Pantheon Report

Generated at 2018-05-22 00:55:08 (UTC).

Data path: AWS India 1 Ethernet (*local*) →India Ethernet (*remote*).

Repeated the test of 16 congestion control schemes 10 times.
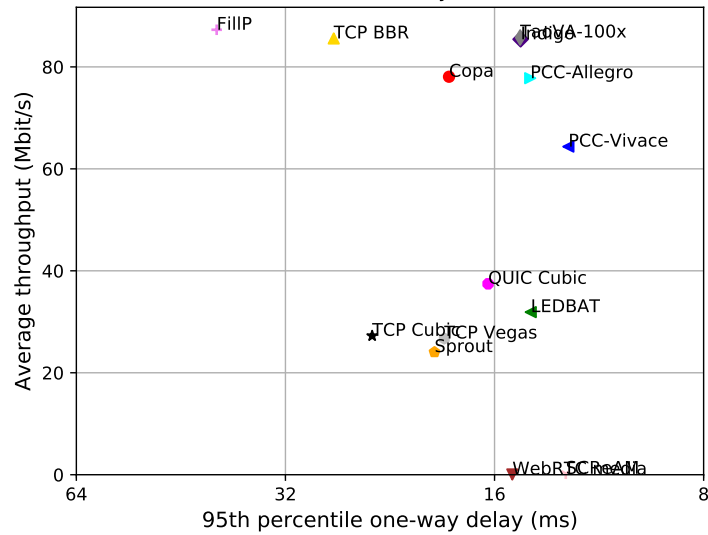
Each test lasted for 30 seconds running 1 flow.

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

NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ 2d1d4407e851ba626e5ca4626a306105793df686
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```
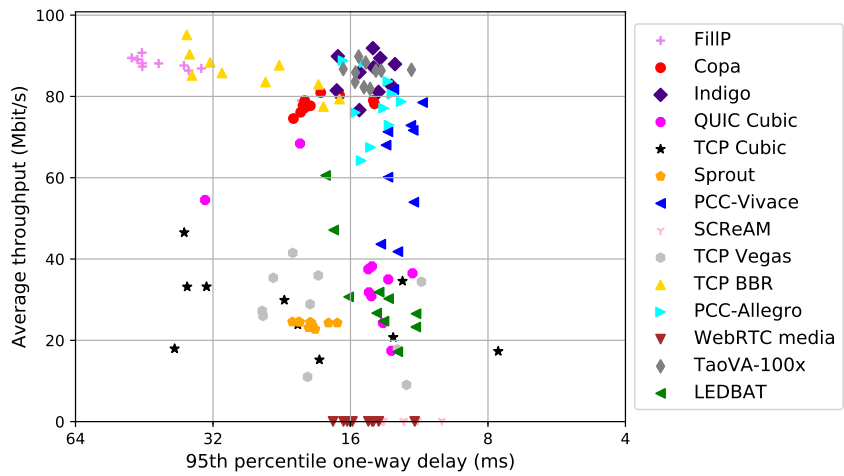
test from AWS India 1 Ethernet to India Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)

test from AWS India 1 Ethernet to India Ethernet, 10 runs of 30s each per scheme

scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	85.58	27.27	8.03
Copa	10	78.07	18.61	8.78
TCP Cubic	10	27.24	24.00	0.33
FillP	10	87.28	40.19	9.42
Indigo	10	85.42	14.68	6.97
LEDBAT	10	31.89	14.19	0.21
PCC-Allegro	10	77.78	14.21	7.58
PCC-Expr	0	N/A	N/A	N/A
QUIC Cubic	10	37.45	16.34	1.08
SCReAM	10	0.18	12.63	0.18
Sprout	10	24.06	19.52	0.74
TaoVA-100x	10	85.77	14.70	7.96
TCP Vegas	10	26.72	18.90	0.58
Verus	0	N/A	N/A	N/A
PCC-Vivace	10	64.36	12.53	5.37
WebRTC media	10	0.05	15.08	0.26

```
Run 1: Statistics of TCP BBR

Start at: 2018-05-21 21:57:38
End at: 2018-05-21 21:58:08
Local clock offset: -2.076 ms
Remote clock offset: -1.49 ms

# Below is generated by plot.py at 2018-05-22 00:40:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.78 Mbit/s
95th percentile per-packet one-way delay: 30.581 ms
Loss rate: 8.71%
-- Flow 1:
Average throughput: 85.78 Mbit/s
95th percentile per-packet one-way delay: 30.581 ms
Loss rate: 8.71%
```
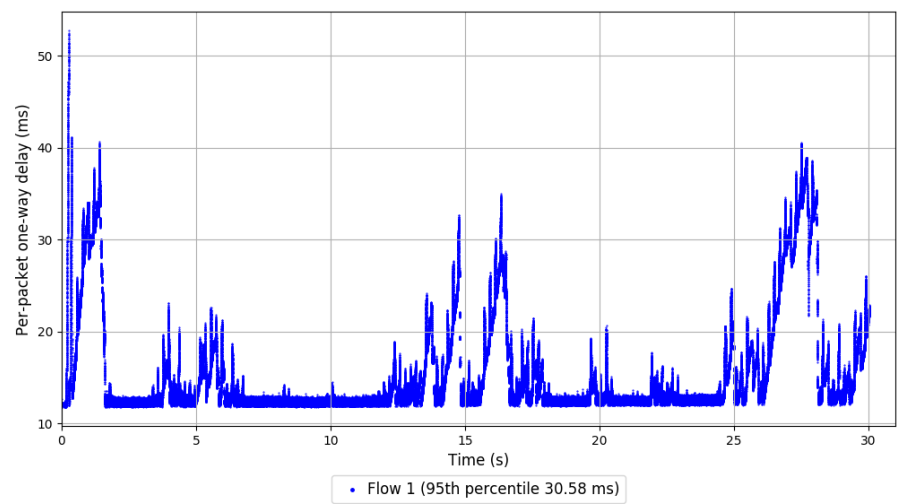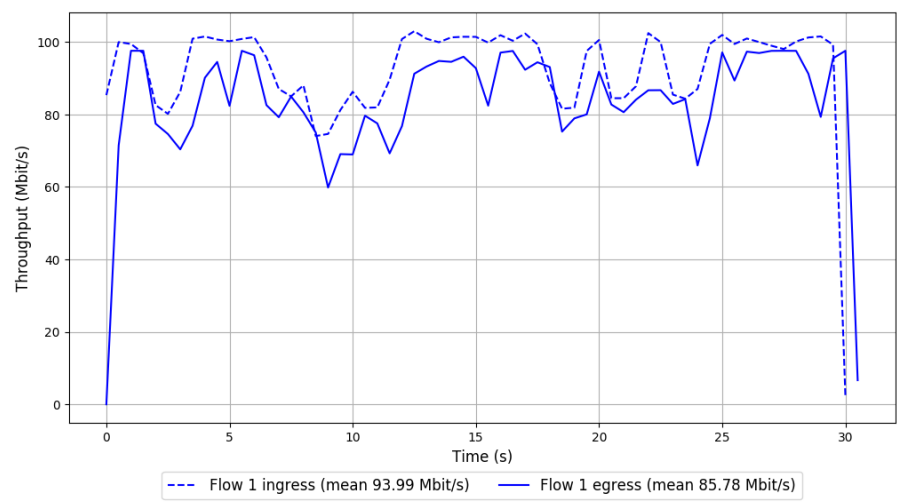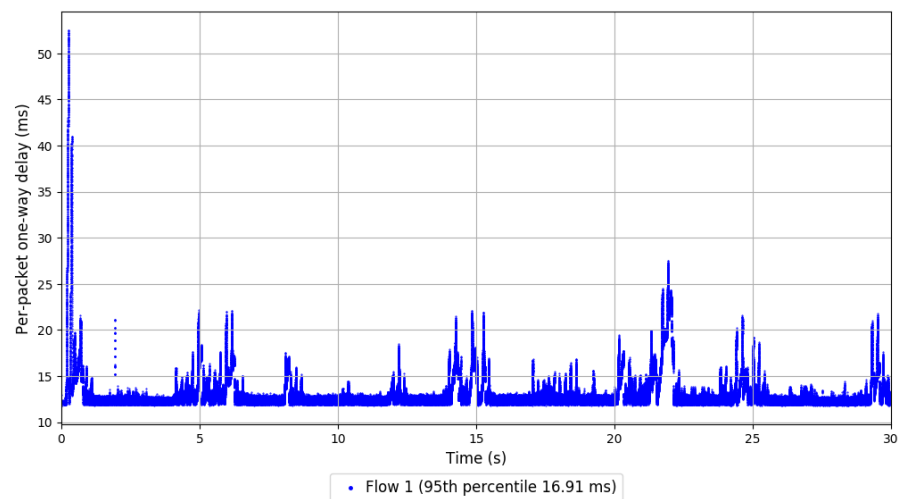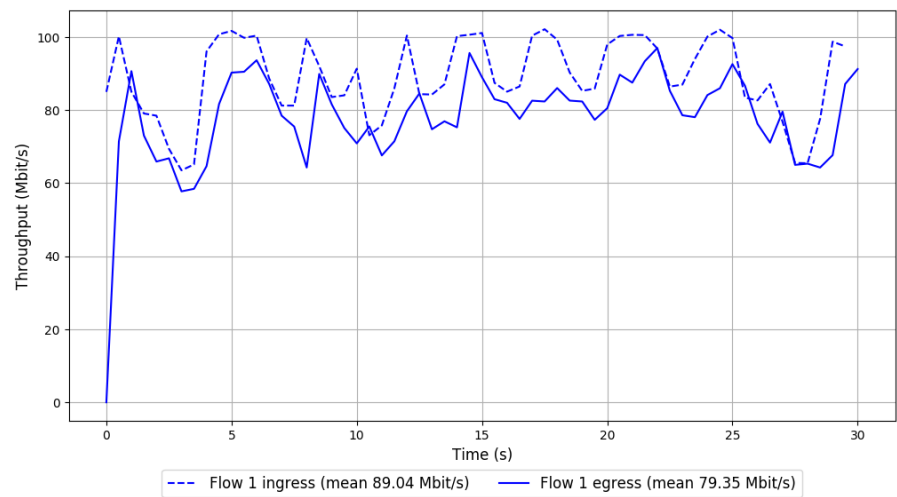
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 93.99 Mbit/s) --- Flow 1 egress (mean 85.78 Mbit/s)

• Flow 1 (95th percentile 30.58 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2018-05-21 22:15:25
End at: 2018-05-21 22:15:55
Local clock offset: 1.246 ms
Remote clock offset: -1.182 ms


# Below is generated by plot.py at 2018-05-22 00:40:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.35 Mbit/s
95th percentile per-packet one-way delay: 16.913 ms
Loss rate: 10.88%
-- Flow 1:
Average throughput: 79.35 Mbit/s
95th percentile per-packet one-way delay: 16.913 ms
Loss rate: 10.88%
```
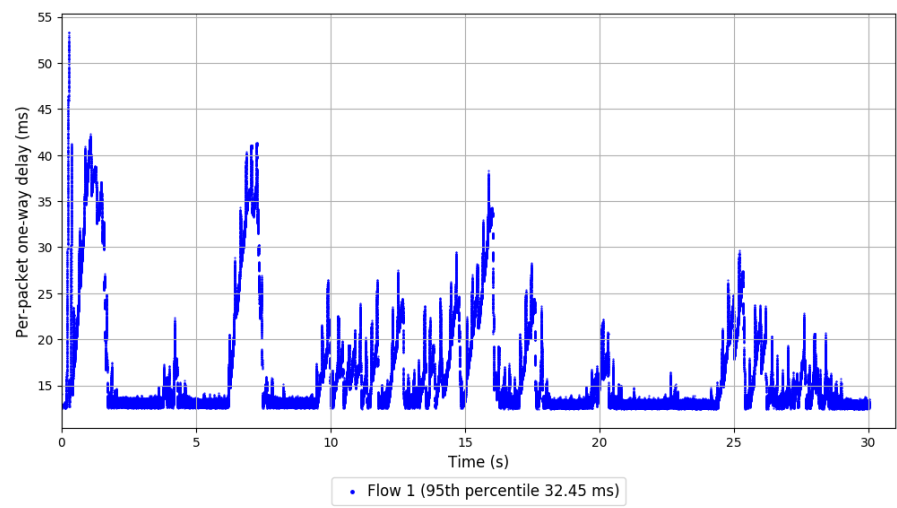
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2018-05-21 22:33:10
End at: 2018-05-21 22:33:40
Local clock offset: 0.557 ms
Remote clock offset: -0.652 ms


# Below is generated by plot.py at 2018-05-22 00:40:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.36 Mbit/s
95th percentile per-packet one-way delay: 32.451 ms
Loss rate: 6.48%
-- Flow 1:
Average throughput: 88.36 Mbit/s
95th percentile per-packet one-way delay: 32.451 ms
Loss rate: 6.48%
```
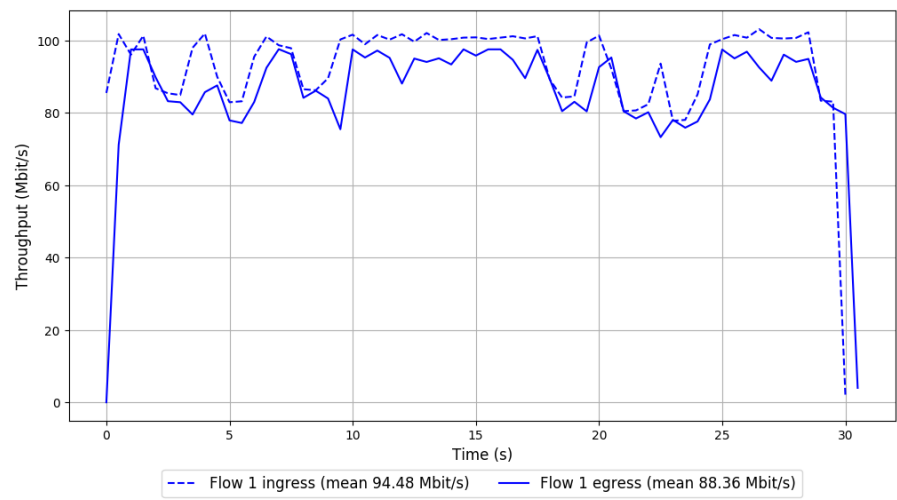
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2018-05-21 22:51:01
End at: 2018-05-21 22:51:31
Local clock offset: -1.123 ms
Remote clock offset: 1.857 ms


# Below is generated by plot.py at 2018-05-22 00:40:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.53 Mbit/s
95th percentile per-packet one-way delay: 24.553 ms
Loss rate: 8.88%
-- Flow 1:
Average throughput: 83.53 Mbit/s
95th percentile per-packet one-way delay: 24.553 ms
Loss rate: 8.88%
```
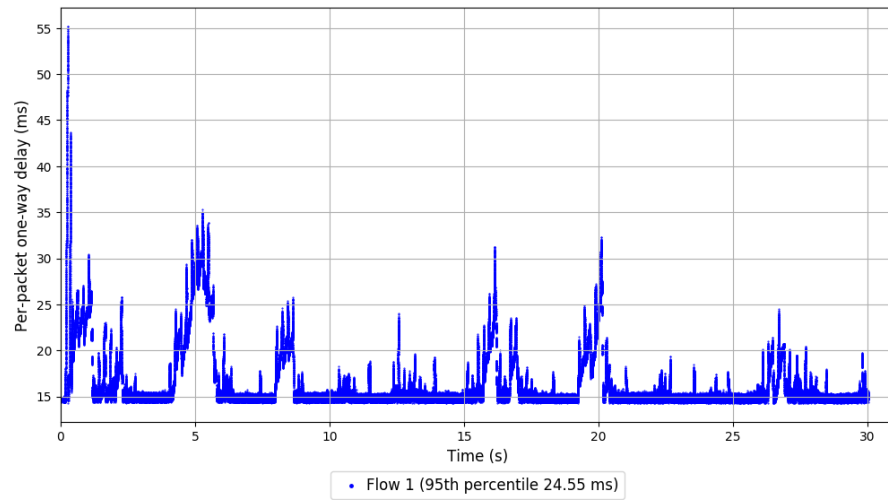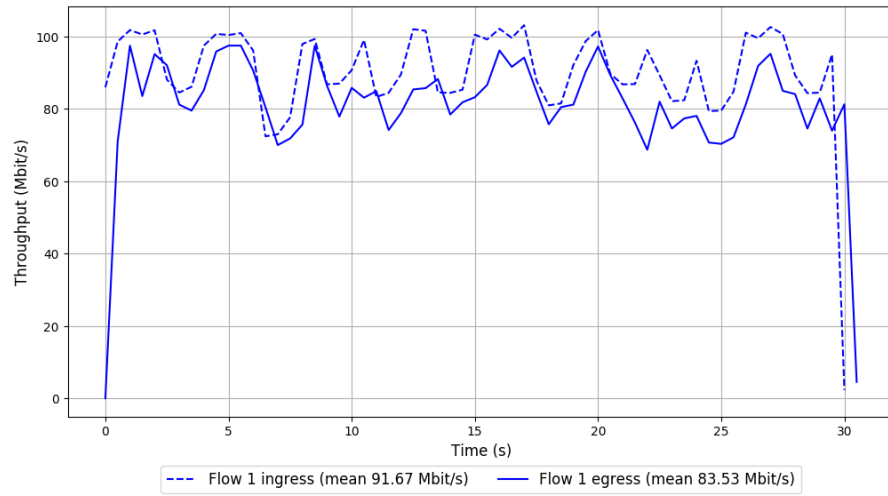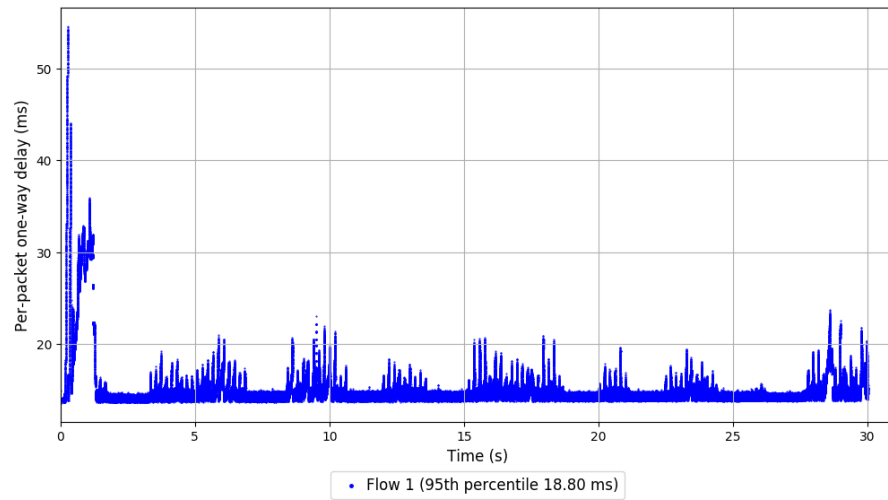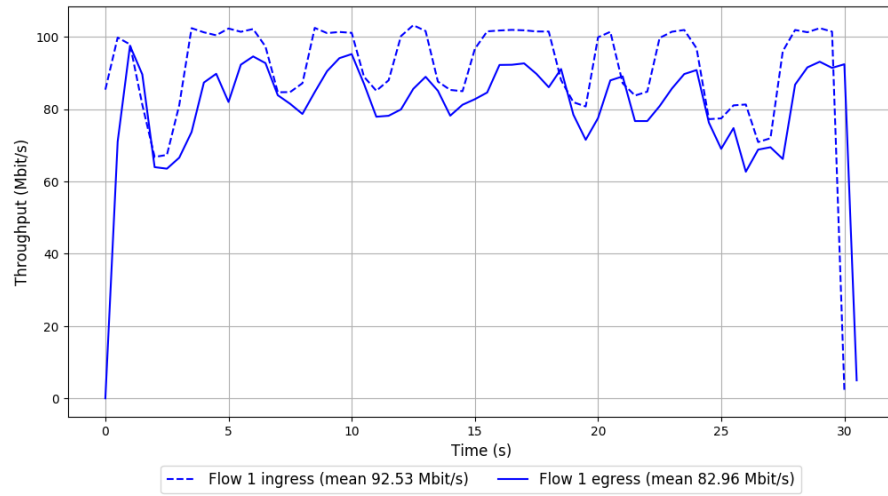
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 91.67 Mbit/s) --- Flow 1 egress (mean 83.53 Mbit/s)
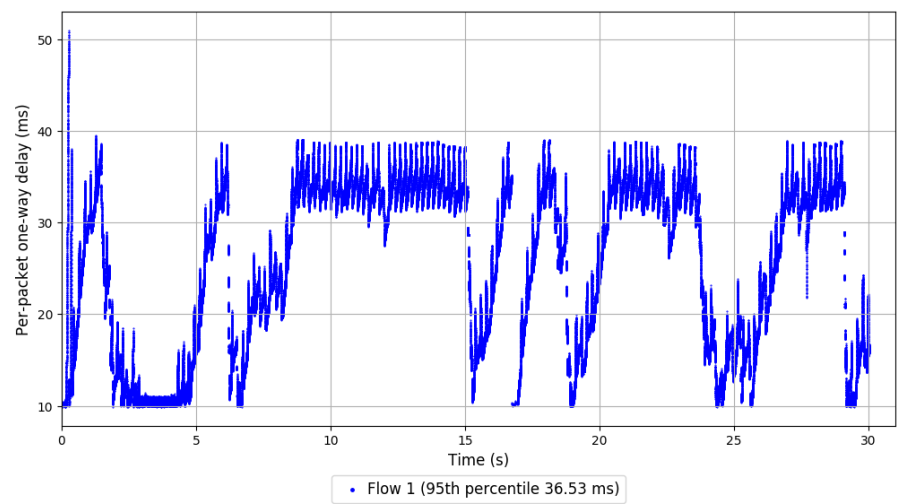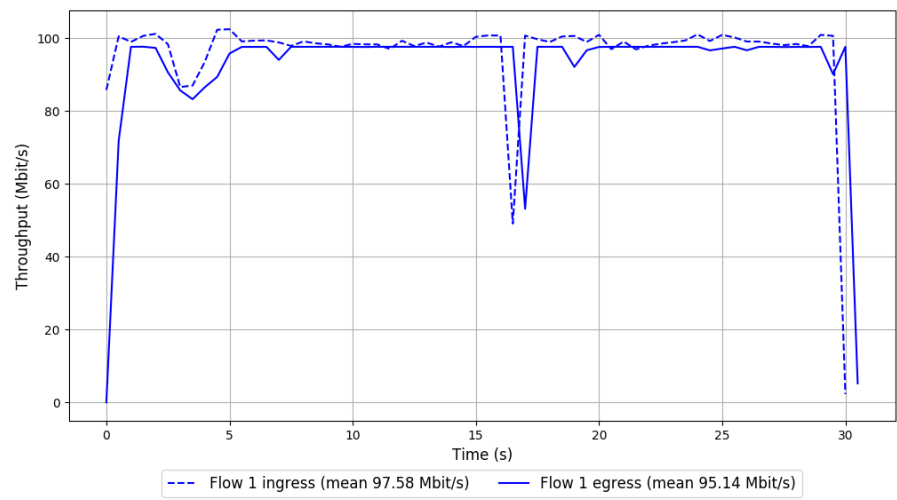

Flow 1 (95th percentile 24.55 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2018-05-21 23:08:46
End at: 2018-05-21 23:09:16
Local clock offset: -3.916 ms
Remote clock offset: -0.9 ms


# Below is generated by plot.py at 2018-05-22 00:40:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.96 Mbit/s
95th percentile per-packet one-way delay: 18.801 ms
Loss rate: 10.35%
-- Flow 1:
Average throughput: 82.96 Mbit/s
95th percentile per-packet one-way delay: 18.801 ms
Loss rate: 10.35%
```

Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 92.53 Mbit/s) — — — Flow 1 egress (mean 82.96 Mbit/s)

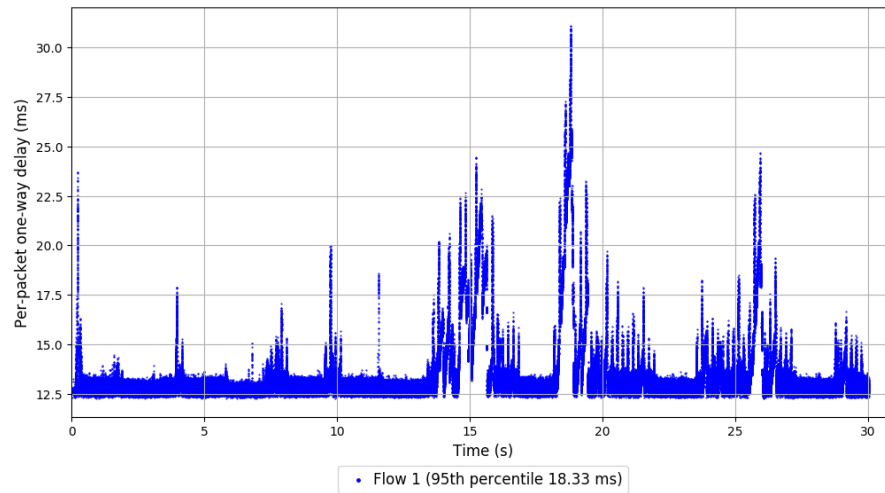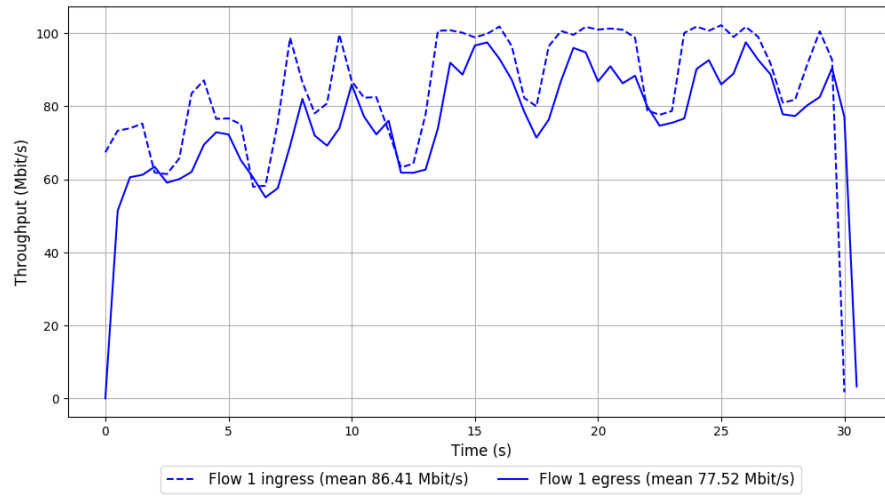Flow 1 (95th percentile 18.80 ms)

```
Run 6: Statistics of TCP BBR

Start at: 2018-05-21 23:26:35
End at: 2018-05-21 23:27:05
Local clock offset: -2.831 ms
Remote clock offset: -5.386 ms


# Below is generated by plot.py at 2018-05-22 00:40:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.14 Mbit/s
95th percentile per-packet one-way delay: 36.528 ms
Loss rate: 2.48%
-- Flow 1:
Average throughput: 95.14 Mbit/s
95th percentile per-packet one-way delay: 36.528 ms
Loss rate: 2.48%
```
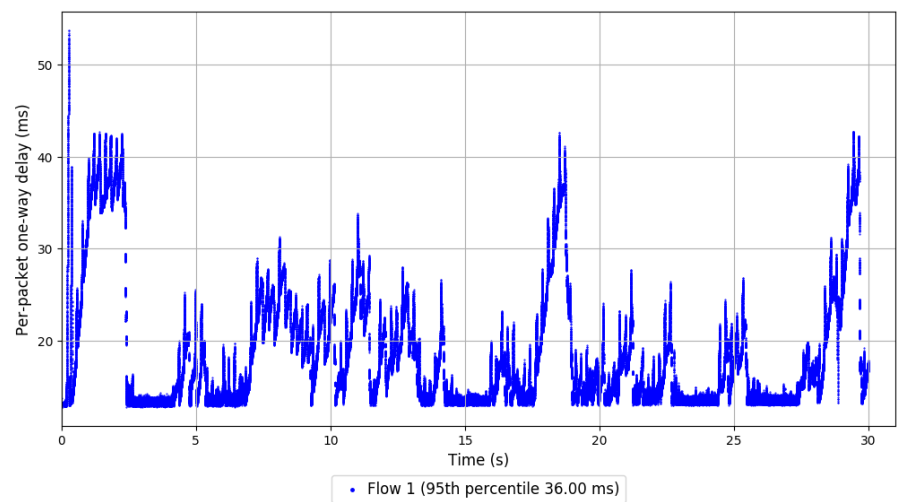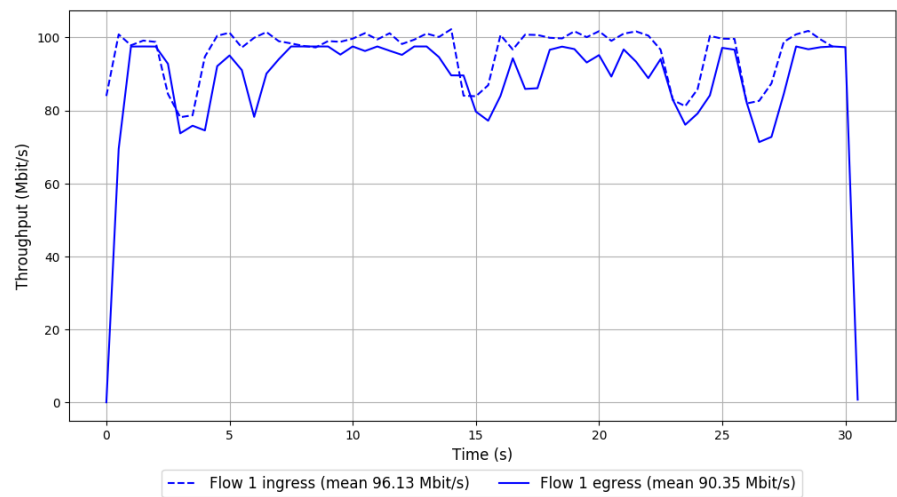
Run 6: Report of TCP BBR — Data Link

```
Run 7: Statistics of TCP BBR

Start at: 2018-05-21 23:44:27
End at: 2018-05-21 23:44:57
Local clock offset: -6.522 ms
Remote clock offset: -6.774 ms


# Below is generated by plot.py at 2018-05-22 00:40:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.52 Mbit/s
95th percentile per-packet one-way delay: 18.334 ms
Loss rate: 10.29%
-- Flow 1:
Average throughput: 77.52 Mbit/s
95th percentile per-packet one-way delay: 18.334 ms
Loss rate: 10.29%
```

Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 86.41 Mbit/s)   Flow 1 egress (mean 77.52 Mbit/s)

Flow 1 (95th percentile 18.33 ms)

```
Run 8: Statistics of TCP BBR

Start at: 2018-05-22 00:02:09
End at: 2018-05-22 00:02:39
Local clock offset: -5.579 ms
Remote clock offset: -8.015 ms


# Below is generated by plot.py at 2018-05-22 00:40:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.35 Mbit/s
95th percentile per-packet one-way delay: 36.002 ms
Loss rate: 6.00%
-- Flow 1:
Average throughput: 90.35 Mbit/s
95th percentile per-packet one-way delay: 36.002 ms
Loss rate: 6.00%
```
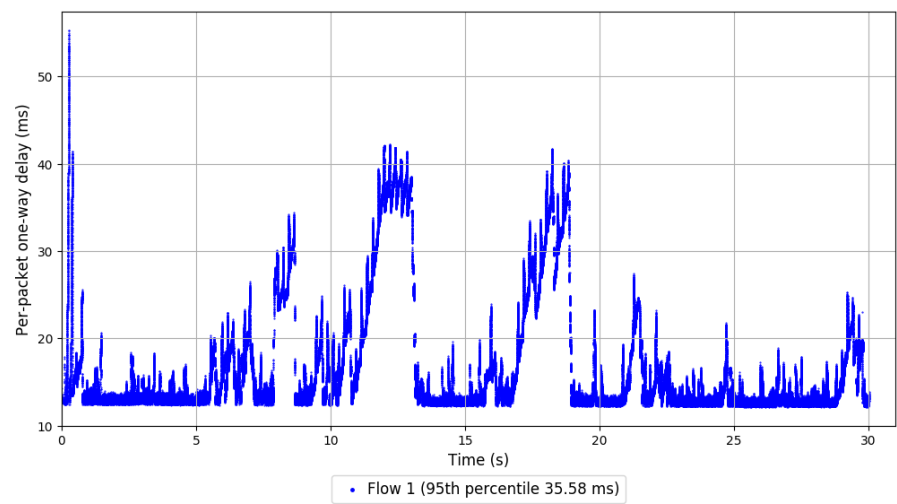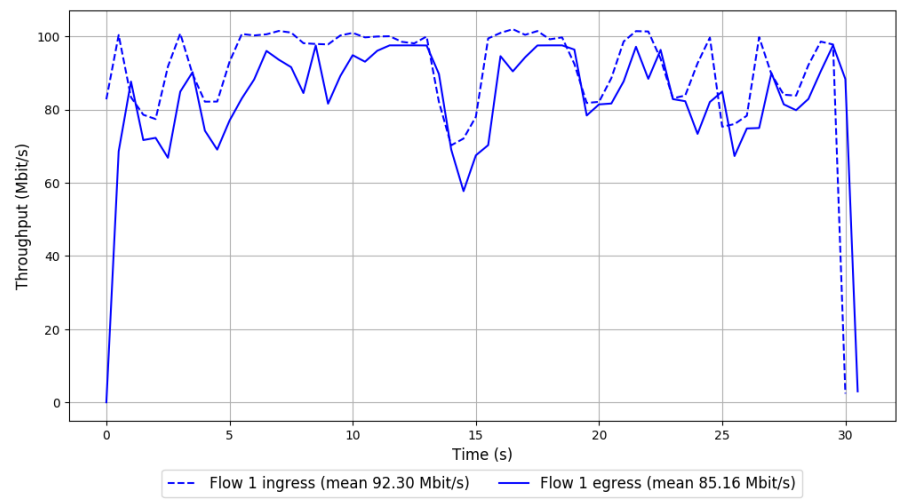
Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 96.13 Mbit/s)   Flow 1 egress (mean 90.35 Mbit/s)

Flow 1 (95th percentile 36.00 ms)

```
Run 9: Statistics of TCP BBR

Start at: 2018-05-22 00:19:59
End at: 2018-05-22 00:20:29
Local clock offset: -3.05 ms
Remote clock offset: -2.315 ms


# Below is generated by plot.py at 2018-05-22 00:41:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.16 Mbit/s
95th percentile per-packet one-way delay: 35.584 ms
Loss rate: 7.74%
-- Flow 1:
Average throughput: 85.16 Mbit/s
95th percentile per-packet one-way delay: 35.584 ms
Loss rate: 7.74%
```
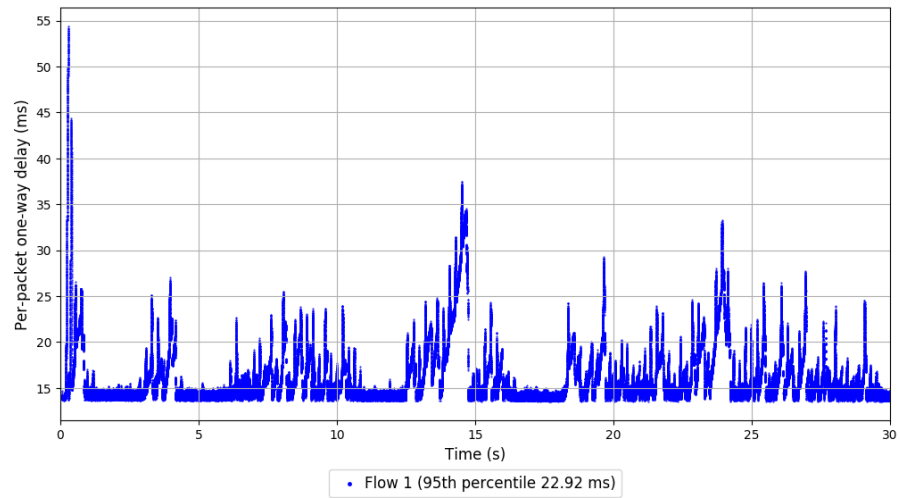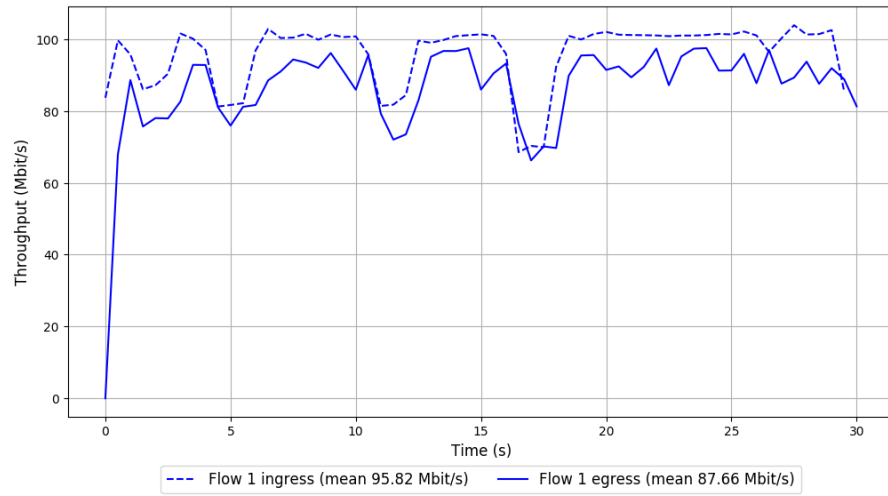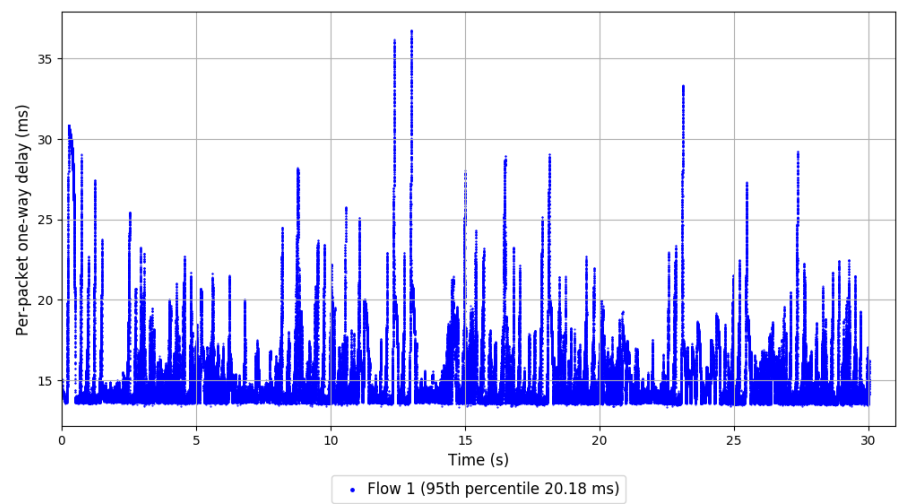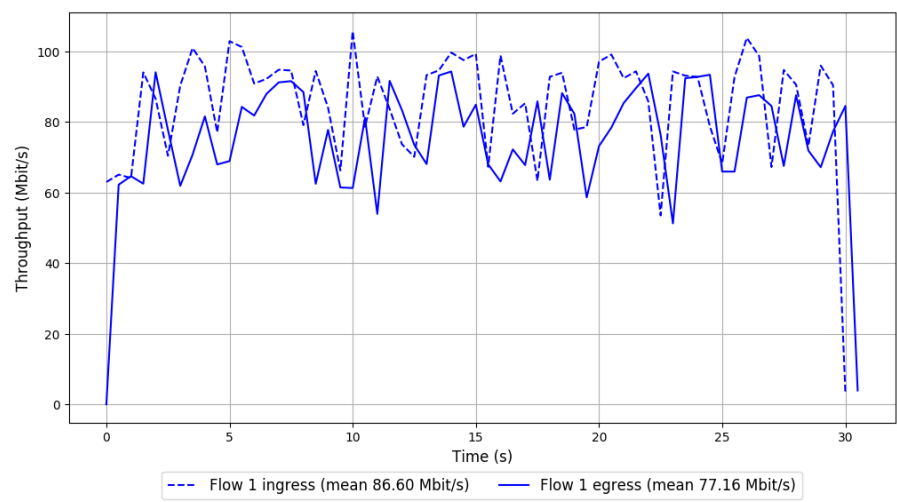
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 92.30 Mbit/s)   Flow 1 egress (mean 85.16 Mbit/s)

Flow 1 (95th percentile 35.58 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2018-05-22 00:37:58
End at: 2018-05-22 00:38:28
Local clock offset: -3.054 ms
Remote clock offset: 3.245 ms


# Below is generated by plot.py at 2018-05-22 00:41:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.66 Mbit/s
95th percentile per-packet one-way delay: 22.919 ms
Loss rate: 8.52%
-- Flow 1:
Average throughput: 87.66 Mbit/s
95th percentile per-packet one-way delay: 22.919 ms
Loss rate: 8.52%
```
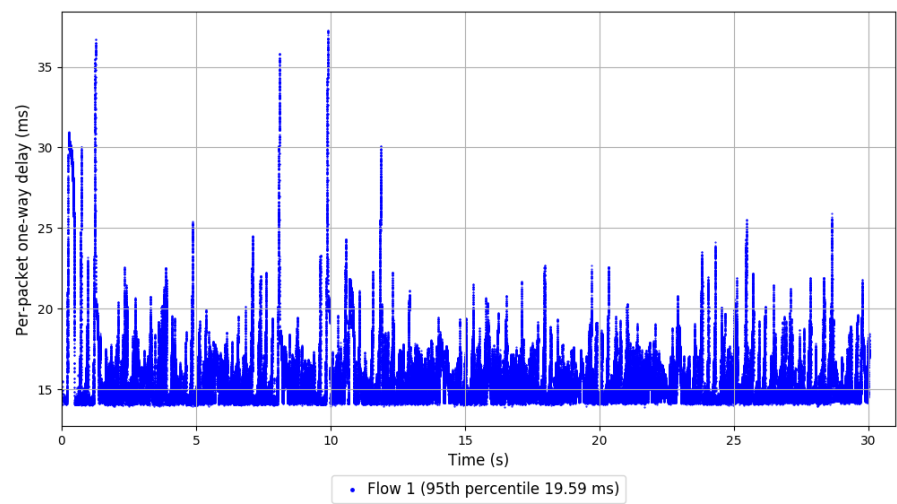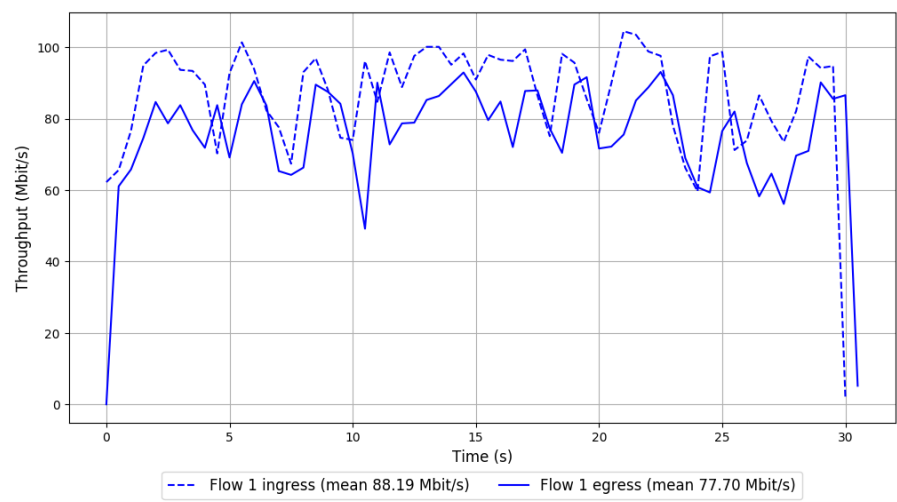
Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2018-05-21 21:47:31
End at: 2018-05-21 21:48:01
Local clock offset: -3.286 ms
Remote clock offset: -1.228 ms

# Below is generated by plot.py at 2018-05-22 00:42:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.16 Mbit/s
95th percentile per-packet one-way delay: 20.175 ms
Loss rate: 10.91%
-- Flow 1:
Average throughput: 77.16 Mbit/s
95th percentile per-packet one-way delay: 20.175 ms
Loss rate: 10.91%
```
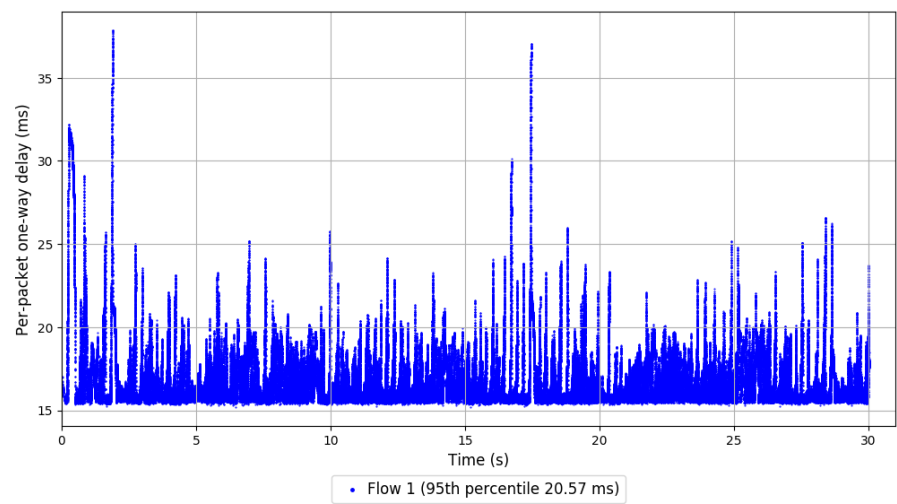
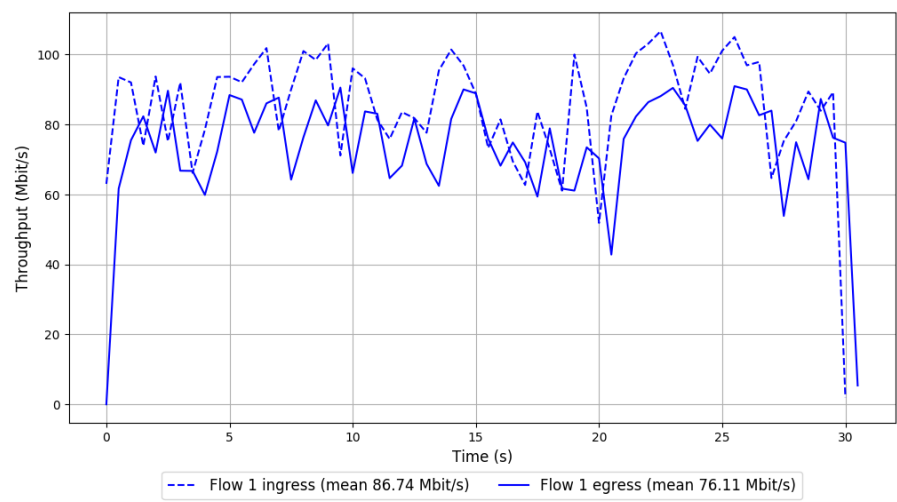Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-05-21 22:05:23
End at: 2018-05-21 22:05:53
Local clock offset: -2.333 ms
Remote clock offset: -1.812 ms


# Below is generated by plot.py at 2018-05-22 00:42:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.70 Mbit/s
95th percentile per-packet one-way delay: 19.587 ms
Loss rate: 11.89%
-- Flow 1:
Average throughput: 77.70 Mbit/s
95th percentile per-packet one-way delay: 19.587 ms
Loss rate: 11.89%
```

Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-05-21 22:23:12
End at: 2018-05-21 22:23:42
Local clock offset: -2.626 ms
Remote clock offset: -1.448 ms

# Below is generated by plot.py at 2018-05-22 00:42:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.11 Mbit/s
95th percentile per-packet one-way delay: 20.573 ms
Loss rate: 12.26%
-- Flow 1:
Average throughput: 76.11 Mbit/s
95th percentile per-packet one-way delay: 20.573 ms
Loss rate: 12.26%
```
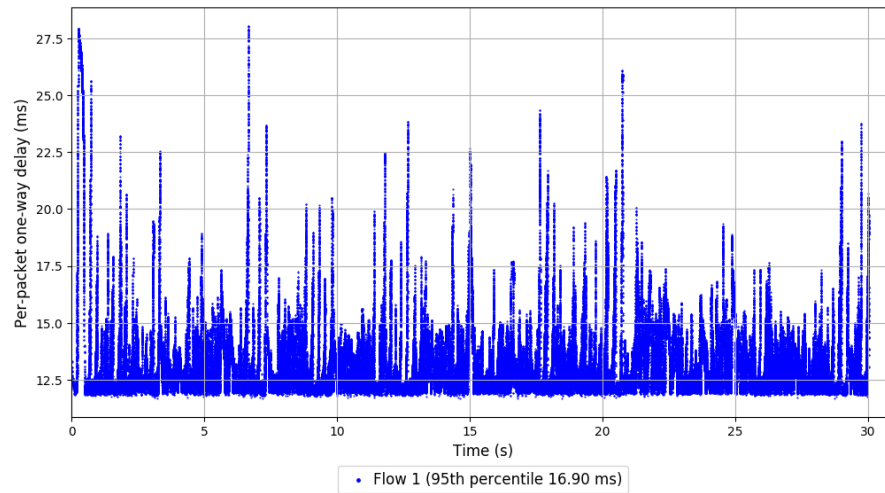
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-05-21 22:40:54
End at: 2018-05-21 22:41:24
Local clock offset: 1.217 ms
Remote clock offset: 0.568 ms


# Below is generated by plot.py at 2018-05-22 00:42:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.28 Mbit/s
95th percentile per-packet one-way delay: 16.899 ms
Loss rate: 9.38%
-- Flow 1:
Average throughput: 80.28 Mbit/s
95th percentile per-packet one-way delay: 16.899 ms
Loss rate: 9.38%
```
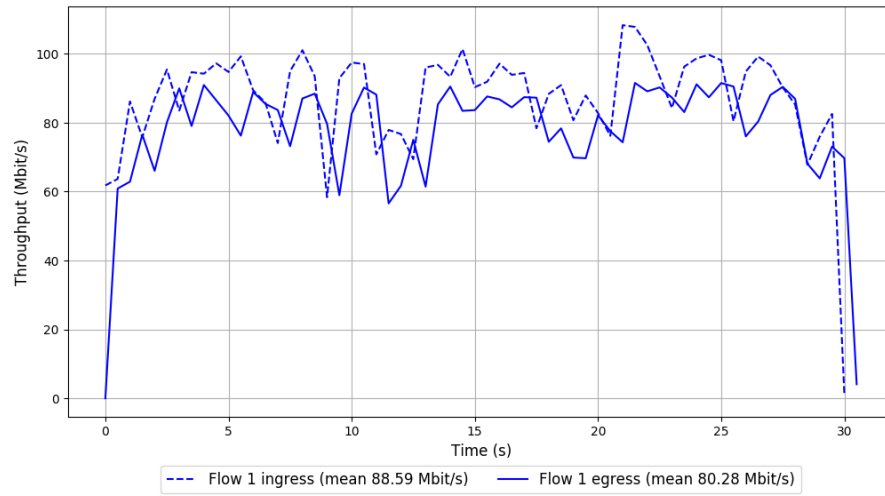
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2018-05-21 22:58:47
End at: 2018-05-21 22:59:17
Local clock offset: -1.816 ms
Remote clock offset: 1.629 ms


# Below is generated by plot.py at 2018-05-22 00:42:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.56 Mbit/s
95th percentile per-packet one-way delay: 21.335 ms
Loss rate: 6.28%
-- Flow 1:
Average throughput: 74.56 Mbit/s
95th percentile per-packet one-way delay: 21.335 ms
Loss rate: 6.28%
```
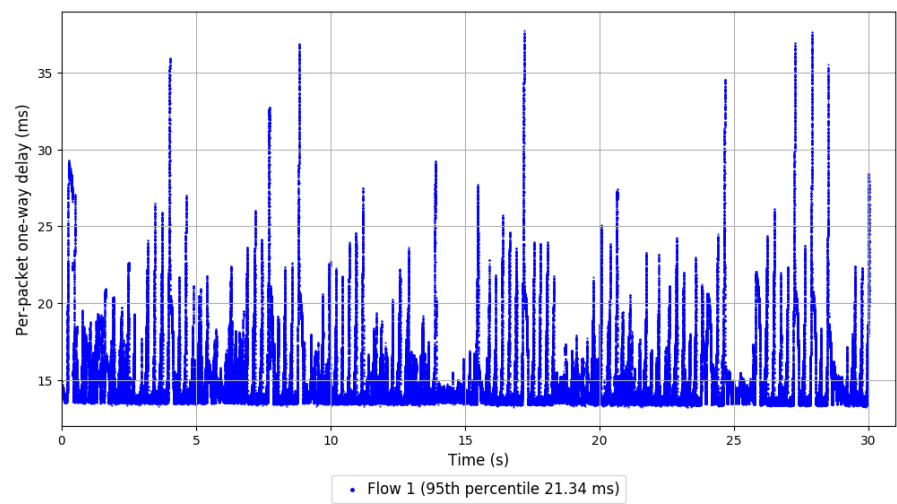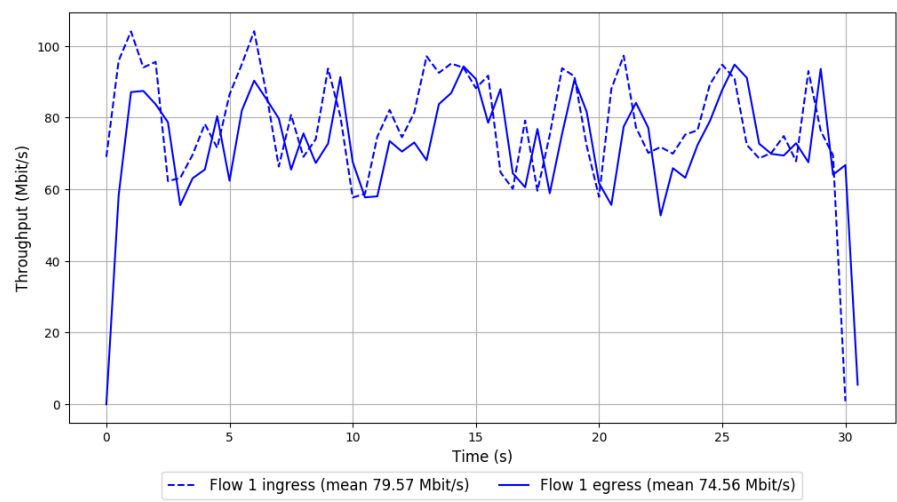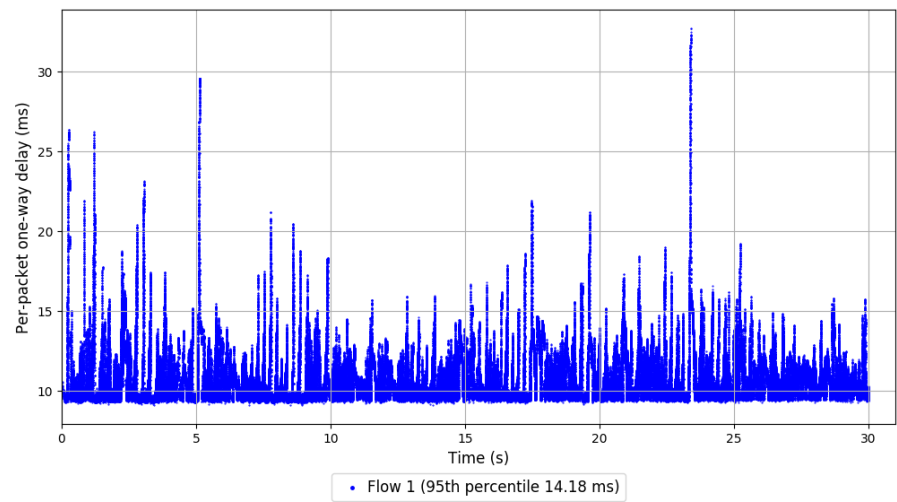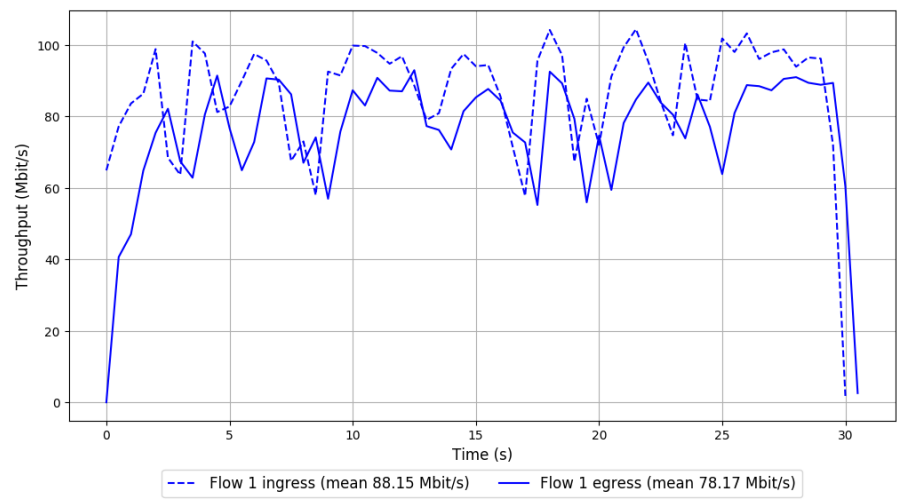
Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 79.57 Mbit/s)   Flow 1 egress (mean 74.56 Mbit/s)

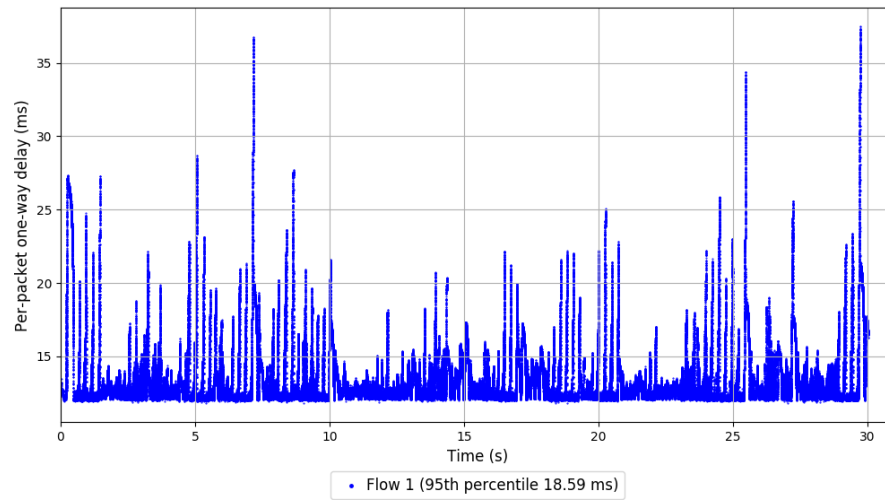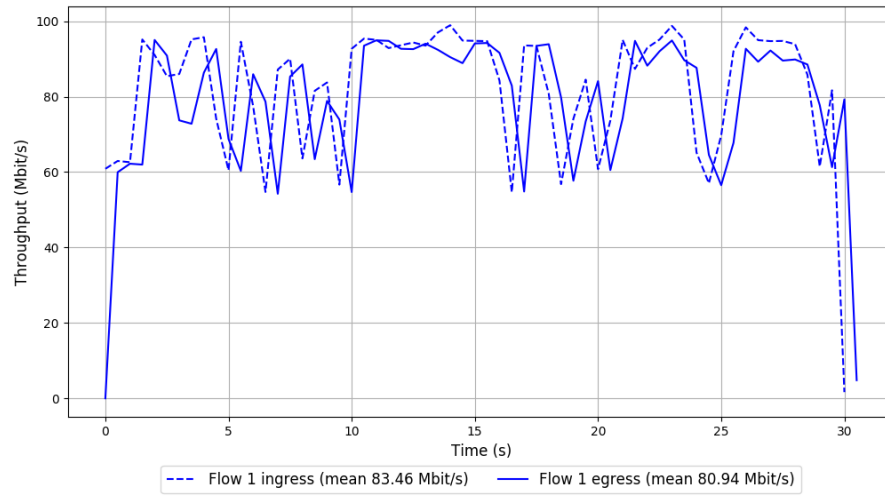Flow 1 (95th percentile 21.34 ms)

```
Run 6: Statistics of Copa

Start at: 2018-05-21 23:16:29
End at: 2018-05-21 23:16:59
Local clock offset: -1.439 ms
Remote clock offset: -4.064 ms


# Below is generated by plot.py at 2018-05-22 00:42:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.17 Mbit/s
95th percentile per-packet one-way delay: 14.177 ms
Loss rate: 11.33%
-- Flow 1:
Average throughput: 78.17 Mbit/s
95th percentile per-packet one-way delay: 14.177 ms
Loss rate: 11.33%
```

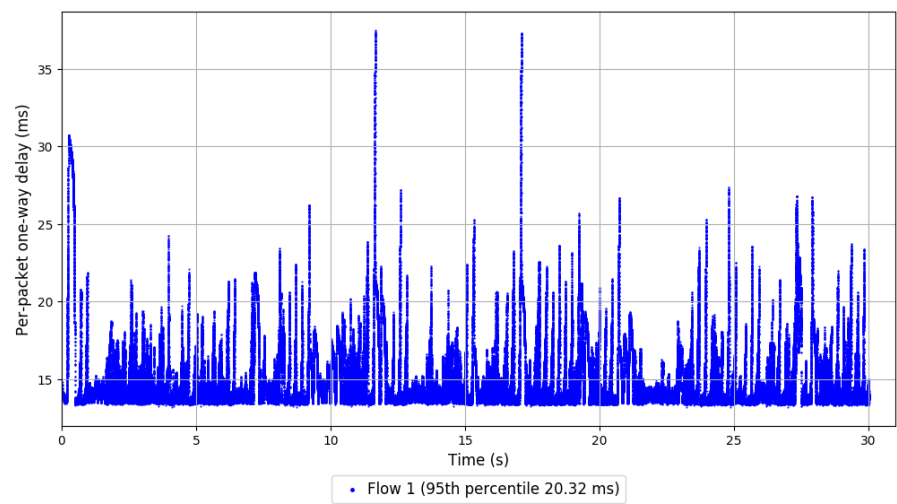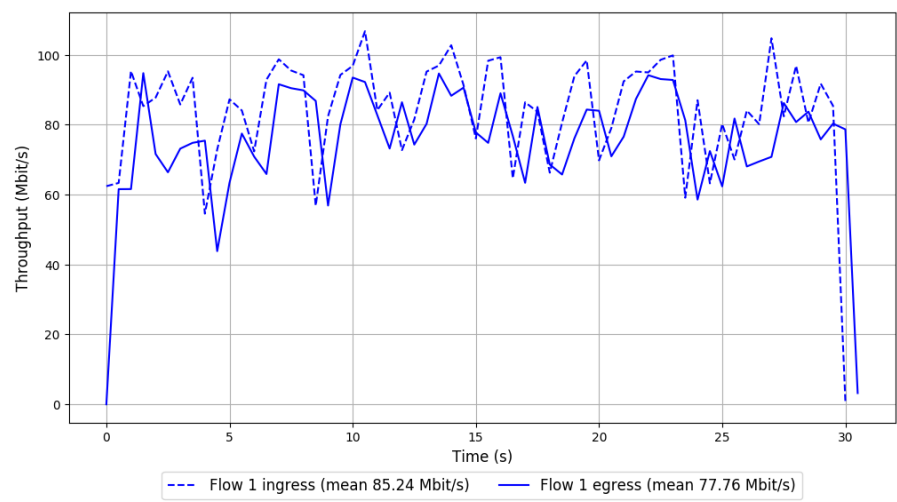Run 6: Report of Copa — Data Link

```
Run 7: Statistics of Copa

Start at: 2018-05-21 23:34:22
End at: 2018-05-21 23:34:52
Local clock offset: -6.313 ms
Remote clock offset: -6.806 ms


# Below is generated by plot.py at 2018-05-22 00:43:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.94 Mbit/s
95th percentile per-packet one-way delay: 18.590 ms
Loss rate: 3.00%
-- Flow 1:
Average throughput: 80.94 Mbit/s
95th percentile per-packet one-way delay: 18.590 ms
Loss rate: 3.00%
```
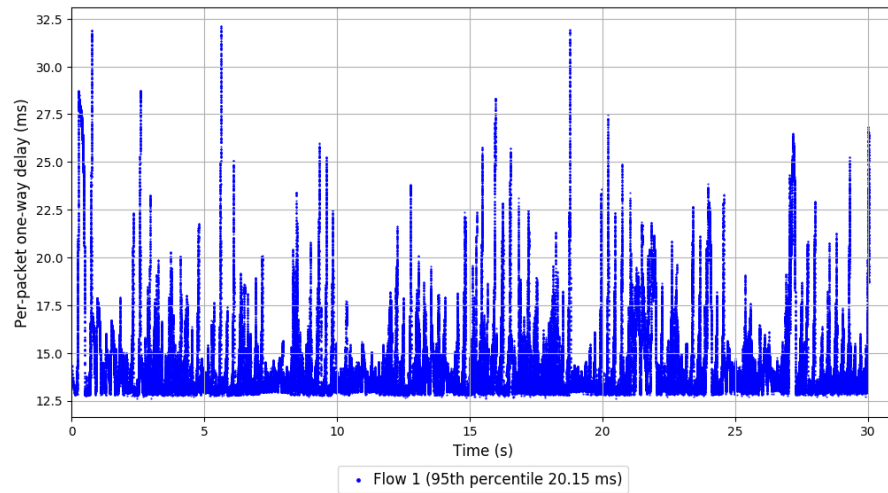
Run 7: Report of Copa — Data Link

```
Run 8: Statistics of Copa

Start at: 2018-05-21 23:52:10
End at: 2018-05-21 23:52:40
Local clock offset: -8.023 ms
Remote clock offset: -7.182 ms


# Below is generated by plot.py at 2018-05-22 00:43:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.76 Mbit/s
95th percentile per-packet one-way delay: 20.323 ms
Loss rate: 8.78%
-- Flow 1:
Average throughput: 77.76 Mbit/s
95th percentile per-packet one-way delay: 20.323 ms
Loss rate: 8.78%
```

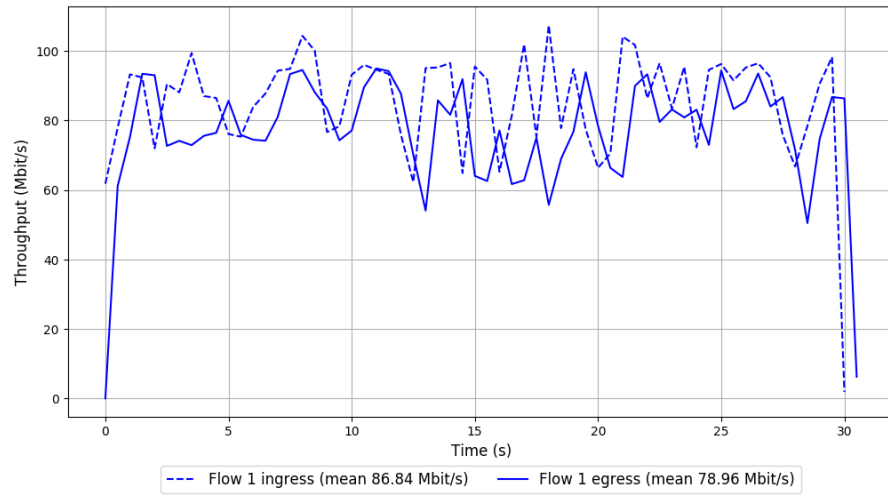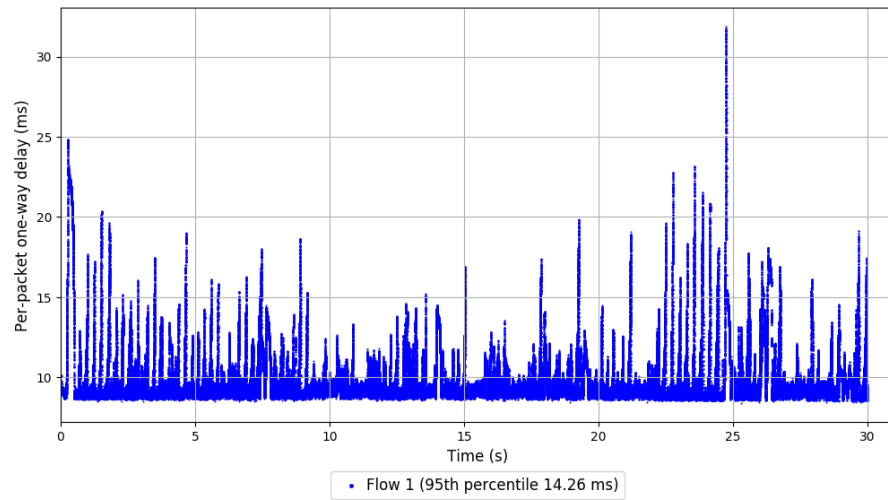# Run 8: Report of Copa — Data Link

```
Run 9: Statistics of Copa

Start at: 2018-05-22 00:09:58
End at: 2018-05-22 00:10:28
Local clock offset: -4.501 ms
Remote clock offset: -8.936 ms

# Below is generated by plot.py at 2018-05-22 00:44:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.96 Mbit/s
95th percentile per-packet one-way delay: 20.148 ms
Loss rate: 9.04%
-- Flow 1:
Average throughput: 78.96 Mbit/s
95th percentile per-packet one-way delay: 20.148 ms
Loss rate: 9.04%
```

Run 9: Report of Copa — Data Link

Flow 1 ingress (mean 86.84 Mbit/s)   Flow 1 egress (mean 78.96 Mbit/s)

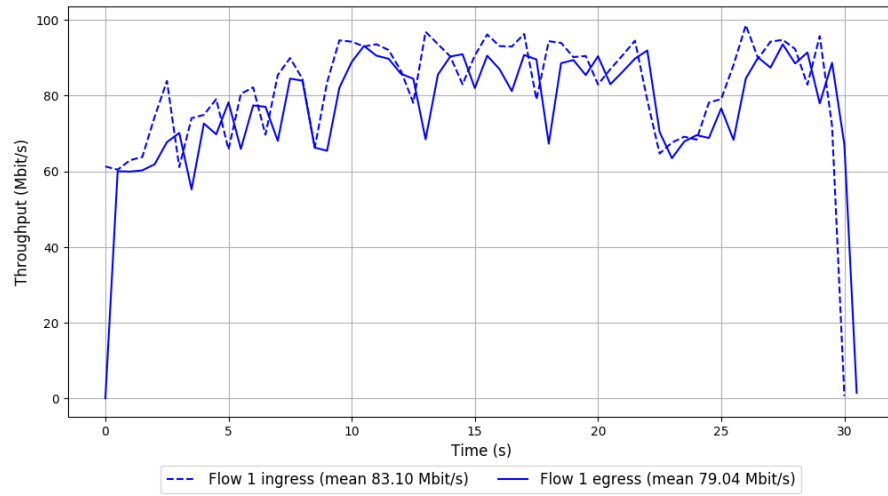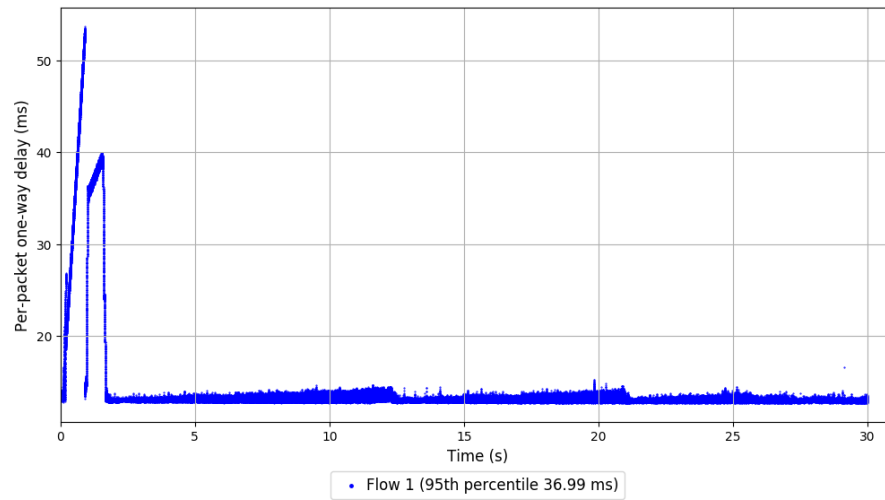Flow 1 (95th percentile 20.15 ms)

```
Run 10: Statistics of Copa

Start at: 2018-05-22 00:27:46
End at: 2018-05-22 00:28:16
Local clock offset: -0.958 ms
Remote clock offset: -1.873 ms


# Below is generated by plot.py at 2018-05-22 00:44:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.04 Mbit/s
95th percentile per-packet one-way delay: 14.256 ms
Loss rate: 4.88%
-- Flow 1:
Average throughput: 79.04 Mbit/s
95th percentile per-packet one-way delay: 14.256 ms
Loss rate: 4.88%
```

Run 10: Report of Copa — Data Link

Flow 1 ingress (mean 83.10 Mbit/s)   Flow 1 egress (mean 79.04 Mbit/s)

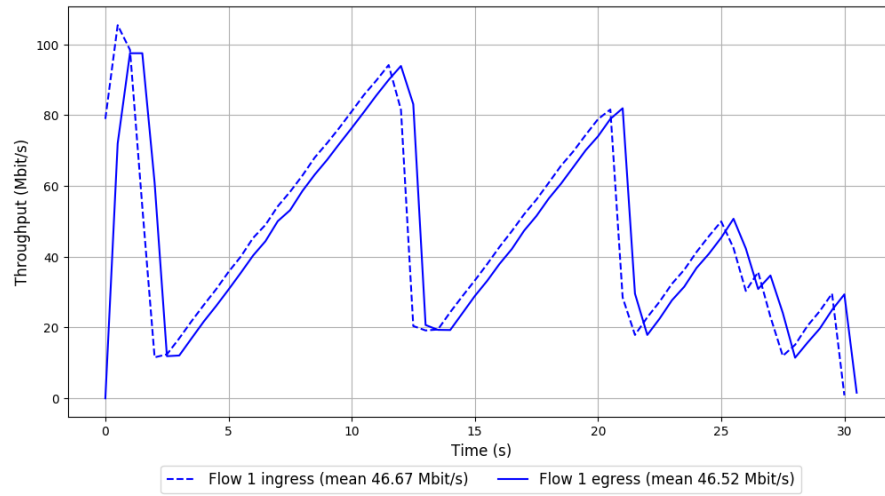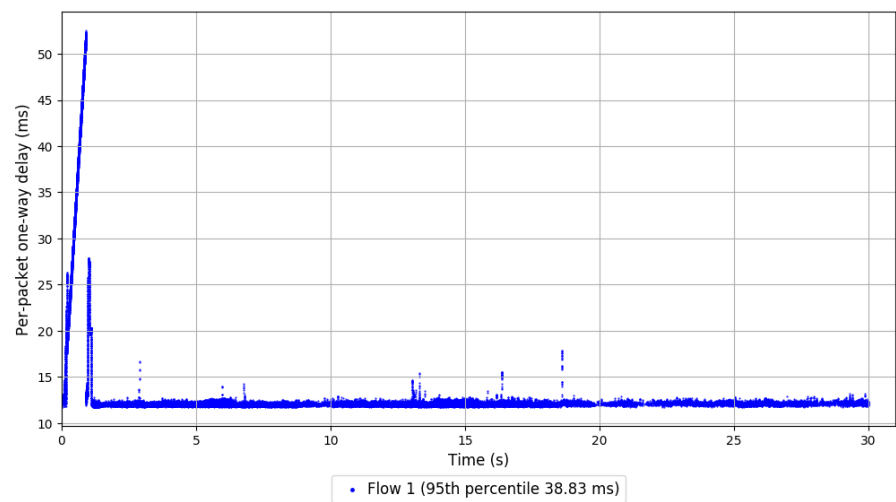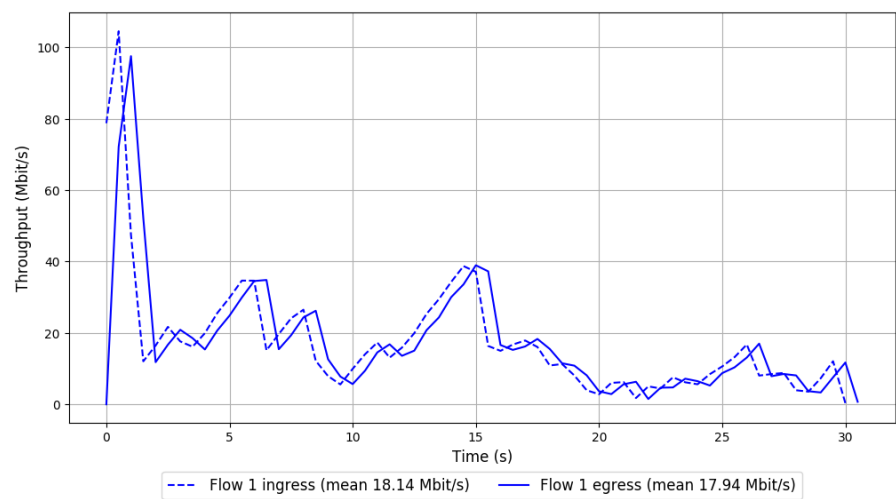Flow 1 (95th percentile 14.26 ms)

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```
Run 1: Statistics of TCP Cubic

Start at: 2018-05-21 21:52:04
End at: 2018-05-21 21:52:34
Local clock offset: -3.215 ms
Remote clock offset: -1.326 ms


# Below is generated by plot.py at 2018-05-22 00:44:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.52 Mbit/s
95th percentile per-packet one-way delay: 36.992 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 46.52 Mbit/s
95th percentile per-packet one-way delay: 36.992 ms
Loss rate: 0.33%
```
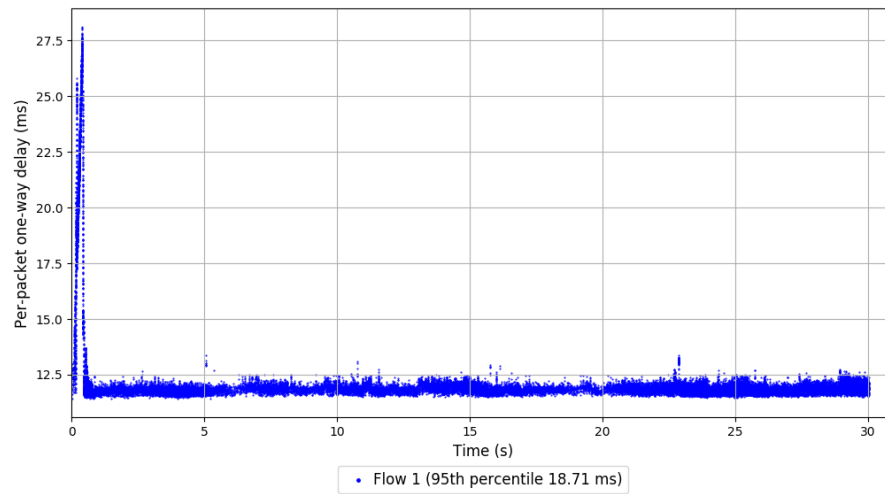
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-05-21 22:09:59
End at: 2018-05-21 22:10:29
Local clock offset: 0.786 ms
Remote clock offset: -1.535 ms


# Below is generated by plot.py at 2018-05-22 00:44:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.94 Mbit/s
95th percentile per-packet one-way delay: 38.833 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 17.94 Mbit/s
95th percentile per-packet one-way delay: 38.833 ms
Loss rate: 1.10%
```
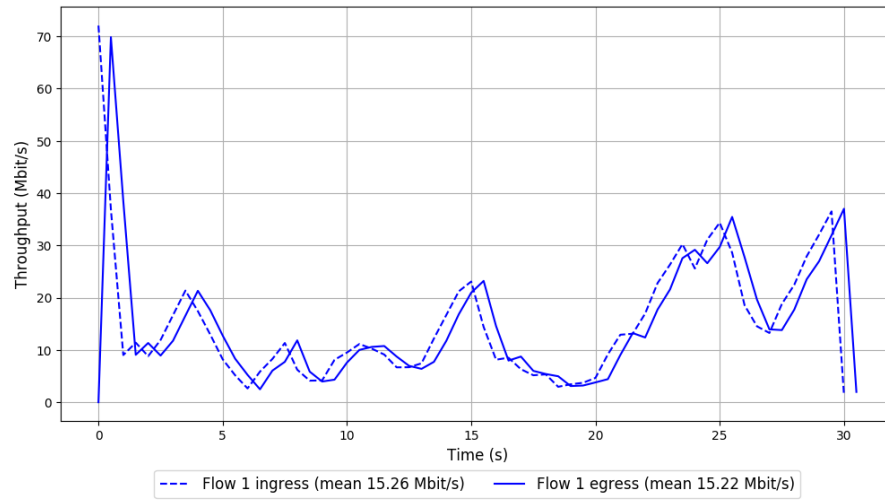
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2018-05-21 22:27:44
End at: 2018-05-21 22:28:15
Local clock offset: 1.167 ms
Remote clock offset: -1.662 ms

# Below is generated by plot.py at 2018-05-22 00:44:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 15.22 Mbit/s
95th percentile per-packet one-way delay: 18.712 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 15.22 Mbit/s
95th percentile per-packet one-way delay: 18.712 ms
Loss rate: 0.24%
```

Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2018-05-21 22:45:32
End at: 2018-05-21 22:46:03
Local clock offset: 1.689 ms
Remote clock offset: 1.037 ms


# Below is generated by plot.py at 2018-05-22 00:44:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.74 Mbit/s
95th percentile per-packet one-way delay: 12.902 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 20.74 Mbit/s
95th percentile per-packet one-way delay: 12.902 ms
Loss rate: 0.14%
```
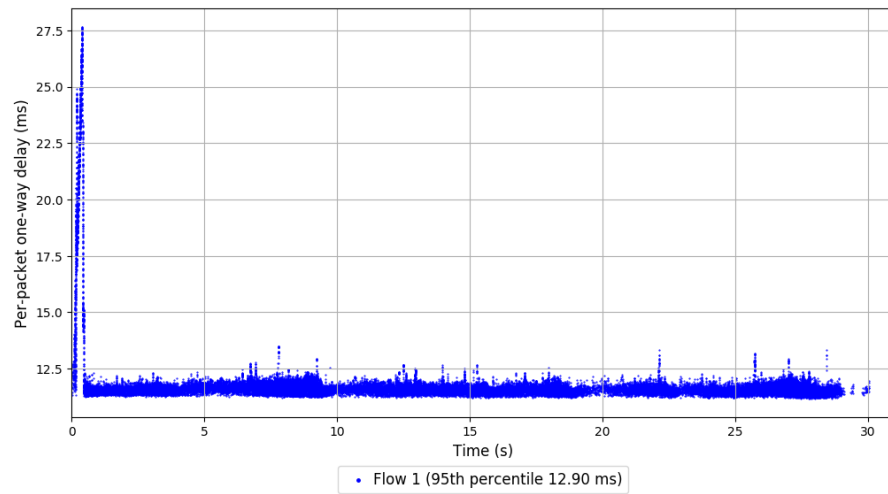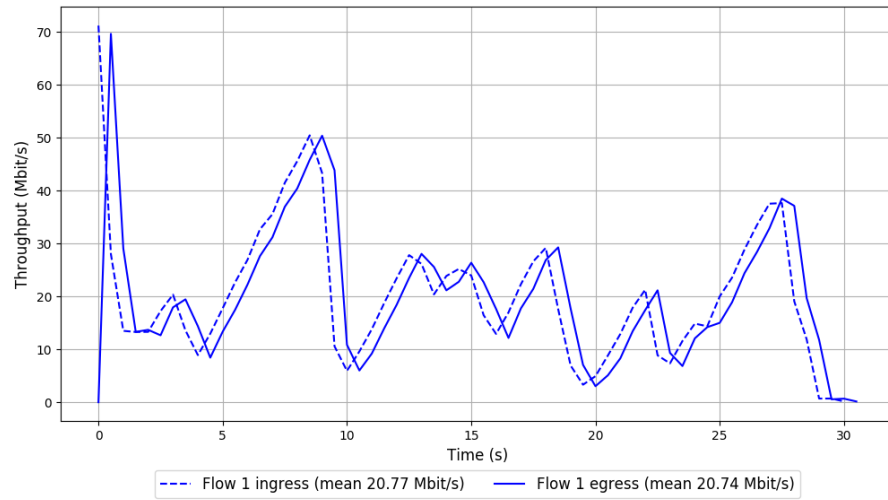
Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2018-05-21 23:03:18
End at: 2018-05-21 23:03:48
Local clock offset: -0.614 ms
Remote clock offset: 1.285 ms


# Below is generated by plot.py at 2018-05-22 00:44:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 29.89 Mbit/s
95th percentile per-packet one-way delay: 22.330 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 29.89 Mbit/s
95th percentile per-packet one-way delay: 22.330 ms
Loss rate: 0.07%
```
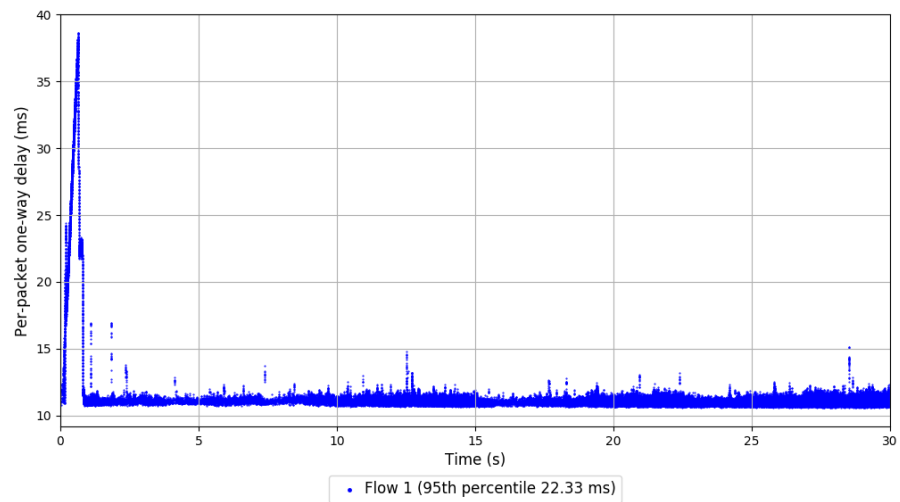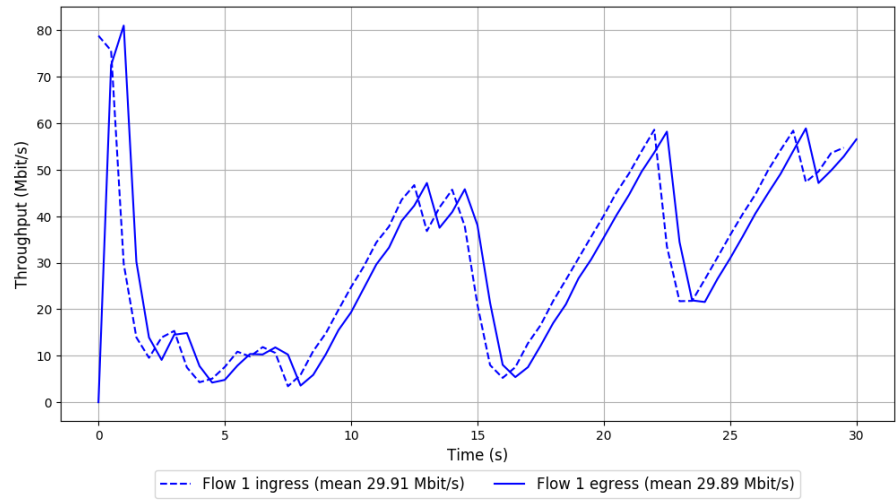
Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 29.91 Mbit/s)   Flow 1 egress (mean 29.89 Mbit/s)

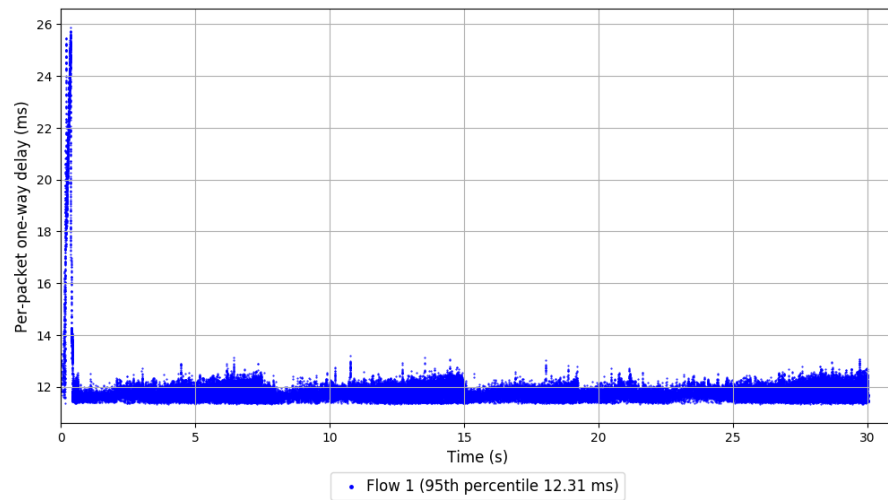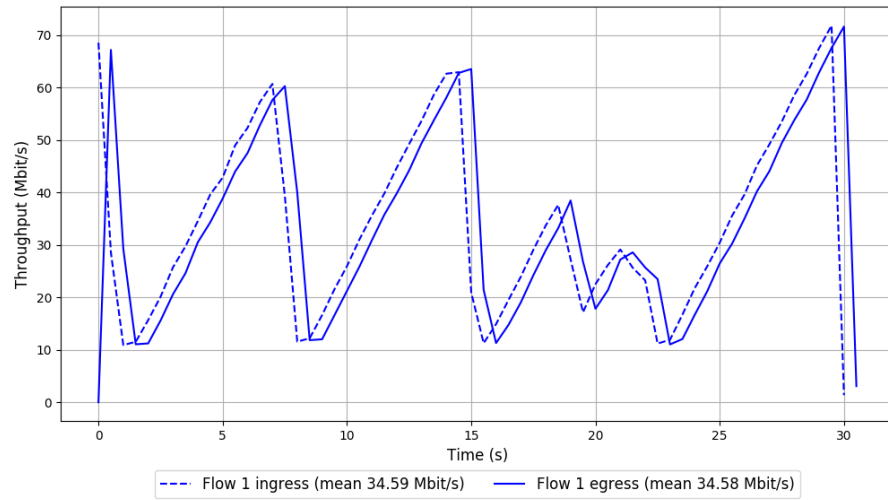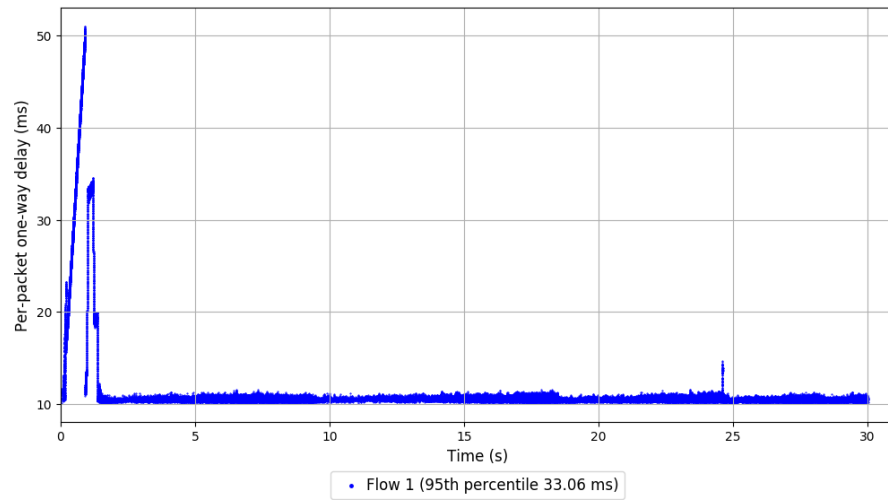

Flow 1 (95th percentile 22.33 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2018-05-21 23:21:04
End at: 2018-05-21 23:21:34
Local clock offset: -3.301 ms
Remote clock offset: -4.273 ms


# Below is generated by plot.py at 2018-05-22 00:44:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.58 Mbit/s
95th percentile per-packet one-way delay: 12.308 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 34.58 Mbit/s
95th percentile per-packet one-way delay: 12.308 ms
Loss rate: 0.05%
```
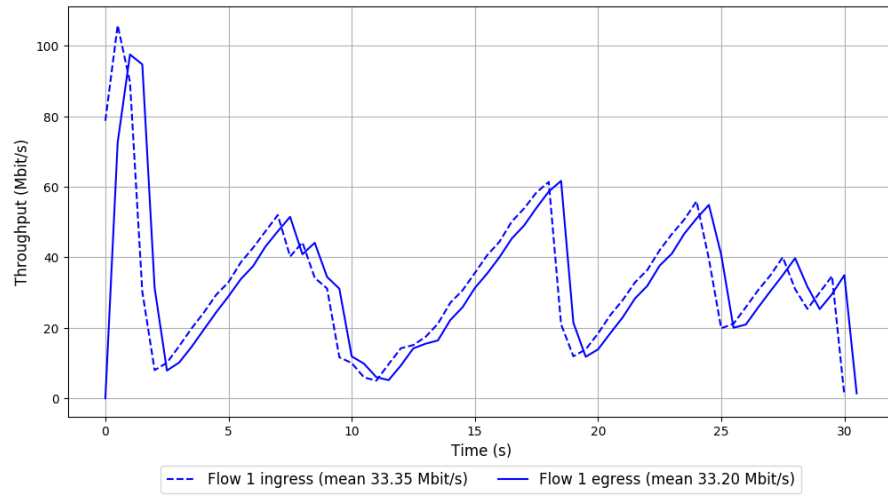
Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2018-05-21 23:38:54
End at: 2018-05-21 23:39:24
Local clock offset: -4.08 ms
Remote clock offset: -6.498 ms


# Below is generated by plot.py at 2018-05-22 00:44:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.20 Mbit/s
95th percentile per-packet one-way delay: 33.062 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 33.20 Mbit/s
95th percentile per-packet one-way delay: 33.062 ms
Loss rate: 0.45%
```
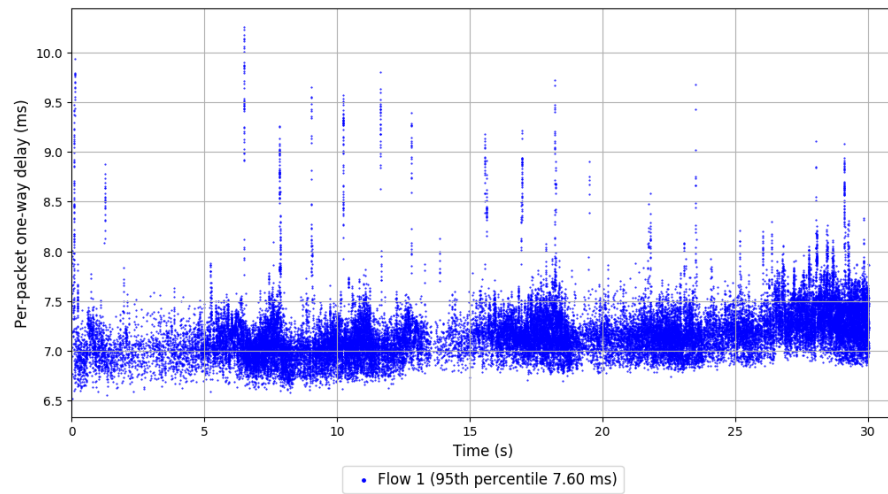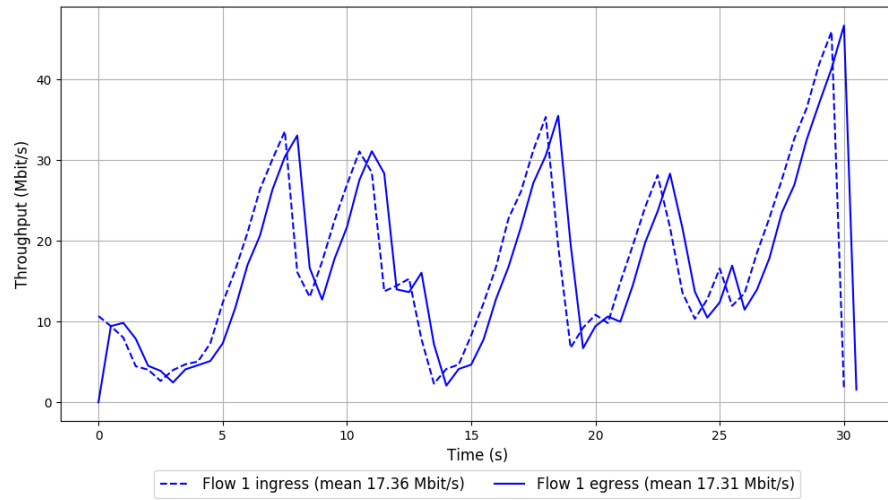
Run 7: Report of TCP Cubic — Data Link

```
Run 8: Statistics of TCP Cubic

Start at: 2018-05-21 23:56:42
End at: 2018-05-21 23:57:12
Local clock offset: -5.083 ms
Remote clock offset: -11.301 ms


# Below is generated by plot.py at 2018-05-22 00:44:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.31 Mbit/s
95th percentile per-packet one-way delay: 7.597 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 17.31 Mbit/s
95th percentile per-packet one-way delay: 7.597 ms
Loss rate: 0.26%
```
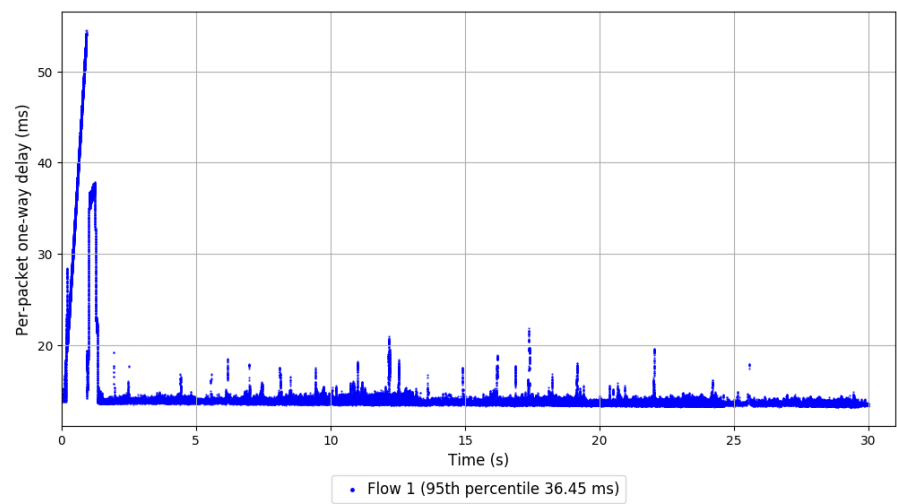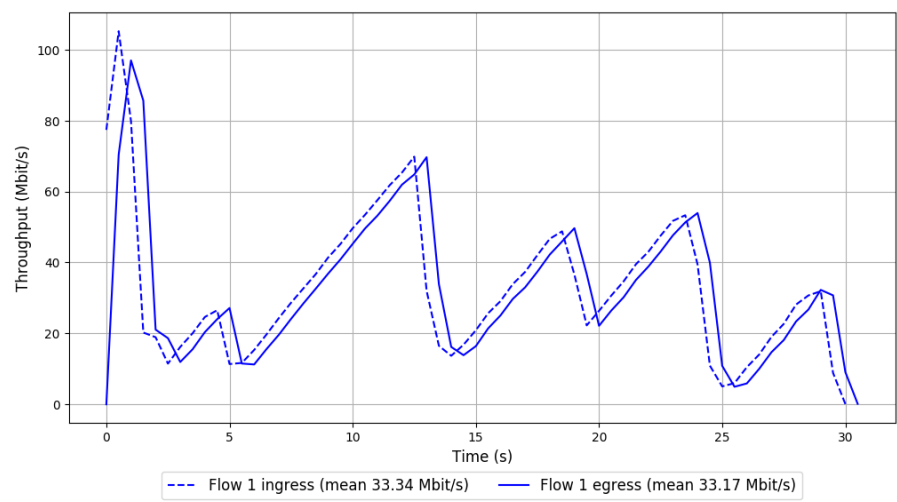
Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2018-05-22 00:14:32
End at: 2018-05-22 00:15:02
Local clock offset: -5.18 ms
Remote clock offset: -7.313 ms


# Below is generated by plot.py at 2018-05-22 00:44:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.17 Mbit/s
95th percentile per-packet one-way delay: 36.447 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 33.17 Mbit/s
95th percentile per-packet one-way delay: 36.447 ms
Loss rate: 0.52%
```
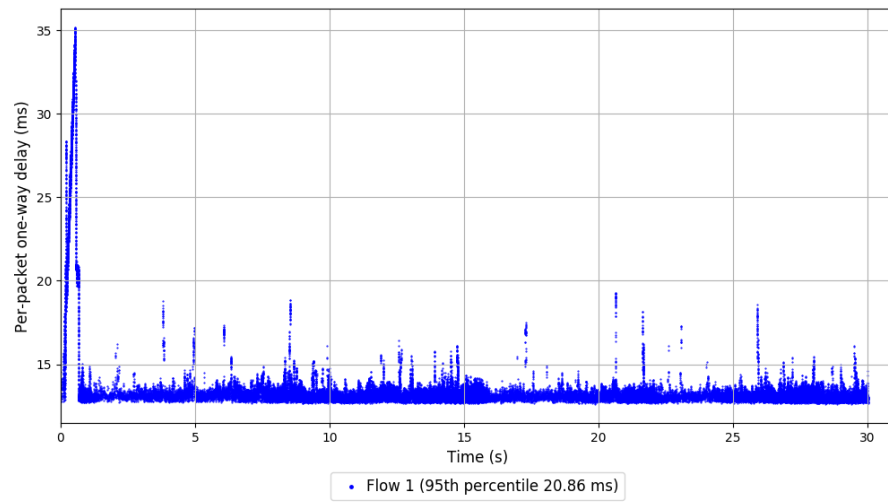
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 33.34 Mbit/s)   Flow 1 egress (mean 33.17 Mbit/s)

Flow 1 (95th percentile 36.45 ms)

```
Run 10: Statistics of TCP Cubic

Start at: 2018-05-22 00:32:26
End at: 2018-05-22 00:32:56
Local clock offset: -3.499 ms
Remote clock offset: 2.035 ms


# Below is generated by plot.py at 2018-05-22 00:44:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.85 Mbit/s
95th percentile per-packet one-way delay: 20.865 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 23.85 Mbit/s
95th percentile per-packet one-way delay: 20.865 ms
Loss rate: 0.10%
```
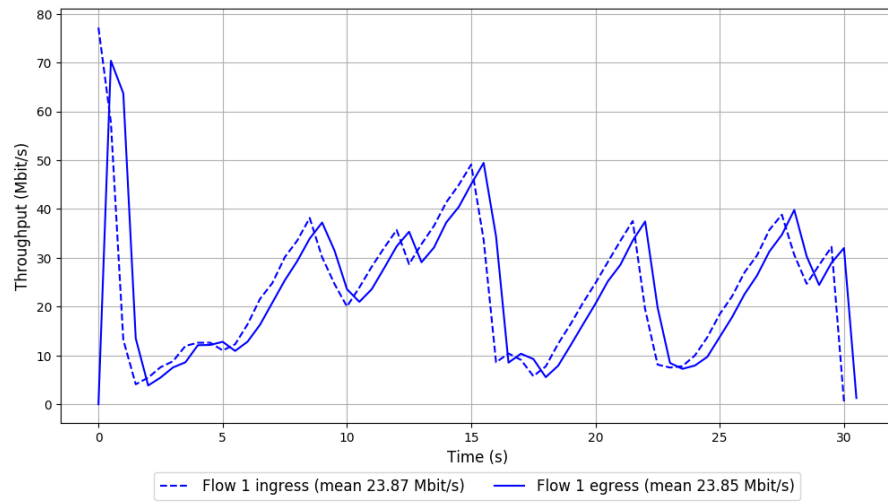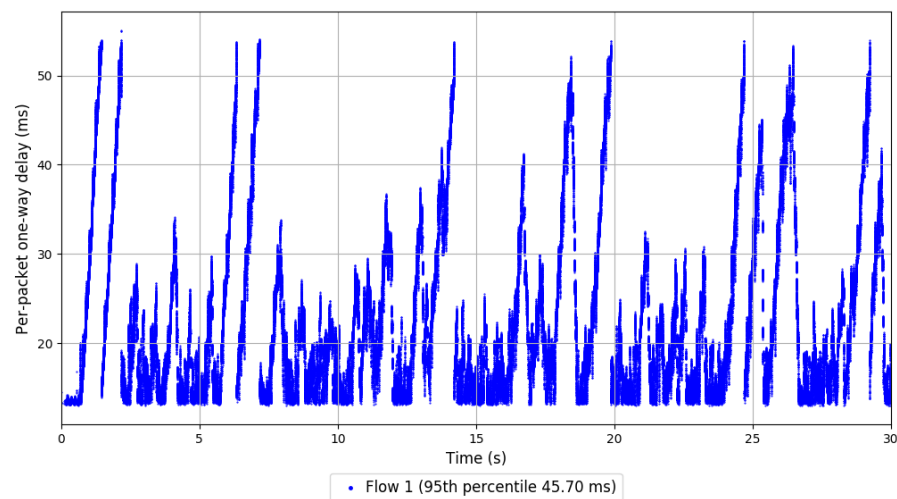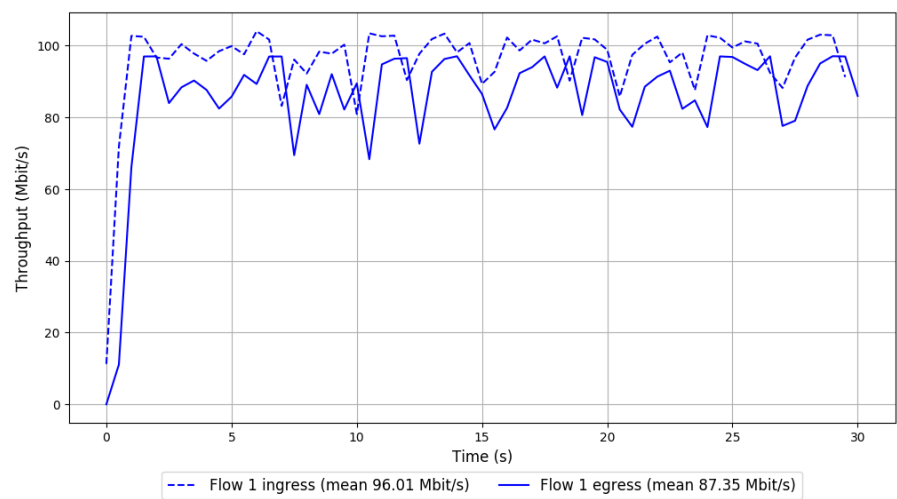
Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-05-21 21:48:41
End at: 2018-05-21 21:49:11
Local clock offset: -3.755 ms
Remote clock offset: -1.753 ms


# Below is generated by plot.py at 2018-05-22 00:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.35 Mbit/s
95th percentile per-packet one-way delay: 45.700 ms
Loss rate: 9.02%
-- Flow 1:
Average throughput: 87.35 Mbit/s
95th percentile per-packet one-way delay: 45.700 ms
Loss rate: 9.02%
```

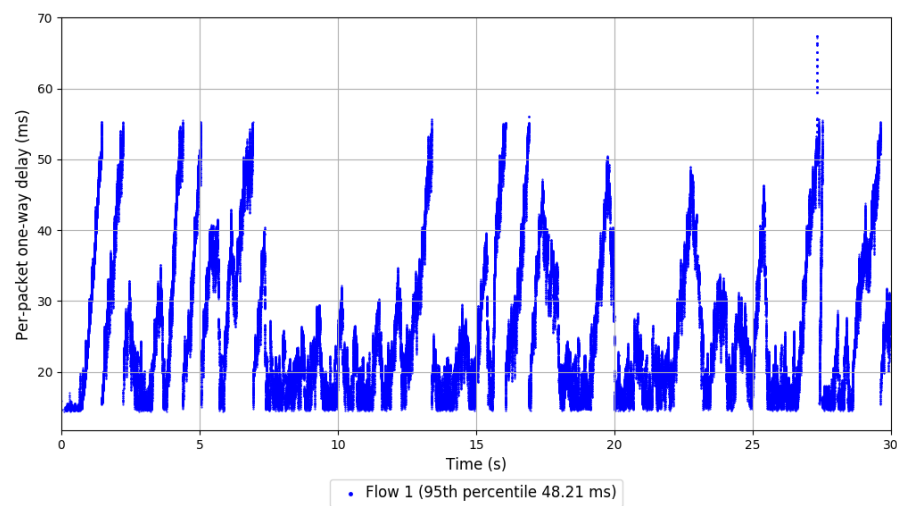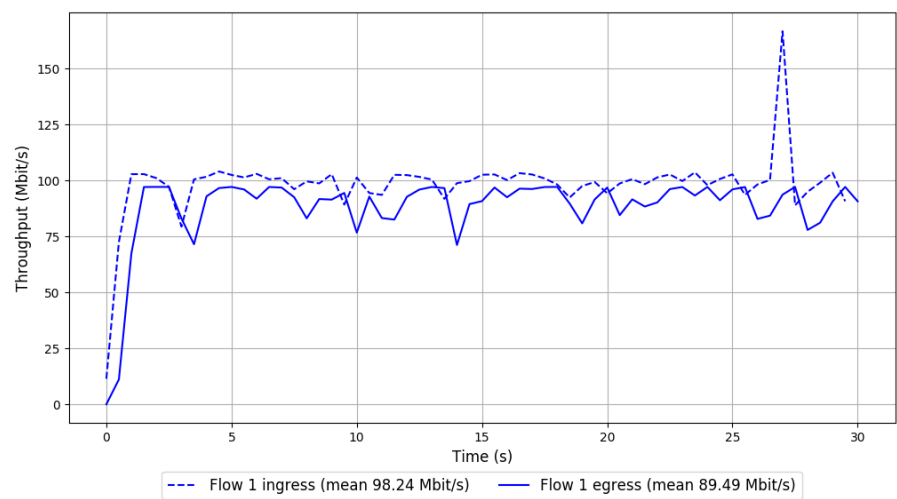Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-05-21 22:06:38
End at: 2018-05-21 22:07:08
Local clock offset: -2.327 ms
Remote clock offset: -1.325 ms


# Below is generated by plot.py at 2018-05-22 00:45:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.49 Mbit/s
95th percentile per-packet one-way delay: 48.213 ms
Loss rate: 8.88%
-- Flow 1:
Average throughput: 89.49 Mbit/s
95th percentile per-packet one-way delay: 48.213 ms
Loss rate: 8.88%
```

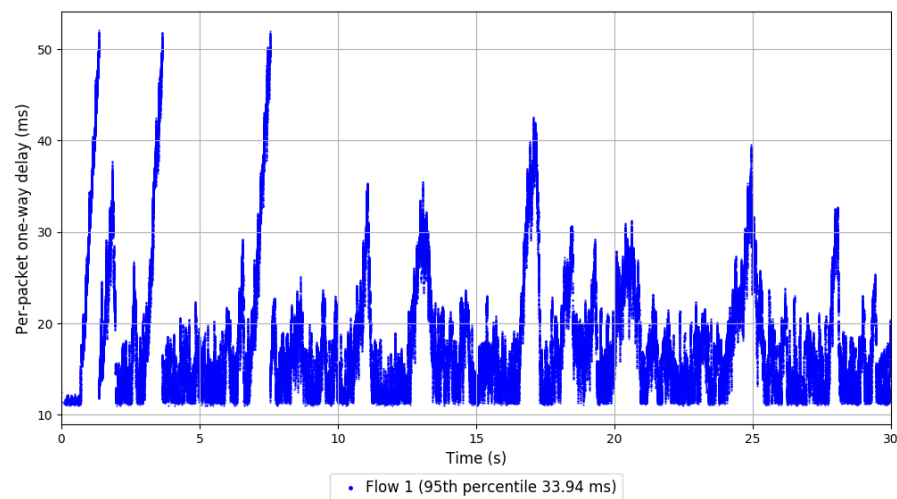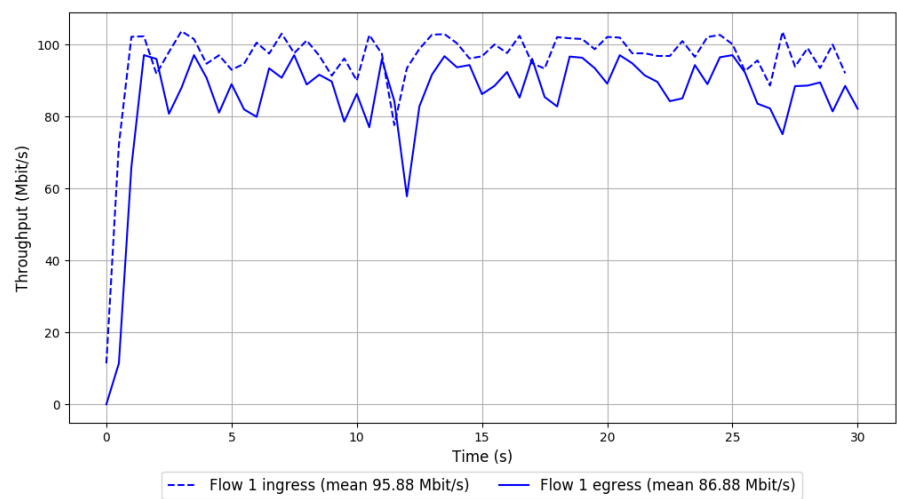Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2018-05-21 22:24:23
End at: 2018-05-21 22:24:53
Local clock offset: 1.247 ms
Remote clock offset: -1.632 ms


# Below is generated by plot.py at 2018-05-22 00:45:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.88 Mbit/s
95th percentile per-packet one-way delay: 33.936 ms
Loss rate: 9.38%
-- Flow 1:
Average throughput: 86.88 Mbit/s
95th percentile per-packet one-way delay: 33.936 ms
Loss rate: 9.38%
```

Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 95.88 Mbit/s)   Flow 1 egress (mean 86.88 Mbit/s)

• Flow 1 (95th percentile 33.94 ms)

```
Run 4: Statistics of FillP

Start at: 2018-05-21 22:42:10
End at: 2018-05-21 22:42:40
Local clock offset: 1.257 ms
Remote clock offset: 1.229 ms


# Below is generated by plot.py at 2018-05-22 00:45:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.36 Mbit/s
95th percentile per-packet one-way delay: 36.179 ms
Loss rate: 9.55%
-- Flow 1:
Average throughput: 86.36 Mbit/s
95th percentile per-packet one-way delay: 36.179 ms
Loss rate: 9.55%
```
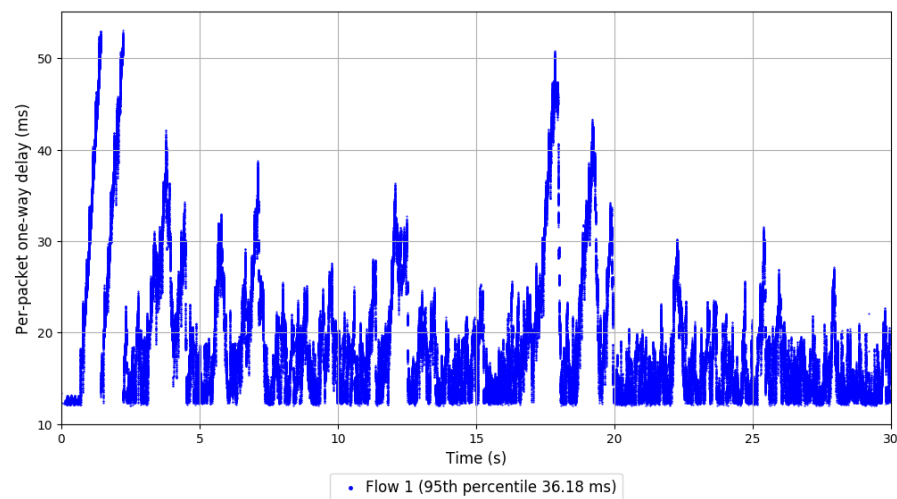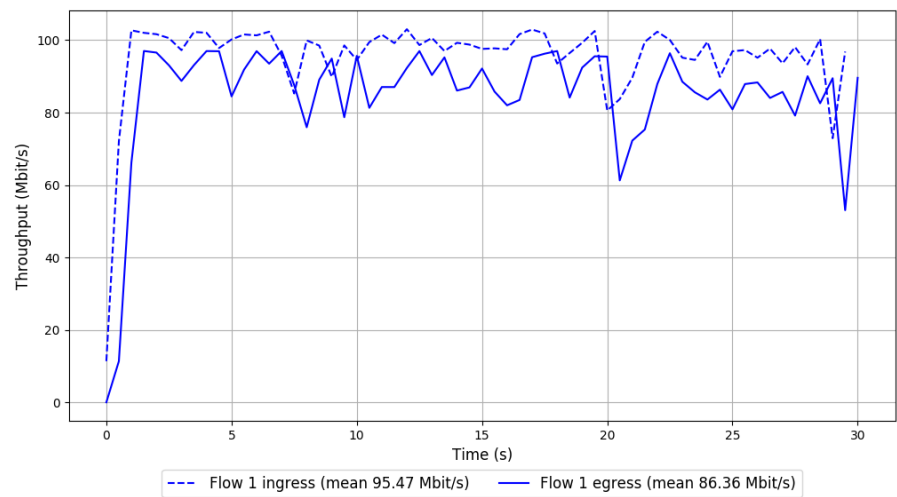
Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2018-05-21 22:59:56
End at: 2018-05-21 23:00:26
Local clock offset: -0.071 ms
Remote clock offset: 2.131 ms


# Below is generated by plot.py at 2018-05-22 00:45:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.12 Mbit/s
95th percentile per-packet one-way delay: 42.099 ms
Loss rate: 8.57%
-- Flow 1:
Average throughput: 88.12 Mbit/s
95th percentile per-packet one-way delay: 42.099 ms
Loss rate: 8.57%
```
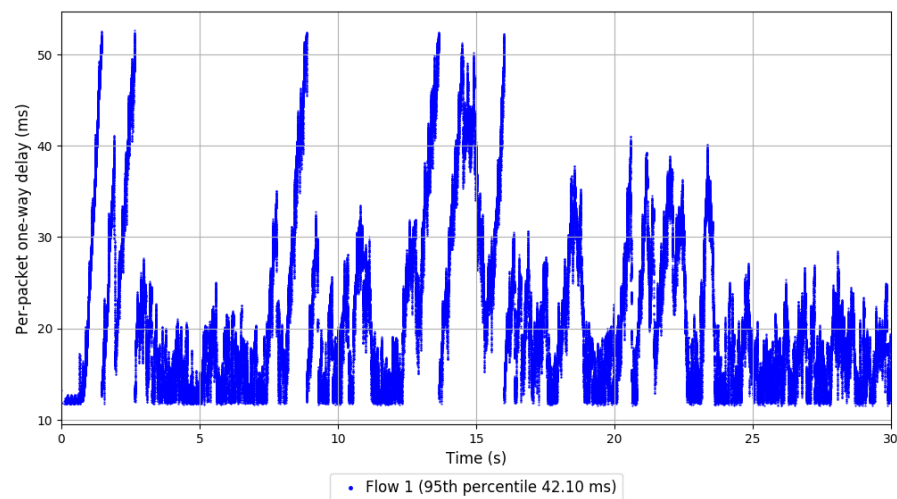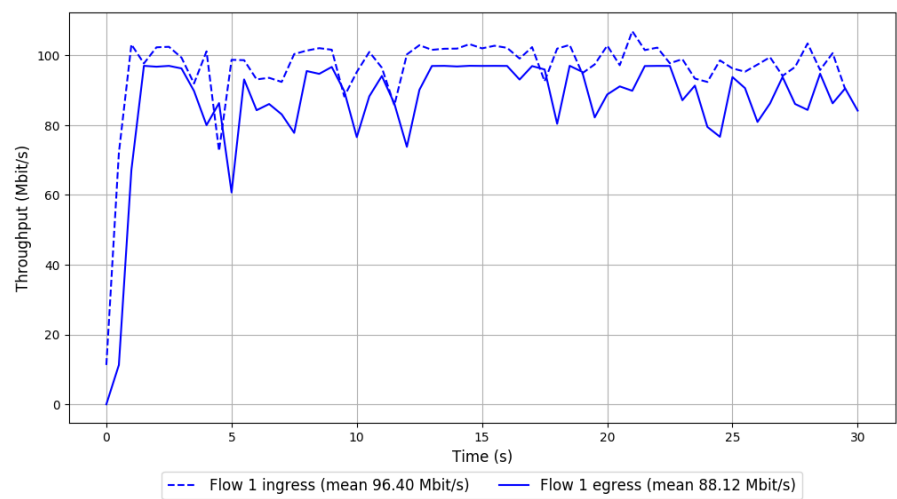
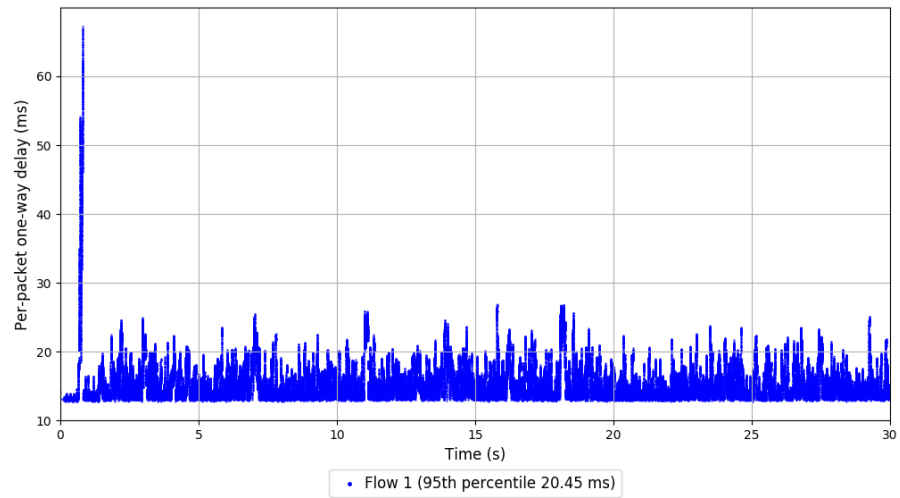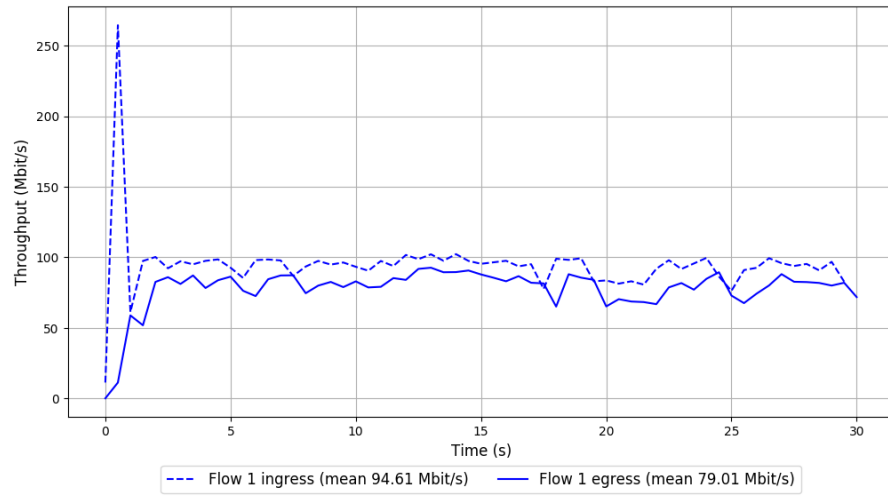Run 5: Report of FillP — Data Link

```
Run 6: Statistics of FillP

Start at: 2018-05-21 23:17:40
End at: 2018-05-21 23:18:10
Local clock offset: -4.977 ms
Remote clock offset: -3.953 ms


# Below is generated by plot.py at 2018-05-22 00:45:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.01 Mbit/s
95th percentile per-packet one-way delay: 20.455 ms
Loss rate: 16.48%
-- Flow 1:
Average throughput: 79.01 Mbit/s
95th percentile per-packet one-way delay: 20.455 ms
Loss rate: 16.48%
```

Run 6: Report of FillP — Data Link

Flow 1 ingress (mean 94.61 Mbit/s)   Flow 1 egress (mean 79.01 Mbit/s)

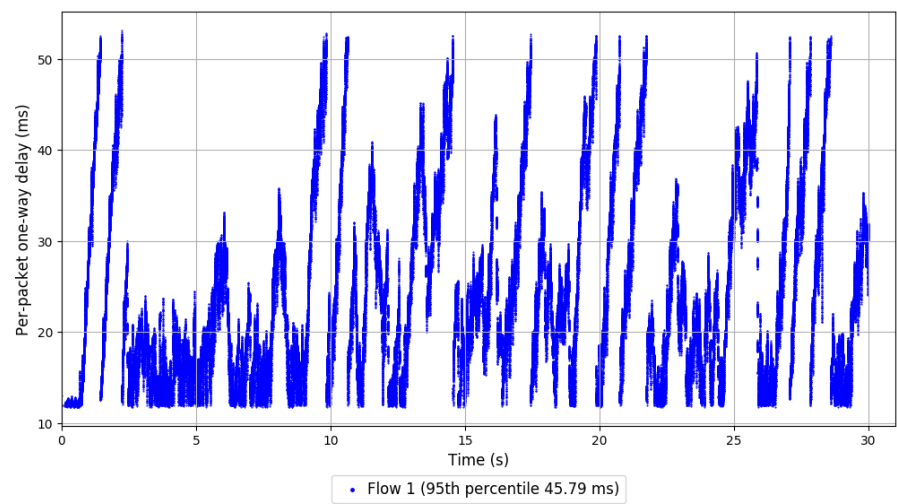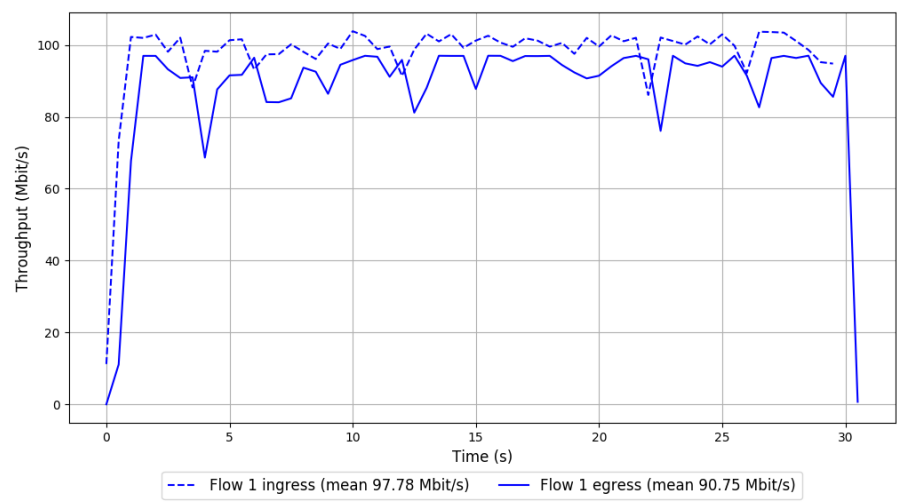• Flow 1 (95th percentile 20.45 ms)

```
Run 7: Statistics of FillP

Start at: 2018-05-21 23:35:32
End at: 2018-05-21 23:36:02
Local clock offset: -5.882 ms
Remote clock offset: -6.431 ms


# Below is generated by plot.py at 2018-05-22 00:46:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.75 Mbit/s
95th percentile per-packet one-way delay: 45.790 ms
Loss rate: 7.14%
-- Flow 1:
Average throughput: 90.75 Mbit/s
95th percentile per-packet one-way delay: 45.790 ms
Loss rate: 7.14%
```

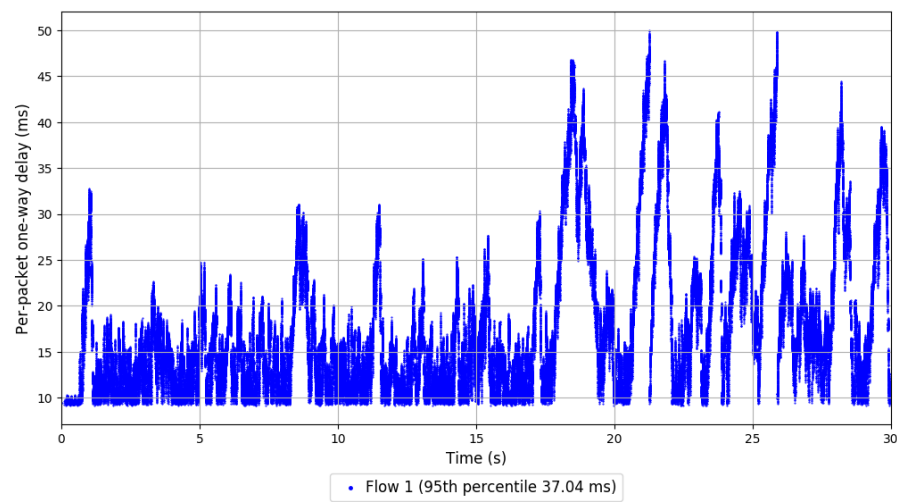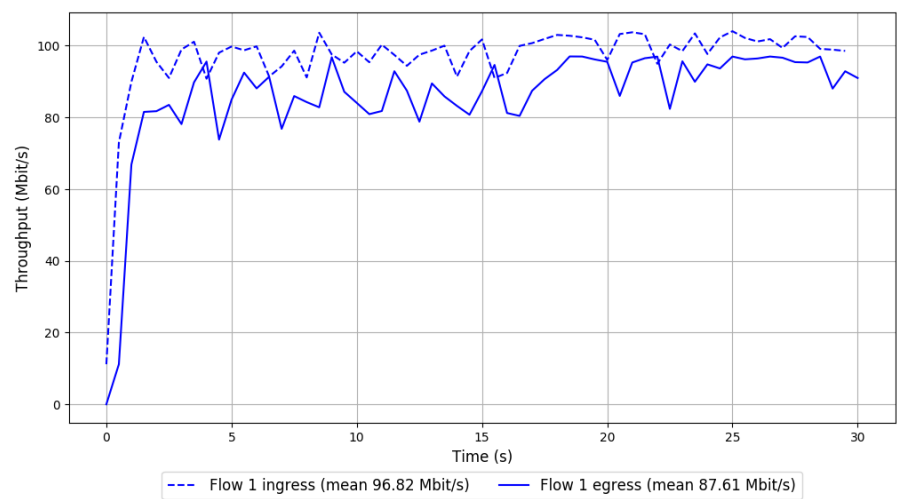Run 7: Report of FillP — Data Link

```
Run 8: Statistics of FillP

Start at: 2018-05-21 23:53:20
End at: 2018-05-21 23:53:50
Local clock offset: -4.87 ms
Remote clock offset: -8.046 ms


# Below is generated by plot.py at 2018-05-22 00:46:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.61 Mbit/s
95th percentile per-packet one-way delay: 37.042 ms
Loss rate: 9.52%
-- Flow 1:
Average throughput: 87.61 Mbit/s
95th percentile per-packet one-way delay: 37.042 ms
Loss rate: 9.52%
```

Run 8: Report of FillP — Data Link

Flow 1 ingress (mean 96.82 Mbit/s)   Flow 1 egress (mean 87.61 Mbit/s)

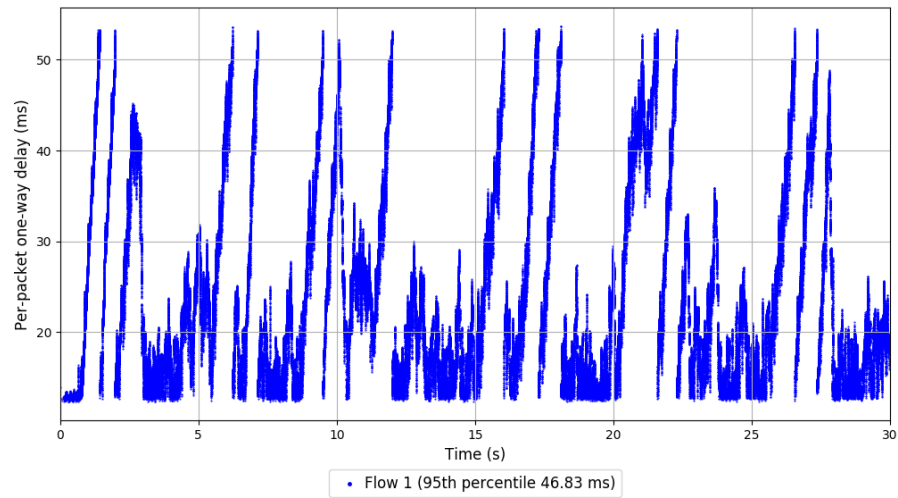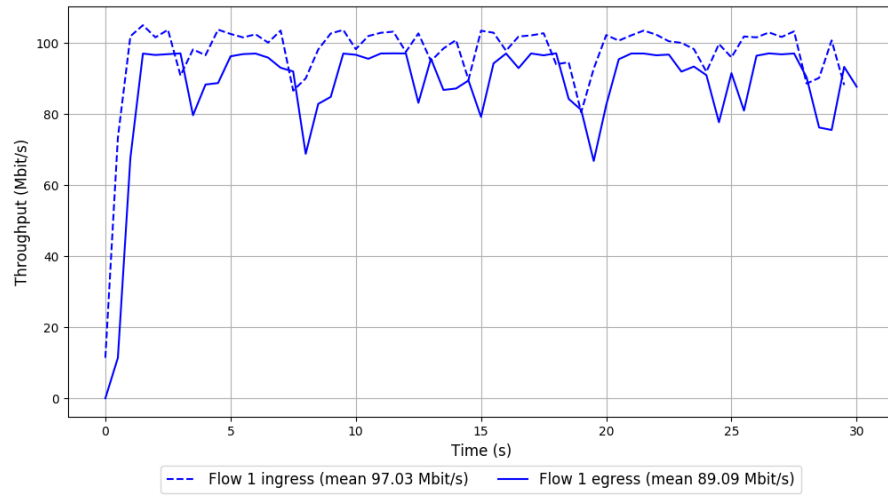Flow 1 (95th percentile 37.04 ms)

```
Run 9: Statistics of FillP

Start at: 2018-05-22 00:11:08
End at: 2018-05-22 00:11:38
Local clock offset: -4.256 ms
Remote clock offset: -9.015 ms


# Below is generated by plot.py at 2018-05-22 00:46:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.09 Mbit/s
95th percentile per-packet one-way delay: 46.826 ms
Loss rate: 8.17%
-- Flow 1:
Average throughput: 89.09 Mbit/s
95th percentile per-packet one-way delay: 46.826 ms
Loss rate: 8.17%
```
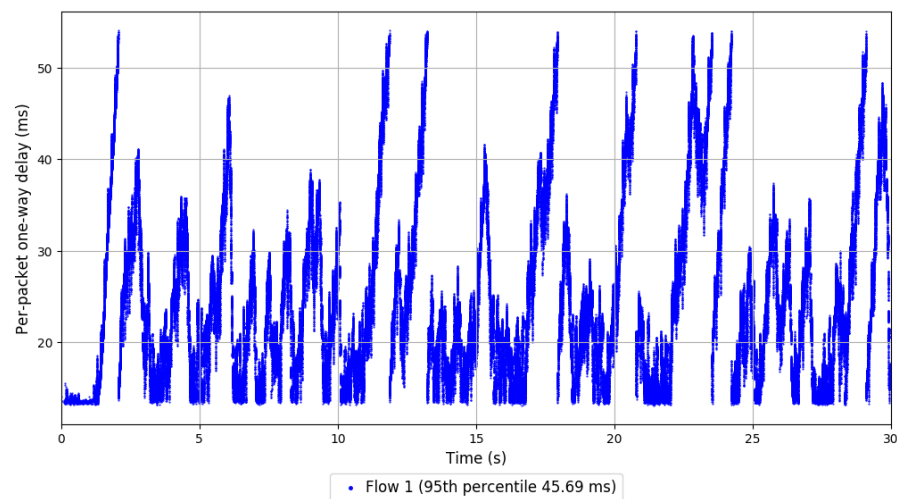
Run 9: Report of FillP — Data Link

Flow 1 ingress (mean 97.03 Mbit/s)   Flow 1 egress (mean 89.09 Mbit/s)

• Flow 1 (95th percentile 46.83 ms)

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```
Run 10: Statistics of FillP

Start at: 2018-05-22 00:28:59
End at: 2018-05-22 00:29:29
Local clock offset: -4.116 ms
Remote clock offset: 0.096 ms


# Below is generated by plot.py at 2018-05-22 00:46:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.16 Mbit/s
95th percentile per-packet one-way delay: 45.691 ms
Loss rate: 7.50%
-- Flow 1:
Average throughput: 88.16 Mbit/s
95th percentile per-packet one-way delay: 45.691 ms
Loss rate: 7.50%
```
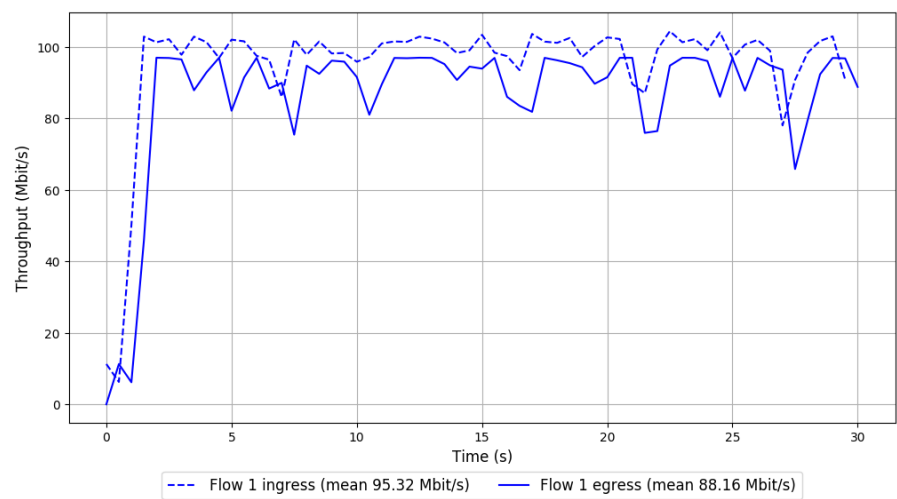
Run 10: Report of FillP — Data Link

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```
Run 1: Statistics of Indigo

Start at: 2018-05-21 21:44:13
End at: 2018-05-21 21:44:43
Local clock offset: 0.469 ms
Remote clock offset: -1.507 ms


# Below is generated by plot.py at 2018-05-22 00:46:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.95 Mbit/s
95th percentile per-packet one-way delay: 12.784 ms
Loss rate: 5.49%
-- Flow 1:
Average throughput: 87.95 Mbit/s
95th percentile per-packet one-way delay: 12.784 ms
Loss rate: 5.49%
```
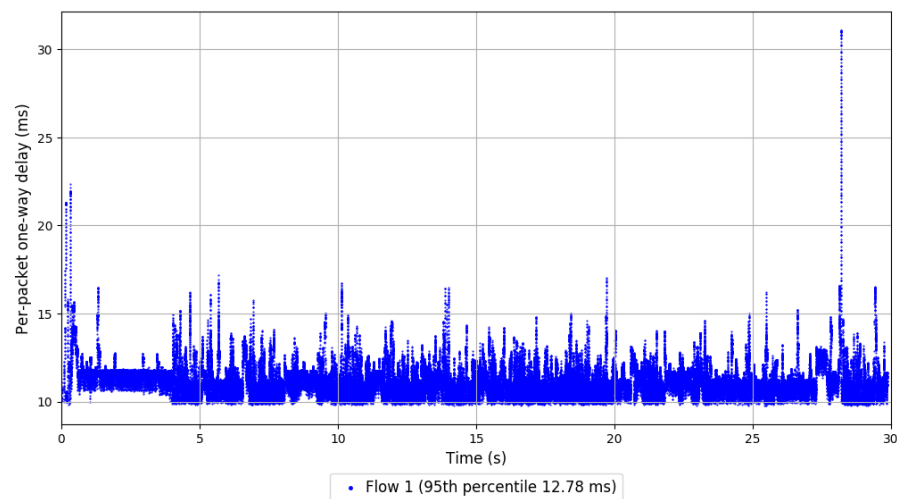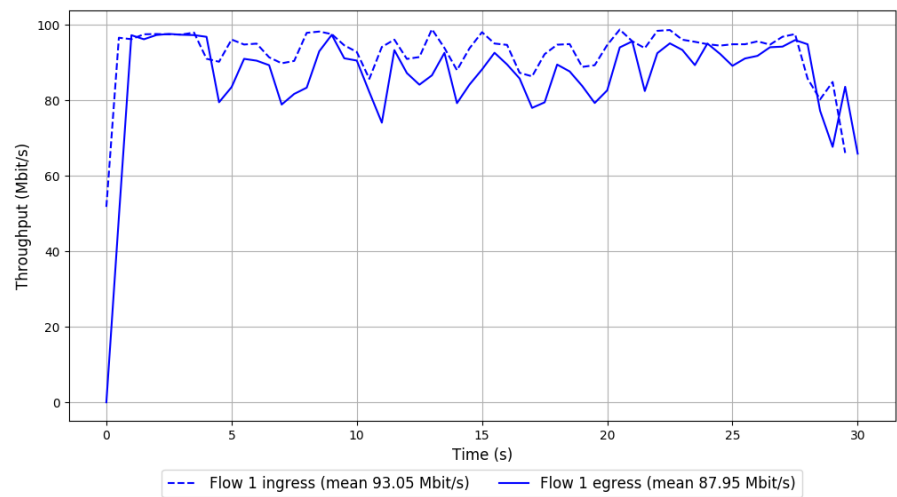
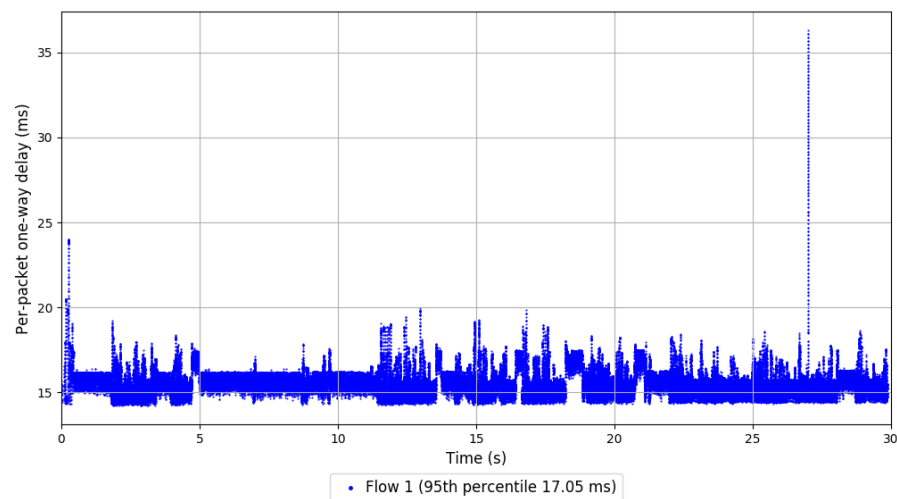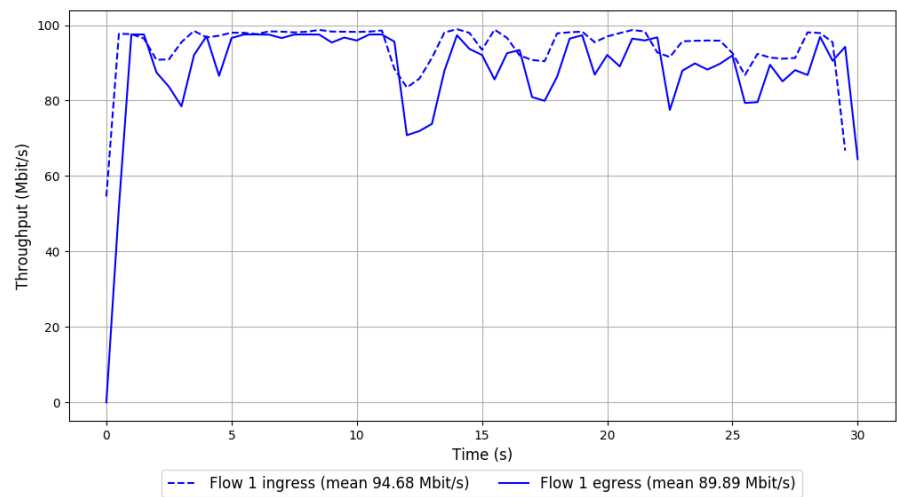Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2018-05-21 22:02:05
End at: 2018-05-21 22:02:35
Local clock offset: -2.818 ms
Remote clock offset: -1.366 ms


# Below is generated by plot.py at 2018-05-22 00:46:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 17.049 ms
Loss rate: 5.06%
-- Flow 1:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 17.049 ms
Loss rate: 5.06%
```

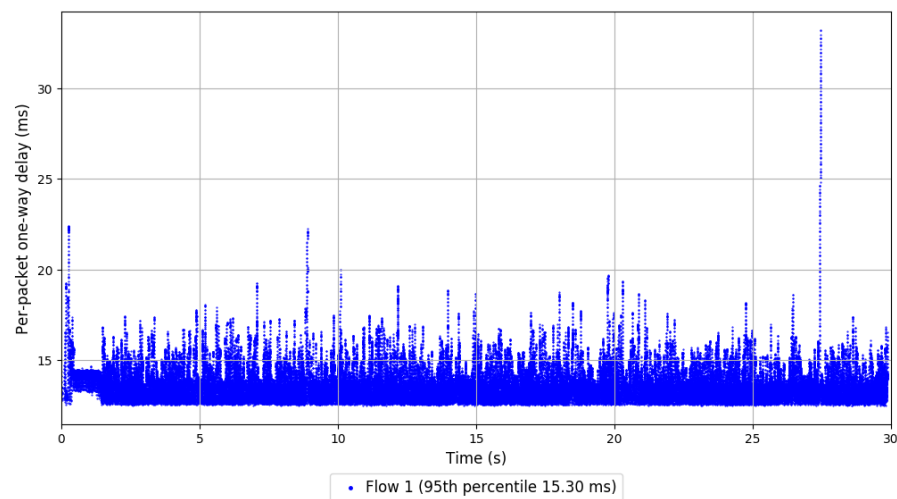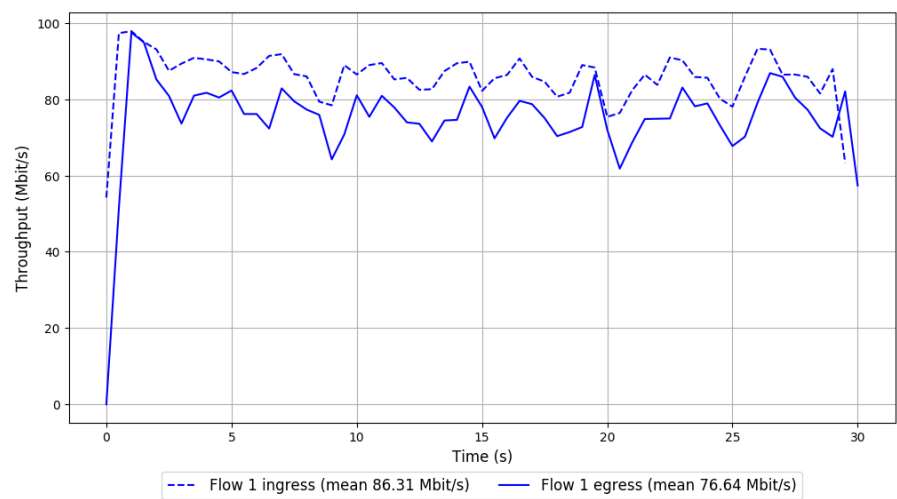Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2018-05-21 22:19:49
End at: 2018-05-21 22:20:19
Local clock offset: 0.613 ms
Remote clock offset: -1.141 ms


# Below is generated by plot.py at 2018-05-22 00:46:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.64 Mbit/s
95th percentile per-packet one-way delay: 15.300 ms
Loss rate: 11.19%
-- Flow 1:
Average throughput: 76.64 Mbit/s
95th percentile per-packet one-way delay: 15.300 ms
Loss rate: 11.19%
```

Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2018-05-21 22:37:35
End at: 2018-05-21 22:38:05
Local clock offset: -0.948 ms
Remote clock offset: 0.285 ms


# Below is generated by plot.py at 2018-05-22 00:46:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.48 Mbit/s
95th percentile per-packet one-way delay: 17.146 ms
Loss rate: 9.45%
-- Flow 1:
Average throughput: 81.48 Mbit/s
95th percentile per-packet one-way delay: 17.146 ms
Loss rate: 9.45%
```
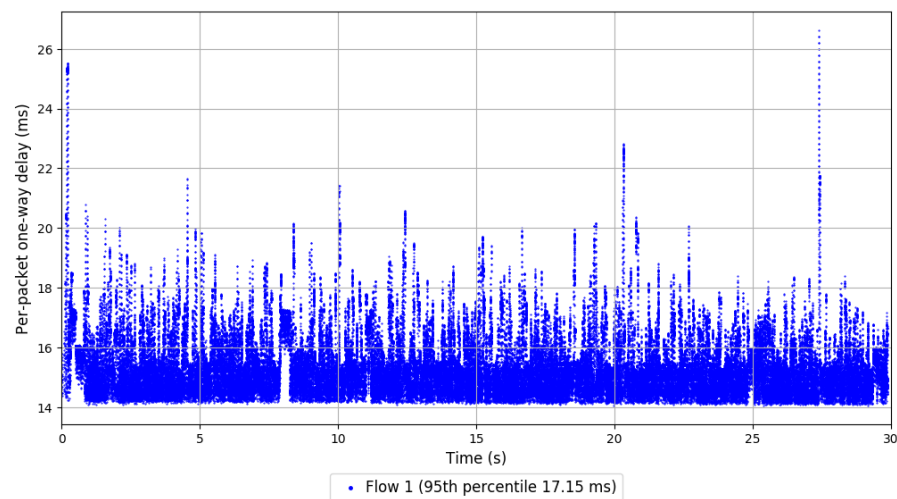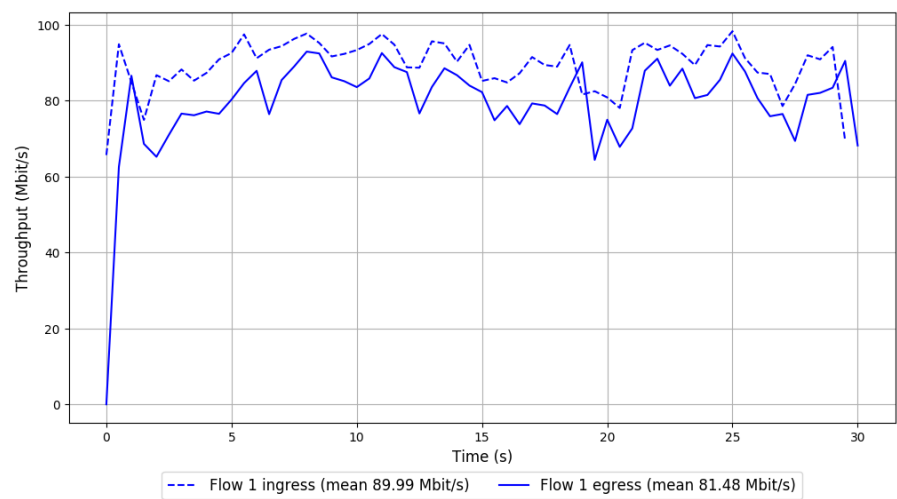
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2018-05-21 22:55:28
End at: 2018-05-21 22:55:58
Local clock offset: 2.286 ms
Remote clock offset: 2.552 ms

# Below is generated by plot.py at 2018-05-22 00:47:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.16 Mbit/s
95th percentile per-packet one-way delay: 14.235 ms
Loss rate: 6.63%
-- Flow 1:
Average throughput: 87.16 Mbit/s
95th percentile per-packet one-way delay: 14.235 ms
Loss rate: 6.63%
```
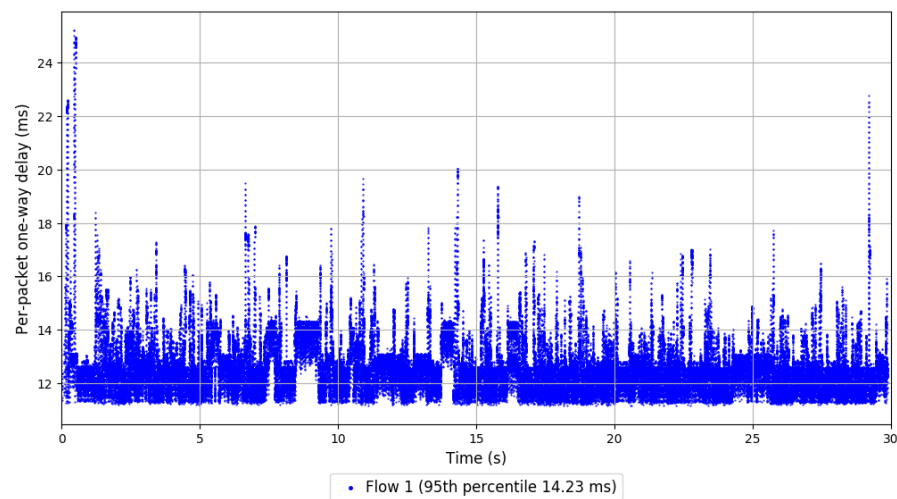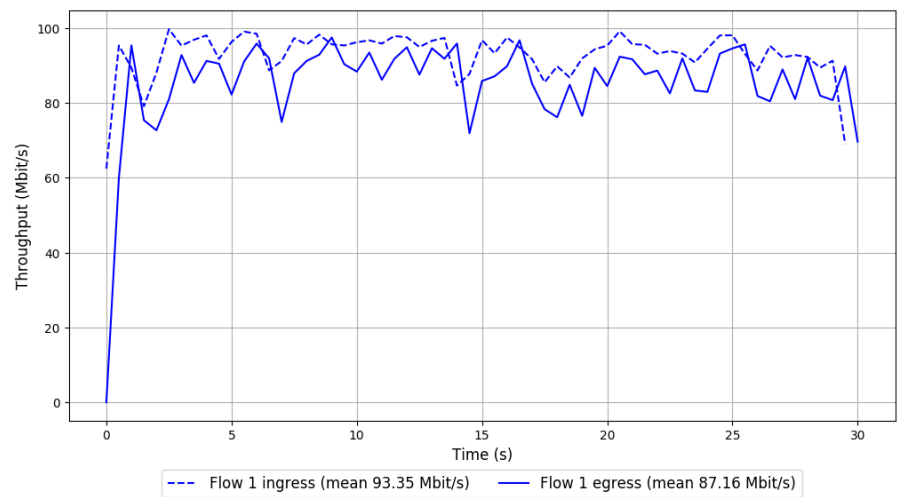
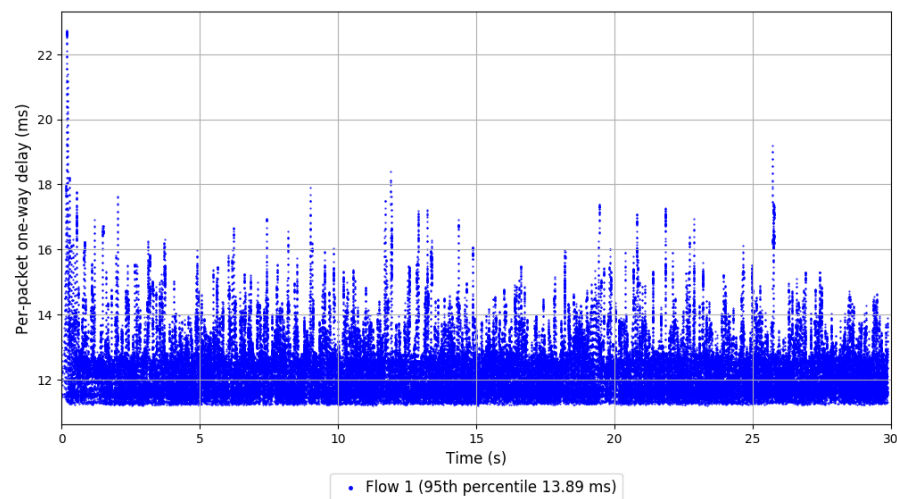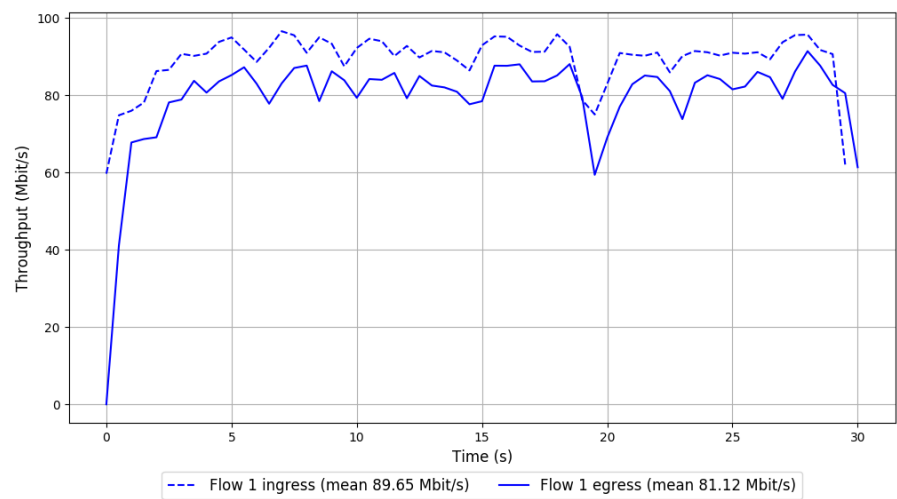Run 5: Report of Indigo — Data Link

```
Run 6: Statistics of Indigo

Start at: 2018-05-21 23:13:12
End at: 2018-05-21 23:13:42
Local clock offset: -2.418 ms
Remote clock offset: -2.732 ms


# Below is generated by plot.py at 2018-05-22 00:47:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.12 Mbit/s
95th percentile per-packet one-way delay: 13.892 ms
Loss rate: 9.52%
-- Flow 1:
Average throughput: 81.12 Mbit/s
95th percentile per-packet one-way delay: 13.892 ms
Loss rate: 9.52%
```

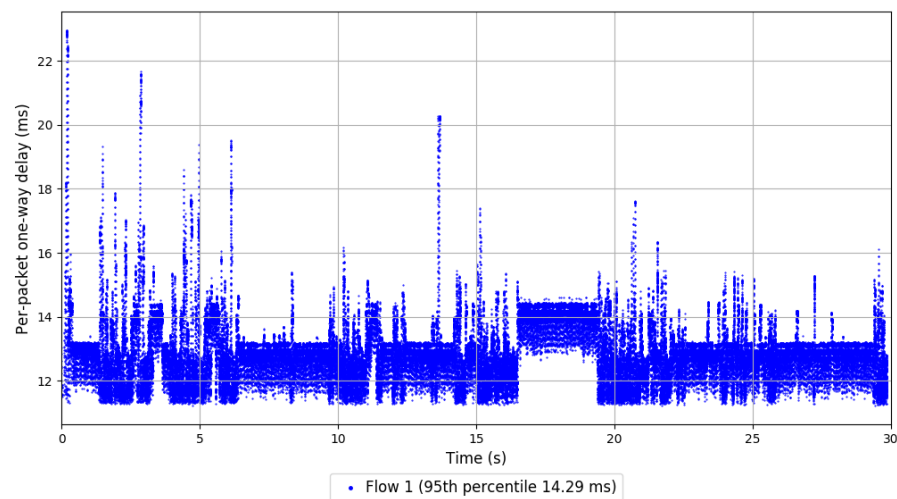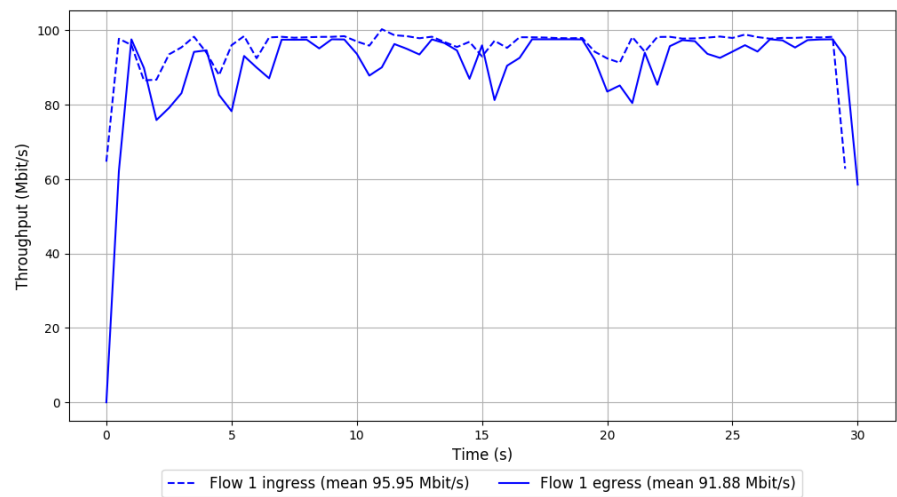Run 6: Report of Indigo — Data Link

```
Run 7: Statistics of Indigo

Start at: 2018-05-21 23:31:03
End at: 2018-05-21 23:31:33
Local clock offset: -4.155 ms
Remote clock offset: -5.245 ms


# Below is generated by plot.py at 2018-05-22 00:47:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.88 Mbit/s
95th percentile per-packet one-way delay: 14.289 ms
Loss rate: 4.24%
-- Flow 1:
Average throughput: 91.88 Mbit/s
95th percentile per-packet one-way delay: 14.289 ms
Loss rate: 4.24%
```
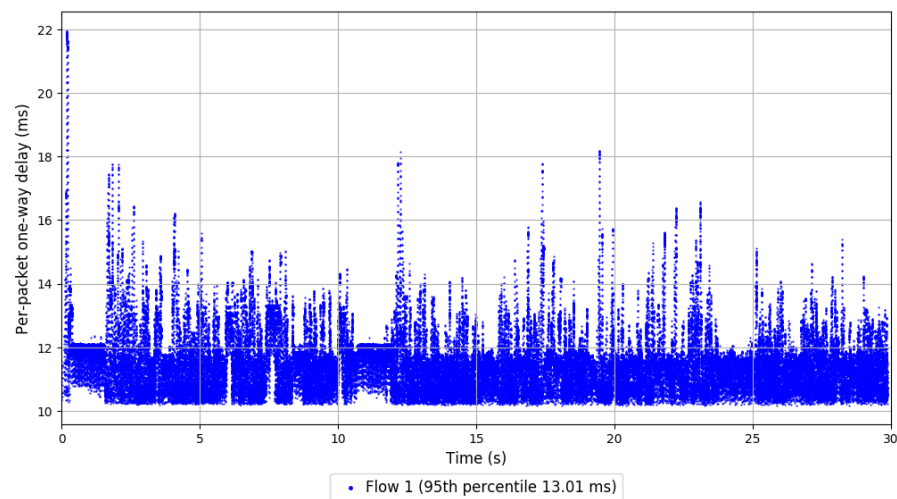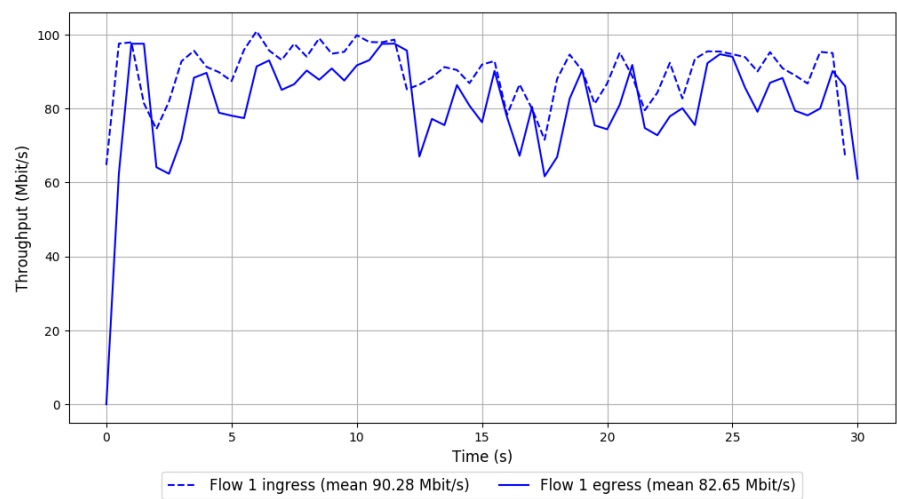
Run 7: Report of Indigo — Data Link

```
Run 8: Statistics of Indigo

Start at: 2018-05-21 23:48:53
End at: 2018-05-21 23:49:23
Local clock offset: -4.587 ms
Remote clock offset: -6.913 ms


# Below is generated by plot.py at 2018-05-22 00:47:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.65 Mbit/s
95th percentile per-packet one-way delay: 13.013 ms
Loss rate: 8.45%
-- Flow 1:
Average throughput: 82.65 Mbit/s
95th percentile per-packet one-way delay: 13.013 ms
Loss rate: 8.45%
```
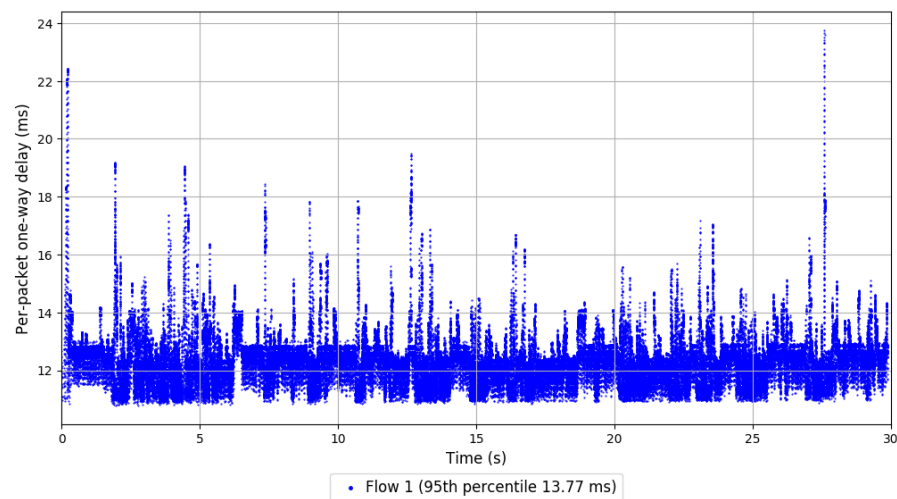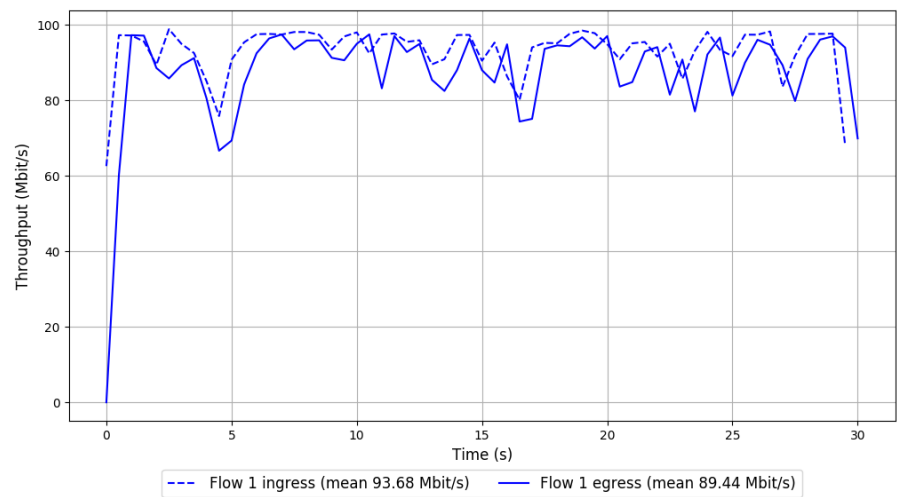
Run 8: Report of Indigo — Data Link

```
Run 9: Statistics of Indigo

Start at: 2018-05-22 00:06:37
End at: 2018-05-22 00:07:07
Local clock offset: -2.728 ms
Remote clock offset: -8.424 ms


# Below is generated by plot.py at 2018-05-22 00:47:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.44 Mbit/s
95th percentile per-packet one-way delay: 13.767 ms
Loss rate: 4.52%
-- Flow 1:
Average throughput: 89.44 Mbit/s
95th percentile per-packet one-way delay: 13.767 ms
Loss rate: 4.52%
```

Run 9: Report of Indigo — Data Link

Flow 1 ingress (mean 93.68 Mbit/s)   Flow 1 egress (mean 89.44 Mbit/s)

Flow 1 (95th percentile 13.77 ms)

```
Run 10: Statistics of Indigo

Start at: 2018-05-22 00:24:26
End at: 2018-05-22 00:24:56
Local clock offset: -1.742 ms
Remote clock offset: 0.174 ms


# Below is generated by plot.py at 2018-05-22 00:47:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.94 Mbit/s
95th percentile per-packet one-way delay: 15.291 ms
Loss rate: 5.14%
-- Flow 1:
Average throughput: 85.94 Mbit/s
95th percentile per-packet one-way delay: 15.291 ms
Loss rate: 5.14%
```
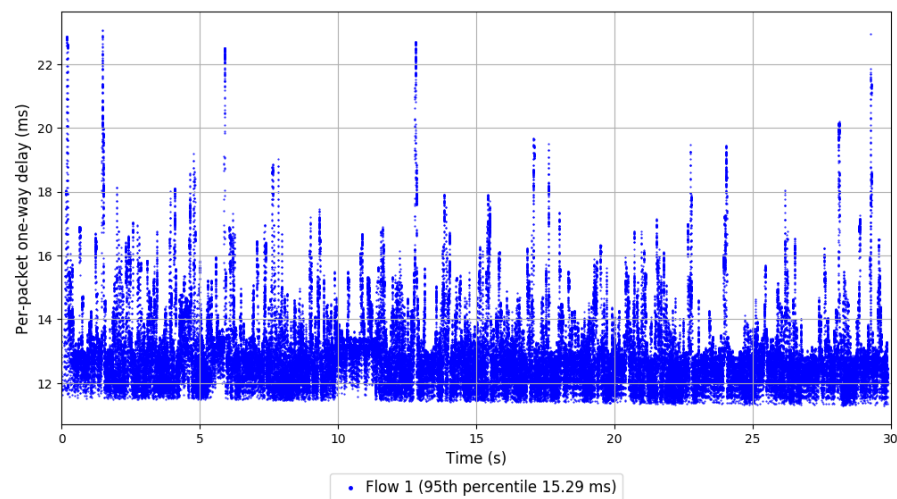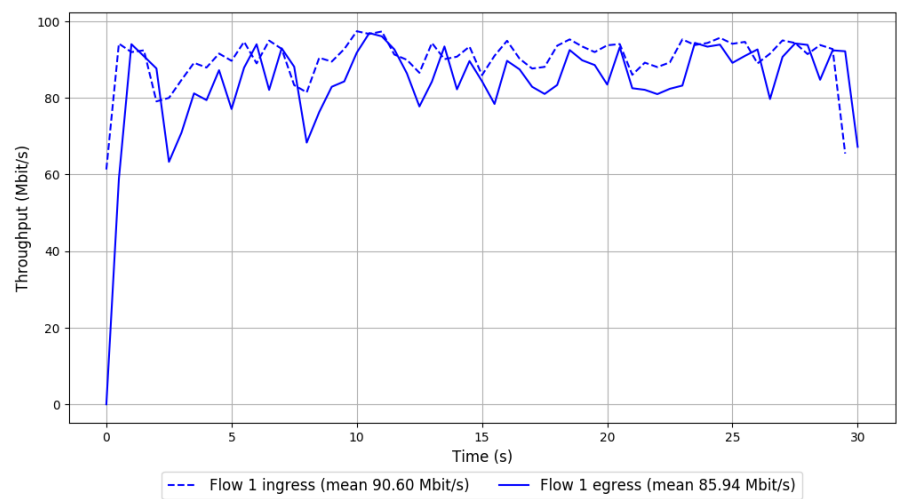
Run 10: Report of Indigo — Data Link

Flow 1 ingress (mean 90.60 Mbit/s) —— Flow 1 egress (mean 85.94 Mbit/s)
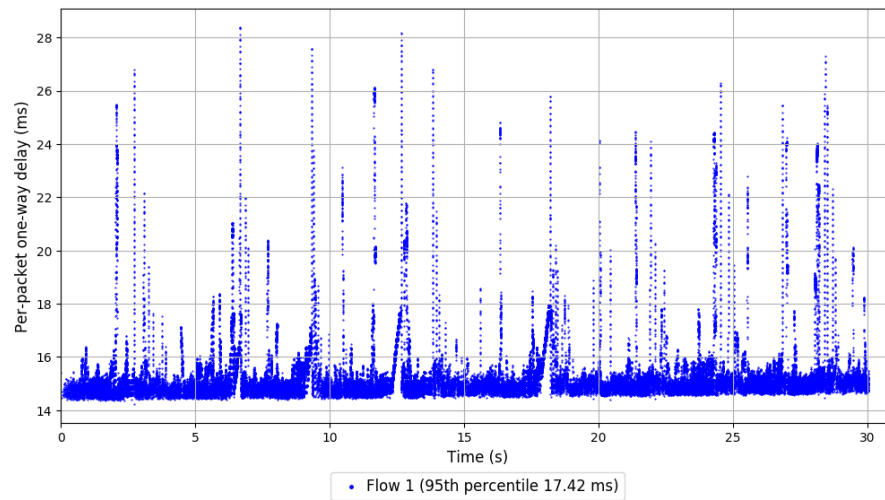
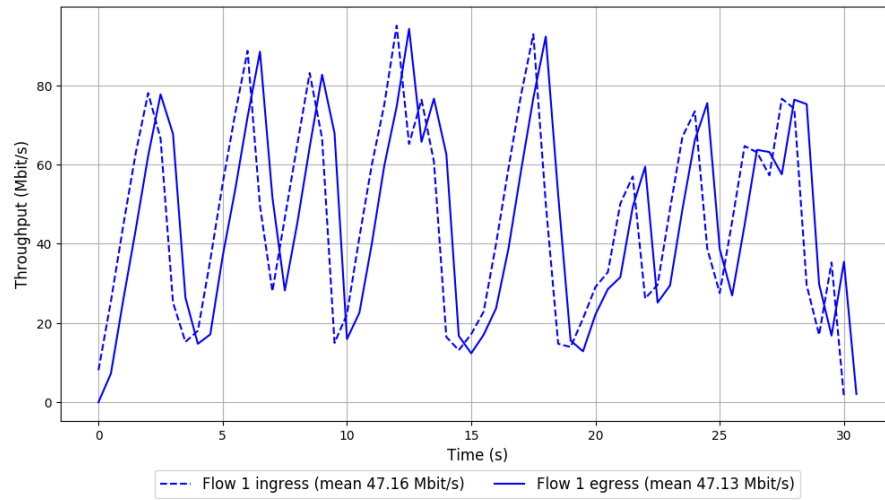

• Flow 1 (95th percentile 15.29 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2018-05-21 21:56:31
End at: 2018-05-21 21:57:01
Local clock offset: -4.809 ms
Remote clock offset: -0.985 ms


# Below is generated by plot.py at 2018-05-22 00:47:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.13 Mbit/s
95th percentile per-packet one-way delay: 17.416 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 47.13 Mbit/s
95th percentile per-packet one-way delay: 17.416 ms
Loss rate: 0.06%
```

Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 47.16 Mbit/s) ---- Flow 1 egress (mean 47.13 Mbit/s) ——
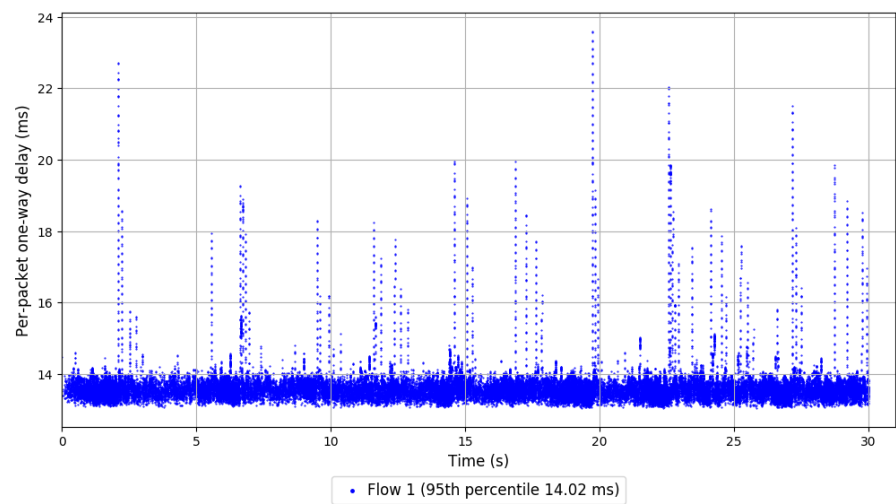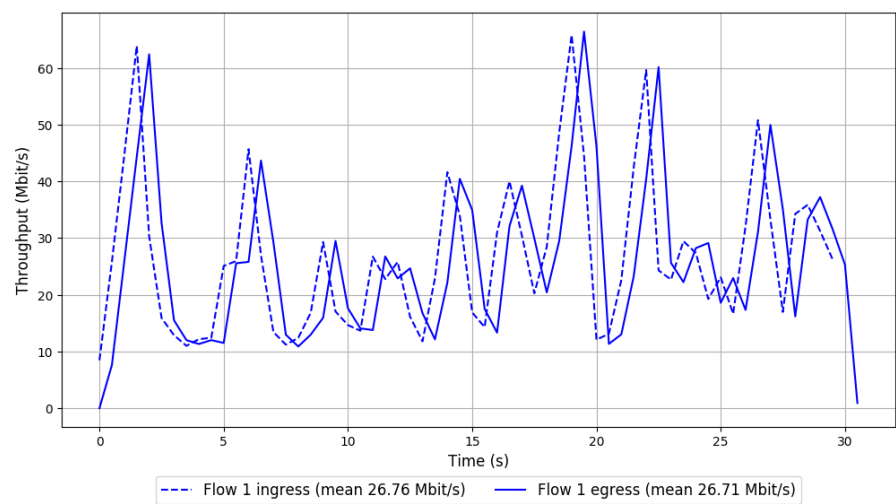

Flow 1 (95th percentile 17.42 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2018-05-21 22:14:20
End at: 2018-05-21 22:14:50
Local clock offset: -0.721 ms
Remote clock offset: -1.899 ms

# Below is generated by plot.py at 2018-05-22 00:47:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.71 Mbit/s
95th percentile per-packet one-way delay: 14.022 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 26.71 Mbit/s
95th percentile per-packet one-way delay: 14.022 ms
Loss rate: 0.22%
```

Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-05-21 22:32:05
End at: 2018-05-21 22:32:35
Local clock offset: 1.251 ms
Remote clock offset: -0.93 ms


# Below is generated by plot.py at 2018-05-22 00:47:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.19 Mbit/s
95th percentile per-packet one-way delay: 12.606 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 17.19 Mbit/s
95th percentile per-packet one-way delay: 12.606 ms
Loss rate: 0.54%
```
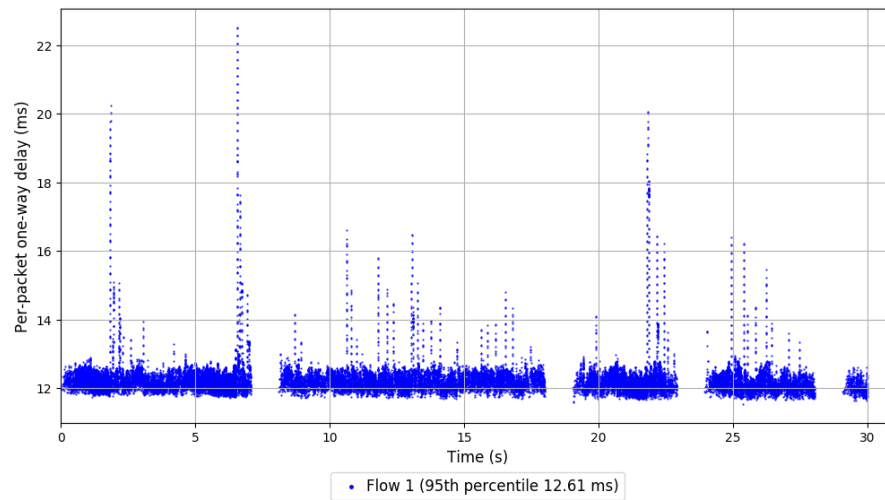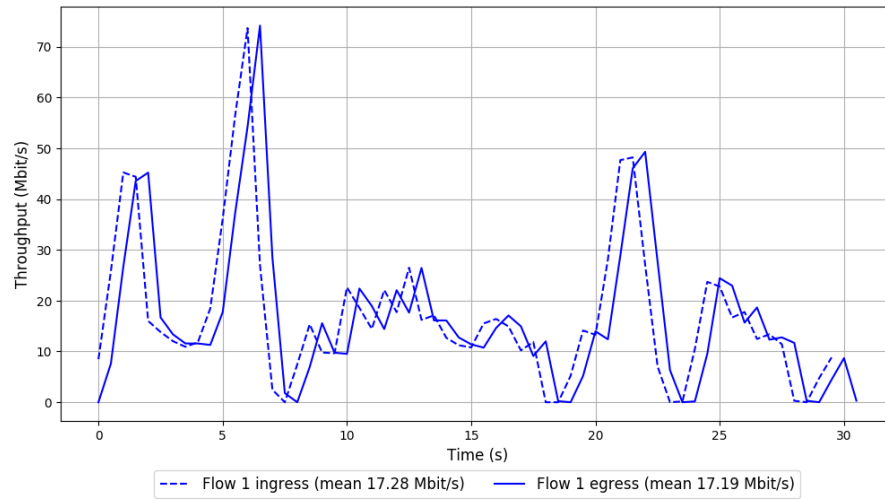
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2018-05-21 22:49:55
End at: 2018-05-21 22:50:25
Local clock offset: 0.366 ms
Remote clock offset: 1.226 ms


# Below is generated by plot.py at 2018-05-22 00:47:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.73 Mbit/s
95th percentile per-packet one-way delay: 13.516 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 24.73 Mbit/s
95th percentile per-packet one-way delay: 13.516 ms
Loss rate: 0.32%
```
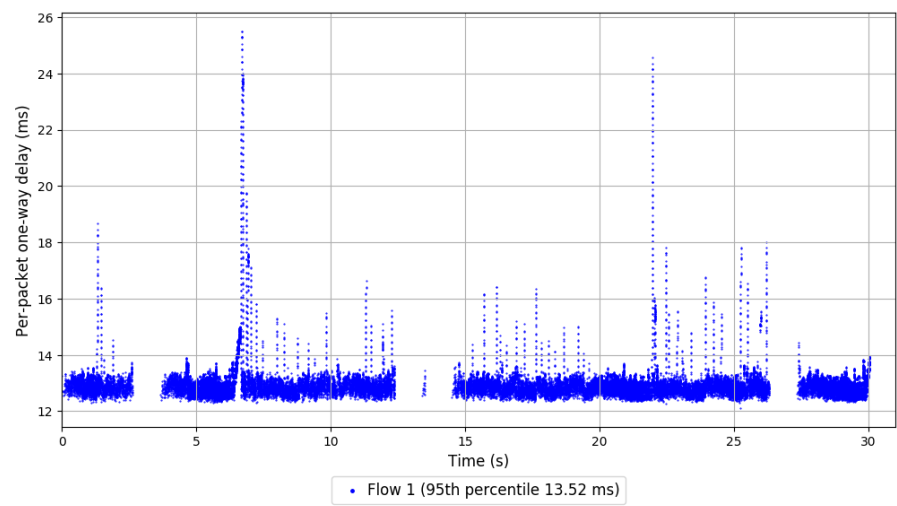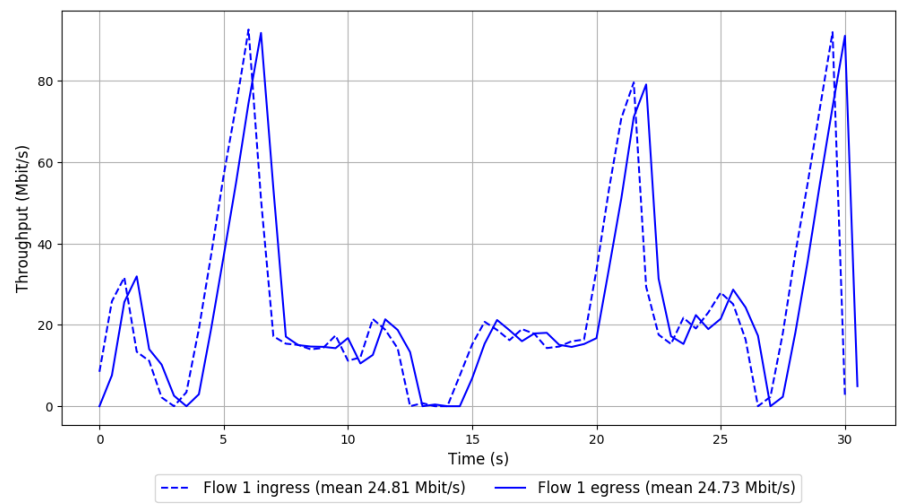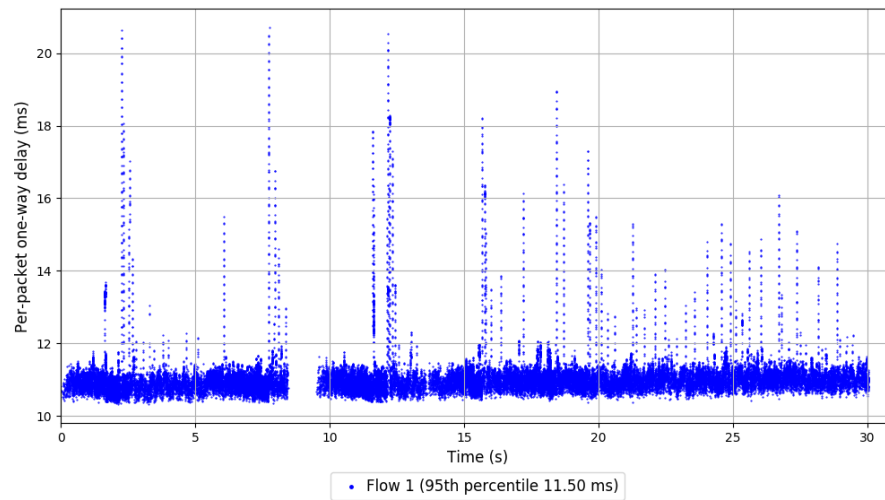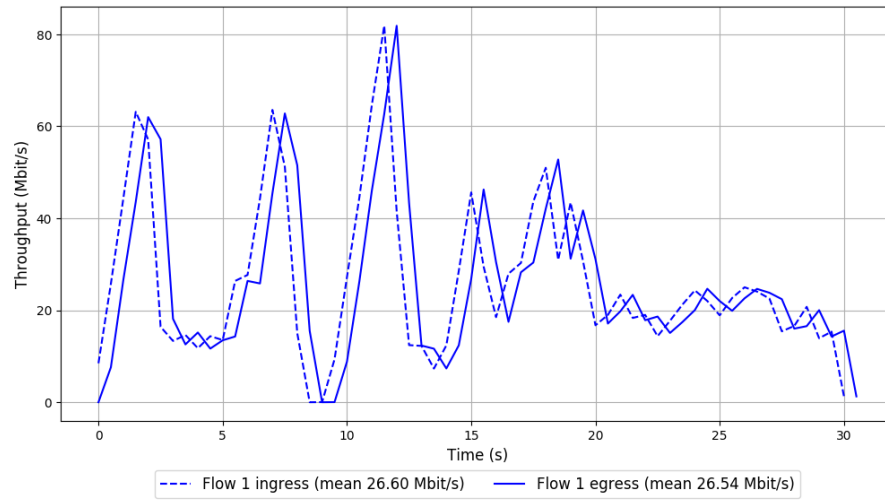
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2018-05-21 23:07:41
End at: 2018-05-21 23:08:11
Local clock offset: -0.519 ms
Remote clock offset: -0.434 ms

# Below is generated by plot.py at 2018-05-22 00:47:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.54 Mbit/s
95th percentile per-packet one-way delay: 11.498 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 26.54 Mbit/s
95th percentile per-packet one-way delay: 11.498 ms
Loss rate: 0.21%
```

Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 26.60 Mbit/s) — — —   Flow 1 egress (mean 26.54 Mbit/s) ———

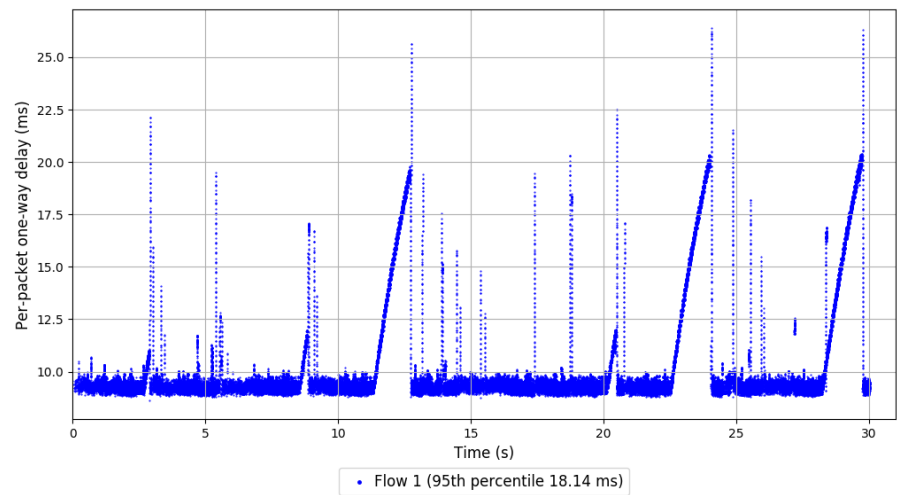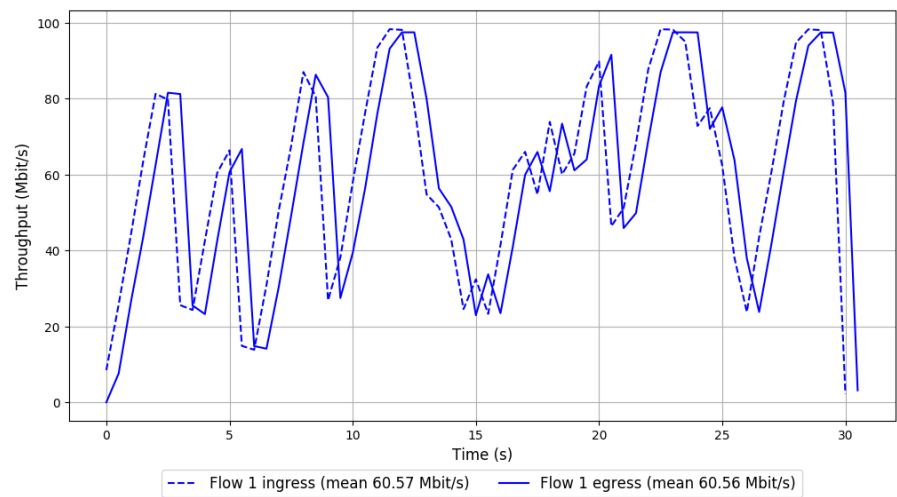• Flow 1 (95th percentile 11.50 ms)

```
Run 6: Statistics of LEDBAT

Start at: 2018-05-21 23:25:27
End at: 2018-05-21 23:25:58
Local clock offset: -2.42 ms
Remote clock offset: -6.053 ms


# Below is generated by plot.py at 2018-05-22 00:48:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.56 Mbit/s
95th percentile per-packet one-way delay: 18.144 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 60.56 Mbit/s
95th percentile per-packet one-way delay: 18.144 ms
Loss rate: 0.03%
```
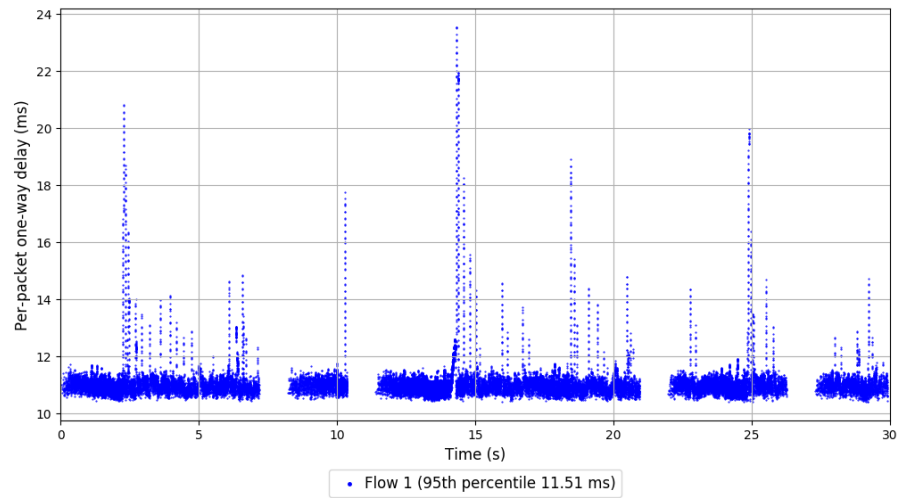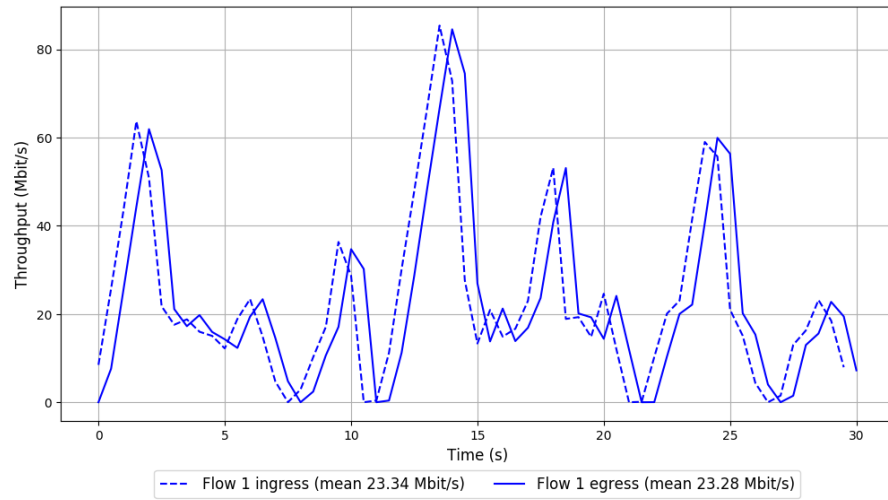
Run 6: Report of LEDBAT — Data Link

```
Run 7: Statistics of LEDBAT

Start at: 2018-05-21 23:43:21
End at: 2018-05-21 23:43:51
Local clock offset: -4.423 ms
Remote clock offset: -6.566 ms


# Below is generated by plot.py at 2018-05-22 00:48:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.28 Mbit/s
95th percentile per-packet one-way delay: 11.513 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 23.28 Mbit/s
95th percentile per-packet one-way delay: 11.513 ms
Loss rate: 0.32%
```

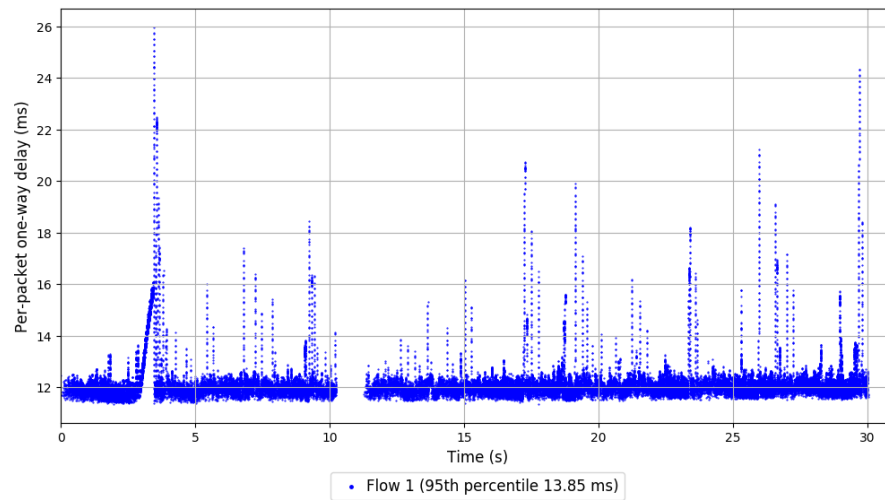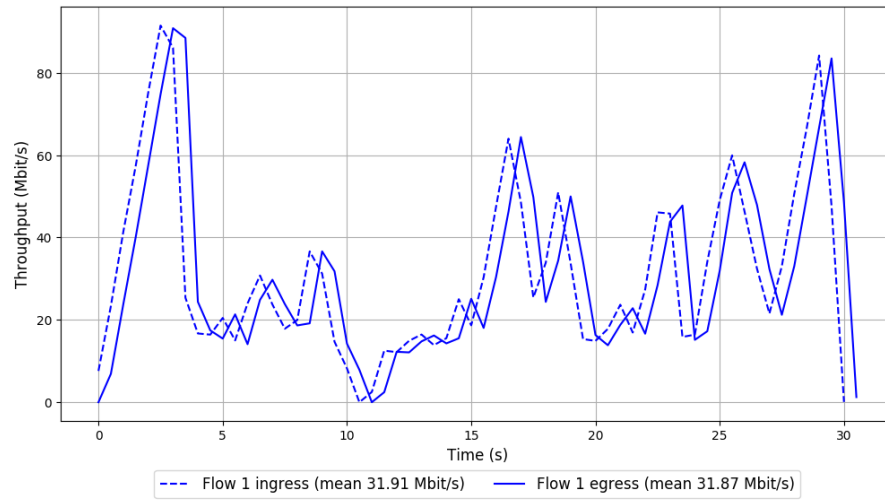Run 7: Report of LEDBAT — Data Link

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```
Run 8: Statistics of LEDBAT

Start at: 2018-05-22 00:01:04
End at: 2018-05-22 00:01:34
Local clock offset: -4.182 ms
Remote clock offset: -7.664 ms


# Below is generated by plot.py at 2018-05-22 00:48:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.87 Mbit/s
95th percentile per-packet one-way delay: 13.848 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 31.87 Mbit/s
95th percentile per-packet one-way delay: 13.848 ms
Loss rate: 0.14%
```
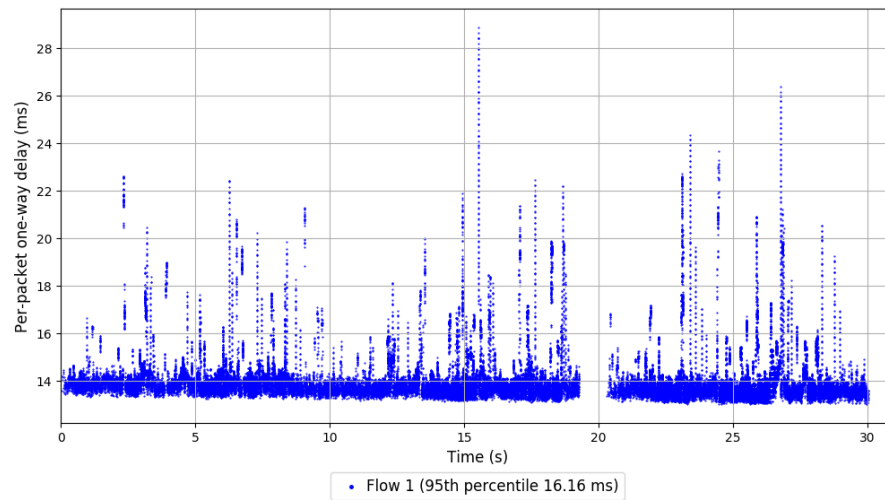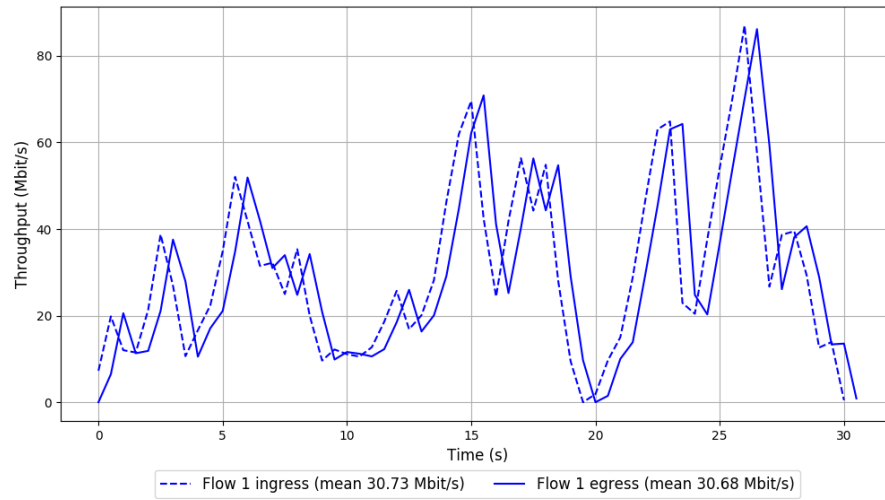
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2018-05-22 00:18:54
End at: 2018-05-22 00:19:24
Local clock offset: -4.154 ms
Remote clock offset: -3.152 ms


# Below is generated by plot.py at 2018-05-22 00:48:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.68 Mbit/s
95th percentile per-packet one-way delay: 16.156 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 30.68 Mbit/s
95th percentile per-packet one-way delay: 16.156 ms
Loss rate: 0.15%
```

Run 9: Report of LEDBAT — Data Link

```
Run 10: Statistics of LEDBAT

Start at: 2018-05-22 00:36:51
End at: 2018-05-22 00:37:21
Local clock offset: -1.91 ms
Remote clock offset: 1.075 ms


# Below is generated by plot.py at 2018-05-22 00:48:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.26 Mbit/s
95th percentile per-packet one-way delay: 13.202 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 30.26 Mbit/s
95th percentile per-packet one-way delay: 13.202 ms
Loss rate: 0.11%
```
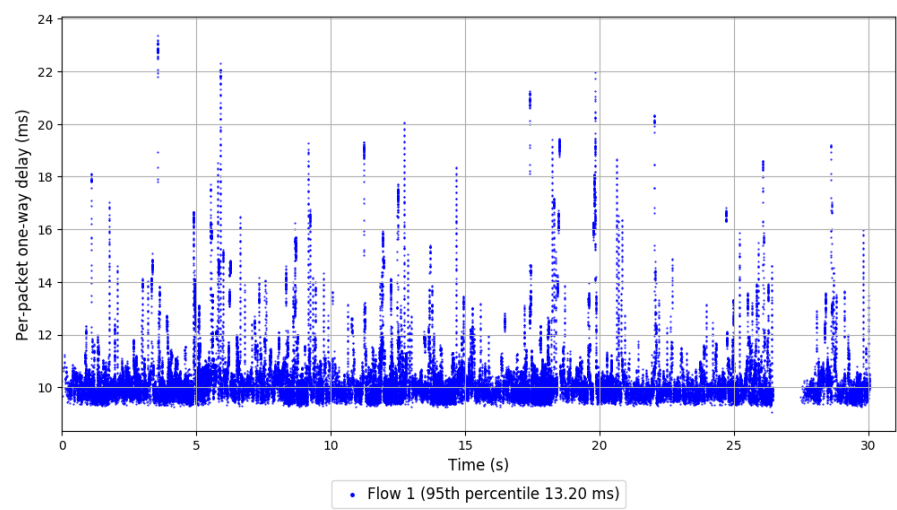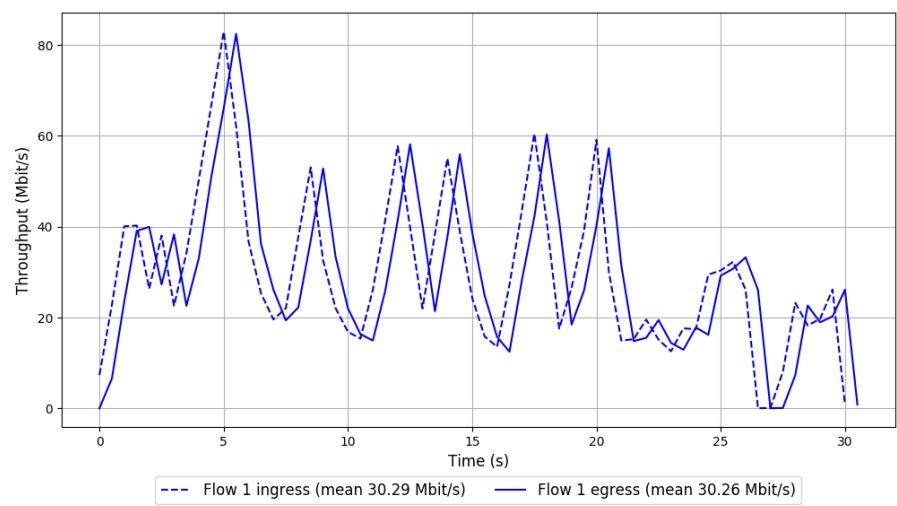
Run 10: Report of LEDBAT — Data Link

Flow 1 ingress (mean 30.29 Mbit/s)   Flow 1 egress (mean 30.26 Mbit/s)

Flow 1 (95th percentile 13.20 ms)

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-05-21 21:54:19
End at: 2018-05-21 21:54:49
Local clock offset: -4.019 ms
Remote clock offset: -1.246 ms


# Below is generated by plot.py at 2018-05-22 00:48:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.45 Mbit/s
95th percentile per-packet one-way delay: 14.462 ms
Loss rate: 8.84%
-- Flow 1:
Average throughput: 67.45 Mbit/s
95th percentile per-packet one-way delay: 14.462 ms
Loss rate: 8.84%
```
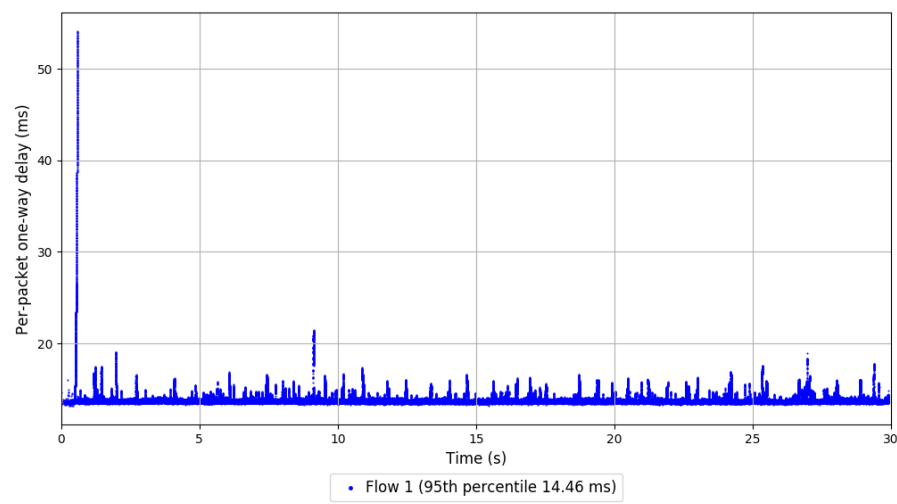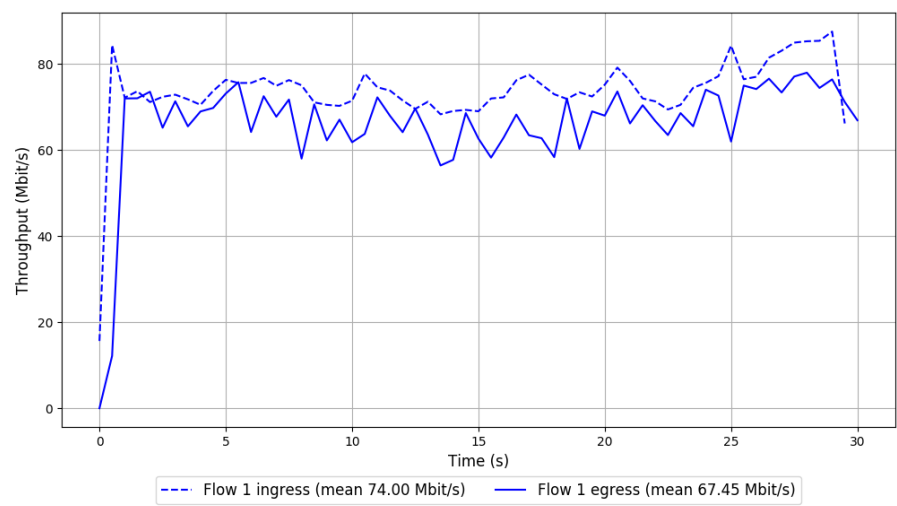
Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 74.00 Mbit/s)   Flow 1 egress (mean 67.45 Mbit/s)

Flow 1 (95th percentile 14.46 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-05-21 22:12:08
End at: 2018-05-21 22:12:38
Local clock offset: -1.892 ms
Remote clock offset: -1.41 ms


# Below is generated by plot.py at 2018-05-22 00:48:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.03 Mbit/s
95th percentile per-packet one-way delay: 15.629 ms
Loss rate: 12.06%
-- Flow 1:
Average throughput: 76.03 Mbit/s
95th percentile per-packet one-way delay: 15.629 ms
Loss rate: 12.06%
```
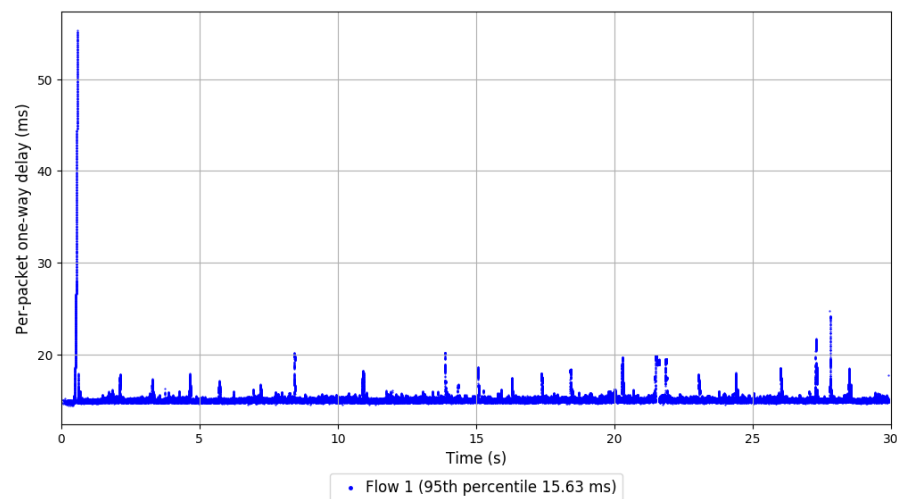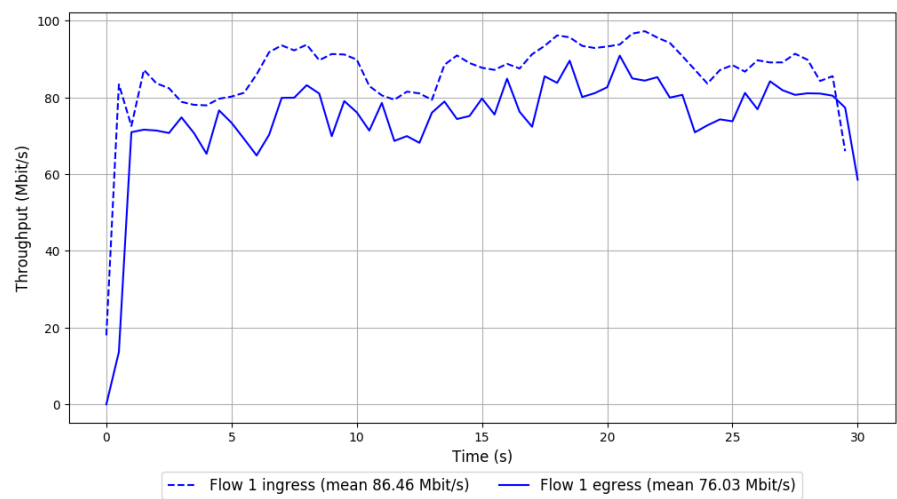
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 86.46 Mbit/s)   Flow 1 egress (mean 76.03 Mbit/s)

Flow 1 (95th percentile 15.63 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-05-21 22:29:53
End at: 2018-05-21 22:30:23
Local clock offset: -1.982 ms
Remote clock offset: -1.75 ms


# Below is generated by plot.py at 2018-05-22 00:48:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.21 Mbit/s
95th percentile per-packet one-way delay: 15.165 ms
Loss rate: 12.80%
-- Flow 1:
Average throughput: 64.21 Mbit/s
95th percentile per-packet one-way delay: 15.165 ms
Loss rate: 12.80%
```
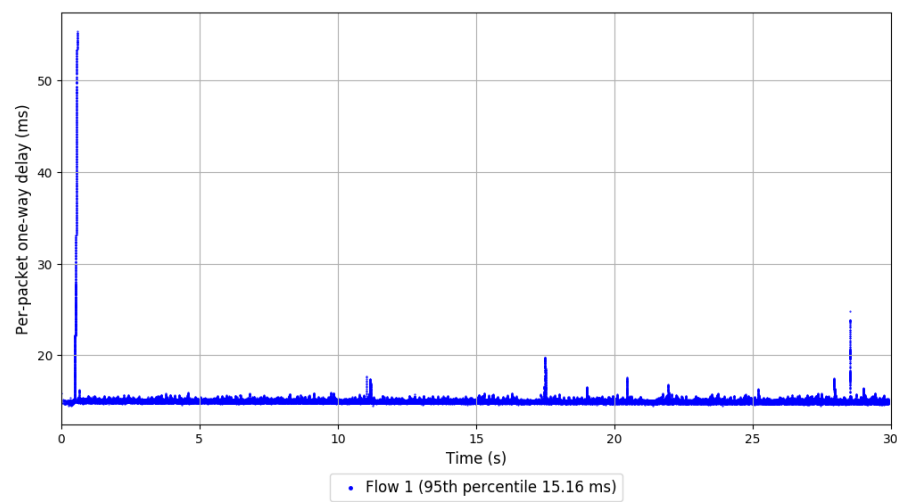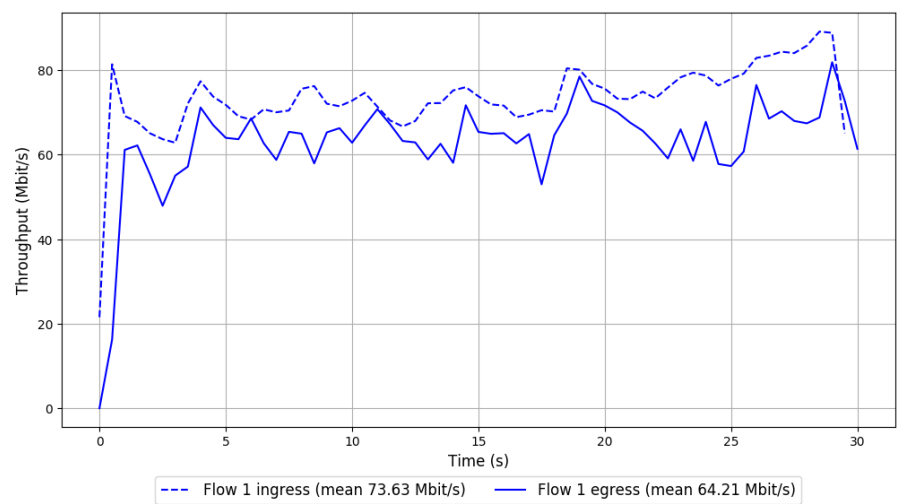
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 73.63 Mbit/s)   Flow 1 egress (mean 64.21 Mbit/s)

• Flow 1 (95th percentile 15.16 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-05-21 22:47:42
End at: 2018-05-21 22:48:12
Local clock offset: -0.027 ms
Remote clock offset: 1.026 ms


# Below is generated by plot.py at 2018-05-22 00:48:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.93 Mbit/s
95th percentile per-packet one-way delay: 13.173 ms
Loss rate: 5.59%
-- Flow 1:
Average throughput: 72.93 Mbit/s
95th percentile per-packet one-way delay: 13.173 ms
Loss rate: 5.59%
```
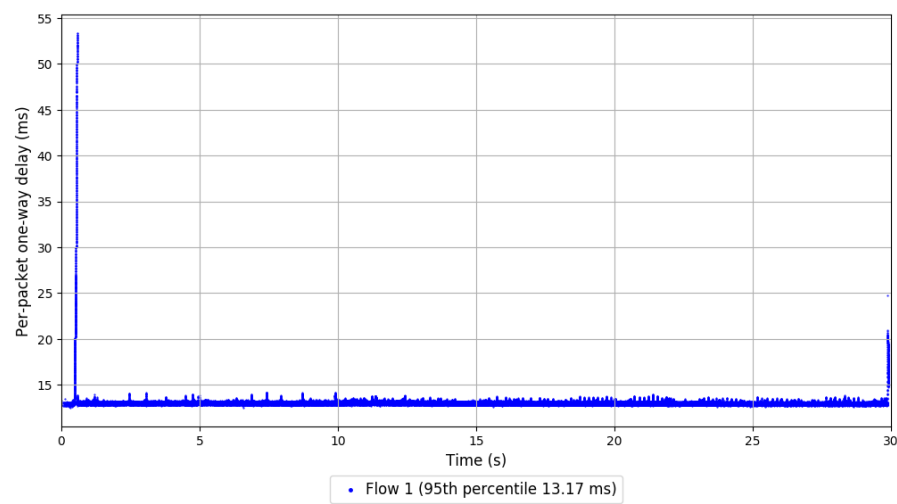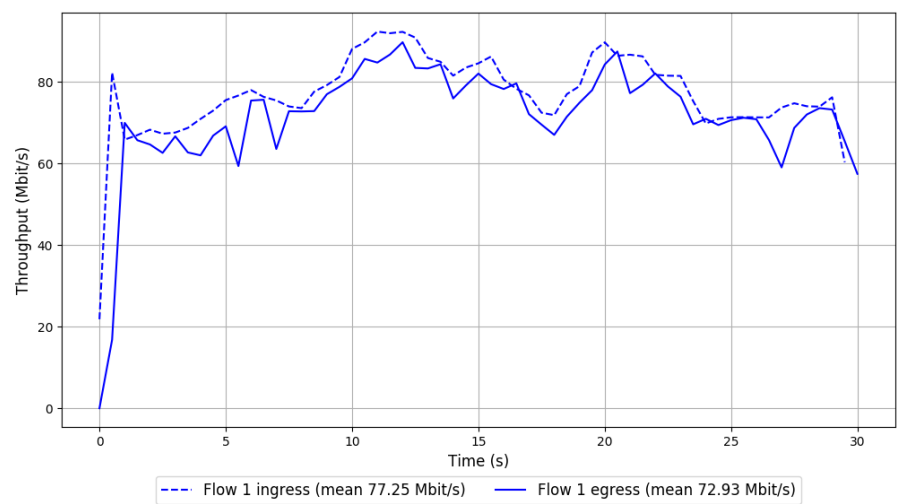
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 77.25 Mbit/s)   Flow 1 egress (mean 72.93 Mbit/s)

Flow 1 (95th percentile 13.17 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-05-21 23:05:27
End at: 2018-05-21 23:05:57
Local clock offset: -2.004 ms
Remote clock offset: 1.069 ms


# Below is generated by plot.py at 2018-05-22 00:49:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.33 Mbit/s
95th percentile per-packet one-way delay: 14.941 ms
Loss rate: 3.05%
-- Flow 1:
Average throughput: 88.33 Mbit/s
95th percentile per-packet one-way delay: 14.941 ms
Loss rate: 3.05%
```
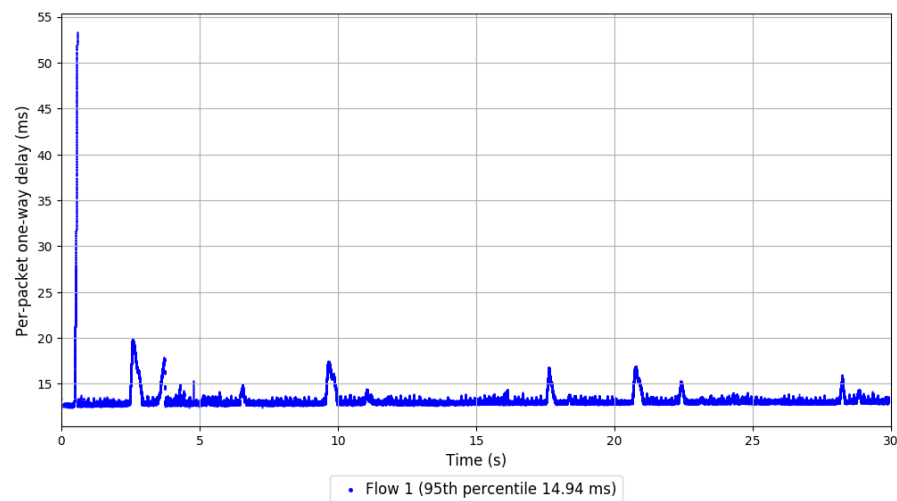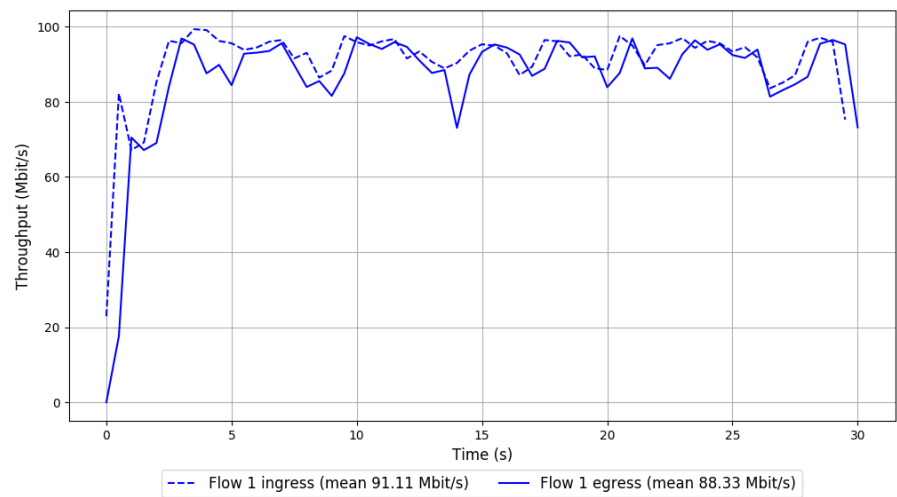
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 91.11 Mbit/s)   Flow 1 egress (mean 88.33 Mbit/s)

• Flow 1 (95th percentile 14.94 ms)

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-05-21 23:23:13
End at: 2018-05-21 23:23:43
Local clock offset: -6.059 ms
Remote clock offset: -3.953 ms


# Below is generated by plot.py at 2018-05-22 00:49:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.80 Mbit/s
95th percentile per-packet one-way delay: 16.615 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 88.80 Mbit/s
95th percentile per-packet one-way delay: 16.615 ms
Loss rate: 1.87%
```
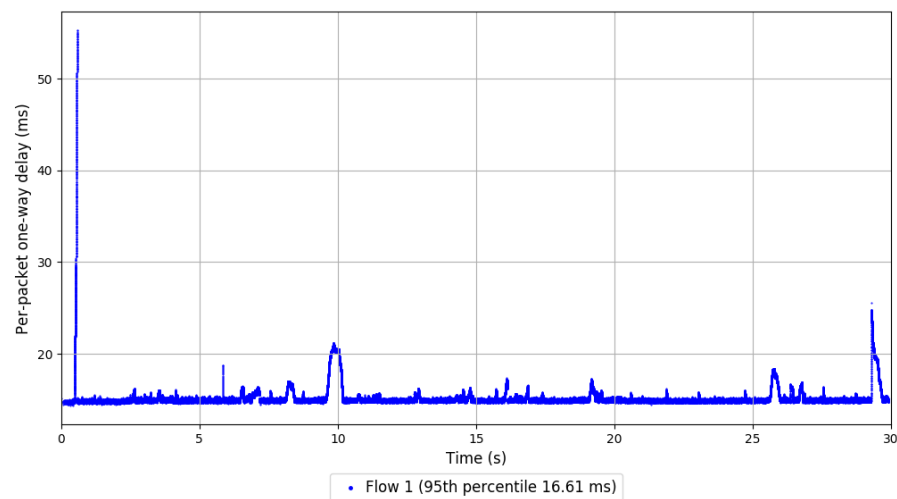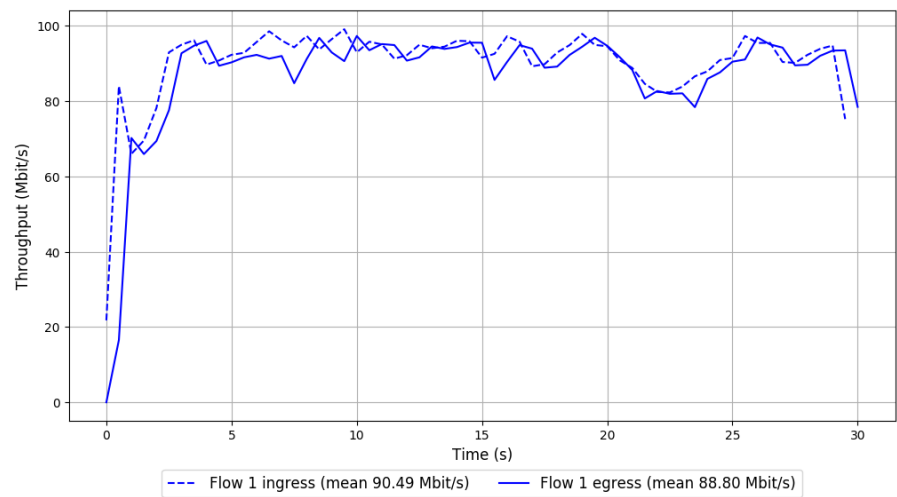
Run 6: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 90.49 Mbit/s)   Flow 1 egress (mean 88.80 Mbit/s)
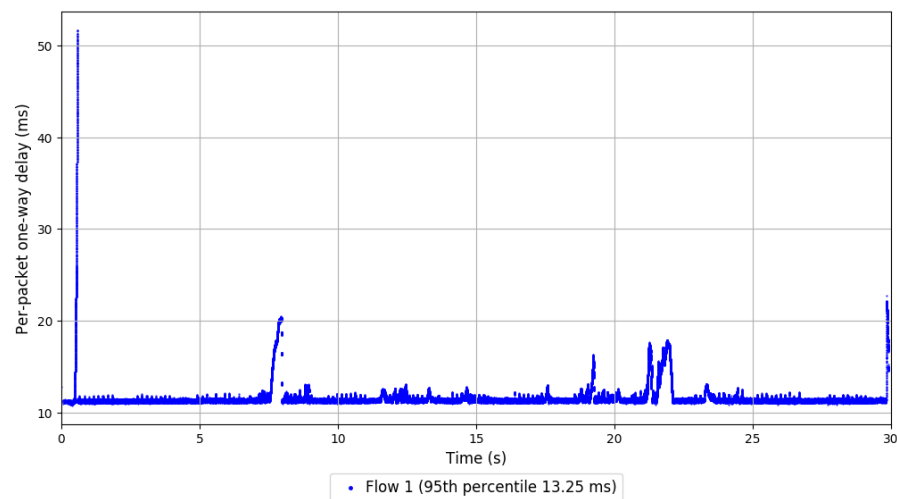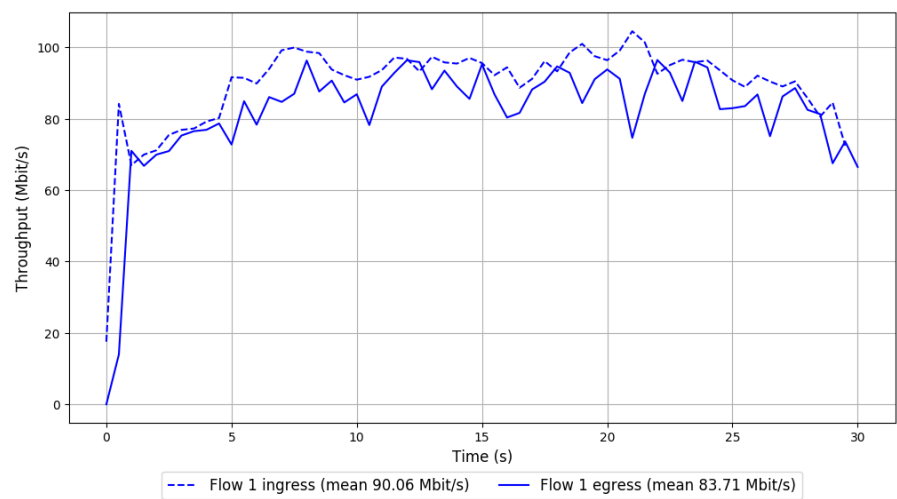

Flow 1 (95th percentile 16.61 ms)

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-05-21 23:41:08
End at: 2018-05-21 23:41:39
Local clock offset: -5.332 ms
Remote clock offset: -6.919 ms


# Below is generated by plot.py at 2018-05-22 00:49:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.71 Mbit/s
95th percentile per-packet one-way delay: 13.253 ms
Loss rate: 7.05%
-- Flow 1:
Average throughput: 83.71 Mbit/s
95th percentile per-packet one-way delay: 13.253 ms
Loss rate: 7.05%
```
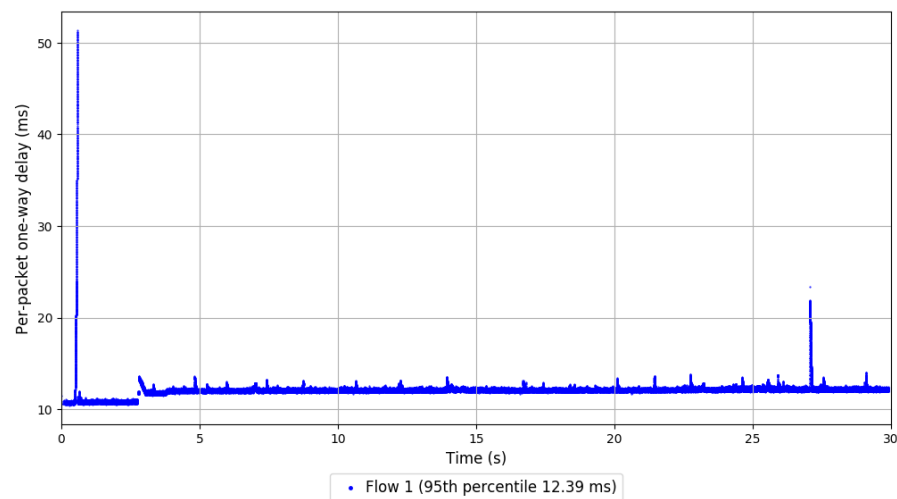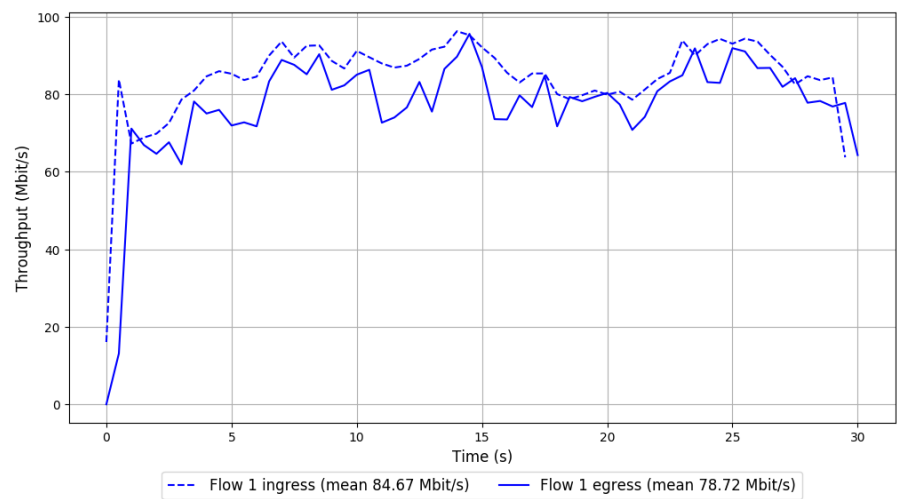
Run 7: Report of PCC-Allegro — Data Link

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-05-21 23:58:51
End at: 2018-05-21 23:59:21
Local clock offset: -4.587 ms
Remote clock offset: -7.997 ms


# Below is generated by plot.py at 2018-05-22 00:49:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.72 Mbit/s
95th percentile per-packet one-way delay: 12.387 ms
Loss rate: 7.03%
-- Flow 1:
Average throughput: 78.72 Mbit/s
95th percentile per-packet one-way delay: 12.387 ms
Loss rate: 7.03%
```

Run 8: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 84.67 Mbit/s) ---- Flow 1 egress (mean 78.72 Mbit/s)
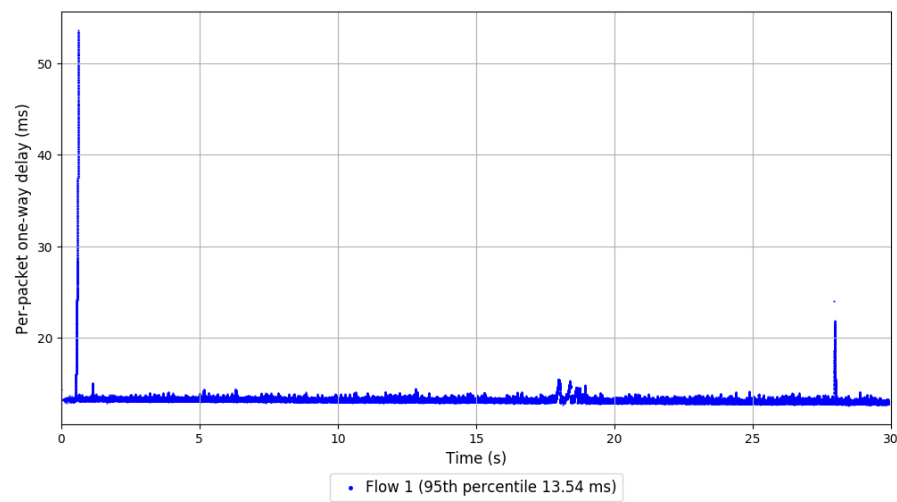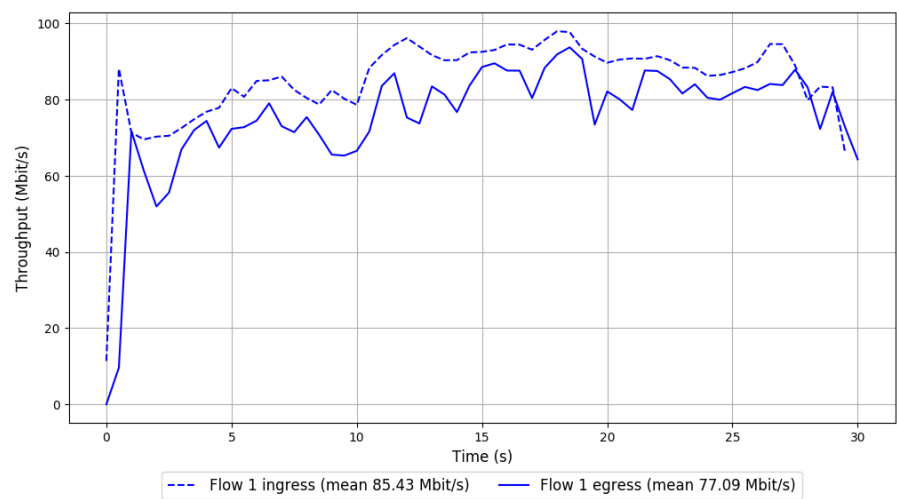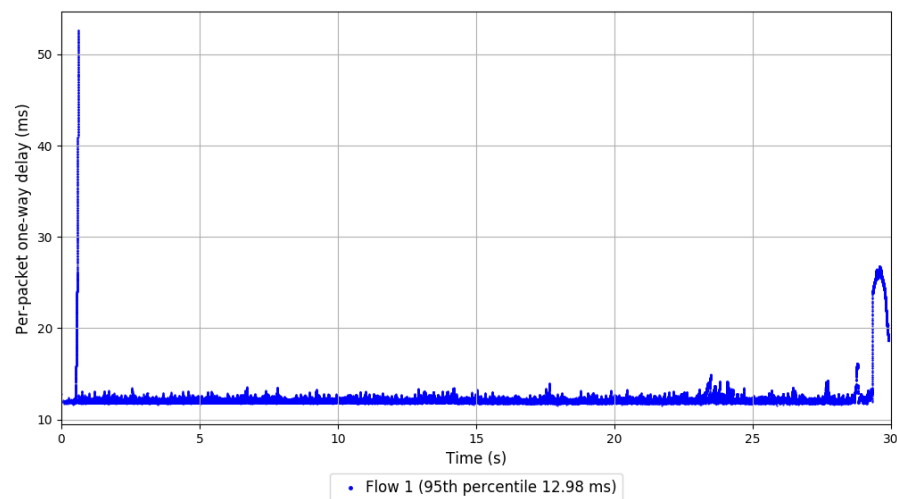

• Flow 1 (95th percentile 12.39 ms)

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-05-22 00:16:41
End at: 2018-05-22 00:17:11
Local clock offset: -3.836 ms
Remote clock offset: -5.813 ms


# Below is generated by plot.py at 2018-05-22 00:49:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.09 Mbit/s
95th percentile per-packet one-way delay: 13.537 ms
Loss rate: 9.76%
-- Flow 1:
Average throughput: 77.09 Mbit/s
95th percentile per-packet one-way delay: 13.537 ms
Loss rate: 9.76%
```

Run 9: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 85.43 Mbit/s)   Flow 1 egress (mean 77.09 Mbit/s)

• Flow 1 (95th percentile 13.54 ms)

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-05-22 00:34:35
End at: 2018-05-22 00:35:05
Local clock offset: -1.416 ms
Remote clock offset: 2.404 ms


# Below is generated by plot.py at 2018-05-22 00:49:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.56 Mbit/s
95th percentile per-packet one-way delay: 12.980 ms
Loss rate: 7.73%
-- Flow 1:
Average throughput: 80.56 Mbit/s
95th percentile per-packet one-way delay: 12.980 ms
Loss rate: 7.73%
```
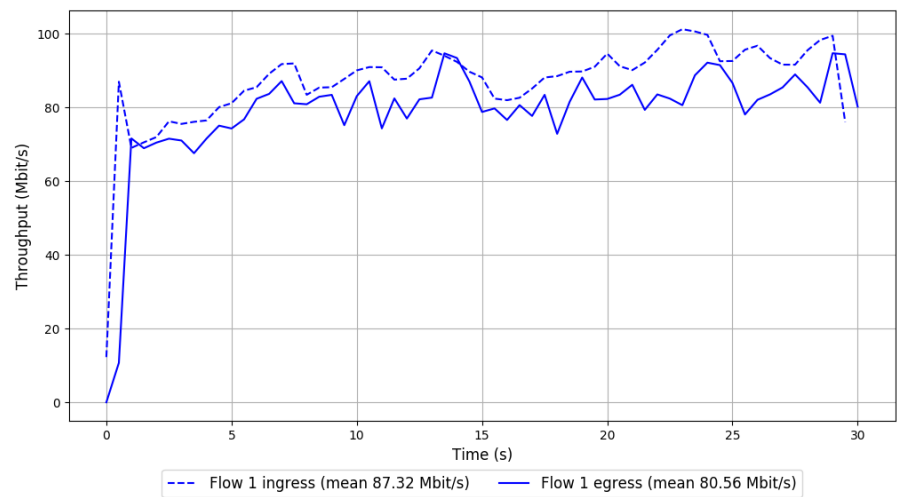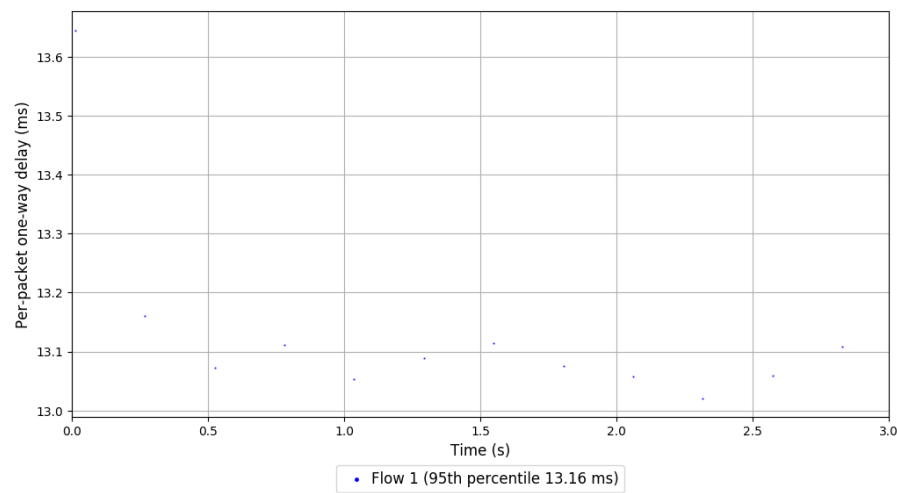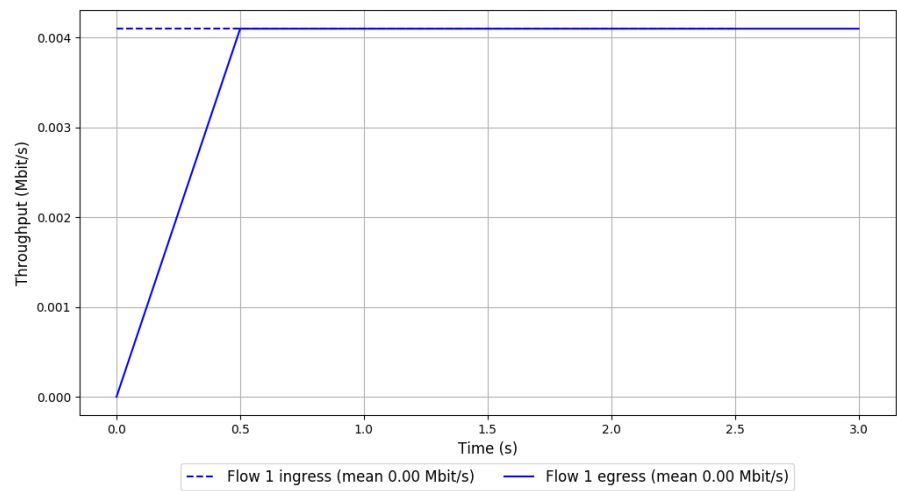
Run 10: Report of PCC-Allegro — Data Link

```
Run 1: Statistics of PCC-Expr

Start at: 2018-05-21 21:53:10
End at: 2018-05-21 21:53:40
Local clock offset: -3.013 ms
Remote clock offset: -0.664 ms
```

Run 1: Report of PCC-Expr — Data Link
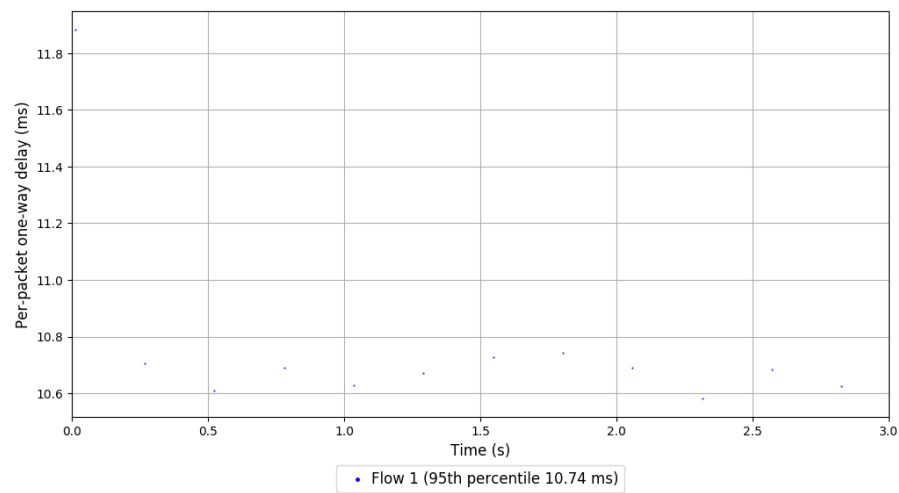
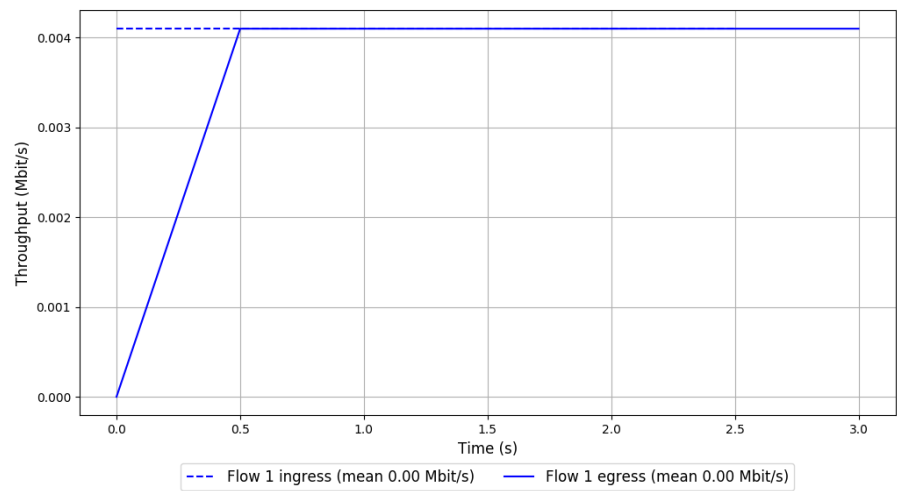```
Run 2: Statistics of PCC-Expr

Start at: 2018-05-21 22:11:04
End at: 2018-05-21 22:11:34
Local clock offset: 1.25 ms
Remote clock offset: -2.213 ms
```

Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2018-05-21 22:28:49
End at: 2018-05-21 22:29:19
Local clock offset: 0.617 ms
Remote clock offset: -2.122 ms
```
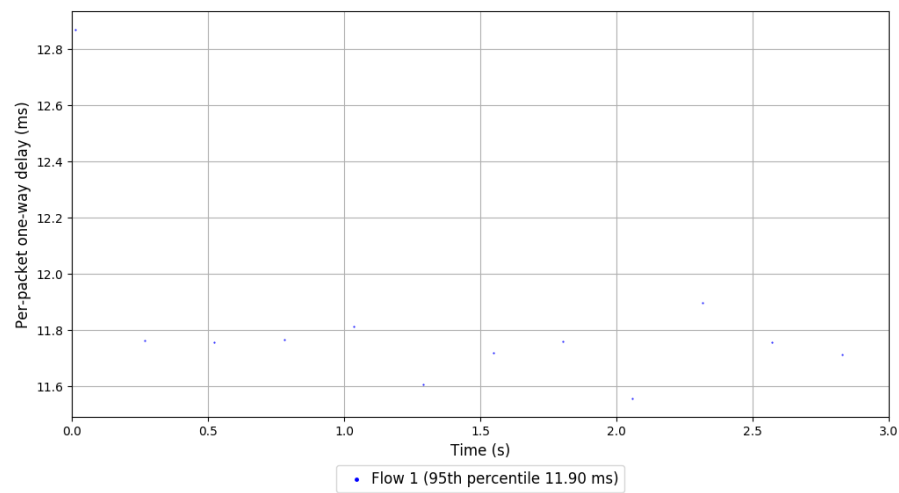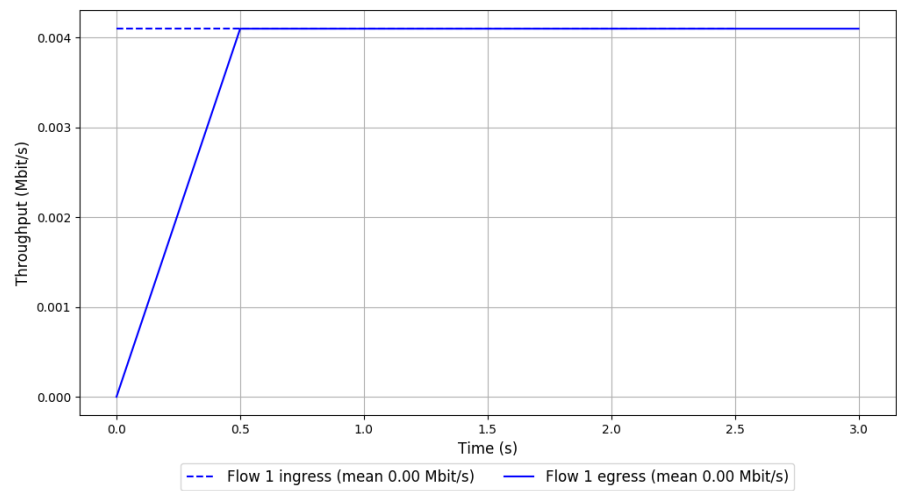
## Run 3: Report of PCC-Expr — Data Link
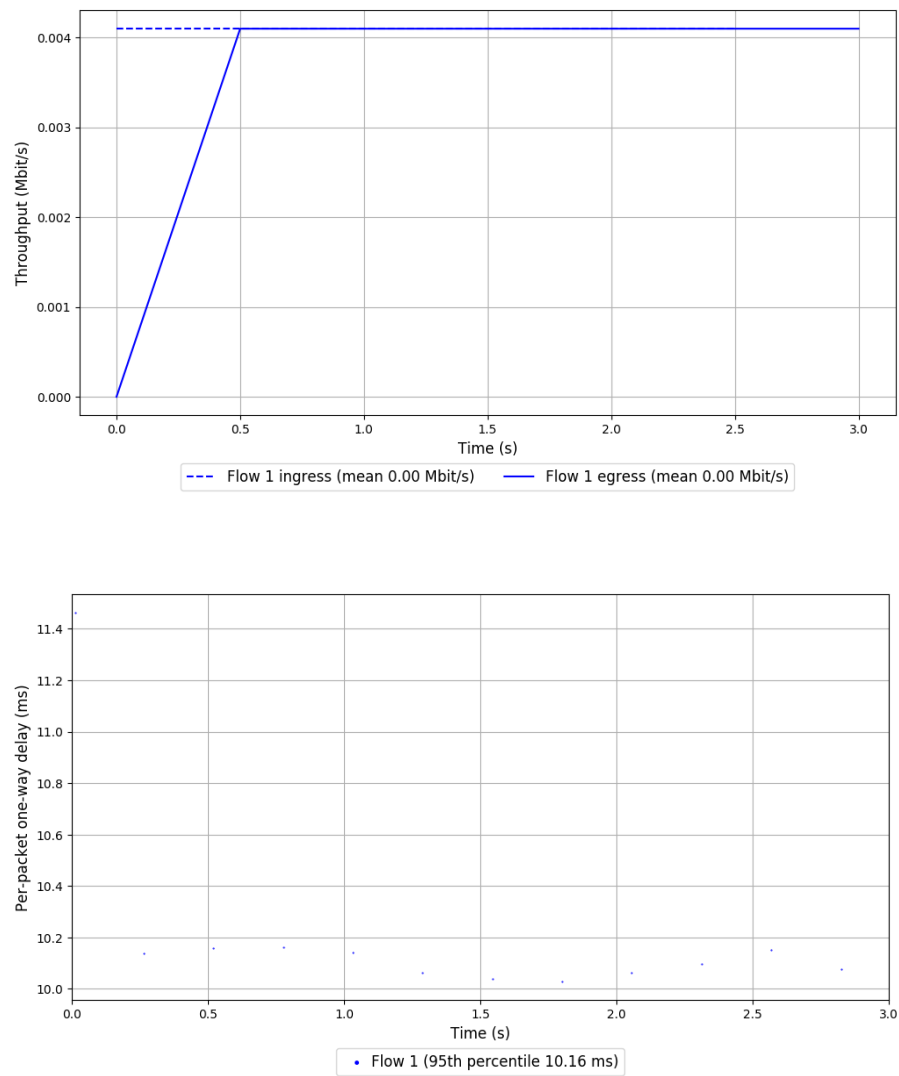
```
Run 4: Statistics of PCC-Expr

Start at: 2018-05-21 22:46:37
End at: 2018-05-21 22:47:07
Local clock offset: 1.717 ms
Remote clock offset: 0.072 ms
```

# Run 4: Report of PCC-Expr — Data Link



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



Flow 1 (95th percentile 10.16 ms)
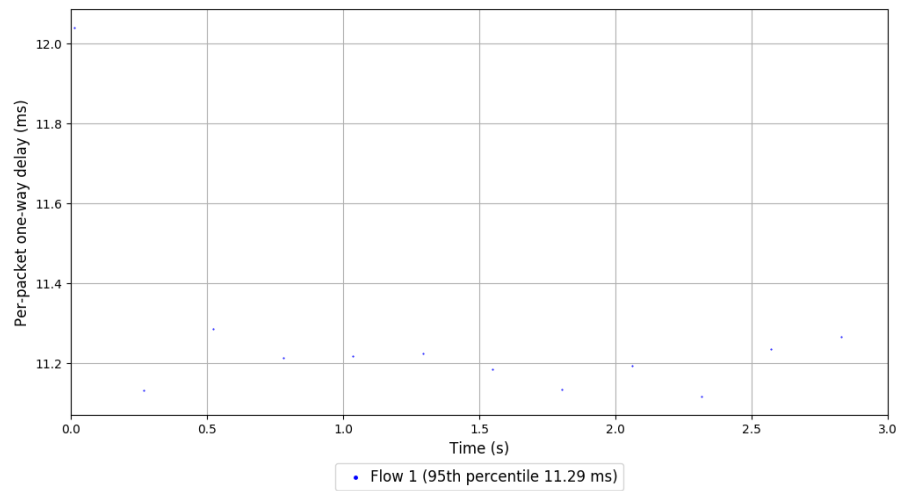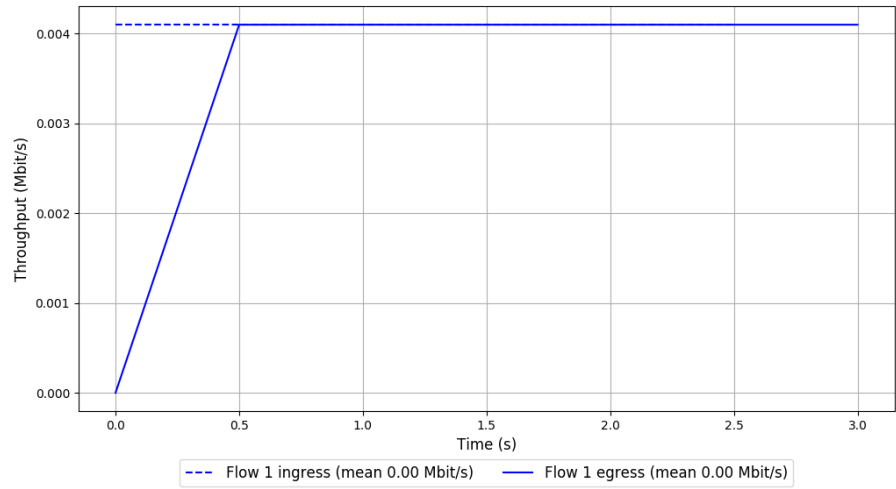
```
Run 5: Statistics of PCC-Expr

Start at: 2018-05-21 23:04:23
End at: 2018-05-21 23:04:53
Local clock offset: 0.154 ms
Remote clock offset: 2.363 ms
```

# Run 5: Report of PCC-Expr — Data Link



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



Flow 1 (95th percentile 11.29 ms)
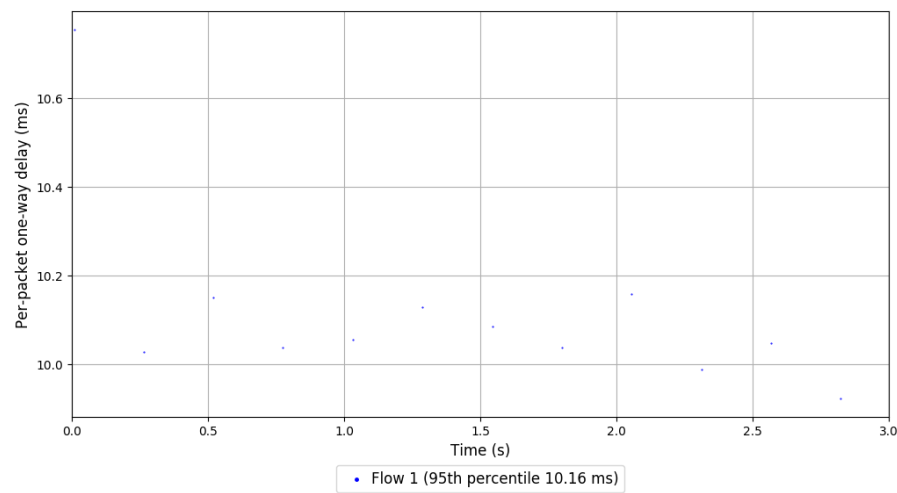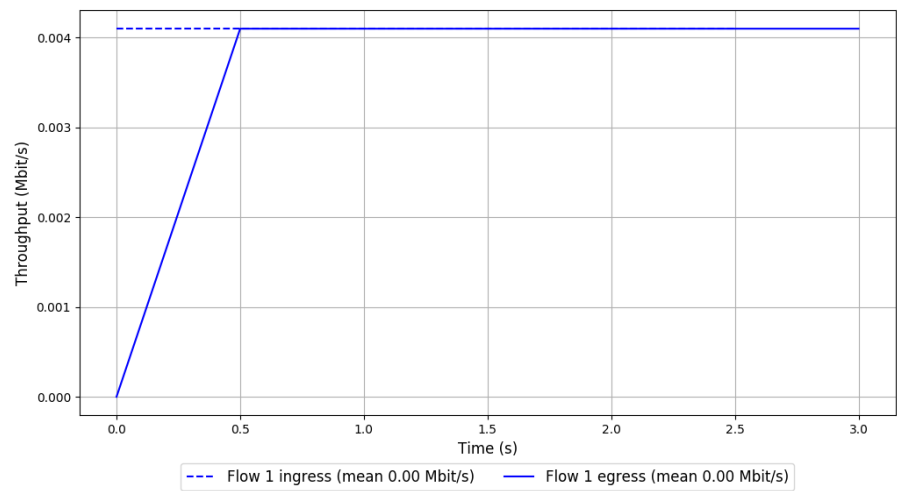
```
Run 6: Statistics of PCC-Expr

Start at: 2018-05-21 23:22:09
End at: 2018-05-21 23:22:39
Local clock offset: -2.992 ms
Remote clock offset: -5.326 ms
```

## Run 6: Report of PCC-Expr — Data Link

```
Run 7: Statistics of PCC-Expr

Start at: 2018-05-21 23:40:04
End at: 2018-05-21 23:40:34
Local clock offset: -4.758 ms
Remote clock offset: -5.858 ms
```
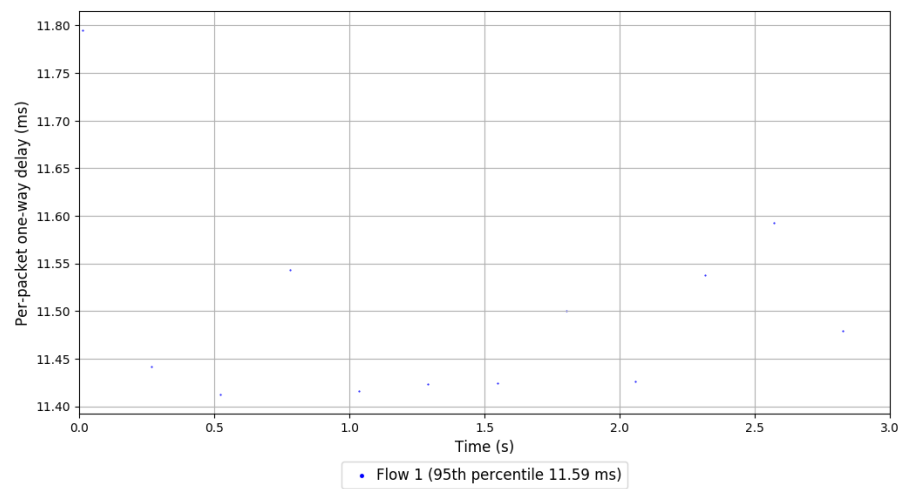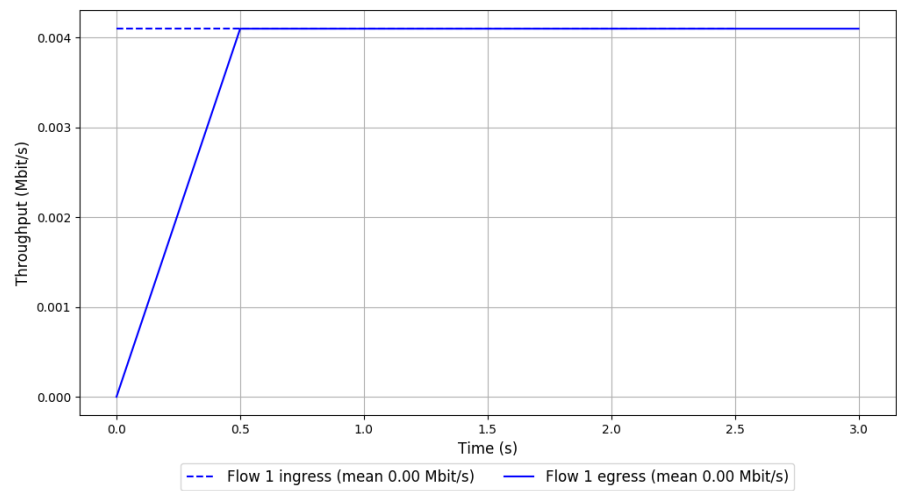
## Run 7: Report of PCC-Expr — Data Link
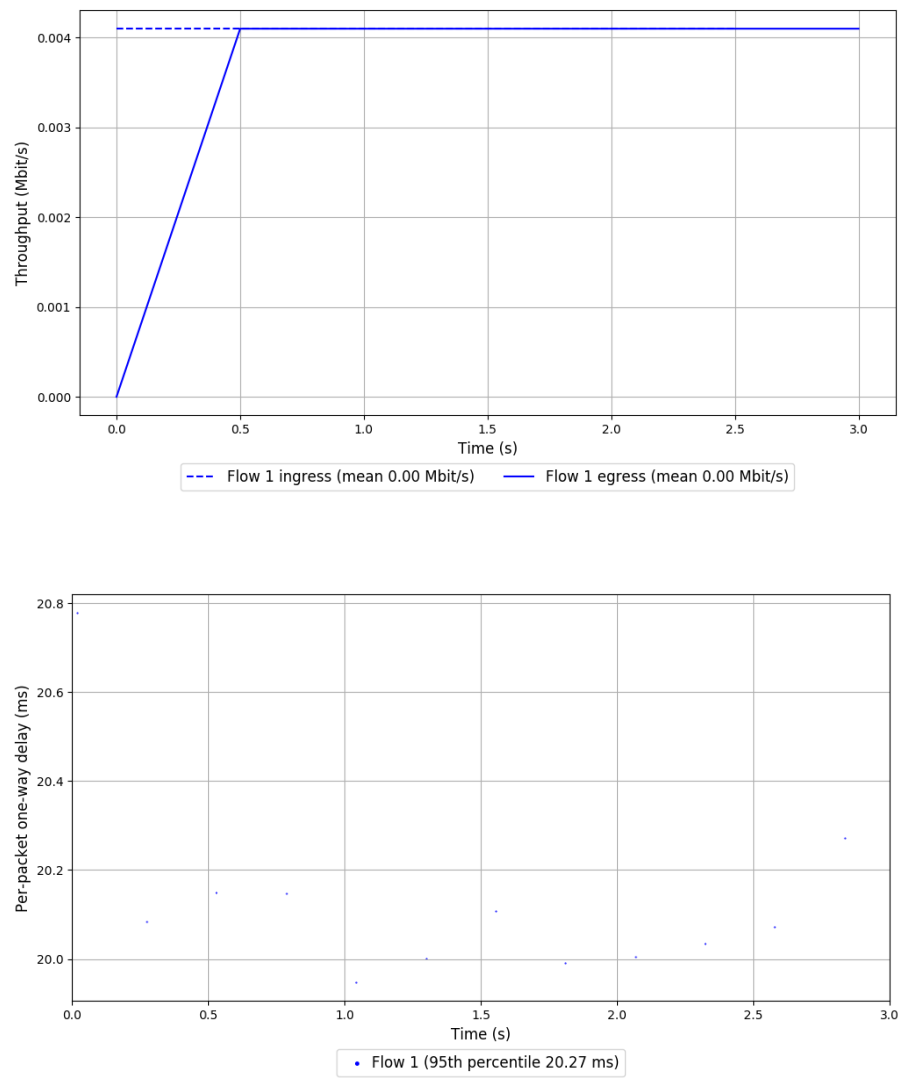
```
Run 8: Statistics of PCC-Expr

Start at: 2018-05-21 23:57:47
End at: 2018-05-21 23:58:17
Local clock offset: -14.295 ms
Remote clock offset: -7.658 ms
```

# Run 8: Report of PCC-Expr — Data Link
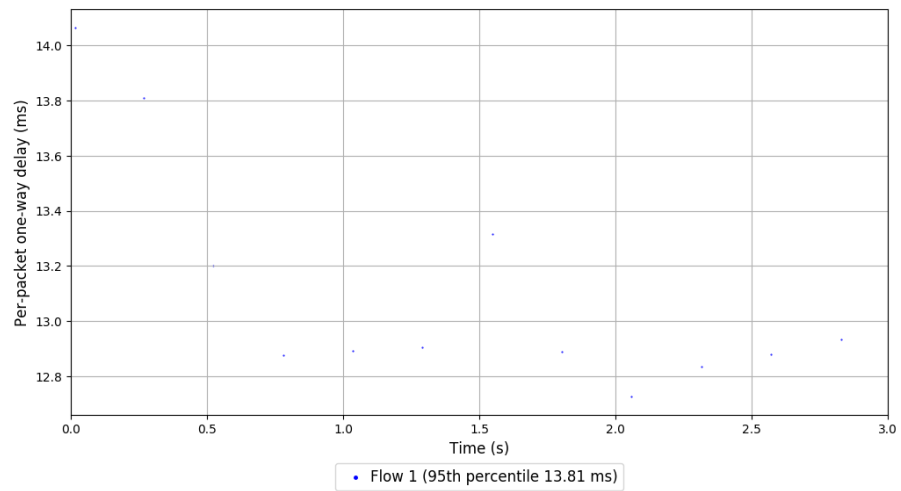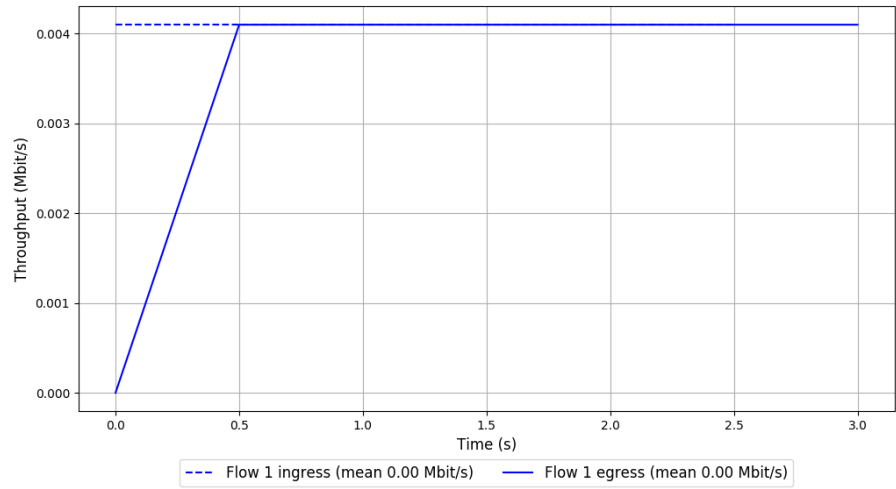
```
Run 9: Statistics of PCC-Expr

Start at: 2018-05-22 00:15:37
End at: 2018-05-22 00:16:07
Local clock offset: -4.213 ms
Remote clock offset: -6.092 ms
```

## Run 9: Report of PCC-Expr — Data Link
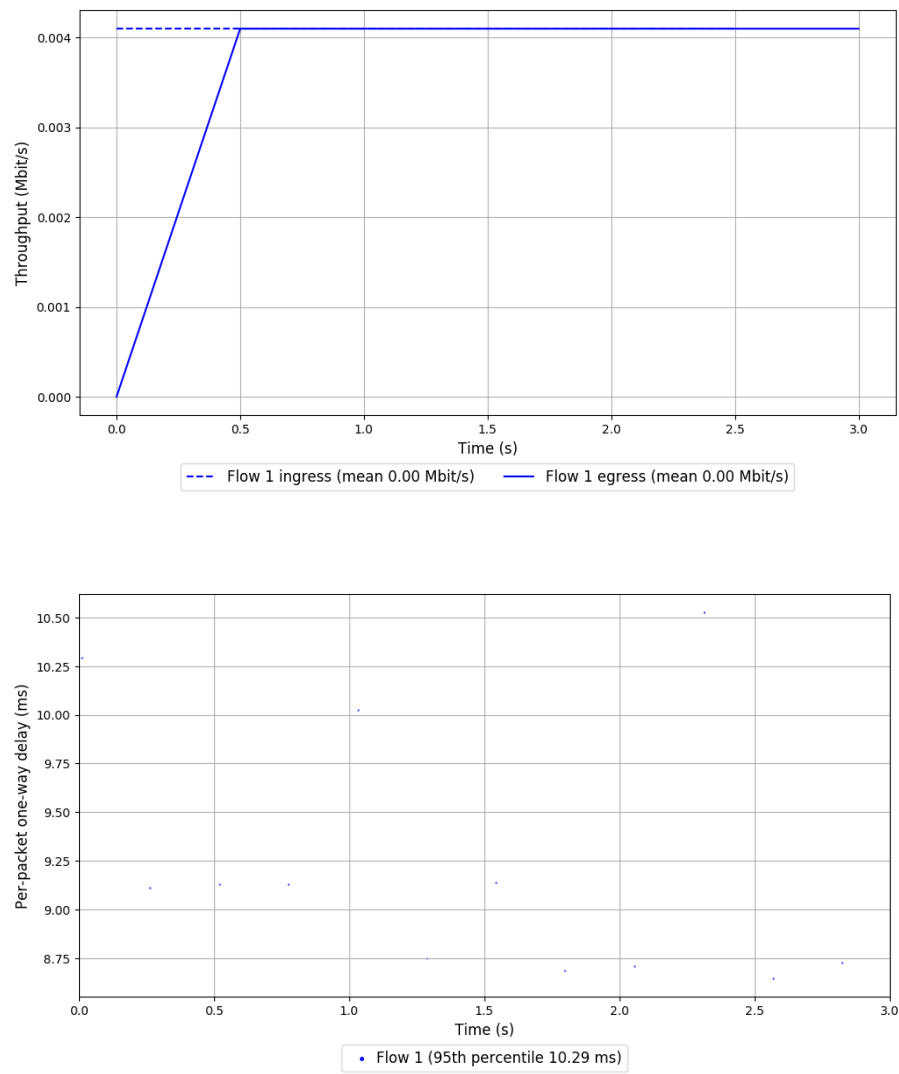
Run 10: Statistics of PCC-Expr

Start at: 2018-05-22 00:33:31
End at: 2018-05-22 00:34:01
Local clock offset: -1.125 ms
Remote clock offset: 0.578 ms

## Run 10: Report of PCC-Expr — Data Link



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



Flow 1 (95th percentile 10.29 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-05-21 21:55:25
End at: 2018-05-21 21:55:55
Local clock offset: -4.665 ms
Remote clock offset: -1.28 ms

Below is generated by plot.py at 2018-05-22 00:49:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 38.21 Mbit/s
95th percentile per-packet one-way delay: 14.360 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 38.21 Mbit/s
95th percentile per-packet one-way delay: 14.360 ms
Loss rate: 0.28%
```
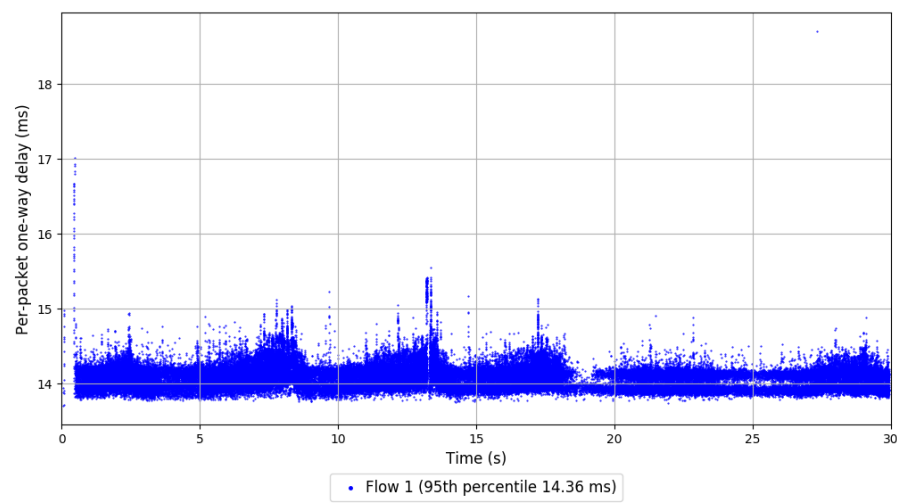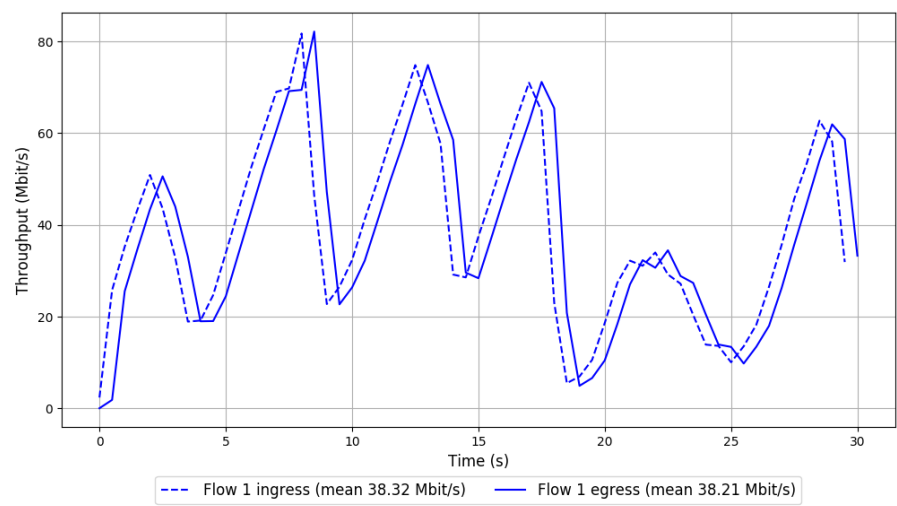
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-05-21 22:13:14
End at: 2018-05-21 22:13:45
Local clock offset: -0.947 ms
Remote clock offset: -1.36 ms

Below is generated by plot.py at 2018-05-22 00:49:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 30.85 Mbit/s
95th percentile per-packet one-way delay: 14.401 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 30.85 Mbit/s
95th percentile per-packet one-way delay: 14.401 ms
Loss rate: 1.03%
```
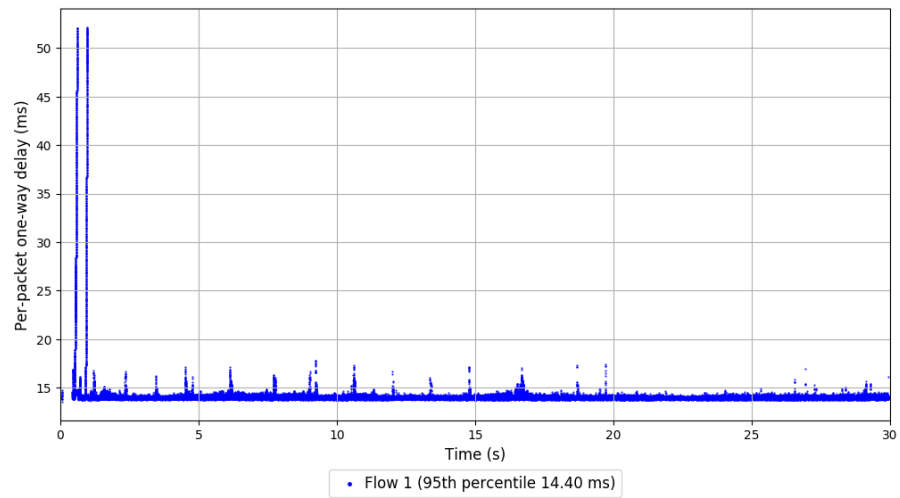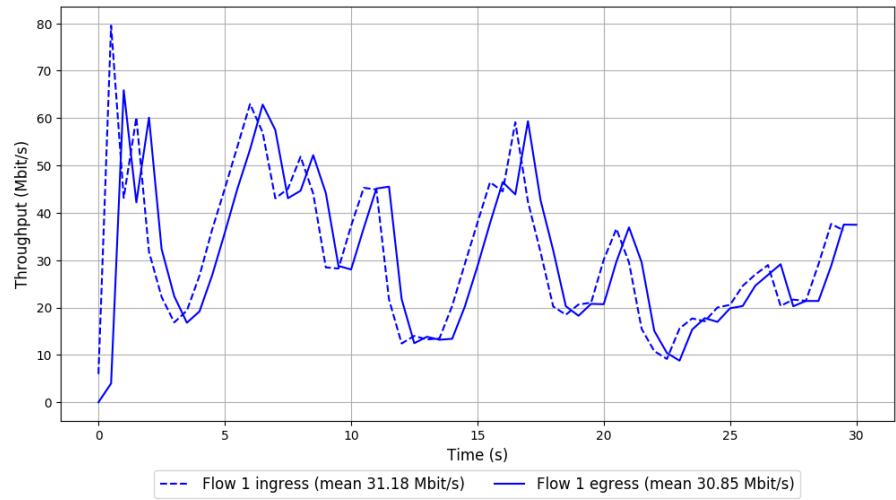
# Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-05-21 22:31:00
End at: 2018-05-21 22:31:30
Local clock offset: 1.075 ms
Remote clock offset: -0.761 ms

Below is generated by plot.py at 2018-05-22 00:49:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 17.42 Mbit/s
95th percentile per-packet one-way delay: 13.022 ms
Loss rate: 2.64%
-- Flow 1:
Average throughput: 17.42 Mbit/s
95th percentile per-packet one-way delay: 13.022 ms
Loss rate: 2.64%
```
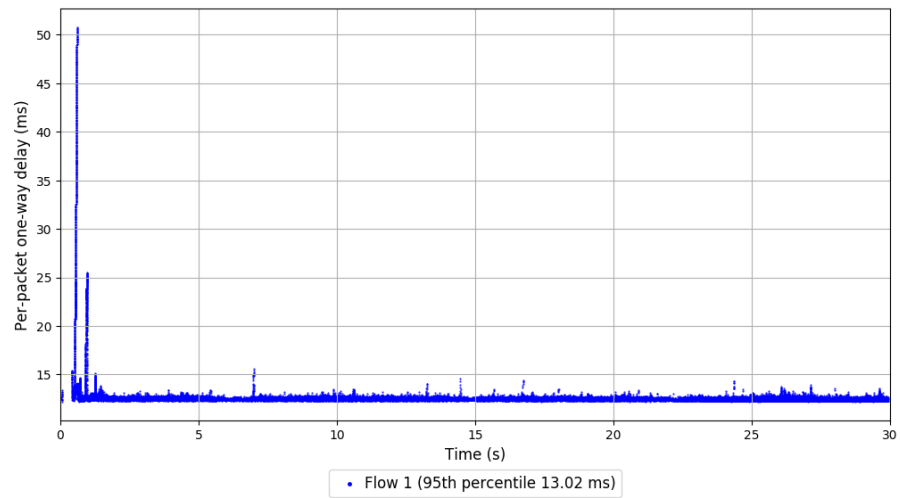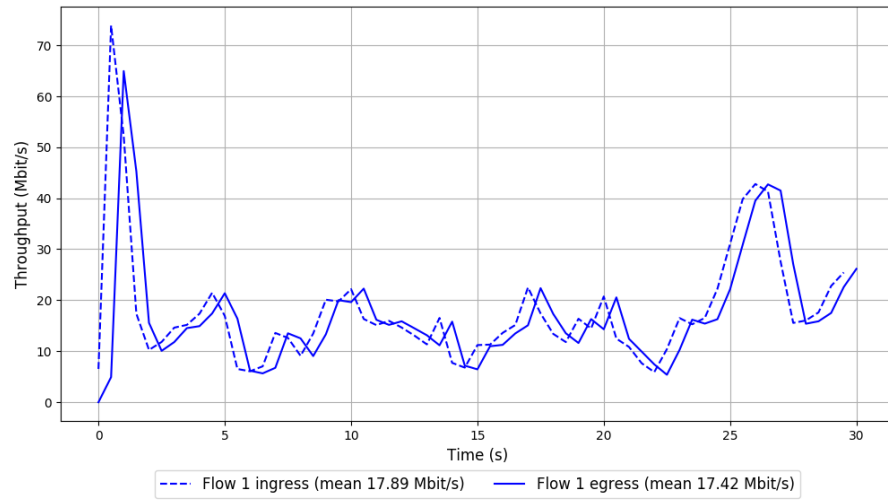
## Run 3: Report of QUIC Cubic — Data Link





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```
Run 4: Statistics of QUIC Cubic

Start at: 2018-05-21 22:48:48
End at: 2018-05-21 22:49:18
Local clock offset: 0.304 ms
Remote clock offset: 1.812 ms

Below is generated by plot.py at 2018-05-22 00:49:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.26 Mbit/s
95th percentile per-packet one-way delay: 13.584 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 24.26 Mbit/s
95th percentile per-packet one-way delay: 13.584 ms
Loss rate: 1.61%
```
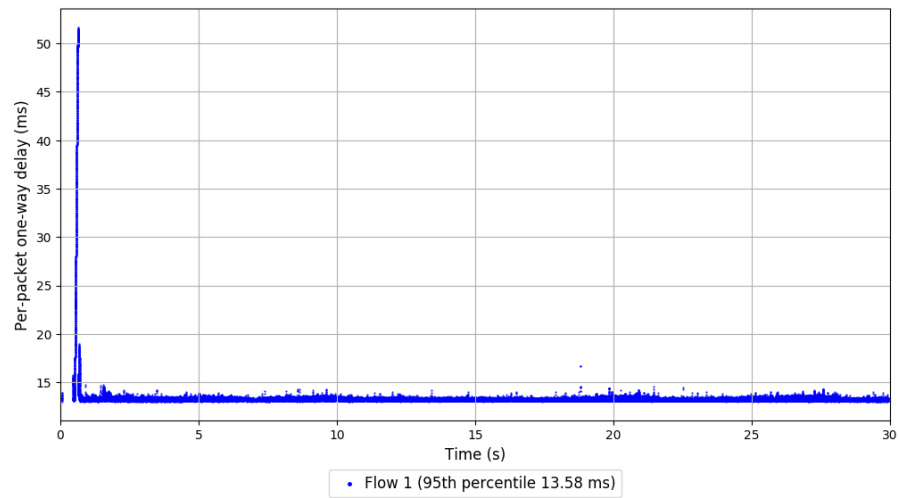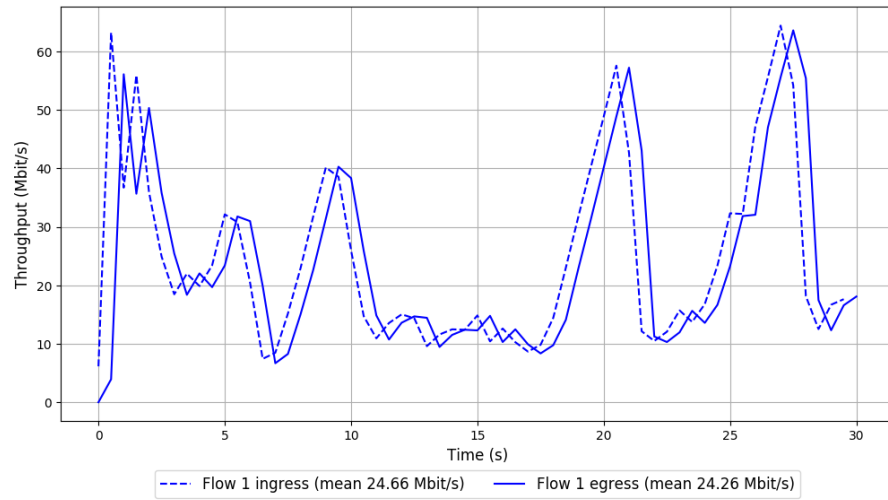
# Run 4: Report of QUIC Cubic — Data Link



Flow 1 ingress (mean 24.66 Mbit/s)     Flow 1 egress (mean 24.26 Mbit/s)



Flow 1 (95th percentile 13.58 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-05-21 23:06:34
End at: 2018-05-21 23:07:04
Local clock offset: -0.898 ms
Remote clock offset: 0.399 ms

Below is generated by plot.py at 2018-05-22 00:50:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 54.52 Mbit/s
95th percentile per-packet one-way delay: 33.304 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 54.52 Mbit/s
95th percentile per-packet one-way delay: 33.304 ms
Loss rate: 0.56%
```
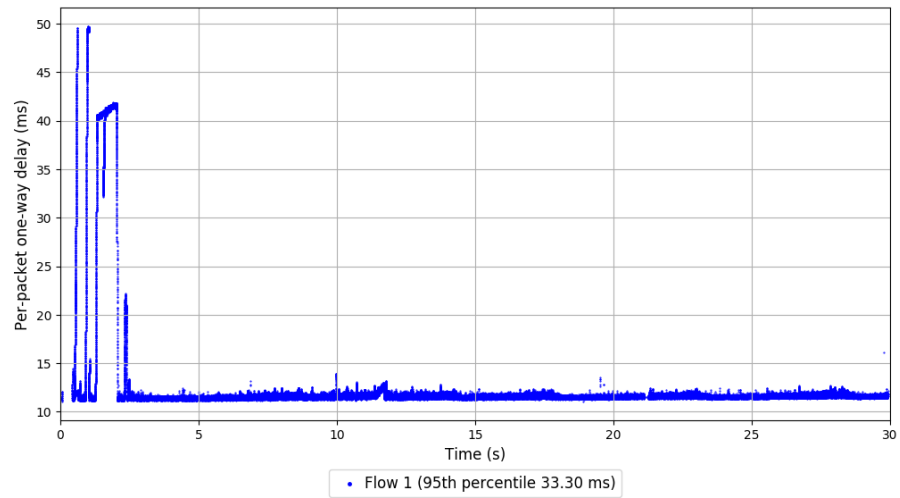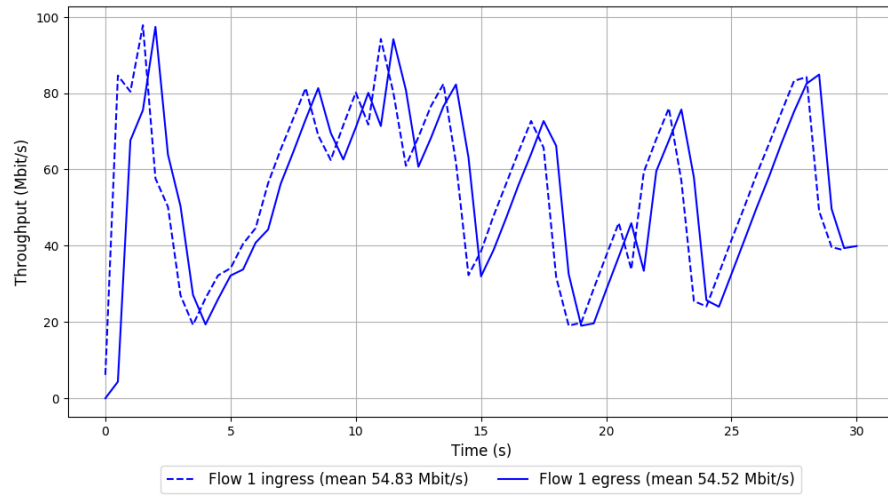
# Run 5: Report of QUIC Cubic — Data Link



Flow 1 ingress (mean 54.83 Mbit/s) — Flow 1 egress (mean 54.52 Mbit/s)



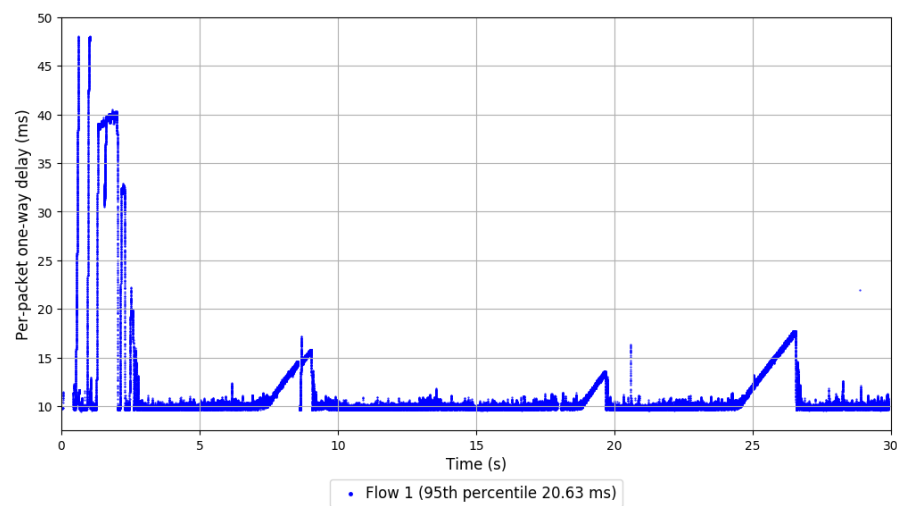Flow 1 (95th percentile 33.30 ms)

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```
Run 6: Statistics of QUIC Cubic

Start at: 2018-05-21 23:24:20
End at: 2018-05-21 23:24:50
Local clock offset: -2.494 ms
Remote clock offset: -5.283 ms

Below is generated by plot.py at 2018-05-22 00:50:31
Datalink statistics
-- Total of 1 flow:
Average throughput: 68.42 Mbit/s
95th percentile per-packet one-way delay: 20.631 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 68.42 Mbit/s
95th percentile per-packet one-way delay: 20.631 ms
Loss rate: 0.43%
```
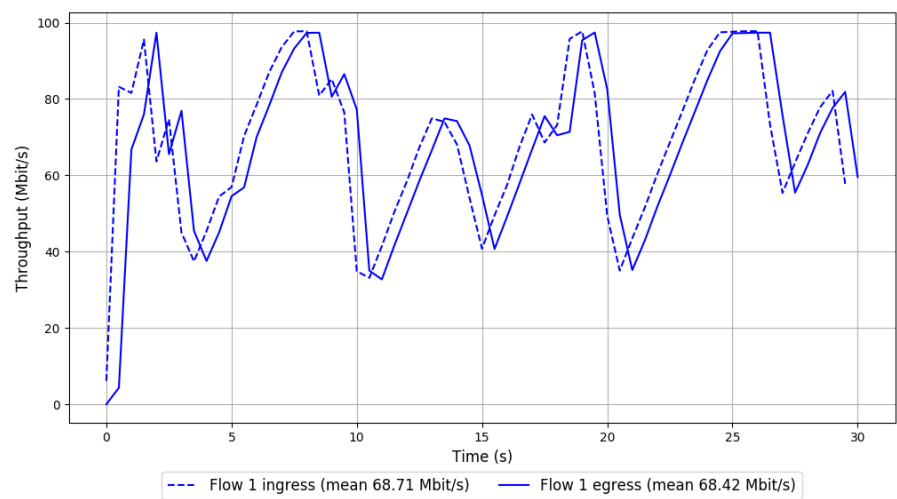
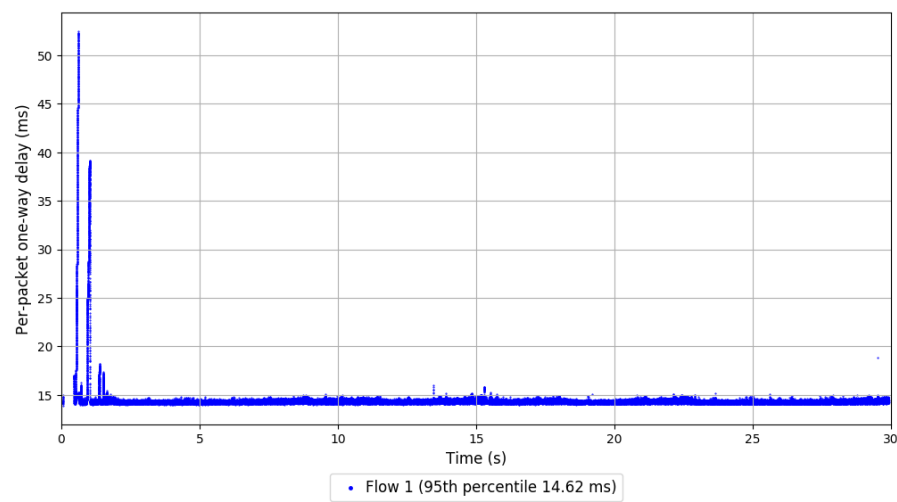Run 6: Report of QUIC Cubic — Data Link

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-05-21 23:42:15
End at: 2018-05-21 23:42:45
Local clock offset: -8.073 ms
Remote clock offset: -6.549 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.49 Mbit/s
95th percentile per-packet one-way delay: 14.625 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 37.49 Mbit/s
95th percentile per-packet one-way delay: 14.625 ms
Loss rate: 0.57%
```

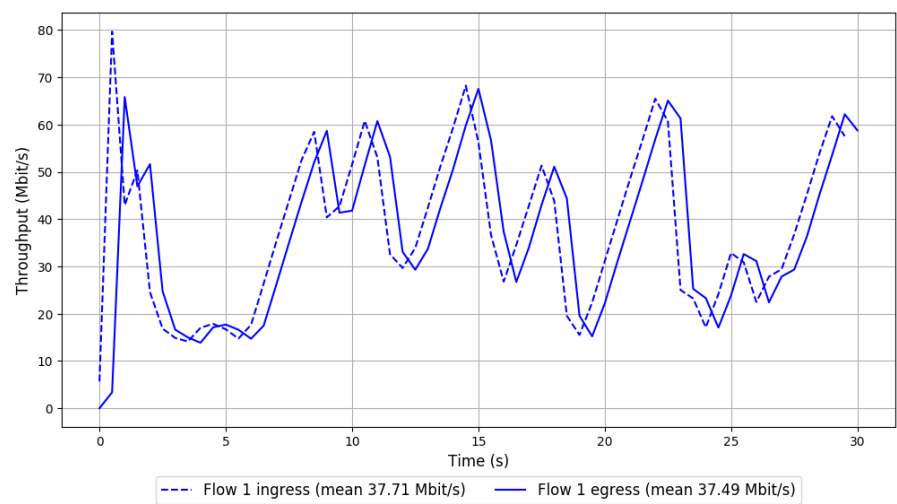## Run 7: Report of QUIC Cubic — Data Link

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-05-21 23:59:58
End at: 2018-05-22 00:00:28
Local clock offset: -4.453 ms
Remote clock offset: -8.311 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.50 Mbit/s
95th percentile per-packet one-way delay: 11.703 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 36.50 Mbit/s
95th percentile per-packet one-way delay: 11.703 ms
Loss rate: 1.03%
```
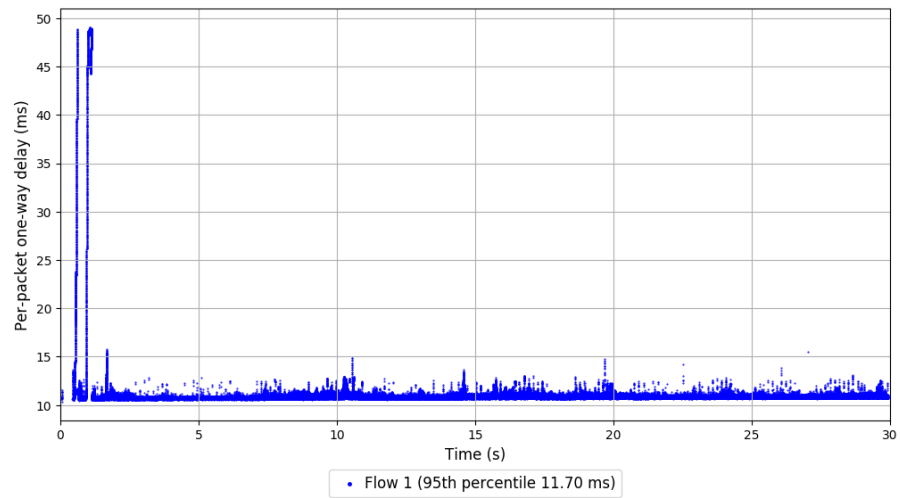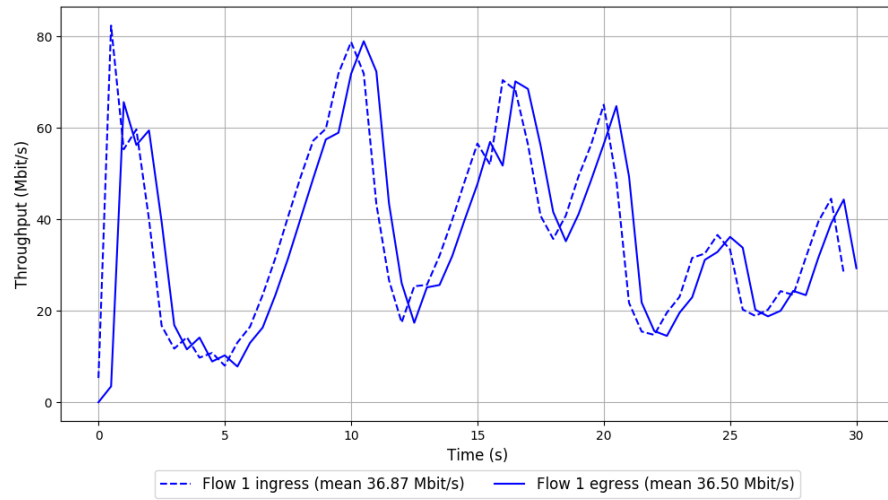
Run 8: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 36.87 Mbit/s)   Flow 1 egress (mean 36.50 Mbit/s)

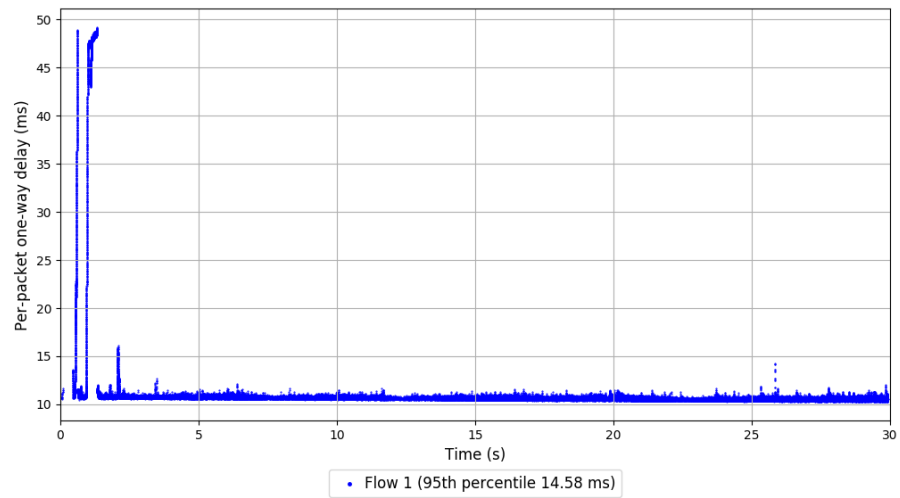

• Flow 1 (95th percentile 11.70 ms)

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-05-22 00:17:48
End at: 2018-05-22 00:18:18
Local clock offset: -0.372 ms
Remote clock offset: -3.993 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.81 Mbit/s
95th percentile per-packet one-way delay: 14.582 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 31.81 Mbit/s
95th percentile per-packet one-way delay: 14.582 ms
Loss rate: 1.46%
```

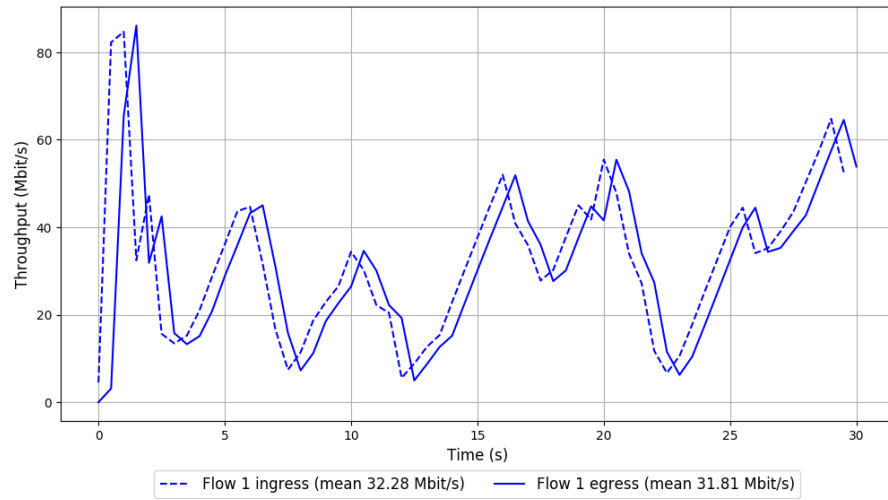## Run 9: Report of QUIC Cubic — Data Link

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-05-22 00:35:43
End at: 2018-05-22 00:36:13
Local clock offset: -1.625 ms
Remote clock offset: 2.697 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.99 Mbit/s
95th percentile per-packet one-way delay: 13.226 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 34.99 Mbit/s
95th percentile per-packet one-way delay: 13.226 ms
Loss rate: 1.17%
```
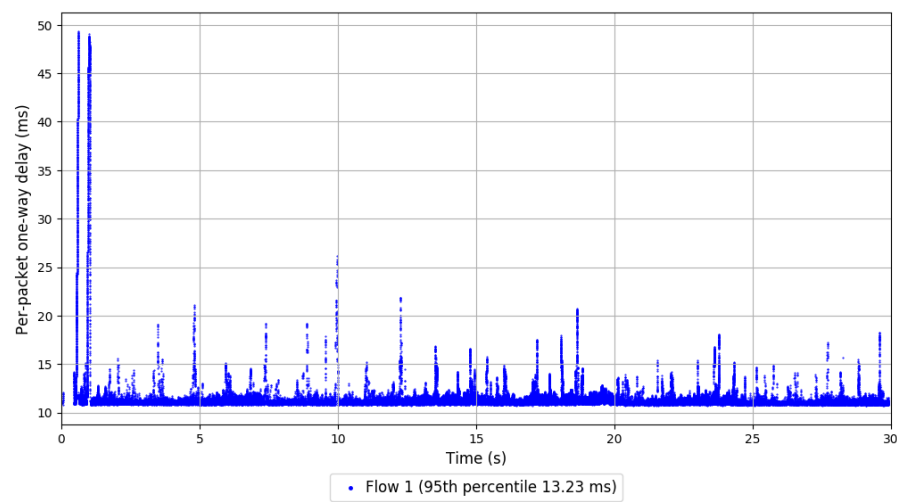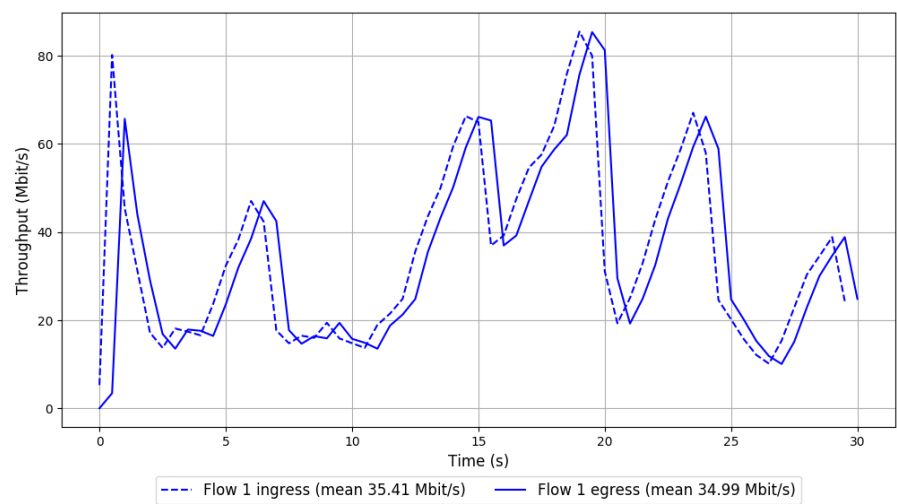
Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2018-05-21 21:40:51
End at: 2018-05-21 21:41:21
Local clock offset: -2.408 ms
Remote clock offset: -1.338 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.658 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.658 ms
Loss rate: 0.00%
```

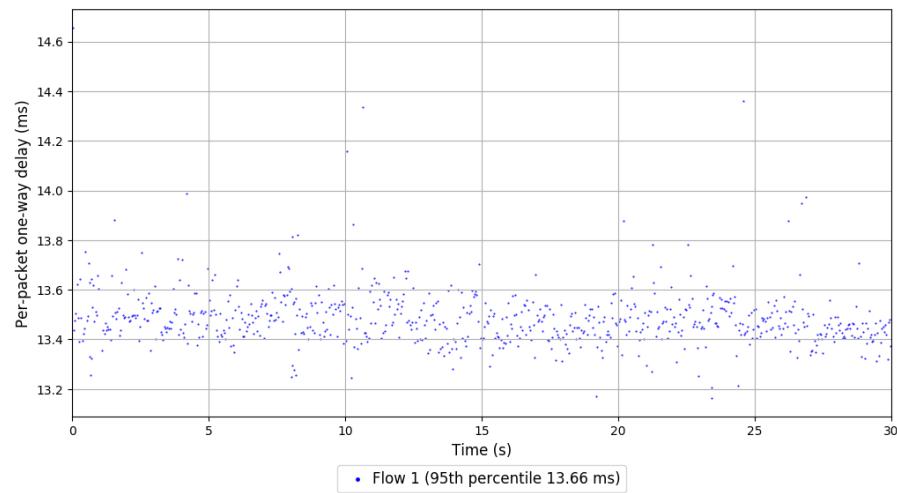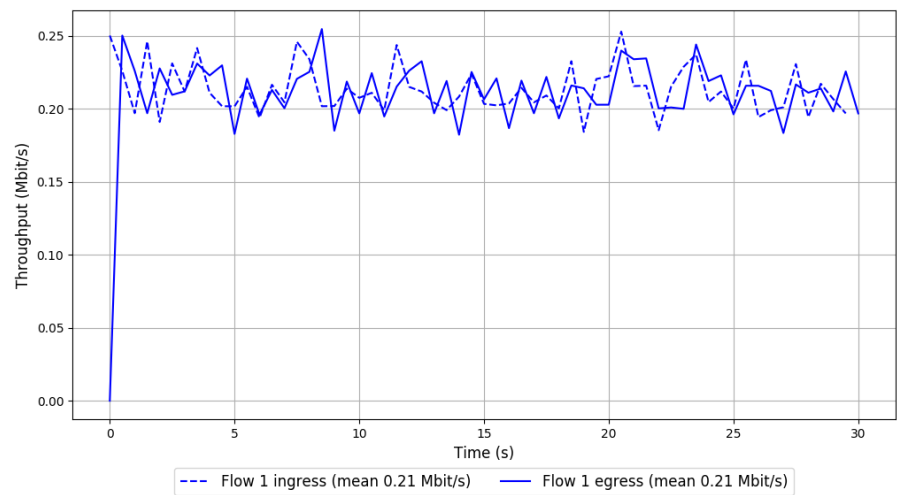# Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-05-21 21:58:47
End at: 2018-05-21 21:59:17
Local clock offset: -2.707 ms
Remote clock offset: -1.342 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.514 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.514 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-05-21 22:16:34
End at: 2018-05-21 22:17:04
Local clock offset: -1.836 ms
Remote clock offset: -2.133 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 14.323 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 14.323 ms
Loss rate: 0.00%
```
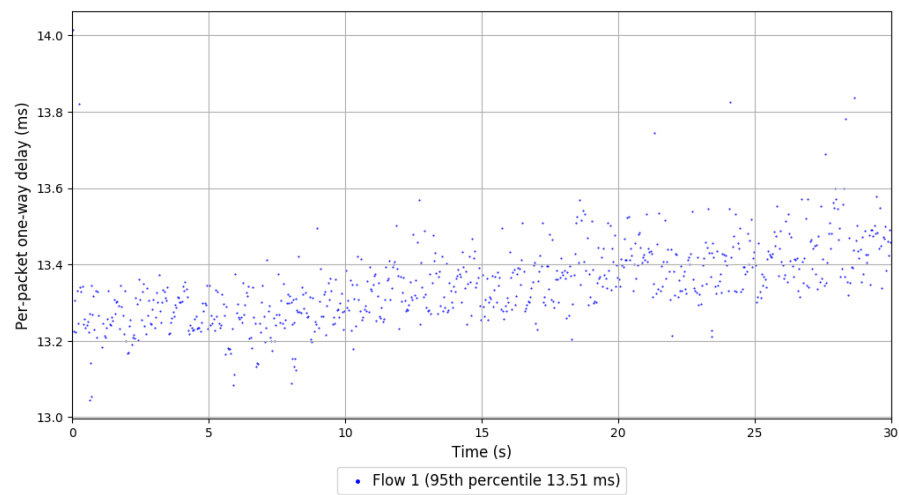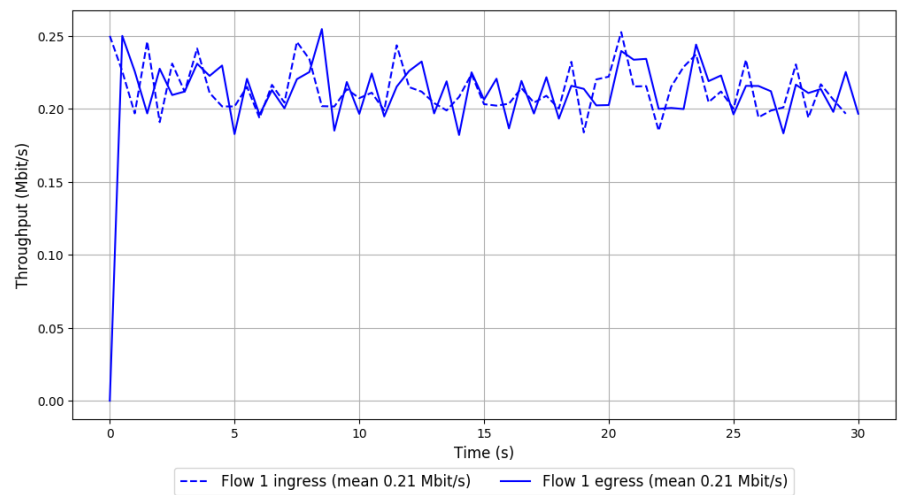
Run 3: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 14.32 ms)

```
Run 4: Statistics of SCReAM

Start at: 2018-05-21 22:34:20
End at: 2018-05-21 22:34:50
Local clock offset: 0.087 ms
Remote clock offset: 0.207 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 13.886 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 13.886 ms
Loss rate: 0.73%
```
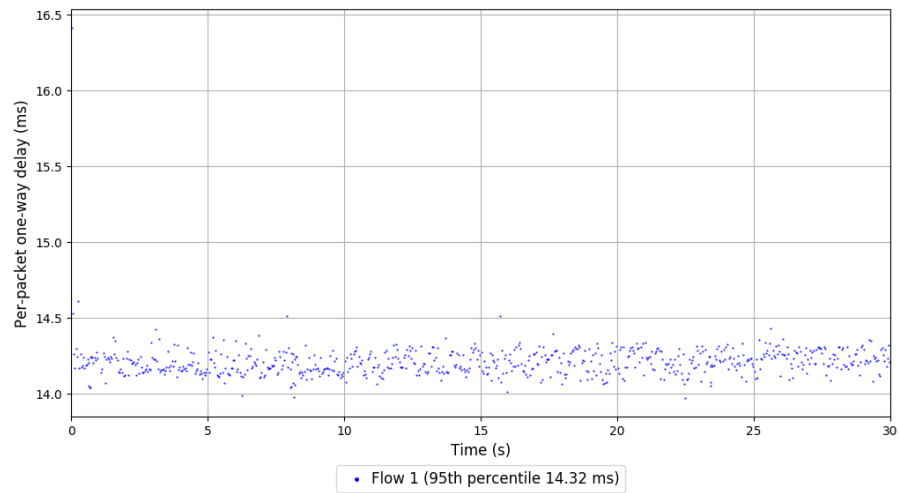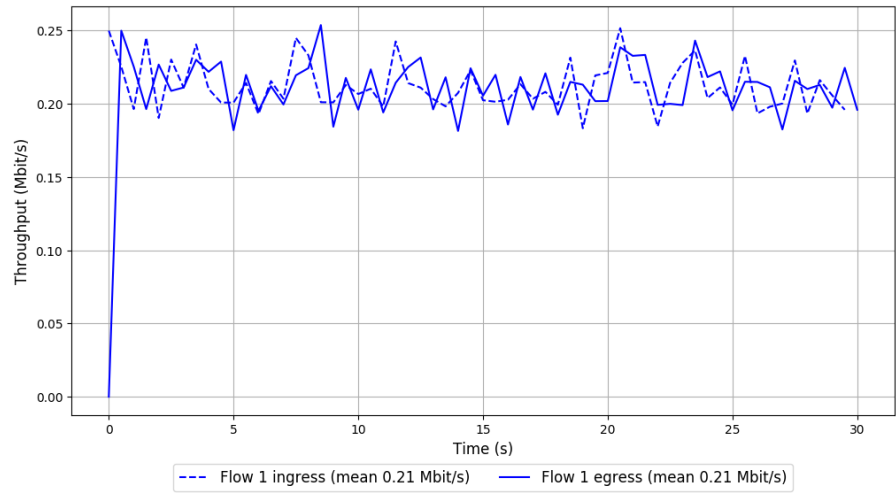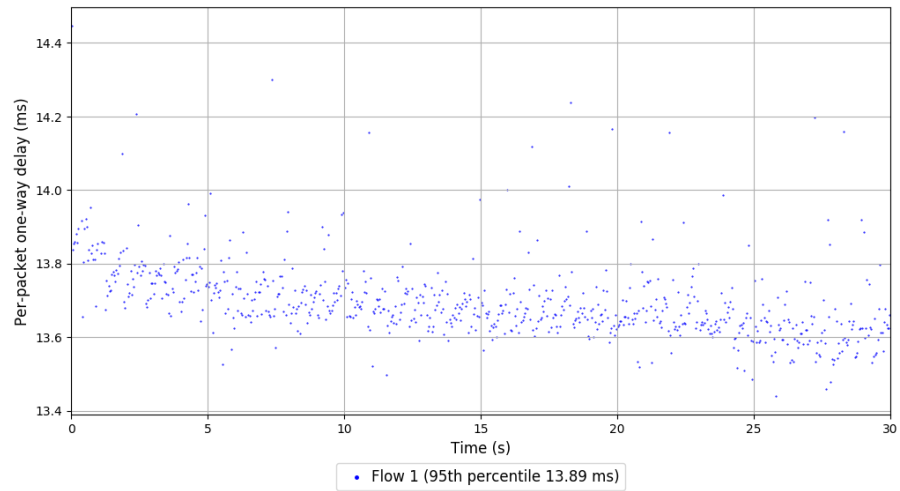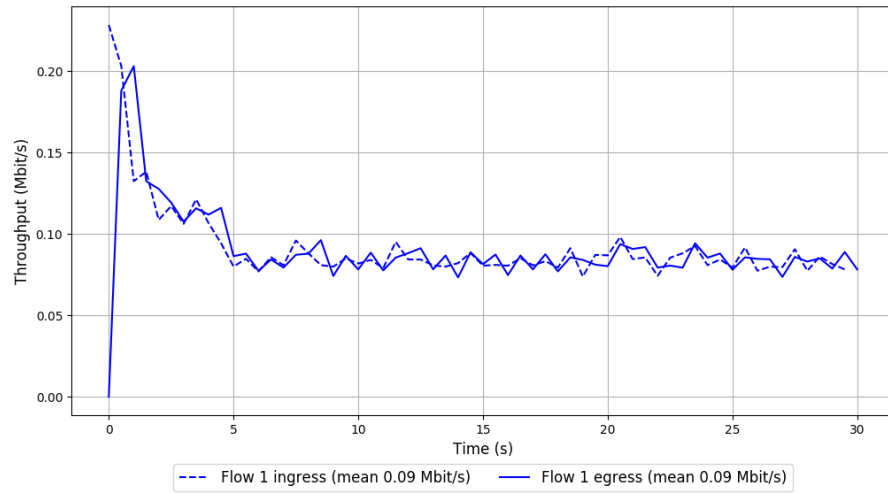
Run 4: Report of SCReAM — Data Link

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```
Run 5: Statistics of SCReAM

Start at: 2018-05-21 22:52:10
End at: 2018-05-21 22:52:40
Local clock offset: -0.137 ms
Remote clock offset: 1.884 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 13.569 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 13.569 ms
Loss rate: 0.22%
```
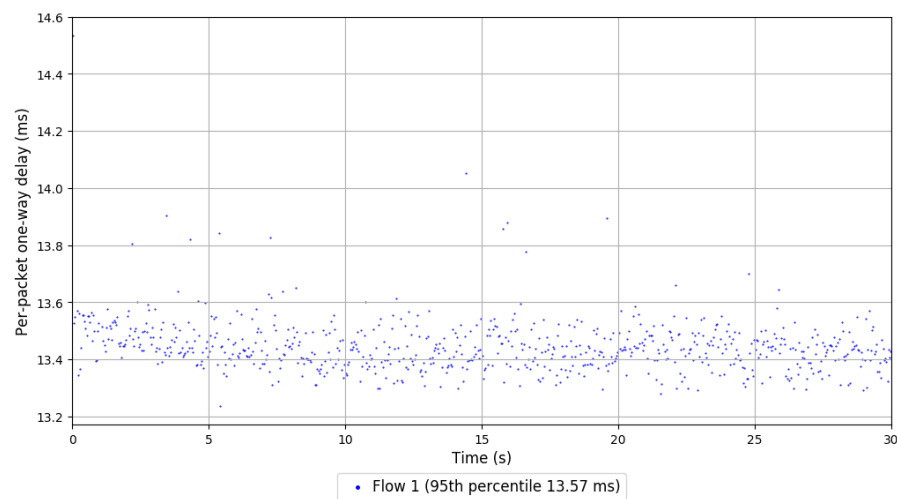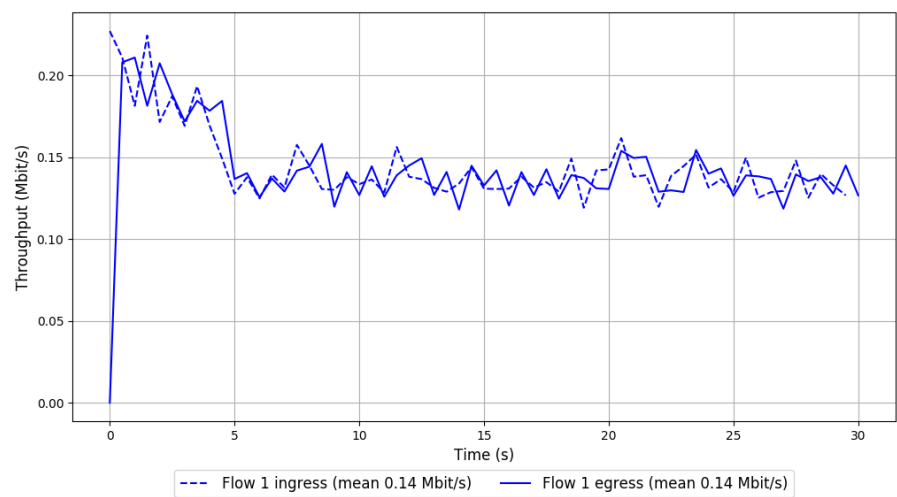
Run 5: Report of SCReAM — Data Link

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```
Run 6: Statistics of SCReAM

Start at: 2018-05-21 23:09:54
End at: 2018-05-21 23:10:25
Local clock offset: -2.499 ms
Remote clock offset: -1.467 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 12.207 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 12.207 ms
Loss rate: 0.82%
```

Run 6: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.12 Mbit/s) Flow 1 egress (mean 0.11 Mbit/s)
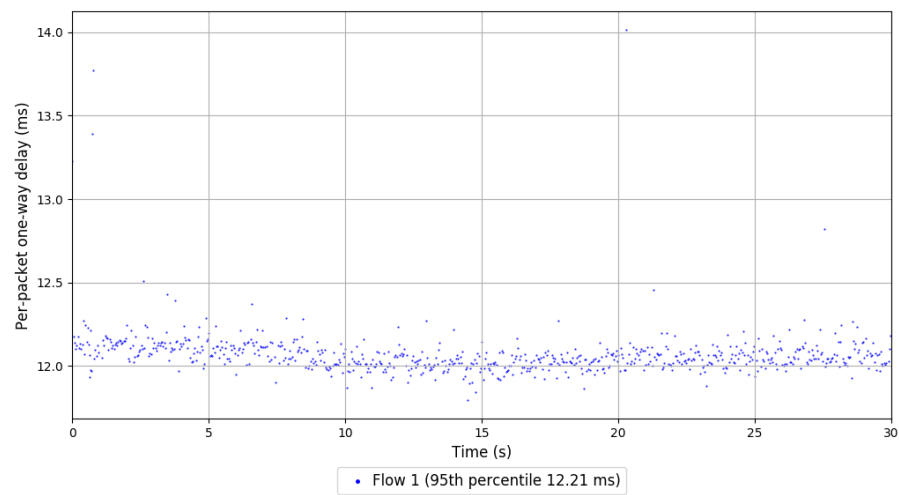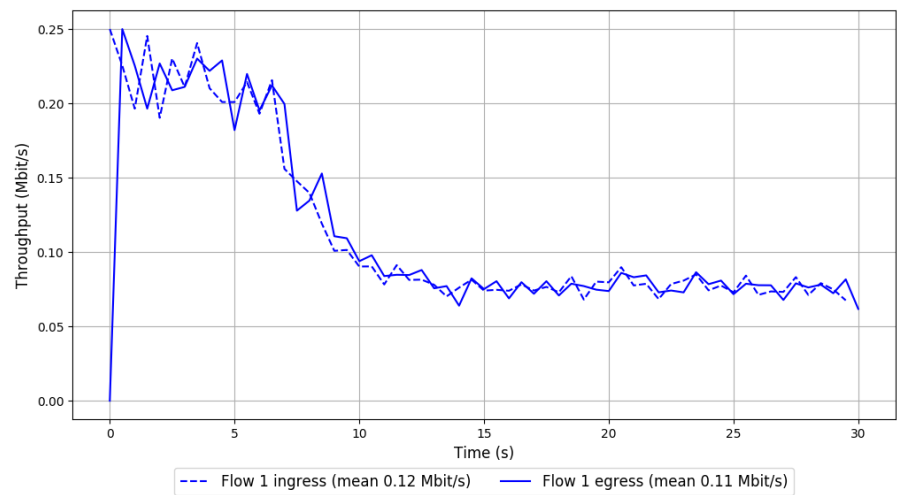

Flow 1 (95th percentile 12.21 ms)

```
Run 7: Statistics of SCReAM

Start at: 2018-05-21 23:27:45
End at: 2018-05-21 23:28:15
Local clock offset: -5.706 ms
Remote clock offset: -6.197 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 12.261 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 12.261 ms
Loss rate: 0.00%
```

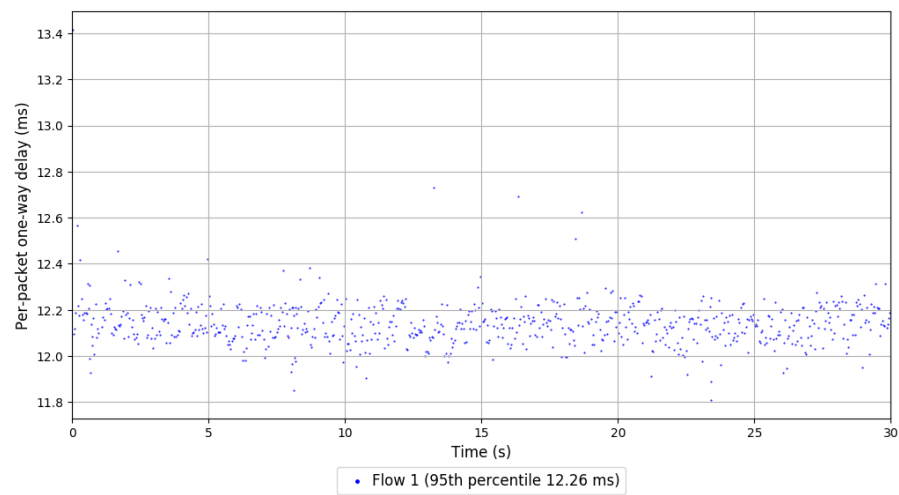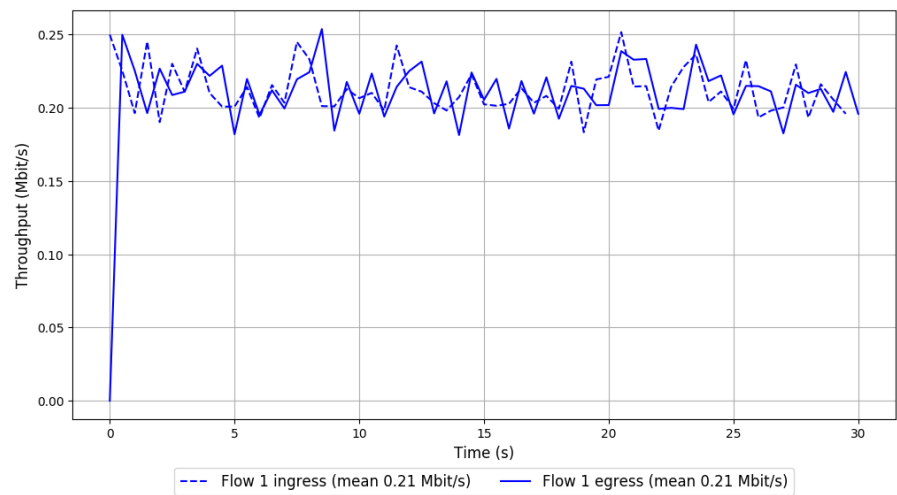## Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2018-05-21 23:45:35
End at: 2018-05-21 23:46:05
Local clock offset: -5.581 ms
Remote clock offset: -7.006 ms

# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 11.434 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 11.434 ms
Loss rate: 0.00%
```

Run 8: Report of SCReAM — Data Link

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

• Flow 1 (95th percentile 11.43 ms)

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```
Run 9: Statistics of SCReAM

Start at: 2018-05-22 00:03:18
End at: 2018-05-22 00:03:48
Local clock offset: -3.335 ms
Remote clock offset: -8.217 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 11.400 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 11.400 ms
Loss rate: 0.00%
```
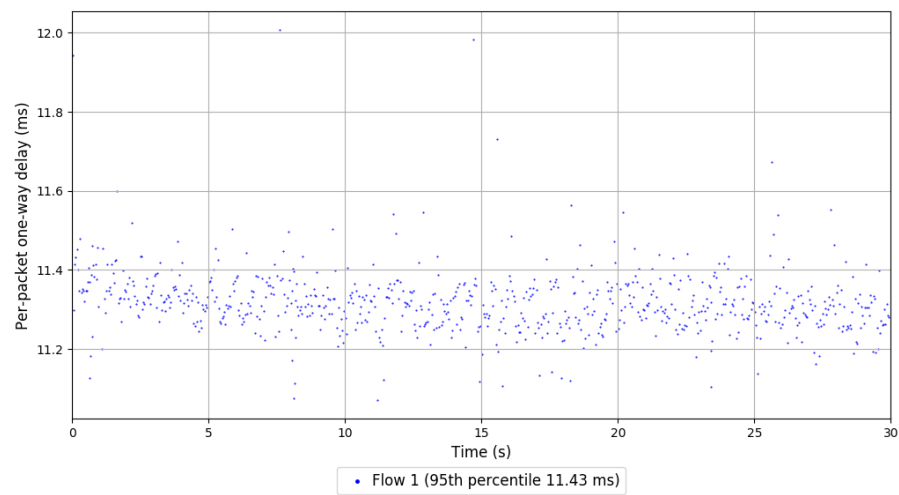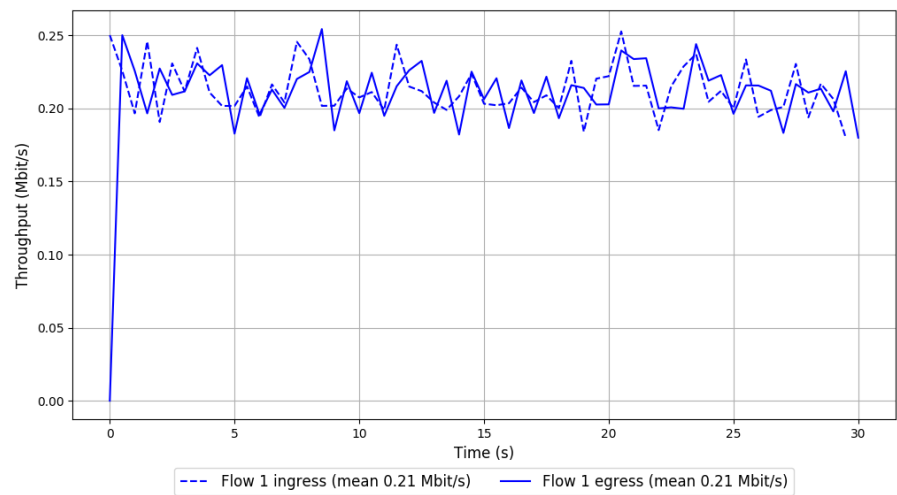
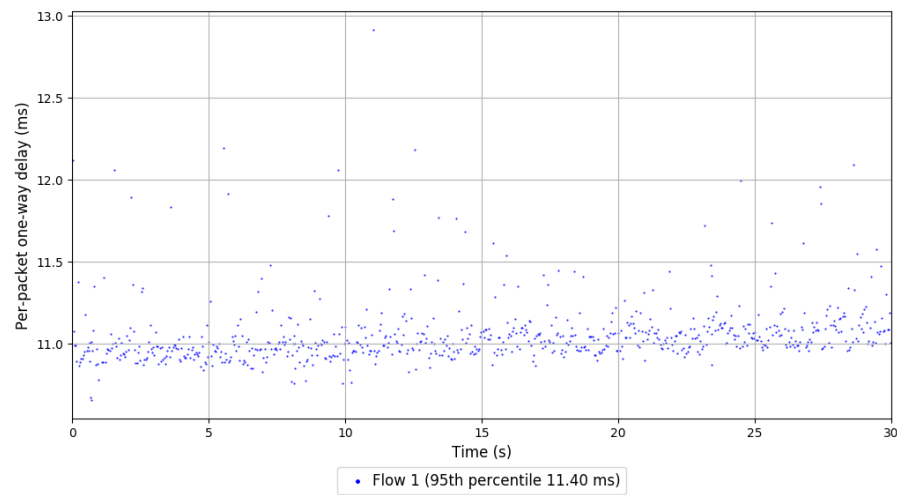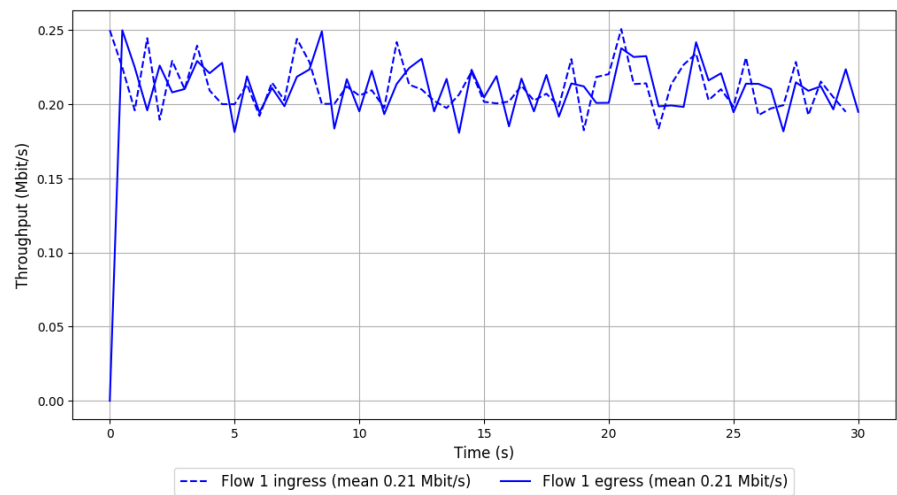## Run 9: Report of SCReAM — Data Link

```
Run 10: Statistics of SCReAM

Start at: 2018-05-22 00:21:08
End at: 2018-05-22 00:21:38
Local clock offset: -1.791 ms
Remote clock offset: -3.219 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 10.095 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 10.095 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link

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```
Run 1: Statistics of Sprout

Start at: 2018-05-21 21:43:08
End at: 2018-05-21 21:43:38
Local clock offset: -1.314 ms
Remote clock offset: -1.693 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.31 Mbit/s
95th percentile per-packet one-way delay: 17.098 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 24.31 Mbit/s
95th percentile per-packet one-way delay: 17.098 ms
Loss rate: 0.08%
```

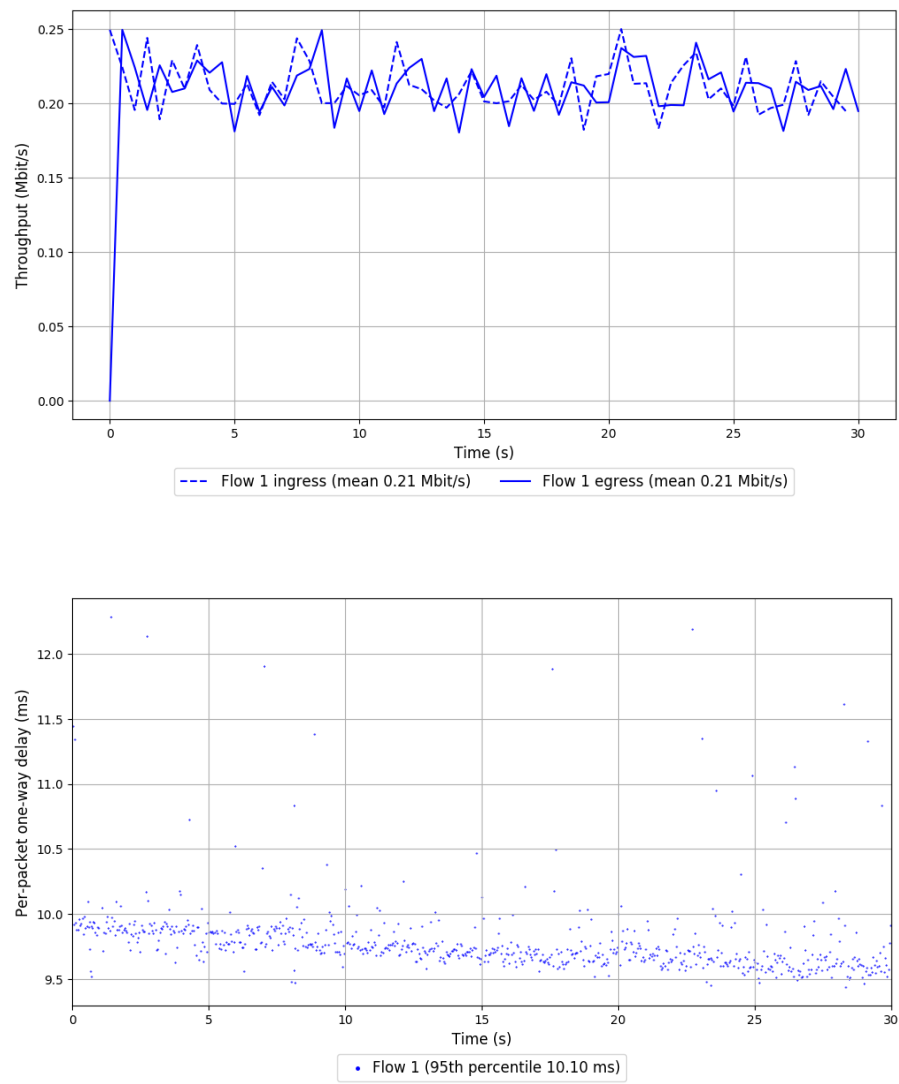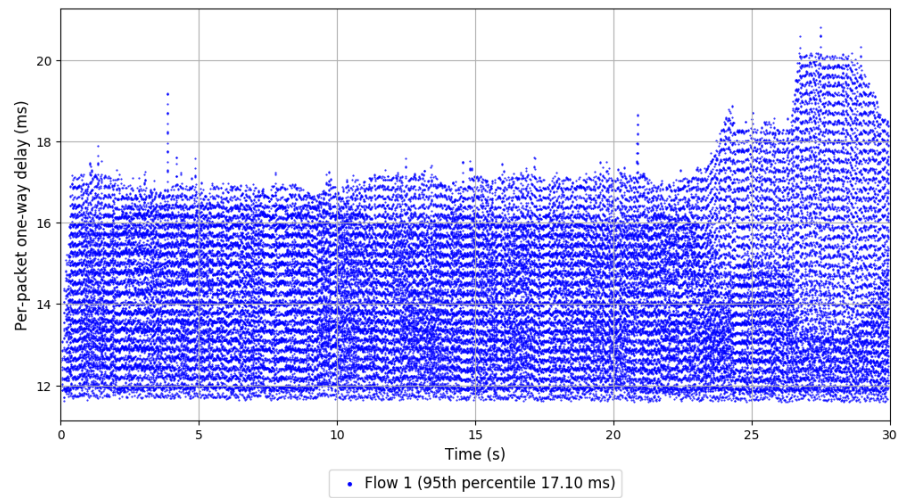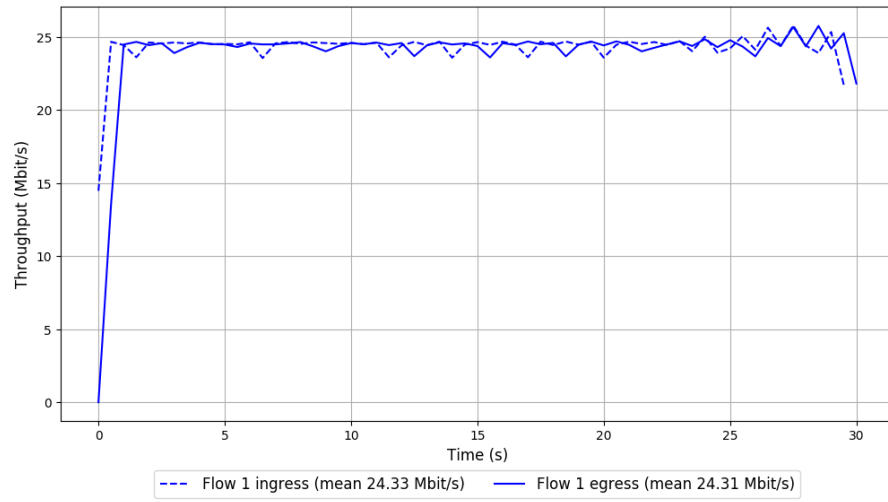Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-05-21 22:01:00
End at: 2018-05-21 22:01:30
Local clock offset: -2.254 ms
Remote clock offset: -1.62 ms

# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 20.774 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 20.774 ms
Loss rate: 0.01%
```
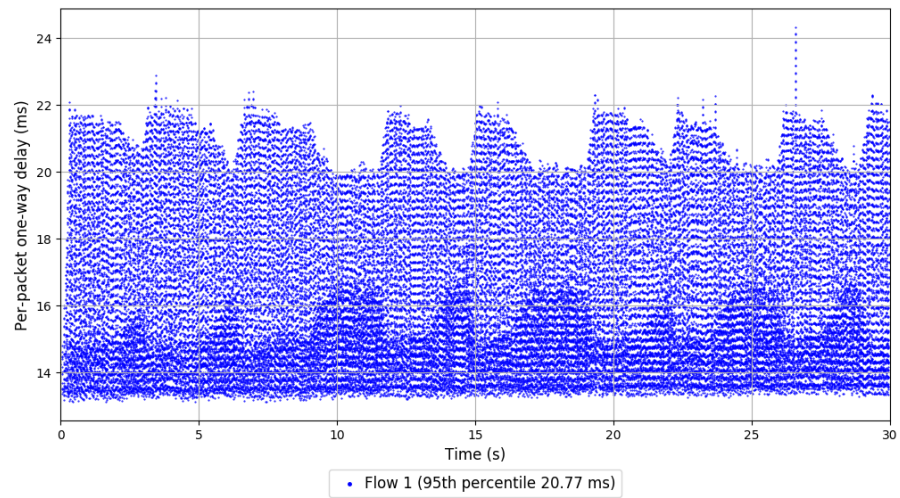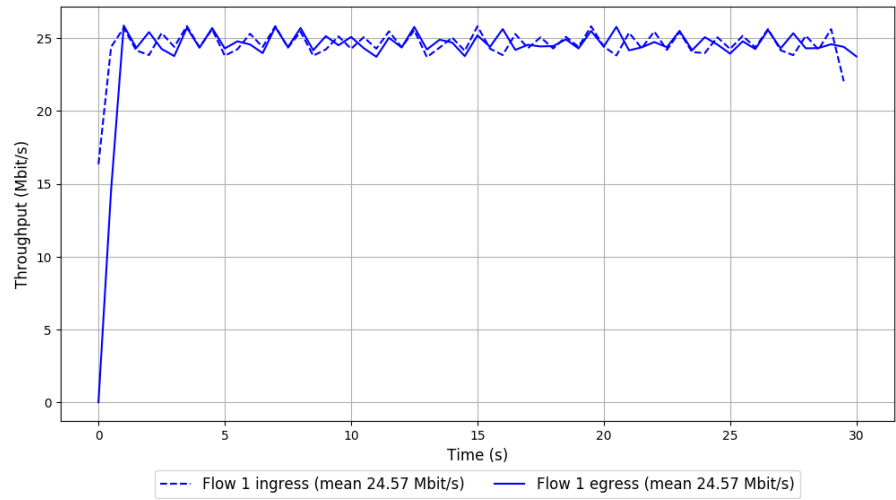
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-05-21 22:18:44
End at: 2018-05-21 22:19:14
Local clock offset: 0.346 ms
Remote clock offset: -2.132 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.74 Mbit/s
95th percentile per-packet one-way delay: 19.114 ms
Loss rate: 3.26%
-- Flow 1:
Average throughput: 22.74 Mbit/s
95th percentile per-packet one-way delay: 19.114 ms
Loss rate: 3.26%
```

Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-05-21 22:36:30
End at: 2018-05-21 22:37:00
Local clock offset: 1.504 ms
Remote clock offset: 0.349 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.67 Mbit/s
95th percentile per-packet one-way delay: 19.388 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 23.67 Mbit/s
95th percentile per-packet one-way delay: 19.388 ms
Loss rate: 1.69%
```

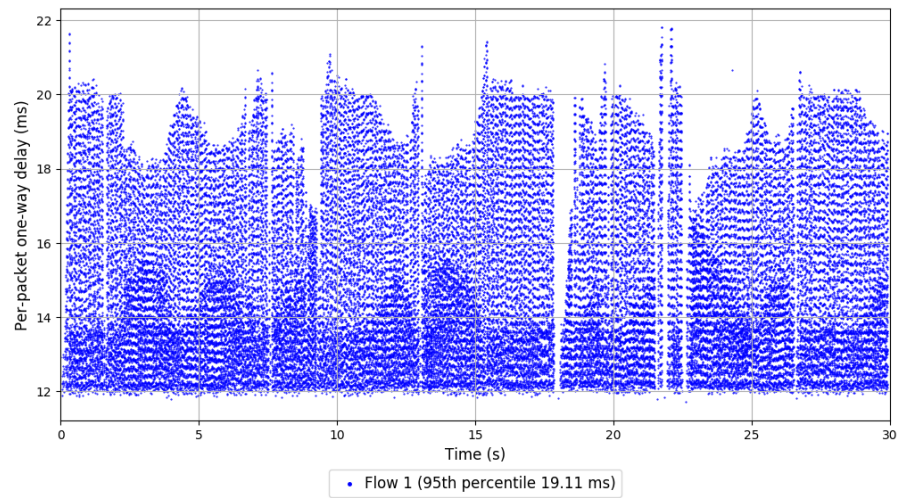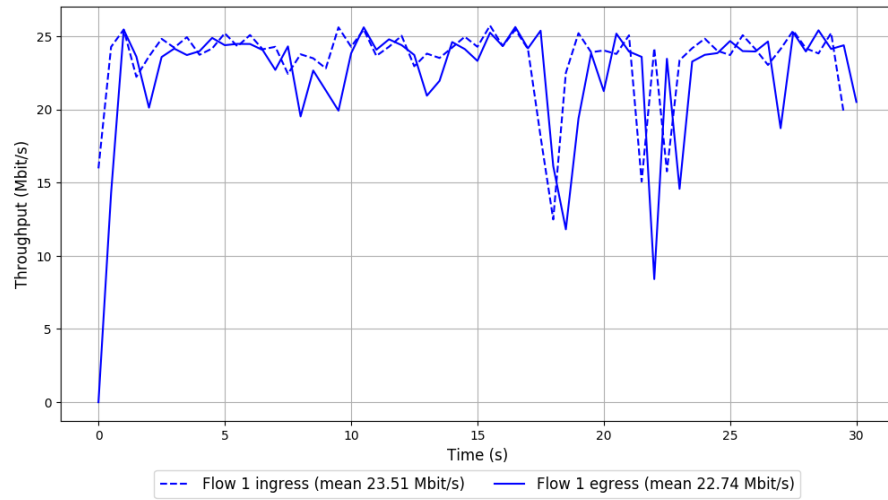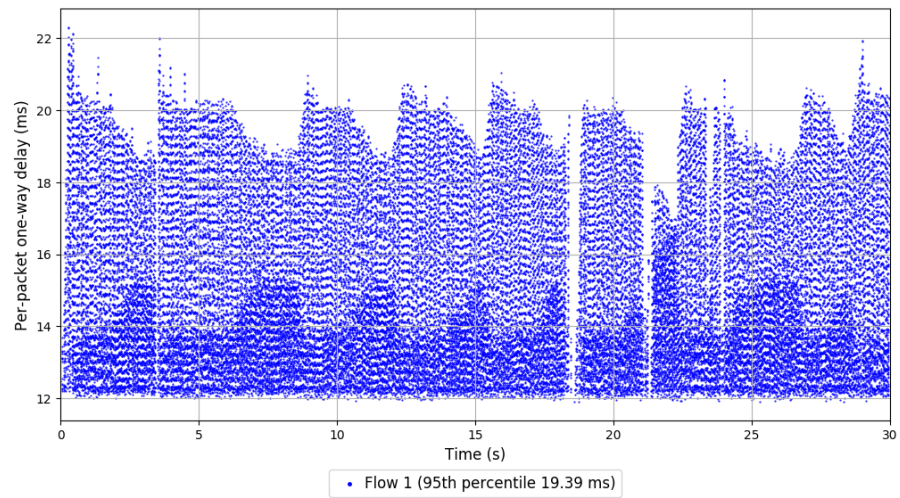## Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-05-21 22:54:24
End at: 2018-05-21 22:54:54
Local clock offset: -1.05 ms
Remote clock offset: 1.652 ms


# Below is generated by plot.py at 2018-05-22 00:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.56 Mbit/s
95th percentile per-packet one-way delay: 21.456 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.56 Mbit/s
95th percentile per-packet one-way delay: 21.456 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

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```
Run 6: Statistics of Sprout

Start at: 2018-05-21 23:12:07
End at: 2018-05-21 23:12:37
Local clock offset: -3.513 ms
Remote clock offset: -2.469 ms


# Below is generated by plot.py at 2018-05-22 00:50:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.15 Mbit/s
95th percentile per-packet one-way delay: 19.759 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 23.15 Mbit/s
95th percentile per-packet one-way delay: 19.759 ms
Loss rate: 1.77%
```
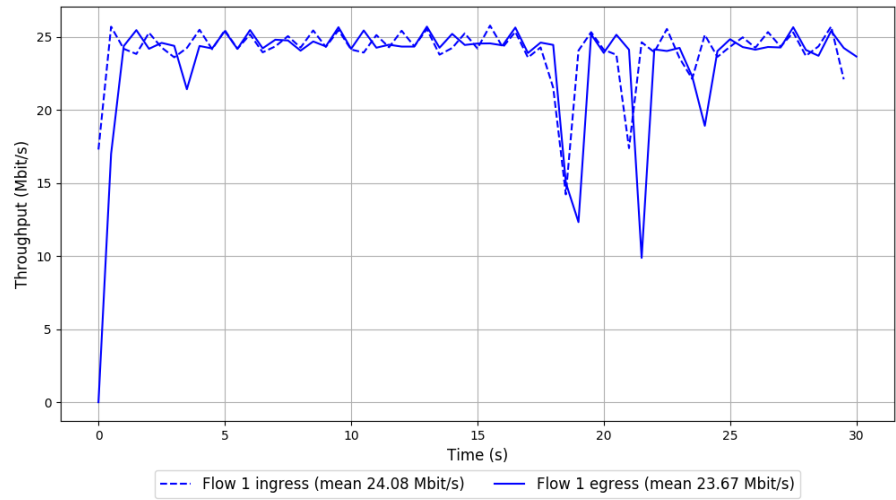
Run 6: Report of Sprout — Data Link

Flow 1 ingress (mean 23.57 Mbit/s) ——— Flow 1 egress (mean 23.15 Mbit/s)

• Flow 1 (95th percentile 19.76 ms)

```
Run 7: Statistics of Sprout

Start at: 2018-05-21 23:29:58
End at: 2018-05-21 23:30:28
Local clock offset: -3.922 ms
Remote clock offset: -5.658 ms


# Below is generated by plot.py at 2018-05-22 00:50:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.30 Mbit/s
95th percentile per-packet one-way delay: 17.873 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 24.30 Mbit/s
95th percentile per-packet one-way delay: 17.873 ms
Loss rate: 0.36%
```
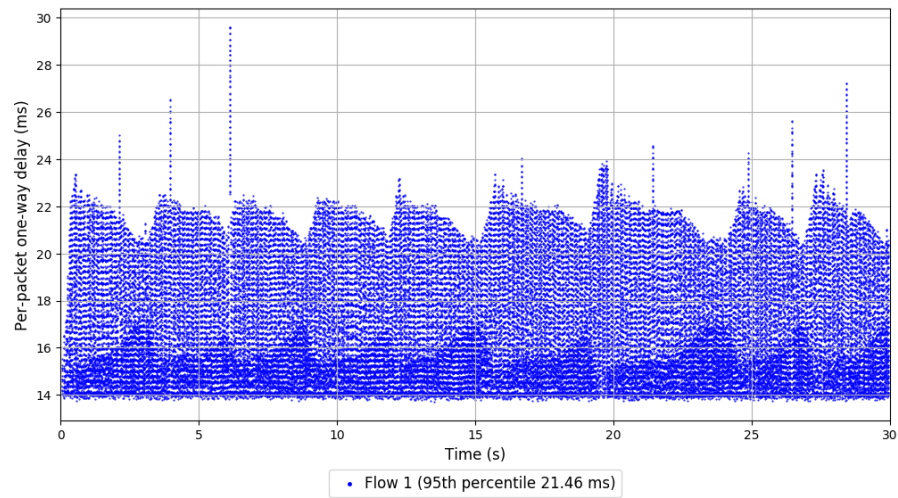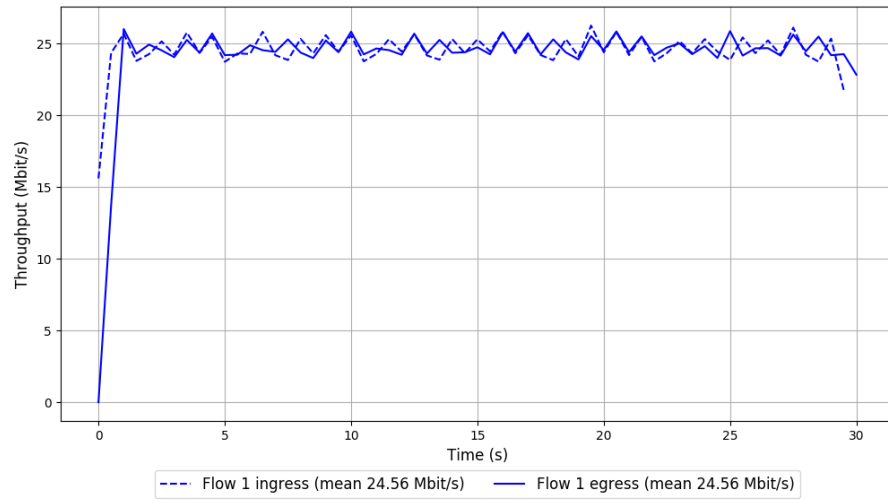
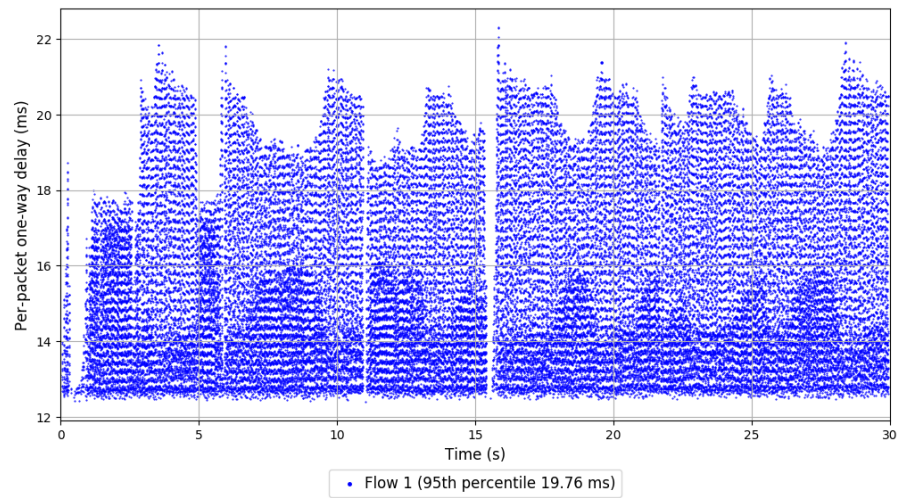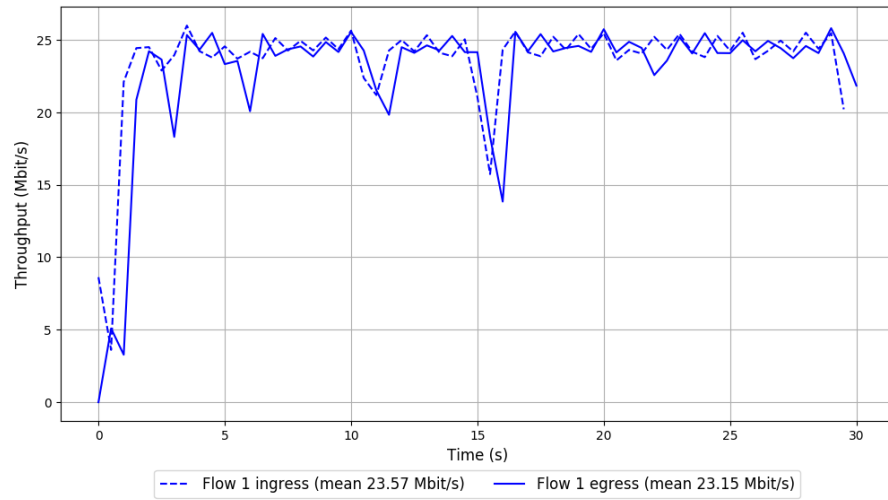Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2018-05-21 23:47:48
End at: 2018-05-21 23:48:18
Local clock offset: -6.998 ms
Remote clock offset: -6.393 ms


# Below is generated by plot.py at 2018-05-22 00:50:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.48 Mbit/s
95th percentile per-packet one-way delay: 20.655 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 24.48 Mbit/s
95th percentile per-packet one-way delay: 20.655 ms
Loss rate: 0.08%
```

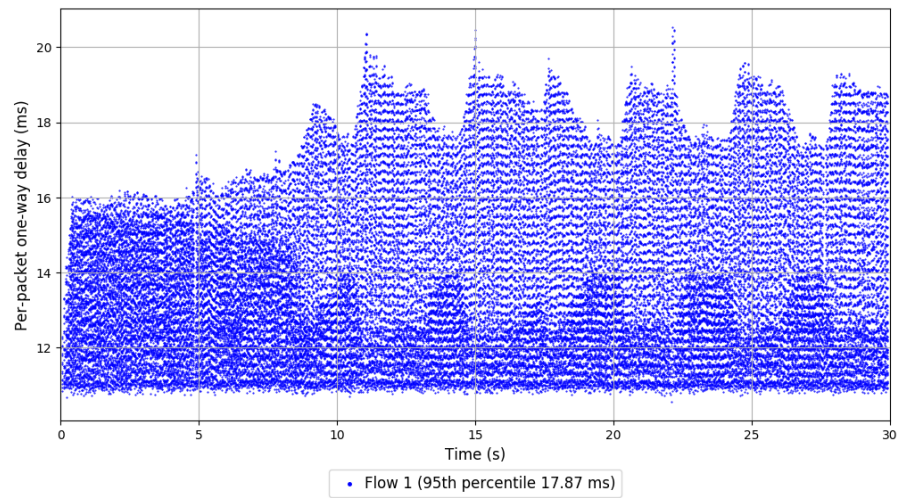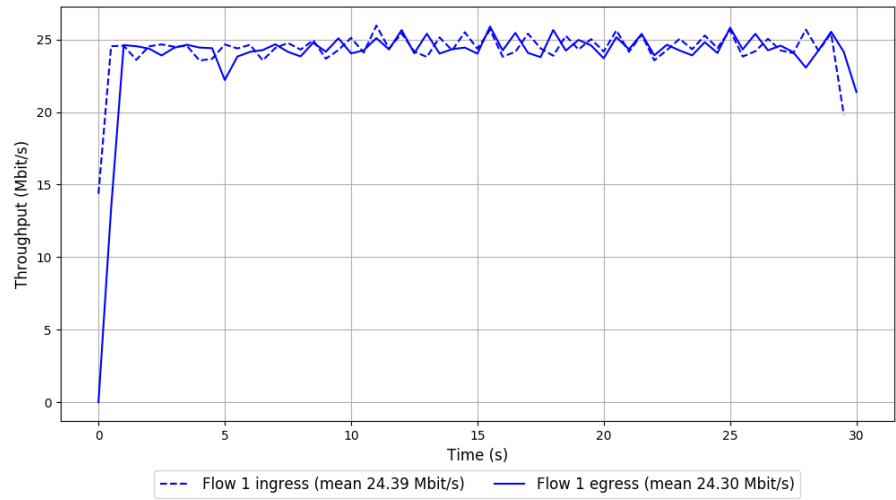## Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-05-22 00:05:32
End at: 2018-05-22 00:06:02
Local clock offset: -3.197 ms
Remote clock offset: -8.316 ms


# Below is generated by plot.py at 2018-05-22 00:50:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.46 Mbit/s
95th percentile per-packet one-way delay: 19.612 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.46 Mbit/s
95th percentile per-packet one-way delay: 19.612 ms
Loss rate: 0.01%
```

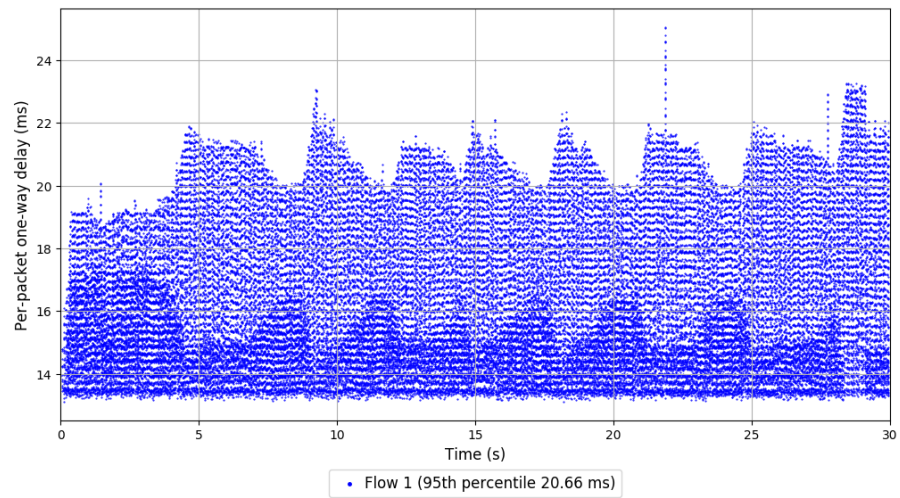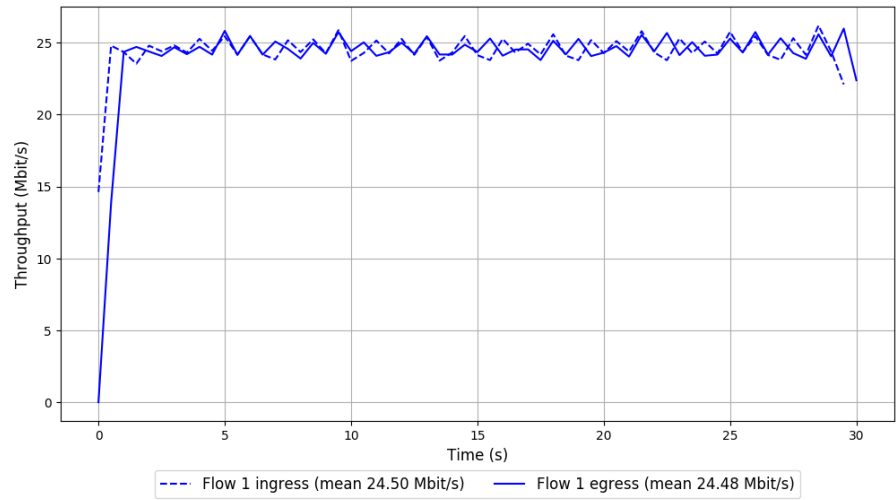Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-05-22 00:23:21
End at: 2018-05-22 00:23:51
Local clock offset: -3.508 ms
Remote clock offset: -2.435 ms


# Below is generated by plot.py at 2018-05-22 00:50:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.36 Mbit/s
95th percentile per-packet one-way delay: 19.508 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 24.36 Mbit/s
95th percentile per-packet one-way delay: 19.508 ms
Loss rate: 0.19%
```
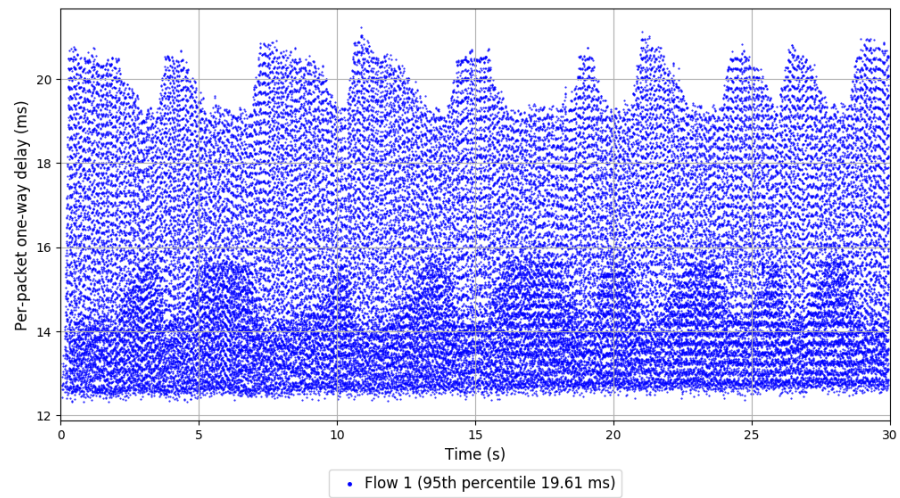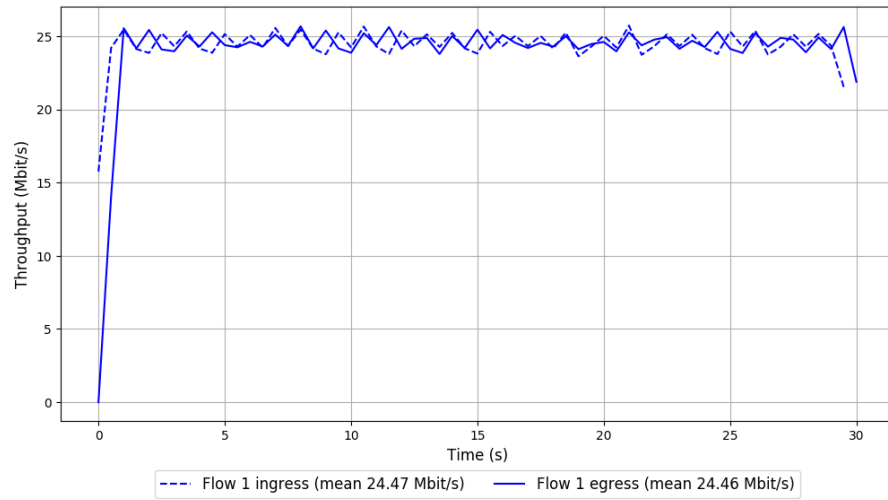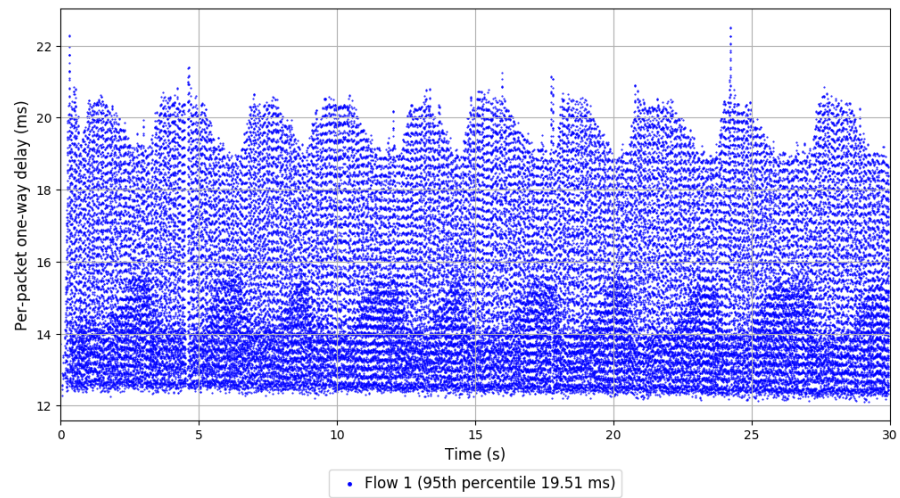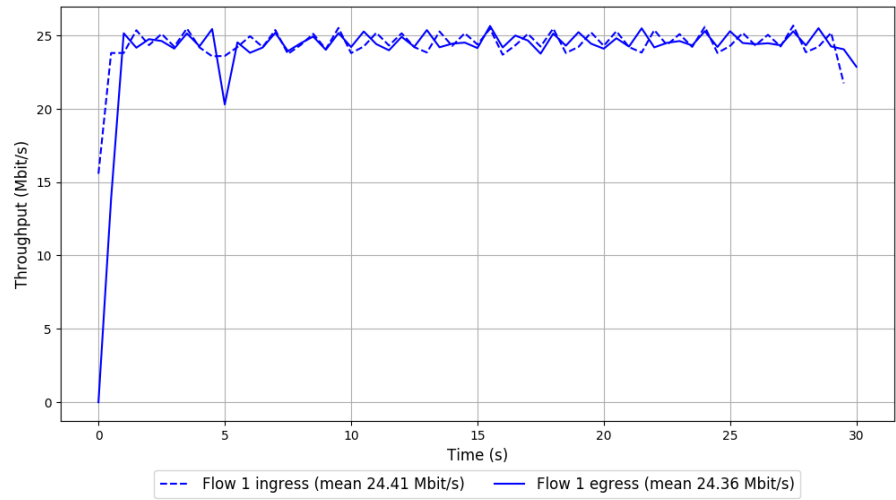
Run 10: Report of Sprout — Data Link

Flow 1 ingress (mean 24.41 Mbit/s) --- Flow 1 egress (mean 24.36 Mbit/s)

Flow 1 (95th percentile 19.51 ms)

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

Start at: 2018-05-21 21:50:53
End at: 2018-05-21 21:51:23
Local clock offset: -2.277 ms
Remote clock offset: -1.646 ms


# Below is generated by plot.py at 2018-05-22 00:52:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.34 Mbit/s
95th percentile per-packet one-way delay: 14.821 ms
Loss rate: 5.38%
-- Flow 1:
Average throughput: 88.34 Mbit/s
95th percentile per-packet one-way delay: 14.821 ms
Loss rate: 5.38%
```

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

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

Start at: 2018-05-21 22:08:49
End at: 2018-05-21 22:09:19
Local clock offset: 0.293 ms
Remote clock offset: -1.978 ms


# Below is generated by plot.py at 2018-05-22 00:52:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.86 Mbit/s
95th percentile per-packet one-way delay: 14.492 ms
Loss rate: 11.69%
-- Flow 1:
Average throughput: 81.86 Mbit/s
95th percentile per-packet one-way delay: 14.492 ms
Loss rate: 11.69%
```
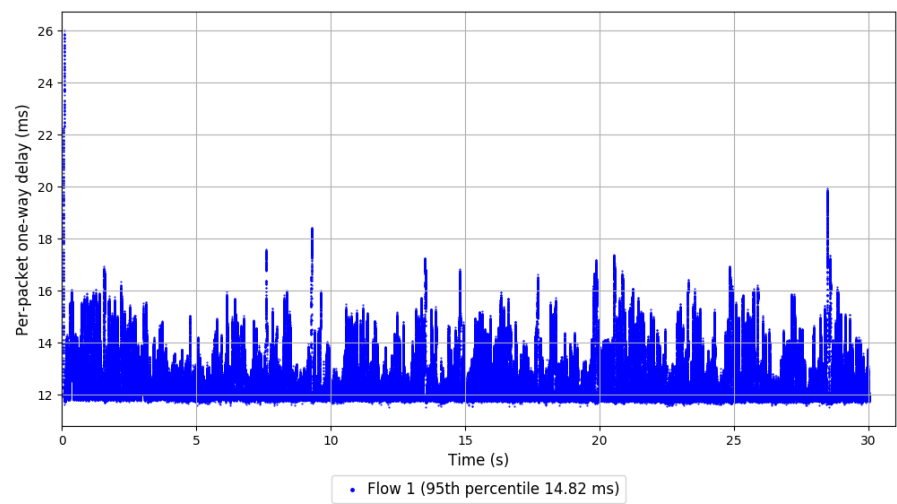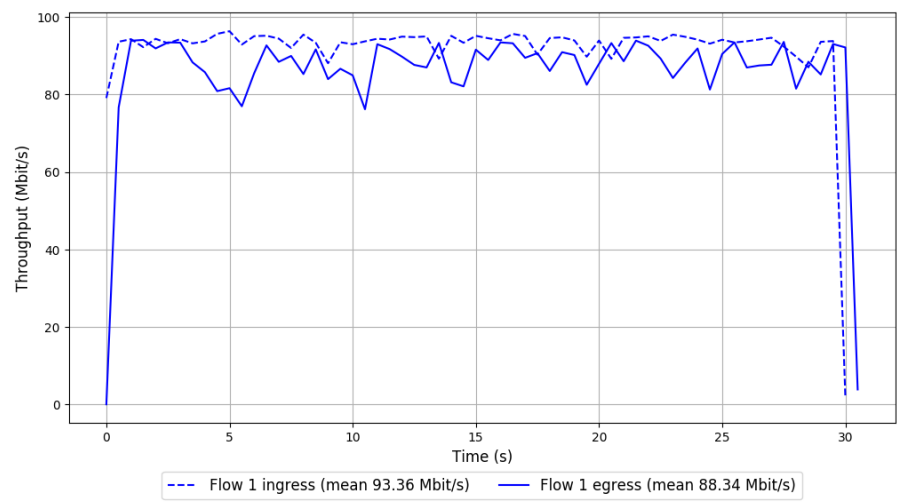
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2018-05-21 22:26:34
End at: 2018-05-21 22:27:04
Local clock offset: 0.091 ms
Remote clock offset: -1.712 ms


# Below is generated by plot.py at 2018-05-22 00:52:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.26 Mbit/s
95th percentile per-packet one-way delay: 14.945 ms
Loss rate: 10.46%
-- Flow 1:
Average throughput: 82.26 Mbit/s
95th percentile per-packet one-way delay: 14.945 ms
Loss rate: 10.46%
```

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

Flow 1 ingress (mean 91.87 Mbit/s)   Flow 1 egress (mean 82.26 Mbit/s)

• Flow 1 (95th percentile 14.95 ms)

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

Start at: 2018-05-21 22:44:22
End at: 2018-05-21 22:44:52
Local clock offset: 1.9 ms
Remote clock offset: 0.762 ms


# Below is generated by plot.py at 2018-05-22 00:52:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.34 Mbit/s
95th percentile per-packet one-way delay: 13.702 ms
Loss rate: 8.86%
-- Flow 1:
Average throughput: 86.34 Mbit/s
95th percentile per-packet one-way delay: 13.702 ms
Loss rate: 8.86%
```
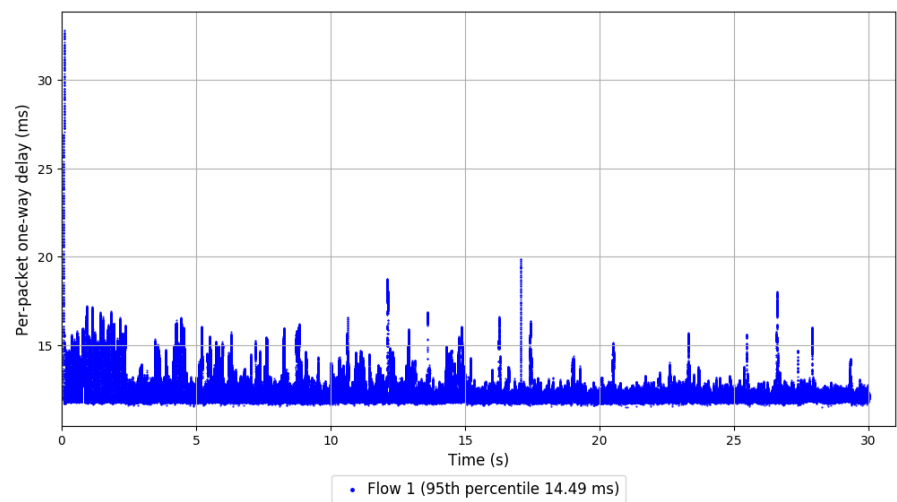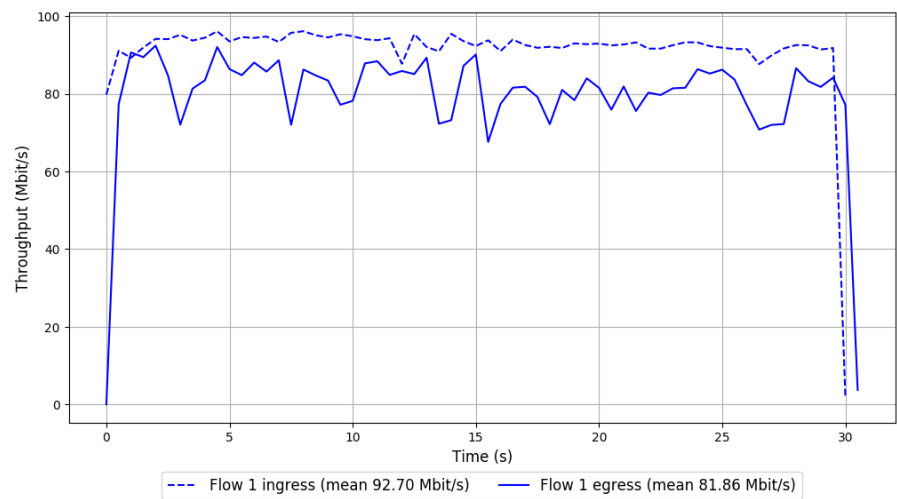
Run 4: Report of TaoVA-100x — Data Link

231

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

Start at: 2018-05-21 23:02:08
End at: 2018-05-21 23:02:38
Local clock offset: -2.641 ms
Remote clock offset: 2.155 ms


# Below is generated by plot.py at 2018-05-22 00:52:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.73 Mbit/s
95th percentile per-packet one-way delay: 16.595 ms
Loss rate: 7.70%
-- Flow 1:
Average throughput: 86.73 Mbit/s
95th percentile per-packet one-way delay: 16.595 ms
Loss rate: 7.70%
```
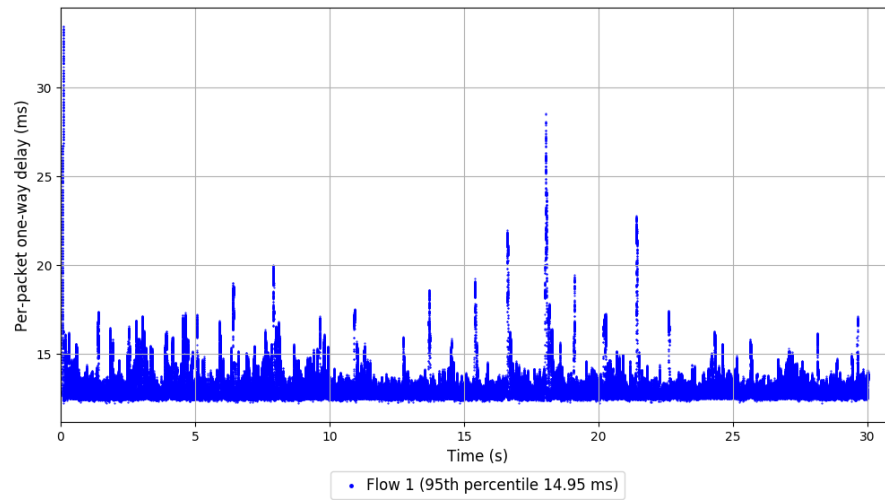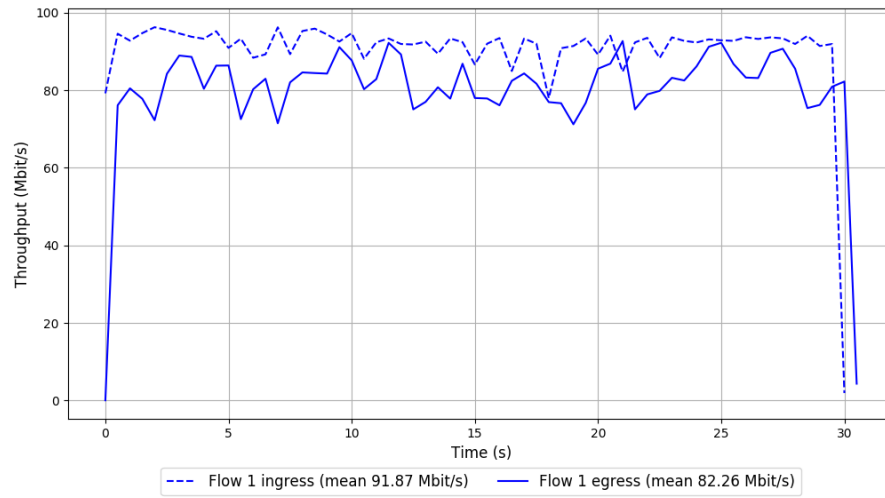
Run 5: Report of TaoVA-100x — Data Link

233

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

Start at: 2018-05-21 23:19:52
End at: 2018-05-21 23:20:22
Local clock offset: -3.456 ms
Remote clock offset: -4.046 ms


# Below is generated by plot.py at 2018-05-22 00:52:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.32 Mbit/s
95th percentile per-packet one-way delay: 14.074 ms
Loss rate: 8.53%
-- Flow 1:
Average throughput: 86.32 Mbit/s
95th percentile per-packet one-way delay: 14.074 ms
Loss rate: 8.53%
```
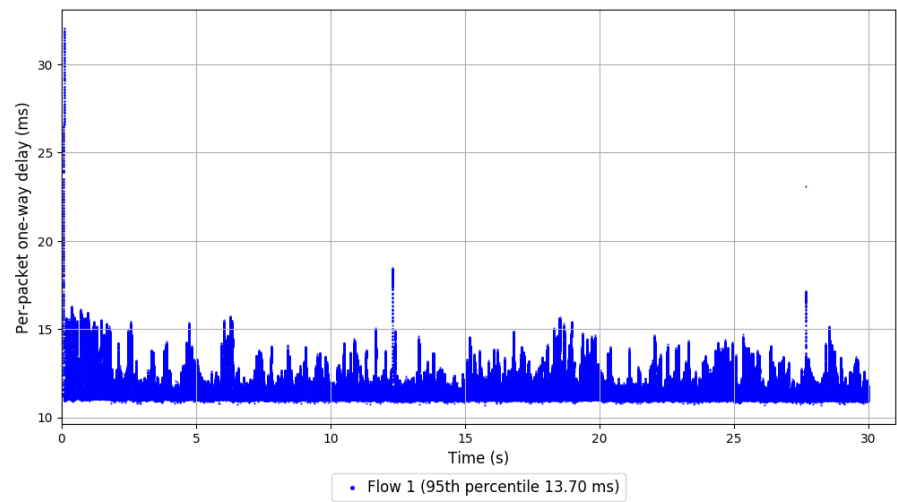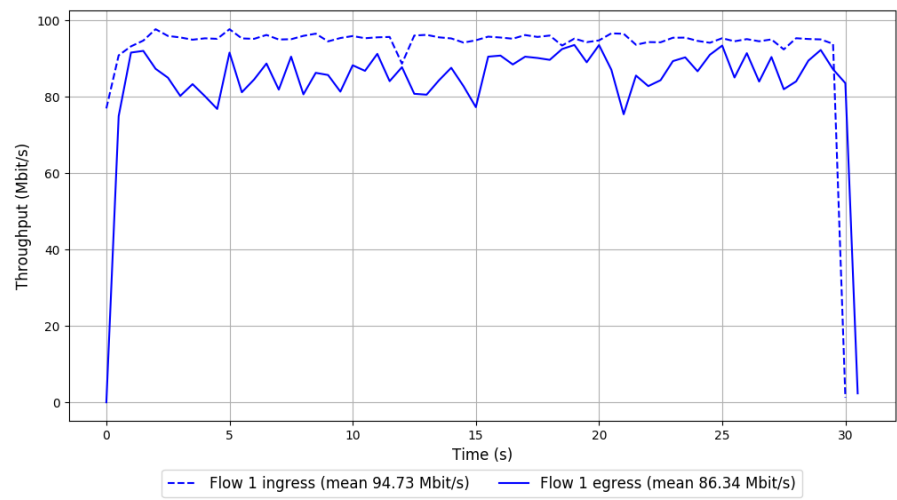
Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 94.38 Mbit/s) —— Flow 1 egress (mean 86.32 Mbit/s)

• Flow 1 (95th percentile 14.07 ms)

235

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

Start at: 2018-05-21 23:37:43
End at: 2018-05-21 23:38:13
Local clock offset: -7.642 ms
Remote clock offset: -5.808 ms

# Below is generated by plot.py at 2018-05-22 00:52:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.89 Mbit/s
95th percentile per-packet one-way delay: 15.600 ms
Loss rate: 7.10%
-- Flow 1:
Average throughput: 85.89 Mbit/s
95th percentile per-packet one-way delay: 15.600 ms
Loss rate: 7.10%
```
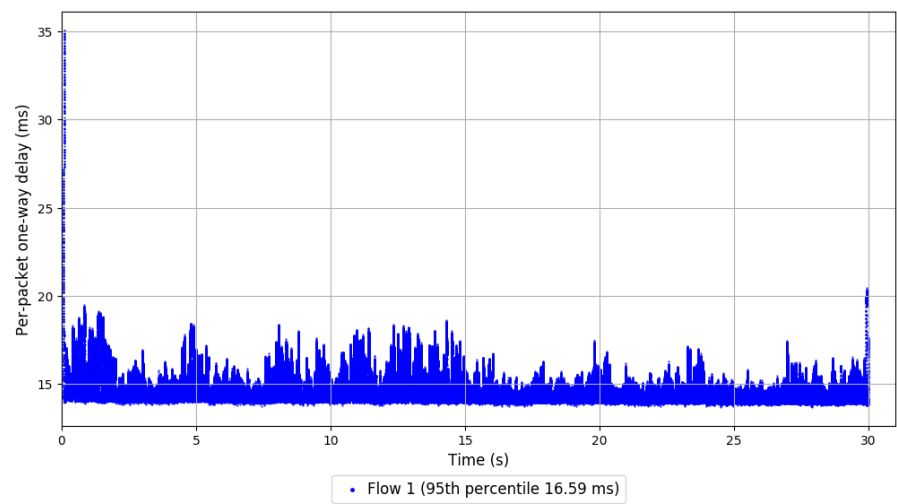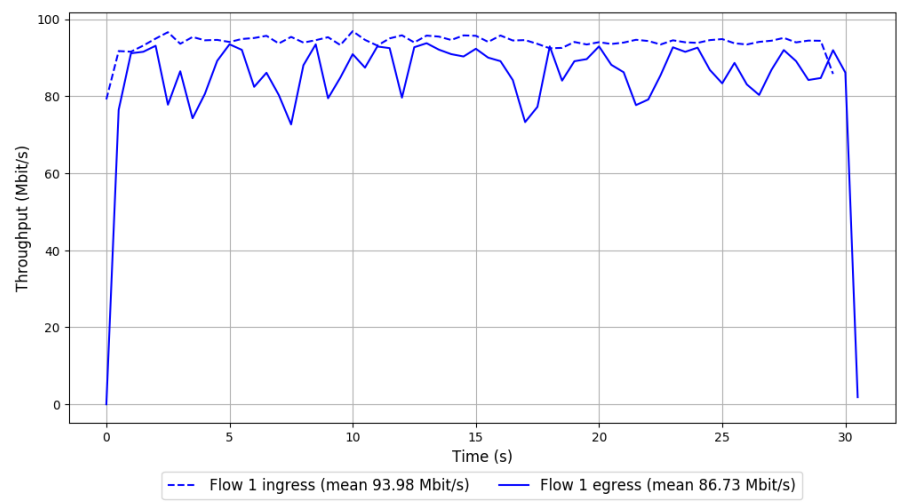
Run 7: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 92.46 Mbit/s)   Flow 1 egress (mean 85.89 Mbit/s)

Flow 1 (95th percentile 15.60 ms)

237

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

Start at: 2018-05-21 23:55:32
End at: 2018-05-21 23:56:02
Local clock offset: -8.122 ms
Remote clock offset: -7.691 ms


# Below is generated by plot.py at 2018-05-22 00:52:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.57 Mbit/s
95th percentile per-packet one-way delay: 15.634 ms
Loss rate: 10.02%
-- Flow 1:
Average throughput: 83.57 Mbit/s
95th percentile per-packet one-way delay: 15.634 ms
Loss rate: 10.02%
```
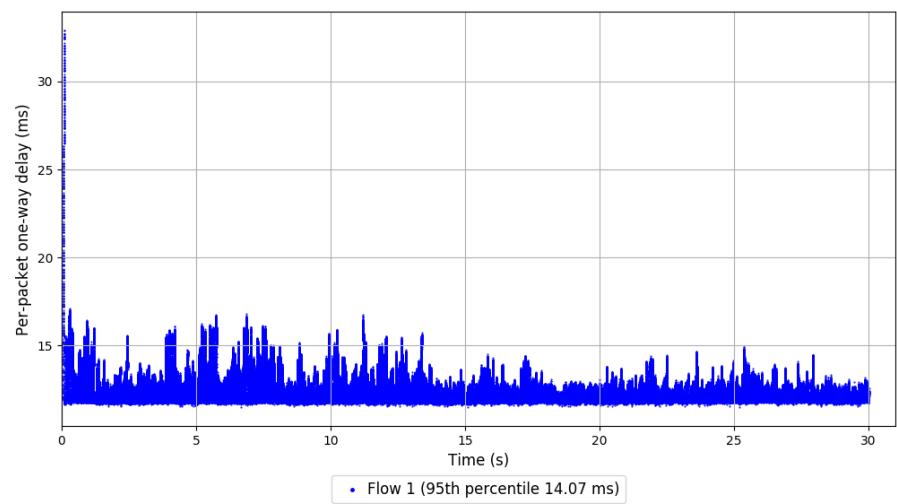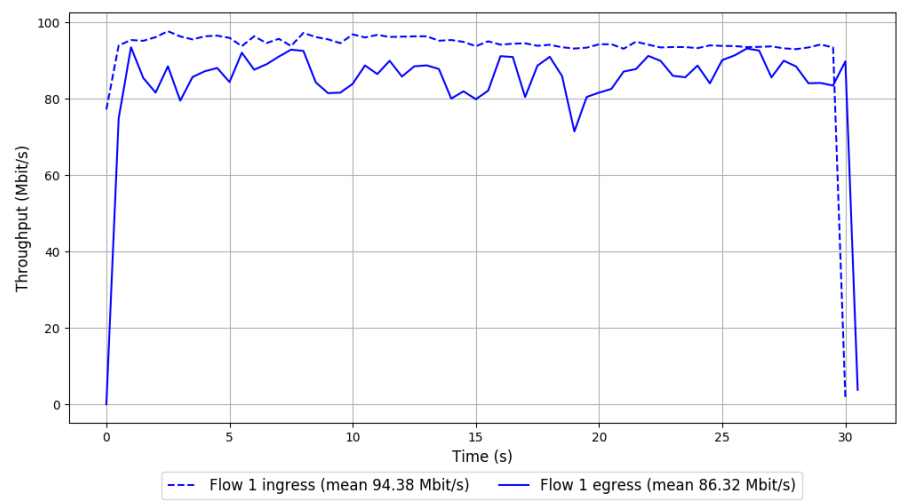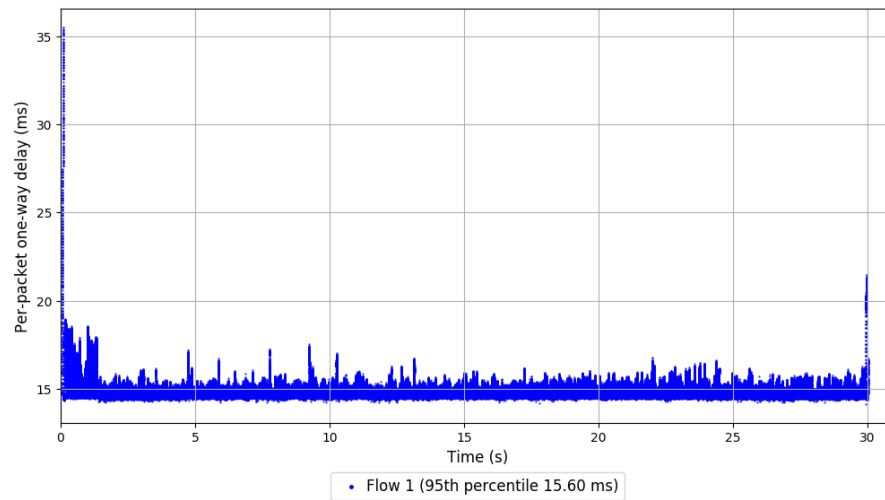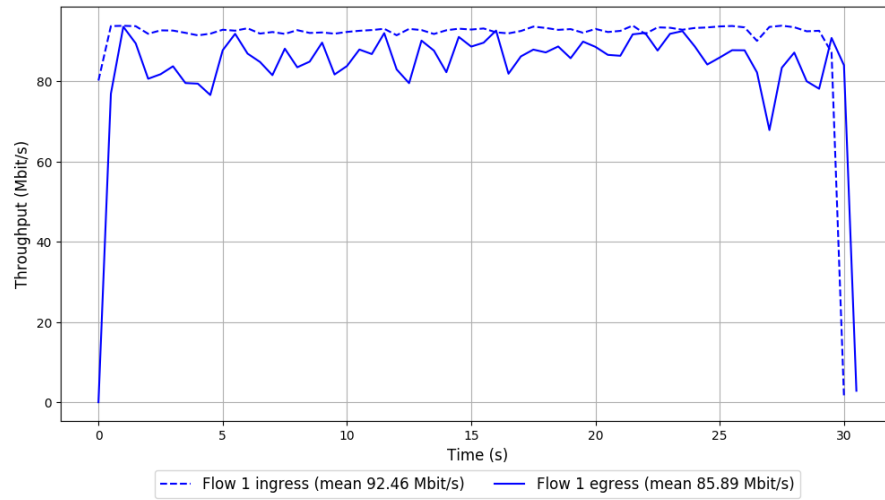
Run 8: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 92.88 Mbit/s) Flow 1 egress (mean 83.57 Mbit/s)

• Flow 1 (95th percentile 15.63 ms)

239

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

Start at: 2018-05-22 00:13:20
End at: 2018-05-22 00:13:50
Local clock offset: -1.546 ms
Remote clock offset: -8.308 ms


# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.81 Mbit/s
95th percentile per-packet one-way delay: 15.355 ms
Loss rate: 4.06%
-- Flow 1:
Average throughput: 89.81 Mbit/s
95th percentile per-packet one-way delay: 15.355 ms
Loss rate: 4.06%
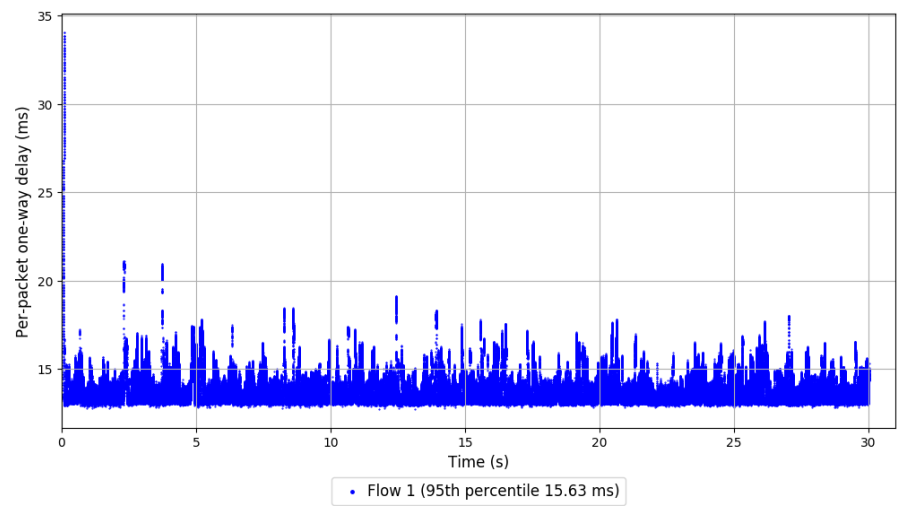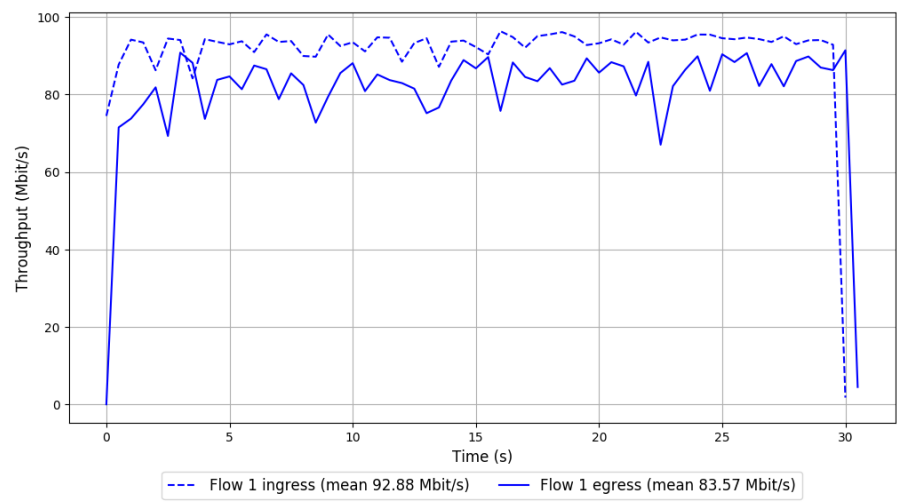```

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



Flow 1 ingress (mean 93.61 Mbit/s)    Flow 1 egress (mean 89.81 Mbit/s)

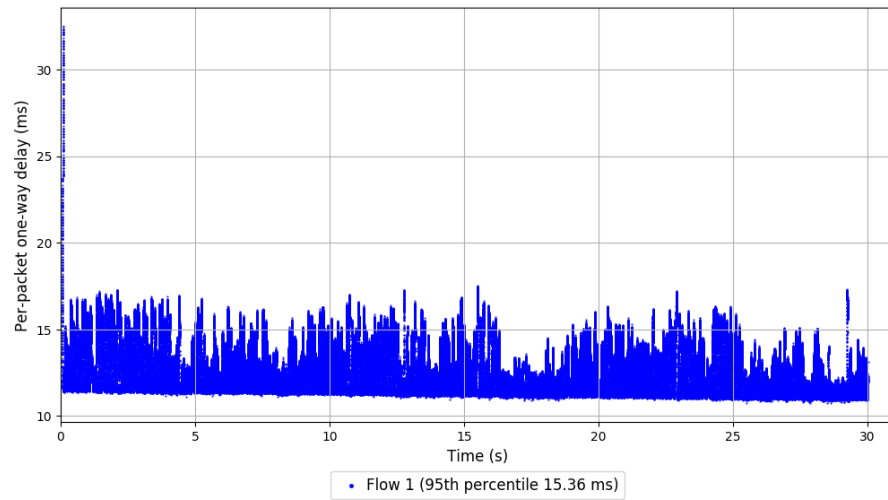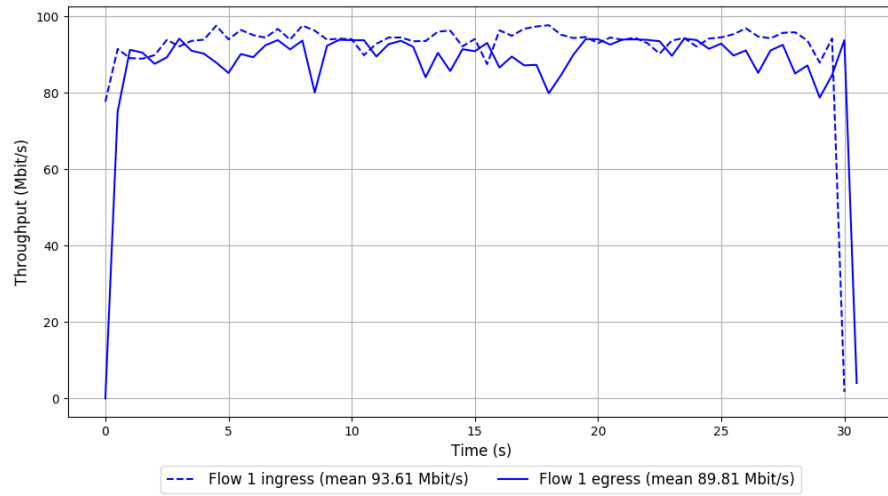

• Flow 1 (95th percentile 15.36 ms)

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

Start at: 2018-05-22 00:31:11
End at: 2018-05-22 00:31:41
Local clock offset: -1.771 ms
Remote clock offset: 0.508 ms

Below is generated by plot.py at 2018-05-22 00:54:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 86.56 Mbit/s
95th percentile per-packet one-way delay: 11.766 ms
Loss rate: 5.85%
-- Flow 1:
Average throughput: 86.56 Mbit/s
95th percentile per-packet one-way delay: 11.766 ms
Loss rate: 5.85%
```
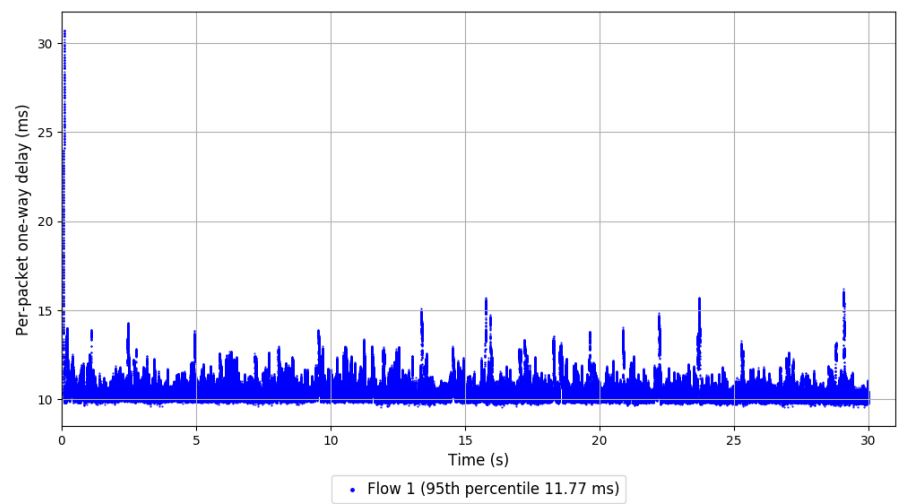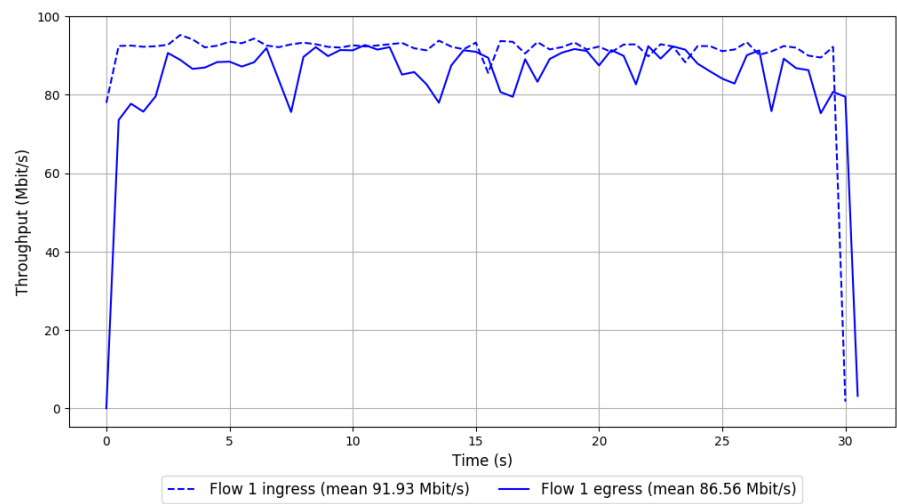
# Run 10: Report of TaoVA-100x — Data Link



Flow 1 ingress (mean 91.93 Mbit/s)    Flow 1 egress (mean 86.56 Mbit/s)



Flow 1 (95th percentile 11.77 ms)

243

```
Run 1: Statistics of TCP Vegas

Start at: 2018-05-21 21:45:22
End at: 2018-05-21 21:45:52
Local clock offset: -3.184 ms
Remote clock offset: -0.776 ms


# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.02 Mbit/s
95th percentile per-packet one-way delay: 24.868 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 26.02 Mbit/s
95th percentile per-packet one-way delay: 24.868 ms
Loss rate: 0.09%
```

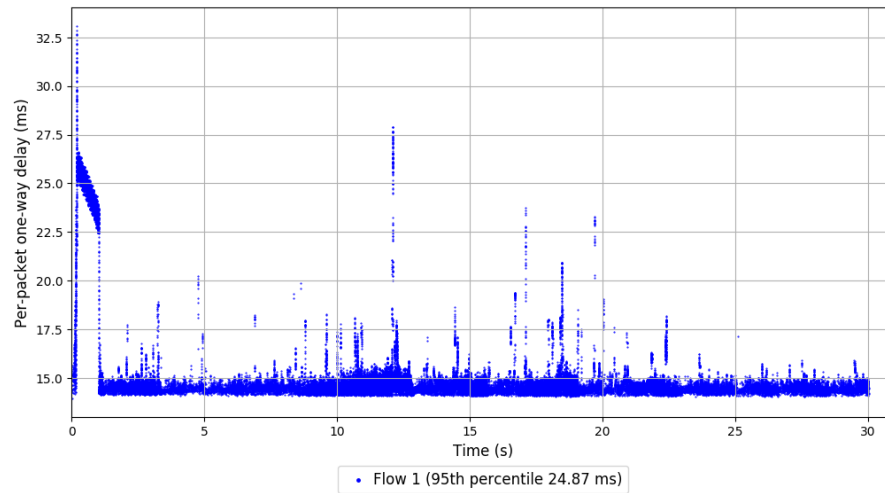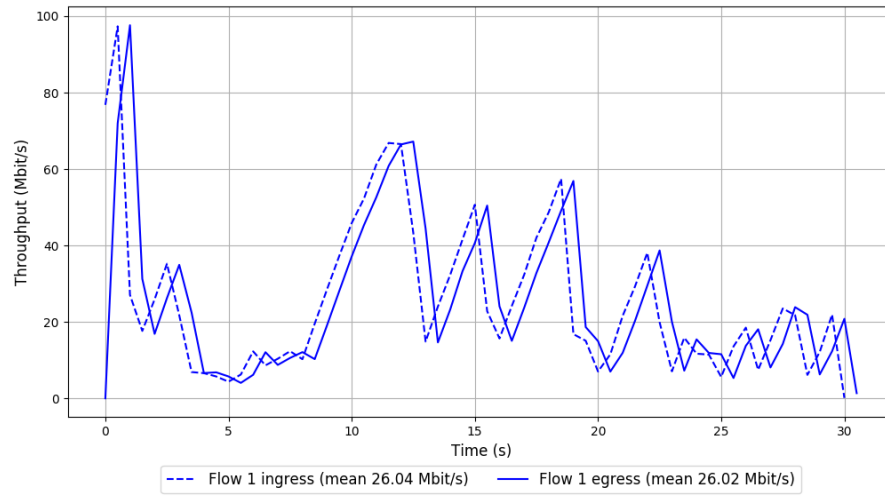Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-05-21 22:03:14
End at: 2018-05-21 22:03:44
Local clock offset: -1.617 ms
Remote clock offset: -1.925 ms

# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.88 Mbit/s
95th percentile per-packet one-way delay: 19.614 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 28.88 Mbit/s
95th percentile per-packet one-way delay: 19.614 ms
Loss rate: 1.46%
```

Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 29.31 Mbit/s) ——— Flow 1 egress (mean 28.88 Mbit/s)

• Flow 1 (95th percentile 19.61 ms)

```
Run 3: Statistics of TCP Vegas

Start at: 2018-05-21 22:21:03
End at: 2018-05-21 22:21:33
Local clock offset: 0.442 ms
Remote clock offset: -2.167 ms


# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.78 Mbit/s
95th percentile per-packet one-way delay: 12.622 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 17.78 Mbit/s
95th percentile per-packet one-way delay: 12.622 ms
Loss rate: 0.68%
```
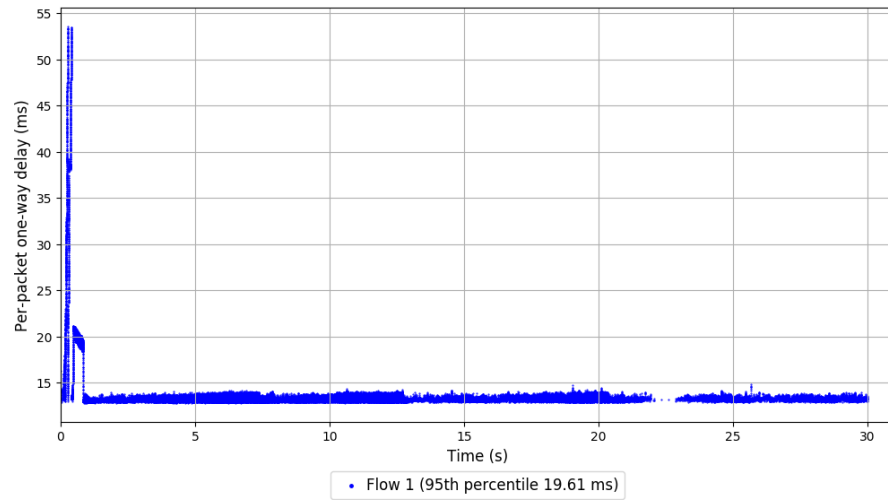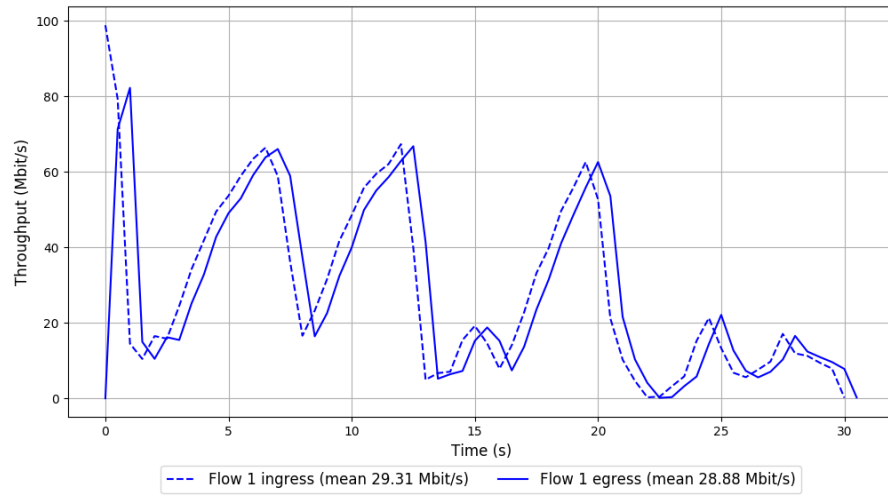
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2018-05-21 22:38:44
End at: 2018-05-21 22:39:14
Local clock offset: -1.267 ms
Remote clock offset: 0.509 ms


# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.38 Mbit/s
95th percentile per-packet one-way delay: 23.613 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 35.38 Mbit/s
95th percentile per-packet one-way delay: 23.613 ms
Loss rate: 0.04%
```
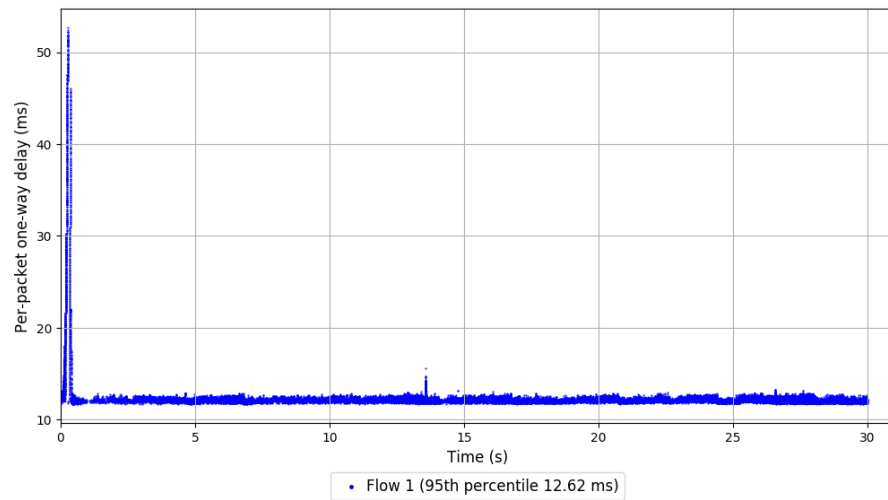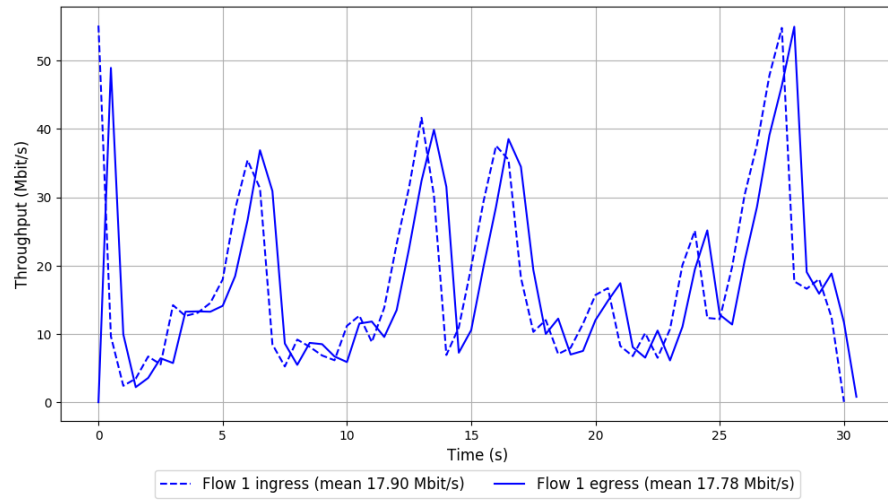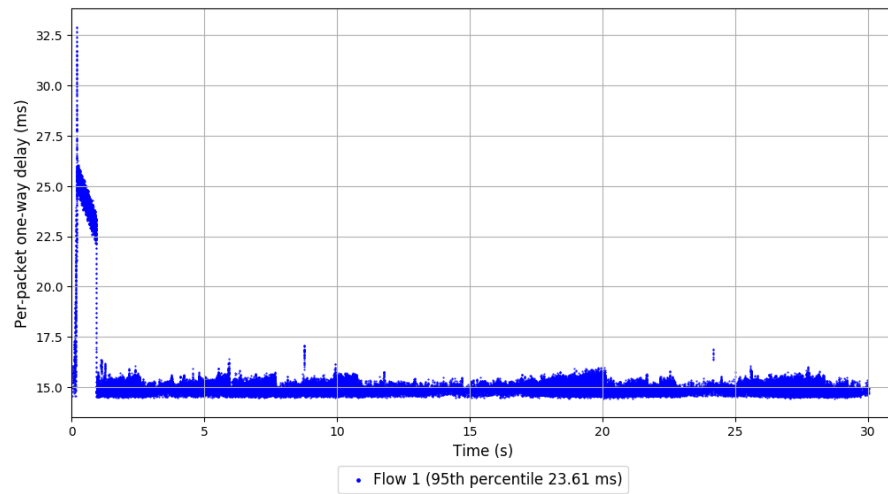
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-05-21 22:56:37
End at: 2018-05-21 22:57:08
Local clock offset: -1.314 ms
Remote clock offset: 2.176 ms


# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 27.25 Mbit/s
95th percentile per-packet one-way delay: 24.967 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 27.25 Mbit/s
95th percentile per-packet one-way delay: 24.967 ms
Loss rate: 0.07%
```

Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2018-05-21 23:14:21
End at: 2018-05-21 23:14:51
Local clock offset: -2.6 ms
Remote clock offset: -2.717 ms


# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.01 Mbit/s
95th percentile per-packet one-way delay: 19.867 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 11.01 Mbit/s
95th percentile per-packet one-way delay: 19.867 ms
Loss rate: 2.05%
```
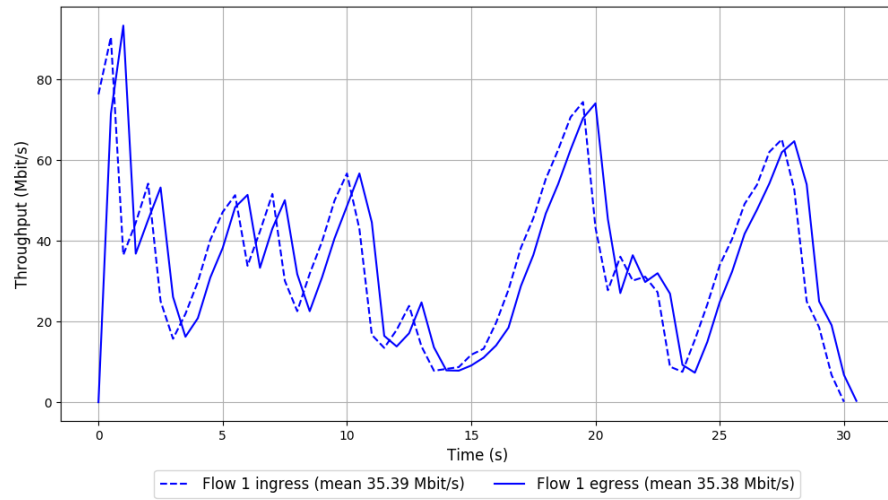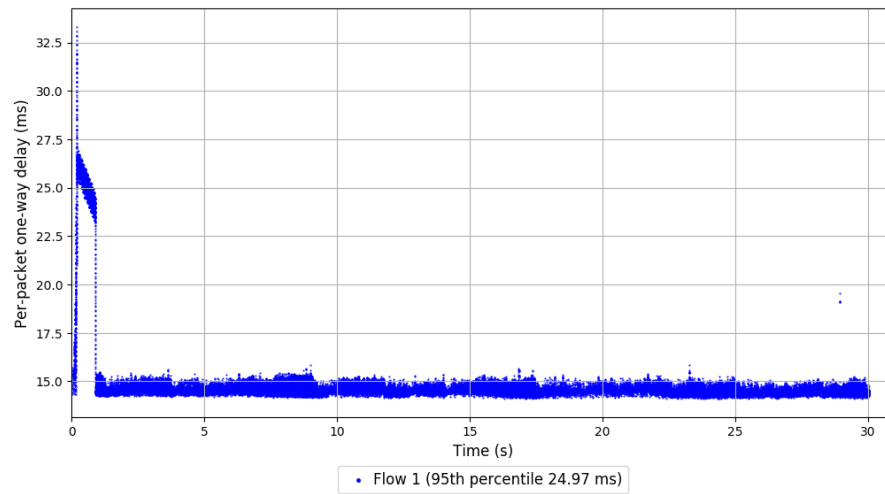
Run 6: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 11.24 Mbit/s)   Flow 1 egress (mean 11.01 Mbit/s)

Flow 1 (95th percentile 19.87 ms)

```
Run 7: Statistics of TCP Vegas

Start at: 2018-05-21 23:32:12
End at: 2018-05-21 23:32:42
Local clock offset: -2.882 ms
Remote clock offset: -5.076 ms


# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.42 Mbit/s
95th percentile per-packet one-way delay: 11.185 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 34.42 Mbit/s
95th percentile per-packet one-way delay: 11.185 ms
Loss rate: 0.49%
```
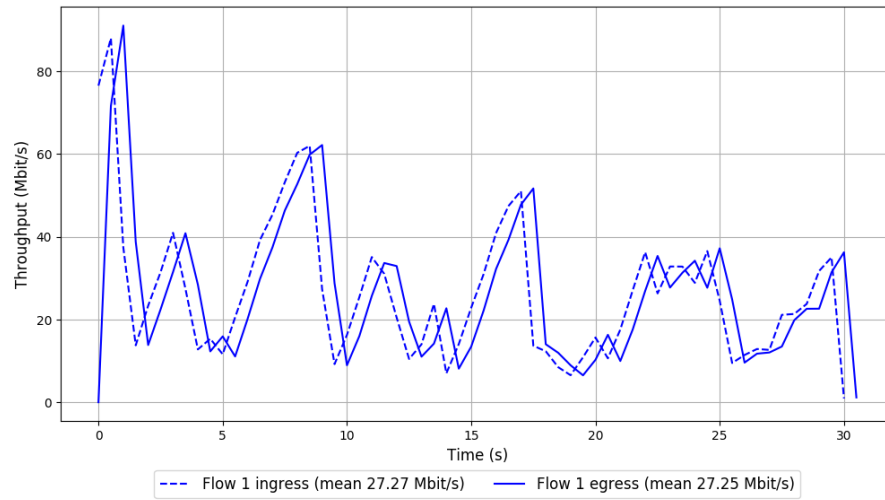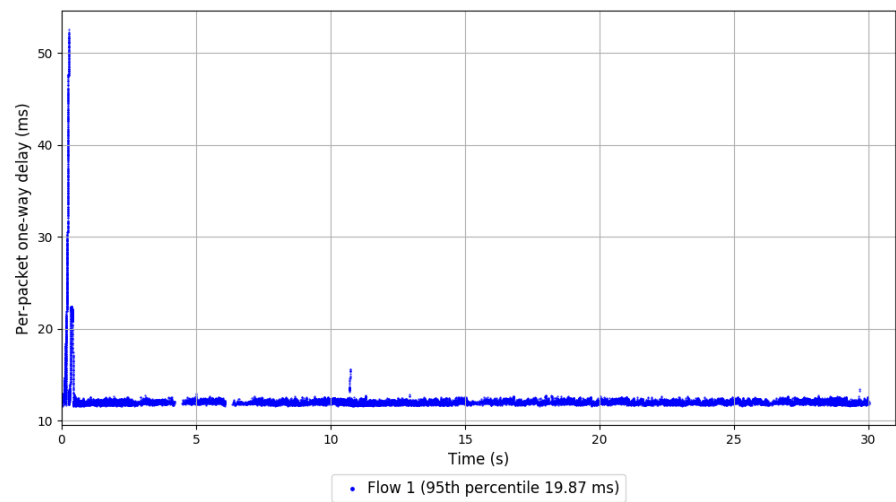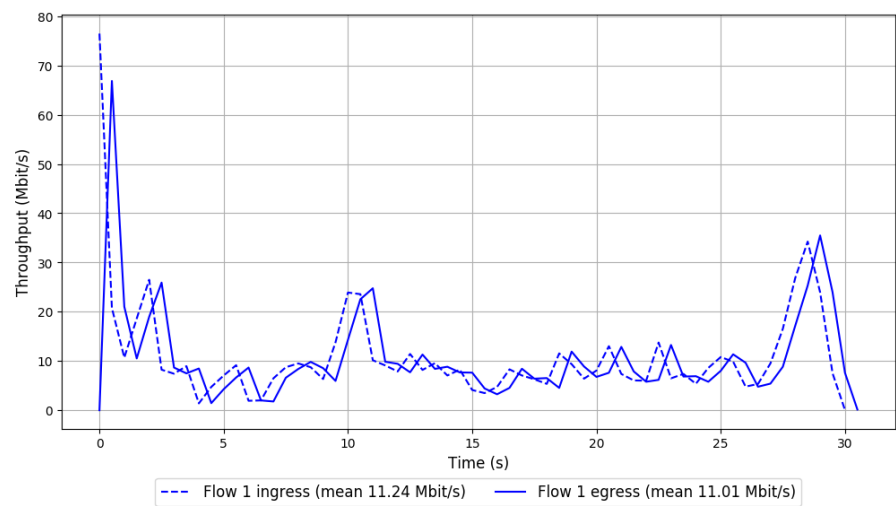
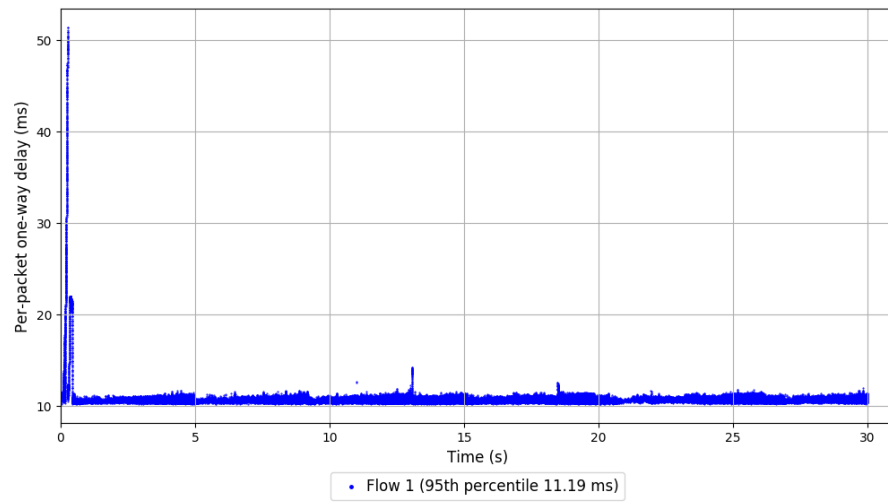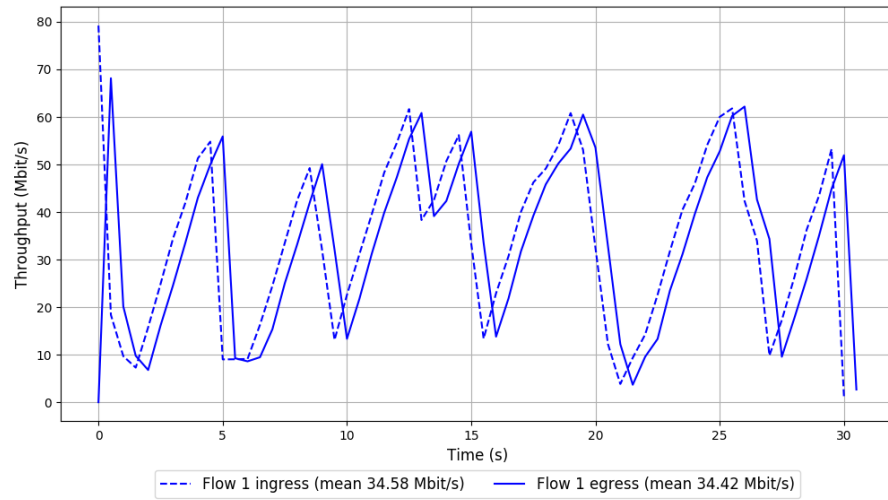Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2018-05-21 23:50:01
End at: 2018-05-21 23:50:31
Local clock offset: -4.604 ms
Remote clock offset: -6.606 ms


# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.04 Mbit/s
95th percentile per-packet one-way delay: 12.060 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 9.04 Mbit/s
95th percentile per-packet one-way delay: 12.060 ms
Loss rate: 0.89%
```

Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2018-05-22 00:07:47
End at: 2018-05-22 00:08:17
Local clock offset: -5.623 ms
Remote clock offset: -9.444 ms


# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.51 Mbit/s
95th percentile per-packet one-way delay: 21.403 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 41.51 Mbit/s
95th percentile per-packet one-way delay: 21.403 ms
Loss rate: 0.02%
```
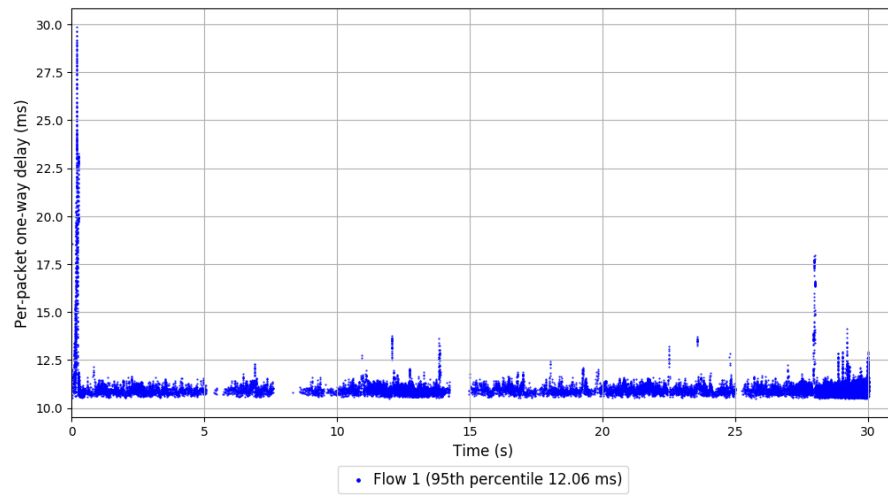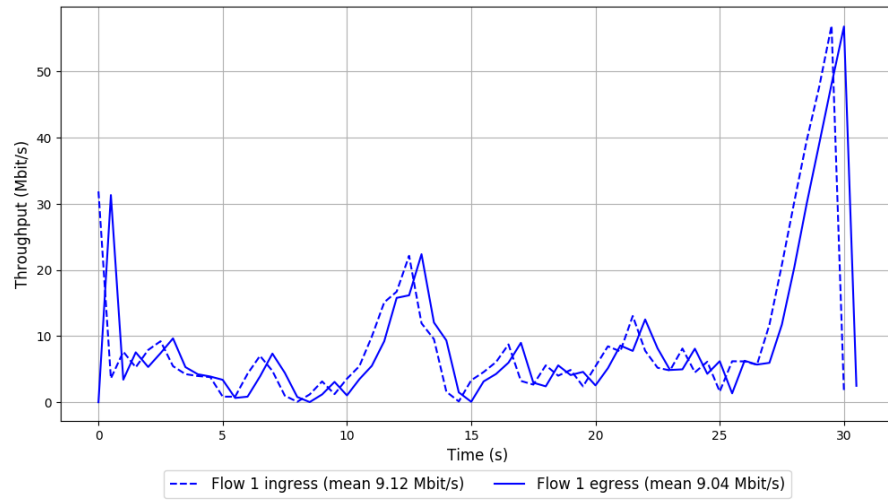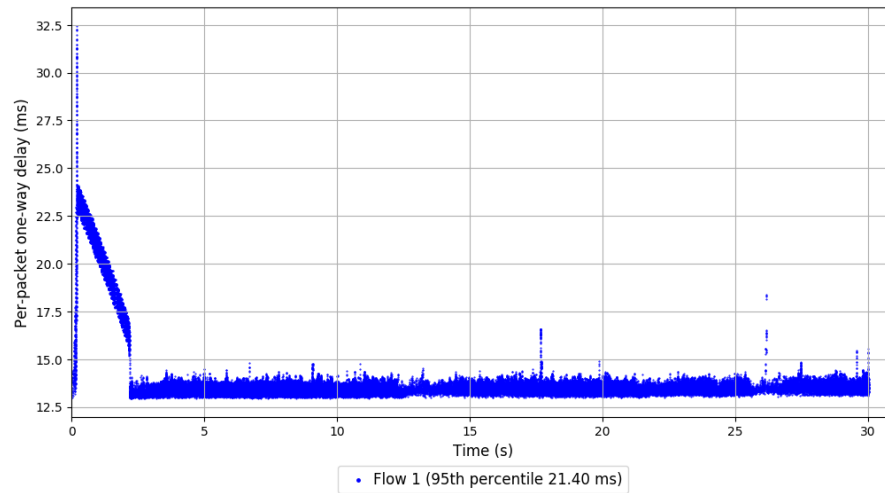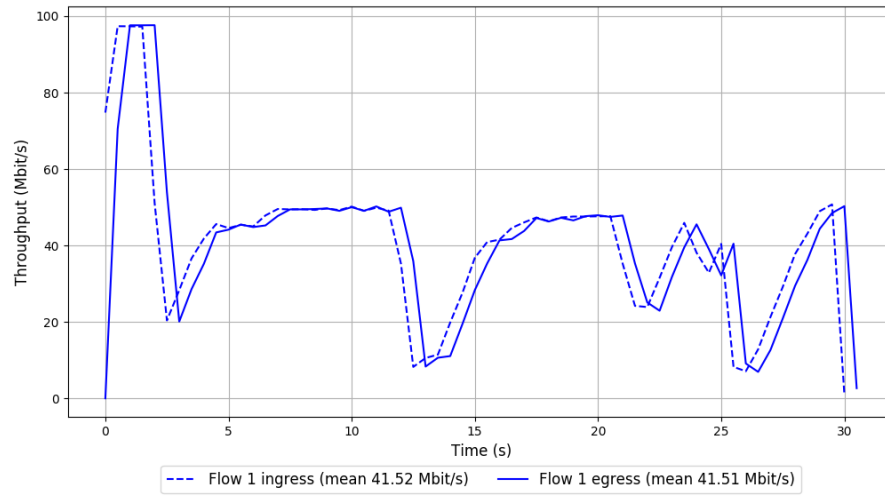
Run 9: Report of TCP Vegas — Data Link

```
Run 10: Statistics of TCP Vegas

Start at: 2018-05-22 00:25:36
End at: 2018-05-22 00:26:06
Local clock offset: -0.25 ms
Remote clock offset: 0.445 ms


# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.95 Mbit/s
95th percentile per-packet one-way delay: 18.824 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 35.95 Mbit/s
95th percentile per-packet one-way delay: 18.824 ms
Loss rate: 0.02%
```

Run 10: Report of TCP Vegas — Data Link

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```
Run 1: Statistics of Verus

Start at: 2018-05-21 21:46:27
End at: 2018-05-21 21:46:57
Local clock offset: -4.754 ms
Remote clock offset: -1.441 ms
```

Run 1: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 2: Statistics of Verus

Start at: 2018-05-21 22:04:19
End at: 2018-05-21 22:04:49
Local clock offset: -1.819 ms
Remote clock offset: -2.958 ms
```

Run 2: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 3: Statistics of Verus

Start at: 2018-05-21 22:22:08
End at: 2018-05-21 22:22:38
Local clock offset: 0.255 ms
Remote clock offset: -1.915 ms
```

Run 3: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 4: Statistics of Verus

Start at: 2018-05-21 22:39:50
End at: 2018-05-21 22:40:20
Local clock offset: 0.787 ms
Remote clock offset: 0.758 ms
```

Run 4: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 5: Statistics of Verus

Start at: 2018-05-21 22:57:43
End at: 2018-05-21 22:58:13
Local clock offset: -0.198 ms
Remote clock offset: 2.117 ms
```

Run 5: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 6: Statistics of Verus

Start at: 2018-05-21 23:15:25
End at: 2018-05-21 23:15:55
Local clock offset: -0.832 ms
Remote clock offset: -3.481 ms
```

Run 6: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 7: Statistics of Verus

Start at: 2018-05-21 23:33:18
End at: 2018-05-21 23:33:48
Local clock offset: -3.414 ms
Remote clock offset: -5.011 ms
```

Run 7: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 8: Statistics of Verus

Start at: 2018-05-21 23:51:06
End at: 2018-05-21 23:51:36
Local clock offset: -7.257 ms
Remote clock offset: -6.818 ms
```

Run 8: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 9: Statistics of Verus

Start at: 2018-05-22 00:08:53
End at: 2018-05-22 00:09:24
Local clock offset: -4.614 ms
Remote clock offset: -8.522 ms
```

Run 9: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 10: Statistics of Verus

Start at: 2018-05-22 00:26:42
End at: 2018-05-22 00:27:12
Local clock offset: -1.831 ms
Remote clock offset: 0.562 ms
```

Run 10: Report of Verus — Data Link
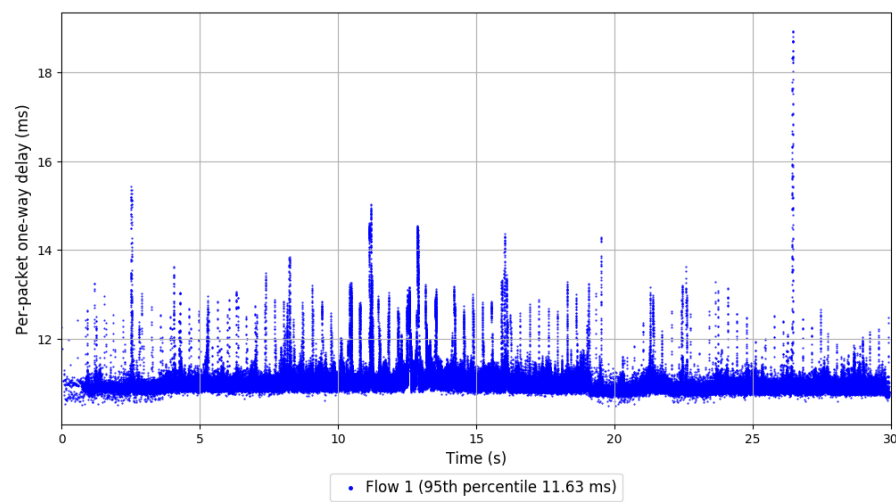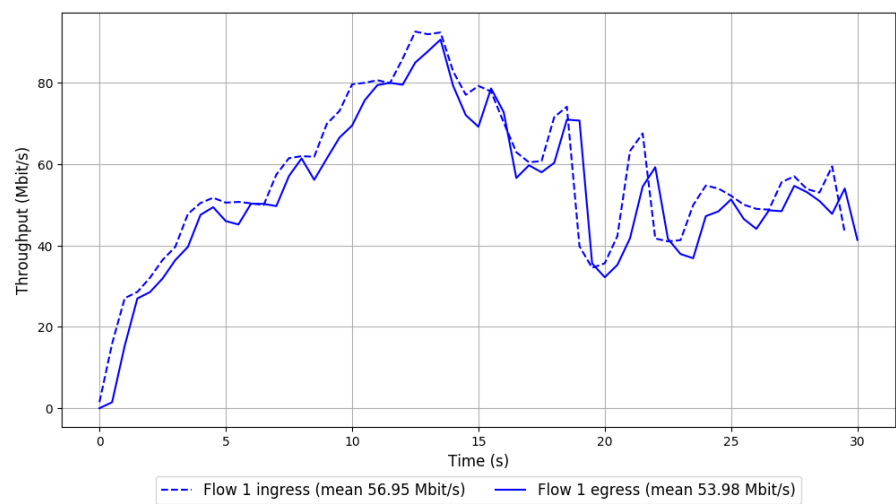
Figure is missing

Figure is missing

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-05-21 21:42:00
End at: 2018-05-21 21:42:30
Local clock offset: -0.37 ms
Remote clock offset: -1.691 ms

# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.98 Mbit/s
95th percentile per-packet one-way delay: 11.627 ms
Loss rate: 5.23%
-- Flow 1:
Average throughput: 53.98 Mbit/s
95th percentile per-packet one-way delay: 11.627 ms
Loss rate: 5.23%
```

Run 1: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 56.95 Mbit/s)   Flow 1 egress (mean 53.98 Mbit/s)
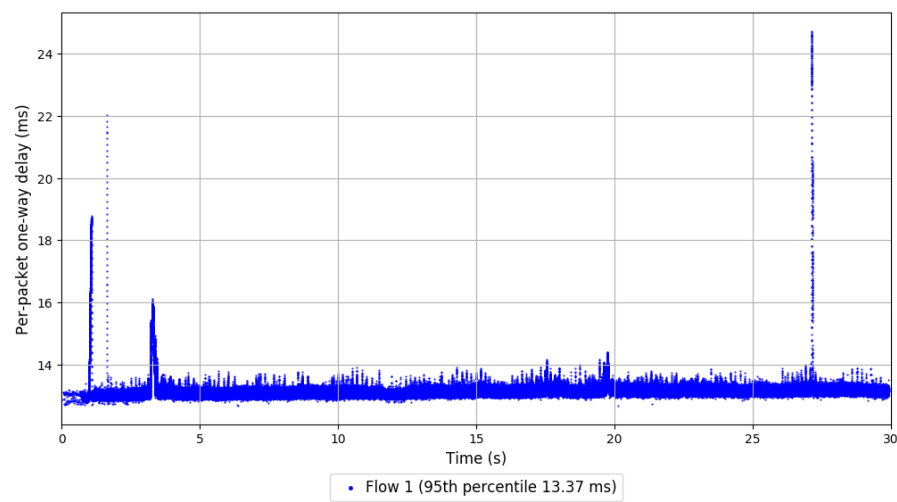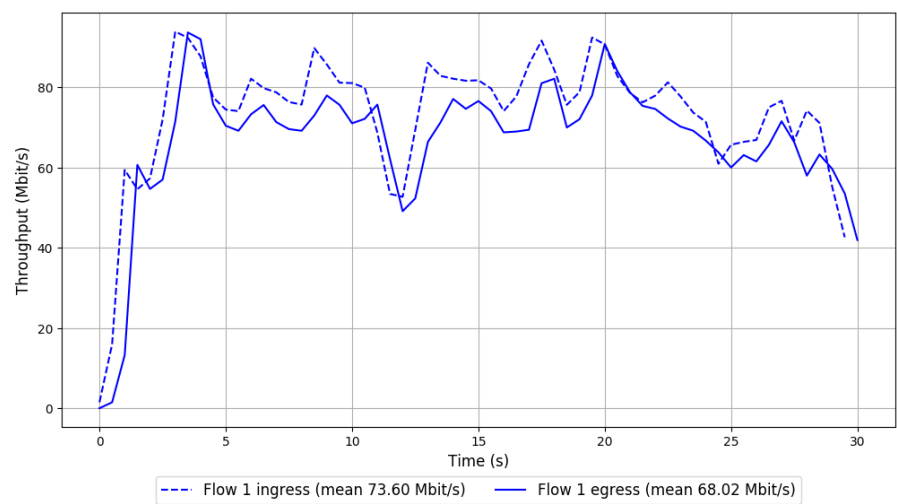

Flow 1 (95th percentile 11.63 ms)

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-05-21 21:59:51
End at: 2018-05-21 22:00:22
Local clock offset: -1.809 ms
Remote clock offset: -1.134 ms

# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.02 Mbit/s
95th percentile per-packet one-way delay: 13.371 ms
Loss rate: 7.58%
-- Flow 1:
Average throughput: 68.02 Mbit/s
95th percentile per-packet one-way delay: 13.371 ms
Loss rate: 7.58%
```

Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-05-21 22:17:38
End at: 2018-05-21 22:18:08
Local clock offset: 0.631 ms
Remote clock offset: -1.458 ms


# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.82 Mbit/s
95th percentile per-packet one-way delay: 12.602 ms
Loss rate: 7.33%
-- Flow 1:
Average throughput: 41.82 Mbit/s
95th percentile per-packet one-way delay: 12.602 ms
Loss rate: 7.33%
```
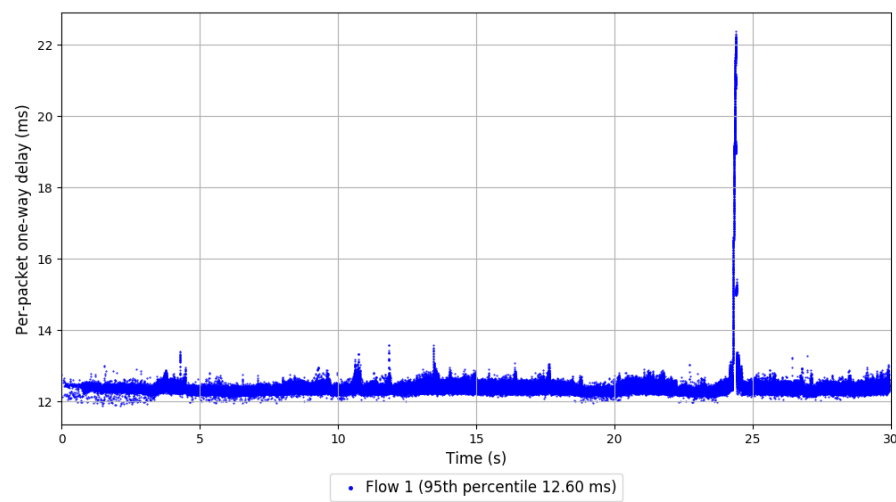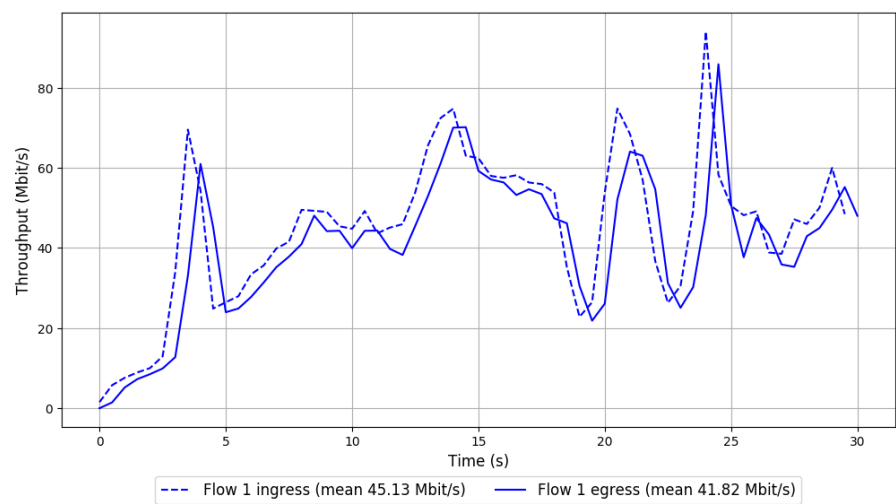
Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-05-21 22:35:24
End at: 2018-05-21 22:35:54
Local clock offset: 0.25 ms
Remote clock offset: 0.204 ms


# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.65 Mbit/s
95th percentile per-packet one-way delay: 13.734 ms
Loss rate: 7.51%
-- Flow 1:
Average throughput: 43.65 Mbit/s
95th percentile per-packet one-way delay: 13.734 ms
Loss rate: 7.51%
```
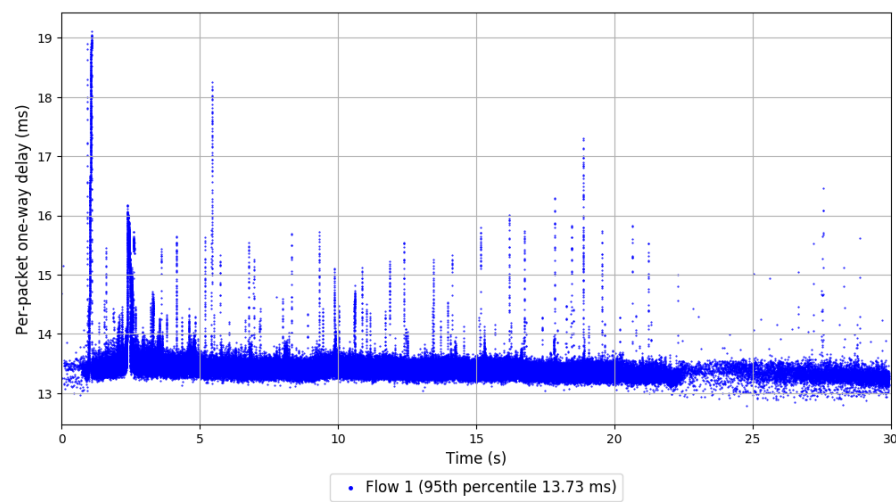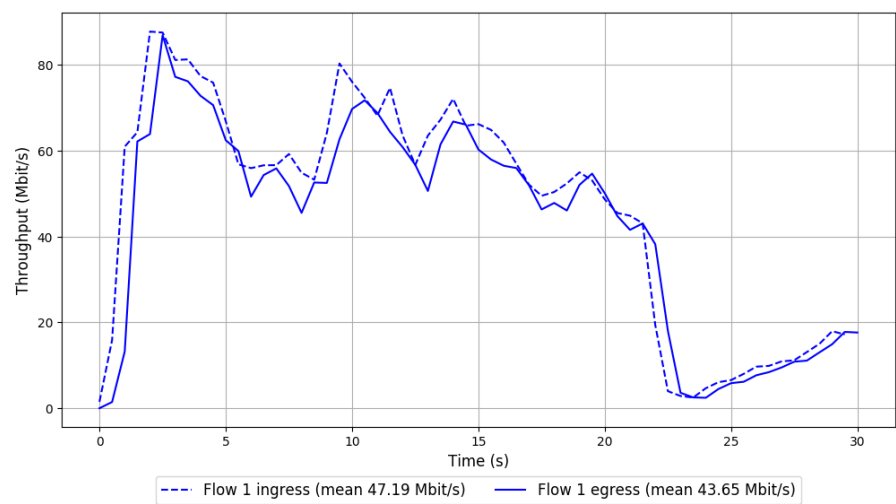
Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 47.19 Mbit/s) ----   Flow 1 egress (mean 43.65 Mbit/s) ——

• Flow 1 (95th percentile 13.73 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-05-21 22:53:14
End at: 2018-05-21 22:53:44
Local clock offset: 0.883 ms
Remote clock offset: 1.833 ms


# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.68 Mbit/s
95th percentile per-packet one-way delay: 12.859 ms
Loss rate: 2.68%
-- Flow 1:
Average throughput: 81.68 Mbit/s
95th percentile per-packet one-way delay: 12.859 ms
Loss rate: 2.68%
```
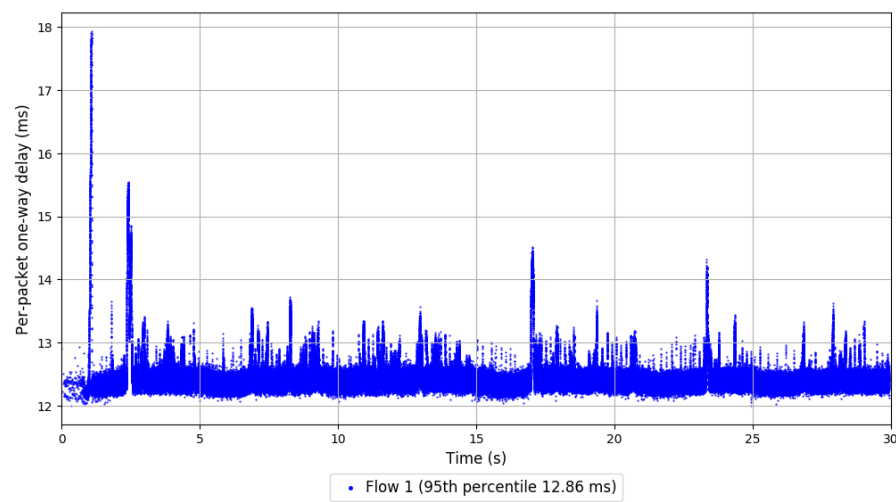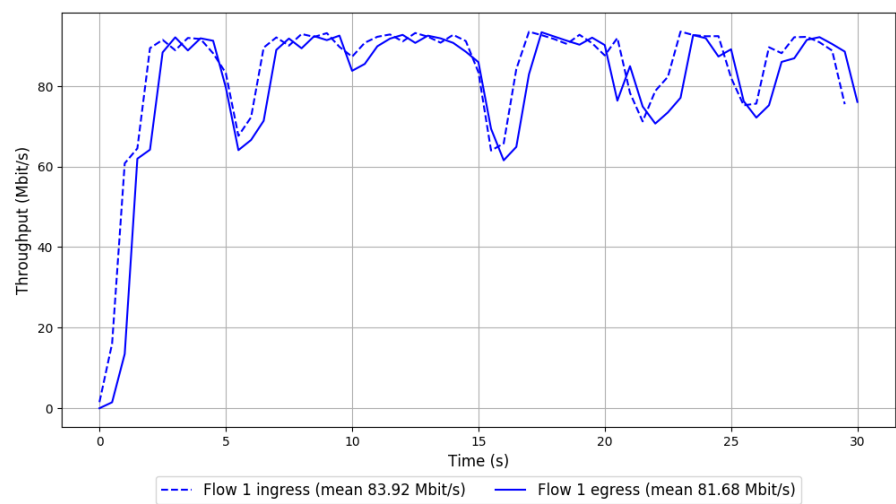
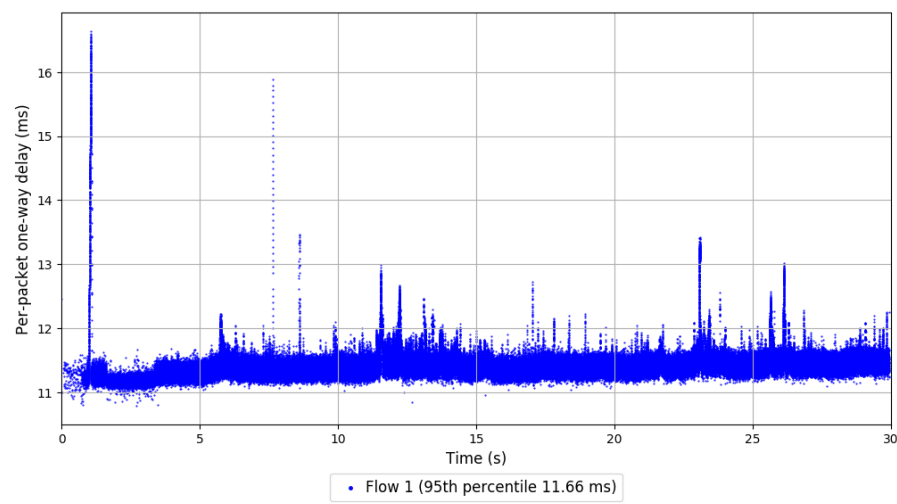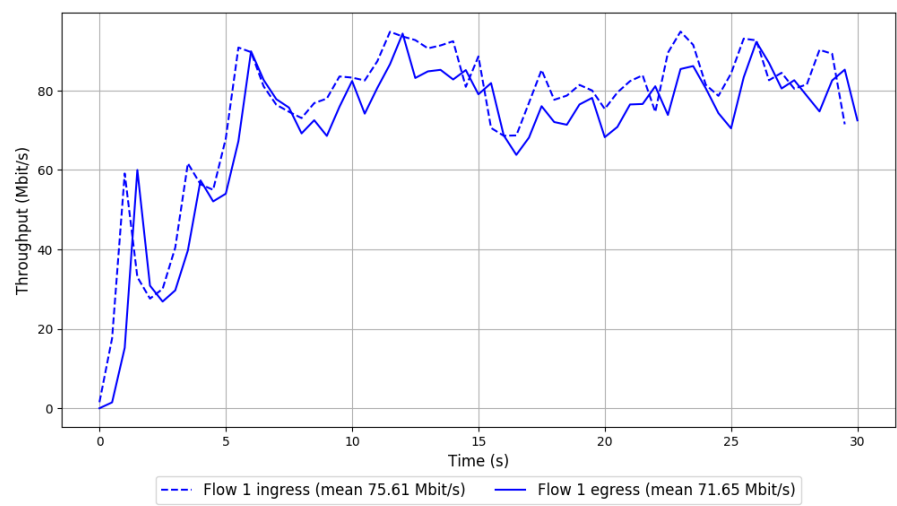# Run 5: Report of PCC-Vivace — Data Link

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-05-21 23:10:59
End at: 2018-05-21 23:11:29
Local clock offset: -2.167 ms
Remote clock offset: -2.213 ms


# Below is generated by plot.py at 2018-05-22 00:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.65 Mbit/s
95th percentile per-packet one-way delay: 11.662 ms
Loss rate: 5.24%
-- Flow 1:
Average throughput: 71.65 Mbit/s
95th percentile per-packet one-way delay: 11.662 ms
Loss rate: 5.24%
```

Run 6: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 75.61 Mbit/s) ----   Flow 1 egress (mean 71.65 Mbit/s) ———
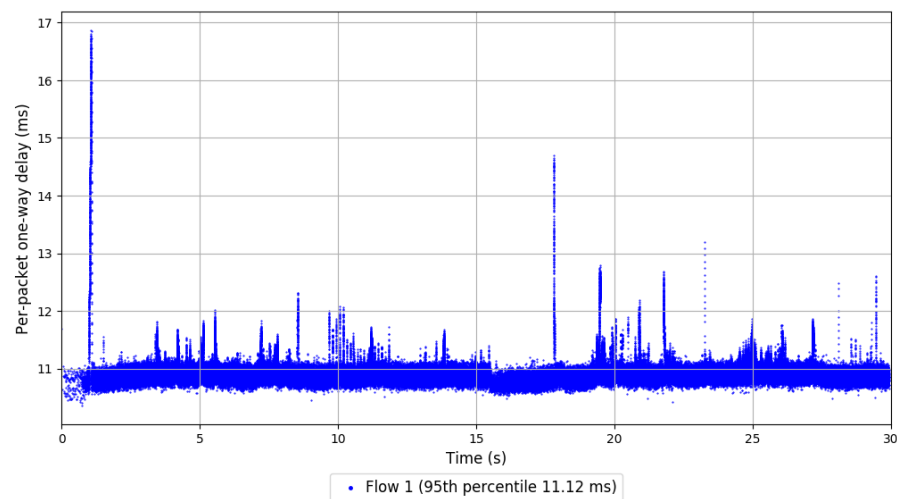
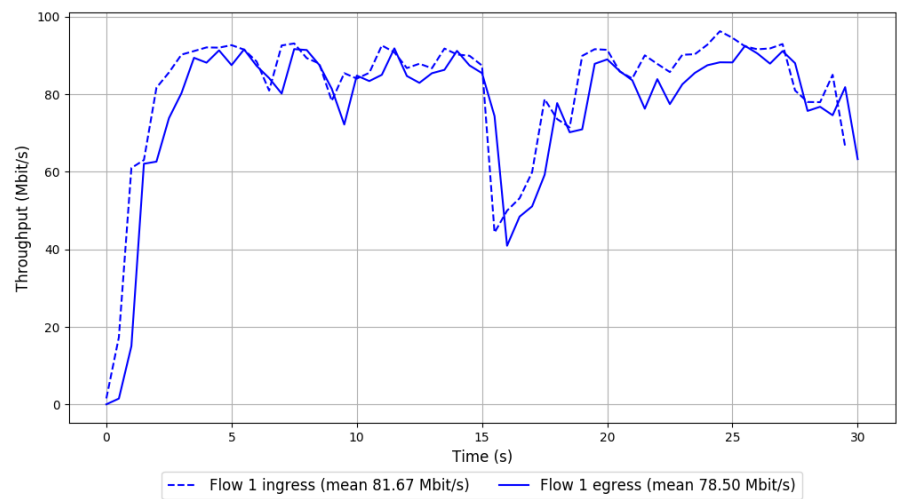

· Flow 1 (95th percentile 11.66 ms)

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-05-21 23:28:49
End at: 2018-05-21 23:29:19
Local clock offset: -3.08 ms
Remote clock offset: -4.883 ms


# Below is generated by plot.py at 2018-05-22 00:55:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.50 Mbit/s
95th percentile per-packet one-way delay: 11.122 ms
Loss rate: 3.88%
-- Flow 1:
Average throughput: 78.50 Mbit/s
95th percentile per-packet one-way delay: 11.122 ms
Loss rate: 3.88%
```

Run 7: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 81.67 Mbit/s) ---- Flow 1 egress (mean 78.50 Mbit/s)
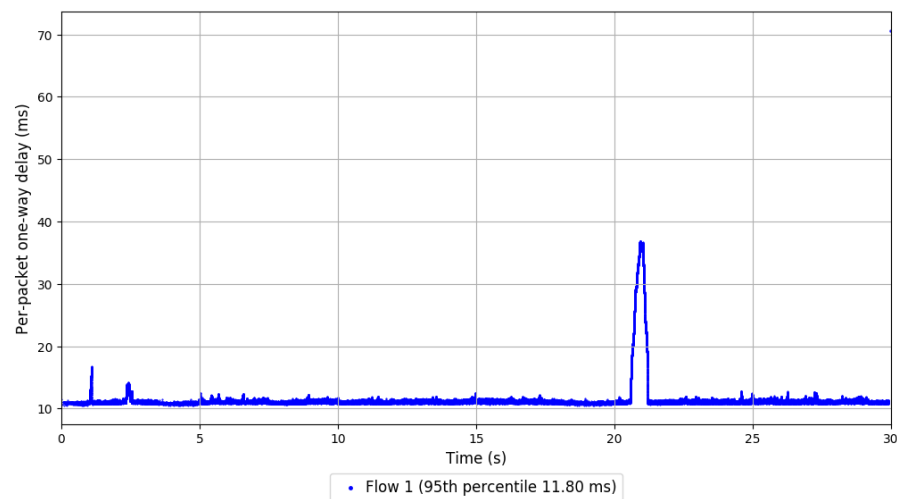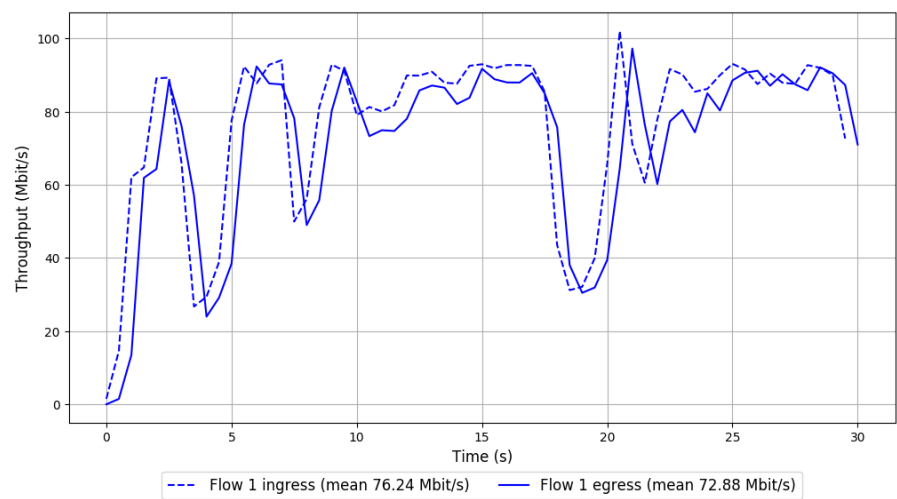

Flow 1 (95th percentile 11.12 ms)

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-05-21 23:46:39
End at: 2018-05-21 23:47:09
Local clock offset: -5.595 ms
Remote clock offset: -7.354 ms


# Below is generated by plot.py at 2018-05-22 00:55:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.88 Mbit/s
95th percentile per-packet one-way delay: 11.802 ms
Loss rate: 4.21%
-- Flow 1:
Average throughput: 72.88 Mbit/s
95th percentile per-packet one-way delay: 11.802 ms
Loss rate: 4.21%
```

Run 8: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 76.24 Mbit/s)   Flow 1 egress (mean 72.88 Mbit/s)
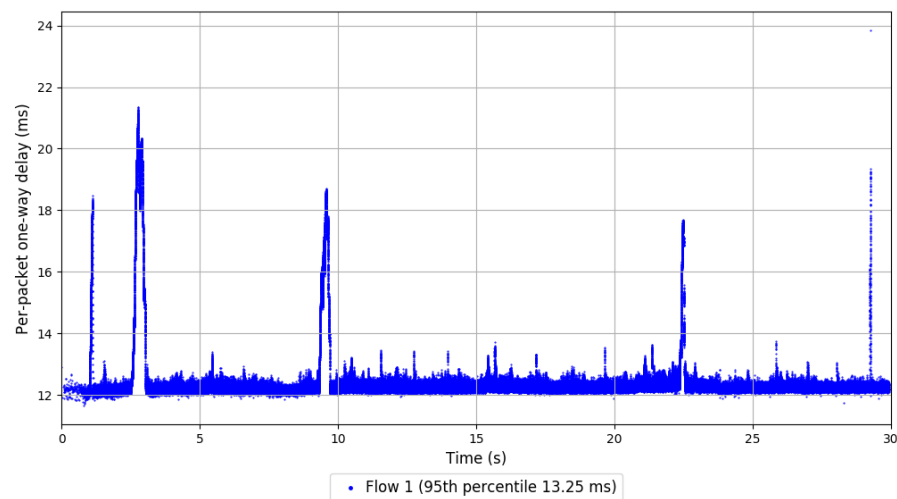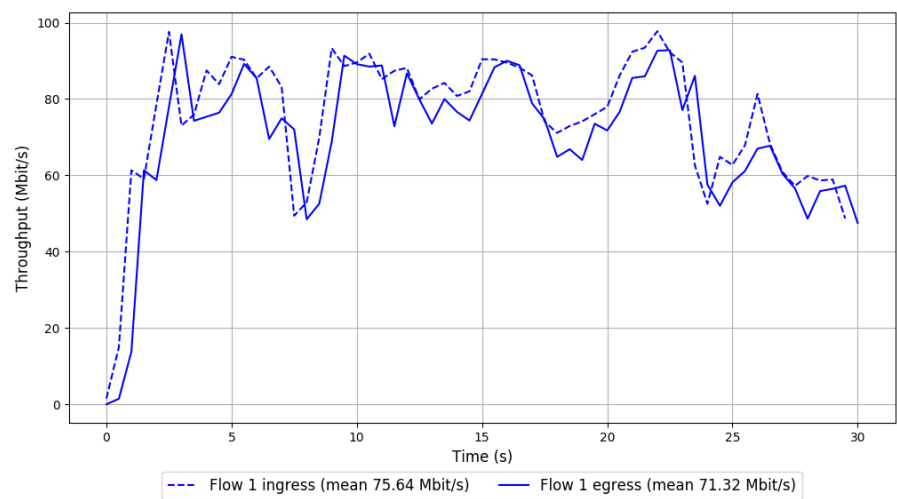

Flow 1 (95th percentile 11.80 ms)

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-05-22 00:04:22
End at: 2018-05-22 00:04:52
Local clock offset: -2.745 ms
Remote clock offset: -7.936 ms


# Below is generated by plot.py at 2018-05-22 00:55:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.32 Mbit/s
95th percentile per-packet one-way delay: 13.249 ms
Loss rate: 5.71%
-- Flow 1:
Average throughput: 71.32 Mbit/s
95th percentile per-packet one-way delay: 13.249 ms
Loss rate: 5.71%
```

Run 9: Report of PCC-Vivace — Data Link

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-05-22 00:22:12
End at: 2018-05-22 00:22:43
Local clock offset: -1.057 ms
Remote clock offset: -0.768 ms


# Below is generated by plot.py at 2018-05-22 00:55:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.14 Mbit/s
95th percentile per-packet one-way delay: 13.247 ms
Loss rate: 4.36%
-- Flow 1:
Average throughput: 60.14 Mbit/s
95th percentile per-packet one-way delay: 13.247 ms
Loss rate: 4.36%
```
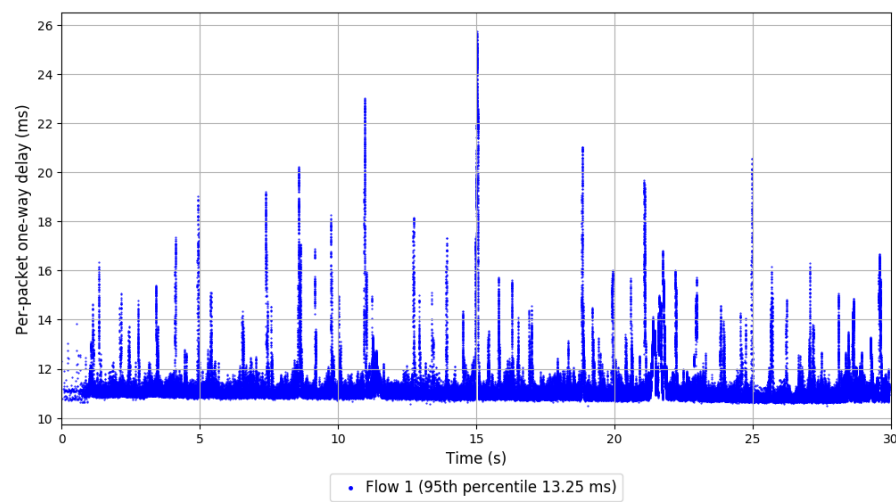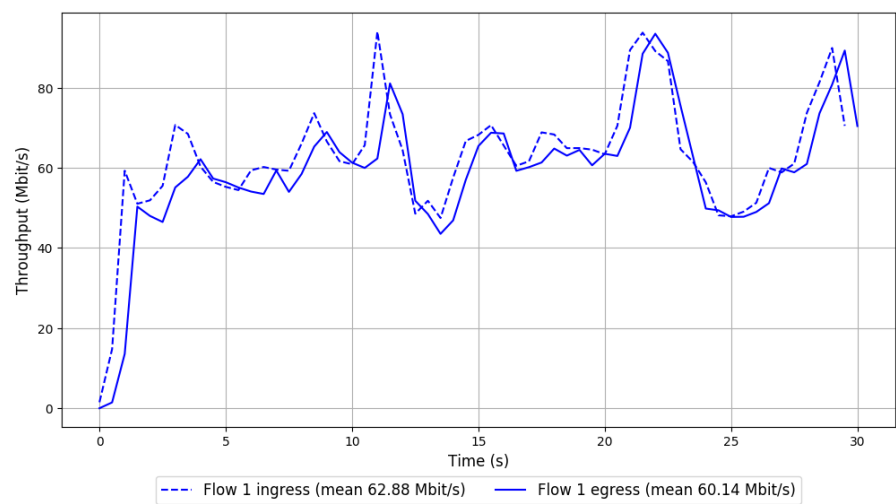
Run 10: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 62.88 Mbit/s)　　Flow 1 egress (mean 60.14 Mbit/s)
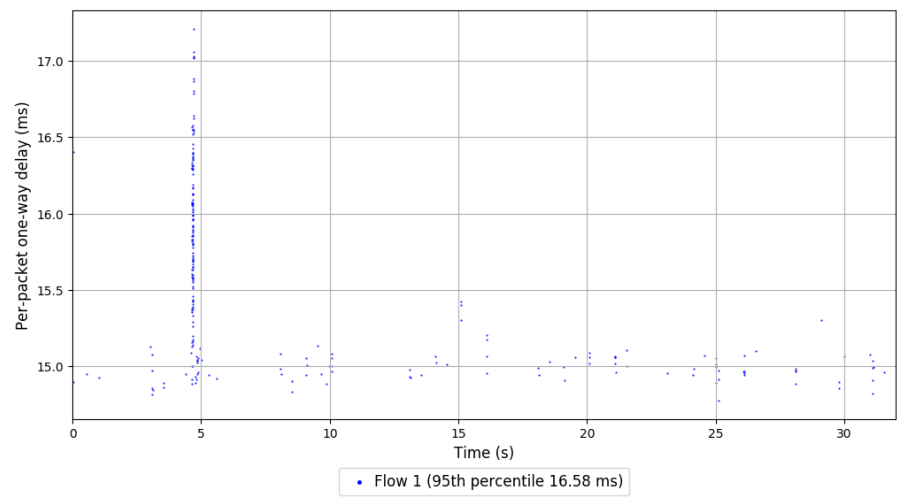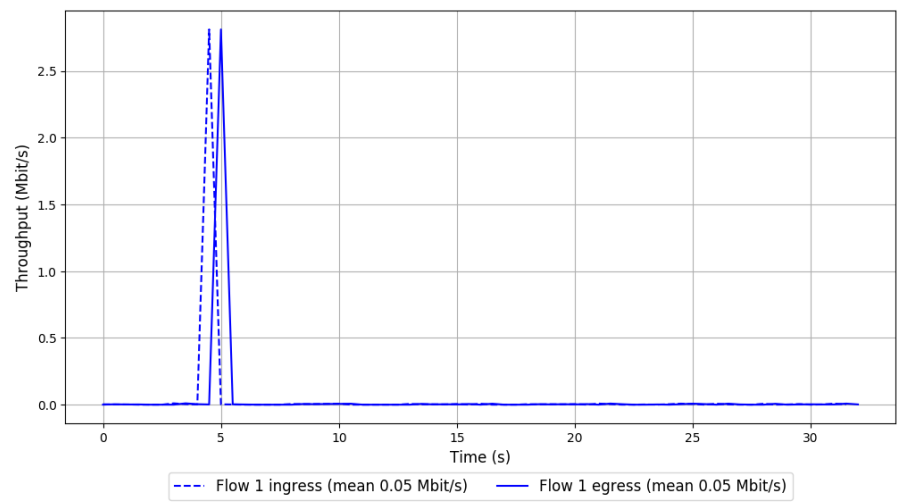

Flow 1 (95th percentile 13.25 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2018-05-21 21:49:49
End at: 2018-05-21 21:50:19
Local clock offset: -4.963 ms
Remote clock offset: -1.145 ms


# Below is generated by plot.py at 2018-05-22 00:55:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 16.576 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 16.576 ms
Loss rate: 0.00%
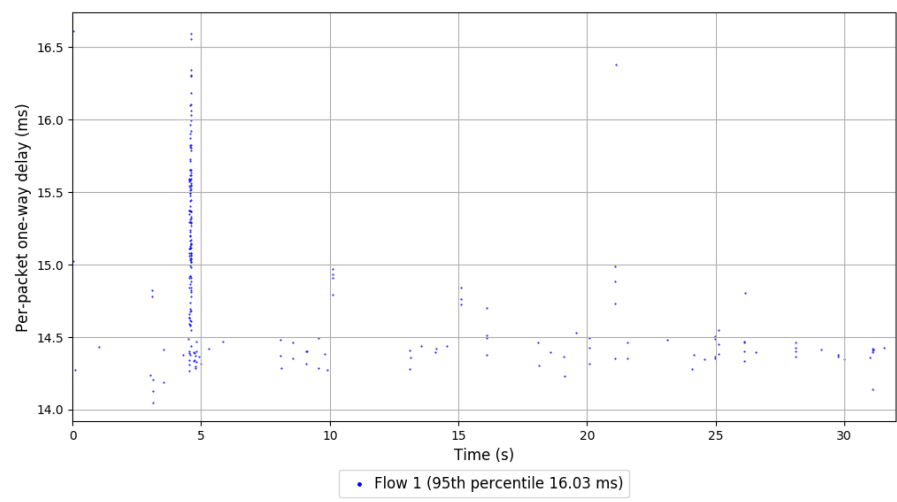```
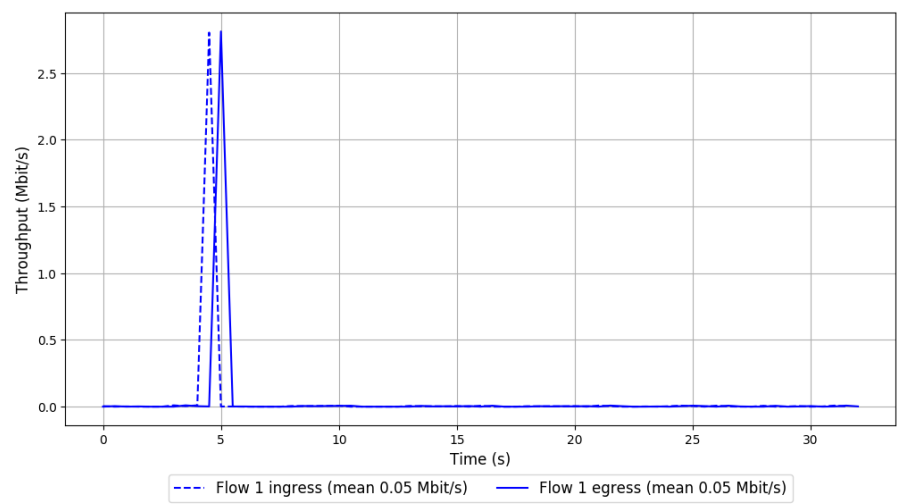
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-05-21 22:07:45
End at: 2018-05-21 22:08:15
Local clock offset: -2.13 ms
Remote clock offset: -1.605 ms

Below is generated by plot.py at 2018-05-22 00:55:06
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 16.028 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 16.028 ms
Loss rate: 0.00%
```
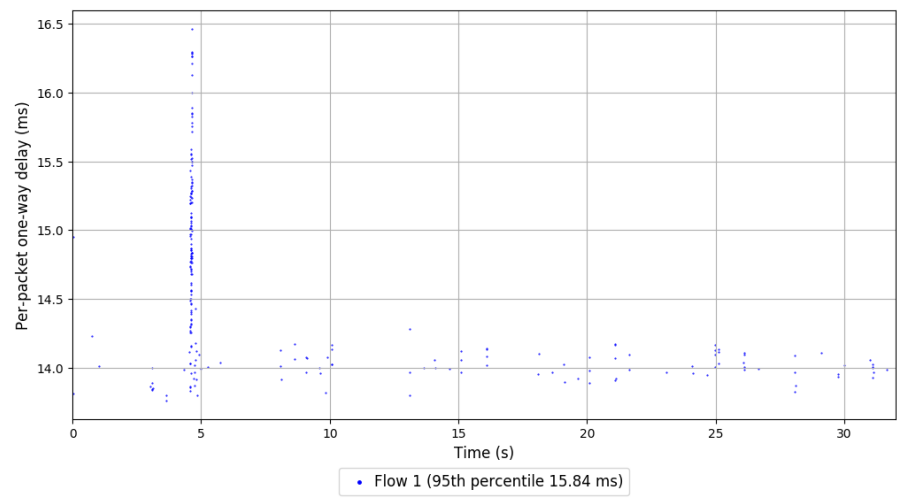
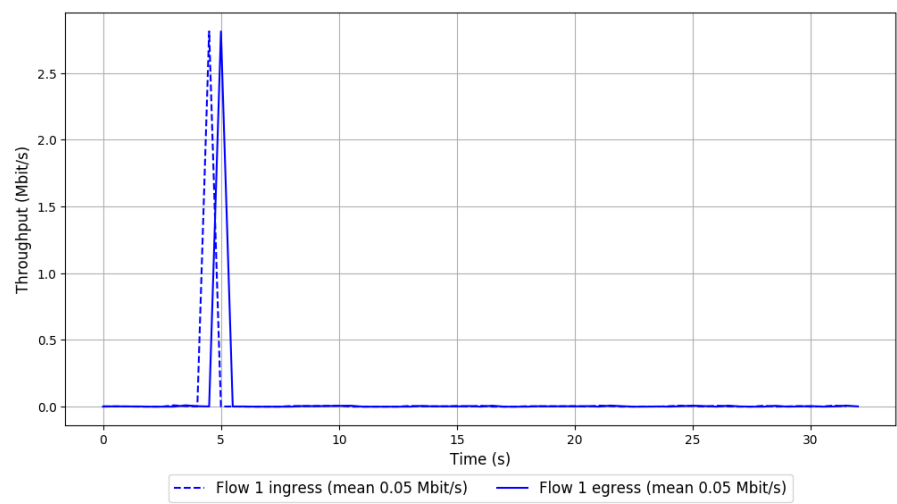Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-05-21 22:25:30
End at: 2018-05-21 22:26:00
Local clock offset: -1.17 ms
Remote clock offset: -1.317 ms

Below is generated by plot.py at 2018-05-22 00:55:06
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 15.842 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 15.842 ms
Loss rate: 0.00%
```
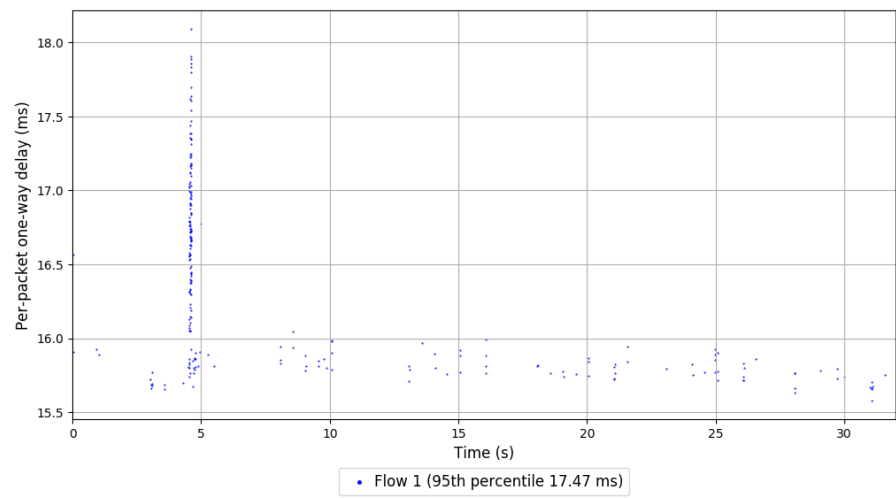
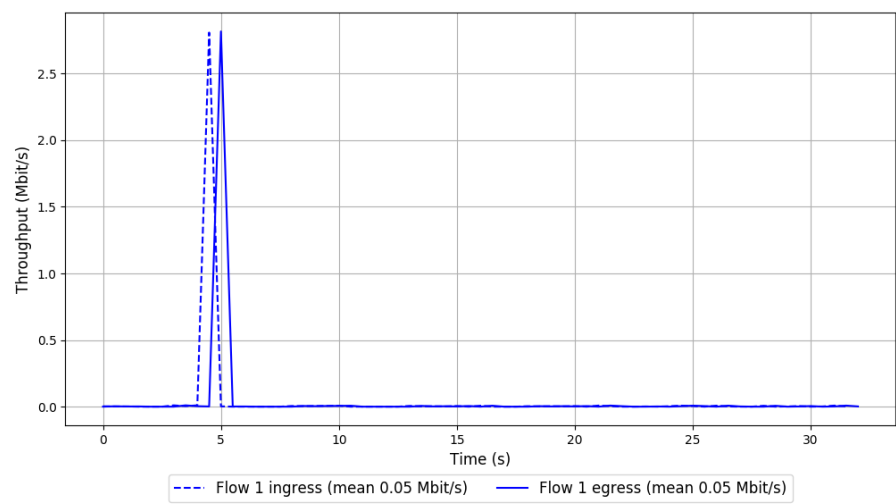Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-05-21 22:43:18
End at: 2018-05-21 22:43:48
Local clock offset: -6.175 ms
Remote clock offset: -2.539 ms


# Below is generated by plot.py at 2018-05-22 00:55:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 17.469 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 17.469 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-05-21 23:01:04
End at: 2018-05-21 23:01:34
Local clock offset: -1.041 ms
Remote clock offset: 2.511 ms


# Below is generated by plot.py at 2018-05-22 00:55:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 14.620 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 14.620 ms
Loss rate: 0.00%
```
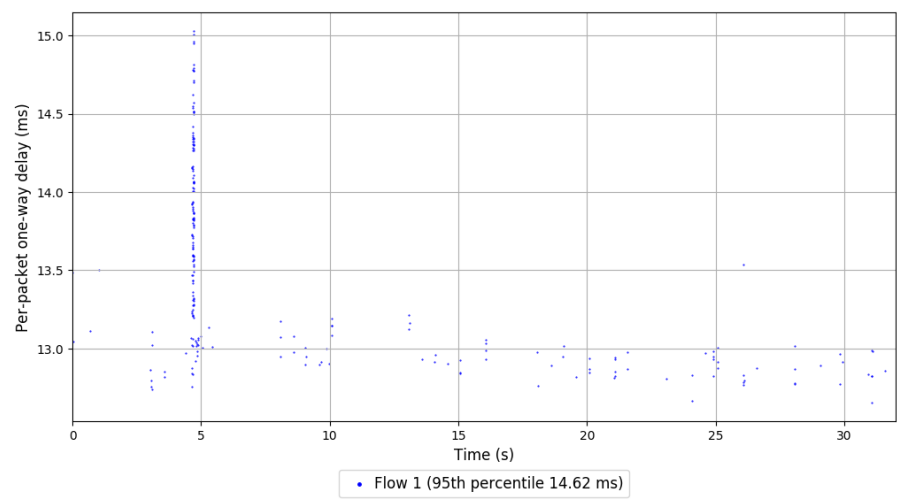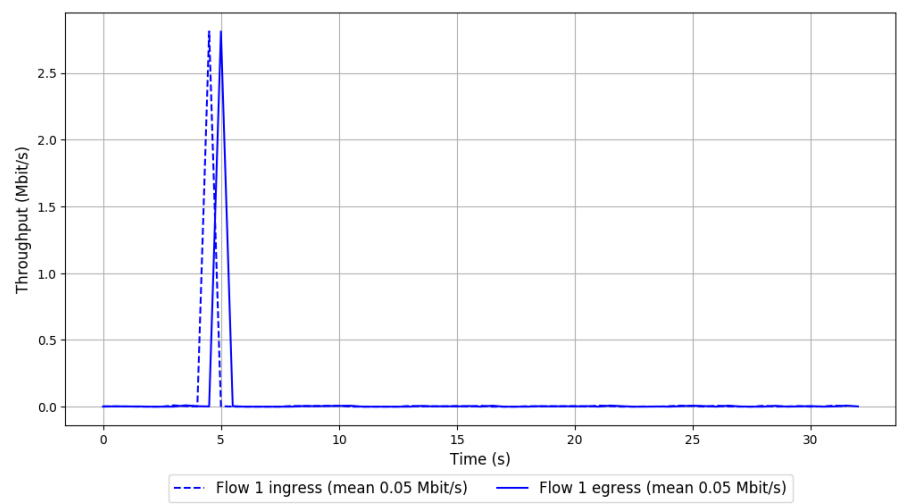
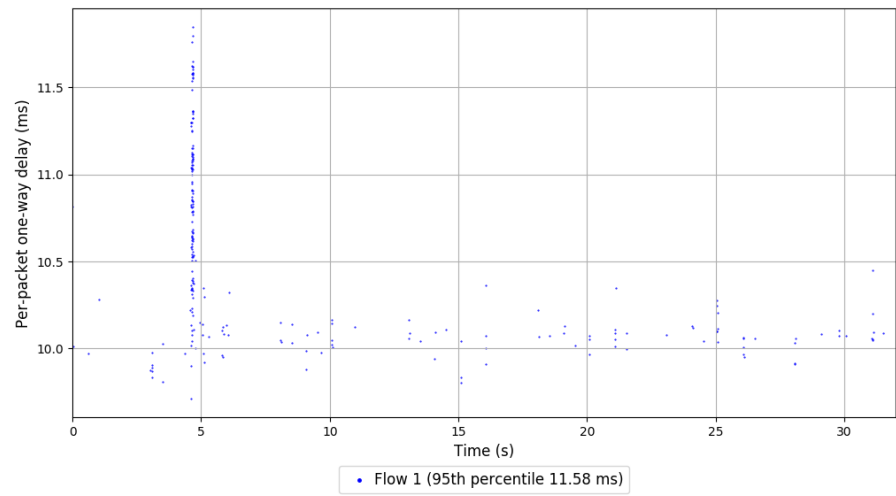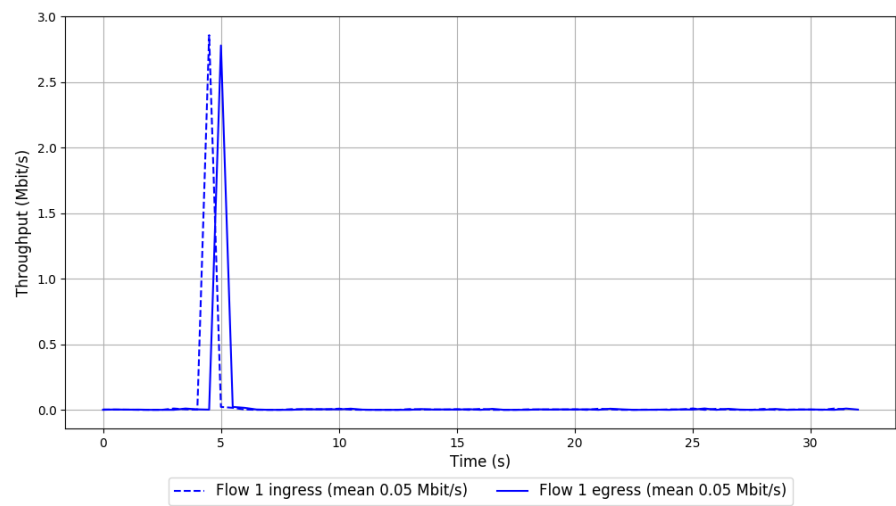Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-05-21 23:18:48
End at: 2018-05-21 23:19:18
Local clock offset: -1.908 ms
Remote clock offset: -3.997 ms


# Below is generated by plot.py at 2018-05-22 00:55:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 11.576 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 11.576 ms
Loss rate: 2.58%
```

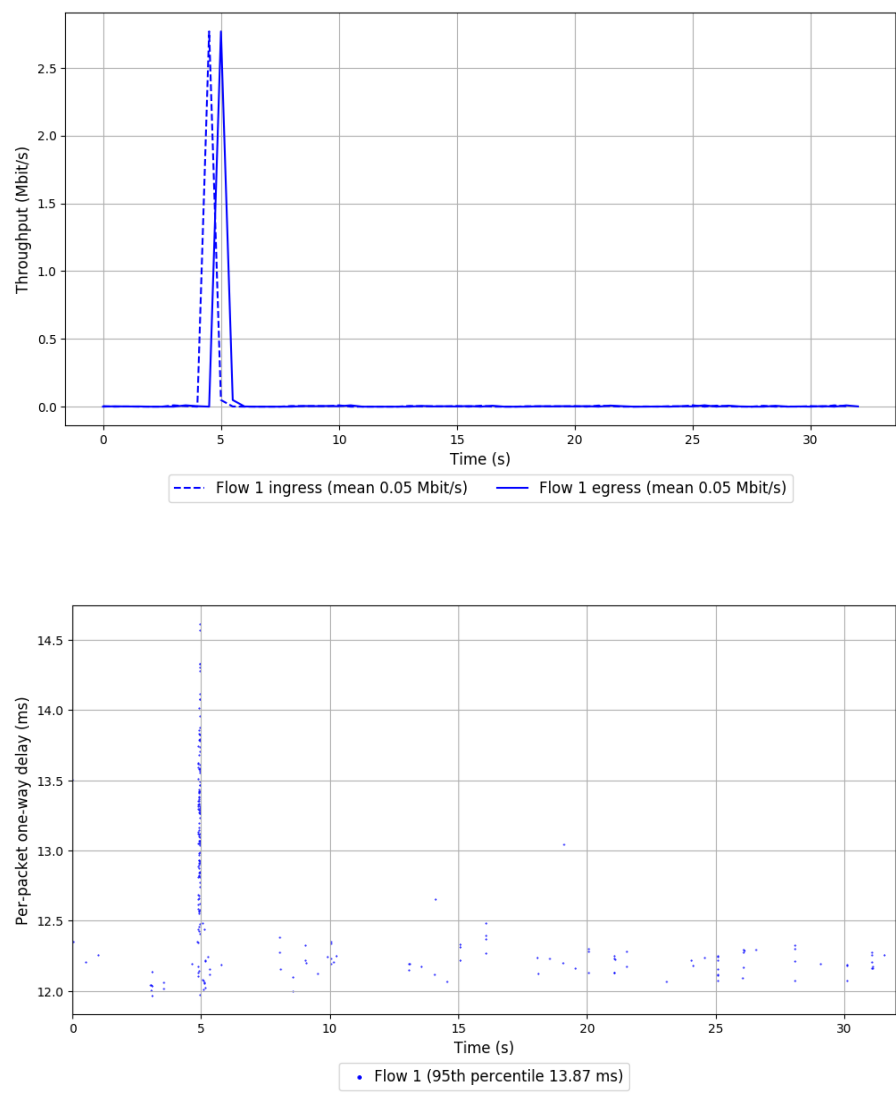Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-05-21 23:36:39
End at: 2018-05-21 23:37:09
Local clock offset: -6.375 ms
Remote clock offset: -6.664 ms


# Below is generated by plot.py at 2018-05-22 00:55:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 13.874 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 13.874 ms
Loss rate: 0.00%
```

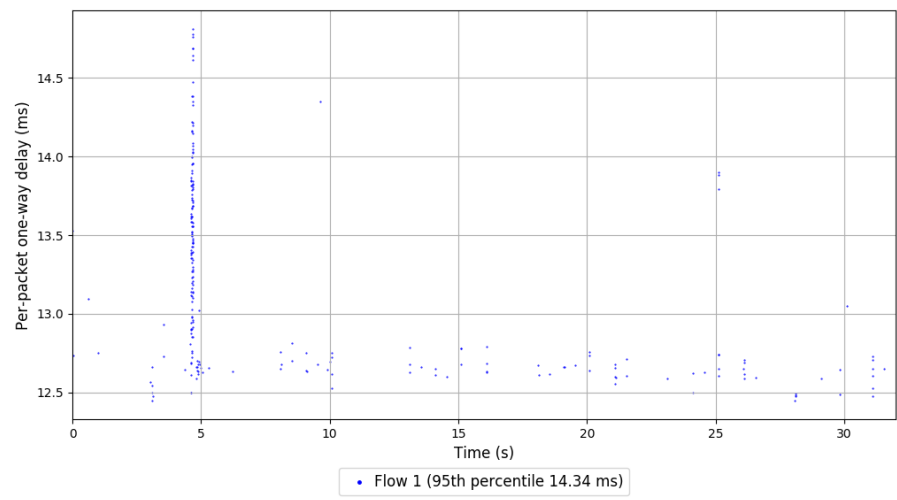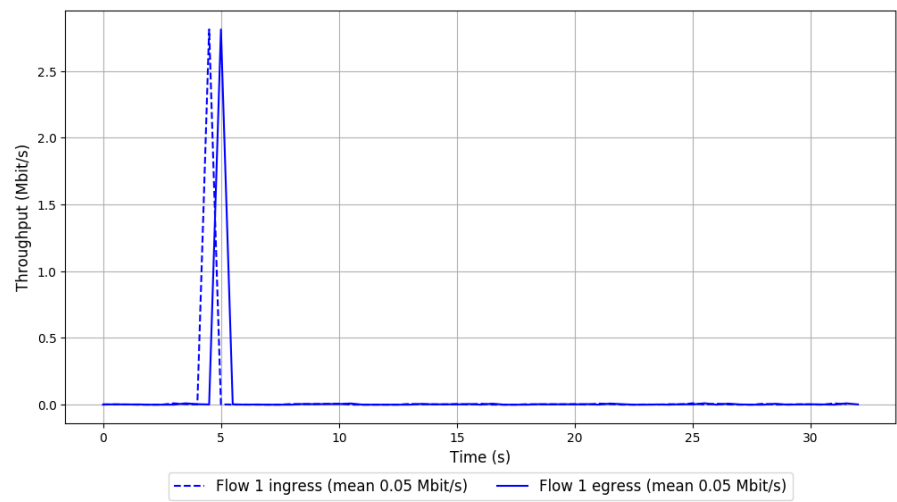Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-05-21 23:54:28
End at: 2018-05-21 23:54:58
Local clock offset: -7.449 ms
Remote clock offset: -7.354 ms


# Below is generated by plot.py at 2018-05-22 00:55:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 14.344 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 14.344 ms
Loss rate: 0.00%
```

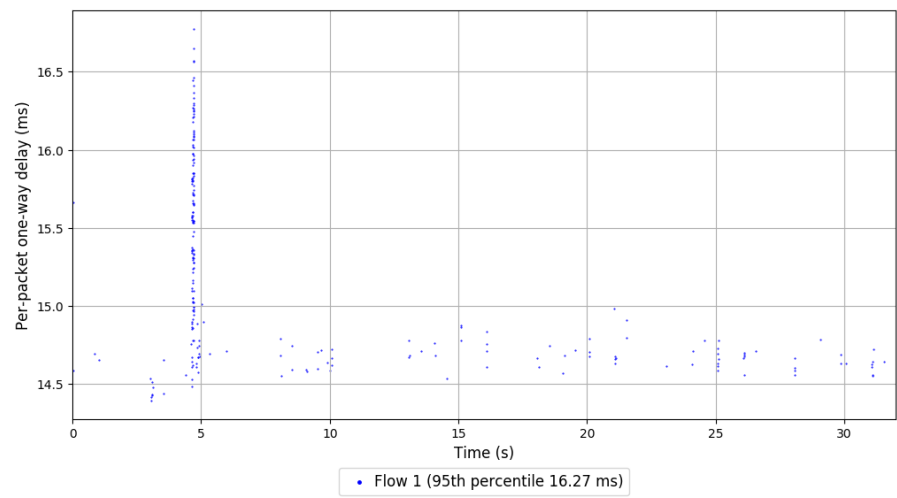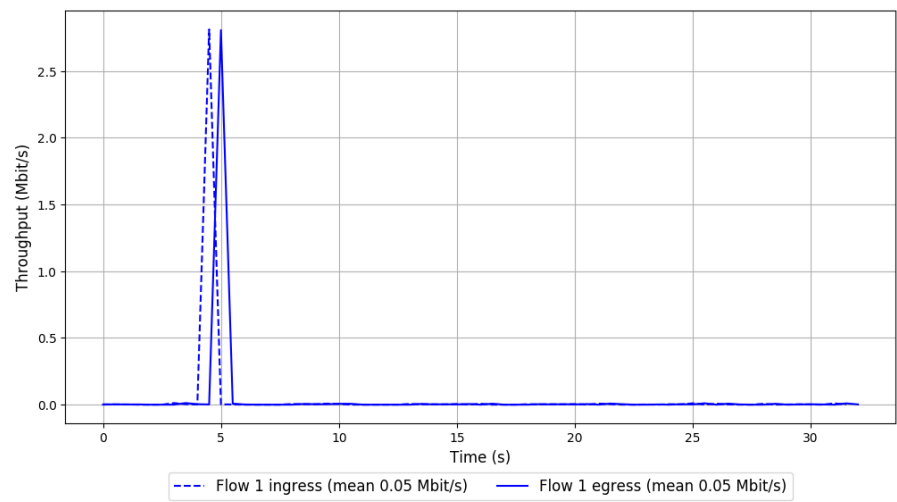Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-05-22 00:12:16
End at: 2018-05-22 00:12:46
Local clock offset: -4.968 ms
Remote clock offset: -9.099 ms


# Below is generated by plot.py at 2018-05-22 00:55:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 16.270 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 16.270 ms
Loss rate: 0.00%
```

Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-05-22 00:30:07
End at: 2018-05-22 00:30:37
Local clock offset: -1.512 ms
Remote clock offset: 2.058 ms


# Below is generated by plot.py at 2018-05-22 00:55:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 14.249 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 14.249 ms
Loss rate: 0.00%
```

Run 10: Report of WebRTC media — Data Link