Pantheon Report

Generated at 2019-01-21 07:15:23 (UTC).

Data path: AWS California 2 on `ens5` (*local*) →Mexico on `em1` (*remote*).

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.
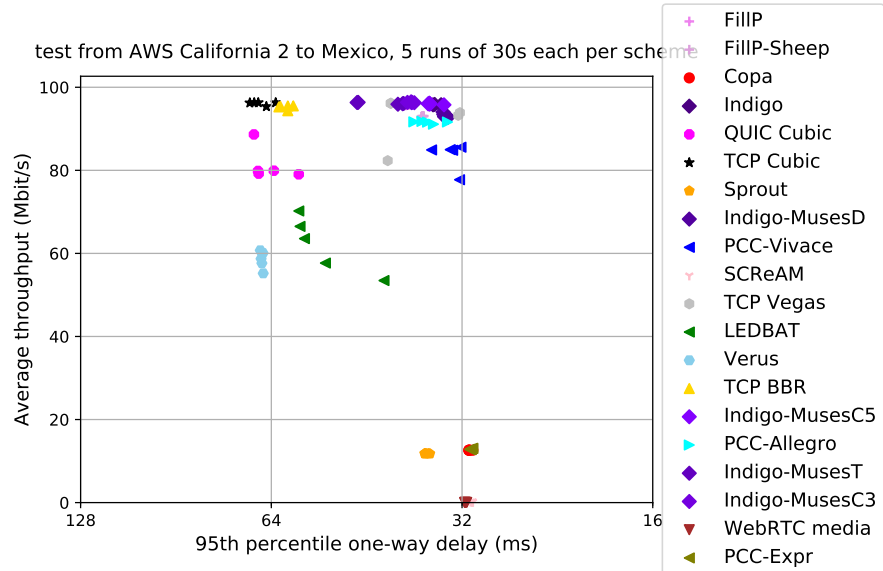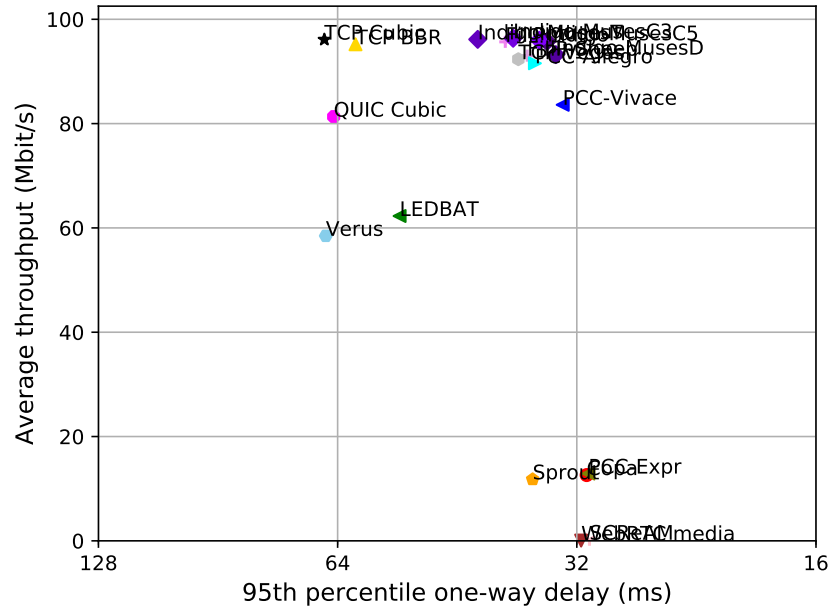
```
System info:
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 89d24e57783e7fbfec537a619071de937b639e38
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 1ddcff131048c6962f123bcd22b4d166a422adde
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 California 2 to Mexico, 5 runs of 30s each per scheme
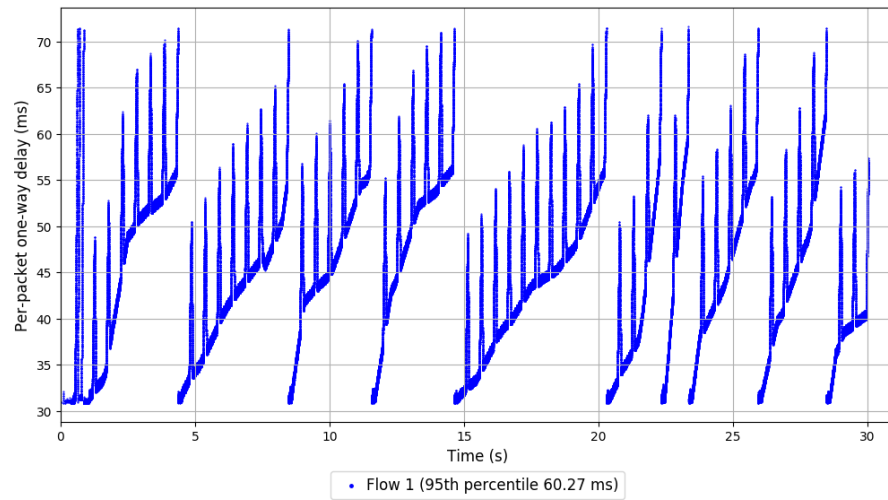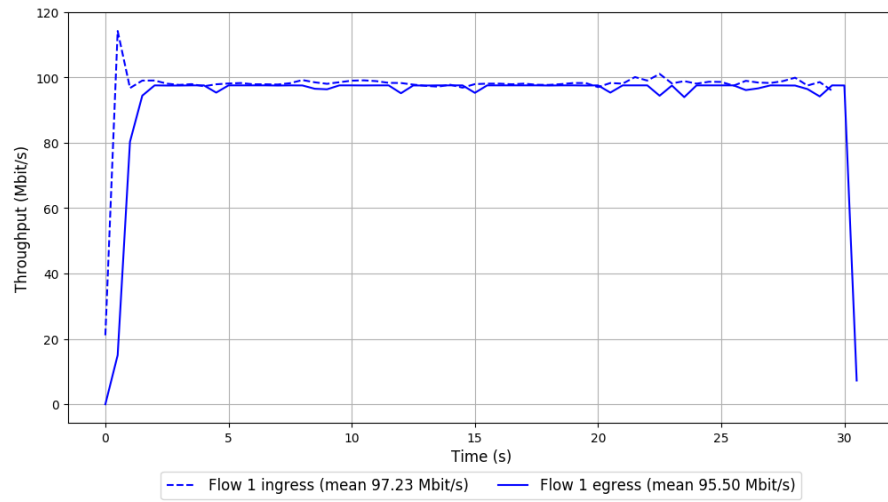### (mean of all runs by scheme)

test from AWS California 2 to Mexico, 5 runs of 30s each per scheme

scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	95.21	60.77	1.97
Copa	5	12.61	31.10	70.61
TCP Cubic	5	96.10	66.51	0.40
FillP	5	95.68	39.37	0.64
FillP-Sheep	5	93.03	36.94	0.60
Indigo	5	95.75	34.89	0.02
Indigo-MusesC3	5	96.36	38.48	0.04
Indigo-MusesC5	5	95.98	35.67	0.01
Indigo-MusesD	5	93.22	34.01	0.01
Indigo-MusesT	5	96.15	42.65	0.89
LEDBAT	5	62.28	53.48	0.02
PCC-Allegro	5	91.56	36.13	0.71
PCC-Expr	5	12.90	30.94	47.17
QUIC Cubic	5	81.33	64.74	1.53
SCReAM	5	0.21	30.85	0.00
Sprout	5	11.80	36.37	0.02
TaoVA-100x	0	N/A	N/A	N/A
TCP Vegas	5	92.34	37.91	0.42
Verus	5	58.48	66.23	24.30
PCC-Vivace	5	83.60	33.34	0.00
WebRTC media	5	0.05	31.60	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2019-01-21 05:14:01
End at: 2019-01-21 05:14:31
Local clock offset: 0.938 ms
Remote clock offset: -3.196 ms

# Below is generated by plot.py at 2019-01-21 07:05:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.50 Mbit/s
95th percentile per-packet one-way delay: 60.275 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 95.50 Mbit/s
95th percentile per-packet one-way delay: 60.275 ms
Loss rate: 1.71%
```
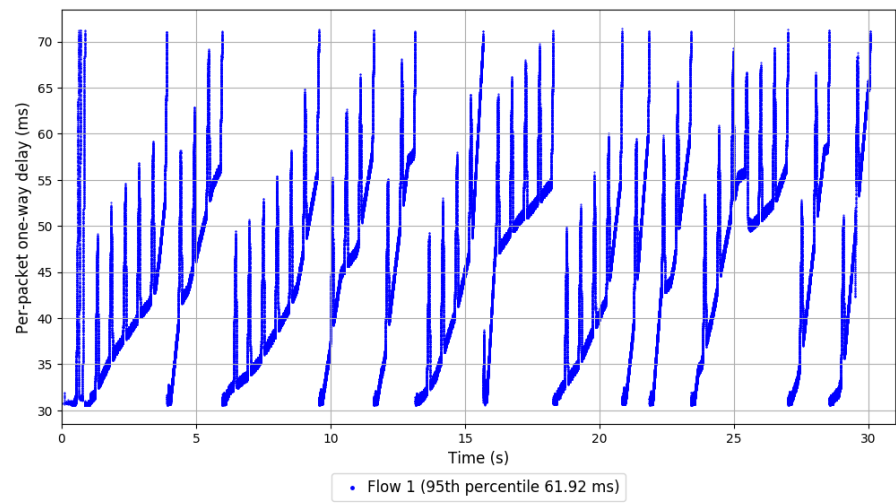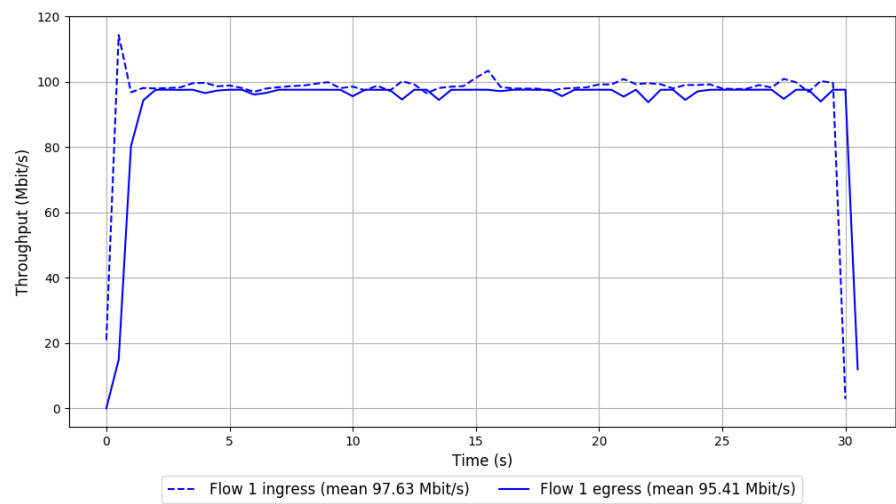
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2019-01-21 05:40:28
End at: 2019-01-21 05:40:58
Local clock offset: 1.08 ms
Remote clock offset: -2.818 ms


# Below is generated by plot.py at 2019-01-21 07:05:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.41 Mbit/s
95th percentile per-packet one-way delay: 61.922 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 95.41 Mbit/s
95th percentile per-packet one-way delay: 61.922 ms
Loss rate: 2.22%
```
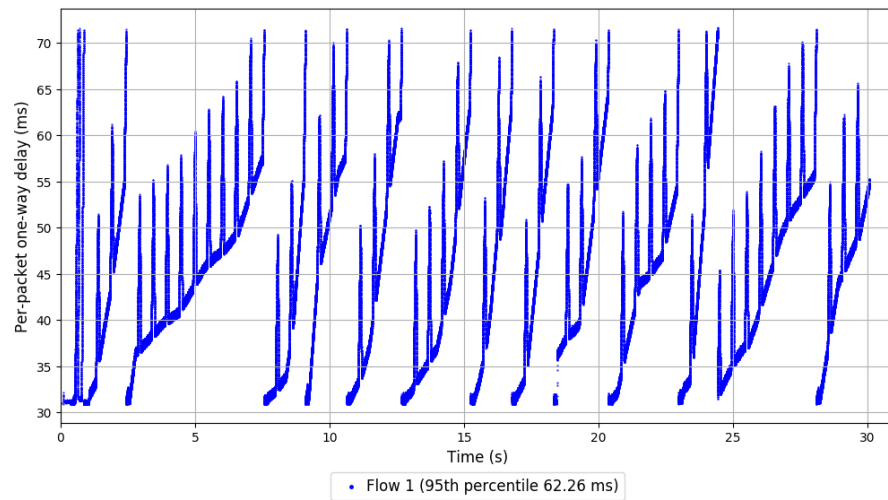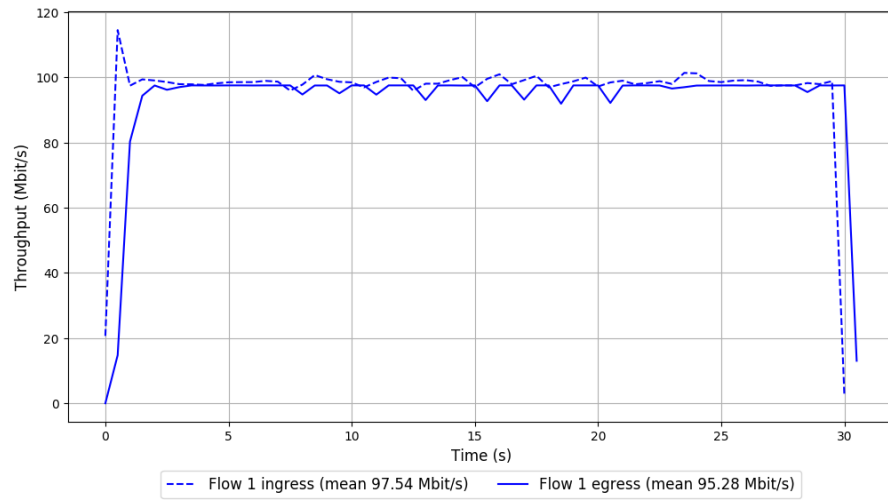
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2019-01-21 06:07:08
End at: 2019-01-21 06:07:38
Local clock offset: 4.0 ms
Remote clock offset: -2.116 ms


# Below is generated by plot.py at 2019-01-21 07:05:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.28 Mbit/s
95th percentile per-packet one-way delay: 62.262 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 95.28 Mbit/s
95th percentile per-packet one-way delay: 62.262 ms
Loss rate: 2.24%
```
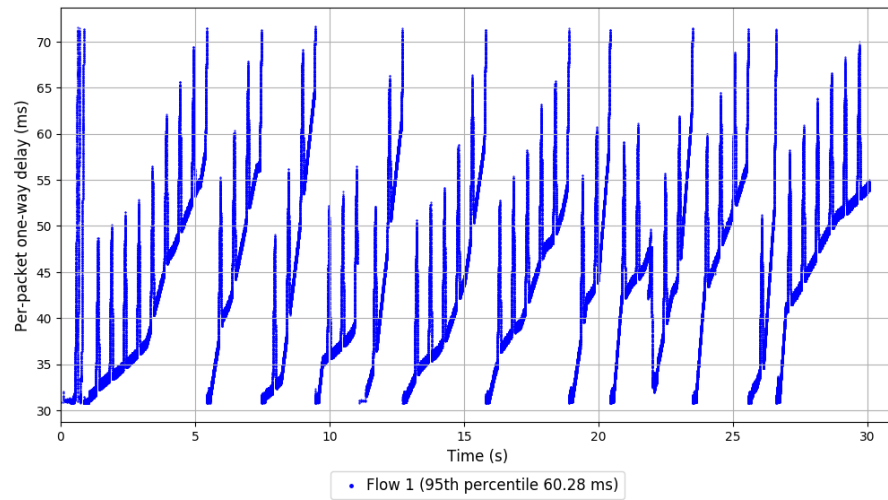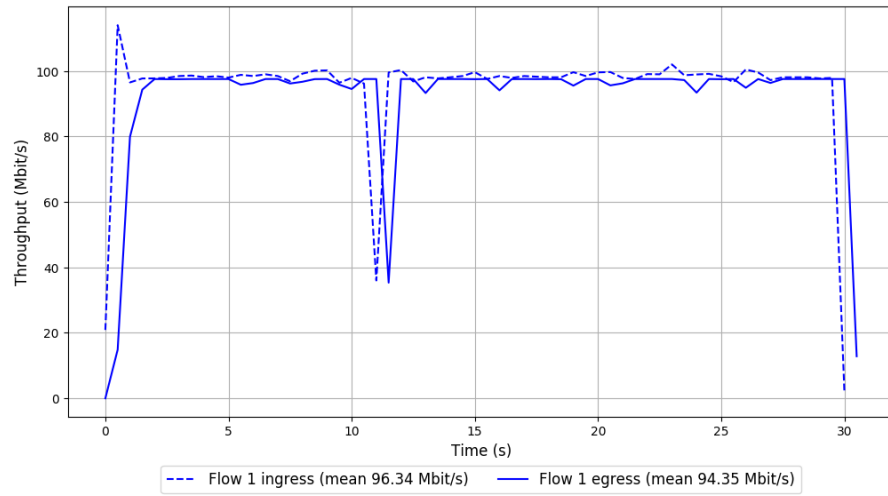
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 97.54 Mbit/s)   Flow 1 egress (mean 95.28 Mbit/s)

Flow 1 (95th percentile 62.26 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2019-01-21 06:33:57
End at: 2019-01-21 06:34:27
Local clock offset: 3.803 ms
Remote clock offset: -1.96 ms


# Below is generated by plot.py at 2019-01-21 07:05:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.35 Mbit/s
95th percentile per-packet one-way delay: 60.284 ms
Loss rate: 1.99%
-- Flow 1:
Average throughput: 94.35 Mbit/s
95th percentile per-packet one-way delay: 60.284 ms
Loss rate: 1.99%
```
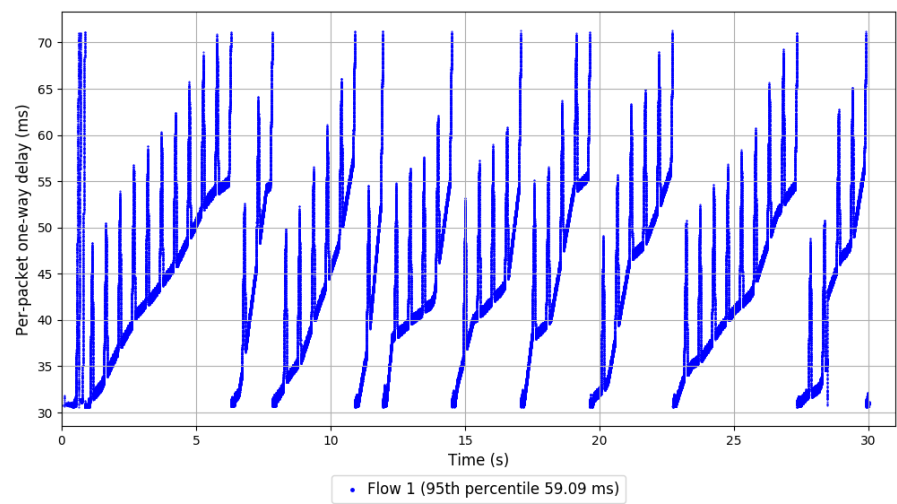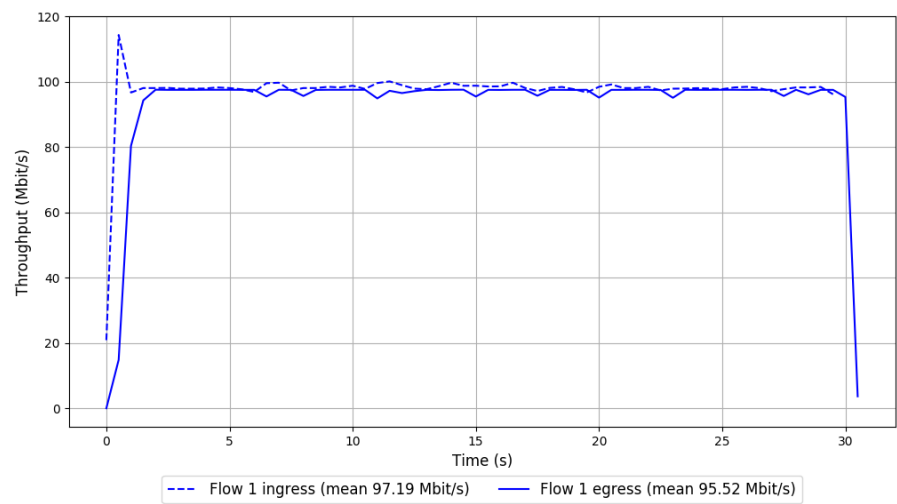
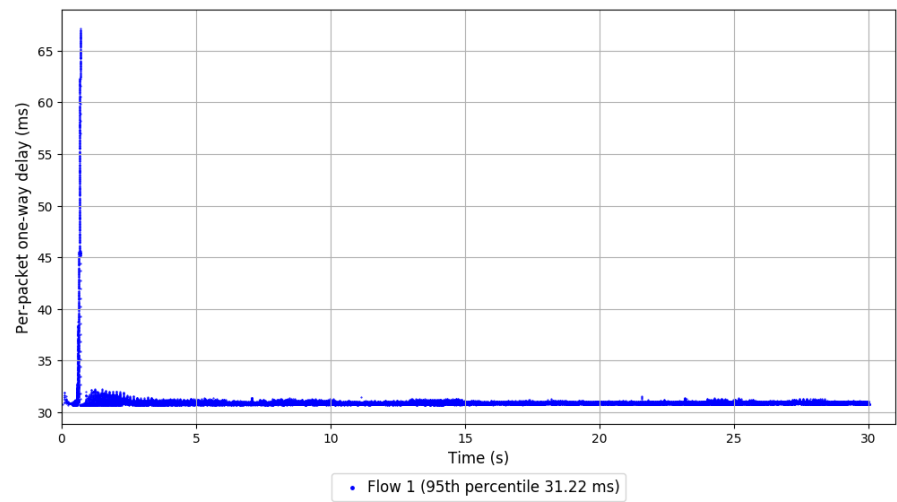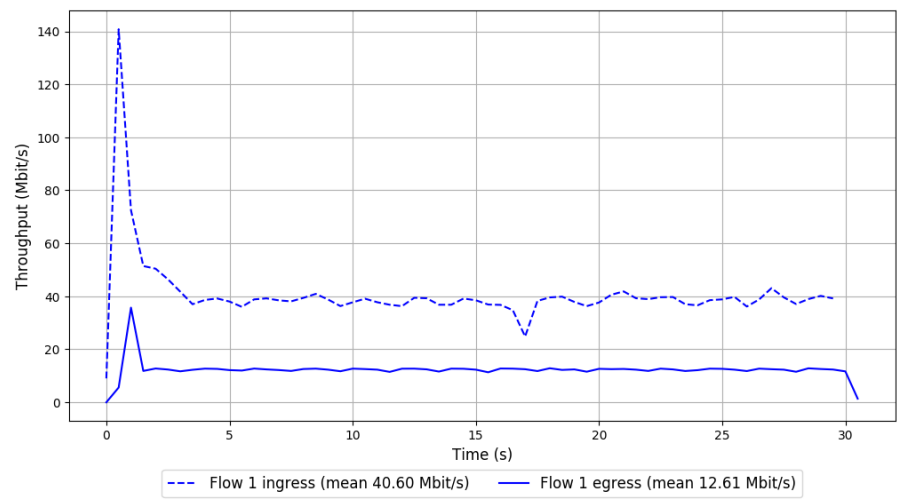# Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 96.34 Mbit/s) --- Flow 1 egress (mean 94.35 Mbit/s)

• Flow 1 (95th percentile 60.28 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2019-01-21 06:59:16
End at: 2019-01-21 06:59:46
Local clock offset: 0.745 ms
Remote clock offset: -2.161 ms


# Below is generated by plot.py at 2019-01-21 07:05:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.52 Mbit/s
95th percentile per-packet one-way delay: 59.088 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 95.52 Mbit/s
95th percentile per-packet one-way delay: 59.088 ms
Loss rate: 1.71%
```

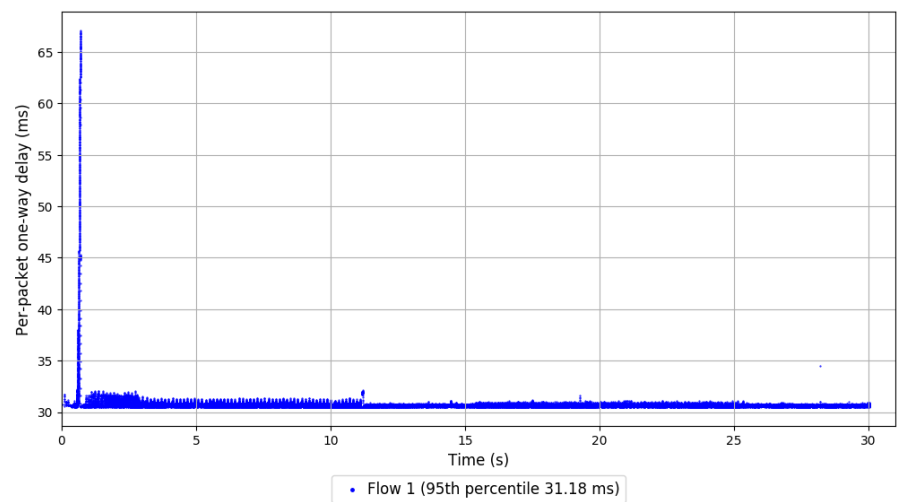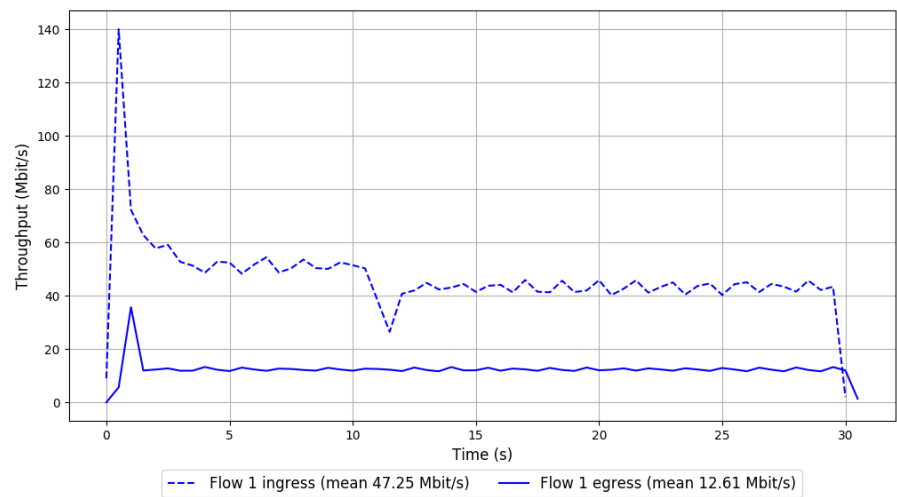Run 5: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2019-01-21 05:00:30
End at: 2019-01-21 05:01:00
Local clock offset: -1.04 ms
Remote clock offset: -3.678 ms


# Below is generated by plot.py at 2019-01-21 07:05:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 31.223 ms
Loss rate: 68.93%
-- Flow 1:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 31.223 ms
Loss rate: 68.93%
```
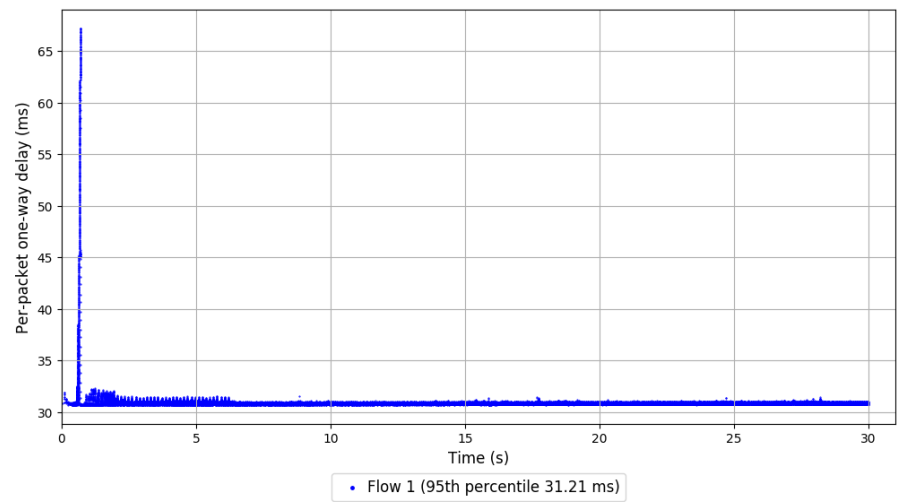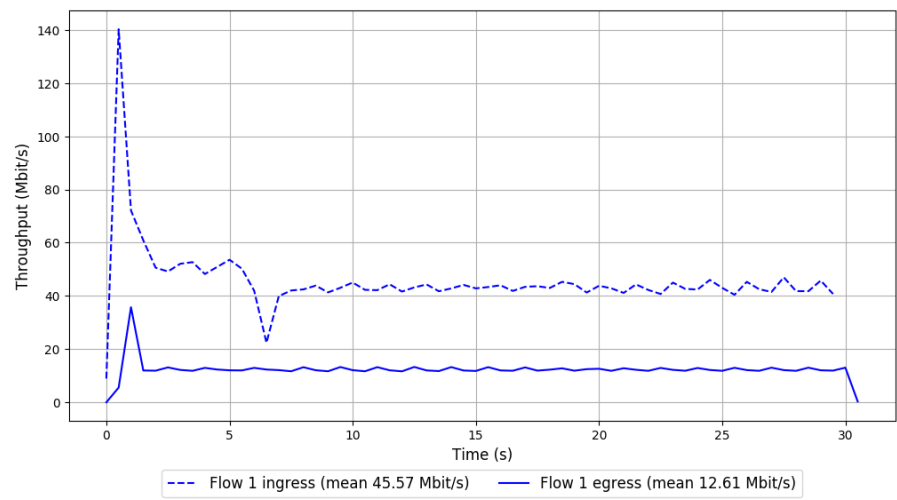
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 40.60 Mbit/s) --- Flow 1 egress (mean 12.61 Mbit/s)

• Flow 1 (95th percentile 31.22 ms)

```
Run 2: Statistics of Copa

Start at: 2019-01-21 05:26:44
End at: 2019-01-21 05:27:14
Local clock offset: 0.778 ms
Remote clock offset: -3.141 ms


# Below is generated by plot.py at 2019-01-21 07:05:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 31.184 ms
Loss rate: 73.31%
-- Flow 1:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 31.184 ms
Loss rate: 73.31%
```

Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 47.25 Mbit/s) --- Flow 1 egress (mean 12.61 Mbit/s)

• Flow 1 (95th percentile 31.18 ms)

```
Run 3: Statistics of Copa

Start at: 2019-01-21 05:53:15
End at: 2019-01-21 05:53:45
Local clock offset: 2.597 ms
Remote clock offset: -2.507 ms


# Below is generated by plot.py at 2019-01-21 07:05:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 31.206 ms
Loss rate: 72.32%
-- Flow 1:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 31.206 ms
Loss rate: 72.32%
```
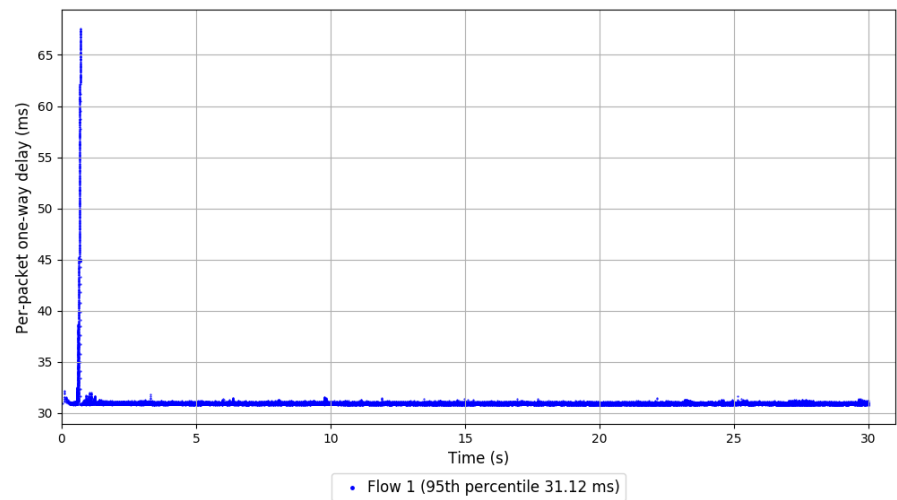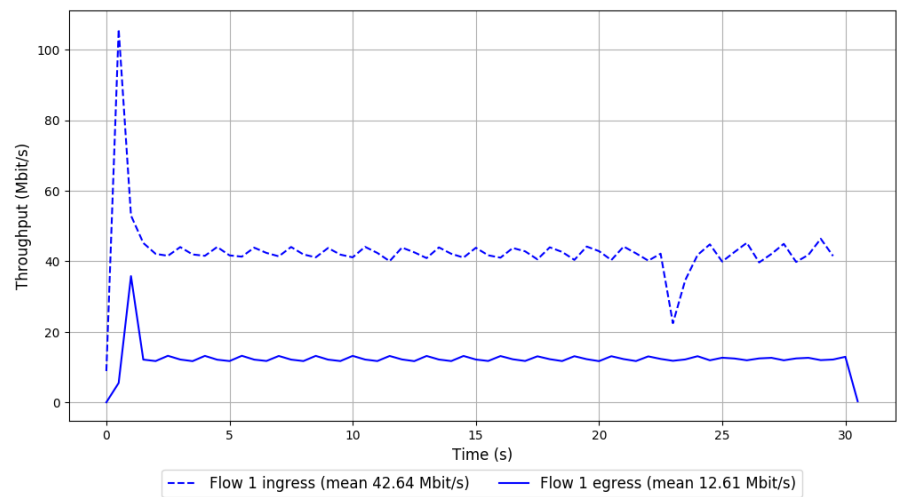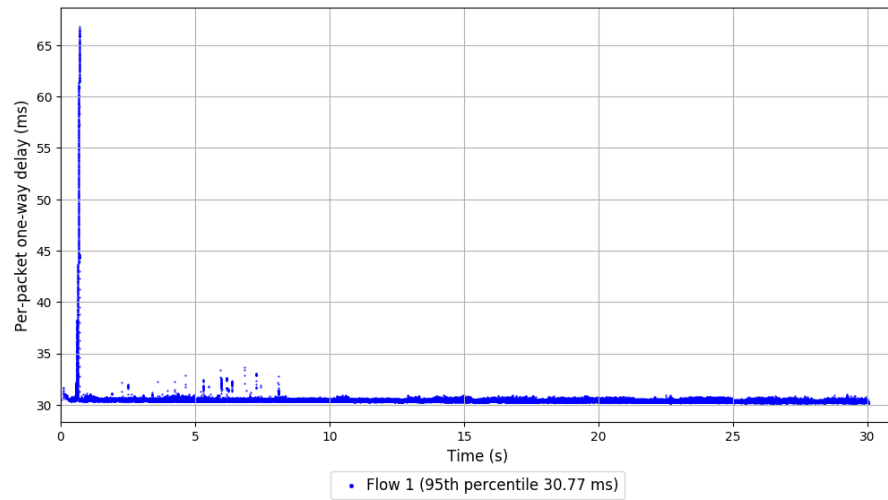
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 45.57 Mbit/s)   Flow 1 egress (mean 12.61 Mbit/s)

Flow 1 (95th percentile 31.21 ms)

```
Run 4: Statistics of Copa

Start at: 2019-01-21 06:20:07
End at: 2019-01-21 06:20:37
Local clock offset: 4.112 ms
Remote clock offset: -2.08 ms


# Below is generated by plot.py at 2019-01-21 07:05:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 31.120 ms
Loss rate: 70.43%
-- Flow 1:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 31.120 ms
Loss rate: 70.43%
```
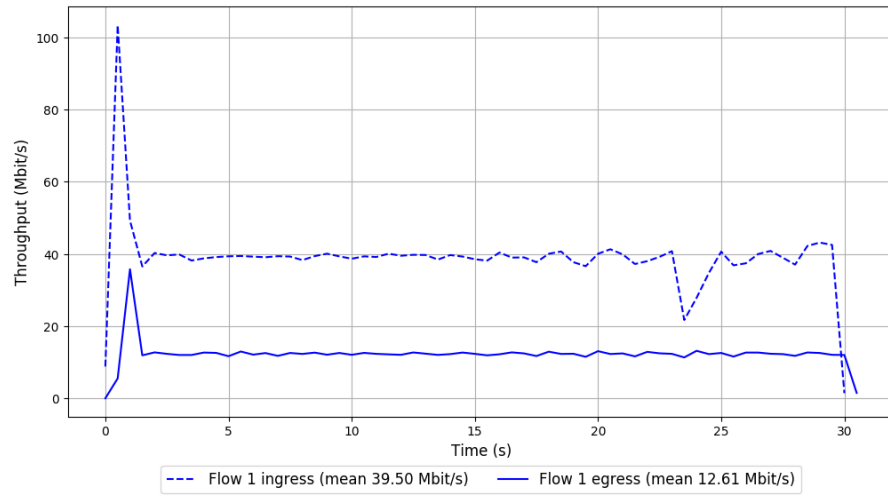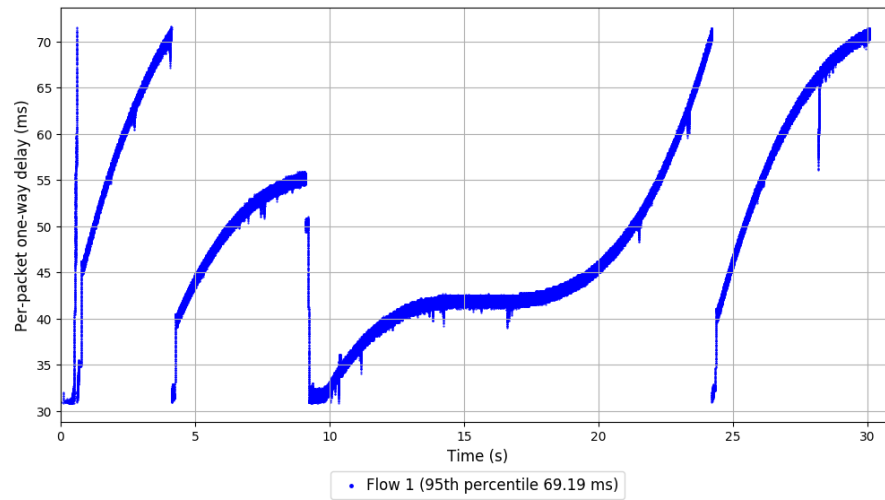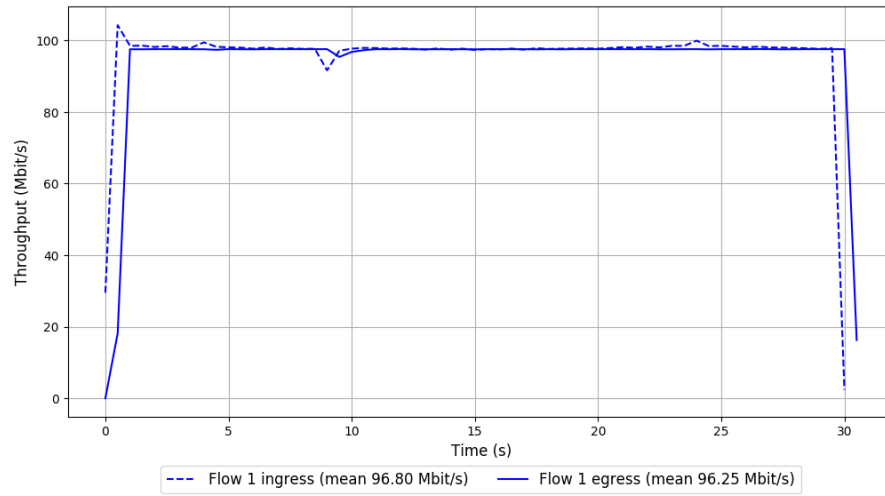
Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 42.64 Mbit/s)   Flow 1 egress (mean 12.61 Mbit/s)

Flow 1 (95th percentile 31.12 ms)

```
Run 5: Statistics of Copa

Start at: 2019-01-21 06:46:19
End at: 2019-01-21 06:46:49
Local clock offset: 3.941 ms
Remote clock offset: -2.26 ms


# Below is generated by plot.py at 2019-01-21 07:05:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 30.771 ms
Loss rate: 68.08%
-- Flow 1:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 30.771 ms
Loss rate: 68.08%
```

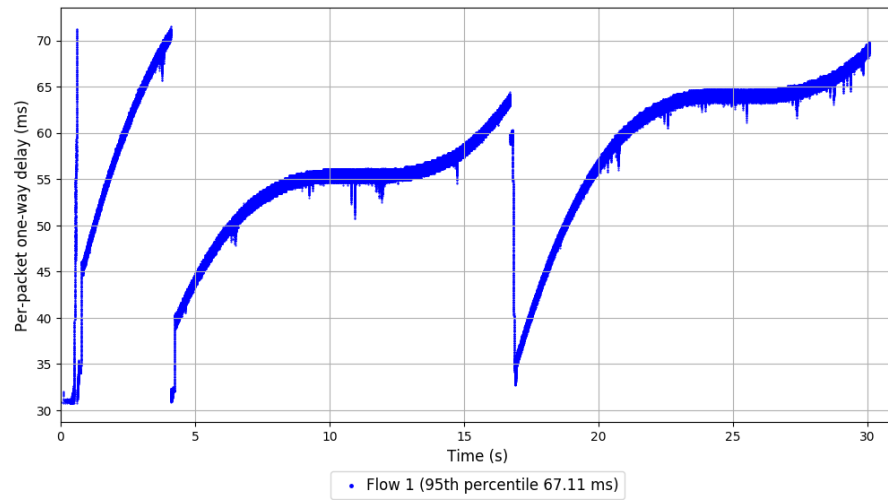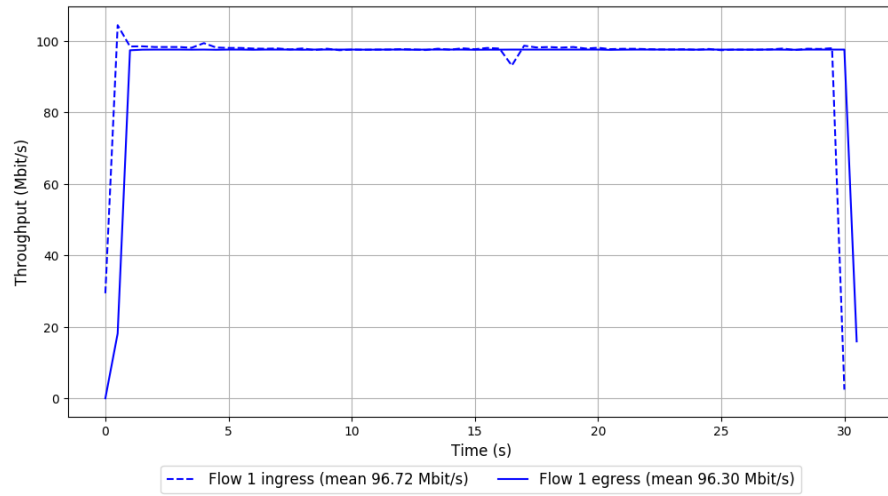Run 5: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2019-01-21 05:02:45
End at: 2019-01-21 05:03:15
Local clock offset: -0.52 ms
Remote clock offset: -3.498 ms


# Below is generated by plot.py at 2019-01-21 07:06:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.25 Mbit/s
95th percentile per-packet one-way delay: 69.195 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 96.25 Mbit/s
95th percentile per-packet one-way delay: 69.195 ms
Loss rate: 0.43%
```
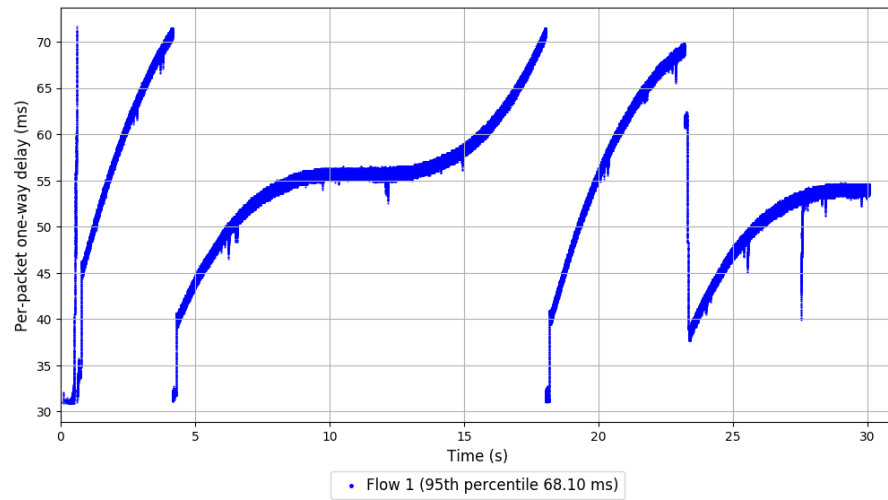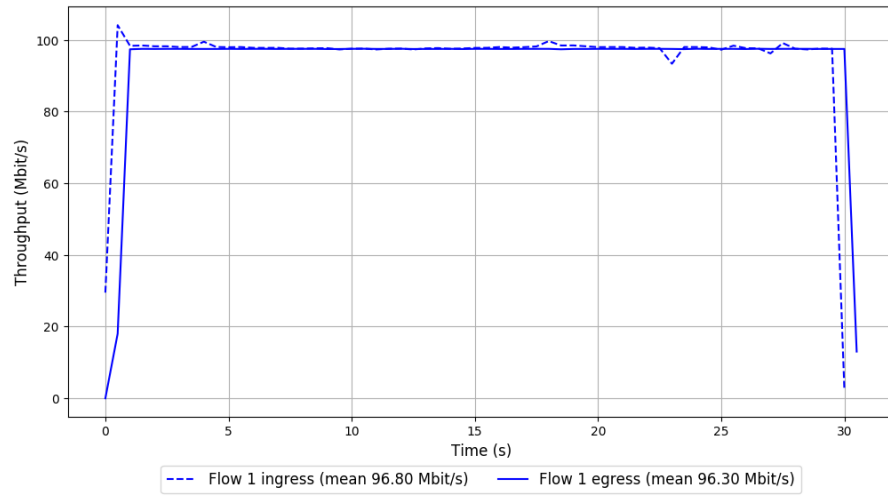
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2019-01-21 05:28:59
End at: 2019-01-21 05:29:29
Local clock offset: 0.791 ms
Remote clock offset: -2.877 ms


# Below is generated by plot.py at 2019-01-21 07:06:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 67.107 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 67.107 ms
Loss rate: 0.30%
```
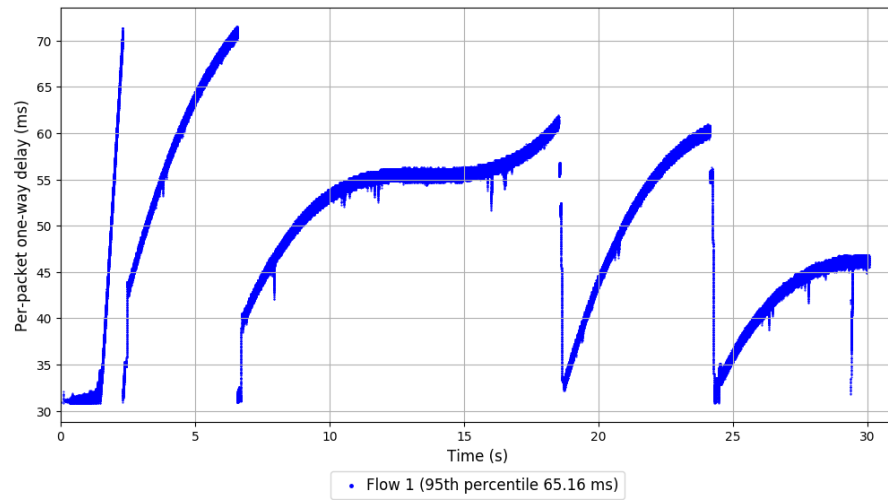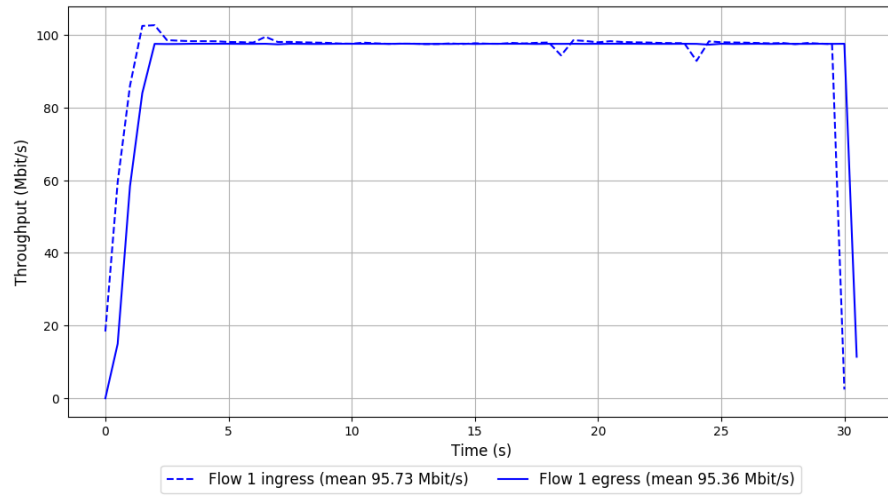
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 96.72 Mbit/s)   Flow 1 egress (mean 96.30 Mbit/s)

Flow 1 (95th percentile 67.11 ms)

28

```
Run 3: Statistics of TCP Cubic

Start at: 2019-01-21 05:55:32
End at: 2019-01-21 05:56:02
Local clock offset: 2.894 ms
Remote clock offset: -2.253 ms


# Below is generated by plot.py at 2019-01-21 07:06:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 68.098 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 68.098 ms
Loss rate: 0.44%
```
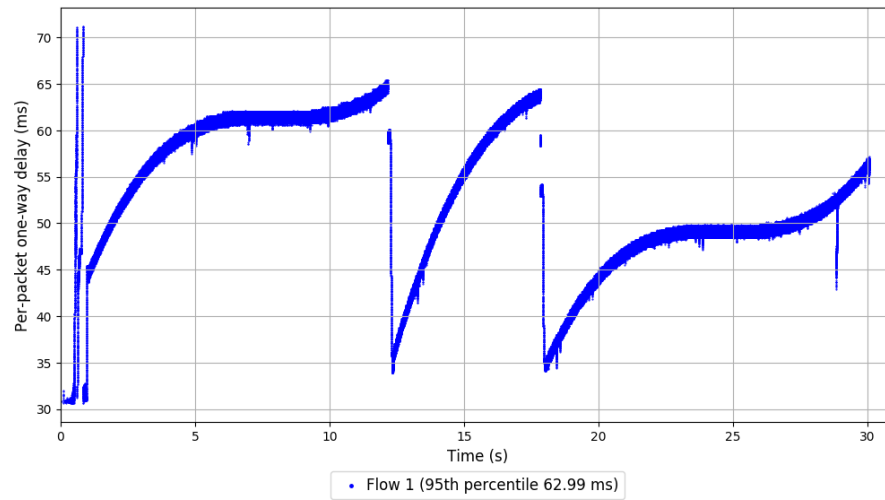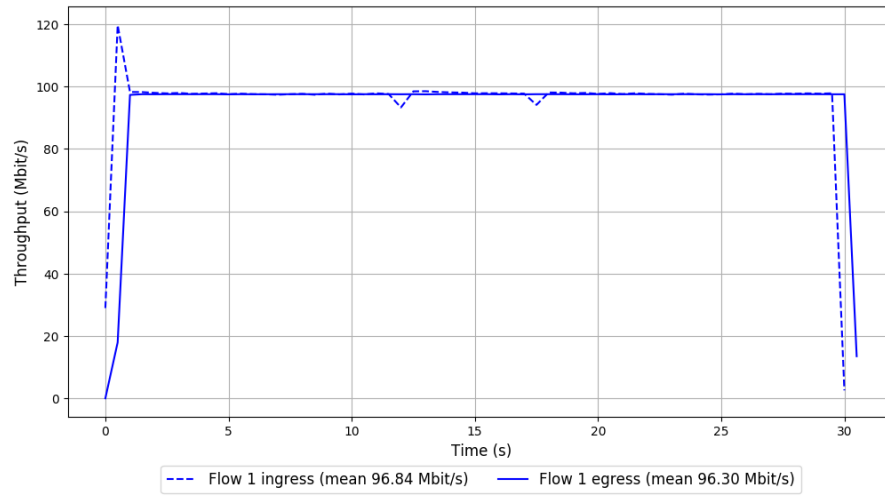
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 96.80 Mbit/s)   Flow 1 egress (mean 96.30 Mbit/s)

• Flow 1 (95th percentile 68.10 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2019-01-21 06:22:27
End at: 2019-01-21 06:22:57
Local clock offset: 3.968 ms
Remote clock offset: -2.041 ms


# Below is generated by plot.py at 2019-01-21 07:06:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.36 Mbit/s
95th percentile per-packet one-way delay: 65.159 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 95.36 Mbit/s
95th percentile per-packet one-way delay: 65.159 ms
Loss rate: 0.33%
```
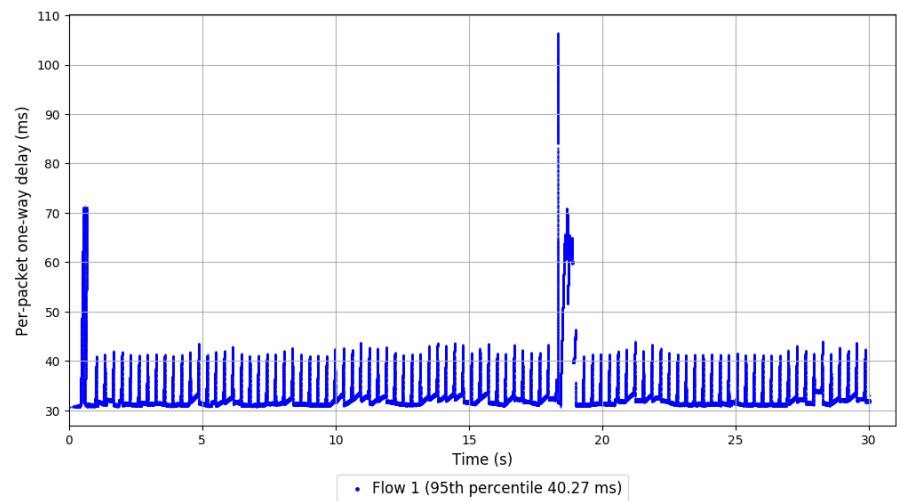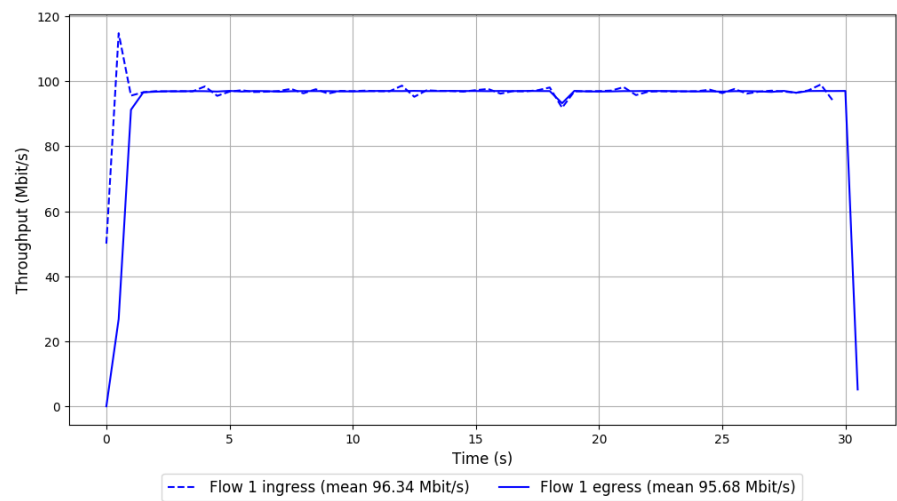
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 95.73 Mbit/s) --- Flow 1 egress (mean 95.36 Mbit/s)

• Flow 1 (95th percentile 65.16 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2019-01-21 06:48:35
End at: 2019-01-21 06:49:05
Local clock offset: 3.071 ms
Remote clock offset: -2.037 ms


# Below is generated by plot.py at 2019-01-21 07:07:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 62.995 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 62.995 ms
Loss rate: 0.48%
```

Run 5: Report of TCP Cubic — Data Link
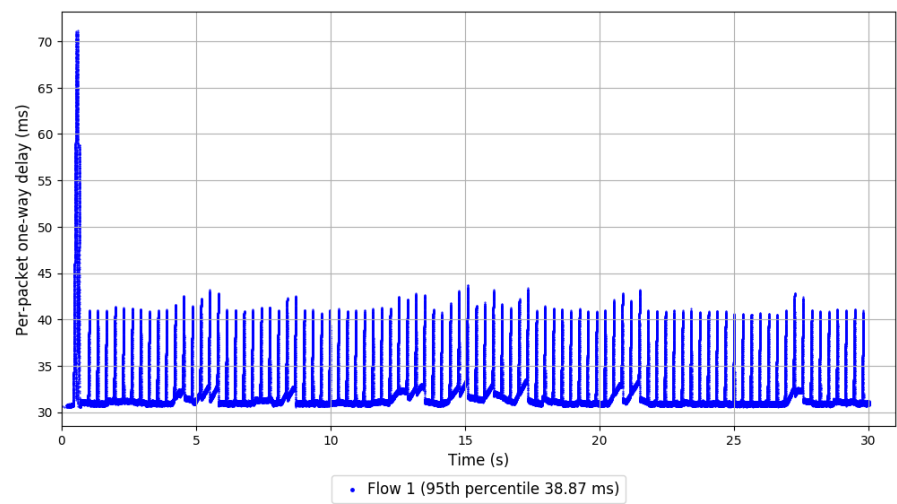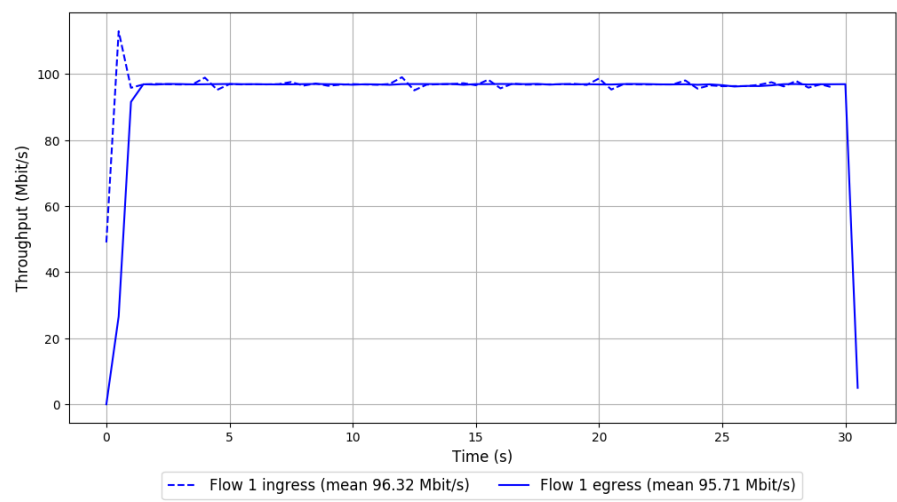

Flow 1 ingress (mean 96.84 Mbit/s) ---- Flow 1 egress (mean 96.30 Mbit/s)

· Flow 1 (95th percentile 62.99 ms)

```
Run 1: Statistics of FillP

Start at: 2019-01-21 04:59:20
End at: 2019-01-21 04:59:50
Local clock offset: -1.283 ms
Remote clock offset: -3.555 ms


# Below is generated by plot.py at 2019-01-21 07:07:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.68 Mbit/s
95th percentile per-packet one-way delay: 40.271 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 95.68 Mbit/s
95th percentile per-packet one-way delay: 40.271 ms
Loss rate: 0.68%
```

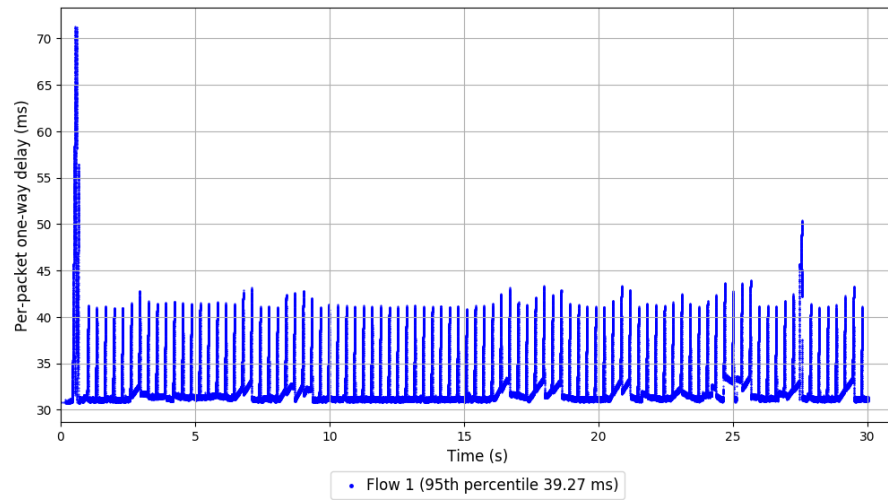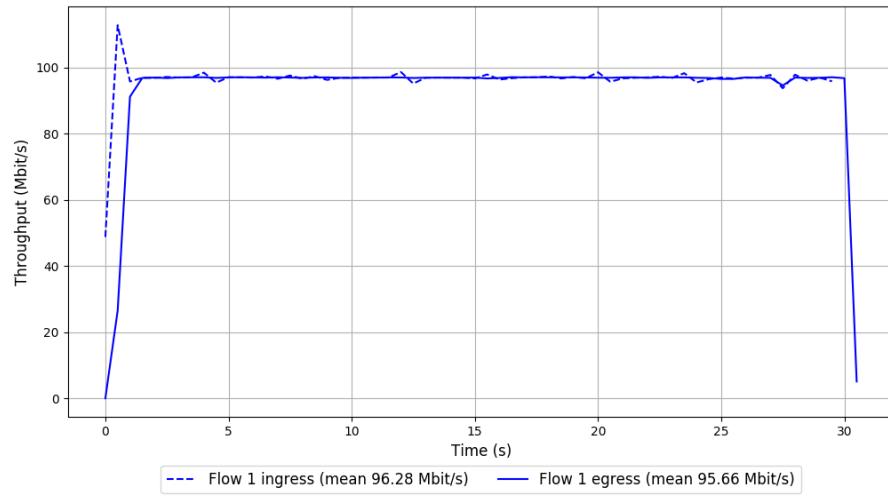Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2019-01-21 05:25:30
End at: 2019-01-21 05:26:00
Local clock offset: 0.762 ms
Remote clock offset: -2.953 ms


# Below is generated by plot.py at 2019-01-21 07:07:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 38.867 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 38.867 ms
Loss rate: 0.64%
```
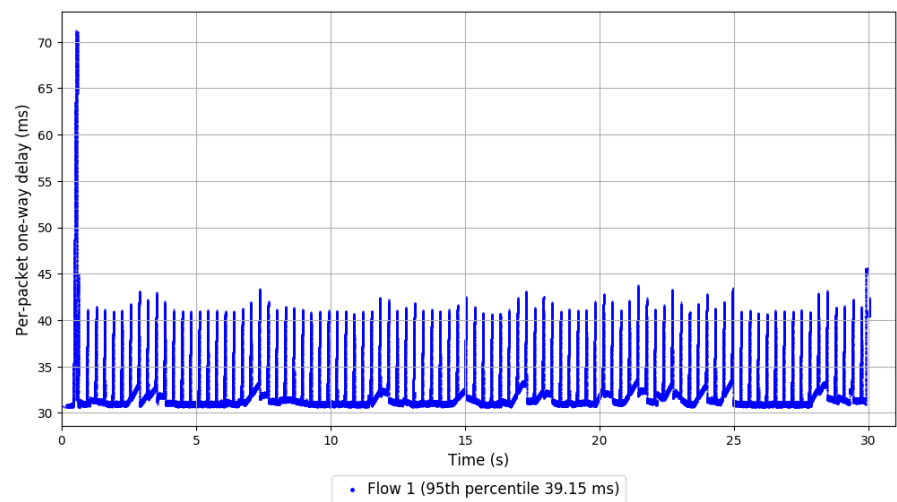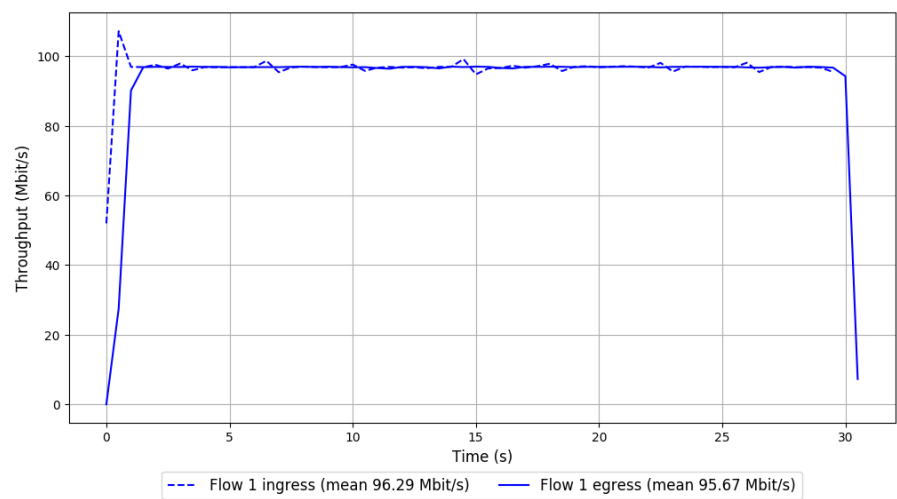
Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 96.32 Mbit/s) --- Flow 1 egress (mean 95.71 Mbit/s)

• Flow 1 (95th percentile 38.87 ms)

```
Run 3: Statistics of FillP

Start at: 2019-01-21 05:51:56
End at: 2019-01-21 05:52:26
Local clock offset: 2.397 ms
Remote clock offset: -2.316 ms


# Below is generated by plot.py at 2019-01-21 07:07:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.66 Mbit/s
95th percentile per-packet one-way delay: 39.265 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 95.66 Mbit/s
95th percentile per-packet one-way delay: 39.265 ms
Loss rate: 0.64%
```
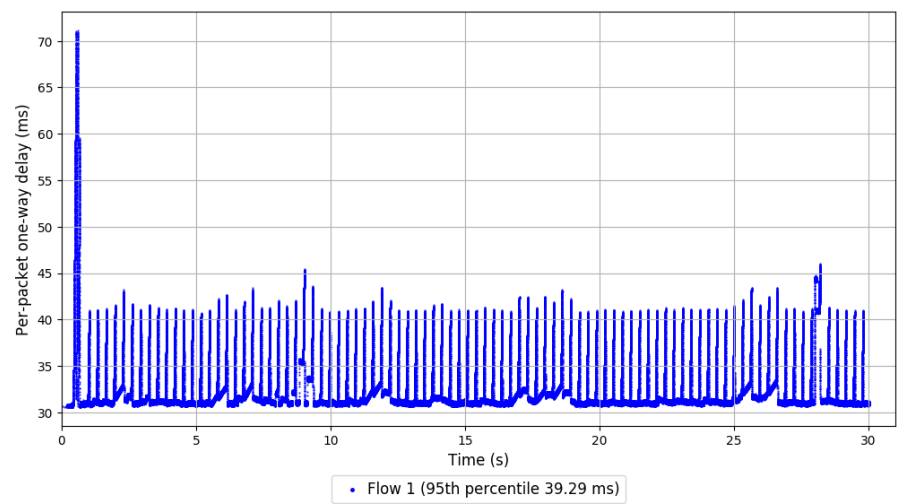
Run 3: Report of FillP — Data Link

```
Run 4: Statistics of FillP

Start at: 2019-01-21 06:18:47
End at: 2019-01-21 06:19:17
Local clock offset: 4.277 ms
Remote clock offset: -2.062 ms


# Below is generated by plot.py at 2019-01-21 07:07:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.67 Mbit/s
95th percentile per-packet one-way delay: 39.152 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 95.67 Mbit/s
95th percentile per-packet one-way delay: 39.152 ms
Loss rate: 0.62%
```
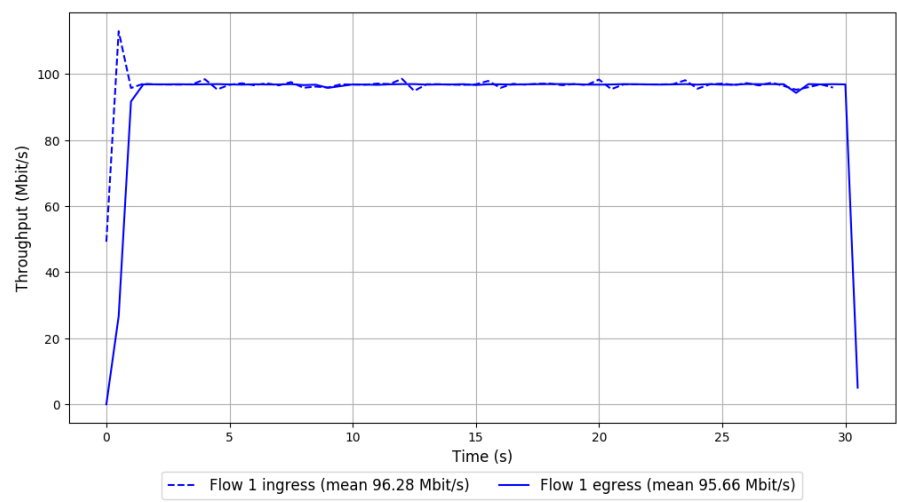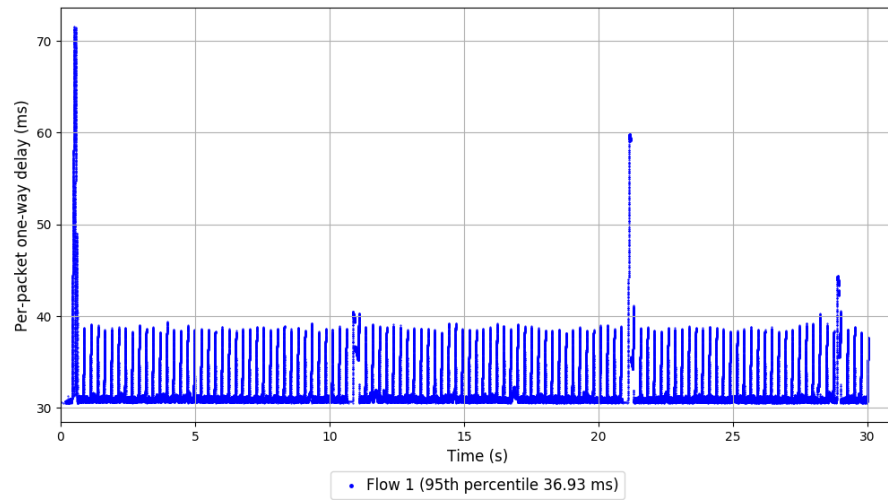
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 96.29 Mbit/s)   Flow 1 egress (mean 95.67 Mbit/s)

Flow 1 (95th percentile 39.15 ms)

```
Run 5: Statistics of FillP

Start at: 2019-01-21 06:45:05
End at: 2019-01-21 06:45:35
Local clock offset: 4.071 ms
Remote clock offset: -2.07 ms


# Below is generated by plot.py at 2019-01-21 07:07:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.66 Mbit/s
95th percentile per-packet one-way delay: 39.292 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 95.66 Mbit/s
95th percentile per-packet one-way delay: 39.292 ms
Loss rate: 0.64%
```
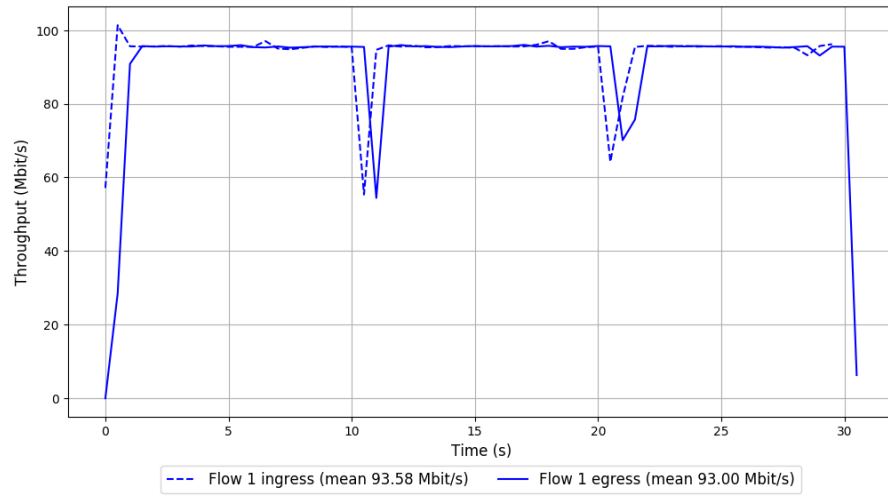
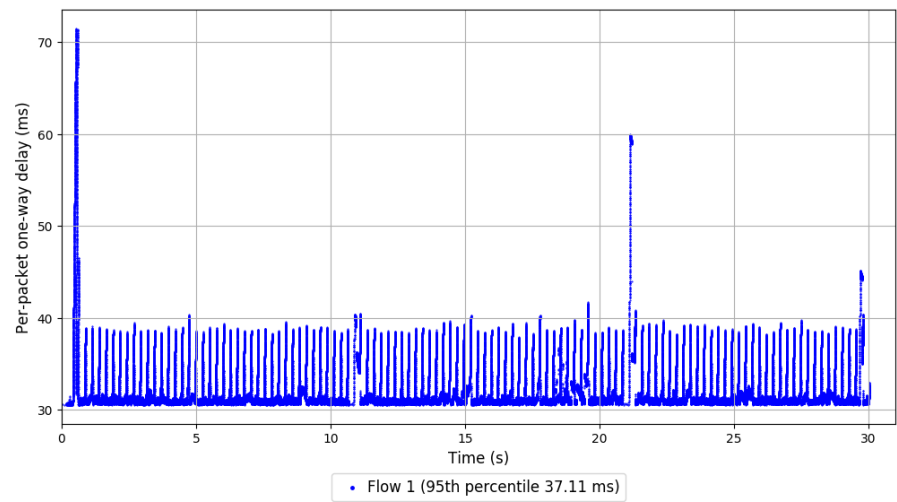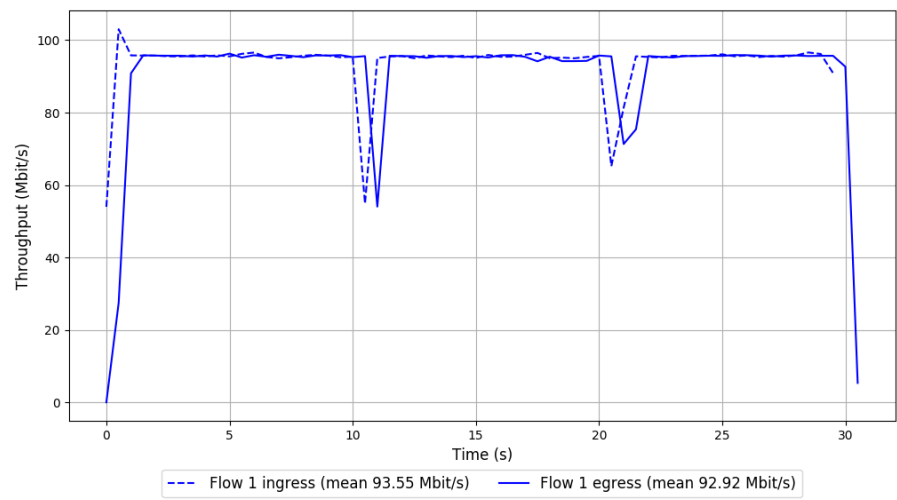# Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 96.28 Mbit/s) --- Flow 1 egress (mean 95.66 Mbit/s)

Flow 1 (95th percentile 39.29 ms)

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-01-21 05:16:44
End at: 2019-01-21 05:17:14
Local clock offset: 1.092 ms
Remote clock offset: -3.164 ms


# Below is generated by plot.py at 2019-01-21 07:07:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.00 Mbit/s
95th percentile per-packet one-way delay: 36.929 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 93.00 Mbit/s
95th percentile per-packet one-way delay: 36.929 ms
Loss rate: 0.59%
```
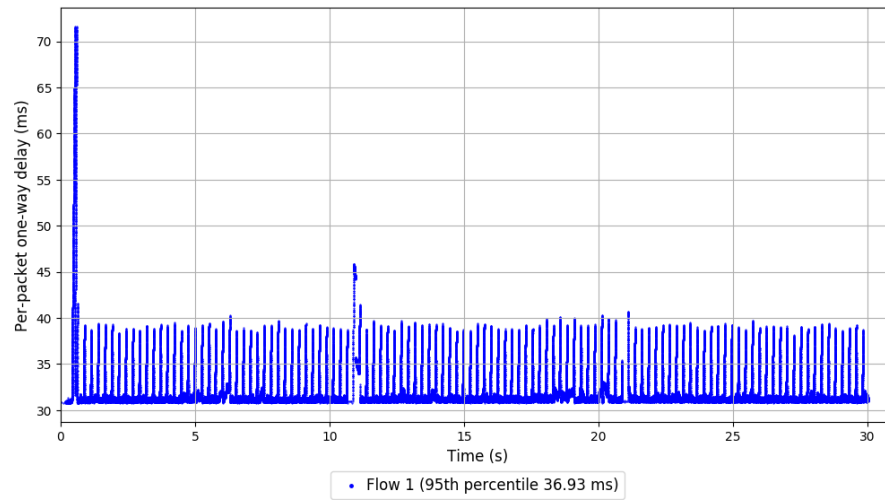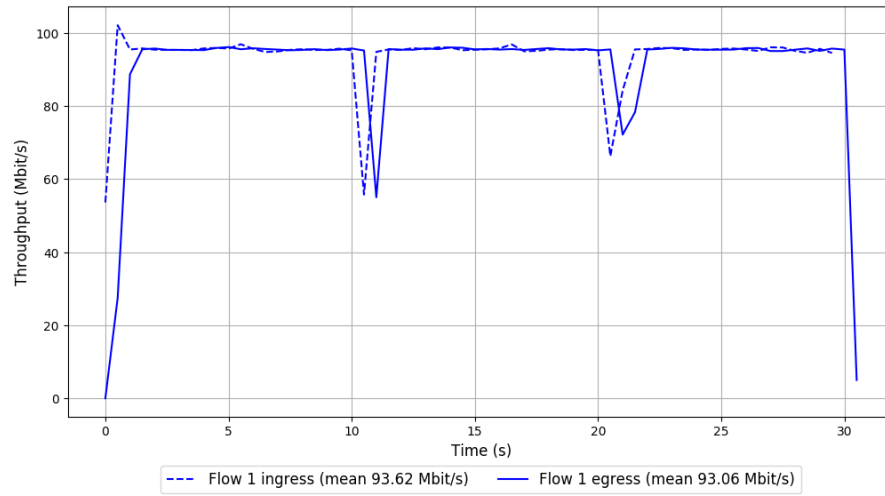
Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-01-21 05:43:11
End at: 2019-01-21 05:43:41
Local clock offset: 1.175 ms
Remote clock offset: -2.589 ms


# Below is generated by plot.py at 2019-01-21 07:08:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.92 Mbit/s
95th percentile per-packet one-way delay: 37.112 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 92.92 Mbit/s
95th percentile per-packet one-way delay: 37.112 ms
Loss rate: 0.66%
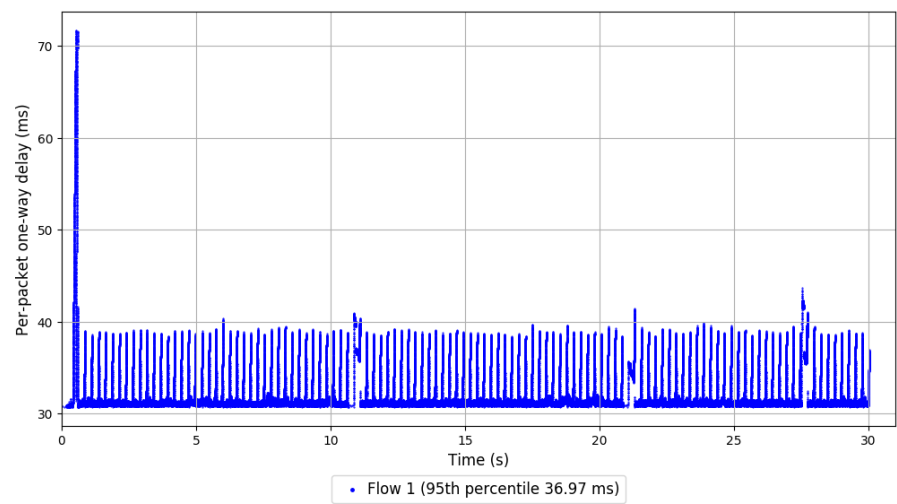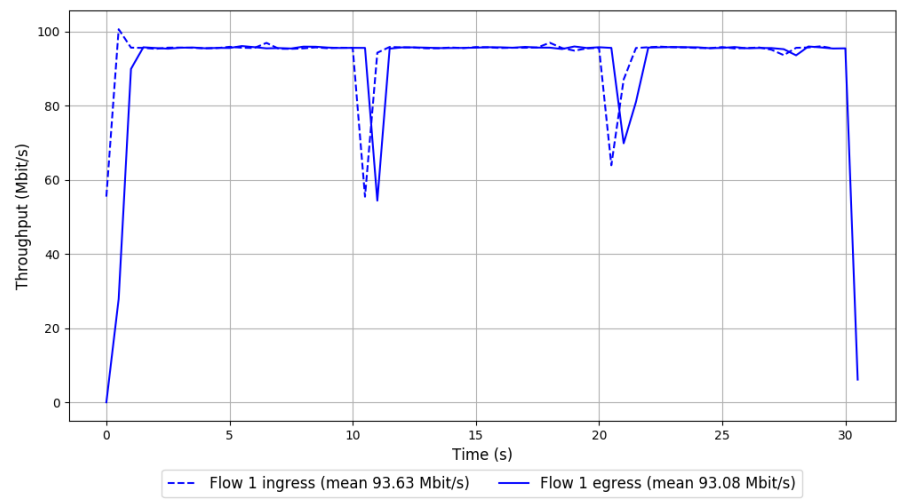```

Run 2: Report of FillP-Sheep — Data Link

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-01-21 06:09:42
End at: 2019-01-21 06:10:12
Local clock offset: 4.189 ms
Remote clock offset: -2.12 ms

Below is generated by plot.py at 2019-01-21 07:08:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.06 Mbit/s
95th percentile per-packet one-way delay: 36.931 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 93.06 Mbit/s
95th percentile per-packet one-way delay: 36.931 ms
Loss rate: 0.60%
```
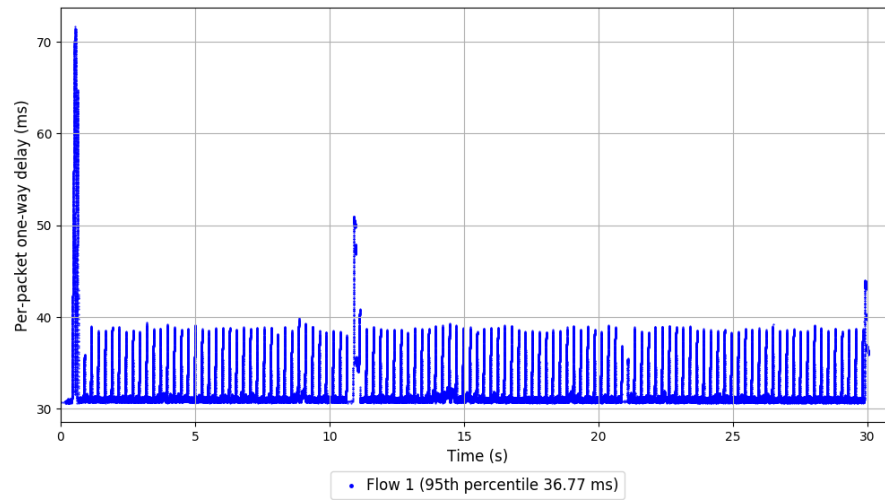
Run 3: Report of FillP-Sheep — Data Link

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-01-21 06:36:34
End at: 2019-01-21 06:37:04
Local clock offset: 3.848 ms
Remote clock offset: -1.917 ms

Below is generated by plot.py at 2019-01-21 07:08:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.08 Mbit/s
95th percentile per-packet one-way delay: 36.969 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 93.08 Mbit/s
95th percentile per-packet one-way delay: 36.969 ms
Loss rate: 0.57%
```
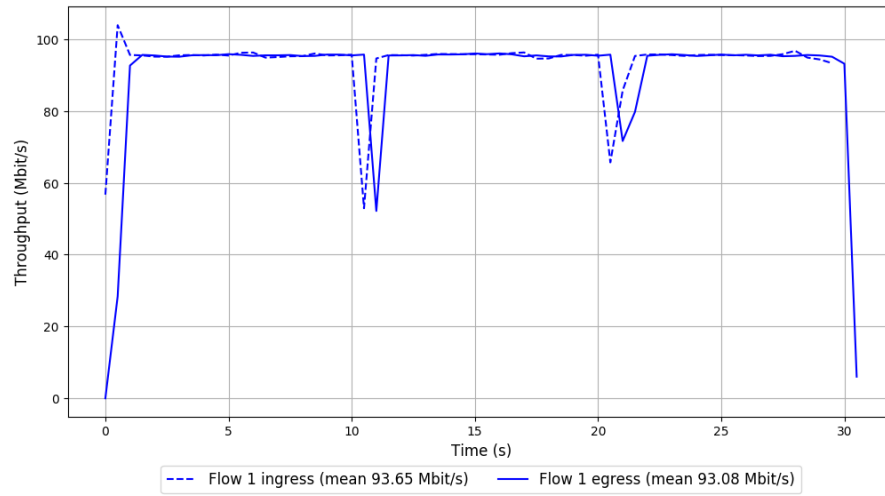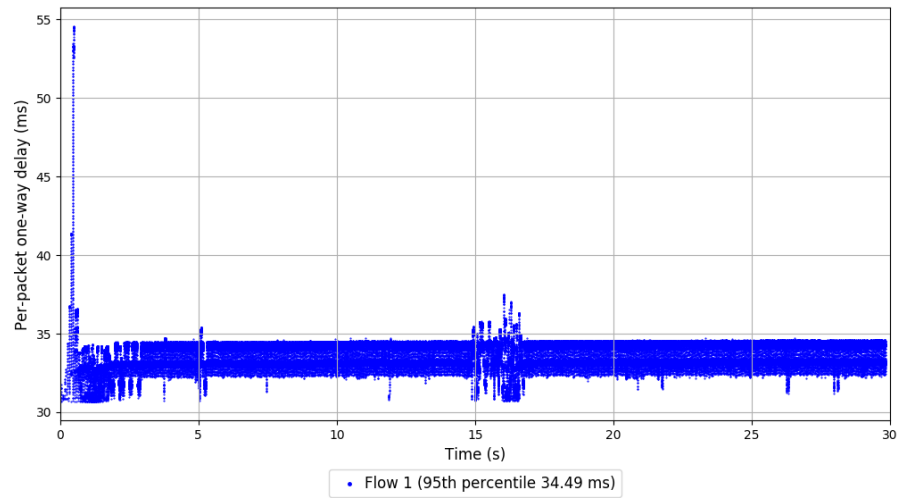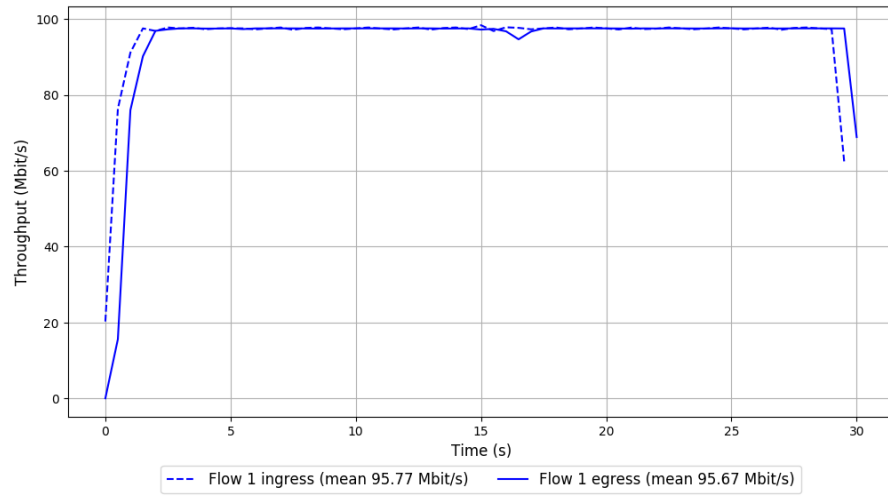
Run 4: Report of FillP-Sheep — Data Link

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-01-21 07:01:38
End at: 2019-01-21 07:02:08
Local clock offset: 0.501 ms
Remote clock offset: -2.076 ms

Below is generated by plot.py at 2019-01-21 07:08:31
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.08 Mbit/s
95th percentile per-packet one-way delay: 36.772 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 93.08 Mbit/s
95th percentile per-packet one-way delay: 36.772 ms
Loss rate: 0.60%
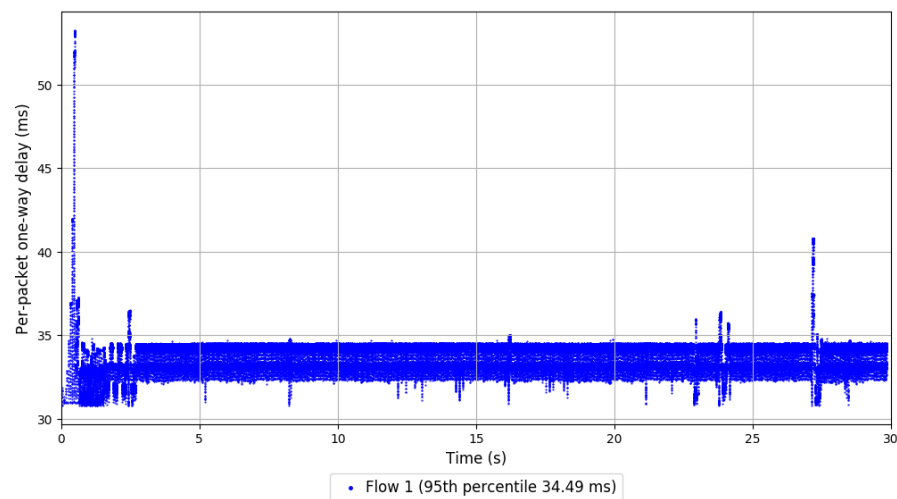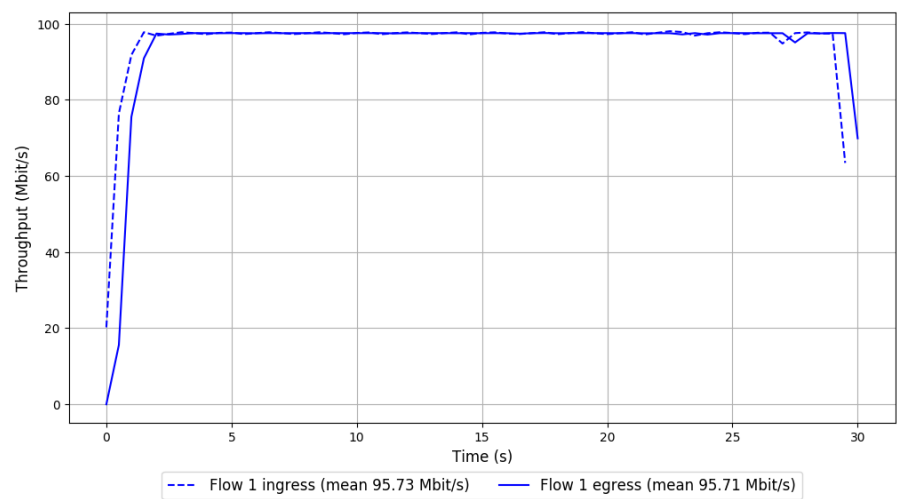```

Run 5: Report of FillP-Sheep — Data Link

```
Run 1: Statistics of Indigo

Start at: 2019-01-21 04:58:06
End at: 2019-01-21 04:58:36
Local clock offset: -1.617 ms
Remote clock offset: -3.758 ms


# Below is generated by plot.py at 2019-01-21 07:08:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.67 Mbit/s
95th percentile per-packet one-way delay: 34.488 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 95.67 Mbit/s
95th percentile per-packet one-way delay: 34.488 ms
Loss rate: 0.09%
```

Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-01-21 05:24:06
End at: 2019-01-21 05:24:36
Local clock offset: 0.777 ms
Remote clock offset: -2.945 ms


# Below is generated by plot.py at 2019-01-21 07:08:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 34.486 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 34.486 ms
Loss rate: 0.02%
```
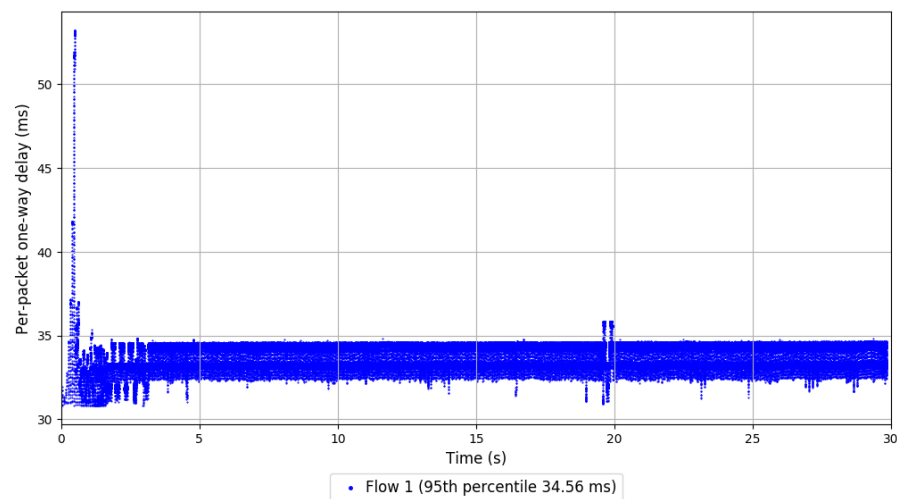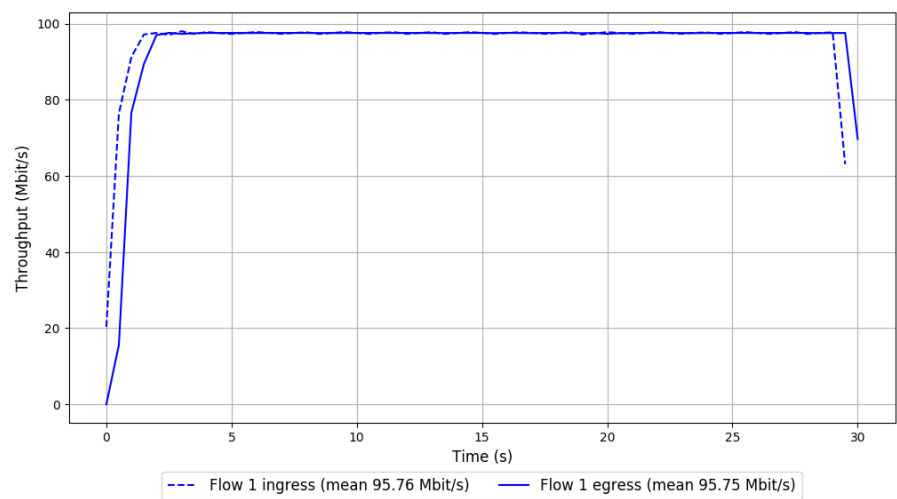
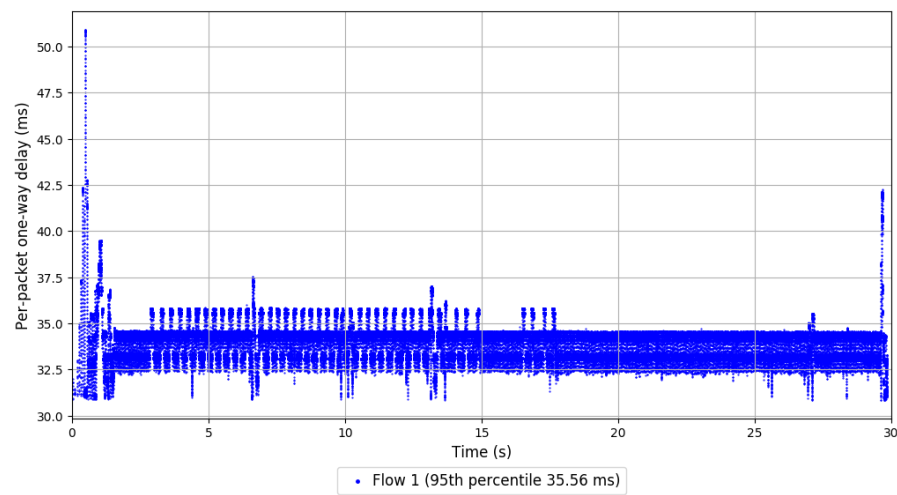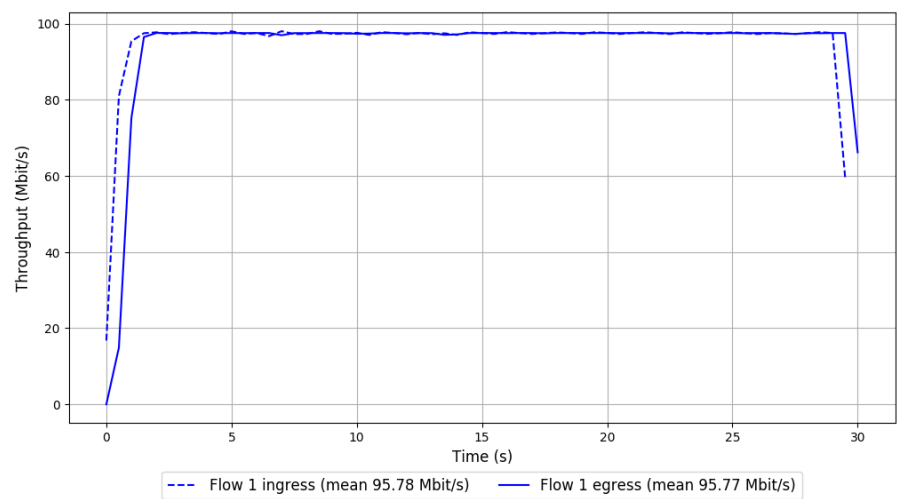Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 95.73 Mbit/s)   Flow 1 egress (mean 95.71 Mbit/s)

Flow 1 (95th percentile 34.49 ms)

```
Run 3: Statistics of Indigo

Start at: 2019-01-21 05:50:21
End at: 2019-01-21 05:50:51
Local clock offset: 2.168 ms
Remote clock offset: -2.39 ms


# Below is generated by plot.py at 2019-01-21 07:08:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 34.561 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 34.561 ms
Loss rate: 0.00%
```

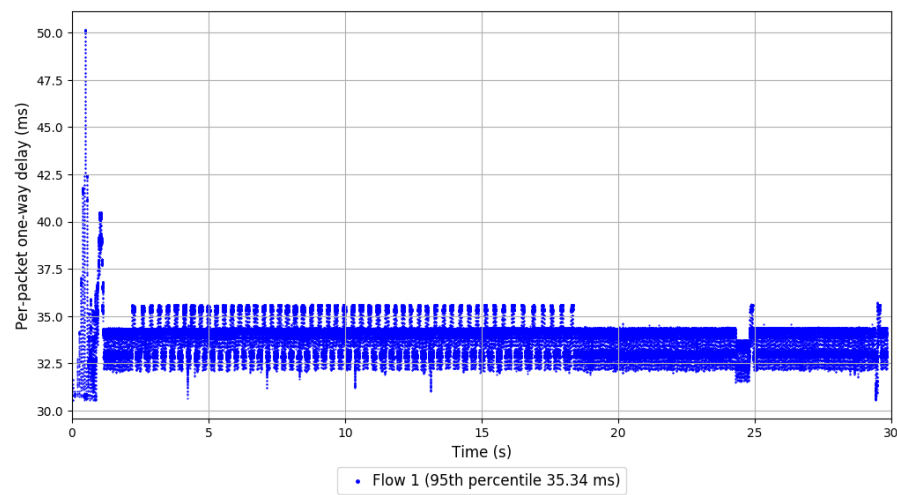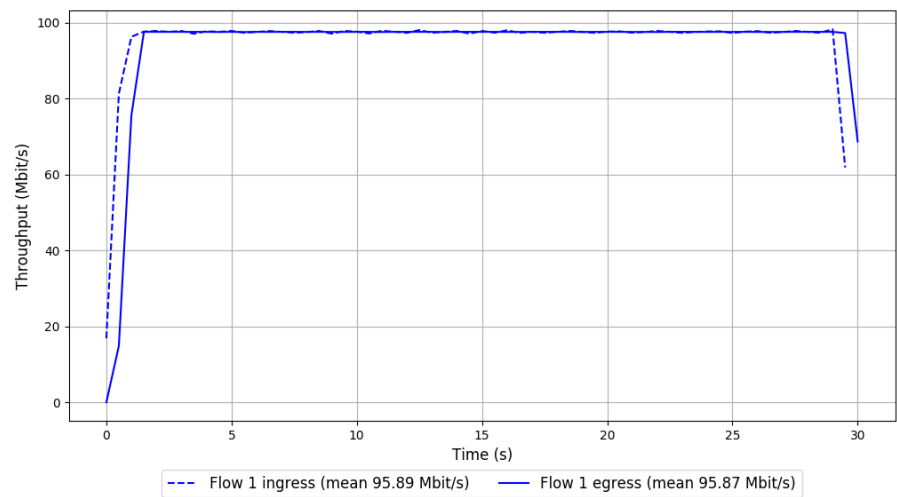Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2019-01-21 06:17:20
End at: 2019-01-21 06:17:50
Local clock offset: 4.441 ms
Remote clock offset: -2.024 ms


# Below is generated by plot.py at 2019-01-21 07:08:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.77 Mbit/s
95th percentile per-packet one-way delay: 35.558 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.77 Mbit/s
95th percentile per-packet one-way delay: 35.558 ms
Loss rate: 0.00%
```

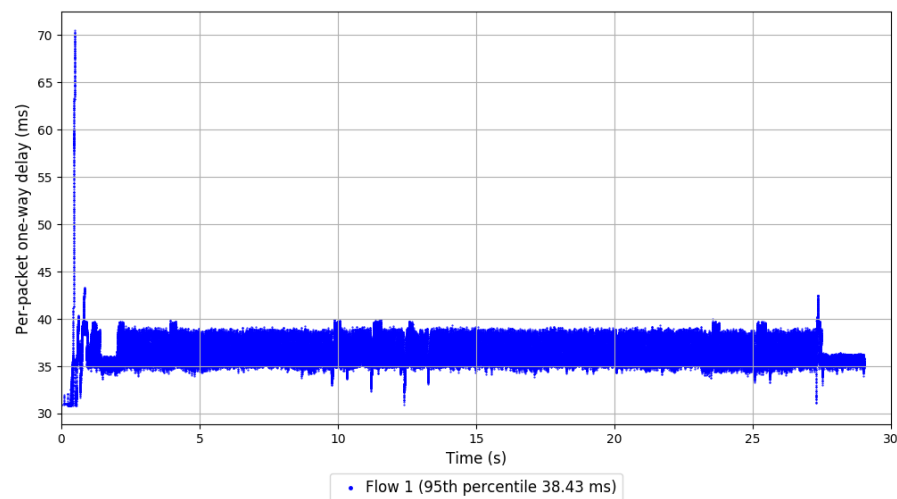Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2019-01-21 06:43:46
End at: 2019-01-21 06:44:16
Local clock offset: 4.023 ms
Remote clock offset: -2.242 ms


# Below is generated by plot.py at 2019-01-21 07:09:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.87 Mbit/s
95th percentile per-packet one-way delay: 35.345 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 95.87 Mbit/s
95th percentile per-packet one-way delay: 35.345 ms
Loss rate: 0.01%
```

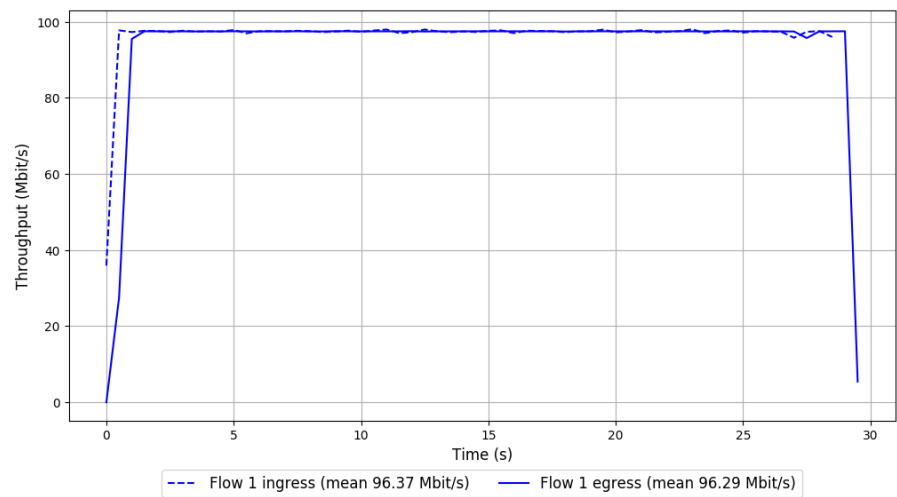## Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-21 05:07:37
End at: 2019-01-21 05:08:07
Local clock offset: 0.252 ms
Remote clock offset: -3.341 ms


# Below is generated by plot.py at 2019-01-21 07:09:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.29 Mbit/s
95th percentile per-packet one-way delay: 38.430 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 96.29 Mbit/s
95th percentile per-packet one-way delay: 38.430 ms
Loss rate: 0.06%
```
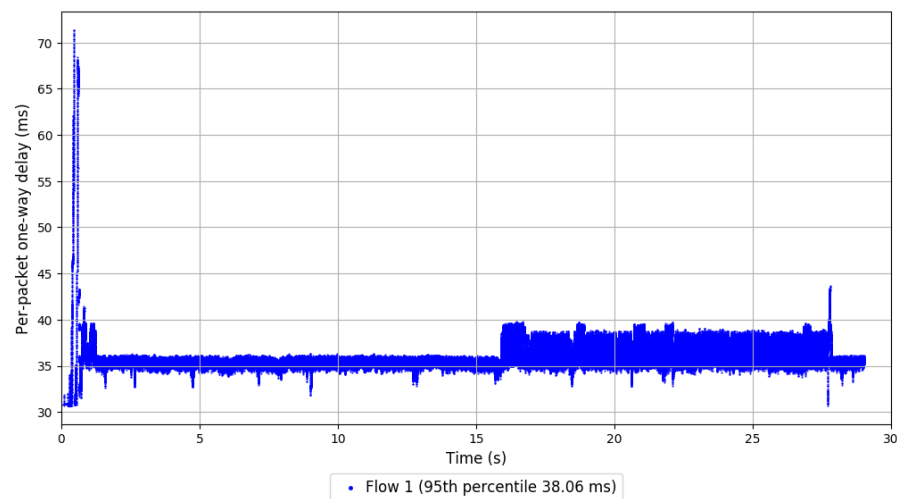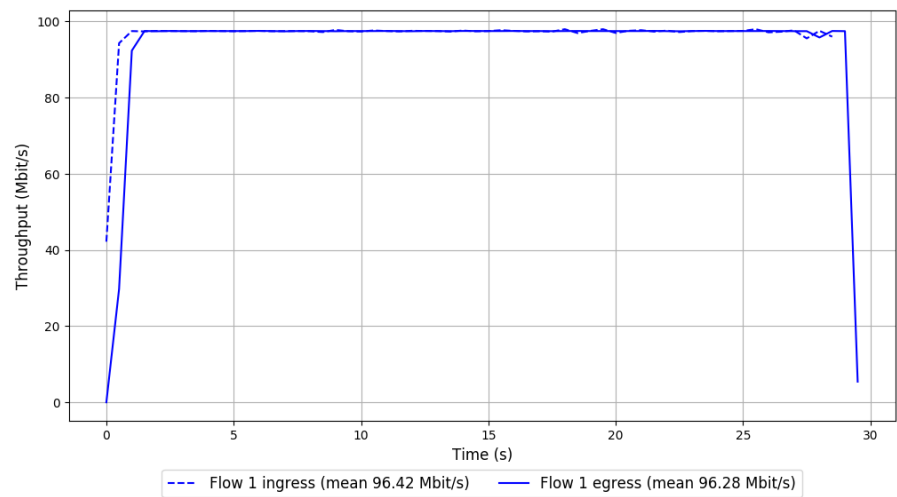
Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-21 05:33:54
End at: 2019-01-21 05:34:24
Local clock offset: 0.887 ms
Remote clock offset: -2.75 ms


# Below is generated by plot.py at 2019-01-21 07:09:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.28 Mbit/s
95th percentile per-packet one-way delay: 38.059 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 96.28 Mbit/s
95th percentile per-packet one-way delay: 38.059 ms
Loss rate: 0.13%
```
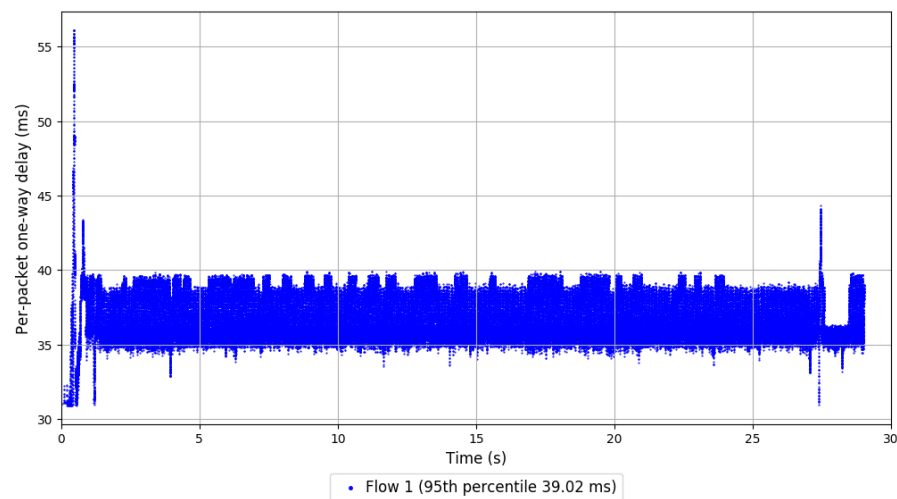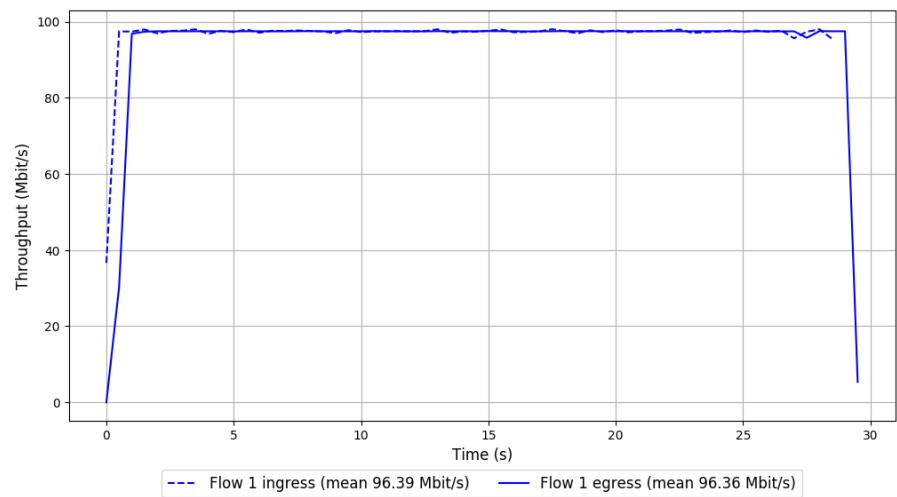
Run 2: Report of Indigo-MusesC3 — Data Link

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-21 06:00:43
End at: 2019-01-21 06:01:13
Local clock offset: 3.457 ms
Remote clock offset: -2.171 ms


# Below is generated by plot.py at 2019-01-21 07:09:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.36 Mbit/s
95th percentile per-packet one-way delay: 39.021 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.36 Mbit/s
95th percentile per-packet one-way delay: 39.021 ms
Loss rate: 0.00%
```
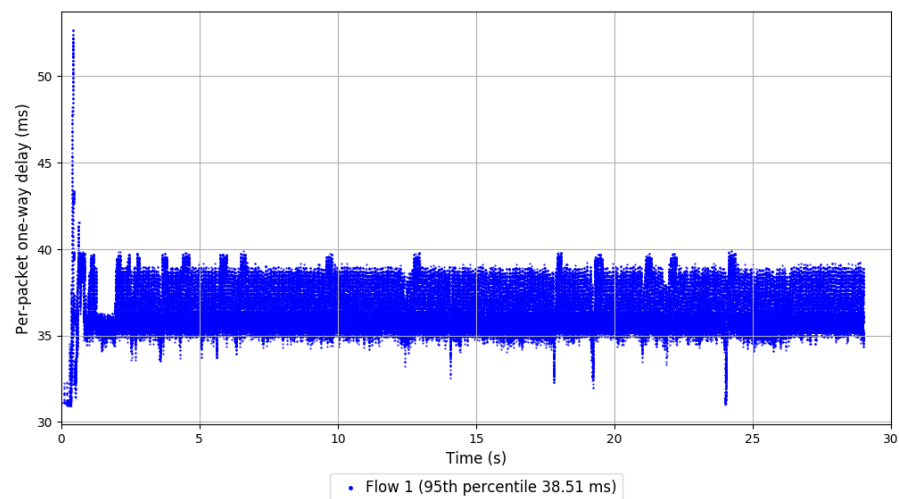
Run 3: Report of Indigo-MusesC3 — Data Link

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```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-21 06:27:24
End at: 2019-01-21 06:27:54
Local clock offset: 3.79 ms
Remote clock offset: -1.915 ms


# Below is generated by plot.py at 2019-01-21 07:09:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.48 Mbit/s
95th percentile per-packet one-way delay: 38.513 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.48 Mbit/s
95th percentile per-packet one-way delay: 38.513 ms
Loss rate: 0.00%
```
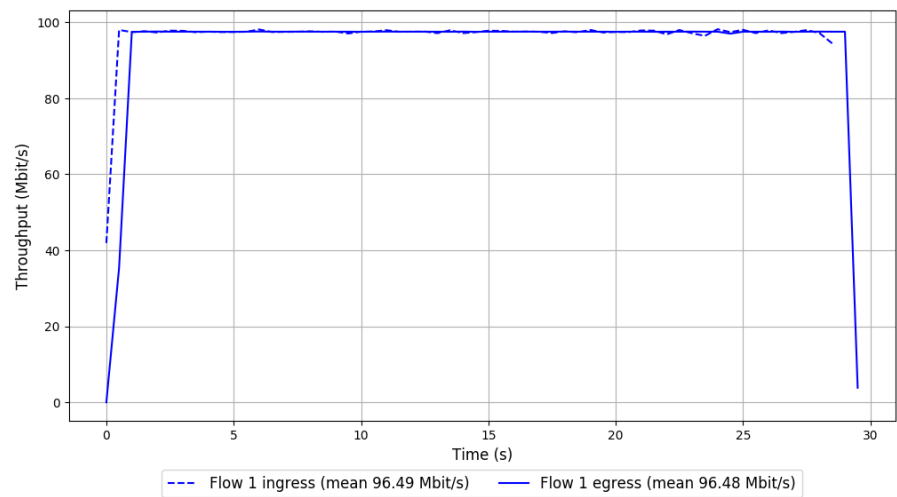
Run 4: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 96.49 Mbit/s)   Flow 1 egress (mean 96.48 Mbit/s)
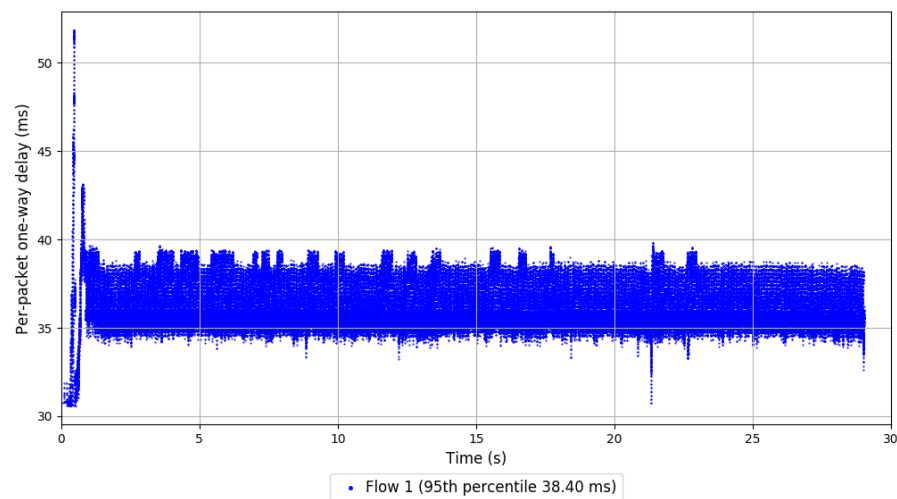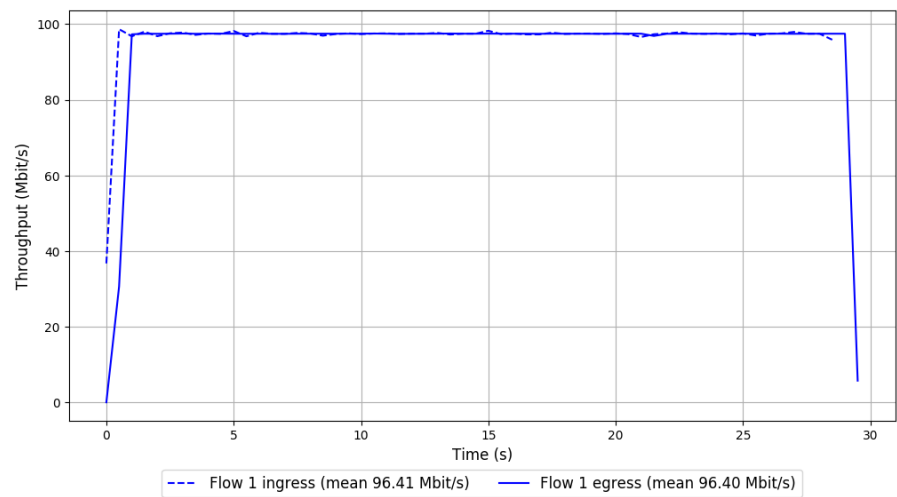

• Flow 1 (95th percentile 38.51 ms)

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-21 06:53:23
End at: 2019-01-21 06:53:53
Local clock offset: 1.742 ms
Remote clock offset: -2.035 ms


# Below is generated by plot.py at 2019-01-21 07:09:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 38.400 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 38.400 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC3 — Data Link

```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-21 05:06:18
End at: 2019-01-21 05:06:48
Local clock offset: 0.042 ms
Remote clock offset: -3.424 ms


# Below is generated by plot.py at 2019-01-21 07:09:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.77 Mbit/s
95th percentile per-packet one-way delay: 34.170 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.77 Mbit/s
95th percentile per-packet one-way delay: 34.170 ms
Loss rate: 0.00%
```
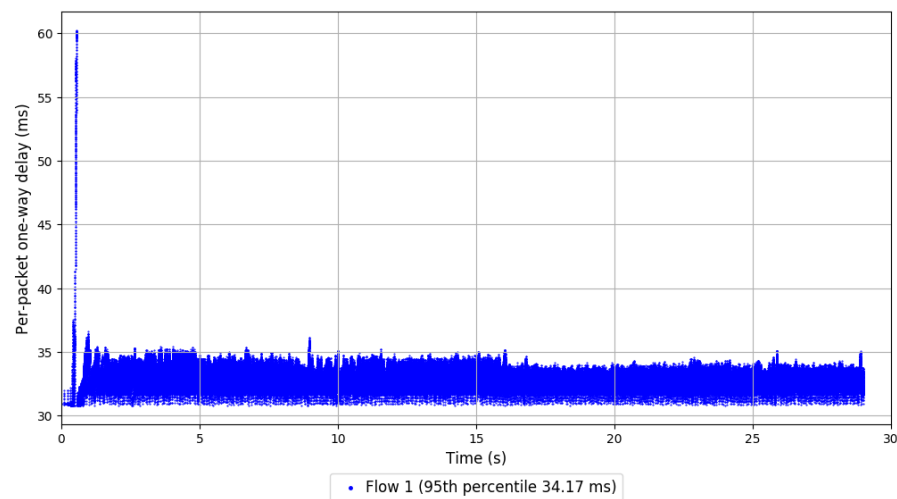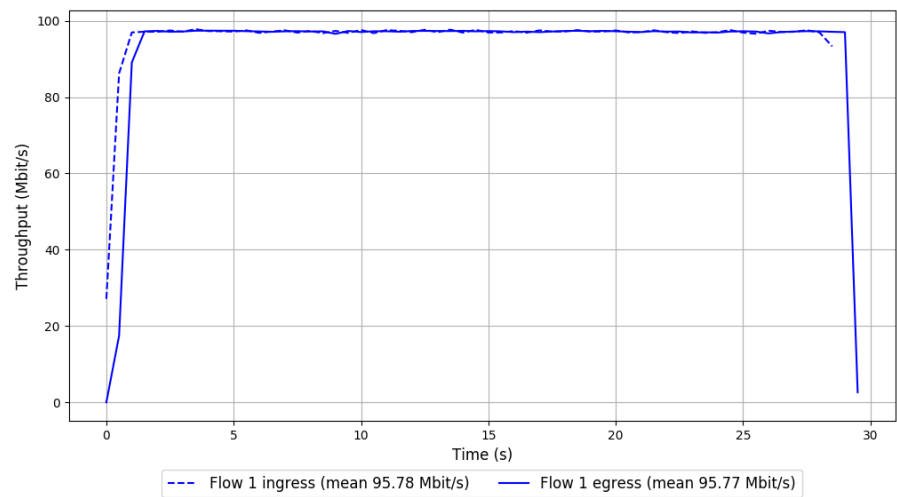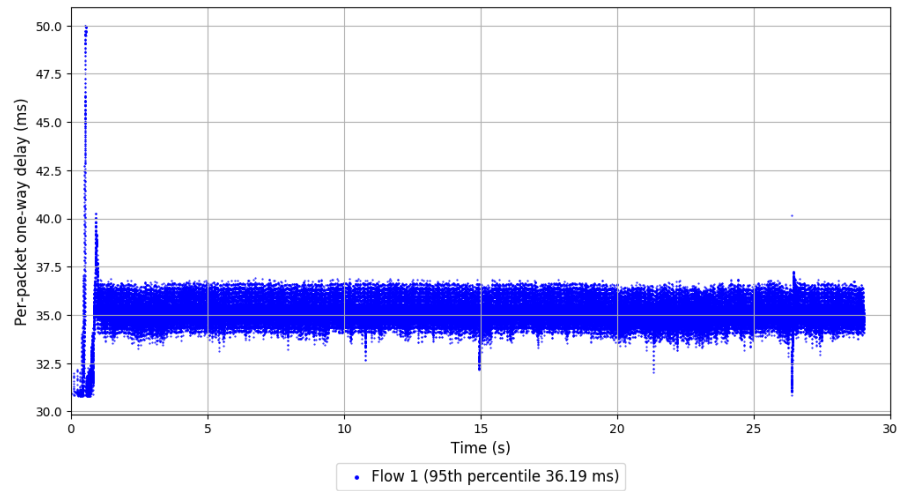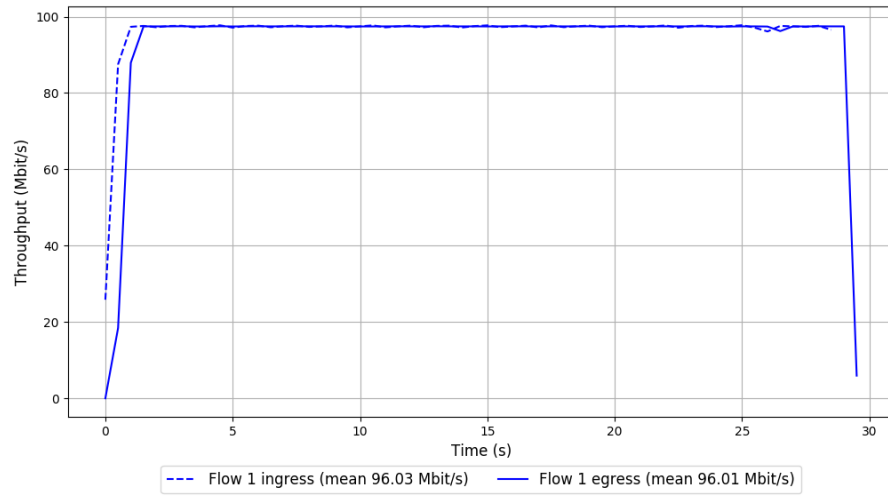
Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-21 05:32:39
End at: 2019-01-21 05:33:09
Local clock offset: 0.856 ms
Remote clock offset: -2.757 ms


# Below is generated by plot.py at 2019-01-21 07:09:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 36.191 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 36.191 ms
Loss rate: 0.00%
```
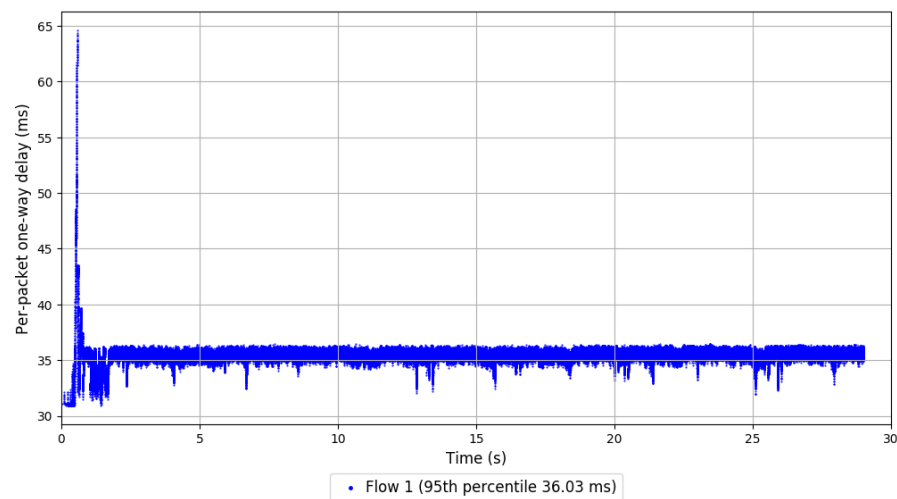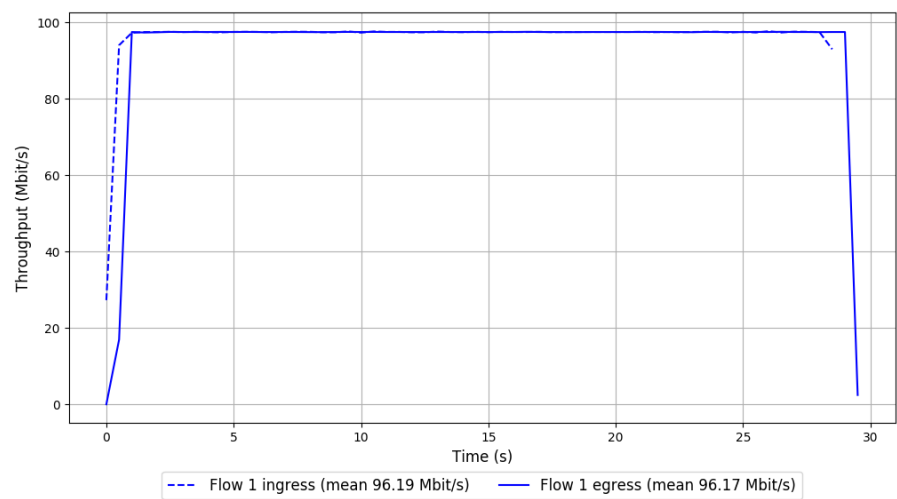
Run 2: Report of Indigo-MusesC5 — Data Link

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-21 05:59:25
End at: 2019-01-21 05:59:55
Local clock offset: 3.32 ms
Remote clock offset: -2.225 ms


# Below is generated by plot.py at 2019-01-21 07:10:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.17 Mbit/s
95th percentile per-packet one-way delay: 36.035 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.17 Mbit/s
95th percentile per-packet one-way delay: 36.035 ms
Loss rate: 0.00%
```
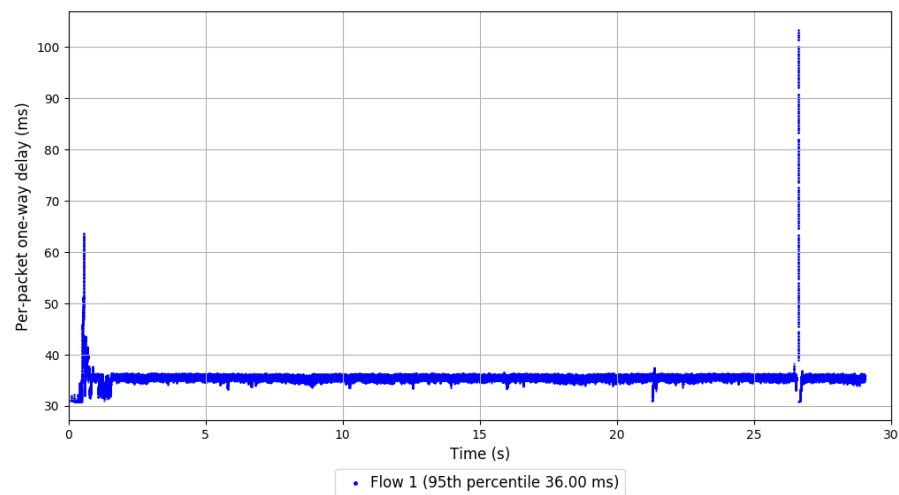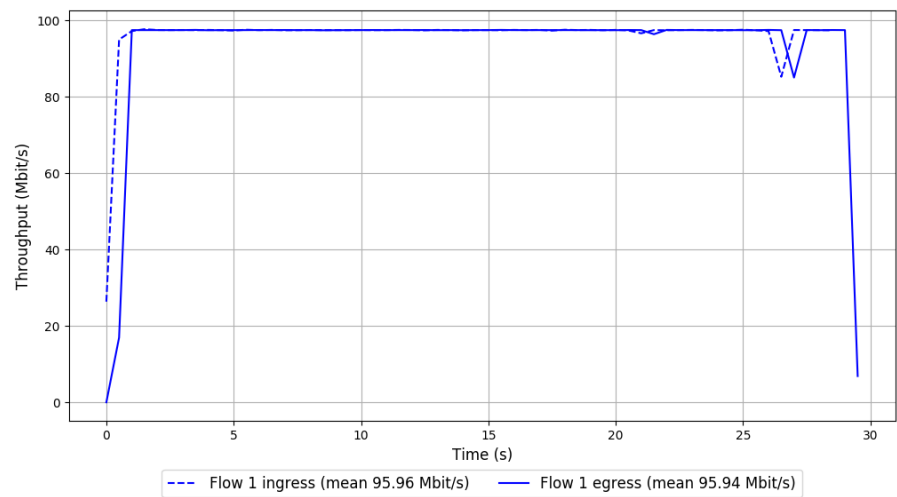
Run 3: Report of Indigo-MusesC5 — Data Link

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-21 06:26:10
End at: 2019-01-21 06:26:40
Local clock offset: 3.819 ms
Remote clock offset: -1.996 ms


# Below is generated by plot.py at 2019-01-21 07:10:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.94 Mbit/s
95th percentile per-packet one-way delay: 36.004 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.94 Mbit/s
95th percentile per-packet one-way delay: 36.004 ms
Loss rate: 0.00%
```
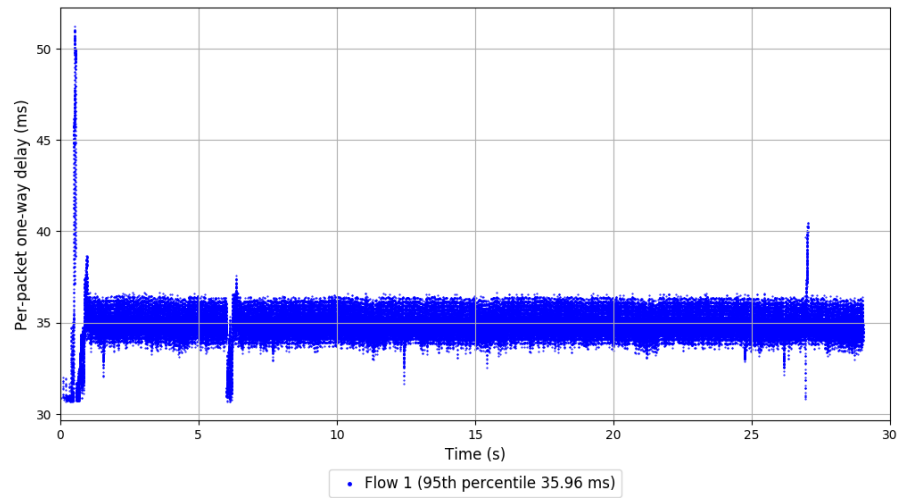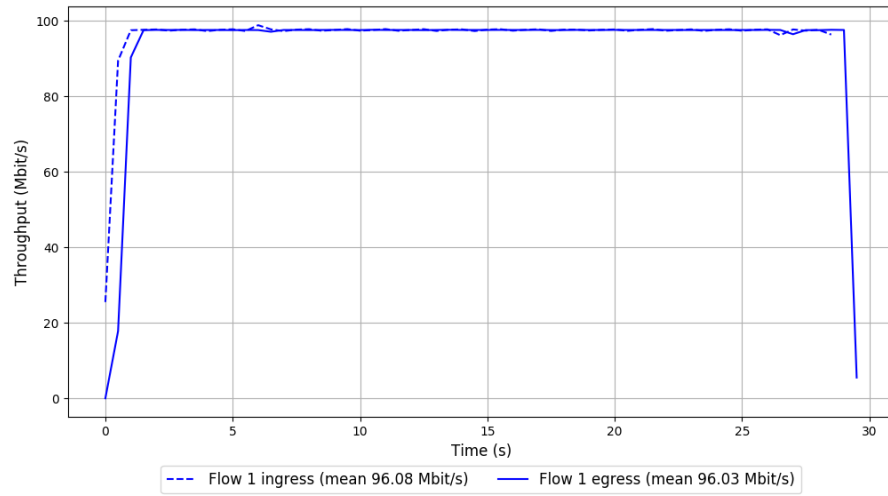
Run 4: Report of Indigo-MusesC5 — Data Link

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-21 06:52:10
End at: 2019-01-21 06:52:40
Local clock offset: 1.933 ms
Remote clock offset: -2.035 ms


# Below is generated by plot.py at 2019-01-21 07:10:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.03 Mbit/s
95th percentile per-packet one-way delay: 35.963 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 96.03 Mbit/s
95th percentile per-packet one-way delay: 35.963 ms
Loss rate: 0.03%
```

Run 5: Report of Indigo-MusesC5 — Data Link

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-21 04:55:45
End at: 2019-01-21 04:56:15
Local clock offset: -2.439 ms
Remote clock offset: -3.569 ms


# Below is generated by plot.py at 2019-01-21 07:10:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.01 Mbit/s
95th percentile per-packet one-way delay: 34.275 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 94.01 Mbit/s
95th percentile per-packet one-way delay: 34.275 ms
Loss rate: 0.00%
```
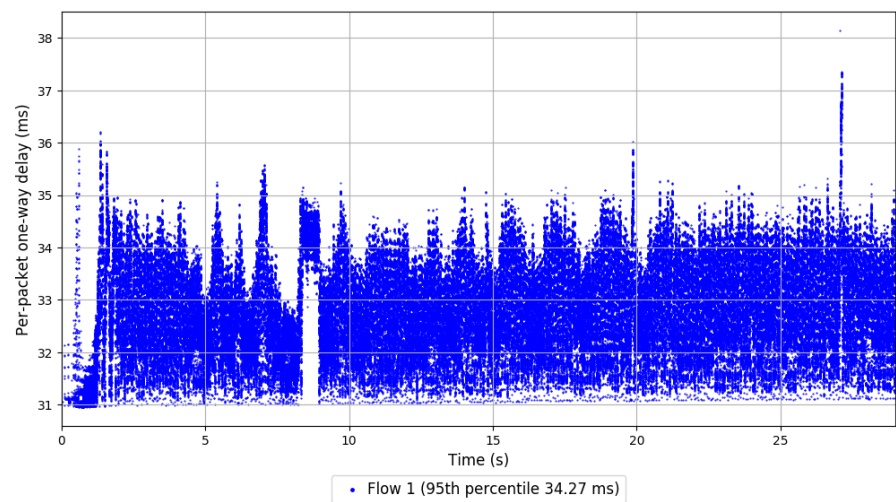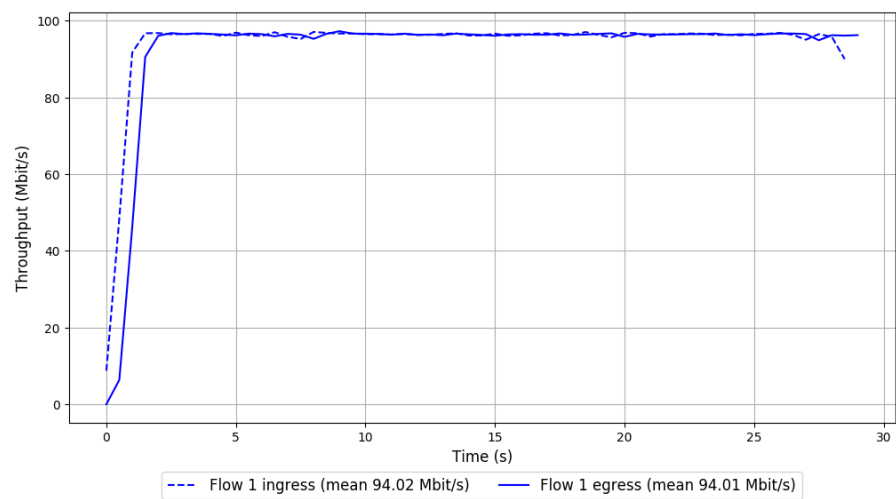
Run 1: Report of Indigo-MusesD — Data Link

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-21 05:21:42
End at: 2019-01-21 05:22:12
Local clock offset: 0.827 ms
Remote clock offset: -3.018 ms


# Below is generated by plot.py at 2019-01-21 07:10:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.93 Mbit/s
95th percentile per-packet one-way delay: 33.772 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 92.93 Mbit/s
95th percentile per-packet one-way delay: 33.772 ms
Loss rate: 0.03%
```
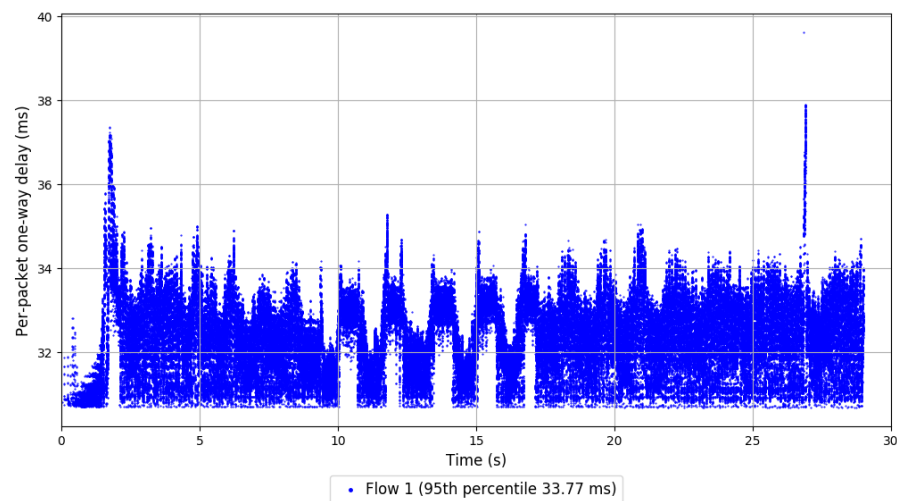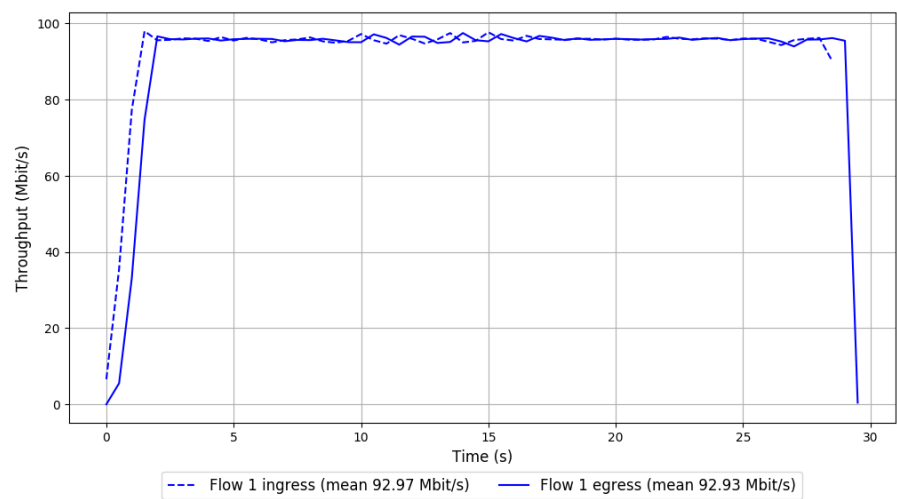
Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-21 05:47:55
End at: 2019-01-21 05:48:25
Local clock offset: 1.708 ms
Remote clock offset: -2.42 ms


# Below is generated by plot.py at 2019-01-21 07:10:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.93 Mbit/s
95th percentile per-packet one-way delay: 34.109 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 92.93 Mbit/s
95th percentile per-packet one-way delay: 34.109 ms
Loss rate: 0.01%
```
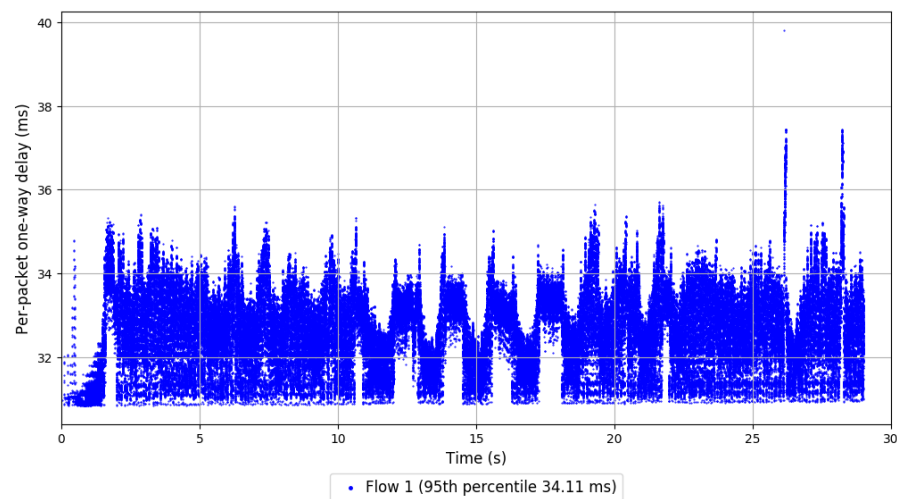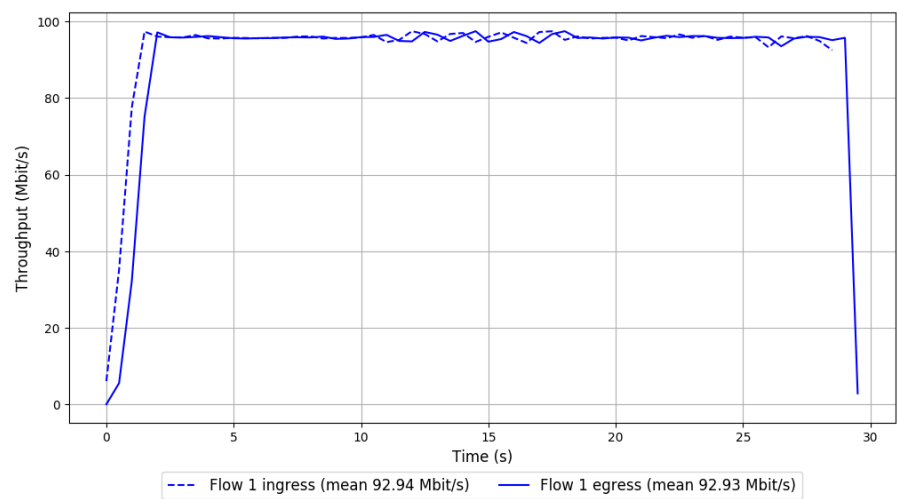
Run 3: Report of Indigo-MusesD — Data Link

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-21 06:14:46
End at: 2019-01-21 06:15:16
Local clock offset: 4.541 ms
Remote clock offset: -2.069 ms


# Below is generated by plot.py at 2019-01-21 07:10:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.46 Mbit/s
95th percentile per-packet one-way delay: 34.205 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 93.46 Mbit/s
95th percentile per-packet one-way delay: 34.205 ms
Loss rate: 0.00%
```
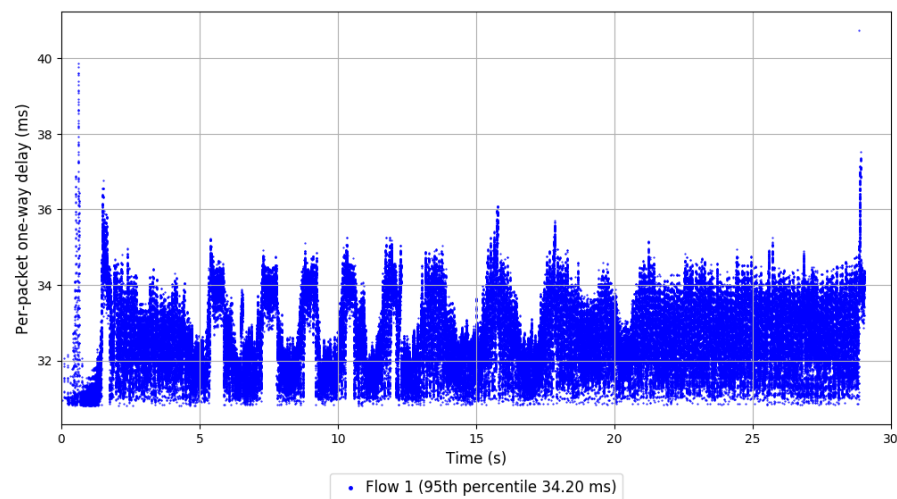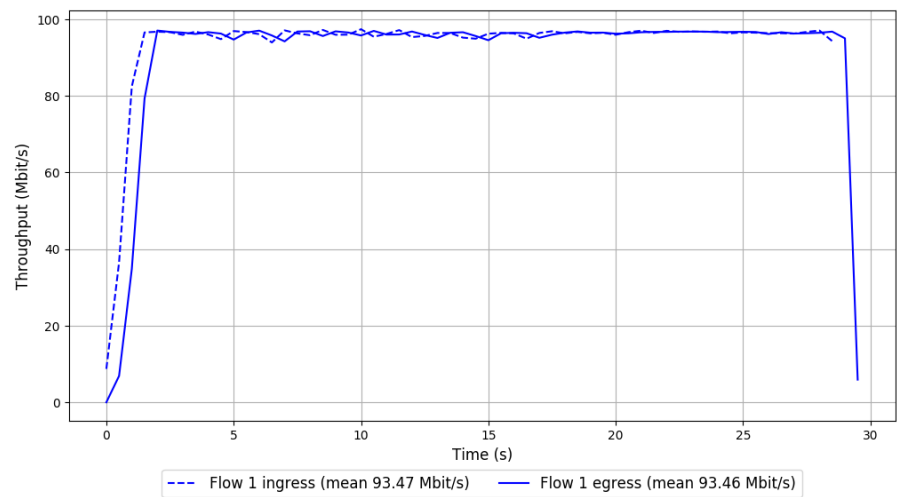
Run 4: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 93.47 Mbit/s)   Flow 1 egress (mean 93.46 Mbit/s)

Flow 1 (95th percentile 34.20 ms)

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-21 06:41:27
End at: 2019-01-21 06:41:57
Local clock offset: 3.949 ms
Remote clock offset: -2.022 ms


# Below is generated by plot.py at 2019-01-21 07:10:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.77 Mbit/s
95th percentile per-packet one-way delay: 33.693 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 92.77 Mbit/s
95th percentile per-packet one-way delay: 33.693 ms
Loss rate: 0.00%
```
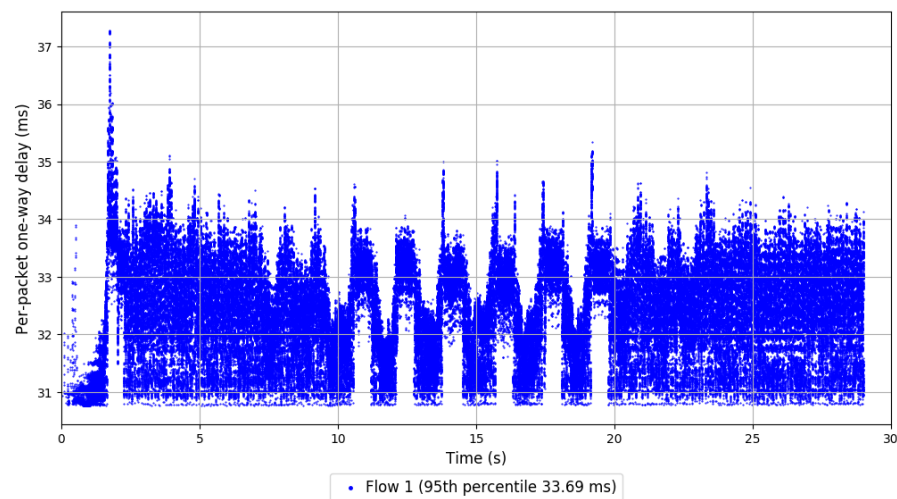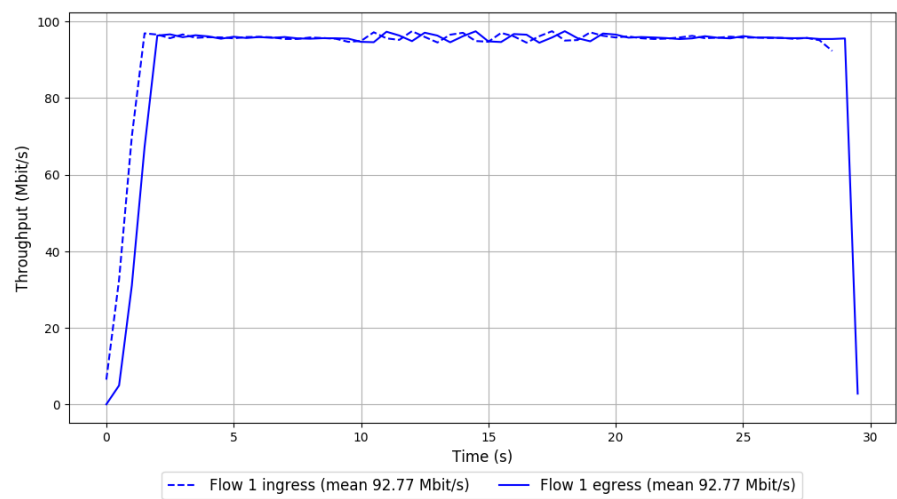
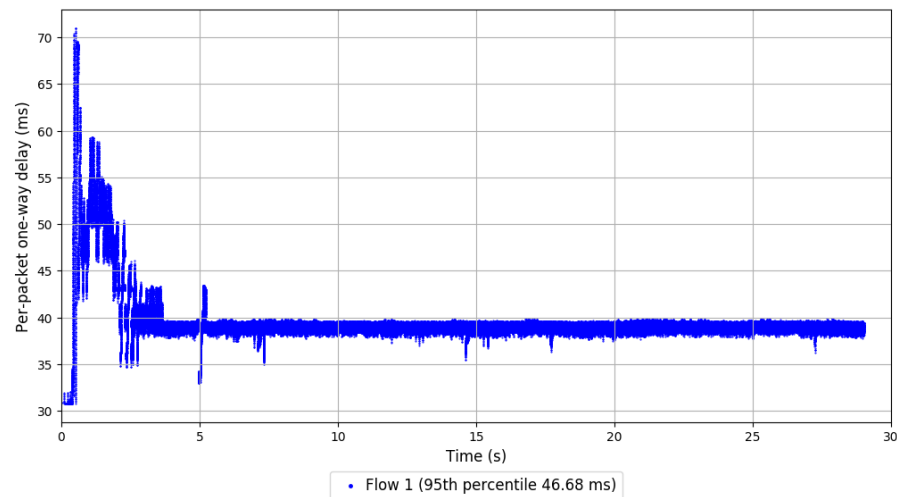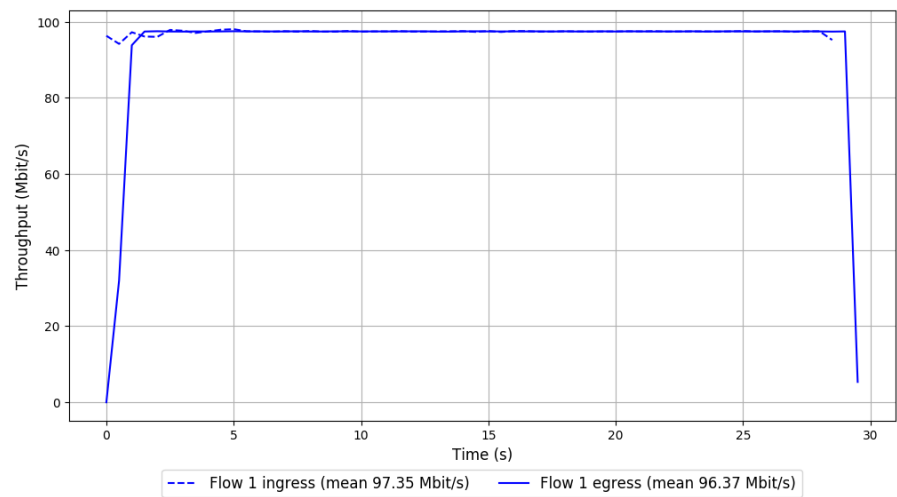Run 5: Report of Indigo-MusesD — Data Link

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```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-21 05:12:41
End at: 2019-01-21 05:13:11
Local clock offset: 0.816 ms
Remote clock offset: -3.268 ms


# Below is generated by plot.py at 2019-01-21 07:11:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.37 Mbit/s
95th percentile per-packet one-way delay: 46.677 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 96.37 Mbit/s
95th percentile per-packet one-way delay: 46.677 ms
Loss rate: 0.98%
```

Run 1: Report of Indigo-MusesT — Data Link

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-21 05:39:03
End at: 2019-01-21 05:39:33
Local clock offset: 1.025 ms
Remote clock offset: -2.543 ms


# Below is generated by plot.py at 2019-01-21 07:11:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.92 Mbit/s
95th percentile per-packet one-way delay: 40.400 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 95.92 Mbit/s
95th percentile per-packet one-way delay: 40.400 ms
Loss rate: 0.94%
```
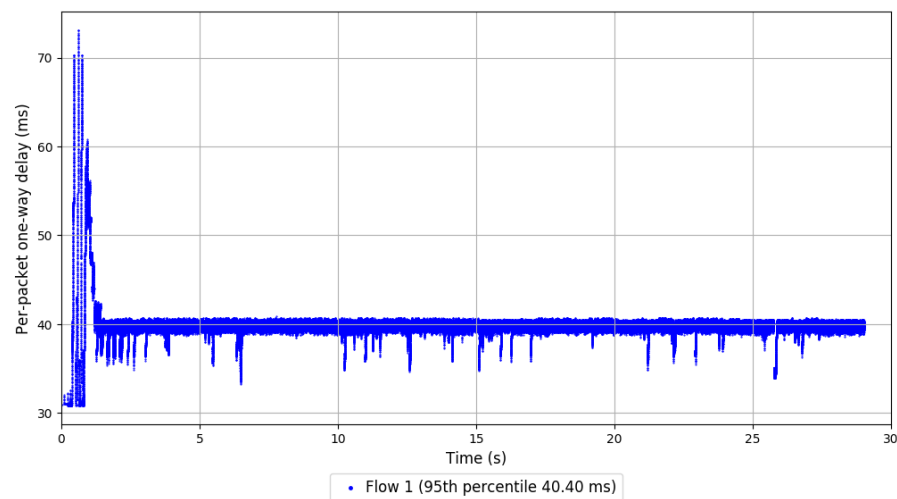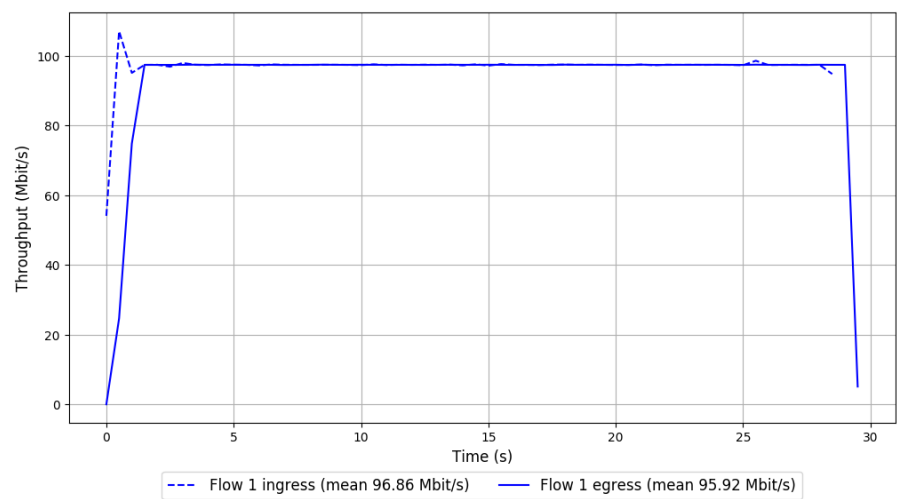
Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-21 06:05:47
End at: 2019-01-21 06:06:17
Local clock offset: 3.897 ms
Remote clock offset: -2.129 ms


# Below is generated by plot.py at 2019-01-21 07:11:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.03 Mbit/s
95th percentile per-packet one-way delay: 39.715 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 96.03 Mbit/s
95th percentile per-packet one-way delay: 39.715 ms
Loss rate: 0.62%
```
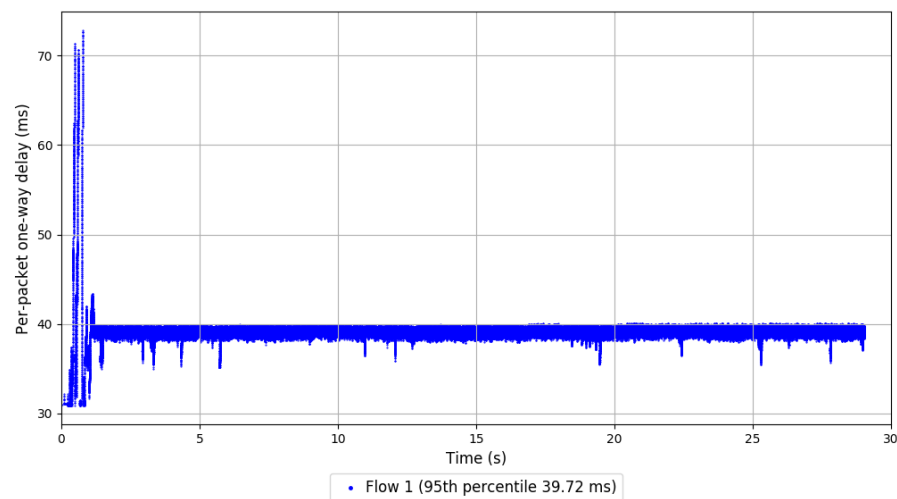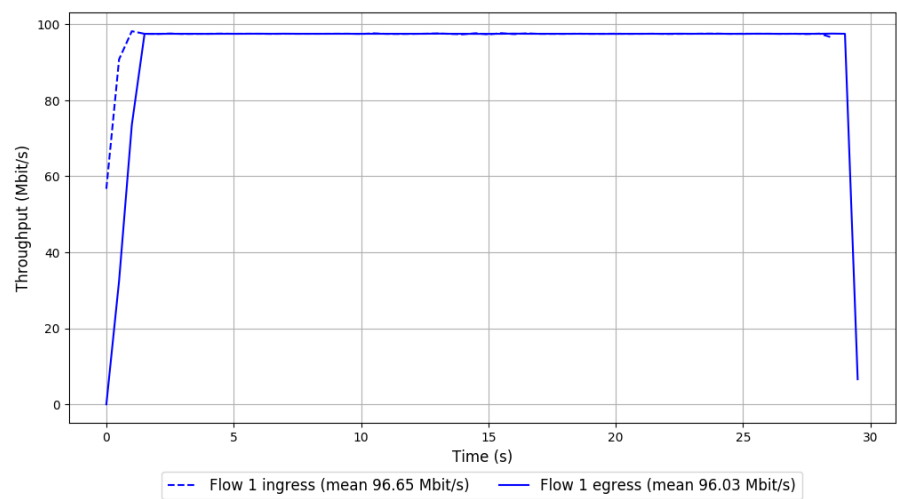
Run 3: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 96.65 Mbit/s)   Flow 1 egress (mean 96.03 Mbit/s)

• Flow 1 (95th percentile 39.72 ms)

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-21 06:32:38
End at: 2019-01-21 06:33:08
Local clock offset: 3.791 ms
Remote clock offset: -1.965 ms


# Below is generated by plot.py at 2019-01-21 07:11:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.09 Mbit/s
95th percentile per-packet one-way delay: 39.578 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 96.09 Mbit/s
95th percentile per-packet one-way delay: 39.578 ms
Loss rate: 0.61%
```
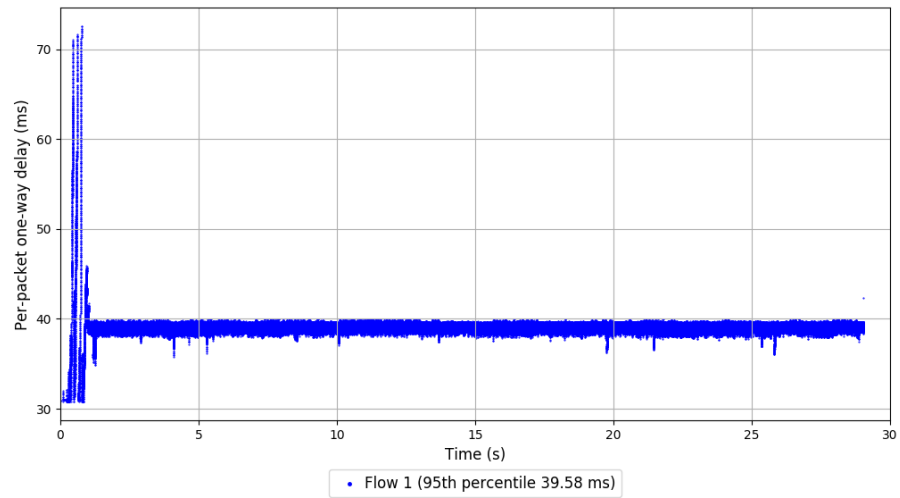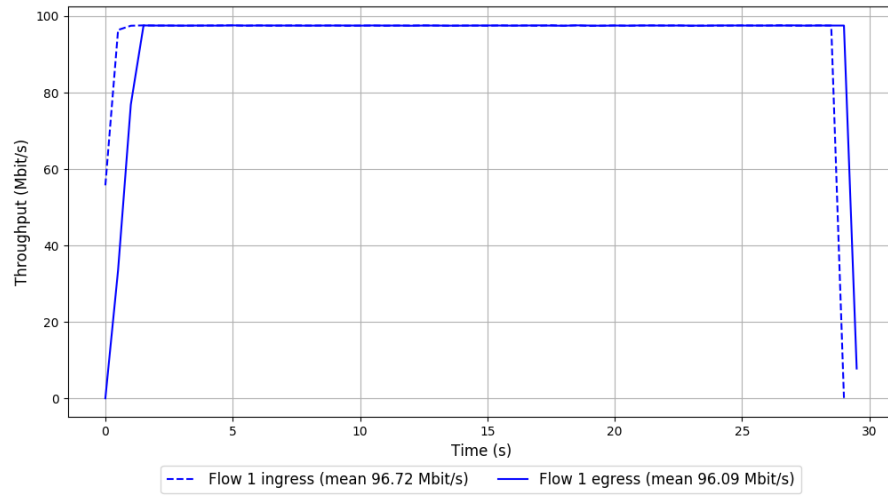
Run 4: Report of Indigo-MusesT — Data Link

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-21 06:58:04
End at: 2019-01-21 06:58:34
Local clock offset: 0.905 ms
Remote clock offset: -2.099 ms


# Below is generated by plot.py at 2019-01-21 07:11:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.33 Mbit/s
95th percentile per-packet one-way delay: 46.859 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 96.33 Mbit/s
95th percentile per-packet one-way delay: 46.859 ms
Loss rate: 1.31%
```
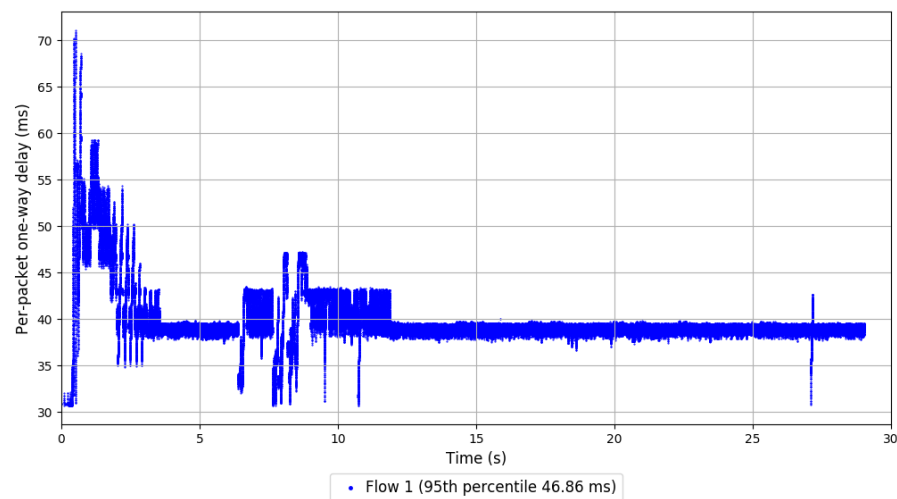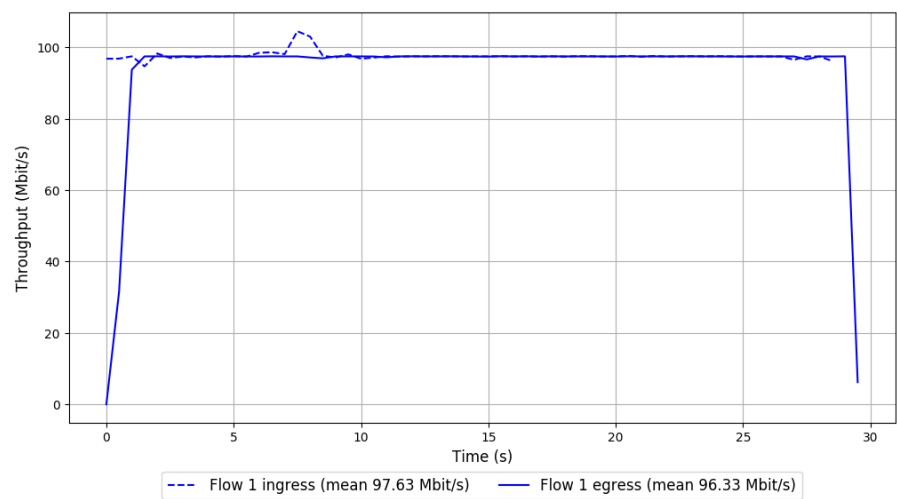
Run 5: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 97.63 Mbit/s)   Flow 1 egress (mean 96.33 Mbit/s)
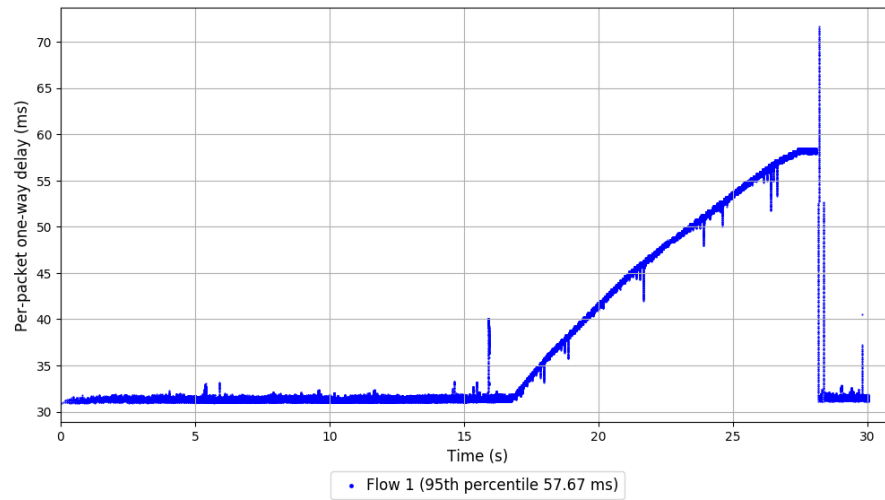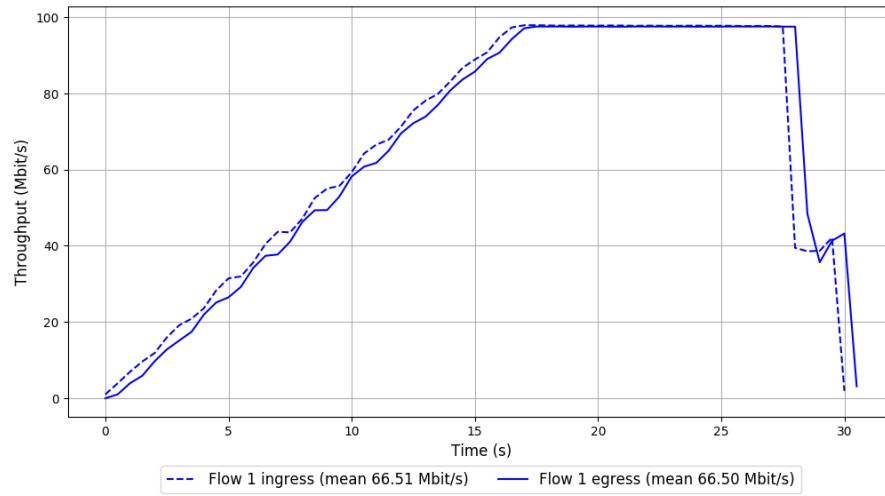

Flow 1 (95th percentile 46.86 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2019-01-21 04:54:27
End at: 2019-01-21 04:54:57
Local clock offset: -2.893 ms
Remote clock offset: -3.544 ms


# Below is generated by plot.py at 2019-01-21 07:11:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.50 Mbit/s
95th percentile per-packet one-way delay: 57.667 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 66.50 Mbit/s
95th percentile per-packet one-way delay: 57.667 ms
Loss rate: 0.01%
```

Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 66.51 Mbit/s)   Flow 1 egress (mean 66.50 Mbit/s)
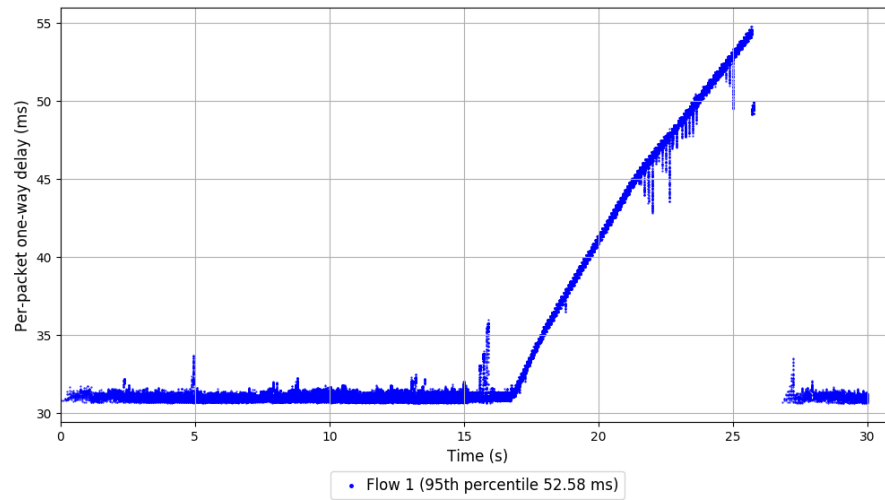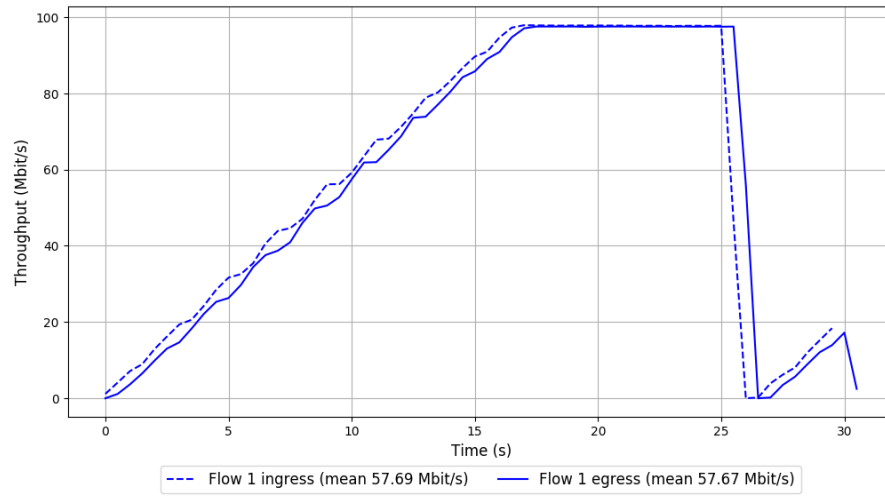

Flow 1 (95th percentile 57.67 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2019-01-21 05:20:24
End at: 2019-01-21 05:20:54
Local clock offset: 0.861 ms
Remote clock offset: -3.091 ms


# Below is generated by plot.py at 2019-01-21 07:11:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.67 Mbit/s
95th percentile per-packet one-way delay: 52.584 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 57.67 Mbit/s
95th percentile per-packet one-way delay: 52.584 ms
Loss rate: 0.03%
```

Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 57.69 Mbit/s)   Flow 1 egress (mean 57.67 Mbit/s)
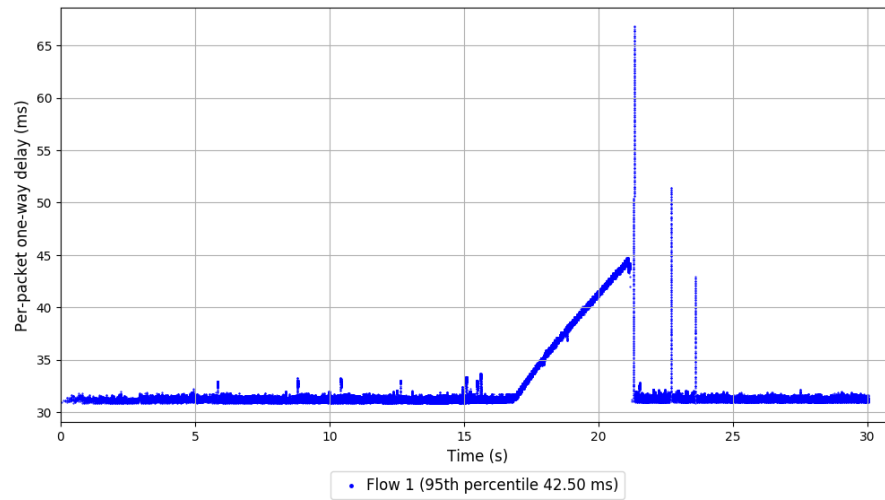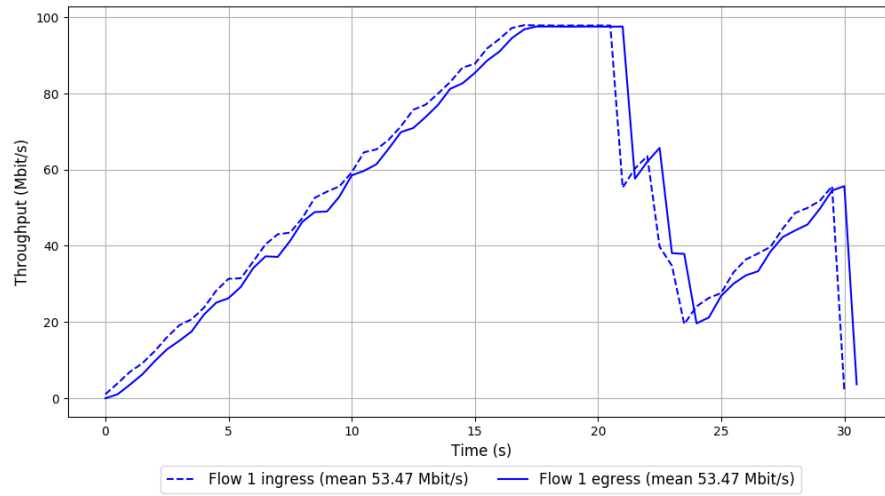

Flow 1 (95th percentile 52.58 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2019-01-21 05:46:44
End at: 2019-01-21 05:47:14
Local clock offset: 1.443 ms
Remote clock offset: -2.424 ms


# Below is generated by plot.py at 2019-01-21 07:11:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.47 Mbit/s
95th percentile per-packet one-way delay: 42.500 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 53.47 Mbit/s
95th percentile per-packet one-way delay: 42.500 ms
Loss rate: 0.02%
```

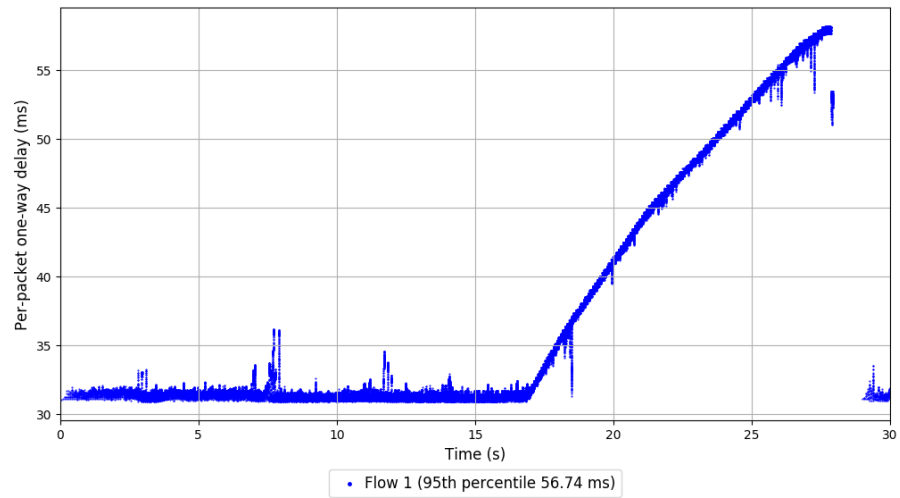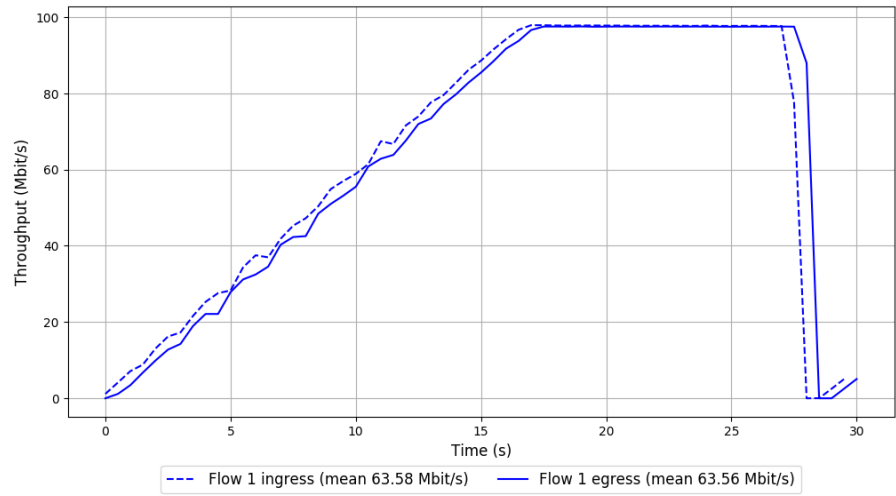## Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2019-01-21 06:13:22
End at: 2019-01-21 06:13:52
Local clock offset: 4.438 ms
Remote clock offset: -2.106 ms

# Below is generated by plot.py at 2019-01-21 07:12:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.56 Mbit/s
95th percentile per-packet one-way delay: 56.744 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 63.56 Mbit/s
95th percentile per-packet one-way delay: 56.744 ms
Loss rate: 0.02%
```

Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 63.58 Mbit/s)   Flow 1 egress (mean 63.56 Mbit/s)

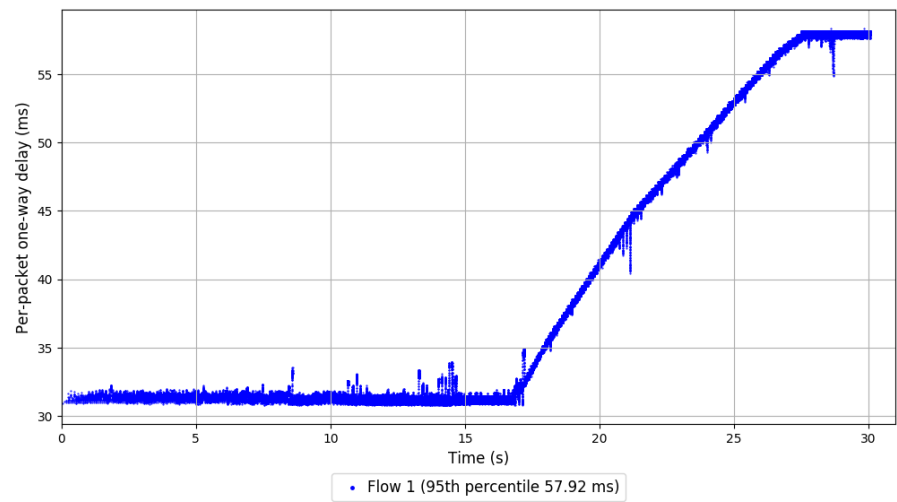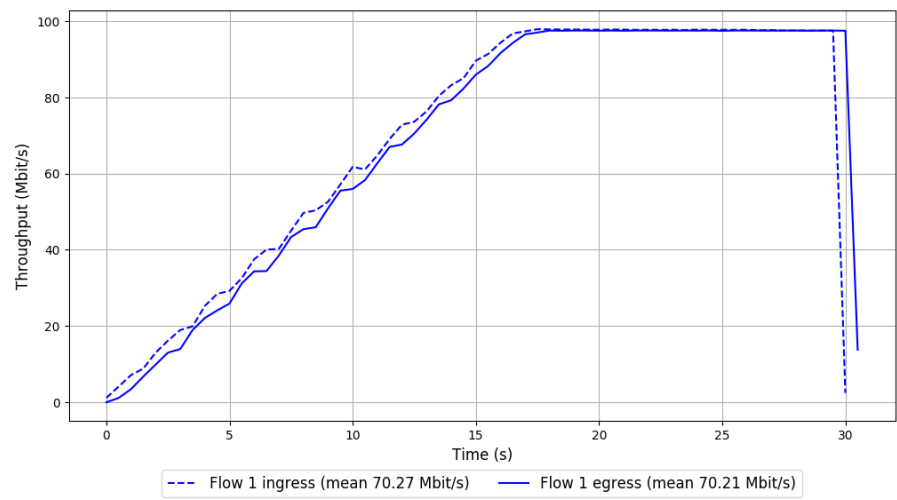

• Flow 1 (95th percentile 56.74 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2019-01-21 06:40:10
End at: 2019-01-21 06:40:40
Local clock offset: 3.919 ms
Remote clock offset: -1.936 ms


# Below is generated by plot.py at 2019-01-21 07:12:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.21 Mbit/s
95th percentile per-packet one-way delay: 57.921 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.21 Mbit/s
95th percentile per-packet one-way delay: 57.921 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2019-01-21 05:17:59
End at: 2019-01-21 05:18:29
Local clock offset: 0.976 ms
Remote clock offset: -3.339 ms


# Below is generated by plot.py at 2019-01-21 07:12:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.60 Mbit/s
95th percentile per-packet one-way delay: 36.271 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 91.60 Mbit/s
95th percentile per-packet one-way delay: 36.271 ms
Loss rate: 0.67%
```
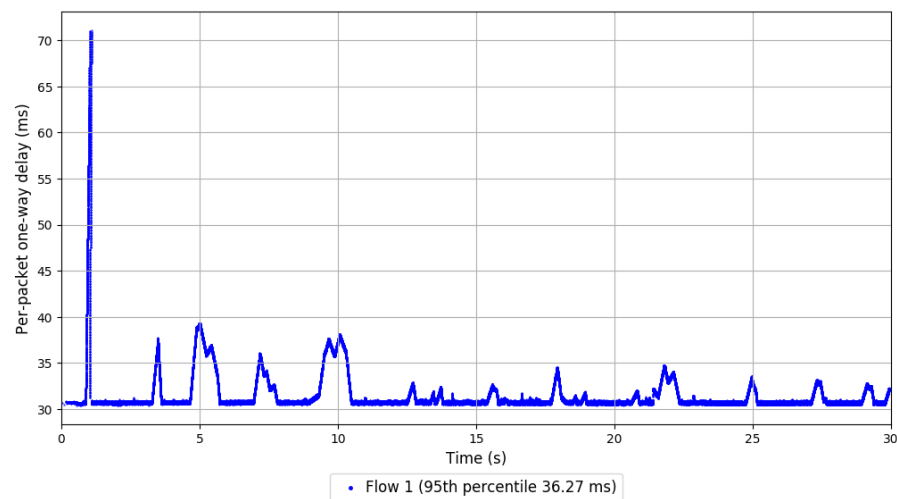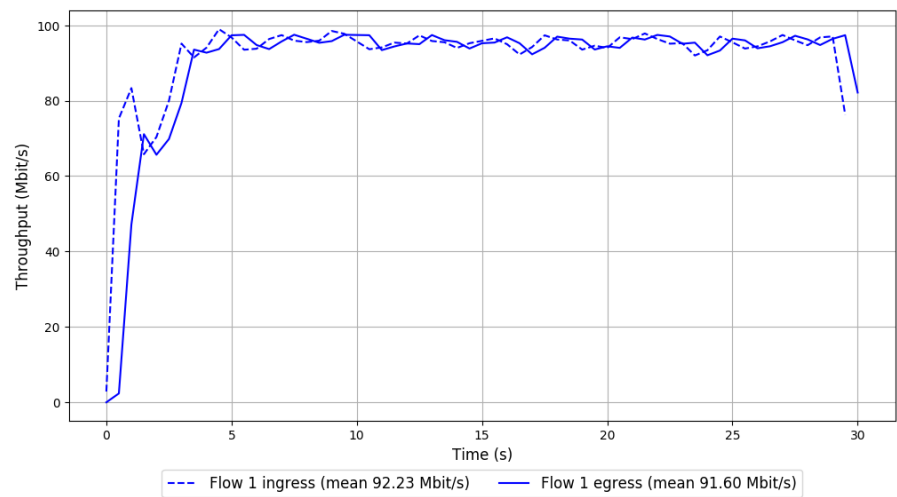
Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 92.23 Mbit/s)   Flow 1 egress (mean 91.60 Mbit/s)

Flow 1 (95th percentile 36.27 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-01-21 05:44:25
End at: 2019-01-21 05:44:55
Local clock offset: 1.227 ms
Remote clock offset: -2.518 ms


# Below is generated by plot.py at 2019-01-21 07:12:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.64 Mbit/s
95th percentile per-packet one-way delay: 33.739 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 91.64 Mbit/s
95th percentile per-packet one-way delay: 33.739 ms
Loss rate: 0.72%
```
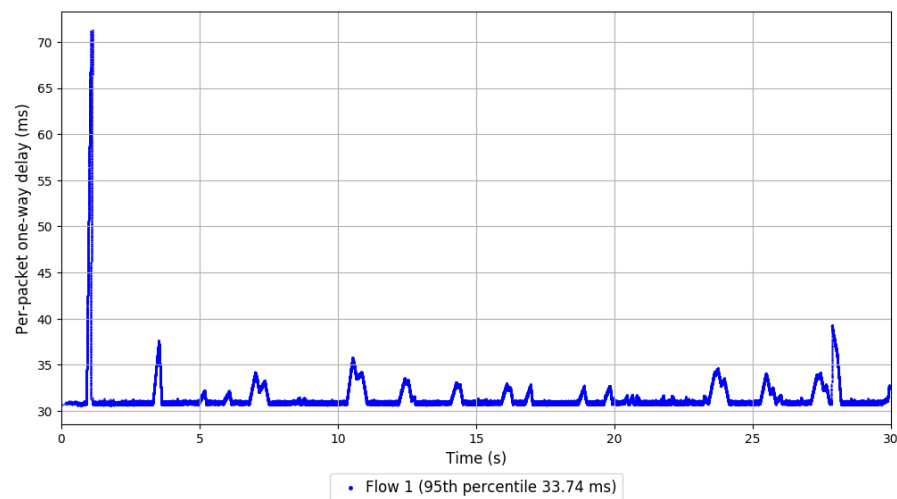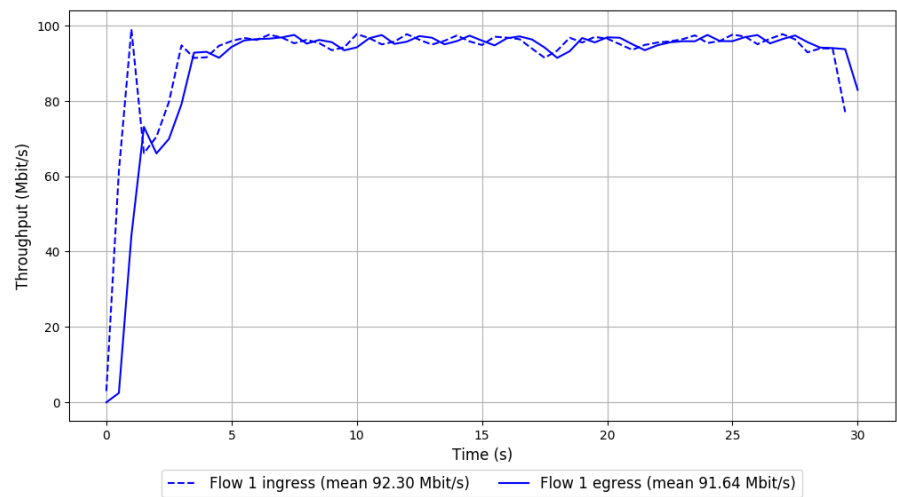
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 92.30 Mbit/s) --- Flow 1 egress (mean 91.64 Mbit/s)

Flow 1 (95th percentile 33.74 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-01-21 06:11:00
End at: 2019-01-21 06:11:30
Local clock offset: 4.295 ms
Remote clock offset: -2.352 ms


# Below is generated by plot.py at 2019-01-21 07:12:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.67 Mbit/s
95th percentile per-packet one-way delay: 38.122 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 91.67 Mbit/s
95th percentile per-packet one-way delay: 38.122 ms
Loss rate: 0.69%
```
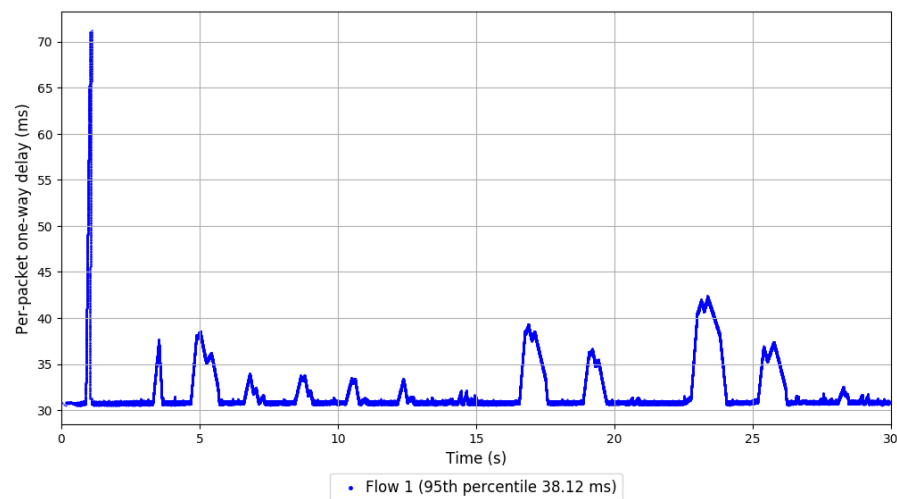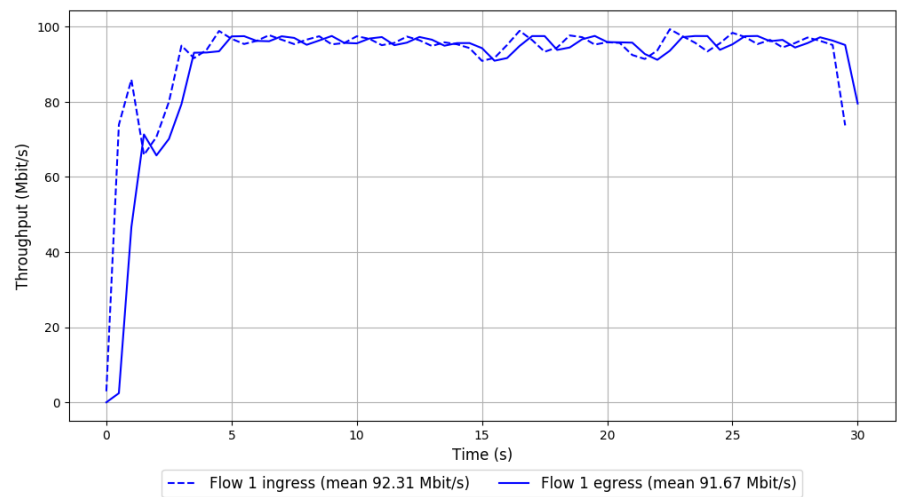
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 92.31 Mbit/s)   Flow 1 egress (mean 91.67 Mbit/s)

Flow 1 (95th percentile 38.12 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-01-21 06:37:47
End at: 2019-01-21 06:38:17
Local clock offset: 3.869 ms
Remote clock offset: -1.903 ms


# Below is generated by plot.py at 2019-01-21 07:12:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.11 Mbit/s
95th percentile per-packet one-way delay: 35.501 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 91.11 Mbit/s
95th percentile per-packet one-way delay: 35.501 ms
Loss rate: 0.73%
```
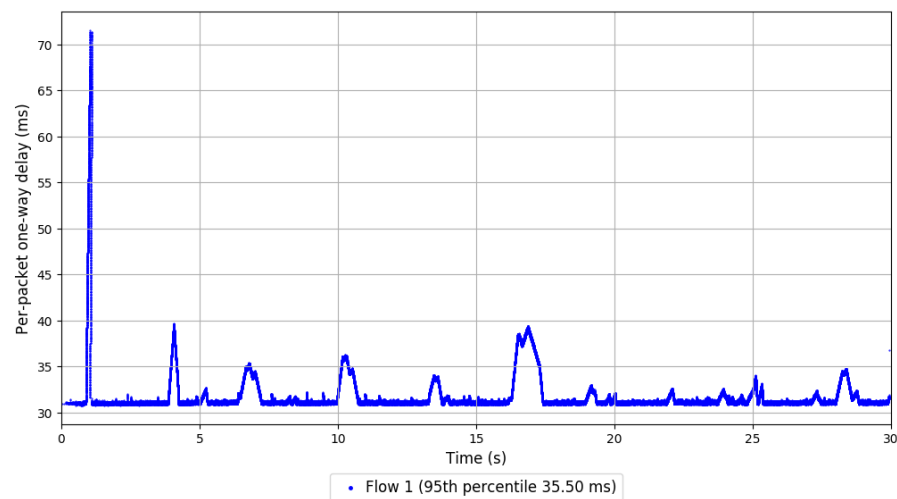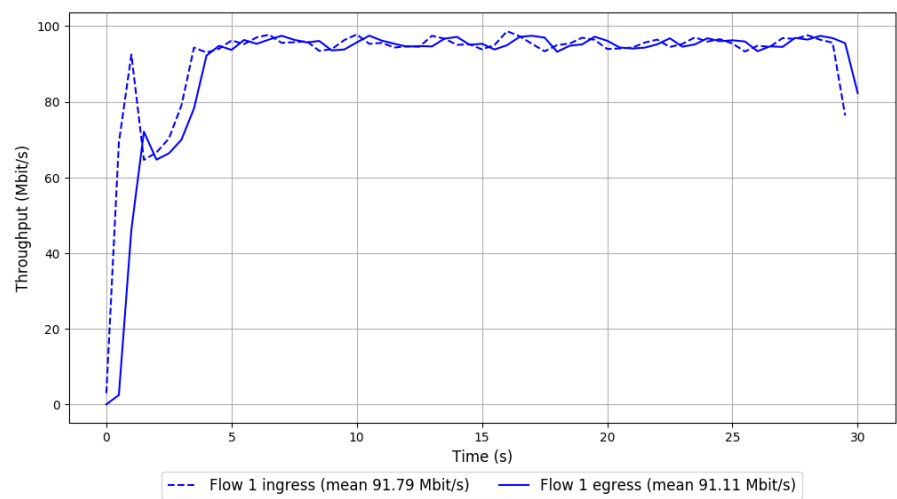
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 91.79 Mbit/s) --- Flow 1 egress (mean 91.11 Mbit/s)

• Flow 1 (95th percentile 35.50 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-01-21 07:02:47
End at: 2019-01-21 07:03:17
Local clock offset: 0.404 ms
Remote clock offset: -2.072 ms


# Below is generated by plot.py at 2019-01-21 07:12:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.78 Mbit/s
95th percentile per-packet one-way delay: 37.016 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 91.78 Mbit/s
95th percentile per-packet one-way delay: 37.016 ms
Loss rate: 0.72%
```
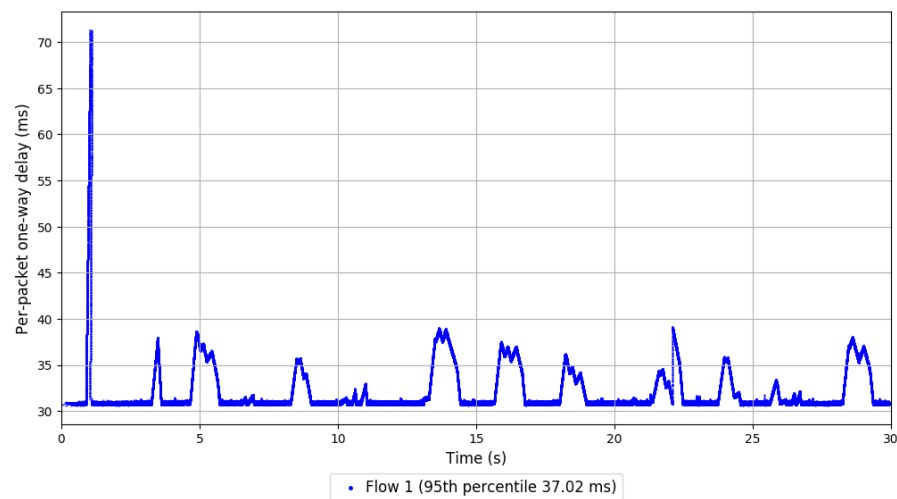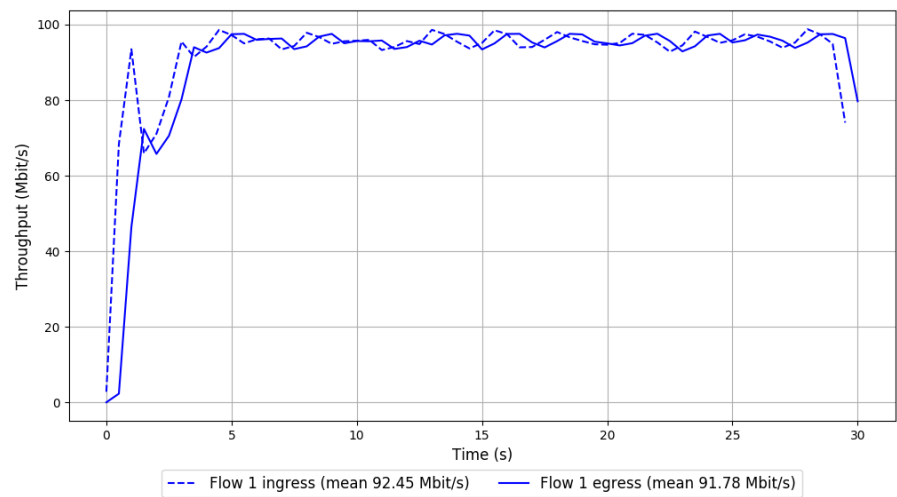
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 92.45 Mbit/s)   Flow 1 egress (mean 91.78 Mbit/s)

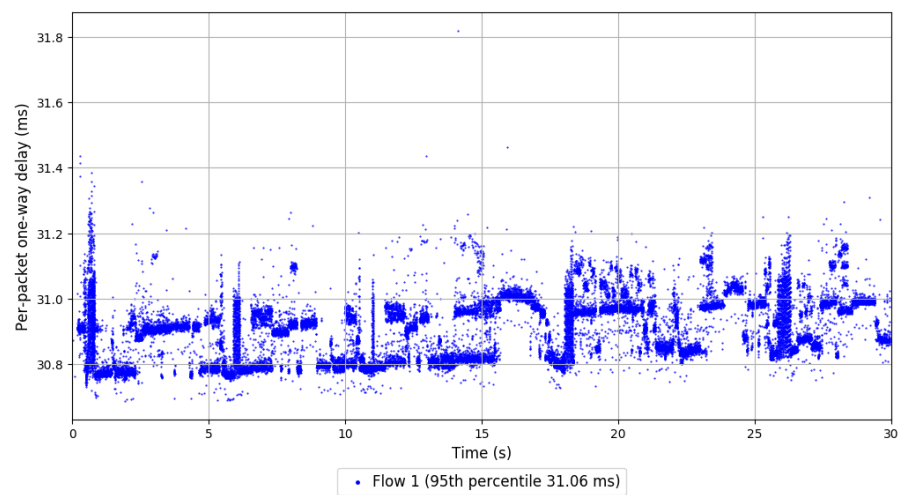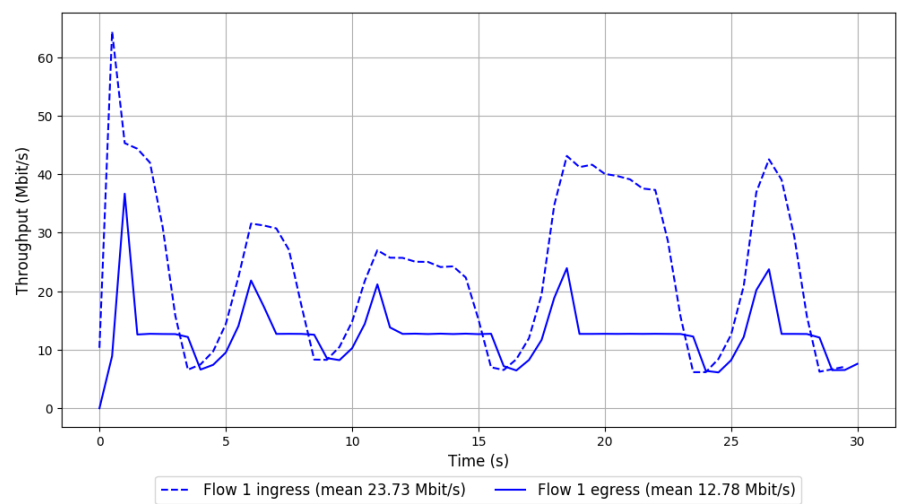

• Flow 1 (95th percentile 37.02 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2019-01-21 05:01:37
End at: 2019-01-21 05:02:08
Local clock offset: -0.736 ms
Remote clock offset: -3.548 ms


# Below is generated by plot.py at 2019-01-21 07:12:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.78 Mbit/s
95th percentile per-packet one-way delay: 31.056 ms
Loss rate: 46.13%
-- Flow 1:
Average throughput: 12.78 Mbit/s
95th percentile per-packet one-way delay: 31.056 ms
Loss rate: 46.13%
```
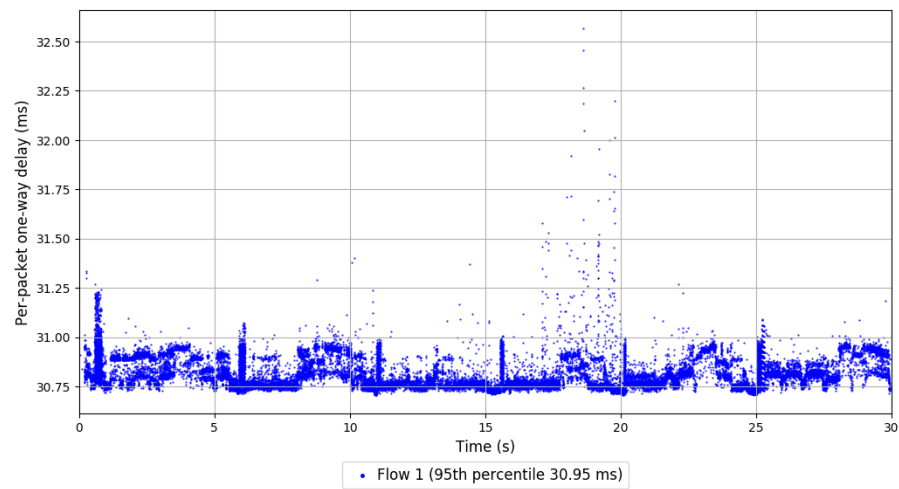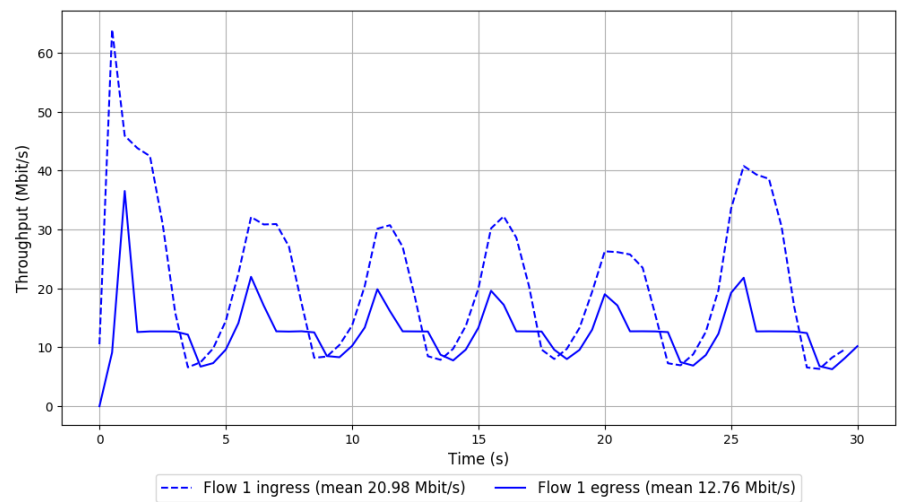
Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2019-01-21 05:27:51
End at: 2019-01-21 05:28:21
Local clock offset: 0.784 ms
Remote clock offset: -2.891 ms


# Below is generated by plot.py at 2019-01-21 07:12:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.76 Mbit/s
95th percentile per-packet one-way delay: 30.949 ms
Loss rate: 39.19%
-- Flow 1:
Average throughput: 12.76 Mbit/s
95th percentile per-packet one-way delay: 30.949 ms
Loss rate: 39.19%
```
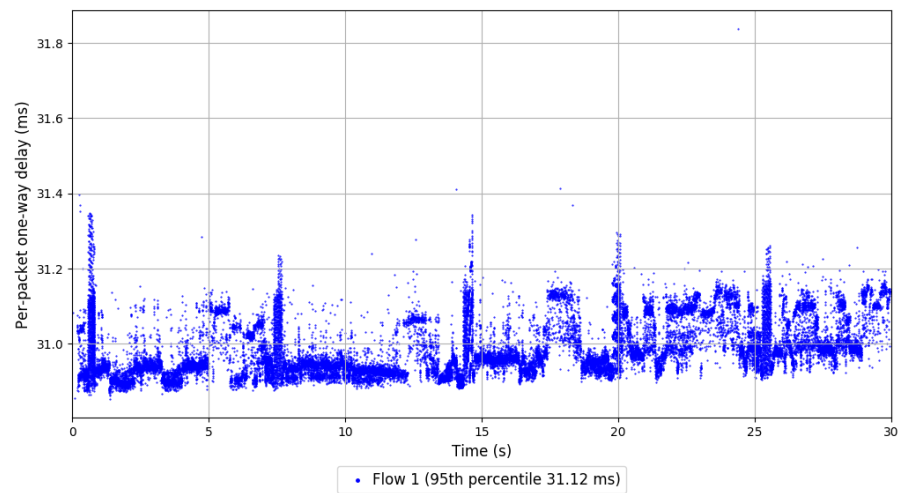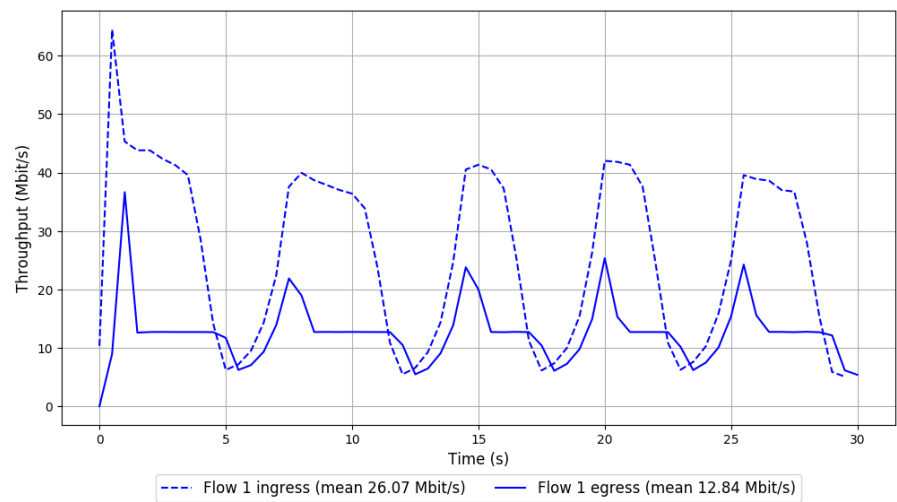
Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2019-01-21 05:54:24
End at: 2019-01-21 05:54:54
Local clock offset: 2.784 ms
Remote clock offset: -2.268 ms


# Below is generated by plot.py at 2019-01-21 07:12:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.84 Mbit/s
95th percentile per-packet one-way delay: 31.125 ms
Loss rate: 50.73%
-- Flow 1:
Average throughput: 12.84 Mbit/s
95th percentile per-packet one-way delay: 31.125 ms
Loss rate: 50.73%
```

Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 26.07 Mbit/s) ----- Flow 1 egress (mean 12.84 Mbit/s)
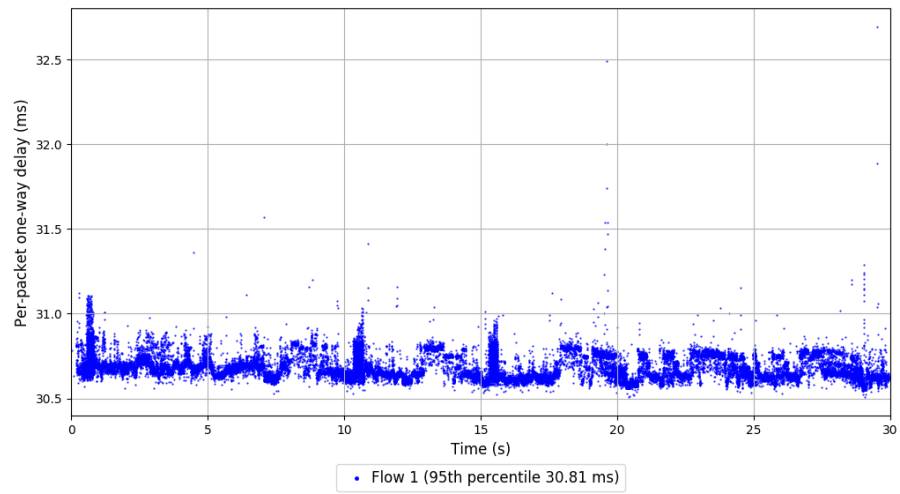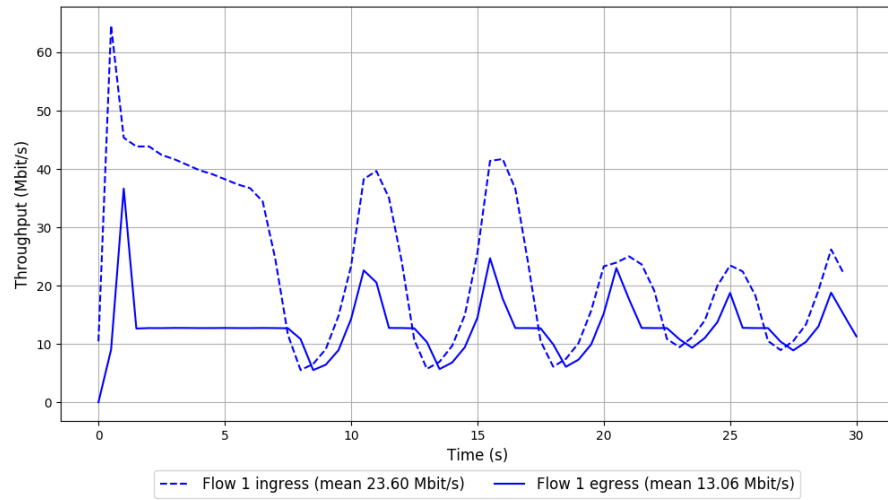

Flow 1 (95th percentile 31.12 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2019-01-21 06:21:18
End at: 2019-01-21 06:21:48
Local clock offset: 4.048 ms
Remote clock offset: -2.236 ms


# Below is generated by plot.py at 2019-01-21 07:12:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.06 Mbit/s
95th percentile per-packet one-way delay: 30.809 ms
Loss rate: 44.66%
-- Flow 1:
Average throughput: 13.06 Mbit/s
95th percentile per-packet one-way delay: 30.809 ms
Loss rate: 44.66%
```
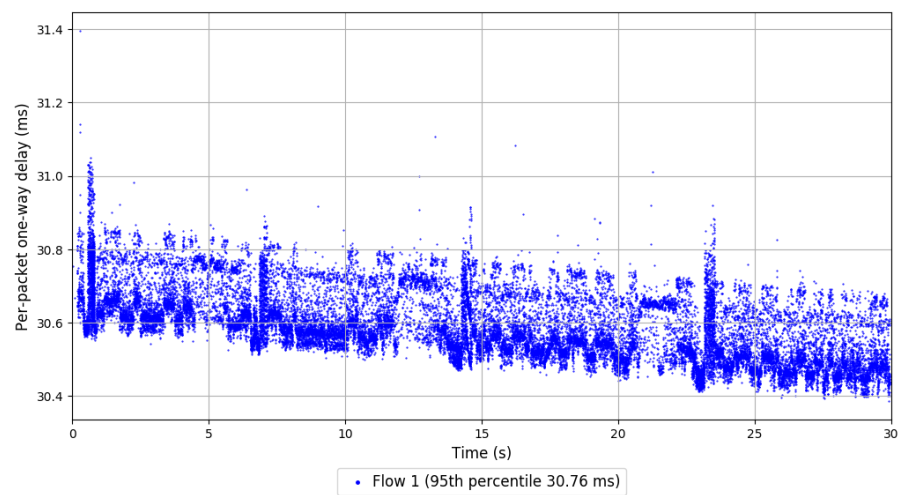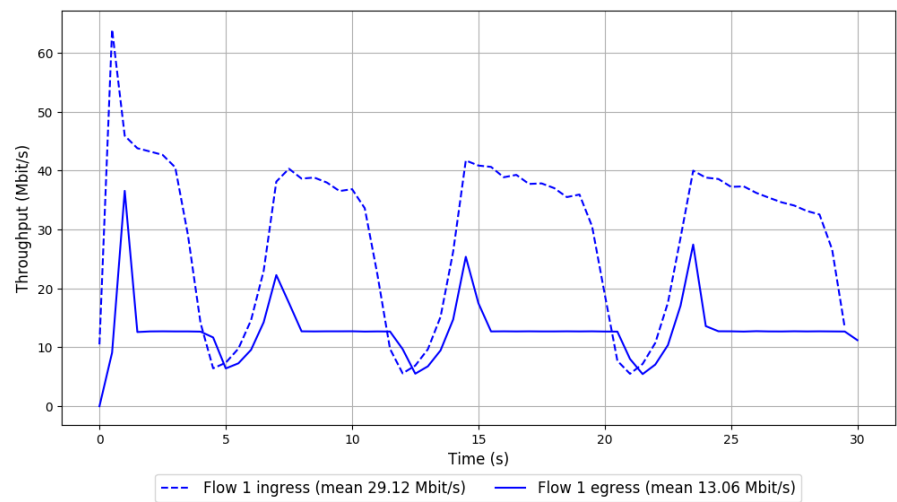
Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2019-01-21 06:47:26
End at: 2019-01-21 06:47:56
Local clock offset: 3.447 ms
Remote clock offset: -2.081 ms


# Below is generated by plot.py at 2019-01-21 07:12:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.06 Mbit/s
95th percentile per-packet one-way delay: 30.764 ms
Loss rate: 55.15%
-- Flow 1:
Average throughput: 13.06 Mbit/s
95th percentile per-packet one-way delay: 30.764 ms
Loss rate: 55.15%
```

Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 29.12 Mbit/s) --- Flow 1 egress (mean 13.06 Mbit/s)

Flow 1 (95th percentile 30.76 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-21 05:03:57
End at: 2019-01-21 05:04:27
Local clock offset: -0.314 ms
Remote clock offset: -3.439 ms


# Below is generated by plot.py at 2019-01-21 07:13:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.04 Mbit/s
95th percentile per-packet one-way delay: 57.924 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 79.04 Mbit/s
95th percentile per-packet one-way delay: 57.924 ms
Loss rate: 1.73%
```
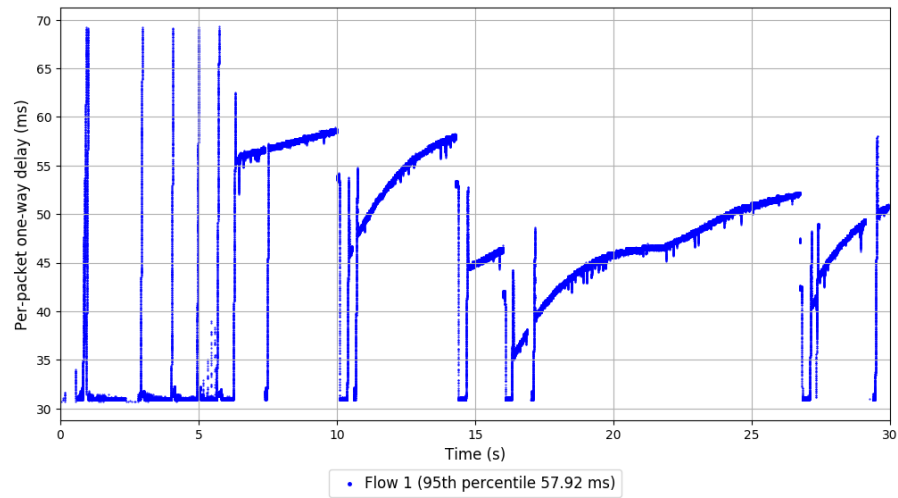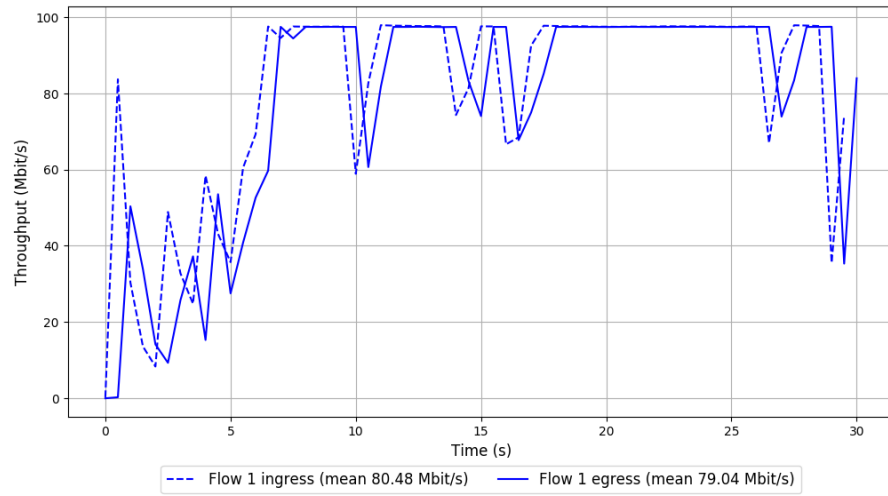
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-01-21 05:30:18
End at: 2019-01-21 05:30:48
Local clock offset: 0.818 ms
Remote clock offset: -2.819 ms


# Below is generated by plot.py at 2019-01-21 07:13:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.91 Mbit/s
95th percentile per-packet one-way delay: 63.420 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 79.91 Mbit/s
95th percentile per-packet one-way delay: 63.420 ms
Loss rate: 1.76%
```
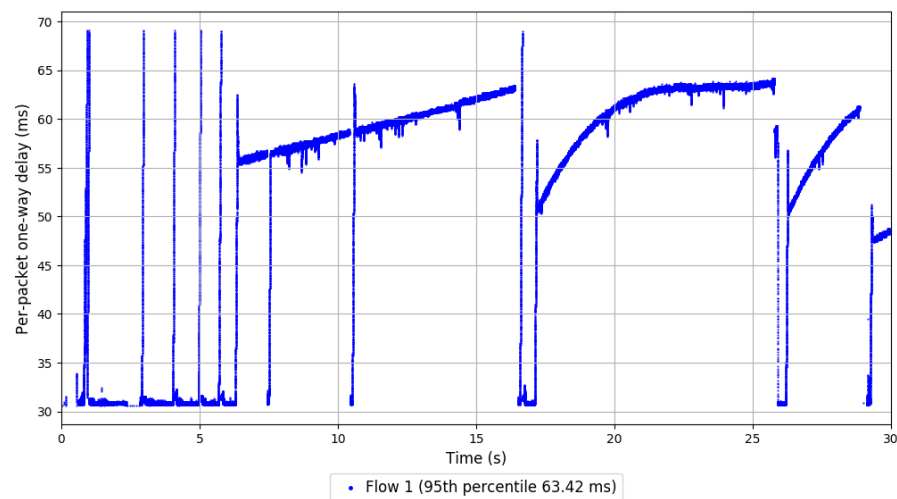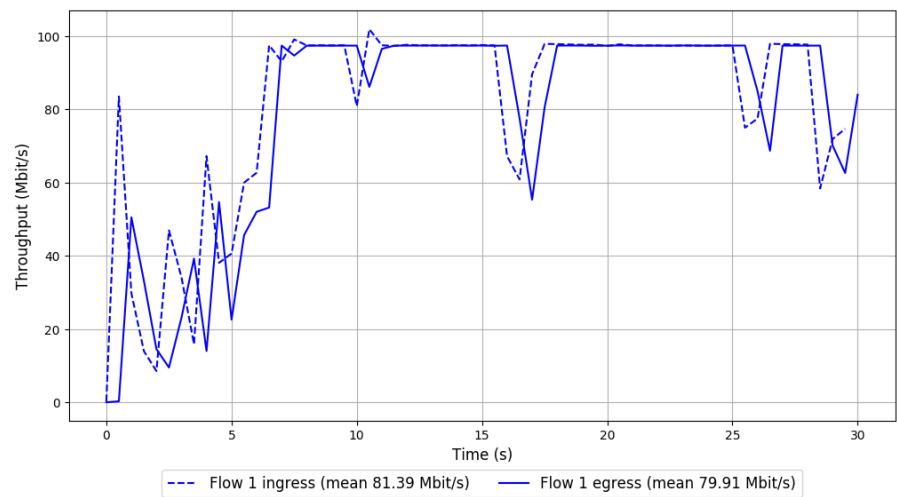
Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 81.39 Mbit/s)   Flow 1 egress (mean 79.91 Mbit/s)

• Flow 1 (95th percentile 63.42 ms)

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-01-21 05:56:58
End at: 2019-01-21 05:57:28
Local clock offset: 3.079 ms
Remote clock offset: -2.272 ms


# Below is generated by plot.py at 2019-01-21 07:13:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.64 Mbit/s
95th percentile per-packet one-way delay: 68.175 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 88.64 Mbit/s
95th percentile per-packet one-way delay: 68.175 ms
Loss rate: 0.55%
```
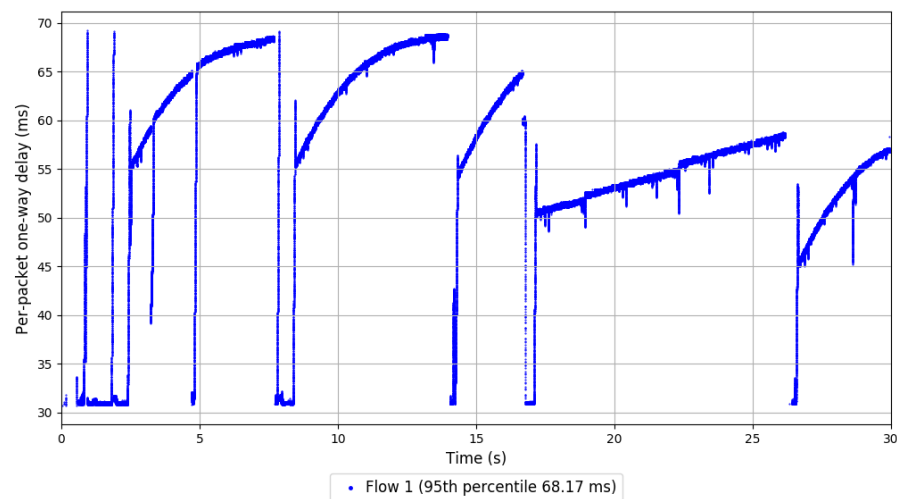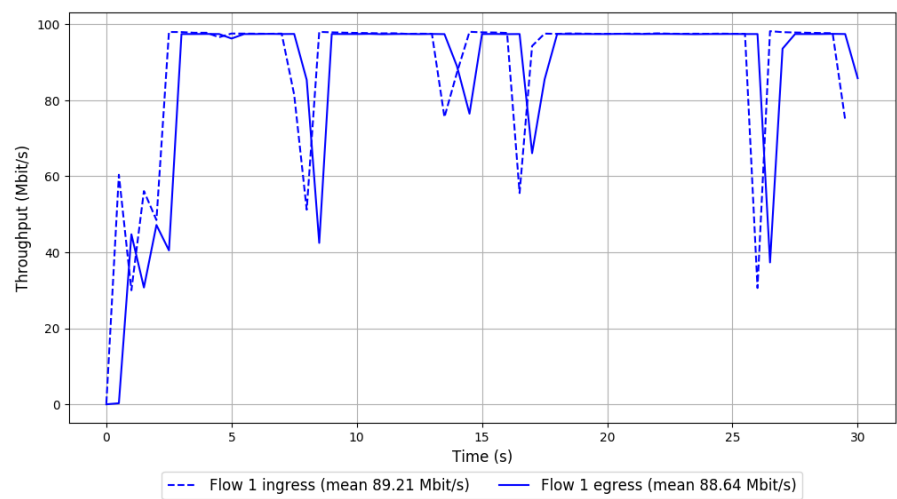
Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-01-21 06:23:48
End at: 2019-01-21 06:24:18
Local clock offset: 3.922 ms
Remote clock offset: -2.271 ms


# Below is generated by plot.py at 2019-01-21 07:13:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.21 Mbit/s
95th percentile per-packet one-way delay: 67.010 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 79.21 Mbit/s
95th percentile per-packet one-way delay: 67.010 ms
Loss rate: 1.80%
```
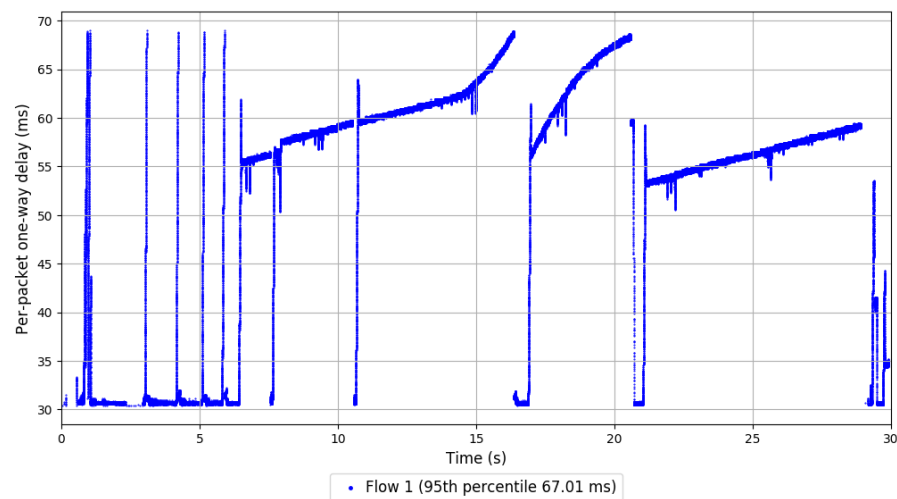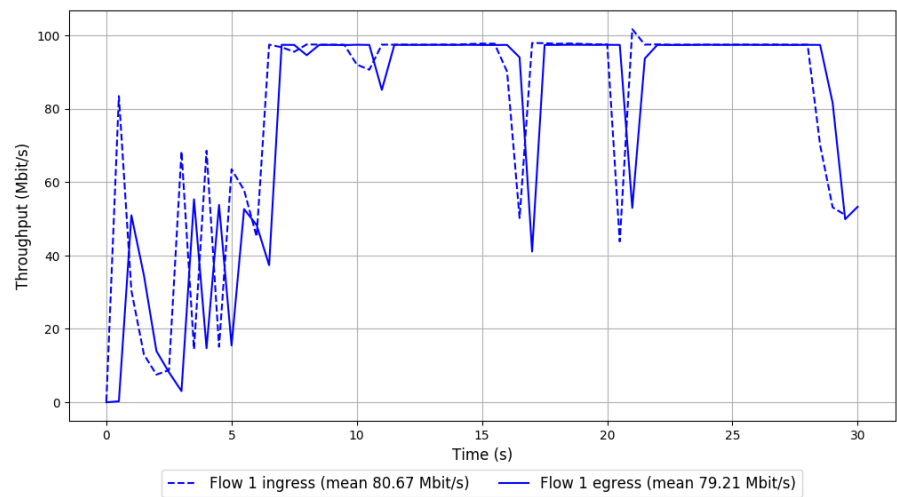
Run 4: Report of QUIC Cubic — Data Link

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```
Run 5: Statistics of QUIC Cubic

Start at: 2019-01-21 06:49:51
End at: 2019-01-21 06:50:21
Local clock offset: 2.671 ms
Remote clock offset: -2.285 ms


# Below is generated by plot.py at 2019-01-21 07:13:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.85 Mbit/s
95th percentile per-packet one-way delay: 67.166 ms
Loss rate: 1.79%
-- Flow 1:
Average throughput: 79.85 Mbit/s
95th percentile per-packet one-way delay: 67.166 ms
Loss rate: 1.79%
```
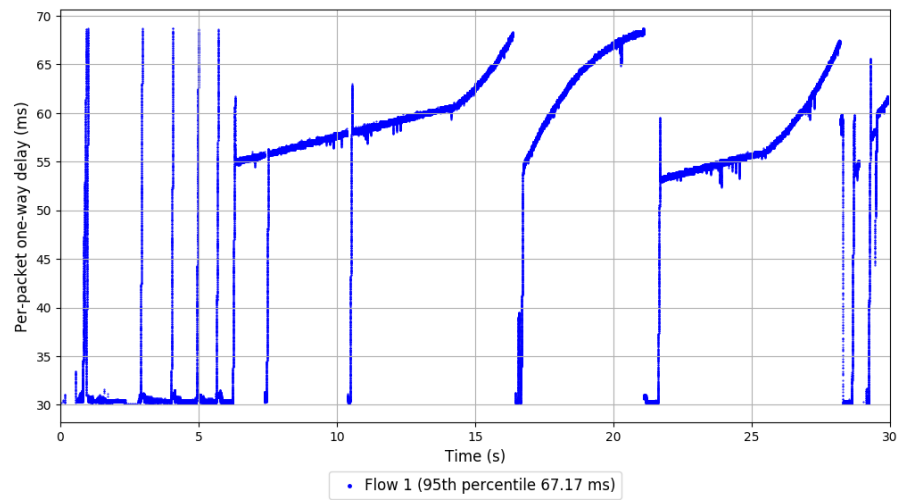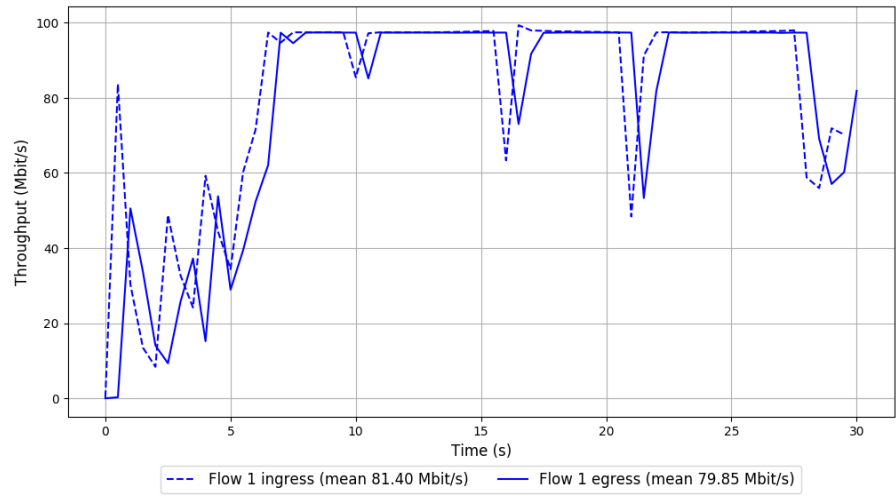
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 81.40 Mbit/s)   Flow 1 egress (mean 79.85 Mbit/s)
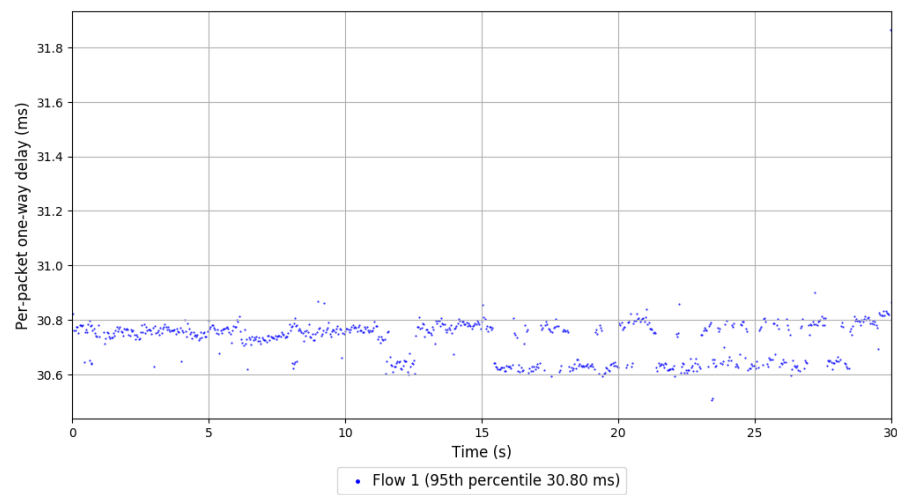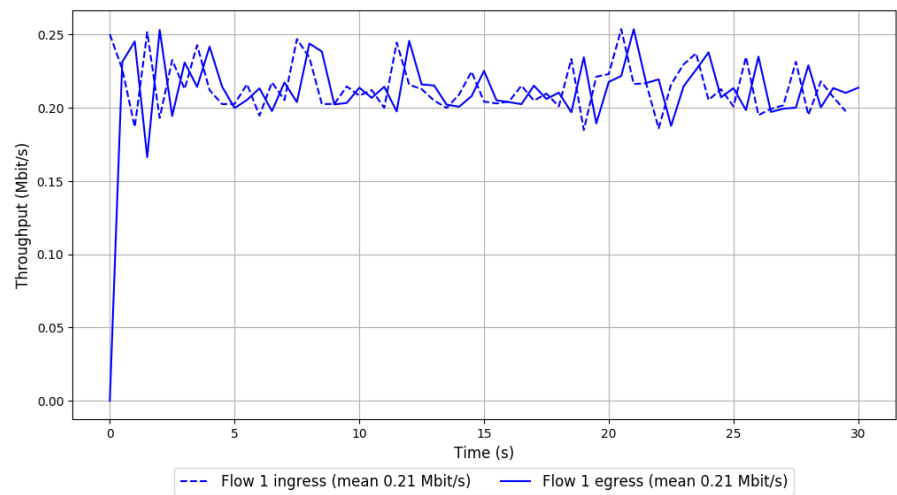

Flow 1 (95th percentile 67.17 ms)

```
Run 1: Statistics of SCReAM

Start at: 2019-01-21 05:08:55
End at: 2019-01-21 05:09:25
Local clock offset: 0.415 ms
Remote clock offset: -3.474 ms


# Below is generated by plot.py at 2019-01-21 07:13:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.805 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.805 ms
Loss rate: 0.00%
```
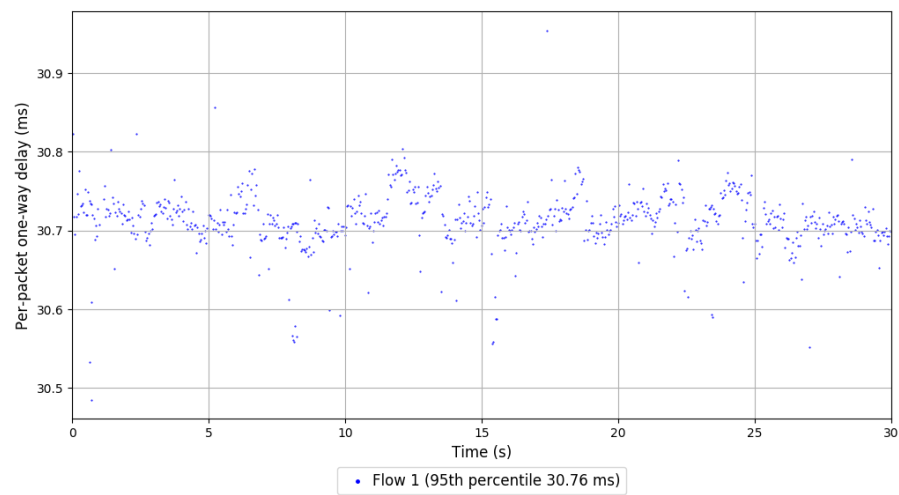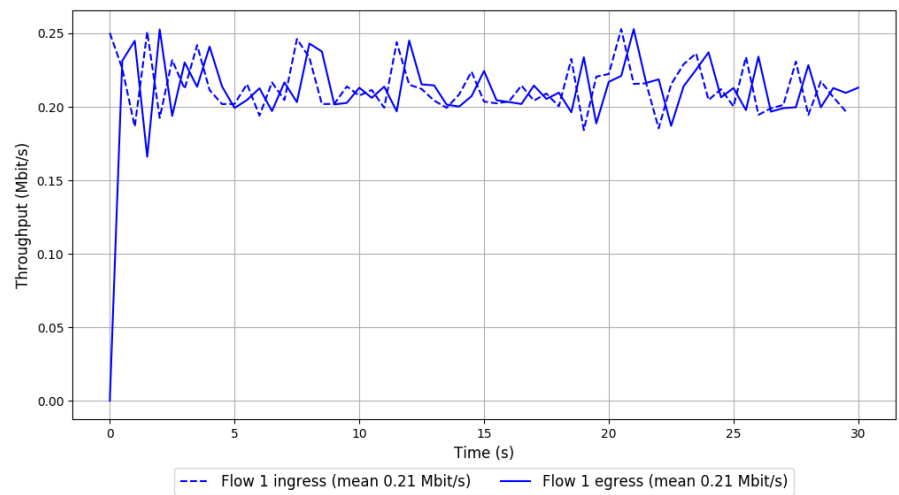
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2019-01-21 05:35:08
End at: 2019-01-21 05:35:38
Local clock offset: 0.925 ms
Remote clock offset: -2.893 ms


# Below is generated by plot.py at 2019-01-21 07:13:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.763 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.763 ms
Loss rate: 0.00%
```
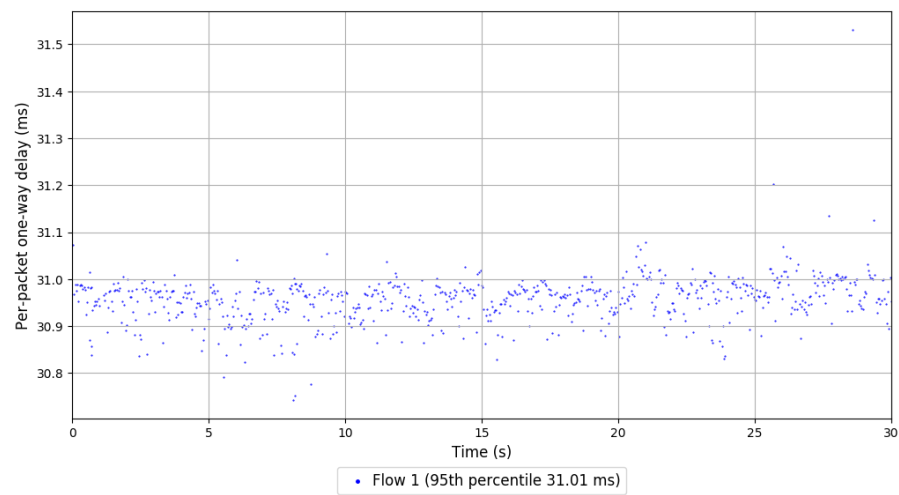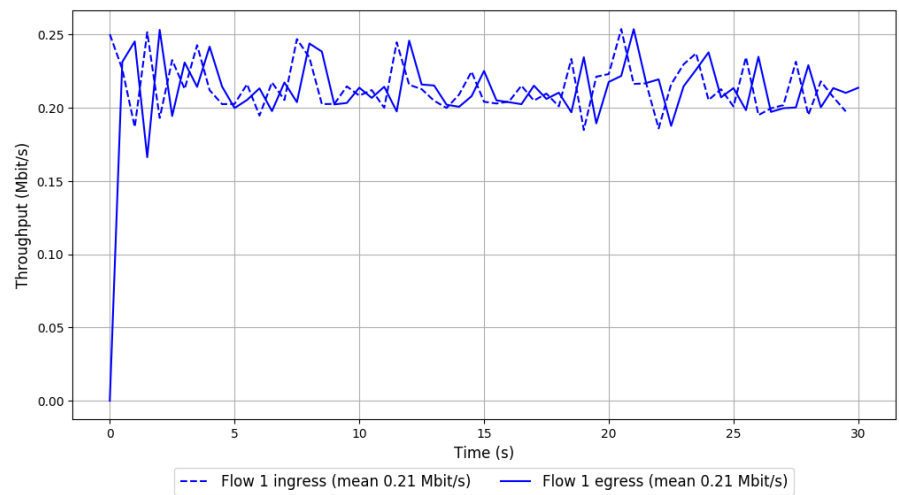
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2019-01-21 06:02:01
End at: 2019-01-21 06:02:31
Local clock offset: 3.575 ms
Remote clock offset: -2.162 ms


# Below is generated by plot.py at 2019-01-21 07:13:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 31.014 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 31.014 ms
Loss rate: 0.00%
```
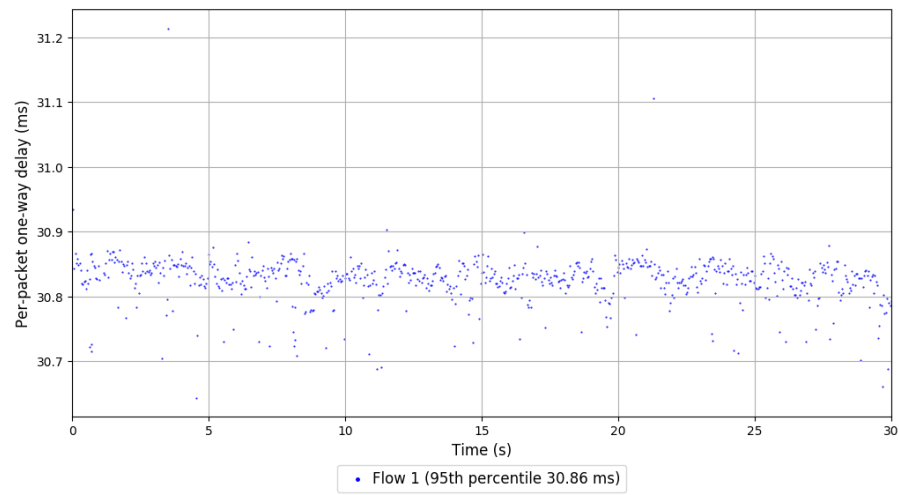
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-01-21 06:28:48
End at: 2019-01-21 06:29:18
Local clock offset: 3.857 ms
Remote clock offset: -2.009 ms


# Below is generated by plot.py at 2019-01-21 07:13:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.861 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.861 ms
Loss rate: 0.00%
```
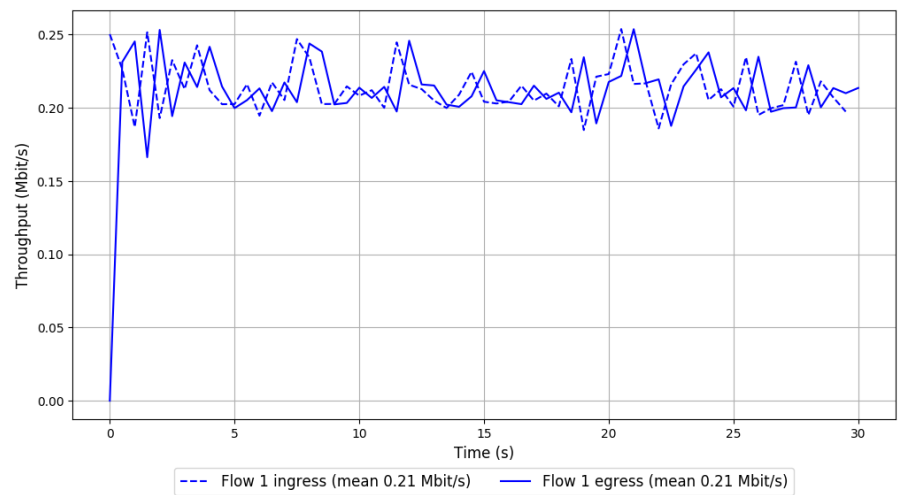
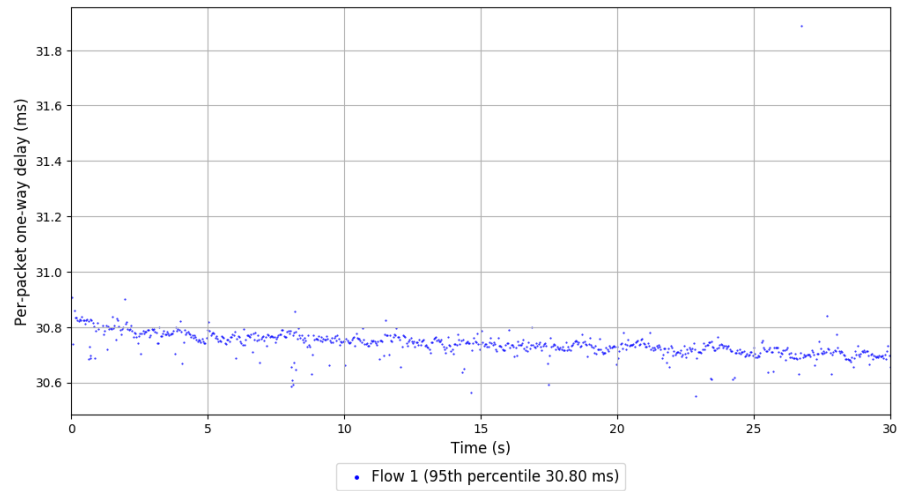Run 4: Report of SCReAM — Data Link

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```
Run 5: Statistics of SCReAM

Start at: 2019-01-21 06:54:35
End at: 2019-01-21 06:55:05
Local clock offset: 1.463 ms
Remote clock offset: -2.093 ms


# Below is generated by plot.py at 2019-01-21 07:13:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.800 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.800 ms
Loss rate: 0.00%
```
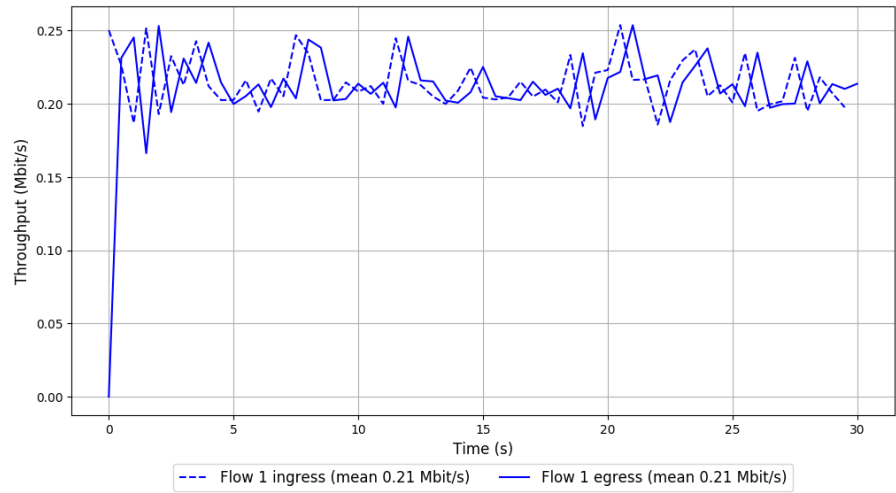
Run 5: Report of SCReAM — Data Link

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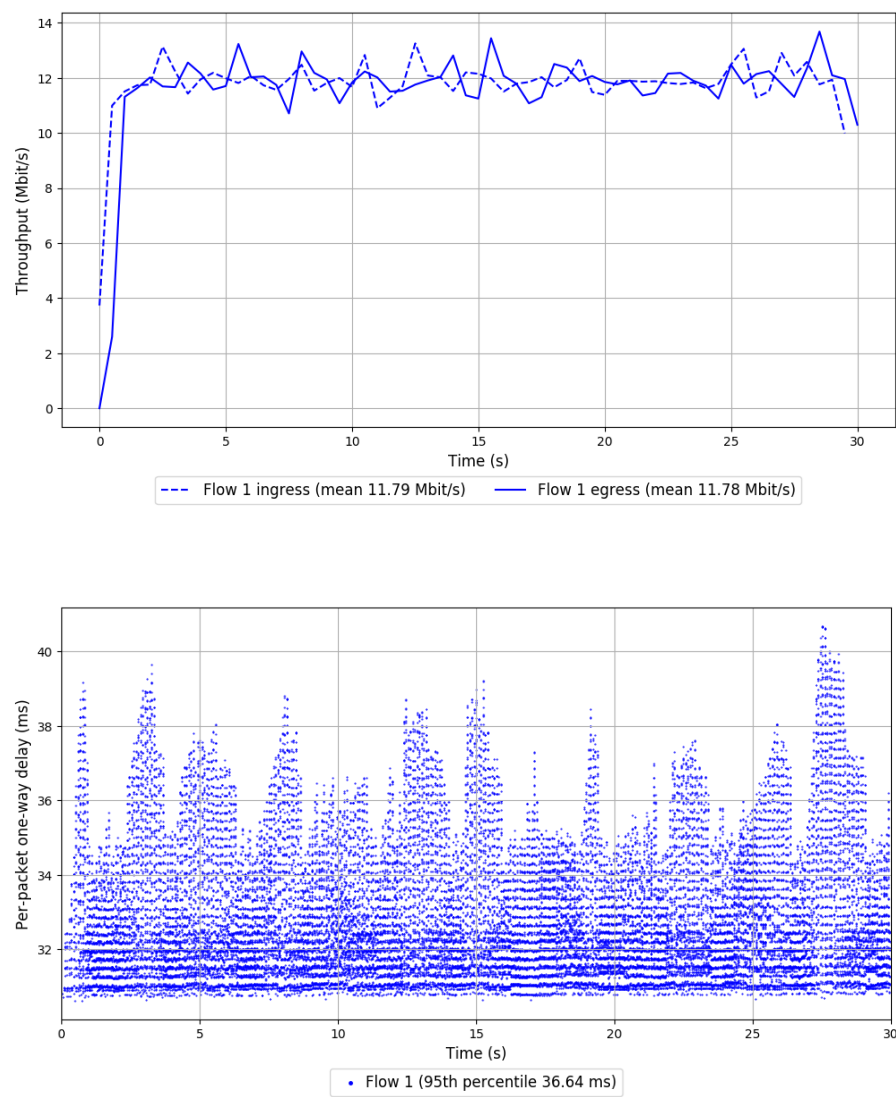

Flow 1 (95th percentile 30.80 ms)

```
Run 1: Statistics of Sprout

Start at: 2019-01-21 05:05:09
End at: 2019-01-21 05:05:39
Local clock offset: -0.083 ms
Remote clock offset: -3.484 ms


# Below is generated by plot.py at 2019-01-21 07:13:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.78 Mbit/s
95th percentile per-packet one-way delay: 36.642 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 11.78 Mbit/s
95th percentile per-packet one-way delay: 36.642 ms
Loss rate: 0.03%
```

Run 1: Report of Sprout — Data Link

Flow 1 ingress (mean 11.79 Mbit/s)   Flow 1 egress (mean 11.78 Mbit/s)

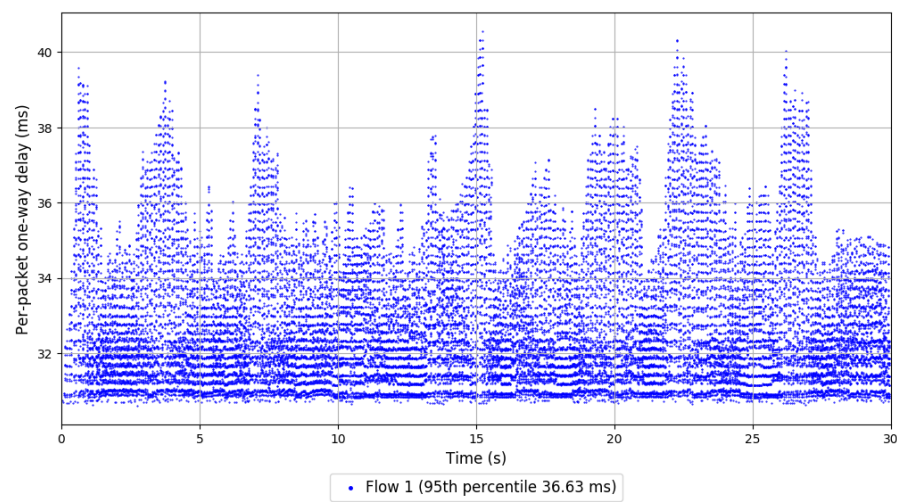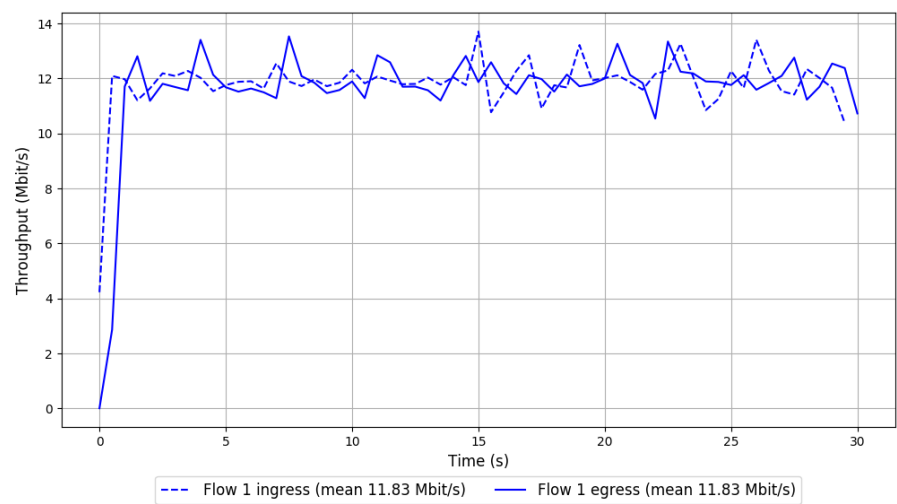

• Flow 1 (95th percentile 36.64 ms)

Run 2: Statistics of Sprout

Start at: 2019-01-21 05:31:32
End at: 2019-01-21 05:32:02
Local clock offset: 0.842 ms
Remote clock offset: -2.864 ms

Below is generated by plot.py at 2019-01-21 07:13:44
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.83 Mbit/s
95th percentile per-packet one-way delay: 36.629 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 11.83 Mbit/s
95th percentile per-packet one-way delay: 36.629 ms
Loss rate: 0.06%
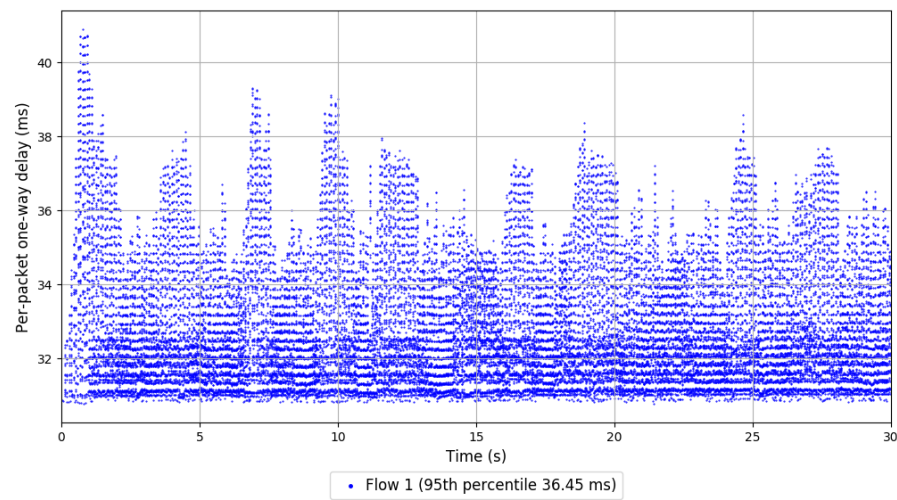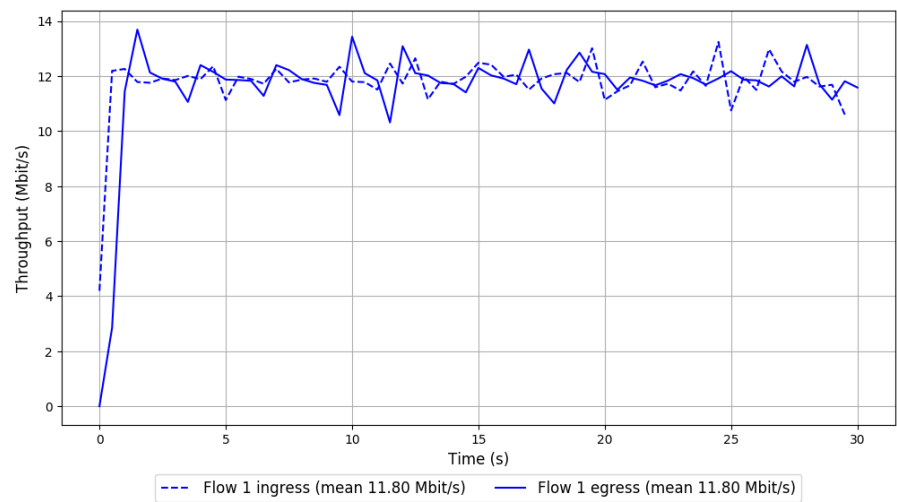
Run 2: Report of Sprout — Data Link

Flow 1 ingress (mean 11.83 Mbit/s) --- Flow 1 egress (mean 11.83 Mbit/s)

• Flow 1 (95th percentile 36.63 ms)

```
Run 3: Statistics of Sprout

Start at: 2019-01-21 05:58:17
End at: 2019-01-21 05:58:47
Local clock offset: 3.216 ms
Remote clock offset: -2.286 ms


# Below is generated by plot.py at 2019-01-21 07:13:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 36.447 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 36.447 ms
Loss rate: 0.03%
```

Run 3: Report of Sprout — Data Link

Flow 1 ingress (mean 11.80 Mbit/s)   Flow 1 egress (mean 11.80 Mbit/s)

Flow 1 (95th percentile 36.45 ms)

```
Run 4: Statistics of Sprout

Start at: 2019-01-21 06:25:03
End at: 2019-01-21 06:25:33
Local clock offset: 3.85 ms
Remote clock offset: -2.2 ms


# Below is generated by plot.py at 2019-01-21 07:13:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.78 Mbit/s
95th percentile per-packet one-way delay: 35.968 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.78 Mbit/s
95th percentile per-packet one-way delay: 35.968 ms
Loss rate: 0.00%
```
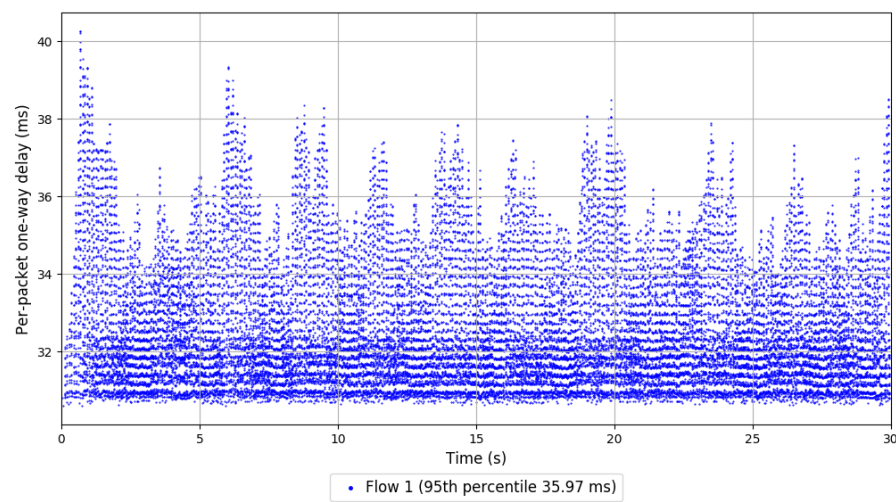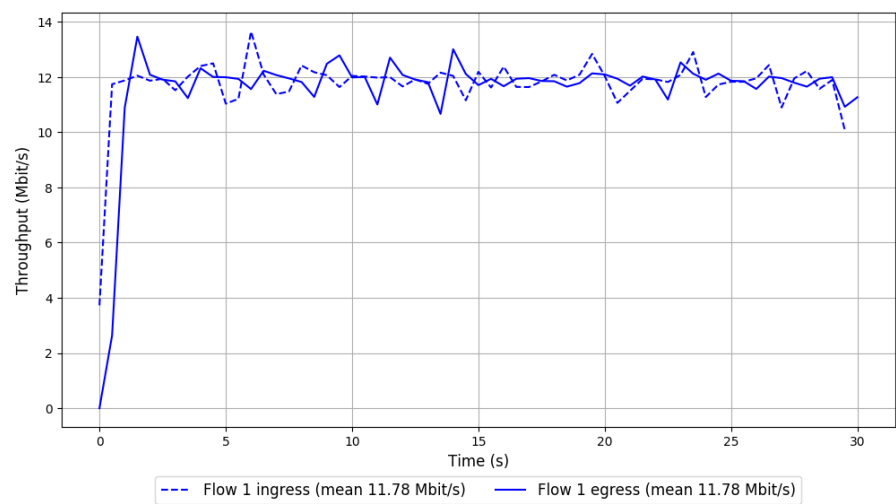
Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 11.78 Mbit/s)   Flow 1 egress (mean 11.78 Mbit/s)

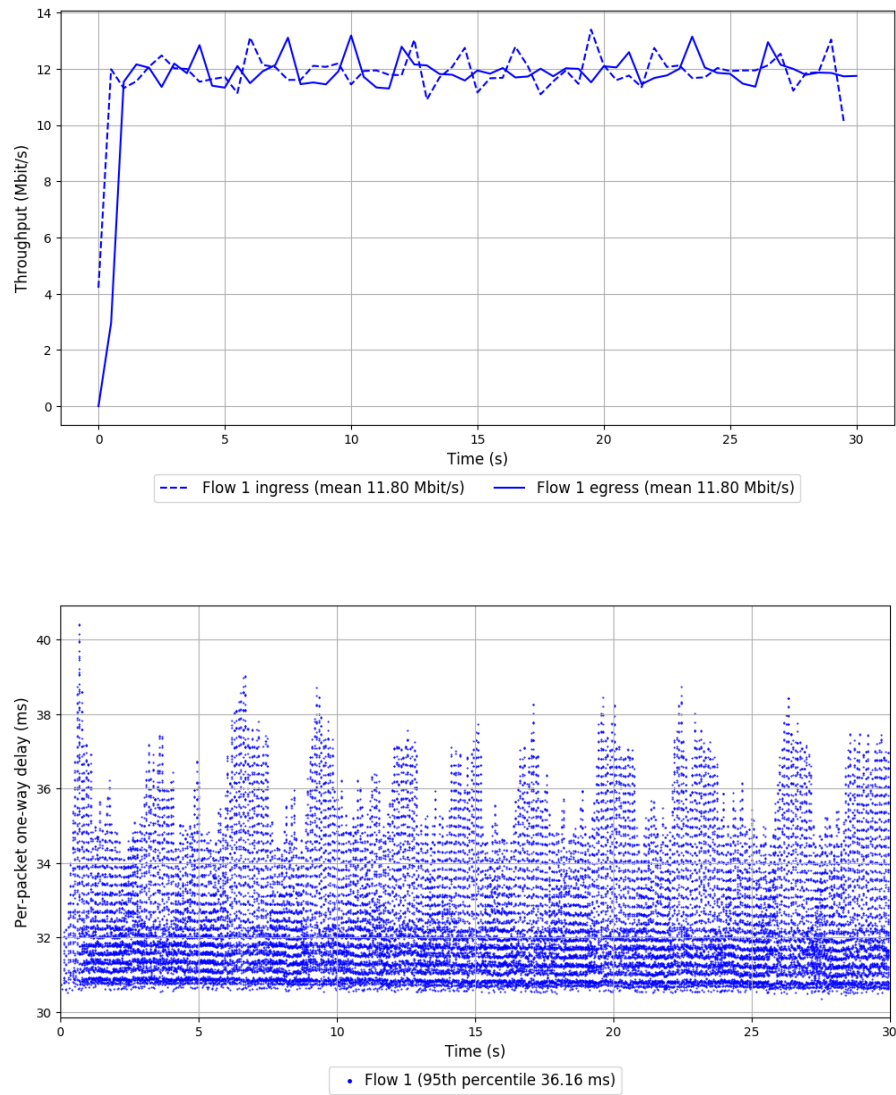

• Flow 1 (95th percentile 35.97 ms)

```
Run 5: Statistics of Sprout

Start at: 2019-01-21 06:51:04
End at: 2019-01-21 06:51:34
Local clock offset: 2.314 ms
Remote clock offset: -2.088 ms


# Below is generated by plot.py at 2019-01-21 07:13:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 36.165 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 36.165 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

Flow 1 ingress (mean 11.80 Mbit/s) —— Flow 1 egress (mean 11.80 Mbit/s)

• Flow 1 (95th percentile 36.16 ms)
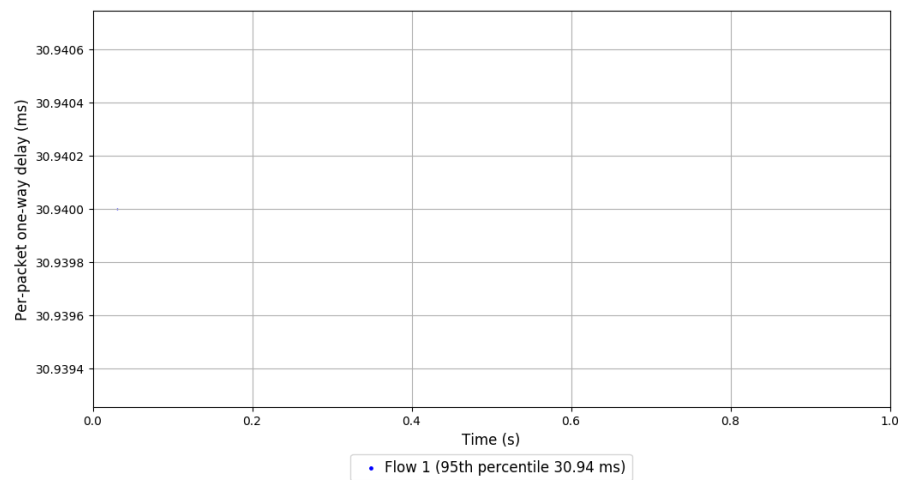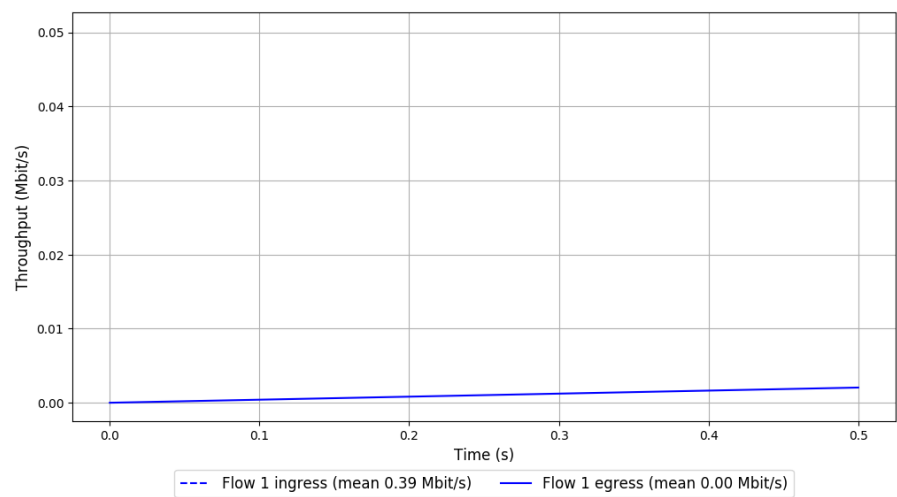
```
Run 1: Statistics of TaoVA-100x

Start at: 2019-01-21 04:57:00
End at: 2019-01-21 04:57:30
Local clock offset: -2.013 ms
Remote clock offset: -3.556 ms
```

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

Flow 1 ingress (mean 0.39 Mbit/s)   Flow 1 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 30.94 ms)
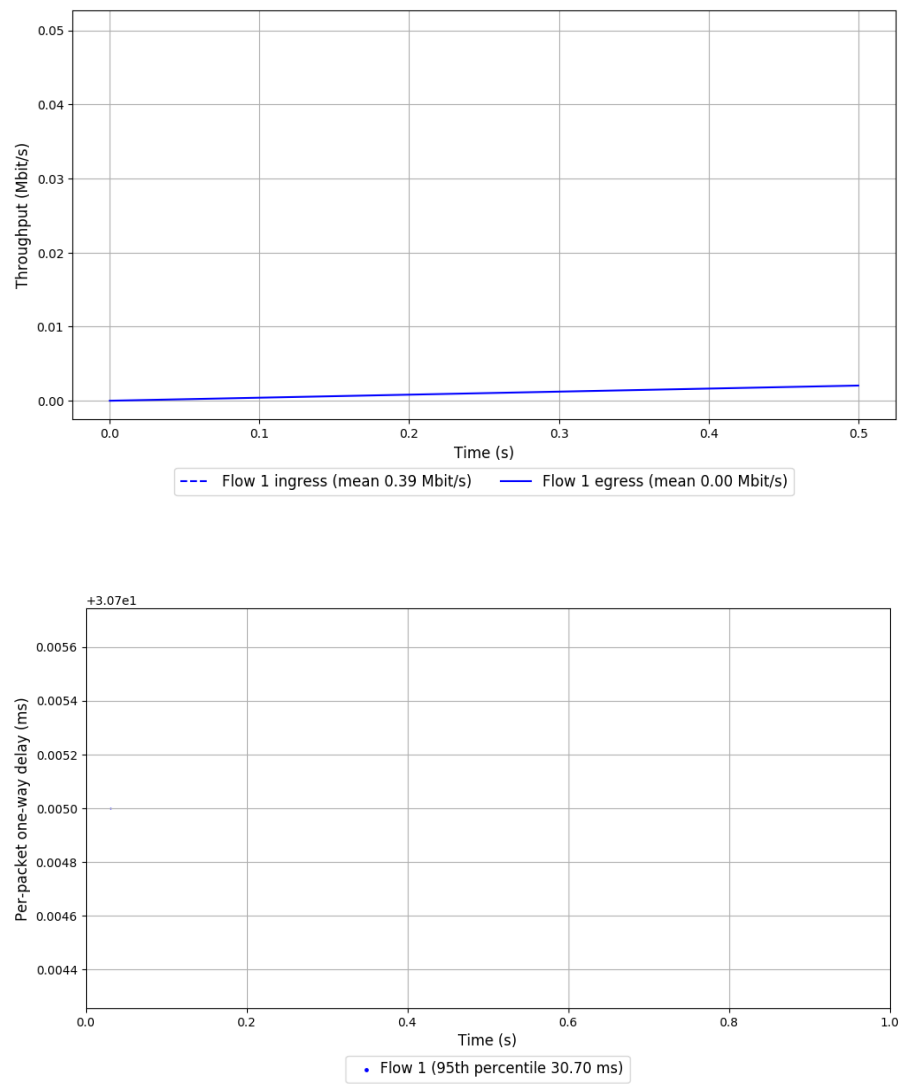
```
Run 2: Statistics of TaoVA-100x

Start at: 2019-01-21 05:23:00
End at: 2019-01-21 05:23:30
Local clock offset: 0.805 ms
Remote clock offset: -3.019 ms
```

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

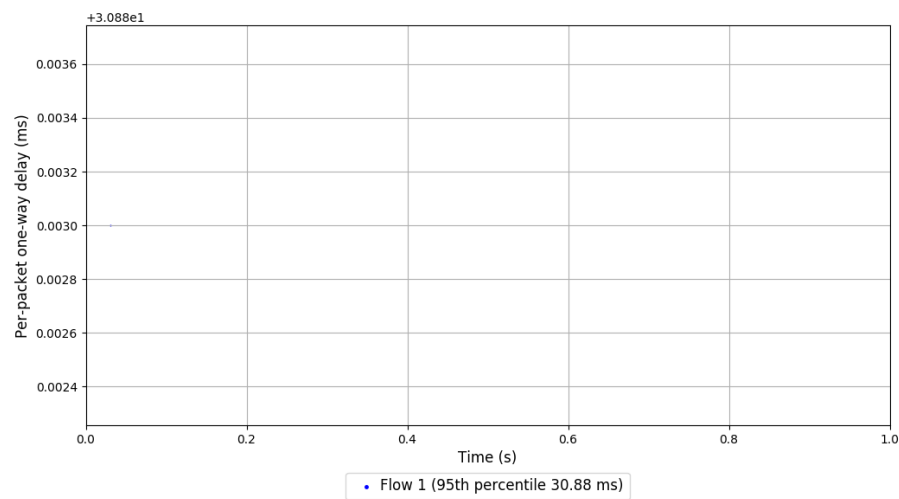

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```
Run 3: Statistics of TaoVA-100x

Start at: 2019-01-21 05:49:15
End at: 2019-01-21 05:49:45
Local clock offset: 1.946 ms
Remote clock offset: -2.512 ms
```
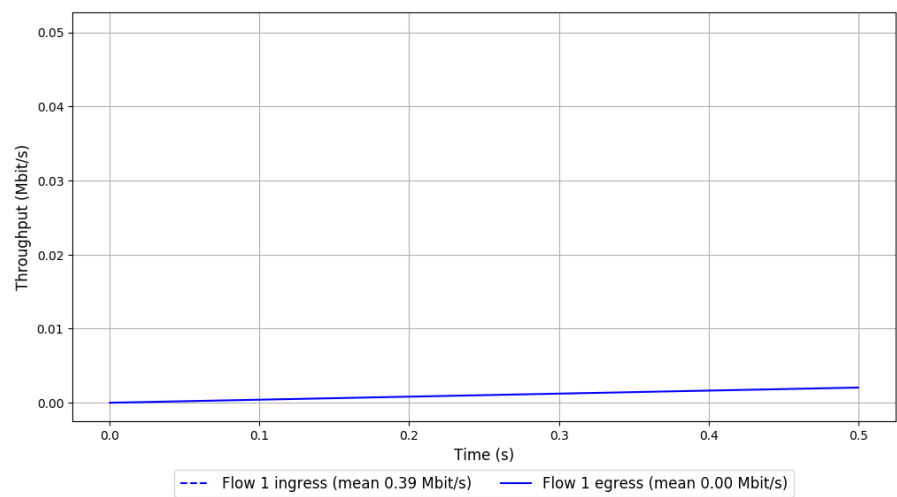
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 0.39 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 30.88 ms)
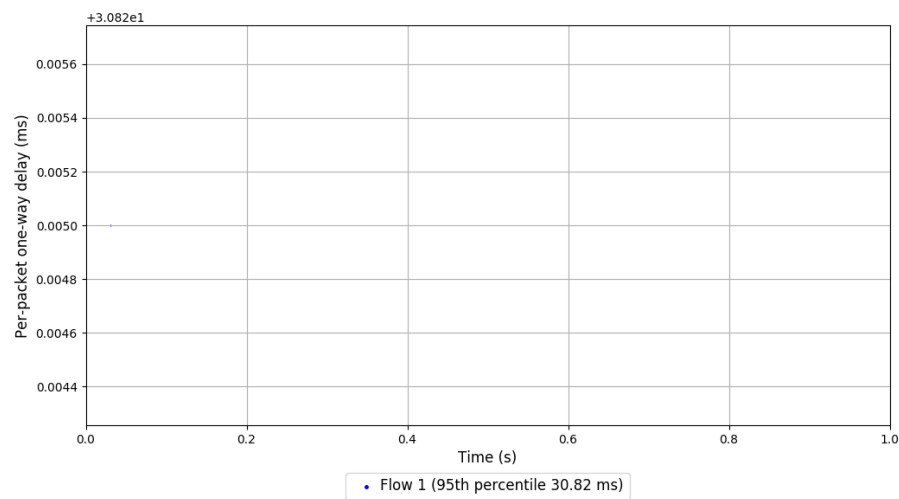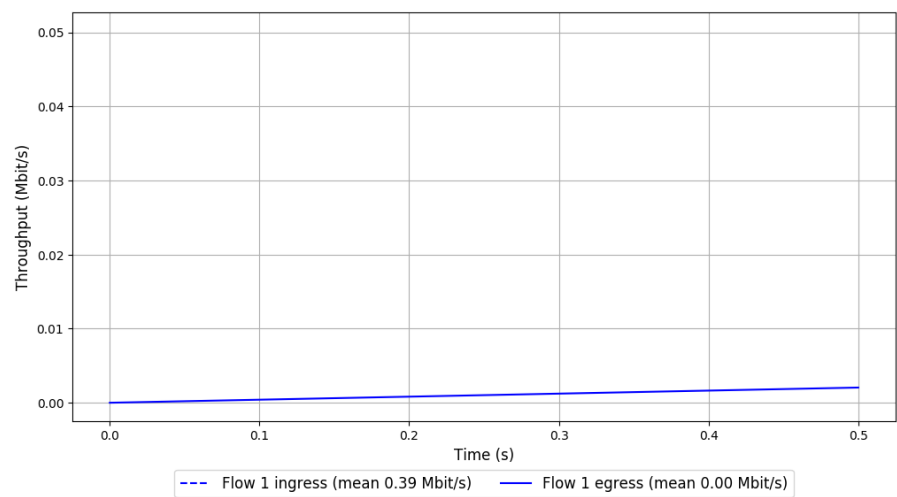
Run 4: Statistics of TaoVA-100x

Start at: 2019-01-21 06:16:14
End at: 2019-01-21 06:16:44
Local clock offset: 4.638 ms
Remote clock offset: -2.069 ms

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

Flow 1 ingress (mean 0.39 Mbit/s)   Flow 1 egress (mean 0.00 Mbit/s)

Flow 1 (95th percentile 30.82 ms)
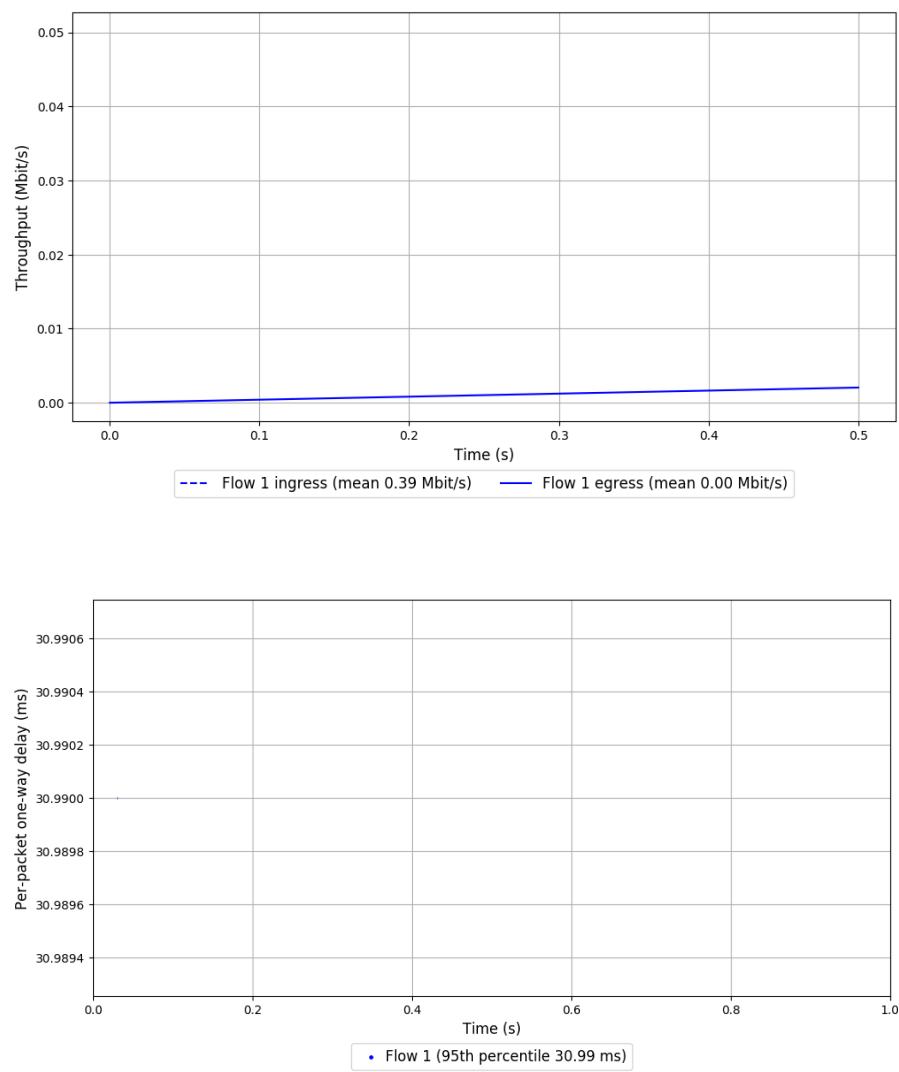
172

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

Start at: 2019-01-21 06:42:40
End at: 2019-01-21 06:43:10
Local clock offset: 3.995 ms
Remote clock offset: -2.028 ms
```

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

Flow 1 ingress (mean 0.39 Mbit/s) --- Flow 1 egress (mean 0.00 Mbit/s)
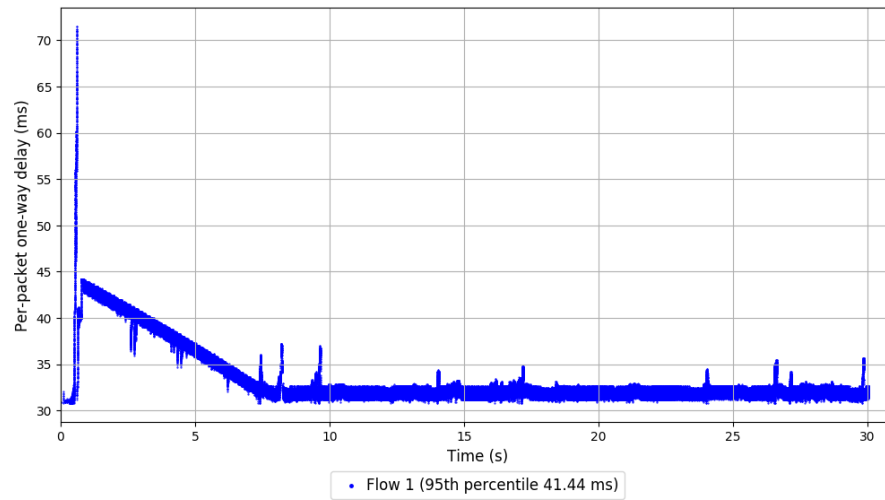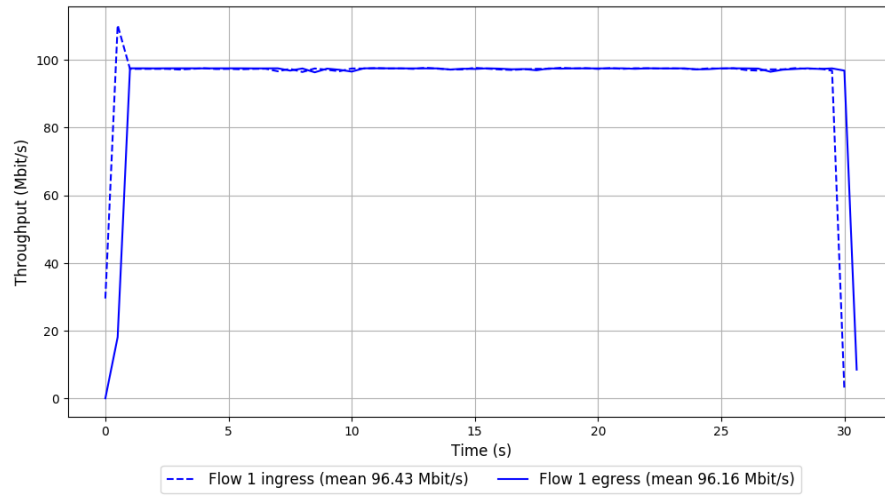

Flow 1 (95th percentile 30.99 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2019-01-21 05:15:14
End at: 2019-01-21 05:15:44
Local clock offset: 1.059 ms
Remote clock offset: -3.185 ms


# Below is generated by plot.py at 2019-01-21 07:14:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.16 Mbit/s
95th percentile per-packet one-way delay: 41.439 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.16 Mbit/s
95th percentile per-packet one-way delay: 41.439 ms
Loss rate: 0.27%
```

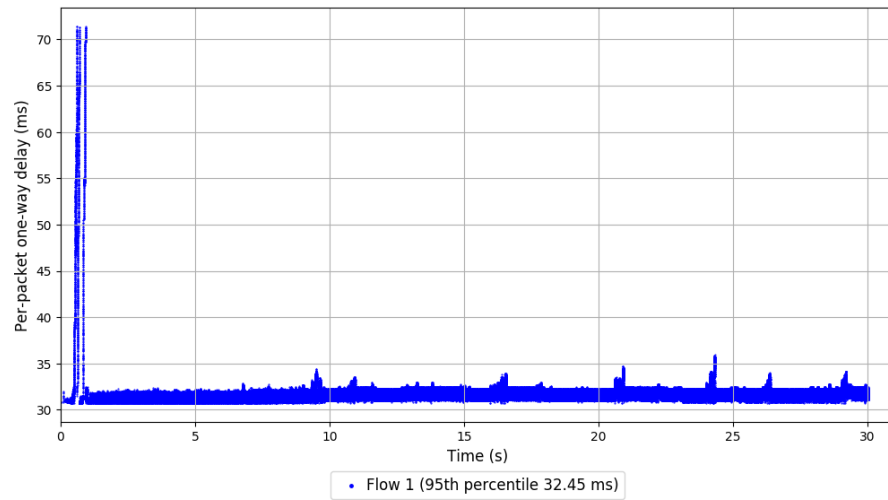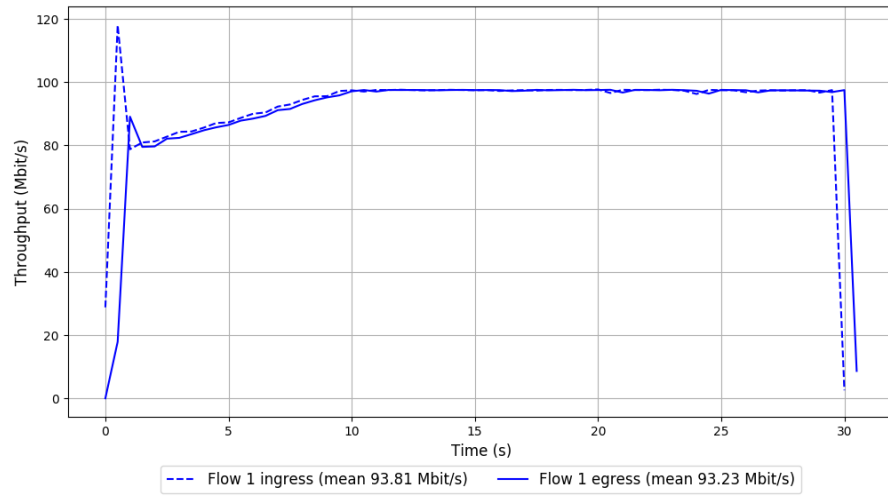Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-01-21 05:41:48
End at: 2019-01-21 05:42:18
Local clock offset: 1.133 ms
Remote clock offset: -2.614 ms


# Below is generated by plot.py at 2019-01-21 07:14:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.23 Mbit/s
95th percentile per-packet one-way delay: 32.445 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 93.23 Mbit/s
95th percentile per-packet one-way delay: 32.445 ms
Loss rate: 0.62%
```

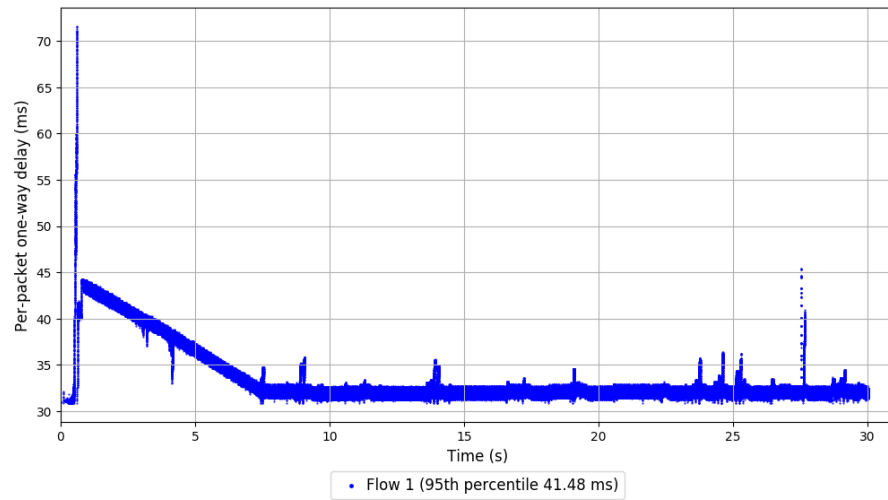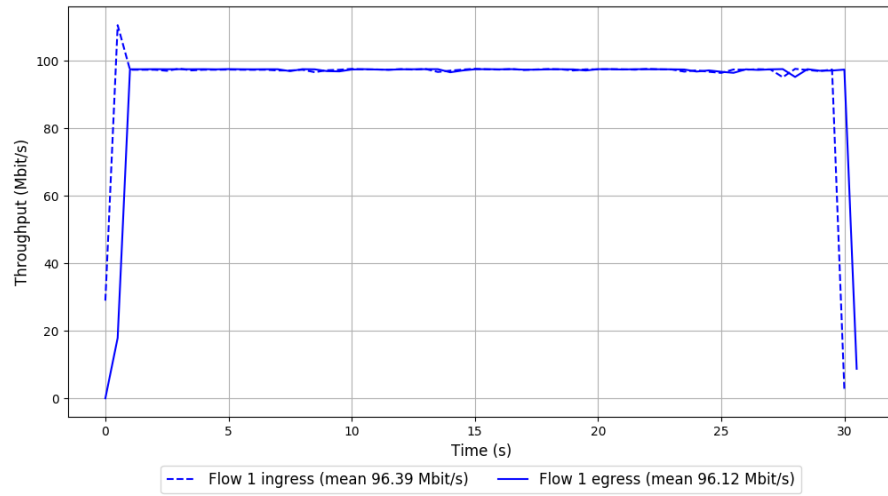Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-01-21 06:08:25
End at: 2019-01-21 06:08:55
Local clock offset: 4.103 ms
Remote clock offset: -2.177 ms


# Below is generated by plot.py at 2019-01-21 07:14:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.12 Mbit/s
95th percentile per-packet one-way delay: 41.483 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.12 Mbit/s
95th percentile per-packet one-way delay: 41.483 ms
Loss rate: 0.27%
```

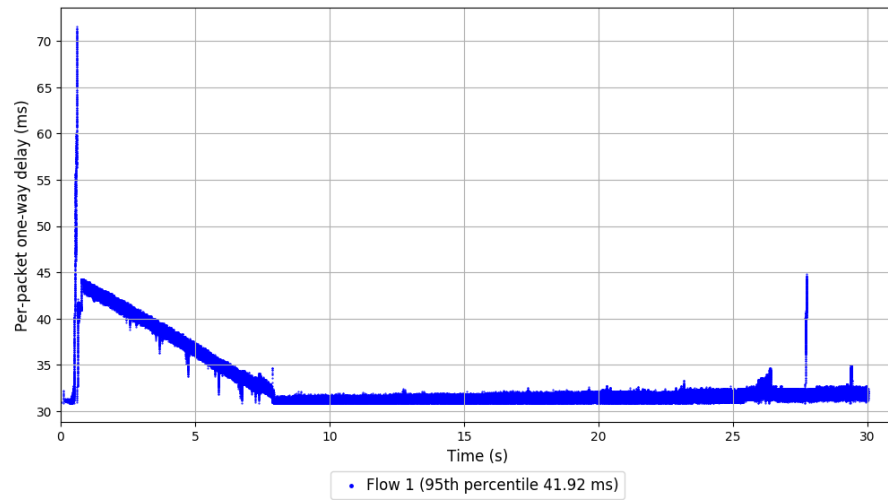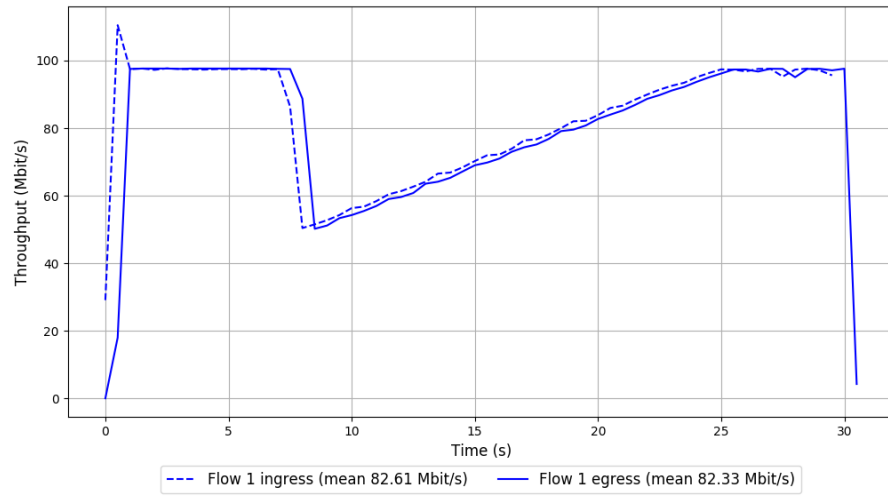Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2019-01-21 06:35:16
End at: 2019-01-21 06:35:46
Local clock offset: 3.831 ms
Remote clock offset: -1.918 ms


# Below is generated by plot.py at 2019-01-21 07:14:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.33 Mbit/s
95th percentile per-packet one-way delay: 41.923 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 82.33 Mbit/s
95th percentile per-packet one-way delay: 41.923 ms
Loss rate: 0.33%
```

Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 82.61 Mbit/s) --- Flow 1 egress (mean 82.33 Mbit/s)

Flow 1 (95th percentile 41.92 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2019-01-21 07:00:27
End at: 2019-01-21 07:00:57
Local clock offset: 0.643 ms
Remote clock offset: -2.11 ms


# Below is generated by plot.py at 2019-01-21 07:14:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.88 Mbit/s
95th percentile per-packet one-way delay: 32.246 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 93.88 Mbit/s
95th percentile per-packet one-way delay: 32.246 ms
Loss rate: 0.62%
```
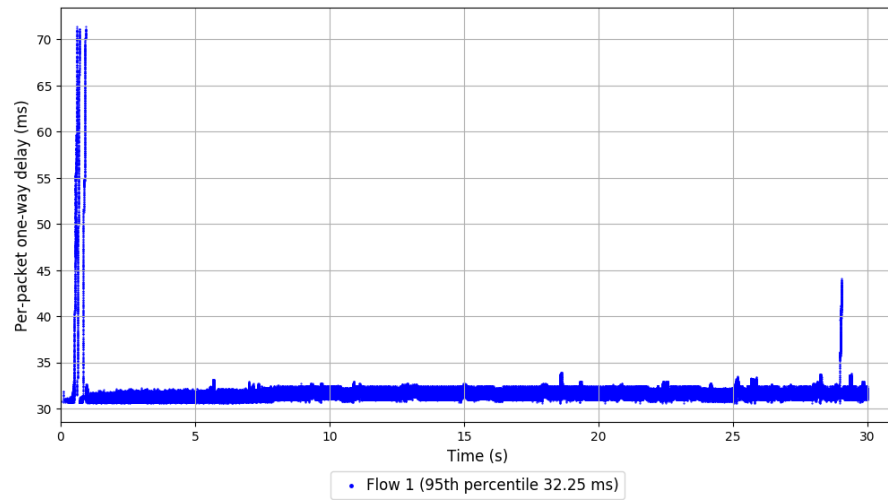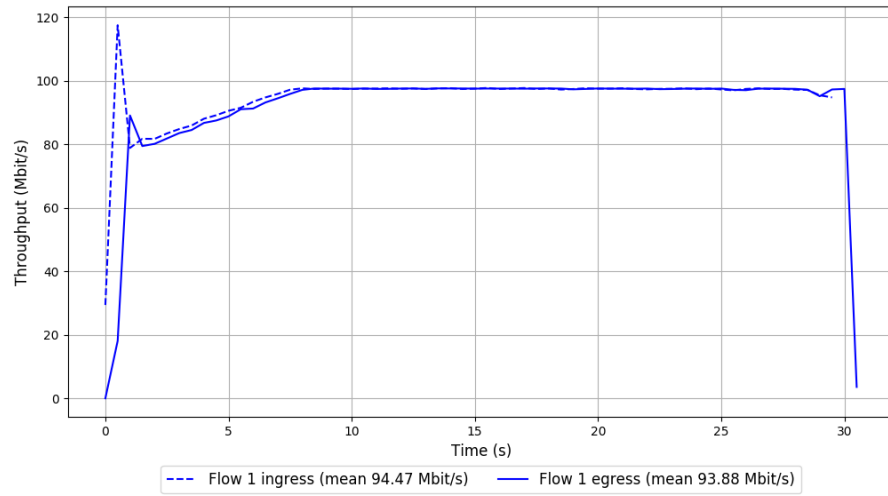
Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 94.47 Mbit/s) --- Flow 1 egress (mean 93.88 Mbit/s)
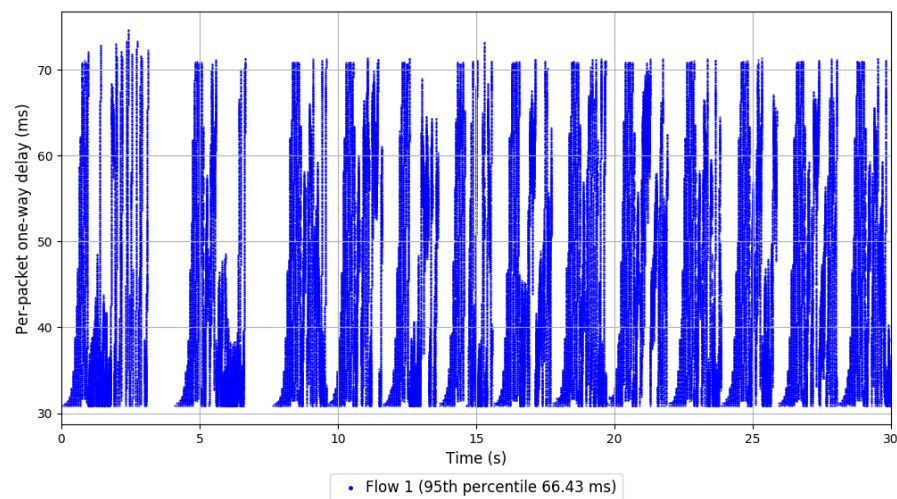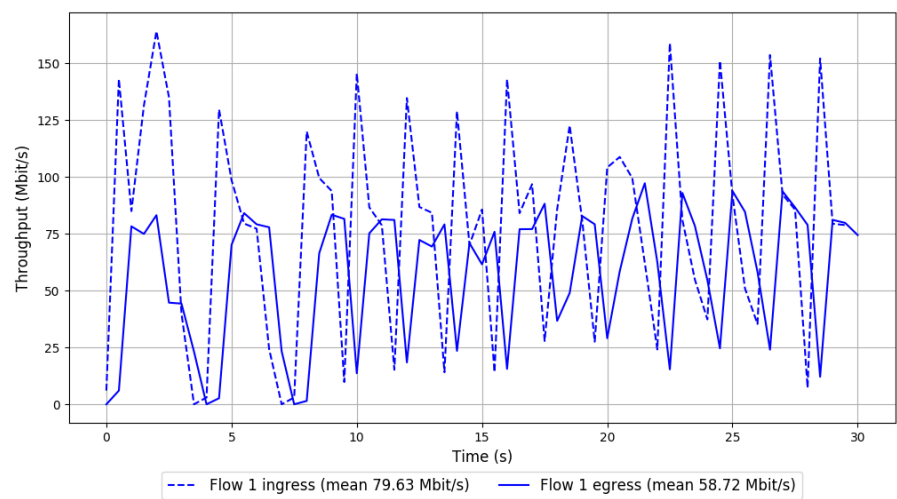

Flow 1 (95th percentile 32.25 ms)

```
Run 1: Statistics of Verus

Start at: 2019-01-21 05:10:01
End at: 2019-01-21 05:10:31
Local clock offset: 0.532 ms
Remote clock offset: -3.236 ms


# Below is generated by plot.py at 2019-01-21 07:14:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.72 Mbit/s
95th percentile per-packet one-way delay: 66.429 ms
Loss rate: 26.25%
-- Flow 1:
Average throughput: 58.72 Mbit/s
95th percentile per-packet one-way delay: 66.429 ms
Loss rate: 26.25%
```
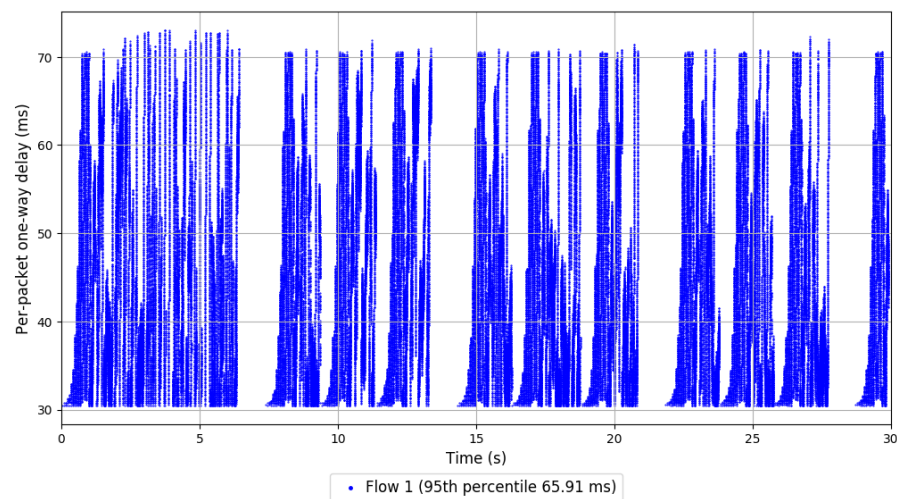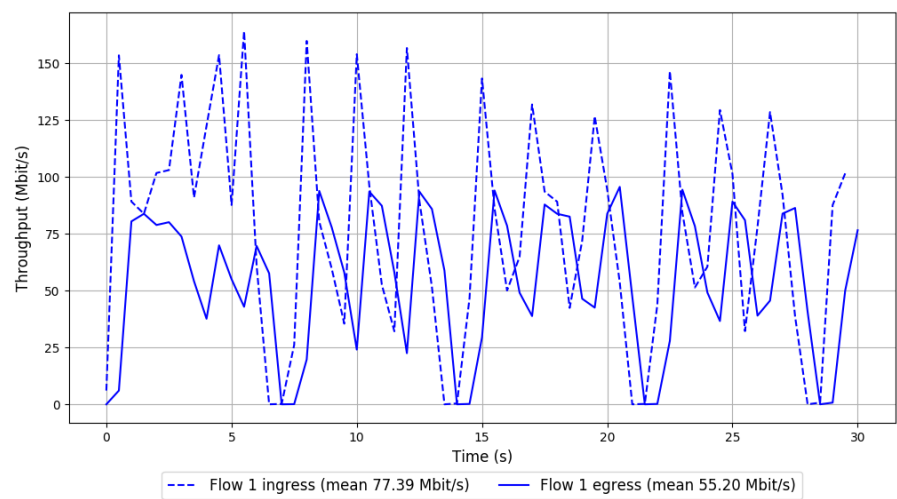
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2019-01-21 05:36:14
End at: 2019-01-21 05:36:44
Local clock offset: 0.963 ms
Remote clock offset: -2.893 ms


# Below is generated by plot.py at 2019-01-21 07:14:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.20 Mbit/s
95th percentile per-packet one-way delay: 65.909 ms
Loss rate: 28.64%
-- Flow 1:
Average throughput: 55.20 Mbit/s
95th percentile per-packet one-way delay: 65.909 ms
Loss rate: 28.64%
```

Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-01-21 06:03:07
End at: 2019-01-21 06:03:37
Local clock offset: 3.684 ms
Remote clock offset: -2.15 ms


# Below is generated by plot.py at 2019-01-21 07:14:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.65 Mbit/s
95th percentile per-packet one-way delay: 66.230 ms
Loss rate: 22.30%
-- Flow 1:
Average throughput: 57.65 Mbit/s
95th percentile per-packet one-way delay: 66.230 ms
Loss rate: 22.30%
```
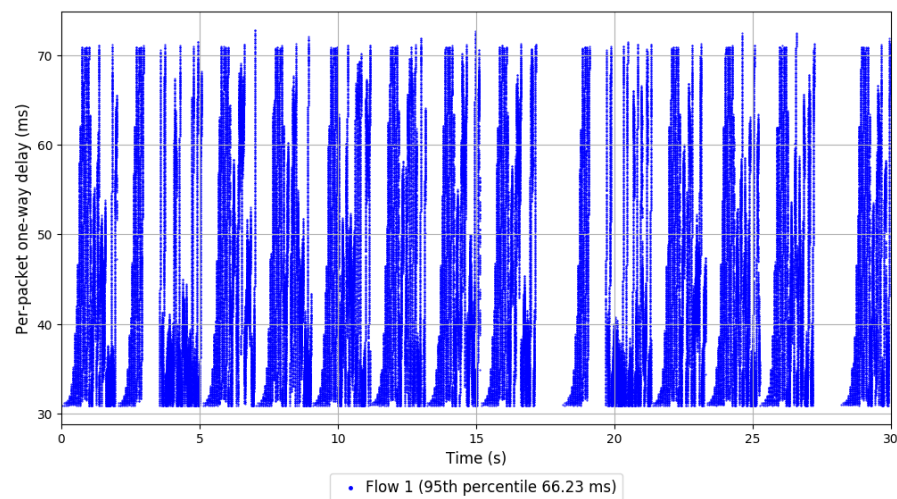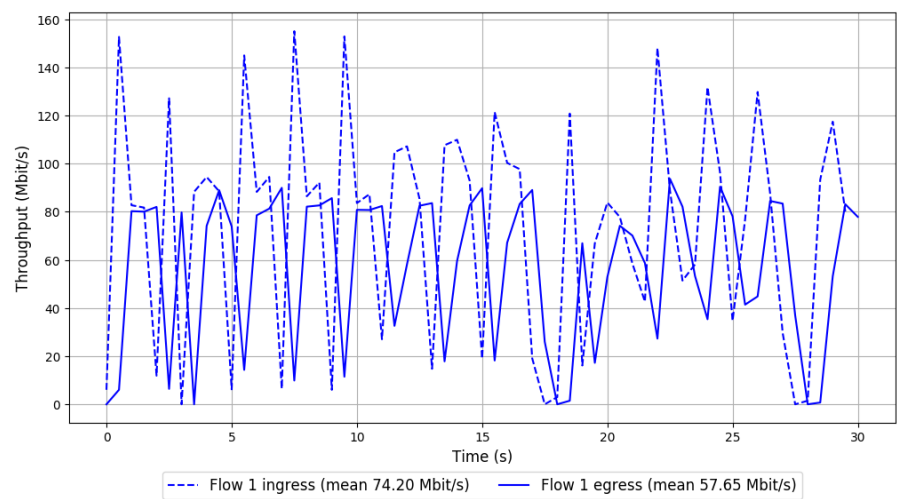
Run 3: Report of Verus — Data Link

Flow 1 ingress (mean 74.20 Mbit/s)   Flow 1 egress (mean 57.65 Mbit/s)
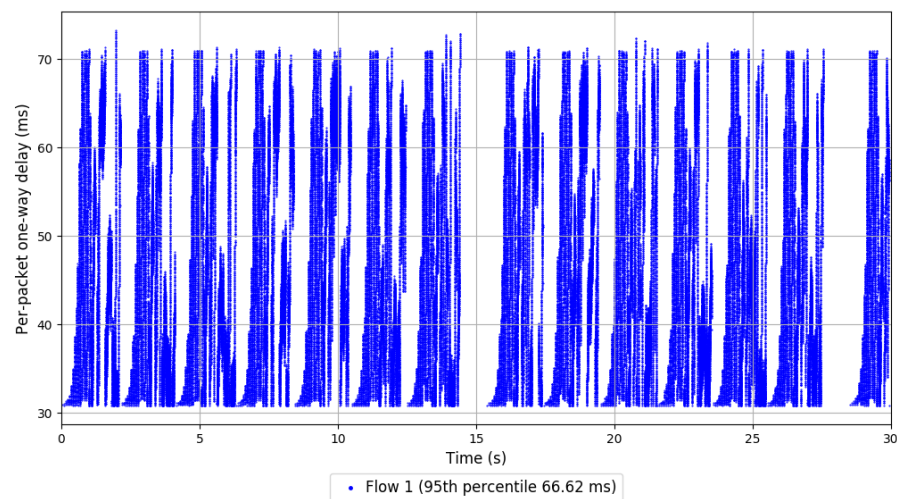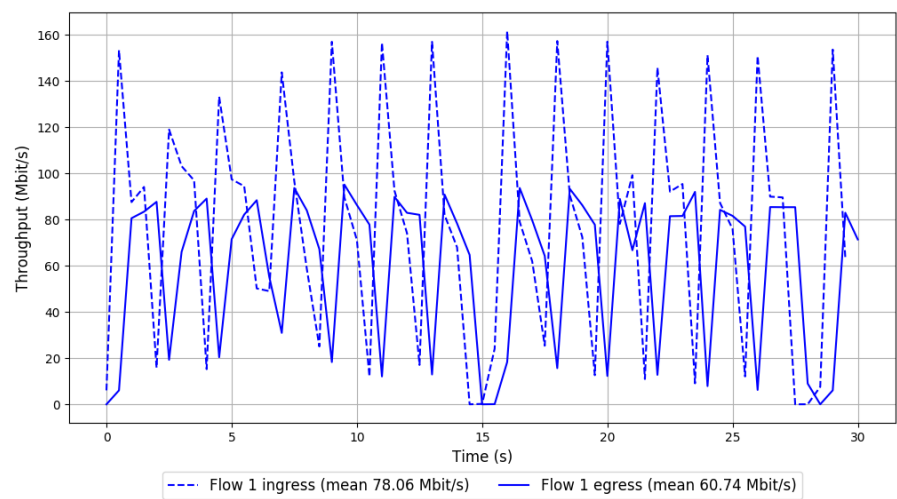

Flow 1 (95th percentile 66.23 ms)

```
Run 4: Statistics of Verus

Start at: 2019-01-21 06:29:54
End at: 2019-01-21 06:30:24
Local clock offset: 3.774 ms
Remote clock offset: -1.962 ms


# Below is generated by plot.py at 2019-01-21 07:14:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.74 Mbit/s
95th percentile per-packet one-way delay: 66.624 ms
Loss rate: 22.19%
-- Flow 1:
Average throughput: 60.74 Mbit/s
95th percentile per-packet one-way delay: 66.624 ms
Loss rate: 22.19%
```
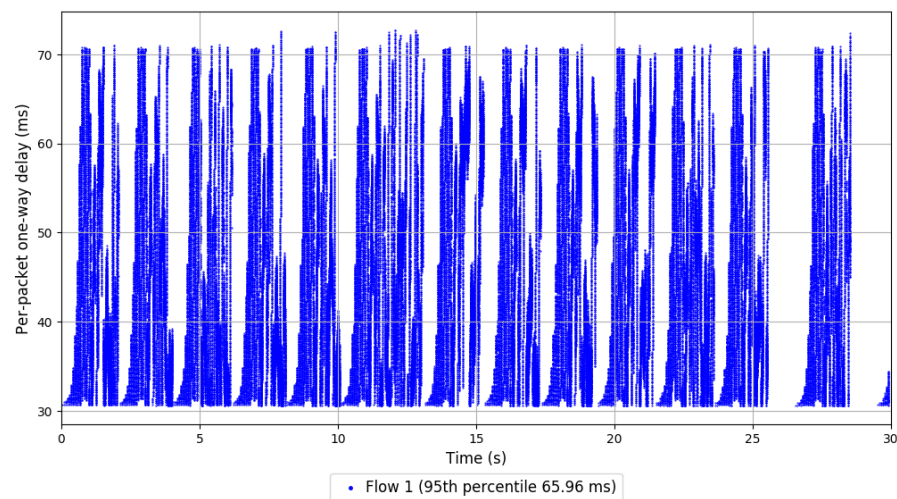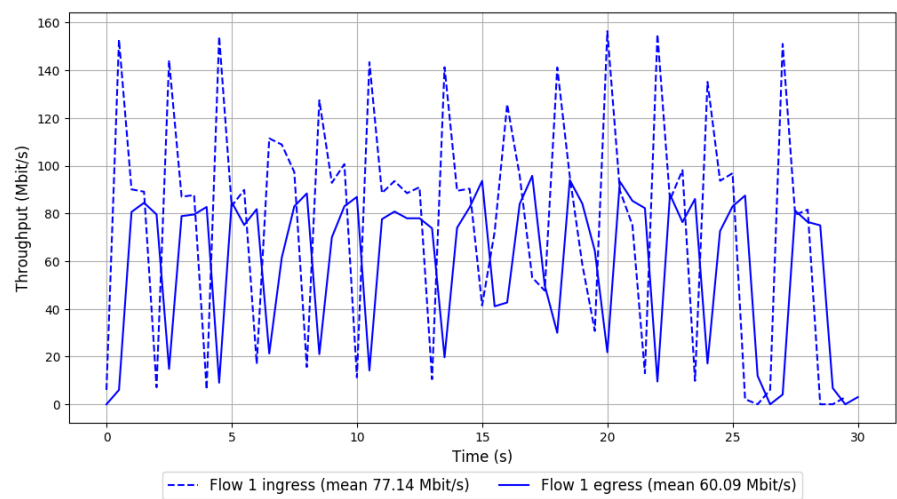
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-01-21 06:55:41
End at: 2019-01-21 06:56:11
Local clock offset: 1.267 ms
Remote clock offset: -2.109 ms


# Below is generated by plot.py at 2019-01-21 07:14:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.09 Mbit/s
95th percentile per-packet one-way delay: 65.956 ms
Loss rate: 22.10%
-- Flow 1:
Average throughput: 60.09 Mbit/s
95th percentile per-packet one-way delay: 65.956 ms
Loss rate: 22.10%
```
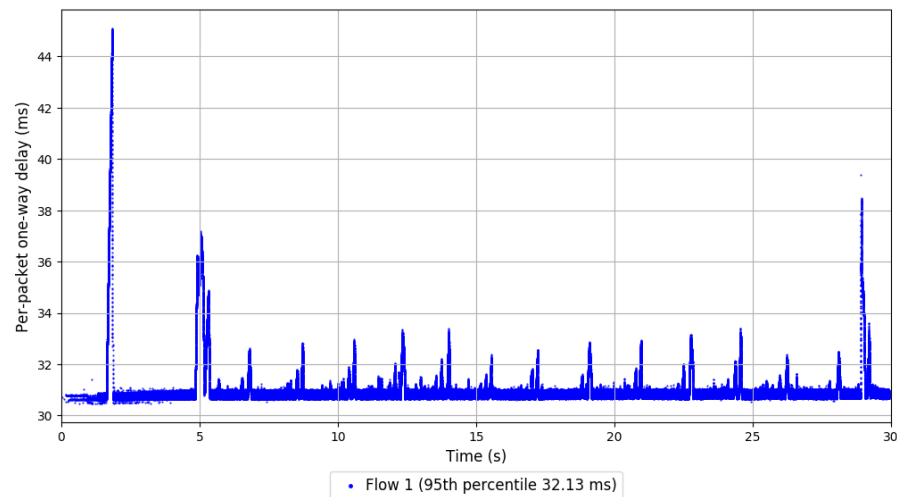
Run 5: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-01-21 05:11:16
End at: 2019-01-21 05:11:46
Local clock offset: 0.679 ms
Remote clock offset: -3.428 ms


# Below is generated by plot.py at 2019-01-21 07:15:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.56 Mbit/s
95th percentile per-packet one-way delay: 32.126 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.56 Mbit/s
95th percentile per-packet one-way delay: 32.126 ms
Loss rate: 0.00%
```
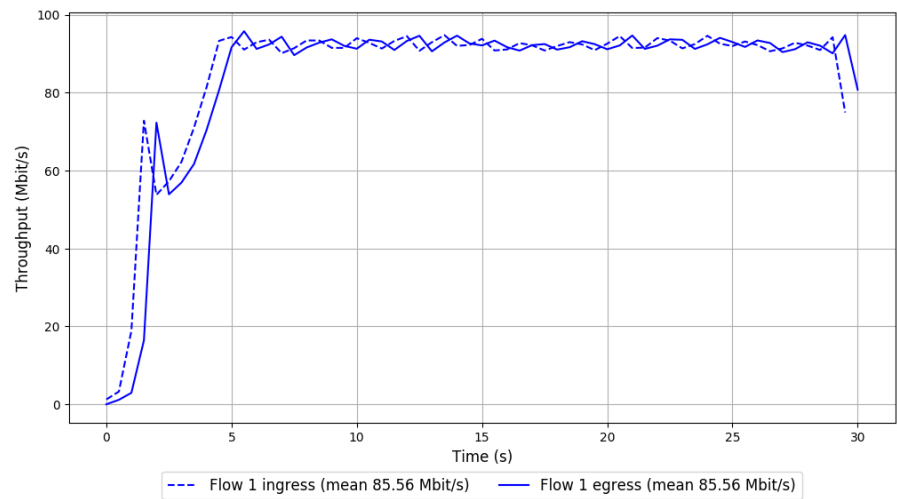
Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-01-21 05:37:38
End at: 2019-01-21 05:38:08
Local clock offset: 0.994 ms
Remote clock offset: -2.633 ms


# Below is generated by plot.py at 2019-01-21 07:15:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.83 Mbit/s
95th percentile per-packet one-way delay: 33.114 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.83 Mbit/s
95th percentile per-packet one-way delay: 33.114 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 84.83 Mbit/s) --- Flow 1 egress (mean 84.83 Mbit/s)

• Flow 1 (95th percentile 33.11 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-01-21 06:04:25
End at: 2019-01-21 06:04:55
Local clock offset: 3.784 ms
Remote clock offset: -2.211 ms


# Below is generated by plot.py at 2019-01-21 07:15:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.98 Mbit/s
95th percentile per-packet one-way delay: 33.406 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.98 Mbit/s
95th percentile per-packet one-way delay: 33.406 ms
Loss rate: 0.00%
```
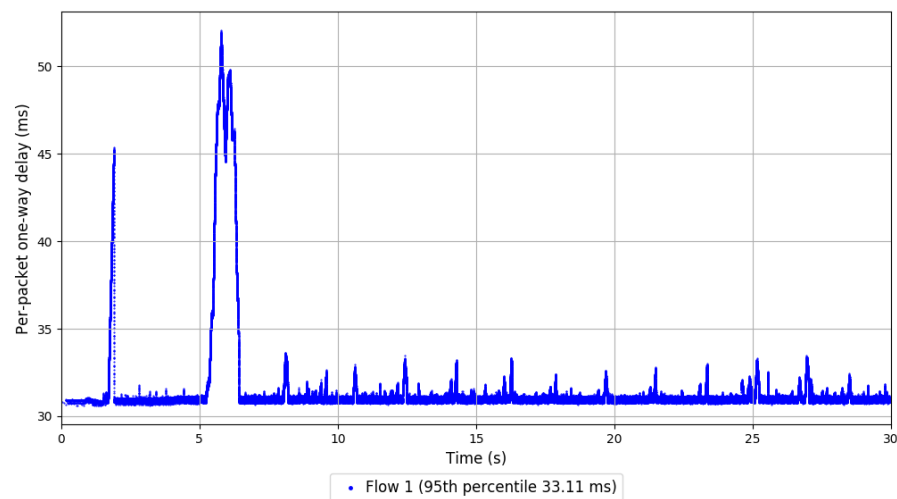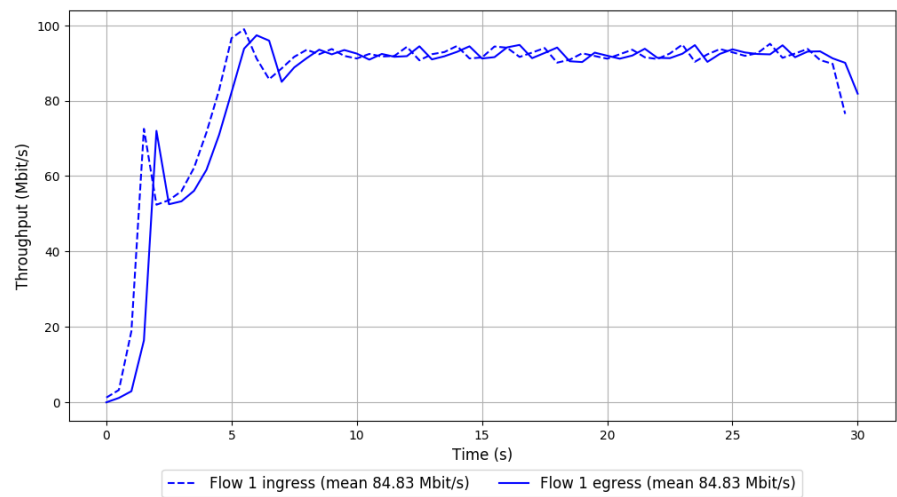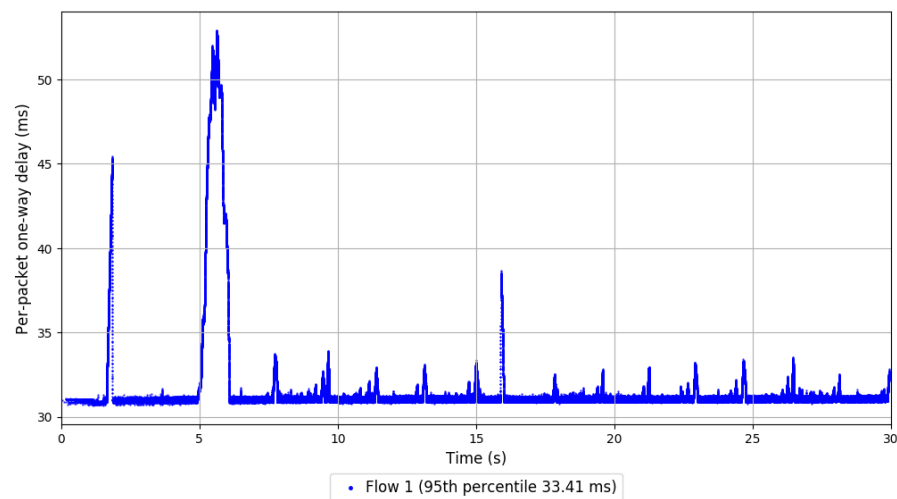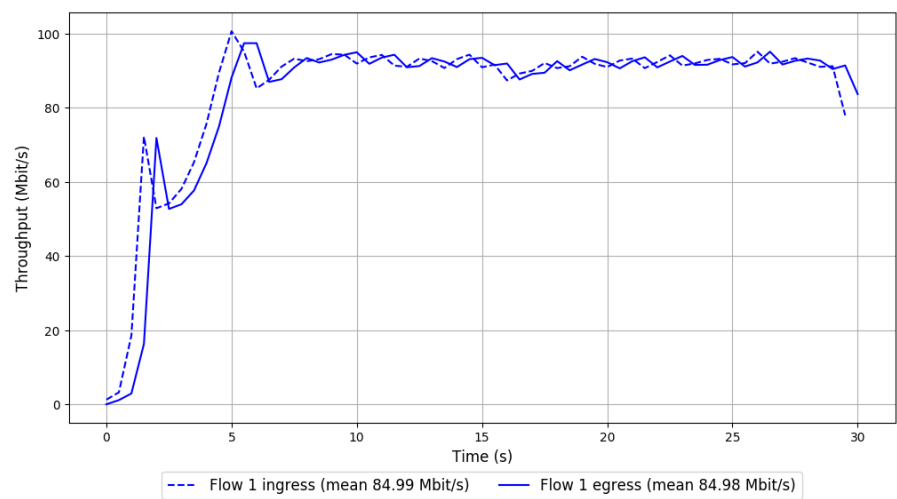
Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 84.99 Mbit/s) Flow 1 egress (mean 84.98 Mbit/s)

Flow 1 (95th percentile 33.41 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-01-21 06:31:13
End at: 2019-01-21 06:31:43
Local clock offset: 3.777 ms
Remote clock offset: -2.13 ms


# Below is generated by plot.py at 2019-01-21 07:15:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.73 Mbit/s
95th percentile per-packet one-way delay: 32.294 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 77.73 Mbit/s
95th percentile per-packet one-way delay: 32.294 ms
Loss rate: 0.00%
```
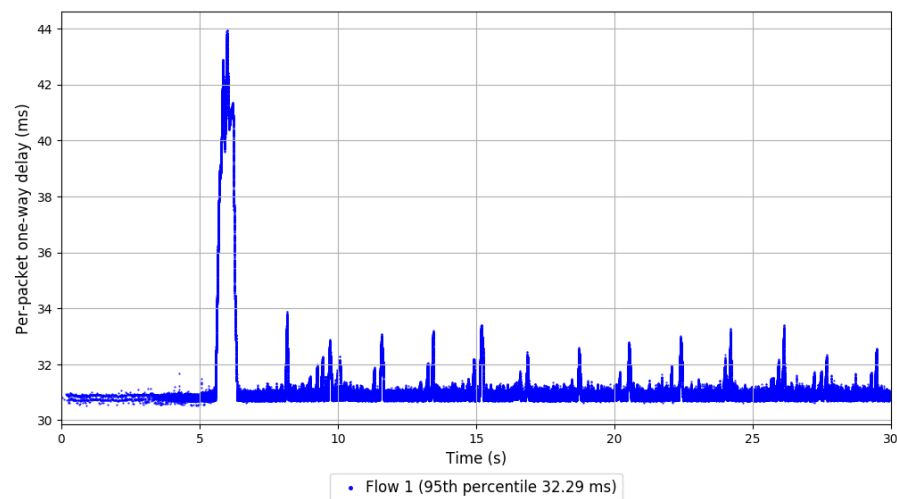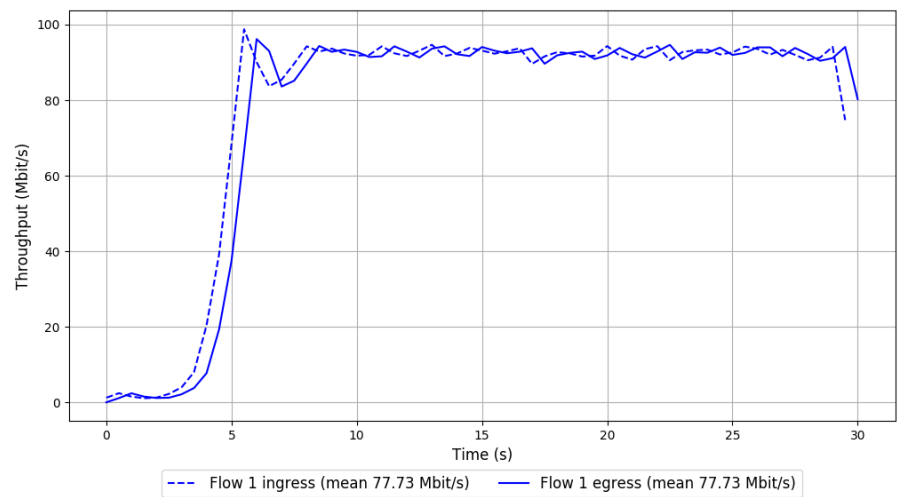
Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 77.73 Mbit/s) --- Flow 1 egress (mean 77.73 Mbit/s)
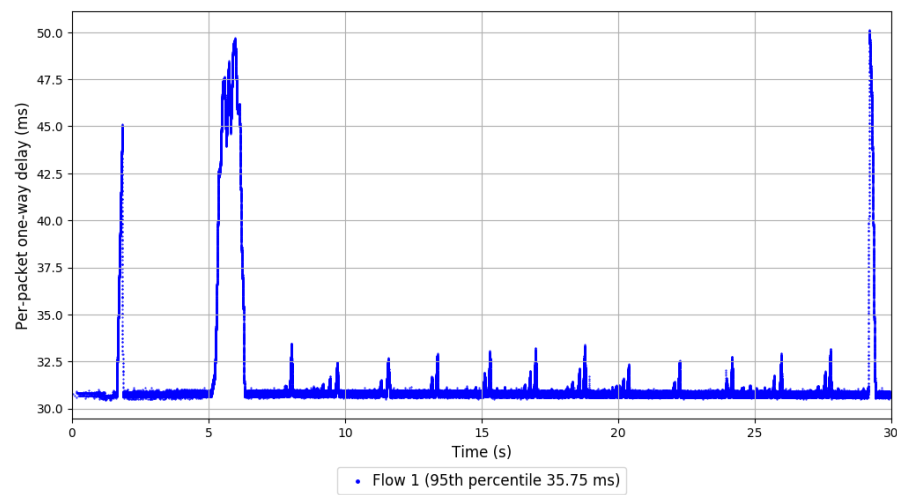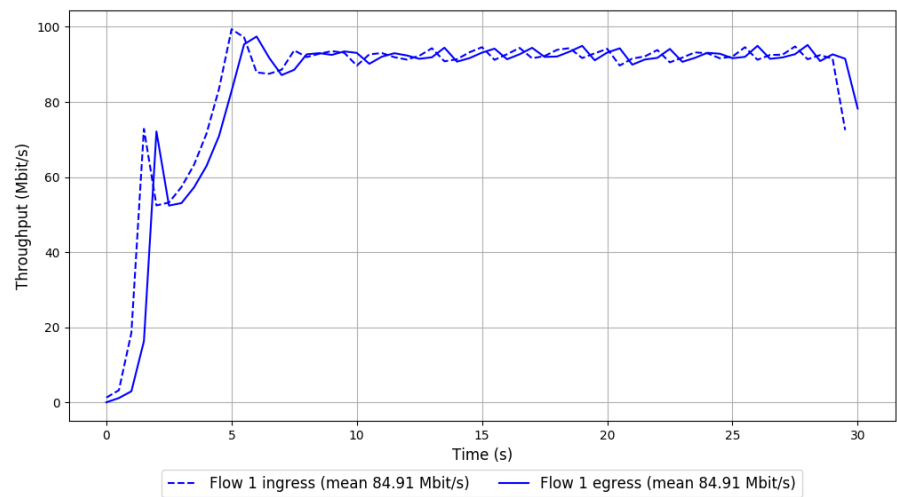

Flow 1 (95th percentile 32.29 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-01-21 06:56:51
End at: 2019-01-21 06:57:22
Local clock offset: 1.089 ms
Remote clock offset: -2.075 ms


# Below is generated by plot.py at 2019-01-21 07:15:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.91 Mbit/s
95th percentile per-packet one-way delay: 35.748 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.91 Mbit/s
95th percentile per-packet one-way delay: 35.748 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 84.91 Mbit/s)   Flow 1 egress (mean 84.91 Mbit/s)
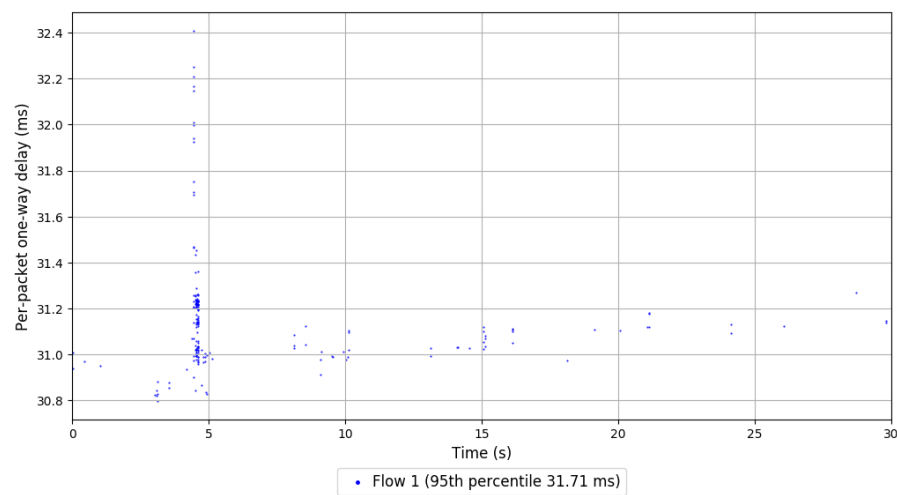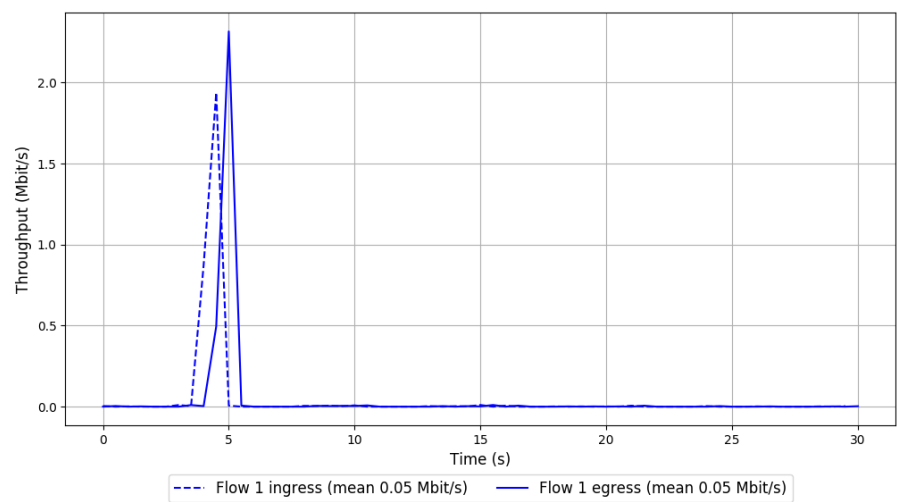

Flow 1 (95th percentile 35.75 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2019-01-21 04:53:21
End at: 2019-01-21 04:53:51
Local clock offset: -3.446 ms
Remote clock offset: -3.623 ms


# Below is generated by plot.py at 2019-01-21 07:15:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.708 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.708 ms
Loss rate: 0.00%
```

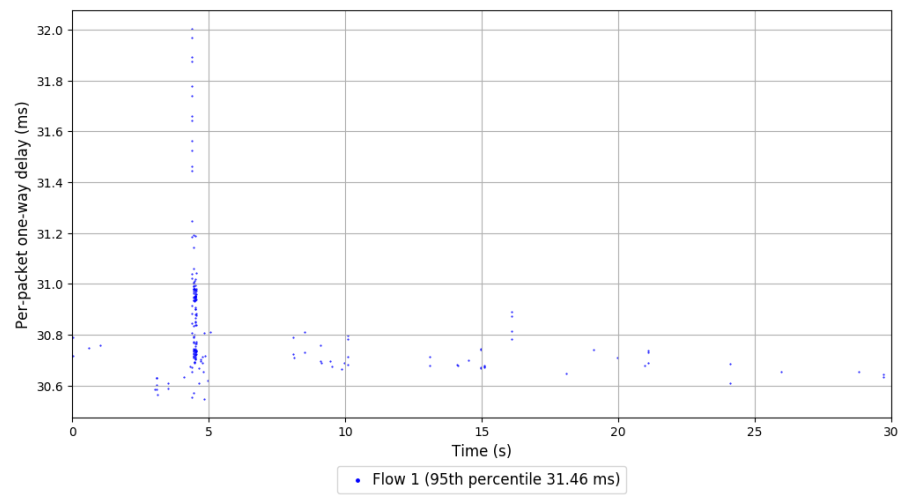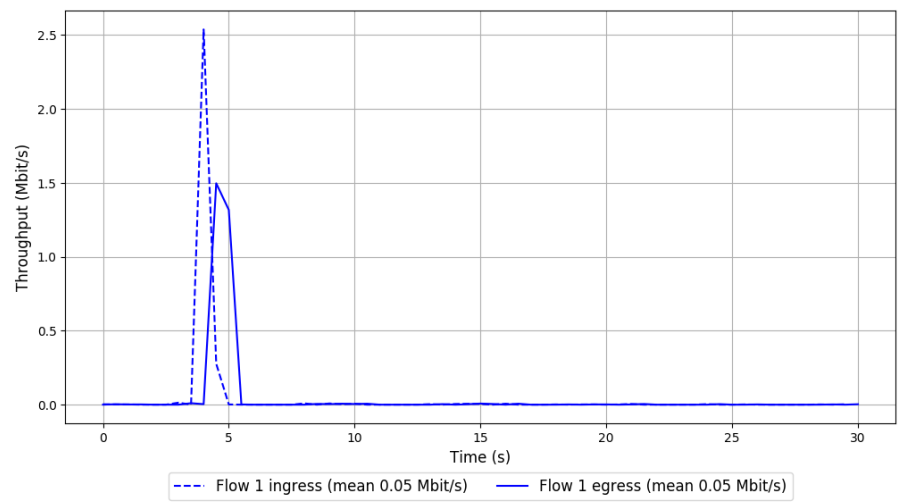Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-01-21 05:19:18
End at: 2019-01-21 05:19:48
Local clock offset: 0.91 ms
Remote clock offset: -3.088 ms


# Below is generated by plot.py at 2019-01-21 07:15:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.462 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.462 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.05 Mbit/s)   Flow 1 egress (mean 0.05 Mbit/s)

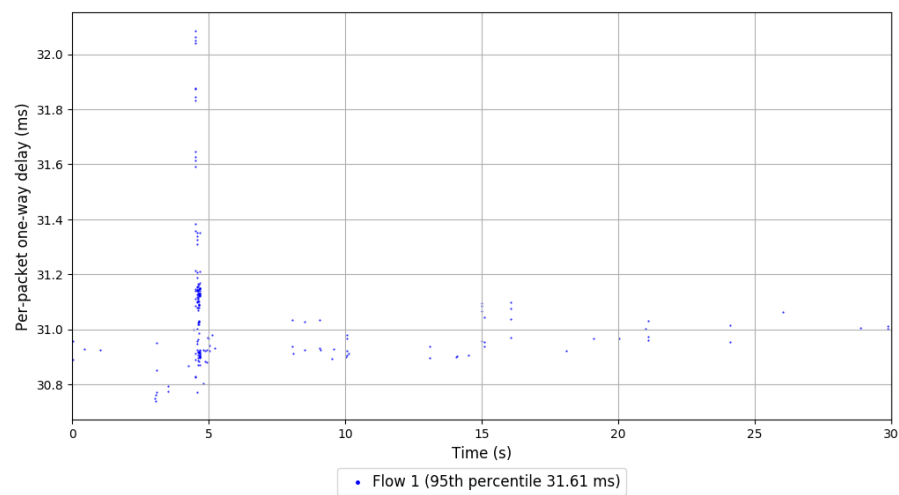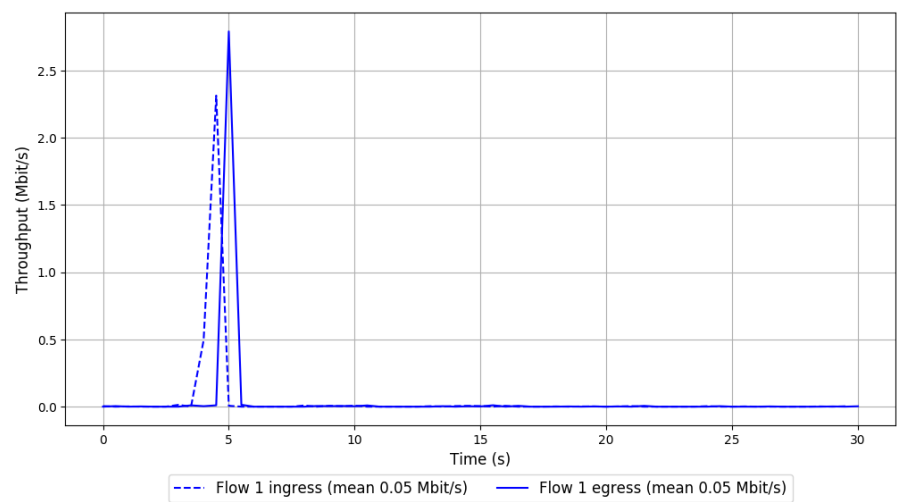

• Flow 1 (95th percentile 31.46 ms)

```
Run 3: Statistics of WebRTC media

Start at: 2019-01-21 05:45:39
End at: 2019-01-21 05:46:09
Local clock offset: 1.27 ms
Remote clock offset: -2.399 ms


# Below is generated by plot.py at 2019-01-21 07:15:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.614 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.614 ms
Loss rate: 0.00%
```

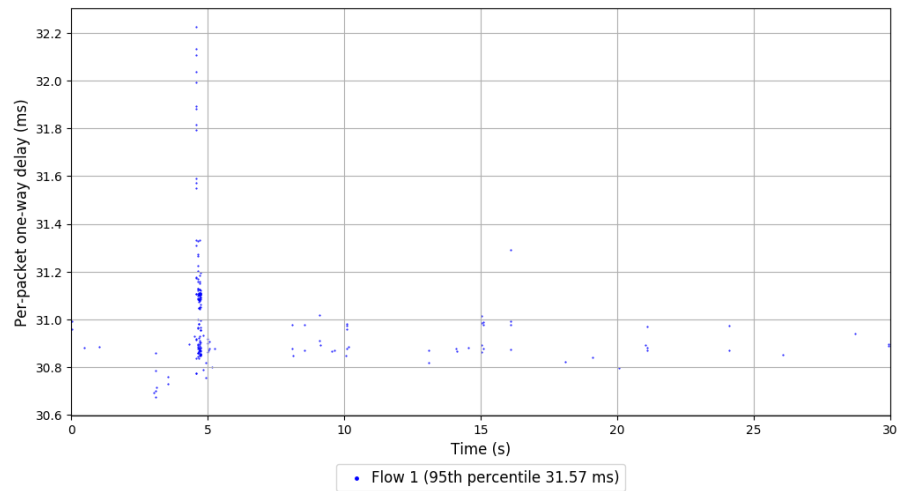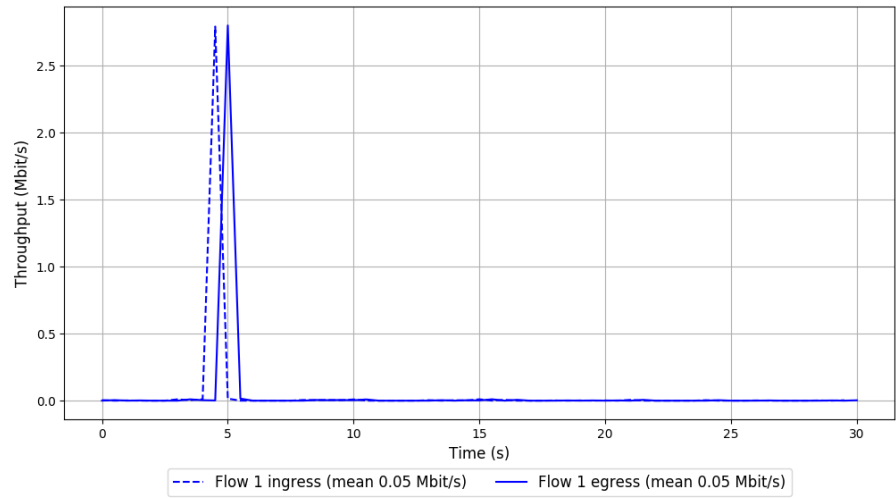## Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-01-21 06:12:16
End at: 2019-01-21 06:12:46
Local clock offset: 4.379 ms
Remote clock offset: -2.122 ms


# Below is generated by plot.py at 2019-01-21 07:15:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.572 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.572 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.05 Mbit/s) —— Flow 1 egress (mean 0.05 Mbit/s)

• Flow 1 (95th percentile 31.57 ms)

```
Run 5: Statistics of WebRTC media

Start at: 2019-01-21 06:39:04
End at: 2019-01-21 06:39:34
Local clock offset: 3.903 ms
Remote clock offset: -1.951 ms


# Below is generated by plot.py at 2019-01-21 07:15:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.651 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.651 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.05 Mbit/s)   Flow 1 egress (mean 0.05 Mbit/s)

Flow 1 (95th percentile 31.65 ms)