Pantheon Report

Generated at 2017-09-17 18:22:02 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

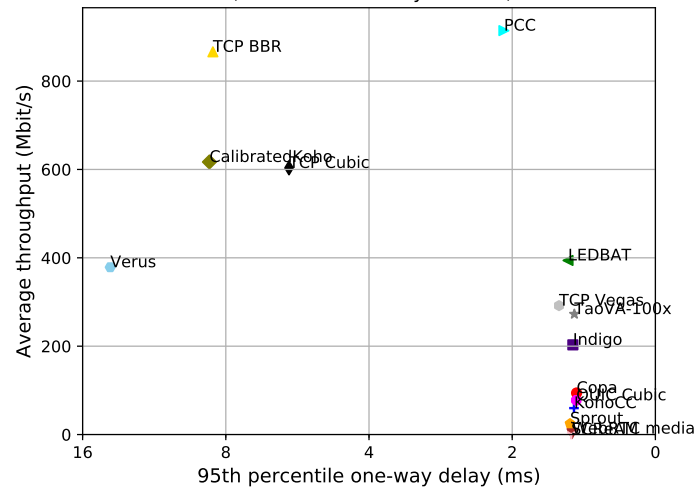Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

Tested BBR with qdisc of Fair Queuing (`fq`), and other schemes with the default Linux qdisc (`pfifo_fast`).

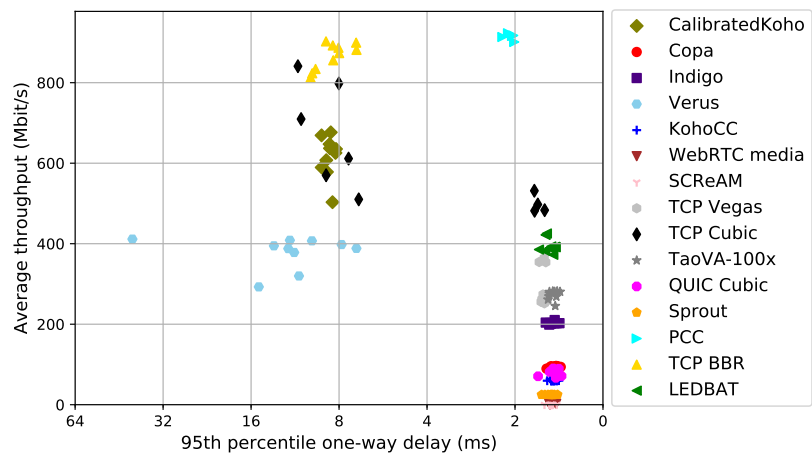NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ 57453dc11f8da93a2e03eea75289fea01b816298
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
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/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from Stanford Ethernet to AWS California 1 Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)

test from Stanford Ethernet to AWS California 1 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	866.25	8.52	0.09
CalibratedKoho	10	616.94	8.66	0.08
Copa	10	94.05	1.10	0.06
TCP Cubic	10	603.44	5.89	0.06
Indigo	10	203.02	1.15	0.07
KohoCC	10	59.84	1.14	0.07
LEDBAT	10	394.05	1.22	0.08
PCC	5	914.21	2.08	0.23
QUIC Cubic	9	77.59	1.11	0.07
SCReAM	10	0.22	1.18	0.13
Sprout	10	24.76	1.19	0.08
TaoVA-100x	10	272.65	1.13	0.07
TCP Vegas	10	291.78	1.35	0.07
Verus	10	378.68	14.00	0.07
WebRTC media	10	2.15	1.16	0.09

```
Run 1: Statistics of TCP BBR

Start at: 2017-09-17 09:38:18
End at: 2017-09-17 09:38:48
Local clock offset: 5.897 ms
Remote clock offset: -4.496 ms


# Below is generated by plot.py at 2017-09-17 17:10:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 886.96 Mbit/s
95th percentile per-packet one-way delay: 8.037 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 886.96 Mbit/s
95th percentile per-packet one-way delay: 8.037 ms
Loss rate: 0.08%
```
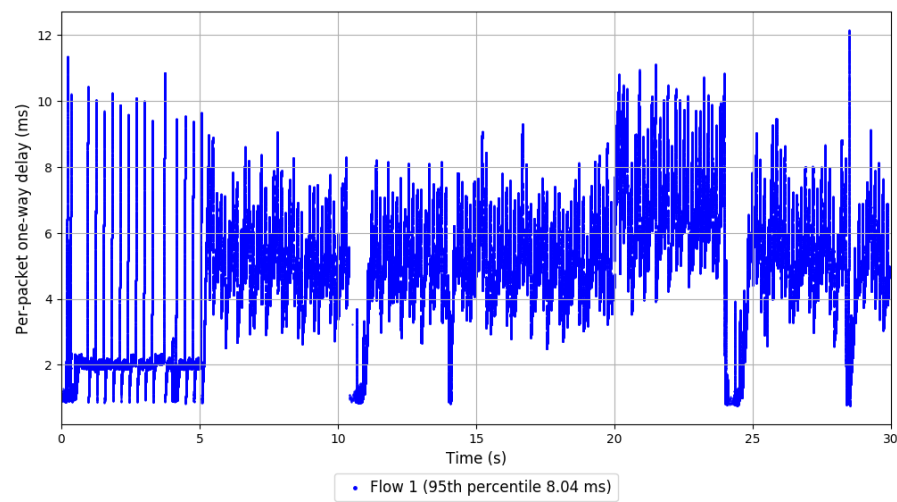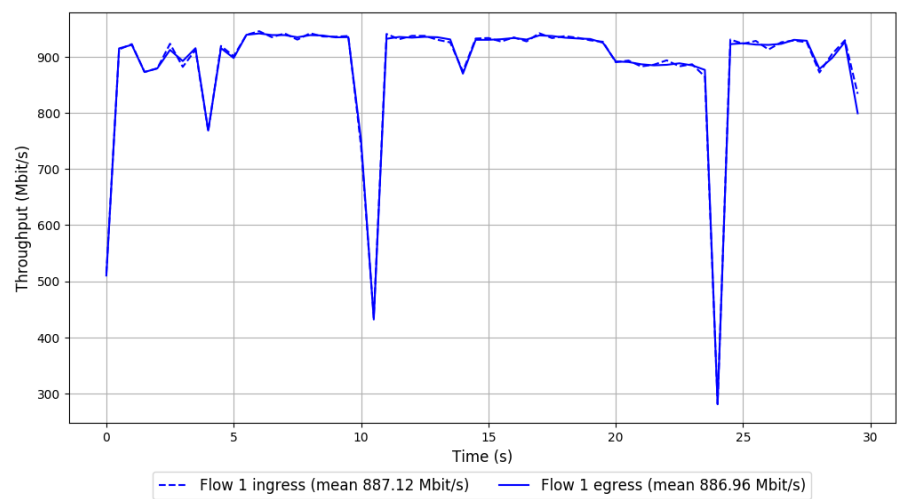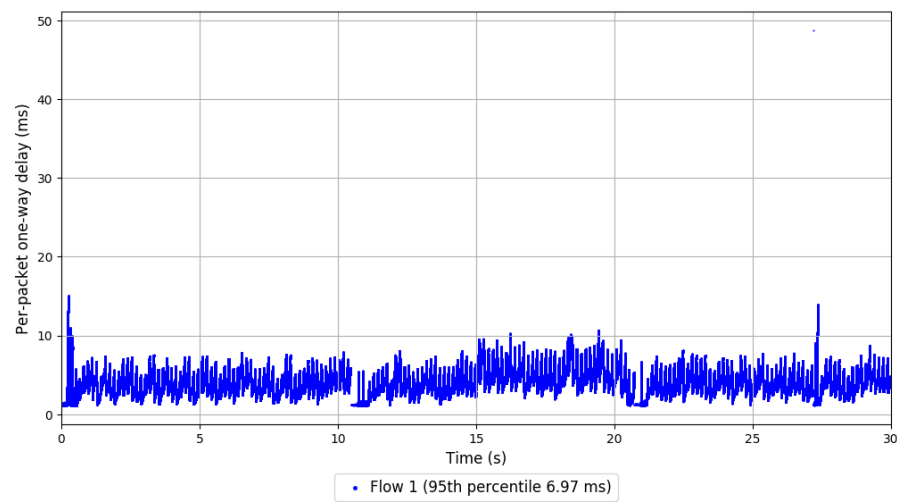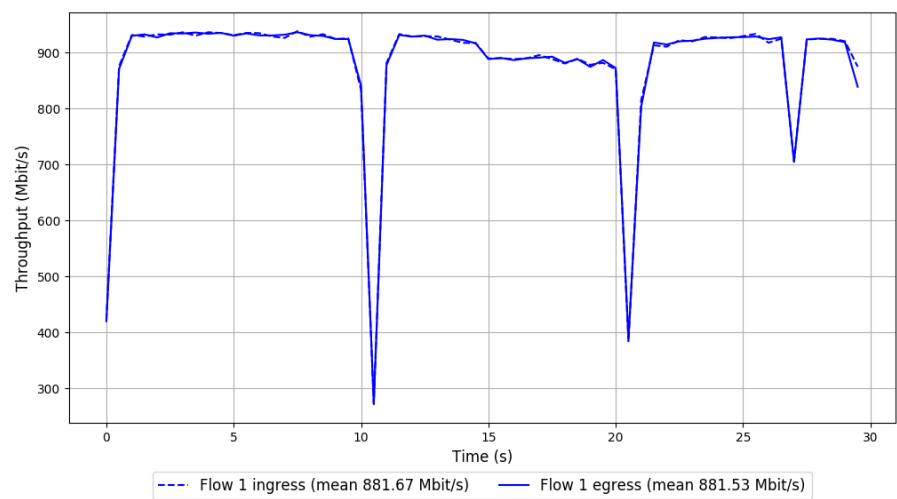
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2017-09-17 09:59:11
End at: 2017-09-17 09:59:41
Local clock offset: 5.371 ms
Remote clock offset: -4.454 ms


# Below is generated by plot.py at 2017-09-17 17:10:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 881.53 Mbit/s
95th percentile per-packet one-way delay: 6.973 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 881.53 Mbit/s
95th percentile per-packet one-way delay: 6.973 ms
Loss rate: 0.08%
```
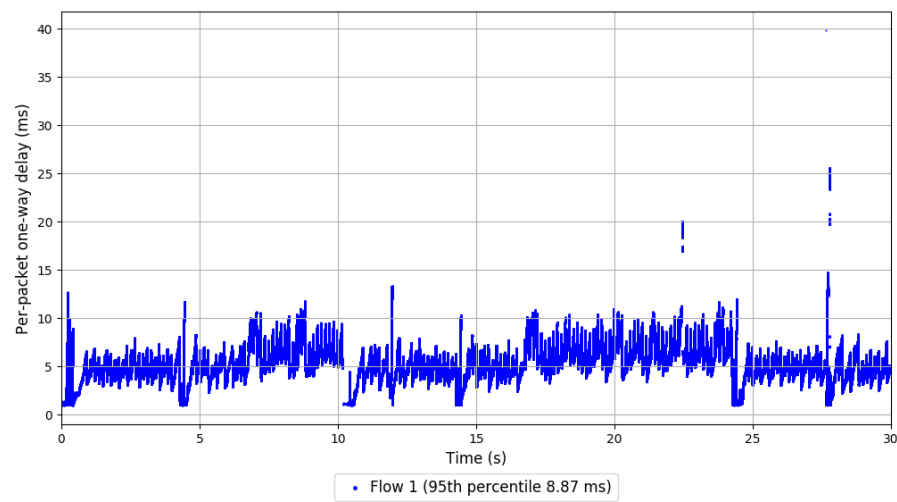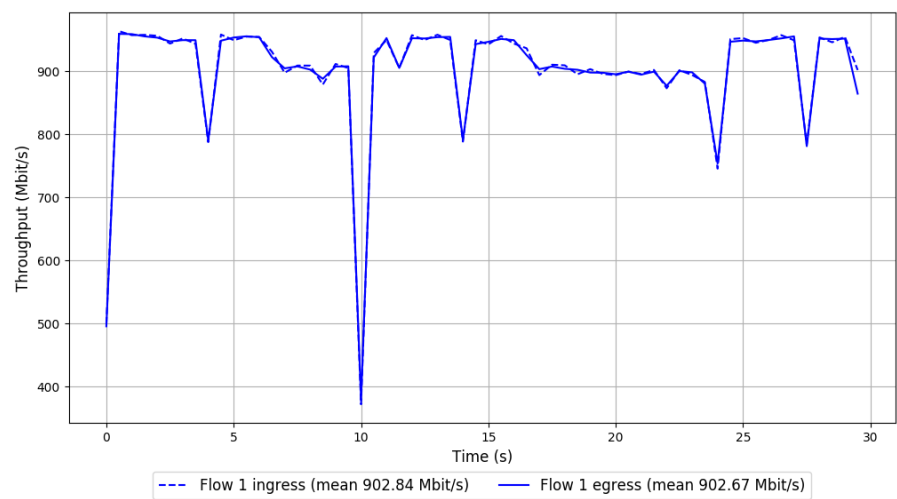
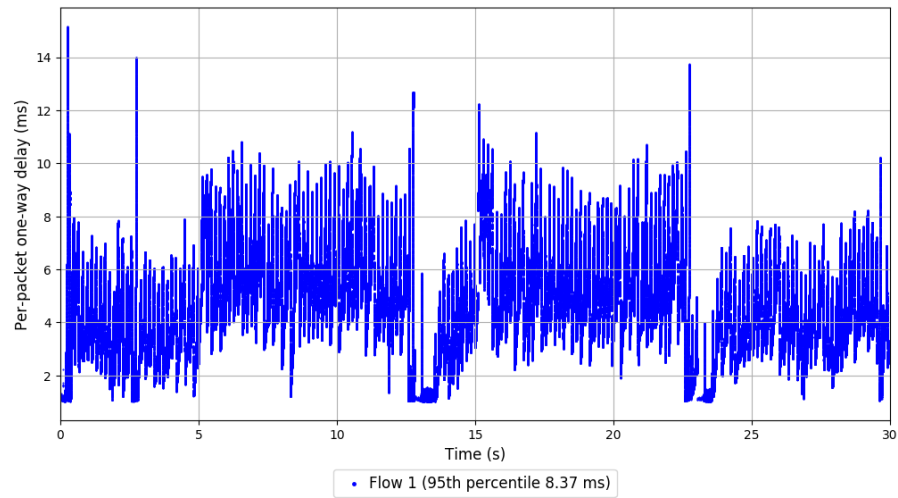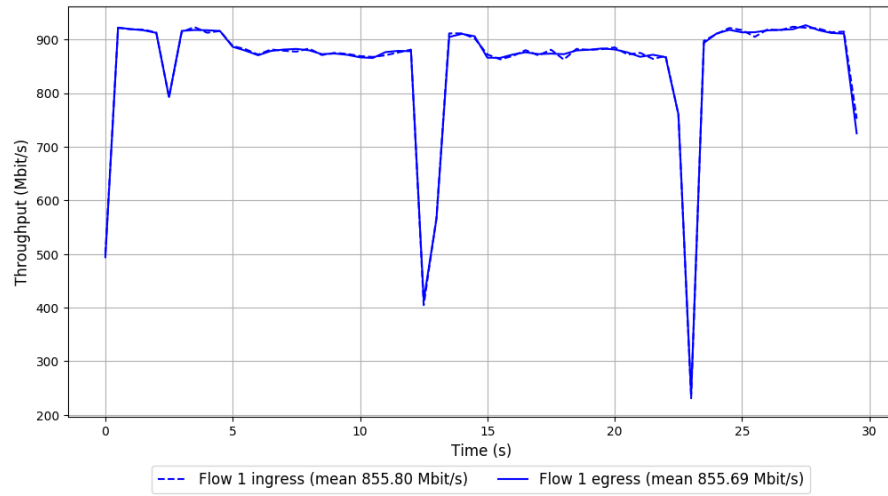Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 881.67 Mbit/s)   Flow 1 egress (mean 881.53 Mbit/s)

Flow 1 (95th percentile 6.97 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2017-09-17 10:19:58
End at: 2017-09-17 10:20:28
Local clock offset: 3.867 ms
Remote clock offset: -3.965 ms


# Below is generated by plot.py at 2017-09-17 17:11:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 902.67 Mbit/s
95th percentile per-packet one-way delay: 8.867 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 902.67 Mbit/s
95th percentile per-packet one-way delay: 8.867 ms
Loss rate: 0.09%
```

Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 902.84 Mbit/s) --- Flow 1 egress (mean 902.67 Mbit/s)

• Flow 1 (95th percentile 8.87 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2017-09-17 10:40:59
End at: 2017-09-17 10:41:29
Local clock offset: 2.58 ms
Remote clock offset: -3.871 ms


# Below is generated by plot.py at 2017-09-17 17:11:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 855.69 Mbit/s
95th percentile per-packet one-way delay: 8.374 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 855.69 Mbit/s
95th percentile per-packet one-way delay: 8.374 ms
Loss rate: 0.08%
```
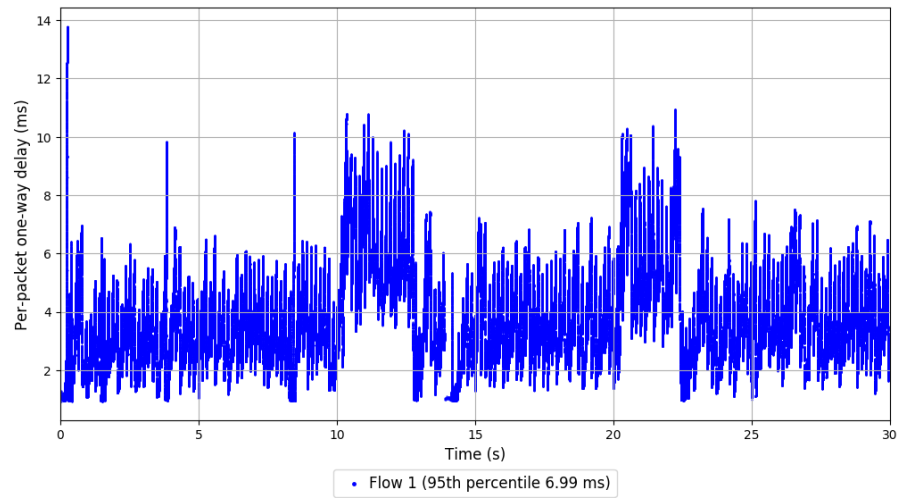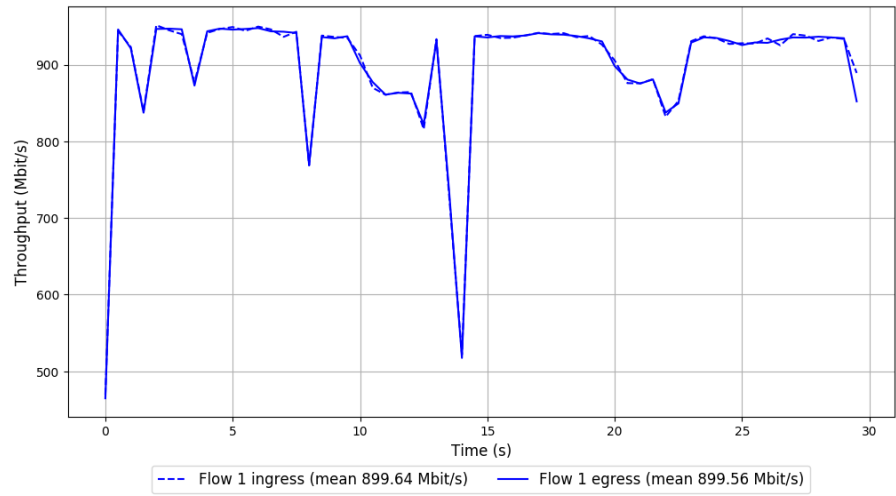
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 855.80 Mbit/s)   Flow 1 egress (mean 855.69 Mbit/s)

Flow 1 (95th percentile 8.37 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2017-09-17 11:01:39
End at: 2017-09-17 11:02:09
Local clock offset: 2.019 ms
Remote clock offset: -3.55 ms

# Below is generated by plot.py at 2017-09-17 17:11:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 899.56 Mbit/s
95th percentile per-packet one-way delay: 6.992 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 899.56 Mbit/s
95th percentile per-packet one-way delay: 6.992 ms
Loss rate: 0.08%
```
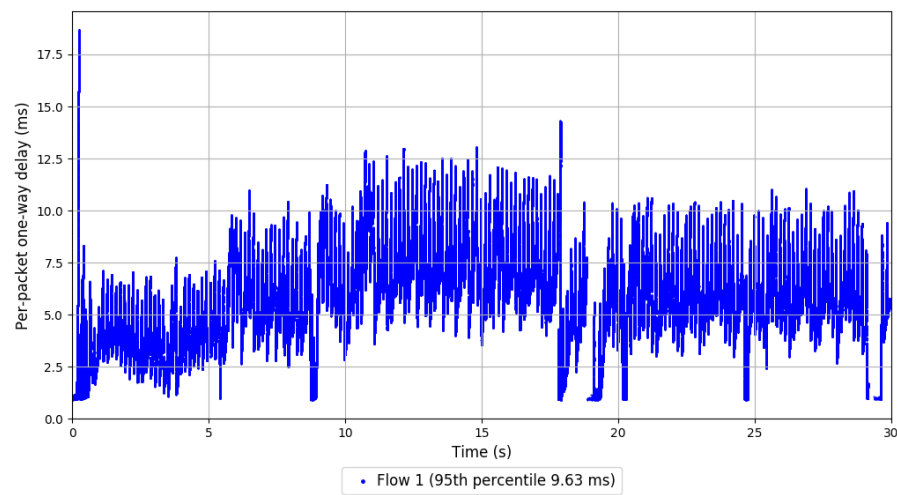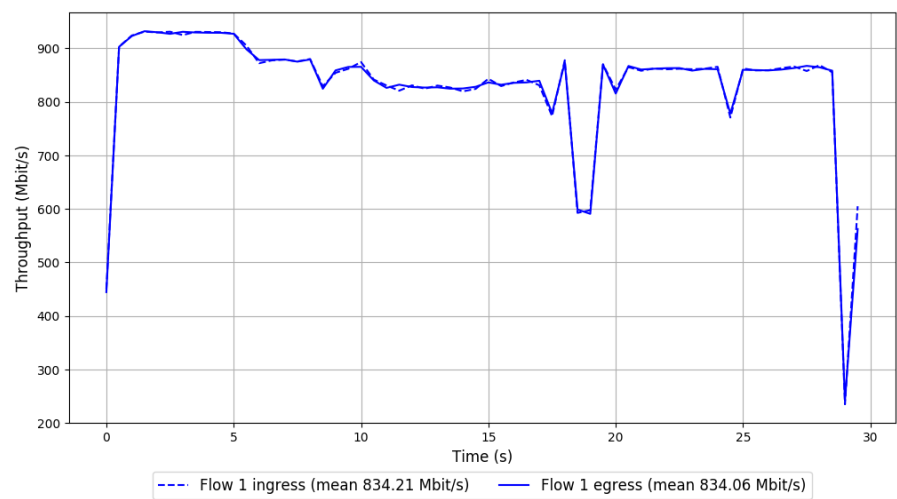
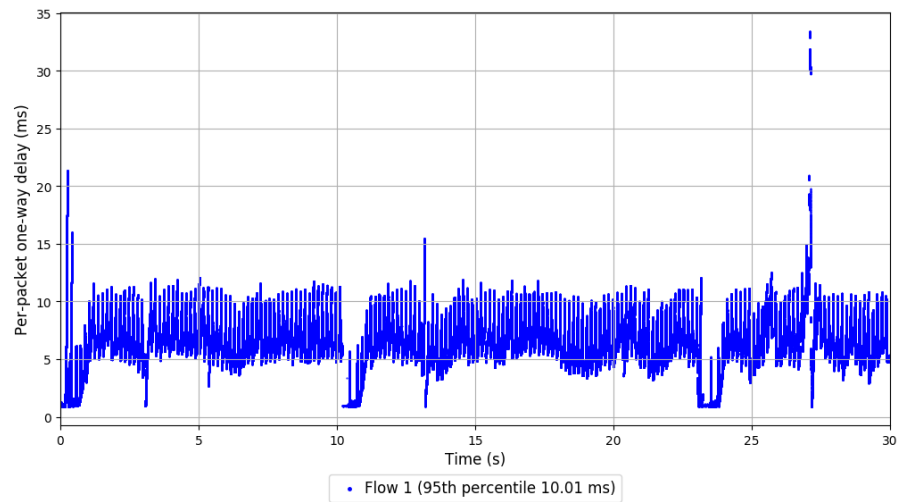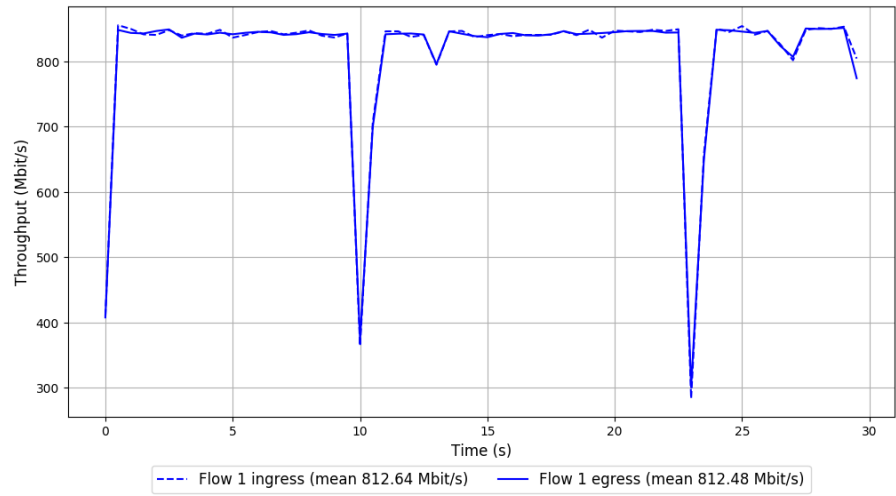Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 899.64 Mbit/s)   Flow 1 egress (mean 899.56 Mbit/s)

Flow 1 (95th percentile 6.99 ms)

```
Run 6: Statistics of TCP BBR

Start at: 2017-09-17 11:22:23
End at: 2017-09-17 11:22:53
Local clock offset: 2.363 ms
Remote clock offset: -3.354 ms


# Below is generated by plot.py at 2017-09-17 17:11:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 834.06 Mbit/s
95th percentile per-packet one-way delay: 9.628 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 834.06 Mbit/s
95th percentile per-packet one-way delay: 9.628 ms
Loss rate: 0.09%
```

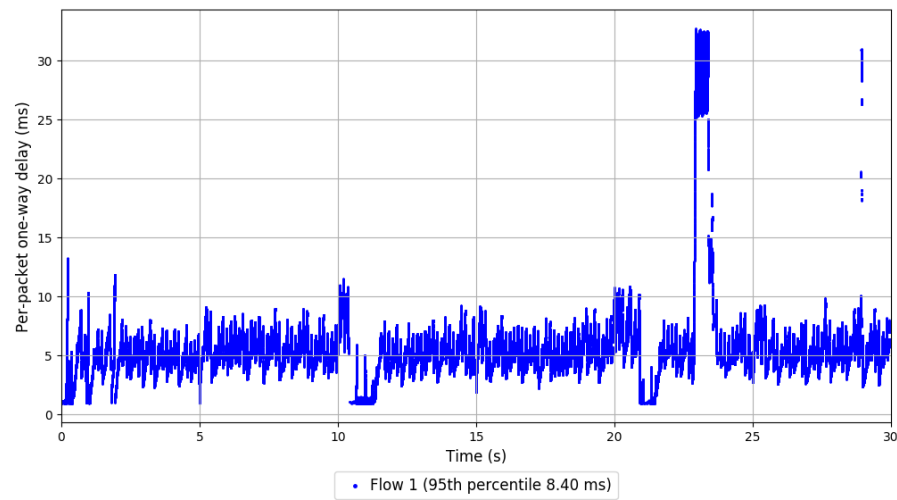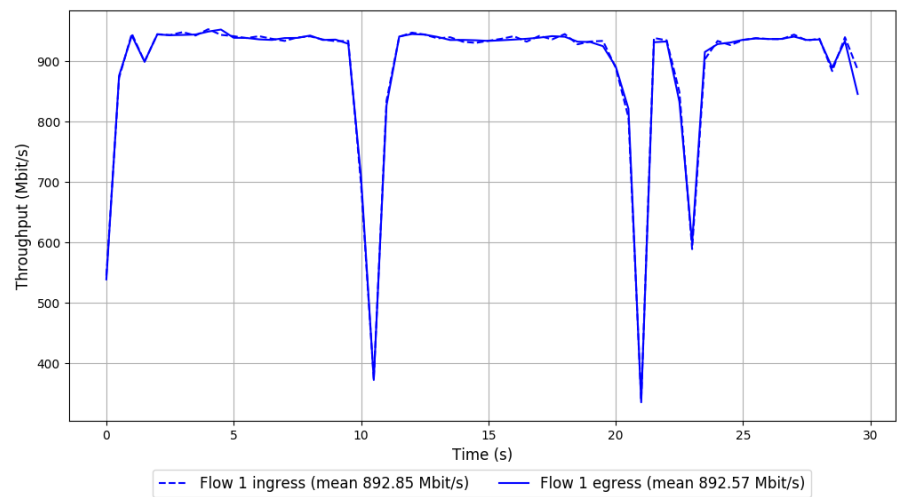Run 6: Report of TCP BBR — Data Link

```
Run 7: Statistics of TCP BBR

Start at: 2017-09-17 11:43:09
End at: 2017-09-17 11:43:39
Local clock offset: 2.992 ms
Remote clock offset: -3.187 ms


# Below is generated by plot.py at 2017-09-17 17:11:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 812.48 Mbit/s
95th percentile per-packet one-way delay: 10.012 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 812.48 Mbit/s
95th percentile per-packet one-way delay: 10.012 ms
Loss rate: 0.09%
```

Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 812.64 Mbit/s) --- Flow 1 egress (mean 812.48 Mbit/s)

Flow 1 (95th percentile 10.01 ms)

```
Run 8: Statistics of TCP BBR

Start at: 2017-09-17 12:03:51
End at: 2017-09-17 12:04:21
Local clock offset: 3.126 ms
Remote clock offset: -3.364 ms


# Below is generated by plot.py at 2017-09-17 17:11:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 892.57 Mbit/s
95th percentile per-packet one-way delay: 8.404 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 892.57 Mbit/s
95th percentile per-packet one-way delay: 8.404 ms
Loss rate: 0.10%
```
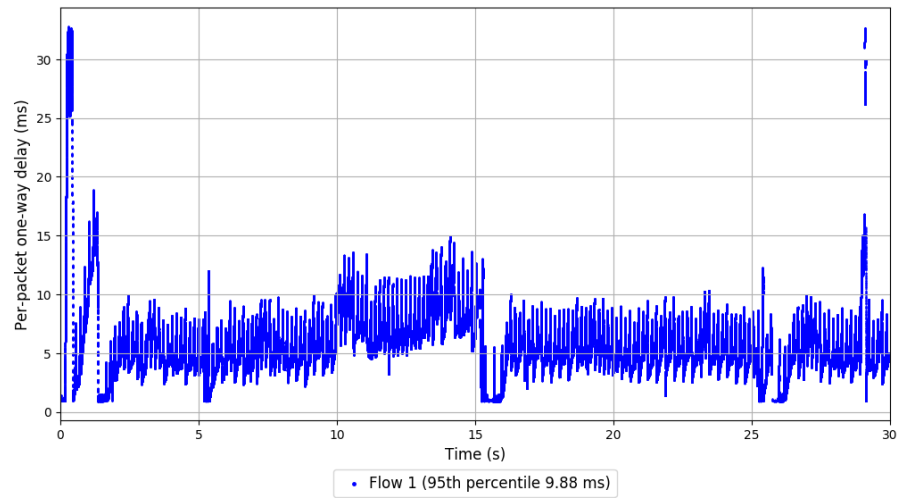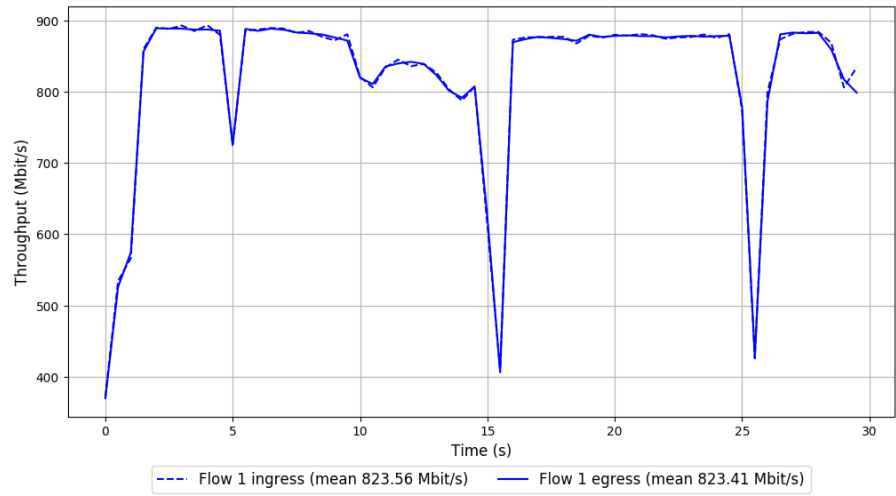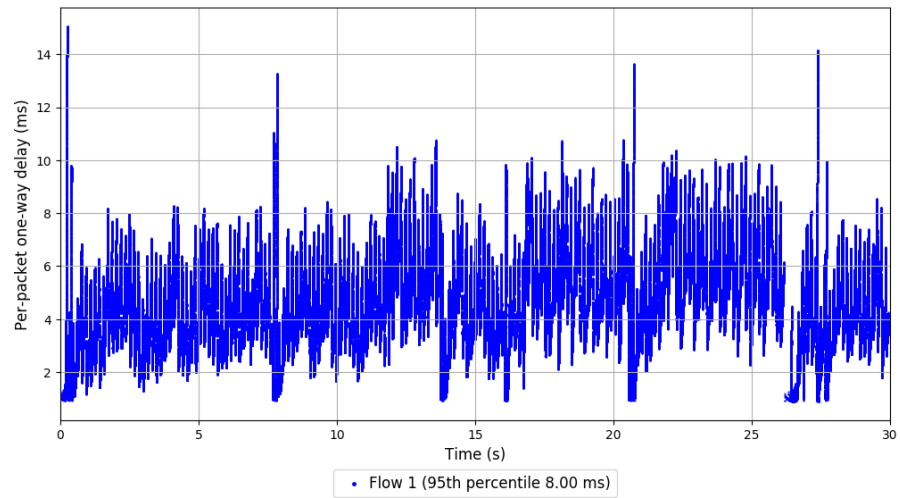
Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 892.85 Mbit/s)   Flow 1 egress (mean 892.57 Mbit/s)

• Flow 1 (95th percentile 8.40 ms)

```
Run 9: Statistics of TCP BBR

Start at: 2017-09-17 12:24:47
End at: 2017-09-17 12:25:17
Local clock offset: 3.21 ms
Remote clock offset: -3.54 ms


# Below is generated by plot.py at 2017-09-17 17:21:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 823.41 Mbit/s
95th percentile per-packet one-way delay: 9.884 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 823.41 Mbit/s
95th percentile per-packet one-way delay: 9.884 ms
Loss rate: 0.09%
```
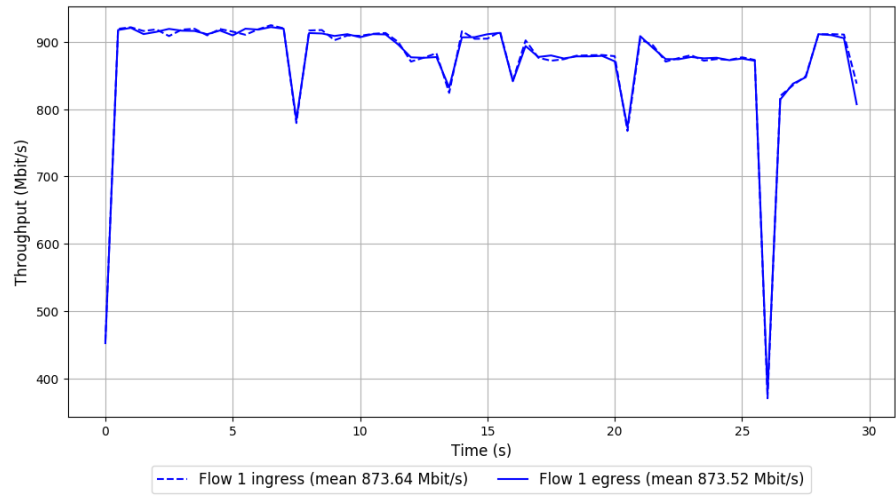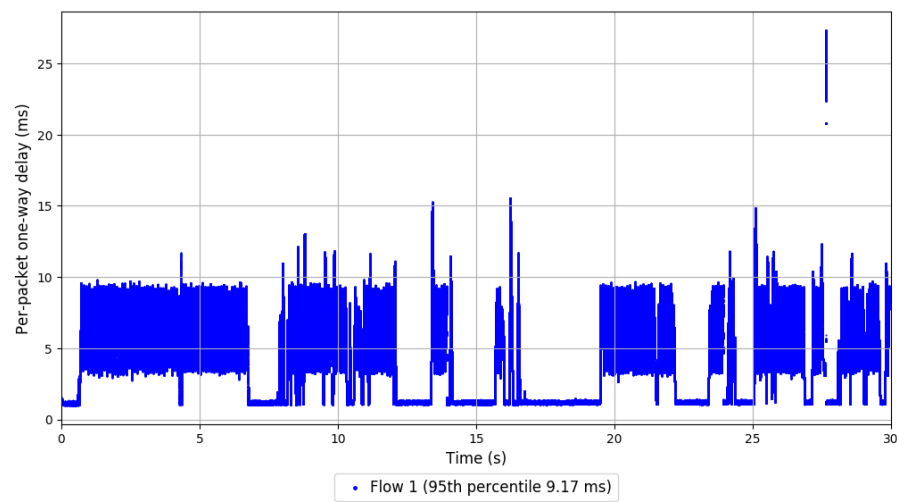
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 823.56 Mbit/s) ----   Flow 1 egress (mean 823.41 Mbit/s) ——

Flow 1 (95th percentile 9.88 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2017-09-17 12:45:24
End at: 2017-09-17 12:45:54
Local clock offset: 4.175 ms
Remote clock offset: -3.826 ms


# Below is generated by plot.py at 2017-09-17 17:22:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 873.52 Mbit/s
95th percentile per-packet one-way delay: 7.995 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 873.52 Mbit/s
95th percentile per-packet one-way delay: 7.995 ms
Loss rate: 0.08%
```
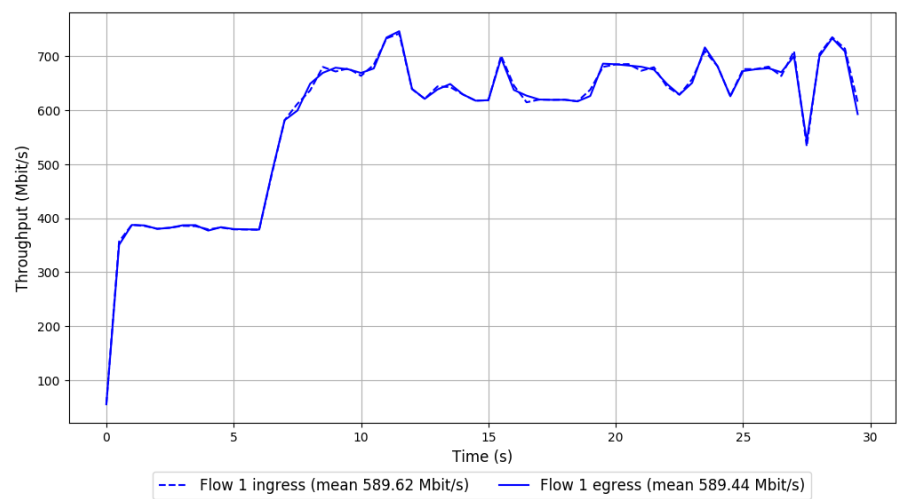
Run 10: Report of TCP BBR — Data Link

Flow 1 ingress (mean 873.64 Mbit/s) --- Flow 1 egress (mean 873.52 Mbit/s)
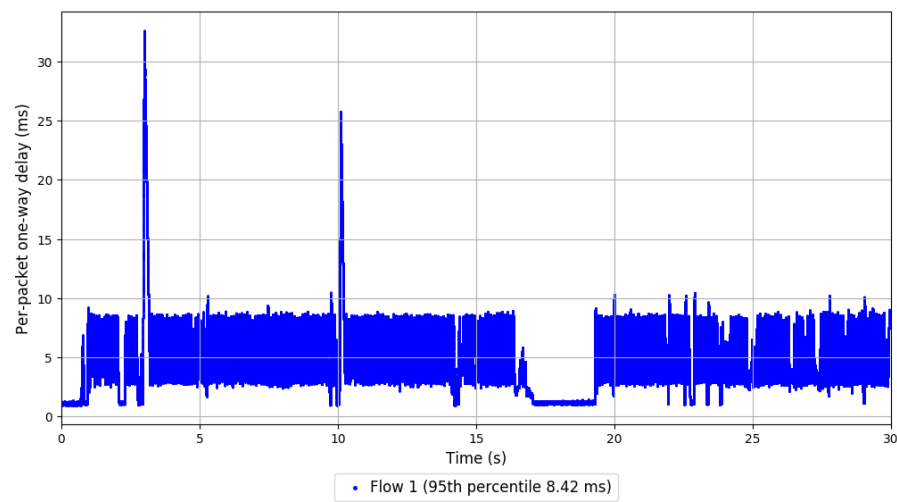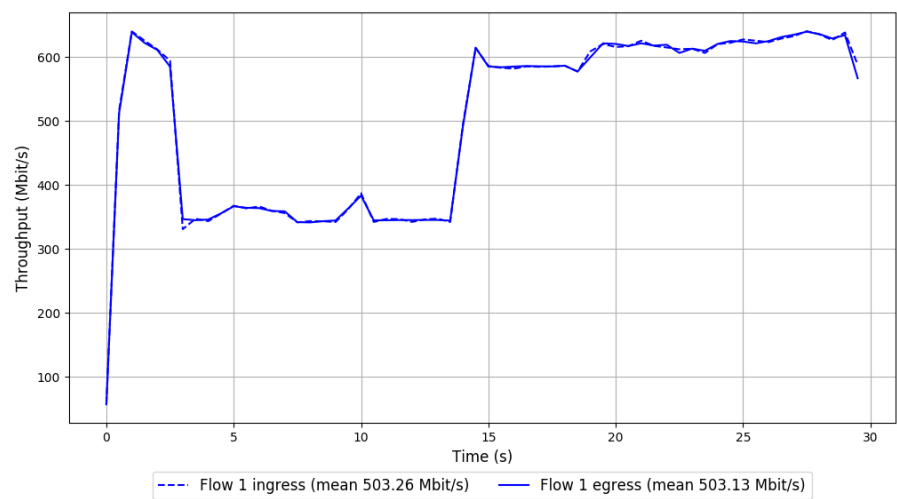

• Flow 1 (95th percentile 8.00 ms)

```
Run 1: Statistics of CalibratedKoho

Start at: 2017-09-17 09:43:03
End at: 2017-09-17 09:43:33
Local clock offset: 6.462 ms
Remote clock offset: -4.466 ms


# Below is generated by plot.py at 2017-09-17 17:22:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 589.44 Mbit/s
95th percentile per-packet one-way delay: 9.174 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 589.44 Mbit/s
95th percentile per-packet one-way delay: 9.174 ms
Loss rate: 0.10%
```
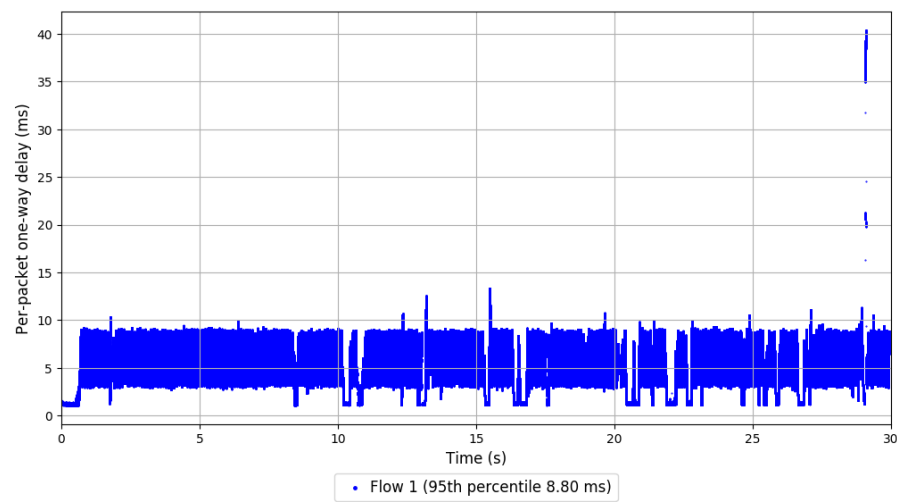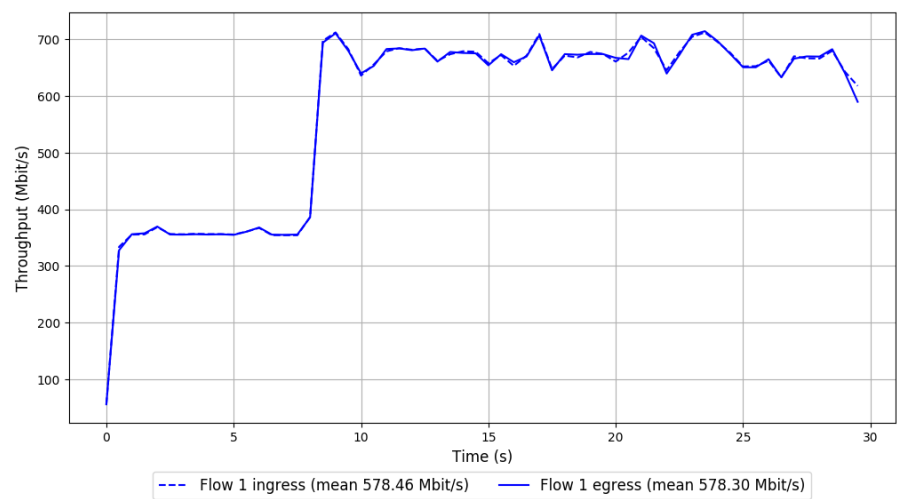
Run 1: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 589.62 Mbit/s) ----   Flow 1 egress (mean 589.44 Mbit/s) ——

Flow 1 (95th percentile 9.17 ms)

```
Run 2: Statistics of CalibratedKoho

Start at: 2017-09-17 10:03:53
End at: 2017-09-17 10:04:23
Local clock offset: 4.87 ms
Remote clock offset: -4.364 ms


# Below is generated by plot.py at 2017-09-17 17:22:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 503.13 Mbit/s
95th percentile per-packet one-way delay: 8.424 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 503.13 Mbit/s
95th percentile per-packet one-way delay: 8.424 ms
Loss rate: 0.09%
```
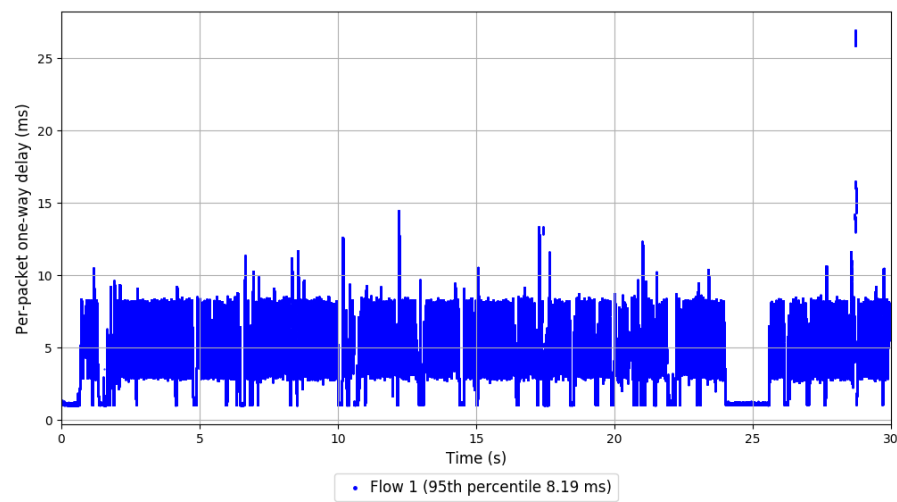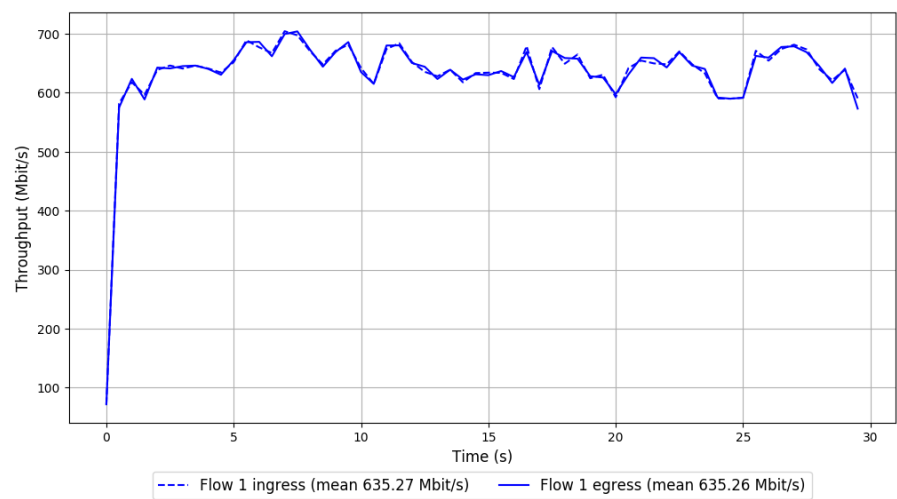
Run 2: Report of CalibratedKoho — Data Link

```
Run 3: Statistics of CalibratedKoho

Start at: 2017-09-17 10:24:45
End at: 2017-09-17 10:25:15
Local clock offset: 3.687 ms
Remote clock offset: -3.889 ms


# Below is generated by plot.py at 2017-09-17 17:22:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 578.30 Mbit/s
95th percentile per-packet one-way delay: 8.800 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 578.30 Mbit/s
95th percentile per-packet one-way delay: 8.800 ms
Loss rate: 0.10%
```
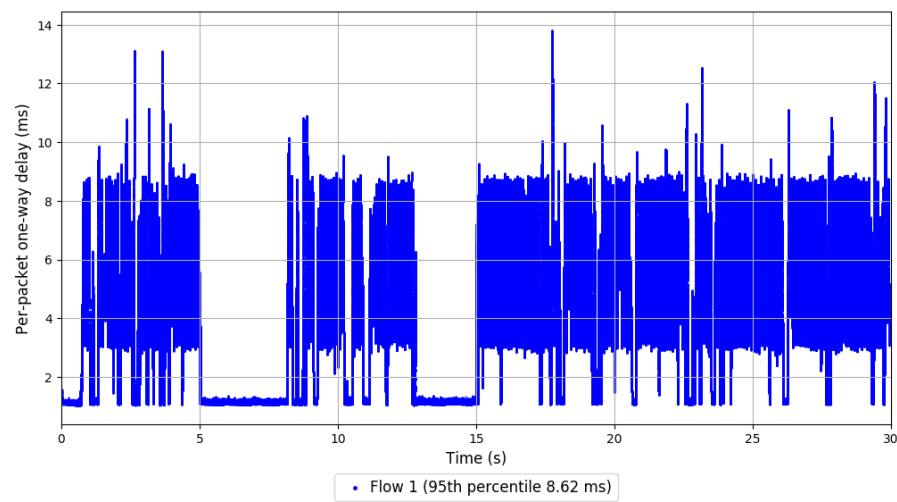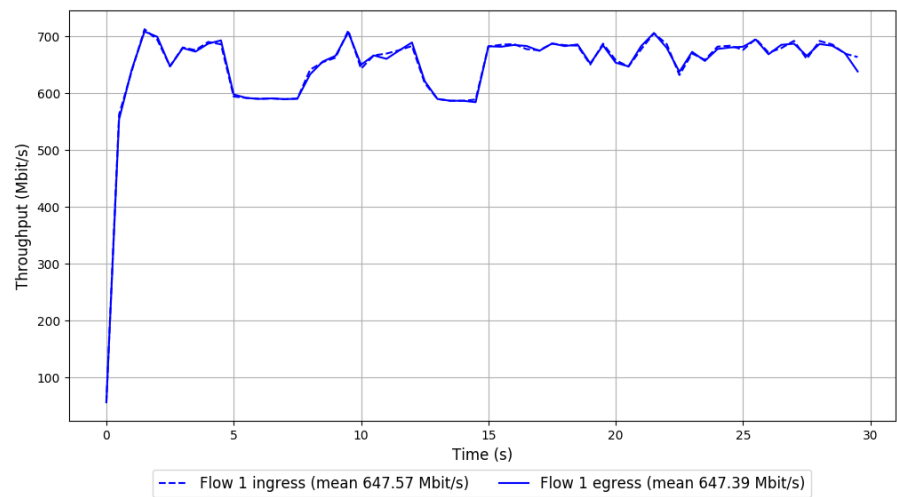
Run 3: Report of CalibratedKoho — Data Link

```
Run 4: Statistics of CalibratedKoho

Start at: 2017-09-17 10:45:45
End at: 2017-09-17 10:46:15
Local clock offset: 2.334 ms
Remote clock offset: -3.799 ms


# Below is generated by plot.py at 2017-09-17 17:22:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 635.26 Mbit/s
95th percentile per-packet one-way delay: 8.194 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 635.26 Mbit/s
95th percentile per-packet one-way delay: 8.194 ms
Loss rate: 0.06%
```
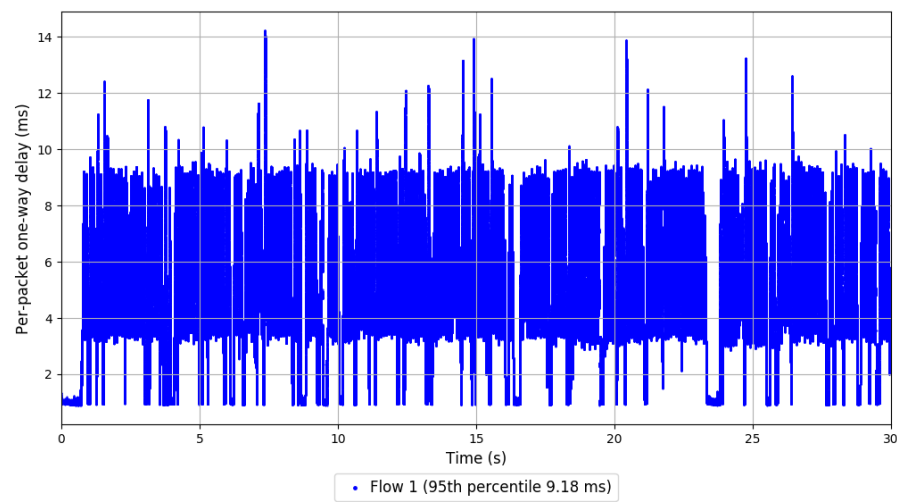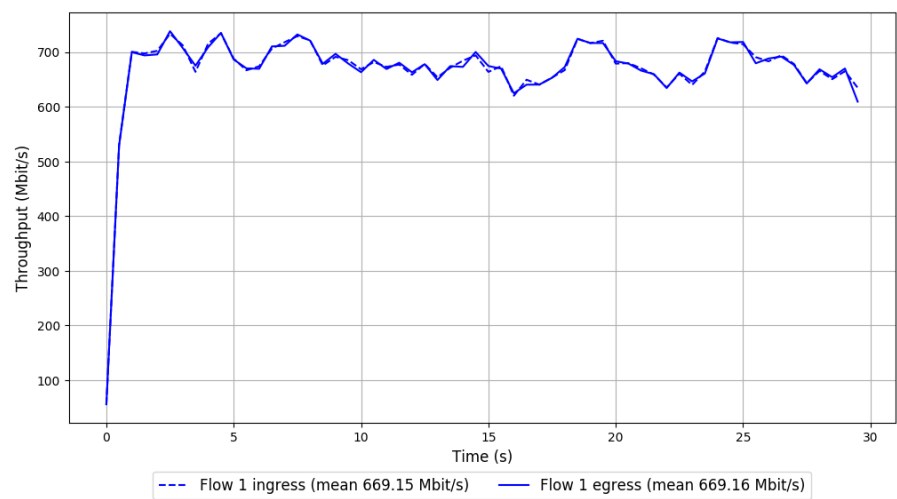
Run 4: Report of CalibratedKoho — Data Link

```
Run 5: Statistics of CalibratedKoho

Start at: 2017-09-17 11:06:24
End at: 2017-09-17 11:06:54
Local clock offset: 1.884 ms
Remote clock offset: -3.572 ms


# Below is generated by plot.py at 2017-09-17 17:22:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 647.39 Mbit/s
95th percentile per-packet one-way delay: 8.620 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 647.39 Mbit/s
95th percentile per-packet one-way delay: 8.620 ms
Loss rate: 0.09%
```
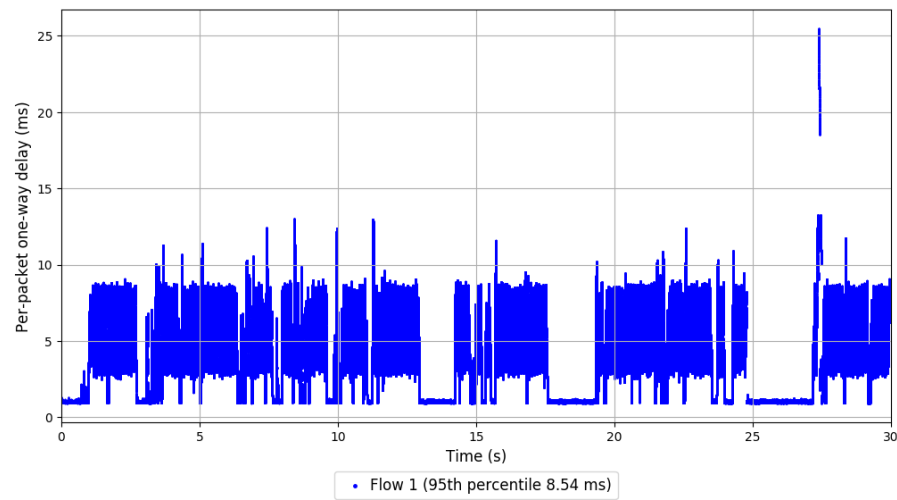
Run 5: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 647.57 Mbit/s) — Flow 1 egress (mean 647.39 Mbit/s)

• Flow 1 (95th percentile 8.62 ms)

```
Run 6: Statistics of CalibratedKoho

Start at: 2017-09-17 11:27:07
End at: 2017-09-17 11:27:37
Local clock offset: 2.522 ms
Remote clock offset: -3.311 ms


# Below is generated by plot.py at 2017-09-17 17:22:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 669.16 Mbit/s
95th percentile per-packet one-way delay: 9.183 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 669.16 Mbit/s
95th percentile per-packet one-way delay: 9.183 ms
Loss rate: 0.06%
```
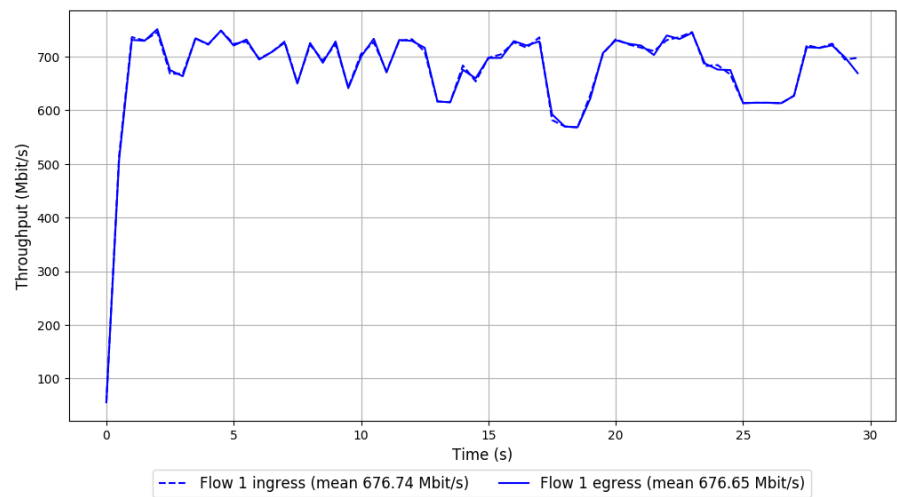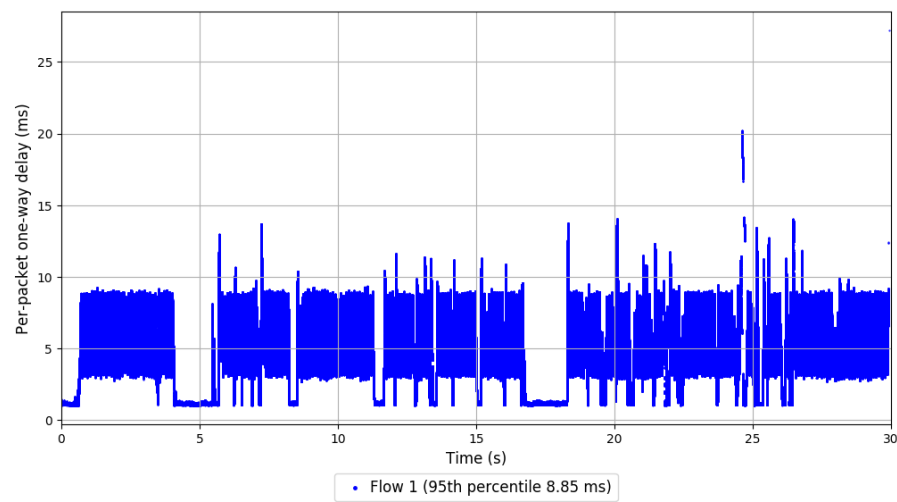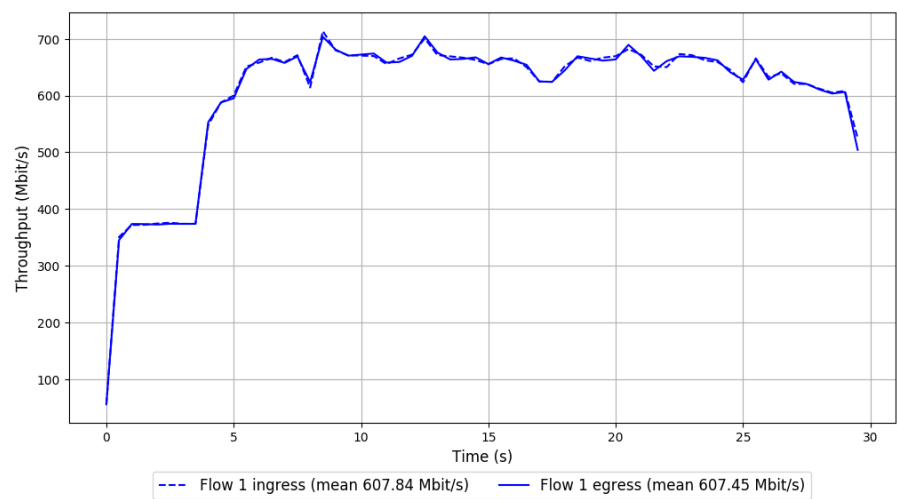
Run 6: Report of CalibratedKoho — Data Link

```
Run 7: Statistics of CalibratedKoho

Start at: 2017-09-17 11:47:52
End at: 2017-09-17 11:48:22
Local clock offset: 2.983 ms
Remote clock offset: -3.34 ms


# Below is generated by plot.py at 2017-09-17 17:27:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 676.65 Mbit/s
95th percentile per-packet one-way delay: 8.539 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 676.65 Mbit/s
95th percentile per-packet one-way delay: 8.539 ms
Loss rate: 0.08%
```
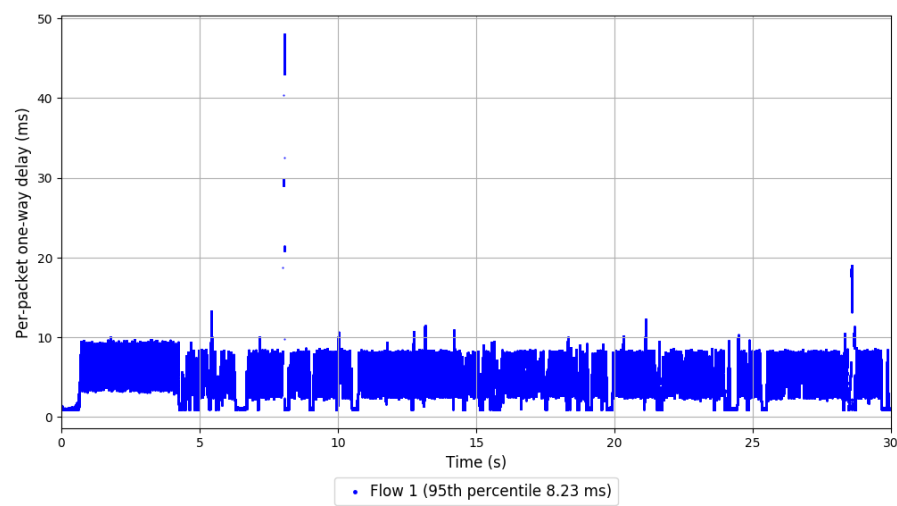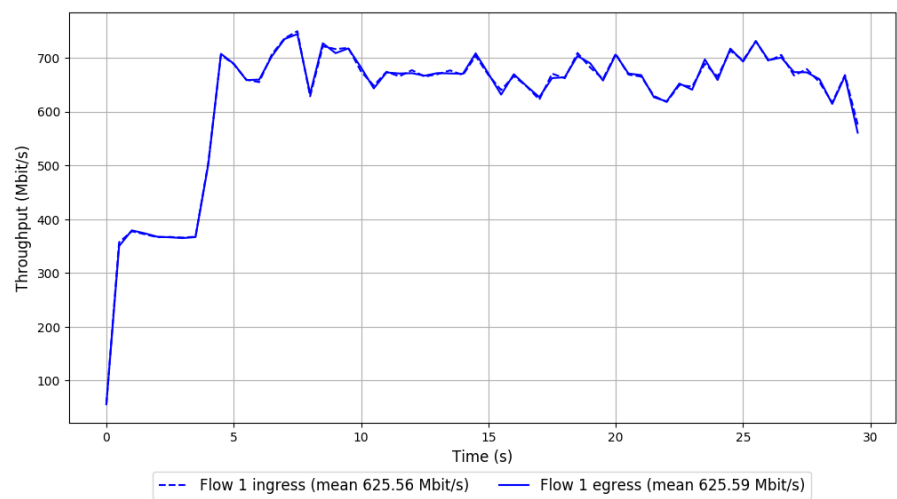
Run 7: Report of CalibratedKoho — Data Link

```
Run 8: Statistics of CalibratedKoho

Start at: 2017-09-17 12:08:33
End at: 2017-09-17 12:09:03
Local clock offset: 3.226 ms
Remote clock offset: -3.341 ms


# Below is generated by plot.py at 2017-09-17 17:27:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 607.45 Mbit/s
95th percentile per-packet one-way delay: 8.848 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 607.45 Mbit/s
95th percentile per-packet one-way delay: 8.848 ms
Loss rate: 0.08%
```
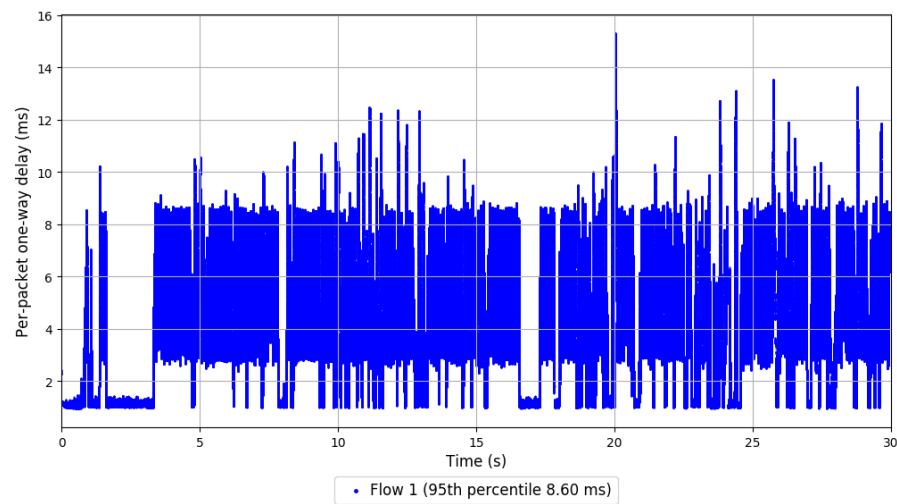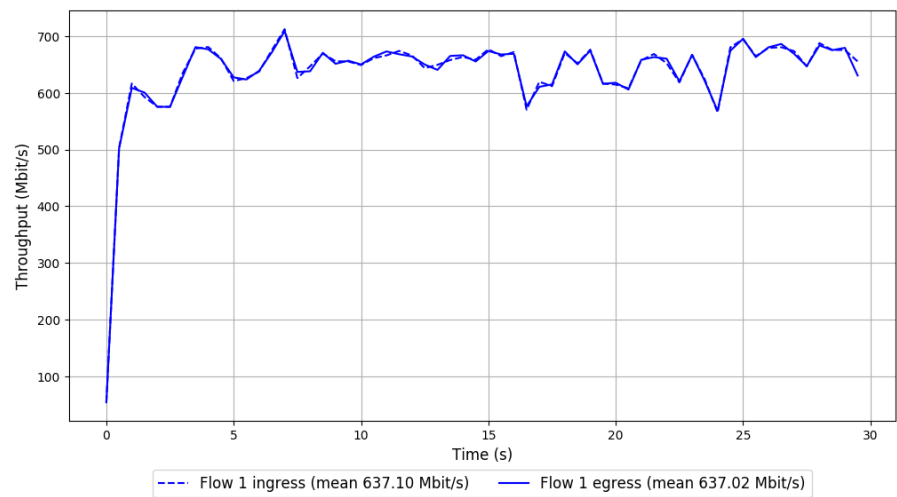
Run 8: Report of CalibratedKoho — Data Link

```
Run 9: Statistics of CalibratedKoho

Start at: 2017-09-17 12:29:31
End at: 2017-09-17 12:30:01
Local clock offset: 3.443 ms
Remote clock offset: -3.525 ms


# Below is generated by plot.py at 2017-09-17 17:28:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 625.59 Mbit/s
95th percentile per-packet one-way delay: 8.228 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 625.59 Mbit/s
95th percentile per-packet one-way delay: 8.228 ms
Loss rate: 0.06%
```

Run 9: Report of CalibratedKoho — Data Link

```
Run 10: Statistics of CalibratedKoho

Start at: 2017-09-17 12:50:09
End at: 2017-09-17 12:50:39
Local clock offset: 4.395 ms
Remote clock offset: -3.863 ms


# Below is generated by plot.py at 2017-09-17 17:29:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 637.02 Mbit/s
95th percentile per-packet one-way delay: 8.598 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 637.02 Mbit/s
95th percentile per-packet one-way delay: 8.598 ms
Loss rate: 0.08%
```
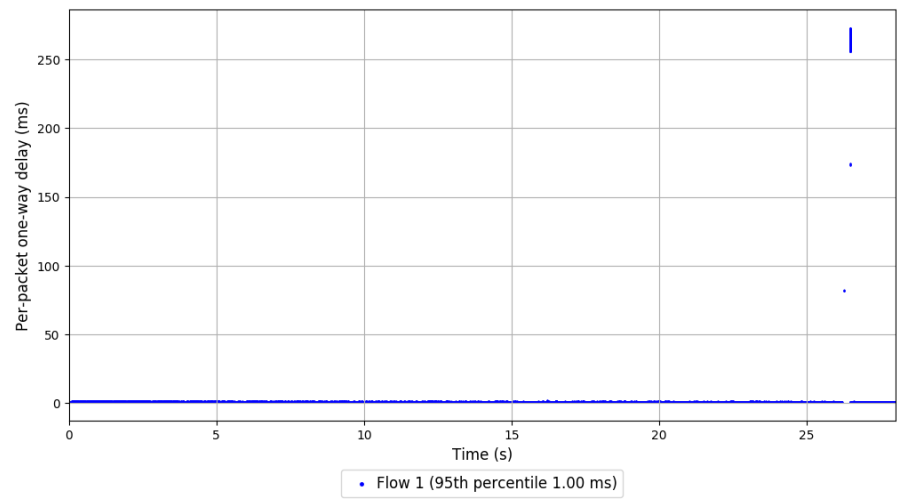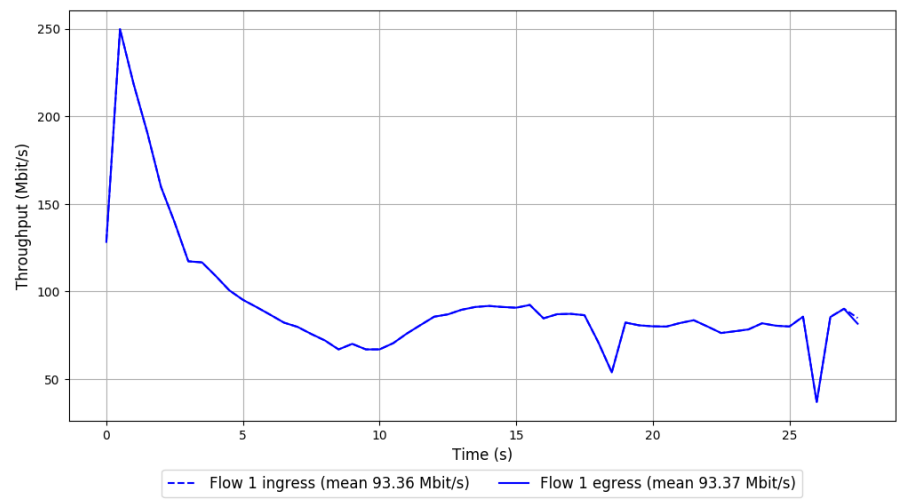
Run 10: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 637.10 Mbit/s)   Flow 1 egress (mean 637.02 Mbit/s)
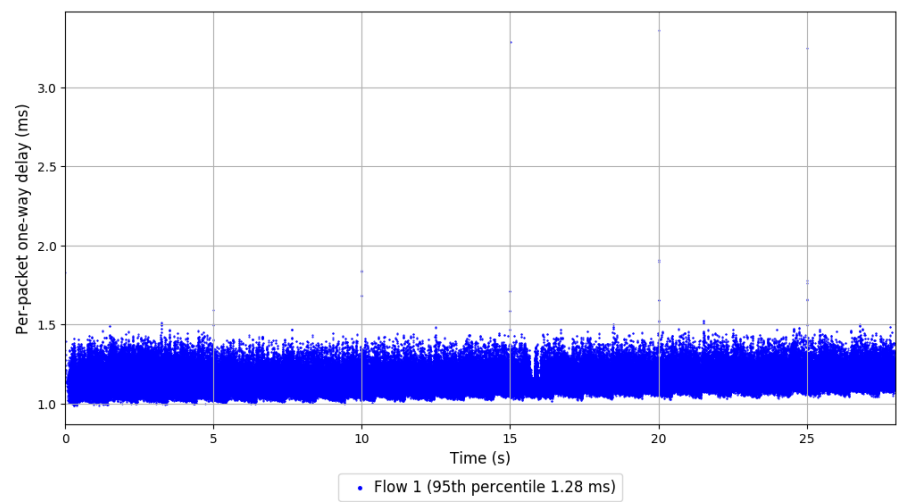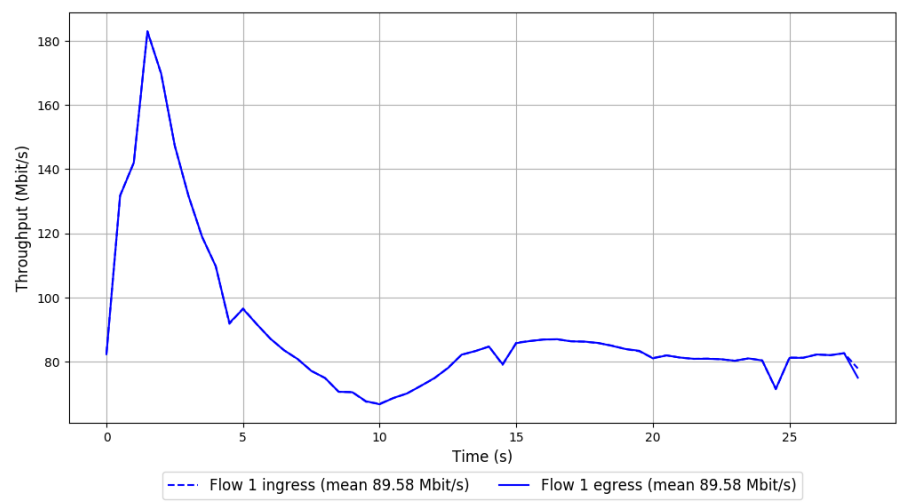

• Flow 1 (95th percentile 8.60 ms)

```
Run 1: Statistics of Copa

Start at: 2017-09-17 09:37:01
End at: 2017-09-17 09:37:31
Local clock offset: 5.623 ms
Remote clock offset: -4.43 ms

# Below is generated by plot.py at 2017-09-17 17:29:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.37 Mbit/s
95th percentile per-packet one-way delay: 0.997 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 93.37 Mbit/s
95th percentile per-packet one-way delay: 0.997 ms
Loss rate: 0.07%
```
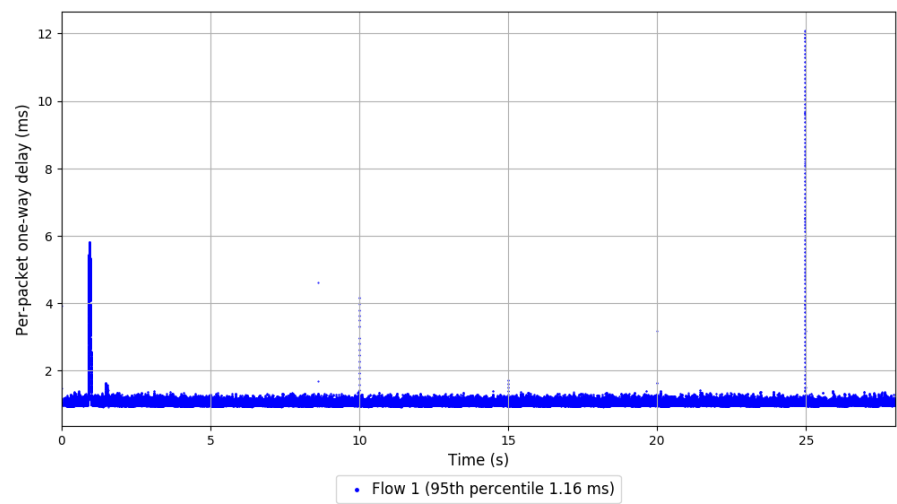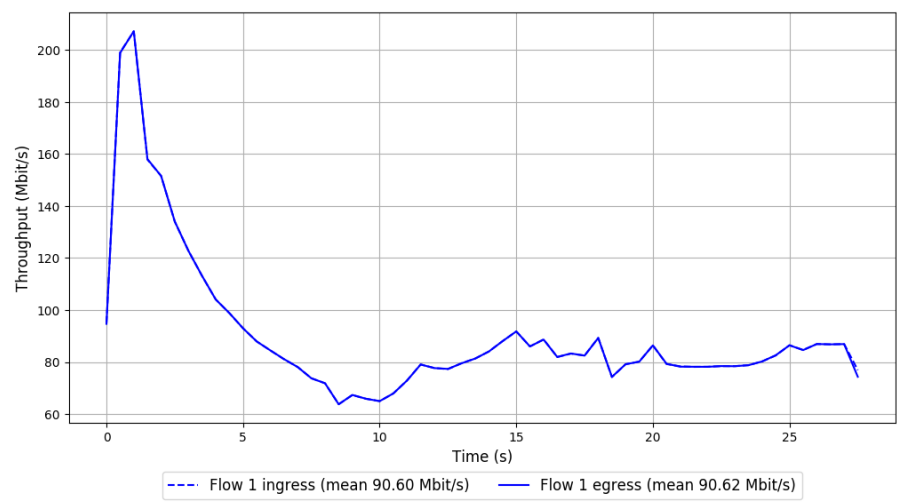
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 93.36 Mbit/s) ----   Flow 1 egress (mean 93.37 Mbit/s) ——

• Flow 1 (95th percentile 1.00 ms)

```
Run 2: Statistics of Copa

Start at: 2017-09-17 09:57:55
End at: 2017-09-17 09:58:25
Local clock offset: 5.561 ms
Remote clock offset: -4.375 ms


# Below is generated by plot.py at 2017-09-17 17:29:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.58 Mbit/s
95th percentile per-packet one-way delay: 1.284 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 89.58 Mbit/s
95th percentile per-packet one-way delay: 1.284 ms
Loss rate: 0.06%
```
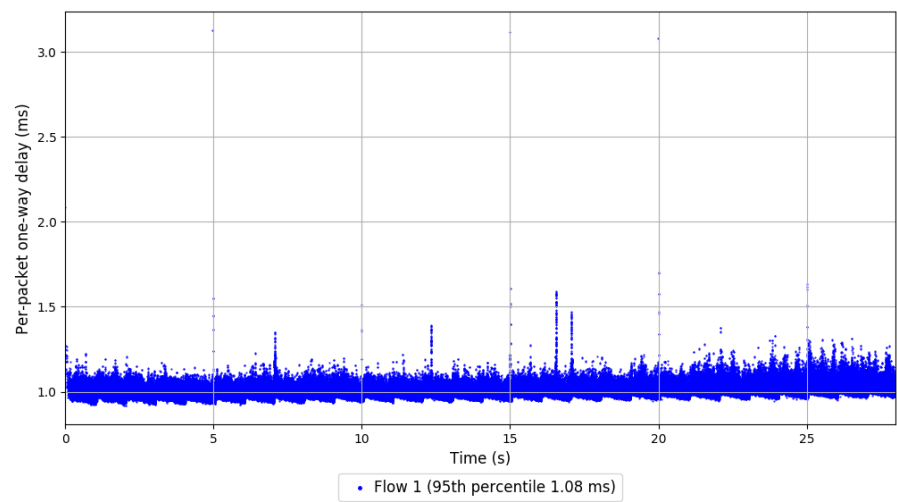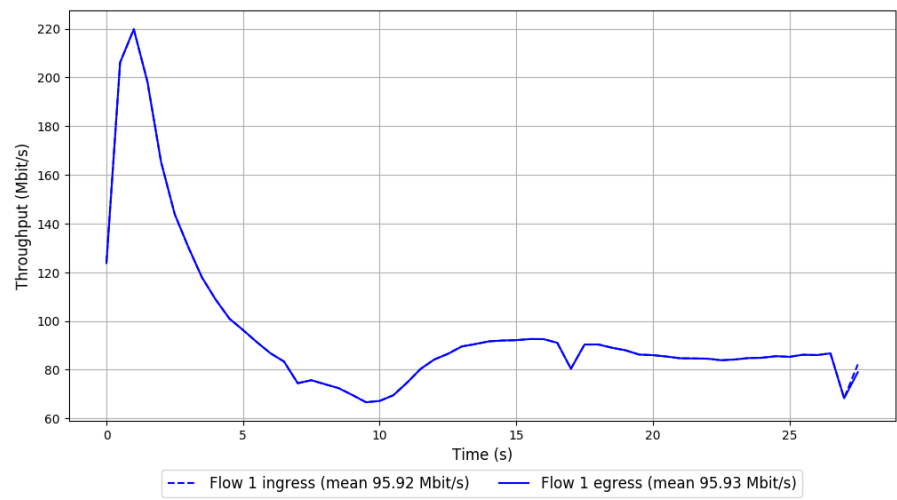
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2017-09-17 10:18:41
End at: 2017-09-17 10:19:11
Local clock offset: 3.731 ms
Remote clock offset: -4.134 ms


# Below is generated by plot.py at 2017-09-17 17:29:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.62 Mbit/s
95th percentile per-packet one-way delay: 1.159 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 90.62 Mbit/s
95th percentile per-packet one-way delay: 1.159 ms
Loss rate: 0.05%
```
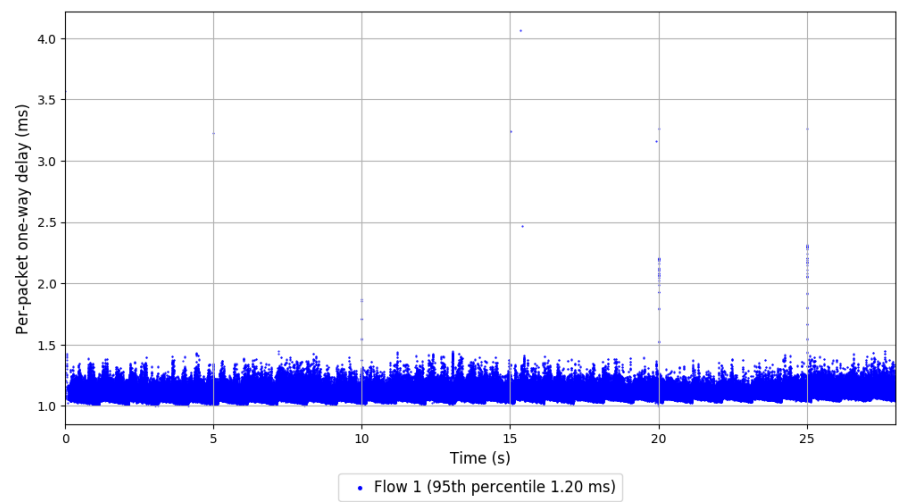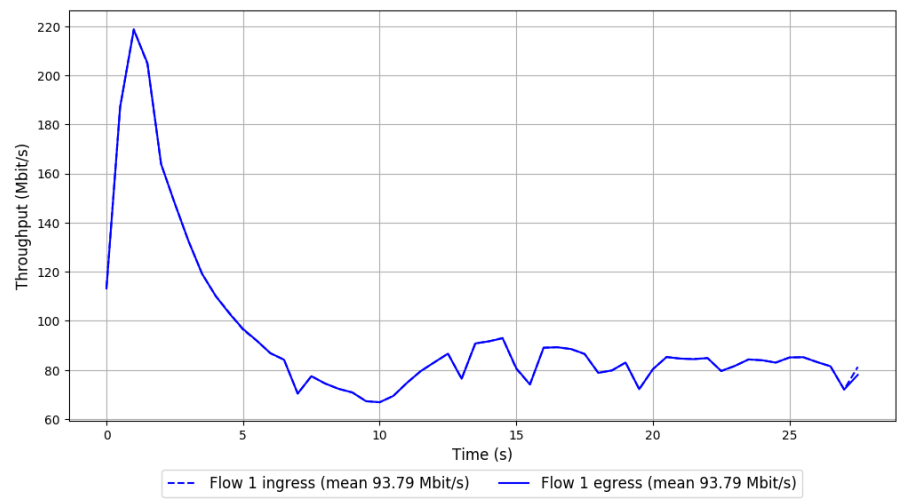
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2017-09-17 10:39:43
End at: 2017-09-17 10:40:13
Local clock offset: 2.589 ms
Remote clock offset: -3.918 ms


# Below is generated by plot.py at 2017-09-17 17:29:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.93 Mbit/s
95th percentile per-packet one-way delay: 1.076 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 95.93 Mbit/s
95th percentile per-packet one-way delay: 1.076 ms
Loss rate: 0.06%
```
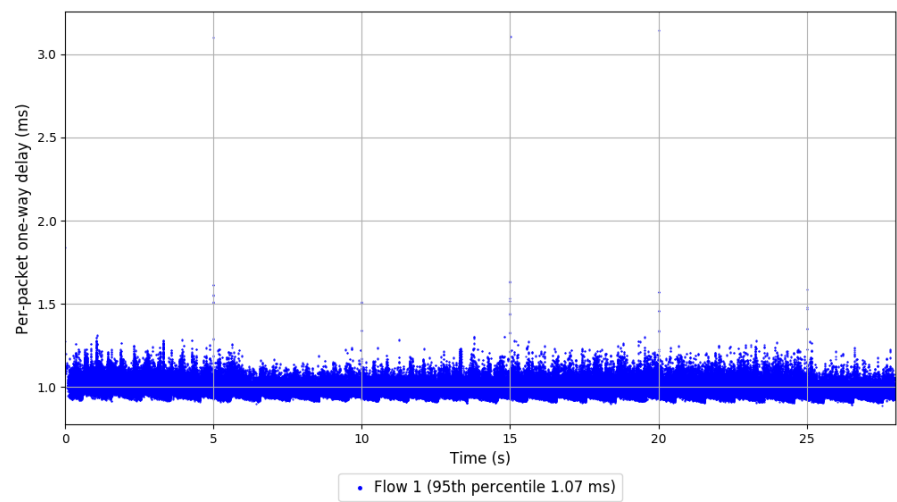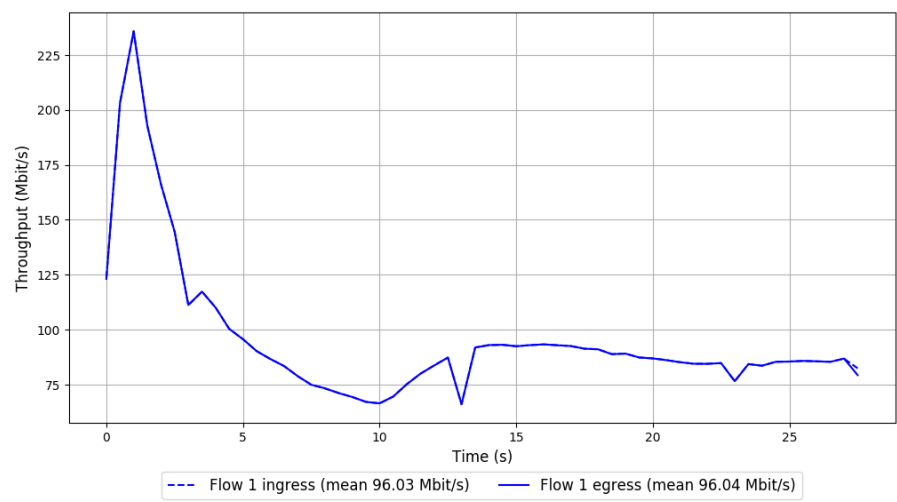
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2017-09-17 11:00:23
End at: 2017-09-17 11:00:53
Local clock offset: 2.138 ms
Remote clock offset: -3.625 ms


# Below is generated by plot.py at 2017-09-17 17:29:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.79 Mbit/s
95th percentile per-packet one-way delay: 1.199 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 93.79 Mbit/s
95th percentile per-packet one-way delay: 1.199 ms
Loss rate: 0.07%
```

Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 93.79 Mbit/s) --- Flow 1 egress (mean 93.79 Mbit/s)

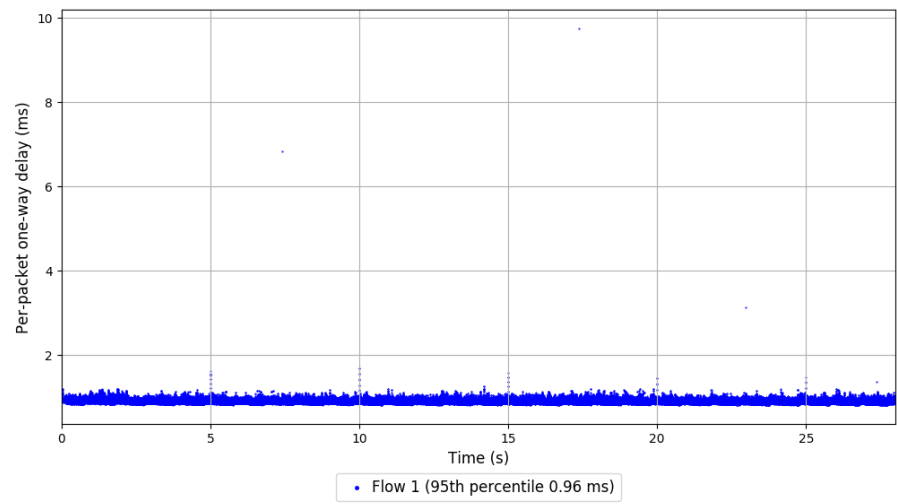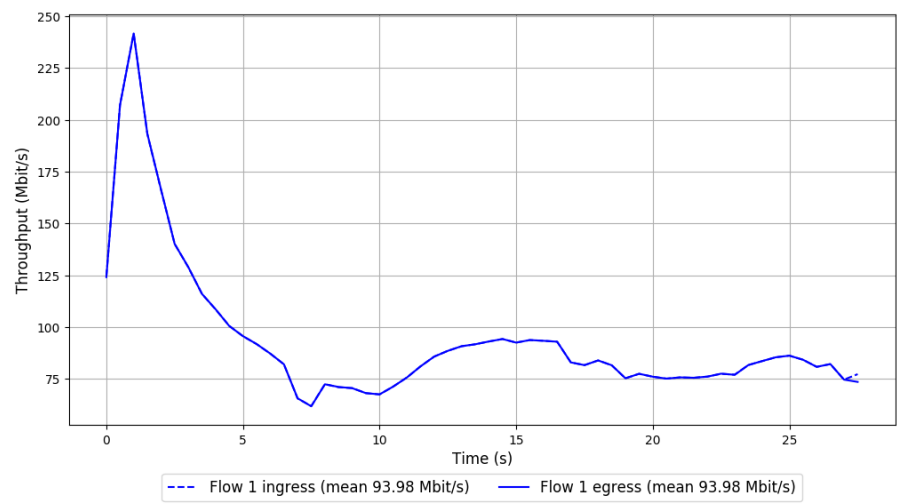Flow 1 (95th percentile 1.20 ms)

```
Run 6: Statistics of Copa

Start at: 2017-09-17 11:21:07
End at: 2017-09-17 11:21:37
Local clock offset: 2.198 ms
Remote clock offset: -3.491 ms


# Below is generated by plot.py at 2017-09-17 17:29:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.04 Mbit/s
95th percentile per-packet one-way delay: 1.072 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 96.04 Mbit/s
95th percentile per-packet one-way delay: 1.072 ms
Loss rate: 0.06%
```
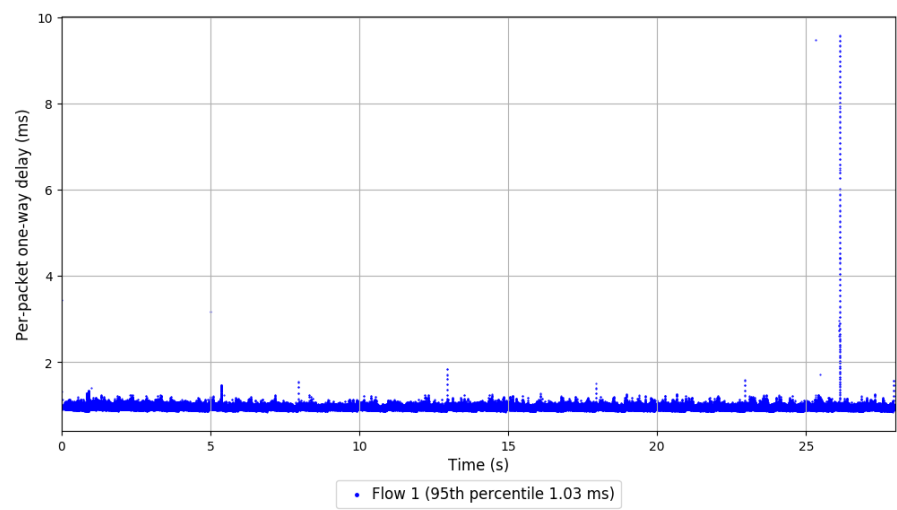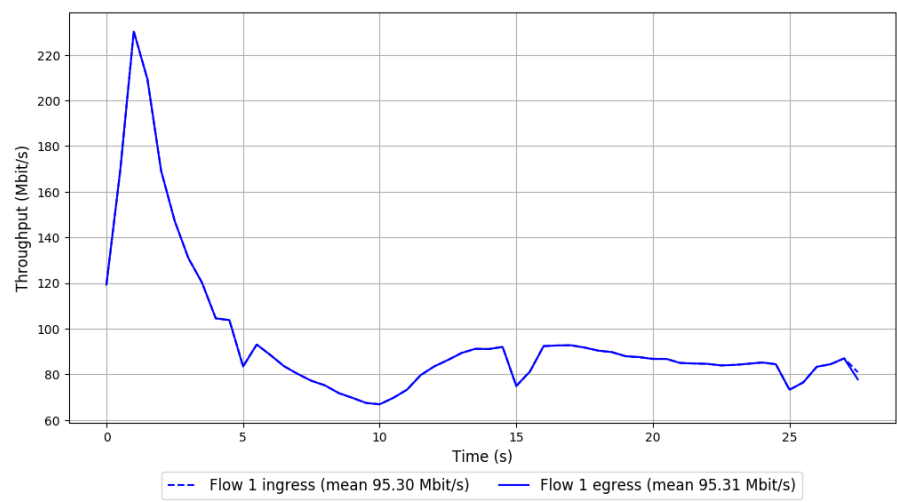
Run 6: Report of Copa — Data Link

Flow 1 ingress (mean 96.03 Mbit/s) --- Flow 1 egress (mean 96.04 Mbit/s)

Flow 1 (95th percentile 1.07 ms)

```
Run 7: Statistics of Copa

Start at: 2017-09-17 11:41:52
End at: 2017-09-17 11:42:22
Local clock offset: 2.883 ms
Remote clock offset: -3.182 ms


# Below is generated by plot.py at 2017-09-17 17:29:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.98 Mbit/s
95th percentile per-packet one-way delay: 0.961 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 93.98 Mbit/s
95th percentile per-packet one-way delay: 0.961 ms
Loss rate: 0.07%
```
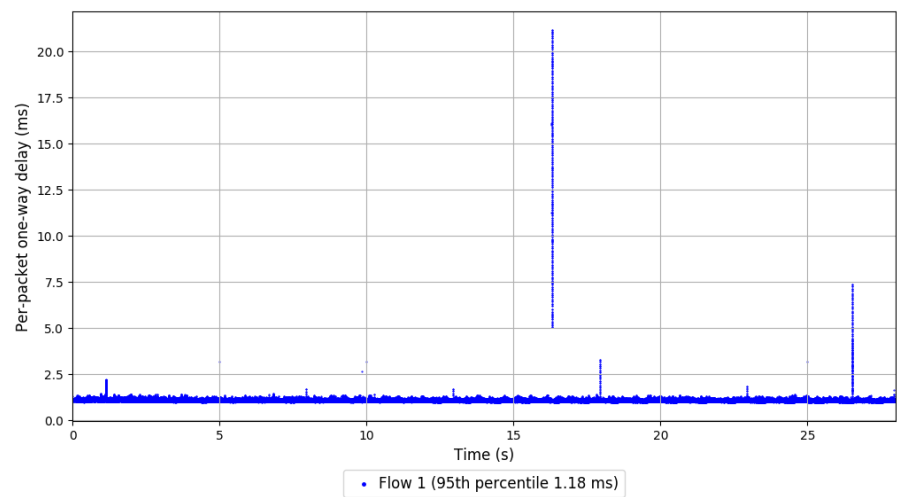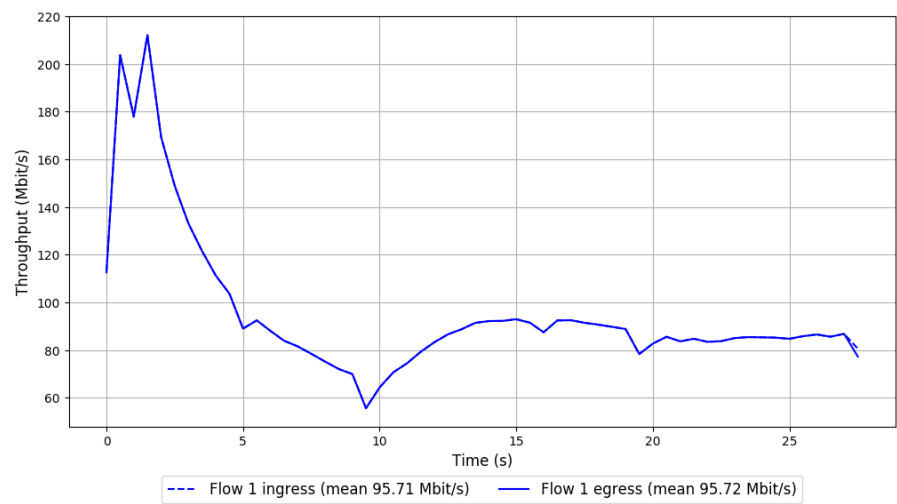
Run 7: Report of Copa — Data Link

```
Run 8: Statistics of Copa

Start at: 2017-09-17 12:02:34
End at: 2017-09-17 12:03:04
Local clock offset: 2.997 ms
Remote clock offset: -3.435 ms


# Below is generated by plot.py at 2017-09-17 17:29:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.31 Mbit/s
95th percentile per-packet one-way delay: 1.027 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 95.31 Mbit/s
95th percentile per-packet one-way delay: 1.027 ms
Loss rate: 0.06%
```
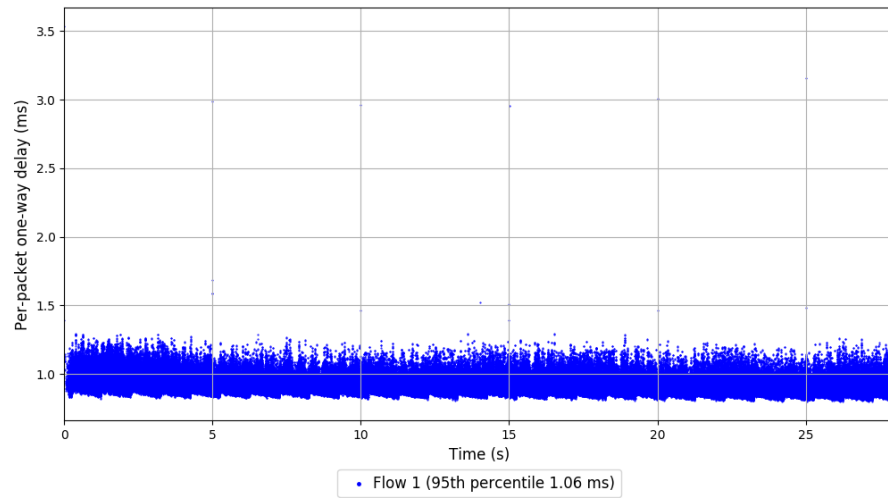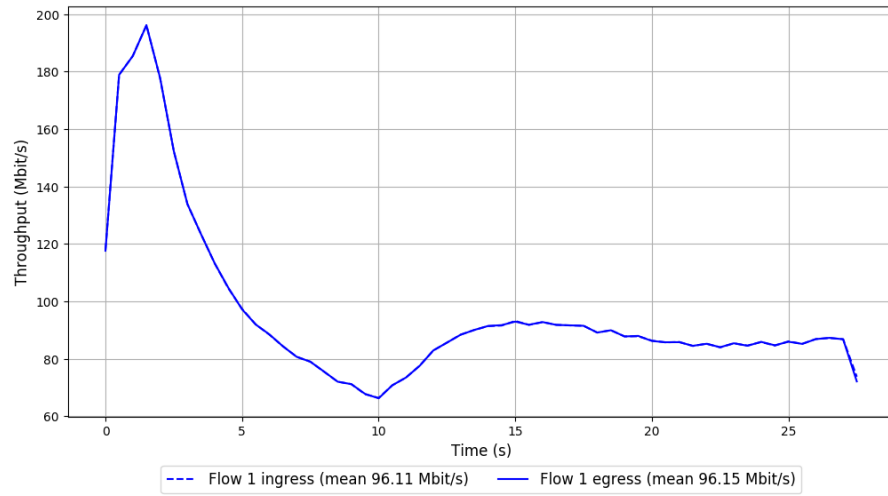
Run 8: Report of Copa — Data Link

Flow 1 ingress (mean 95.30 Mbit/s) ---- Flow 1 egress (mean 95.31 Mbit/s) ——

• Flow 1 (95th percentile 1.03 ms)

```
Run 9: Statistics of Copa

Start at: 2017-09-17 12:23:30
End at: 2017-09-17 12:24:00
Local clock offset: 3.307 ms
Remote clock offset: -3.514 ms


# Below is generated by plot.py at 2017-09-17 17:29:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.72 Mbit/s
95th percentile per-packet one-way delay: 1.177 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 95.72 Mbit/s
95th percentile per-packet one-way delay: 1.177 ms
Loss rate: 0.07%
```

Run 9: Report of Copa — Data Link

Flow 1 ingress (mean 95.71 Mbit/s)   Flow 1 egress (mean 95.72 Mbit/s)

Flow 1 (95th percentile 1.18 ms)

```
Run 10: Statistics of Copa

Start at: 2017-09-17 12:44:07
End at: 2017-09-17 12:44:37
Local clock offset: 4.091 ms
Remote clock offset: -3.766 ms


# Below is generated by plot.py at 2017-09-17 17:29:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.15 Mbit/s
95th percentile per-packet one-way delay: 1.059 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 96.15 Mbit/s
95th percentile per-packet one-way delay: 1.059 ms
Loss rate: 0.03%
```
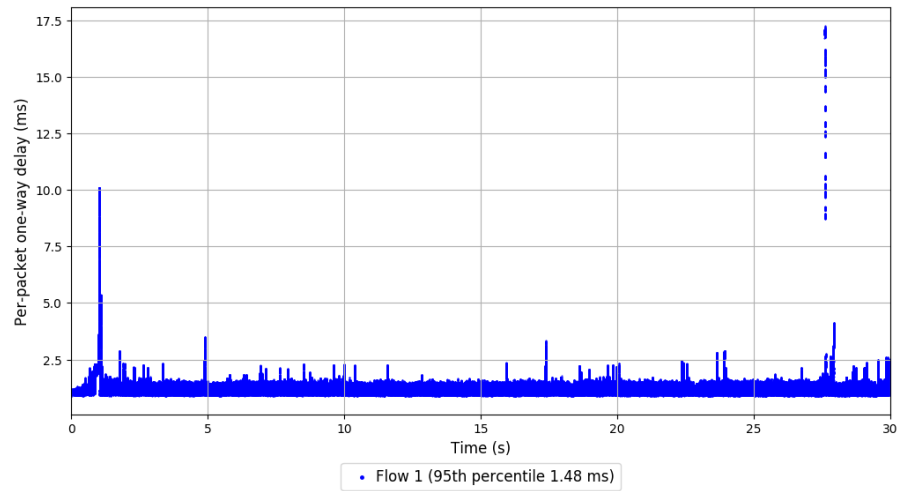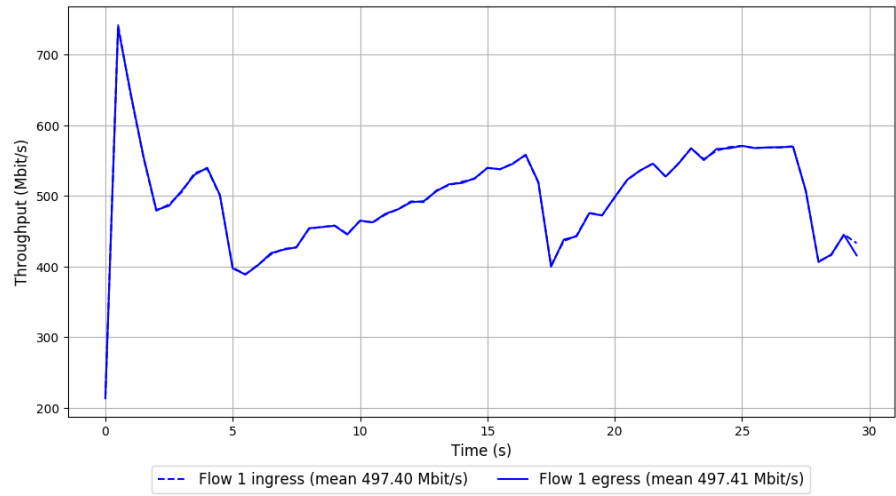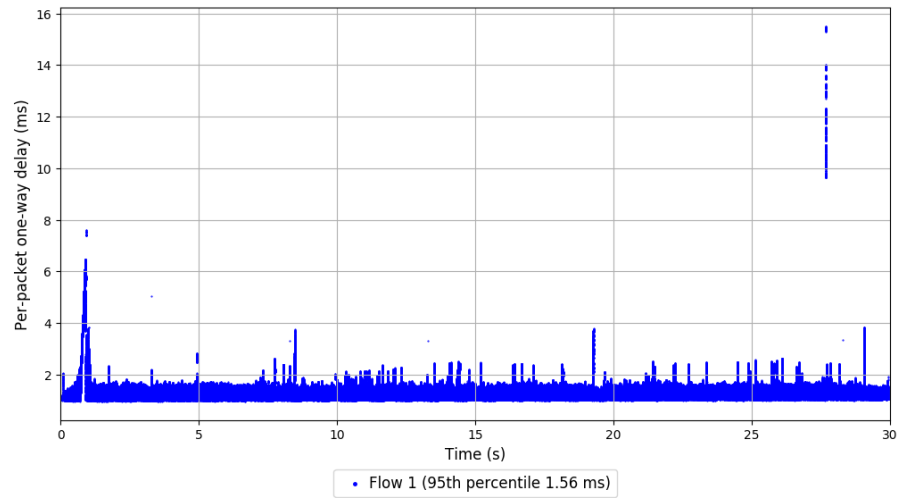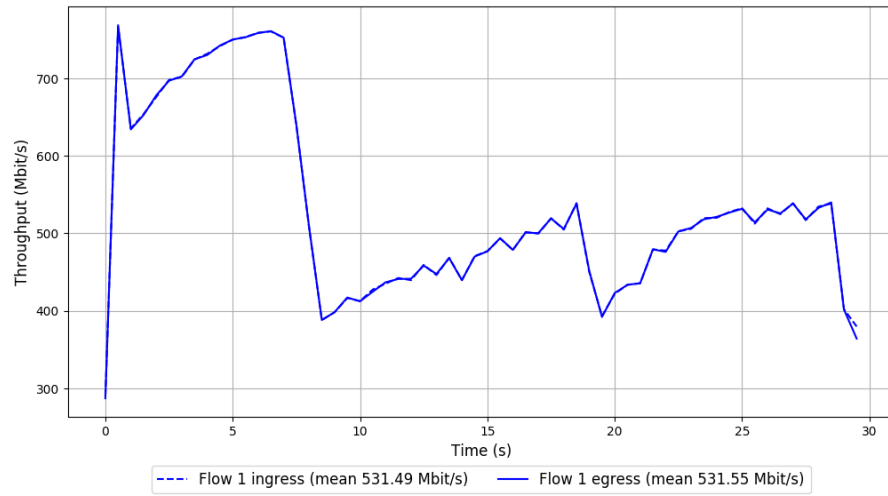
Run 10: Report of Copa — Data Link

Flow 1 ingress (mean 96.11 Mbit/s)   Flow 1 egress (mean 96.15 Mbit/s)

• Flow 1 (95th percentile 1.06 ms)

```
Run 1: Statistics of TCP Cubic

Start at: 2017-09-17 09:52:34
End at: 2017-09-17 09:53:04
Local clock offset: 5.969 ms
Remote clock offset: -4.437 ms


# Below is generated by plot.py at 2017-09-17 17:32:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 497.41 Mbit/s
95th percentile per-packet one-way delay: 1.482 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 497.41 Mbit/s
95th percentile per-packet one-way delay: 1.482 ms
Loss rate: 0.06%
```
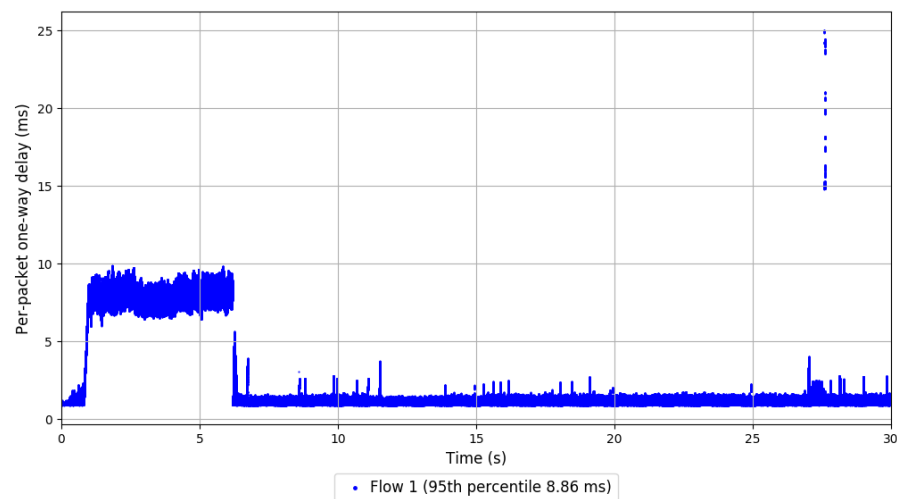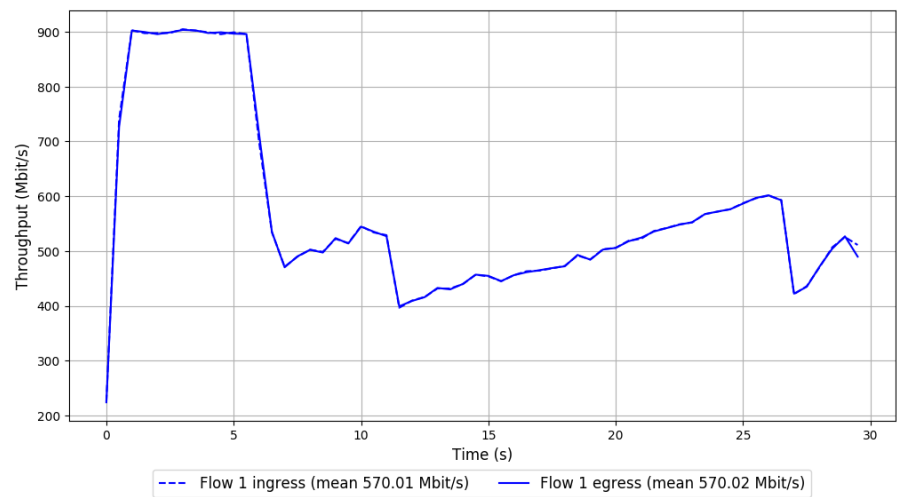
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 497.40 Mbit/s)   Flow 1 egress (mean 497.41 Mbit/s)

• Flow 1 (95th percentile 1.48 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2017-09-17 10:13:22
End at: 2017-09-17 10:13:52
Local clock offset: 3.885 ms
Remote clock offset: -4.295 ms


# Below is generated by plot.py at 2017-09-17 17:34:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 531.55 Mbit/s
95th percentile per-packet one-way delay: 1.560 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 531.55 Mbit/s
95th percentile per-packet one-way delay: 1.560 ms
Loss rate: 0.05%
```
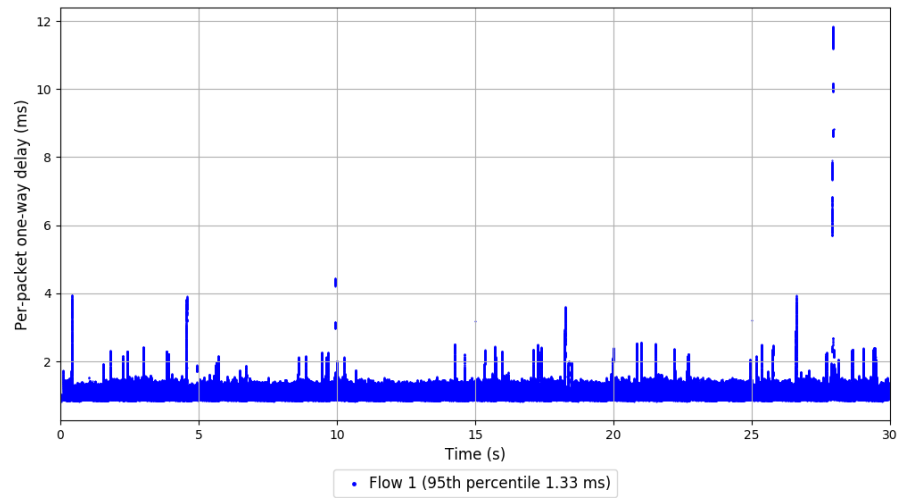
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2017-09-17 10:34:17
End at: 2017-09-17 10:34:47
Local clock offset: 2.958 ms
Remote clock offset: -3.856 ms


# Below is generated by plot.py at 2017-09-17 17:35:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 570.02 Mbit/s
95th percentile per-packet one-way delay: 8.859 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 570.02 Mbit/s
95th percentile per-packet one-way delay: 8.859 ms
Loss rate: 0.07%
```
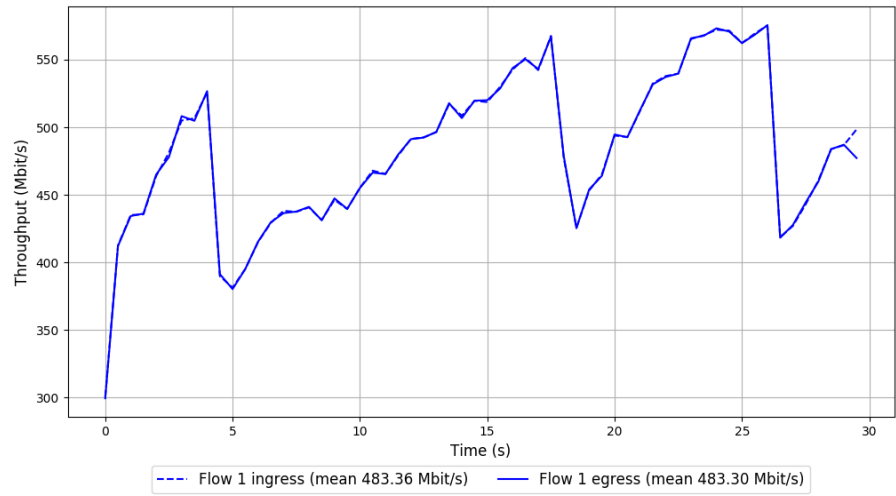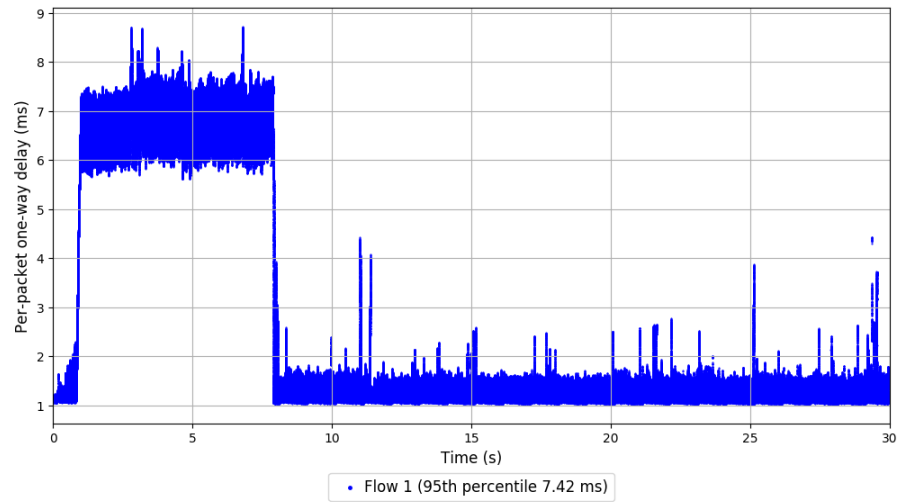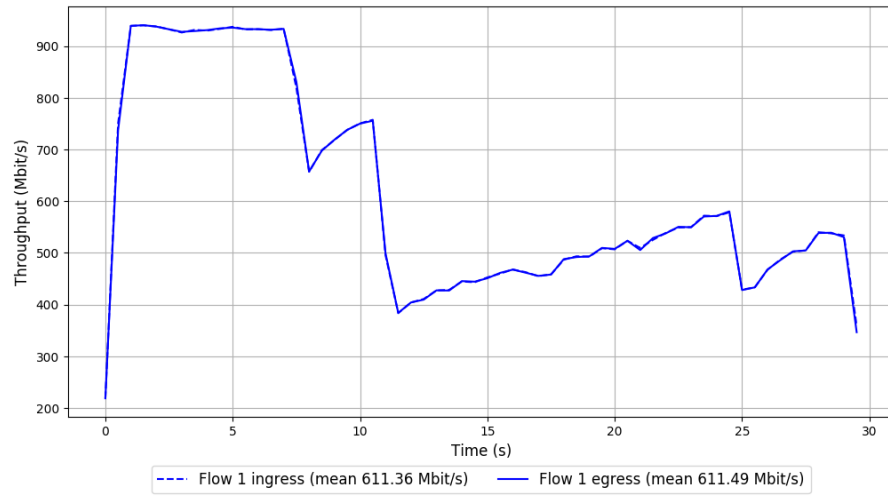
Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2017-09-17 10:55:00
End at: 2017-09-17 10:55:30
Local clock offset: 1.974 ms
Remote clock offset: -3.64 ms


# Below is generated by plot.py at 2017-09-17 17:35:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 483.30 Mbit/s
95th percentile per-packet one-way delay: 1.326 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 483.30 Mbit/s
95th percentile per-packet one-way delay: 1.326 ms
Loss rate: 0.08%
```
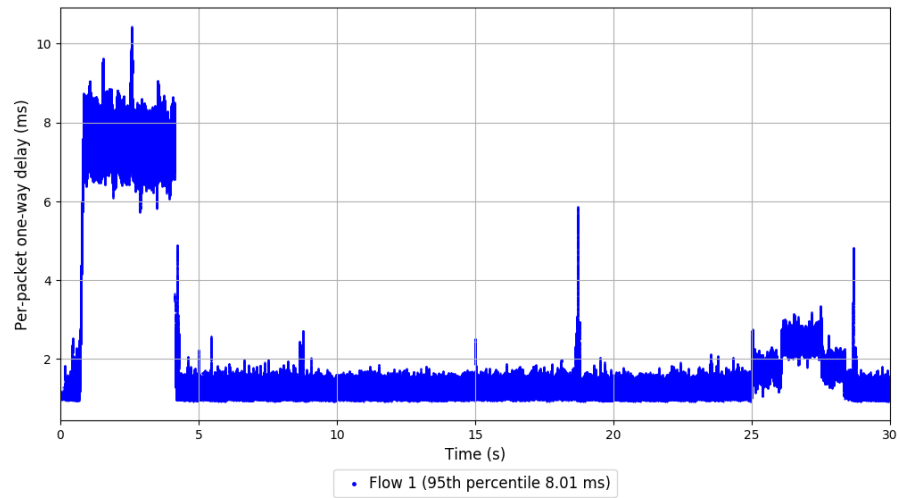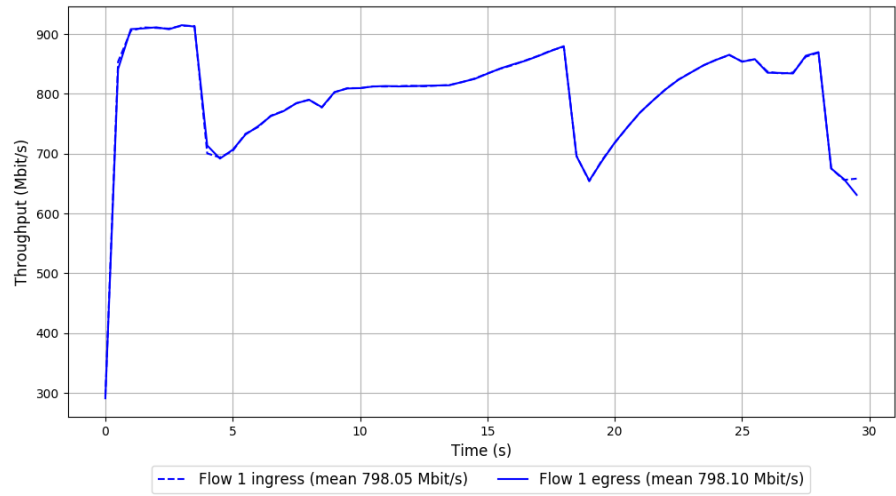
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 483.36 Mbit/s)   Flow 1 egress (mean 483.30 Mbit/s)
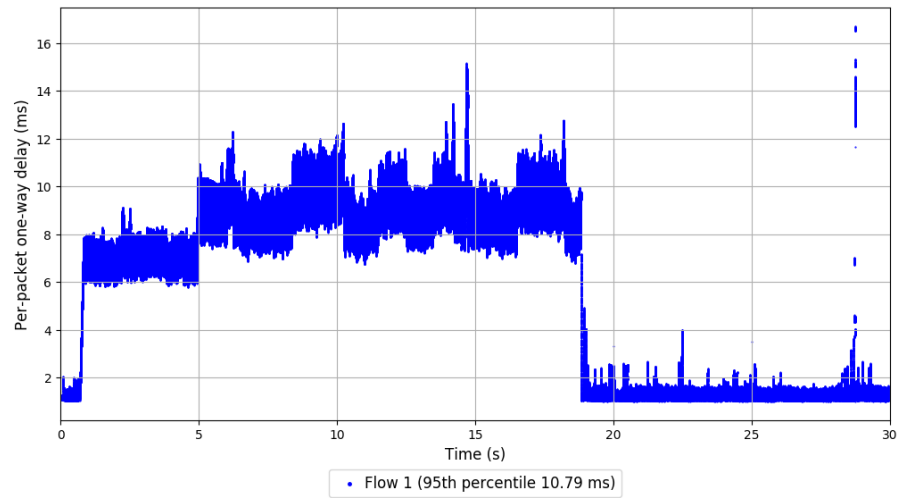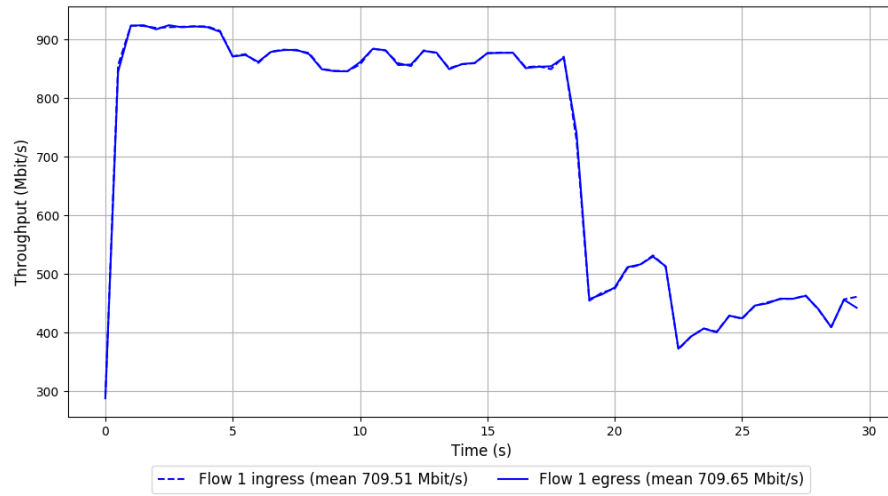

Flow 1 (95th percentile 1.33 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2017-09-17 11:15:39
End at: 2017-09-17 11:16:09
Local clock offset: 2.096 ms
Remote clock offset: -3.454 ms


# Below is generated by plot.py at 2017-09-17 17:36:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 611.49 Mbit/s
95th percentile per-packet one-way delay: 7.423 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 611.49 Mbit/s
95th percentile per-packet one-way delay: 7.423 ms
Loss rate: 0.05%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 611.36 Mbit/s)   Flow 1 egress (mean 611.49 Mbit/s)

Flow 1 (95th percentile 7.42 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2017-09-17 11:36:18
End at: 2017-09-17 11:36:48
Local clock offset: 2.921 ms
Remote clock offset: -3.17 ms


# Below is generated by plot.py at 2017-09-17 17:39:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 798.10 Mbit/s
95th percentile per-packet one-way delay: 8.010 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 798.10 Mbit/s
95th percentile per-packet one-way delay: 8.010 ms
Loss rate: 0.06%
```
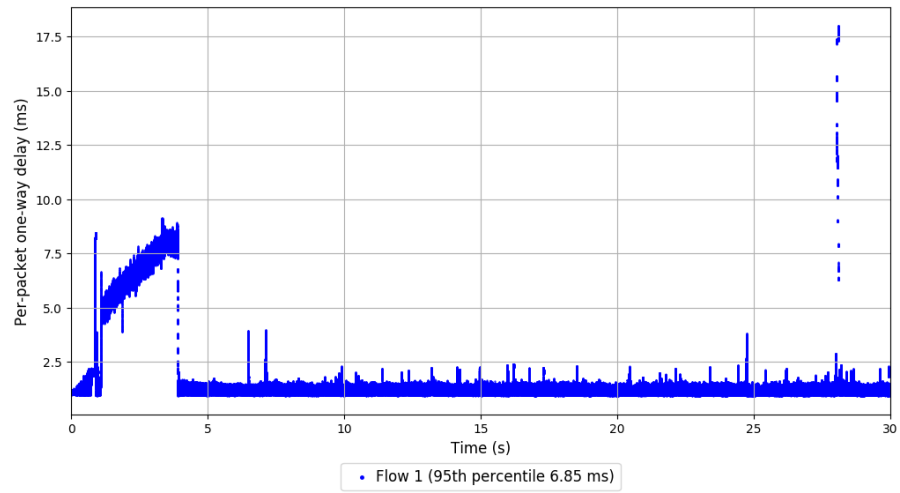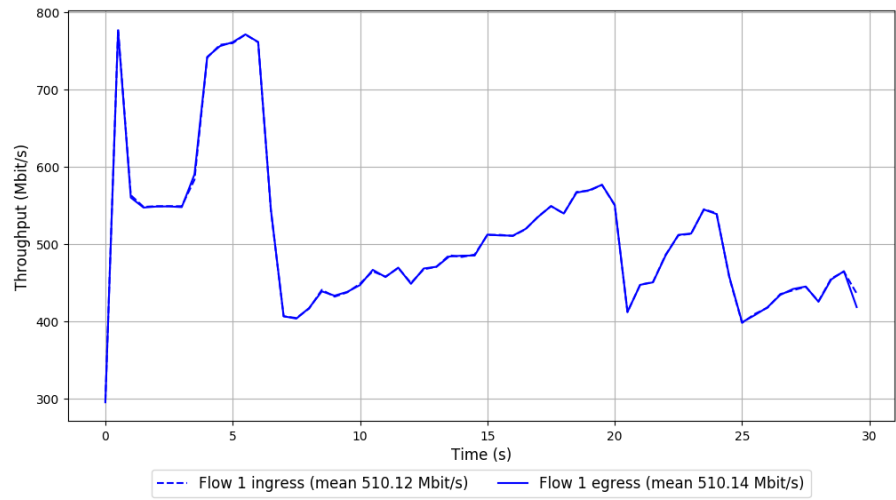
Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2017-09-17 11:57:03
End at: 2017-09-17 11:57:34
Local clock offset: 3.075 ms
Remote clock offset: -3.443 ms


# Below is generated by plot.py at 2017-09-17 17:39:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 709.65 Mbit/s
95th percentile per-packet one-way delay: 10.789 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 709.65 Mbit/s
95th percentile per-packet one-way delay: 10.789 ms
Loss rate: 0.05%
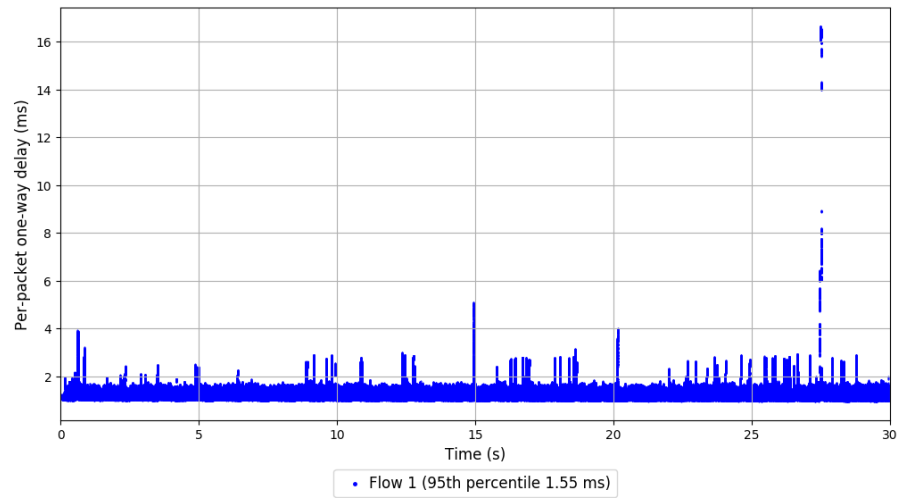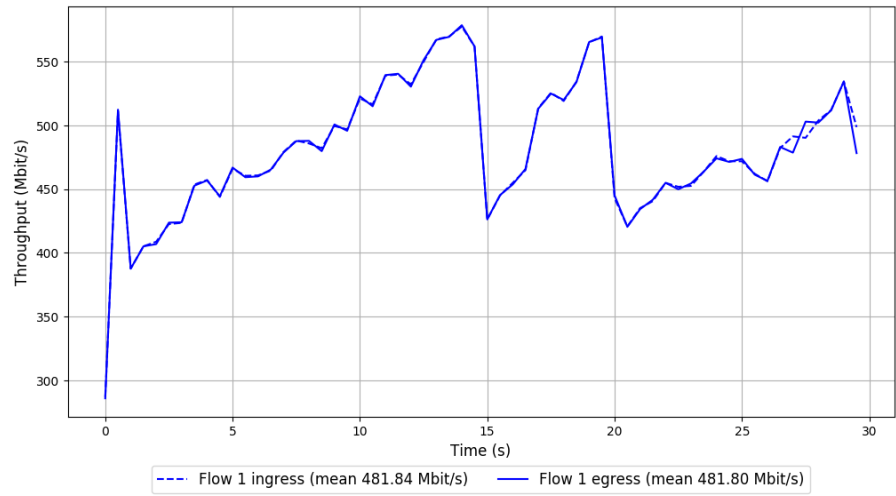```

Run 7: Report of TCP Cubic — Data Link

```
Run 8: Statistics of TCP Cubic

Start at: 2017-09-17 12:18:06
End at: 2017-09-17 12:18:36
Local clock offset: 3.197 ms
Remote clock offset: -3.363 ms

Below is generated by plot.py at 2017-09-17 17:39:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 510.14 Mbit/s
95th percentile per-packet one-way delay: 6.852 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 510.14 Mbit/s
95th percentile per-packet one-way delay: 6.852 ms
Loss rate: 0.06%
```
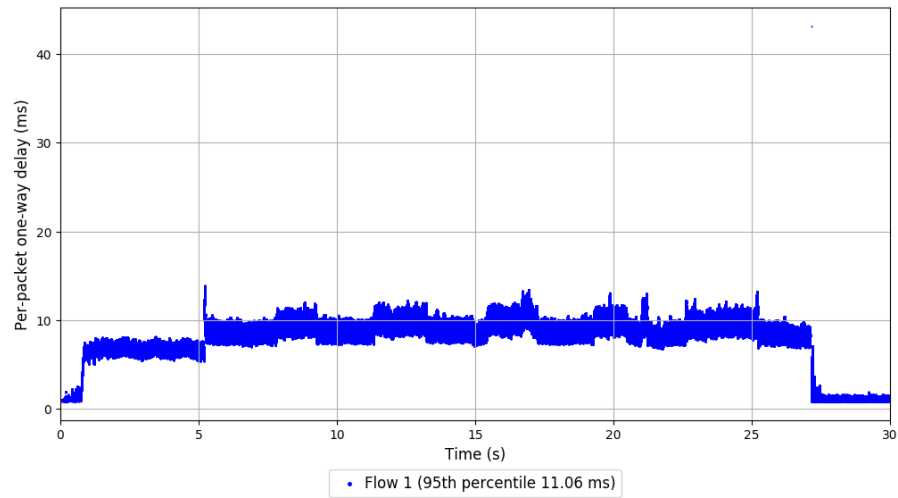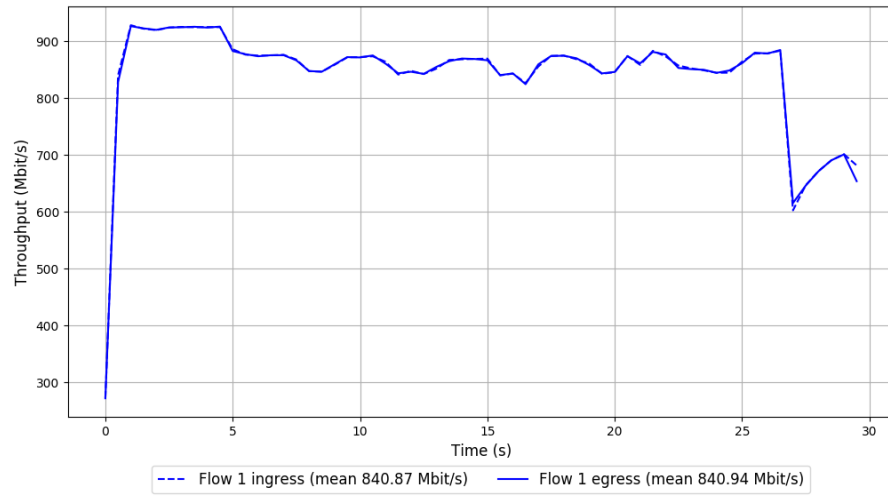
Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2017-09-17 12:38:47
End at: 2017-09-17 12:39:17
Local clock offset: 3.886 ms
Remote clock offset: -3.737 ms

Below is generated by plot.py at 2017-09-17 17:40:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 481.80 Mbit/s
95th percentile per-packet one-way delay: 1.555 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 481.80 Mbit/s
95th percentile per-packet one-way delay: 1.555 ms
Loss rate: 0.08%
```
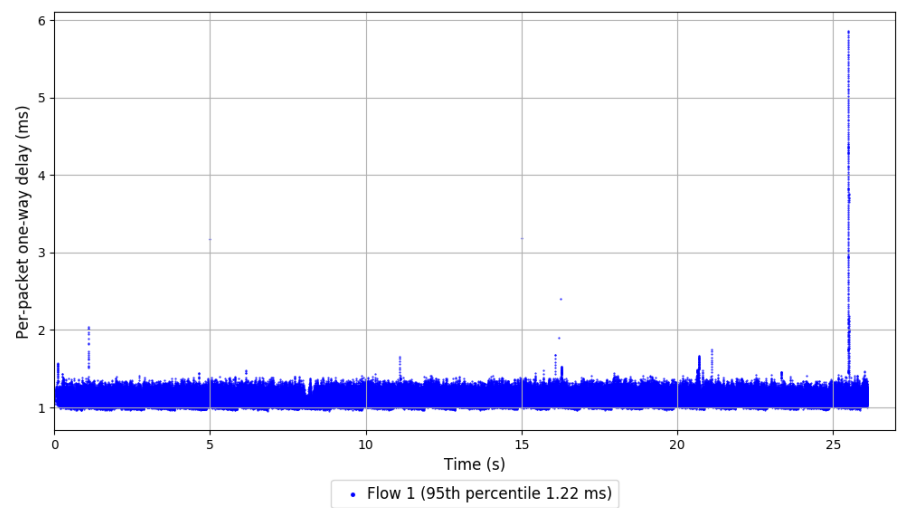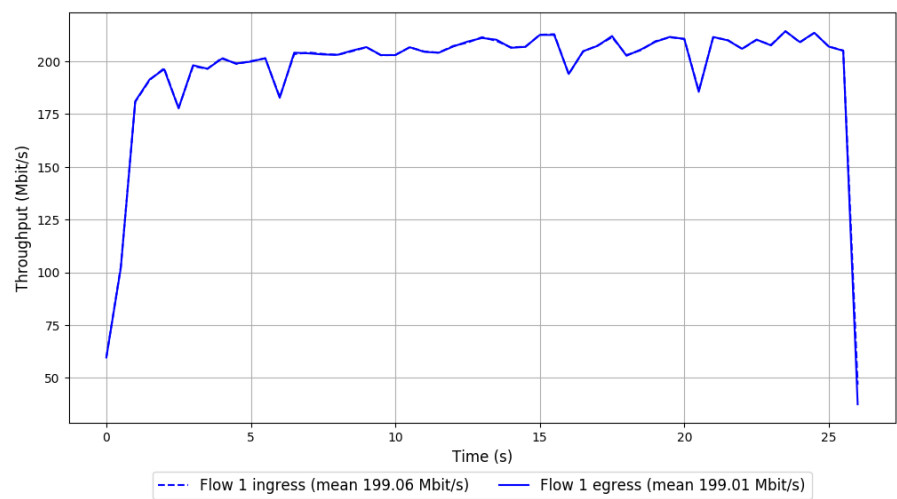
Run 9: Report of TCP Cubic — Data Link



Flow 1 ingress (mean 481.84 Mbit/s) --- Flow 1 egress (mean 481.80 Mbit/s)



Flow 1 (95th percentile 1.55 ms)

```
Run 10: Statistics of TCP Cubic

Start at: 2017-09-17 12:59:44
End at: 2017-09-17 13:00:15
Local clock offset: 4.54 ms
Remote clock offset: -3.921 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 840.94 Mbit/s
95th percentile per-packet one-way delay: 11.062 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 840.94 Mbit/s
95th percentile per-packet one-way delay: 11.062 ms
Loss rate: 0.06%
```

Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of Indigo

Start at: 2017-09-17 09:48:52
End at: 2017-09-17 09:49:22
Local clock offset: 6.116 ms
Remote clock offset: -4.38 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 199.01 Mbit/s
95th percentile per-packet one-way delay: 1.221 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 199.01 Mbit/s
95th percentile per-packet one-way delay: 1.221 ms
Loss rate: 0.10%
```
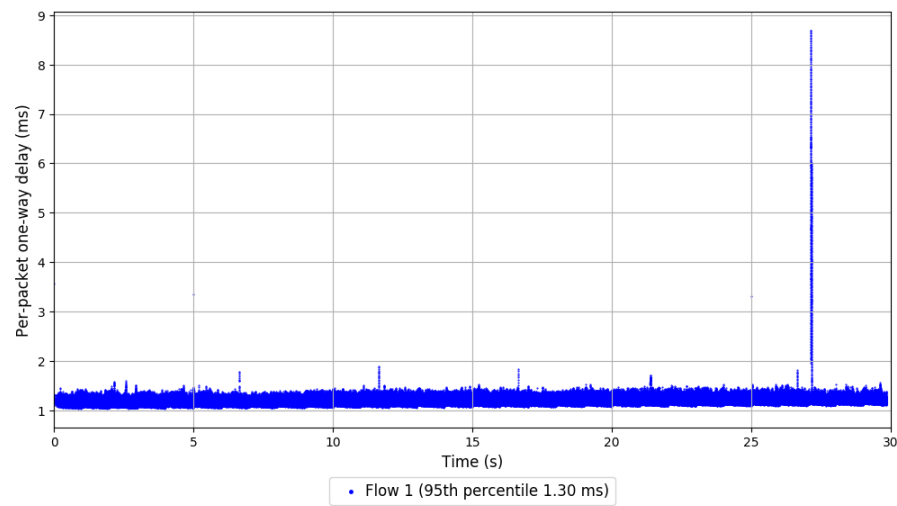
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2017-09-17 10:09:37
End at: 2017-09-17 10:10:08
Local clock offset: 4.302 ms
Remote clock offset: -4.43 ms

# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 204.02 Mbit/s
95th percentile per-packet one-way delay: 1.301 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 204.02 Mbit/s
95th percentile per-packet one-way delay: 1.301 ms
Loss rate: 0.07%
```
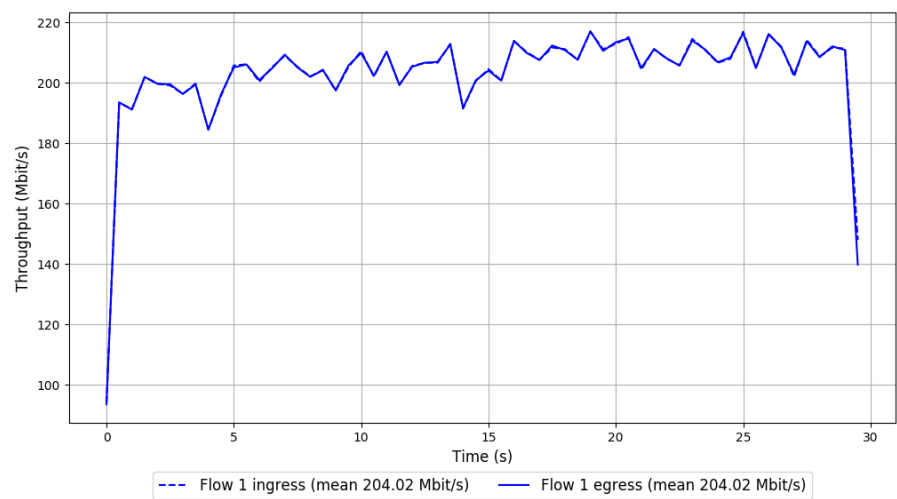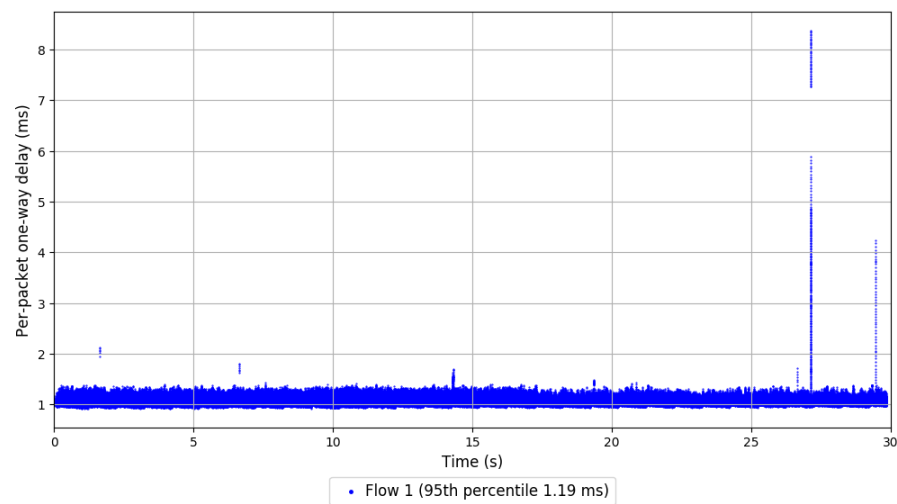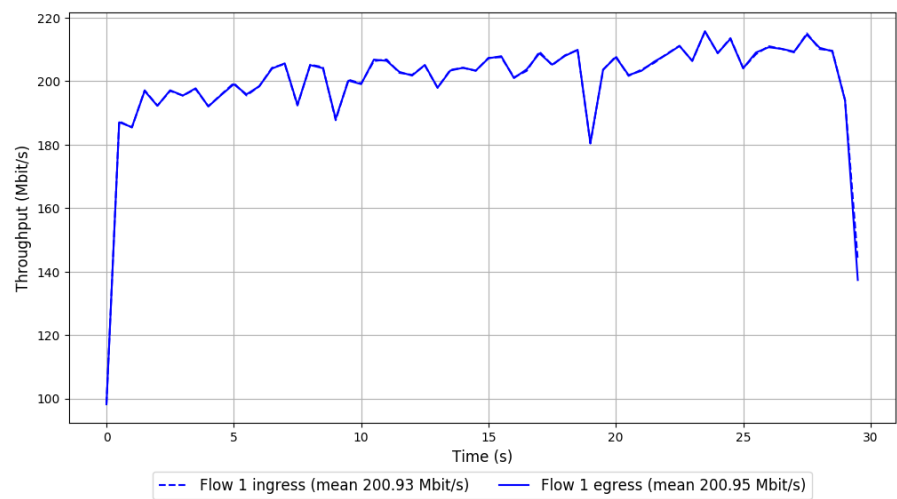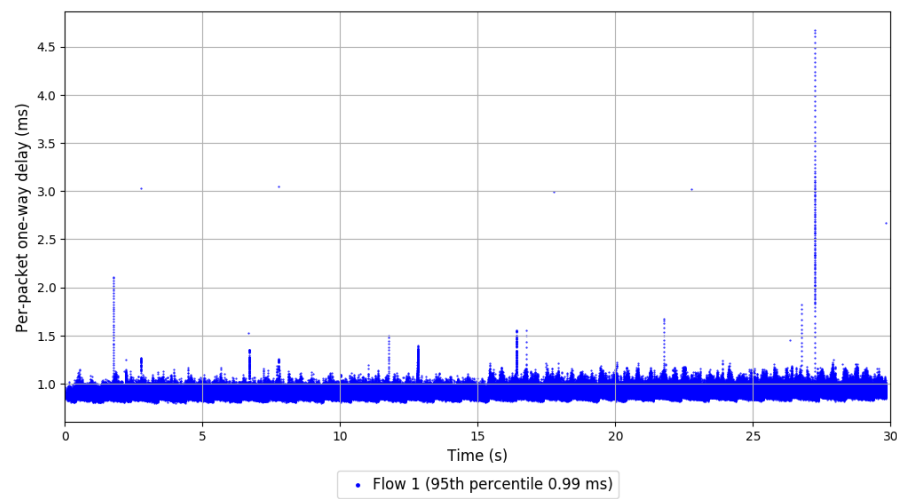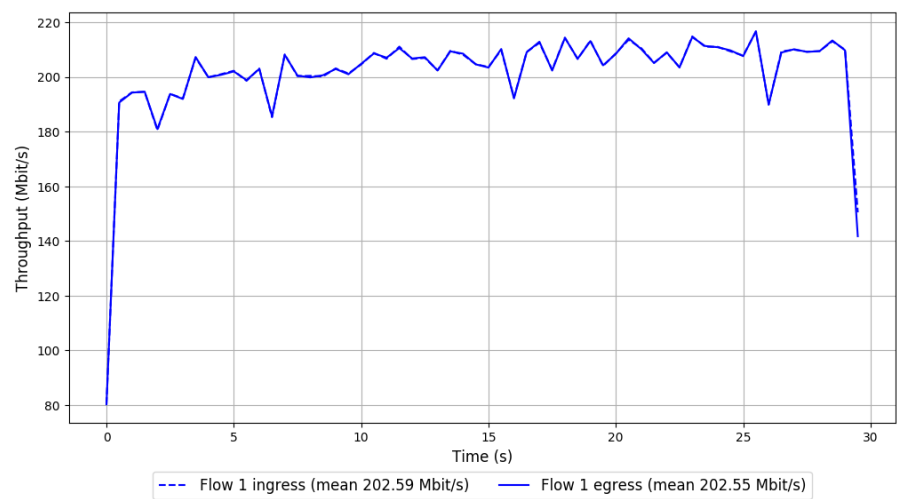
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2017-09-17 10:30:32
End at: 2017-09-17 10:31:02
Local clock offset: 3.061 ms
Remote clock offset: -3.943 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 200.95 Mbit/s
95th percentile per-packet one-way delay: 1.189 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 200.95 Mbit/s
95th percentile per-packet one-way delay: 1.189 ms
Loss rate: 0.06%
```

Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2017-09-17 10:51:15
End at: 2017-09-17 10:51:45
Local clock offset: 2.004 ms
Remote clock offset: -3.708 ms

# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.55 Mbit/s
95th percentile per-packet one-way delay: 0.990 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 202.55 Mbit/s
95th percentile per-packet one-way delay: 0.990 ms
Loss rate: 0.08%
```
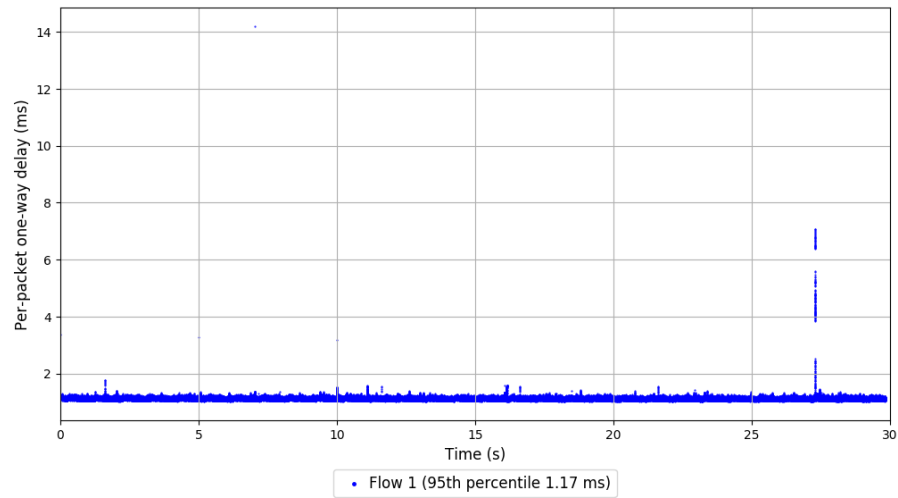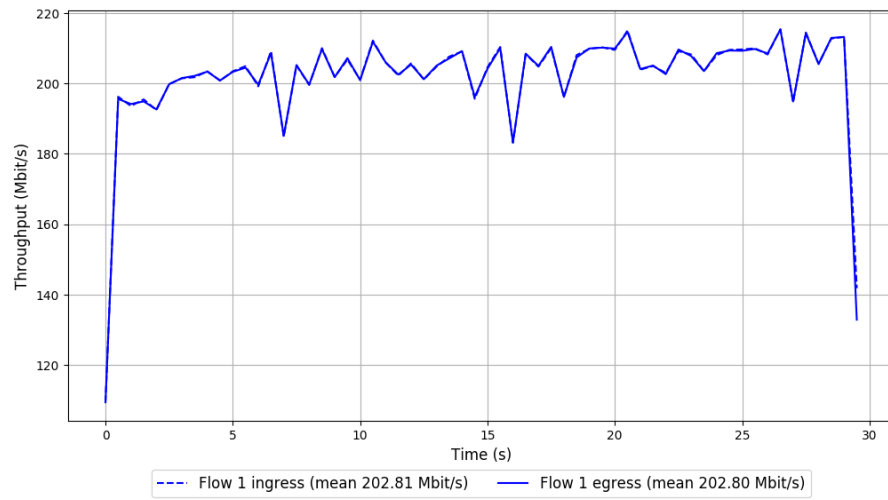
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2017-09-17 11:11:55
End at: 2017-09-17 11:12:25
Local clock offset: 1.946 ms
Remote clock offset: -3.518 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.80 Mbit/s
95th percentile per-packet one-way delay: 1.167 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 202.80 Mbit/s
95th percentile per-packet one-way delay: 1.167 ms
Loss rate: 0.08%
```
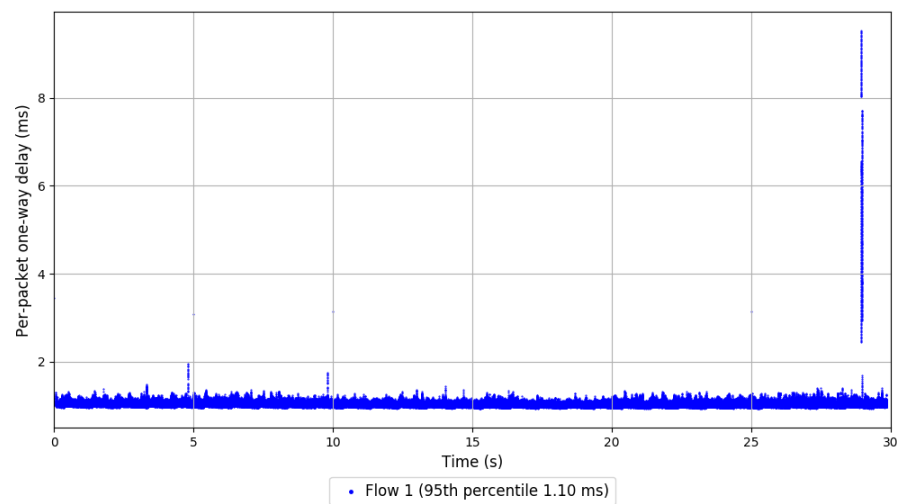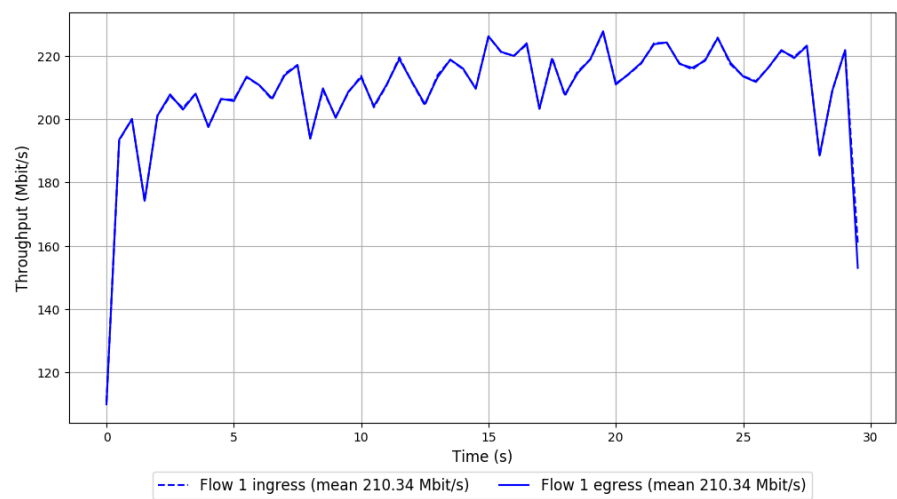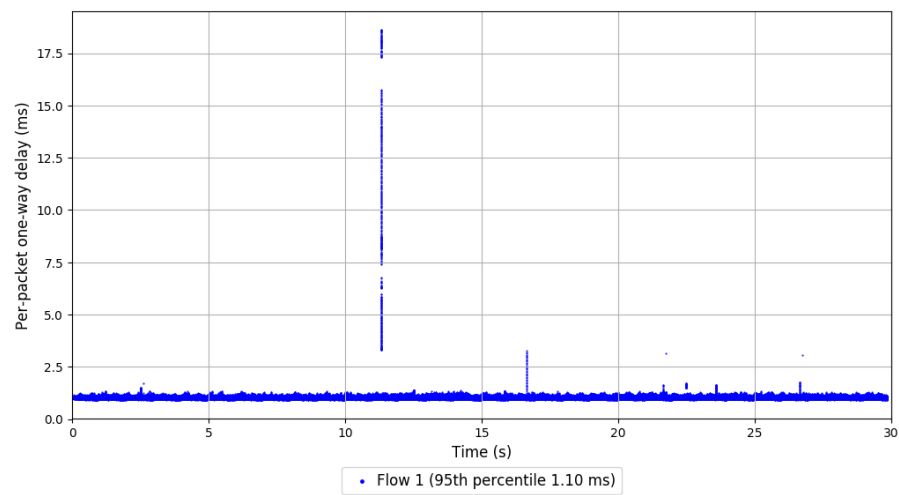
Run 5: Report of Indigo — Data Link

```
Run 6: Statistics of Indigo

Start at: 2017-09-17 11:32:34
End at: 2017-09-17 11:33:04
Local clock offset: 2.976 ms
Remote clock offset: -3.194 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 210.34 Mbit/s
95th percentile per-packet one-way delay: 1.098 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 210.34 Mbit/s
95th percentile per-packet one-way delay: 1.098 ms
Loss rate: 0.07%
```

Run 6: Report of Indigo — Data Link

Flow 1 ingress (mean 210.34 Mbit/s)   Flow 1 egress (mean 210.34 Mbit/s)

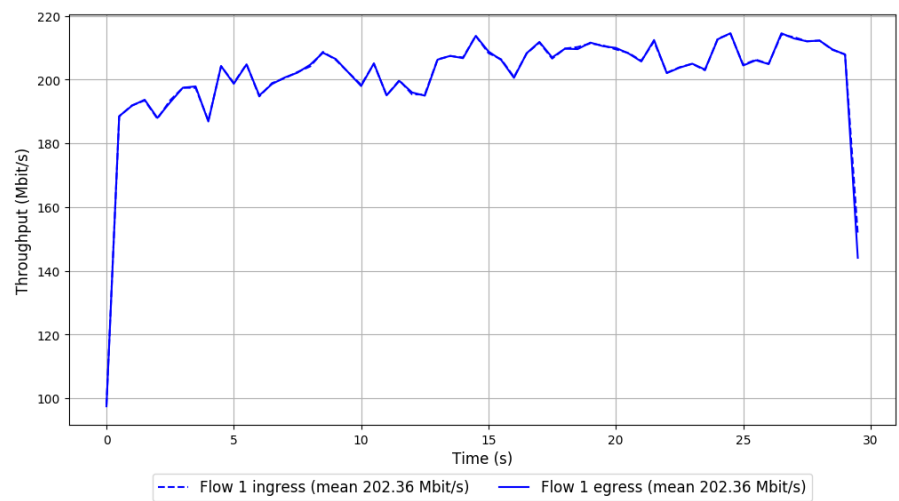• Flow 1 (95th percentile 1.10 ms)

```
Run 7: Statistics of Indigo

Start at: 2017-09-17 11:53:19
End at: 2017-09-17 11:53:49
Local clock offset: 2.97 ms
Remote clock offset: -3.454 ms

# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.36 Mbit/s
95th percentile per-packet one-way delay: 1.100 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 202.36 Mbit/s
95th percentile per-packet one-way delay: 1.100 ms
Loss rate: 0.07%
```
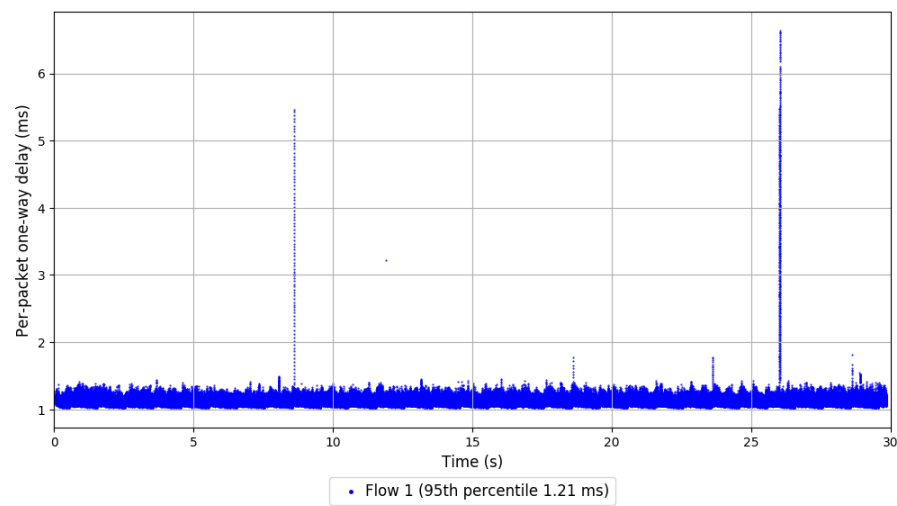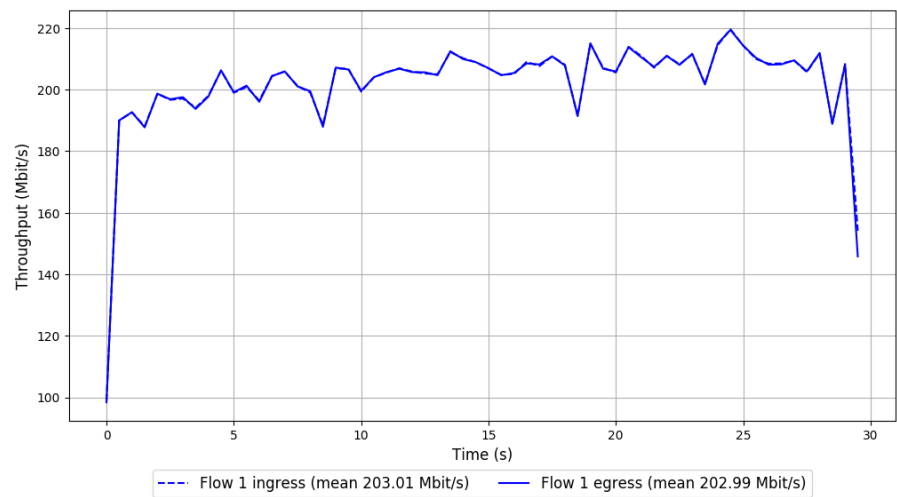
Run 7: Report of Indigo — Data Link

```
Run 8: Statistics of Indigo

Start at: 2017-09-17 12:14:23
End at: 2017-09-17 12:14:53
Local clock offset: 3.188 ms
Remote clock offset: -3.382 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.99 Mbit/s
95th percentile per-packet one-way delay: 1.208 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 202.99 Mbit/s
95th percentile per-packet one-way delay: 1.208 ms
Loss rate: 0.07%
```
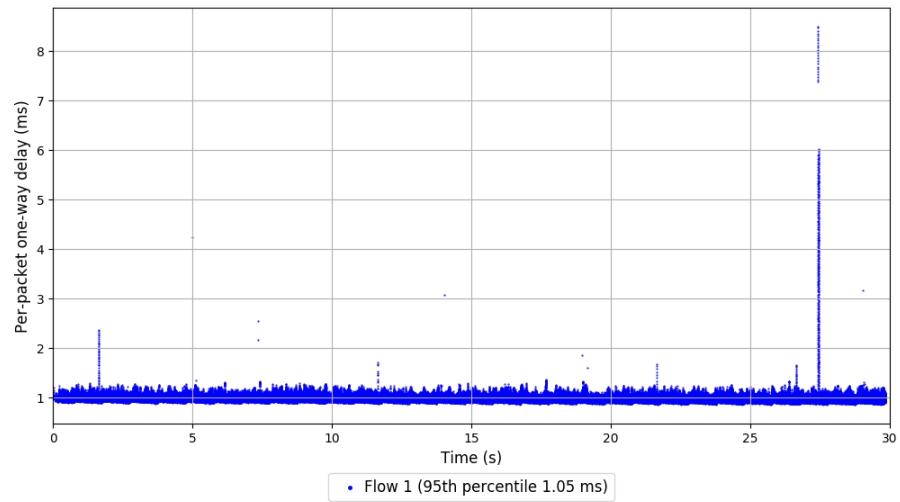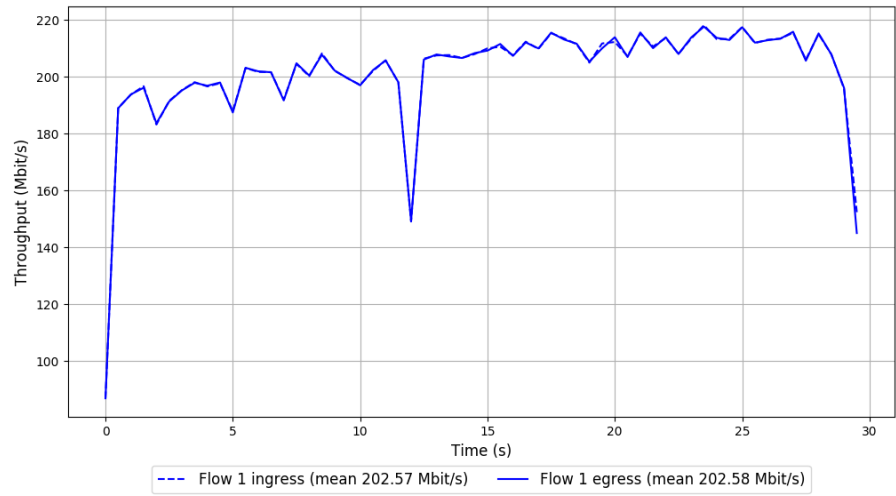
Run 8: Report of Indigo — Data Link

Flow 1 ingress (mean 203.01 Mbit/s)   Flow 1 egress (mean 202.99 Mbit/s)

• Flow 1 (95th percentile 1.21 ms)

```
Run 9: Statistics of Indigo

Start at: 2017-09-17 12:35:03
End at: 2017-09-17 12:35:33
Local clock offset: 3.569 ms
Remote clock offset: -3.678 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.58 Mbit/s
95th percentile per-packet one-way delay: 1.050 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 202.58 Mbit/s
95th percentile per-packet one-way delay: 1.050 ms
Loss rate: 0.06%
```
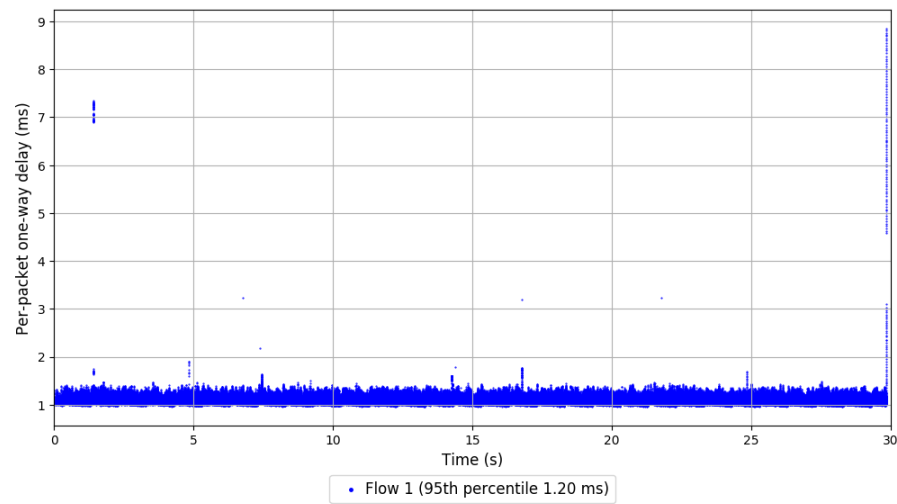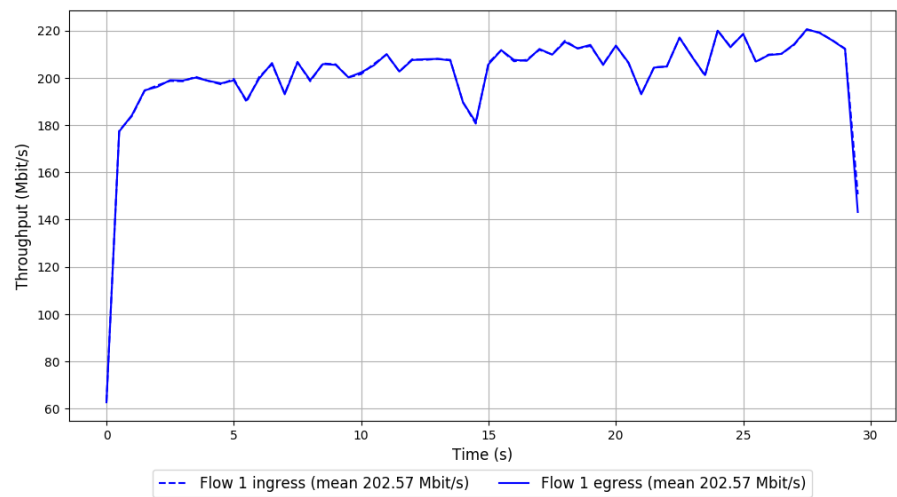
Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2017-09-17 12:56:00
End at: 2017-09-17 12:56:30
Local clock offset: 4.543 ms
Remote clock offset: -3.918 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.57 Mbit/s
95th percentile per-packet one-way delay: 1.204 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 202.57 Mbit/s
95th percentile per-packet one-way delay: 1.204 ms
Loss rate: 0.07%
```

Run 10: Report of Indigo — Data Link

Flow 1 ingress (mean 202.57 Mbit/s)   Flow 1 egress (mean 202.57 Mbit/s)

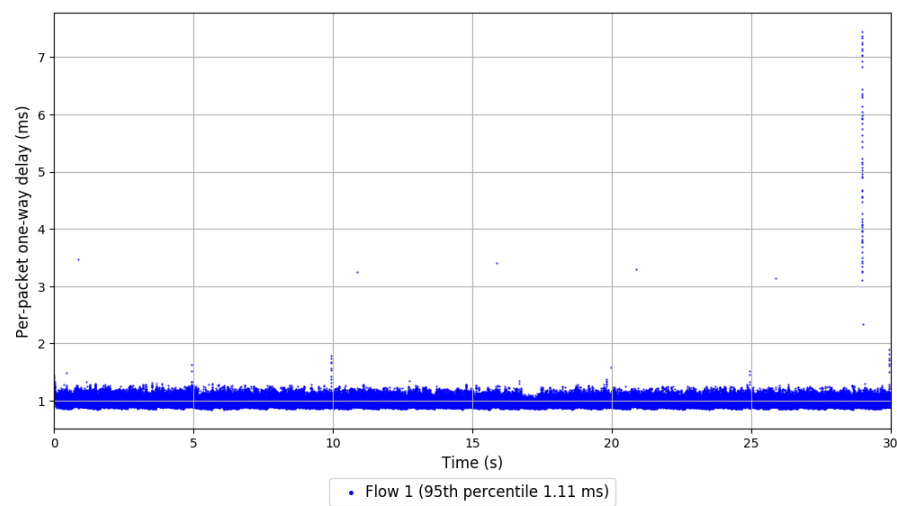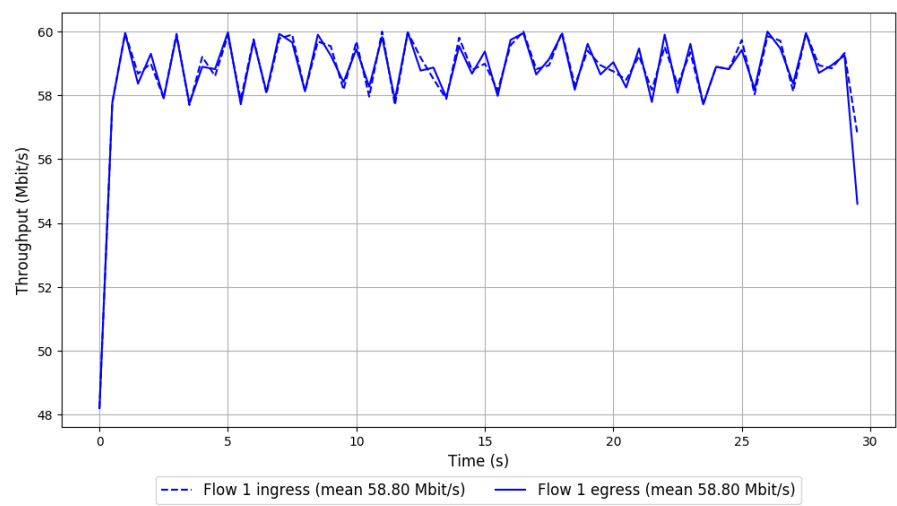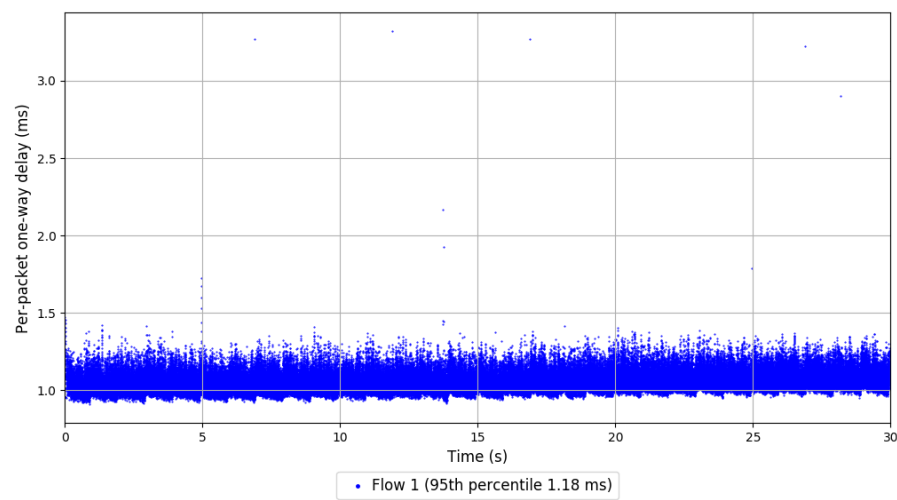• Flow 1 (95th percentile 1.20 ms)

```
Run 1: Statistics of KohoCC

Start at: 2017-09-17 09:51:21
End at: 2017-09-17 09:51:51
Local clock offset: 5.963 ms
Remote clock offset: -4.381 ms

# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.80 Mbit/s
95th percentile per-packet one-way delay: 1.109 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 58.80 Mbit/s
95th percentile per-packet one-way delay: 1.109 ms
Loss rate: 0.07%
```

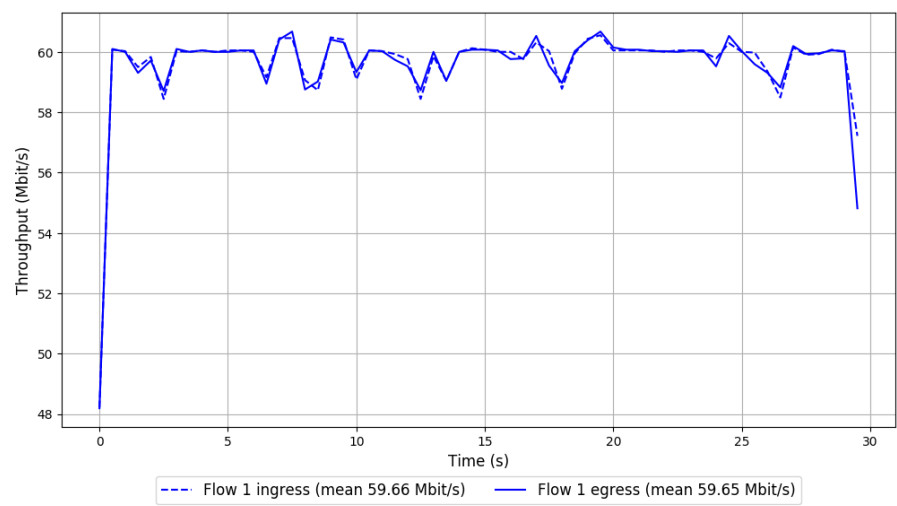Run 1: Report of KohoCC — Data Link

```
Run 2: Statistics of KohoCC

Start at: 2017-09-17 10:12:09
End at: 2017-09-17 10:12:39
Local clock offset: 3.963 ms
Remote clock offset: -4.276 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.65 Mbit/s
95th percentile per-packet one-way delay: 1.178 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 59.65 Mbit/s
95th percentile per-packet one-way delay: 1.178 ms
Loss rate: 0.07%
```
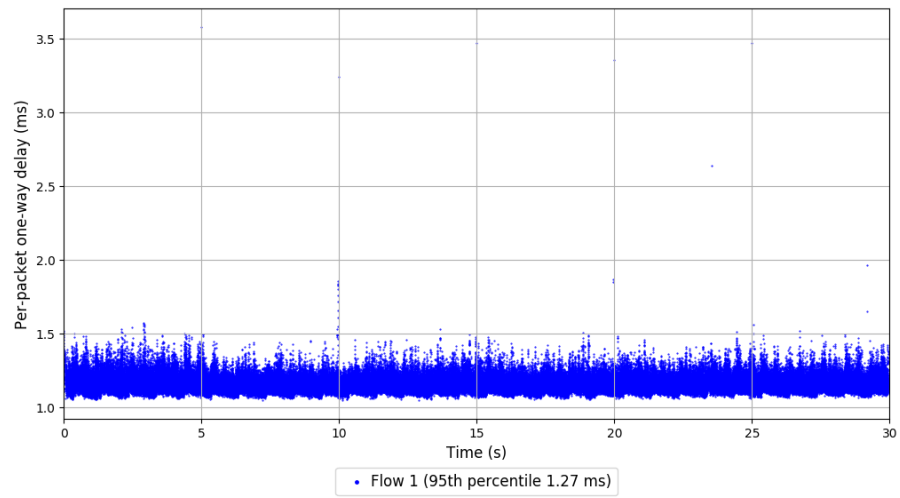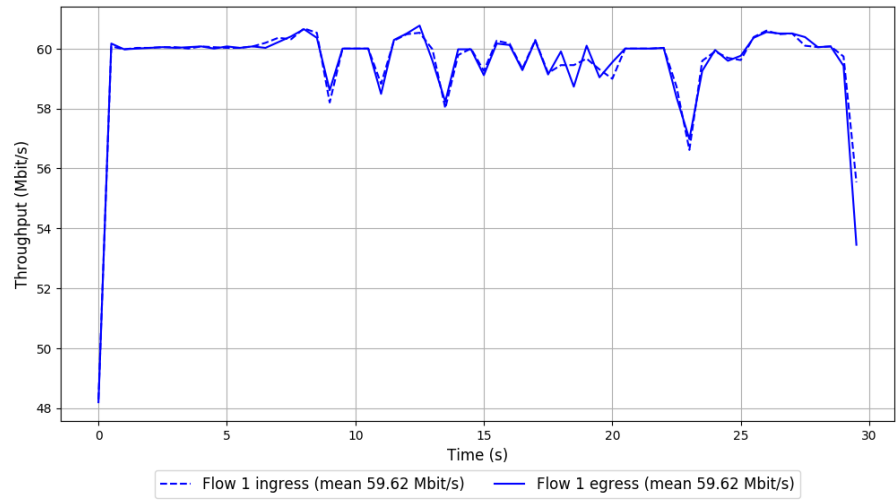
Run 2: Report of KohoCC — Data Link

```
Run 3: Statistics of KohoCC

Start at: 2017-09-17 10:33:03
End at: 2017-09-17 10:33:33
Local clock offset: 3.078 ms
Remote clock offset: -3.93 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.62 Mbit/s
95th percentile per-packet one-way delay: 1.268 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 59.62 Mbit/s
95th percentile per-packet one-way delay: 1.268 ms
Loss rate: 0.07%
```

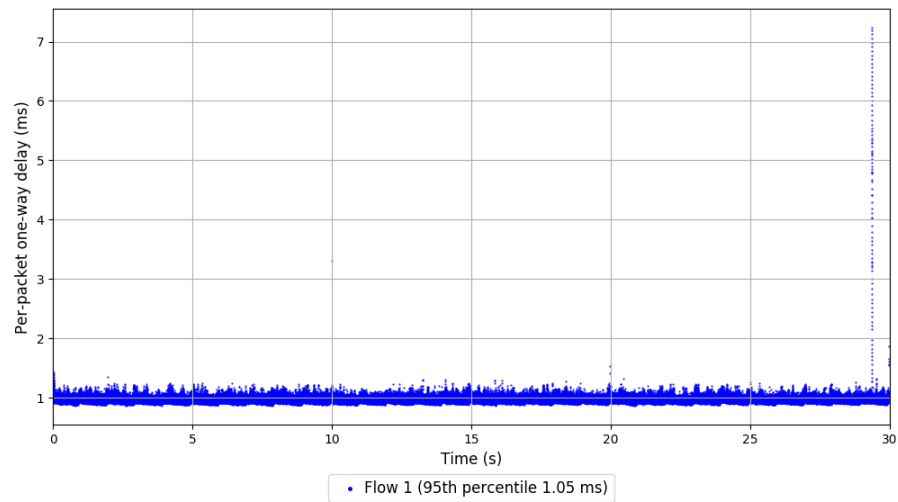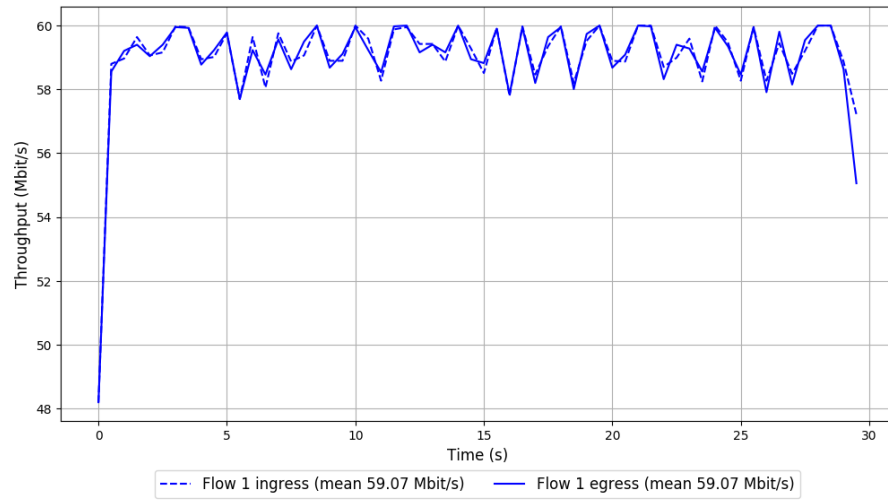## Run 3: Report of KohoCC — Data Link

```
Run 4: Statistics of KohoCC

Start at: 2017-09-17 10:53:47
End at: 2017-09-17 10:54:17
Local clock offset: 1.969 ms
Remote clock offset: -3.706 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.07 Mbit/s
95th percentile per-packet one-way delay: 1.049 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 59.07 Mbit/s
95th percentile per-packet one-way delay: 1.049 ms
Loss rate: 0.07%
```

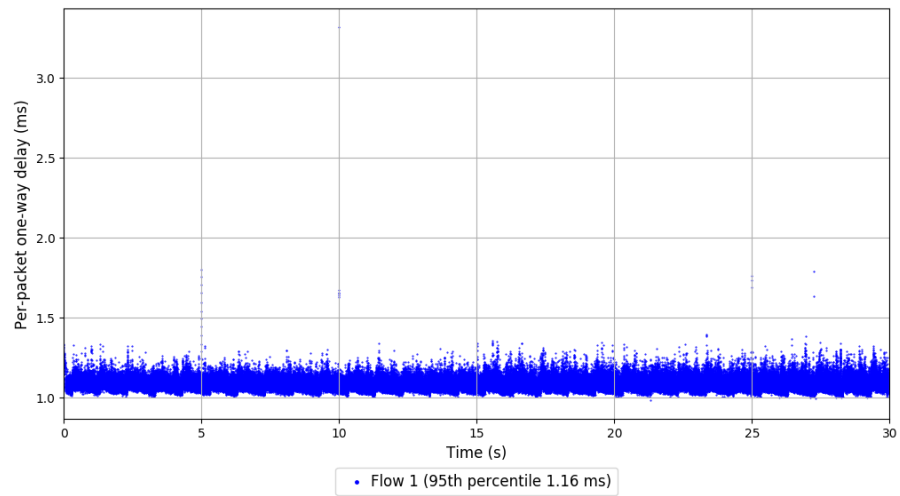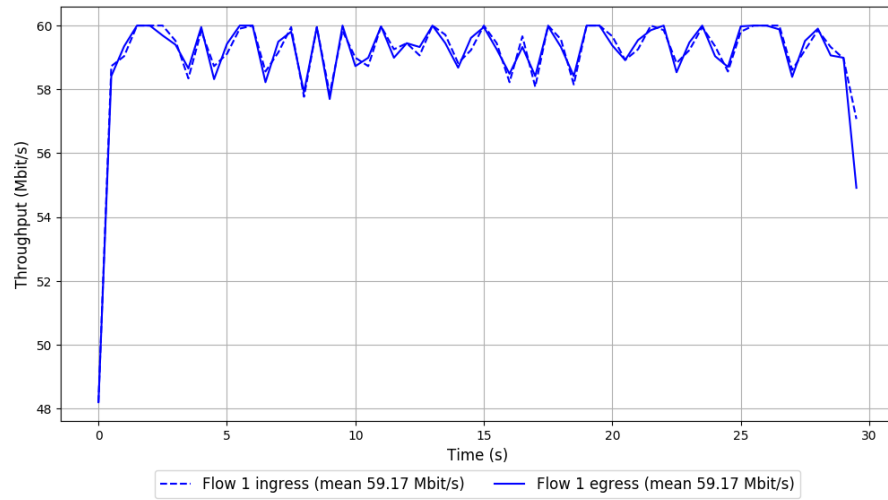Run 4: Report of KohoCC — Data Link

```
Run 5: Statistics of KohoCC

Start at: 2017-09-17 11:14:26
End at: 2017-09-17 11:14:56
Local clock offset: 2.029 ms
Remote clock offset: -3.477 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.17 Mbit/s
95th percentile per-packet one-way delay: 1.159 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 59.17 Mbit/s
95th percentile per-packet one-way delay: 1.159 ms
Loss rate: 0.07%
```

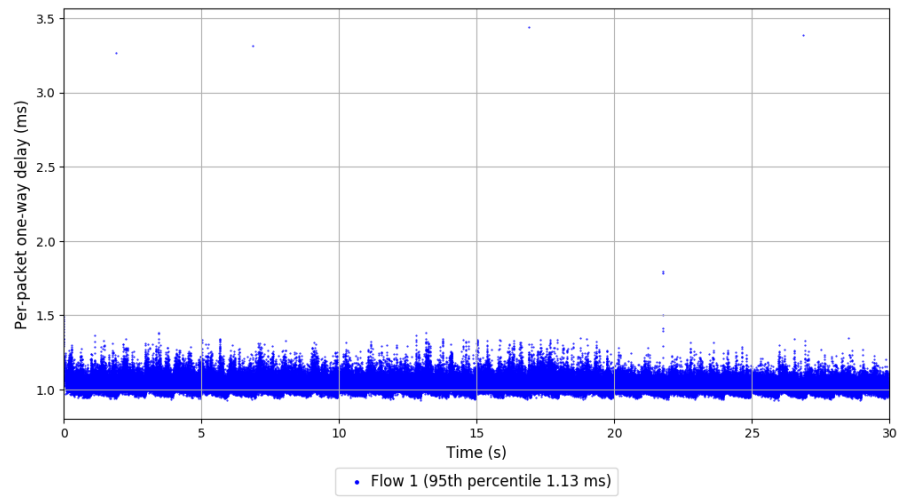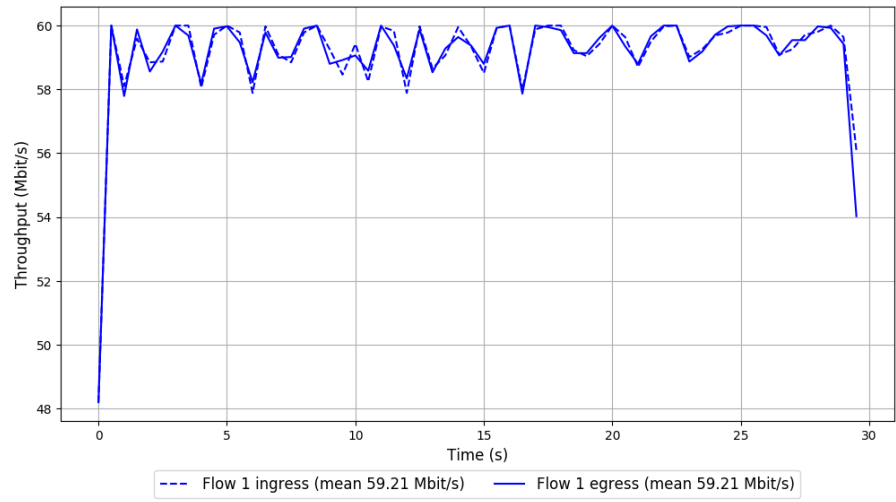Run 5: Report of KohoCC — Data Link

```
Run 6: Statistics of KohoCC

Start at: 2017-09-17 11:35:05
End at: 2017-09-17 11:35:35
Local clock offset: 3.001 ms
Remote clock offset: -3.057 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.21 Mbit/s
95th percentile per-packet one-way delay: 1.129 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 59.21 Mbit/s
95th percentile per-packet one-way delay: 1.129 ms
Loss rate: 0.07%
```

Run 6: Report of KohoCC — Data Link

Flow 1 ingress (mean 59.21 Mbit/s)   Flow 1 egress (mean 59.21 Mbit/s)

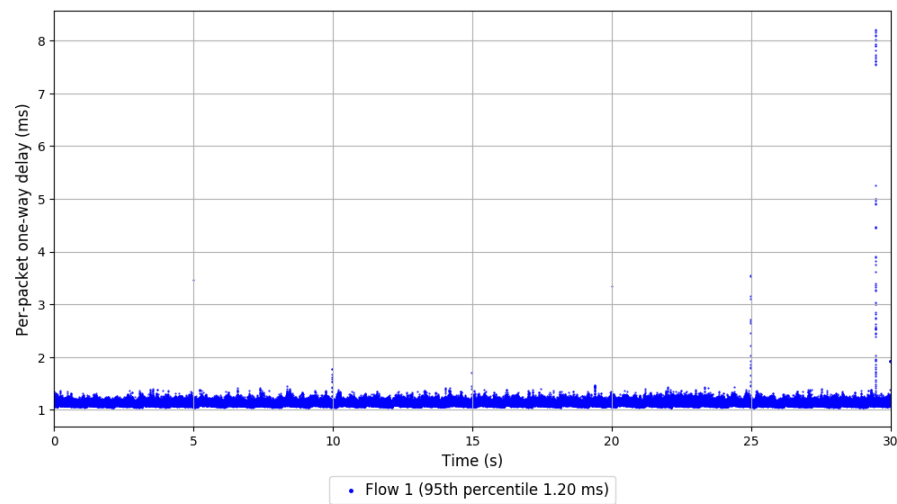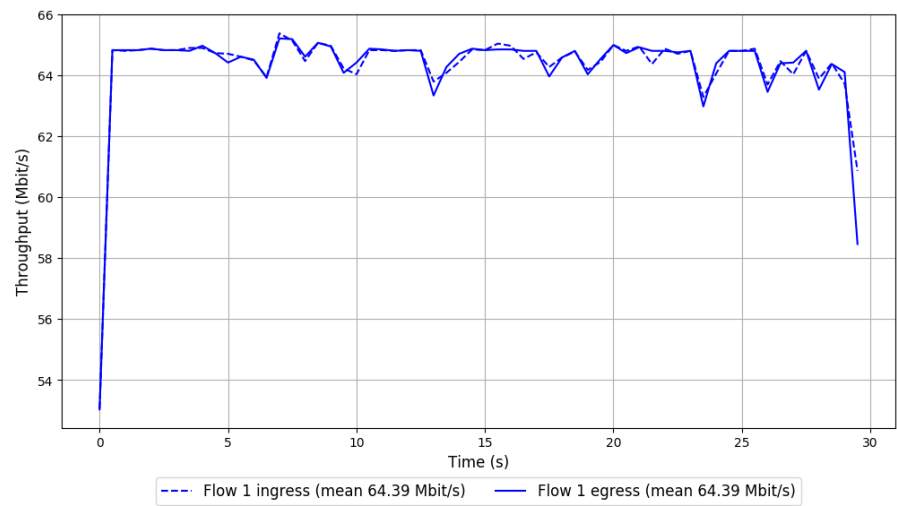Flow 1 (95th percentile 1.13 ms)

```
Run 7: Statistics of KohoCC

Start at: 2017-09-17 11:55:50
End at: 2017-09-17 11:56:20
Local clock offset: 3.094 ms
Remote clock offset: -3.443 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.39 Mbit/s
95th percentile per-packet one-way delay: 1.202 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 64.39 Mbit/s
95th percentile per-packet one-way delay: 1.202 ms
Loss rate: 0.06%
```

Run 7: Report of KohoCC — Data Link

Flow 1 ingress (mean 64.39 Mbit/s) ---- Flow 1 egress (mean 64.39 Mbit/s)

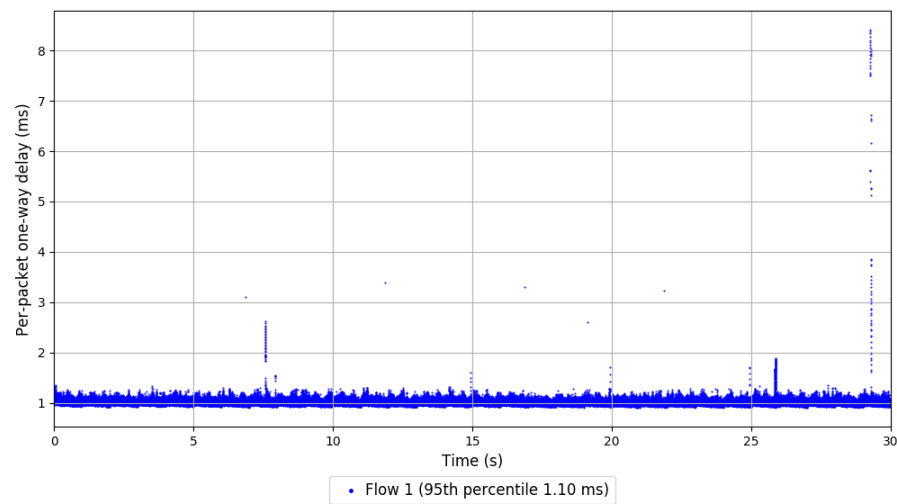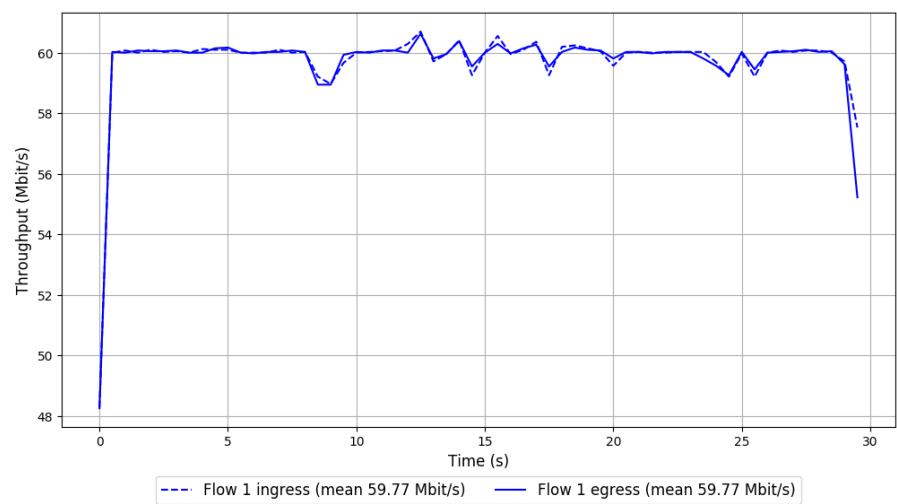• Flow 1 (95th percentile 1.20 ms)

```
Run 8: Statistics of KohoCC

Start at: 2017-09-17 12:16:53
End at: 2017-09-17 12:17:24
Local clock offset: 3.076 ms
Remote clock offset: -3.421 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.77 Mbit/s
95th percentile per-packet one-way delay: 1.096 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 59.77 Mbit/s
95th percentile per-packet one-way delay: 1.096 ms
Loss rate: 0.07%
```

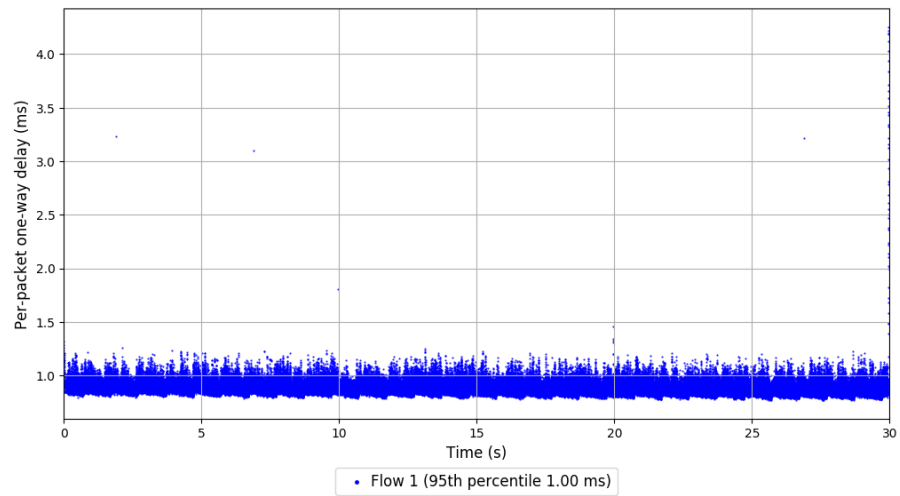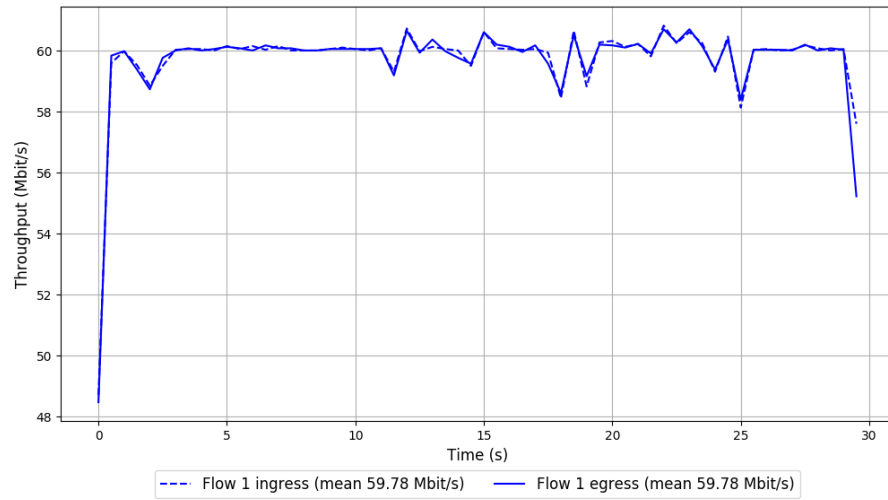Run 8: Report of KohoCC — Data Link

```
Run 9: Statistics of KohoCC

Start at: 2017-09-17 12:37:34
End at: 2017-09-17 12:38:04
Local clock offset: 3.713 ms
Remote clock offset: -3.617 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.78 Mbit/s
95th percentile per-packet one-way delay: 1.003 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 59.78 Mbit/s
95th percentile per-packet one-way delay: 1.003 ms
Loss rate: 0.07%
```

Run 9: Report of KohoCC — Data Link

```
Run 10: Statistics of KohoCC

Start at: 2017-09-17 12:58:31
End at: 2017-09-17 12:59:01
Local clock offset: 4.608 ms
Remote clock offset: -3.886 ms


# Below is generated by plot.py at 2017-09-17 17:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.99 Mbit/s
95th percentile per-packet one-way delay: 1.179 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 58.99 Mbit/s
95th percentile per-packet one-way delay: 1.179 ms
Loss rate: 0.07%
```
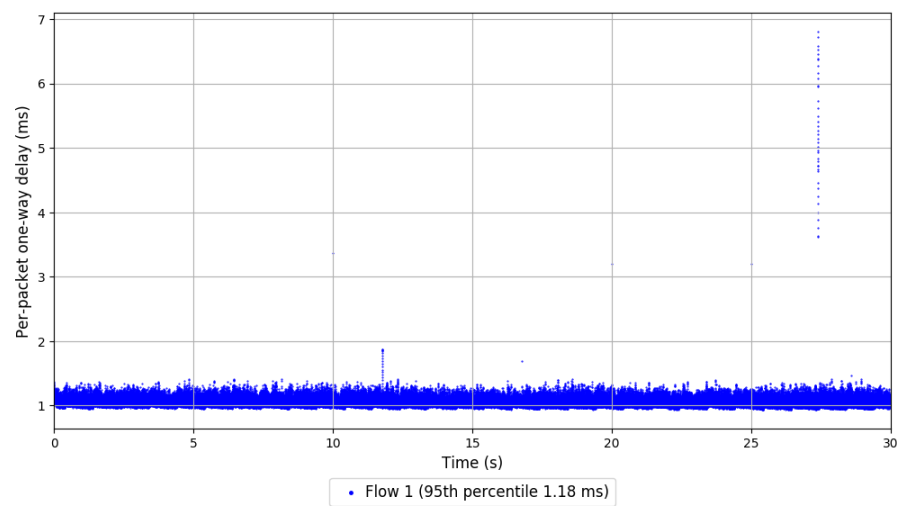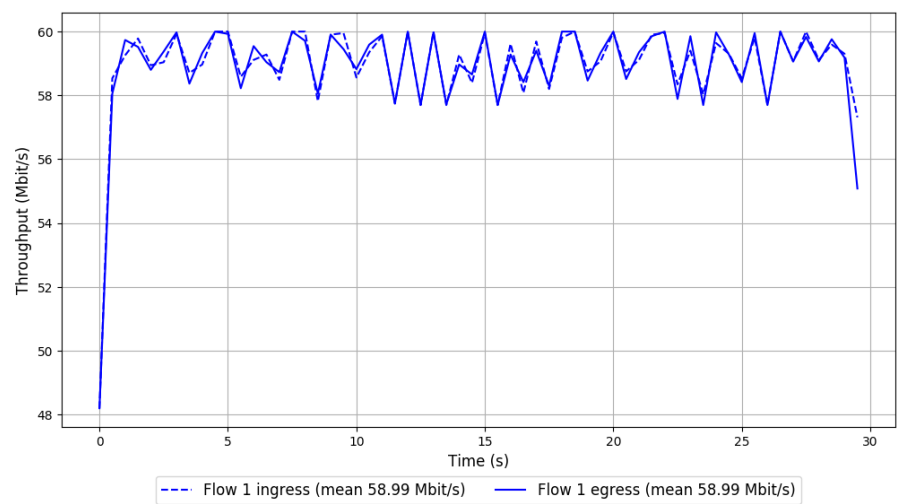
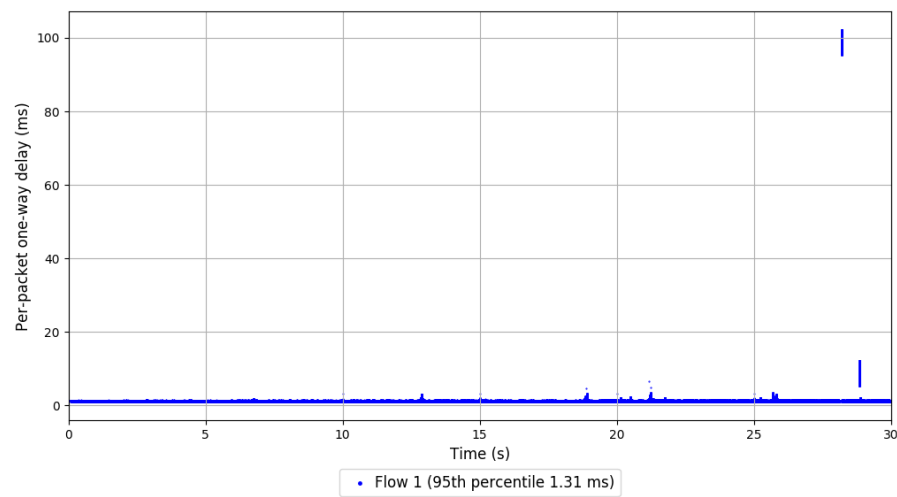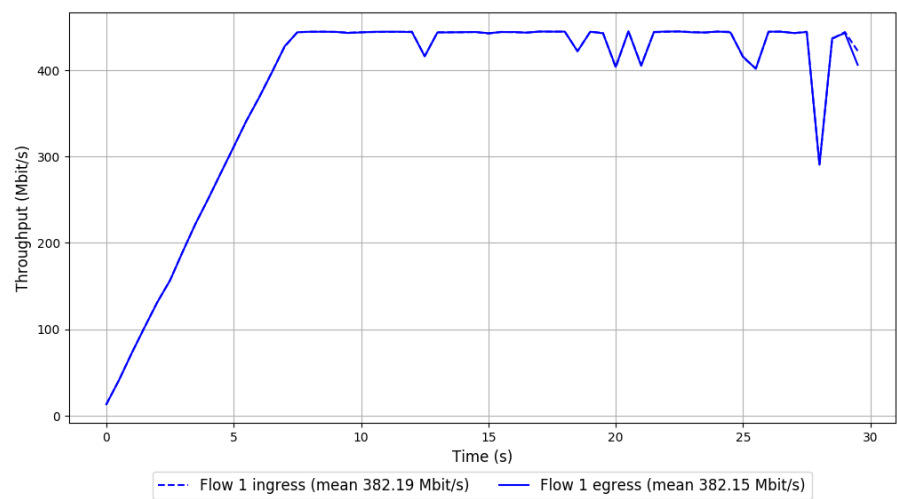Run 10: Report of KohoCC — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2017-09-17 09:41:34
End at: 2017-09-17 09:42:04
Local clock offset: 6.699 ms
Remote clock offset: -4.457 ms

# Below is generated by plot.py at 2017-09-17 17:48:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 382.15 Mbit/s
95th percentile per-packet one-way delay: 1.313 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 382.15 Mbit/s
95th percentile per-packet one-way delay: 1.313 ms
Loss rate: 0.08%
```

Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 382.19 Mbit/s) ---- Flow 1 egress (mean 382.15 Mbit/s) ——

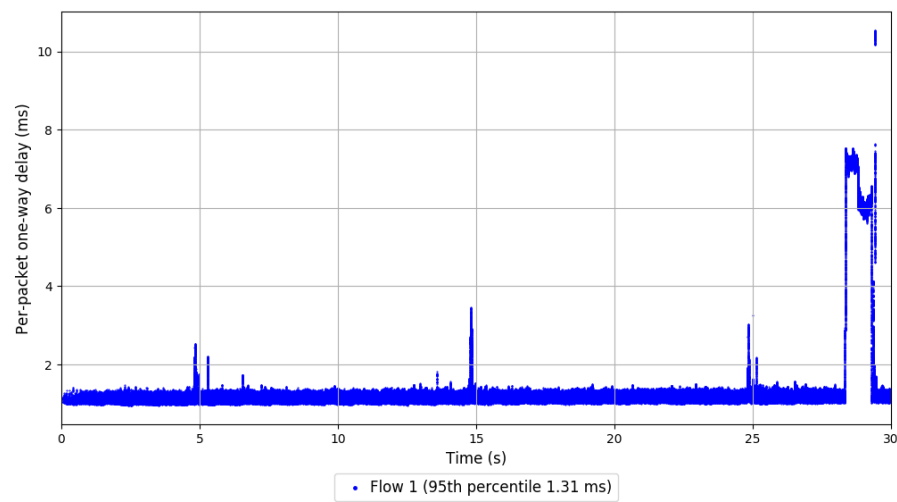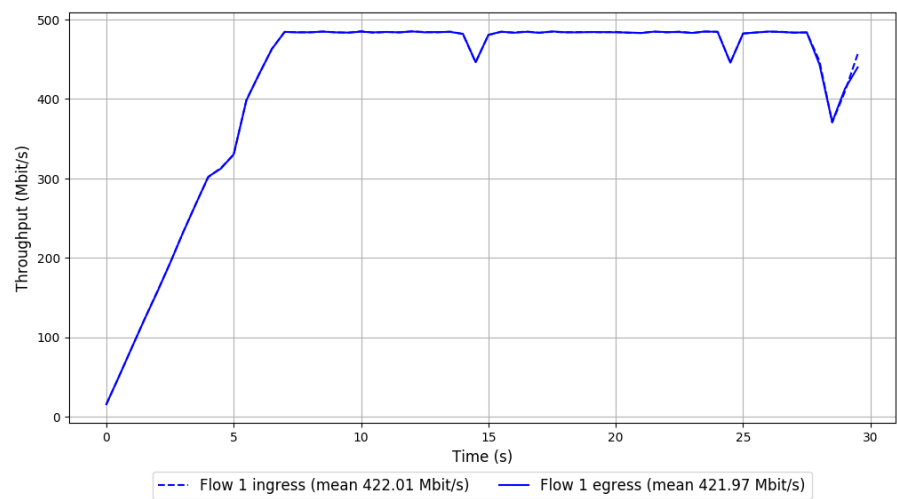

• Flow 1 (95th percentile 1.31 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2017-09-17 10:02:22
End at: 2017-09-17 10:02:52
Local clock offset: 5.01 ms
Remote clock offset: -4.374 ms


# Below is generated by plot.py at 2017-09-17 17:48:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 421.97 Mbit/s
95th percentile per-packet one-way delay: 1.306 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 421.97 Mbit/s
95th percentile per-packet one-way delay: 1.306 ms
Loss rate: 0.07%
```

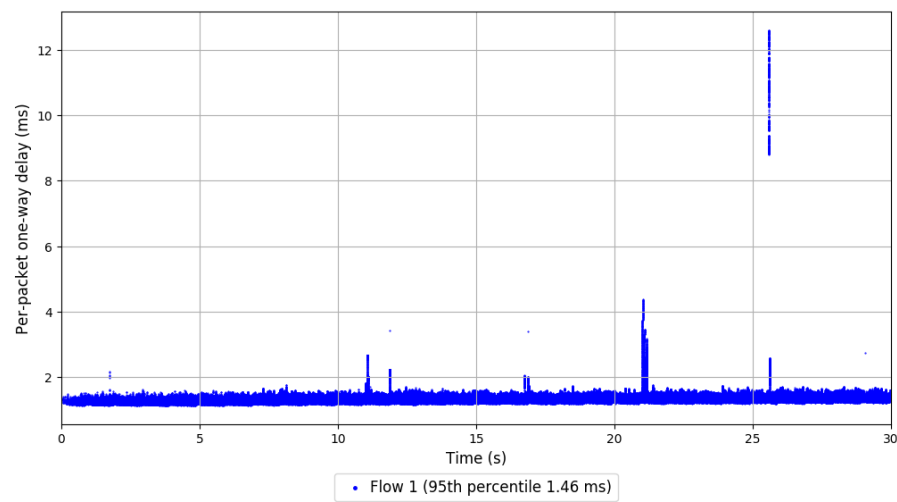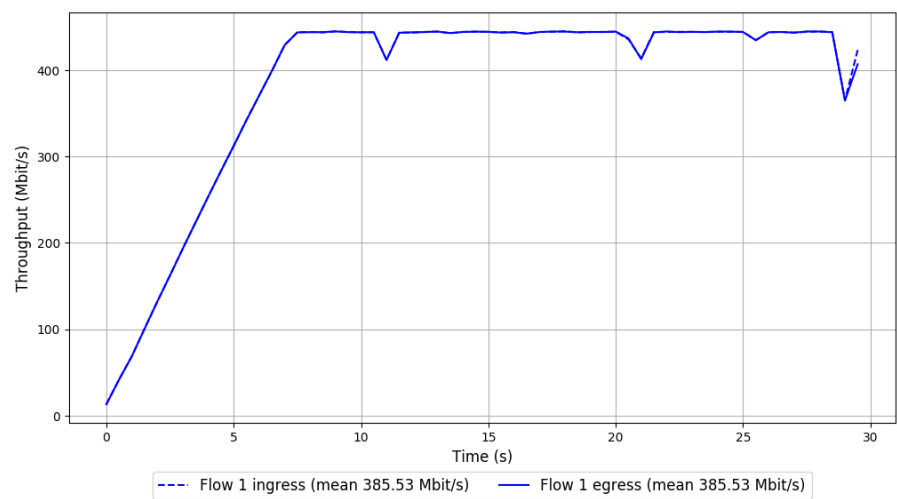## Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2017-09-17 10:23:16
End at: 2017-09-17 10:23:46
Local clock offset: 3.934 ms
Remote clock offset: -3.949 ms


# Below is generated by plot.py at 2017-09-17 17:48:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 385.53 Mbit/s
95th percentile per-packet one-way delay: 1.456 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 385.53 Mbit/s
95th percentile per-packet one-way delay: 1.456 ms
Loss rate: 0.08%
```

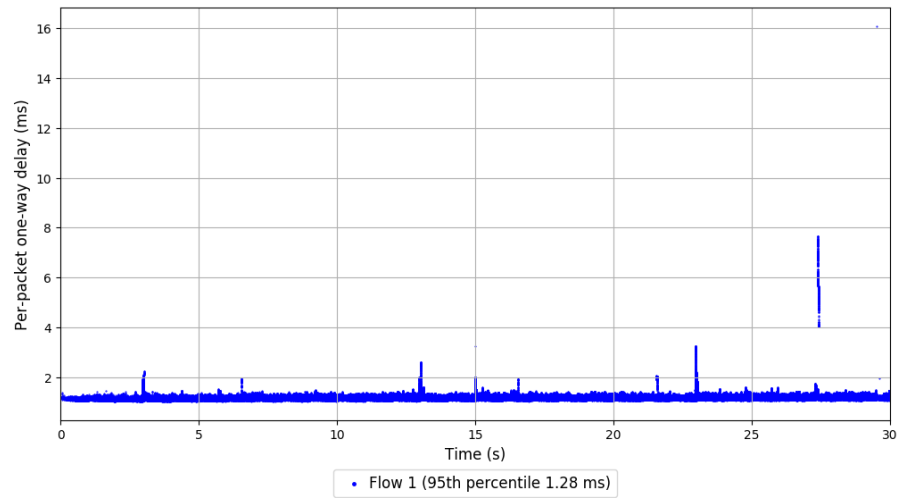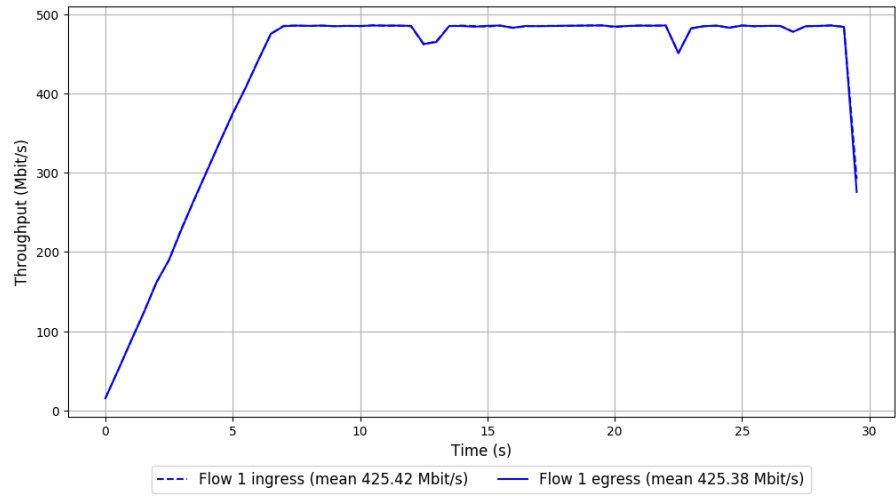Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2017-09-17 10:44:14
End at: 2017-09-17 10:44:44
Local clock offset: 2.372 ms
Remote clock offset: -3.942 ms


# Below is generated by plot.py at 2017-09-17 17:49:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 425.38 Mbit/s
95th percentile per-packet one-way delay: 1.276 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 425.38 Mbit/s
95th percentile per-packet one-way delay: 1.276 ms
Loss rate: 0.07%
```

Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 425.42 Mbit/s)   Flow 1 egress (mean 425.38 Mbit/s)

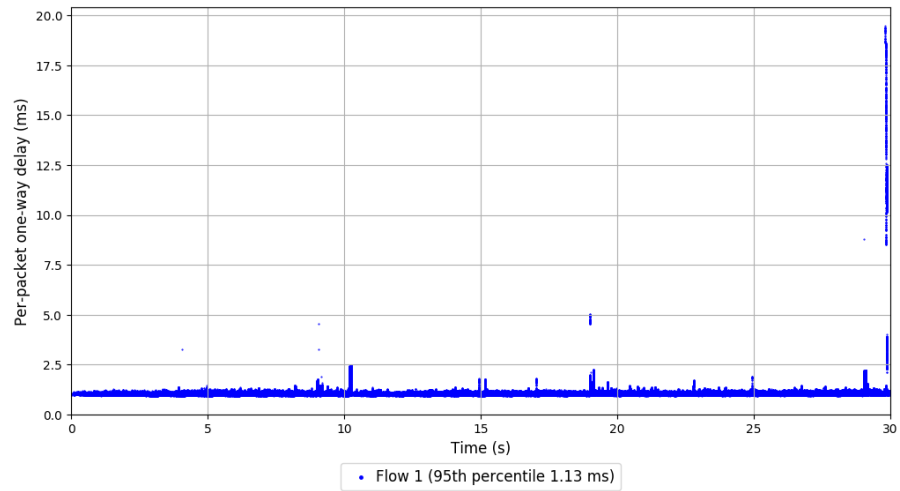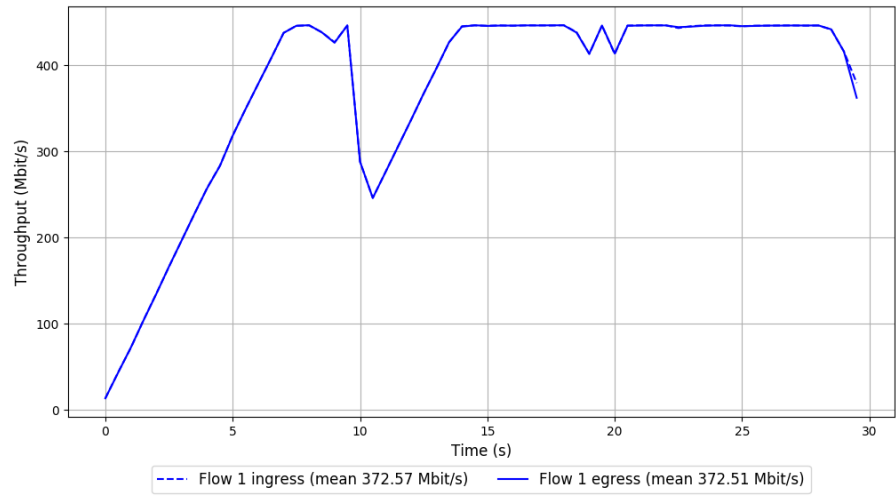Flow 1 (95th percentile 1.28 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2017-09-17 11:04:58
End at: 2017-09-17 11:05:28
Local clock offset: 1.936 ms
Remote clock offset: -3.501 ms


# Below is generated by plot.py at 2017-09-17 17:49:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 372.51 Mbit/s
95th percentile per-packet one-way delay: 1.130 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 372.51 Mbit/s
95th percentile per-packet one-way delay: 1.130 ms
Loss rate: 0.08%
```

Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 372.57 Mbit/s) — Flow 1 egress (mean 372.51 Mbit/s)

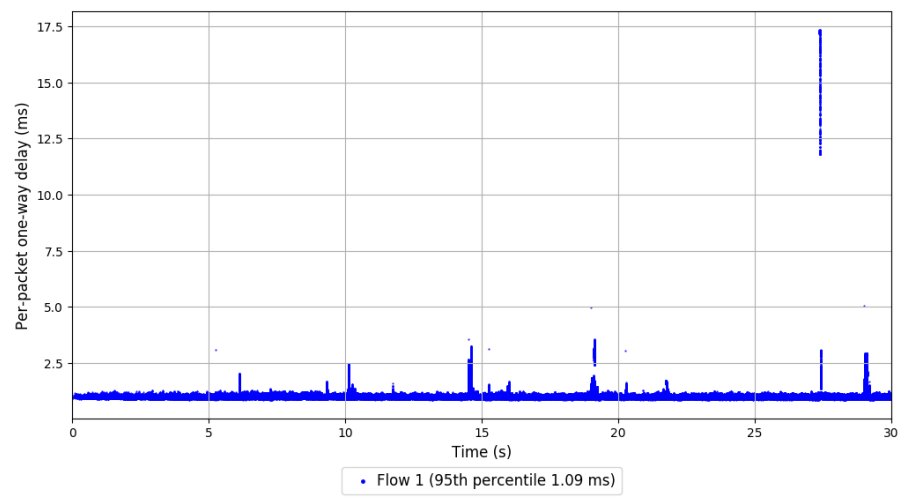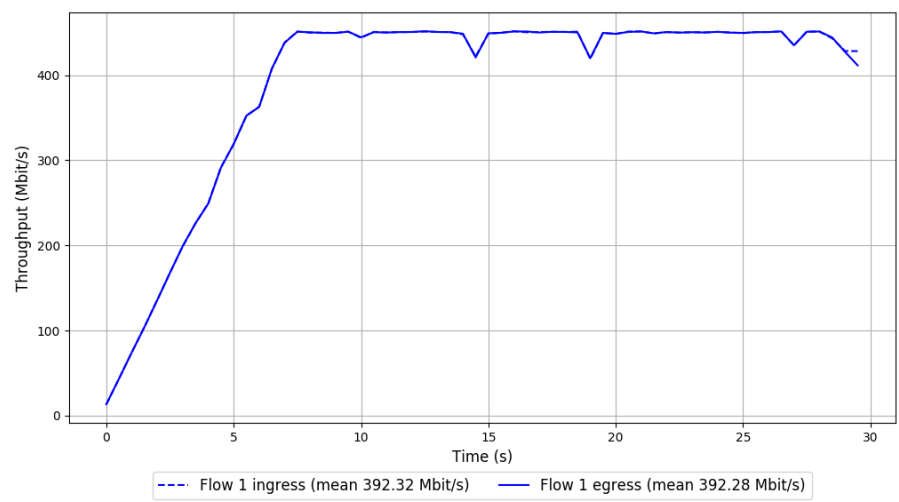Flow 1 (95th percentile 1.13 ms)

```
Run 6: Statistics of LEDBAT

Start at: 2017-09-17 11:25:38
End at: 2017-09-17 11:26:08
Local clock offset: 2.535 ms
Remote clock offset: -3.263 ms


# Below is generated by plot.py at 2017-09-17 17:49:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 392.28 Mbit/s
95th percentile per-packet one-way delay: 1.086 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 392.28 Mbit/s
95th percentile per-packet one-way delay: 1.086 ms
Loss rate: 0.08%
```

Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 392.32 Mbit/s)   Flow 1 egress (mean 392.28 Mbit/s)

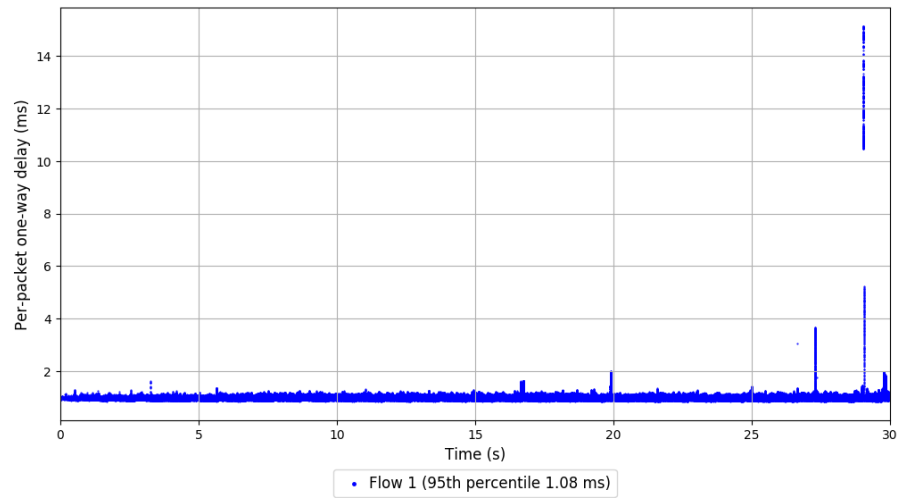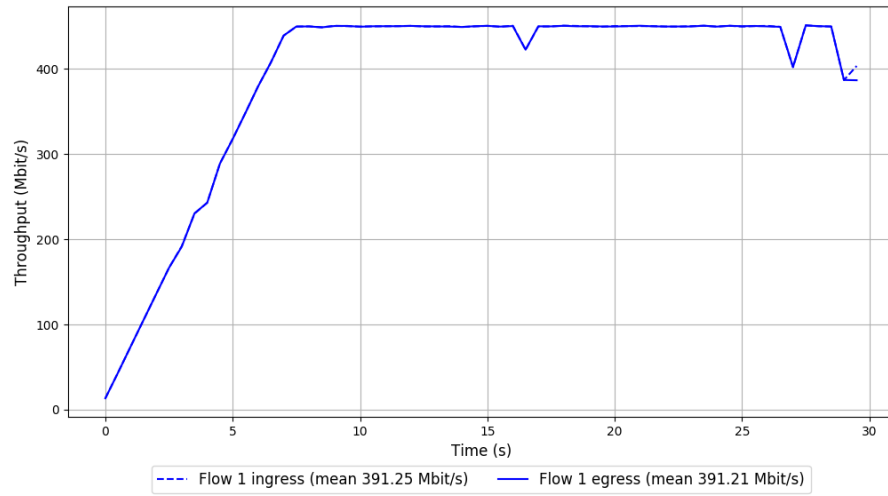Flow 1 (95th percentile 1.09 ms)

```
Run 7: Statistics of LEDBAT

Start at: 2017-09-17 11:46:23
End at: 2017-09-17 11:46:53
Local clock offset: 3.058 ms
Remote clock offset: -3.224 ms


# Below is generated by plot.py at 2017-09-17 17:49:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 391.21 Mbit/s
95th percentile per-packet one-way delay: 1.076 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 391.21 Mbit/s
95th percentile per-packet one-way delay: 1.076 ms
Loss rate: 0.08%
```

Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 391.25 Mbit/s)   Flow 1 egress (mean 391.21 Mbit/s)

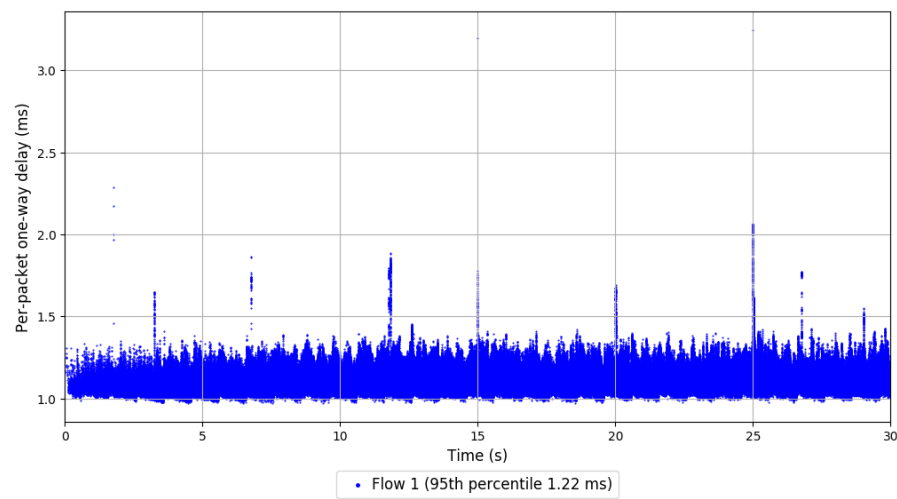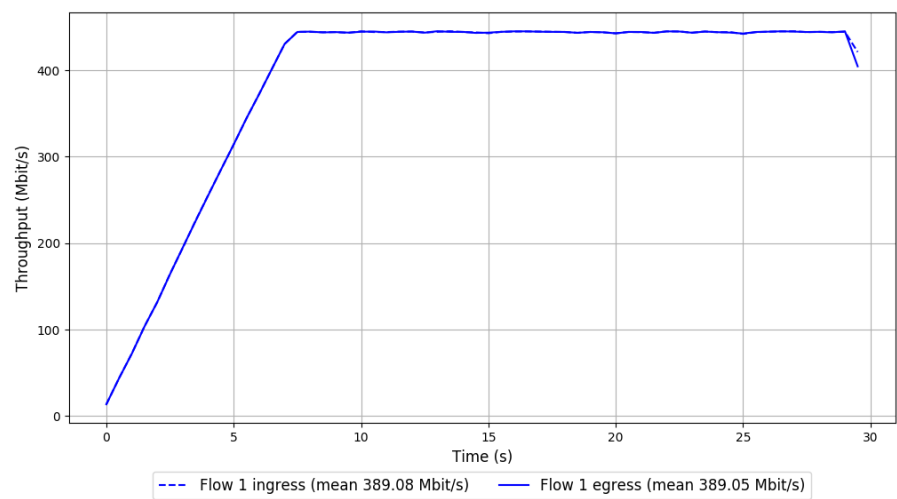• Flow 1 (95th percentile 1.08 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2017-09-17 12:07:04
End at: 2017-09-17 12:07:34
Local clock offset: 3.184 ms
Remote clock offset: -3.405 ms


# Below is generated by plot.py at 2017-09-17 17:51:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 389.05 Mbit/s
95th percentile per-packet one-way delay: 1.217 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 389.05 Mbit/s
95th percentile per-packet one-way delay: 1.217 ms
Loss rate: 0.07%
```
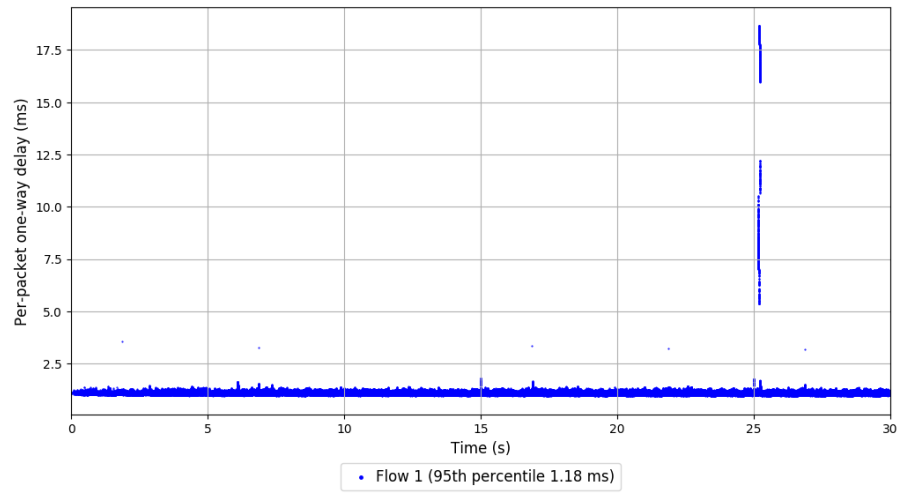
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2017-09-17 12:28:02
End at: 2017-09-17 12:28:32
Local clock offset: 3.404 ms
Remote clock offset: -3.55 ms


# Below is generated by plot.py at 2017-09-17 17:53:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 393.15 Mbit/s
95th percentile per-packet one-way delay: 1.176 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 393.15 Mbit/s
95th percentile per-packet one-way delay: 1.176 ms
Loss rate: 0.08%
```
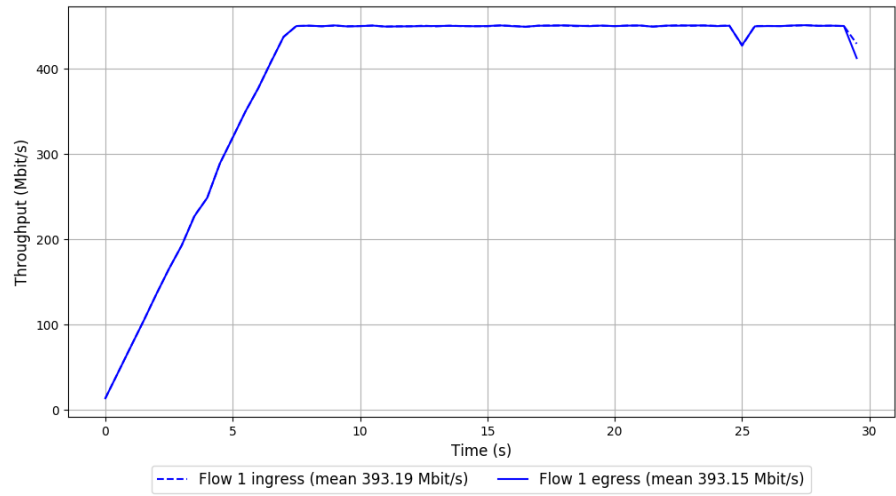
Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 393.19 Mbit/s)   Flow 1 egress (mean 393.15 Mbit/s)

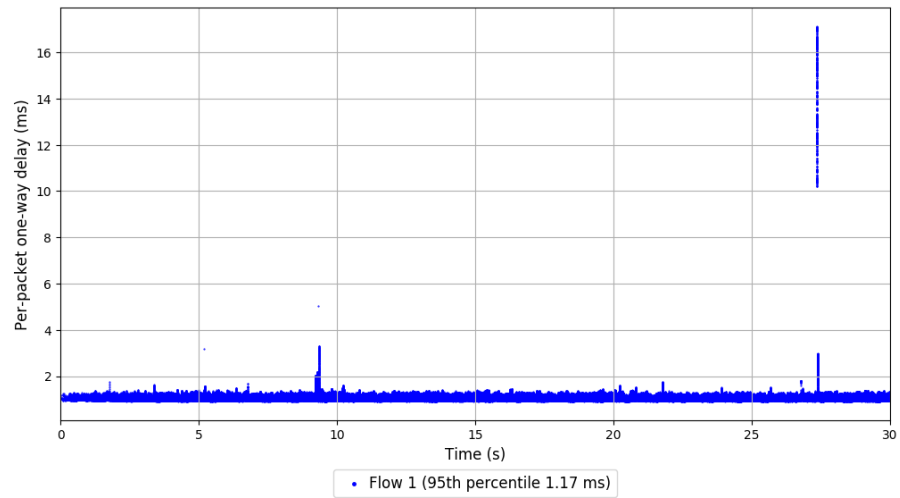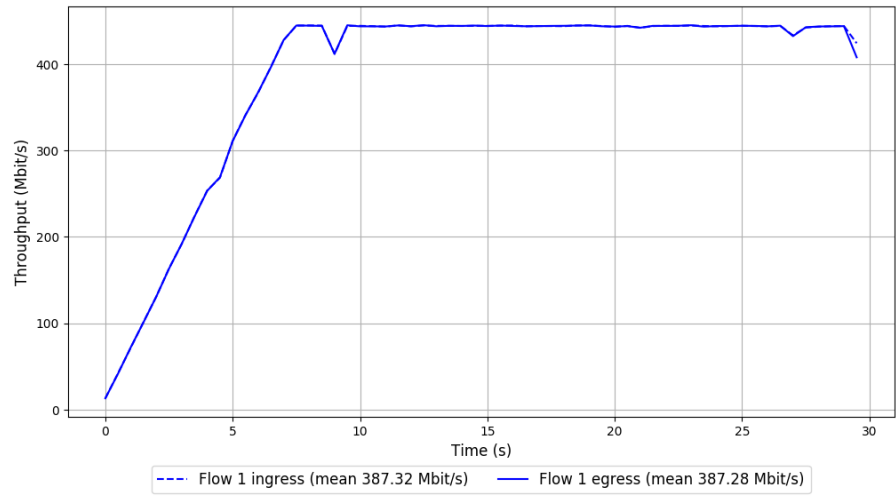• Flow 1 (95th percentile 1.18 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2017-09-17 12:48:40
End at: 2017-09-17 12:49:10
Local clock offset: 4.344 ms
Remote clock offset: -3.866 ms


# Below is generated by plot.py at 2017-09-17 17:53:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 387.28 Mbit/s
95th percentile per-packet one-way delay: 1.174 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 387.28 Mbit/s
95th percentile per-packet one-way delay: 1.174 ms
Loss rate: 0.08%
```

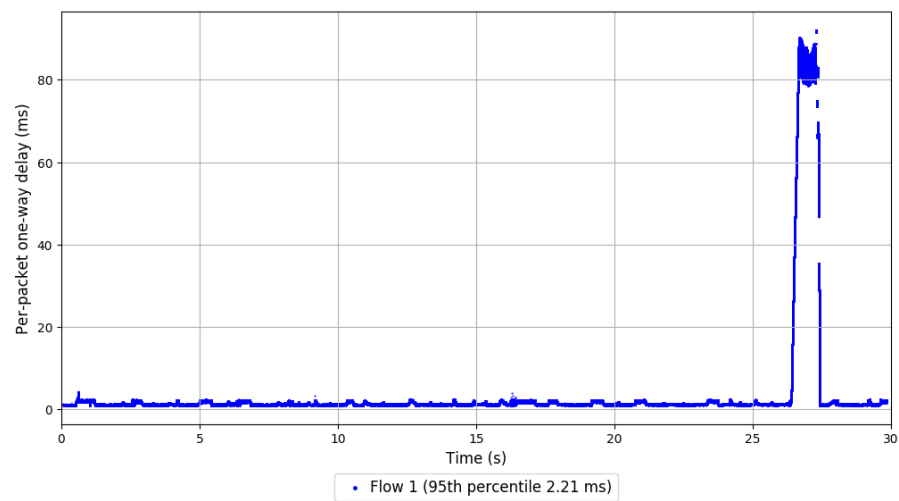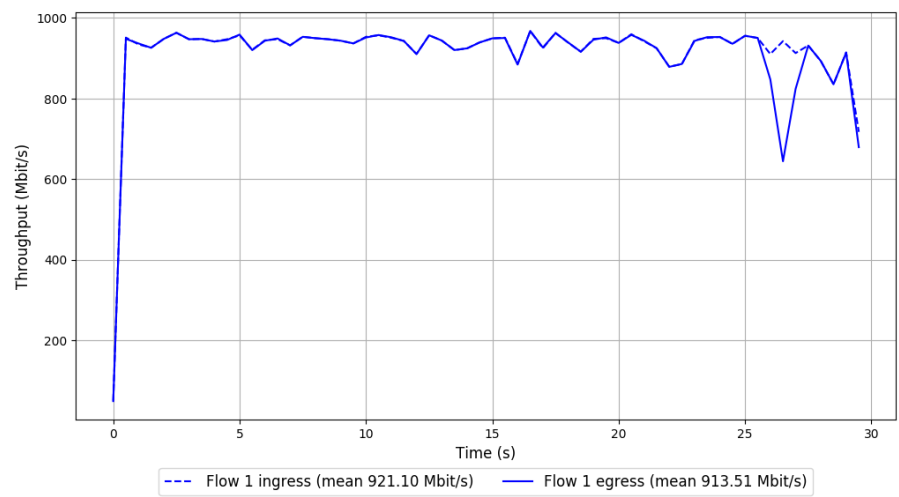# Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC

Start at: 2017-09-17 09:47:15
End at: 2017-09-17 09:47:45
Local clock offset: 6.18 ms
Remote clock offset: -4.386 ms


# Below is generated by plot.py at 2017-09-17 18:02:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 913.51 Mbit/s
95th percentile per-packet one-way delay: 2.209 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 913.51 Mbit/s
95th percentile per-packet one-way delay: 2.209 ms
Loss rate: 0.89%
```

Run 1: Report of PCC — Data Link

Flow 1 ingress (mean 921.10 Mbit/s)   Flow 1 egress (mean 913.51 Mbit/s)
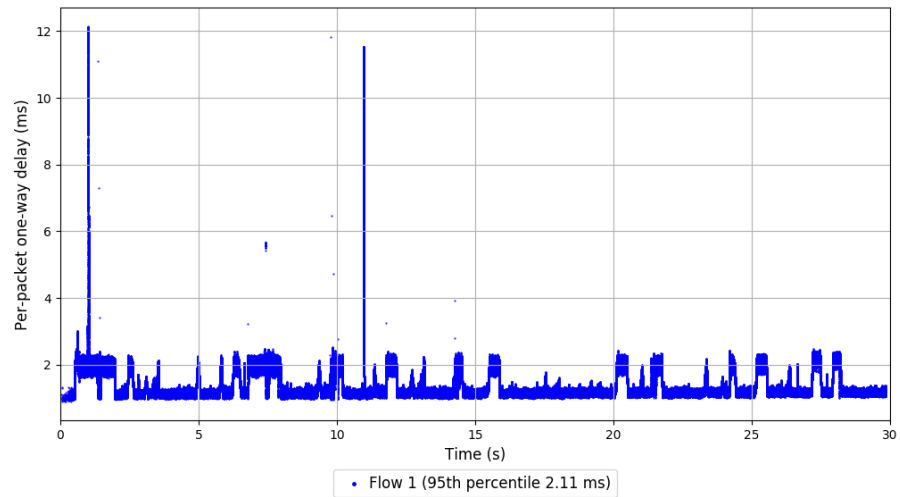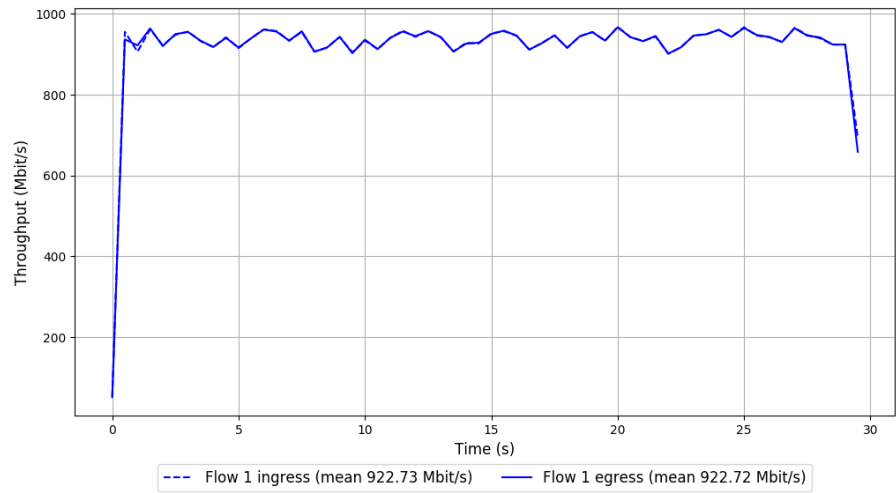

Flow 1 (95th percentile 2.21 ms)

```
Run 2: Statistics of PCC

Start at: 2017-09-17 10:08:00
End at: 2017-09-17 10:08:30
Local clock offset: 4.438 ms
Remote clock offset: -4.343 ms


# Below is generated by plot.py at 2017-09-17 18:02:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 922.72 Mbit/s
95th percentile per-packet one-way delay: 2.113 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 922.72 Mbit/s
95th percentile per-packet one-way delay: 2.113 ms
Loss rate: 0.07%
```

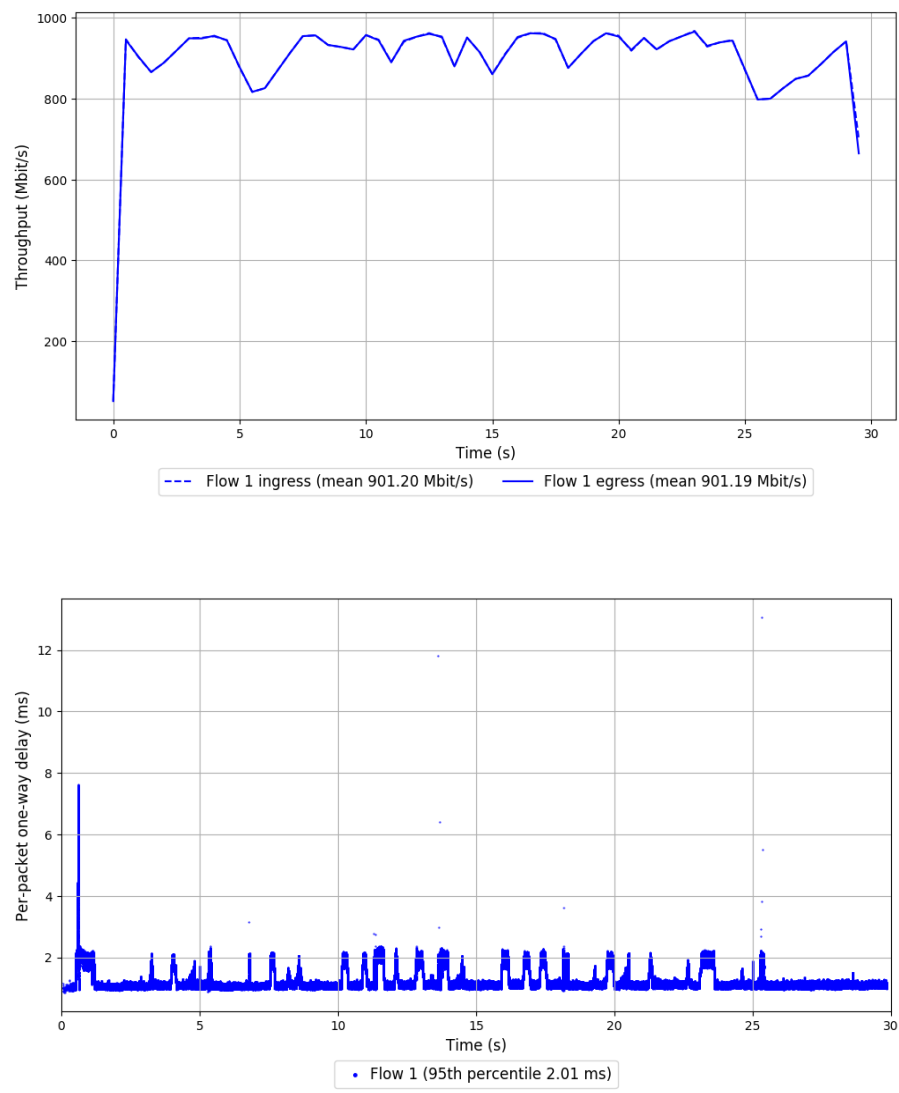Run 2: Report of PCC — Data Link

```
Run 3: Statistics of PCC

Start at: 2017-09-17 10:28:56
End at: 2017-09-17 10:29:26
Local clock offset: 3.165 ms
Remote clock offset: -3.875 ms


# Below is generated by plot.py at 2017-09-17 18:02:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 901.19 Mbit/s
95th percentile per-packet one-way delay: 2.012 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 901.19 Mbit/s
95th percentile per-packet one-way delay: 2.012 ms
Loss rate: 0.07%
```

Run 3: Report of PCC — Data Link

Flow 1 ingress (mean 901.20 Mbit/s) --- Flow 1 egress (mean 901.19 Mbit/s)

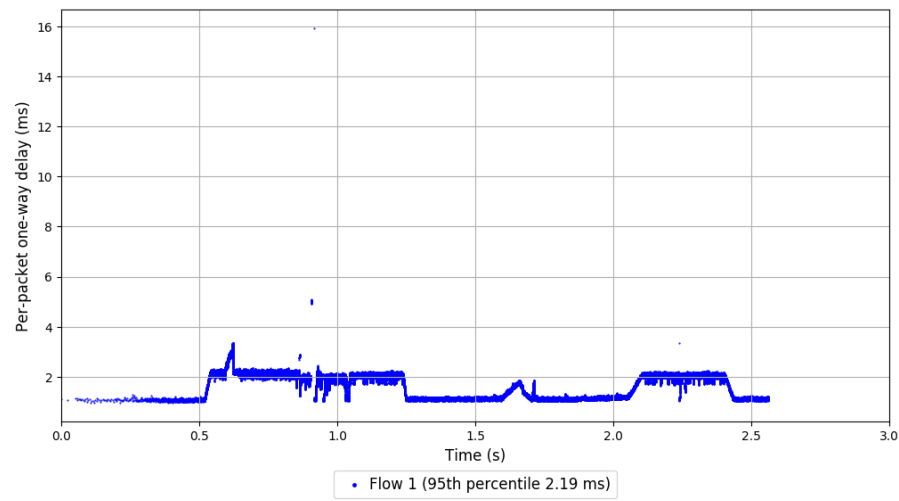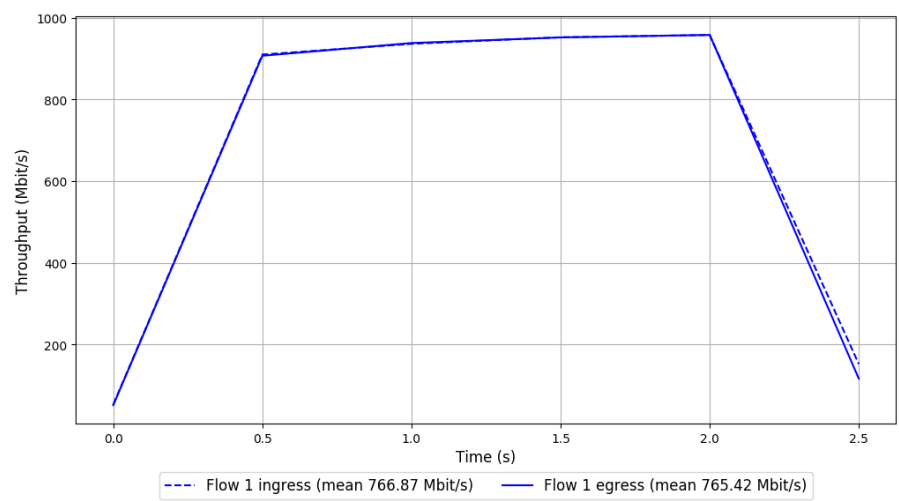Flow 1 (95th percentile 2.01 ms)

```
Run 4: Statistics of PCC

Start at: 2017-09-17 10:50:04
End at: 2017-09-17 10:50:34
Local clock offset: 2.073 ms
Remote clock offset: -3.823 ms
```

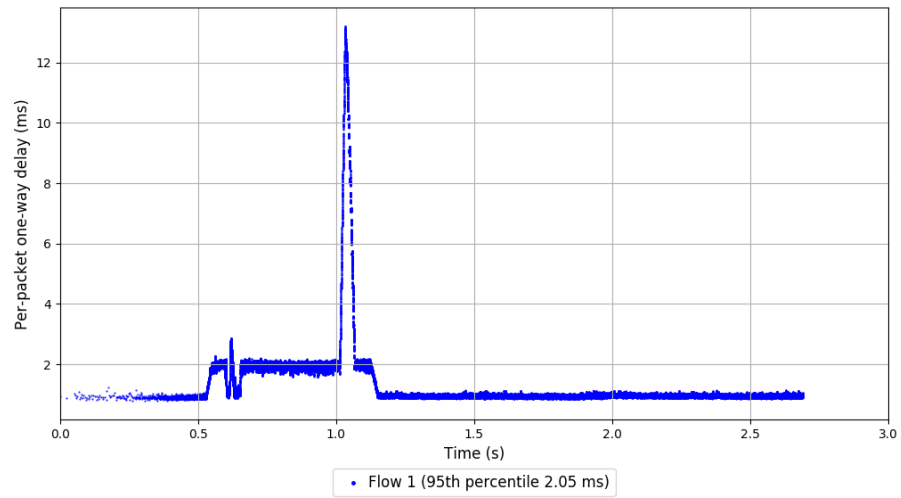## Run 4: Report of PCC — Data Link
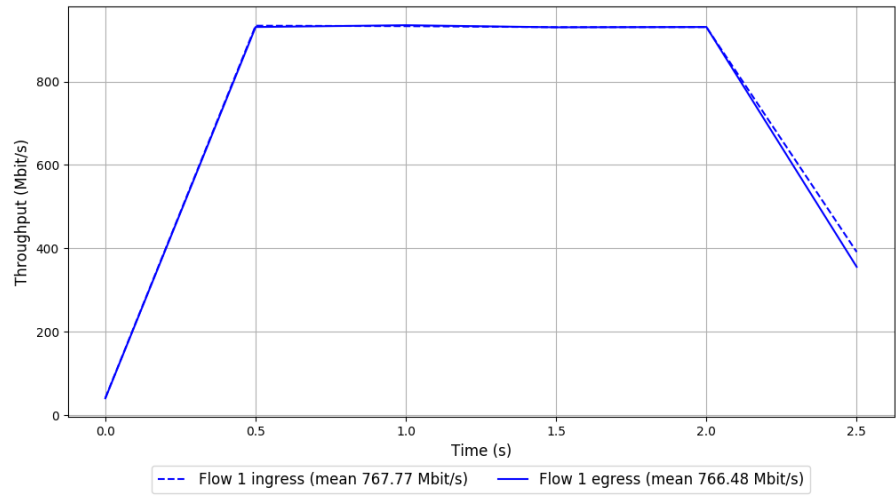
```
Run 5: Statistics of PCC

Start at: 2017-09-17 11:10:43
End at: 2017-09-17 11:11:13
Local clock offset: 1.815 ms
Remote clock offset: -3.423 ms
```

Run 5: Report of PCC — Data Link

Flow 1 ingress (mean 767.77 Mbit/s) — Flow 1 egress (mean 766.48 Mbit/s)

• Flow 1 (95th percentile 2.05 ms)

```
Run 6: Statistics of PCC

Start at: 2017-09-17 11:31:24
End at: 2017-09-17 11:31:54
Local clock offset: 2.799 ms
Remote clock offset: -3.165 ms
```

Run 6: Report of PCC — Data Link

Figure is missing

Figure is missing

```
Run 7: Statistics of PCC

Start at: 2017-09-17 11:52:10
End at: 2017-09-17 11:52:40
Local clock offset: 2.987 ms
Remote clock offset: -3.417 ms
```

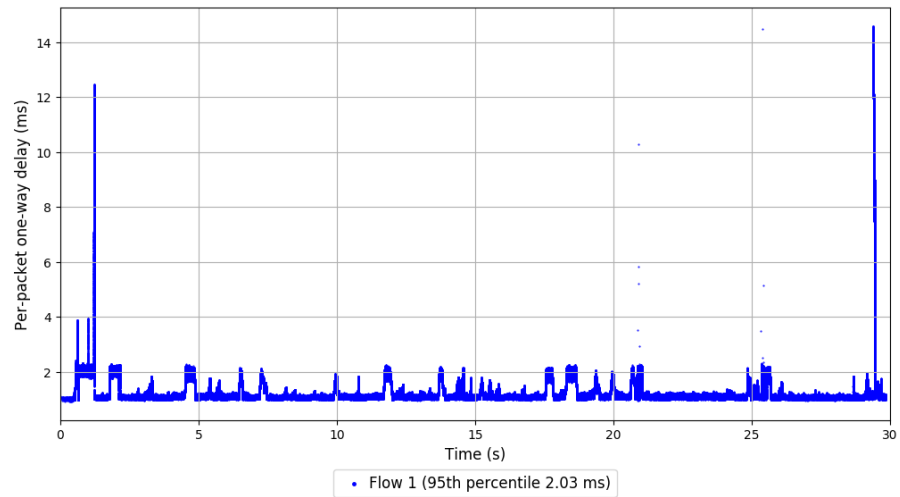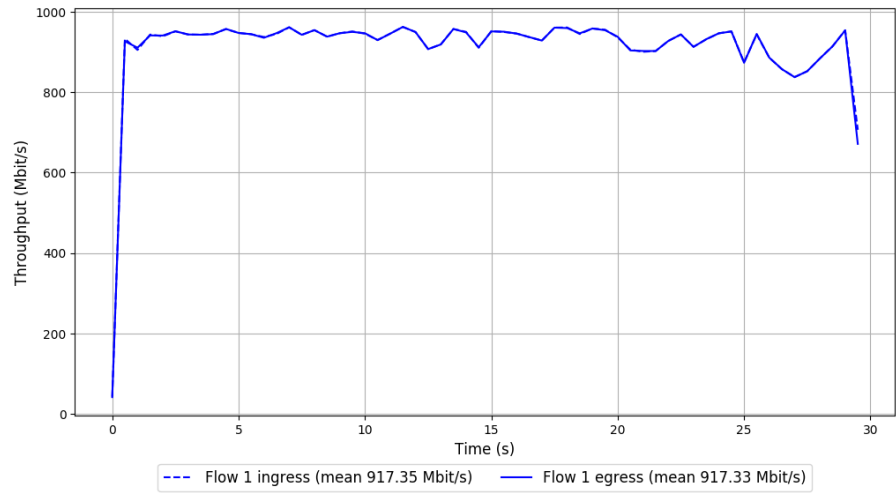Run 7: Report of PCC — Data Link

Figure is missing

Figure is missing

```
Run 8: Statistics of PCC

Start at: 2017-09-17 12:12:46
End at: 2017-09-17 12:13:16
Local clock offset: 3.097 ms
Remote clock offset: -3.381 ms


# Below is generated by plot.py at 2017-09-17 18:03:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 917.33 Mbit/s
95th percentile per-packet one-way delay: 2.028 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 917.33 Mbit/s
95th percentile per-packet one-way delay: 2.028 ms
Loss rate: 0.07%
```

Run 8: Report of PCC — Data Link

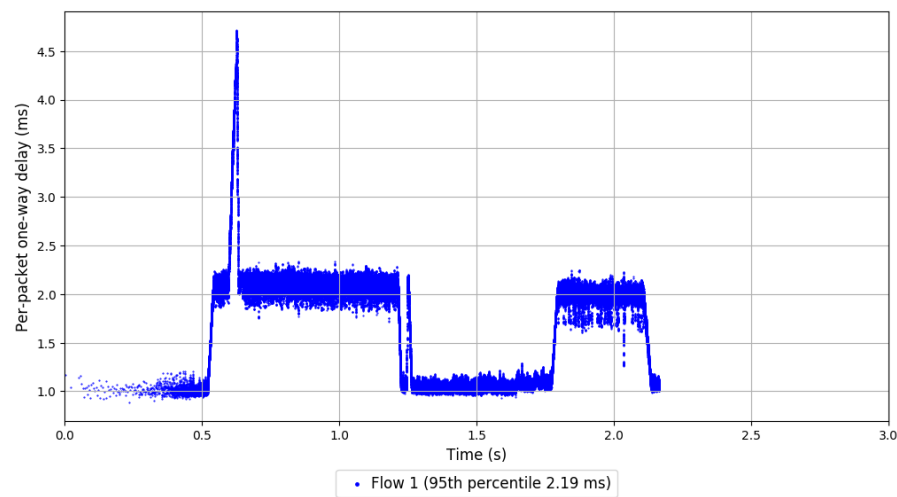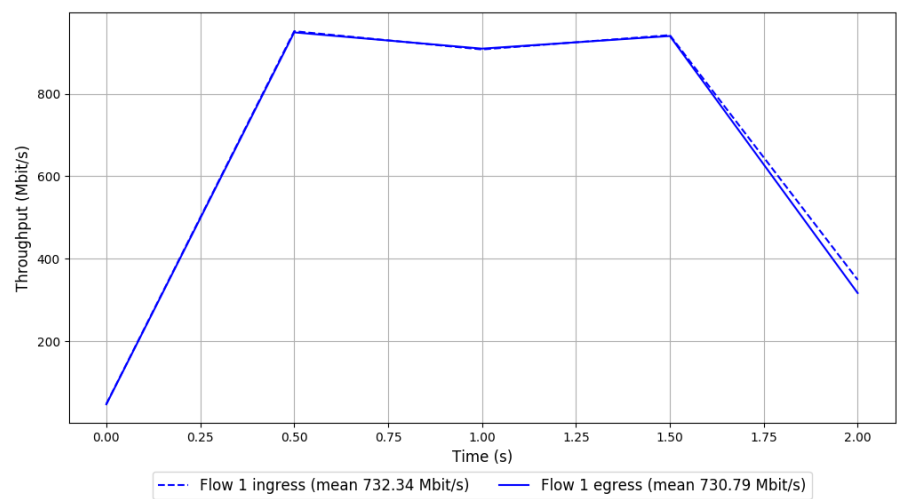

159

```
Run 9: Statistics of PCC

Start at: 2017-09-17 12:33:51
End at: 2017-09-17 12:34:21
Local clock offset: 3.65 ms
Remote clock offset: -3.606 ms
```
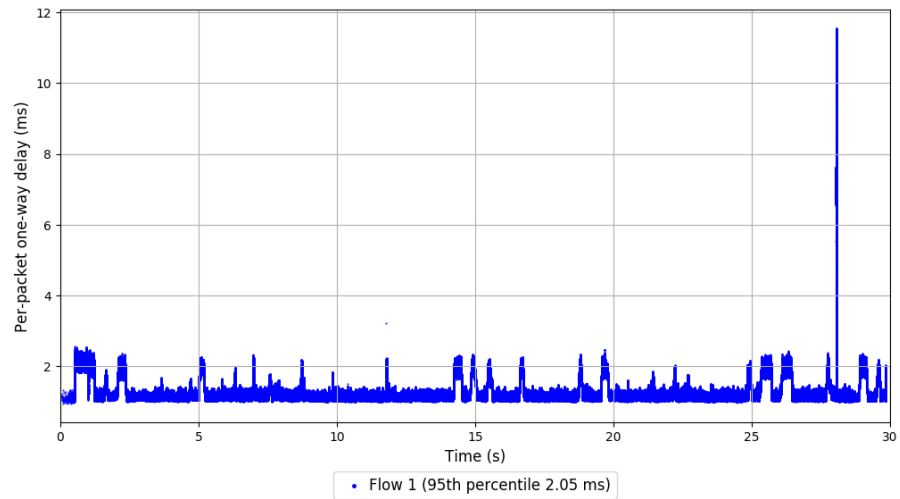
Run 9: Report of PCC — Data Link

Flow 1 ingress (mean 732.34 Mbit/s)   Flow 1 egress (mean 730.79 Mbit/s)
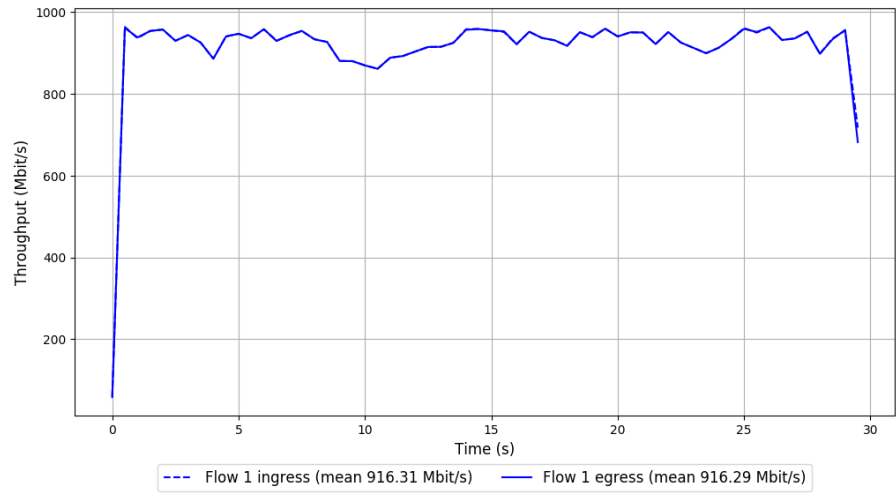

Flow 1 (95th percentile 2.19 ms)

```
Run 10: Statistics of PCC

Start at: 2017-09-17 12:54:24
End at: 2017-09-17 12:54:54
Local clock offset: 4.521 ms
Remote clock offset: -3.879 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 916.29 Mbit/s
95th percentile per-packet one-way delay: 2.047 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 916.29 Mbit/s
95th percentile per-packet one-way delay: 2.047 ms
Loss rate: 0.07%
```
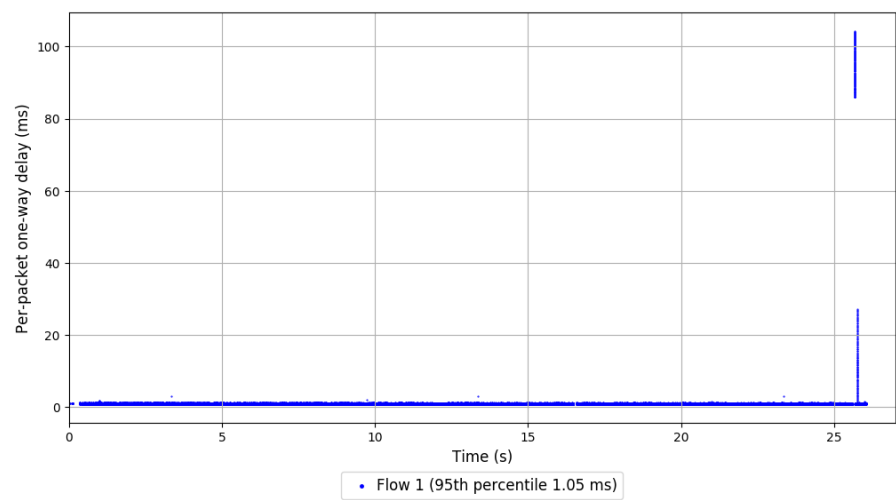
Run 10: Report of PCC — Data Link

Flow 1 ingress (mean 916.31 Mbit/s) ----   Flow 1 egress (mean 916.29 Mbit/s) ——

Flow 1 (95th percentile 2.05 ms)

163

```
Run 1: Statistics of QUIC Cubic

Start at: 2017-09-17 09:34:21
End at: 2017-09-17 09:34:51
Local clock offset: 5.121 ms
Remote clock offset: -4.403 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.66 Mbit/s
95th percentile per-packet one-way delay: 1.049 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 70.66 Mbit/s
95th percentile per-packet one-way delay: 1.049 ms
Loss rate: 0.09%
```
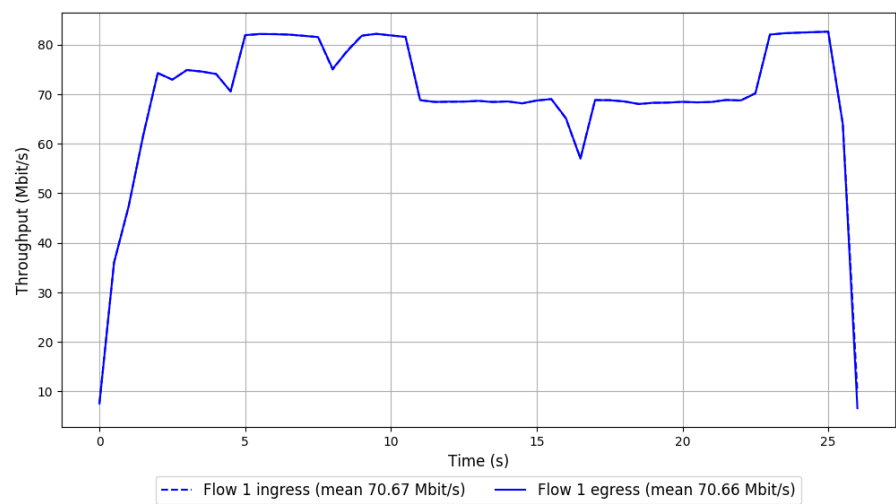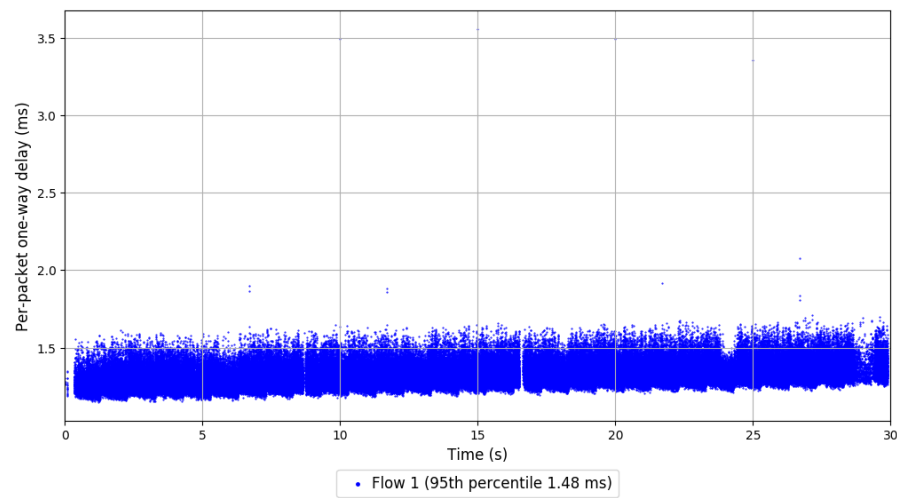
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2017-09-17 09:55:14
End at: 2017-09-17 09:55:44
Local clock offset: 6.108 ms
Remote clock offset: -4.463 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.65 Mbit/s
95th percentile per-packet one-way delay: 1.476 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 70.65 Mbit/s
95th percentile per-packet one-way delay: 1.476 ms
Loss rate: 0.07%
```
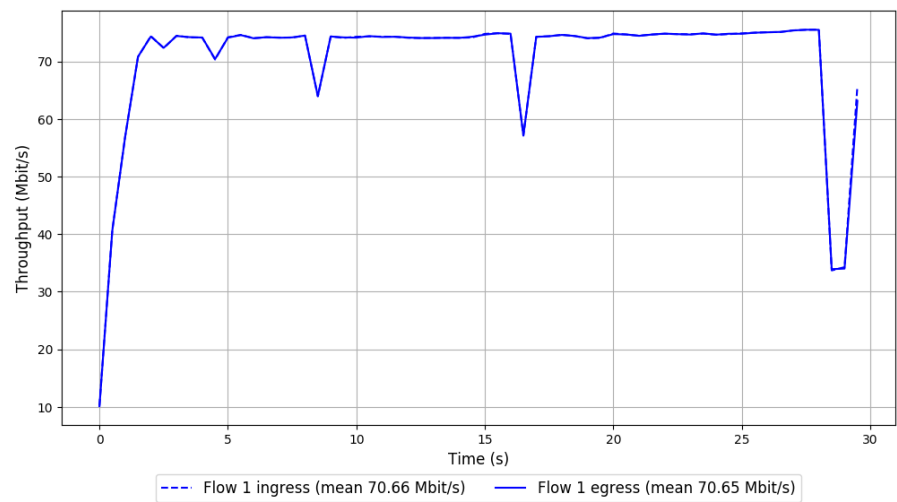
Run 2: Report of QUIC Cubic — Data Link
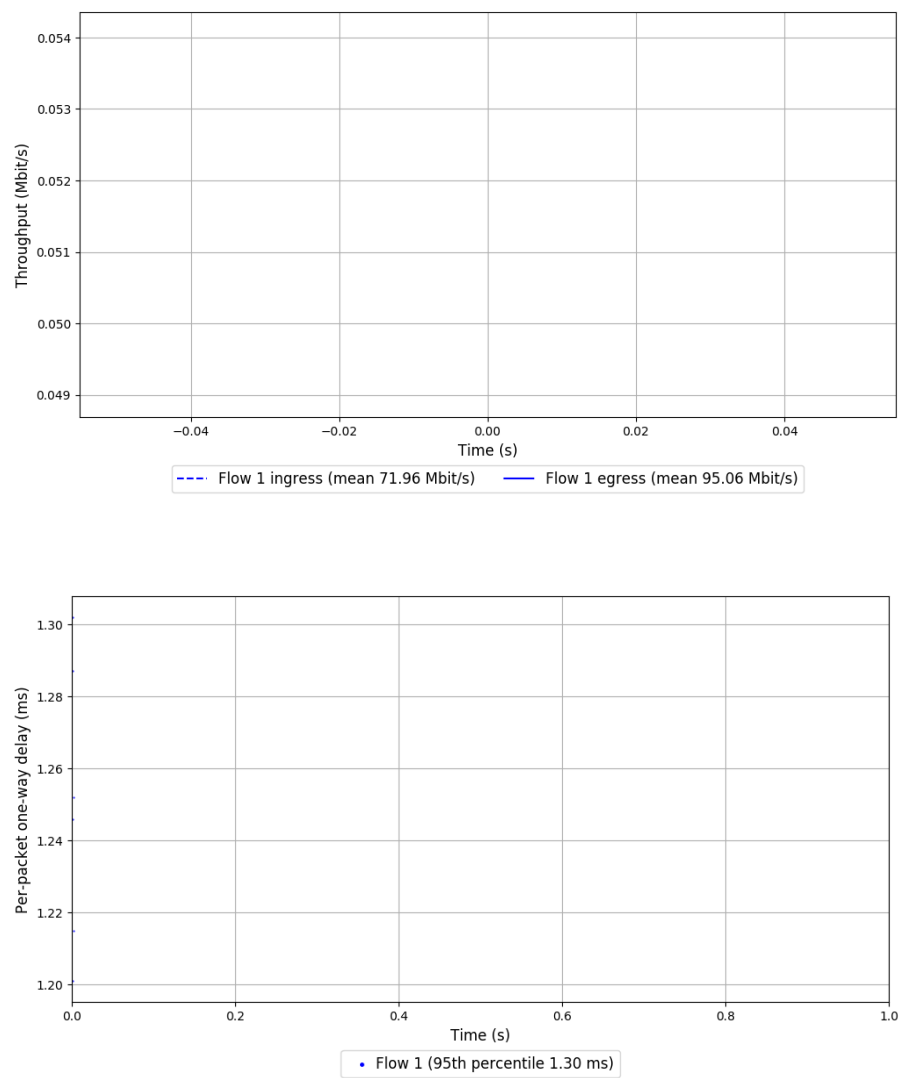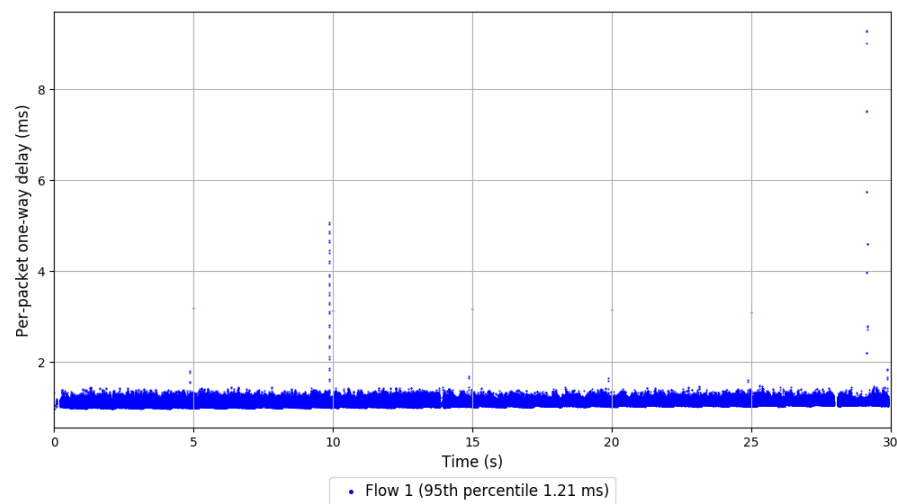
```
Run 3: Statistics of QUIC Cubic

Start at: 2017-09-17 10:16:03
End at: 2017-09-17 10:16:33
Local clock offset: 3.853 ms
Remote clock offset: -4.191 ms
```

Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 71.96 Mbit/s)   Flow 1 egress (mean 95.06 Mbit/s)

Flow 1 (95th percentile 1.30 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2017-09-17 10:37:00
End at: 2017-09-17 10:37:30
Local clock offset: 2.872 ms
Remote clock offset: -3.959 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.58 Mbit/s
95th percentile per-packet one-way delay: 1.212 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 81.58 Mbit/s
95th percentile per-packet one-way delay: 1.212 ms
Loss rate: 0.07%
```
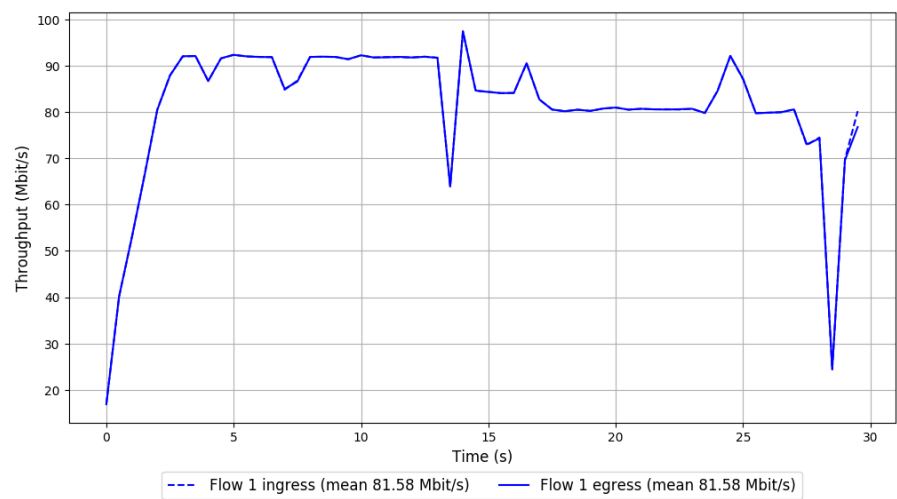
Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2017-09-17 10:57:40
End at: 2017-09-17 10:58:10
Local clock offset: 2.005 ms
Remote clock offset: -3.7 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.69 Mbit/s
95th percentile per-packet one-way delay: 1.068 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 85.69 Mbit/s
95th percentile per-packet one-way delay: 1.068 ms
Loss rate: 0.07%
```
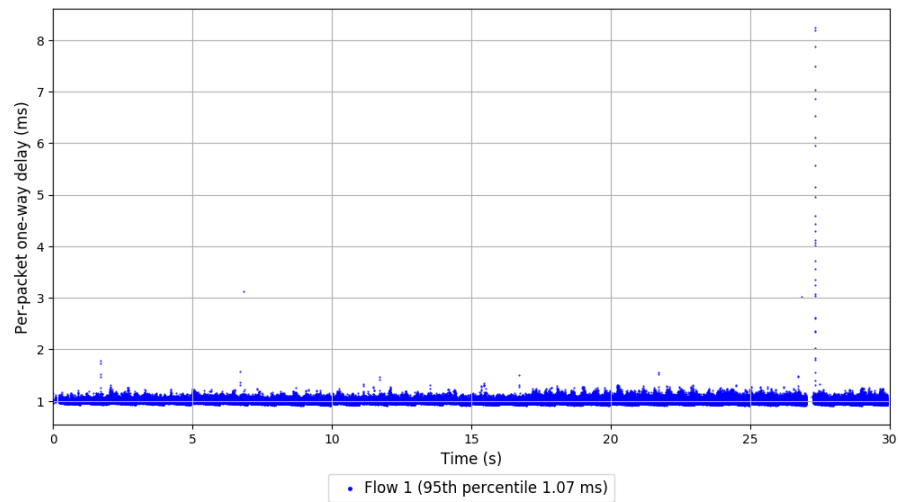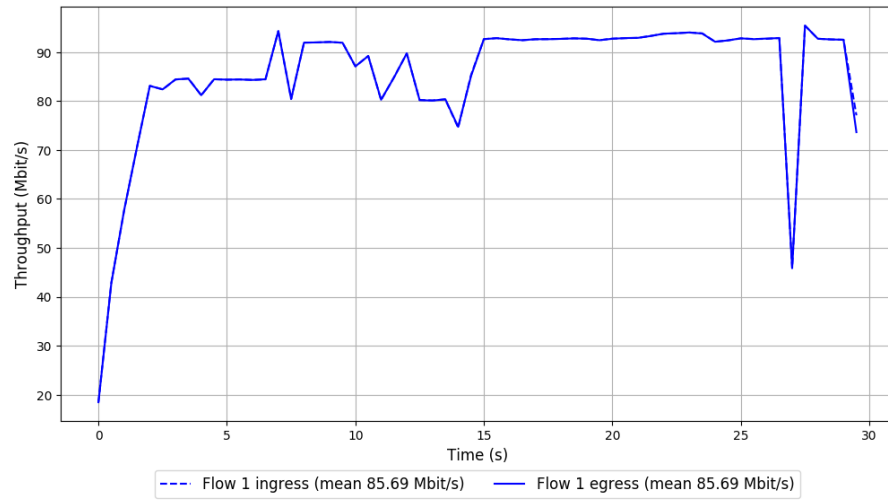
Run 5: Report of QUIC Cubic — Data Link

173

```
Run 6: Statistics of QUIC Cubic

Start at: 2017-09-17 11:18:24
End at: 2017-09-17 11:18:54
Local clock offset: 2.174 ms
Remote clock offset: -3.472 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.07 Mbit/s
95th percentile per-packet one-way delay: 1.131 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 90.07 Mbit/s
95th percentile per-packet one-way delay: 1.131 ms
Loss rate: 0.06%
```
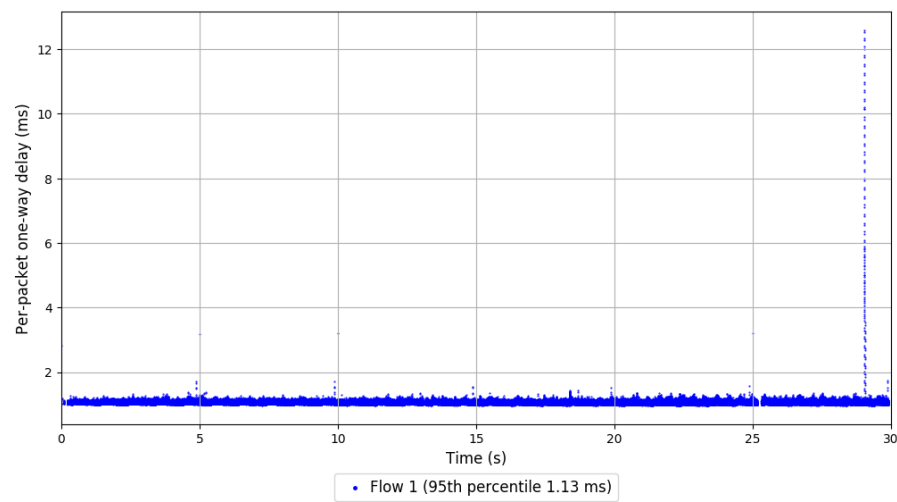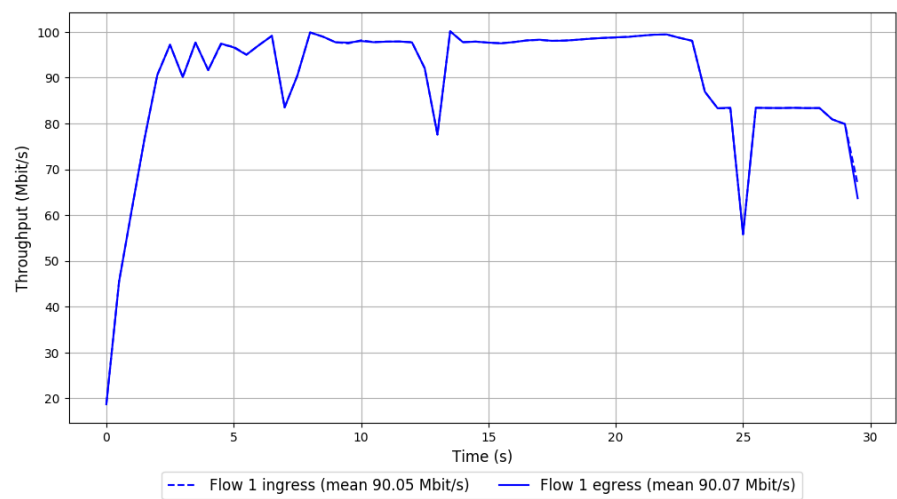
Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 90.05 Mbit/s)   Flow 1 egress (mean 90.07 Mbit/s)

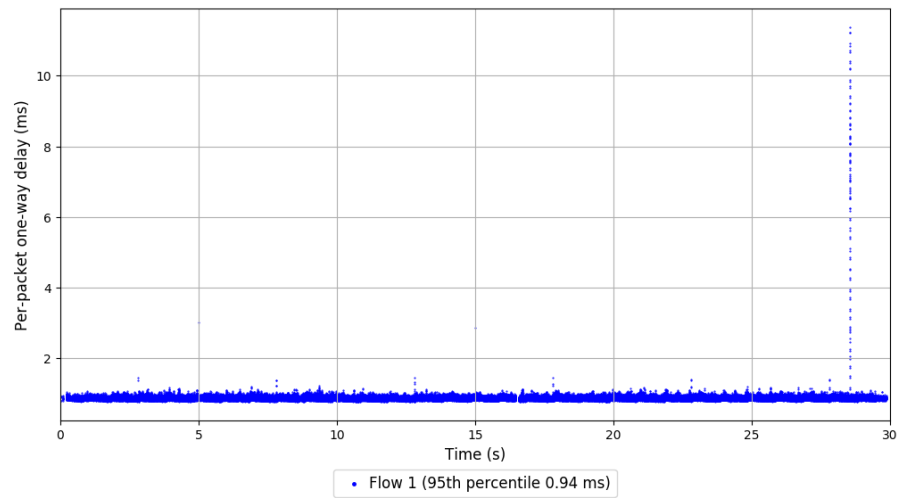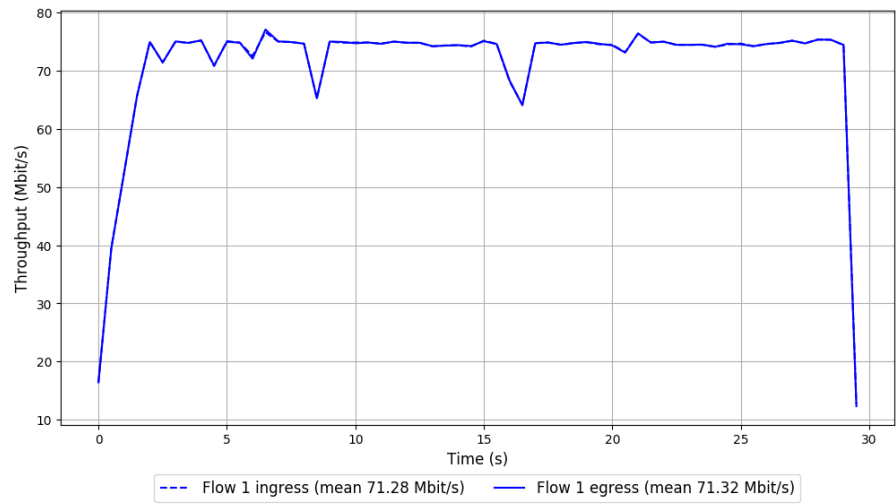
Flow 1 (95th percentile 1.13 ms)

```
Run 7: Statistics of QUIC Cubic

Start at: 2017-09-17 11:39:10
End at: 2017-09-17 11:39:40
Local clock offset: 2.863 ms
Remote clock offset: -3.113 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.32 Mbit/s
95th percentile per-packet one-way delay: 0.942 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 71.32 Mbit/s
95th percentile per-packet one-way delay: 0.942 ms
Loss rate: 0.01%
```
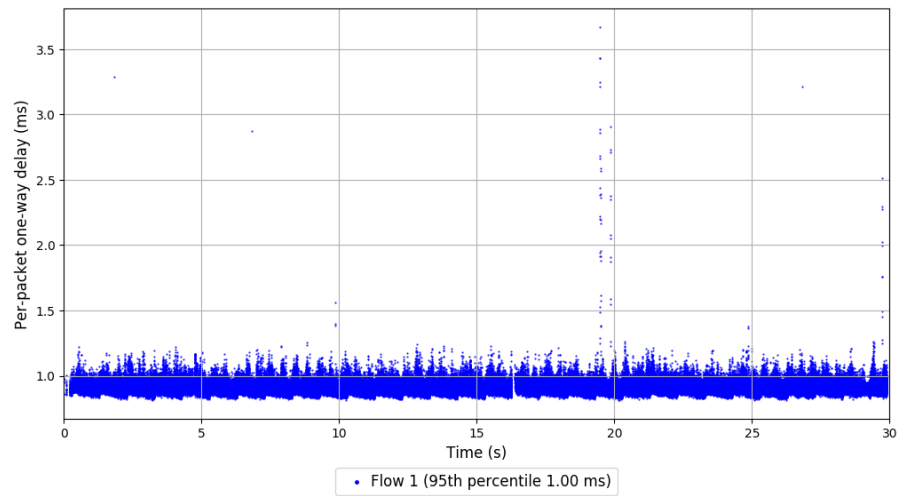
Run 7: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 71.28 Mbit/s)   Flow 1 egress (mean 71.32 Mbit/s)

Flow 1 (95th percentile 0.94 ms)

```
Run 8: Statistics of QUIC Cubic

Start at: 2017-09-17 11:59:52
End at: 2017-09-17 12:00:22
Local clock offset: 3.005 ms
Remote clock offset: -3.338 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.15 Mbit/s
95th percentile per-packet one-way delay: 0.998 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 72.15 Mbit/s
95th percentile per-packet one-way delay: 0.998 ms
Loss rate: 0.07%
```
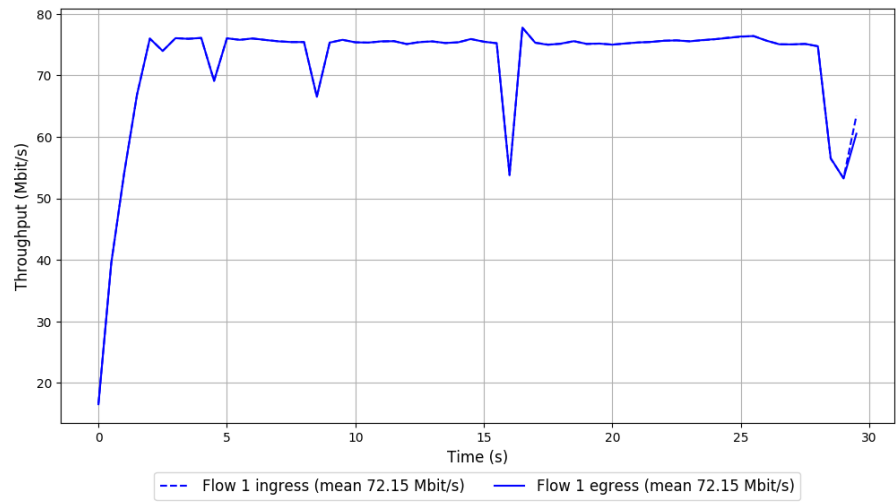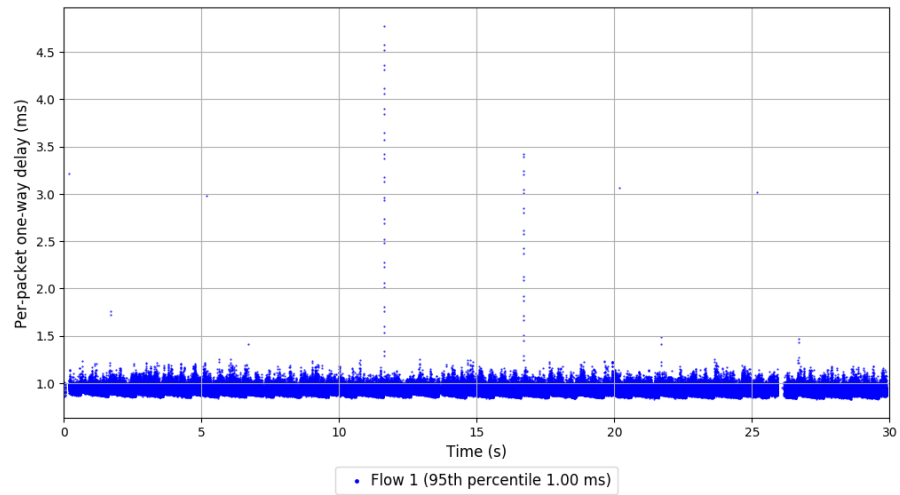
Run 8: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 72.15 Mbit/s)   Flow 1 egress (mean 72.15 Mbit/s)

Flow 1 (95th percentile 1.00 ms)

```
Run 9: Statistics of QUIC Cubic

Start at: 2017-09-17 12:20:47
End at: 2017-09-17 12:21:17
Local clock offset: 3.146 ms
Remote clock offset: -3.428 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.39 Mbit/s
95th percentile per-packet one-way delay: 1.004 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 89.39 Mbit/s
95th percentile per-packet one-way delay: 1.004 ms
Loss rate: 0.07%
```
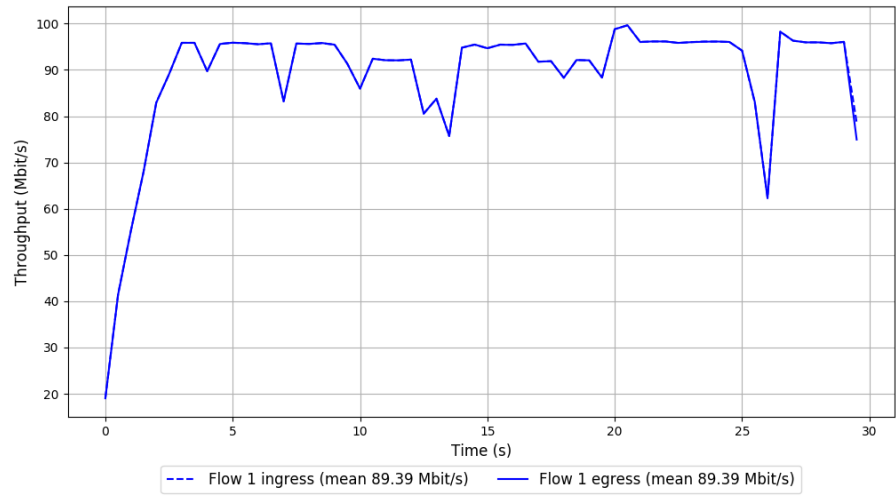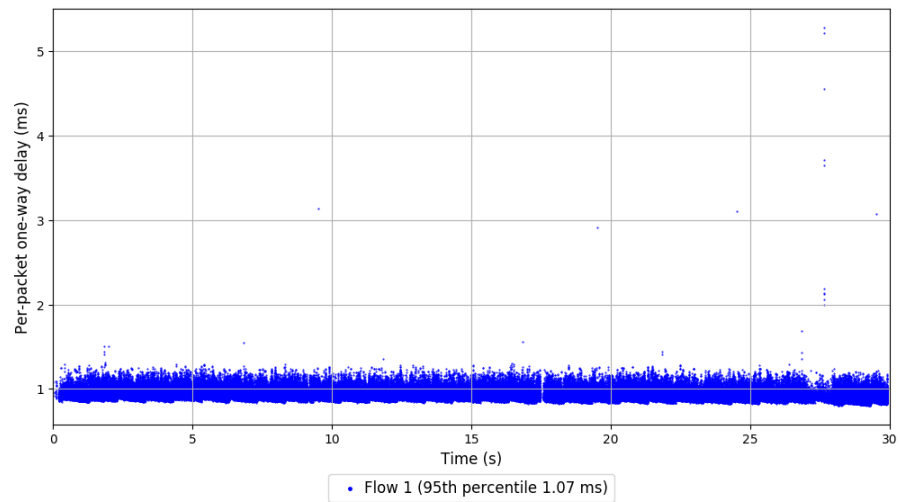
Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 89.39 Mbit/s)   Flow 1 egress (mean 89.39 Mbit/s)

Flow 1 (95th percentile 1.00 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2017-09-17 12:41:26
End at: 2017-09-17 12:41:56
Local clock offset: 3.932 ms
Remote clock offset: -3.716 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.84 Mbit/s
95th percentile per-packet one-way delay: 1.072 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 66.84 Mbit/s
95th percentile per-packet one-way delay: 1.072 ms
Loss rate: 0.08%
```
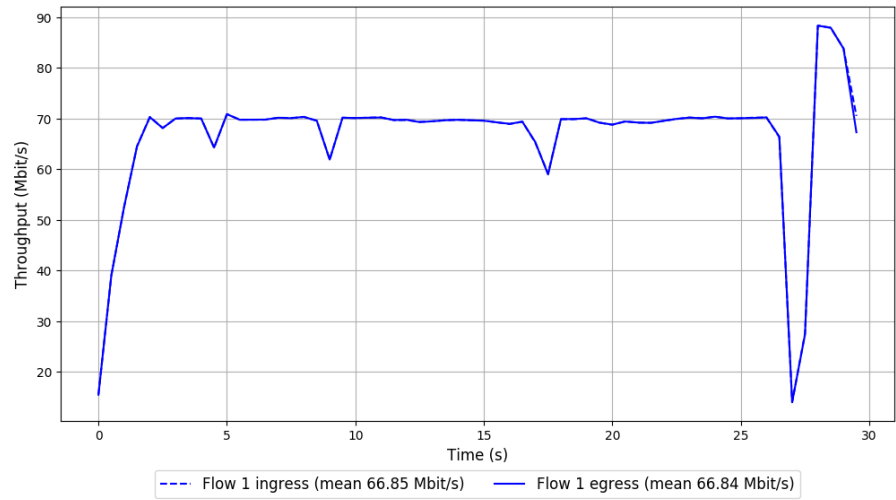
Run 10: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 66.85 Mbit/s) —— Flow 1 egress (mean 66.84 Mbit/s)
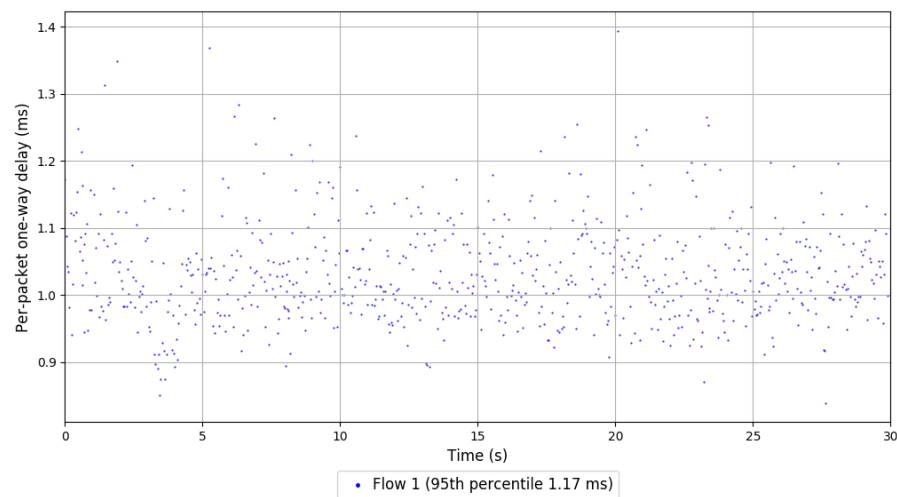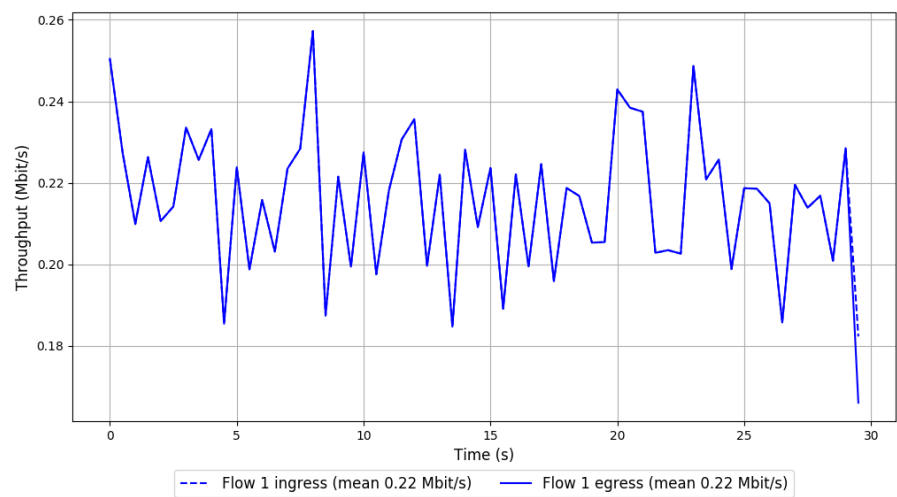

• Flow 1 (95th percentile 1.07 ms)

```
Run 1: Statistics of SCReAM

Start at: 2017-09-17 09:54:04
End at: 2017-09-17 09:54:34
Local clock offset: 6.013 ms
Remote clock offset: -4.372 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.172 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.172 ms
Loss rate: 0.13%
```

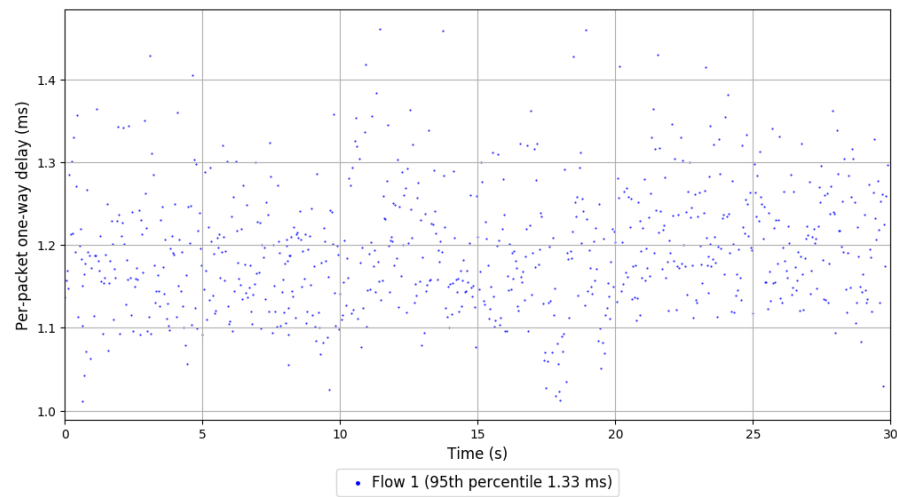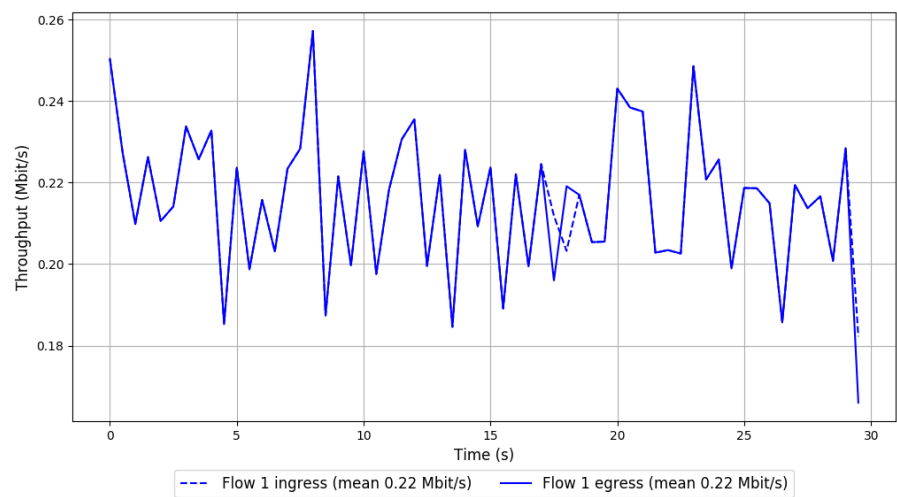Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2017-09-17 10:14:53
End at: 2017-09-17 10:15:23
Local clock offset: 3.916 ms
Remote clock offset: -4.157 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.330 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.330 ms
Loss rate: 0.13%
```

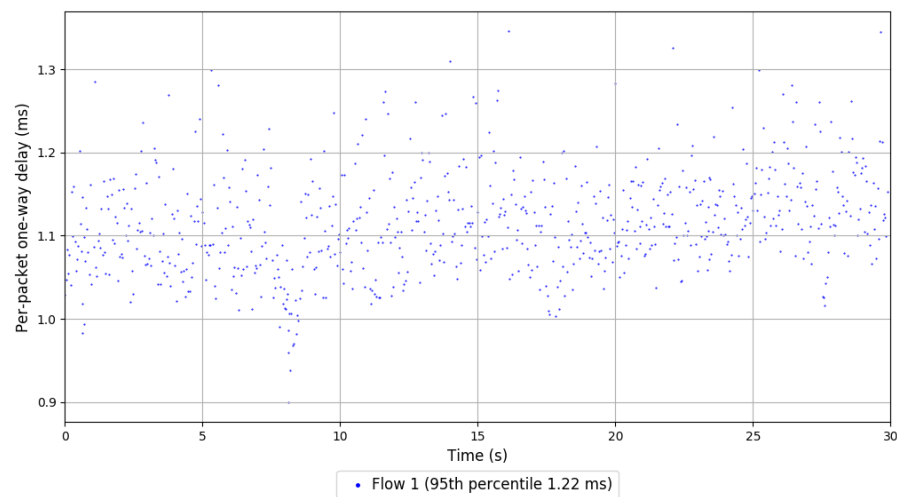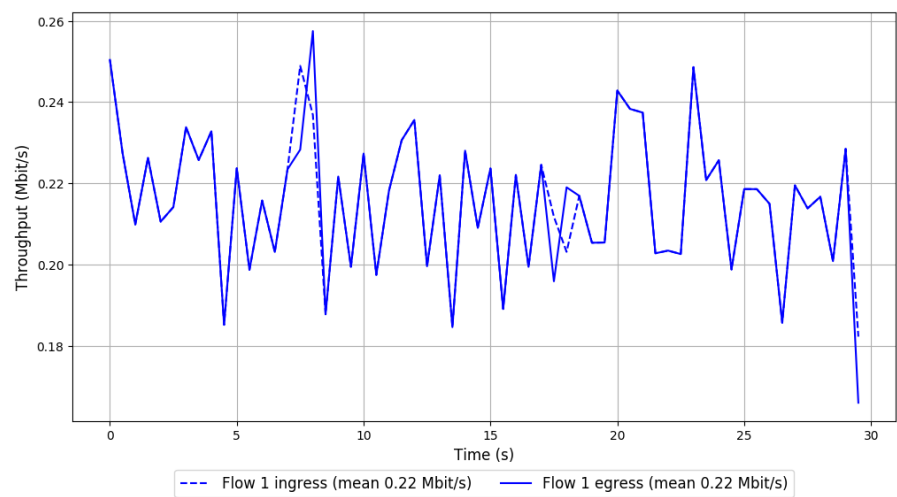# Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2017-09-17 10:35:49
End at: 2017-09-17 10:36:19
Local clock offset: 2.927 ms
Remote clock offset: -3.955 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.224 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.224 ms
Loss rate: 0.13%
```

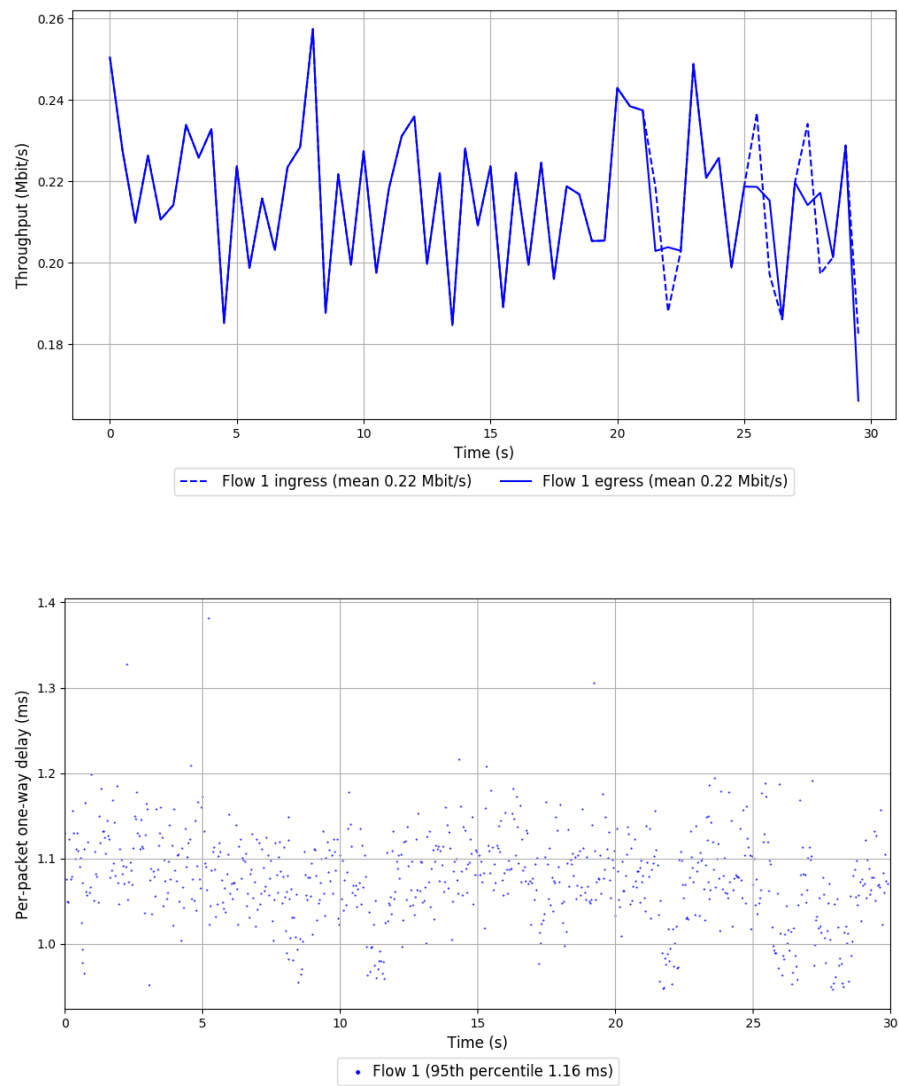## Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2017-09-17 10:56:30
End at: 2017-09-17 10:57:00
Local clock offset: 1.96 ms
Remote clock offset: -3.728 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.159 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.159 ms
Loss rate: 0.13%
```

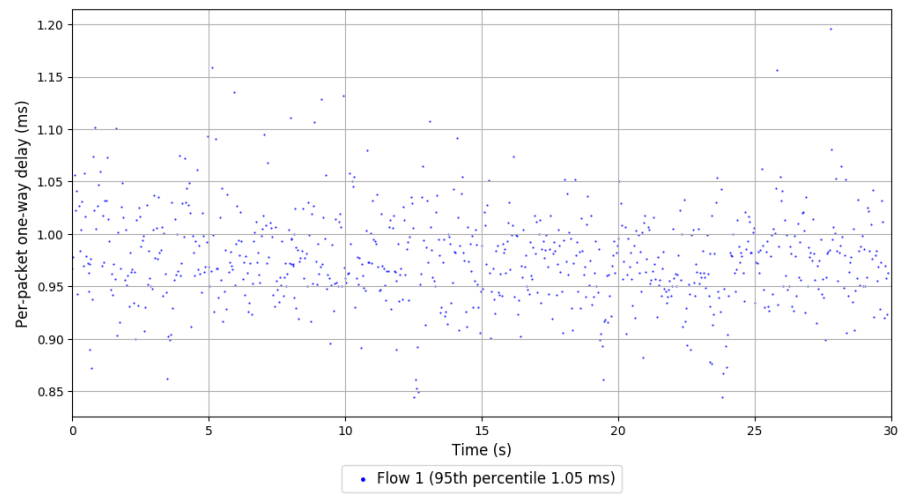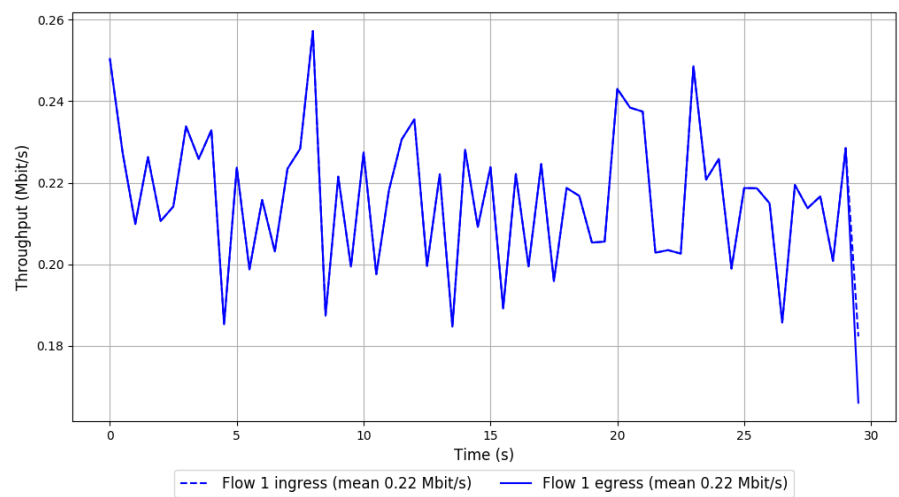Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2017-09-17 11:17:13
End at: 2017-09-17 11:17:43
Local clock offset: 2.022 ms
Remote clock offset: -3.352 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.052 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.052 ms
Loss rate: 0.13%
```

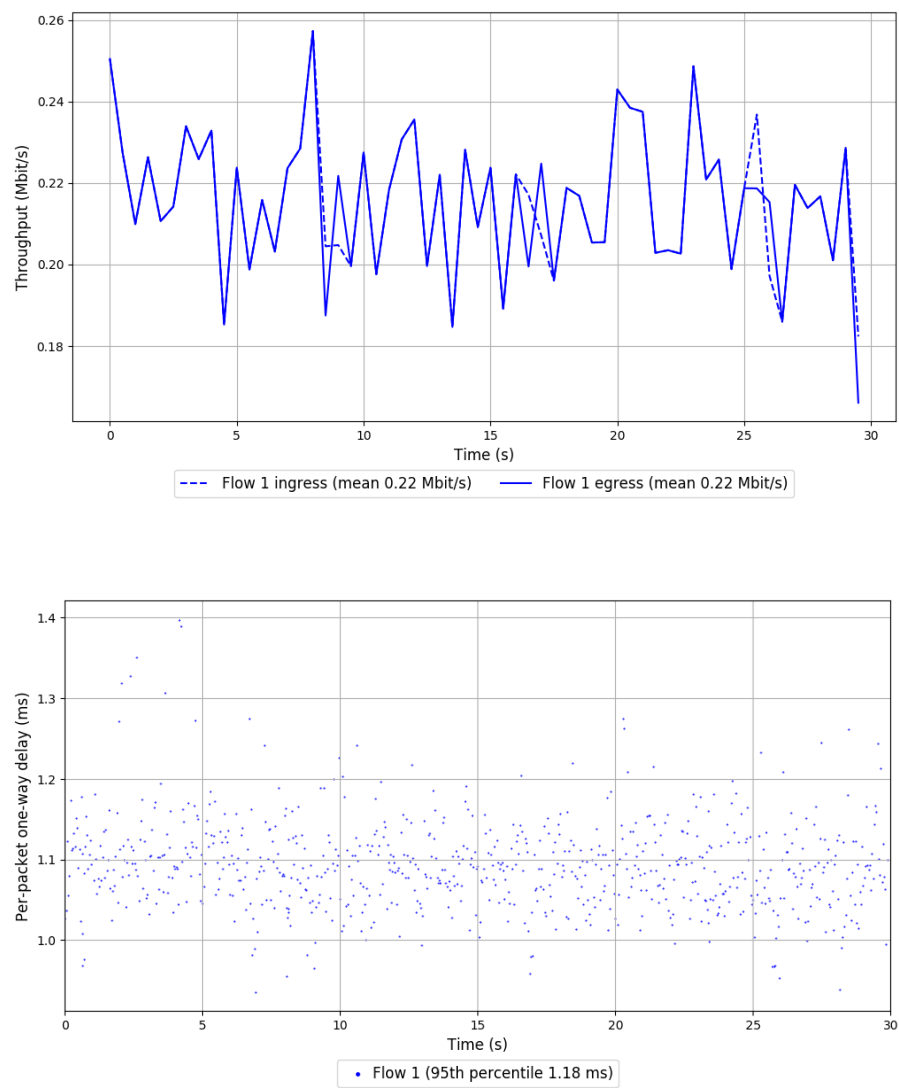Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2017-09-17 11:38:00
End at: 2017-09-17 11:38:30
Local clock offset: 2.895 ms
Remote clock offset: -3.196 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.181 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.181 ms
Loss rate: 0.13%
```
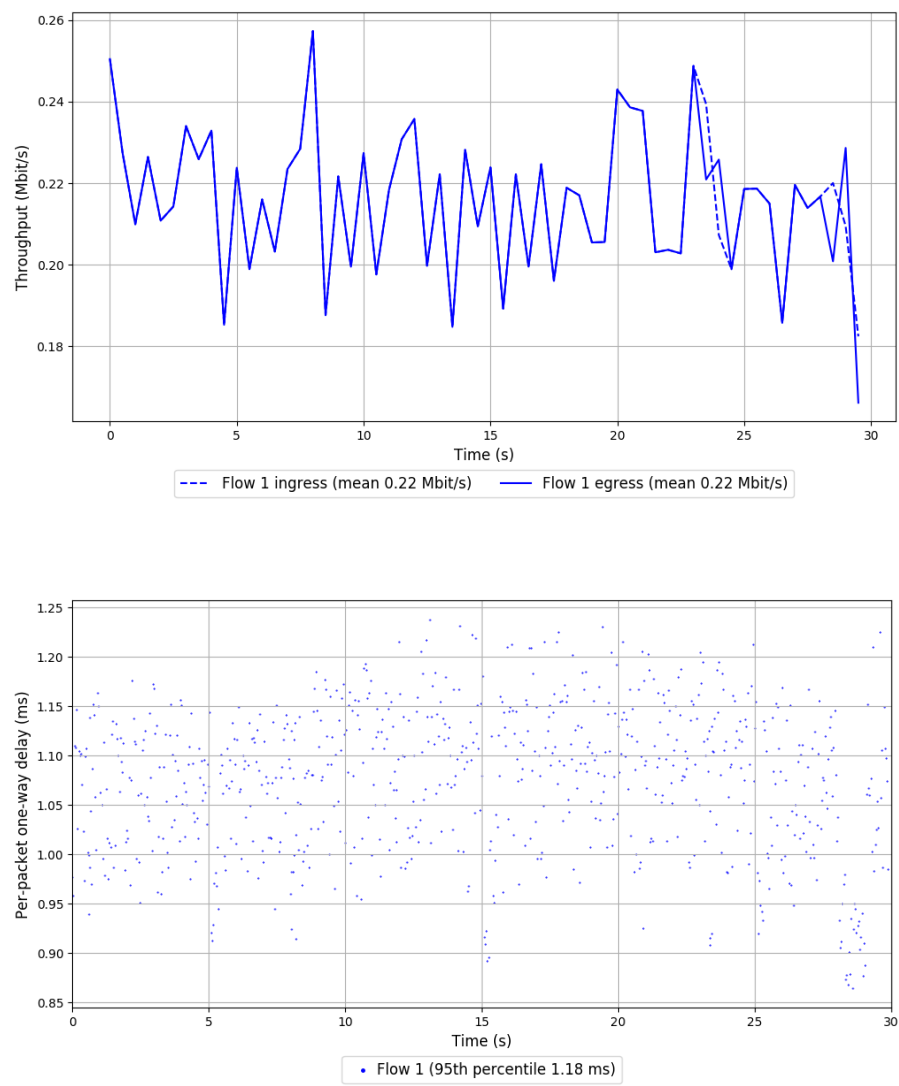
Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2017-09-17 11:58:42
End at: 2017-09-17 11:59:12
Local clock offset: 2.979 ms
Remote clock offset: -3.37 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.183 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.183 ms
Loss rate: 0.13%
```

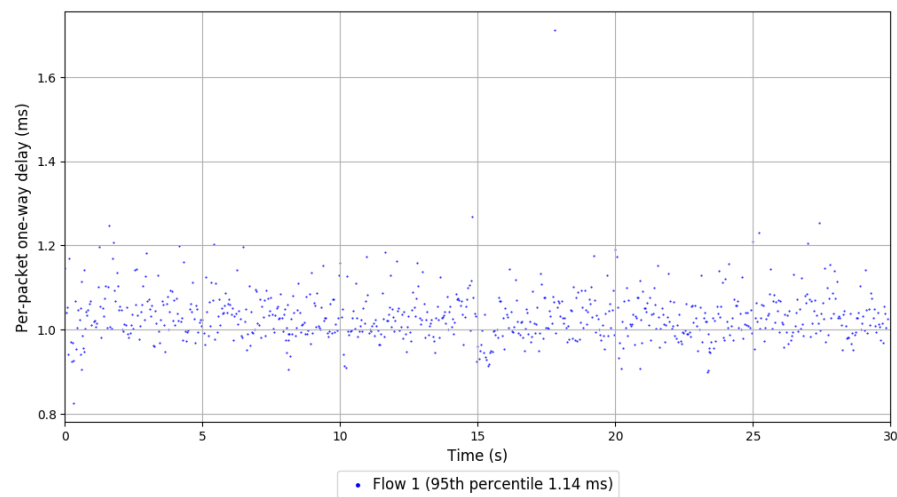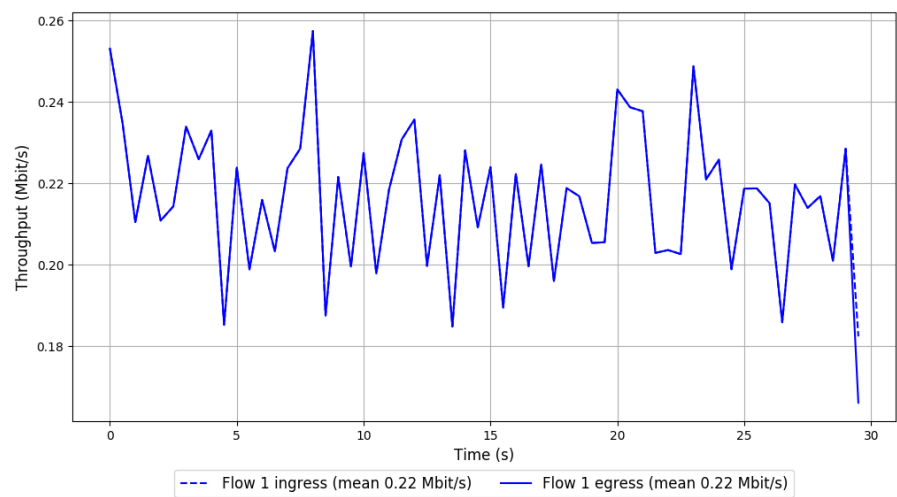Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2017-09-17 12:19:37
End at: 2017-09-17 12:20:07
Local clock offset: 3.091 ms
Remote clock offset: -3.412 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.139 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.139 ms
Loss rate: 0.13%
```

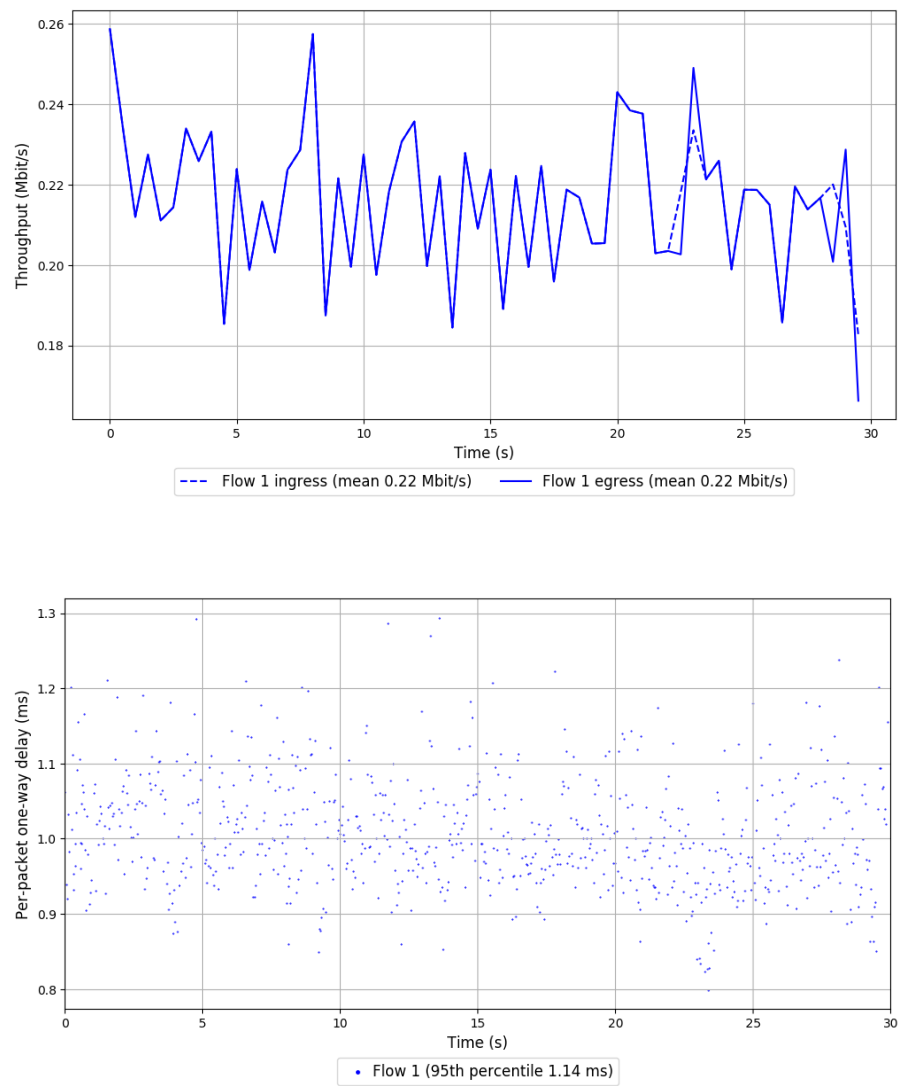Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2017-09-17 12:40:16
End at: 2017-09-17 12:40:46
Local clock offset: 3.873 ms
Remote clock offset: -3.683 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.136 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.136 ms
Loss rate: 0.13%
```
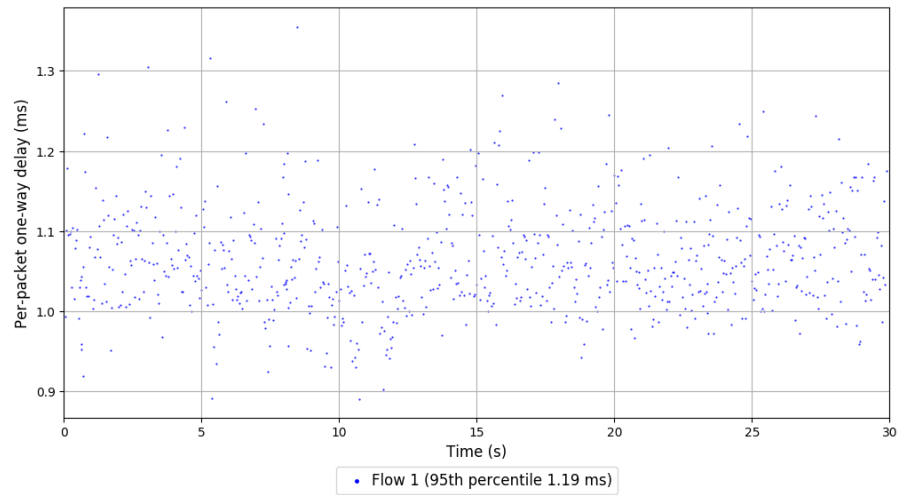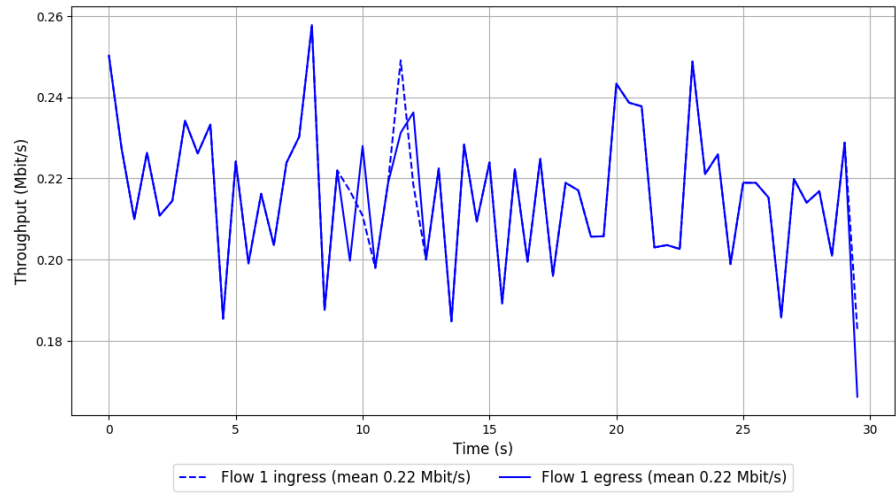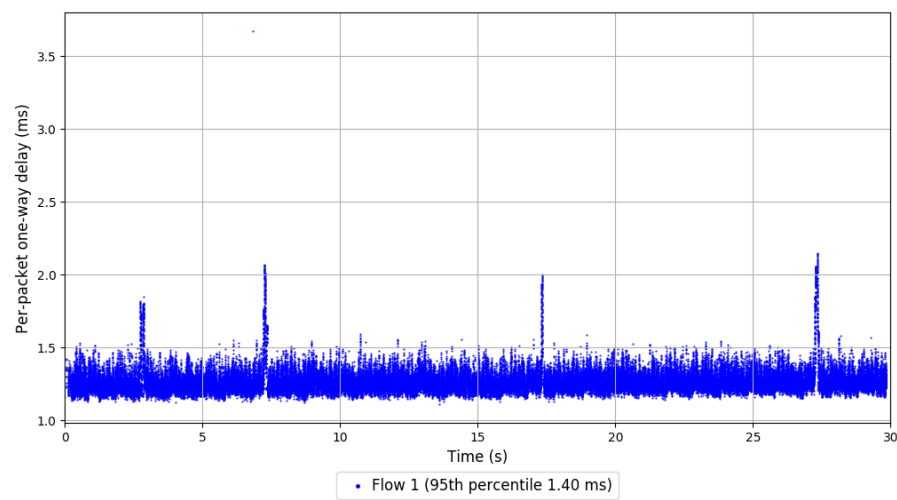
Run 9: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 1.14 ms)

```
Run 10: Statistics of SCReAM

Start at: 2017-09-17 13:01:28
End at: 2017-09-17 13:01:58
Local clock offset: 4.563 ms
Remote clock offset: -3.988 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.190 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.190 ms
Loss rate: 0.13%
```

Run 10: Report of SCReAM — Data Link

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

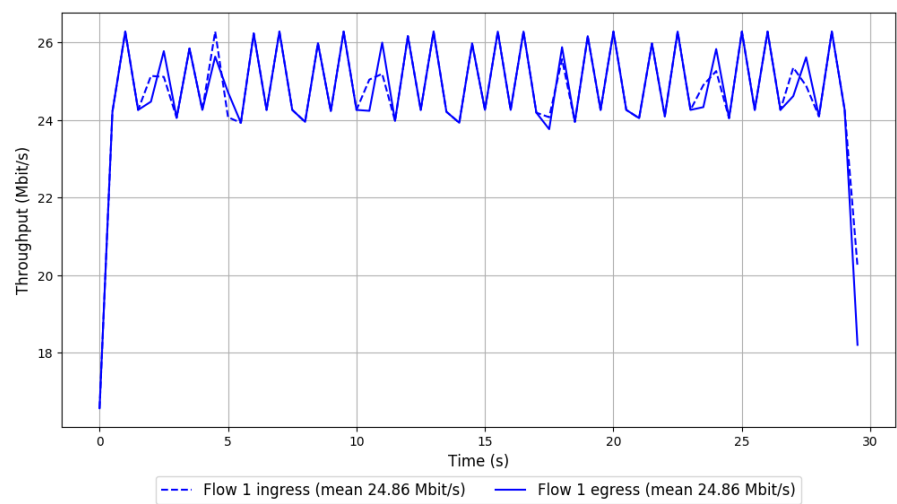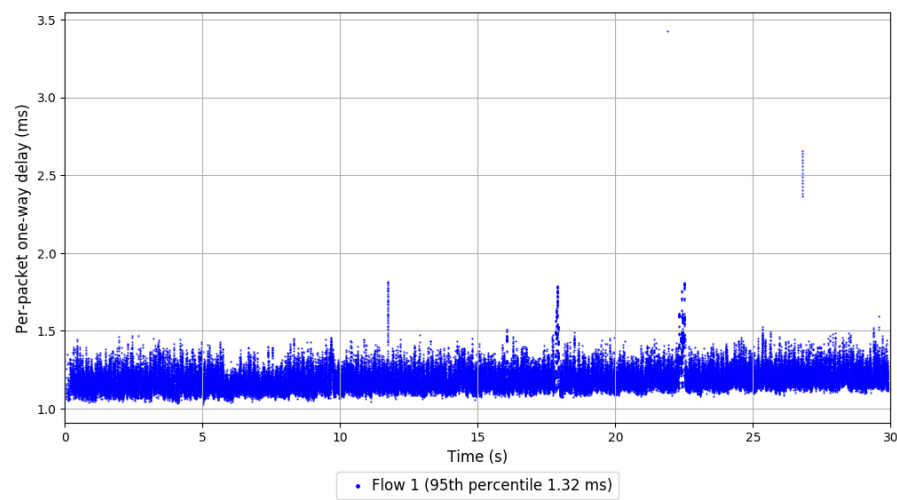Flow 1 (95th percentile 1.19 ms)

```
Run 1: Statistics of Sprout

Start at: 2017-09-17 09:46:05
End at: 2017-09-17 09:46:35
Local clock offset: 6.272 ms
Remote clock offset: -4.465 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.86 Mbit/s
95th percentile per-packet one-way delay: 1.396 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.86 Mbit/s
95th percentile per-packet one-way delay: 1.396 ms
Loss rate: 0.14%
```

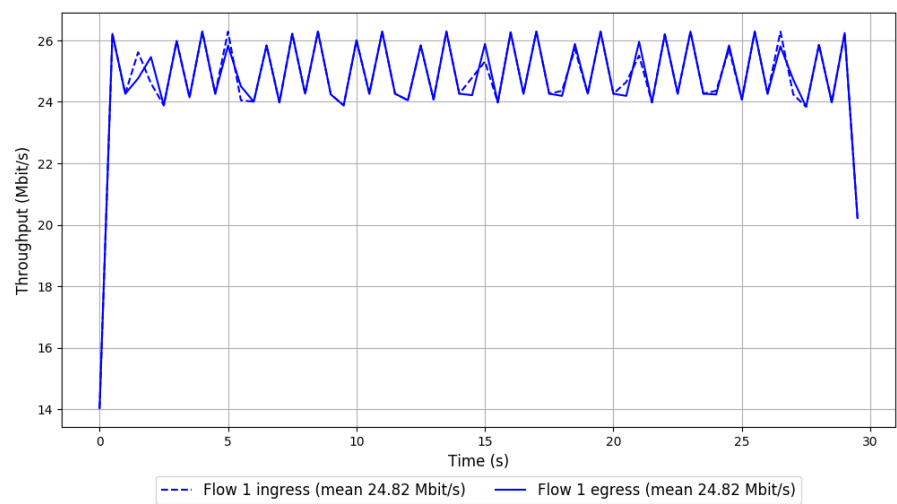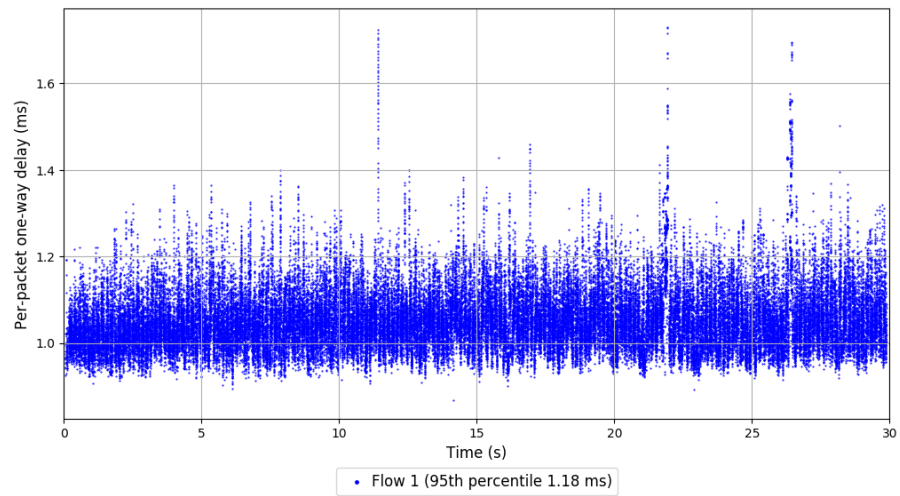Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2017-09-17 10:06:49
End at: 2017-09-17 10:07:19
Local clock offset: 4.609 ms
Remote clock offset: -4.446 ms

# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.82 Mbit/s
95th percentile per-packet one-way delay: 1.322 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.82 Mbit/s
95th percentile per-packet one-way delay: 1.322 ms
Loss rate: 0.00%
```

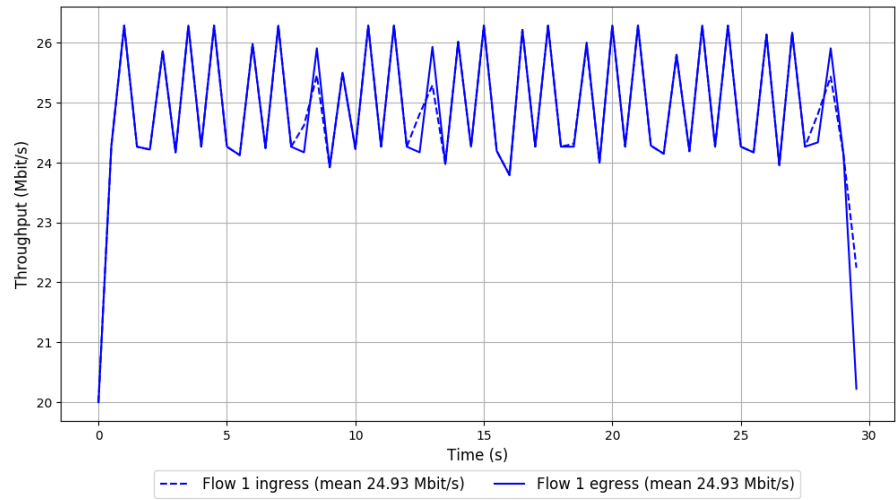Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2017-09-17 10:27:46
End at: 2017-09-17 10:28:16
Local clock offset: 3.247 ms
Remote clock offset: -3.848 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.93 Mbit/s
95th percentile per-packet one-way delay: 1.184 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.93 Mbit/s
95th percentile per-packet one-way delay: 1.184 ms
Loss rate: 0.14%
```

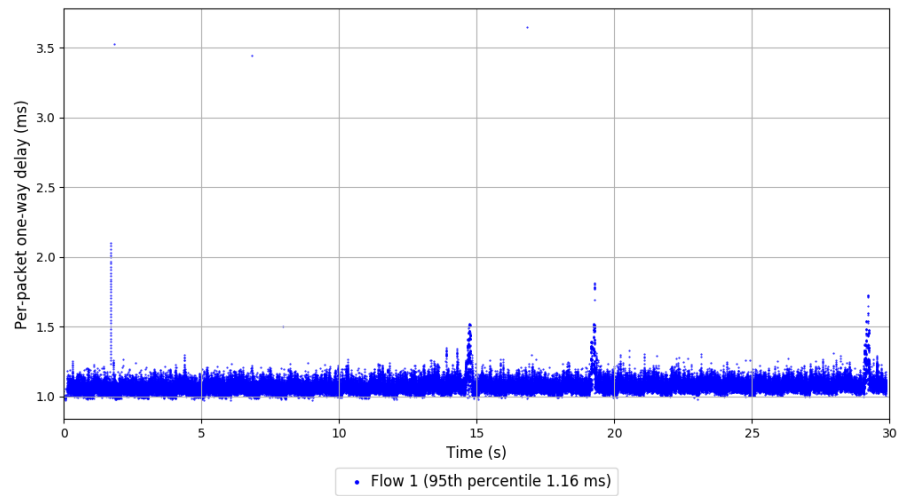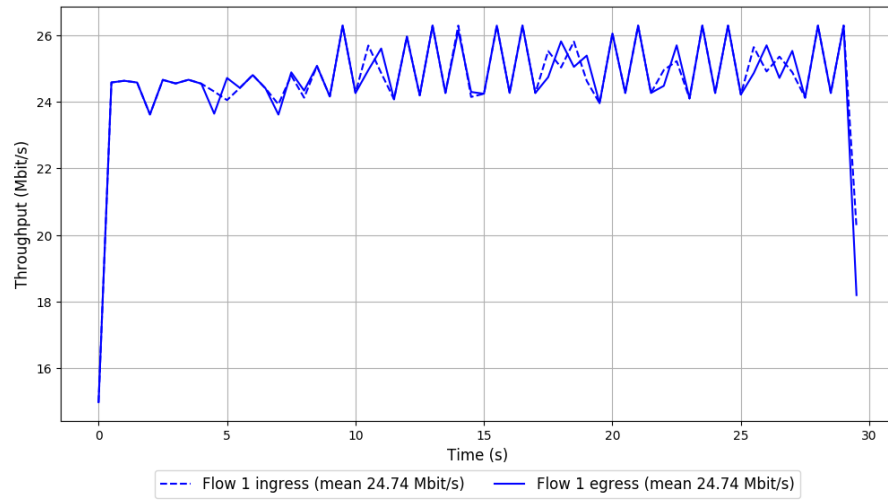## Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2017-09-17 10:48:53
End at: 2017-09-17 10:49:23
Local clock offset: 2.11 ms
Remote clock offset: -3.853 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 1.157 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 1.157 ms
Loss rate: 0.14%
```

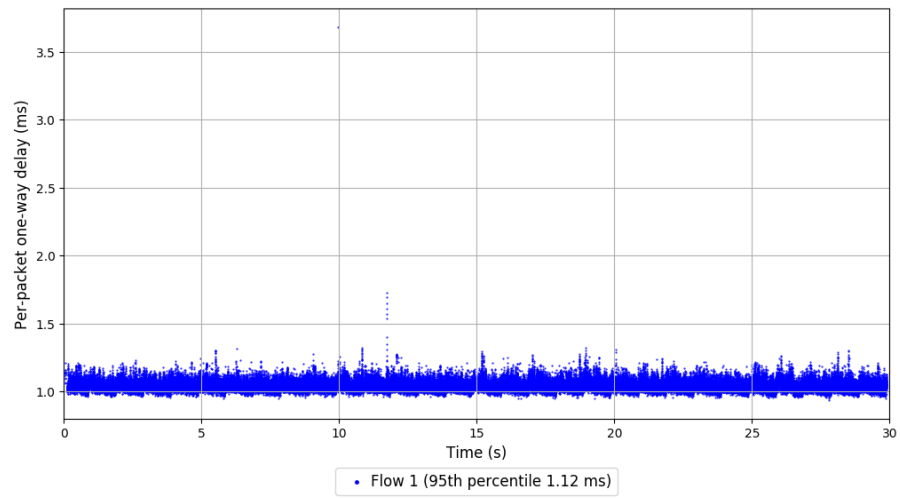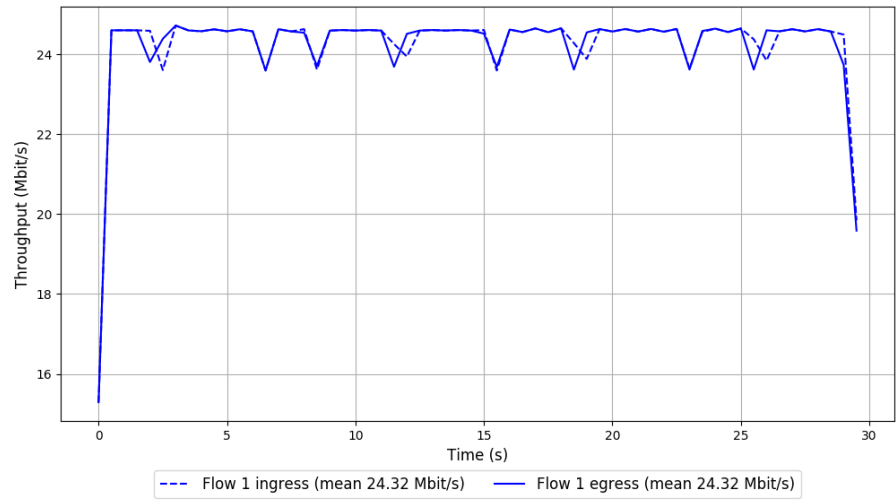# Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2017-09-17 11:09:32
End at: 2017-09-17 11:10:02
Local clock offset: 1.886 ms
Remote clock offset: -3.459 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.32 Mbit/s
95th percentile per-packet one-way delay: 1.124 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 24.32 Mbit/s
95th percentile per-packet one-way delay: 1.124 ms
Loss rate: 0.07%
```

Run 5: Report of Sprout — Data Link

Flow 1 ingress (mean 24.32 Mbit/s) --- Flow 1 egress (mean 24.32 Mbit/s)

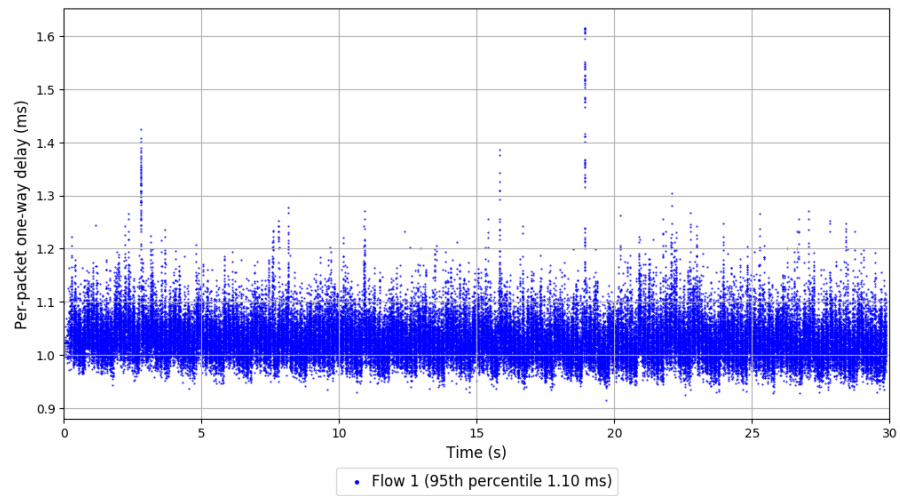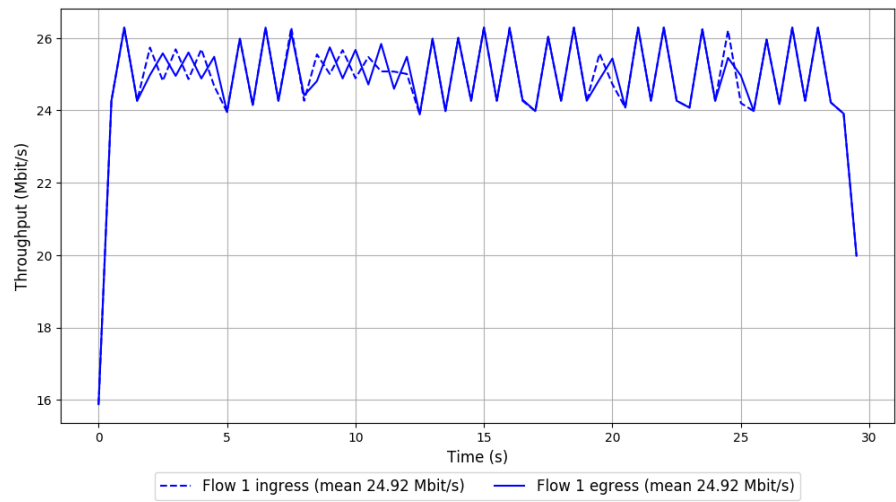Flow 1 (95th percentile 1.12 ms)

```
Run 6: Statistics of Sprout

Start at: 2017-09-17 11:30:13
End at: 2017-09-17 11:30:43
Local clock offset: 2.827 ms
Remote clock offset: -3.163 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.92 Mbit/s
95th percentile per-packet one-way delay: 1.104 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.92 Mbit/s
95th percentile per-packet one-way delay: 1.104 ms
Loss rate: 0.00%
```

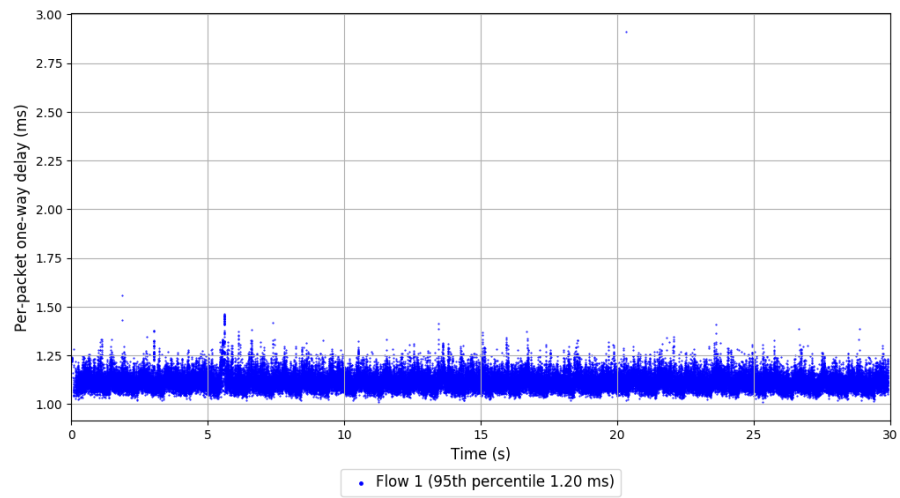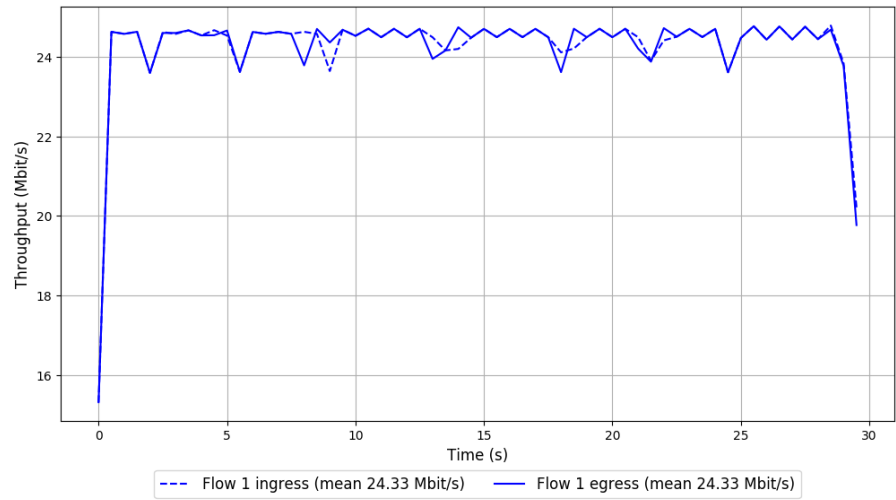Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2017-09-17 11:50:59
End at: 2017-09-17 11:51:29
Local clock offset: 3.123 ms
Remote clock offset: -3.361 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.33 Mbit/s
95th percentile per-packet one-way delay: 1.199 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 24.33 Mbit/s
95th percentile per-packet one-way delay: 1.199 ms
Loss rate: 0.04%
```

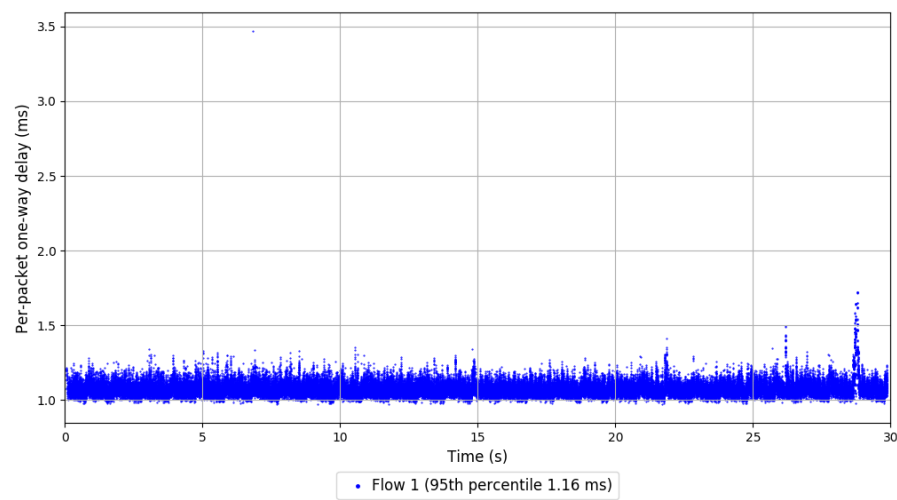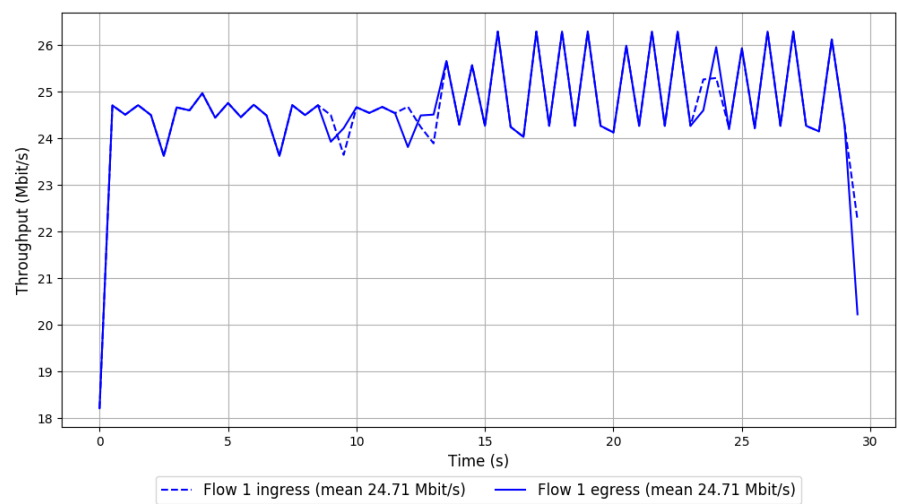## Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2017-09-17 12:11:36
End at: 2017-09-17 12:12:06
Local clock offset: 3.166 ms
Remote clock offset: -3.318 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 1.157 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 1.157 ms
Loss rate: 0.14%
```

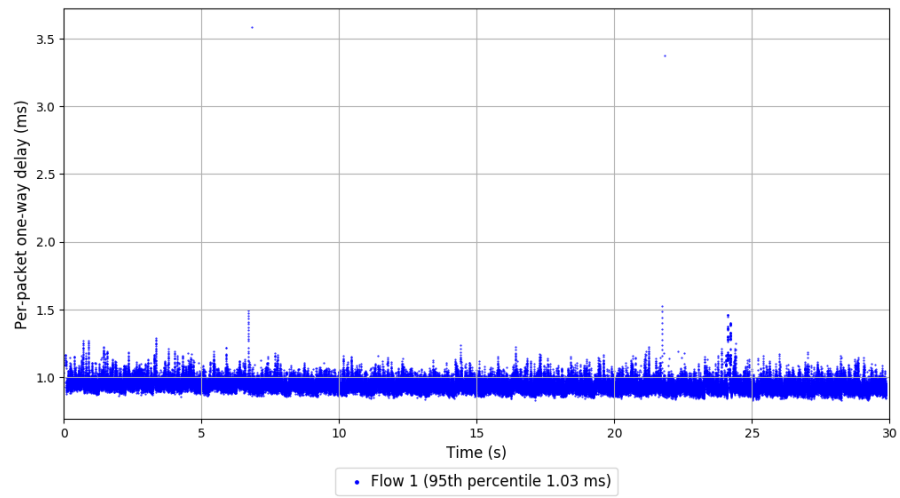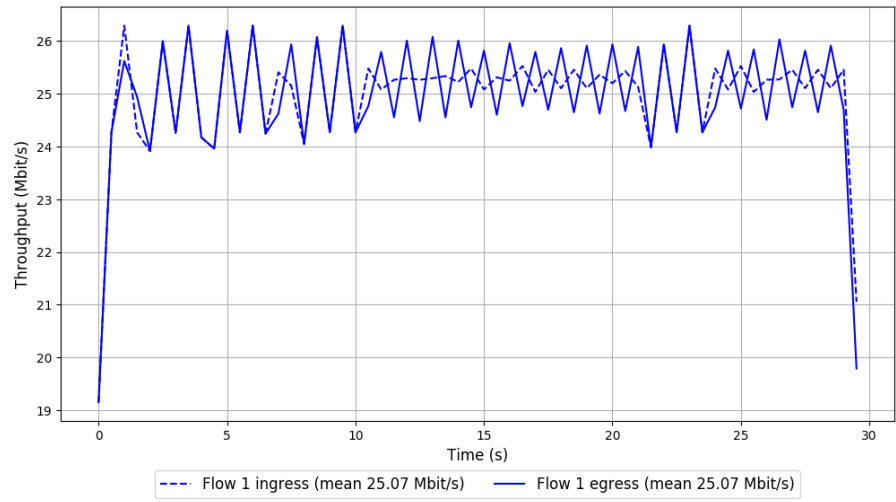## Run 8: Report of Sprout — Data Link

219

```
Run 9: Statistics of Sprout

Start at: 2017-09-17 12:32:40
End at: 2017-09-17 12:33:10
Local clock offset: 3.476 ms
Remote clock offset: -3.561 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.07 Mbit/s
95th percentile per-packet one-way delay: 1.033 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 25.07 Mbit/s
95th percentile per-packet one-way delay: 1.033 ms
Loss rate: 0.13%
```

Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2017-09-17 12:53:13
End at: 2017-09-17 12:53:43
Local clock offset: 4.528 ms
Remote clock offset: -3.889 ms


# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.90 Mbit/s
95th percentile per-packet one-way delay: 1.250 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.90 Mbit/s
95th percentile per-packet one-way delay: 1.250 ms
Loss rate: 0.00%
```
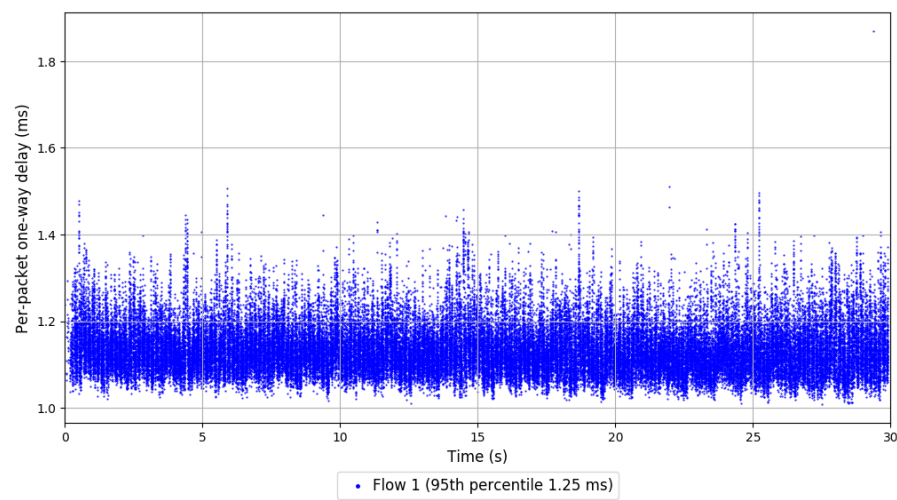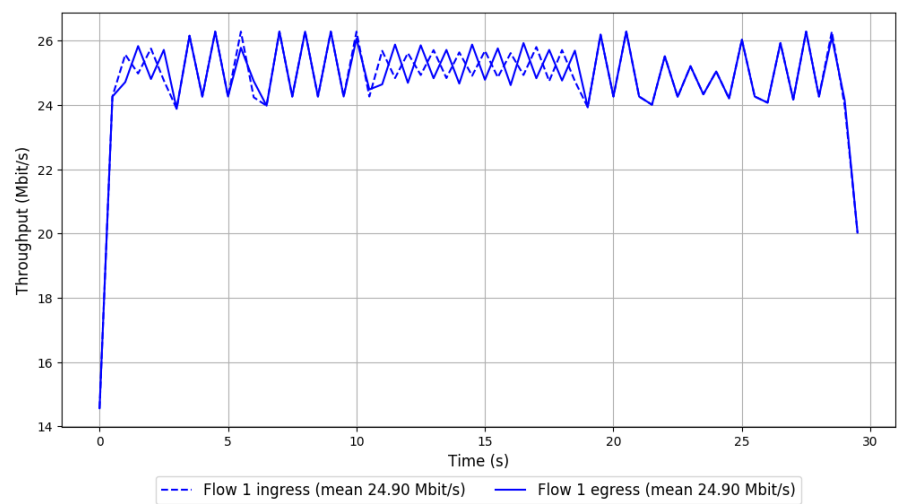
Run 10: Report of Sprout — Data Link

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

Start at: 2017-09-17 09:35:33
End at: 2017-09-17 09:36:03
Local clock offset: 5.285 ms
Remote clock offset: -4.481 ms

# Below is generated by plot.py at 2017-09-17 18:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 245.41 Mbit/s
95th percentile per-packet one-way delay: 1.085 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 245.41 Mbit/s
95th percentile per-packet one-way delay: 1.085 ms
Loss rate: 0.04%
```
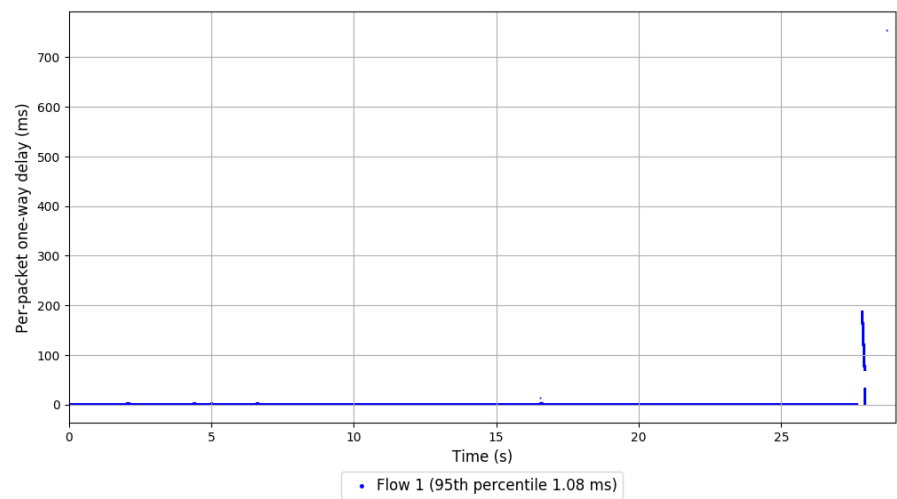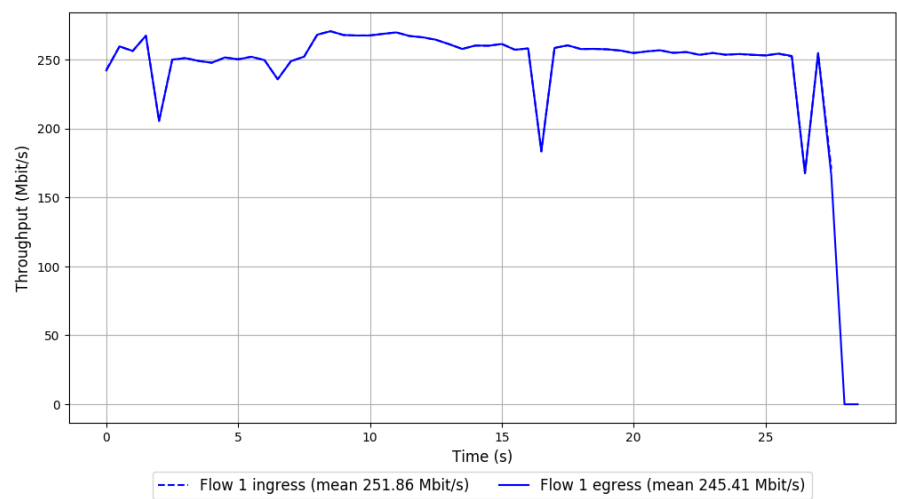
Run 1: Report of TaoVA-100x — Data Link

Throughput (Mbit/s) vs Time (s)

- - - Flow 1 ingress (mean 251.86 Mbit/s)   —— Flow 1 egress (mean 245.41 Mbit/s)

Per-packet one-way delay (ms) vs Time (s)

• Flow 1 (95th percentile 1.08 ms)

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

Start at: 2017-09-17 09:56:27
End at: 2017-09-17 09:56:57
Local clock offset: 5.73 ms
Remote clock offset: -4.401 ms


# Below is generated by plot.py at 2017-09-17 18:04:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 261.30 Mbit/s
95th percentile per-packet one-way delay: 1.250 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 261.30 Mbit/s
95th percentile per-packet one-way delay: 1.250 ms
Loss rate: 0.07%
```
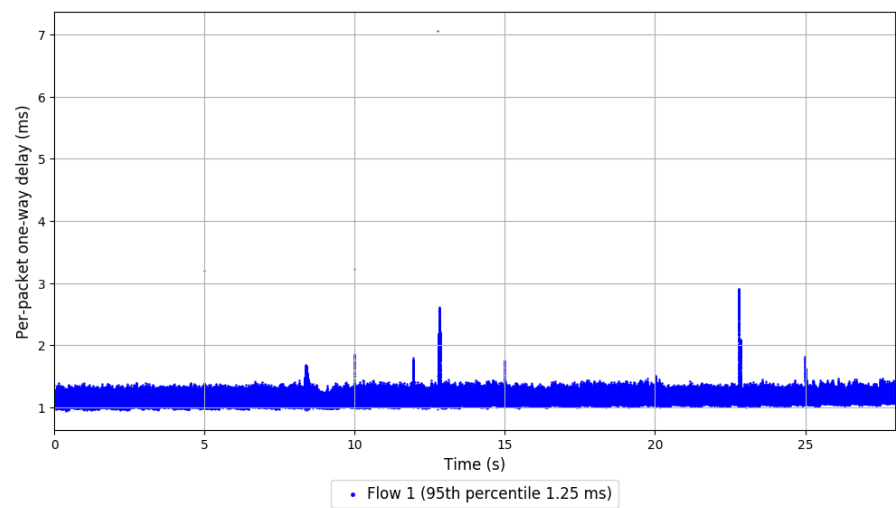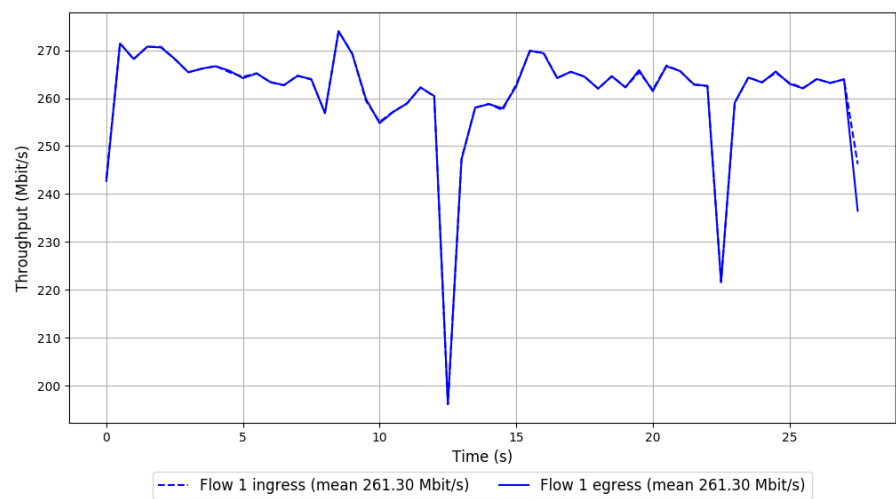
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-17 10:17:13
End at: 2017-09-17 10:17:43
Local clock offset: 3.845 ms
Remote clock offset: -4.098 ms


# Below is generated by plot.py at 2017-09-17 18:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 269.30 Mbit/s
95th percentile per-packet one-way delay: 1.229 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 269.30 Mbit/s
95th percentile per-packet one-way delay: 1.229 ms
Loss rate: 0.07%
```
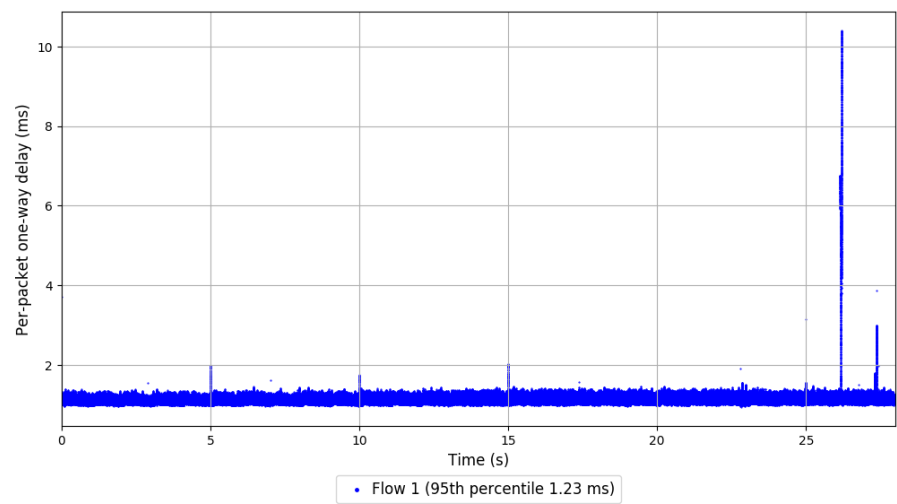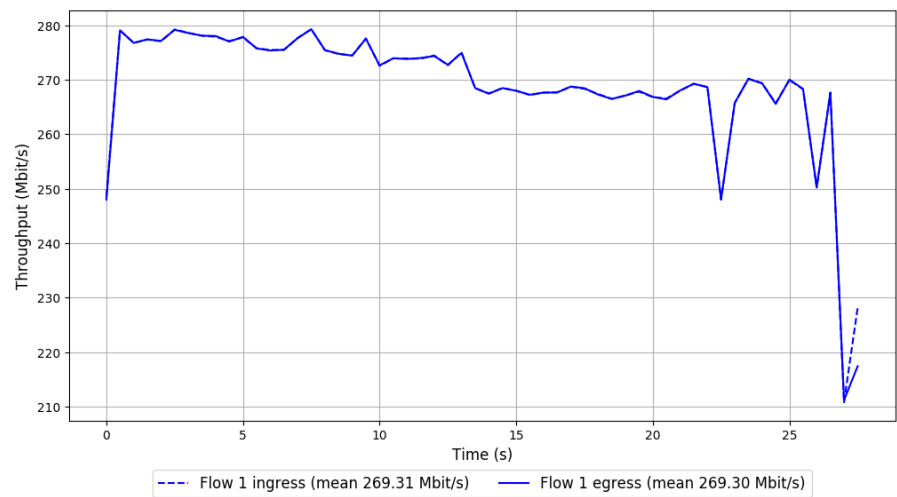
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 269.31 Mbit/s)   Flow 1 egress (mean 269.30 Mbit/s)

Flow 1 (95th percentile 1.23 ms)

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

Start at: 2017-09-17 10:38:13
End at: 2017-09-17 10:38:43
Local clock offset: 2.738 ms
Remote clock offset: -3.932 ms


# Below is generated by plot.py at 2017-09-17 18:08:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 276.19 Mbit/s
95th percentile per-packet one-way delay: 1.219 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 276.19 Mbit/s
95th percentile per-packet one-way delay: 1.219 ms
Loss rate: 0.07%
```
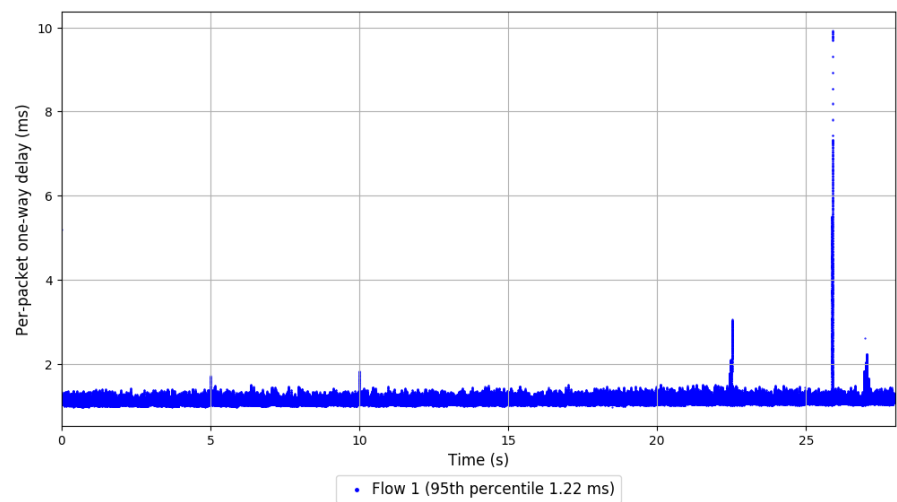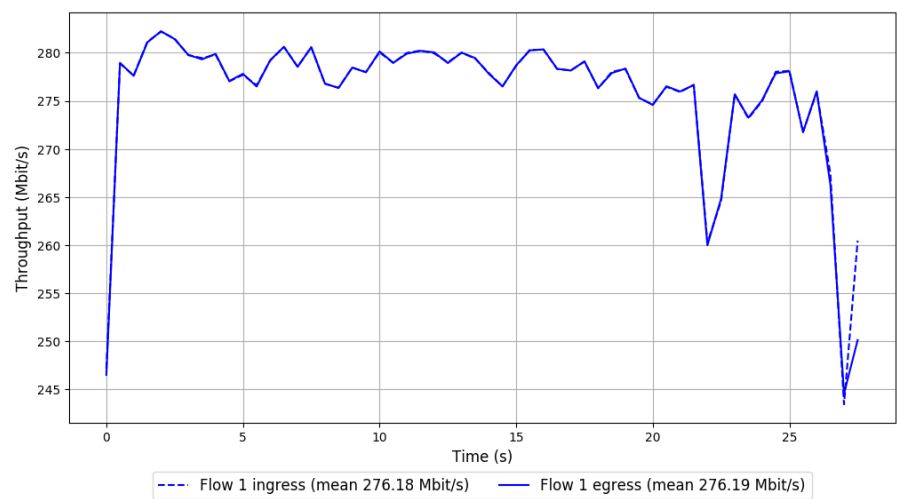
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 276.18 Mbit/s) — Flow 1 egress (mean 276.19 Mbit/s)

Flow 1 (95th percentile 1.22 ms)

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

Start at: 2017-09-17 10:58:53
End at: 2017-09-17 10:59:23
Local clock offset: 1.984 ms
Remote clock offset: -3.704 ms


# Below is generated by plot.py at 2017-09-17 18:09:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 282.05 Mbit/s
95th percentile per-packet one-way delay: 1.042 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 282.05 Mbit/s
95th percentile per-packet one-way delay: 1.042 ms
Loss rate: 0.07%
```
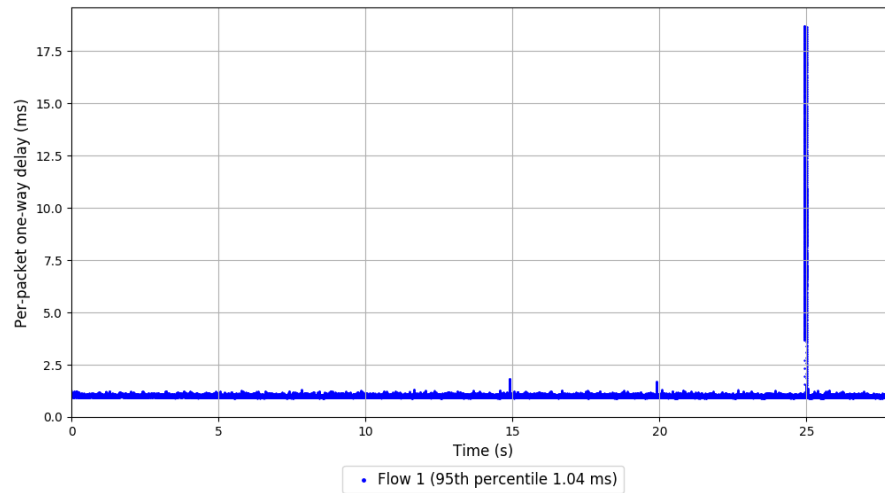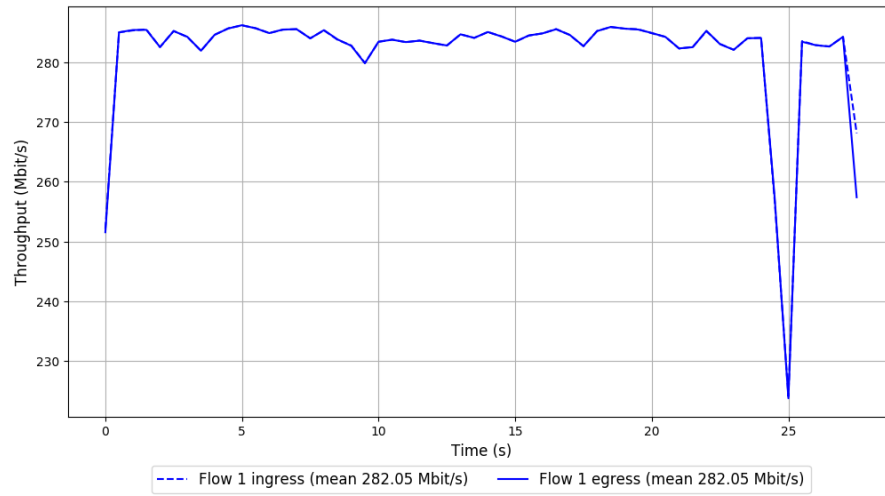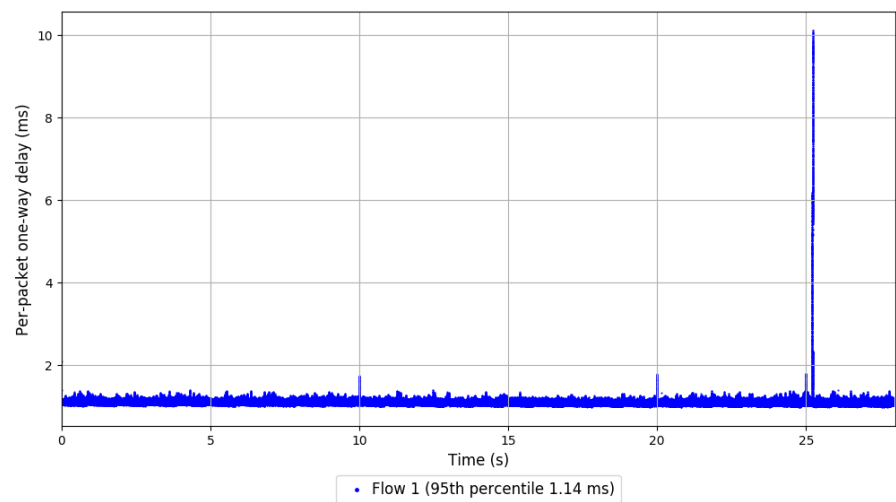
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 282.05 Mbit/s) ----   Flow 1 egress (mean 282.05 Mbit/s) ———

Flow 1 (95th percentile 1.04 ms)

233

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

Start at: 2017-09-17 11:19:37
End at: 2017-09-17 11:20:07
Local clock offset: 2.231 ms
Remote clock offset: -3.466 ms


# Below is generated by plot.py at 2017-09-17 18:09:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 281.85 Mbit/s
95th percentile per-packet one-way delay: 1.141 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 281.85 Mbit/s
95th percentile per-packet one-way delay: 1.141 ms
Loss rate: 0.07%
```
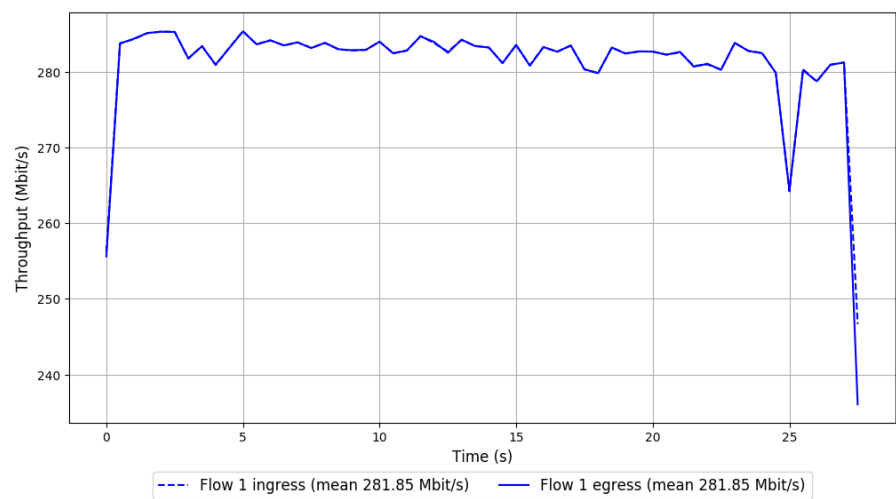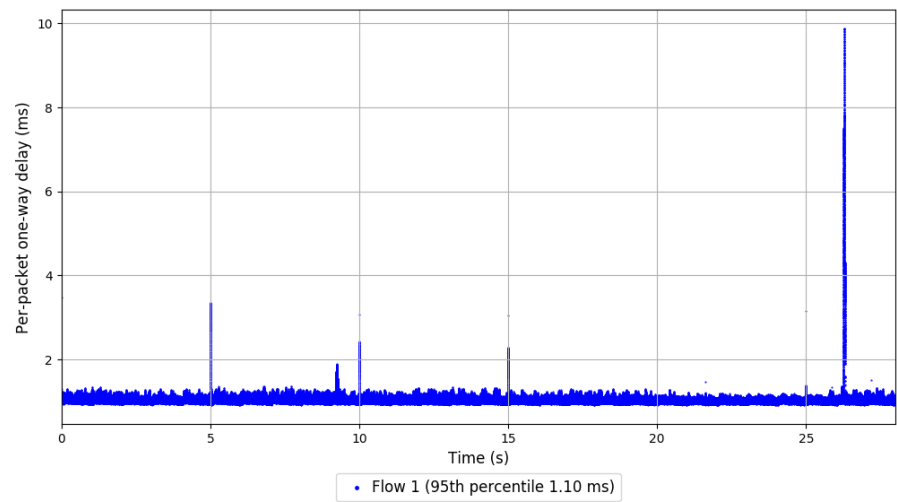
Run 6: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-17 11:40:23
End at: 2017-09-17 11:40:53
Local clock offset: 2.896 ms
Remote clock offset: -3.243 ms


# Below is generated by plot.py at 2017-09-17 18:10:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 280.75 Mbit/s
95th percentile per-packet one-way delay: 1.100 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 280.75 Mbit/s
95th percentile per-packet one-way delay: 1.100 ms
Loss rate: 0.07%
```
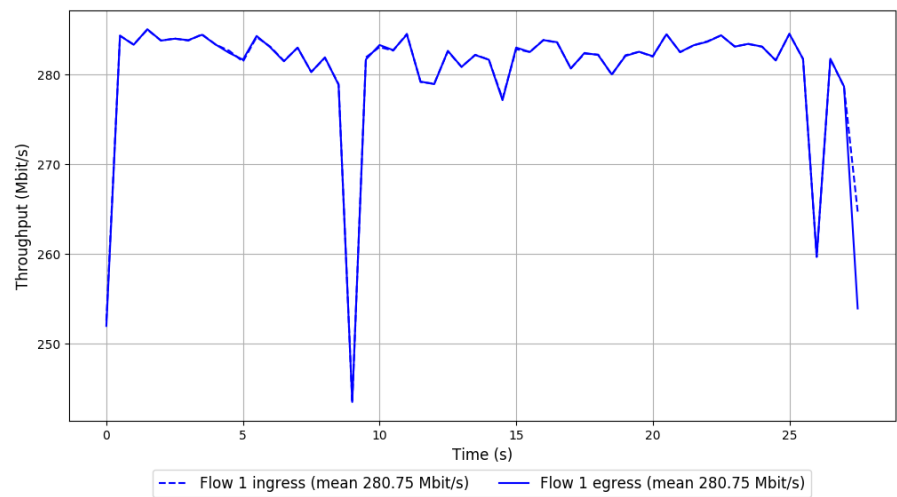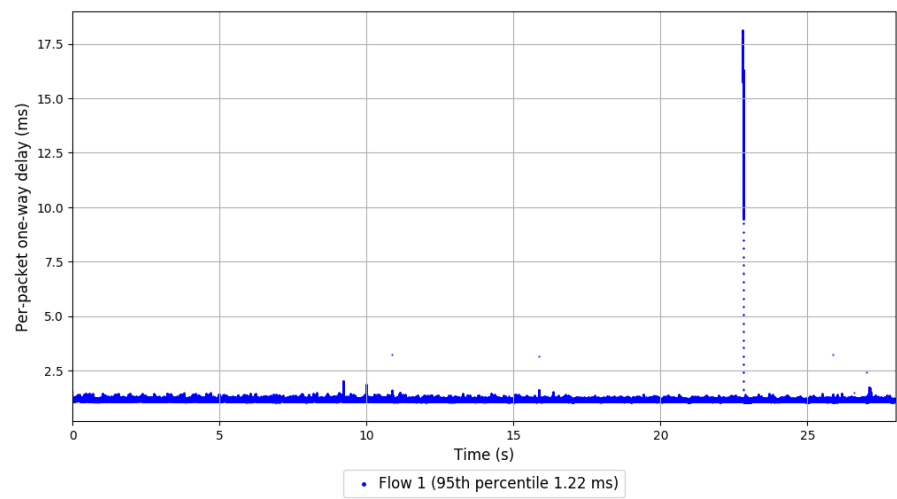
Run 7: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 280.75 Mbit/s)   Flow 1 egress (mean 280.75 Mbit/s)

Flow 1 (95th percentile 1.10 ms)

237

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

Start at: 2017-09-17 12:01:05
End at: 2017-09-17 12:01:35
Local clock offset: 3.112 ms
Remote clock offset: -3.448 ms


# Below is generated by plot.py at 2017-09-17 18:11:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 280.44 Mbit/s
95th percentile per-packet one-way delay: 1.217 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 280.44 Mbit/s
95th percentile per-packet one-way delay: 1.217 ms
Loss rate: 0.07%
```
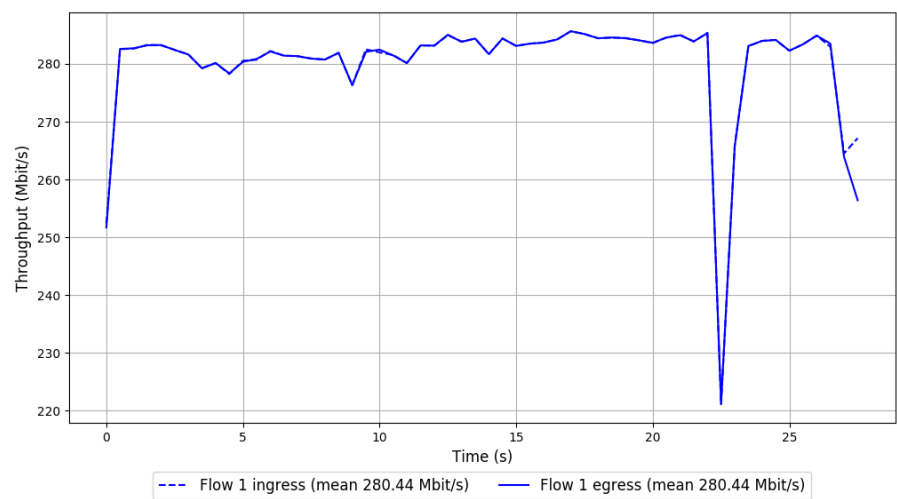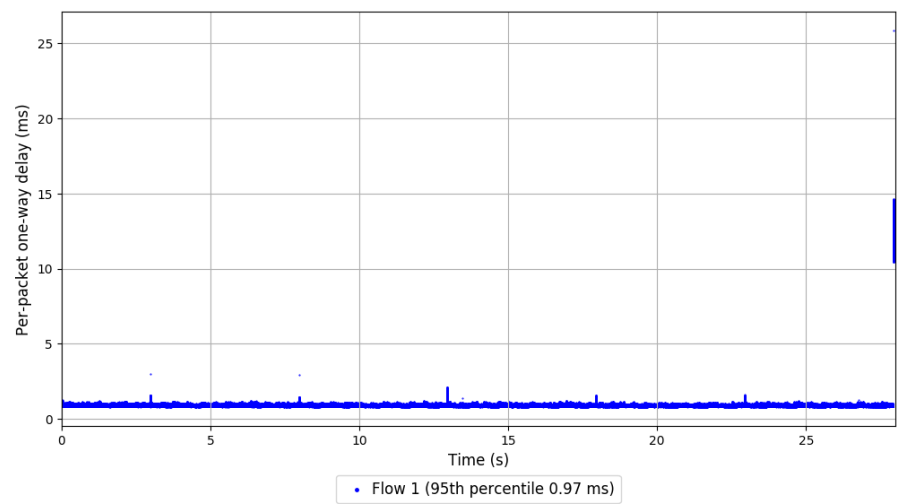
Run 8: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 280.44 Mbit/s) --- Flow 1 egress (mean 280.44 Mbit/s)

Flow 1 (95th percentile 1.22 ms)

239

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

Start at: 2017-09-17 12:22:01
End at: 2017-09-17 12:22:31
Local clock offset: 3.152 ms
Remote clock offset: -3.413 ms


# Below is generated by plot.py at 2017-09-17 18:11:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 280.71 Mbit/s
95th percentile per-packet one-way delay: 0.975 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 280.71 Mbit/s
95th percentile per-packet one-way delay: 0.975 ms
Loss rate: 0.09%
```
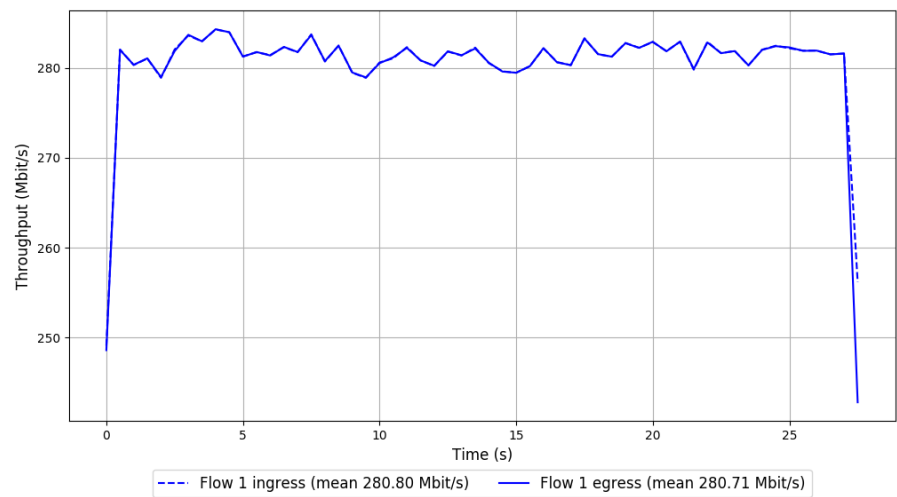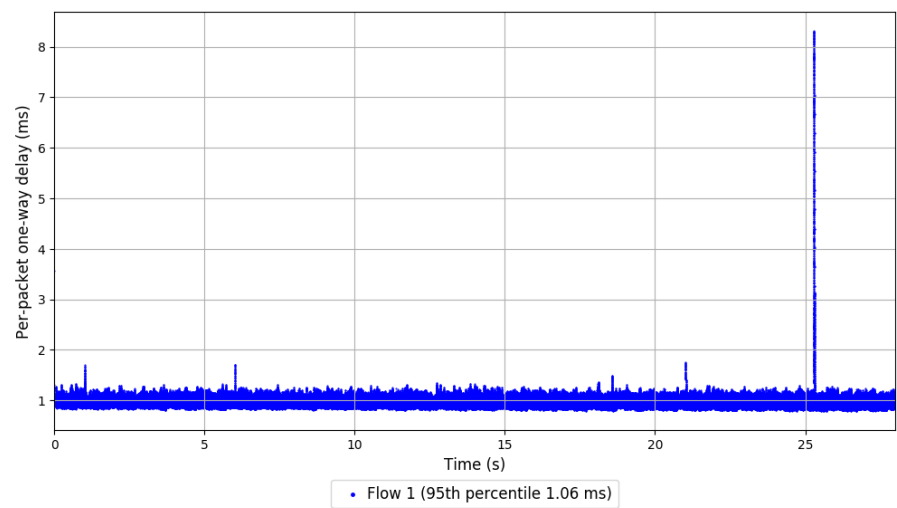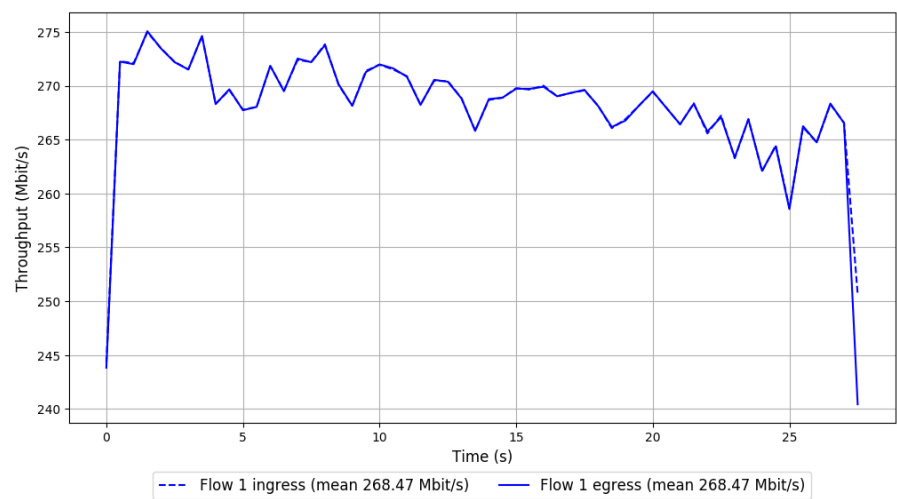
Run 9: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 280.80 Mbit/s)   Flow 1 egress (mean 280.71 Mbit/s)

Flow 1 (95th percentile 0.97 ms)

241

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

Start at: 2017-09-17 12:42:39
End at: 2017-09-17 12:43:09
Local clock offset: 4.007 ms
Remote clock offset: -3.703 ms


# Below is generated by plot.py at 2017-09-17 18:11:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 268.47 Mbit/s
95th percentile per-packet one-way delay: 1.061 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 268.47 Mbit/s
95th percentile per-packet one-way delay: 1.061 ms
Loss rate: 0.07%
```

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

Flow 1 ingress (mean 268.47 Mbit/s)   Flow 1 egress (mean 268.47 Mbit/s)
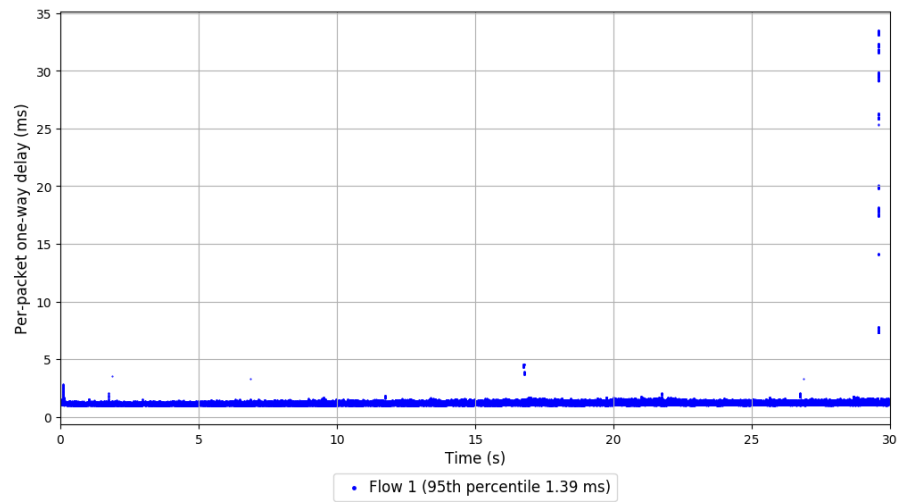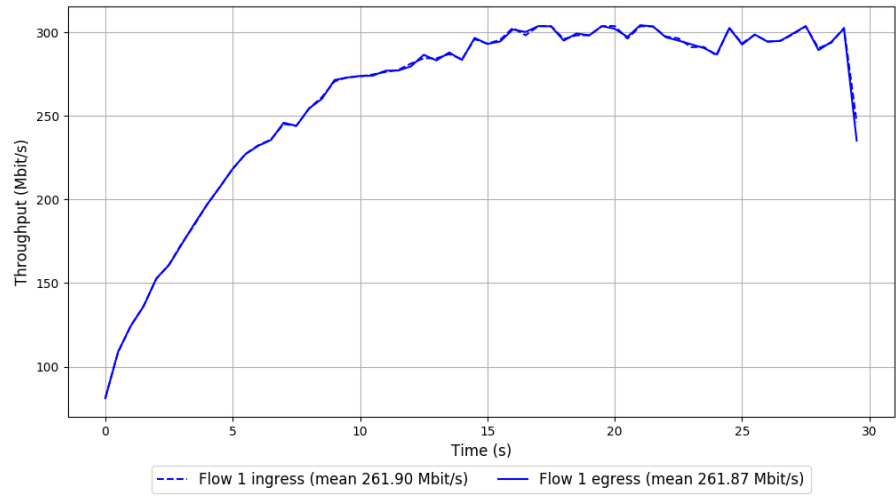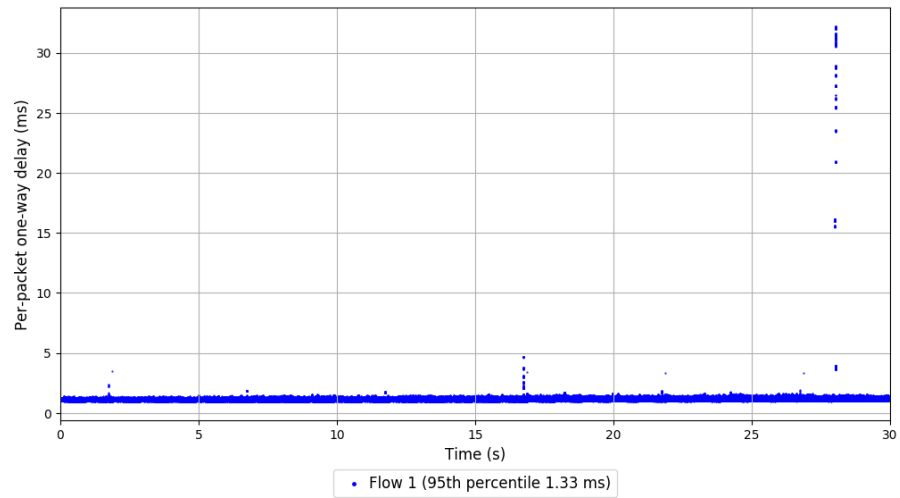

• Flow 1 (95th percentile 1.06 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2017-09-17 09:44:44
End at: 2017-09-17 09:45:15
Local clock offset: 6.288 ms
Remote clock offset: -4.467 ms


# Below is generated by plot.py at 2017-09-17 18:11:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 261.87 Mbit/s
95th percentile per-packet one-way delay: 1.389 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 261.87 Mbit/s
95th percentile per-packet one-way delay: 1.389 ms
Loss rate: 0.08%
```
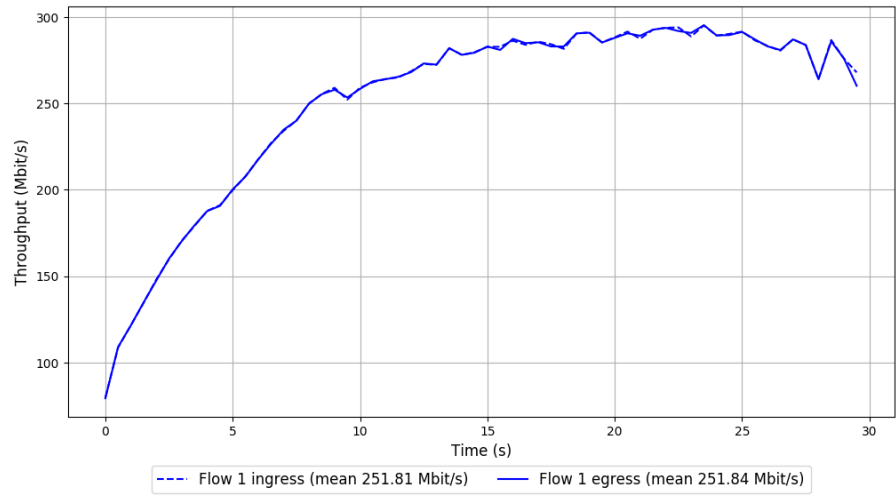
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2017-09-17 10:05:30
End at: 2017-09-17 10:06:00
Local clock offset: 4.732 ms
Remote clock offset: -4.431 ms


# Below is generated by plot.py at 2017-09-17 18:12:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 251.84 Mbit/s
95th percentile per-packet one-way delay: 1.332 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 251.84 Mbit/s
95th percentile per-packet one-way delay: 1.332 ms
Loss rate: 0.06%
```
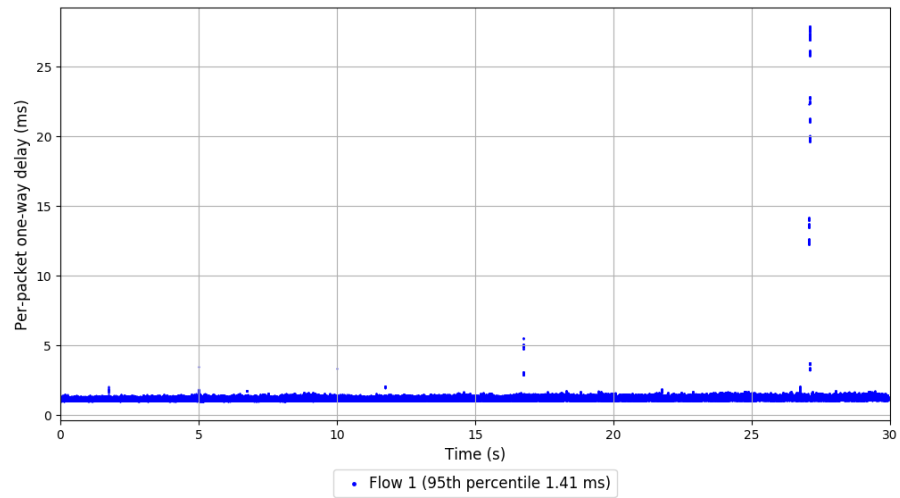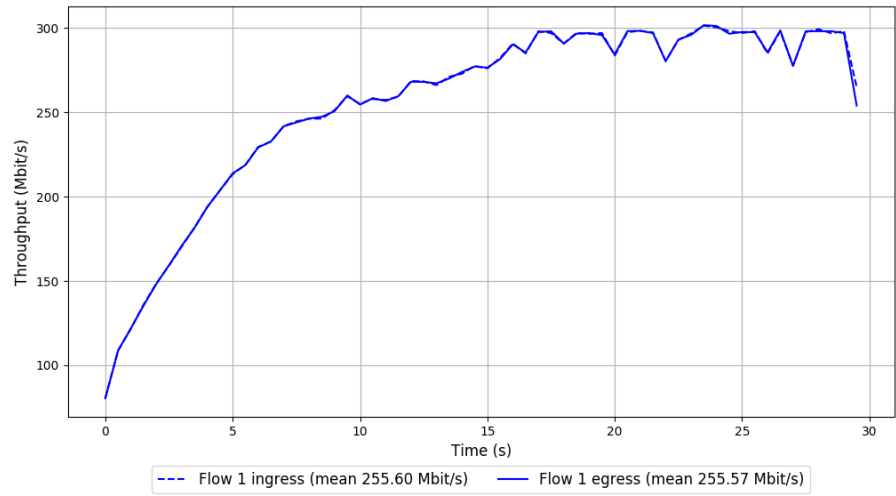
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2017-09-17 10:26:26
End at: 2017-09-17 10:26:56
Local clock offset: 3.519 ms
Remote clock offset: -3.845 ms


# Below is generated by plot.py at 2017-09-17 18:12:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 255.57 Mbit/s
95th percentile per-packet one-way delay: 1.407 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 255.57 Mbit/s
95th percentile per-packet one-way delay: 1.407 ms
Loss rate: 0.08%
```

Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 255.60 Mbit/s) — Flow 1 egress (mean 255.57 Mbit/s)

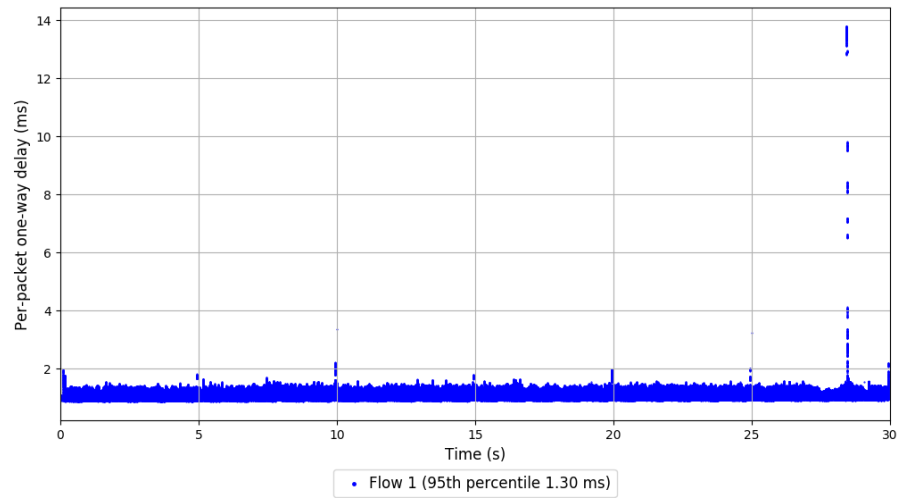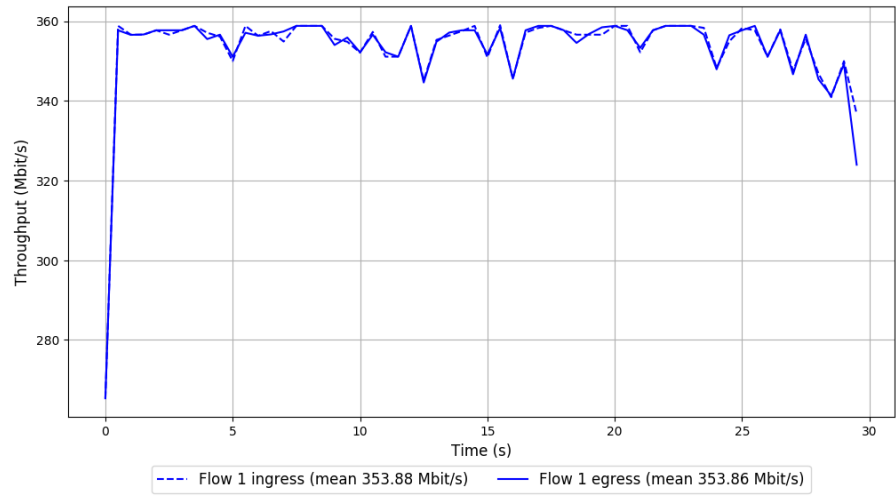

Flow 1 (95th percentile 1.41 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2017-09-17 10:47:29
End at: 2017-09-17 10:47:59
Local clock offset: 2.187 ms
Remote clock offset: -3.786 ms


# Below is generated by plot.py at 2017-09-17 18:14:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 353.86 Mbit/s
95th percentile per-packet one-way delay: 1.300 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 353.86 Mbit/s
95th percentile per-packet one-way delay: 1.300 ms
Loss rate: 0.07%
```
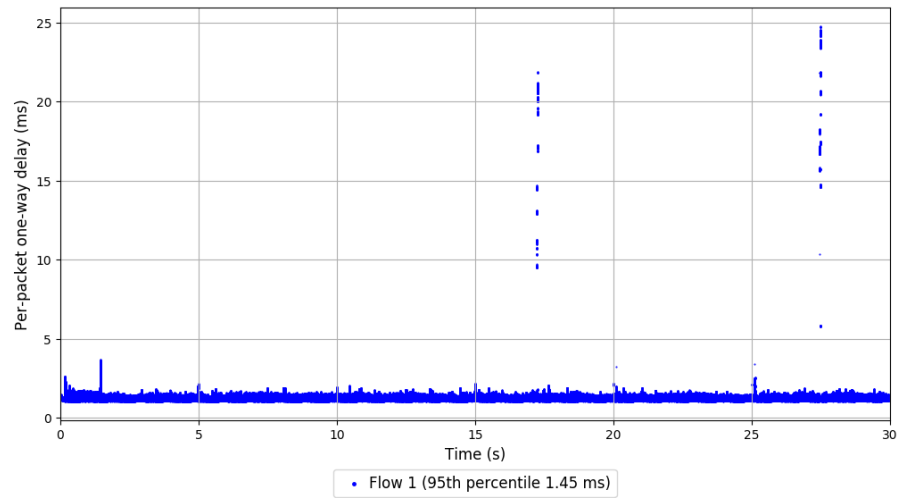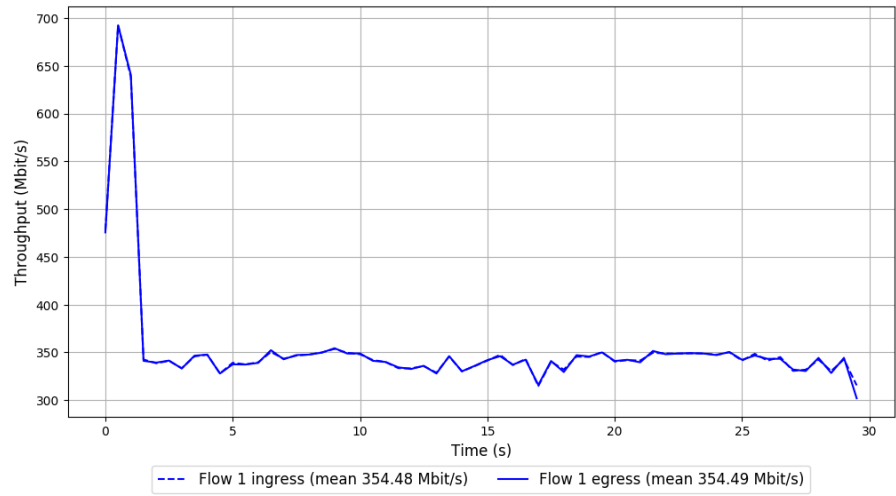
Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 353.88 Mbit/s)   Flow 1 egress (mean 353.86 Mbit/s)

Flow 1 (95th percentile 1.30 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2017-09-17 11:08:08
End at: 2017-09-17 11:08:38
Local clock offset: 1.878 ms
Remote clock offset: -3.541 ms


# Below is generated by plot.py at 2017-09-17 18:14:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 354.49 Mbit/s
95th percentile per-packet one-way delay: 1.450 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 354.49 Mbit/s
95th percentile per-packet one-way delay: 1.450 ms
Loss rate: 0.07%
```
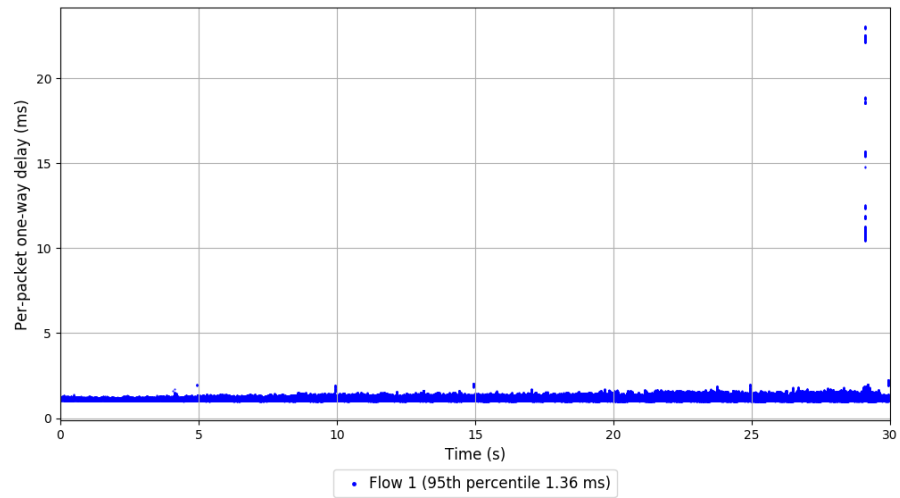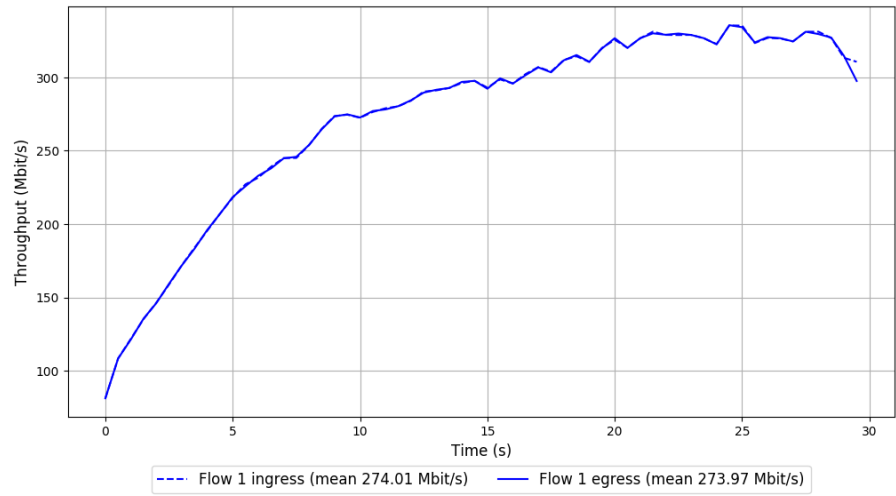
Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 354.48 Mbit/s)   Flow 1 egress (mean 354.49 Mbit/s)
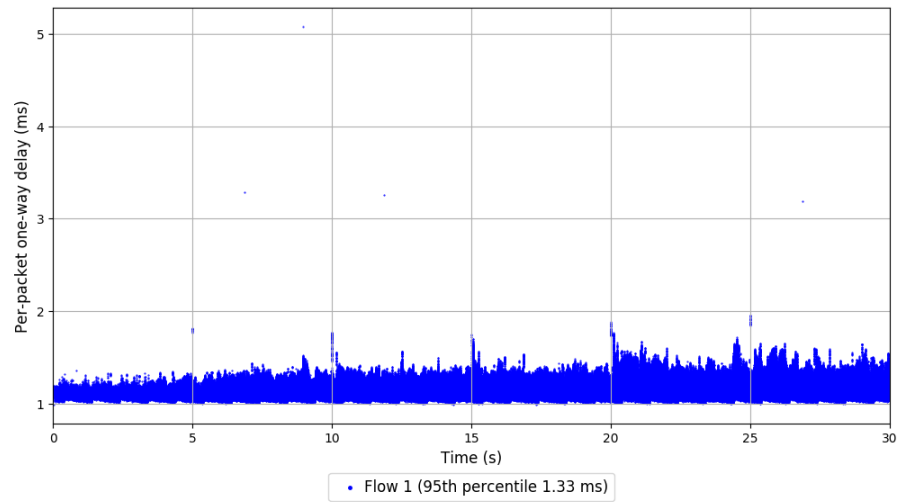

Flow 1 (95th percentile 1.45 ms)

```
Run 6: Statistics of TCP Vegas

Start at: 2017-09-17 11:28:53
End at: 2017-09-17 11:29:23
Local clock offset: 2.729 ms
Remote clock offset: -3.266 ms


# Below is generated by plot.py at 2017-09-17 18:14:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 273.97 Mbit/s
95th percentile per-packet one-way delay: 1.363 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 273.97 Mbit/s
95th percentile per-packet one-way delay: 1.363 ms
Loss rate: 0.08%
```
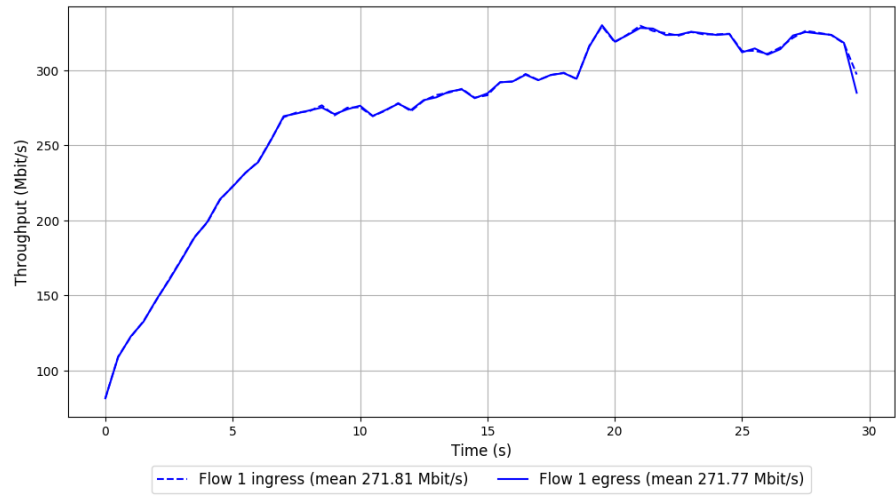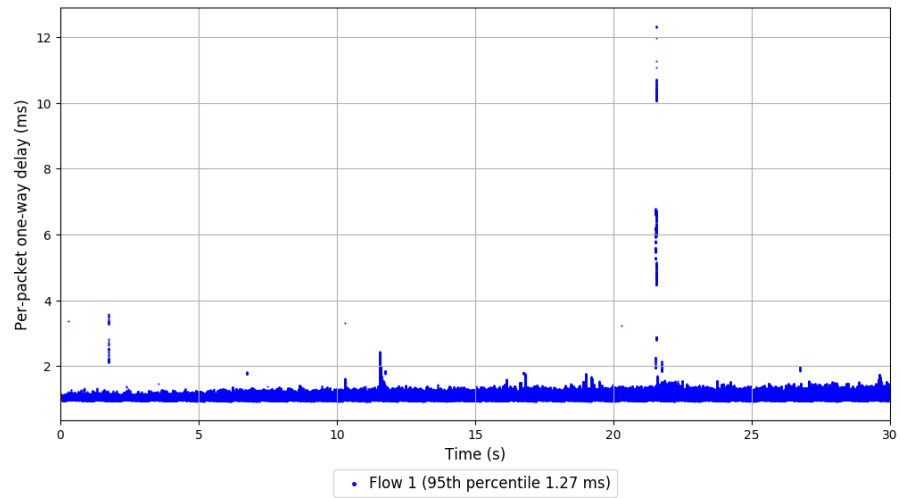
Run 6: Report of TCP Vegas — Data Link

```
Run 7: Statistics of TCP Vegas

Start at: 2017-09-17 11:49:38
End at: 2017-09-17 11:50:08
Local clock offset: 3.147 ms
Remote clock offset: -3.332 ms


# Below is generated by plot.py at 2017-09-17 18:15:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 271.77 Mbit/s
95th percentile per-packet one-way delay: 1.326 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 271.77 Mbit/s
95th percentile per-packet one-way delay: 1.326 ms
Loss rate: 0.08%
```
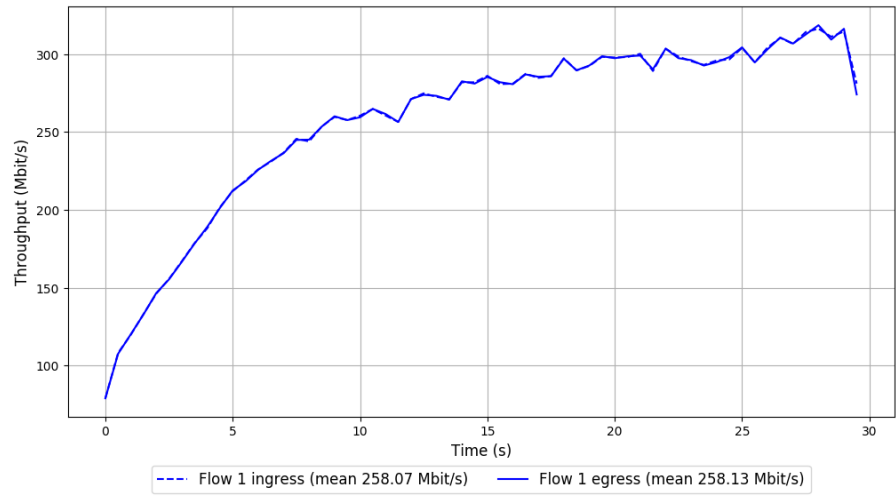
Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2017-09-17 12:10:15
End at: 2017-09-17 12:10:45
Local clock offset: 3.106 ms
Remote clock offset: -3.386 ms


# Below is generated by plot.py at 2017-09-17 18:15:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 258.13 Mbit/s
95th percentile per-packet one-way delay: 1.270 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 258.13 Mbit/s
95th percentile per-packet one-way delay: 1.270 ms
Loss rate: 0.05%
```

Run 8: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 258.07 Mbit/s) Flow 1 egress (mean 258.13 Mbit/s)

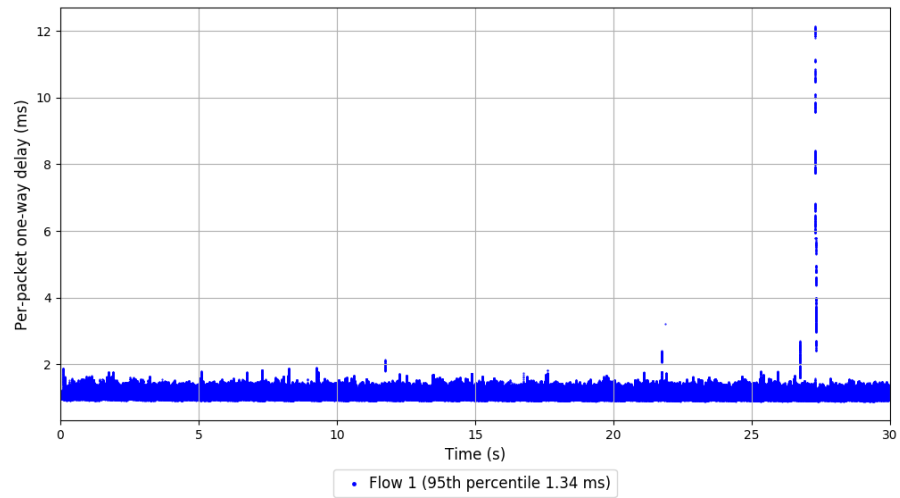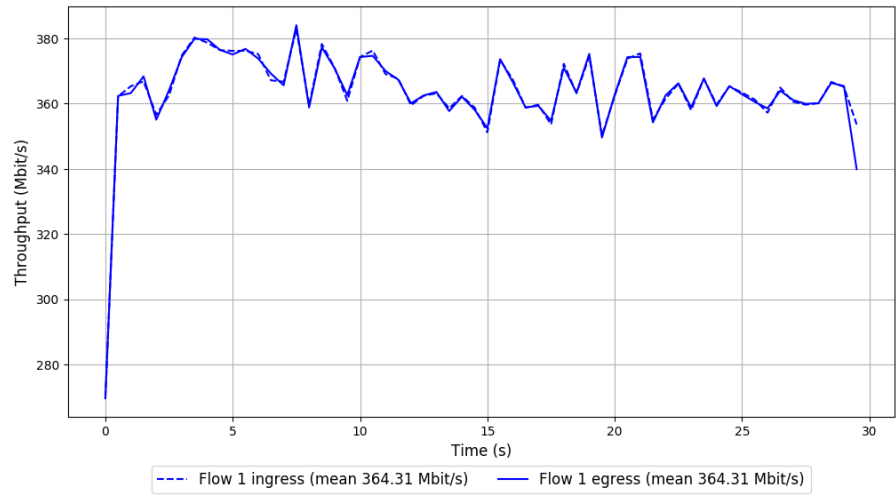

Flow 1 (95th percentile 1.27 ms)

```
Run 9: Statistics of TCP Vegas

Start at: 2017-09-17 12:31:16
End at: 2017-09-17 12:31:46
Local clock offset: 3.528 ms
Remote clock offset: -3.506 ms


# Below is generated by plot.py at 2017-09-17 18:16:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 364.31 Mbit/s
95th percentile per-packet one-way delay: 1.337 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 364.31 Mbit/s
95th percentile per-packet one-way delay: 1.337 ms
Loss rate: 0.07%
```

Run 9: Report of TCP Vegas — Data Link

```
Run 10: Statistics of TCP Vegas

Start at: 2017-09-17 12:51:52
End at: 2017-09-17 12:52:22
Local clock offset: 4.403 ms
Remote clock offset: -3.846 ms


# Below is generated by plot.py at 2017-09-17 18:16:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 271.96 Mbit/s
95th percentile per-packet one-way delay: 1.291 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 271.96 Mbit/s
95th percentile per-packet one-way delay: 1.291 ms
Loss rate: 0.08%
```
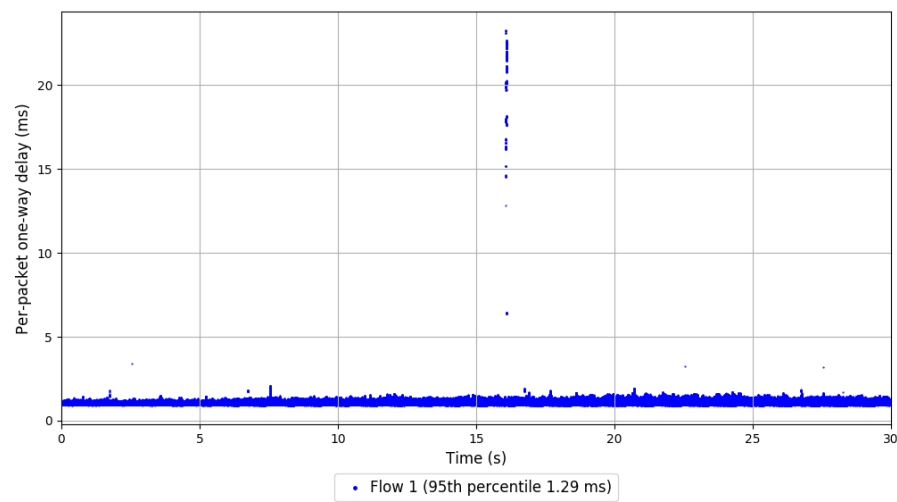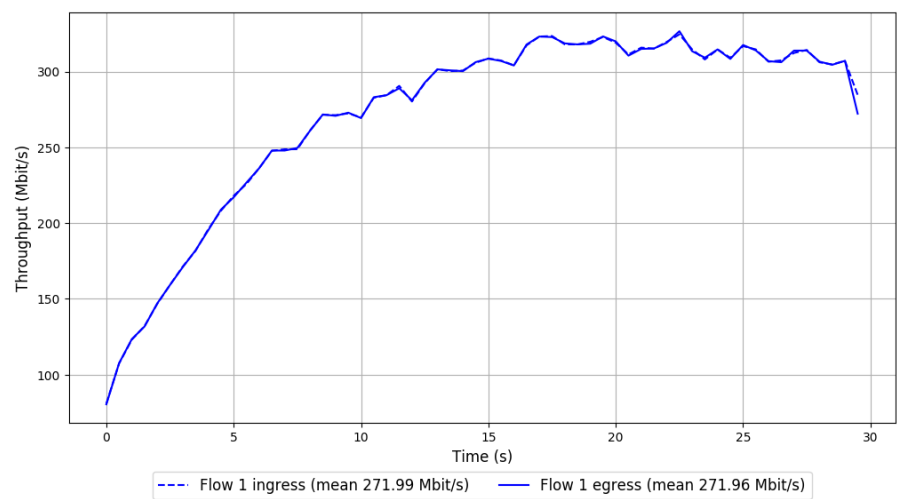
Run 10: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 271.99 Mbit/s)   Flow 1 egress (mean 271.96 Mbit/s)
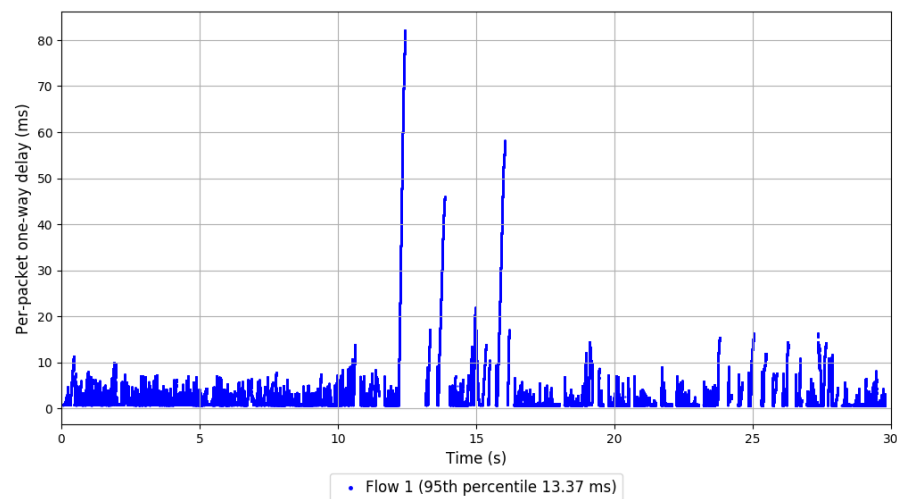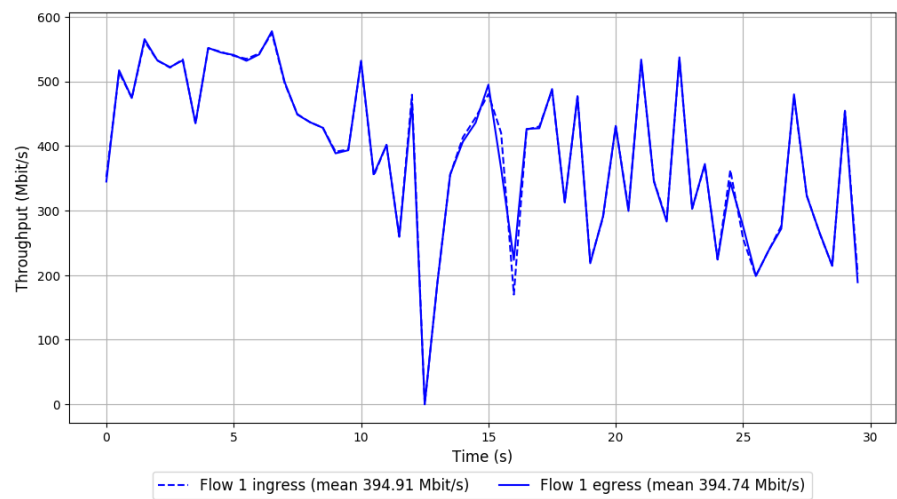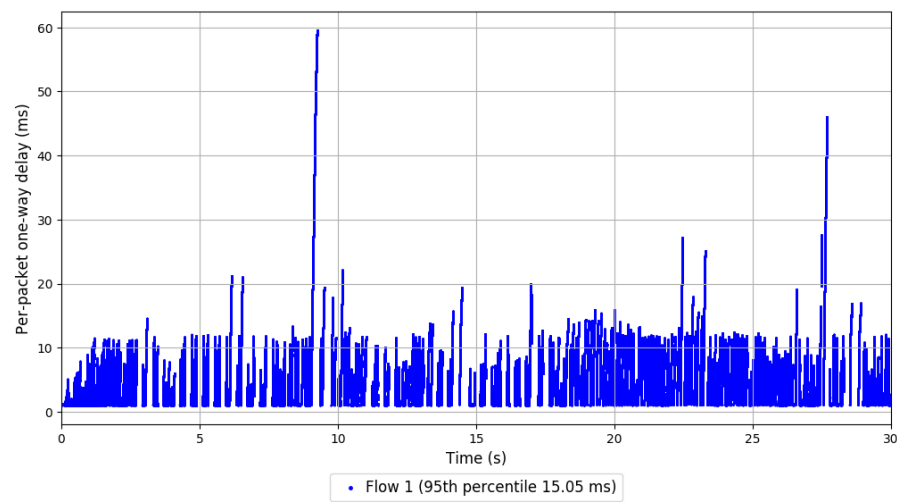

Flow 1 (95th percentile 1.29 ms)

```
Run 1: Statistics of Verus

Start at: 2017-09-17 09:40:03
End at: 2017-09-17 09:40:33
Local clock offset: 6.241 ms
Remote clock offset: -4.387 ms


# Below is generated by plot.py at 2017-09-17 18:18:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 394.74 Mbit/s
95th percentile per-packet one-way delay: 13.367 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 394.74 Mbit/s
95th percentile per-packet one-way delay: 13.367 ms
Loss rate: 0.11%
```

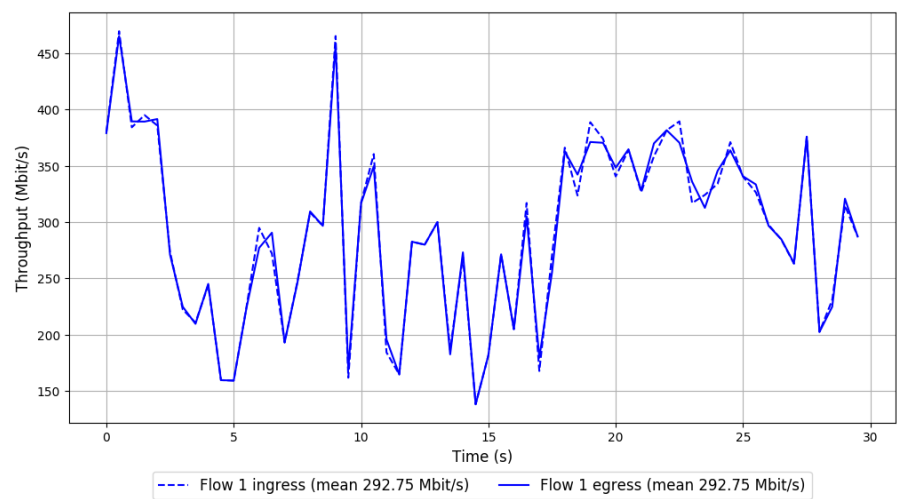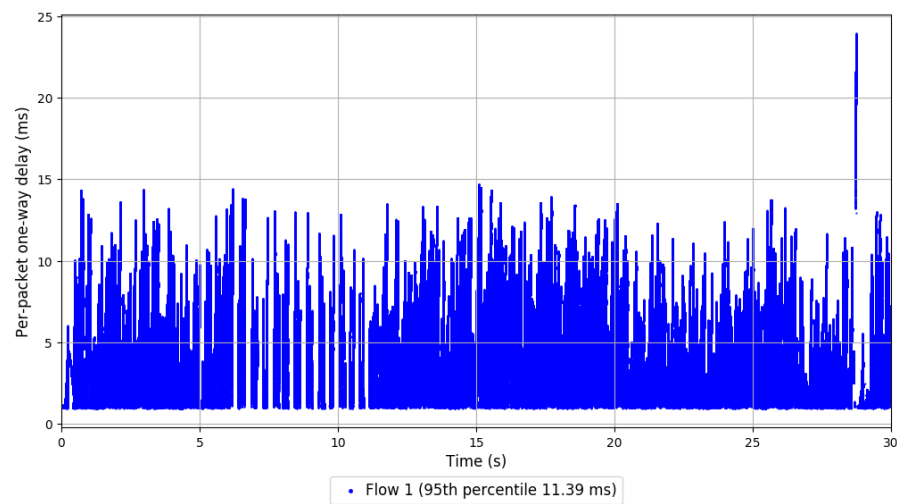Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2017-09-17 10:00:56
End at: 2017-09-17 10:01:26
Local clock offset: 5.054 ms
Remote clock offset: -4.471 ms


# Below is generated by plot.py at 2017-09-17 18:18:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 292.75 Mbit/s
95th percentile per-packet one-way delay: 15.055 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 292.75 Mbit/s
95th percentile per-packet one-way delay: 15.055 ms
Loss rate: 0.00%
```

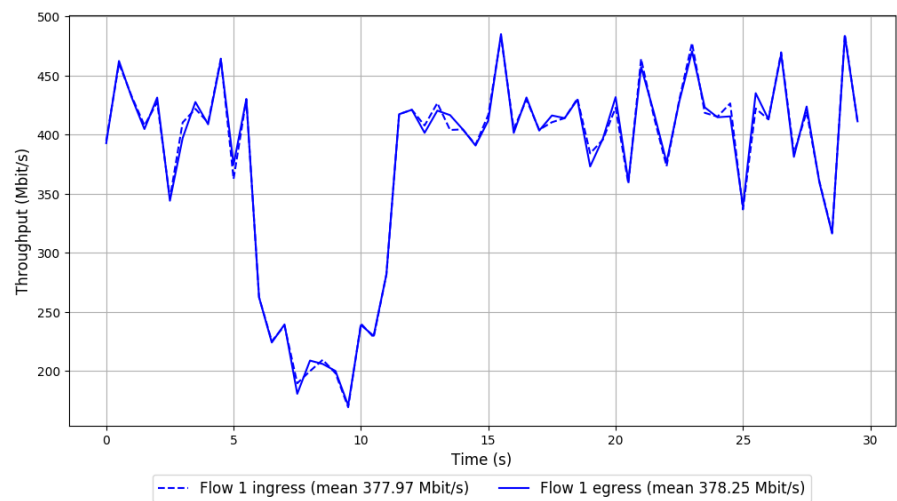Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2017-09-17 10:21:45
End at: 2017-09-17 10:22:15
Local clock offset: 3.78 ms
Remote clock offset: -4.004 ms


# Below is generated by plot.py at 2017-09-17 18:20:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 378.25 Mbit/s
95th percentile per-packet one-way delay: 11.393 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 378.25 Mbit/s
95th percentile per-packet one-way delay: 11.393 ms
Loss rate: 0.01%
```

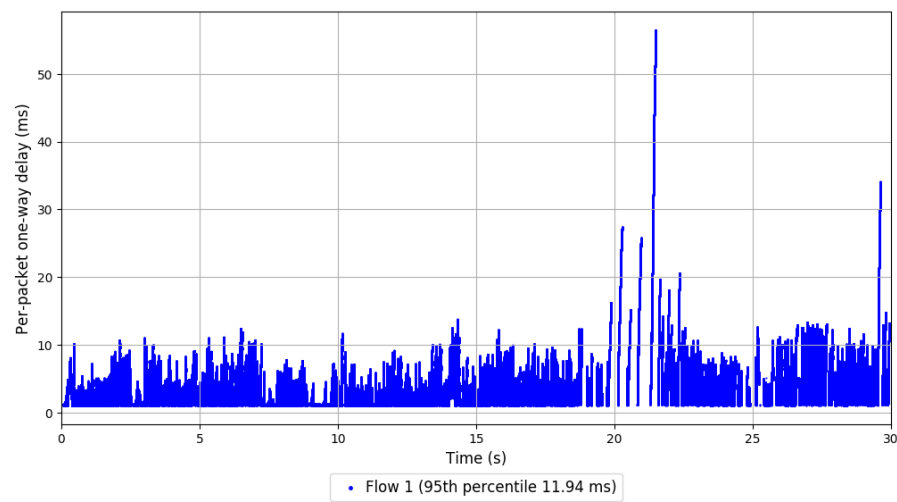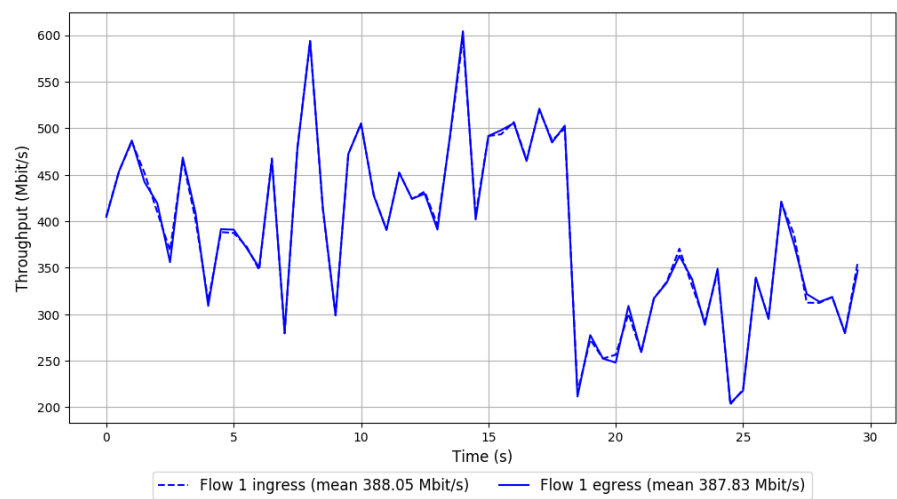Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2017-09-17 10:42:43
End at: 2017-09-17 10:43:13
Local clock offset: 2.443 ms
Remote clock offset: -3.968 ms


# Below is generated by plot.py at 2017-09-17 18:20:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 387.83 Mbit/s
95th percentile per-packet one-way delay: 11.936 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 387.83 Mbit/s
95th percentile per-packet one-way delay: 11.936 ms
Loss rate: 0.04%
```

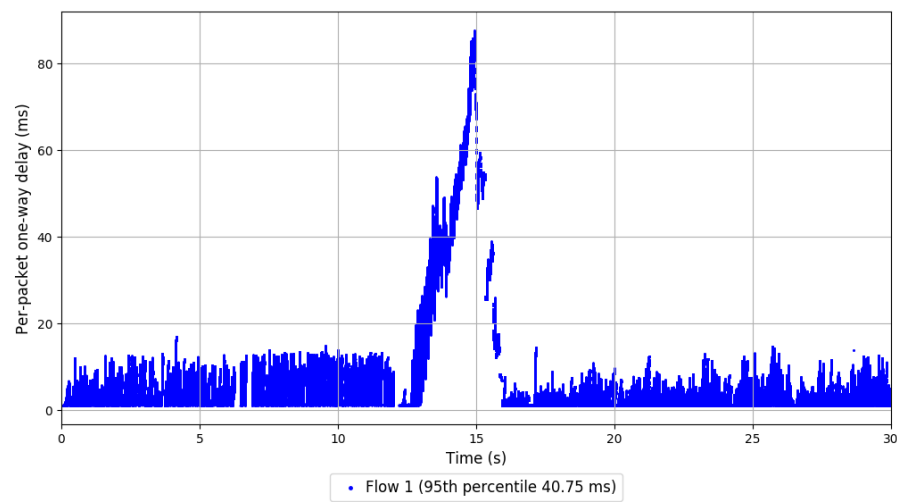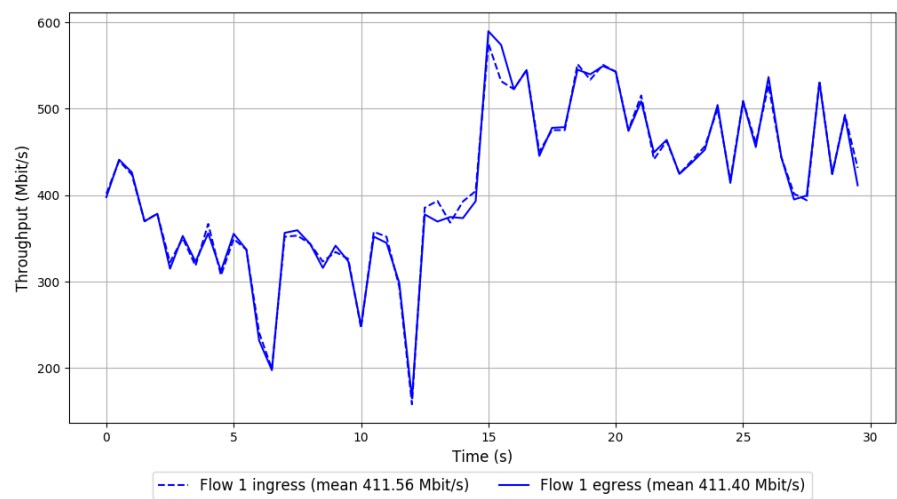Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2017-09-17 11:03:26
End at: 2017-09-17 11:03:56
Local clock offset: 1.978 ms
Remote clock offset: -3.581 ms


# Below is generated by plot.py at 2017-09-17 18:21:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 411.40 Mbit/s
95th percentile per-packet one-way delay: 40.753 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 411.40 Mbit/s
95th percentile per-packet one-way delay: 40.753 ms
Loss rate: 0.11%
```
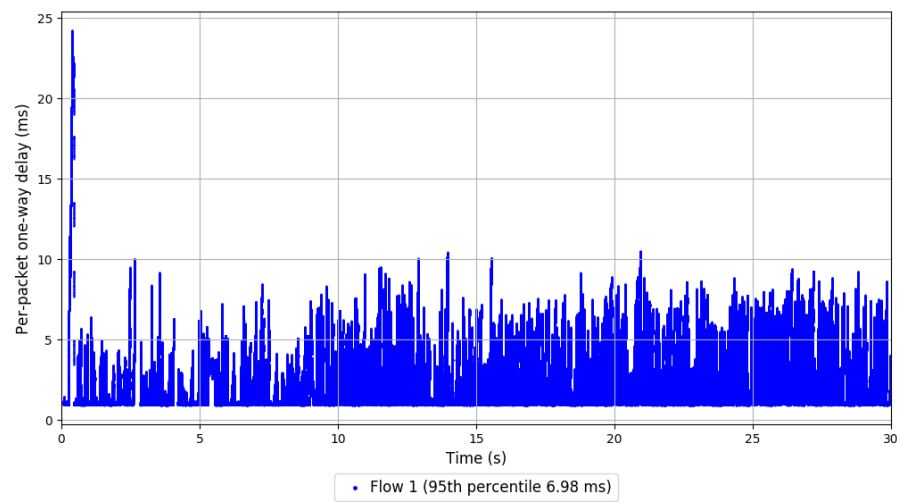
Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 411.56 Mbit/s) —— Flow 1 egress (mean 411.40 Mbit/s)

· Flow 1 (95th percentile 40.75 ms)

```
Run 6: Statistics of Verus

Start at: 2017-09-17 11:24:06
End at: 2017-09-17 11:24:36
Local clock offset: 2.455 ms
Remote clock offset: -3.305 ms


# Below is generated by plot.py at 2017-09-17 18:21:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 388.40 Mbit/s
95th percentile per-packet one-way delay: 6.977 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 388.40 Mbit/s
95th percentile per-packet one-way delay: 6.977 ms
Loss rate: 0.11%
```
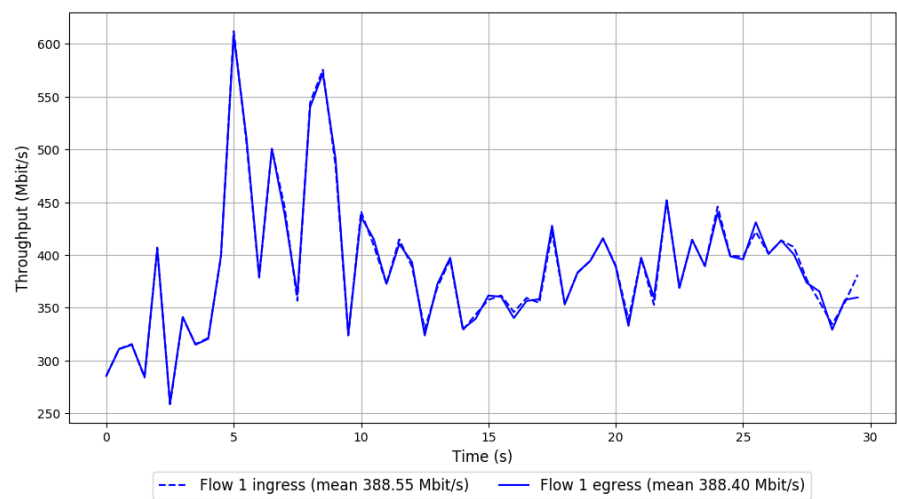
Run 6: Report of Verus — Data Link

Flow 1 ingress (mean 388.55 Mbit/s) ----- Flow 1 egress (mean 388.40 Mbit/s)

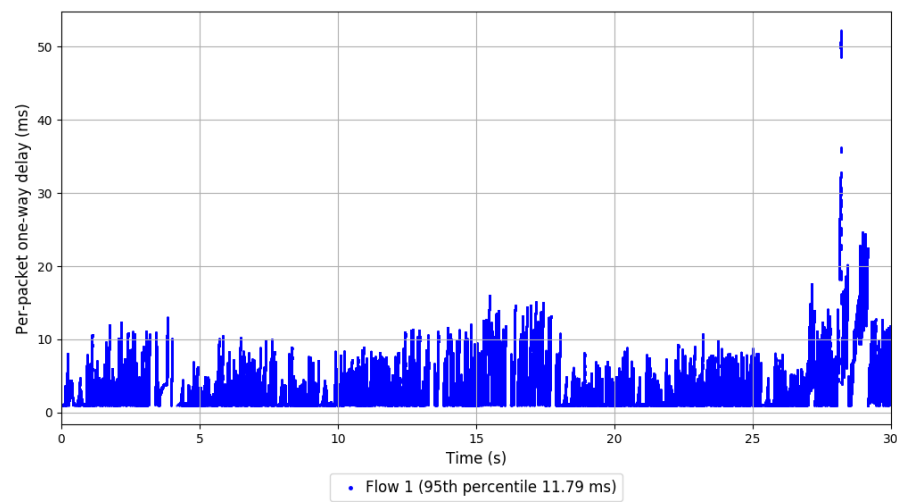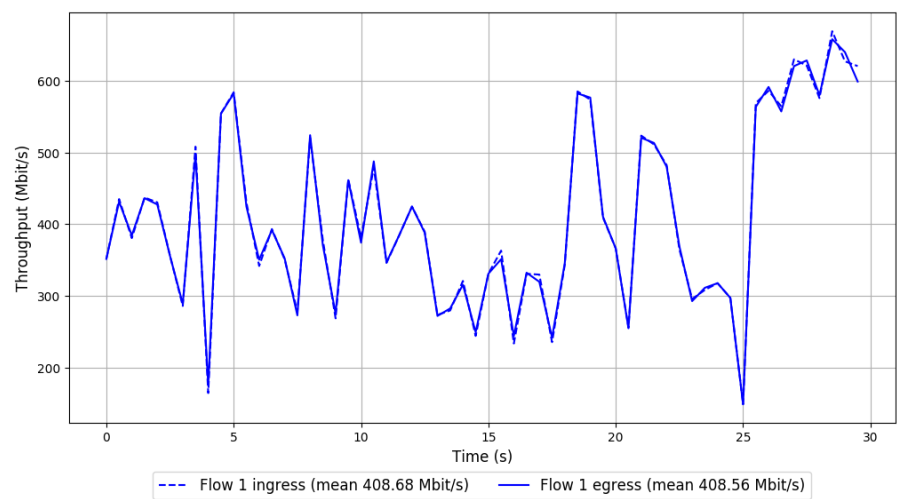• Flow 1 (95th percentile 6.98 ms)

```
Run 7: Statistics of Verus

Start at: 2017-09-17 11:44:51
End at: 2017-09-17 11:45:21
Local clock offset: 2.943 ms
Remote clock offset: -3.317 ms


# Below is generated by plot.py at 2017-09-17 18:21:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 408.56 Mbit/s
95th percentile per-packet one-way delay: 11.787 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 408.56 Mbit/s
95th percentile per-packet one-way delay: 11.787 ms
Loss rate: 0.10%
```

Run 7: Report of Verus — Data Link
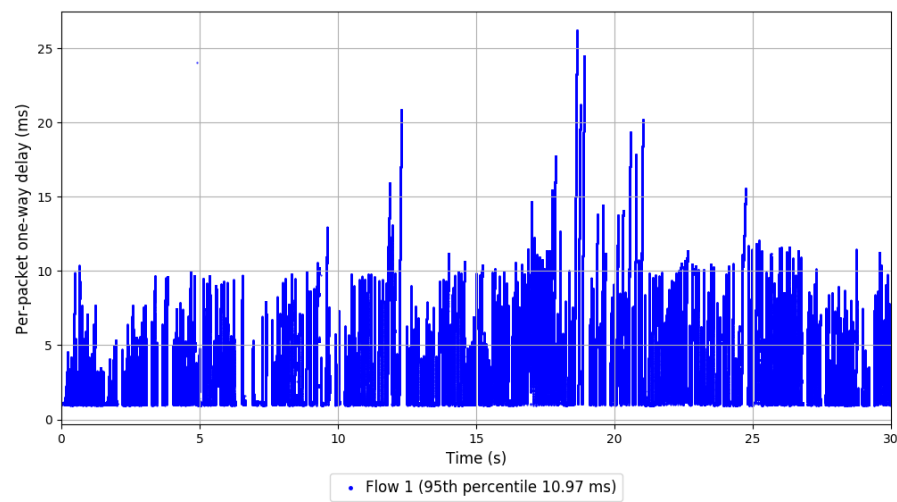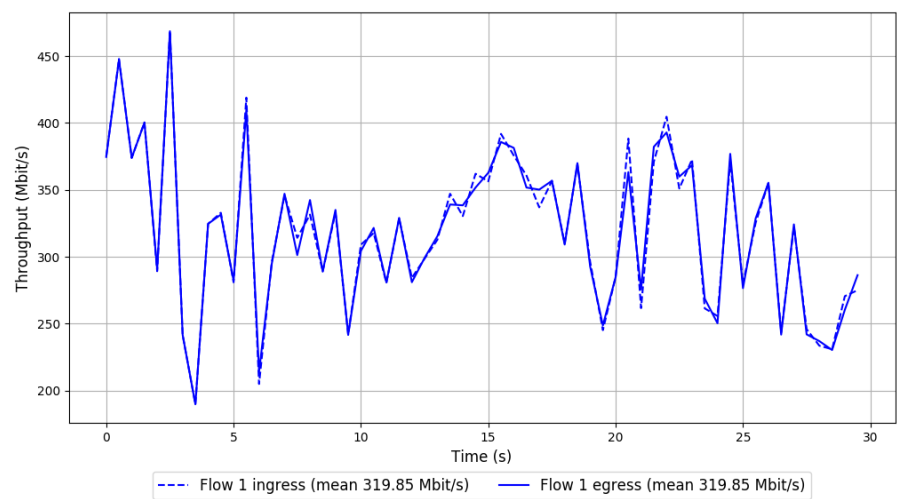
Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2017-09-17 12:05:37
End at: 2017-09-17 12:06:07
Local clock offset: 3.172 ms
Remote clock offset: -3.345 ms


# Below is generated by plot.py at 2017-09-17 18:21:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 319.85 Mbit/s
95th percentile per-packet one-way delay: 10.971 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 319.85 Mbit/s
95th percentile per-packet one-way delay: 10.971 ms
Loss rate: 0.00%
```

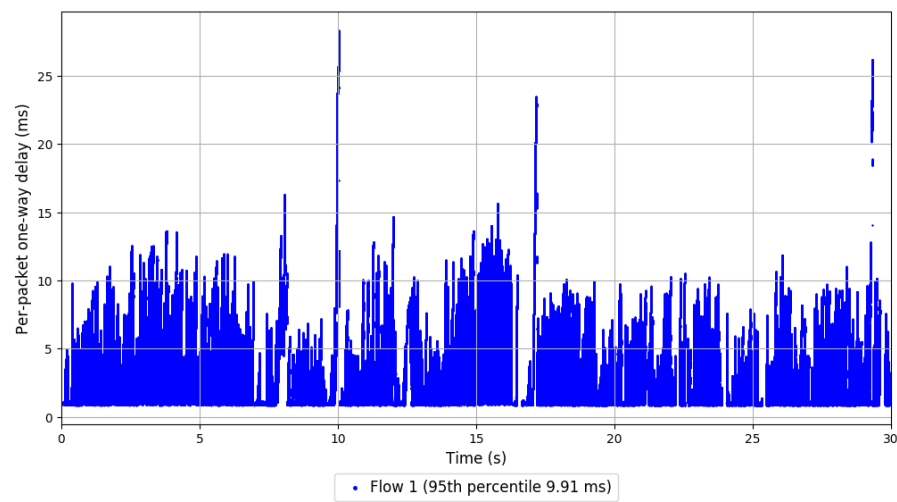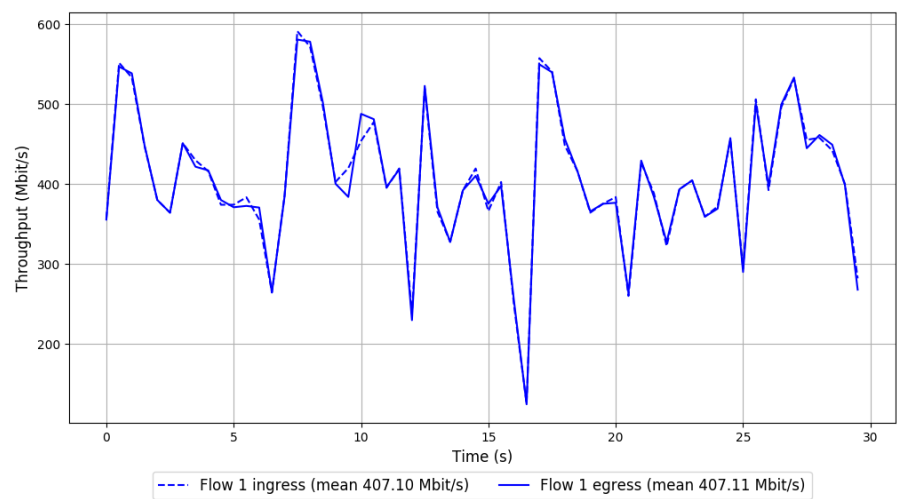Run 8: Report of Verus — Data Link

```
Run 9: Statistics of Verus

Start at: 2017-09-17 12:26:30
End at: 2017-09-17 12:27:00
Local clock offset: 3.264 ms
Remote clock offset: -3.486 ms


# Below is generated by plot.py at 2017-09-17 18:21:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 407.11 Mbit/s
95th percentile per-packet one-way delay: 9.908 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 407.11 Mbit/s
95th percentile per-packet one-way delay: 9.908 ms
Loss rate: 0.06%
```

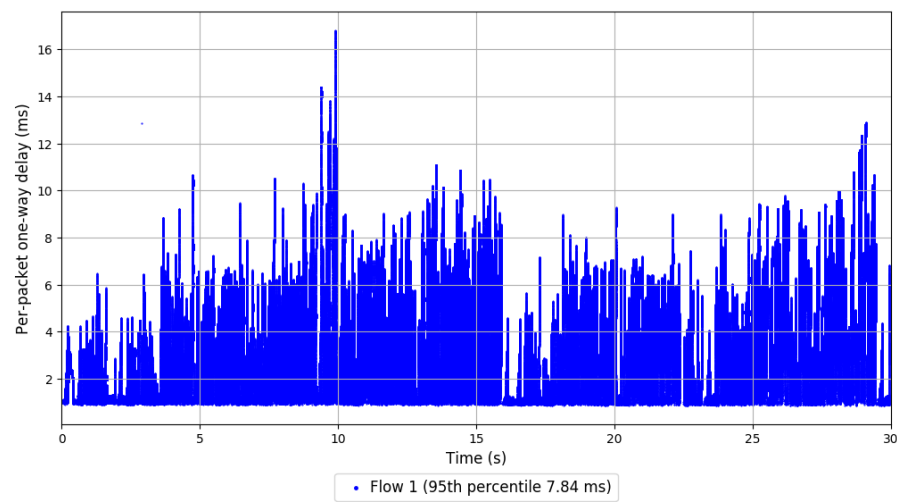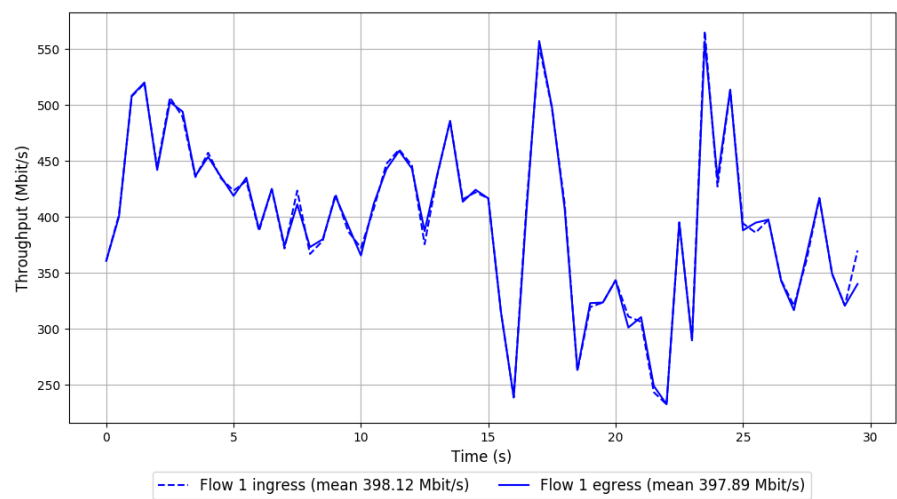Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2017-09-17 12:47:09
End at: 2017-09-17 12:47:39
Local clock offset: 4.269 ms
Remote clock offset: -3.839 ms


# Below is generated by plot.py at 2017-09-17 18:22:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 397.89 Mbit/s
95th percentile per-packet one-way delay: 7.840 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 397.89 Mbit/s
95th percentile per-packet one-way delay: 7.840 ms
Loss rate: 0.13%
```

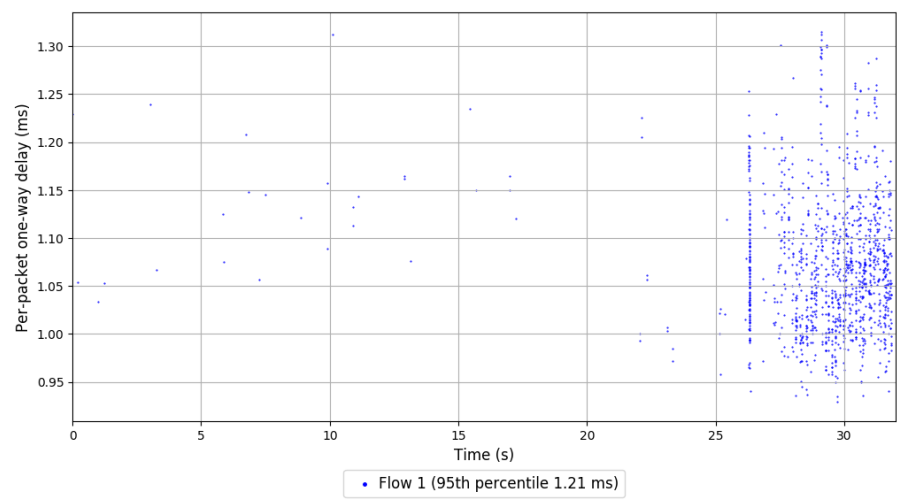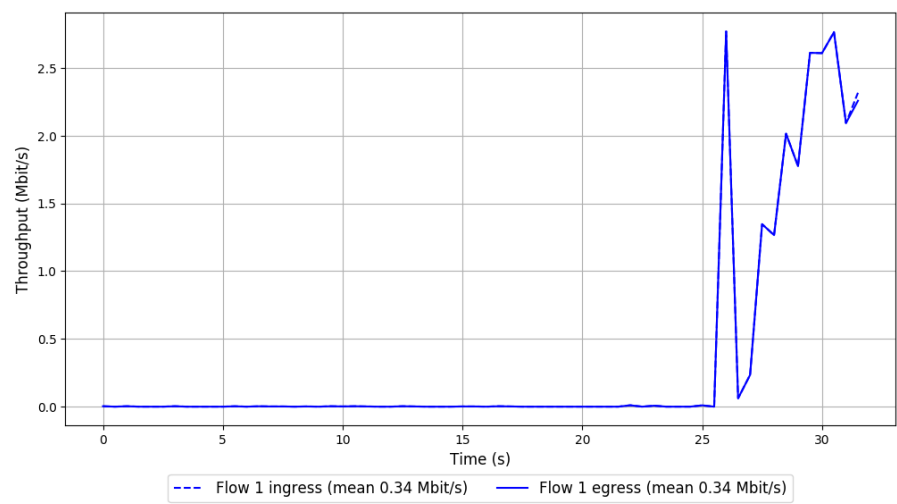Run 10: Report of Verus — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2017-09-17 09:50:11
End at: 2017-09-17 09:50:41
Local clock offset: 6.001 ms
Remote clock offset: -4.435 ms


# Below is generated by plot.py at 2017-09-17 18:22:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 1.205 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 1.205 ms
Loss rate: 0.27%
```
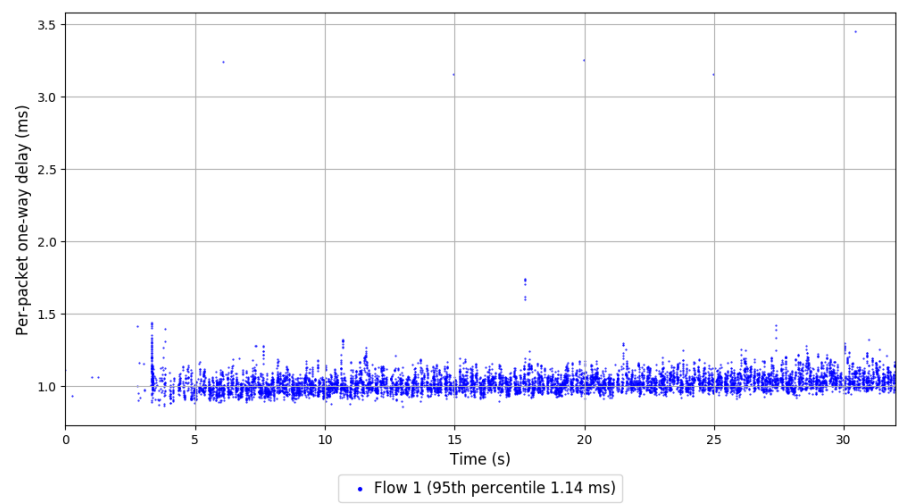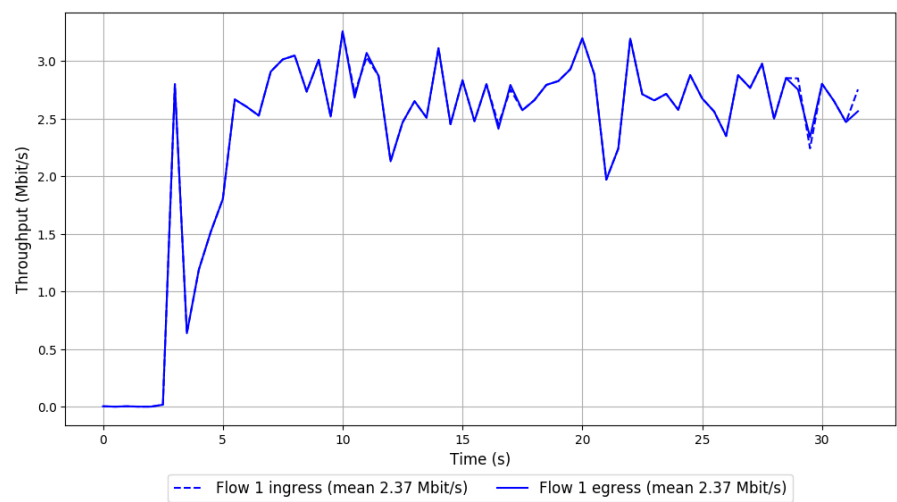
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2017-09-17 10:10:58
End at: 2017-09-17 10:11:28
Local clock offset: 4.067 ms
Remote clock offset: -4.317 ms


# Below is generated by plot.py at 2017-09-17 18:22:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 1.138 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 1.138 ms
Loss rate: 0.12%
```
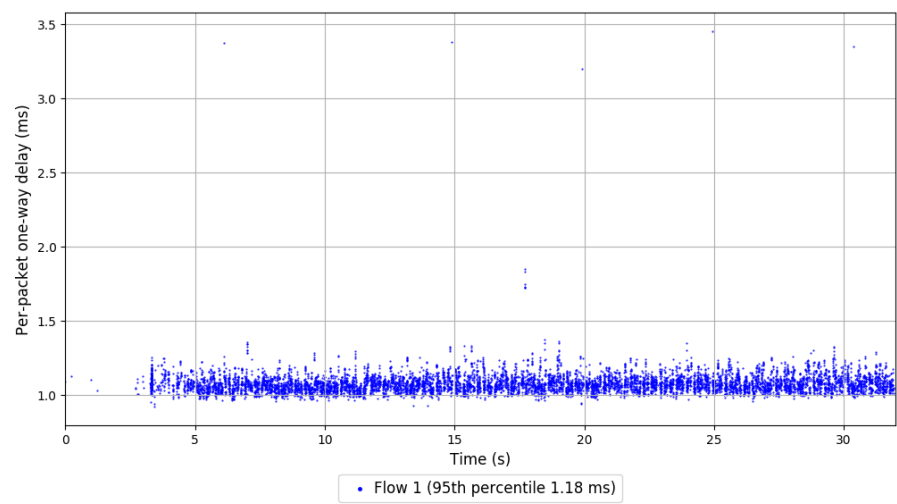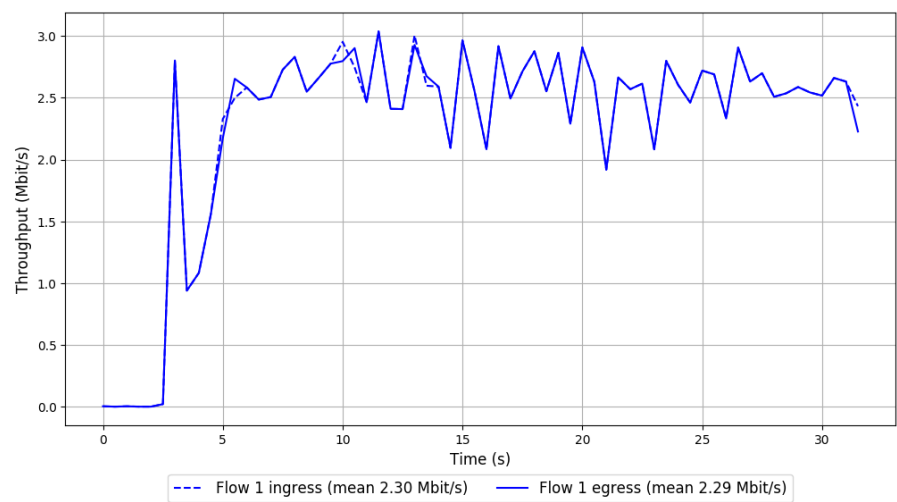
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2017-09-17 10:31:53
End at: 2017-09-17 10:32:23
Local clock offset: 3.108 ms
Remote clock offset: -3.875 ms

# Below is generated by plot.py at 2017-09-17 18:22:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 1.183 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 1.183 ms
Loss rate: 0.14%
```

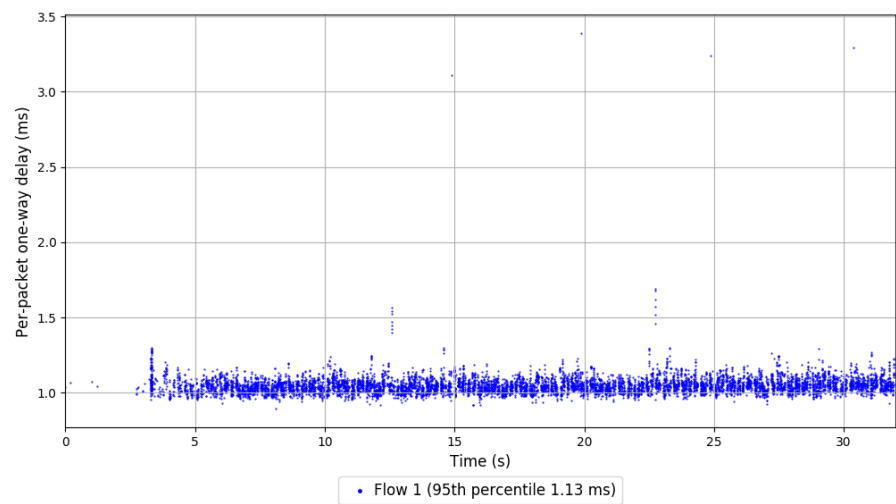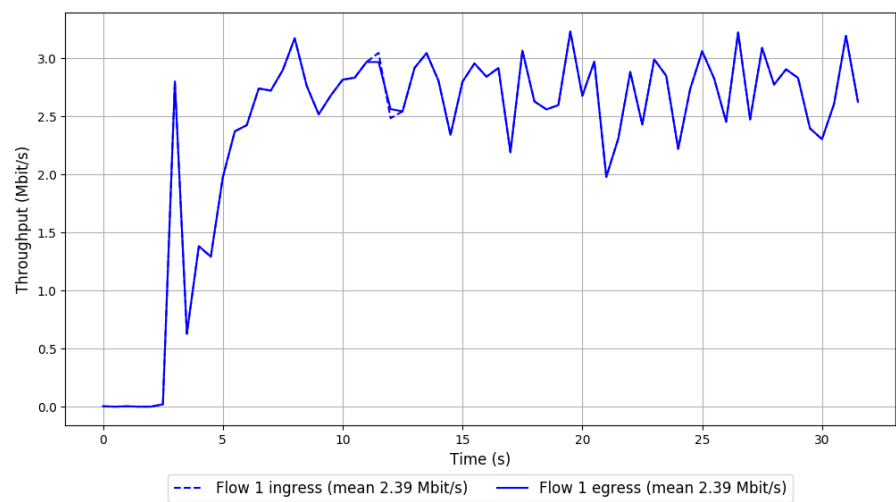Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2017-09-17 10:52:37
End at: 2017-09-17 10:53:07
Local clock offset: 1.998 ms
Remote clock offset: -3.794 ms


# Below is generated by plot.py at 2017-09-17 18:22:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 1.132 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 1.132 ms
Loss rate: 0.00%
```
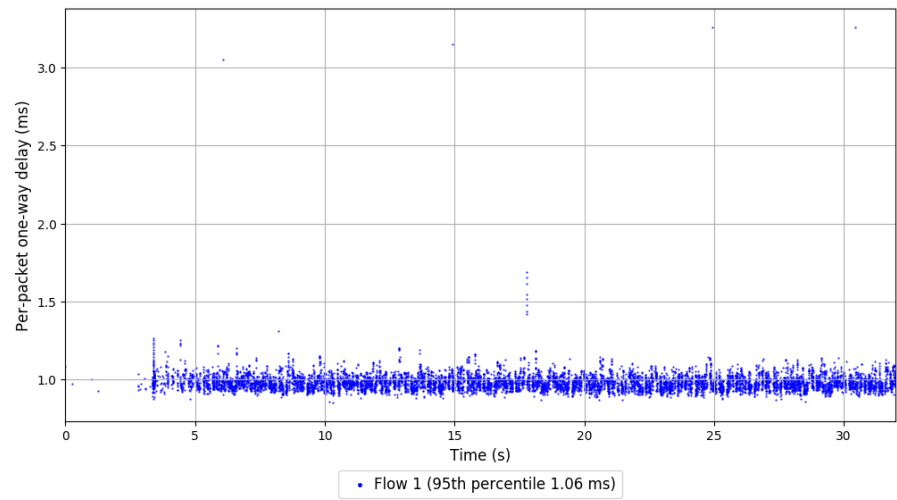
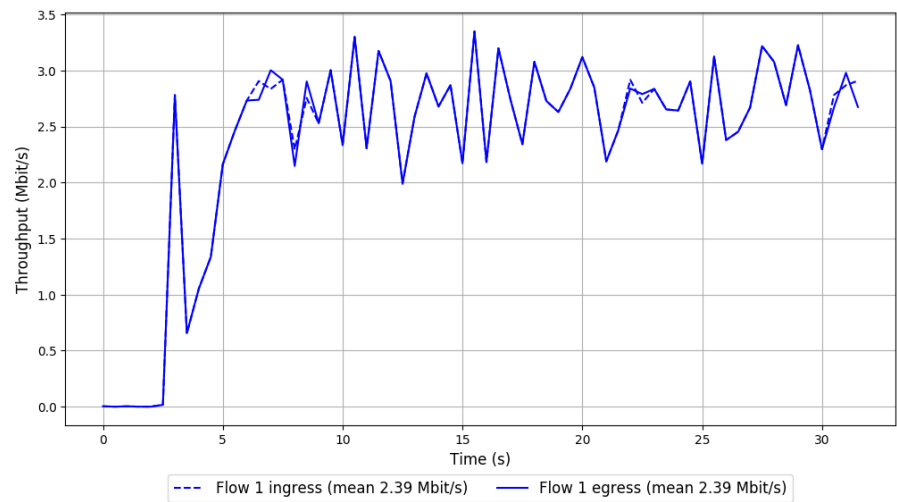## Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2017-09-17 11:13:16
End at: 2017-09-17 11:13:46
Local clock offset: 1.98 ms
Remote clock offset: -3.366 ms


# Below is generated by plot.py at 2017-09-17 18:22:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 1.064 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 1.064 ms
Loss rate: 0.15%
```

Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2017-09-17 11:33:55
End at: 2017-09-17 11:34:25
Local clock offset: 2.946 ms
Remote clock offset: -3.17 ms


# Below is generated by plot.py at 2017-09-17 18:22:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 1.152 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 1.152 ms
Loss rate: 0.00%
```
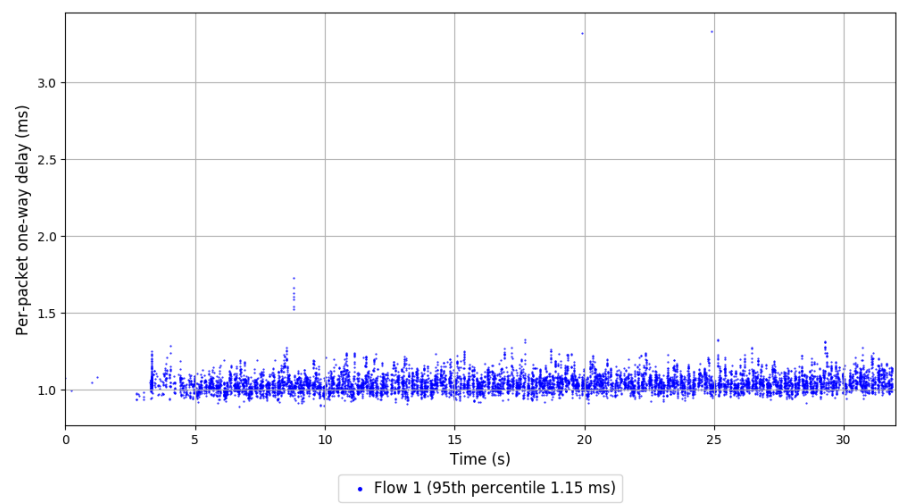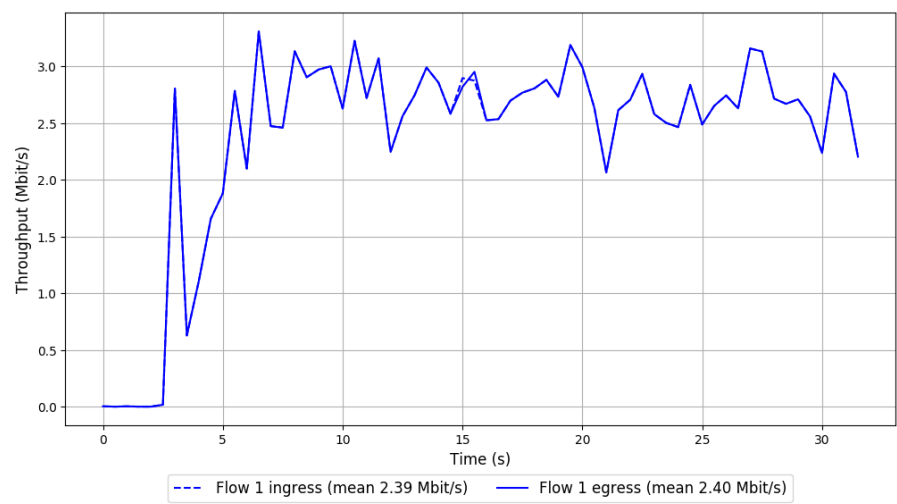
Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2017-09-17 11:54:40
End at: 2017-09-17 11:55:10
Local clock offset: 3.082 ms
Remote clock offset: -3.46 ms

# Below is generated by plot.py at 2017-09-17 18:22:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 1.213 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 1.213 ms
Loss rate: 0.00%
```
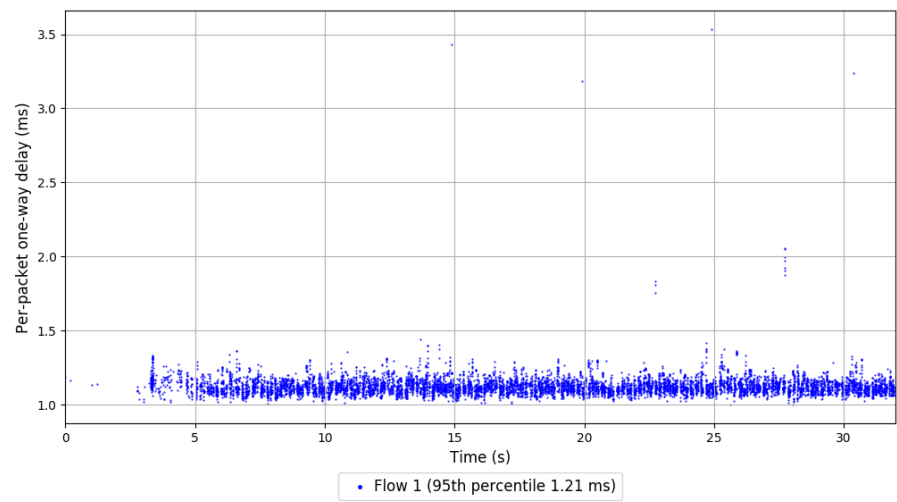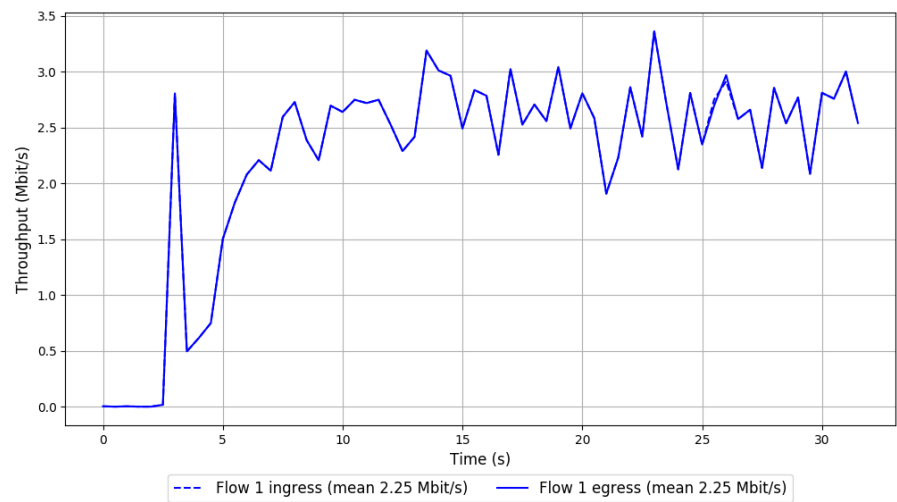
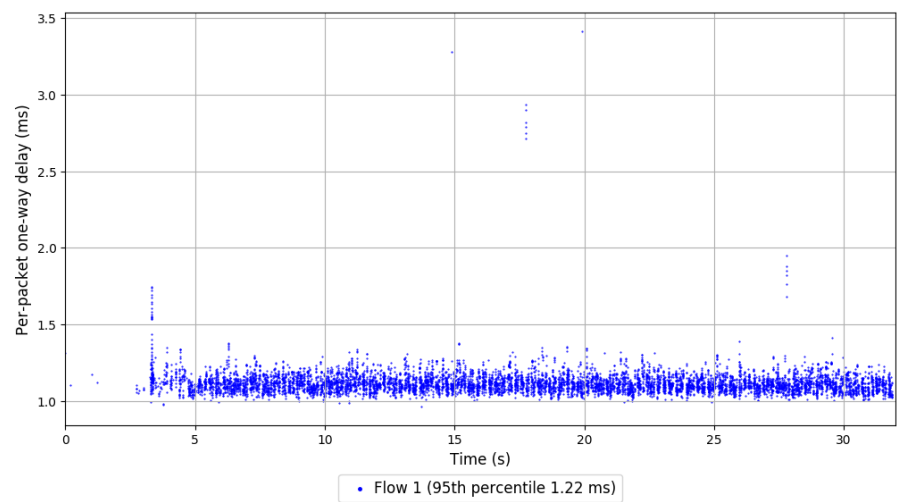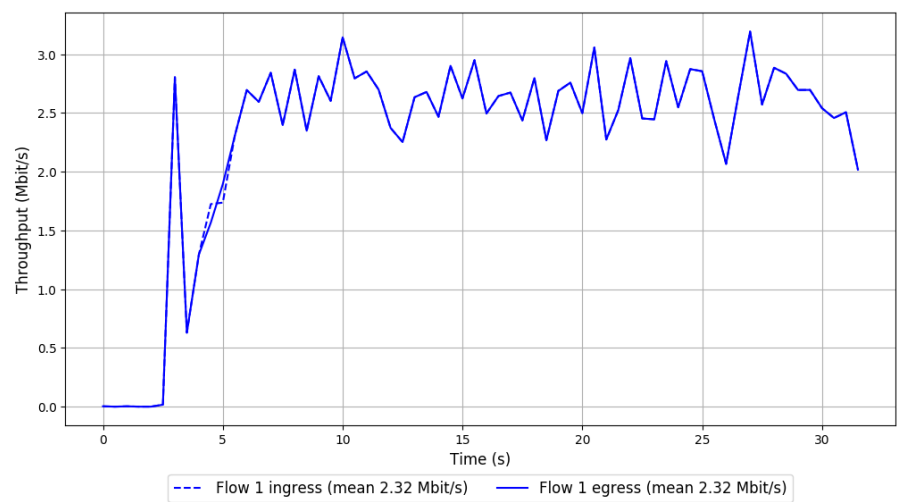Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2017-09-17 12:15:43
End at: 2017-09-17 12:16:13
Local clock offset: 3.191 ms
Remote clock offset: -3.388 ms


# Below is generated by plot.py at 2017-09-17 18:22:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 1.220 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 1.220 ms
Loss rate: 0.00%
```

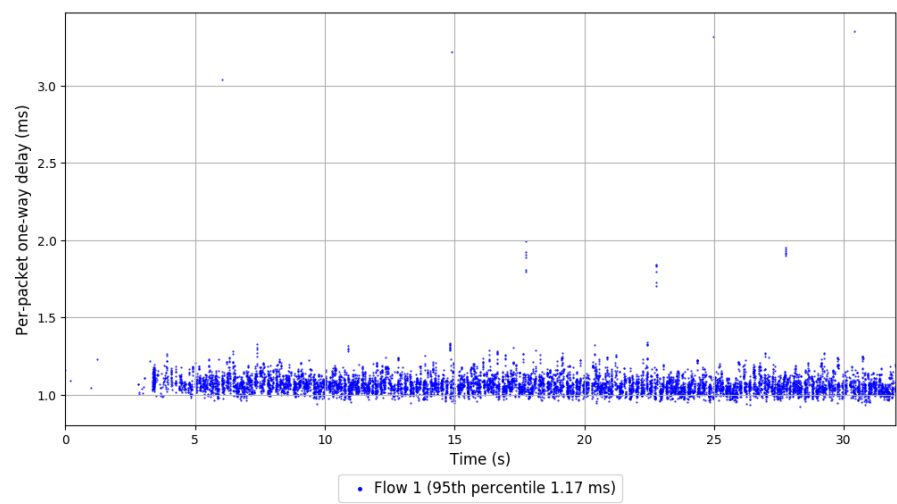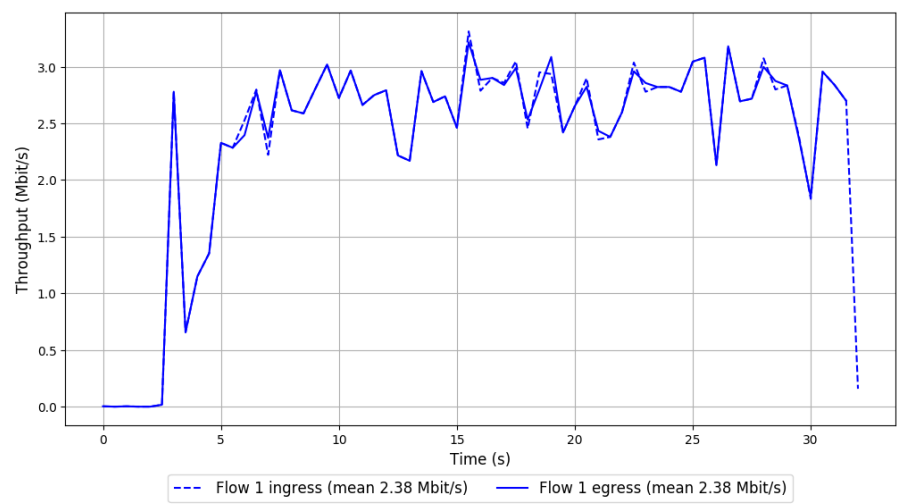## Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2017-09-17 12:36:24
End at: 2017-09-17 12:36:54
Local clock offset: 3.719 ms
Remote clock offset: -3.701 ms


# Below is generated by plot.py at 2017-09-17 18:22:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.38 Mbit/s
95th percentile per-packet one-way delay: 1.169 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 2.38 Mbit/s
95th percentile per-packet one-way delay: 1.169 ms
Loss rate: 0.10%
```

Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2017-09-17 12:57:21
End at: 2017-09-17 12:57:51
Local clock offset: 4.588 ms
Remote clock offset: -3.866 ms


# Below is generated by plot.py at 2017-09-17 18:22:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 1.166 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 1.166 ms
Loss rate: 0.16%
```

Run 10: Report of WebRTC media — Data Link

303