Pantheon Report

Generated at 2020-02-18 00:01:04 (UTC).

Data path: AWS Brazil 2 on `ens5` (*local*) →Colombia on `p4p1` (*remote*).

Repeated the test of 24 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.
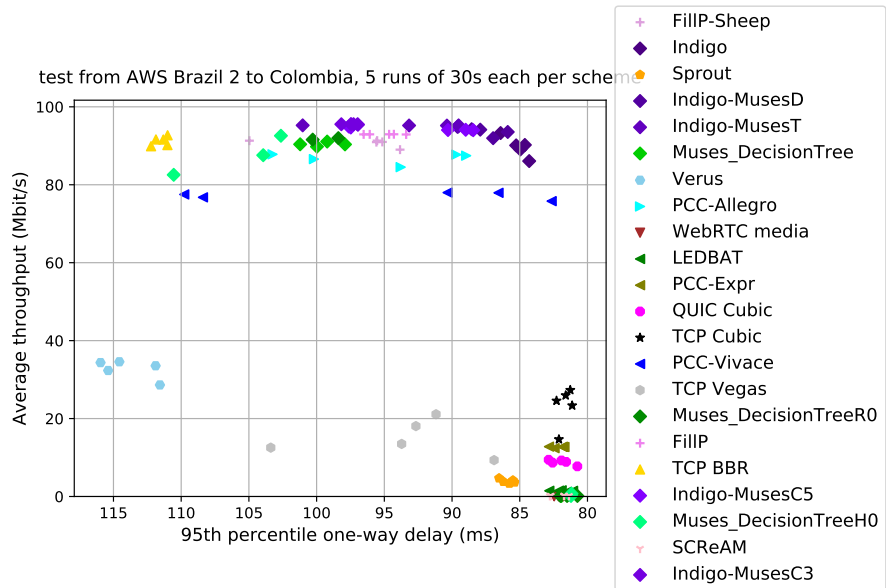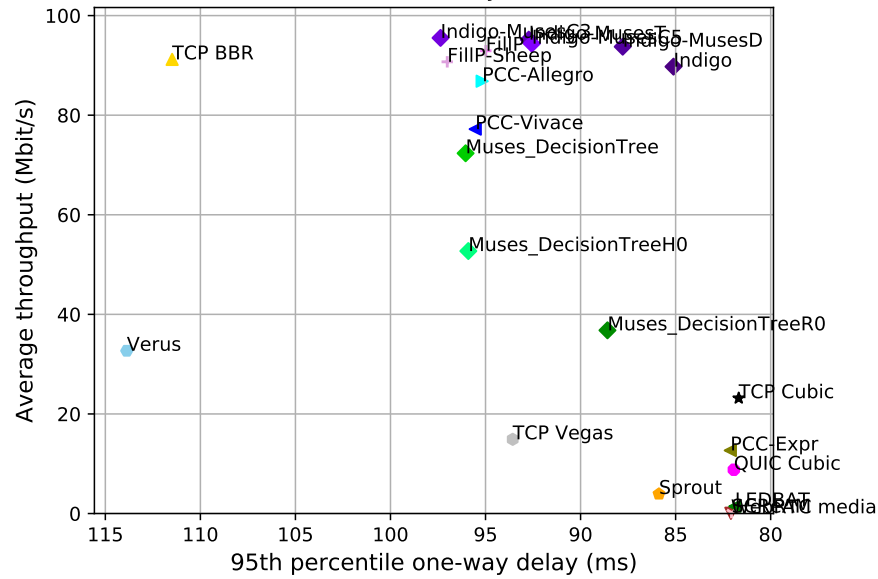
```
System info:
Linux 4.15.0-1056-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ de42328552b3776a75a932a94dfafd722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
```

```
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS Brazil 2 to Colombia, 5 runs of 30s each per scheme
(mean of all runs by scheme)

test from AWS Brazil 2 to Colombia, 5 runs of 30s each per scheme

3

scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	91.20	111.49	2.68
Copa	0	N/A	N/A	N/A
TCP Cubic	5	23.17	81.68	0.01
FillP	5	92.94	94.99	0.17
FillP-Sheep	5	90.71	97.01	0.40
Indigo	5	89.75	85.11	0.91
Indigo-MusesC3	5	95.52	97.37	0.13
Indigo-MusesC5	5	94.36	92.57	0.07
Indigo-MusesD	5	93.75	87.78	0.04
Indigo-MusesT	5	95.17	92.73	0.94
LEDBAT	5	1.44	81.88	0.00
Muses_DecisionTree	5	72.35	96.05	0.02
Muses_DecisionTreeH0	5	52.72	95.90	6.58
Muses_DecisionTreeR0	5	36.79	88.59	0.01
PCC-Allegro	5	86.82	95.18	1.34
PCC-Expr	5	12.67	82.12	52.68
QUIC Cubic	5	8.80	81.94	0.02
SCReAM	5	0.19	82.06	0.00
Sprout	5	3.93	85.88	0.25
TaoVA-100x	0	N/A	N/A	N/A
TCP Vegas	5	14.90	93.57	2.05
Verus	5	32.69	113.87	46.21
PCC-Vivace	5	77.20	95.54	0.06
WebRTC media	5	0.05	82.09	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2020-02-17 21:56:40
End at: 2020-02-17 21:57:10
Local clock offset: 1.722 ms
Remote clock offset: -8.179 ms


# Below is generated by plot.py at 2020-02-17 23:52:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.19 Mbit/s
95th percentile per-packet one-way delay: 111.015 ms
Loss rate: 2.69%
-- Flow 1:
Average throughput: 90.19 Mbit/s
95th percentile per-packet one-way delay: 111.015 ms
Loss rate: 2.69%
```
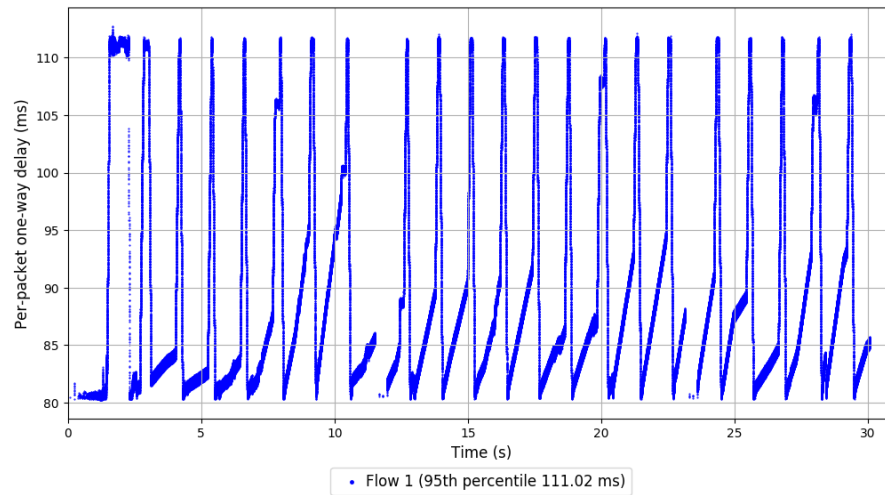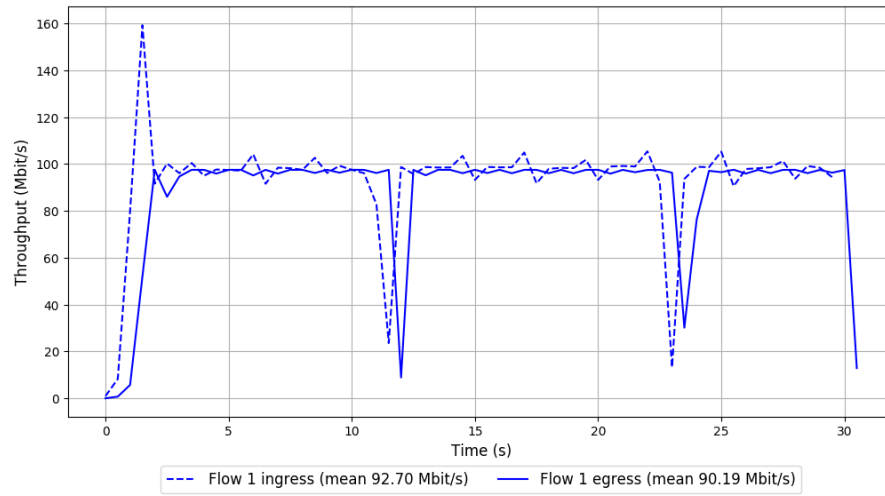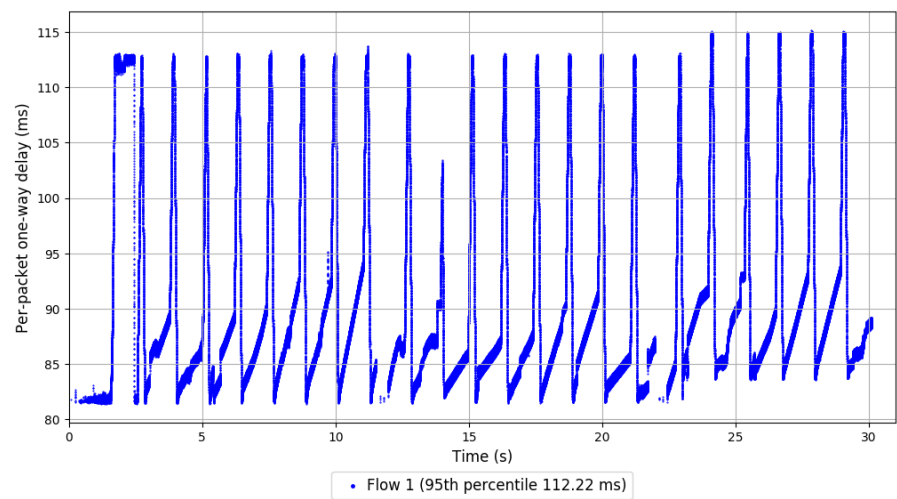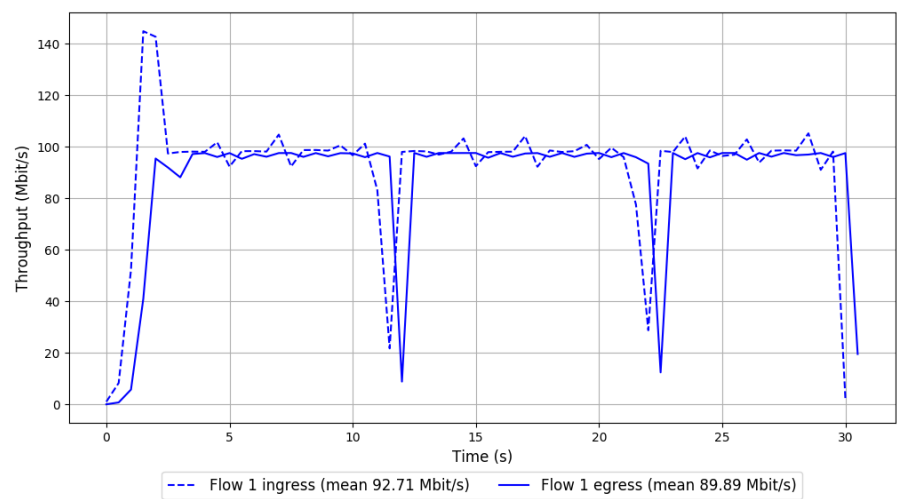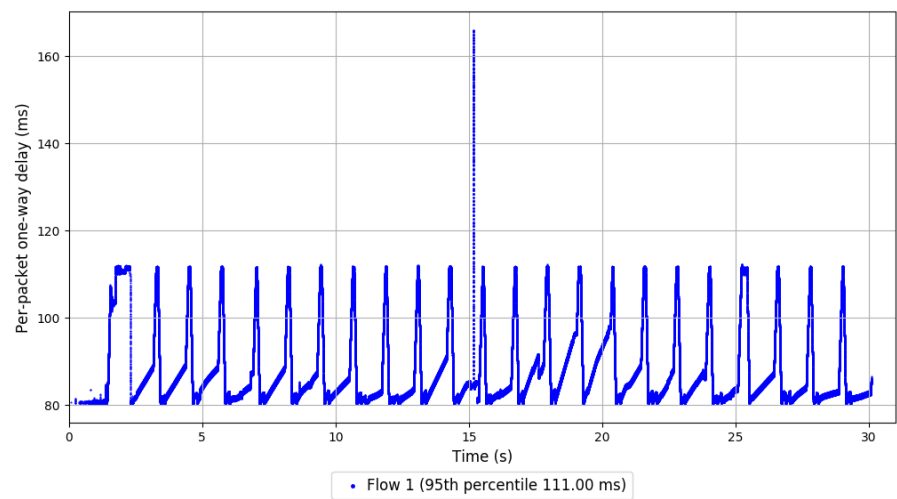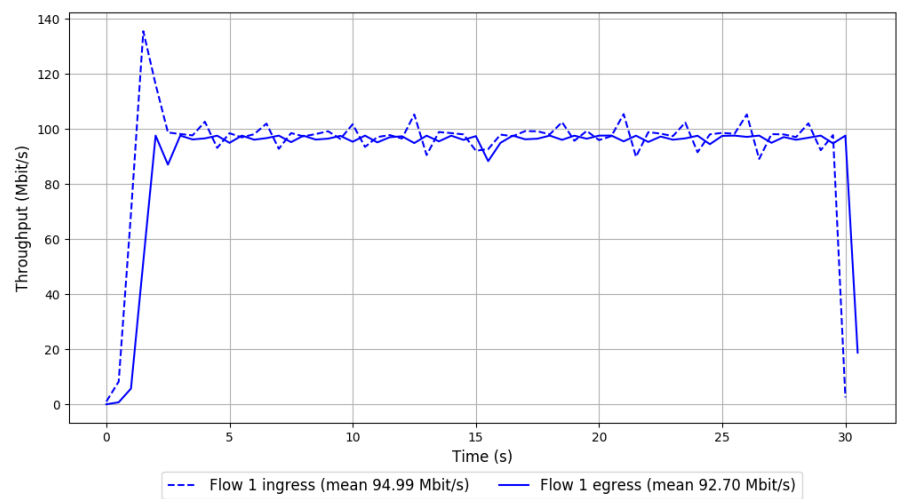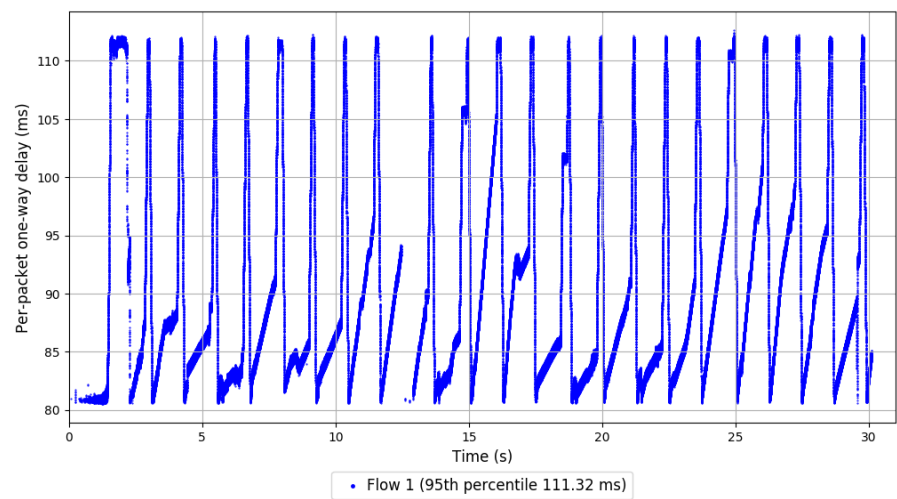
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 92.70 Mbit/s) --- Flow 1 egress (mean 90.19 Mbit/s)

Flow 1 (95th percentile 111.02 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2020-02-17 22:25:00
End at: 2020-02-17 22:25:30
Local clock offset: 1.858 ms
Remote clock offset: -7.578 ms


# Below is generated by plot.py at 2020-02-17 23:52:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 112.225 ms
Loss rate: 3.02%
-- Flow 1:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 112.225 ms
Loss rate: 3.02%
```
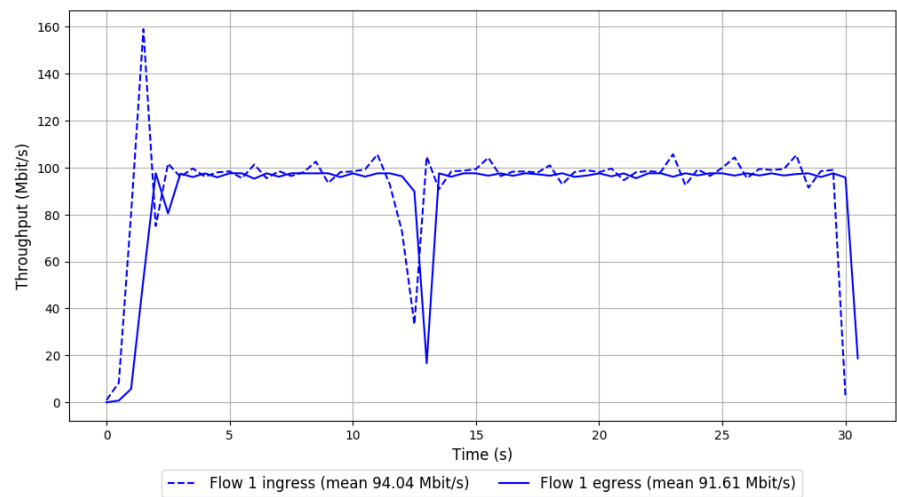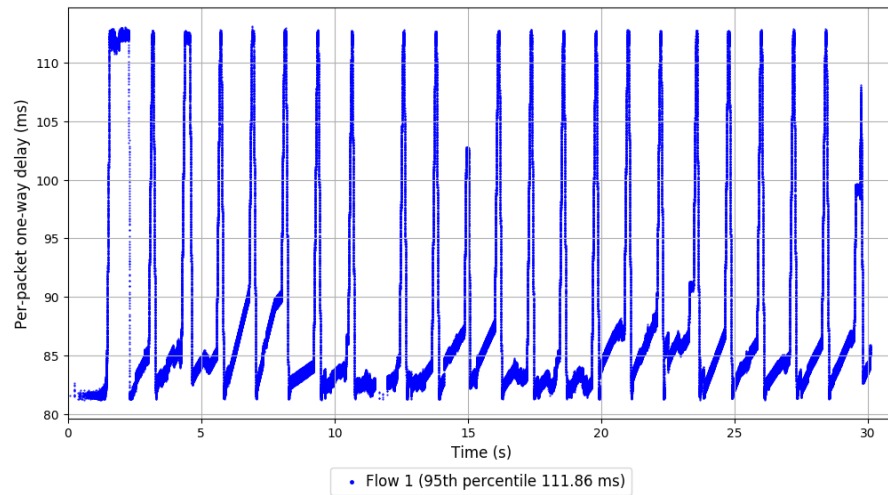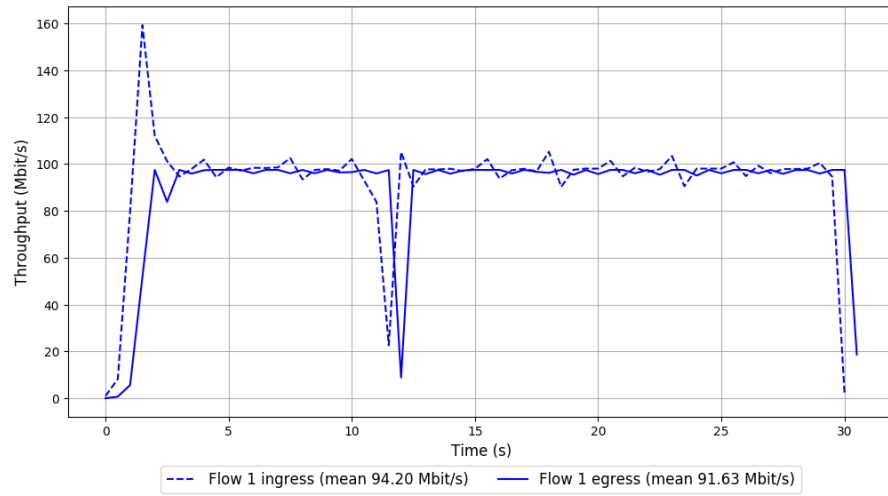
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 92.71 Mbit/s) — Flow 1 egress (mean 89.89 Mbit/s)

· Flow 1 (95th percentile 112.22 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2020-02-17 22:52:56
End at: 2020-02-17 22:53:26
Local clock offset: 1.671 ms
Remote clock offset: -8.882 ms


# Below is generated by plot.py at 2020-02-17 23:52:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.70 Mbit/s
95th percentile per-packet one-way delay: 111.004 ms
Loss rate: 2.38%
-- Flow 1:
Average throughput: 92.70 Mbit/s
95th percentile per-packet one-way delay: 111.004 ms
Loss rate: 2.38%
```

Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 94.99 Mbit/s) --- Flow 1 egress (mean 92.70 Mbit/s)

Flow 1 (95th percentile 111.00 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2020-02-17 23:20:58
End at: 2020-02-17 23:21:28
Local clock offset: 0.193 ms
Remote clock offset: -10.097 ms


# Below is generated by plot.py at 2020-02-17 23:52:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.61 Mbit/s
95th percentile per-packet one-way delay: 111.318 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 91.61 Mbit/s
95th percentile per-packet one-way delay: 111.318 ms
Loss rate: 2.58%
```

Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2020-02-17 23:48:56
End at: 2020-02-17 23:49:26
Local clock offset: -0.828 ms
Remote clock offset: -10.723 ms


# Below is generated by plot.py at 2020-02-17 23:52:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.63 Mbit/s
95th percentile per-packet one-way delay: 111.865 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 91.63 Mbit/s
95th percentile per-packet one-way delay: 111.865 ms
Loss rate: 2.71%
```

Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 94.20 Mbit/s)   Flow 1 egress (mean 91.63 Mbit/s)

Flow 1 (95th percentile 111.86 ms)
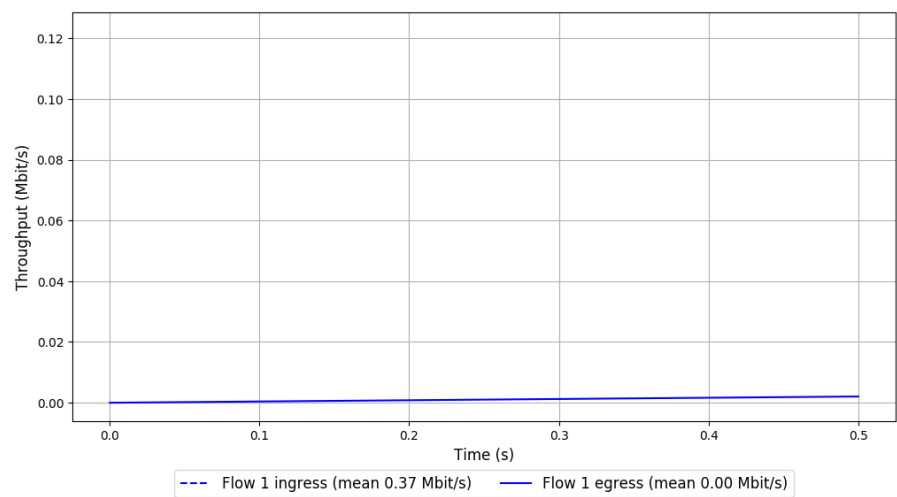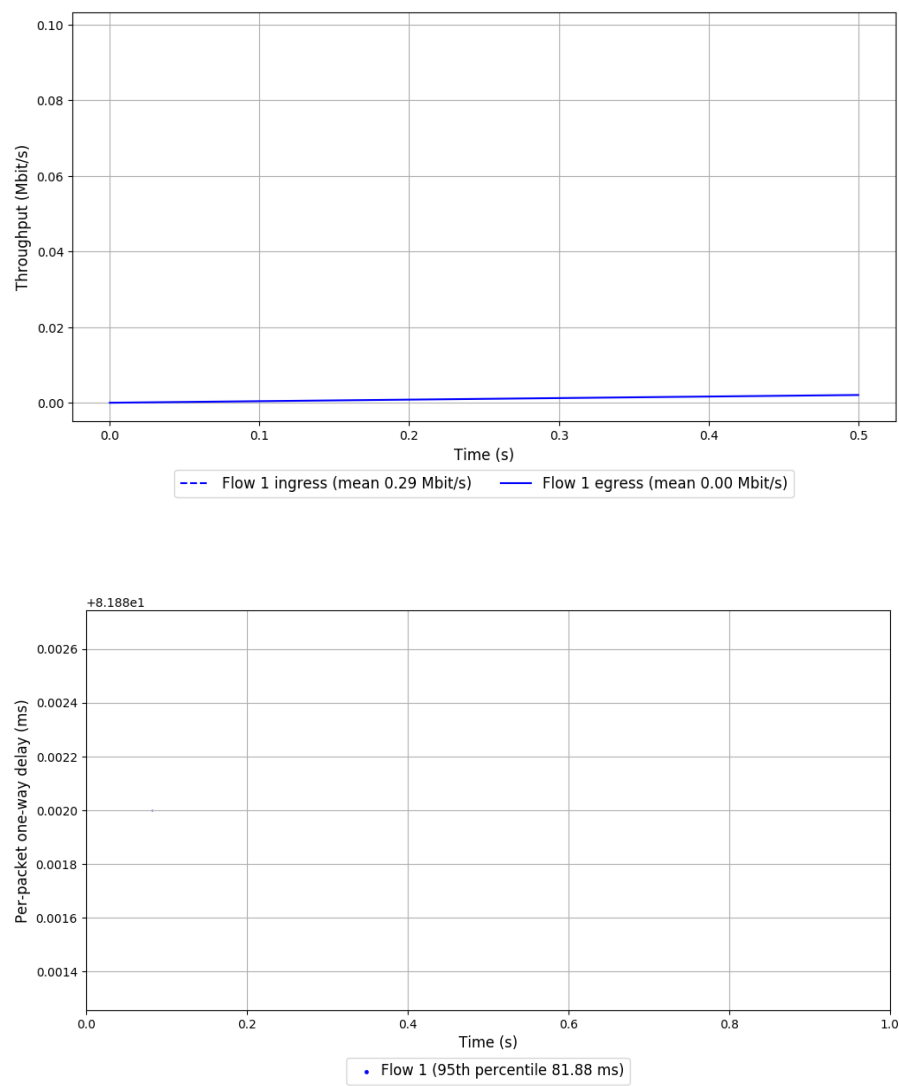
```
Run 1: Statistics of Copa

Start at: 2020-02-17 21:48:30
End at: 2020-02-17 21:49:00
Local clock offset: 1.427 ms
Remote clock offset: -7.791 ms
```
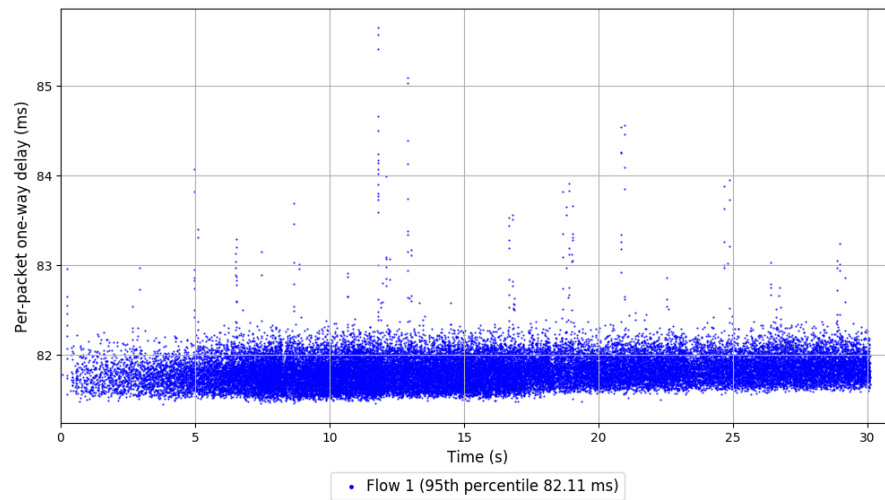
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 0.37 Mbit/s)   Flow 1 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 80.80 ms)

Run 2: Statistics of Copa

Start at: 2020-02-17 22:16:55
End at: 2020-02-17 22:17:25
Local clock offset: 2.039 ms
Remote clock offset: -8.033 ms

Run 2: Report of Copa — Data Link

Run 3: Statistics of Copa

Start at: 2020-02-17 22:44:52
End at: 2020-02-17 22:45:22
Local clock offset: 1.567 ms
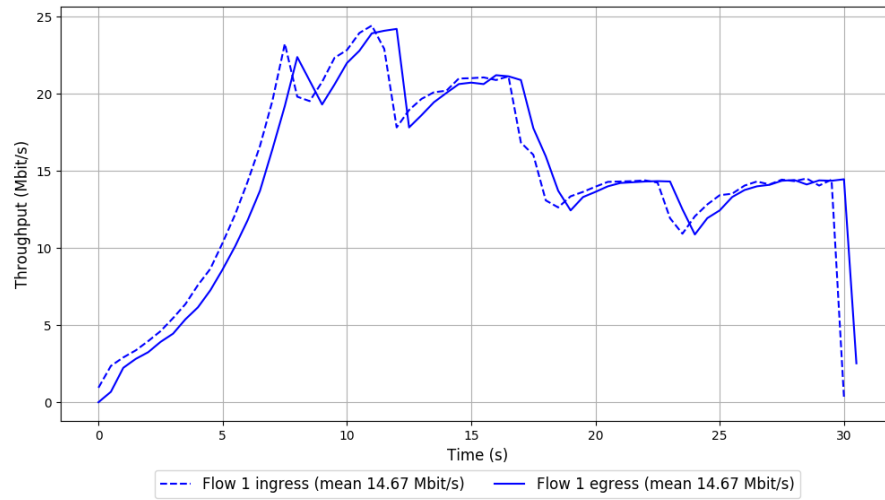Remote clock offset: -8.565 ms

Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 0.37 Mbit/s)   Flow 1 egress (mean 0.00 Mbit/s)

• Flow 1 (95th percentile 80.77 ms)

```
Run 4: Statistics of Copa

Start at: 2020-02-17 23:12:53
End at: 2020-02-17 23:13:23
Local clock offset: -0.372 ms
Remote clock offset: -9.802 ms
```

Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 0.44 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 81.50 ms)

```
Run 5: Statistics of Copa

Start at: 2020-02-17 23:40:53
End at: 2020-02-17 23:41:23
Local clock offset: -0.827 ms
Remote clock offset: -10.521 ms
```

Run 5: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2020-02-17 21:36:39
End at: 2020-02-17 21:37:09
Local clock offset: -0.372 ms
Remote clock offset: -7.998 ms


# Below is generated by plot.py at 2020-02-17 23:52:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.67 Mbit/s
95th percentile per-packet one-way delay: 82.109 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 14.67 Mbit/s
95th percentile per-packet one-way delay: 82.109 ms
Loss rate: 0.01%
```
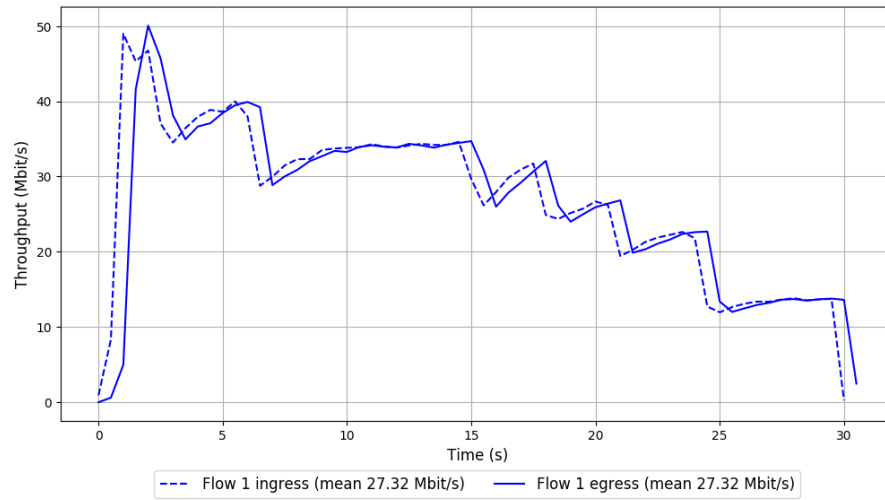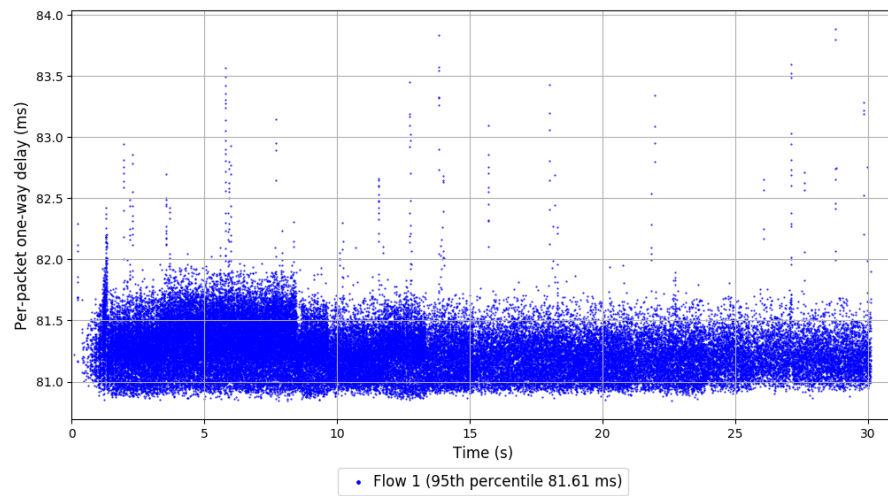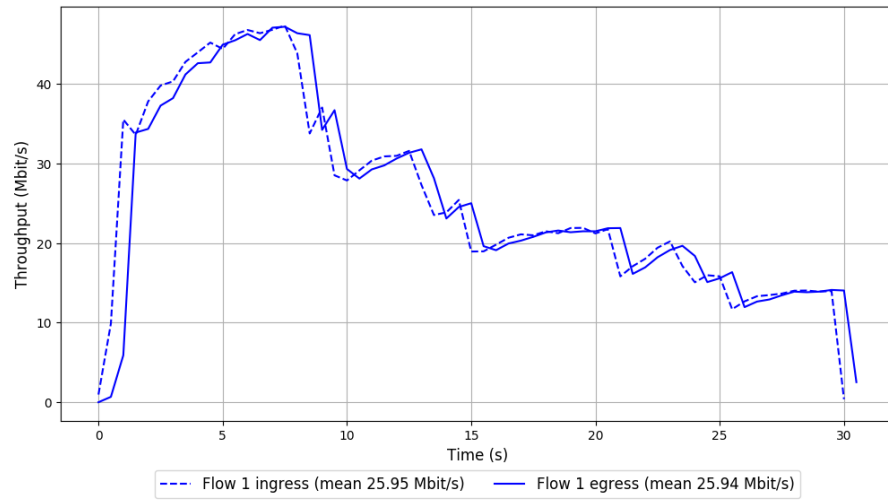
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 14.67 Mbit/s)   Flow 1 egress (mean 14.67 Mbit/s)

• Flow 1 (95th percentile 82.11 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2020-02-17 22:05:01
End at: 2020-02-17 22:05:31
Local clock offset: 1.68 ms
Remote clock offset: -7.81 ms


# Below is generated by plot.py at 2020-02-17 23:52:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 27.32 Mbit/s
95th percentile per-packet one-way delay: 81.270 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 27.32 Mbit/s
95th percentile per-packet one-way delay: 81.270 ms
Loss rate: 0.02%
```
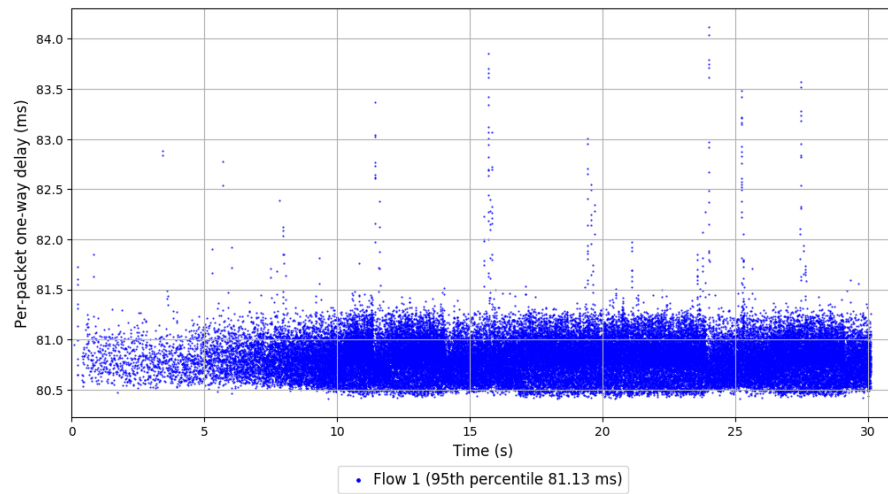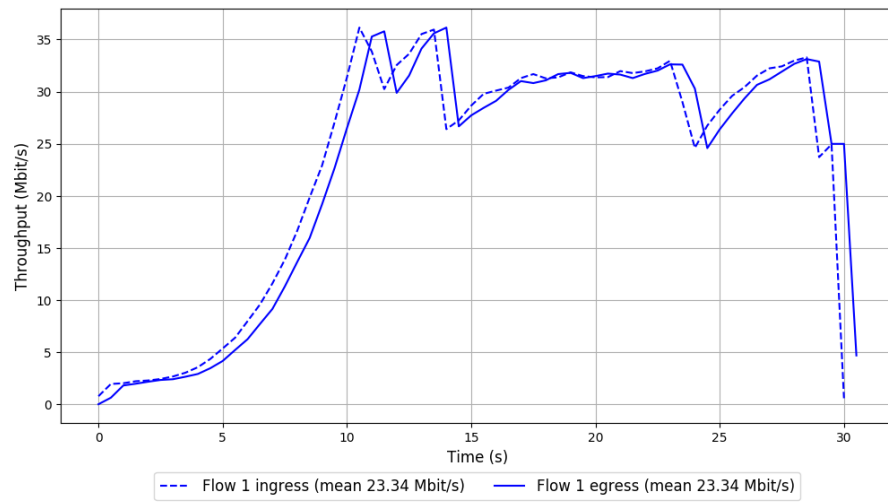
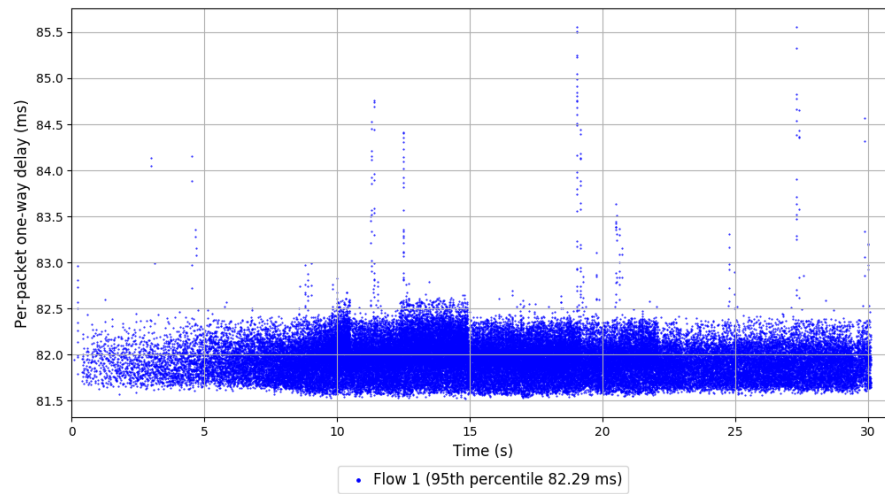Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2020-02-17 22:33:09
End at: 2020-02-17 22:33:40
Local clock offset: 1.332 ms
Remote clock offset: -8.563 ms

# Below is generated by plot.py at 2020-02-17 23:52:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.94 Mbit/s
95th percentile per-packet one-way delay: 81.609 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 25.94 Mbit/s
95th percentile per-packet one-way delay: 81.609 ms
Loss rate: 0.02%
```
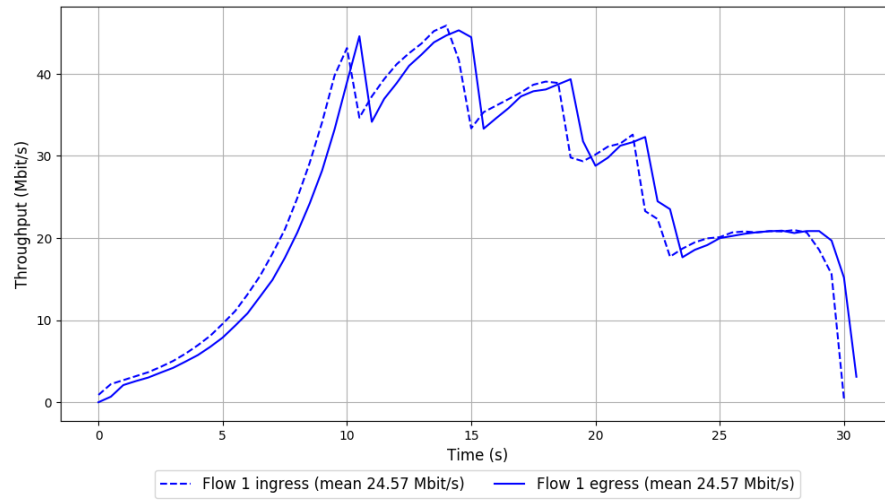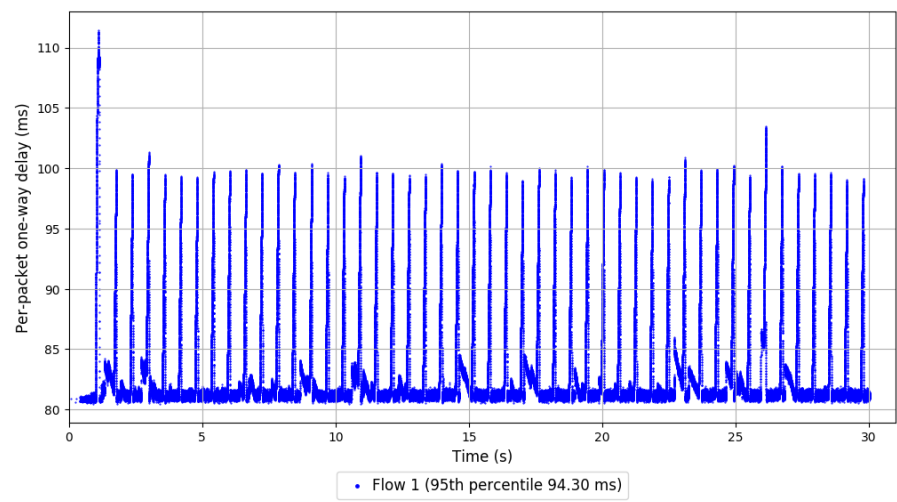
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 25.95 Mbit/s)   Flow 1 egress (mean 25.94 Mbit/s)

Flow 1 (95th percentile 81.61 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2020-02-17 23:01:06
End at: 2020-02-17 23:01:36
Local clock offset: 1.324 ms
Remote clock offset: -8.97 ms


# Below is generated by plot.py at 2020-02-17 23:52:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.34 Mbit/s
95th percentile per-packet one-way delay: 81.131 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 23.34 Mbit/s
95th percentile per-packet one-way delay: 81.131 ms
Loss rate: 0.01%
```
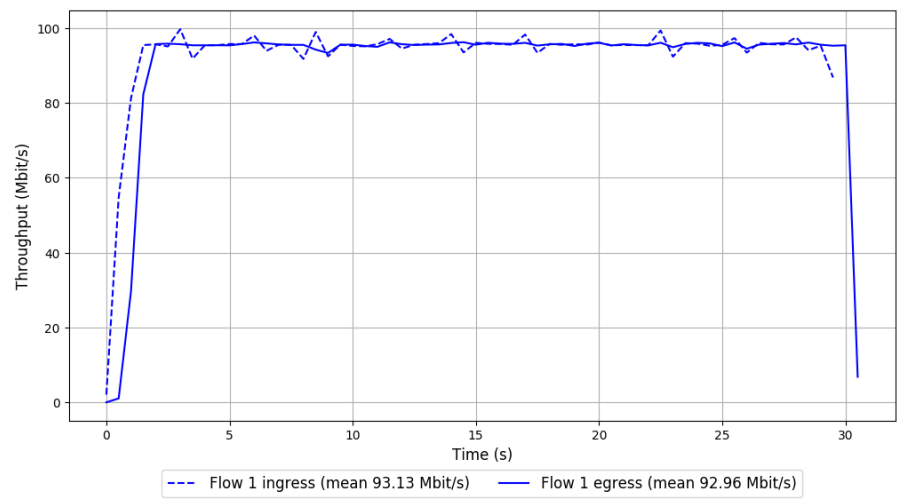
Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2020-02-17 23:29:06
End at: 2020-02-17 23:29:36
Local clock offset: 0.146 ms
Remote clock offset: -10.273 ms


# Below is generated by plot.py at 2020-02-17 23:52:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 82.286 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 82.286 ms
Loss rate: 0.01%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 24.57 Mbit/s)   Flow 1 egress (mean 24.57 Mbit/s)

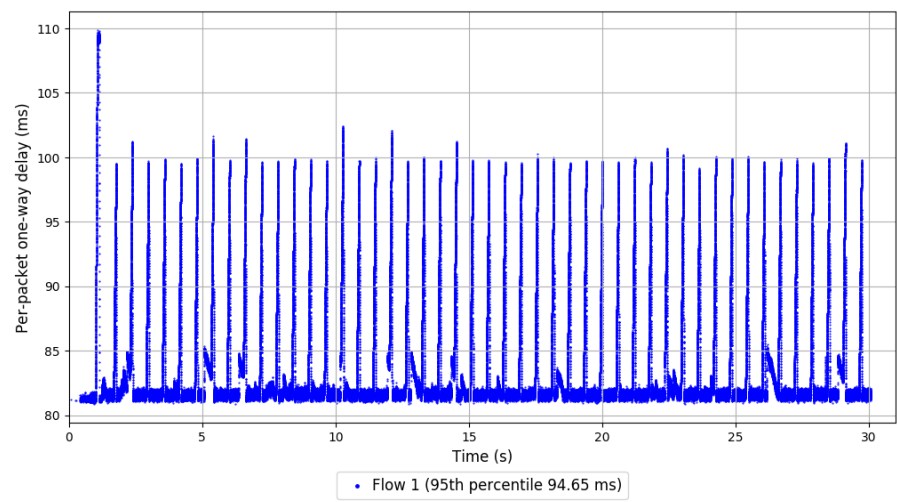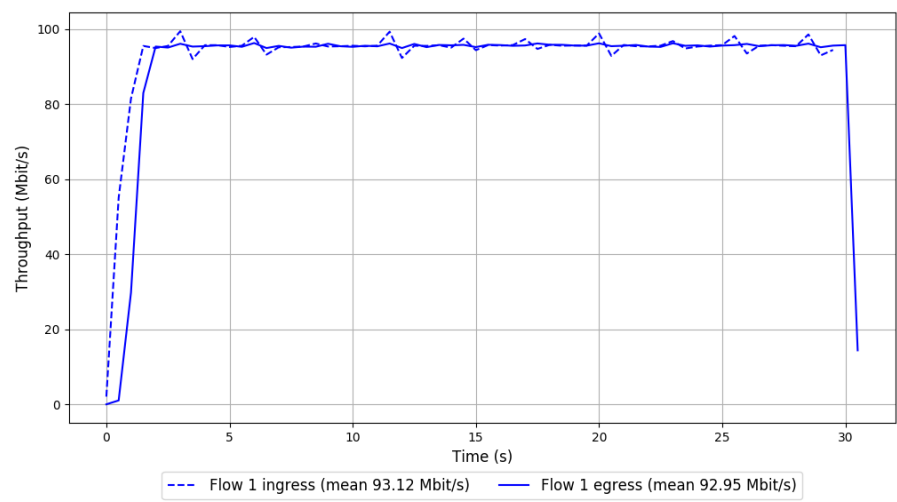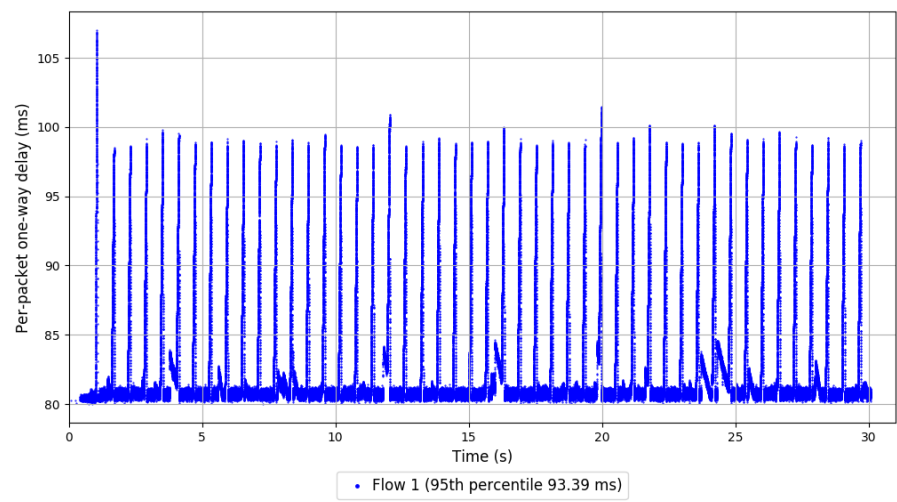• Flow 1 (95th percentile 82.29 ms)

```
Run 1: Statistics of FillP

Start at: 2020-02-17 21:55:18
End at: 2020-02-17 21:55:48
Local clock offset: 1.648 ms
Remote clock offset: -7.765 ms

# Below is generated by plot.py at 2020-02-17 23:52:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.96 Mbit/s
95th percentile per-packet one-way delay: 94.295 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 92.96 Mbit/s
95th percentile per-packet one-way delay: 94.295 ms
Loss rate: 0.18%
```
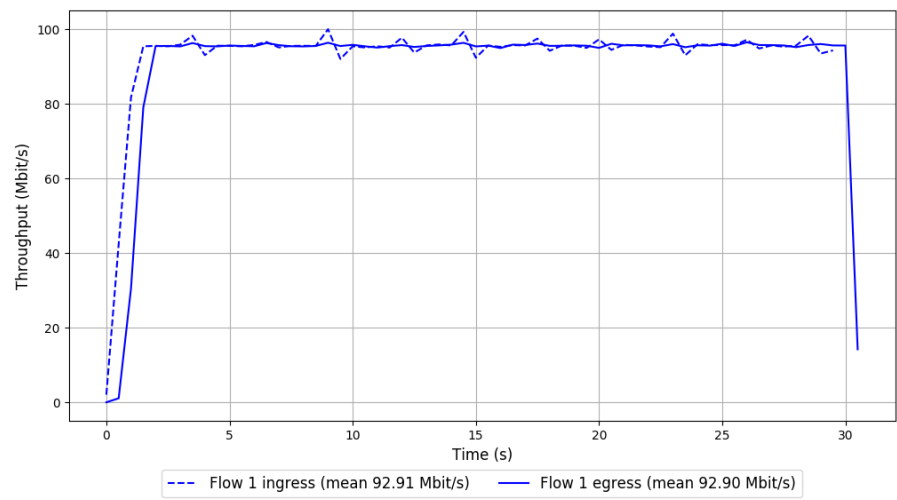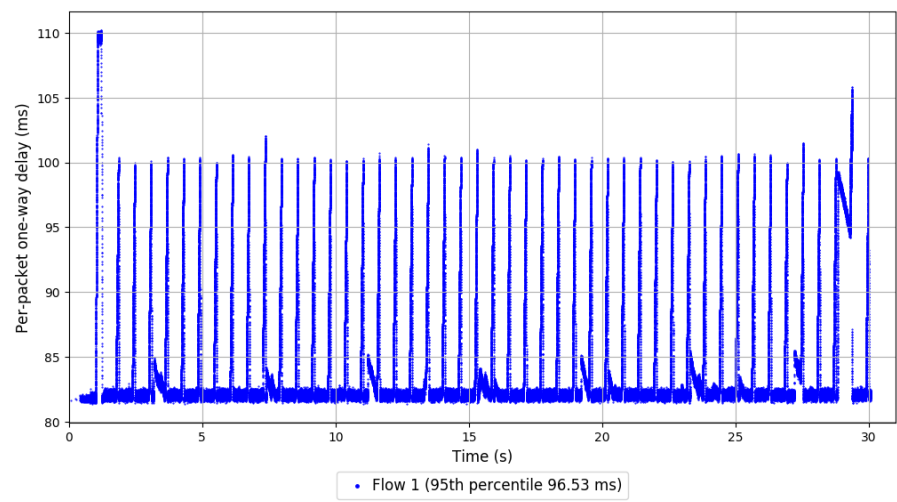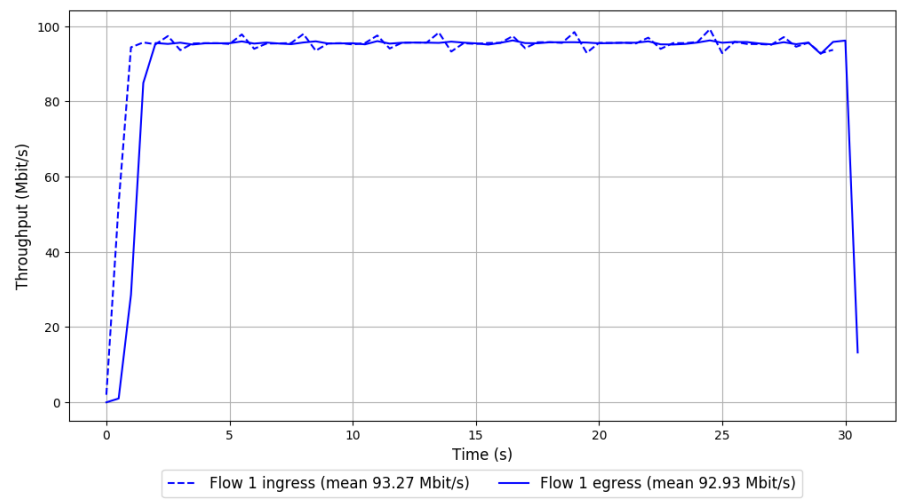
Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 93.13 Mbit/s) ---- Flow 1 egress (mean 92.96 Mbit/s) ——

• Flow 1 (95th percentile 94.30 ms)

```
Run 2: Statistics of FillP

Start at: 2020-02-17 22:23:49
End at: 2020-02-17 22:24:19
Local clock offset: 1.723 ms
Remote clock offset: -7.937 ms

# Below is generated by plot.py at 2020-02-17 23:52:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.95 Mbit/s
95th percentile per-packet one-way delay: 94.646 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 92.95 Mbit/s
95th percentile per-packet one-way delay: 94.646 ms
Loss rate: 0.18%
```
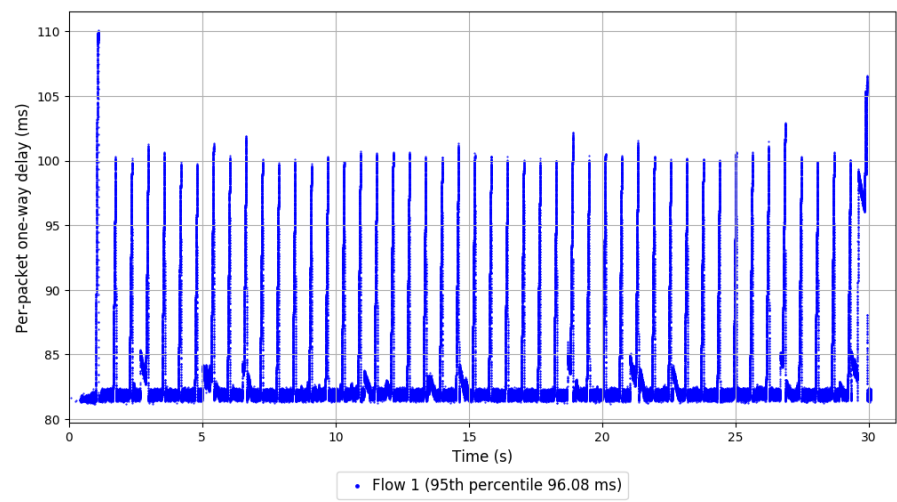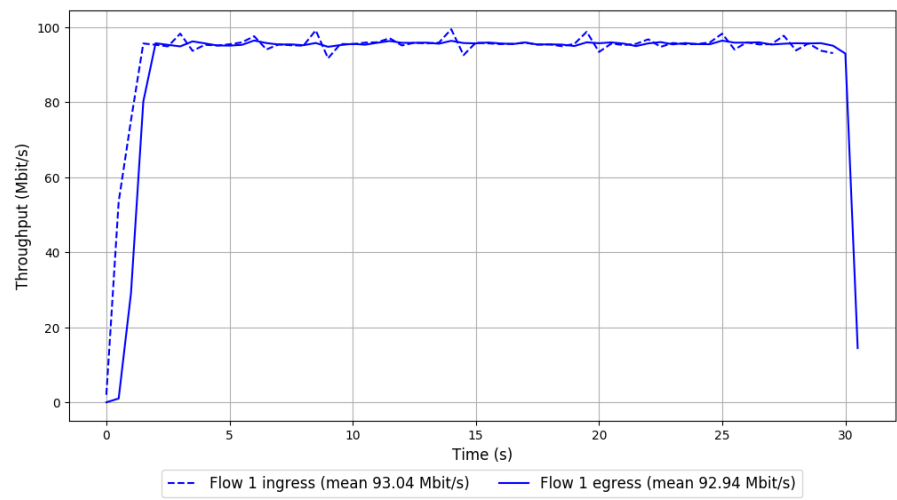
Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 93.12 Mbit/s)   Flow 1 egress (mean 92.95 Mbit/s)

• Flow 1 (95th percentile 94.65 ms)

```
Run 3: Statistics of FillP

Start at: 2020-02-17 22:51:45
End at: 2020-02-17 22:52:15
Local clock offset: 1.717 ms
Remote clock offset: -8.923 ms


# Below is generated by plot.py at 2020-02-17 23:52:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.90 Mbit/s
95th percentile per-packet one-way delay: 93.388 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 92.90 Mbit/s
95th percentile per-packet one-way delay: 93.388 ms
Loss rate: 0.01%
```

Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 92.91 Mbit/s)   Flow 1 egress (mean 92.90 Mbit/s)

Flow 1 (95th percentile 93.39 ms)

```
Run 4: Statistics of FillP

Start at: 2020-02-17 23:19:47
End at: 2020-02-17 23:20:17
Local clock offset: 0.203 ms
Remote clock offset: -10.04 ms


# Below is generated by plot.py at 2020-02-17 23:53:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.93 Mbit/s
95th percentile per-packet one-way delay: 96.527 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 92.93 Mbit/s
95th percentile per-packet one-way delay: 96.527 ms
Loss rate: 0.36%
```
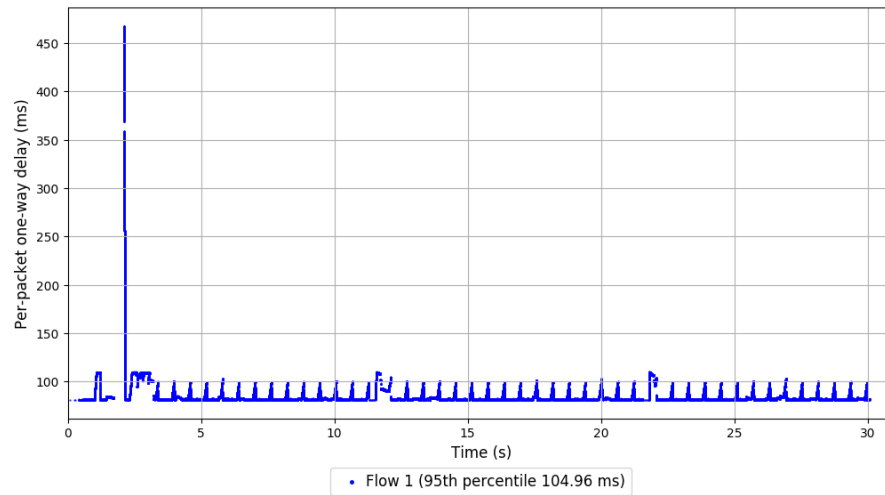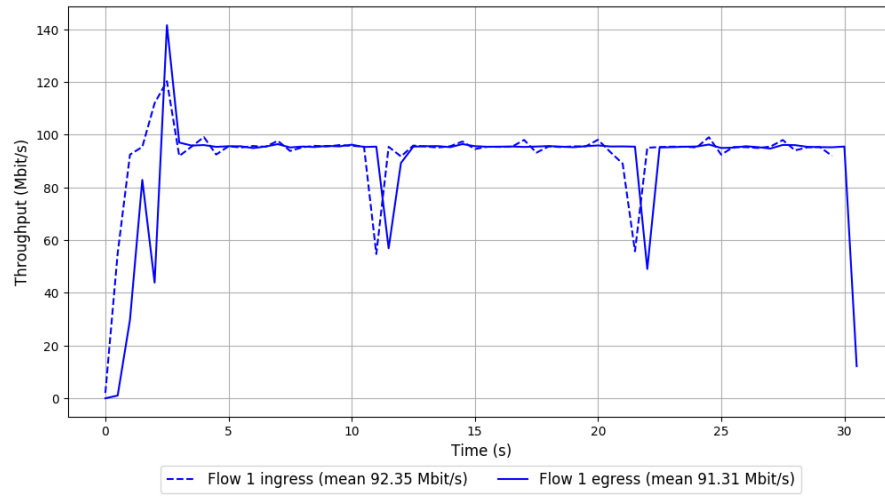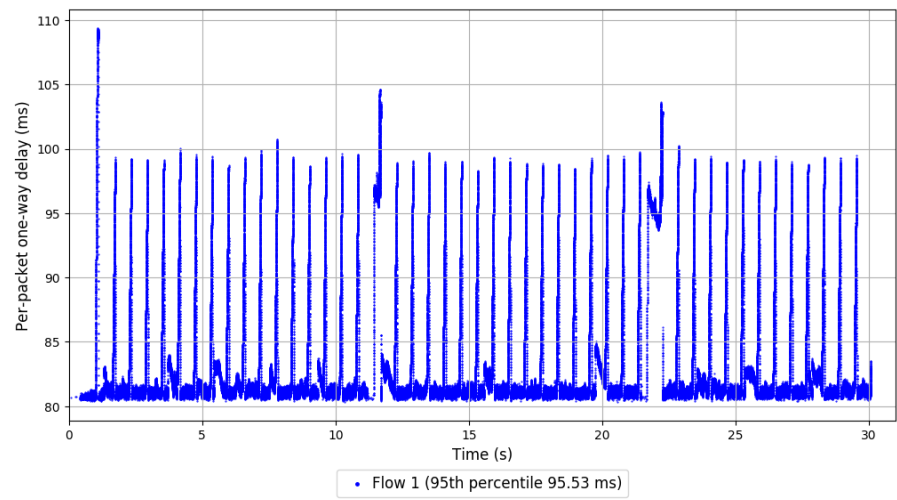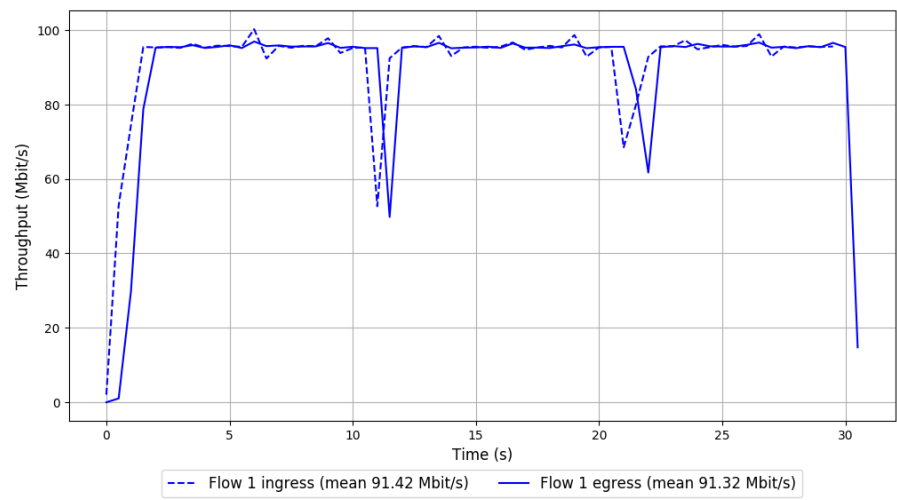
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 93.27 Mbit/s) ——— Flow 1 egress (mean 92.93 Mbit/s)

• Flow 1 (95th percentile 96.53 ms)

```
Run 5: Statistics of FillP

Start at: 2020-02-17 23:47:45
End at: 2020-02-17 23:48:15
Local clock offset: -0.143 ms
Remote clock offset: -10.887 ms

# Below is generated by plot.py at 2020-02-17 23:53:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.94 Mbit/s
95th percentile per-packet one-way delay: 96.079 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 92.94 Mbit/s
95th percentile per-packet one-way delay: 96.079 ms
Loss rate: 0.11%
```

Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 93.04 Mbit/s) —— Flow 1 egress (mean 92.94 Mbit/s)

• Flow 1 (95th percentile 96.08 ms)

```
Run 1: Statistics of FillP-Sheep

Start at: 2020-02-17 21:46:03
End at: 2020-02-17 21:46:33
Local clock offset: 0.86 ms
Remote clock offset: -7.956 ms


# Below is generated by plot.py at 2020-02-17 23:53:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.31 Mbit/s
95th percentile per-packet one-way delay: 104.963 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 91.31 Mbit/s
95th percentile per-packet one-way delay: 104.963 ms
Loss rate: 1.13%
```
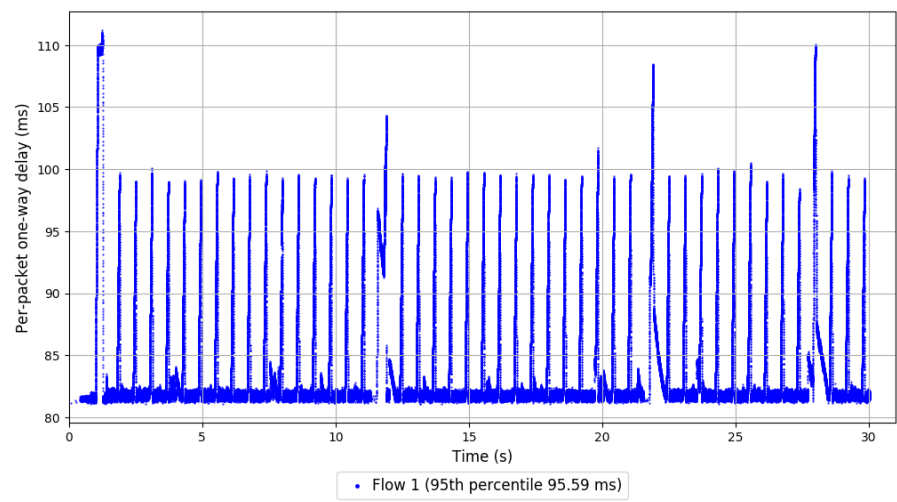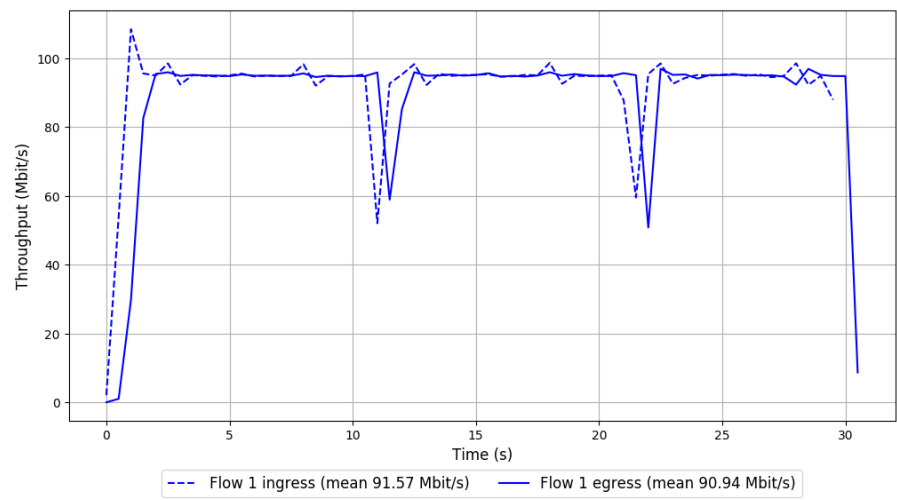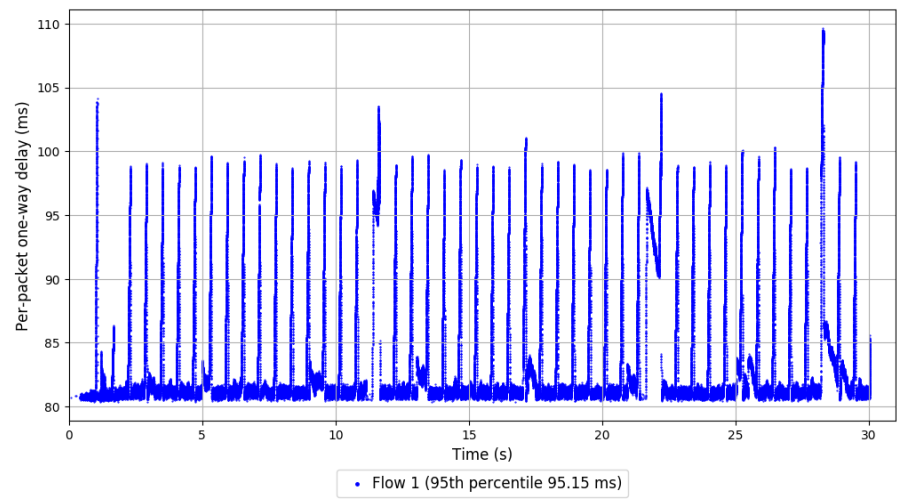
Run 1: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 92.35 Mbit/s) --- Flow 1 egress (mean 91.31 Mbit/s) —
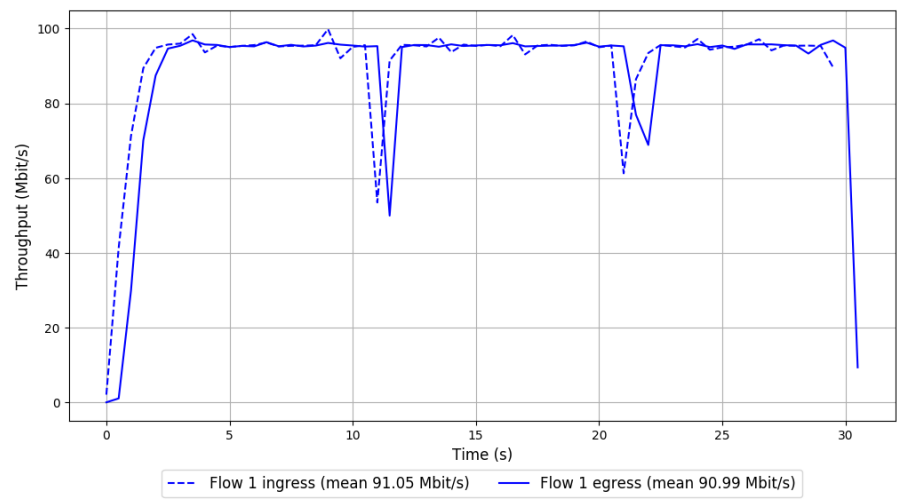

Flow 1 (95th percentile 104.96 ms)

```
Run 2: Statistics of FillP-Sheep

Start at: 2020-02-17 22:14:31
End at: 2020-02-17 22:15:01
Local clock offset: 1.99 ms
Remote clock offset: -7.827 ms


# Below is generated by plot.py at 2020-02-17 23:53:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.32 Mbit/s
95th percentile per-packet one-way delay: 95.531 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 91.32 Mbit/s
95th percentile per-packet one-way delay: 95.531 ms
Loss rate: 0.10%
```
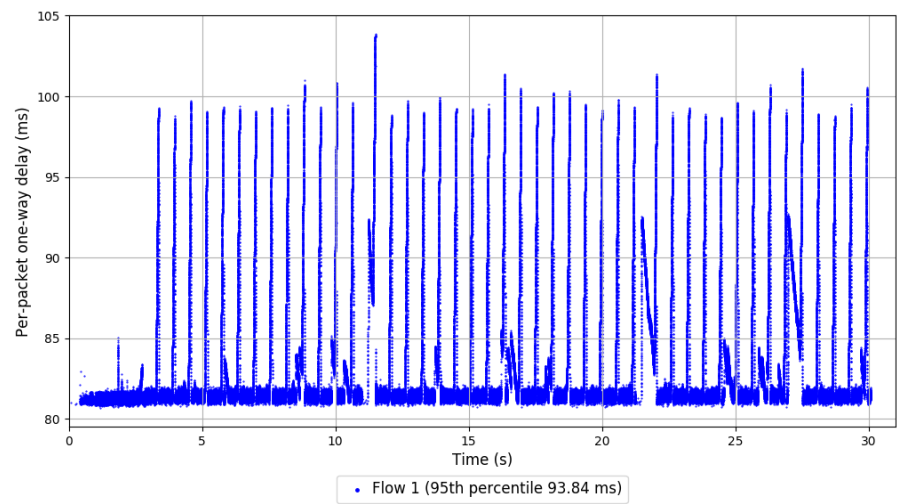
Run 2: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 91.42 Mbit/s)   Flow 1 egress (mean 91.32 Mbit/s)

Flow 1 (95th percentile 95.53 ms)

```
Run 3: Statistics of FillP-Sheep

Start at: 2020-02-17 22:42:28
End at: 2020-02-17 22:42:58
Local clock offset: 1.632 ms
Remote clock offset: -8.833 ms

# Below is generated by plot.py at 2020-02-17 23:53:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.94 Mbit/s
95th percentile per-packet one-way delay: 95.586 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 90.94 Mbit/s
95th percentile per-packet one-way delay: 95.586 ms
Loss rate: 0.69%
```
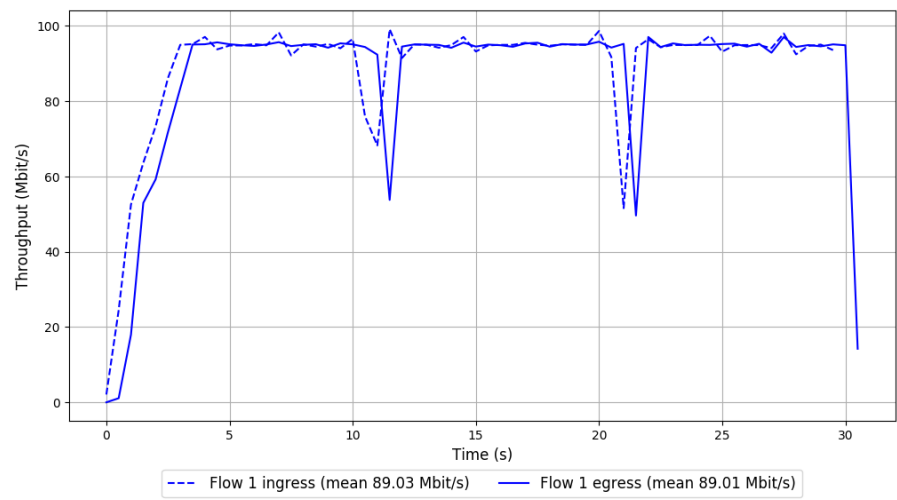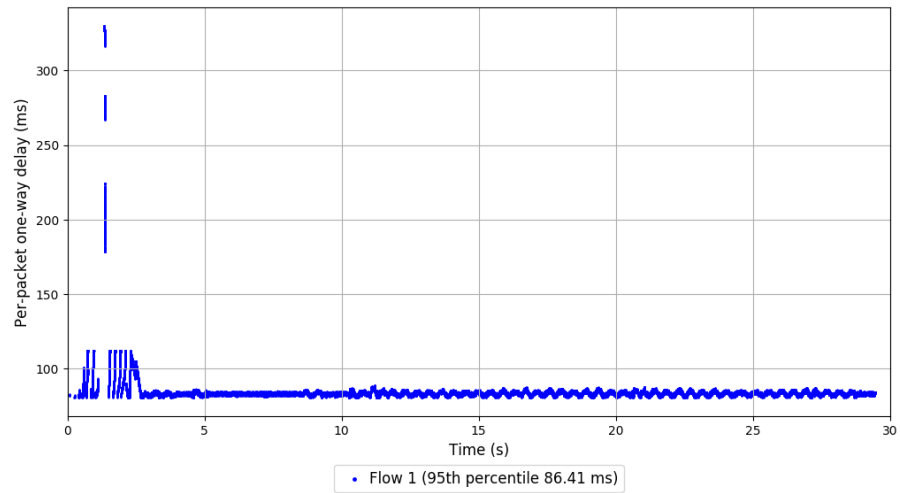
Run 3: Report of FillP-Sheep — Data Link

```
Run 4: Statistics of FillP-Sheep

Start at: 2020-02-17 23:10:25
End at: 2020-02-17 23:10:55
Local clock offset: 0.46 ms
Remote clock offset: -9.712 ms


# Below is generated by plot.py at 2020-02-17 23:54:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.99 Mbit/s
95th percentile per-packet one-way delay: 95.147 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 90.99 Mbit/s
95th percentile per-packet one-way delay: 95.147 ms
Loss rate: 0.05%
```
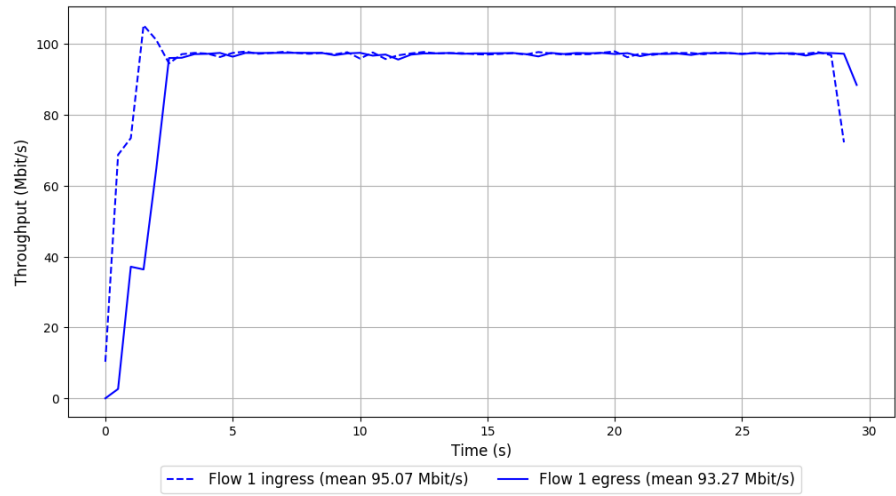
Run 4: Report of FillP-Sheep — Data Link
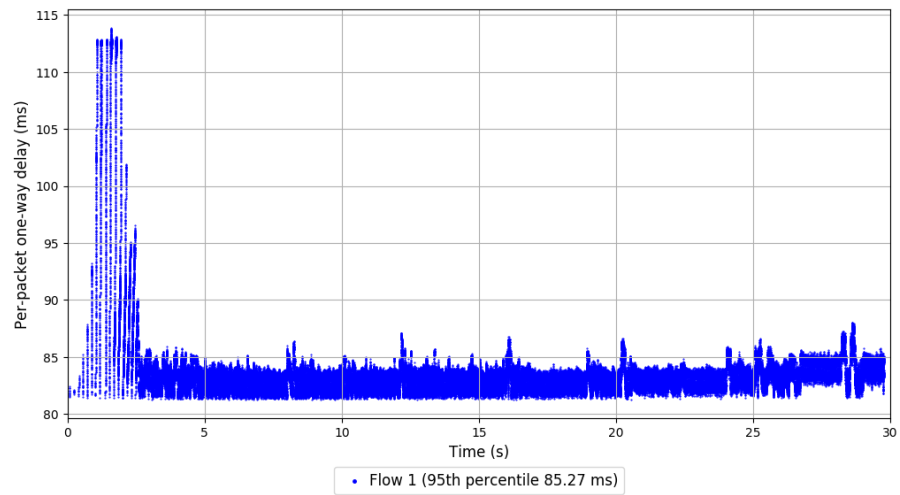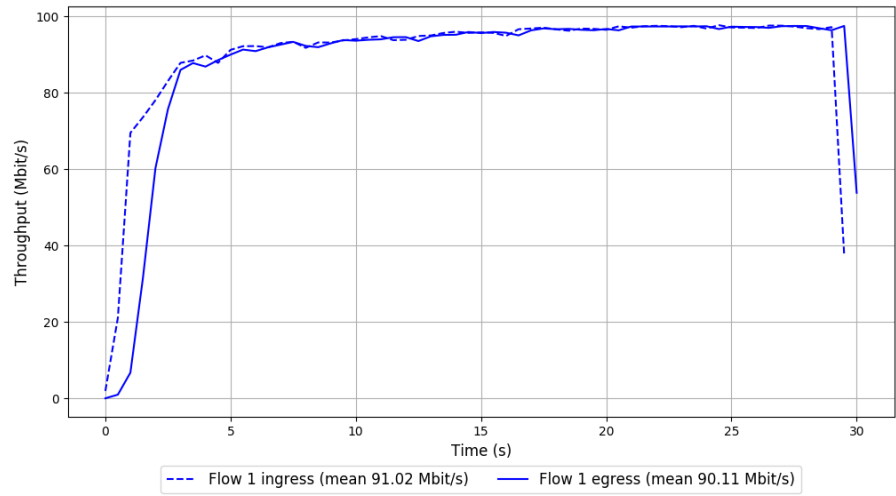

Flow 1 ingress (mean 91.05 Mbit/s)   Flow 1 egress (mean 90.99 Mbit/s)

Flow 1 (95th percentile 95.15 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2020-02-17 23:38:29
End at: 2020-02-17 23:39:00
Local clock offset: -0.75 ms
Remote clock offset: -10.864 ms


# Below is generated by plot.py at 2020-02-17 23:54:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.01 Mbit/s
95th percentile per-packet one-way delay: 93.840 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 89.01 Mbit/s
95th percentile per-packet one-way delay: 93.840 ms
Loss rate: 0.03%
```

Run 5: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 89.03 Mbit/s)   Flow 1 egress (mean 89.01 Mbit/s)
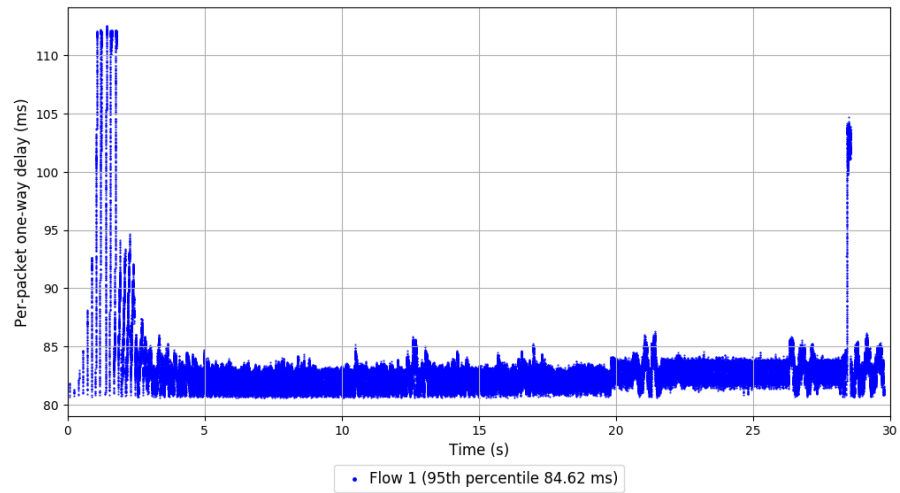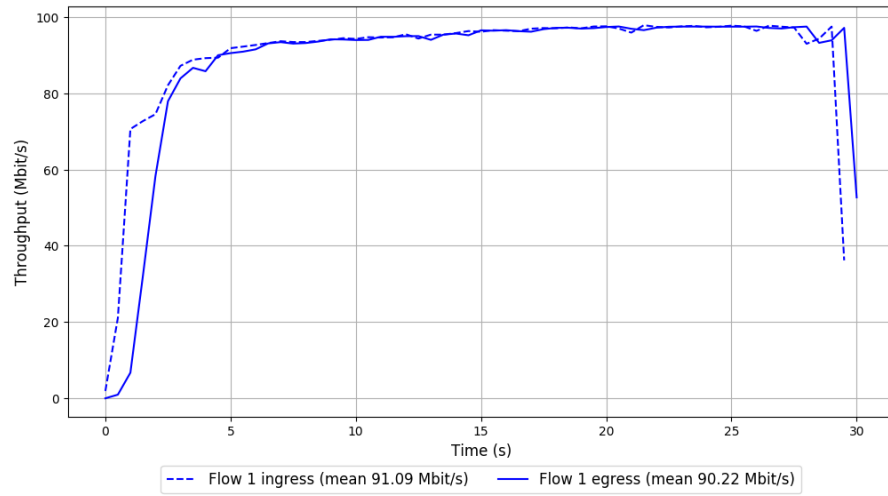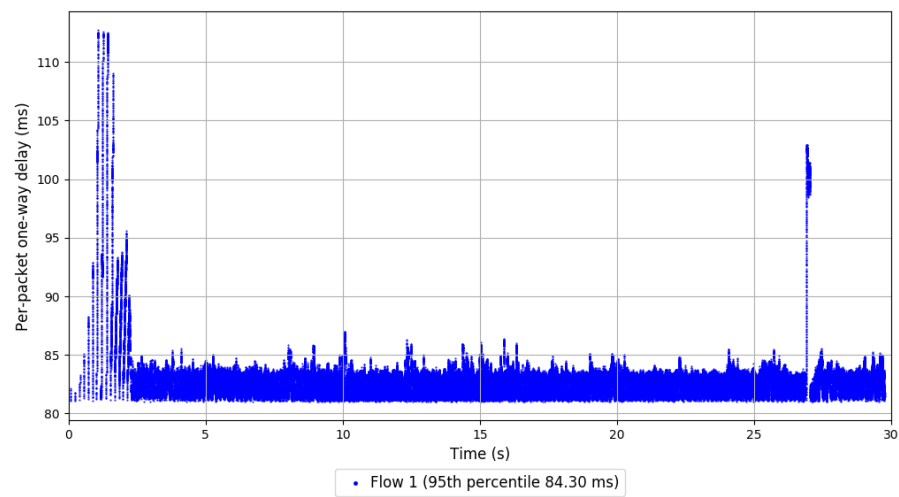

Flow 1 (95th percentile 93.84 ms)

```
Run 1: Statistics of Indigo

Start at: 2020-02-17 21:47:15
End at: 2020-02-17 21:47:45
Local clock offset: 1.485 ms
Remote clock offset: -7.736 ms

# Below is generated by plot.py at 2020-02-17 23:54:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.27 Mbit/s
95th percentile per-packet one-way delay: 86.414 ms
Loss rate: 1.89%
-- Flow 1:
Average throughput: 93.27 Mbit/s
95th percentile per-packet one-way delay: 86.414 ms
Loss rate: 1.89%
```

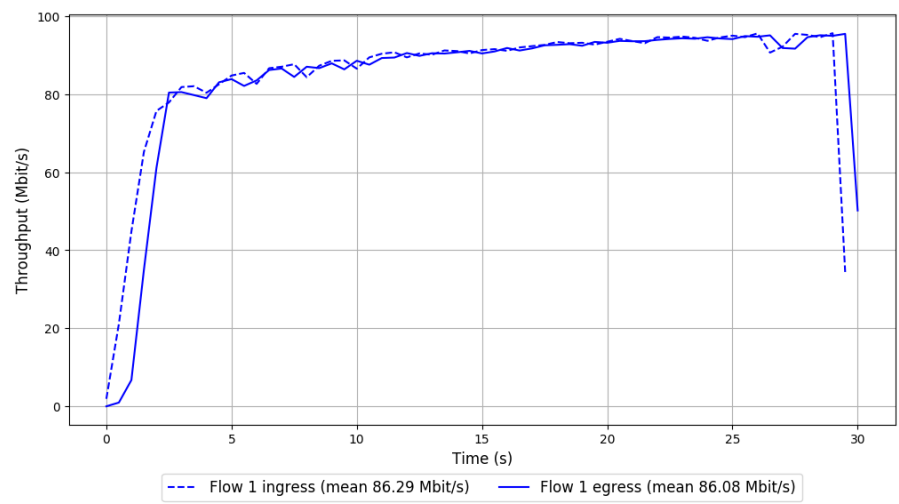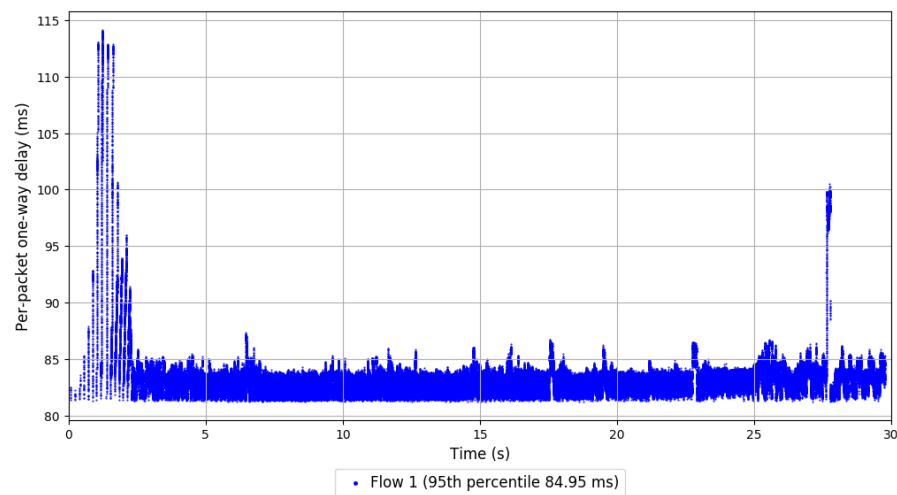Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2020-02-17 22:15:42
End at: 2020-02-17 22:16:12
Local clock offset: 1.34 ms
Remote clock offset: -7.719 ms


# Below is generated by plot.py at 2020-02-17 23:54:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.11 Mbit/s
95th percentile per-packet one-way delay: 85.265 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 90.11 Mbit/s
95th percentile per-packet one-way delay: 85.265 ms
Loss rate: 0.99%
```

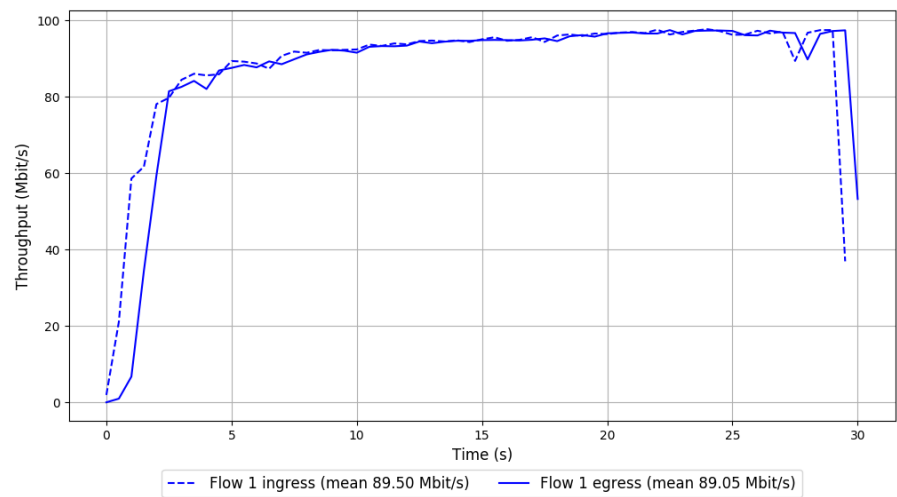Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2020-02-17 22:43:39
End at: 2020-02-17 22:44:09
Local clock offset: 1.564 ms
Remote clock offset: -8.507 ms

# Below is generated by plot.py at 2020-02-17 23:54:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.22 Mbit/s
95th percentile per-packet one-way delay: 84.623 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 90.22 Mbit/s
95th percentile per-packet one-way delay: 84.623 ms
Loss rate: 0.95%
```

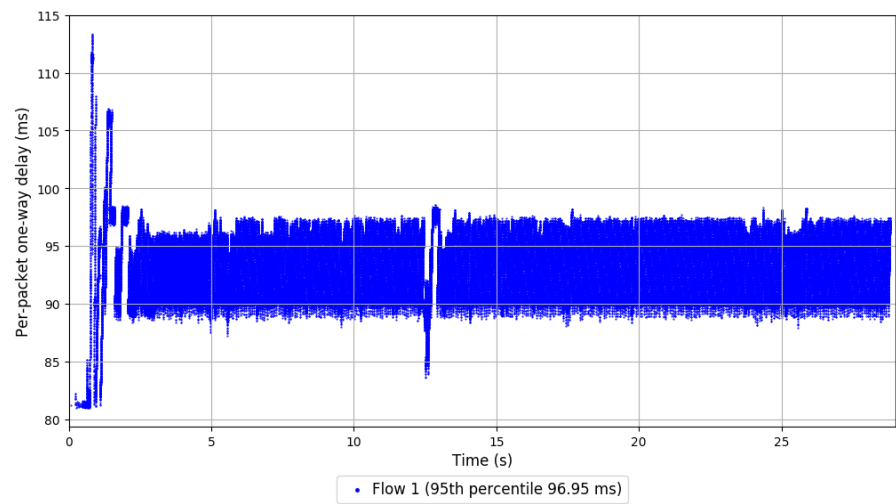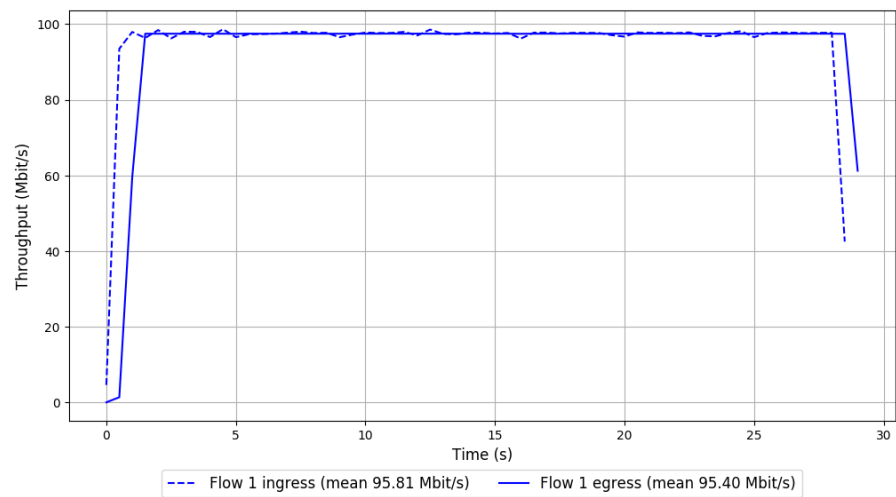Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2020-02-17 23:11:37
End at: 2020-02-17 23:12:08
Local clock offset: -0.332 ms
Remote clock offset: -10.013 ms

# Below is generated by plot.py at 2020-02-17 23:54:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.08 Mbit/s
95th percentile per-packet one-way delay: 84.304 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 86.08 Mbit/s
95th percentile per-packet one-way delay: 84.304 ms
Loss rate: 0.25%
```
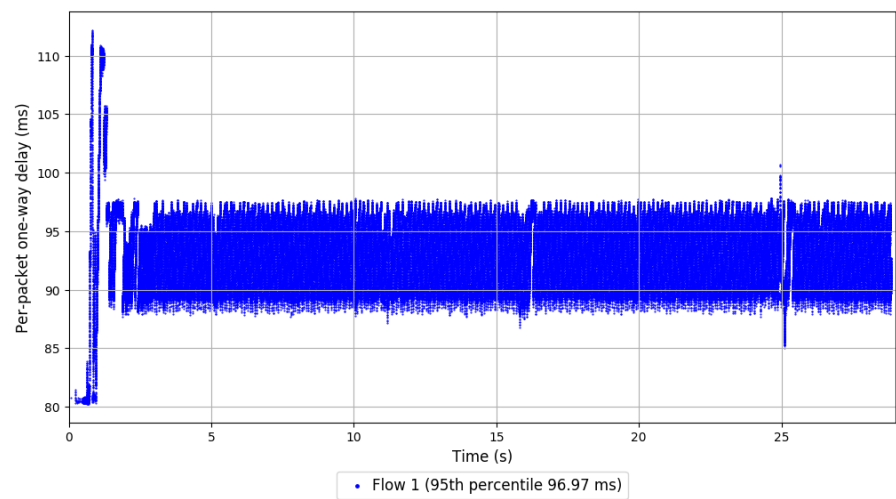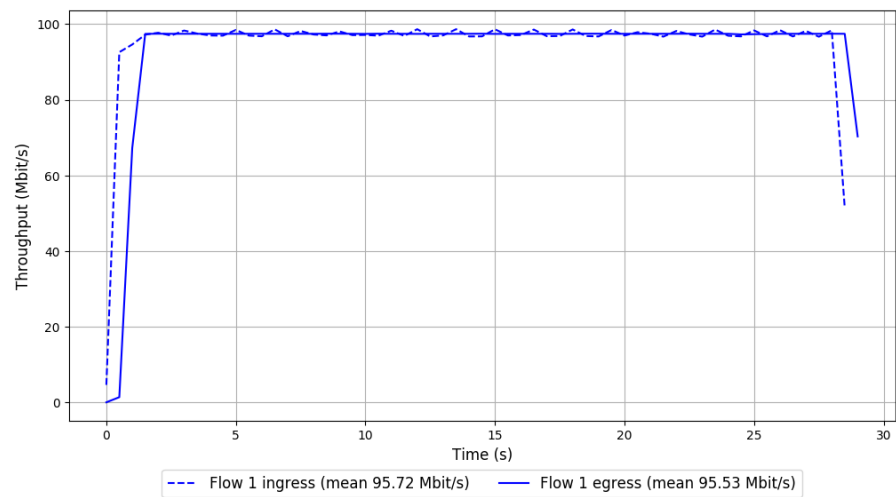
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2020-02-17 23:39:40
End at: 2020-02-17 23:40:10
Local clock offset: -0.77 ms
Remote clock offset: -10.494 ms

# Below is generated by plot.py at 2020-02-17 23:54:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.05 Mbit/s
95th percentile per-packet one-way delay: 84.954 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 89.05 Mbit/s
95th percentile per-packet one-way delay: 84.954 ms
Loss rate: 0.48%
```

Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2020-02-17 21:32:01
End at: 2020-02-17 21:32:31
Local clock offset: -0.479 ms
Remote clock offset: -8.422 ms

# Below is generated by plot.py at 2020-02-17 23:54:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.40 Mbit/s
95th percentile per-packet one-way delay: 96.949 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 95.40 Mbit/s
95th percentile per-packet one-way delay: 96.949 ms
Loss rate: 0.37%
```
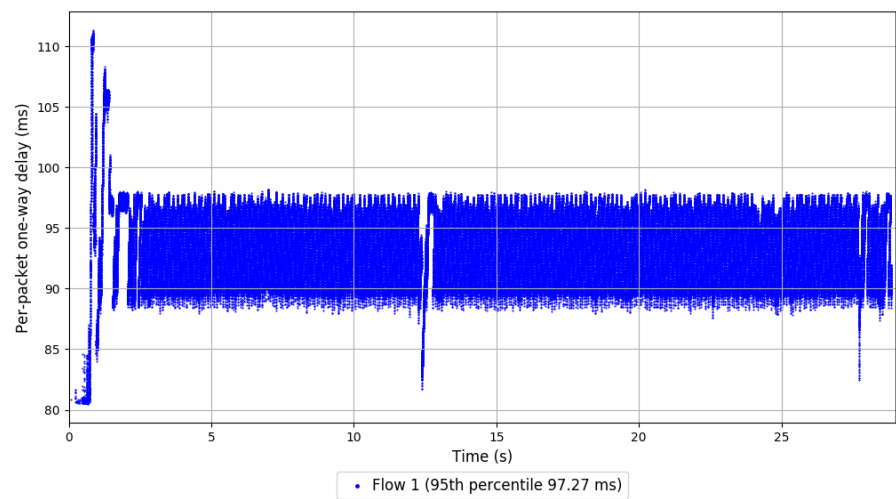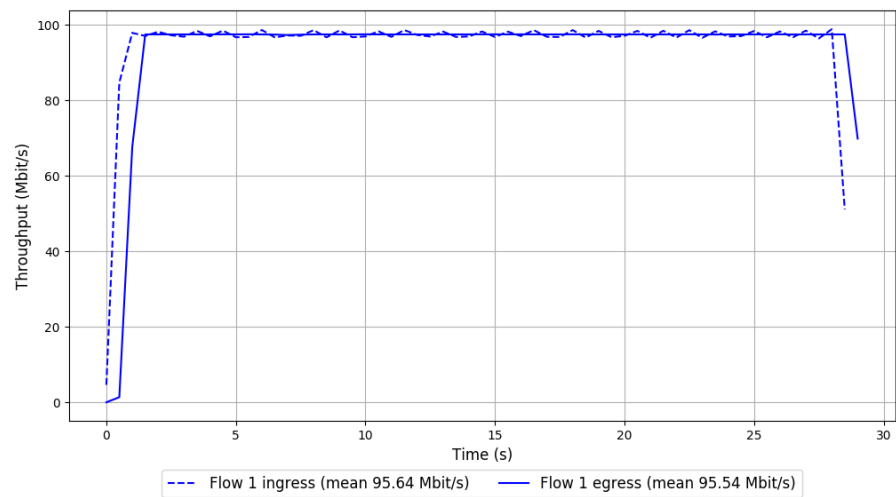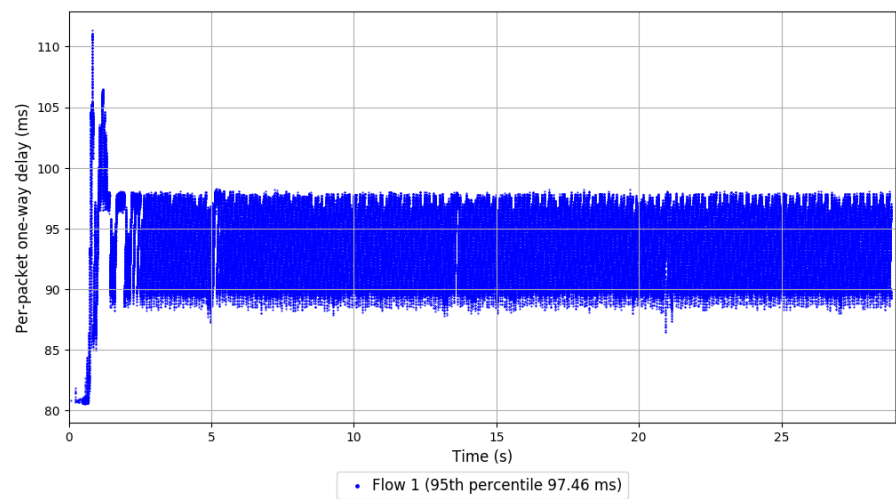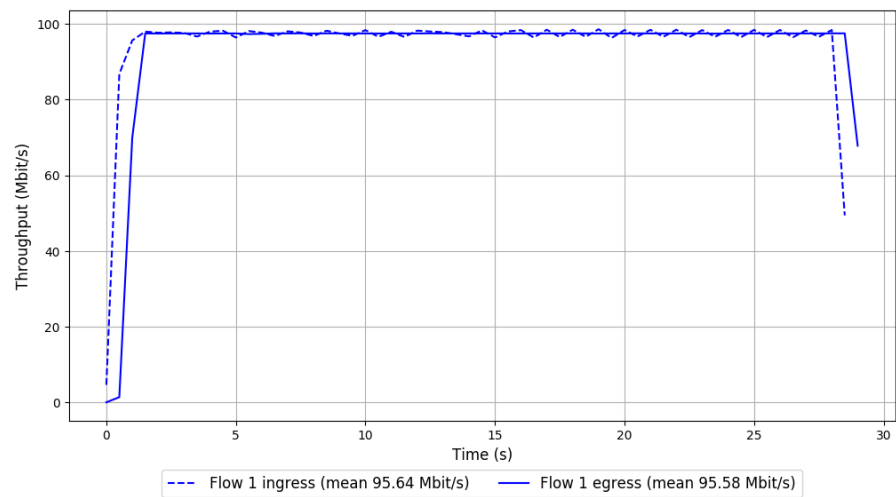
Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2020-02-17 22:00:21
End at: 2020-02-17 22:00:51
Local clock offset: 1.644 ms
Remote clock offset: -8.216 ms

# Below is generated by plot.py at 2020-02-17 23:55:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.53 Mbit/s
95th percentile per-packet one-way delay: 96.974 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 95.53 Mbit/s
95th percentile per-packet one-way delay: 96.974 ms
Loss rate: 0.15%
```
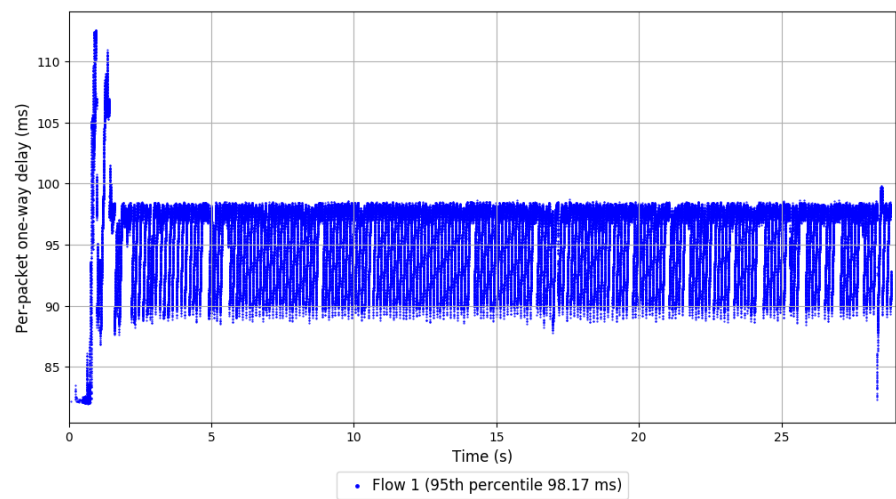
Run 2: Report of Indigo-MusesC3 — Data Link

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2020-02-17 22:28:32
End at: 2020-02-17 22:29:02
Local clock offset: 2.7 ms
Remote clock offset: -7.951 ms

# Below is generated by plot.py at 2020-02-17 23:55:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.54 Mbit/s
95th percentile per-packet one-way delay: 97.273 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 95.54 Mbit/s
95th percentile per-packet one-way delay: 97.273 ms
Loss rate: 0.06%
```
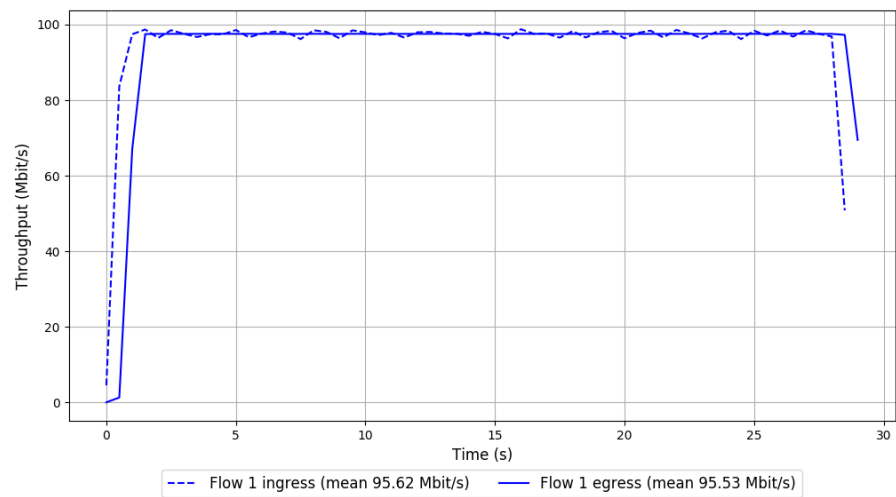
Run 3: Report of Indigo-MusesC3 — Data Link

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```
Run 4: Statistics of Indigo-MusesC3

Start at: 2020-02-17 22:56:27
End at: 2020-02-17 22:56:57
Local clock offset: 1.823 ms
Remote clock offset: -8.617 ms


# Below is generated by plot.py at 2020-02-17 23:55:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.58 Mbit/s
95th percentile per-packet one-way delay: 97.461 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 95.58 Mbit/s
95th percentile per-packet one-way delay: 97.461 ms
Loss rate: 0.04%
```
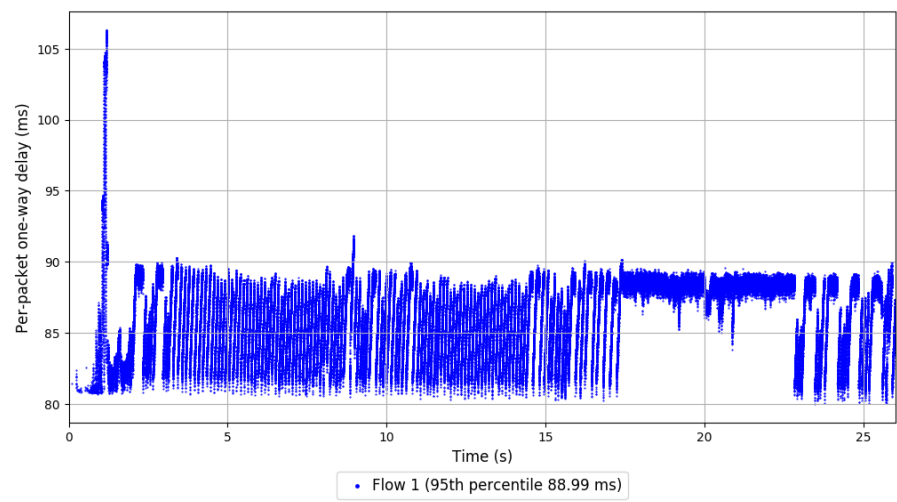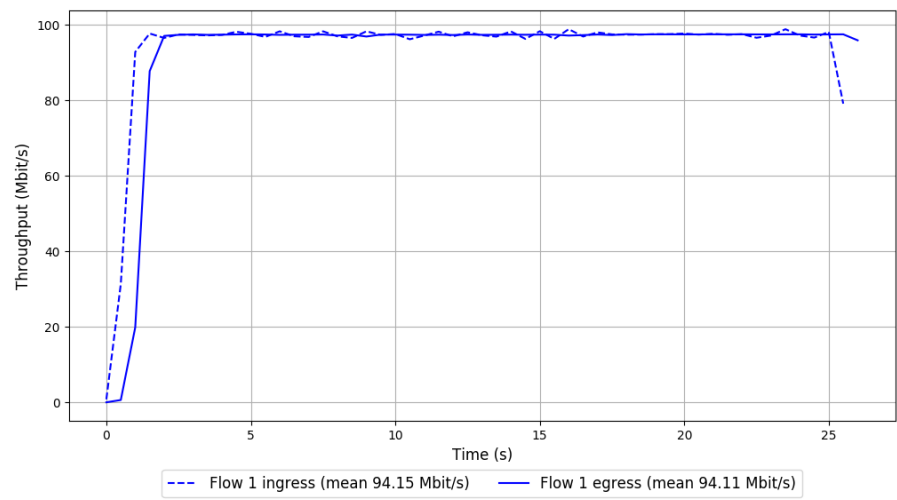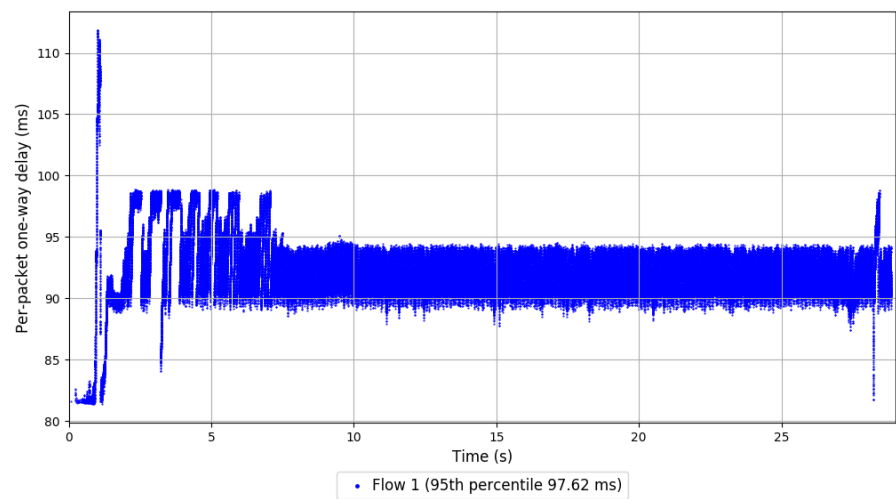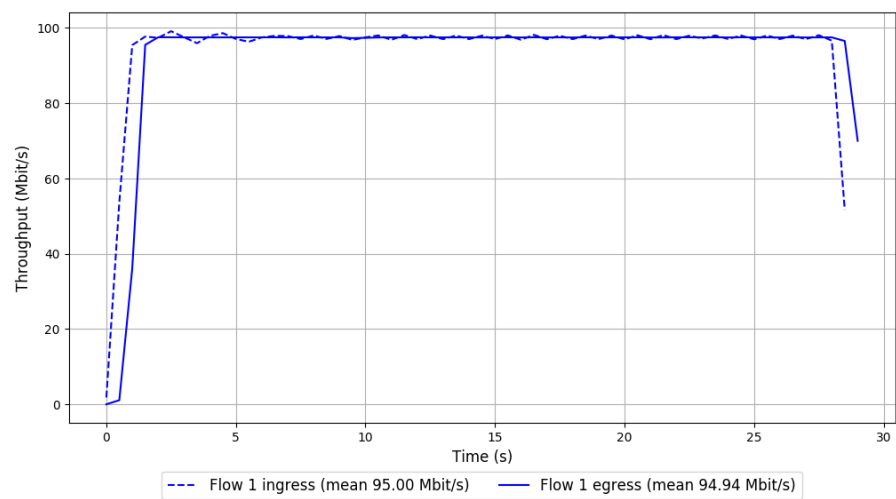
Run 4: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 95.64 Mbit/s)   Flow 1 egress (mean 95.58 Mbit/s)

Flow 1 (95th percentile 97.46 ms)

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2020-02-17 23:24:29
End at: 2020-02-17 23:24:59
Local clock offset: -0.521 ms
Remote clock offset: -10.413 ms


# Below is generated by plot.py at 2020-02-17 23:55:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.53 Mbit/s
95th percentile per-packet one-way delay: 98.174 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 95.53 Mbit/s
95th percentile per-packet one-way delay: 98.174 ms
Loss rate: 0.05%
```

Run 5: Report of Indigo-MusesC3 — Data Link

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```
Run 1: Statistics of Indigo-MusesC5

Start at: 2020-02-17 21:29:42
End at: 2020-02-17 21:30:12
Local clock offset: 1.469 ms
Remote clock offset: -8.131 ms

# Below is generated by plot.py at 2020-02-17 23:55:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.11 Mbit/s
95th percentile per-packet one-way delay: 88.992 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 94.11 Mbit/s
95th percentile per-packet one-way delay: 88.992 ms
Loss rate: 0.02%
```
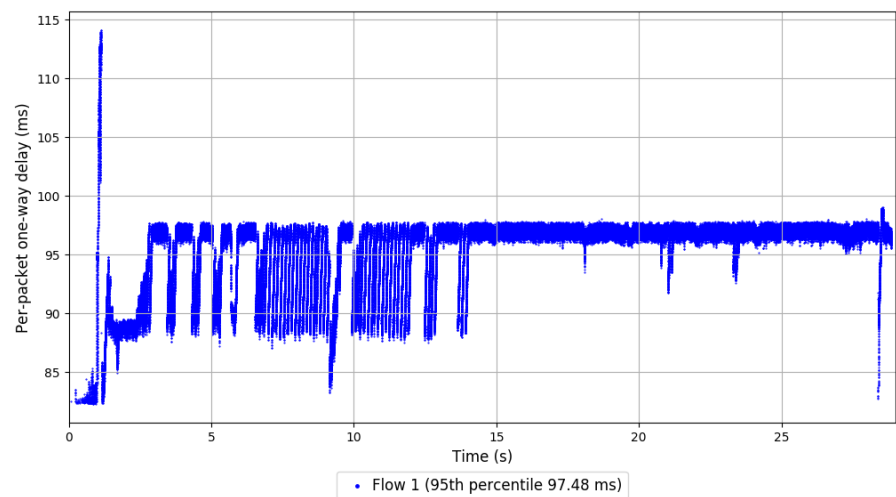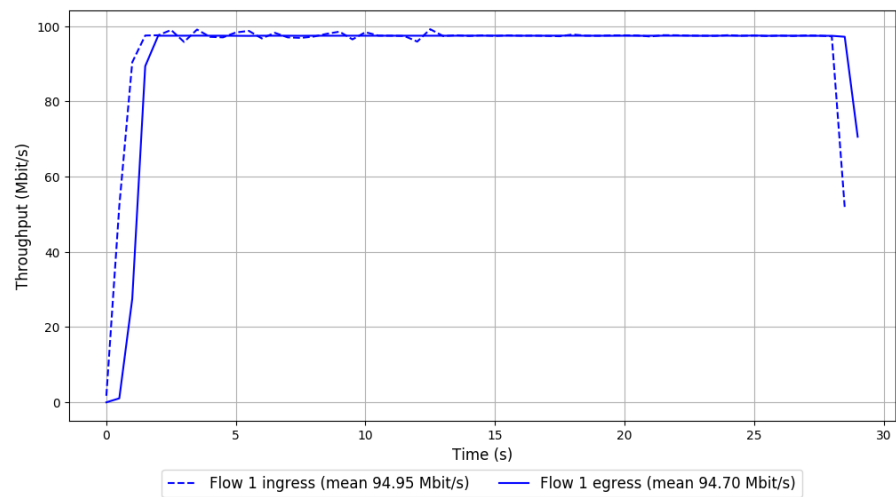
Run 1: Report of Indigo-MusesC5 — Data Link

--- Flow 1 ingress (mean 94.15 Mbit/s) —— Flow 1 egress (mean 94.11 Mbit/s)

· Flow 1 (95th percentile 88.99 ms)

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2020-02-17 21:57:59
End at: 2020-02-17 21:58:29
Local clock offset: 1.019 ms
Remote clock offset: -7.812 ms


# Below is generated by plot.py at 2020-02-17 23:55:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.94 Mbit/s
95th percentile per-packet one-way delay: 97.621 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 94.94 Mbit/s
95th percentile per-packet one-way delay: 97.621 ms
Loss rate: 0.03%
```
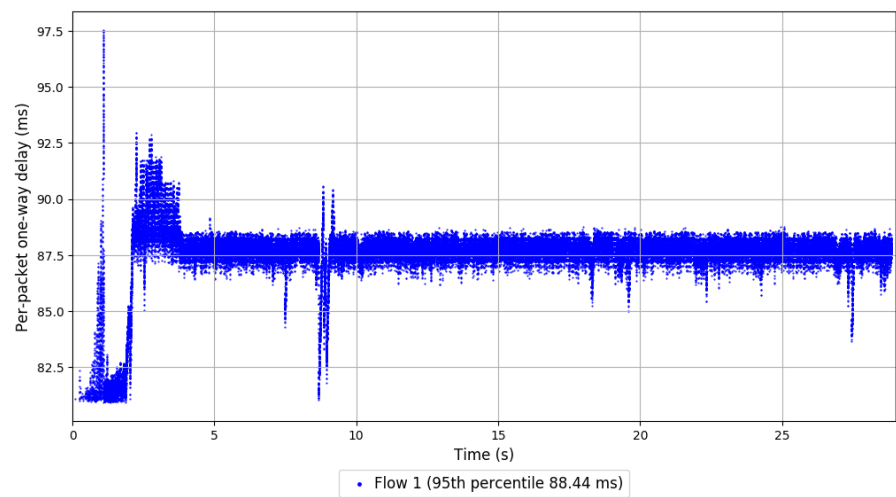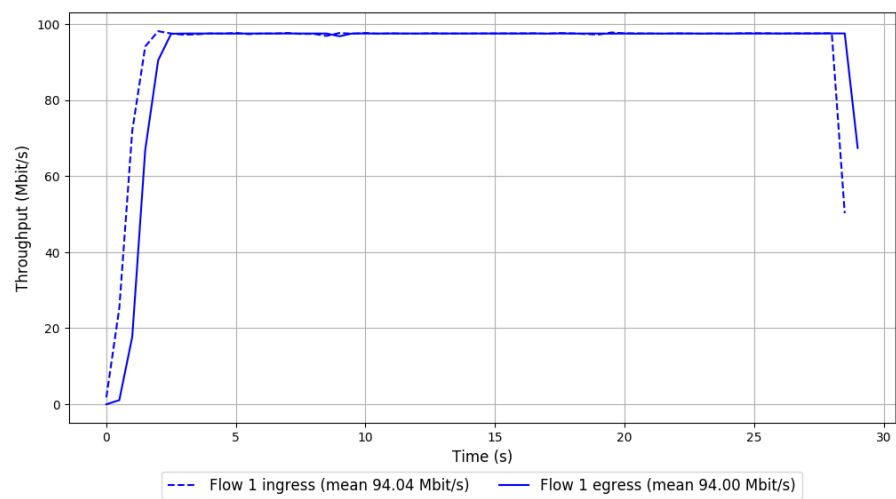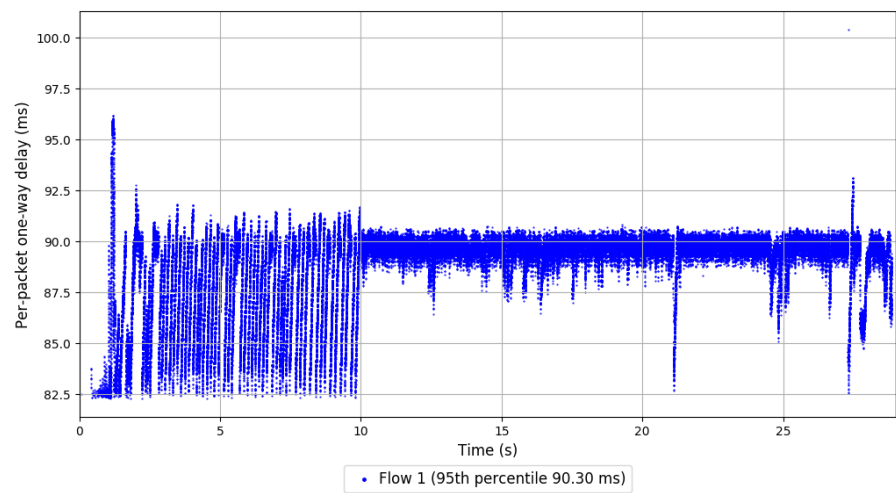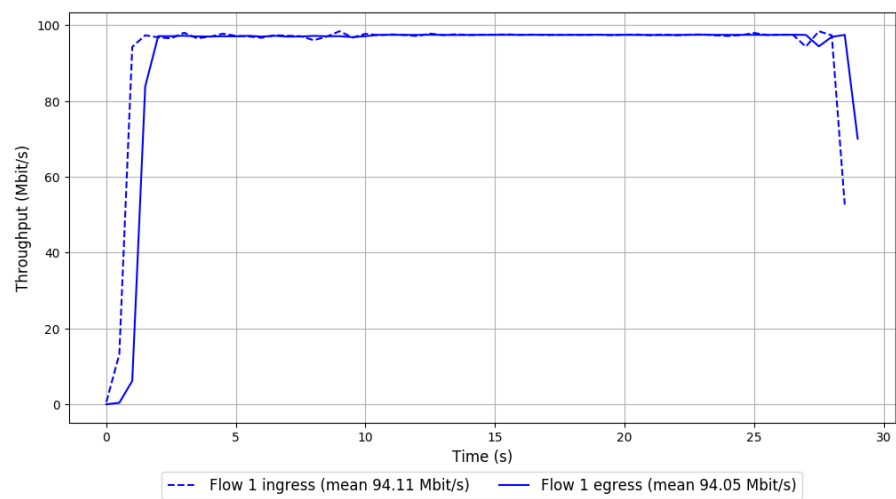
Run 2: Report of Indigo-MusesC5 — Data Link

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```
Run 3: Statistics of Indigo-MusesC5

Start at: 2020-02-17 22:26:13
End at: 2020-02-17 22:26:43
Local clock offset: 2.682 ms
Remote clock offset: -8.091 ms

# Below is generated by plot.py at 2020-02-17 23:55:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.70 Mbit/s
95th percentile per-packet one-way delay: 97.477 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 94.70 Mbit/s
95th percentile per-packet one-way delay: 97.477 ms
Loss rate: 0.22%
```

Run 3: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 94.95 Mbit/s) — — — — Flow 1 egress (mean 94.70 Mbit/s)

Flow 1 (95th percentile 97.48 ms)

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2020-02-17 22:54:08
End at: 2020-02-17 22:54:38
Local clock offset: 1.054 ms
Remote clock offset: -8.931 ms


# Below is generated by plot.py at 2020-02-17 23:55:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.00 Mbit/s
95th percentile per-packet one-way delay: 88.436 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 94.00 Mbit/s
95th percentile per-packet one-way delay: 88.436 ms
Loss rate: 0.01%
```
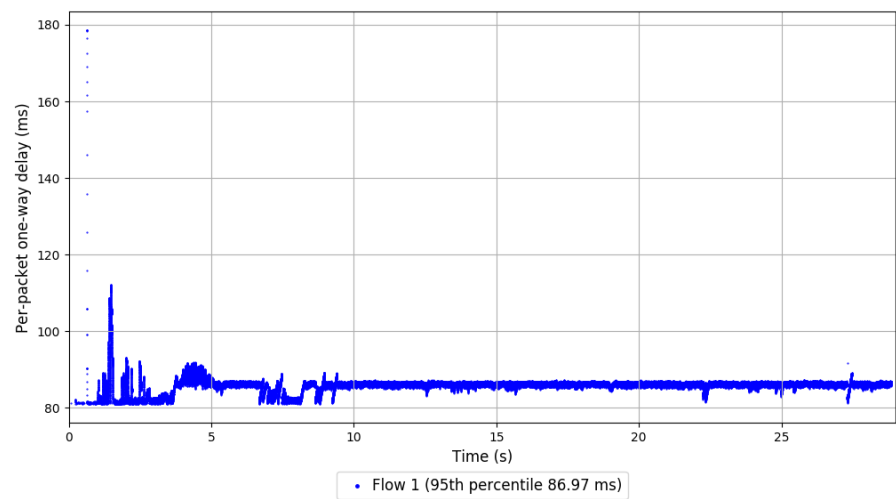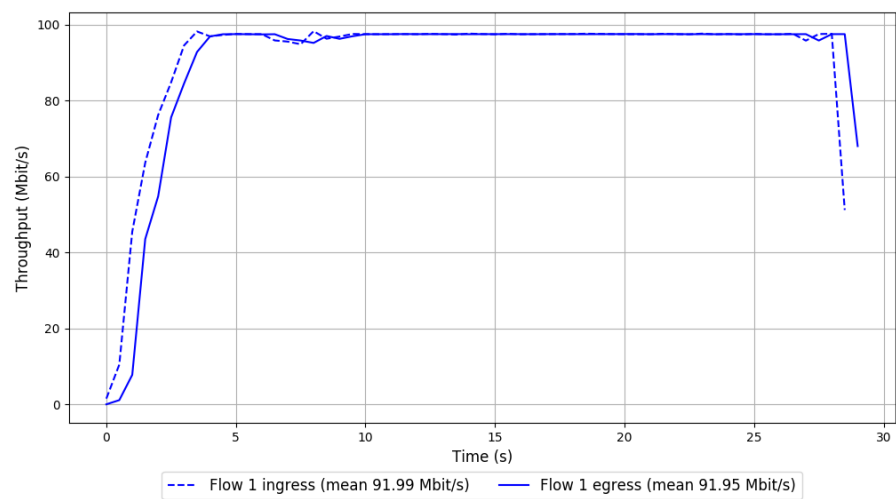
Run 4: Report of Indigo-MusesC5 — Data Link

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2020-02-17 23:22:11
End at: 2020-02-17 23:22:41
Local clock offset: -0.532 ms
Remote clock offset: -10.115 ms


# Below is generated by plot.py at 2020-02-17 23:56:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.05 Mbit/s
95th percentile per-packet one-way delay: 90.301 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 94.05 Mbit/s
95th percentile per-packet one-way delay: 90.301 ms
Loss rate: 0.05%
```
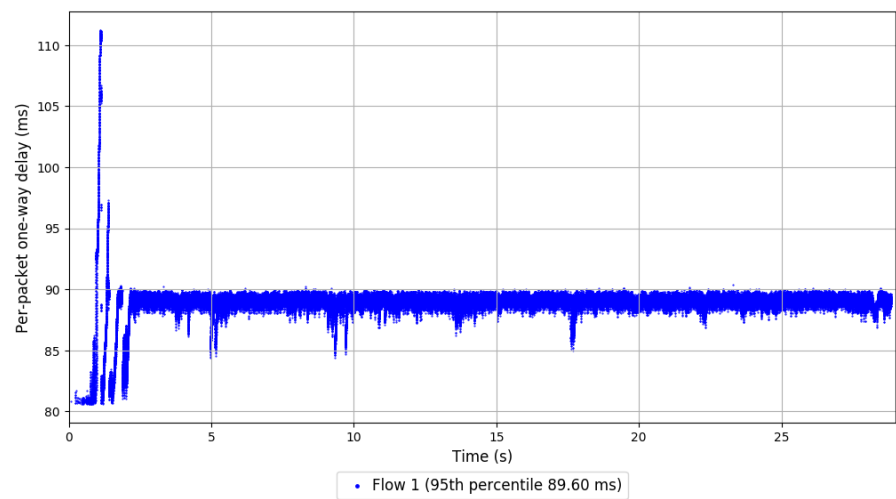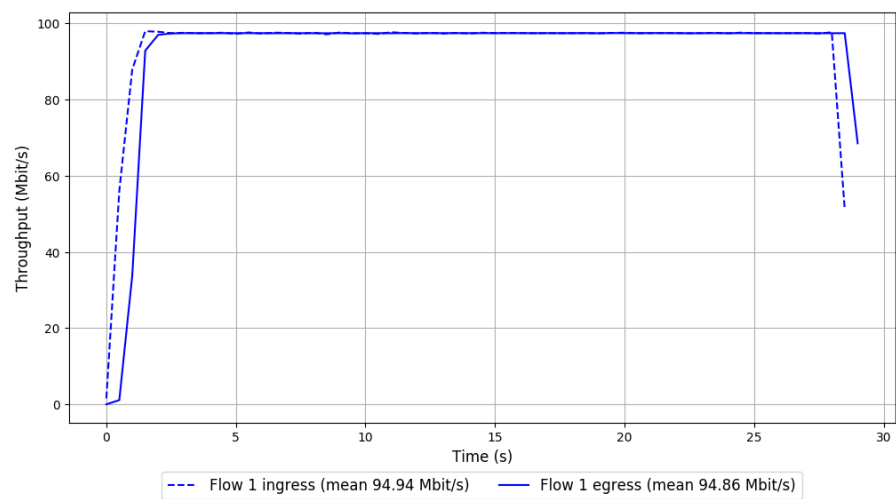
Run 5: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 94.11 Mbit/s)   Flow 1 egress (mean 94.05 Mbit/s)

Flow 1 (95th percentile 90.30 ms)

```
Run 1: Statistics of Indigo-MusesD

Start at: 2020-02-17 21:43:42
End at: 2020-02-17 21:44:12
Local clock offset: 0.814 ms
Remote clock offset: -8.221 ms


# Below is generated by plot.py at 2020-02-17 23:56:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.95 Mbit/s
95th percentile per-packet one-way delay: 86.966 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 91.95 Mbit/s
95th percentile per-packet one-way delay: 86.966 ms
Loss rate: 0.03%
```
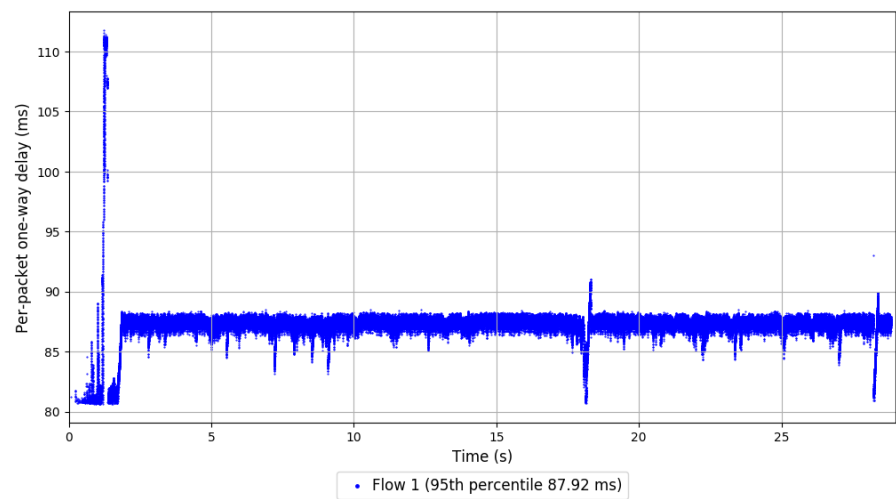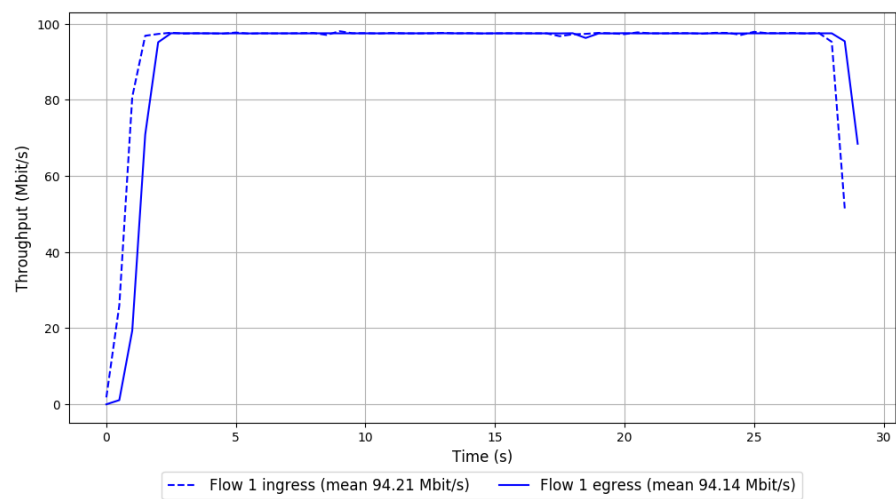
Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2020-02-17 22:12:02
End at: 2020-02-17 22:12:32
Local clock offset: 1.88 ms
Remote clock offset: -7.791 ms


# Below is generated by plot.py at 2020-02-17 23:56:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.86 Mbit/s
95th percentile per-packet one-way delay: 89.597 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 94.86 Mbit/s
95th percentile per-packet one-way delay: 89.597 ms
Loss rate: 0.05%
```
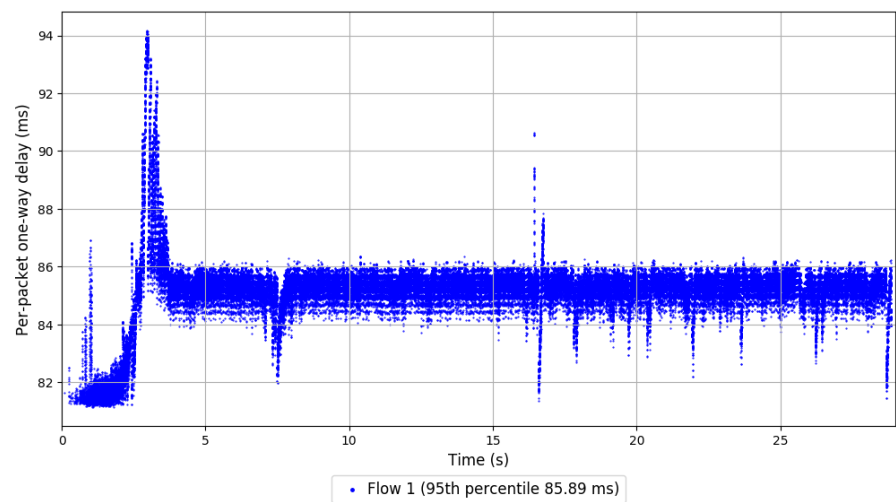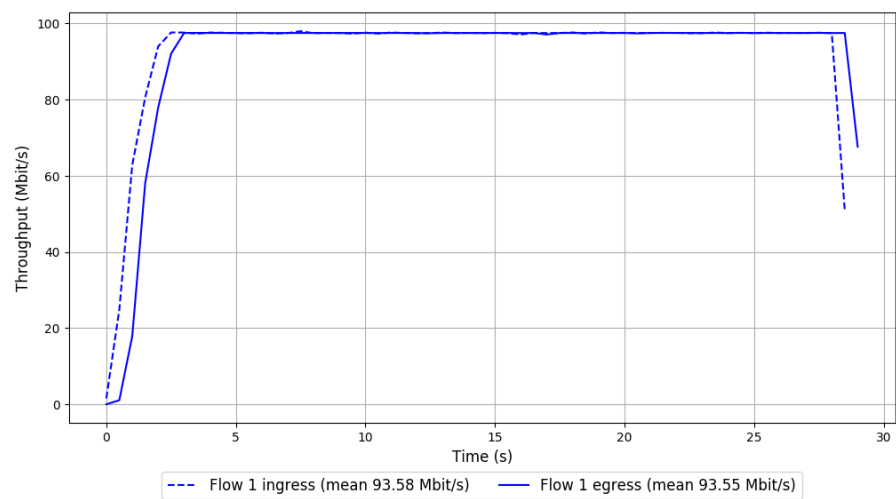
Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2020-02-17 22:40:09
End at: 2020-02-17 22:40:39
Local clock offset: 1.601 ms
Remote clock offset: -8.431 ms

# Below is generated by plot.py at 2020-02-17 23:56:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 87.916 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 87.916 ms
Loss rate: 0.06%
```
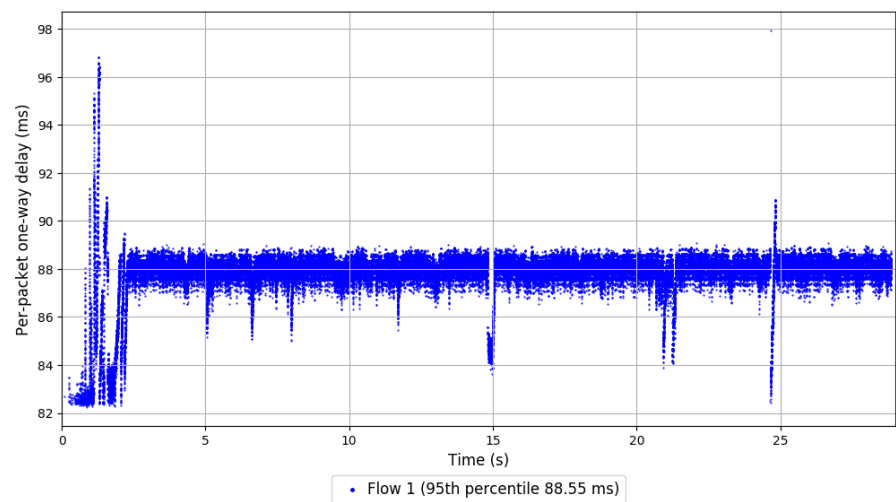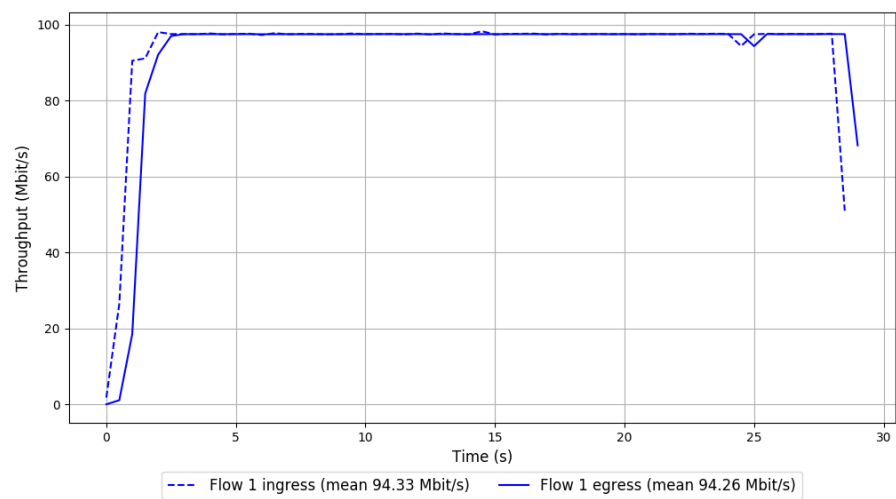
Run 3: Report of Indigo-MusesD — Data Link

```
Run 4: Statistics of Indigo-MusesD

Start at: 2020-02-17 23:08:04
End at: 2020-02-17 23:08:34
Local clock offset: 0.61 ms
Remote clock offset: -9.899 ms

# Below is generated by plot.py at 2020-02-17 23:56:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.55 Mbit/s
95th percentile per-packet one-way delay: 85.887 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 93.55 Mbit/s
95th percentile per-packet one-way delay: 85.887 ms
Loss rate: 0.02%
```
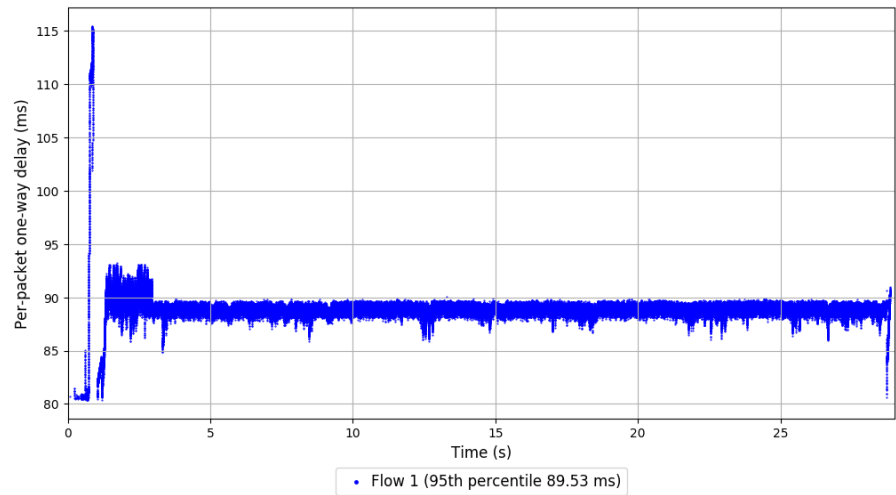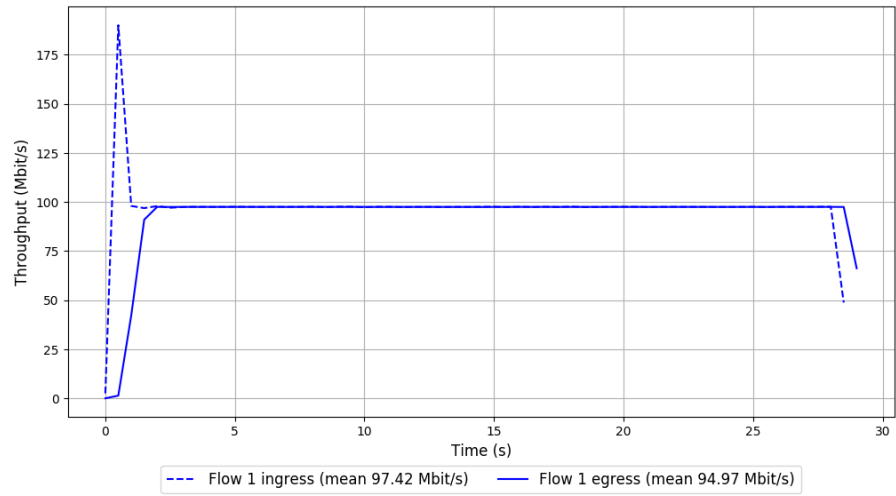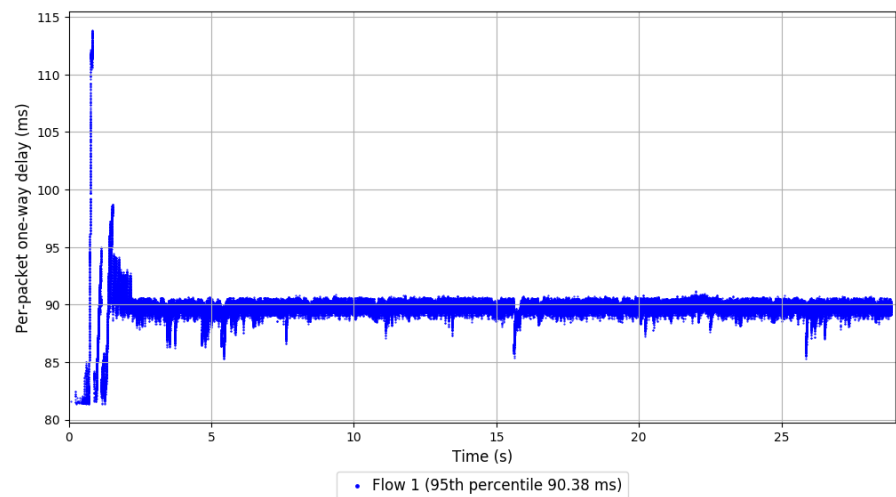
Run 4: Report of Indigo-MusesD — Data Link

```
Run 5: Statistics of Indigo-MusesD

Start at: 2020-02-17 23:36:05
End at: 2020-02-17 23:36:35
Local clock offset: -0.789 ms
Remote clock offset: -10.487 ms

# Below is generated by plot.py at 2020-02-17 23:56:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.26 Mbit/s
95th percentile per-packet one-way delay: 88.553 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 94.26 Mbit/s
95th percentile per-packet one-way delay: 88.553 ms
Loss rate: 0.05%
```
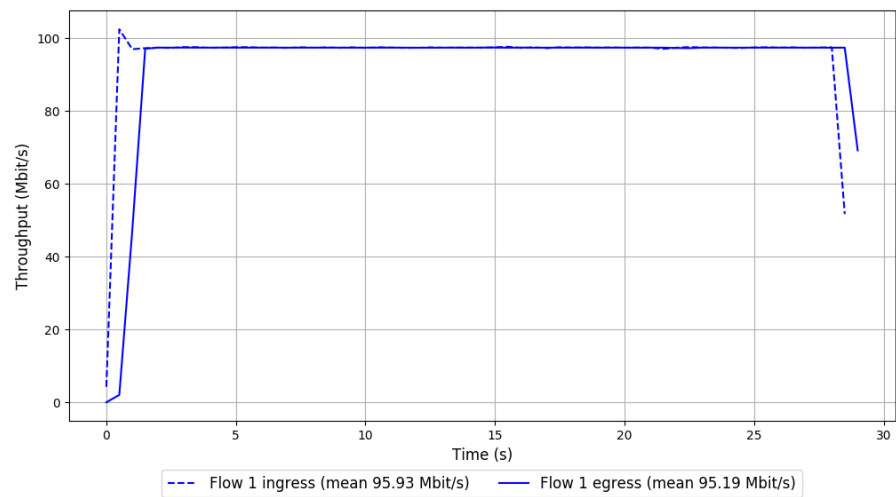
Run 5: Report of Indigo-MusesD — Data Link

```
Run 1: Statistics of Indigo-MusesT

Start at: 2020-02-17 21:42:29
End at: 2020-02-17 21:42:59
Local clock offset: 1.378 ms
Remote clock offset: -8.197 ms

# Below is generated by plot.py at 2020-02-17 23:57:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.97 Mbit/s
95th percentile per-packet one-way delay: 89.533 ms
Loss rate: 2.48%
-- Flow 1:
Average throughput: 94.97 Mbit/s
95th percentile per-packet one-way delay: 89.533 ms
Loss rate: 2.48%
```
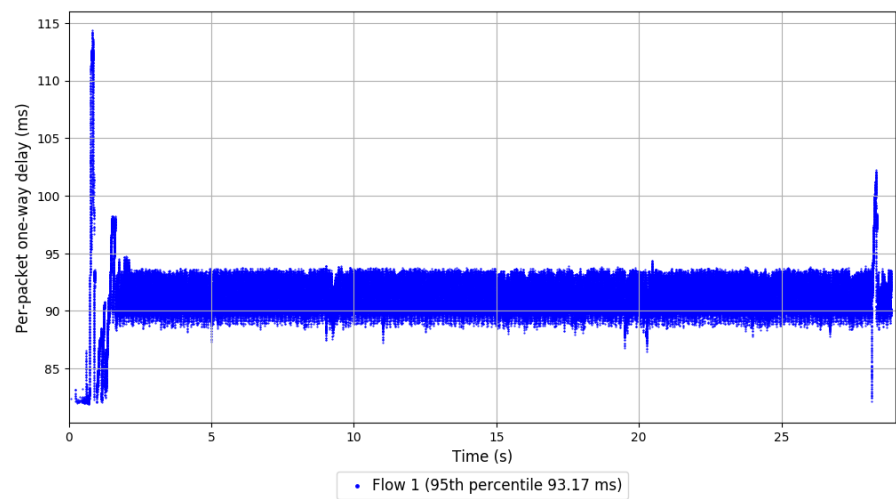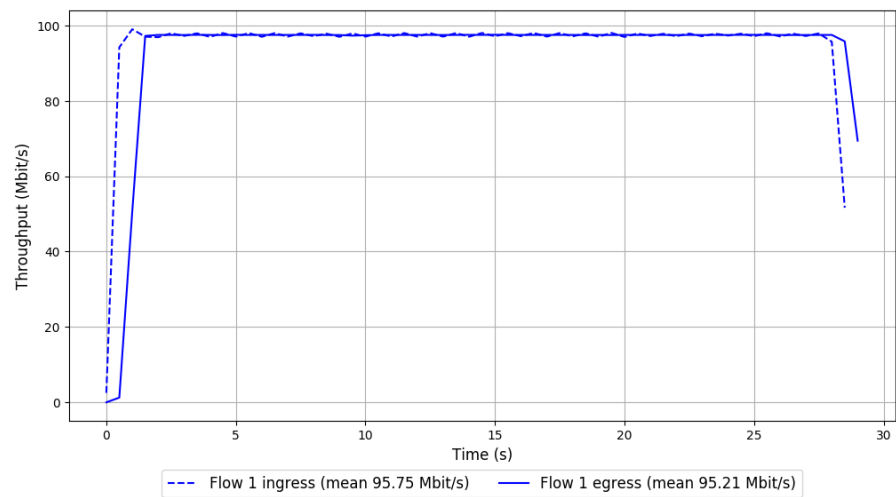
Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2020-02-17 22:10:49
End at: 2020-02-17 22:11:19
Local clock offset: 1.027 ms
Remote clock offset: -7.869 ms


# Below is generated by plot.py at 2020-02-17 23:57:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.19 Mbit/s
95th percentile per-packet one-way delay: 90.378 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 95.19 Mbit/s
95th percentile per-packet one-way delay: 90.378 ms
Loss rate: 0.75%
```
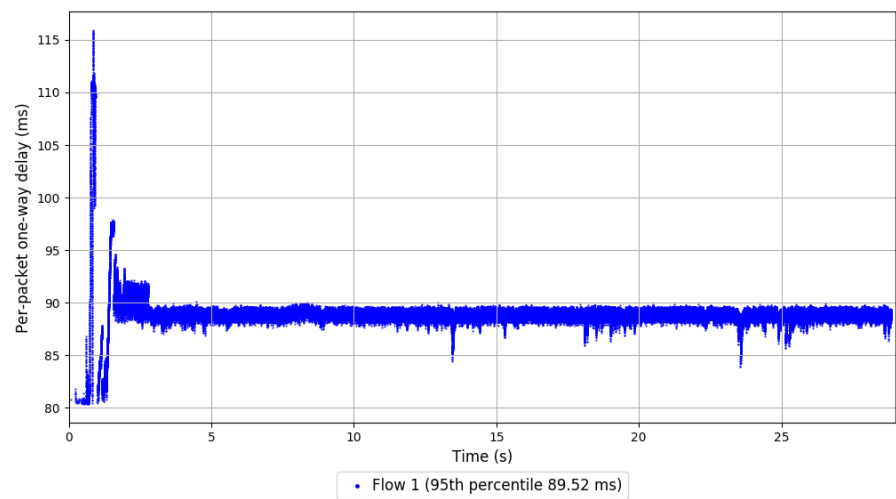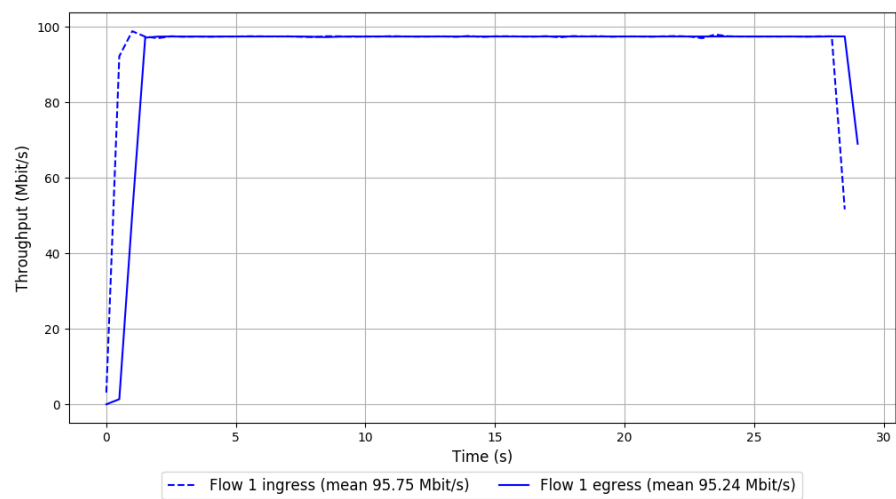
Run 2: Report of Indigo-MusesT — Data Link

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```
Run 3: Statistics of Indigo-MusesT

Start at: 2020-02-17 22:38:57
End at: 2020-02-17 22:39:27
Local clock offset: 0.955 ms
Remote clock offset: -8.824 ms

# Below is generated by plot.py at 2020-02-17 23:57:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.21 Mbit/s
95th percentile per-packet one-way delay: 93.172 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 95.21 Mbit/s
95th percentile per-packet one-way delay: 93.172 ms
Loss rate: 0.53%
```
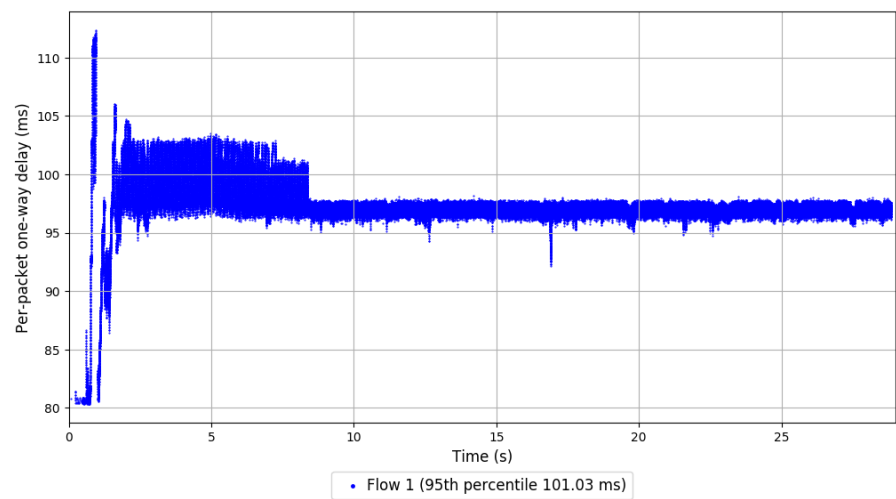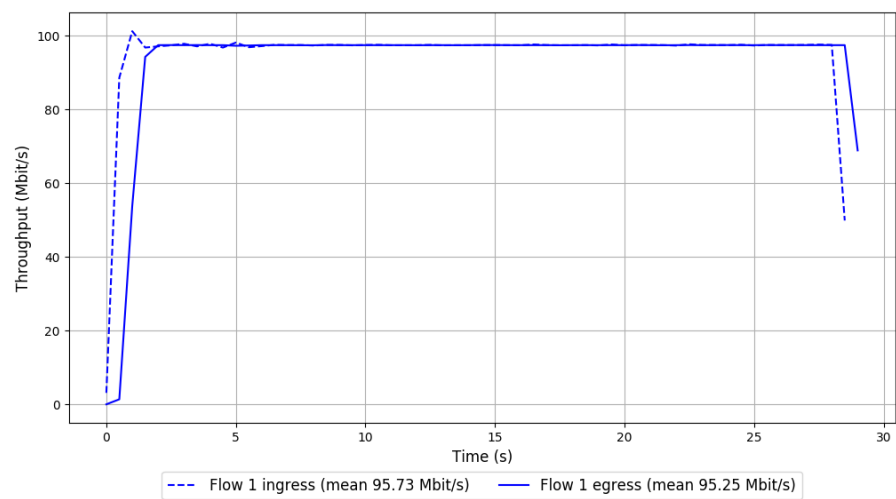
Run 3: Report of Indigo-MusesT — Data Link

```
Run 4: Statistics of Indigo-MusesT

Start at: 2020-02-17 23:06:53
End at: 2020-02-17 23:07:23
Local clock offset: 0.64 ms
Remote clock offset: -9.729 ms

# Below is generated by plot.py at 2020-02-17 23:57:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.24 Mbit/s
95th percentile per-packet one-way delay: 89.516 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 95.24 Mbit/s
95th percentile per-packet one-way delay: 89.516 ms
Loss rate: 0.51%
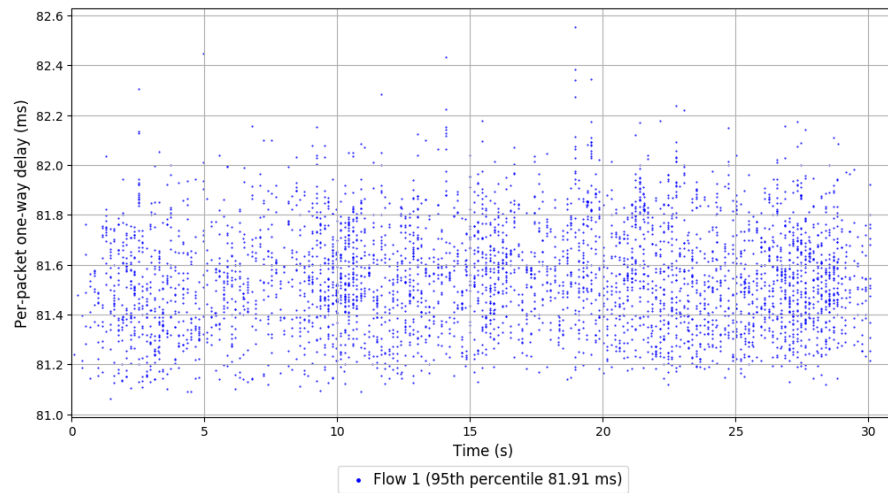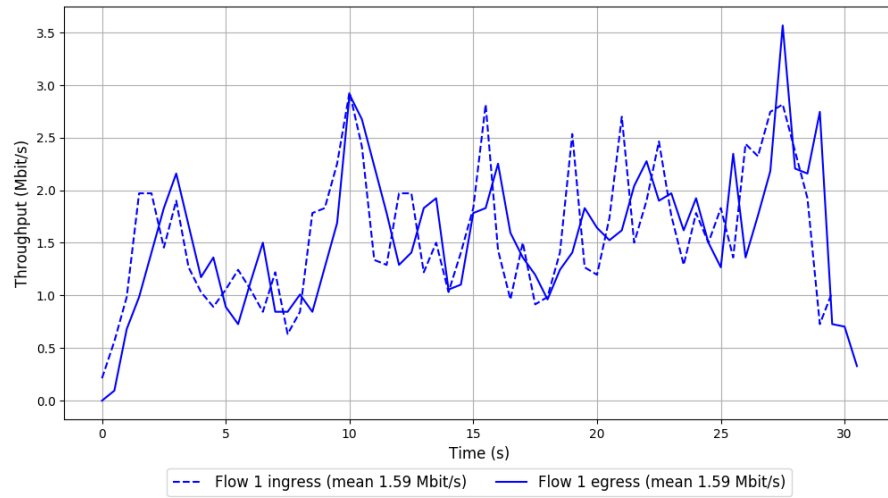```

Run 4: Report of Indigo-MusesT — Data Link

```
Run 5: Statistics of Indigo-MusesT

Start at: 2020-02-17 23:34:53
End at: 2020-02-17 23:35:23
Local clock offset: 0.027 ms
Remote clock offset: -10.671 ms


# Below is generated by plot.py at 2020-02-17 23:57:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.25 Mbit/s
95th percentile per-packet one-way delay: 101.029 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 95.25 Mbit/s
95th percentile per-packet one-way delay: 101.029 ms
Loss rate: 0.45%
```

Run 5: Report of Indigo-MusesT — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2020-02-17 21:37:47
End at: 2020-02-17 21:38:17
Local clock offset: -0.097 ms
Remote clock offset: -8.359 ms


# Below is generated by plot.py at 2020-02-17 23:57:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 81.911 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 81.911 ms
Loss rate: 0.00%
```
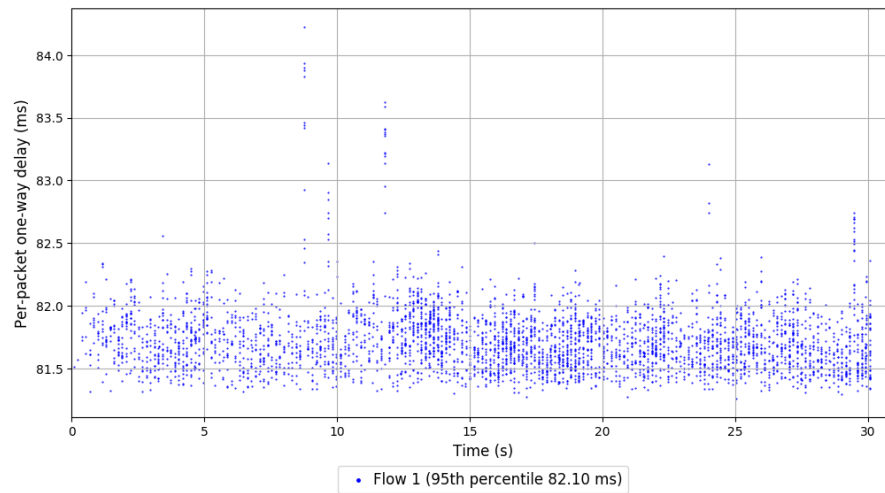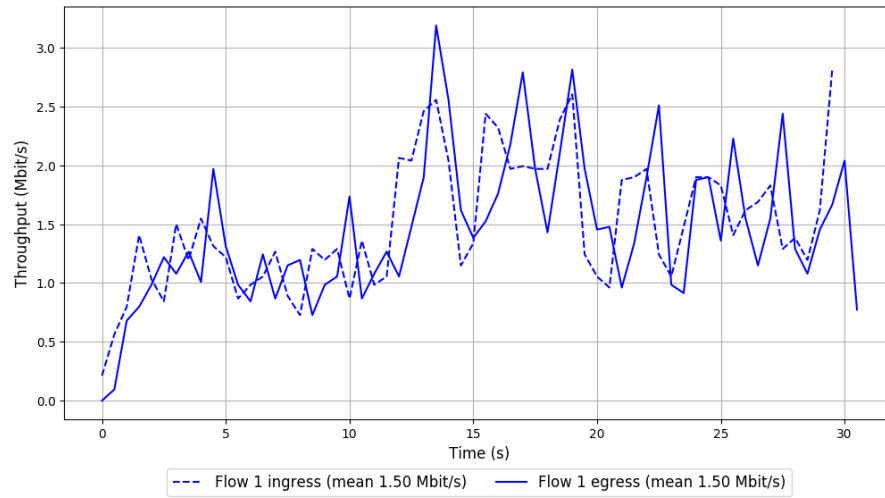
Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2020-02-17 22:06:10
End at: 2020-02-17 22:06:40
Local clock offset: 0.898 ms
Remote clock offset: -7.867 ms

# Below is generated by plot.py at 2020-02-17 23:57:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 82.103 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 82.103 ms
Loss rate: 0.00%
```
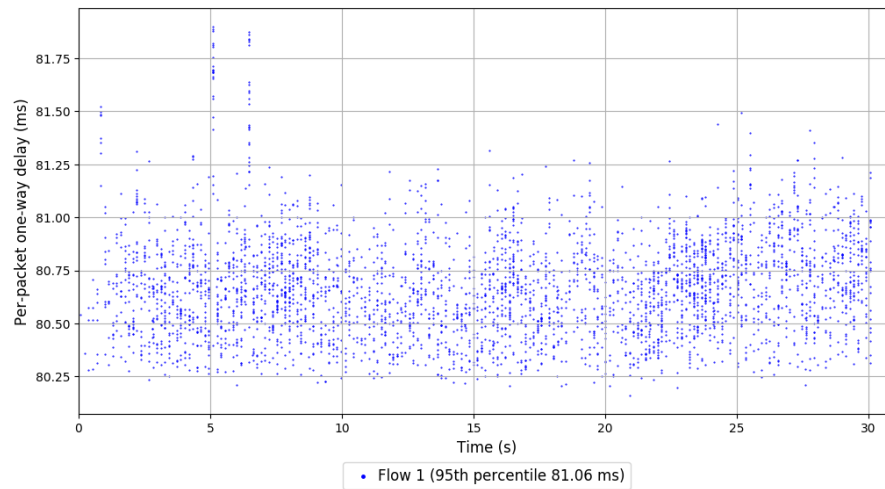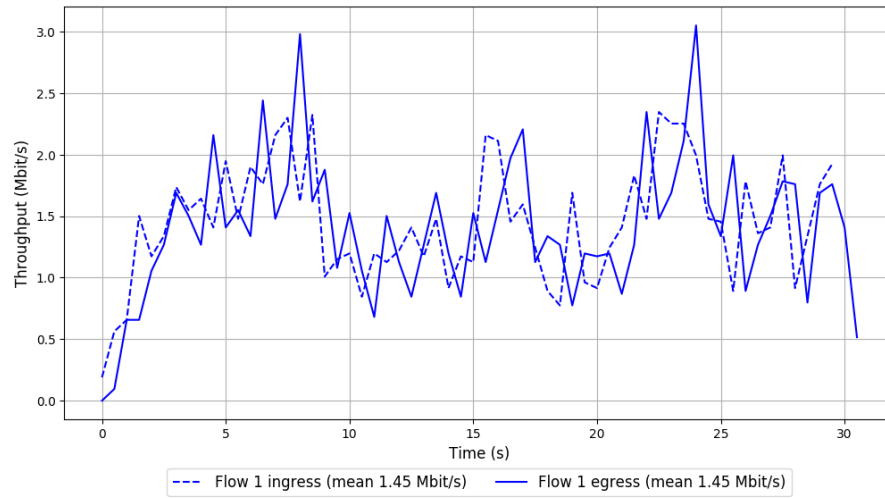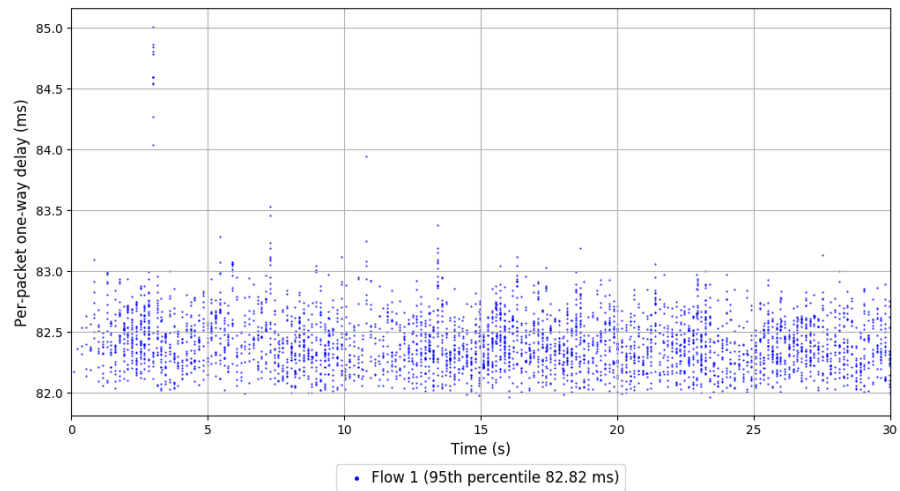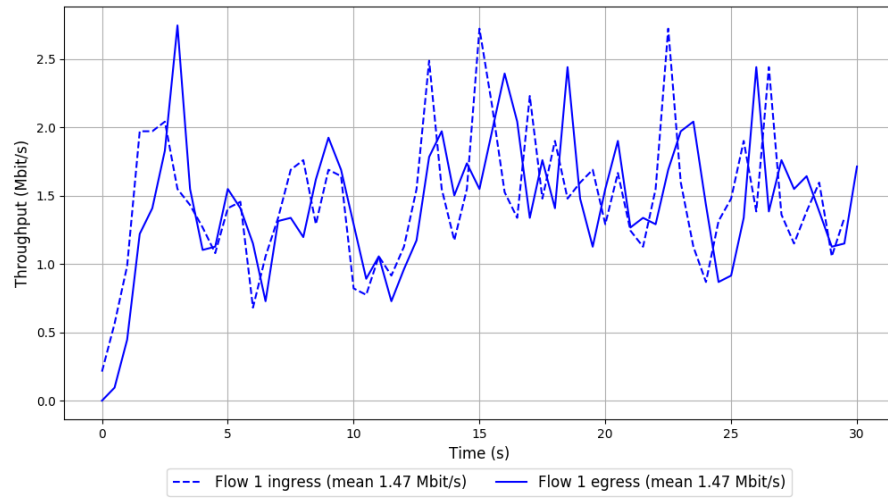
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2020-02-17 22:34:19
End at: 2020-02-17 22:34:49
Local clock offset: 1.938 ms
Remote clock offset: -8.61 ms


# Below is generated by plot.py at 2020-02-17 23:57:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 81.065 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 81.065 ms
Loss rate: 0.00%
```
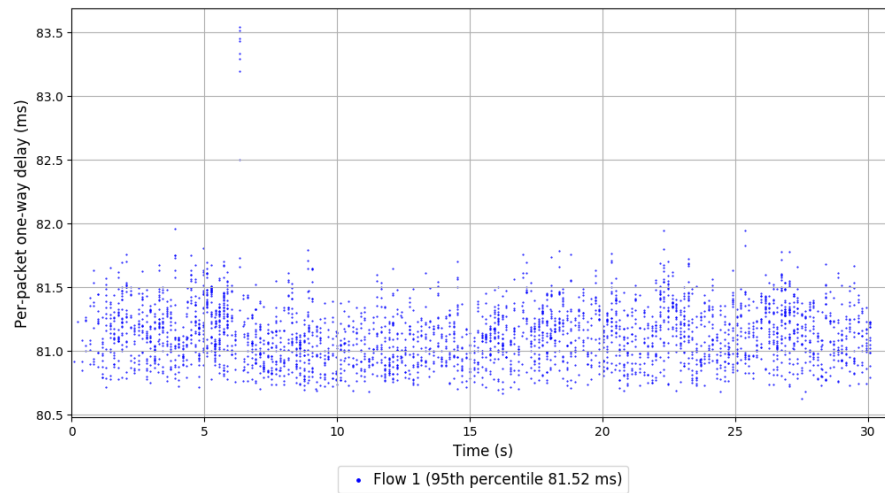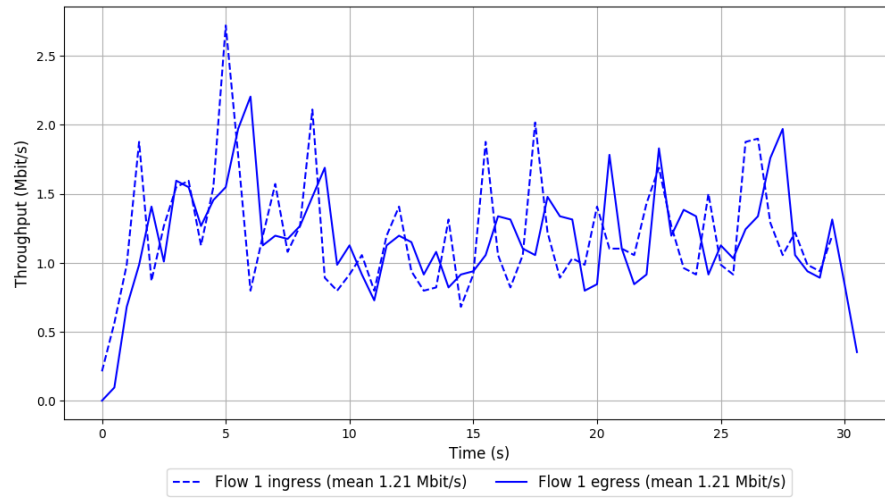
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2020-02-17 23:02:15
End at: 2020-02-17 23:02:45
Local clock offset: 0.407 ms
Remote clock offset: -9.344 ms

# Below is generated by plot.py at 2020-02-17 23:57:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 82.819 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 82.819 ms
Loss rate: 0.00%
```
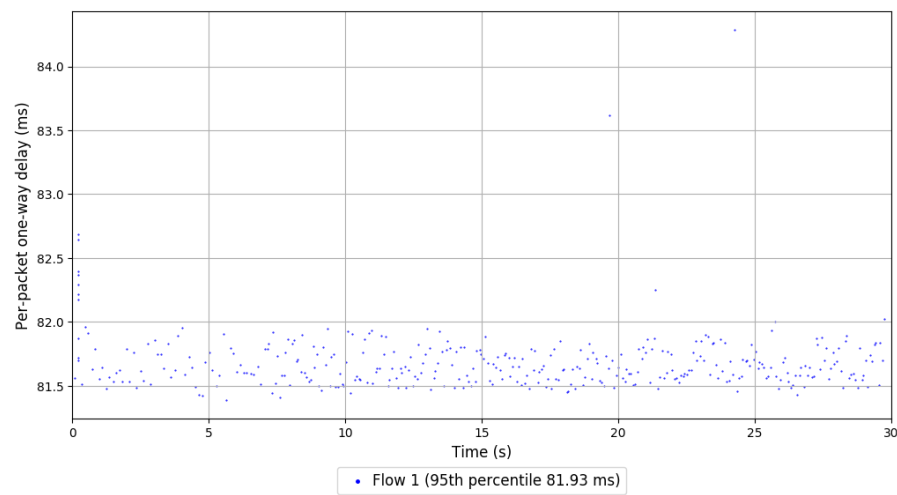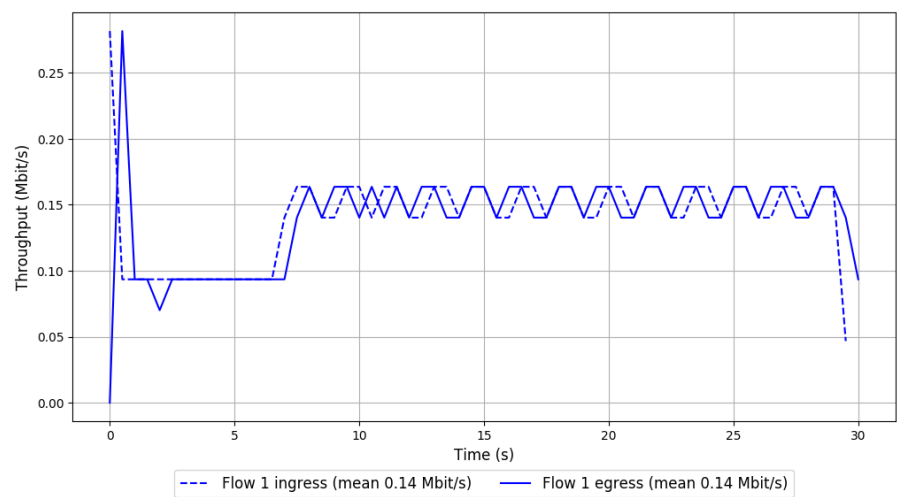
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2020-02-17 23:30:15
End at: 2020-02-17 23:30:45
Local clock offset: 0.054 ms
Remote clock offset: -10.265 ms


# Below is generated by plot.py at 2020-02-17 23:57:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 81.520 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 81.520 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 1.21 Mbit/s) ——— Flow 1 egress (mean 1.21 Mbit/s)

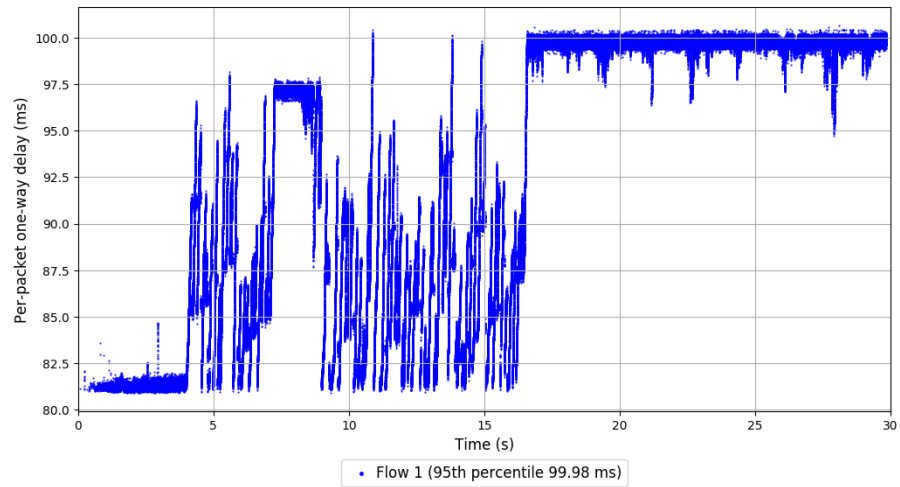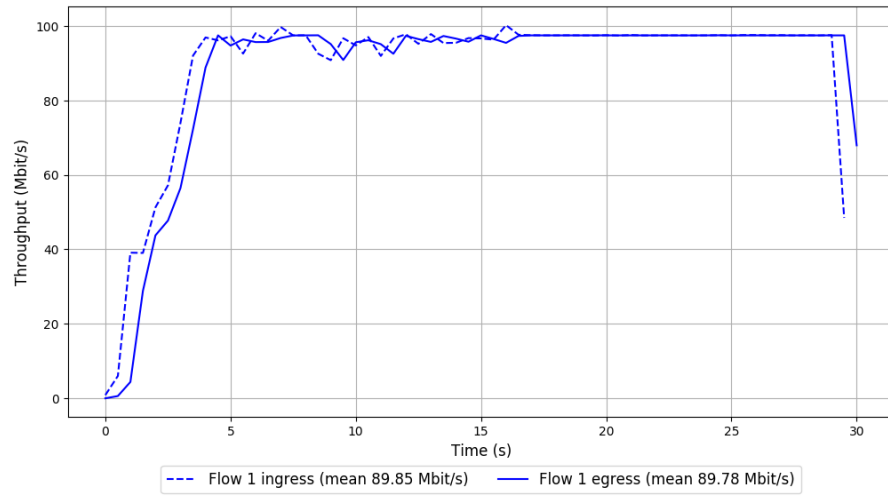• Flow 1 (95th percentile 81.52 ms)

```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2020-02-17 21:53:04
End at: 2020-02-17 21:53:34
Local clock offset: 0.786 ms
Remote clock offset: -7.778 ms


# Below is generated by plot.py at 2020-02-17 23:57:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 81.927 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 81.927 ms
Loss rate: 0.00%
```

Run 1: Report of Muses_DecisionTree — Data Link

Flow 1 ingress (mean 0.14 Mbit/s)   Flow 1 egress (mean 0.14 Mbit/s)
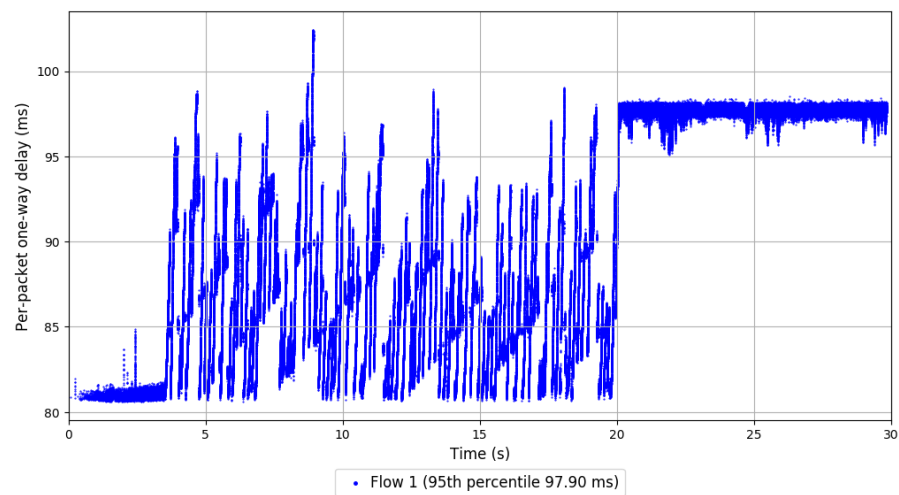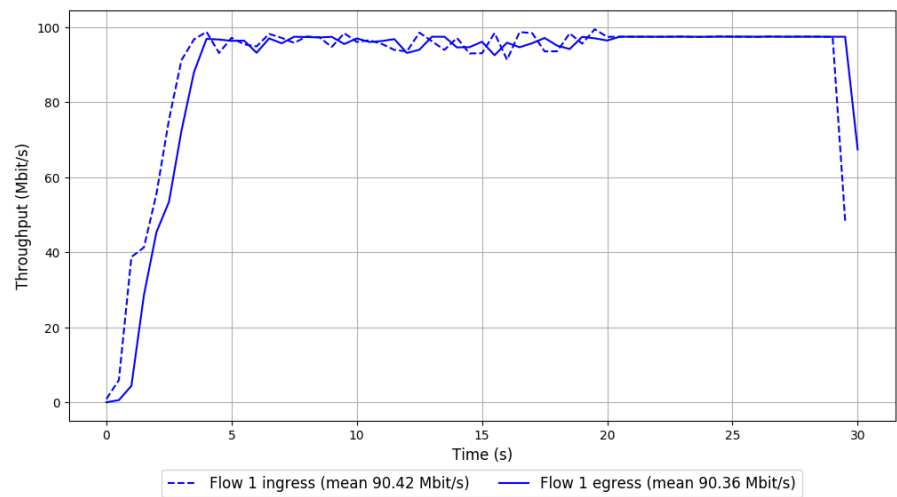

Flow 1 (95th percentile 81.93 ms)

```
Run 2: Statistics of Muses\_DecisionTree

Start at: 2020-02-17 22:21:30
End at: 2020-02-17 22:22:00
Local clock offset: 1.633 ms
Remote clock offset: -8.027 ms


# Below is generated by plot.py at 2020-02-17 23:58:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.78 Mbit/s
95th percentile per-packet one-way delay: 99.976 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 89.78 Mbit/s
95th percentile per-packet one-way delay: 99.976 ms
Loss rate: 0.02%
```
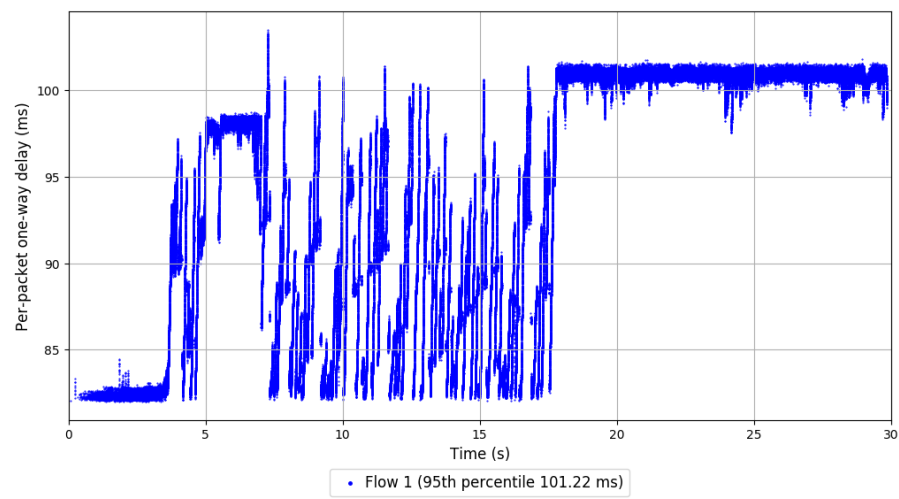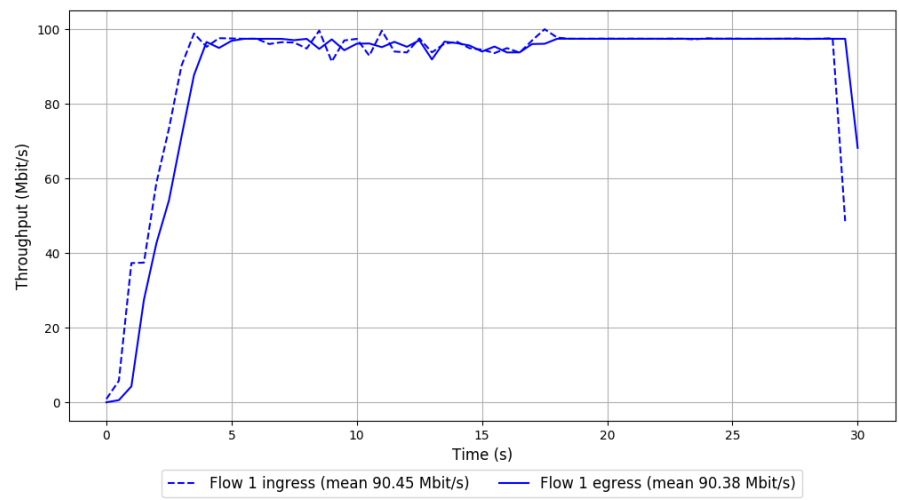
Run 2: Report of Muses_DecisionTree — Data Link

```
Run 3: Statistics of Muses\_DecisionTree

Start at: 2020-02-17 22:49:26
End at: 2020-02-17 22:49:56
Local clock offset: 1.667 ms
Remote clock offset: -8.476 ms


# Below is generated by plot.py at 2020-02-17 23:58:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.36 Mbit/s
95th percentile per-packet one-way delay: 97.904 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 90.36 Mbit/s
95th percentile per-packet one-way delay: 97.904 ms
Loss rate: 0.01%
```

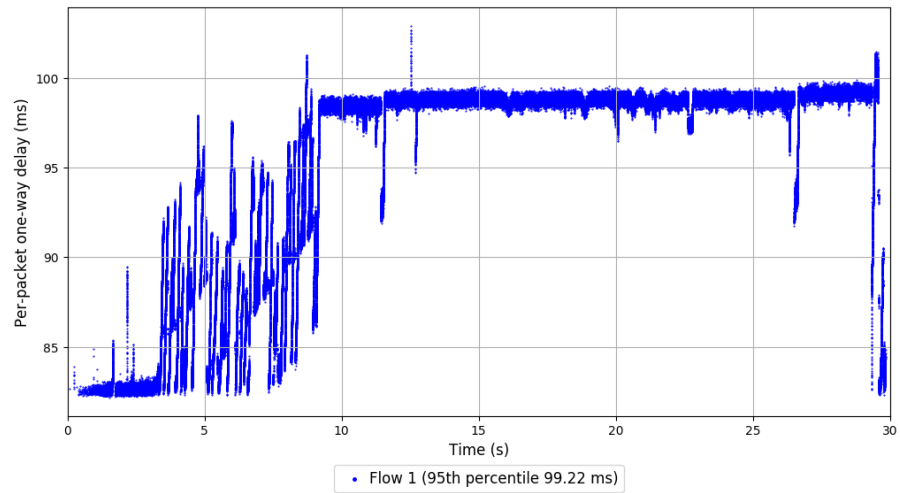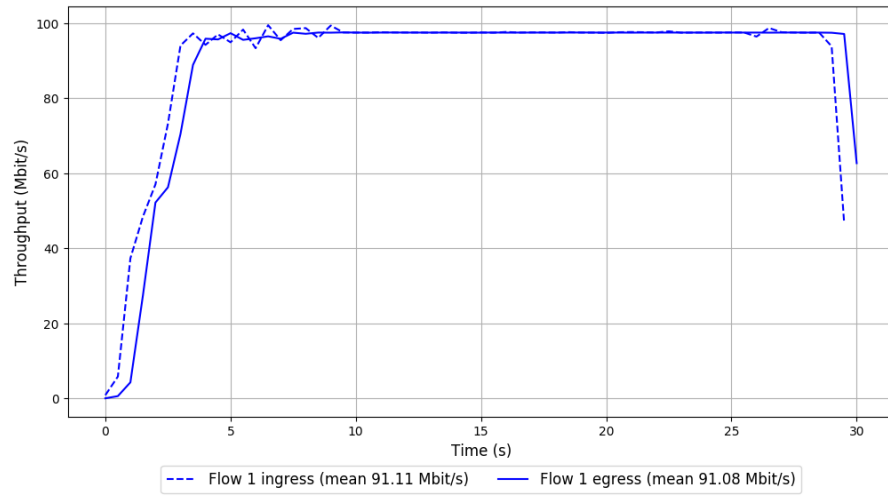Run 3: Report of Muses_DecisionTree — Data Link

```
Run 4: Statistics of Muses\_DecisionTree

Start at: 2020-02-17 23:17:28
End at: 2020-02-17 23:17:58
Local clock offset: -0.478 ms
Remote clock offset: -10.183 ms


# Below is generated by plot.py at 2020-02-17 23:58:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.38 Mbit/s
95th percentile per-packet one-way delay: 101.215 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 90.38 Mbit/s
95th percentile per-packet one-way delay: 101.215 ms
Loss rate: 0.02%
```
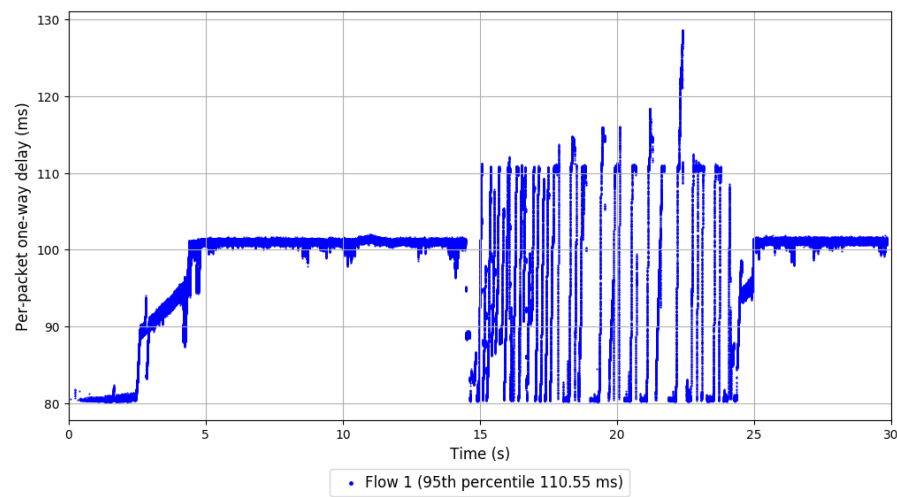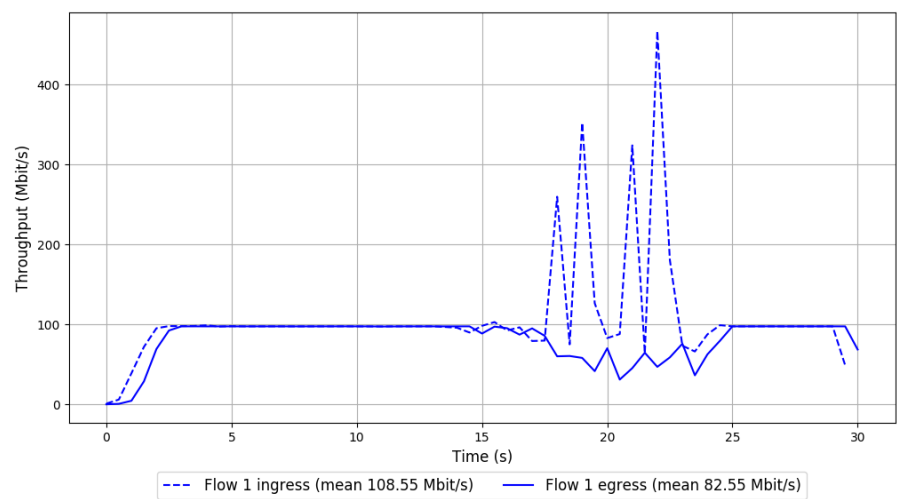
Run 4: Report of Muses_DecisionTree — Data Link

Flow 1 ingress (mean 90.45 Mbit/s)   Flow 1 egress (mean 90.38 Mbit/s)

Flow 1 (95th percentile 101.22 ms)

```
Run 5: Statistics of Muses\_DecisionTree

Start at: 2020-02-17 23:45:27
End at: 2020-02-17 23:45:57
Local clock offset: -0.807 ms
Remote clock offset: -10.632 ms

# Below is generated by plot.py at 2020-02-17 23:58:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.08 Mbit/s
95th percentile per-packet one-way delay: 99.219 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 91.08 Mbit/s
95th percentile per-packet one-way delay: 99.219 ms
Loss rate: 0.03%
```

Run 5: Report of Muses_DecisionTree — Data Link

Flow 1 ingress (mean 91.11 Mbit/s) Flow 1 egress (mean 91.08 Mbit/s)
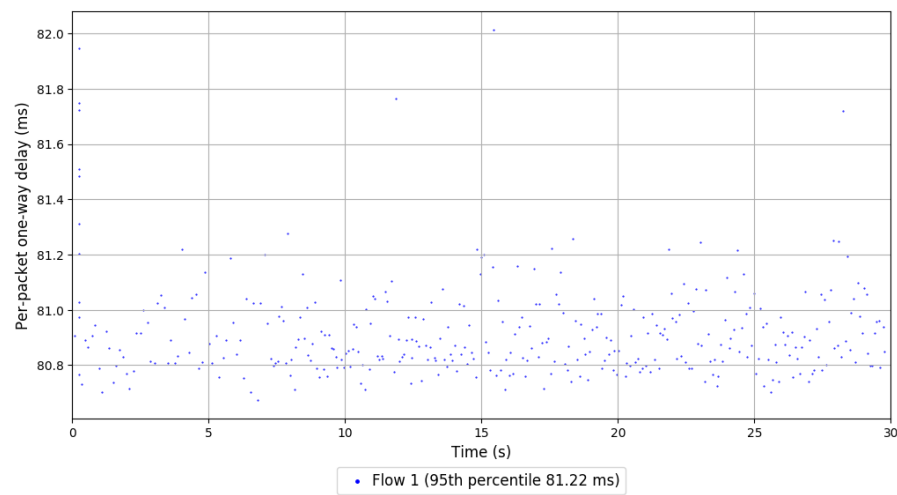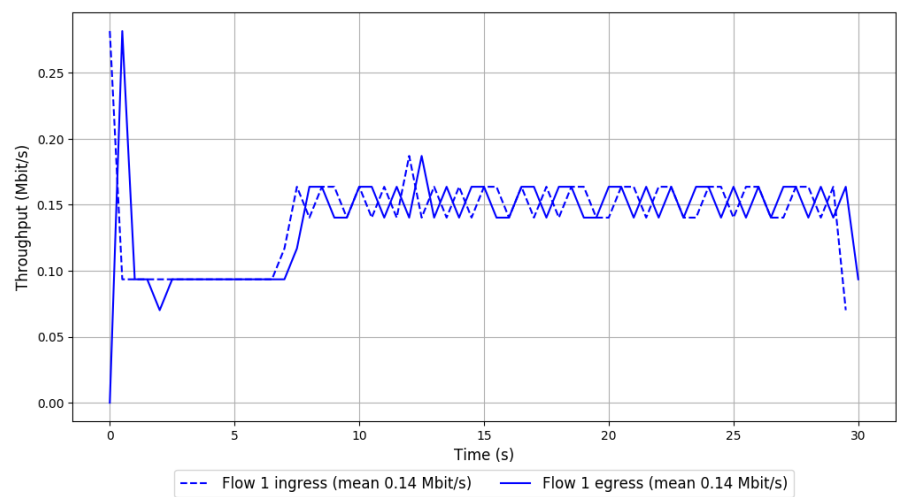

Flow 1 (95th percentile 99.22 ms)

```
Run 1: Statistics of Muses\_DecisionTreeH0

Start at: 2020-02-17 21:51:52
End at: 2020-02-17 21:52:22
Local clock offset: 1.479 ms
Remote clock offset: -8.136 ms


# Below is generated by plot.py at 2020-02-17 23:58:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.55 Mbit/s
95th percentile per-packet one-way delay: 110.551 ms
Loss rate: 23.90%
-- Flow 1:
Average throughput: 82.55 Mbit/s
95th percentile per-packet one-way delay: 110.551 ms
Loss rate: 23.90%
```

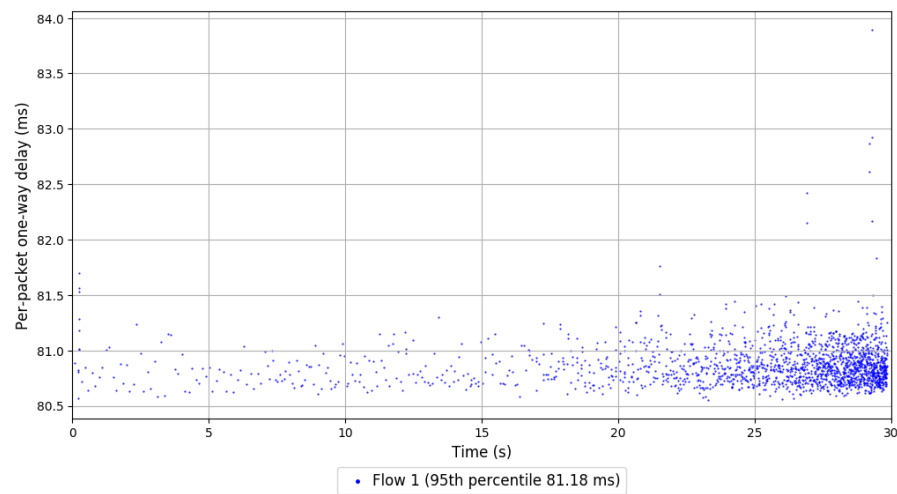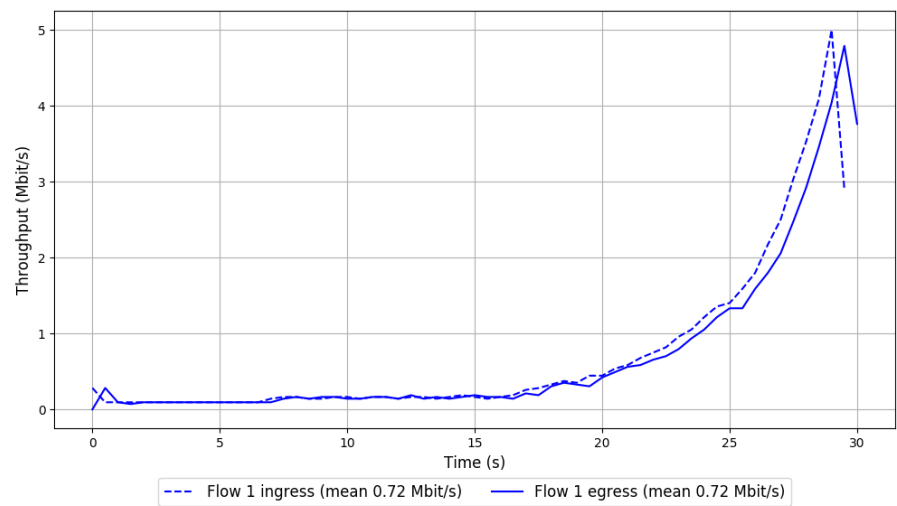Run 1: Report of Muses_DecisionTreeH0 — Data Link

Run 2: Statistics of Muses_DecisionTreeH0

Start at: 2020-02-17 22:20:23
End at: 2020-02-17 22:20:53
Local clock offset: 2.243 ms
Remote clock offset: -7.662 ms

Below is generated by plot.py at 2020-02-17 23:58:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 81.217 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 81.217 ms
Loss rate: 0.00%
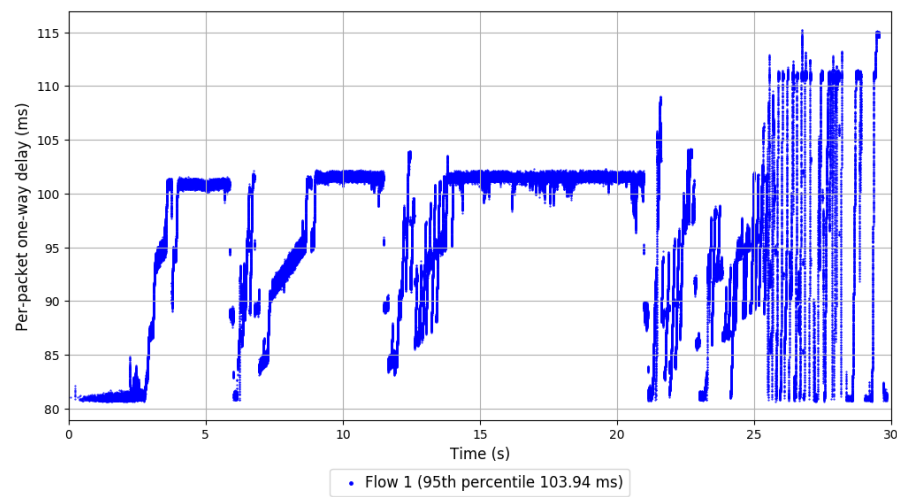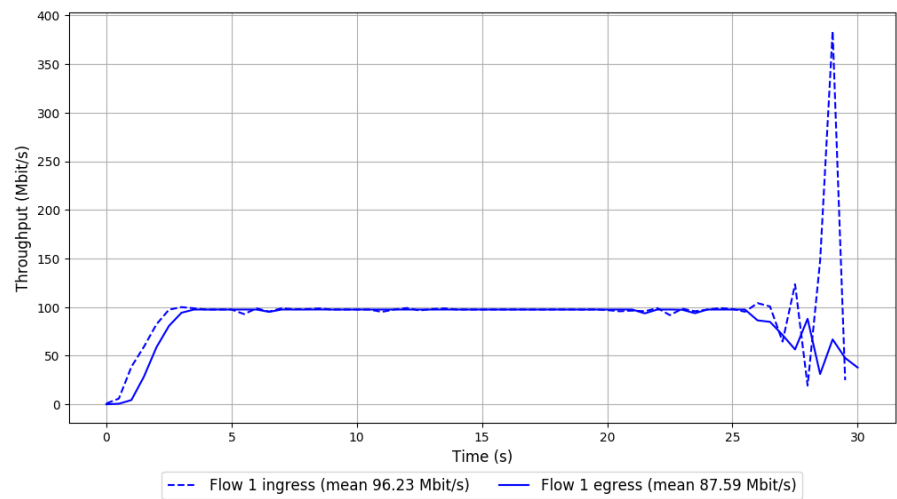
Run 2: Report of Muses_DecisionTreeH0 — Data Link

```
Run 3: Statistics of Muses\_DecisionTreeH0

Start at: 2020-02-17 22:48:19
End at: 2020-02-17 22:48:49
Local clock offset: 1.644 ms
Remote clock offset: -8.566 ms


# Below is generated by plot.py at 2020-02-17 23:58:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 81.178 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 81.178 ms
Loss rate: 0.00%
```

Run 3: Report of Muses_DecisionTreeH0 — Data Link

Flow 1 ingress (mean 0.72 Mbit/s)   Flow 1 egress (mean 0.72 Mbit/s)

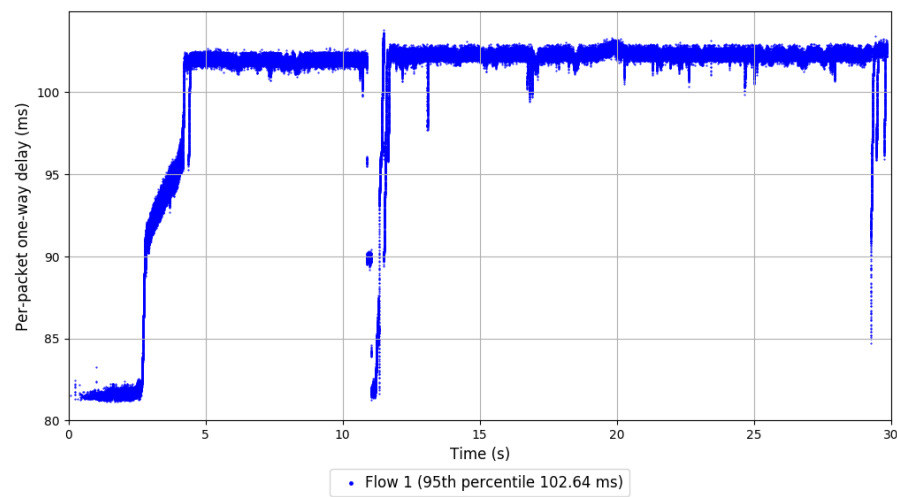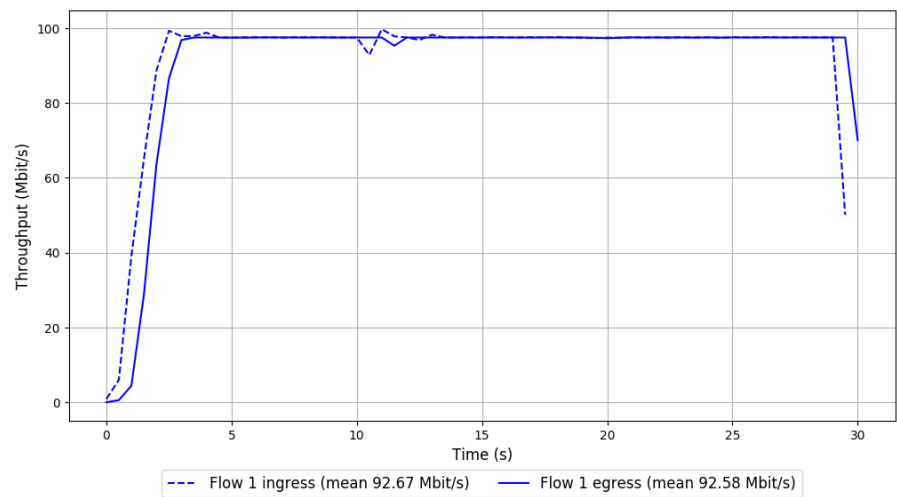Flow 1 (95th percentile 81.18 ms)

```
Run 4: Statistics of Muses\_DecisionTreeH0

Start at: 2020-02-17 23:16:15
End at: 2020-02-17 23:16:45
Local clock offset: 0.262 ms
Remote clock offset: -9.787 ms


# Below is generated by plot.py at 2020-02-17 23:59:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.59 Mbit/s
95th percentile per-packet one-way delay: 103.941 ms
Loss rate: 8.98%
-- Flow 1:
Average throughput: 87.59 Mbit/s
95th percentile per-packet one-way delay: 103.941 ms
Loss rate: 8.98%
```

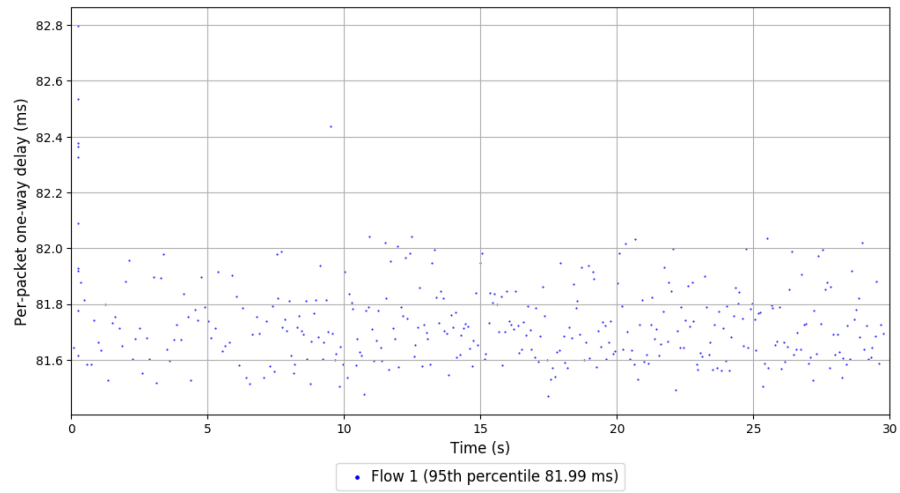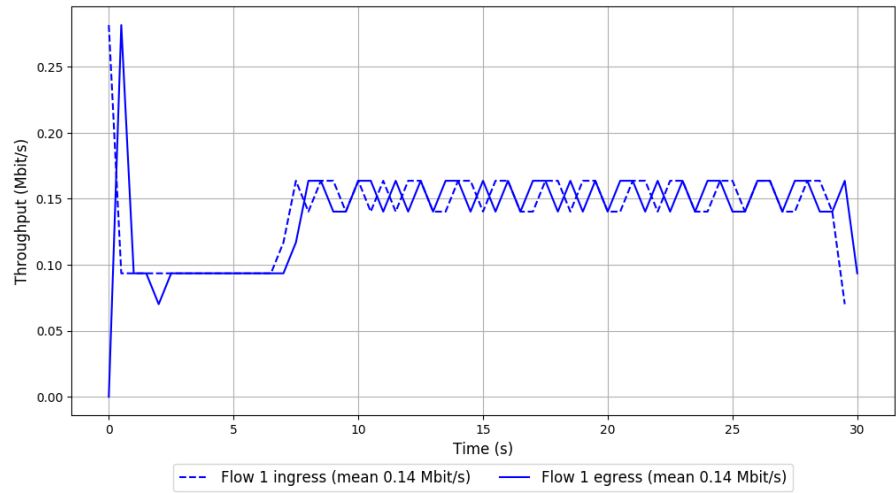Run 4: Report of Muses_DecisionTreeH0 — Data Link

```
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2020-02-17 23:44:15
End at: 2020-02-17 23:44:45
Local clock offset: -0.791 ms
Remote clock offset: -10.644 ms


# Below is generated by plot.py at 2020-02-17 23:59:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.58 Mbit/s
95th percentile per-packet one-way delay: 102.636 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 92.58 Mbit/s
95th percentile per-packet one-way delay: 102.636 ms
Loss rate: 0.03%
```

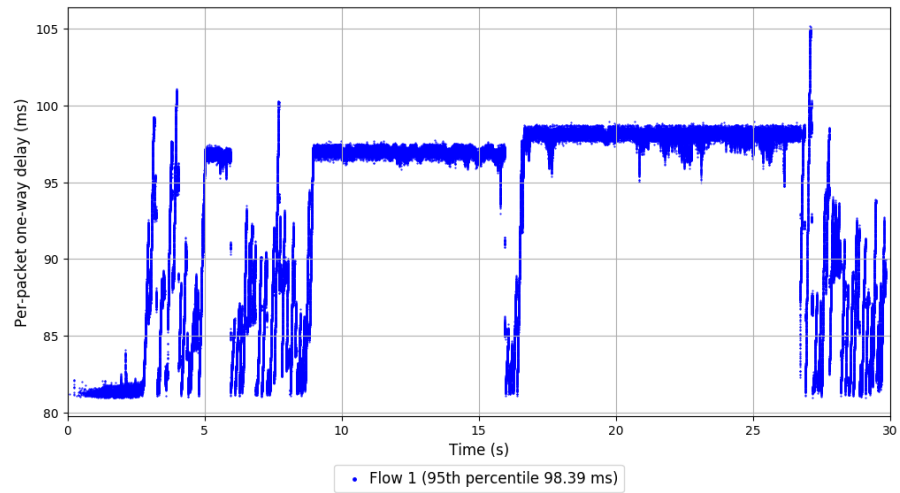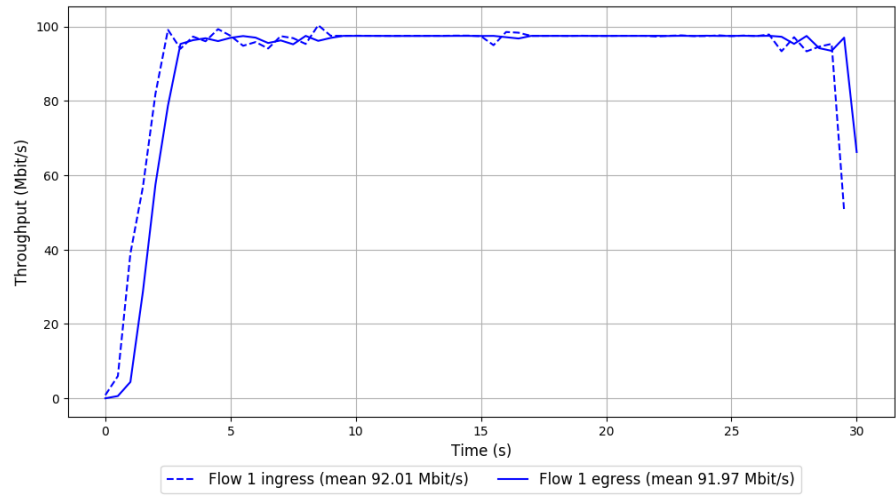Run 5: Report of Muses_DecisionTreeH0 — Data Link

```
Run 1: Statistics of Muses\_DecisionTreeR0

Start at: 2020-02-17 21:50:45
End at: 2020-02-17 21:51:15
Local clock offset: 0.733 ms
Remote clock offset: -7.641 ms


# Below is generated by plot.py at 2020-02-17 23:59:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 81.993 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 81.993 ms
Loss rate: 0.00%
```
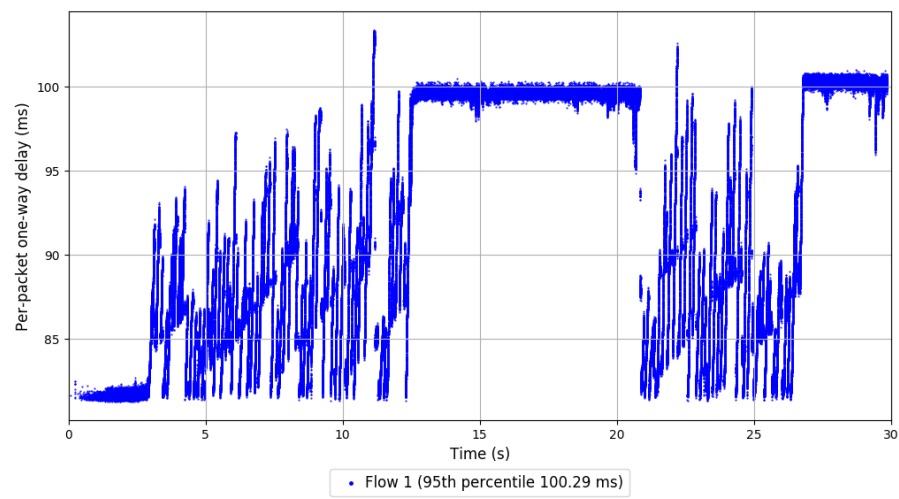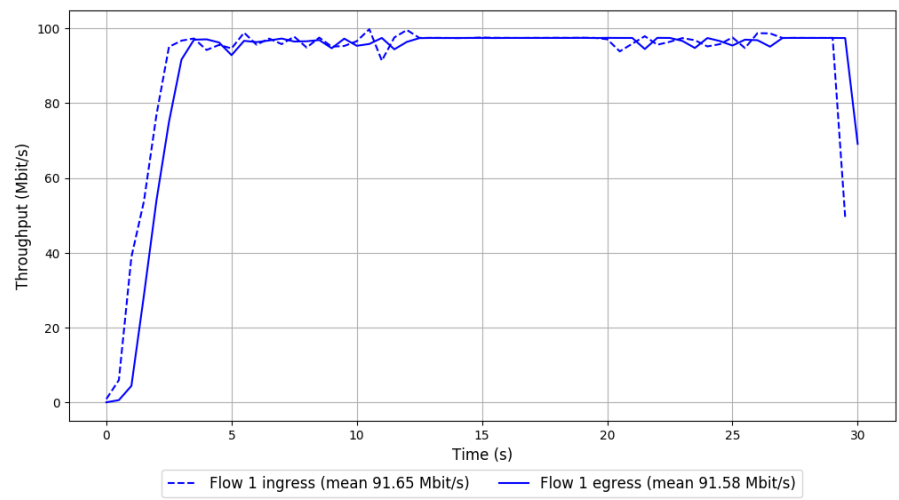
Run 1: Report of Muses_DecisionTreeR0 — Data Link

```
Run 2: Statistics of Muses\_DecisionTreeR0

Start at: 2020-02-17 22:19:11
End at: 2020-02-17 22:19:41
Local clock offset: 1.515 ms
Remote clock offset: -7.986 ms


# Below is generated by plot.py at 2020-02-17 23:59:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.97 Mbit/s
95th percentile per-packet one-way delay: 98.395 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 91.97 Mbit/s
95th percentile per-packet one-way delay: 98.395 ms
Loss rate: 0.01%
```

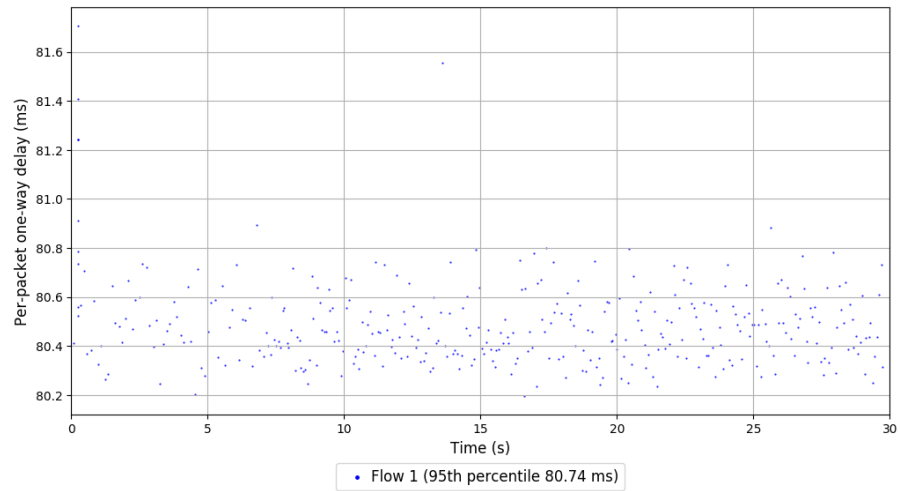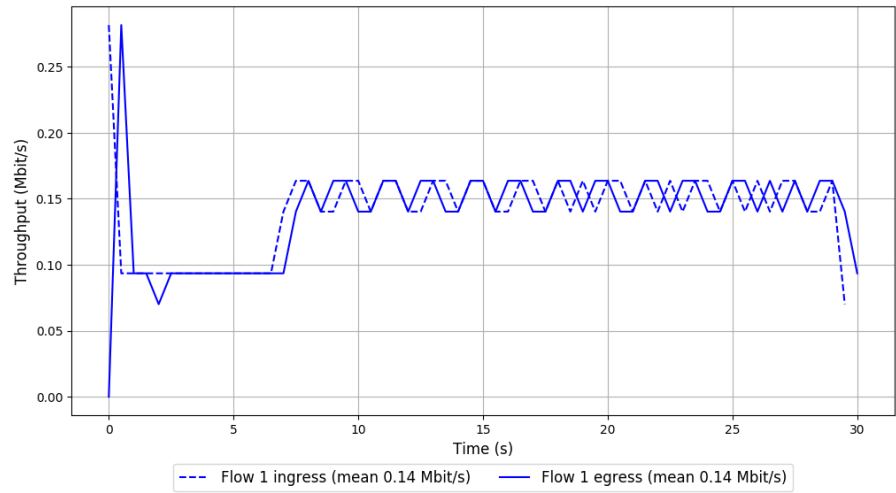## Run 2: Report of Muses_DecisionTreeR0 — Data Link

```
Run 3: Statistics of Muses\_DecisionTreeR0

Start at: 2020-02-17 22:47:07
End at: 2020-02-17 22:47:37
Local clock offset: 0.915 ms
Remote clock offset: -8.526 ms


# Below is generated by plot.py at 2020-02-17 23:59:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.58 Mbit/s
95th percentile per-packet one-way delay: 100.289 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 91.58 Mbit/s
95th percentile per-packet one-way delay: 100.289 ms
Loss rate: 0.02%
```

Run 3: Report of Muses_DecisionTreeR0 — Data Link

Flow 1 ingress (mean 91.65 Mbit/s)   Flow 1 egress (mean 91.58 Mbit/s)

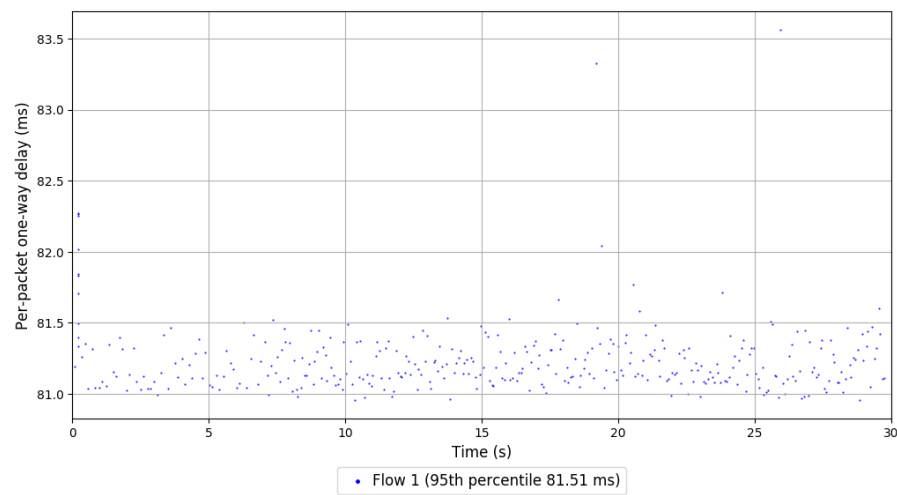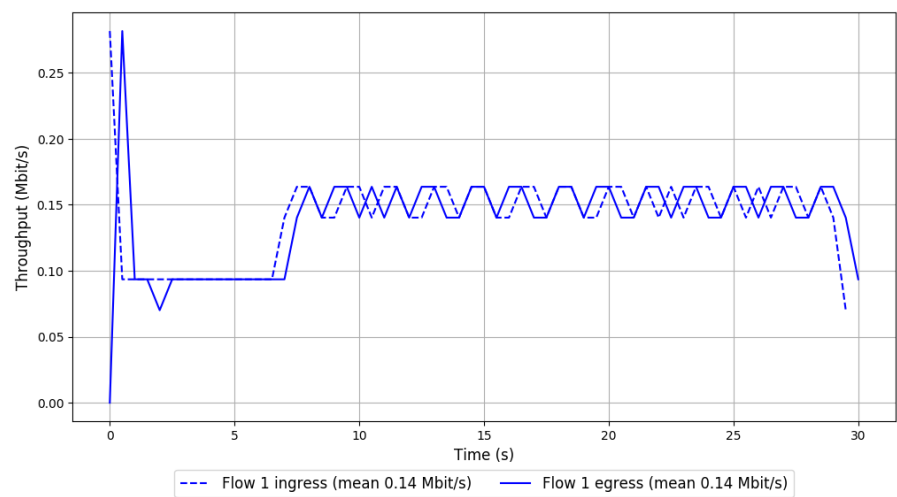Flow 1 (95th percentile 100.29 ms)

```
Run 4: Statistics of Muses\_DecisionTreeR0

Start at: 2020-02-17 23:15:08
End at: 2020-02-17 23:15:39
Local clock offset: 0.295 ms
Remote clock offset: -10.226 ms

# Below is generated by plot.py at 2020-02-17 23:59:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 80.744 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 80.744 ms
Loss rate: 0.00%
```

Run 4: Report of Muses_DecisionTreeR0 — Data Link

```
Run 5: Statistics of Muses\_DecisionTreeR0

Start at: 2020-02-17 23:43:08
End at: 2020-02-17 23:43:38
Local clock offset: -0.793 ms
Remote clock offset: -10.927 ms


# Below is generated by plot.py at 2020-02-17 23:59:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 81.507 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 81.507 ms
Loss rate: 0.00%
```

Run 5: Report of Muses_DecisionTreeR0 — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2020-02-17 21:41:17
End at: 2020-02-17 21:41:47
Local clock offset: 0.507 ms
Remote clock offset: -7.927 ms

# Below is generated by plot.py at 2020-02-17 23:59:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.73 Mbit/s
95th percentile per-packet one-way delay: 89.687 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 87.73 Mbit/s
95th percentile per-packet one-way delay: 89.687 ms
Loss rate: 1.33%
```
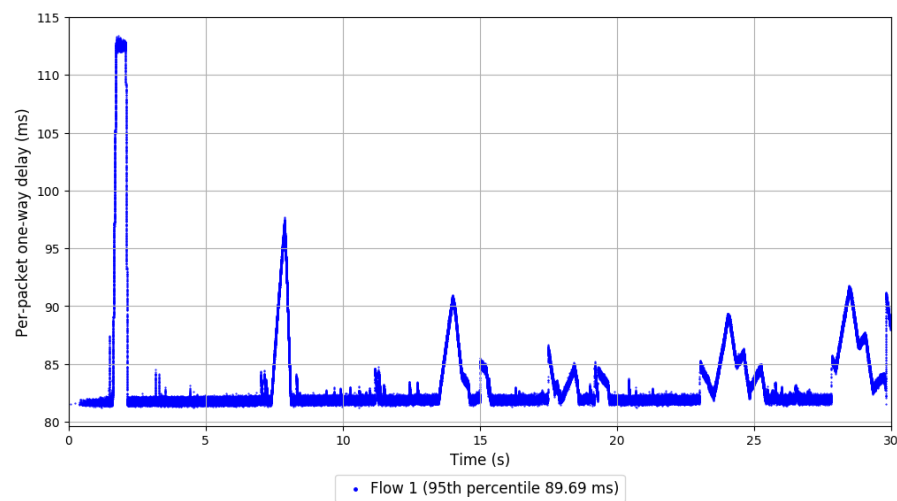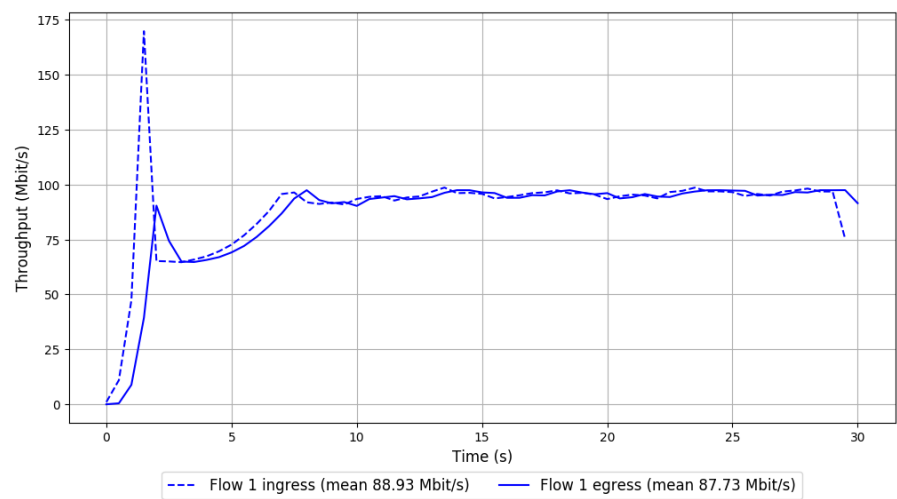
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2020-02-17 22:09:38
End at: 2020-02-17 22:10:08
Local clock offset: 1.783 ms
Remote clock offset: -7.747 ms

# Below is generated by plot.py at 2020-02-17 23:59:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.81 Mbit/s
95th percentile per-packet one-way delay: 103.253 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 87.81 Mbit/s
95th percentile per-packet one-way delay: 103.253 ms
Loss rate: 1.33%
```
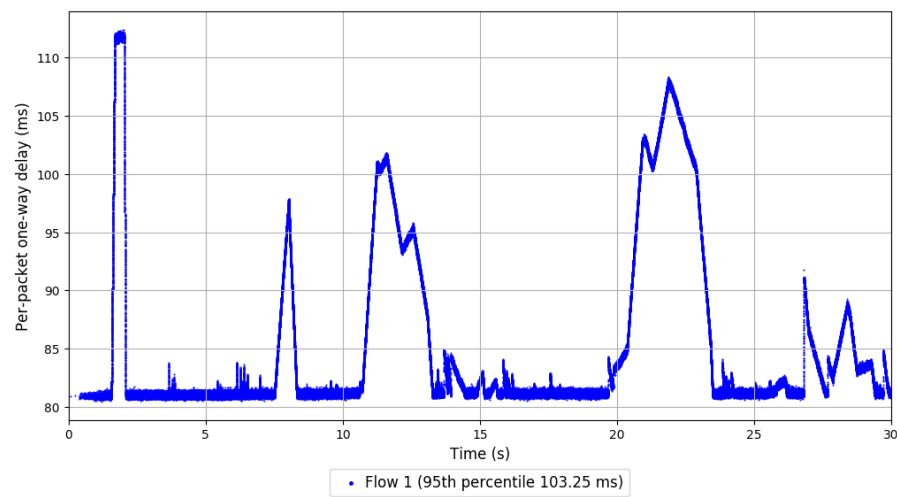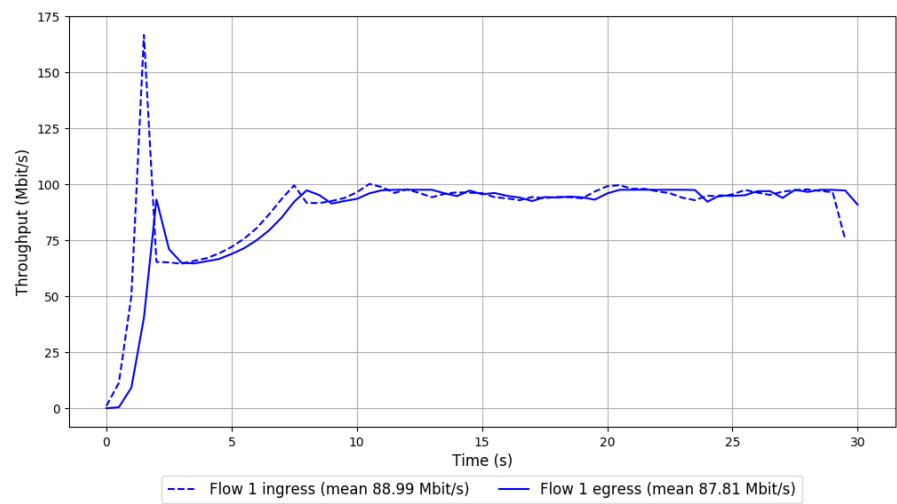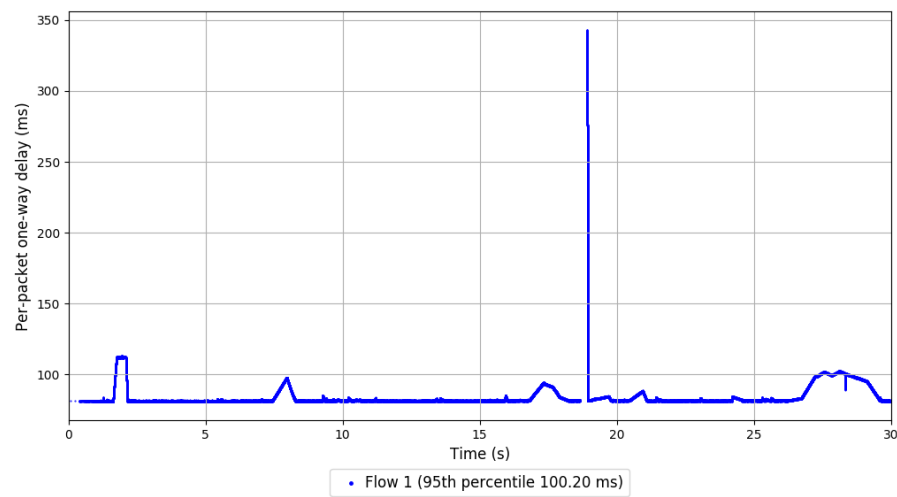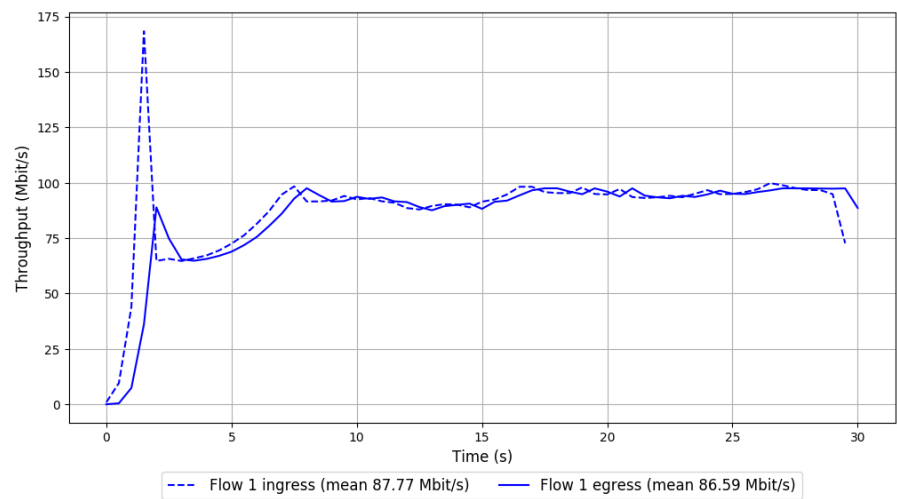
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 88.99 Mbit/s) ---- Flow 1 egress (mean 87.81 Mbit/s)

• Flow 1 (95th percentile 103.25 ms)

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```
Run 3: Statistics of PCC-Allegro

Start at: 2020-02-17 22:37:46
End at: 2020-02-17 22:38:16
Local clock offset: 1.668 ms
Remote clock offset: -8.309 ms


# Below is generated by plot.py at 2020-02-17 23:59:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.59 Mbit/s
95th percentile per-packet one-way delay: 100.198 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 86.59 Mbit/s
95th percentile per-packet one-way delay: 100.198 ms
Loss rate: 1.35%
```

Run 3: Report of PCC-Allegro — Data Link

```
Run 4: Statistics of PCC-Allegro

Start at: 2020-02-17 23:05:42
End at: 2020-02-17 23:06:12
Local clock offset: 0.057 ms
Remote clock offset: -9.708 ms


# Below is generated by plot.py at 2020-02-17 23:59:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.52 Mbit/s
95th percentile per-packet one-way delay: 93.791 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 84.52 Mbit/s
95th percentile per-packet one-way delay: 93.791 ms
Loss rate: 1.38%
```
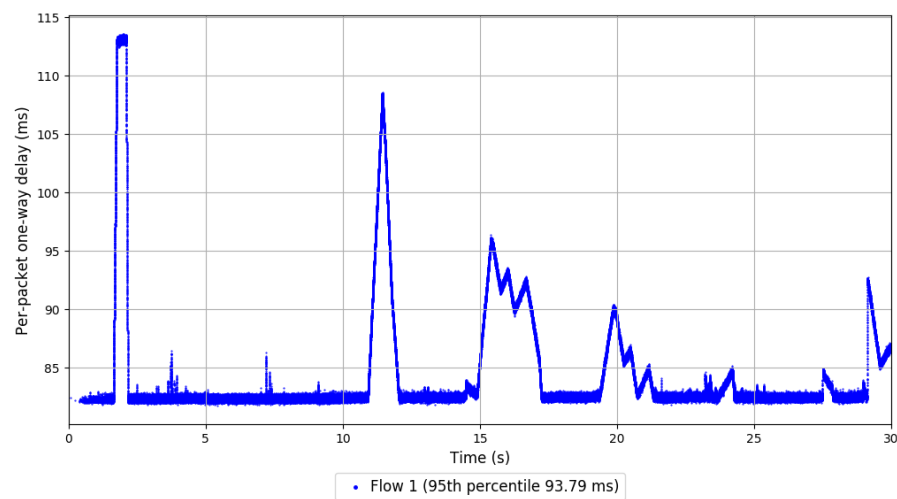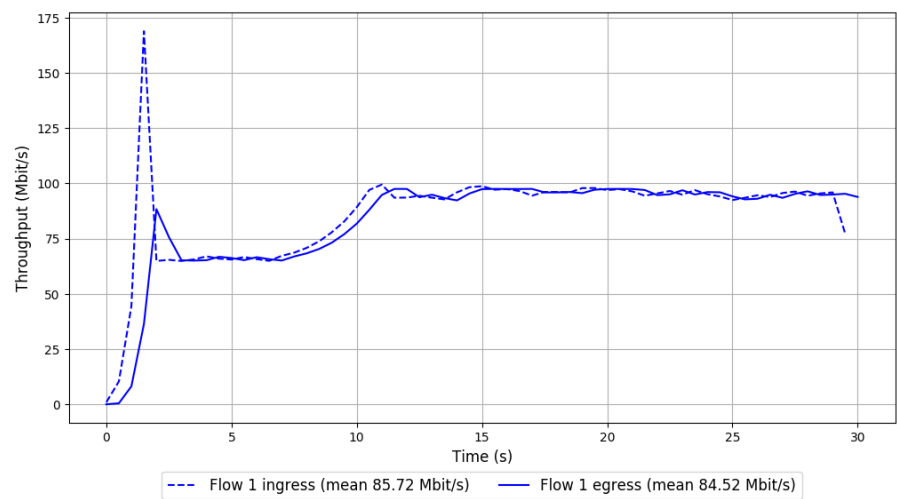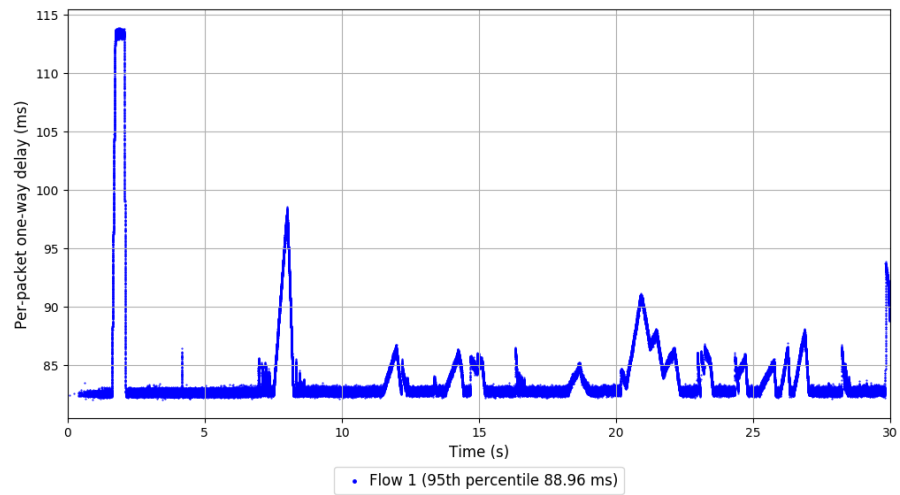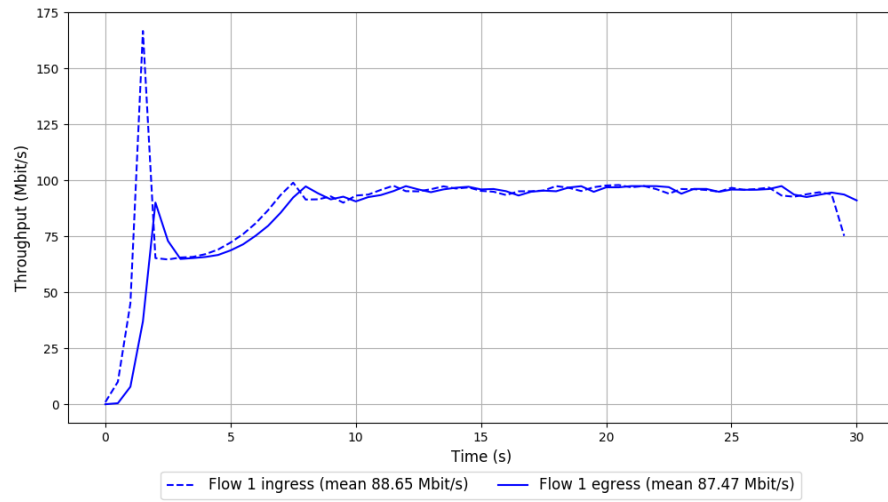
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 85.72 Mbit/s)   Flow 1 egress (mean 84.52 Mbit/s)

Flow 1 (95th percentile 93.79 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2020-02-17 23:33:43
End at: 2020-02-17 23:34:13
Local clock offset: -0.695 ms
Remote clock offset: -10.469 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.47 Mbit/s
95th percentile per-packet one-way delay: 88.956 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 87.47 Mbit/s
95th percentile per-packet one-way delay: 88.956 ms
Loss rate: 1.32%
```

Run 5: Report of PCC-Allegro — Data Link

```
Run 1: Statistics of PCC-Expr

Start at: 2020-02-17 21:49:37
End at: 2020-02-17 21:50:07
Local clock offset: 0.699 ms
Remote clock offset: -7.761 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.74 Mbit/s
95th percentile per-packet one-way delay: 81.814 ms
Loss rate: 54.17%
-- Flow 1:
Average throughput: 12.74 Mbit/s
95th percentile per-packet one-way delay: 81.814 ms
Loss rate: 54.17%
```
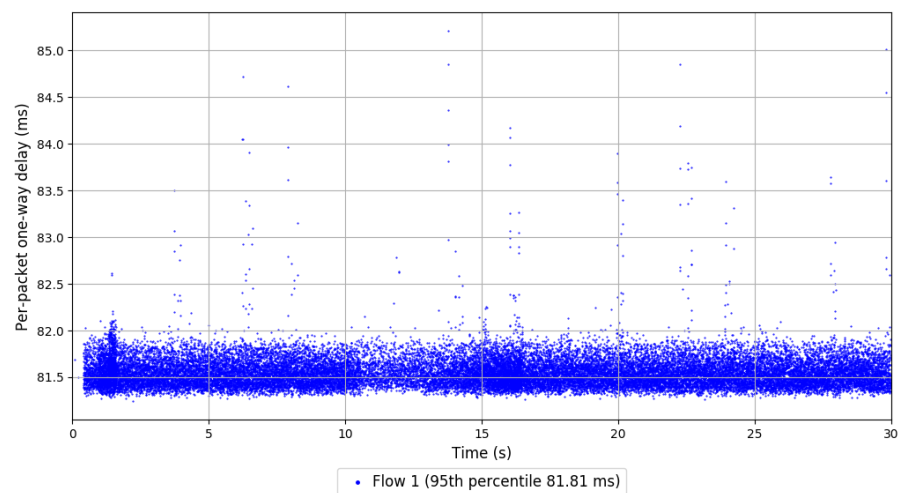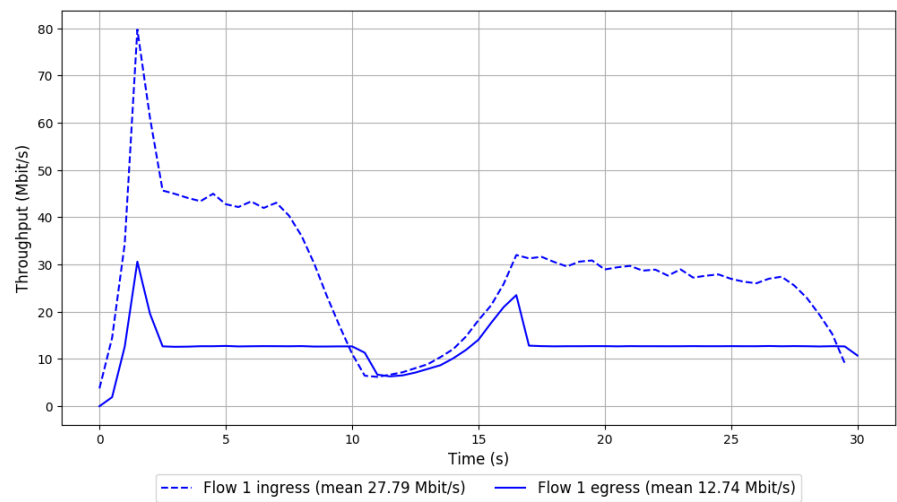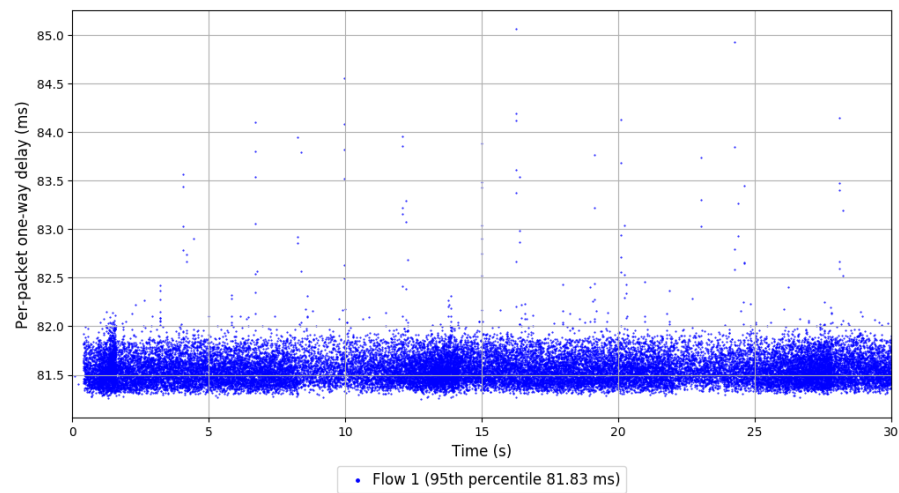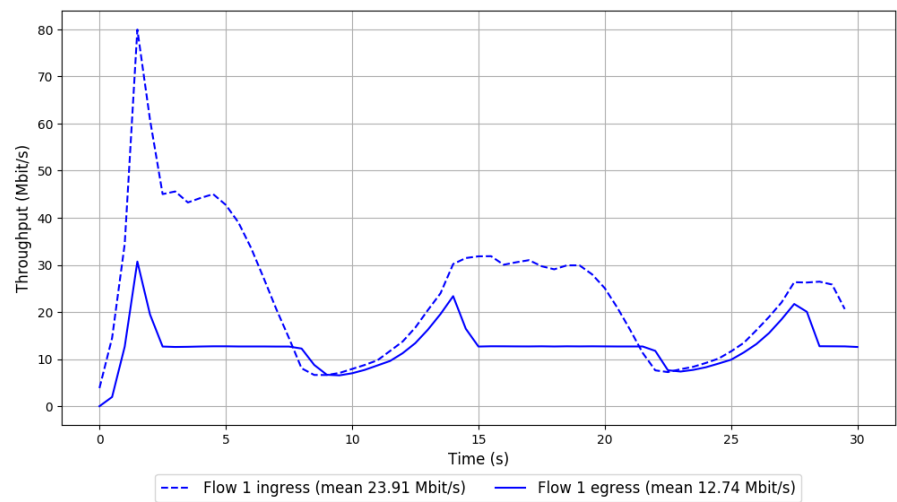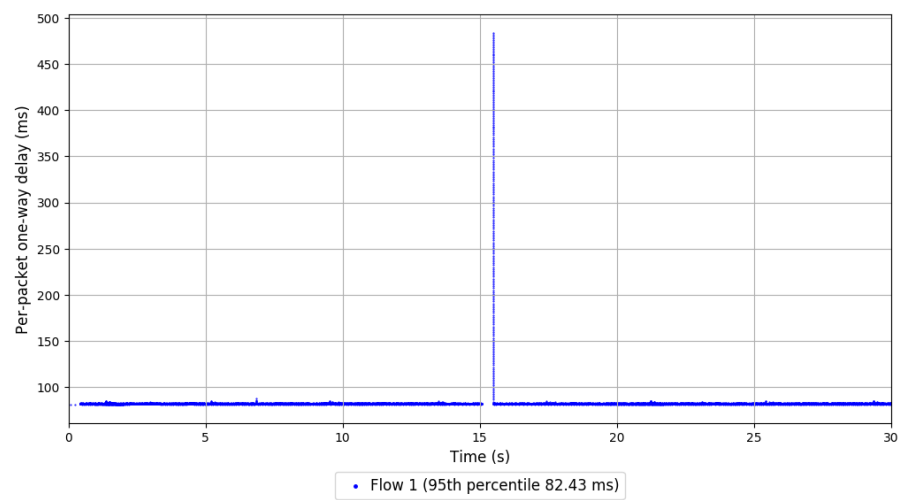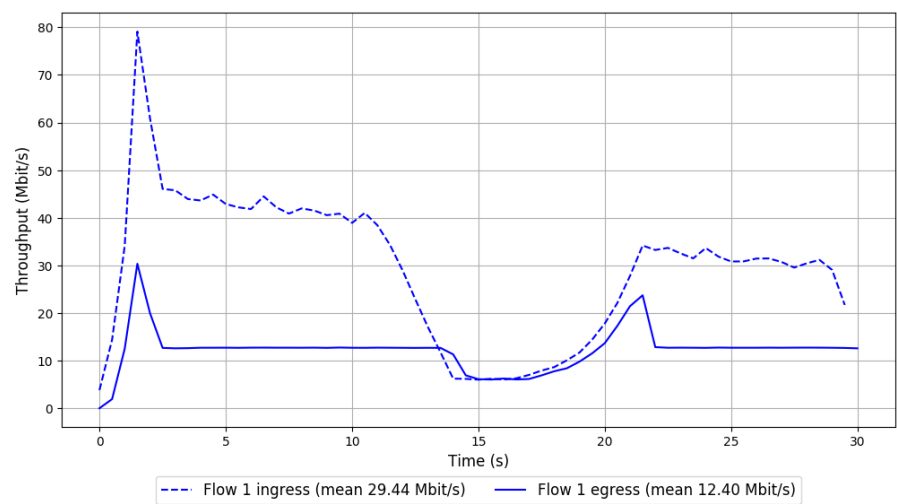
Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 27.79 Mbit/s) ----   Flow 1 egress (mean 12.74 Mbit/s) ——

• Flow 1 (95th percentile 81.81 ms)

```
Run 2: Statistics of PCC-Expr

Start at: 2020-02-17 22:18:02
End at: 2020-02-17 22:18:32
Local clock offset: 1.454 ms
Remote clock offset: -7.677 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.74 Mbit/s
95th percentile per-packet one-way delay: 81.828 ms
Loss rate: 46.73%
-- Flow 1:
Average throughput: 12.74 Mbit/s
95th percentile per-packet one-way delay: 81.828 ms
Loss rate: 46.73%
```

Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 23.91 Mbit/s) --- Flow 1 egress (mean 12.74 Mbit/s)
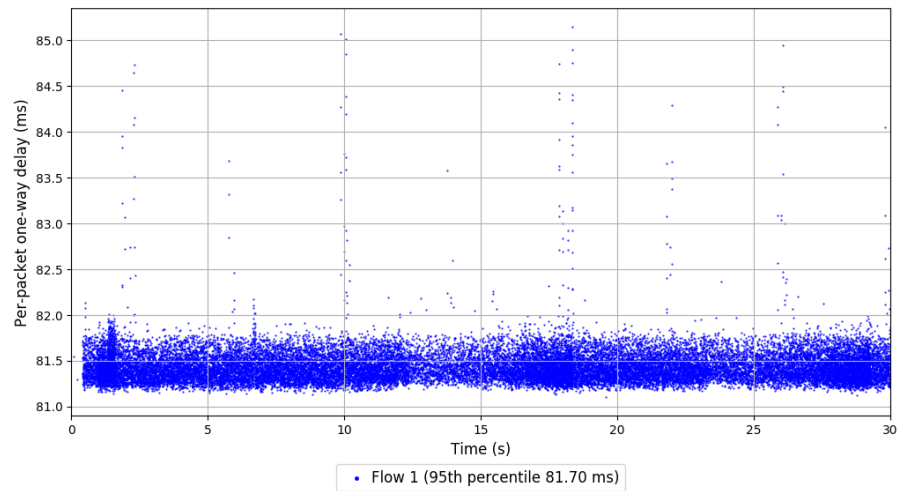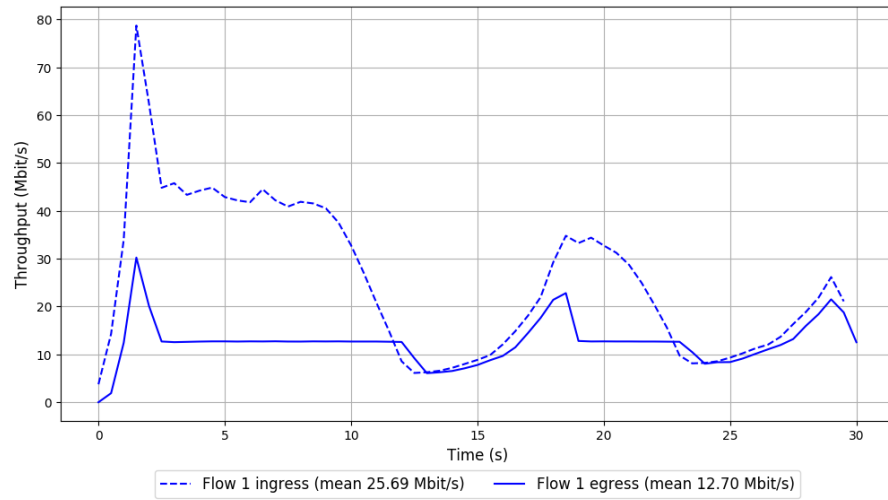

Flow 1 (95th percentile 81.83 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2020-02-17 22:45:59
End at: 2020-02-17 22:46:29
Local clock offset: 0.896 ms
Remote clock offset: -8.924 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.40 Mbit/s
95th percentile per-packet one-way delay: 82.433 ms
Loss rate: 57.87%
-- Flow 1:
Average throughput: 12.40 Mbit/s
95th percentile per-packet one-way delay: 82.433 ms
Loss rate: 57.87%
```
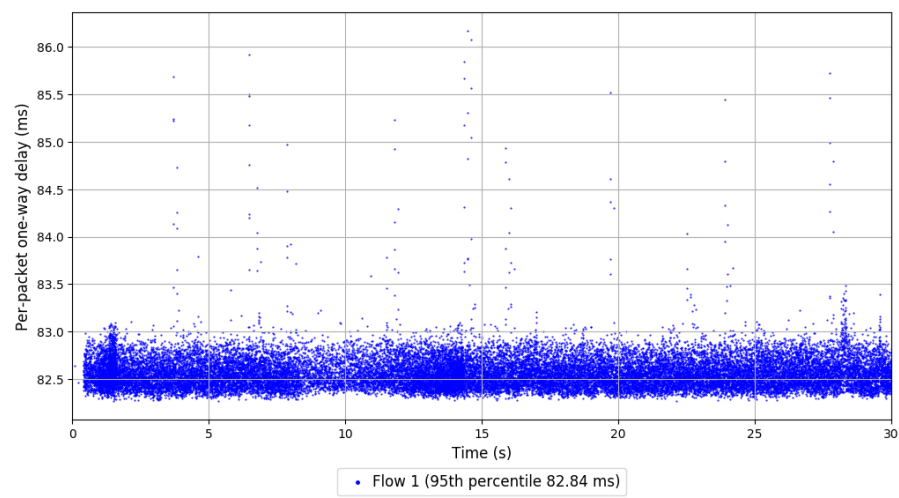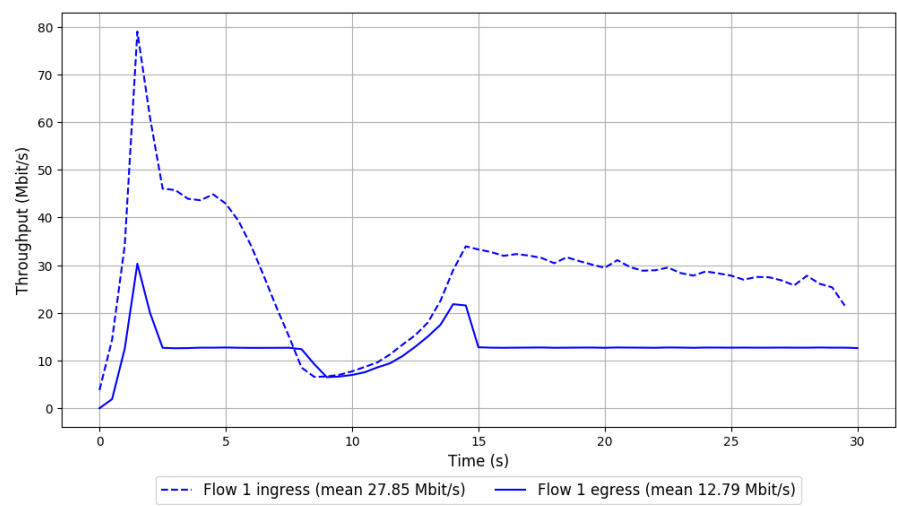
Run 3: Report of PCC-Expr — Data Link

```
Run 4: Statistics of PCC-Expr

Start at: 2020-02-17 23:14:00
End at: 2020-02-17 23:14:30
Local clock offset: 0.324 ms
Remote clock offset: -10.192 ms

# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 81.703 ms
Loss rate: 50.57%
-- Flow 1:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 81.703 ms
Loss rate: 50.57%
```

Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2020-02-17 23:42:00
End at: 2020-02-17 23:42:30
Local clock offset: -0.802 ms
Remote clock offset: -10.512 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.79 Mbit/s
95th percentile per-packet one-way delay: 82.843 ms
Loss rate: 54.06%
-- Flow 1:
Average throughput: 12.79 Mbit/s
95th percentile per-packet one-way delay: 82.843 ms
Loss rate: 54.06%
```

Run 5: Report of PCC-Expr — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2020-02-17 21:44:55
End at: 2020-02-17 21:45:25
Local clock offset: 1.665 ms
Remote clock offset: -8.229 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.74 Mbit/s
95th percentile per-packet one-way delay: 80.749 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 7.74 Mbit/s
95th percentile per-packet one-way delay: 80.749 ms
Loss rate: 0.01%
```
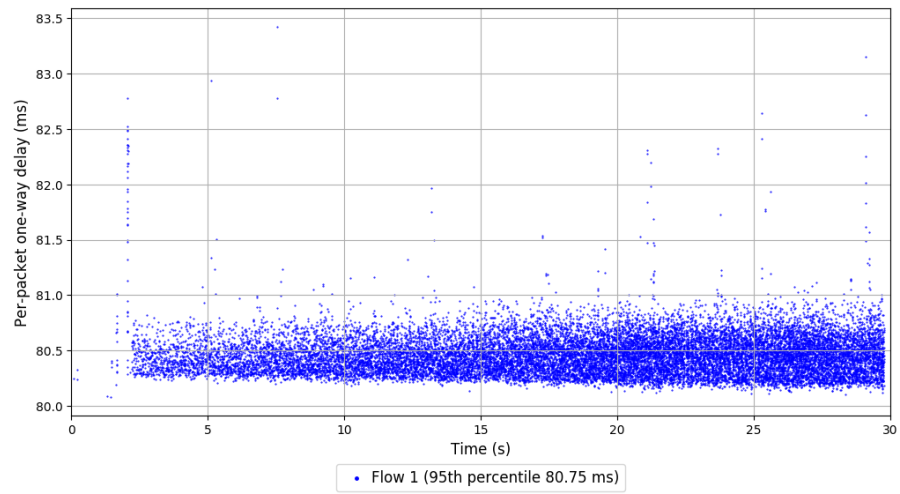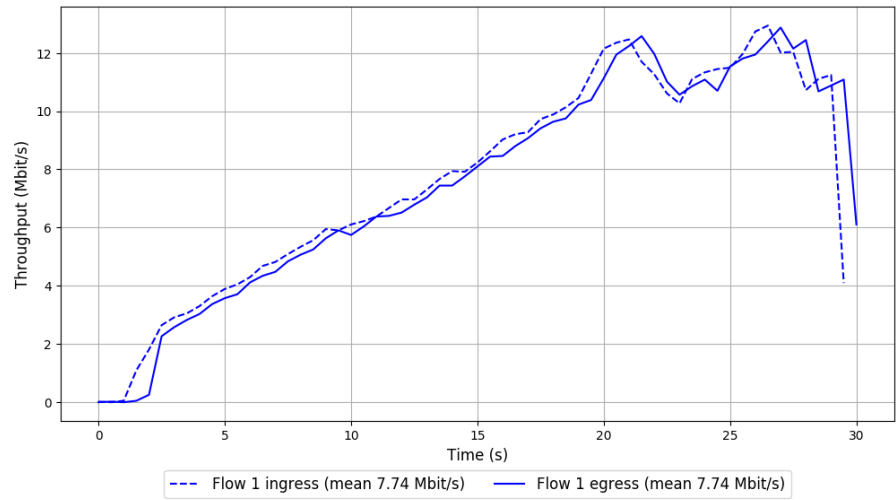
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2020-02-17 22:13:23
End at: 2020-02-17 22:13:53
Local clock offset: 1.224 ms
Remote clock offset: -8.082 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.88 Mbit/s
95th percentile per-packet one-way delay: 81.577 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 8.88 Mbit/s
95th percentile per-packet one-way delay: 81.577 ms
Loss rate: 0.02%
```
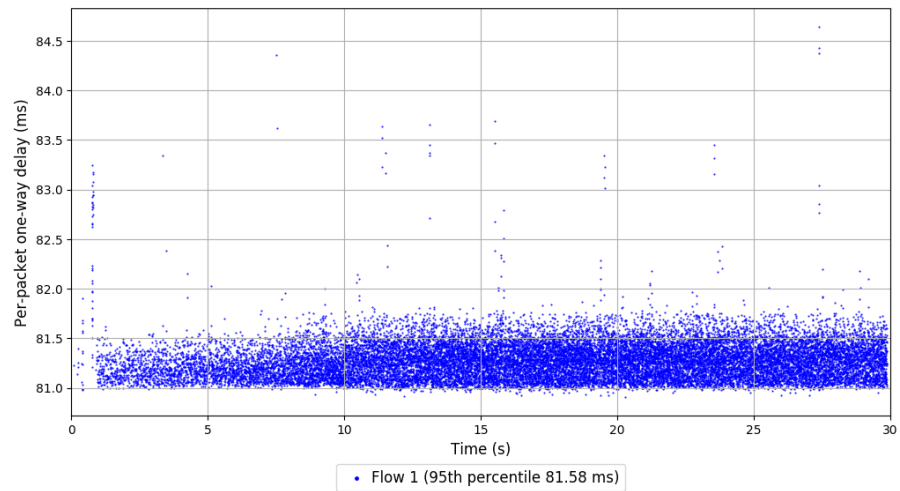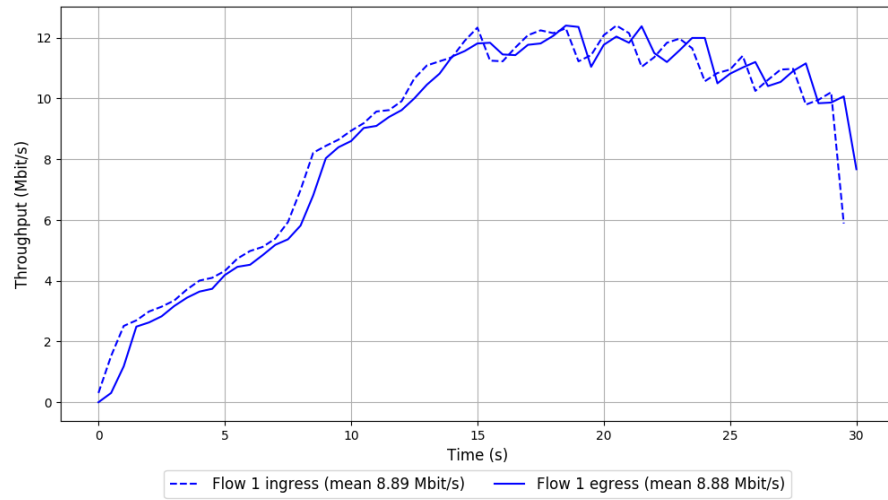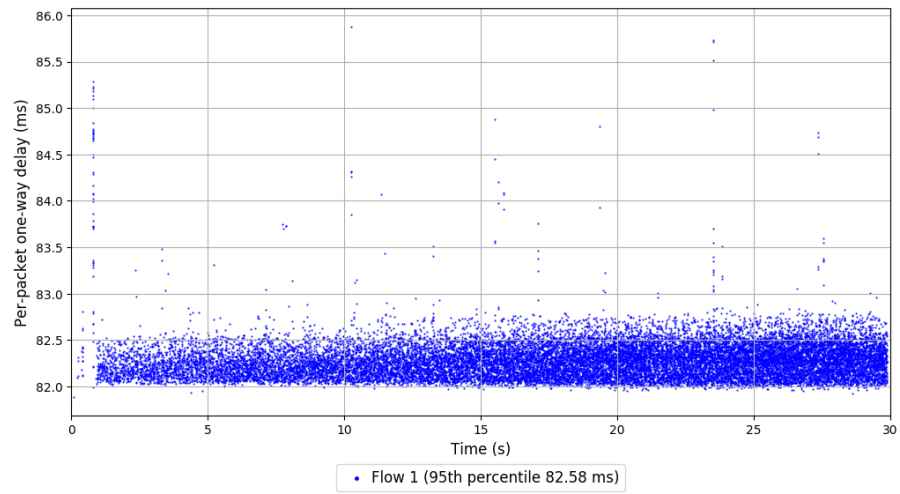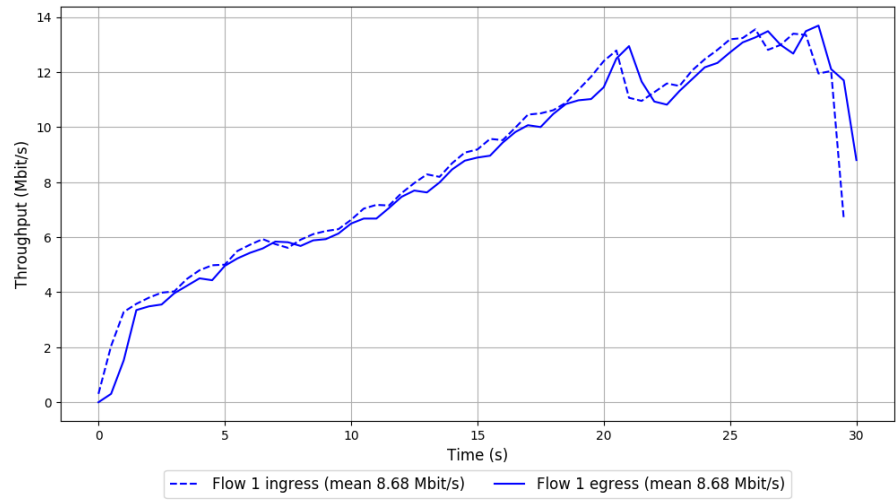
Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 8.89 Mbit/s)   Flow 1 egress (mean 8.88 Mbit/s)

Flow 1 (95th percentile 81.58 ms)

```
Run 3: Statistics of QUIC Cubic

Start at: 2020-02-17 22:41:20
End at: 2020-02-17 22:41:50
Local clock offset: 0.917 ms
Remote clock offset: -8.769 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.68 Mbit/s
95th percentile per-packet one-way delay: 82.577 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 8.68 Mbit/s
95th percentile per-packet one-way delay: 82.577 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2020-02-17 23:09:16
End at: 2020-02-17 23:09:46
Local clock offset: -0.225 ms
Remote clock offset: -9.635 ms

# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.43 Mbit/s
95th percentile per-packet one-way delay: 82.866 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 9.43 Mbit/s
95th percentile per-packet one-way delay: 82.866 ms
Loss rate: 0.02%
```
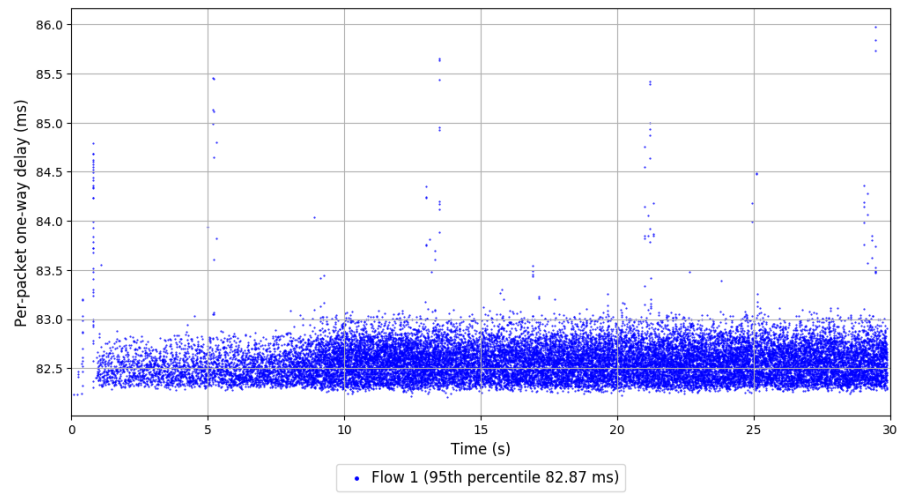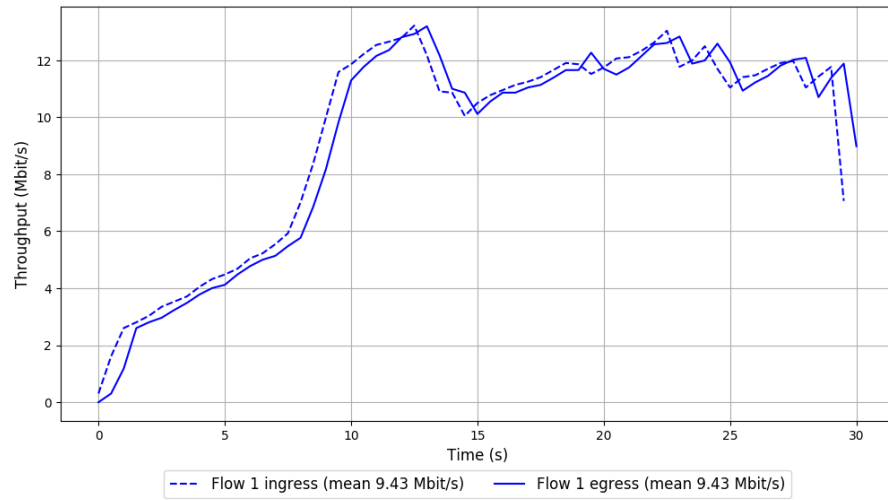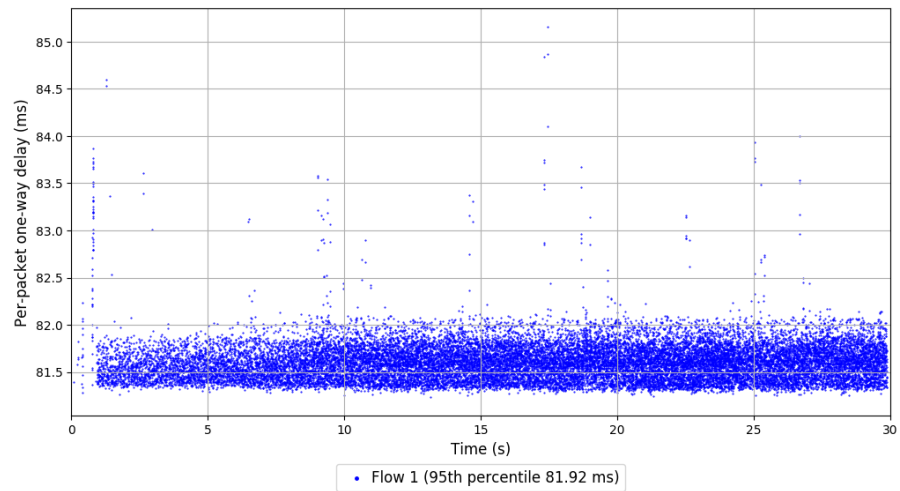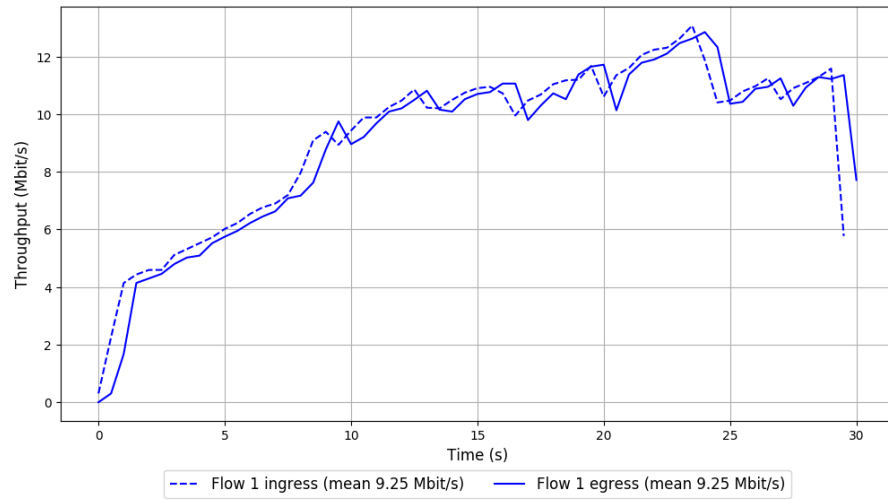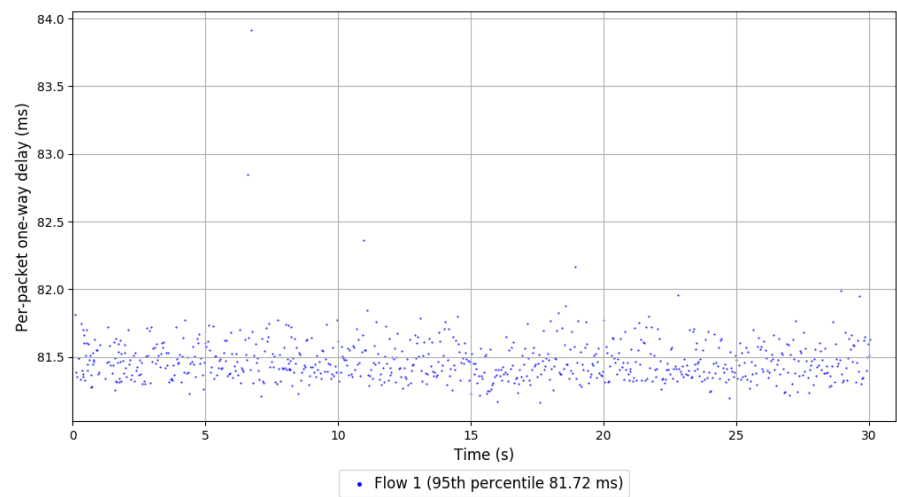
Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2020-02-17 23:37:16
End at: 2020-02-17 23:37:46
Local clock offset: -0.748 ms
Remote clock offset: -10.452 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.25 Mbit/s
95th percentile per-packet one-way delay: 81.920 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 9.25 Mbit/s
95th percentile per-packet one-way delay: 81.920 ms
Loss rate: 0.04%
```
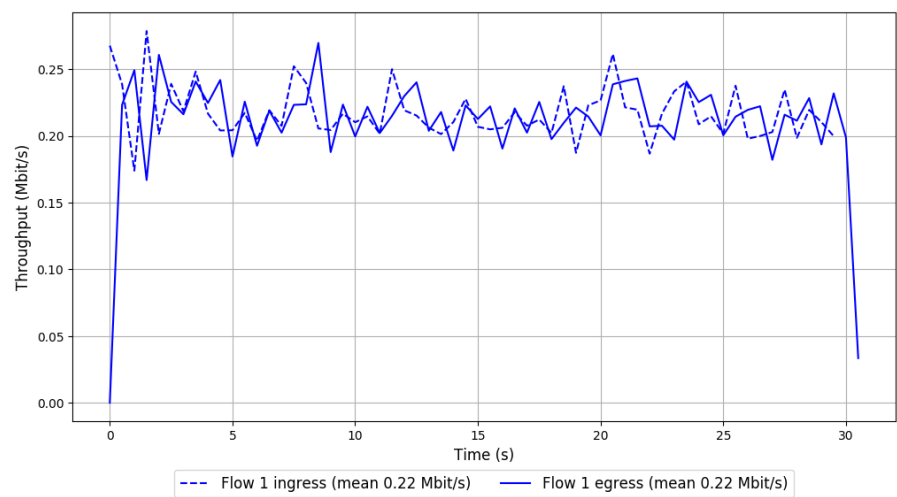
Run 5: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2020-02-17 21:33:12
End at: 2020-02-17 21:33:43
Local clock offset: -0.548 ms
Remote clock offset: -8.162 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.719 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.719 ms
Loss rate: 0.00%
```
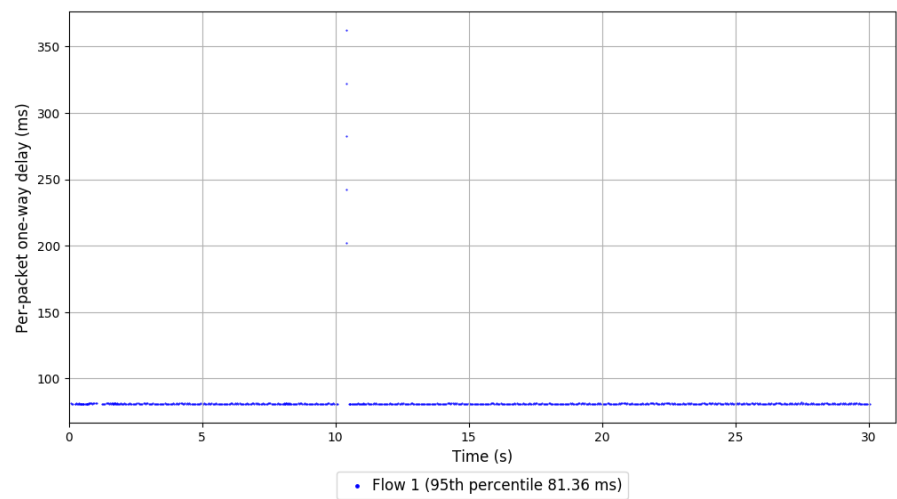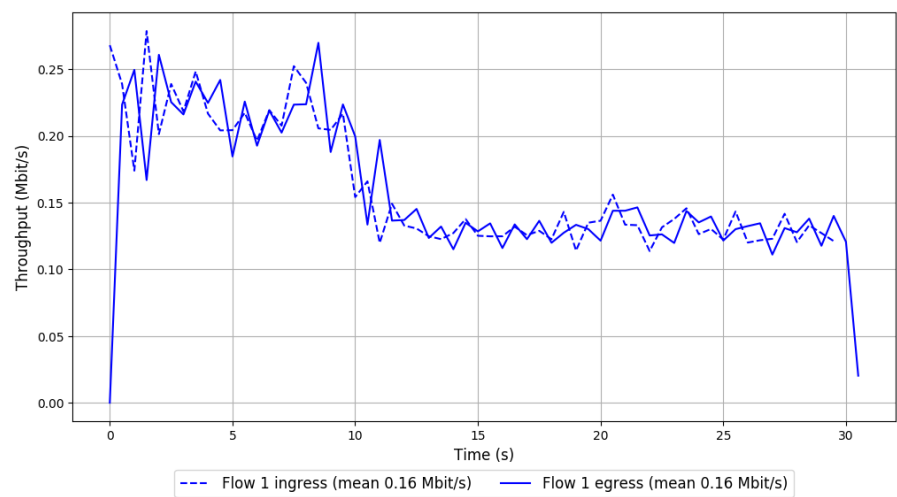
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2020-02-17 22:01:35
End at: 2020-02-17 22:02:05
Local clock offset: 0.964 ms
Remote clock offset: -8.24 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 81.364 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 81.364 ms
Loss rate: 0.00%
```

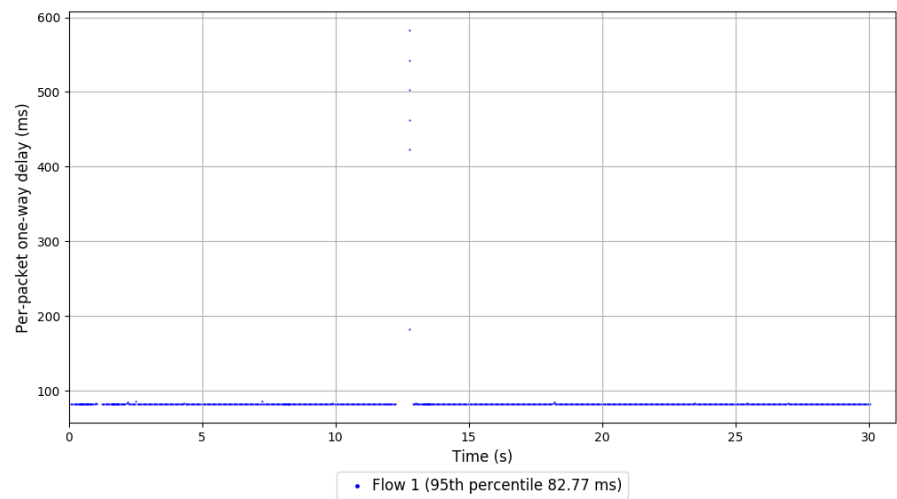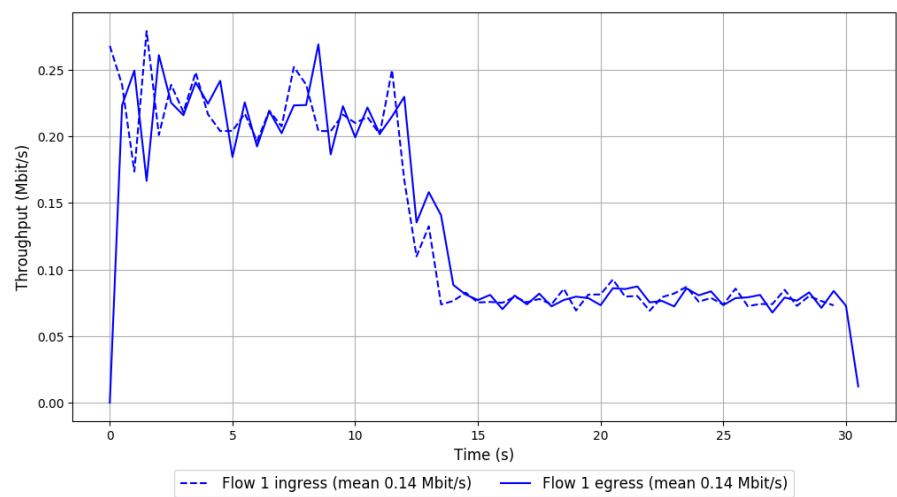Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2020-02-17 22:29:44
End at: 2020-02-17 22:30:14
Local clock offset: 1.726 ms
Remote clock offset: -8.028 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 82.774 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 82.774 ms
Loss rate: 0.00%
```

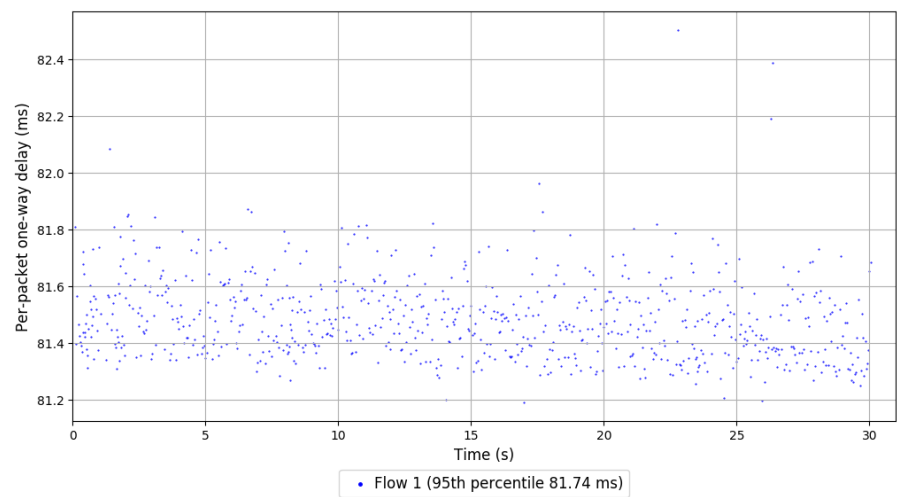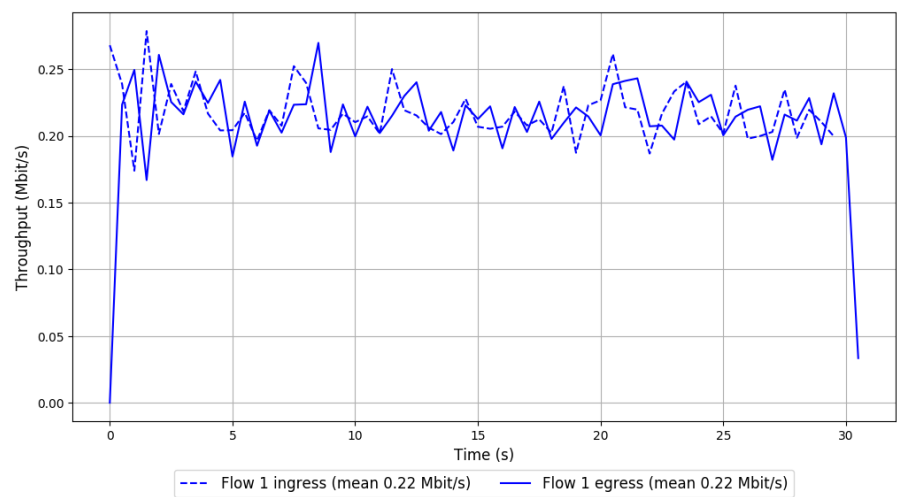Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2020-02-17 22:57:38
End at: 2020-02-17 22:58:08
Local clock offset: 1.146 ms
Remote clock offset: -8.586 ms

# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.737 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.737 ms
Loss rate: 0.00%
```
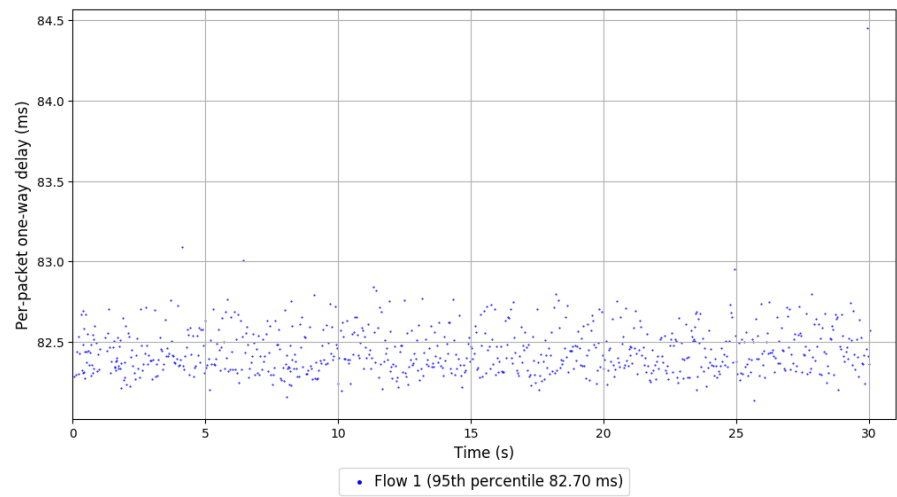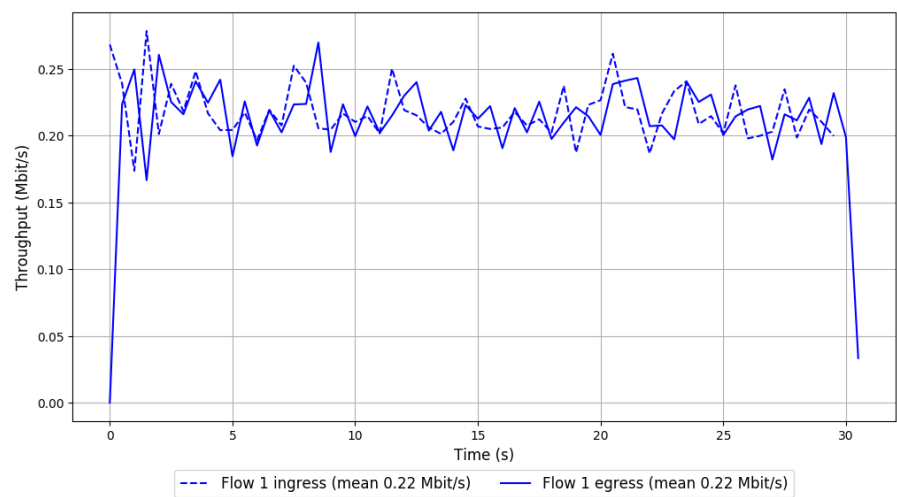
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2020-02-17 23:25:41
End at: 2020-02-17 23:26:11
Local clock offset: -0.535 ms
Remote clock offset: -10.271 ms

# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.704 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.704 ms
Loss rate: 0.00%
```

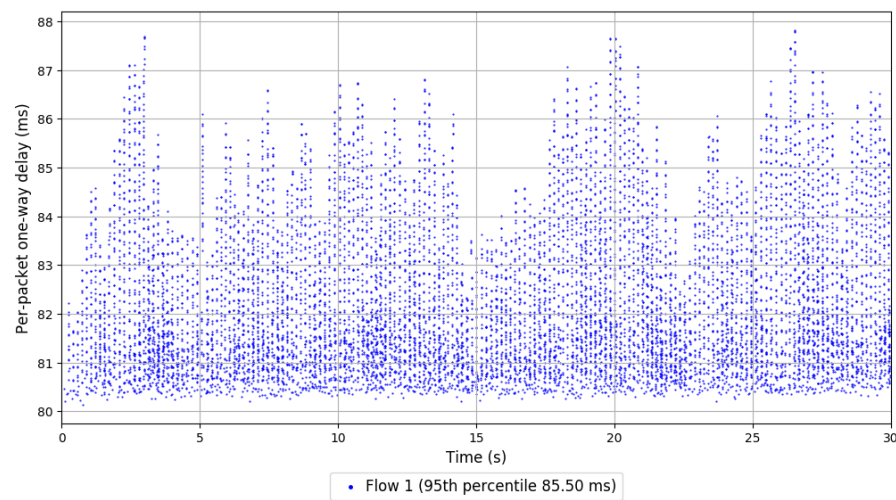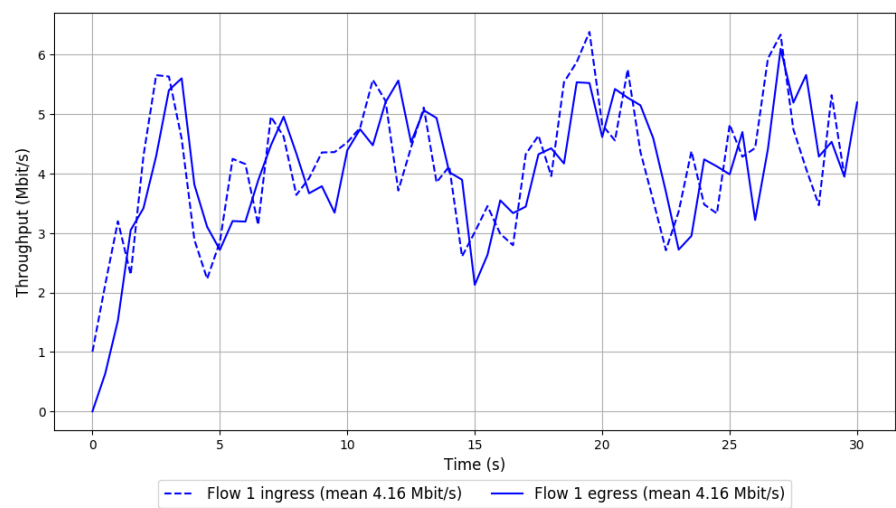# Run 5: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2020-02-17 21:40:09
End at: 2020-02-17 21:40:39
Local clock offset: 1.046 ms
Remote clock offset: -8.304 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 85.505 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 85.505 ms
Loss rate: 0.18%
```

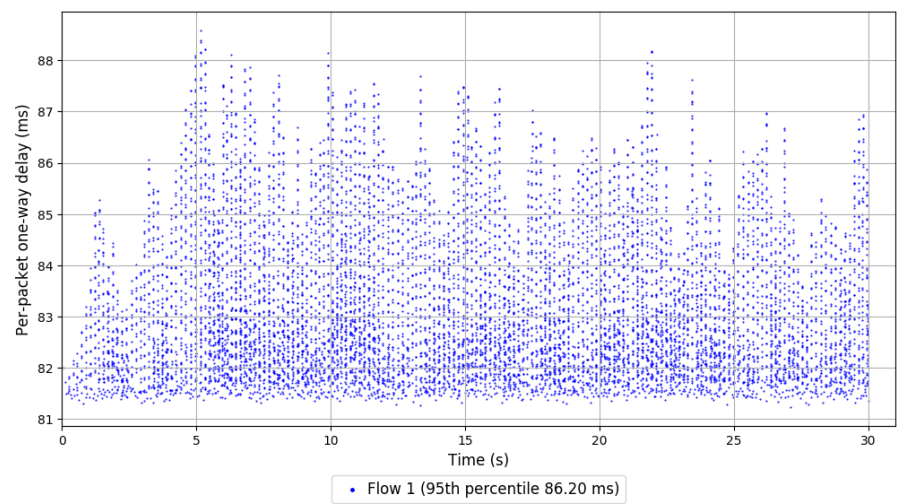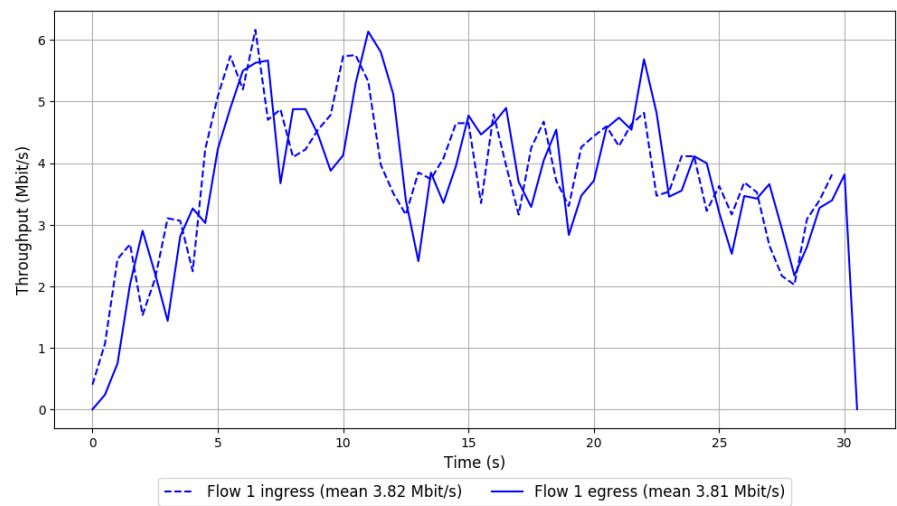# Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2020-02-17 22:08:30
End at: 2020-02-17 22:09:00
Local clock offset: 0.977 ms
Remote clock offset: -7.744 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 86.202 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 86.202 ms
Loss rate: 0.20%
```

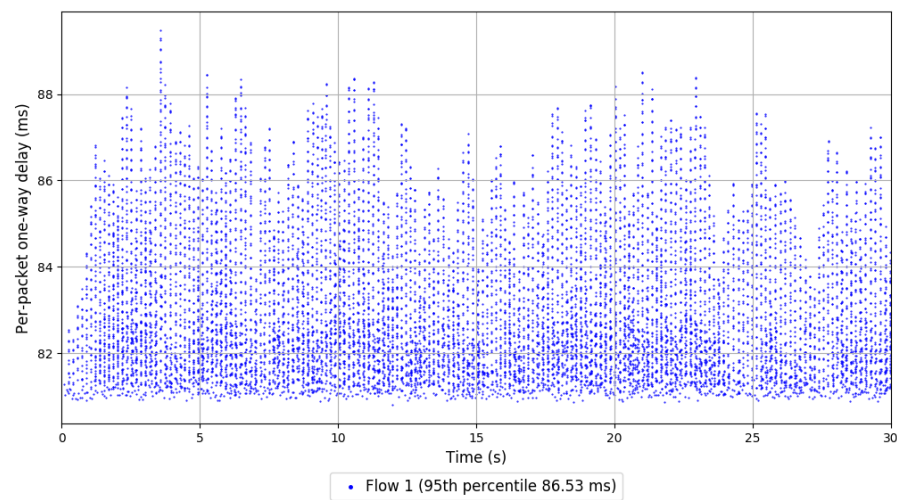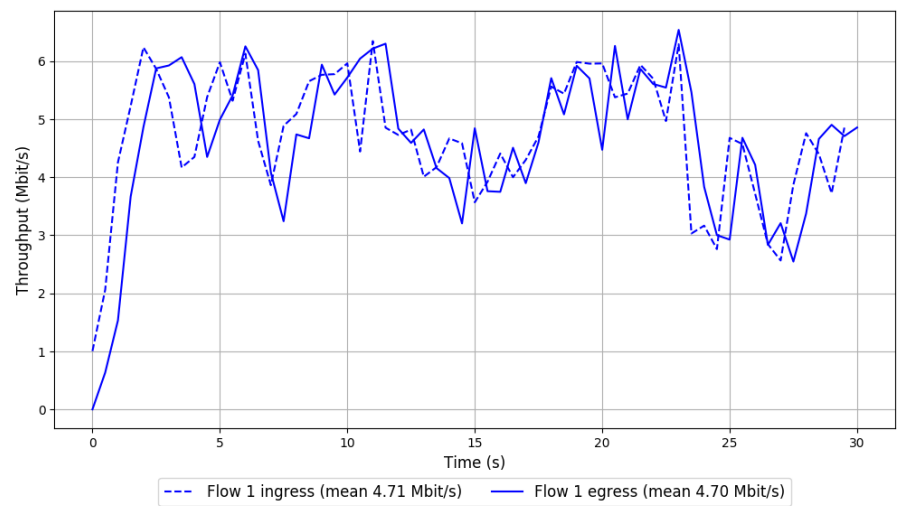Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2020-02-17 22:36:38
End at: 2020-02-17 22:37:09
Local clock offset: 0.977 ms
Remote clock offset: -8.733 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.70 Mbit/s
95th percentile per-packet one-way delay: 86.527 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 4.70 Mbit/s
95th percentile per-packet one-way delay: 86.527 ms
Loss rate: 0.28%
```

Run 3: Report of Sprout — Data Link

Flow 1 ingress (mean 4.71 Mbit/s) ----   Flow 1 egress (mean 4.70 Mbit/s) ——

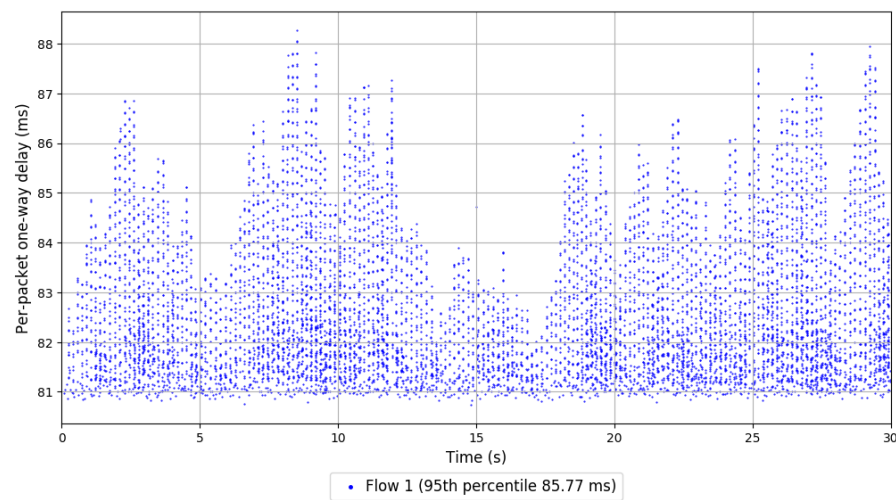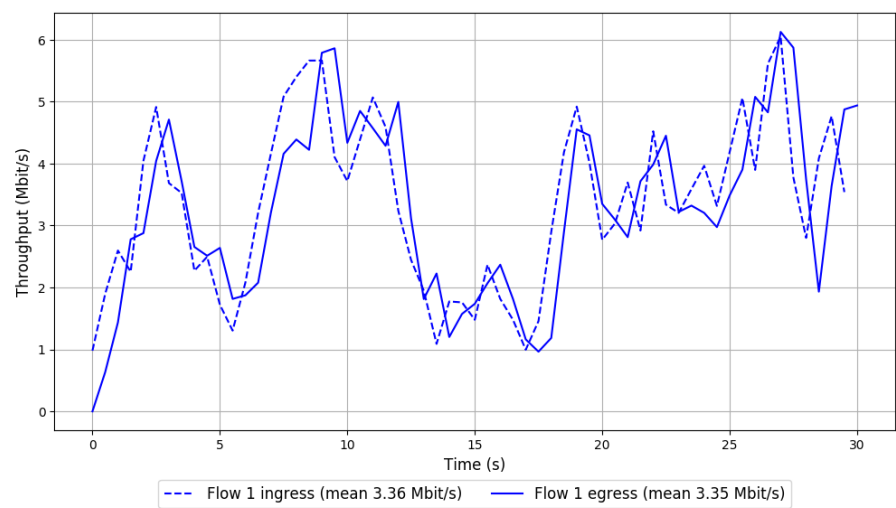• Flow 1 (95th percentile 86.53 ms)

```
Run 4: Statistics of Sprout

Start at: 2020-02-17 23:04:34
End at: 2020-02-17 23:05:04
Local clock offset: 0.145 ms
Remote clock offset: -9.631 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.35 Mbit/s
95th percentile per-packet one-way delay: 85.769 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 3.35 Mbit/s
95th percentile per-packet one-way delay: 85.769 ms
Loss rate: 0.34%
```

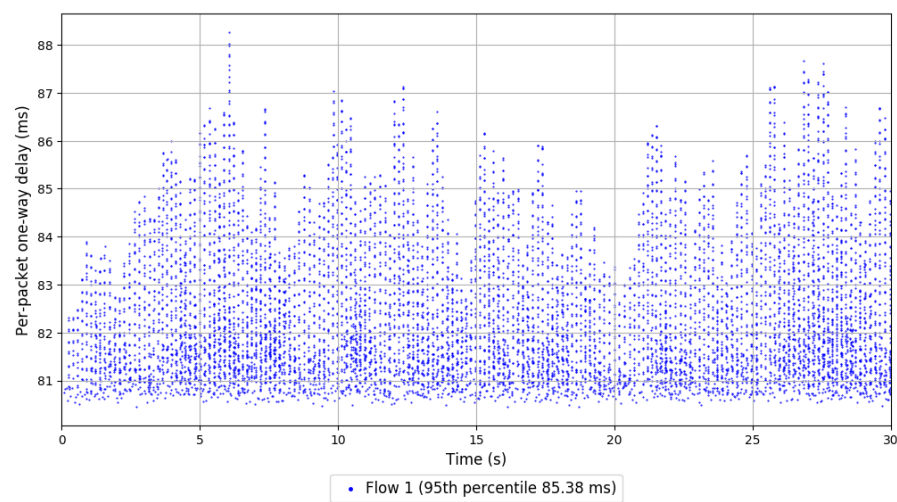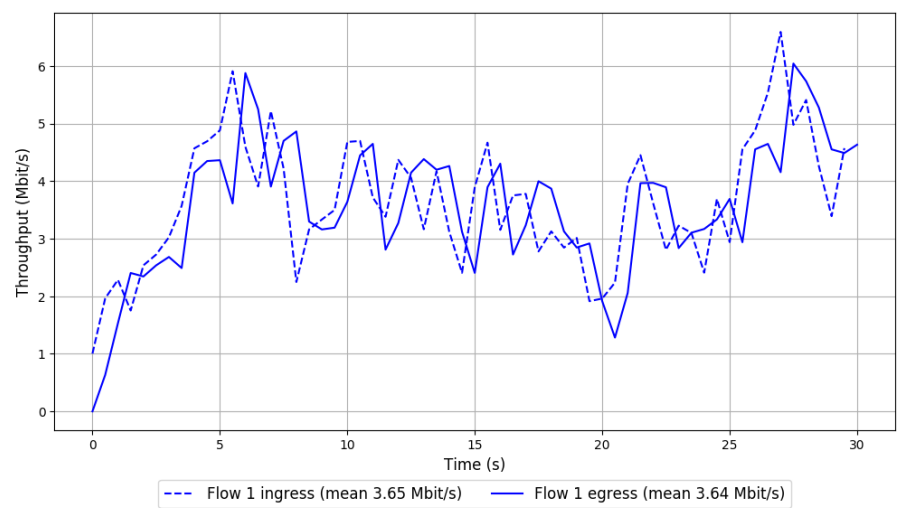Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2020-02-17 23:32:35
End at: 2020-02-17 23:33:05
Local clock offset: -0.02 ms
Remote clock offset: -10.395 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.64 Mbit/s
95th percentile per-packet one-way delay: 85.383 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 3.64 Mbit/s
95th percentile per-packet one-way delay: 85.383 ms
Loss rate: 0.24%
```

Run 5: Report of Sprout — Data Link

Flow 1 ingress (mean 3.65 Mbit/s)   Flow 1 egress (mean 3.64 Mbit/s)

Flow 1 (95th percentile 85.38 ms)

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

Start at: 2020-02-17 21:30:54
End at: 2020-02-17 21:31:24
Local clock offset: -0.237 ms
Remote clock offset: -8.183 ms
```
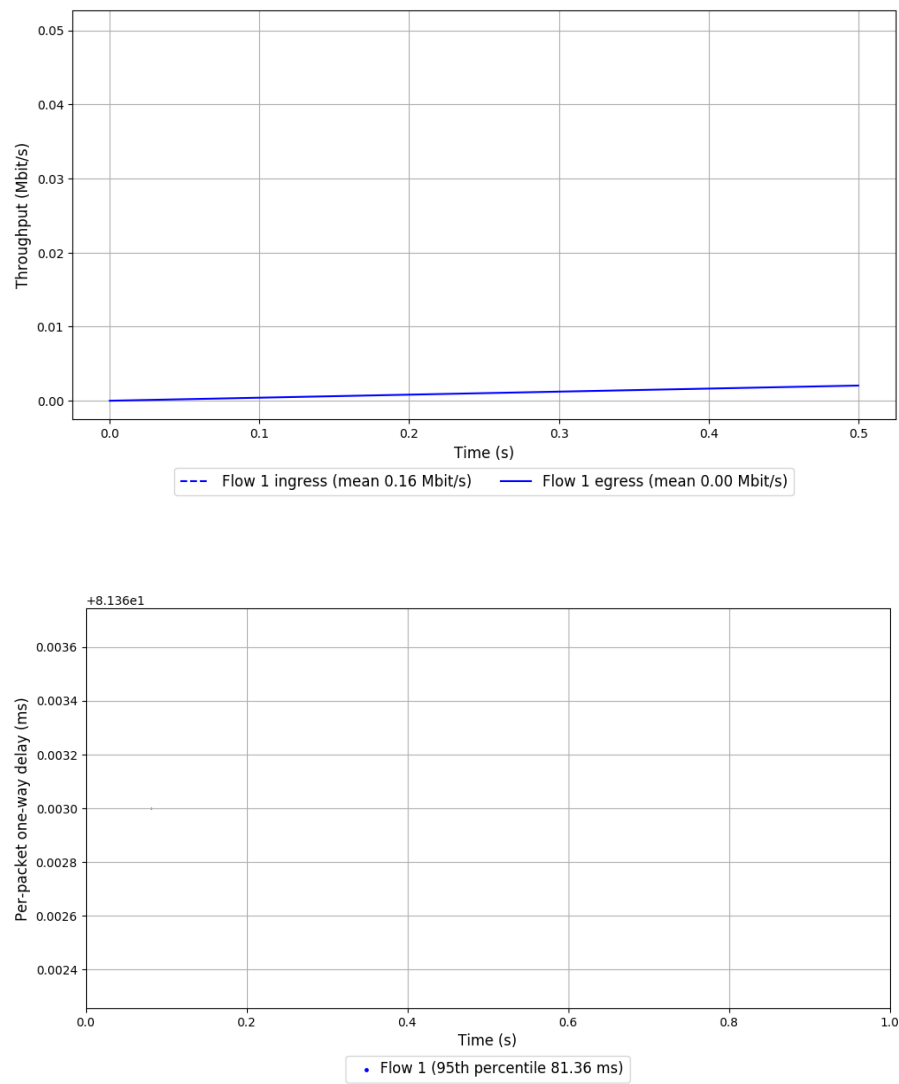
Run 1: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 0.16 Mbit/s)   Flow 1 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 81.36 ms)

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

Start at: 2020-02-17 21:59:14
End at: 2020-02-17 21:59:44
Local clock offset: 1.741 ms
Remote clock offset: -7.791 ms
```
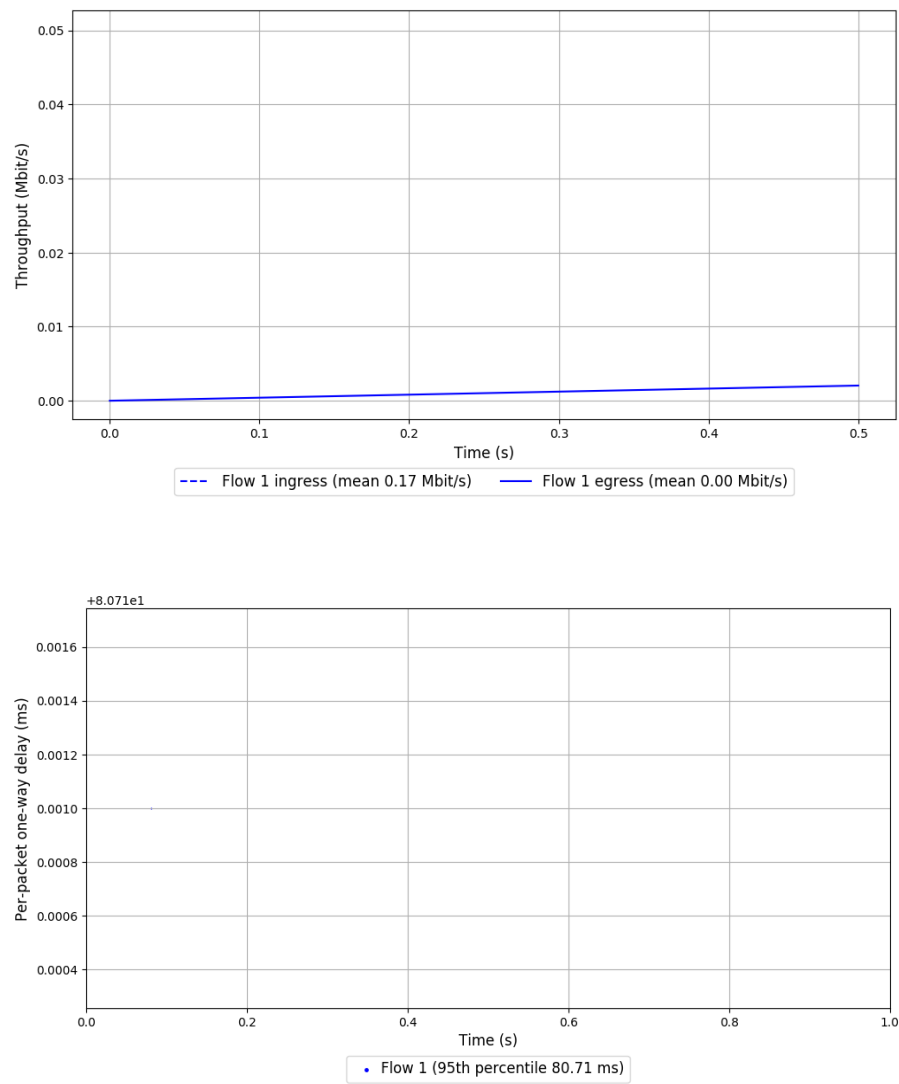
Run 2: Report of TaoVA-100x — Data Link
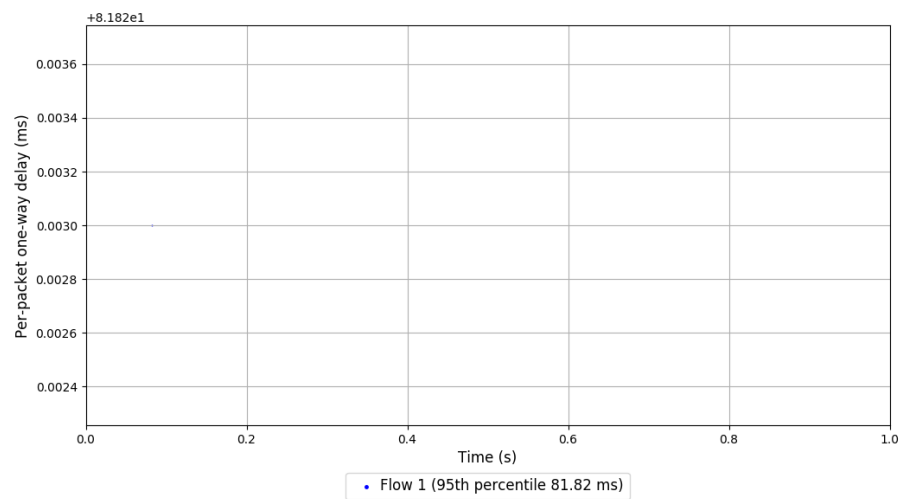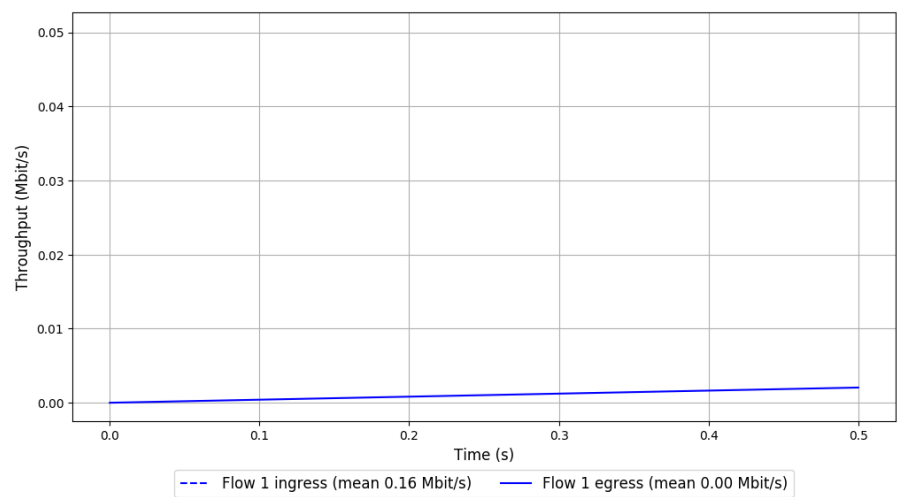
```
Run 3: Statistics of TaoVA-100x

Start at: 2020-02-17 22:27:25
End at: 2020-02-17 22:27:55
Local clock offset: 2.006 ms
Remote clock offset: -7.837 ms
```

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

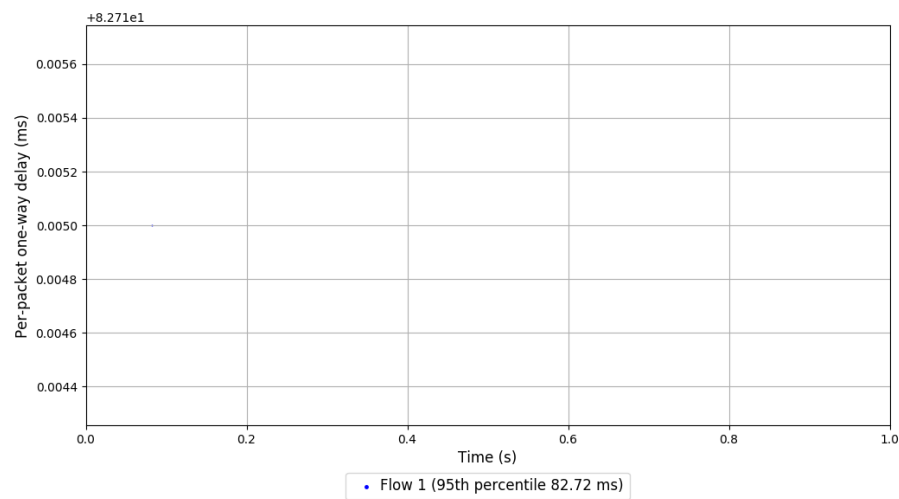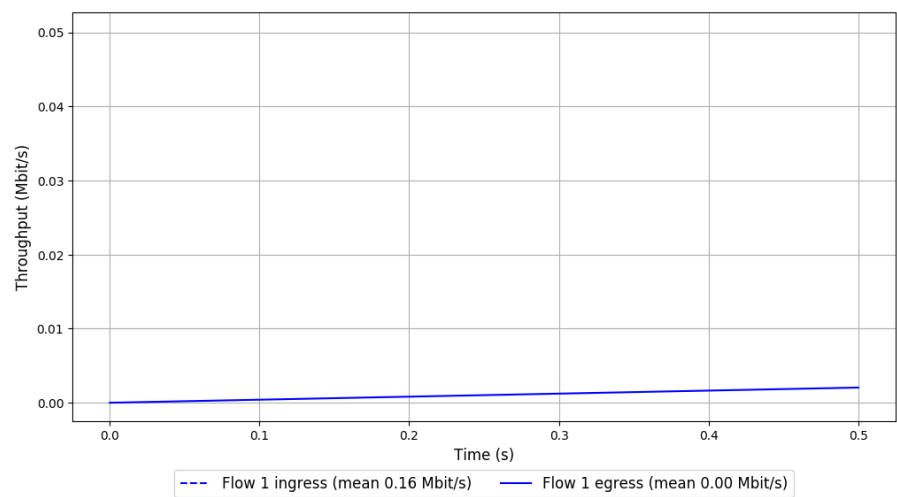```
Run 4: Statistics of TaoVA-100x

Start at: 2020-02-17 22:55:20
End at: 2020-02-17 22:55:50
Local clock offset: 1.093 ms
Remote clock offset: -8.637 ms
```

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

Flow 1 ingress (mean 0.16 Mbit/s)   Flow 1 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 82.72 ms)
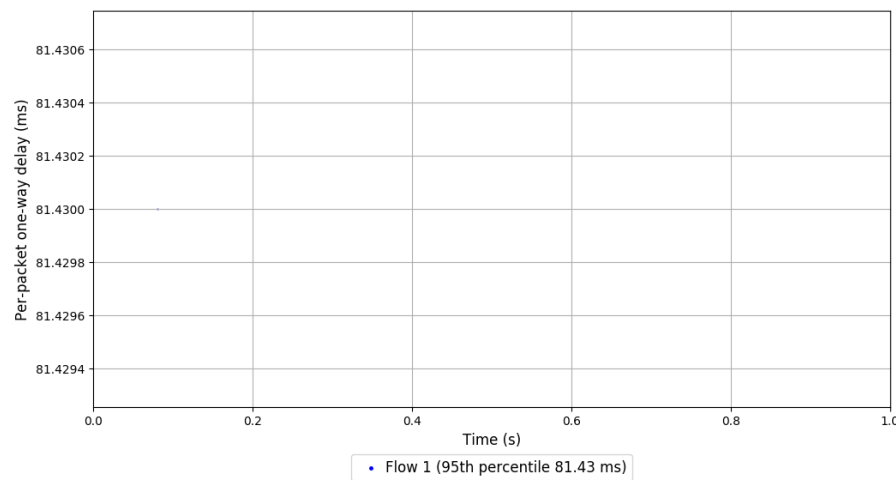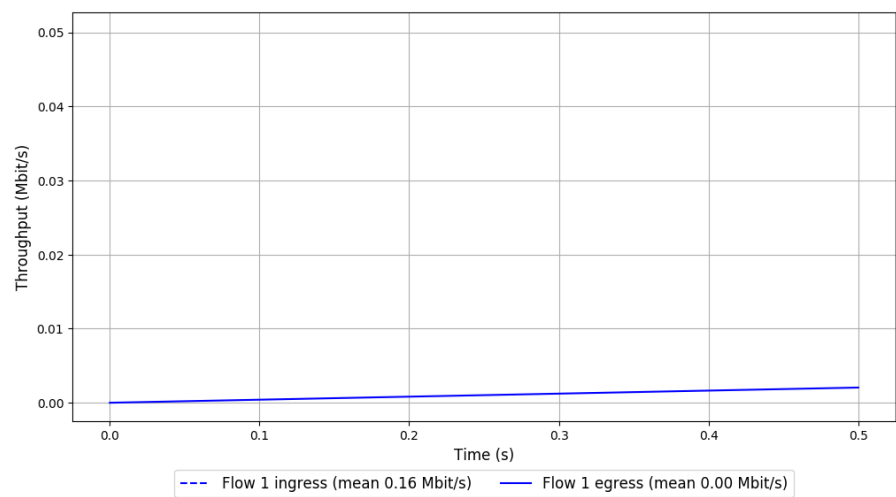
202

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

Start at: 2020-02-17 23:23:22
End at: 2020-02-17 23:23:52
Local clock offset: -0.532 ms
Remote clock offset: -10.125 ms
```

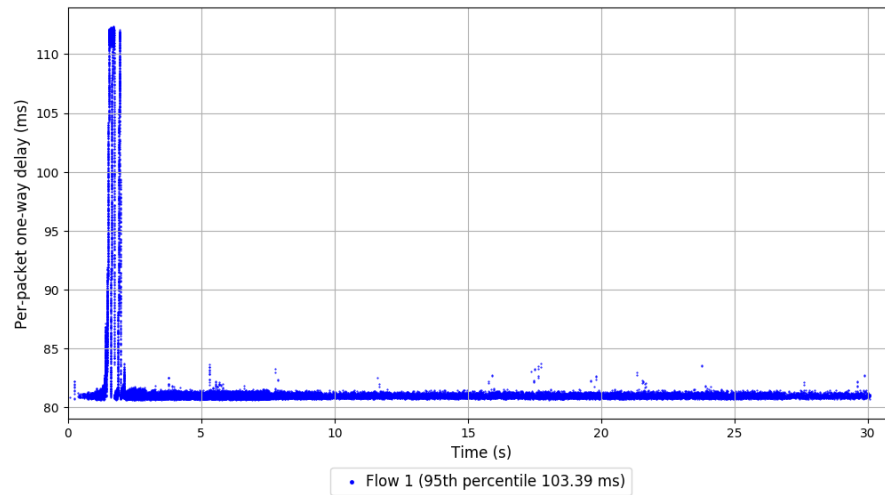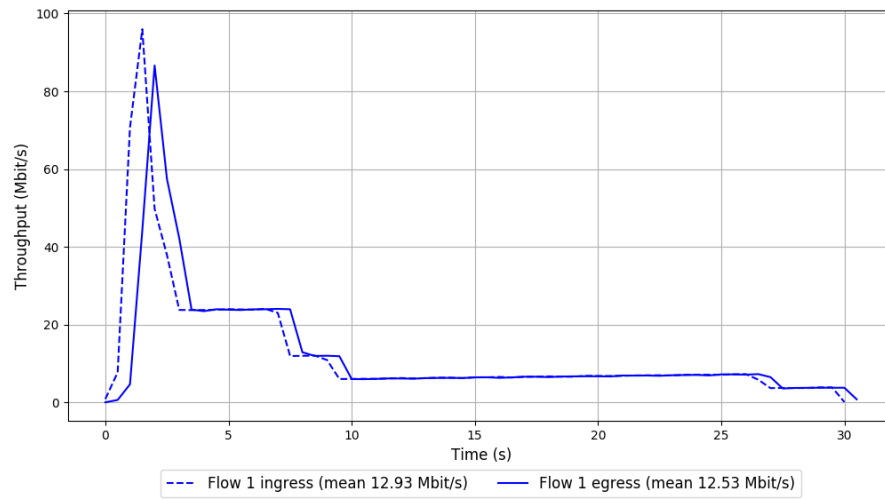# Run 5: Report of TaoVA-100x — Data Link

```
Run 1: Statistics of TCP Vegas

Start at: 2020-02-17 21:34:20
End at: 2020-02-17 21:34:50
Local clock offset: 0.193 ms
Remote clock offset: -7.996 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.53 Mbit/s
95th percentile per-packet one-way delay: 103.385 ms
Loss rate: 3.03%
-- Flow 1:
Average throughput: 12.53 Mbit/s
95th percentile per-packet one-way delay: 103.385 ms
Loss rate: 3.03%
```

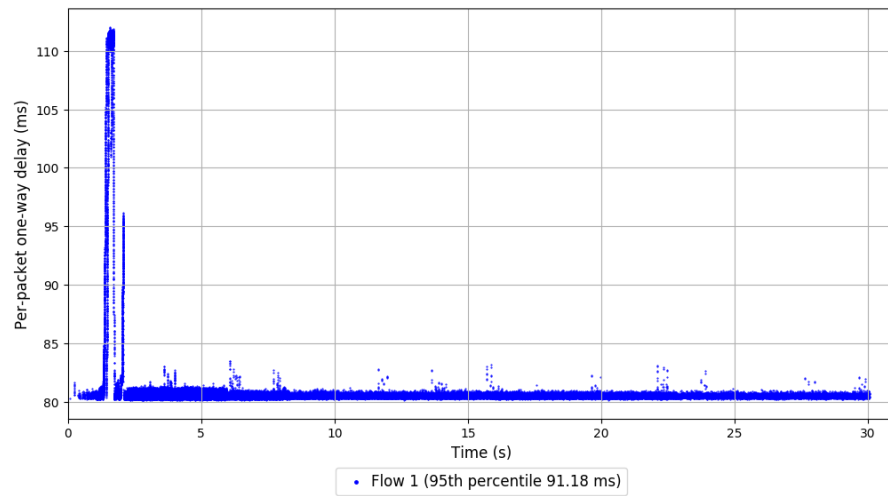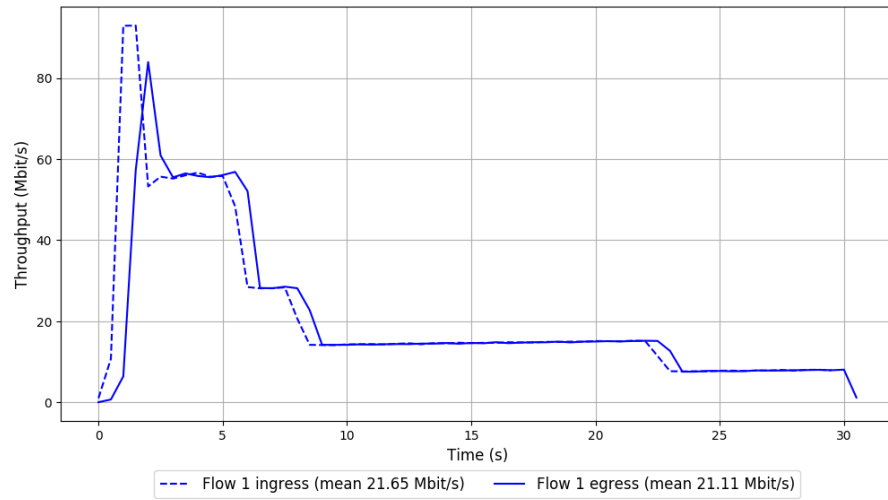Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2020-02-17 22:02:42
End at: 2020-02-17 22:03:12
Local clock offset: 1.675 ms
Remote clock offset: -8.186 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.11 Mbit/s
95th percentile per-packet one-way delay: 91.182 ms
Loss rate: 2.48%
-- Flow 1:
Average throughput: 21.11 Mbit/s
95th percentile per-packet one-way delay: 91.182 ms
Loss rate: 2.48%
```

Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 21.65 Mbit/s) ----- Flow 1 egress (mean 21.11 Mbit/s) ——
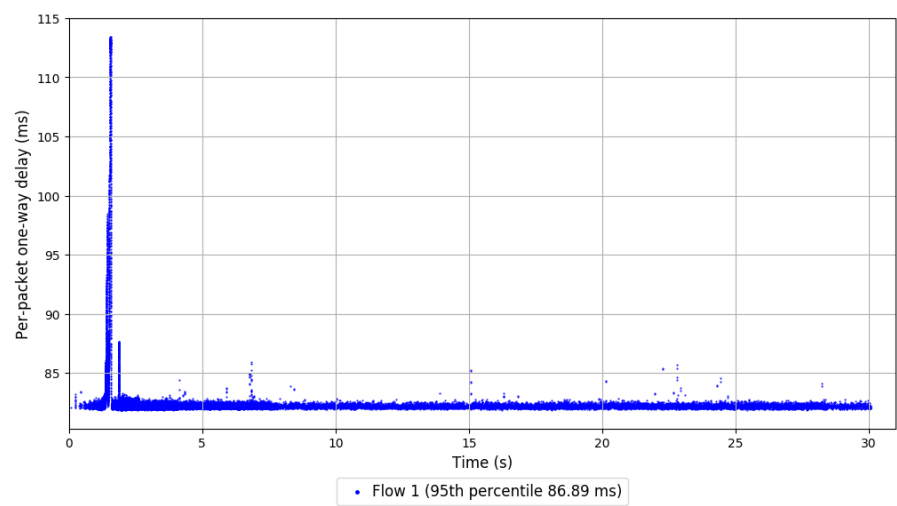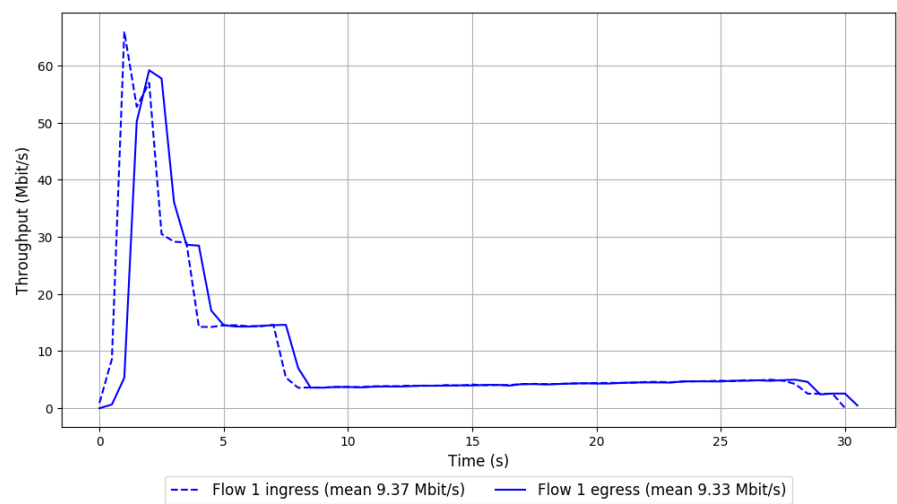

Flow 1 (95th percentile 91.18 ms)

```
Run 3: Statistics of TCP Vegas

Start at: 2020-02-17 22:30:51
End at: 2020-02-17 22:31:21
Local clock offset: 1.585 ms
Remote clock offset: -8.423 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.33 Mbit/s
95th percentile per-packet one-way delay: 86.895 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 9.33 Mbit/s
95th percentile per-packet one-way delay: 86.895 ms
Loss rate: 0.45%
```

Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 9.37 Mbit/s) --- Flow 1 egress (mean 9.33 Mbit/s)

Flow 1 (95th percentile 86.89 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2020-02-17 22:58:46
End at: 2020-02-17 22:59:16
Local clock offset: 1.711 ms
Remote clock offset: -8.99 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.06 Mbit/s
95th percentile per-packet one-way delay: 92.669 ms
Loss rate: 1.99%
-- Flow 1:
Average throughput: 18.06 Mbit/s
95th percentile per-packet one-way delay: 92.669 ms
Loss rate: 1.99%
```
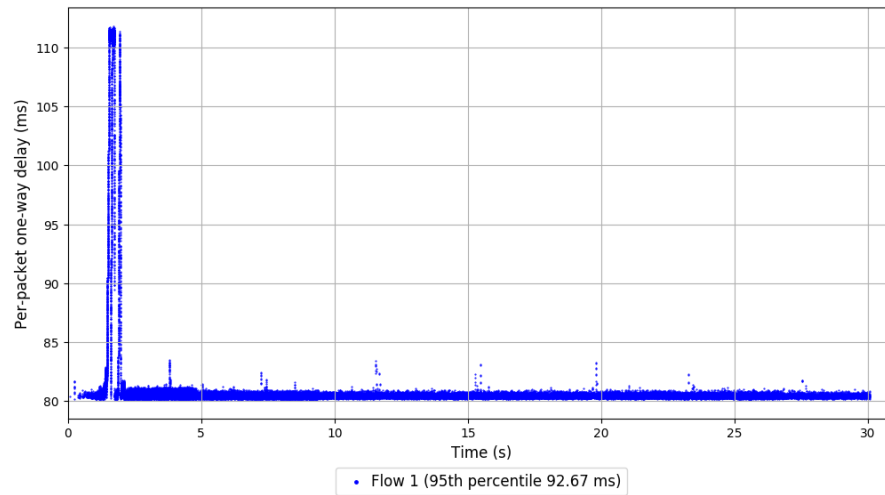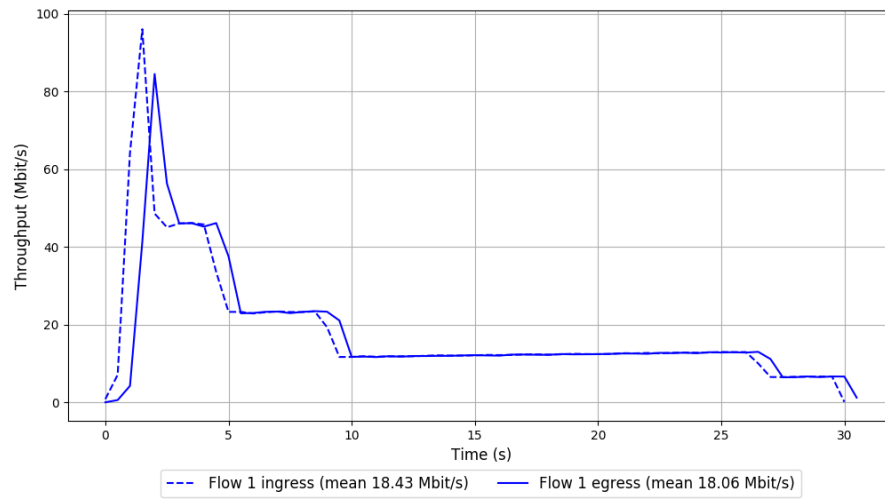
Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 18.43 Mbit/s)   Flow 1 egress (mean 18.06 Mbit/s)
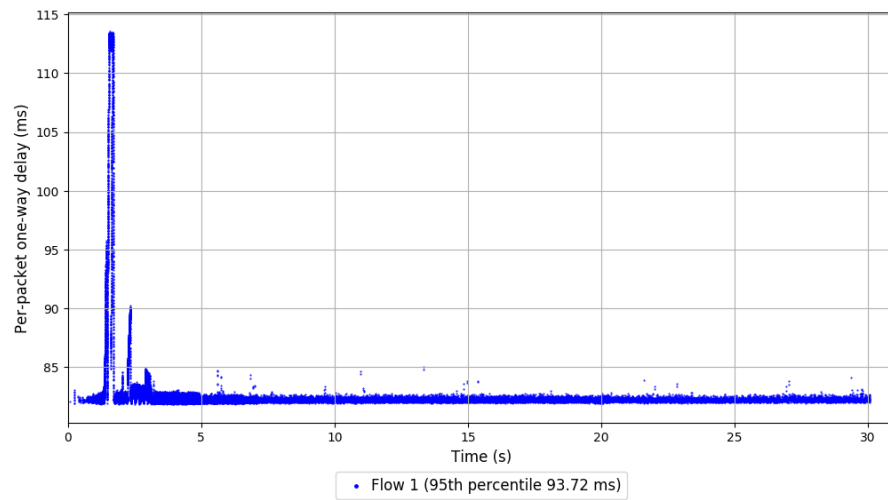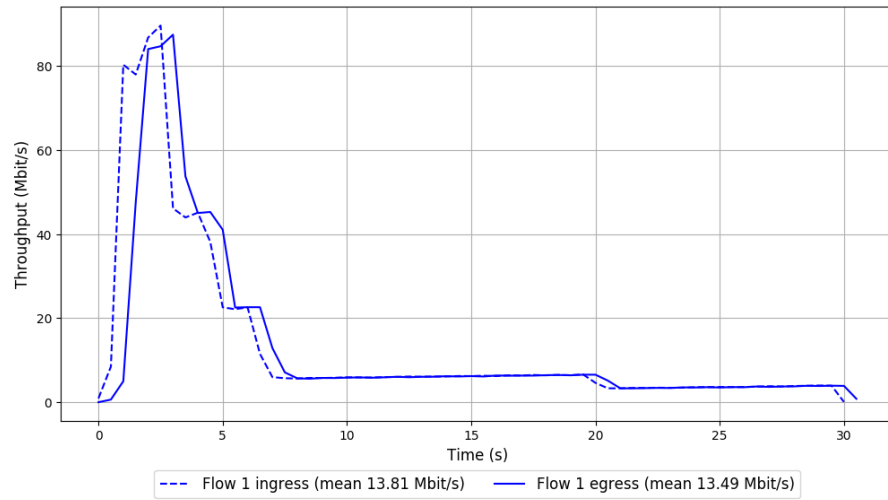

Flow 1 (95th percentile 92.67 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2020-02-17 23:26:48
End at: 2020-02-17 23:27:18
Local clock offset: -0.526 ms
Remote clock offset: -10.599 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.49 Mbit/s
95th percentile per-packet one-way delay: 93.722 ms
Loss rate: 2.31%
-- Flow 1:
Average throughput: 13.49 Mbit/s
95th percentile per-packet one-way delay: 93.722 ms
Loss rate: 2.31%
```

Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 13.81 Mbit/s)   Flow 1 egress (mean 13.49 Mbit/s)
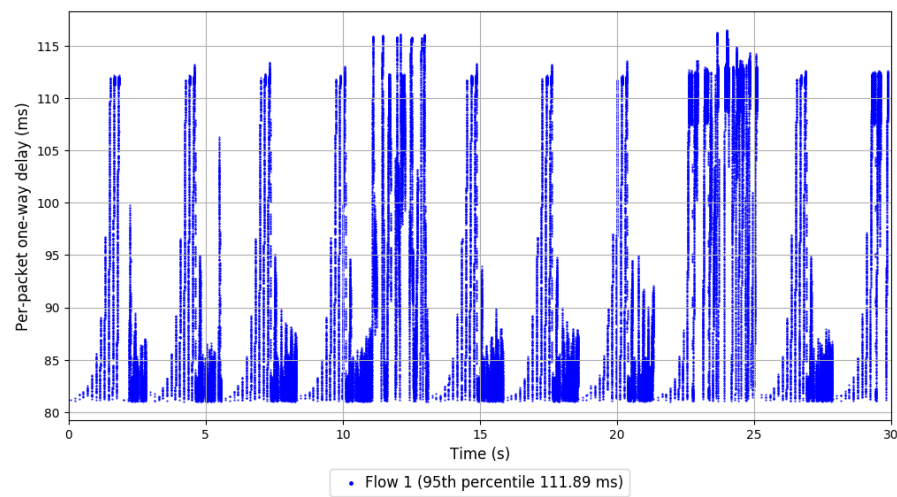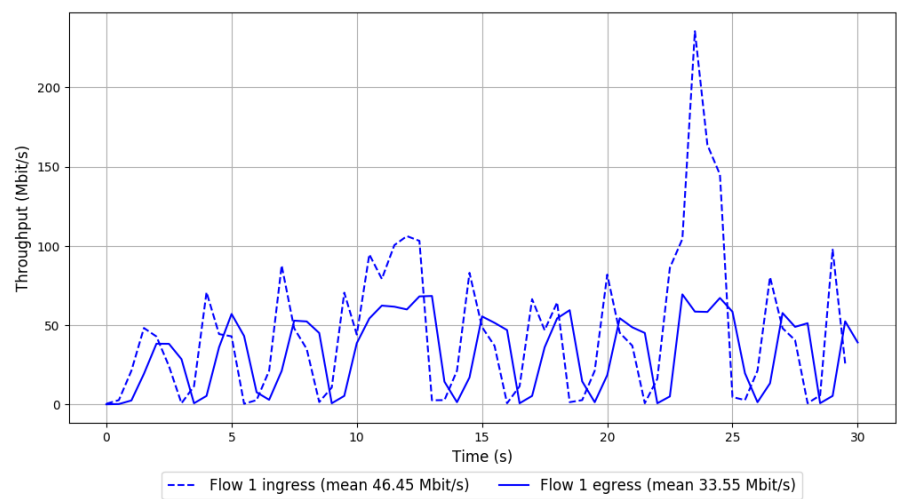

Flow 1 (95th percentile 93.72 ms)

```
Run 1: Statistics of Verus

Start at: 2020-02-17 21:35:28
End at: 2020-02-17 21:35:58
Local clock offset: -0.538 ms
Remote clock offset: -8.407 ms

# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.55 Mbit/s
95th percentile per-packet one-way delay: 111.887 ms
Loss rate: 27.69%
-- Flow 1:
Average throughput: 33.55 Mbit/s
95th percentile per-packet one-way delay: 111.887 ms
Loss rate: 27.69%
```
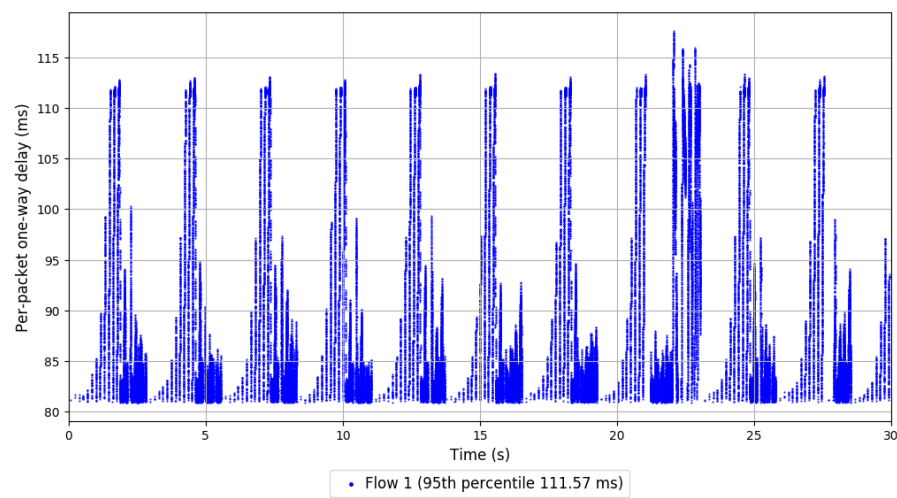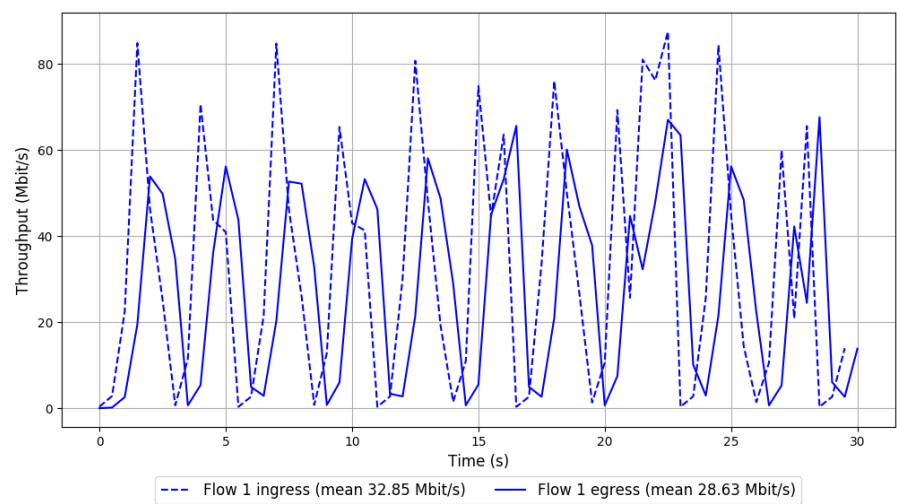
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2020-02-17 22:03:51
End at: 2020-02-17 22:04:21
Local clock offset: 0.942 ms
Remote clock offset: -8.178 ms


# Below is generated by plot.py at 2020-02-18 00:00:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.63 Mbit/s
95th percentile per-packet one-way delay: 111.569 ms
Loss rate: 12.81%
-- Flow 1:
Average throughput: 28.63 Mbit/s
95th percentile per-packet one-way delay: 111.569 ms
Loss rate: 12.81%
```
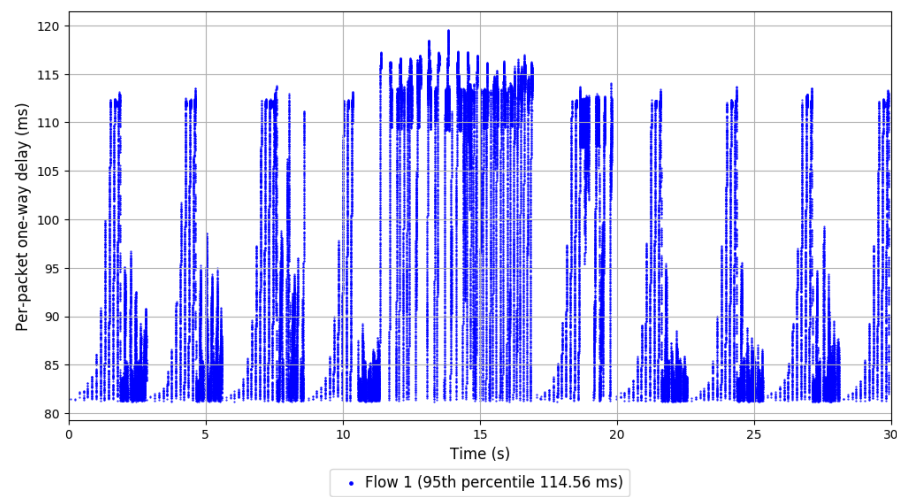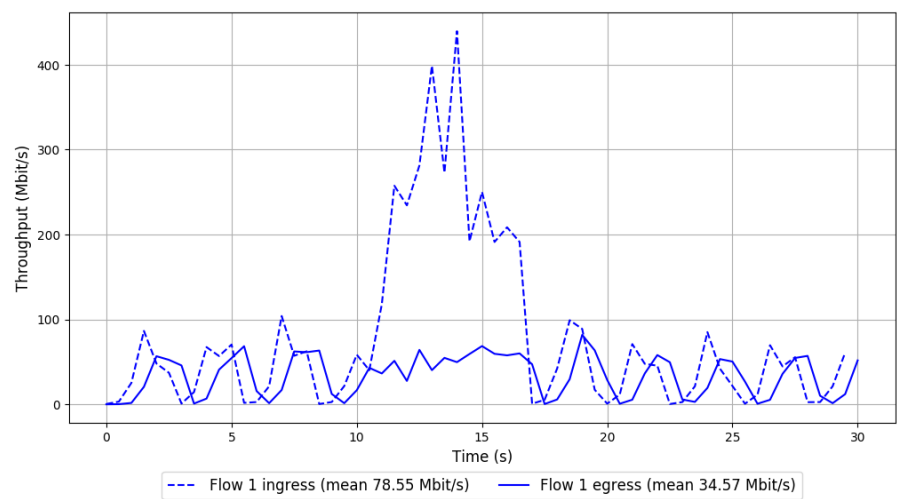
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2020-02-17 22:31:59
End at: 2020-02-17 22:32:29
Local clock offset: 2.167 ms
Remote clock offset: -8.419 ms

# Below is generated by plot.py at 2020-02-18 00:00:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.57 Mbit/s
95th percentile per-packet one-way delay: 114.563 ms
Loss rate: 55.98%
-- Flow 1:
Average throughput: 34.57 Mbit/s
95th percentile per-packet one-way delay: 114.563 ms
Loss rate: 55.98%
```
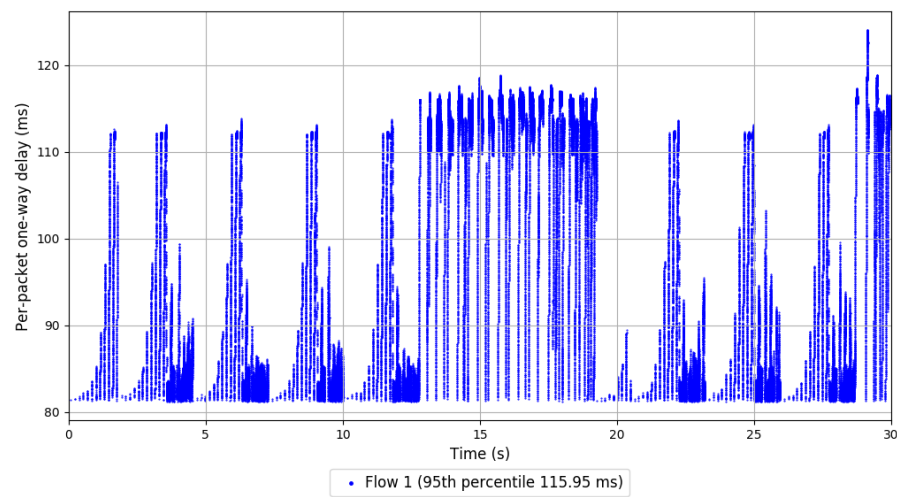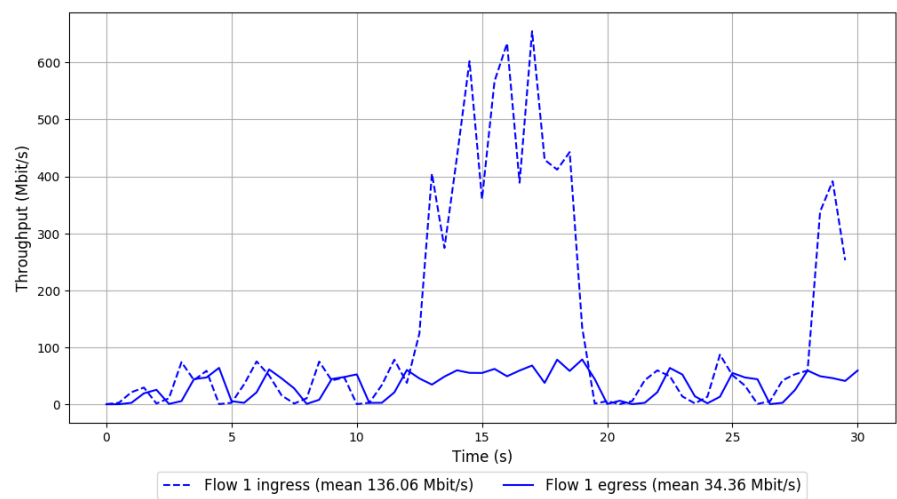
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2020-02-17 22:59:54
End at: 2020-02-17 23:00:24
Local clock offset: 0.74 ms
Remote clock offset: -8.811 ms


# Below is generated by plot.py at 2020-02-18 00:00:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.36 Mbit/s
95th percentile per-packet one-way delay: 115.955 ms
Loss rate: 74.72%
-- Flow 1:
Average throughput: 34.36 Mbit/s
95th percentile per-packet one-way delay: 115.955 ms
Loss rate: 74.72%
```

Run 4: Report of Verus — Data Link

Flow 1 ingress (mean 136.06 Mbit/s)   Flow 1 egress (mean 34.36 Mbit/s)
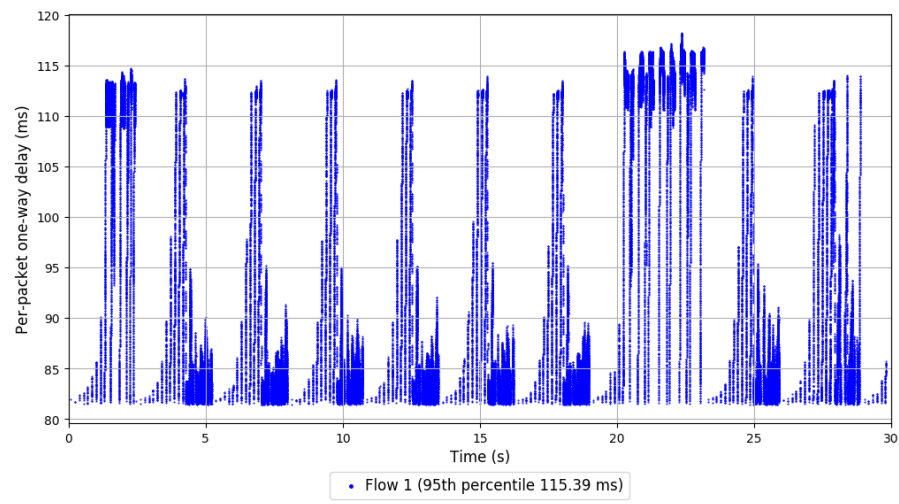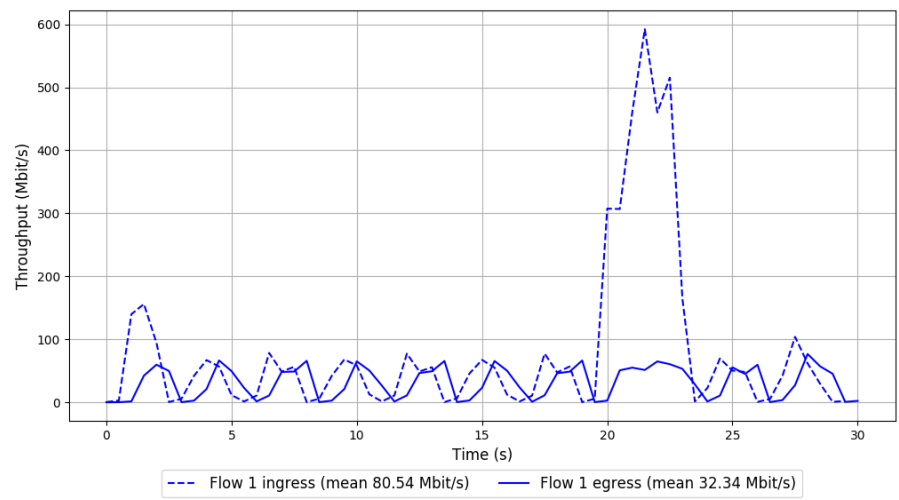

Flow 1 (95th percentile 115.95 ms)

```
Run 5: Statistics of Verus

Start at: 2020-02-17 23:27:56
End at: 2020-02-17 23:28:26
Local clock offset: 0.184 ms
Remote clock offset: -10.321 ms

# Below is generated by plot.py at 2020-02-18 00:00:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.34 Mbit/s
95th percentile per-packet one-way delay: 115.391 ms
Loss rate: 59.85%
-- Flow 1:
Average throughput: 32.34 Mbit/s
95th percentile per-packet one-way delay: 115.391 ms
Loss rate: 59.85%
```

Run 5: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2020-02-17 21:38:55
End at: 2020-02-17 21:39:25
Local clock offset: 0.883 ms
Remote clock offset: -8.366 ms


# Below is generated by plot.py at 2020-02-18 00:00:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.99 Mbit/s
95th percentile per-packet one-way delay: 90.328 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 77.99 Mbit/s
95th percentile per-packet one-way delay: 90.328 ms
Loss rate: 0.03%
```
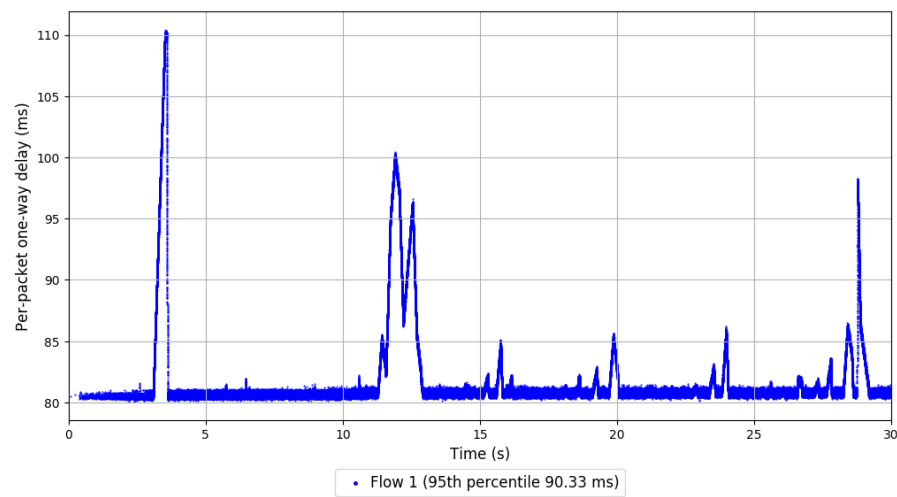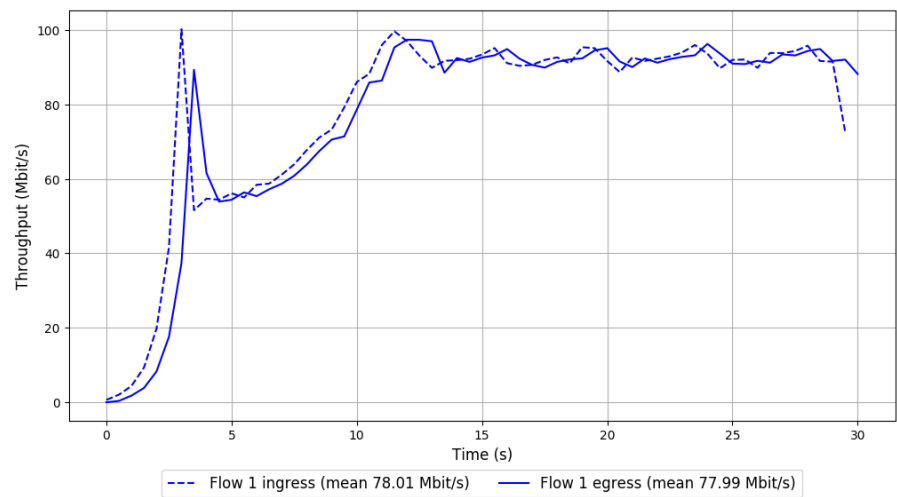
Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2020-02-17 22:07:17
End at: 2020-02-17 22:07:47
Local clock offset: 1.639 ms
Remote clock offset: -7.724 ms


# Below is generated by plot.py at 2020-02-18 00:00:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.93 Mbit/s
95th percentile per-packet one-way delay: 86.571 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 77.93 Mbit/s
95th percentile per-packet one-way delay: 86.571 ms
Loss rate: 0.03%
```
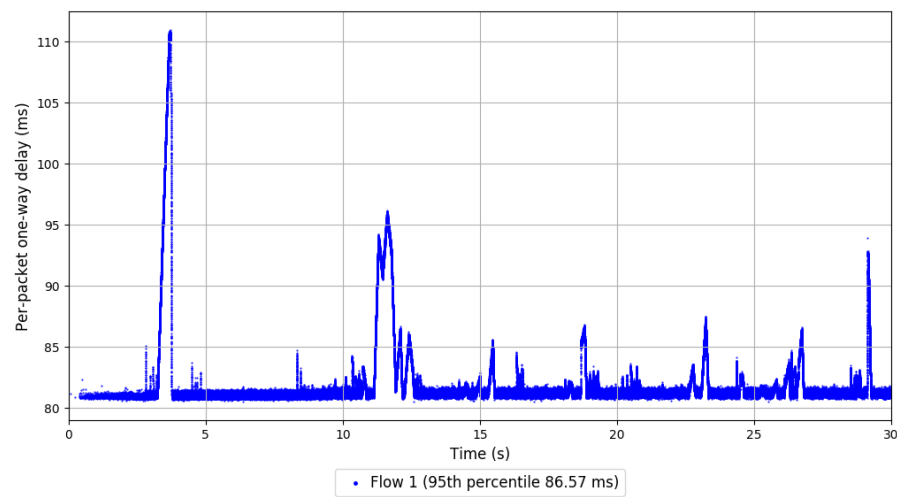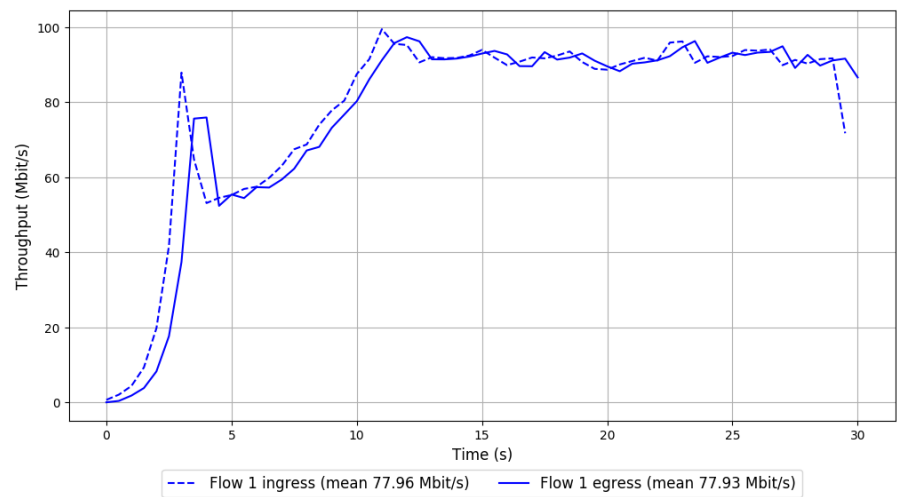
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 77.96 Mbit/s) — Flow 1 egress (mean 77.93 Mbit/s)

Flow 1 (95th percentile 86.57 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2020-02-17 22:35:26
End at: 2020-02-17 22:35:56
Local clock offset: 1.791 ms
Remote clock offset: -8.727 ms


# Below is generated by plot.py at 2020-02-18 00:01:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.52 Mbit/s
95th percentile per-packet one-way delay: 109.775 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 77.52 Mbit/s
95th percentile per-packet one-way delay: 109.775 ms
Loss rate: 0.10%
```
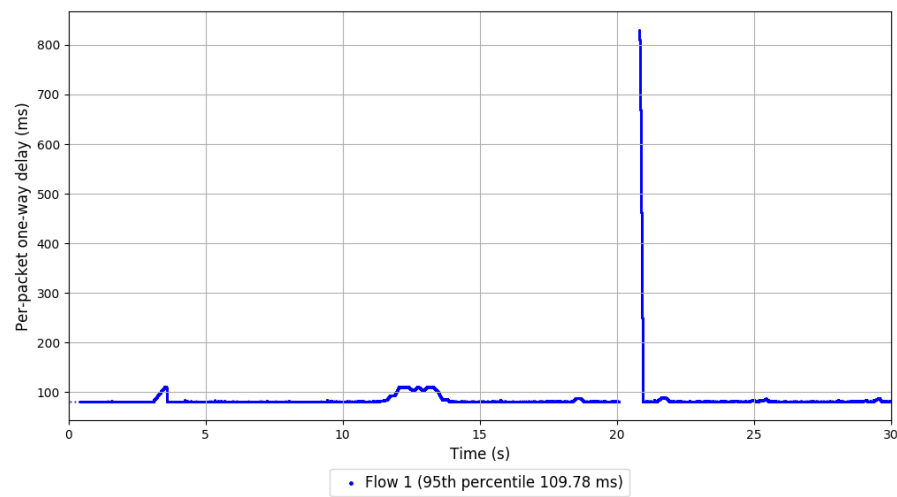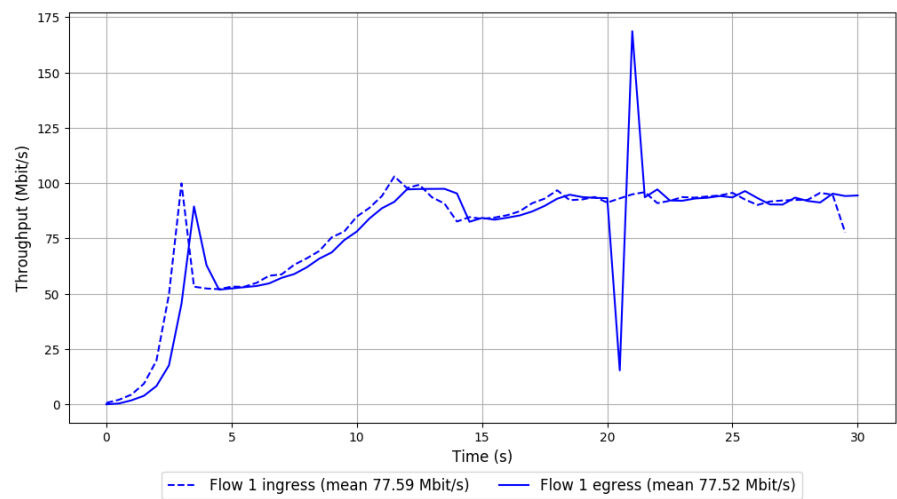
Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 77.59 Mbit/s)   Flow 1 egress (mean 77.52 Mbit/s)

• Flow 1 (95th percentile 109.78 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2020-02-17 23:03:22
End at: 2020-02-17 23:03:52
Local clock offset: 0.995 ms
Remote clock offset: -9.462 ms


# Below is generated by plot.py at 2020-02-18 00:01:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.79 Mbit/s
95th percentile per-packet one-way delay: 82.648 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 75.79 Mbit/s
95th percentile per-packet one-way delay: 82.648 ms
Loss rate: 0.04%
```
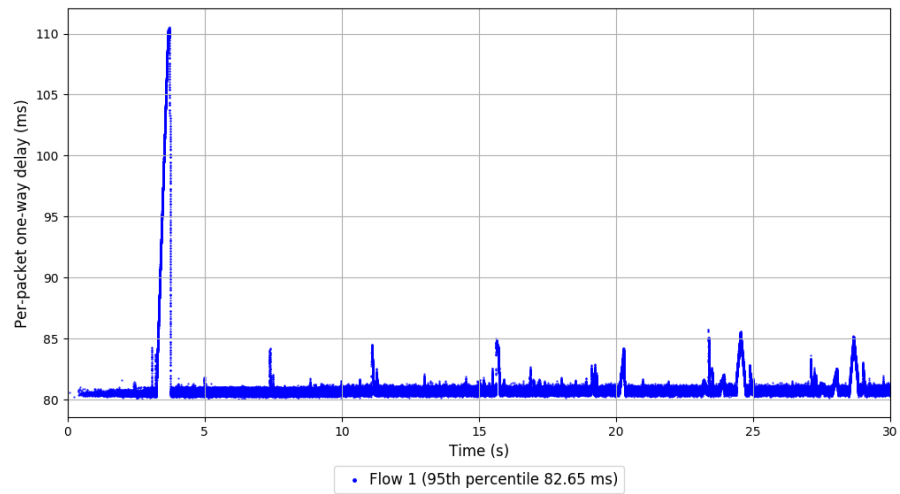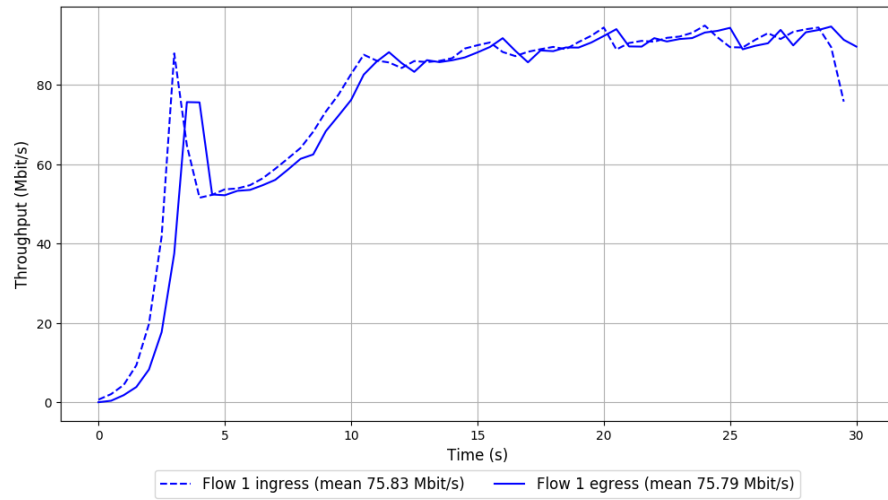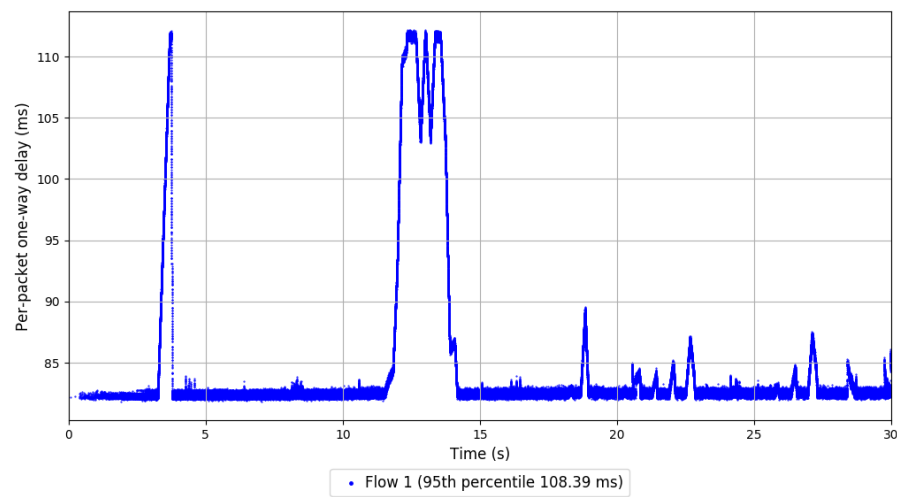
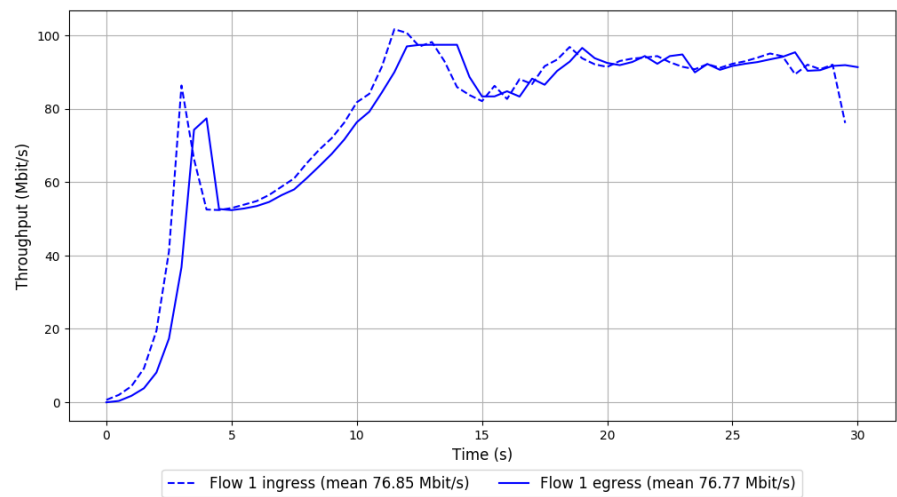# Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2020-02-17 23:31:23
End at: 2020-02-17 23:31:53
Local clock offset: -0.706 ms
Remote clock offset: -10.697 ms


# Below is generated by plot.py at 2020-02-18 00:01:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.77 Mbit/s
95th percentile per-packet one-way delay: 108.394 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 76.77 Mbit/s
95th percentile per-packet one-way delay: 108.394 ms
Loss rate: 0.10%
```
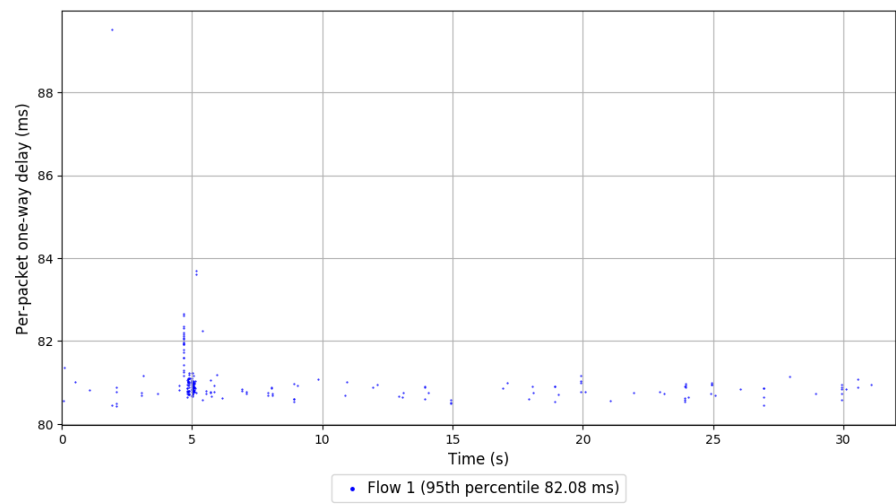
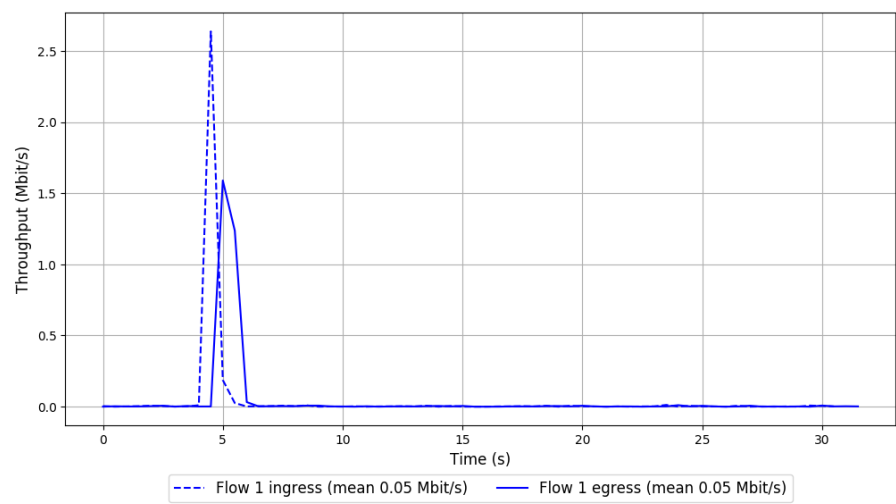# Run 5: Report of PCC-Vivace — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2020-02-17 21:54:11
End at: 2020-02-17 21:54:41
Local clock offset: 1.563 ms
Remote clock offset: -7.838 ms


# Below is generated by plot.py at 2020-02-18 00:01:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 82.079 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 82.079 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2020-02-17 22:22:42
End at: 2020-02-17 22:23:12
Local clock offset: 1.635 ms
Remote clock offset: -7.957 ms


# Below is generated by plot.py at 2020-02-18 00:01:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 81.797 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 81.797 ms
Loss rate: 0.00%
```
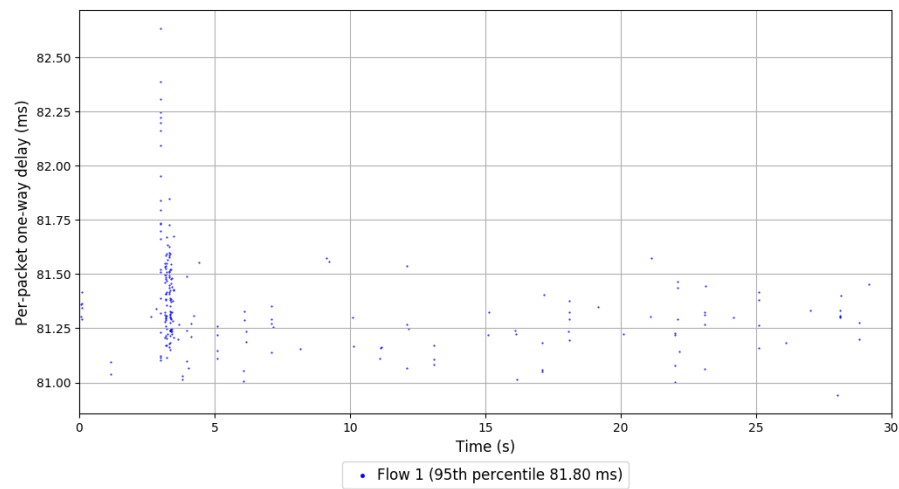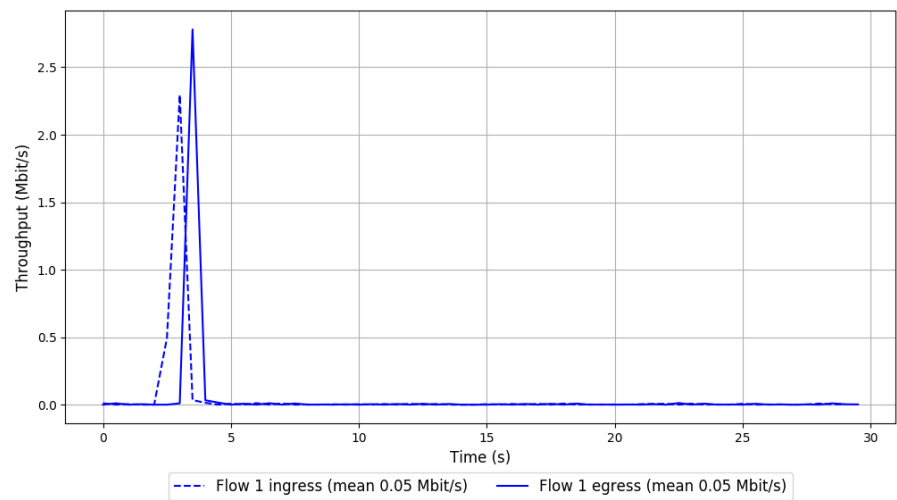
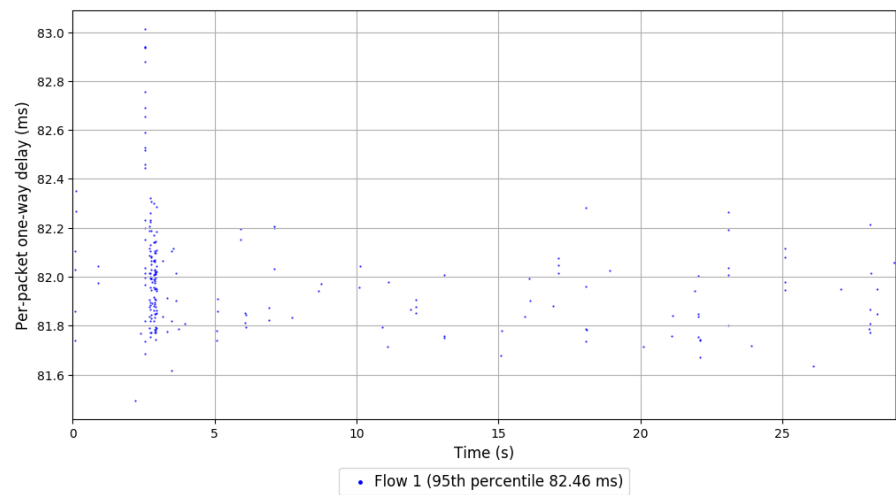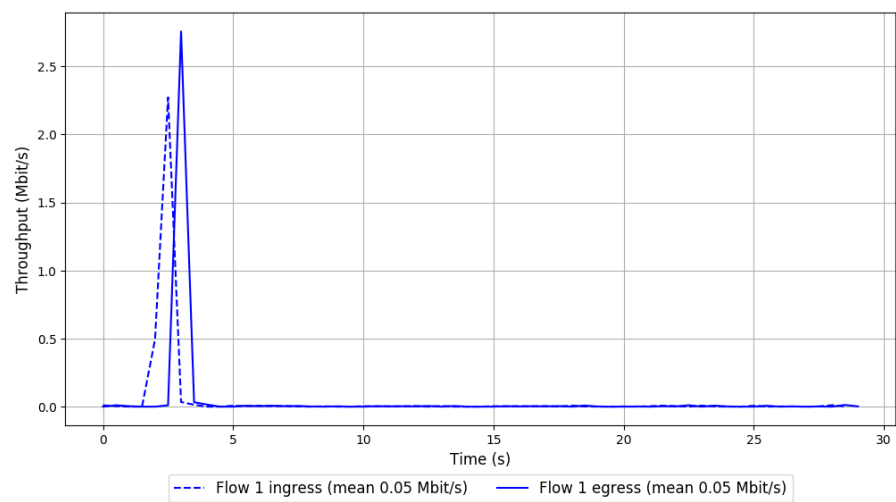Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2020-02-17 22:50:38
End at: 2020-02-17 22:51:08
Local clock offset: 1.627 ms
Remote clock offset: -8.518 ms


# Below is generated by plot.py at 2020-02-18 00:01:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 82.459 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 82.459 ms
Loss rate: 0.00%
```

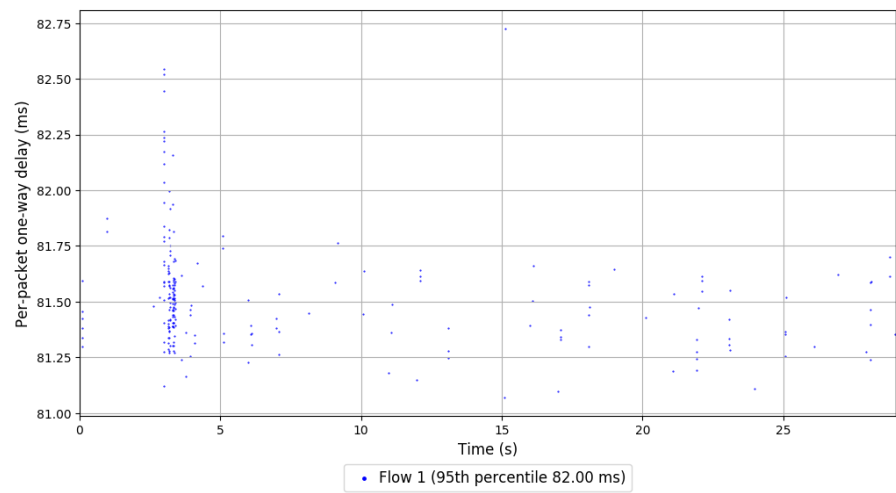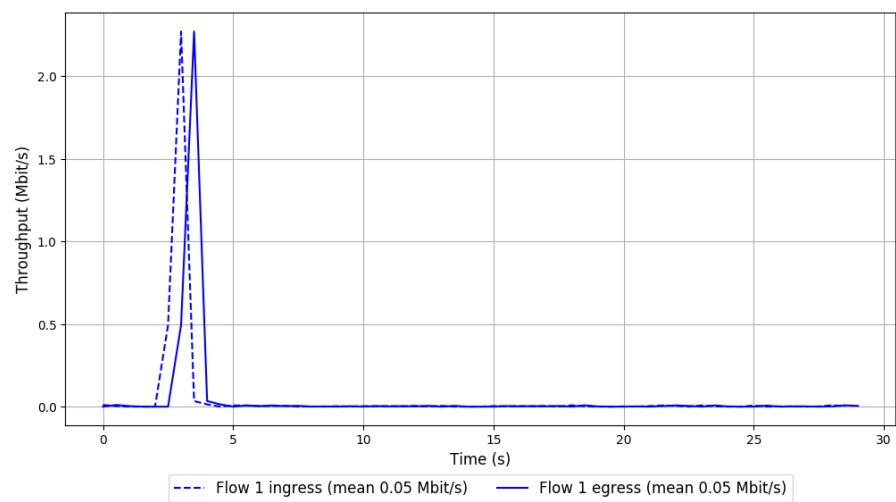## Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2020-02-17 23:18:40
End at: 2020-02-17 23:19:10
Local clock offset: -0.475 ms
Remote clock offset: -10.032 ms

# Below is generated by plot.py at 2020-02-18 00:01:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 81.996 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 81.996 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2020-02-17 23:46:38
End at: 2020-02-17 23:47:08
Local clock offset: -0.815 ms
Remote clock offset: -10.595 ms


# Below is generated by plot.py at 2020-02-18 00:01:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 82.133 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 82.133 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link