Pantheon Report

Generated at 2019-07-18 08:36:25 (UTC).

Data path: Stanford on **eno1** (*remote*) →AWS California 1 on **ens5** (*local*).

Repeated the test of 24 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.
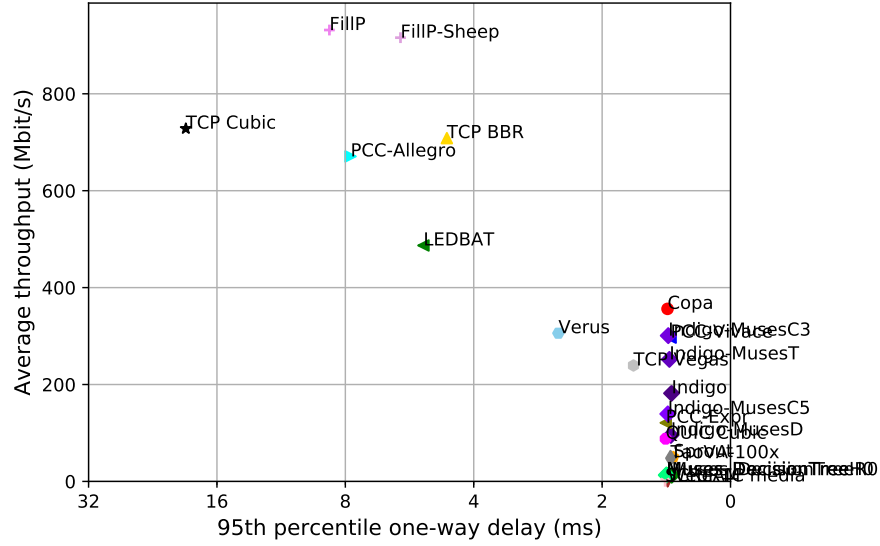
```
System info:
Linux 4.15.0-1043-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ de42328552b3776a75a932a94dfafd722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
```
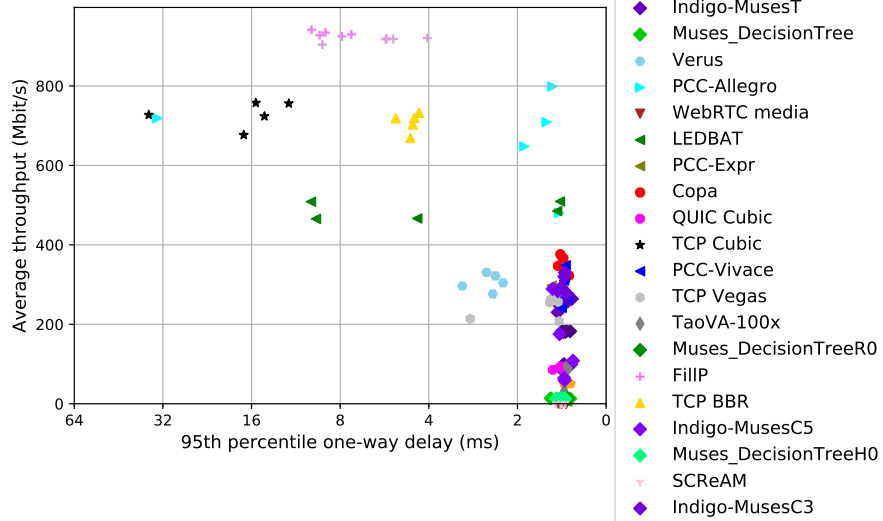
```
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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

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

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scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	708.53	4.62	0.02
Copa	5	356.11	0.98	0.01
TCP Cubic	5	728.07	18.93	0.04
FillP	5	931.61	8.72	0.02
FillP-Sheep	5	915.82	5.94	0.02
Indigo	5	181.87	0.92	0.01
Indigo-MusesC3	5	300.88	0.97	0.00
Indigo-MusesC5	5	139.33	0.98	0.00
Indigo-MusesD	5	95.00	0.93	0.01
Indigo-MusesT	5	251.86	0.95	0.01
LEDBAT	5	486.97	5.25	0.01
Muses_DecisionTree	5	12.82	0.99	0.01
Muses_DecisionTreeH0	5	13.19	1.00	0.01
Muses_DecisionTreeR0	5	12.79	0.92	0.01
PCC-Allegro	5	670.76	7.78	0.06
PCC-Expr	5	120.95	1.01	0.01
QUIC Cubic	5	88.05	1.01	0.01
SCReAM	5	0.22	1.02	0.03
Sprout	5	50.23	0.89	0.00
TaoVA-100x	5	47.88	0.93	0.01
TCP Vegas	5	239.26	1.51	0.01
Verus	5	305.88	2.53	0.01
PCC-Vivace	5	296.79	0.93	0.00
WebRTC media	5	0.05	0.98	0.01

```
Run 1: Statistics of TCP BBR

Start at: 2019-07-18 04:56:03
End at: 2019-07-18 04:56:33
Local clock offset: -0.246 ms
Remote clock offset: 0.772 ms

# Below is generated by plot.py at 2019-07-18 07:46:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 669.20 Mbit/s
95th percentile per-packet one-way delay: 4.617 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 669.20 Mbit/s
95th percentile per-packet one-way delay: 4.617 ms
Loss rate: 0.02%
```
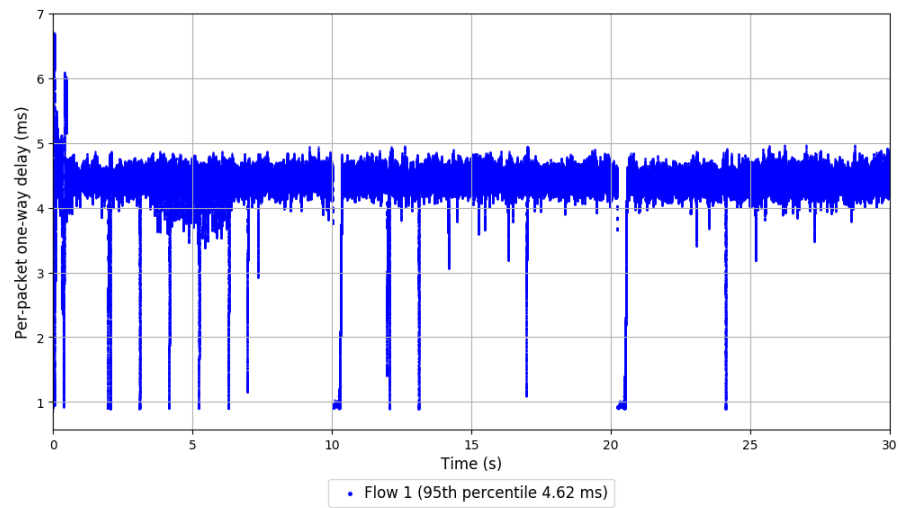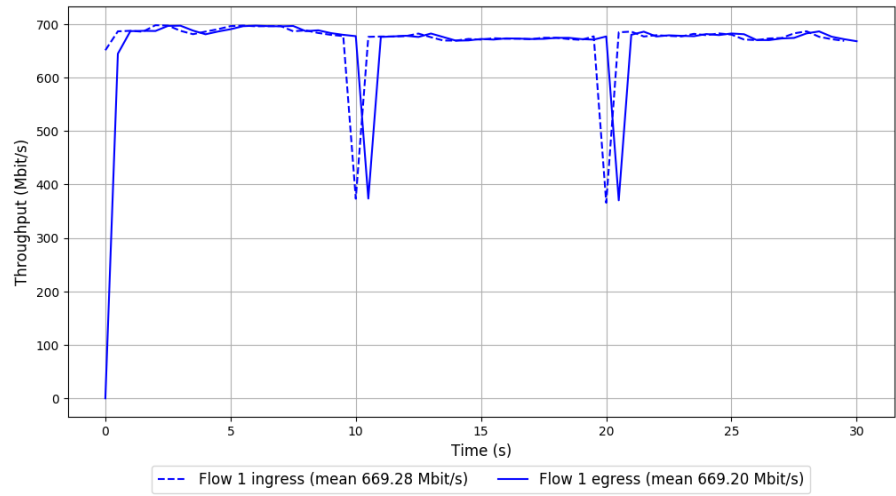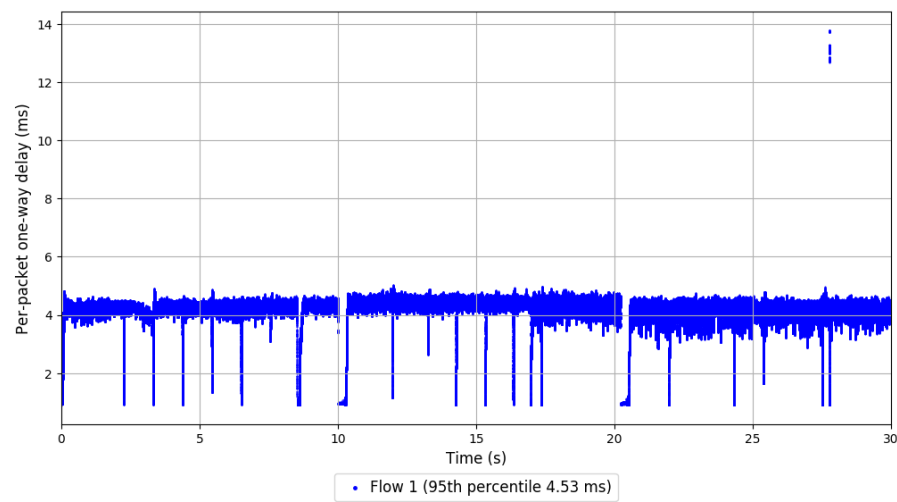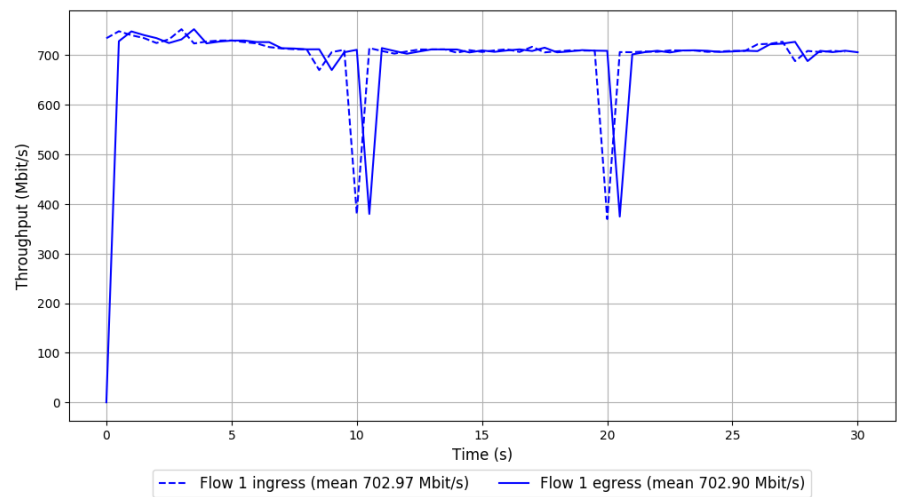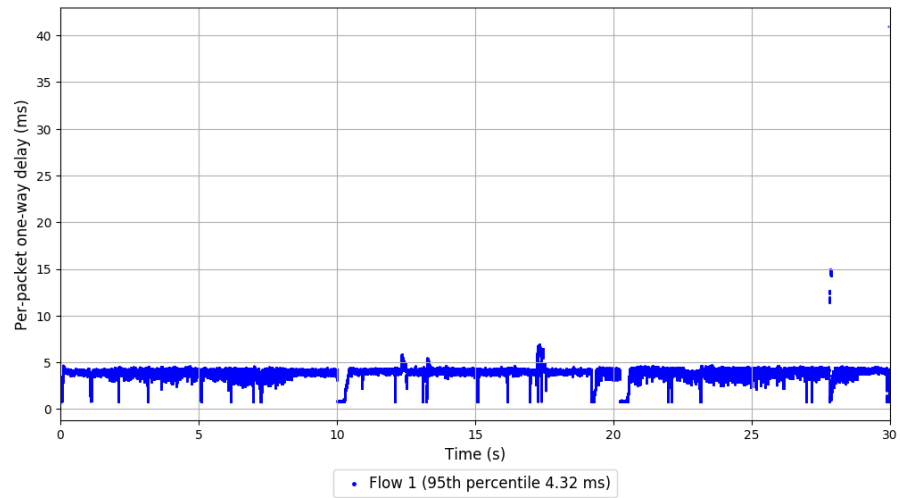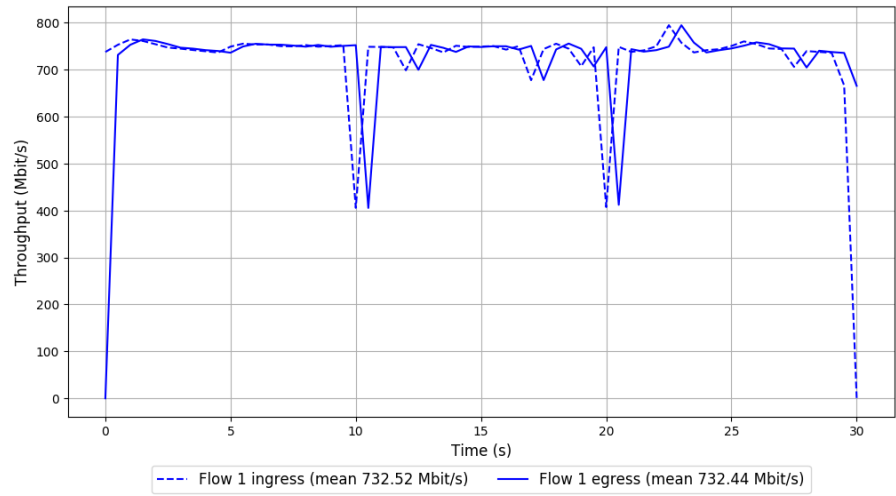
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2019-07-18 05:29:19
End at: 2019-07-18 05:29:50
Local clock offset: -0.254 ms
Remote clock offset: 0.021 ms


# Below is generated by plot.py at 2019-07-18 07:46:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 702.90 Mbit/s
95th percentile per-packet one-way delay: 4.533 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 702.90 Mbit/s
95th percentile per-packet one-way delay: 4.533 ms
Loss rate: 0.02%
```
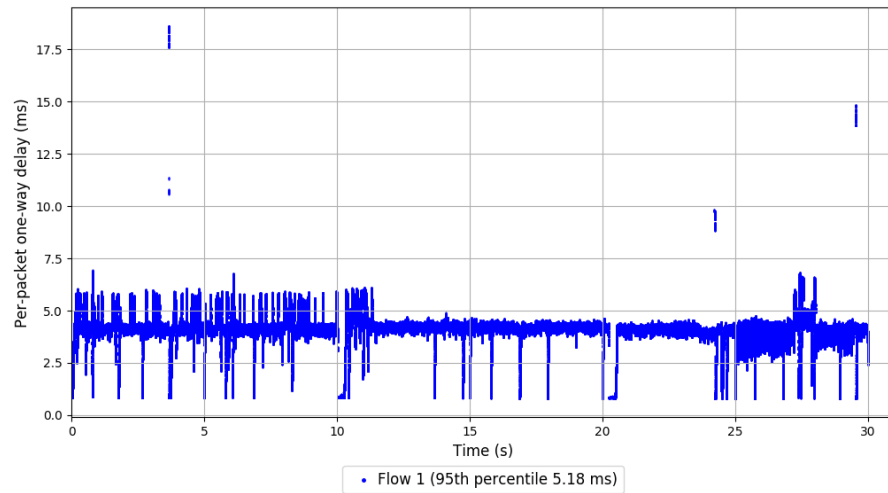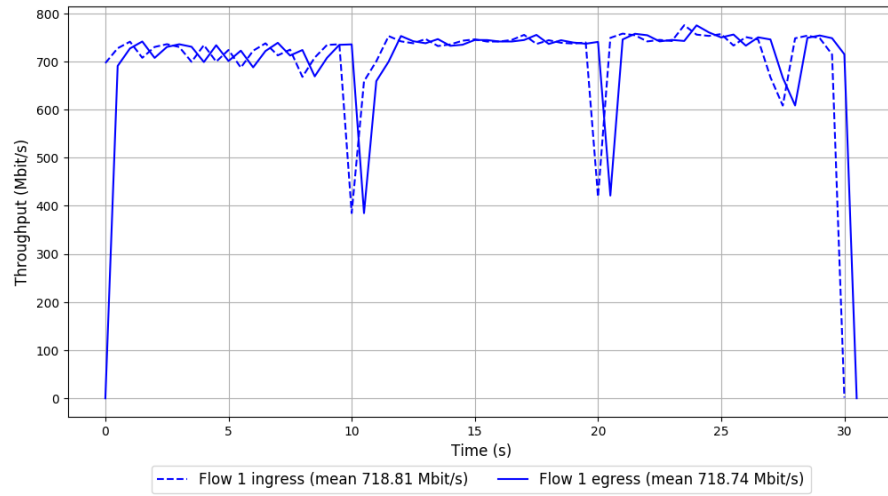
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 702.97 Mbit/s)   Flow 1 egress (mean 702.90 Mbit/s)

Flow 1 (95th percentile 4.53 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2019-07-18 06:02:45
End at: 2019-07-18 06:03:15
Local clock offset: 1.962 ms
Remote clock offset: 2.784 ms


# Below is generated by plot.py at 2019-07-18 07:47:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 732.44 Mbit/s
95th percentile per-packet one-way delay: 4.316 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 732.44 Mbit/s
95th percentile per-packet one-way delay: 4.316 ms
Loss rate: 0.02%
```
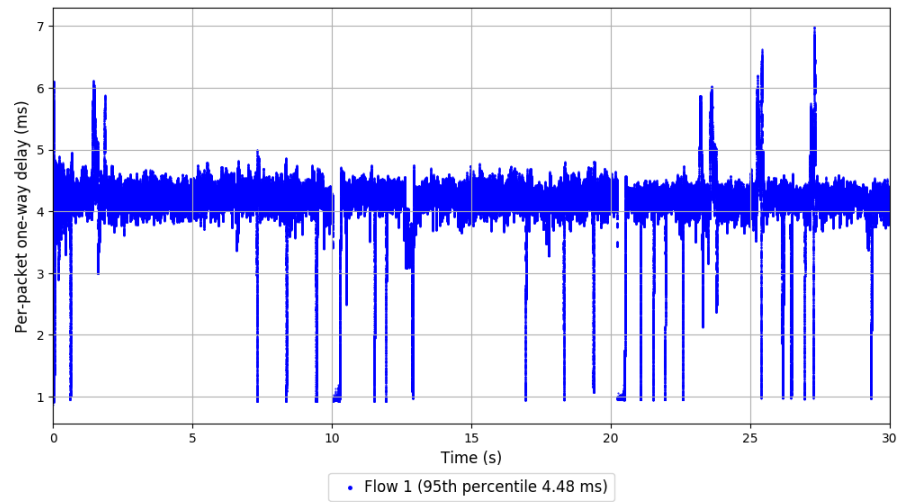
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2019-07-18 06:36:08
End at: 2019-07-18 06:36:38
Local clock offset: 3.27 ms
Remote clock offset: 0.2 ms


# Below is generated by plot.py at 2019-07-18 07:47:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 718.74 Mbit/s
95th percentile per-packet one-way delay: 5.179 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 718.74 Mbit/s
95th percentile per-packet one-way delay: 5.179 ms
Loss rate: 0.02%
```
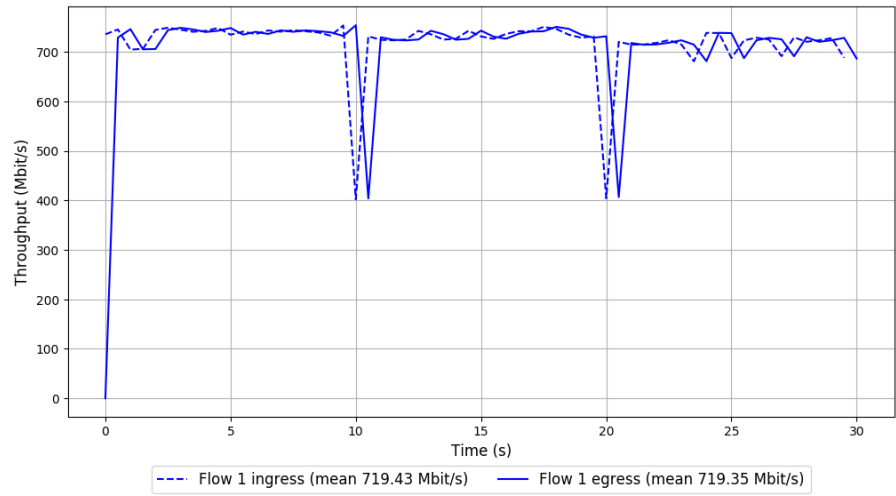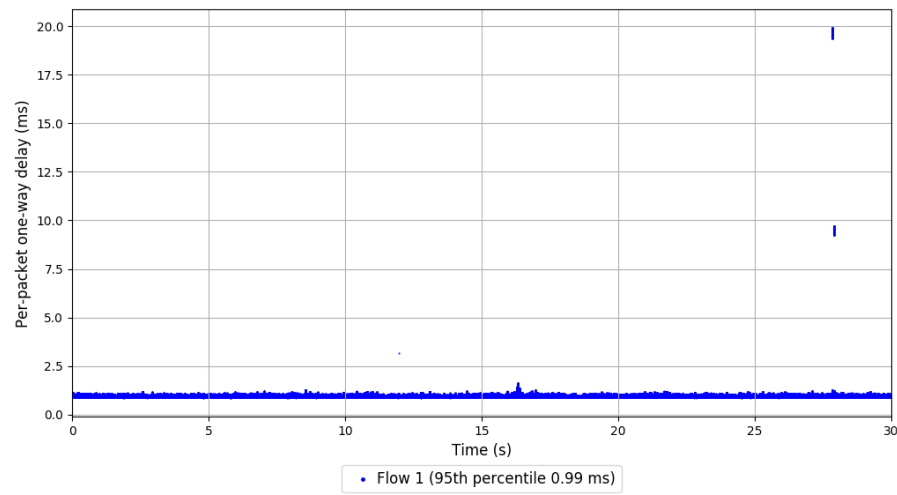
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 718.81 Mbit/s)   Flow 1 egress (mean 718.74 Mbit/s)

Flow 1 (95th percentile 5.18 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2019-07-18 07:09:38
End at: 2019-07-18 07:10:08
Local clock offset: 1.415 ms
Remote clock offset: 1.006 ms

# Below is generated by plot.py at 2019-07-18 07:47:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 719.35 Mbit/s
95th percentile per-packet one-way delay: 4.477 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 719.35 Mbit/s
95th percentile per-packet one-way delay: 4.477 ms
Loss rate: 0.02%
```
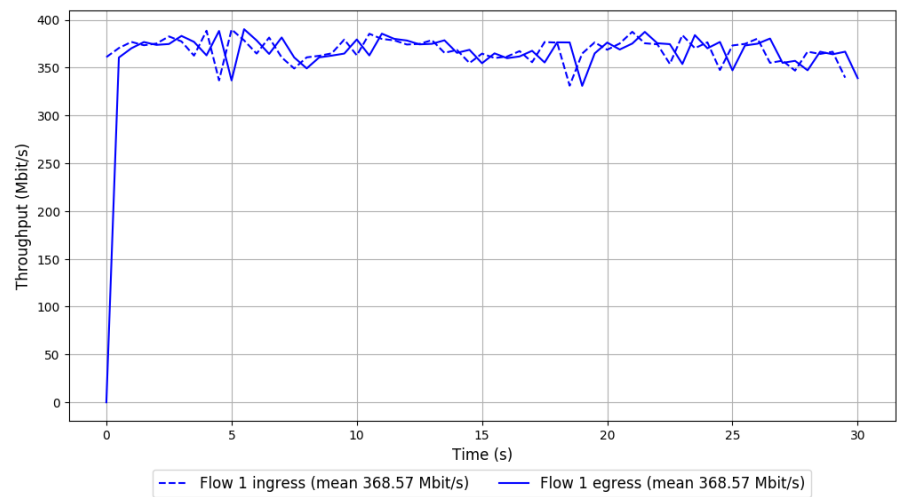
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 719.43 Mbit/s) — Flow 1 egress (mean 719.35 Mbit/s)
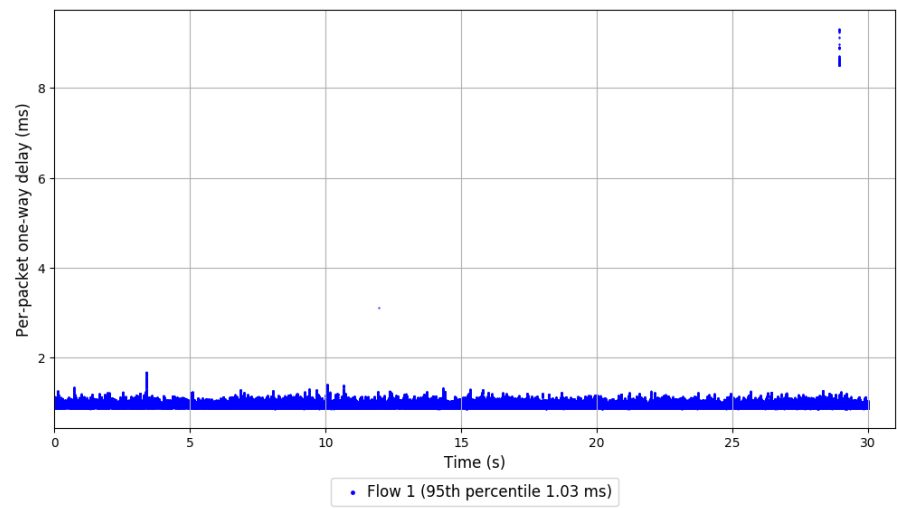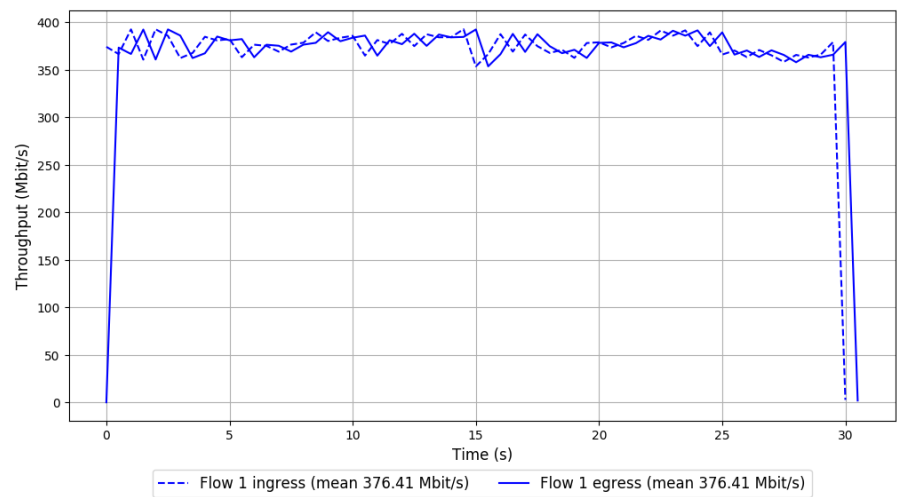

Flow 1 (95th percentile 4.48 ms)

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```
Run 1: Statistics of Copa

Start at: 2019-07-18 05:00:28
End at: 2019-07-18 05:00:58
Local clock offset: -0.099 ms
Remote clock offset: 0.968 ms


# Below is generated by plot.py at 2019-07-18 07:47:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 368.57 Mbit/s
95th percentile per-packet one-way delay: 0.988 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 368.57 Mbit/s
95th percentile per-packet one-way delay: 0.988 ms
Loss rate: 0.01%
```
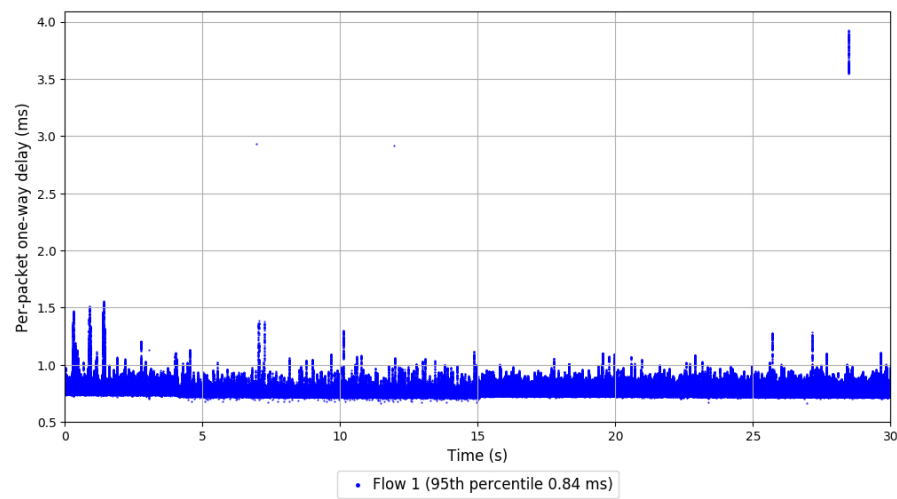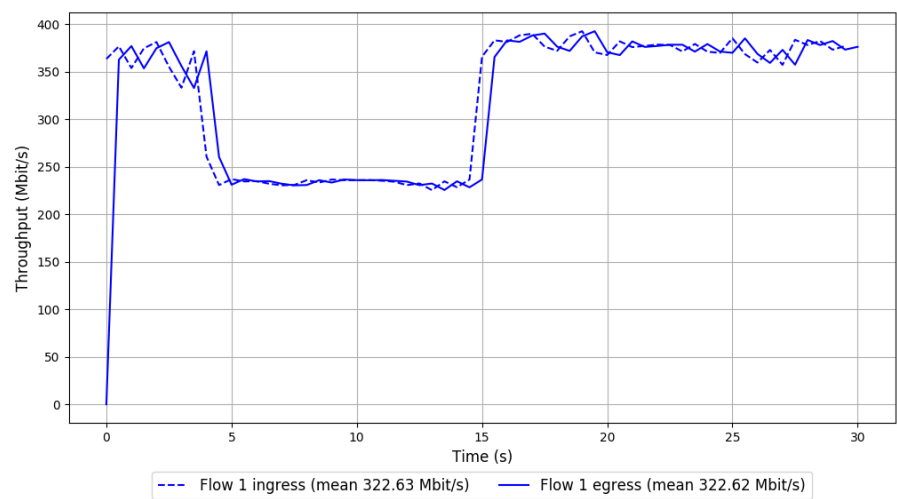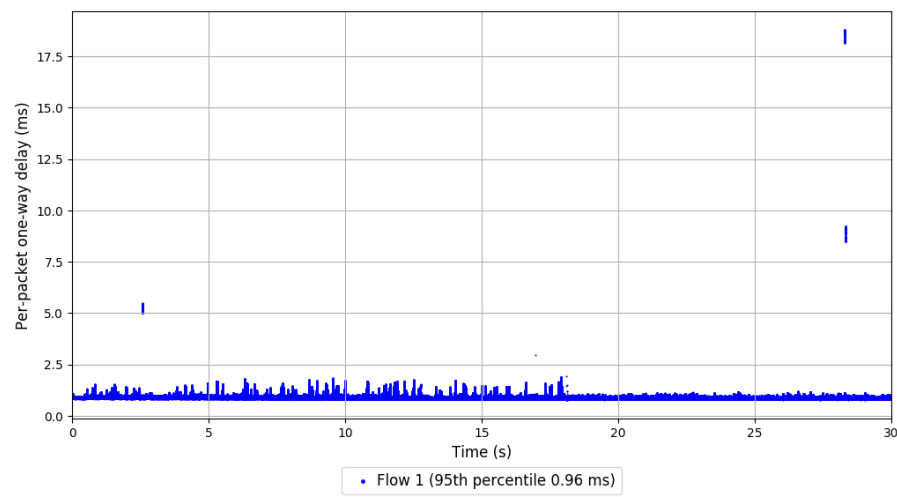
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 368.57 Mbit/s) ---- Flow 1 egress (mean 368.57 Mbit/s) ——

• Flow 1 (95th percentile 0.99 ms)

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```
Run 2: Statistics of Copa

Start at: 2019-07-18 05:33:47
End at: 2019-07-18 05:34:17
Local clock offset: -0.268 ms
Remote clock offset: -0.101 ms


# Below is generated by plot.py at 2019-07-18 07:47:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 376.41 Mbit/s
95th percentile per-packet one-way delay: 1.032 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 376.41 Mbit/s
95th percentile per-packet one-way delay: 1.032 ms
Loss rate: 0.01%
```

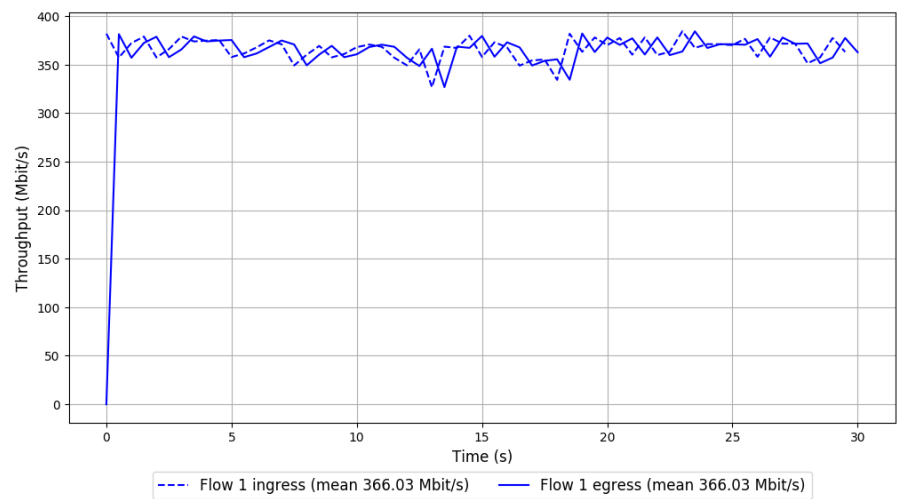Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 376.41 Mbit/s)   Flow 1 egress (mean 376.41 Mbit/s)

Flow 1 (95th percentile 1.03 ms)

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```
Run 3: Statistics of Copa

Start at: 2019-07-18 06:07:12
End at: 2019-07-18 06:07:43
Local clock offset: 2.591 ms
Remote clock offset: 3.226 ms

# Below is generated by plot.py at 2019-07-18 07:47:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 322.62 Mbit/s
95th percentile per-packet one-way delay: 0.838 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 322.62 Mbit/s
95th percentile per-packet one-way delay: 0.838 ms
Loss rate: 0.01%
```
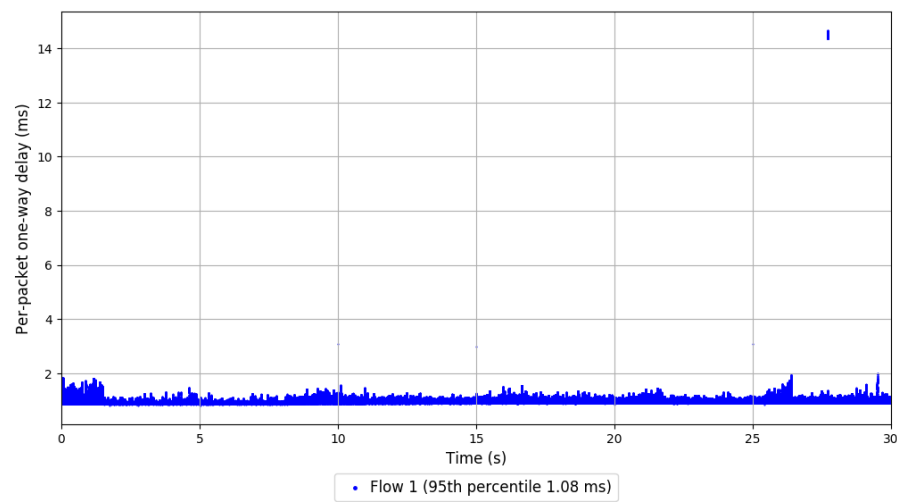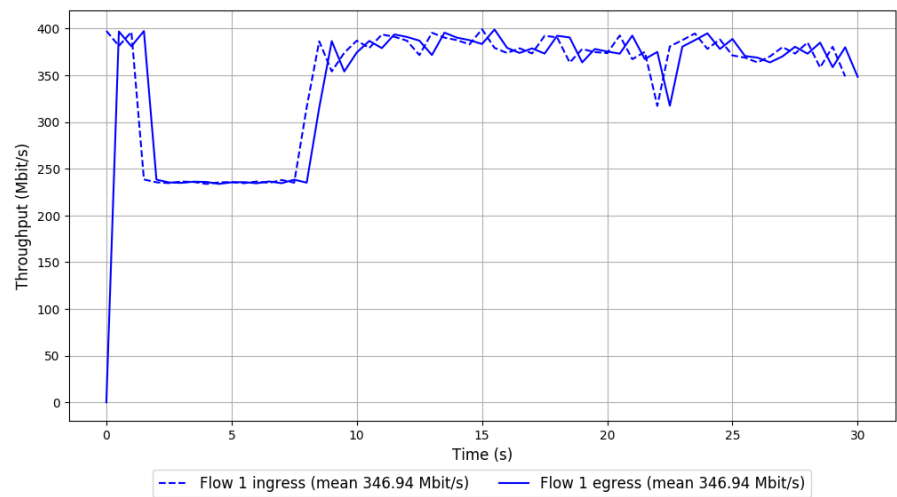
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 322.63 Mbit/s)   Flow 1 egress (mean 322.62 Mbit/s)

Flow 1 (95th percentile 0.84 ms)

```
Run 4: Statistics of Copa

Start at: 2019-07-18 06:40:33
End at: 2019-07-18 06:41:03
Local clock offset: 3.24 ms
Remote clock offset: -0.267 ms


# Below is generated by plot.py at 2019-07-18 07:54:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 366.03 Mbit/s
95th percentile per-packet one-way delay: 0.965 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 366.03 Mbit/s
95th percentile per-packet one-way delay: 0.965 ms
Loss rate: 0.01%
```
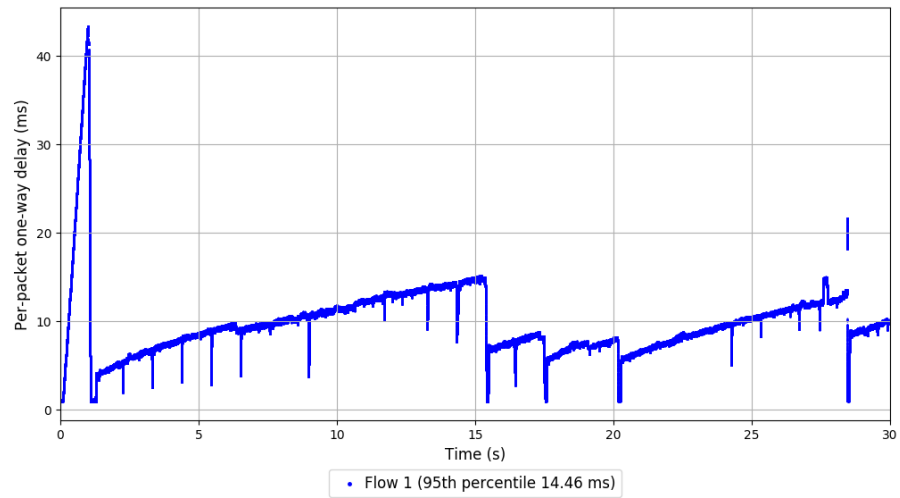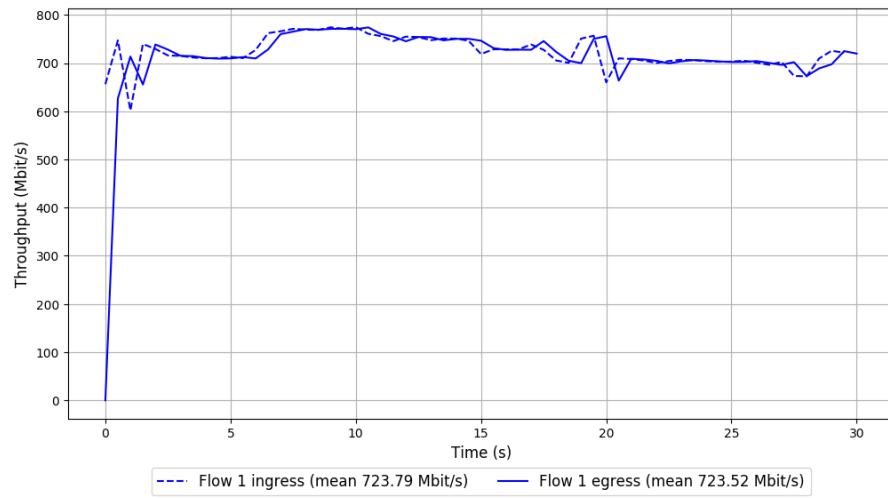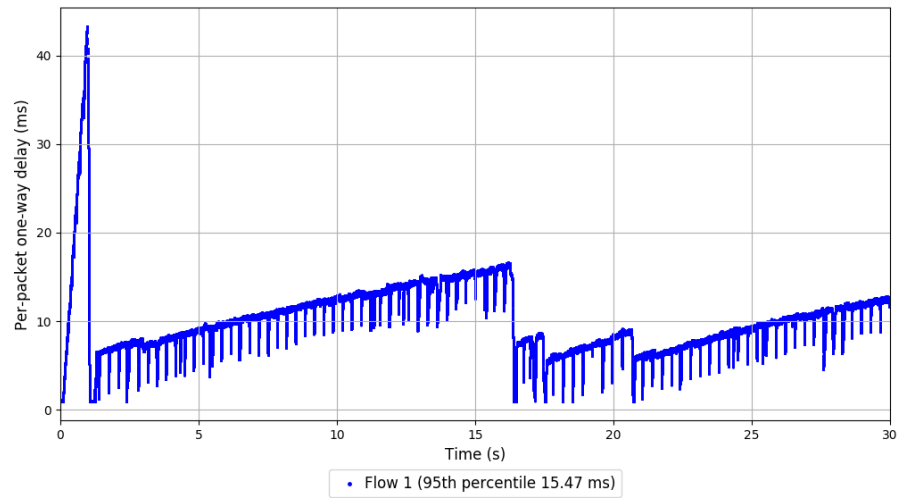
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2019-07-18 07:14:05
End at: 2019-07-18 07:14:35
Local clock offset: 1.232 ms
Remote clock offset: 1.329 ms


# Below is generated by plot.py at 2019-07-18 07:54:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 346.94 Mbit/s
95th percentile per-packet one-way delay: 1.084 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 346.94 Mbit/s
95th percentile per-packet one-way delay: 1.084 ms
Loss rate: 0.01%
```

Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 346.94 Mbit/s)   Flow 1 egress (mean 346.94 Mbit/s)
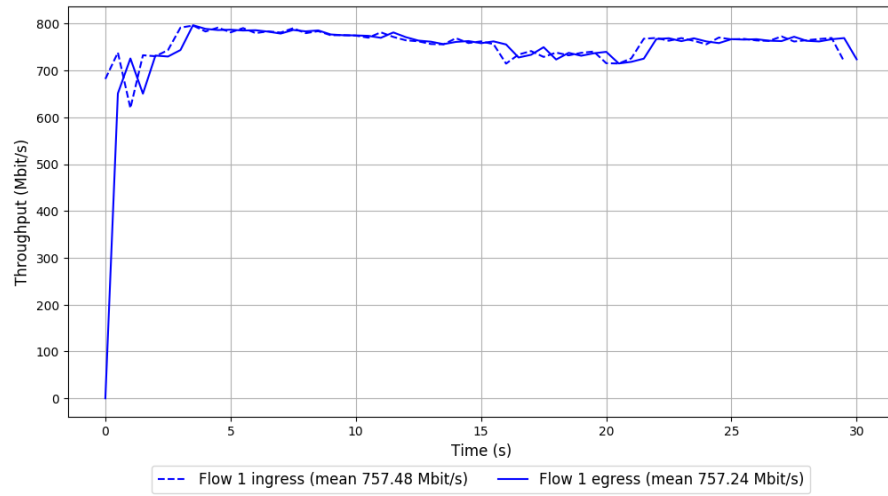

Flow 1 (95th percentile 1.08 ms)

```
Run 1: Statistics of TCP Cubic

Start at: 2019-07-18 04:57:37
End at: 2019-07-18 04:58:08
Local clock offset: -0.19 ms
Remote clock offset: 0.804 ms


# Below is generated by plot.py at 2019-07-18 07:54:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 723.52 Mbit/s
95th percentile per-packet one-way delay: 14.465 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 723.52 Mbit/s
95th percentile per-packet one-way delay: 14.465 ms
Loss rate: 0.04%
```
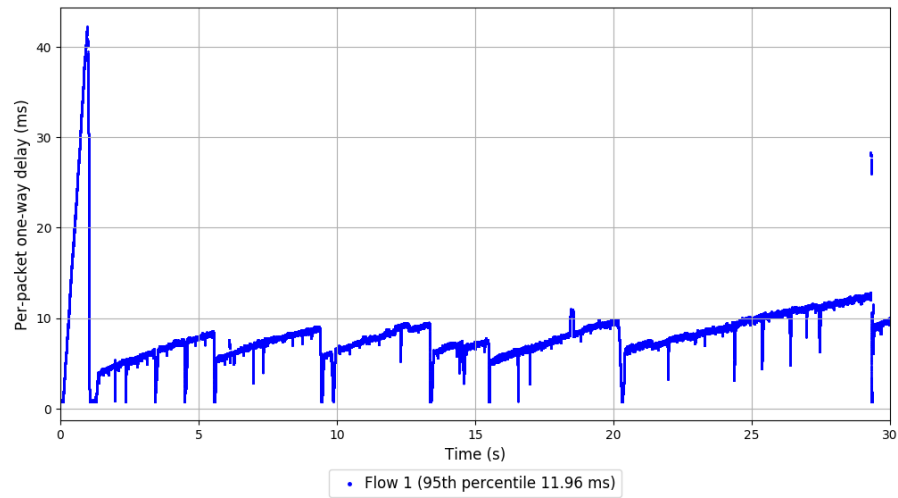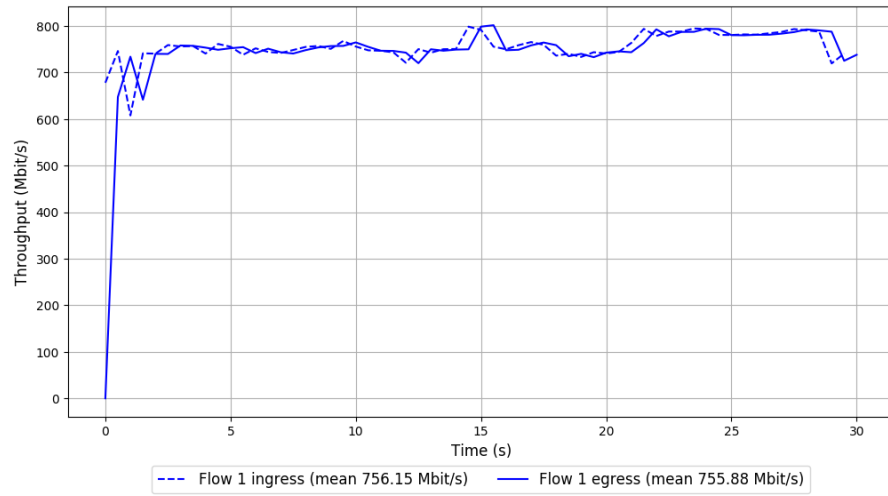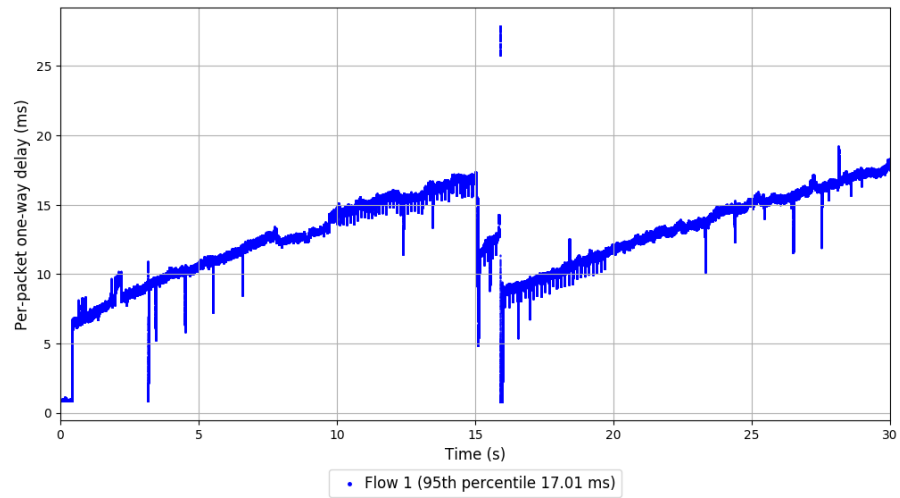
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2019-07-18 05:30:55
End at: 2019-07-18 05:31:25
Local clock offset: -0.237 ms
Remote clock offset: -0.004 ms


# Below is generated by plot.py at 2019-07-18 07:55:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 757.24 Mbit/s
95th percentile per-packet one-way delay: 15.474 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 757.24 Mbit/s
95th percentile per-packet one-way delay: 15.474 ms
Loss rate: 0.04%
```
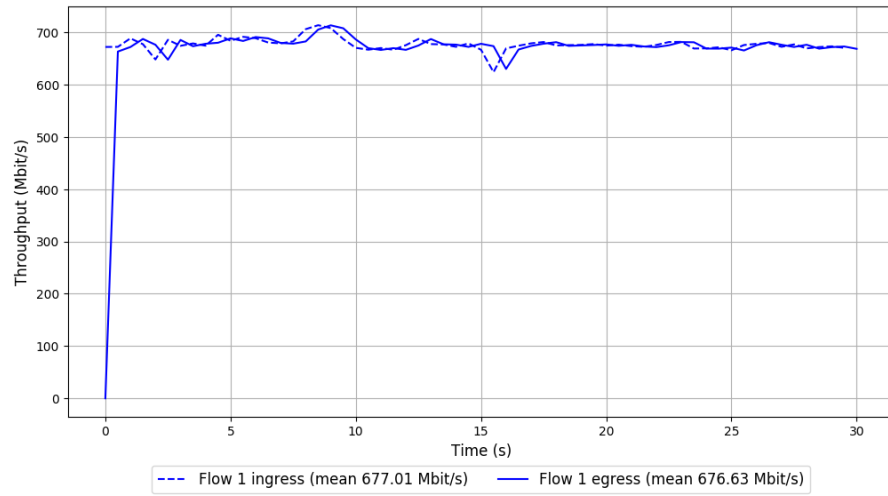
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2019-07-18 06:04:21
End at: 2019-07-18 06:04:51
Local clock offset: 2.162 ms
Remote clock offset: 2.924 ms


# Below is generated by plot.py at 2019-07-18 07:55:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 755.88 Mbit/s
95th percentile per-packet one-way delay: 11.956 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 755.88 Mbit/s
95th percentile per-packet one-way delay: 11.956 ms
Loss rate: 0.04%
```
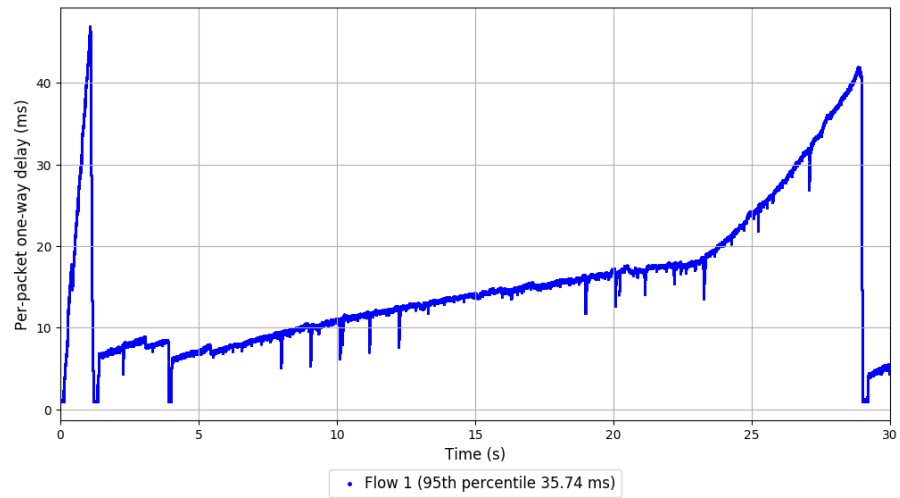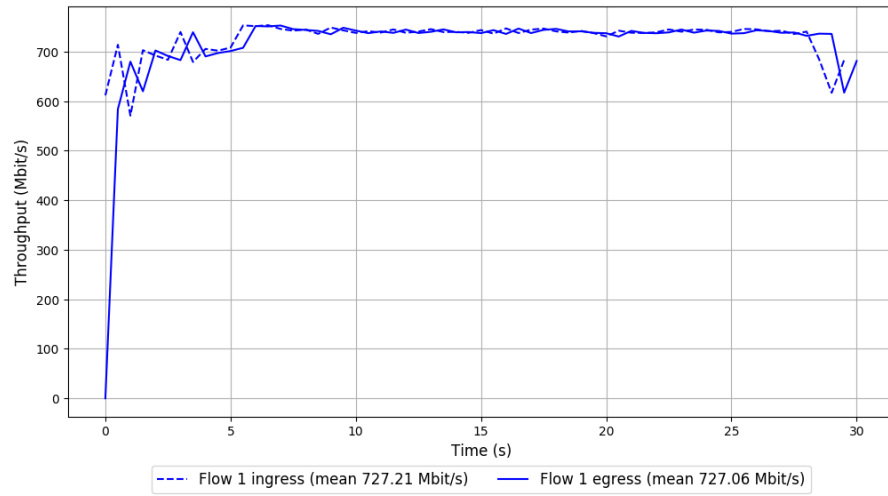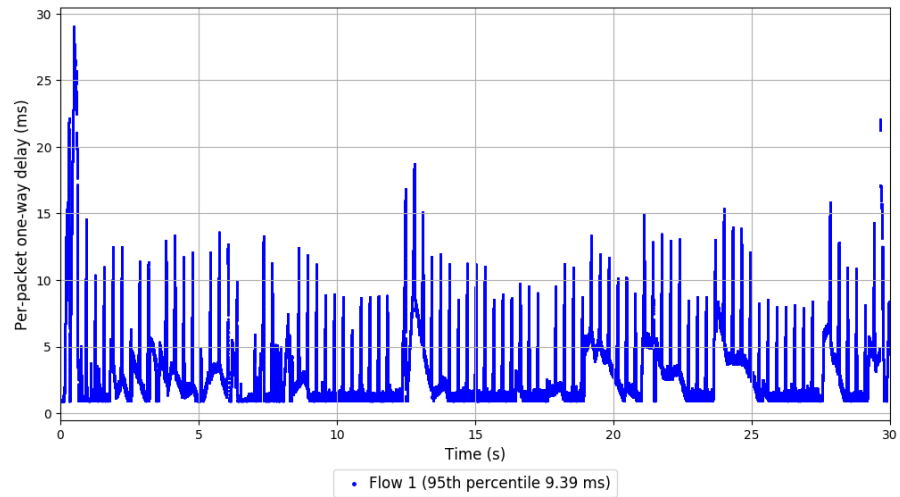
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 756.15 Mbit/s)   Flow 1 egress (mean 755.88 Mbit/s)

• Flow 1 (95th percentile 11.96 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2019-07-18 06:37:44
End at: 2019-07-18 06:38:14
Local clock offset: 3.239 ms
Remote clock offset: -0.018 ms


# Below is generated by plot.py at 2019-07-18 07:55:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 676.63 Mbit/s
95th percentile per-packet one-way delay: 17.008 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 676.63 Mbit/s
95th percentile per-packet one-way delay: 17.008 ms
Loss rate: 0.06%
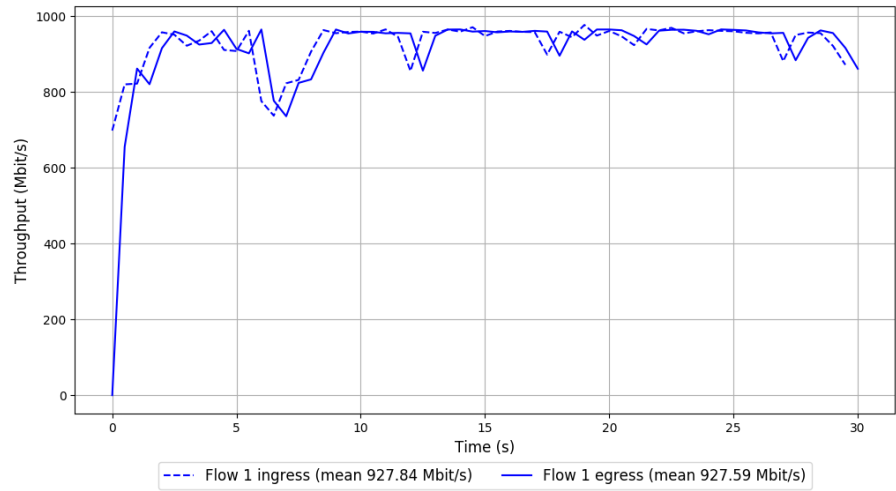```
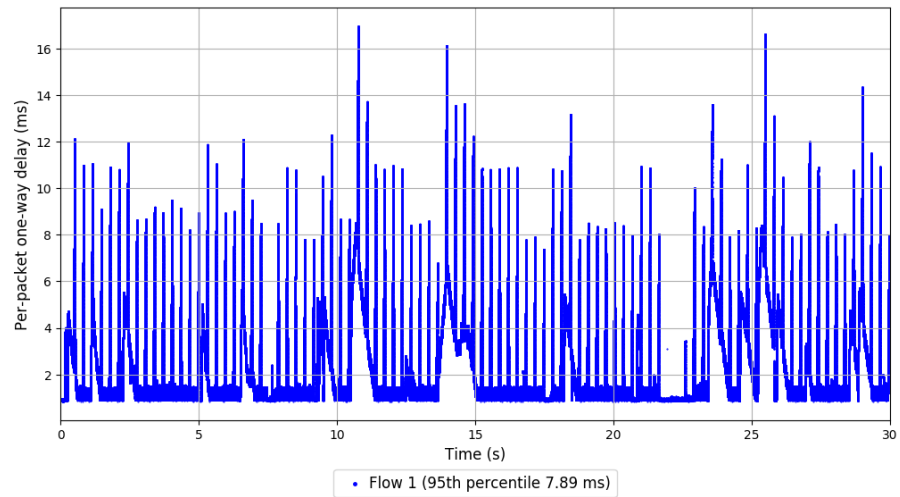
Run 4: Report of TCP Cubic — Data Link



Flow 1 ingress (mean 677.01 Mbit/s)　　Flow 1 egress (mean 676.63 Mbit/s)



Flow 1 (95th percentile 17.01 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2019-07-18 07:11:15
End at: 2019-07-18 07:11:45
Local clock offset: 1.33 ms
Remote clock offset: 1.092 ms


# Below is generated by plot.py at 2019-07-18 07:55:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 727.06 Mbit/s
95th percentile per-packet one-way delay: 35.745 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 727.06 Mbit/s
95th percentile per-packet one-way delay: 35.745 ms
Loss rate: 0.03%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 727.21 Mbit/s)   Flow 1 egress (mean 727.06 Mbit/s)
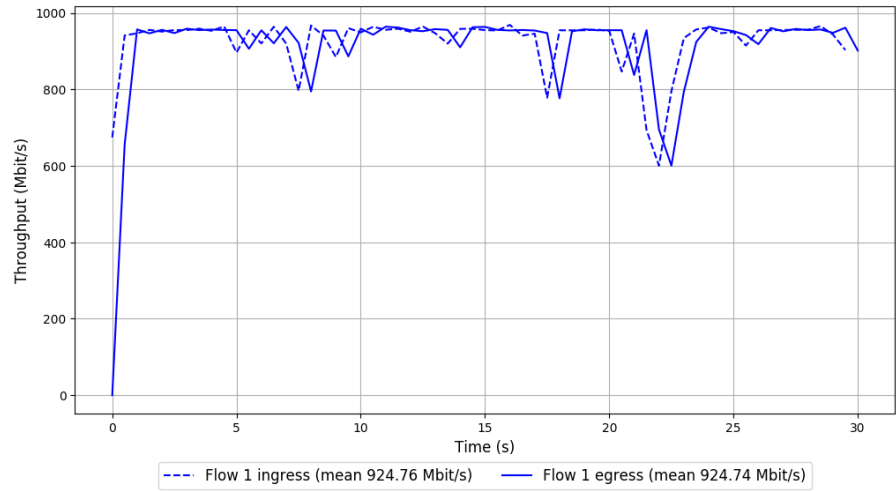

• Flow 1 (95th percentile 35.74 ms)

```
Run 1: Statistics of FillP

Start at: 2019-07-18 05:02:04
End at: 2019-07-18 05:02:34
Local clock offset: -0.097 ms
Remote clock offset: 0.96 ms


# Below is generated by plot.py at 2019-07-18 07:59:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 927.59 Mbit/s
95th percentile per-packet one-way delay: 9.392 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 927.59 Mbit/s
95th percentile per-packet one-way delay: 9.392 ms
Loss rate: 0.03%
```
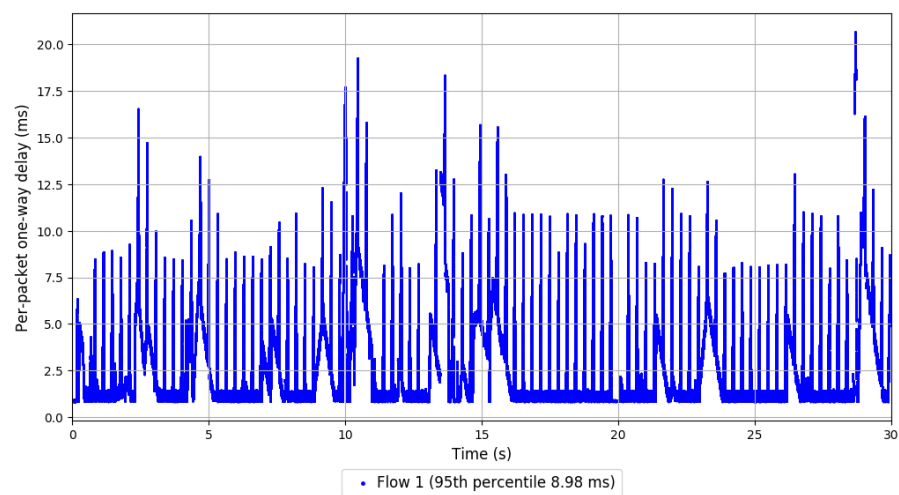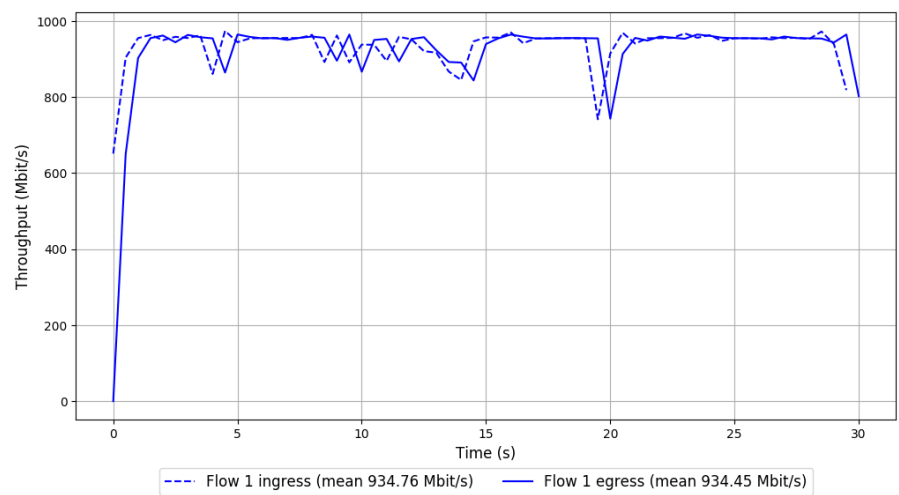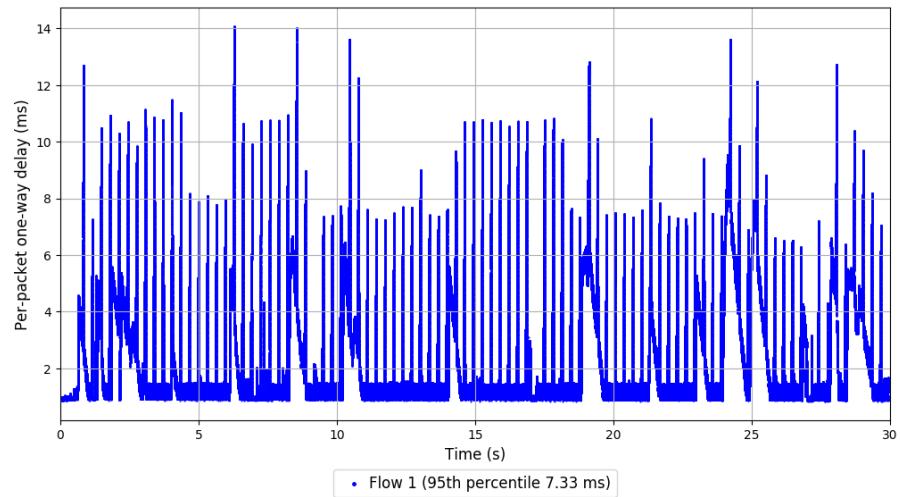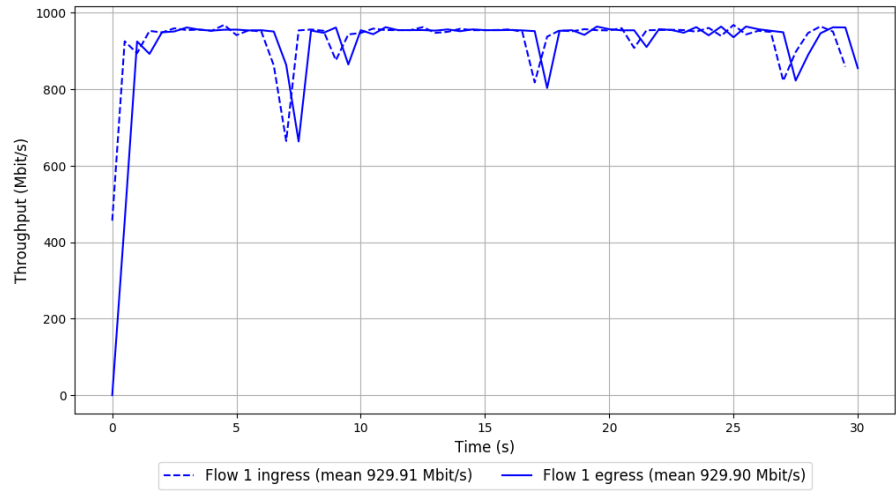
Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 927.84 Mbit/s)   Flow 1 egress (mean 927.59 Mbit/s)

• Flow 1 (95th percentile 9.39 ms)

```
Run 2: Statistics of FillP

Start at: 2019-07-18 05:35:23
End at: 2019-07-18 05:35:53
Local clock offset: -0.244 ms
Remote clock offset: -0.122 ms


# Below is generated by plot.py at 2019-07-18 08:06:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 924.74 Mbit/s
95th percentile per-packet one-way delay: 7.888 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 924.74 Mbit/s
95th percentile per-packet one-way delay: 7.888 ms
Loss rate: 0.01%
```

Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 924.76 Mbit/s) ——— Flow 1 egress (mean 924.74 Mbit/s)

• Flow 1 (95th percentile 7.89 ms)

```
Run 3: Statistics of FillP

Start at: 2019-07-18 06:08:46
End at: 2019-07-18 06:09:16
Local clock offset: 2.784 ms
Remote clock offset: 3.204 ms


# Below is generated by plot.py at 2019-07-18 08:07:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 934.45 Mbit/s
95th percentile per-packet one-way delay: 8.981 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 934.45 Mbit/s
95th percentile per-packet one-way delay: 8.981 ms
Loss rate: 0.04%
```
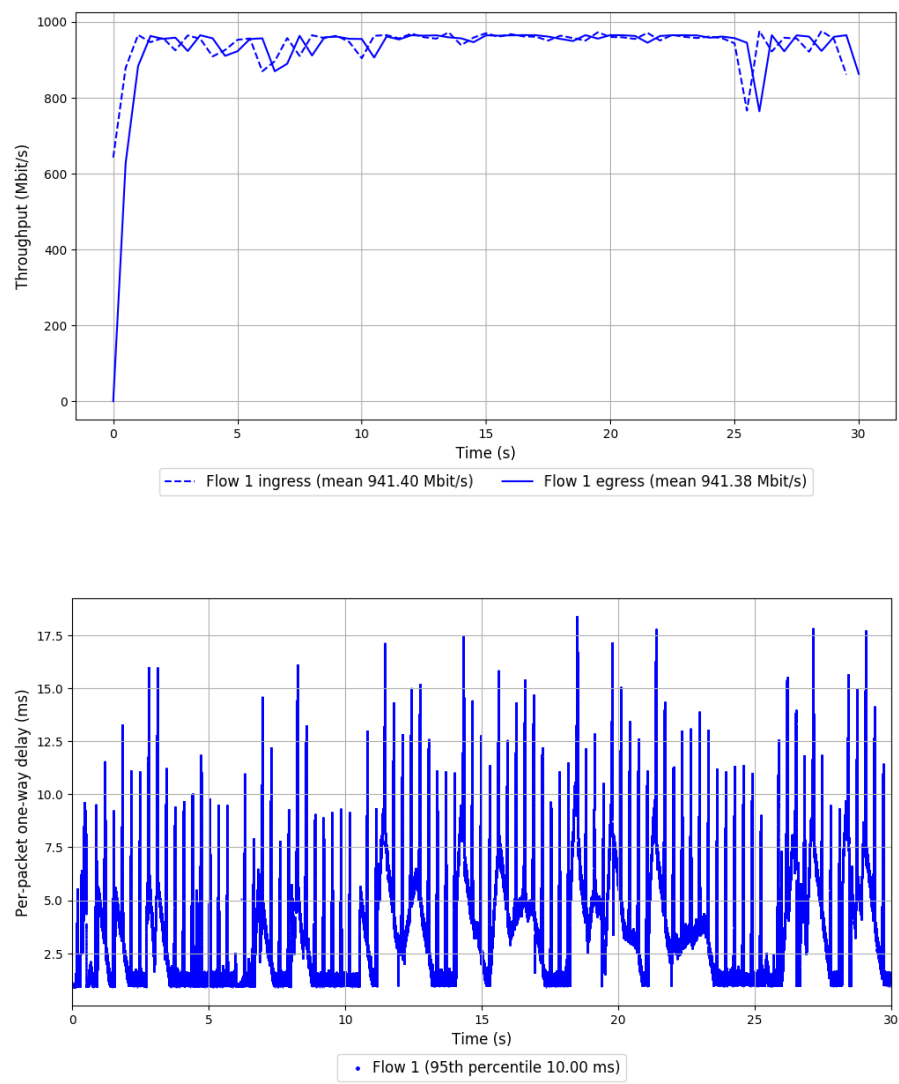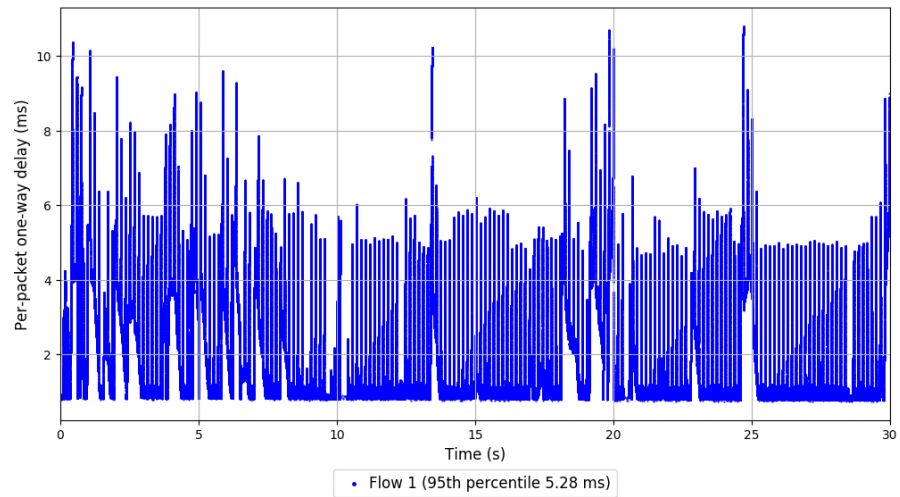
Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 934.76 Mbit/s)　　Flow 1 egress (mean 934.45 Mbit/s)

Flow 1 (95th percentile 8.98 ms)

40

```
Run 4: Statistics of FillP

Start at: 2019-07-18 06:42:10
End at: 2019-07-18 06:42:40
Local clock offset: 3.228 ms
Remote clock offset: -0.468 ms


# Below is generated by plot.py at 2019-07-18 08:07:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 929.90 Mbit/s
95th percentile per-packet one-way delay: 7.331 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 929.90 Mbit/s
95th percentile per-packet one-way delay: 7.331 ms
Loss rate: 0.01%
```
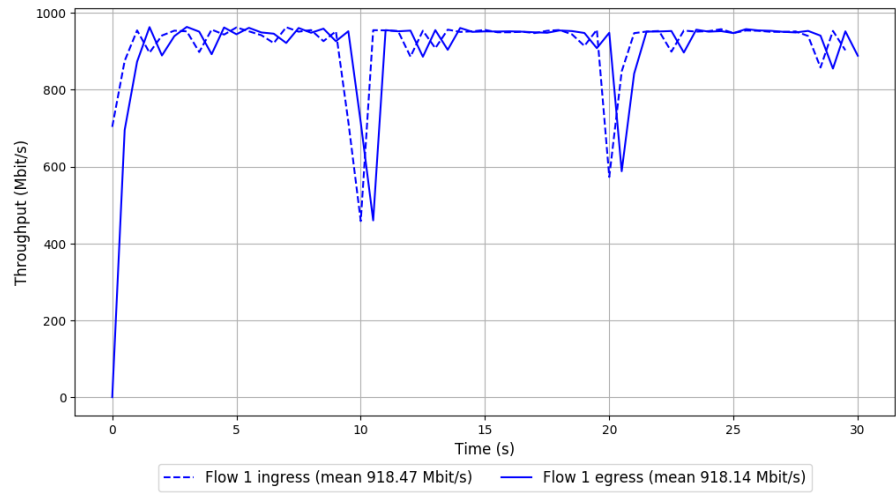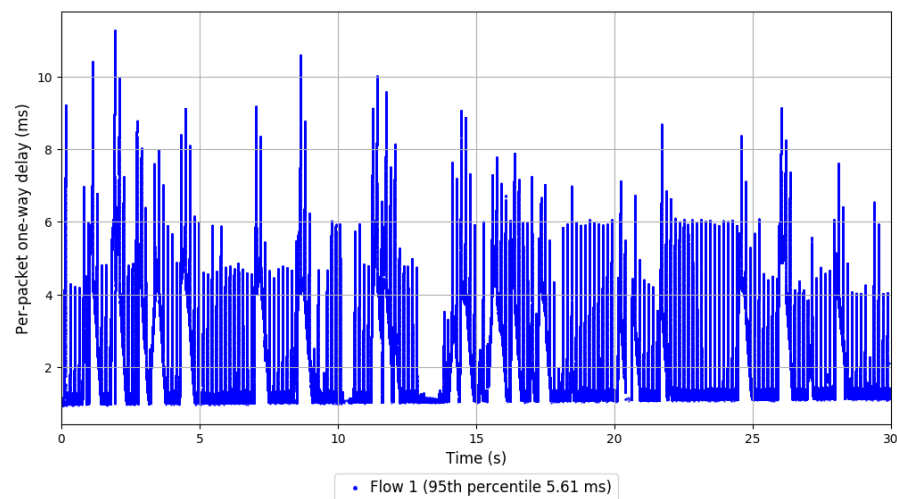
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 929.91 Mbit/s)   Flow 1 egress (mean 929.90 Mbit/s)

Flow 1 (95th percentile 7.33 ms)

```
Run 5: Statistics of FillP

Start at: 2019-07-18 07:15:40
End at: 2019-07-18 07:16:10
Local clock offset: 1.168 ms
Remote clock offset: 1.31 ms


# Below is generated by plot.py at 2019-07-18 08:07:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 941.38 Mbit/s
95th percentile per-packet one-way delay: 10.003 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 941.38 Mbit/s
95th percentile per-packet one-way delay: 10.003 ms
Loss rate: 0.01%
```
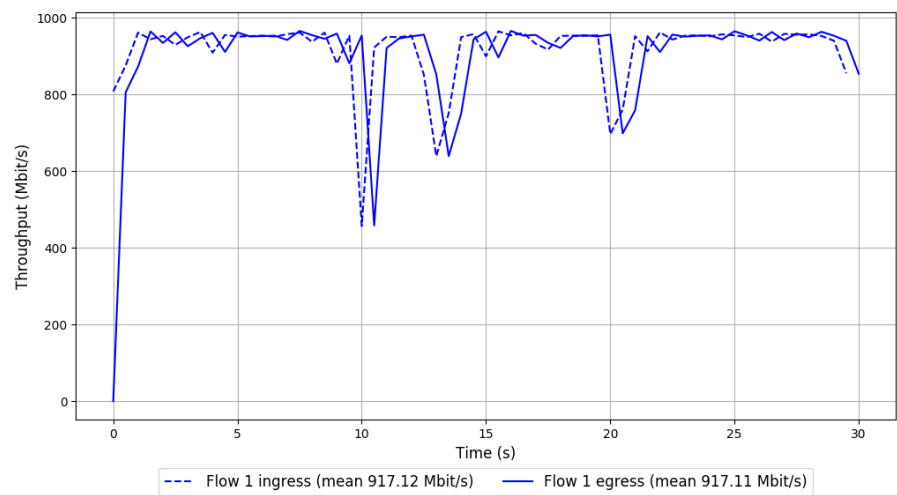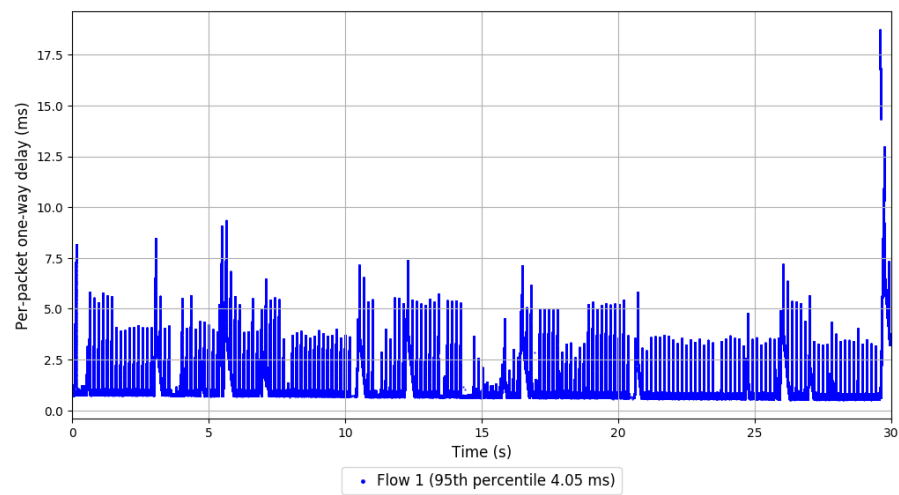
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 941.40 Mbit/s)   Flow 1 egress (mean 941.38 Mbit/s)

Flow 1 (95th percentile 10.00 ms)

```
Run 1: Statistics of FillP-Sheep

Start at: 2019-07-18 05:16:04
End at: 2019-07-18 05:16:34
Local clock offset: -0.178 ms
Remote clock offset: 0.985 ms


# Below is generated by plot.py at 2019-07-18 08:07:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 918.14 Mbit/s
95th percentile per-packet one-way delay: 5.282 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 918.14 Mbit/s
95th percentile per-packet one-way delay: 5.282 ms
Loss rate: 0.03%
```
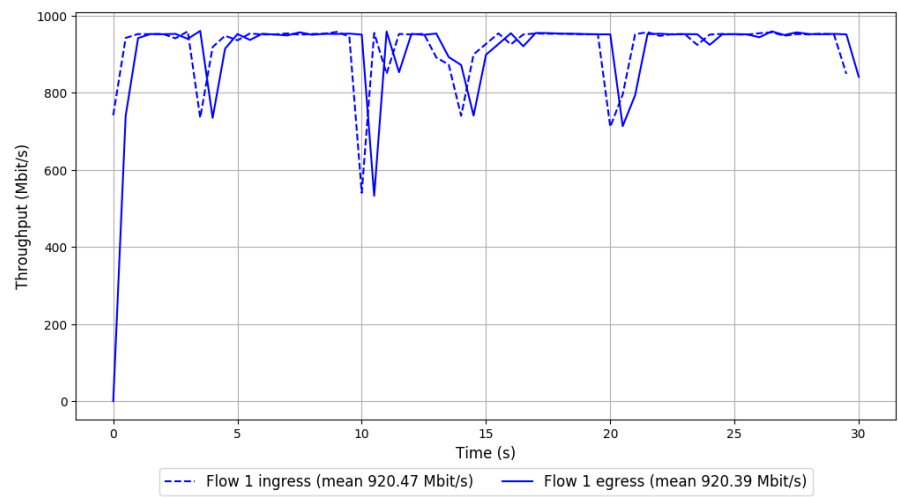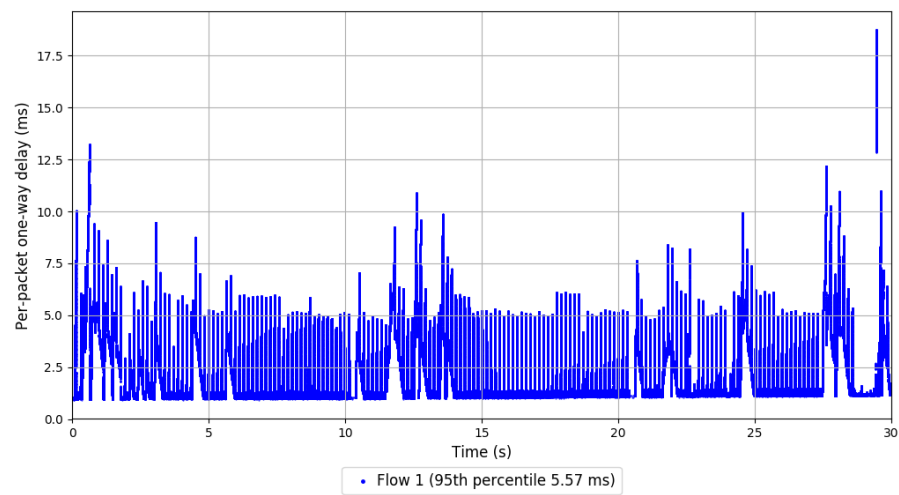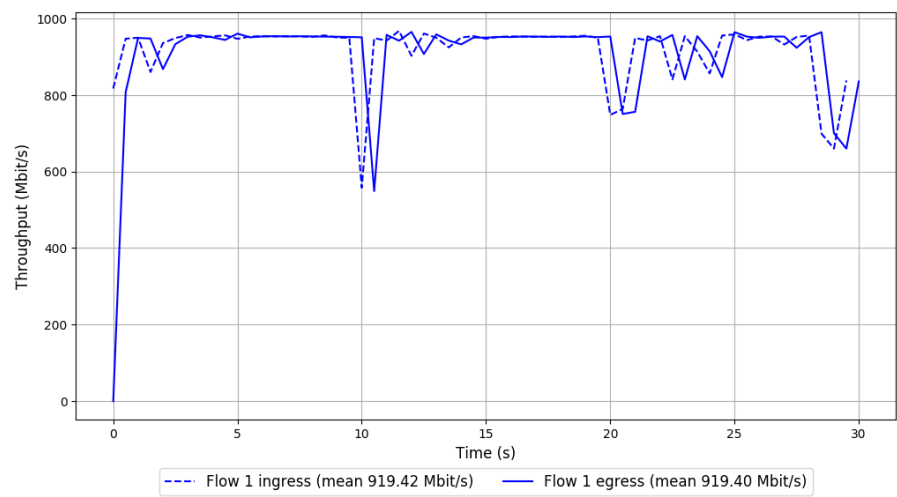
Run 1: Report of FillP-Sheep — Data Link

```
Run 2: Statistics of FillP-Sheep

Start at: 2019-07-18 05:49:12
End at: 2019-07-18 05:49:42
Local clock offset: -0.187 ms
Remote clock offset: 0.254 ms


# Below is generated by plot.py at 2019-07-18 08:07:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 917.11 Mbit/s
95th percentile per-packet one-way delay: 5.607 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 917.11 Mbit/s
95th percentile per-packet one-way delay: 5.607 ms
Loss rate: 0.01%
```
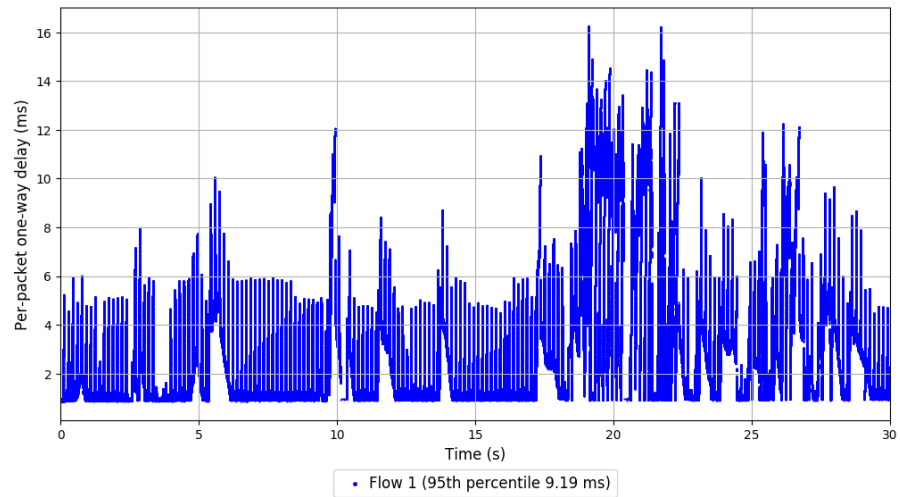
Run 2: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 917.12 Mbit/s) --- Flow 1 egress (mean 917.11 Mbit/s)

Flow 1 (95th percentile 5.61 ms)

```
Run 3: Statistics of FillP-Sheep

Start at: 2019-07-18 06:22:46
End at: 2019-07-18 06:23:16
Local clock offset: 3.775 ms
Remote clock offset: 3.414 ms


# Below is generated by plot.py at 2019-07-18 08:08:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 920.39 Mbit/s
95th percentile per-packet one-way delay: 4.051 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 920.39 Mbit/s
95th percentile per-packet one-way delay: 4.051 ms
Loss rate: 0.02%
```
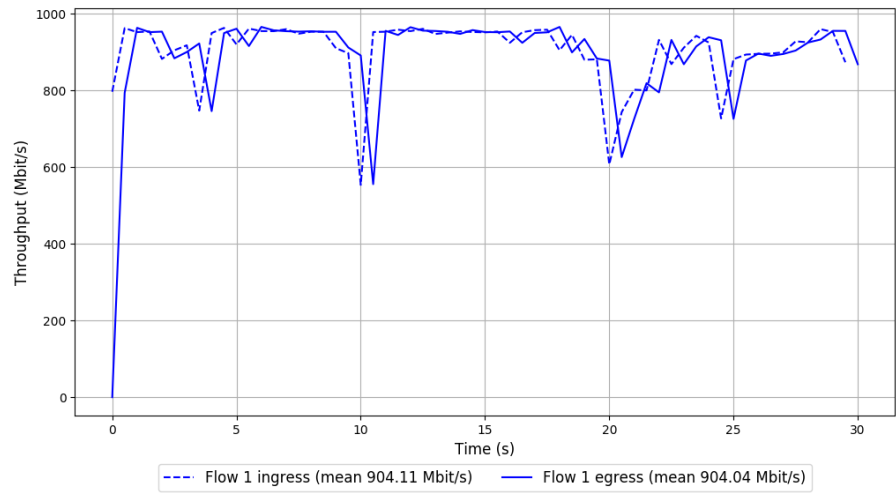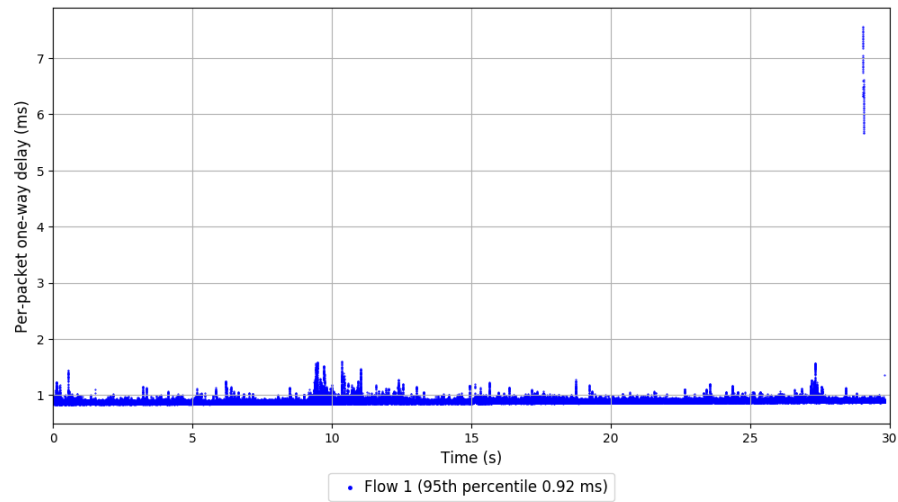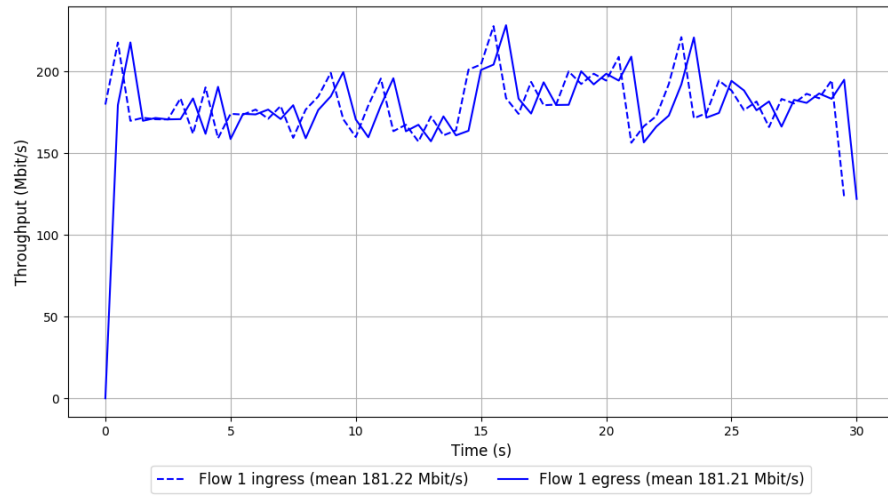
Run 3: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 920.47 Mbit/s) — — — Flow 1 egress (mean 920.39 Mbit/s)

• Flow 1 (95th percentile 4.05 ms)

```
Run 4: Statistics of FillP-Sheep

Start at: 2019-07-18 06:56:04
End at: 2019-07-18 06:56:34
Local clock offset: 3.111 ms
Remote clock offset: -1.044 ms


# Below is generated by plot.py at 2019-07-18 08:13:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 919.40 Mbit/s
95th percentile per-packet one-way delay: 5.569 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 919.40 Mbit/s
95th percentile per-packet one-way delay: 5.569 ms
Loss rate: 0.01%
```
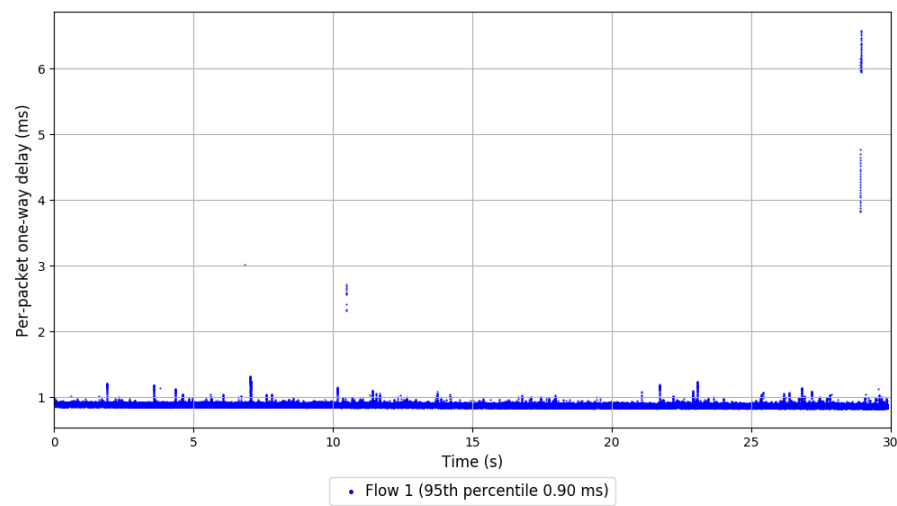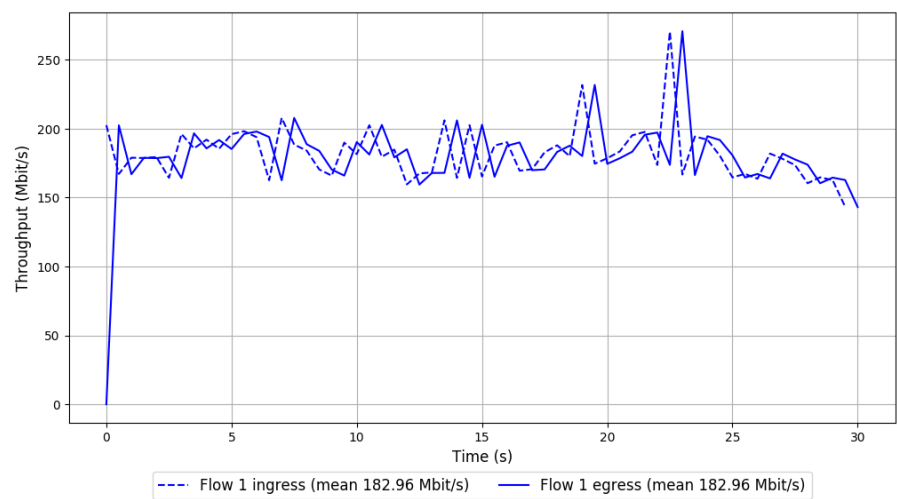
Run 4: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 919.42 Mbit/s)　　Flow 1 egress (mean 919.40 Mbit/s)

Flow 1 (95th percentile 5.57 ms)

```
Run 5: Statistics of FillP-Sheep

Start at: 2019-07-18 07:29:30
End at: 2019-07-18 07:30:00
Local clock offset: 0.399 ms
Remote clock offset: 1.855 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 904.04 Mbit/s
95th percentile per-packet one-way delay: 9.193 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 904.04 Mbit/s
95th percentile per-packet one-way delay: 9.193 ms
Loss rate: 0.01%
```
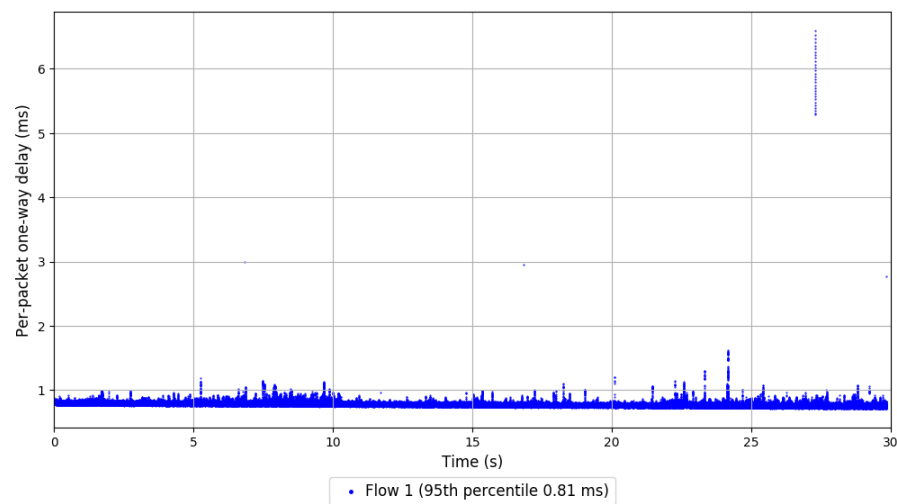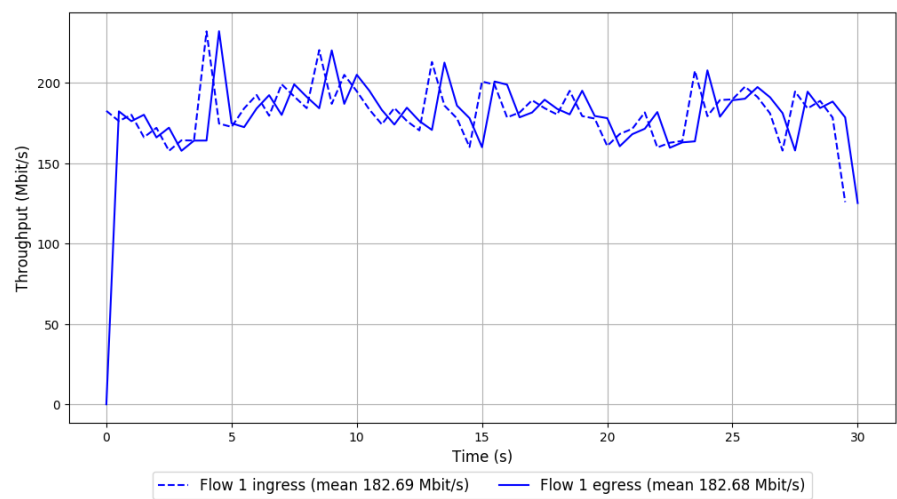
Run 5: Report of FillP-Sheep — Data Link

Flow 1 ingress (mean 904.11 Mbit/s) — — — Flow 1 egress (mean 904.04 Mbit/s)

• Flow 1 (95th percentile 9.19 ms)

```
Run 1: Statistics of Indigo

Start at: 2019-07-18 04:52:10
End at: 2019-07-18 04:52:40
Local clock offset: -0.208 ms
Remote clock offset: 0.677 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.21 Mbit/s
95th percentile per-packet one-way delay: 0.918 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 181.21 Mbit/s
95th percentile per-packet one-way delay: 0.918 ms
Loss rate: 0.01%
```
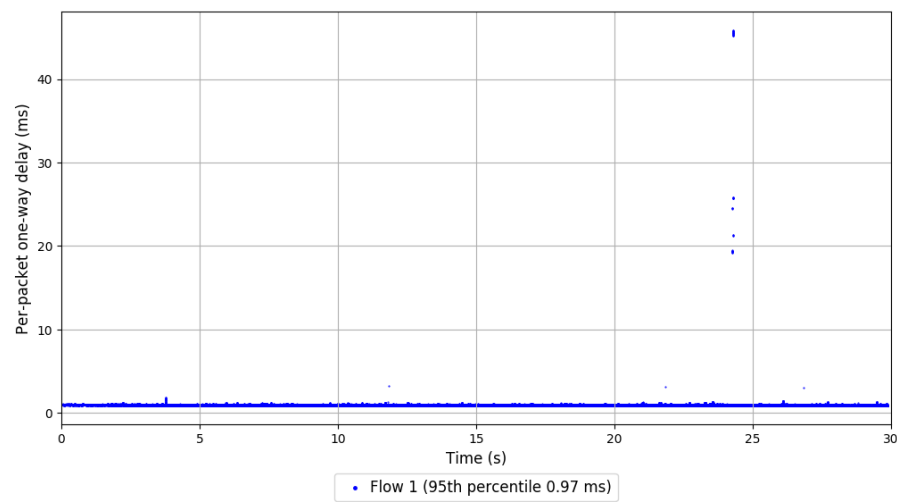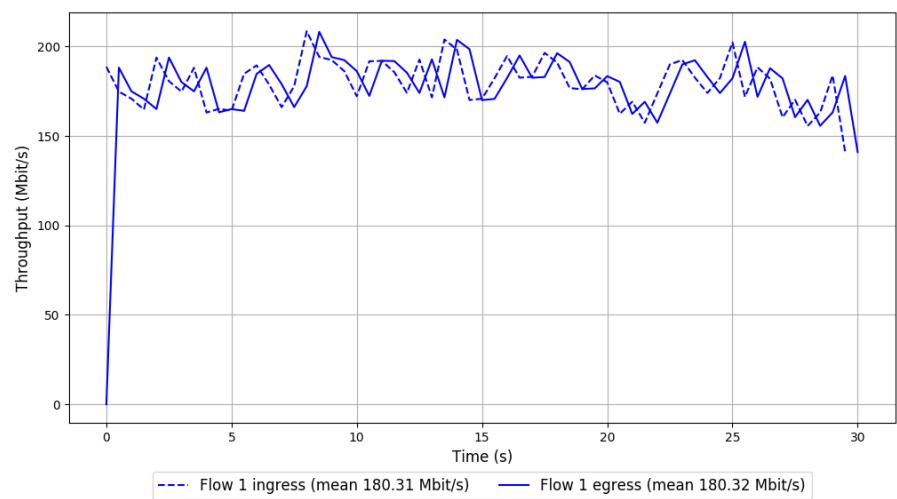
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2019-07-18 05:25:27
End at: 2019-07-18 05:25:57
Local clock offset: -0.311 ms
Remote clock offset: 0.208 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.96 Mbit/s
95th percentile per-packet one-way delay: 0.897 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 182.96 Mbit/s
95th percentile per-packet one-way delay: 0.897 ms
Loss rate: 0.01%
```
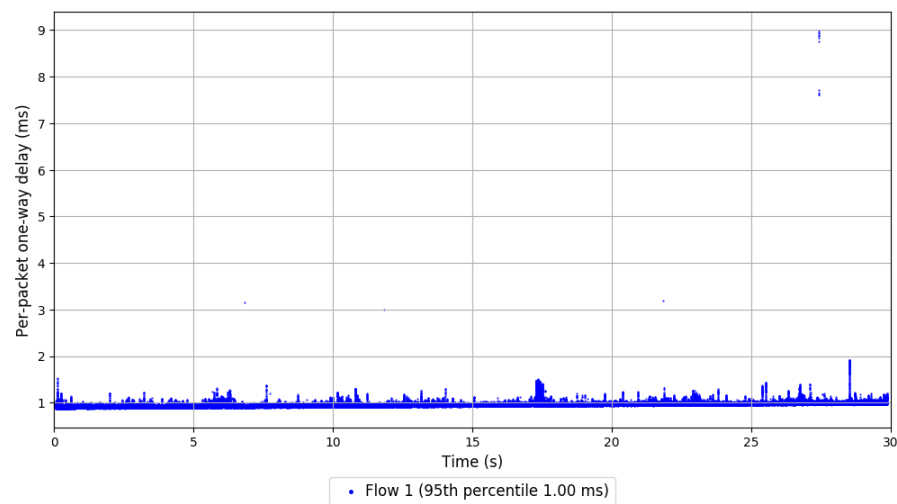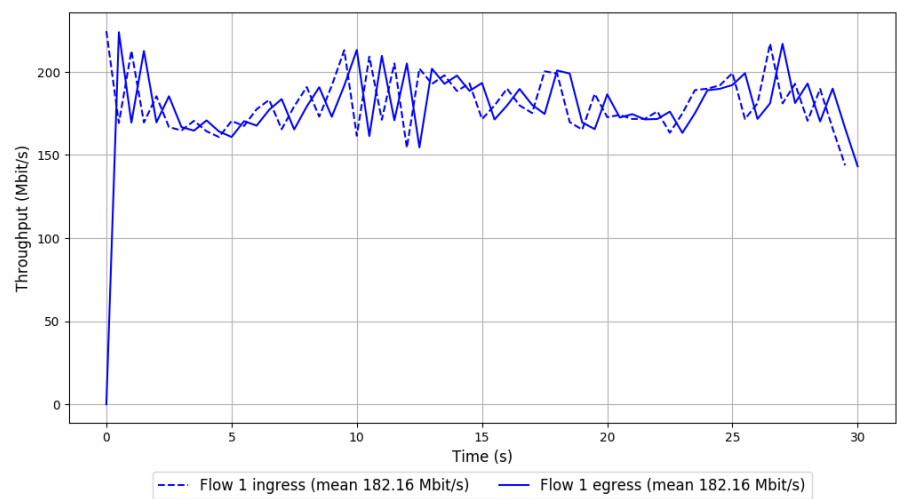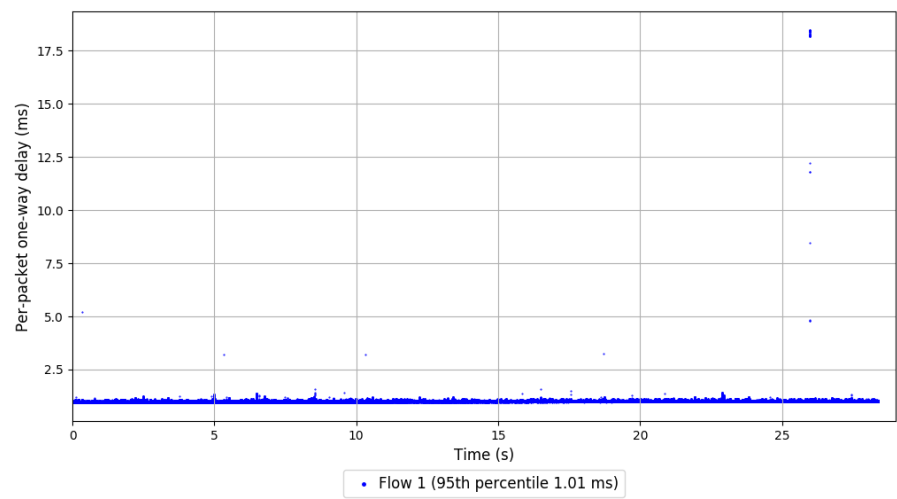
Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 182.96 Mbit/s)   Flow 1 egress (mean 182.96 Mbit/s)

• Flow 1 (95th percentile 0.90 ms)

```
Run 3: Statistics of Indigo

Start at: 2019-07-18 05:58:52
End at: 2019-07-18 05:59:22
Local clock offset: 1.061 ms
Remote clock offset: 2.314 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.68 Mbit/s
95th percentile per-packet one-way delay: 0.812 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 182.68 Mbit/s
95th percentile per-packet one-way delay: 0.812 ms
Loss rate: 0.01%
```

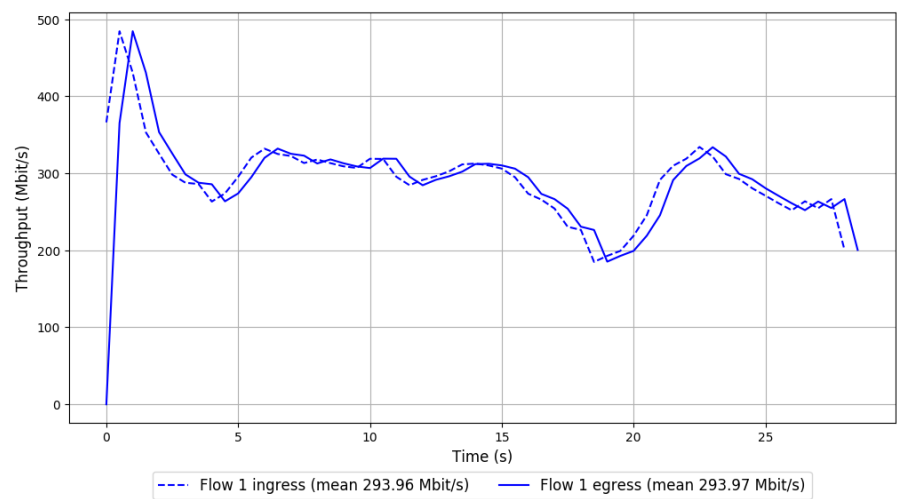# Run 3: Report of Indigo — Data Link

Flow 1 ingress (mean 182.69 Mbit/s)   Flow 1 egress (mean 182.68 Mbit/s)

Flow 1 (95th percentile 0.81 ms)

```
Run 4: Statistics of Indigo

Start at: 2019-07-18 06:32:16
End at: 2019-07-18 06:32:46
Local clock offset: 3.391 ms
Remote clock offset: 0.653 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 180.32 Mbit/s
95th percentile per-packet one-way delay: 0.966 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 180.32 Mbit/s
95th percentile per-packet one-way delay: 0.966 ms
Loss rate: 0.00%
```
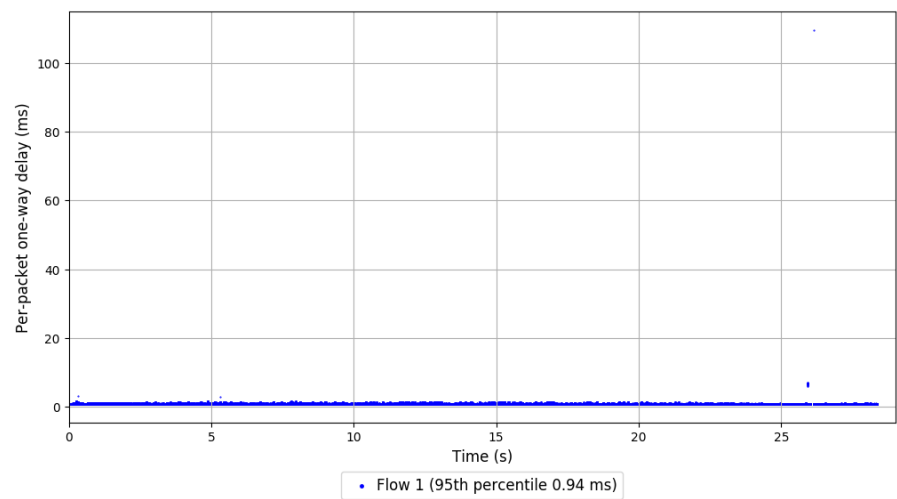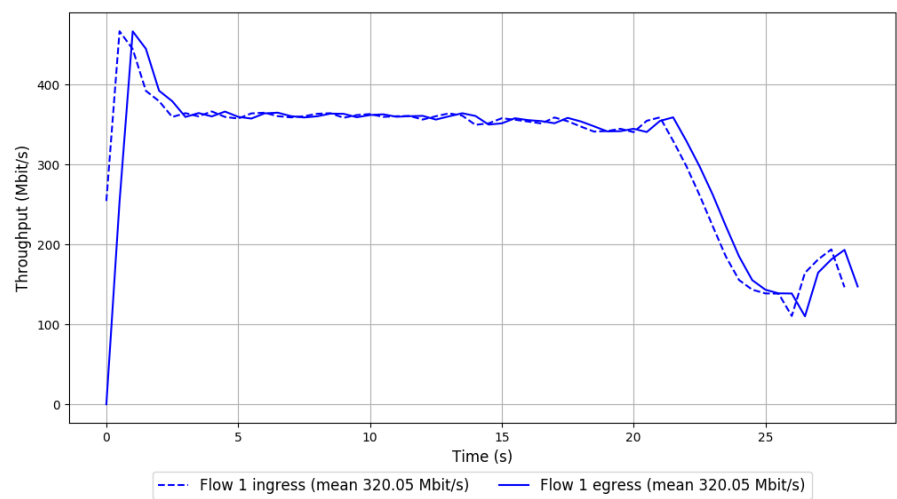
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2019-07-18 07:05:46
End at: 2019-07-18 07:06:16
Local clock offset: 1.701 ms
Remote clock offset: 0.687 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.16 Mbit/s
95th percentile per-packet one-way delay: 0.999 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 182.16 Mbit/s
95th percentile per-packet one-way delay: 0.999 ms
Loss rate: 0.01%
```
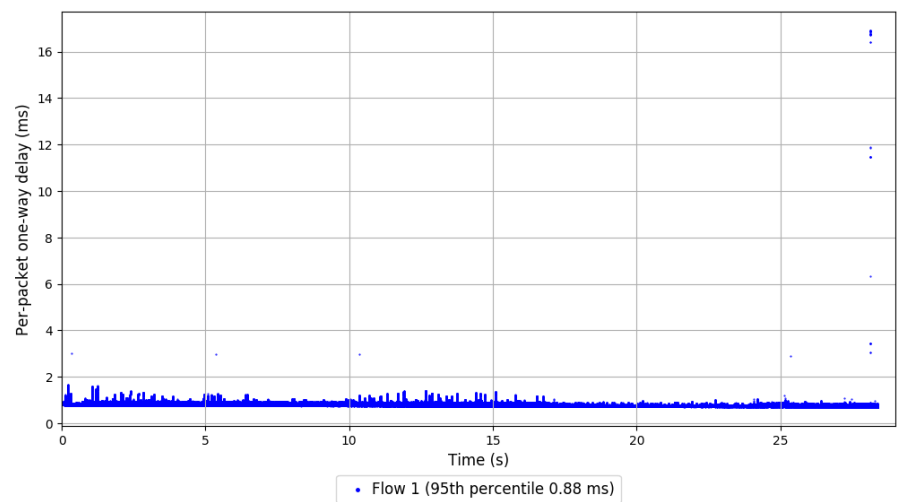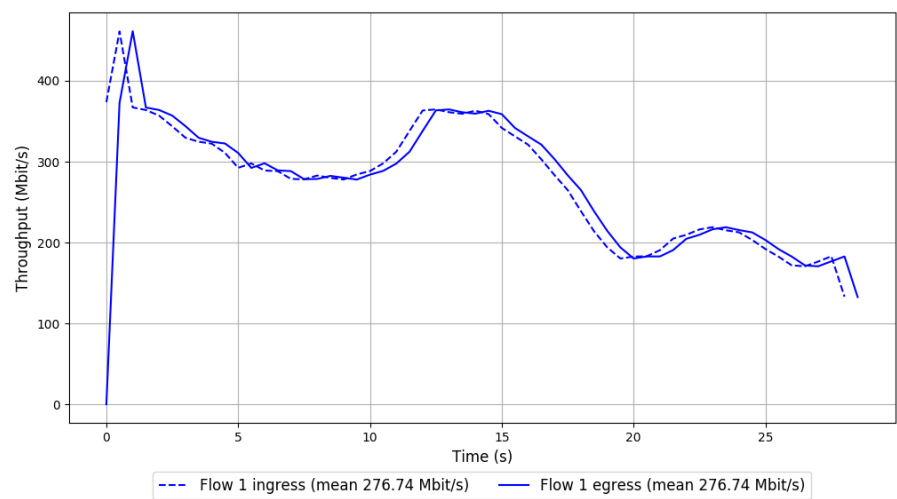
Run 5: Report of Indigo — Data Link

```
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-07-18 04:48:11
End at: 2019-07-18 04:48:41
Local clock offset: -0.111 ms
Remote clock offset: 0.385 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 293.97 Mbit/s
95th percentile per-packet one-way delay: 1.011 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 293.97 Mbit/s
95th percentile per-packet one-way delay: 1.011 ms
Loss rate: 0.00%
```
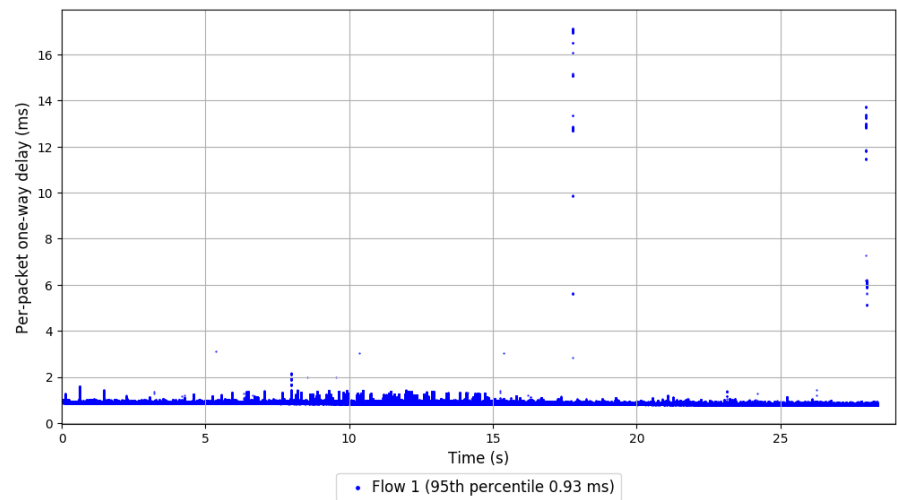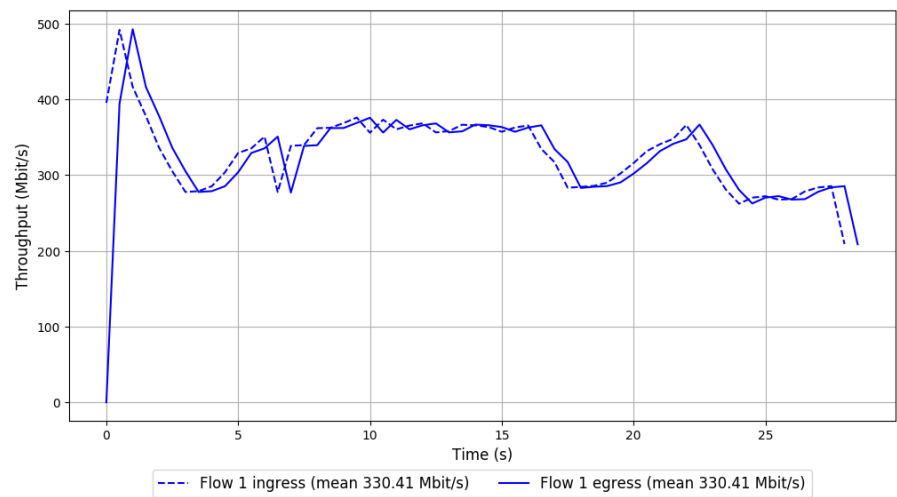
Run 1: Report of Indigo-MusesC3 — Data Link

```
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-07-18 05:21:26
End at: 2019-07-18 05:21:56
Local clock offset: -0.276 ms
Remote clock offset: 0.458 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 320.05 Mbit/s
95th percentile per-packet one-way delay: 0.942 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 320.05 Mbit/s
95th percentile per-packet one-way delay: 0.942 ms
Loss rate: 0.00%
```
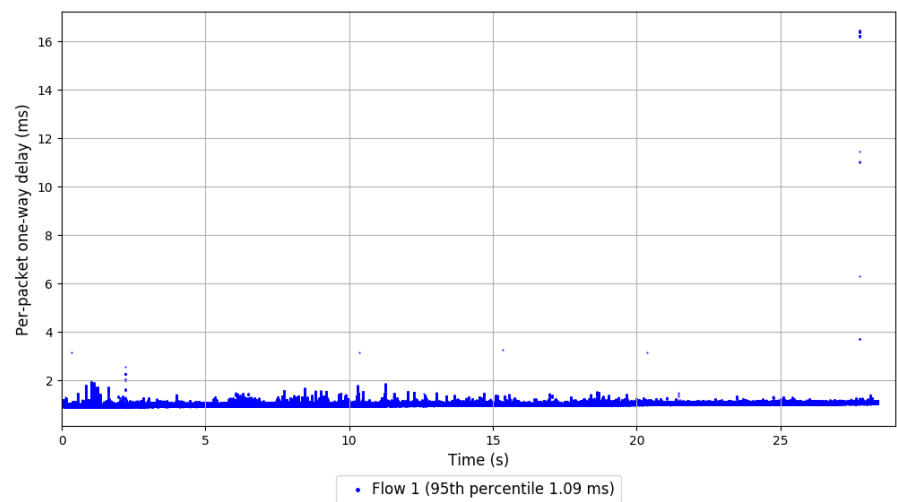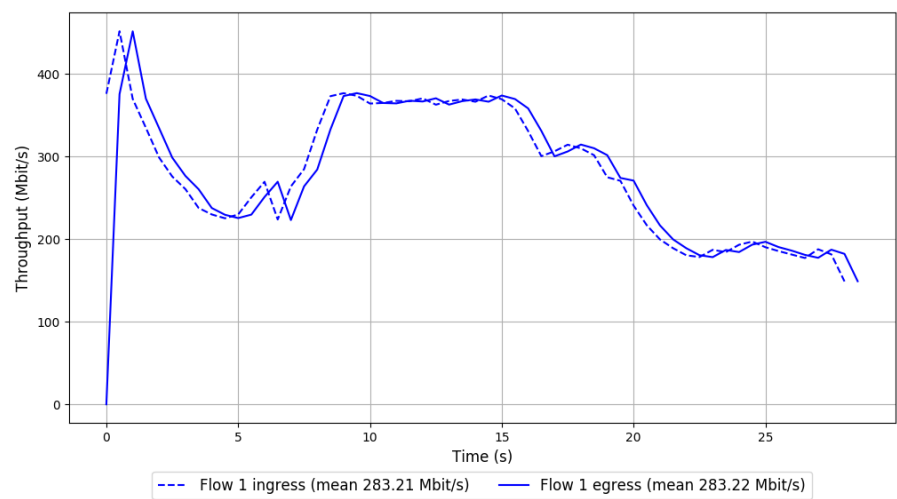
Run 2: Report of Indigo-MusesC3 — Data Link

Flow 1 ingress (mean 320.05 Mbit/s) ----- Flow 1 egress (mean 320.05 Mbit/s)

• Flow 1 (95th percentile 0.94 ms)

```
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-07-18 05:54:51
End at: 2019-07-18 05:55:21
Local clock offset: -0.19 ms
Remote clock offset: 1.647 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 276.74 Mbit/s
95th percentile per-packet one-way delay: 0.876 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 276.74 Mbit/s
95th percentile per-packet one-way delay: 0.876 ms
Loss rate: 0.01%
```
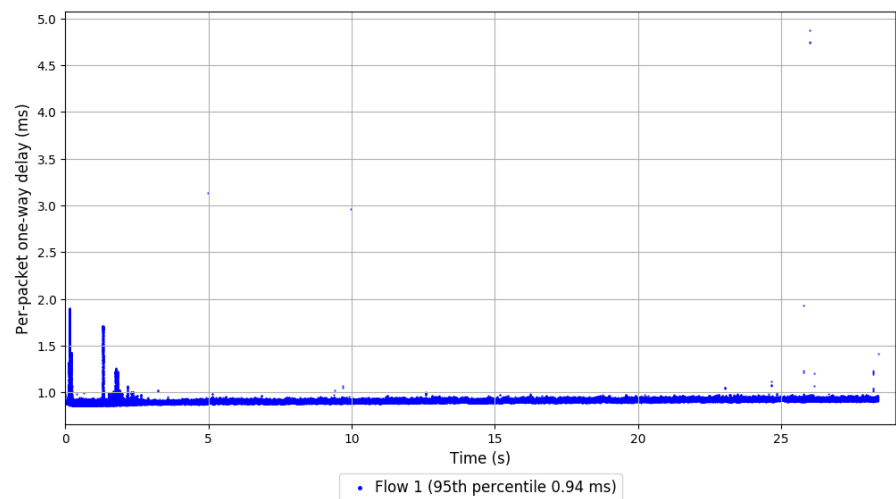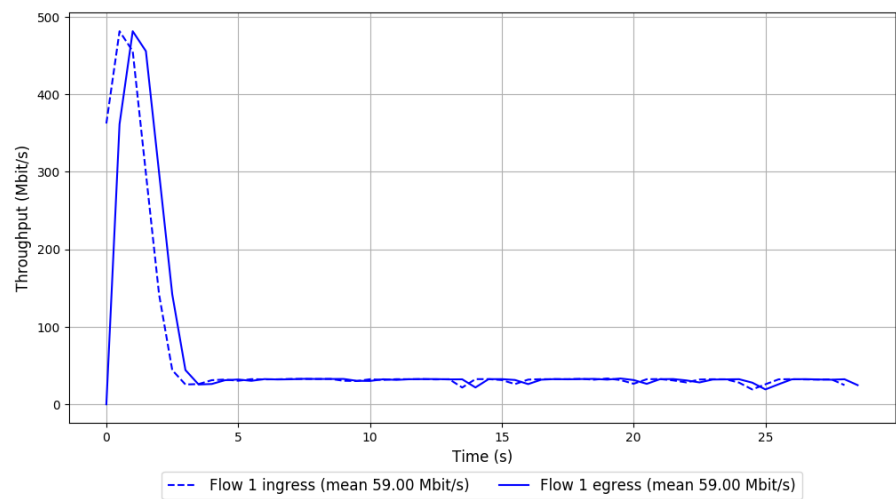
Run 3: Report of Indigo-MusesC3 — Data Link

```
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-07-18 06:28:08
End at: 2019-07-18 06:28:38
Local clock offset: 3.566 ms
Remote clock offset: 1.517 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 330.41 Mbit/s
95th percentile per-packet one-way delay: 0.927 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 330.41 Mbit/s
95th percentile per-packet one-way delay: 0.927 ms
Loss rate: 0.01%
```
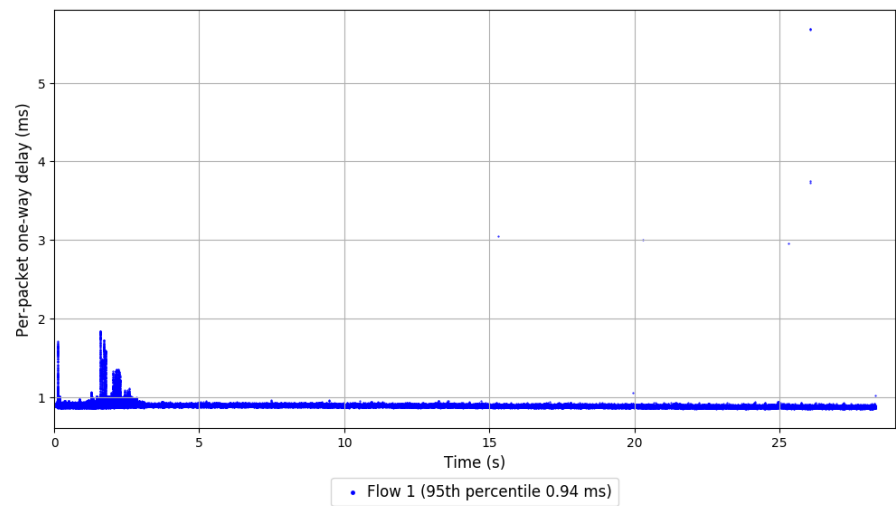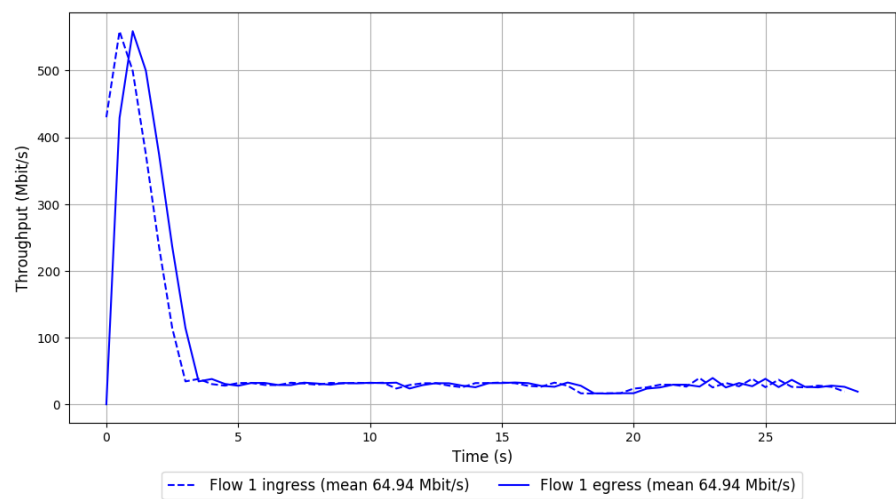
Run 4: Report of Indigo-MusesC3 — Data Link

```
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-07-18 07:01:44
End at: 2019-07-18 07:02:14
Local clock offset: 2.123 ms
Remote clock offset: 0.161 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 283.22 Mbit/s
95th percentile per-packet one-way delay: 1.094 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 283.22 Mbit/s
95th percentile per-packet one-way delay: 1.094 ms
Loss rate: 0.00%
```
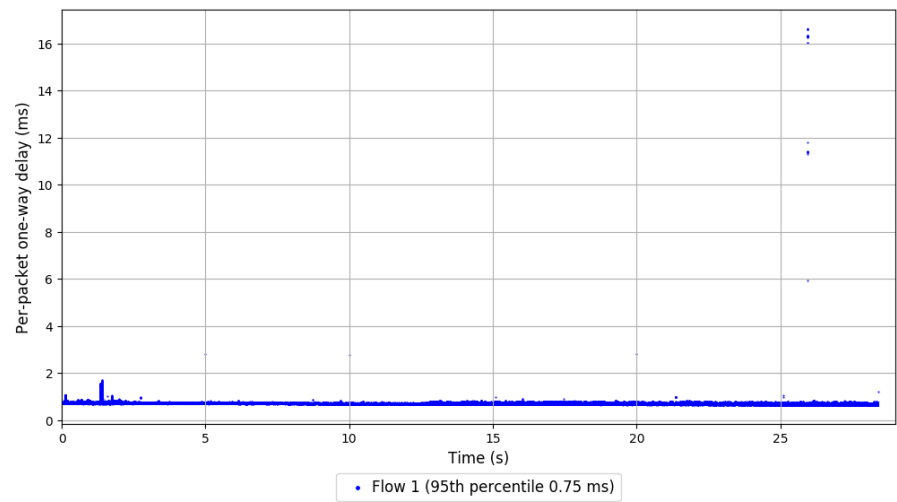
Run 5: Report of Indigo-MusesC3 — Data Link

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```
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-07-18 04:50:55
End at: 2019-07-18 04:51:25
Local clock offset: -0.162 ms
Remote clock offset: 0.594 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.00 Mbit/s
95th percentile per-packet one-way delay: 0.937 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.00 Mbit/s
95th percentile per-packet one-way delay: 0.937 ms
Loss rate: 0.00%
```
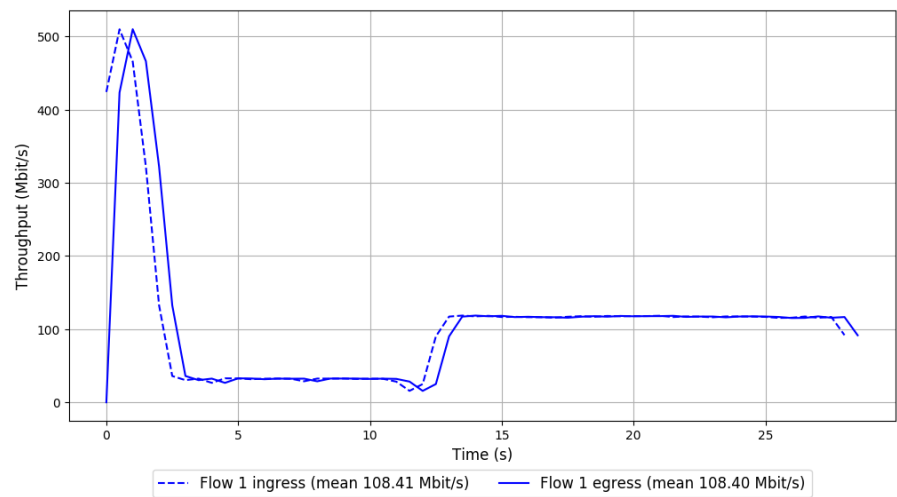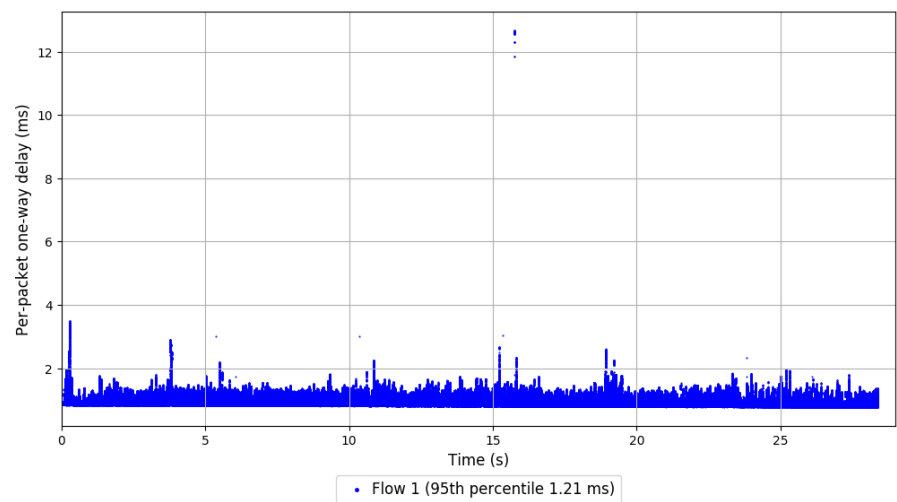
Run 1: Report of Indigo-MusesC5 — Data Link

```
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-07-18 05:24:11
End at: 2019-07-18 05:24:41
Local clock offset: -0.322 ms
Remote clock offset: 0.255 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.94 Mbit/s
95th percentile per-packet one-way delay: 0.944 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.94 Mbit/s
95th percentile per-packet one-way delay: 0.944 ms
Loss rate: 0.00%
```
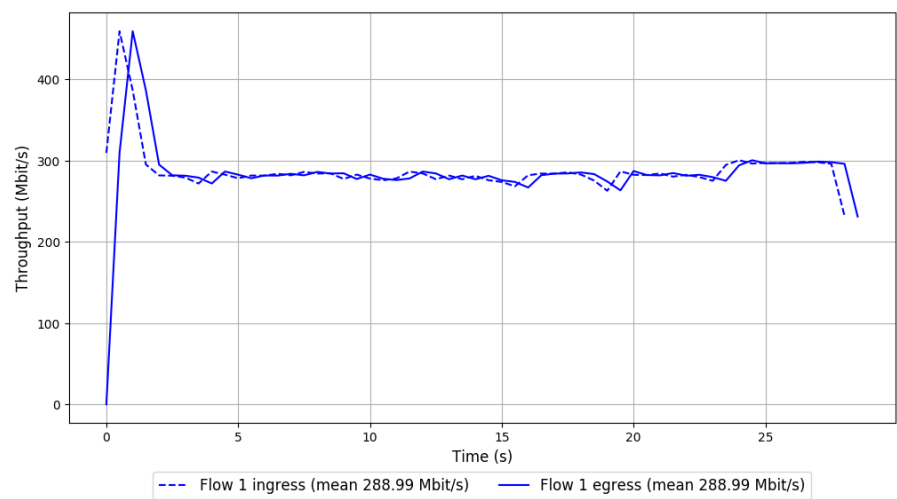
Run 2: Report of Indigo-MusesC5 — Data Link

```
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-07-18 05:57:35
End at: 2019-07-18 05:58:05
Local clock offset: 0.693 ms
Remote clock offset: 2.17 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 108.40 Mbit/s
95th percentile per-packet one-way delay: 0.747 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 108.40 Mbit/s
95th percentile per-packet one-way delay: 0.747 ms
Loss rate: 0.01%
```
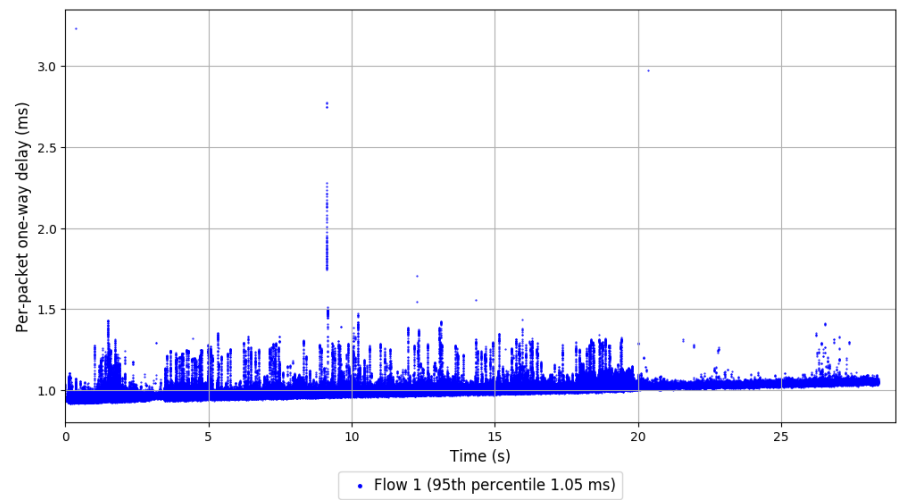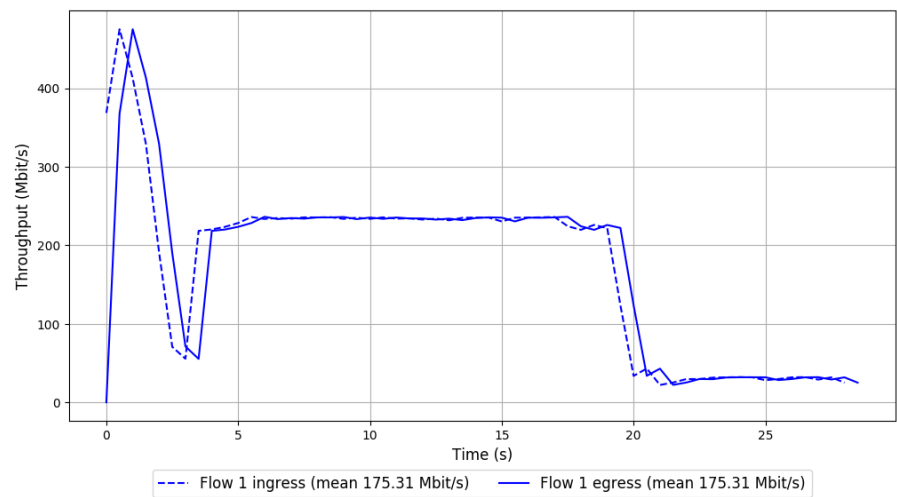
Run 3: Report of Indigo-MusesC5 — Data Link

Flow 1 ingress (mean 108.41 Mbit/s)   Flow 1 egress (mean 108.40 Mbit/s)

Flow 1 (95th percentile 0.75 ms)

```
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-07-18 06:30:53
End at: 2019-07-18 06:31:23
Local clock offset: 3.407 ms
Remote clock offset: 0.926 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 288.99 Mbit/s
95th percentile per-packet one-way delay: 1.207 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 288.99 Mbit/s
95th percentile per-packet one-way delay: 1.207 ms
Loss rate: 0.01%
```
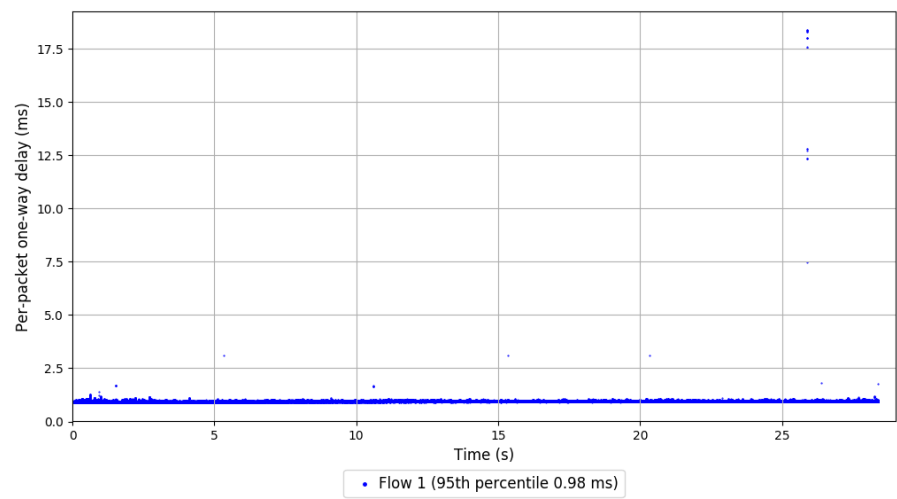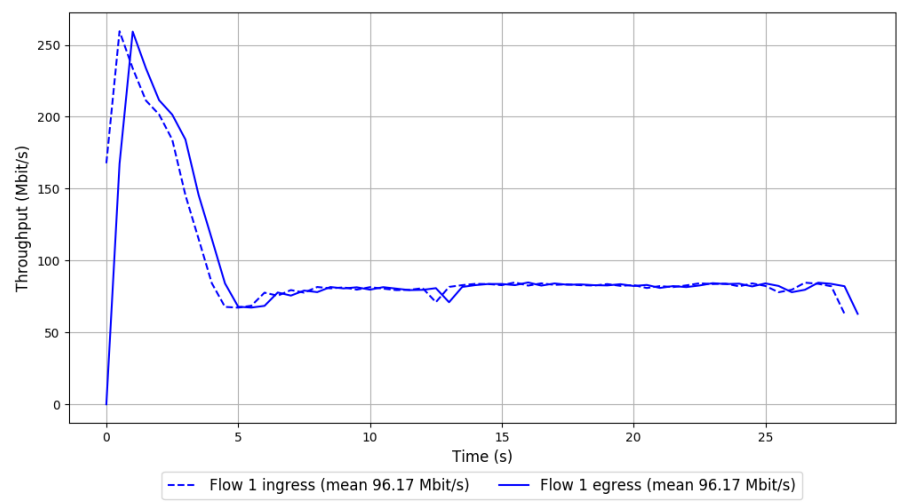
Run 4: Report of Indigo-MusesC5 — Data Link

```
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-07-18 07:04:27
End at: 2019-07-18 07:04:57
Local clock offset: 1.807 ms
Remote clock offset: 0.495 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 175.31 Mbit/s
95th percentile per-packet one-way delay: 1.050 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 175.31 Mbit/s
95th percentile per-packet one-way delay: 1.050 ms
Loss rate: 0.00%
```
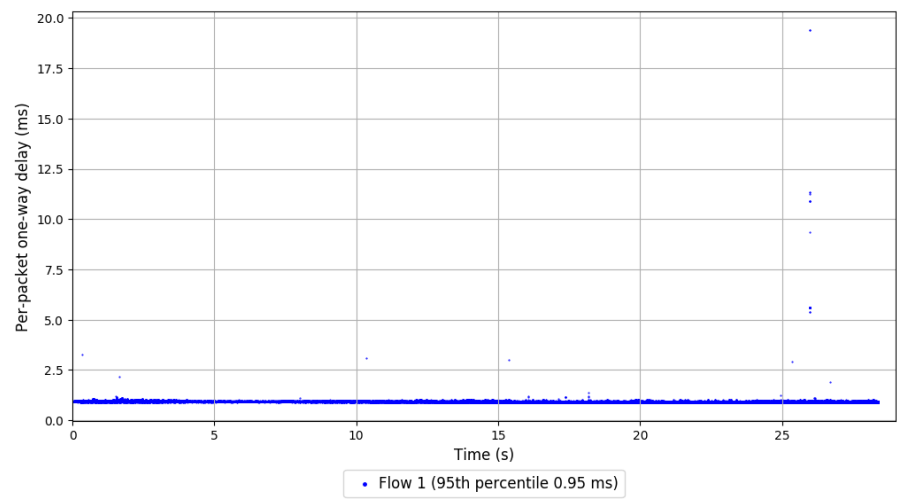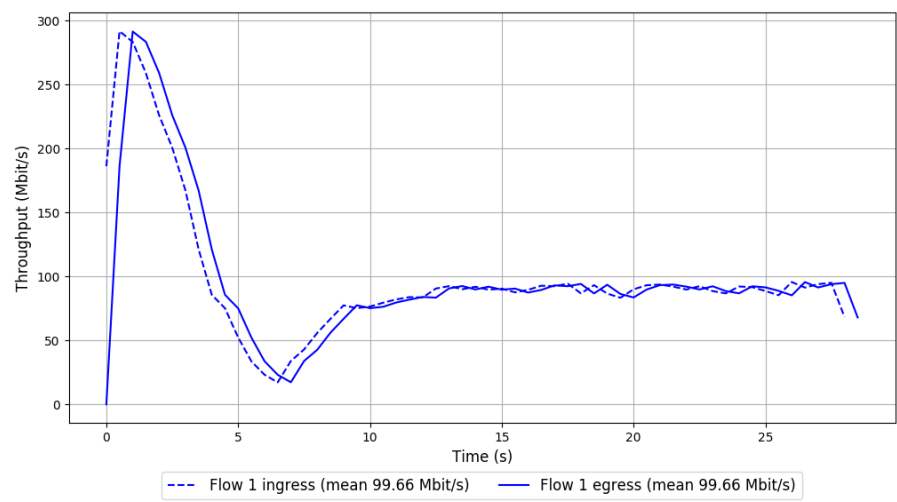
Run 5: Report of Indigo-MusesC5 — Data Link

```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-07-18 04:53:31
End at: 2019-07-18 04:54:02
Local clock offset: -0.24 ms
Remote clock offset: 0.686 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.17 Mbit/s
95th percentile per-packet one-way delay: 0.976 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.17 Mbit/s
95th percentile per-packet one-way delay: 0.976 ms
Loss rate: 0.00%
```
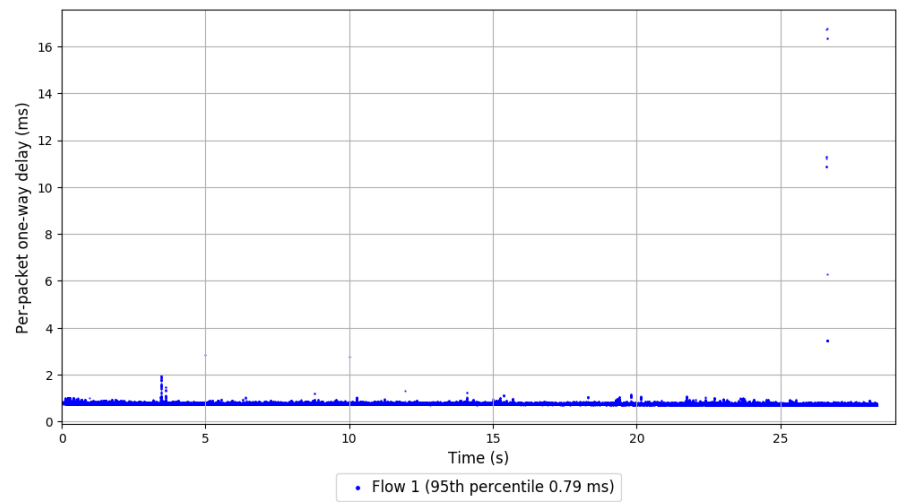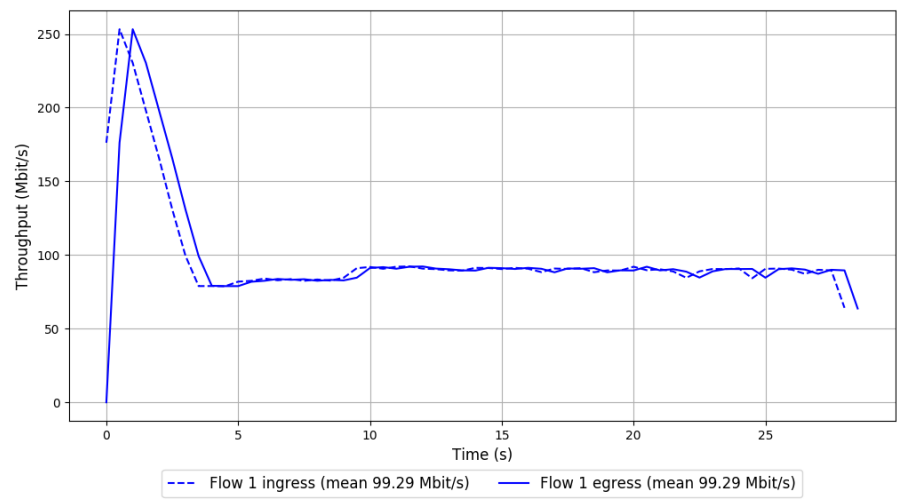
Run 1: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 96.17 Mbit/s)   Flow 1 egress (mean 96.17 Mbit/s)

Flow 1 (95th percentile 0.98 ms)

```
Run 2: Statistics of Indigo-MusesD

Start at: 2019-07-18 05:26:48
End at: 2019-07-18 05:27:18
Local clock offset: -0.288 ms
Remote clock offset: 0.096 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 99.66 Mbit/s
95th percentile per-packet one-way delay: 0.952 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 99.66 Mbit/s
95th percentile per-packet one-way delay: 0.952 ms
Loss rate: 0.01%
```
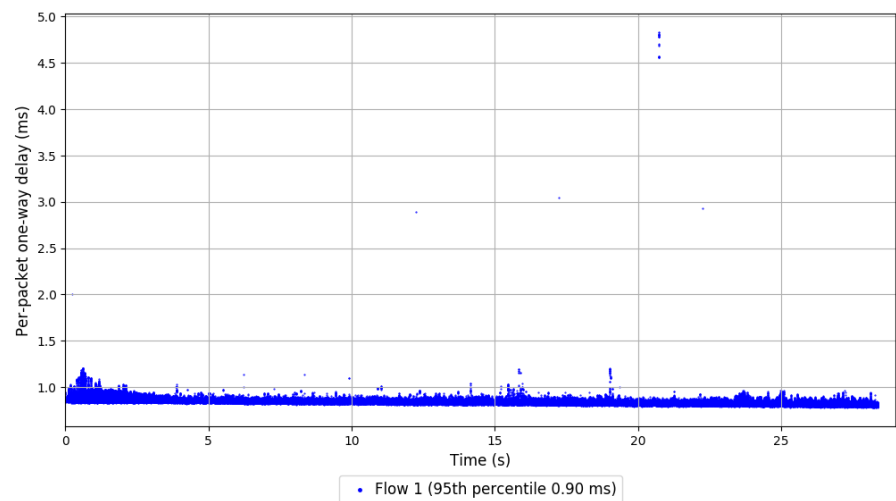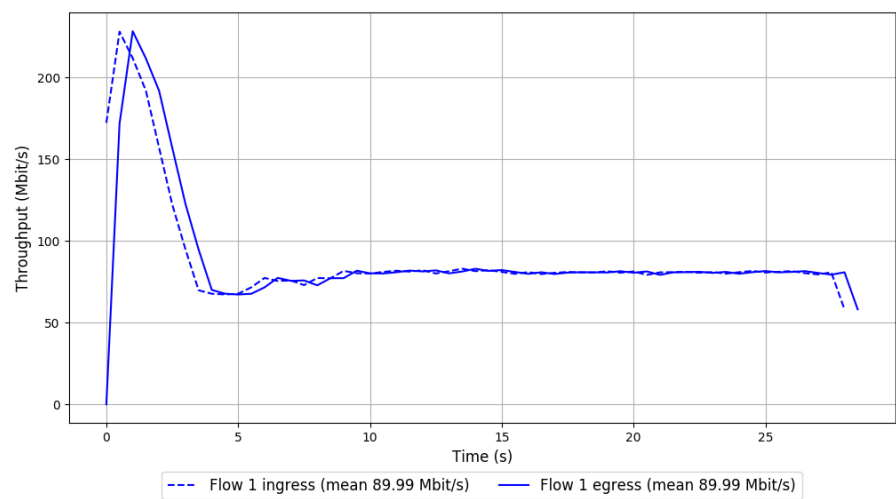
Run 2: Report of Indigo-MusesD — Data Link

```
Run 3: Statistics of Indigo-MusesD

Start at: 2019-07-18 06:00:13
End at: 2019-07-18 06:00:43
Local clock offset: 1.386 ms
Remote clock offset: 2.532 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 99.29 Mbit/s
95th percentile per-packet one-way delay: 0.790 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 99.29 Mbit/s
95th percentile per-packet one-way delay: 0.790 ms
Loss rate: 0.01%
```
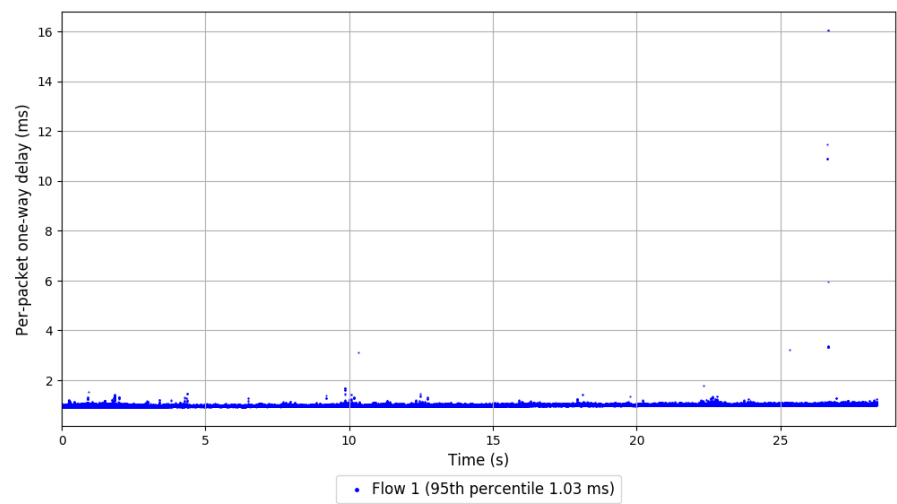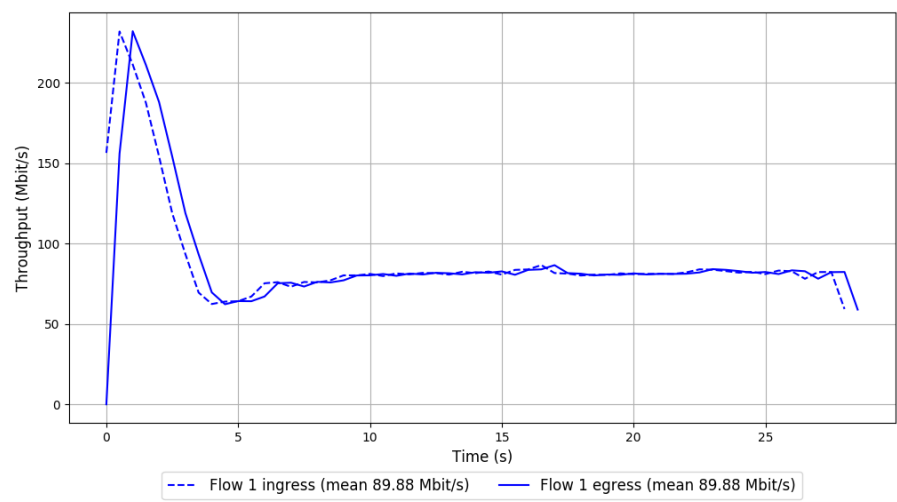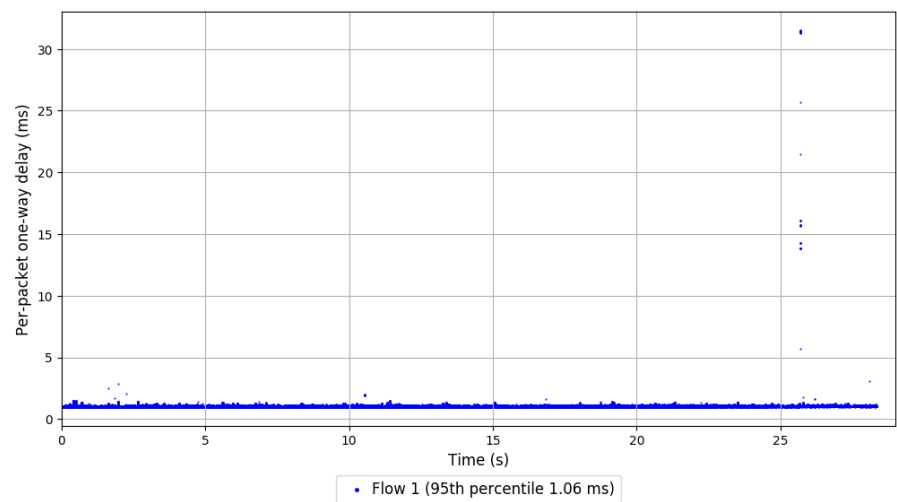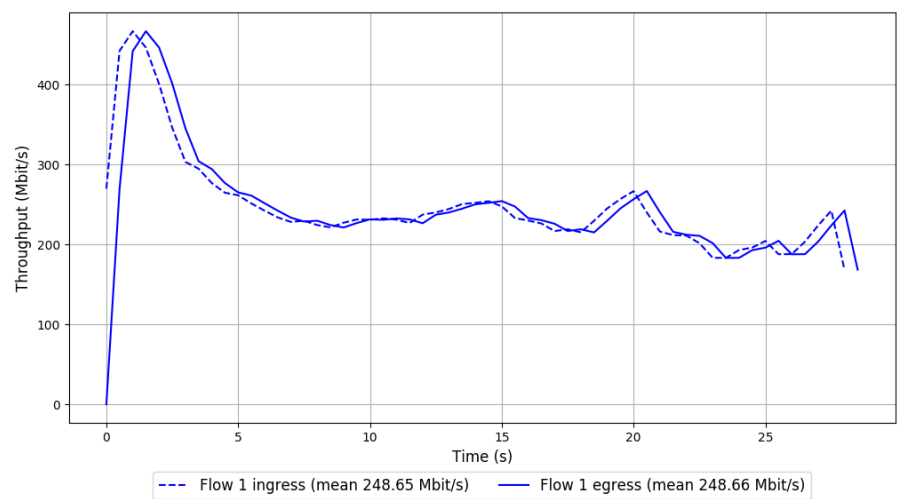
Run 3: Report of Indigo-MusesD — Data Link

```
Run 4: Statistics of Indigo-MusesD

Start at: 2019-07-18 06:33:37
End at: 2019-07-18 06:34:07
Local clock offset: 3.292 ms
Remote clock offset: 0.468 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.99 Mbit/s
95th percentile per-packet one-way delay: 0.900 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 89.99 Mbit/s
95th percentile per-packet one-way delay: 0.900 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 89.99 Mbit/s) — Flow 1 egress (mean 89.99 Mbit/s)

Flow 1 (95th percentile 0.90 ms)

```
Run 5: Statistics of Indigo-MusesD

Start at: 2019-07-18 07:07:07
End at: 2019-07-18 07:07:37
Local clock offset: 1.589 ms
Remote clock offset: 0.804 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.88 Mbit/s
95th percentile per-packet one-way delay: 1.029 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 89.88 Mbit/s
95th percentile per-packet one-way delay: 1.029 ms
Loss rate: 0.01%
```
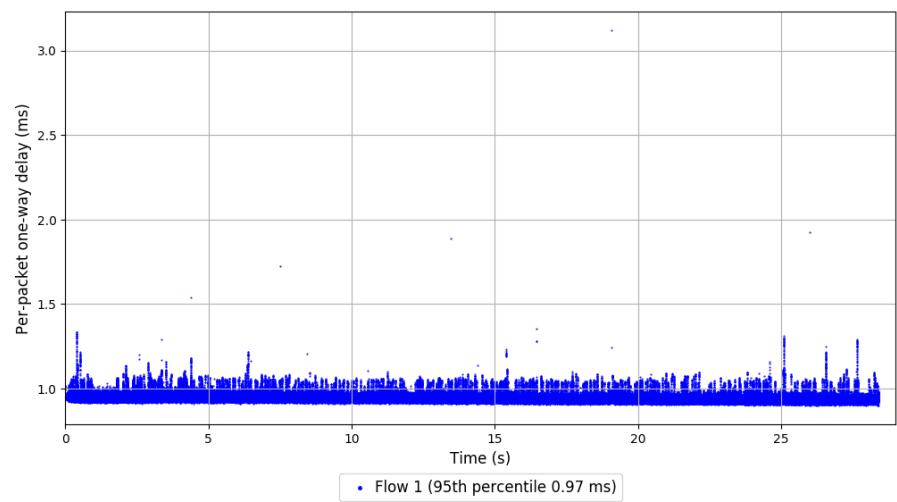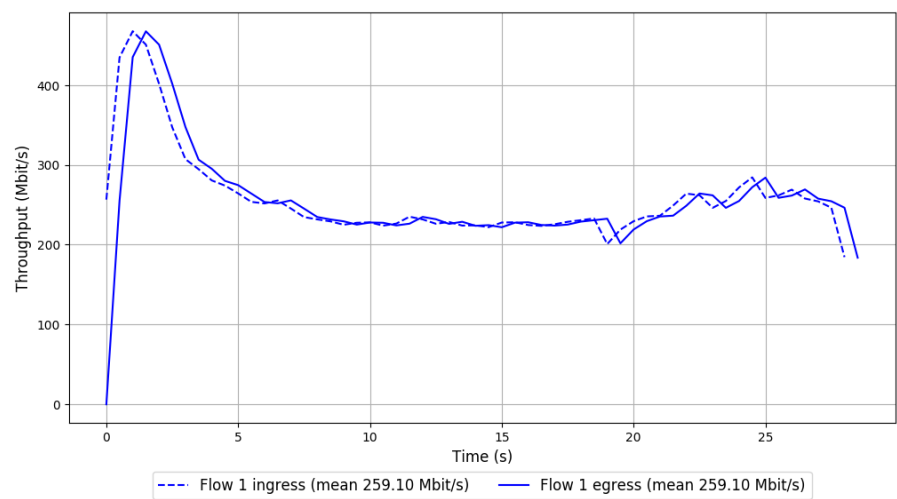
Run 5: Report of Indigo-MusesD — Data Link

Flow 1 ingress (mean 89.88 Mbit/s)   Flow 1 egress (mean 89.88 Mbit/s)

Flow 1 (95th percentile 1.03 ms)

```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-07-18 04:49:33
End at: 2019-07-18 04:50:03
Local clock offset: -0.133 ms
Remote clock offset: 0.43 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 248.66 Mbit/s
95th percentile per-packet one-way delay: 1.063 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 248.66 Mbit/s
95th percentile per-packet one-way delay: 1.063 ms
Loss rate: 0.00%
```
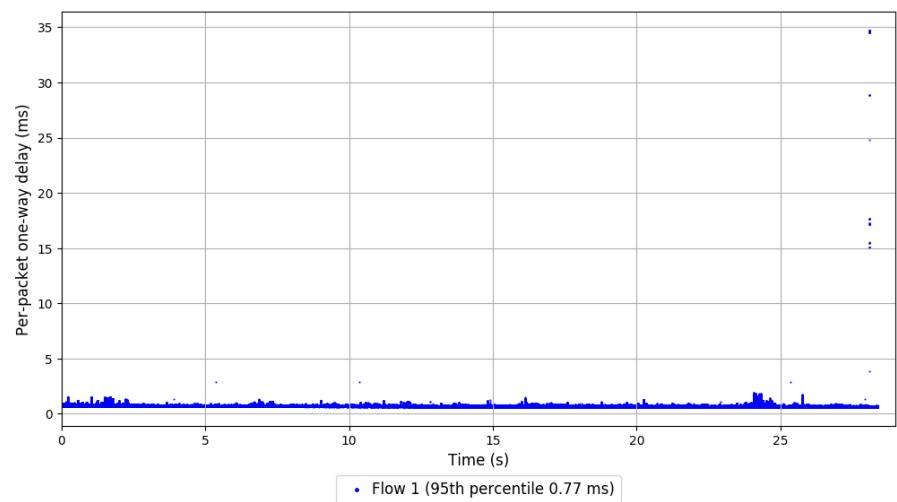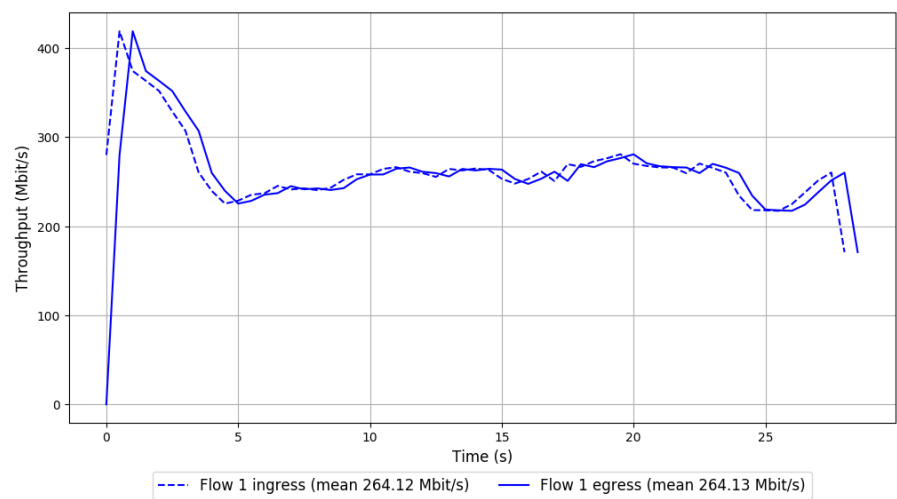
Run 1: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 248.65 Mbit/s)   Flow 1 egress (mean 248.66 Mbit/s)

Flow 1 (95th percentile 1.06 ms)

```
Run 2: Statistics of Indigo-MusesT

Start at: 2019-07-18 05:22:50
End at: 2019-07-18 05:23:20
Local clock offset: -0.294 ms
Remote clock offset: 0.274 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 259.10 Mbit/s
95th percentile per-packet one-way delay: 0.968 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 259.10 Mbit/s
95th percentile per-packet one-way delay: 0.968 ms
Loss rate: 0.01%
```
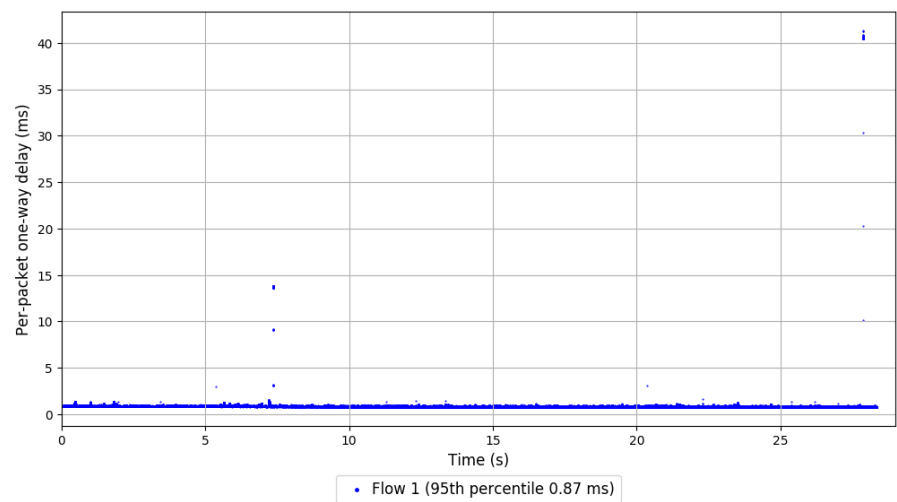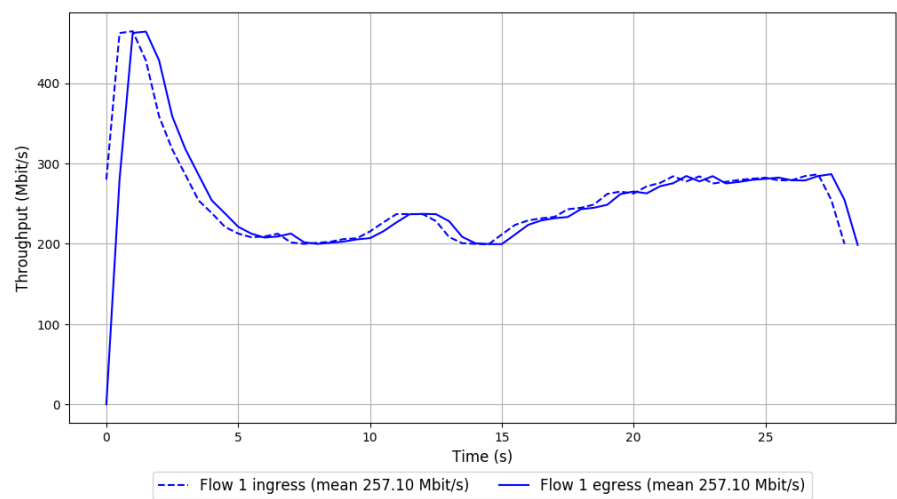
Run 2: Report of Indigo-MusesT — Data Link

```
Run 3: Statistics of Indigo-MusesT

Start at: 2019-07-18 05:56:13
End at: 2019-07-18 05:56:43
Local clock offset: 0.201 ms
Remote clock offset: 1.926 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 264.13 Mbit/s
95th percentile per-packet one-way delay: 0.770 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 264.13 Mbit/s
95th percentile per-packet one-way delay: 0.770 ms
Loss rate: 0.00%
```
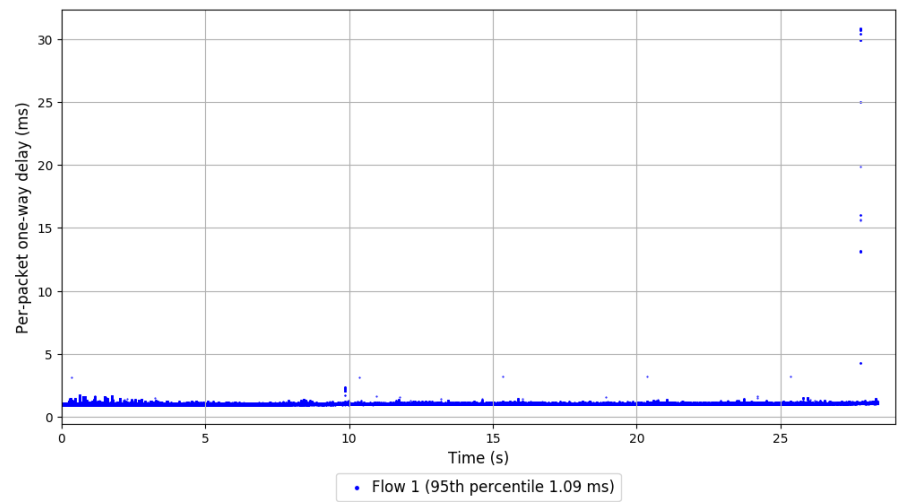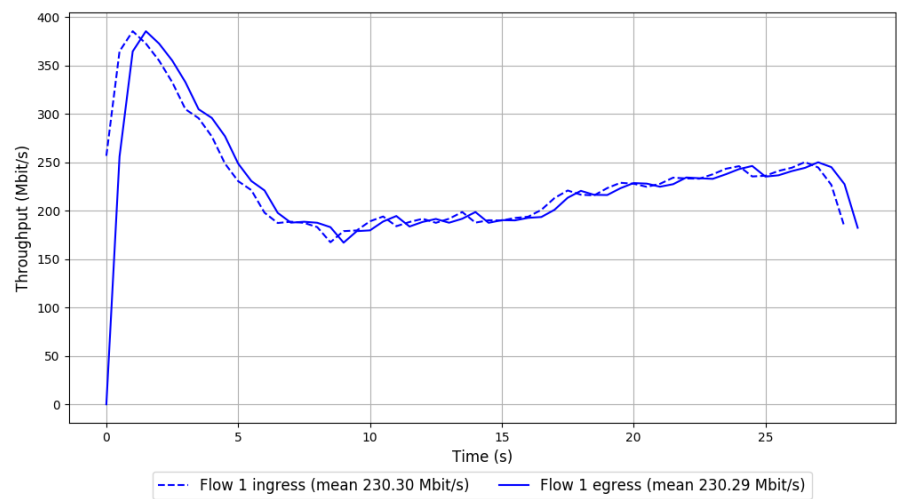
Run 3: Report of Indigo-MusesT — Data Link

Flow 1 ingress (mean 264.12 Mbit/s)   Flow 1 egress (mean 264.13 Mbit/s)

Flow 1 (95th percentile 0.77 ms)

```
Run 4: Statistics of Indigo-MusesT

Start at: 2019-07-18 06:29:32
End at: 2019-07-18 06:30:02
Local clock offset: 3.538 ms
Remote clock offset: 1.275 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 257.10 Mbit/s
95th percentile per-packet one-way delay: 0.870 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 257.10 Mbit/s
95th percentile per-packet one-way delay: 0.870 ms
Loss rate: 0.01%
```
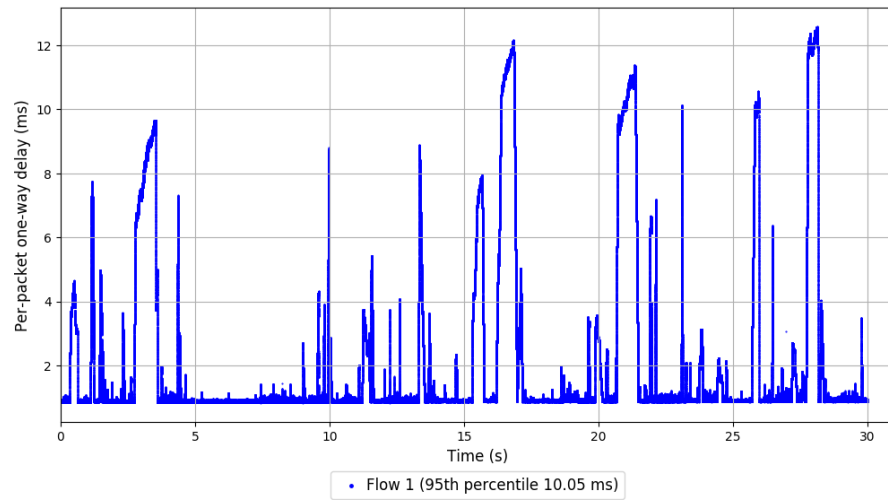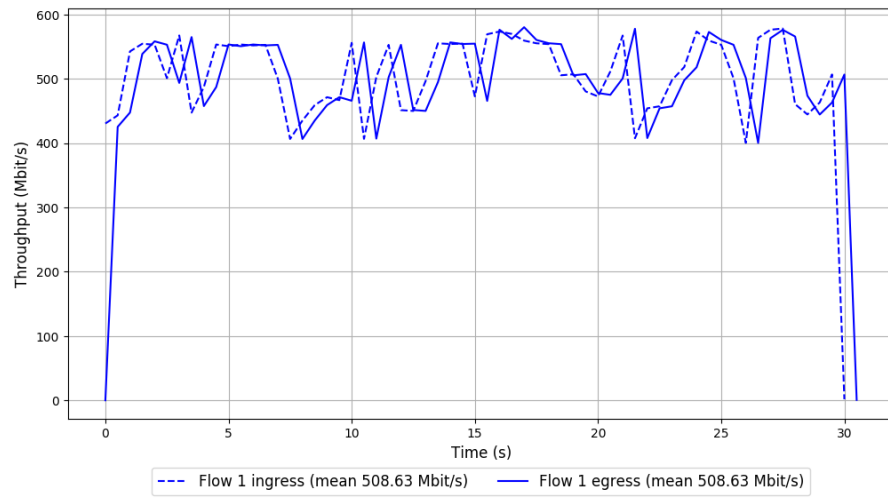
Run 4: Report of Indigo-MusesT — Data Link

```
Run 5: Statistics of Indigo-MusesT

Start at: 2019-07-18 07:03:06
End at: 2019-07-18 07:03:36
Local clock offset: 1.946 ms
Remote clock offset: 0.3 ms


# Below is generated by plot.py at 2019-07-18 08:20:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 230.29 Mbit/s
95th percentile per-packet one-way delay: 1.091 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 230.29 Mbit/s
95th percentile per-packet one-way delay: 1.091 ms
Loss rate: 0.01%
```
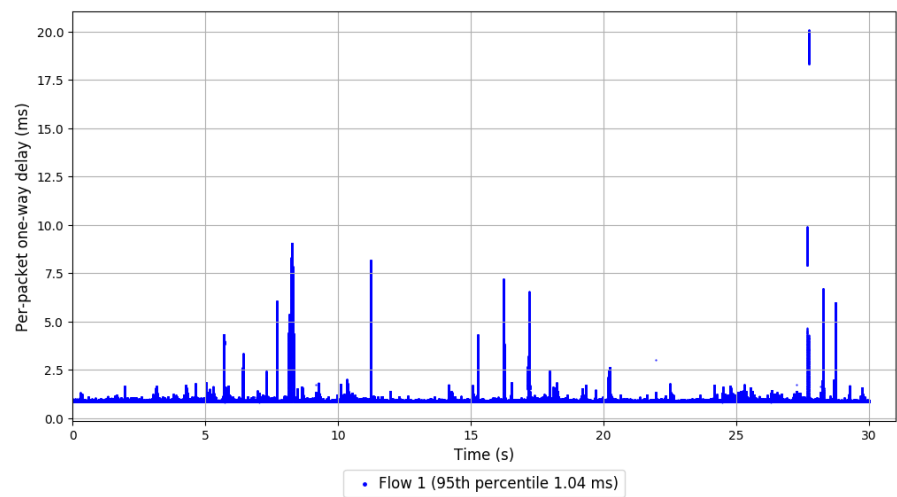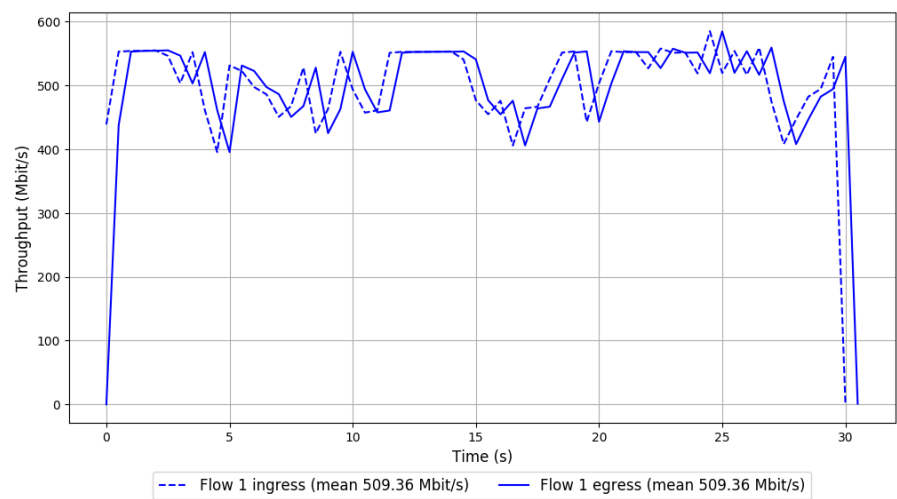
Run 5: Report of Indigo-MusesT — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2019-07-18 05:08:57
End at: 2019-07-18 05:09:27
Local clock offset: -0.067 ms
Remote clock offset: 1.3 ms


# Below is generated by plot.py at 2019-07-18 08:21:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 508.63 Mbit/s
95th percentile per-packet one-way delay: 10.054 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 508.63 Mbit/s
95th percentile per-packet one-way delay: 10.054 ms
Loss rate: 0.01%
```
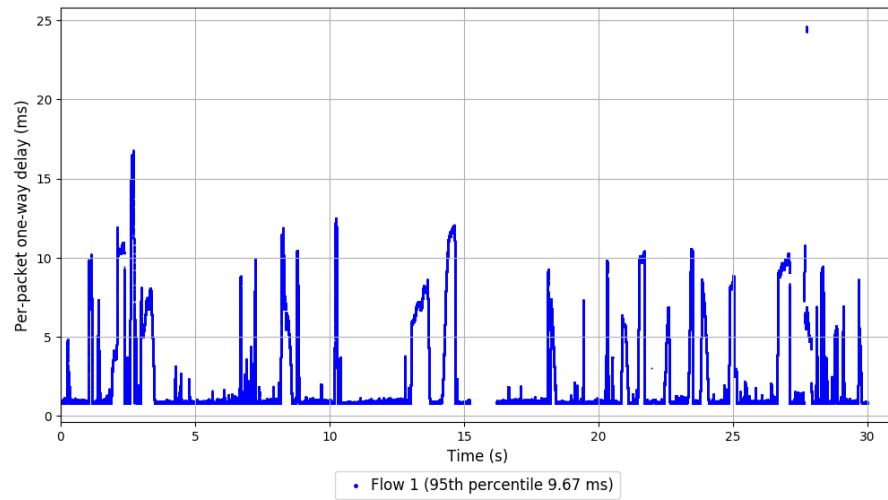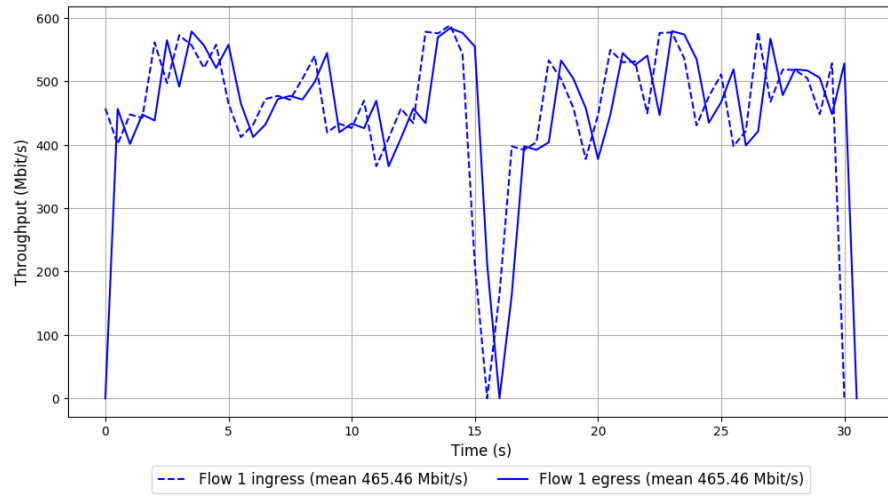
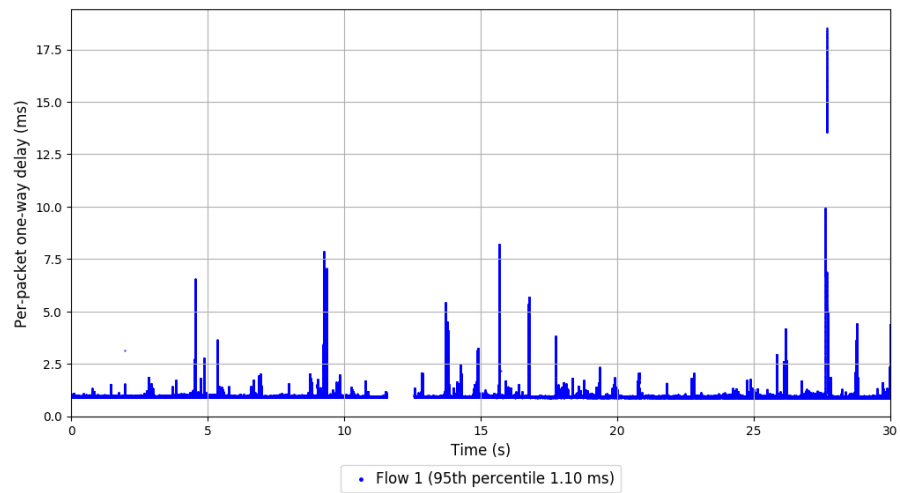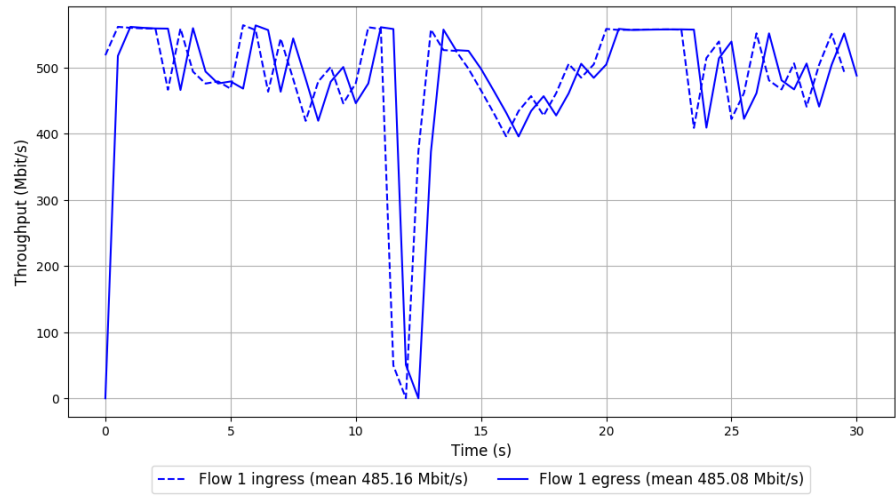# Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2019-07-18 05:42:10
End at: 2019-07-18 05:42:40
Local clock offset: -0.225 ms
Remote clock offset: -0.19 ms

# Below is generated by plot.py at 2019-07-18 08:21:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 509.36 Mbit/s
95th percentile per-packet one-way delay: 1.041 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 509.36 Mbit/s
95th percentile per-packet one-way delay: 1.041 ms
Loss rate: 0.01%
```

Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 509.36 Mbit/s)   Flow 1 egress (mean 509.36 Mbit/s)

Flow 1 (95th percentile 1.04 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2019-07-18 06:15:39
End at: 2019-07-18 06:16:09
Local clock offset: 3.328 ms
Remote clock offset: 3.658 ms


# Below is generated by plot.py at 2019-07-18 08:22:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 465.46 Mbit/s
95th percentile per-packet one-way delay: 9.668 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 465.46 Mbit/s
95th percentile per-packet one-way delay: 9.668 ms
Loss rate: 0.01%
```
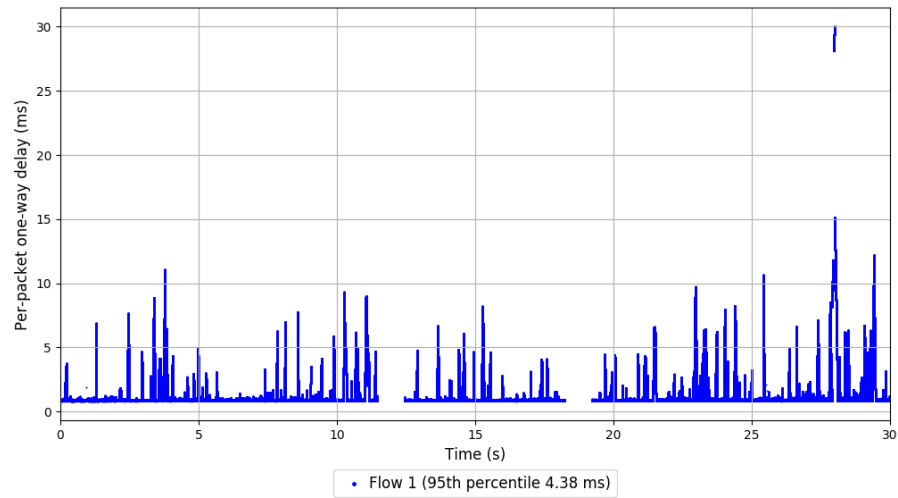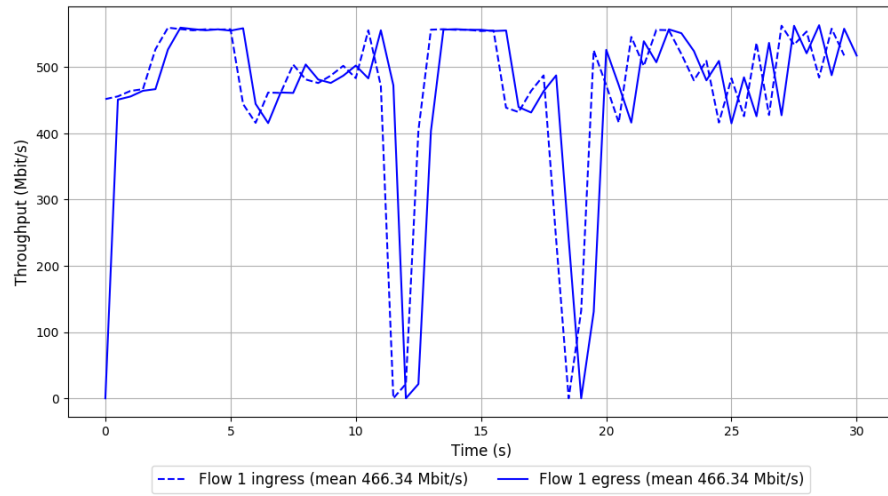
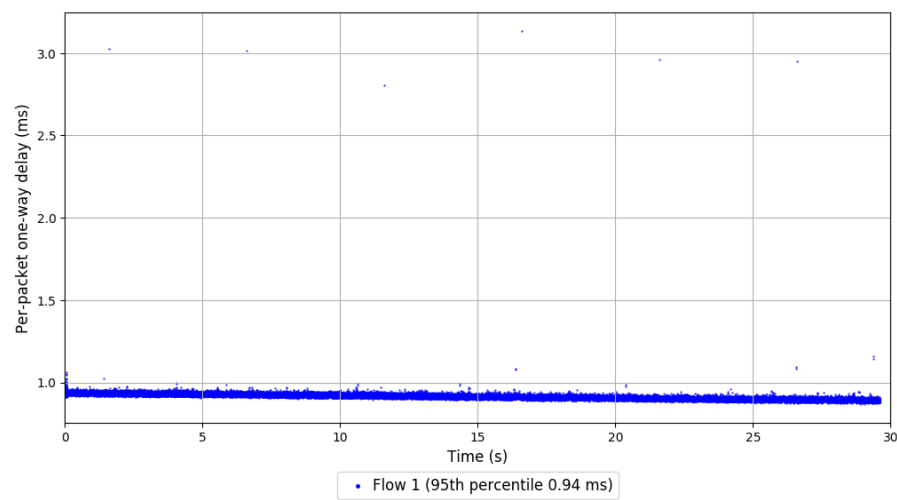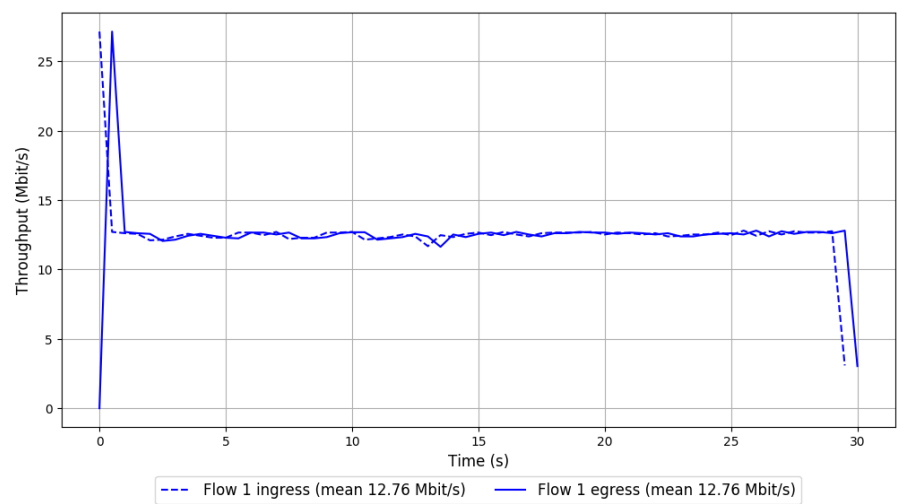# Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2019-07-18 06:48:58
End at: 2019-07-18 06:49:28
Local clock offset: 3.3 ms
Remote clock offset: -0.842 ms

# Below is generated by plot.py at 2019-07-18 08:22:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 485.08 Mbit/s
95th percentile per-packet one-way delay: 1.104 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 485.08 Mbit/s
95th percentile per-packet one-way delay: 1.104 ms
Loss rate: 0.02%
```

Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 485.16 Mbit/s)   Flow 1 egress (mean 485.08 Mbit/s)

Flow 1 (95th percentile 1.10 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2019-07-18 07:22:26
End at: 2019-07-18 07:22:56
Local clock offset: 0.998 ms
Remote clock offset: 1.705 ms


# Below is generated by plot.py at 2019-07-18 08:23:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 466.34 Mbit/s
95th percentile per-packet one-way delay: 4.377 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 466.34 Mbit/s
95th percentile per-packet one-way delay: 4.377 ms
Loss rate: 0.00%
```
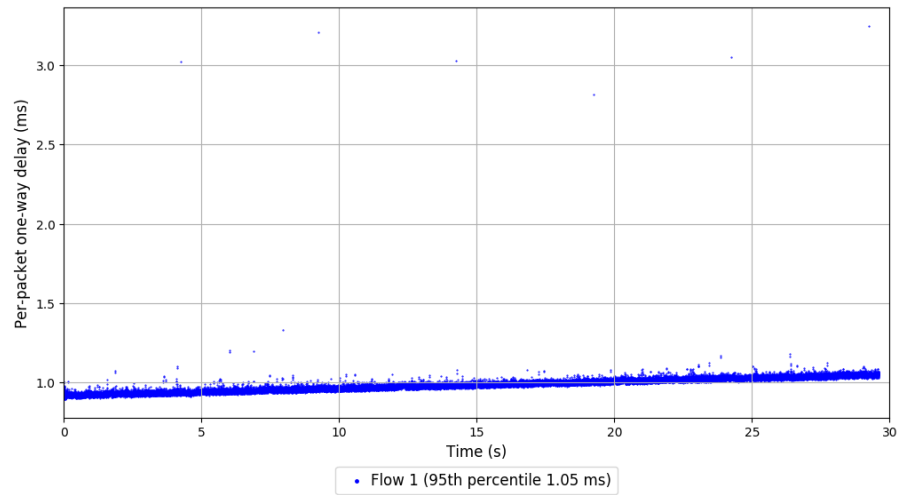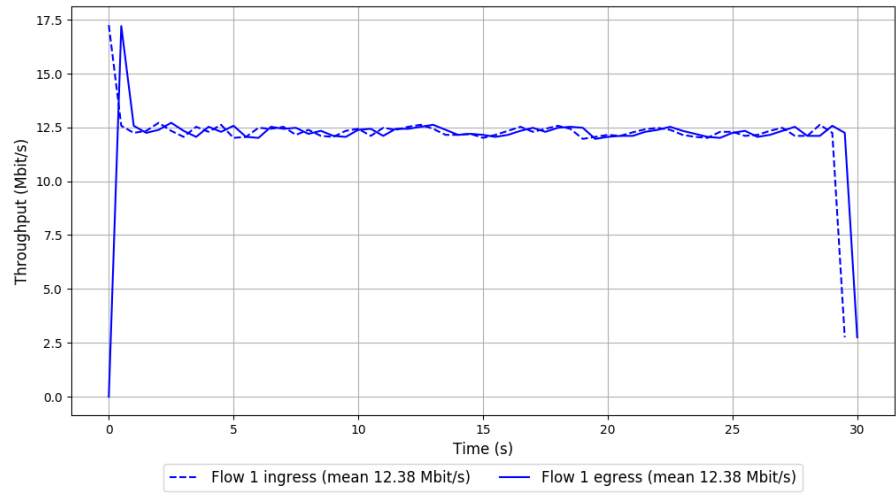
Run 5: Report of LEDBAT — Data Link

```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-07-18 05:17:42
End at: 2019-07-18 05:18:12
Local clock offset: -0.188 ms
Remote clock offset: 0.722 ms


# Below is generated by plot.py at 2019-07-18 08:23:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.76 Mbit/s
95th percentile per-packet one-way delay: 0.942 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.76 Mbit/s
95th percentile per-packet one-way delay: 0.942 ms
Loss rate: 0.01%
```
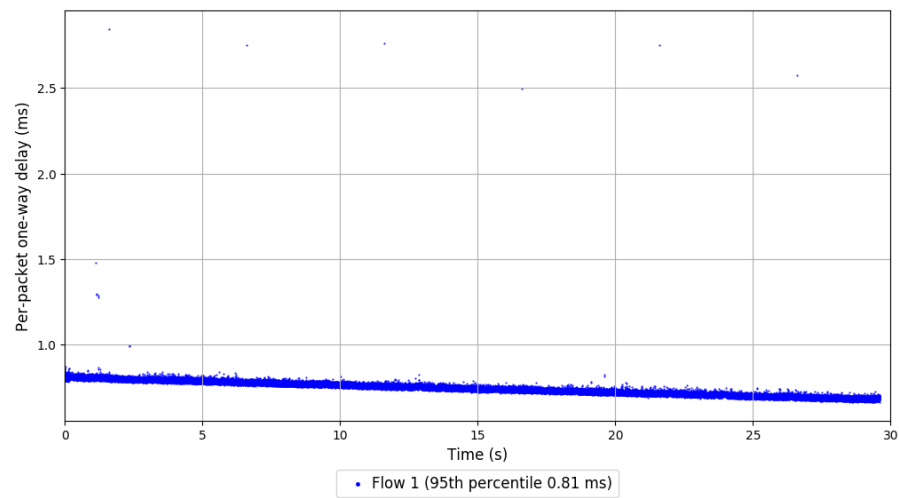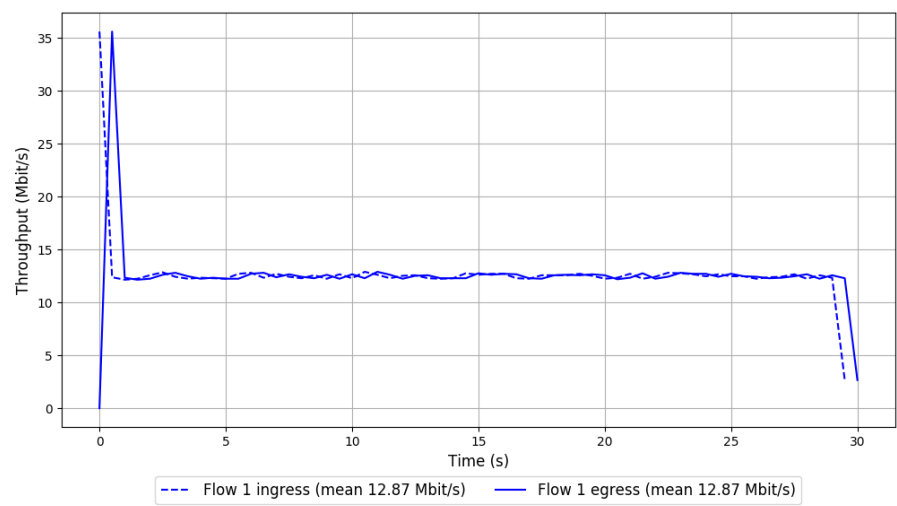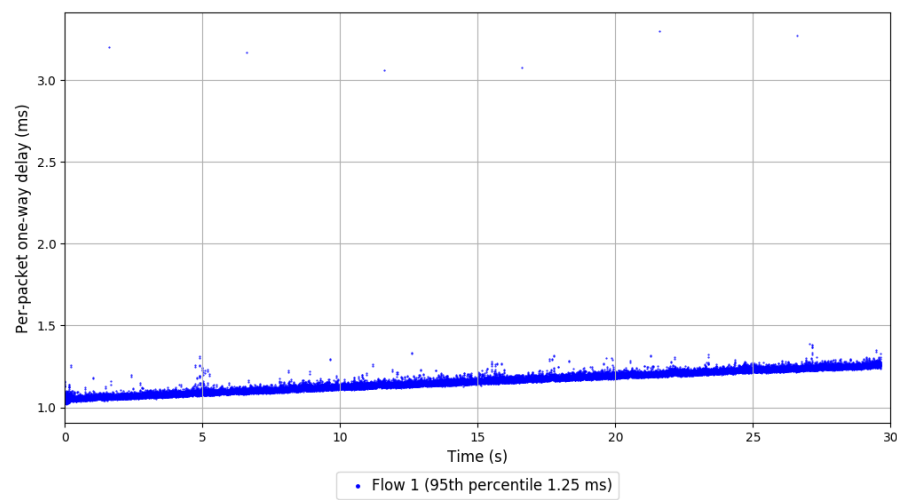
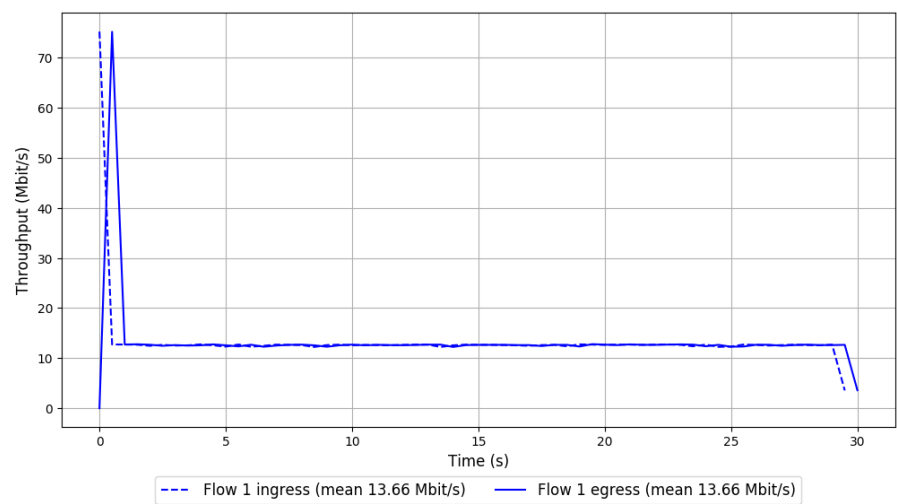Run 1: Report of Muses_DecisionTree — Data Link

```
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-07-18 05:50:50
End at: 2019-07-18 05:51:20
Local clock offset: -0.196 ms
Remote clock offset: 0.831 ms


# Below is generated by plot.py at 2019-07-18 08:23:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.38 Mbit/s
95th percentile per-packet one-way delay: 1.047 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.38 Mbit/s
95th percentile per-packet one-way delay: 1.047 ms
Loss rate: 0.01%
```

Run 2: Report of Muses_DecisionTree — Data Link

Run 3: Statistics of Muses_DecisionTree

Start at: 2019-07-18 06:24:24
End at: 2019-07-18 06:24:54
Local clock offset: 3.867 ms
Remote clock offset: 2.742 ms

Below is generated by plot.py at 2019-07-18 08:23:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.87 Mbit/s
95th percentile per-packet one-way delay: 0.809 ms
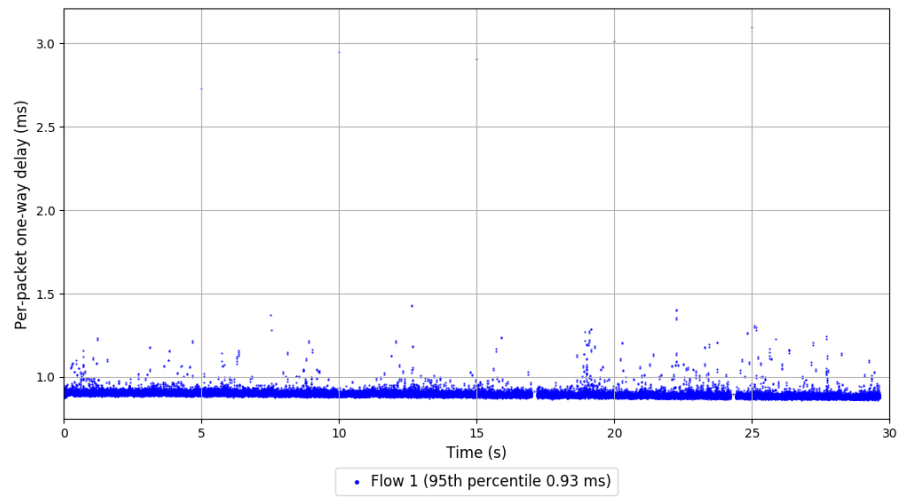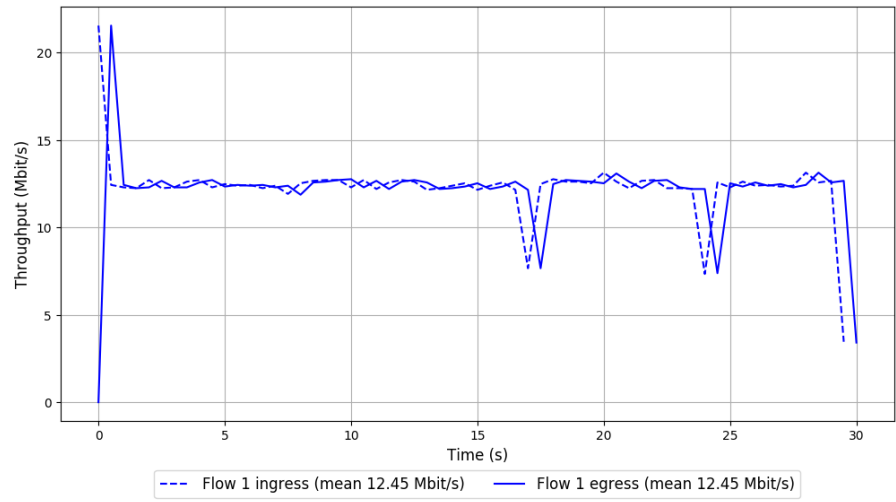Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.87 Mbit/s
95th percentile per-packet one-way delay: 0.809 ms
Loss rate: 0.01%

Run 3: Report of Muses_DecisionTree — Data Link

```
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-07-18 06:57:42
End at: 2019-07-18 06:58:12
Local clock offset: 2.721 ms
Remote clock offset: -0.766 ms


# Below is generated by plot.py at 2019-07-18 08:23:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.66 Mbit/s
95th percentile per-packet one-way delay: 1.250 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.66 Mbit/s
95th percentile per-packet one-way delay: 1.250 ms
Loss rate: 0.00%
```
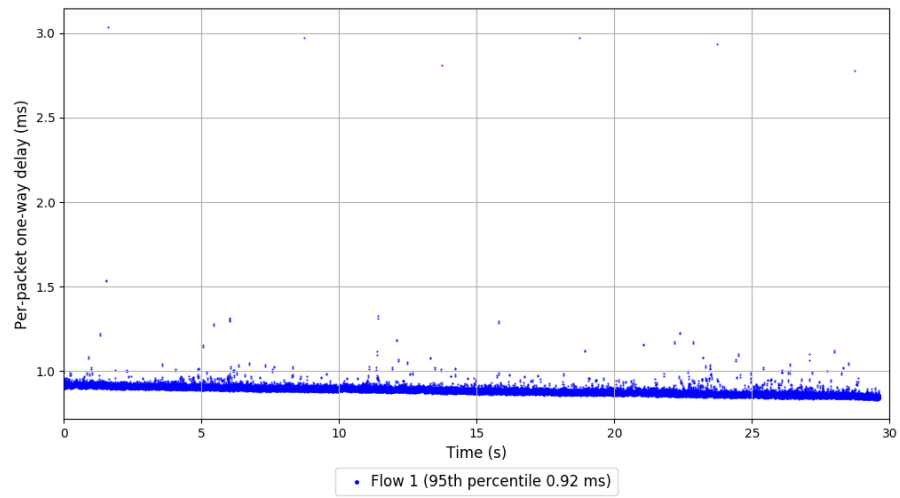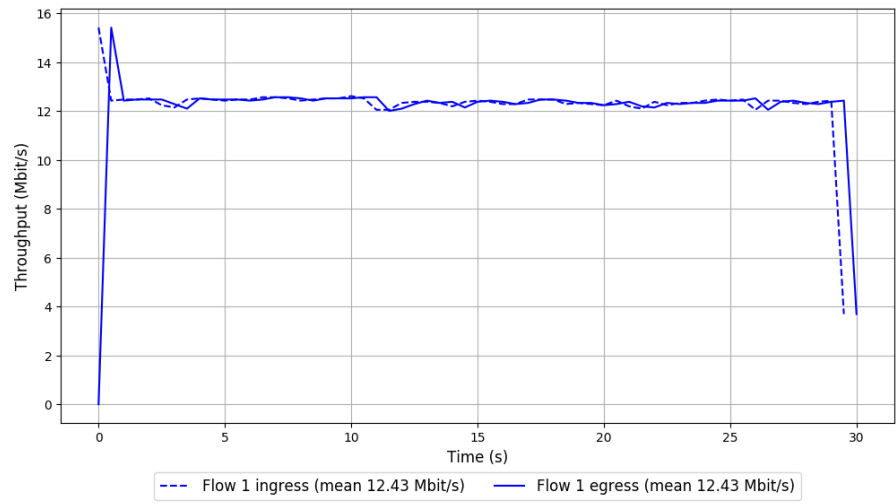
Run 4: Report of Muses_DecisionTree — Data Link

```
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-07-18 07:31:08
End at: 2019-07-18 07:31:38
Local clock offset: 0.282 ms
Remote clock offset: 1.826 ms


# Below is generated by plot.py at 2019-07-18 08:23:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.45 Mbit/s
95th percentile per-packet one-way delay: 0.926 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.45 Mbit/s
95th percentile per-packet one-way delay: 0.926 ms
Loss rate: 0.01%
```
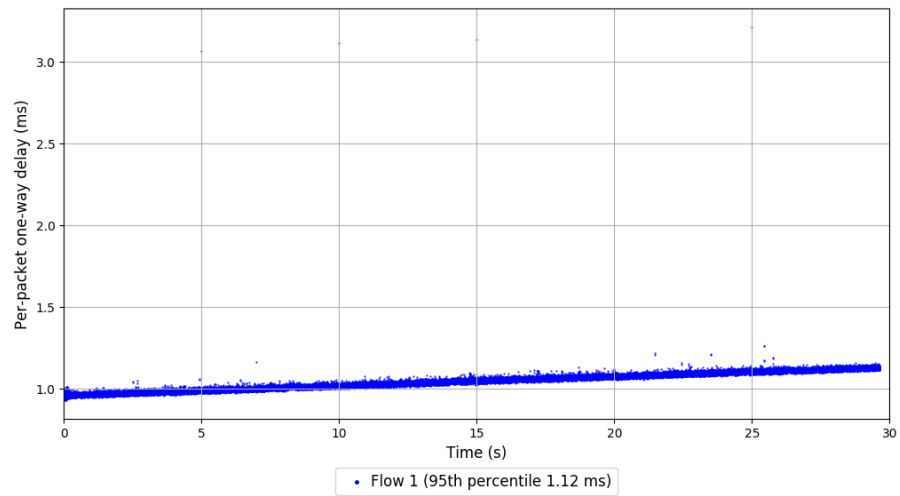
Run 5: Report of Muses_DecisionTree — Data Link

```
Run 1: Statistics of Muses\_DecisionTreeH0

Start at: 2019-07-18 05:14:50
End at: 2019-07-18 05:15:20
Local clock offset: -0.133 ms
Remote clock offset: 1.154 ms


# Below is generated by plot.py at 2019-07-18 08:23:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.43 Mbit/s
95th percentile per-packet one-way delay: 0.920 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.43 Mbit/s
95th percentile per-packet one-way delay: 0.920 ms
Loss rate: 0.01%
```
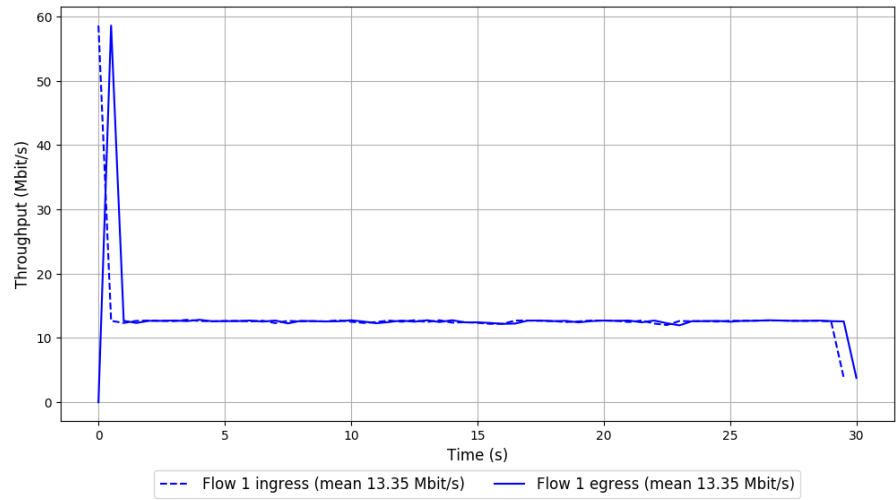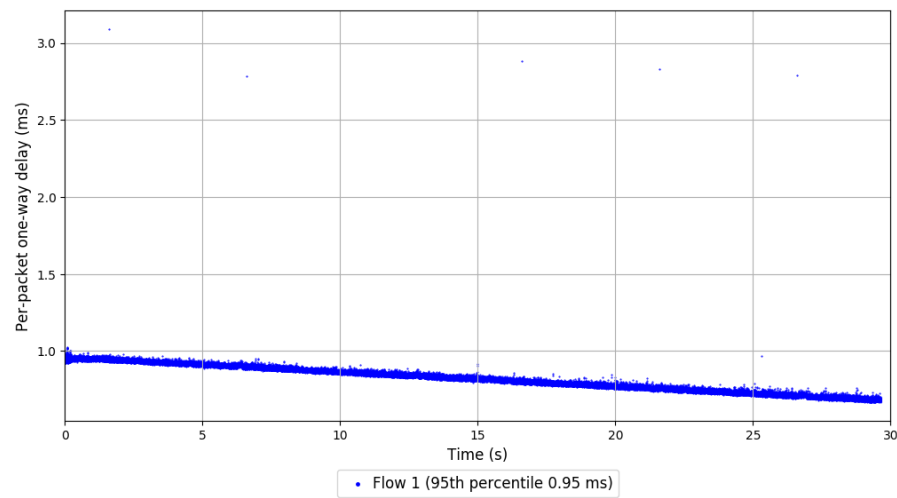
Run 1: Report of Muses_DecisionTreeH0 — Data Link

Run 2: Statistics of Muses_DecisionTreeH0

Start at: 2019-07-18 05:47:58
End at: 2019-07-18 05:48:28
Local clock offset: -0.193 ms
Remote clock offset: -0.109 ms

Below is generated by plot.py at 2019-07-18 08:23:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.35 Mbit/s
95th percentile per-packet one-way delay: 1.122 ms
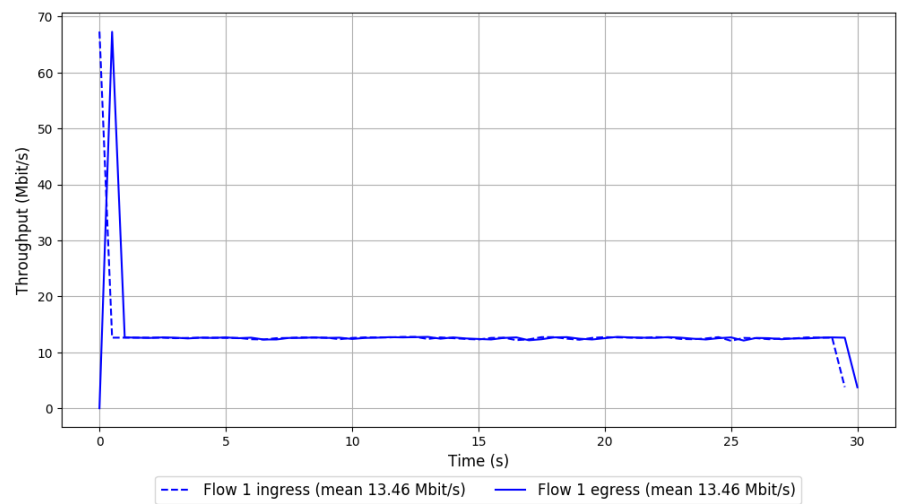Loss rate: 0.01%
-- Flow 1:
Average throughput: 13.35 Mbit/s
95th percentile per-packet one-way delay: 1.122 ms
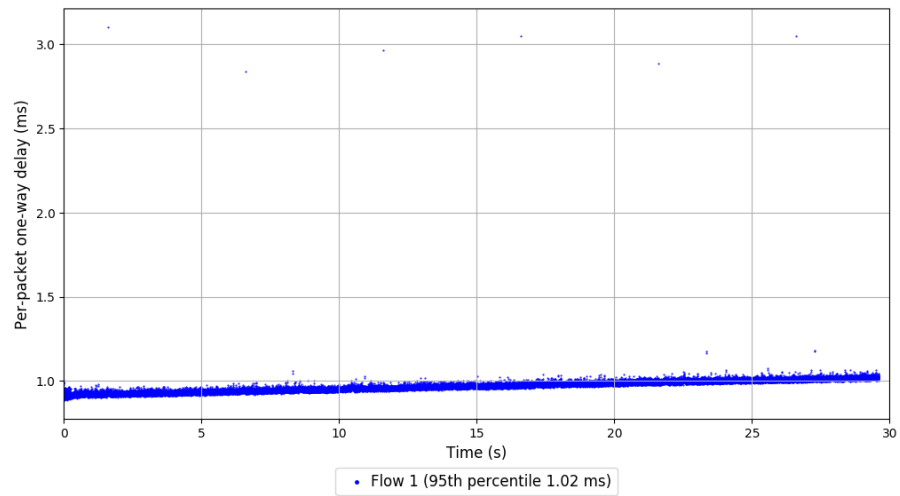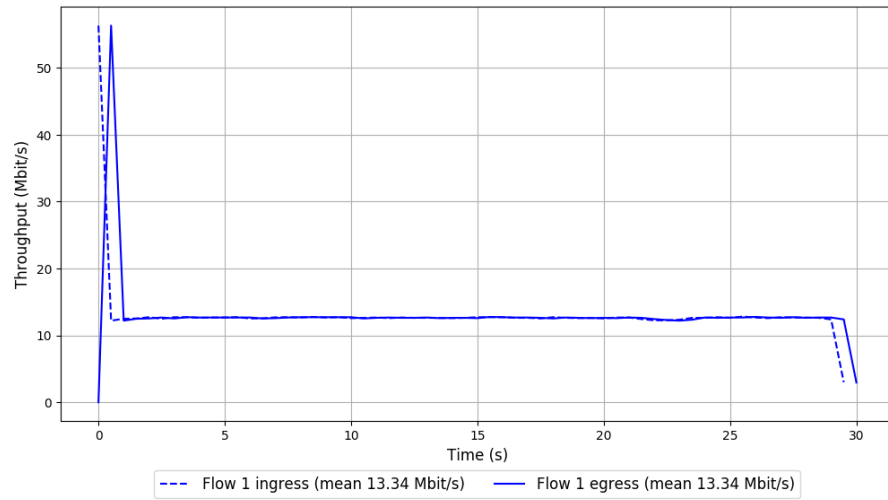Loss rate: 0.01%

Run 2: Report of Muses_DecisionTreeH0 — Data Link

Run 3: Statistics of Muses_DecisionTreeH0

Start at: 2019-07-18 06:21:32
End at: 2019-07-18 06:22:02
Local clock offset: 3.711 ms
Remote clock offset: 3.872 ms

Below is generated by plot.py at 2019-07-18 08:23:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.46 Mbit/s
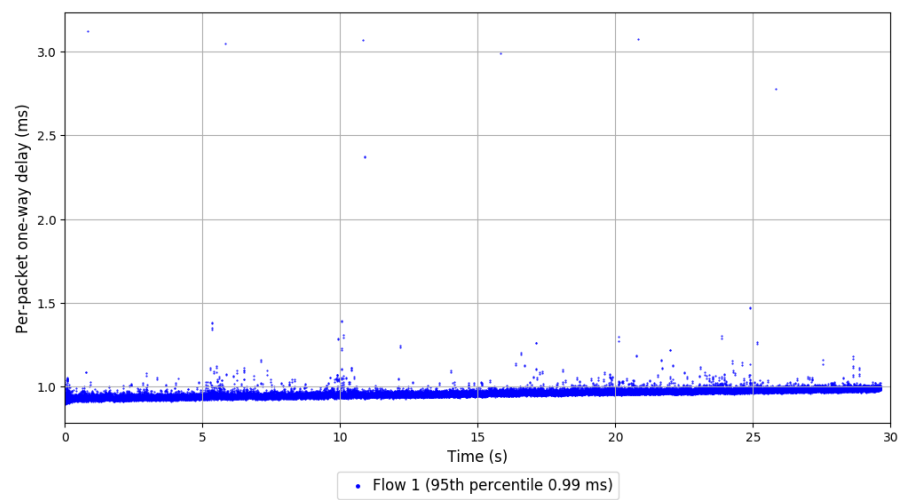95th percentile per-packet one-way delay: 0.950 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 13.46 Mbit/s
95th percentile per-packet one-way delay: 0.950 ms
Loss rate: 0.01%

Run 3: Report of Muses_DecisionTreeH0 — Data Link

Flow 1 ingress (mean 13.46 Mbit/s)   Flow 1 egress (mean 13.46 Mbit/s)

Flow 1 (95th percentile 0.95 ms)

Run 4: Statistics of Muses_DecisionTreeH0

Start at: 2019-07-18 06:54:50
End at: 2019-07-18 06:55:20
Local clock offset: 3.35 ms
Remote clock offset: -0.962 ms

Below is generated by plot.py at 2019-07-18 08:23:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.34 Mbit/s
95th percentile per-packet one-way delay: 1.018 ms
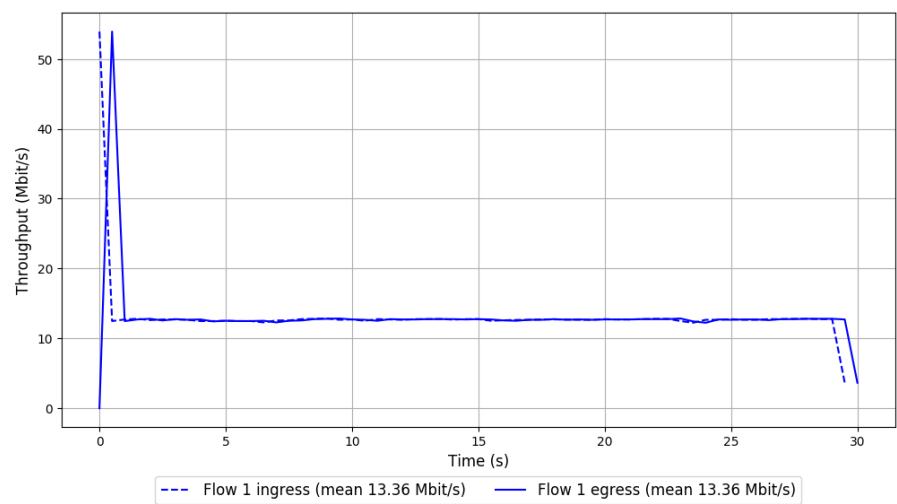Loss rate: 0.01%
-- Flow 1:
Average throughput: 13.34 Mbit/s
95th percentile per-packet one-way delay: 1.018 ms
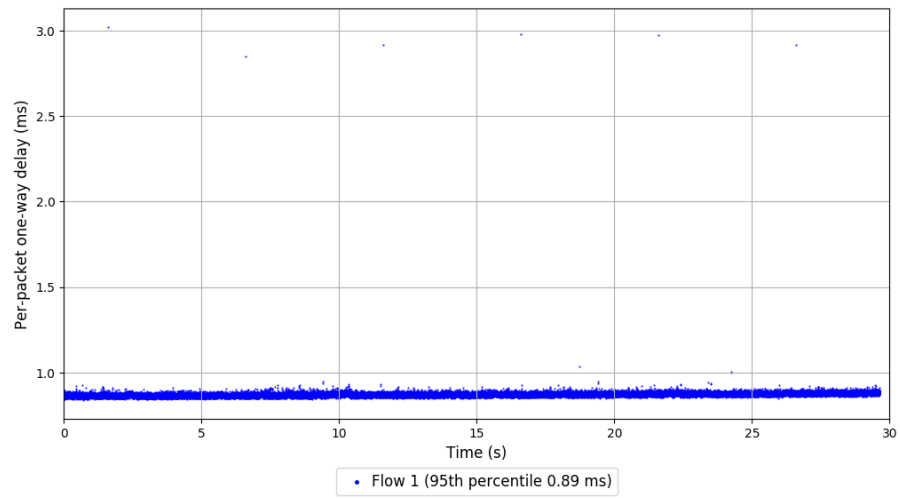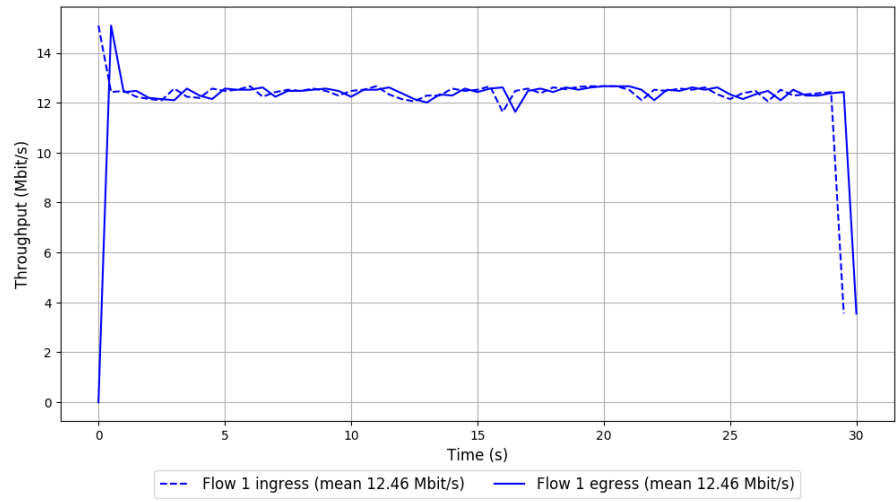Loss rate: 0.01%

Run 4: Report of Muses_DecisionTreeH0 — Data Link

```
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2019-07-18 07:28:16
End at: 2019-07-18 07:28:46
Local clock offset: 0.517 ms
Remote clock offset: 1.829 ms


# Below is generated by plot.py at 2019-07-18 08:23:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.36 Mbit/s
95th percentile per-packet one-way delay: 0.993 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 13.36 Mbit/s
95th percentile per-packet one-way delay: 0.993 ms
Loss rate: 0.01%
```
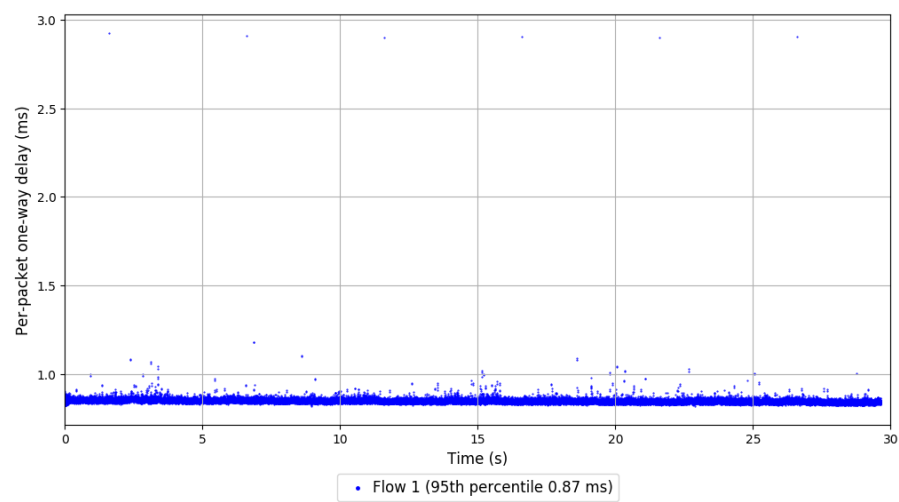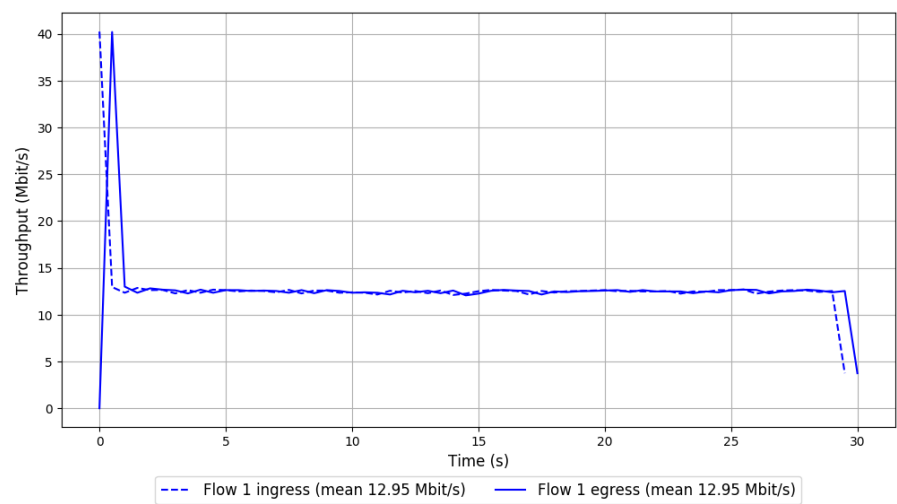
Run 5: Report of Muses_DecisionTreeH0 — Data Link

```
Run 1: Statistics of Muses\_DecisionTreeR0

Start at: 2019-07-18 05:05:02
End at: 2019-07-18 05:05:32
Local clock offset: -0.101 ms
Remote clock offset: 1.129 ms


# Below is generated by plot.py at 2019-07-18 08:23:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.46 Mbit/s
95th percentile per-packet one-way delay: 0.889 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.46 Mbit/s
95th percentile per-packet one-way delay: 0.889 ms
Loss rate: 0.01%
```

Run 1: Report of Muses_DecisionTreeR0 — Data Link

```
Run 2: Statistics of Muses\_DecisionTreeR0

Start at: 2019-07-18 05:38:15
End at: 2019-07-18 05:38:45
Local clock offset: -0.258 ms
Remote clock offset: -0.095 ms


# Below is generated by plot.py at 2019-07-18 08:23:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.95 Mbit/s
95th percentile per-packet one-way delay: 0.867 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.95 Mbit/s
95th percentile per-packet one-way delay: 0.867 ms
Loss rate: 0.01%
```
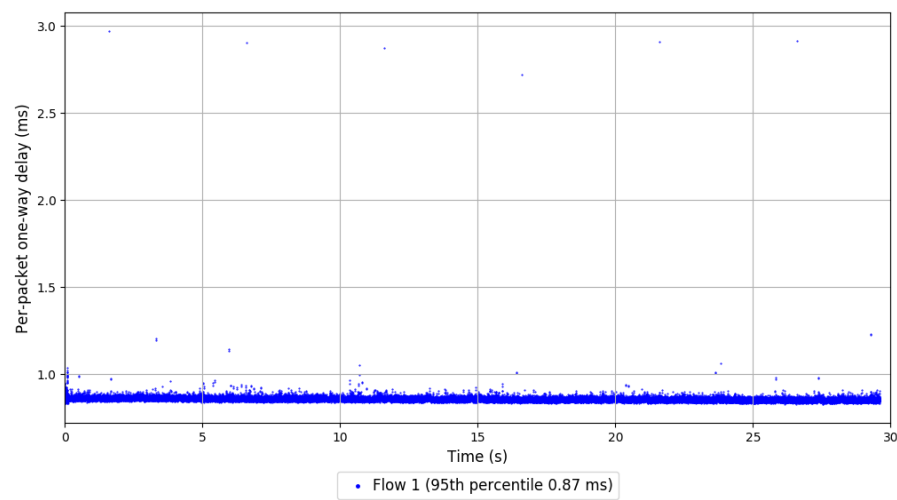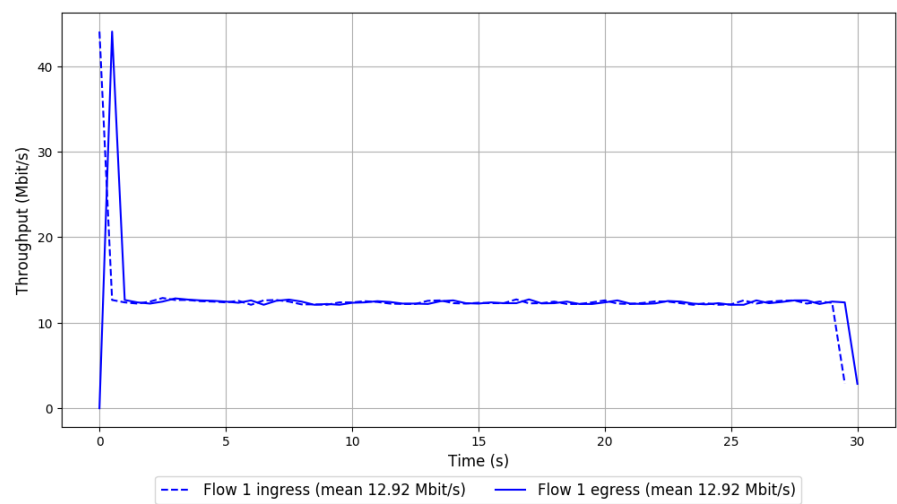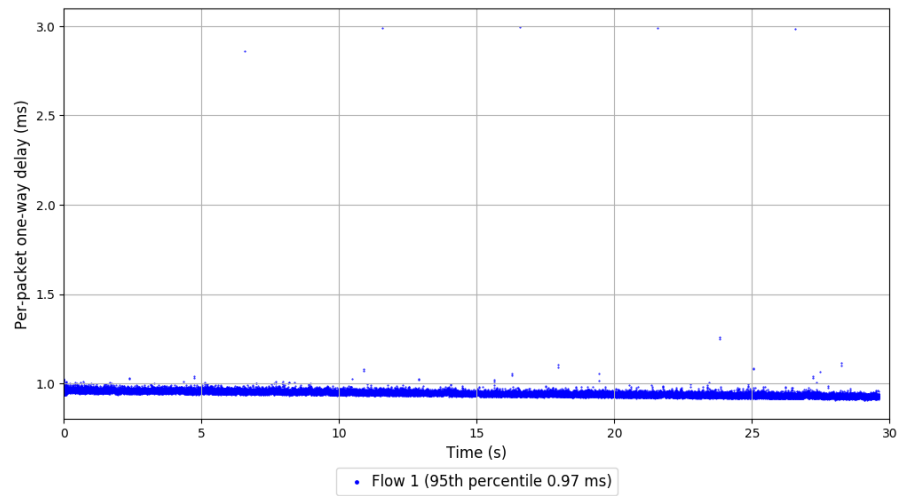
Run 2: Report of Muses_DecisionTreeR0 — Data Link

```
Run 3: Statistics of Muses\_DecisionTreeR0

Start at: 2019-07-18 06:11:44
End at: 2019-07-18 06:12:14
Local clock offset: 3.055 ms
Remote clock offset: 3.444 ms


# Below is generated by plot.py at 2019-07-18 08:23:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.92 Mbit/s
95th percentile per-packet one-way delay: 0.874 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.92 Mbit/s
95th percentile per-packet one-way delay: 0.874 ms
Loss rate: 0.01%
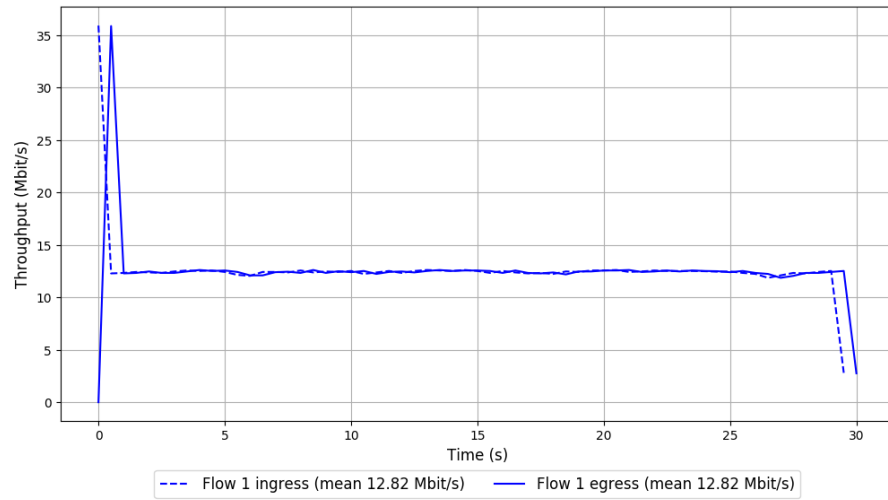```

Run 3: Report of Muses_DecisionTreeR0 — Data Link

```
Run 4: Statistics of Muses_DecisionTreeR0

Start at: 2019-07-18 06:45:04
End at: 2019-07-18 06:45:34
Local clock offset: 3.246 ms
Remote clock offset: -0.667 ms

Below is generated by plot.py at 2019-07-18 08:23:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.82 Mbit/s
95th percentile per-packet one-way delay: 0.970 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.82 Mbit/s
95th percentile per-packet one-way delay: 0.970 ms
Loss rate: 0.01%
```
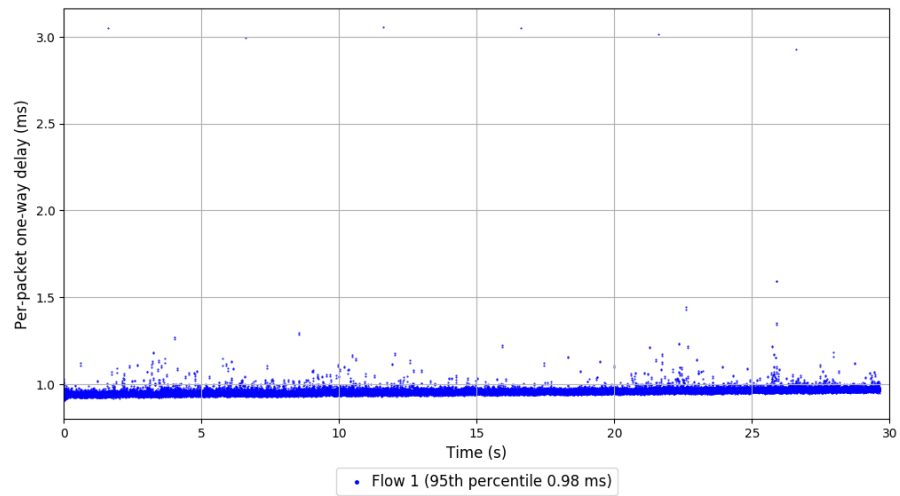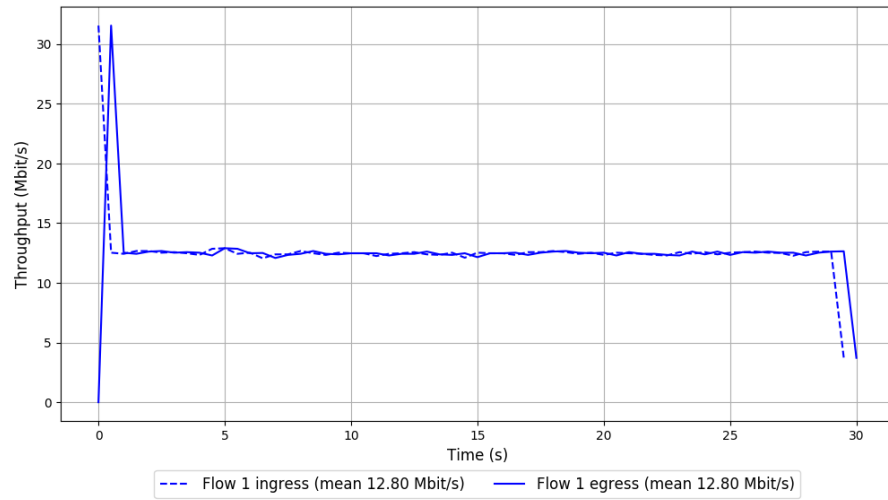
Run 4: Report of Muses_DecisionTreeR0 — Data Link



Flow 1 ingress (mean 12.82 Mbit/s) ——— Flow 1 egress (mean 12.82 Mbit/s)



Flow 1 (95th percentile 0.97 ms)

```
Run 5: Statistics of Muses\_DecisionTreeR0

Start at: 2019-07-18 07:18:33
End at: 2019-07-18 07:19:03
Local clock offset: 1.073 ms
Remote clock offset: 1.483 ms


# Below is generated by plot.py at 2019-07-18 08:23:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.80 Mbit/s
95th percentile per-packet one-way delay: 0.984 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.80 Mbit/s
95th percentile per-packet one-way delay: 0.984 ms
Loss rate: 0.01%
```

Run 5: Report of Muses_DecisionTreeR0 — Data Link

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```
Run 1: Statistics of PCC-Allegro

Start at: 2019-07-18 05:10:32
End at: 2019-07-18 05:11:02
Local clock offset: -0.124 ms
Remote clock offset: 1.306 ms


# Below is generated by plot.py at 2019-07-18 08:27:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 708.83 Mbit/s
95th percentile per-packet one-way delay: 1.343 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 708.83 Mbit/s
95th percentile per-packet one-way delay: 1.343 ms
Loss rate: 0.01%
```
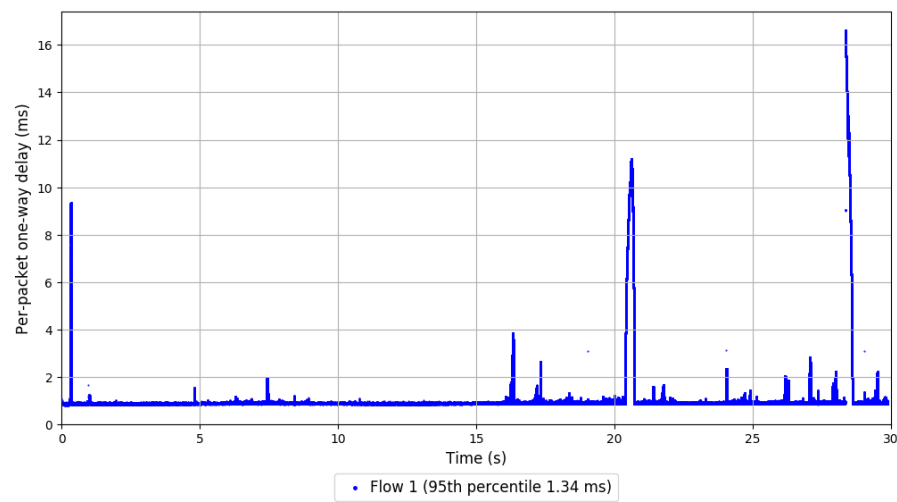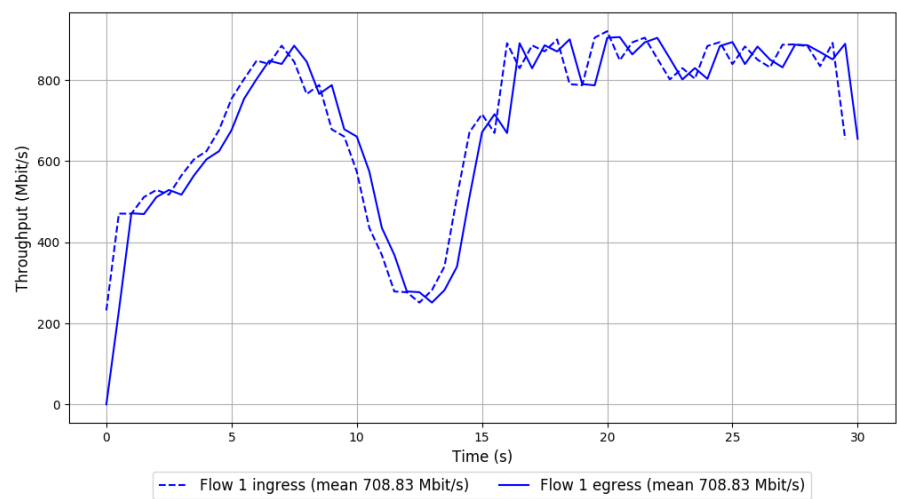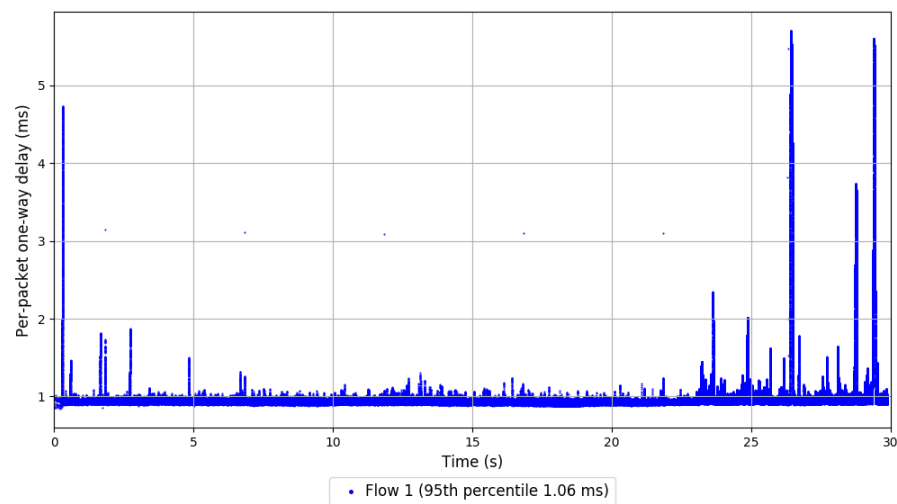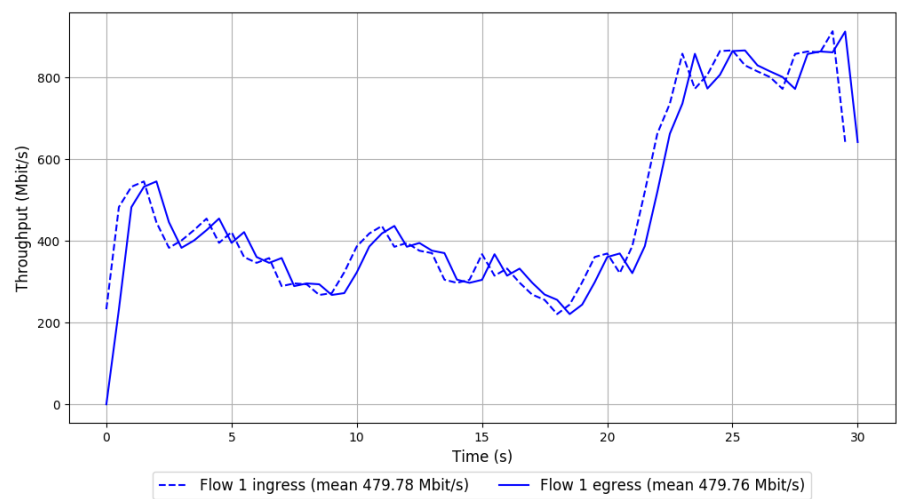
Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 708.83 Mbit/s) --- Flow 1 egress (mean 708.83 Mbit/s)

Flow 1 (95th percentile 1.34 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2019-07-18 05:43:44
End at: 2019-07-18 05:44:14
Local clock offset: -0.222 ms
Remote clock offset: -0.255 ms

# Below is generated by plot.py at 2019-07-18 08:27:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 479.76 Mbit/s
95th percentile per-packet one-way delay: 1.056 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 479.76 Mbit/s
95th percentile per-packet one-way delay: 1.056 ms
Loss rate: 0.01%
```
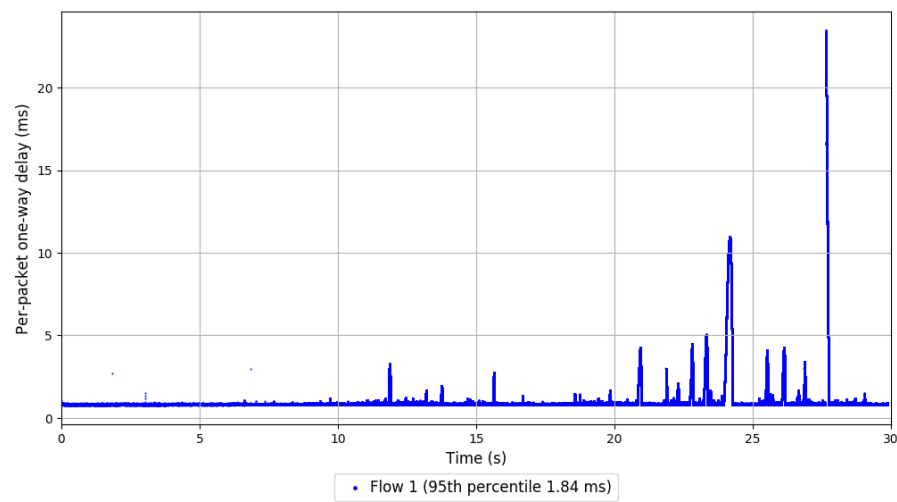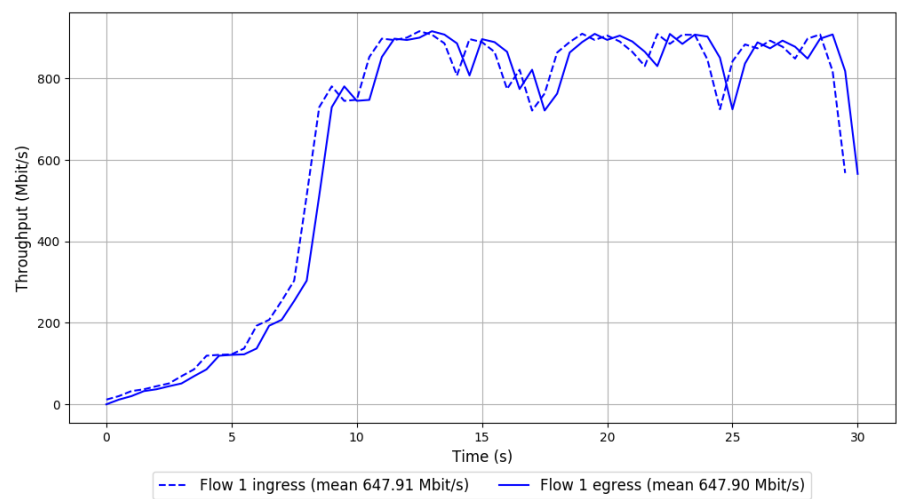
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 479.78 Mbit/s)   Flow 1 egress (mean 479.76 Mbit/s)

Flow 1 (95th percentile 1.06 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2019-07-18 06:17:12
End at: 2019-07-18 06:17:42
Local clock offset: 3.463 ms
Remote clock offset: 3.755 ms


# Below is generated by plot.py at 2019-07-18 08:28:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 647.90 Mbit/s
95th percentile per-packet one-way delay: 1.844 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 647.90 Mbit/s
95th percentile per-packet one-way delay: 1.844 ms
Loss rate: 0.01%
```
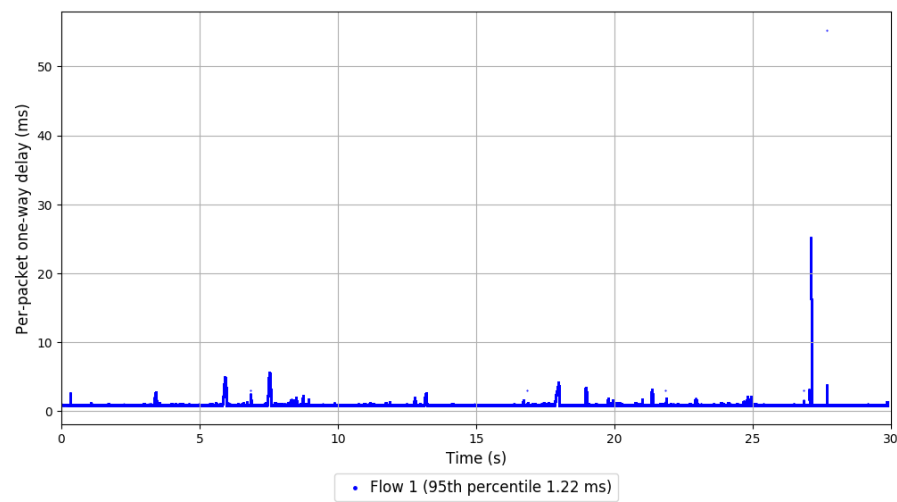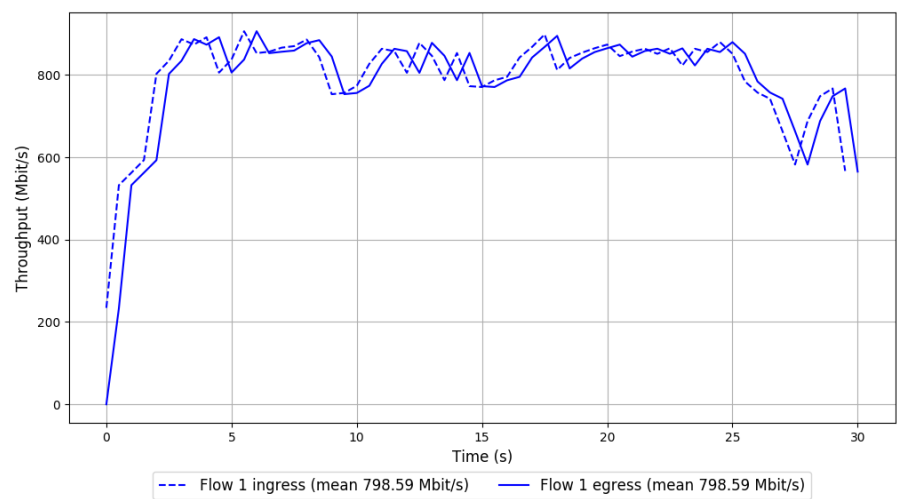
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 647.91 Mbit/s)   Flow 1 egress (mean 647.90 Mbit/s)

Flow 1 (95th percentile 1.84 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2019-07-18 06:50:32
End at: 2019-07-18 06:51:02
Local clock offset: 3.3 ms
Remote clock offset: -0.86 ms

# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 798.59 Mbit/s
95th percentile per-packet one-way delay: 1.216 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 798.59 Mbit/s
95th percentile per-packet one-way delay: 1.216 ms
Loss rate: 0.01%
```
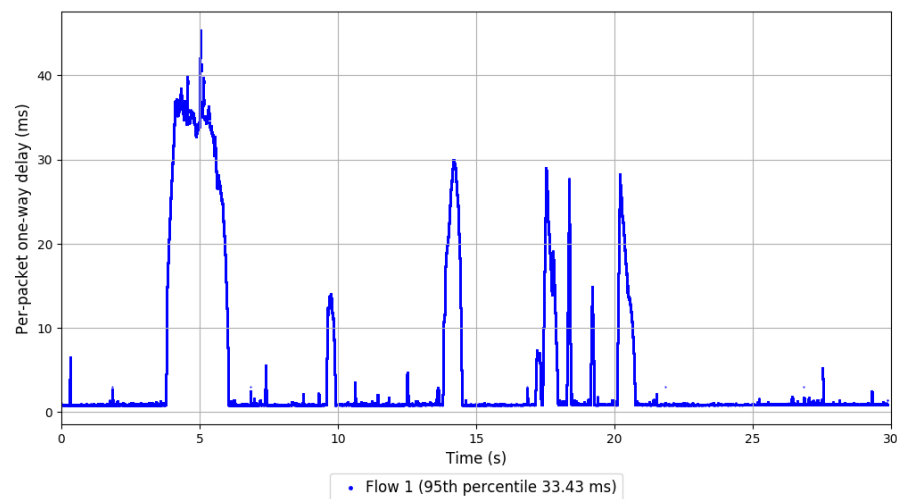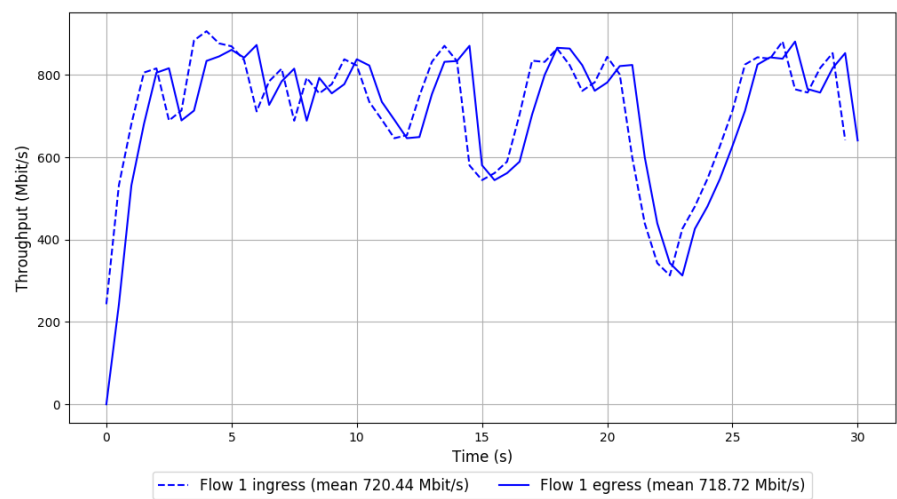
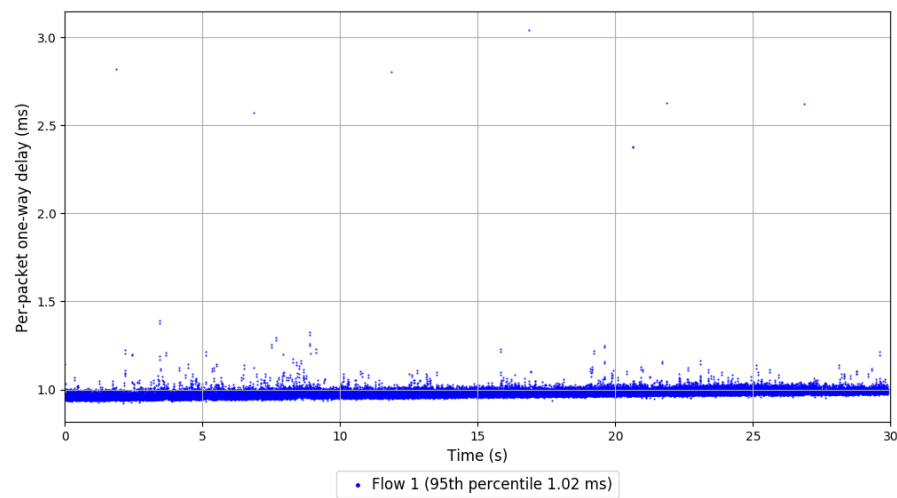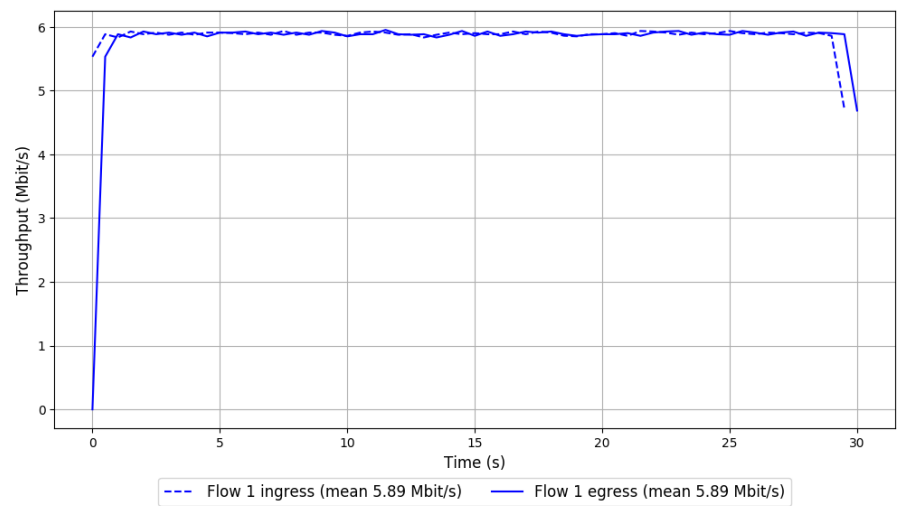# Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 798.59 Mbit/s)   Flow 1 egress (mean 798.59 Mbit/s)

Flow 1 (95th percentile 1.22 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2019-07-18 07:23:59
End at: 2019-07-18 07:24:29
Local clock offset: 0.957 ms
Remote clock offset: 1.751 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 718.72 Mbit/s
95th percentile per-packet one-way delay: 33.430 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 718.72 Mbit/s
95th percentile per-packet one-way delay: 33.430 ms
Loss rate: 0.24%
```

Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 720.44 Mbit/s) — Flow 1 egress (mean 718.72 Mbit/s)

• Flow 1 (95th percentile 33.43 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2019-07-18 04:46:57
End at: 2019-07-18 04:47:27
Local clock offset: -0.088 ms
Remote clock offset: 0.319 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.89 Mbit/s
95th percentile per-packet one-way delay: 1.017 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 5.89 Mbit/s
95th percentile per-packet one-way delay: 1.017 ms
Loss rate: 0.01%
```
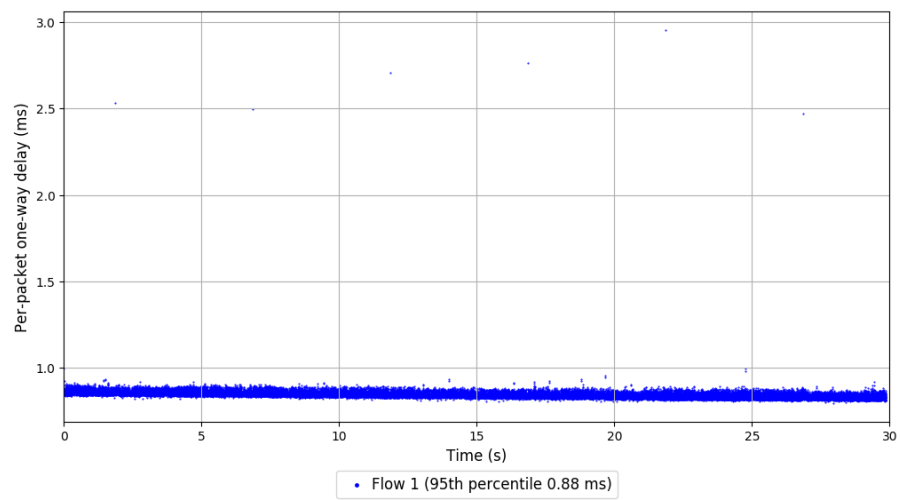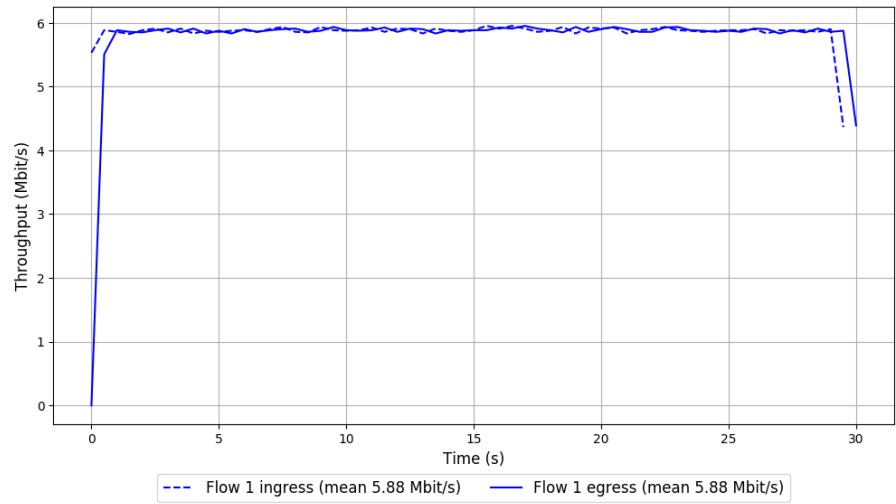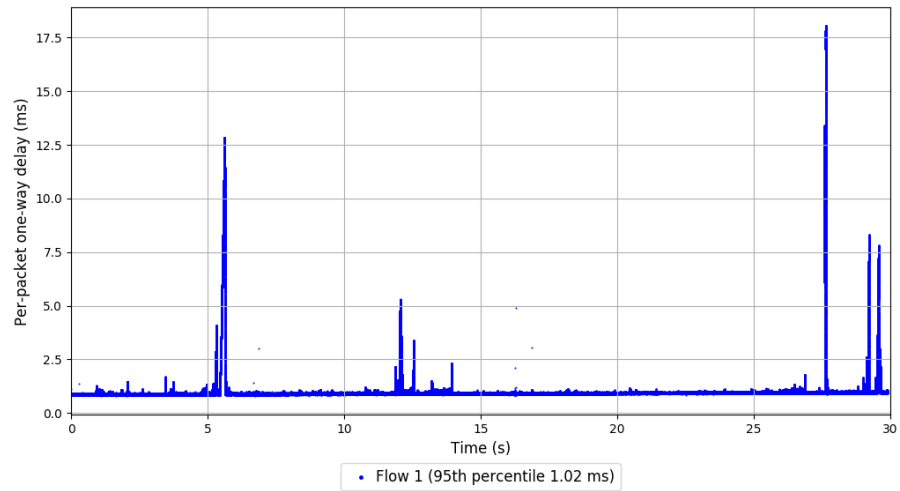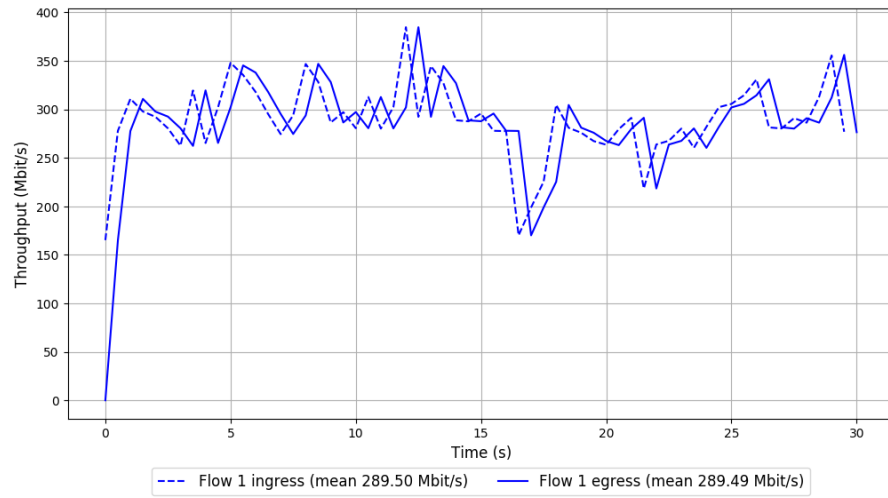
Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2019-07-18 05:20:12
End at: 2019-07-18 05:20:42
Local clock offset: -0.245 ms
Remote clock offset: 0.559 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.88 Mbit/s
95th percentile per-packet one-way delay: 0.878 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.88 Mbit/s
95th percentile per-packet one-way delay: 0.878 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2019-07-18 05:53:20
End at: 2019-07-18 05:53:50
Local clock offset: -0.182 ms
Remote clock offset: 1.47 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 289.49 Mbit/s
95th percentile per-packet one-way delay: 1.019 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 289.49 Mbit/s
95th percentile per-packet one-way delay: 1.019 ms
Loss rate: 0.01%
```
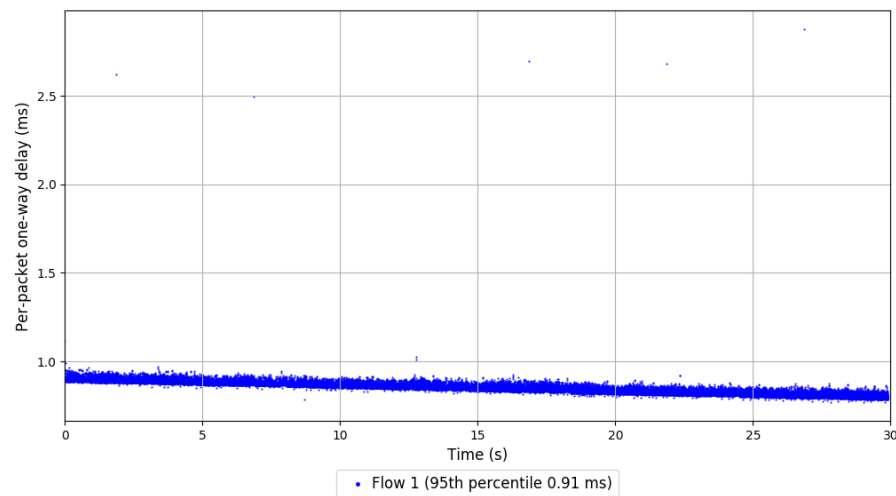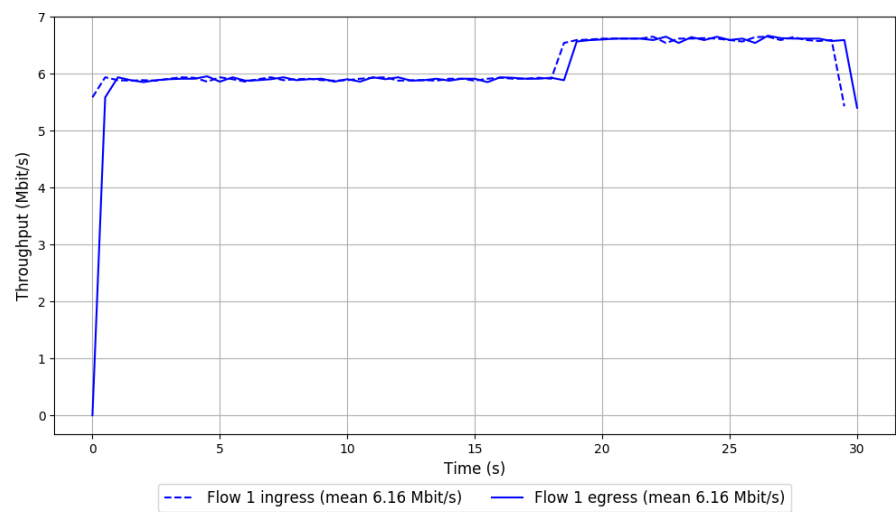
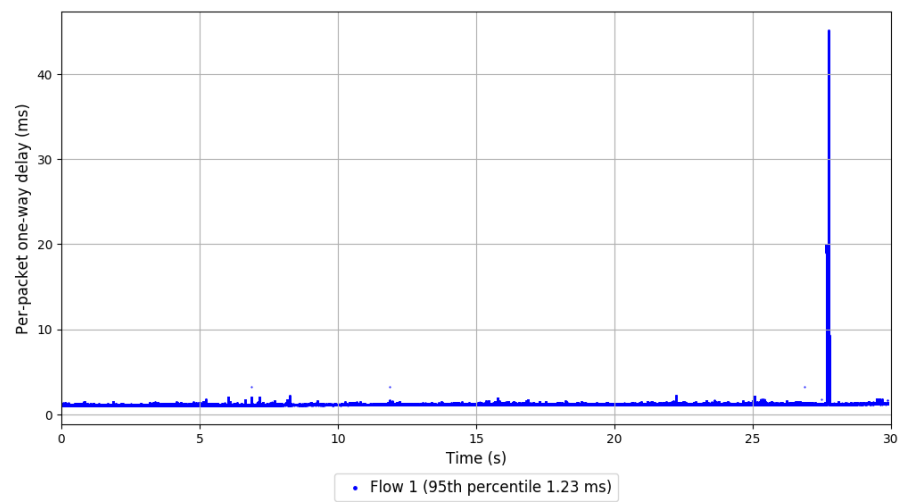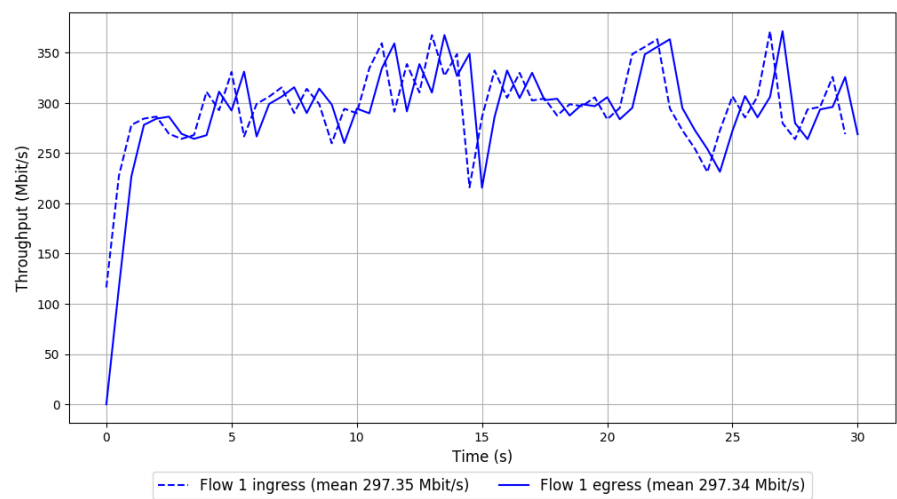## Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 289.50 Mbit/s) — Flow 1 egress (mean 289.49 Mbit/s)

• Flow 1 (95th percentile 1.02 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2019-07-18 06:26:54
End at: 2019-07-18 06:27:24
Local clock offset: 3.677 ms
Remote clock offset: 1.857 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 0.907 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 0.907 ms
Loss rate: 0.01%
```
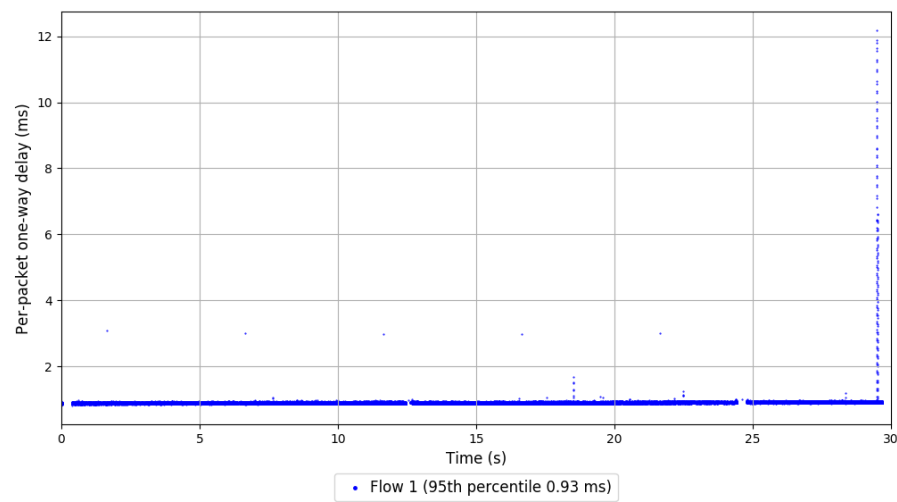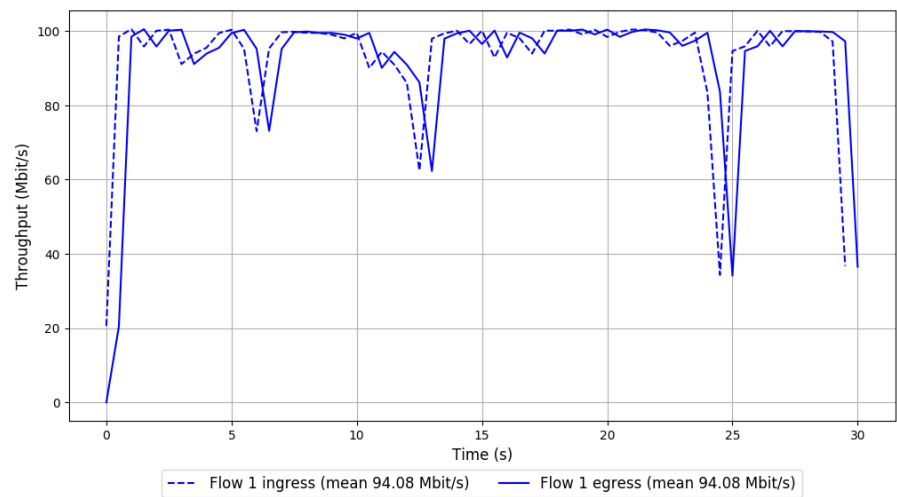
Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2019-07-18 07:00:12
End at: 2019-07-18 07:00:42
Local clock offset: 2.315 ms
Remote clock offset: -0.265 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 297.34 Mbit/s
95th percentile per-packet one-way delay: 1.228 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 297.34 Mbit/s
95th percentile per-packet one-way delay: 1.228 ms
Loss rate: 0.01%
```

Run 5: Report of PCC-Expr — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2019-07-18 04:45:40
End at: 2019-07-18 04:46:10
Local clock offset: -0.045 ms
Remote clock offset: 0.338 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.08 Mbit/s
95th percentile per-packet one-way delay: 0.929 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 94.08 Mbit/s
95th percentile per-packet one-way delay: 0.929 ms
Loss rate: 0.01%
```
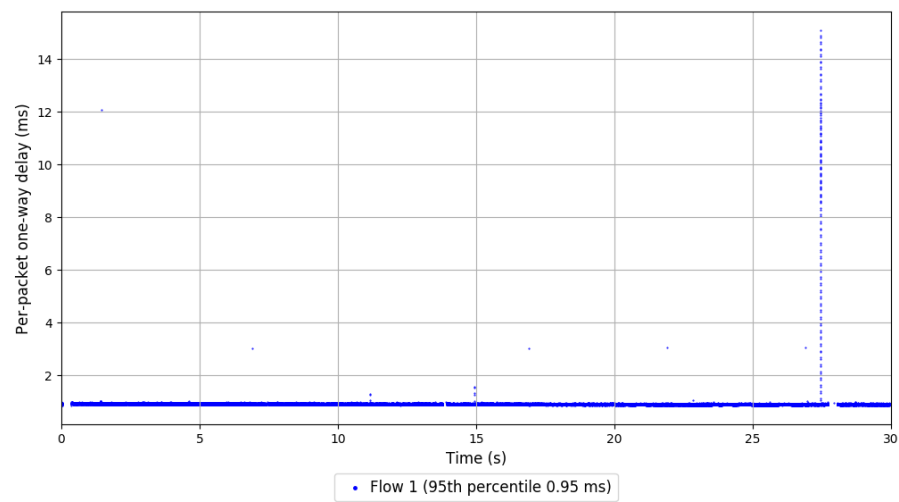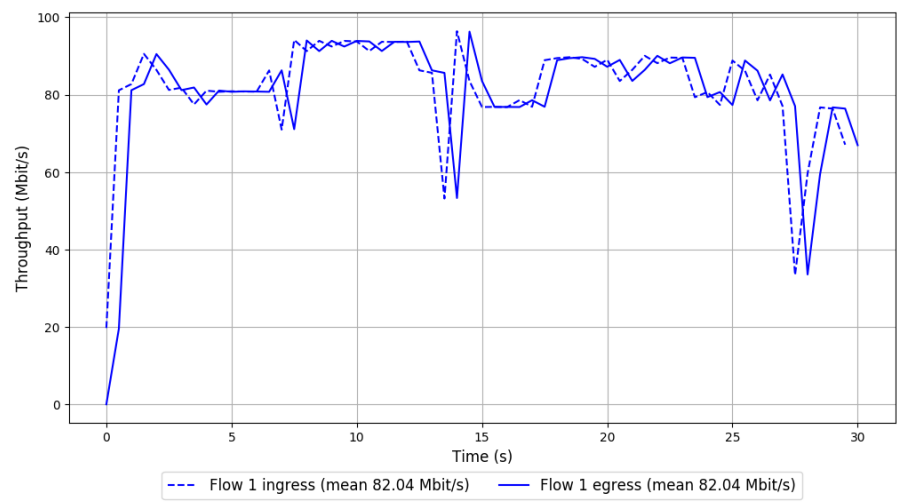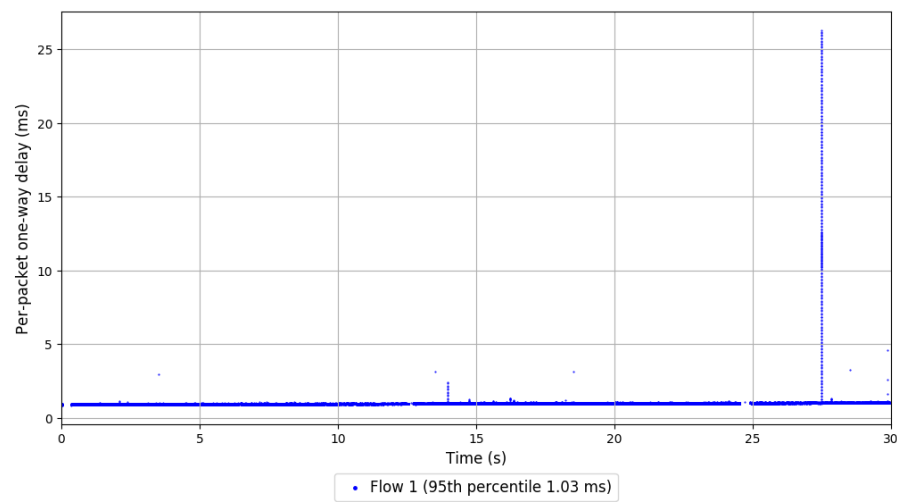
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2019-07-18 05:18:56
End at: 2019-07-18 05:19:26
Local clock offset: -0.233 ms
Remote clock offset: 0.593 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.04 Mbit/s
95th percentile per-packet one-way delay: 0.946 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 82.04 Mbit/s
95th percentile per-packet one-way delay: 0.946 ms
Loss rate: 0.01%
```

Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2019-07-18 05:52:04
End at: 2019-07-18 05:52:34
Local clock offset: -0.196 ms
Remote clock offset: 1.131 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.70 Mbit/s
95th percentile per-packet one-way delay: 1.032 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 93.70 Mbit/s
95th percentile per-packet one-way delay: 1.032 ms
Loss rate: 0.00%
```
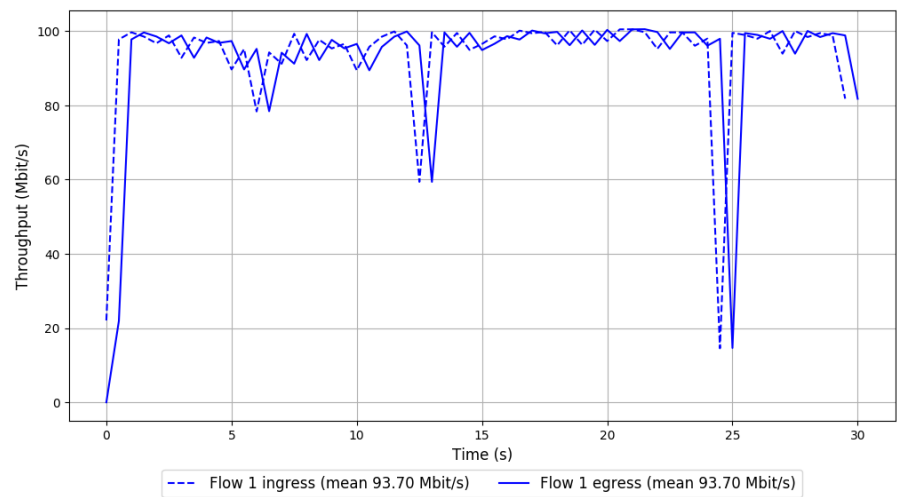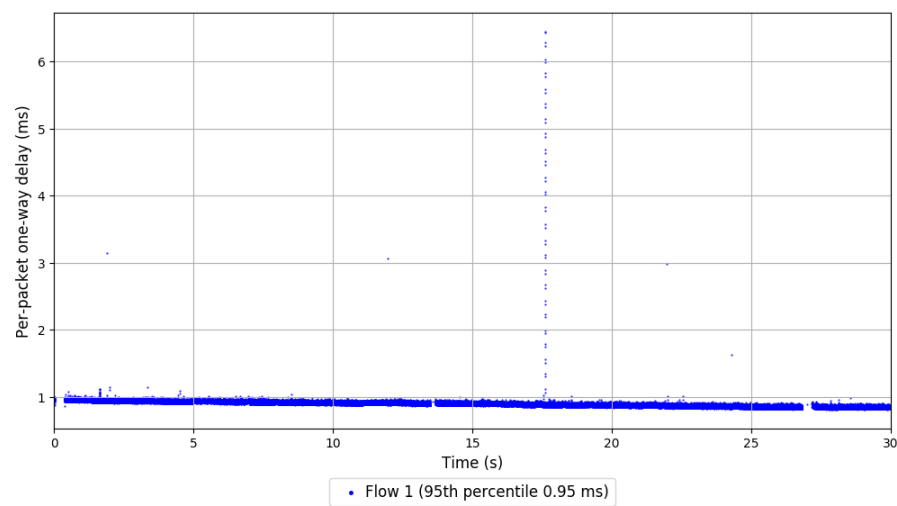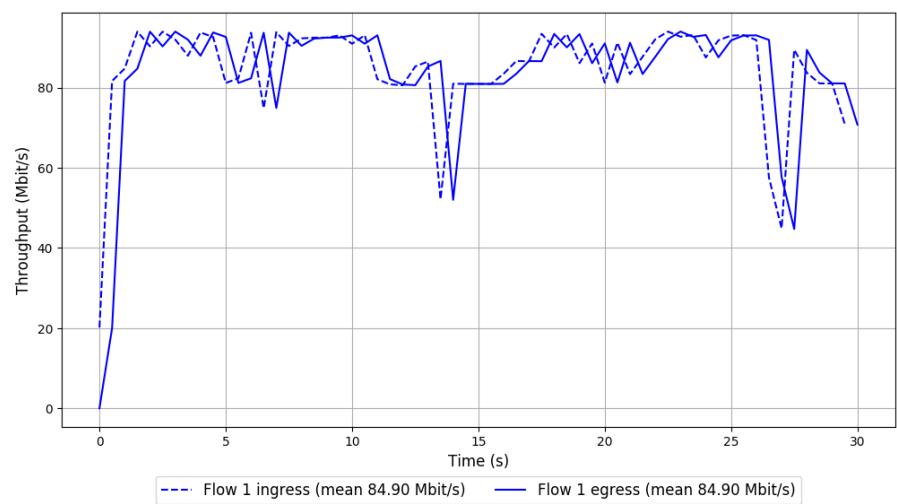
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 93.70 Mbit/s) ---- Flow 1 egress (mean 93.70 Mbit/s)

Flow 1 (95th percentile 1.03 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2019-07-18 06:25:38
End at: 2019-07-18 06:26:08
Local clock offset: 3.8 ms
Remote clock offset: 2.213 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.90 Mbit/s
95th percentile per-packet one-way delay: 0.947 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 84.90 Mbit/s
95th percentile per-packet one-way delay: 0.947 ms
Loss rate: 0.01%
```
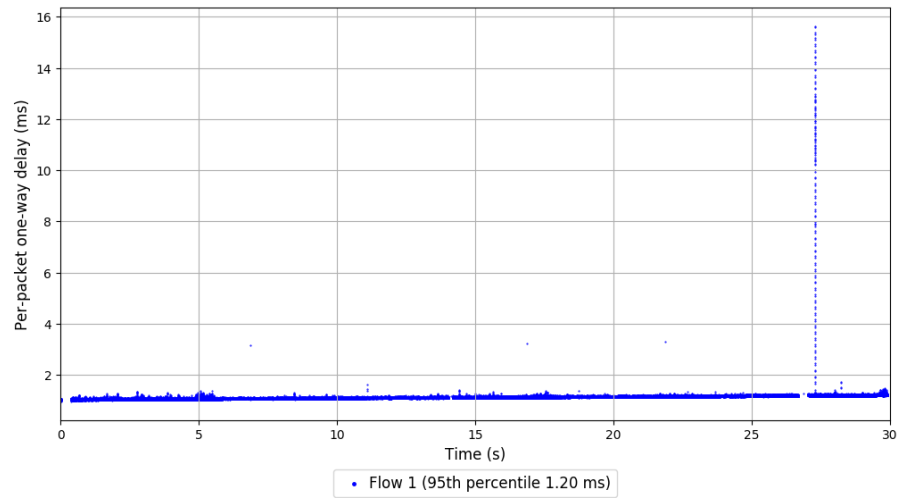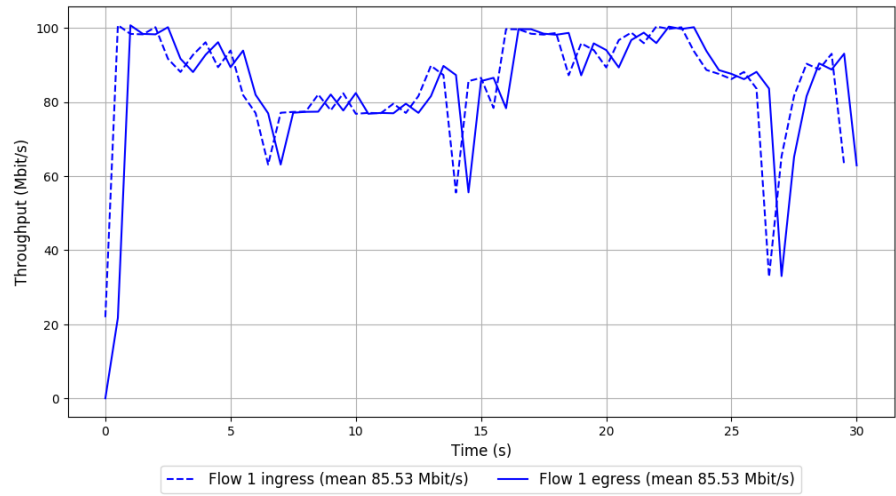
Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 84.90 Mbit/s) ----   Flow 1 egress (mean 84.90 Mbit/s) ———

• Flow 1 (95th percentile 0.95 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2019-07-18 06:58:56
End at: 2019-07-18 06:59:26
Local clock offset: 2.524 ms
Remote clock offset: -0.45 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.53 Mbit/s
95th percentile per-packet one-way delay: 1.203 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.53 Mbit/s
95th percentile per-packet one-way delay: 1.203 ms
Loss rate: 0.00%
```
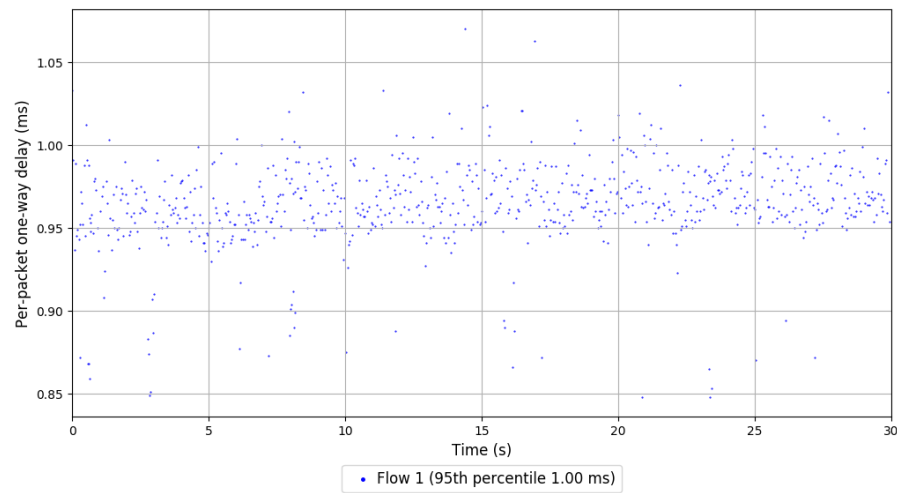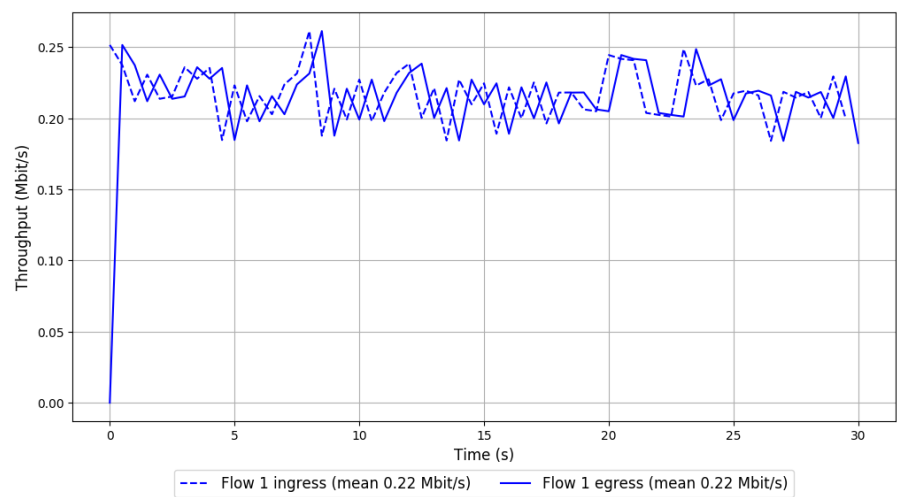
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 85.53 Mbit/s) —— Flow 1 egress (mean 85.53 Mbit/s)

• Flow 1 (95th percentile 1.20 ms)

```
Run 1: Statistics of SCReAM

Start at: 2019-07-18 05:07:44
End at: 2019-07-18 05:08:14
Local clock offset: -0.088 ms
Remote clock offset: 1.256 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.003 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.003 ms
Loss rate: 0.13%
```
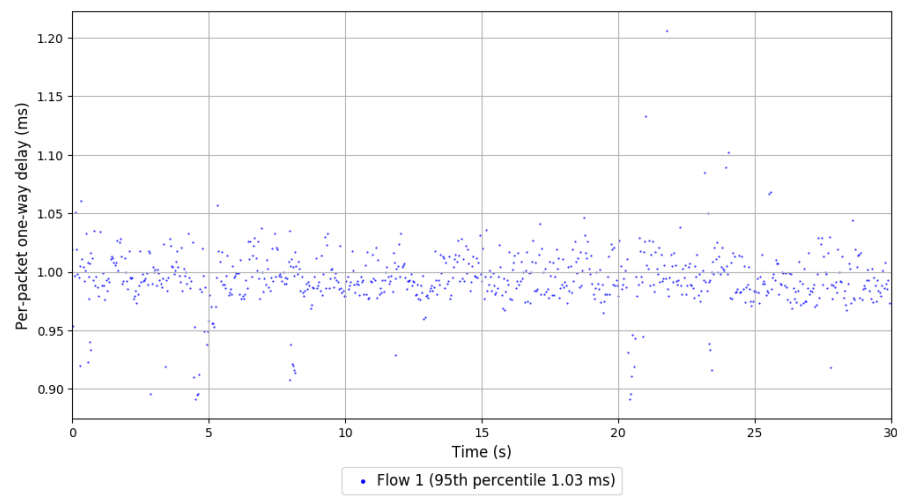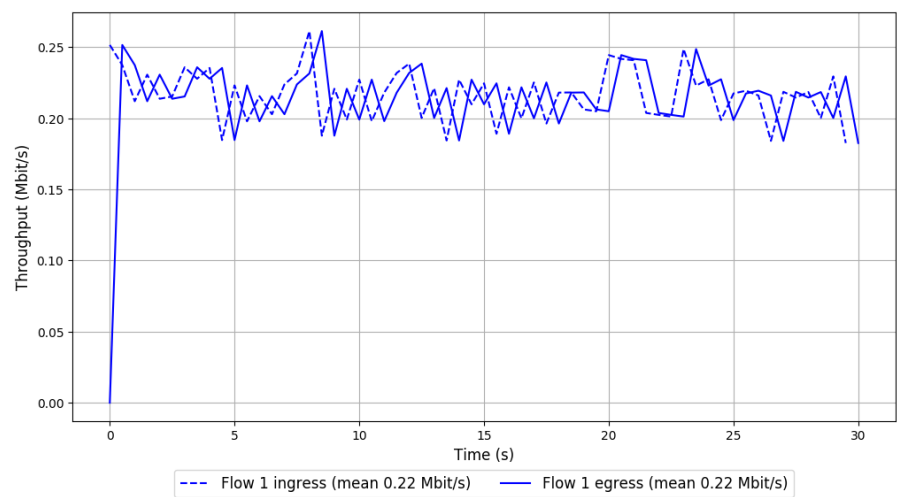
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2019-07-18 05:40:56
End at: 2019-07-18 05:41:26
Local clock offset: -0.215 ms
Remote clock offset: -0.16 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.027 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.027 ms
Loss rate: 0.00%
```
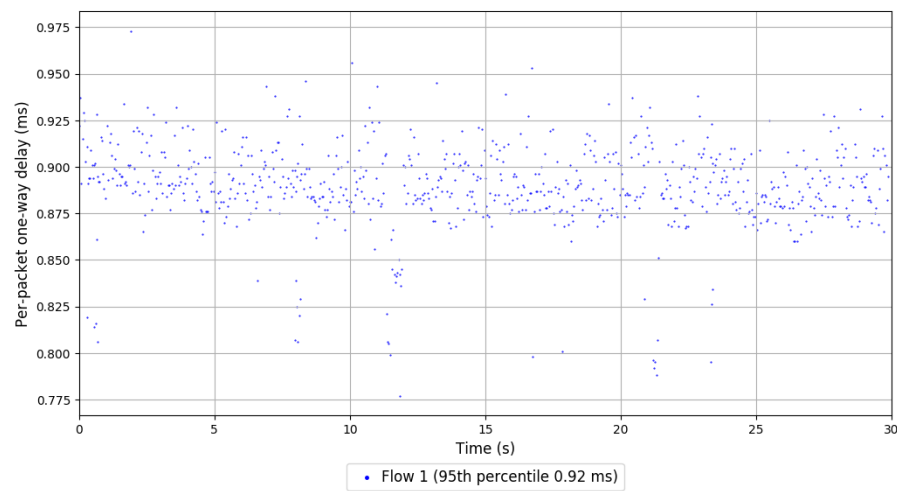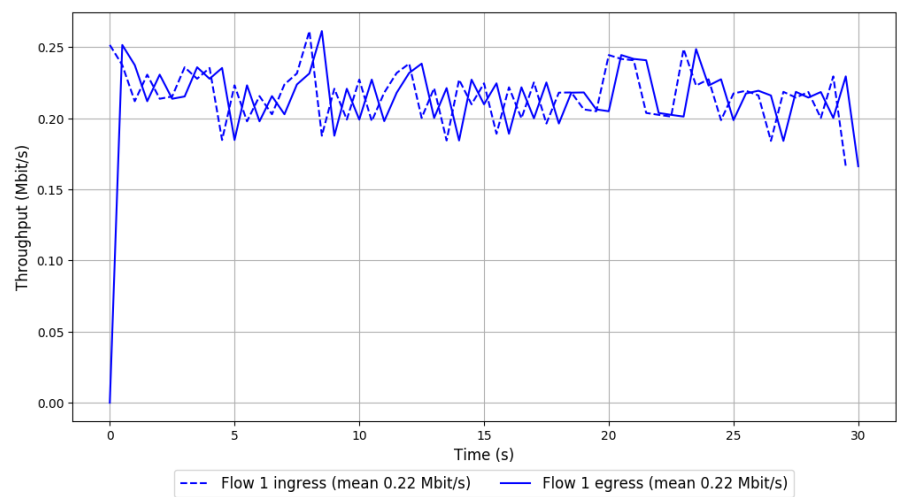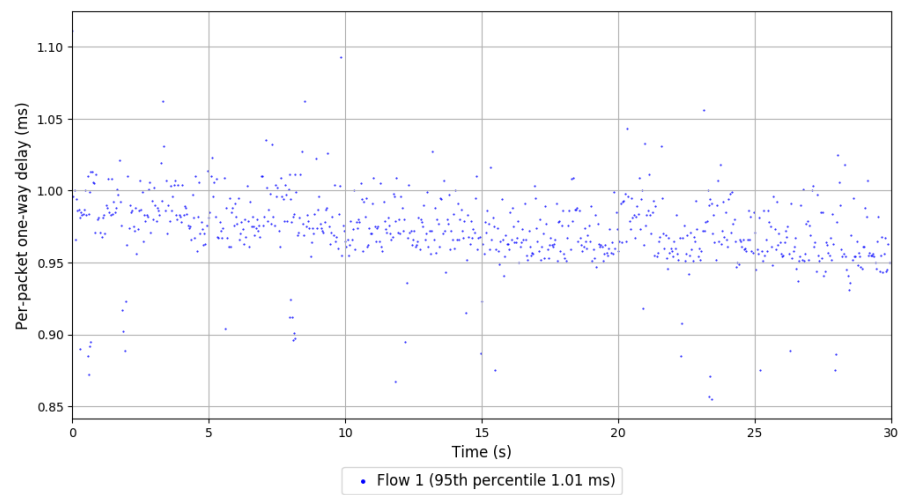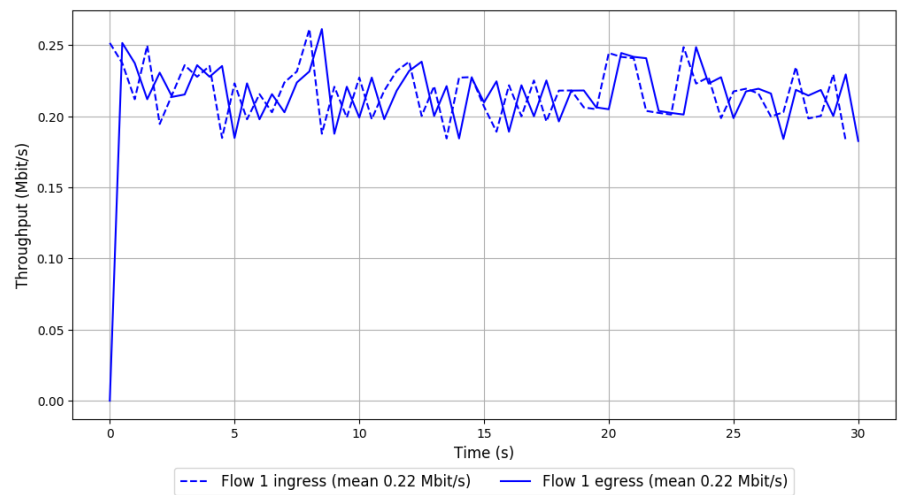
Run 2: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 1.03 ms)

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```
Run 3: Statistics of SCReAM

Start at: 2019-07-18 06:14:25
End at: 2019-07-18 06:14:55
Local clock offset: 3.242 ms
Remote clock offset: 3.642 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.922 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.922 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2019-07-18 06:47:44
End at: 2019-07-18 06:48:15
Local clock offset: 3.282 ms
Remote clock offset: -0.728 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.009 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.009 ms
Loss rate: 0.00%
```
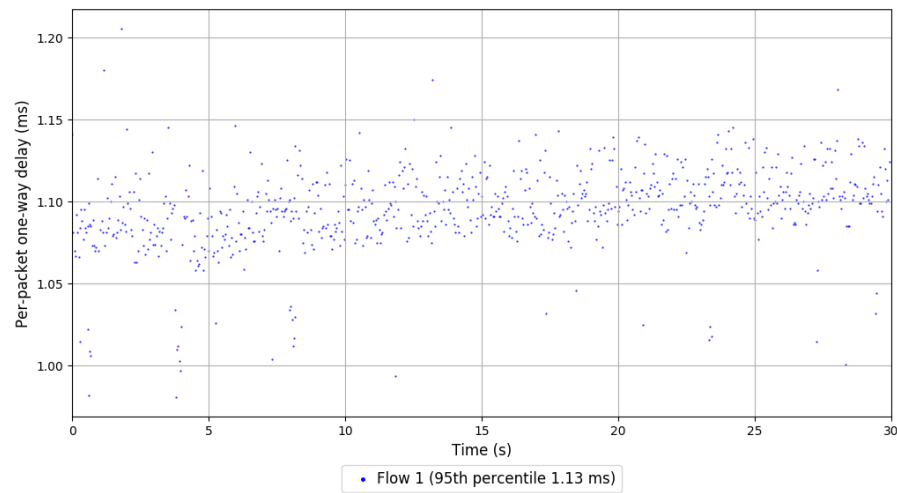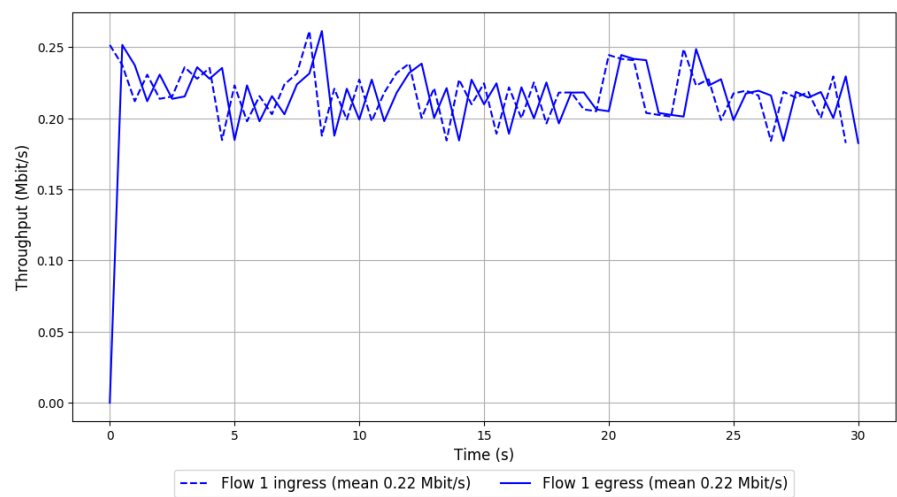
Run 4: Report of SCReAM — Data Link

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```
Run 5: Statistics of SCReAM

Start at: 2019-07-18 07:21:13
End at: 2019-07-18 07:21:43
Local clock offset: 1.026 ms
Remote clock offset: 1.535 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.132 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.132 ms
Loss rate: 0.00%
```
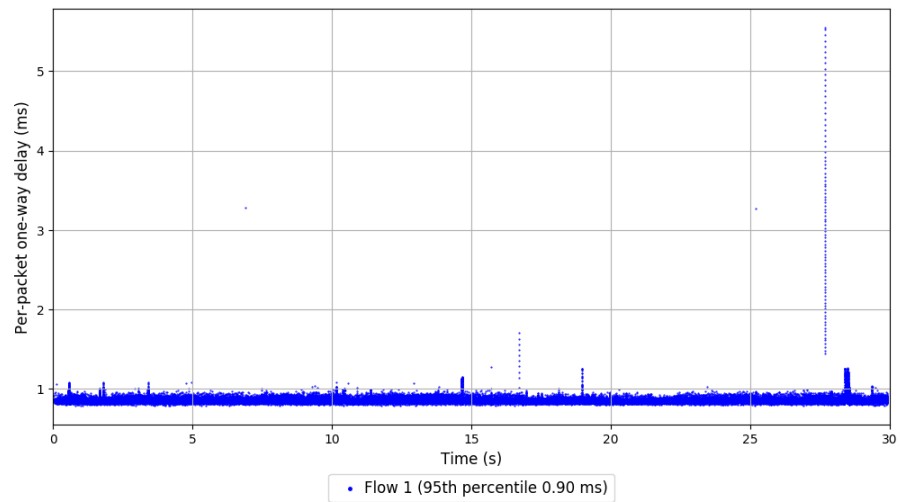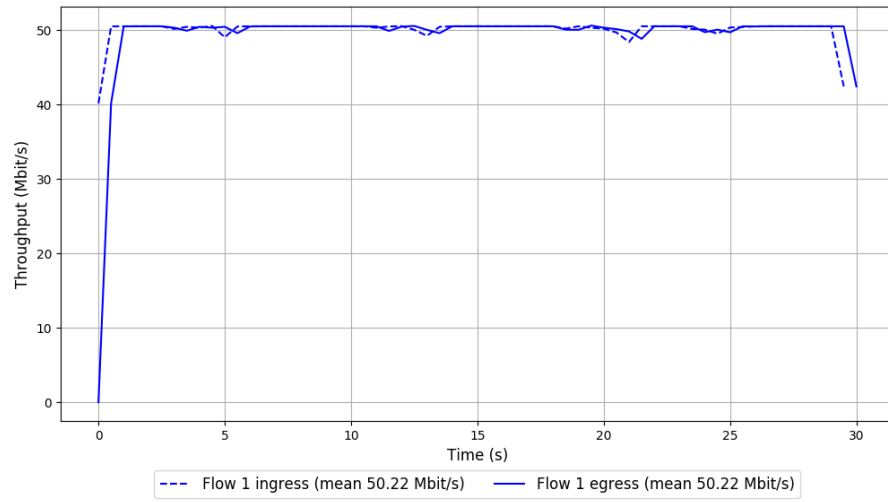
Run 5: Report of SCReAM — Data Link

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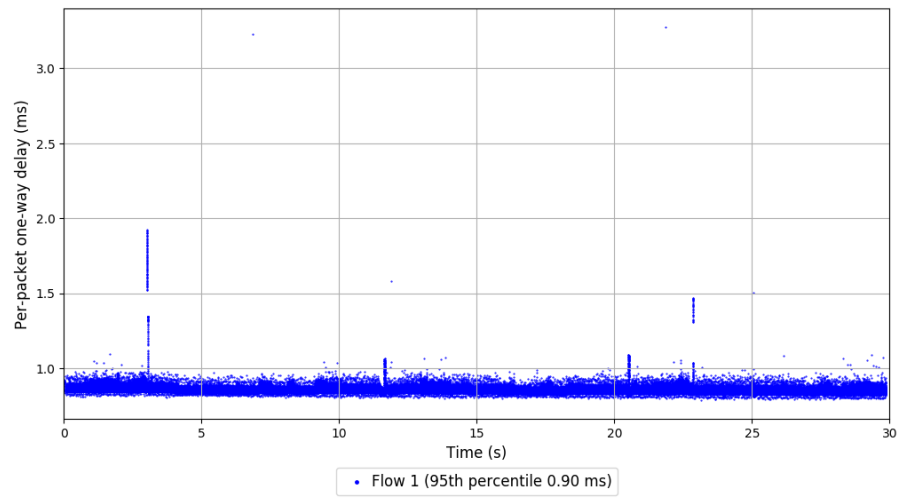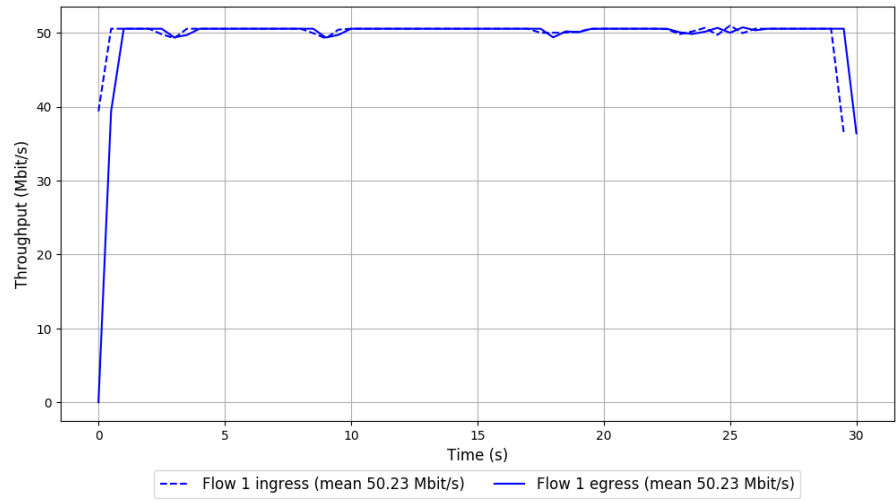

Flow 1 (95th percentile 1.13 ms)

```
Run 1: Statistics of Sprout

Start at: 2019-07-18 04:54:48
End at: 2019-07-18 04:55:18
Local clock offset: -0.291 ms
Remote clock offset: 0.812 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.22 Mbit/s
95th percentile per-packet one-way delay: 0.898 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.22 Mbit/s
95th percentile per-packet one-way delay: 0.898 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2019-07-18 05:28:05
End at: 2019-07-18 05:28:35
Local clock offset: -0.255 ms
Remote clock offset: 0.175 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.23 Mbit/s
95th percentile per-packet one-way delay: 0.895 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.23 Mbit/s
95th percentile per-packet one-way delay: 0.895 ms
Loss rate: 0.00%
```
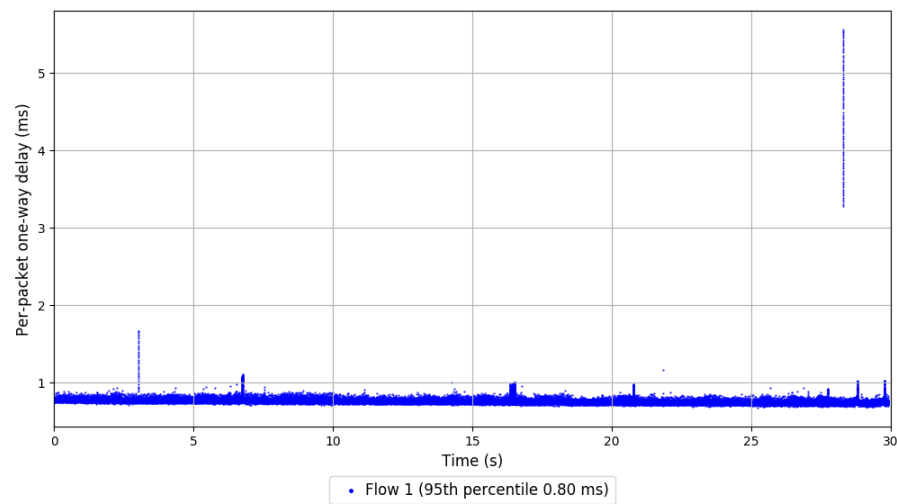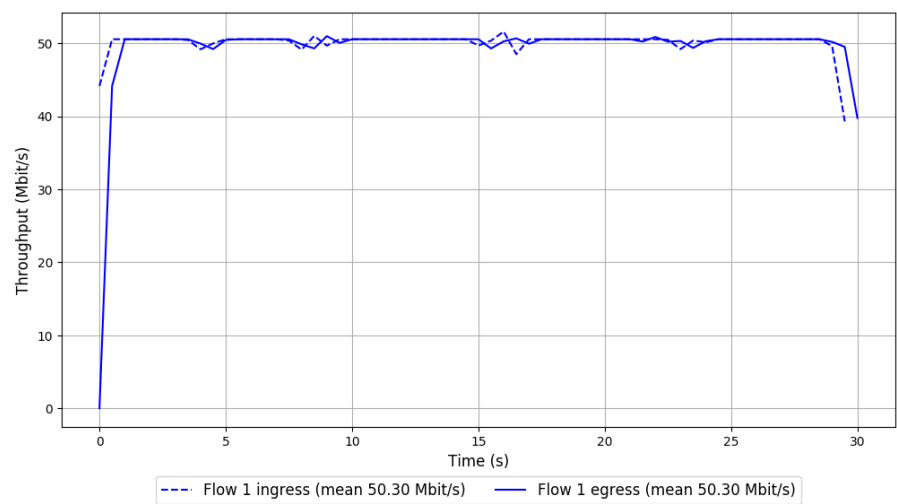
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2019-07-18 06:01:30
End at: 2019-07-18 06:02:00
Local clock offset: 1.737 ms
Remote clock offset: 2.764 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.30 Mbit/s
95th percentile per-packet one-way delay: 0.799 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.30 Mbit/s
95th percentile per-packet one-way delay: 0.799 ms
Loss rate: 0.00%
```
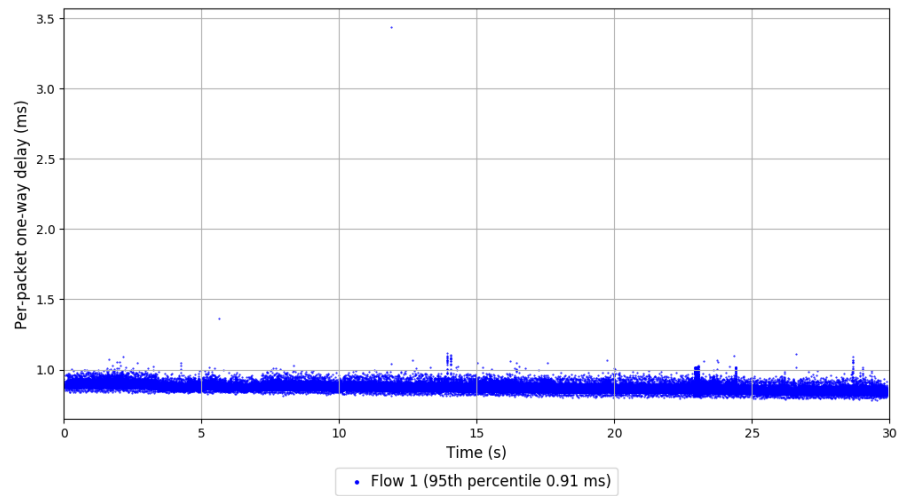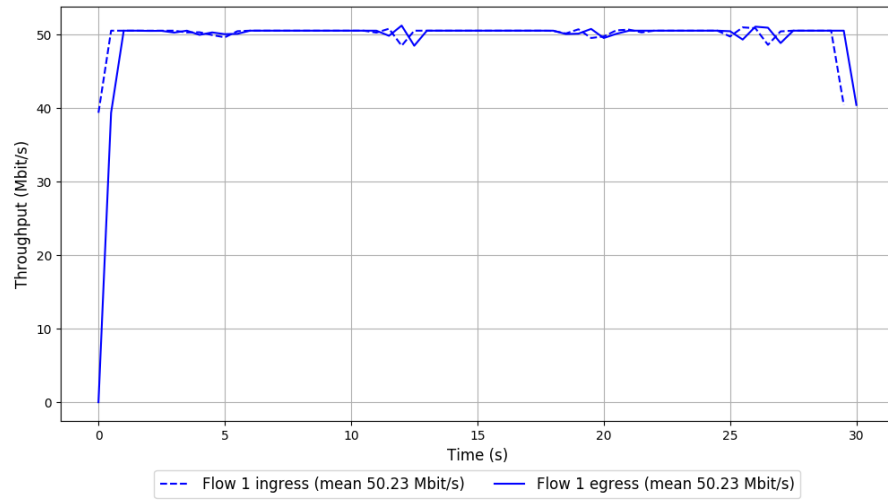
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2019-07-18 06:34:53
End at: 2019-07-18 06:35:23
Local clock offset: 3.288 ms
Remote clock offset: 0.305 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.23 Mbit/s
95th percentile per-packet one-way delay: 0.913 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.23 Mbit/s
95th percentile per-packet one-way delay: 0.913 ms
Loss rate: 0.00%
```
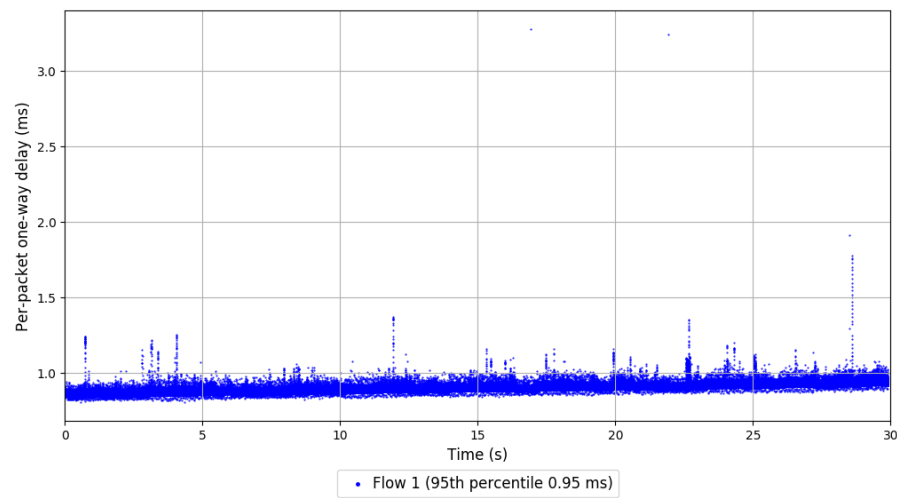
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2019-07-18 07:08:24
End at: 2019-07-18 07:08:54
Local clock offset: 1.484 ms
Remote clock offset: 0.977 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.19 Mbit/s
95th percentile per-packet one-way delay: 0.952 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.19 Mbit/s
95th percentile per-packet one-way delay: 0.952 ms
Loss rate: 0.00%
```
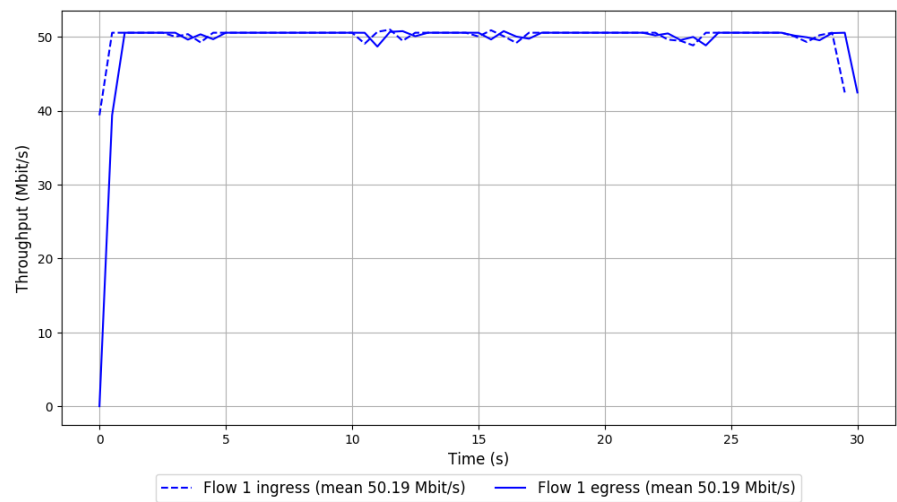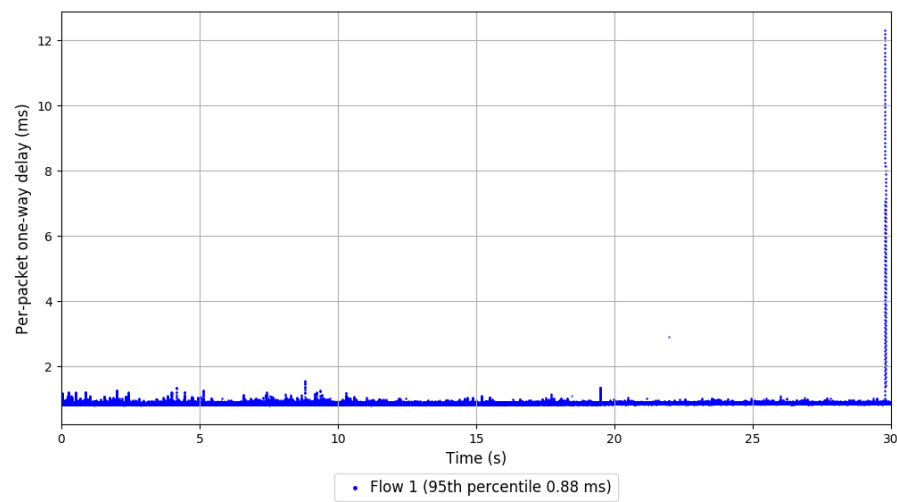
Run 5: Report of Sprout — Data Link

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

Start at: 2019-07-18 05:03:42
End at: 2019-07-18 05:04:12
Local clock offset: -0.076 ms
Remote clock offset: 1.148 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.82 Mbit/s
95th percentile per-packet one-way delay: 0.879 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 94.82 Mbit/s
95th percentile per-packet one-way delay: 0.879 ms
Loss rate: 0.00%
```
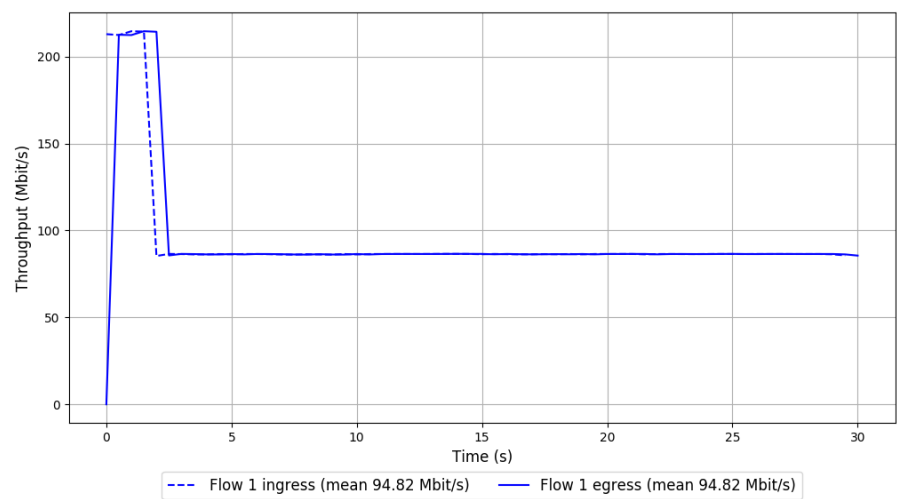
Run 1: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 94.82 Mbit/s)   Flow 1 egress (mean 94.82 Mbit/s)

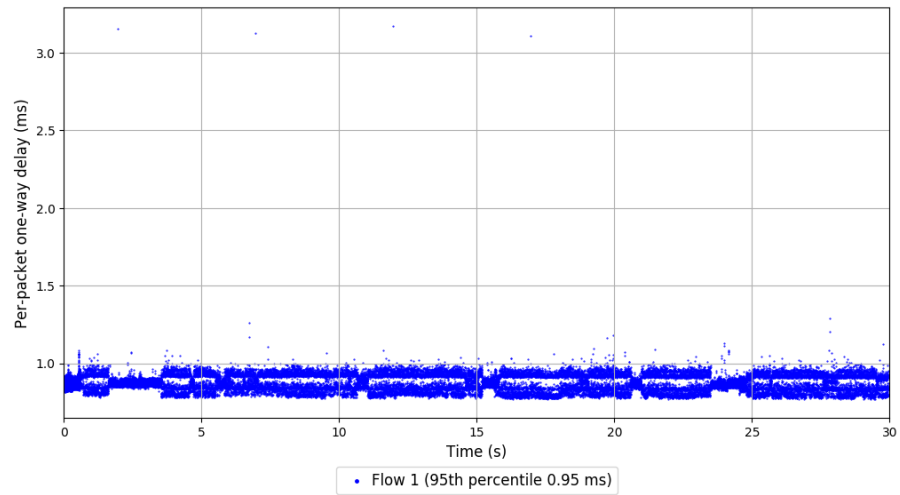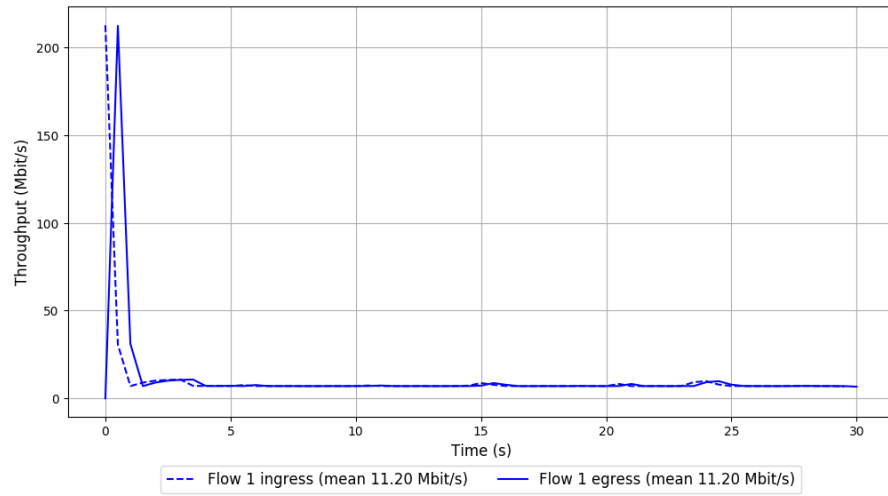
Flow 1 (95th percentile 0.88 ms)

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

Start at: 2019-07-18 05:37:01
End at: 2019-07-18 05:37:31
Local clock offset: -0.258 ms
Remote clock offset: -0.095 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.20 Mbit/s
95th percentile per-packet one-way delay: 0.950 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 11.20 Mbit/s
95th percentile per-packet one-way delay: 0.950 ms
Loss rate: 0.01%
```
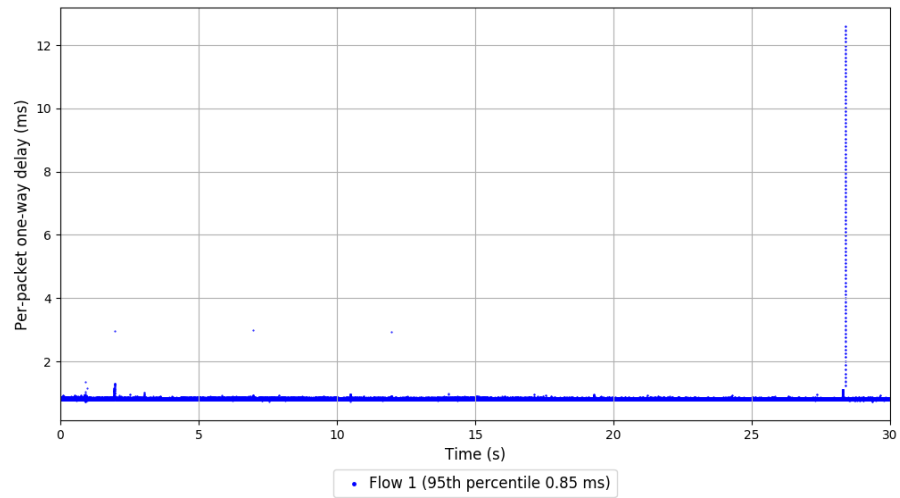
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2019-07-18 06:10:25
End at: 2019-07-18 06:10:55
Local clock offset: 2.948 ms
Remote clock offset: 3.395 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.06 Mbit/s
95th percentile per-packet one-way delay: 0.848 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 90.06 Mbit/s
95th percentile per-packet one-way delay: 0.848 ms
Loss rate: 0.01%
```
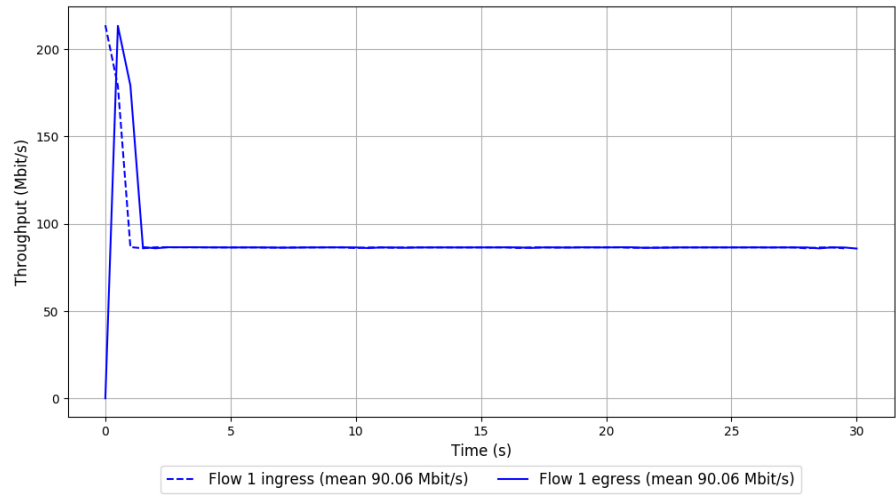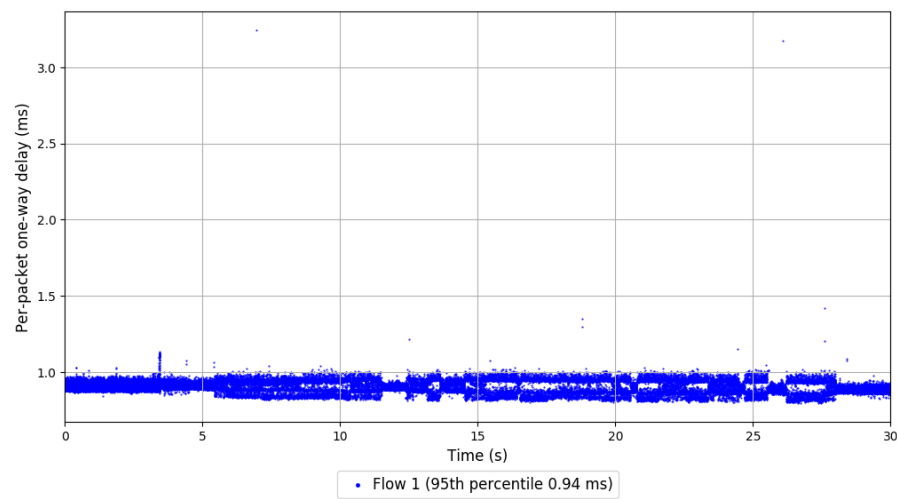
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 90.06 Mbit/s)   Flow 1 egress (mean 90.06 Mbit/s)

Flow 1 (95th percentile 0.85 ms)

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

Start at: 2019-07-18 06:43:48
End at: 2019-07-18 06:44:18
Local clock offset: 3.237 ms
Remote clock offset: -0.552 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.32 Mbit/s
95th percentile per-packet one-way delay: 0.945 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 31.32 Mbit/s
95th percentile per-packet one-way delay: 0.945 ms
Loss rate: 0.00%
```
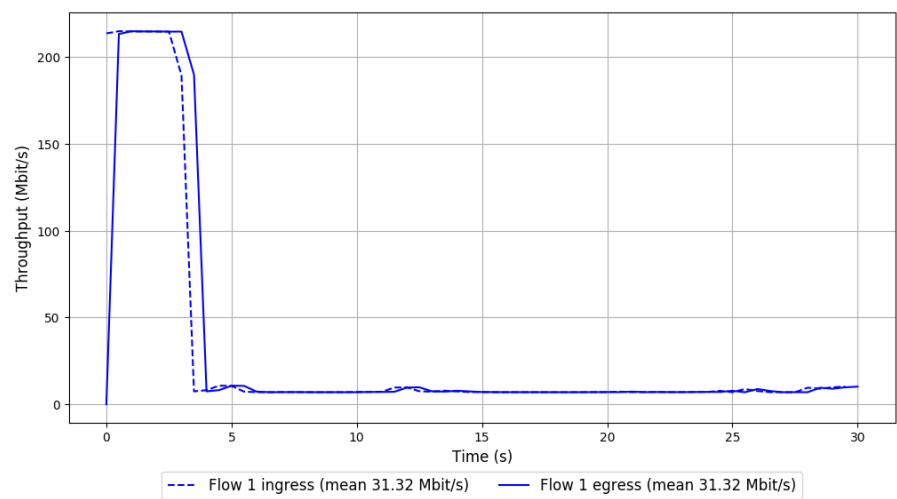
Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2019-07-18 07:17:19
End at: 2019-07-18 07:17:49
Local clock offset: 1.11 ms
Remote clock offset: 1.428 ms


# Below is generated by plot.py at 2019-07-18 08:30:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.98 Mbit/s
95th percentile per-packet one-way delay: 1.053 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 11.98 Mbit/s
95th percentile per-packet one-way delay: 1.053 ms
Loss rate: 0.01%
```
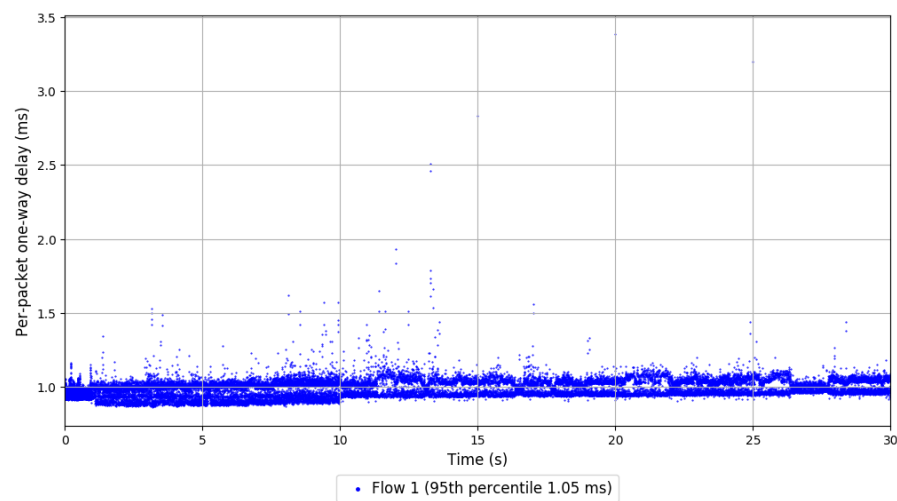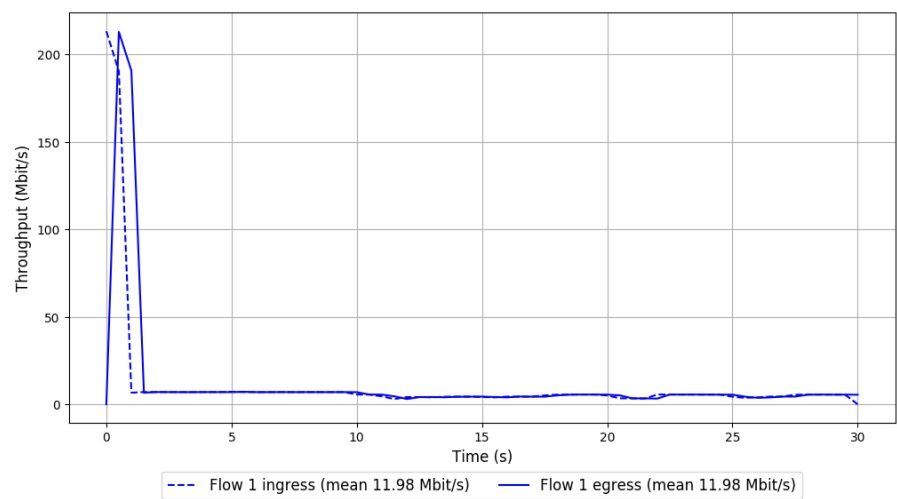
Run 5: Report of TaoVA-100x — Data Link

```
Run 1: Statistics of TCP Vegas

Start at: 2019-07-18 05:13:30
End at: 2019-07-18 05:14:00
Local clock offset: -0.134 ms
Remote clock offset: 1.447 ms


# Below is generated by plot.py at 2019-07-18 08:31:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 207.95 Mbit/s
95th percentile per-packet one-way delay: 1.060 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 207.95 Mbit/s
95th percentile per-packet one-way delay: 1.060 ms
Loss rate: 0.01%
```
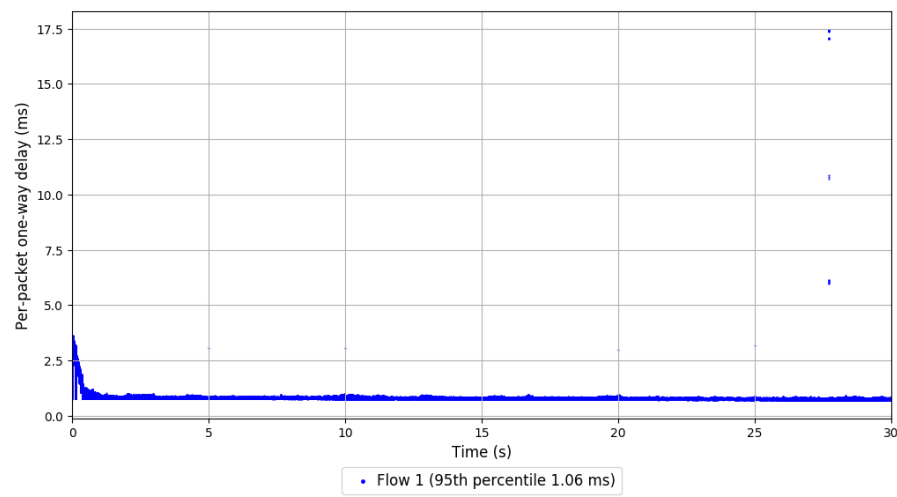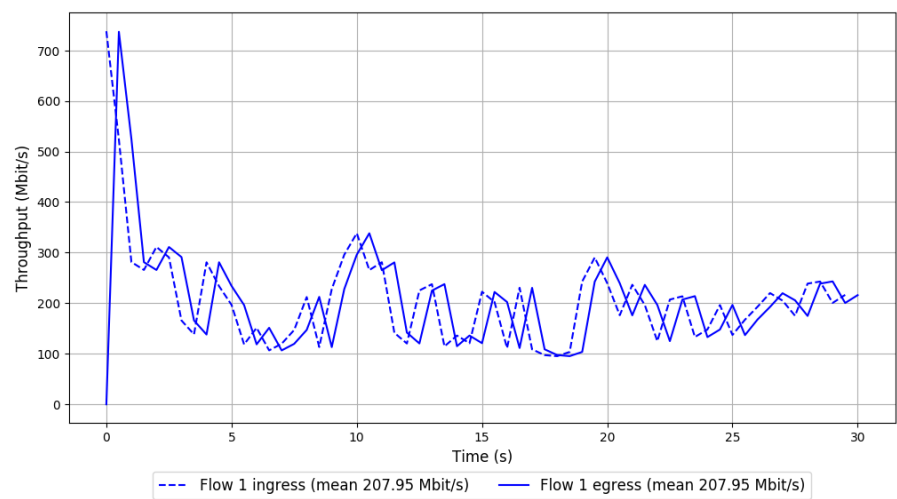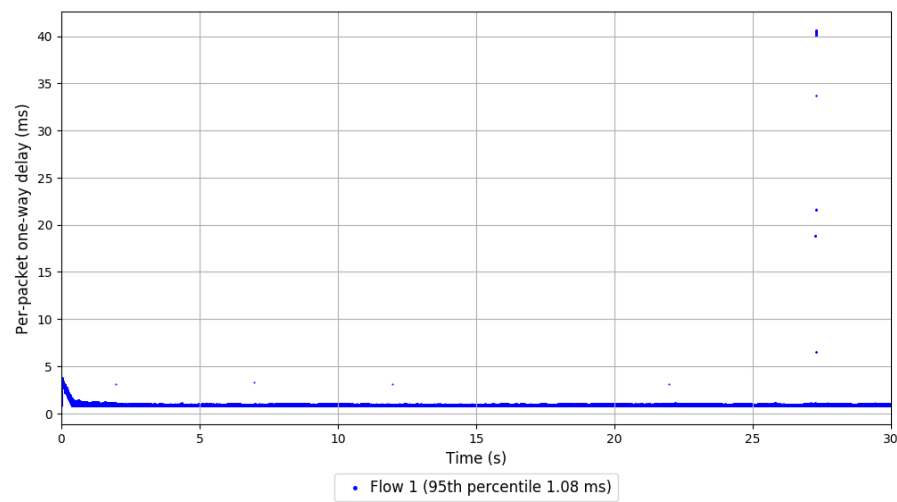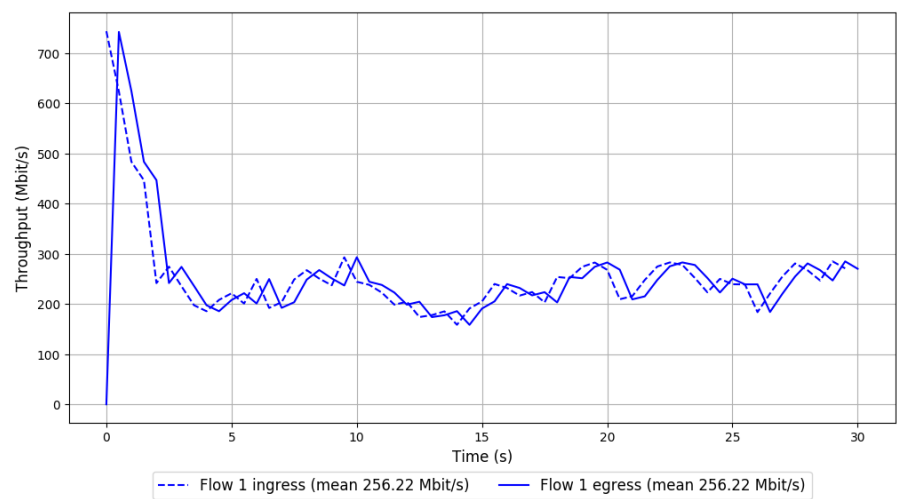
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2019-07-18 05:46:37
End at: 2019-07-18 05:47:07
Local clock offset: -0.201 ms
Remote clock offset: -0.221 ms


# Below is generated by plot.py at 2019-07-18 08:32:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 256.22 Mbit/s
95th percentile per-packet one-way delay: 1.083 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 256.22 Mbit/s
95th percentile per-packet one-way delay: 1.083 ms
Loss rate: 0.01%
```

Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2019-07-18 06:20:10
End at: 2019-07-18 06:20:40
Local clock offset: 3.639 ms
Remote clock offset: 3.892 ms

# Below is generated by plot.py at 2019-07-18 08:32:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 254.89 Mbit/s
95th percentile per-packet one-way delay: 1.276 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 254.89 Mbit/s
95th percentile per-packet one-way delay: 1.276 ms
Loss rate: 0.01%
```
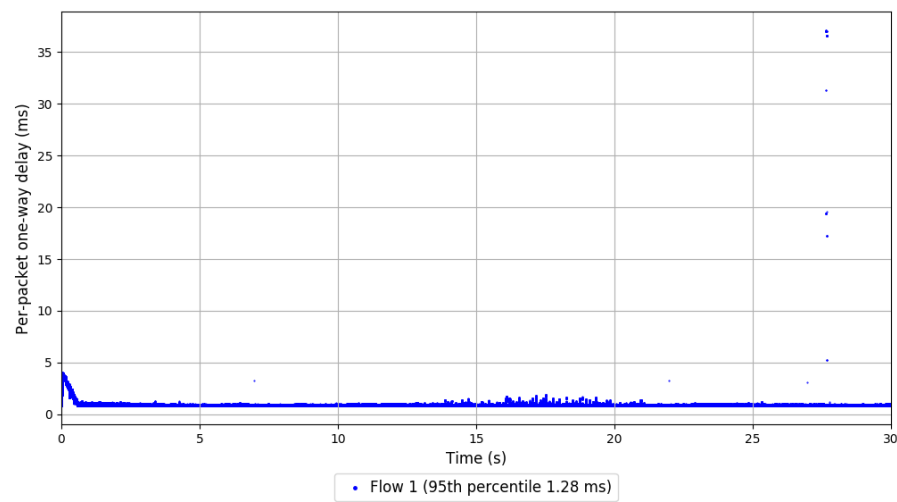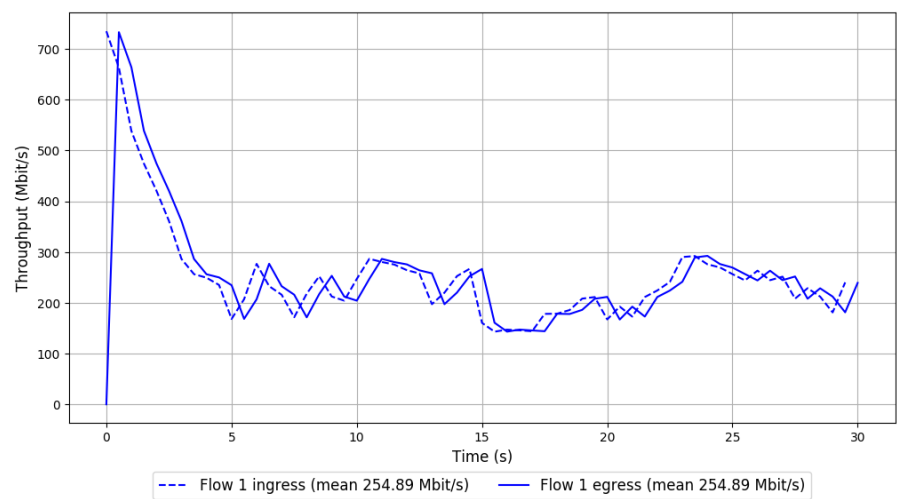
Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 254.89 Mbit/s)   Flow 1 egress (mean 254.89 Mbit/s)

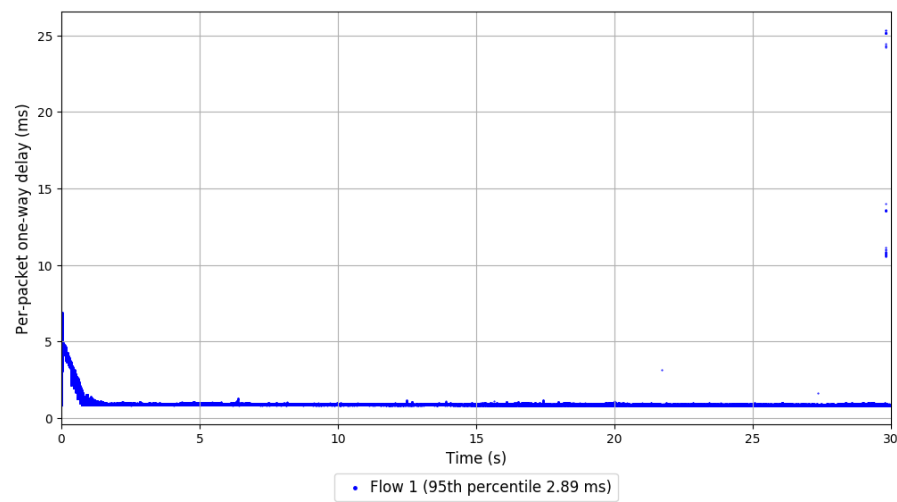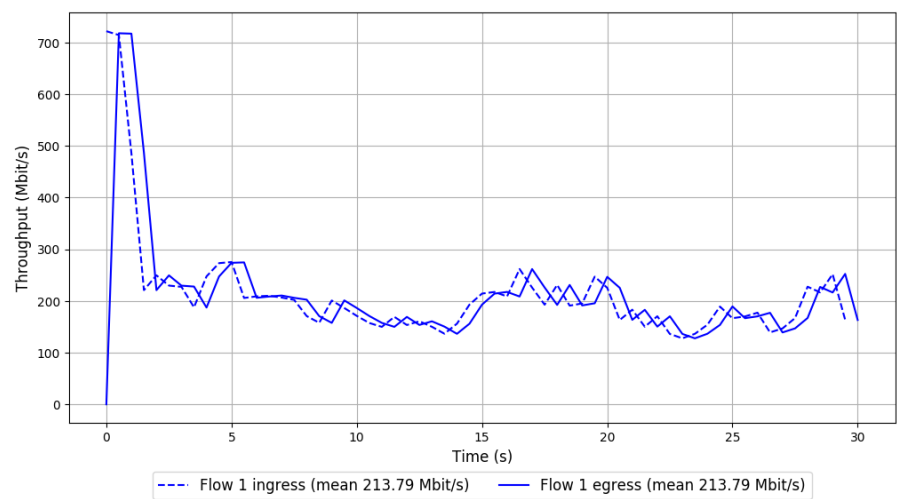

Flow 1 (95th percentile 1.28 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2019-07-18 06:53:30
End at: 2019-07-18 06:54:00
Local clock offset: 3.321 ms
Remote clock offset: -1.005 ms


# Below is generated by plot.py at 2019-07-18 08:32:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.79 Mbit/s
95th percentile per-packet one-way delay: 2.894 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 213.79 Mbit/s
95th percentile per-packet one-way delay: 2.894 ms
Loss rate: 0.01%
```

Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 213.79 Mbit/s) ----   Flow 1 egress (mean 213.79 Mbit/s) ——

Flow 1 (95th percentile 2.89 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2019-07-18 07:26:54
End at: 2019-07-18 07:27:24
Local clock offset: 0.686 ms
Remote clock offset: 1.686 ms


# Below is generated by plot.py at 2019-07-18 08:33:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 263.45 Mbit/s
95th percentile per-packet one-way delay: 1.246 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 263.45 Mbit/s
95th percentile per-packet one-way delay: 1.246 ms
Loss rate: 0.00%
```
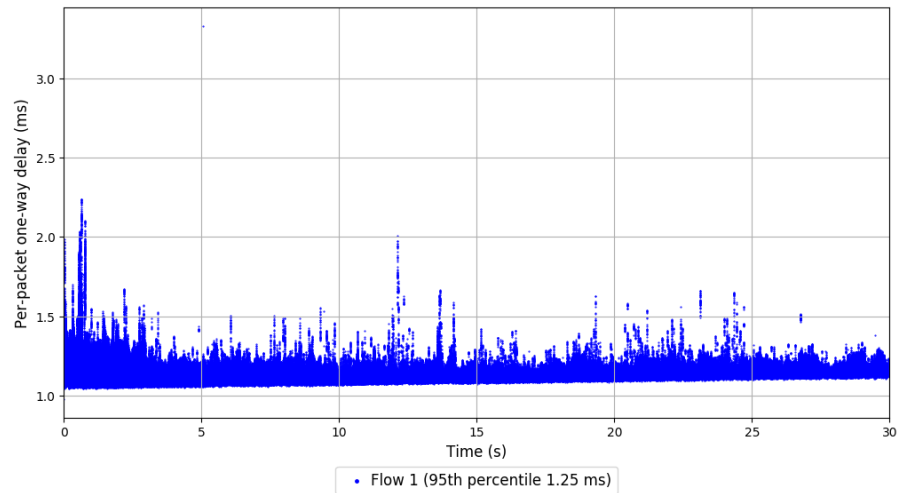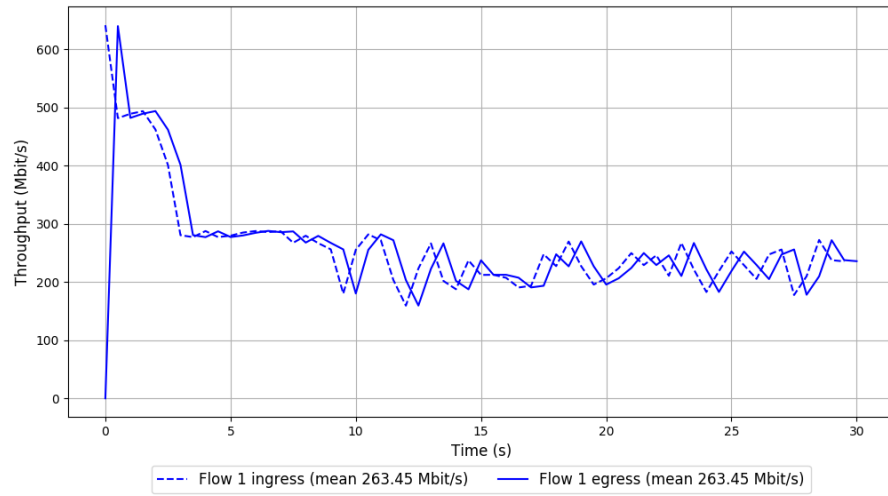
Run 5: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2019-07-18 05:06:16
End at: 2019-07-18 05:06:46
Local clock offset: -0.069 ms
Remote clock offset: 1.127 ms


# Below is generated by plot.py at 2019-07-18 08:34:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 330.65 Mbit/s
95th percentile per-packet one-way delay: 2.547 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 330.65 Mbit/s
95th percentile per-packet one-way delay: 2.547 ms
Loss rate: 0.01%
```
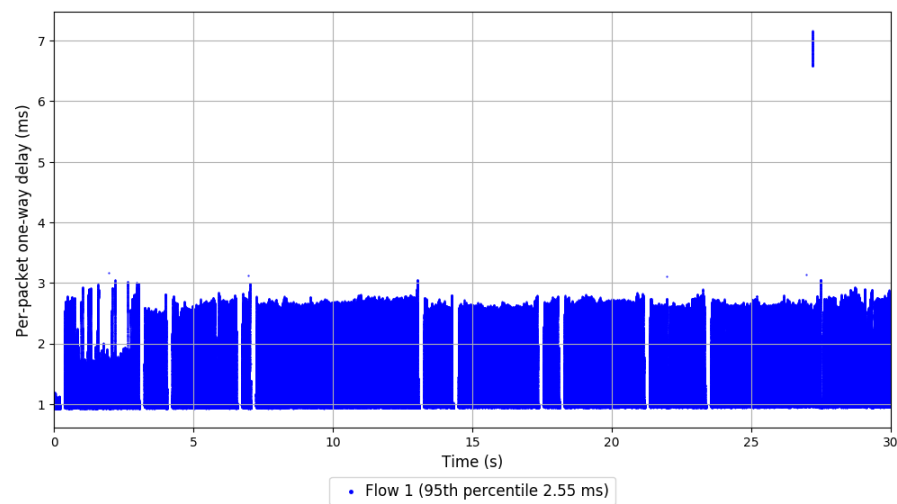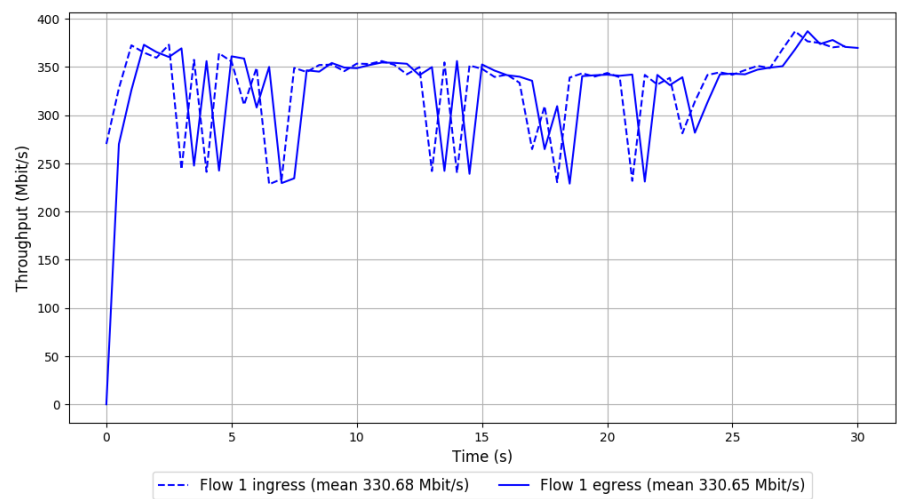
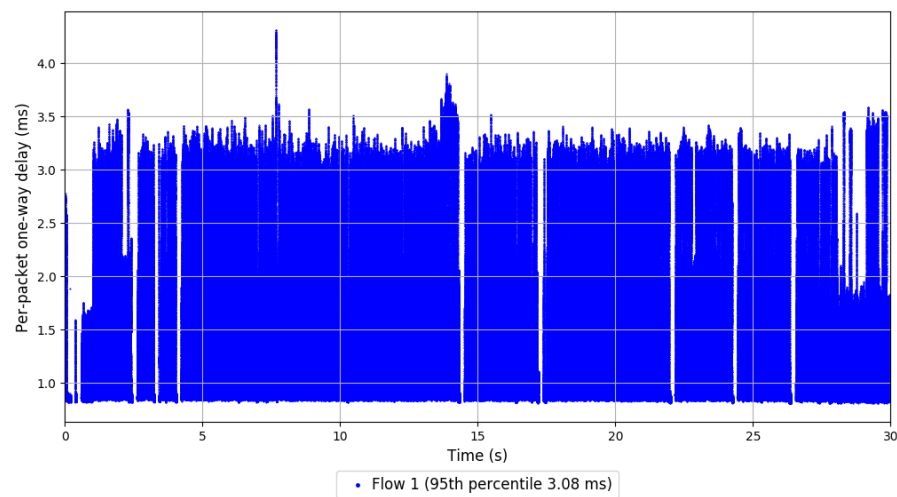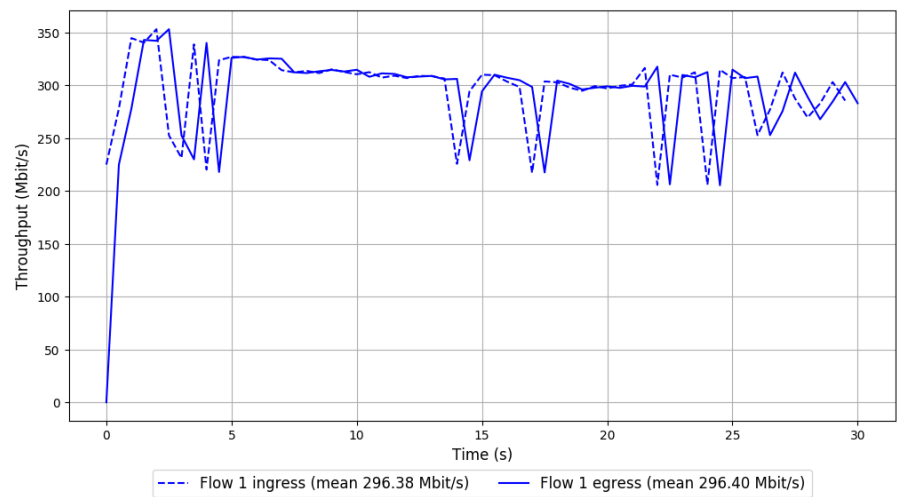# Run 1: Report of Verus — Data Link

216

```
Run 2: Statistics of Verus

Start at: 2019-07-18 05:39:30
End at: 2019-07-18 05:40:00
Local clock offset: -0.252 ms
Remote clock offset: -0.127 ms


# Below is generated by plot.py at 2019-07-18 08:34:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 296.40 Mbit/s
95th percentile per-packet one-way delay: 3.077 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 296.40 Mbit/s
95th percentile per-packet one-way delay: 3.077 ms
Loss rate: 0.01%
```

Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2019-07-18 06:12:58
End at: 2019-07-18 06:13:28
Local clock offset: 3.127 ms
Remote clock offset: 3.524 ms


# Below is generated by plot.py at 2019-07-18 08:34:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 321.66 Mbit/s
95th percentile per-packet one-way delay: 2.376 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 321.66 Mbit/s
95th percentile per-packet one-way delay: 2.376 ms
Loss rate: 0.02%
```
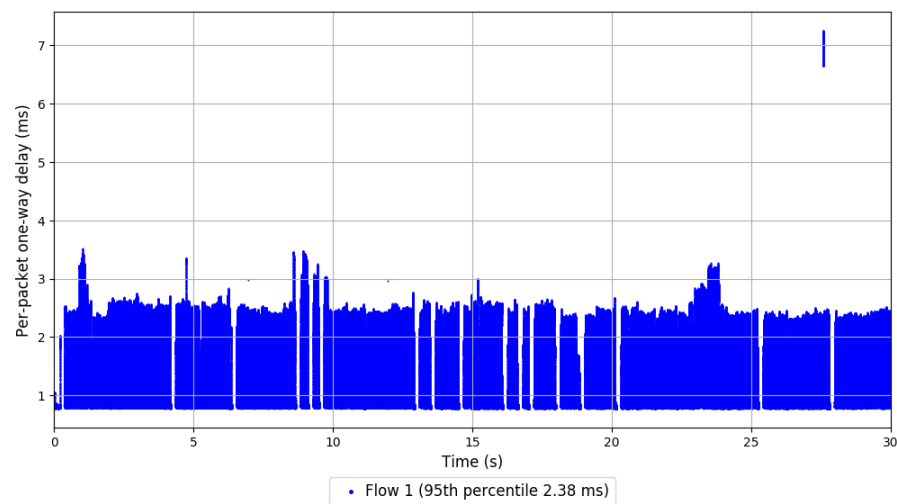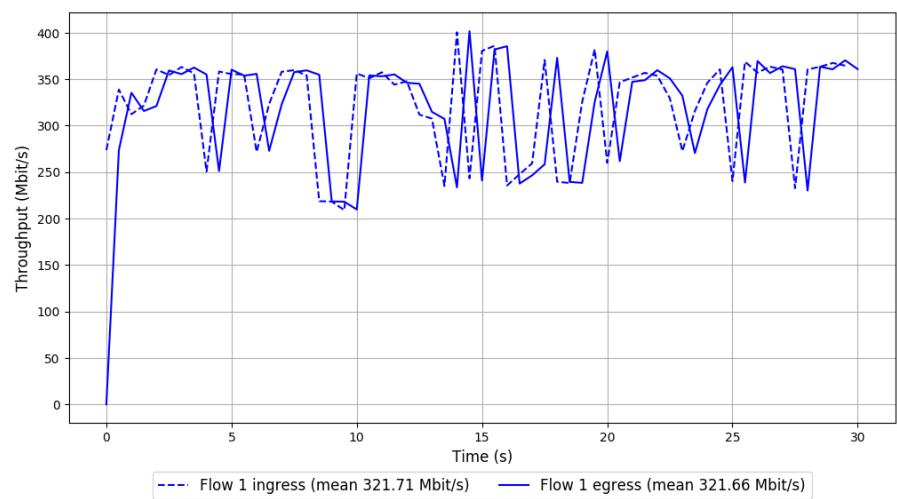
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2019-07-18 06:46:18
End at: 2019-07-18 06:46:48
Local clock offset: 3.242 ms
Remote clock offset: -0.68 ms


# Below is generated by plot.py at 2019-07-18 08:34:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 304.41 Mbit/s
95th percentile per-packet one-way delay: 2.239 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 304.41 Mbit/s
95th percentile per-packet one-way delay: 2.239 ms
Loss rate: 0.01%
```
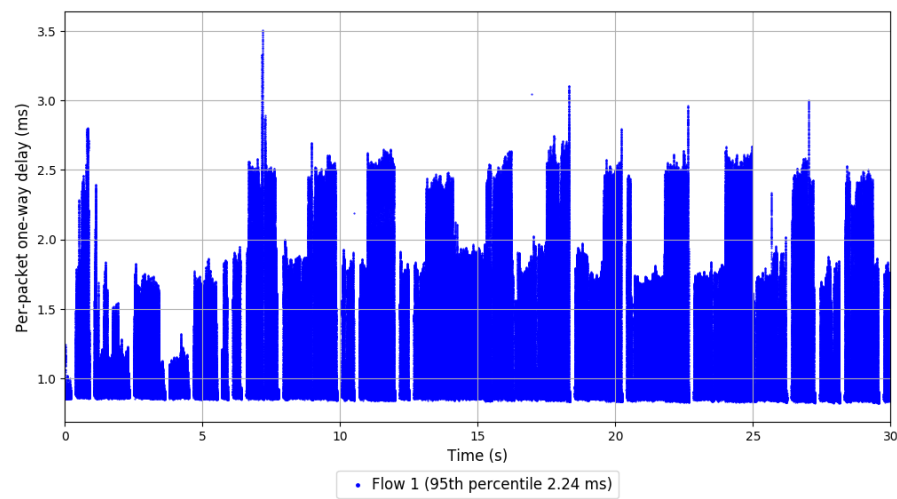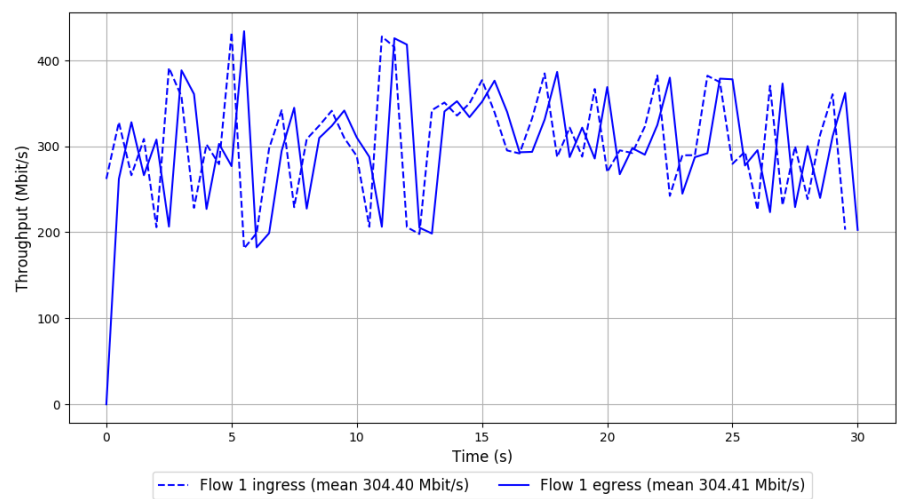
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2019-07-18 07:19:47
End at: 2019-07-18 07:20:17
Local clock offset: 1.076 ms
Remote clock offset: 1.512 ms


# Below is generated by plot.py at 2019-07-18 08:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 276.30 Mbit/s
95th percentile per-packet one-way delay: 2.426 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 276.30 Mbit/s
95th percentile per-packet one-way delay: 2.426 ms
Loss rate: 0.00%
```
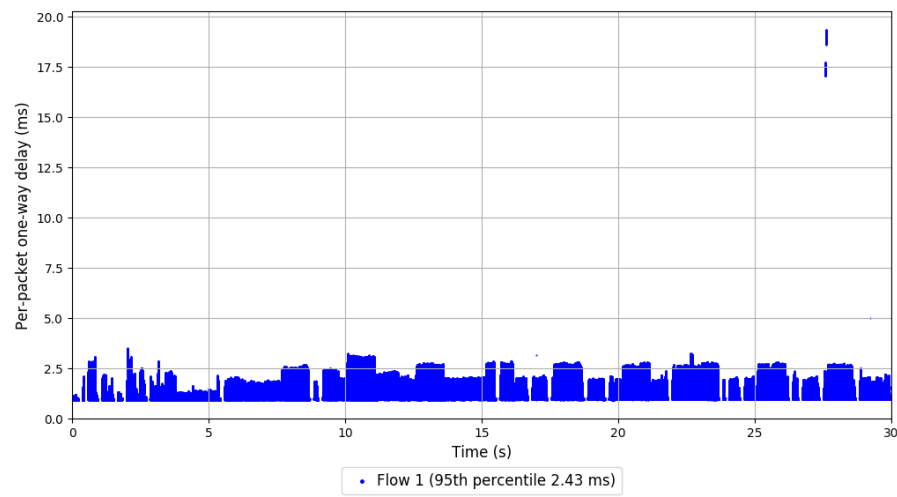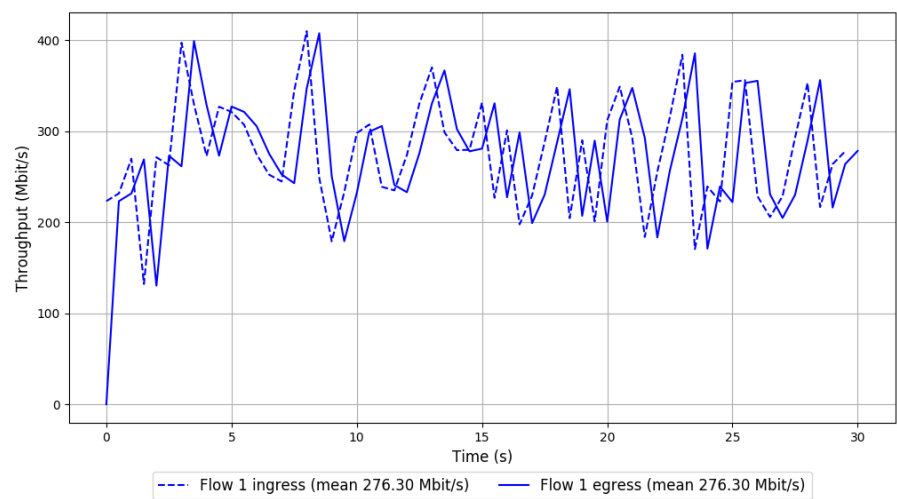
Run 5: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2019-07-18 05:12:02
End at: 2019-07-18 05:12:32
Local clock offset: -0.105 ms
Remote clock offset: 1.355 ms


# Below is generated by plot.py at 2019-07-18 08:35:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 310.40 Mbit/s
95th percentile per-packet one-way delay: 0.949 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 310.40 Mbit/s
95th percentile per-packet one-way delay: 0.949 ms
Loss rate: 0.00%
```
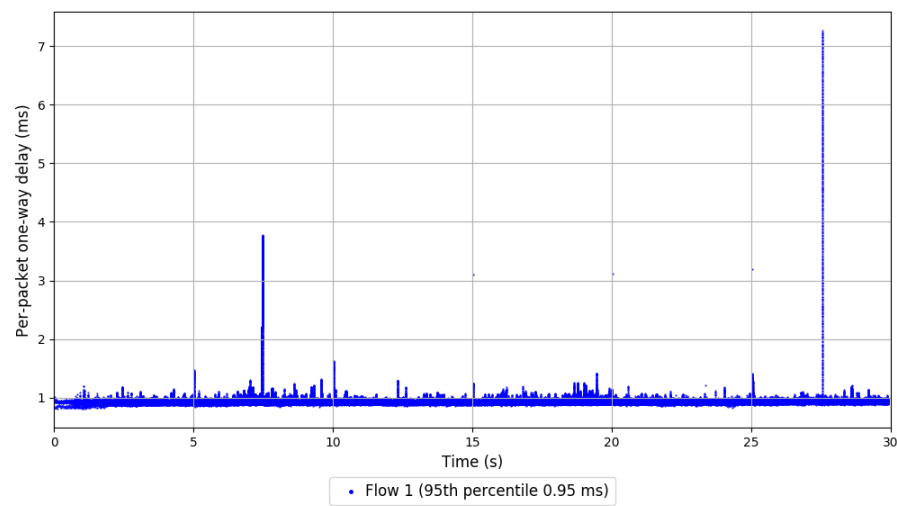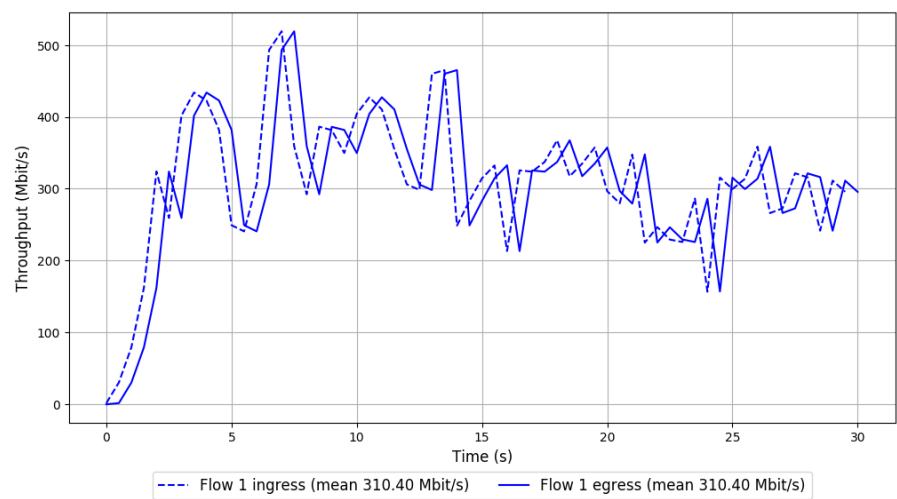
Run 1: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 310.40 Mbit/s) — — — Flow 1 egress (mean 310.40 Mbit/s)
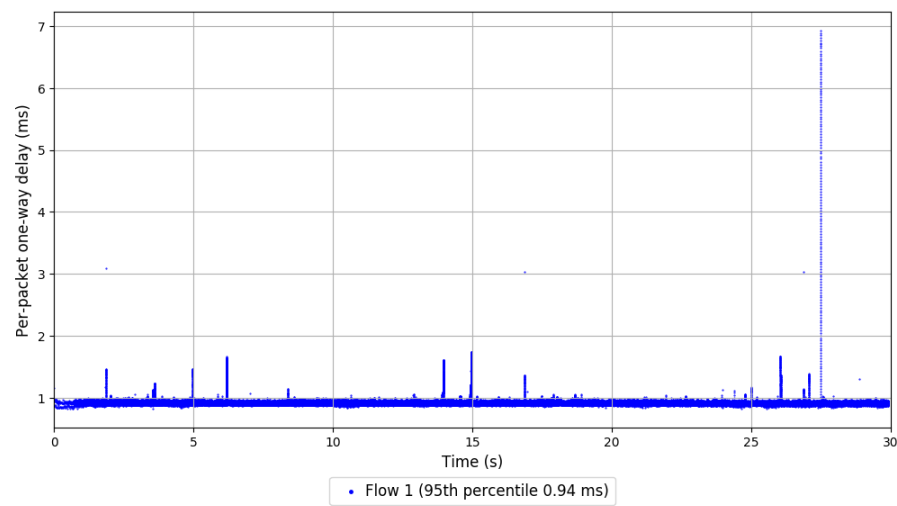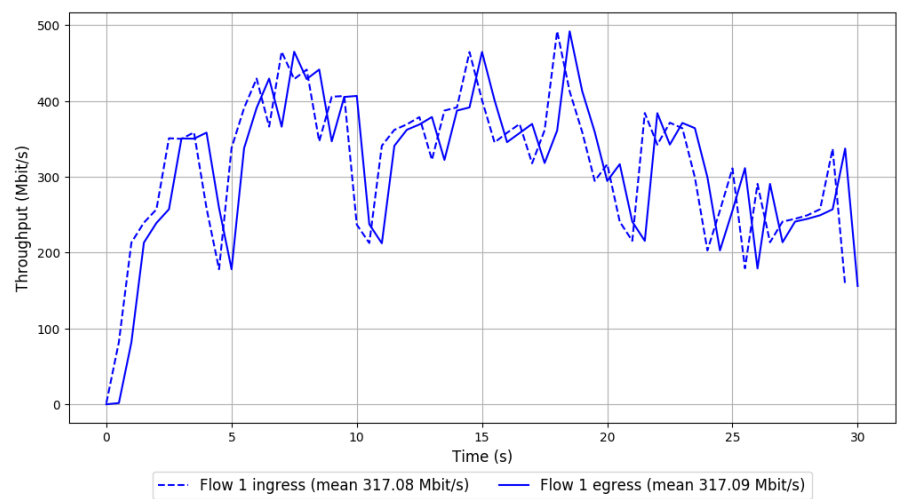

Flow 1 (95th percentile 0.95 ms)

```
Run 2: Statistics of PCC-Vivace

Start at: 2019-07-18 05:45:09
End at: 2019-07-18 05:45:39
Local clock offset: -0.228 ms
Remote clock offset: -0.269 ms


# Below is generated by plot.py at 2019-07-18 08:35:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 317.09 Mbit/s
95th percentile per-packet one-way delay: 0.936 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 317.09 Mbit/s
95th percentile per-packet one-way delay: 0.936 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2019-07-18 06:18:41
End at: 2019-07-18 06:19:11
Local clock offset: 3.547 ms
Remote clock offset: 3.779 ms


# Below is generated by plot.py at 2019-07-18 08:36:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 348.58 Mbit/s
95th percentile per-packet one-way delay: 0.913 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 348.58 Mbit/s
95th percentile per-packet one-way delay: 0.913 ms
Loss rate: 0.00%
```
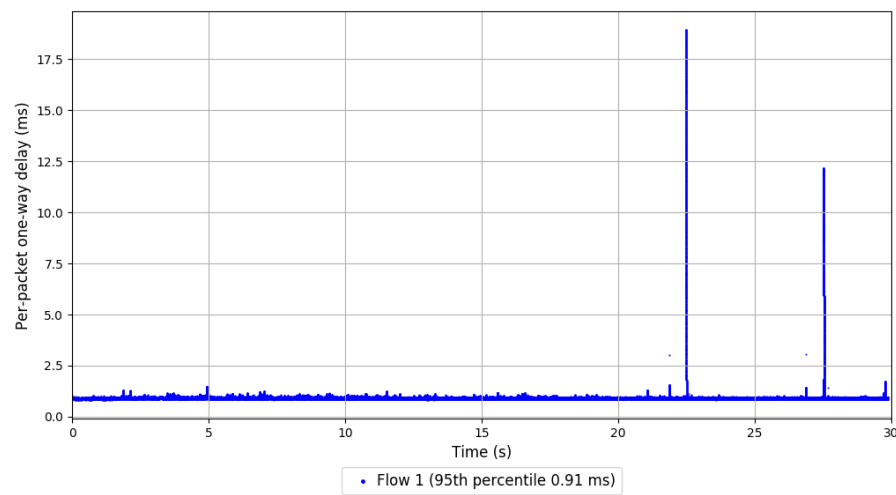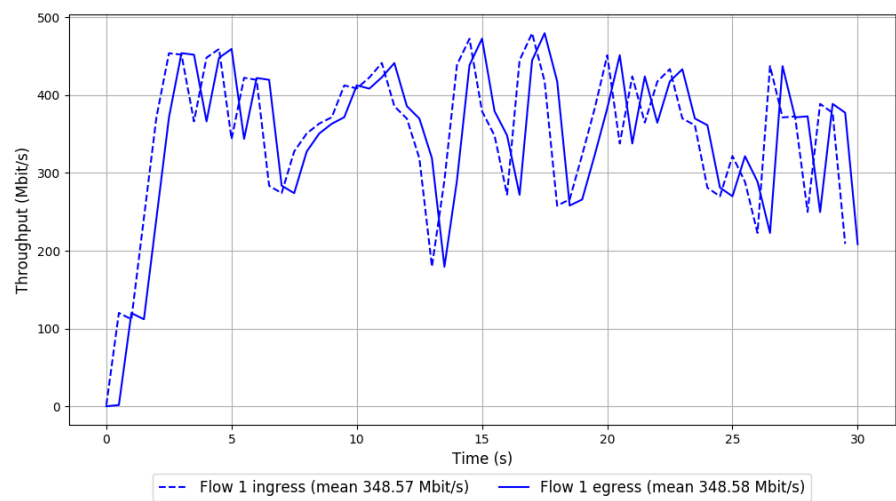
Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 348.57 Mbit/s)   Flow 1 egress (mean 348.58 Mbit/s)

Flow 1 (95th percentile 0.91 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2019-07-18 06:52:04
End at: 2019-07-18 06:52:34
Local clock offset: 3.307 ms
Remote clock offset: -0.943 ms


# Below is generated by plot.py at 2019-07-18 08:36:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 266.34 Mbit/s
95th percentile per-packet one-way delay: 0.873 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 266.34 Mbit/s
95th percentile per-packet one-way delay: 0.873 ms
Loss rate: 0.00%
```
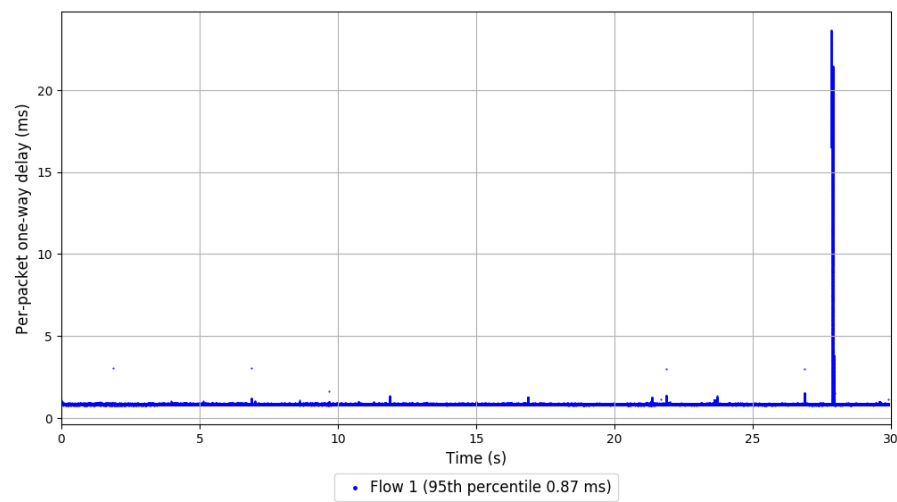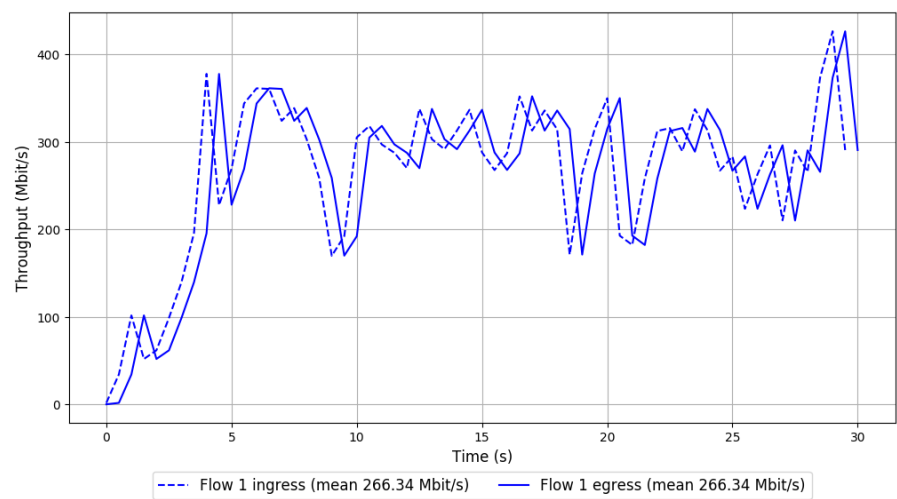
Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 266.34 Mbit/s) —— Flow 1 egress (mean 266.34 Mbit/s)

Flow 1 (95th percentile 0.87 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2019-07-18 07:25:30
End at: 2019-07-18 07:26:00
Local clock offset: 0.88 ms
Remote clock offset: 1.812 ms


# Below is generated by plot.py at 2019-07-18 08:36:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 241.56 Mbit/s
95th percentile per-packet one-way delay: 1.001 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 241.56 Mbit/s
95th percentile per-packet one-way delay: 1.001 ms
Loss rate: 0.01%
```
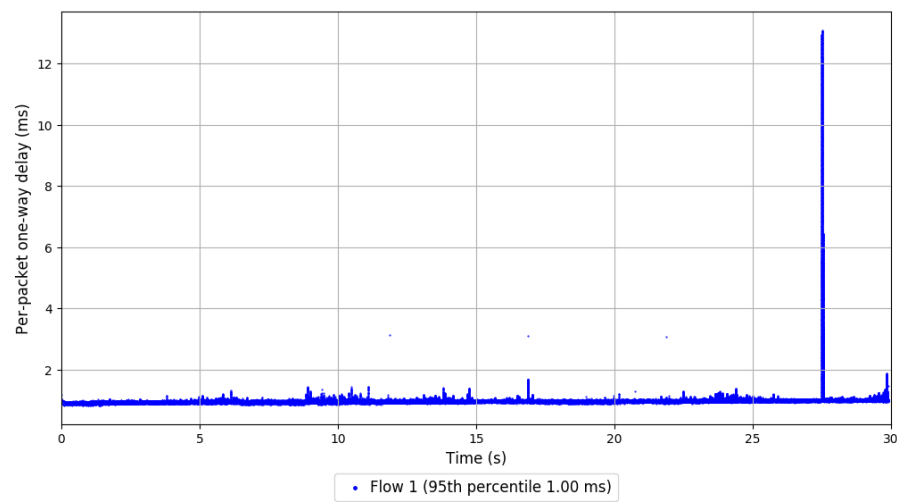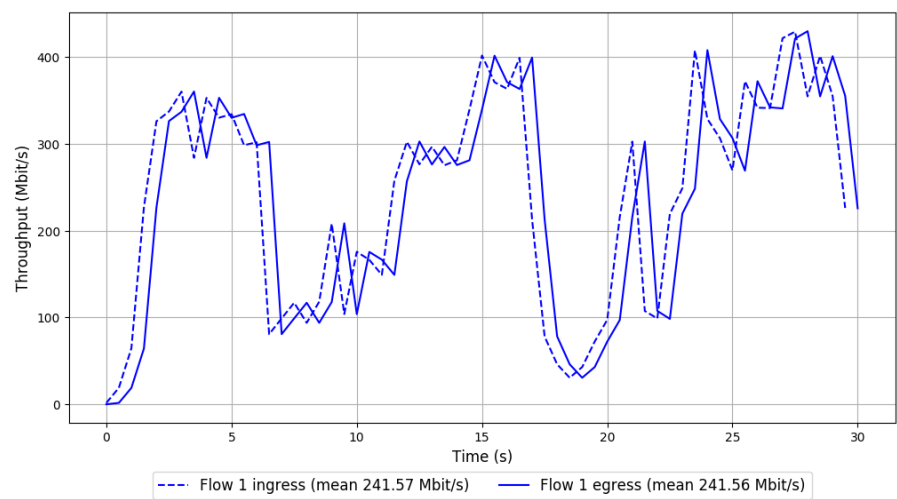
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 241.57 Mbit/s)   Flow 1 egress (mean 241.56 Mbit/s)

Flow 1 (95th percentile 1.00 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2019-07-18 04:59:15
End at: 2019-07-18 04:59:45
Local clock offset: -0.15 ms
Remote clock offset: 0.886 ms


# Below is generated by plot.py at 2019-07-18 08:36:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.001 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.001 ms
Loss rate: 0.00%
```
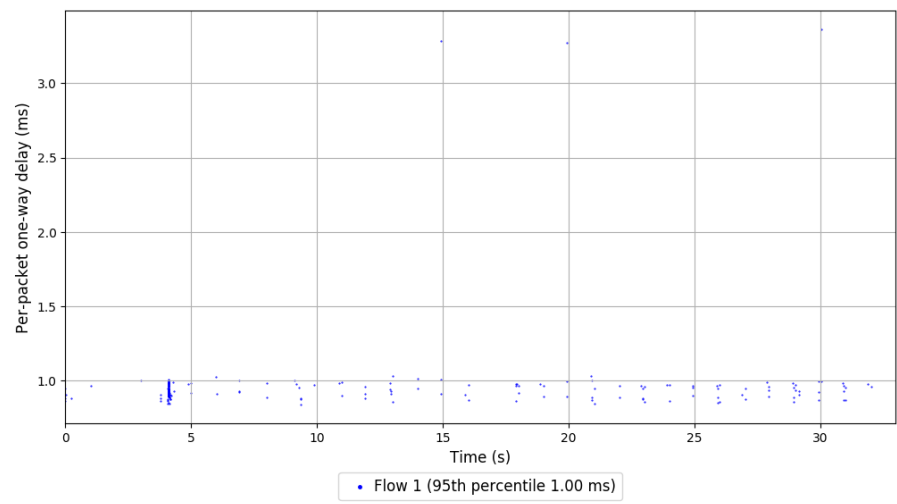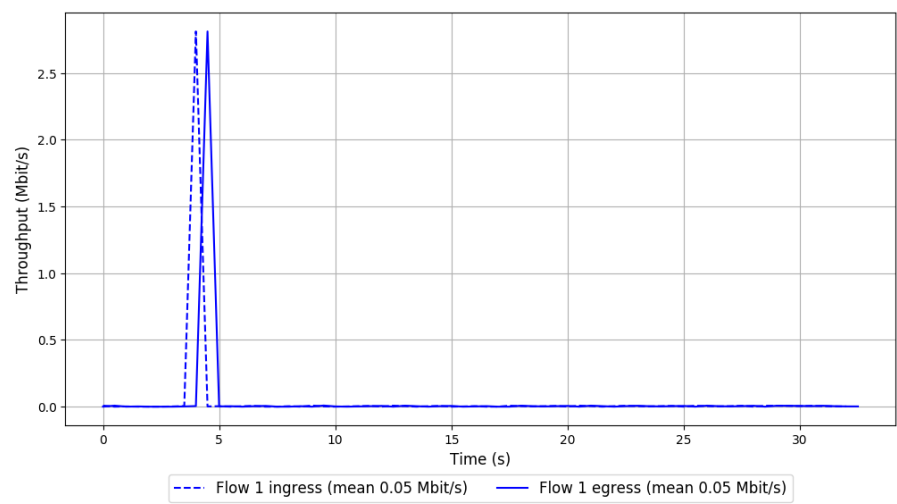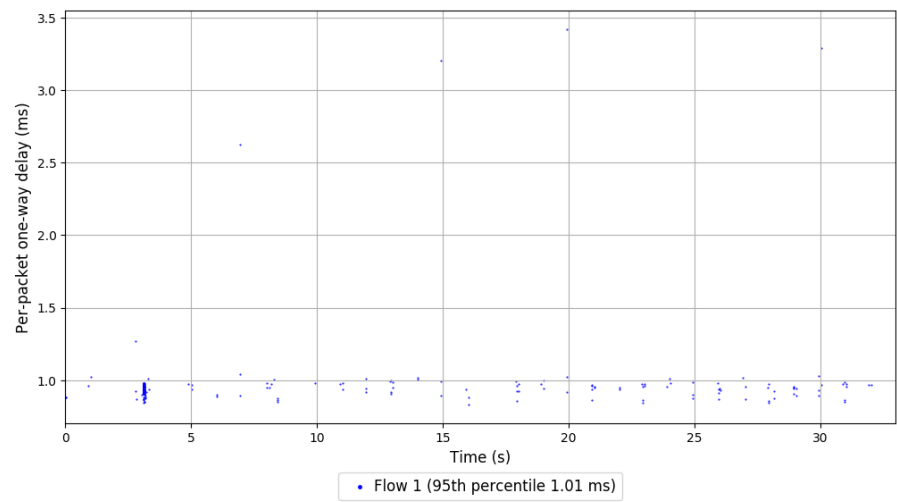
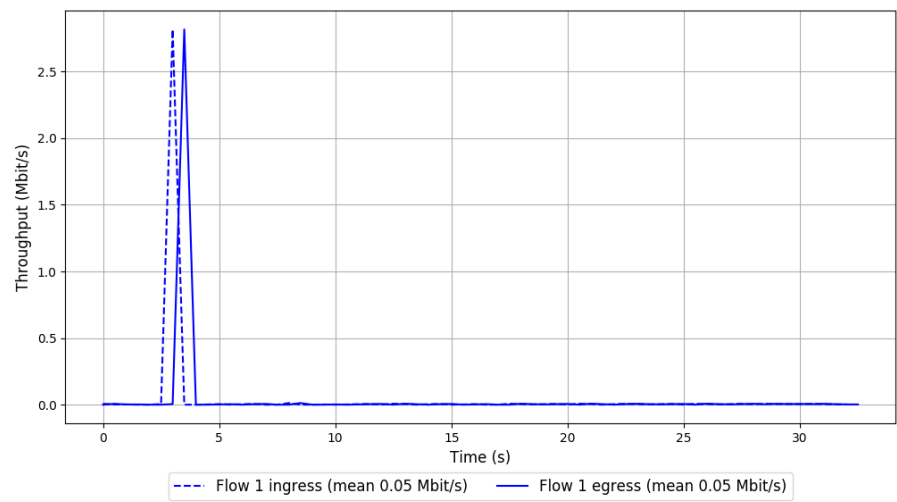Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2019-07-18 05:32:33
End at: 2019-07-18 05:33:03
Local clock offset: -0.233 ms
Remote clock offset: -0.035 ms


# Below is generated by plot.py at 2019-07-18 08:36:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.013 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.013 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2019-07-18 06:05:59
End at: 2019-07-18 06:06:29
Local clock offset: 2.408 ms
Remote clock offset: 3.06 ms


# Below is generated by plot.py at 2019-07-18 08:36:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 0.914 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 0.914 ms
Loss rate: 0.05%
```
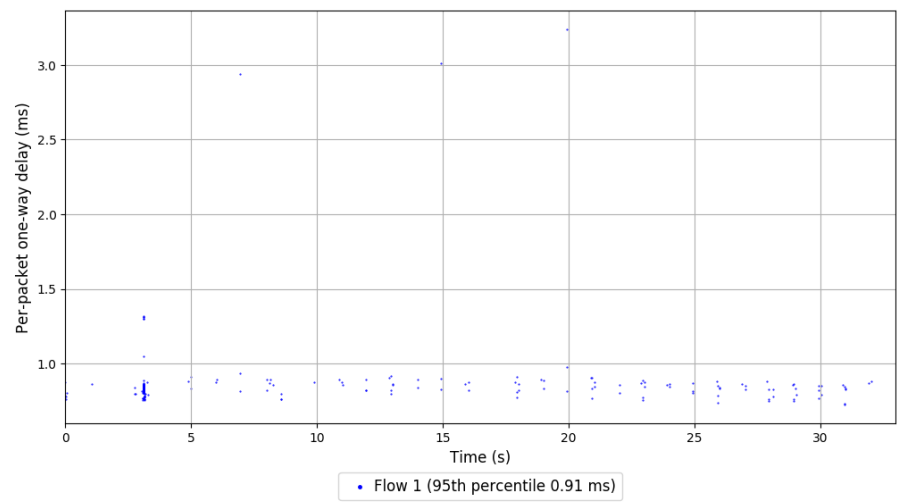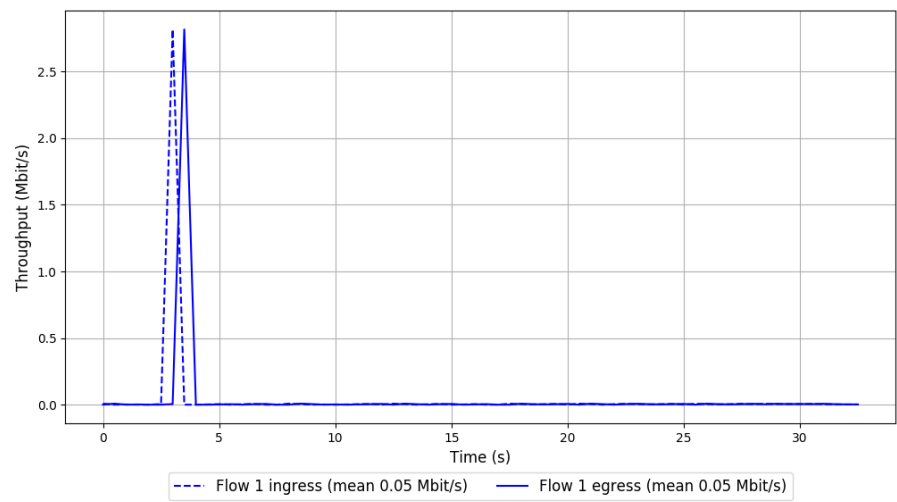
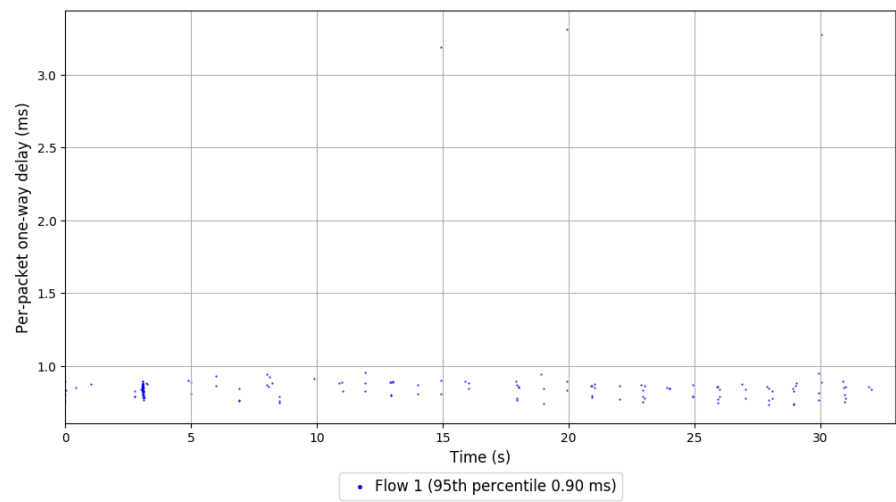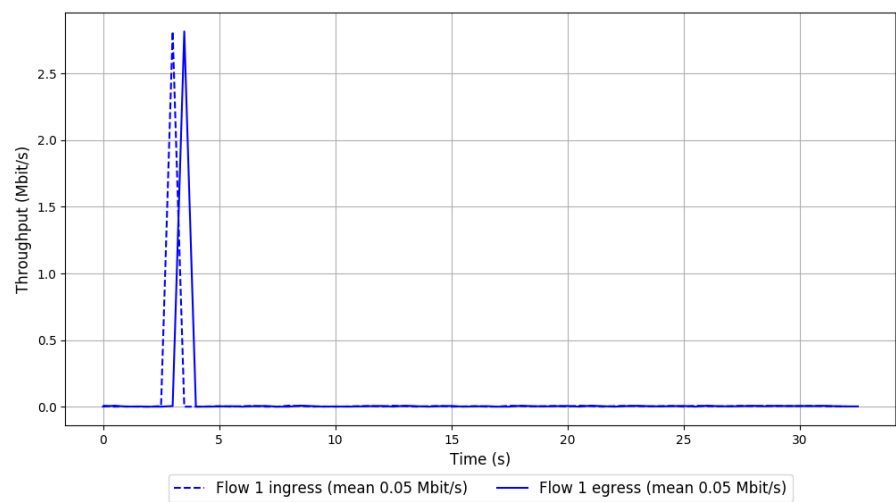Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2019-07-18 06:39:20
End at: 2019-07-18 06:39:50
Local clock offset: 3.238 ms
Remote clock offset: -0.128 ms


# Below is generated by plot.py at 2019-07-18 08:36:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 0.899 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 0.899 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2019-07-18 07:12:52
End at: 2019-07-18 07:13:22
Local clock offset: 1.27 ms
Remote clock offset: 1.213 ms


# Below is generated by plot.py at 2019-07-18 08:36:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.070 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.070 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link