Pantheon Report

Generated at 2018-05-23 10:10:02 (UTC).

Data path: GCE Tokyo Ethernet (*remote*) →GCE Iowa Ethernet (*local*).

Repeated the test of 16 congestion control schemes 10 times.

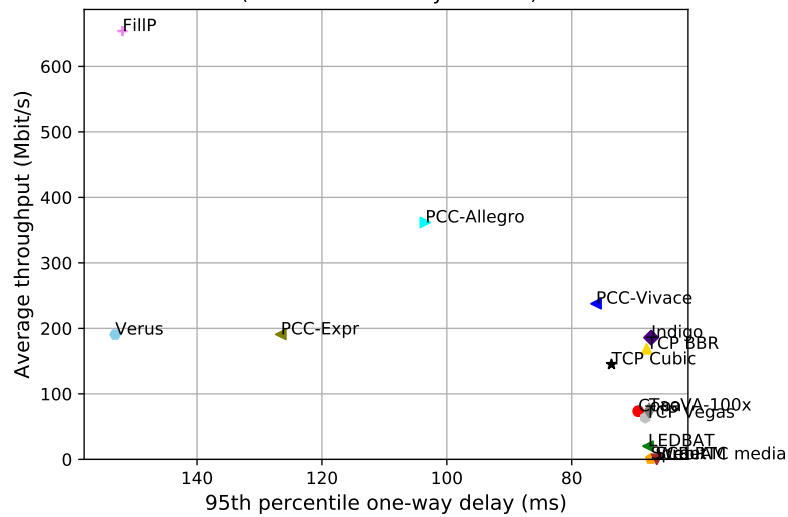Each test lasted for 30 seconds running 1 flow.

Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

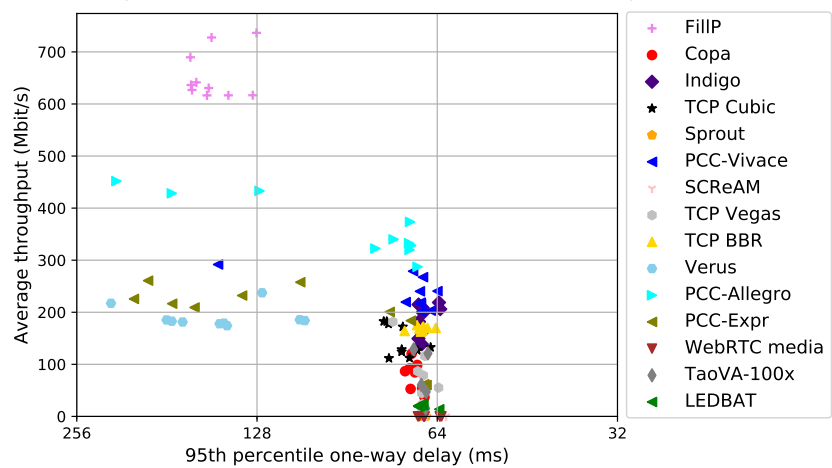NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ 2d1d4407e851ba626e5ca4626a306105793df686
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
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
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from GCE Tokyo Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)

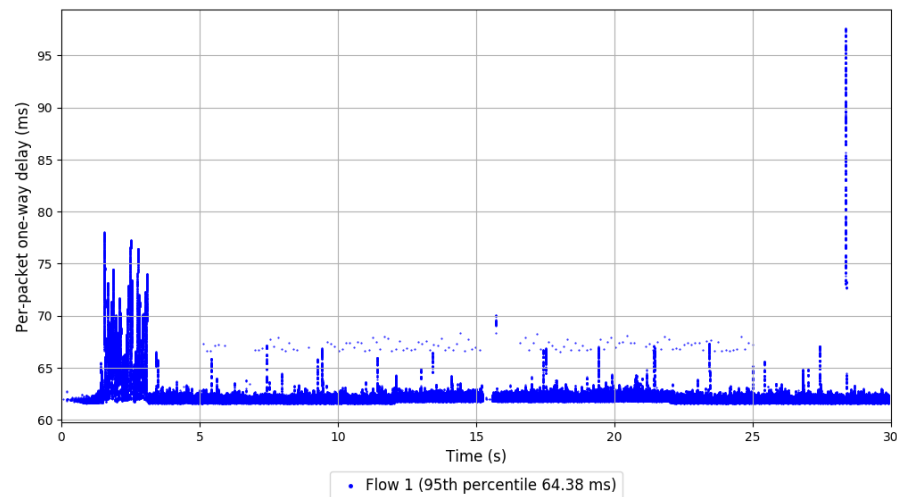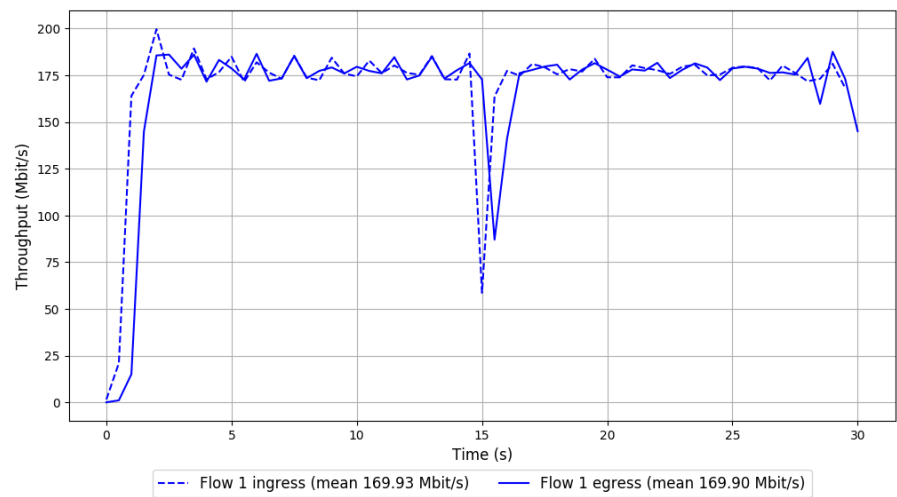## test from GCE Tokyo Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme

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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	10	168.73	68.01	0.40
Copa	10	73.53	69.35	0.24
TCP Cubic	10	145.09	73.64	0.53
FillP	10	653.93	151.94	3.75
Indigo	10	185.92	67.30	0.45
LEDBAT	10	20.14	67.79	0.81
PCC-Allegro	10	361.74	103.44	0.77
PCC-Expr	10	190.84	126.59	1.03
QUIC Cubic	0	N/A	N/A	N/A
SCReAM	10	0.22	66.59	0.39
Sprout	10	0.71	67.38	0.39
TaoVA-100x	5	74.57	67.62	0.19
TCP Vegas	10	63.59	68.22	0.41
Verus	10	190.51	153.12	0.51
PCC-Vivace	10	237.72	76.11	0.65
WebRTC media	10	0.05	66.38	0.01

```
Run 1: Statistics of TCP BBR

Start at: 2018-05-23 05:46:41
End at: 2018-05-23 05:47:11
Local clock offset: -0.44 ms
Remote clock offset: -0.131 ms


# Below is generated by plot.py at 2018-05-23 08:57:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.90 Mbit/s
95th percentile per-packet one-way delay: 64.379 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 169.90 Mbit/s
95th percentile per-packet one-way delay: 64.379 ms
Loss rate: 0.45%
```
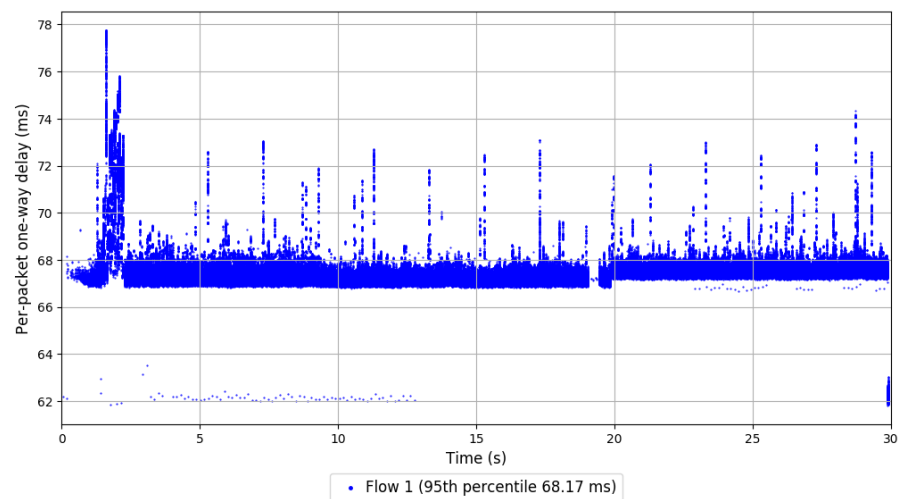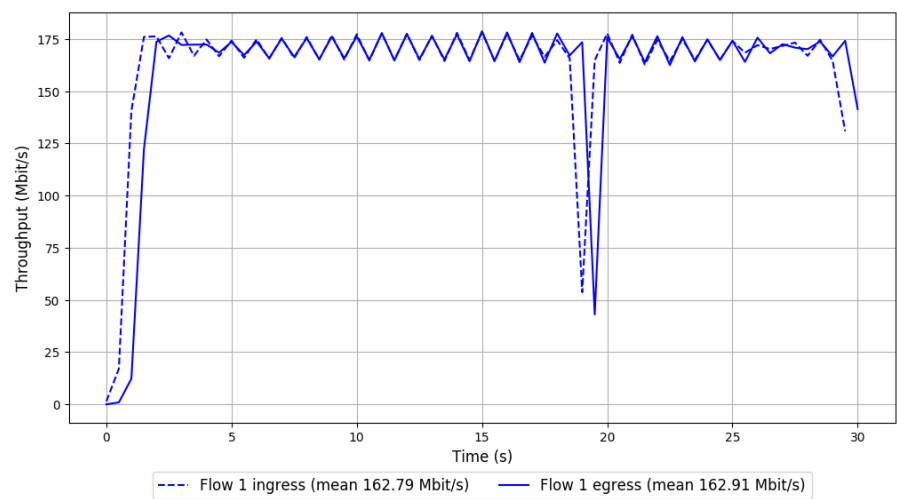
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 169.93 Mbit/s)   Flow 1 egress (mean 169.90 Mbit/s)
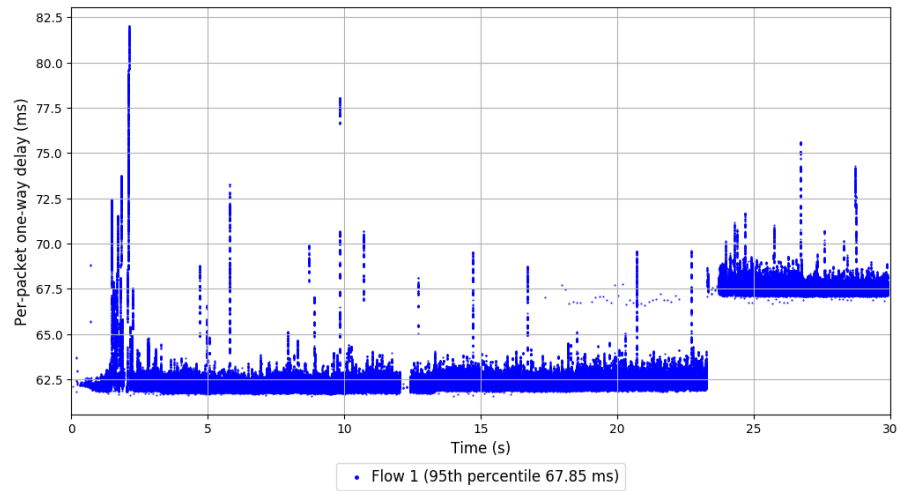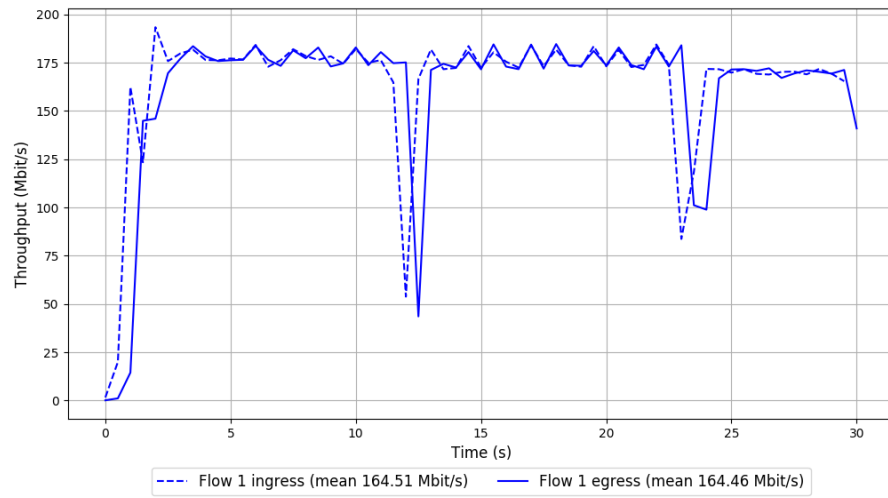

Flow 1 (95th percentile 64.38 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2018-05-23 06:06:33
End at: 2018-05-23 06:07:03
Local clock offset: -0.544 ms
Remote clock offset: -0.316 ms


# Below is generated by plot.py at 2018-05-23 08:57:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 162.91 Mbit/s
95th percentile per-packet one-way delay: 68.175 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 162.91 Mbit/s
95th percentile per-packet one-way delay: 68.175 ms
Loss rate: 0.08%
```
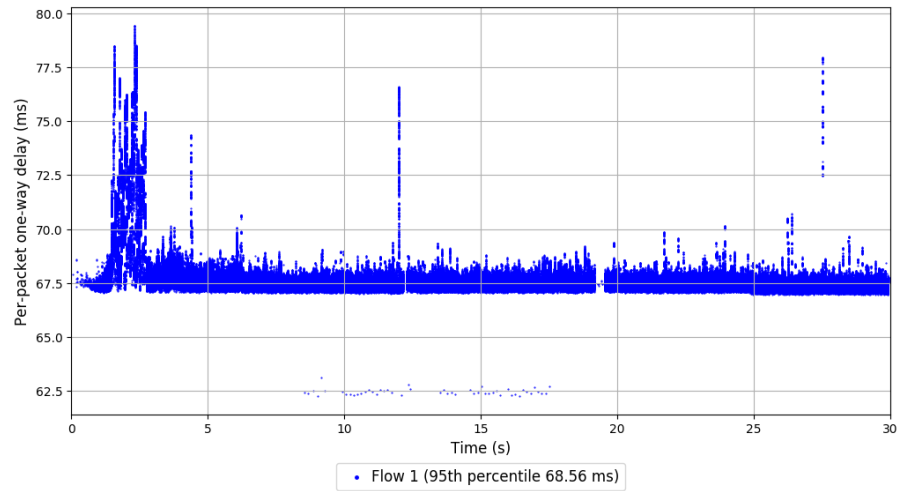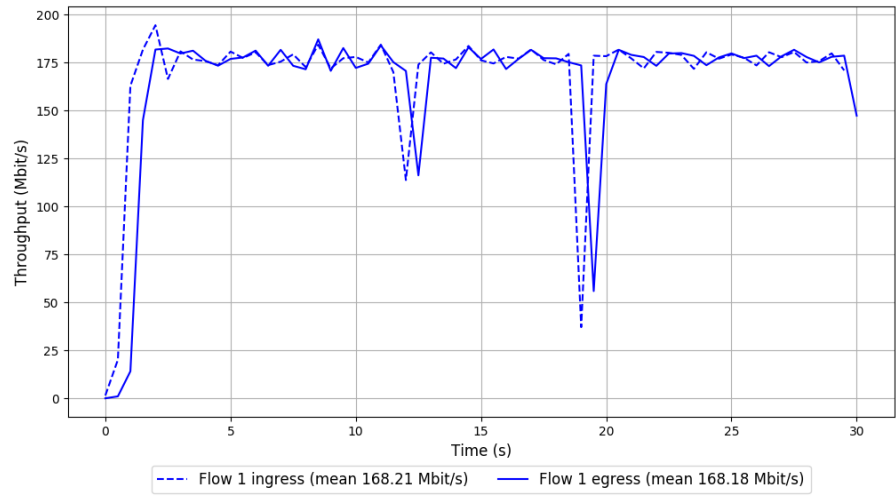
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 162.79 Mbit/s) —— Flow 1 egress (mean 162.91 Mbit/s)

• Flow 1 (95th percentile 68.17 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2018-05-23 06:26:19
End at: 2018-05-23 06:26:49
Local clock offset: -0.756 ms
Remote clock offset: -0.358 ms


# Below is generated by plot.py at 2018-05-23 08:57:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 164.46 Mbit/s
95th percentile per-packet one-way delay: 67.852 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 164.46 Mbit/s
95th percentile per-packet one-way delay: 67.852 ms
Loss rate: 0.47%
```

Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2018-05-23 06:45:58
End at: 2018-05-23 06:46:28
Local clock offset: -0.868 ms
Remote clock offset: -0.449 ms


# Below is generated by plot.py at 2018-05-23 08:57:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 168.18 Mbit/s
95th percentile per-packet one-way delay: 68.556 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 168.18 Mbit/s
95th percentile per-packet one-way delay: 68.556 ms
Loss rate: 0.47%
```
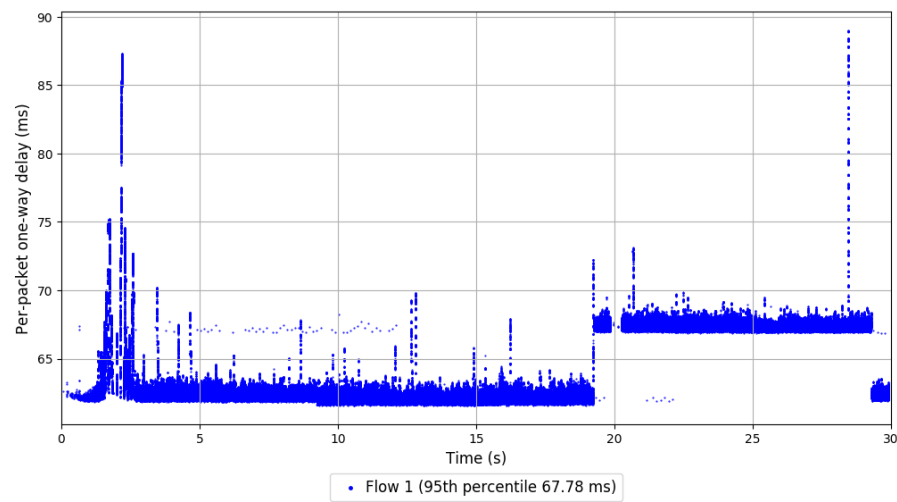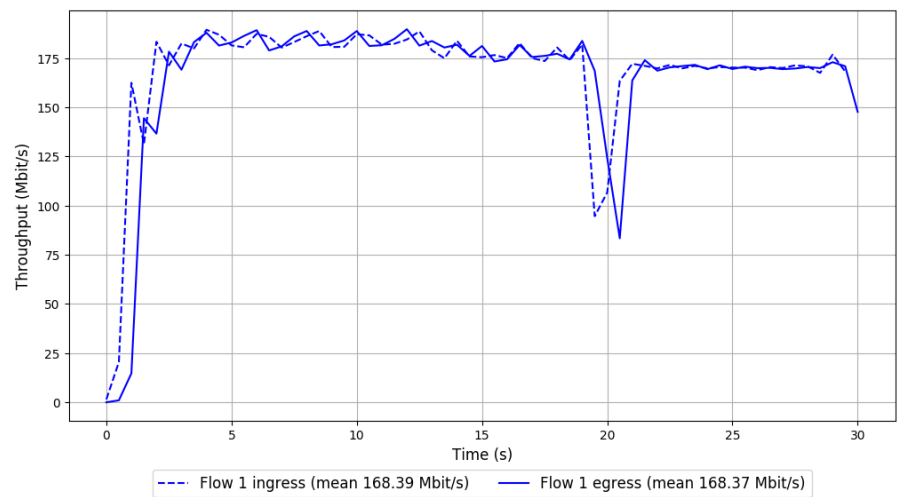
Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2018-05-23 07:05:43
End at: 2018-05-23 07:06:14
Local clock offset: -1.015 ms
Remote clock offset: -0.185 ms


# Below is generated by plot.py at 2018-05-23 08:57:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 168.37 Mbit/s
95th percentile per-packet one-way delay: 67.783 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 168.37 Mbit/s
95th percentile per-packet one-way delay: 67.783 ms
Loss rate: 0.46%
```
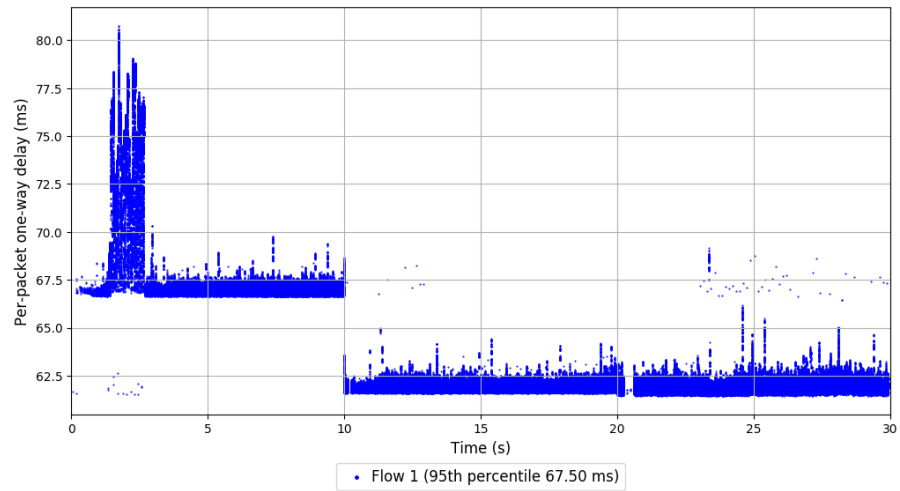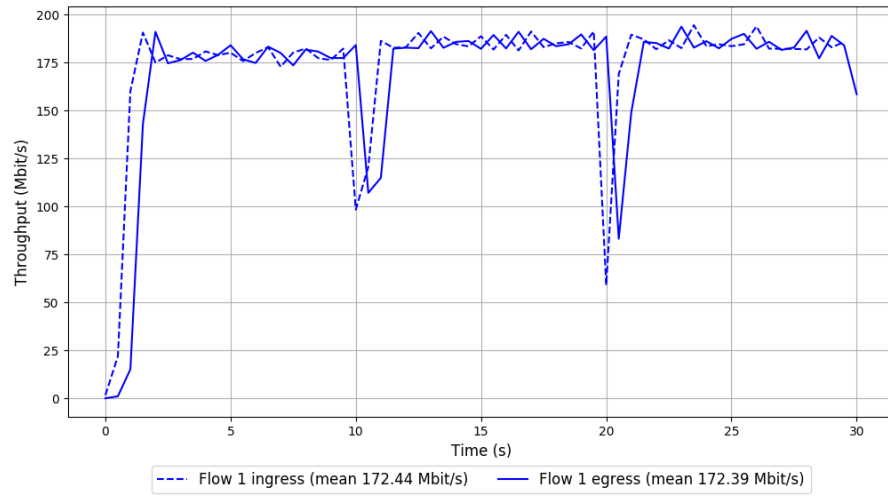
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 168.39 Mbit/s)   Flow 1 egress (mean 168.37 Mbit/s)

Flow 1 (95th percentile 67.78 ms)

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```
Run 6: Statistics of TCP BBR

Start at: 2018-05-23 07:25:33
End at: 2018-05-23 07:26:03
Local clock offset: 0.039 ms
Remote clock offset: -0.078 ms


# Below is generated by plot.py at 2018-05-23 08:57:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 172.39 Mbit/s
95th percentile per-packet one-way delay: 67.500 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 172.39 Mbit/s
95th percentile per-packet one-way delay: 67.500 ms
Loss rate: 0.47%
```

Run 6: Report of TCP BBR — Data Link

```
Run 7: Statistics of TCP BBR

Start at: 2018-05-23 07:45:33
End at: 2018-05-23 07:46:03
Local clock offset: 0.386 ms
Remote clock offset: -0.174 ms


# Below is generated by plot.py at 2018-05-23 08:57:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 175.25 Mbit/s
95th percentile per-packet one-way delay: 69.169 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 175.25 Mbit/s
95th percentile per-packet one-way delay: 69.169 ms
Loss rate: 0.45%
```
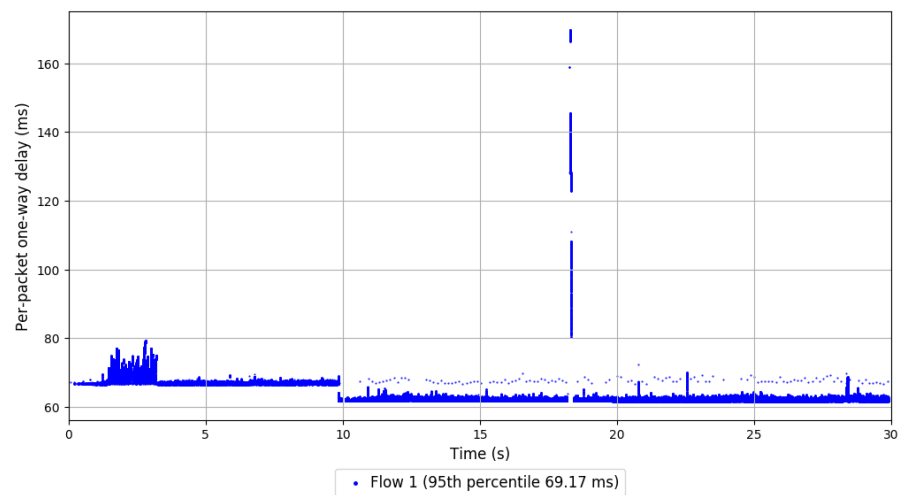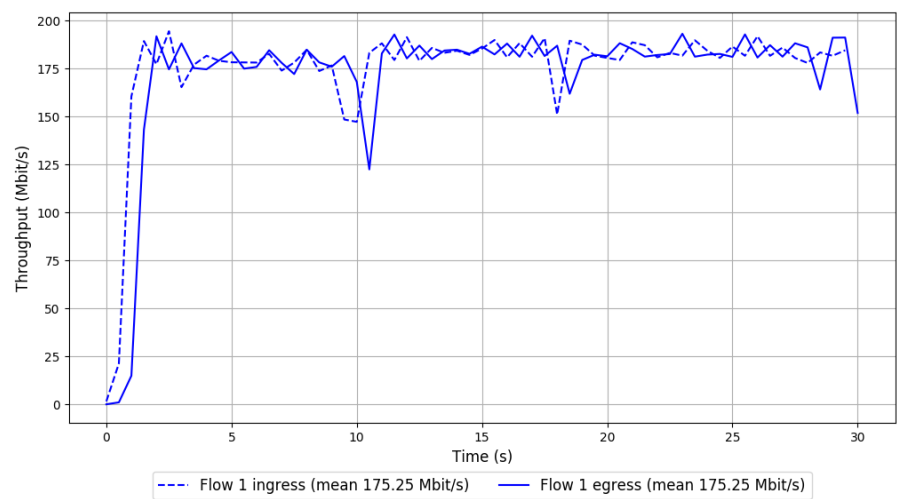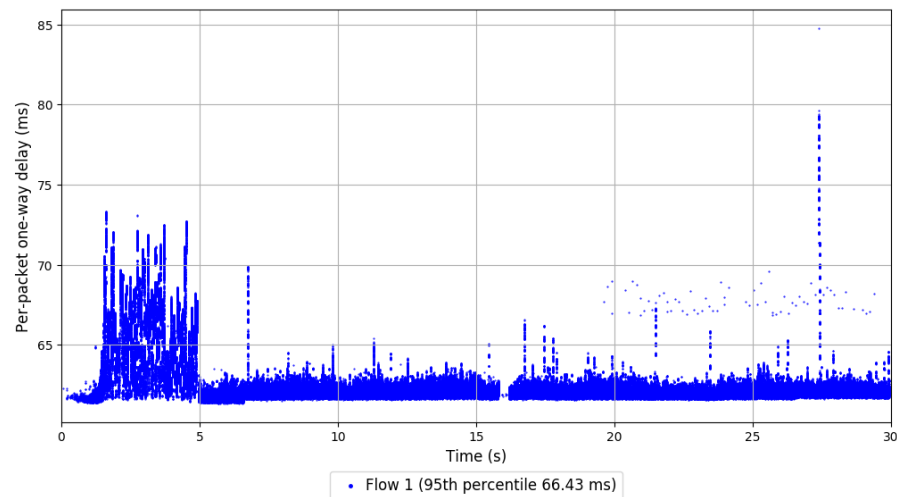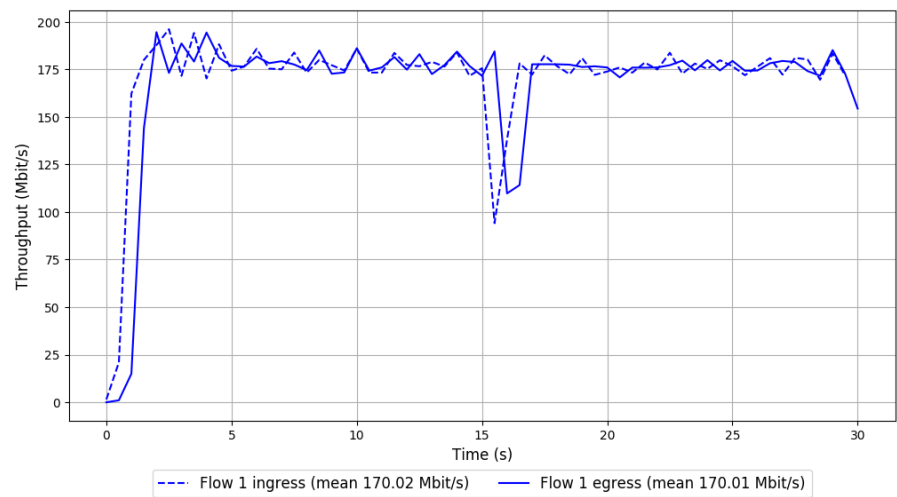
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 175.25 Mbit/s) — — —   Flow 1 egress (mean 175.25 Mbit/s) ——

• Flow 1 (95th percentile 69.17 ms)

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```
Run 8: Statistics of TCP BBR

Start at: 2018-05-23 08:05:26
End at: 2018-05-23 08:05:56
Local clock offset: 0.569 ms
Remote clock offset: -0.002 ms


# Below is generated by plot.py at 2018-05-23 08:57:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 170.01 Mbit/s
95th percentile per-packet one-way delay: 66.427 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 170.01 Mbit/s
95th percentile per-packet one-way delay: 66.427 ms
Loss rate: 0.42%
```

Run 8: Report of TCP BBR — Data Link

```
Run 9: Statistics of TCP BBR

Start at: 2018-05-23 08:25:29
End at: 2018-05-23 08:25:59
Local clock offset: 0.778 ms
Remote clock offset: 0.133 ms


# Below is generated by plot.py at 2018-05-23 09:00:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 164.15 Mbit/s
95th percentile per-packet one-way delay: 72.566 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 164.15 Mbit/s
95th percentile per-packet one-way delay: 72.566 ms
Loss rate: 0.27%
```
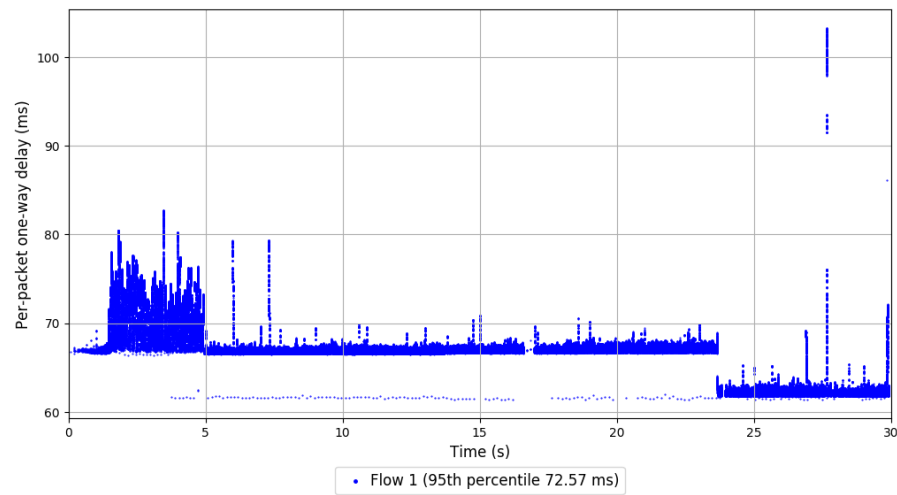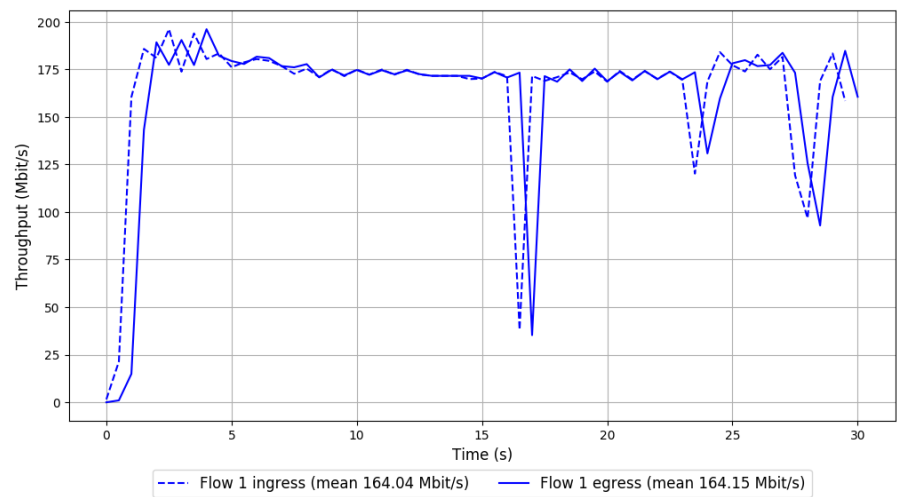
Run 9: Report of TCP BBR — Data Link

```
Run 10: Statistics of TCP BBR

Start at: 2018-05-23 08:45:24
End at: 2018-05-23 08:45:54
Local clock offset: 0.996 ms
Remote clock offset: -0.105 ms


# Below is generated by plot.py at 2018-05-23 09:00:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 171.64 Mbit/s
95th percentile per-packet one-way delay: 67.700 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 171.64 Mbit/s
95th percentile per-packet one-way delay: 67.700 ms
Loss rate: 0.44%
```
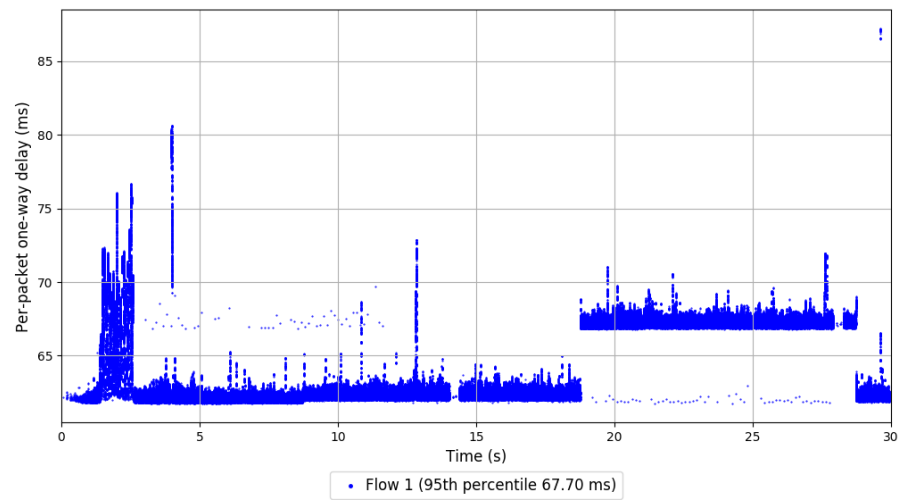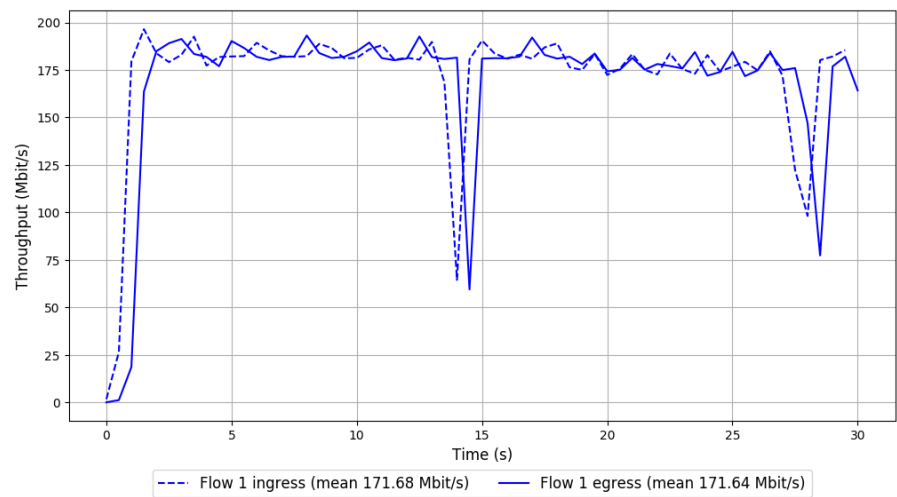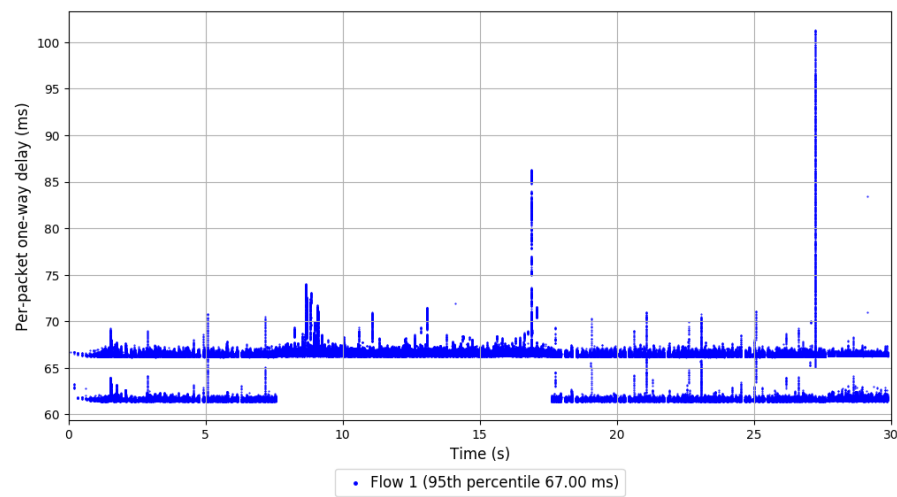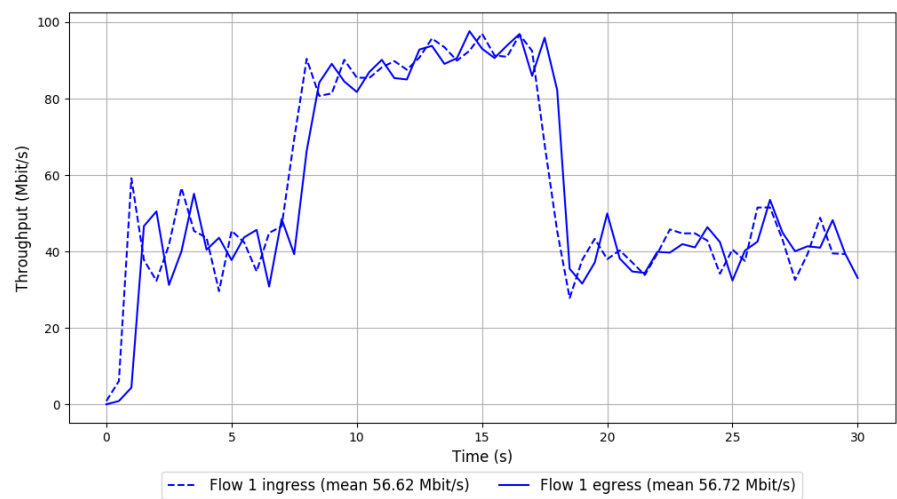
Run 10: Report of TCP BBR — Data Link

Flow 1 ingress (mean 171.68 Mbit/s)   Flow 1 egress (mean 171.64 Mbit/s)

Flow 1 (95th percentile 67.70 ms)

```
Run 1: Statistics of Copa

Start at: 2018-05-23 05:33:15
End at: 2018-05-23 05:33:45
Local clock offset: -0.327 ms
Remote clock offset: 0.098 ms


# Below is generated by plot.py at 2018-05-23 09:00:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.72 Mbit/s
95th percentile per-packet one-way delay: 67.005 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 56.72 Mbit/s
95th percentile per-packet one-way delay: 67.005 ms
Loss rate: 0.27%
```

Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-05-23 05:53:04
End at: 2018-05-23 05:53:34
Local clock offset: -0.446 ms
Remote clock offset: 0.041 ms


# Below is generated by plot.py at 2018-05-23 09:00:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.35 Mbit/s
95th percentile per-packet one-way delay: 67.829 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 54.35 Mbit/s
95th percentile per-packet one-way delay: 67.829 ms
Loss rate: 0.17%
```
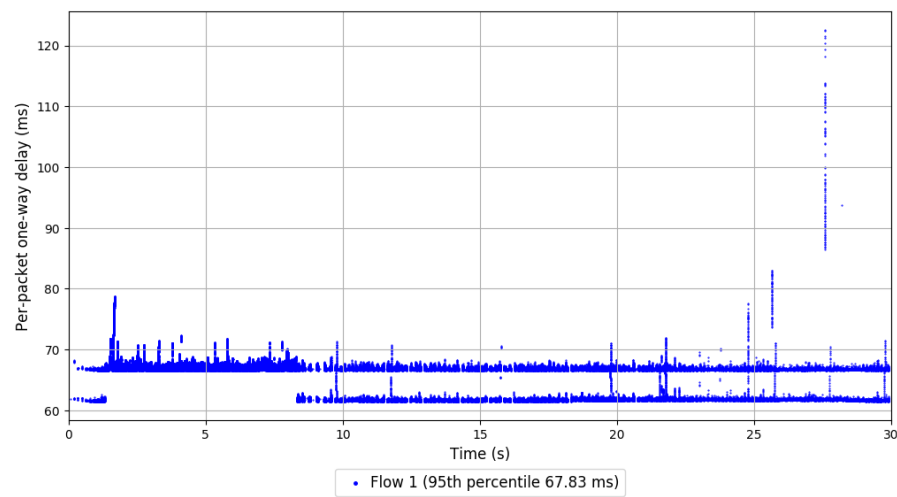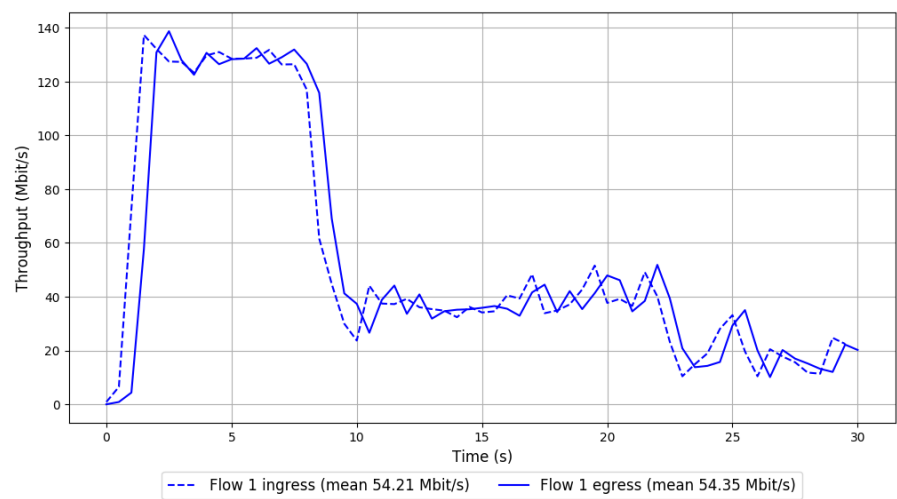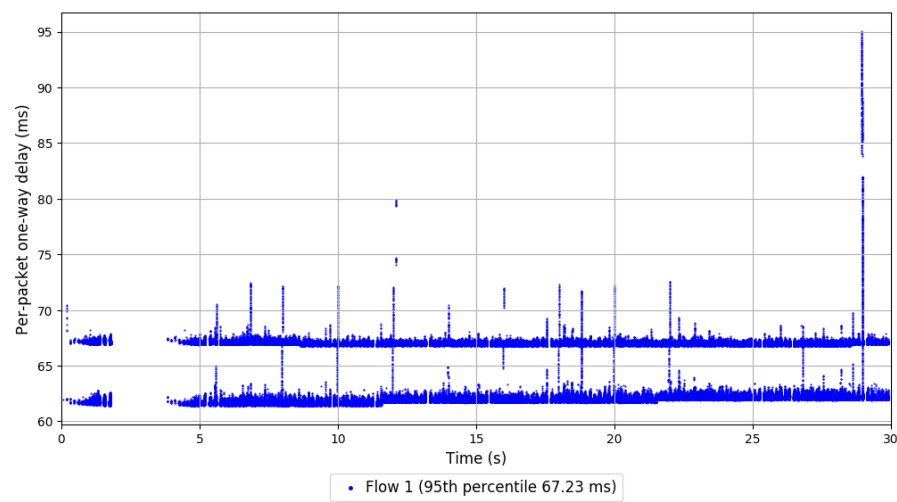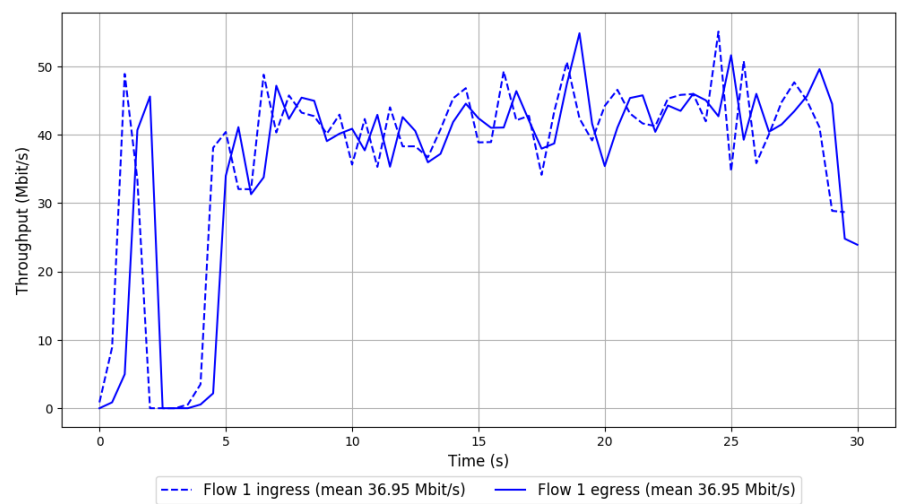
Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 54.21 Mbit/s) —— Flow 1 egress (mean 54.35 Mbit/s)

• Flow 1 (95th percentile 67.83 ms)

```
Run 3: Statistics of Copa

Start at: 2018-05-23 06:12:54
End at: 2018-05-23 06:13:24
Local clock offset: -0.611 ms
Remote clock offset: -0.292 ms


# Below is generated by plot.py at 2018-05-23 09:00:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.95 Mbit/s
95th percentile per-packet one-way delay: 67.226 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 36.95 Mbit/s
95th percentile per-packet one-way delay: 67.226 ms
Loss rate: 0.40%
```
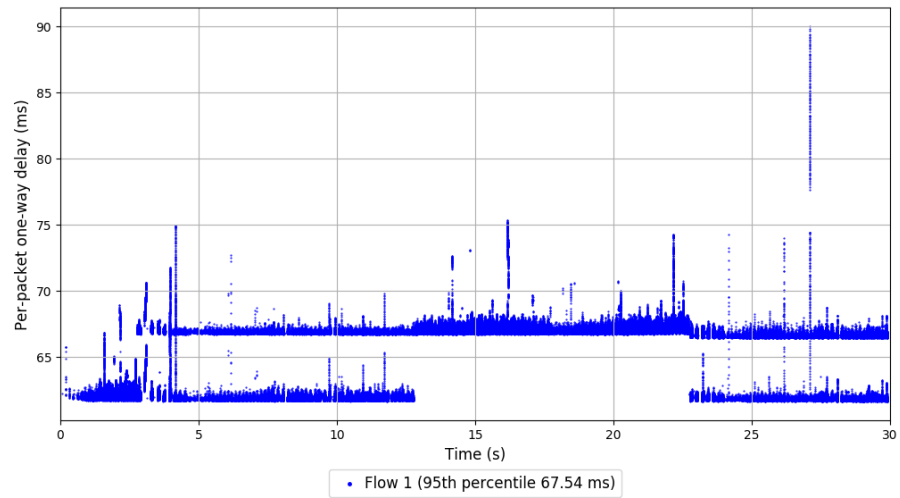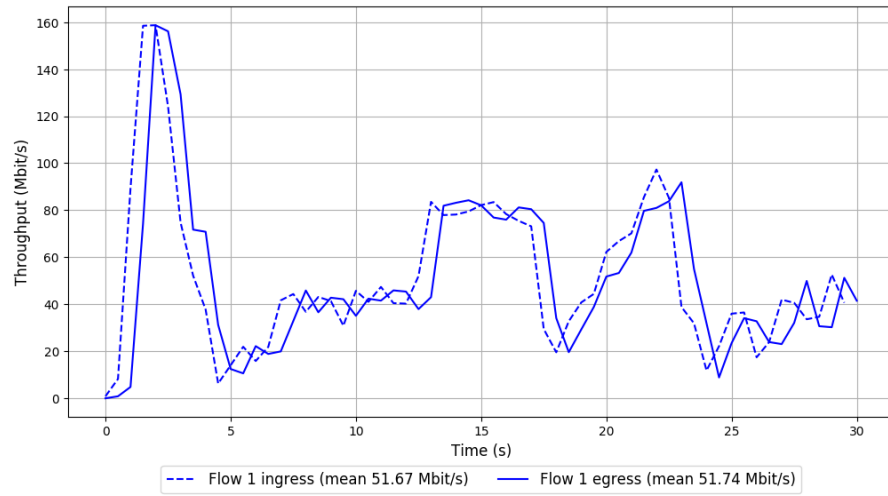
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 36.95 Mbit/s)   Flow 1 egress (mean 36.95 Mbit/s)

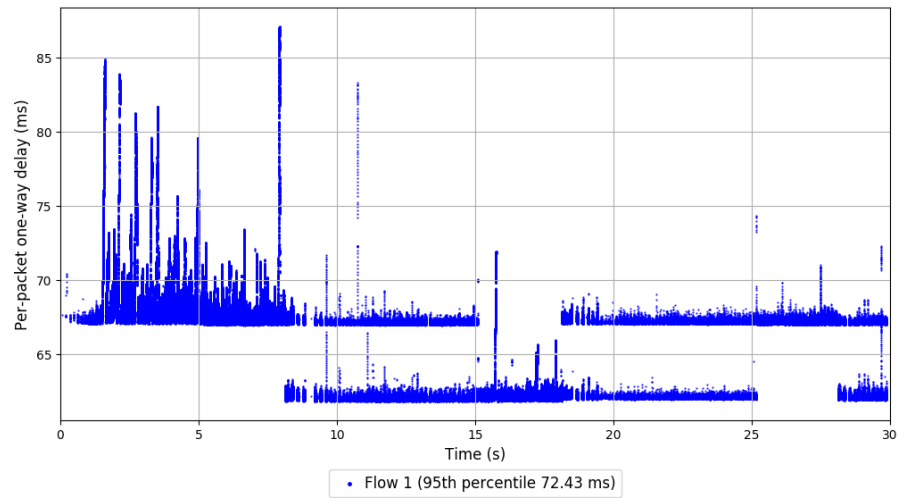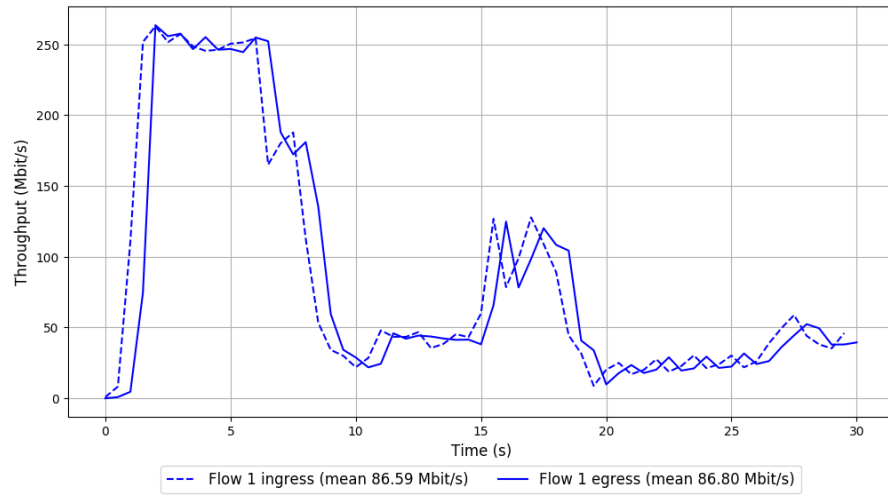• Flow 1 (95th percentile 67.23 ms)

```
Run 4: Statistics of Copa

Start at: 2018-05-23 06:32:40
End at: 2018-05-23 06:33:10
Local clock offset: -0.758 ms
Remote clock offset: -0.23 ms


# Below is generated by plot.py at 2018-05-23 09:00:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.74 Mbit/s
95th percentile per-packet one-way delay: 67.542 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 51.74 Mbit/s
95th percentile per-packet one-way delay: 67.542 ms
Loss rate: 0.33%
```

Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 51.67 Mbit/s)   Flow 1 egress (mean 51.74 Mbit/s)

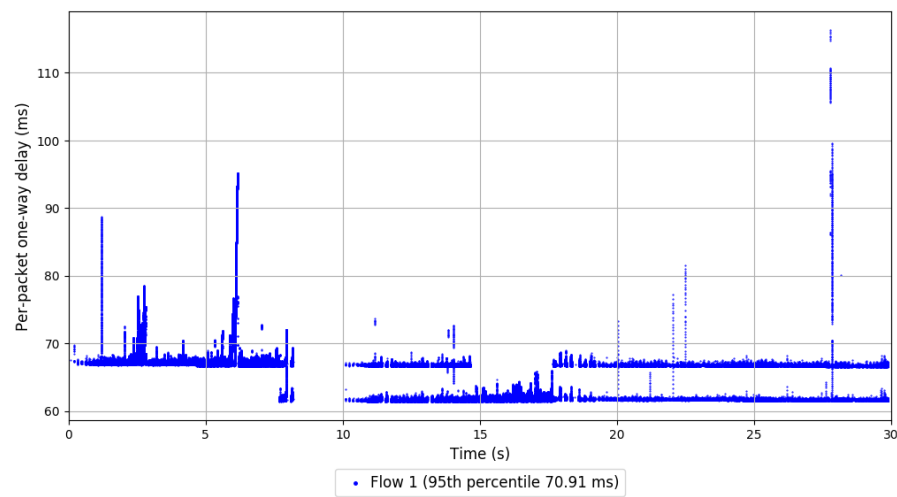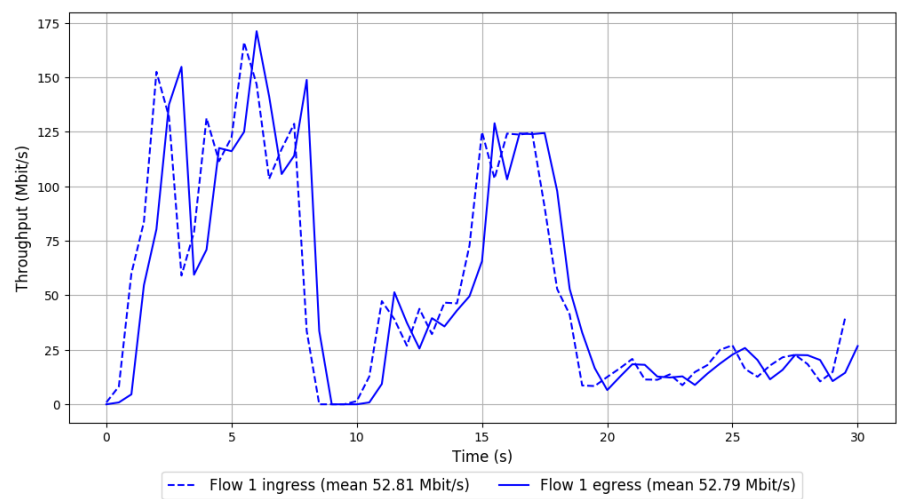Flow 1 (95th percentile 67.54 ms)

```
Run 5: Statistics of Copa

Start at: 2018-05-23 06:52:18
End at: 2018-05-23 06:52:48
Local clock offset: -0.877 ms
Remote clock offset: -0.261 ms


# Below is generated by plot.py at 2018-05-23 09:00:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.80 Mbit/s
95th percentile per-packet one-way delay: 72.433 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 86.80 Mbit/s
95th percentile per-packet one-way delay: 72.433 ms
Loss rate: 0.27%
```
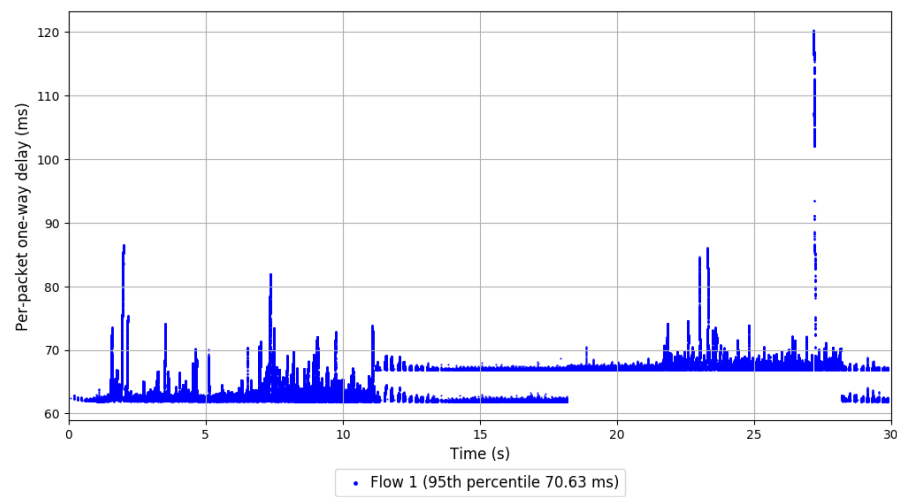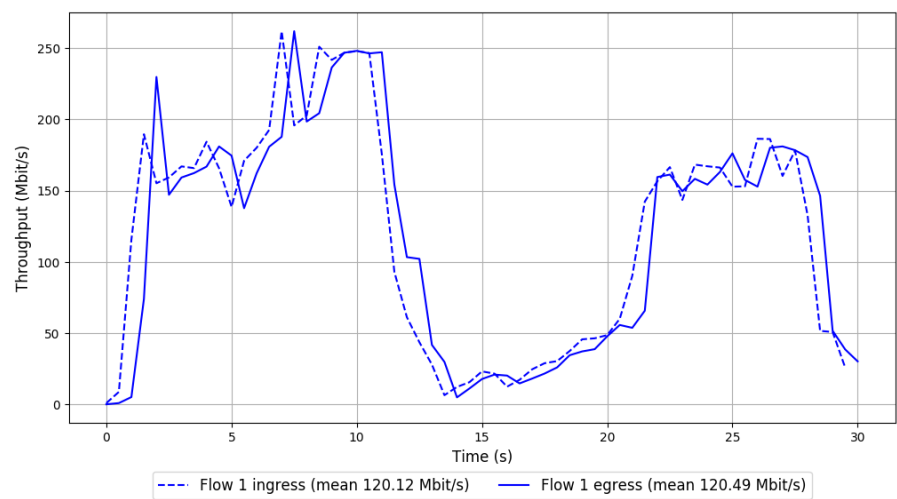
Run 5: Report of Copa — Data Link

```
Run 6: Statistics of Copa

Start at: 2018-05-23 07:12:08
End at: 2018-05-23 07:12:38
Local clock offset: -0.696 ms
Remote clock offset: -0.006 ms


# Below is generated by plot.py at 2018-05-23 09:00:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.79 Mbit/s
95th percentile per-packet one-way delay: 70.911 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 52.79 Mbit/s
95th percentile per-packet one-way delay: 70.911 ms
Loss rate: 0.45%
```
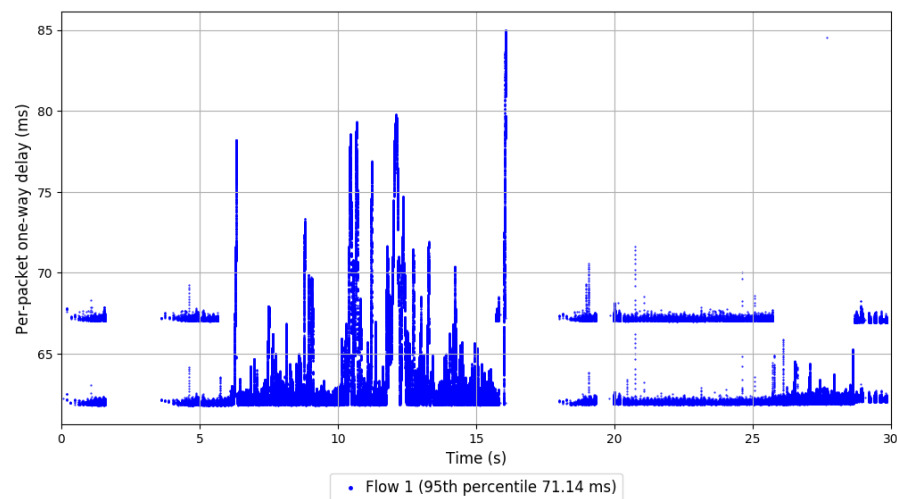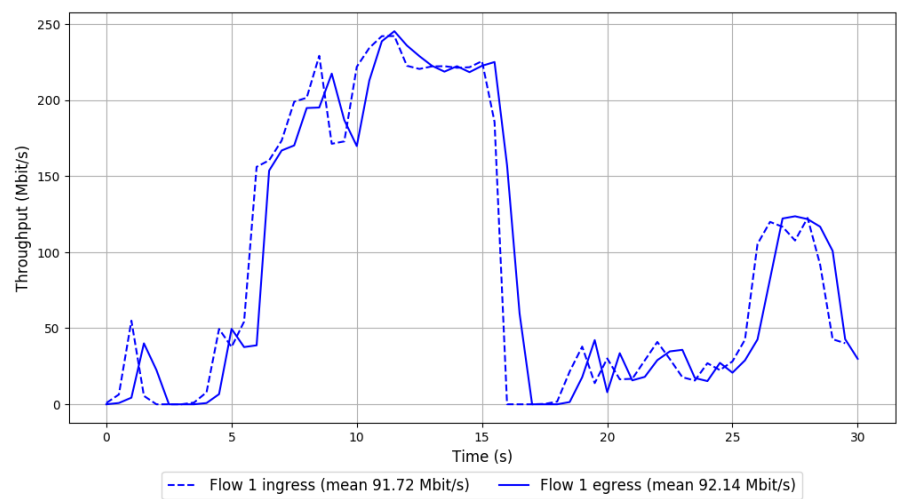
Run 6: Report of Copa — Data Link

Flow 1 ingress (mean 52.81 Mbit/s)   Flow 1 egress (mean 52.79 Mbit/s)

Flow 1 (95th percentile 70.91 ms)

```
Run 7: Statistics of Copa

Start at: 2018-05-23 07:32:05
End at: 2018-05-23 07:32:35
Local clock offset: 0.21 ms
Remote clock offset: -0.398 ms


# Below is generated by plot.py at 2018-05-23 09:03:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 120.49 Mbit/s
95th percentile per-packet one-way delay: 70.629 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 120.49 Mbit/s
95th percentile per-packet one-way delay: 70.629 ms
Loss rate: 0.11%
```
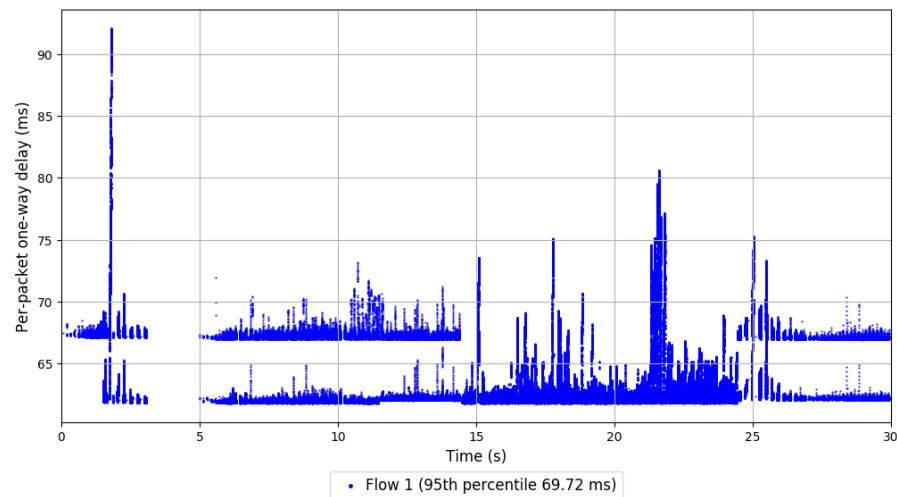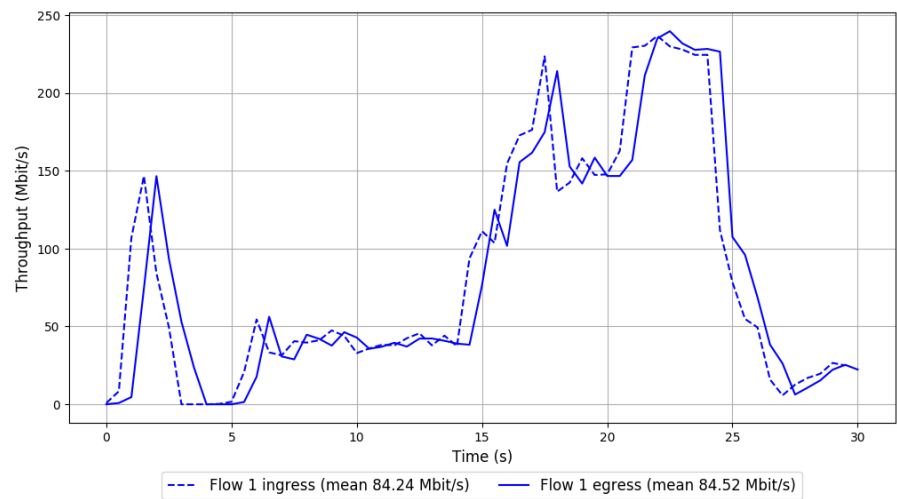
Run 7: Report of Copa — Data Link

```
Run 8: Statistics of Copa

Start at: 2018-05-23 07:51:57
End at: 2018-05-23 07:52:27
Local clock offset: 0.466 ms
Remote clock offset: -0.436 ms


# Below is generated by plot.py at 2018-05-23 09:03:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.14 Mbit/s
95th percentile per-packet one-way delay: 71.140 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 92.14 Mbit/s
95th percentile per-packet one-way delay: 71.140 ms
Loss rate: 0.19%
```

Run 8: Report of Copa — Data Link

Flow 1 ingress (mean 91.72 Mbit/s)   Flow 1 egress (mean 92.14 Mbit/s)

Flow 1 (95th percentile 71.14 ms)

```
Run 9: Statistics of Copa

Start at: 2018-05-23 08:11:51
End at: 2018-05-23 08:12:21
Local clock offset: 0.73 ms
Remote clock offset: -0.337 ms


# Below is generated by plot.py at 2018-05-23 09:03:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.52 Mbit/s
95th percentile per-packet one-way delay: 69.716 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 84.52 Mbit/s
95th percentile per-packet one-way delay: 69.716 ms
Loss rate: 0.10%
```
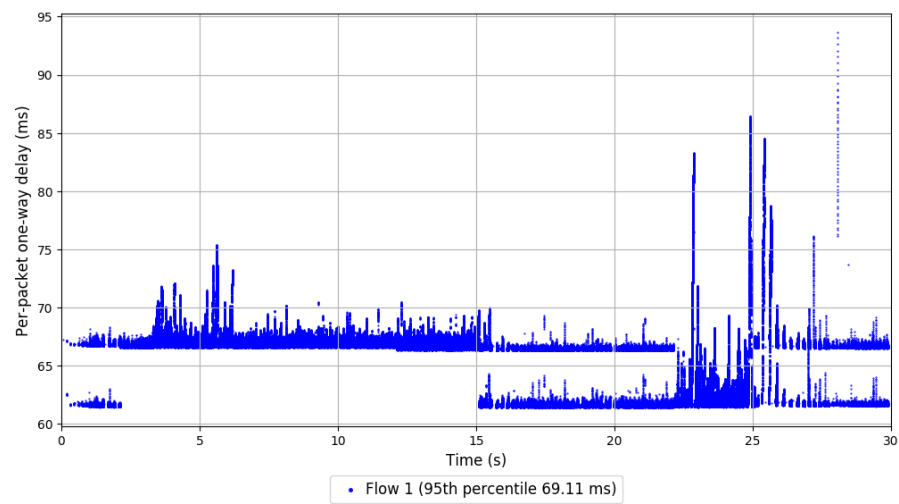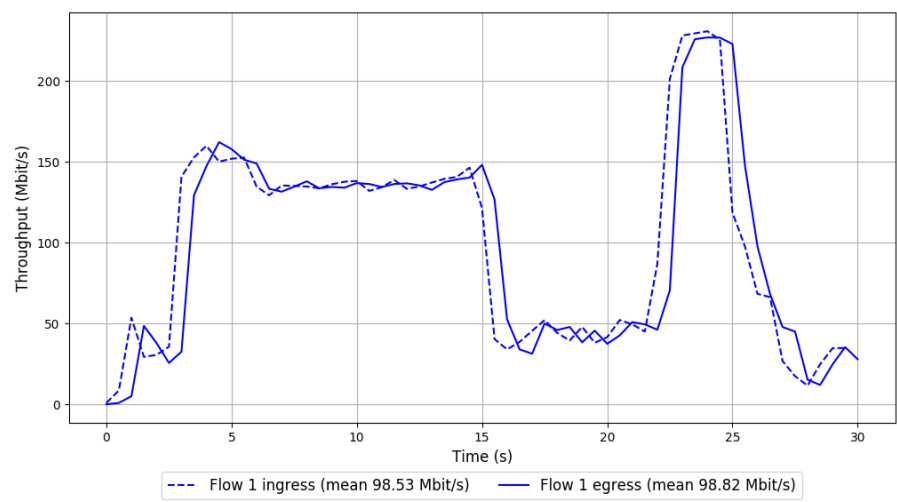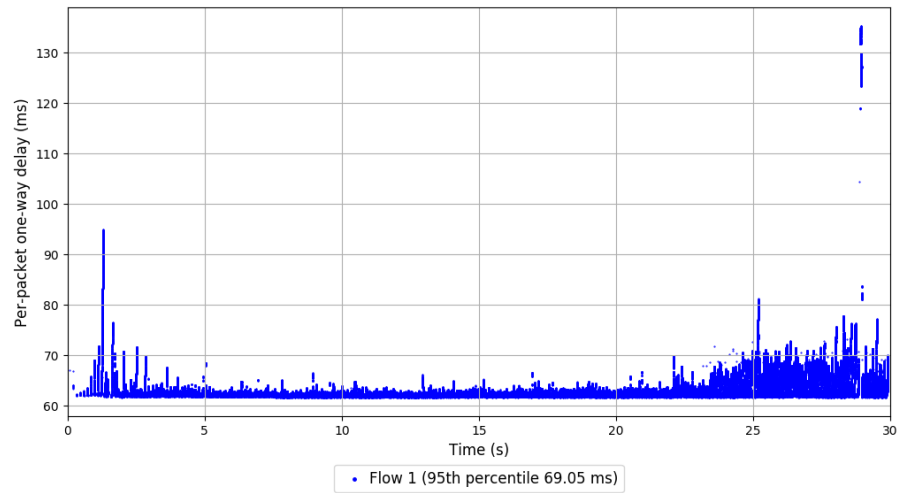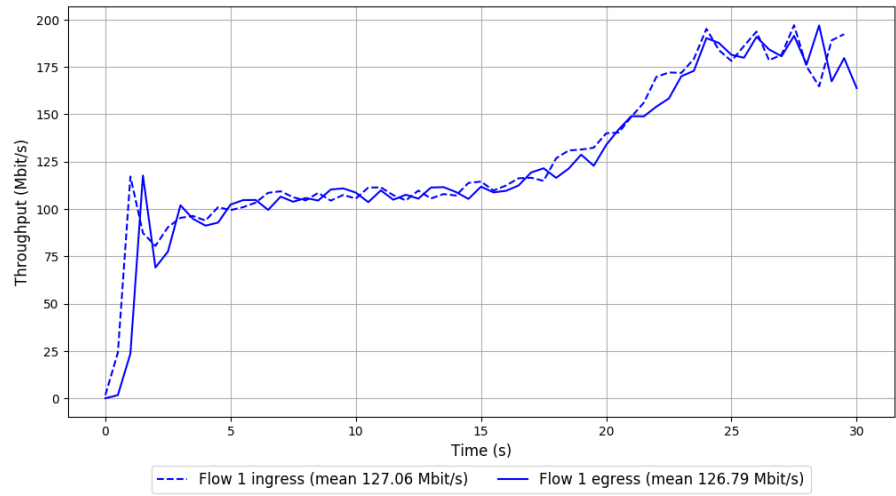
Run 9: Report of Copa — Data Link

```
Run 10: Statistics of Copa

Start at: 2018-05-23 08:32:01
End at: 2018-05-23 08:32:31
Local clock offset: 0.894 ms
Remote clock offset: 0.176 ms

# Below is generated by plot.py at 2018-05-23 09:03:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 98.82 Mbit/s
95th percentile per-packet one-way delay: 69.113 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 98.82 Mbit/s
95th percentile per-packet one-way delay: 69.113 ms
Loss rate: 0.14%
```

Run 10: Report of Copa — Data Link

Flow 1 ingress (mean 98.53 Mbit/s)   Flow 1 egress (mean 98.82 Mbit/s)

Flow 1 (95th percentile 69.11 ms)

```
Run 1: Statistics of TCP Cubic

Start at: 2018-05-23 05:44:05
End at: 2018-05-23 05:44:35
Local clock offset: -0.384 ms
Remote clock offset: -0.206 ms


# Below is generated by plot.py at 2018-05-23 09:03:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 126.79 Mbit/s
95th percentile per-packet one-way delay: 69.051 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 126.79 Mbit/s
95th percentile per-packet one-way delay: 69.051 ms
Loss rate: 0.66%
```
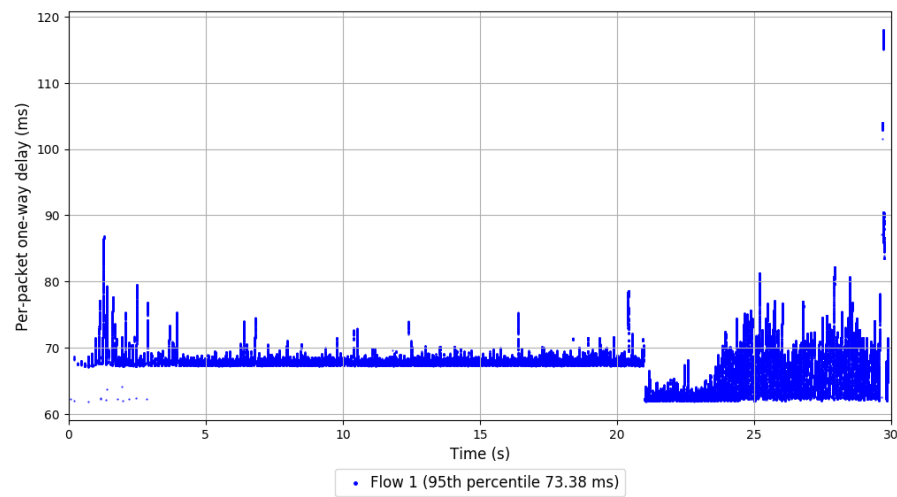
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-05-23 06:04:02
End at: 2018-05-23 06:04:32
Local clock offset: -0.499 ms
Remote clock offset: -0.41 ms


# Below is generated by plot.py at 2018-05-23 09:03:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 128.58 Mbit/s
95th percentile per-packet one-way delay: 73.375 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 128.58 Mbit/s
95th percentile per-packet one-way delay: 73.375 ms
Loss rate: 0.66%
```
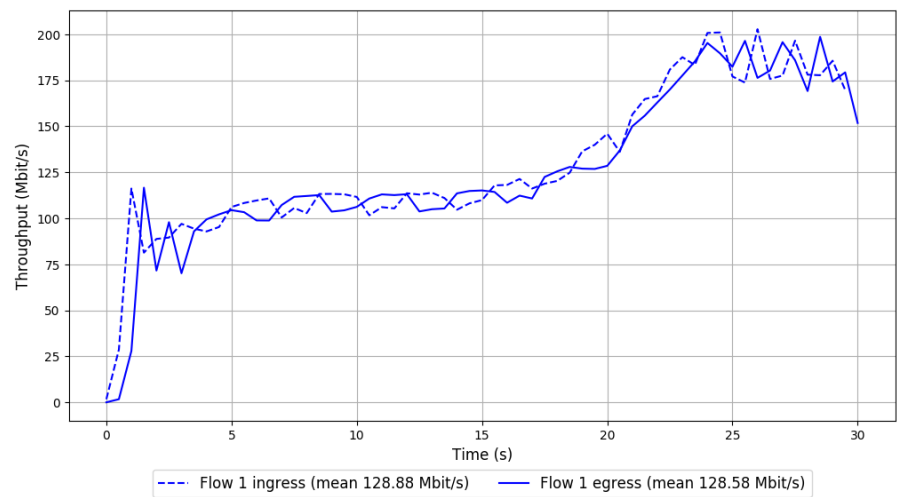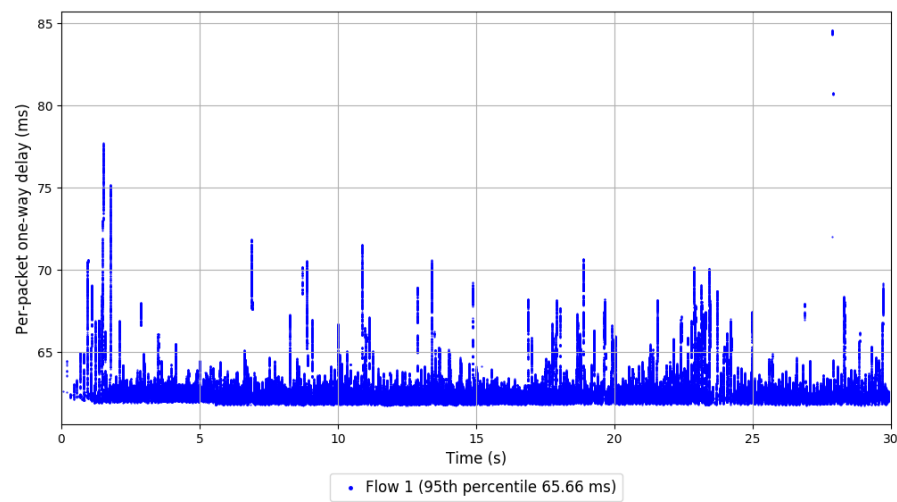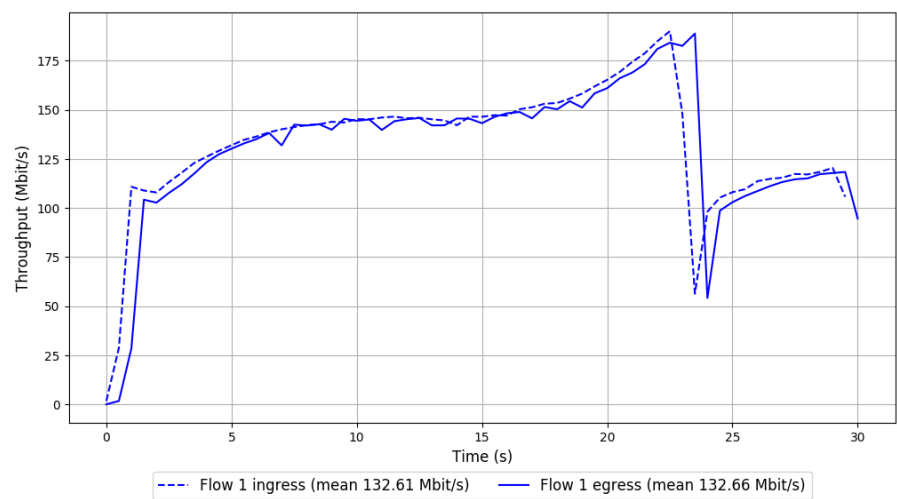
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2018-05-23 06:23:47
End at: 2018-05-23 06:24:17
Local clock offset: -0.662 ms
Remote clock offset: -0.391 ms


# Below is generated by plot.py at 2018-05-23 09:03:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 132.66 Mbit/s
95th percentile per-packet one-way delay: 65.655 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 132.66 Mbit/s
95th percentile per-packet one-way delay: 65.655 ms
Loss rate: 0.37%
```
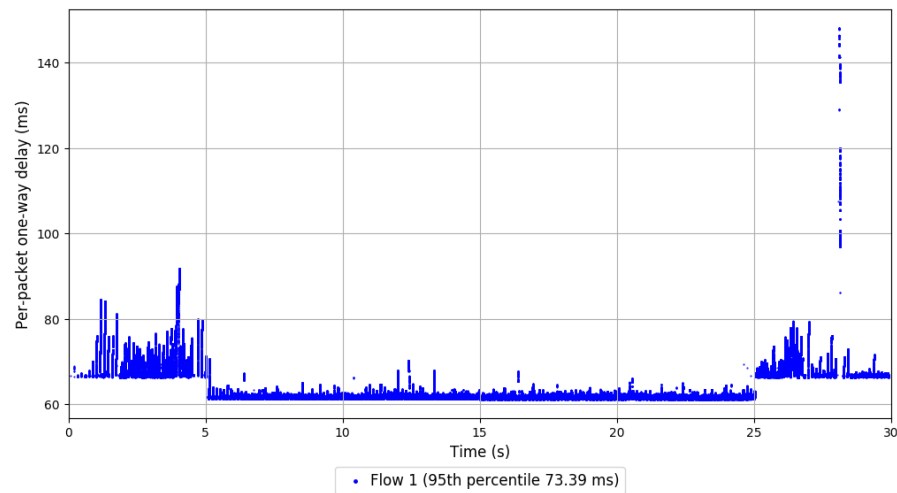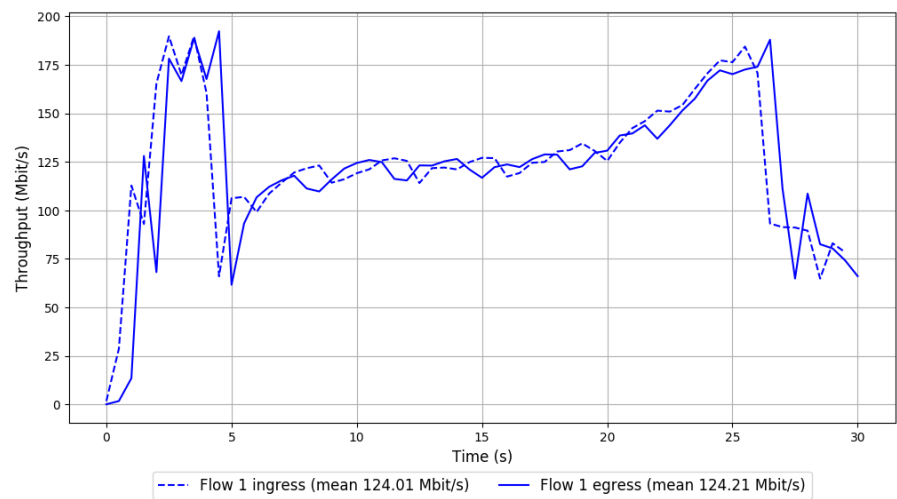
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 132.61 Mbit/s)   Flow 1 egress (mean 132.66 Mbit/s)

Flow 1 (95th percentile 65.66 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2018-05-23 06:43:28
End at: 2018-05-23 06:43:58
Local clock offset: -0.856 ms
Remote clock offset: 0.257 ms


# Below is generated by plot.py at 2018-05-23 09:03:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 124.21 Mbit/s
95th percentile per-packet one-way delay: 73.394 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 124.21 Mbit/s
95th percentile per-packet one-way delay: 73.394 ms
Loss rate: 0.29%
```

Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2018-05-23 07:03:12
End at: 2018-05-23 07:03:42
Local clock offset: -0.997 ms
Remote clock offset: 0.053 ms


# Below is generated by plot.py at 2018-05-23 09:04:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 112.37 Mbit/s
95th percentile per-packet one-way delay: 71.209 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 112.37 Mbit/s
95th percentile per-packet one-way delay: 71.209 ms
Loss rate: 0.43%
```
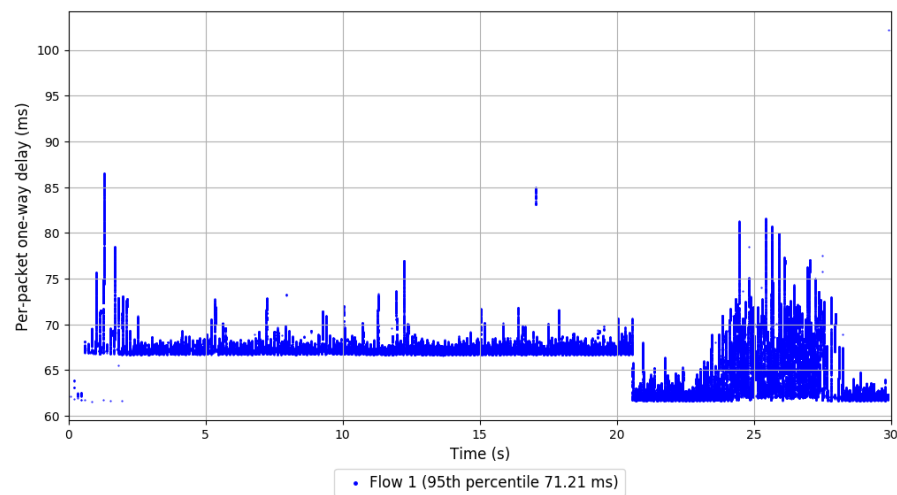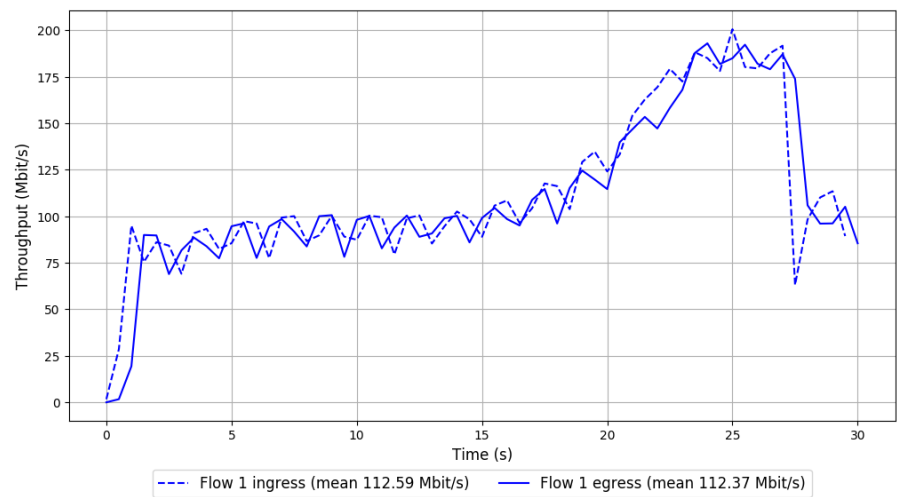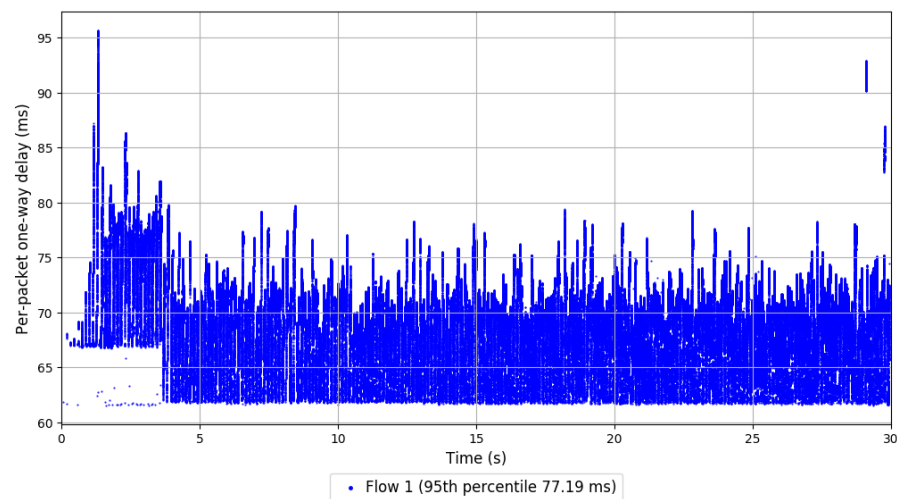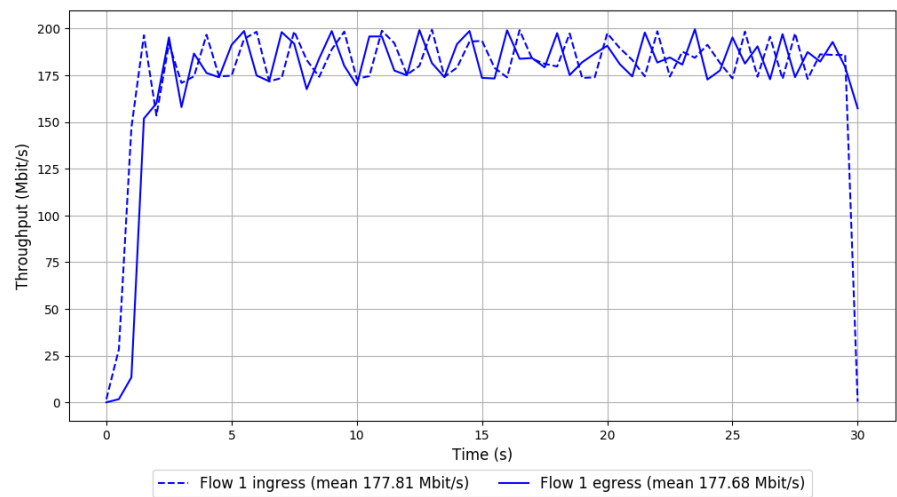
Run 5: Report of TCP Cubic — Data Link

```
Run 6: Statistics of TCP Cubic

Start at: 2018-05-23 07:22:59
End at: 2018-05-23 07:23:29
Local clock offset: -0.016 ms
Remote clock offset: -0.065 ms


# Below is generated by plot.py at 2018-05-23 09:06:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.68 Mbit/s
95th percentile per-packet one-way delay: 77.188 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 177.68 Mbit/s
95th percentile per-packet one-way delay: 77.188 ms
Loss rate: 0.50%
```
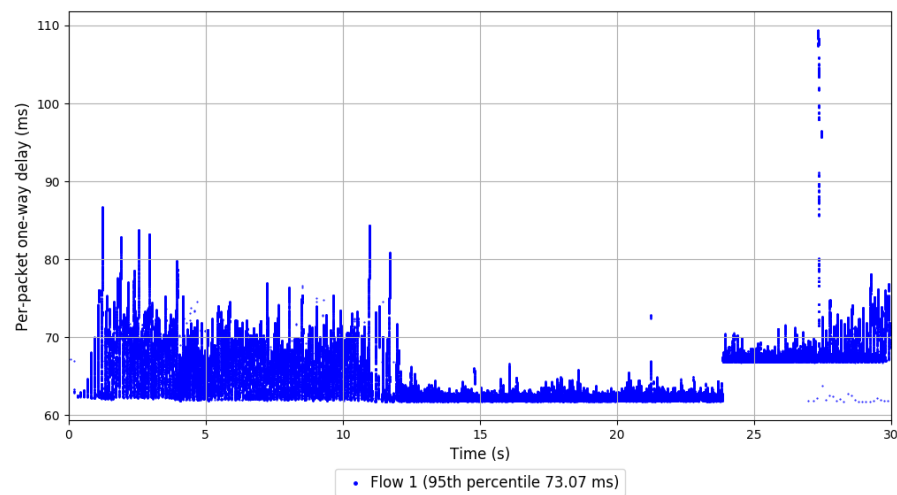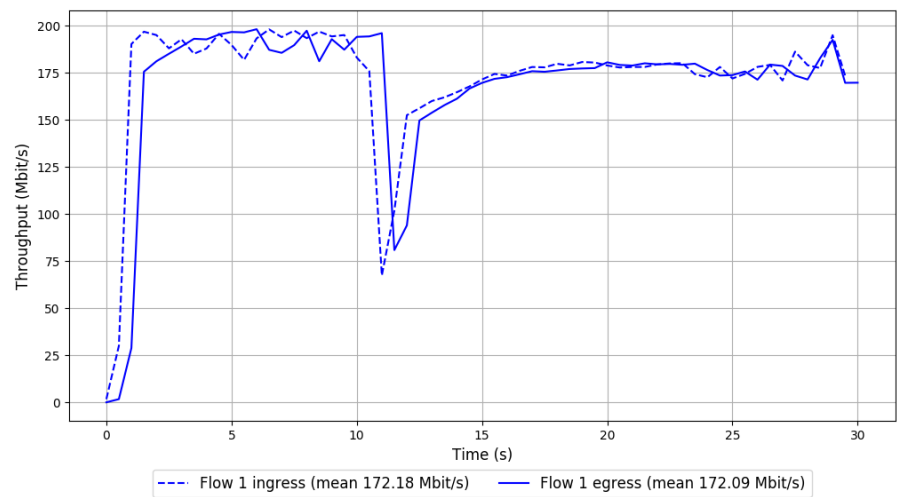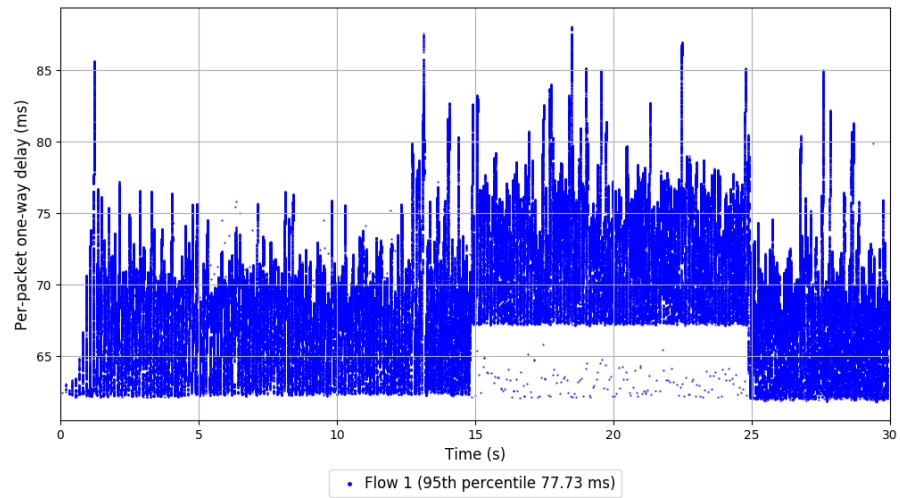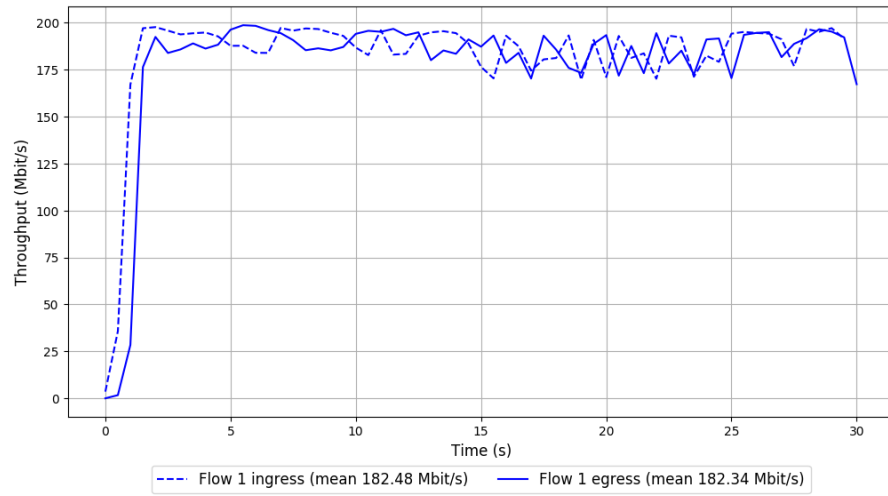
Run 6: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 177.81 Mbit/s) — Flow 1 egress (mean 177.68 Mbit/s)

• Flow 1 (95th percentile 77.19 ms)

```
Run 7: Statistics of TCP Cubic

Start at: 2018-05-23 07:42:59
End at: 2018-05-23 07:43:29
Local clock offset: 0.359 ms
Remote clock offset: -0.24 ms


# Below is generated by plot.py at 2018-05-23 09:06:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 172.09 Mbit/s
95th percentile per-packet one-way delay: 73.074 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 172.09 Mbit/s
95th percentile per-packet one-way delay: 73.074 ms
Loss rate: 0.45%
```

Run 7: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 172.18 Mbit/s)   Flow 1 egress (mean 172.09 Mbit/s)

Flow 1 (95th percentile 73.07 ms)

```
Run 8: Statistics of TCP Cubic

Start at: 2018-05-23 08:02:48
End at: 2018-05-23 08:03:18
Local clock offset: 0.588 ms
Remote clock offset: -0.314 ms


# Below is generated by plot.py at 2018-05-23 09:06:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.34 Mbit/s
95th percentile per-packet one-way delay: 77.730 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 182.34 Mbit/s
95th percentile per-packet one-way delay: 77.730 ms
Loss rate: 0.49%
```
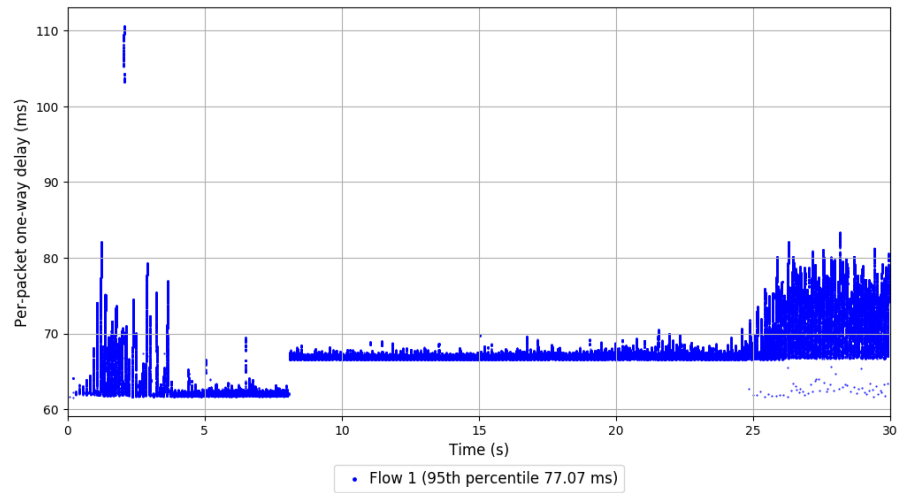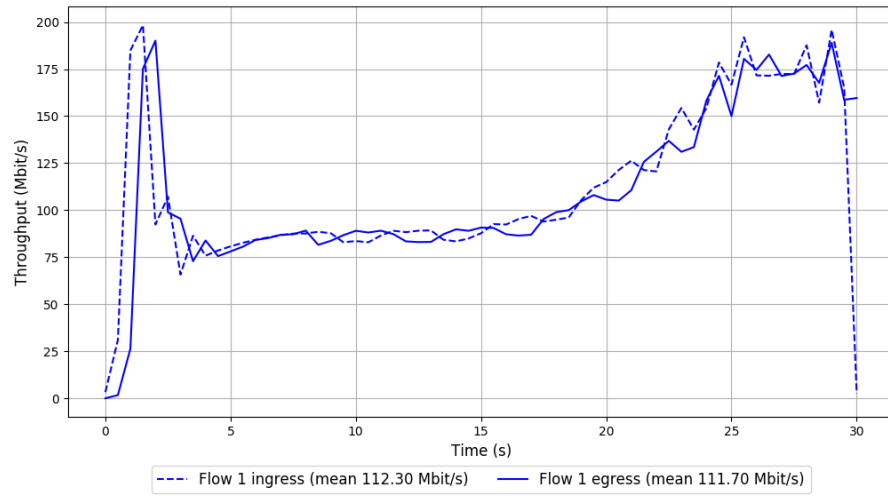
Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 182.48 Mbit/s) ----- Flow 1 egress (mean 182.34 Mbit/s)

• Flow 1 (95th percentile 77.73 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2018-05-23 08:22:55
End at: 2018-05-23 08:23:25
Local clock offset: 0.87 ms
Remote clock offset: 0.292 ms


# Below is generated by plot.py at 2018-05-23 09:06:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 111.70 Mbit/s
95th percentile per-packet one-way delay: 77.066 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 111.70 Mbit/s
95th percentile per-packet one-way delay: 77.066 ms
Loss rate: 0.96%
```
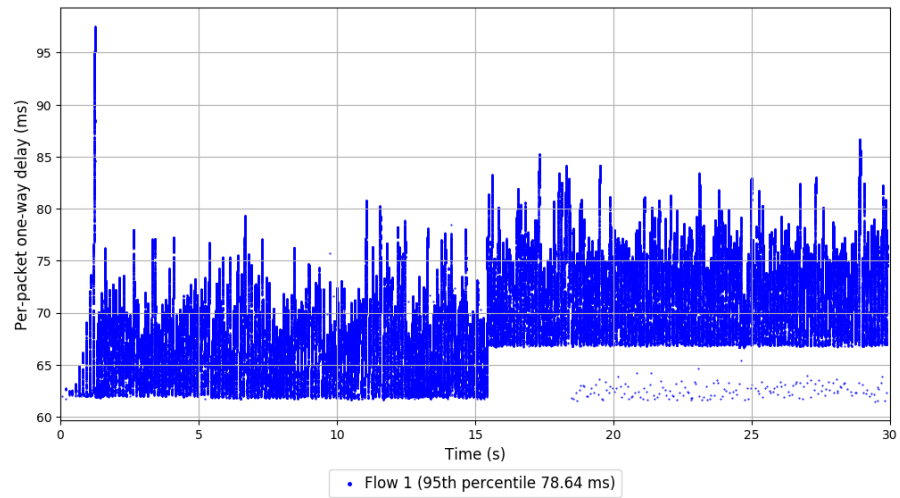
Run 9: Report of TCP Cubic — Data Link

```
Run 10: Statistics of TCP Cubic

Start at: 2018-05-23 08:42:47
End at: 2018-05-23 08:43:17
Local clock offset: 1.005 ms
Remote clock offset: 0.118 ms


# Below is generated by plot.py at 2018-05-23 09:06:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.50 Mbit/s
95th percentile per-packet one-way delay: 78.639 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 182.50 Mbit/s
95th percentile per-packet one-way delay: 78.639 ms
Loss rate: 0.45%
```
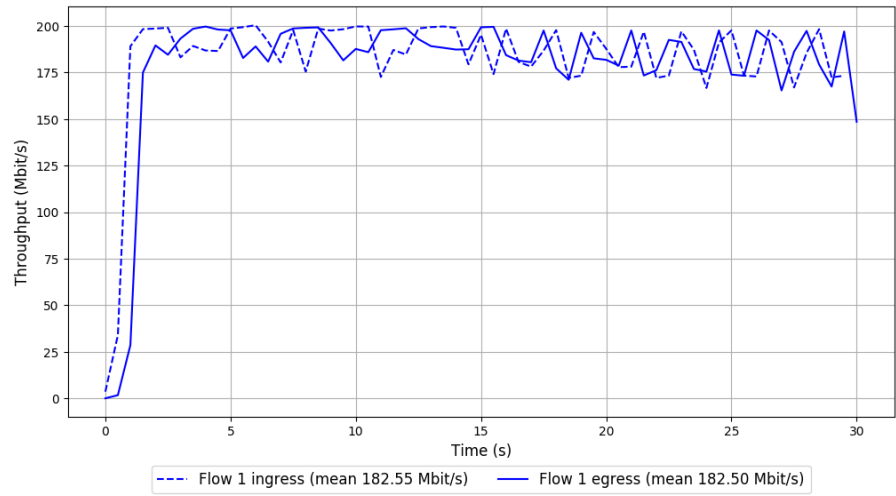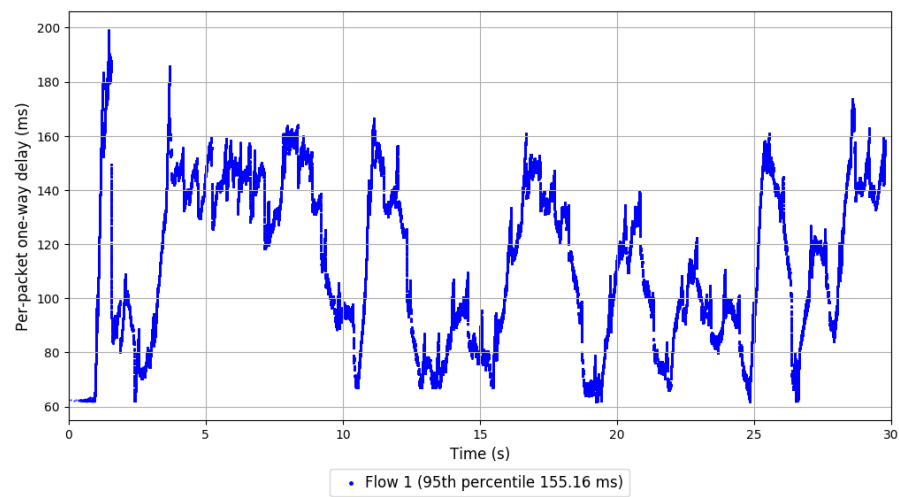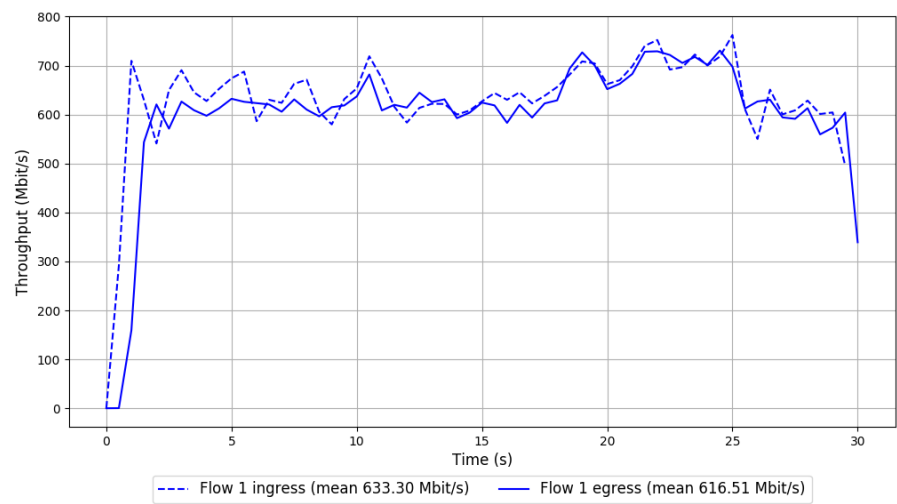
Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-05-23 05:50:27
End at: 2018-05-23 05:50:57
Local clock offset: -0.44 ms
Remote clock offset: -0.353 ms

# Below is generated by plot.py at 2018-05-23 09:18:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 616.51 Mbit/s
95th percentile per-packet one-way delay: 155.159 ms
Loss rate: 3.08%
-- Flow 1:
Average throughput: 616.51 Mbit/s
95th percentile per-packet one-way delay: 155.159 ms
Loss rate: 3.08%
```
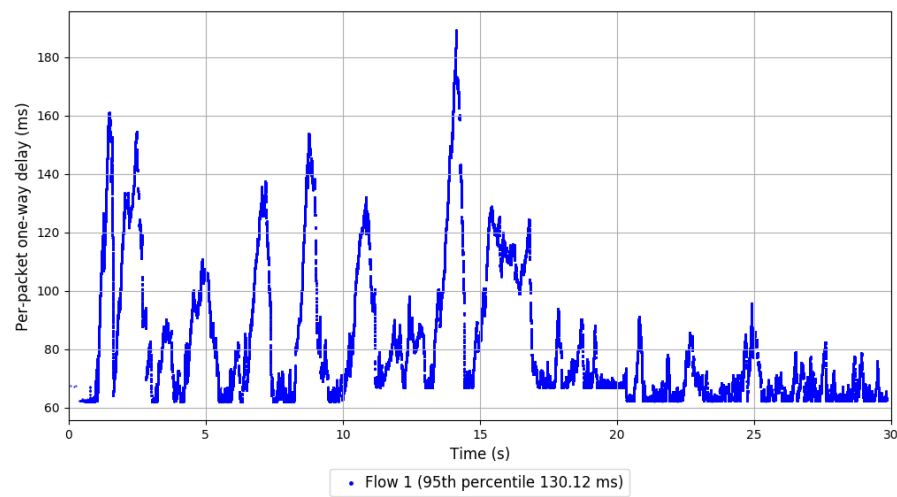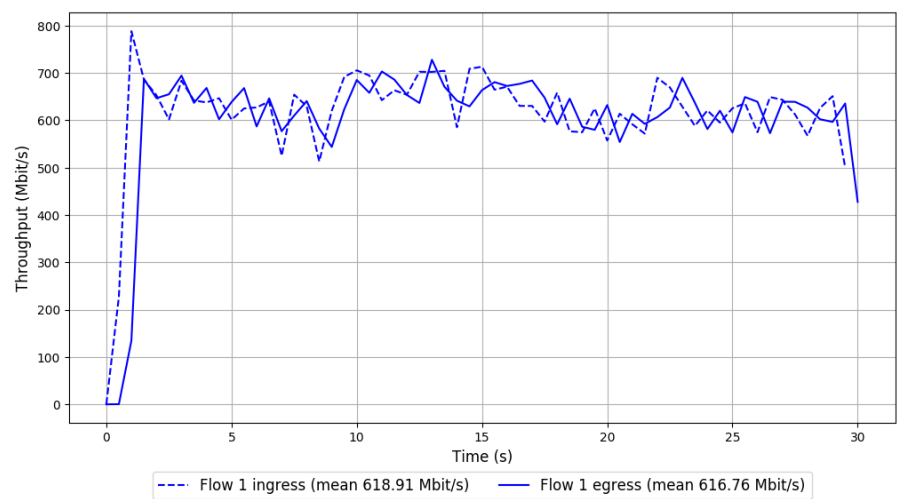
Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 633.30 Mbit/s)   Flow 1 egress (mean 616.51 Mbit/s)

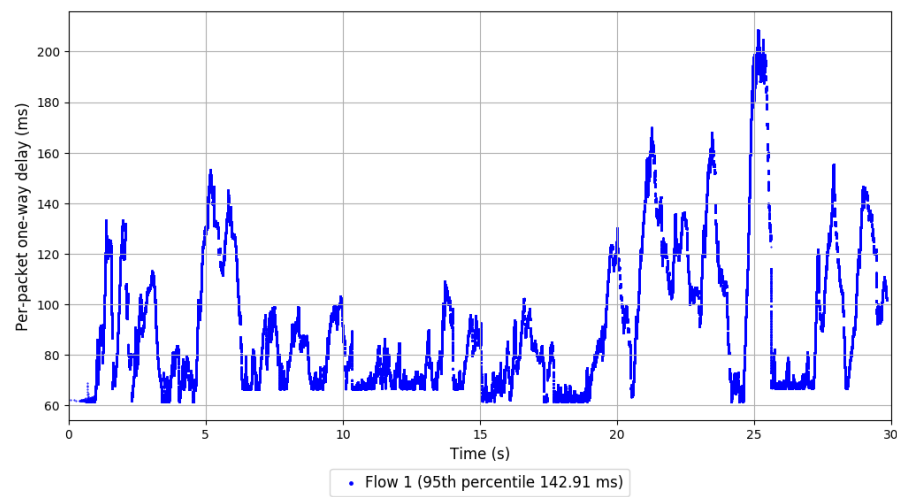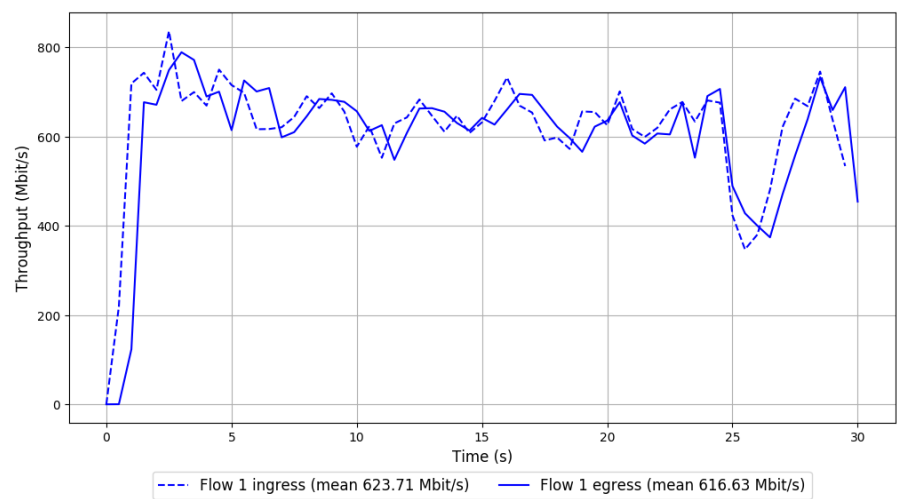Flow 1 (95th percentile 155.16 ms)

```
Run 2: Statistics of FillP

Start at: 2018-05-23 06:10:15
End at: 2018-05-23 06:10:45
Local clock offset: -0.574 ms
Remote clock offset: -0.43 ms


# Below is generated by plot.py at 2018-05-23 09:18:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 616.76 Mbit/s
95th percentile per-packet one-way delay: 130.117 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 616.76 Mbit/s
95th percentile per-packet one-way delay: 130.117 ms
Loss rate: 0.79%
```
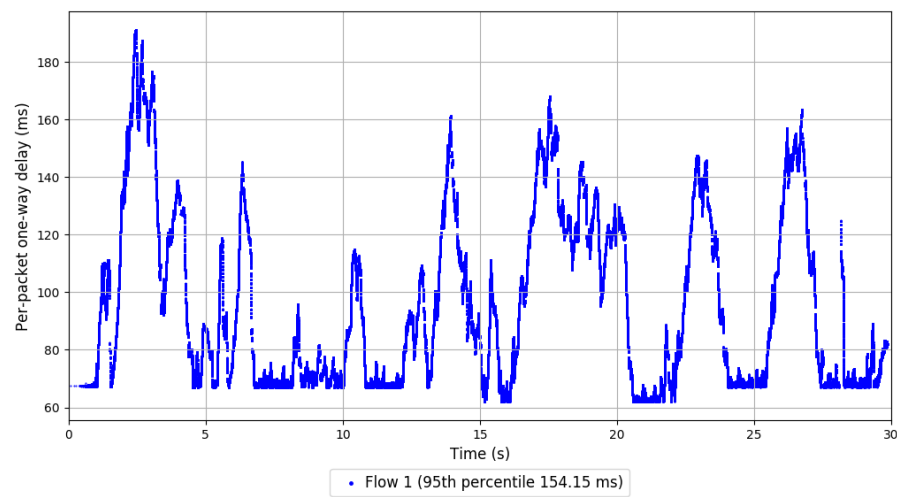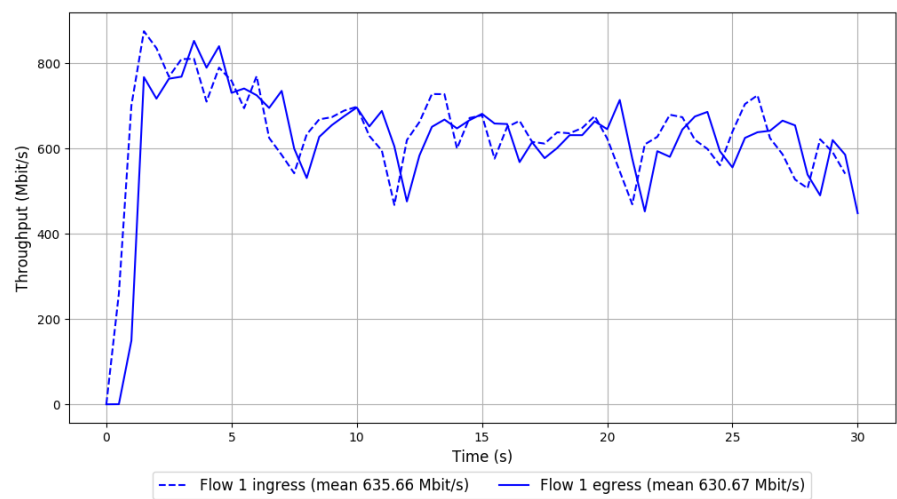
Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2018-05-23 06:30:01
End at: 2018-05-23 06:30:31
Local clock offset: -0.778 ms
Remote clock offset: -0.199 ms


# Below is generated by plot.py at 2018-05-23 09:20:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 616.63 Mbit/s
95th percentile per-packet one-way delay: 142.914 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 616.63 Mbit/s
95th percentile per-packet one-way delay: 142.914 ms
Loss rate: 1.56%
```

Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 623.71 Mbit/s) — Flow 1 egress (mean 616.63 Mbit/s)

Flow 1 (95th percentile 142.91 ms)

69

```
Run 4: Statistics of FillP

Start at: 2018-05-23 06:49:39
End at: 2018-05-23 06:50:09
Local clock offset: -0.91 ms
Remote clock offset: -0.379 ms


# Below is generated by plot.py at 2018-05-23 09:22:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 630.67 Mbit/s
95th percentile per-packet one-way delay: 154.147 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 630.67 Mbit/s
95th percentile per-packet one-way delay: 154.147 ms
Loss rate: 1.22%
```
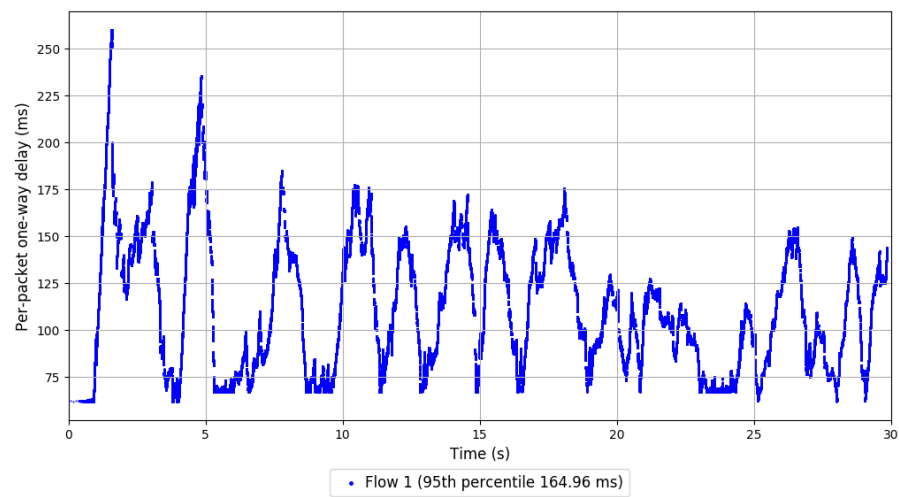
Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2018-05-23 07:09:28
End at: 2018-05-23 07:09:58
Local clock offset: -0.938 ms
Remote clock offset: -0.3 ms


# Below is generated by plot.py at 2018-05-23 09:23:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 636.47 Mbit/s
95th percentile per-packet one-way delay: 164.962 ms
Loss rate: 4.35%
-- Flow 1:
Average throughput: 636.47 Mbit/s
95th percentile per-packet one-way delay: 164.962 ms
Loss rate: 4.35%
```
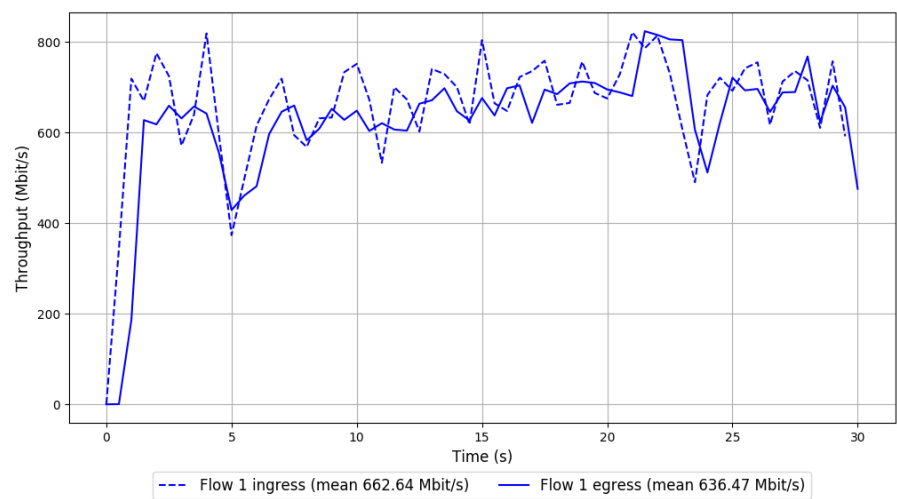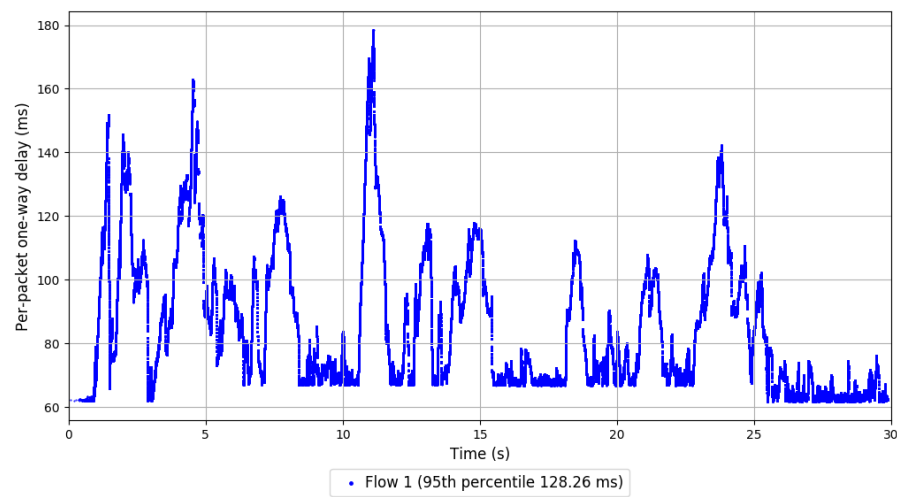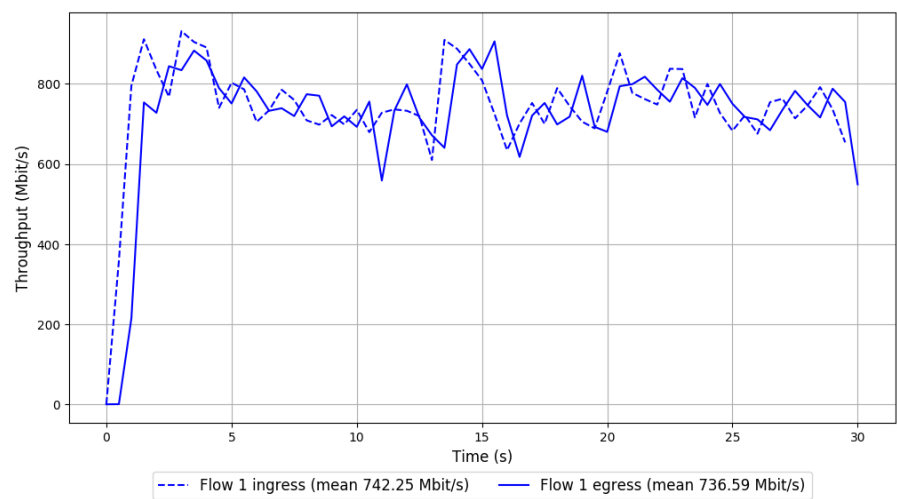
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 662.64 Mbit/s) — — — Flow 1 egress (mean 636.47 Mbit/s)

Flow 1 (95th percentile 164.96 ms)

```
Run 6: Statistics of FillP

Start at: 2018-05-23 07:29:20
End at: 2018-05-23 07:29:50
Local clock offset: 0.126 ms
Remote clock offset: -0.065 ms


# Below is generated by plot.py at 2018-05-23 09:25:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 736.59 Mbit/s
95th percentile per-packet one-way delay: 128.261 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 736.59 Mbit/s
95th percentile per-packet one-way delay: 128.261 ms
Loss rate: 1.28%
```
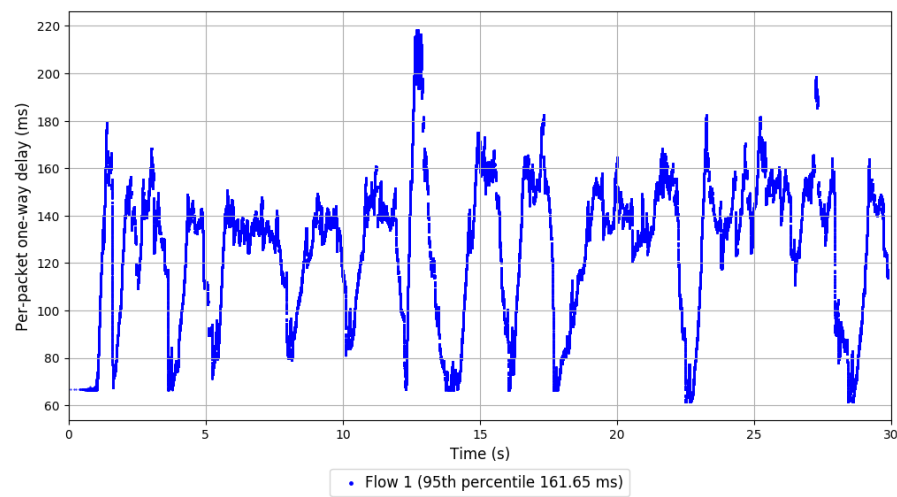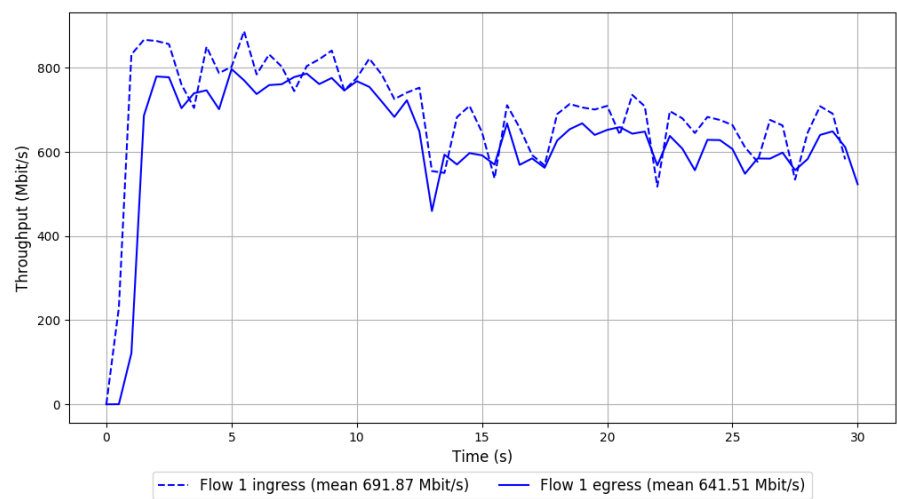
Run 6: Report of FillP — Data Link

Flow 1 ingress (mean 742.25 Mbit/s) — Flow 1 egress (mean 736.59 Mbit/s)

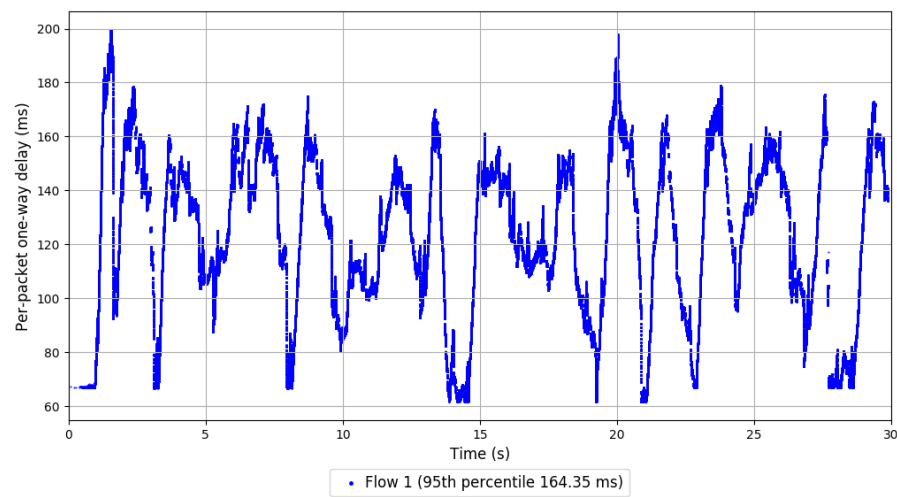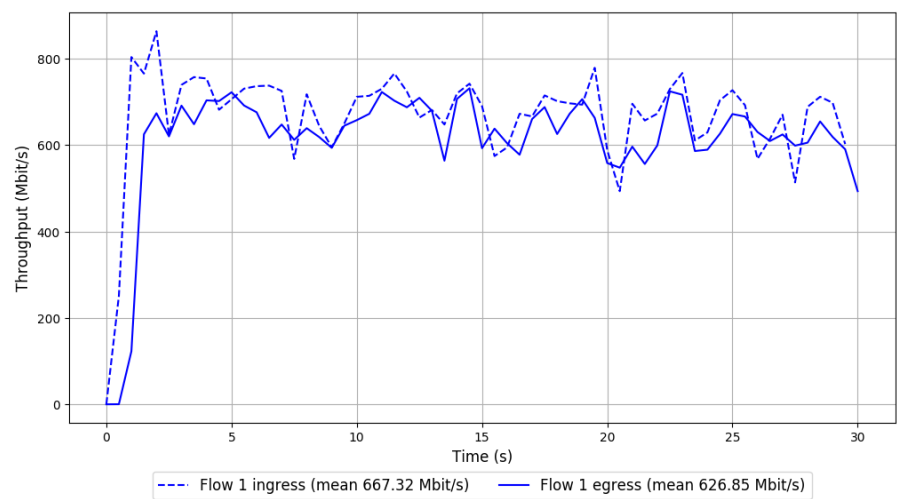Flow 1 (95th percentile 128.26 ms)

75

```
Run 7: Statistics of FillP

Start at: 2018-05-23 07:49:16
End at: 2018-05-23 07:49:46
Local clock offset: 0.421 ms
Remote clock offset: 0.041 ms


# Below is generated by plot.py at 2018-05-23 09:25:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 641.51 Mbit/s
95th percentile per-packet one-way delay: 161.651 ms
Loss rate: 7.68%
-- Flow 1:
Average throughput: 641.51 Mbit/s
95th percentile per-packet one-way delay: 161.651 ms
Loss rate: 7.68%
```
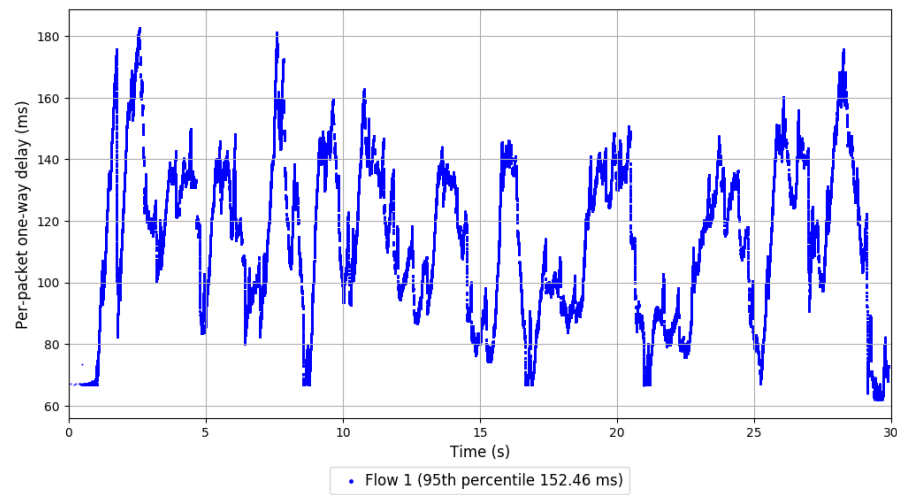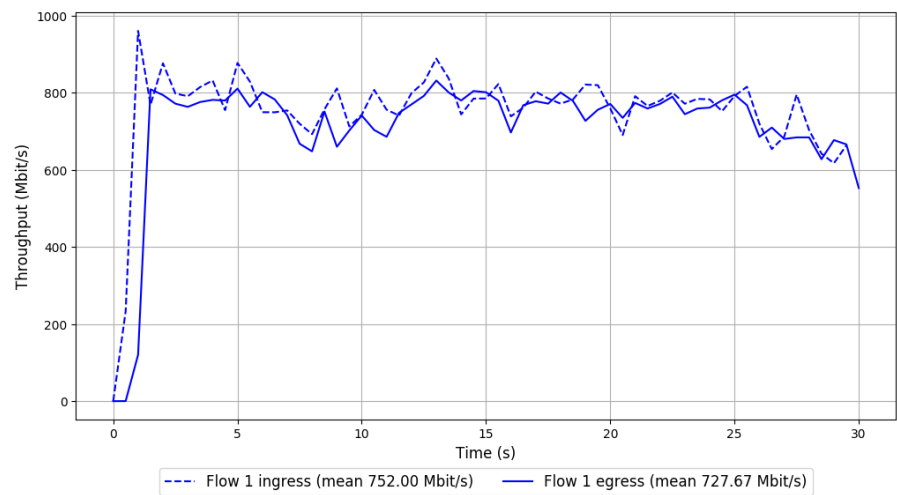
Run 7: Report of FillP — Data Link

```
Run 8: Statistics of FillP

Start at: 2018-05-23 08:09:11
End at: 2018-05-23 08:09:41
Local clock offset: 0.674 ms
Remote clock offset: -0.032 ms


# Below is generated by plot.py at 2018-05-23 09:25:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 626.85 Mbit/s
95th percentile per-packet one-way delay: 164.348 ms
Loss rate: 6.49%
-- Flow 1:
Average throughput: 626.85 Mbit/s
95th percentile per-packet one-way delay: 164.348 ms
Loss rate: 6.49%
```

Run 8: Report of FillP — Data Link

```
Run 9: Statistics of FillP

Start at: 2018-05-23 08:29:17
End at: 2018-05-23 08:29:47
Local clock offset: 0.942 ms
Remote clock offset: -0.074 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 727.67 Mbit/s
95th percentile per-packet one-way delay: 152.458 ms
Loss rate: 3.67%
-- Flow 1:
Average throughput: 727.67 Mbit/s
95th percentile per-packet one-way delay: 152.458 ms
Loss rate: 3.67%
```

Run 9: Report of FillP — Data Link

```
Run 10: Statistics of FillP

Start at: 2018-05-23 08:49:07
End at: 2018-05-23 08:49:37
Local clock offset: 1.046 ms
Remote clock offset: 0.049 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 689.67 Mbit/s
95th percentile per-packet one-way delay: 165.386 ms
Loss rate: 7.33%
-- Flow 1:
Average throughput: 689.67 Mbit/s
95th percentile per-packet one-way delay: 165.386 ms
Loss rate: 7.33%
```
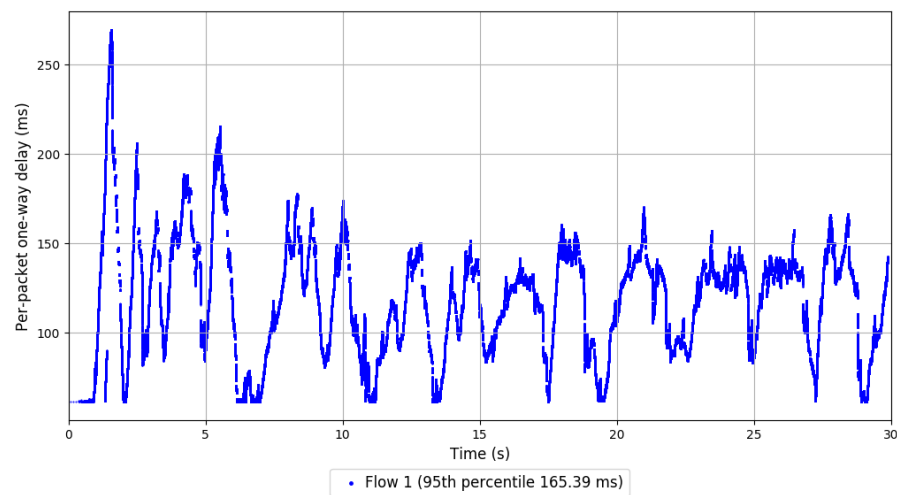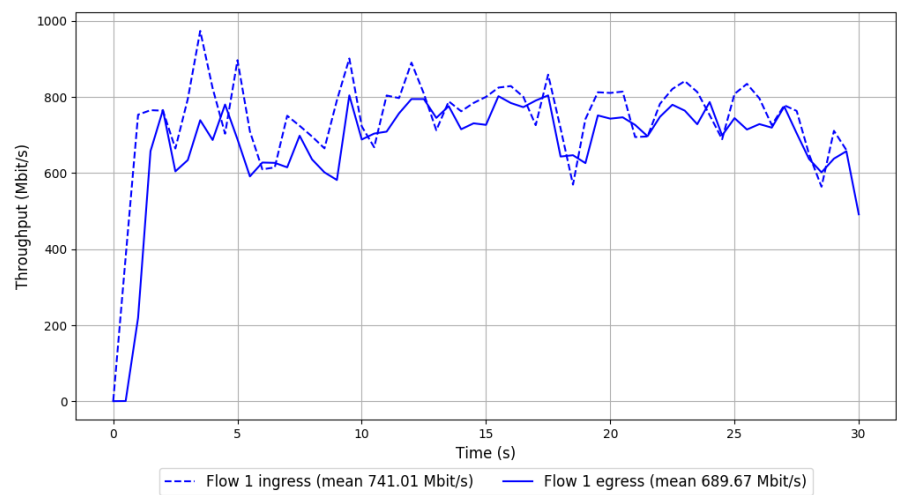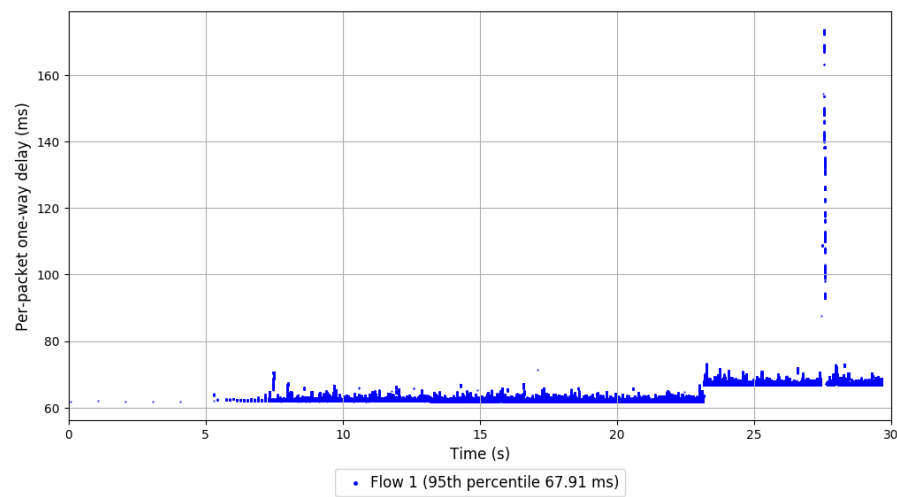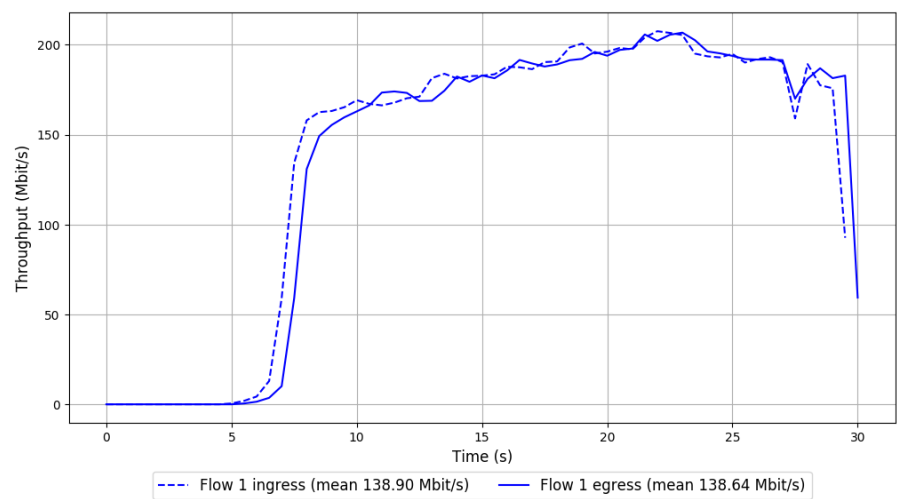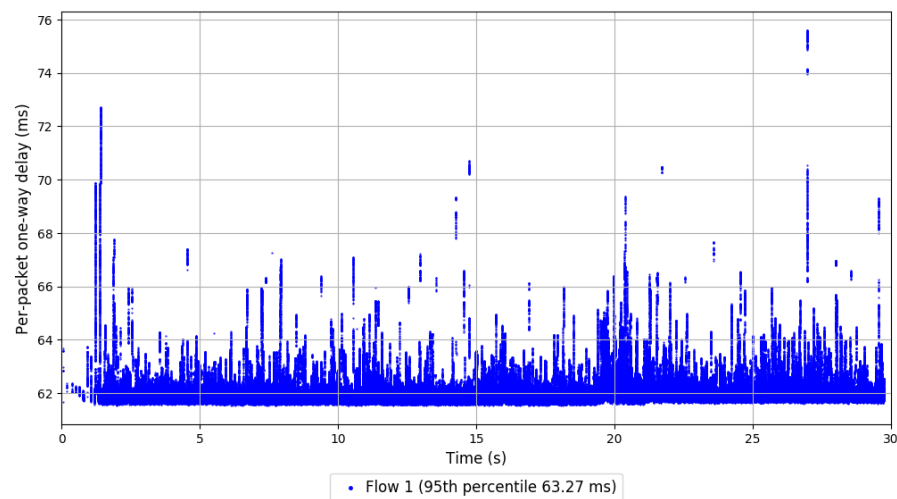
Run 10: Report of FillP — Data Link

```
Run 1: Statistics of Indigo

Start at: 2018-05-23 05:42:49
End at: 2018-05-23 05:43:19
Local clock offset: -0.328 ms
Remote clock offset: -0.371 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 138.64 Mbit/s
95th percentile per-packet one-way delay: 67.912 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 138.64 Mbit/s
95th percentile per-packet one-way delay: 67.912 ms
Loss rate: 0.62%
```
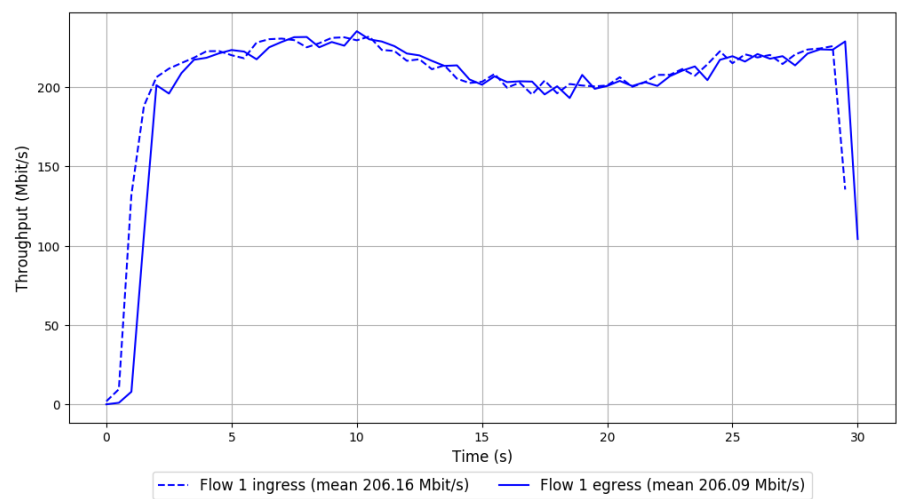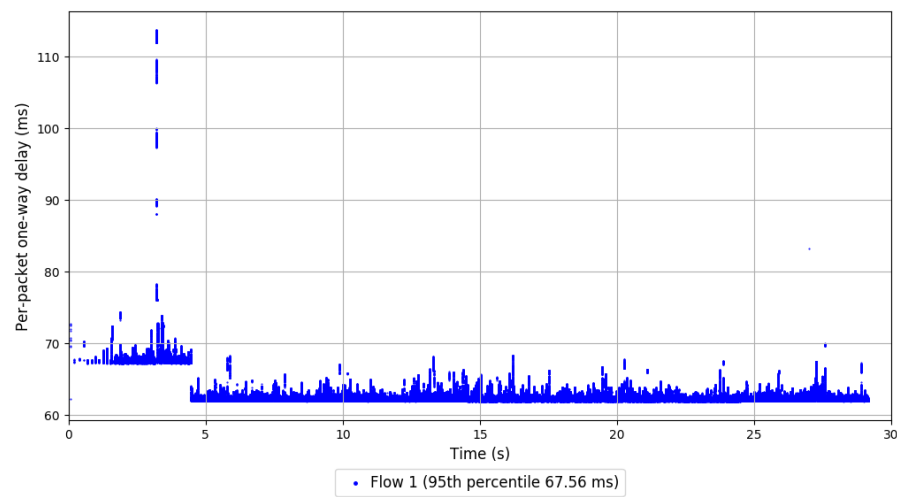
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2018-05-23 06:02:41
End at: 2018-05-23 06:03:11
Local clock offset: -0.502 ms
Remote clock offset: -0.073 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 206.09 Mbit/s
95th percentile per-packet one-way delay: 63.267 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 206.09 Mbit/s
95th percentile per-packet one-way delay: 63.267 ms
Loss rate: 0.46%
```
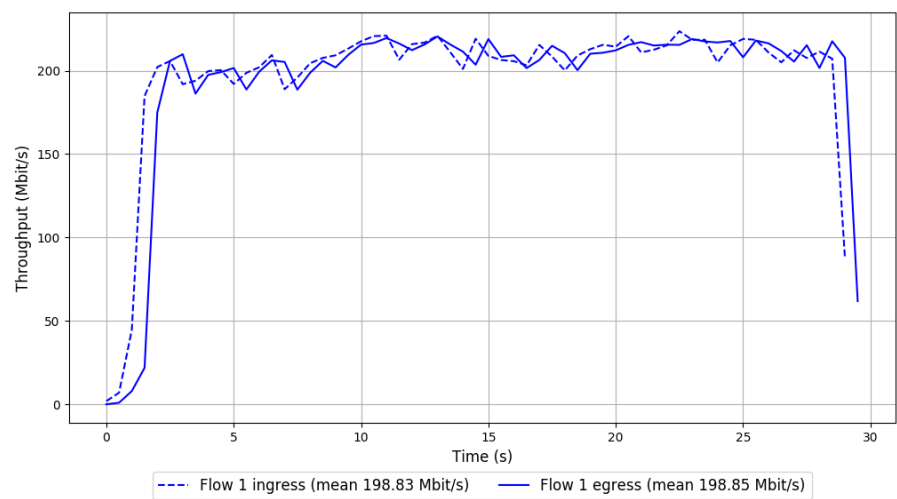
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2018-05-23 06:22:28
End at: 2018-05-23 06:22:58
Local clock offset: -0.631 ms
Remote clock offset: -0.347 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 198.85 Mbit/s
95th percentile per-packet one-way delay: 67.565 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 198.85 Mbit/s
95th percentile per-packet one-way delay: 67.565 ms
Loss rate: 0.43%
```

Run 3: Report of Indigo — Data Link

Flow 1 ingress (mean 198.83 Mbit/s) ——— Flow 1 egress (mean 198.85 Mbit/s)
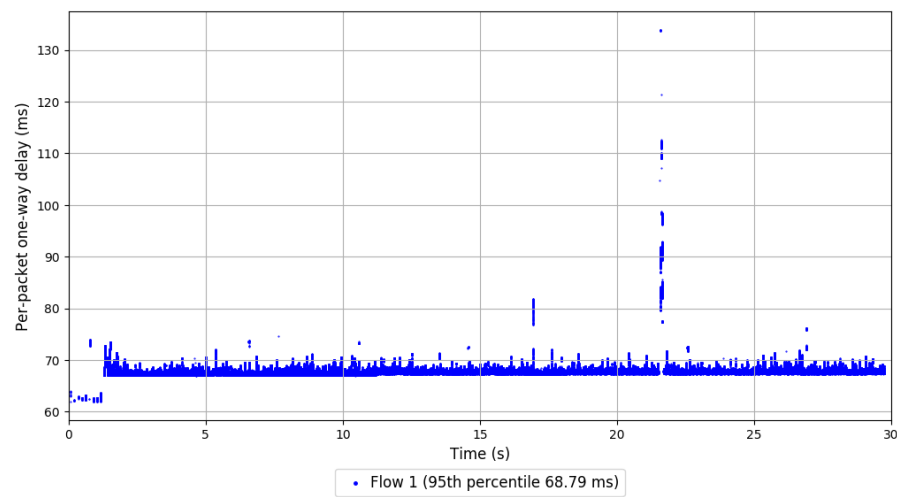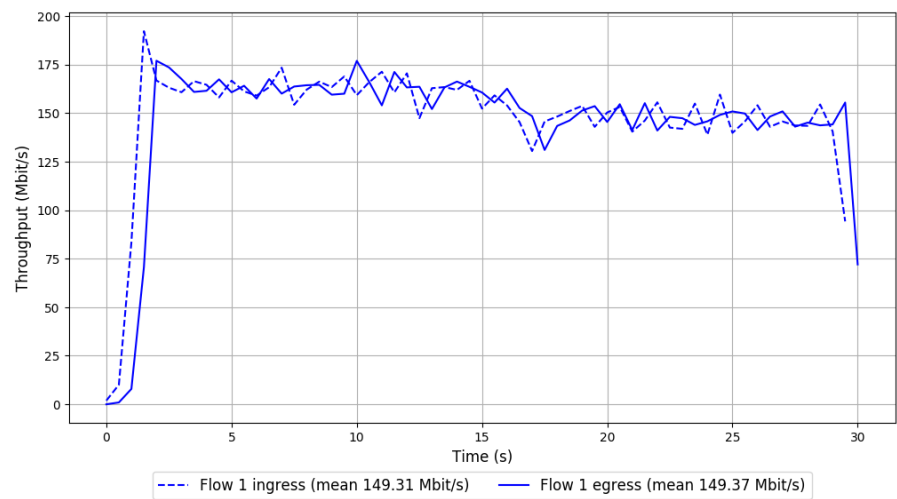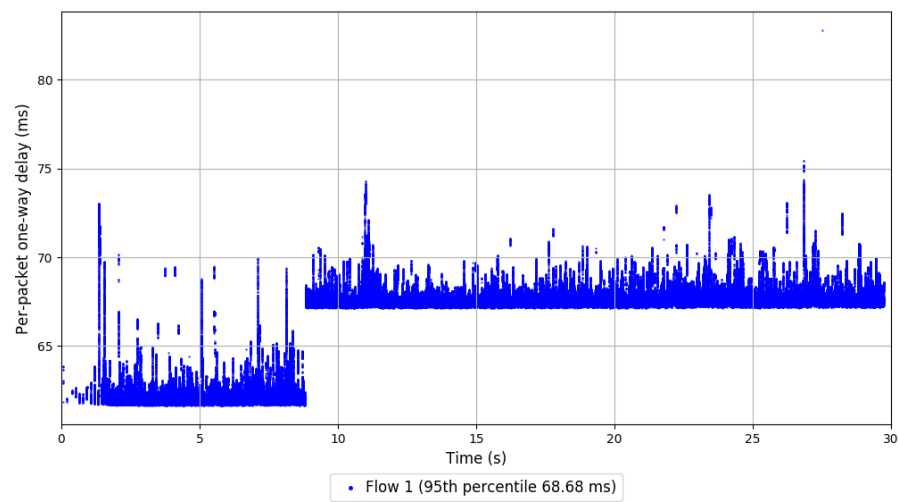

• Flow 1 (95th percentile 67.56 ms)

```
Run 4: Statistics of Indigo

Start at: 2018-05-23 06:42:11
End at: 2018-05-23 06:42:41
Local clock offset: -0.852 ms
Remote clock offset: -0.523 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 149.37 Mbit/s
95th percentile per-packet one-way delay: 68.794 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 149.37 Mbit/s
95th percentile per-packet one-way delay: 68.794 ms
Loss rate: 0.40%
```
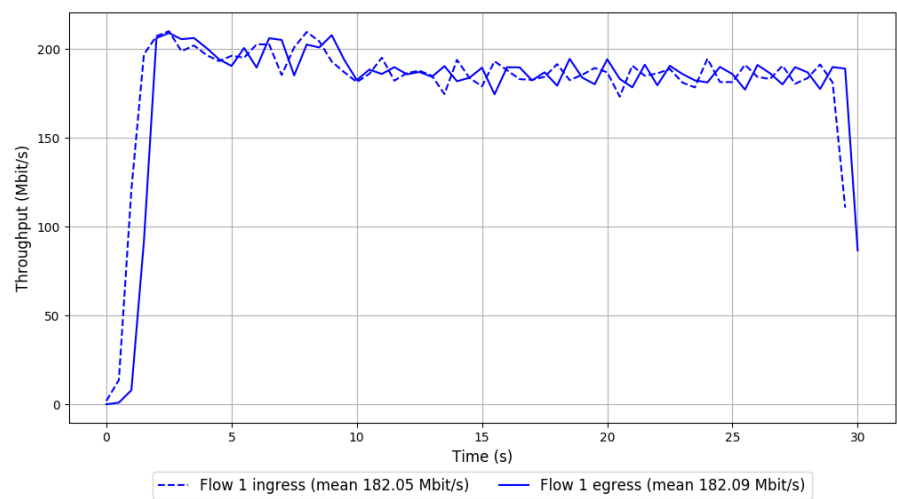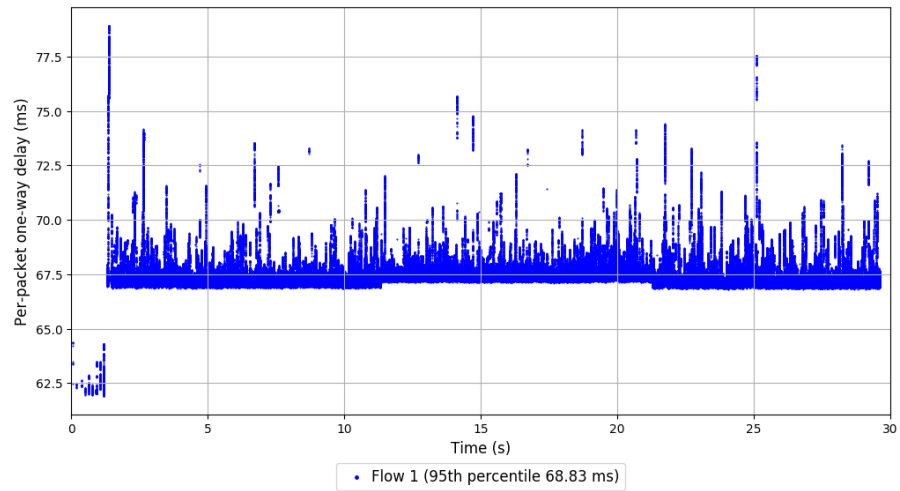
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2018-05-23 07:01:54
End at: 2018-05-23 07:02:24
Local clock offset: -0.981 ms
Remote clock offset: -0.168 ms

# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.09 Mbit/s
95th percentile per-packet one-way delay: 68.677 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 182.09 Mbit/s
95th percentile per-packet one-way delay: 68.677 ms
Loss rate: 0.42%
```

Run 5: Report of Indigo — Data Link

Flow 1 ingress (mean 182.05 Mbit/s) ----   Flow 1 egress (mean 182.09 Mbit/s) ——
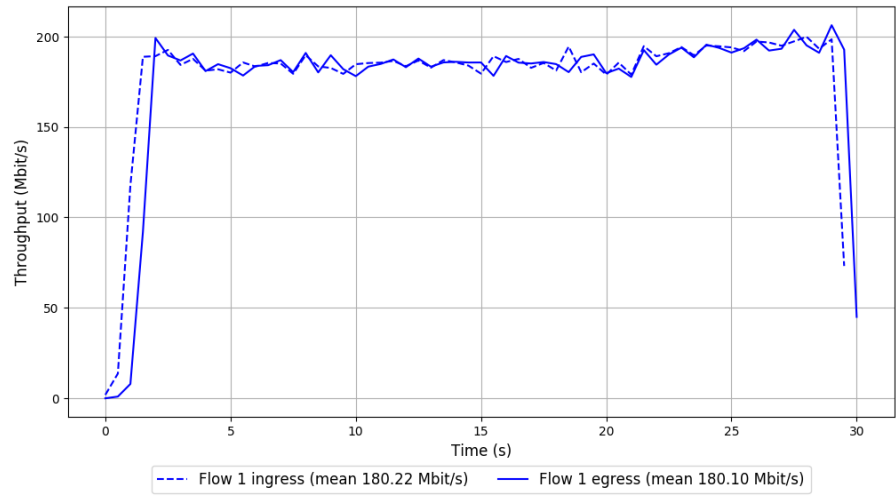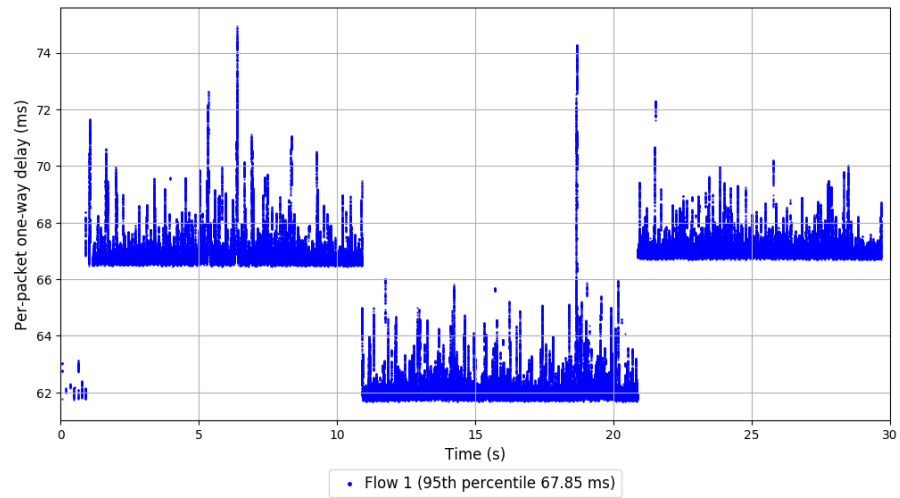

• Flow 1 (95th percentile 68.68 ms)

```
Run 6: Statistics of Indigo

Start at: 2018-05-23 07:21:41
End at: 2018-05-23 07:22:11
Local clock offset: -0.111 ms
Remote clock offset: -0.292 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 180.10 Mbit/s
95th percentile per-packet one-way delay: 68.827 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 180.10 Mbit/s
95th percentile per-packet one-way delay: 68.827 ms
Loss rate: 0.50%
```
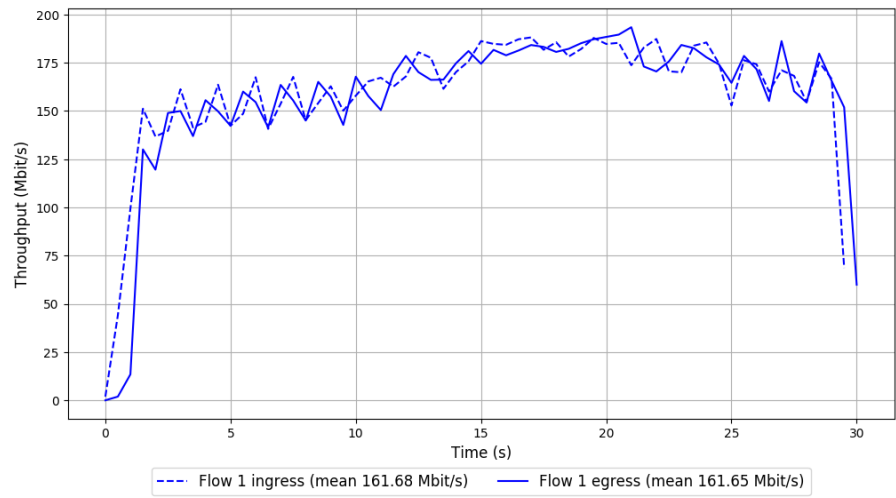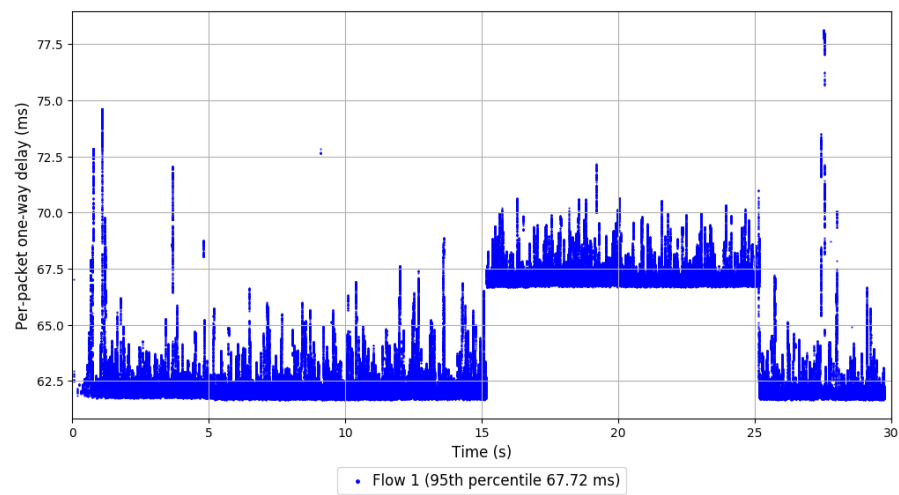
Run 6: Report of Indigo — Data Link

```
Run 7: Statistics of Indigo

Start at: 2018-05-23 07:41:42
End at: 2018-05-23 07:42:12
Local clock offset: 0.373 ms
Remote clock offset: -0.149 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 161.65 Mbit/s
95th percentile per-packet one-way delay: 67.850 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 161.65 Mbit/s
95th percentile per-packet one-way delay: 67.850 ms
Loss rate: 0.45%
```

Run 7: Report of Indigo — Data Link

Flow 1 ingress (mean 161.68 Mbit/s)   Flow 1 egress (mean 161.65 Mbit/s)

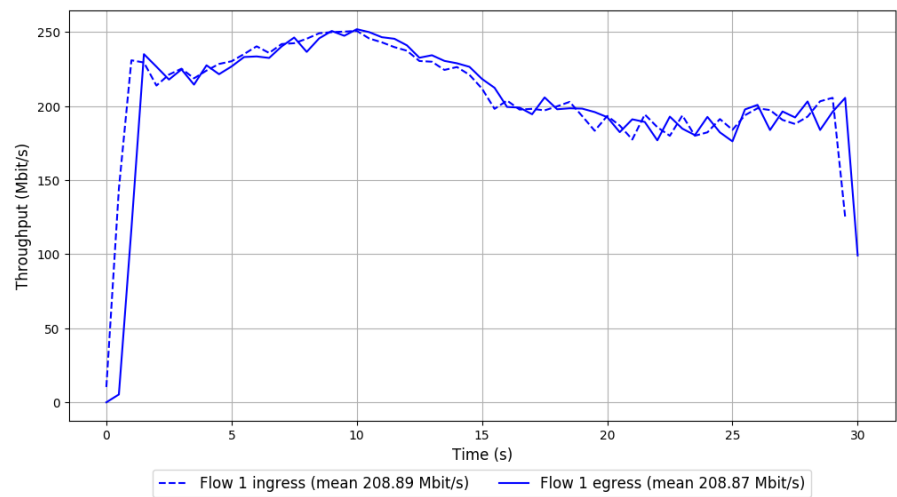Flow 1 (95th percentile 67.85 ms)

```
Run 8: Statistics of Indigo

Start at: 2018-05-23 08:01:27
End at: 2018-05-23 08:01:57
Local clock offset: 0.493 ms
Remote clock offset: -0.079 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 208.87 Mbit/s
95th percentile per-packet one-way delay: 67.721 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 208.87 Mbit/s
95th percentile per-packet one-way delay: 67.721 ms
Loss rate: 0.44%
```
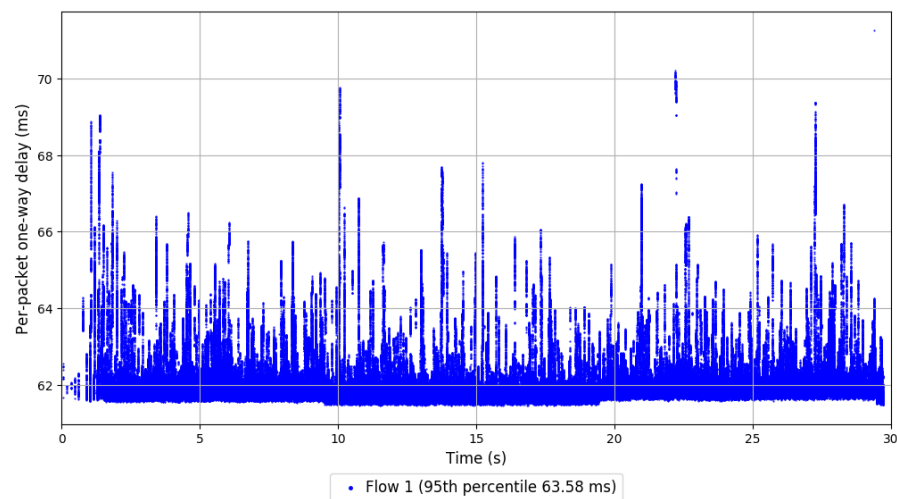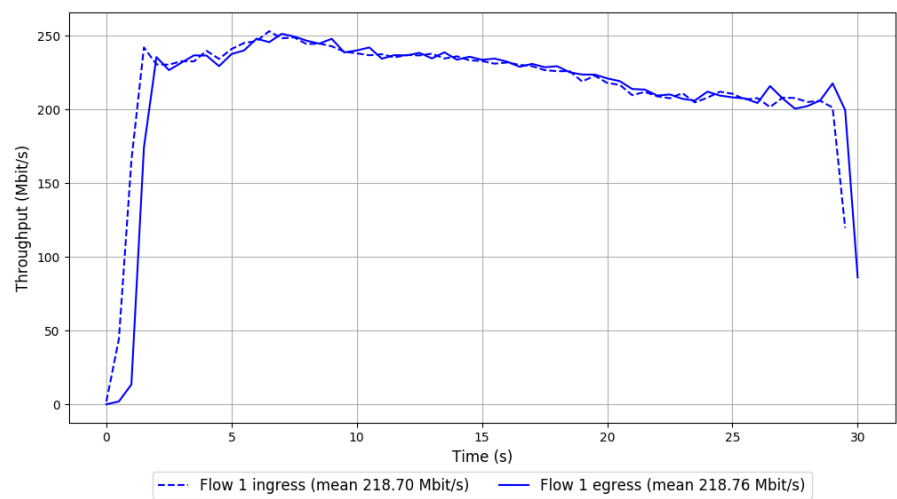
Run 8: Report of Indigo — Data Link

Flow 1 ingress (mean 208.89 Mbit/s) --- Flow 1 egress (mean 208.87 Mbit/s)

Flow 1 (95th percentile 67.72 ms)

```
Run 9: Statistics of Indigo

Start at: 2018-05-23 08:21:33
End at: 2018-05-23 08:22:03
Local clock offset: 0.734 ms
Remote clock offset: 0.151 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.76 Mbit/s
95th percentile per-packet one-way delay: 63.575 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 218.76 Mbit/s
95th percentile per-packet one-way delay: 63.575 ms
Loss rate: 0.41%
```
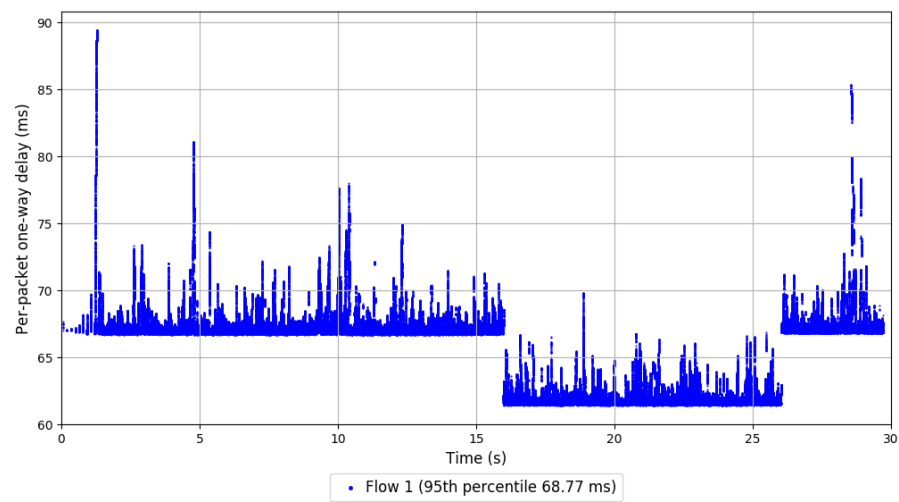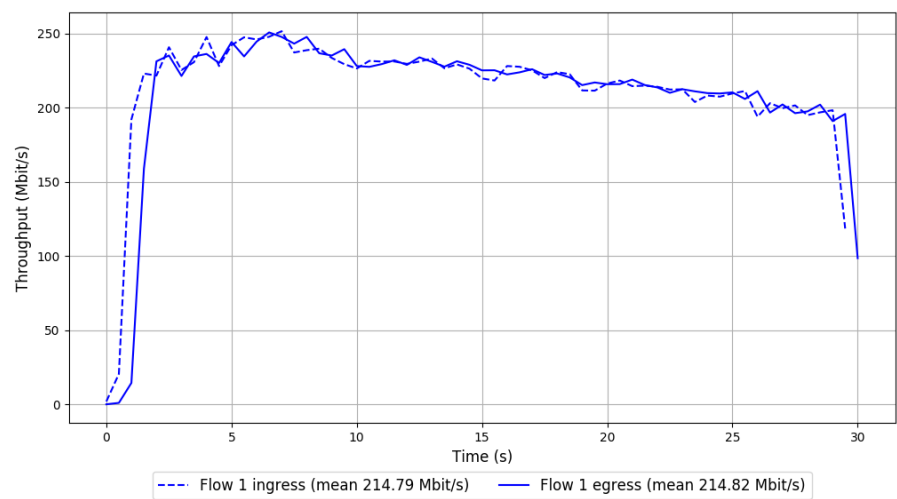
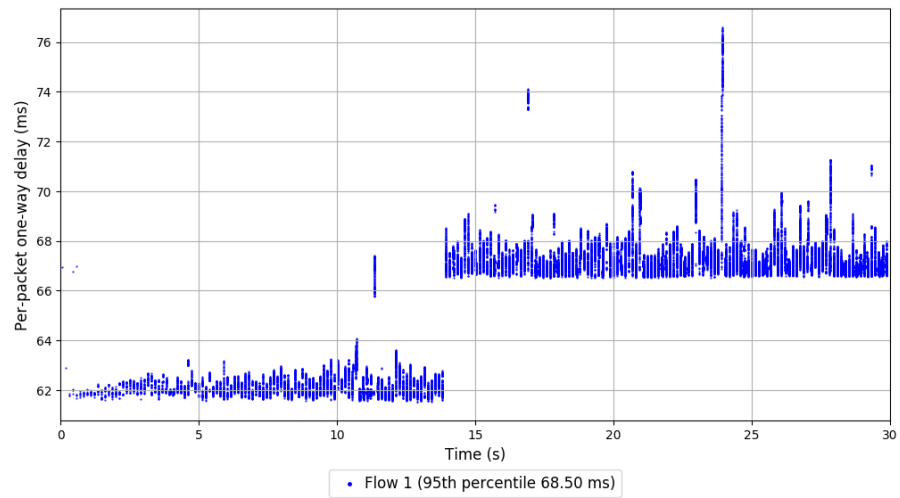Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2018-05-23 08:41:27
End at: 2018-05-23 08:41:57
Local clock offset: 0.972 ms
Remote clock offset: 0.042 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.82 Mbit/s
95th percentile per-packet one-way delay: 68.769 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 214.82 Mbit/s
95th percentile per-packet one-way delay: 68.769 ms
Loss rate: 0.42%
```

Run 10: Report of Indigo — Data Link

Flow 1 ingress (mean 214.79 Mbit/s)   Flow 1 egress (mean 214.82 Mbit/s)

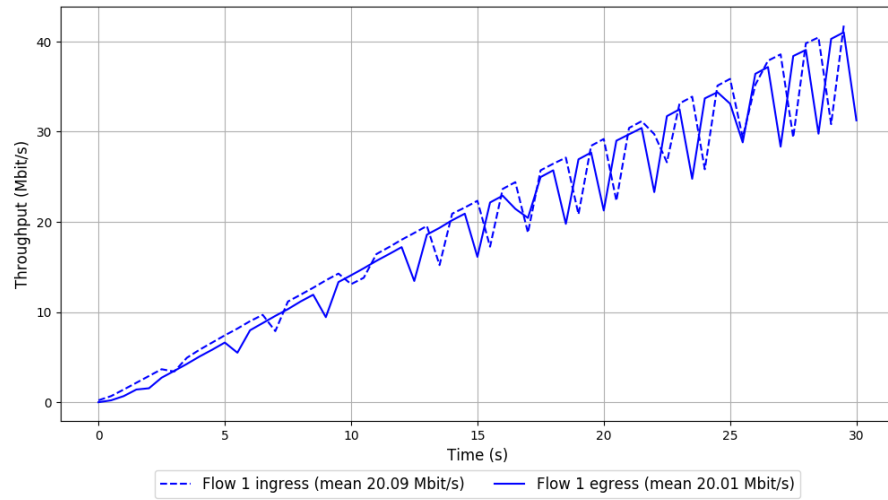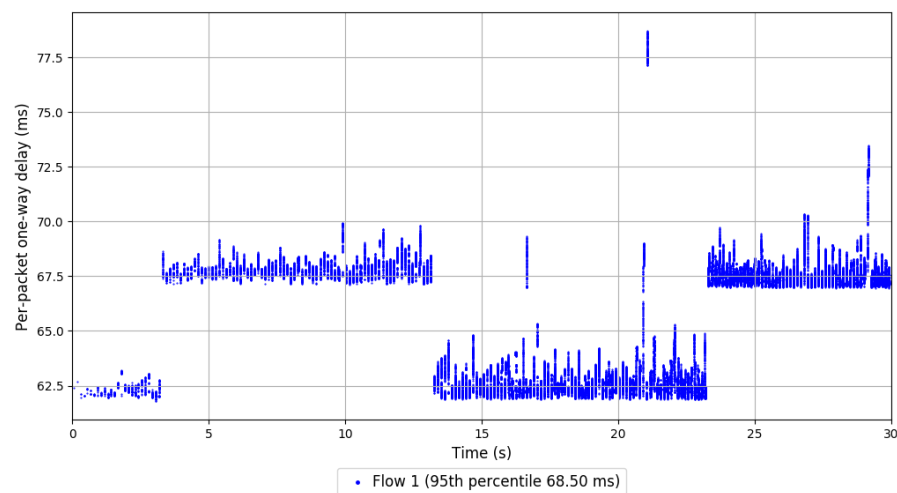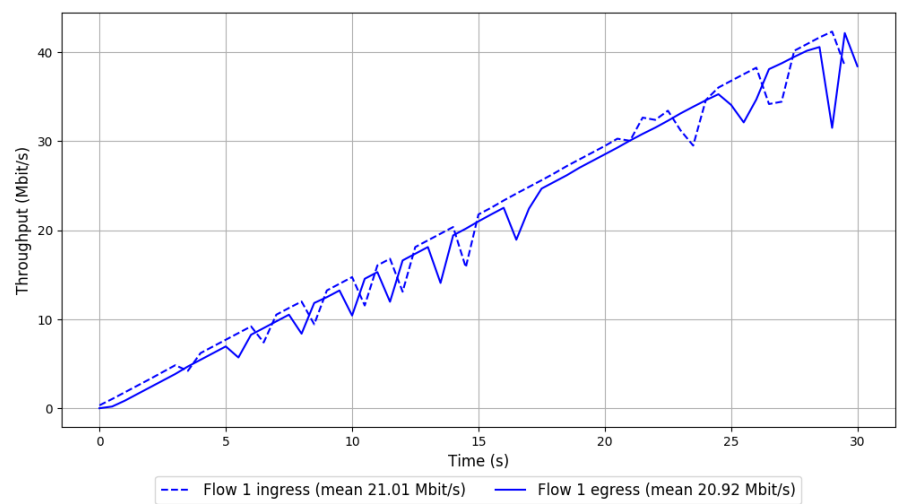• Flow 1 (95th percentile 68.77 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2018-05-23 05:39:29
End at: 2018-05-23 05:39:59
Local clock offset: -0.435 ms
Remote clock offset: -0.144 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.01 Mbit/s
95th percentile per-packet one-way delay: 68.501 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 20.01 Mbit/s
95th percentile per-packet one-way delay: 68.501 ms
Loss rate: 0.87%
```

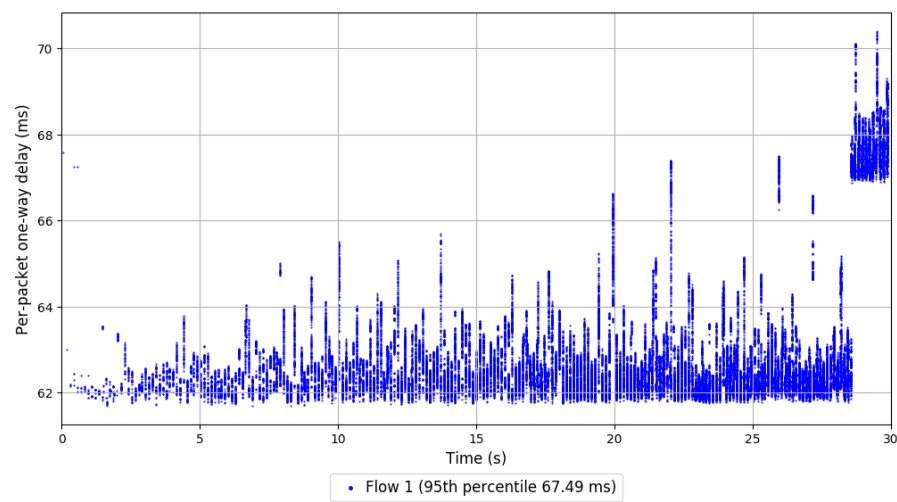Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-05-23 05:59:09
End at: 2018-05-23 05:59:40
Local clock offset: -0.474 ms
Remote clock offset: -0.373 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.92 Mbit/s
95th percentile per-packet one-way delay: 68.495 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 20.92 Mbit/s
95th percentile per-packet one-way delay: 68.495 ms
Loss rate: 0.85%
```

Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 21.01 Mbit/s) --- Flow 1 egress (mean 20.92 Mbit/s)

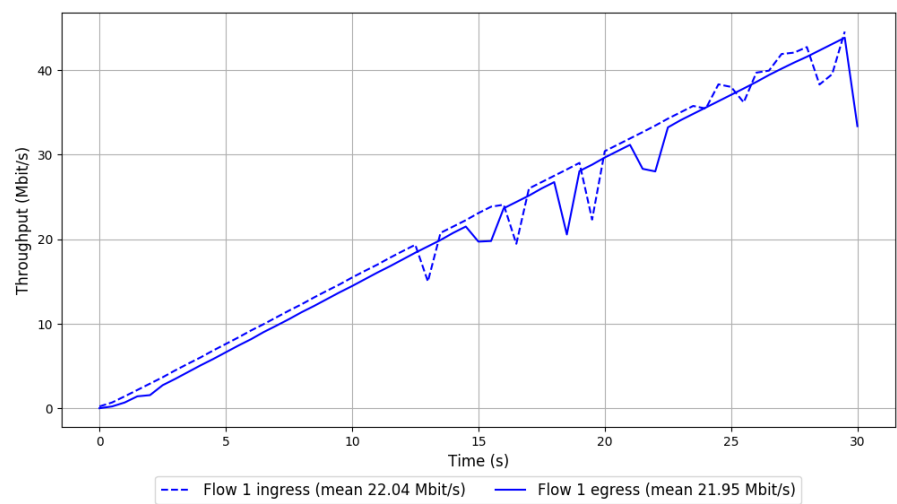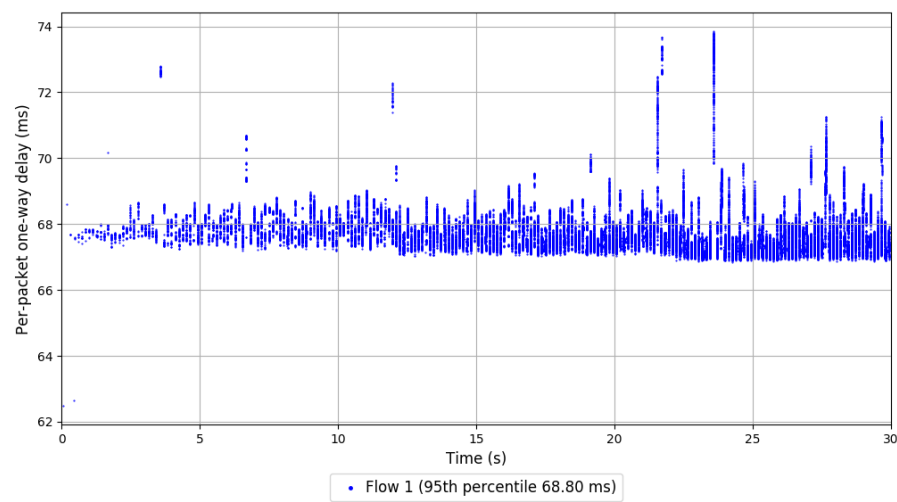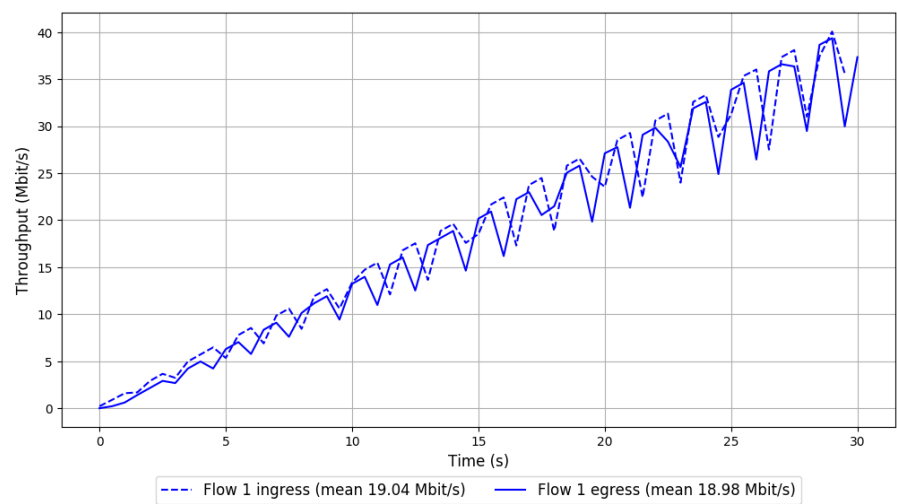Flow 1 (95th percentile 68.50 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2018-05-23 06:19:04
End at: 2018-05-23 06:19:34
Local clock offset: -0.688 ms
Remote clock offset: -0.302 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.95 Mbit/s
95th percentile per-packet one-way delay: 67.493 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 21.95 Mbit/s
95th percentile per-packet one-way delay: 67.493 ms
Loss rate: 0.85%
```

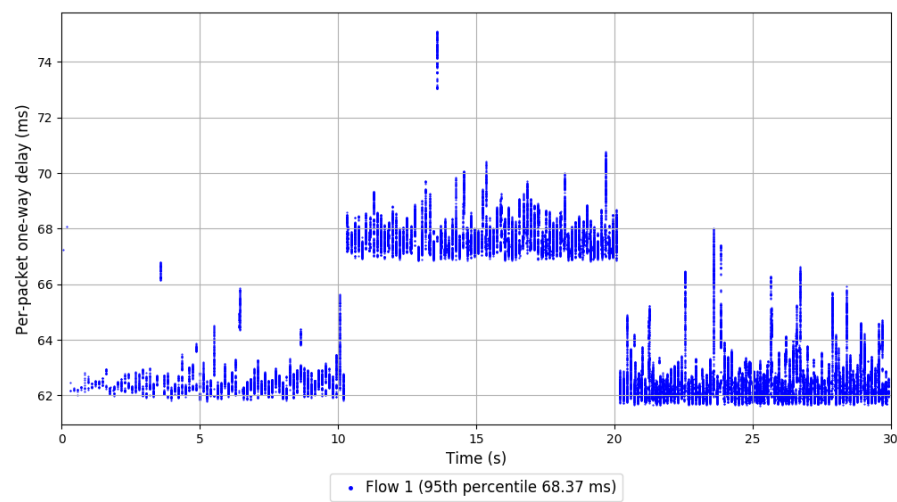Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2018-05-23 06:38:51
End at: 2018-05-23 06:39:21
Local clock offset: -0.819 ms
Remote clock offset: -0.428 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.98 Mbit/s
95th percentile per-packet one-way delay: 68.801 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 18.98 Mbit/s
95th percentile per-packet one-way delay: 68.801 ms
Loss rate: 0.73%
```

Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 19.04 Mbit/s) --- Flow 1 egress (mean 18.98 Mbit/s)

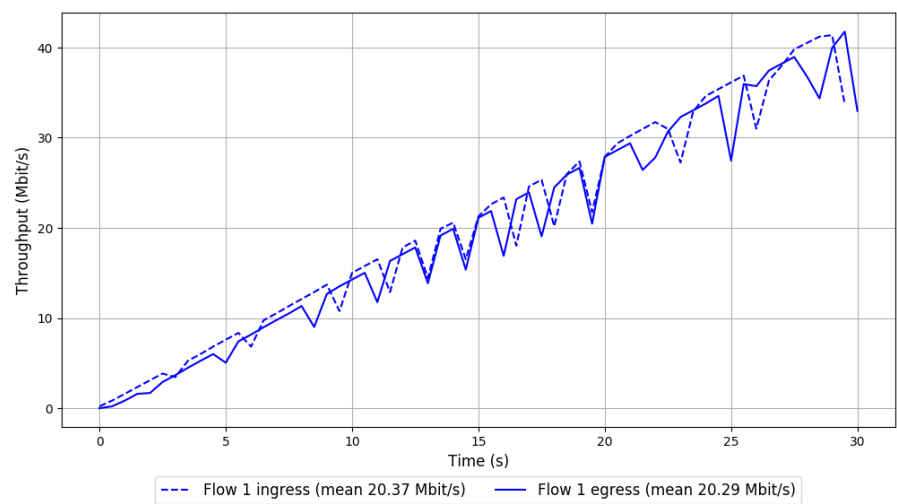• Flow 1 (95th percentile 68.80 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2018-05-23 06:58:33
End at: 2018-05-23 06:59:03
Local clock offset: -0.975 ms
Remote clock offset: -0.141 ms

# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.29 Mbit/s
95th percentile per-packet one-way delay: 68.370 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 20.29 Mbit/s
95th percentile per-packet one-way delay: 68.370 ms
Loss rate: 0.88%
```
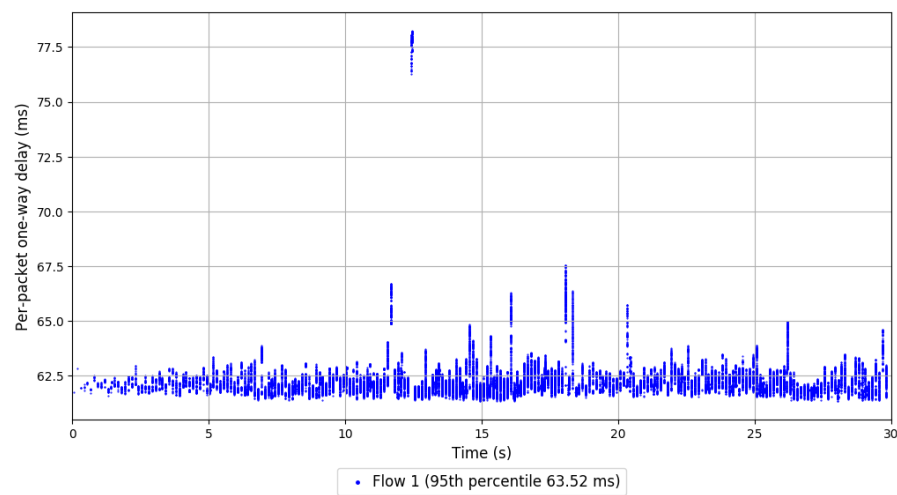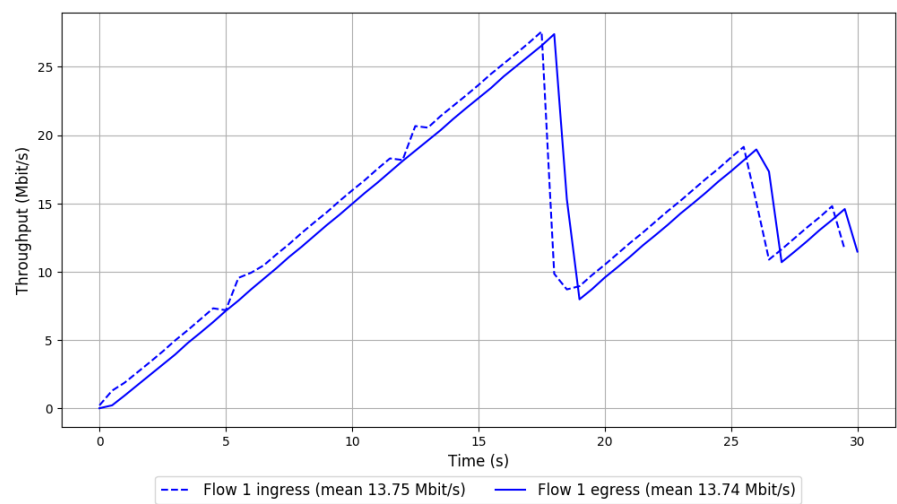
Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 20.37 Mbit/s) --- Flow 1 egress (mean 20.29 Mbit/s)

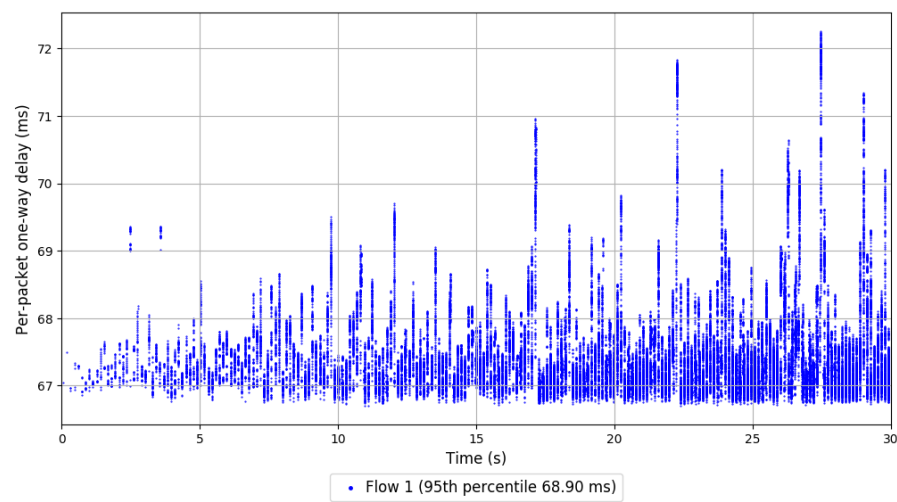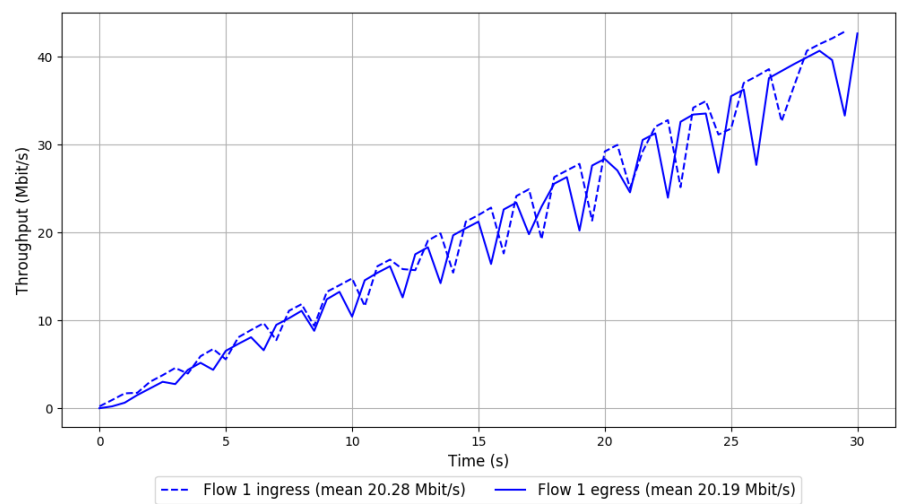Flow 1 (95th percentile 68.37 ms)

```
Run 6: Statistics of LEDBAT

Start at: 2018-05-23 07:18:16
End at: 2018-05-23 07:18:46
Local clock offset: -0.222 ms
Remote clock offset: 0.117 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.74 Mbit/s
95th percentile per-packet one-way delay: 63.519 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 13.74 Mbit/s
95th percentile per-packet one-way delay: 63.519 ms
Loss rate: 0.49%
```

Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 13.75 Mbit/s) Flow 1 egress (mean 13.74 Mbit/s)

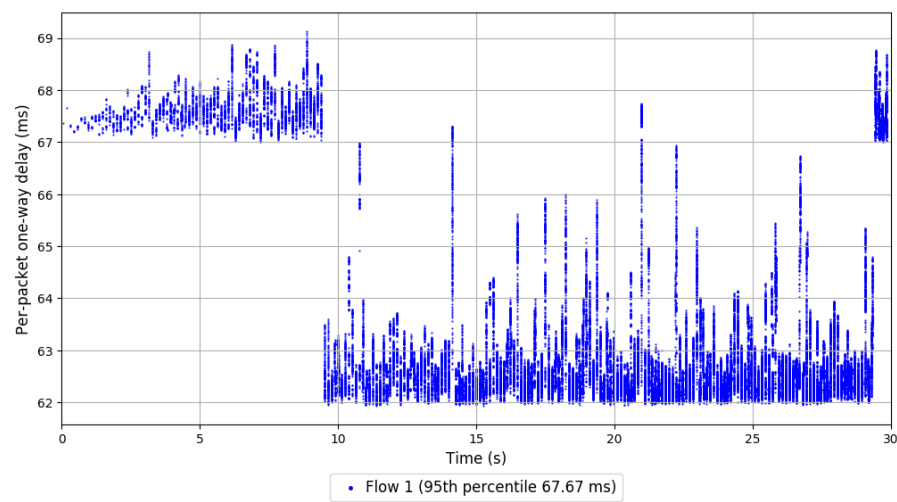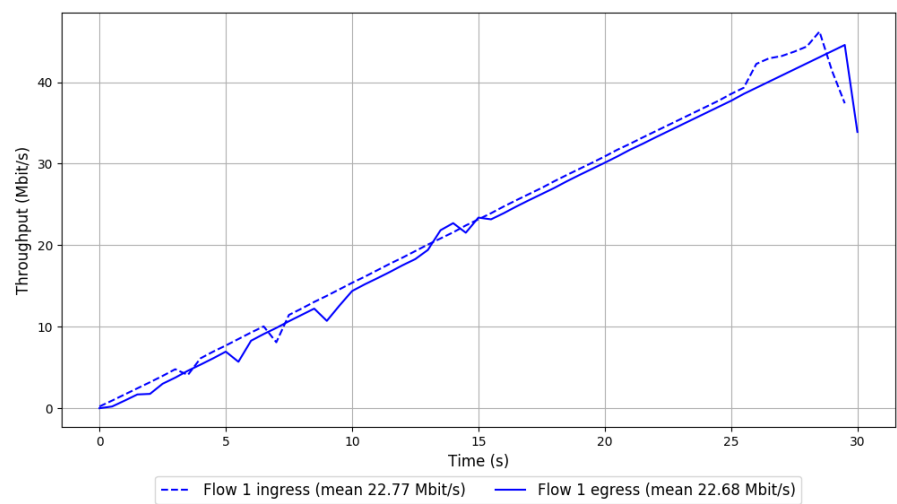Flow 1 (95th percentile 63.52 ms)

```
Run 7: Statistics of LEDBAT

Start at: 2018-05-23 07:38:21
End at: 2018-05-23 07:38:51
Local clock offset: 0.277 ms
Remote clock offset: -0.216 ms

# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.19 Mbit/s
95th percentile per-packet one-way delay: 68.898 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 20.19 Mbit/s
95th percentile per-packet one-way delay: 68.898 ms
Loss rate: 0.89%
```

Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 20.28 Mbit/s)   —— Flow 1 egress (mean 20.19 Mbit/s)

• Flow 1 (95th percentile 68.90 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2018-05-23 07:58:03
End at: 2018-05-23 07:58:33
Local clock offset: 0.558 ms
Remote clock offset: -0.295 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.68 Mbit/s
95th percentile per-packet one-way delay: 67.674 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 22.68 Mbit/s
95th percentile per-packet one-way delay: 67.674 ms
Loss rate: 0.84%
```
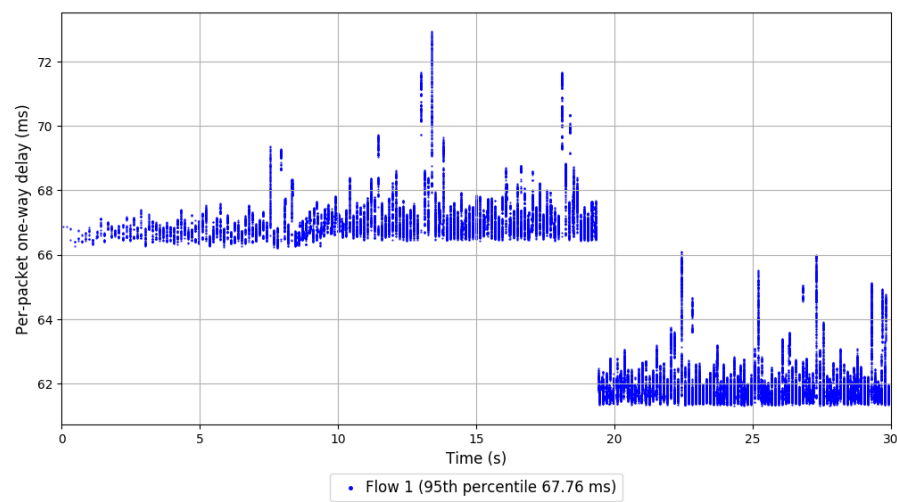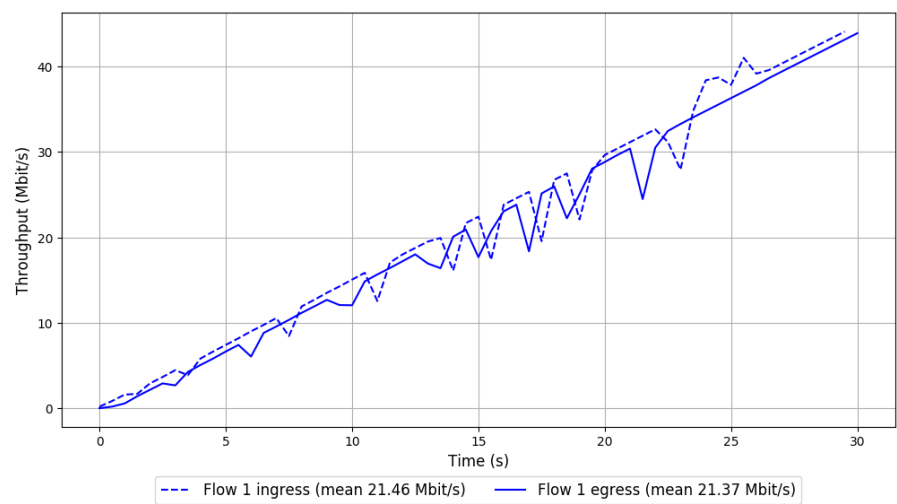
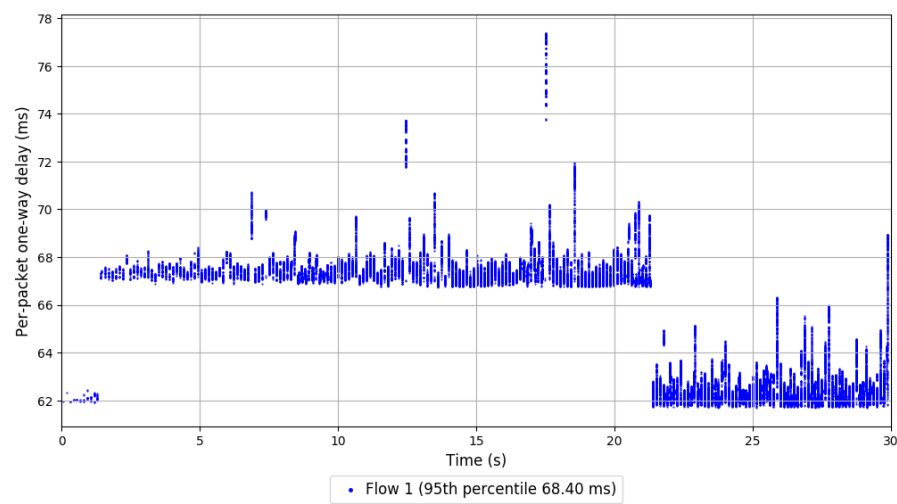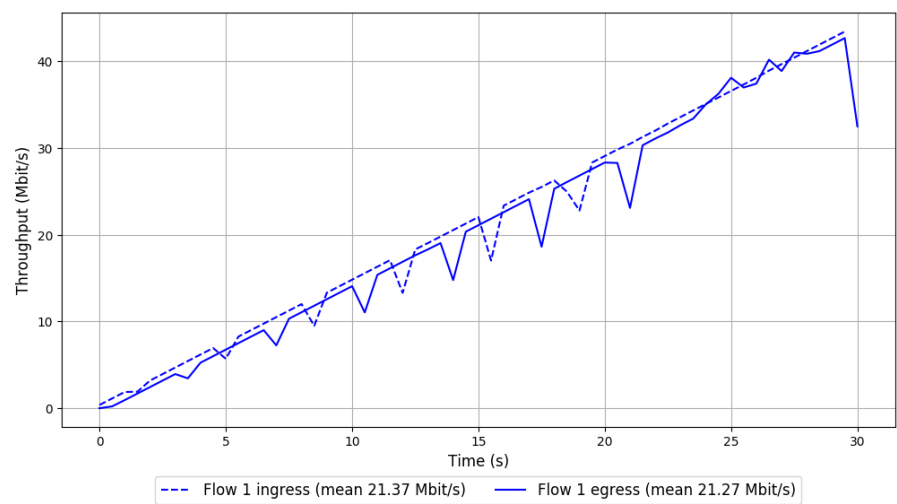Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2018-05-23 08:18:03
End at: 2018-05-23 08:18:33
Local clock offset: 0.794 ms
Remote clock offset: 0.391 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.37 Mbit/s
95th percentile per-packet one-way delay: 67.764 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 21.37 Mbit/s
95th percentile per-packet one-way delay: 67.764 ms
Loss rate: 0.86%
```

Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 21.46 Mbit/s)   Flow 1 egress (mean 21.37 Mbit/s)

Flow 1 (95th percentile 67.76 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2018-05-23 08:38:01
End at: 2018-05-23 08:38:31
Local clock offset: 0.925 ms
Remote clock offset: -0.054 ms


# Below is generated by plot.py at 2018-05-23 09:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.27 Mbit/s
95th percentile per-packet one-way delay: 68.400 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 21.27 Mbit/s
95th percentile per-packet one-way delay: 68.400 ms
Loss rate: 0.85%
```
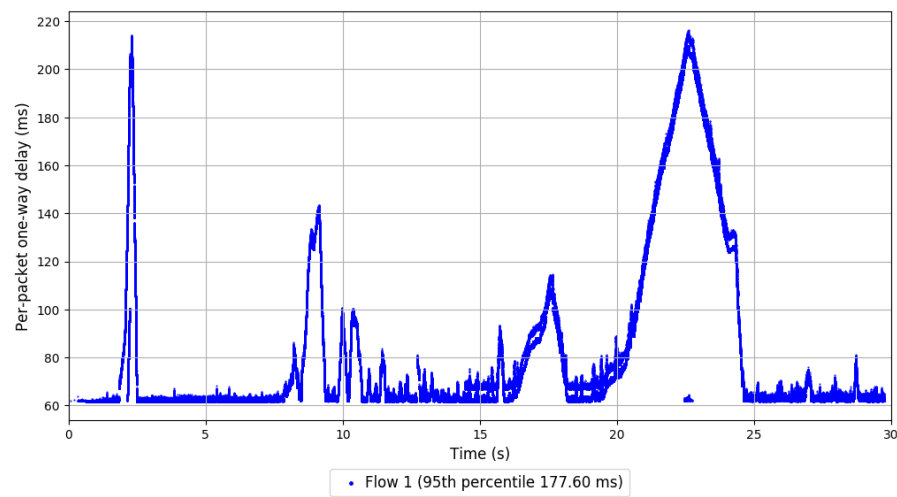
Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-05-23 05:45:18
End at: 2018-05-23 05:45:48
Local clock offset: -0.452 ms
Remote clock offset: -0.198 ms


# Below is generated by plot.py at 2018-05-23 09:39:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 428.44 Mbit/s
95th percentile per-packet one-way delay: 177.602 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 428.44 Mbit/s
95th percentile per-packet one-way delay: 177.602 ms
Loss rate: 0.70%
```
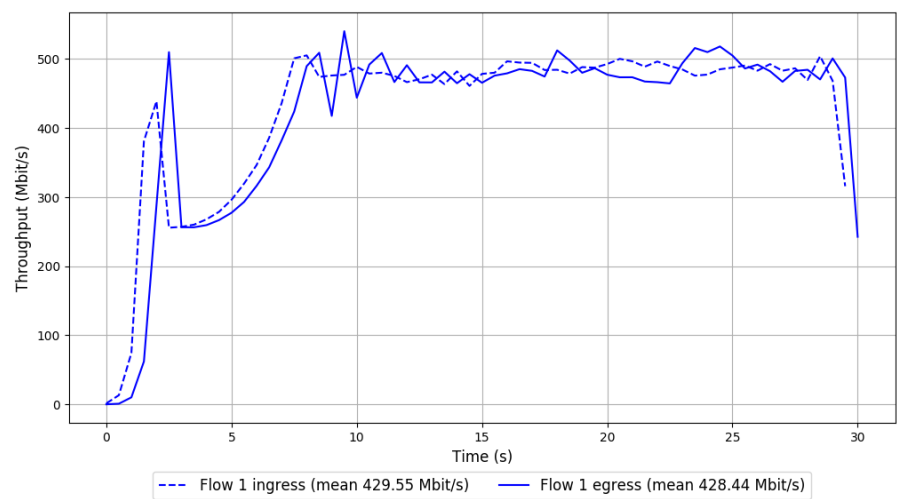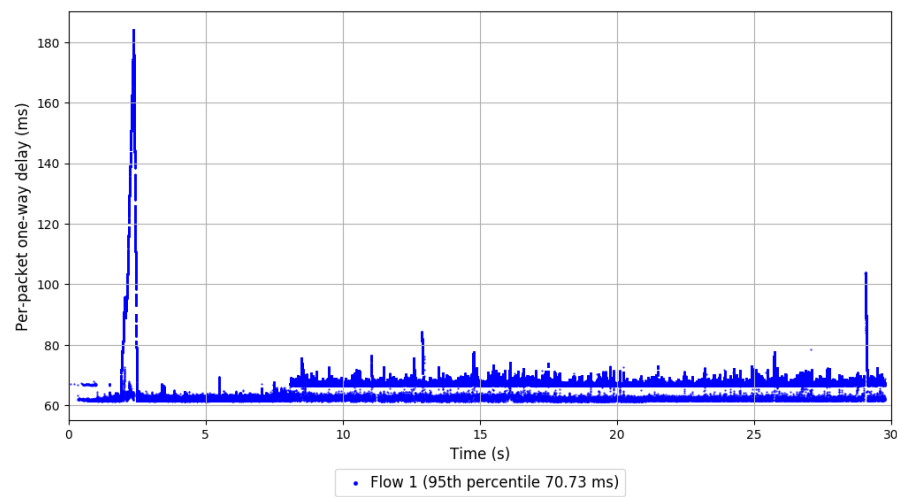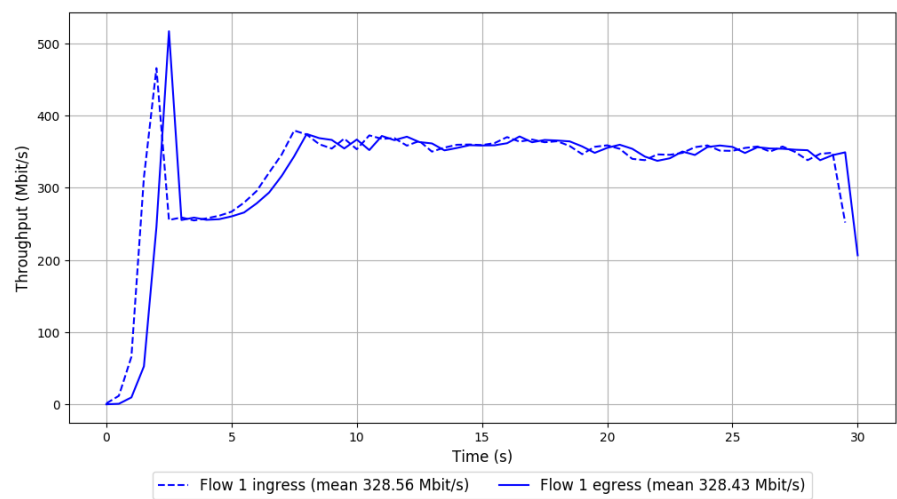
Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 429.55 Mbit/s) — Flow 1 egress (mean 428.44 Mbit/s)

• Flow 1 (95th percentile 177.60 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-05-23 06:05:15
End at: 2018-05-23 06:05:45
Local clock offset: -0.514 ms
Remote clock offset: 0.152 ms


# Below is generated by plot.py at 2018-05-23 09:39:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 328.43 Mbit/s
95th percentile per-packet one-way delay: 70.732 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 328.43 Mbit/s
95th percentile per-packet one-way delay: 70.732 ms
Loss rate: 0.49%
```
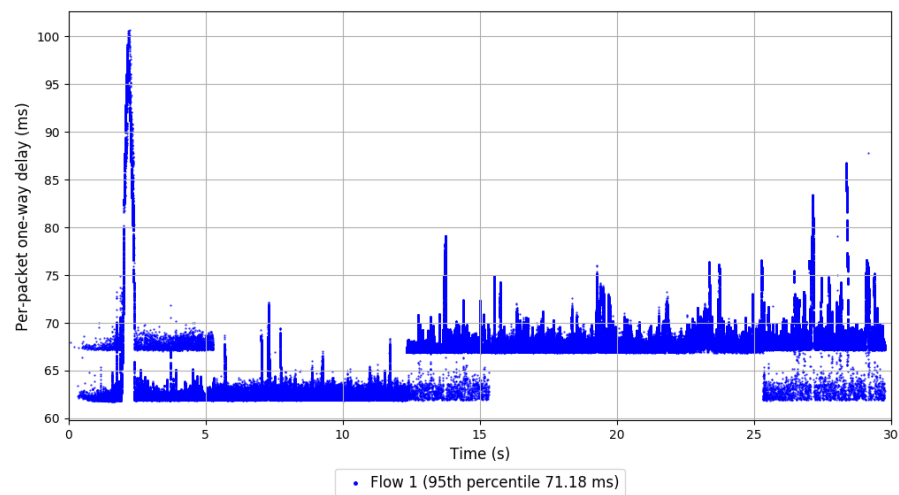
Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-05-23 06:25:00
End at: 2018-05-23 06:25:30
Local clock offset: -0.742 ms
Remote clock offset: -0.382 ms


# Below is generated by plot.py at 2018-05-23 09:39:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 319.79 Mbit/s
95th percentile per-packet one-way delay: 71.180 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 319.79 Mbit/s
95th percentile per-packet one-way delay: 71.180 ms
Loss rate: 0.53%
```
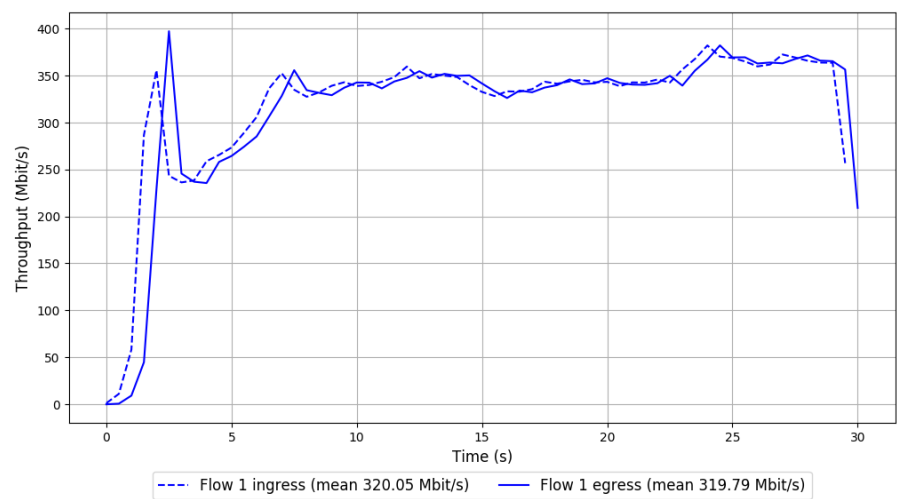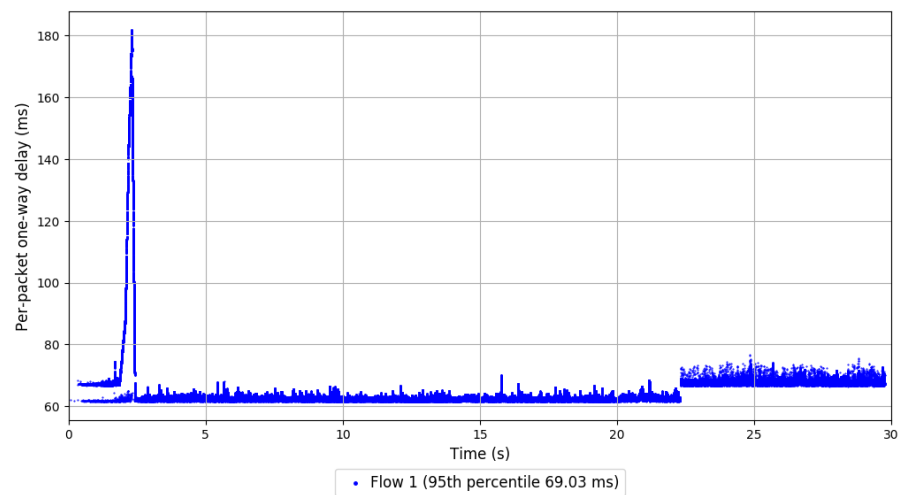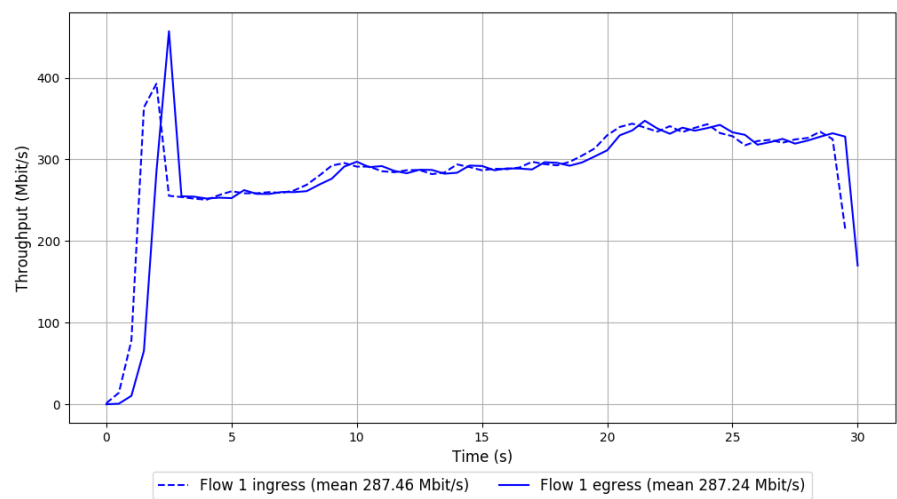
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 320.05 Mbit/s)   Flow 1 egress (mean 319.79 Mbit/s)

Flow 1 (95th percentile 71.18 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-05-23 06:44:40
End at: 2018-05-23 06:45:10
Local clock offset: -0.846 ms
Remote clock offset: -0.198 ms


# Below is generated by plot.py at 2018-05-23 09:39:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 287.24 Mbit/s
95th percentile per-packet one-way delay: 69.033 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 287.24 Mbit/s
95th percentile per-packet one-way delay: 69.033 ms
Loss rate: 0.51%
```
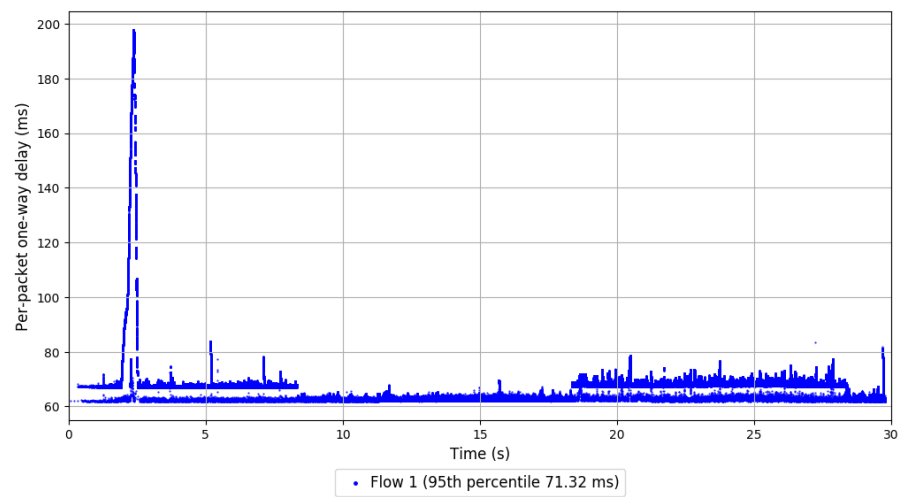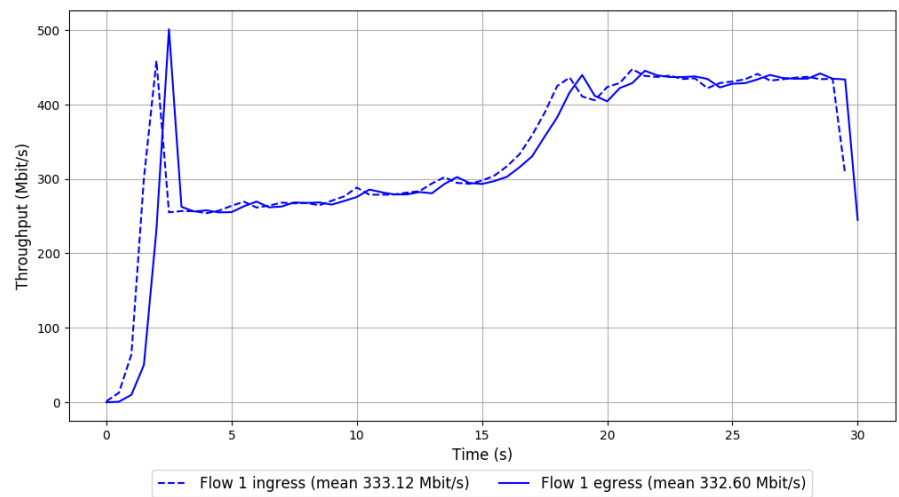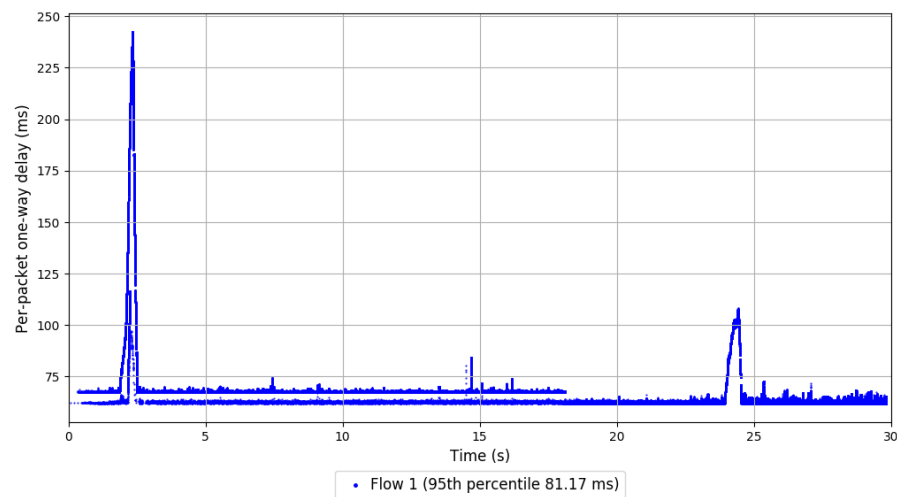
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 287.46 Mbit/s)   Flow 1 egress (mean 287.24 Mbit/s)

Flow 1 (95th percentile 69.03 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-05-23 07:04:24
End at: 2018-05-23 07:04:54
Local clock offset: -1.023 ms
Remote clock offset: -0.298 ms


# Below is generated by plot.py at 2018-05-23 09:39:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 332.60 Mbit/s
95th percentile per-packet one-way delay: 71.320 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 332.60 Mbit/s
95th percentile per-packet one-way delay: 71.320 ms
Loss rate: 0.60%
```
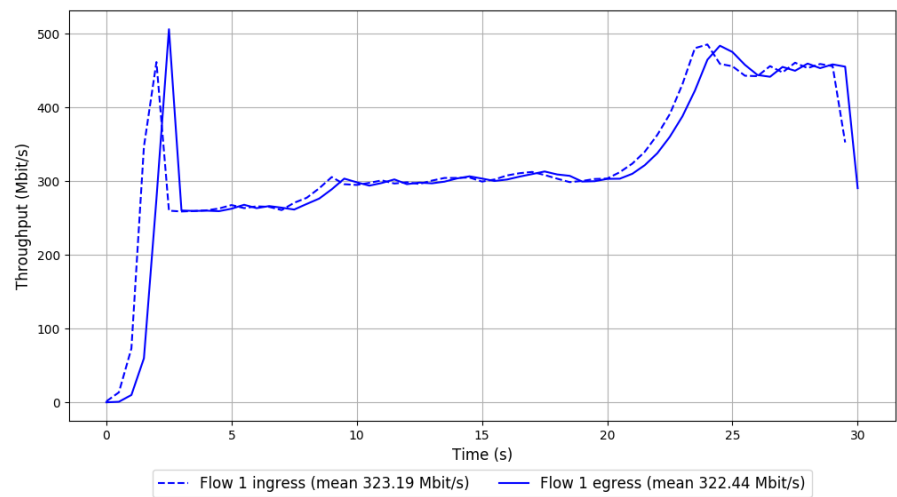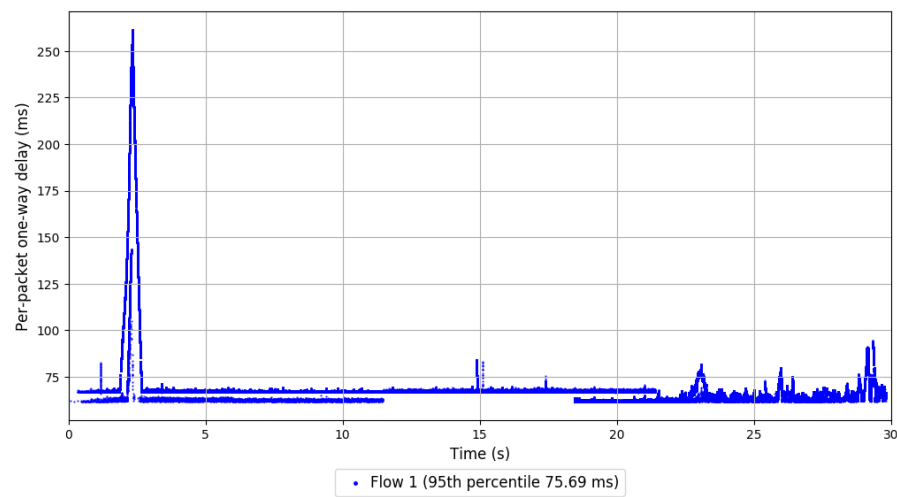
Run 5: Report of PCC-Allegro — Data Link

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-05-23 07:24:15
End at: 2018-05-23 07:24:45
Local clock offset: -0.044 ms
Remote clock offset: -0.299 ms


# Below is generated by plot.py at 2018-05-23 09:39:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 322.44 Mbit/s
95th percentile per-packet one-way delay: 81.173 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 322.44 Mbit/s
95th percentile per-packet one-way delay: 81.173 ms
Loss rate: 0.66%
```

Run 6: Report of PCC-Allegro — Data Link

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-05-23 07:44:14
End at: 2018-05-23 07:44:44
Local clock offset: 0.367 ms
Remote clock offset: -0.348 ms


# Below is generated by plot.py at 2018-05-23 09:44:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 340.03 Mbit/s
95th percentile per-packet one-way delay: 75.695 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 340.03 Mbit/s
95th percentile per-packet one-way delay: 75.695 ms
Loss rate: 0.68%
```
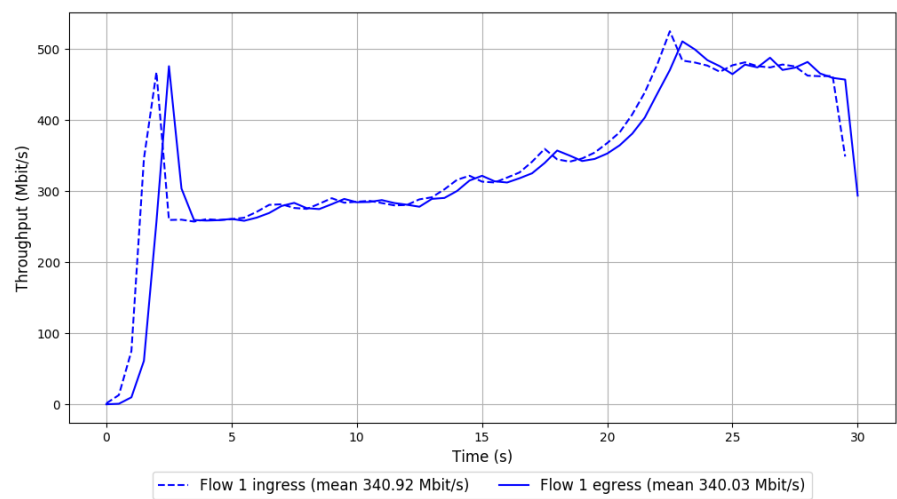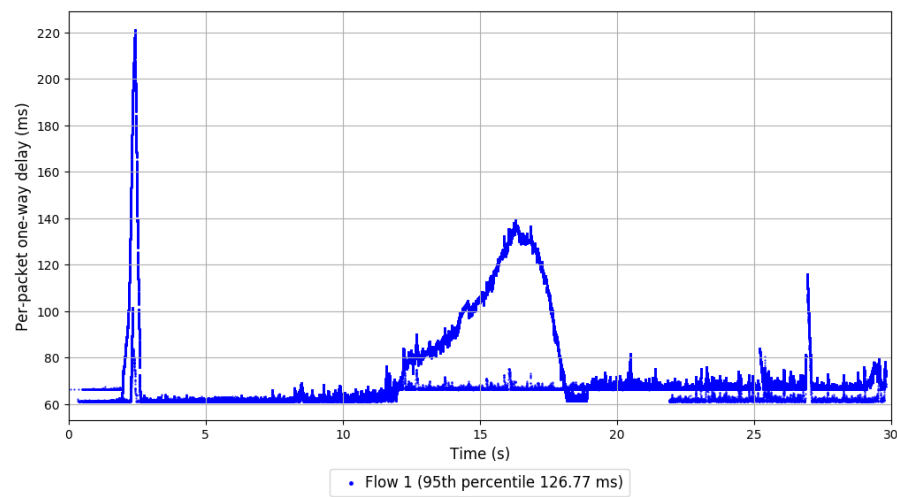
Run 7: Report of PCC-Allegro — Data Link

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-05-23 08:04:04
End at: 2018-05-23 08:04:34
Local clock offset: 0.584 ms
Remote clock offset: 0.298 ms


# Below is generated by plot.py at 2018-05-23 09:46:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 433.12 Mbit/s
95th percentile per-packet one-way delay: 126.765 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 433.12 Mbit/s
95th percentile per-packet one-way delay: 126.765 ms
Loss rate: 0.59%
```
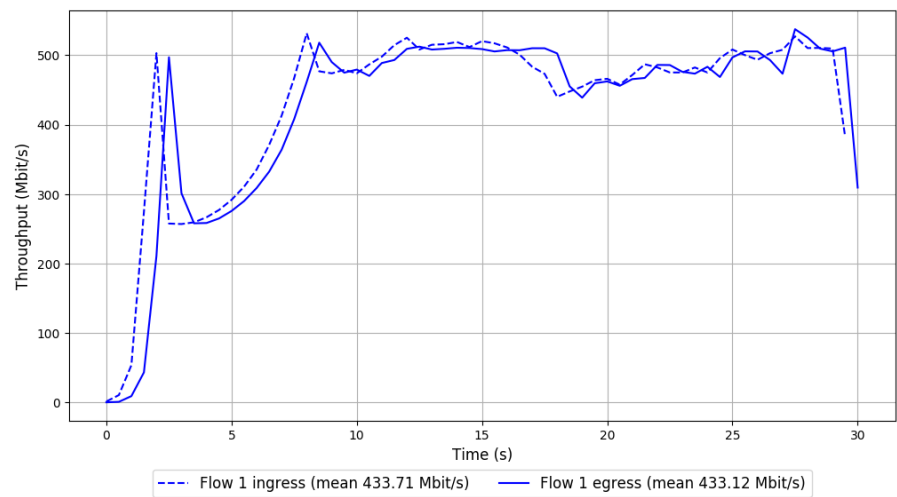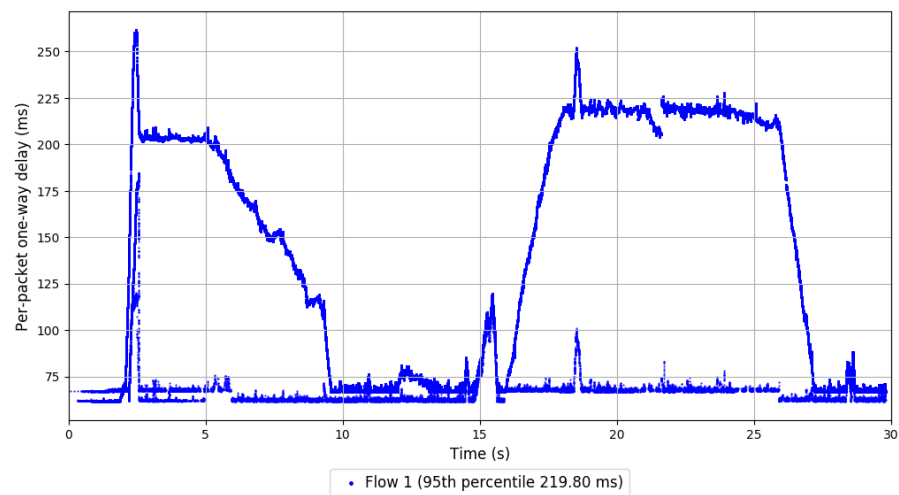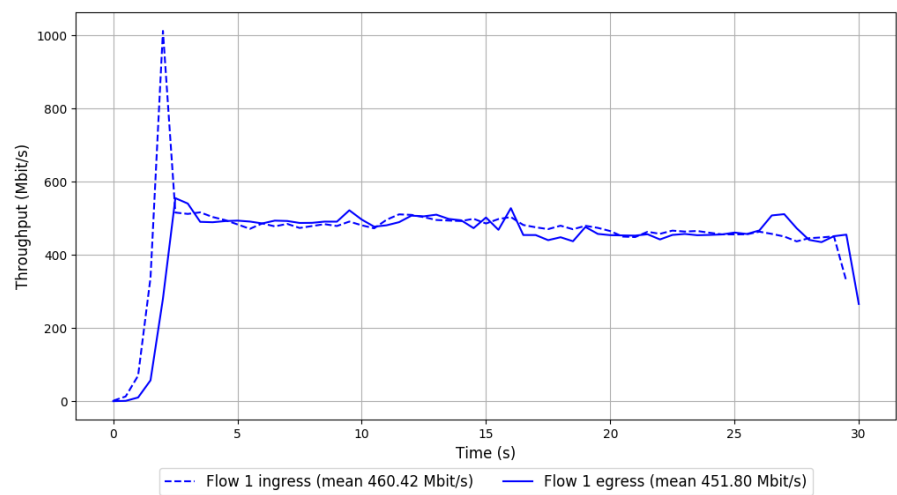
Run 8: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 433.71 Mbit/s)   Flow 1 egress (mean 433.12 Mbit/s)

Flow 1 (95th percentile 126.77 ms)

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-05-23 08:24:07
End at: 2018-05-23 08:24:37
Local clock offset: 0.879 ms
Remote clock offset: 0.143 ms


# Below is generated by plot.py at 2018-05-23 09:47:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 451.80 Mbit/s
95th percentile per-packet one-way delay: 219.802 ms
Loss rate: 2.31%
-- Flow 1:
Average throughput: 451.80 Mbit/s
95th percentile per-packet one-way delay: 219.802 ms
Loss rate: 2.31%
```
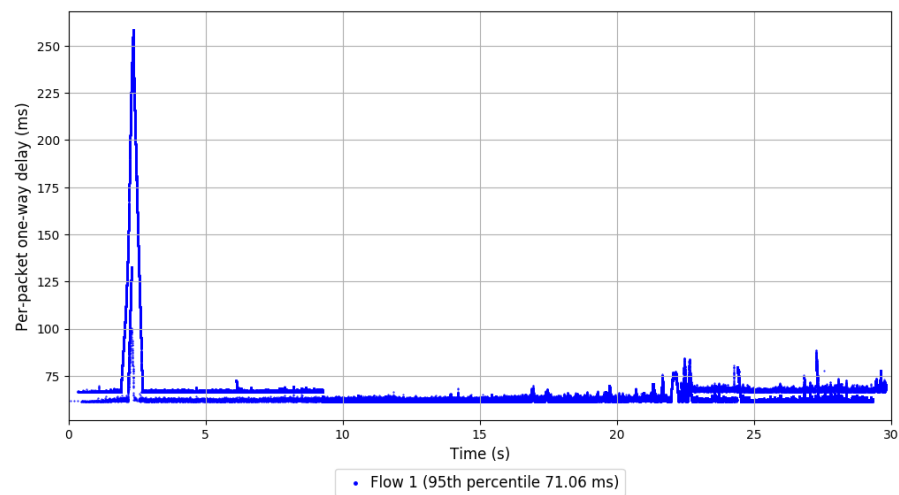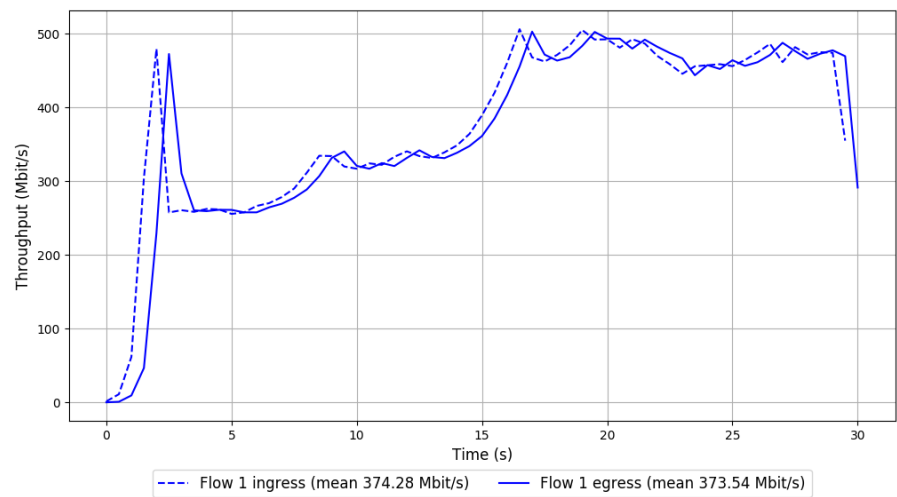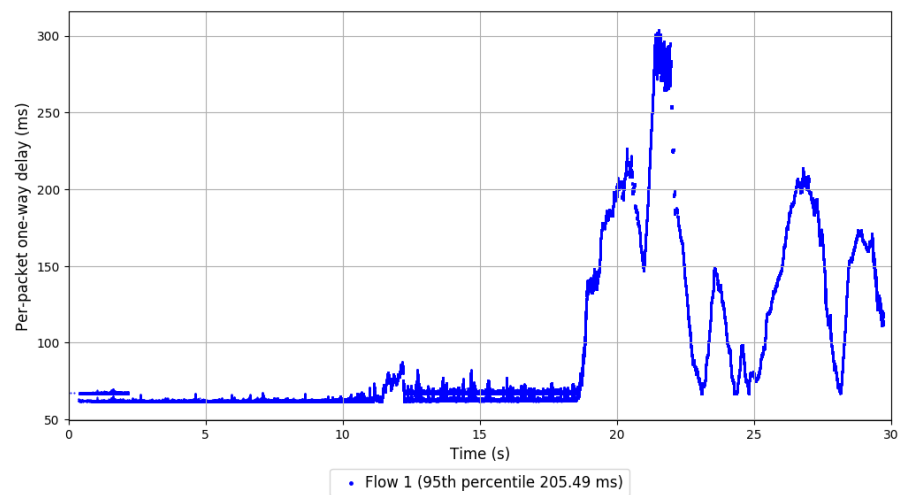
Run 9: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 460.42 Mbit/s) ----   Flow 1 egress (mean 451.80 Mbit/s) ——

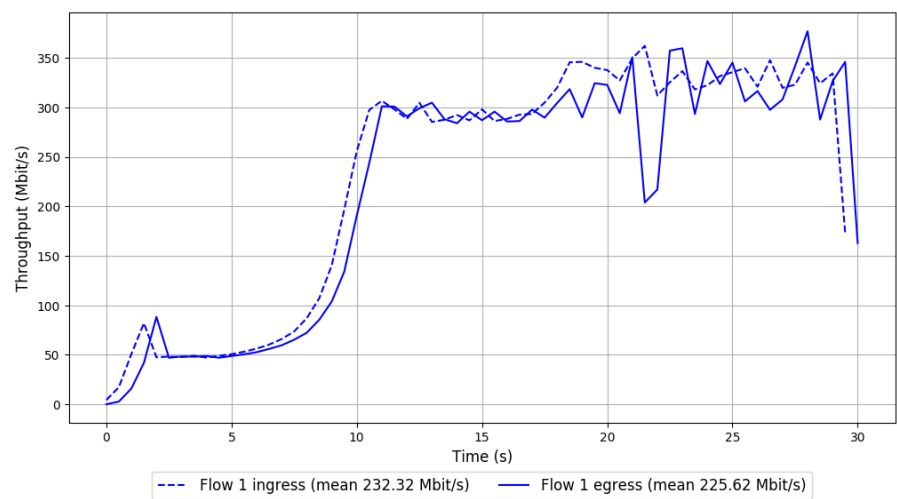· Flow 1 (95th percentile 219.80 ms)

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-05-23 08:44:03
End at: 2018-05-23 08:44:33
Local clock offset: 0.977 ms
Remote clock offset: 0.274 ms


# Below is generated by plot.py at 2018-05-23 09:47:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 373.54 Mbit/s
95th percentile per-packet one-way delay: 71.060 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 373.54 Mbit/s
95th percentile per-packet one-way delay: 71.060 ms
Loss rate: 0.61%
```
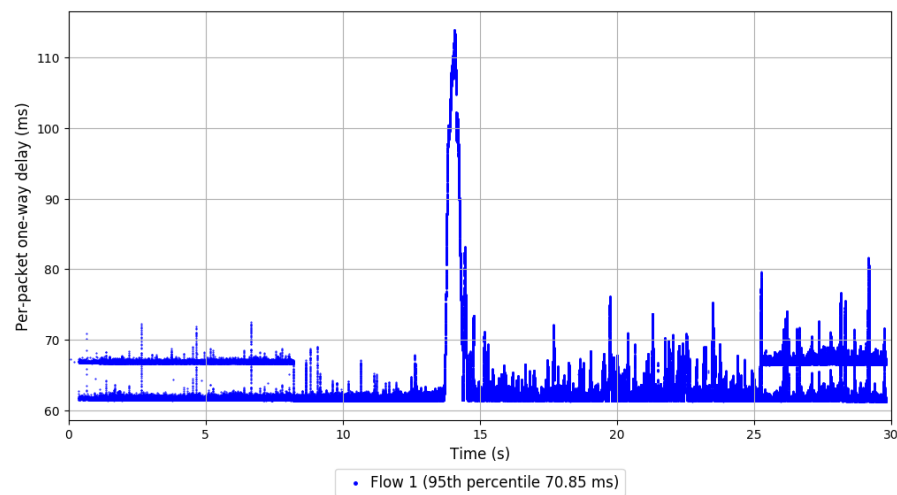
Run 10: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 374.28 Mbit/s)   Flow 1 egress (mean 373.54 Mbit/s)

Flow 1 (95th percentile 71.06 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2018-05-23 05:38:03
End at: 2018-05-23 05:38:33
Local clock offset: -0.33 ms
Remote clock offset: -0.085 ms


# Below is generated by plot.py at 2018-05-23 09:48:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.62 Mbit/s
95th percentile per-packet one-way delay: 205.487 ms
Loss rate: 3.32%
-- Flow 1:
Average throughput: 225.62 Mbit/s
95th percentile per-packet one-way delay: 205.487 ms
Loss rate: 3.32%
```
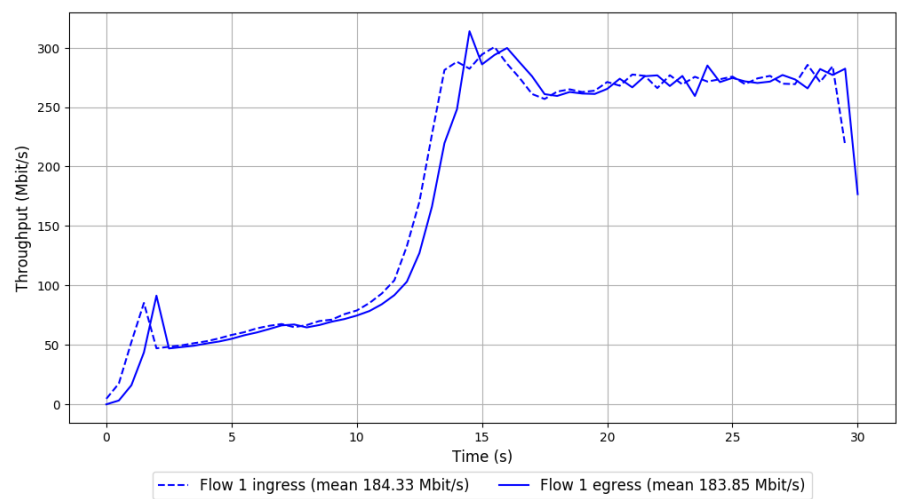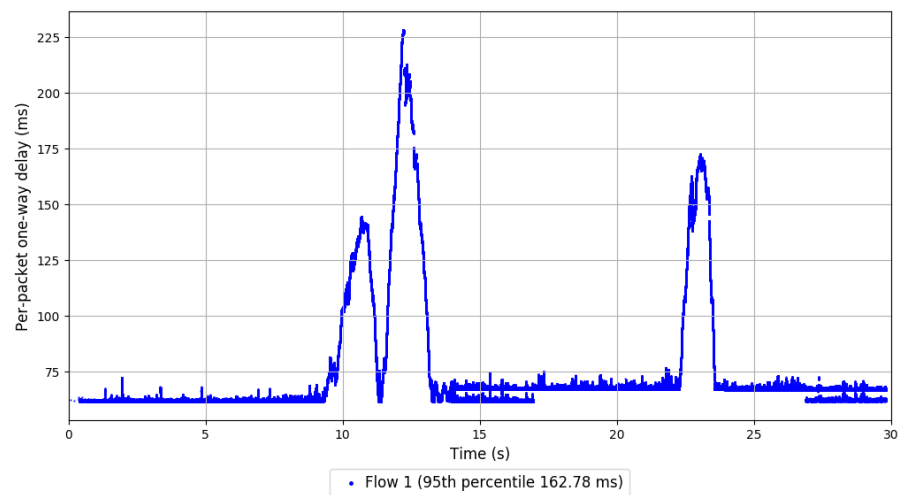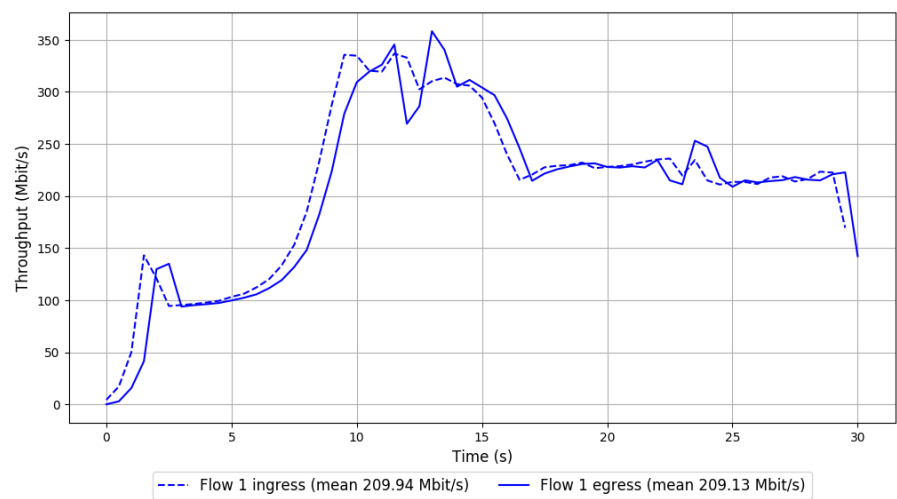
Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 232.32 Mbit/s)   Flow 1 egress (mean 225.62 Mbit/s)
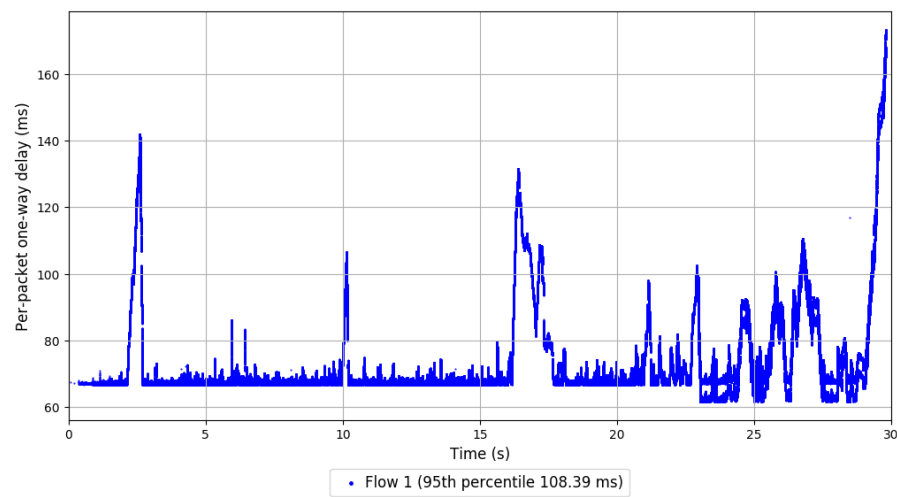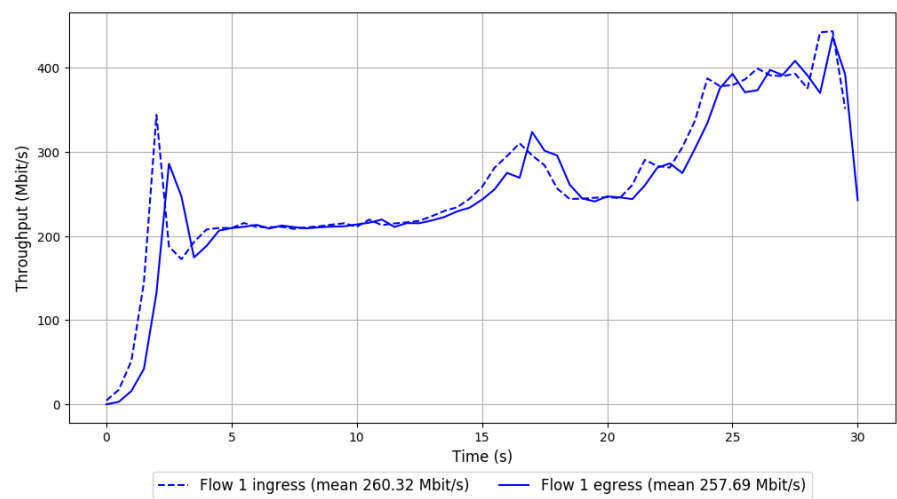

Flow 1 (95th percentile 205.49 ms)

```
Run 2: Statistics of PCC-Expr

Start at: 2018-05-23 05:57:47
End at: 2018-05-23 05:58:17
Local clock offset: -0.505 ms
Remote clock offset: 0.029 ms


# Below is generated by plot.py at 2018-05-23 09:48:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.85 Mbit/s
95th percentile per-packet one-way delay: 70.854 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 183.85 Mbit/s
95th percentile per-packet one-way delay: 70.854 ms
Loss rate: 0.71%
```

Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 184.33 Mbit/s) --- Flow 1 egress (mean 183.85 Mbit/s)

Flow 1 (95th percentile 70.85 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2018-05-23 06:17:39
End at: 2018-05-23 06:18:09
Local clock offset: -0.629 ms
Remote clock offset: -0.215 ms


# Below is generated by plot.py at 2018-05-23 09:48:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 209.13 Mbit/s
95th percentile per-packet one-way delay: 162.781 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 209.13 Mbit/s
95th percentile per-packet one-way delay: 162.781 ms
Loss rate: 0.82%
```
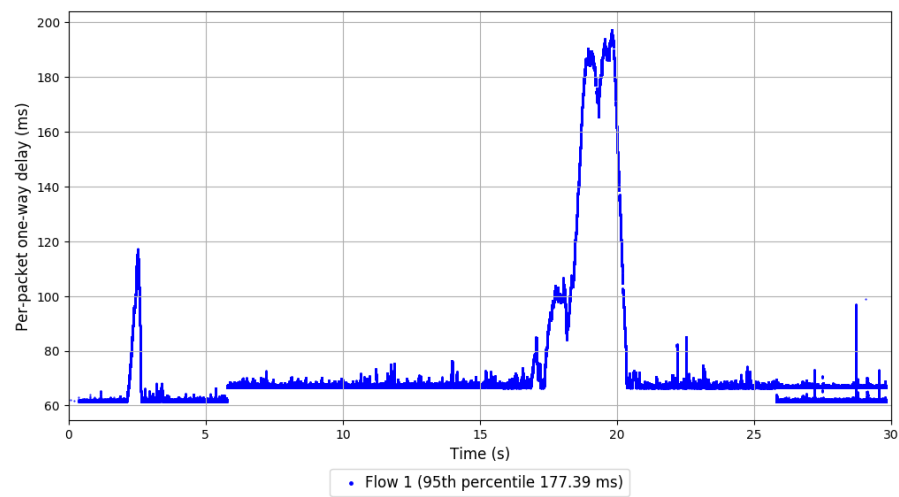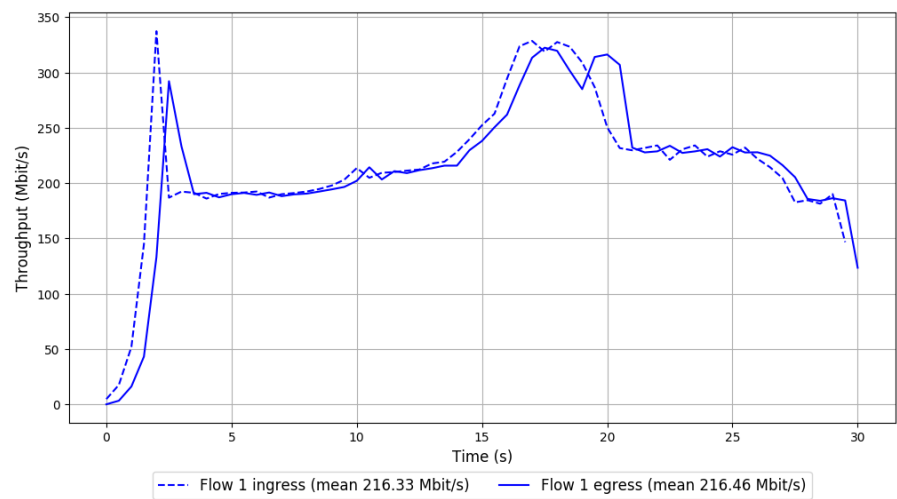
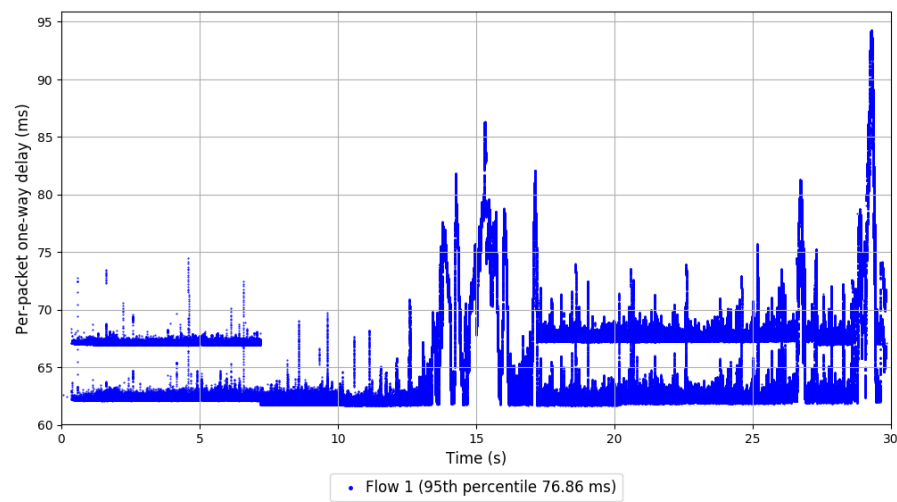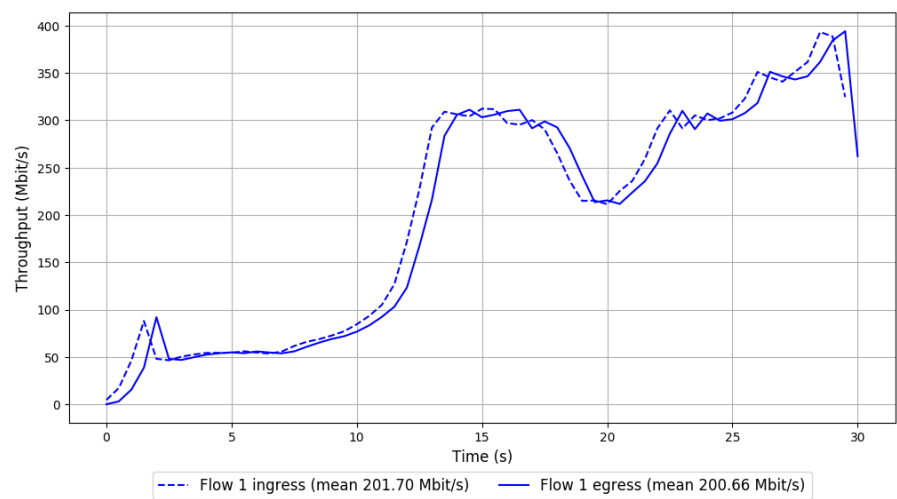## Run 3: Report of PCC-Expr — Data Link

```
Run 4: Statistics of PCC-Expr

Start at: 2018-05-23 06:37:23
End at: 2018-05-23 06:37:53
Local clock offset: -0.779 ms
Remote clock offset: -0.297 ms


# Below is generated by plot.py at 2018-05-23 09:50:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 257.69 Mbit/s
95th percentile per-packet one-way delay: 108.393 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 257.69 Mbit/s
95th percentile per-packet one-way delay: 108.393 ms
Loss rate: 1.46%
```

Run 4: Report of PCC-Expr — Data Link

Legend: Flow 1 ingress (mean 260.32 Mbit/s), Flow 1 egress (mean 257.69 Mbit/s)

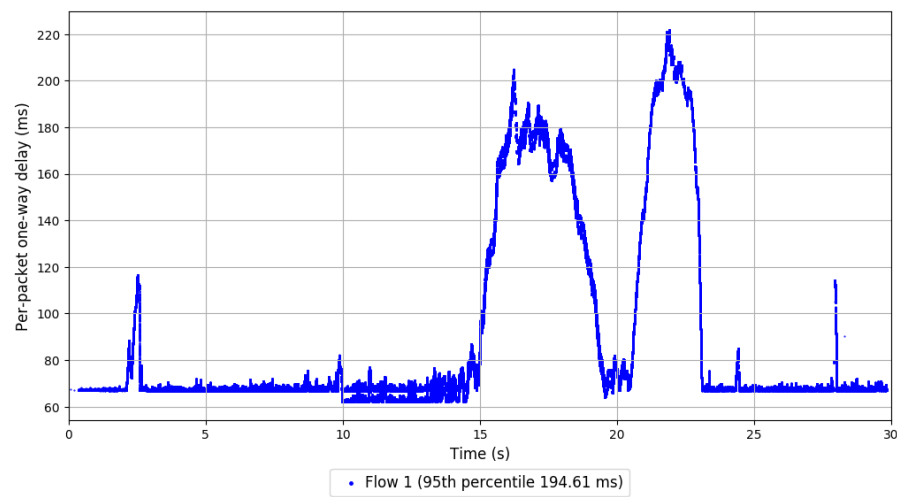Legend: Flow 1 (95th percentile 108.39 ms)

```
Run 5: Statistics of PCC-Expr

Start at: 2018-05-23 06:57:07
End at: 2018-05-23 06:57:37
Local clock offset: -0.906 ms
Remote clock offset: 0.07 ms


# Below is generated by plot.py at 2018-05-23 09:53:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.46 Mbit/s
95th percentile per-packet one-way delay: 177.392 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 216.46 Mbit/s
95th percentile per-packet one-way delay: 177.392 ms
Loss rate: 0.38%
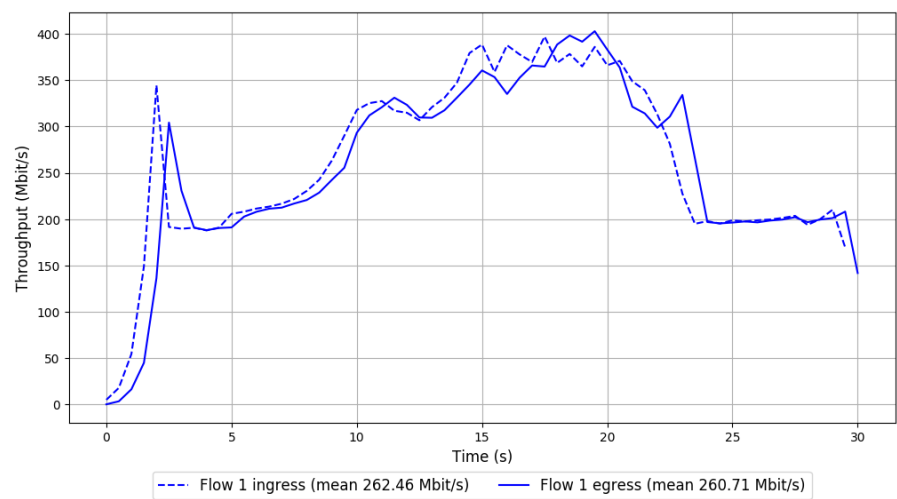```

Run 5: Report of PCC-Expr — Data Link



Flow 1 ingress (mean 216.33 Mbit/s) ---   Flow 1 egress (mean 216.46 Mbit/s) ——
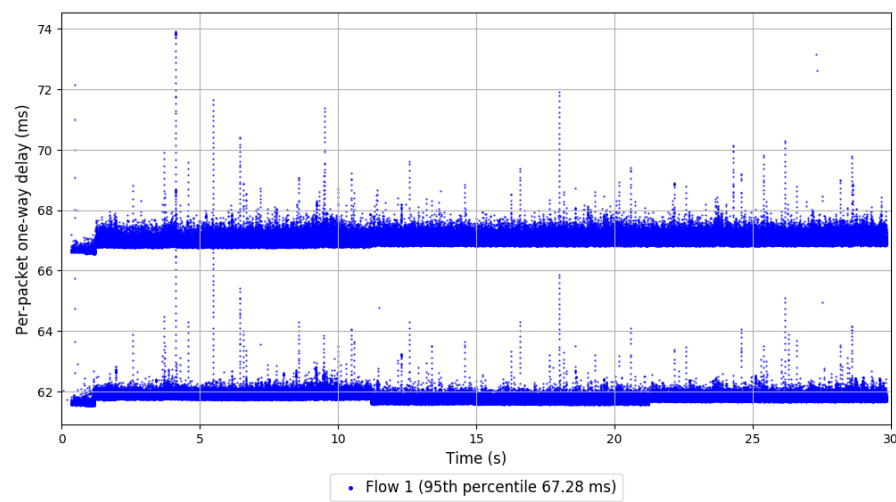

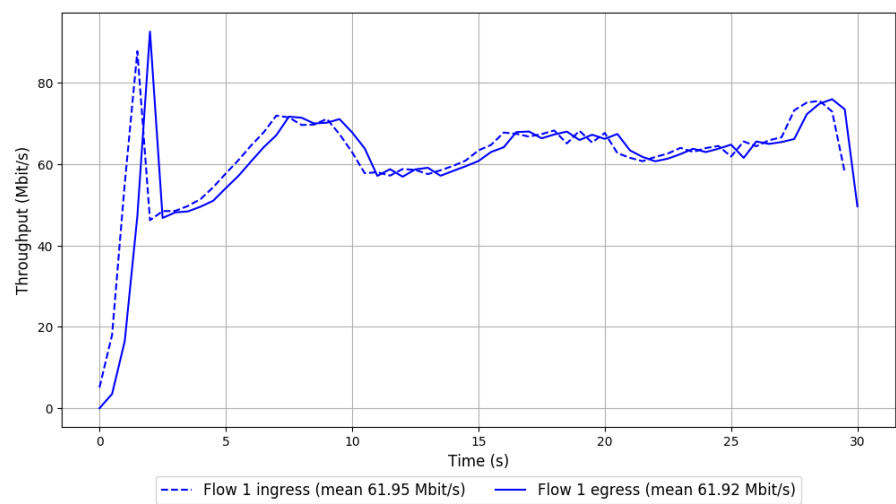
• Flow 1 (95th percentile 177.39 ms)

```
Run 6: Statistics of PCC-Expr

Start at: 2018-05-23 07:16:55
End at: 2018-05-23 07:17:25
Local clock offset: -0.222 ms
Remote clock offset: -0.178 ms


# Below is generated by plot.py at 2018-05-23 09:55:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 200.66 Mbit/s
95th percentile per-packet one-way delay: 76.860 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 200.66 Mbit/s
95th percentile per-packet one-way delay: 76.860 ms
Loss rate: 0.95%
```

Run 6: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 201.70 Mbit/s)   Flow 1 egress (mean 200.66 Mbit/s)

Flow 1 (95th percentile 76.86 ms)

```
Run 7: Statistics of PCC-Expr

Start at: 2018-05-23 07:36:53
End at: 2018-05-23 07:37:23
Local clock offset: 0.248 ms
Remote clock offset: -0.411 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 260.71 Mbit/s
95th percentile per-packet one-way delay: 194.611 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 260.71 Mbit/s
95th percentile per-packet one-way delay: 194.611 ms
Loss rate: 1.12%
```
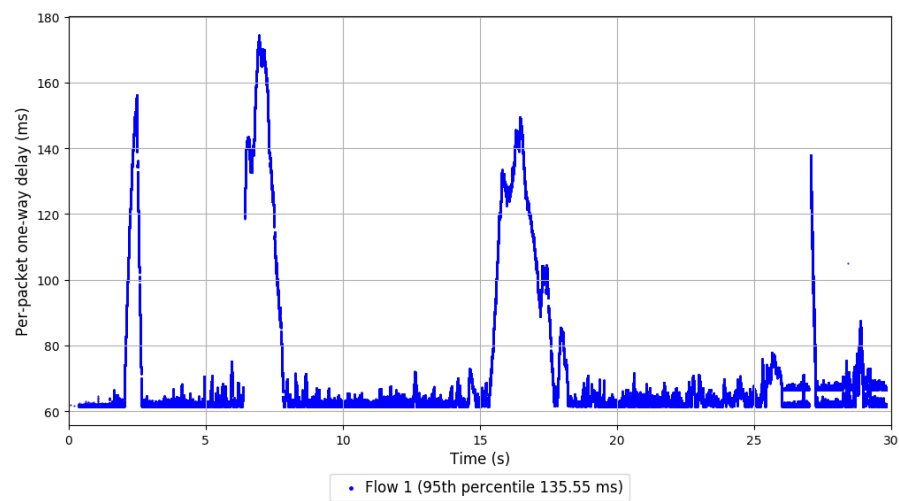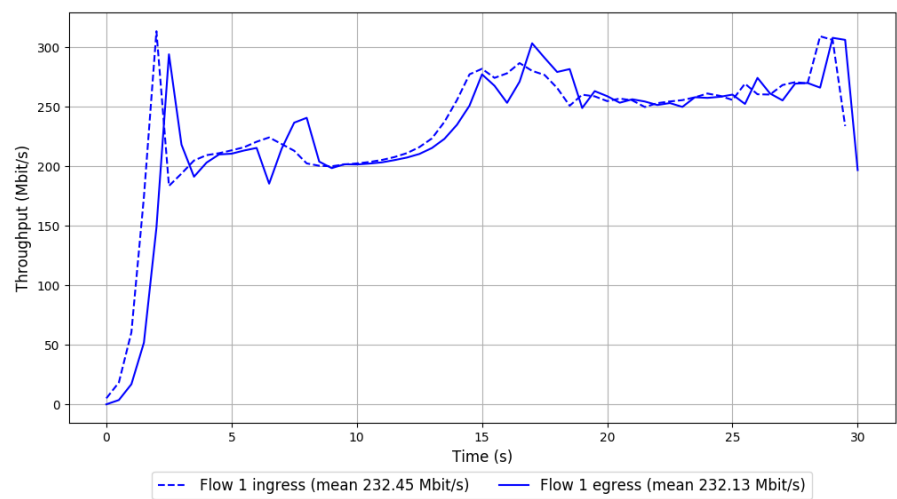
Run 7: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 262.46 Mbit/s)   Flow 1 egress (mean 260.71 Mbit/s)

Flow 1 (95th percentile 194.61 ms)

```
Run 8: Statistics of PCC-Expr

Start at: 2018-05-23 07:56:51
End at: 2018-05-23 07:57:21
Local clock offset: 0.504 ms
Remote clock offset: -0.135 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.92 Mbit/s
95th percentile per-packet one-way delay: 67.282 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 61.92 Mbit/s
95th percentile per-packet one-way delay: 67.282 ms
Loss rate: 0.47%
```
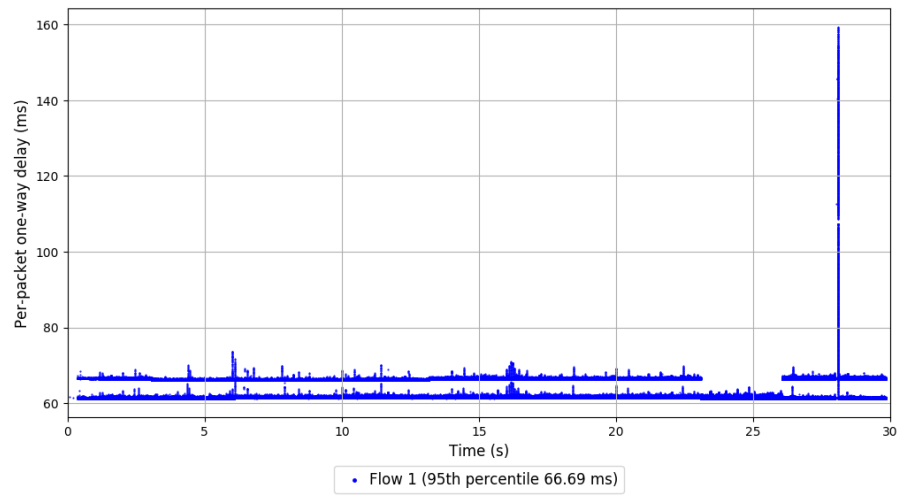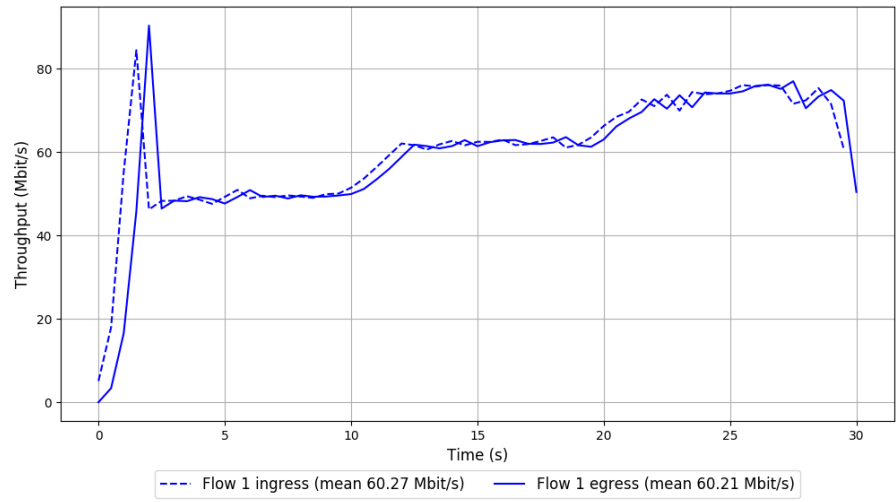
Run 8: Report of PCC-Expr — Data Link
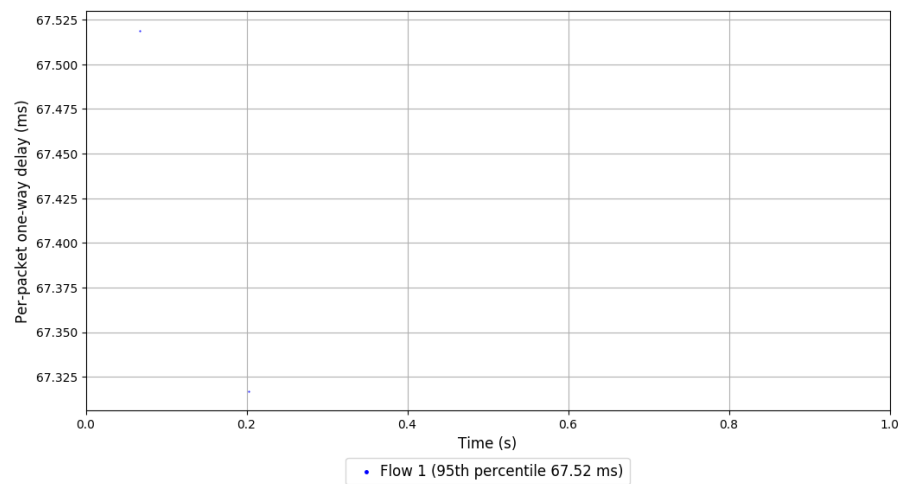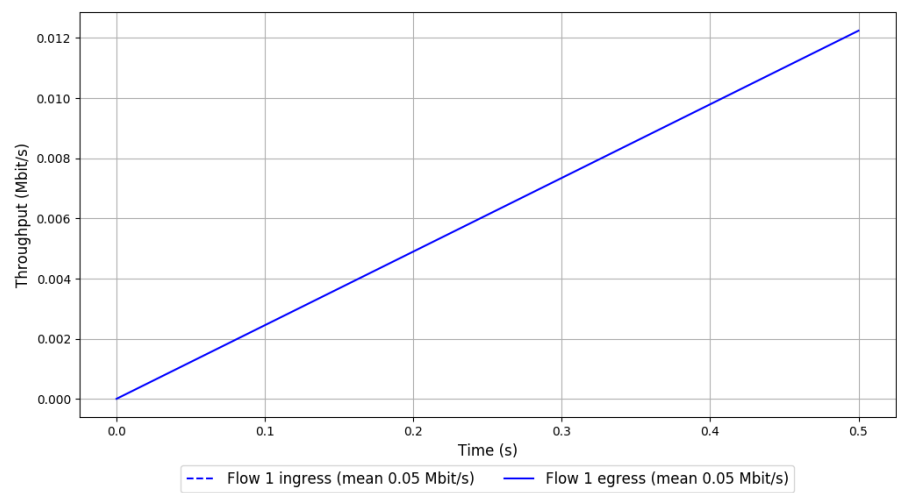
```
Run 9: Statistics of PCC-Expr

Start at: 2018-05-23 08:16:37
End at: 2018-05-23 08:17:07
Local clock offset: 0.626 ms
Remote clock offset: 0.157 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 232.13 Mbit/s
95th percentile per-packet one-way delay: 135.554 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 232.13 Mbit/s
95th percentile per-packet one-way delay: 135.554 ms
Loss rate: 0.57%
```

Run 9: Report of PCC-Expr — Data Link

```
Run 10: Statistics of PCC-Expr

Start at: 2018-05-23 08:36:50
End at: 2018-05-23 08:37:20
Local clock offset: 0.902 ms
Remote clock offset: 0.398 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.21 Mbit/s
95th percentile per-packet one-way delay: 66.688 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 60.21 Mbit/s
95th percentile per-packet one-way delay: 66.688 ms
Loss rate: 0.53%
```

Run 10: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 60.27 Mbit/s) ——— Flow 1 egress (mean 60.21 Mbit/s)

• Flow 1 (95th percentile 66.69 ms)
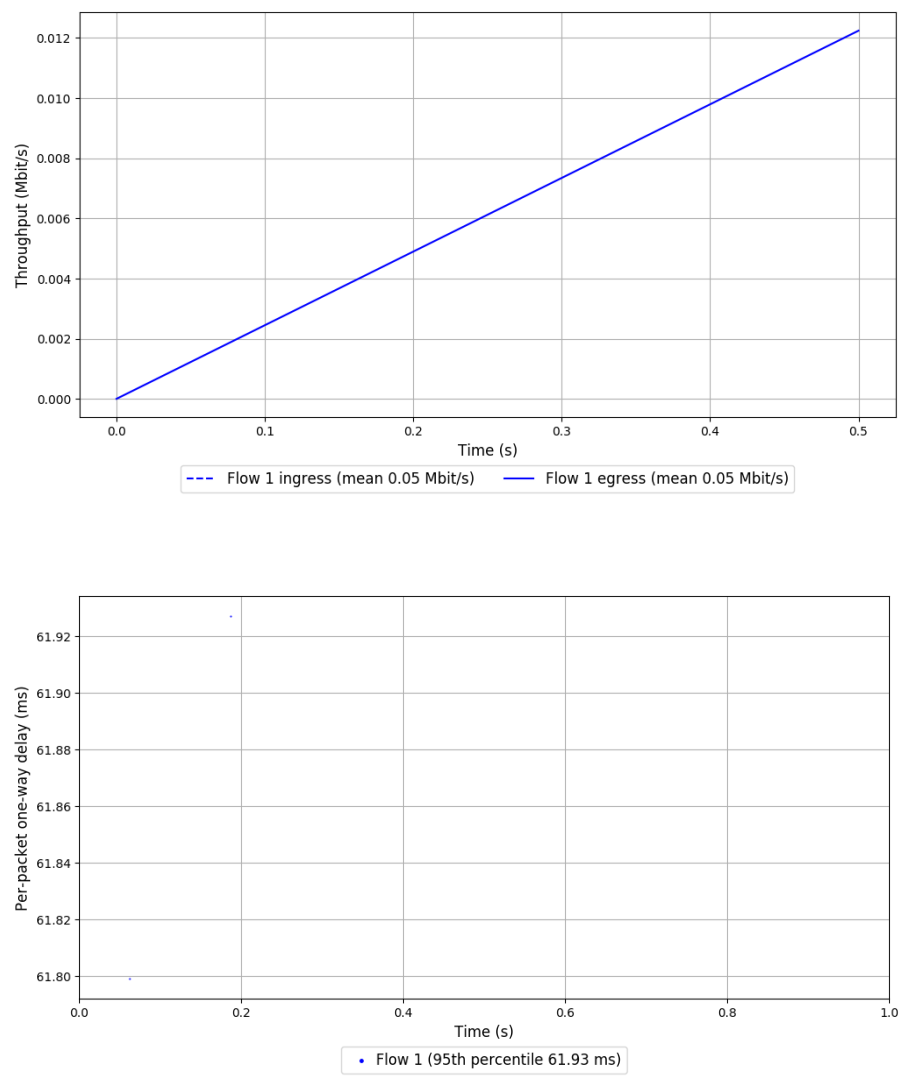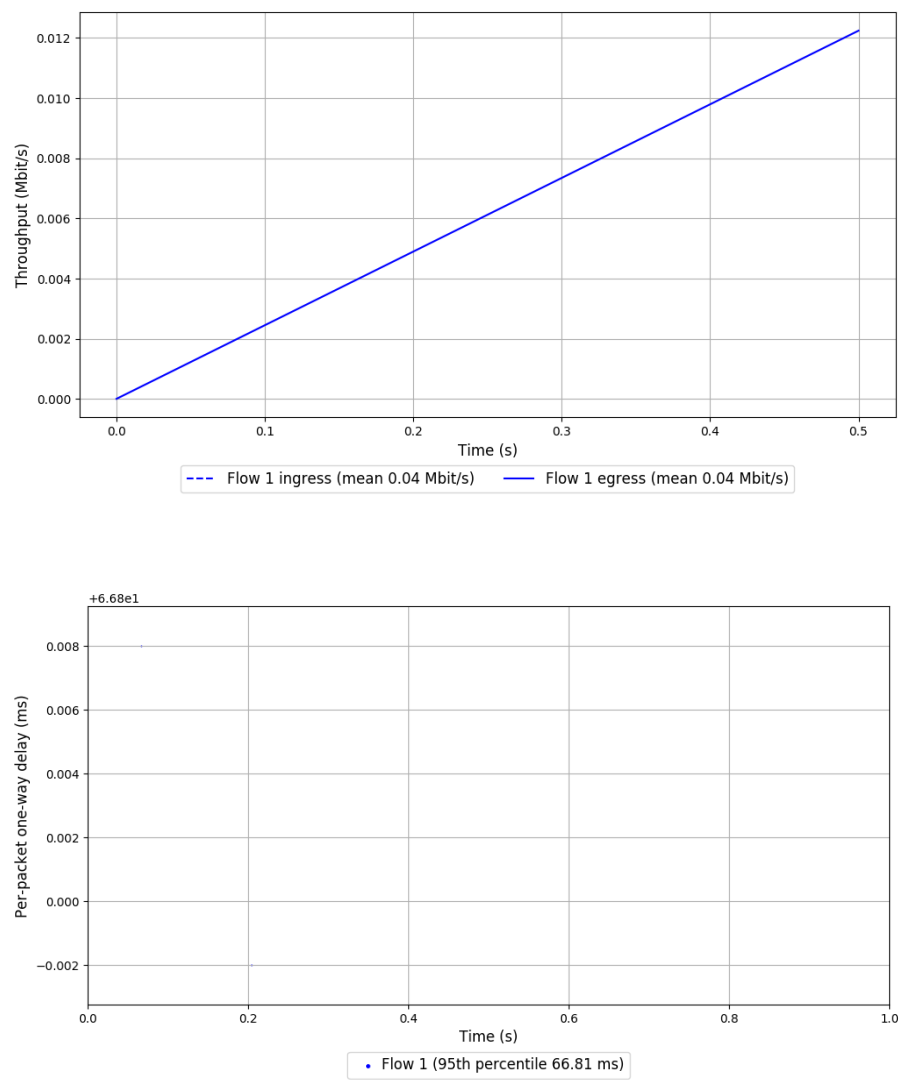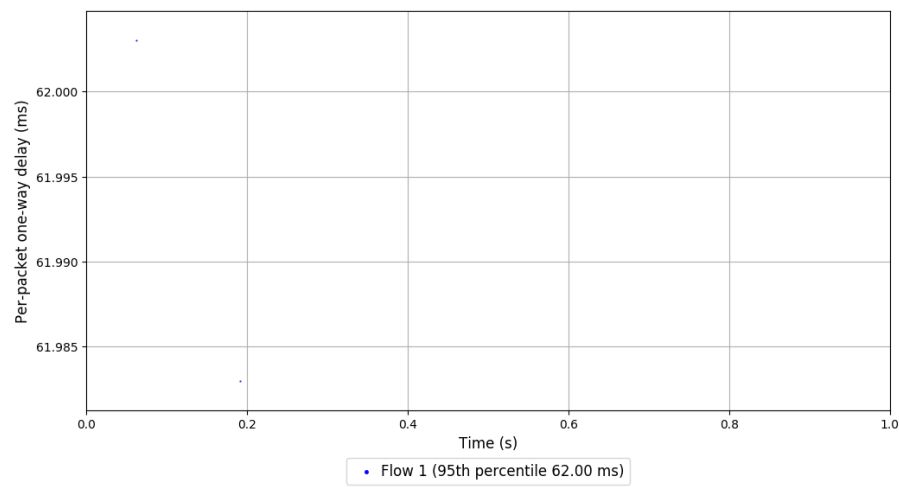
```
Run 1: Statistics of QUIC Cubic

Start at: 2018-05-23 05:40:37
End at: 2018-05-23 05:41:07
Local clock offset: -0.433 ms
Remote clock offset: -0.356 ms
```

Run 1: Report of QUIC Cubic — Data Link

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

Flow 1 (95th percentile 67.52 ms)

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-05-23 06:00:17
End at: 2018-05-23 06:00:47
Local clock offset: -0.521 ms
Remote clock offset: 0.001 ms
```

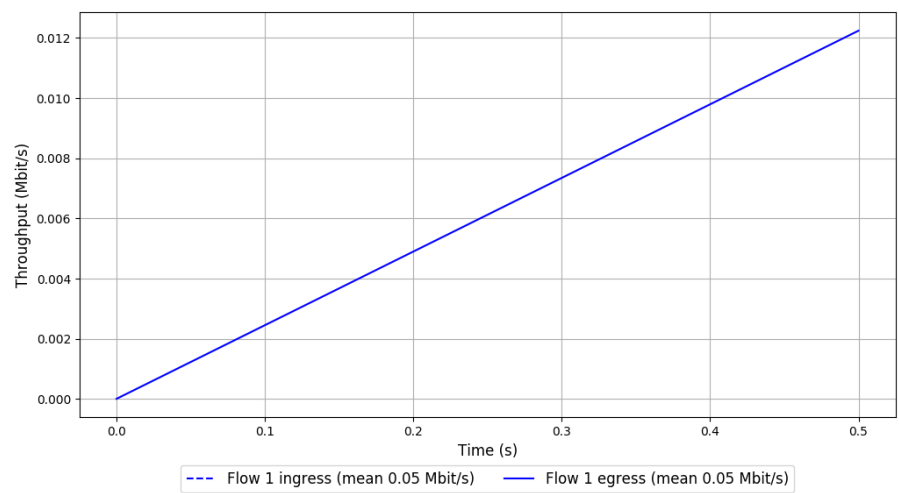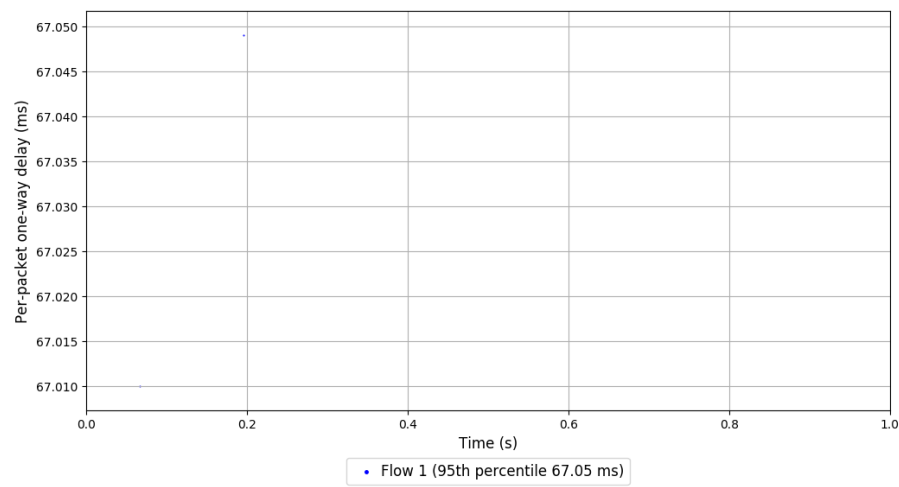# Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-05-23 06:20:12
End at: 2018-05-23 06:20:42
Local clock offset: -0.635 ms
Remote clock offset: -0.224 ms
```

Run 3: Report of QUIC Cubic — Data Link
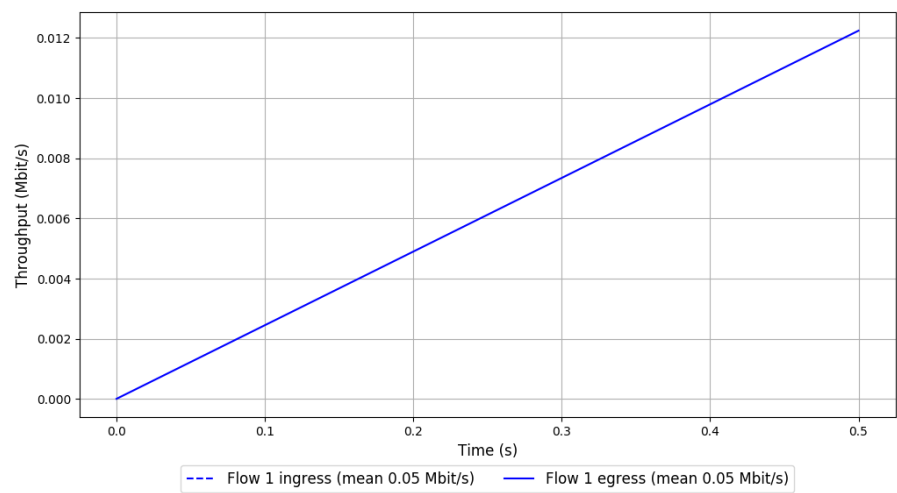
```
Run 4: Statistics of QUIC Cubic

Start at: 2018-05-23 06:39:58
End at: 2018-05-23 06:40:28
Local clock offset: -0.81 ms
Remote clock offset: -0.346 ms
```

Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-05-23 06:59:40
End at: 2018-05-23 07:00:10
Local clock offset: -0.979 ms
Remote clock offset: 0.188 ms
```

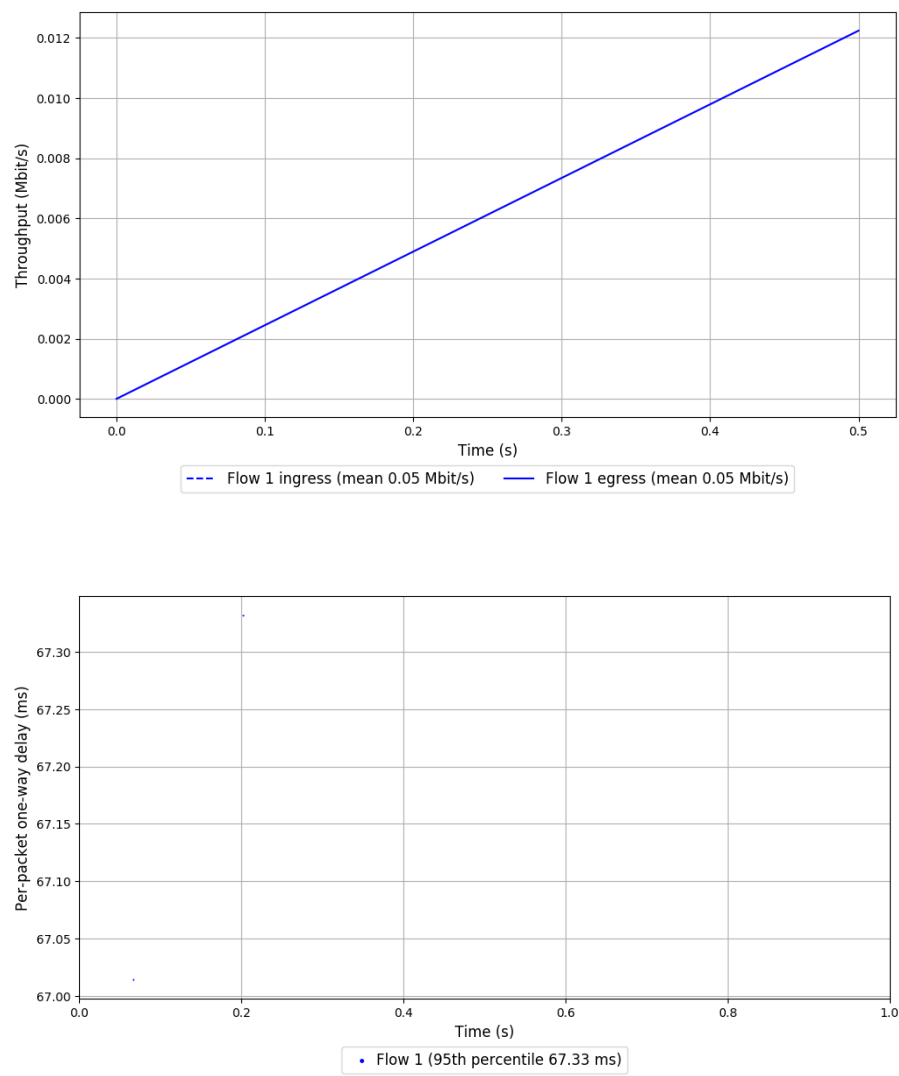## Run 5: Report of QUIC Cubic — Data Link
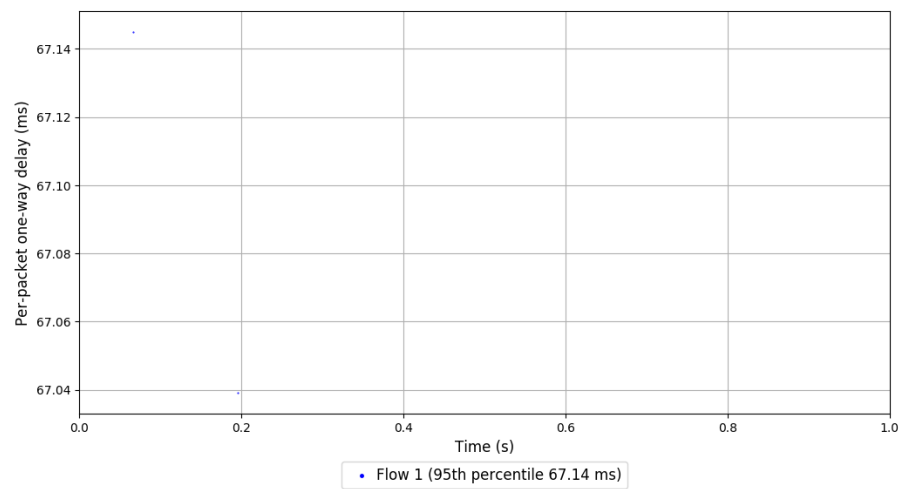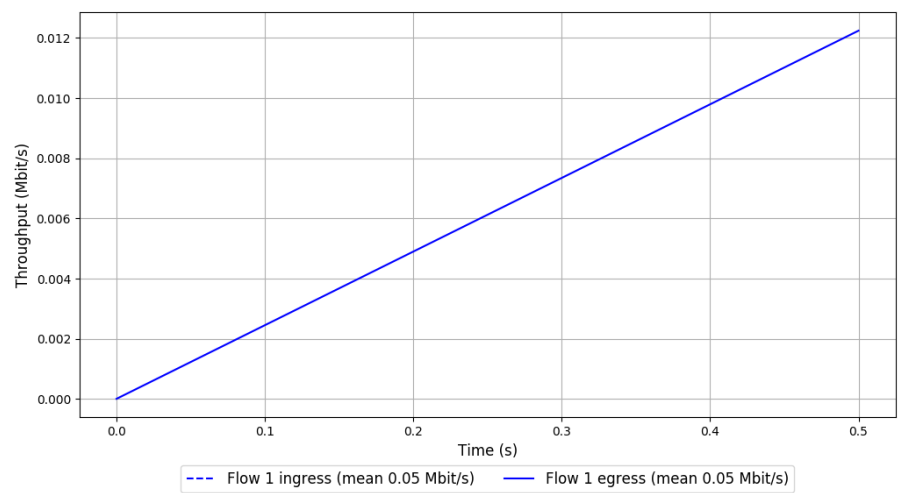
Run 6: Statistics of QUIC Cubic

Start at: 2018-05-23 07:19:23
End at: 2018-05-23 07:19:54
Local clock offset: -0.2 ms
Remote clock offset: -0.259 ms

Run 6: Report of QUIC Cubic — Data Link
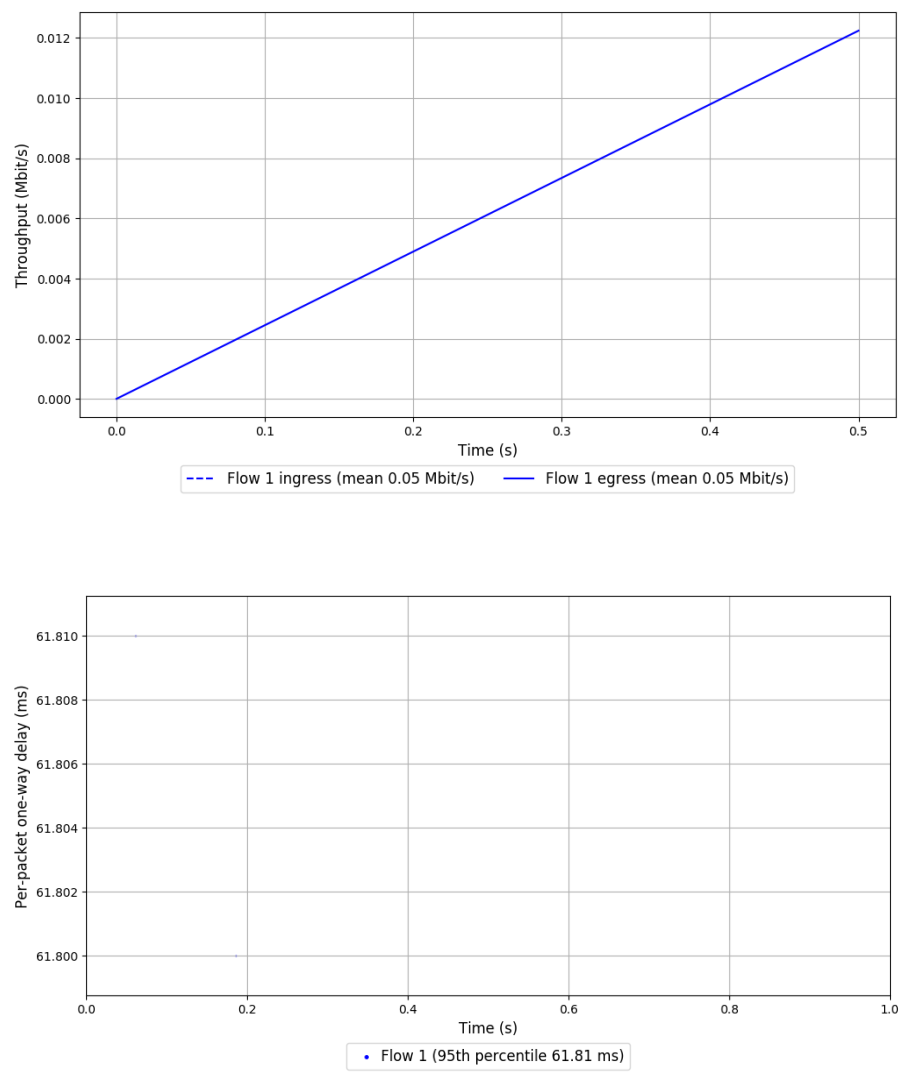
```
Run 7: Statistics of QUIC Cubic

Start at: 2018-05-23 07:39:28
End at: 2018-05-23 07:39:58
Local clock offset: 0.294 ms
Remote clock offset: -0.356 ms
```

Run 7: Report of QUIC Cubic — Data Link

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

Flow 1 (95th percentile 67.05 ms)

Run 8: Statistics of QUIC Cubic

Start at: 2018-05-23 07:59:11
End at: 2018-05-23 07:59:41
Local clock offset: 0.536 ms
Remote clock offset: -0.088 ms

Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-05-23 08:19:11
End at: 2018-05-23 08:19:41
Local clock offset: 0.73 ms
Remote clock offset: -0.247 ms
```

Run 9: Report of QUIC Cubic — Data Link

Run 10: Statistics of QUIC Cubic

Start at: 2018-05-23 08:39:09
End at: 2018-05-23 08:39:39
Local clock offset: 0.934 ms
Remote clock offset: -0.11 ms

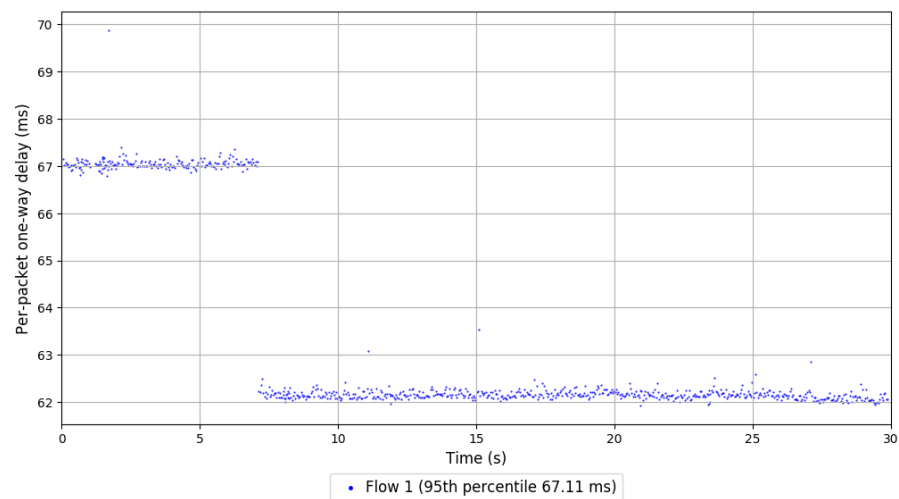# Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2018-05-23 05:32:09
End at: 2018-05-23 05:32:39
Local clock offset: -0.32 ms
Remote clock offset: 0.095 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.844 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.844 ms
Loss rate: 0.38%
```

Run 1: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 61.84 ms)

```
Run 2: Statistics of SCReAM

Start at: 2018-05-23 05:51:59
End at: 2018-05-23 05:52:29
Local clock offset: -0.435 ms
Remote clock offset: -0.236 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.110 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.110 ms
Loss rate: 0.38%
```
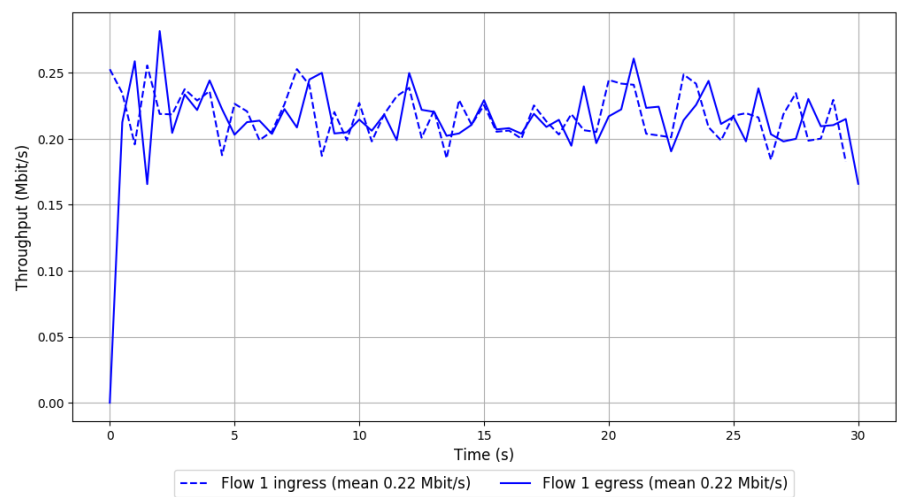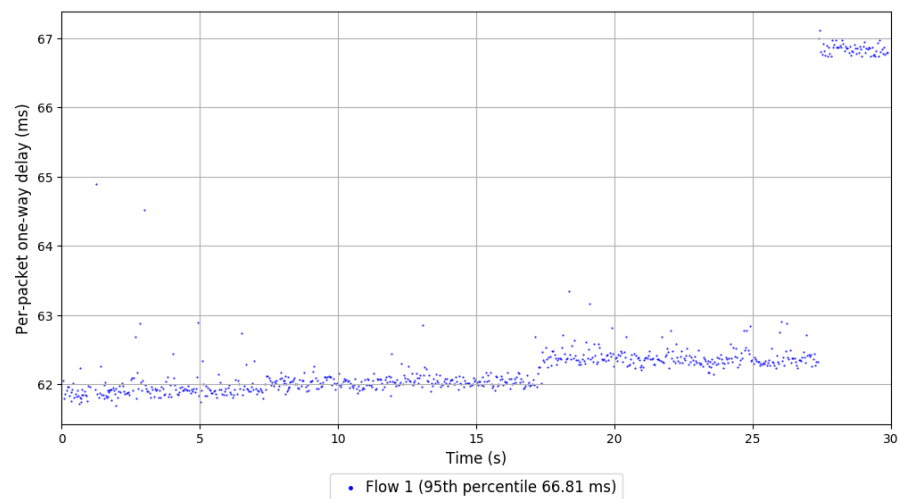
Run 2: Report of SCReAM — Data Link

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

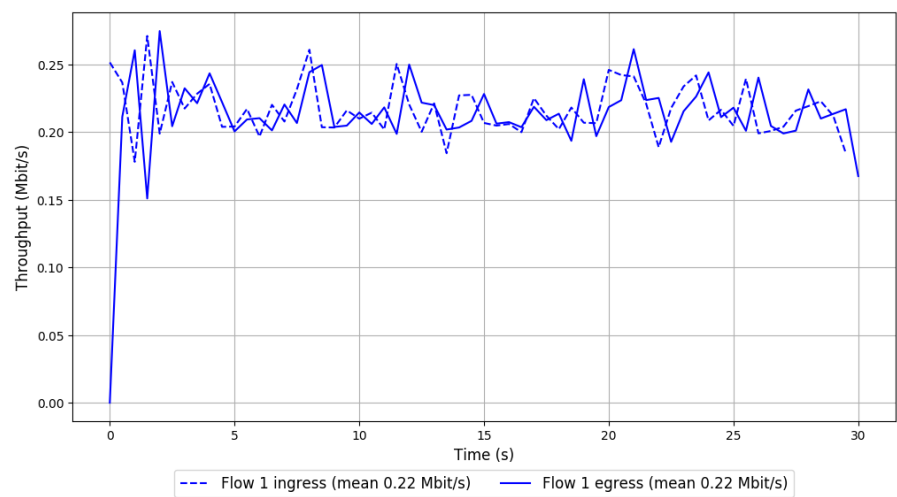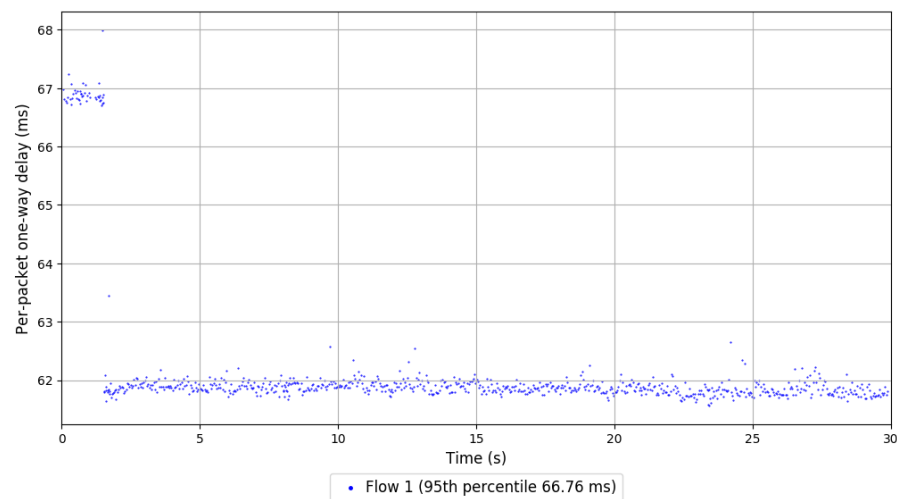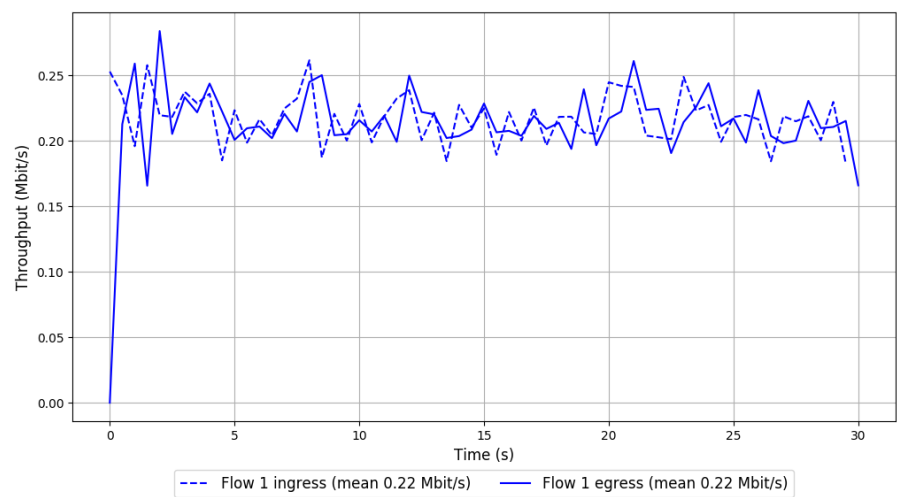Flow 1 (95th percentile 67.11 ms)

```
Run 3: Statistics of SCReAM

Start at: 2018-05-23 06:11:48
End at: 2018-05-23 06:12:18
Local clock offset: -0.576 ms
Remote clock offset: -0.181 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.814 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.814 ms
Loss rate: 0.38%
```
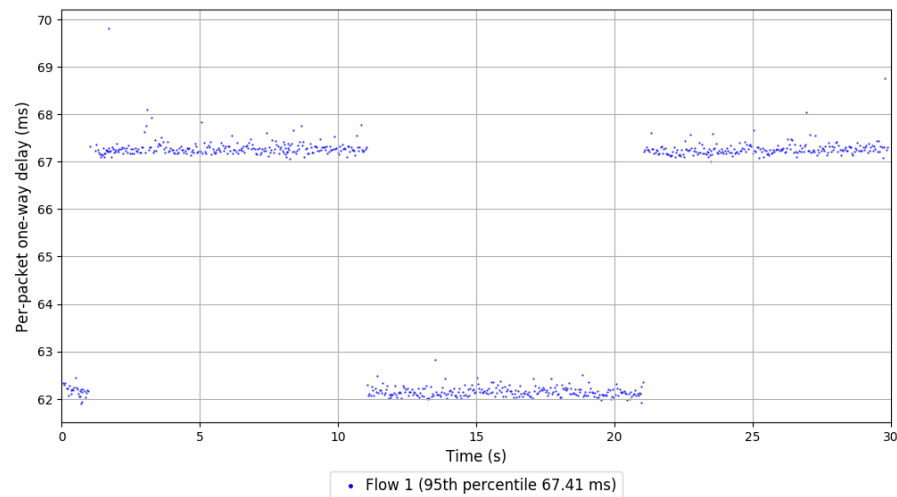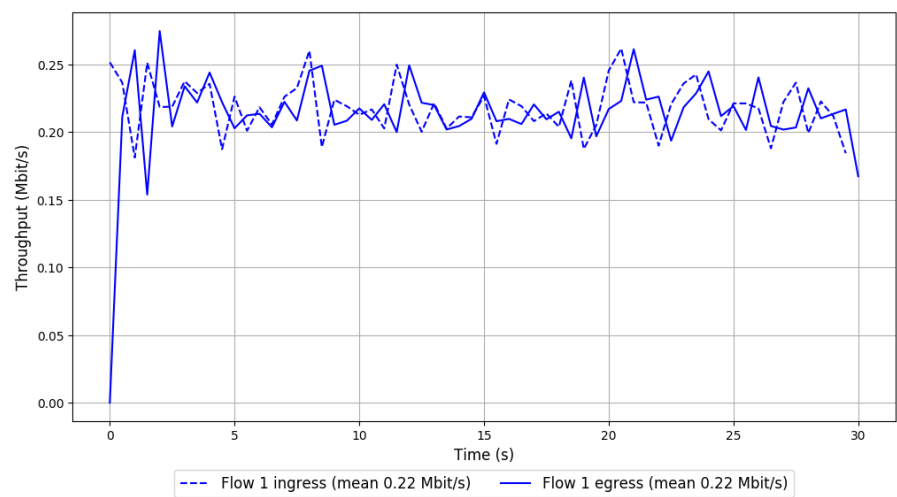
Run 3: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 66.81 ms)

```
Run 4: Statistics of SCReAM

Start at: 2018-05-23 06:31:34
End at: 2018-05-23 06:32:04
Local clock offset: -0.803 ms
Remote clock offset: -0.193 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.756 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.756 ms
Loss rate: 0.38%
```
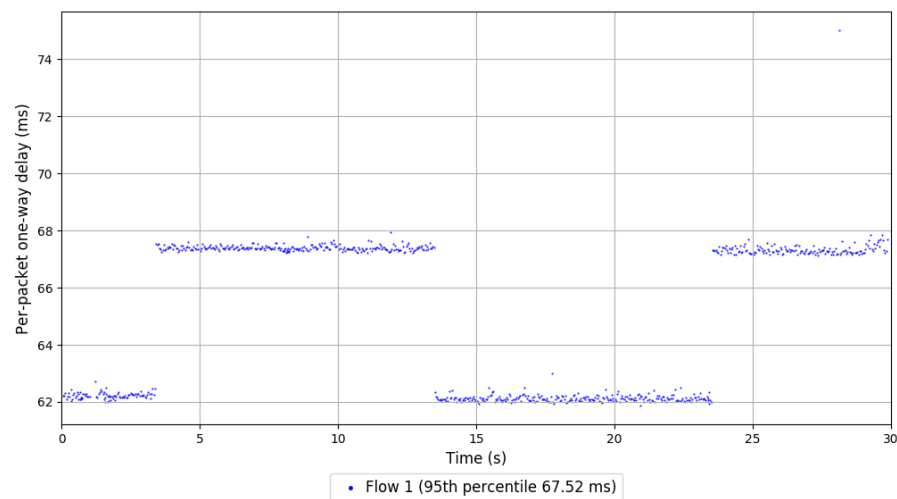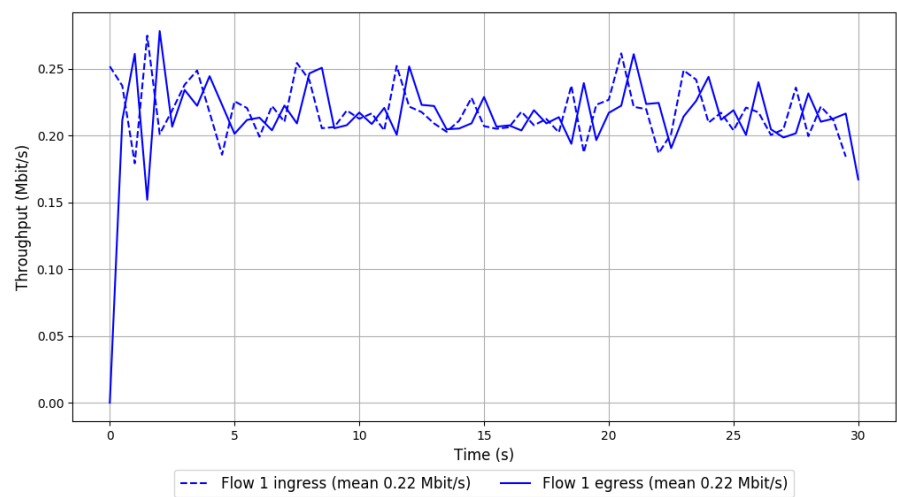
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-05-23 06:51:12
End at: 2018-05-23 06:51:42
Local clock offset: -0.874 ms
Remote clock offset: -0.222 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.412 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.412 ms
Loss rate: 0.38%
```
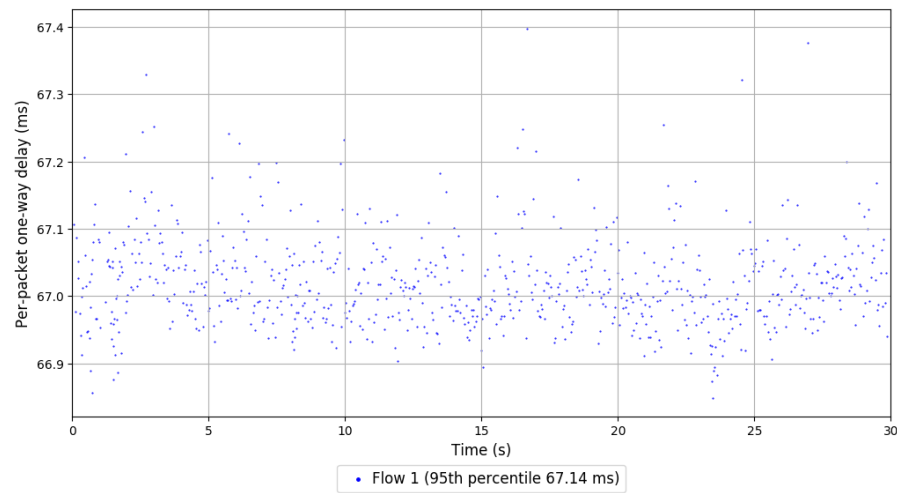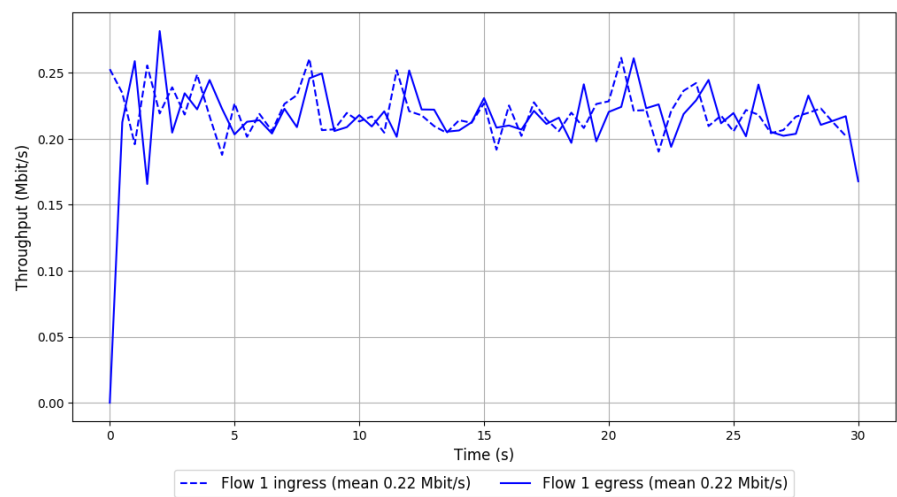
Run 5: Report of SCReAM — Data Link

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

• Flow 1 (95th percentile 67.41 ms)

```
Run 6: Statistics of SCReAM

Start at: 2018-05-23 07:11:02
End at: 2018-05-23 07:11:32
Local clock offset: -0.77 ms
Remote clock offset: -0.188 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.515 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.515 ms
Loss rate: 0.38%
```

Run 6: Report of SCReAM — Data Link

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

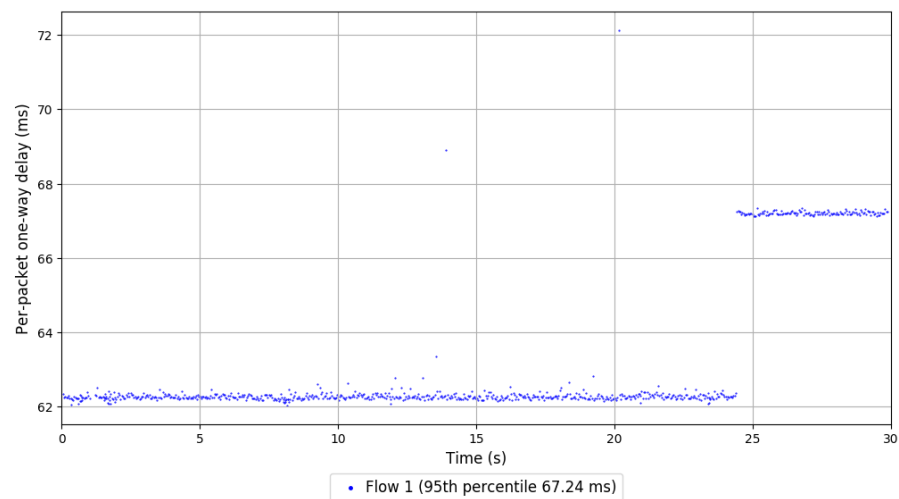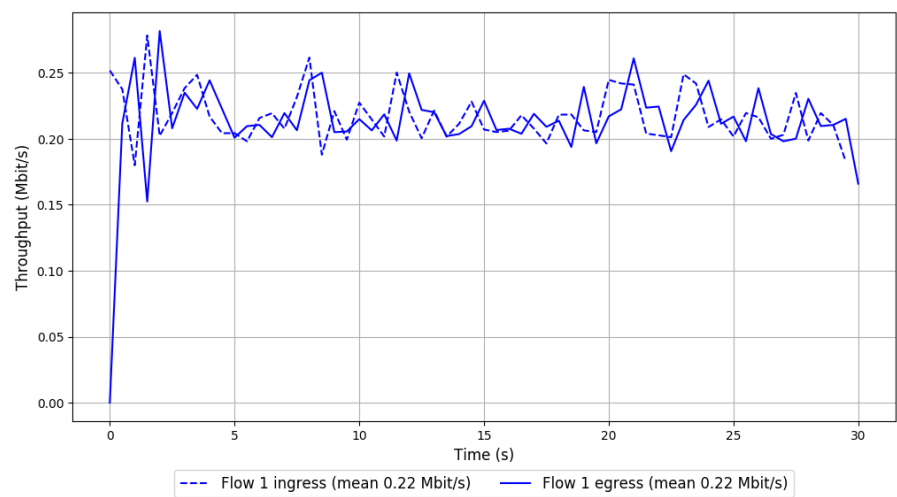Flow 1 (95th percentile 67.52 ms)

195

```
Run 7: Statistics of SCReAM

Start at: 2018-05-23 07:30:59
End at: 2018-05-23 07:31:29
Local clock offset: 0.17 ms
Remote clock offset: -0.201 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.137 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.137 ms
Loss rate: 0.51%
```

Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2018-05-23 07:50:51
End at: 2018-05-23 07:51:21
Local clock offset: 0.471 ms
Remote clock offset: -0.247 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.241 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.241 ms
Loss rate: 0.38%
```
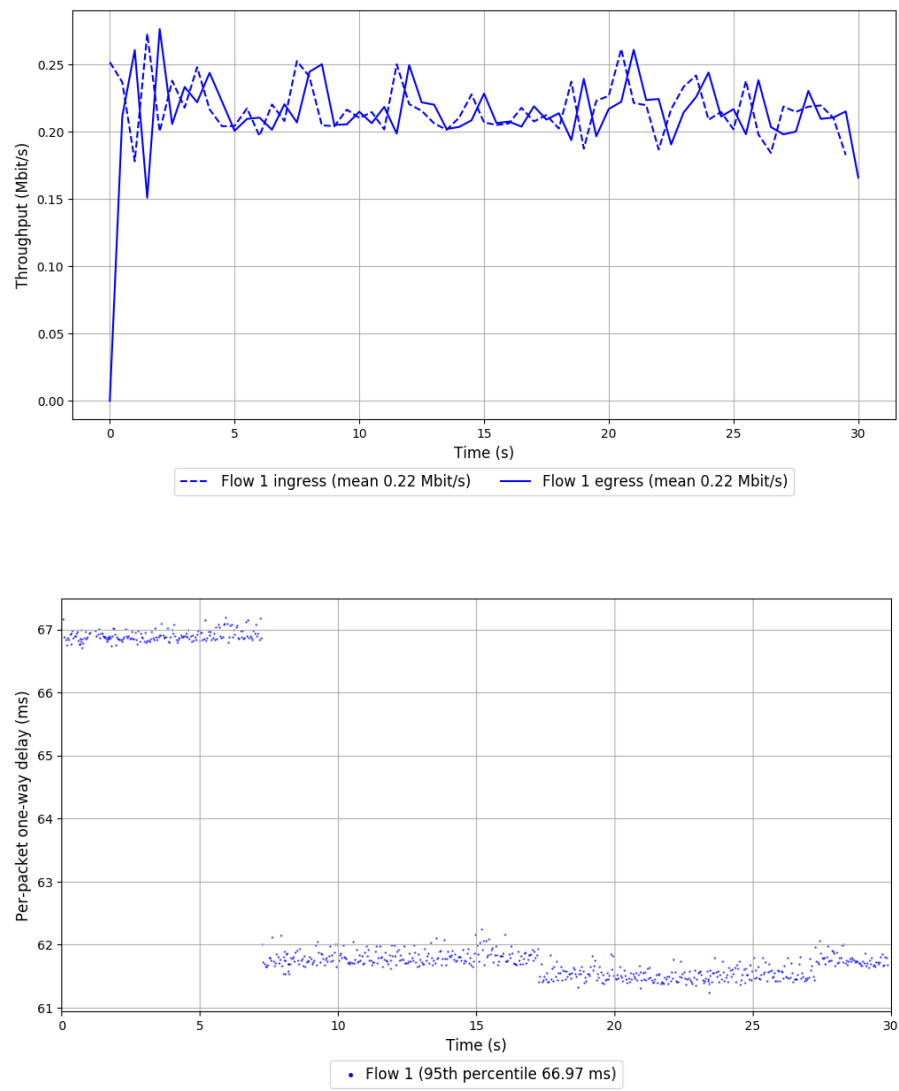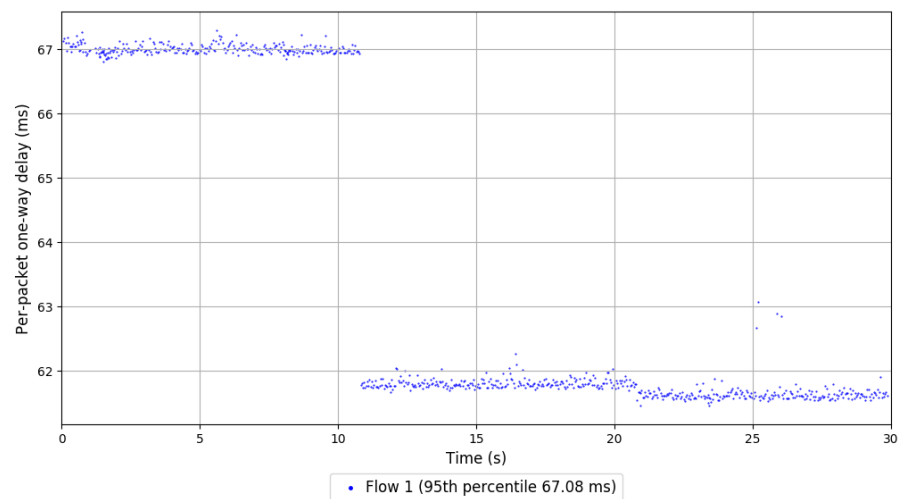
Run 8: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 67.24 ms)

199

```
Run 9: Statistics of SCReAM

Start at: 2018-05-23 08:10:46
End at: 2018-05-23 08:11:16
Local clock offset: 0.647 ms
Remote clock offset: 0.269 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.968 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.968 ms
Loss rate: 0.38%
```
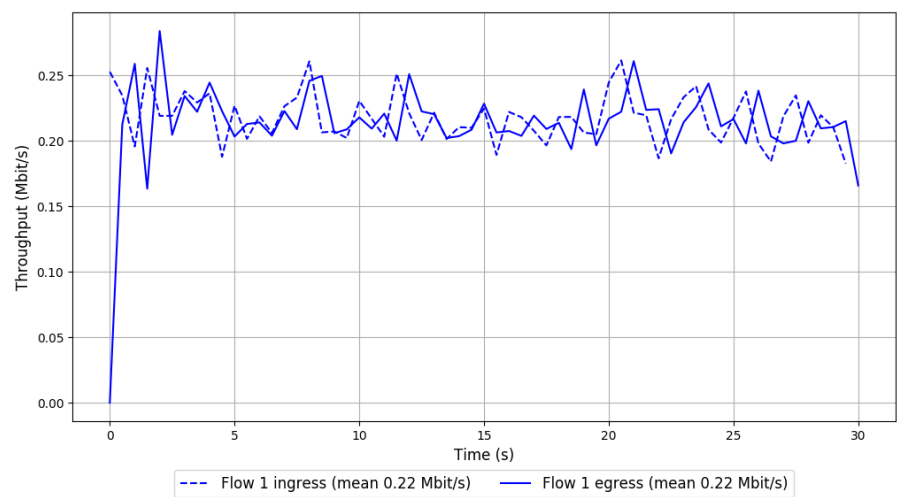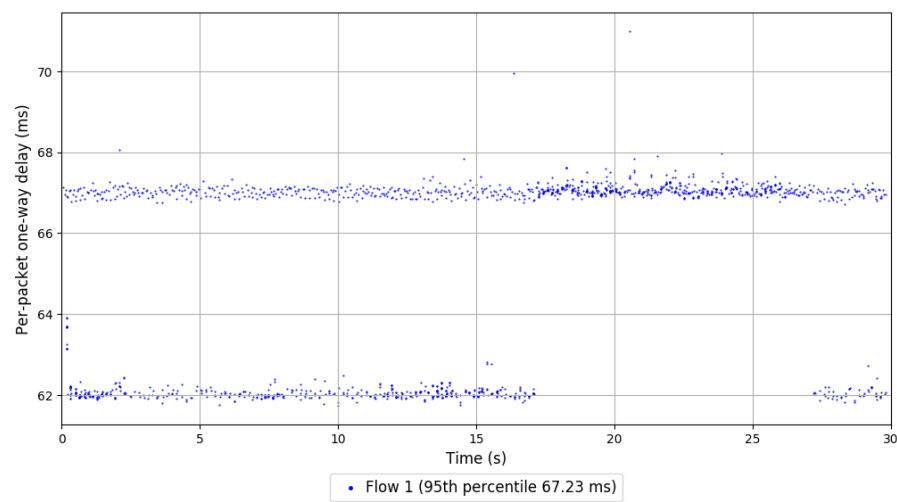
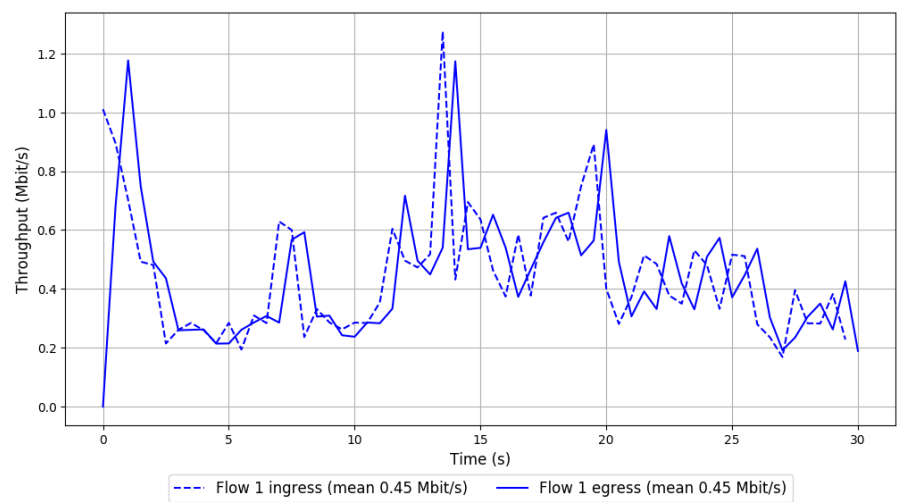# Run 9: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 66.97 ms)

```
Run 10: Statistics of SCReAM

Start at: 2018-05-23 08:30:55
End at: 2018-05-23 08:31:25
Local clock offset: 0.852 ms
Remote clock offset: 0.104 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.082 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.082 ms
Loss rate: 0.38%
```
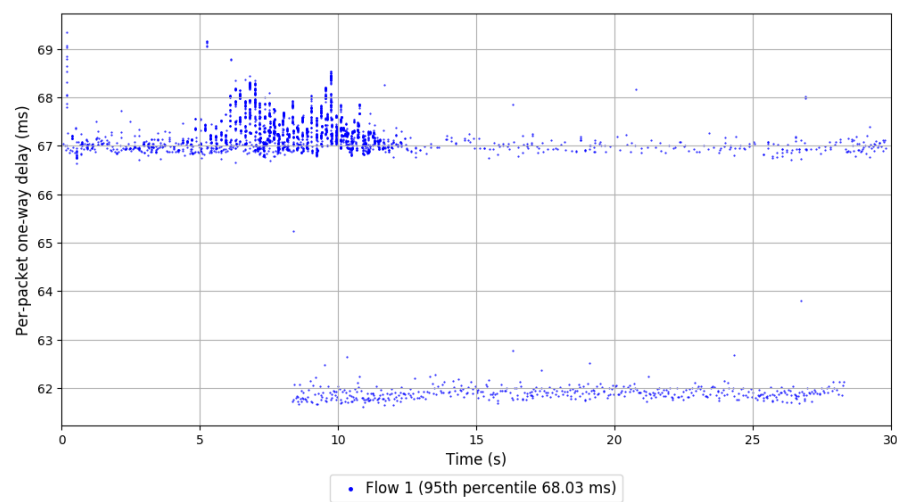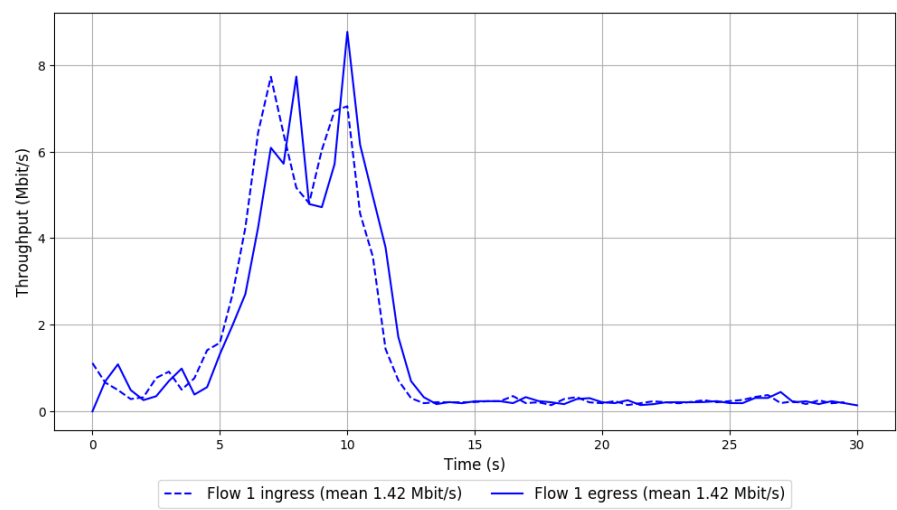
Run 10: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 67.08 ms)

```
Run 1: Statistics of Sprout

Start at: 2018-05-23 05:47:55
End at: 2018-05-23 05:48:26
Local clock offset: -0.472 ms
Remote clock offset: -0.188 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 67.235 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 67.235 ms
Loss rate: 0.15%
```

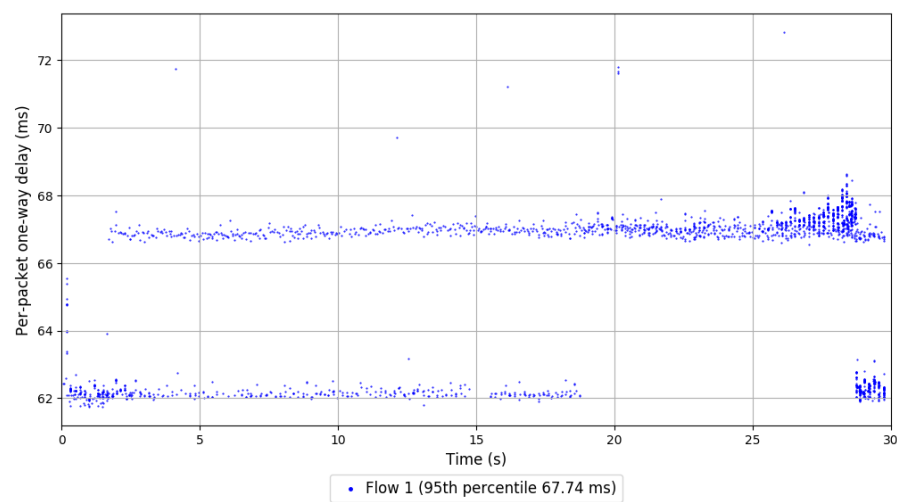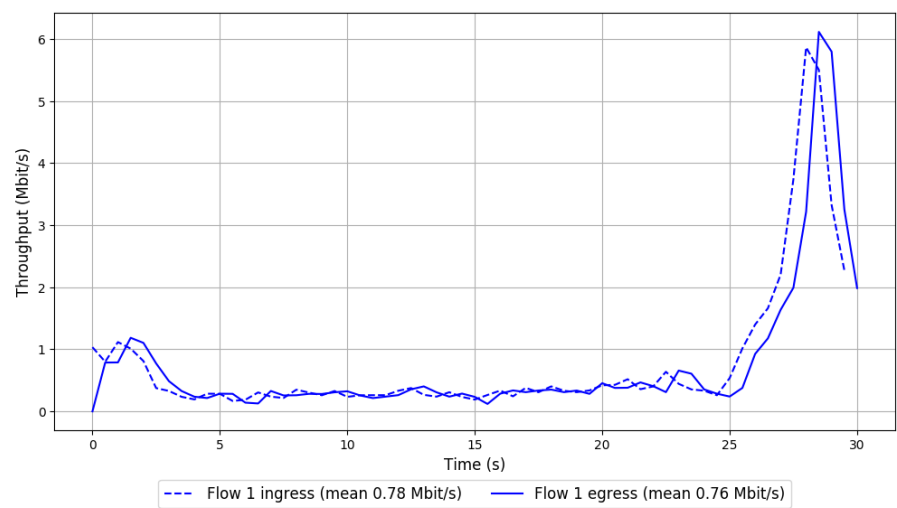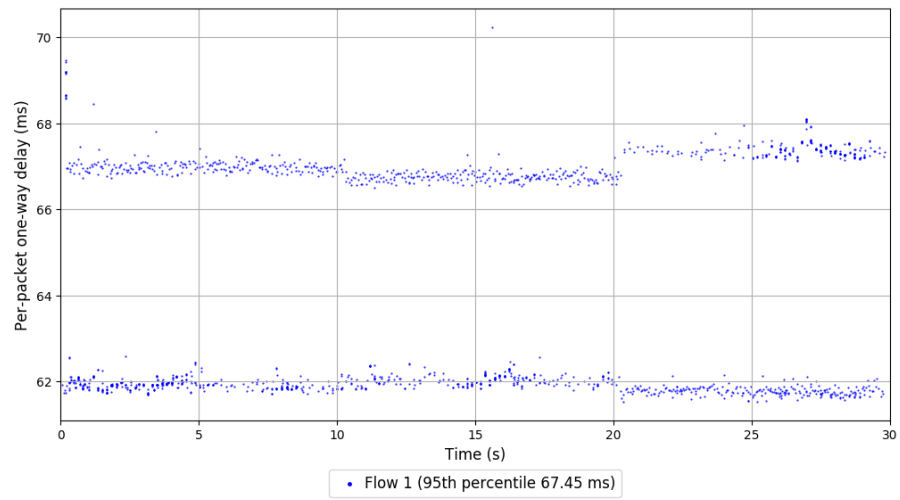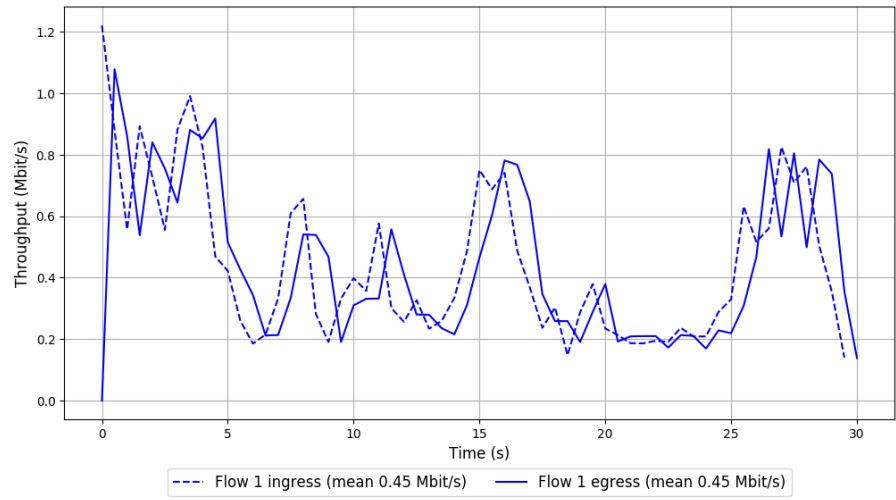# Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-05-23 06:07:47
End at: 2018-05-23 06:08:17
Local clock offset: -0.611 ms
Remote clock offset: -0.08 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 68.028 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 68.028 ms
Loss rate: 0.11%
```

Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-05-23 06:27:34
End at: 2018-05-23 06:28:04
Local clock offset: -0.753 ms
Remote clock offset: -0.224 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 67.743 ms
Loss rate: 2.40%
-- Flow 1:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 67.743 ms
Loss rate: 2.40%
```
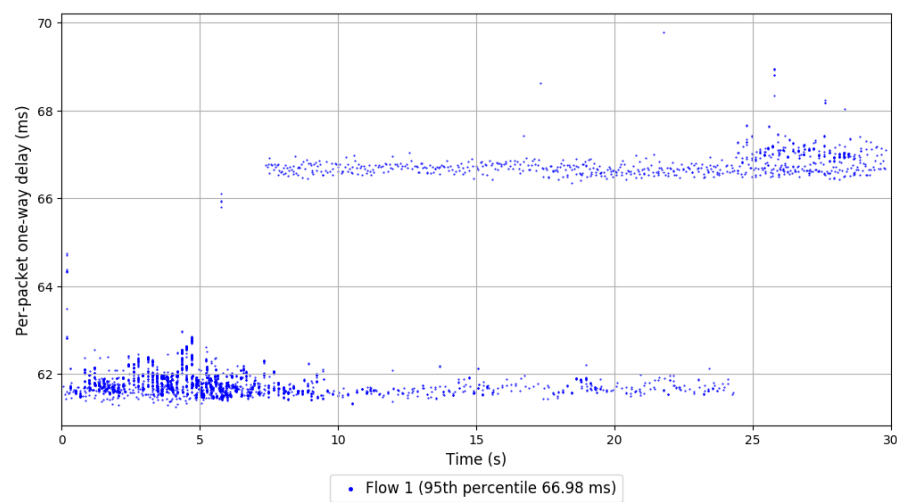
Run 3: Report of Sprout — Data Link

Flow 1 ingress (mean 0.78 Mbit/s)   Flow 1 egress (mean 0.76 Mbit/s)

Flow 1 (95th percentile 67.74 ms)

```
Run 4: Statistics of Sprout

Start at: 2018-05-23 06:47:12
End at: 2018-05-23 06:47:42
Local clock offset: -0.847 ms
Remote clock offset: -0.037 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 67.452 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 67.452 ms
Loss rate: 0.01%
```
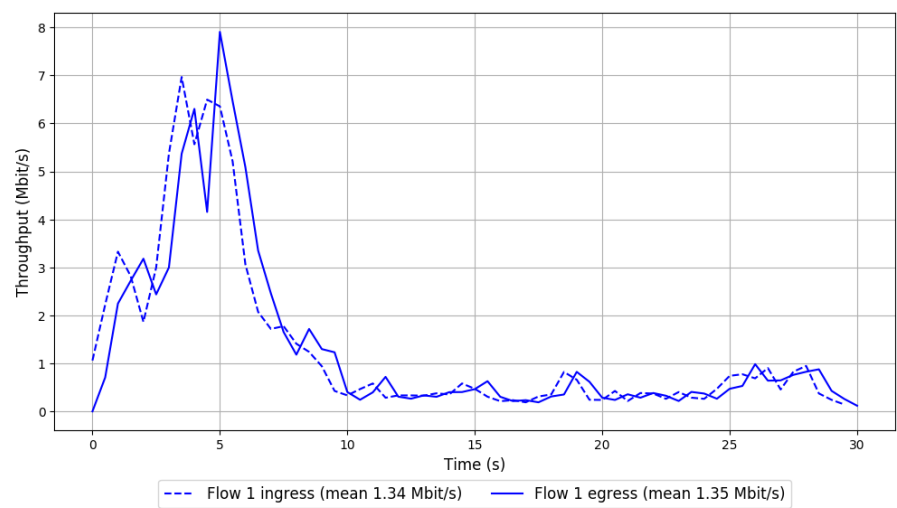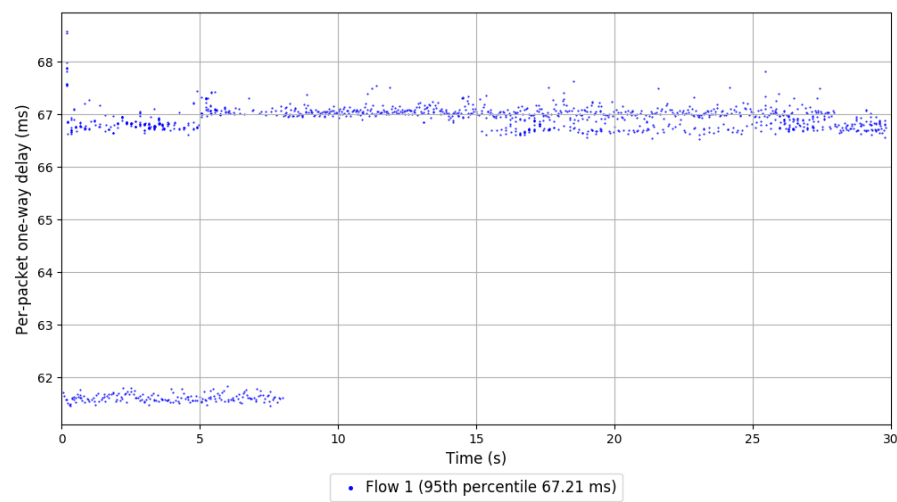
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-05-23 07:06:58
End at: 2018-05-23 07:07:28
Local clock offset: -1.043 ms
Remote clock offset: 0.377 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 66.978 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 66.978 ms
Loss rate: 0.03%
```
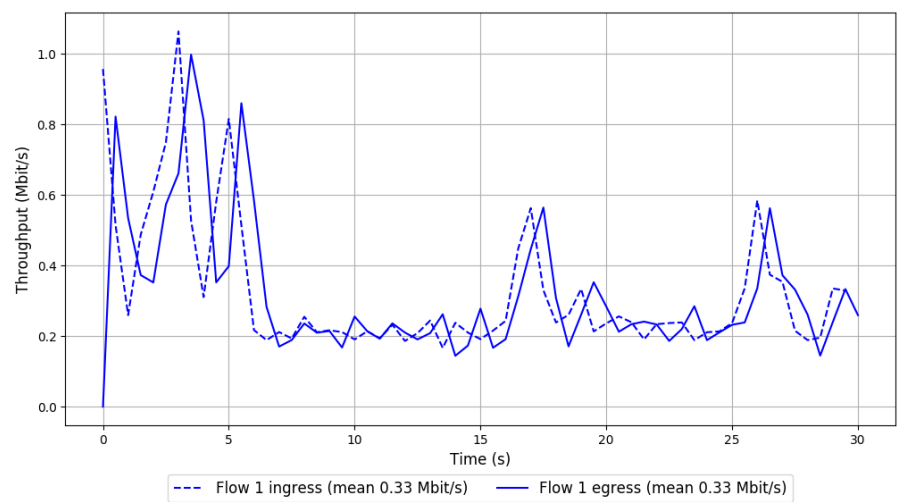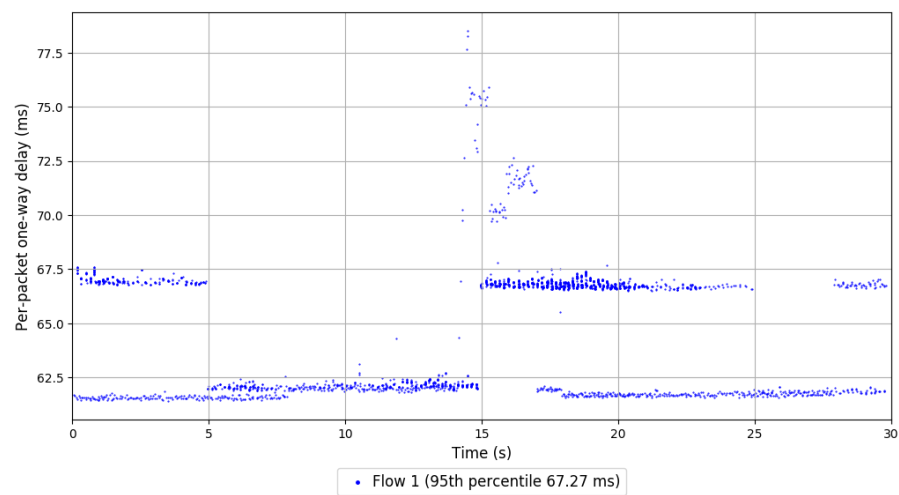
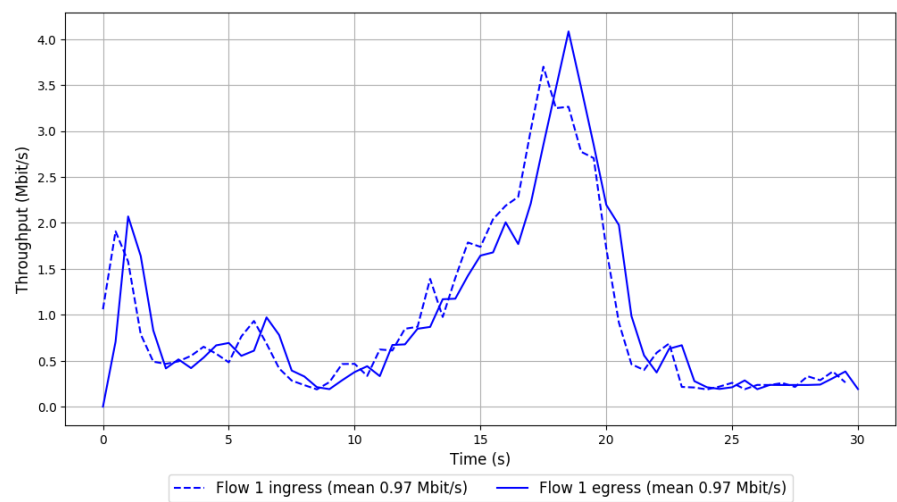## Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-05-23 07:26:48
End at: 2018-05-23 07:27:18
Local clock offset: 0.055 ms
Remote clock offset: 0.03 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 67.208 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 67.208 ms
Loss rate: 0.37%
```
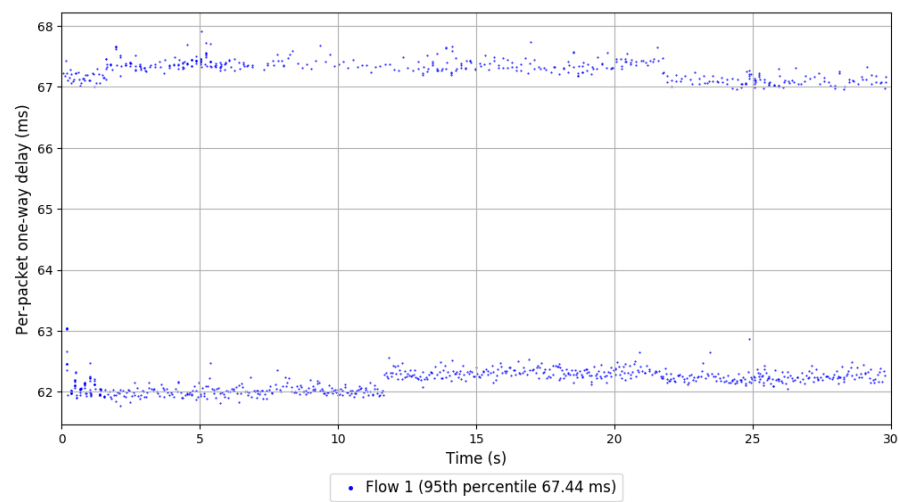
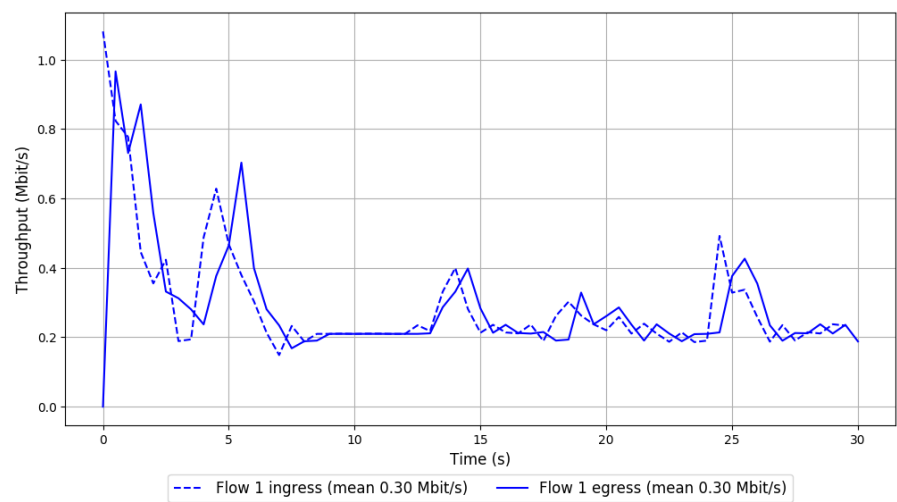# Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2018-05-23 07:46:48
End at: 2018-05-23 07:47:18
Local clock offset: 0.37 ms
Remote clock offset: -0.091 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 67.266 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 67.266 ms
Loss rate: 0.25%
```

Run 7: Report of Sprout — Data Link

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```
Run 8: Statistics of Sprout

Start at: 2018-05-23 08:06:41
End at: 2018-05-23 08:07:11
Local clock offset: 0.693 ms
Remote clock offset: -0.215 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 67.445 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 67.445 ms
Loss rate: 0.28%
```
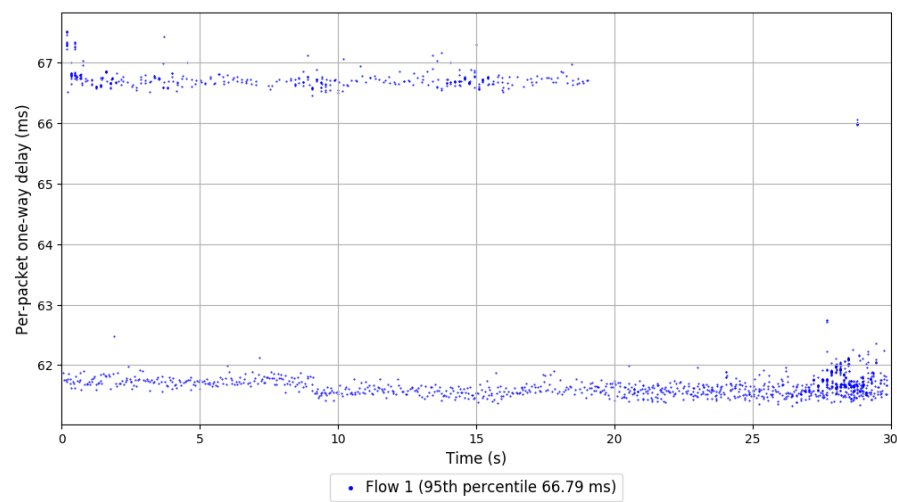
Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-05-23 08:26:44
End at: 2018-05-23 08:27:14
Local clock offset: 0.773 ms
Remote clock offset: 0.315 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 66.789 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 66.789 ms
Loss rate: 0.07%
```
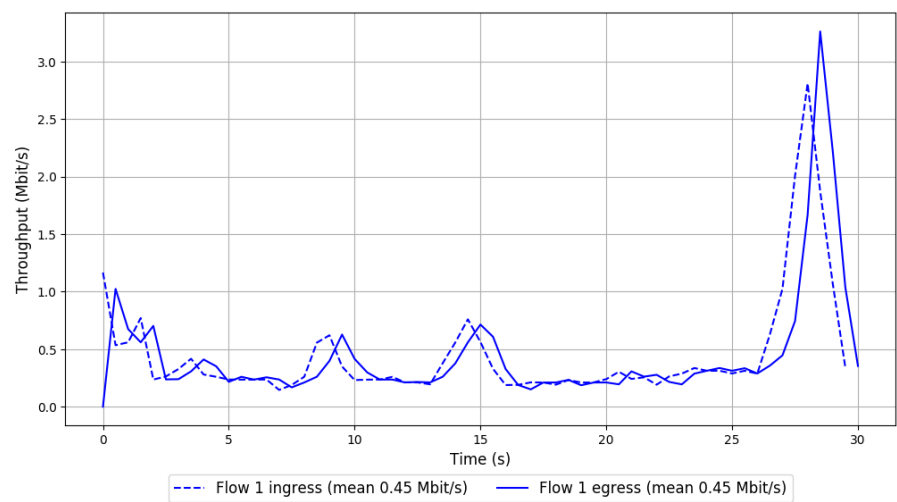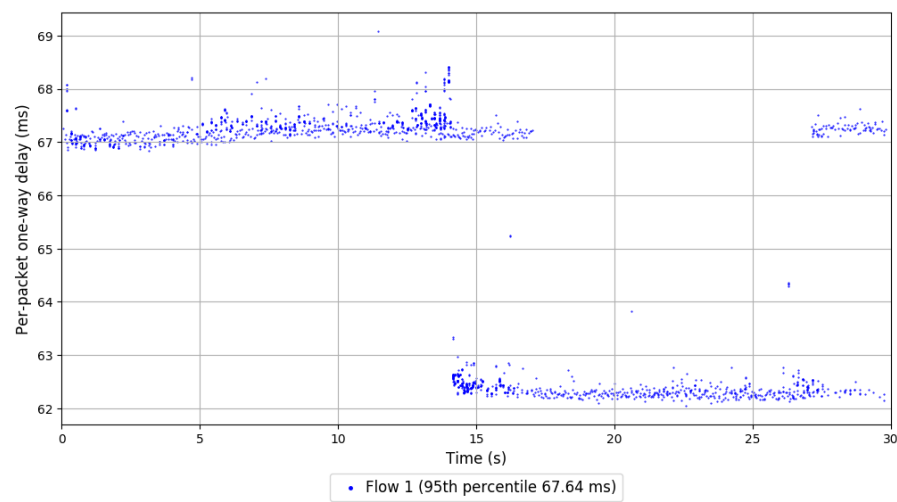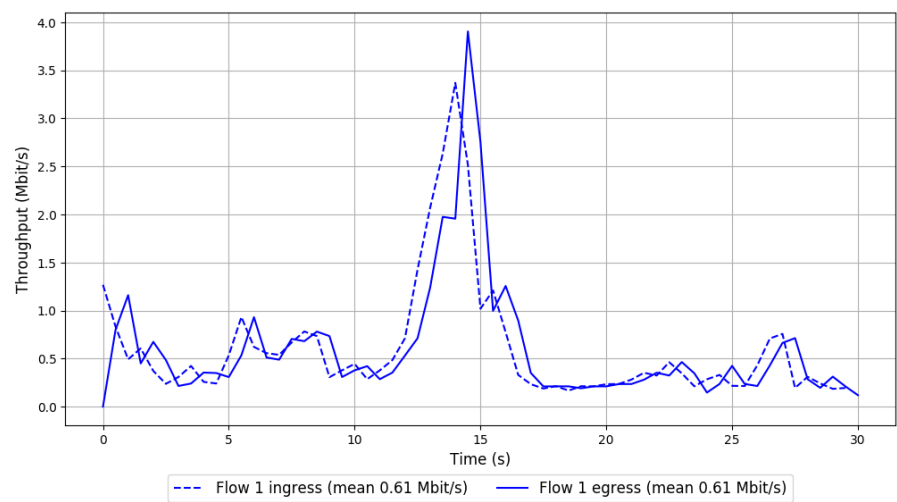
Run 9: Report of Sprout — Data Link
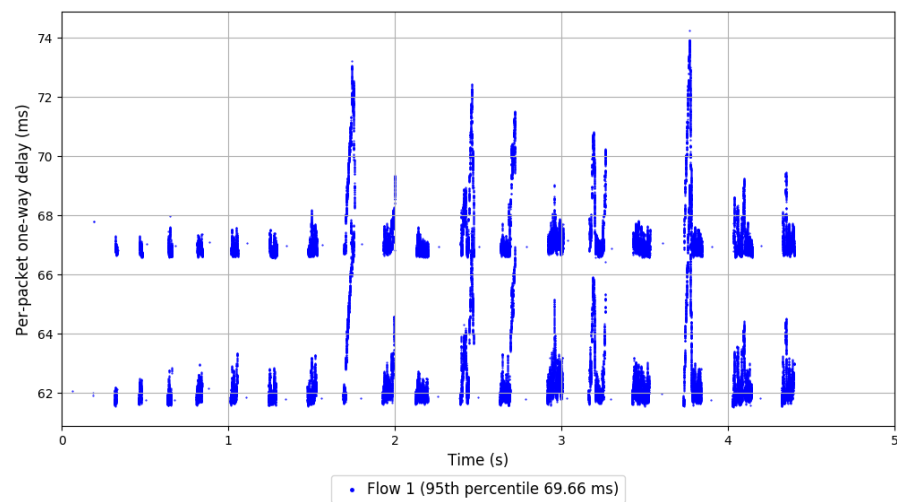
```
Run 10: Statistics of Sprout

Start at: 2018-05-23 08:46:39
End at: 2018-05-23 08:47:09
Local clock offset: 1.026 ms
Remote clock offset: -0.156 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 67.636 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 67.636 ms
Loss rate: 0.26%
```

Run 10: Report of Sprout — Data Link
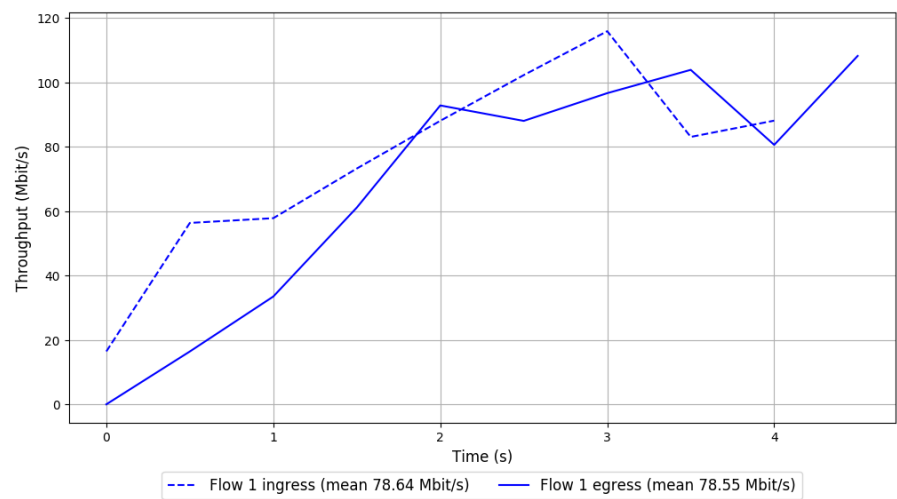
```
Run 1: Statistics of TaoVA-100x

Start at: 2018-05-23 05:41:42
End at: 2018-05-23 05:42:12
Local clock offset: -0.38 ms
Remote clock offset: -0.124 ms
```
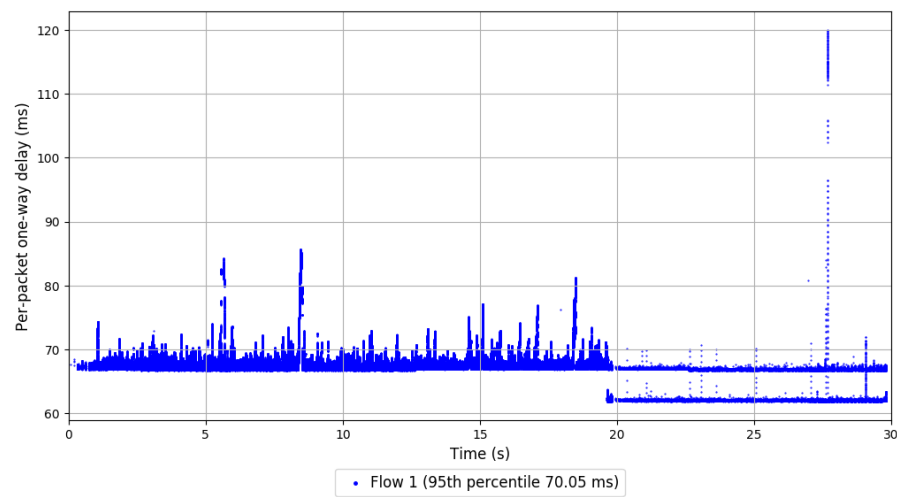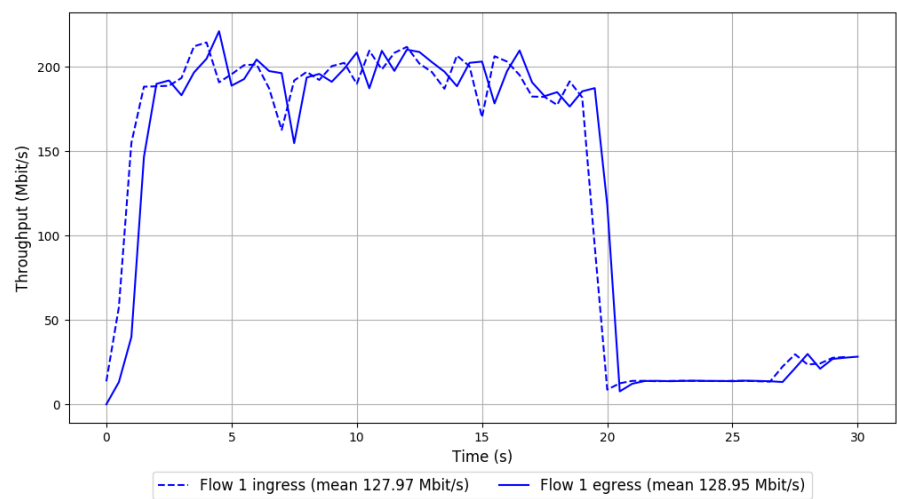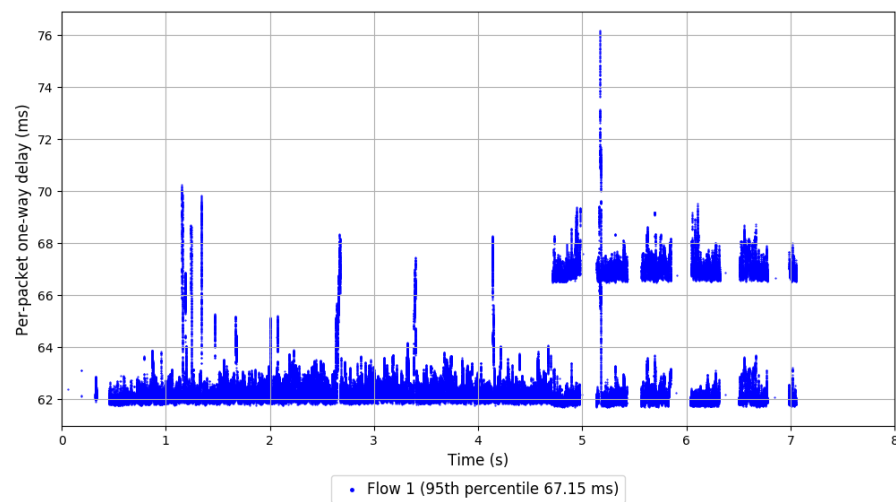
Run 1: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 78.64 Mbit/s)   Flow 1 egress (mean 78.55 Mbit/s)

• Flow 1 (95th percentile 69.66 ms)

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

Start at: 2018-05-23 06:01:23
End at: 2018-05-23 06:01:53
Local clock offset: -0.497 ms
Remote clock offset: -0.398 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 128.95 Mbit/s
95th percentile per-packet one-way delay: 70.052 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 128.95 Mbit/s
95th percentile per-packet one-way delay: 70.052 ms
Loss rate: 0.03%
```

Run 2: Report of TaoVA-100x — Data Link
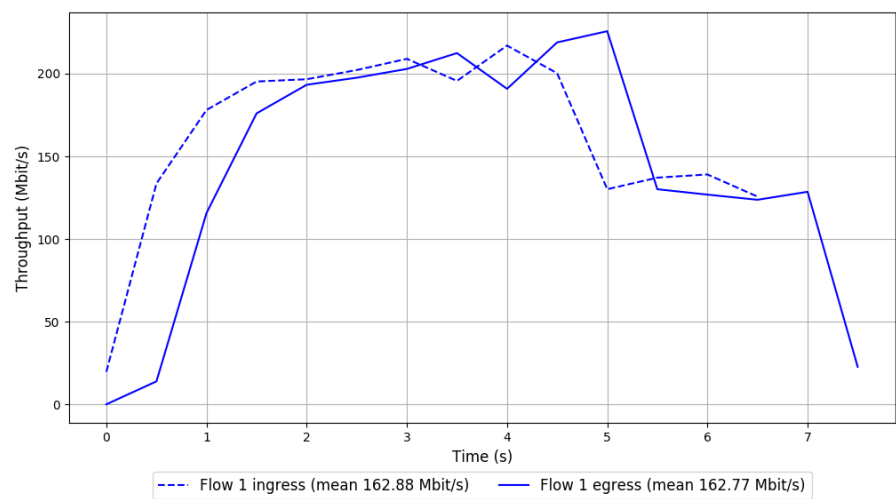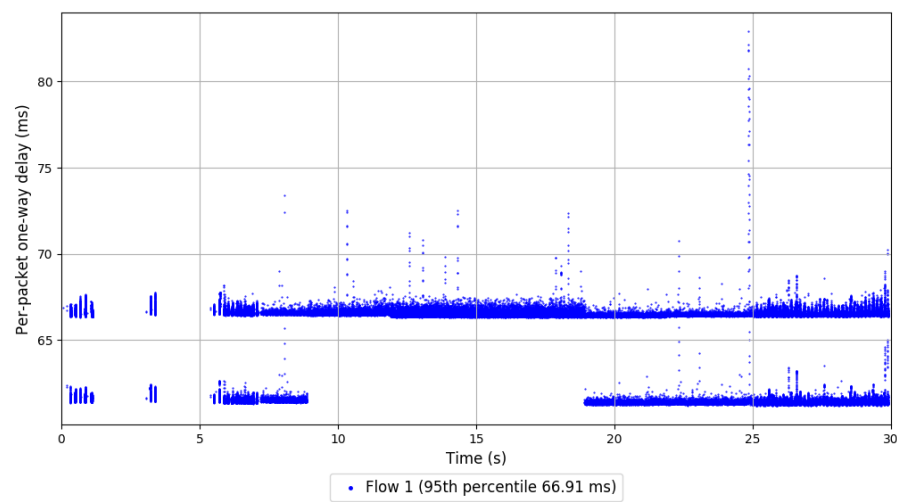
```
Run 3: Statistics of TaoVA-100x

Start at: 2018-05-23 06:21:18
End at: 2018-05-23 06:21:48
Local clock offset: -0.77 ms
Remote clock offset: -0.4 ms
```

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

Flow 1 ingress (mean 162.88 Mbit/s)   Flow 1 egress (mean 162.77 Mbit/s)

Flow 1 (95th percentile 67.15 ms)

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

Start at: 2018-05-23 06:41:04
End at: 2018-05-23 06:41:34
Local clock offset: -0.886 ms
Remote clock offset: 0.048 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 15.14 Mbit/s
95th percentile per-packet one-way delay: 66.908 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 15.14 Mbit/s
95th percentile per-packet one-way delay: 66.908 ms
Loss rate: 0.78%
```
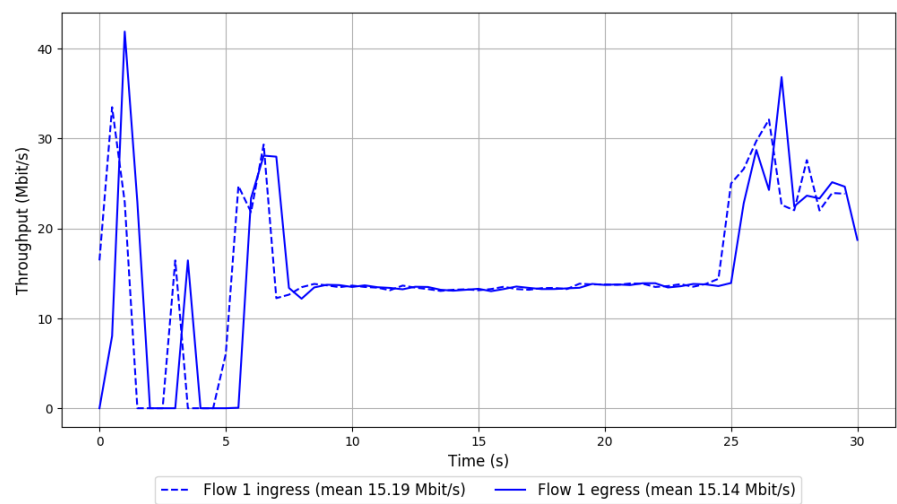
Run 4: Report of TaoVA-100x — Data Link
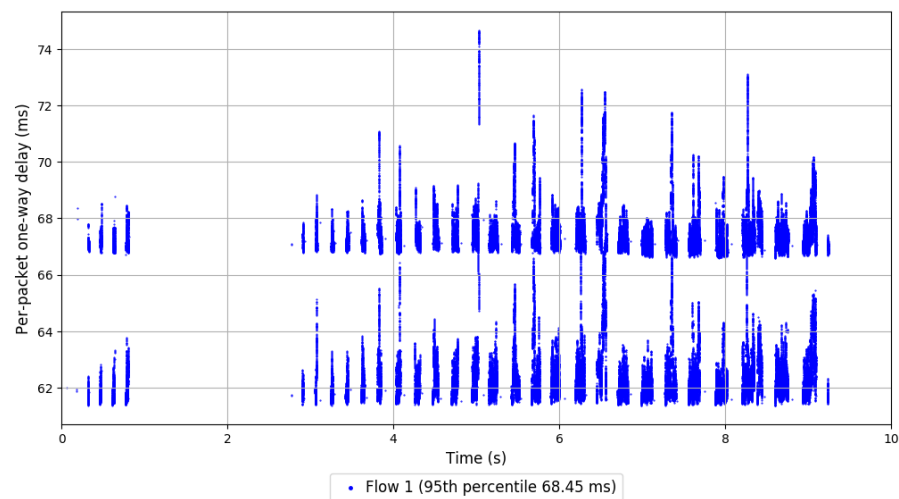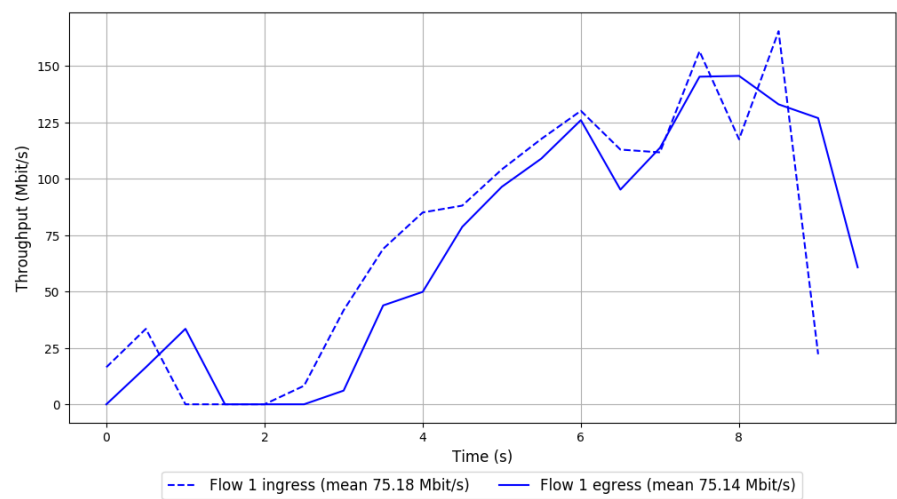
```
Run 5: Statistics of TaoVA-100x

Start at: 2018-05-23 07:00:46
End at: 2018-05-23 07:01:16
Local clock offset: -0.987 ms
Remote clock offset: 0.132 ms
```
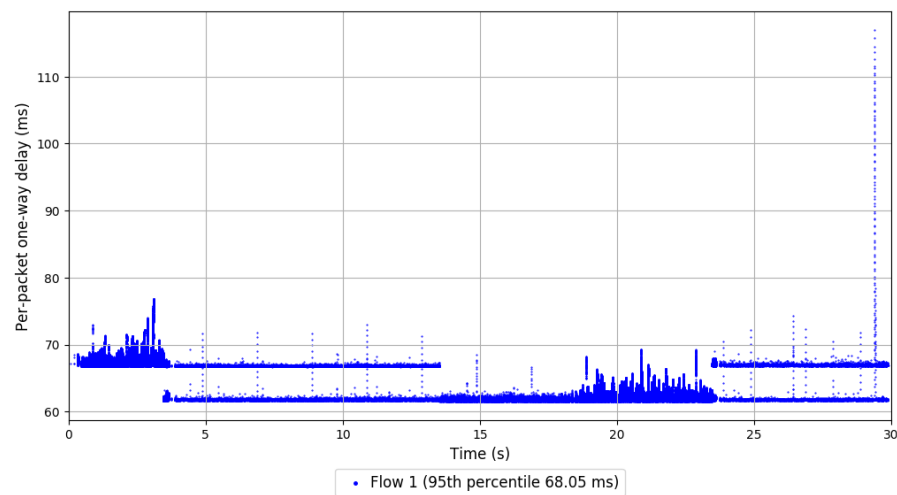
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 75.18 Mbit/s)   Flow 1 egress (mean 75.14 Mbit/s)
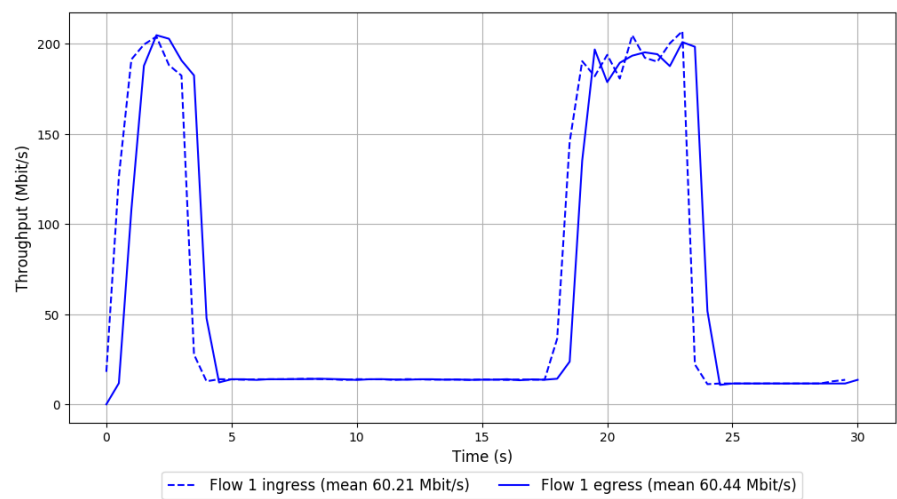

Flow 1 (95th percentile 68.45 ms)

```
Run 6: Statistics of TaoVA-100x

Start at: 2018-05-23 07:20:29
End at: 2018-05-23 07:20:59
Local clock offset: -0.117 ms
Remote clock offset: -0.148 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.44 Mbit/s
95th percentile per-packet one-way delay: 68.048 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 60.44 Mbit/s
95th percentile per-packet one-way delay: 68.048 ms
Loss rate: 0.08%
```

Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 60.21 Mbit/s) ---- Flow 1 egress (mean 60.44 Mbit/s)

Flow 1 (95th percentile 68.05 ms)
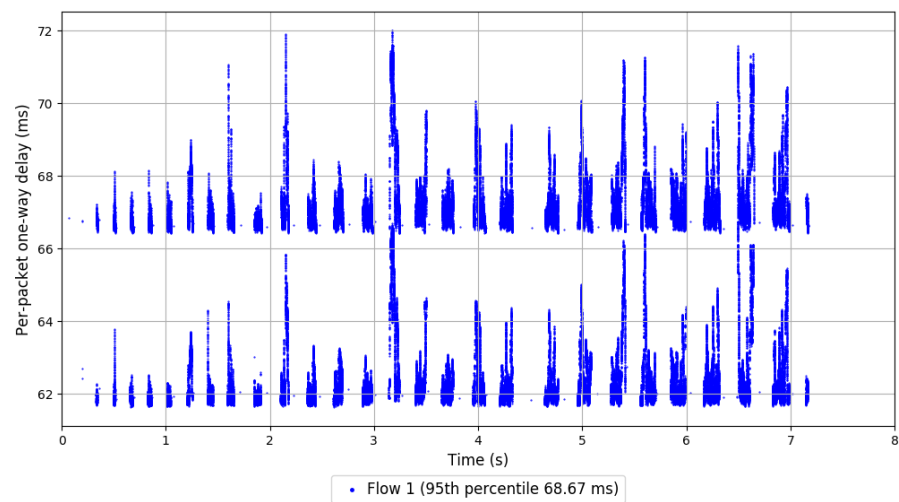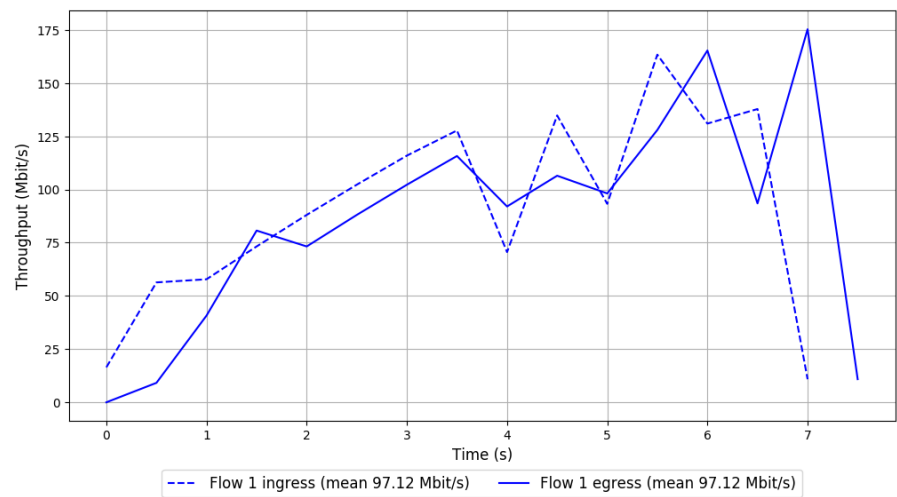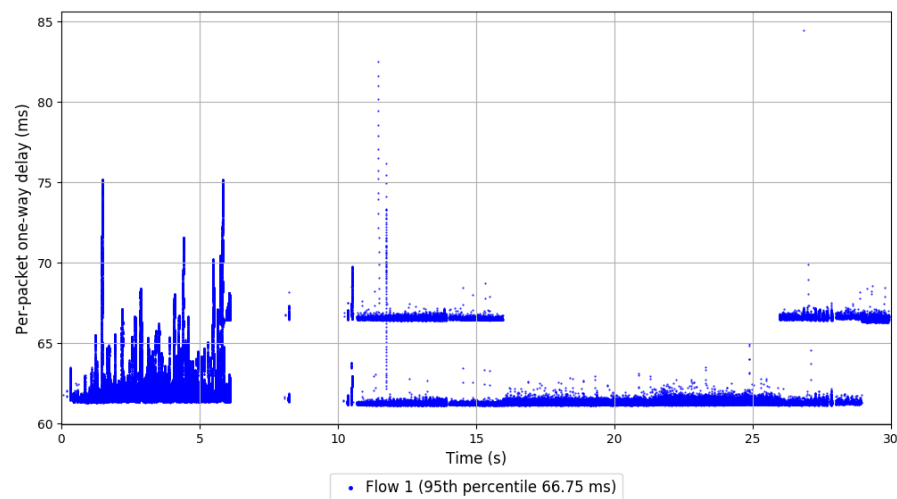
```
Run 7: Statistics of TaoVA-100x

Start at: 2018-05-23 07:40:34
End at: 2018-05-23 07:41:04
Local clock offset: 0.311 ms
Remote clock offset: -0.111 ms
```

Run 7: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 97.12 Mbit/s)   Flow 1 egress (mean 97.12 Mbit/s)

Flow 1 (95th percentile 68.67 ms)

```
Run 8: Statistics of TaoVA-100x

Start at: 2018-05-23 08:00:17
End at: 2018-05-23 08:00:47
Local clock offset: 0.522 ms
Remote clock offset: 0.232 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.33 Mbit/s
95th percentile per-packet one-way delay: 66.751 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 47.33 Mbit/s
95th percentile per-packet one-way delay: 66.751 ms
Loss rate: 0.05%
```
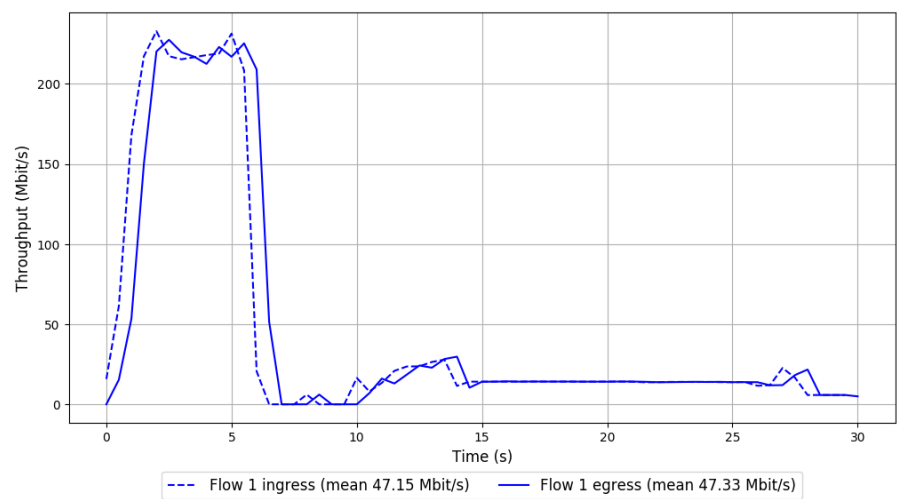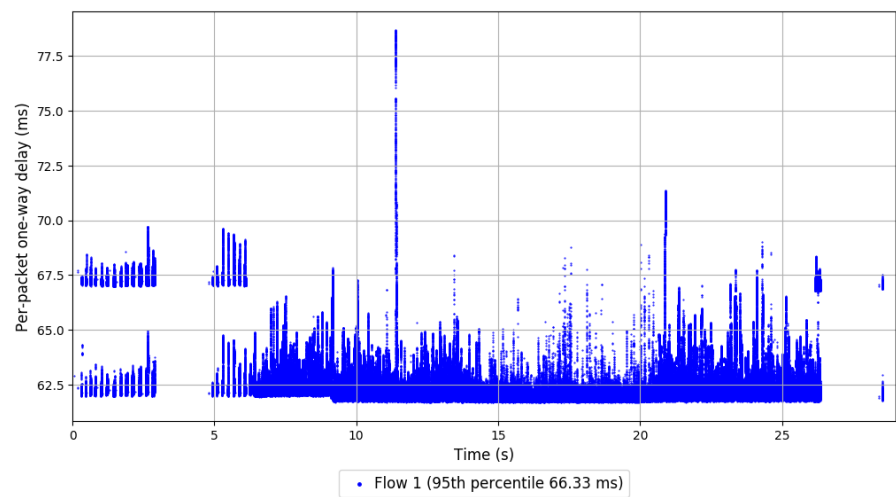
Run 8: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 47.15 Mbit/s) --- Flow 1 egress (mean 47.33 Mbit/s)

Flow 1 (95th percentile 66.75 ms)

```
Run 9: Statistics of TaoVA-100x

Start at: 2018-05-23 08:20:17
End at: 2018-05-23 08:20:47
Local clock offset: 0.751 ms
Remote clock offset: -0.224 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 120.99 Mbit/s
95th percentile per-packet one-way delay: 66.327 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 120.99 Mbit/s
95th percentile per-packet one-way delay: 66.327 ms
Loss rate: 0.00%
```
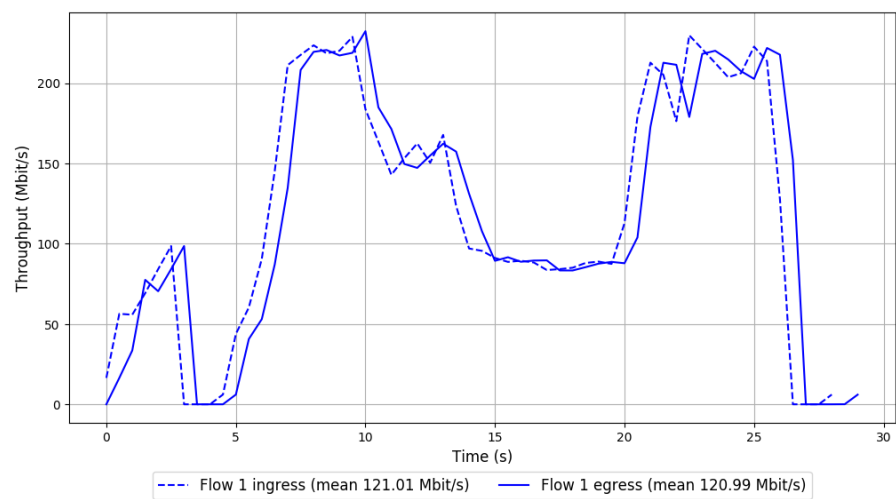
Run 9: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 121.01 Mbit/s) — Flow 1 egress (mean 120.99 Mbit/s)

Flow 1 (95th percentile 66.33 ms)
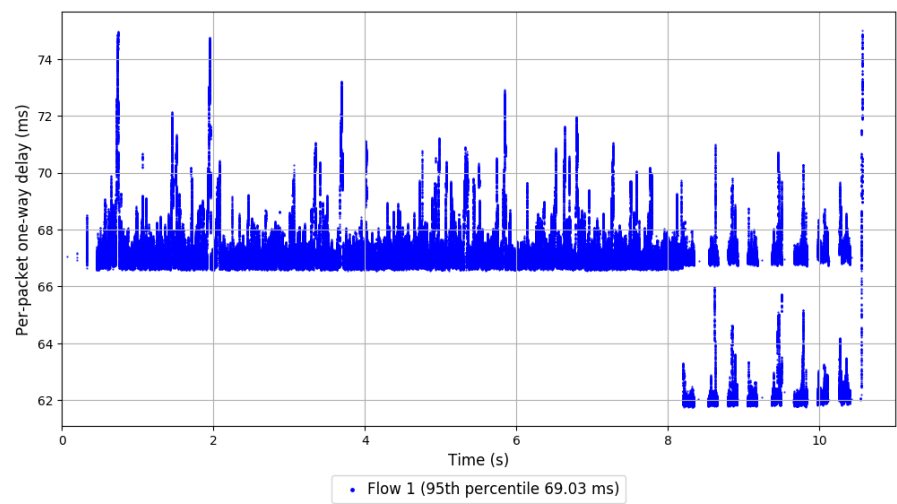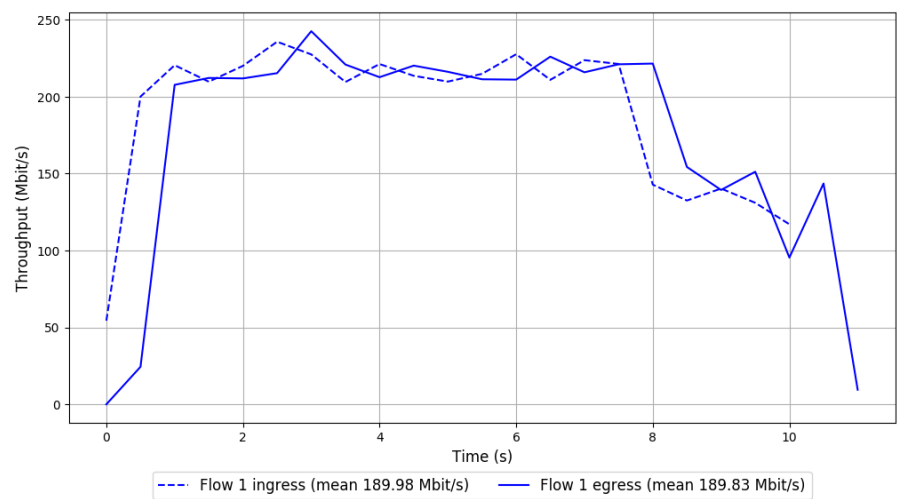
```
Run 10: Statistics of TaoVA-100x

Start at: 2018-05-23 08:40:15
End at: 2018-05-23 08:40:45
Local clock offset: 1.001 ms
Remote clock offset: -0.035 ms
```
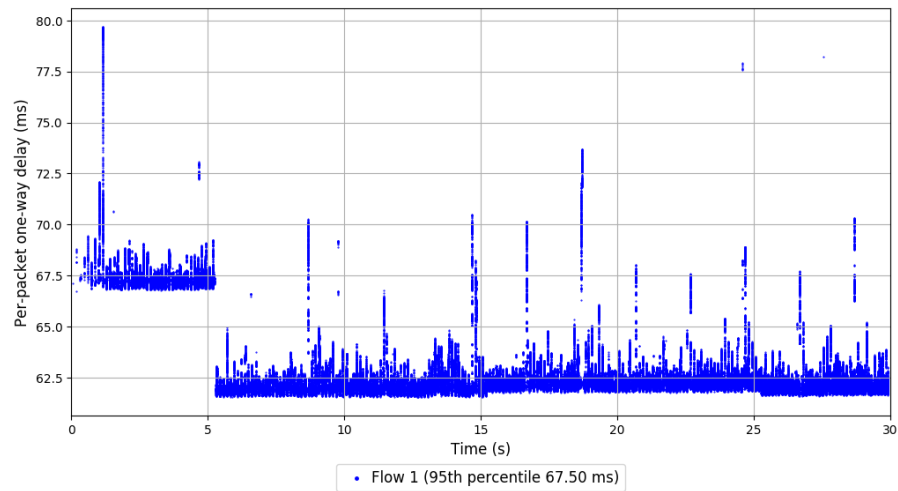
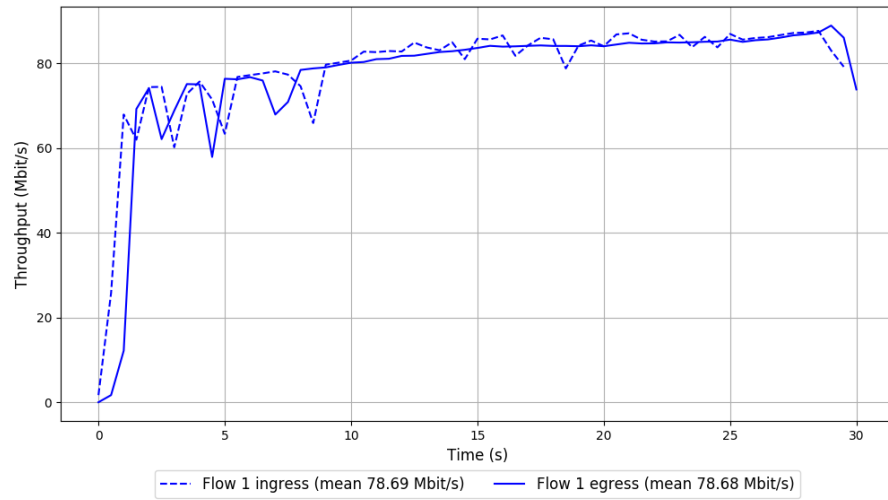## Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 189.98 Mbit/s) --- Flow 1 egress (mean 189.83 Mbit/s)

Flow 1 (95th percentile 69.03 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2018-05-23 05:35:47
End at: 2018-05-23 05:36:17
Local clock offset: -0.279 ms
Remote clock offset: -0.188 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.68 Mbit/s
95th percentile per-packet one-way delay: 67.504 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 78.68 Mbit/s
95th percentile per-packet one-way delay: 67.504 ms
Loss rate: 0.46%
```
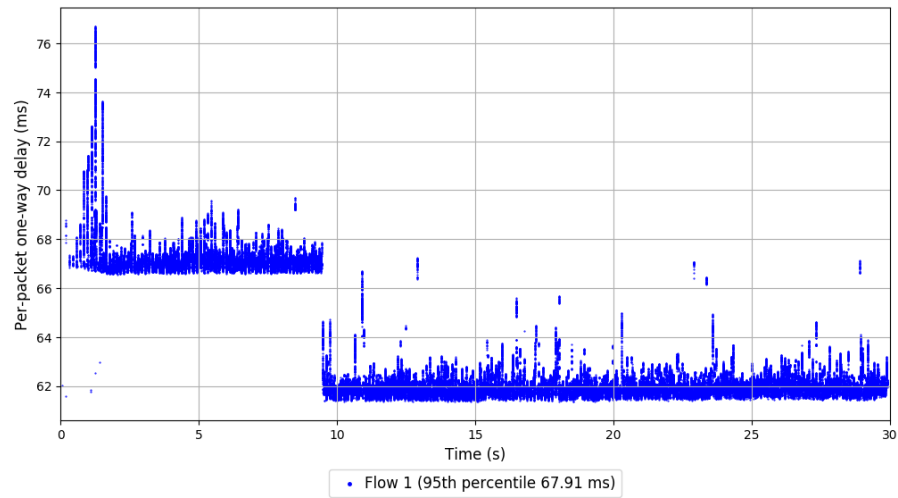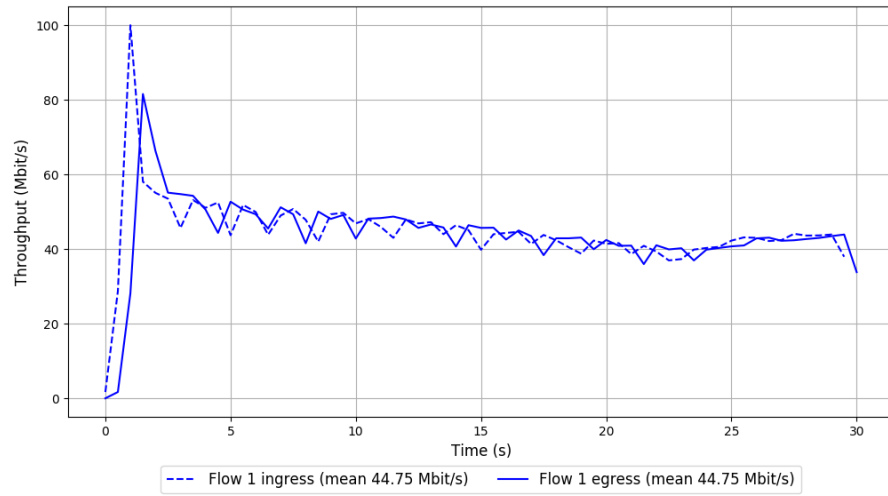
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-05-23 05:55:33
End at: 2018-05-23 05:56:03
Local clock offset: -0.475 ms
Remote clock offset: -0.043 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.75 Mbit/s
95th percentile per-packet one-way delay: 67.912 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 44.75 Mbit/s
95th percentile per-packet one-way delay: 67.912 ms
Loss rate: 0.42%
```
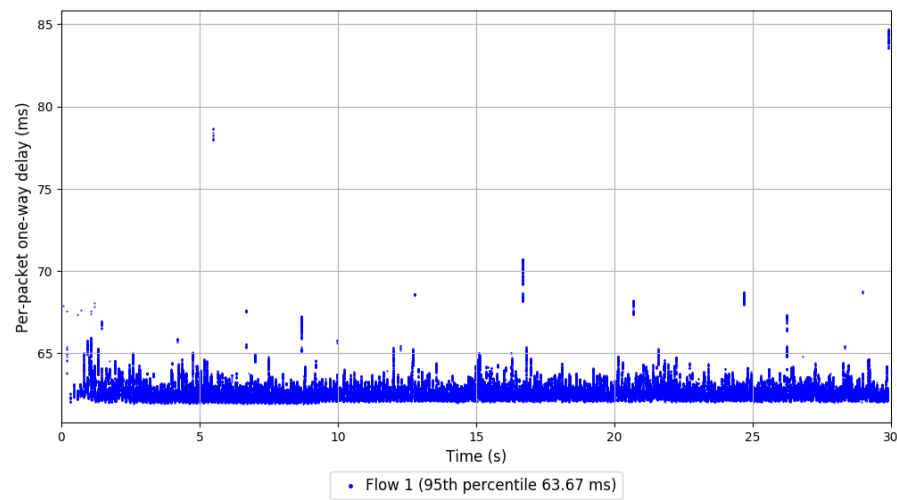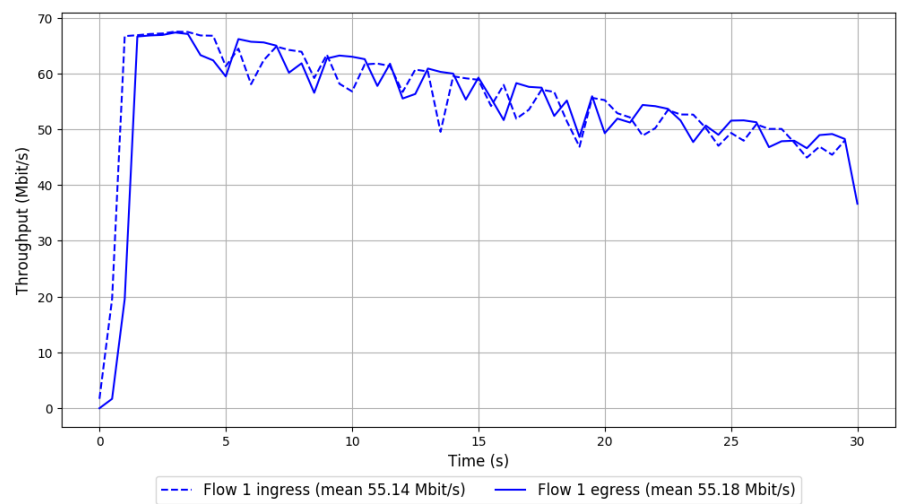
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-05-23 06:15:23
End at: 2018-05-23 06:15:53
Local clock offset: -0.638 ms
Remote clock offset: -0.527 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.18 Mbit/s
95th percentile per-packet one-way delay: 63.675 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 55.18 Mbit/s
95th percentile per-packet one-way delay: 63.675 ms
Loss rate: 0.36%
```
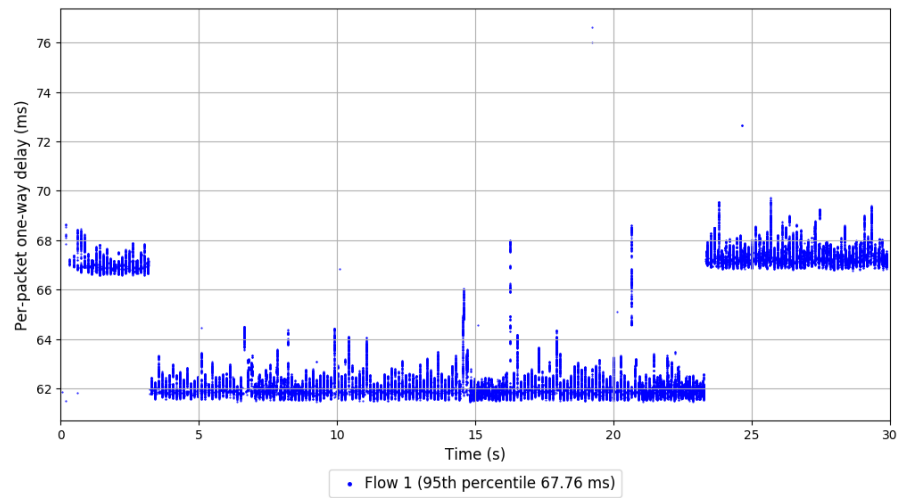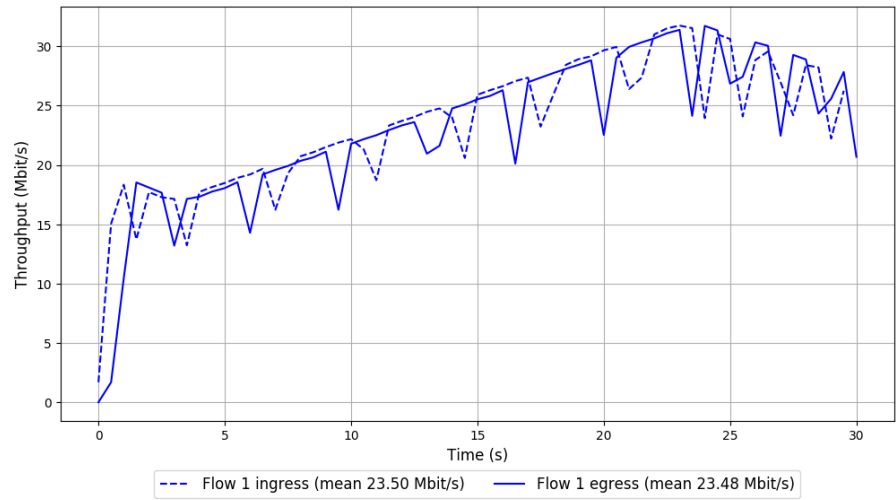
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2018-05-23 06:35:09
End at: 2018-05-23 06:35:39
Local clock offset: -0.738 ms
Remote clock offset: -0.014 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.48 Mbit/s
95th percentile per-packet one-way delay: 67.757 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 23.48 Mbit/s
95th percentile per-packet one-way delay: 67.757 ms
Loss rate: 0.49%
```

Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-05-23 06:54:51
End at: 2018-05-23 06:55:21
Local clock offset: -0.878 ms
Remote clock offset: 0.078 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.63 Mbit/s
95th percentile per-packet one-way delay: 69.007 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 86.63 Mbit/s
95th percentile per-packet one-way delay: 69.007 ms
Loss rate: 0.45%
```
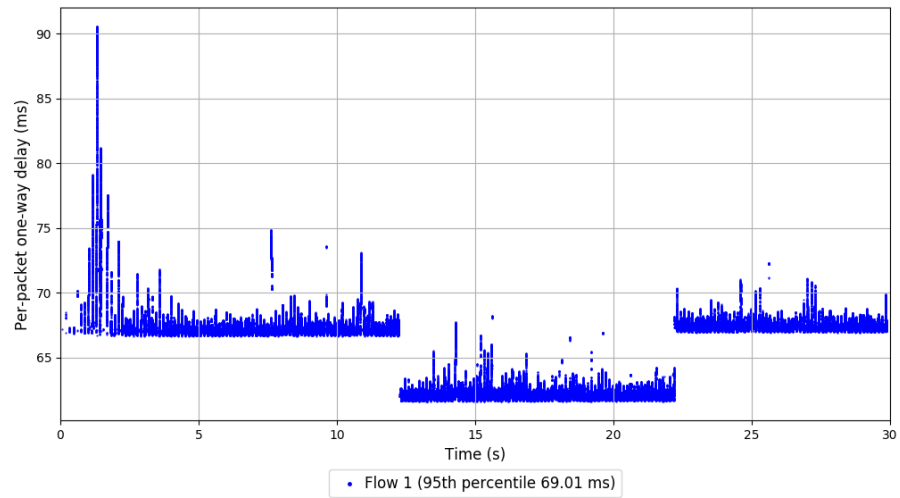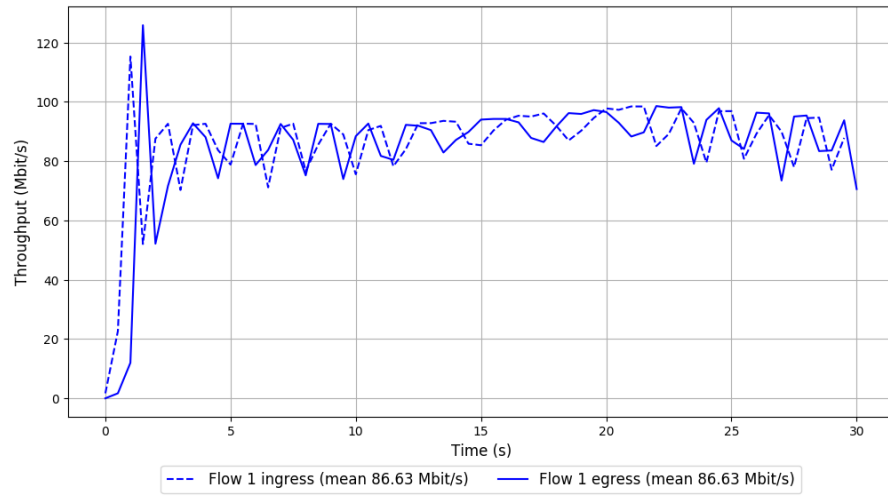
Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 86.63 Mbit/s) --- Flow 1 egress (mean 86.63 Mbit/s)

Flow 1 (95th percentile 69.01 ms)

```
Run 6: Statistics of TCP Vegas

Start at: 2018-05-23 07:14:38
End at: 2018-05-23 07:15:08
Local clock offset: -0.499 ms
Remote clock offset: 0.269 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 116.03 Mbit/s
95th percentile per-packet one-way delay: 67.124 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 116.03 Mbit/s
95th percentile per-packet one-way delay: 67.124 ms
Loss rate: 0.24%
```
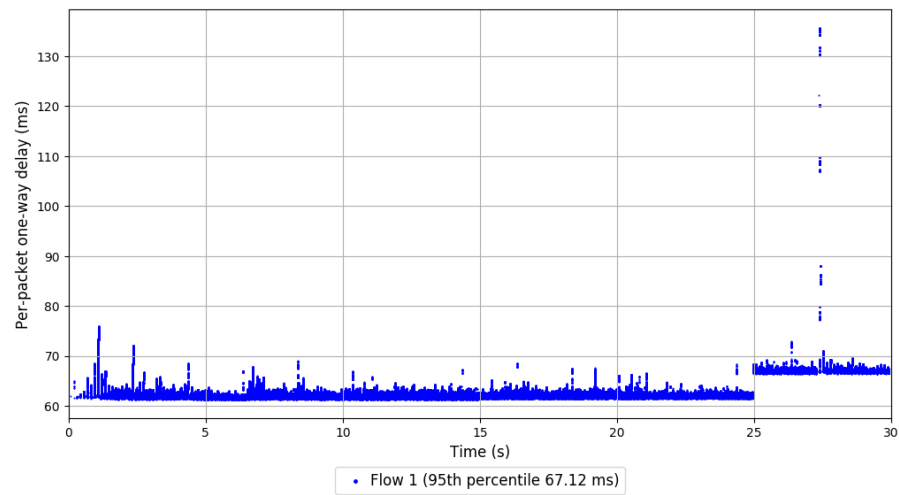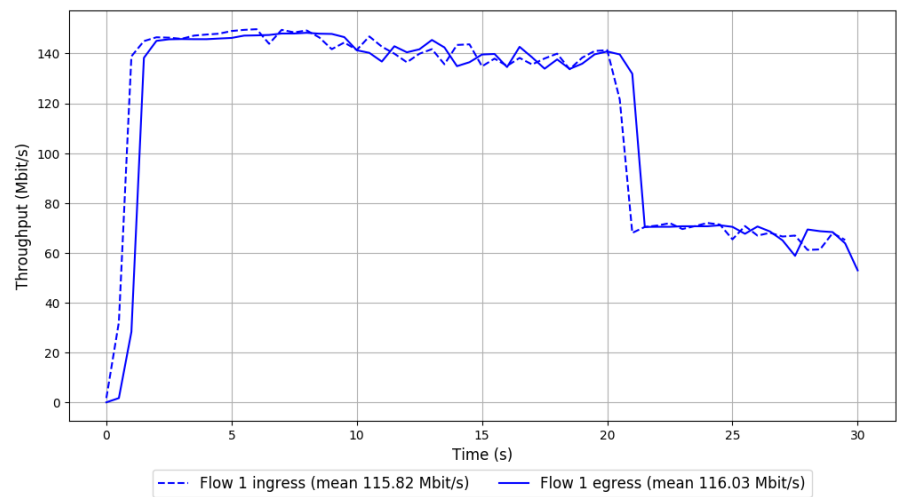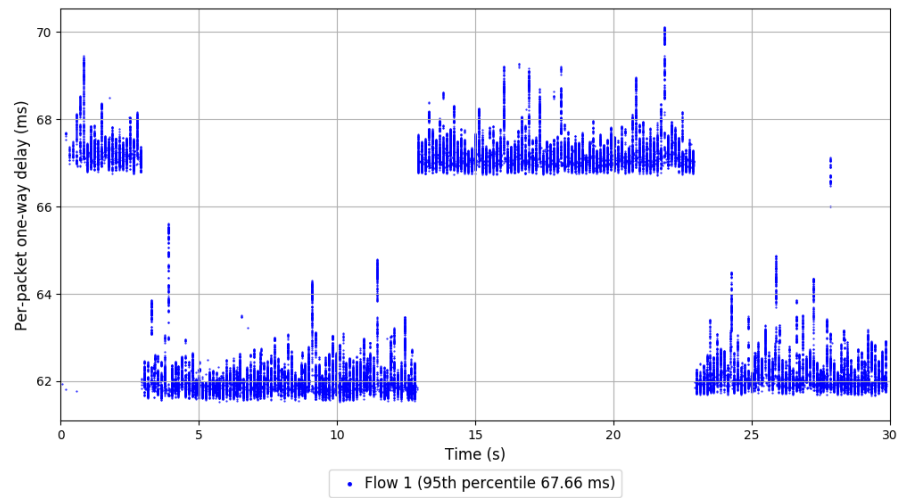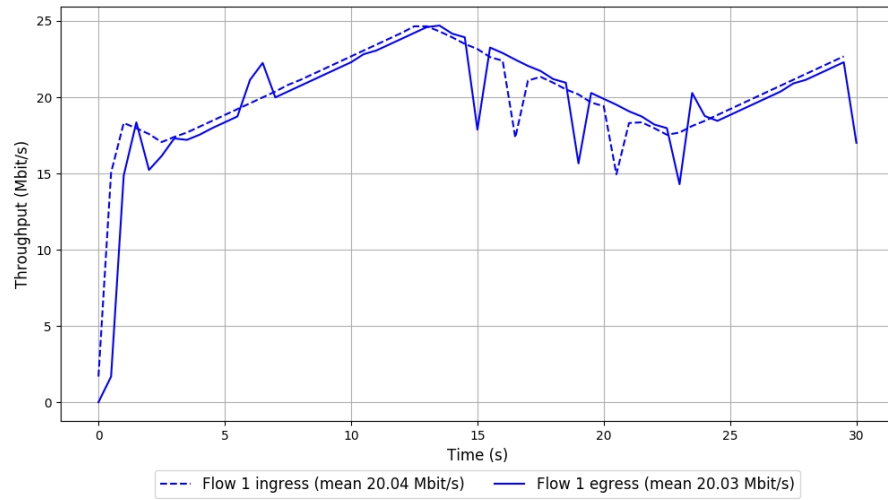
Run 6: Report of TCP Vegas — Data Link

```
Run 7: Statistics of TCP Vegas

Start at: 2018-05-23 07:34:40
End at: 2018-05-23 07:35:10
Local clock offset: 0.205 ms
Remote clock offset: -0.209 ms


# Below is generated by plot.py at 2018-05-23 09:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.03 Mbit/s
95th percentile per-packet one-way delay: 67.656 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 20.03 Mbit/s
95th percentile per-packet one-way delay: 67.656 ms
Loss rate: 0.48%
```

Run 7: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 20.04 Mbit/s) —— Flow 1 egress (mean 20.03 Mbit/s)

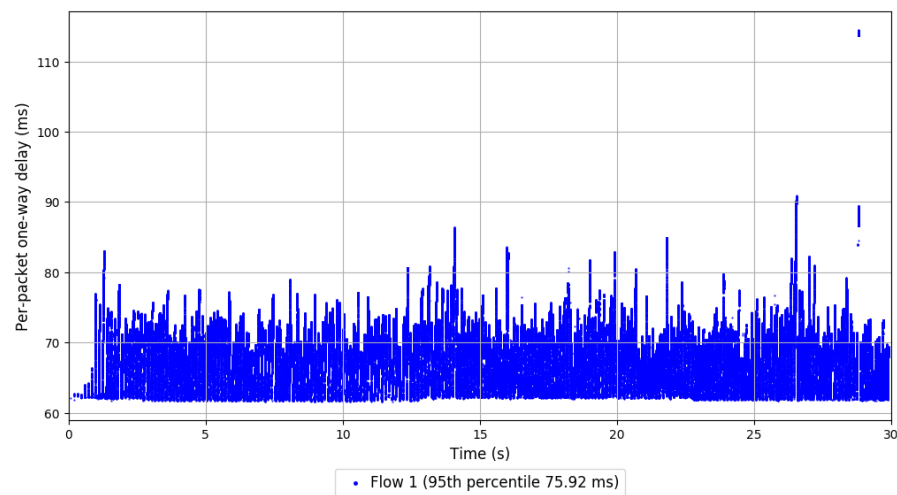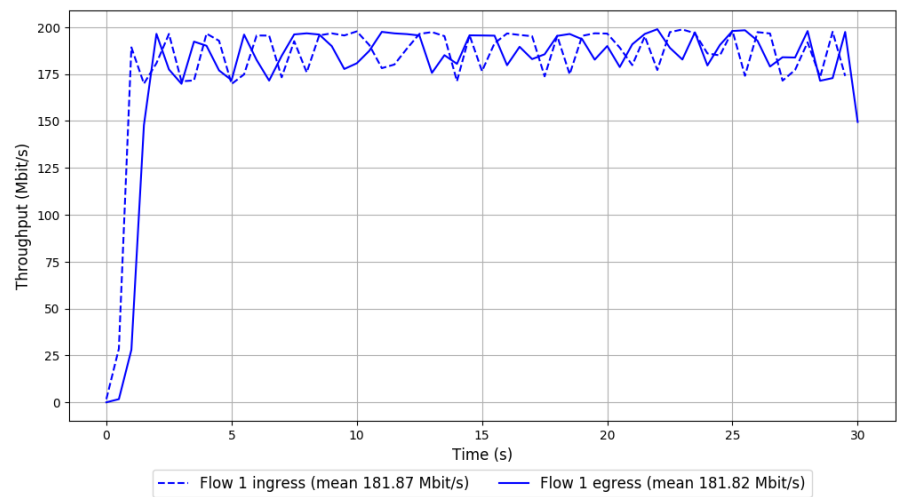• Flow 1 (95th percentile 67.66 ms)

```
Run 8: Statistics of TCP Vegas

Start at: 2018-05-23 07:54:30
End at: 2018-05-23 07:55:00
Local clock offset: 0.504 ms
Remote clock offset: -0.107 ms


# Below is generated by plot.py at 2018-05-23 09:59:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.82 Mbit/s
95th percentile per-packet one-way delay: 75.920 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 181.82 Mbit/s
95th percentile per-packet one-way delay: 75.920 ms
Loss rate: 0.46%
```

Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2018-05-23 08:14:24
End at: 2018-05-23 08:14:54
Local clock offset: 0.752 ms
Remote clock offset: 0.009 ms


# Below is generated by plot.py at 2018-05-23 09:59:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.15 Mbit/s
95th percentile per-packet one-way delay: 67.920 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 16.15 Mbit/s
95th percentile per-packet one-way delay: 67.920 ms
Loss rate: 0.39%
```
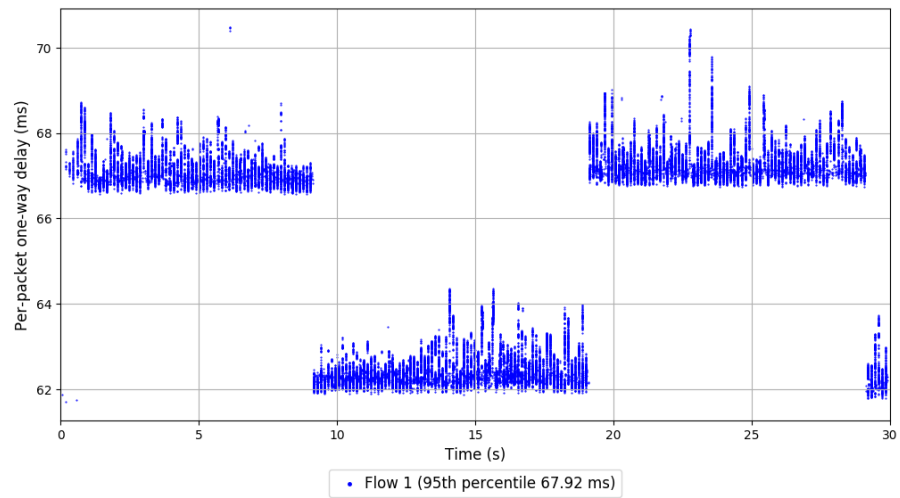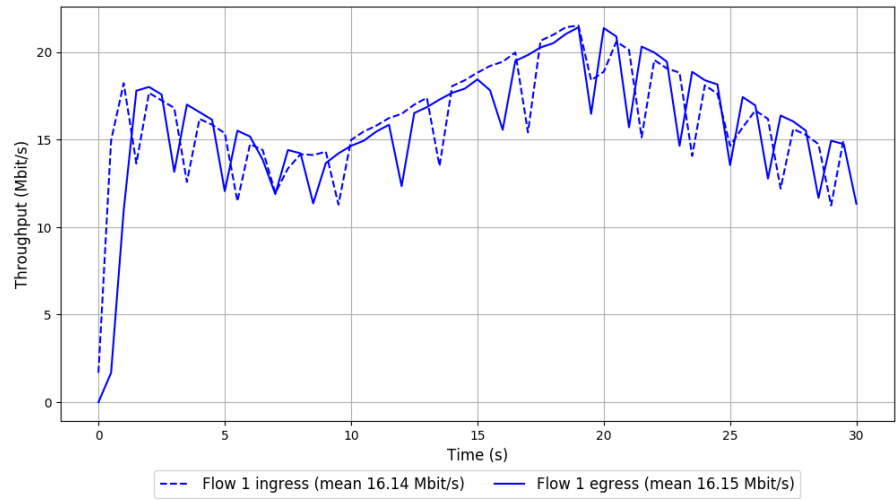
Run 9: Report of TCP Vegas — Data Link

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```
Run 10: Statistics of TCP Vegas

Start at: 2018-05-23 08:34:37
End at: 2018-05-23 08:35:07
Local clock offset: 0.864 ms
Remote clock offset: -0.039 ms


# Below is generated by plot.py at 2018-05-23 09:59:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.18 Mbit/s
95th percentile per-packet one-way delay: 67.768 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 13.18 Mbit/s
95th percentile per-packet one-way delay: 67.768 ms
Loss rate: 0.33%
```
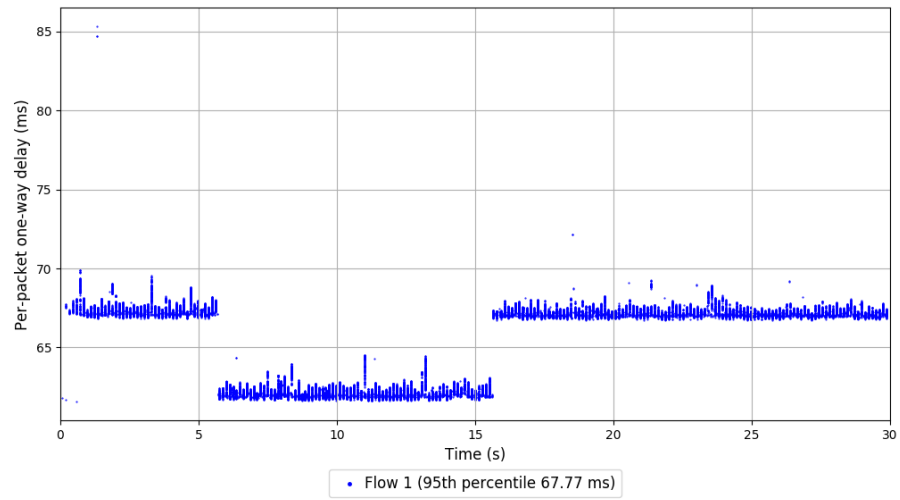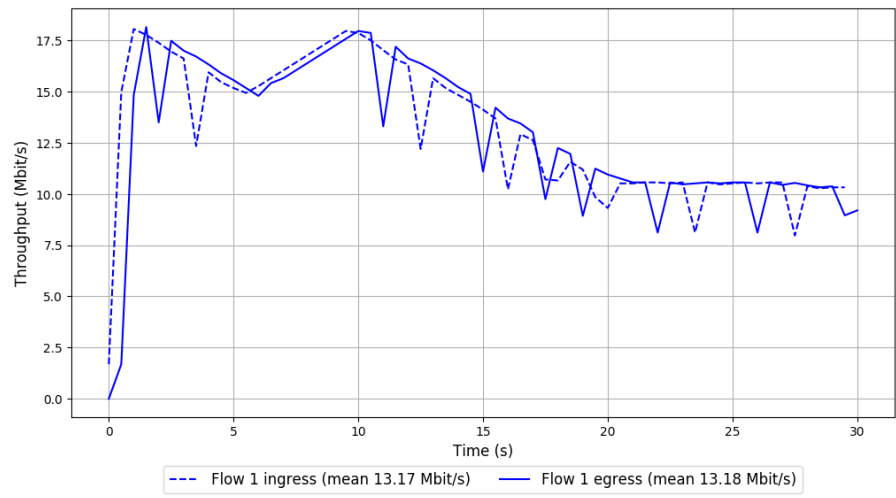
Run 10: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 13.17 Mbit/s)   Flow 1 egress (mean 13.18 Mbit/s)

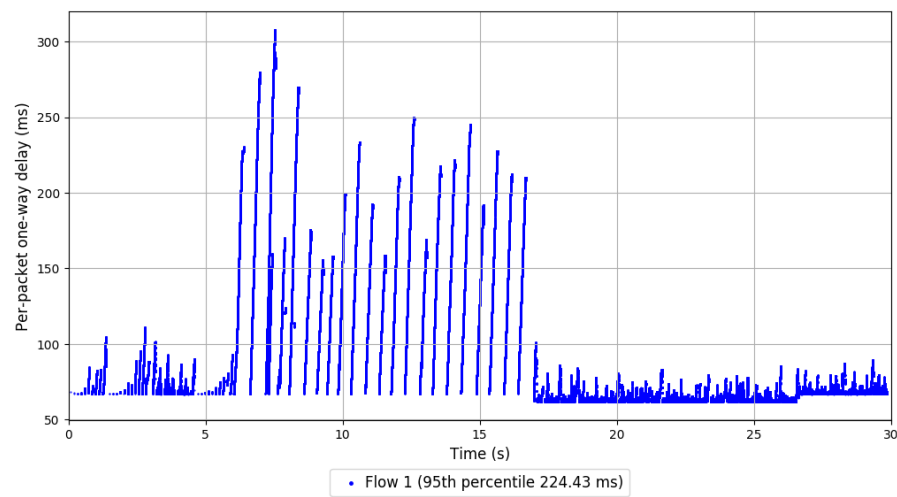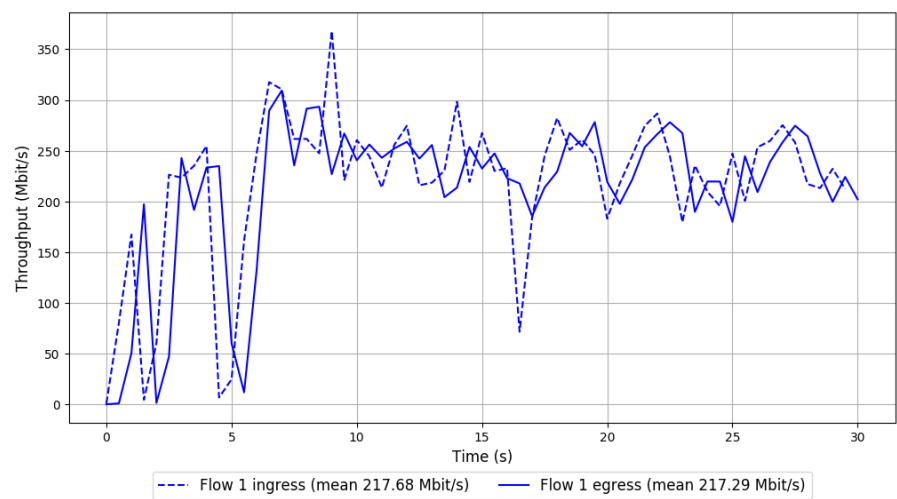
Flow 1 (95th percentile 67.77 ms)

```
Run 1: Statistics of Verus

Start at: 2018-05-23 05:34:26
End at: 2018-05-23 05:34:56
Local clock offset: -0.251 ms
Remote clock offset: -0.319 ms

# Below is generated by plot.py at 2018-05-23 10:01:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.29 Mbit/s
95th percentile per-packet one-way delay: 224.434 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 217.29 Mbit/s
95th percentile per-packet one-way delay: 224.434 ms
Loss rate: 0.63%
```

Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2018-05-23 05:54:15
End at: 2018-05-23 05:54:45
Local clock offset: -0.448 ms
Remote clock offset: -0.05 ms


# Below is generated by plot.py at 2018-05-23 10:01:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 174.24 Mbit/s
95th percentile per-packet one-way delay: 143.630 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 174.24 Mbit/s
95th percentile per-packet one-way delay: 143.630 ms
Loss rate: 1.15%
```
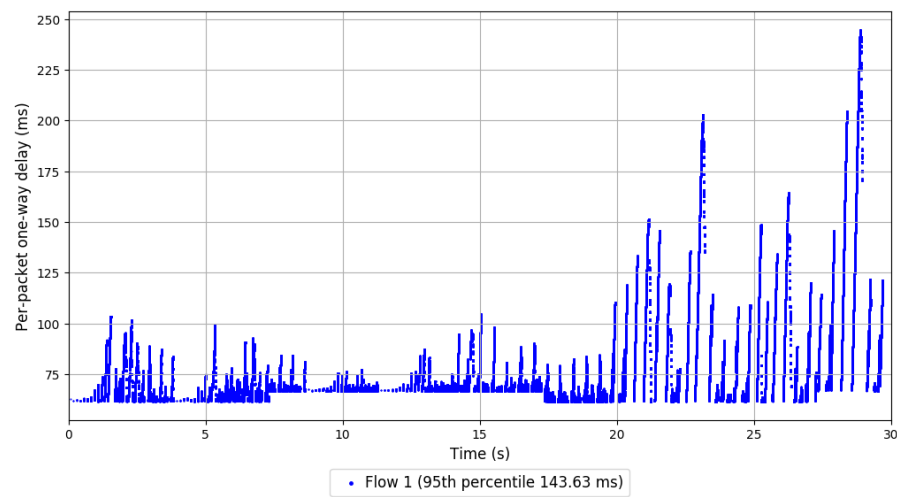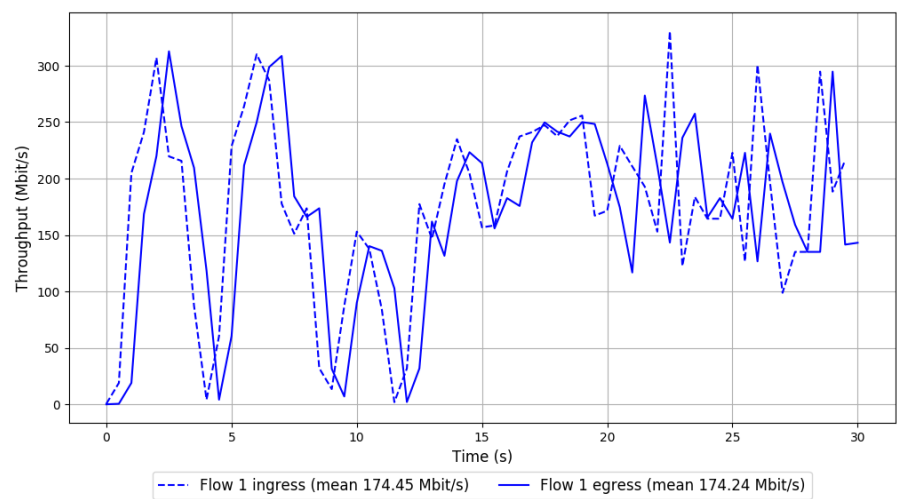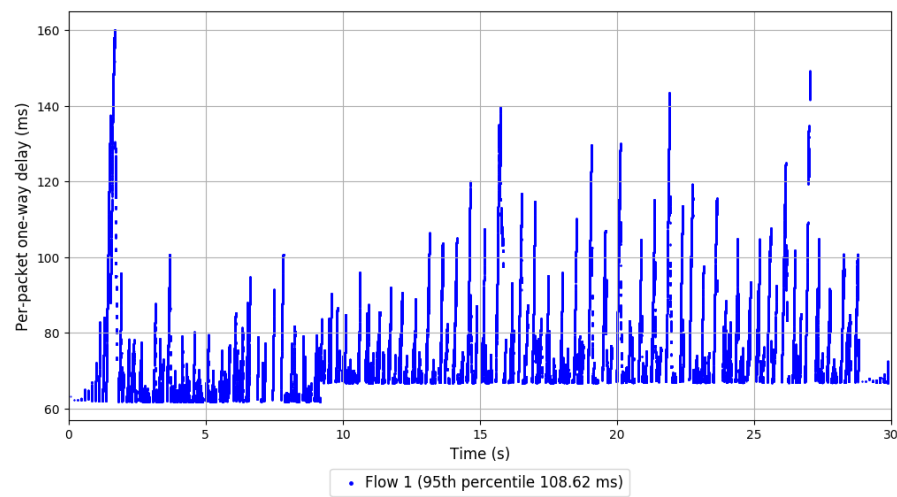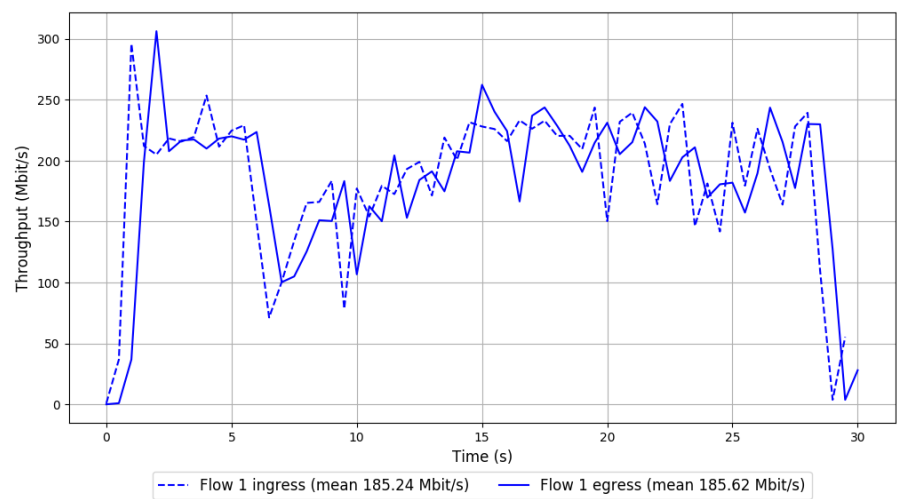
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-05-23 06:14:03
End at: 2018-05-23 06:14:34
Local clock offset: -0.668 ms
Remote clock offset: -0.377 ms


# Below is generated by plot.py at 2018-05-23 10:01:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 185.62 Mbit/s
95th percentile per-packet one-way delay: 108.620 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 185.62 Mbit/s
95th percentile per-packet one-way delay: 108.620 ms
Loss rate: 0.25%
```
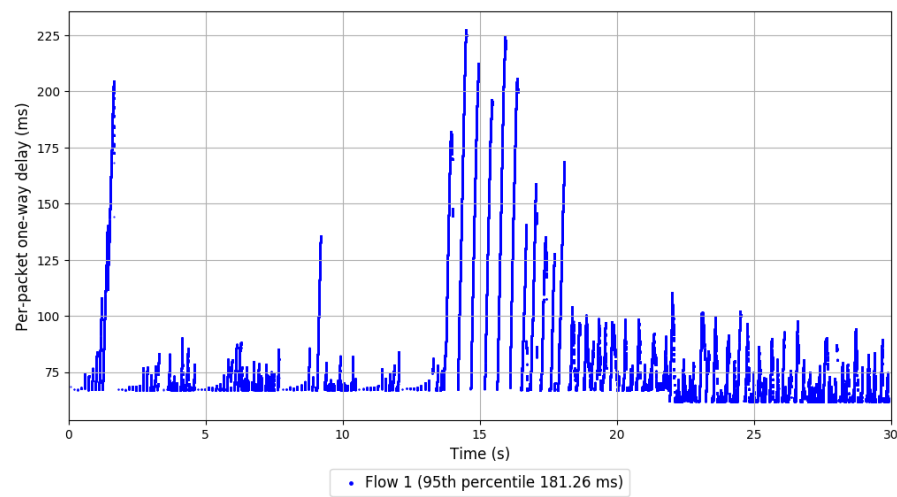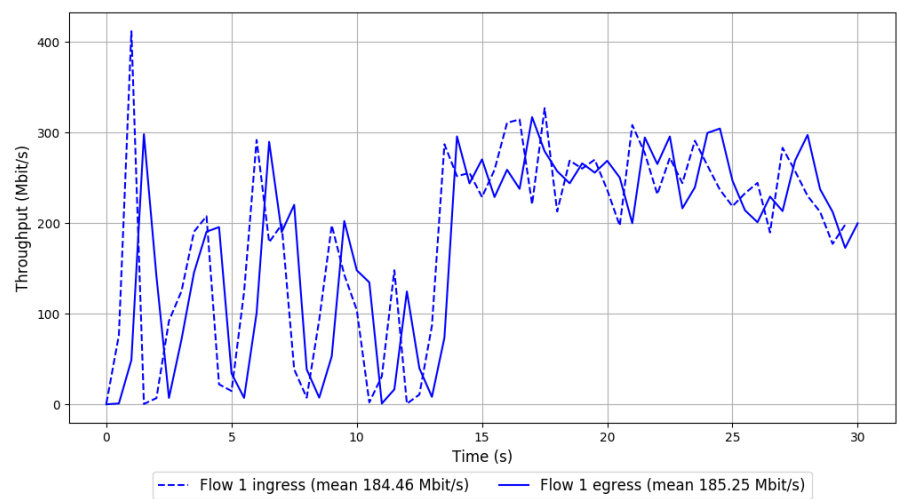
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2018-05-23 06:33:51
End at: 2018-05-23 06:34:21
Local clock offset: -0.773 ms
Remote clock offset: -0.346 ms


# Below is generated by plot.py at 2018-05-23 10:01:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 185.25 Mbit/s
95th percentile per-packet one-way delay: 181.262 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 185.25 Mbit/s
95th percentile per-packet one-way delay: 181.262 ms
Loss rate: 0.03%
```
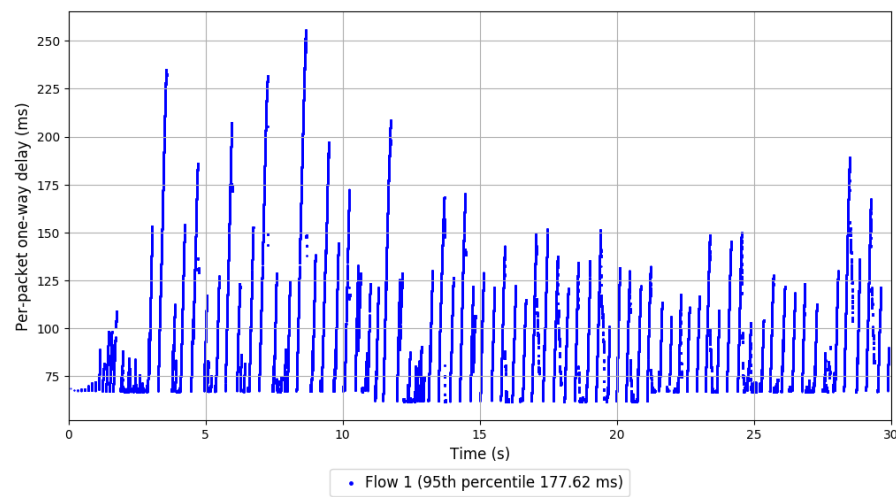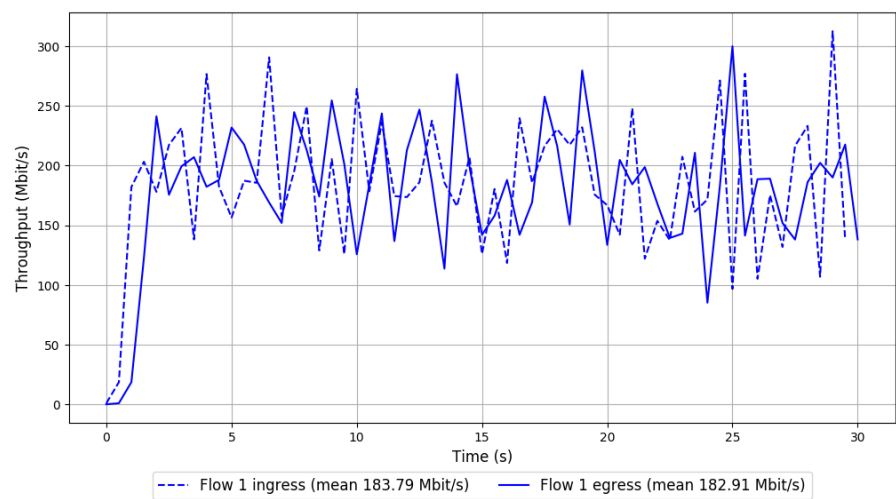
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2018-05-23 06:53:32
End at: 2018-05-23 06:54:02
Local clock offset: -0.927 ms
Remote clock offset: -0.199 ms


# Below is generated by plot.py at 2018-05-23 10:01:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.91 Mbit/s
95th percentile per-packet one-way delay: 177.625 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 182.91 Mbit/s
95th percentile per-packet one-way delay: 177.625 ms
Loss rate: 0.93%
```
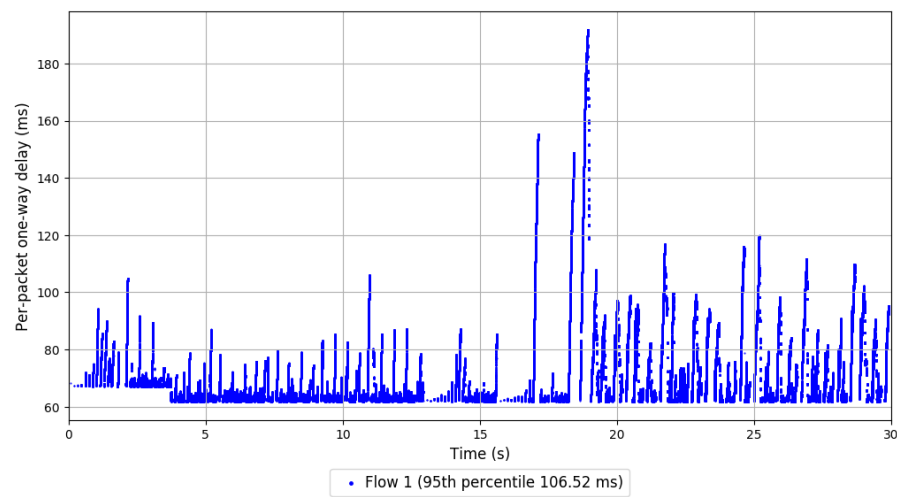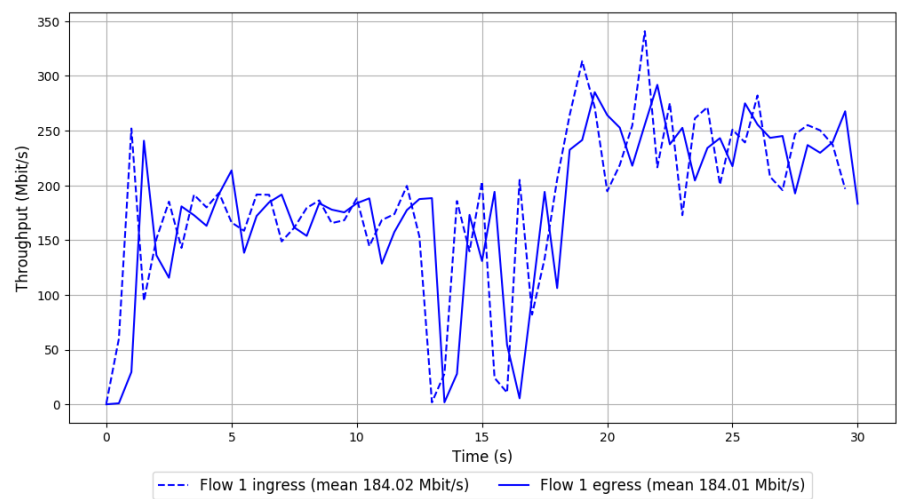
Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2018-05-23 07:13:19
End at: 2018-05-23 07:13:49
Local clock offset: -0.557 ms
Remote clock offset: -0.222 ms


# Below is generated by plot.py at 2018-05-23 10:02:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.01 Mbit/s
95th percentile per-packet one-way delay: 106.515 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 184.01 Mbit/s
95th percentile per-packet one-way delay: 106.515 ms
Loss rate: 0.46%
```
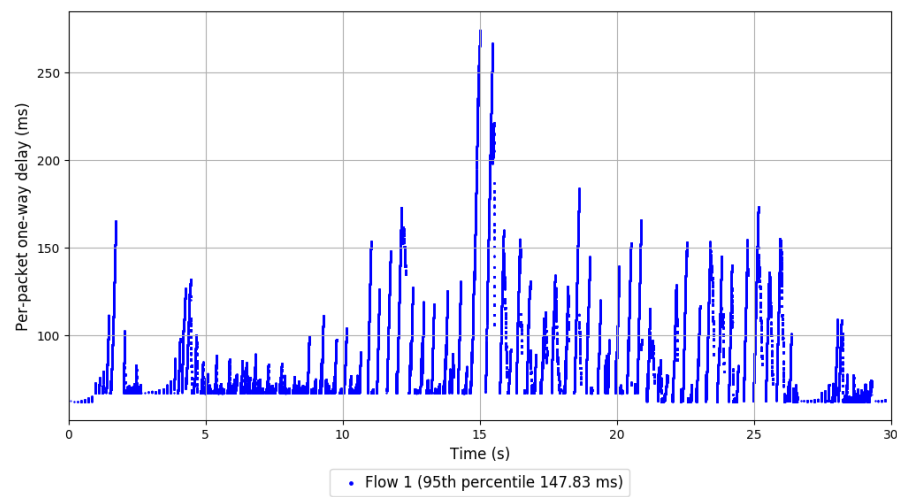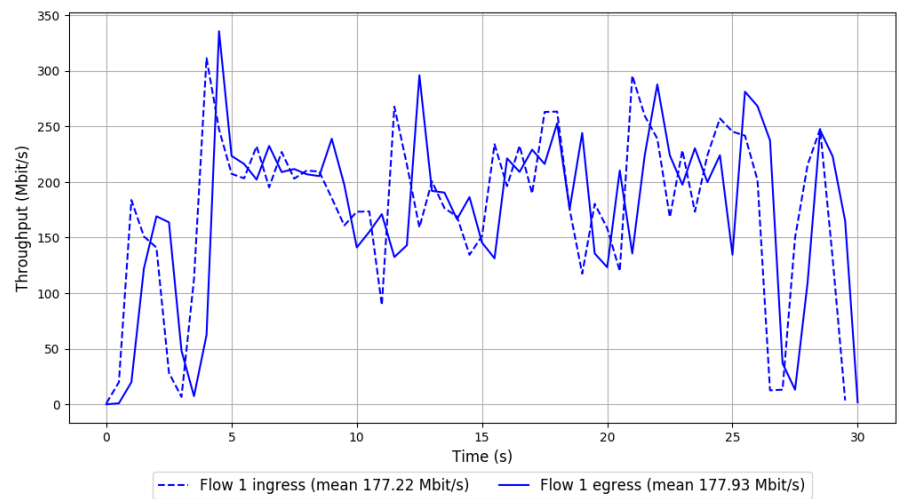
Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2018-05-23 07:33:22
End at: 2018-05-23 07:33:52
Local clock offset: 0.172 ms
Remote clock offset: -0.244 ms


# Below is generated by plot.py at 2018-05-23 10:02:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.93 Mbit/s
95th percentile per-packet one-way delay: 147.829 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 177.93 Mbit/s
95th percentile per-packet one-way delay: 147.829 ms
Loss rate: 0.02%
```
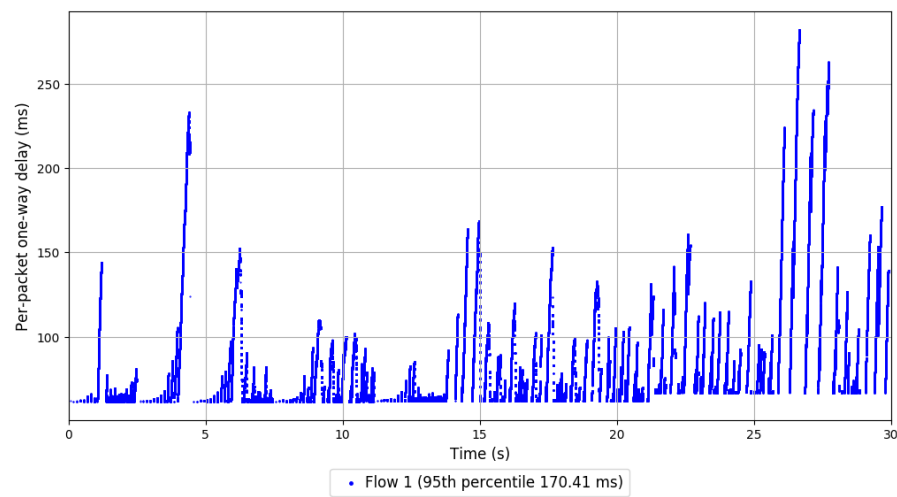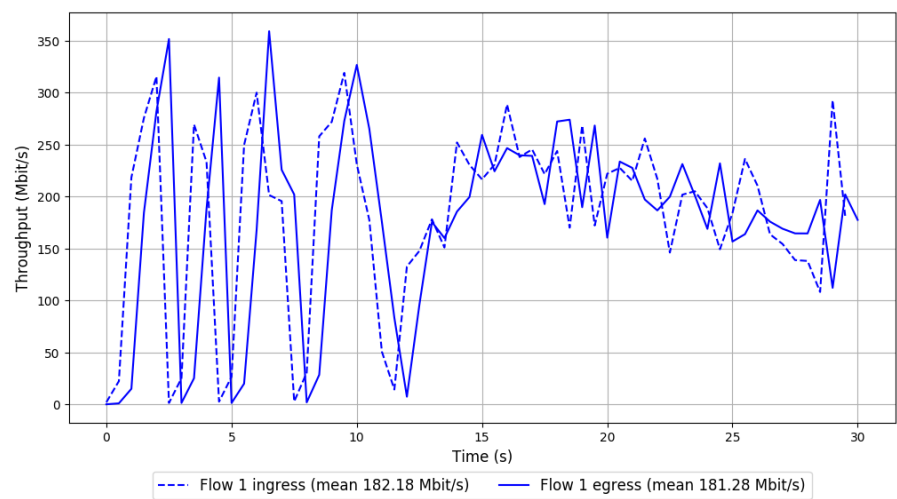
Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2018-05-23 07:53:12
End at: 2018-05-23 07:53:42
Local clock offset: 0.485 ms
Remote clock offset: -0.026 ms


# Below is generated by plot.py at 2018-05-23 10:04:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.28 Mbit/s
95th percentile per-packet one-way delay: 170.407 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 181.28 Mbit/s
95th percentile per-packet one-way delay: 170.407 ms
Loss rate: 0.92%
```

Run 8: Report of Verus — Data Link

```
Run 9: Statistics of Verus

Start at: 2018-05-23 08:13:05
End at: 2018-05-23 08:13:35
Local clock offset: 0.667 ms
Remote clock offset: 0.268 ms


# Below is generated by plot.py at 2018-05-23 10:04:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 179.12 Mbit/s
95th percentile per-packet one-way delay: 145.341 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 179.12 Mbit/s
95th percentile per-packet one-way delay: 145.341 ms
Loss rate: 0.00%
```
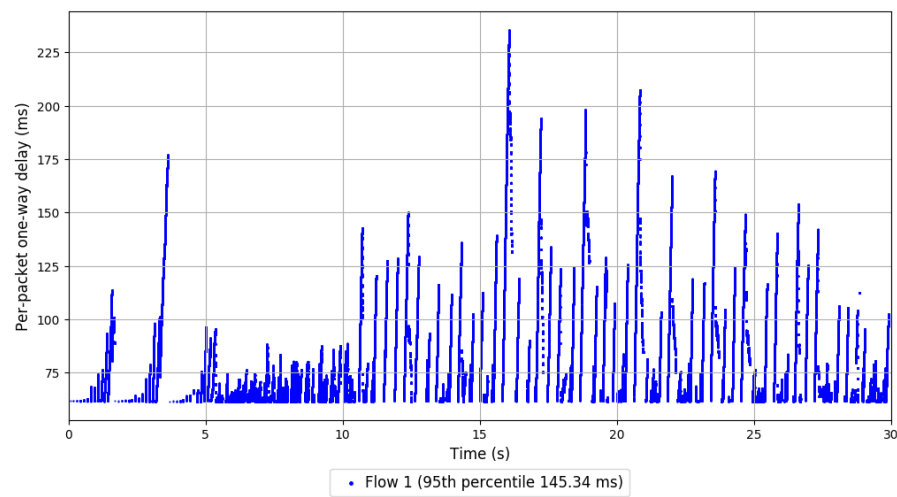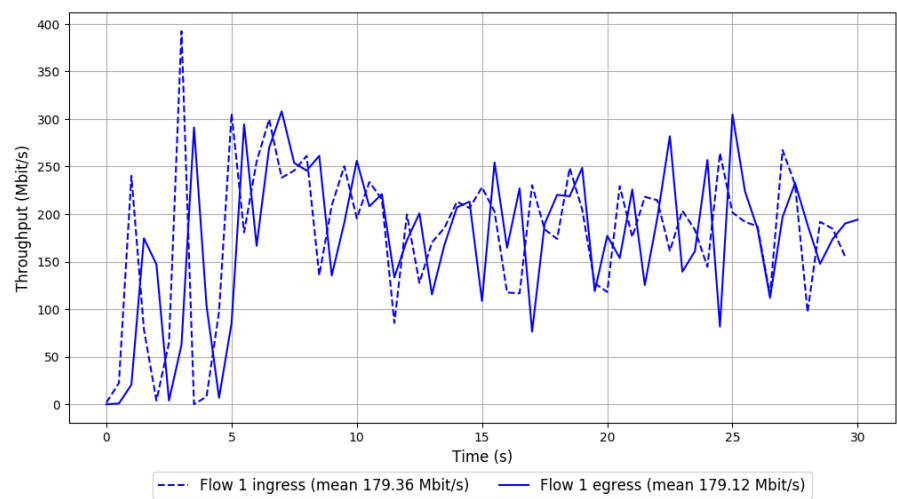
Run 9: Report of Verus — Data Link

Flow 1 ingress (mean 179.36 Mbit/s) — Flow 1 egress (mean 179.12 Mbit/s)

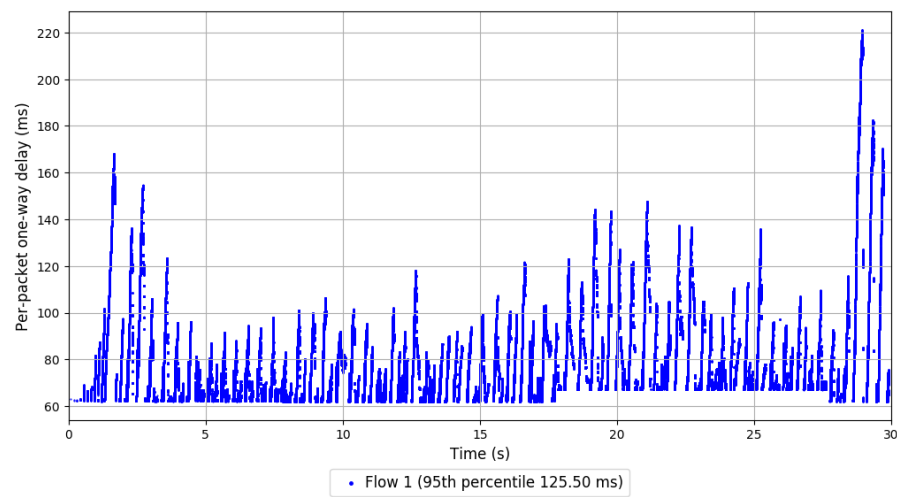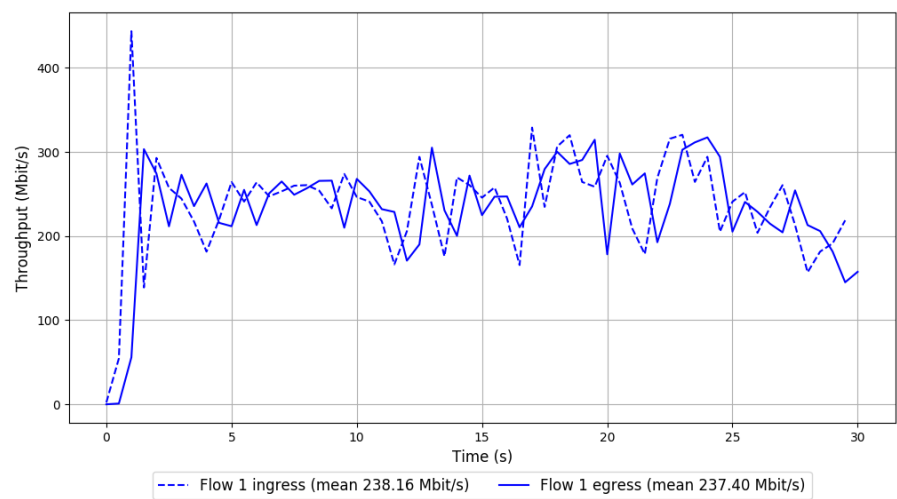
• Flow 1 (95th percentile 145.34 ms)

```
Run 10: Statistics of Verus

Start at: 2018-05-23 08:33:15
End at: 2018-05-23 08:33:45
Local clock offset: 0.876 ms
Remote clock offset: -0.239 ms


# Below is generated by plot.py at 2018-05-23 10:06:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 237.40 Mbit/s
95th percentile per-packet one-way delay: 125.504 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 237.40 Mbit/s
95th percentile per-packet one-way delay: 125.504 ms
Loss rate: 0.75%
```

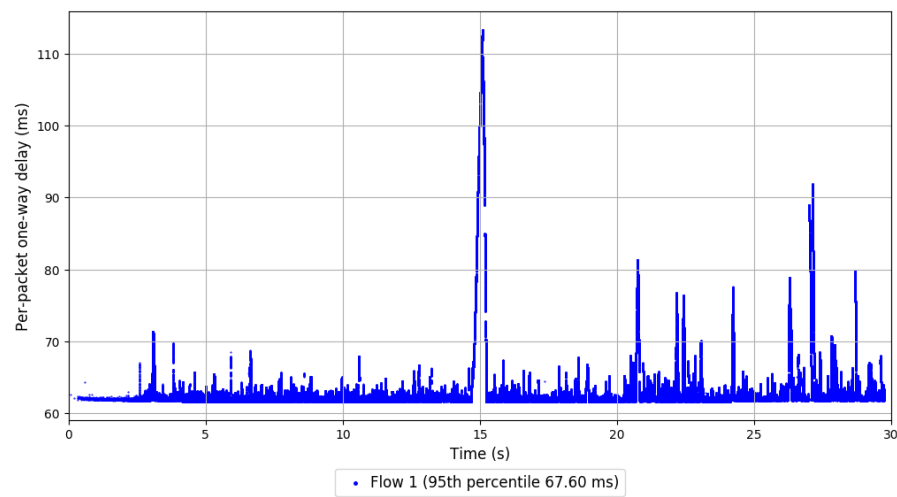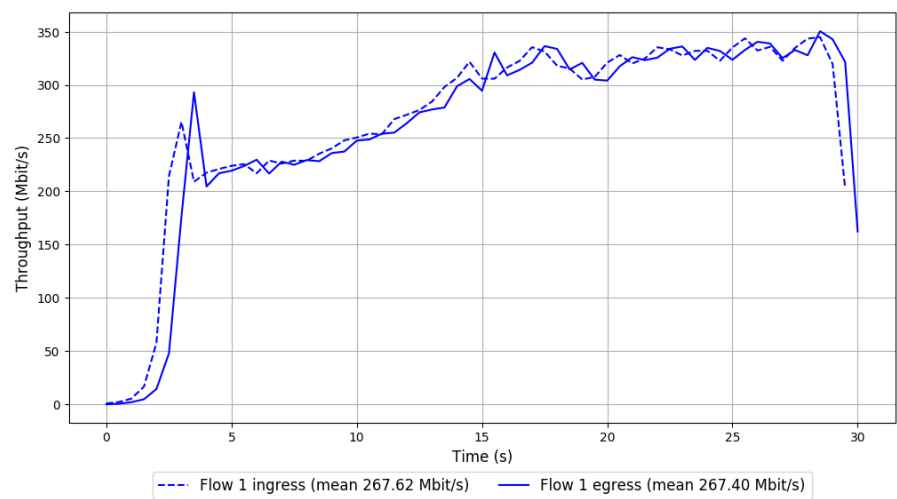## Run 10: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-05-23 05:49:01
End at: 2018-05-23 05:49:31
Local clock offset: -0.471 ms
Remote clock offset: -0.343 ms


# Below is generated by plot.py at 2018-05-23 10:07:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 267.40 Mbit/s
95th percentile per-packet one-way delay: 67.601 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 267.40 Mbit/s
95th percentile per-packet one-way delay: 67.601 ms
Loss rate: 0.50%
```

Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-05-23 06:08:53
End at: 2018-05-23 06:09:23
Local clock offset: -0.564 ms
Remote clock offset: -0.16 ms


# Below is generated by plot.py at 2018-05-23 10:07:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.48 Mbit/s
95th percentile per-packet one-way delay: 68.215 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 218.48 Mbit/s
95th percentile per-packet one-way delay: 68.215 ms
Loss rate: 0.48%
```
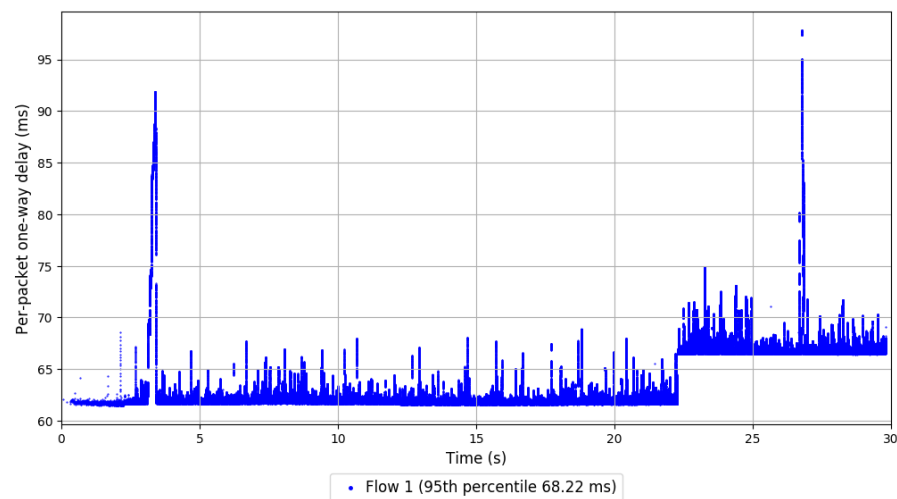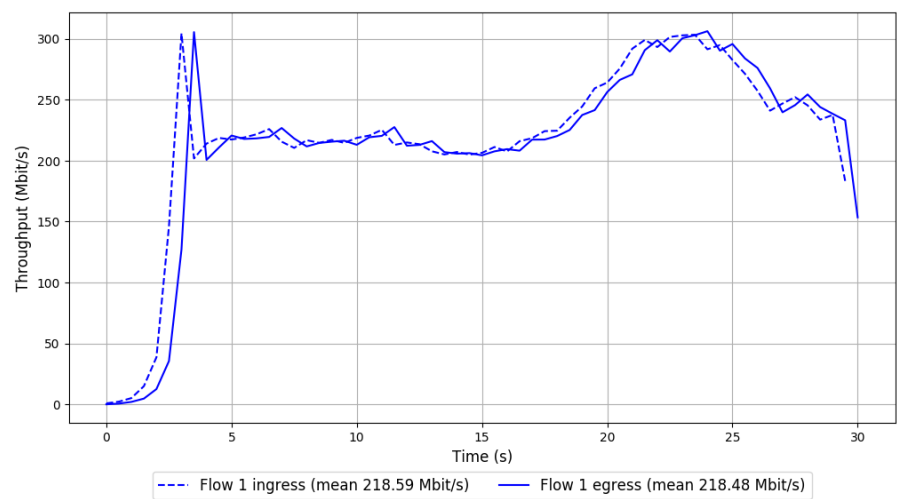
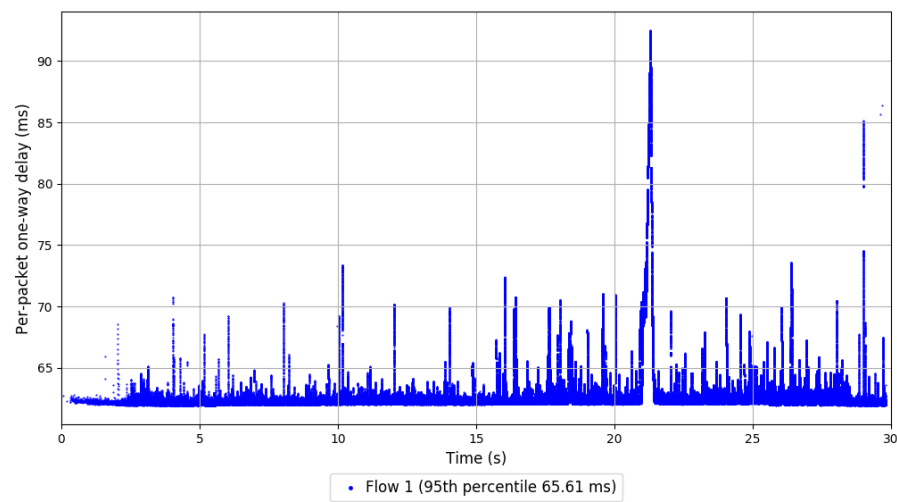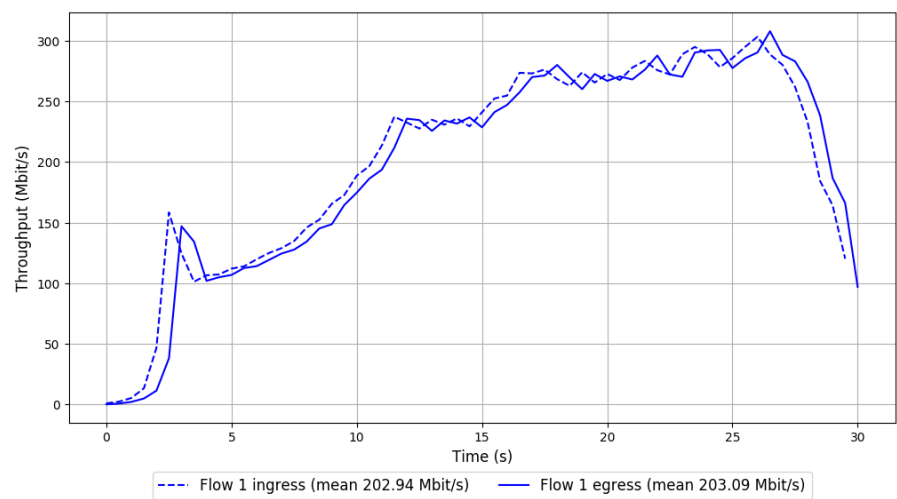Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-05-23 06:28:40
End at: 2018-05-23 06:29:10
Local clock offset: -0.748 ms
Remote clock offset: -0.646 ms


# Below is generated by plot.py at 2018-05-23 10:07:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.09 Mbit/s
95th percentile per-packet one-way delay: 65.609 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 203.09 Mbit/s
95th percentile per-packet one-way delay: 65.609 ms
Loss rate: 0.36%
```

Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 202.94 Mbit/s) — — — —   Flow 1 egress (mean 203.09 Mbit/s) ————
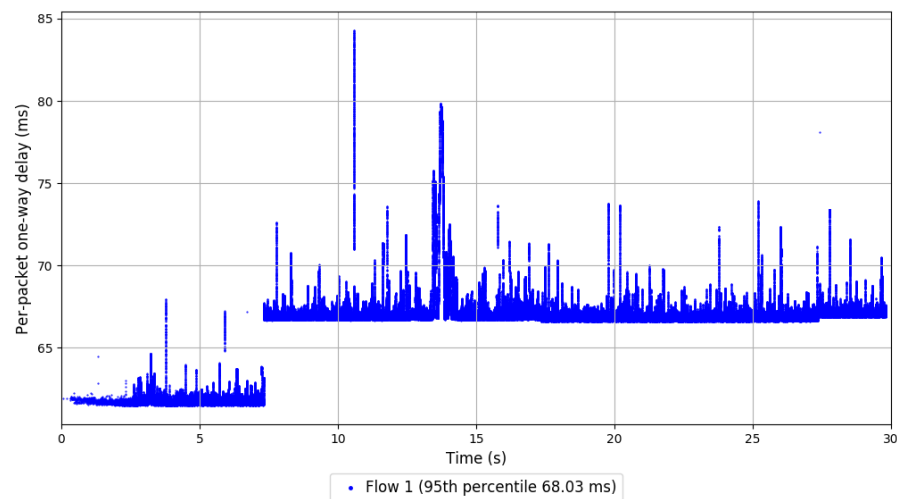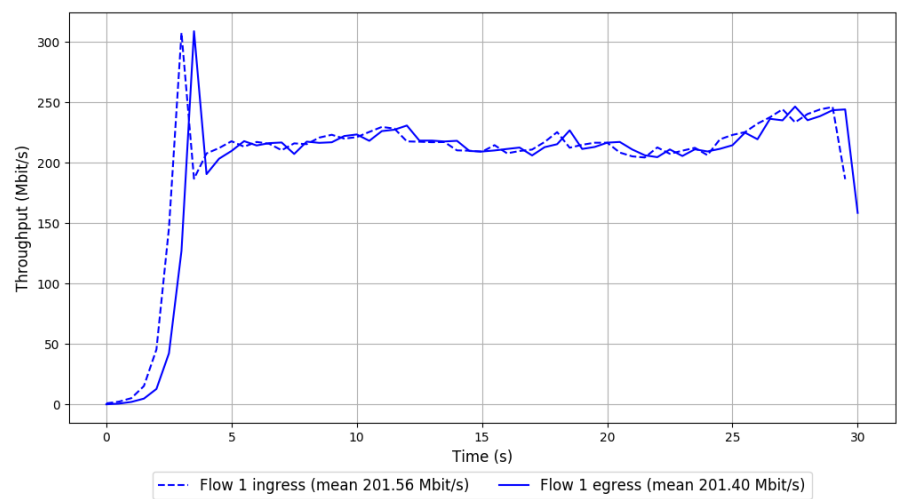

Flow 1 (95th percentile 65.61 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-05-23 06:48:18
End at: 2018-05-23 06:48:48
Local clock offset: -0.917 ms
Remote clock offset: -0.157 ms


# Below is generated by plot.py at 2018-05-23 10:07:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 201.40 Mbit/s
95th percentile per-packet one-way delay: 68.032 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 201.40 Mbit/s
95th percentile per-packet one-way delay: 68.032 ms
Loss rate: 0.51%
```

Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 201.56 Mbit/s)   Flow 1 egress (mean 201.40 Mbit/s)

Flow 1 (95th percentile 68.03 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-05-23 07:08:04
End at: 2018-05-23 07:08:34
Local clock offset: -1.045 ms
Remote clock offset: -0.051 ms


# Below is generated by plot.py at 2018-05-23 10:07:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 240.22 Mbit/s
95th percentile per-packet one-way delay: 68.419 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 240.22 Mbit/s
95th percentile per-packet one-way delay: 68.419 ms
Loss rate: 1.71%
```
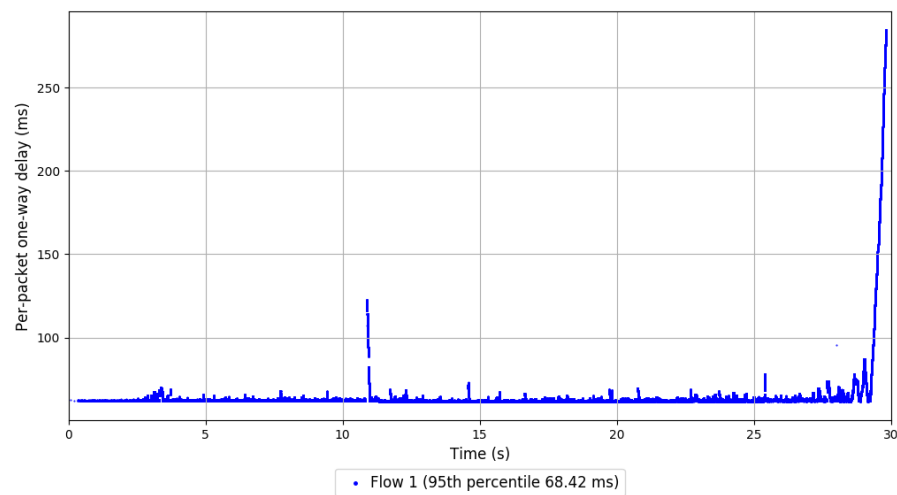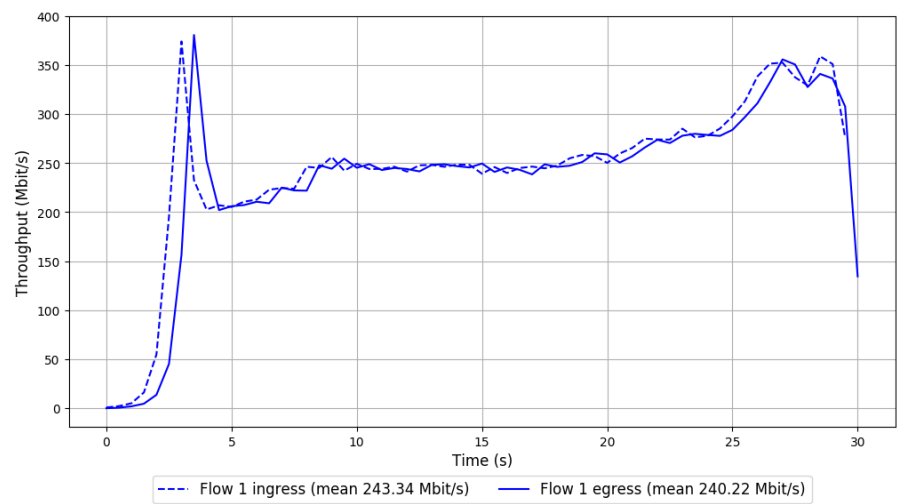
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 243.34 Mbit/s) —— Flow 1 egress (mean 240.22 Mbit/s)

• Flow 1 (95th percentile 68.42 ms)

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```
Run 6: Statistics of PCC-Vivace

Start at: 2018-05-23 07:27:54
End at: 2018-05-23 07:28:24
Local clock offset: 0.117 ms
Remote clock offset: -0.257 ms


# Below is generated by plot.py at 2018-05-23 10:09:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 278.81 Mbit/s
95th percentile per-packet one-way delay: 70.243 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 278.81 Mbit/s
95th percentile per-packet one-way delay: 70.243 ms
Loss rate: 0.39%
```
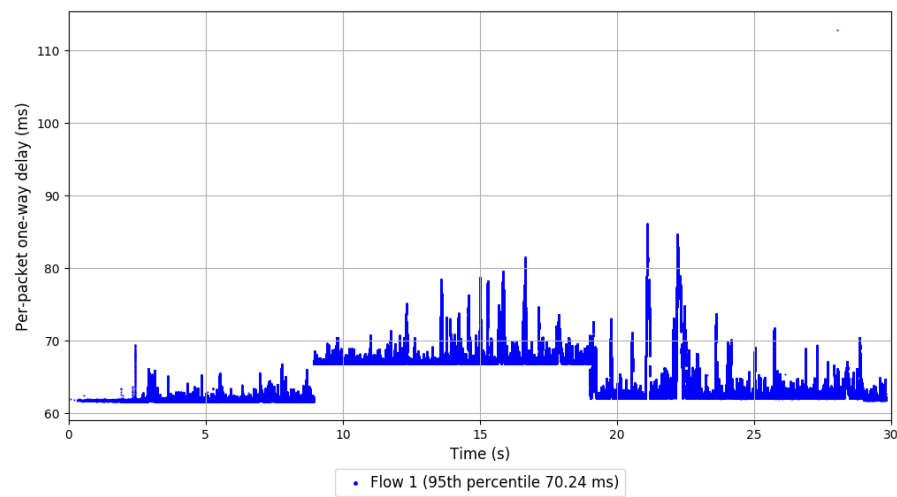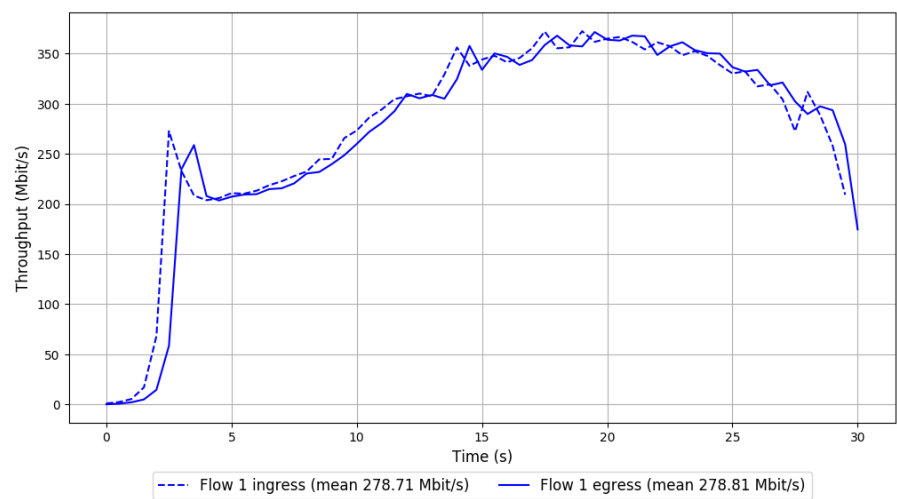
Run 6: Report of PCC-Vivace — Data Link

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-05-23 07:47:54
End at: 2018-05-23 07:48:24
Local clock offset: 0.438 ms
Remote clock offset: 0.011 ms


# Below is generated by plot.py at 2018-05-23 10:09:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.82 Mbit/s
95th percentile per-packet one-way delay: 68.121 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 215.82 Mbit/s
95th percentile per-packet one-way delay: 68.121 ms
Loss rate: 0.56%
```
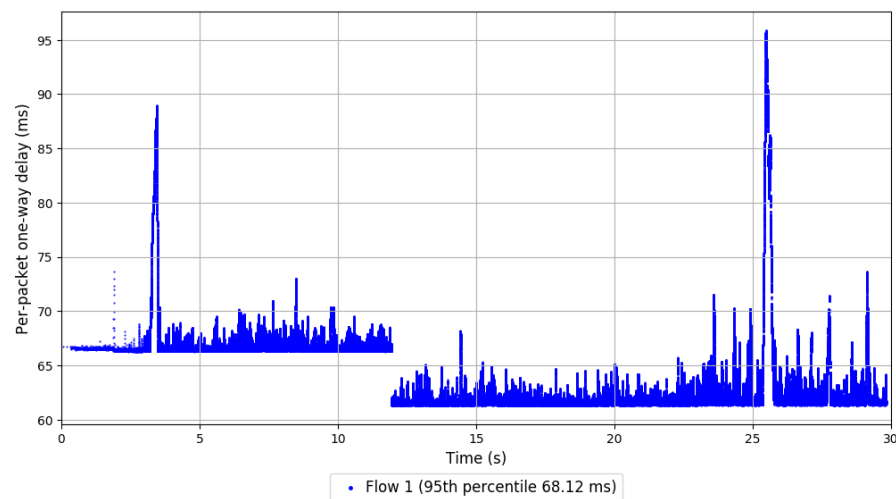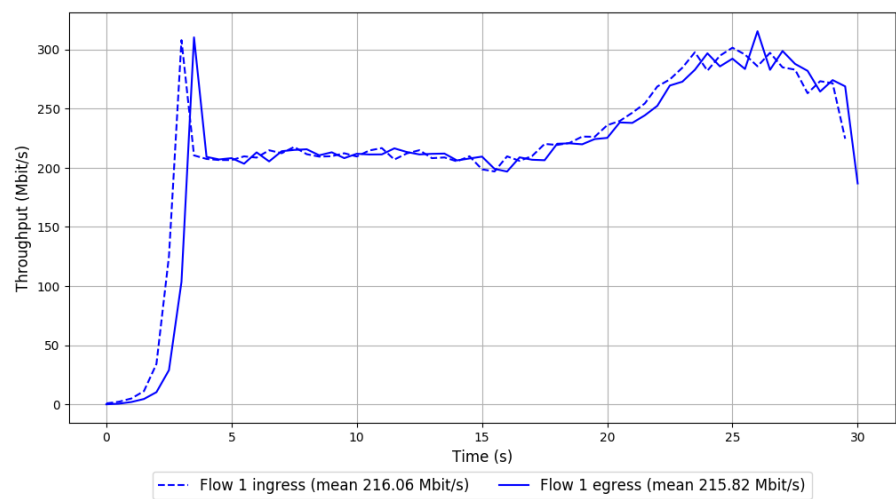
Run 7: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 216.06 Mbit/s)   Flow 1 egress (mean 215.82 Mbit/s)

Flow 1 (95th percentile 68.12 ms)

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-05-23 08:07:47
End at: 2018-05-23 08:08:17
Local clock offset: 0.613 ms
Remote clock offset: -0.071 ms


# Below is generated by plot.py at 2018-05-23 10:09:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 240.64 Mbit/s
95th percentile per-packet one-way delay: 63.956 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 240.64 Mbit/s
95th percentile per-packet one-way delay: 63.956 ms
Loss rate: 0.55%
```
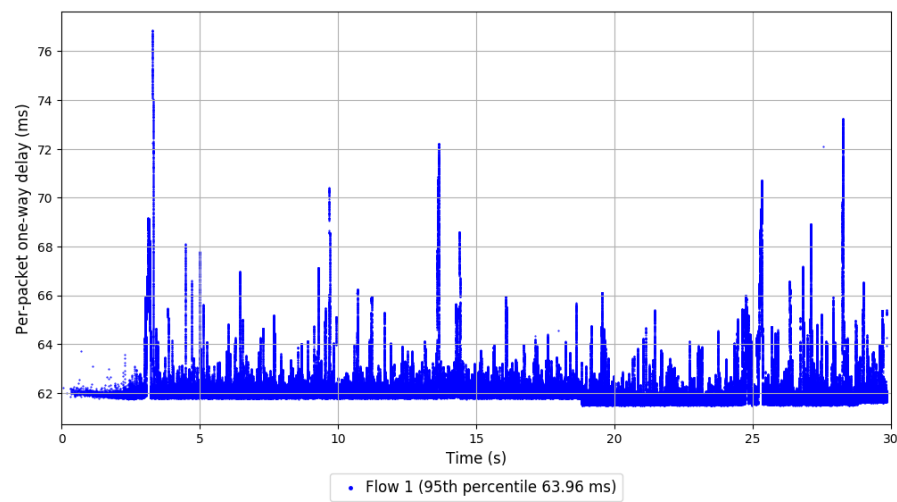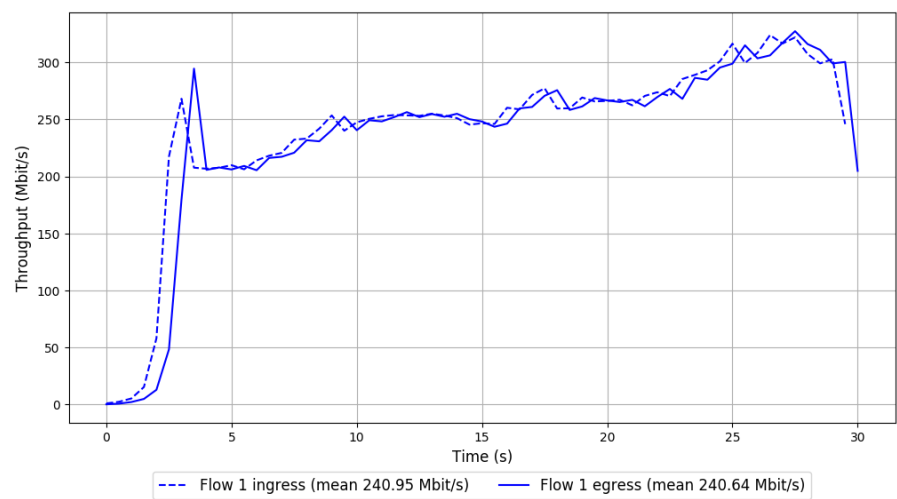
Run 8: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 240.95 Mbit/s) — — — Flow 1 egress (mean 240.64 Mbit/s)

• Flow 1 (95th percentile 63.96 ms)

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-05-23 08:27:50
End at: 2018-05-23 08:28:20
Local clock offset: 0.812 ms
Remote clock offset: 0.044 ms


# Below is generated by plot.py at 2018-05-23 10:09:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 291.75 Mbit/s
95th percentile per-packet one-way delay: 148.690 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 291.75 Mbit/s
95th percentile per-packet one-way delay: 148.690 ms
Loss rate: 0.71%
```
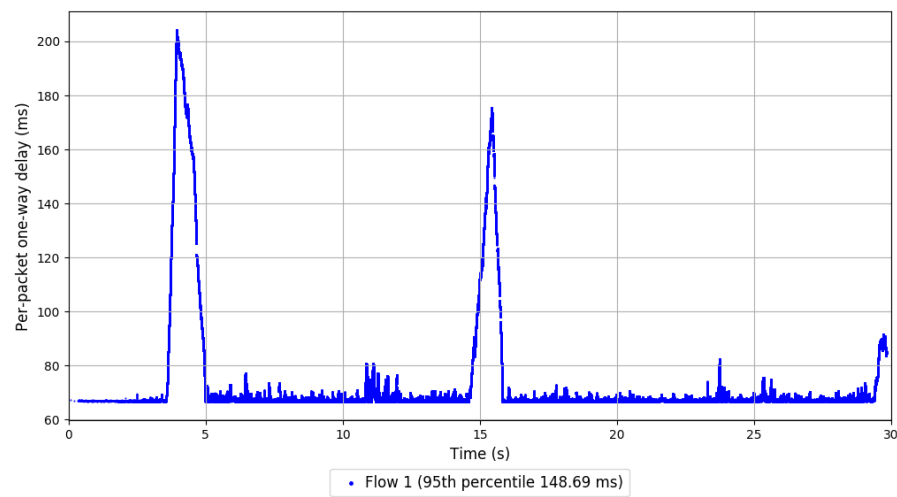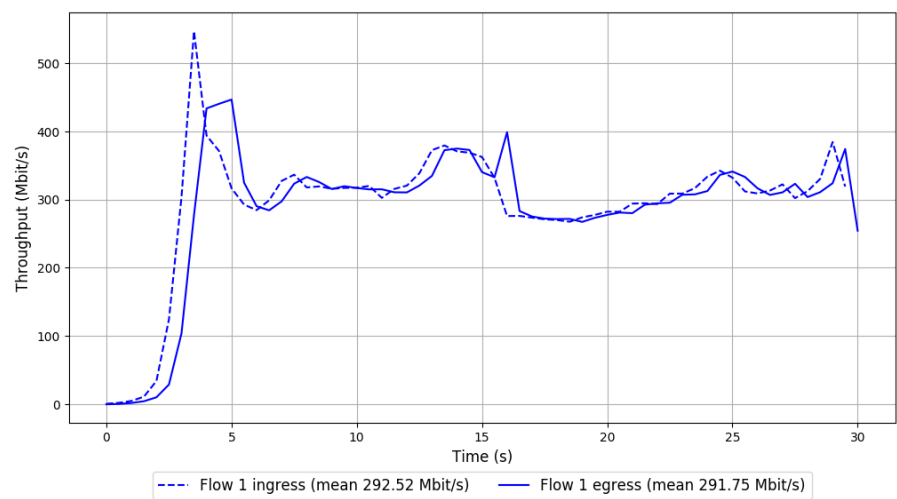
Run 9: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 292.52 Mbit/s)   Flow 1 egress (mean 291.75 Mbit/s)

• Flow 1 (95th percentile 148.69 ms)

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-05-23 08:47:45
End at: 2018-05-23 08:48:15
Local clock offset: 1.054 ms
Remote clock offset: -0.173 ms


# Below is generated by plot.py at 2018-05-23 10:09:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 219.59 Mbit/s
95th percentile per-packet one-way delay: 72.262 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 219.59 Mbit/s
95th percentile per-packet one-way delay: 72.262 ms
Loss rate: 0.75%
```
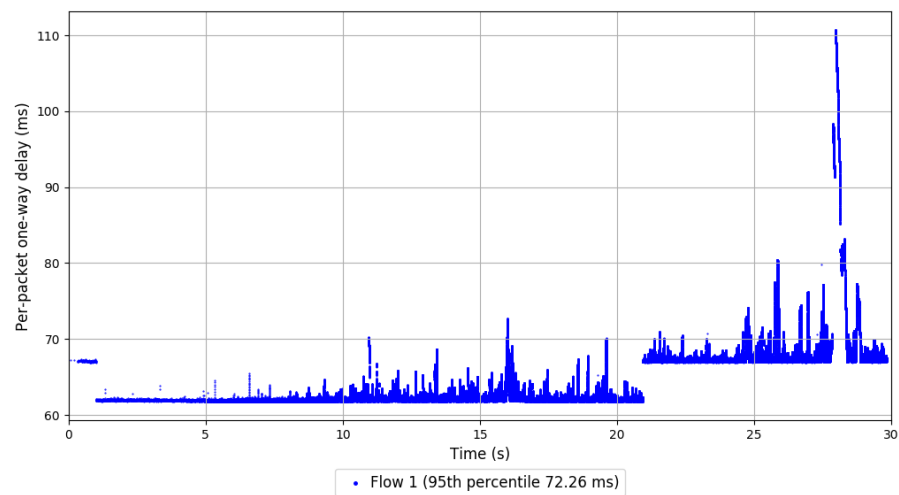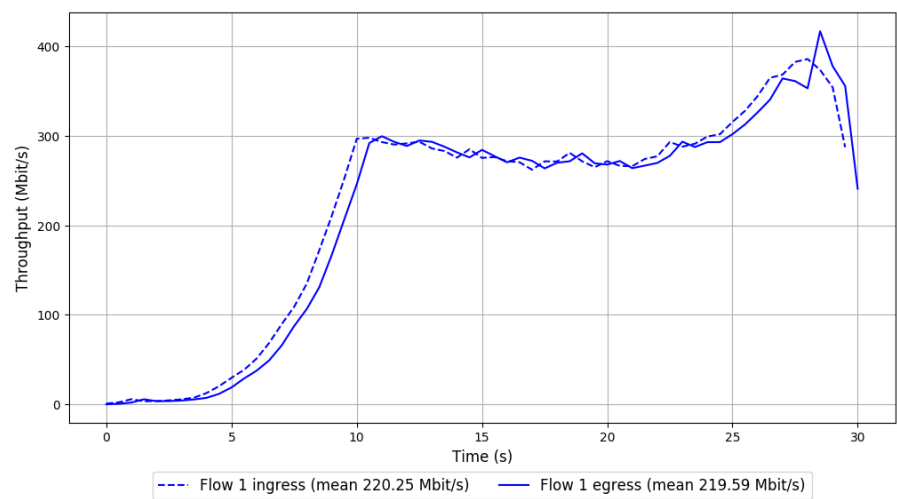
Run 10: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 220.25 Mbit/s)   Flow 1 egress (mean 219.59 Mbit/s)
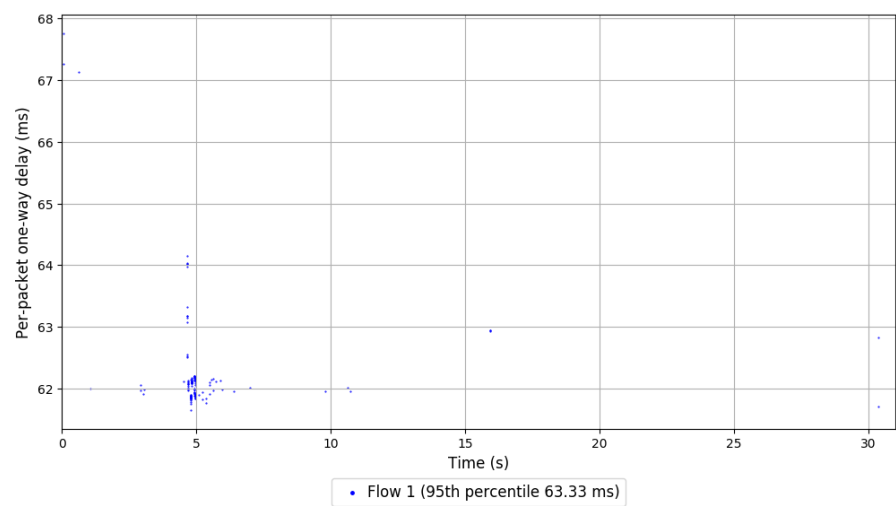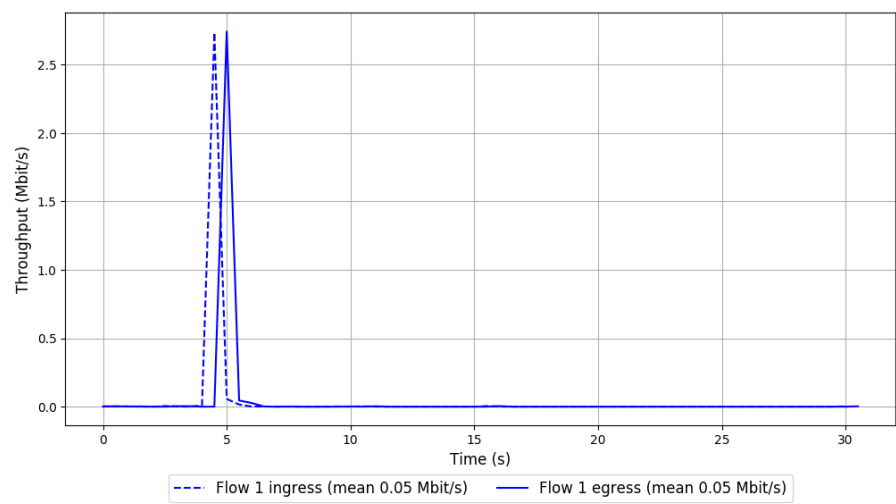

Flow 1 (95th percentile 72.26 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2018-05-23 05:36:58
End at: 2018-05-23 05:37:28
Local clock offset: -0.281 ms
Remote clock offset: -0.128 ms


# Below is generated by plot.py at 2018-05-23 10:09:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.328 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.328 ms
Loss rate: 0.00%
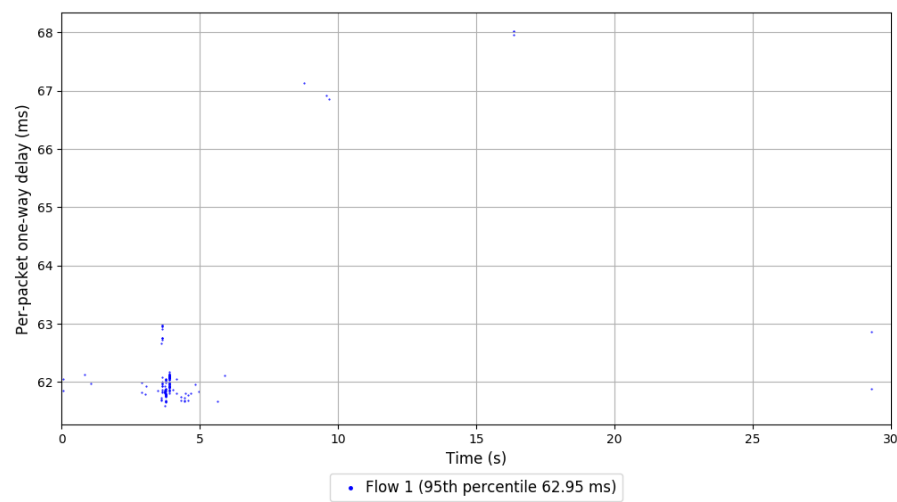```

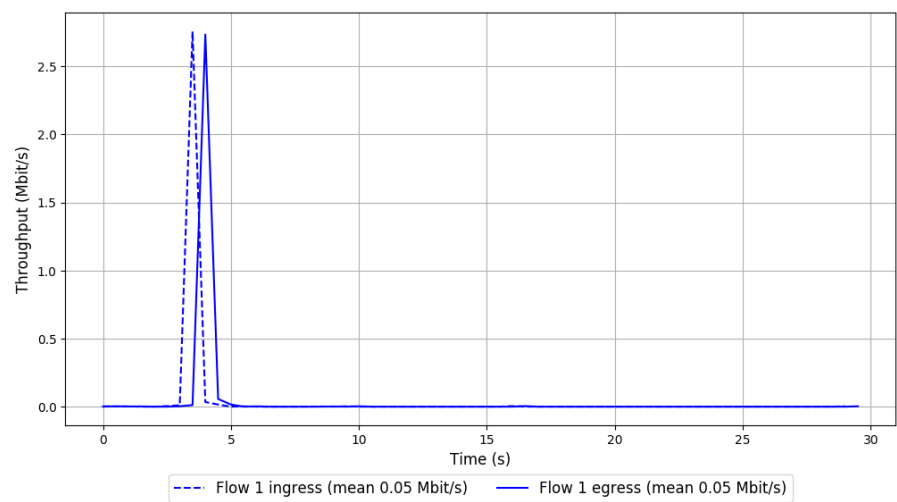Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-05-23 05:56:42
End at: 2018-05-23 05:57:12
Local clock offset: -0.501 ms
Remote clock offset: -0.172 ms

Below is generated by plot.py at 2018-05-23 10:09:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.955 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.955 ms
Loss rate: 0.00%
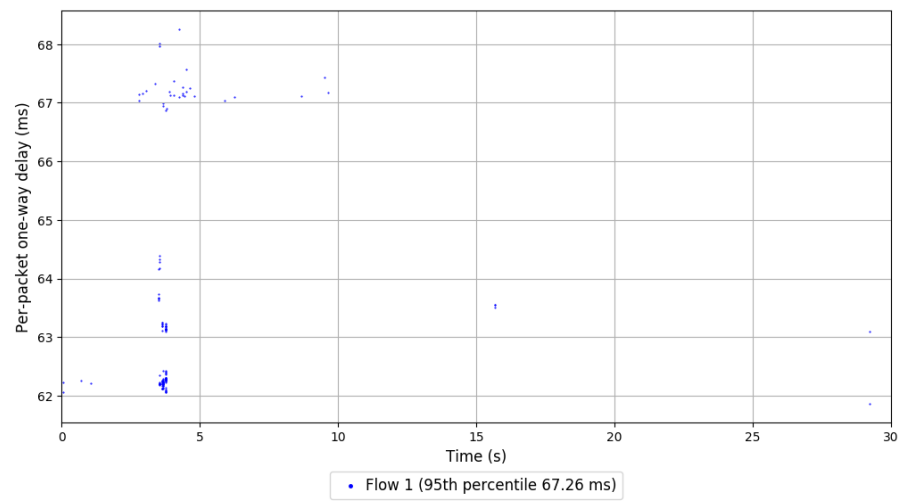```

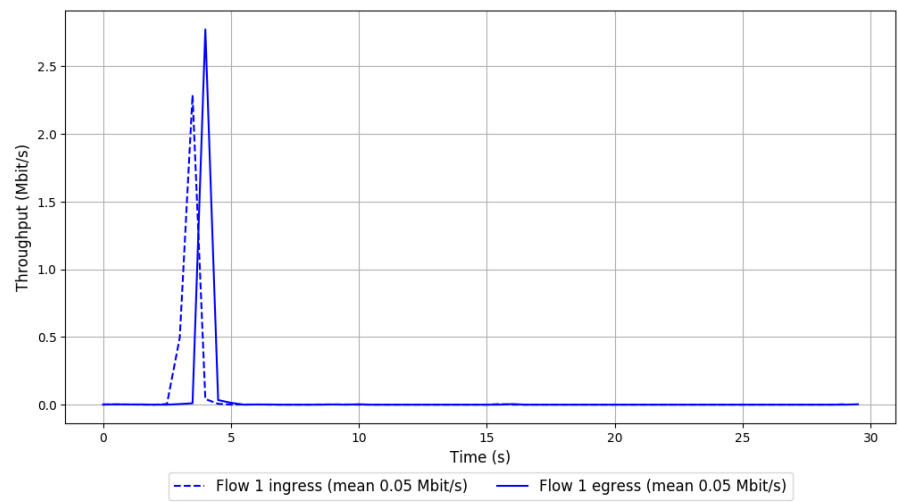Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-05-23 06:16:33
End at: 2018-05-23 06:17:03
Local clock offset: -0.691 ms
Remote clock offset: -0.374 ms


# Below is generated by plot.py at 2018-05-23 10:09:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.260 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.260 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

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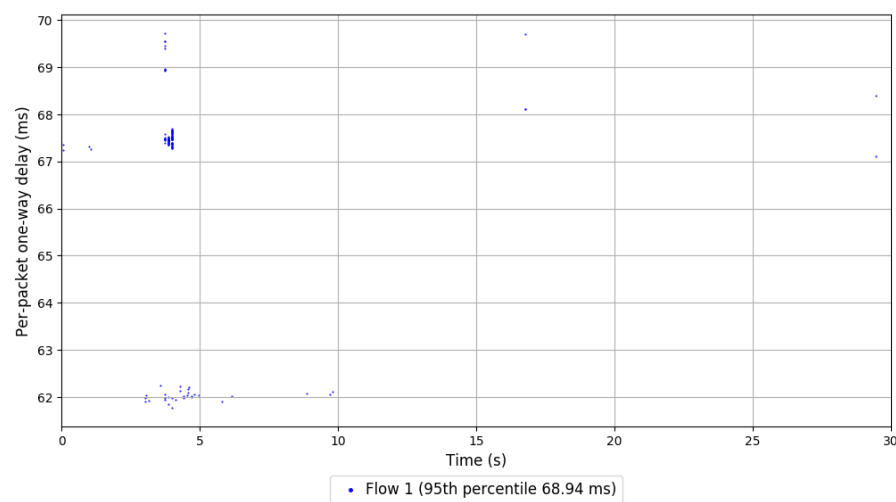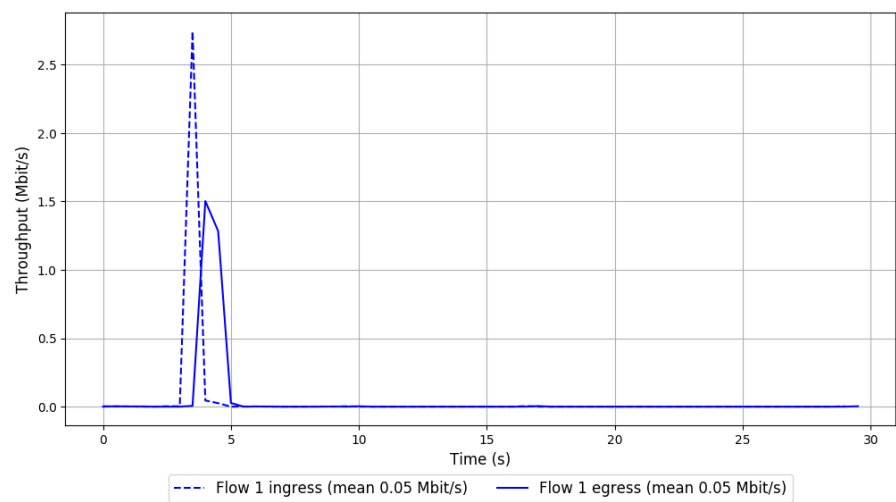

• Flow 1 (95th percentile 67.26 ms)

309

```
Run 4: Statistics of WebRTC media

Start at: 2018-05-23 06:36:17
End at: 2018-05-23 06:36:47
Local clock offset: -0.833 ms
Remote clock offset: -0.389 ms


# Below is generated by plot.py at 2018-05-23 10:09:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.942 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.942 ms
Loss rate: 0.00%
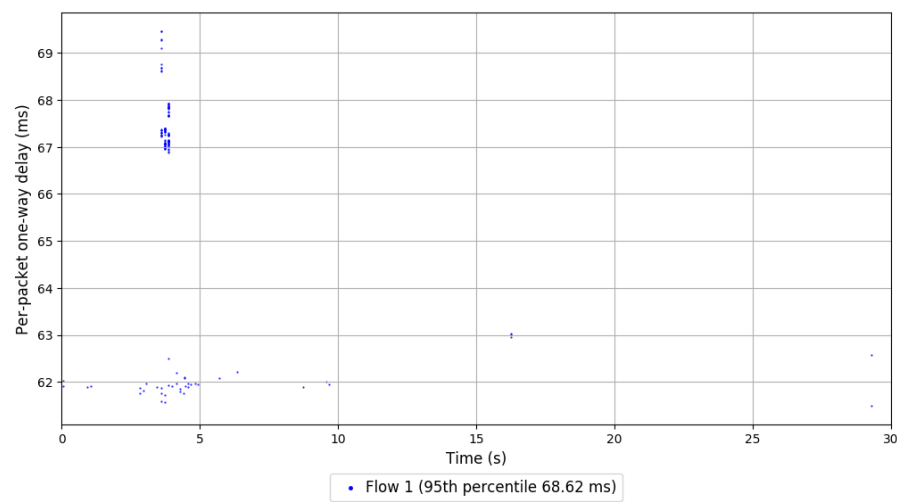```

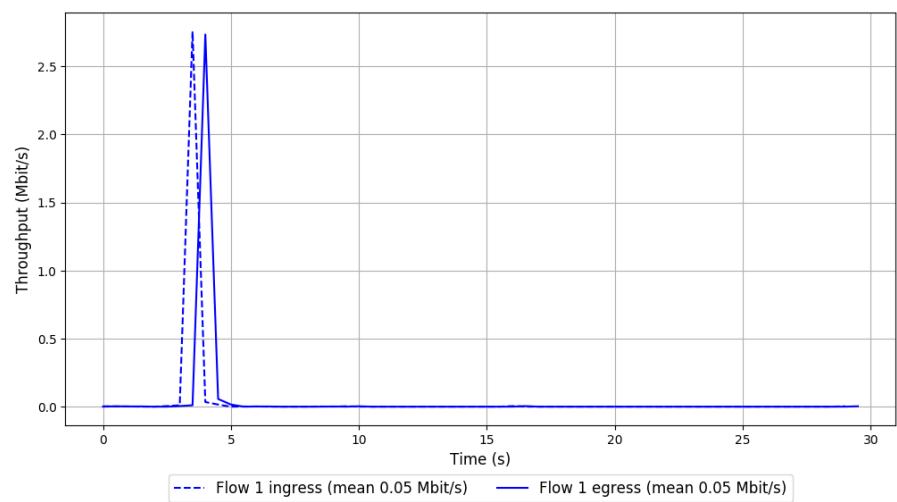Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-05-23 06:56:01
End at: 2018-05-23 06:56:31
Local clock offset: -0.95 ms
Remote clock offset: -0.012 ms


# Below is generated by plot.py at 2018-05-23 10:09:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.621 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.621 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link
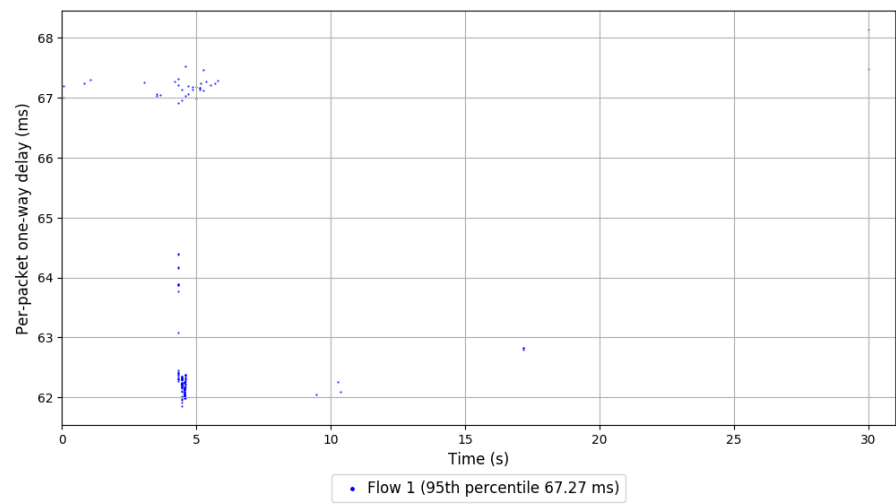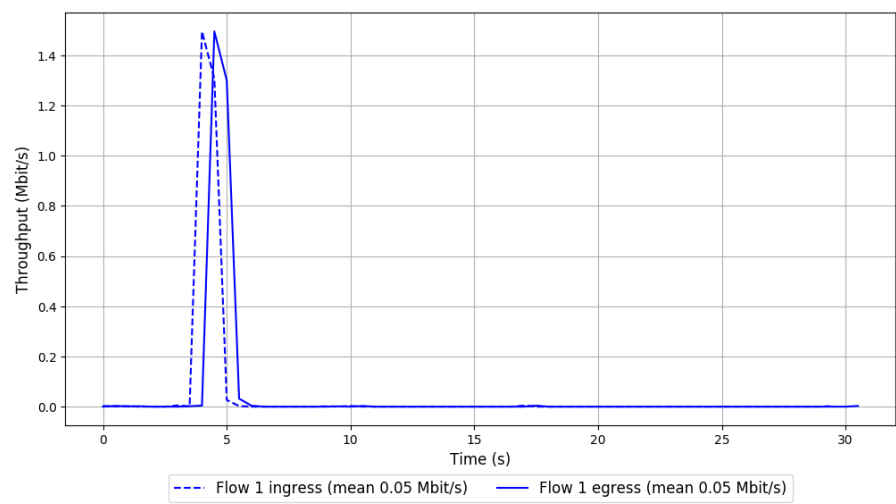

313

```
Run 6: Statistics of WebRTC media

Start at: 2018-05-23 07:15:50
End at: 2018-05-23 07:16:20
Local clock offset: -0.329 ms
Remote clock offset: -0.172 ms


# Below is generated by plot.py at 2018-05-23 10:09:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.274 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.274 ms
Loss rate: 0.00%
```

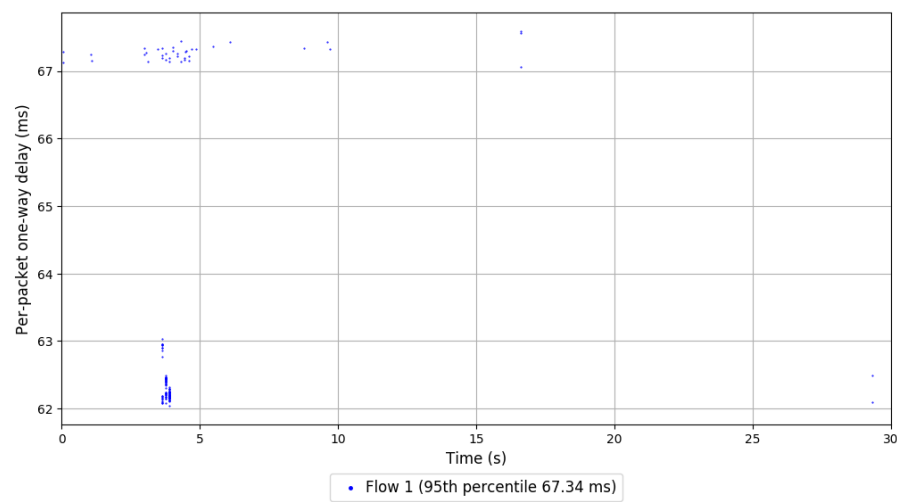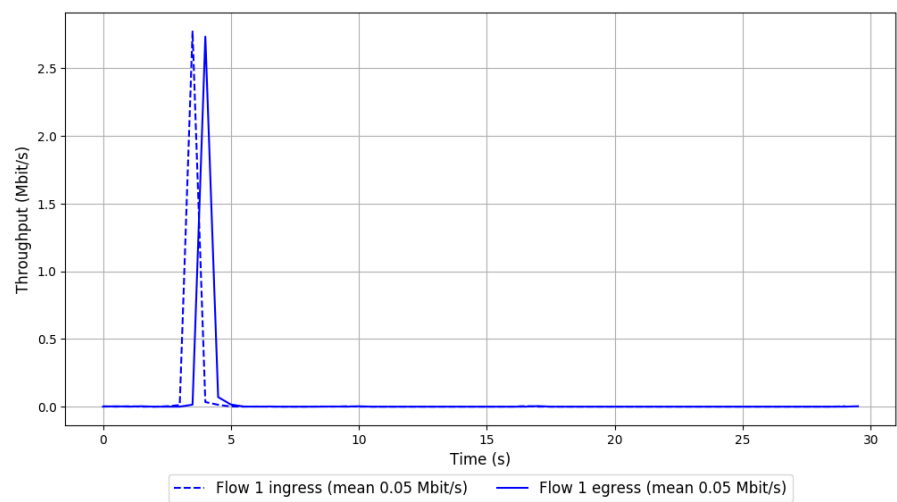Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-05-23 07:35:47
End at: 2018-05-23 07:36:17
Local clock offset: 0.252 ms
Remote clock offset: -0.406 ms


# Below is generated by plot.py at 2018-05-23 10:09:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.338 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.338 ms
Loss rate: 0.00%
```

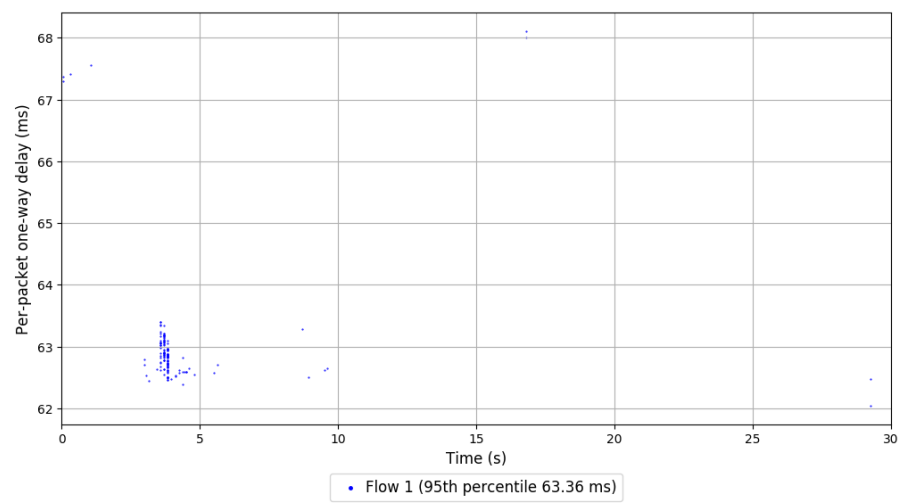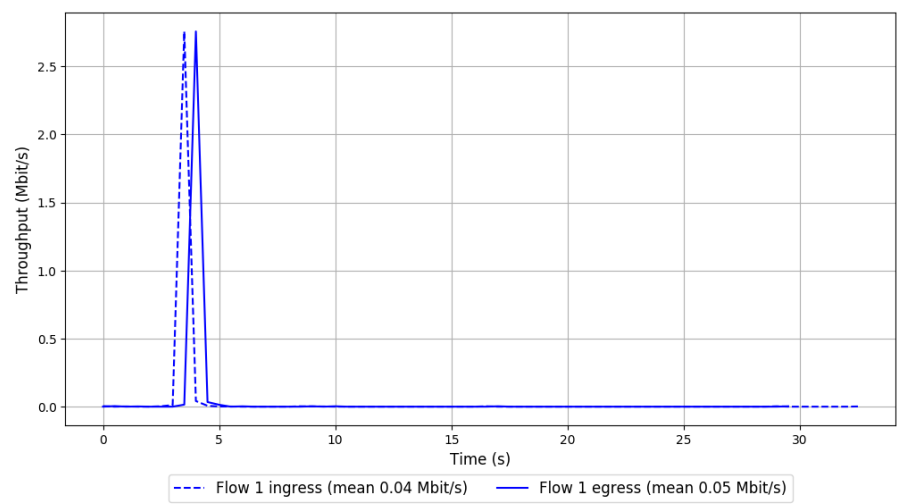Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-05-23 07:55:46
End at: 2018-05-23 07:56:16
Local clock offset: 0.53 ms
Remote clock offset: -0.477 ms


# Below is generated by plot.py at 2018-05-23 10:09:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.362 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.362 ms
Loss rate: 0.05%
```

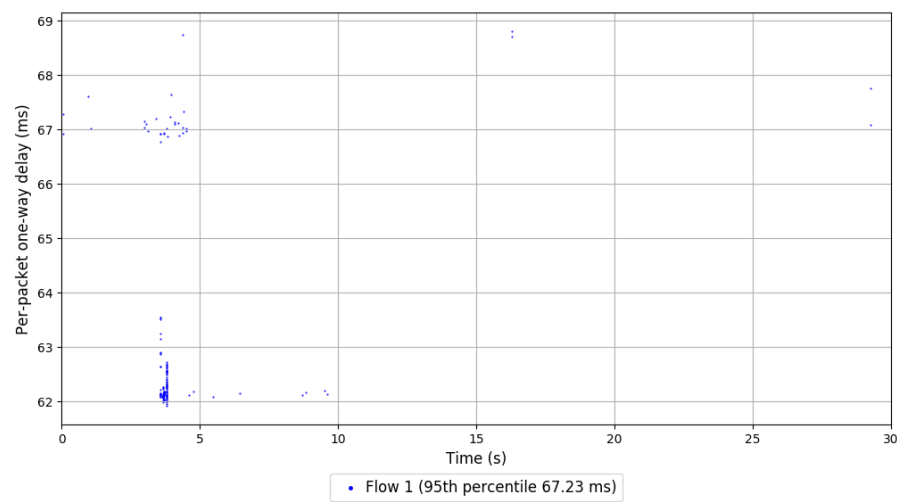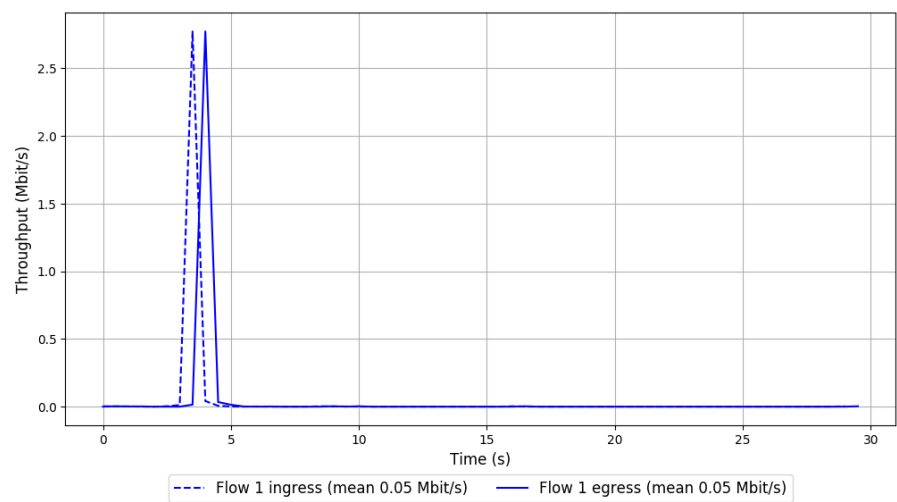Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-05-23 08:15:31
End at: 2018-05-23 08:16:01
Local clock offset: 0.718 ms
Remote clock offset: -0.076 ms


# Below is generated by plot.py at 2018-05-23 10:09:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.228 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.228 ms
Loss rate: 0.00%
```

Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-05-23 08:35:44
End at: 2018-05-23 08:36:14
Local clock offset: 0.865 ms
Remote clock offset: 0.061 ms


# Below is generated by plot.py at 2018-05-23 10:09:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.466 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.466 ms
Loss rate: 0.00%
```

Run 10: Report of WebRTC media — Data Link