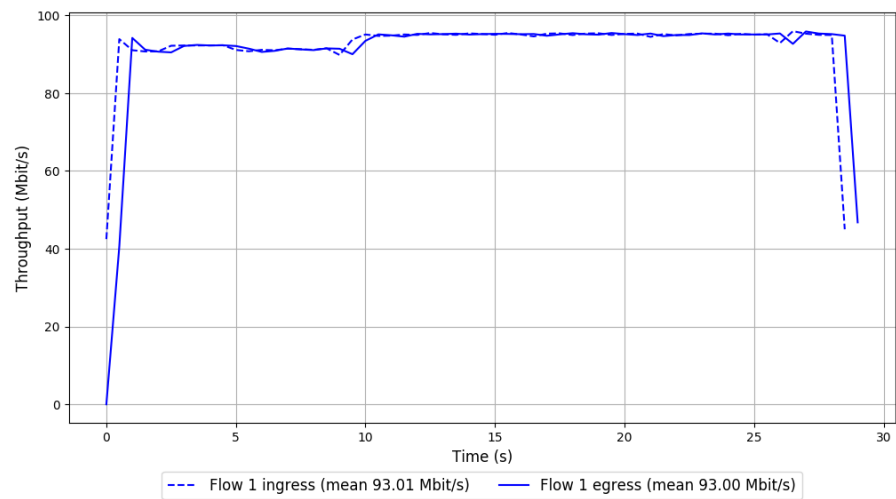
Run 4: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 92.78 Mbit/s) — — — Flow 1 egress (mean 92.77 Mbit/s)

• Flow 1 (95th percentile 18.32 ms)

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-06-27 21:09:26
End at: 2019-06-27 21:09:56
Local clock offset: -1.178 ms
Remote clock offset: -4.623 ms


# Below is generated by plot.py at 2019-06-27 21:20:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.00 Mbit/s
95th percentile per-packet one-way delay: 10.377 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 93.00 Mbit/s
95th percentile per-packet one-way delay: 10.377 ms
Loss rate: 0.00%
```
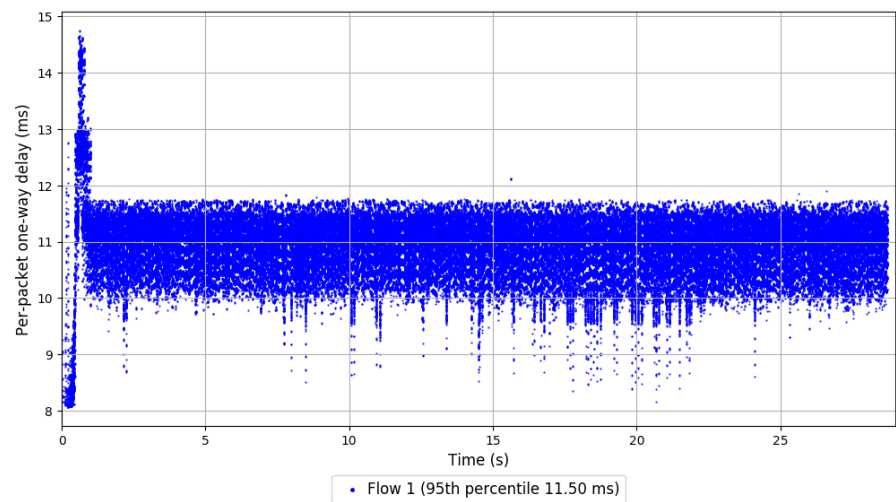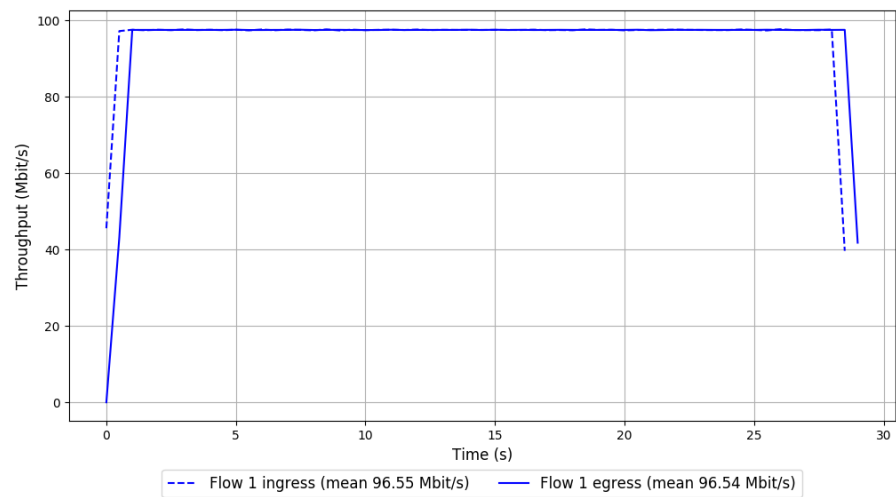
Run 5: Report of Indigo-MusesD — Data Link

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-06-27 19:12:41
End at: 2019-06-27 19:13:11
Local clock offset: -1.754 ms
Remote clock offset: -6.122 ms


# Below is generated by plot.py at 2019-06-27 21:20:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.54 Mbit/s
95th percentile per-packet one-way delay: 11.504 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.54 Mbit/s
95th percentile per-packet one-way delay: 11.504 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 96.55 Mbit/s)   Flow 1 egress (mean 96.54 Mbit/s)
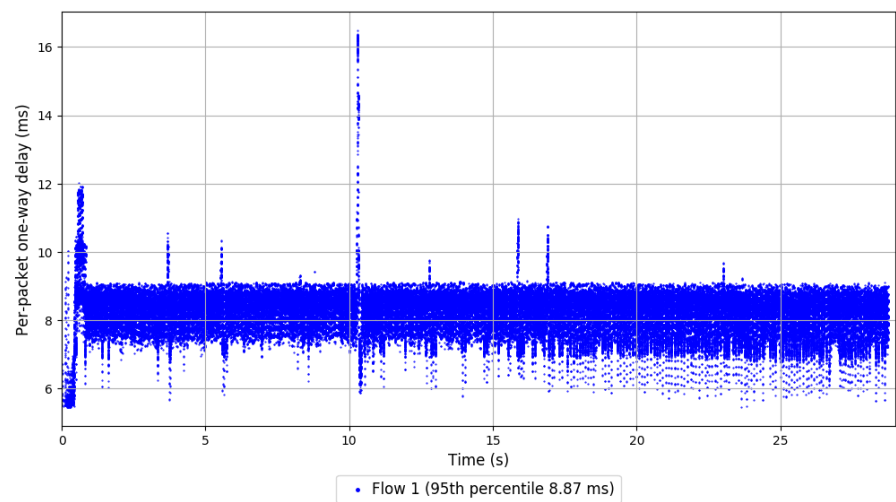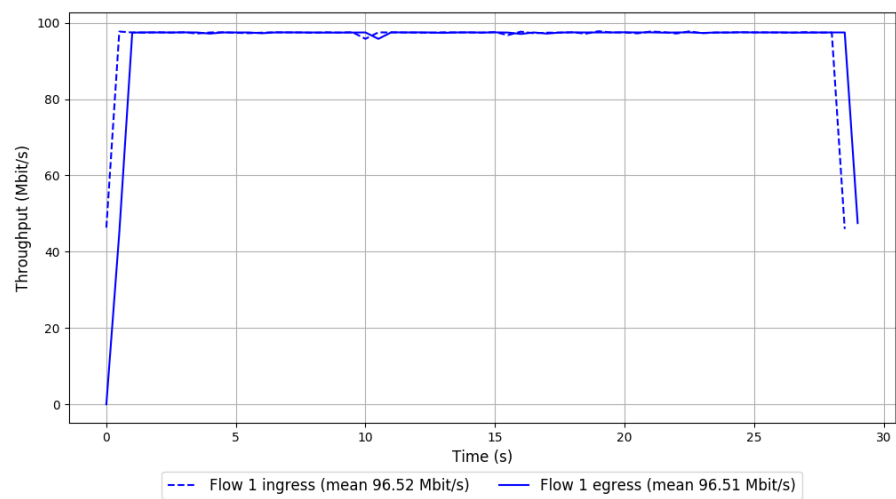

Flow 1 (95th percentile 11.50 ms)

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-06-27 19:38:21
End at: 2019-06-27 19:38:51
Local clock offset: -0.832 ms
Remote clock offset: -7.396 ms


# Below is generated by plot.py at 2019-06-27 21:20:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.51 Mbit/s
95th percentile per-packet one-way delay: 8.867 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.51 Mbit/s
95th percentile per-packet one-way delay: 8.867 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-06-27 20:03:55
End at: 2019-06-27 20:04:25
Local clock offset: -1.315 ms
Remote clock offset: -6.716 ms


# Below is generated by plot.py at 2019-06-27 21:21:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.41 Mbit/s
95th percentile per-packet one-way delay: 9.384 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.41 Mbit/s
95th percentile per-packet one-way delay: 9.384 ms
Loss rate: 0.00%
```
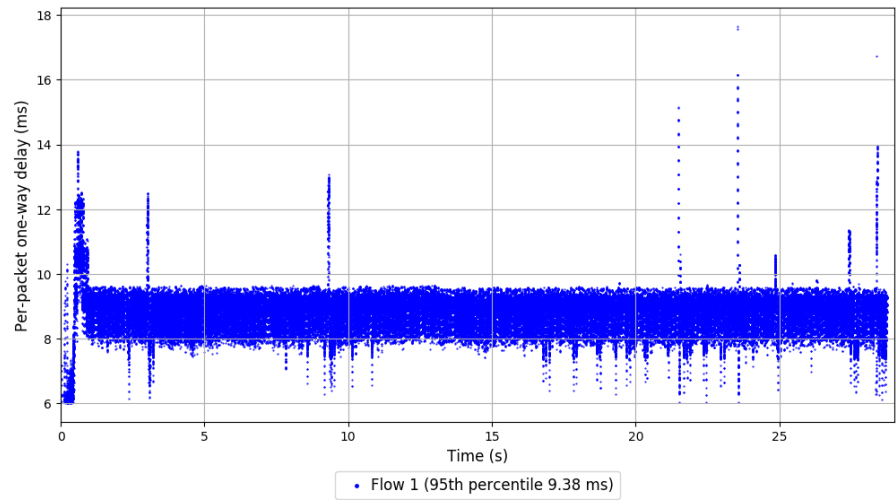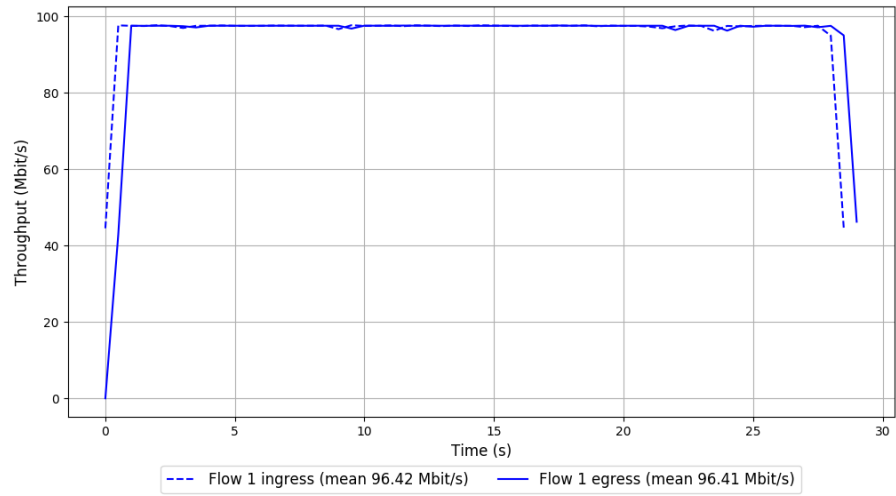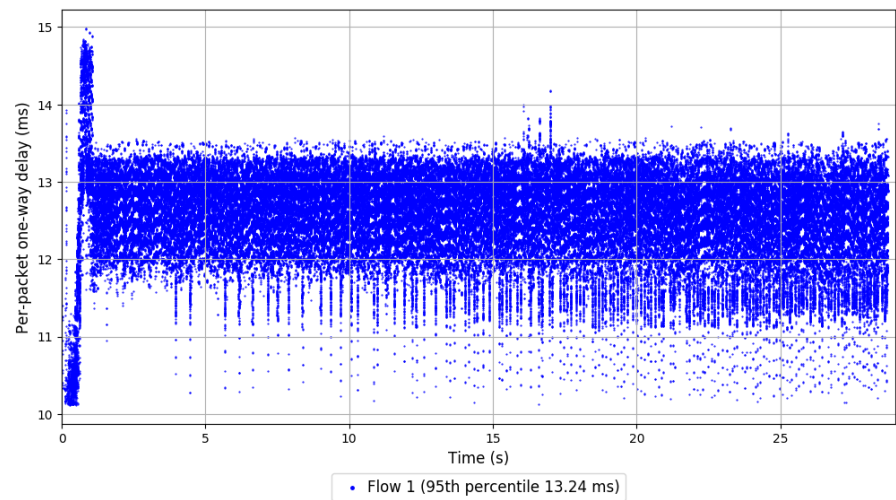
Run 3: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 96.42 Mbit/s)   Flow 1 egress (mean 96.41 Mbit/s)

Flow 1 (95th percentile 9.38 ms)

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-06-27 20:29:05
End at: 2019-06-27 20:29:35
Local clock offset: -0.949 ms
Remote clock offset: -5.408 ms


# Below is generated by plot.py at 2019-06-27 21:21:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.35 Mbit/s
95th percentile per-packet one-way delay: 13.245 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 96.35 Mbit/s
95th percentile per-packet one-way delay: 13.245 ms
Loss rate: 0.01%
```
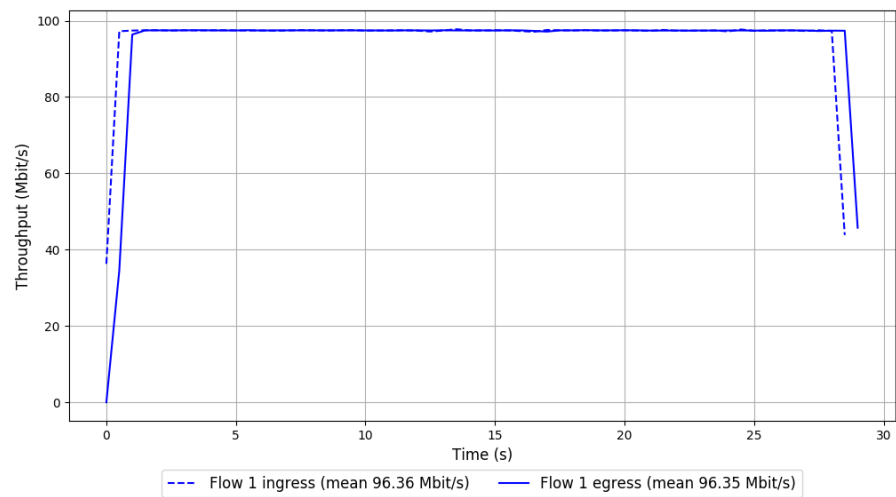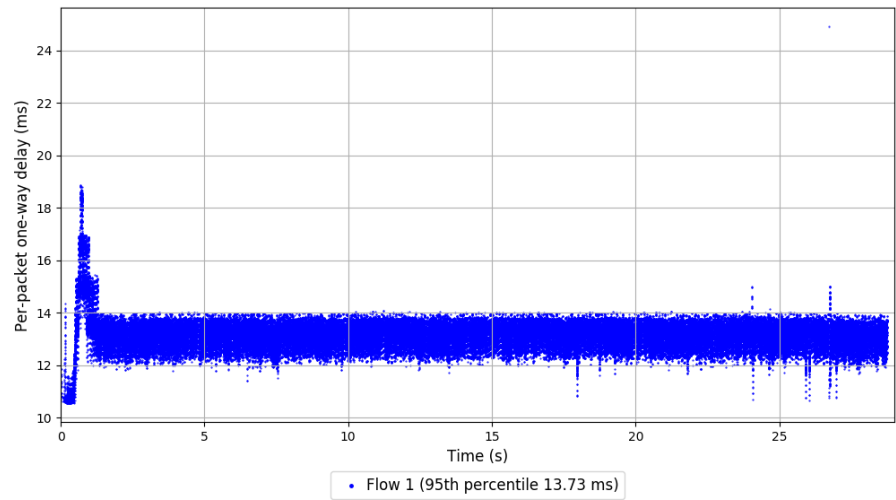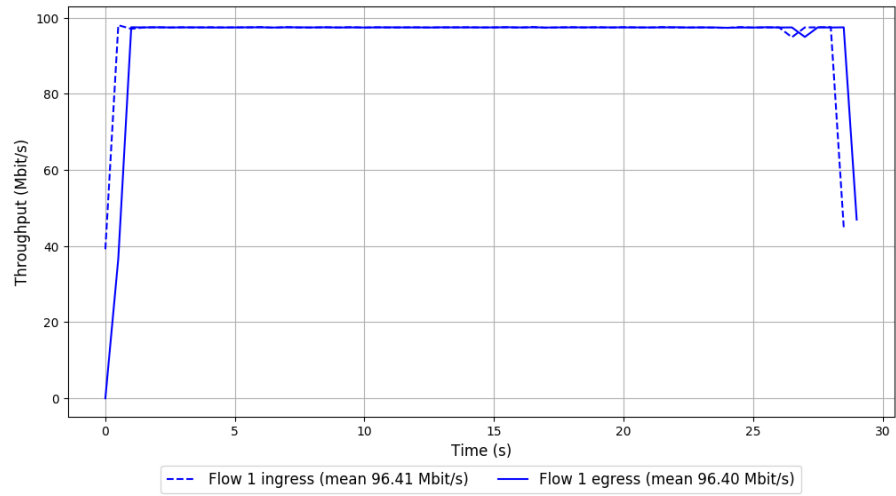
Run 4: Report of Indigo-MusesT — Data Link

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-06-27 20:54:19
End at: 2019-06-27 20:54:49
Local clock offset: -1.395 ms
Remote clock offset: -5.415 ms


# Below is generated by plot.py at 2019-06-27 21:21:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 13.734 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 13.734 ms
Loss rate: 0.01%
```

Run 5: Report of Indigo-MusesT — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2019-06-27 19:20:51
End at: 2019-06-27 19:21:21
Local clock offset: -2.002 ms
Remote clock offset: -5.39 ms


# Below is generated by plot.py at 2019-06-27 21:21:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.92 Mbit/s
95th percentile per-packet one-way delay: 48.970 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 75.92 Mbit/s
95th percentile per-packet one-way delay: 48.970 ms
Loss rate: 0.19%
```
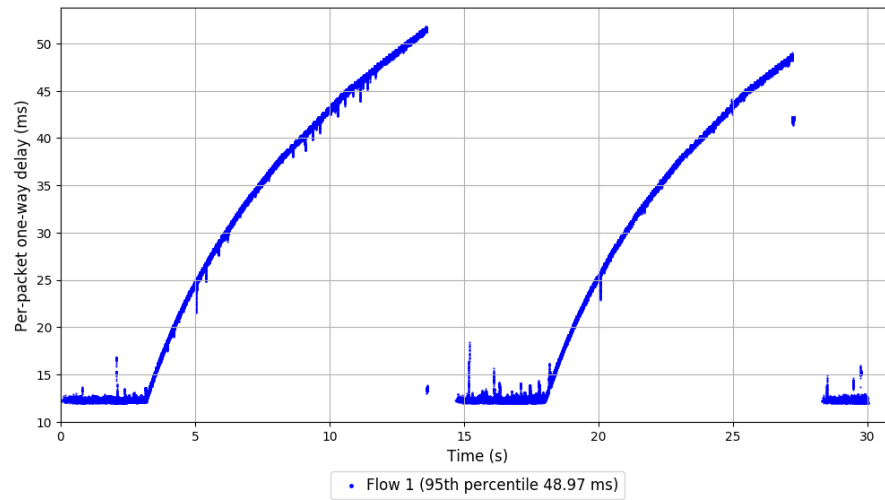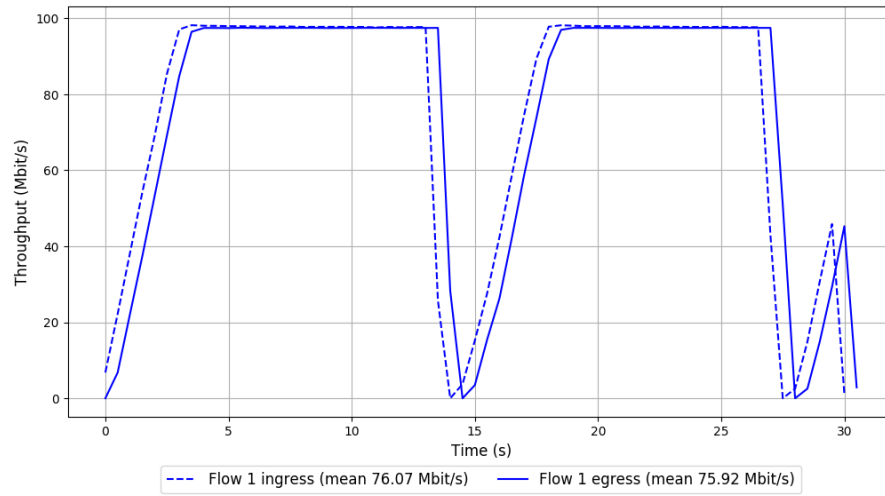
Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 76.07 Mbit/s) --- Flow 1 egress (mean 75.92 Mbit/s)
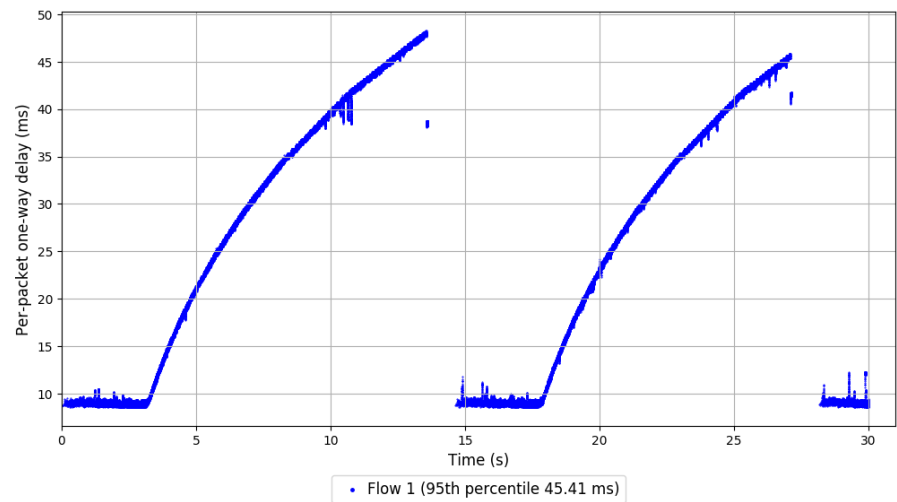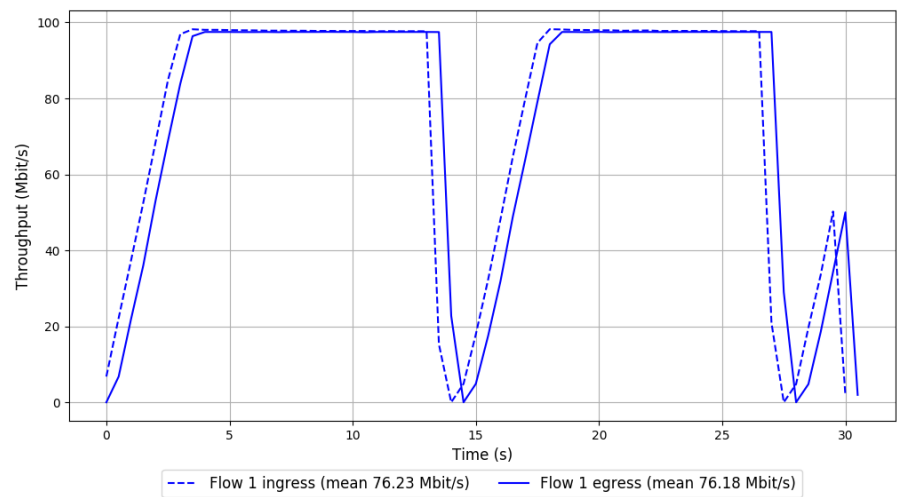

• Flow 1 (95th percentile 48.97 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2019-06-27 19:46:27
End at: 2019-06-27 19:46:57
Local clock offset: -6.096 ms
Remote clock offset: -12.628 ms


# Below is generated by plot.py at 2019-06-27 21:21:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.18 Mbit/s
95th percentile per-packet one-way delay: 45.414 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 76.18 Mbit/s
95th percentile per-packet one-way delay: 45.414 ms
Loss rate: 0.07%
```
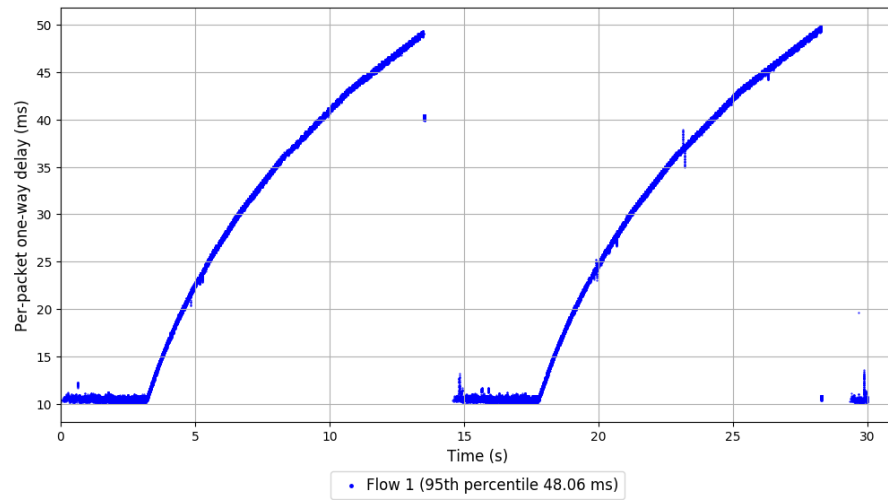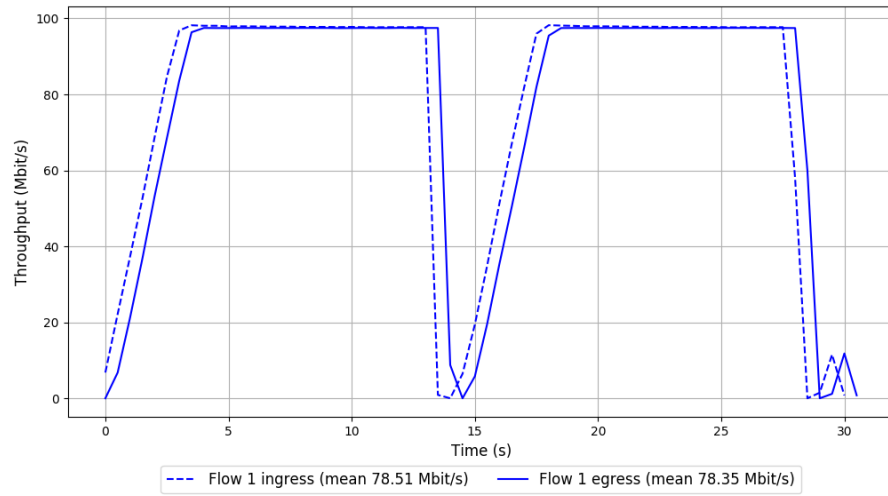
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2019-06-27 20:12:02
End at: 2019-06-27 20:12:32
Local clock offset: -1.061 ms
Remote clock offset: -5.499 ms

# Below is generated by plot.py at 2019-06-27 21:21:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.35 Mbit/s
95th percentile per-packet one-way delay: 48.059 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 78.35 Mbit/s
95th percentile per-packet one-way delay: 48.059 ms
Loss rate: 0.20%
```

Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 78.51 Mbit/s) ——— Flow 1 egress (mean 78.35 Mbit/s)

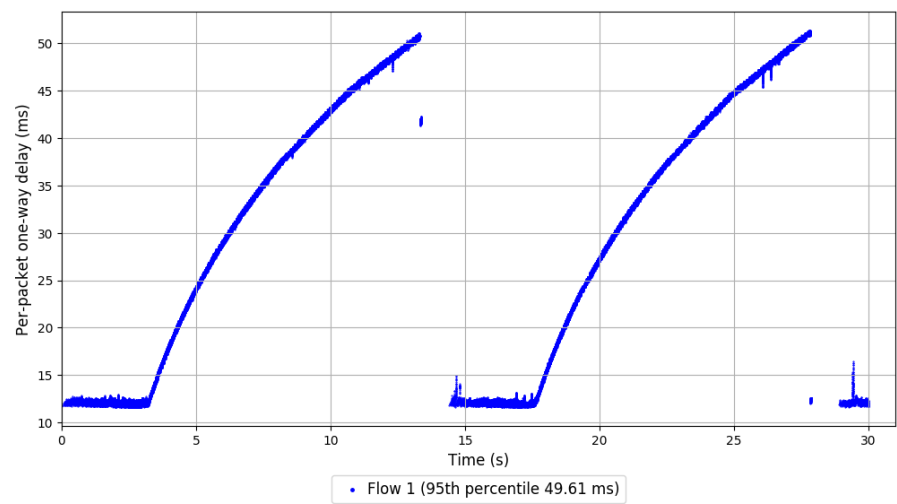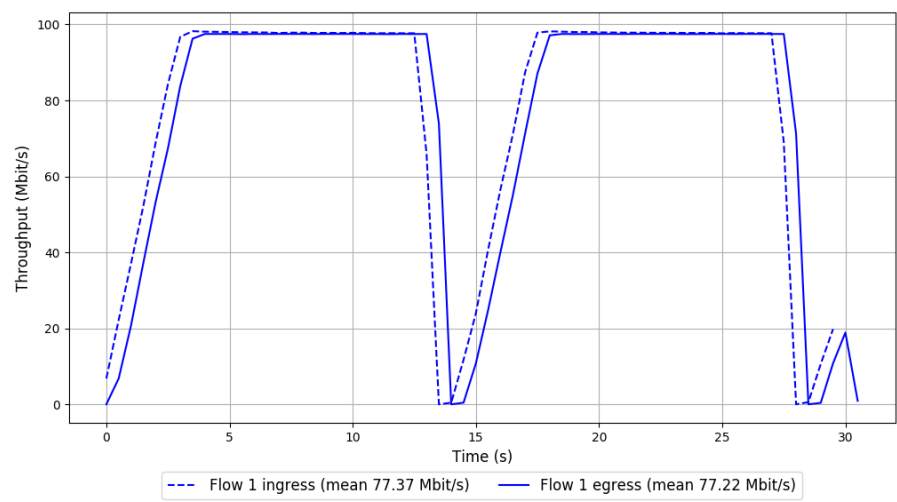• Flow 1 (95th percentile 48.06 ms)

```
Run 4: Statistics of LEDBAT

Start at: 2019-06-27 20:37:09
End at: 2019-06-27 20:37:39
Local clock offset: -1.804 ms
Remote clock offset: -4.758 ms


# Below is generated by plot.py at 2019-06-27 21:21:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.22 Mbit/s
95th percentile per-packet one-way delay: 49.609 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 77.22 Mbit/s
95th percentile per-packet one-way delay: 49.609 ms
Loss rate: 0.20%
```
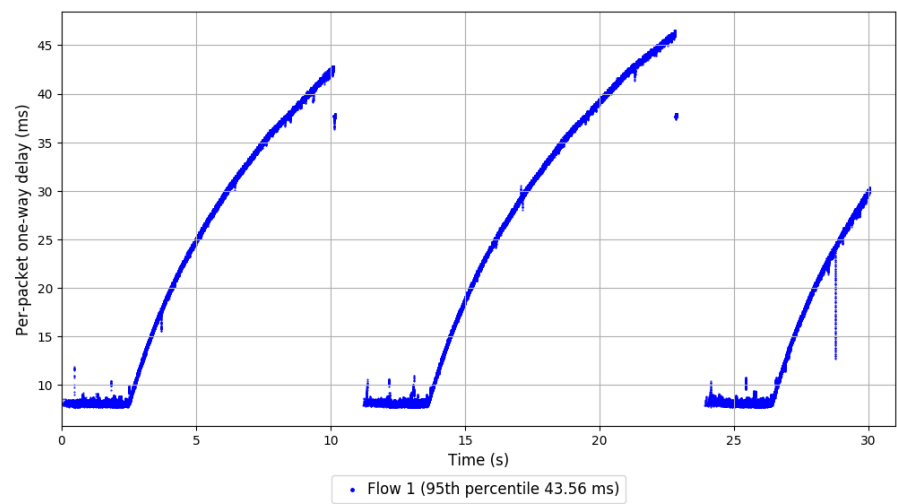
Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 77.37 Mbit/s)   Flow 1 egress (mean 77.22 Mbit/s)

Flow 1 (95th percentile 49.61 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2019-06-27 21:02:15
End at: 2019-06-27 21:02:45
Local clock offset: -0.902 ms
Remote clock offset: -4.68 ms


# Below is generated by plot.py at 2019-06-27 21:21:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.69 Mbit/s
95th percentile per-packet one-way delay: 43.560 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 78.69 Mbit/s
95th percentile per-packet one-way delay: 43.560 ms
Loss rate: 0.06%
```
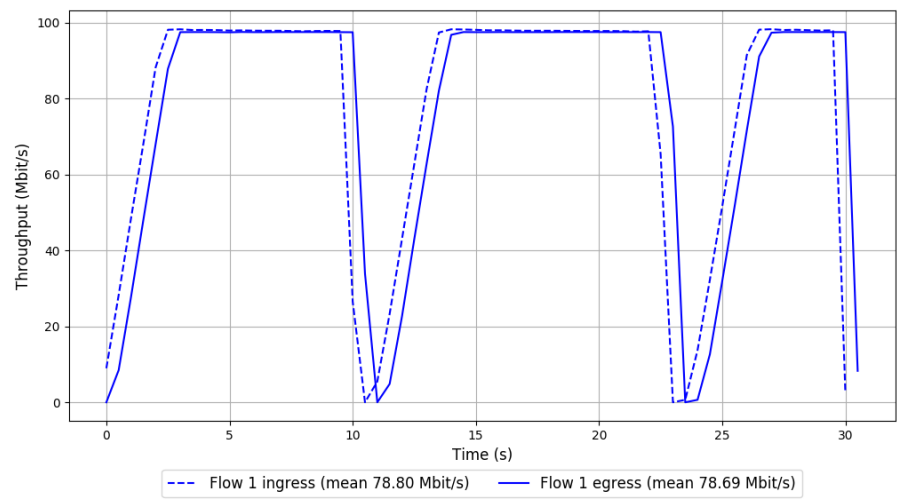
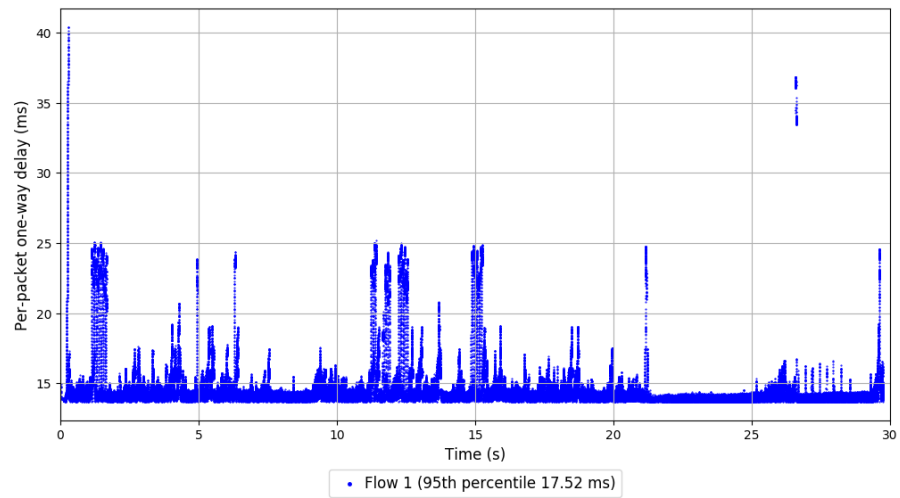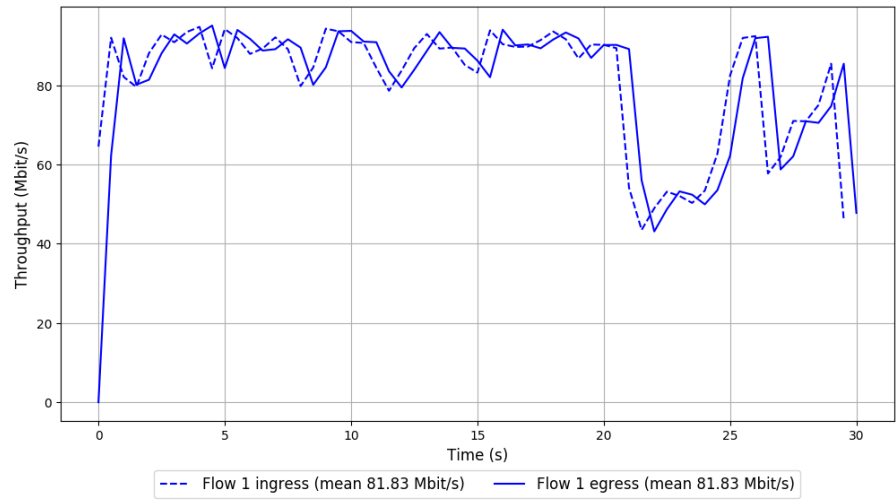# Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-06-27 19:15:03
End at: 2019-06-27 19:15:33
Local clock offset: -2.622 ms
Remote clock offset: -4.489 ms


# Below is generated by plot.py at 2019-06-27 21:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.83 Mbit/s
95th percentile per-packet one-way delay: 17.515 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 81.83 Mbit/s
95th percentile per-packet one-way delay: 17.515 ms
Loss rate: 0.01%
```

Run 1: Report of Muses_DecisionTree — Data Link

```
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-06-27 19:40:44
End at: 2019-06-27 19:41:14
Local clock offset: -0.774 ms
Remote clock offset: -7.42 ms


# Below is generated by plot.py at 2019-06-27 21:22:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.40 Mbit/s
95th percentile per-packet one-way delay: 8.417 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 86.40 Mbit/s
95th percentile per-packet one-way delay: 8.417 ms
Loss rate: 0.00%
```
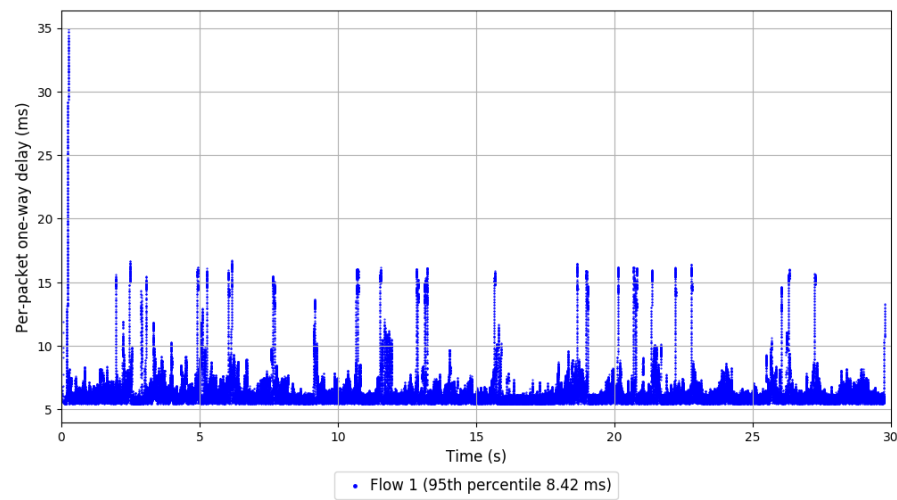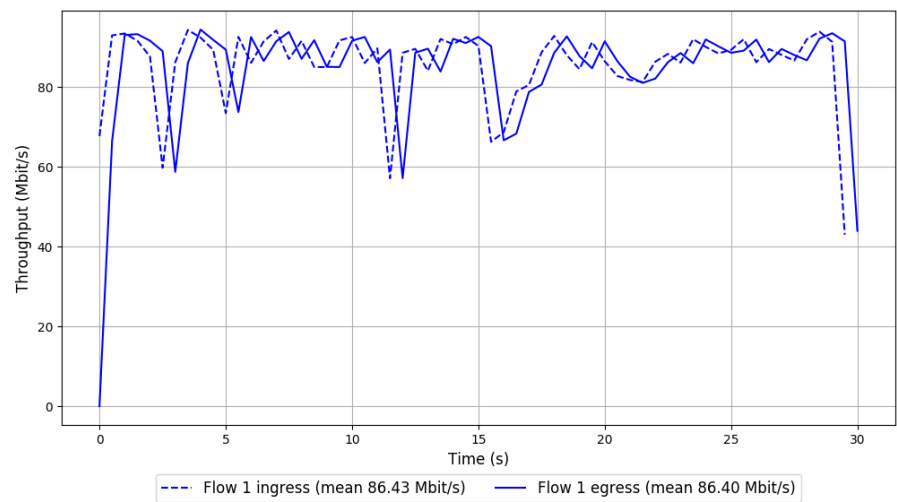
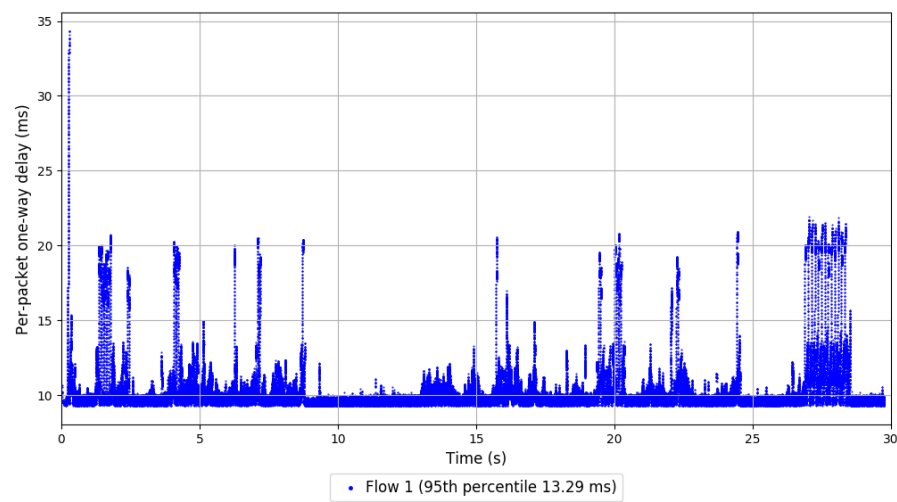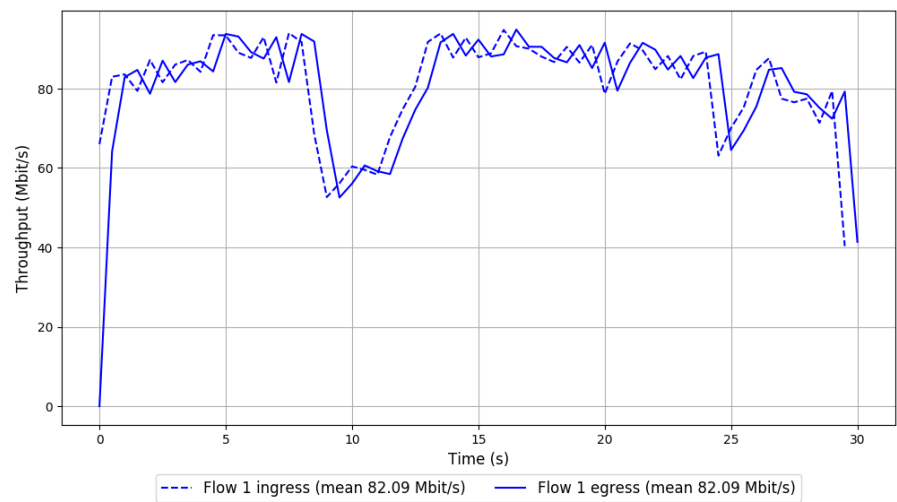Run 2: Report of Muses_DecisionTree — Data Link

```
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-06-27 20:06:18
End at: 2019-06-27 20:06:48
Local clock offset: -1.478 ms
Remote clock offset: -6.741 ms


# Below is generated by plot.py at 2019-06-27 21:22:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.09 Mbit/s
95th percentile per-packet one-way delay: 13.292 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 82.09 Mbit/s
95th percentile per-packet one-way delay: 13.292 ms
Loss rate: 0.01%
```

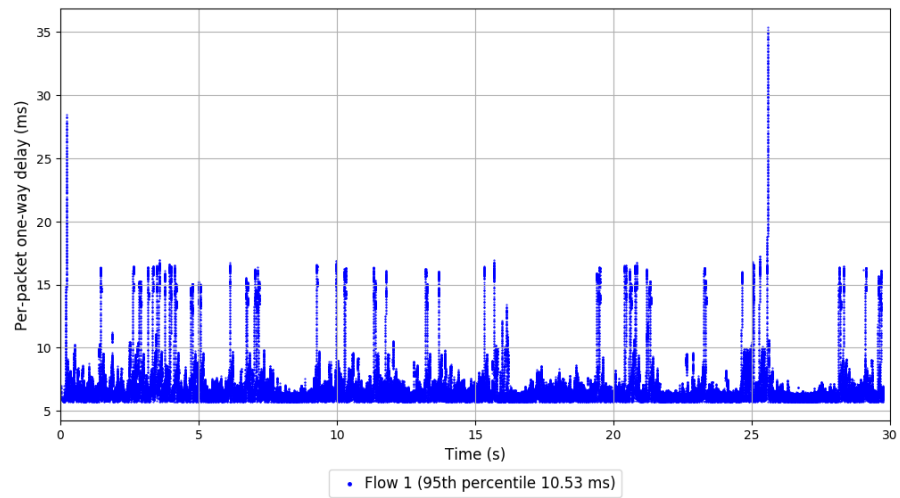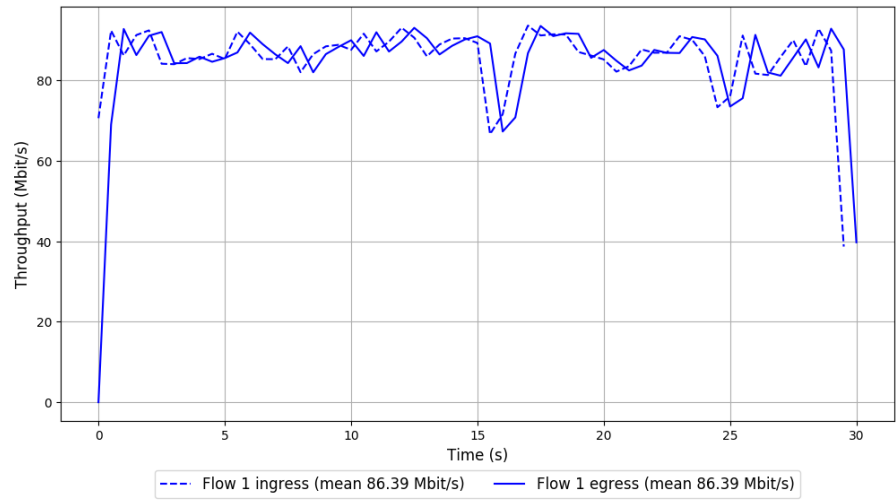Run 3: Report of Muses_DecisionTree — Data Link

```
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-06-27 20:31:25
End at: 2019-06-27 20:31:55
Local clock offset: -1.41 ms
Remote clock offset: -7.324 ms


# Below is generated by plot.py at 2019-06-27 21:22:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.39 Mbit/s
95th percentile per-packet one-way delay: 10.528 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 86.39 Mbit/s
95th percentile per-packet one-way delay: 10.528 ms
Loss rate: 0.00%
```

Run 4: Report of Muses_DecisionTree — Data Link

Flow 1 ingress (mean 86.39 Mbit/s)   Flow 1 egress (mean 86.39 Mbit/s)
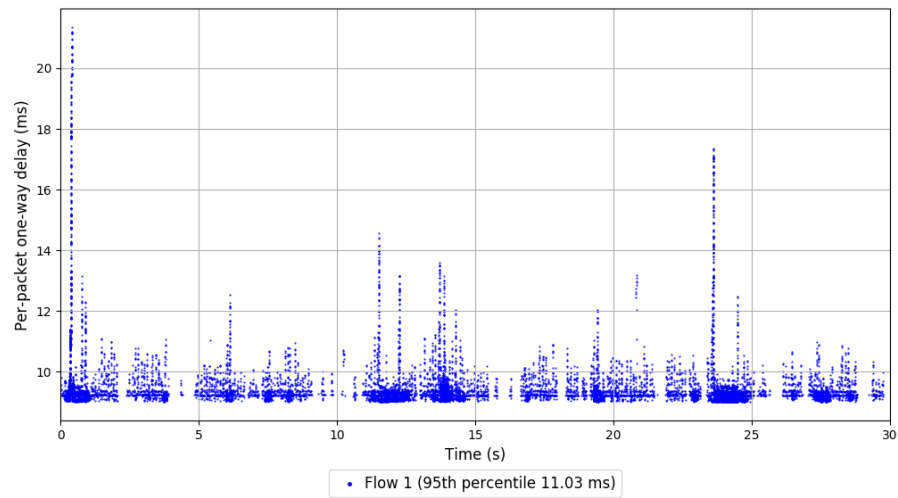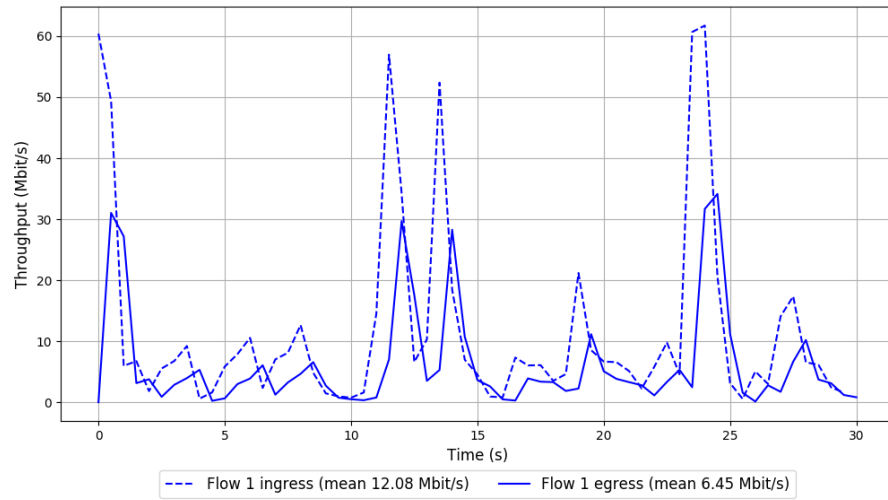

Flow 1 (95th percentile 10.53 ms)

```
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-06-27 20:56:38
End at: 2019-06-27 20:57:08
Local clock offset: -0.822 ms
Remote clock offset: -6.618 ms


# Below is generated by plot.py at 2019-06-27 21:22:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.45 Mbit/s
95th percentile per-packet one-way delay: 11.027 ms
Loss rate: 46.69%
-- Flow 1:
Average throughput: 6.45 Mbit/s
95th percentile per-packet one-way delay: 11.027 ms
Loss rate: 46.69%
```

Run 5: Report of Muses_DecisionTree — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-06-27 19:26:48
End at: 2019-06-27 19:27:18
Local clock offset: -1.478 ms
Remote clock offset: -7.055 ms


# Below is generated by plot.py at 2019-06-27 21:22:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.89 Mbit/s
95th percentile per-packet one-way delay: 13.010 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 90.89 Mbit/s
95th percentile per-packet one-way delay: 13.010 ms
Loss rate: 0.35%
```
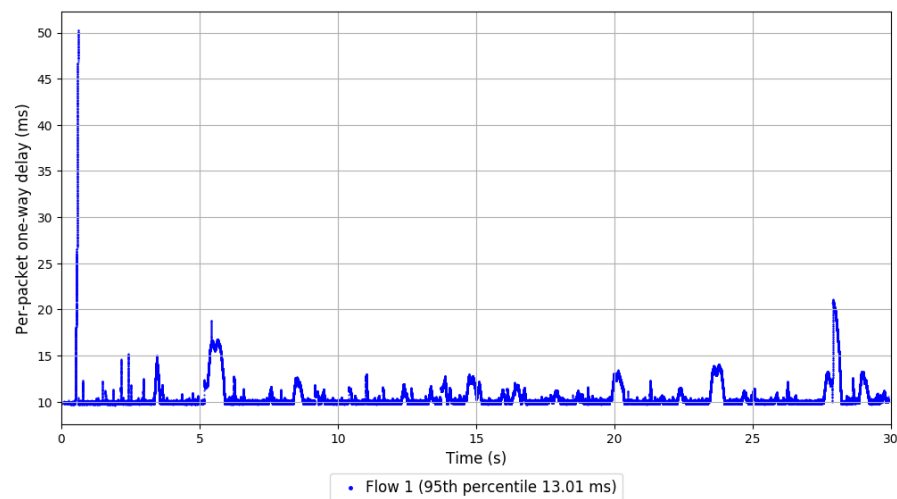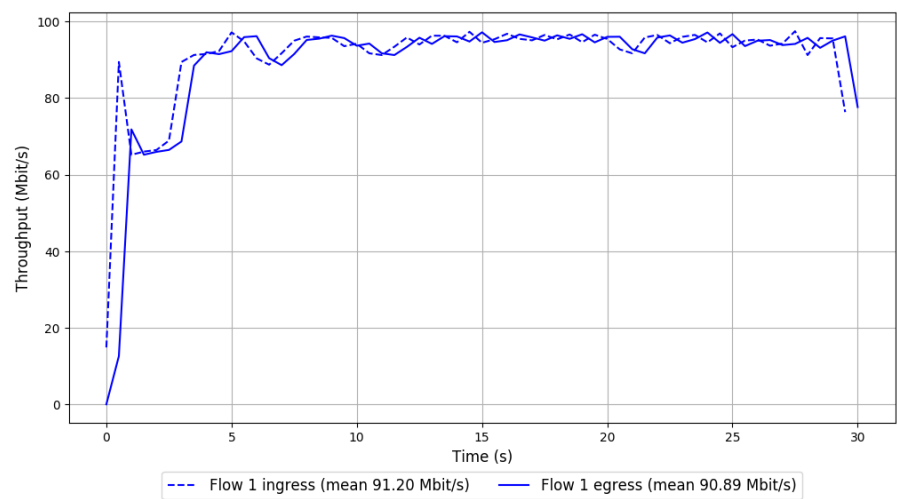
Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 91.20 Mbit/s)   Flow 1 egress (mean 90.89 Mbit/s)

Flow 1 (95th percentile 13.01 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-06-27 19:52:35
End at: 2019-06-27 19:53:05
Local clock offset: -2.625 ms
Remote clock offset: -4.901 ms


# Below is generated by plot.py at 2019-06-27 21:22:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.94 Mbit/s
95th percentile per-packet one-way delay: 16.315 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 90.94 Mbit/s
95th percentile per-packet one-way delay: 16.315 ms
Loss rate: 0.31%
```
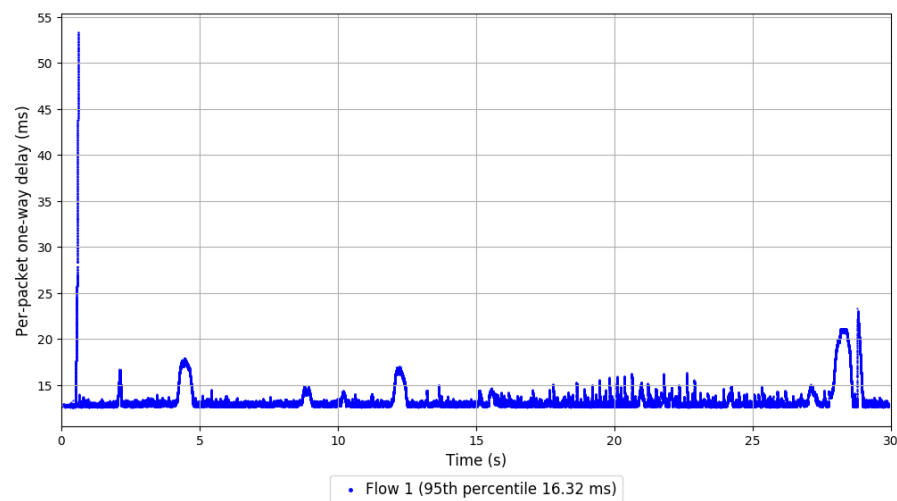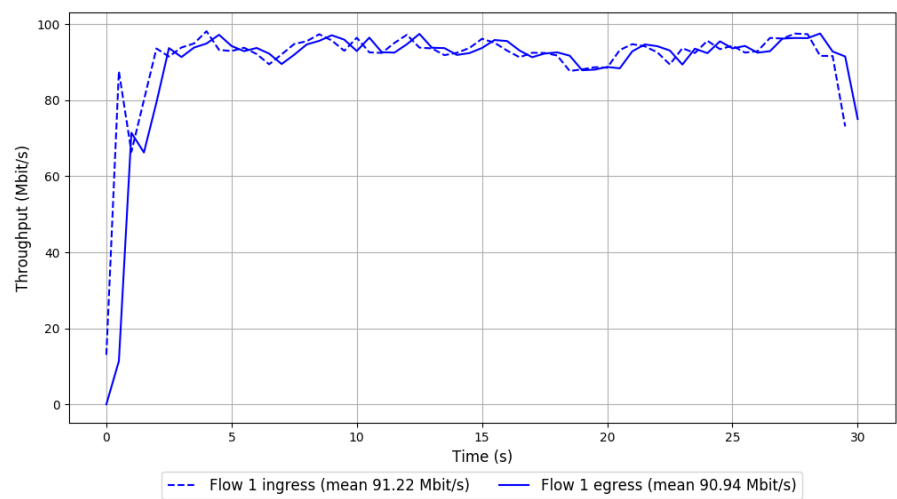
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 91.22 Mbit/s) --- Flow 1 egress (mean 90.94 Mbit/s)

• Flow 1 (95th percentile 16.32 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-06-27 20:17:58
End at: 2019-06-27 20:18:28
Local clock offset: -1.02 ms
Remote clock offset: -6.472 ms


# Below is generated by plot.py at 2019-06-27 21:22:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 9.514 ms
Loss rate: 40.01%
-- Flow 1:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 9.514 ms
Loss rate: 40.01%
```
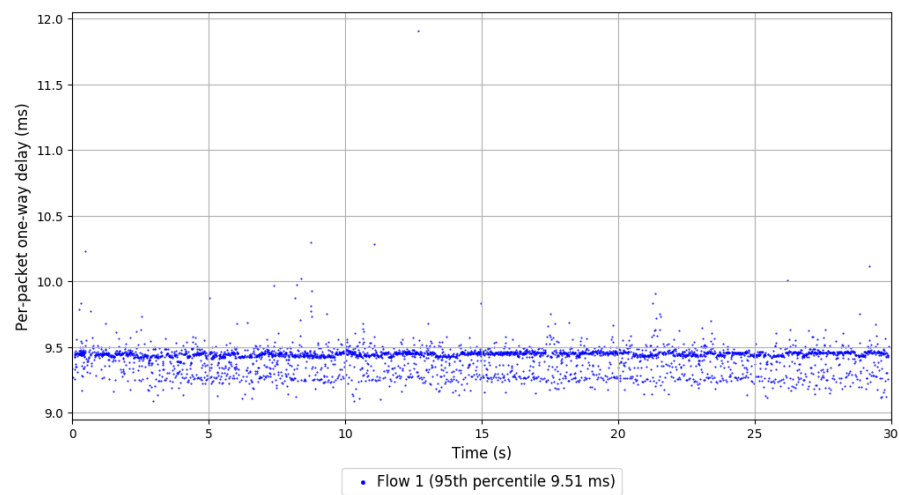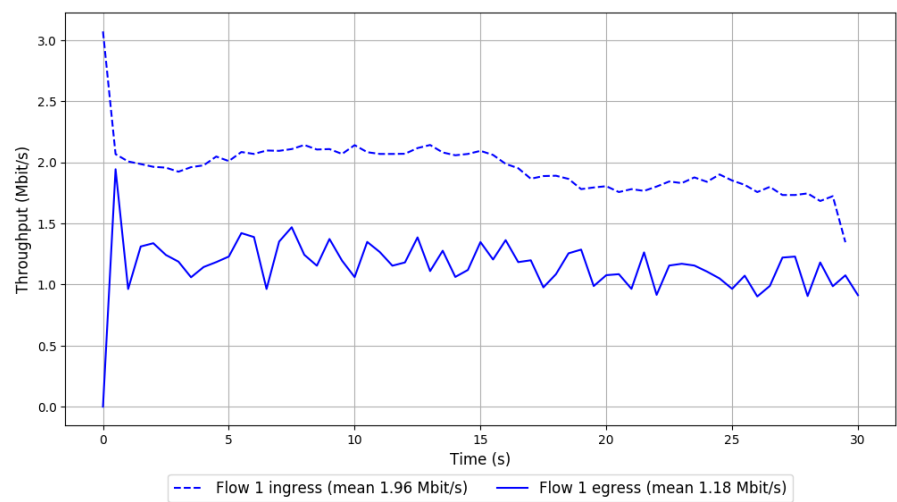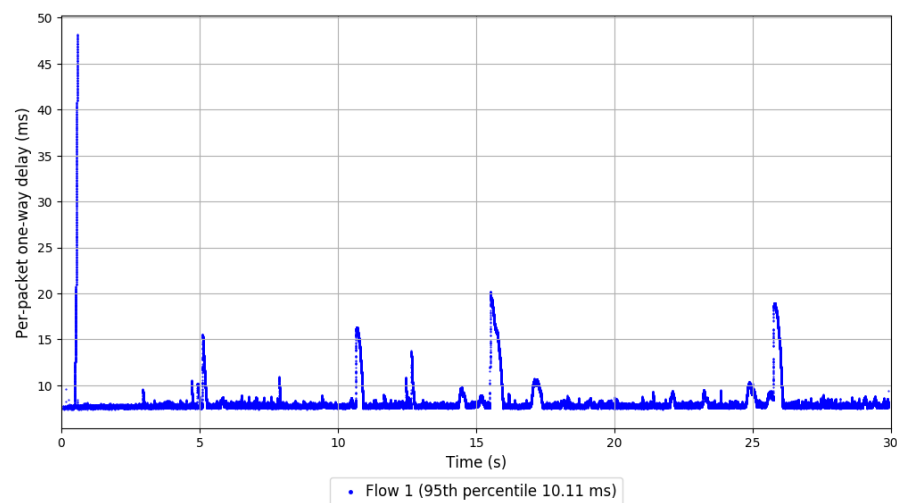
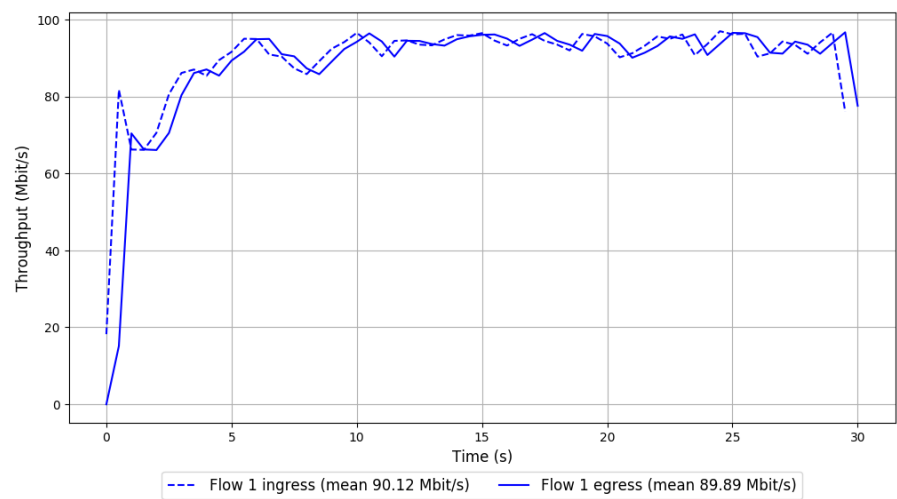Run 3: Report of PCC-Allegro — Data Link

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-06-27 20:43:00
End at: 2019-06-27 20:43:30
Local clock offset: -1.717 ms
Remote clock offset: -5.624 ms

# Below is generated by plot.py at 2019-06-27 21:23:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 10.108 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 10.108 ms
Loss rate: 0.25%
```

Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 90.12 Mbit/s)   Flow 1 egress (mean 89.89 Mbit/s)
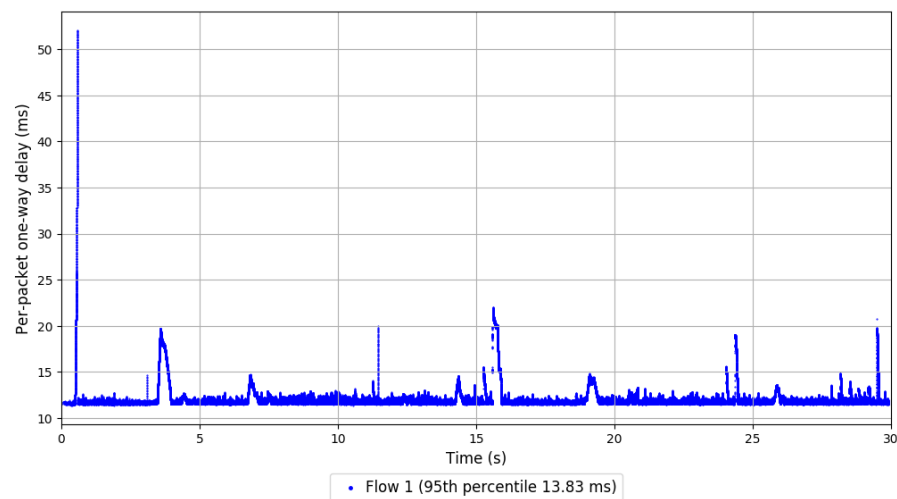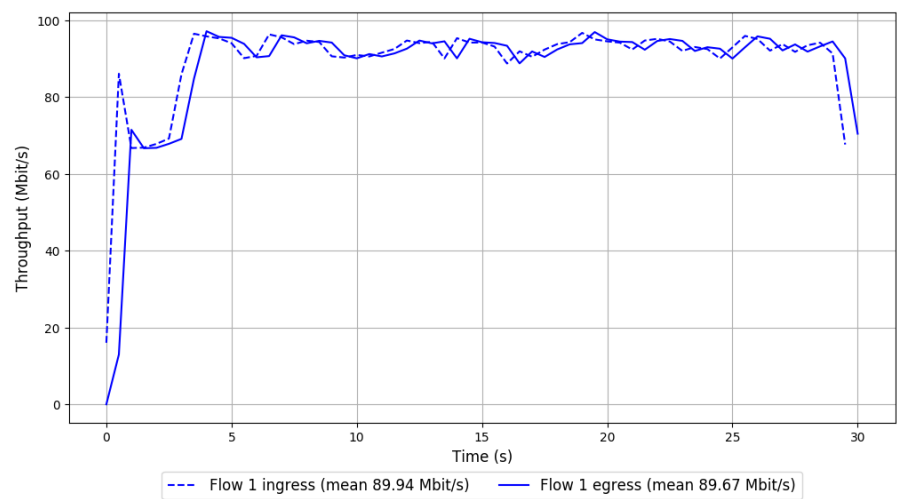

Flow 1 (95th percentile 10.11 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-06-27 21:08:17
End at: 2019-06-27 21:08:47
Local clock offset: -1.635 ms
Remote clock offset: -4.793 ms


# Below is generated by plot.py at 2019-06-27 21:23:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.67 Mbit/s
95th percentile per-packet one-way delay: 13.826 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 89.67 Mbit/s
95th percentile per-packet one-way delay: 13.826 ms
Loss rate: 0.31%
```

Run 5: Report of PCC-Allegro — Data Link
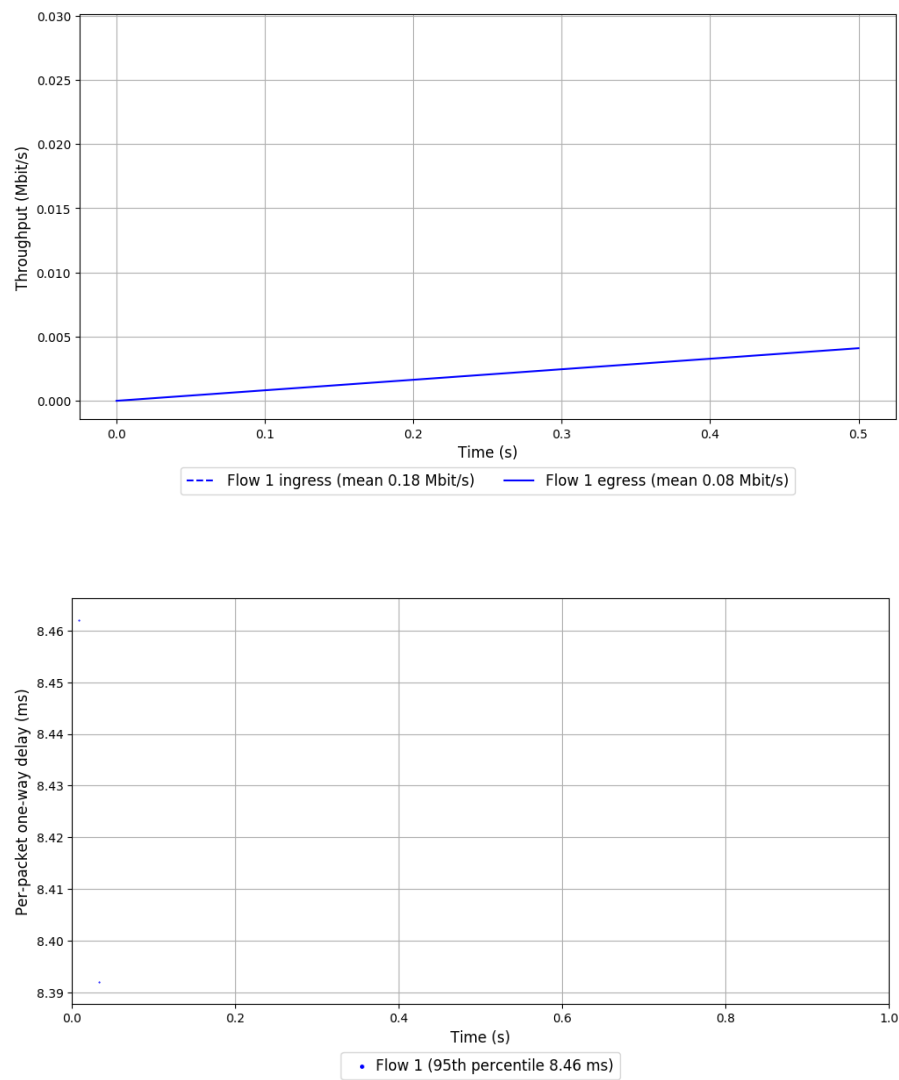
```
Run 1: Statistics of PCC-Expr

Start at: 2019-06-27 19:08:08
End at: 2019-06-27 19:08:38
Local clock offset: -0.631 ms
Remote clock offset: -4.714 ms
```
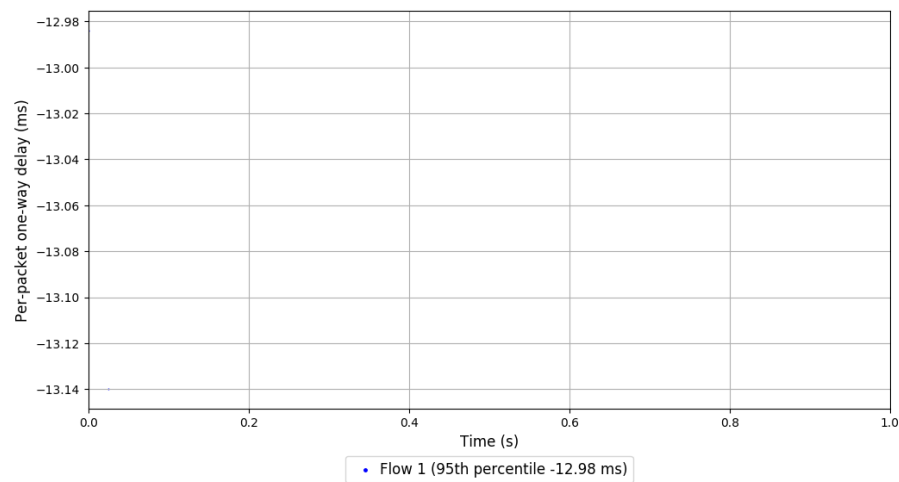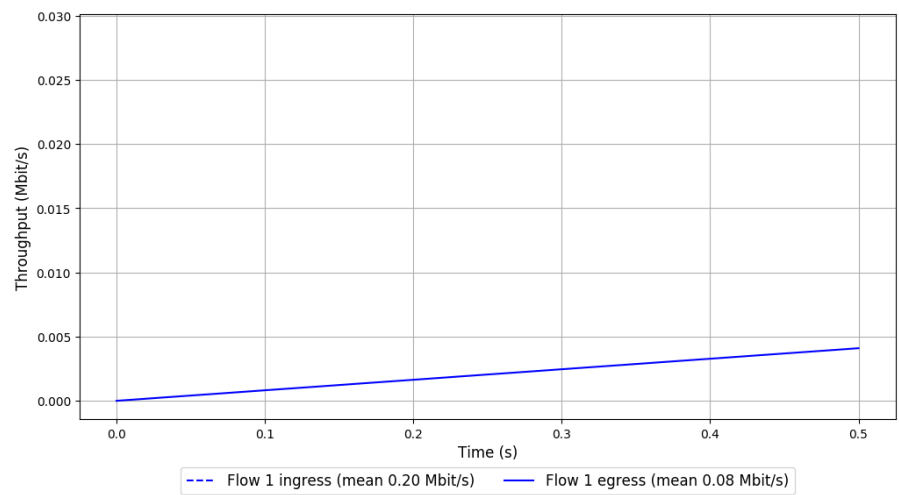
Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 0.18 Mbit/s) --- Flow 1 egress (mean 0.08 Mbit/s)

Flow 1 (95th percentile 8.46 ms)

Run 2: Statistics of PCC-Expr

Start at: 2019-06-27 19:33:48
End at: 2019-06-27 19:34:18
Local clock offset: -0.826 ms
Remote clock offset: -25.825 ms

Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 0.20 Mbit/s)   Flow 1 egress (mean 0.08 Mbit/s)

Flow 1 (95th percentile -12.98 ms)
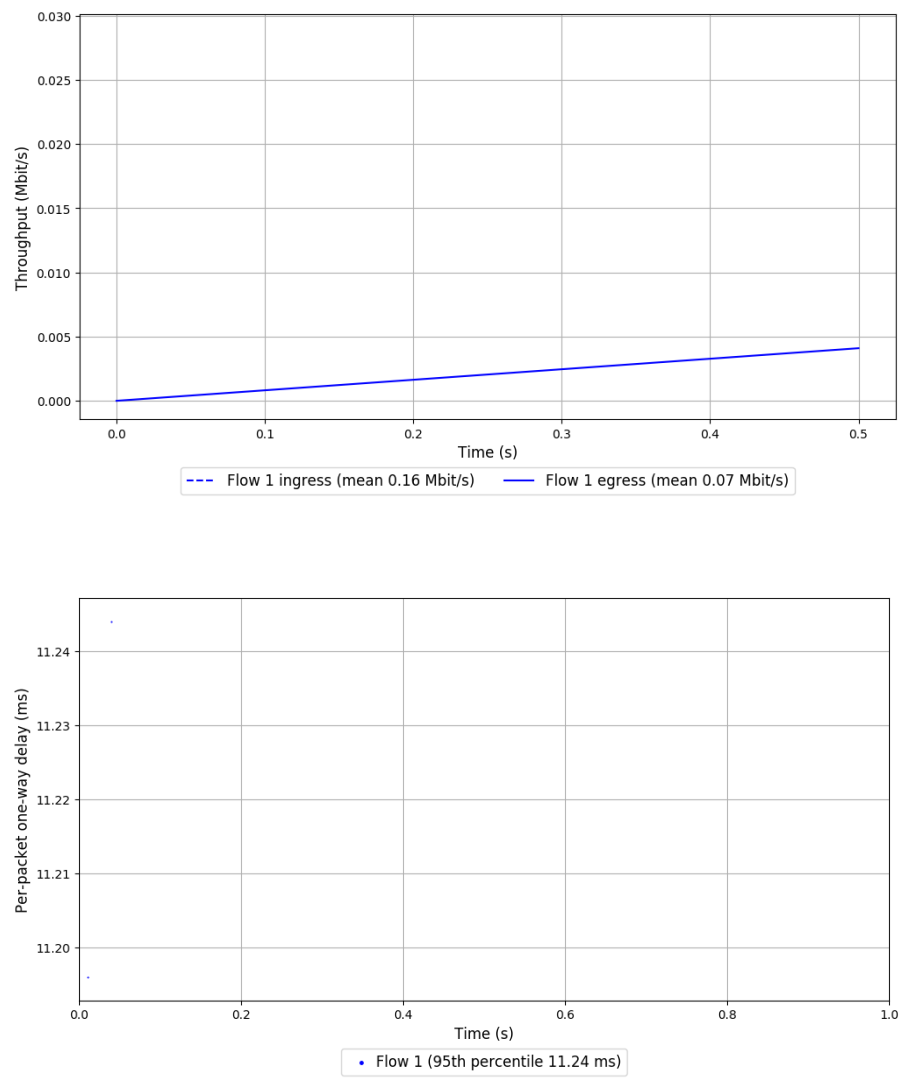
```
Run 3: Statistics of PCC-Expr

Start at: 2019-06-27 19:59:27
End at: 2019-06-27 19:59:57
Local clock offset: -2.609 ms
Remote clock offset: -6.352 ms
```

Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 0.16 Mbit/s)   Flow 1 egress (mean 0.07 Mbit/s)

• Flow 1 (95th percentile 11.24 ms)
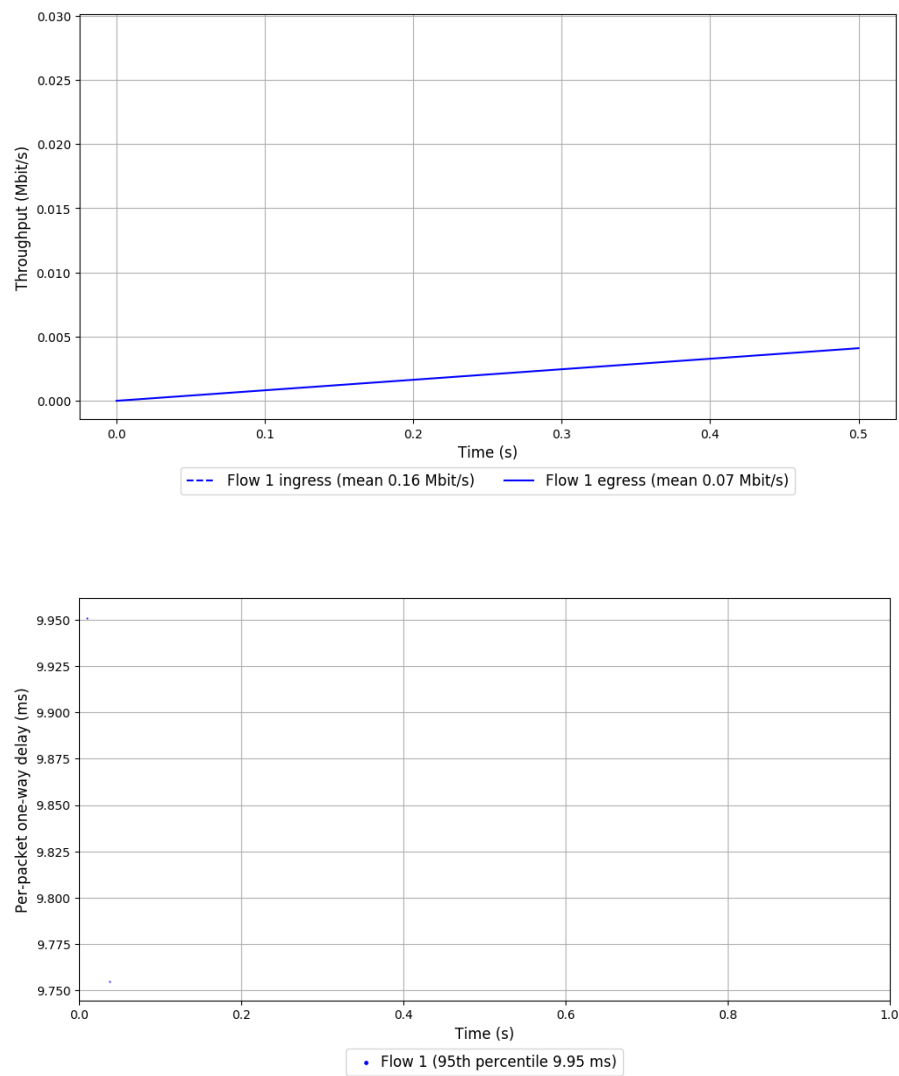
```
Run 4: Statistics of PCC-Expr

Start at: 2019-06-27 20:24:39
End at: 2019-06-27 20:25:09
Local clock offset: -1.766 ms
Remote clock offset: -6.618 ms
```

Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2019-06-27 20:49:49
End at: 2019-06-27 20:50:19
Local clock offset: -1.402 ms
Remote clock offset: -4.828 ms
```
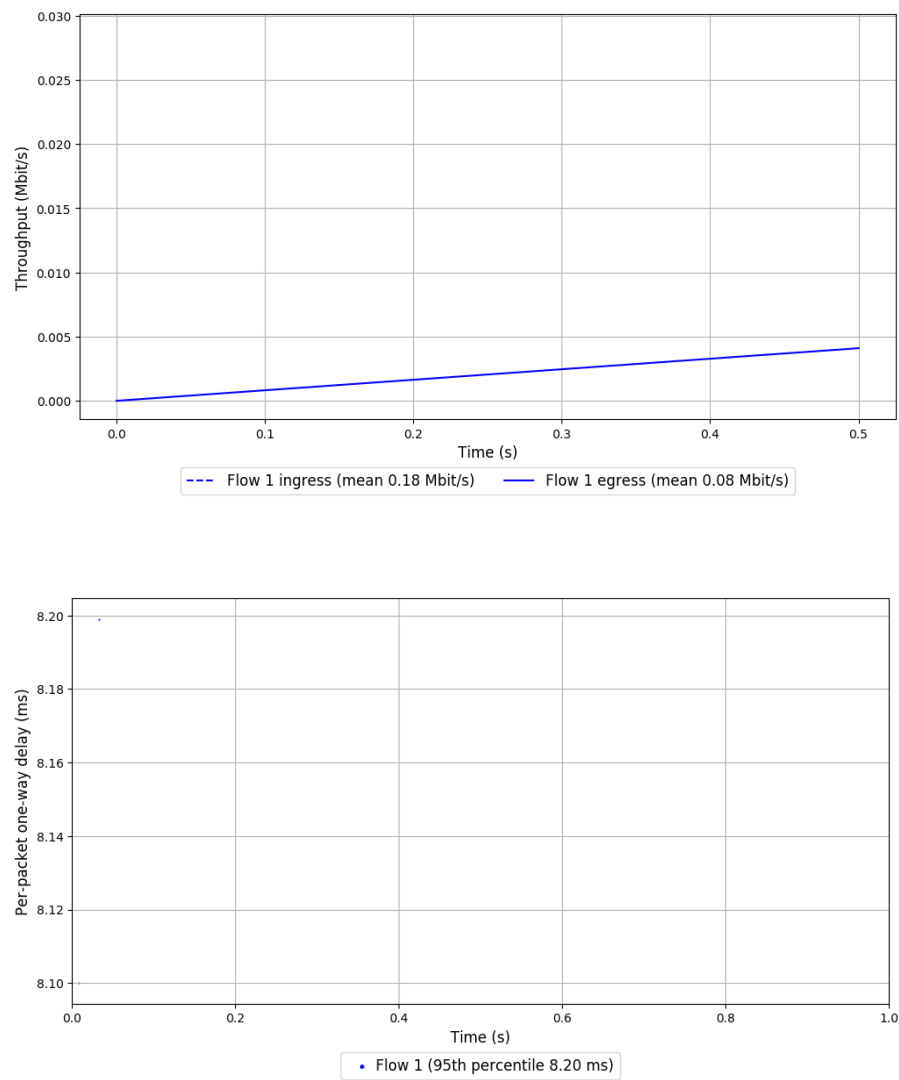
Run 5: Report of PCC-Expr — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-06-27 19:29:08
End at: 2019-06-27 19:29:38
Local clock offset: -0.641 ms
Remote clock offset: -5.103 ms

# Below is generated by plot.py at 2019-06-27 21:23:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.77 Mbit/s
95th percentile per-packet one-way delay: 47.820 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 91.77 Mbit/s
95th percentile per-packet one-way delay: 47.820 ms
Loss rate: 0.46%
```
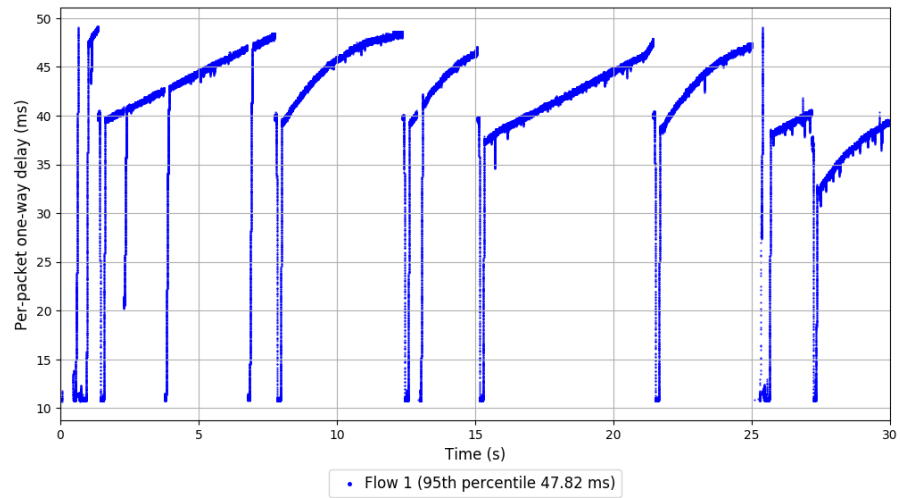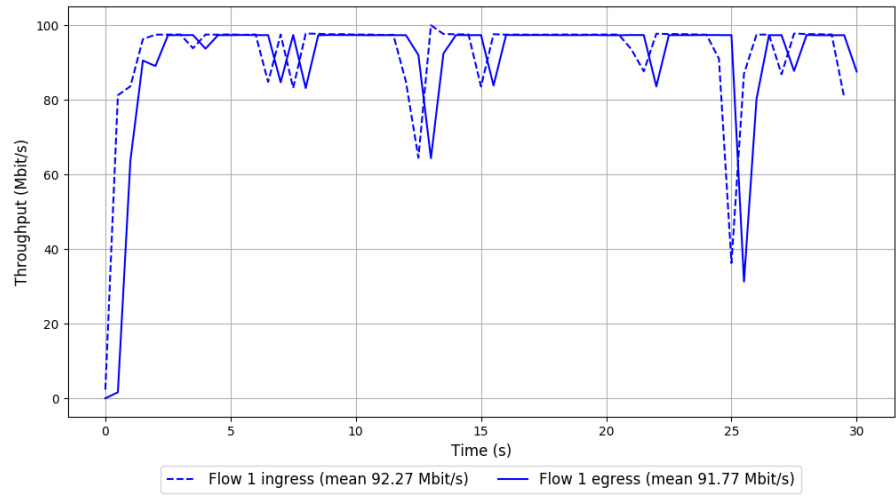
Run 1: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 92.27 Mbit/s)   Flow 1 egress (mean 91.77 Mbit/s)

Flow 1 (95th percentile 47.82 ms)

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-06-27 19:54:56
End at: 2019-06-27 19:55:26
Local clock offset: 0.251 ms
Remote clock offset: -5.285 ms


# Below is generated by plot.py at 2019-06-27 21:23:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.91 Mbit/s
95th percentile per-packet one-way delay: 43.186 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 91.91 Mbit/s
95th percentile per-packet one-way delay: 43.186 ms
Loss rate: 0.59%
```
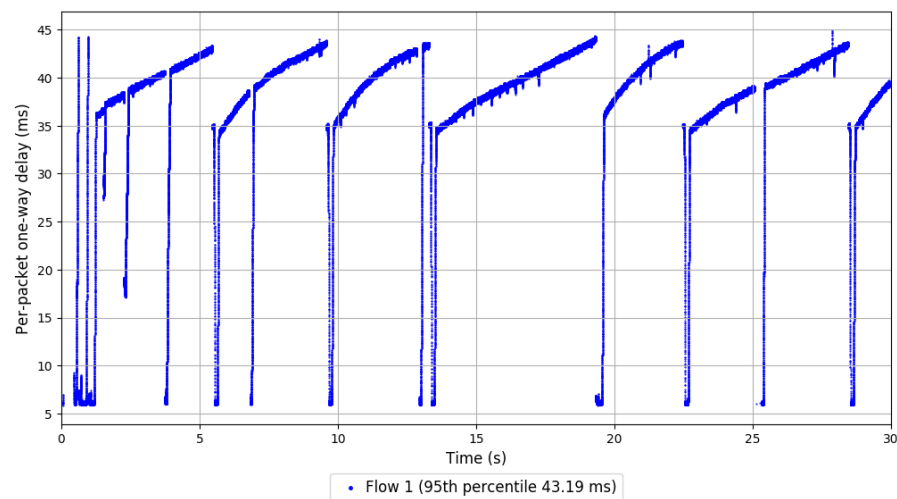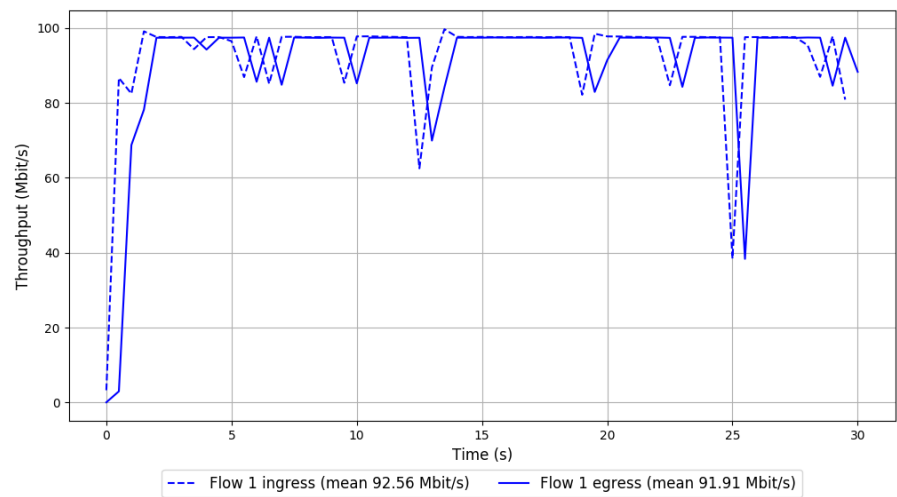
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-06-27 20:20:13
End at: 2019-06-27 20:20:43
Local clock offset: -1.833 ms
Remote clock offset: -5.776 ms


# Below is generated by plot.py at 2019-06-27 21:23:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.86 Mbit/s
95th percentile per-packet one-way delay: 48.219 ms
Loss rate: 4.22%
-- Flow 1:
Average throughput: 24.86 Mbit/s
95th percentile per-packet one-way delay: 48.219 ms
Loss rate: 4.22%
```
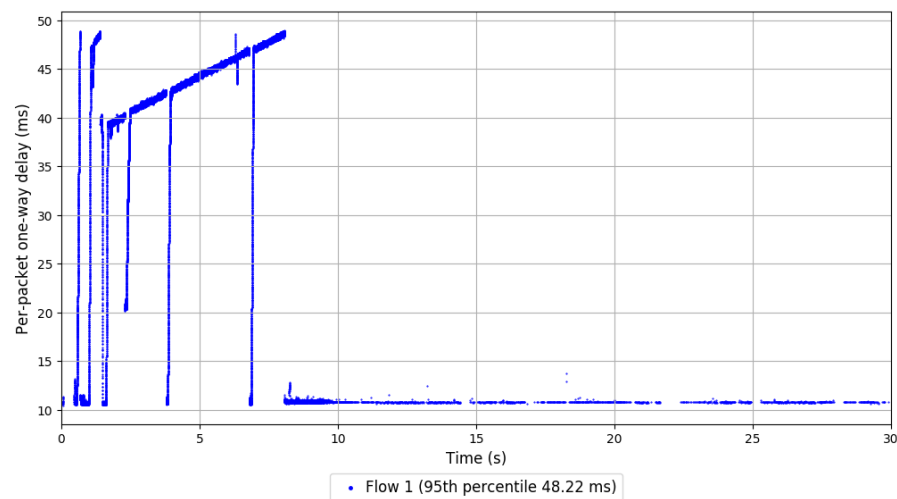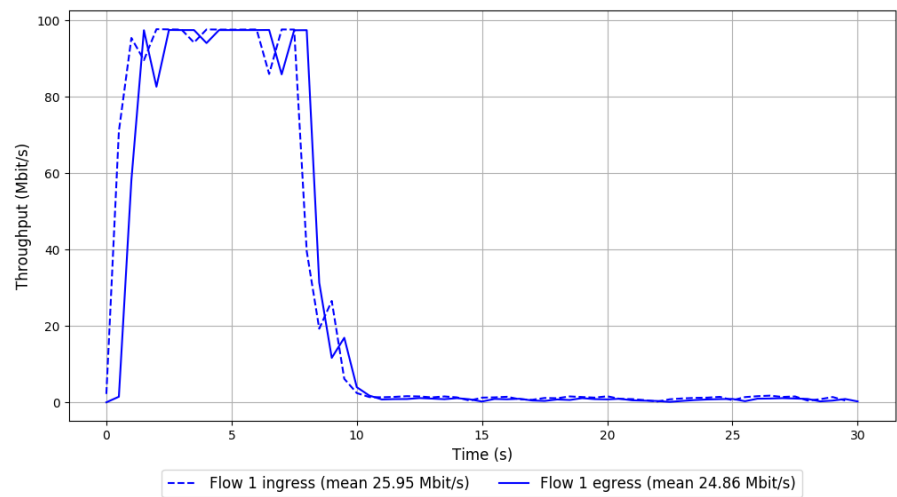
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 25.95 Mbit/s) Flow 1 egress (mean 24.86 Mbit/s)

• Flow 1 (95th percentile 48.22 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-06-27 20:45:19
End at: 2019-06-27 20:45:49
Local clock offset: -1.804 ms
Remote clock offset: -5.109 ms


# Below is generated by plot.py at 2019-06-27 21:23:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.08 Mbit/s
95th percentile per-packet one-way delay: 48.315 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 92.08 Mbit/s
95th percentile per-packet one-way delay: 48.315 ms
Loss rate: 0.32%
```
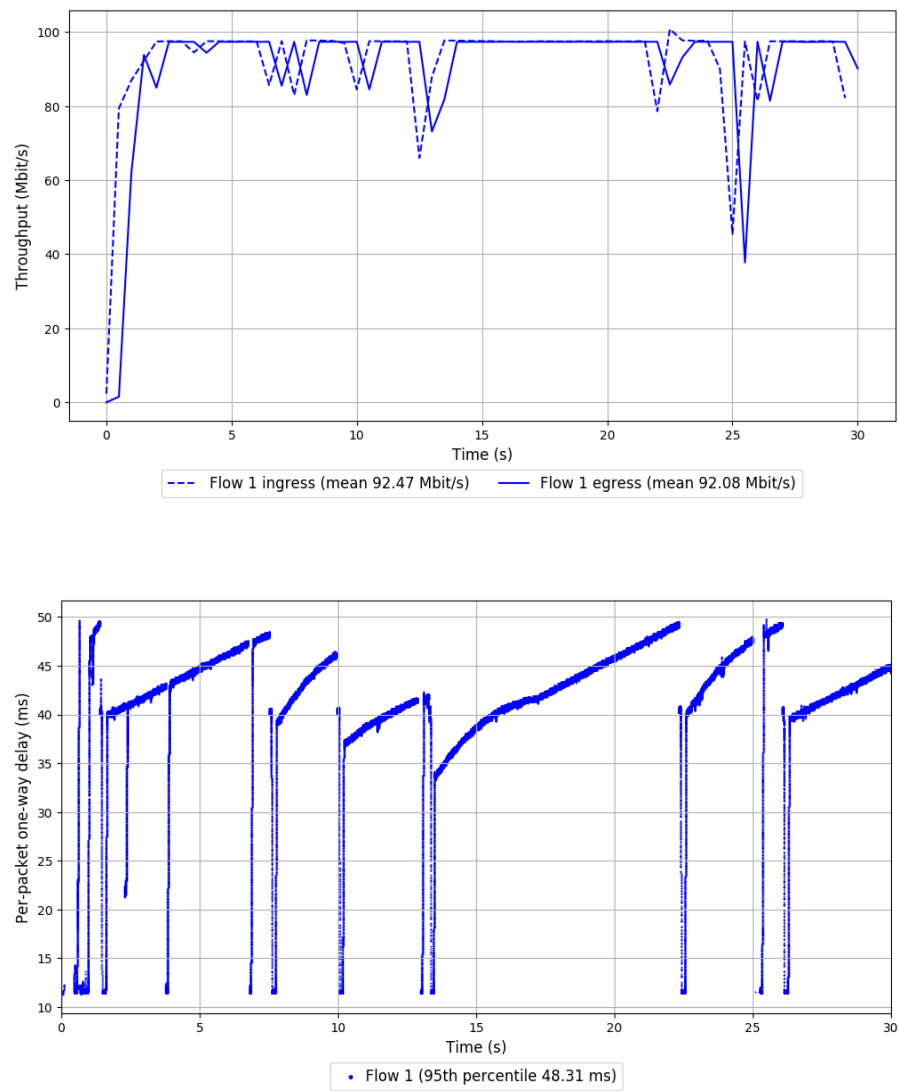
Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 92.47 Mbit/s)   Flow 1 egress (mean 92.08 Mbit/s)
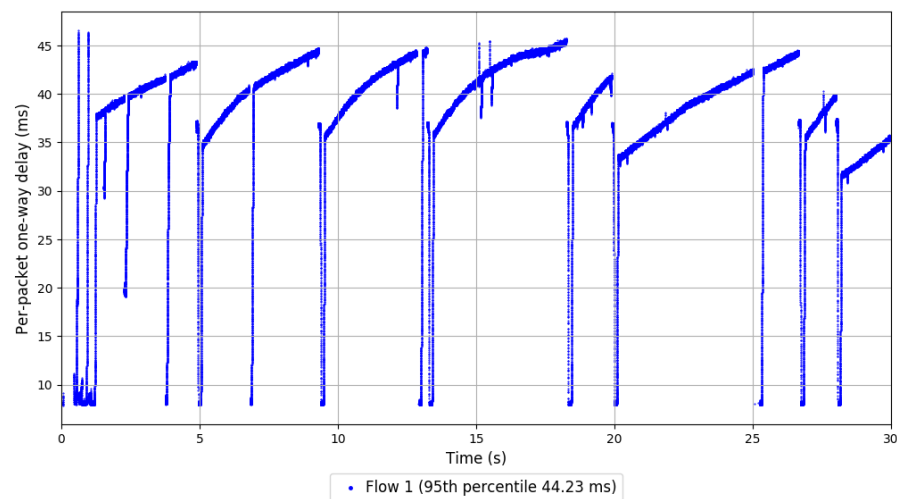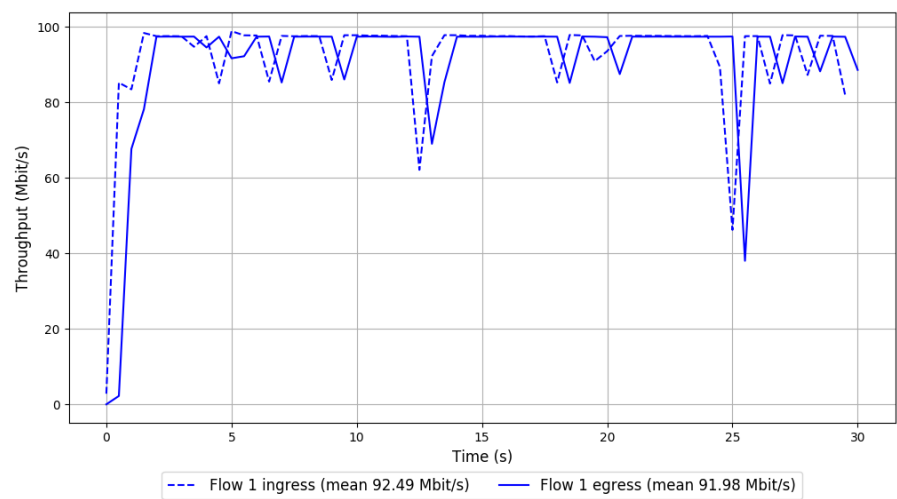

Flow 1 (95th percentile 48.31 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-06-27 21:10:36
End at: 2019-06-27 21:11:06
Local clock offset: -1.225 ms
Remote clock offset: -4.585 ms


# Below is generated by plot.py at 2019-06-27 21:23:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.98 Mbit/s
95th percentile per-packet one-way delay: 44.229 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 91.98 Mbit/s
95th percentile per-packet one-way delay: 44.229 ms
Loss rate: 0.46%
```

Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 92.49 Mbit/s)   Flow 1 egress (mean 91.98 Mbit/s)
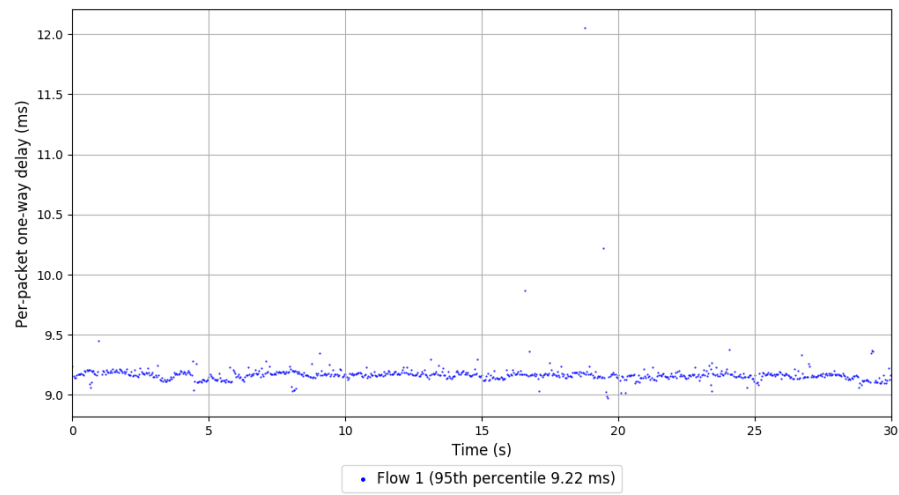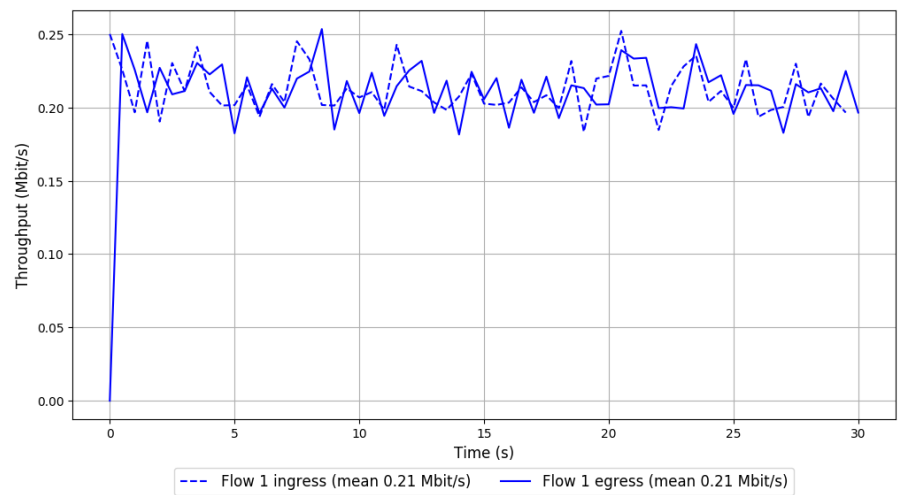

Flow 1 (95th percentile 44.23 ms)

```
Run 1: Statistics of SCReAM

Start at: 2019-06-27 19:05:58
End at: 2019-06-27 19:06:28
Local clock offset: -1.238 ms
Remote clock offset: -5.037 ms


# Below is generated by plot.py at 2019-06-27 21:23:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 9.222 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 9.222 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.21 Mbit/s)　　Flow 1 egress (mean 0.21 Mbit/s)
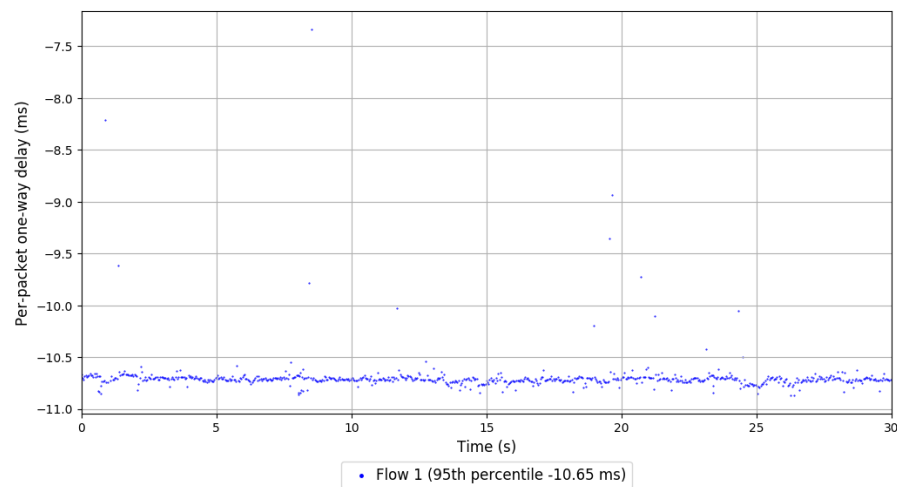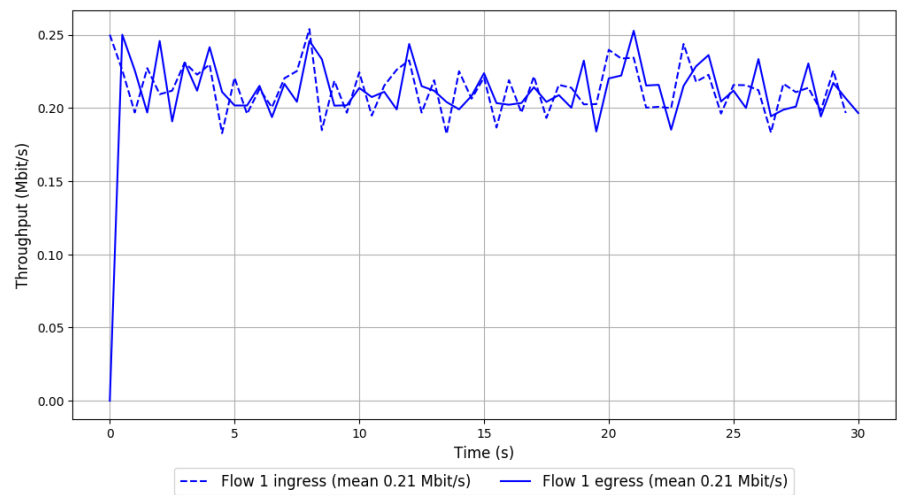

Flow 1 (95th percentile 9.22 ms)

```
Run 2: Statistics of SCReAM

Start at: 2019-06-27 19:31:32
End at: 2019-06-27 19:32:02
Local clock offset: -0.396 ms
Remote clock offset: -23.545 ms


# Below is generated by plot.py at 2019-06-27 21:23:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: -10.649 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: -10.649 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.21 Mbit/s)   Flow 1 egress (mean 0.21 Mbit/s)

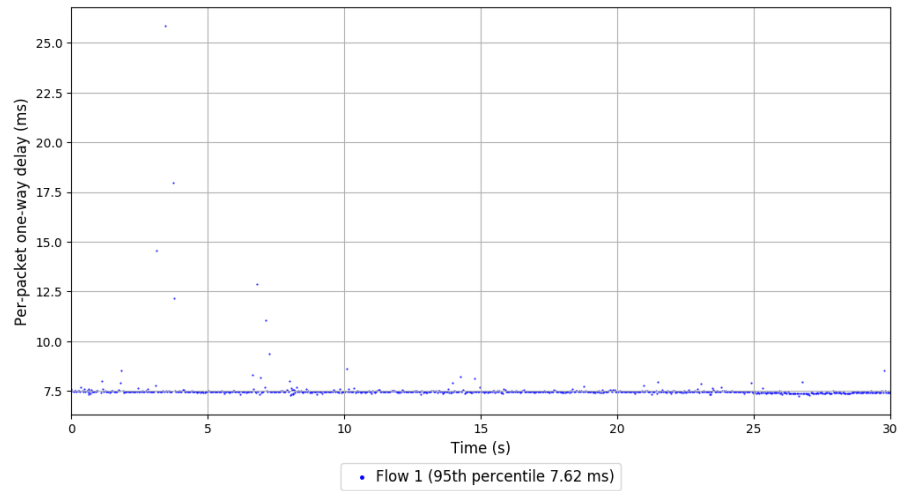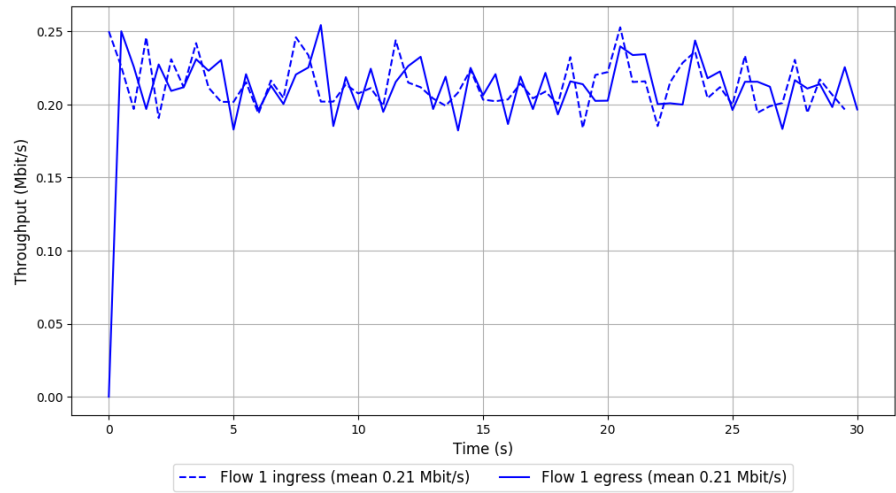Flow 1 (95th percentile -10.65 ms)

```
Run 3: Statistics of SCReAM

Start at: 2019-06-27 19:57:16
End at: 2019-06-27 19:57:46
Local clock offset: -2.699 ms
Remote clock offset: -7.077 ms


# Below is generated by plot.py at 2019-06-27 21:23:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 7.617 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 7.617 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.21 Mbit/s) — — —   Flow 1 egress (mean 0.21 Mbit/s) ———

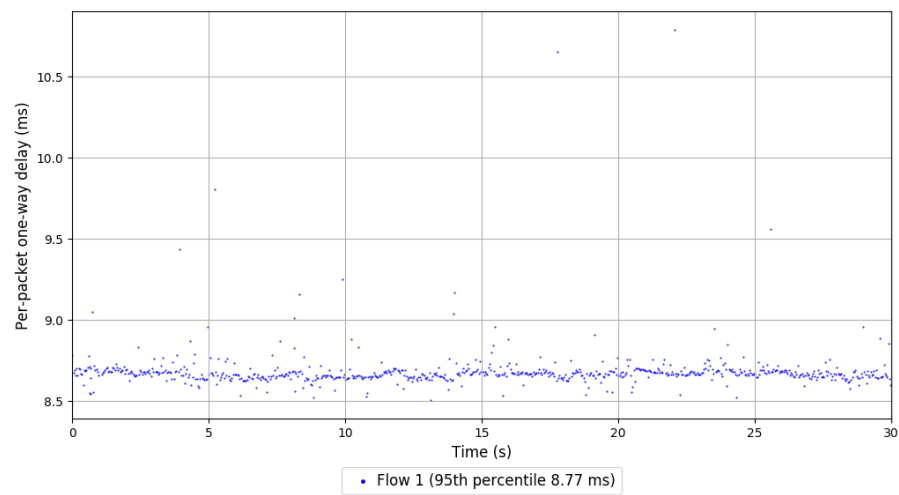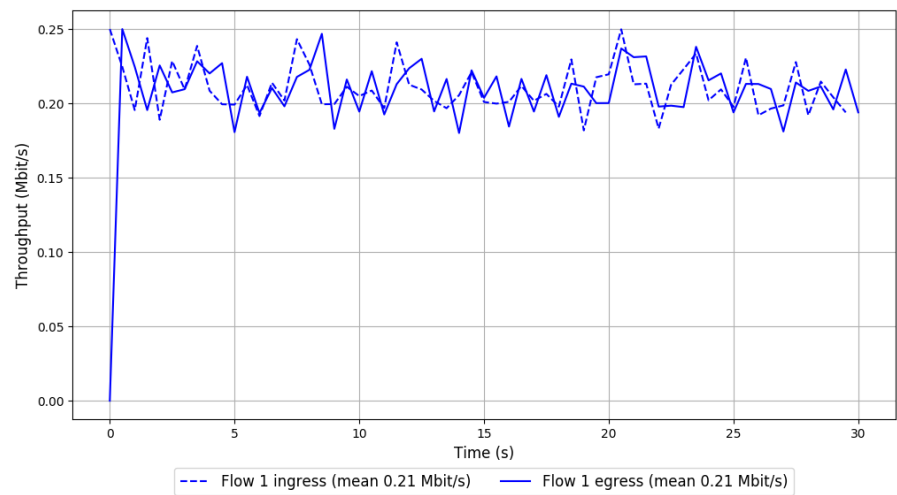Flow 1 (95th percentile 7.62 ms)

```
Run 4: Statistics of SCReAM

Start at: 2019-06-27 20:22:28
End at: 2019-06-27 20:22:58
Local clock offset: -0.952 ms
Remote clock offset: -6.983 ms


# Below is generated by plot.py at 2019-06-27 21:23:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 8.768 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 8.768 ms
Loss rate: 0.00%
```

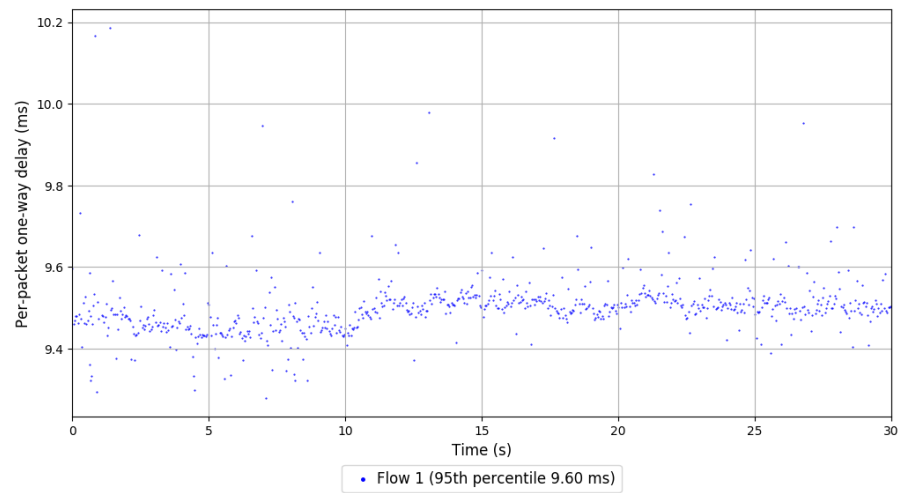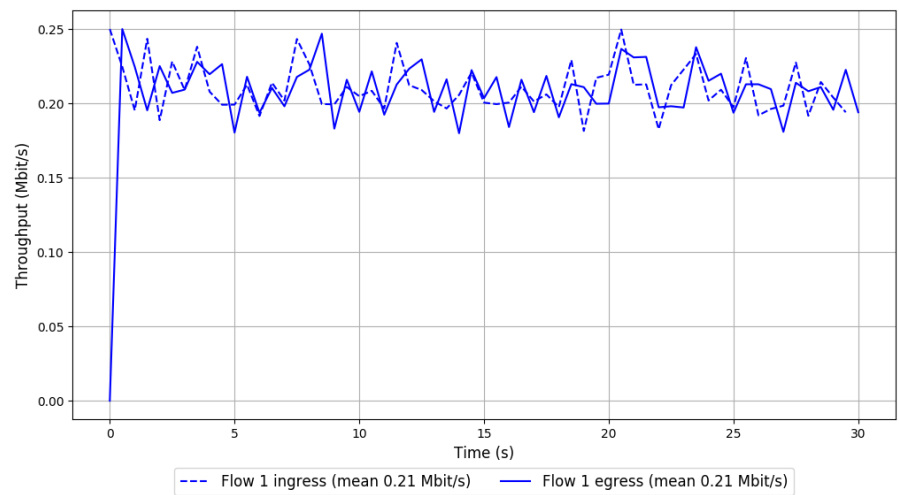# Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2019-06-27 20:47:38
End at: 2019-06-27 20:48:08
Local clock offset: -1.484 ms
Remote clock offset: -6.663 ms

# Below is generated by plot.py at 2019-06-27 21:23:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 9.602 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 9.602 ms
Loss rate: 0.00%
```

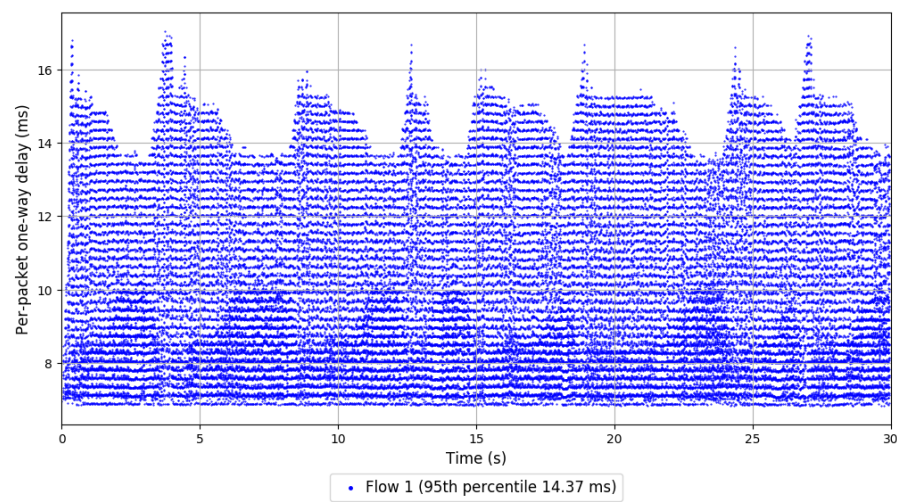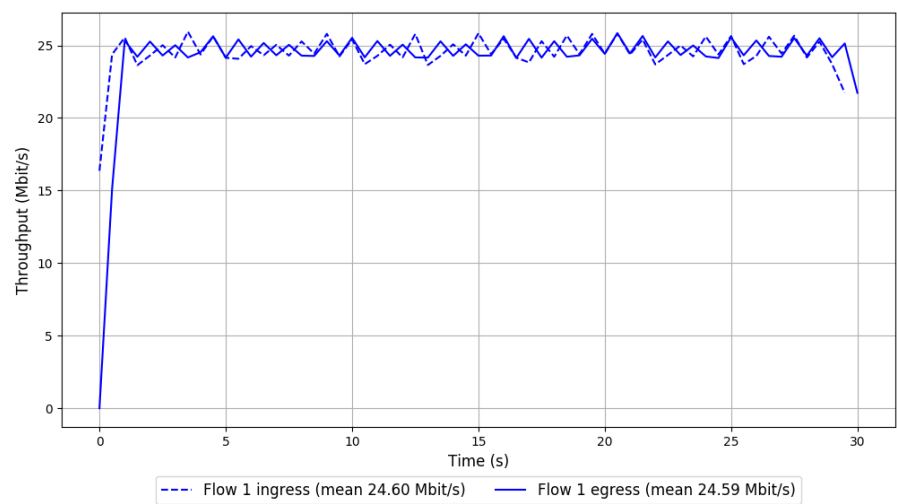Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2019-06-27 19:07:03
End at: 2019-06-27 19:07:33
Local clock offset: -1.006 ms
Remote clock offset: -6.811 ms


# Below is generated by plot.py at 2019-06-27 21:23:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.59 Mbit/s
95th percentile per-packet one-way delay: 14.371 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.59 Mbit/s
95th percentile per-packet one-way delay: 14.371 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

Flow 1 ingress (mean 24.60 Mbit/s) ----- Flow 1 egress (mean 24.59 Mbit/s) ——

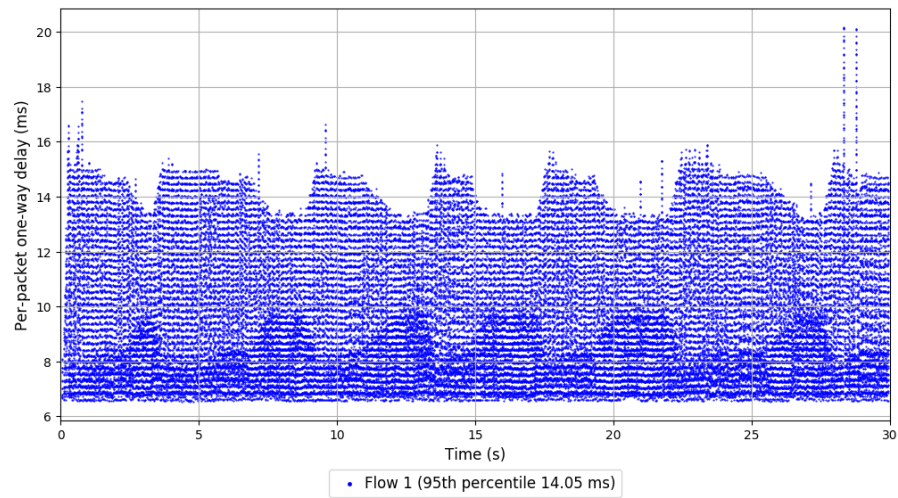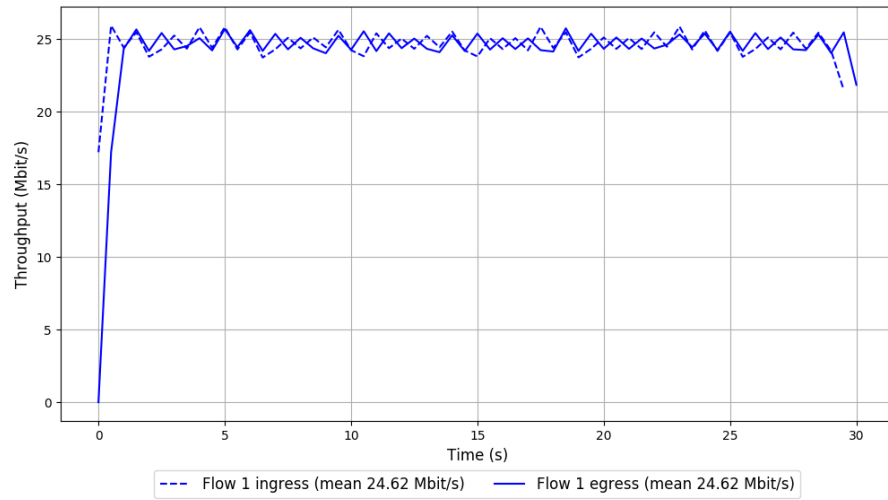

Flow 1 (95th percentile 14.37 ms) •

```
Run 2: Statistics of Sprout

Start at: 2019-06-27 19:32:42
End at: 2019-06-27 19:33:12
Local clock offset: -1.314 ms
Remote clock offset: -7.002 ms


# Below is generated by plot.py at 2019-06-27 21:23:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 14.047 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 14.047 ms
Loss rate: 0.00%
```

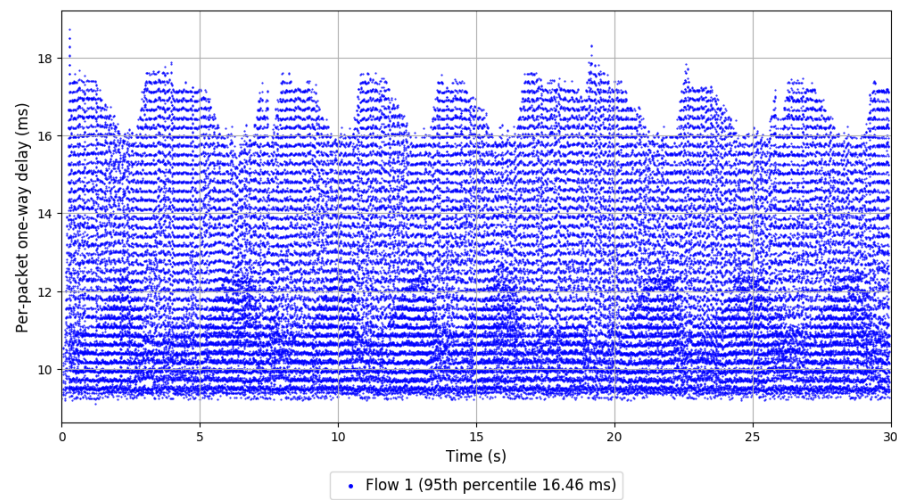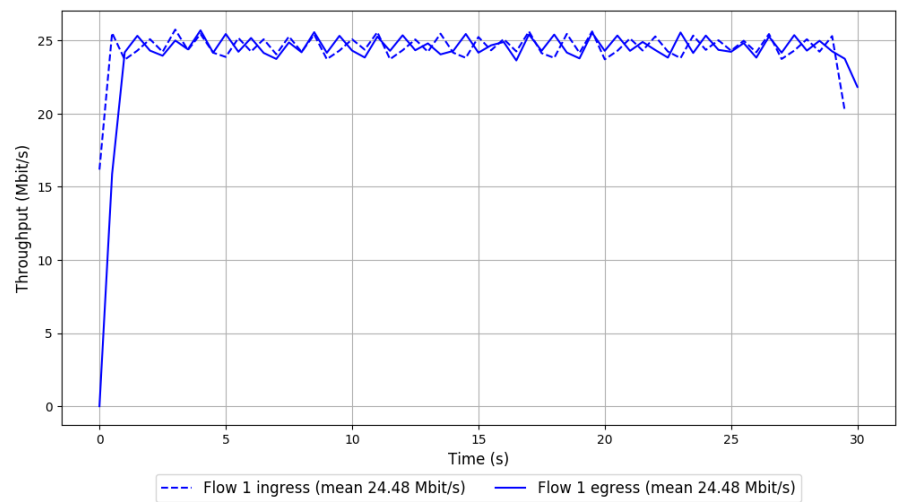Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-06-27 19:58:21
End at: 2019-06-27 19:58:51
Local clock offset: -0.106 ms
Remote clock offset: -5.741 ms


# Below is generated by plot.py at 2019-06-27 21:23:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.48 Mbit/s
95th percentile per-packet one-way delay: 16.457 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.48 Mbit/s
95th percentile per-packet one-way delay: 16.457 ms
Loss rate: 0.00%
```

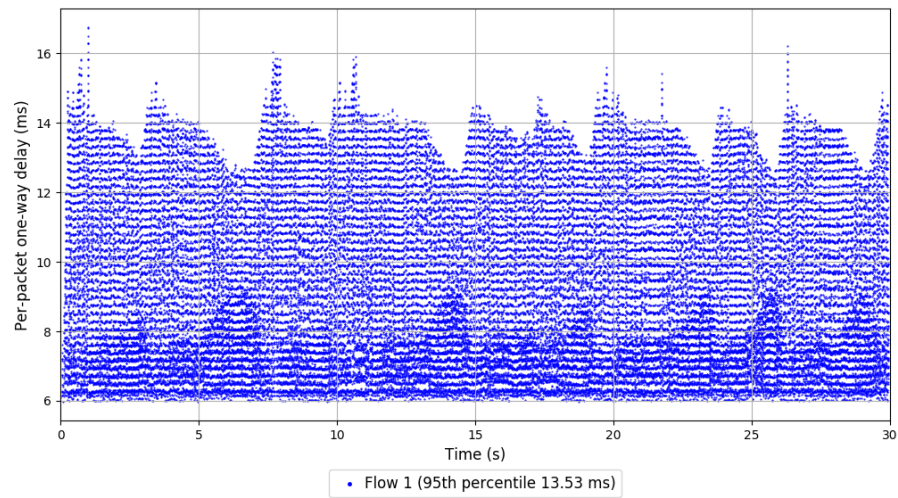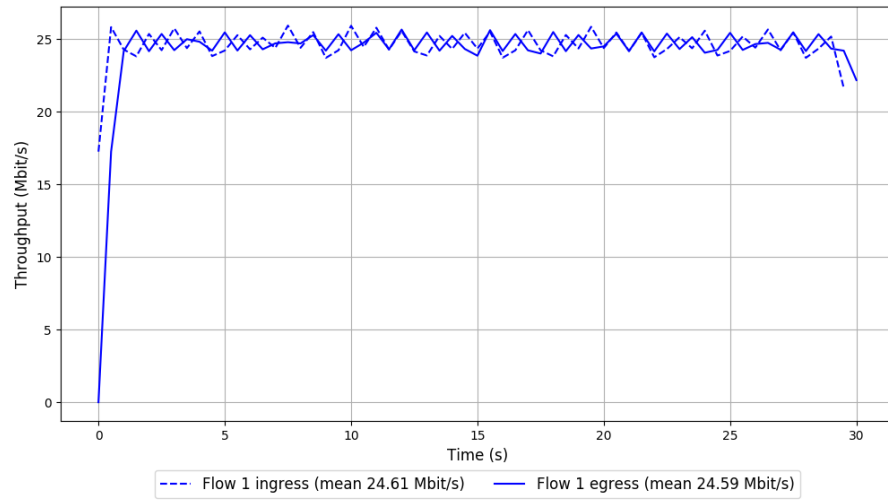Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-06-27 20:23:33
End at: 2019-06-27 20:24:03
Local clock offset: -1.023 ms
Remote clock offset: -6.547 ms


# Below is generated by plot.py at 2019-06-27 21:23:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.59 Mbit/s
95th percentile per-packet one-way delay: 13.528 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 24.59 Mbit/s
95th percentile per-packet one-way delay: 13.528 ms
Loss rate: 0.03%
```

Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 24.61 Mbit/s)   Flow 1 egress (mean 24.59 Mbit/s)

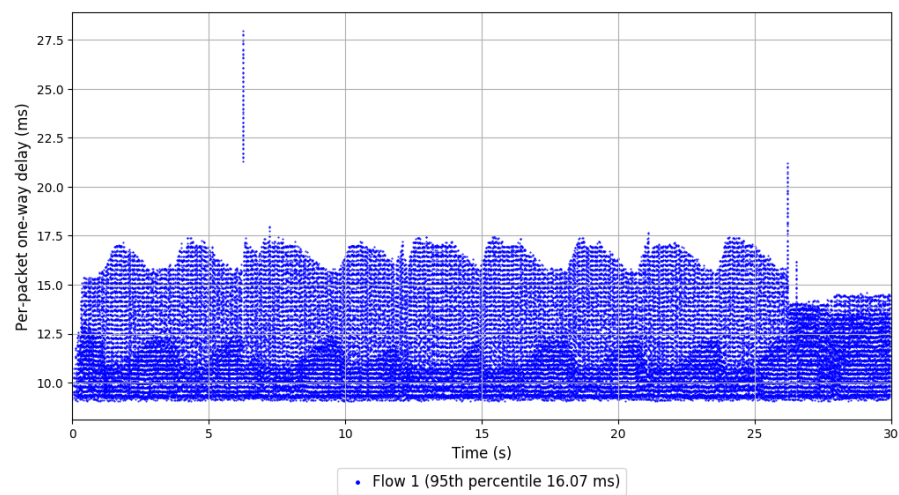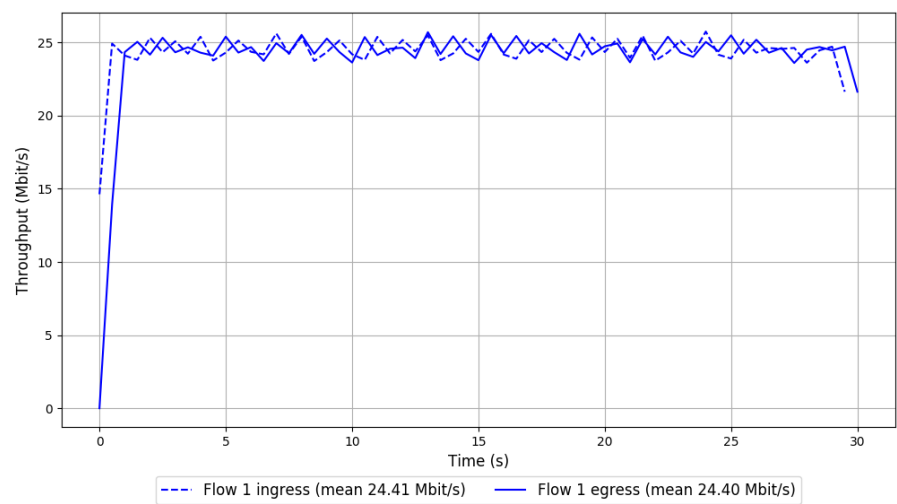• Flow 1 (95th percentile 13.53 ms)

```
Run 5: Statistics of Sprout

Start at: 2019-06-27 20:48:43
End at: 2019-06-27 20:49:13
Local clock offset: -1.928 ms
Remote clock offset: -7.424 ms


# Below is generated by plot.py at 2019-06-27 21:23:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.40 Mbit/s
95th percentile per-packet one-way delay: 16.075 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.40 Mbit/s
95th percentile per-packet one-way delay: 16.075 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

Flow 1 ingress (mean 24.41 Mbit/s) --- Flow 1 egress (mean 24.40 Mbit/s)

Flow 1 (95th percentile 16.07 ms)
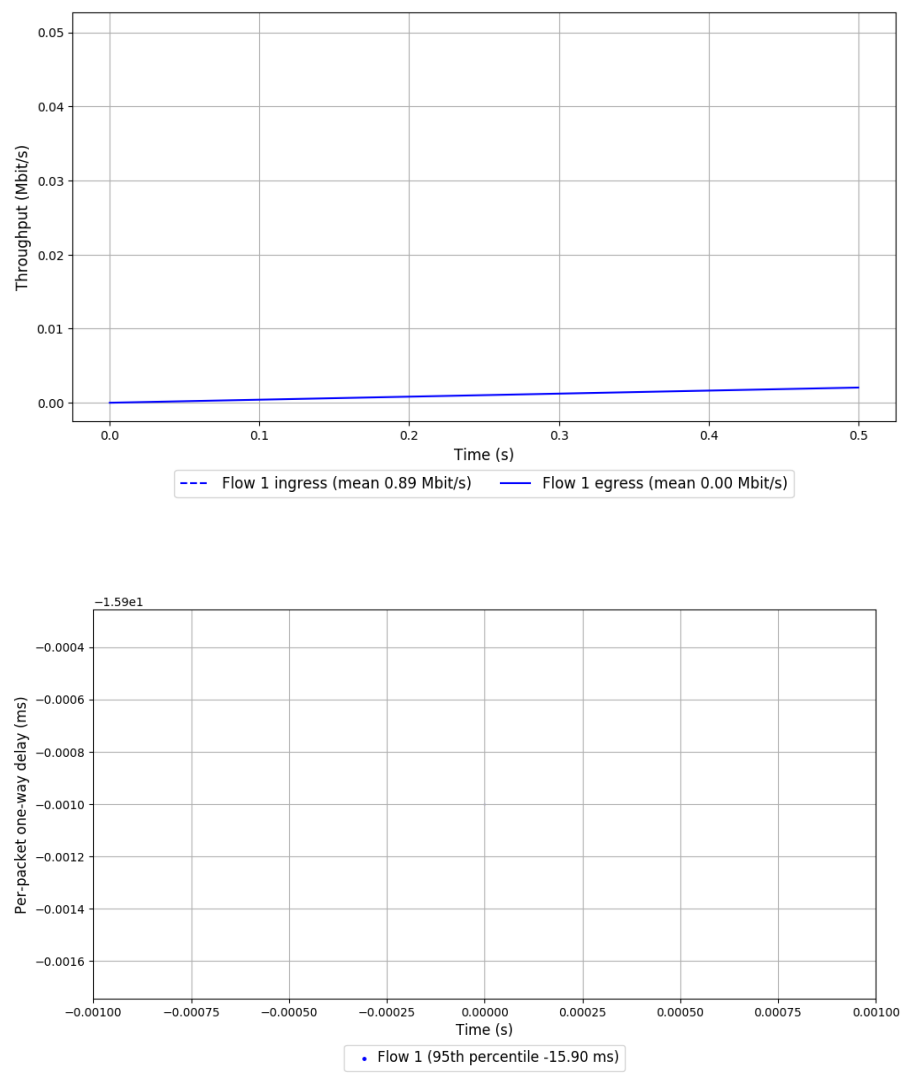
```
Run 1: Statistics of TaoVA-100x

Start at: 2019-06-27 19:19:47
End at: 2019-06-27 19:20:17
Local clock offset: -2.133 ms
Remote clock offset: -33.621 ms
```

Run 1: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 0.89 Mbit/s) — Flow 1 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile -15.90 ms)

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

Start at: 2019-06-27 19:45:22
End at: 2019-06-27 19:45:52
Local clock offset: -1.499 ms
Remote clock offset: -4.952 ms
```
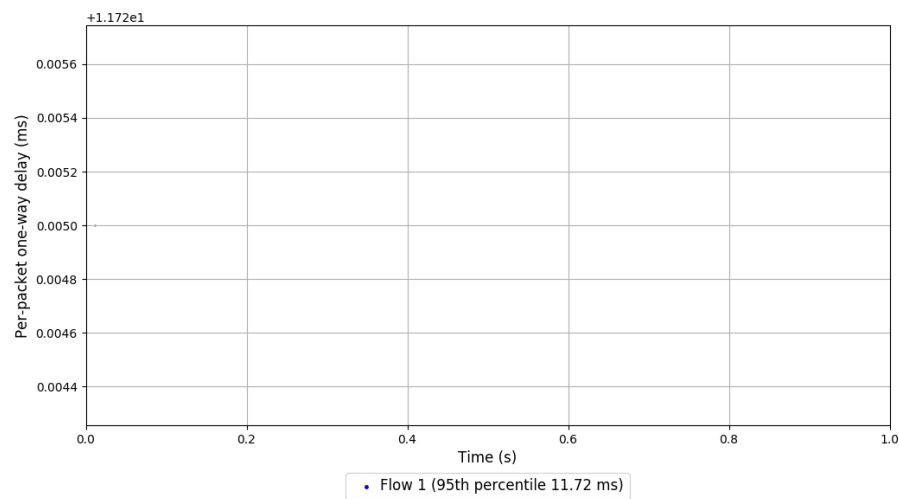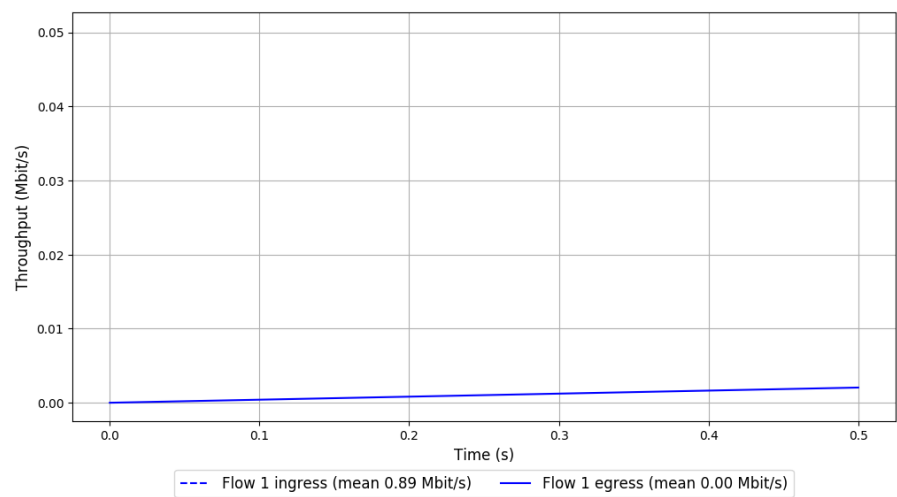
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 0.89 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 11.72 ms)

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

Start at: 2019-06-27 20:10:57
End at: 2019-06-27 20:11:27
Local clock offset: -1.822 ms
Remote clock offset: -5.838 ms
```
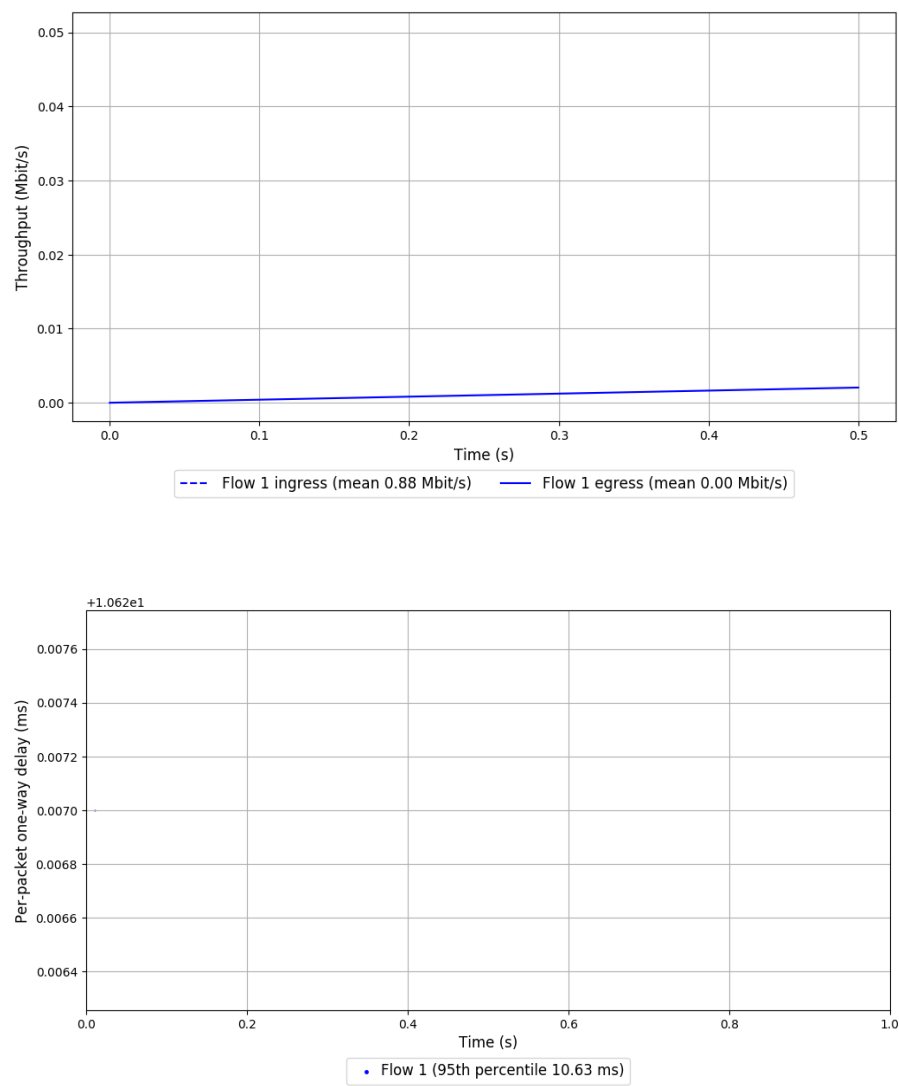
Run 3: Report of TaoVA-100x — Data Link
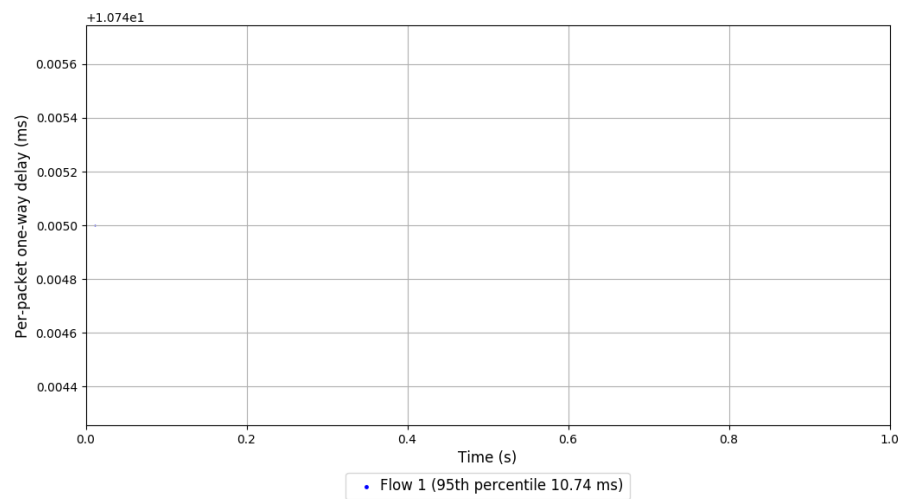
```
Run 4: Statistics of TaoVA-100x

Start at: 2019-06-27 20:36:04
End at: 2019-06-27 20:36:34
Local clock offset: -1.078 ms
Remote clock offset: -5.056 ms
```
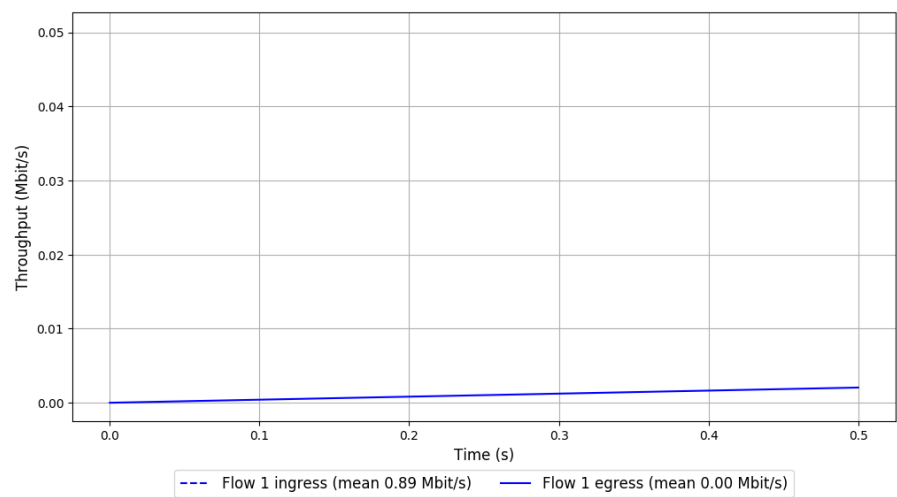
Run 4: Report of TaoVA-100x — Data Link

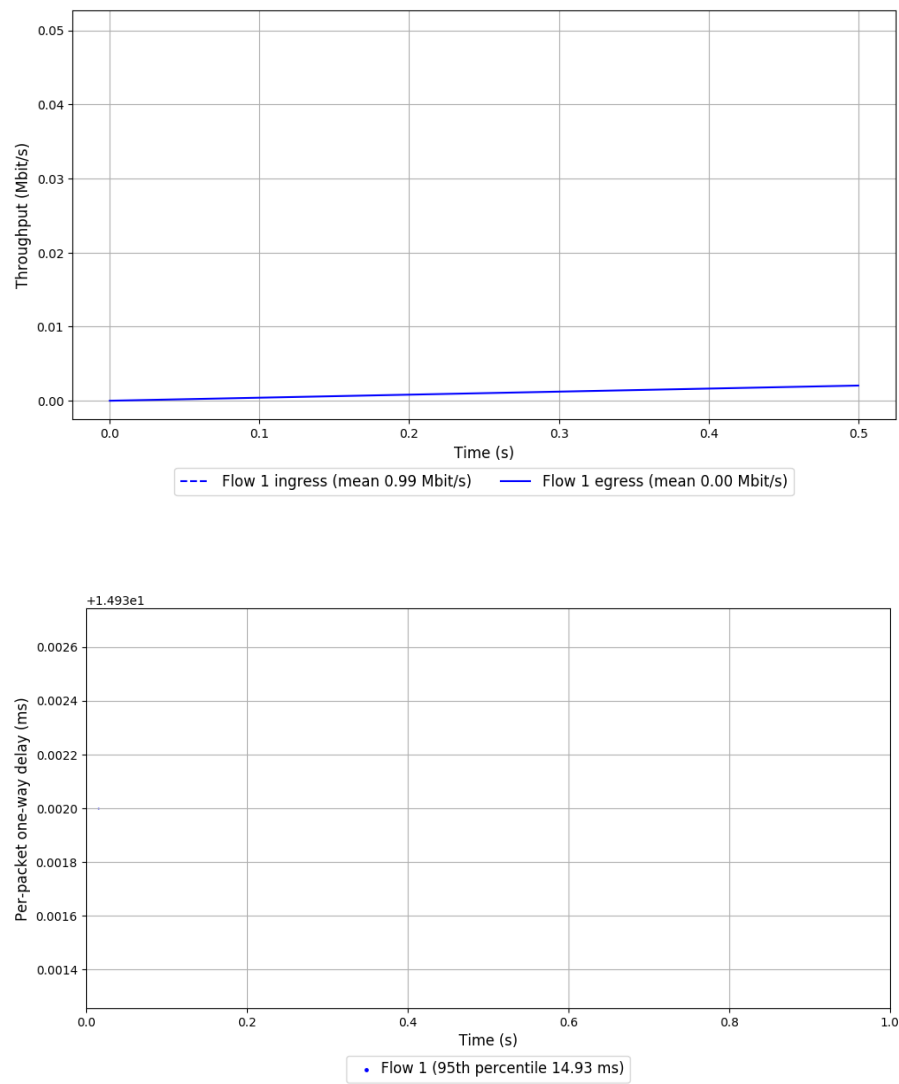

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```
Run 5: Statistics of TaoVA-100x

Start at: 2019-06-27 21:01:10
End at: 2019-06-27 21:01:40
Local clock offset: -6.874 ms
Remote clock offset: -3.622 ms
```

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

Flow 1 ingress (mean 0.99 Mbit/s)   Flow 1 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 14.93 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2019-06-27 19:22:04
End at: 2019-06-27 19:22:34
Local clock offset: -2.109 ms
Remote clock offset: -7.185 ms


# Below is generated by plot.py at 2019-06-27 21:24:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.16 Mbit/s
95th percentile per-packet one-way delay: 13.296 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 74.16 Mbit/s
95th percentile per-packet one-way delay: 13.296 ms
Loss rate: 0.54%
```
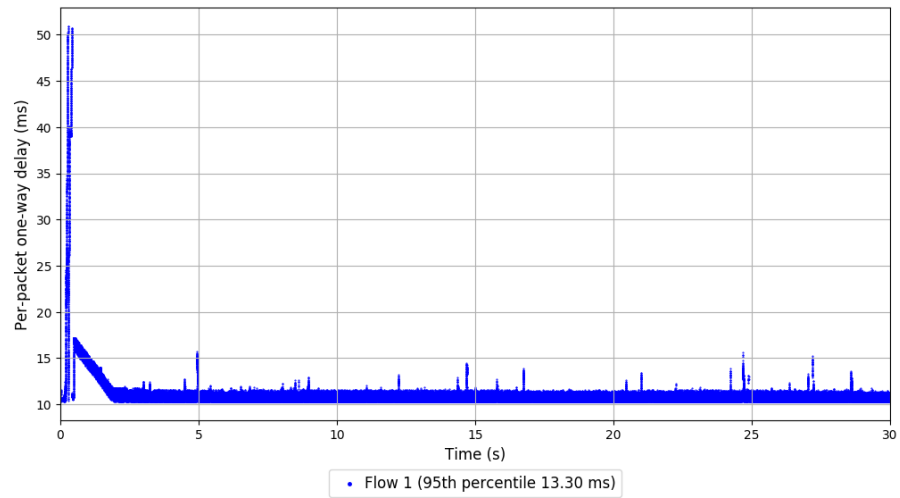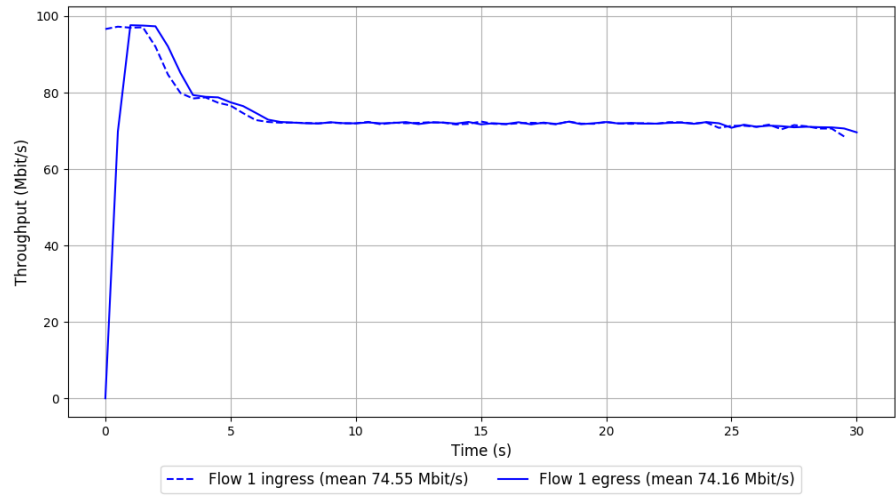
Run 1: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 74.55 Mbit/s)   Flow 1 egress (mean 74.16 Mbit/s)
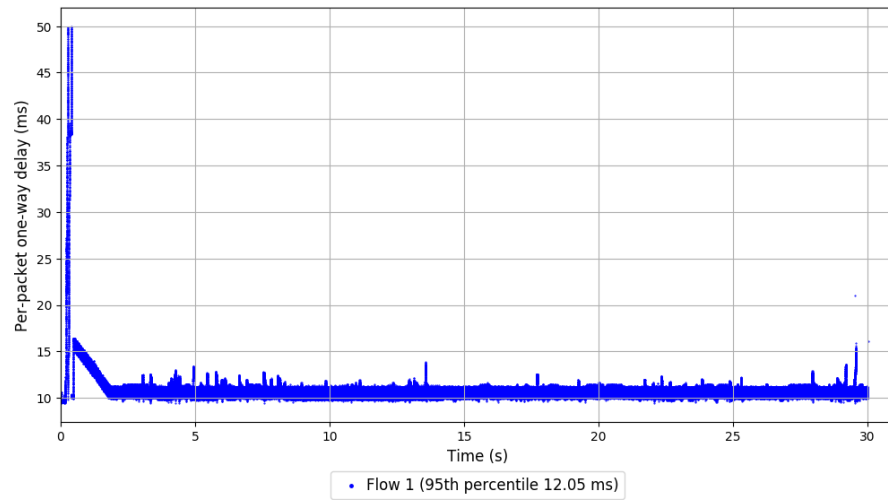
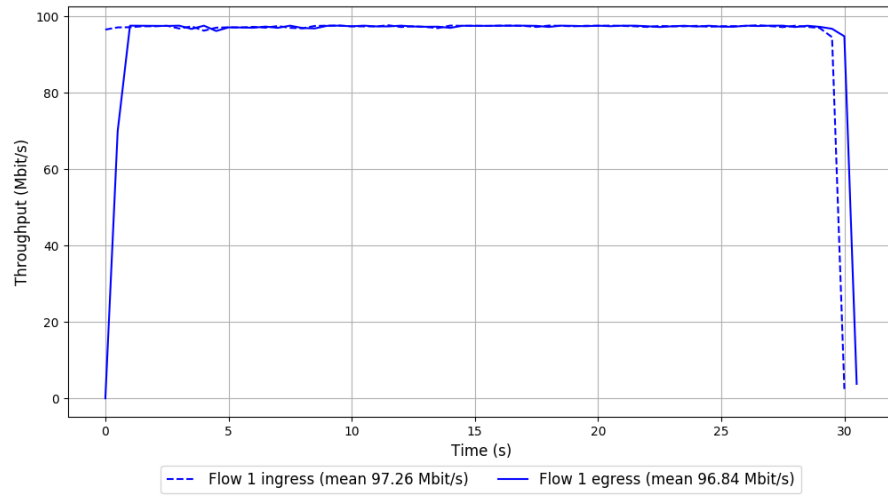

• Flow 1 (95th percentile 13.30 ms)

```
Run 2: Statistics of TCP Vegas

Start at: 2019-06-27 19:47:42
End at: 2019-06-27 19:48:12
Local clock offset: 0.282 ms
Remote clock offset: -5.364 ms


# Below is generated by plot.py at 2019-06-27 21:24:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.84 Mbit/s
95th percentile per-packet one-way delay: 12.048 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 96.84 Mbit/s
95th percentile per-packet one-way delay: 12.048 ms
Loss rate: 0.41%
```

Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-06-27 20:13:12
End at: 2019-06-27 20:13:42
Local clock offset: -1.087 ms
Remote clock offset: -7.04 ms


# Below is generated by plot.py at 2019-06-27 21:24:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.79 Mbit/s
95th percentile per-packet one-way delay: 9.578 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 80.79 Mbit/s
95th percentile per-packet one-way delay: 9.578 ms
Loss rate: 0.48%
```
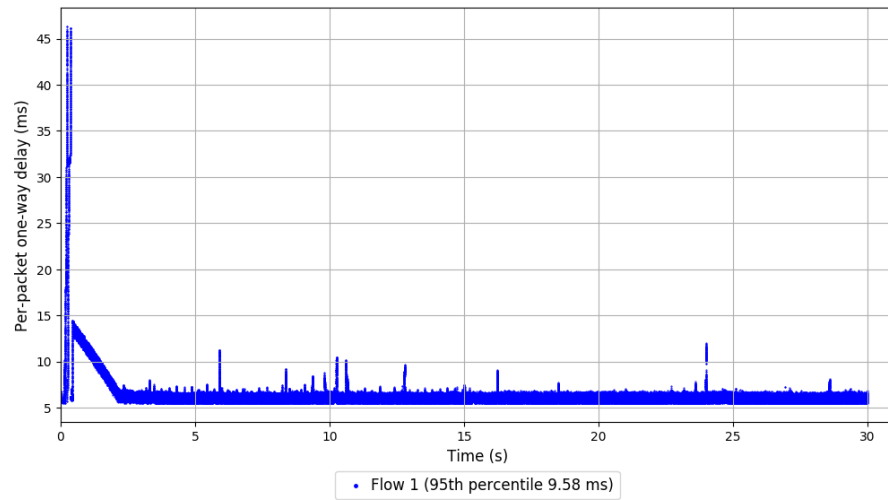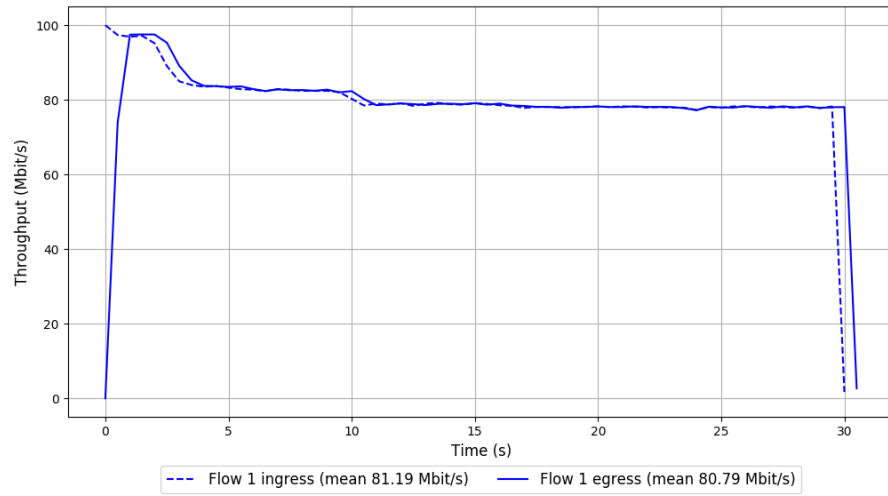
Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 81.19 Mbit/s)   Flow 1 egress (mean 80.79 Mbit/s)
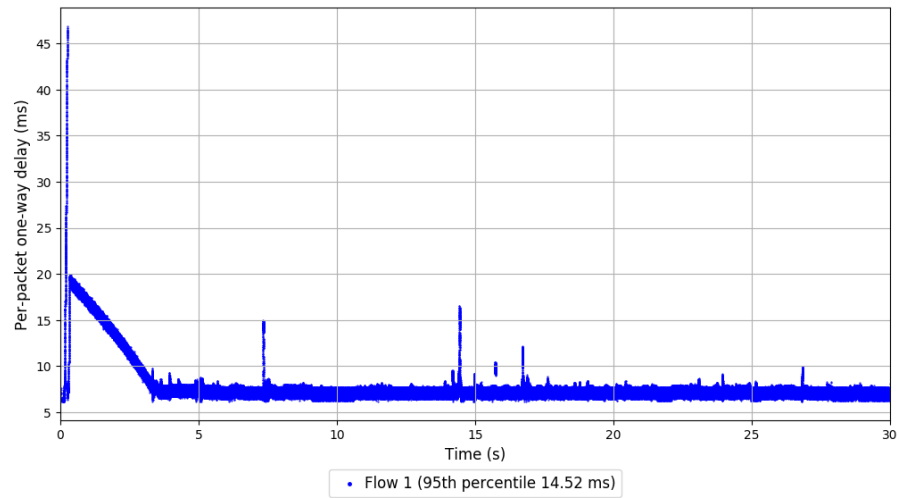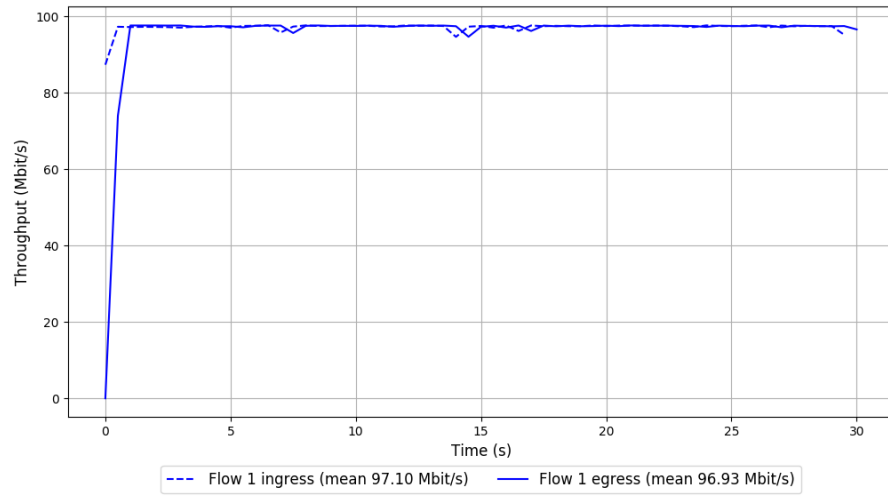

Flow 1 (95th percentile 9.58 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2019-06-27 20:38:18
End at: 2019-06-27 20:38:48
Local clock offset: -1.407 ms
Remote clock offset: -6.753 ms


# Below is generated by plot.py at 2019-06-27 21:24:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.93 Mbit/s
95th percentile per-packet one-way delay: 14.519 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 96.93 Mbit/s
95th percentile per-packet one-way delay: 14.519 ms
Loss rate: 0.17%
```
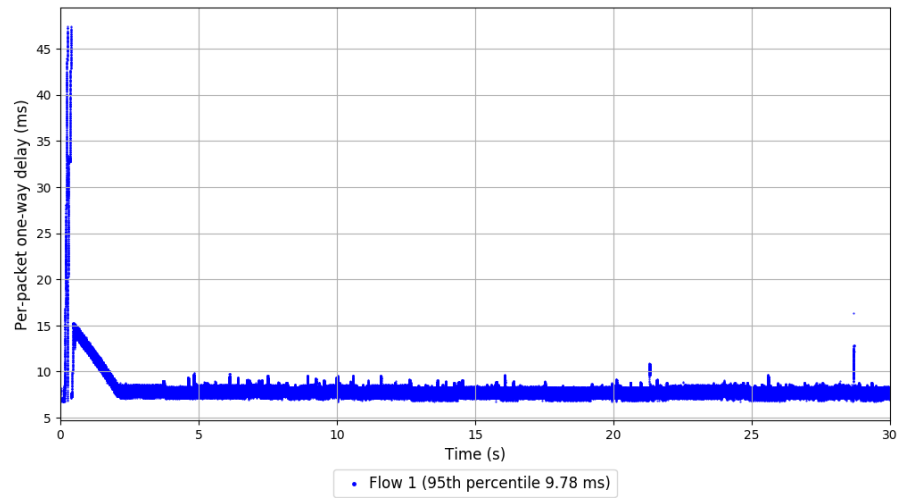
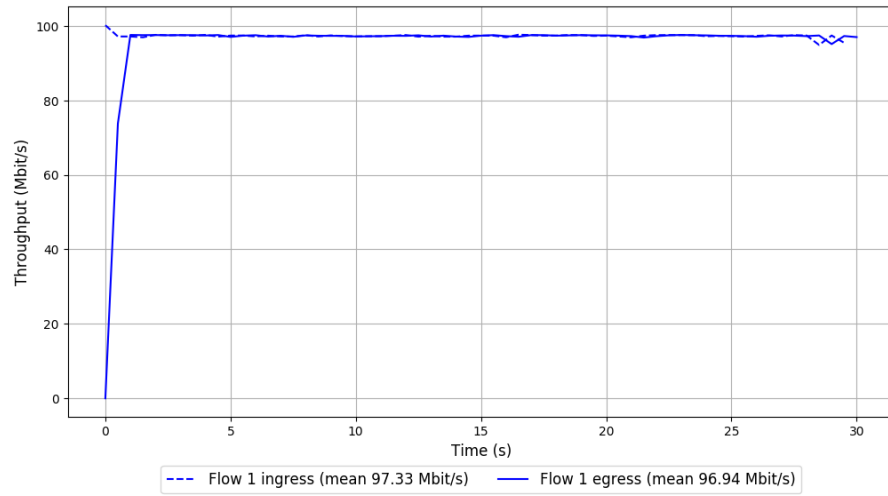Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2019-06-27 21:03:27
End at: 2019-06-27 21:03:57
Local clock offset: -0.997 ms
Remote clock offset: -5.794 ms


# Below is generated by plot.py at 2019-06-27 21:24:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.94 Mbit/s
95th percentile per-packet one-way delay: 9.780 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 96.94 Mbit/s
95th percentile per-packet one-way delay: 9.780 ms
Loss rate: 0.40%
```

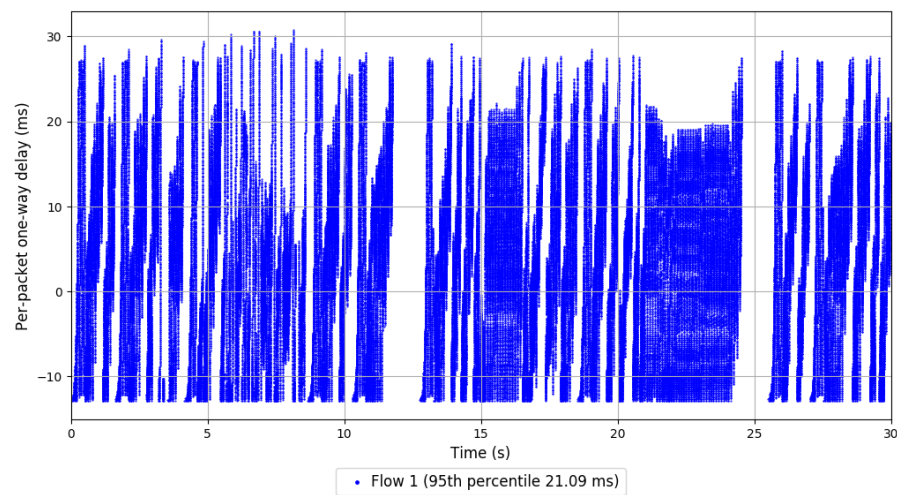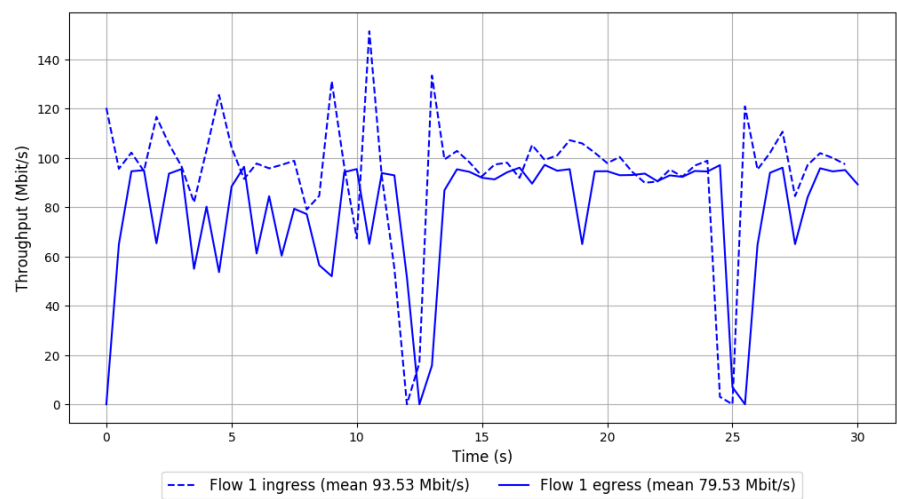Run 5: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2019-06-27 19:25:38
End at: 2019-06-27 19:26:08
Local clock offset: -0.827 ms
Remote clock offset: -25.908 ms

# Below is generated by plot.py at 2019-06-27 21:24:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.53 Mbit/s
95th percentile per-packet one-way delay: 21.094 ms
Loss rate: 14.89%
-- Flow 1:
Average throughput: 79.53 Mbit/s
95th percentile per-packet one-way delay: 21.094 ms
Loss rate: 14.89%
```

Run 1: Report of Verus — Data Link

Flow 1 ingress (mean 93.53 Mbit/s) — — — Flow 1 egress (mean 79.53 Mbit/s)

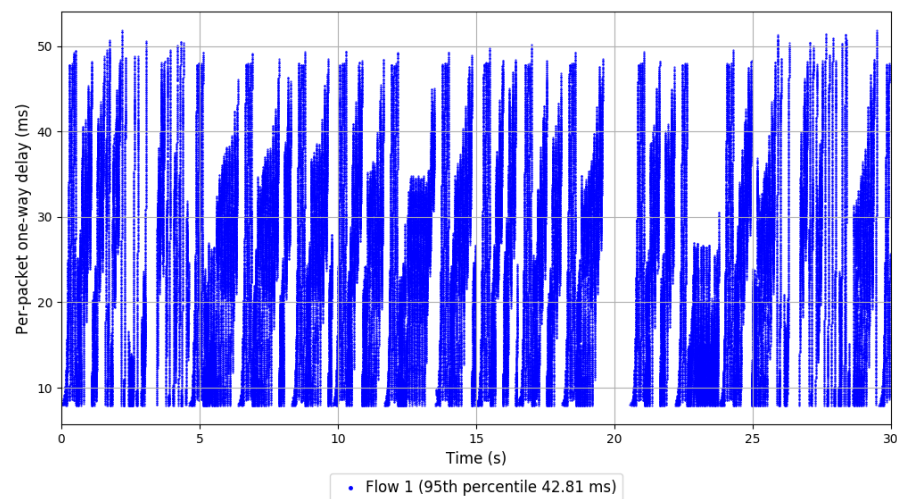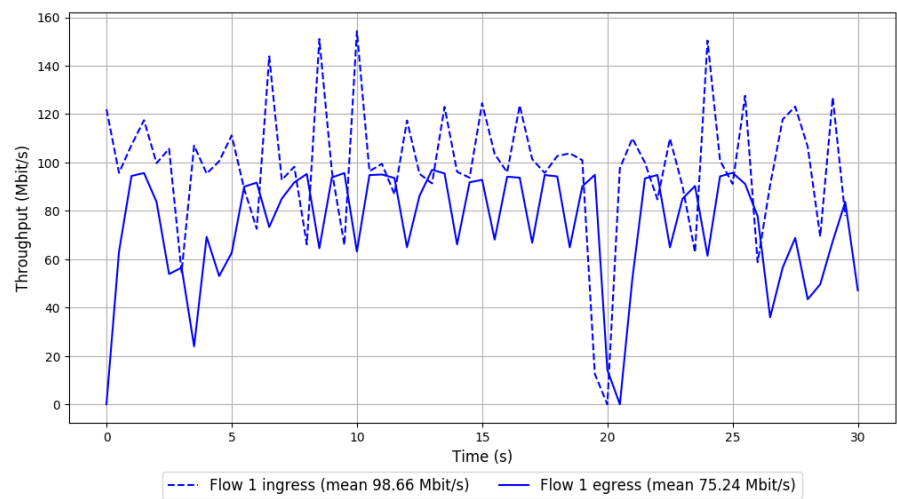

• Flow 1 (95th percentile 21.09 ms)

```
Run 2: Statistics of Verus

Start at: 2019-06-27 19:51:21
End at: 2019-06-27 19:51:51
Local clock offset: -2.036 ms
Remote clock offset: -5.945 ms


# Below is generated by plot.py at 2019-06-27 21:24:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.24 Mbit/s
95th percentile per-packet one-way delay: 42.810 ms
Loss rate: 23.70%
-- Flow 1:
Average throughput: 75.24 Mbit/s
95th percentile per-packet one-way delay: 42.810 ms
Loss rate: 23.70%
```
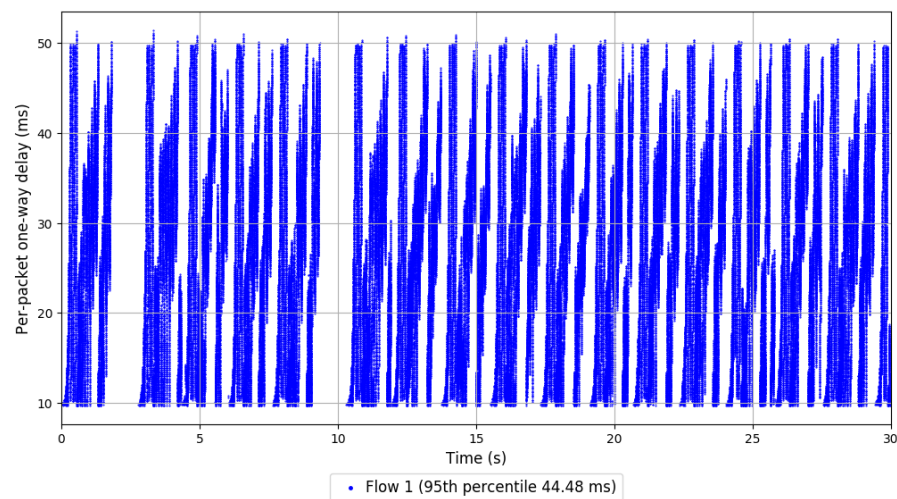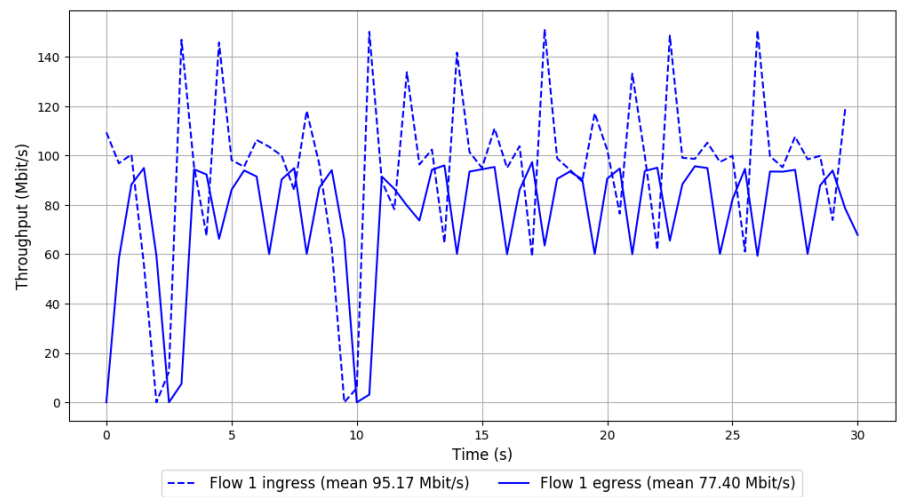
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-06-27 20:16:46
End at: 2019-06-27 20:17:16
Local clock offset: -1.775 ms
Remote clock offset: -6.469 ms


# Below is generated by plot.py at 2019-06-27 21:25:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.40 Mbit/s
95th percentile per-packet one-way delay: 44.483 ms
Loss rate: 18.67%
-- Flow 1:
Average throughput: 77.40 Mbit/s
95th percentile per-packet one-way delay: 44.483 ms
Loss rate: 18.67%
```

Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 95.17 Mbit/s) --- Flow 1 egress (mean 77.40 Mbit/s) —

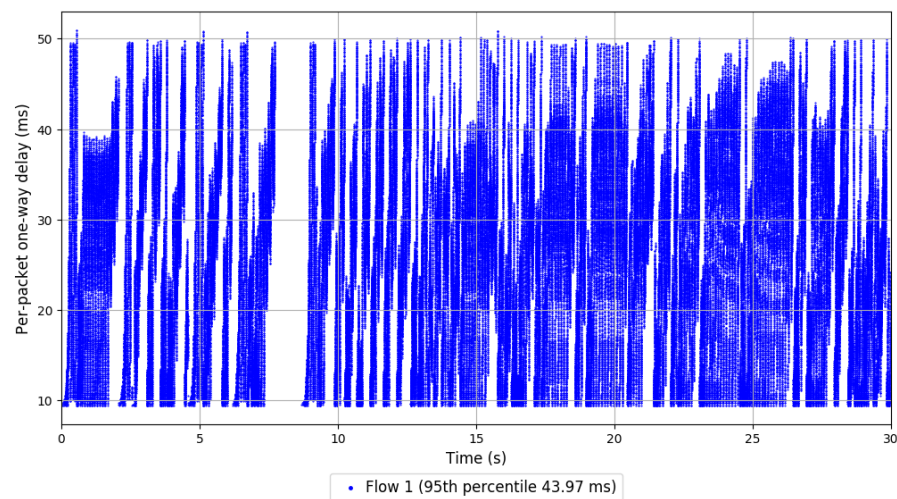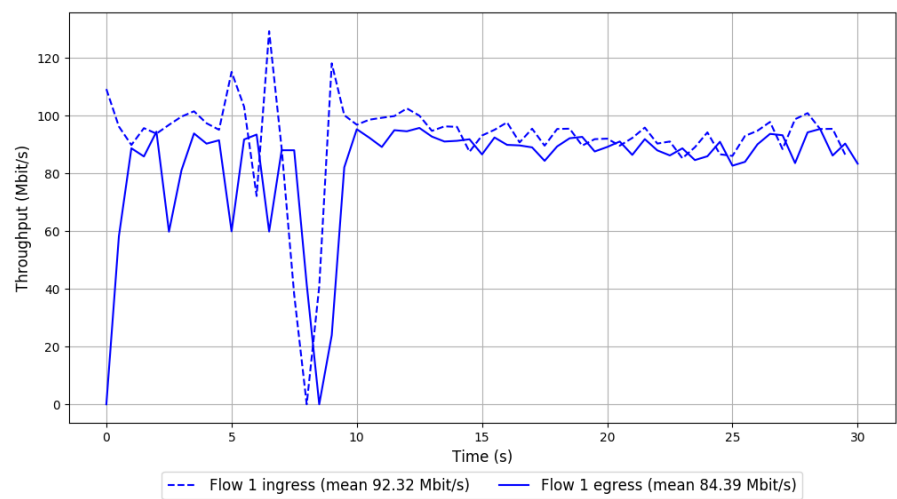

• Flow 1 (95th percentile 44.48 ms)

```
Run 4: Statistics of Verus

Start at: 2019-06-27 20:41:49
End at: 2019-06-27 20:42:19
Local clock offset: -1.892 ms
Remote clock offset: -6.968 ms


# Below is generated by plot.py at 2019-06-27 21:25:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.39 Mbit/s
95th percentile per-packet one-way delay: 43.965 ms
Loss rate: 8.59%
-- Flow 1:
Average throughput: 84.39 Mbit/s
95th percentile per-packet one-way delay: 43.965 ms
Loss rate: 8.59%
```

Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-06-27 21:07:05
End at: 2019-06-27 21:07:35
Local clock offset: -0.898 ms
Remote clock offset: -6.73 ms


# Below is generated by plot.py at 2019-06-27 21:25:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.08 Mbit/s
95th percentile per-packet one-way delay: 43.534 ms
Loss rate: 18.19%
-- Flow 1:
Average throughput: 83.08 Mbit/s
95th percentile per-packet one-way delay: 43.534 ms
Loss rate: 18.19%
```
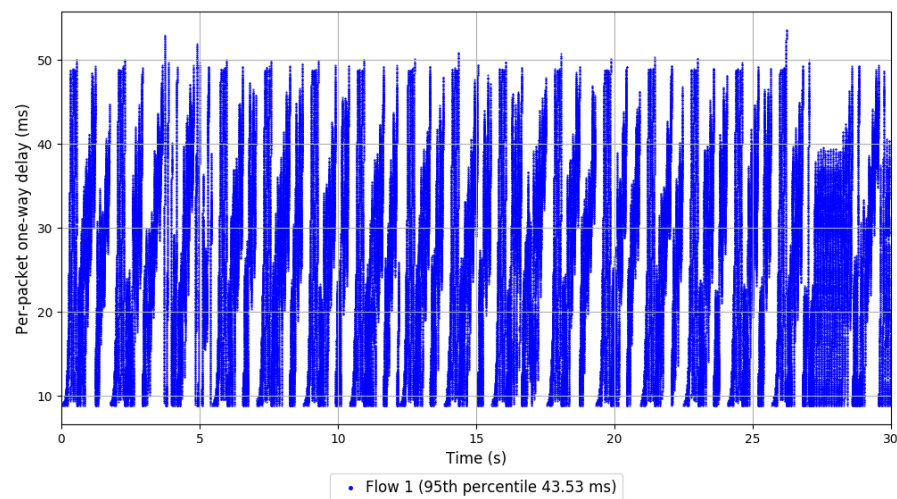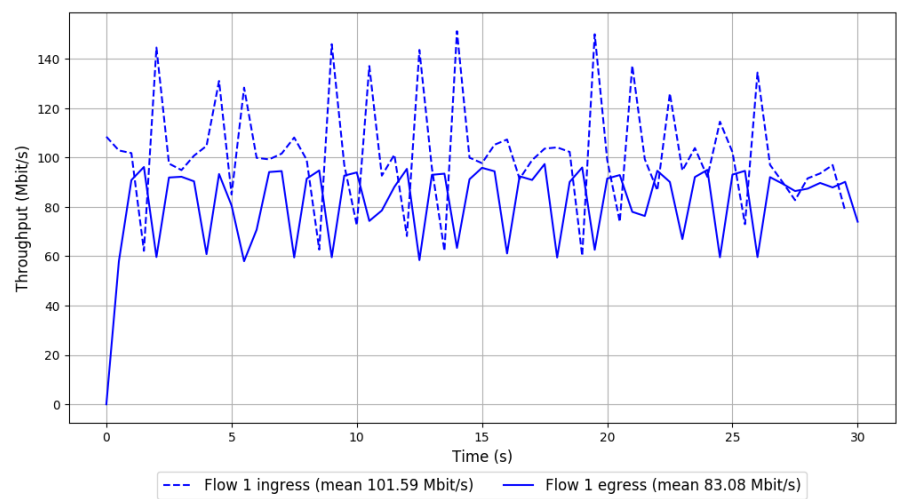
Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 101.59 Mbit/s)   Flow 1 egress (mean 83.08 Mbit/s)

• Flow 1 (95th percentile 43.53 ms)

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-06-27 19:23:14
End at: 2019-06-27 19:23:44
Local clock offset: -1.919 ms
Remote clock offset: -7.716 ms


# Below is generated by plot.py at 2019-06-27 21:25:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.14 Mbit/s
95th percentile per-packet one-way delay: 11.061 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 87.14 Mbit/s
95th percentile per-packet one-way delay: 11.061 ms
Loss rate: 0.01%
```
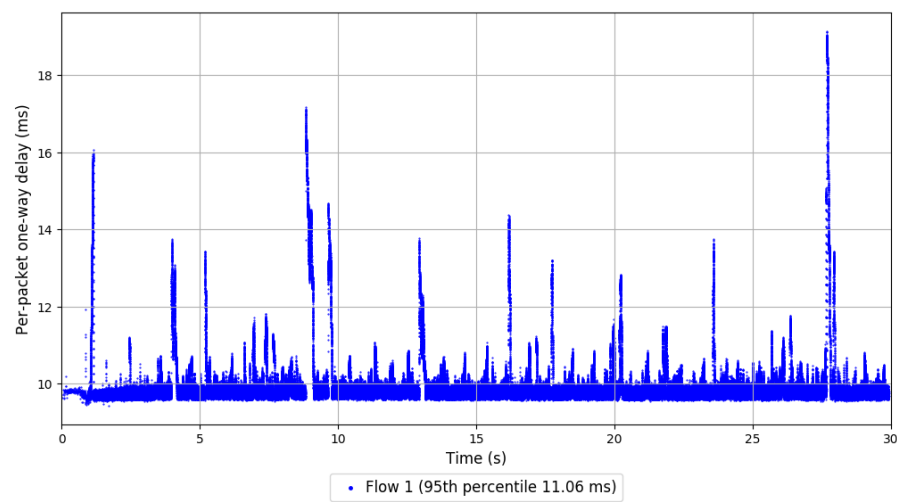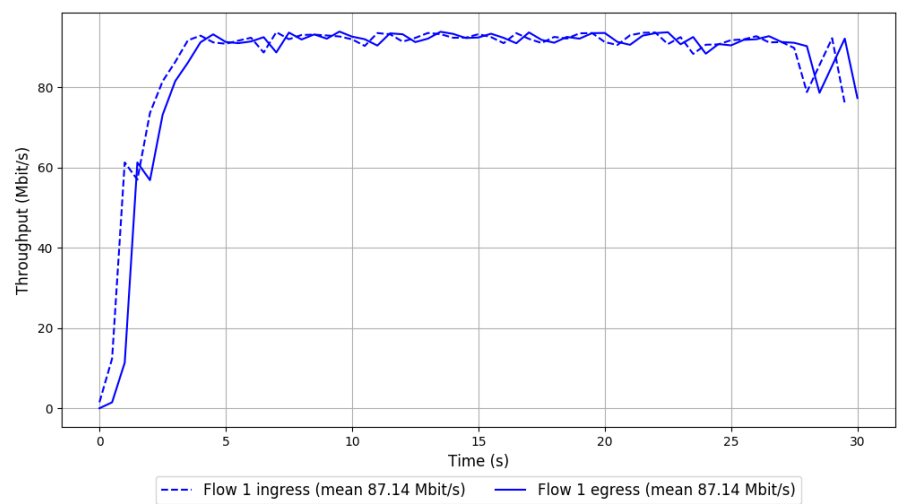
Run 1: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 87.14 Mbit/s) --- Flow 1 egress (mean 87.14 Mbit/s)

• Flow 1 (95th percentile 11.06 ms)

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-06-27 19:48:53
End at: 2019-06-27 19:49:23
Local clock offset: -1.998 ms
Remote clock offset: -6.25 ms


# Below is generated by plot.py at 2019-06-27 21:25:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.86 Mbit/s
95th percentile per-packet one-way delay: 8.928 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.86 Mbit/s
95th percentile per-packet one-way delay: 8.928 ms
Loss rate: 0.00%
```
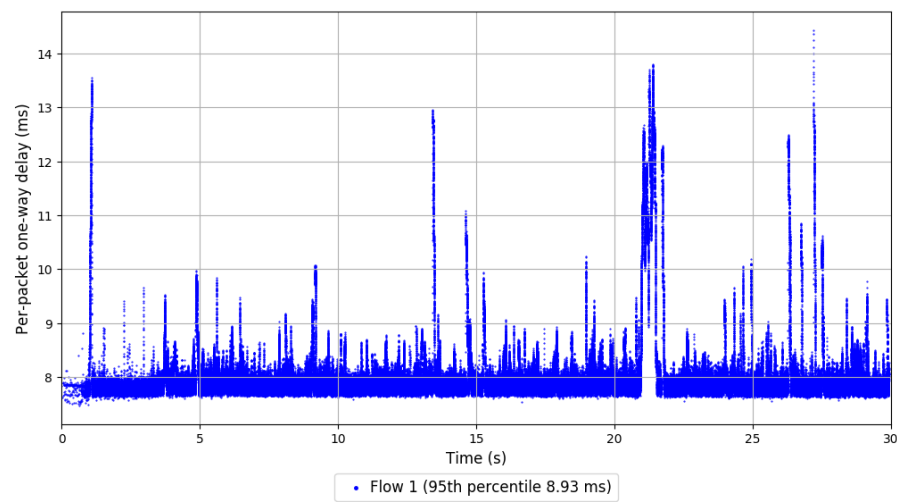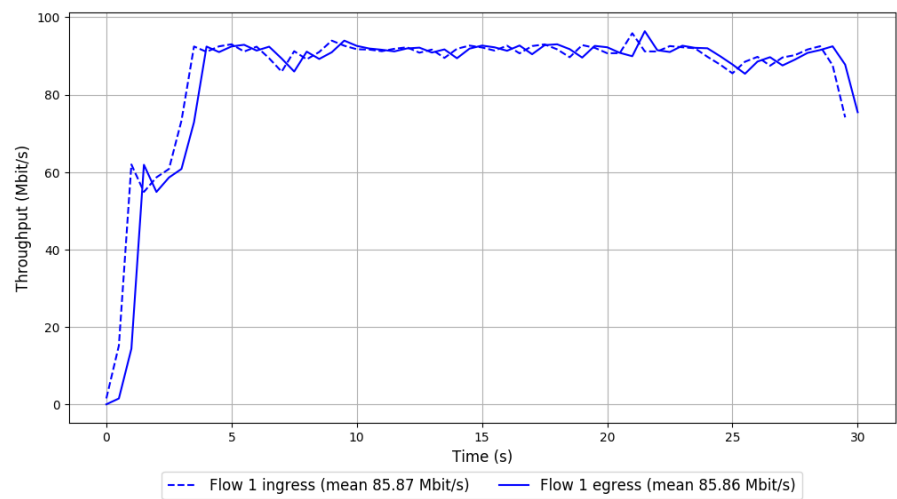
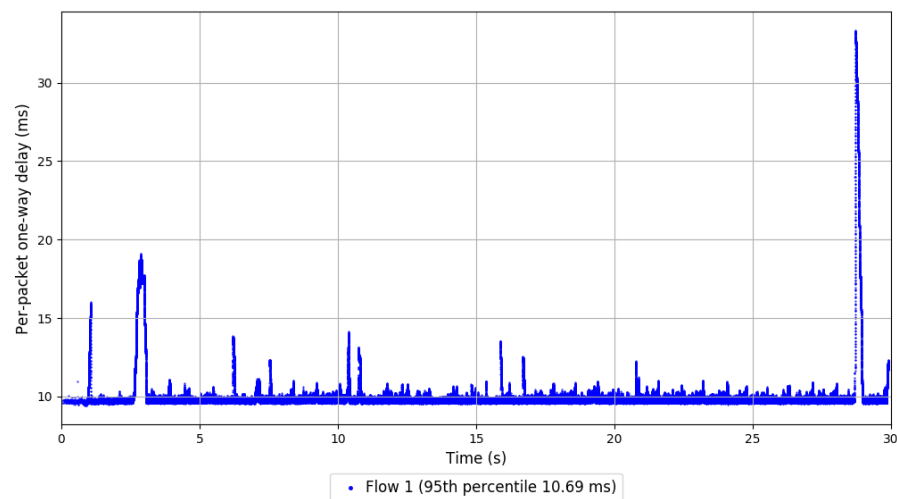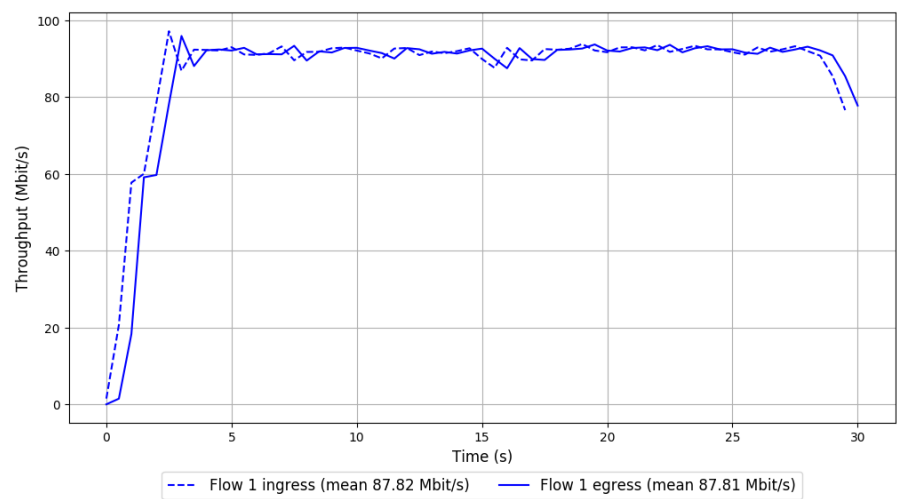Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-06-27 20:14:21
End at: 2019-06-27 20:14:51
Local clock offset: -1.53 ms
Remote clock offset: -6.482 ms

# Below is generated by plot.py at 2019-06-27 21:25:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.81 Mbit/s
95th percentile per-packet one-way delay: 10.686 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 87.81 Mbit/s
95th percentile per-packet one-way delay: 10.686 ms
Loss rate: 0.01%
```

Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 87.82 Mbit/s)   Flow 1 egress (mean 87.81 Mbit/s)

• Flow 1 (95th percentile 10.69 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-06-27 20:39:28
End at: 2019-06-27 20:39:58
Local clock offset: -1.754 ms
Remote clock offset: -6.431 ms


# Below is generated by plot.py at 2019-06-27 21:25:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.07 Mbit/s
95th percentile per-packet one-way delay: 8.828 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 87.07 Mbit/s
95th percentile per-packet one-way delay: 8.828 ms
Loss rate: 0.00%
```
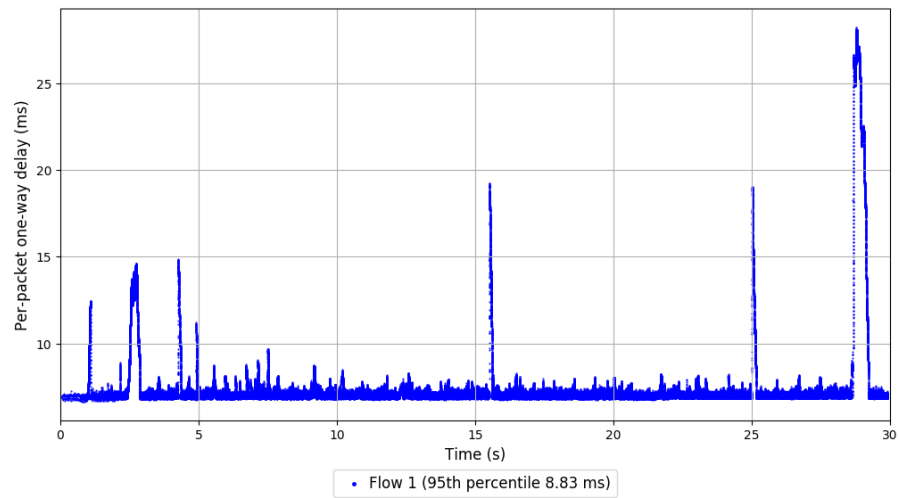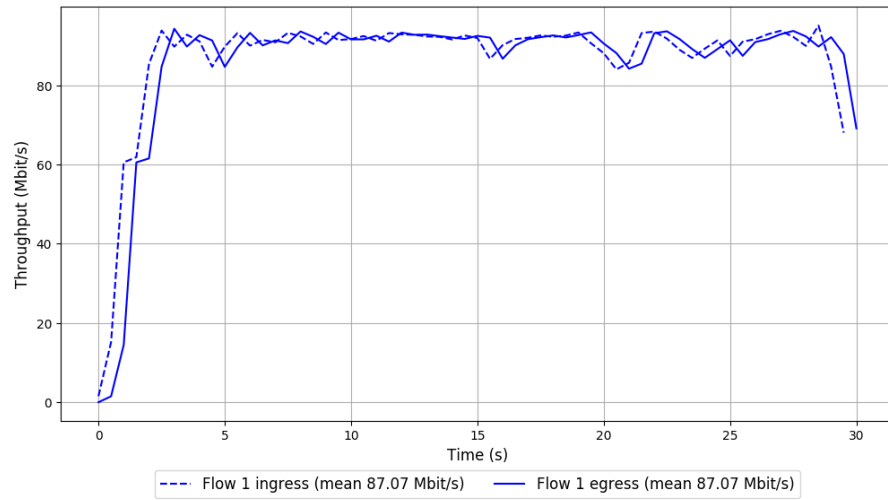
Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 87.07 Mbit/s)   Flow 1 egress (mean 87.07 Mbit/s)

Flow 1 (95th percentile 8.83 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-06-27 21:04:38
End at: 2019-06-27 21:05:08
Local clock offset: -0.839 ms
Remote clock offset: -3.82 ms


# Below is generated by plot.py at 2019-06-27 21:25:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.87 Mbit/s
95th percentile per-packet one-way delay: 9.598 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 86.87 Mbit/s
95th percentile per-packet one-way delay: 9.598 ms
Loss rate: 0.00%
```
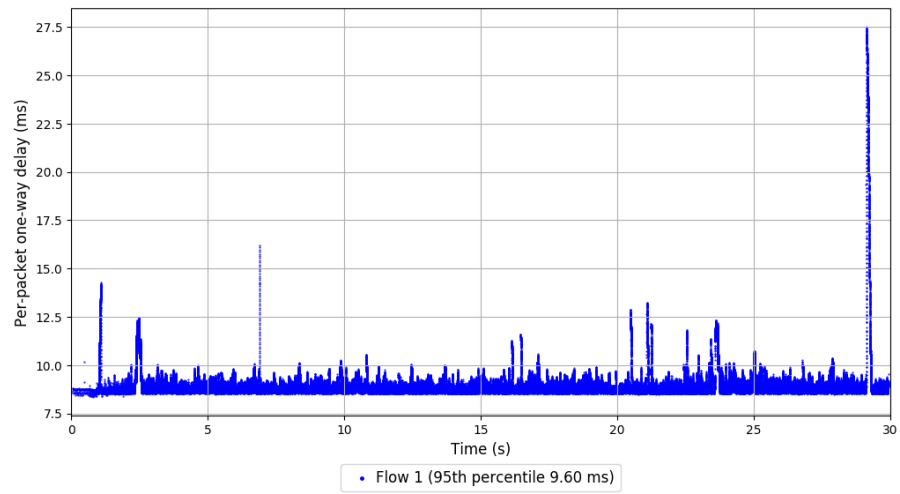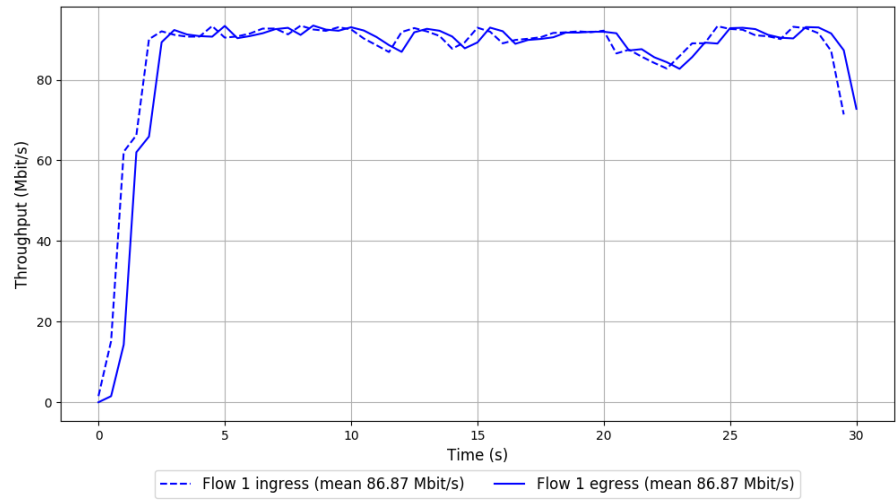
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 86.87 Mbit/s) — — — Flow 1 egress (mean 86.87 Mbit/s)
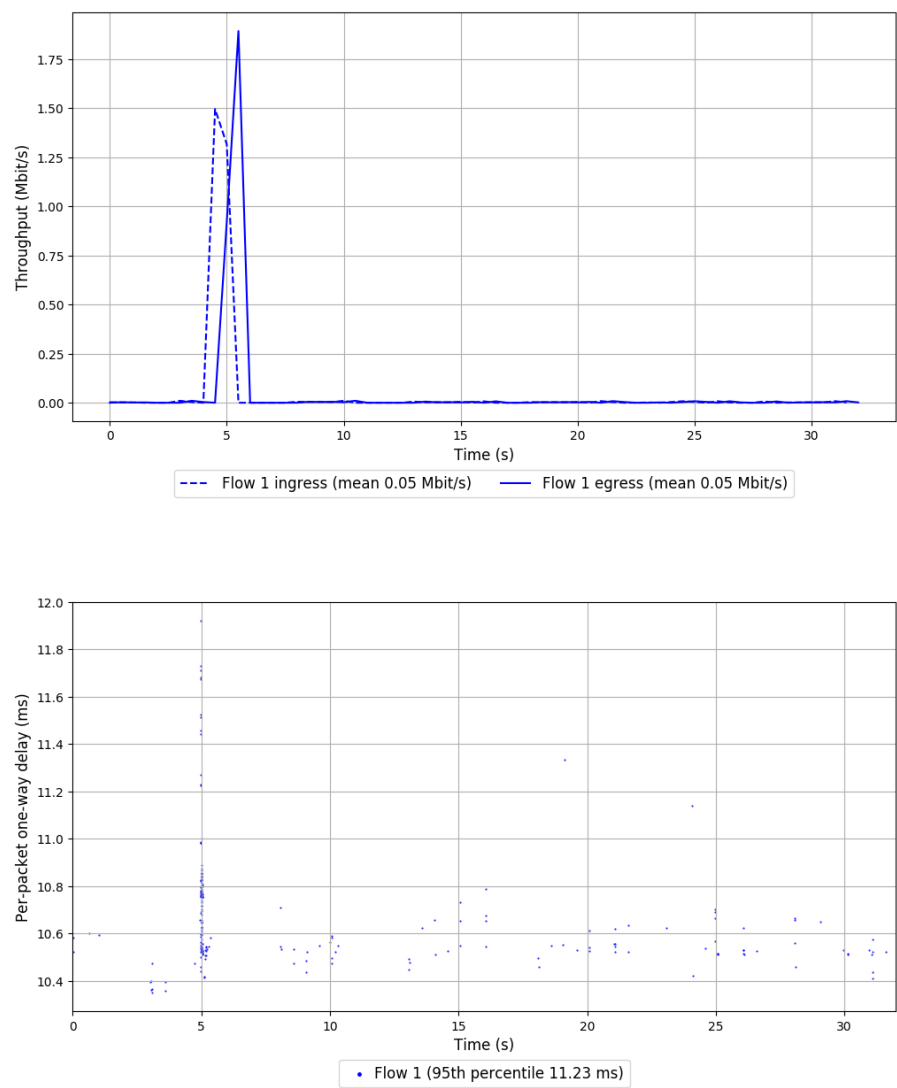

Flow 1 (95th percentile 9.60 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2019-06-27 19:16:14
End at: 2019-06-27 19:16:44
Local clock offset: -2.399 ms
Remote clock offset: -4.272 ms


# Below is generated by plot.py at 2019-06-27 21:25:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 11.227 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 11.227 ms
Loss rate: 0.00%
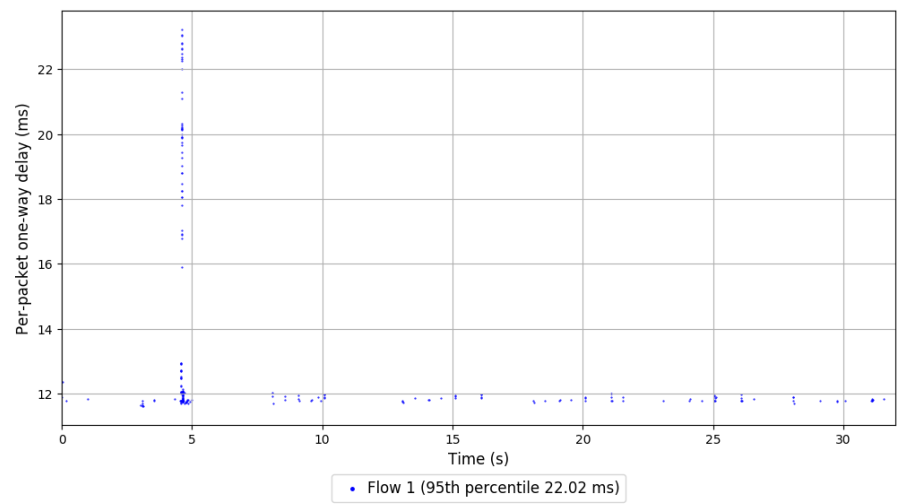```

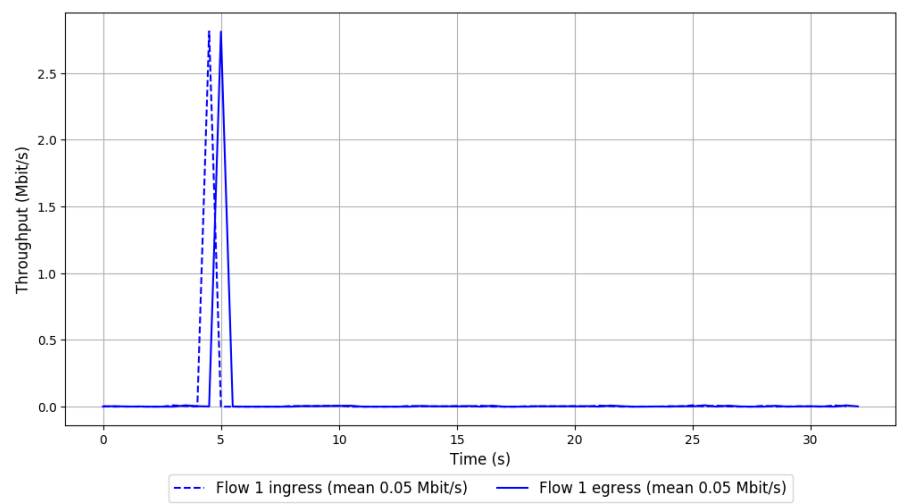Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-06-27 19:41:55
End at: 2019-06-27 19:42:25
Local clock offset: -1.722 ms
Remote clock offset: -5.092 ms


# Below is generated by plot.py at 2019-06-27 21:25:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 22.020 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 22.020 ms
Loss rate: 0.00%
```

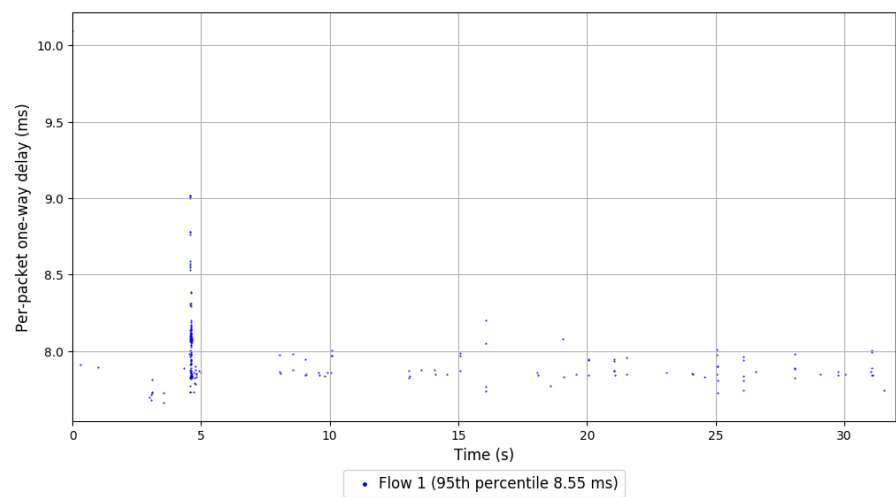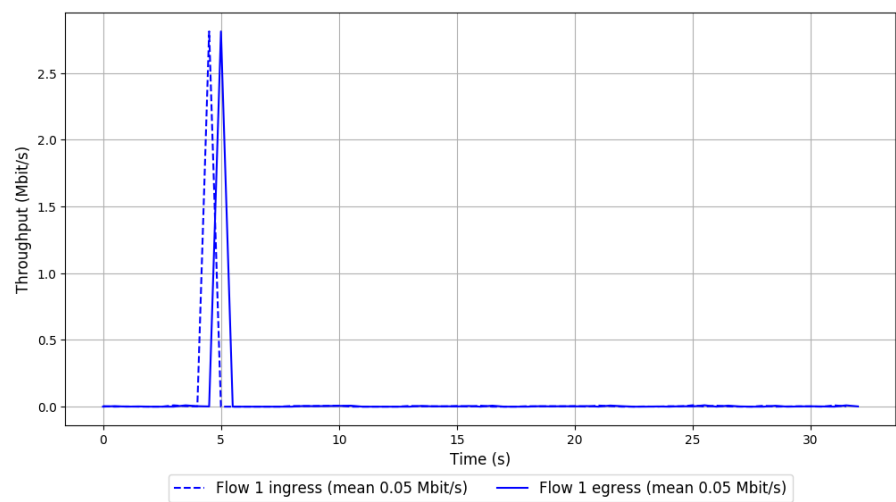Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-06-27 20:07:30
End at: 2019-06-27 20:08:00
Local clock offset: -1.055 ms
Remote clock offset: -4.636 ms


# Below is generated by plot.py at 2019-06-27 21:25:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 8.551 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 8.551 ms
Loss rate: 0.00%
```

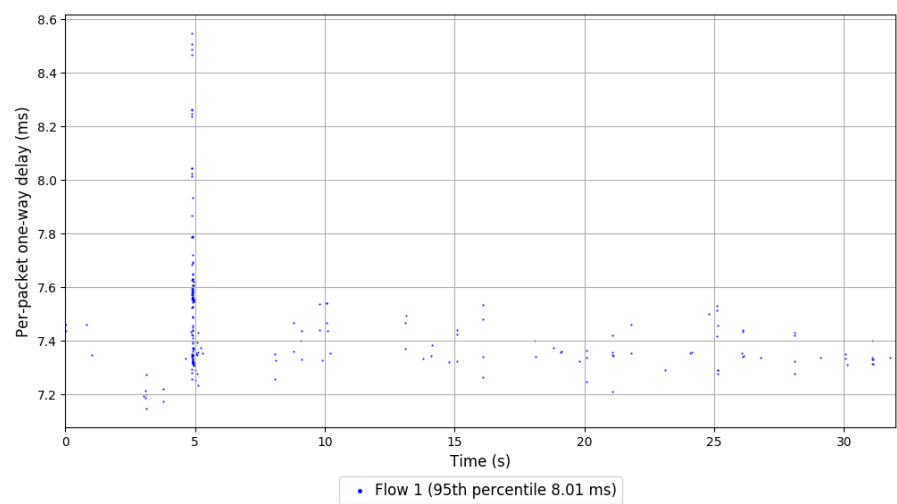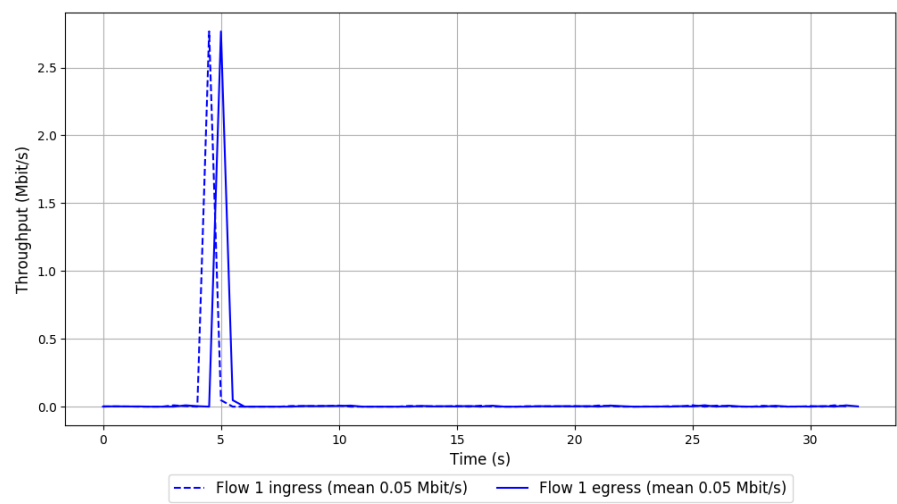Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-06-27 20:32:39
End at: 2019-06-27 20:33:09
Local clock offset: -1.747 ms
Remote clock offset: -5.901 ms


# Below is generated by plot.py at 2019-06-27 21:25:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 8.013 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 8.013 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-06-27 20:57:44
End at: 2019-06-27 20:58:14
Local clock offset: -0.874 ms
Remote clock offset: -5.458 ms


# Below is generated by plot.py at 2019-06-27 21:25:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 7.669 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 7.669 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link