Pantheon Report

Generated at 2018-05-25 14:33:18 (UTC).

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

Repeated the test of 16 congestion control schemes 10 times.

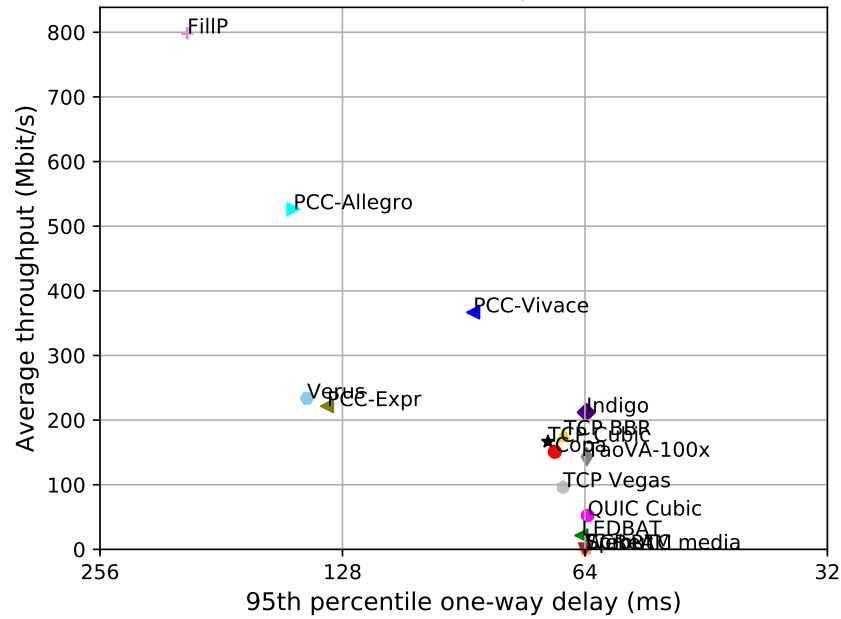Each test lasted for 30 seconds running 1 flow.

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

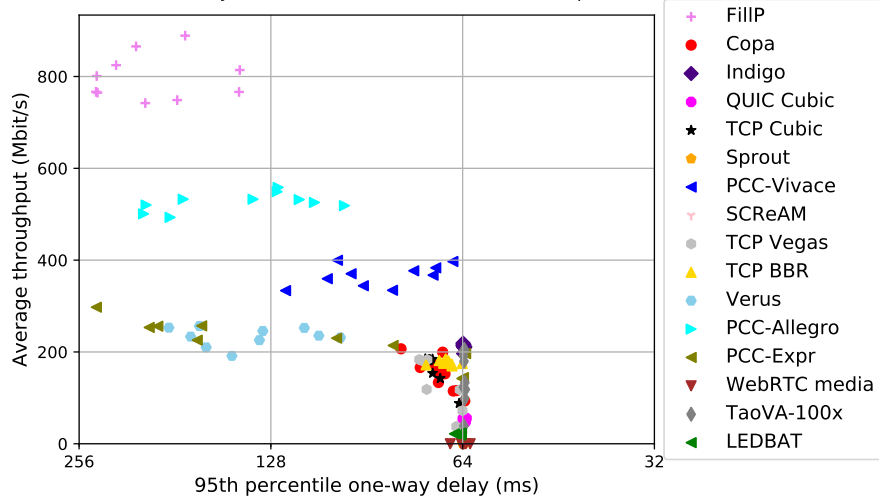NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ 0088822873ea99180f63545a341ef069f40efe59
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 to GCE Iowa, 10 runs of 30s each per scheme (mean of all runs by scheme)

FillP
PCC-Allegro
PCC-Vivace
Verus
CC-Expr
Indigo
TCP BBR
TCP Cubic
Copa
TaoVA-100x
TCP Vegas
QUIC Cubic
LEDBAT
SCReAM media

- Average throughput (Mbit/s)
- 95th percentile one-way delay (ms)

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

- Average throughput (Mbit/s)
- 95th percentile one-way delay (ms)

Legend:
- FillP
- Copa
- Indigo
- QUIC Cubic
- TCP Cubic
- Sprout
- PCC-Vivace
- SCReAM
- TCP Vegas
- TCP BBR
- Verus
- PCC-Allegro
- PCC-Expr
- WebRTC media
- TaoVA-100x
- LEDBAT

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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	176.88	67.97	0.42
Copa	10	151.03	69.75	0.30
TCP Cubic	10	166.62	71.14	0.45
FillP	10	798.30	199.52	3.82
Indigo	10	211.94	63.76	0.45
LEDBAT	10	21.64	64.65	0.78
PCC-Allegro	10	526.34	147.29	1.41
PCC-Expr	10	221.65	133.78	1.45
QUIC Cubic	9	52.47	63.51	0.65
SCReAM	10	0.22	63.69	0.41
Sprout	10	0.94	63.86	0.27
TaoVA-100x	9	143.31	63.66	0.39
TCP Vegas	10	96.21	68.14	0.46
Verus	10	233.52	141.66	0.96
PCC-Vivace	10	366.63	88.08	0.56
WebRTC media	10	0.05	64.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2018-05-25 09:20:11
End at: 2018-05-25 09:20:41
Local clock offset: -0.05 ms
Remote clock offset: 0.258 ms

# Below is generated by plot.py at 2018-05-25 12:53:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 171.87 Mbit/s
95th percentile per-packet one-way delay: 73.055 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 171.87 Mbit/s
95th percentile per-packet one-way delay: 73.055 ms
Loss rate: 0.43%
```
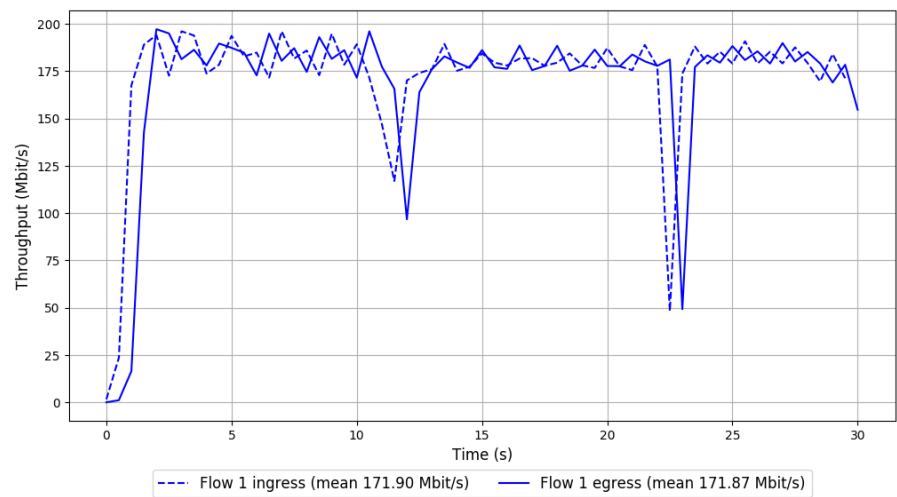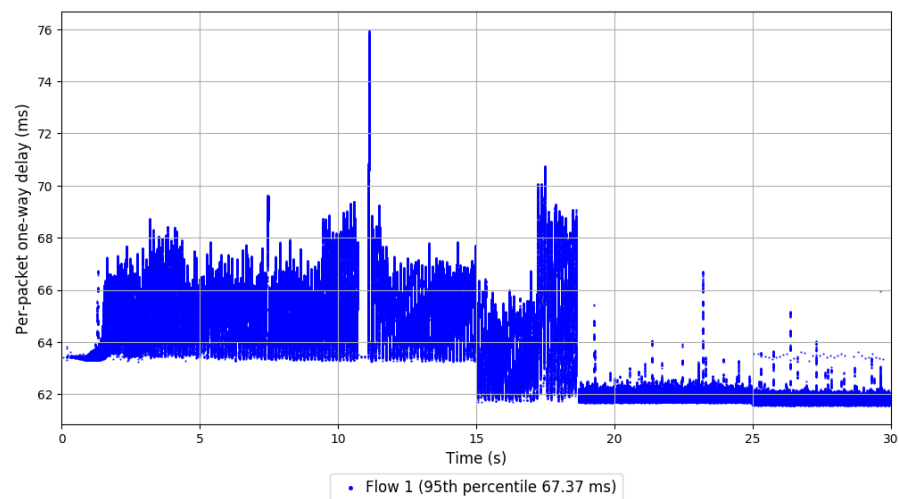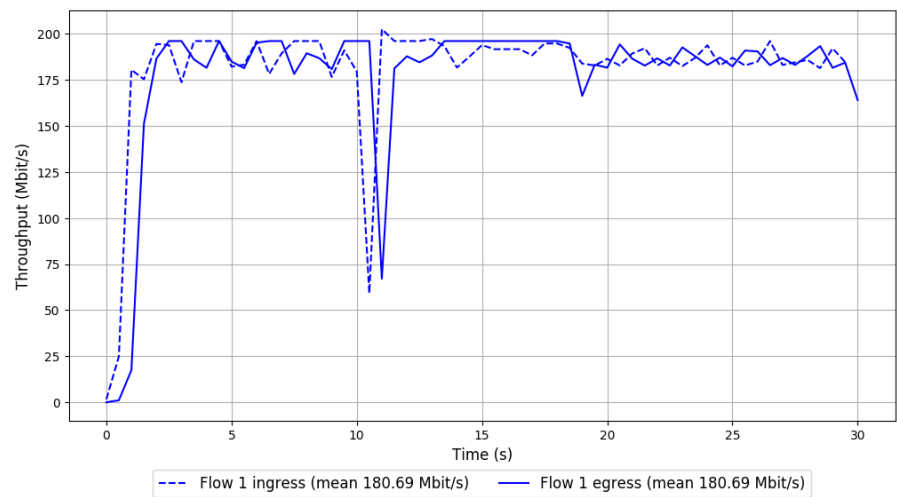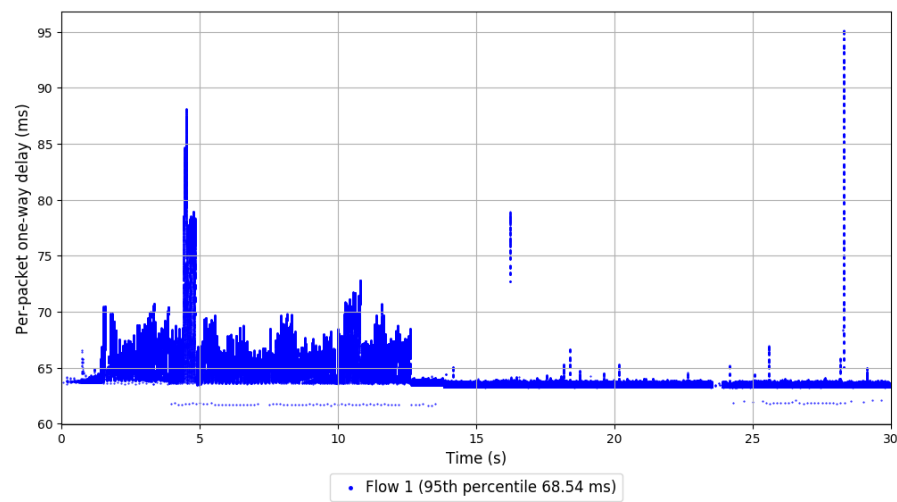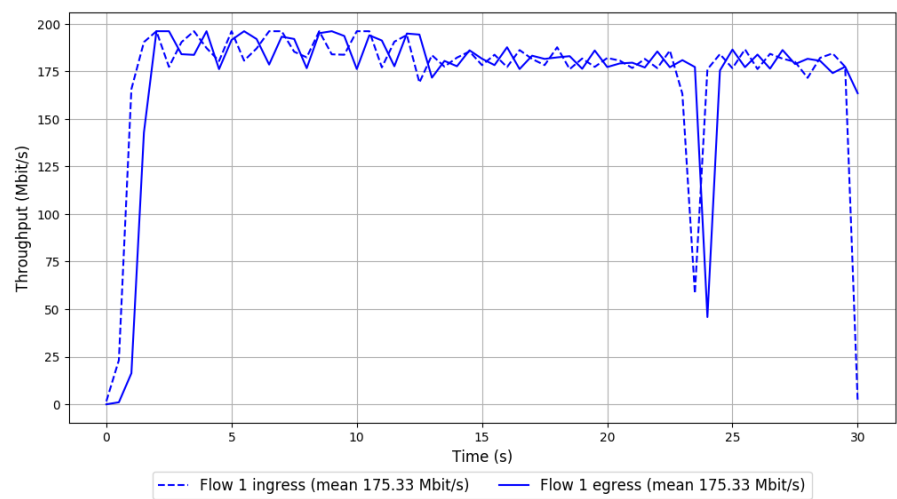
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2018-05-25 09:40:39
End at: 2018-05-25 09:41:09
Local clock offset: -0.051 ms
Remote clock offset: 0.01 ms


# Below is generated by plot.py at 2018-05-25 12:54:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 180.69 Mbit/s
95th percentile per-packet one-way delay: 67.371 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 180.69 Mbit/s
95th percentile per-packet one-way delay: 67.371 ms
Loss rate: 0.42%
```
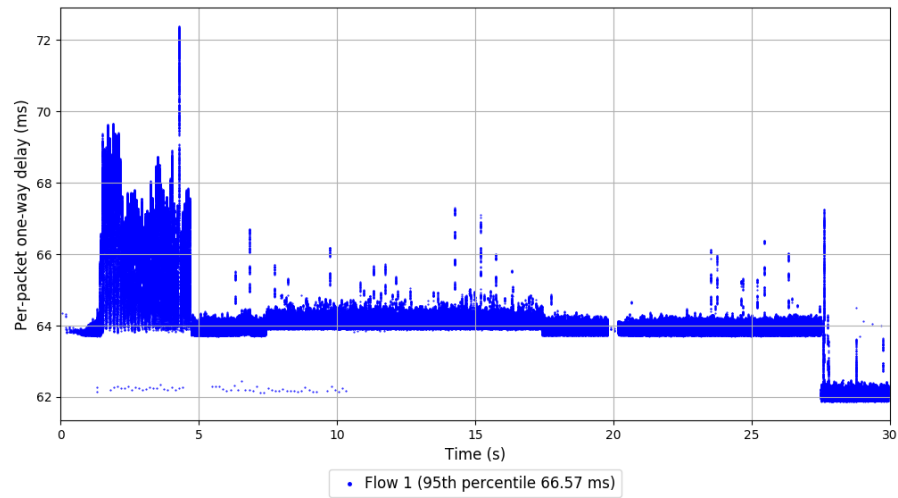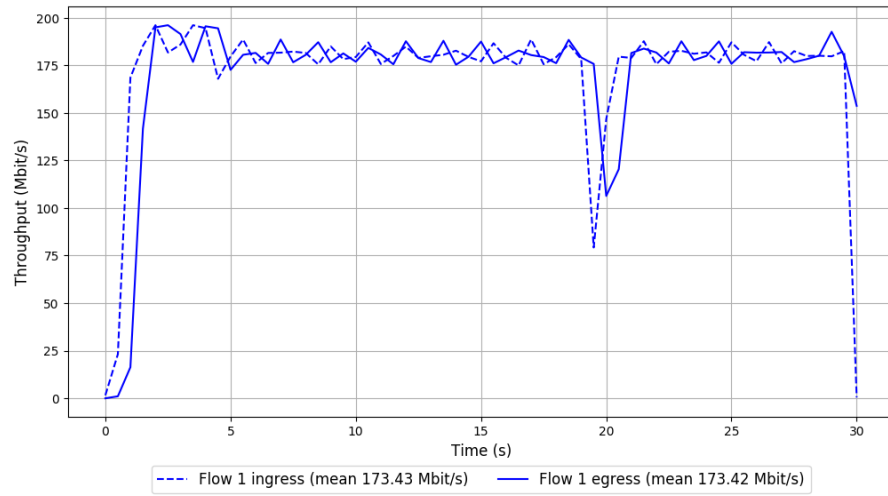
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2018-05-25 10:01:10
End at: 2018-05-25 10:01:40
Local clock offset: -0.018 ms
Remote clock offset: -0.037 ms


# Below is generated by plot.py at 2018-05-25 12:54:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 175.33 Mbit/s
95th percentile per-packet one-way delay: 68.544 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 175.33 Mbit/s
95th percentile per-packet one-way delay: 68.544 ms
Loss rate: 0.42%
```
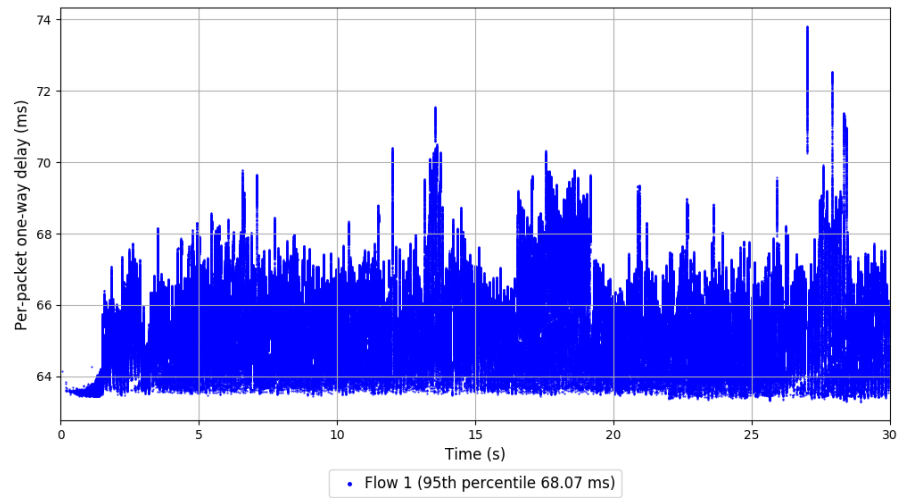
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2018-05-25 10:21:46
End at: 2018-05-25 10:22:16
Local clock offset: -0.019 ms
Remote clock offset: -0.377 ms


# Below is generated by plot.py at 2018-05-25 12:54:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 173.42 Mbit/s
95th percentile per-packet one-way delay: 66.573 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 173.42 Mbit/s
95th percentile per-packet one-way delay: 66.573 ms
Loss rate: 0.43%
```
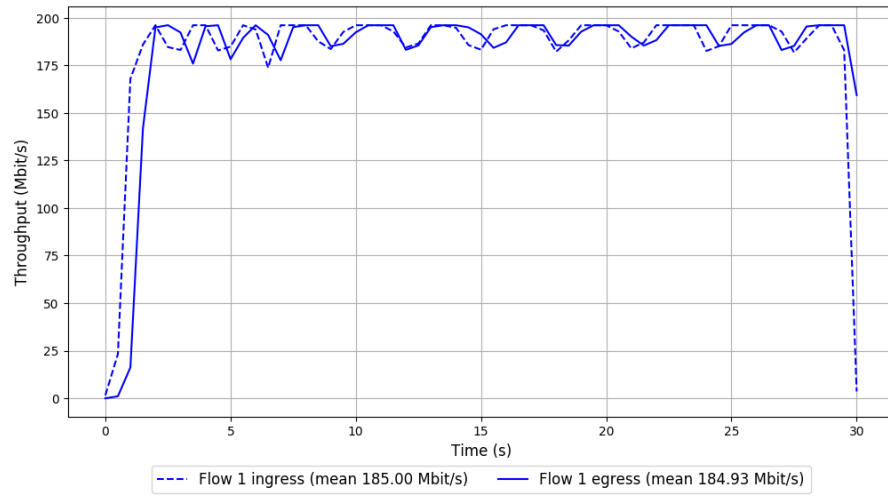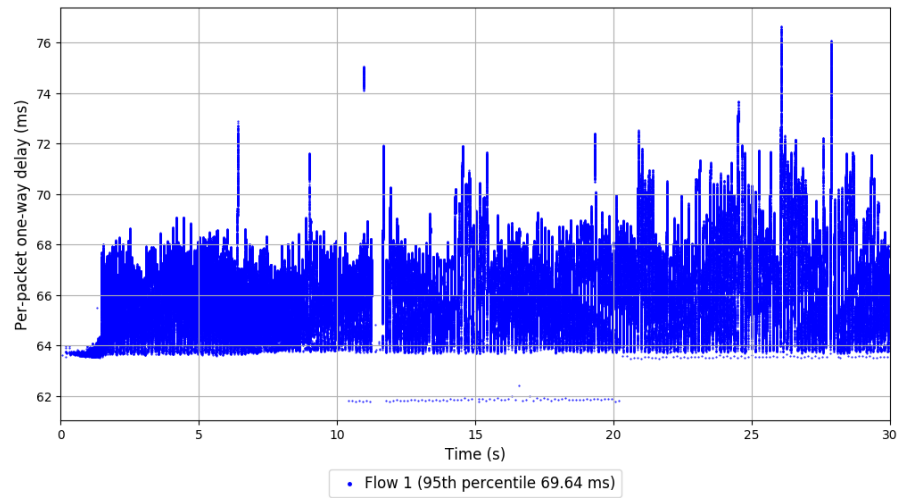
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 173.43 Mbit/s) ---- Flow 1 egress (mean 173.42 Mbit/s)

Flow 1 (95th percentile 66.57 ms)

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```
Run 5: Statistics of TCP BBR

Start at: 2018-05-25 10:42:12
End at: 2018-05-25 10:42:42
Local clock offset: 0.047 ms
Remote clock offset: 0.024 ms


# Below is generated by plot.py at 2018-05-25 12:54:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.93 Mbit/s
95th percentile per-packet one-way delay: 68.066 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 184.93 Mbit/s
95th percentile per-packet one-way delay: 68.066 ms
Loss rate: 0.47%
```
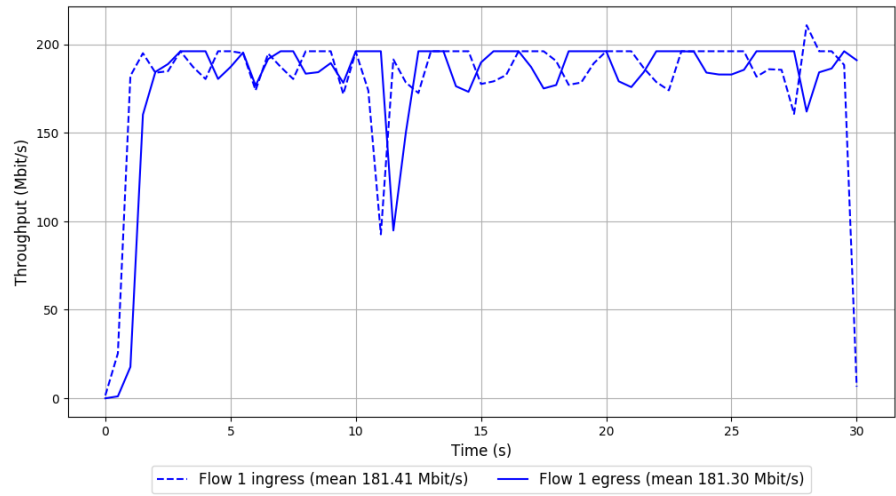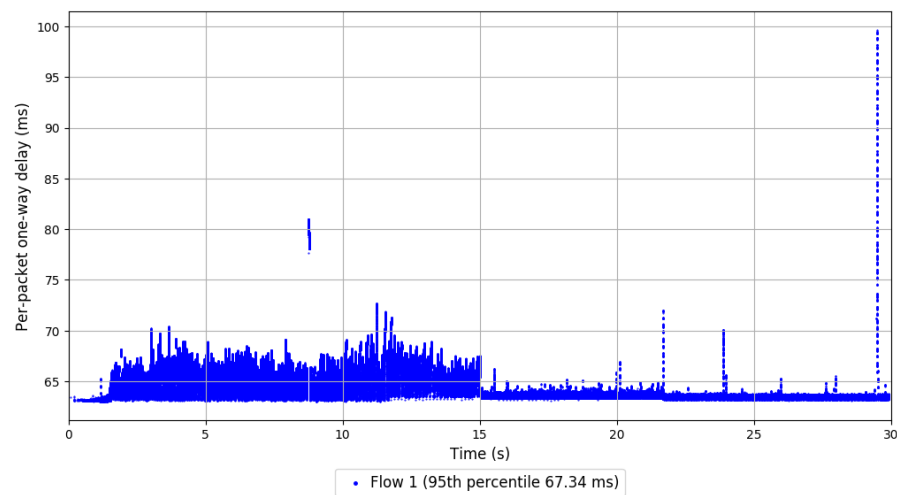
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 185.00 Mbit/s)   Flow 1 egress (mean 184.93 Mbit/s)

Flow 1 (95th percentile 68.07 ms)

```
Run 6: Statistics of TCP BBR

Start at: 2018-05-25 11:02:37
End at: 2018-05-25 11:03:07
Local clock offset: 0.009 ms
Remote clock offset: -0.14 ms


# Below is generated by plot.py at 2018-05-25 12:54:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.30 Mbit/s
95th percentile per-packet one-way delay: 69.638 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 181.30 Mbit/s
95th percentile per-packet one-way delay: 69.638 ms
Loss rate: 0.49%
```
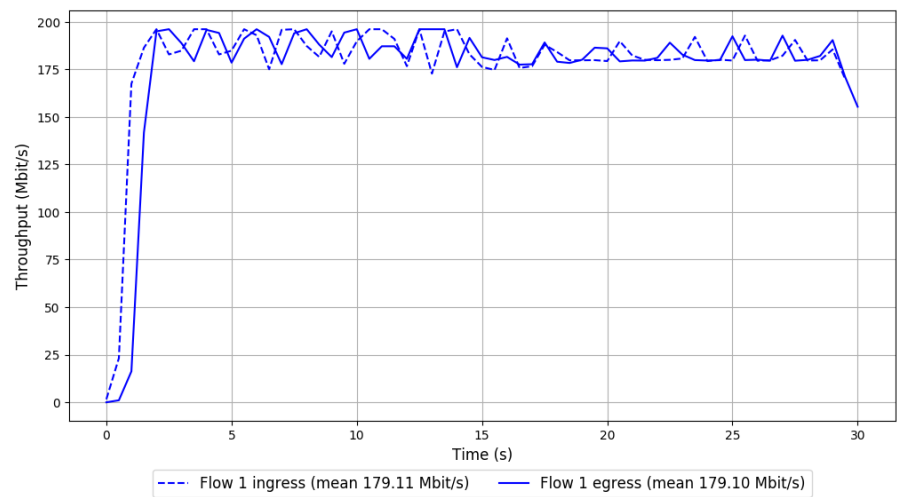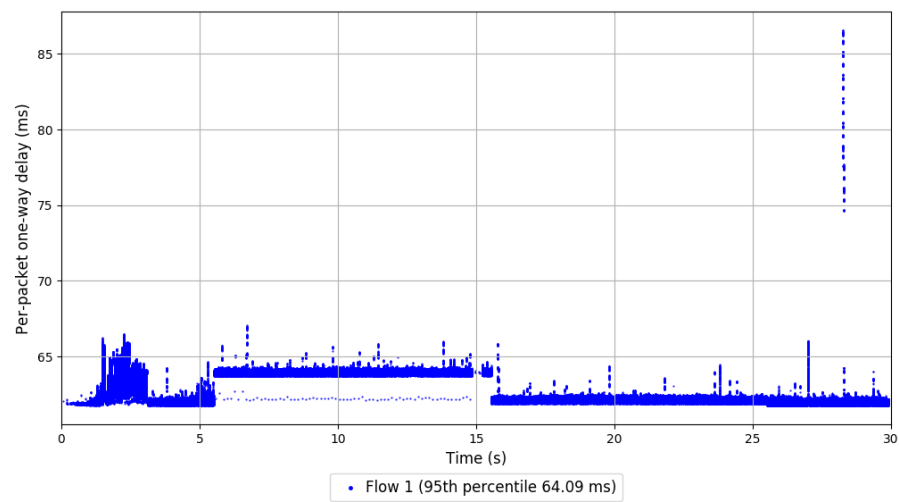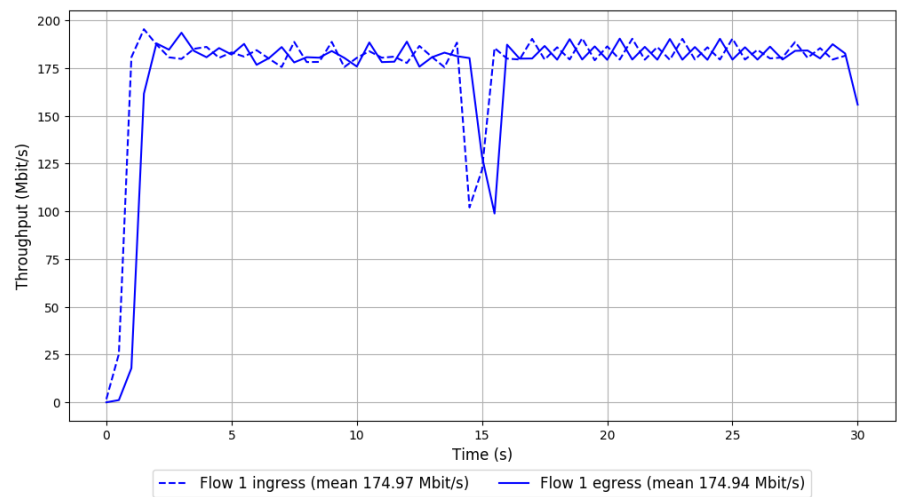
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 181.41 Mbit/s) ----   Flow 1 egress (mean 181.30 Mbit/s) ——

• Flow 1 (95th percentile 69.64 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2018-05-25 11:23:22
End at: 2018-05-25 11:23:52
Local clock offset: 0.013 ms
Remote clock offset: 0.211 ms

# Below is generated by plot.py at 2018-05-25 12:54:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 179.10 Mbit/s
95th percentile per-packet one-way delay: 67.343 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 179.10 Mbit/s
95th percentile per-packet one-way delay: 67.343 ms
Loss rate: 0.42%
```
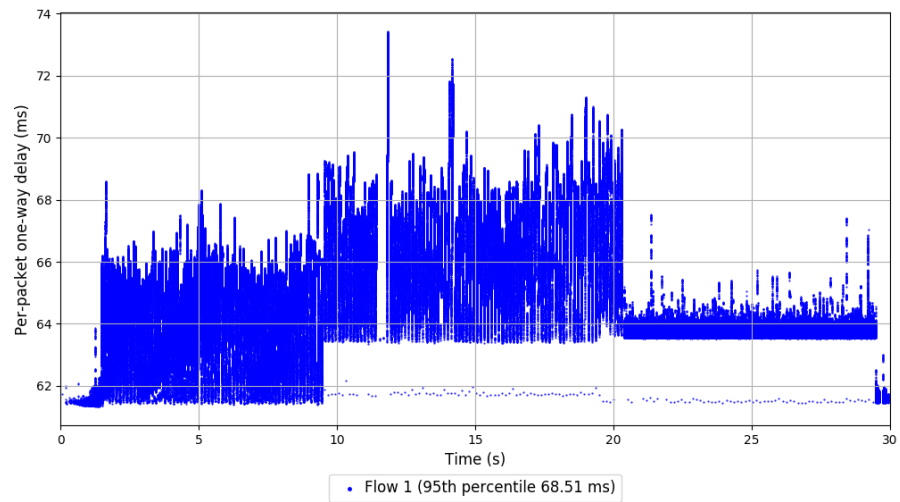
Run 7: Report of TCP BBR — Data Link

```
Run 8: Statistics of TCP BBR

Start at: 2018-05-25 11:43:48
End at: 2018-05-25 11:44:18
Local clock offset: -0.001 ms
Remote clock offset: -0.279 ms


# Below is generated by plot.py at 2018-05-25 12:54:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 174.94 Mbit/s
95th percentile per-packet one-way delay: 64.091 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 174.94 Mbit/s
95th percentile per-packet one-way delay: 64.091 ms
Loss rate: 0.43%
```
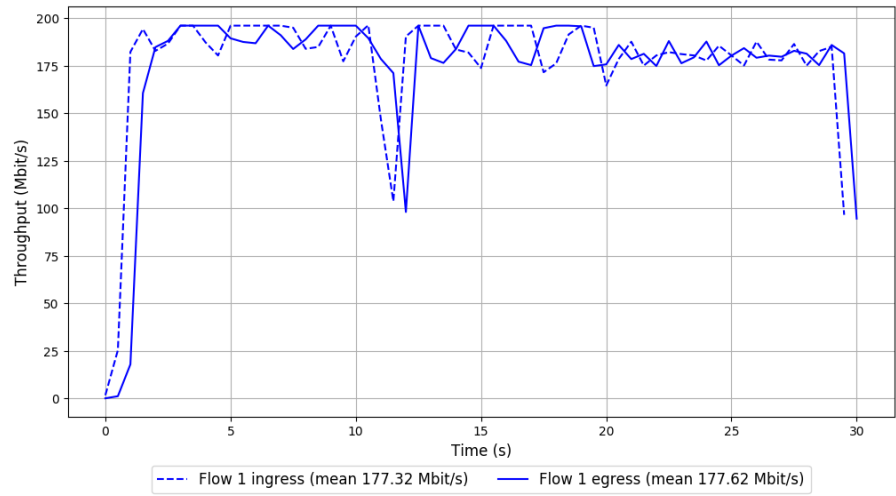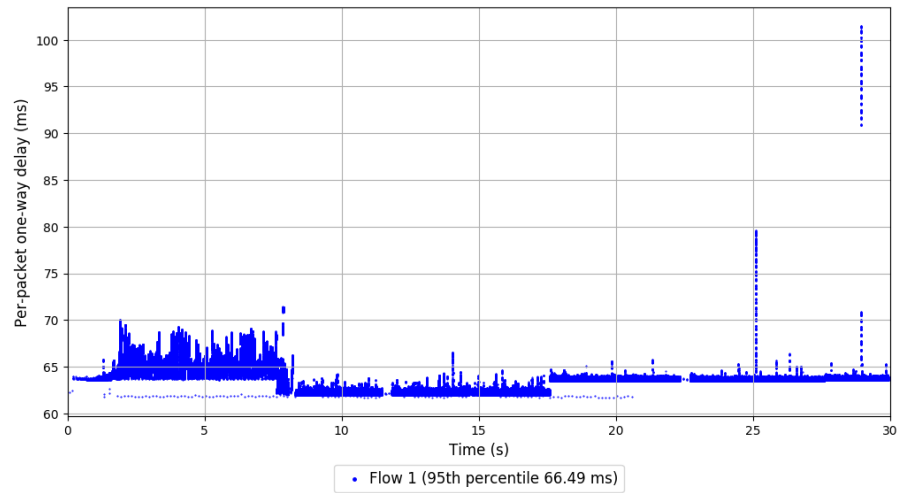
Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 174.97 Mbit/s)   Flow 1 egress (mean 174.94 Mbit/s)

Flow 1 (95th percentile 64.09 ms)

```
Run 9: Statistics of TCP BBR

Start at: 2018-05-25 12:04:24
End at: 2018-05-25 12:04:54
Local clock offset: -0.006 ms
Remote clock offset: 0.17 ms


# Below is generated by plot.py at 2018-05-25 12:57:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.62 Mbit/s
95th percentile per-packet one-way delay: 68.507 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 177.62 Mbit/s
95th percentile per-packet one-way delay: 68.507 ms
Loss rate: 0.25%
```
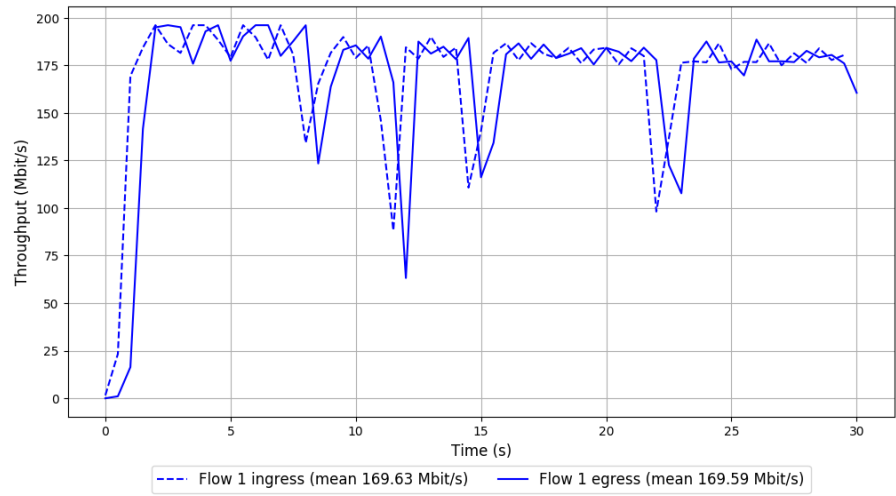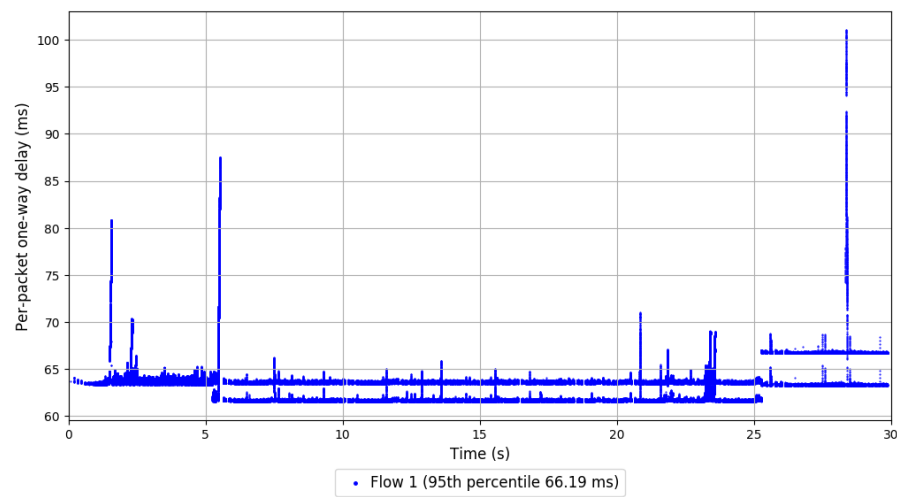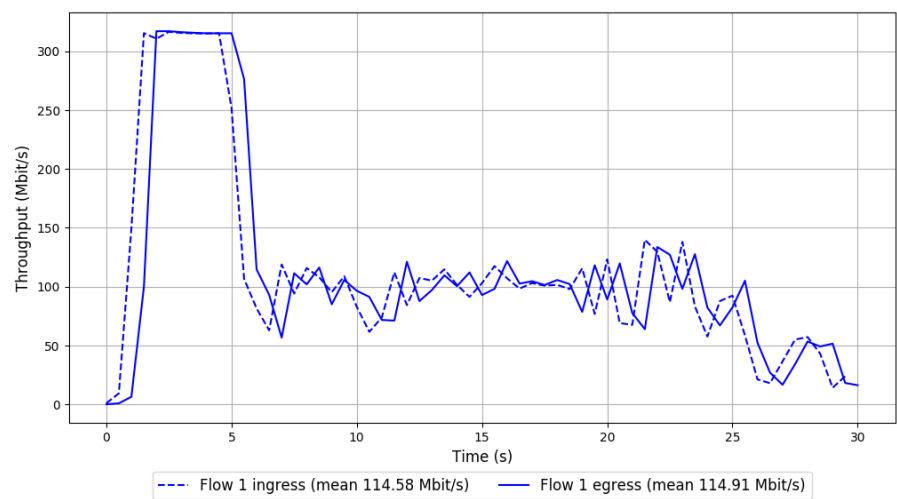
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 177.32 Mbit/s)   Flow 1 egress (mean 177.62 Mbit/s)

Flow 1 (95th percentile 68.51 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2018-05-25 12:24:46
End at: 2018-05-25 12:25:16
Local clock offset: -0.07 ms
Remote clock offset: -0.055 ms


# Below is generated by plot.py at 2018-05-25 12:57:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.59 Mbit/s
95th percentile per-packet one-way delay: 66.490 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 169.59 Mbit/s
95th percentile per-packet one-way delay: 66.490 ms
Loss rate: 0.45%
```
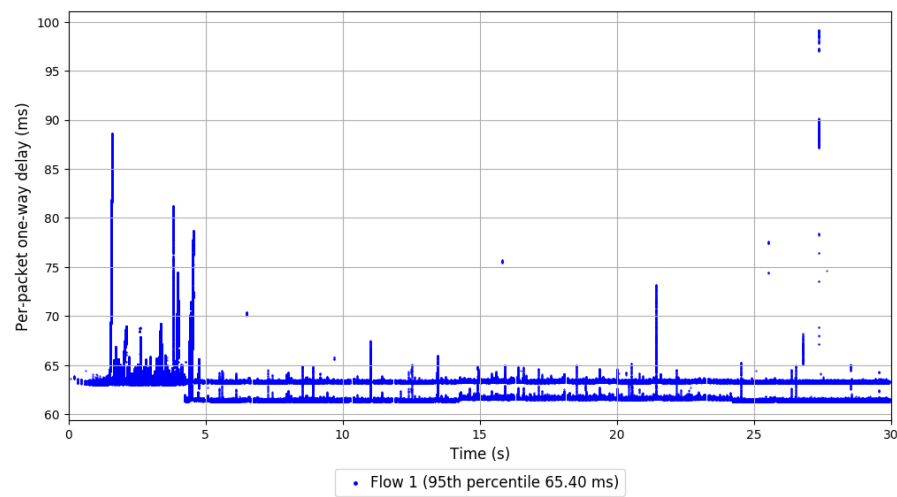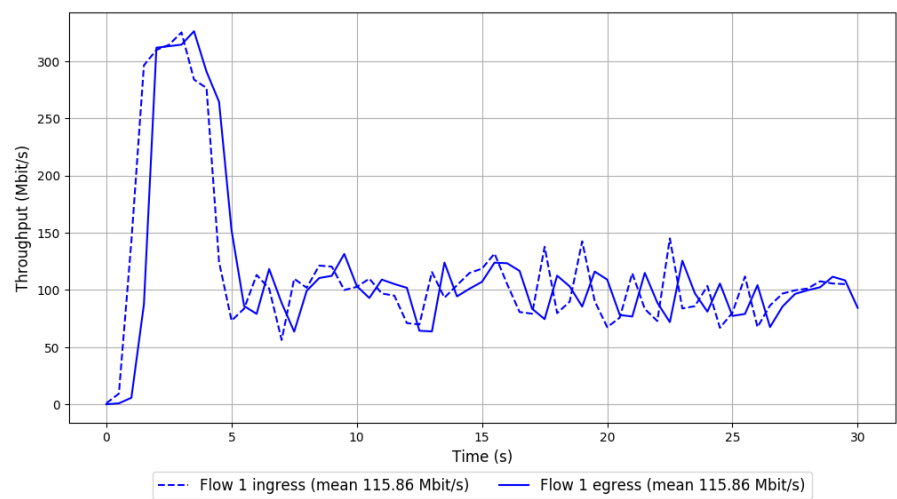
Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2018-05-25 09:27:29
End at: 2018-05-25 09:27:59
Local clock offset: -0.052 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2018-05-25 12:57:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 114.91 Mbit/s
95th percentile per-packet one-way delay: 66.194 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 114.91 Mbit/s
95th percentile per-packet one-way delay: 66.194 ms
Loss rate: 0.13%
```
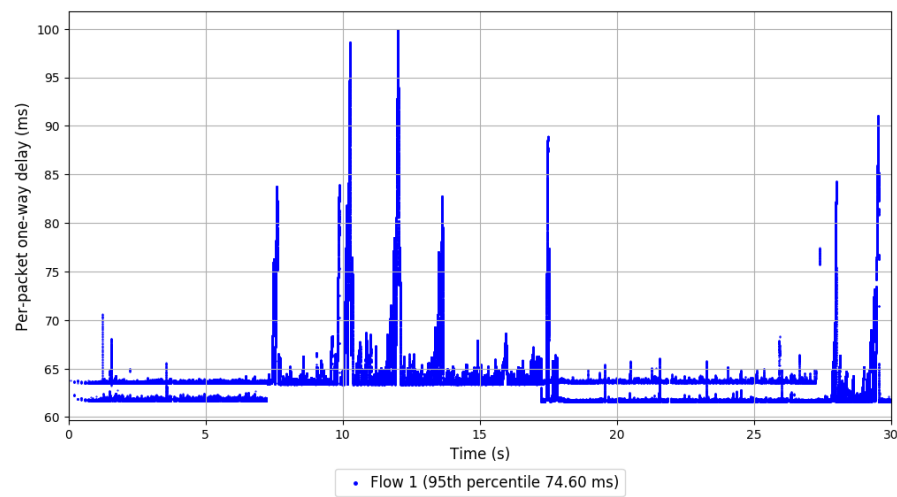
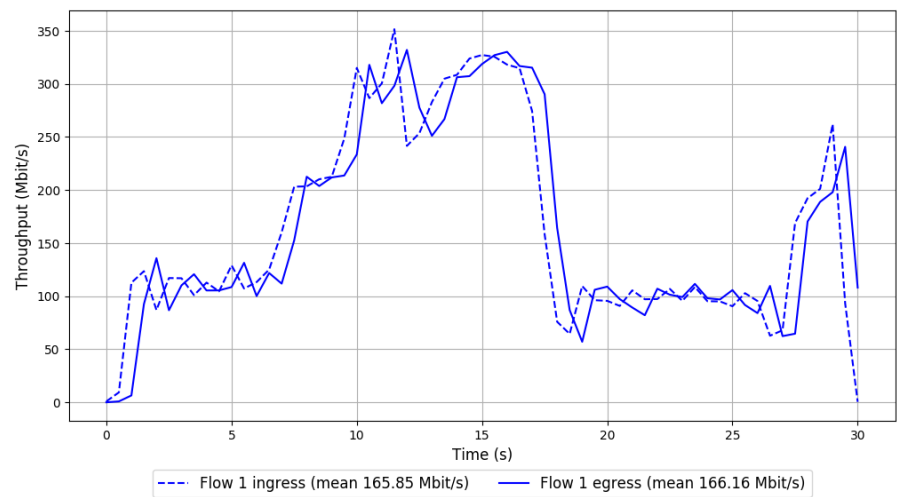Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-05-25 09:48:00
End at: 2018-05-25 09:48:30
Local clock offset: -0.059 ms
Remote clock offset: 0.19 ms


# Below is generated by plot.py at 2018-05-25 12:57:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 115.86 Mbit/s
95th percentile per-packet one-way delay: 65.397 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 115.86 Mbit/s
95th percentile per-packet one-way delay: 65.397 ms
Loss rate: 0.39%
```

Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-05-25 10:08:27
End at: 2018-05-25 10:08:57
Local clock offset: -0.03 ms
Remote clock offset: -0.027 ms


# Below is generated by plot.py at 2018-05-25 12:59:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 166.16 Mbit/s
95th percentile per-packet one-way delay: 74.602 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 166.16 Mbit/s
95th percentile per-packet one-way delay: 74.602 ms
Loss rate: 0.23%
```
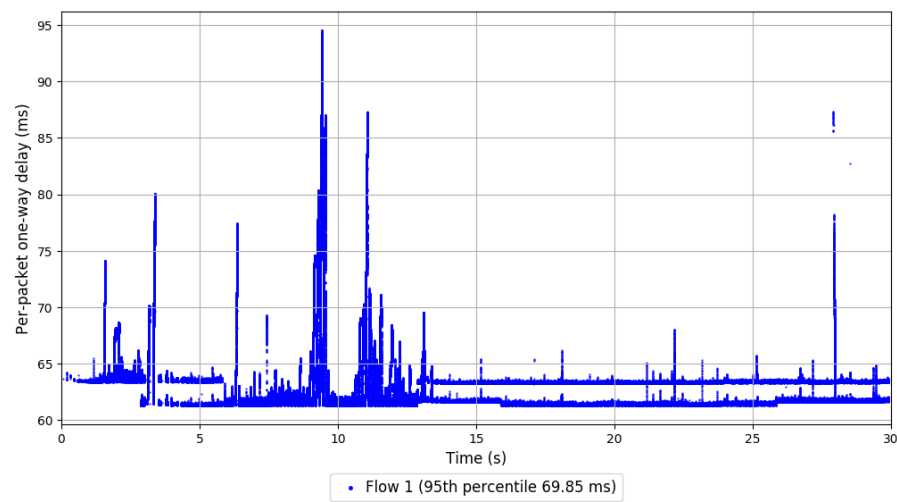
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-05-25 10:29:01
End at: 2018-05-25 10:29:31
Local clock offset: 0.028 ms
Remote clock offset: 0.09 ms


# Below is generated by plot.py at 2018-05-25 12:59:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 133.53 Mbit/s
95th percentile per-packet one-way delay: 69.847 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 133.53 Mbit/s
95th percentile per-packet one-way delay: 69.847 ms
Loss rate: 0.31%
```
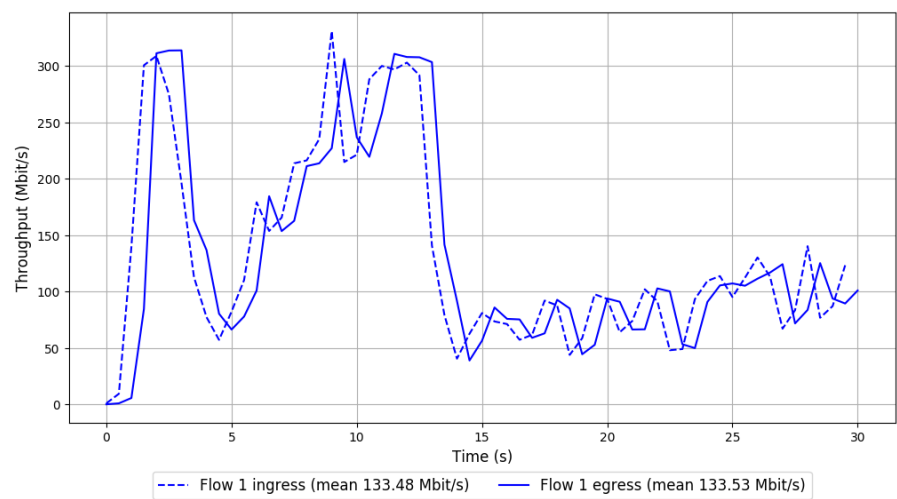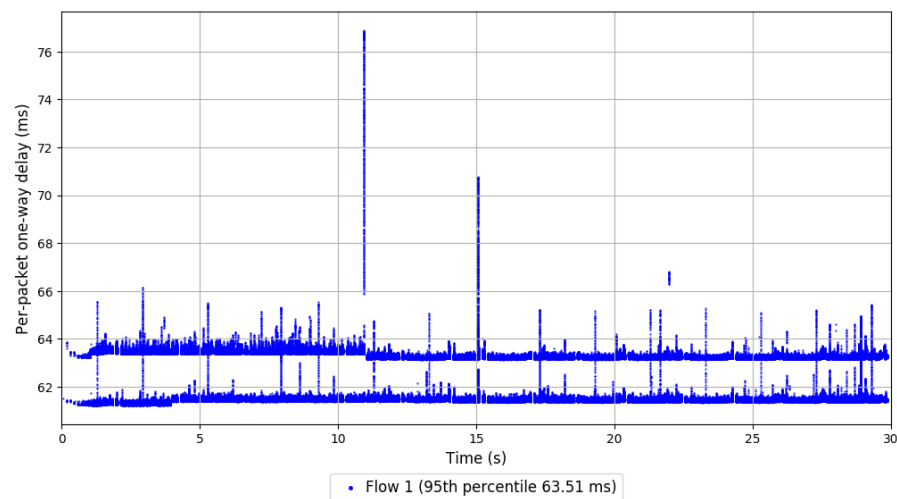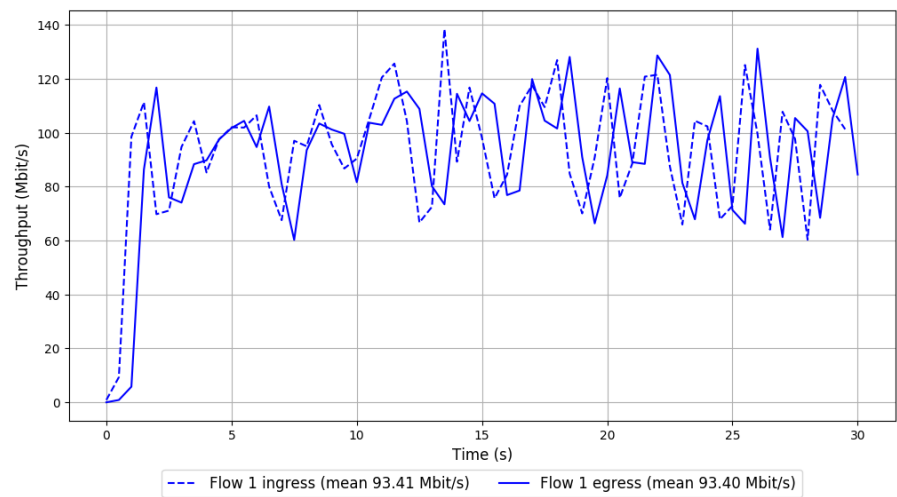
Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 133.48 Mbit/s)   Flow 1 egress (mean 133.53 Mbit/s)
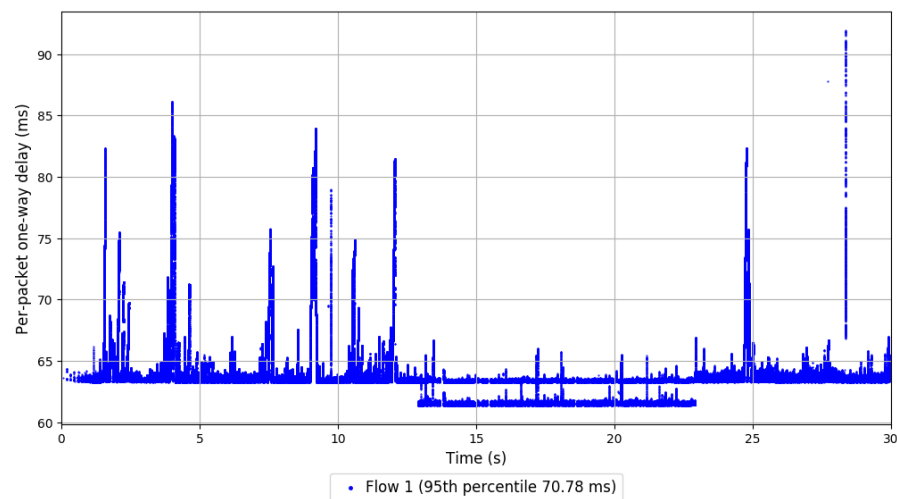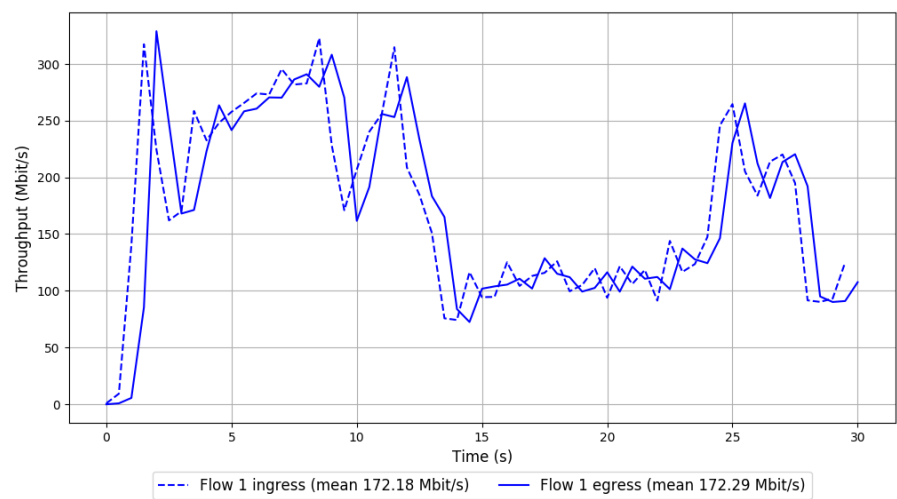

• Flow 1 (95th percentile 69.85 ms)

```
Run 5: Statistics of Copa

Start at: 2018-05-25 10:49:33
End at: 2018-05-25 10:50:03
Local clock offset: 0.013 ms
Remote clock offset: 0.194 ms


# Below is generated by plot.py at 2018-05-25 12:59:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.40 Mbit/s
95th percentile per-packet one-way delay: 63.511 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 93.40 Mbit/s
95th percentile per-packet one-way delay: 63.511 ms
Loss rate: 0.43%
```

Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 93.41 Mbit/s)   Flow 1 egress (mean 93.40 Mbit/s)

Flow 1 (95th percentile 63.51 ms)

```
Run 6: Statistics of Copa

Start at: 2018-05-25 11:09:51
End at: 2018-05-25 11:10:21
Local clock offset: 0.017 ms
Remote clock offset: -0.003 ms


# Below is generated by plot.py at 2018-05-25 12:59:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 172.29 Mbit/s
95th percentile per-packet one-way delay: 70.782 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 172.29 Mbit/s
95th percentile per-packet one-way delay: 70.782 ms
Loss rate: 0.35%
```
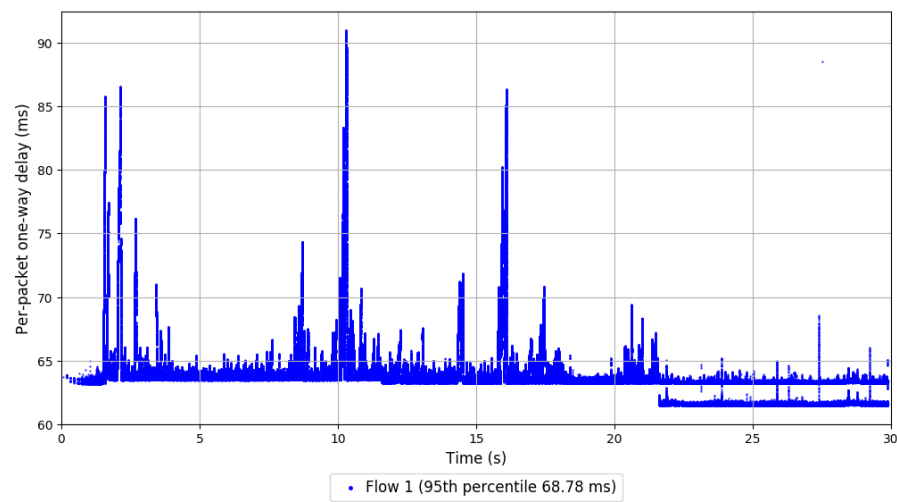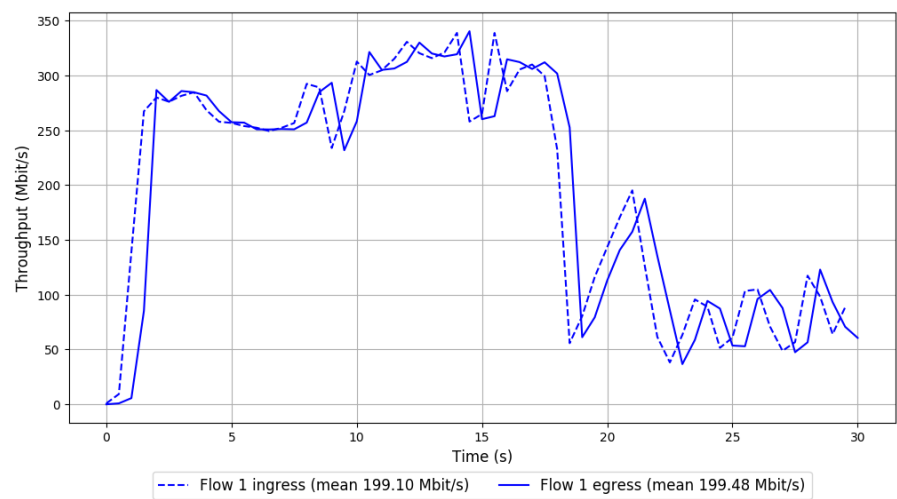
Run 6: Report of Copa — Data Link

Flow 1 ingress (mean 172.18 Mbit/s)   Flow 1 egress (mean 172.29 Mbit/s)

Flow 1 (95th percentile 70.78 ms)

```
Run 7: Statistics of Copa

Start at: 2018-05-25 11:30:42
End at: 2018-05-25 11:31:12
Local clock offset: 0.013 ms
Remote clock offset: 0.06 ms


# Below is generated by plot.py at 2018-05-25 13:04:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 199.48 Mbit/s
95th percentile per-packet one-way delay: 68.783 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 199.48 Mbit/s
95th percentile per-packet one-way delay: 68.783 ms
Loss rate: 0.24%
```
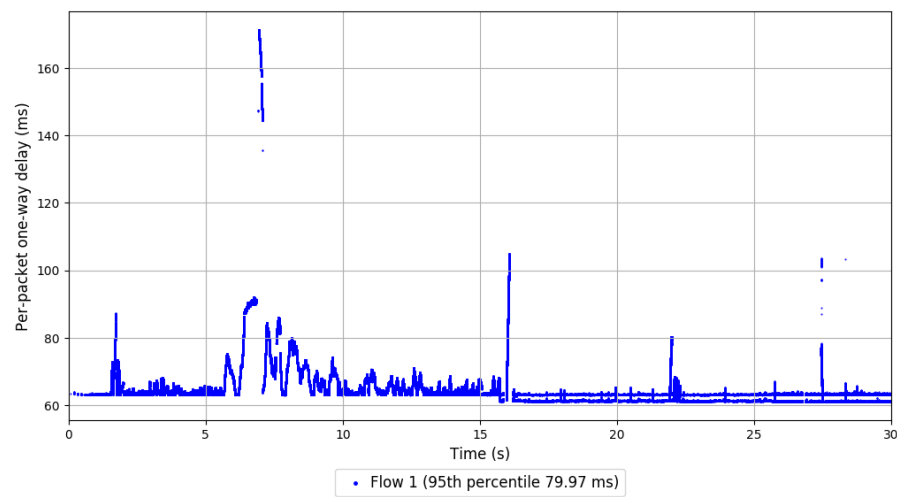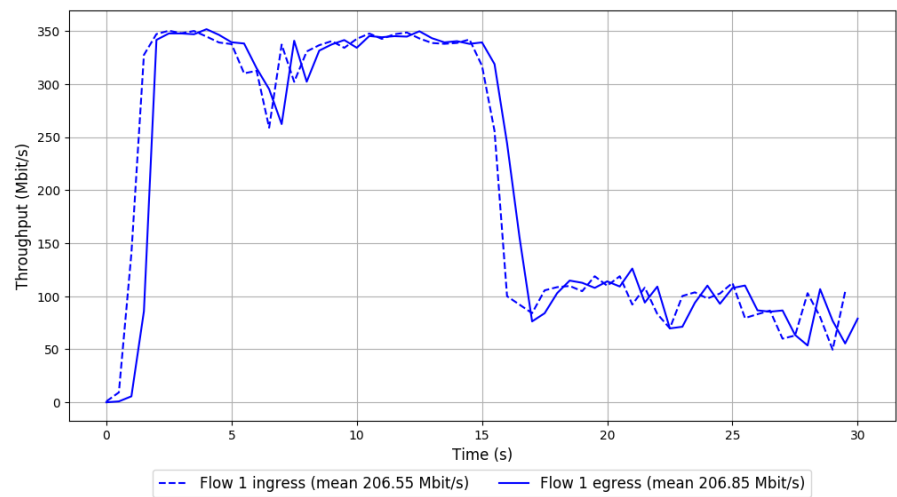
Run 7: Report of Copa — Data Link

```
Run 8: Statistics of Copa

Start at: 2018-05-25 11:51:08
End at: 2018-05-25 11:51:38
Local clock offset: -0.023 ms
Remote clock offset: 0.358 ms


# Below is generated by plot.py at 2018-05-25 13:04:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 206.85 Mbit/s
95th percentile per-packet one-way delay: 79.970 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 206.85 Mbit/s
95th percentile per-packet one-way delay: 79.970 ms
Loss rate: 0.26%
```
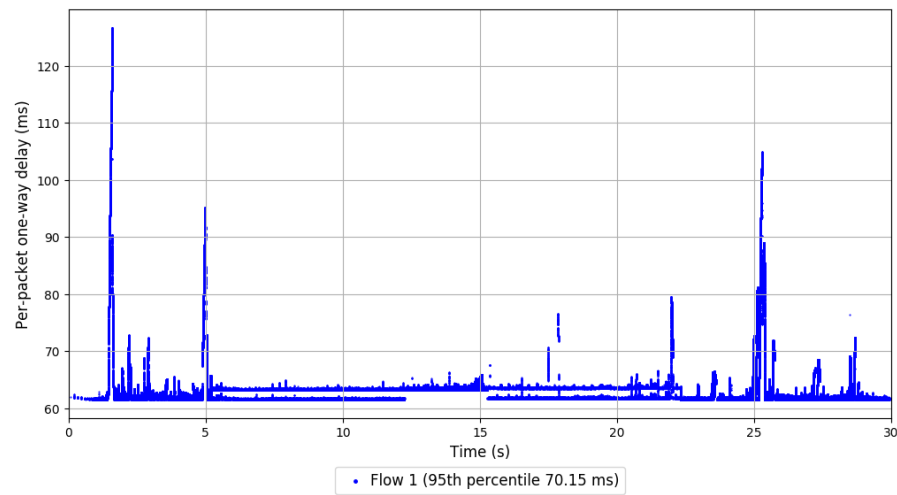
Run 8: Report of Copa — Data Link

```
Run 9: Statistics of Copa

Start at: 2018-05-25 12:11:42
End at: 2018-05-25 12:12:12
Local clock offset: -0.028 ms
Remote clock offset: 0.066 ms


# Below is generated by plot.py at 2018-05-25 13:04:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 155.31 Mbit/s
95th percentile per-packet one-way delay: 70.151 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 155.31 Mbit/s
95th percentile per-packet one-way delay: 70.151 ms
Loss rate: 0.35%
```
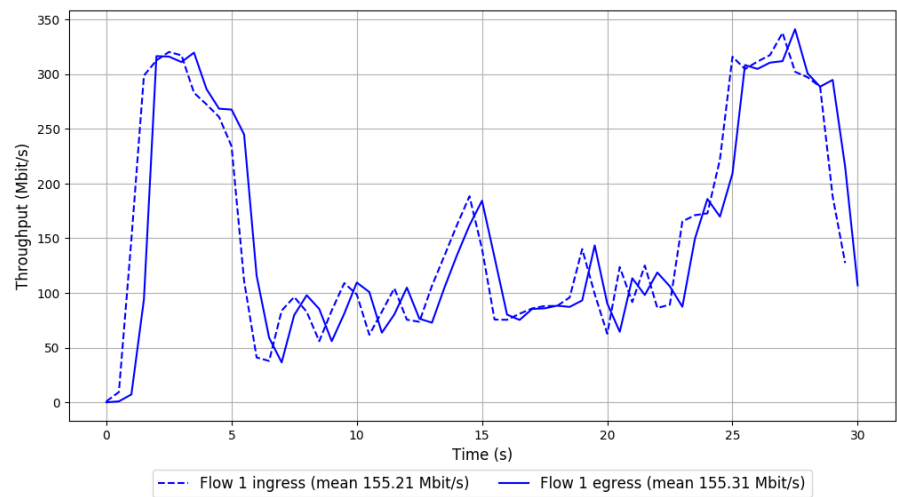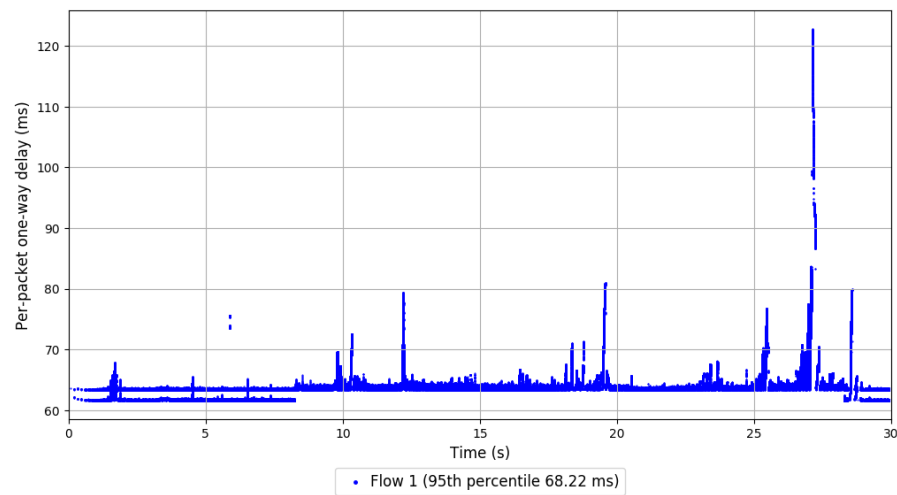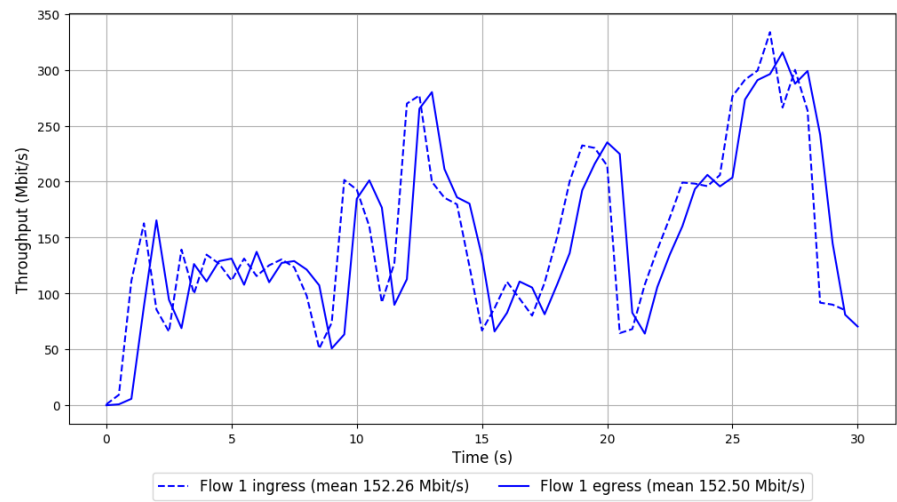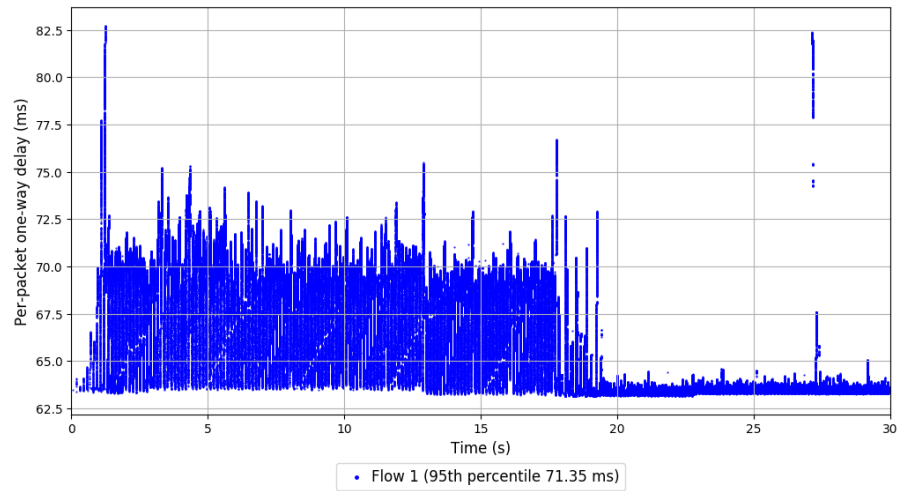
Run 9: Report of Copa — Data Link

```
Run 10: Statistics of Copa

Start at: 2018-05-25 12:32:06
End at: 2018-05-25 12:32:36
Local clock offset: -0.108 ms
Remote clock offset: -0.014 ms


# Below is generated by plot.py at 2018-05-25 13:04:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 152.50 Mbit/s
95th percentile per-packet one-way delay: 68.215 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 152.50 Mbit/s
95th percentile per-packet one-way delay: 68.215 ms
Loss rate: 0.27%
```

Run 10: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2018-05-25 09:22:31
End at: 2018-05-25 09:23:01
Local clock offset: -0.063 ms
Remote clock offset: 0.148 ms


# Below is generated by plot.py at 2018-05-25 13:04:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 153.71 Mbit/s
95th percentile per-packet one-way delay: 71.354 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 153.71 Mbit/s
95th percentile per-packet one-way delay: 71.354 ms
Loss rate: 0.34%
```
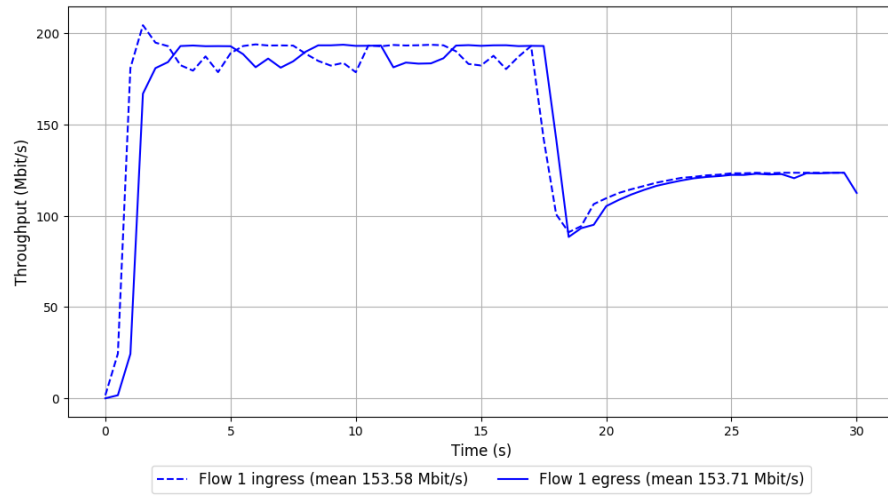
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-05-25 09:42:59
End at: 2018-05-25 09:43:29
Local clock offset: -0.088 ms
Remote clock offset: 0.414 ms


# Below is generated by plot.py at 2018-05-25 13:04:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.26 Mbit/s
95th percentile per-packet one-way delay: 72.006 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 183.26 Mbit/s
95th percentile per-packet one-way delay: 72.006 ms
Loss rate: 0.44%
```
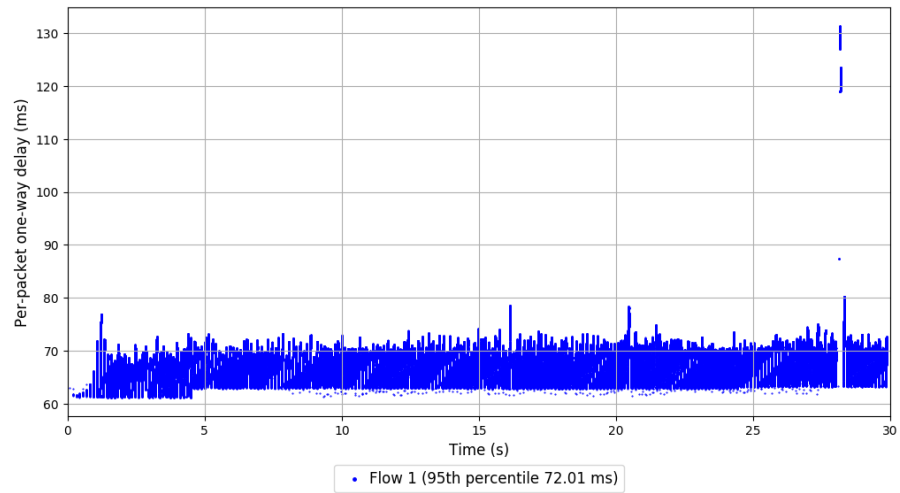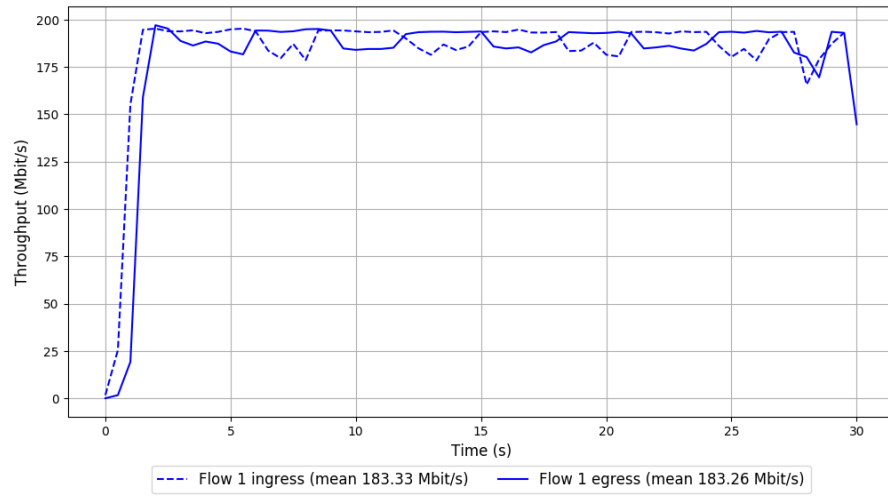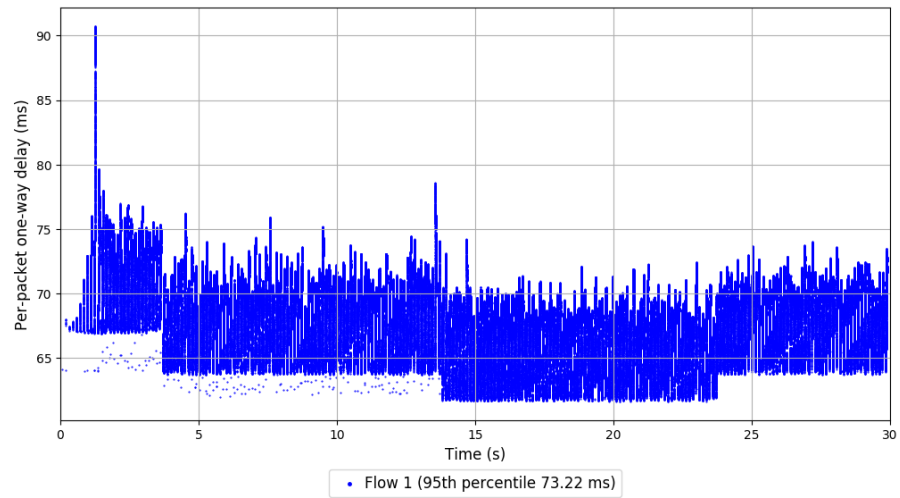
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 183.33 Mbit/s)   Flow 1 egress (mean 183.26 Mbit/s)
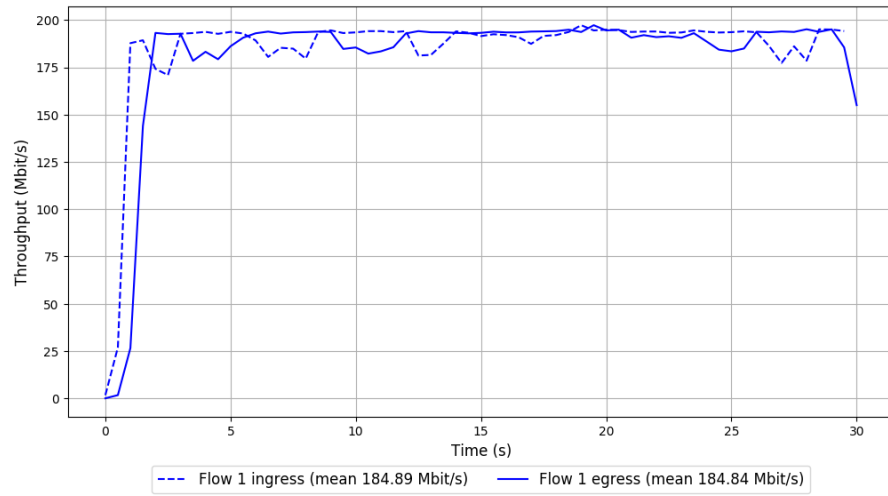

Flow 1 (95th percentile 72.01 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2018-05-25 10:03:30
End at: 2018-05-25 10:04:00
Local clock offset: -0.008 ms
Remote clock offset: -0.214 ms


# Below is generated by plot.py at 2018-05-25 13:04:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.84 Mbit/s
95th percentile per-packet one-way delay: 73.221 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 184.84 Mbit/s
95th percentile per-packet one-way delay: 73.221 ms
Loss rate: 0.44%
```

Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2018-05-25 10:24:07
End at: 2018-05-25 10:24:37
Local clock offset: -0.007 ms
Remote clock offset: 0.017 ms


# Below is generated by plot.py at 2018-05-25 13:04:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 142.41 Mbit/s
95th percentile per-packet one-way delay: 69.393 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 142.41 Mbit/s
95th percentile per-packet one-way delay: 69.393 ms
Loss rate: 0.52%
```
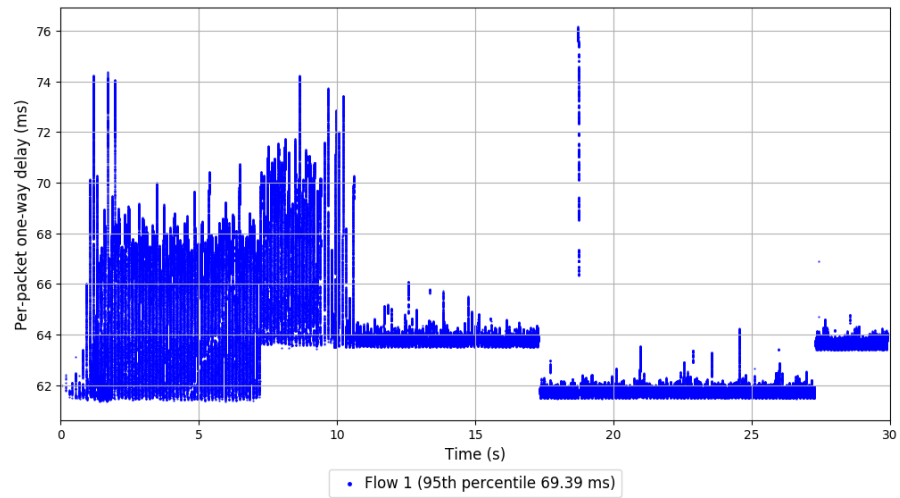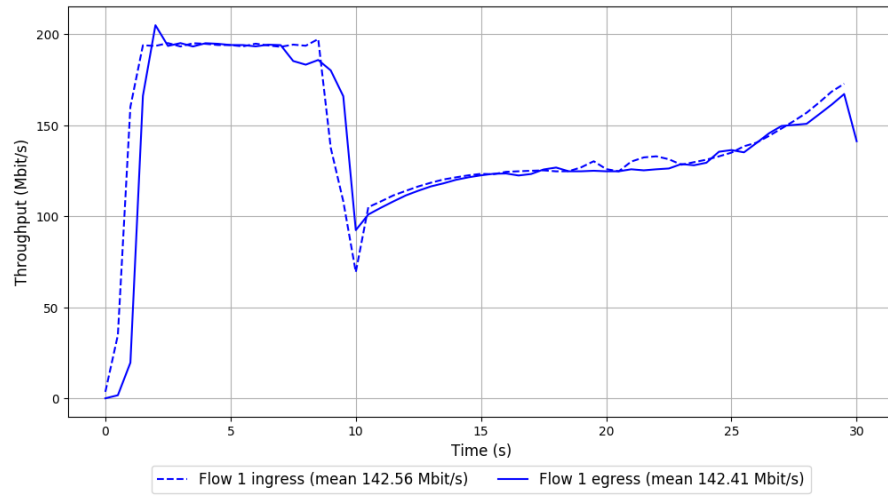
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 142.56 Mbit/s)   Flow 1 egress (mean 142.41 Mbit/s)
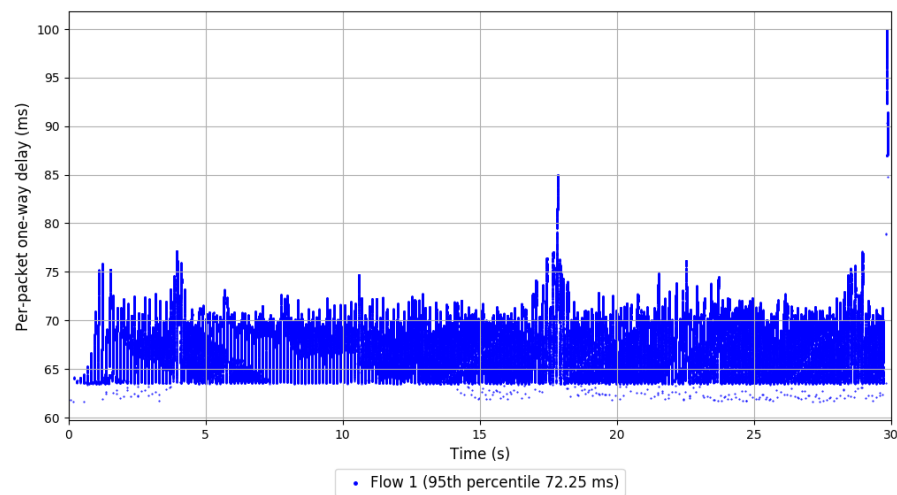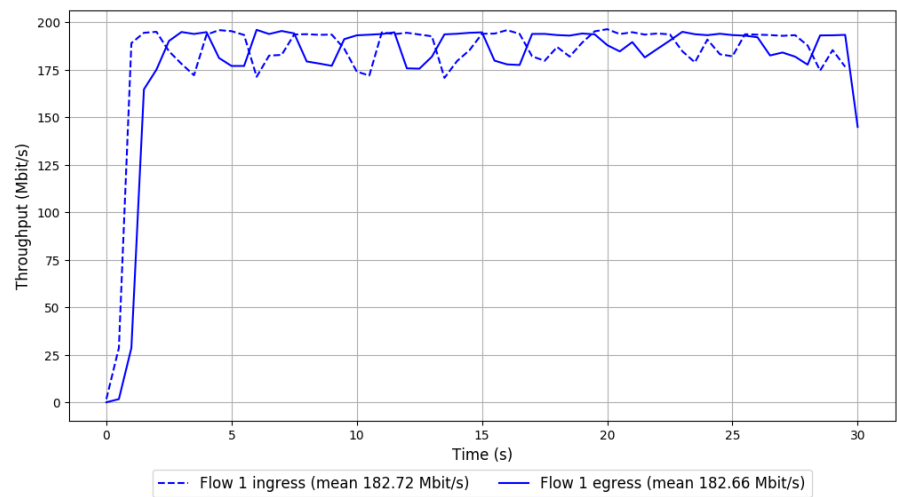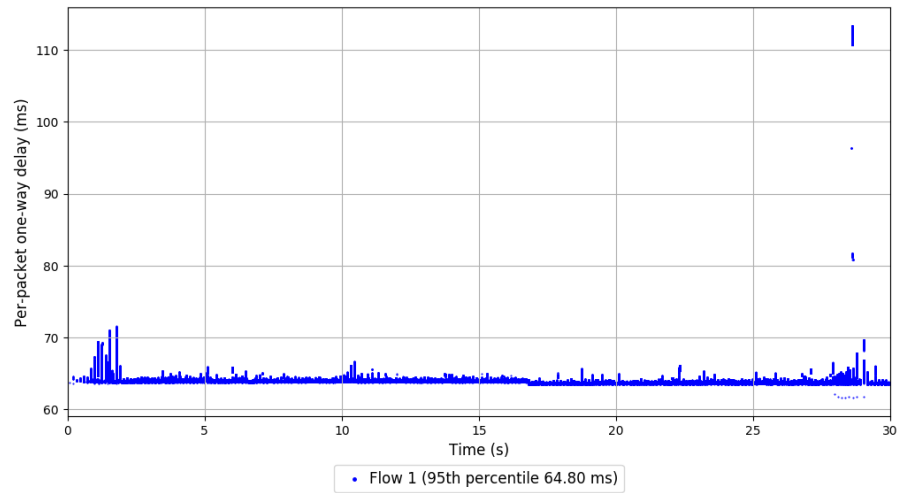

Flow 1 (95th percentile 69.39 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2018-05-25 10:44:33
End at: 2018-05-25 10:45:03
Local clock offset: -0.009 ms
Remote clock offset: -0.068 ms


# Below is generated by plot.py at 2018-05-25 13:04:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.66 Mbit/s
95th percentile per-packet one-way delay: 72.247 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 182.66 Mbit/s
95th percentile per-packet one-way delay: 72.247 ms
Loss rate: 0.44%
```
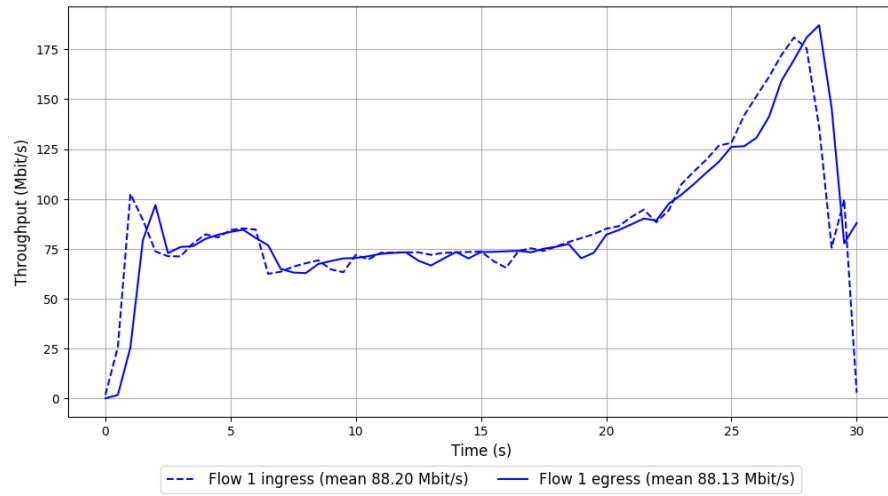
Run 5: Report of TCP Cubic — Data Link

```
Run 6: Statistics of TCP Cubic

Start at: 2018-05-25 11:04:57
End at: 2018-05-25 11:05:27
Local clock offset: 0.029 ms
Remote clock offset: -0.185 ms


# Below is generated by plot.py at 2018-05-25 13:04:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.13 Mbit/s
95th percentile per-packet one-way delay: 64.798 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 88.13 Mbit/s
95th percentile per-packet one-way delay: 64.798 ms
Loss rate: 0.50%
```

Run 6: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 88.20 Mbit/s)   Flow 1 egress (mean 88.13 Mbit/s)

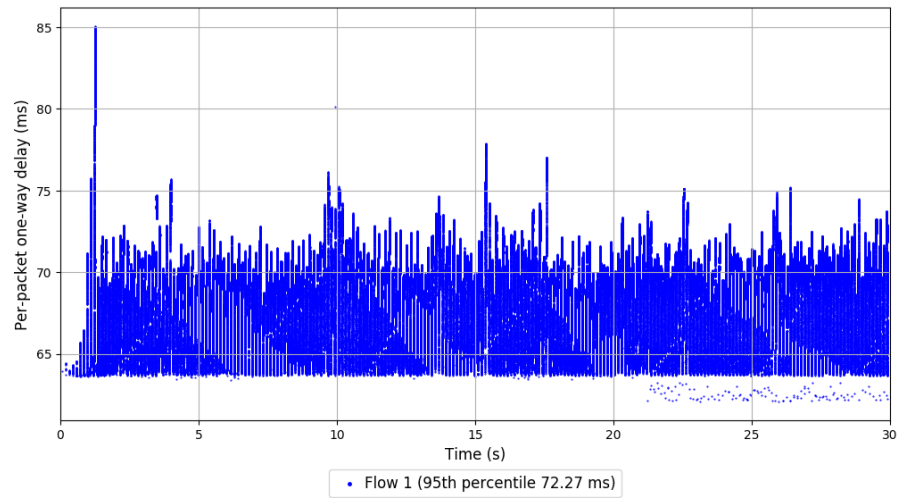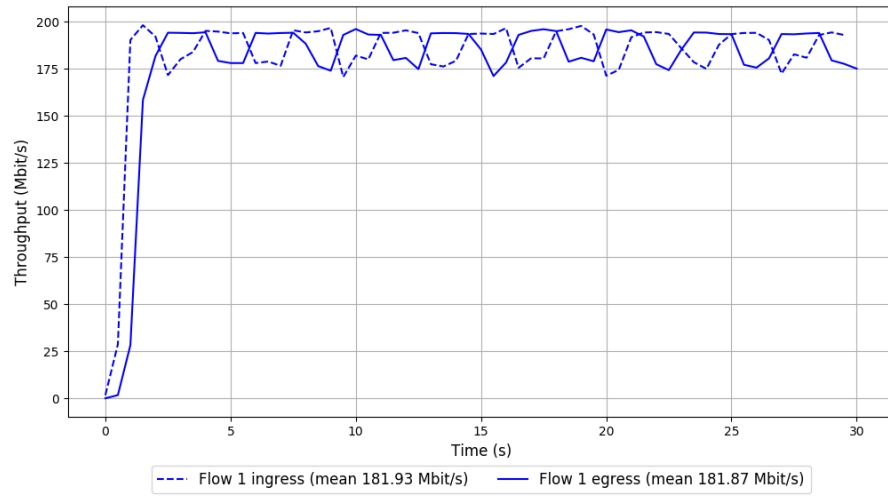Flow 1 (95th percentile 64.80 ms)

```
Run 7: Statistics of TCP Cubic

Start at: 2018-05-25 11:25:43
End at: 2018-05-25 11:26:13
Local clock offset: 0.002 ms
Remote clock offset: -0.201 ms


# Below is generated by plot.py at 2018-05-25 13:06:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.87 Mbit/s
95th percentile per-packet one-way delay: 72.269 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 181.87 Mbit/s
95th percentile per-packet one-way delay: 72.269 ms
Loss rate: 0.44%
```
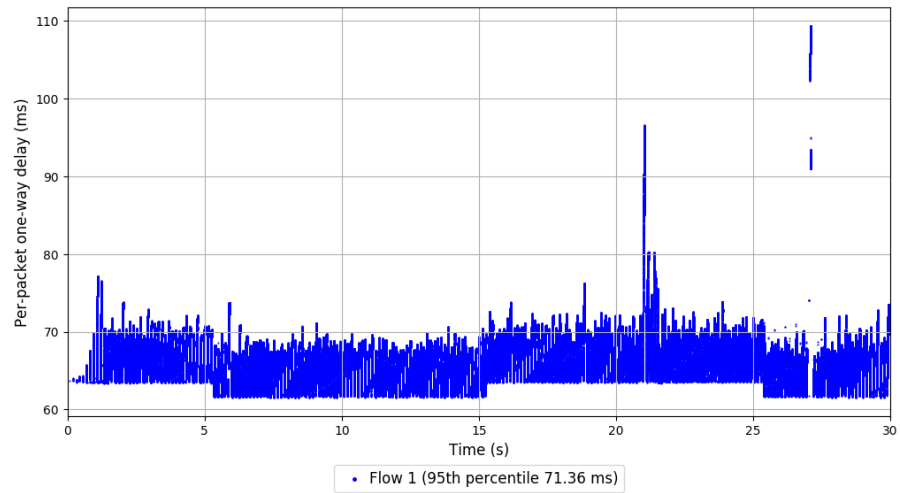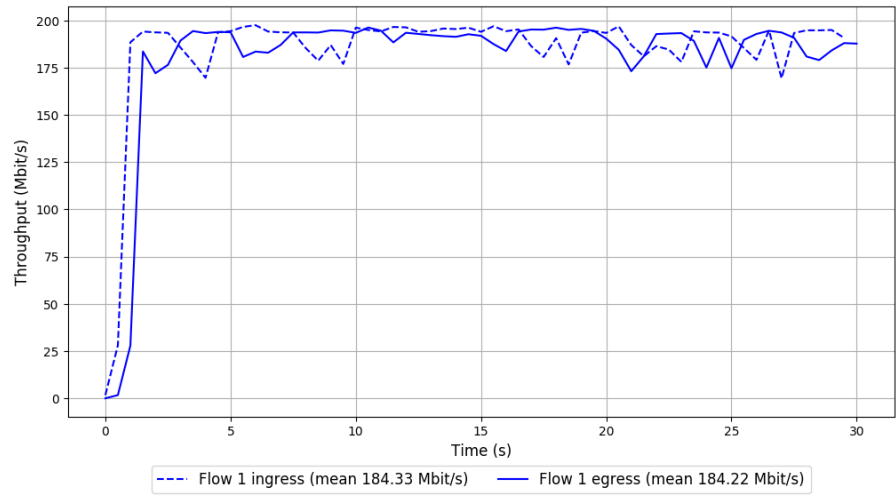
Run 7: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 181.93 Mbit/s) —— Flow 1 egress (mean 181.87 Mbit/s)

• Flow 1 (95th percentile 72.27 ms)

```
Run 8: Statistics of TCP Cubic

Start at: 2018-05-25 11:46:09
End at: 2018-05-25 11:46:39
Local clock offset: 0.007 ms
Remote clock offset: 0.1 ms


# Below is generated by plot.py at 2018-05-25 13:07:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.22 Mbit/s
95th percentile per-packet one-way delay: 71.361 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 184.22 Mbit/s
95th percentile per-packet one-way delay: 71.361 ms
Loss rate: 0.48%
```

Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2018-05-25 12:06:45
End at: 2018-05-25 12:07:15
Local clock offset: 0.002 ms
Remote clock offset: 0.023 ms


# Below is generated by plot.py at 2018-05-25 13:07:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.37 Mbit/s
95th percentile per-packet one-way delay: 72.421 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 181.37 Mbit/s
95th percentile per-packet one-way delay: 72.421 ms
Loss rate: 0.44%
```
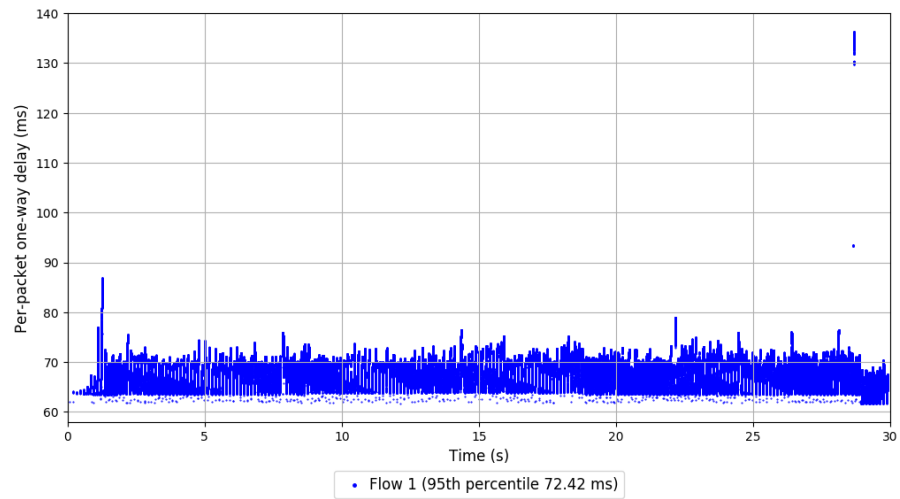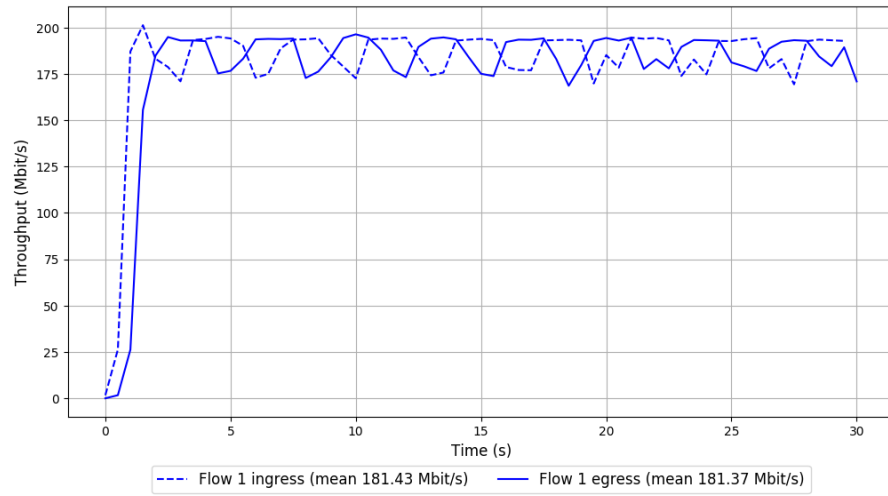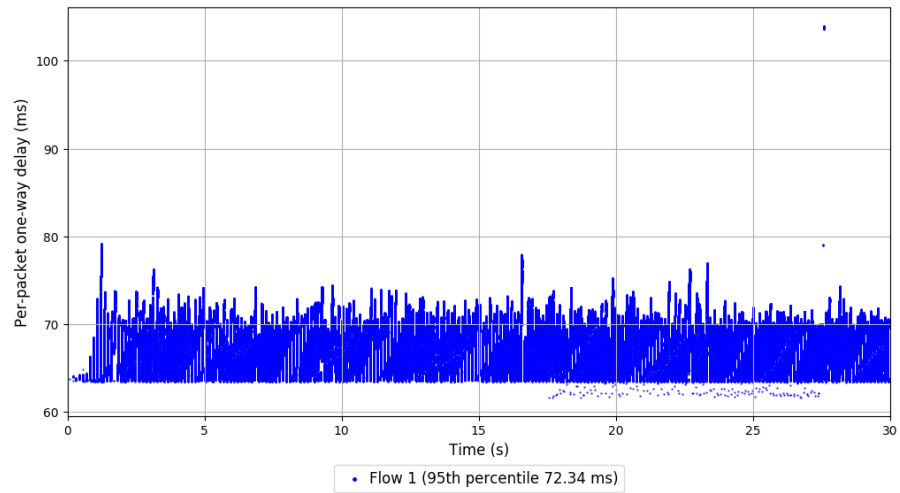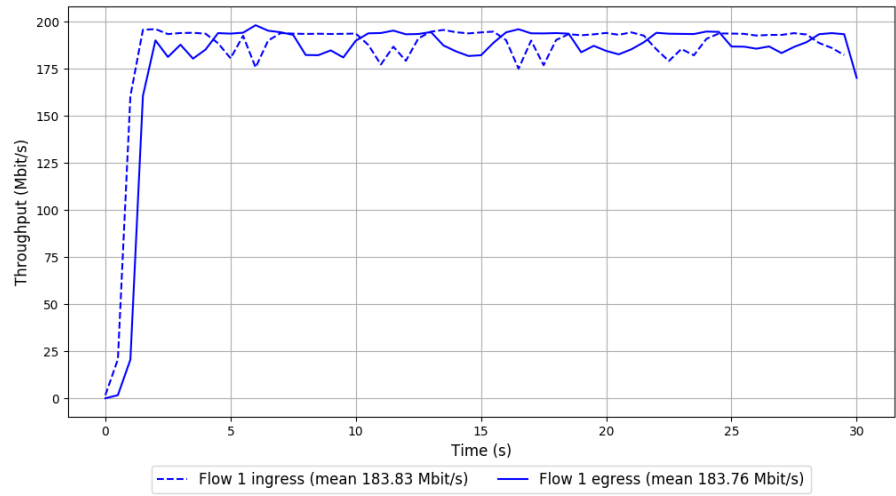
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 181.43 Mbit/s)   Flow 1 egress (mean 181.37 Mbit/s)

Flow 1 (95th percentile 72.42 ms)

```
Run 10: Statistics of TCP Cubic

Start at: 2018-05-25 12:27:06
End at: 2018-05-25 12:27:36
Local clock offset: -0.108 ms
Remote clock offset: 0.021 ms


# Below is generated by plot.py at 2018-05-25 13:07:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.76 Mbit/s
95th percentile per-packet one-way delay: 72.340 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 183.76 Mbit/s
95th percentile per-packet one-way delay: 72.340 ms
Loss rate: 0.43%
```

Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-05-25 09:18:32
End at: 2018-05-25 09:19:02
Local clock offset: -0.085 ms
Remote clock offset: 0.009 ms


# Below is generated by plot.py at 2018-05-25 13:25:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 764.83 Mbit/s
95th percentile per-packet one-way delay: 239.534 ms
Loss rate: 4.05%
-- Flow 1:
Average throughput: 764.83 Mbit/s
95th percentile per-packet one-way delay: 239.534 ms
Loss rate: 4.05%
```
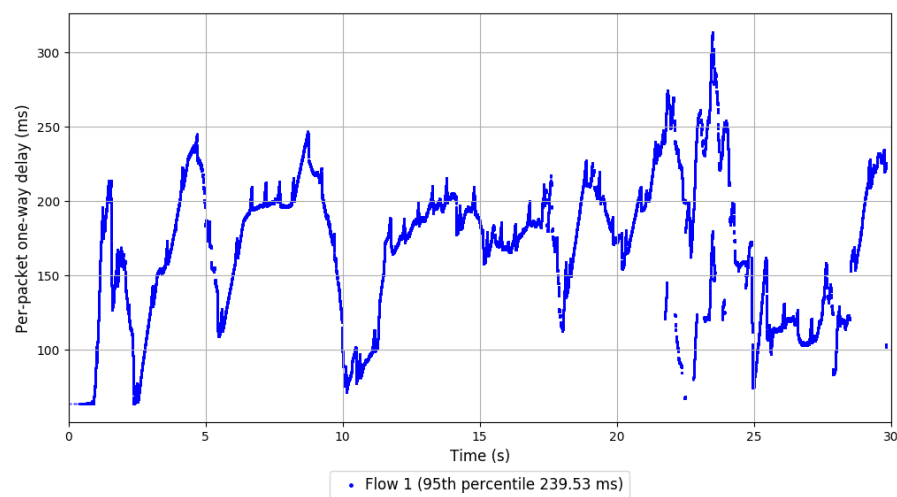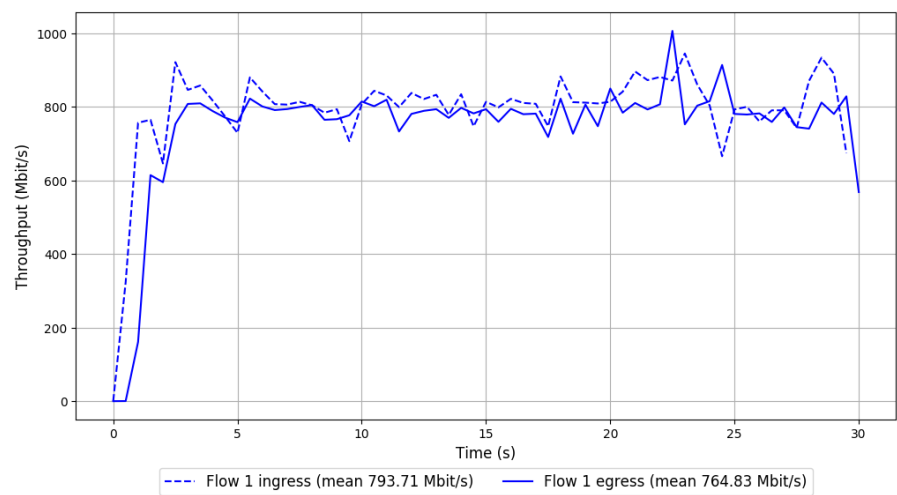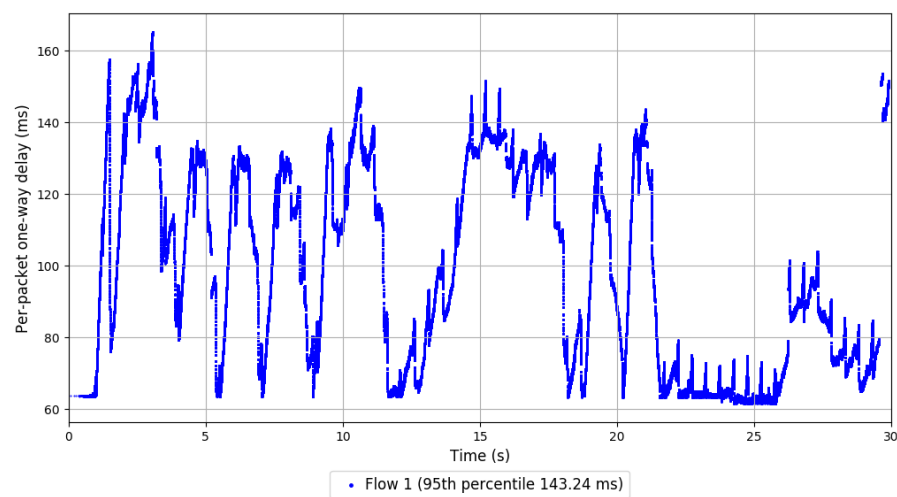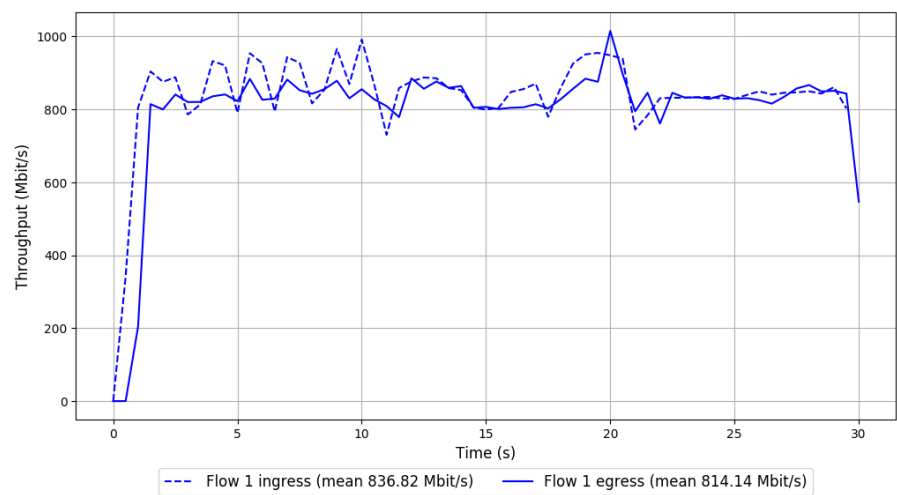
Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 793.71 Mbit/s)   Flow 1 egress (mean 764.83 Mbit/s)

• Flow 1 (95th percentile 239.53 ms)

```
Run 2: Statistics of FillP

Start at: 2018-05-25 09:39:00
End at: 2018-05-25 09:39:30
Local clock offset: -0.08 ms
Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2018-05-25 13:26:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 814.14 Mbit/s
95th percentile per-packet one-way delay: 143.236 ms
Loss rate: 3.12%
-- Flow 1:
Average throughput: 814.14 Mbit/s
95th percentile per-packet one-way delay: 143.236 ms
Loss rate: 3.12%
```

Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2018-05-25 09:59:27
End at: 2018-05-25 09:59:57
Local clock offset: -0.013 ms
Remote clock offset: 0.25 ms


# Below is generated by plot.py at 2018-05-25 13:28:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 888.98 Mbit/s
95th percentile per-packet one-way delay: 174.466 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 888.98 Mbit/s
95th percentile per-packet one-way delay: 174.466 ms
Loss rate: 1.20%
```
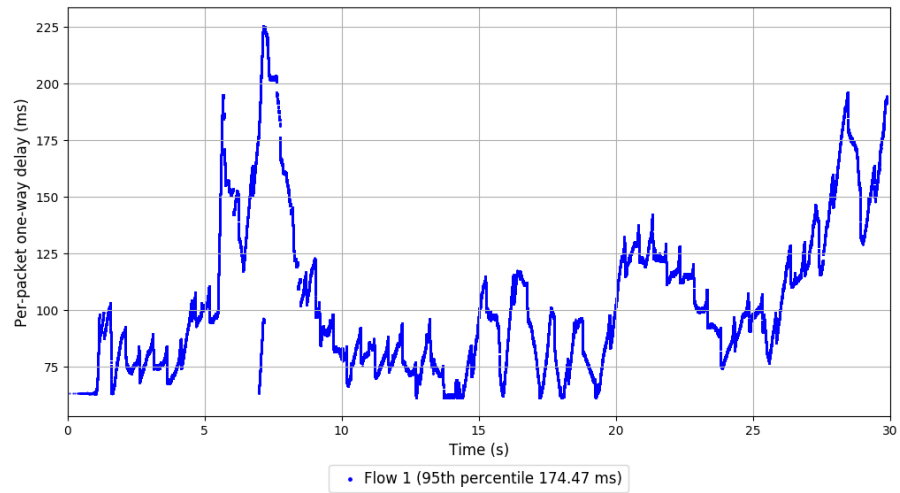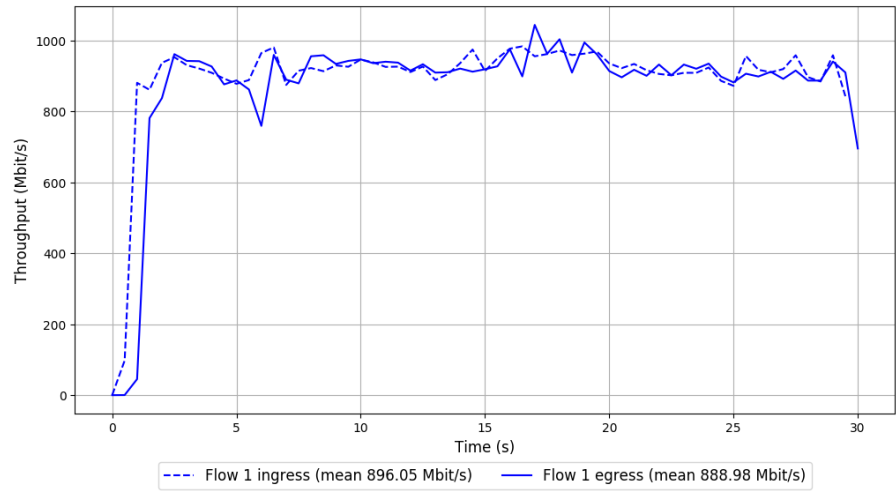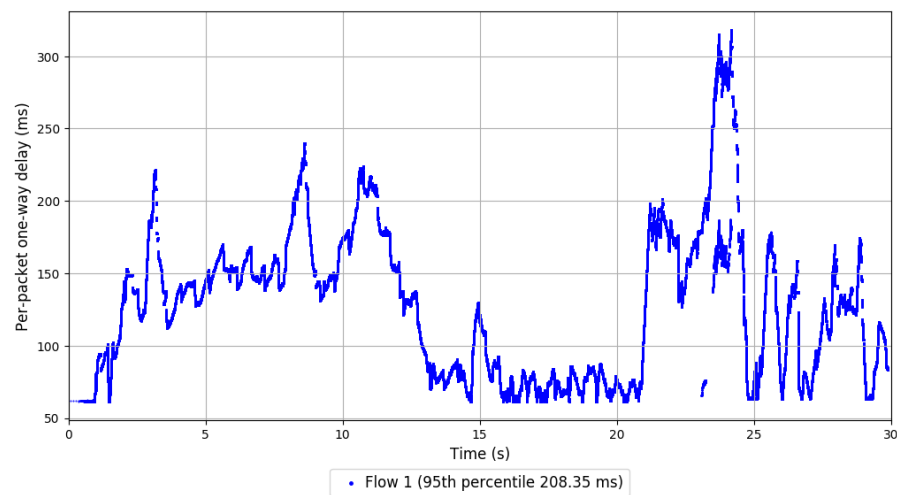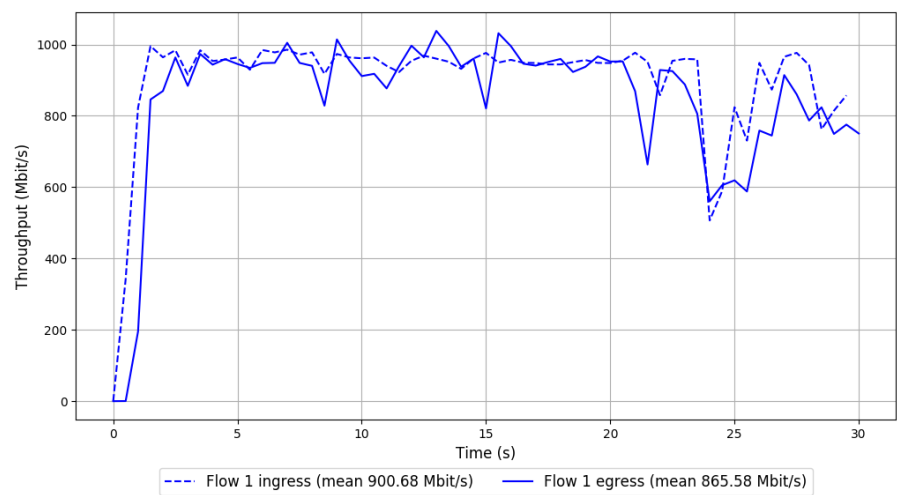
Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 896.05 Mbit/s)   Flow 1 egress (mean 888.98 Mbit/s)

• Flow 1 (95th percentile 174.47 ms)

```
Run 4: Statistics of FillP

Start at: 2018-05-25 10:20:02
End at: 2018-05-25 10:20:32
Local clock offset: -0.052 ms
Remote clock offset: 0.078 ms


# Below is generated by plot.py at 2018-05-25 13:28:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 865.58 Mbit/s
95th percentile per-packet one-way delay: 208.346 ms
Loss rate: 4.30%
-- Flow 1:
Average throughput: 865.58 Mbit/s
95th percentile per-packet one-way delay: 208.346 ms
Loss rate: 4.30%
```
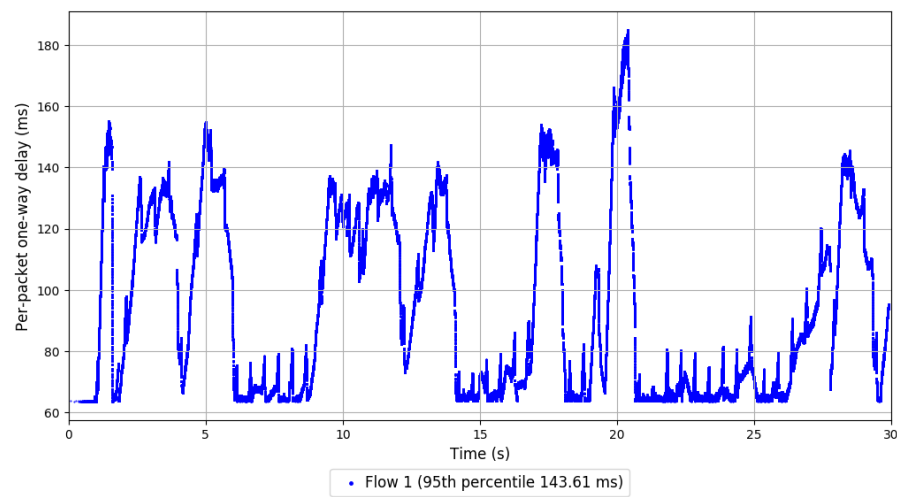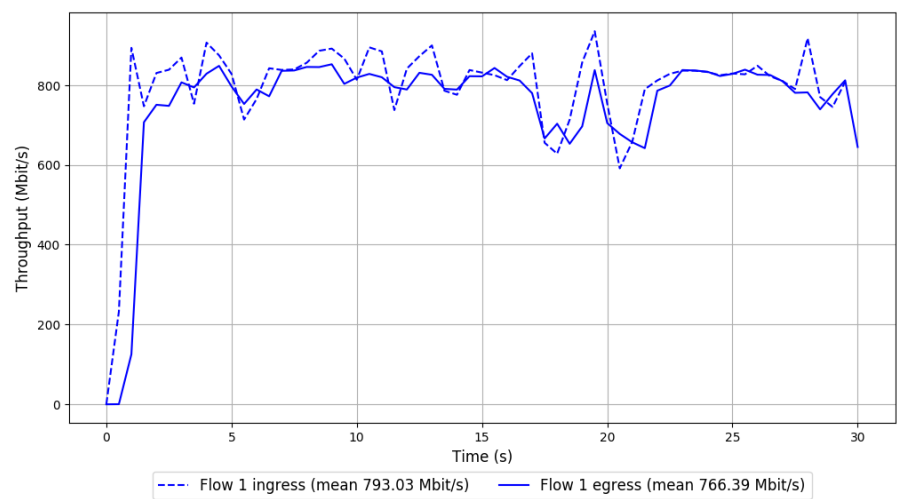
Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2018-05-25 10:40:35
End at: 2018-05-25 10:41:05
Local clock offset: 0.037 ms
Remote clock offset: -0.165 ms


# Below is generated by plot.py at 2018-05-25 13:28:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 766.39 Mbit/s
95th percentile per-packet one-way delay: 143.610 ms
Loss rate: 3.77%
-- Flow 1:
Average throughput: 766.39 Mbit/s
95th percentile per-packet one-way delay: 143.610 ms
Loss rate: 3.77%
```
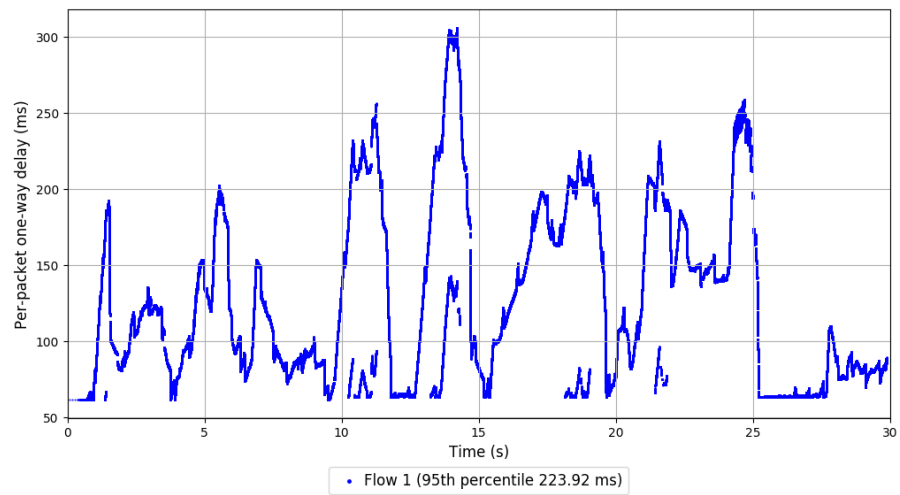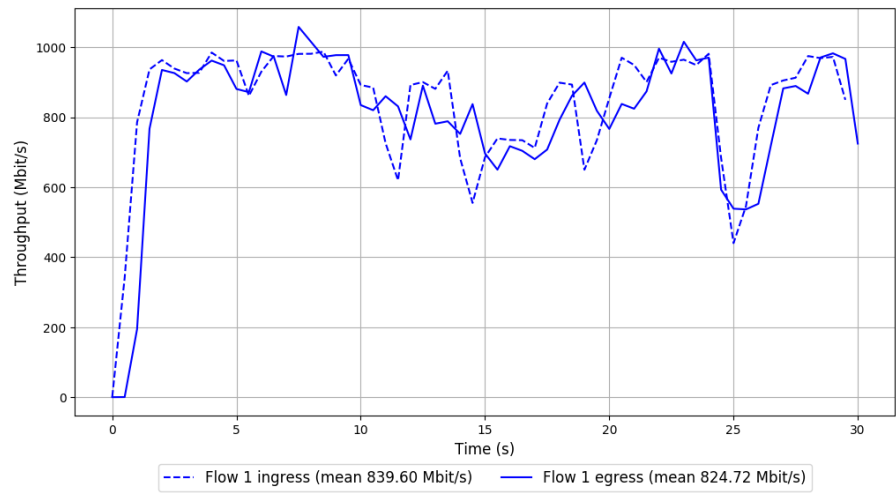
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 793.03 Mbit/s)   Flow 1 egress (mean 766.39 Mbit/s)

Flow 1 (95th percentile 143.61 ms)

```
Run 6: Statistics of FillP

Start at: 2018-05-25 11:00:57
End at: 2018-05-25 11:01:27
Local clock offset: 0.044 ms
Remote clock offset: 0.161 ms


# Below is generated by plot.py at 2018-05-25 13:28:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 824.72 Mbit/s
95th percentile per-packet one-way delay: 223.922 ms
Loss rate: 2.19%
-- Flow 1:
Average throughput: 824.72 Mbit/s
95th percentile per-packet one-way delay: 223.922 ms
Loss rate: 2.19%
```
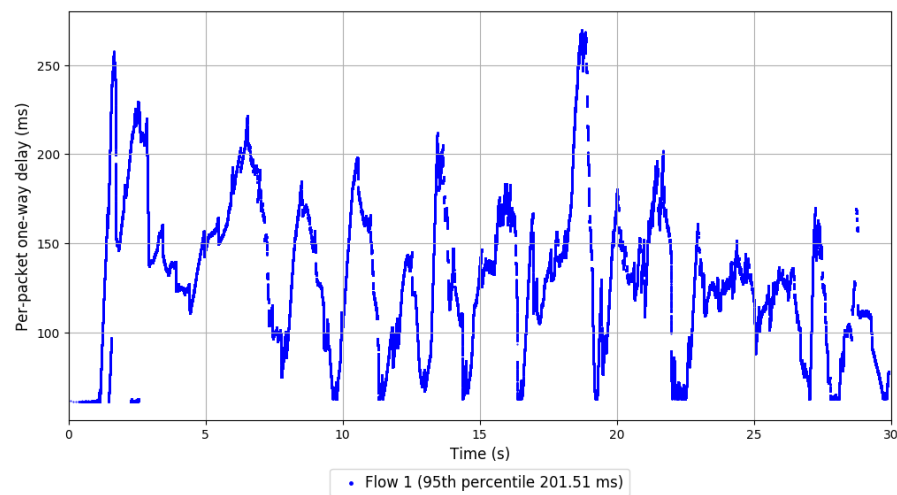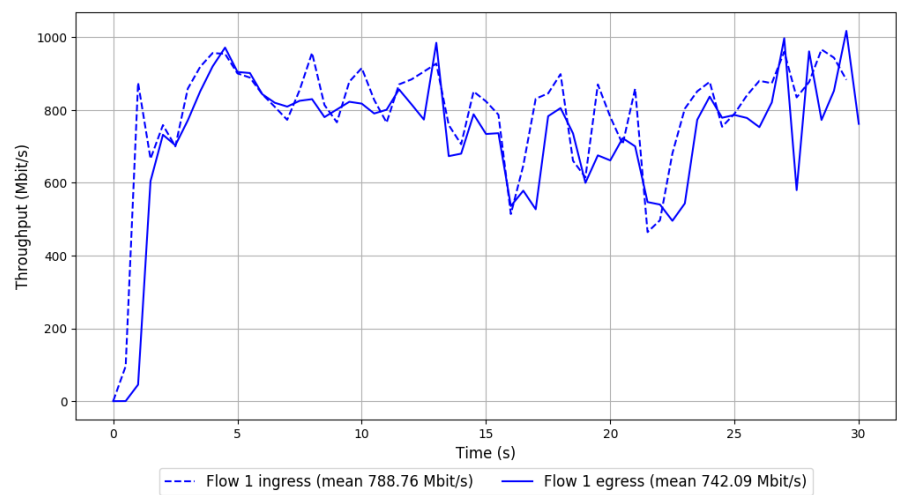
Run 6: Report of FillP — Data Link

Flow 1 ingress (mean 839.60 Mbit/s)   Flow 1 egress (mean 824.72 Mbit/s)
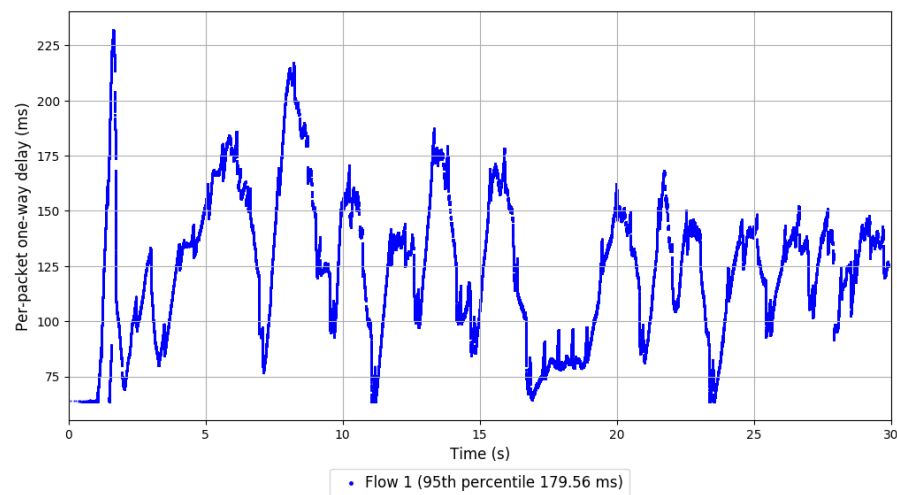

• Flow 1 (95th percentile 223.92 ms)

```
Run 7: Statistics of FillP

Start at: 2018-05-25 11:21:44
End at: 2018-05-25 11:22:14
Local clock offset: 0.036 ms
Remote clock offset: 0.315 ms


# Below is generated by plot.py at 2018-05-25 13:28:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 742.09 Mbit/s
95th percentile per-packet one-way delay: 201.515 ms
Loss rate: 6.31%
-- Flow 1:
Average throughput: 742.09 Mbit/s
95th percentile per-packet one-way delay: 201.515 ms
Loss rate: 6.31%
```
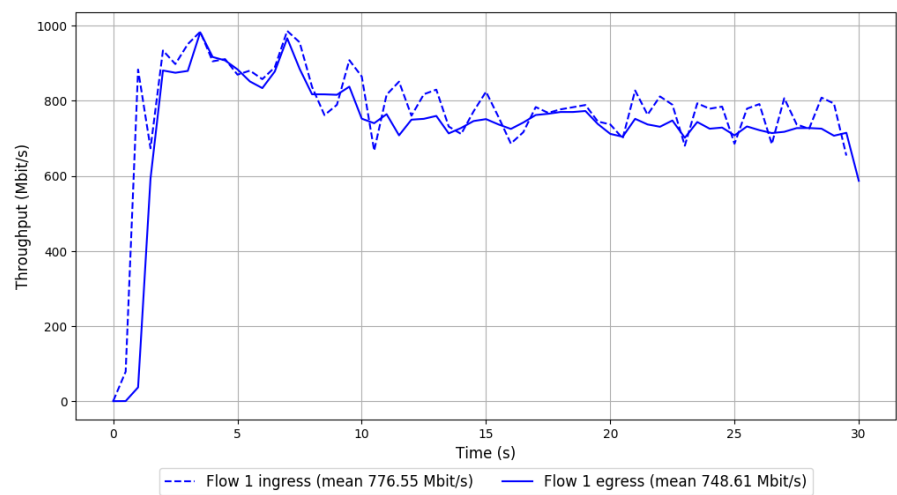
Run 7: Report of FillP — Data Link

```
Run 8: Statistics of FillP

Start at: 2018-05-25 11:42:12
End at: 2018-05-25 11:42:42
Local clock offset: 0.028 ms
Remote clock offset: -0.114 ms


# Below is generated by plot.py at 2018-05-25 13:28:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 748.61 Mbit/s
95th percentile per-packet one-way delay: 179.563 ms
Loss rate: 4.01%
-- Flow 1:
Average throughput: 748.61 Mbit/s
95th percentile per-packet one-way delay: 179.563 ms
Loss rate: 4.01%
```

Run 8: Report of FillP — Data Link

```
Run 9: Statistics of FillP

Start at: 2018-05-25 12:02:47
End at: 2018-05-25 12:03:17
Local clock offset: -0.025 ms
Remote clock offset: 0.025 ms


# Below is generated by plot.py at 2018-05-25 13:46:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 766.65 Mbit/s
95th percentile per-packet one-way delay: 240.842 ms
Loss rate: 3.24%
-- Flow 1:
Average throughput: 766.65 Mbit/s
95th percentile per-packet one-way delay: 240.842 ms
Loss rate: 3.24%
```
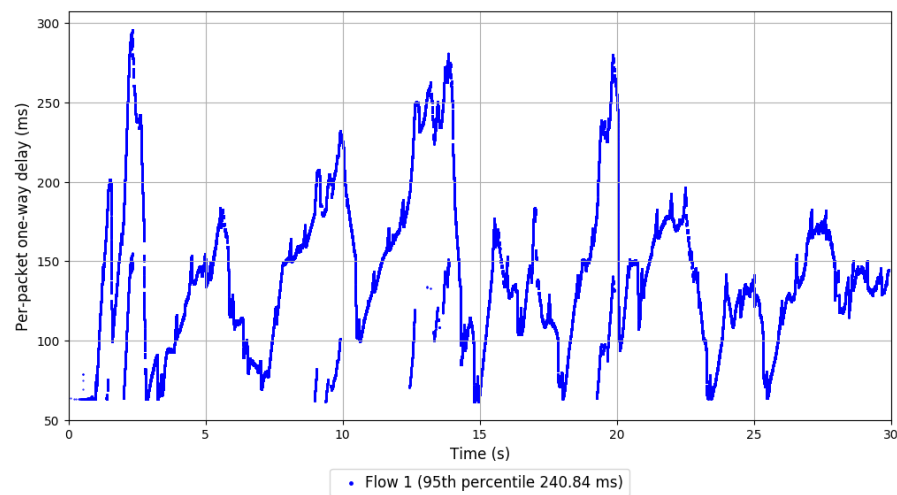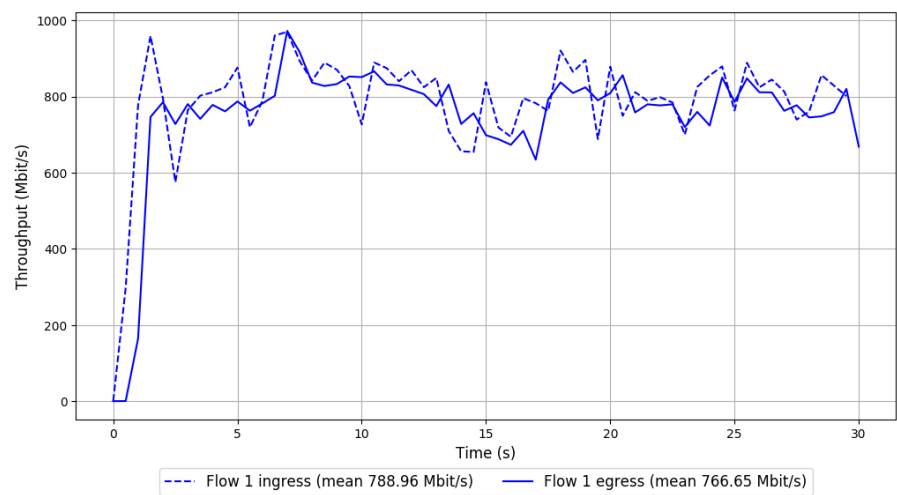
Run 9: Report of FillP — Data Link

Flow 1 ingress (mean 788.96 Mbit/s) --- Flow 1 egress (mean 766.65 Mbit/s)

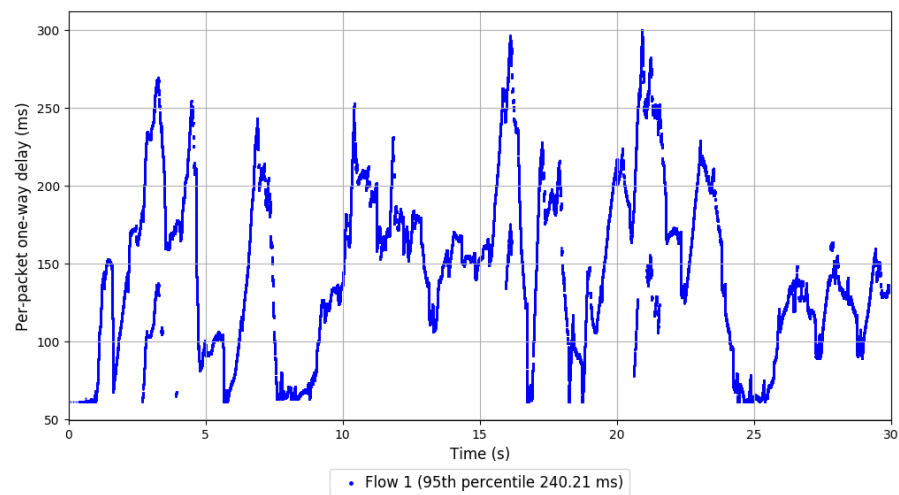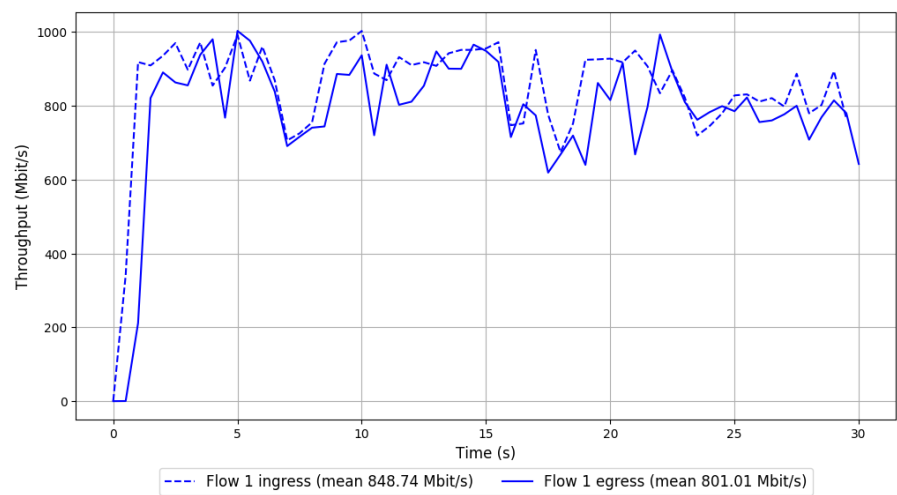
• Flow 1 (95th percentile 240.84 ms)

```
Run 10: Statistics of FillP

Start at: 2018-05-25 12:23:08
End at: 2018-05-25 12:23:38
Local clock offset: -0.081 ms
Remote clock offset: -0.016 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 801.01 Mbit/s
95th percentile per-packet one-way delay: 240.207 ms
Loss rate: 6.02%
-- Flow 1:
Average throughput: 801.01 Mbit/s
95th percentile per-packet one-way delay: 240.207 ms
Loss rate: 6.02%
```

Run 10: Report of FillP — Data Link

```
Run 1: Statistics of Indigo

Start at: 2018-05-25 09:32:31
End at: 2018-05-25 09:33:01
Local clock offset: -0.07 ms
Remote clock offset: 0.022 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 196.84 Mbit/s
95th percentile per-packet one-way delay: 63.796 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 196.84 Mbit/s
95th percentile per-packet one-way delay: 63.796 ms
Loss rate: 0.45%
```
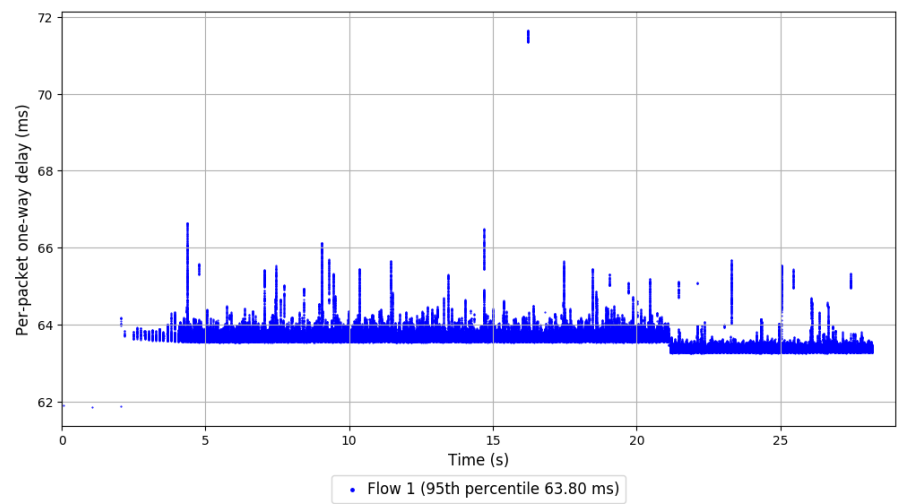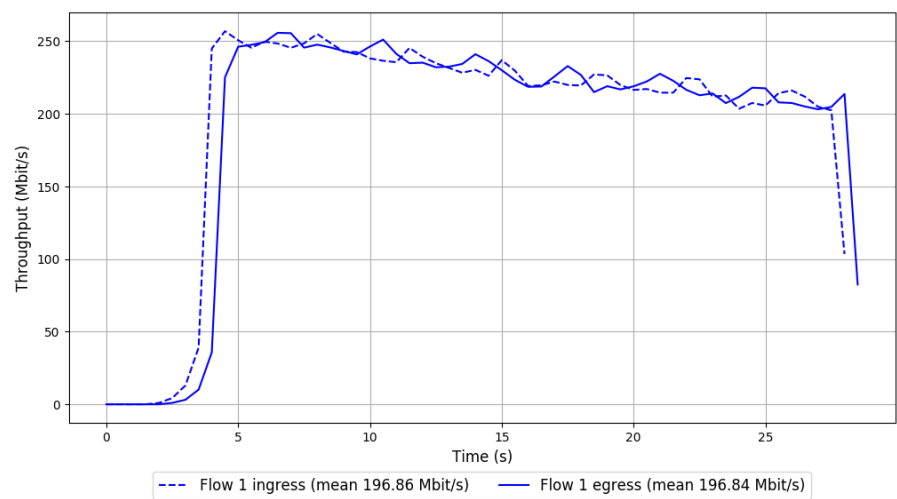
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2018-05-25 09:52:55
End at: 2018-05-25 09:53:25
Local clock offset: -0.006 ms
Remote clock offset: 0.197 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 210.63 Mbit/s
95th percentile per-packet one-way delay: 63.774 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 210.63 Mbit/s
95th percentile per-packet one-way delay: 63.774 ms
Loss rate: 0.43%
```
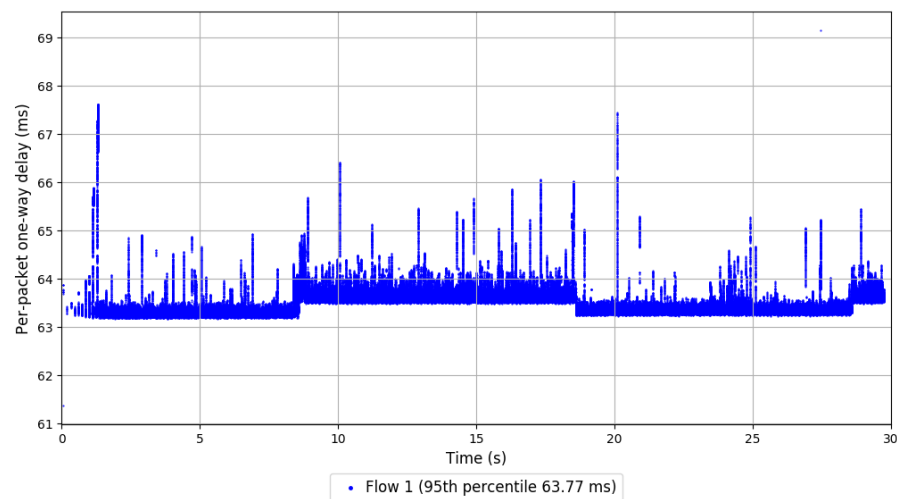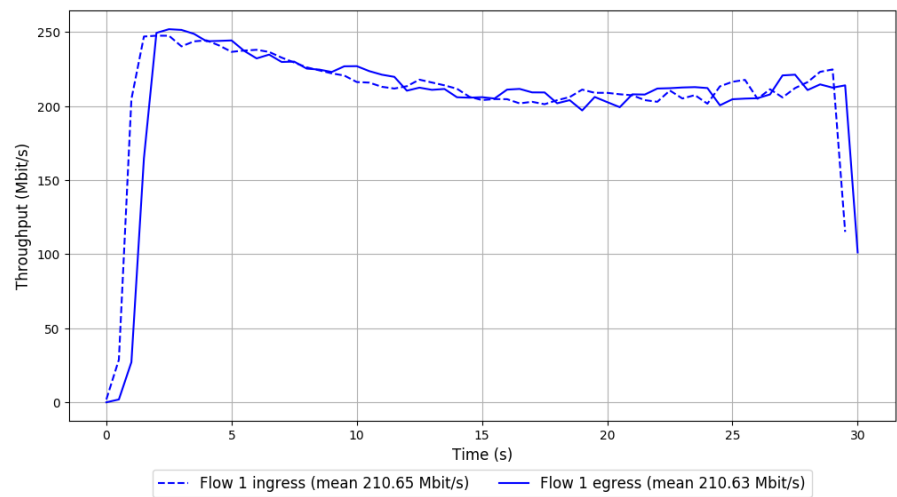
Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 210.65 Mbit/s)   Flow 1 egress (mean 210.63 Mbit/s)

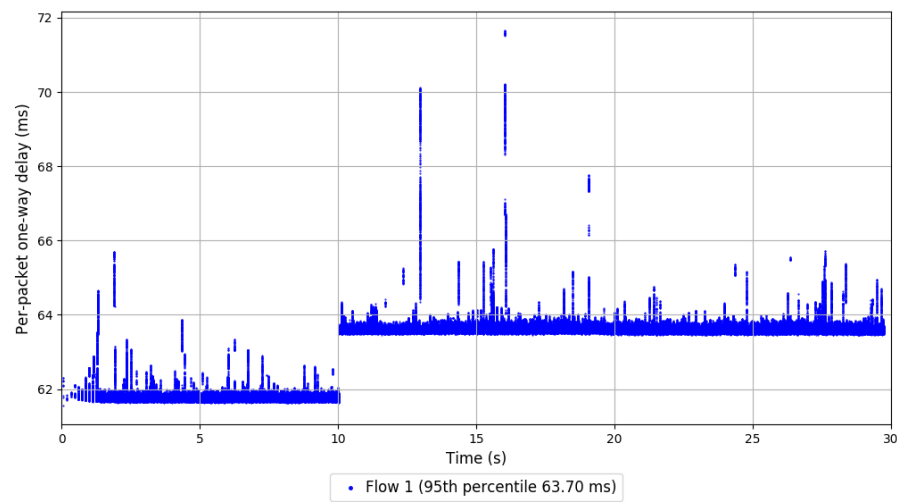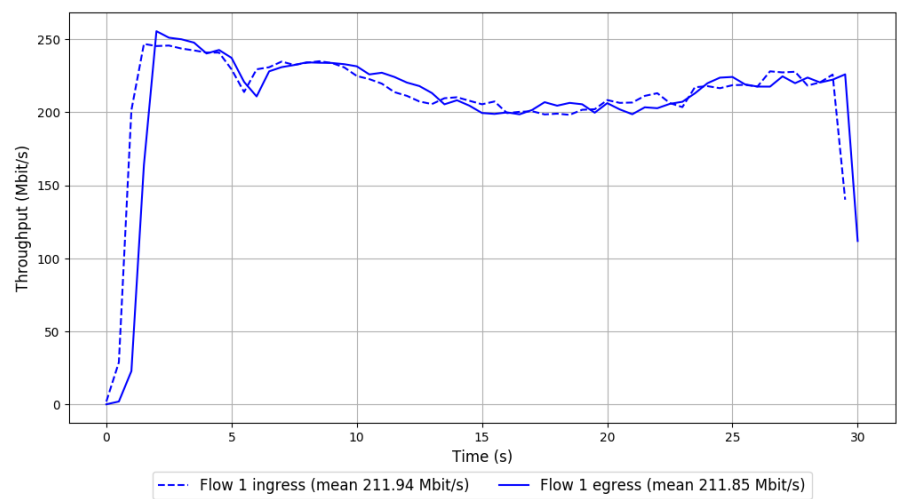• Flow 1 (95th percentile 63.77 ms)

```
Run 3: Statistics of Indigo

Start at: 2018-05-25 10:13:34
End at: 2018-05-25 10:14:04
Local clock offset: -0.014 ms
Remote clock offset: -0.055 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.85 Mbit/s
95th percentile per-packet one-way delay: 63.703 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 211.85 Mbit/s
95th percentile per-packet one-way delay: 63.703 ms
Loss rate: 0.45%
```
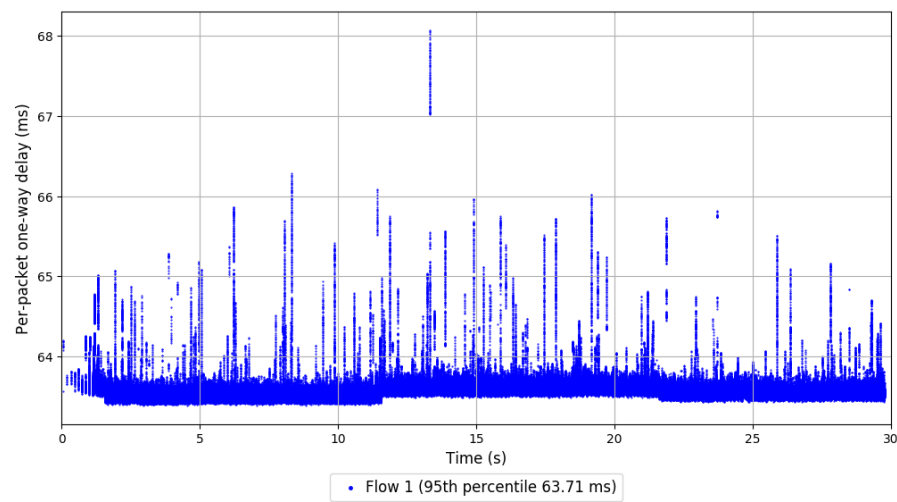
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2018-05-25 10:34:02
End at: 2018-05-25 10:34:32
Local clock offset: 0.003 ms
Remote clock offset: -0.091 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.84 Mbit/s
95th percentile per-packet one-way delay: 63.706 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 215.84 Mbit/s
95th percentile per-packet one-way delay: 63.706 ms
Loss rate: 0.45%
```
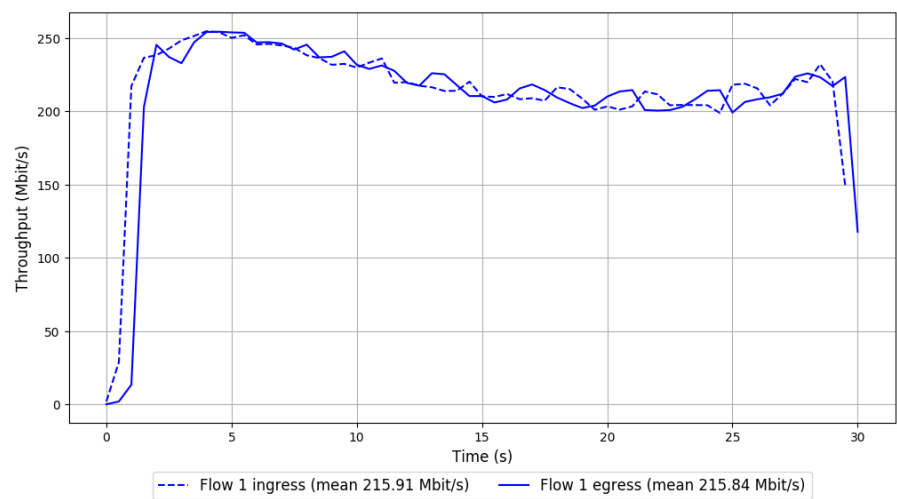
Run 4: Report of Indigo — Data Link

Flow 1 ingress (mean 215.91 Mbit/s) ----- Flow 1 egress (mean 215.84 Mbit/s)

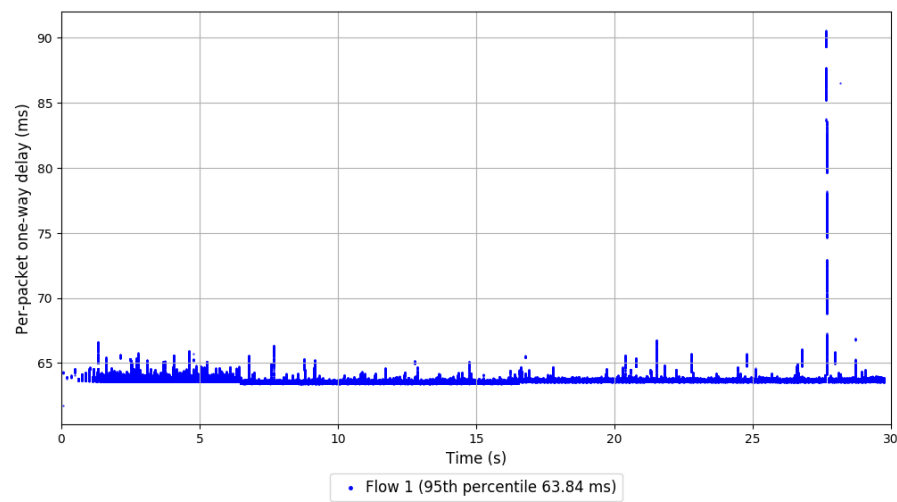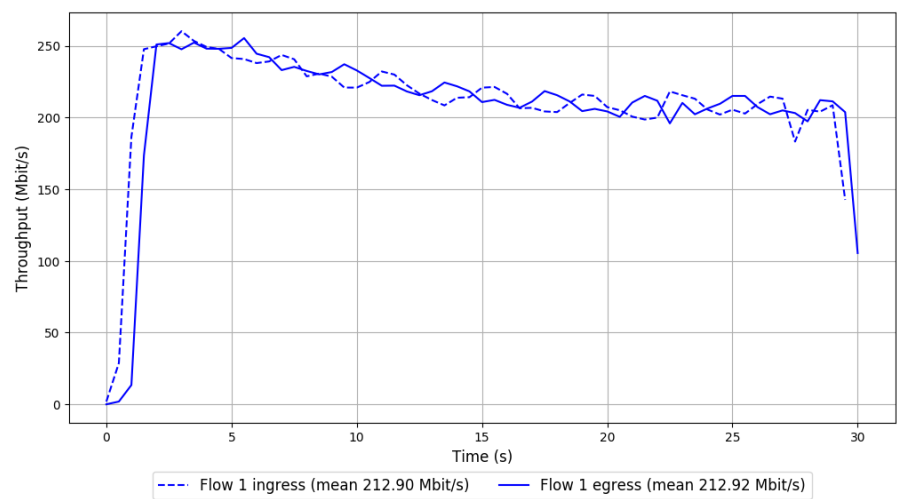Flow 1 (95th percentile 63.71 ms)

```
Run 5: Statistics of Indigo

Start at: 2018-05-25 10:54:27
End at: 2018-05-25 10:54:57
Local clock offset: 0.018 ms
Remote clock offset: -0.003 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 212.92 Mbit/s
95th percentile per-packet one-way delay: 63.835 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 212.92 Mbit/s
95th percentile per-packet one-way delay: 63.835 ms
Loss rate: 0.41%
```
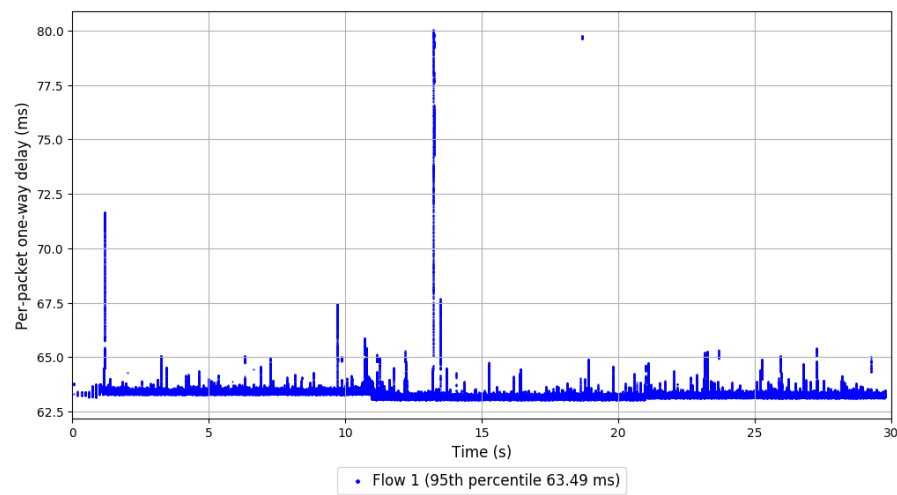
Run 5: Report of Indigo — Data Link

Flow 1 ingress (mean 212.90 Mbit/s)   Flow 1 egress (mean 212.92 Mbit/s)

Flow 1 (95th percentile 63.84 ms)

```
Run 6: Statistics of Indigo

Start at: 2018-05-25 11:15:03
End at: 2018-05-25 11:15:33
Local clock offset: 0.018 ms
Remote clock offset: 0.144 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.06 Mbit/s
95th percentile per-packet one-way delay: 63.486 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 211.06 Mbit/s
95th percentile per-packet one-way delay: 63.486 ms
Loss rate: 0.46%
```
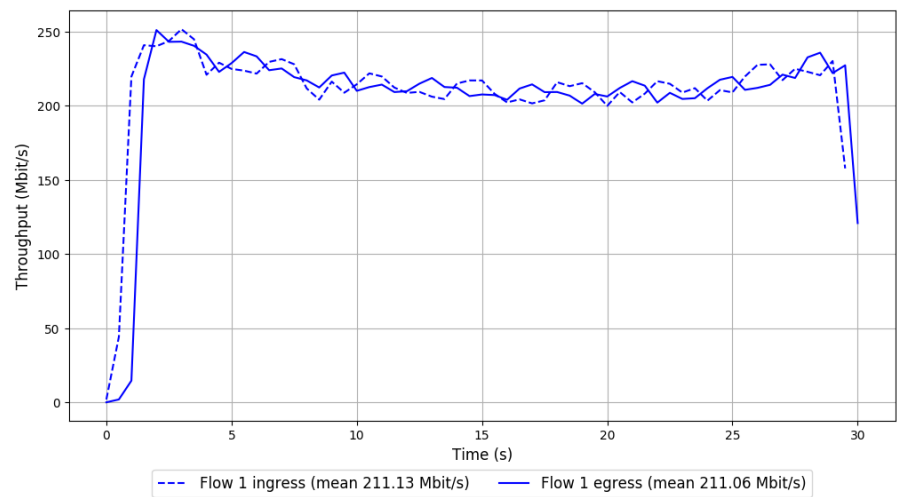
Run 6: Report of Indigo — Data Link

Flow 1 ingress (mean 211.13 Mbit/s) --- Flow 1 egress (mean 211.06 Mbit/s)

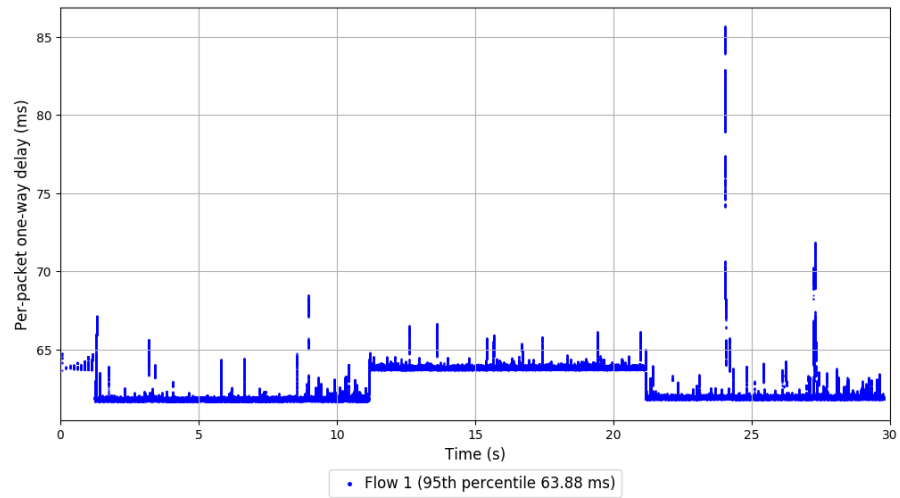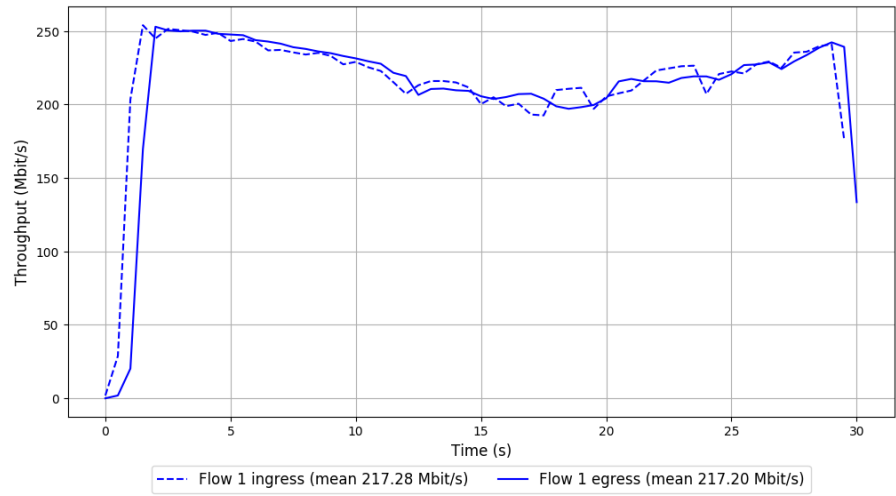Flow 1 (95th percentile 63.49 ms)

```
Run 7: Statistics of Indigo

Start at: 2018-05-25 11:35:53
End at: 2018-05-25 11:36:23
Local clock offset: 0.012 ms
Remote clock offset: -0.224 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.20 Mbit/s
95th percentile per-packet one-way delay: 63.883 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 217.20 Mbit/s
95th percentile per-packet one-way delay: 63.883 ms
Loss rate: 0.46%
```
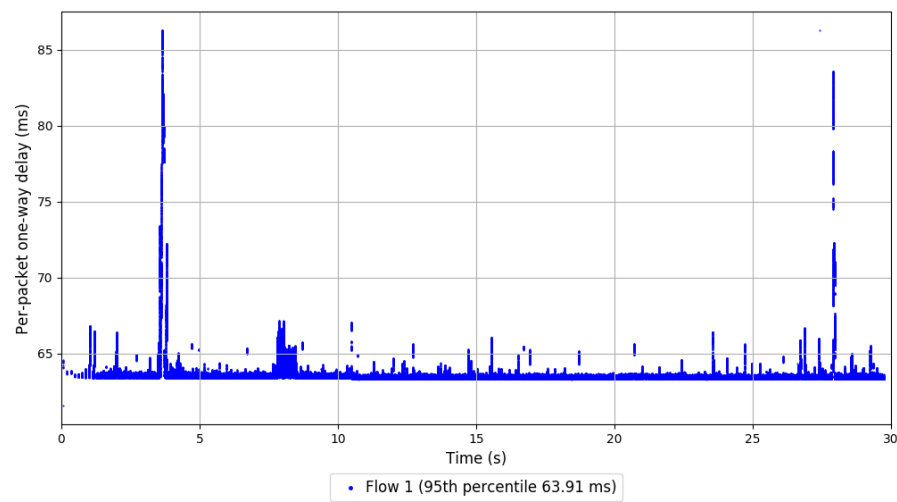
Run 7: Report of Indigo — Data Link

```
Run 8: Statistics of Indigo

Start at: 2018-05-25 11:56:23
End at: 2018-05-25 11:56:53
Local clock offset: 0.02 ms
Remote clock offset: 0.118 ms

# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 219.22 Mbit/s
95th percentile per-packet one-way delay: 63.913 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 219.22 Mbit/s
95th percentile per-packet one-way delay: 63.913 ms
Loss rate: 0.43%
```
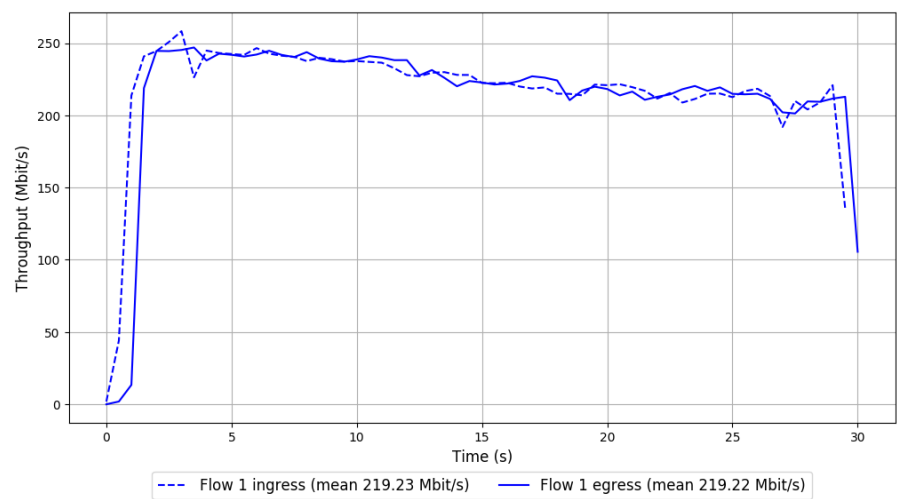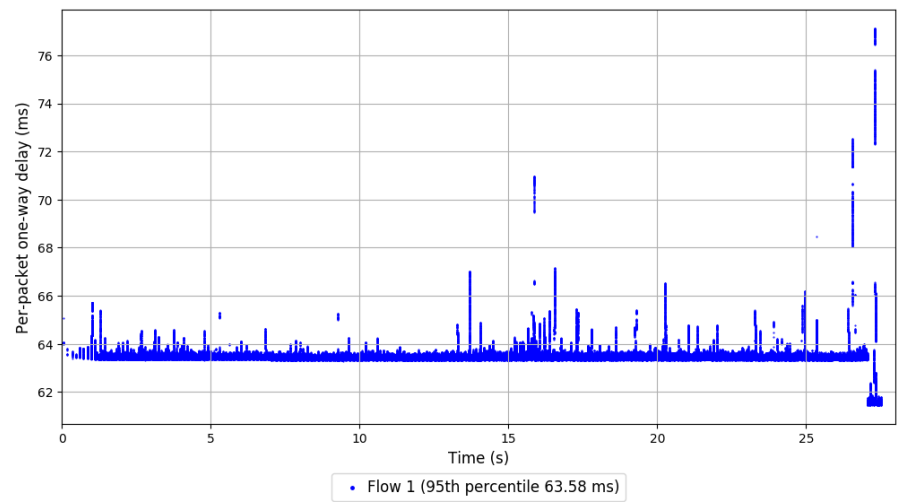
Run 8: Report of Indigo — Data Link

Flow 1 ingress (mean 219.23 Mbit/s)   Flow 1 egress (mean 219.22 Mbit/s)

Flow 1 (95th percentile 63.91 ms)

```
Run 9: Statistics of Indigo

Start at: 2018-05-25 12:16:44
End at: 2018-05-25 12:17:15
Local clock offset: -0.08 ms
Remote clock offset: 0.05 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 209.66 Mbit/s
95th percentile per-packet one-way delay: 63.582 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 209.66 Mbit/s
95th percentile per-packet one-way delay: 63.582 ms
Loss rate: 0.50%
```
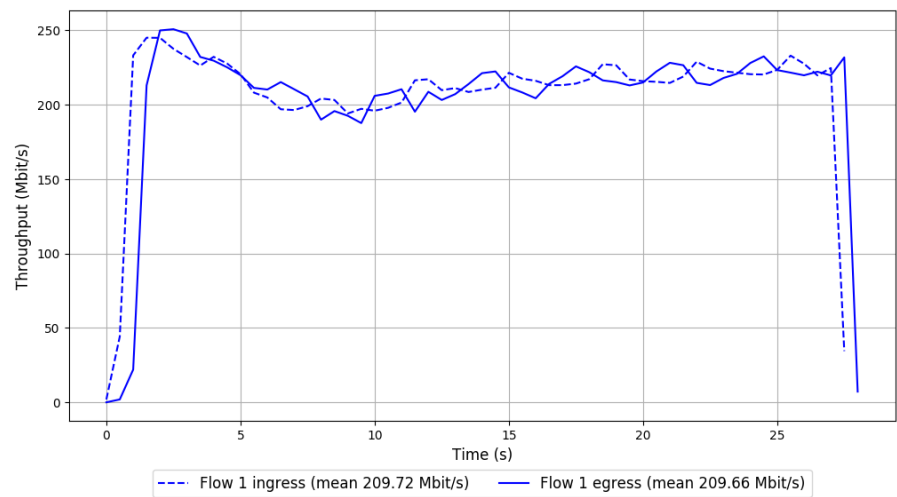
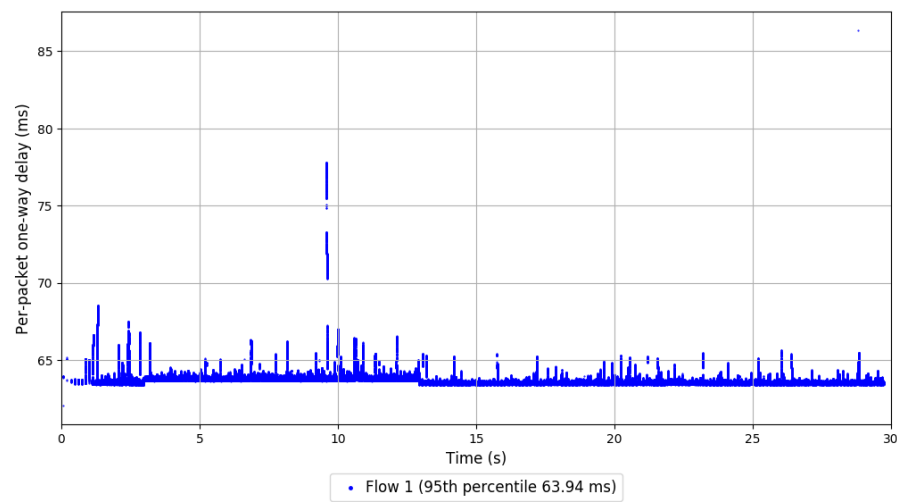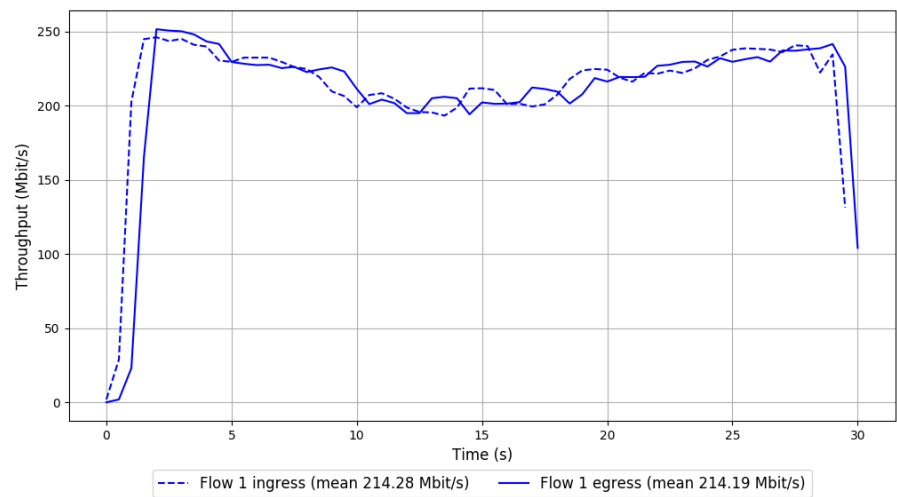## Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2018-05-25 12:37:01
End at: 2018-05-25 12:37:31
Local clock offset: -0.105 ms
Remote clock offset: -0.077 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.19 Mbit/s
95th percentile per-packet one-way delay: 63.935 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 214.19 Mbit/s
95th percentile per-packet one-way delay: 63.935 ms
Loss rate: 0.46%
```
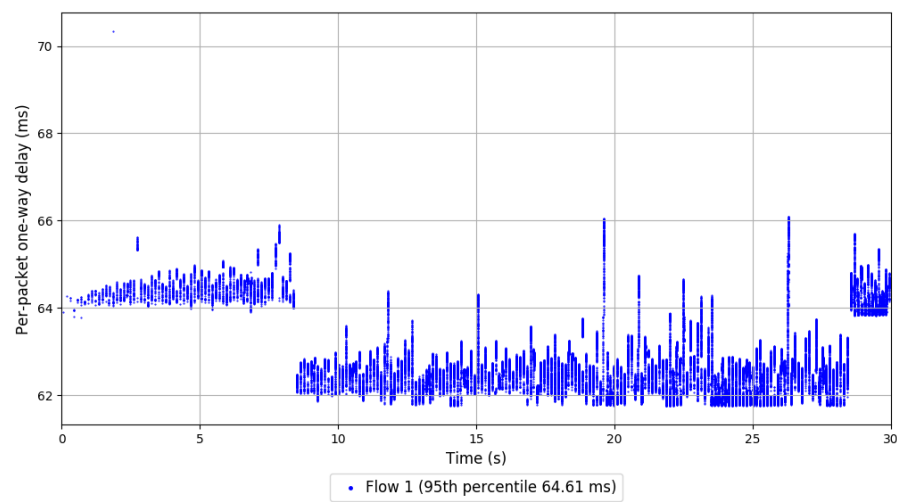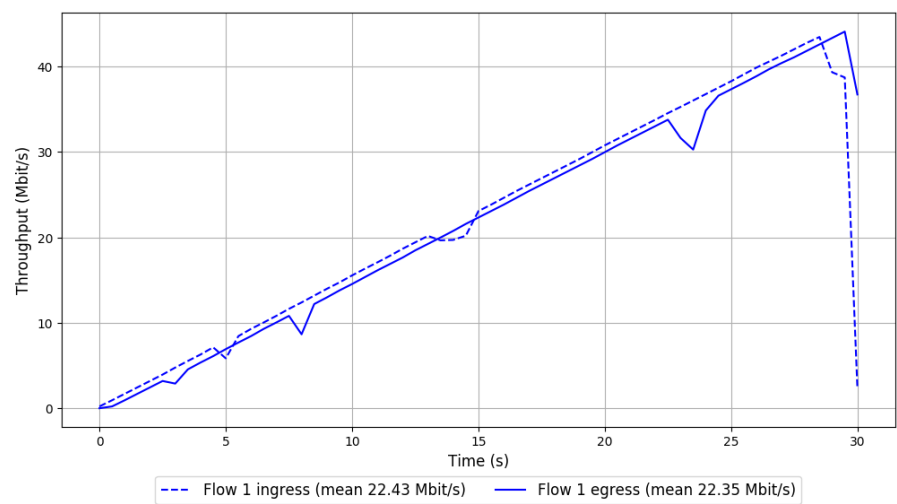
Run 10: Report of Indigo — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2018-05-25 09:25:15
End at: 2018-05-25 09:25:45
Local clock offset: -0.012 ms
Remote clock offset: -0.223 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.35 Mbit/s
95th percentile per-packet one-way delay: 64.610 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 22.35 Mbit/s
95th percentile per-packet one-way delay: 64.610 ms
Loss rate: 0.78%
```

Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-05-25 09:45:47
End at: 2018-05-25 09:46:17
Local clock offset: -0.083 ms
Remote clock offset: 0.0 ms

# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.50 Mbit/s
95th percentile per-packet one-way delay: 64.495 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 22.50 Mbit/s
95th percentile per-packet one-way delay: 64.495 ms
Loss rate: 0.83%
```
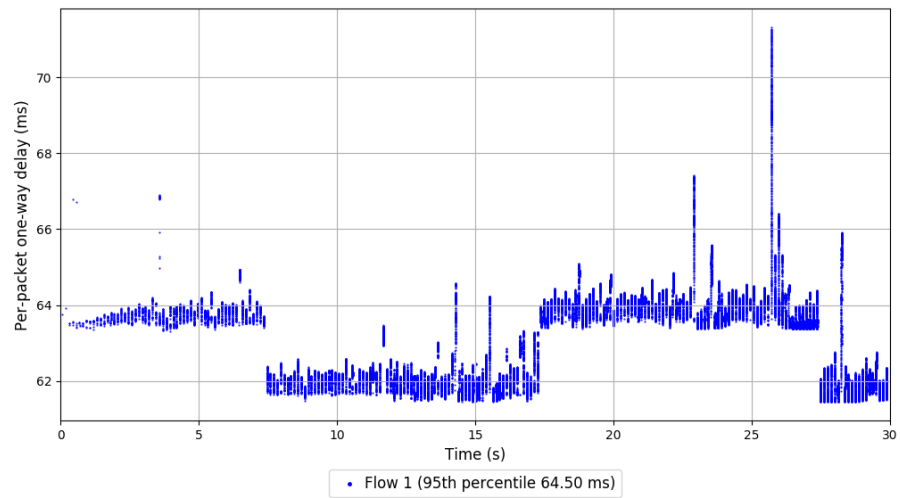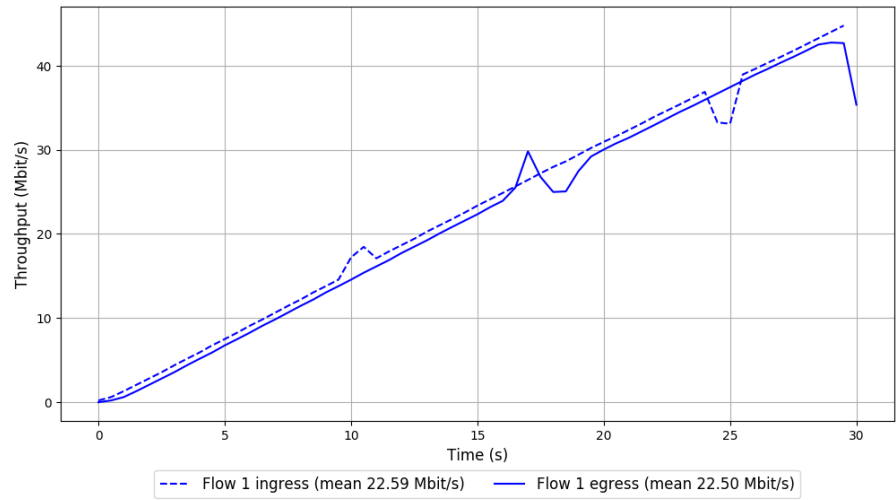
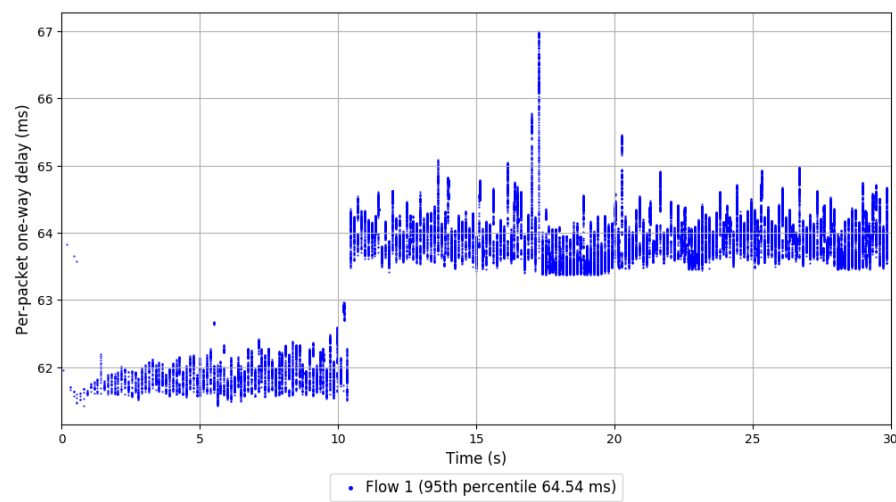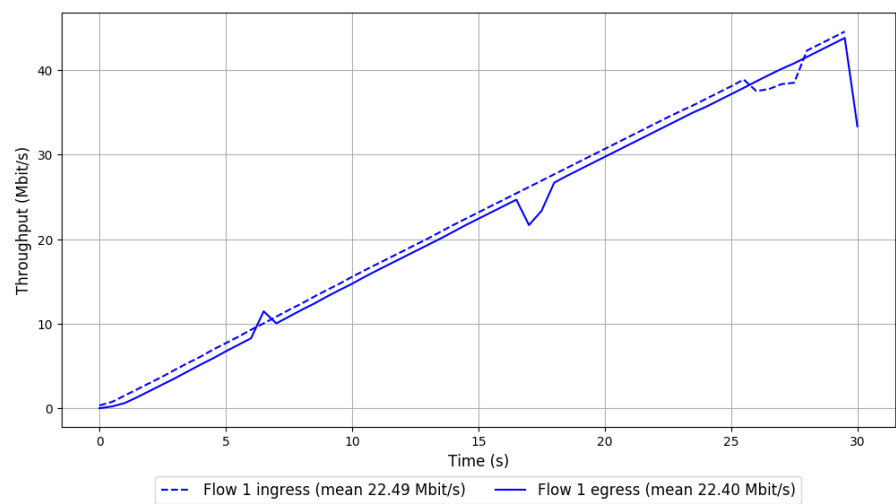## Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-05-25 10:06:14
End at: 2018-05-25 10:06:44
Local clock offset: 0.008 ms
Remote clock offset: -0.003 ms

# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.40 Mbit/s
95th percentile per-packet one-way delay: 64.539 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 22.40 Mbit/s
95th percentile per-packet one-way delay: 64.539 ms
Loss rate: 0.83%
```

Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 22.49 Mbit/s)   Flow 1 egress (mean 22.40 Mbit/s)

Flow 1 (95th percentile 64.54 ms)

```
Run 4: Statistics of LEDBAT

Start at: 2018-05-25 10:26:48
End at: 2018-05-25 10:27:18
Local clock offset: -0.005 ms
Remote clock offset: 0.259 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.72 Mbit/s
95th percentile per-packet one-way delay: 64.384 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 20.72 Mbit/s
95th percentile per-packet one-way delay: 64.384 ms
Loss rate: 0.87%
```
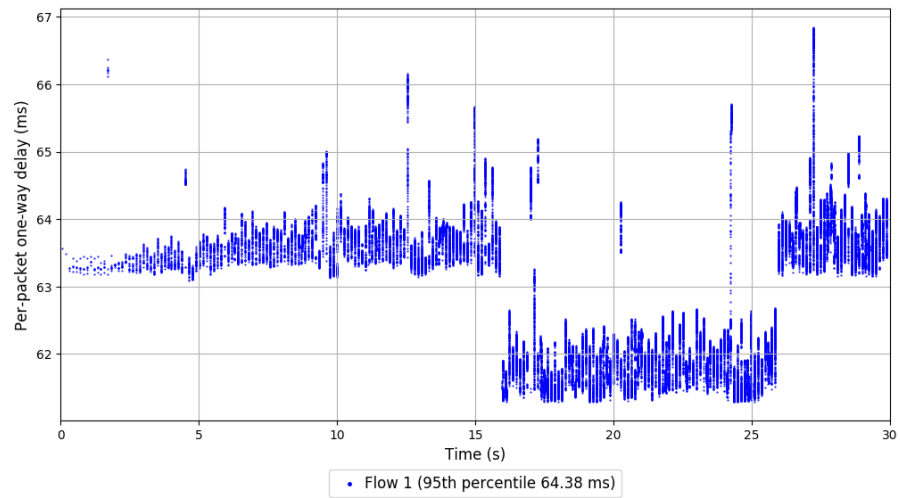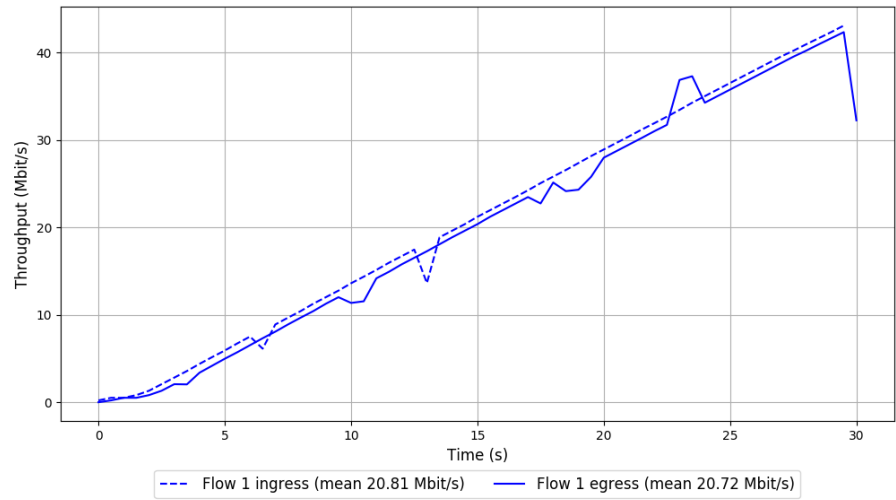
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2018-05-25 10:47:20
End at: 2018-05-25 10:47:50
Local clock offset: 0.04 ms
Remote clock offset: 0.217 ms

# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.94 Mbit/s
95th percentile per-packet one-way delay: 64.293 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 22.94 Mbit/s
95th percentile per-packet one-way delay: 64.293 ms
Loss rate: 0.83%
```
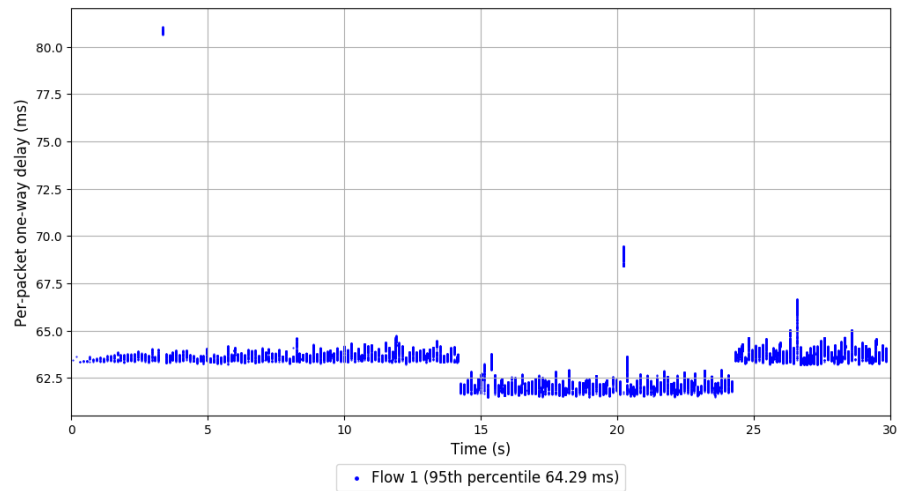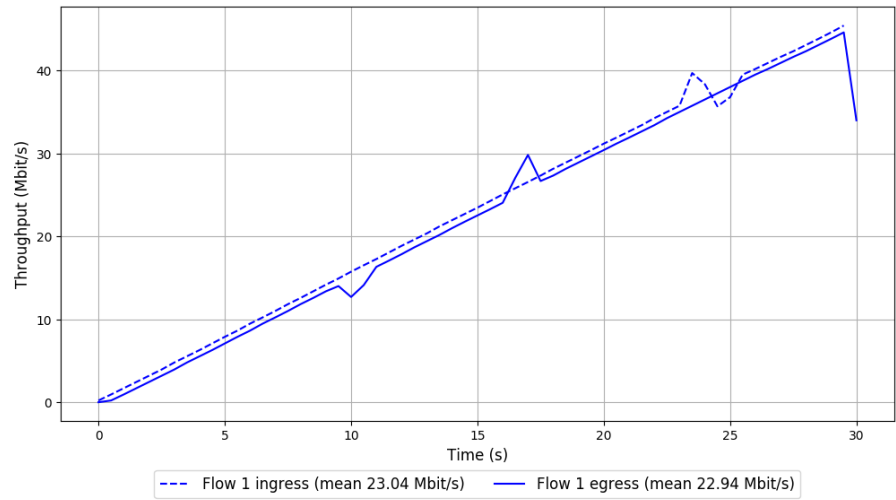
Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 23.04 Mbit/s)   Flow 1 egress (mean 22.94 Mbit/s)

Flow 1 (95th percentile 64.29 ms)

```
Run 6: Statistics of LEDBAT

Start at: 2018-05-25 11:07:38
End at: 2018-05-25 11:08:08
Local clock offset: 0.022 ms
Remote clock offset: 0.069 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.63 Mbit/s
95th percentile per-packet one-way delay: 65.925 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 21.63 Mbit/s
95th percentile per-packet one-way delay: 65.925 ms
Loss rate: 0.84%
```
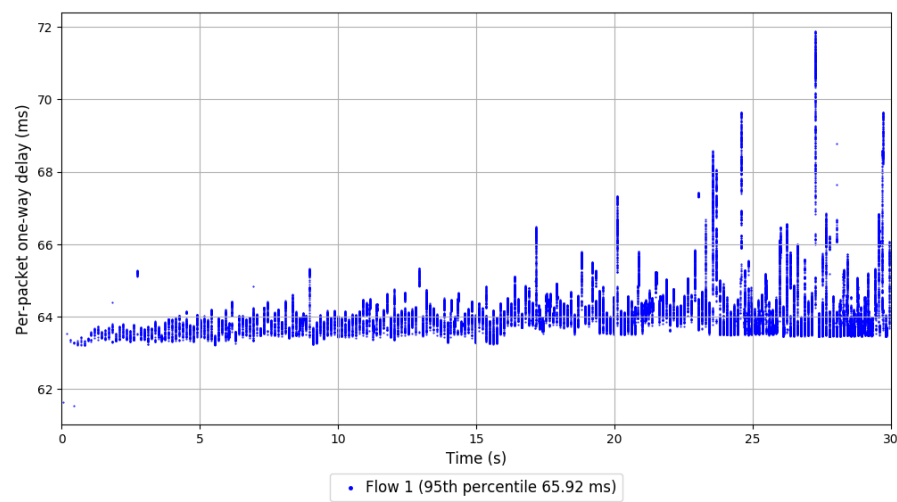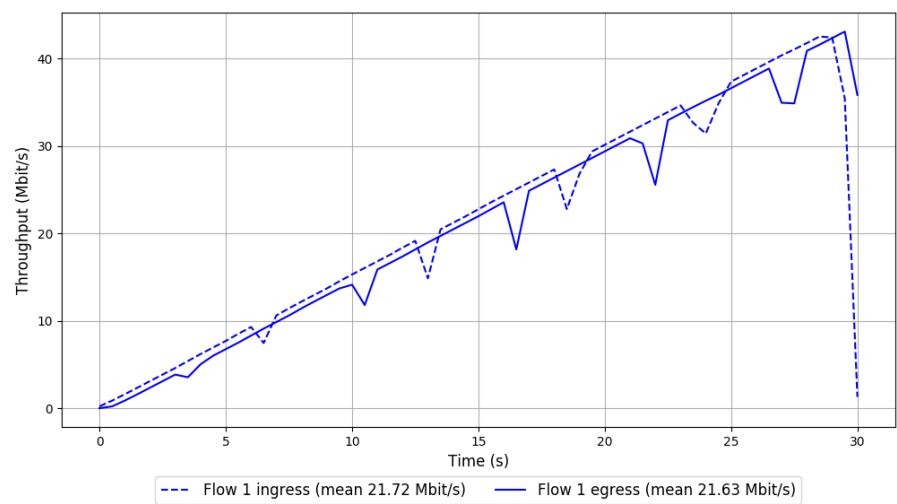
Run 6: Report of LEDBAT — Data Link

```
Run 7: Statistics of LEDBAT

Start at: 2018-05-25 11:28:29
End at: 2018-05-25 11:28:59
Local clock offset: 0.026 ms
Remote clock offset: 0.02 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.35 Mbit/s
95th percentile per-packet one-way delay: 64.576 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 22.35 Mbit/s
95th percentile per-packet one-way delay: 64.576 ms
Loss rate: 0.84%
```
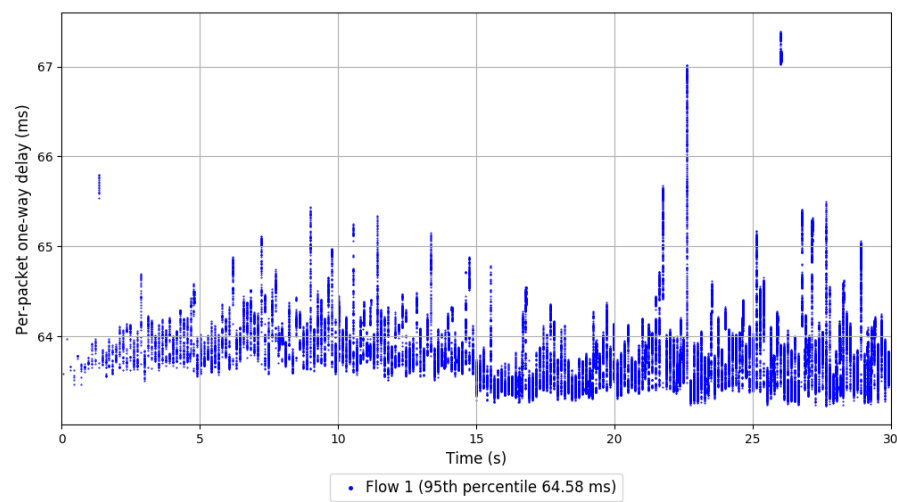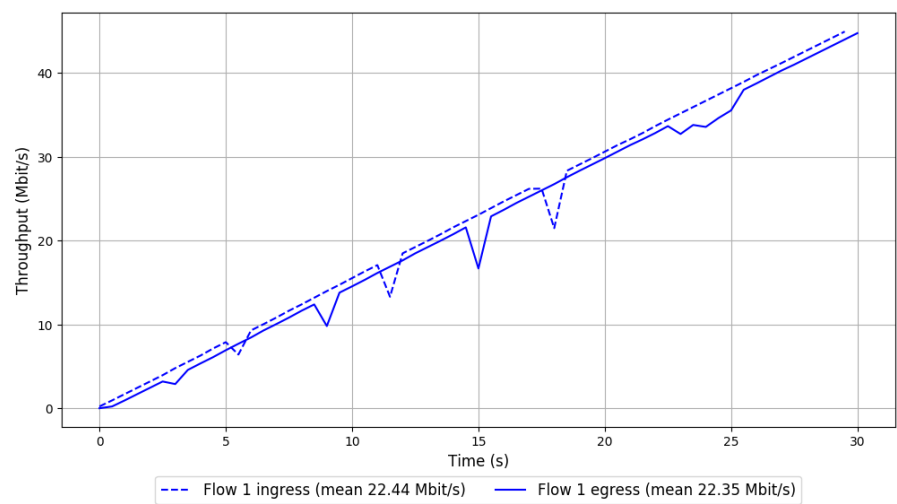
Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 22.44 Mbit/s)   Flow 1 egress (mean 22.35 Mbit/s)

Flow 1 (95th percentile 64.58 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2018-05-25 11:48:55
End at: 2018-05-25 11:49:25
Local clock offset: -0.006 ms
Remote clock offset: 0.094 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.52 Mbit/s
95th percentile per-packet one-way delay: 64.601 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 18.52 Mbit/s
95th percentile per-packet one-way delay: 64.601 ms
Loss rate: 0.92%
```
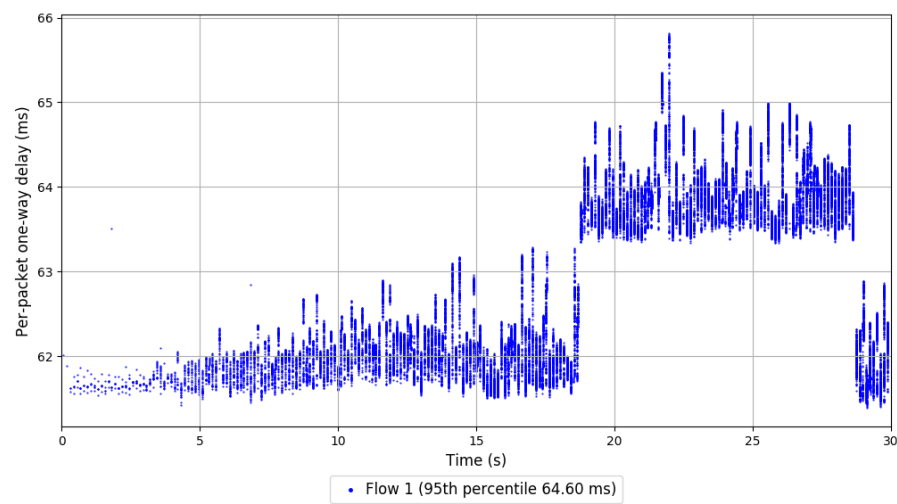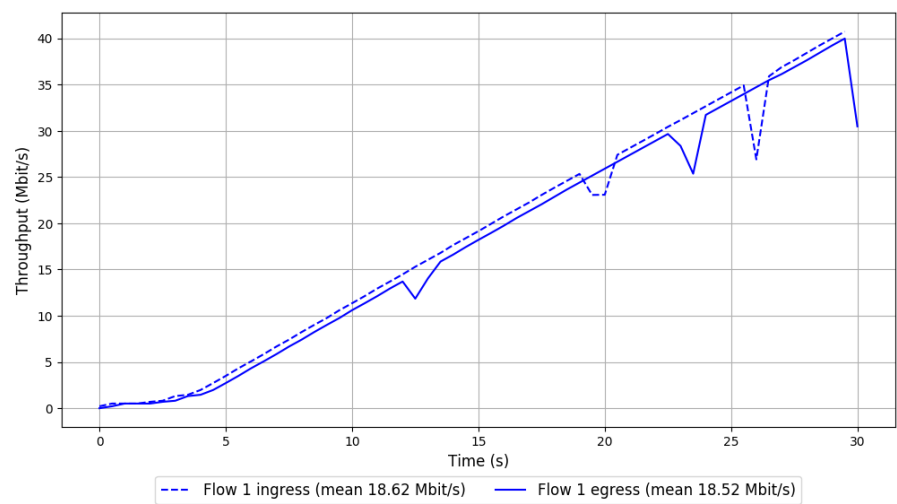
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2018-05-25 12:09:28
End at: 2018-05-25 12:09:58
Local clock offset: -0.014 ms
Remote clock offset: 0.019 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.17 Mbit/s
95th percentile per-packet one-way delay: 64.637 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 21.17 Mbit/s
95th percentile per-packet one-way delay: 64.637 ms
Loss rate: 0.24%
```
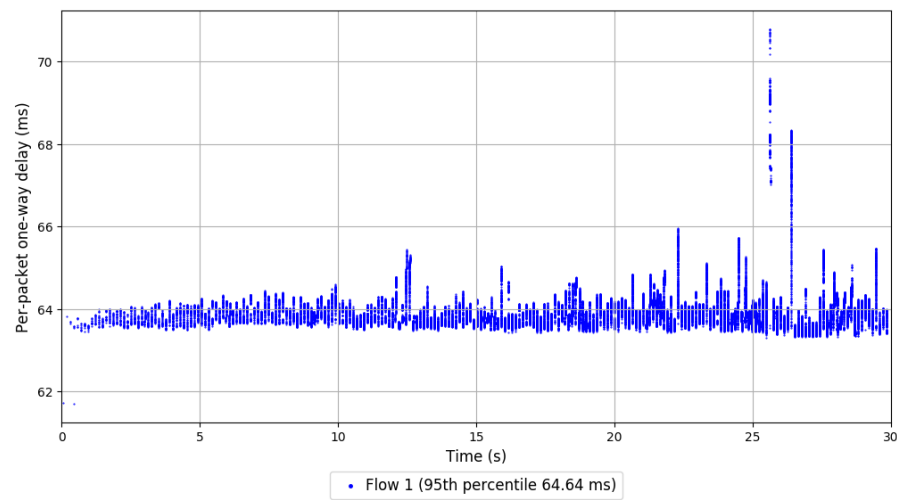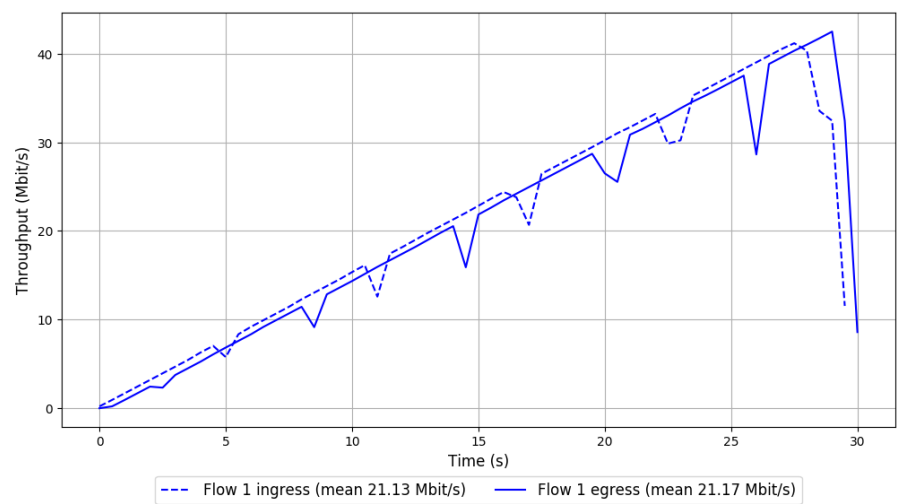
Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 21.13 Mbit/s)   Flow 1 egress (mean 21.17 Mbit/s)

Flow 1 (95th percentile 64.64 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2018-05-25 12:29:53
End at: 2018-05-25 12:30:23
Local clock offset: -0.106 ms
Remote clock offset: 0.138 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.80 Mbit/s
95th percentile per-packet one-way delay: 64.444 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 21.80 Mbit/s
95th percentile per-packet one-way delay: 64.444 ms
Loss rate: 0.85%
```
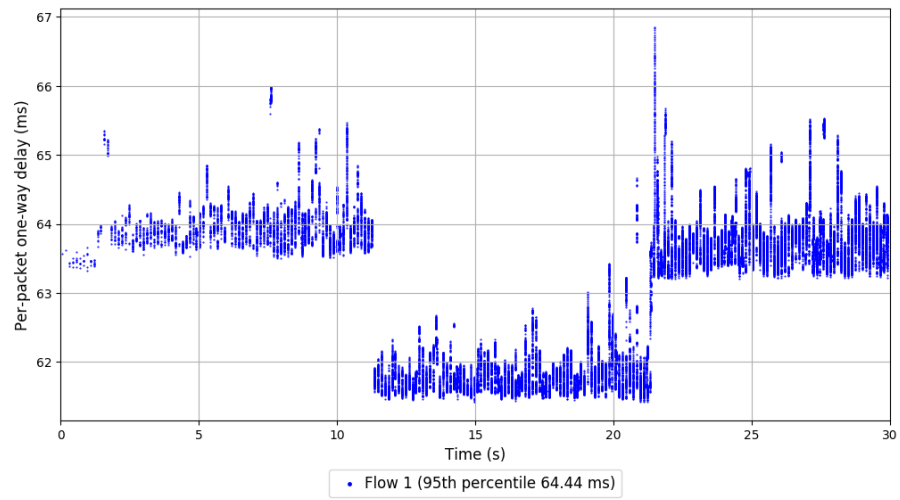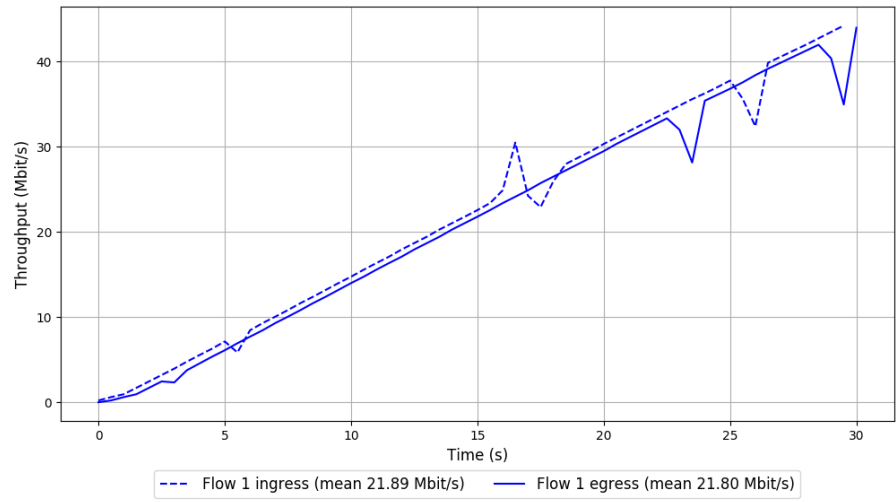
Run 10: Report of LEDBAT — Data Link

Flow 1 ingress (mean 21.89 Mbit/s) --- Flow 1 egress (mean 21.80 Mbit/s)

• Flow 1 (95th percentile 64.44 ms)

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-05-25 09:35:12
End at: 2018-05-25 09:35:42
Local clock offset: -0.077 ms
Remote clock offset: -0.08 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 549.18 Mbit/s
95th percentile per-packet one-way delay: 125.129 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 549.18 Mbit/s
95th percentile per-packet one-way delay: 125.129 ms
Loss rate: 1.07%
```
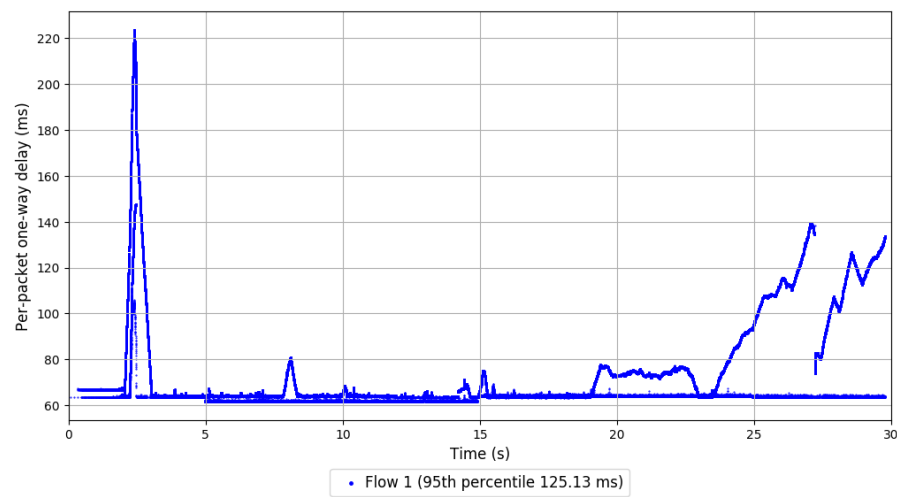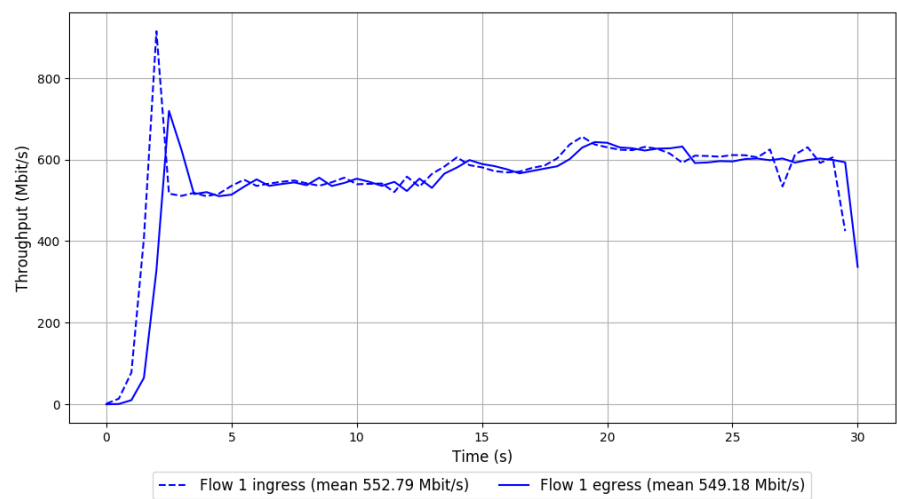
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-05-25 09:55:40
End at: 2018-05-25 09:56:10
Local clock offset: -0.014 ms
Remote clock offset: -0.002 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 518.76 Mbit/s
95th percentile per-packet one-way delay: 98.099 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 518.76 Mbit/s
95th percentile per-packet one-way delay: 98.099 ms
Loss rate: 1.23%
```
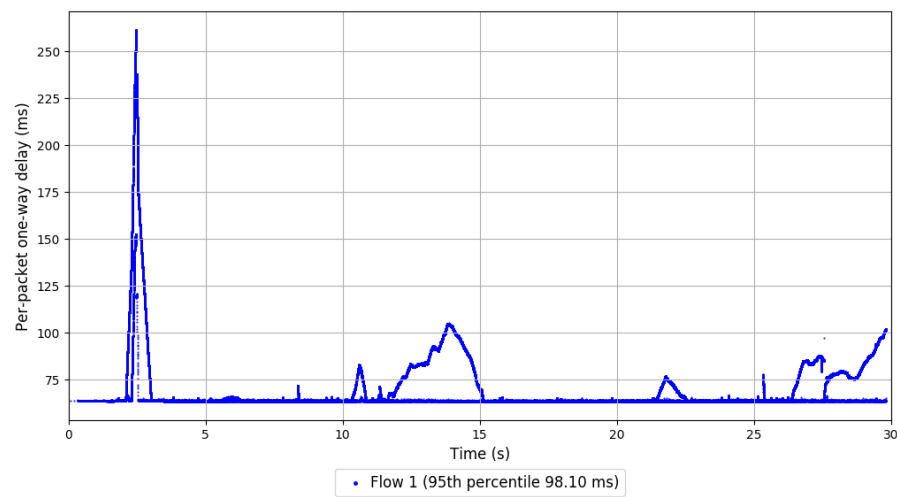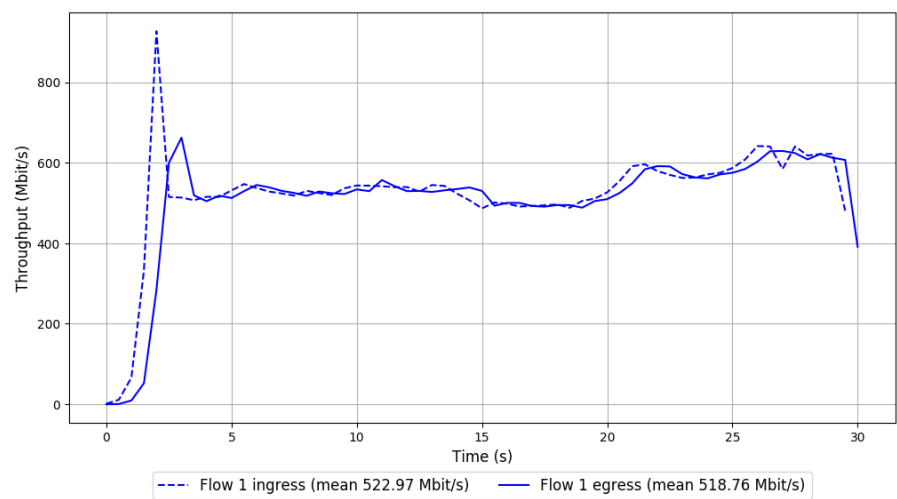
Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-05-25 10:16:22
End at: 2018-05-25 10:16:52
Local clock offset: 0.007 ms
Remote clock offset: 0.097 ms


# Below is generated by plot.py at 2018-05-25 13:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 532.72 Mbit/s
95th percentile per-packet one-way delay: 136.493 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 532.72 Mbit/s
95th percentile per-packet one-way delay: 136.493 ms
Loss rate: 0.79%
```
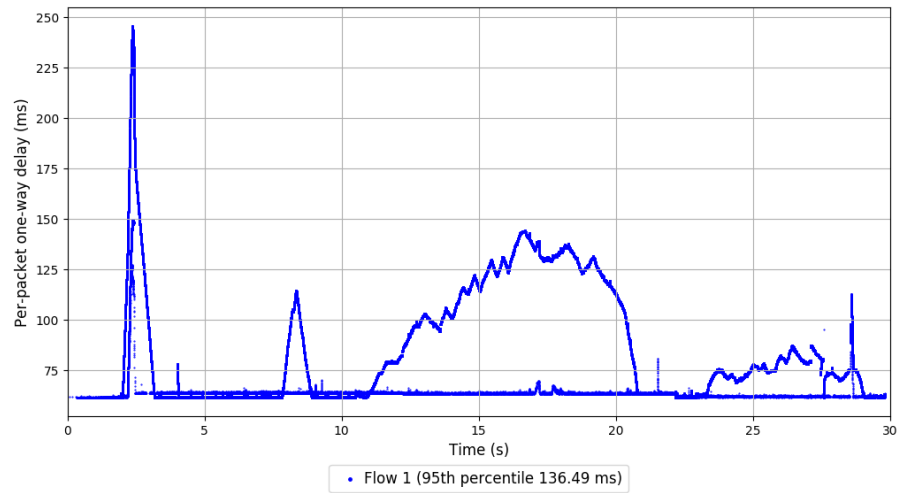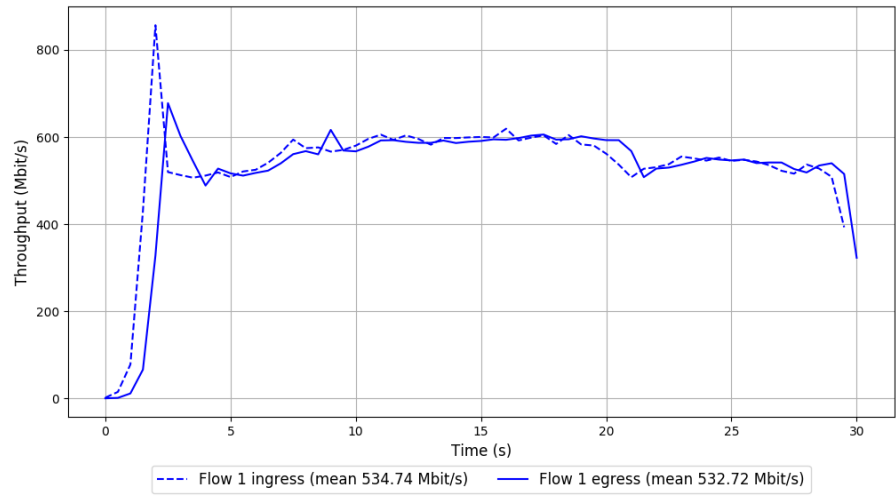
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 534.74 Mbit/s) ---- Flow 1 egress (mean 532.72 Mbit/s)

• Flow 1 (95th percentile 136.49 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-05-25 10:36:51
End at: 2018-05-25 10:37:21
Local clock offset: 0.012 ms
Remote clock offset: 0.083 ms


# Below is generated by plot.py at 2018-05-25 13:48:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 558.46 Mbit/s
95th percentile per-packet one-way delay: 124.679 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 558.46 Mbit/s
95th percentile per-packet one-way delay: 124.679 ms
Loss rate: 0.71%
```
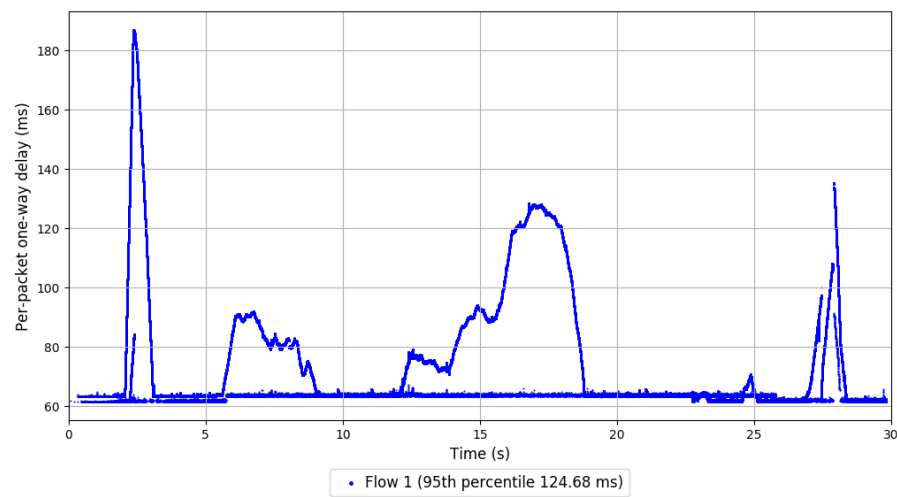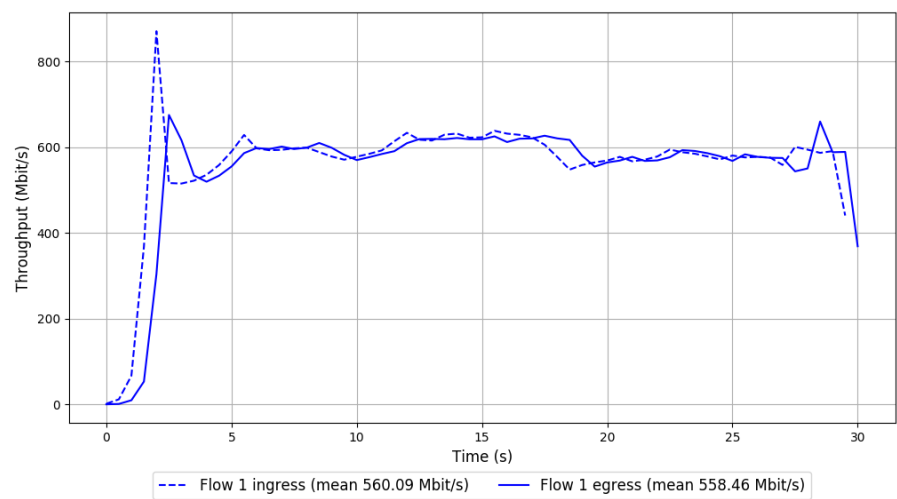
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 560.09 Mbit/s) —— Flow 1 egress (mean 558.46 Mbit/s)

· Flow 1 (95th percentile 124.68 ms)

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```
Run 5: Statistics of PCC-Allegro

Start at: 2018-05-25 10:57:14
End at: 2018-05-25 10:57:44
Local clock offset: 0.038 ms
Remote clock offset: 0.081 ms


# Below is generated by plot.py at 2018-05-25 13:48:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 493.17 Mbit/s
95th percentile per-packet one-way delay: 184.224 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 493.17 Mbit/s
95th percentile per-packet one-way delay: 184.224 ms
Loss rate: 1.00%
```
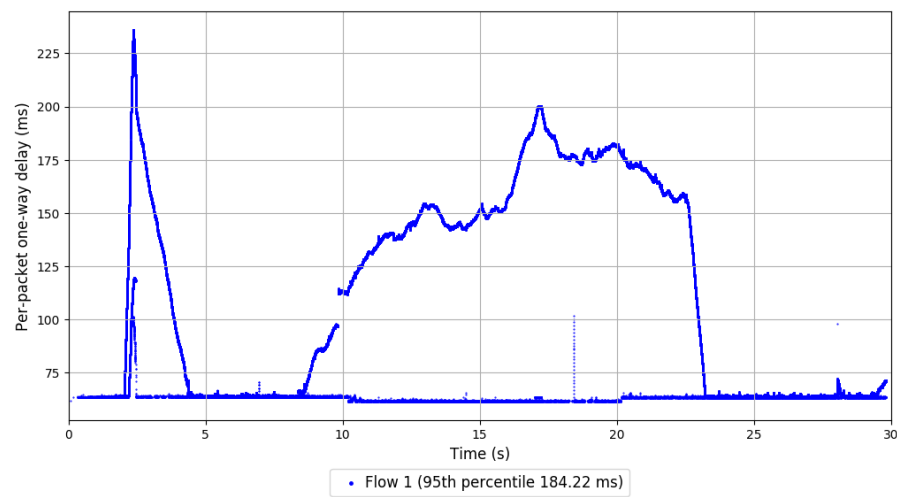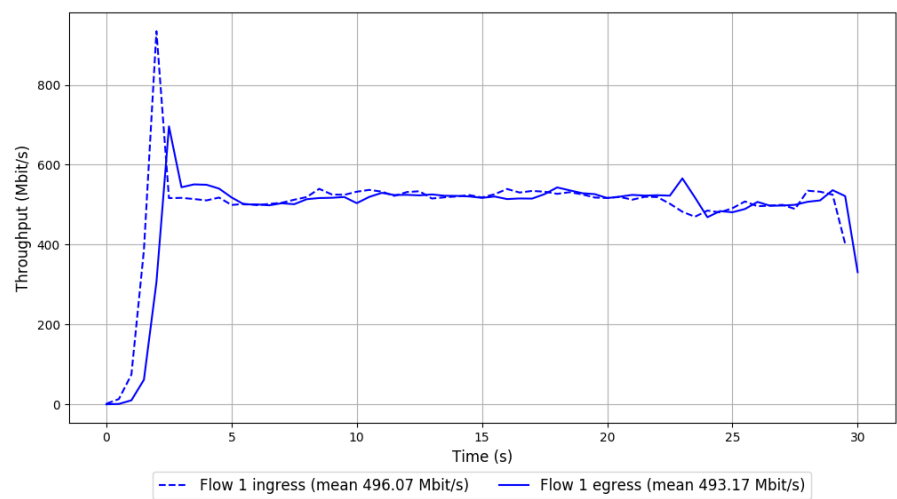
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 496.07 Mbit/s)   Flow 1 egress (mean 493.17 Mbit/s)

Flow 1 (95th percentile 184.22 ms)

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-05-25 11:17:55
End at: 2018-05-25 11:18:25
Local clock offset: 0.057 ms
Remote clock offset: 0.219 ms


# Below is generated by plot.py at 2018-05-25 13:48:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 500.80 Mbit/s
95th percentile per-packet one-way delay: 202.787 ms
Loss rate: 3.92%
-- Flow 1:
Average throughput: 500.80 Mbit/s
95th percentile per-packet one-way delay: 202.787 ms
Loss rate: 3.92%
```
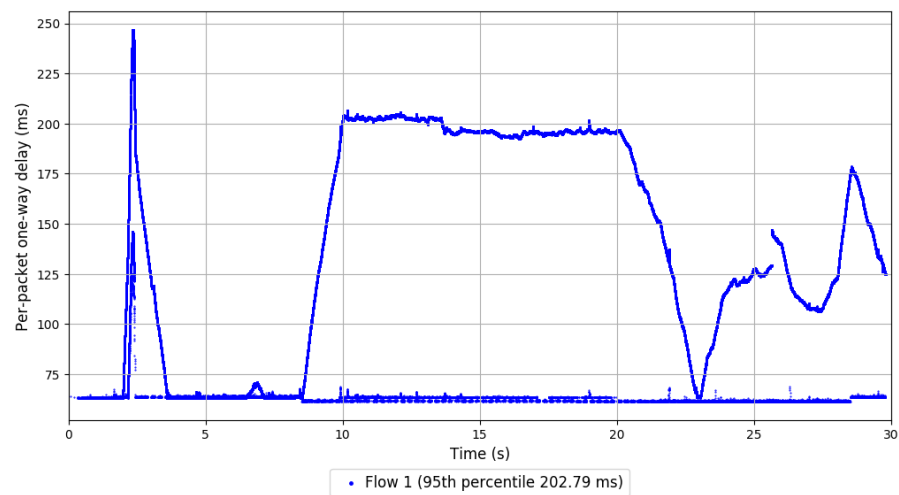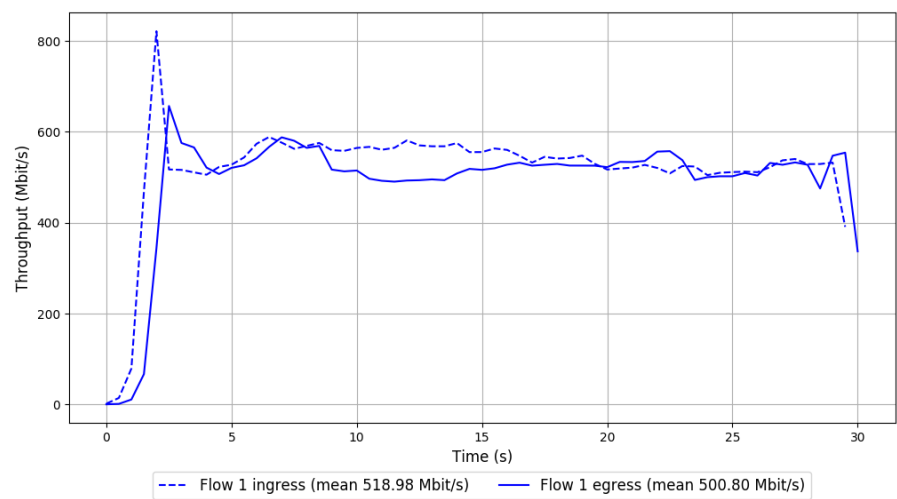
Run 6: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 518.98 Mbit/s)   Flow 1 egress (mean 500.80 Mbit/s)

Flow 1 (95th percentile 202.79 ms)

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-05-25 11:38:31
End at: 2018-05-25 11:39:01
Local clock offset: -0.003 ms
Remote clock offset: 0.283 ms


# Below is generated by plot.py at 2018-05-25 13:57:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 520.05 Mbit/s
95th percentile per-packet one-way delay: 200.924 ms
Loss rate: 2.17%
-- Flow 1:
Average throughput: 520.05 Mbit/s
95th percentile per-packet one-way delay: 200.924 ms
Loss rate: 2.17%
```
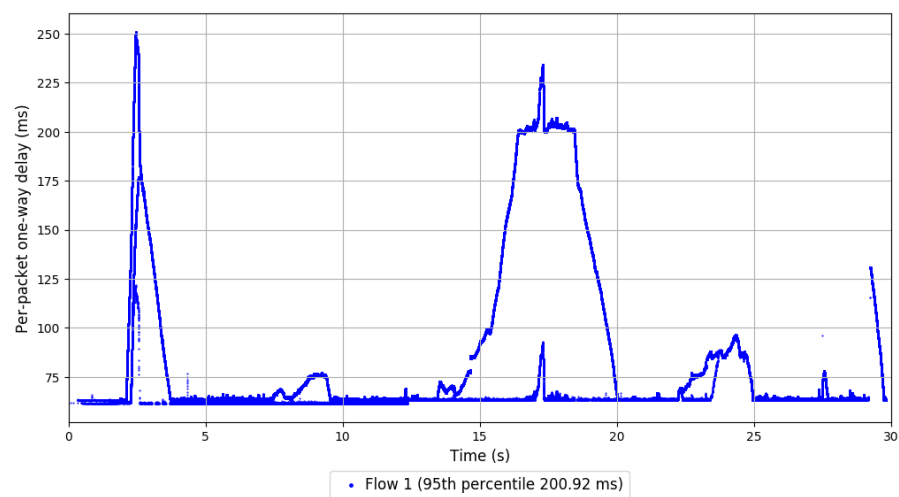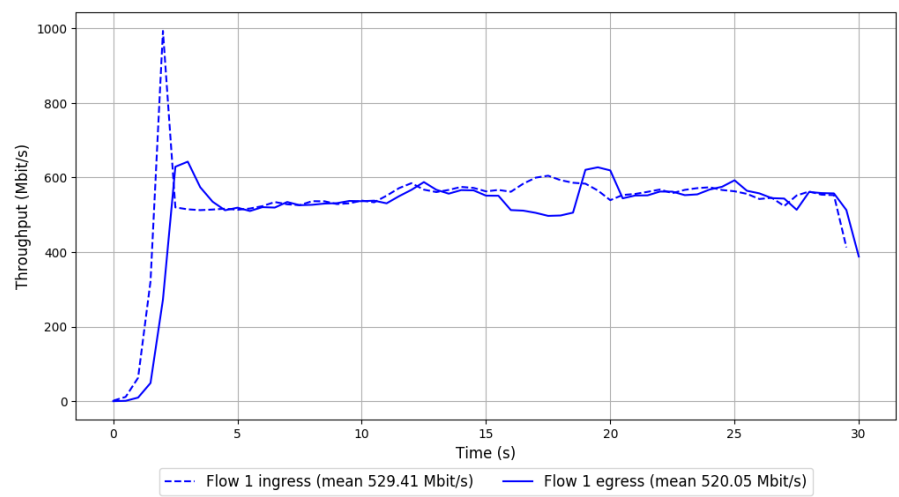
Run 7: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 529.41 Mbit/s) —— Flow 1 egress (mean 520.05 Mbit/s)

• Flow 1 (95th percentile 200.92 ms)

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-05-25 11:59:02
End at: 2018-05-25 11:59:32
Local clock offset: 0.022 ms
Remote clock offset: 0.115 ms


# Below is generated by plot.py at 2018-05-25 13:58:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 525.64 Mbit/s
95th percentile per-packet one-way delay: 109.355 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 525.64 Mbit/s
95th percentile per-packet one-way delay: 109.355 ms
Loss rate: 1.11%
```
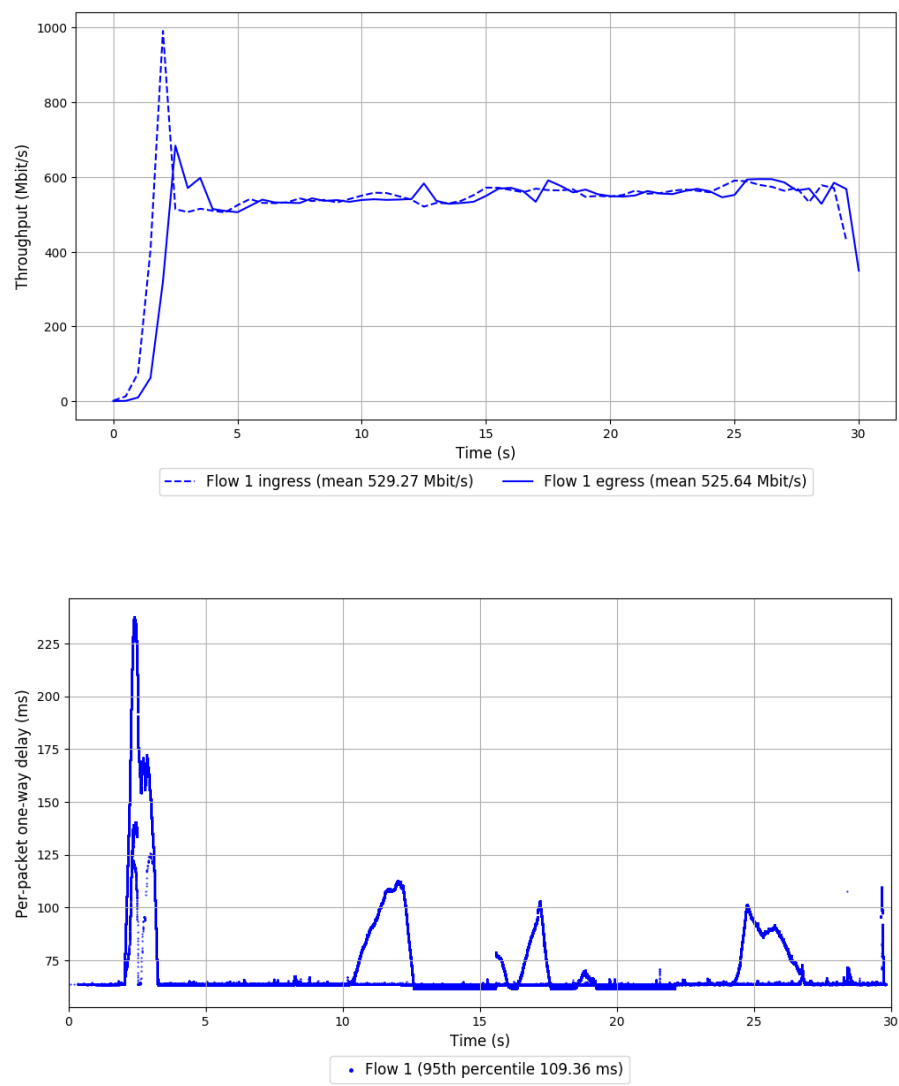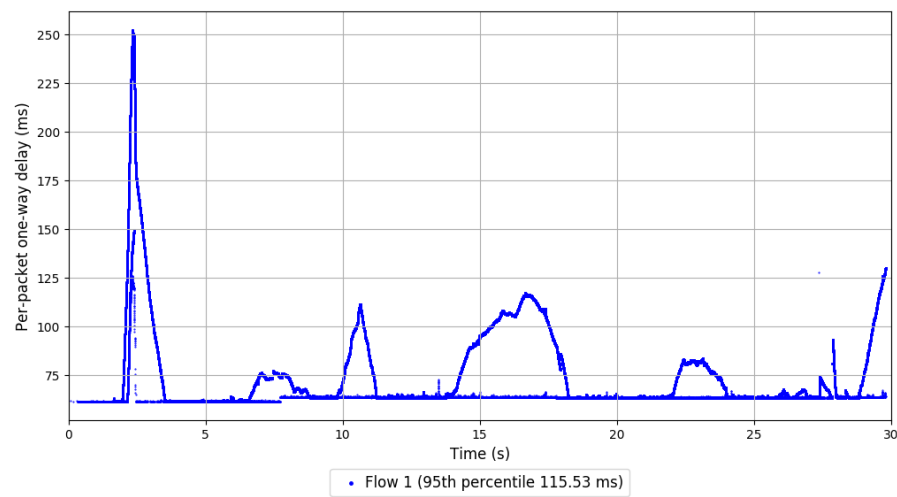
Run 8: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 529.27 Mbit/s) --- Flow 1 egress (mean 525.64 Mbit/s)

• Flow 1 (95th percentile 109.36 ms)

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-05-25 12:19:26
End at: 2018-05-25 12:19:56
Local clock offset: -0.117 ms
Remote clock offset: 0.057 ms


# Below is generated by plot.py at 2018-05-25 13:58:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 531.91 Mbit/s
95th percentile per-packet one-way delay: 115.530 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 531.91 Mbit/s
95th percentile per-packet one-way delay: 115.530 ms
Loss rate: 1.09%
```
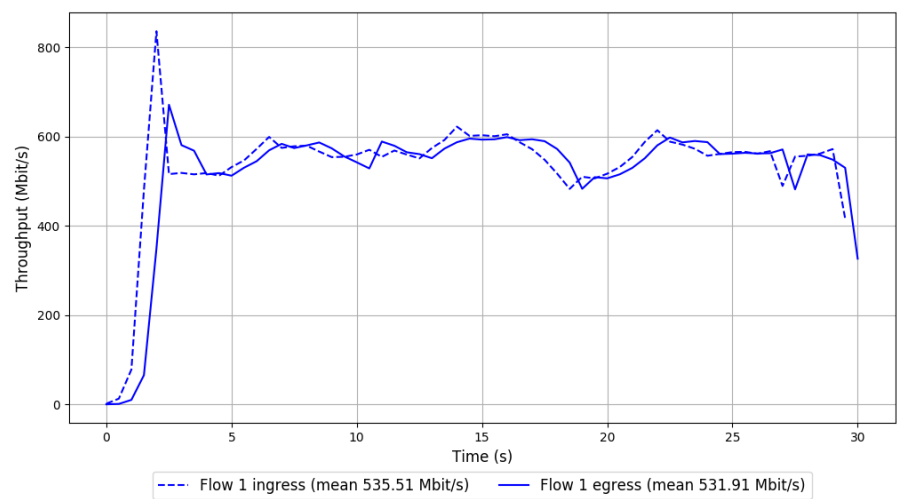
Run 9: Report of PCC-Allegro — Data Link

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-05-25 12:39:46
End at: 2018-05-25 12:40:16
Local clock offset: -0.138 ms
Remote clock offset: 0.025 ms


# Below is generated by plot.py at 2018-05-25 13:58:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 532.74 Mbit/s
95th percentile per-packet one-way delay: 175.690 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 532.74 Mbit/s
95th percentile per-packet one-way delay: 175.690 ms
Loss rate: 1.00%
```
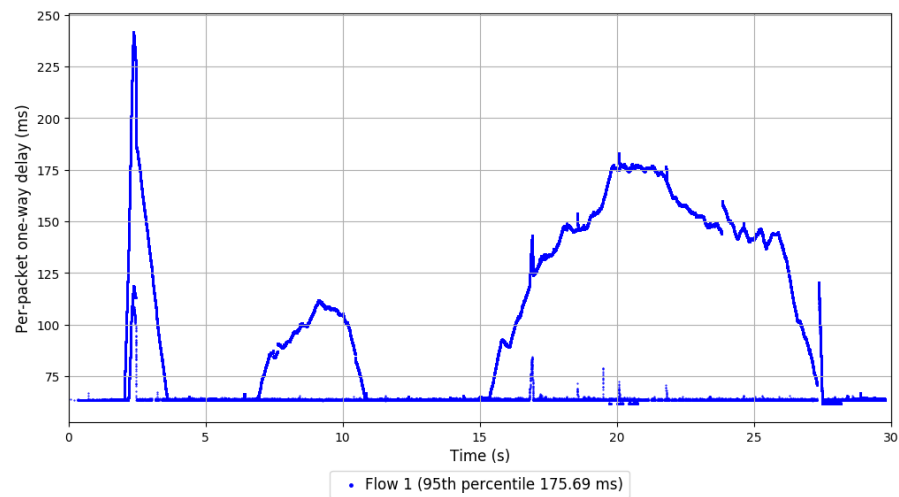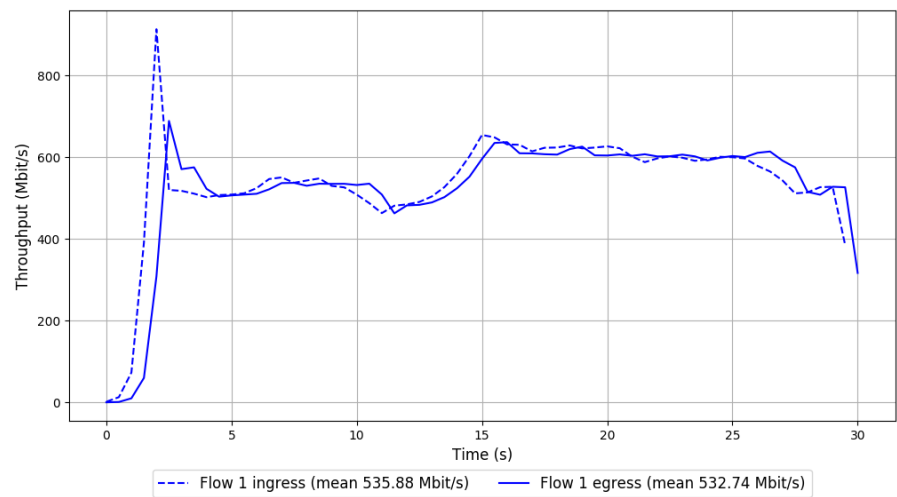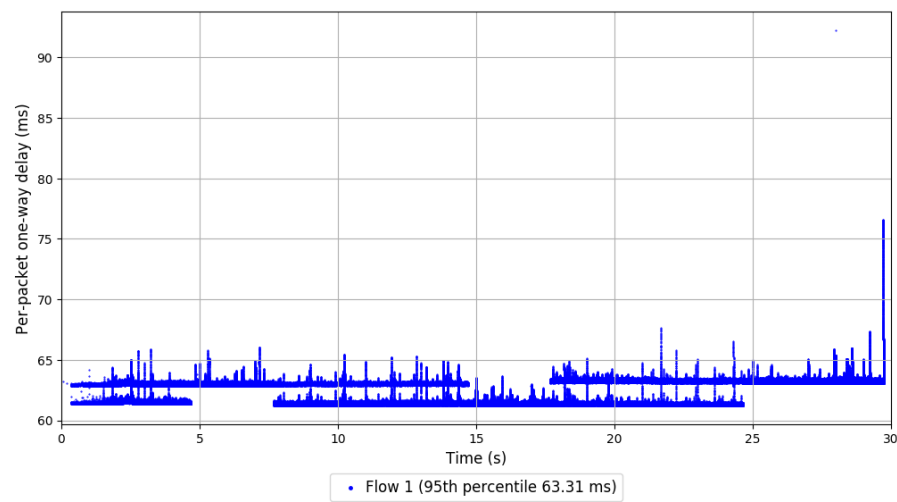
Run 10: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 535.88 Mbit/s) ---- Flow 1 egress (mean 532.74 Mbit/s) ——

Flow 1 (95th percentile 175.69 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2018-05-25 09:33:49
End at: 2018-05-25 09:34:19
Local clock offset: -0.102 ms
Remote clock offset: 0.285 ms


# Below is generated by plot.py at 2018-05-25 13:58:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 196.44 Mbit/s
95th percentile per-packet one-way delay: 63.315 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 196.44 Mbit/s
95th percentile per-packet one-way delay: 63.315 ms
Loss rate: 0.50%
```
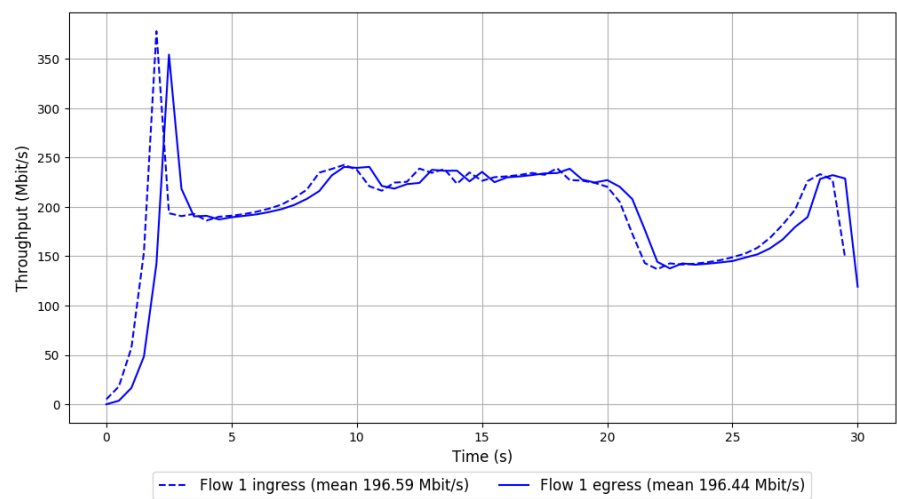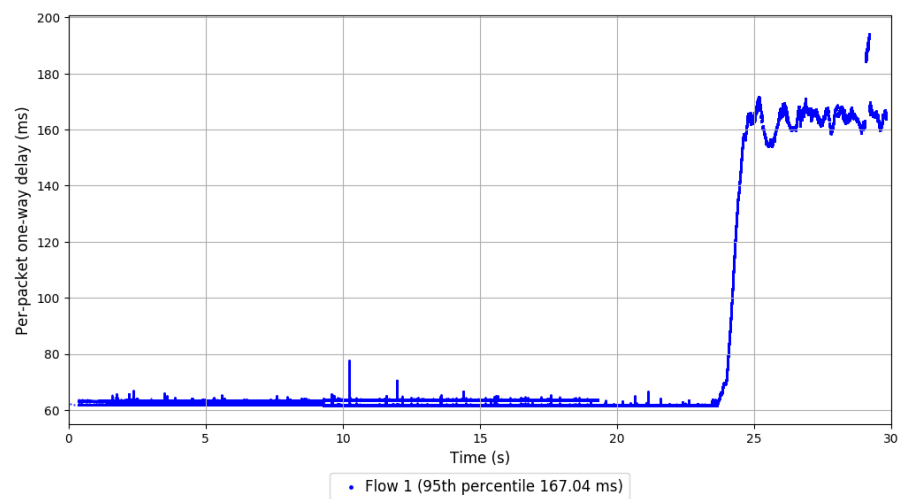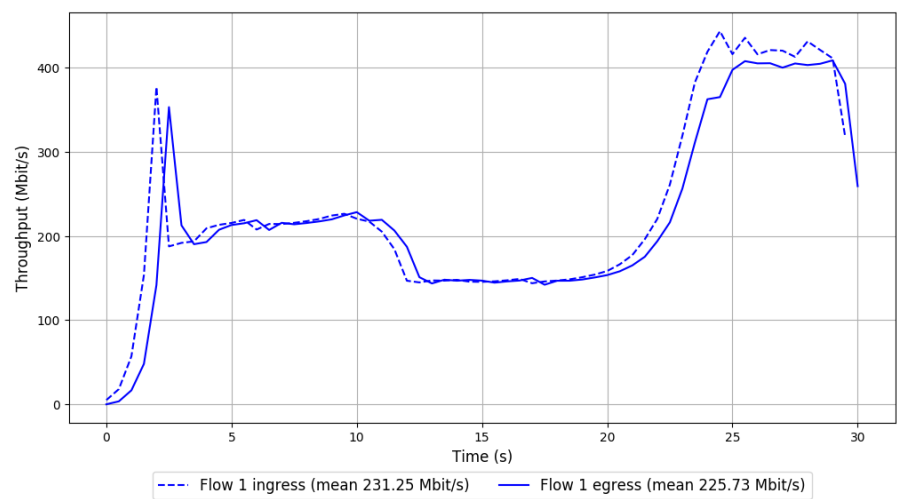
Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 196.59 Mbit/s) Flow 1 egress (mean 196.44 Mbit/s)

Flow 1 (95th percentile 63.31 ms)

```
Run 2: Statistics of PCC-Expr

Start at: 2018-05-25 09:54:14
End at: 2018-05-25 09:54:44
Local clock offset: -0.026 ms
Remote clock offset: 0.043 ms


# Below is generated by plot.py at 2018-05-25 13:58:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.73 Mbit/s
95th percentile per-packet one-way delay: 167.037 ms
Loss rate: 2.79%
-- Flow 1:
Average throughput: 225.73 Mbit/s
95th percentile per-packet one-way delay: 167.037 ms
Loss rate: 2.79%
```

Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2018-05-25 10:14:53
End at: 2018-05-25 10:15:23
Local clock offset: 0.029 ms
Remote clock offset: 0.081 ms


# Below is generated by plot.py at 2018-05-25 13:58:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 256.89 Mbit/s
95th percentile per-packet one-way delay: 164.376 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 256.89 Mbit/s
95th percentile per-packet one-way delay: 164.376 ms
Loss rate: 0.75%
```
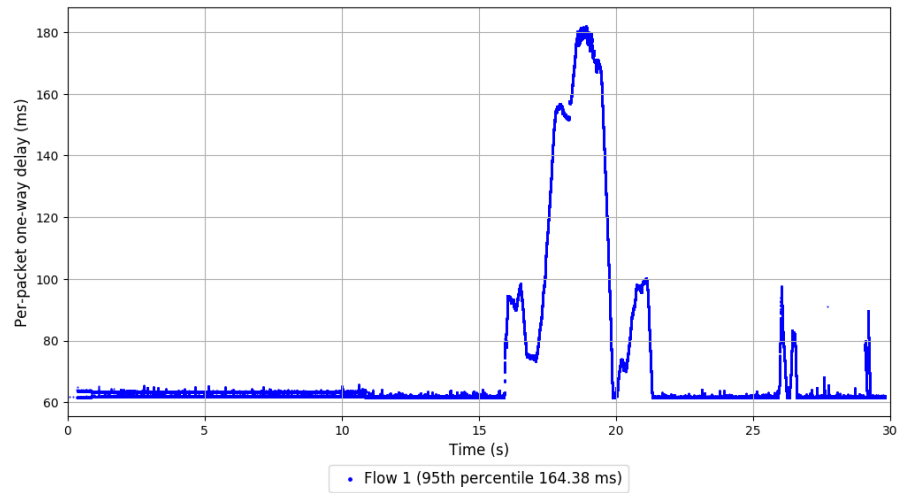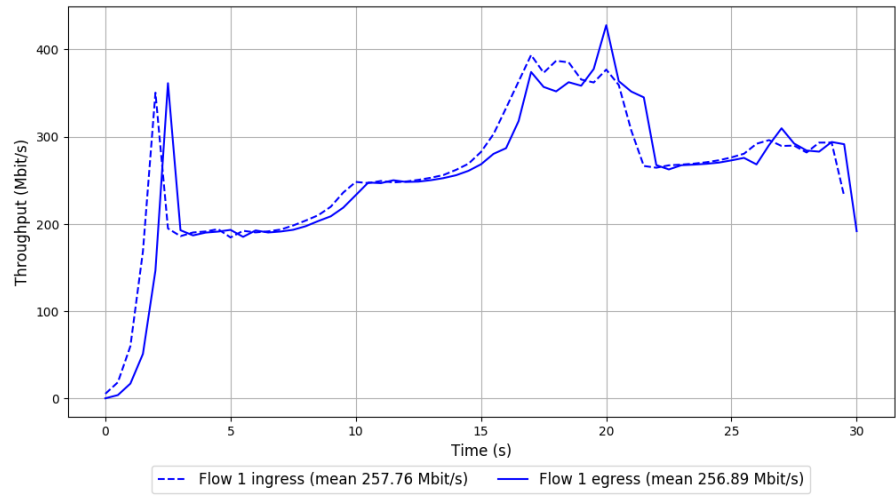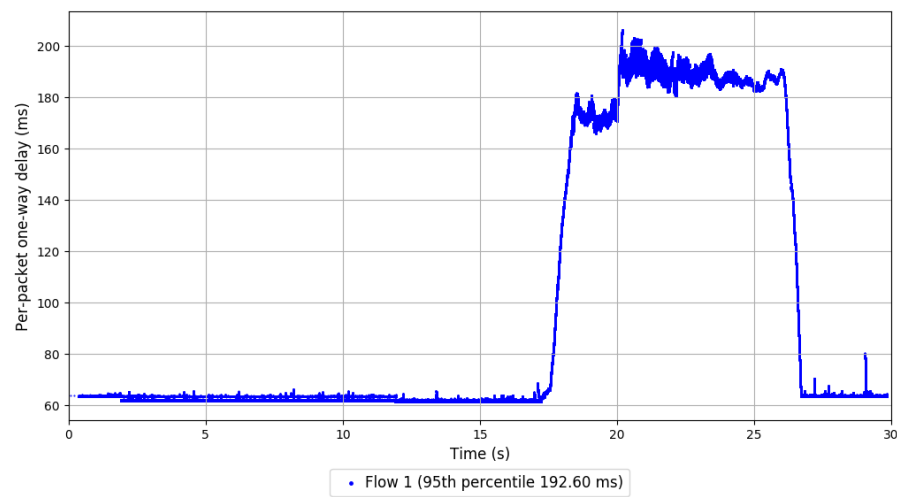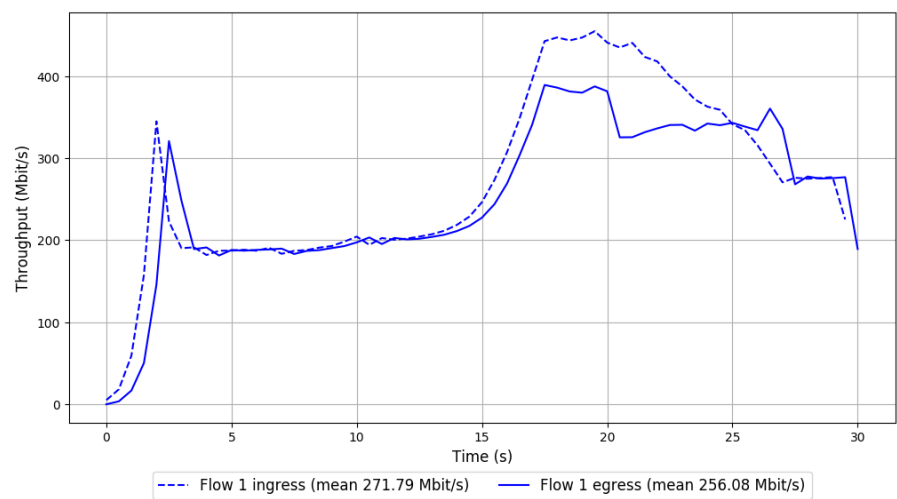
Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 257.76 Mbit/s)   Flow 1 egress (mean 256.89 Mbit/s)

Flow 1 (95th percentile 164.38 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2018-05-25 10:35:22
End at: 2018-05-25 10:35:52
Local clock offset: -0.016 ms
Remote clock offset: 0.07 ms


# Below is generated by plot.py at 2018-05-25 13:59:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 256.08 Mbit/s
95th percentile per-packet one-way delay: 192.603 ms
Loss rate: 6.18%
-- Flow 1:
Average throughput: 256.08 Mbit/s
95th percentile per-packet one-way delay: 192.603 ms
Loss rate: 6.18%
```

Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2018-05-25 10:55:47
End at: 2018-05-25 10:56:17
Local clock offset: -0.007 ms
Remote clock offset: 0.284 ms


# Below is generated by plot.py at 2018-05-25 14:06:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 253.41 Mbit/s
95th percentile per-packet one-way delay: 198.708 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 253.41 Mbit/s
95th percentile per-packet one-way delay: 198.708 ms
Loss rate: 1.58%
```
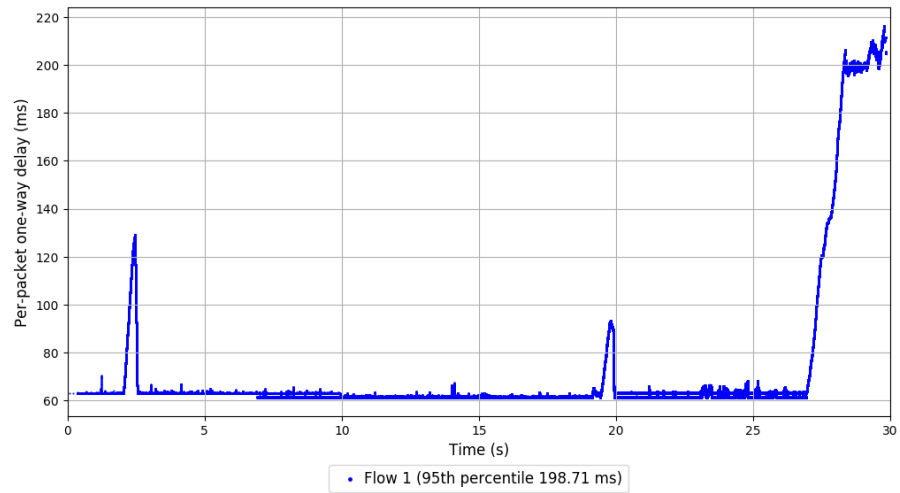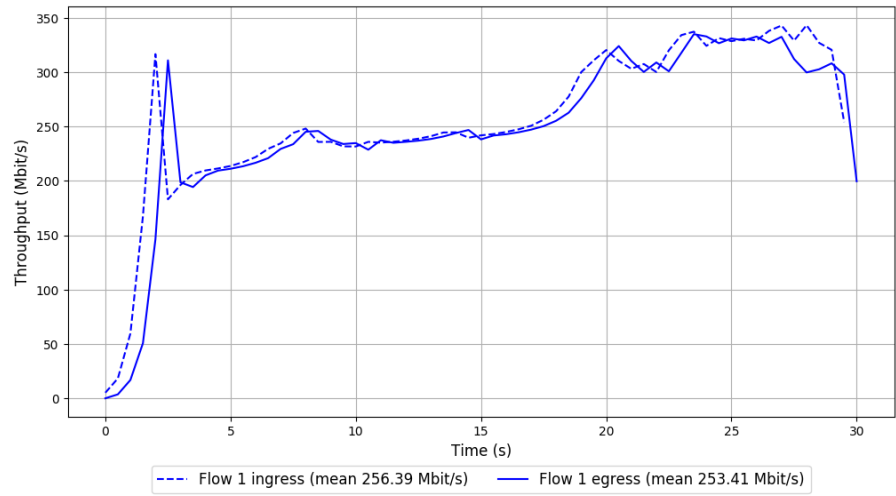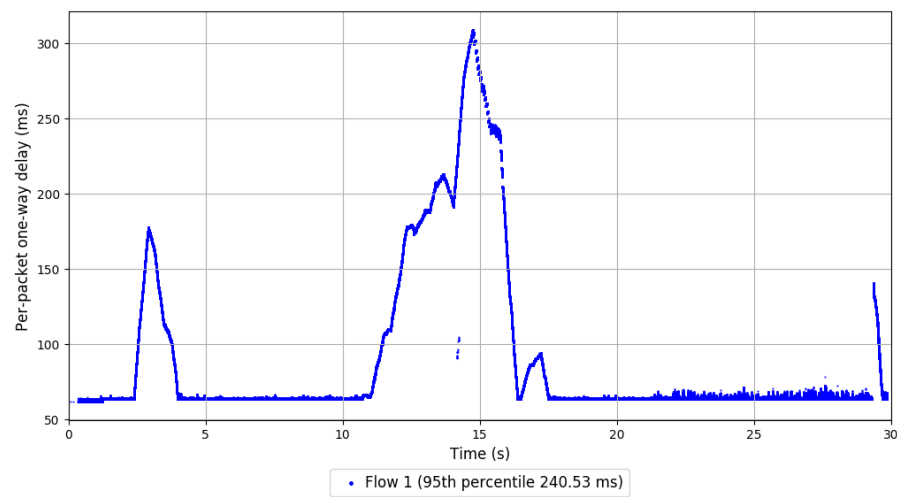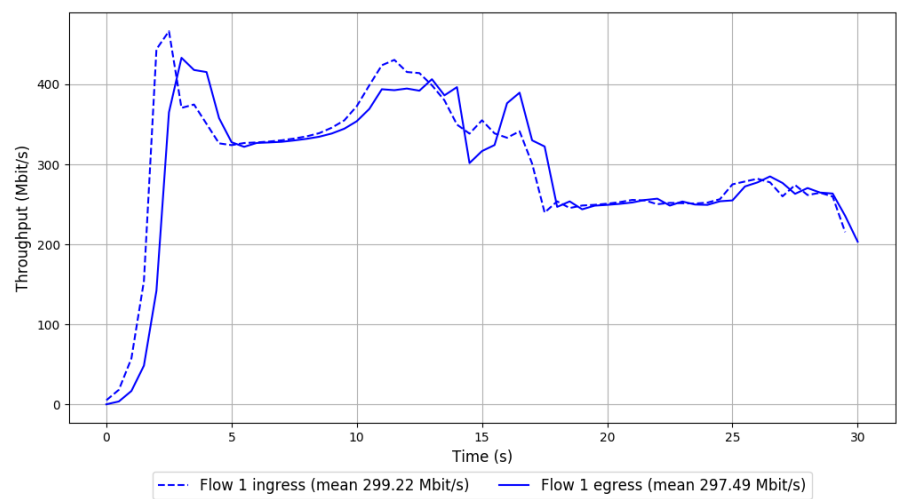
Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 256.39 Mbit/s) —— Flow 1 egress (mean 253.41 Mbit/s)

• Flow 1 (95th percentile 198.71 ms)

```
Run 6: Statistics of PCC-Expr

Start at: 2018-05-25 11:16:23
End at: 2018-05-25 11:16:53
Local clock offset: -0.003 ms
Remote clock offset: -0.19 ms


# Below is generated by plot.py at 2018-05-25 14:09:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 297.49 Mbit/s
95th percentile per-packet one-way delay: 240.530 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 297.49 Mbit/s
95th percentile per-packet one-way delay: 240.530 ms
Loss rate: 0.99%
```
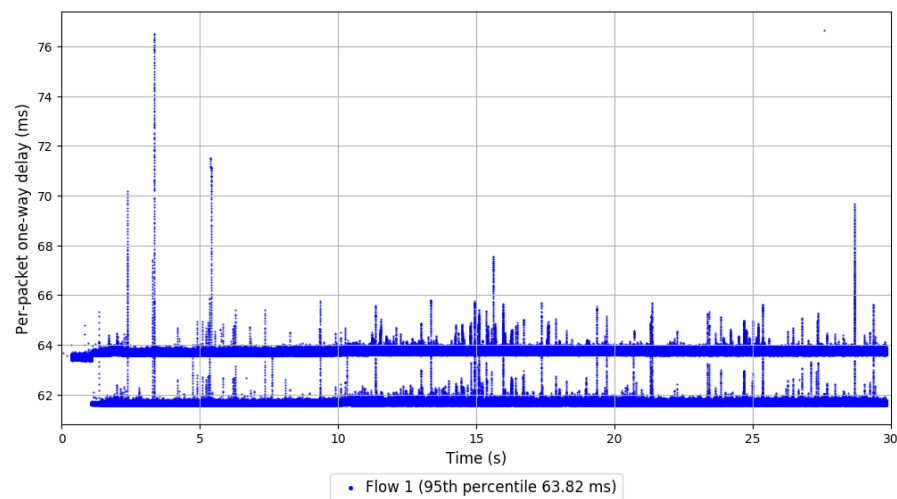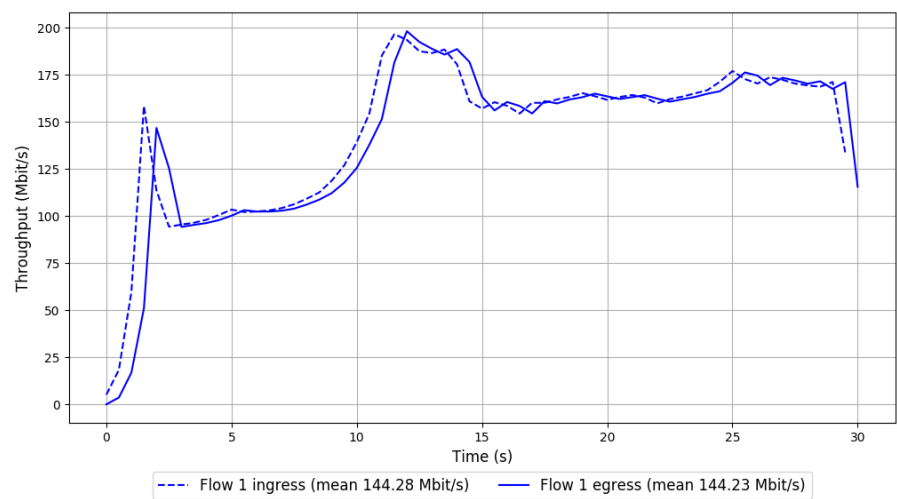
Run 6: Report of PCC-Expr — Data Link

```
Run 7: Statistics of PCC-Expr

Start at: 2018-05-25 11:37:13
End at: 2018-05-25 11:37:43
Local clock offset: 0.009 ms
Remote clock offset: -0.114 ms


# Below is generated by plot.py at 2018-05-25 14:09:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 144.23 Mbit/s
95th percentile per-packet one-way delay: 63.821 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 144.23 Mbit/s
95th percentile per-packet one-way delay: 63.821 ms
Loss rate: 0.46%
```
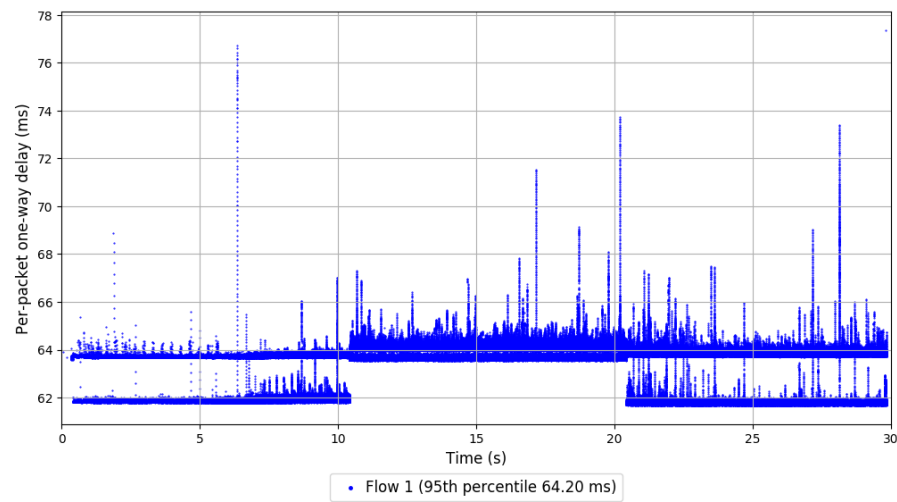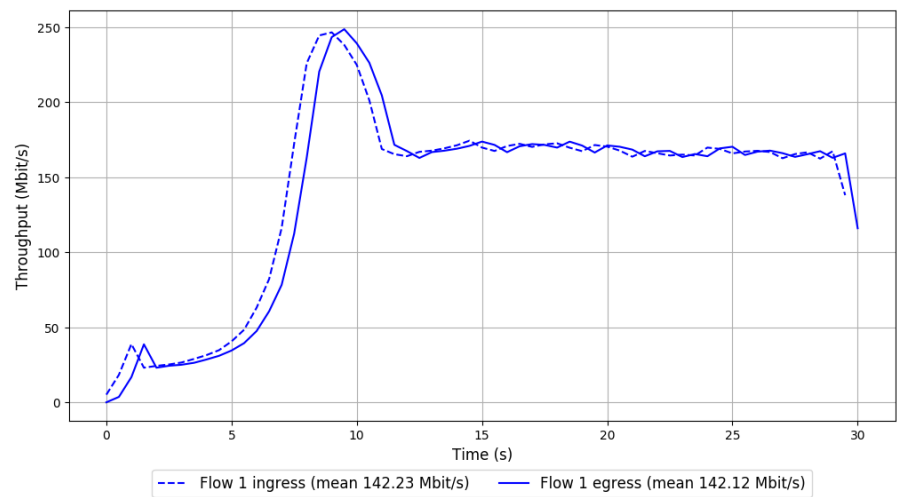
Run 7: Report of PCC-Expr — Data Link

```
Run 8: Statistics of PCC-Expr

Start at: 2018-05-25 11:57:43
End at: 2018-05-25 11:58:13
Local clock offset: -0.015 ms
Remote clock offset: -0.162 ms


# Below is generated by plot.py at 2018-05-25 14:09:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 142.12 Mbit/s
95th percentile per-packet one-way delay: 64.200 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 142.12 Mbit/s
95th percentile per-packet one-way delay: 64.200 ms
Loss rate: 0.50%
```

Run 8: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 142.23 Mbit/s)   Flow 1 egress (mean 142.12 Mbit/s)
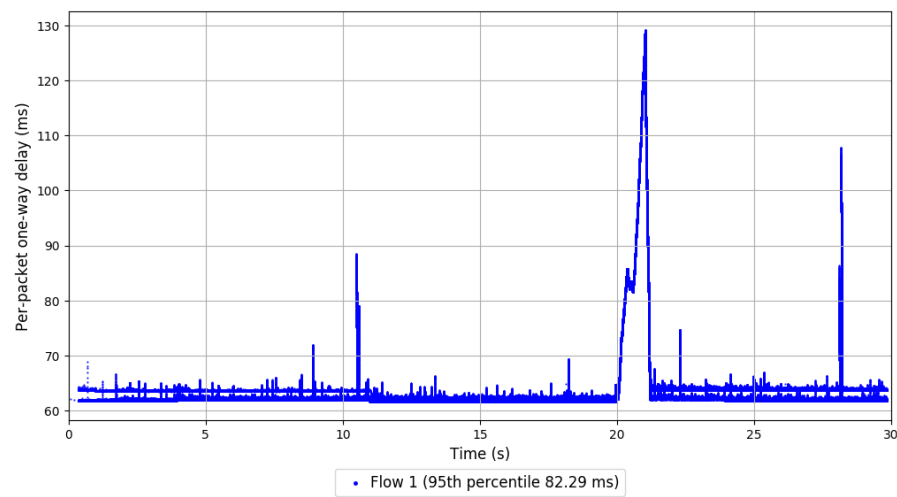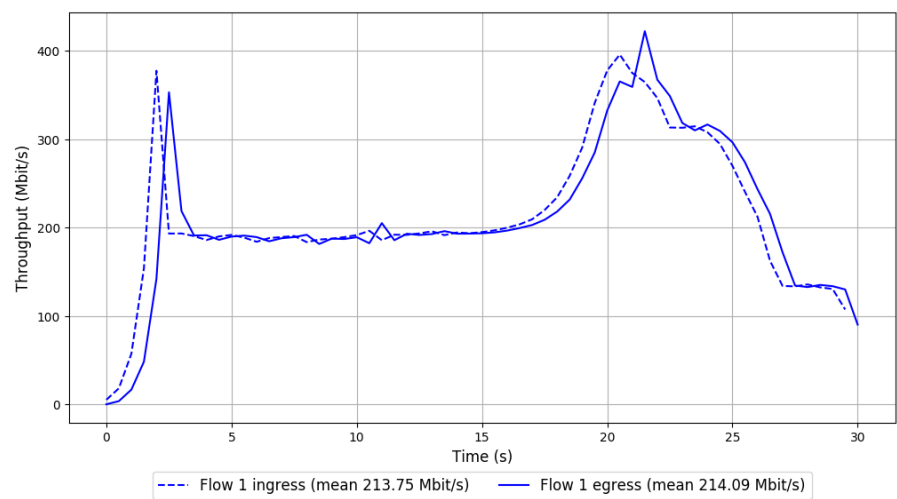

• Flow 1 (95th percentile 64.20 ms)

```
Run 9: Statistics of PCC-Expr

Start at: 2018-05-25 12:18:03
End at: 2018-05-25 12:18:33
Local clock offset: -0.062 ms
Remote clock offset: -0.091 ms


# Below is generated by plot.py at 2018-05-25 14:09:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.09 Mbit/s
95th percentile per-packet one-way delay: 82.290 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 214.09 Mbit/s
95th percentile per-packet one-way delay: 82.290 ms
Loss rate: 0.27%
```
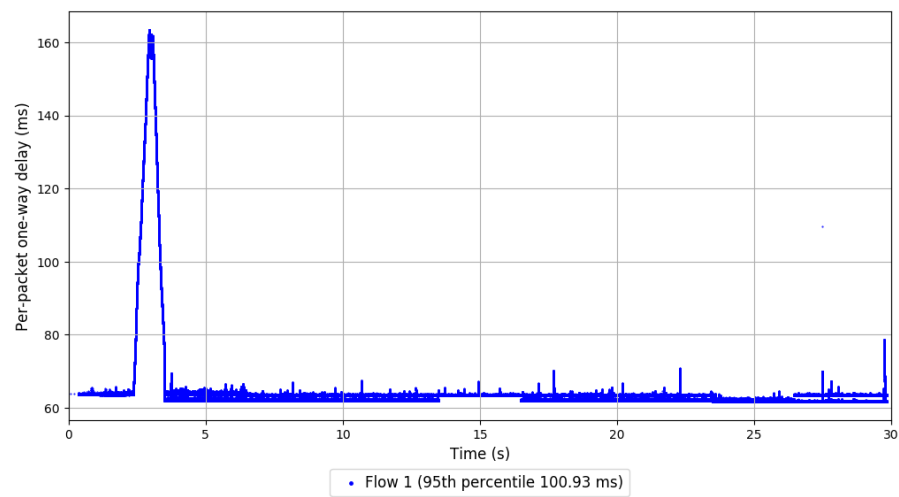
Run 9: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 213.75 Mbit/s)   Flow 1 egress (mean 214.09 Mbit/s)

Flow 1 (95th percentile 82.29 ms)

```
Run 10: Statistics of PCC-Expr

Start at: 2018-05-25 12:38:20
End at: 2018-05-25 12:38:50
Local clock offset: -0.108 ms
Remote clock offset: 0.005 ms


# Below is generated by plot.py at 2018-05-25 14:09:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 230.02 Mbit/s
95th percentile per-packet one-way delay: 100.934 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 230.02 Mbit/s
95th percentile per-packet one-way delay: 100.934 ms
Loss rate: 0.53%
```
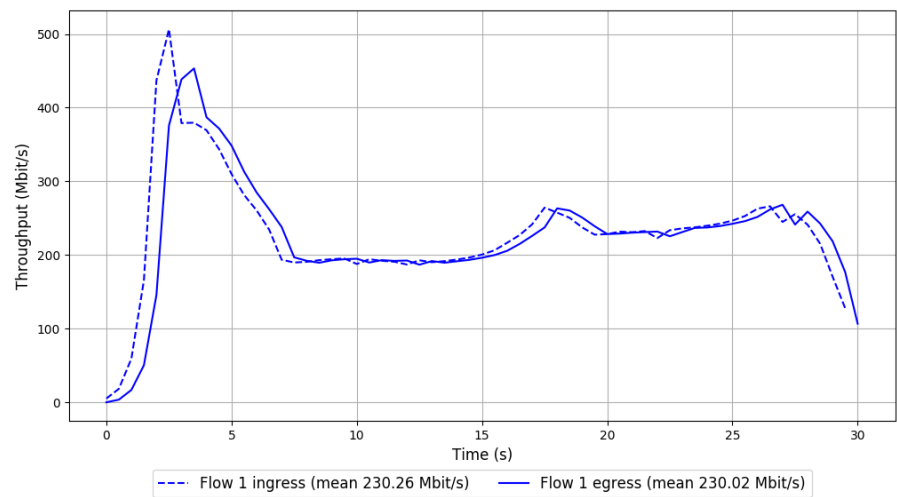
Run 10: Report of PCC-Expr — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-05-25 09:16:19
End at: 2018-05-25 09:16:49
Local clock offset: -0.072 ms
Remote clock offset: 0.292 ms
```
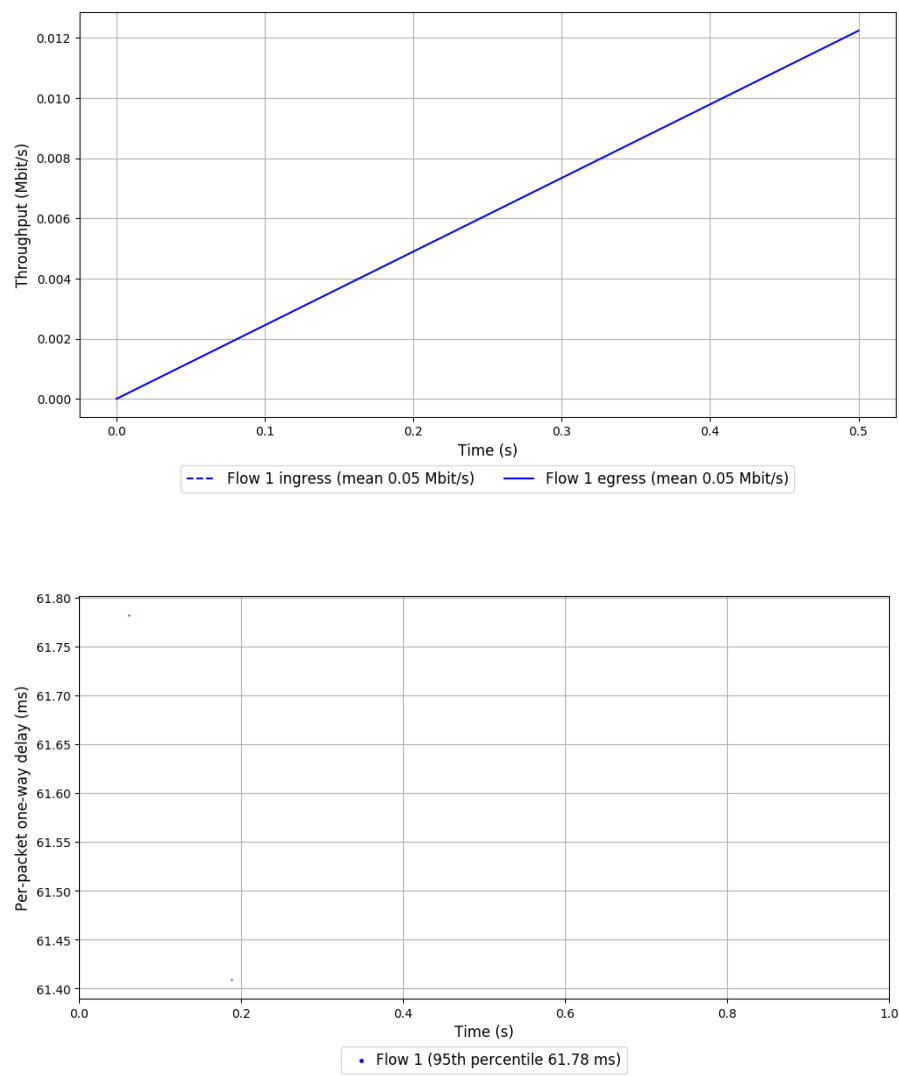
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-05-25 09:36:37
End at: 2018-05-25 09:37:07
Local clock offset: -0.073 ms
Remote clock offset: 0.075 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.94 Mbit/s
95th percentile per-packet one-way delay: 63.416 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 45.94 Mbit/s
95th percentile per-packet one-way delay: 63.416 ms
Loss rate: 0.62%
```
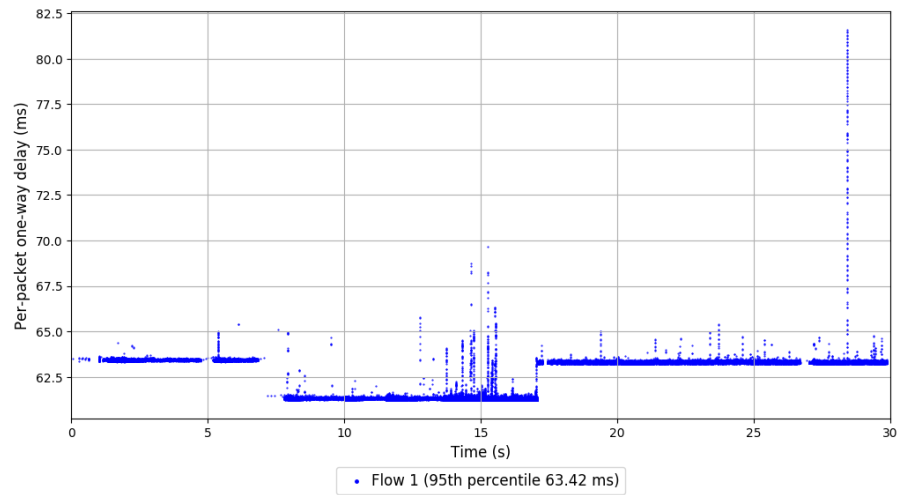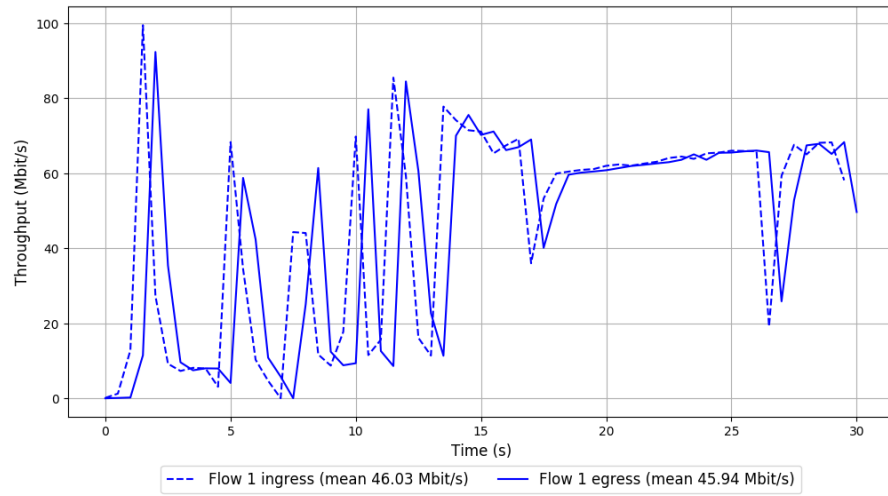
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-05-25 09:57:04
End at: 2018-05-25 09:57:34
Local clock offset: -0.046 ms
Remote clock offset: 0.194 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.79 Mbit/s
95th percentile per-packet one-way delay: 63.103 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 55.79 Mbit/s
95th percentile per-packet one-way delay: 63.103 ms
Loss rate: 0.62%
```
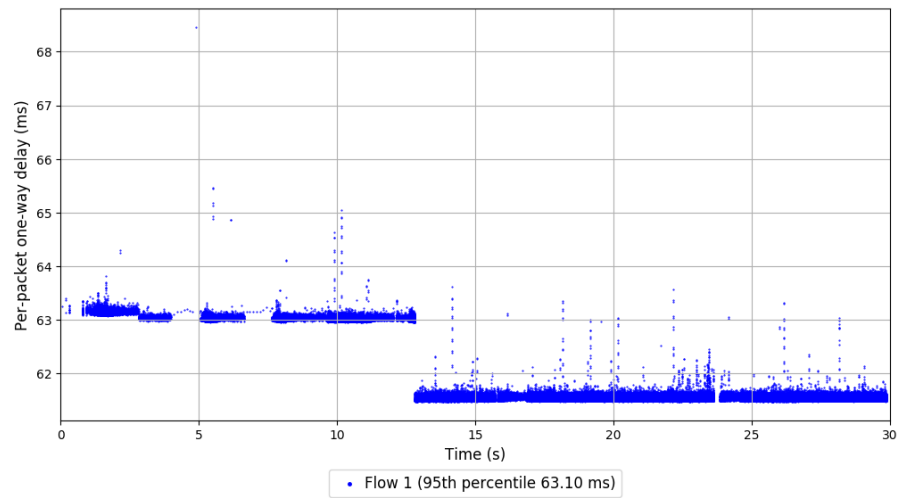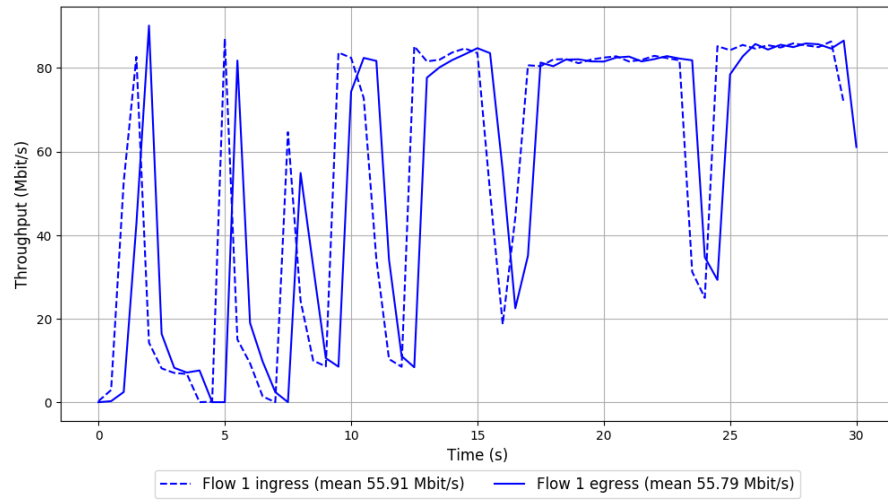
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 55.91 Mbit/s)   Flow 1 egress (mean 55.79 Mbit/s)

• Flow 1 (95th percentile 63.10 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-05-25 10:17:46
End at: 2018-05-25 10:18:16
Local clock offset: 0.014 ms
Remote clock offset: -0.048 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.65 Mbit/s
95th percentile per-packet one-way delay: 63.716 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 56.65 Mbit/s
95th percentile per-packet one-way delay: 63.716 ms
Loss rate: 0.64%
```
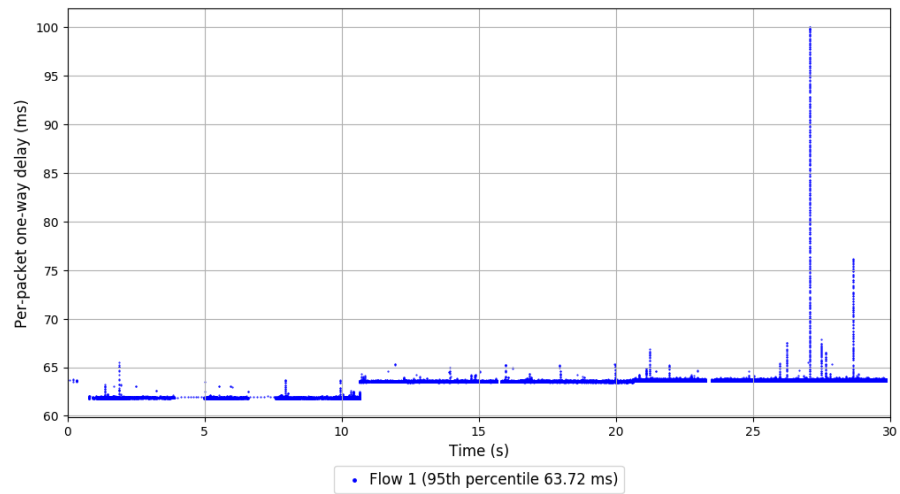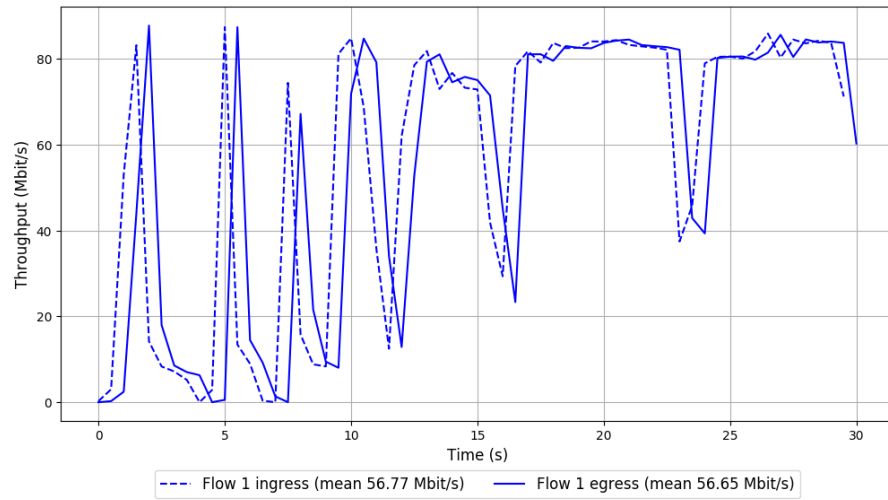
Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 56.77 Mbit/s)   Flow 1 egress (mean 56.65 Mbit/s)

Flow 1 (95th percentile 63.72 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-05-25 10:38:17
End at: 2018-05-25 10:38:47
Local clock offset: 0.01 ms
Remote clock offset: 0.186 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.52 Mbit/s
95th percentile per-packet one-way delay: 63.514 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 54.52 Mbit/s
95th percentile per-packet one-way delay: 63.514 ms
Loss rate: 0.66%
```
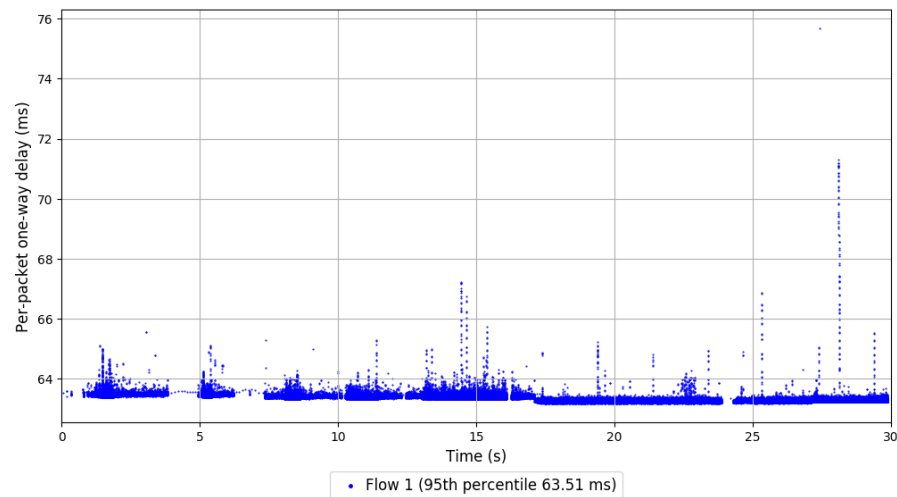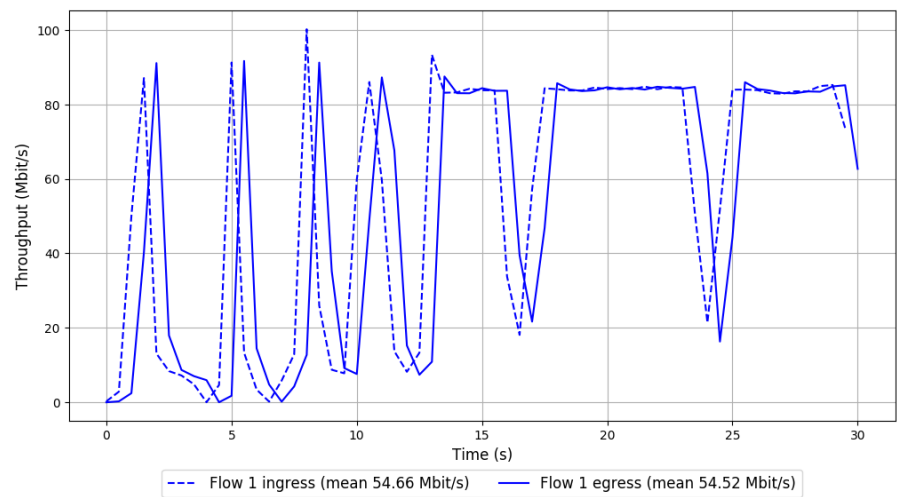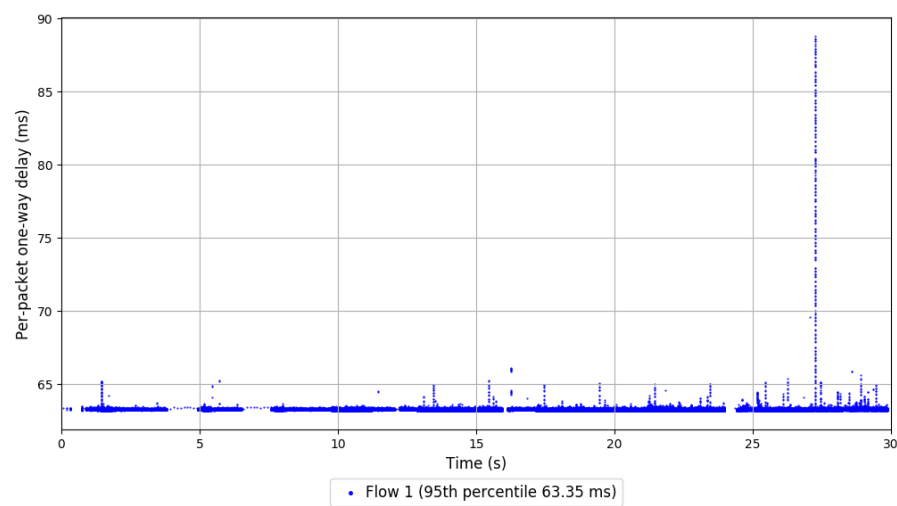
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 54.66 Mbit/s)   Flow 1 egress (mean 54.52 Mbit/s)

• Flow 1 (95th percentile 63.51 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-05-25 10:58:37
End at: 2018-05-25 10:59:07
Local clock offset: 0.023 ms
Remote clock offset: 0.119 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.69 Mbit/s
95th percentile per-packet one-way delay: 63.354 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 53.69 Mbit/s
95th percentile per-packet one-way delay: 63.354 ms
Loss rate: 0.65%
```
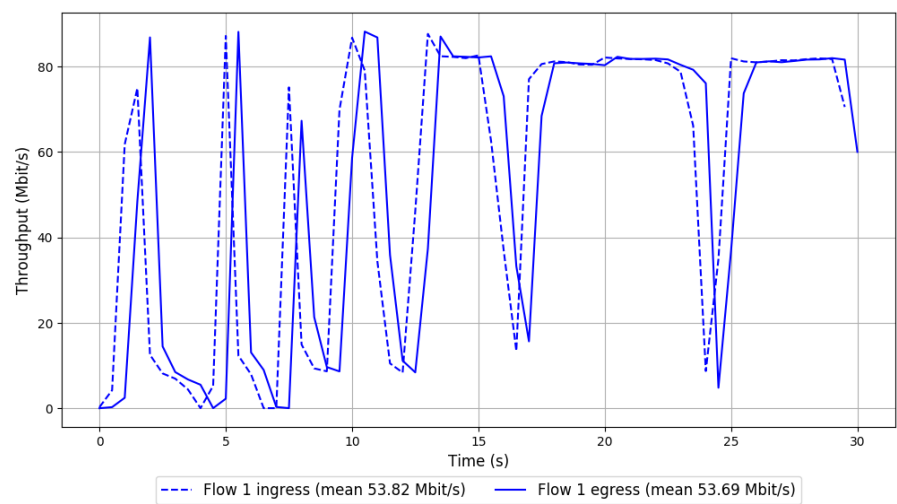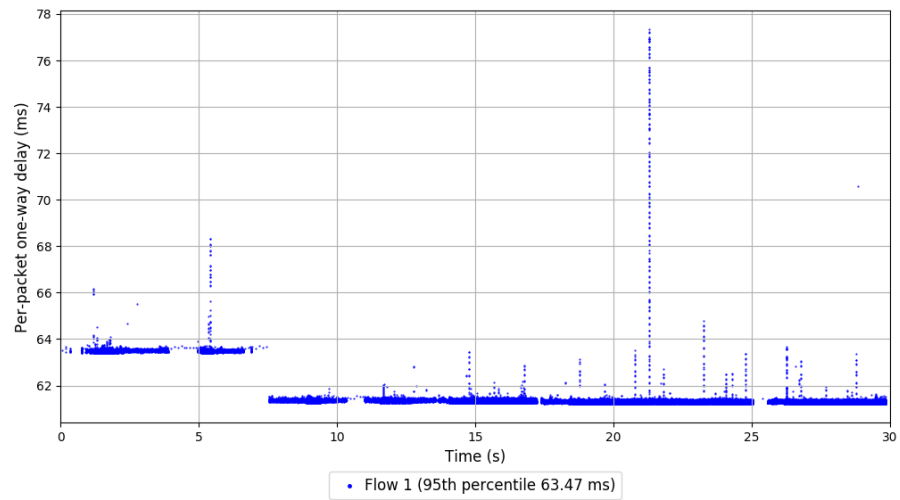
Run 6: Report of QUIC Cubic — Data Link

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-05-25 11:19:19
End at: 2018-05-25 11:19:49
Local clock offset: 0.057 ms
Remote clock offset: 0.136 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.85 Mbit/s
95th percentile per-packet one-way delay: 63.473 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 50.85 Mbit/s
95th percentile per-packet one-way delay: 63.473 ms
Loss rate: 0.67%
```
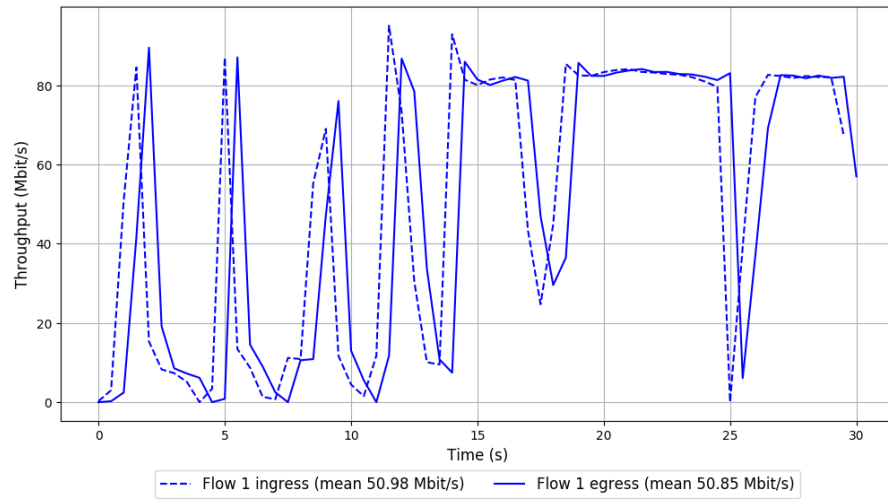
Run 7: Report of QUIC Cubic — Data Link

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-05-25 11:39:56
End at: 2018-05-25 11:40:26
Local clock offset: 0.031 ms
Remote clock offset: -0.272 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.86 Mbit/s
95th percentile per-packet one-way delay: 63.961 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 54.86 Mbit/s
95th percentile per-packet one-way delay: 63.961 ms
Loss rate: 0.63%
```
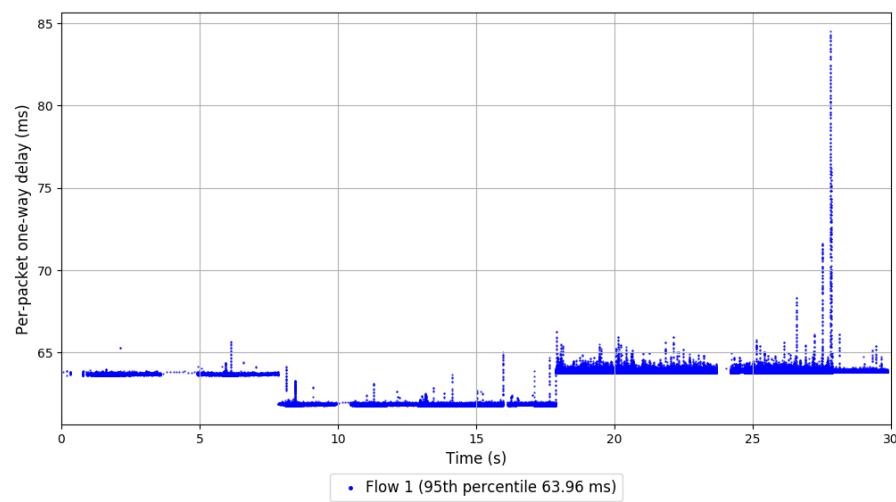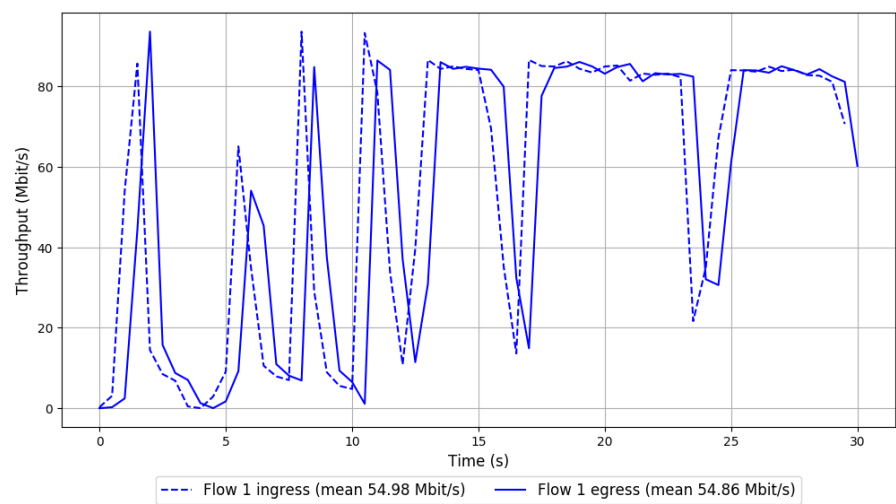
Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-05-25 12:00:27
End at: 2018-05-25 12:00:57
Local clock offset: -0.036 ms
Remote clock offset: 0.467 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.49 Mbit/s
95th percentile per-packet one-way delay: 63.279 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 49.49 Mbit/s
95th percentile per-packet one-way delay: 63.279 ms
Loss rate: 0.71%
```
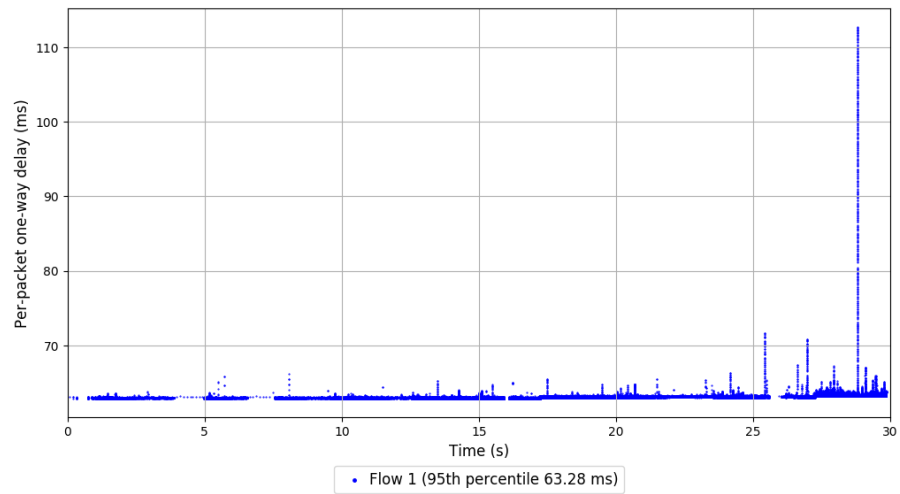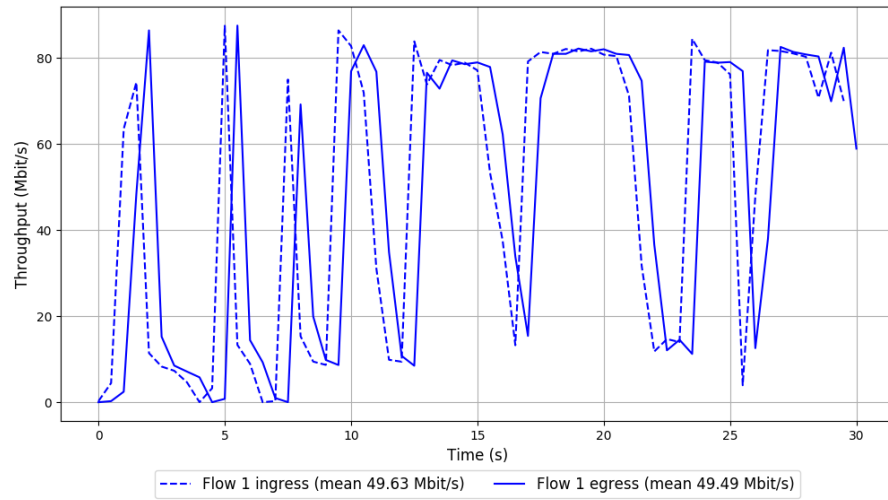
Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 49.63 Mbit/s)   Flow 1 egress (mean 49.49 Mbit/s)
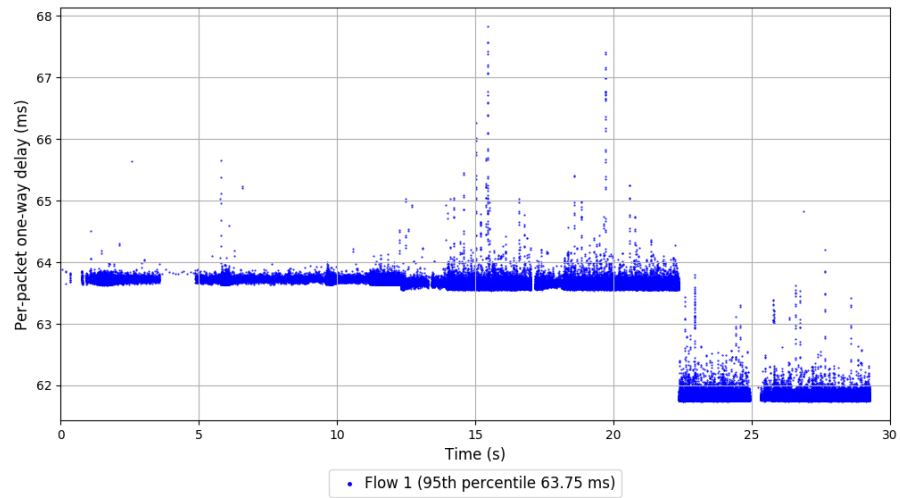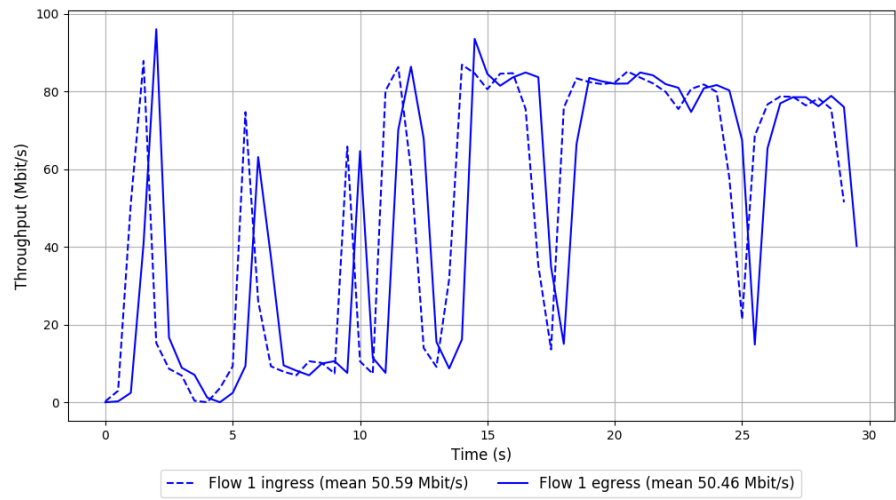

• Flow 1 (95th percentile 63.28 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-05-25 12:20:51
End at: 2018-05-25 12:21:21
Local clock offset: -0.072 ms
Remote clock offset: -0.189 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.46 Mbit/s
95th percentile per-packet one-way delay: 63.752 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 50.46 Mbit/s
95th percentile per-packet one-way delay: 63.752 ms
Loss rate: 0.68%
```

Run 10: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 50.59 Mbit/s) --- Flow 1 egress (mean 50.46 Mbit/s)
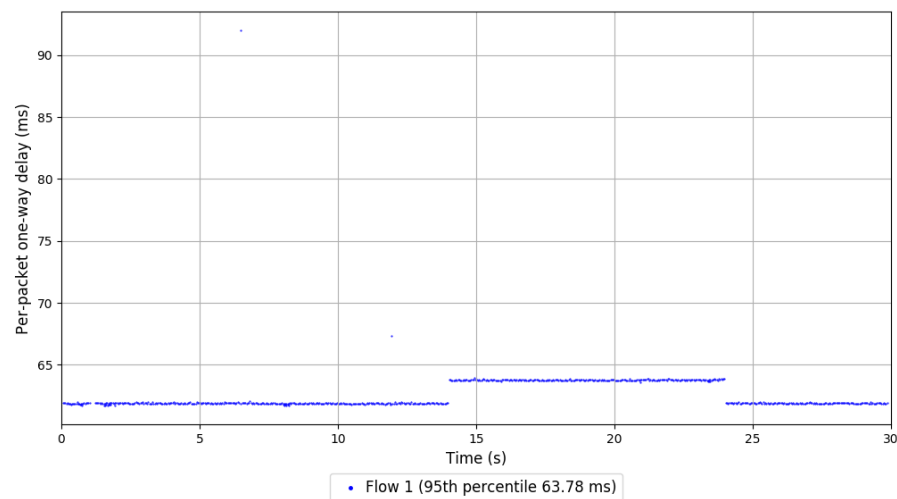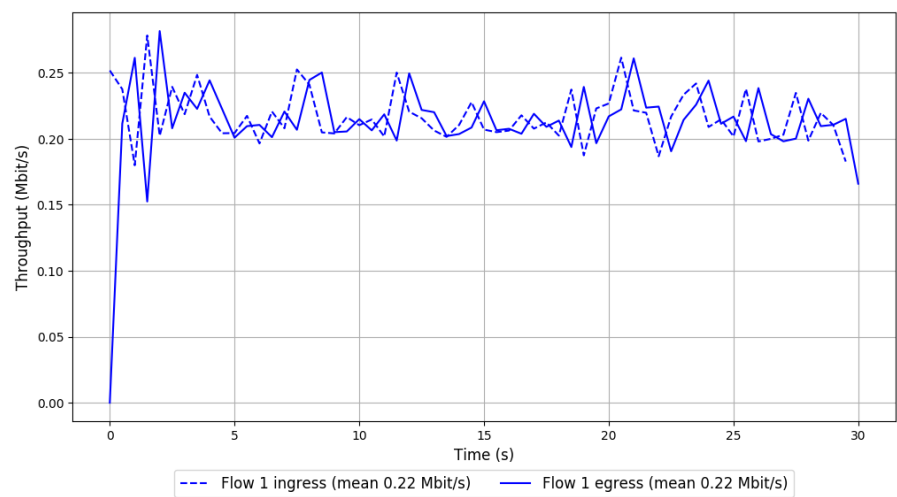

Flow 1 (95th percentile 63.75 ms)

```
Run 1: Statistics of SCReAM

Start at: 2018-05-25 09:26:23
End at: 2018-05-25 09:26:53
Local clock offset: -0.065 ms
Remote clock offset: -0.157 ms

# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.784 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.784 ms
Loss rate: 0.38%
```

Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-05-25 09:46:54
End at: 2018-05-25 09:47:24
Local clock offset: -0.075 ms
Remote clock offset: 0.193 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.385 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.385 ms
Loss rate: 0.38%
```
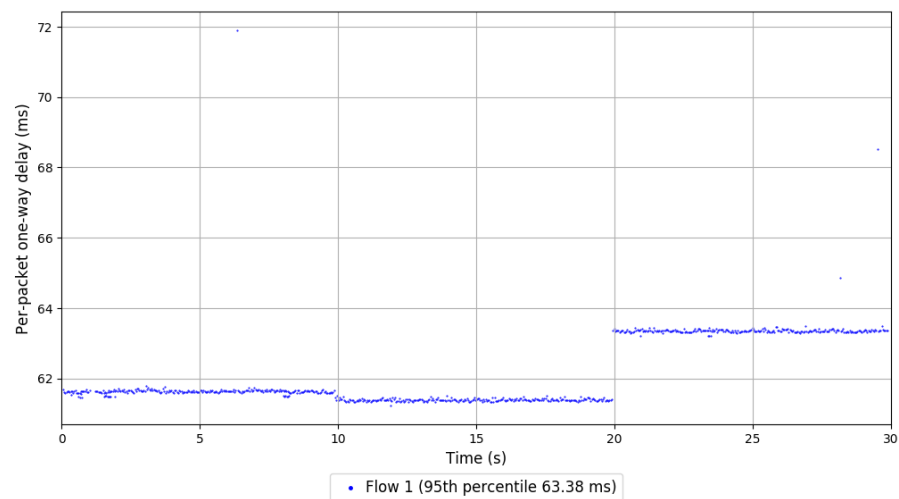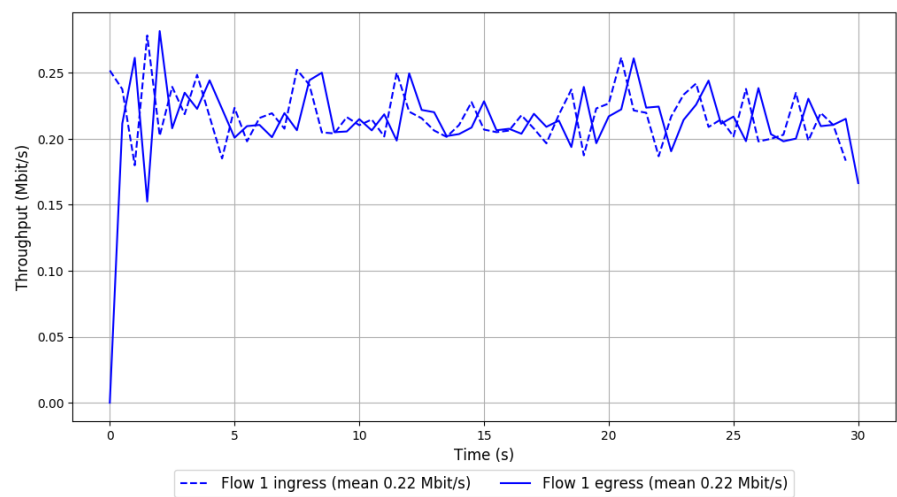
Run 2: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 63.38 ms)

```
Run 3: Statistics of SCReAM

Start at: 2018-05-25 10:07:21
End at: 2018-05-25 10:07:51
Local clock offset: -0.001 ms
Remote clock offset: 0.089 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.669 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.669 ms
Loss rate: 0.38%
```
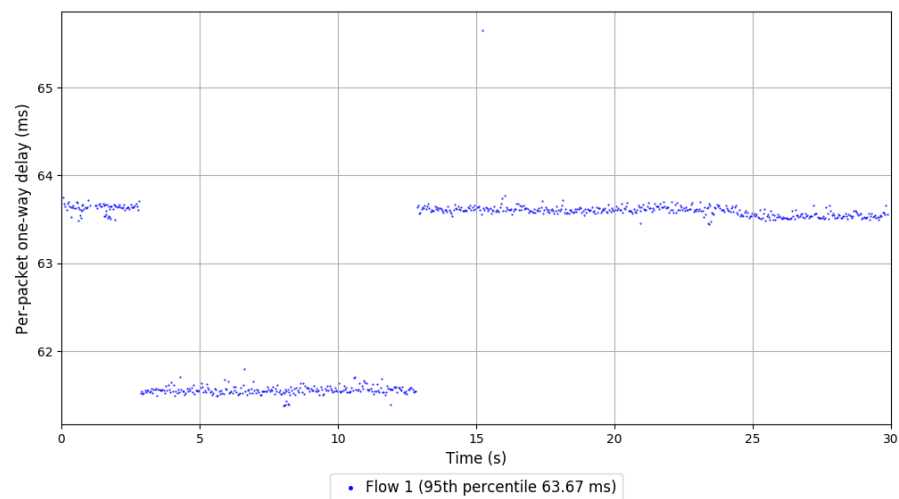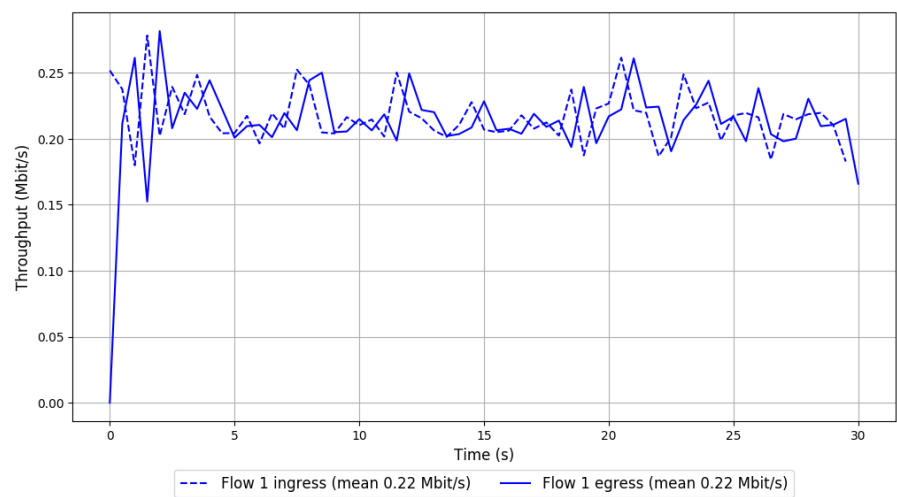
Run 3: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 63.67 ms)

```
Run 4: Statistics of SCReAM

Start at: 2018-05-25 10:27:55
End at: 2018-05-25 10:28:25
Local clock offset: -0.004 ms
Remote clock offset: 0.156 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.654 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.654 ms
Loss rate: 0.38%
```
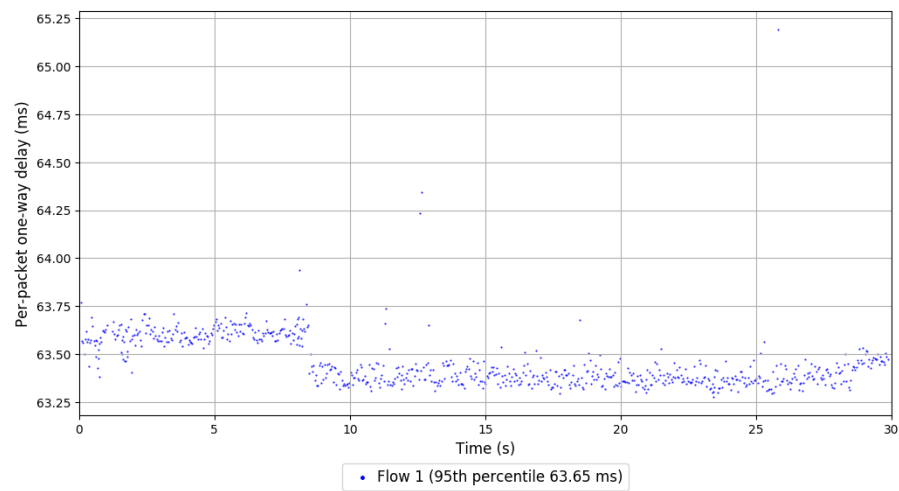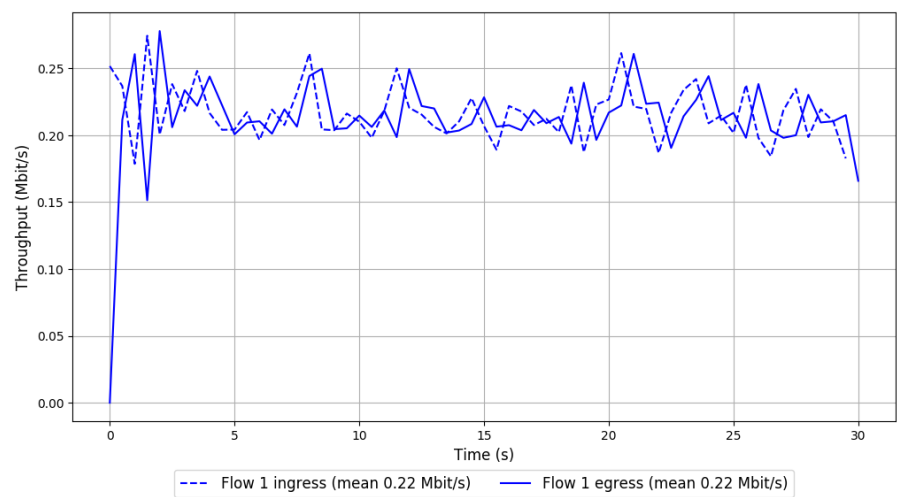
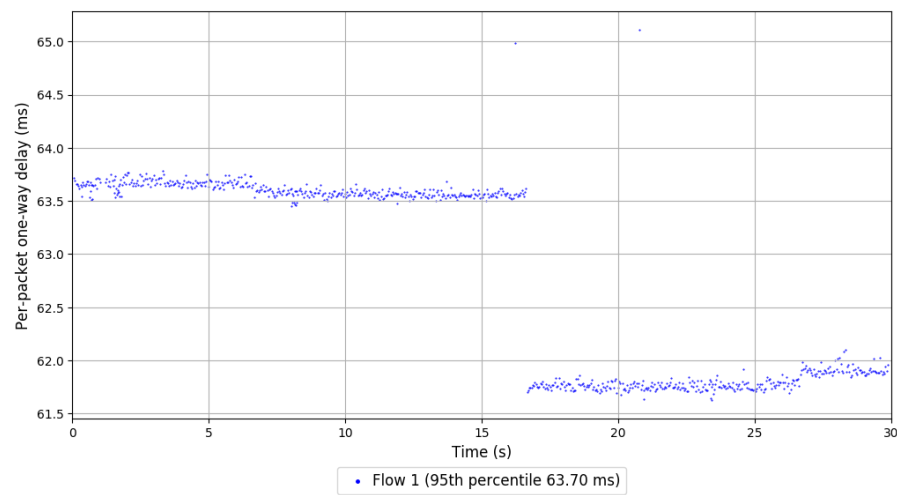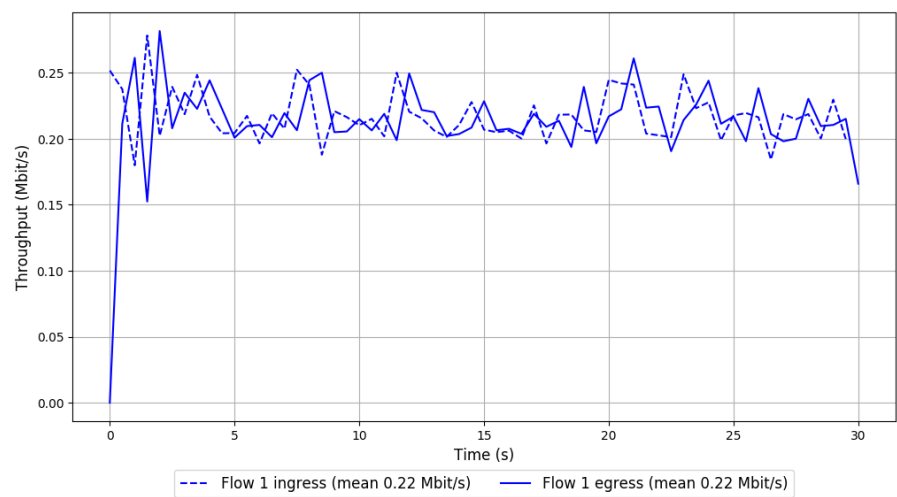# Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-05-25 10:48:27
End at: 2018-05-25 10:48:57
Local clock offset: 0.008 ms
Remote clock offset: -0.093 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.699 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.699 ms
Loss rate: 0.51%
```

Run 5: Report of SCReAM — Data Link

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

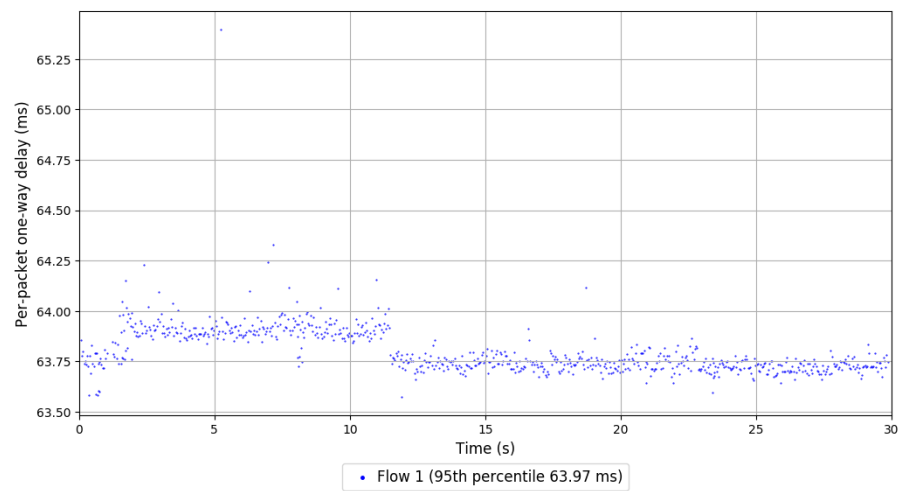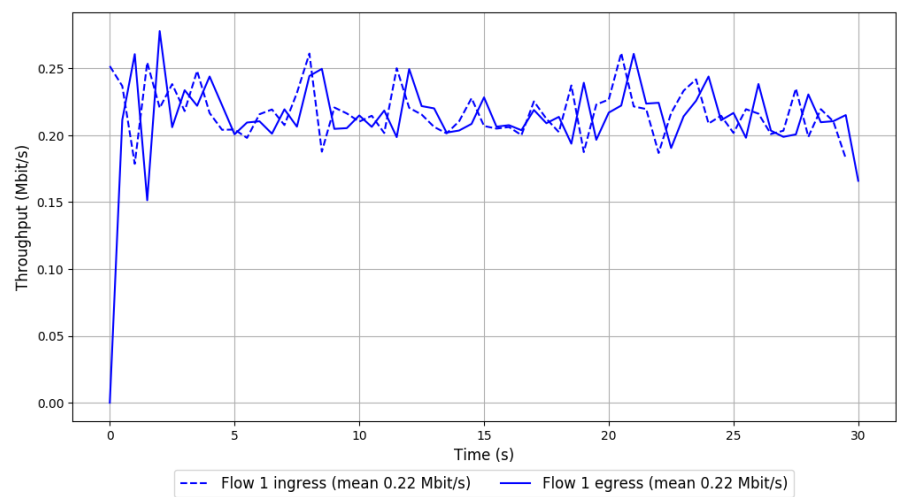Flow 1 (95th percentile 63.70 ms)

```
Run 6: Statistics of SCReAM

Start at: 2018-05-25 11:08:45
End at: 2018-05-25 11:09:15
Local clock offset: 0.028 ms
Remote clock offset: -0.156 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.966 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.966 ms
Loss rate: 0.38%
```

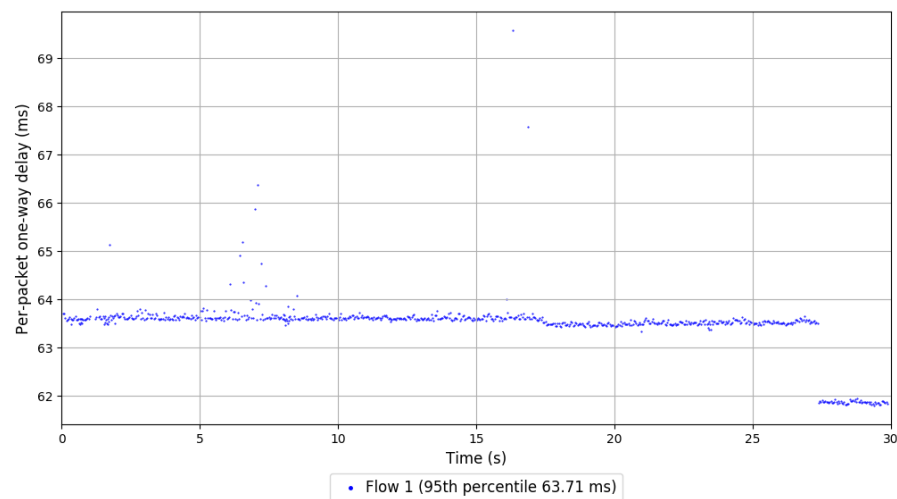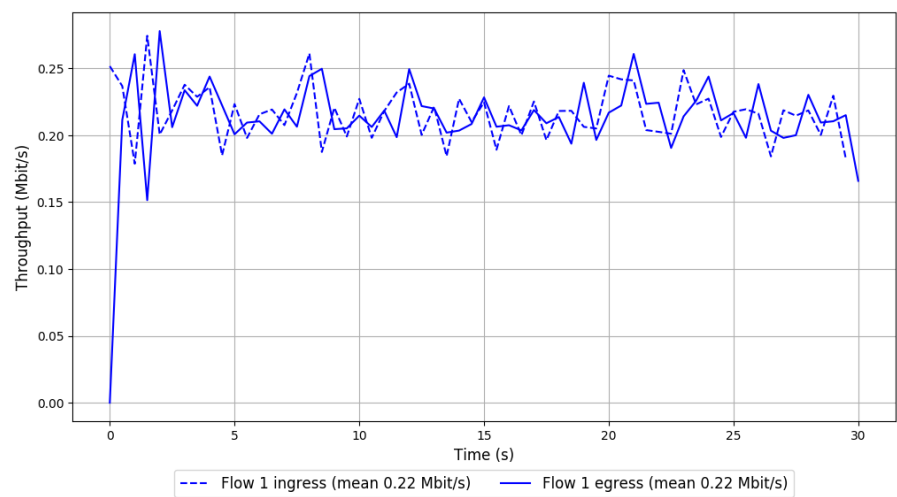# Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2018-05-25 11:29:36
End at: 2018-05-25 11:30:07
Local clock offset: 0.006 ms
Remote clock offset: -0.039 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.709 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.709 ms
Loss rate: 0.38%
```

Run 7: Report of SCReAM — Data Link

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

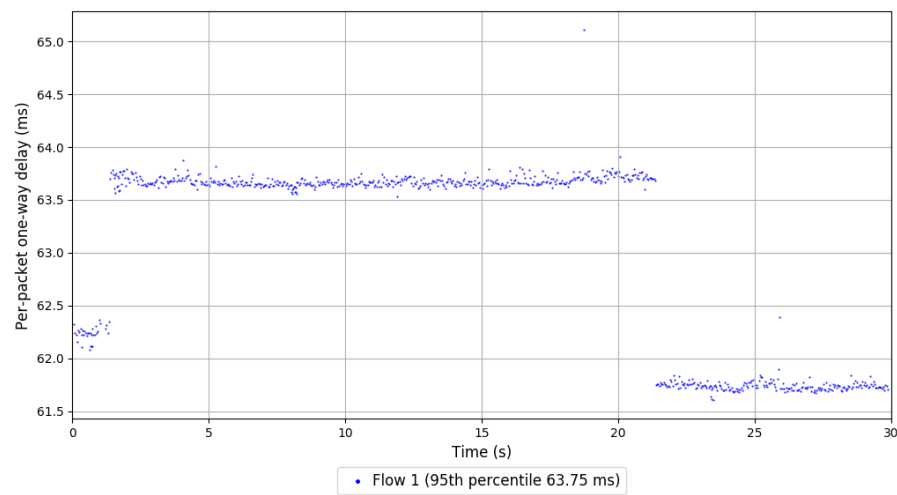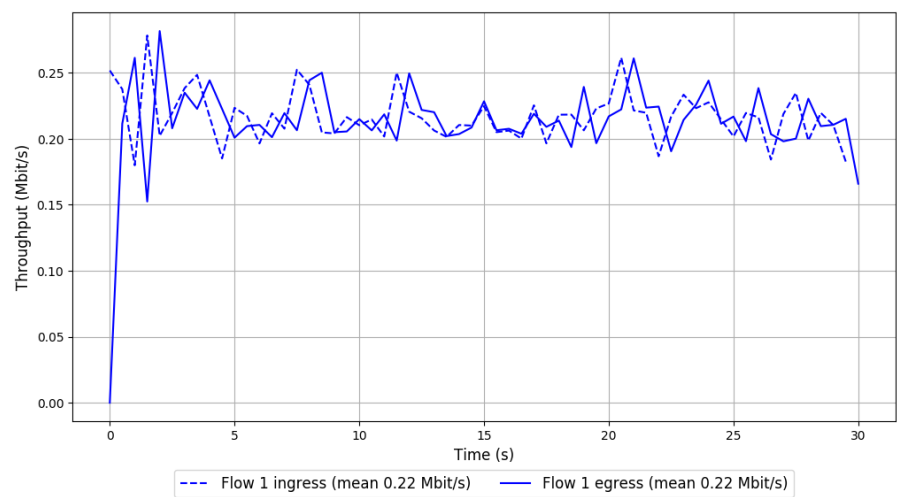• Flow 1 (95th percentile 63.71 ms)

```
Run 8: Statistics of SCReAM

Start at: 2018-05-25 11:50:03
End at: 2018-05-25 11:50:33
Local clock offset: 0.007 ms
Remote clock offset: -0.034 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.753 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.753 ms
Loss rate: 0.38%
```

Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2018-05-25 12:10:36
End at: 2018-05-25 12:11:06
Local clock offset: -0.041 ms
Remote clock offset: 0.02 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.632 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.632 ms
Loss rate: 0.38%
```
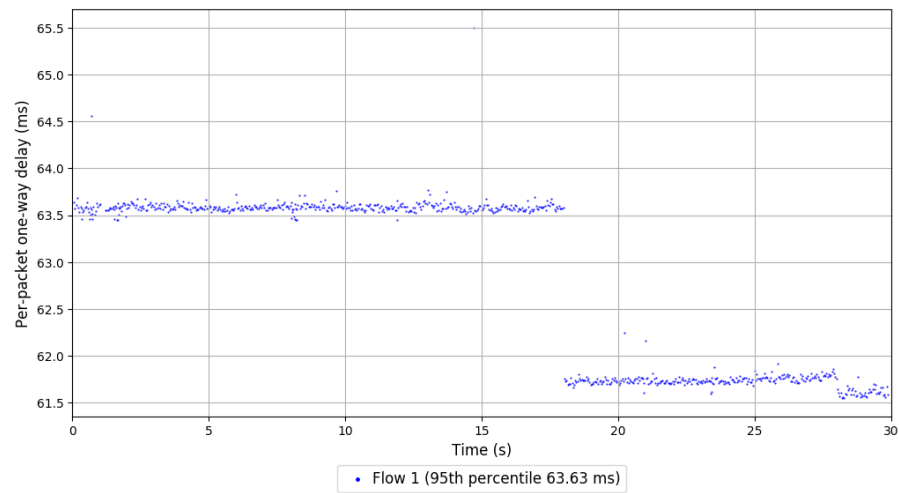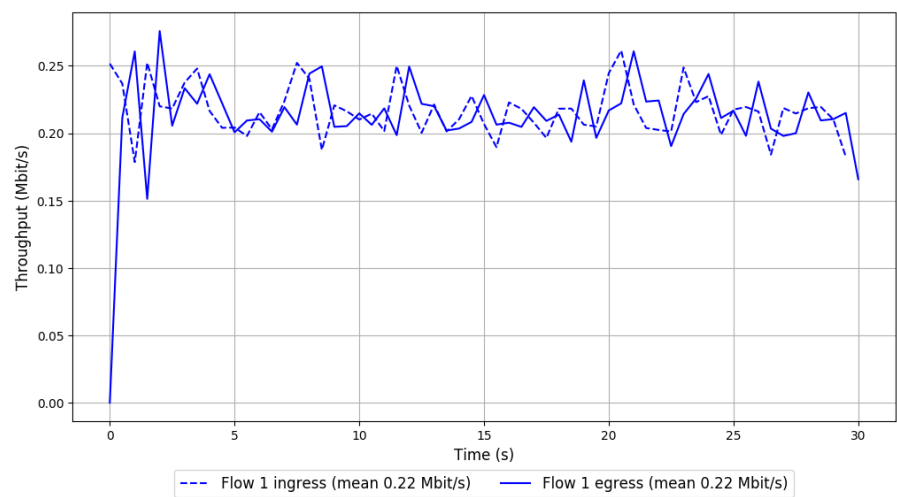
Run 9: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 63.63 ms)

```
Run 10: Statistics of SCReAM

Start at: 2018-05-25 12:31:00
End at: 2018-05-25 12:31:30
Local clock offset: -0.093 ms
Remote clock offset: 0.074 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.683 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.683 ms
Loss rate: 0.51%
```
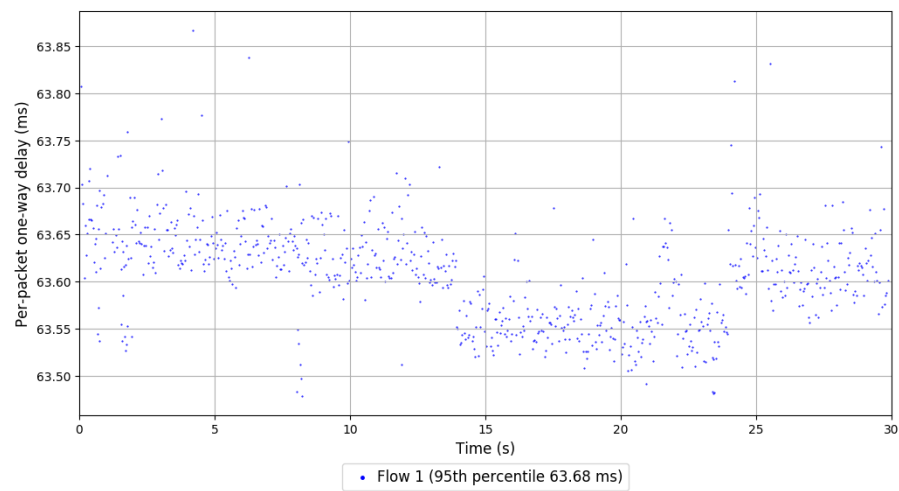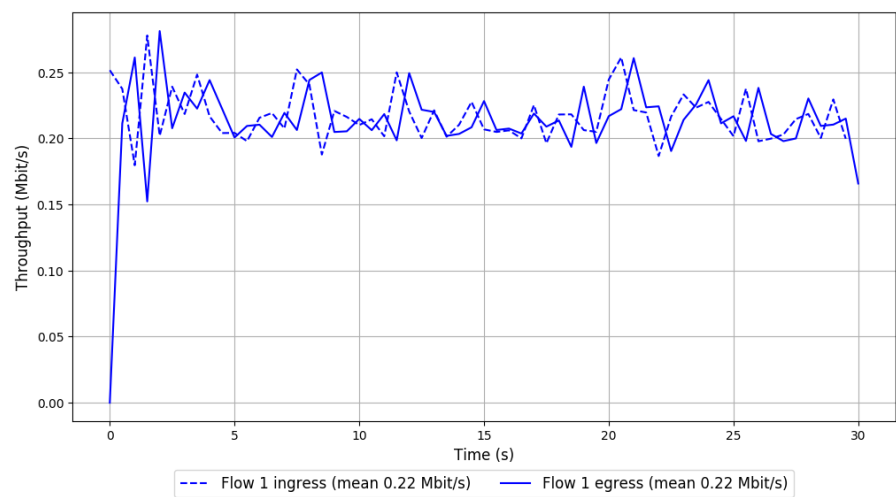
Run 10: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 63.68 ms)

```
Run 1: Statistics of Sprout

Start at: 2018-05-25 09:21:25
End at: 2018-05-25 09:21:55
Local clock offset: -0.07 ms
Remote clock offset: 0.102 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 64.029 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 64.029 ms
Loss rate: 0.00%
```
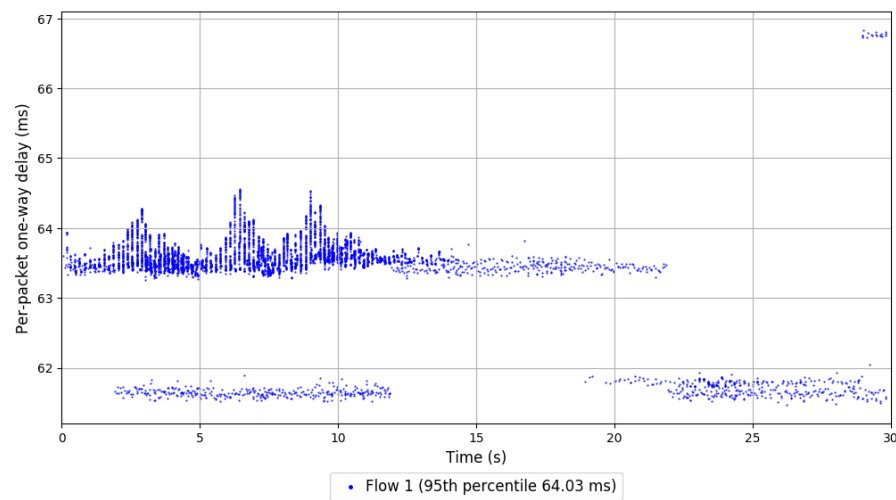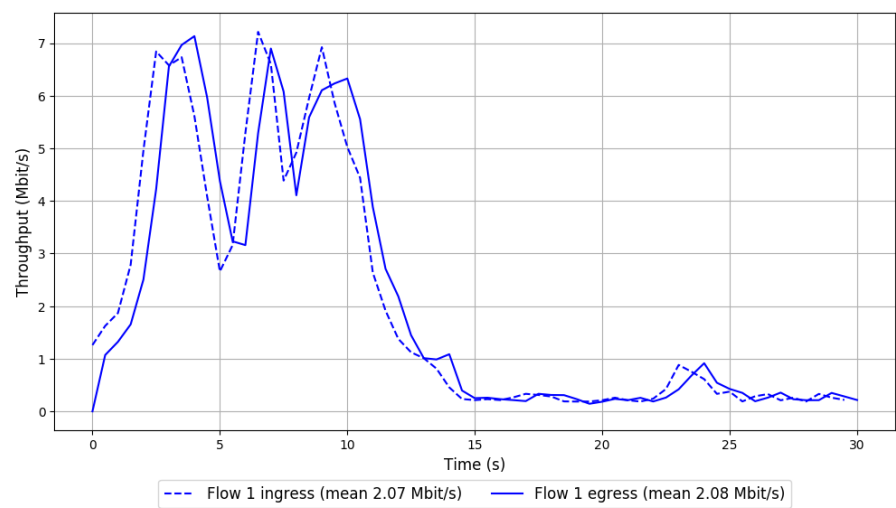
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-05-25 09:41:54
End at: 2018-05-25 09:42:24
Local clock offset: -0.034 ms
Remote clock offset: 0.05 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 63.880 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 63.880 ms
Loss rate: 0.11%
```
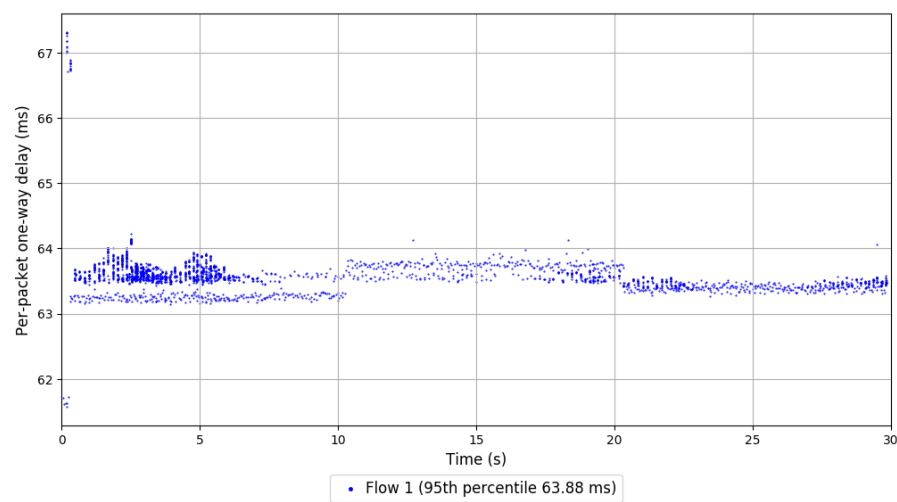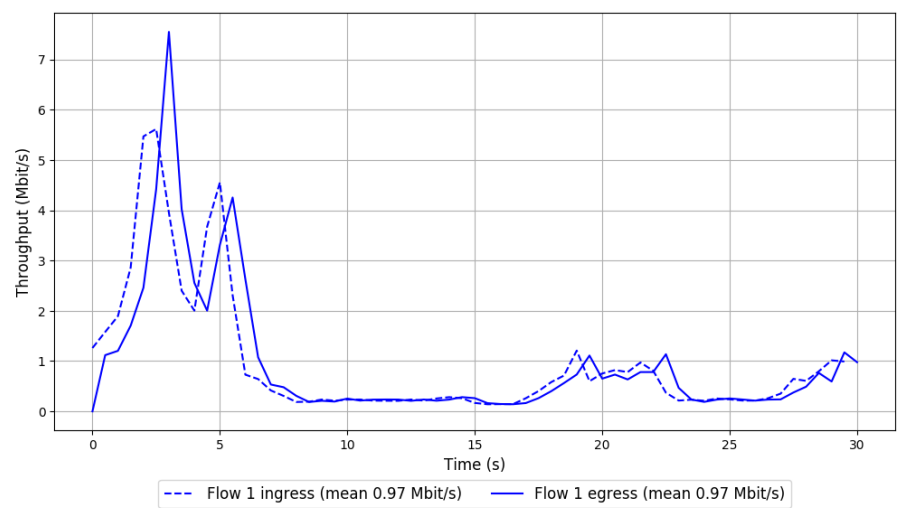
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-05-25 10:02:24
End at: 2018-05-25 10:02:54
Local clock offset: 0.014 ms
Remote clock offset: 0.142 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 63.640 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 63.640 ms
Loss rate: 0.01%
```
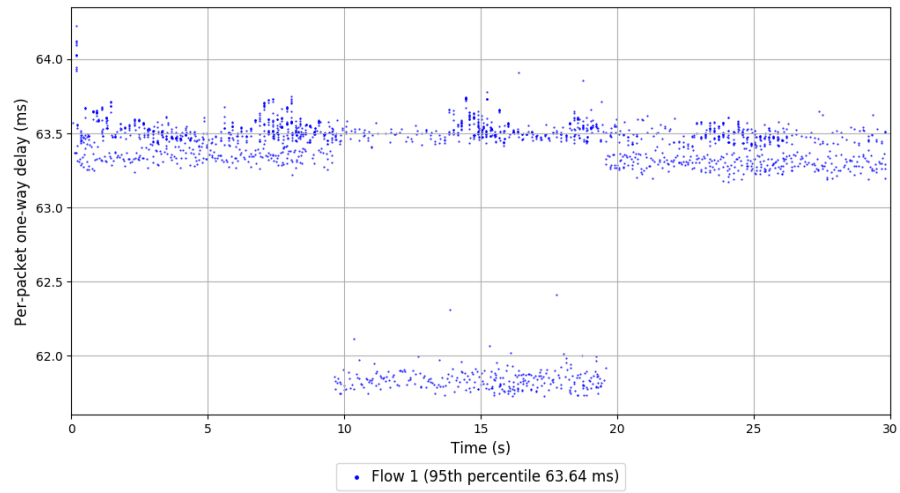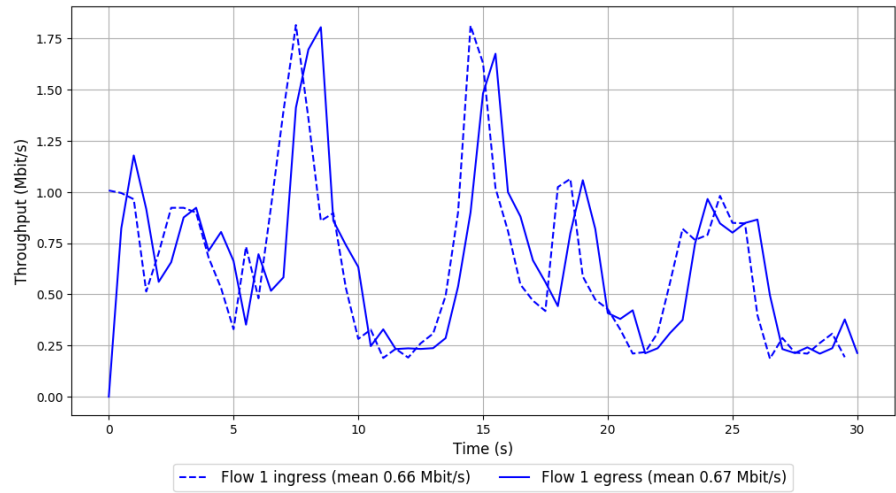
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-05-25 10:23:01
End at: 2018-05-25 10:23:31
Local clock offset: -0.001 ms
Remote clock offset: 0.034 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 63.714 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 63.714 ms
Loss rate: 0.74%
```
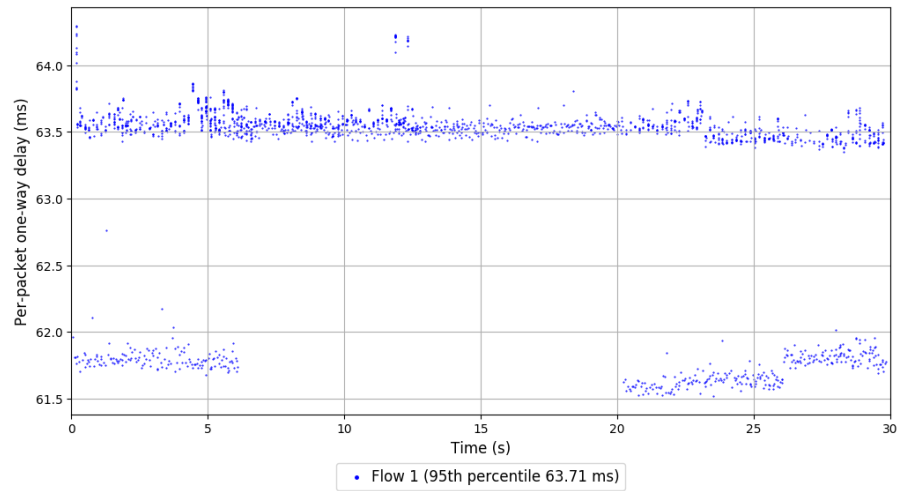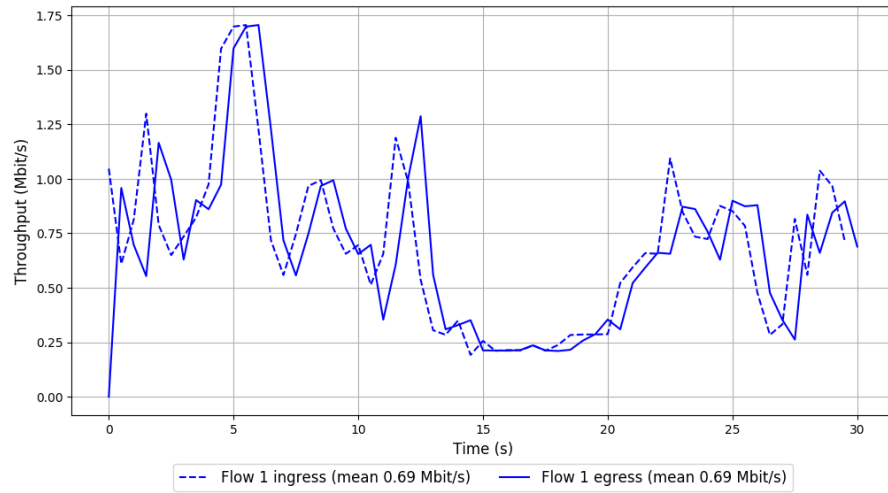
Run 4: Report of Sprout — Data Link
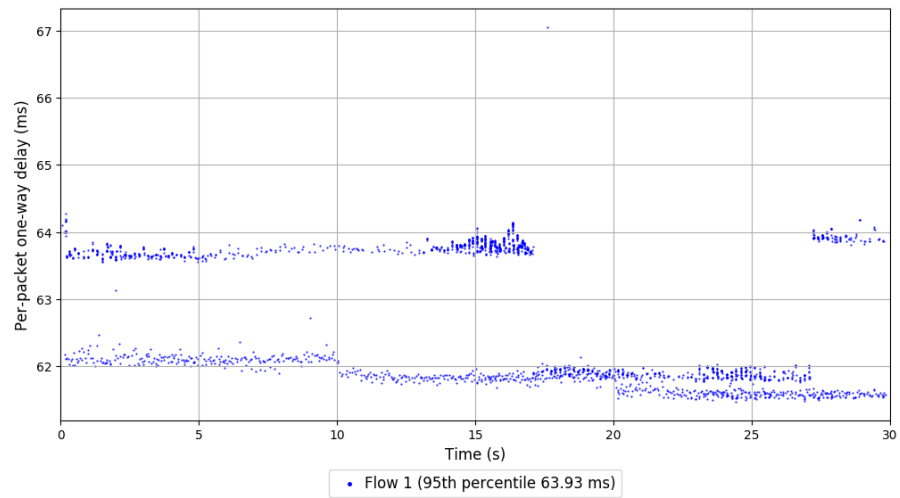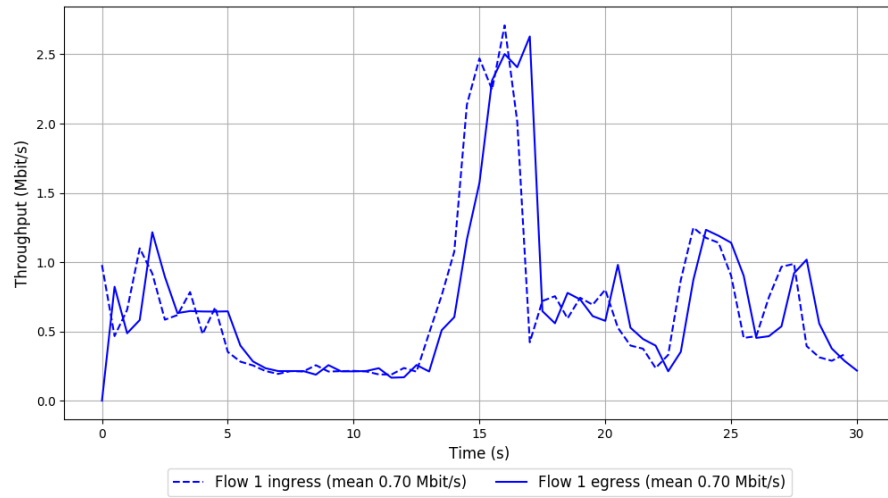

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```
Run 5: Statistics of Sprout

Start at: 2018-05-25 10:43:27
End at: 2018-05-25 10:43:57
Local clock offset: 0.038 ms
Remote clock offset: -0.132 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 63.929 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 63.929 ms
Loss rate: 0.29%
```

Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-05-25 11:03:51
End at: 2018-05-25 11:04:21
Local clock offset: 0.013 ms
Remote clock offset: -0.1 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 63.891 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 63.891 ms
Loss rate: 0.61%
```
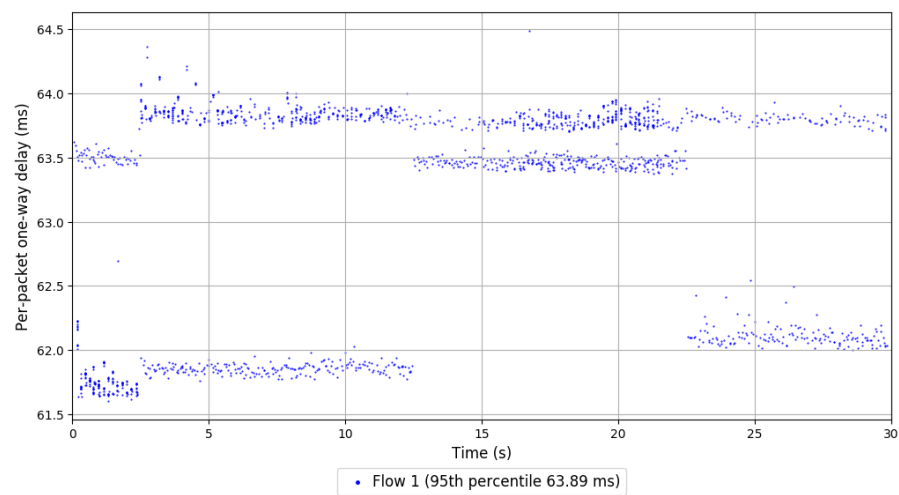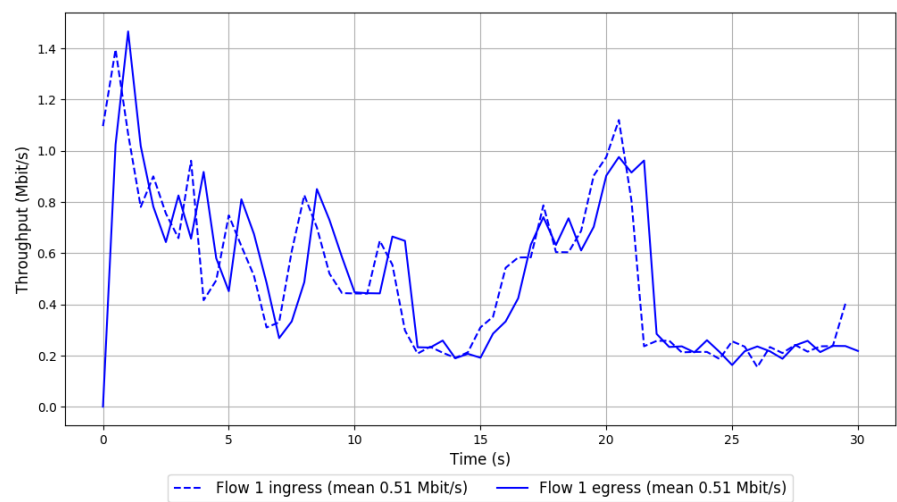
Run 6: Report of Sprout — Data Link

Flow 1 ingress (mean 0.51 Mbit/s)　　Flow 1 egress (mean 0.51 Mbit/s)

Flow 1 (95th percentile 63.89 ms)

```
Run 7: Statistics of Sprout

Start at: 2018-05-25 11:24:37
End at: 2018-05-25 11:25:07
Local clock offset: 0.082 ms
Remote clock offset: 0.026 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 63.919 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 63.919 ms
Loss rate: 0.05%
```
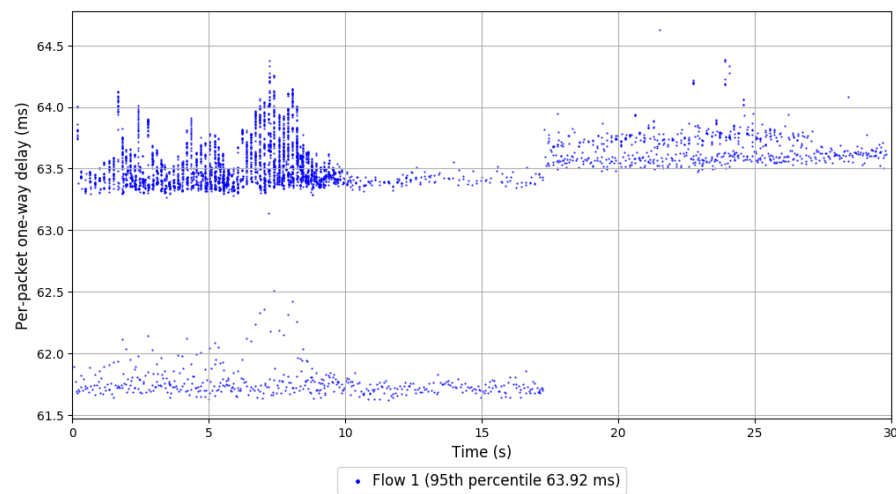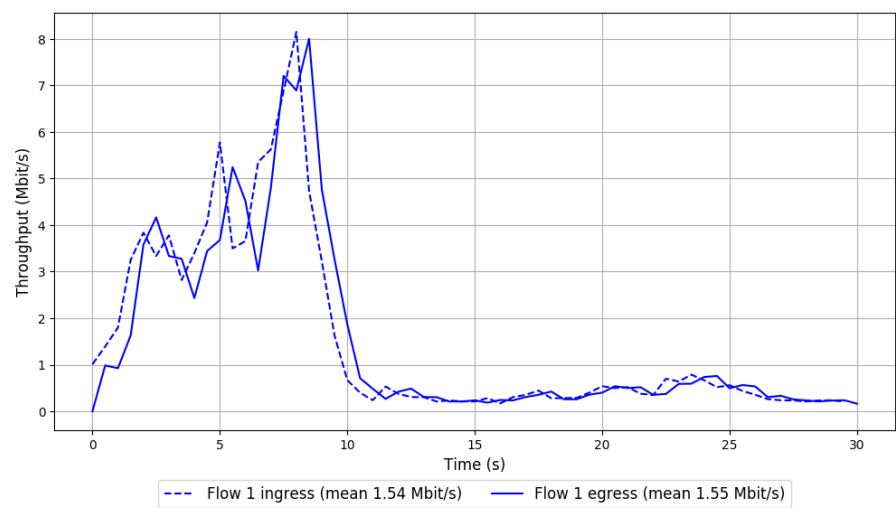
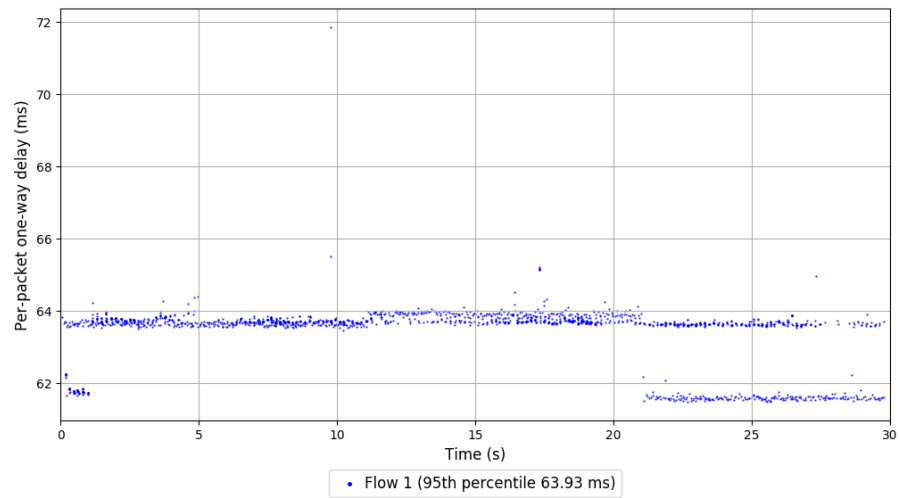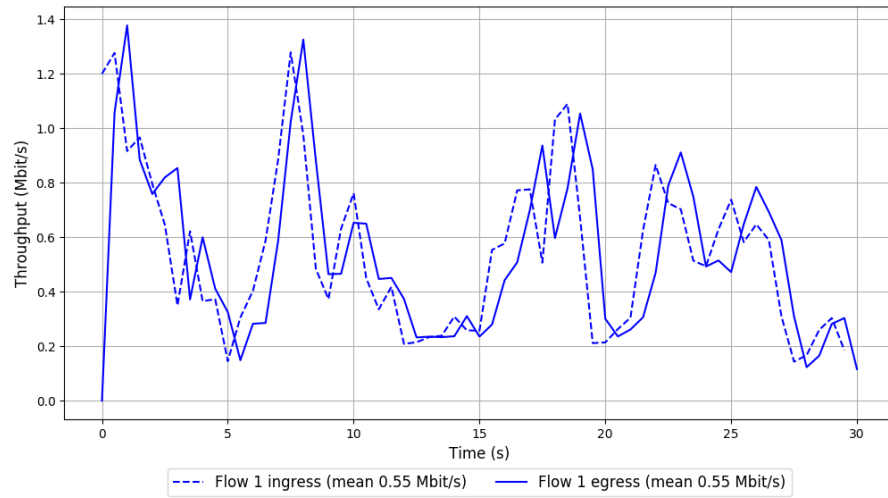## Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2018-05-25 11:45:03
End at: 2018-05-25 11:45:33
Local clock offset: -0.045 ms
Remote clock offset: -0.051 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 63.933 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 63.933 ms
Loss rate: 0.22%
```

Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-05-25 12:05:39
End at: 2018-05-25 12:06:09
Local clock offset: -0.021 ms
Remote clock offset: 0.054 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 63.901 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 63.901 ms
Loss rate: 0.34%
```
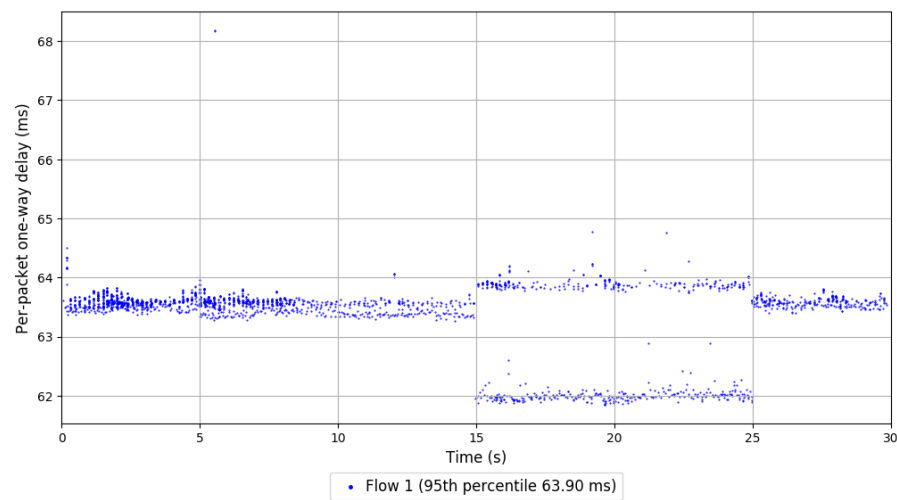
Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-05-25 12:26:00
End at: 2018-05-25 12:26:30
Local clock offset: -0.1 ms
Remote clock offset: -0.133 ms


# Below is generated by plot.py at 2018-05-25 14:09:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 63.716 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 63.716 ms
Loss rate: 0.31%
```
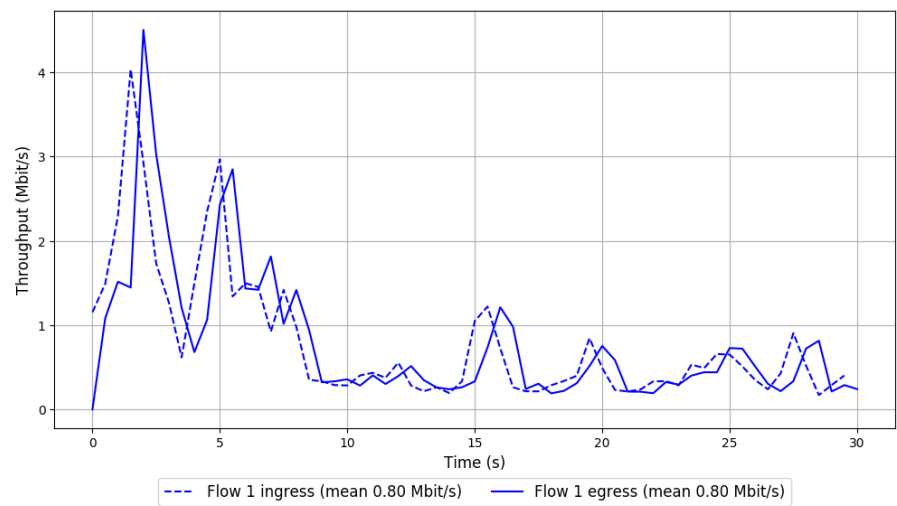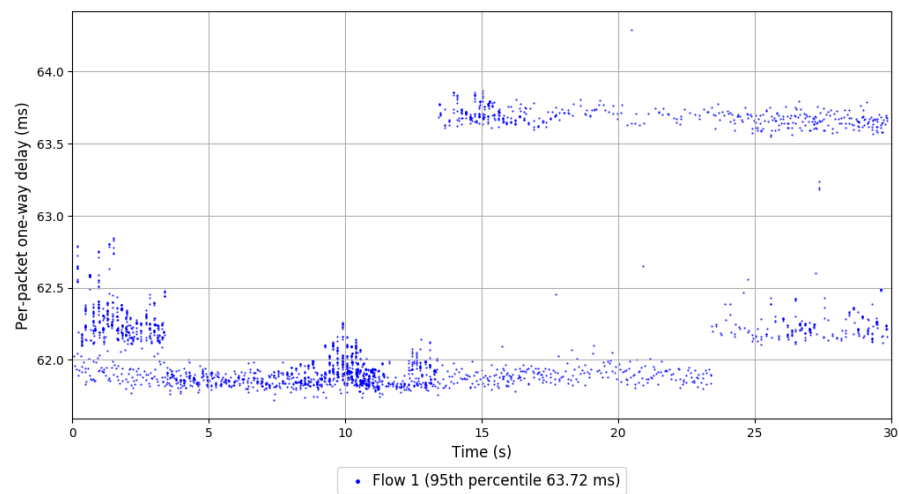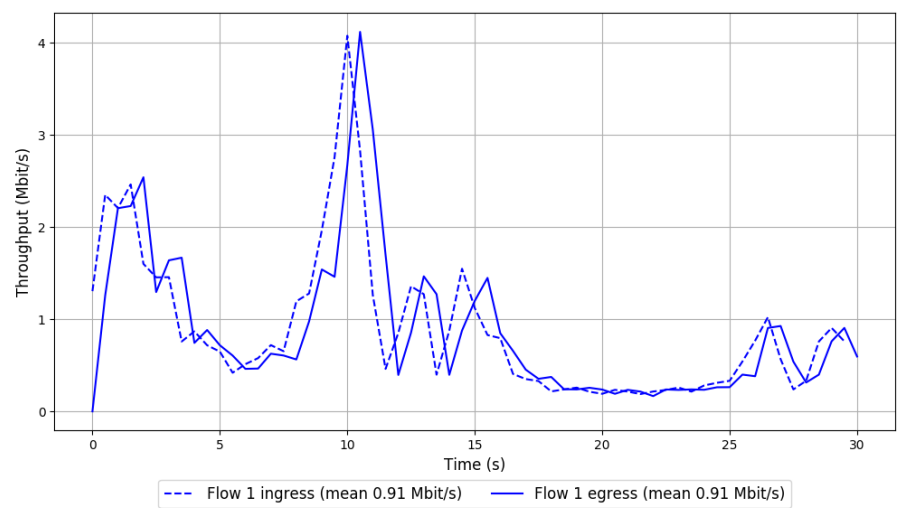
Run 10: Report of Sprout — Data Link

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

Start at: 2018-05-25 09:31:07
End at: 2018-05-25 09:31:37
Local clock offset: -0.039 ms
Remote clock offset: 0.057 ms


# Below is generated by plot.py at 2018-05-25 14:13:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 205.50 Mbit/s
95th percentile per-packet one-way delay: 63.601 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 205.50 Mbit/s
95th percentile per-packet one-way delay: 63.601 ms
Loss rate: 0.14%
```
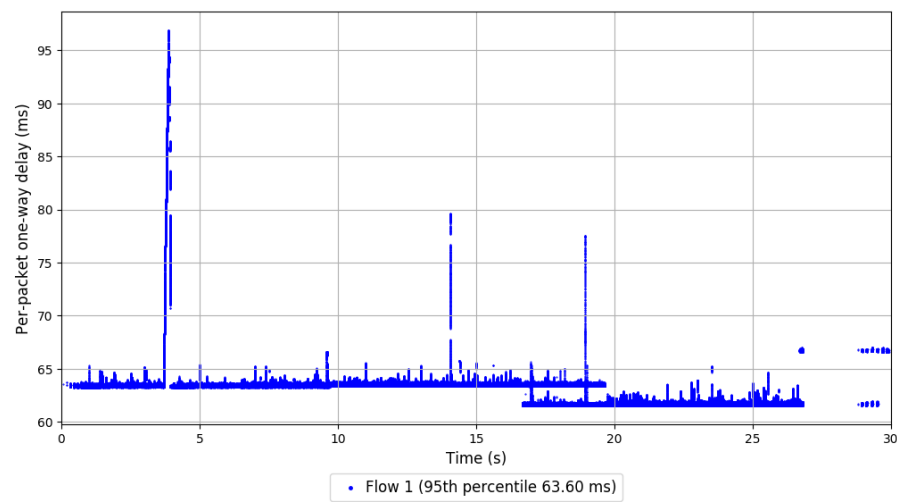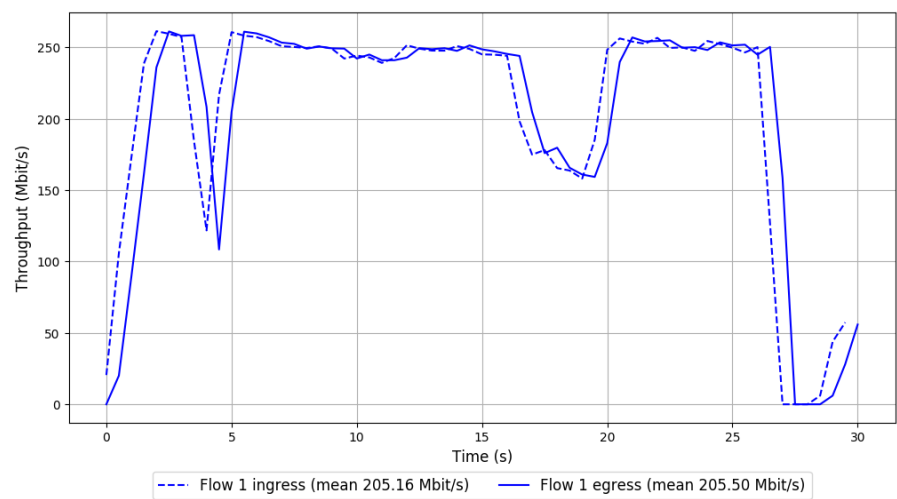
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2018-05-25 09:51:41
End at: 2018-05-25 09:52:11
Local clock offset: 0.01 ms
Remote clock offset: 0.157 ms
```
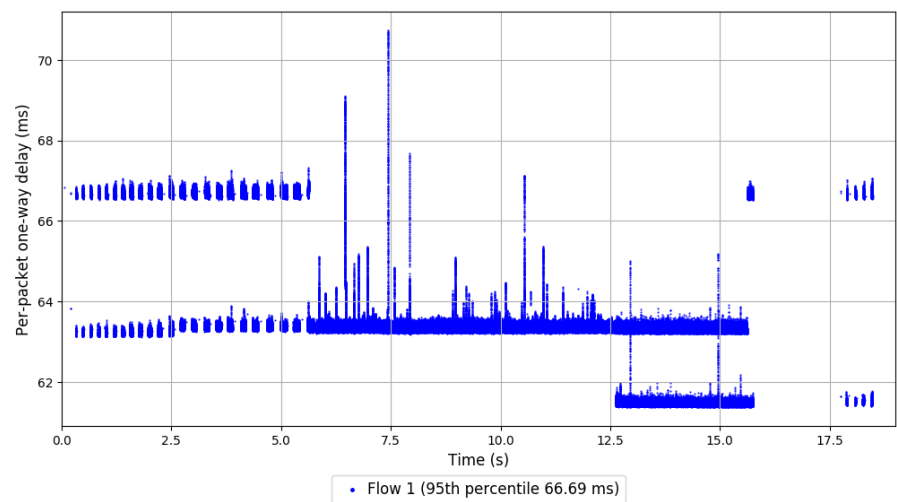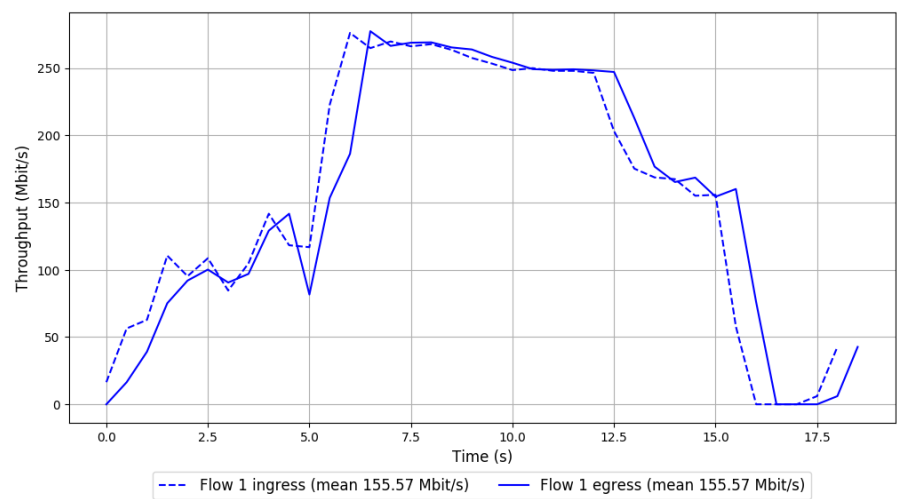
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 155.57 Mbit/s) — Flow 1 egress (mean 155.57 Mbit/s)

- Flow 1 (95th percentile 66.69 ms)

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

Start at: 2018-05-25 10:12:12
End at: 2018-05-25 10:12:42
Local clock offset: -0.009 ms
Remote clock offset: 0.096 ms


# Below is generated by plot.py at 2018-05-25 14:13:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 179.62 Mbit/s
95th percentile per-packet one-way delay: 63.688 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 179.62 Mbit/s
95th percentile per-packet one-way delay: 63.688 ms
Loss rate: 0.21%
```
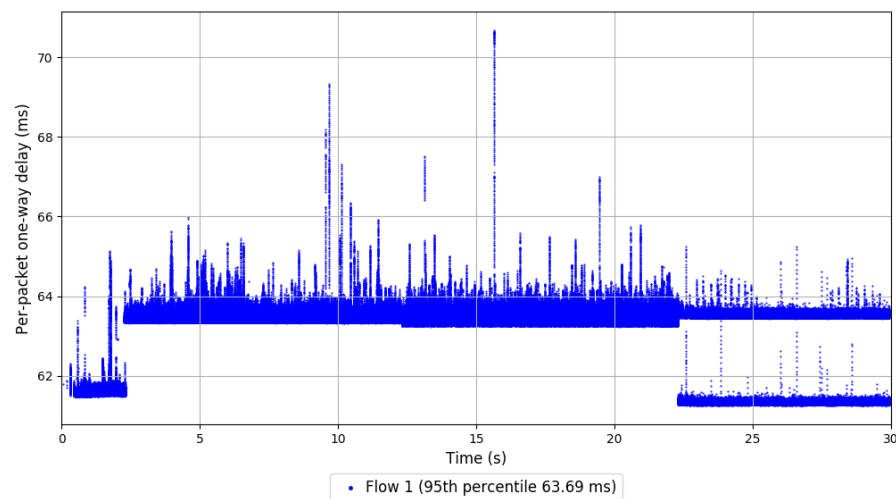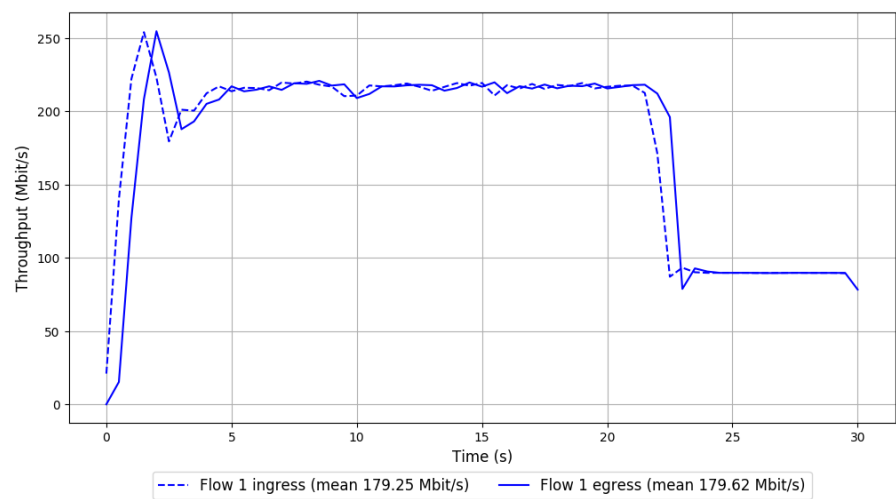
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 179.25 Mbit/s) — — —   Flow 1 egress (mean 179.62 Mbit/s) ———

Flow 1 (95th percentile 63.69 ms)

229

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

Start at: 2018-05-25 10:32:46
End at: 2018-05-25 10:33:16
Local clock offset: 0.049 ms
Remote clock offset: 0.168 ms


# Below is generated by plot.py at 2018-05-25 14:13:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 118.19 Mbit/s
95th percentile per-packet one-way delay: 63.385 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 118.19 Mbit/s
95th percentile per-packet one-way delay: 63.385 ms
Loss rate: 0.30%
```
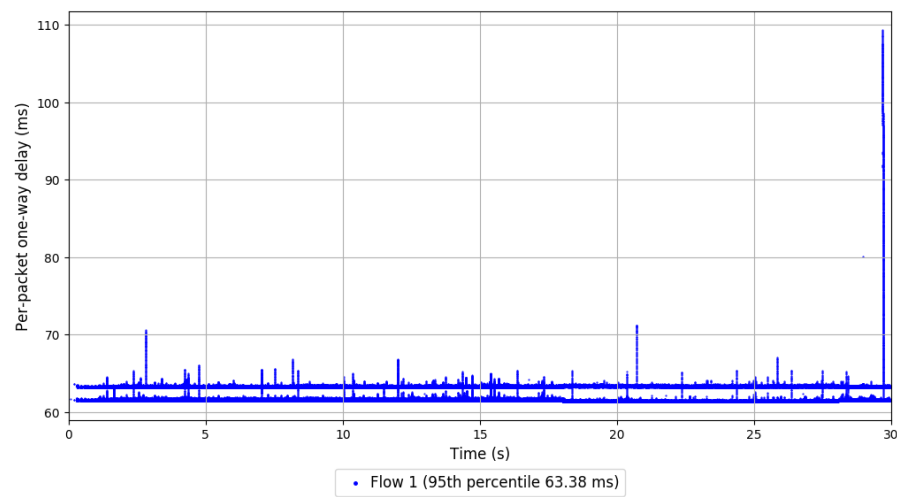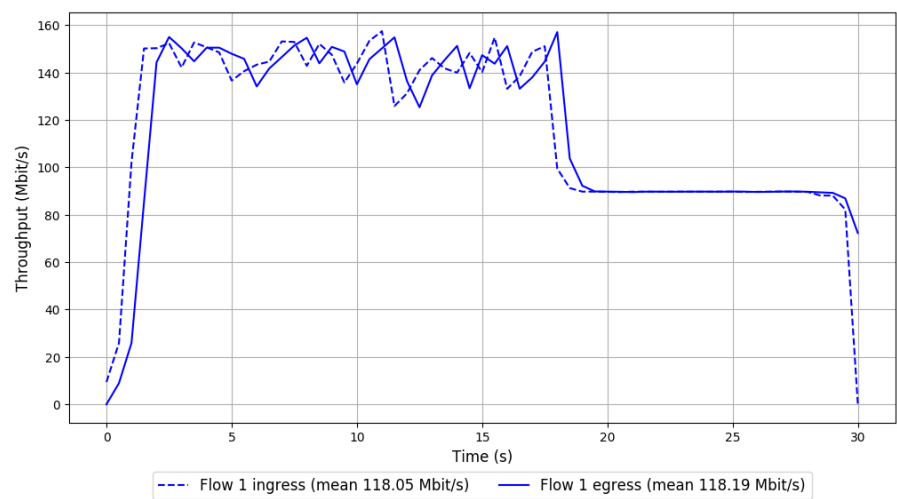
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 118.05 Mbit/s) — Flow 1 egress (mean 118.19 Mbit/s)

Flow 1 (95th percentile 63.38 ms)

231

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

Start at: 2018-05-25 10:53:12
End at: 2018-05-25 10:53:42
Local clock offset: 0.027 ms
Remote clock offset: 0.208 ms


# Below is generated by plot.py at 2018-05-25 14:13:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 98.72 Mbit/s
95th percentile per-packet one-way delay: 63.535 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 98.72 Mbit/s
95th percentile per-packet one-way delay: 63.535 ms
Loss rate: 0.38%
```
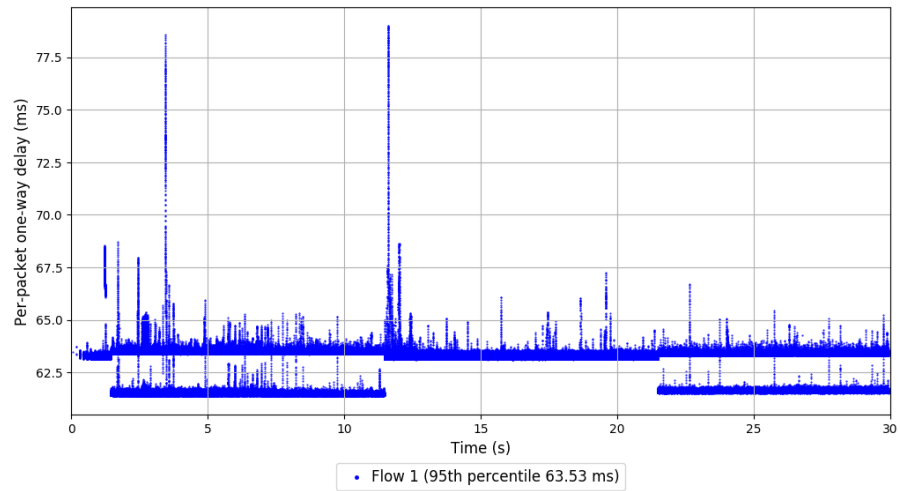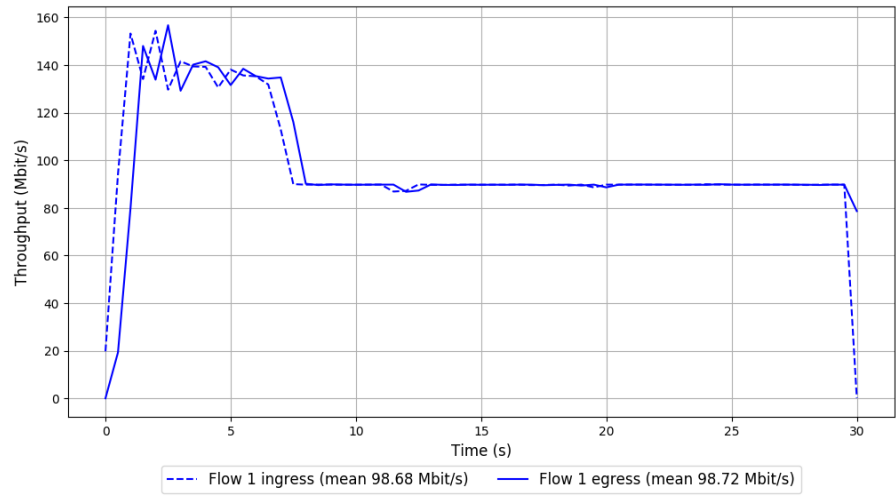
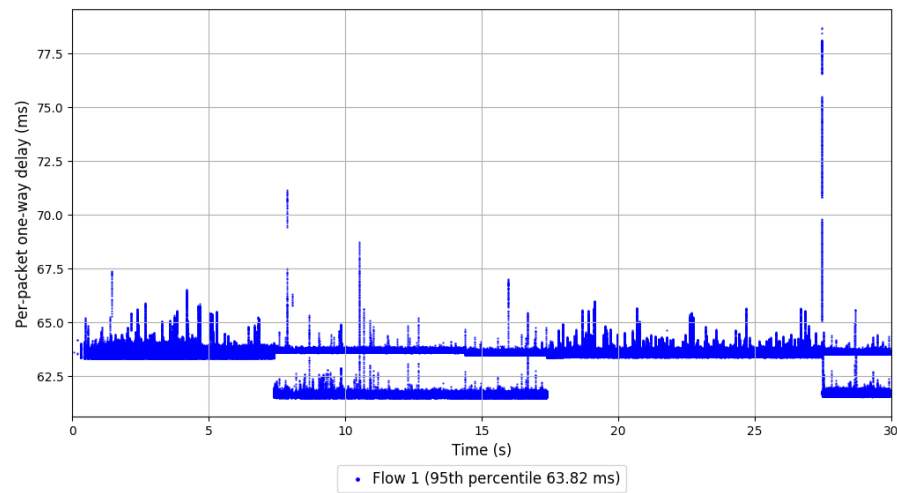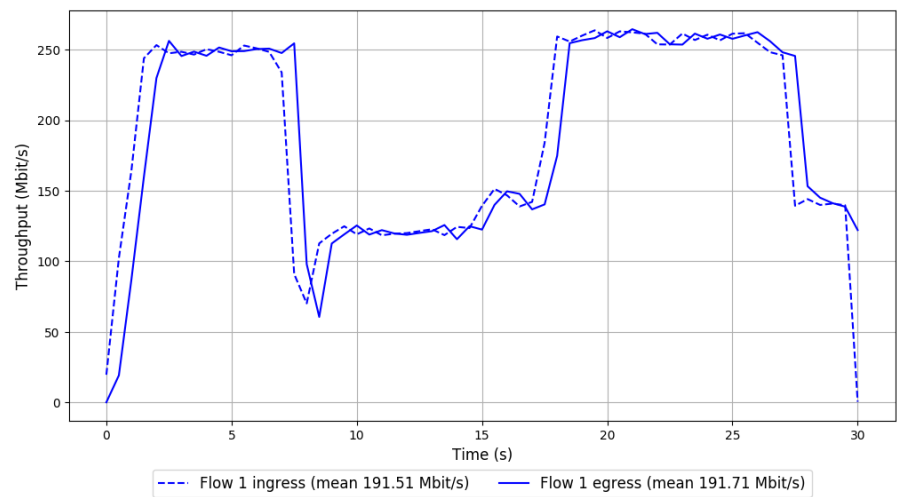# Run 5: Report of TaoVA-100x — Data Link

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

Start at: 2018-05-25 11:13:39
End at: 2018-05-25 11:14:10
Local clock offset: 0.017 ms
Remote clock offset: -0.095 ms


# Below is generated by plot.py at 2018-05-25 14:16:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.71 Mbit/s
95th percentile per-packet one-way delay: 63.822 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 191.71 Mbit/s
95th percentile per-packet one-way delay: 63.822 ms
Loss rate: 0.31%
```

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

```
Run 7: Statistics of TaoVA-100x

Start at: 2018-05-25 11:34:34
End at: 2018-05-25 11:35:04
Local clock offset: 0.012 ms
Remote clock offset: 0.289 ms


# Below is generated by plot.py at 2018-05-25 14:16:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 133.19 Mbit/s
95th percentile per-packet one-way delay: 63.499 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 133.19 Mbit/s
95th percentile per-packet one-way delay: 63.499 ms
Loss rate: 0.28%
```
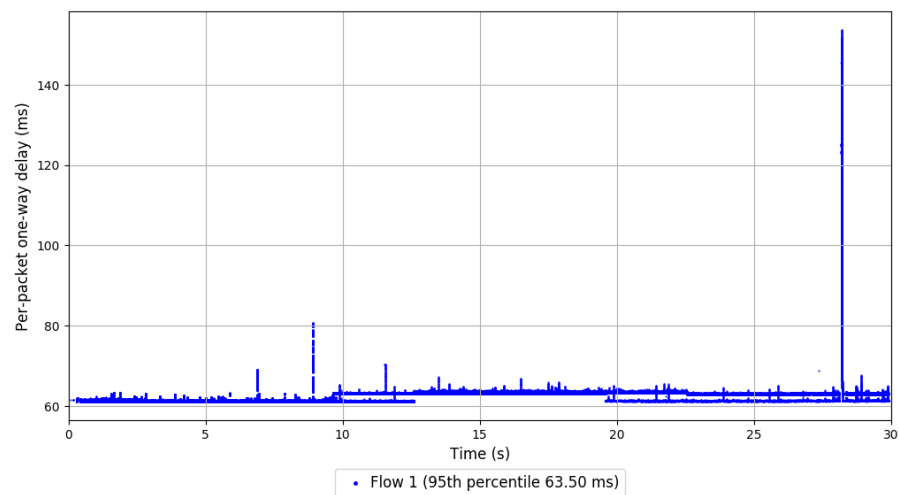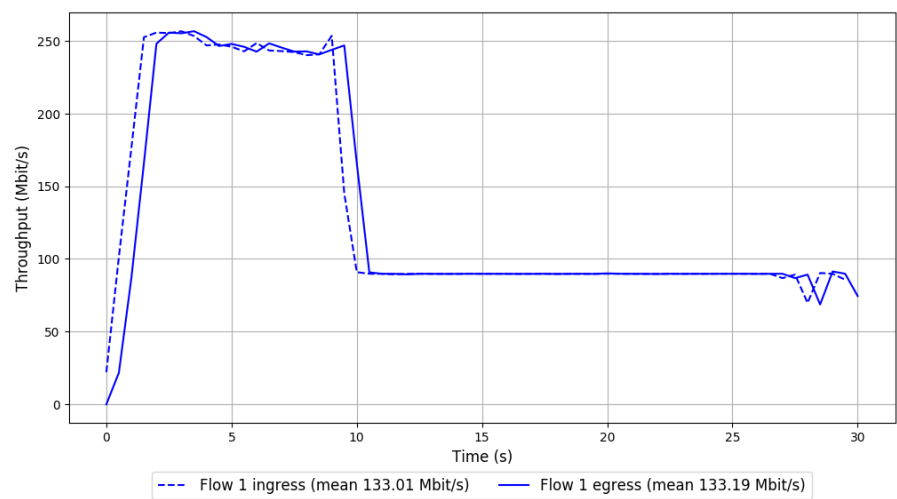
Run 7: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 133.01 Mbit/s) --- Flow 1 egress (mean 133.19 Mbit/s)
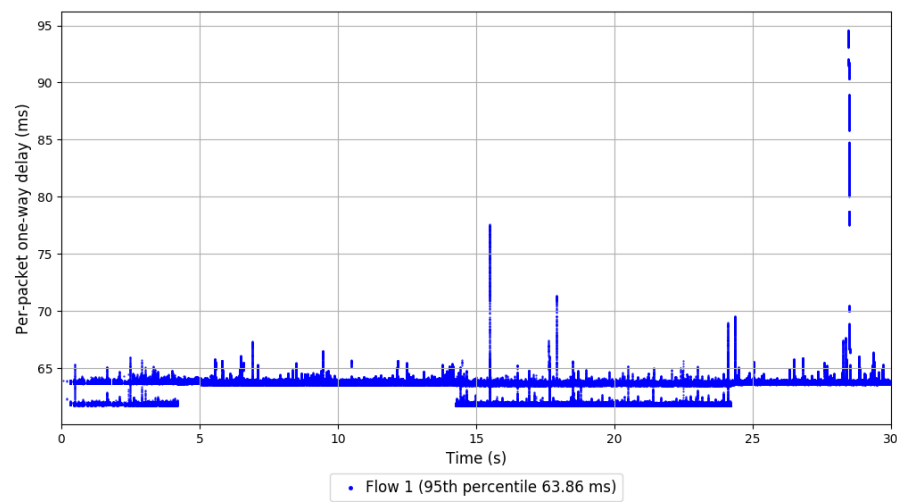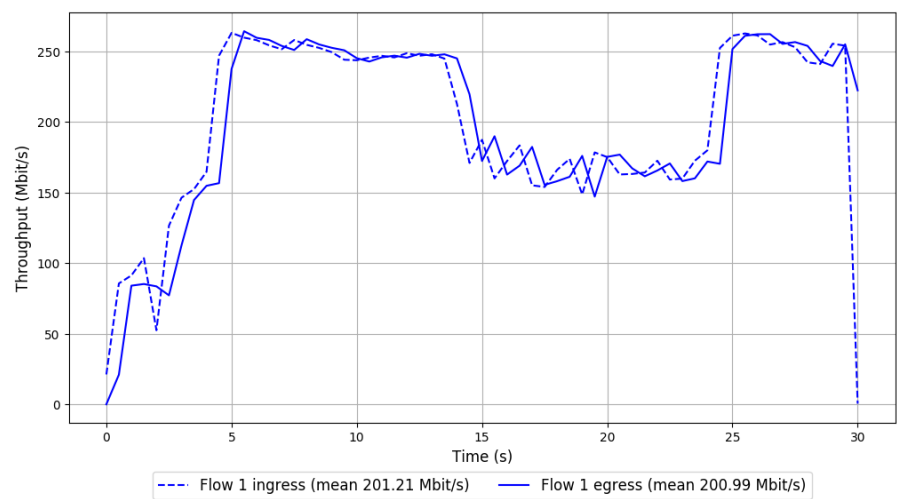

Flow 1 (95th percentile 63.50 ms)

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

Start at: 2018-05-25 11:55:00
End at: 2018-05-25 11:55:30
Local clock offset: 0.013 ms
Remote clock offset: -0.124 ms


# Below is generated by plot.py at 2018-05-25 14:17:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 200.99 Mbit/s
95th percentile per-packet one-way delay: 63.862 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 200.99 Mbit/s
95th percentile per-packet one-way delay: 63.862 ms
Loss rate: 0.53%
```

Run 8: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 201.21 Mbit/s)   Flow 1 egress (mean 200.99 Mbit/s)

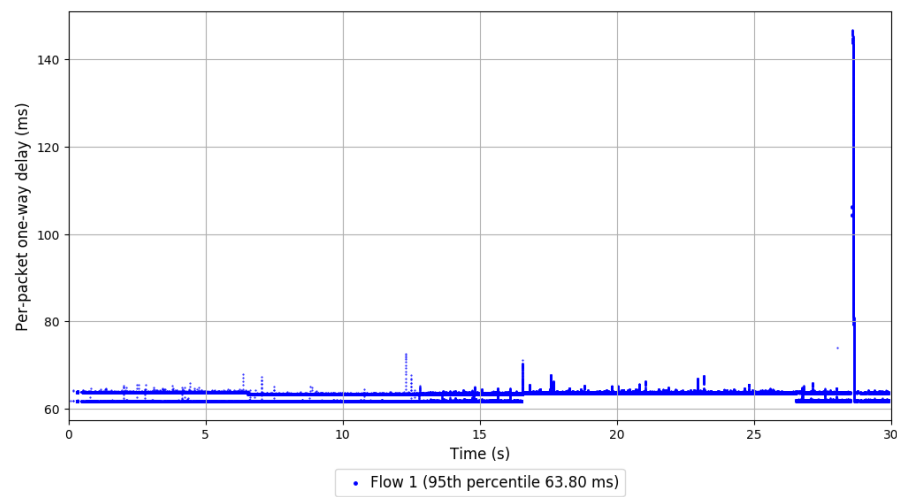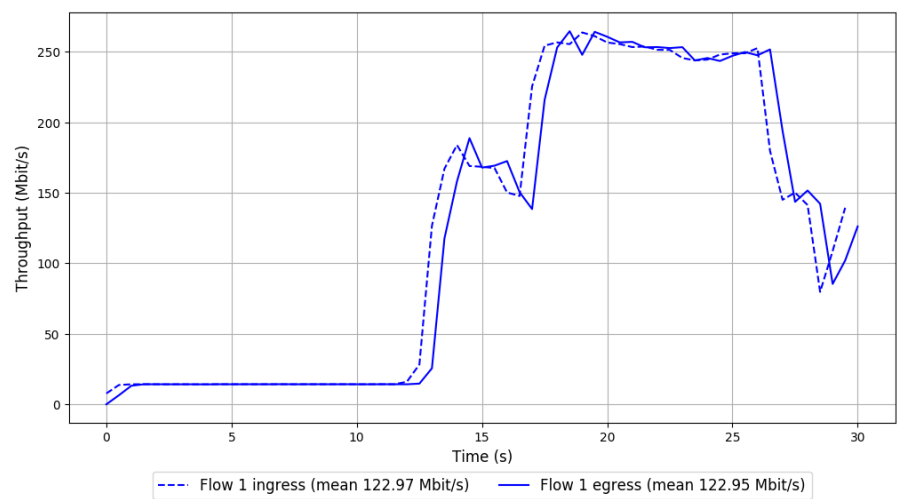

• Flow 1 (95th percentile 63.86 ms)

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

Start at: 2018-05-25 12:15:27
End at: 2018-05-25 12:15:57
Local clock offset: -0.076 ms
Remote clock offset: -0.128 ms


# Below is generated by plot.py at 2018-05-25 14:17:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 122.95 Mbit/s
95th percentile per-packet one-way delay: 63.798 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 122.95 Mbit/s
95th percentile per-packet one-way delay: 63.798 ms
Loss rate: 0.43%
```

Run 9: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 122.97 Mbit/s)   Flow 1 egress (mean 122.95 Mbit/s)
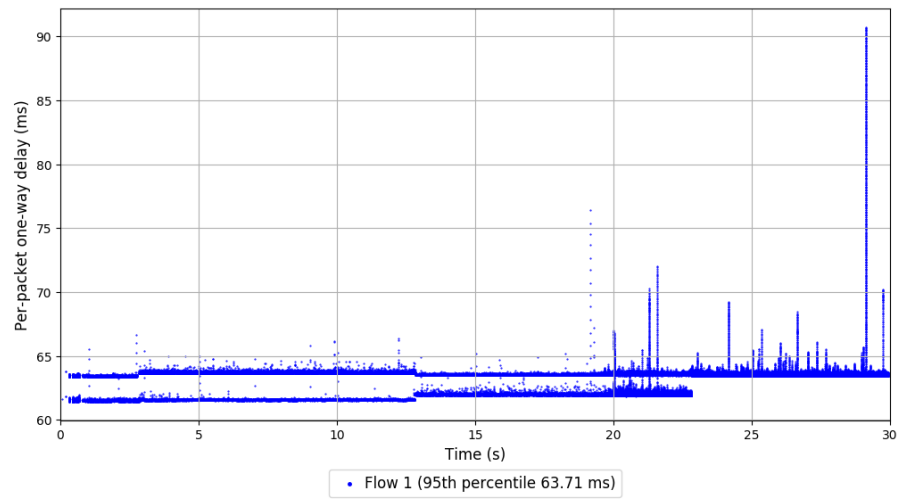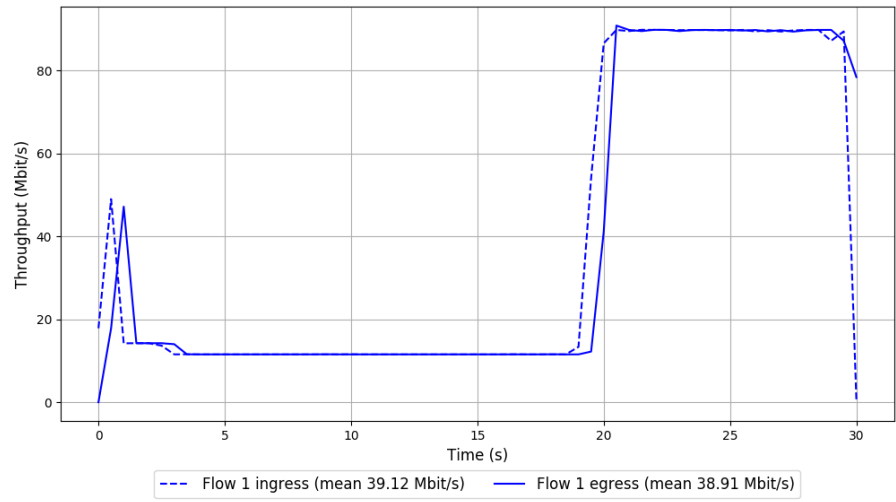

Flow 1 (95th percentile 63.80 ms)

```
Run 10: Statistics of TaoVA-100x

Start at: 2018-05-25 12:35:51
End at: 2018-05-25 12:36:21
Local clock offset: -0.142 ms
Remote clock offset: -0.036 ms


# Below is generated by plot.py at 2018-05-25 14:17:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 38.91 Mbit/s
95th percentile per-packet one-way delay: 63.711 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 38.91 Mbit/s
95th percentile per-packet one-way delay: 63.711 ms
Loss rate: 0.97%
```

Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 39.12 Mbit/s) --- Flow 1 egress (mean 38.91 Mbit/s)

Flow 1 (95th percentile 63.71 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2018-05-25 09:17:24
End at: 2018-05-25 09:17:54
Local clock offset: -0.06 ms
Remote clock offset: 0.286 ms


# Below is generated by plot.py at 2018-05-25 14:17:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.94 Mbit/s
95th percentile per-packet one-way delay: 64.063 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 26.94 Mbit/s
95th percentile per-packet one-way delay: 64.063 ms
Loss rate: 0.57%
```
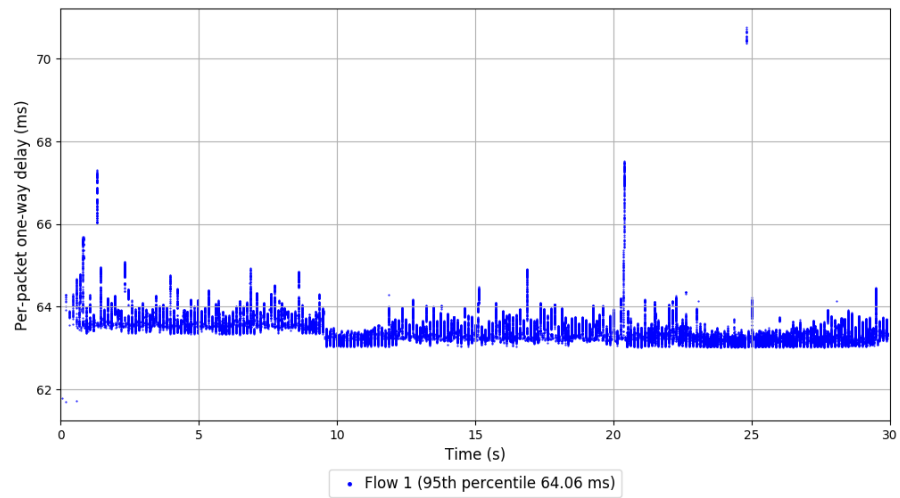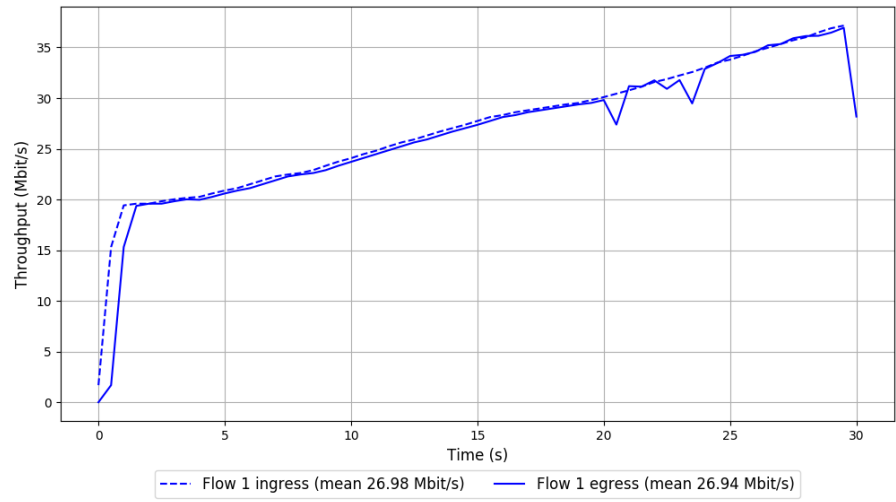
Run 1: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 26.98 Mbit/s)   Flow 1 egress (mean 26.94 Mbit/s)

Flow 1 (95th percentile 64.06 ms)

```
Run 2: Statistics of TCP Vegas

Start at: 2018-05-25 09:37:45
End at: 2018-05-25 09:38:15
Local clock offset: -0.086 ms
Remote clock offset: -0.23 ms


# Below is generated by plot.py at 2018-05-25 14:17:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.00 Mbit/s
95th percentile per-packet one-way delay: 74.098 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 181.00 Mbit/s
95th percentile per-packet one-way delay: 74.098 ms
Loss rate: 0.45%
```
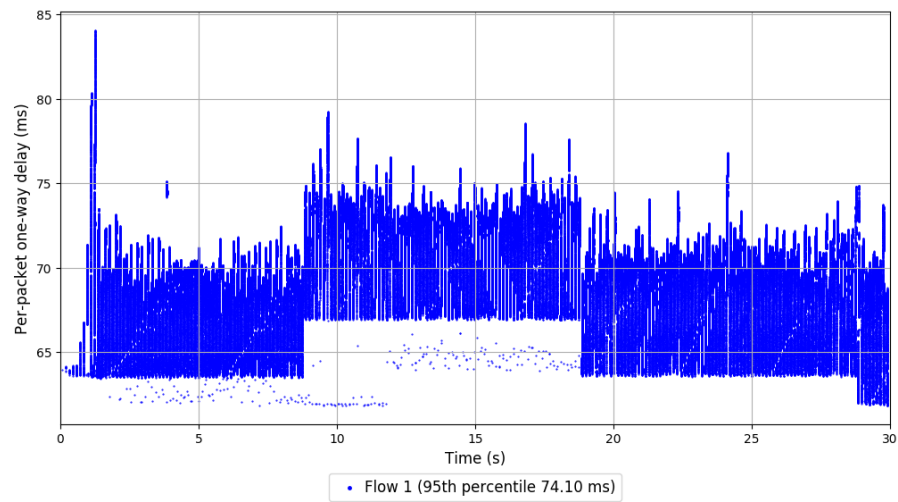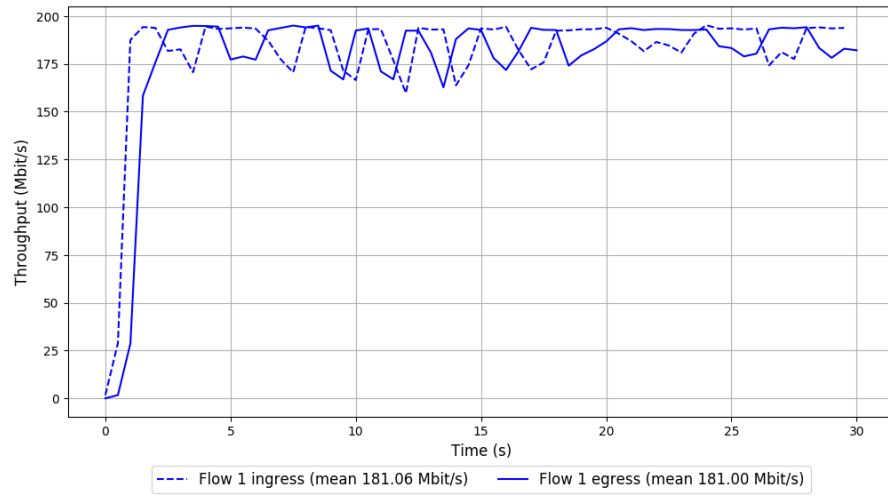
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-05-25 09:58:13
End at: 2018-05-25 09:58:43
Local clock offset: 0.007 ms
Remote clock offset: 0.02 ms


# Below is generated by plot.py at 2018-05-25 14:17:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.18 Mbit/s
95th percentile per-packet one-way delay: 72.692 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 183.18 Mbit/s
95th percentile per-packet one-way delay: 72.692 ms
Loss rate: 0.48%
```
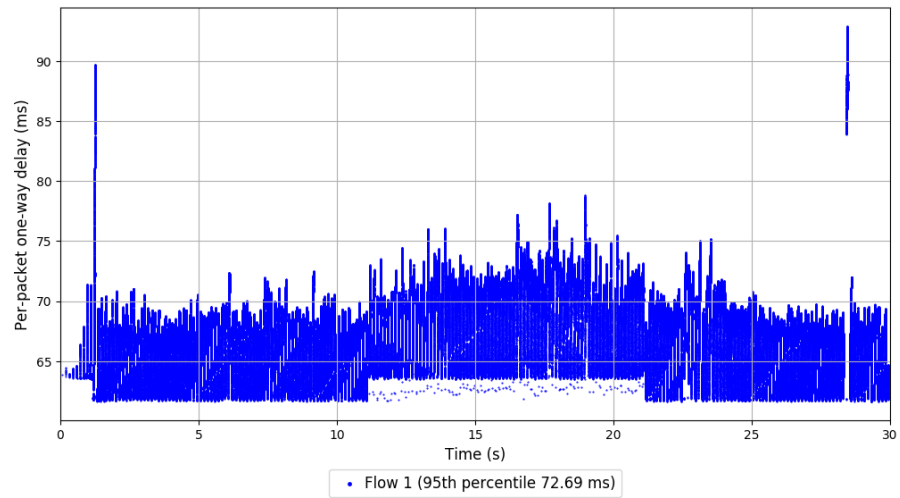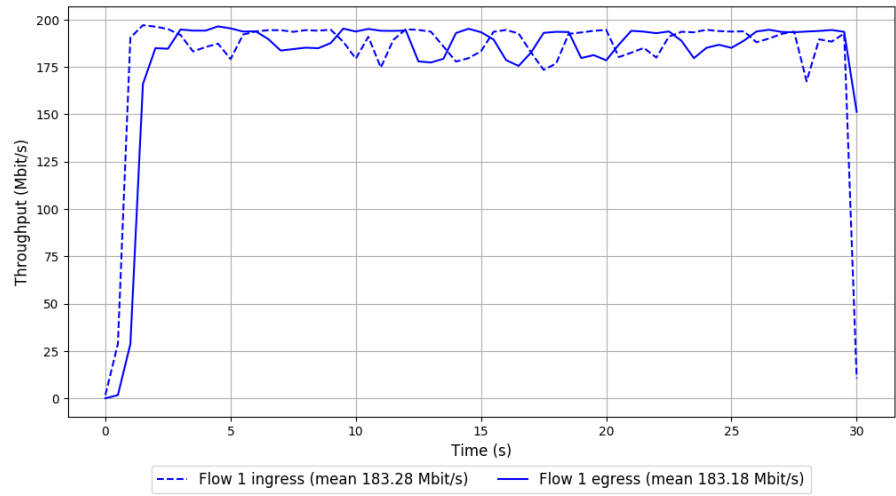
Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 183.28 Mbit/s)   Flow 1 egress (mean 183.18 Mbit/s)

Flow 1 (95th percentile 72.69 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2018-05-25 10:18:55
End at: 2018-05-25 10:19:25
Local clock offset: -0.027 ms
Remote clock offset: 0.212 ms


# Below is generated by plot.py at 2018-05-25 14:17:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.98 Mbit/s
95th percentile per-packet one-way delay: 64.187 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 18.98 Mbit/s
95th percentile per-packet one-way delay: 64.187 ms
Loss rate: 0.56%
```
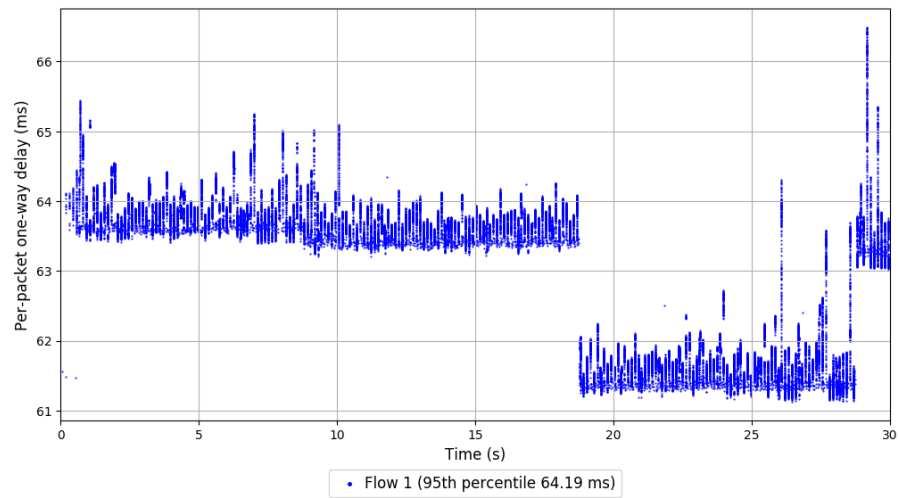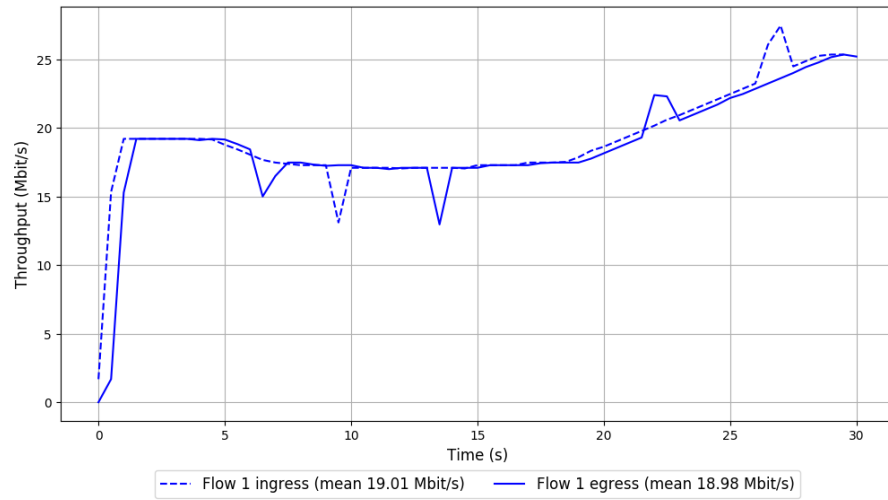
Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 19.01 Mbit/s) ---- Flow 1 egress (mean 18.98 Mbit/s) ——

Flow 1 (95th percentile 64.19 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2018-05-25 10:39:26
End at: 2018-05-25 10:39:56
Local clock offset: 0.002 ms
Remote clock offset: 0.125 ms


# Below is generated by plot.py at 2018-05-25 14:17:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.07 Mbit/s
95th percentile per-packet one-way delay: 64.030 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 72.07 Mbit/s
95th percentile per-packet one-way delay: 64.030 ms
Loss rate: 0.46%
```
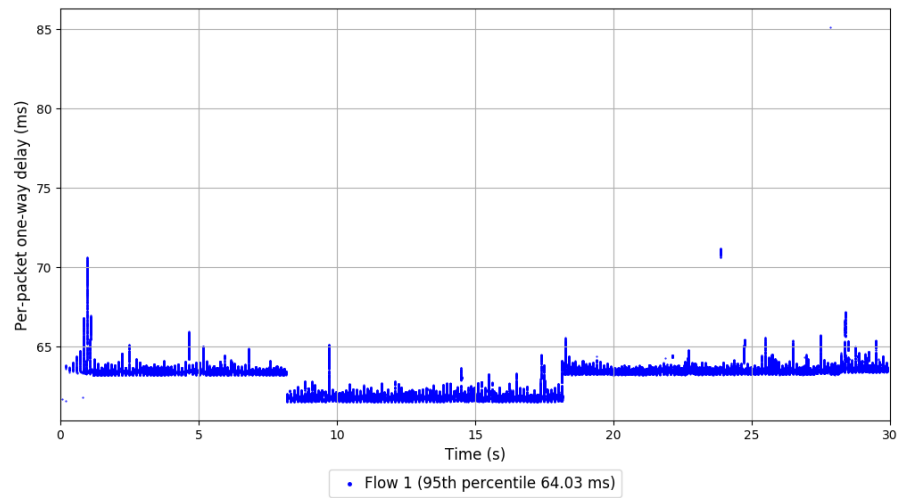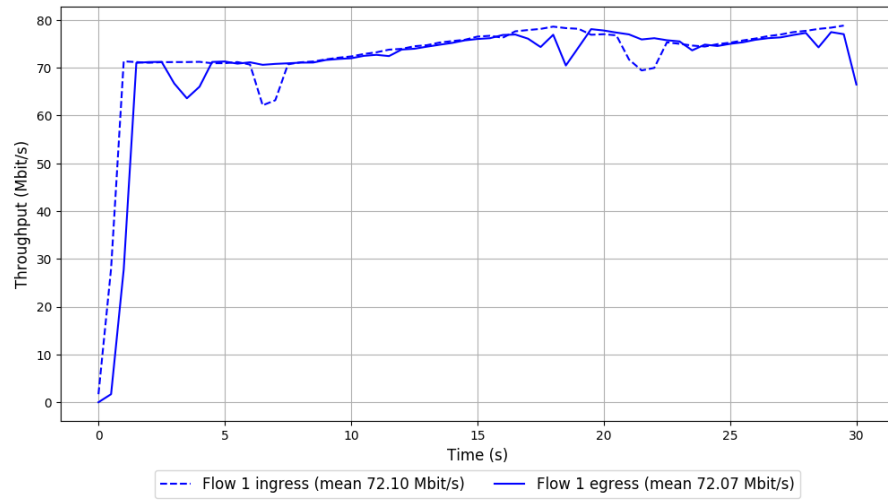
Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 72.10 Mbit/s) --- Flow 1 egress (mean 72.07 Mbit/s)

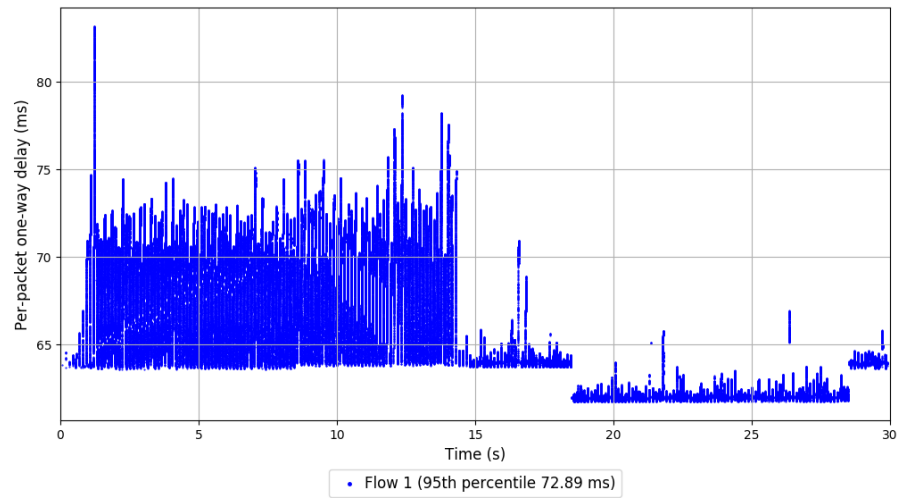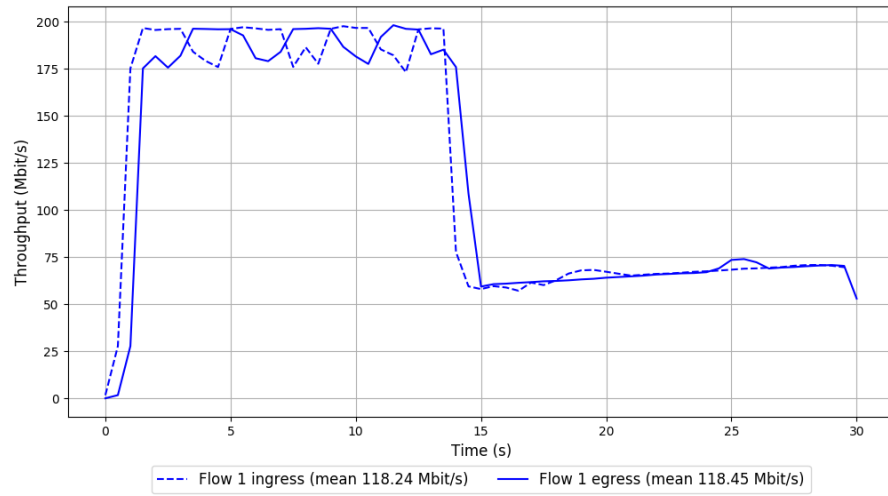

• Flow 1 (95th percentile 64.03 ms)

```
Run 6: Statistics of TCP Vegas

Start at: 2018-05-25 10:59:45
End at: 2018-05-25 11:00:15
Local clock offset: 0.039 ms
Remote clock offset: -0.155 ms


# Below is generated by plot.py at 2018-05-25 14:17:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 118.45 Mbit/s
95th percentile per-packet one-way delay: 72.887 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 118.45 Mbit/s
95th percentile per-packet one-way delay: 72.887 ms
Loss rate: 0.25%
```

Run 6: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 118.24 Mbit/s)   Flow 1 egress (mean 118.45 Mbit/s)

Flow 1 (95th percentile 72.89 ms)

```
Run 7: Statistics of TCP Vegas

Start at: 2018-05-25 11:20:28
End at: 2018-05-25 11:20:58
Local clock offset: 0.032 ms
Remote clock offset: 0.187 ms


# Below is generated by plot.py at 2018-05-25 14:18:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.43 Mbit/s
95th percentile per-packet one-way delay: 74.875 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 183.43 Mbit/s
95th percentile per-packet one-way delay: 74.875 ms
Loss rate: 0.48%
```
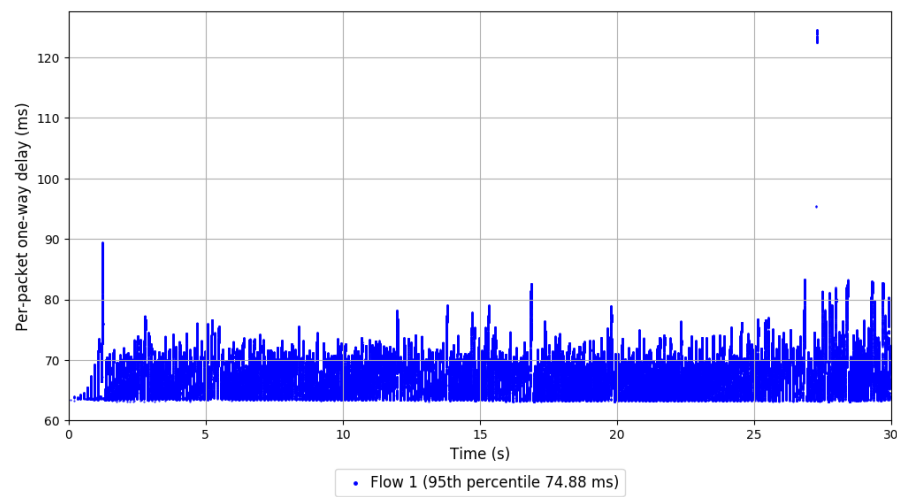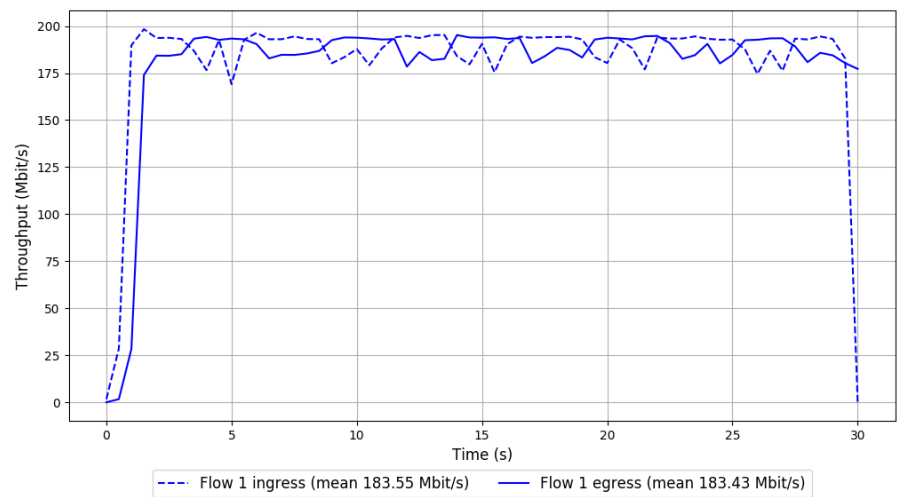
Run 7: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 183.55 Mbit/s) Flow 1 egress (mean 183.43 Mbit/s)

Flow 1 (95th percentile 74.88 ms)

```
Run 8: Statistics of TCP Vegas

Start at: 2018-05-25 11:41:05
End at: 2018-05-25 11:41:35
Local clock offset: 0.022 ms
Remote clock offset: 0.071 ms


# Below is generated by plot.py at 2018-05-25 14:18:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.82 Mbit/s
95th percentile per-packet one-way delay: 64.399 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 22.82 Mbit/s
95th percentile per-packet one-way delay: 64.399 ms
Loss rate: 0.50%
```
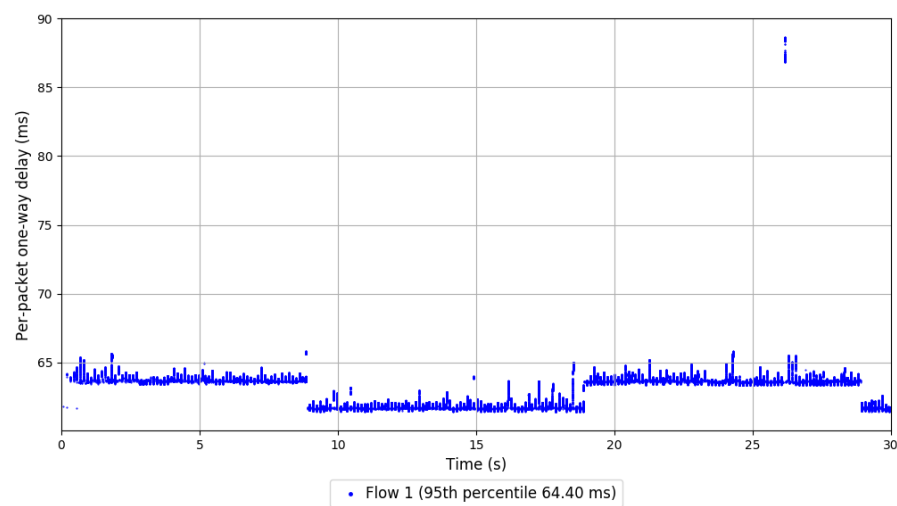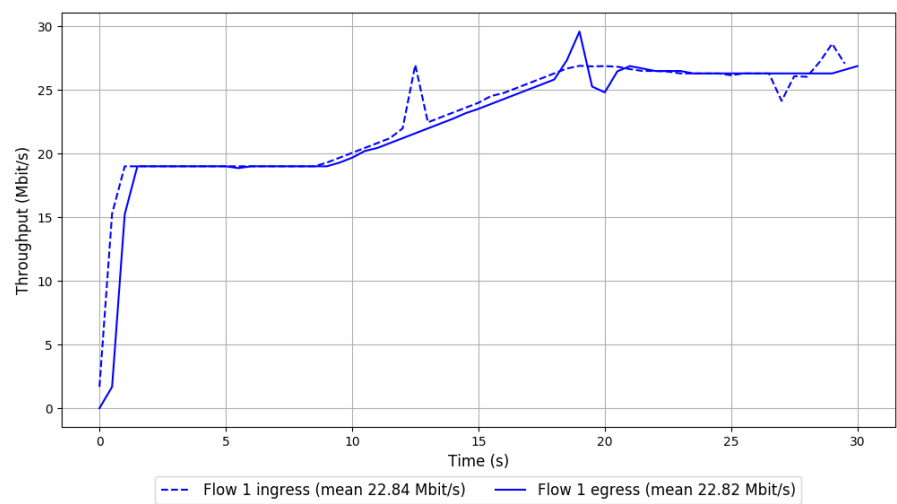
Run 8: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 22.84 Mbit/s) --- Flow 1 egress (mean 22.82 Mbit/s)
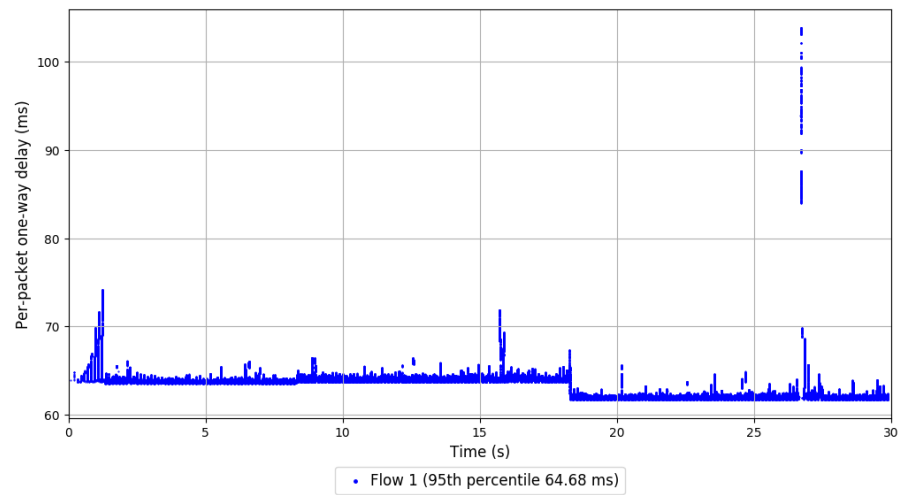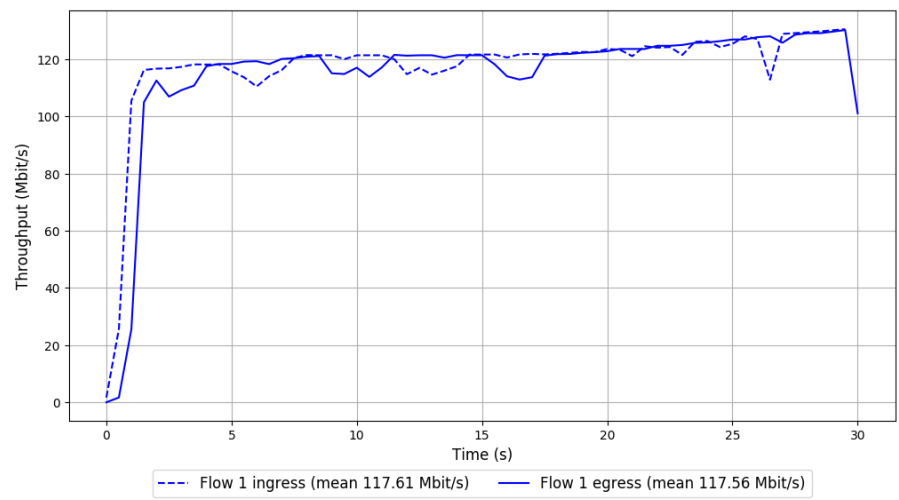

Flow 1 (95th percentile 64.40 ms)

```
Run 9: Statistics of TCP Vegas

Start at: 2018-05-25 12:01:36
End at: 2018-05-25 12:02:06
Local clock offset: 0.015 ms
Remote clock offset: -0.072 ms


# Below is generated by plot.py at 2018-05-25 14:18:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 117.56 Mbit/s
95th percentile per-packet one-way delay: 64.682 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 117.56 Mbit/s
95th percentile per-packet one-way delay: 64.682 ms
Loss rate: 0.46%
```

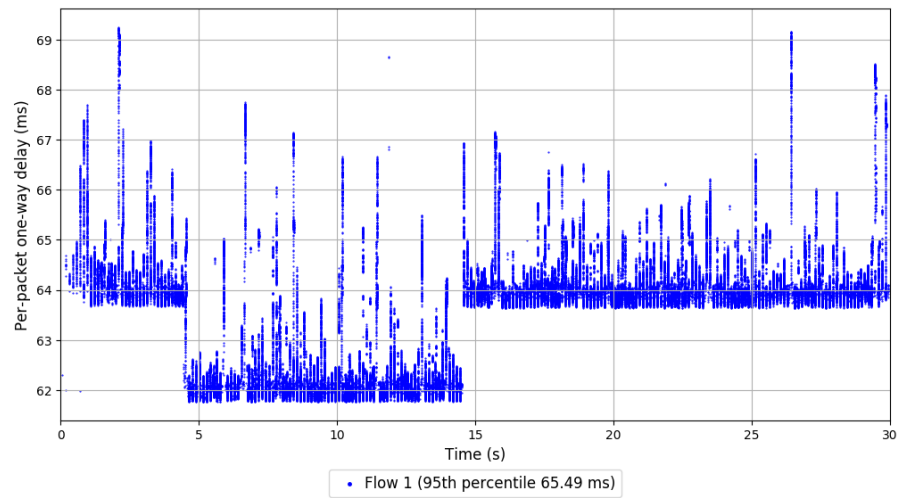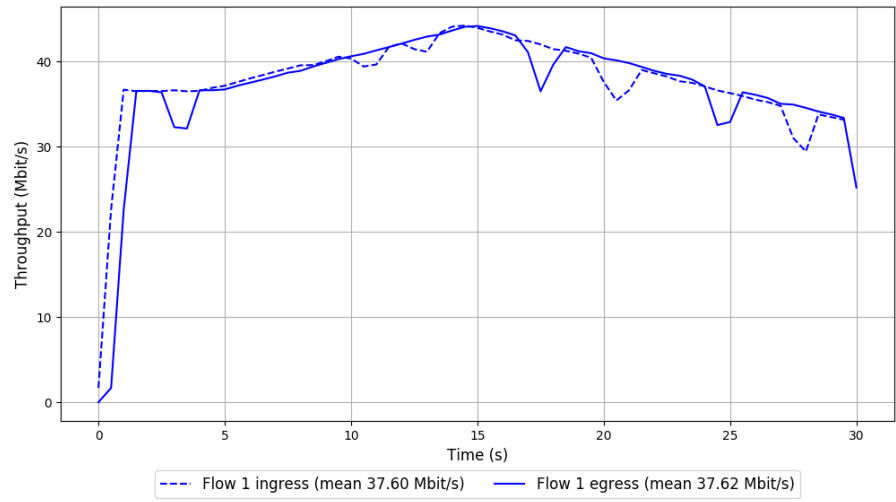Run 9: Report of TCP Vegas — Data Link

```
Run 10: Statistics of TCP Vegas

Start at: 2018-05-25 12:21:59
End at: 2018-05-25 12:22:29
Local clock offset: -0.074 ms
Remote clock offset: -0.264 ms


# Below is generated by plot.py at 2018-05-25 14:18:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.62 Mbit/s
95th percentile per-packet one-way delay: 65.487 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 37.62 Mbit/s
95th percentile per-packet one-way delay: 65.487 ms
Loss rate: 0.37%
```

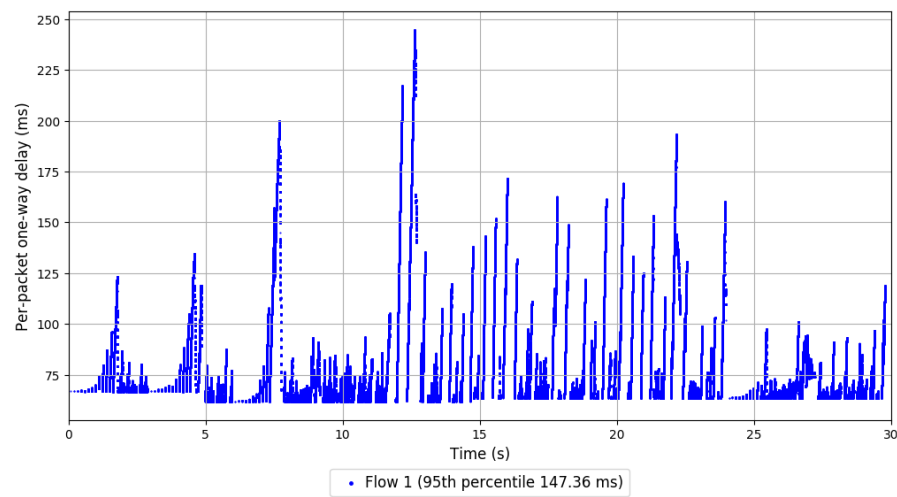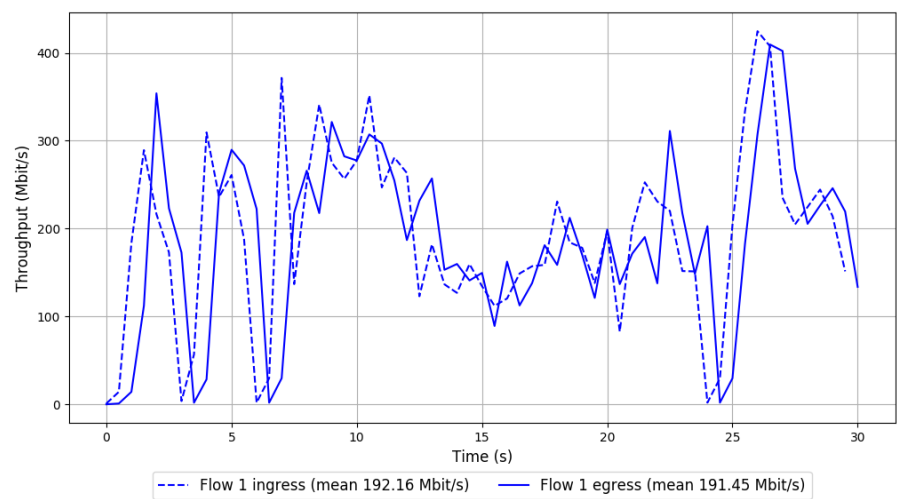Run 10: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2018-05-25 09:29:49
End at: 2018-05-25 09:30:19
Local clock offset: -0.108 ms
Remote clock offset: -0.045 ms


# Below is generated by plot.py at 2018-05-25 14:19:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.45 Mbit/s
95th percentile per-packet one-way delay: 147.360 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 191.45 Mbit/s
95th percentile per-packet one-way delay: 147.360 ms
Loss rate: 0.83%
```
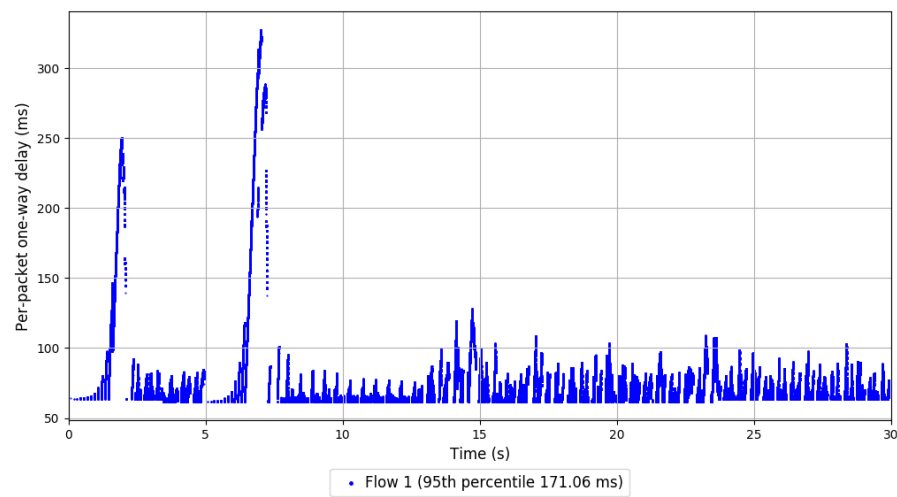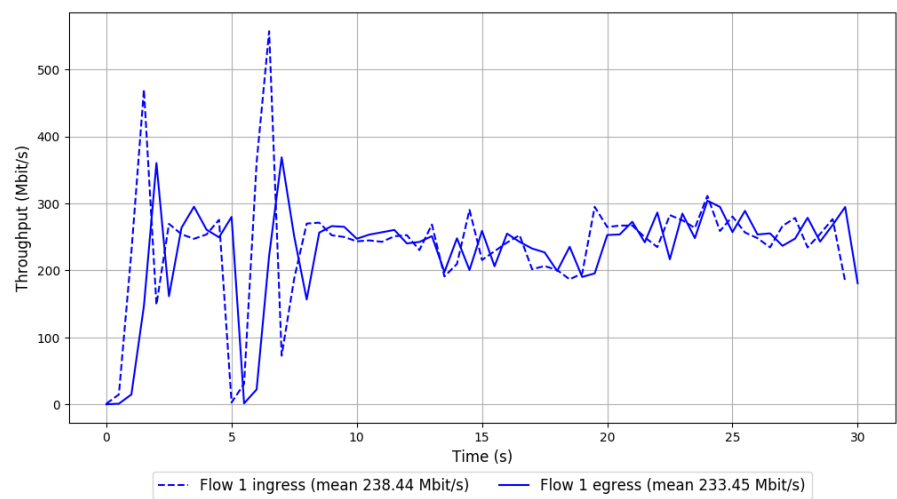
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2018-05-25 09:50:20
End at: 2018-05-25 09:50:50
Local clock offset: -0.014 ms
Remote clock offset: -0.141 ms

# Below is generated by plot.py at 2018-05-25 14:20:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 233.45 Mbit/s
95th percentile per-packet one-way delay: 171.060 ms
Loss rate: 2.18%
-- Flow 1:
Average throughput: 233.45 Mbit/s
95th percentile per-packet one-way delay: 171.060 ms
Loss rate: 2.18%
```

Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-05-25 10:10:52
End at: 2018-05-25 10:11:22
Local clock offset: 0.005 ms
Remote clock offset: 0.015 ms


# Below is generated by plot.py at 2018-05-25 14:20:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 210.04 Mbit/s
95th percentile per-packet one-way delay: 161.704 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 210.04 Mbit/s
95th percentile per-packet one-way delay: 161.704 ms
Loss rate: 1.26%
```
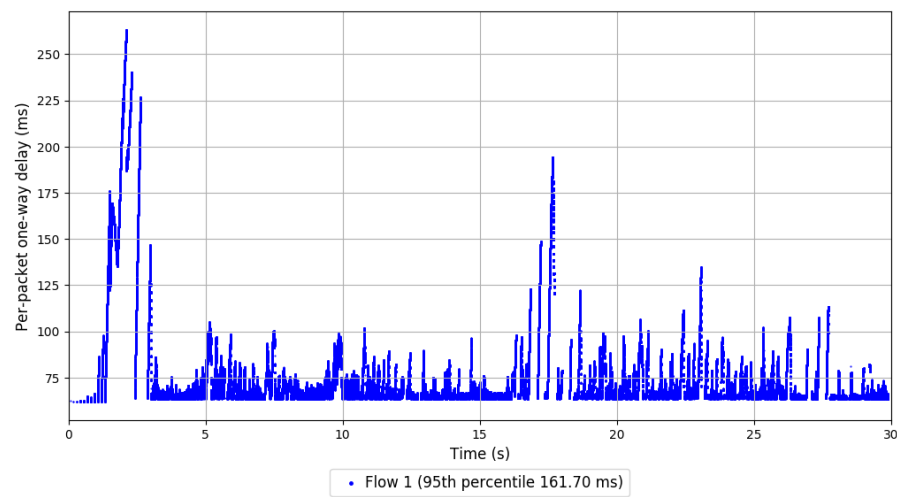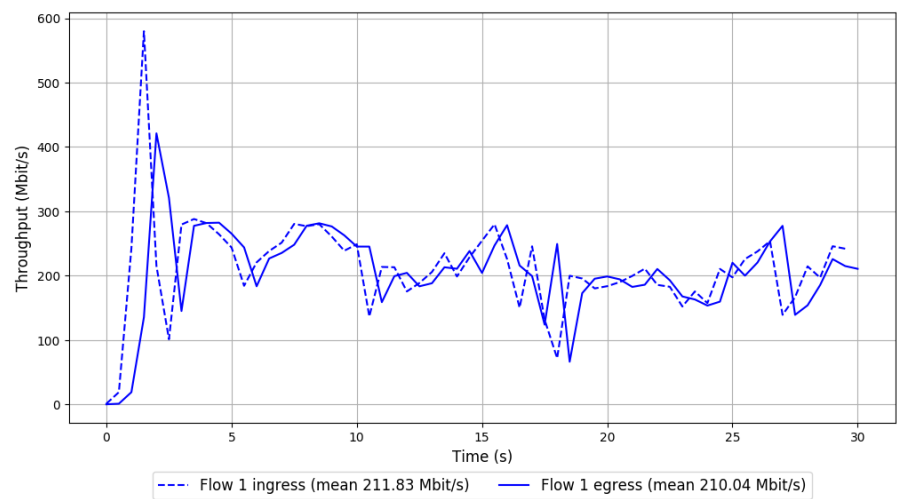
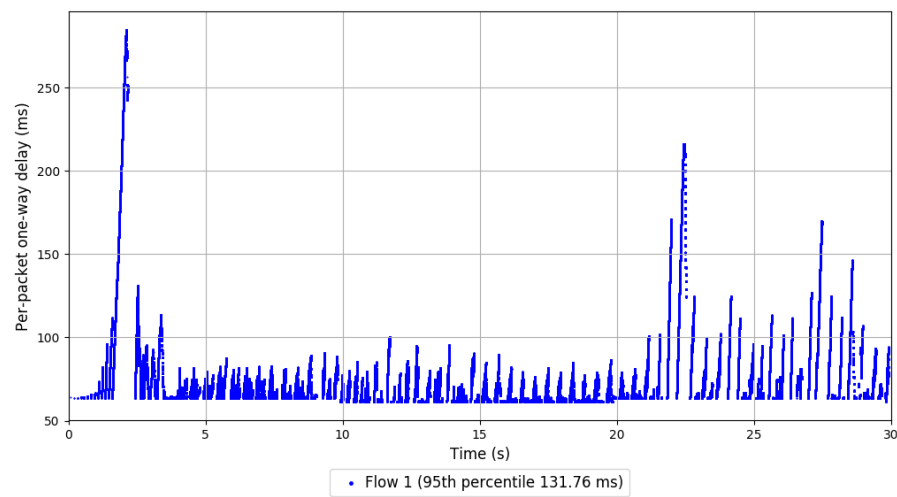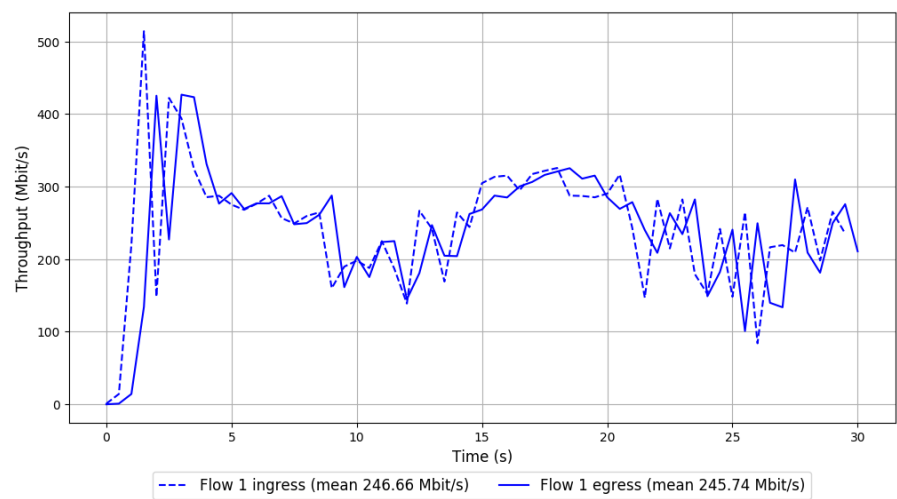## Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2018-05-25 10:31:24
End at: 2018-05-25 10:31:54
Local clock offset: 0.034 ms
Remote clock offset: -0.007 ms


# Below is generated by plot.py at 2018-05-25 14:21:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 245.74 Mbit/s
95th percentile per-packet one-way delay: 131.762 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 245.74 Mbit/s
95th percentile per-packet one-way delay: 131.762 ms
Loss rate: 0.44%
```

Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2018-05-25 10:51:52
End at: 2018-05-25 10:52:22
Local clock offset: 0.006 ms
Remote clock offset: -0.24 ms


# Below is generated by plot.py at 2018-05-25 14:21:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 231.35 Mbit/s
95th percentile per-packet one-way delay: 99.530 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 231.35 Mbit/s
95th percentile per-packet one-way delay: 99.530 ms
Loss rate: 0.46%
```
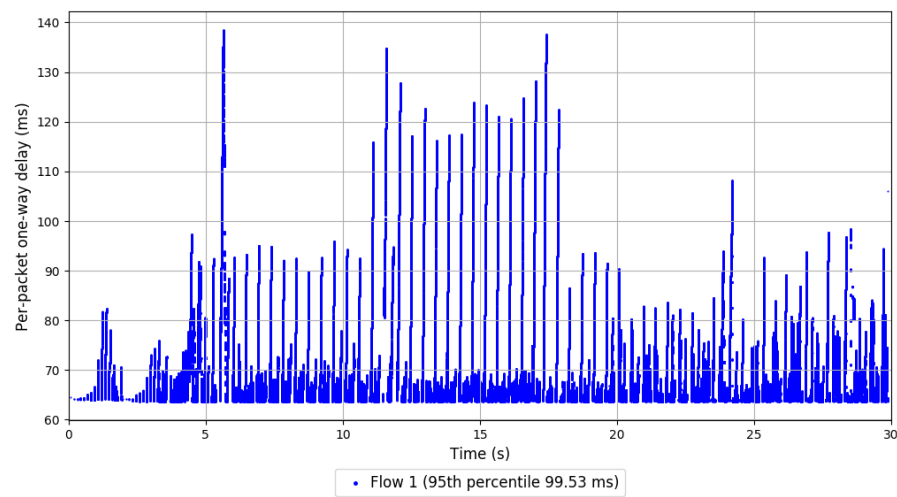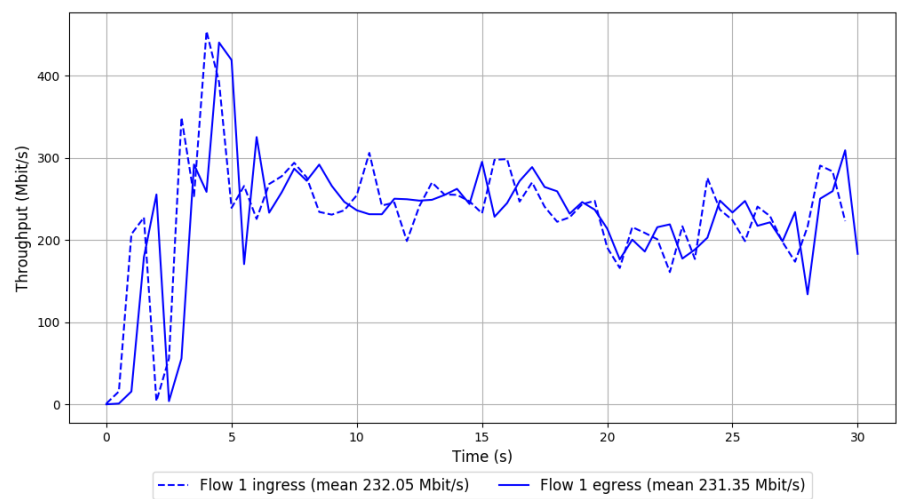
Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2018-05-25 11:12:17
End at: 2018-05-25 11:12:47
Local clock offset: 0.033 ms
Remote clock offset: 0.091 ms


# Below is generated by plot.py at 2018-05-25 14:23:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 256.56 Mbit/s
95th percentile per-packet one-way delay: 165.696 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 256.56 Mbit/s
95th percentile per-packet one-way delay: 165.696 ms
Loss rate: 0.66%
```
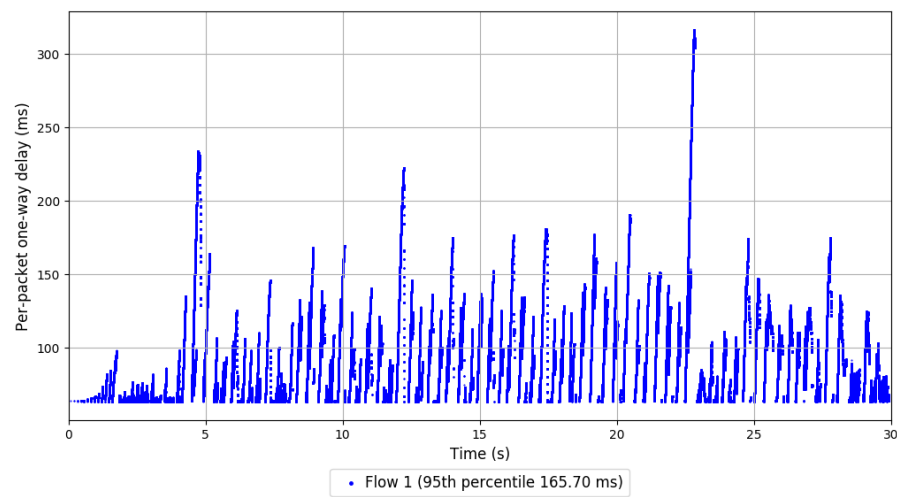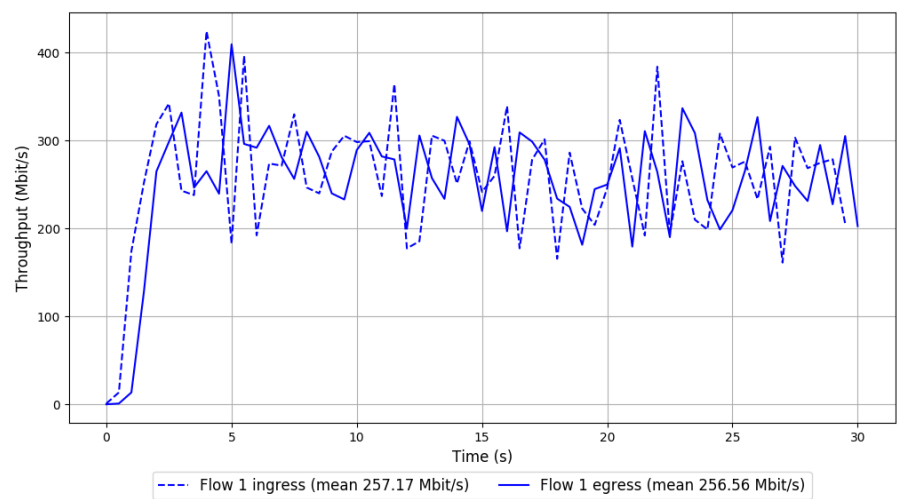
Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2018-05-25 11:33:12
End at: 2018-05-25 11:33:42
Local clock offset: 0.031 ms
Remote clock offset: 0.204 ms


# Below is generated by plot.py at 2018-05-25 14:23:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 252.35 Mbit/s
95th percentile per-packet one-way delay: 113.435 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 252.35 Mbit/s
95th percentile per-packet one-way delay: 113.435 ms
Loss rate: 0.90%
```
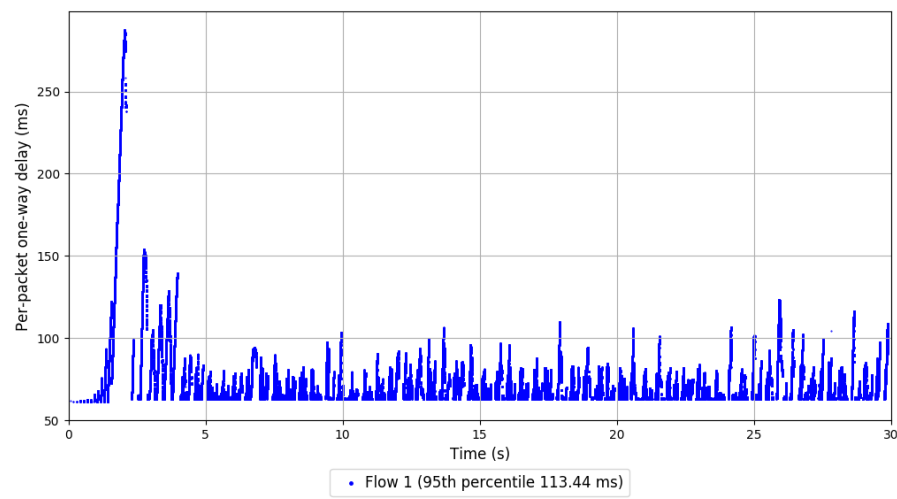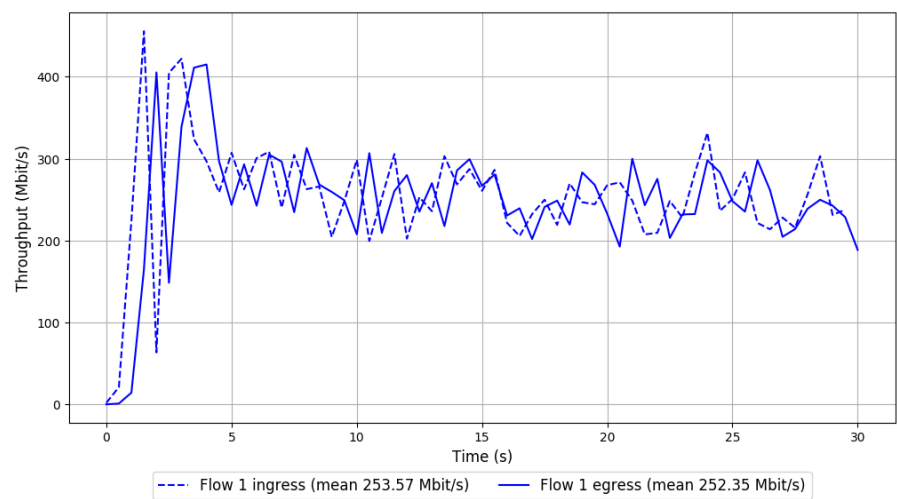
Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2018-05-25 11:53:37
End at: 2018-05-25 11:54:07
Local clock offset: 0.023 ms
Remote clock offset: 0.031 ms


# Below is generated by plot.py at 2018-05-25 14:24:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 252.97 Mbit/s
95th percentile per-packet one-way delay: 185.061 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 252.97 Mbit/s
95th percentile per-packet one-way delay: 185.061 ms
Loss rate: 0.29%
```
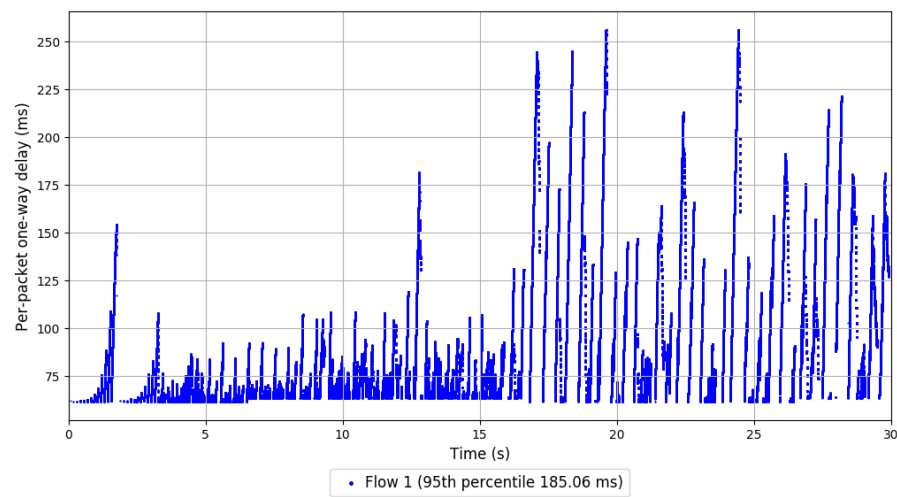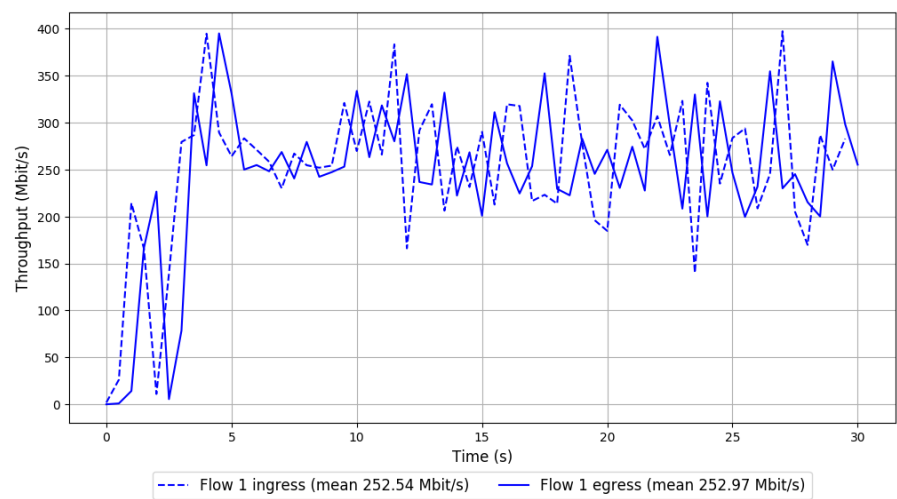
Run 8: Report of Verus — Data Link

```
Run 9: Statistics of Verus

Start at: 2018-05-25 12:14:07
End at: 2018-05-25 12:14:37
Local clock offset: -0.067 ms
Remote clock offset: 0.162 ms


# Below is generated by plot.py at 2018-05-25 14:24:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.74 Mbit/s
95th percentile per-packet one-way delay: 133.400 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 225.74 Mbit/s
95th percentile per-packet one-way delay: 133.400 ms
Loss rate: 1.22%
```
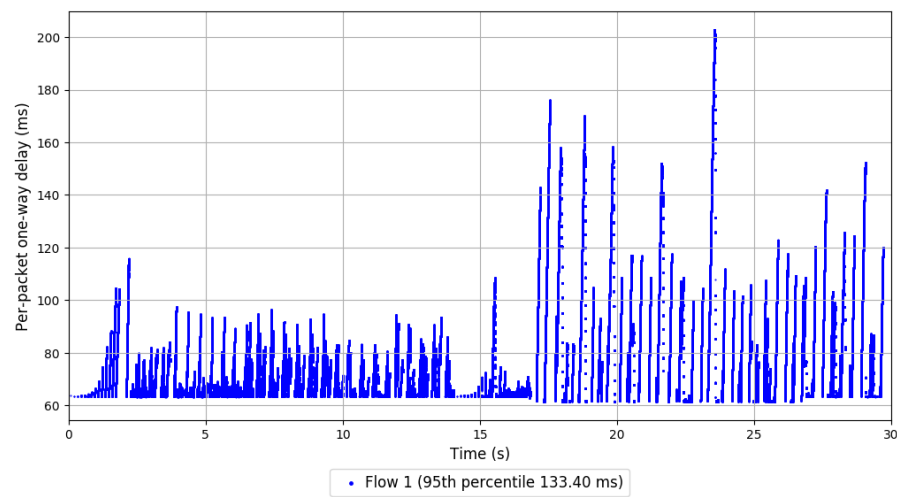
Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2018-05-25 12:34:30
End at: 2018-05-25 12:35:00
Local clock offset: -0.083 ms
Remote clock offset: -0.055 ms


# Below is generated by plot.py at 2018-05-25 14:25:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 235.51 Mbit/s
95th percentile per-packet one-way delay: 107.628 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 235.51 Mbit/s
95th percentile per-packet one-way delay: 107.628 ms
Loss rate: 1.32%
```

Run 10: Report of Verus — Data Link

Flow 1 ingress (mean 237.65 Mbit/s)   Flow 1 egress (mean 235.51 Mbit/s)

Flow 1 (95th percentile 107.63 ms)

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-05-25 09:23:45
End at: 2018-05-25 09:24:15
Local clock offset: -0.086 ms
Remote clock offset: 0.076 ms


# Below is generated by plot.py at 2018-05-25 14:29:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 370.38 Mbit/s
95th percentile per-packet one-way delay: 95.793 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 370.38 Mbit/s
95th percentile per-packet one-way delay: 95.793 ms
Loss rate: 0.46%
```
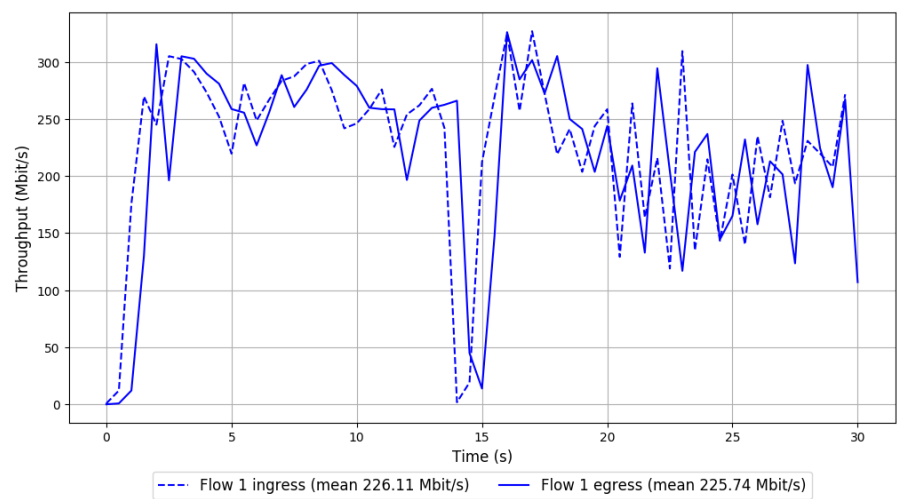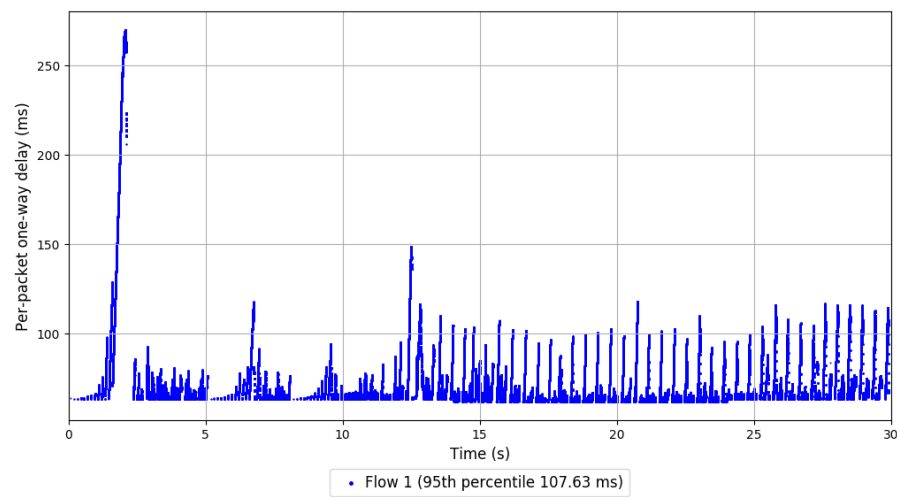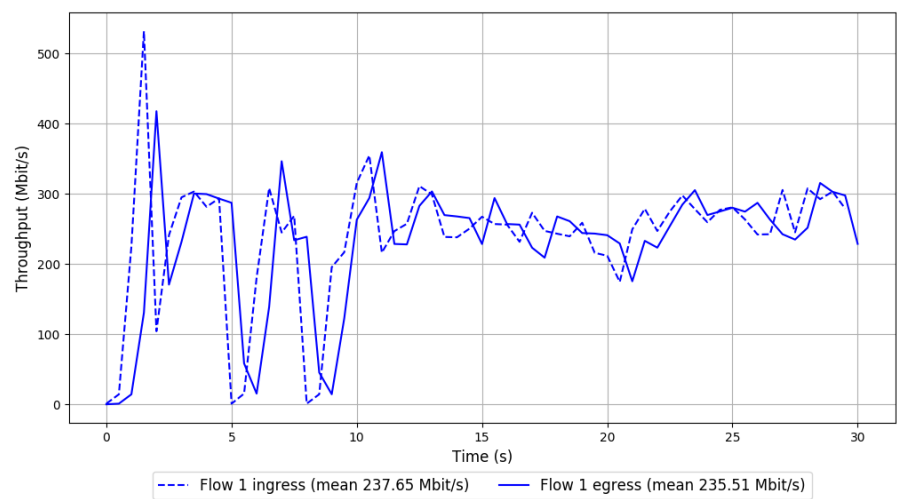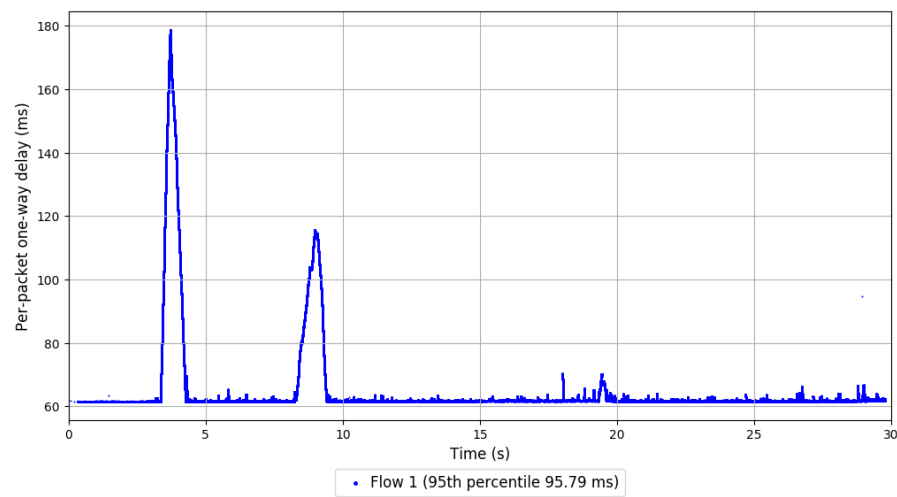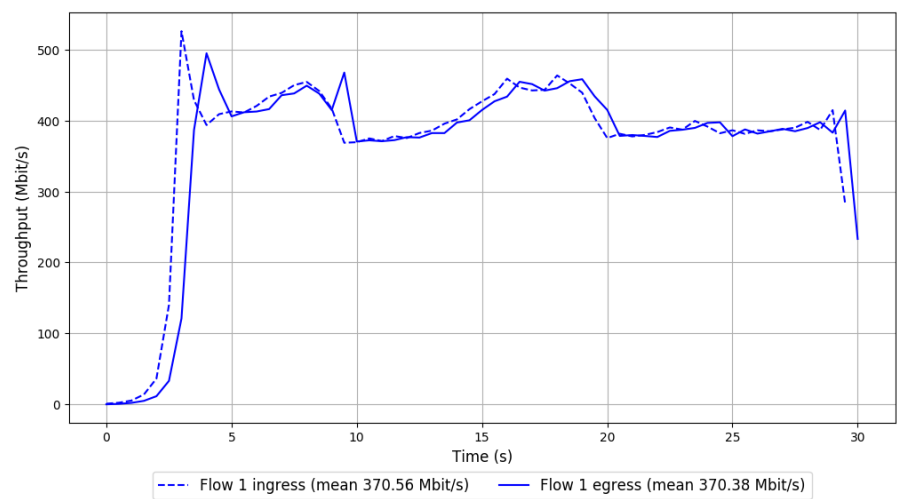
Run 1: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 370.56 Mbit/s) --- Flow 1 egress (mean 370.38 Mbit/s)

Flow 1 (95th percentile 95.79 ms)

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-05-25 09:44:14
End at: 2018-05-25 09:44:44
Local clock offset: -0.098 ms
Remote clock offset: -0.292 ms


# Below is generated by plot.py at 2018-05-25 14:30:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 397.14 Mbit/s
95th percentile per-packet one-way delay: 66.305 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 397.14 Mbit/s
95th percentile per-packet one-way delay: 66.305 ms
Loss rate: 0.59%
```

Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 397.85 Mbit/s)   Flow 1 egress (mean 397.14 Mbit/s)
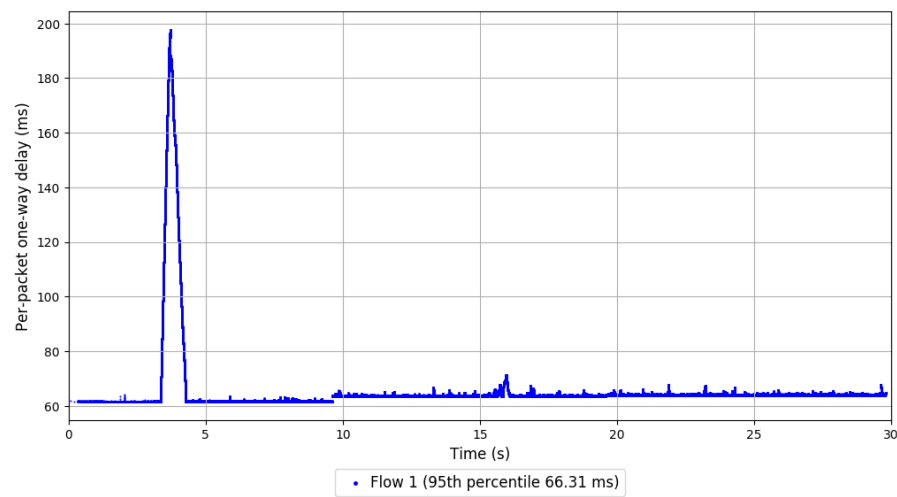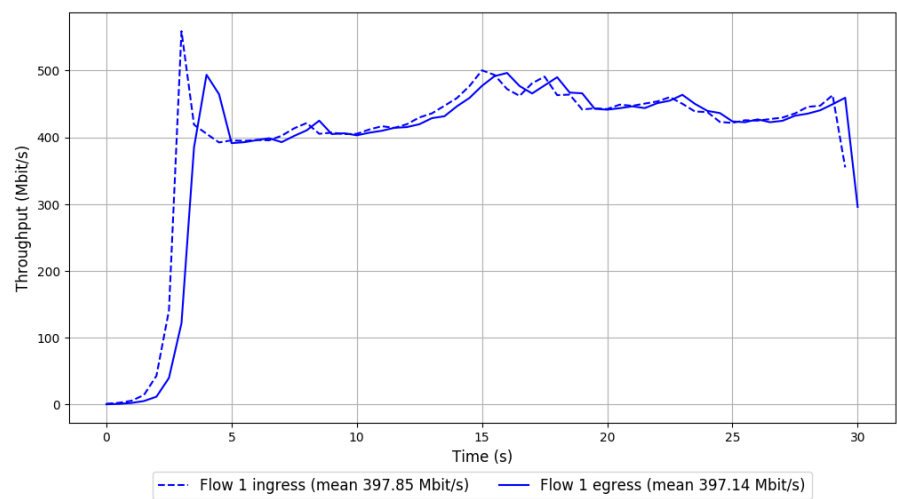

• Flow 1 (95th percentile 66.31 ms)

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```
Run 3: Statistics of PCC-Vivace

Start at: 2018-05-25 10:04:45
End at: 2018-05-25 10:05:15
Local clock offset: -0.042 ms
Remote clock offset: 0.211 ms


# Below is generated by plot.py at 2018-05-25 14:30:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 344.20 Mbit/s
95th percentile per-packet one-way delay: 91.645 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 344.20 Mbit/s
95th percentile per-packet one-way delay: 91.645 ms
Loss rate: 0.46%
```
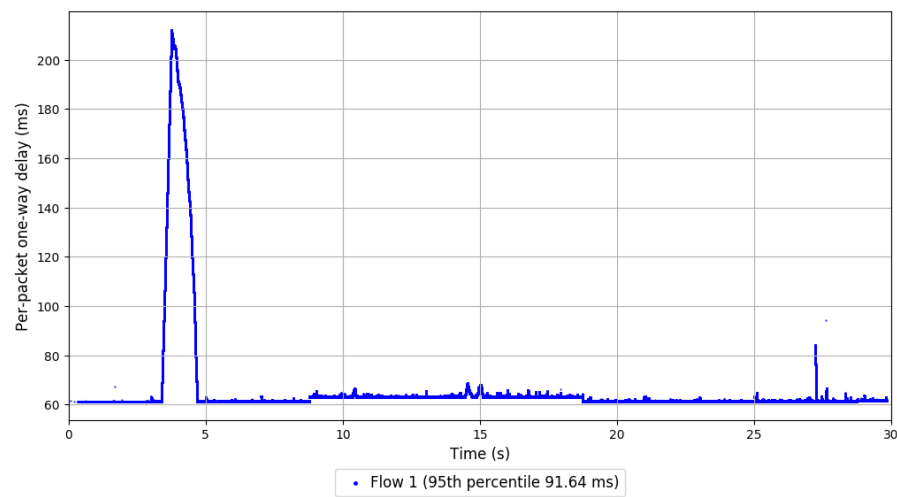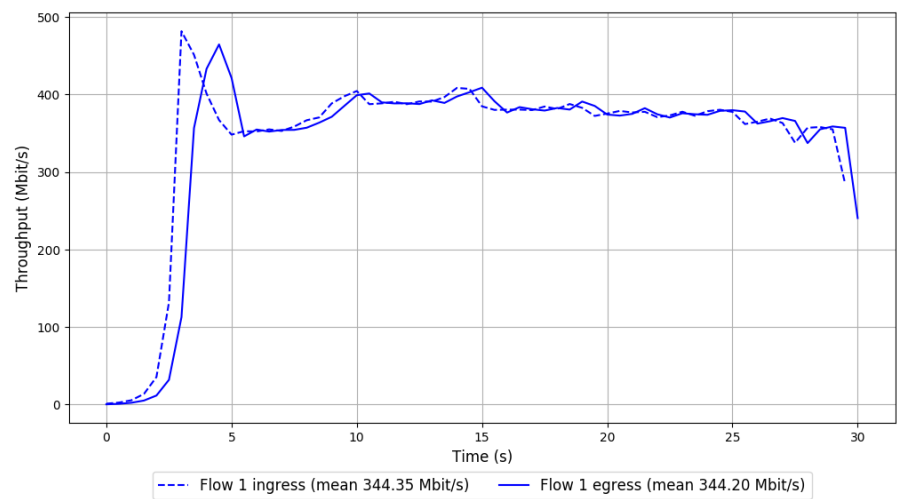
Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 344.35 Mbit/s) — Flow 1 egress (mean 344.20 Mbit/s)

Flow 1 (95th percentile 91.64 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-05-25 10:25:20
End at: 2018-05-25 10:25:50
Local clock offset: -0.009 ms
Remote clock offset: 0.101 ms


# Below is generated by plot.py at 2018-05-25 14:30:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 333.64 Mbit/s
95th percentile per-packet one-way delay: 121.389 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 333.64 Mbit/s
95th percentile per-packet one-way delay: 121.389 ms
Loss rate: 0.72%
```
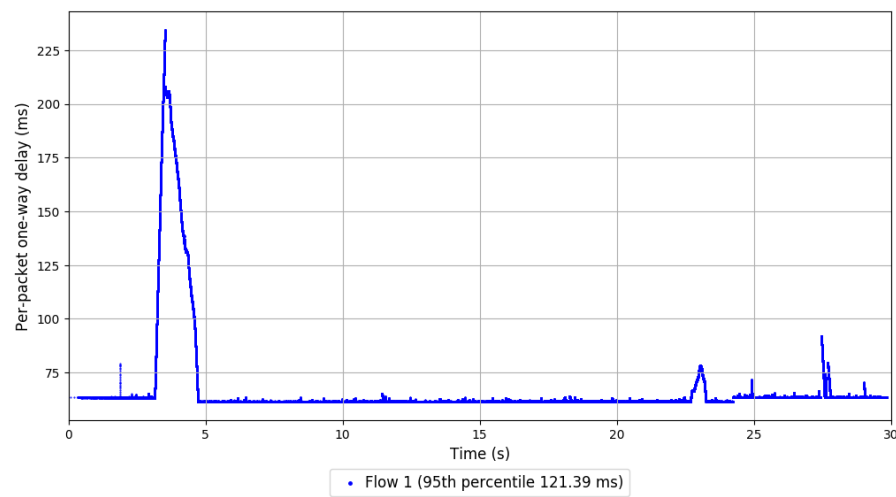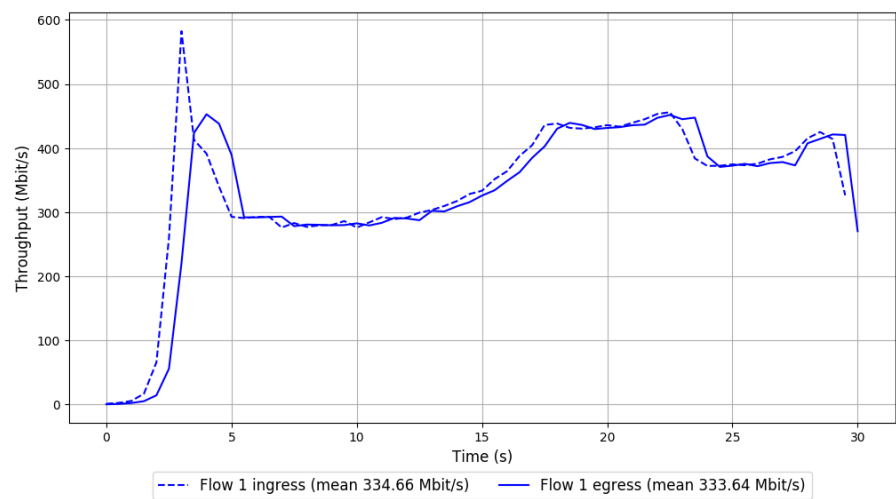
Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 334.66 Mbit/s) --- Flow 1 egress (mean 333.64 Mbit/s)

Flow 1 (95th percentile 121.39 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-05-25 10:45:48
End at: 2018-05-25 10:46:18
Local clock offset: 0.046 ms
Remote clock offset: 0.039 ms


# Below is generated by plot.py at 2018-05-25 14:32:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 399.66 Mbit/s
95th percentile per-packet one-way delay: 100.627 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 399.66 Mbit/s
95th percentile per-packet one-way delay: 100.627 ms
Loss rate: 0.49%
```
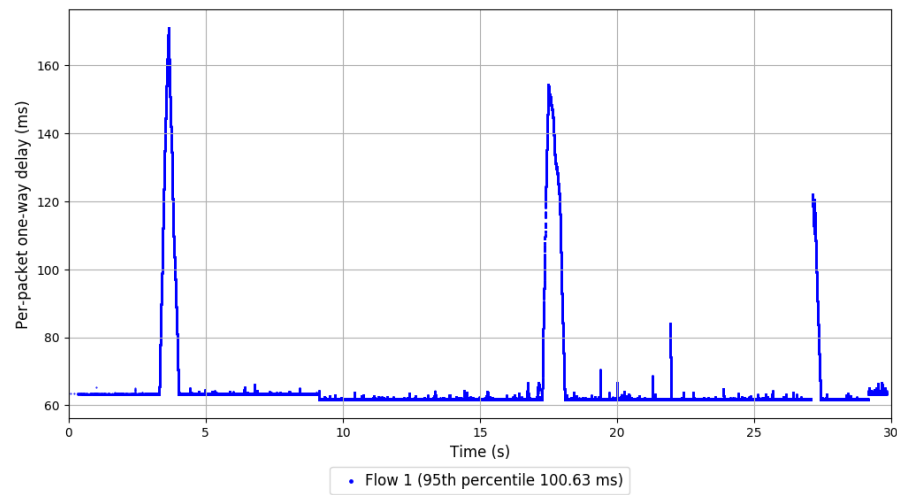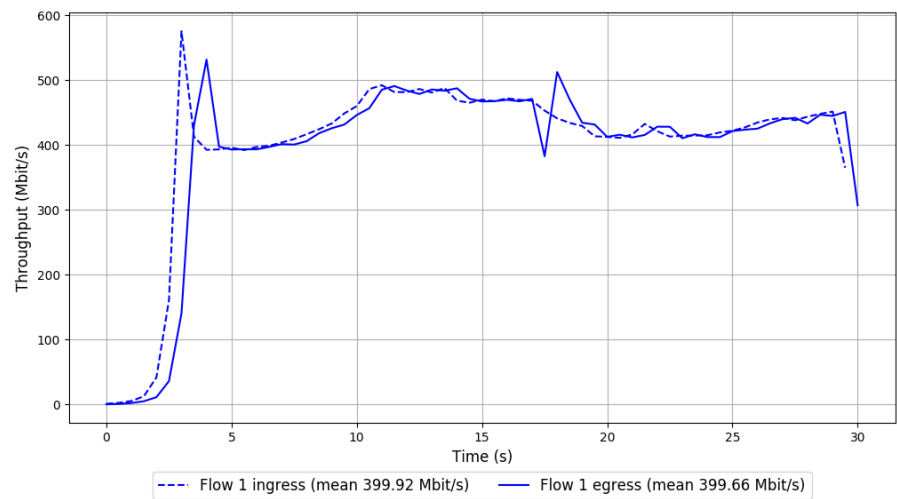
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 399.92 Mbit/s) — Flow 1 egress (mean 399.66 Mbit/s)

Flow 1 (95th percentile 100.63 ms)

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-05-25 11:06:07
End at: 2018-05-25 11:06:37
Local clock offset: 0.028 ms
Remote clock offset: 0.326 ms


# Below is generated by plot.py at 2018-05-25 14:32:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 359.53 Mbit/s
95th percentile per-packet one-way delay: 104.399 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 359.53 Mbit/s
95th percentile per-packet one-way delay: 104.399 ms
Loss rate: 0.74%
```
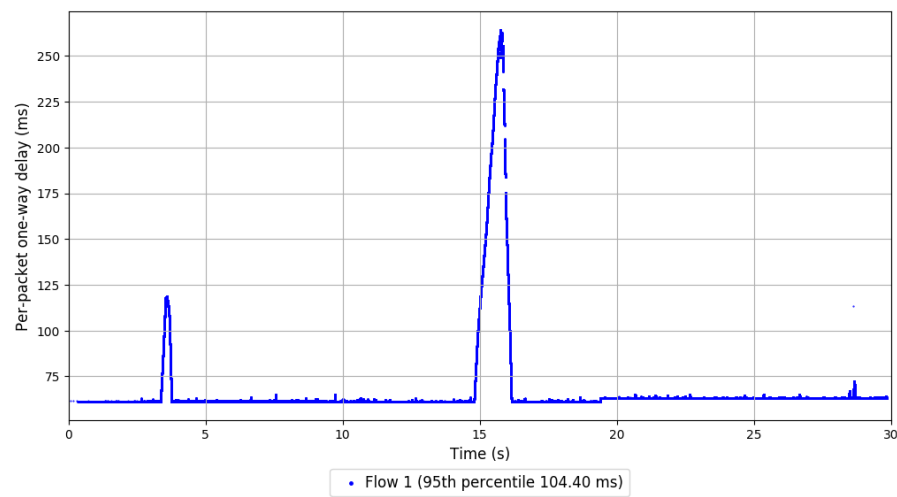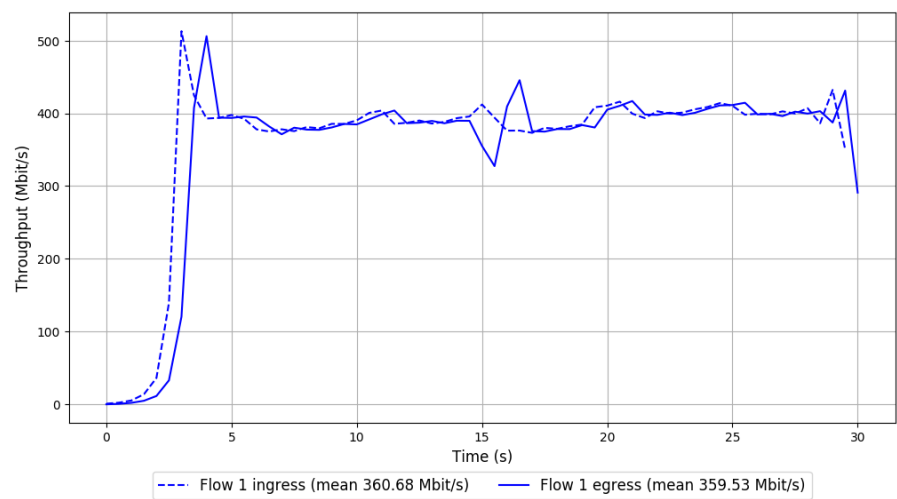
Run 6: Report of PCC-Vivace — Data Link

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-05-25 11:26:58
End at: 2018-05-25 11:27:28
Local clock offset: 0.031 ms
Remote clock offset: 0.091 ms


# Below is generated by plot.py at 2018-05-25 14:32:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 367.28 Mbit/s
95th percentile per-packet one-way delay: 71.231 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 367.28 Mbit/s
95th percentile per-packet one-way delay: 71.231 ms
Loss rate: 0.51%
```
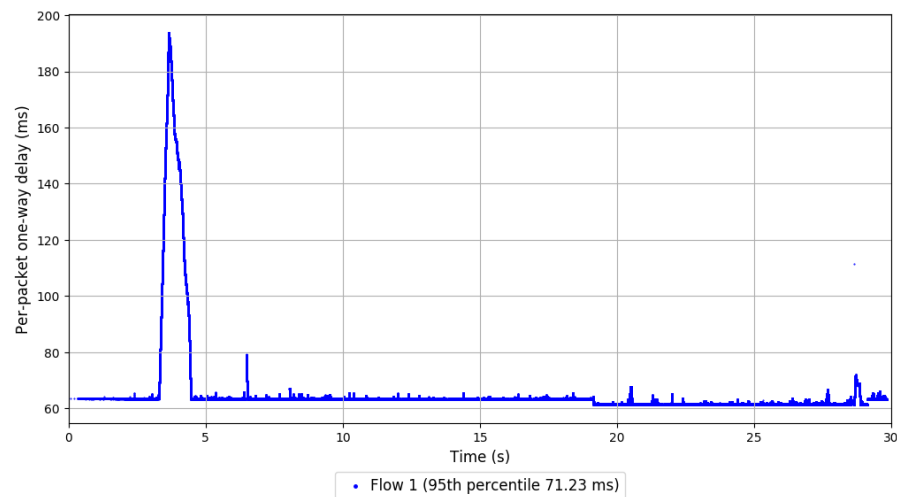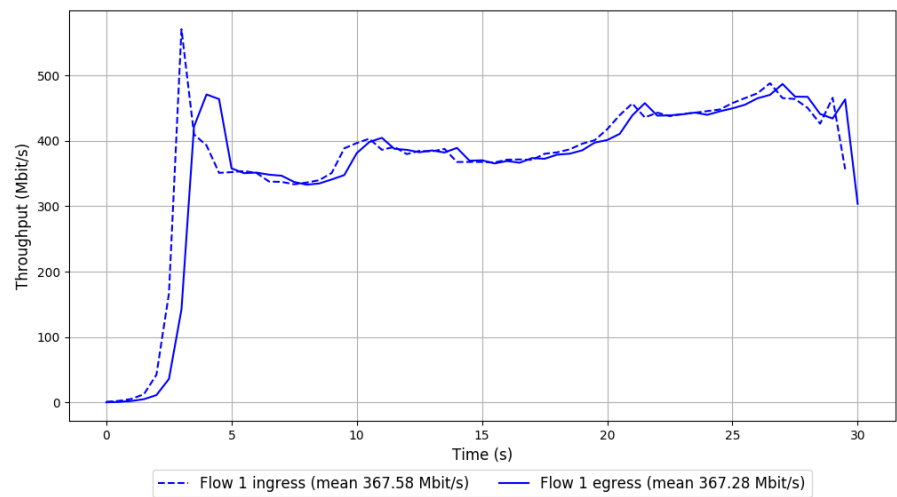
Run 7: Report of PCC-Vivace — Data Link

- - - - Flow 1 ingress (mean 367.58 Mbit/s) —— Flow 1 egress (mean 367.28 Mbit/s)

• Flow 1 (95th percentile 71.23 ms)

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-05-25 11:47:23
End at: 2018-05-25 11:47:53
Local clock offset: 0.02 ms
Remote clock offset: -0.013 ms


# Below is generated by plot.py at 2018-05-25 14:32:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 383.30 Mbit/s
95th percentile per-packet one-way delay: 70.543 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 383.30 Mbit/s
95th percentile per-packet one-way delay: 70.543 ms
Loss rate: 0.75%
```
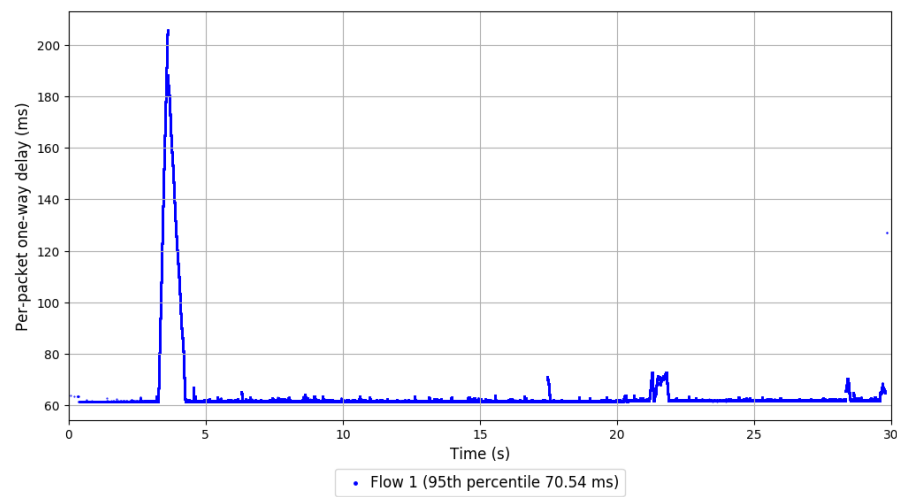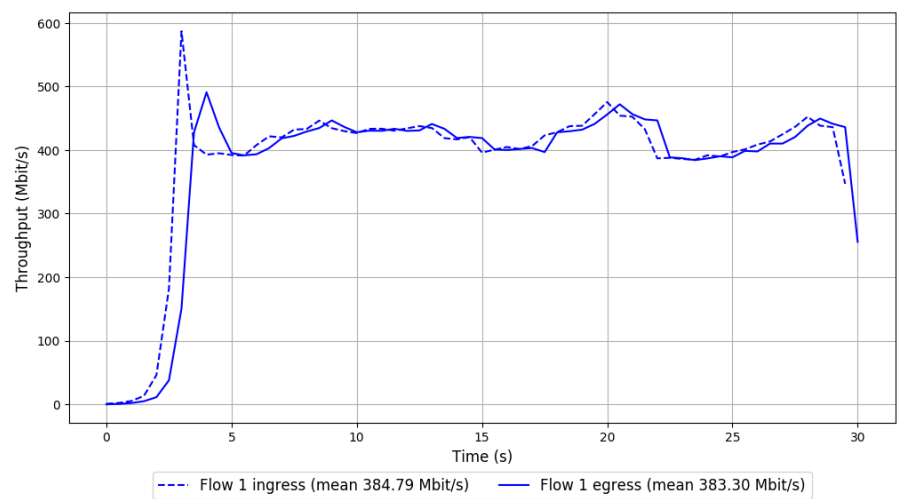
Run 8: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 384.79 Mbit/s) — — — Flow 1 egress (mean 383.30 Mbit/s)

• Flow 1 (95th percentile 70.54 ms)

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-05-25 12:08:00
End at: 2018-05-25 12:08:30
Local clock offset: -0.029 ms
Remote clock offset: 0.146 ms


# Below is generated by plot.py at 2018-05-25 14:33:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 334.39 Mbit/s
95th percentile per-packet one-way delay: 82.473 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 334.39 Mbit/s
95th percentile per-packet one-way delay: 82.473 ms
Loss rate: 0.58%
```
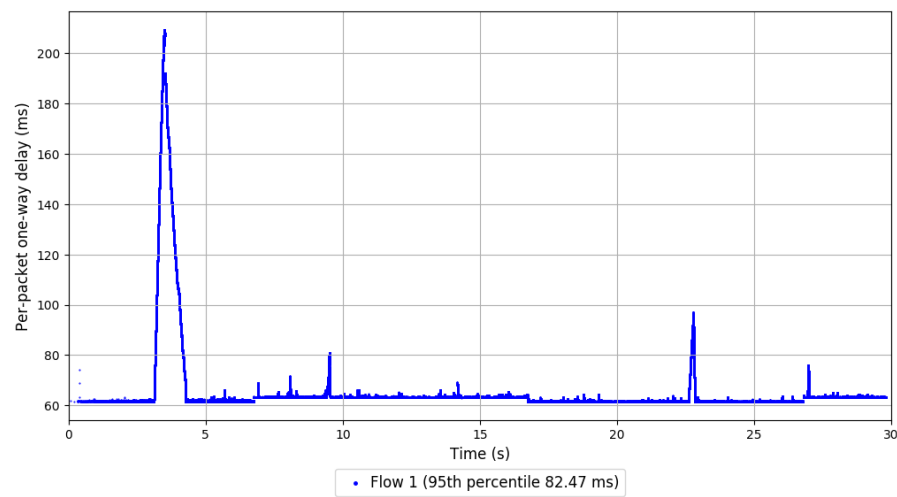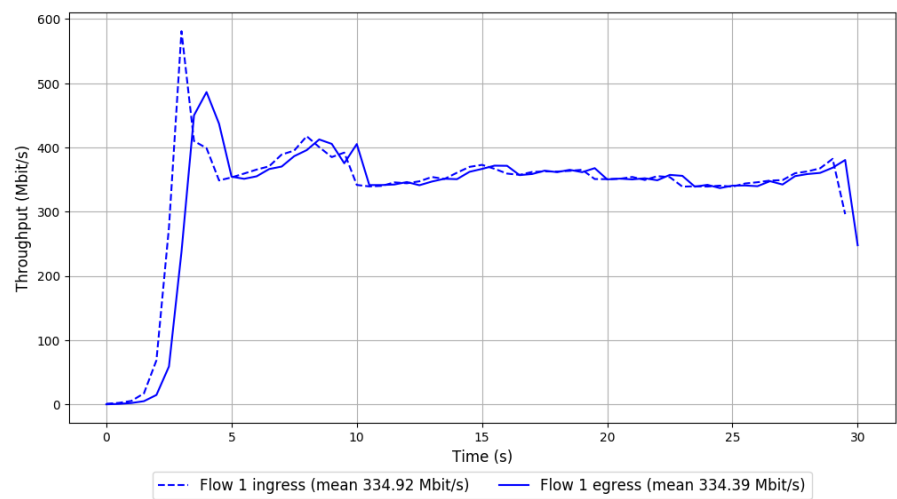
Run 9: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 334.92 Mbit/s) --- Flow 1 egress (mean 334.39 Mbit/s)
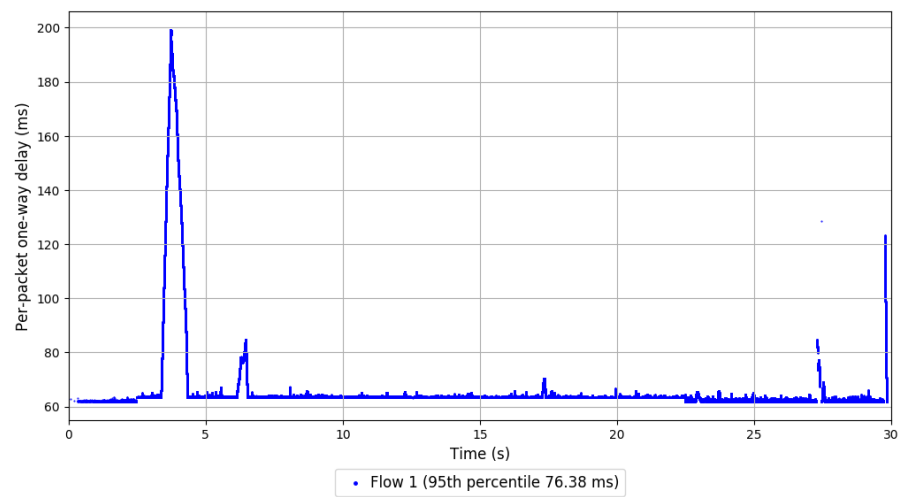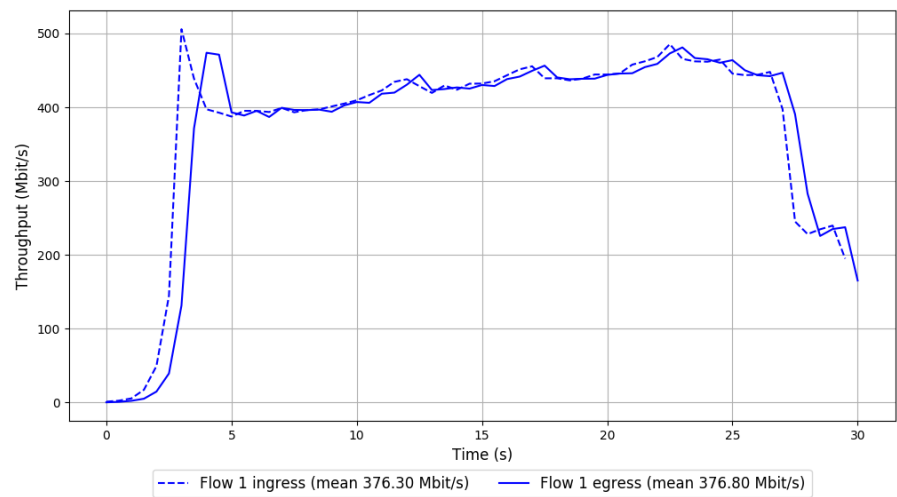

Flow 1 (95th percentile 82.47 ms)

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-05-25 12:28:21
End at: 2018-05-25 12:28:51
Local clock offset: -0.066 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2018-05-25 14:33:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 376.80 Mbit/s
95th percentile per-packet one-way delay: 76.379 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 376.80 Mbit/s
95th percentile per-packet one-way delay: 76.379 ms
Loss rate: 0.28%
```

Run 10: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 376.30 Mbit/s) — Flow 1 egress (mean 376.80 Mbit/s)

Flow 1 (95th percentile 76.38 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2018-05-25 09:28:43
End at: 2018-05-25 09:29:13
Local clock offset: -0.061 ms
Remote clock offset: 0.245 ms


# Below is generated by plot.py at 2018-05-25 14:33:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 66.924 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 66.924 ms
Loss rate: 0.00%
```
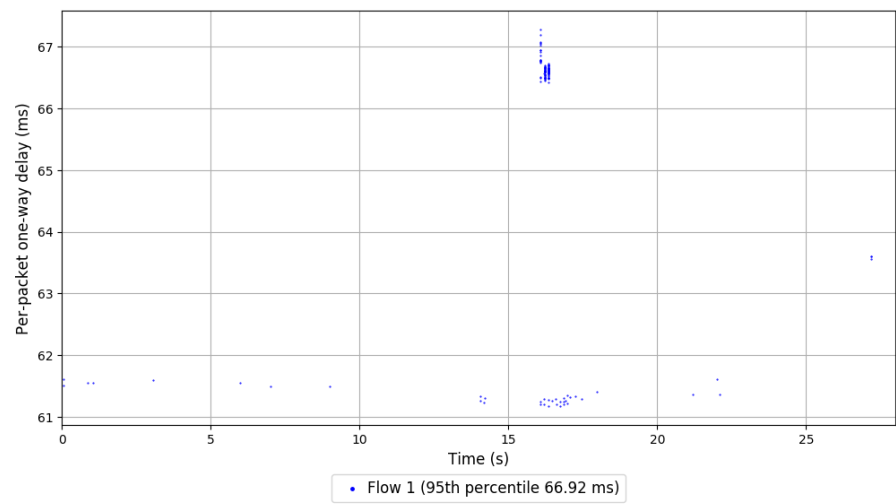
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-05-25 09:49:15
End at: 2018-05-25 09:49:45
Local clock offset: -0.038 ms
Remote clock offset: 0.353 ms


# Below is generated by plot.py at 2018-05-25 14:33:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.657 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.657 ms
Loss rate: 0.00%
```
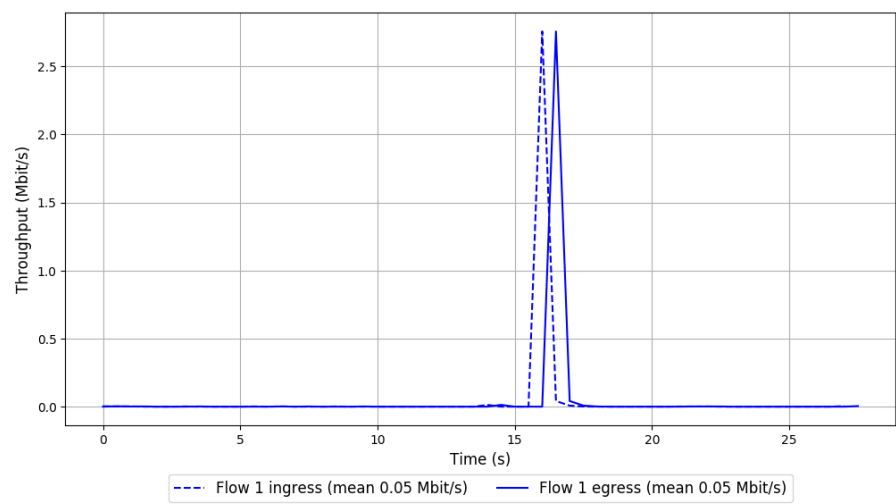
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-05-25 10:09:47
End at: 2018-05-25 10:10:17
Local clock offset: -0.018 ms
Remote clock offset: 0.087 ms


# Below is generated by plot.py at 2018-05-25 14:33:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.866 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.866 ms
Loss rate: 0.00%
```
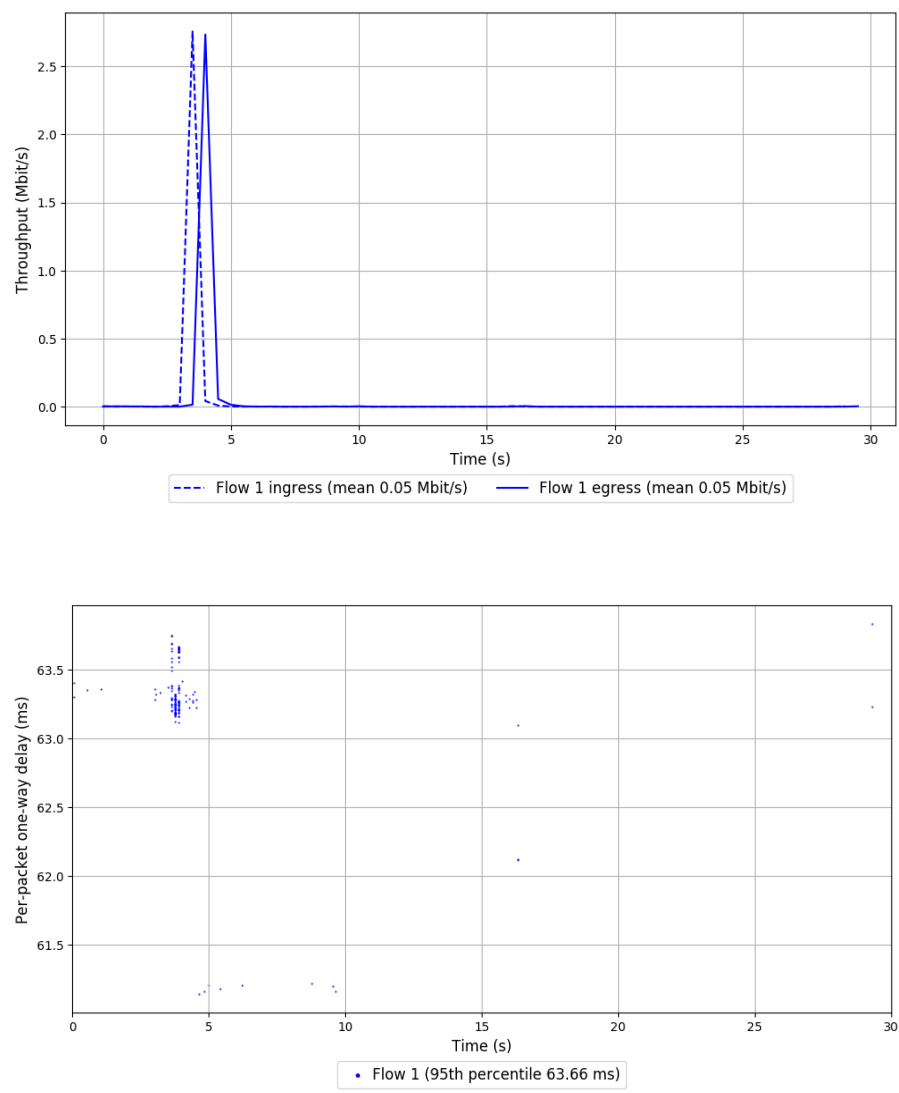
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-05-25 10:30:18
End at: 2018-05-25 10:30:48
Local clock offset: -0.024 ms
Remote clock offset: 0.258 ms


# Below is generated by plot.py at 2018-05-25 14:33:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.283 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.283 ms
Loss rate: 0.00%
```
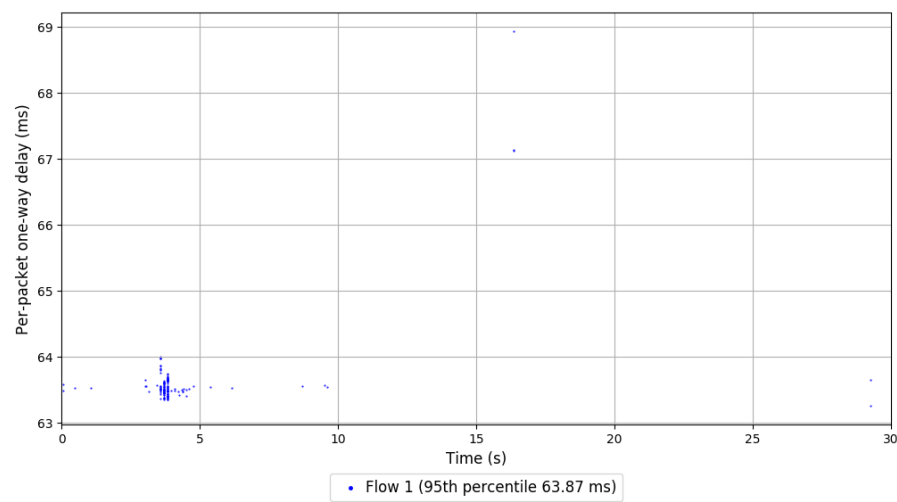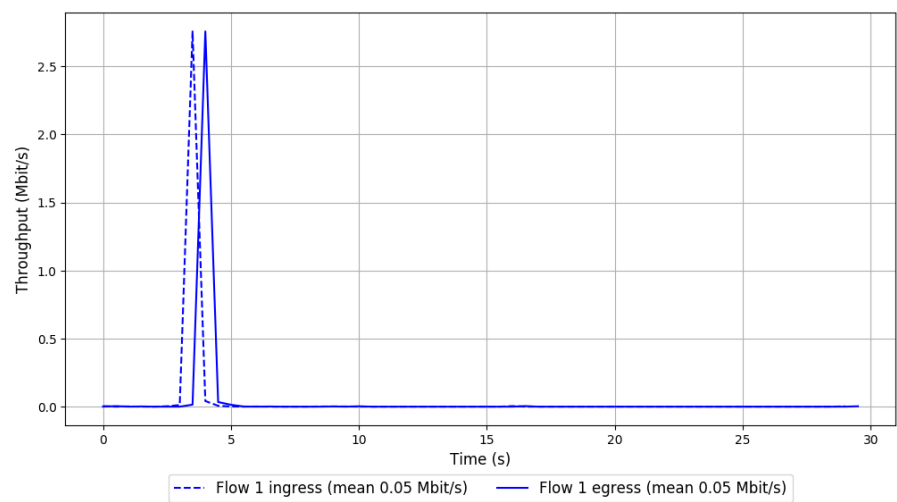
Run 4: Report of WebRTC media — Data Link

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

• Flow 1 (95th percentile 63.28 ms)

```
Run 5: Statistics of WebRTC media

Start at: 2018-05-25 10:50:46
End at: 2018-05-25 10:51:16
Local clock offset: 0.027 ms
Remote clock offset: -0.206 ms


# Below is generated by plot.py at 2018-05-25 14:33:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.267 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.267 ms
Loss rate: 0.00%
```
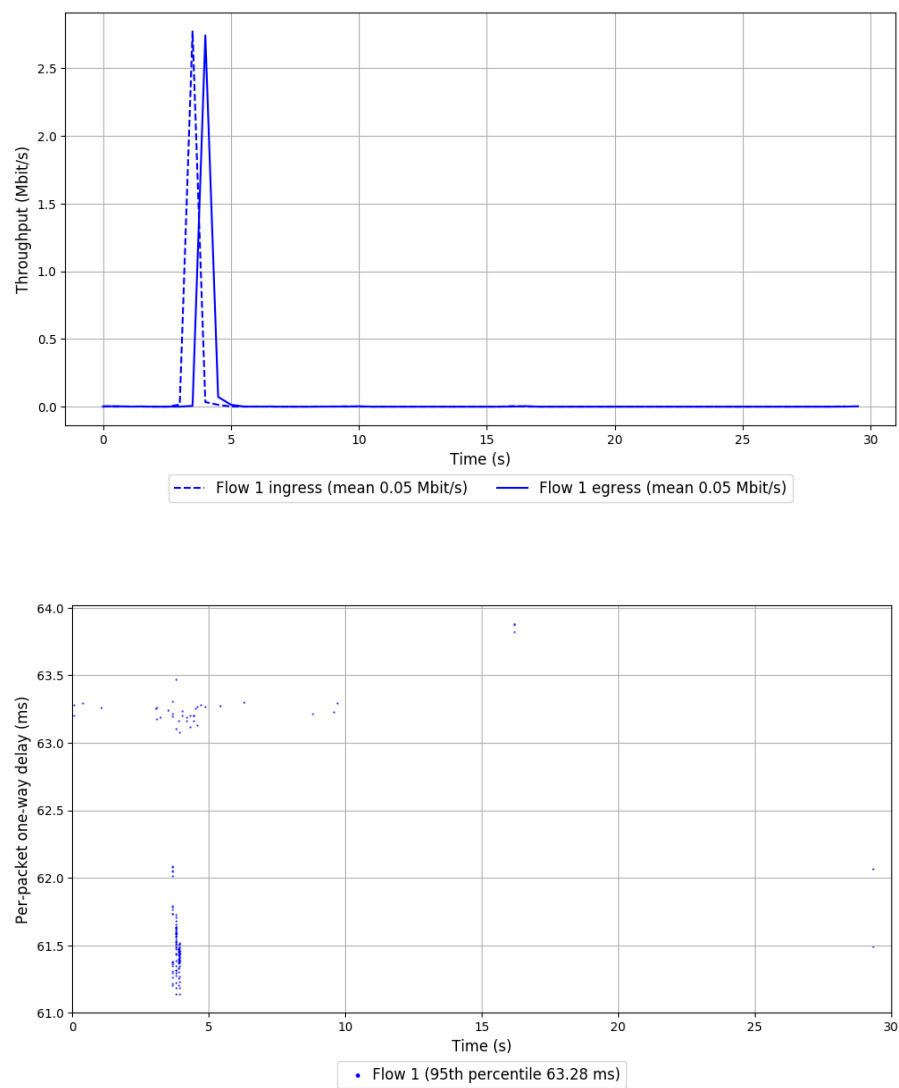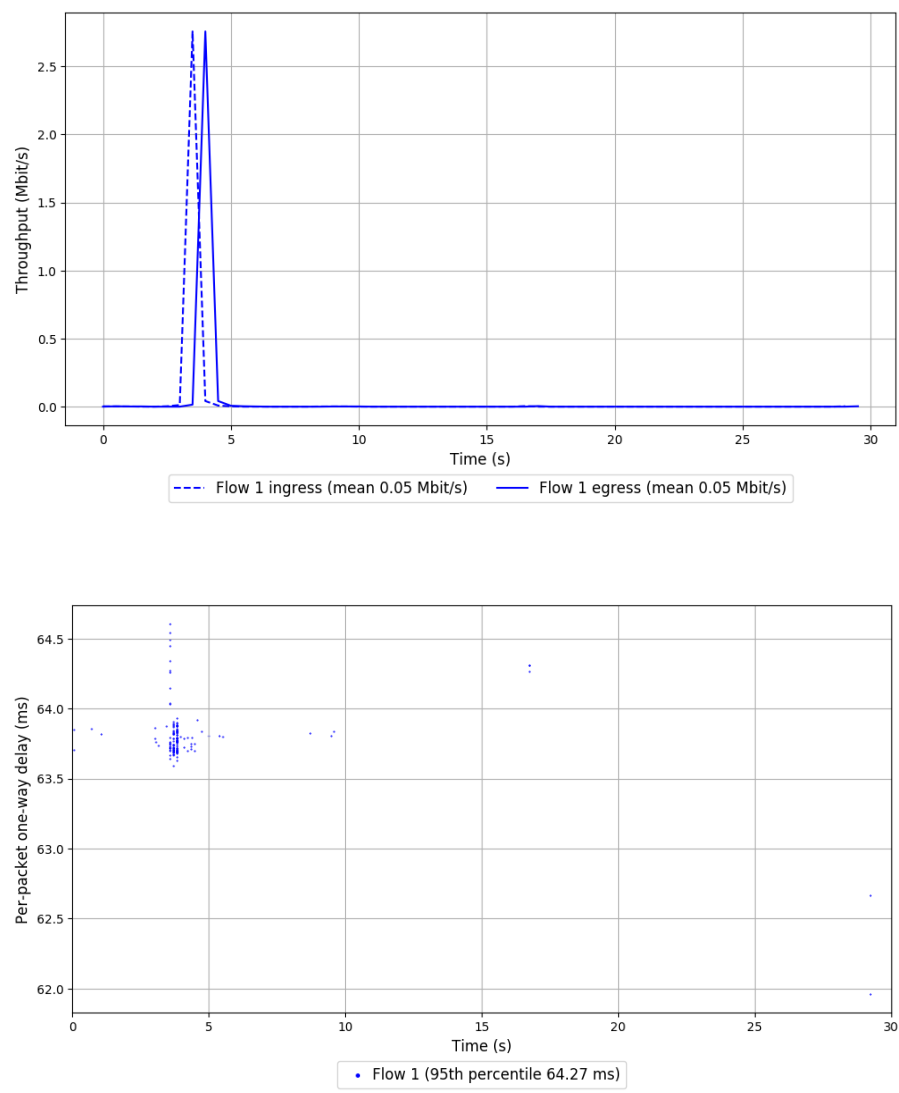
Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-05-25 11:11:11
End at: 2018-05-25 11:11:41
Local clock offset: -0.007 ms
Remote clock offset: 0.1 ms


# Below is generated by plot.py at 2018-05-25 14:33:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.065 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.065 ms
Loss rate: 0.00%
```
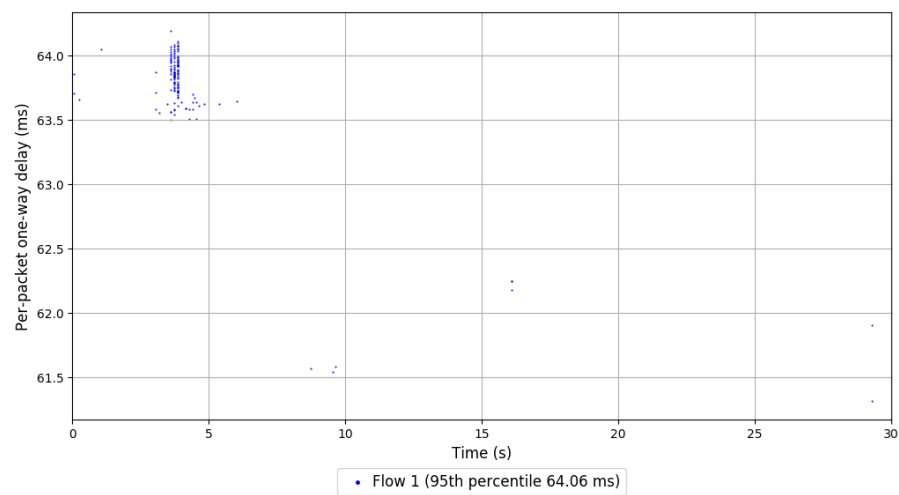
Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-05-25 11:32:06
End at: 2018-05-25 11:32:36
Local clock offset: 0.044 ms
Remote clock offset: 0.03 ms


# Below is generated by plot.py at 2018-05-25 14:33:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.925 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.925 ms
Loss rate: 0.00%
```
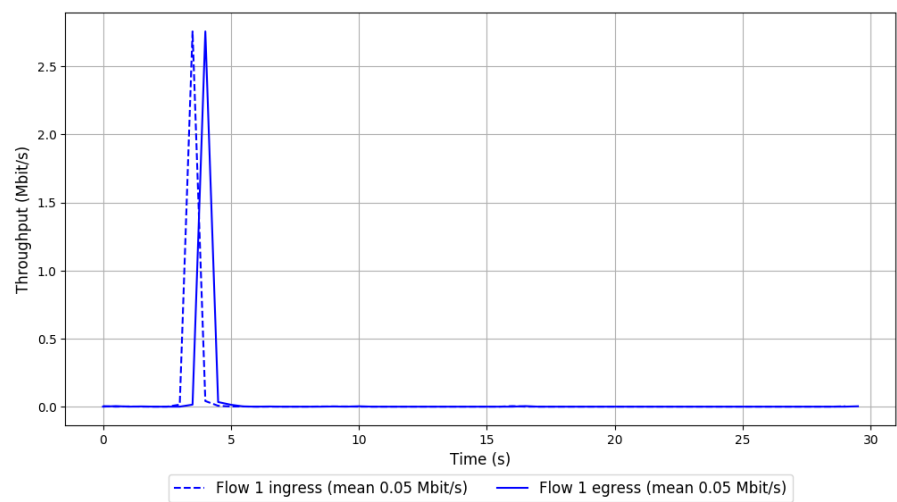
Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-05-25 11:52:32
End at: 2018-05-25 11:53:02
Local clock offset: 0.021 ms
Remote clock offset: 0.261 ms


# Below is generated by plot.py at 2018-05-25 14:33:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.745 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.745 ms
Loss rate: 0.00%
```
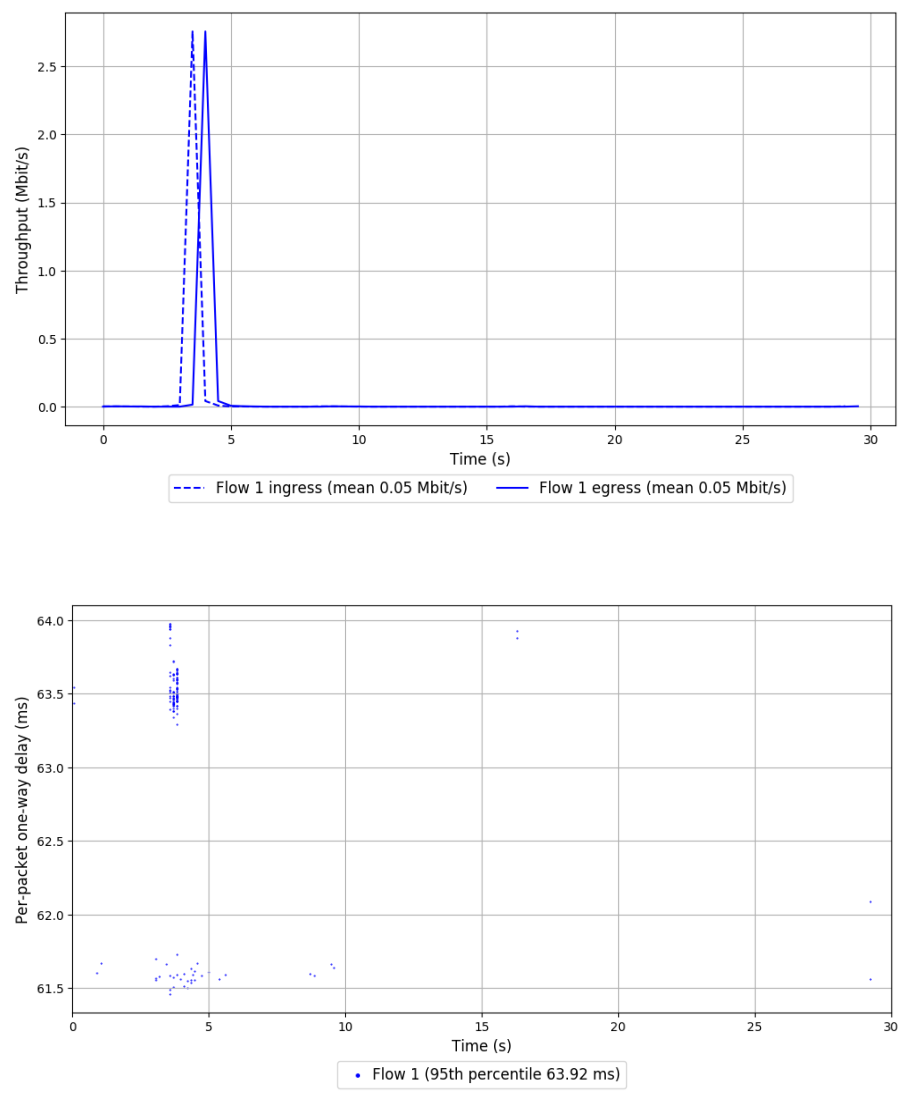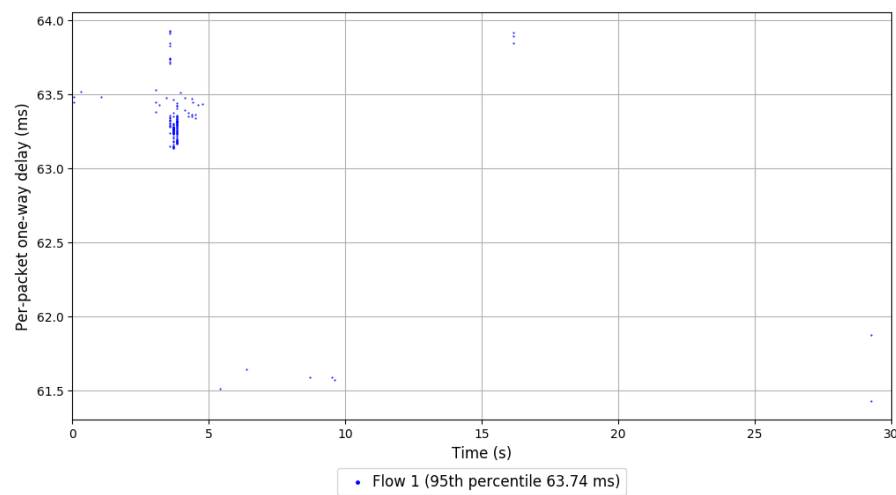
Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-05-25 12:13:02
End at: 2018-05-25 12:13:32
Local clock offset: -0.021 ms
Remote clock offset: 0.046 ms


# Below is generated by plot.py at 2018-05-25 14:33:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.284 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.284 ms
Loss rate: 0.00%
```
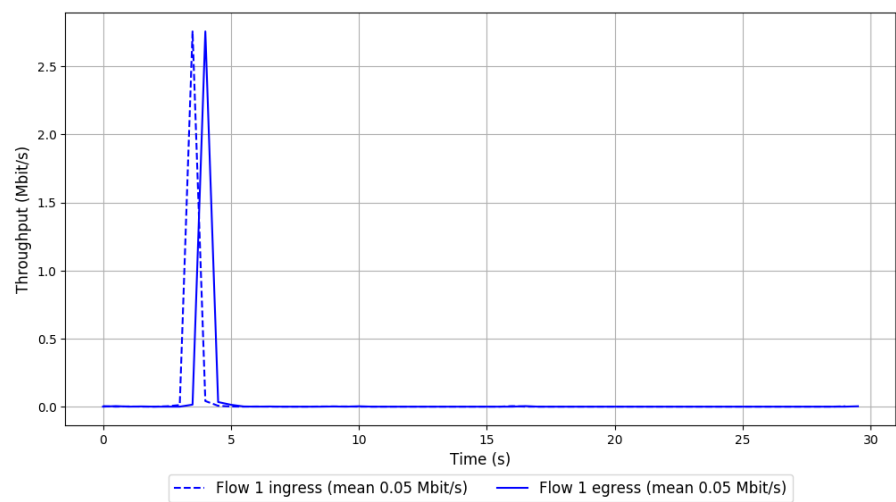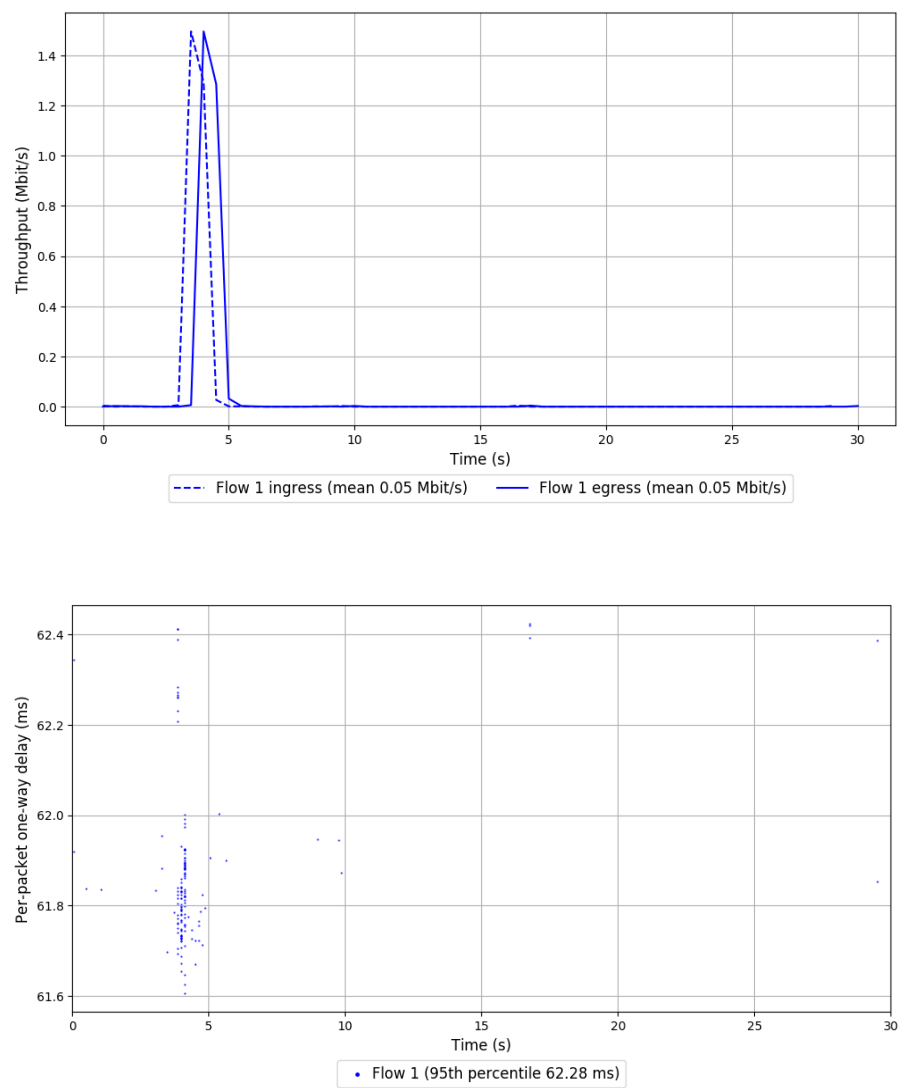
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-05-25 12:33:24
End at: 2018-05-25 12:33:54
Local clock offset: -0.101 ms
Remote clock offset: 0.111 ms


# Below is generated by plot.py at 2018-05-25 14:33:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.957 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.957 ms
Loss rate: 0.00%
```

Run 10: Report of WebRTC media — Data Link