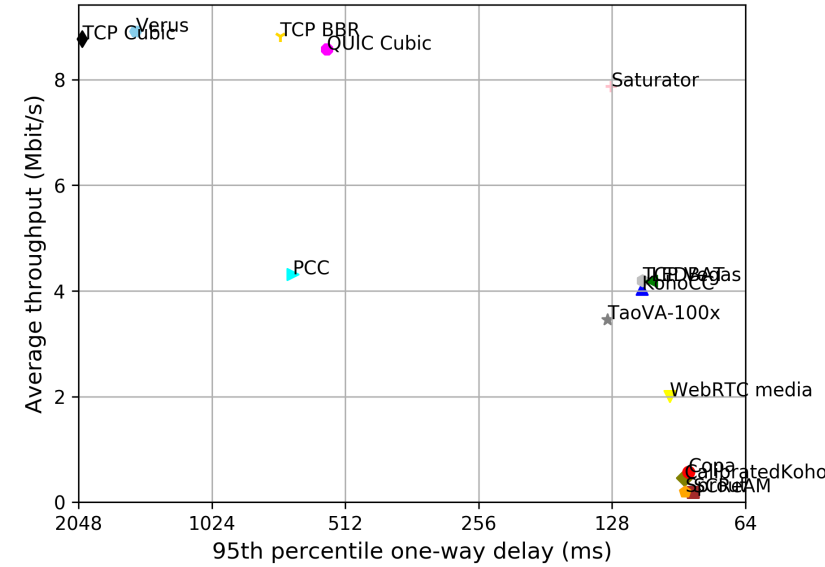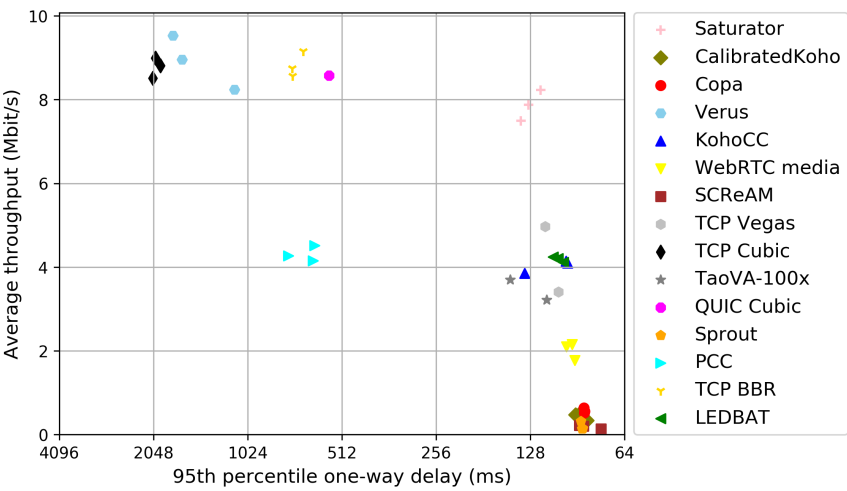**Pantheon Summary** (Generated at Mon, 31 Jul 2017 23:59:11 +0000 with pantheon version `33c7b8d34ce04c76596315aa973f0b30d6129d55`)

Repeated the test of 15 congestion control schemes 3 times.

Each test lasted for 30 seconds running 1 flow.

Data path: AWS Korea Ethernet (*local*) →China ppp0 (*remote*).

NTP offset measured against ntp.nict.jp and has been applied to correct the timestamps in logs.

```
git branch: master @ 33c7b8d34ce04c76596315aa973f0b30d6129d55
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
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 AWS Korea Ethernet to China ppp0, 3 runs of 30s each per scheme
(mean of all runs by scheme)

test from AWS Korea Ethernet to China ppp0, 3 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	3	8.82	718.95	1.23
CalibratedKoho	3	0.46	87.92	0.02
Copa	3	0.57	86.07	0.00
TCP Cubic	3	8.77	2009.26	4.33
KohoCC	3	4.03	109.75	0.00
LEDBAT	3	4.19	104.44	0.09
PCC	3	4.31	673.01	0.03
QUIC Cubic	3	8.58	563.04	2.07
Saturator	3	7.87	128.63	0.05
SCReAM	3	0.19	84.02	0.00
Sprout	3	0.20	87.60	0.00
TaoVA-100x	3	3.46	131.05	0.01
TCP Vegas	3	4.19	109.44	0.14
Verus	3	8.91	1523.01	3.46
WebRTC media	3	2.01	94.82	0.04

```
Run 1: Statistics of TCP BBR

Start at: Mon, 31 Jul 2017 22:17:05 +0000
End at: Mon, 31 Jul 2017 22:17:35 +0000
Local clock offset: -1.265 ms
Remote clock offset: -3.353 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:35 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.16 Mbit/s
95th percentile per-packet one-way delay: 681.380 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 9.16 Mbit/s
95th percentile per-packet one-way delay: 681.380 ms
Loss rate: 0.91%
```
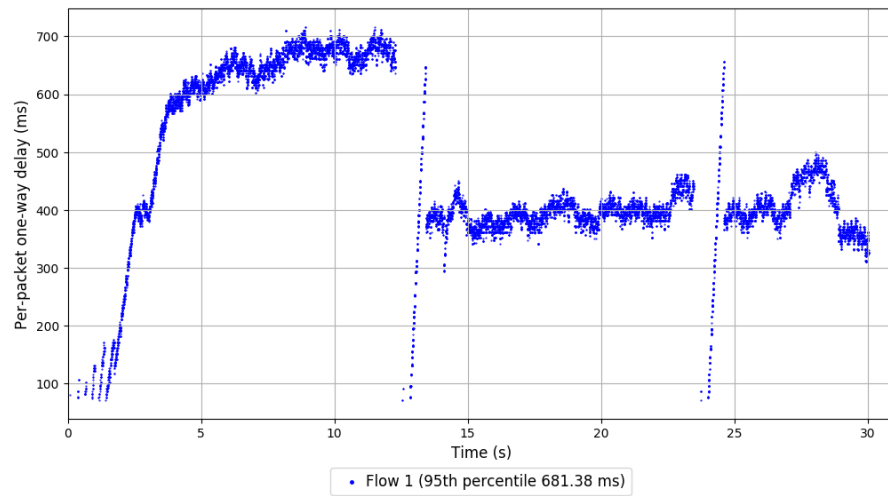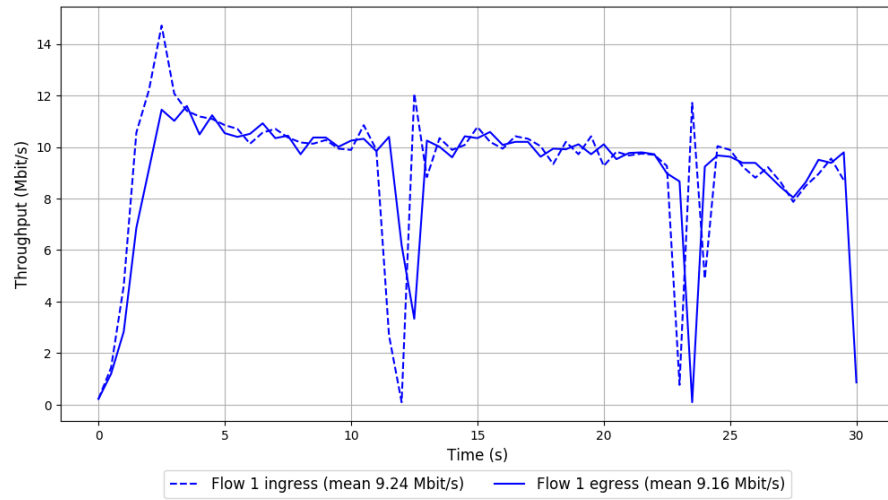
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: Mon, 31 Jul 2017 22:35:31 +0000
End at: Mon, 31 Jul 2017 22:36:01 +0000
Local clock offset: -1.134 ms
Remote clock offset: 1.819 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:35 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.75 Mbit/s
95th percentile per-packet one-way delay: 738.318 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 8.75 Mbit/s
95th percentile per-packet one-way delay: 738.318 ms
Loss rate: 1.41%
```
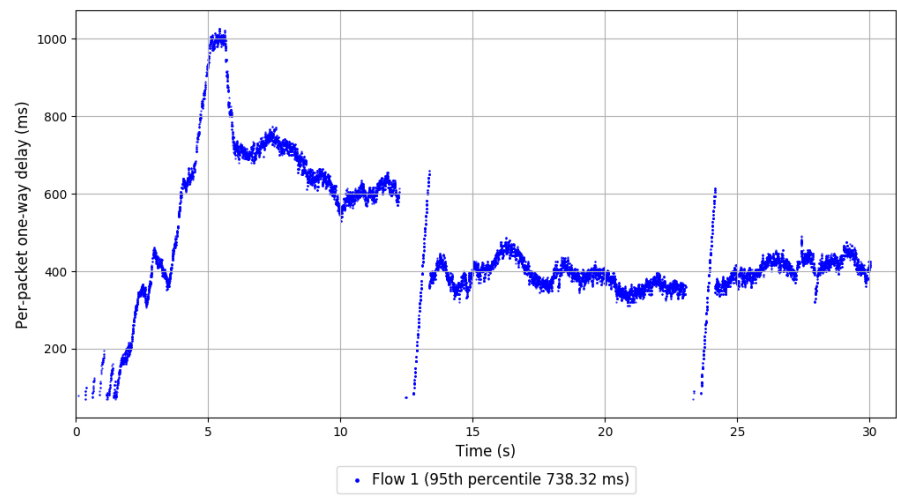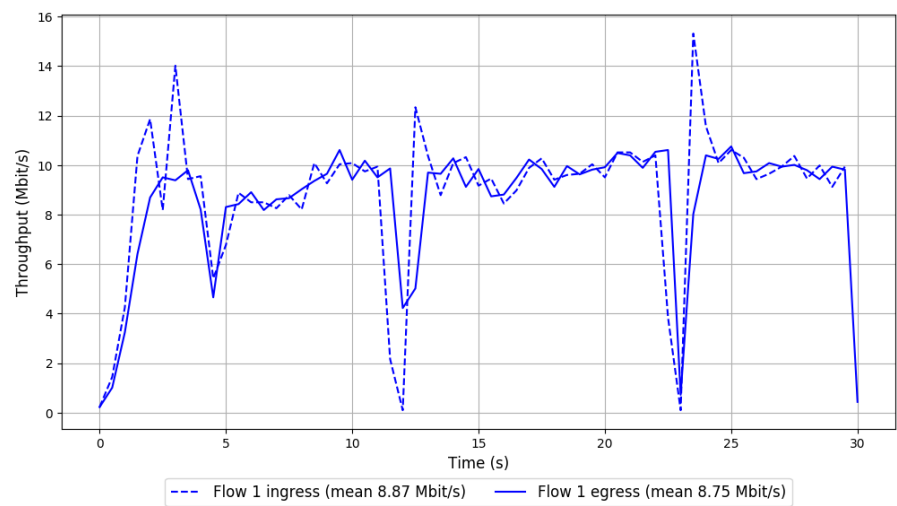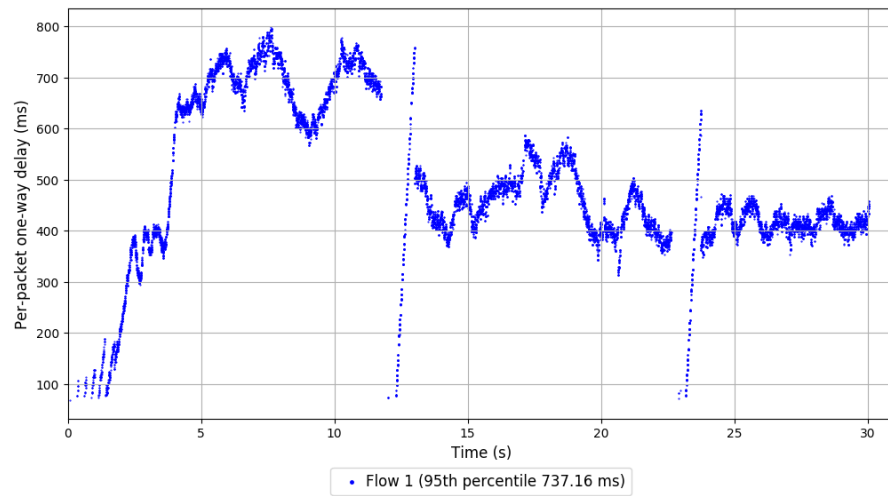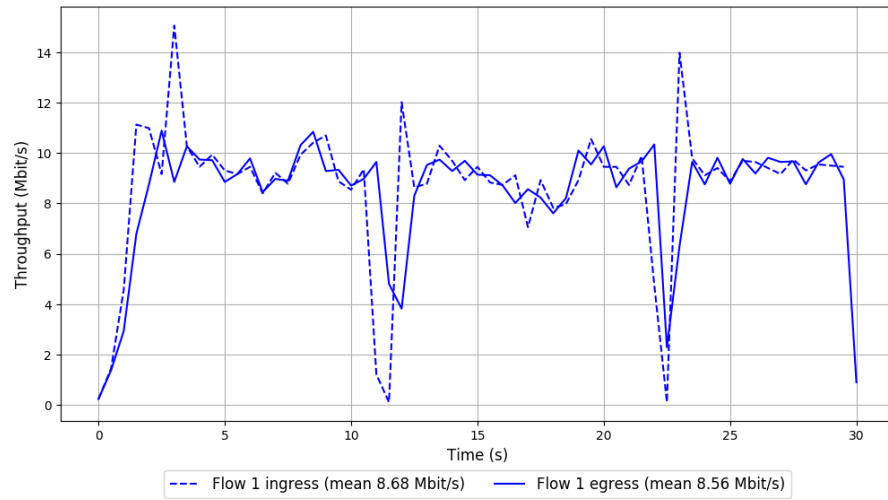
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: Mon, 31 Jul 2017 22:53:56 +0000
End at: Mon, 31 Jul 2017 22:54:26 +0000
Local clock offset: -1.188 ms
Remote clock offset: 0.885 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:38 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 737.163 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 737.163 ms
Loss rate: 1.36%
```

Run 3: Report of TCP BBR — Data Link

```
Run 1: Statistics of CalibratedKoho

Start at: Mon, 31 Jul 2017 22:22:01 +0000
End at: Mon, 31 Jul 2017 22:22:31 +0000
Local clock offset: 0.007 ms
Remote clock offset: -3.387 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:38 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 91.724 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 91.724 ms
Loss rate: 0.00%
```
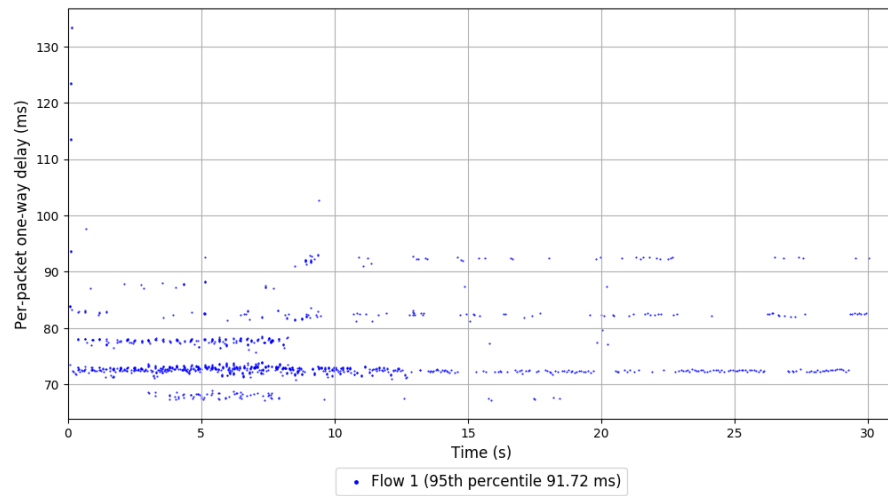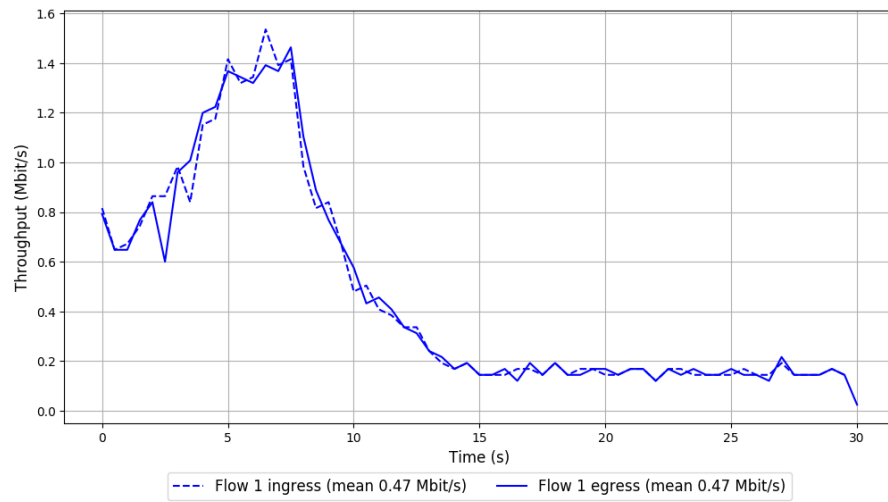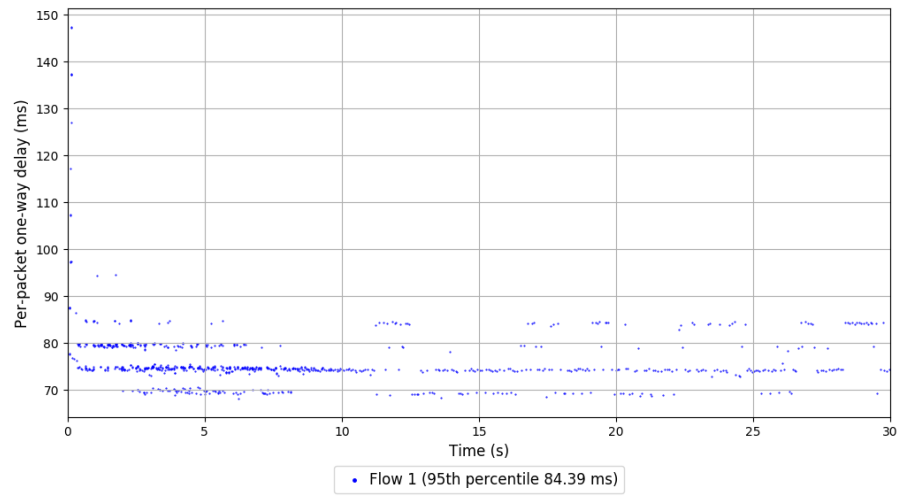
Run 1: Report of CalibratedKoho — Data Link

```
Run 2: Statistics of CalibratedKoho

Start at: Mon, 31 Jul 2017 22:40:27 +0000
End at: Mon, 31 Jul 2017 22:40:57 +0000
Local clock offset: -1.178 ms
Remote clock offset: 1.88 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:38 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 84.385 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 84.385 ms
Loss rate: 0.00%
```
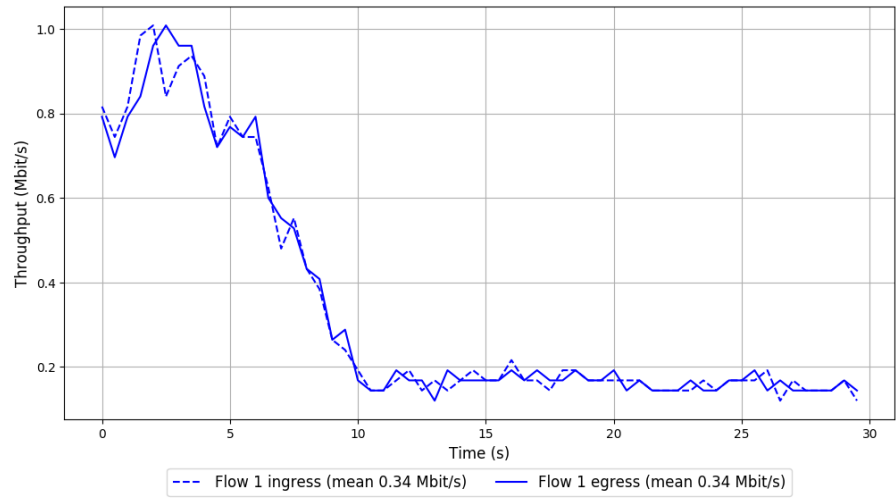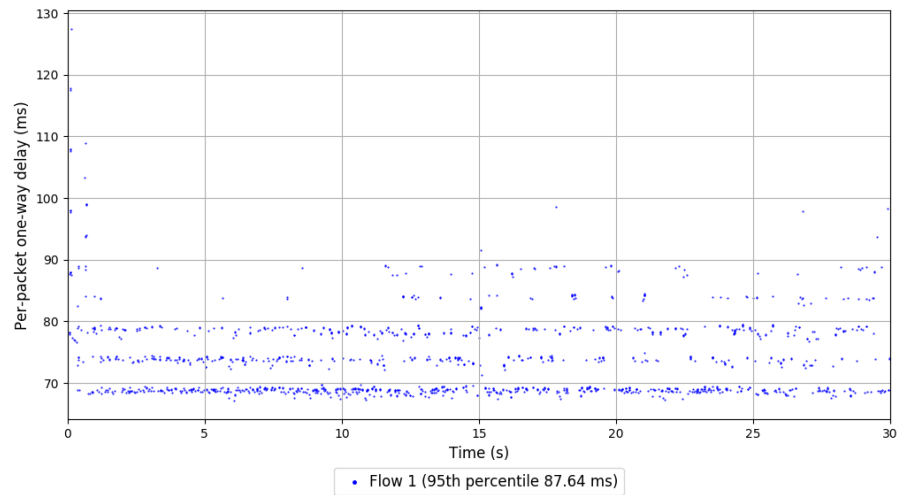
Run 2: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 0.34 Mbit/s)　　Flow 1 egress (mean 0.34 Mbit/s)

Flow 1 (95th percentile 84.39 ms)

13

```
Run 3: Statistics of CalibratedKoho

Start at: Mon, 31 Jul 2017 22:58:51 +0000
End at: Mon, 31 Jul 2017 22:59:21 +0000
Local clock offset: -1.162 ms
Remote clock offset: 0.718 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:38 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 87.643 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 87.643 ms
Loss rate: 0.07%
```
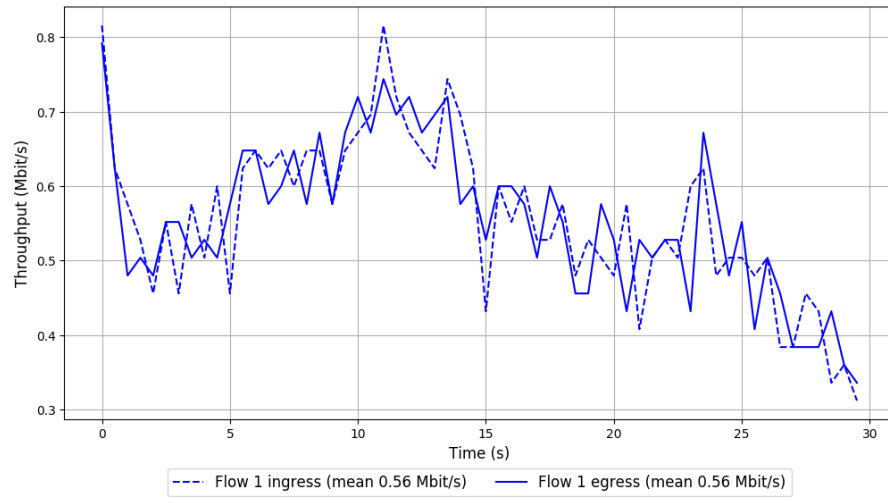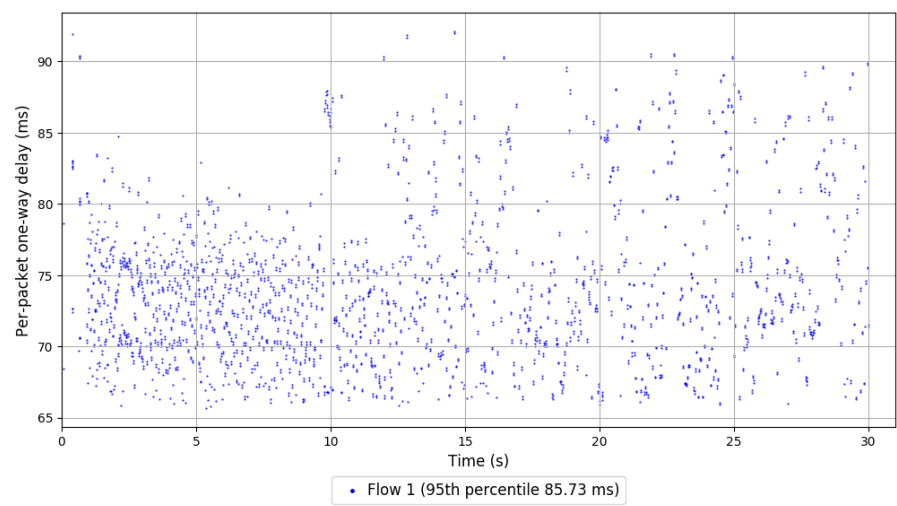
Run 3: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 0.56 Mbit/s)   Flow 1 egress (mean 0.56 Mbit/s)

Flow 1 (95th percentile 87.64 ms)

```
Run 1: Statistics of Copa

Start at: Mon, 31 Jul 2017 22:09:43 +0000
End at: Mon, 31 Jul 2017 22:10:13 +0000
Local clock offset: -0.682 ms
Remote clock offset: 1.159 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:38 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 85.732 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 85.732 ms
Loss rate: 0.00%
```
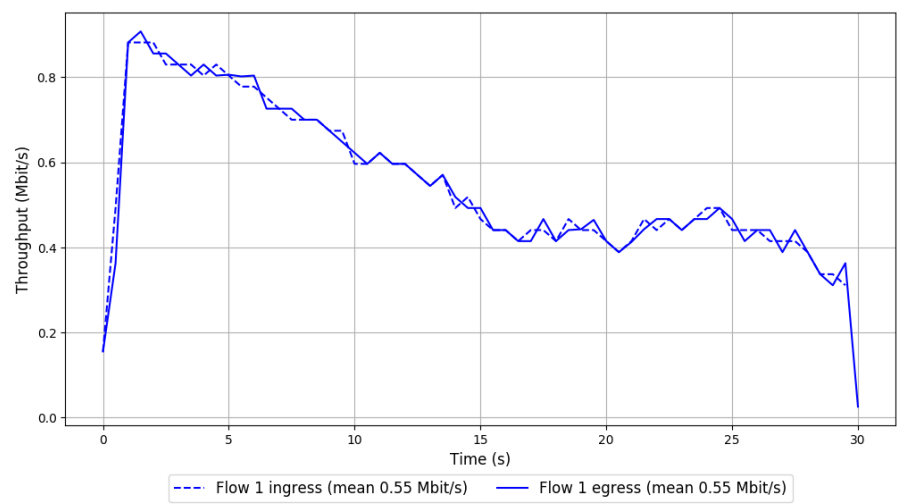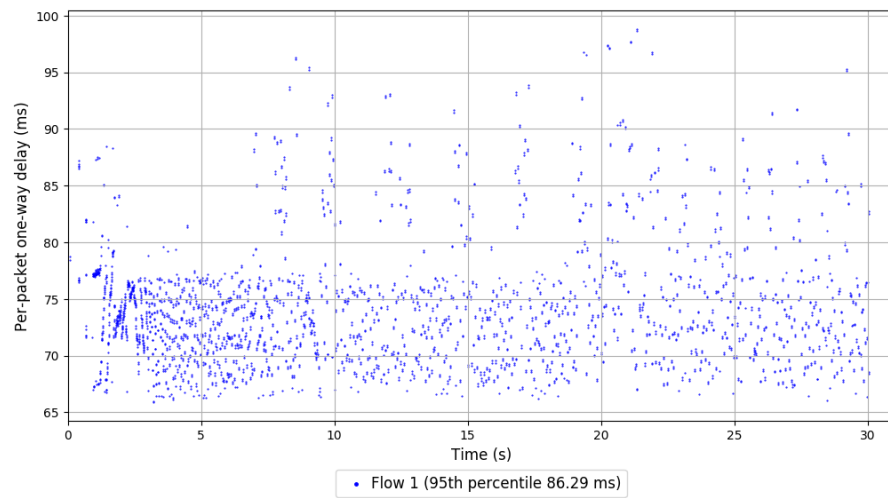
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: Mon, 31 Jul 2017 22:28:09 +0000
End at: Mon, 31 Jul 2017 22:28:39 +0000
Local clock offset: -1.084 ms
Remote clock offset: -2.038 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:39 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 86.290 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 86.290 ms
Loss rate: 0.00%
```
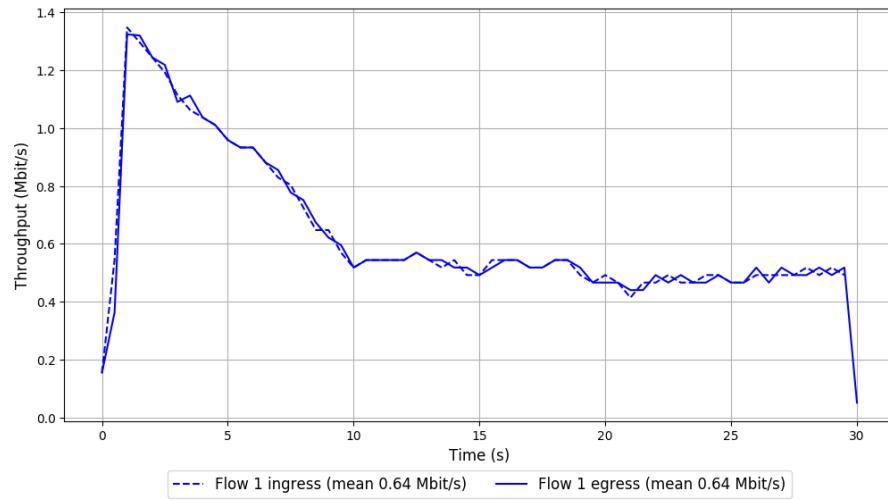
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: Mon, 31 Jul 2017 22:46:35 +0000
End at: Mon, 31 Jul 2017 22:47:05 +0000
Local clock offset: -0.289 ms
Remote clock offset: 1.84 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:40 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 86.196 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 86.196 ms
Loss rate: 0.00%
```
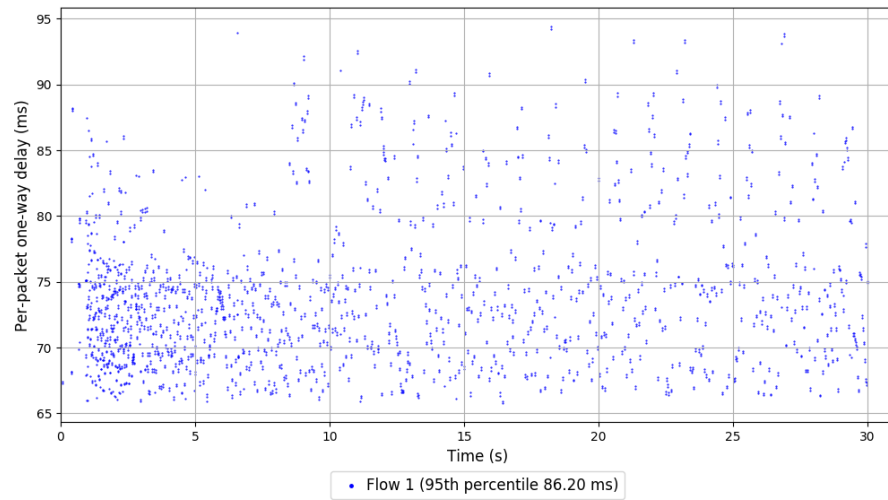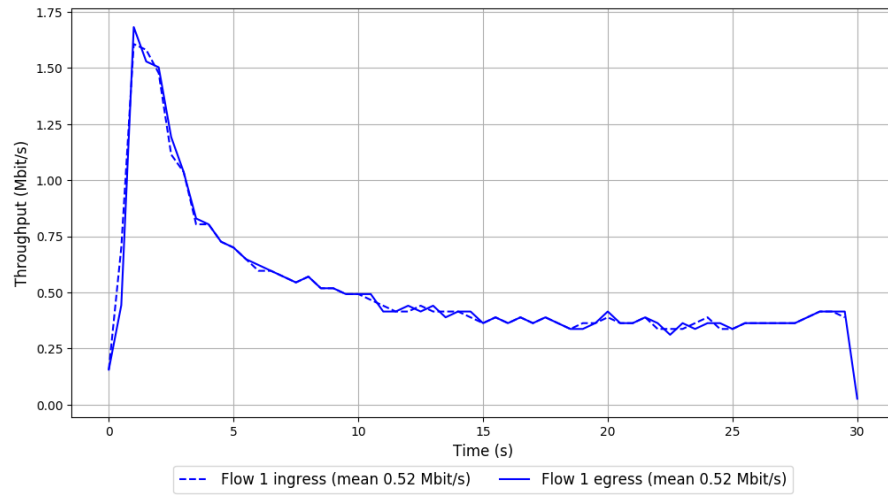
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 0.52 Mbit/s)   Flow 1 egress (mean 0.52 Mbit/s)

Flow 1 (95th percentile 86.20 ms)

```
Run 1: Statistics of TCP Cubic

Start at: Mon, 31 Jul 2017 22:24:27 +0000
End at: Mon, 31 Jul 2017 22:24:57 +0000
Local clock offset: -1.386 ms
Remote clock offset: -3.303 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:41 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.99 Mbit/s
95th percentile per-packet one-way delay: 2018.292 ms
Loss rate: 4.51%
-- Flow 1:
Average throughput: 8.99 Mbit/s
95th percentile per-packet one-way delay: 2018.292 ms
Loss rate: 4.51%
```
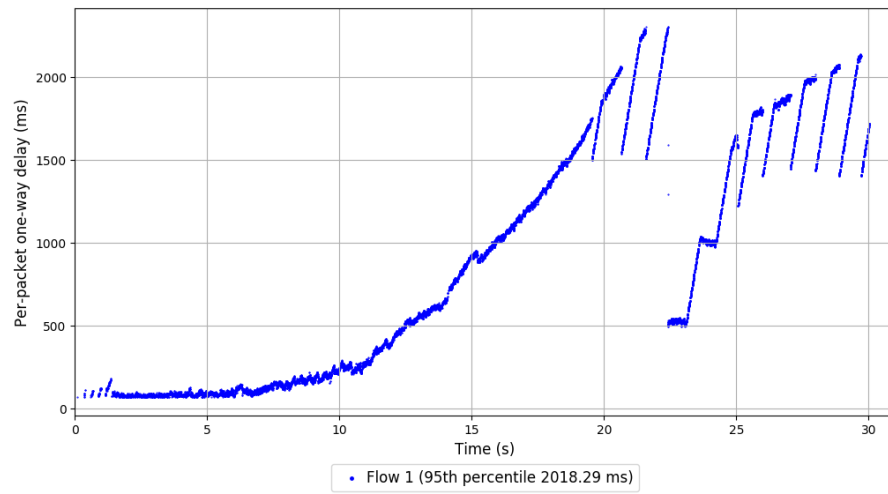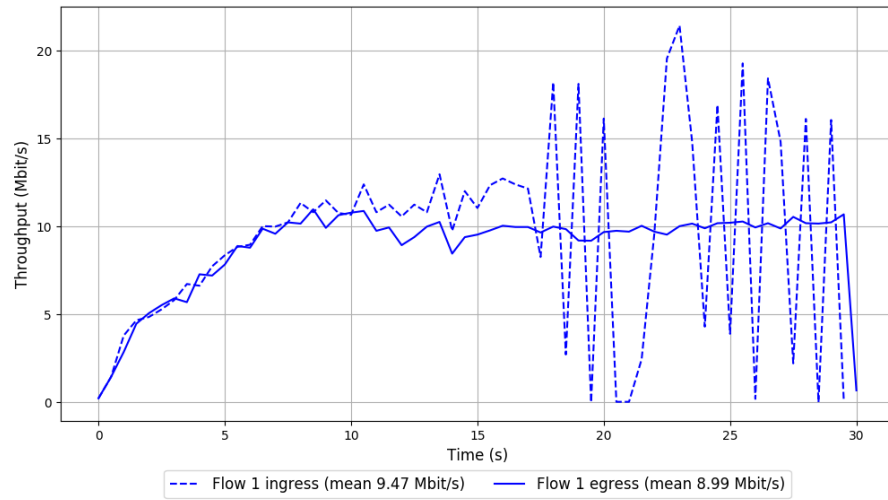
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 9.47 Mbit/s)   Flow 1 egress (mean 8.99 Mbit/s)

Flow 1 (95th percentile 2018.29 ms)

```
Run 2: Statistics of TCP Cubic

Start at: Mon, 31 Jul 2017 22:42:53 +0000
End at: Mon, 31 Jul 2017 22:43:23 +0000
Local clock offset: -1.152 ms
Remote clock offset: 2.042 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:42 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.81 Mbit/s
95th percentile per-packet one-way delay: 1948.644 ms
Loss rate: 2.84%
-- Flow 1:
Average throughput: 8.81 Mbit/s
95th percentile per-packet one-way delay: 1948.644 ms
Loss rate: 2.84%
```
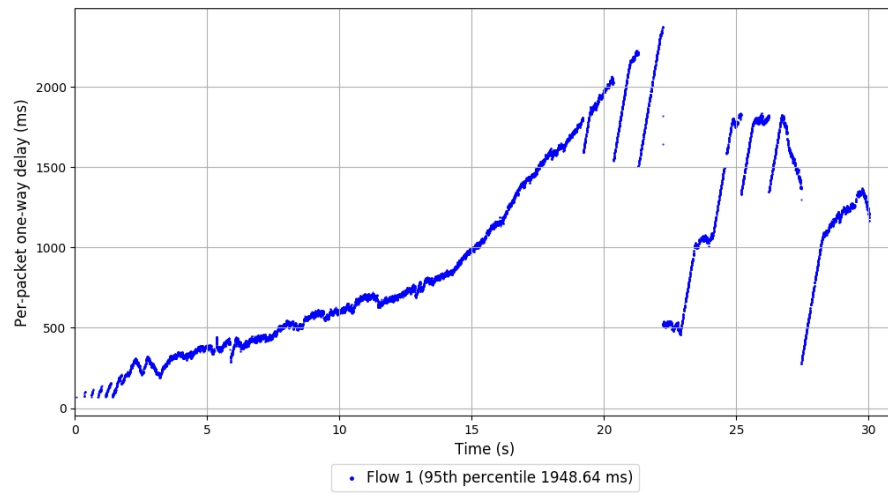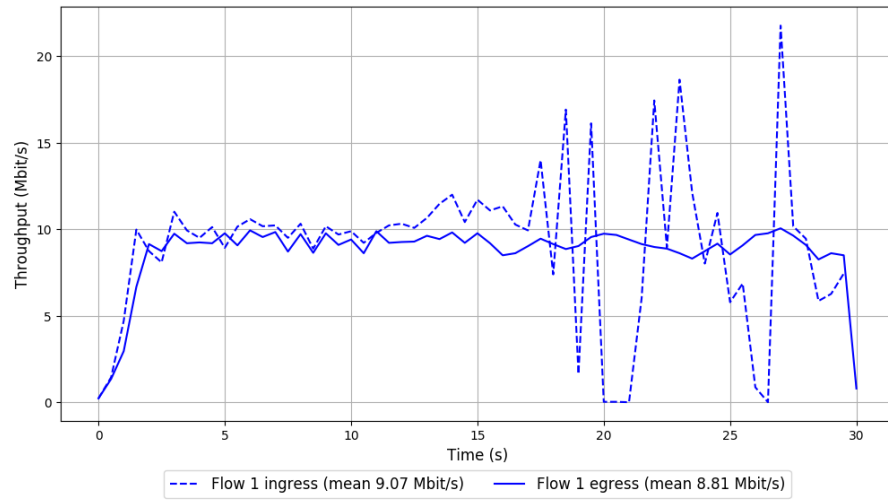
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: Mon, 31 Jul 2017 23:01:18 +0000
End at: Mon, 31 Jul 2017 23:01:48 +0000
Local clock offset: -0.345 ms
Remote clock offset: 0.684 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:43 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.51 Mbit/s
95th percentile per-packet one-way delay: 2060.847 ms
Loss rate: 5.65%
-- Flow 1:
Average throughput: 8.51 Mbit/s
95th percentile per-packet one-way delay: 2060.847 ms
Loss rate: 5.65%
```
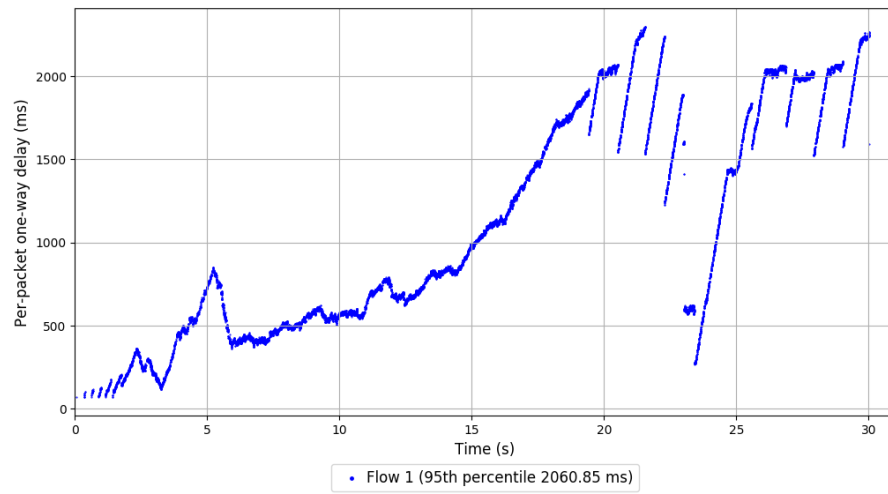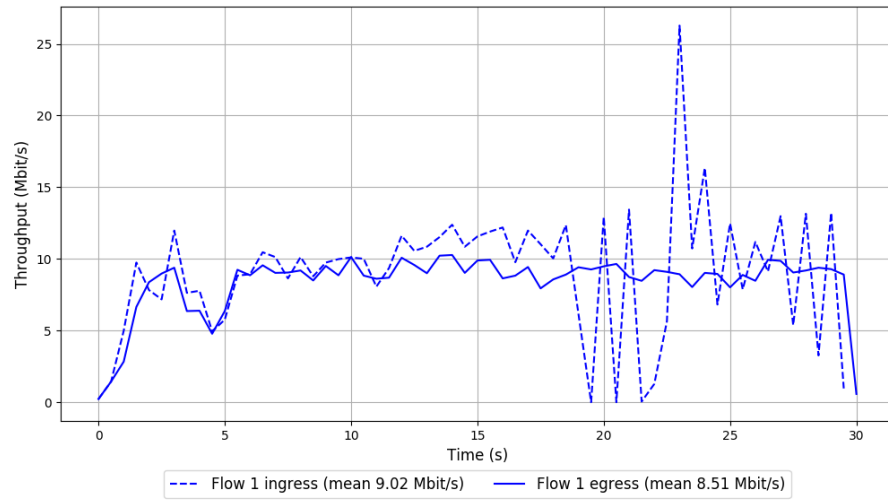
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 9.02 Mbit/s) --- Flow 1 egress (mean 8.51 Mbit/s)

Flow 1 (95th percentile 2060.85 ms)

27

```
Run 1: Statistics of KohoCC

Start at: Mon, 31 Jul 2017 22:20:47 +0000
End at: Mon, 31 Jul 2017 22:21:17 +0000
Local clock offset: -0.911 ms
Remote clock offset: -3.385 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:44 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 98.477 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 98.477 ms
Loss rate: 0.00%
```
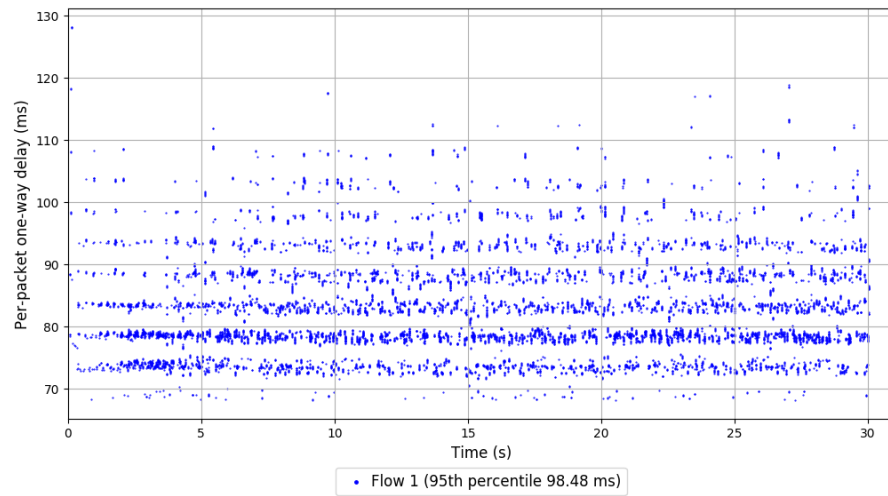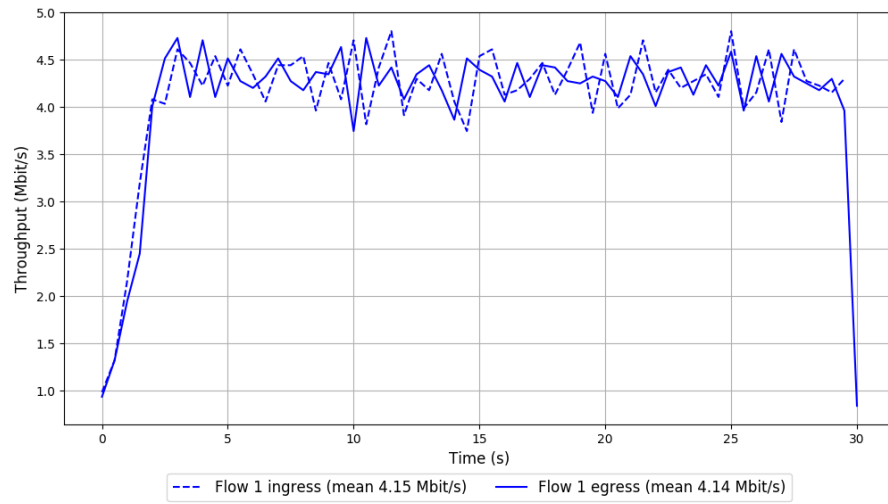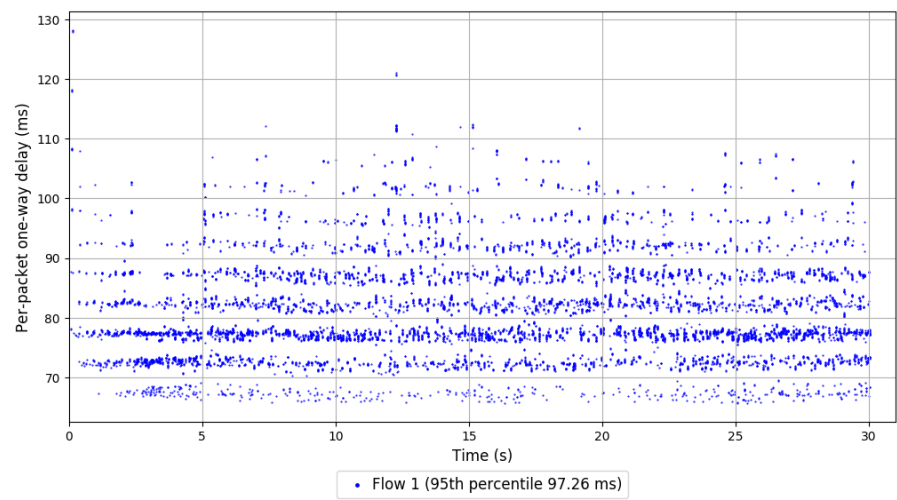
Run 1: Report of KohoCC — Data Link

Flow 1 ingress (mean 4.15 Mbit/s)   Flow 1 egress (mean 4.14 Mbit/s)

Flow 1 (95th percentile 98.48 ms)

```
Run 2: Statistics of KohoCC

Start at: Mon, 31 Jul 2017 22:39:13 +0000
End at: Mon, 31 Jul 2017 22:39:43 +0000
Local clock offset: -1.09 ms
Remote clock offset: 1.898 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:44 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 97.260 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 97.260 ms
Loss rate: 0.00%
```
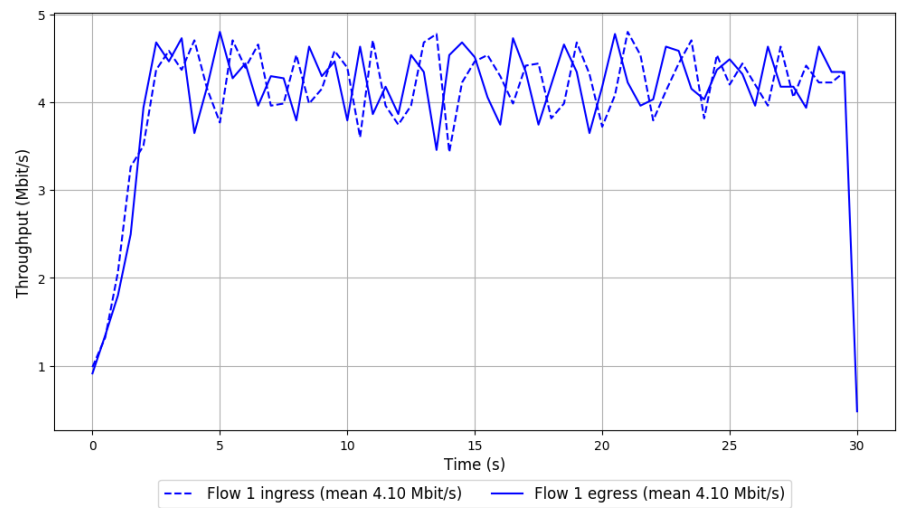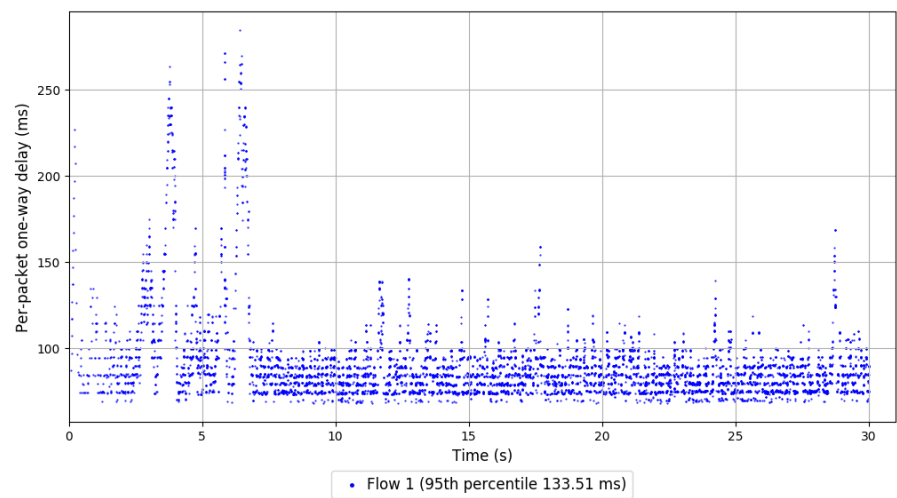
Run 2: Report of KohoCC — Data Link

Flow 1 ingress (mean 4.10 Mbit/s)   Flow 1 egress (mean 4.10 Mbit/s)

Flow 1 (95th percentile 97.26 ms)

31

```
Run 3: Statistics of KohoCC

Start at: Mon, 31 Jul 2017 22:57:38 +0000
End at: Mon, 31 Jul 2017 22:58:08 +0000
Local clock offset: -1.231 ms
Remote clock offset: 0.729 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:46 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 133.506 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 133.506 ms
Loss rate: 0.00%
```
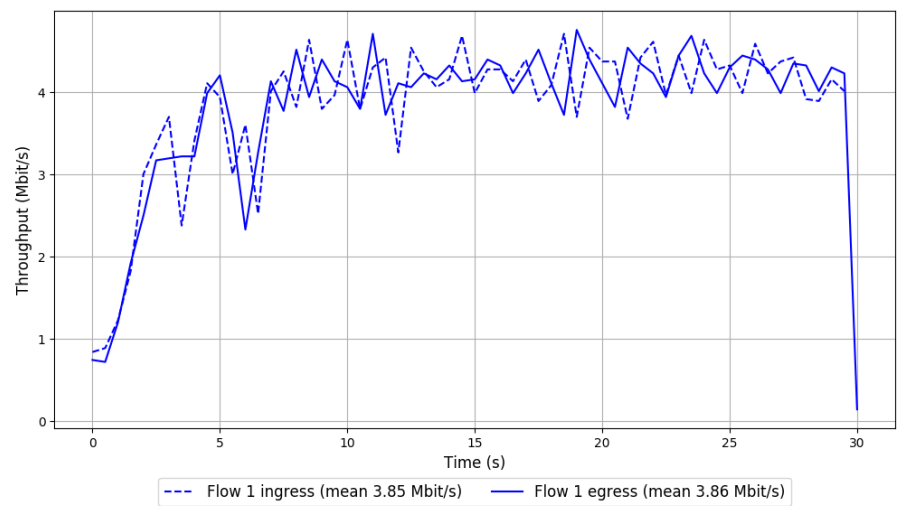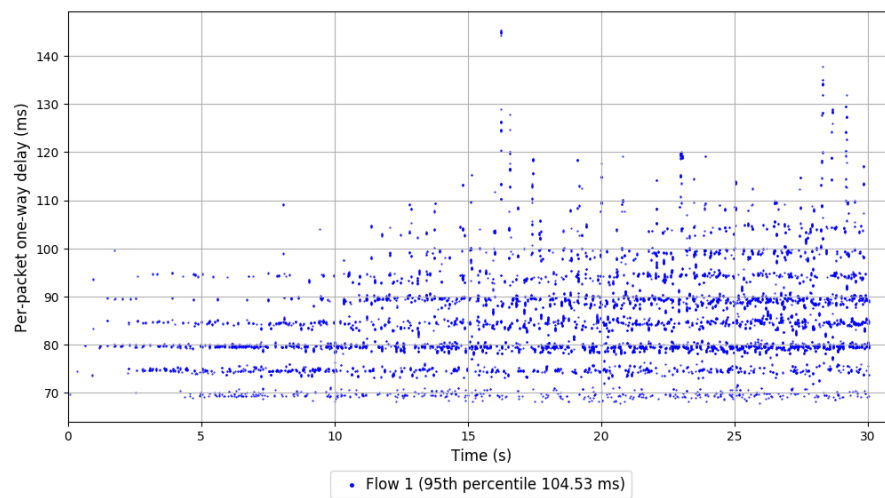
Run 3: Report of KohoCC — Data Link

Flow 1 ingress (mean 3.85 Mbit/s) --- Flow 1 egress (mean 3.86 Mbit/s)

Flow 1 (95th percentile 133.51 ms)

```
Run 1: Statistics of LEDBAT

Start at: Mon, 31 Jul 2017 22:08:29 +0000
End at: Mon, 31 Jul 2017 22:08:59 +0000
Local clock offset: 0.273 ms
Remote clock offset: 0.629 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:46 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 104.527 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 104.527 ms
Loss rate: 0.07%
```
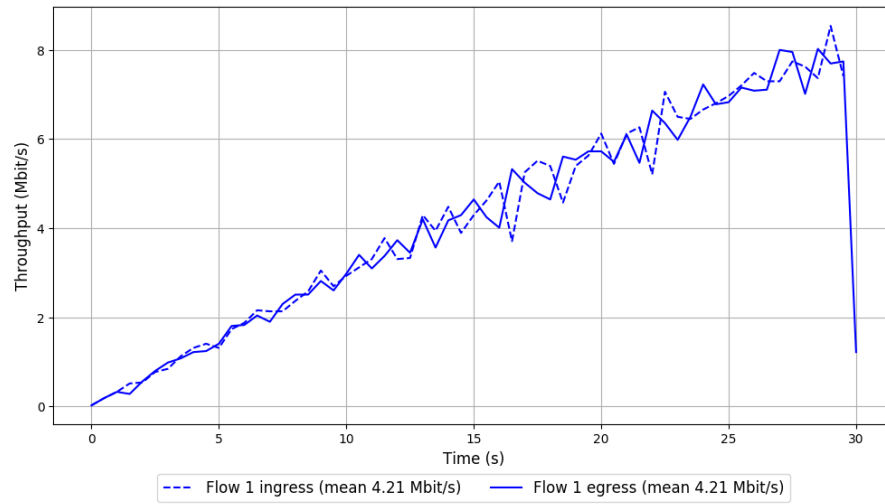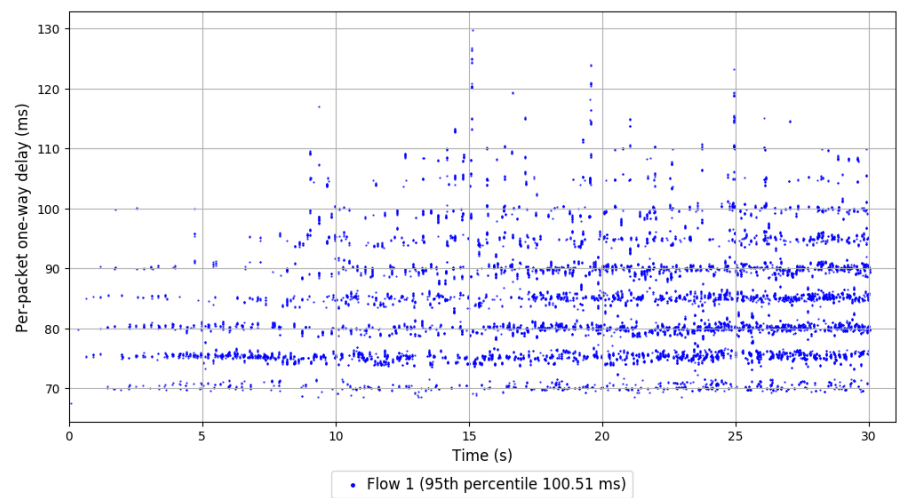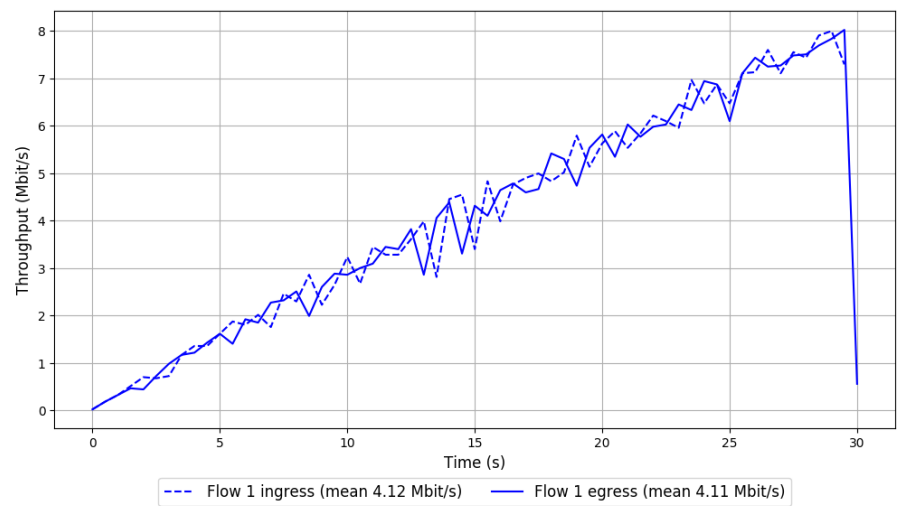
Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 4.21 Mbit/s)   Flow 1 egress (mean 4.21 Mbit/s)

Flow 1 (95th percentile 104.53 ms)

```
Run 2: Statistics of LEDBAT

Start at: Mon, 31 Jul 2017 22:26:56 +0000
End at: Mon, 31 Jul 2017 22:27:26 +0000
Local clock offset: -0.145 ms
Remote clock offset: -2.735 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:47 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 100.506 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 100.506 ms
Loss rate: 0.07%
```
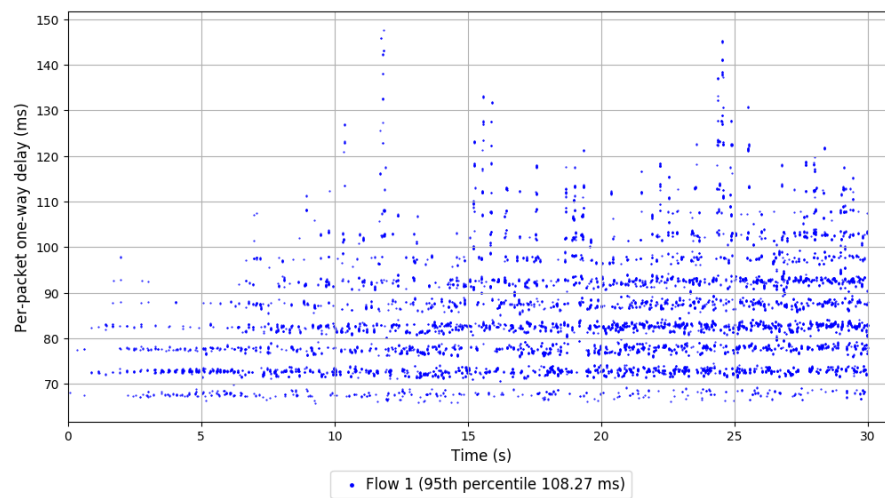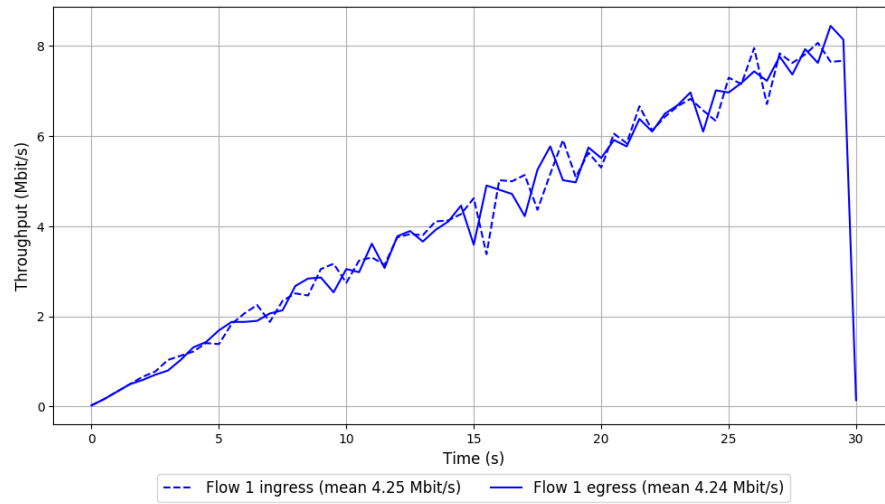
Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 4.12 Mbit/s)   Flow 1 egress (mean 4.11 Mbit/s)

• Flow 1 (95th percentile 100.51 ms)

```
Run 3: Statistics of LEDBAT

Start at: Mon, 31 Jul 2017 22:45:21 +0000
End at: Mon, 31 Jul 2017 22:45:51 +0000
Local clock offset: -1.117 ms
Remote clock offset: 2.153 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:48 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.24 Mbit/s
95th percentile per-packet one-way delay: 108.274 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 4.24 Mbit/s
95th percentile per-packet one-way delay: 108.274 ms
Loss rate: 0.14%
```
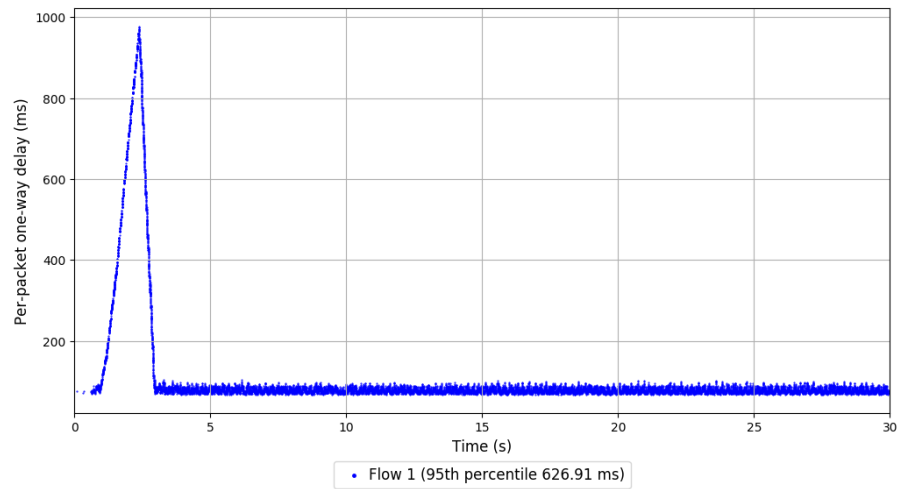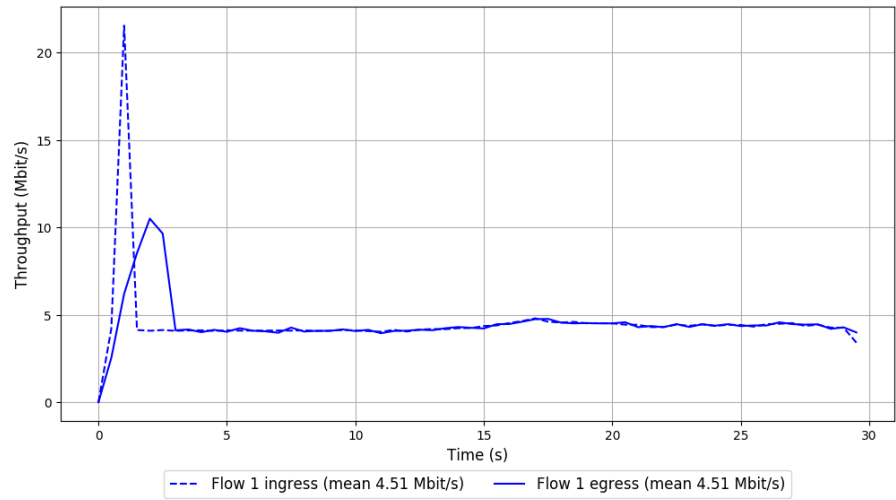
Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 4.25 Mbit/s) ---- Flow 1 egress (mean 4.24 Mbit/s)

• Flow 1 (95th percentile 108.27 ms)

```
Run 1: Statistics of PCC

Start at: Mon, 31 Jul 2017 22:25:42 +0000
End at: Mon, 31 Jul 2017 22:26:12 +0000
Local clock offset: -1.073 ms
Remote clock offset: -3.379 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:49 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 626.906 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 626.906 ms
Loss rate: 0.04%
```
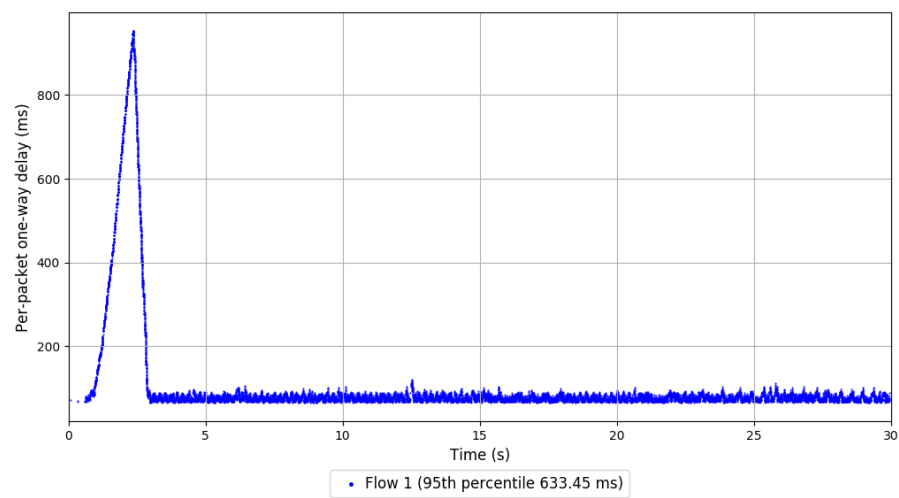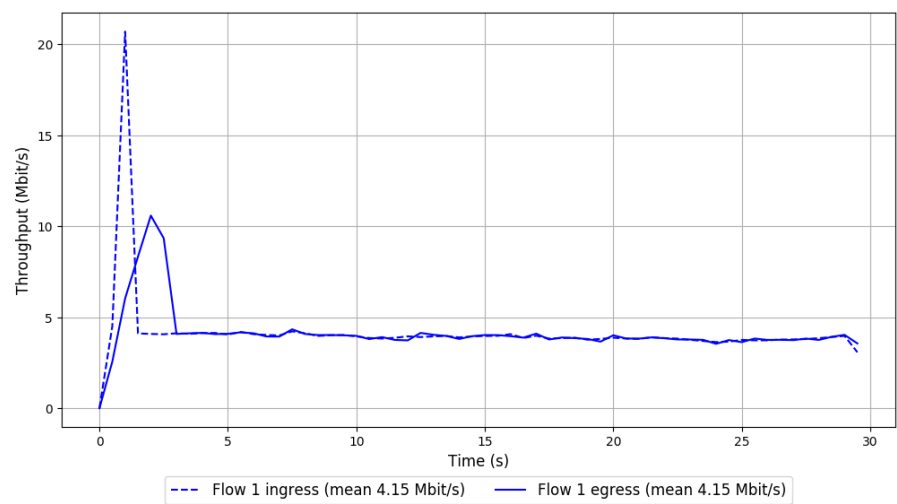
Run 1: Report of PCC — Data Link

Flow 1 ingress (mean 4.51 Mbit/s)   Flow 1 egress (mean 4.51 Mbit/s)

Flow 1 (95th percentile 626.91 ms)

```
Run 2: Statistics of PCC

Start at: Mon, 31 Jul 2017 22:44:07 +0000
End at: Mon, 31 Jul 2017 22:44:37 +0000
Local clock offset: -0.282 ms
Remote clock offset: 2.181 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:49 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 633.451 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 633.451 ms
Loss rate: 0.04%
```
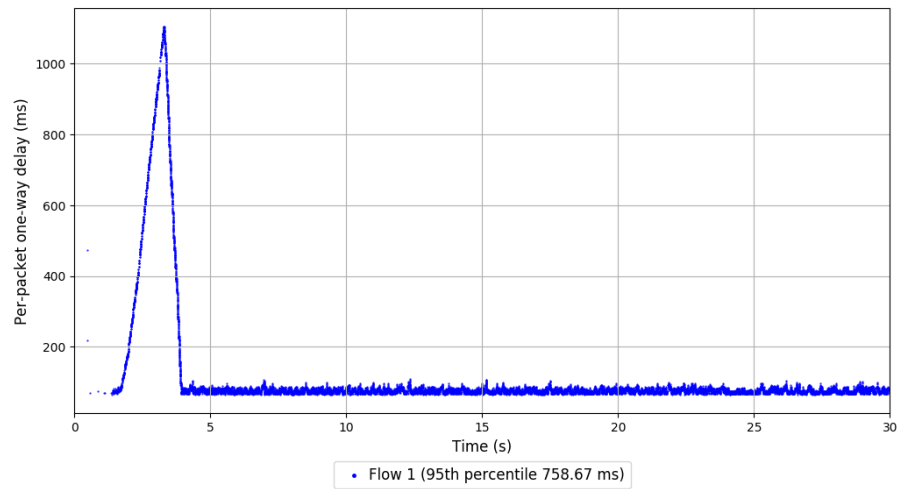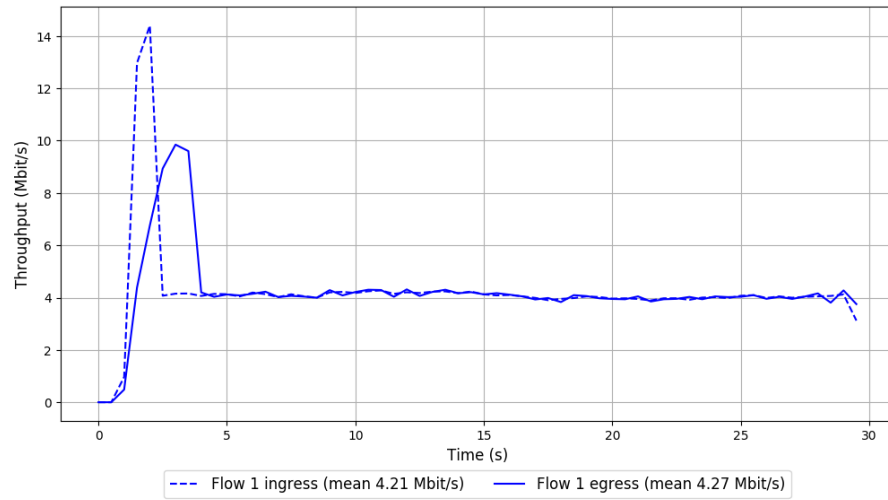
Run 2: Report of PCC — Data Link

Flow 1 ingress (mean 4.15 Mbit/s) --- Flow 1 egress (mean 4.15 Mbit/s)

• Flow 1 (95th percentile 633.45 ms)

```
Run 3: Statistics of PCC

Start at: Mon, 31 Jul 2017 23:02:32 +0000
End at: Mon, 31 Jul 2017 23:03:02 +0000
Local clock offset: -1.318 ms
Remote clock offset: 0.607 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:50 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.27 Mbit/s
95th percentile per-packet one-way delay: 758.669 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 4.27 Mbit/s
95th percentile per-packet one-way delay: 758.669 ms
Loss rate: 0.02%
```

Run 3: Report of PCC — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: Mon, 31 Jul 2017 22:12:09 +0000
End at: Mon, 31 Jul 2017 22:12:40 +0000
Local clock offset: -0.751 ms
Remote clock offset: 2.335 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:51 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.58 Mbit/s
95th percentile per-packet one-way delay: 563.038 ms
Loss rate: 2.07%
-- Flow 1:
Average throughput: 8.58 Mbit/s
95th percentile per-packet one-way delay: 563.038 ms
Loss rate: 2.07%
```
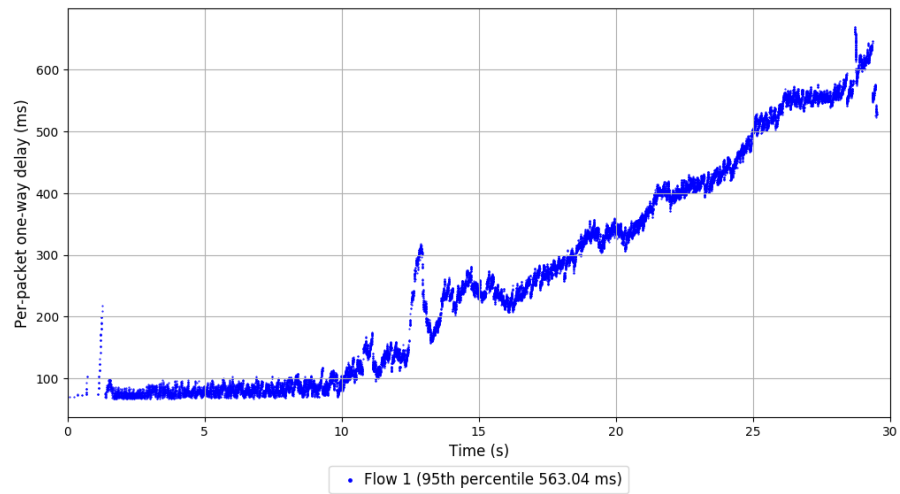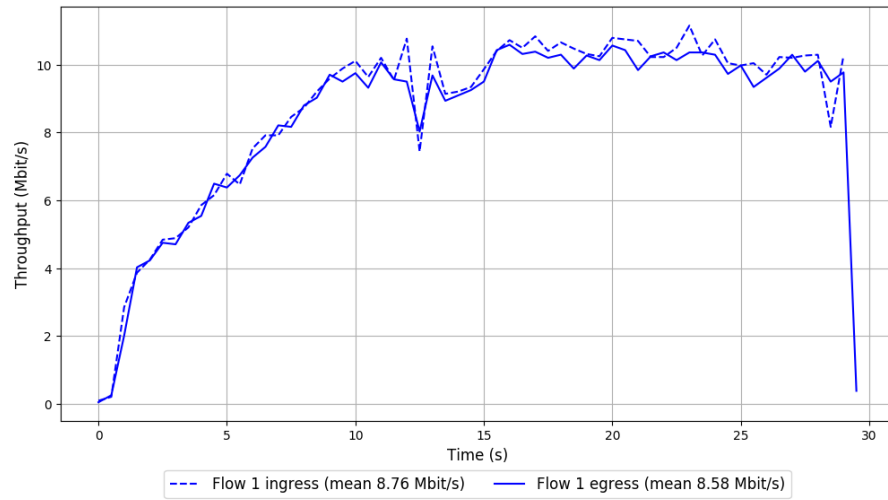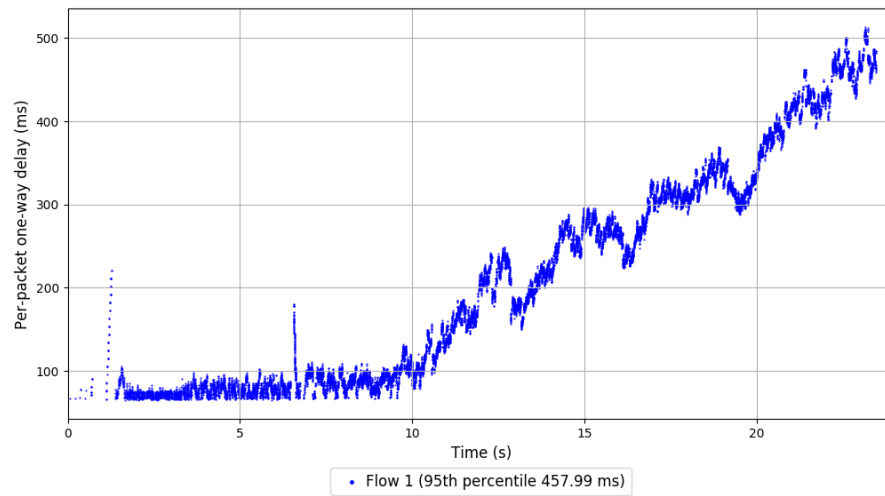
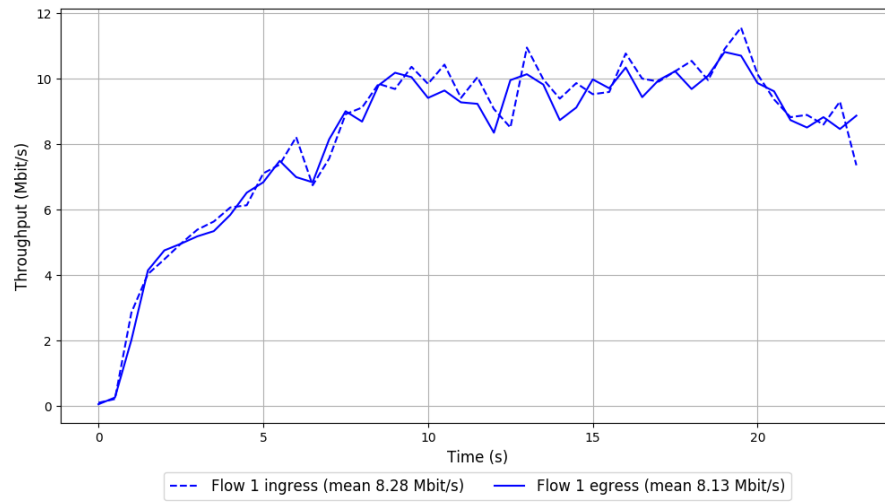Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: Mon, 31 Jul 2017 22:30:36 +0000
End at: Mon, 31 Jul 2017 22:31:06 +0000
Local clock offset: -1.097 ms
Remote clock offset: -0.772 ms
```

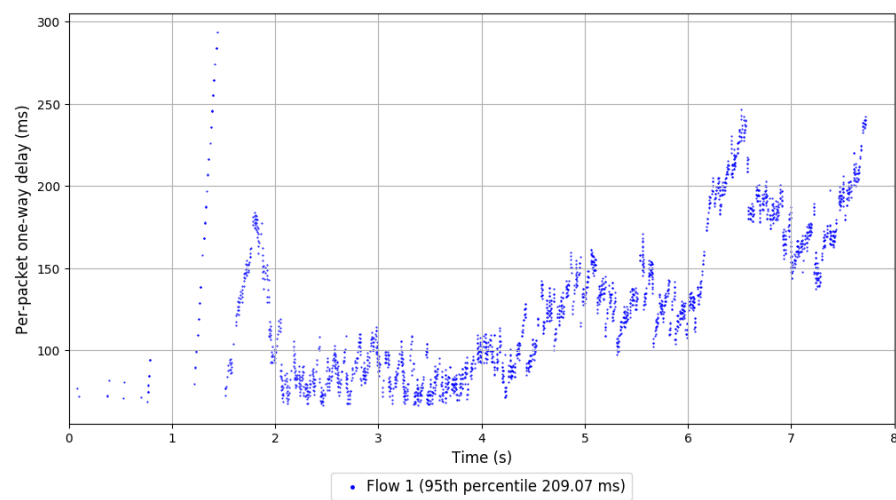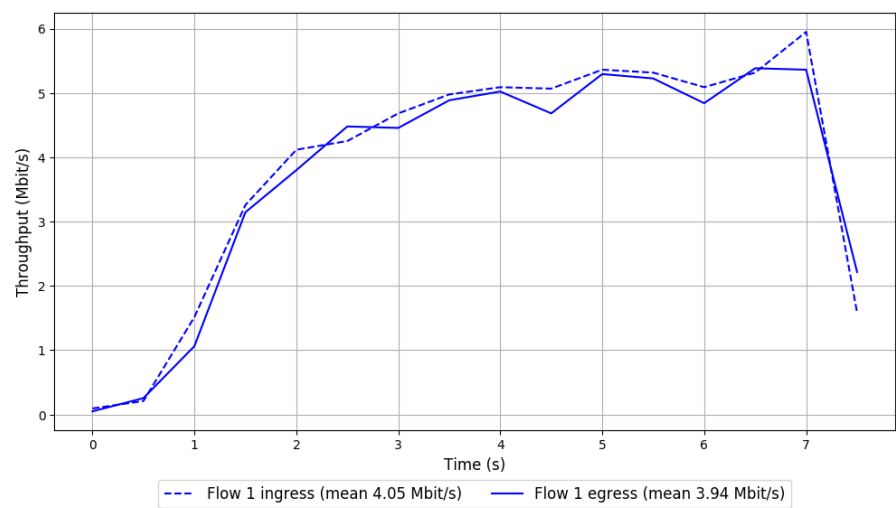Run 2: Report of QUIC Cubic — Data Link

Run 3: Statistics of QUIC Cubic

Start at: Mon, 31 Jul 2017 22:49:01 +0000
End at: Mon, 31 Jul 2017 22:49:31 +0000
Local clock offset: -1.218 ms
Remote clock offset: 1.447 ms

Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 4.05 Mbit/s)   Flow 1 egress (mean 3.94 Mbit/s)

• Flow 1 (95th percentile 209.07 ms)

```
Run 1: Statistics of Saturator

Start at: Mon, 31 Jul 2017 22:18:20 +0000
End at: Mon, 31 Jul 2017 22:18:50 +0000
Local clock offset: -0.884 ms
Remote clock offset: -3.332 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:54 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.23 Mbit/s
95th percentile per-packet one-way delay: 118.560 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 8.23 Mbit/s
95th percentile per-packet one-way delay: 118.560 ms
Loss rate: 0.01%
```
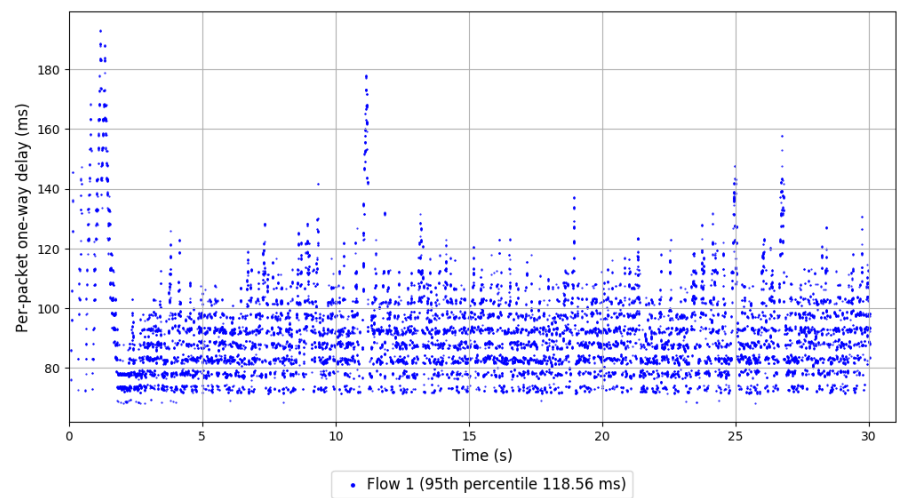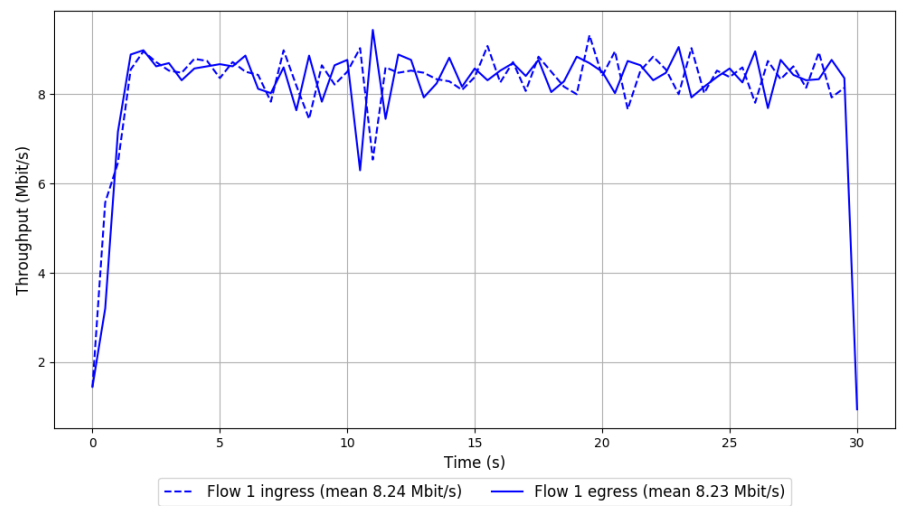
Run 1: Report of Saturator — Data Link

```
Run 2: Statistics of Saturator

Start at: Mon, 31 Jul 2017 22:36:45 +0000
End at: Mon, 31 Jul 2017 22:37:15 +0000
Local clock offset: -0.162 ms
Remote clock offset: 2.064 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:54 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.50 Mbit/s
95th percentile per-packet one-way delay: 137.319 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 7.50 Mbit/s
95th percentile per-packet one-way delay: 137.319 ms
Loss rate: 0.08%
```
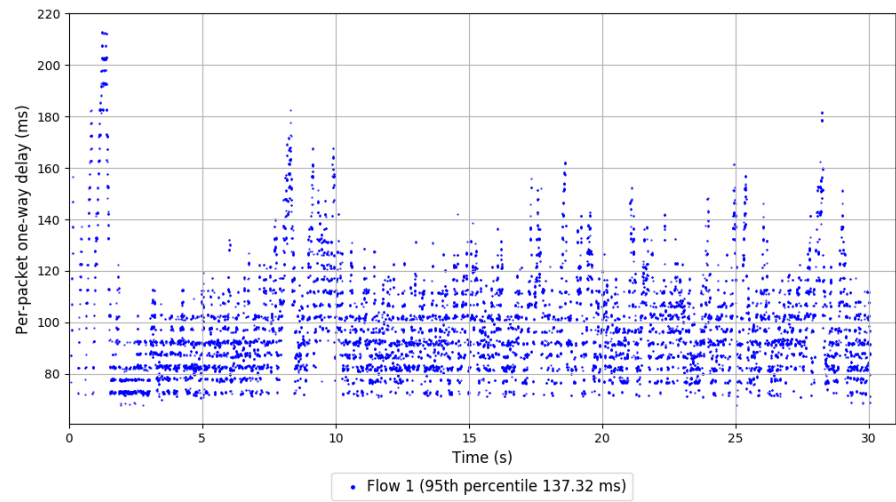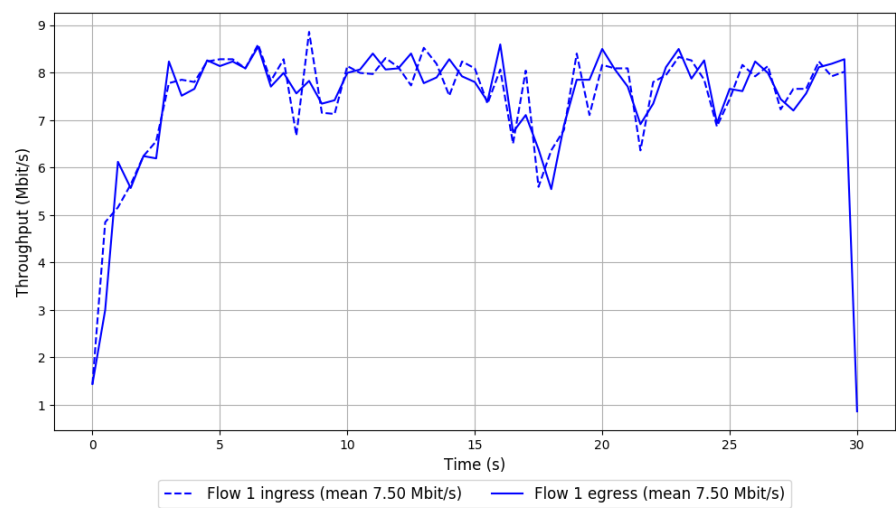
Run 2: Report of Saturator — Data Link

```
Run 3: Statistics of Saturator

Start at: Mon, 31 Jul 2017 22:55:10 +0000
End at: Mon, 31 Jul 2017 22:55:40 +0000
Local clock offset: -1.199 ms
Remote clock offset: 0.735 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:57 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.88 Mbit/s
95th percentile per-packet one-way delay: 130.009 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 7.88 Mbit/s
95th percentile per-packet one-way delay: 130.009 ms
Loss rate: 0.05%
```
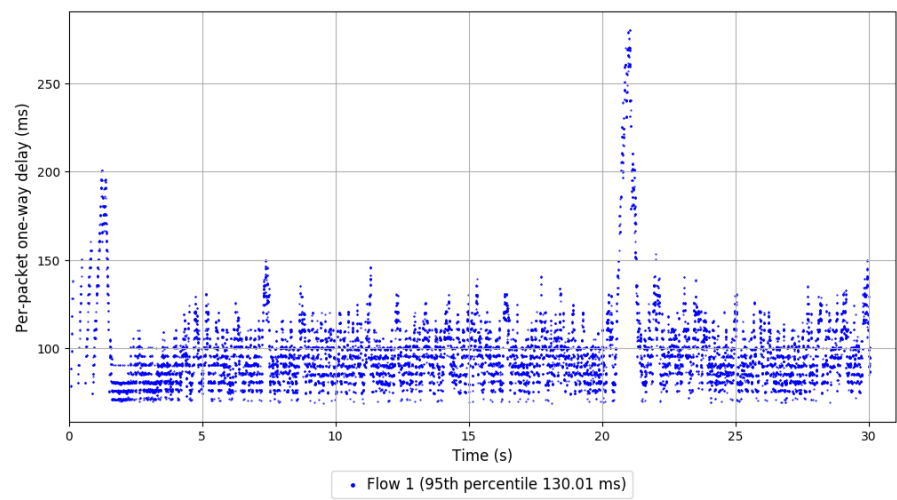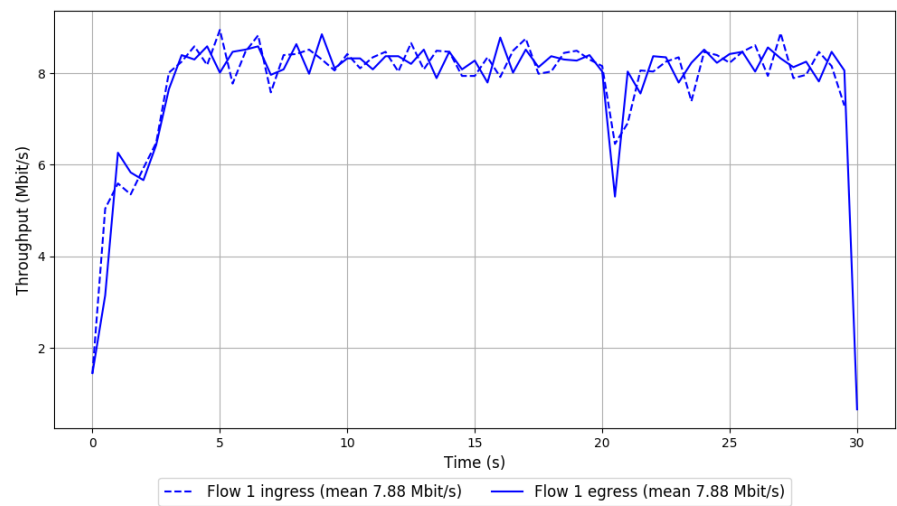
Run 3: Report of Saturator — Data Link

```
Run 1: Statistics of SCReAM

Start at: Mon, 31 Jul 2017 22:14:37 +0000
End at: Mon, 31 Jul 2017 22:15:07 +0000
Local clock offset: -0.764 ms
Remote clock offset: 3.287 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:57 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.342 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.342 ms
Loss rate: 0.00%
```
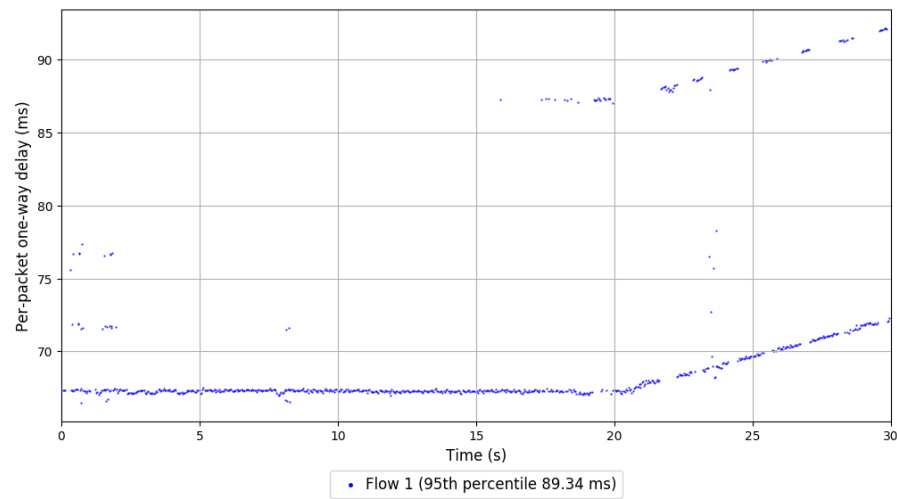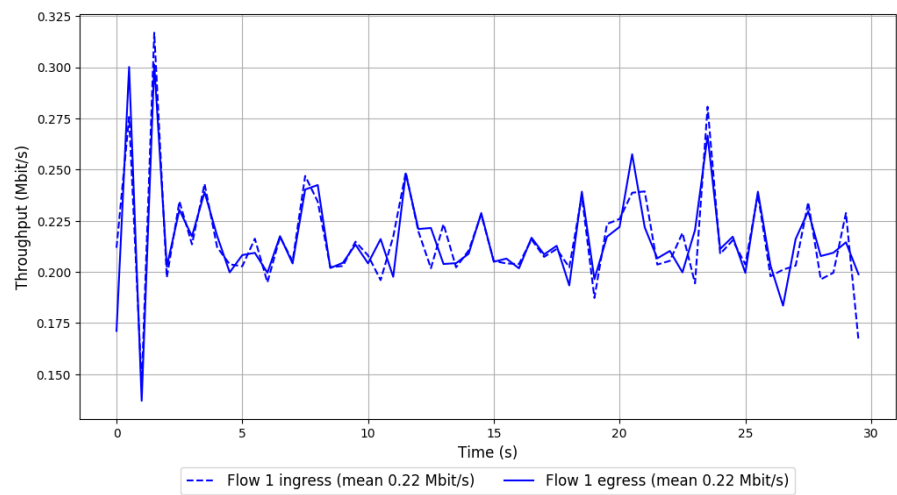
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: Mon, 31 Jul 2017 22:33:03 +0000
End at: Mon, 31 Jul 2017 22:33:33 +0000
Local clock offset: -0.173 ms
Remote clock offset: 0.693 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:57 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 76.216 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 76.216 ms
Loss rate: 0.00%
```
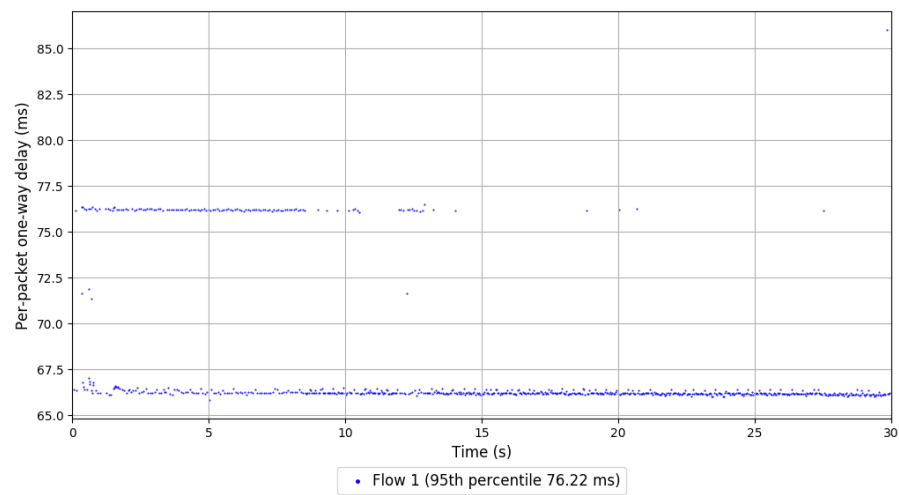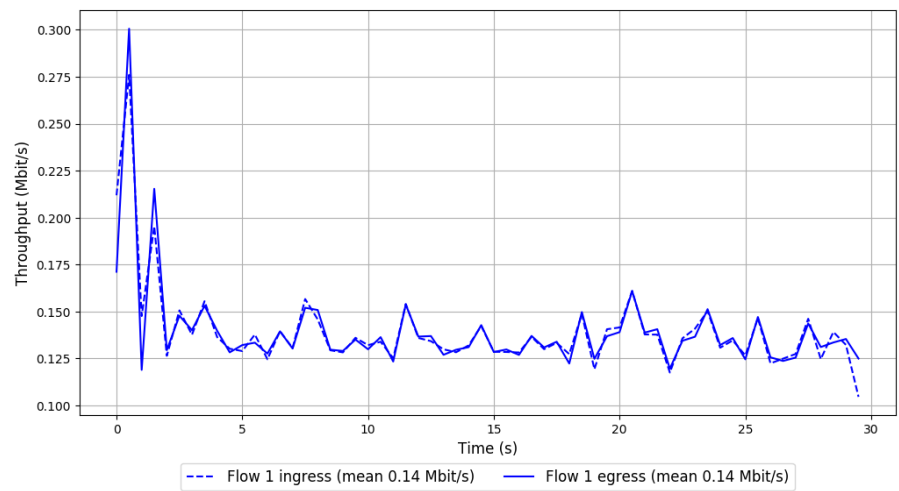
Run 2: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.14 Mbit/s) --- Flow 1 egress (mean 0.14 Mbit/s)

Flow 1 (95th percentile 76.22 ms)

```
Run 3: Statistics of SCReAM

Start at: Mon, 31 Jul 2017 22:51:28 +0000
End at: Mon, 31 Jul 2017 22:51:58 +0000
Local clock offset: -1.177 ms
Remote clock offset: 1.16 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:58 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 86.489 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 86.489 ms
Loss rate: 0.00%
```
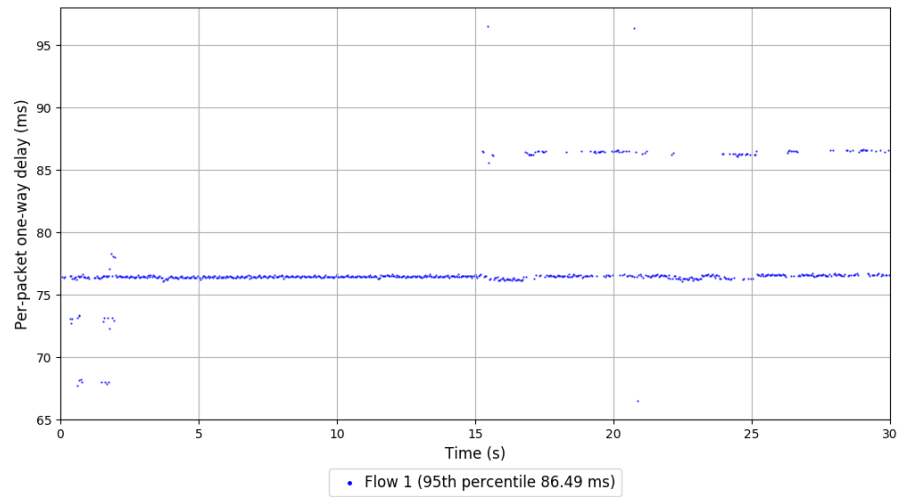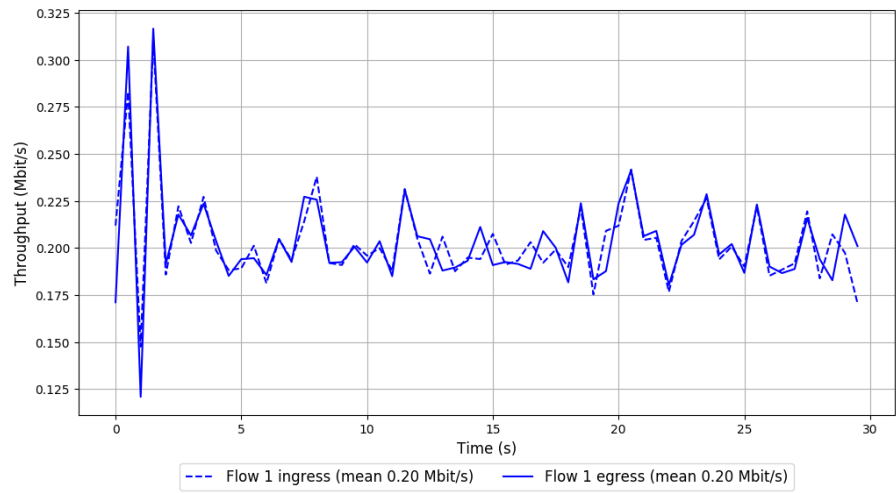
Run 3: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: Mon, 31 Jul 2017 22:10:56 +0000
End at: Mon, 31 Jul 2017 22:11:26 +0000
Local clock offset: 0.219 ms
Remote clock offset: 1.806 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:58 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 87.505 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 87.505 ms
Loss rate: 0.00%
```
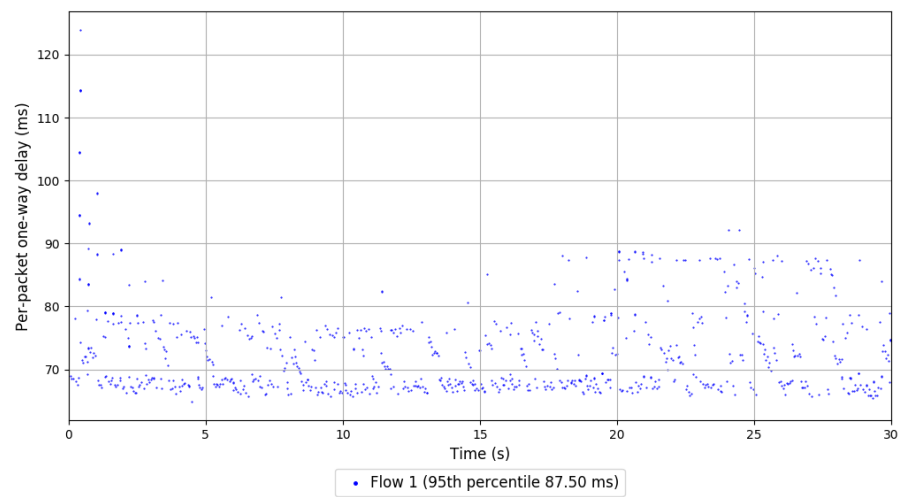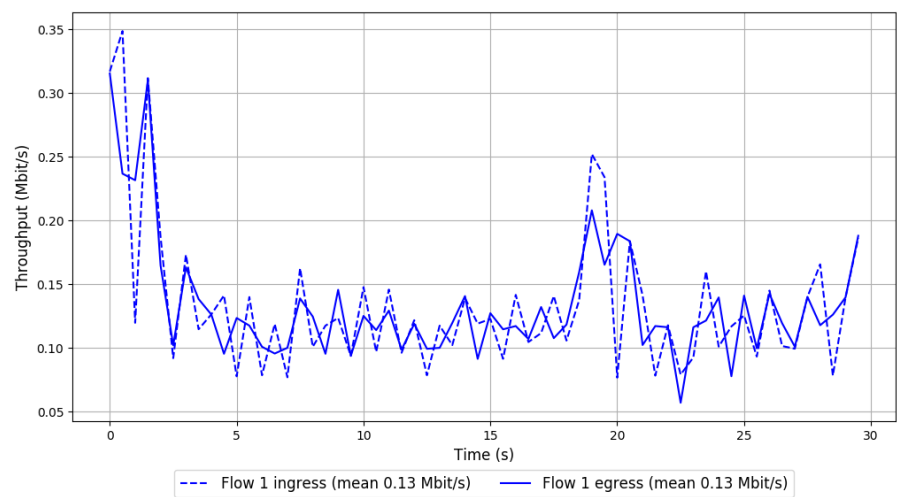
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: Mon, 31 Jul 2017 22:29:23 +0000
End at: Mon, 31 Jul 2017 22:29:53 +0000
Local clock offset: -0.185 ms
Remote clock offset: -1.328 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:59 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 88.209 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 88.209 ms
Loss rate: 0.00%
```
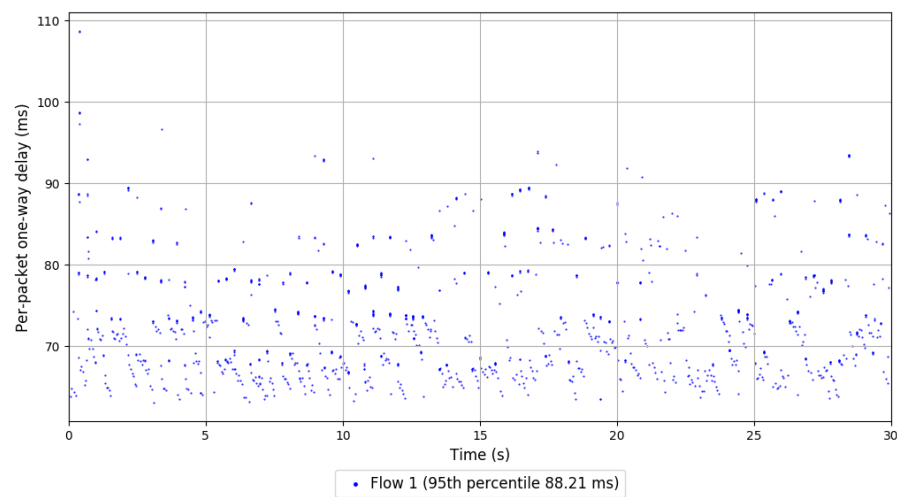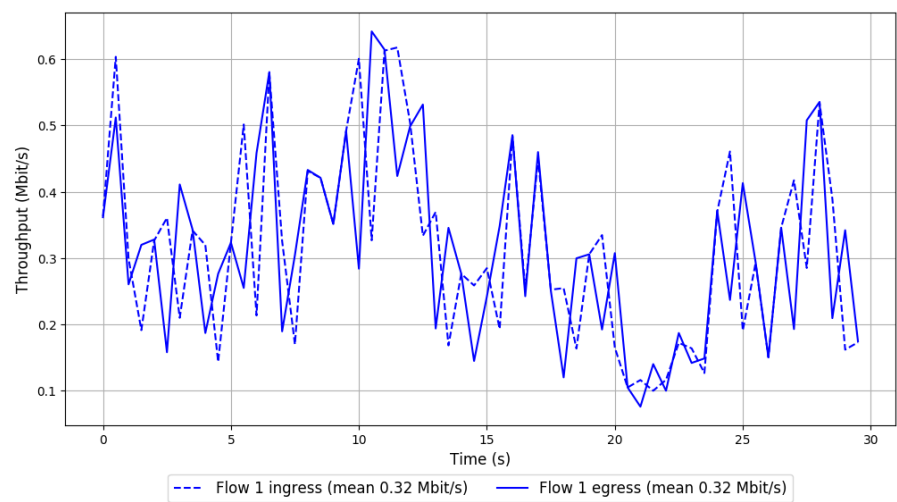
Run 2: Report of Sprout — Data Link

Flow 1 ingress (mean 0.32 Mbit/s)   Flow 1 egress (mean 0.32 Mbit/s)

Flow 1 (95th percentile 88.21 ms)

```
Run 3: Statistics of Sprout

Start at: Mon, 31 Jul 2017 22:47:48 +0000
End at: Mon, 31 Jul 2017 22:48:18 +0000
Local clock offset: -1.102 ms
Remote clock offset: 1.577 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:58:59 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 87.098 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 87.098 ms
Loss rate: 0.00%
```
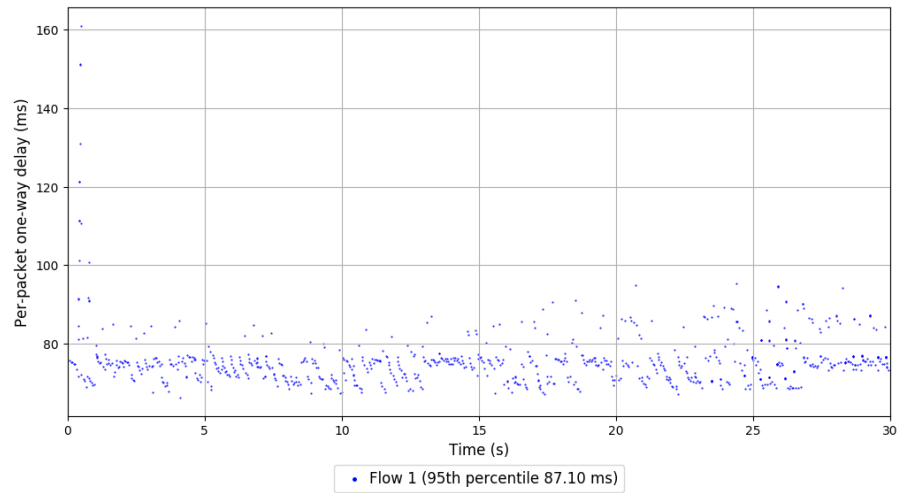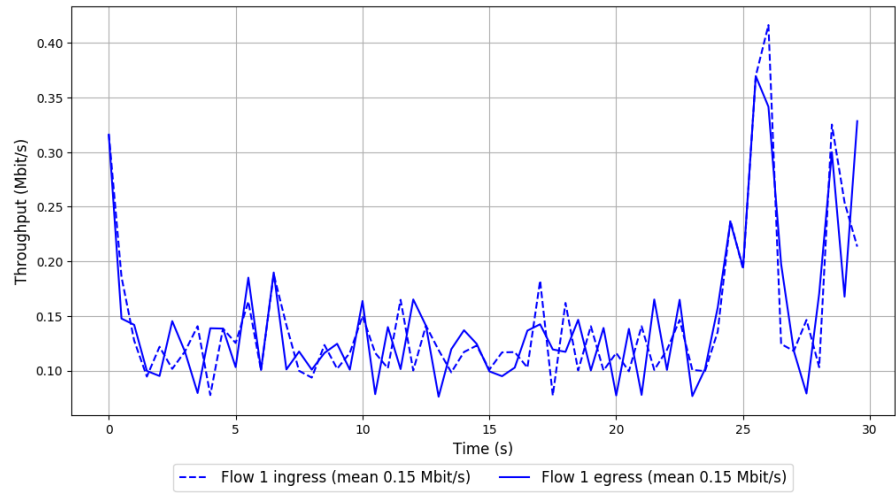
Run 3: Report of Sprout — Data Link

Flow 1 ingress (mean 0.15 Mbit/s)   Flow 1 egress (mean 0.15 Mbit/s)

Flow 1 (95th percentile 87.10 ms)

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

Start at: Mon, 31 Jul 2017 22:23:14 +0000
End at: Mon, 31 Jul 2017 22:23:44 +0000
Local clock offset: -0.906 ms
Remote clock offset: -3.378 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:59:00 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 148.494 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 148.494 ms
Loss rate: 0.00%
```
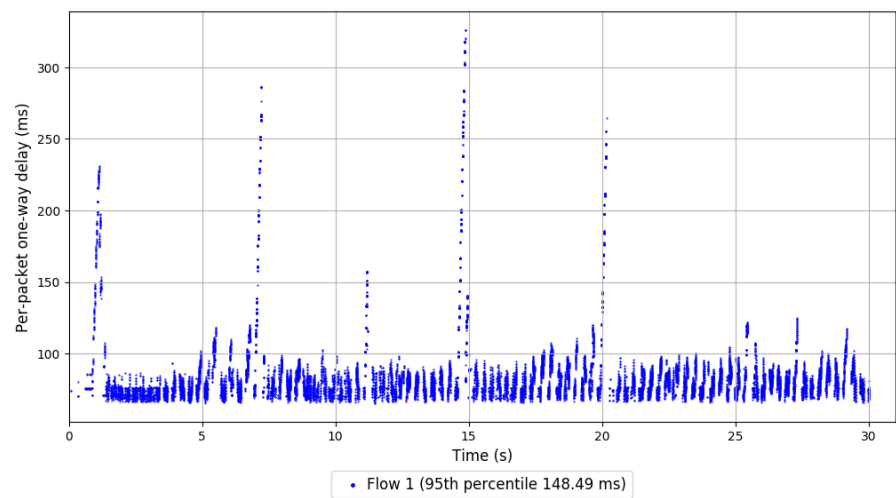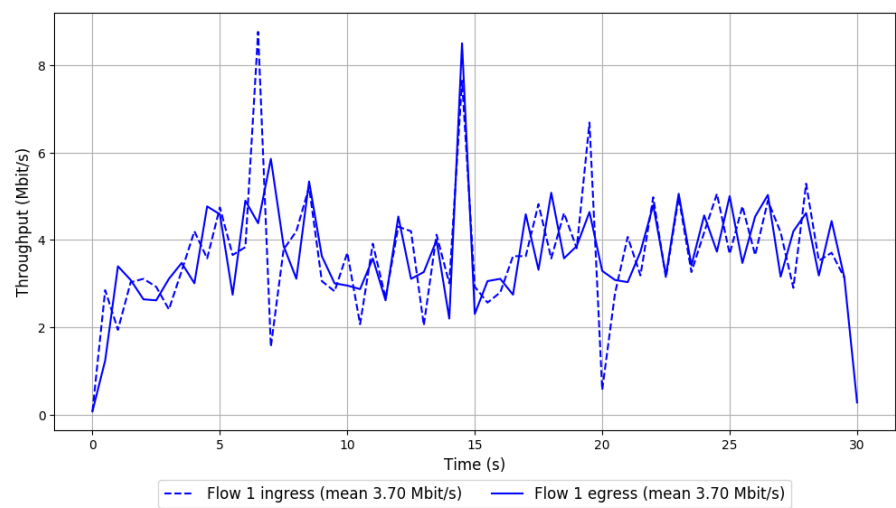
Run 1: Report of TaoVA-100x — Data Link
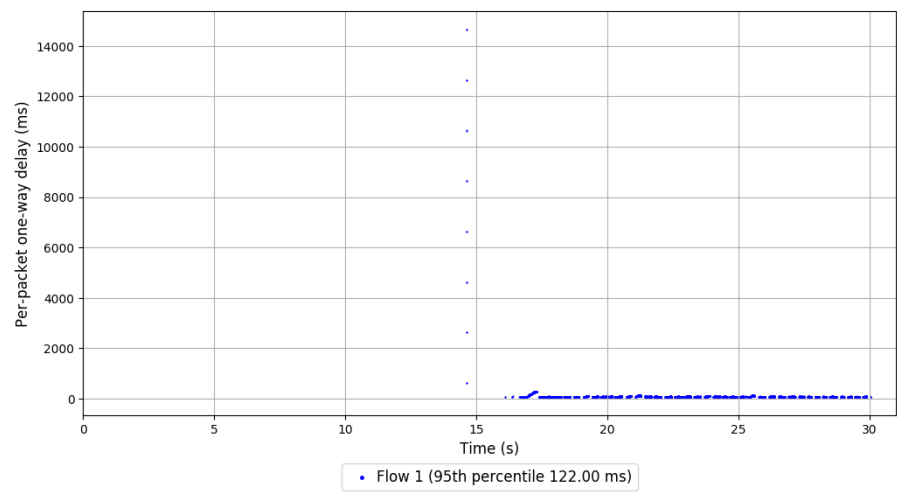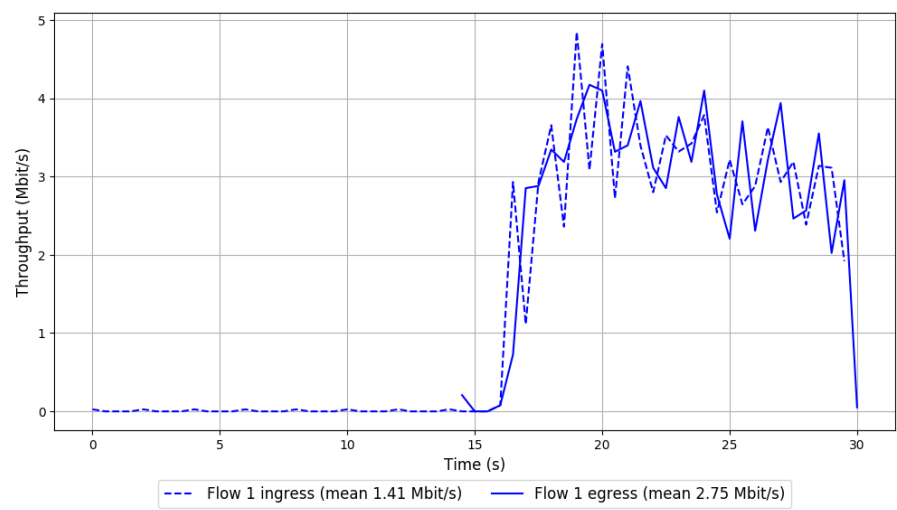
Run 2: Statistics of TaoVA-100x

Start at: Mon, 31 Jul 2017 22:41:40 +0000
End at: Mon, 31 Jul 2017 22:42:10 +0000
Local clock offset: -0.28 ms
Remote clock offset: 1.908 ms

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

Flow 1 ingress (mean 1.41 Mbit/s) — — —   Flow 1 egress (mean 2.75 Mbit/s) ———

· Flow 1 (95th percentile 122.00 ms)

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

Start at: Mon, 31 Jul 2017 23:00:05 +0000
End at: Mon, 31 Jul 2017 23:00:35 +0000
Local clock offset: -1.33 ms
Remote clock offset: 0.641 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:59:02 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.22 Mbit/s
95th percentile per-packet one-way delay: 113.603 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 3.22 Mbit/s
95th percentile per-packet one-way delay: 113.603 ms
Loss rate: 0.01%
```
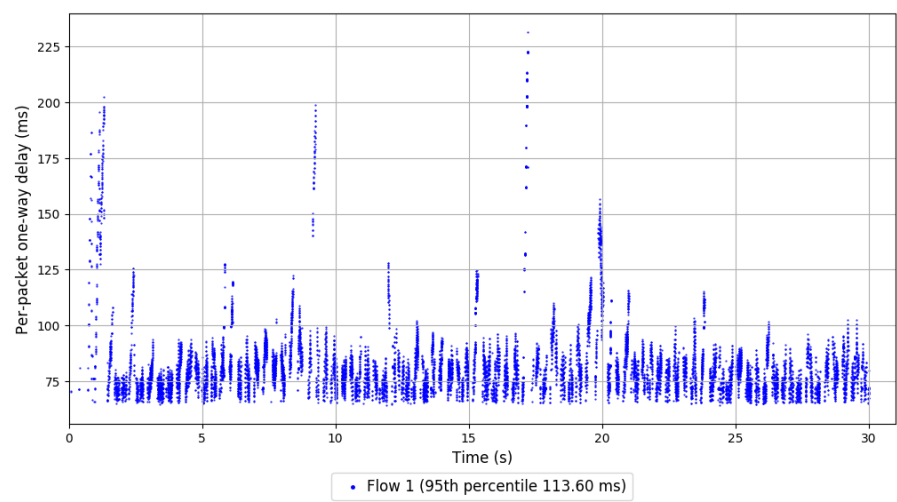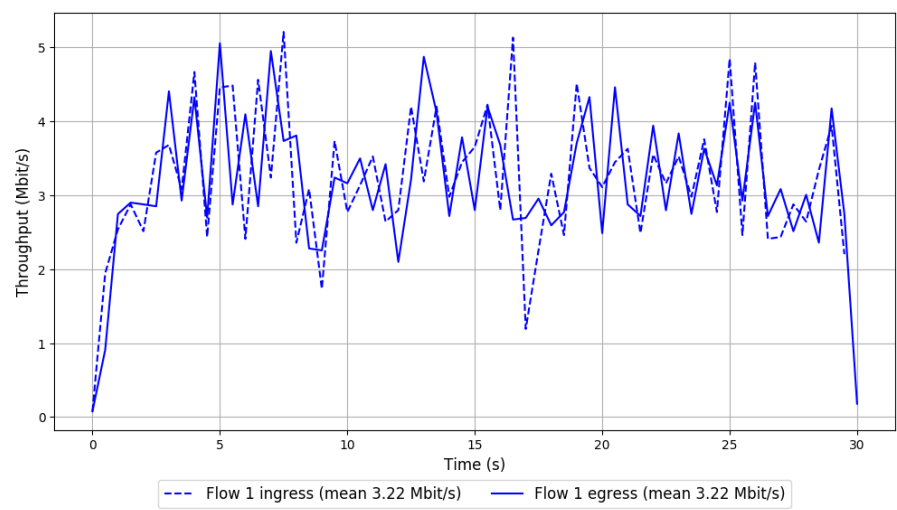
Run 3: Report of TaoVA-100x — Data Link
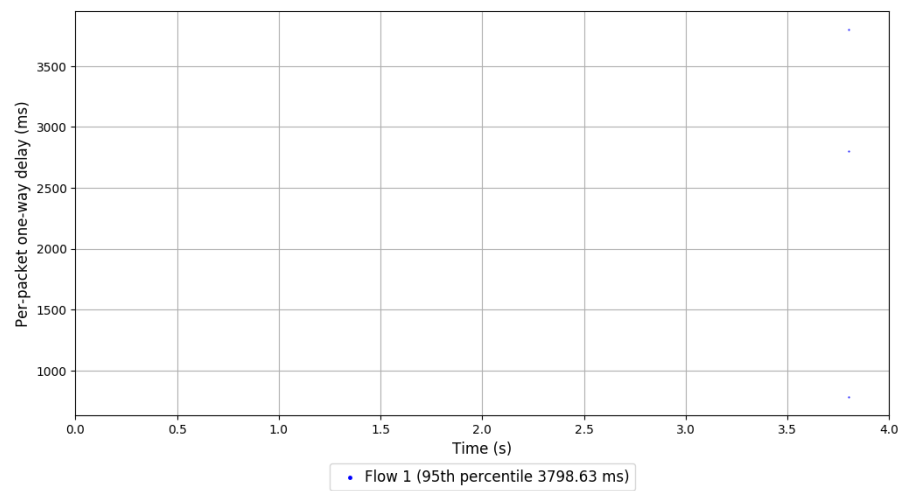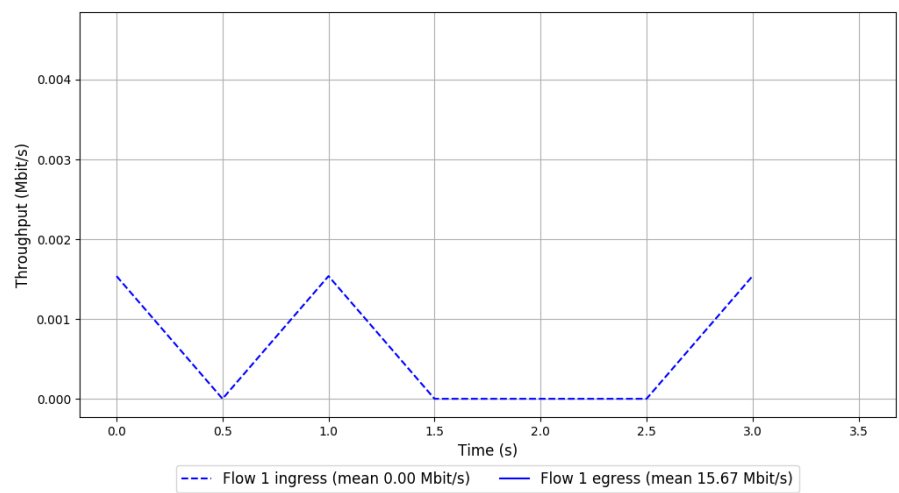
Run 1: Statistics of TCP Vegas

Start at: Mon, 31 Jul 2017 22:19:34 +0000
End at: Mon, 31 Jul 2017 22:20:04 +0000
Local clock offset: -0.886 ms
Remote clock offset: -3.43 ms

Run 1: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 0.00 Mbit/s)   Flow 1 egress (mean 15.67 Mbit/s)

Flow 1 (95th percentile 3798.63 ms)

```
Run 2: Statistics of TCP Vegas

Start at: Mon, 31 Jul 2017 22:37:59 +0000
End at: Mon, 31 Jul 2017 22:38:29 +0000
Local clock offset: -1.041 ms
Remote clock offset: 1.907 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:59:03 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.41 Mbit/s
95th percentile per-packet one-way delay: 104.215 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 3.41 Mbit/s
95th percentile per-packet one-way delay: 104.215 ms
Loss rate: 0.18%
```
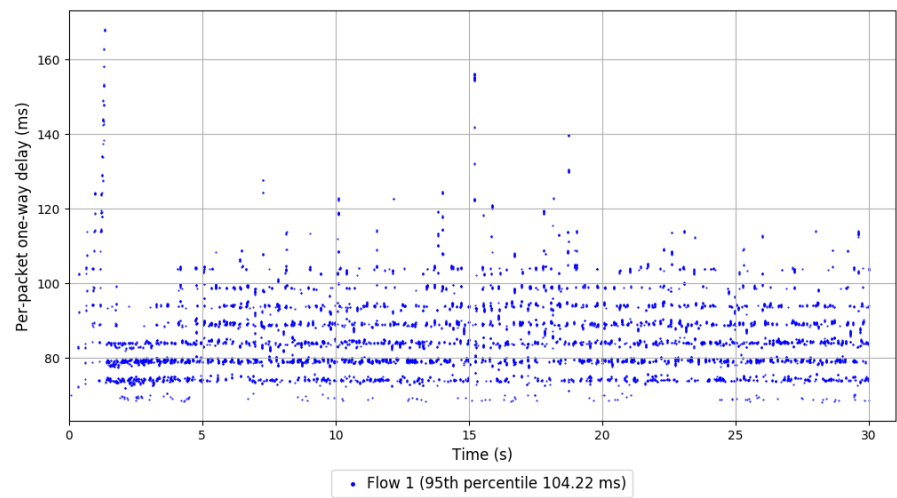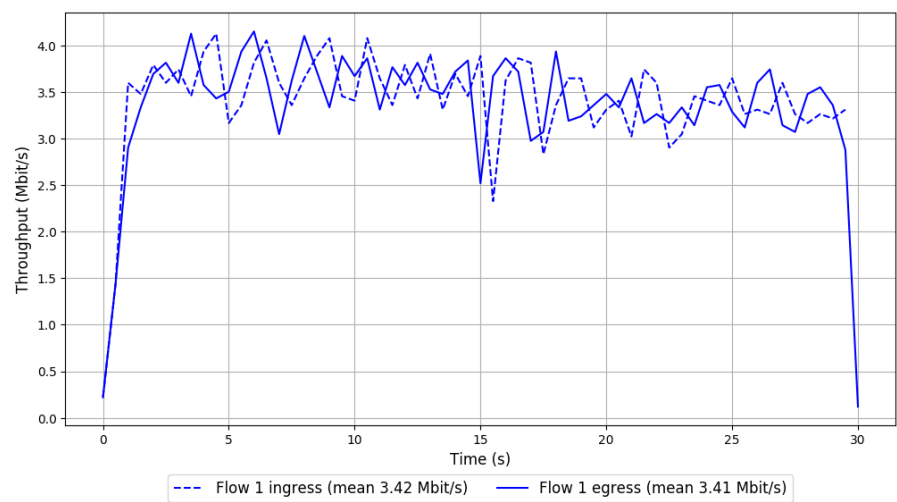
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: Mon, 31 Jul 2017 22:56:24 +0000
End at: Mon, 31 Jul 2017 22:56:54 +0000
Local clock offset: -0.33 ms
Remote clock offset: 0.74 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:59:04 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.97 Mbit/s
95th percentile per-packet one-way delay: 114.660 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 4.97 Mbit/s
95th percentile per-packet one-way delay: 114.660 ms
Loss rate: 0.09%
```
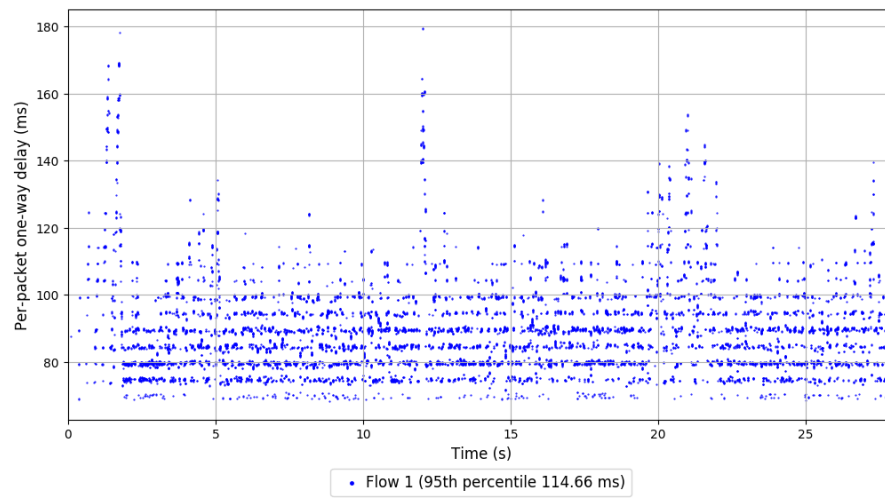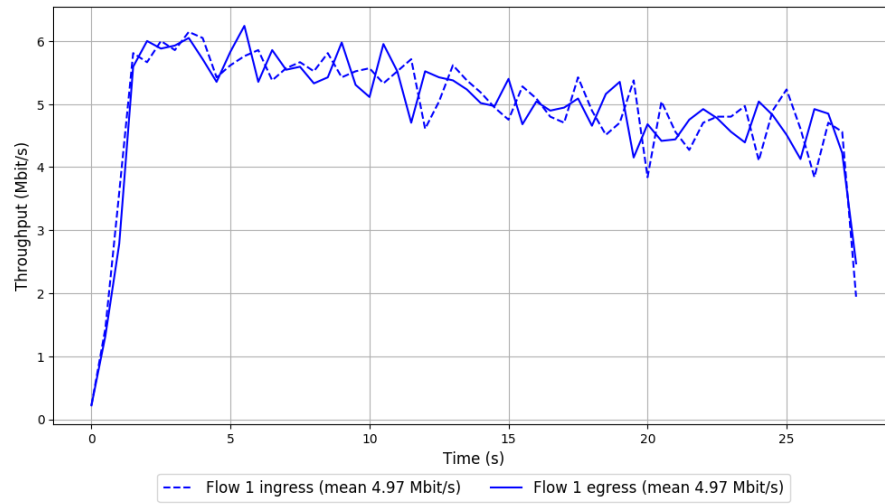
Run 3: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: Mon, 31 Jul 2017 22:15:50 +0000
End at: Mon, 31 Jul 2017 22:16:20 +0000
Local clock offset: -0.814 ms
Remote clock offset: -3.382 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:59:05 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 1776.331 ms
Loss rate: 3.07%
-- Flow 1:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 1776.331 ms
Loss rate: 3.07%
```
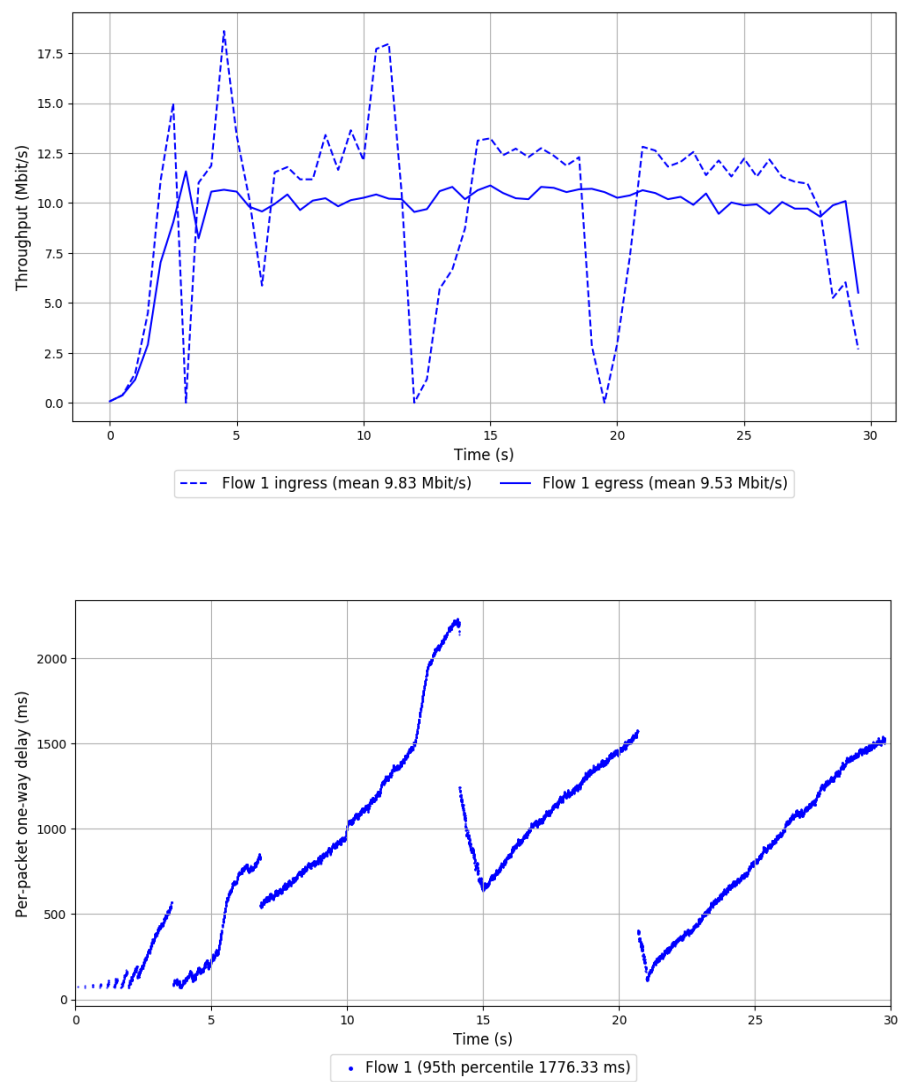
Run 1: Report of Verus — Data Link

Flow 1 ingress (mean 9.83 Mbit/s) --- Flow 1 egress (mean 9.53 Mbit/s)

• Flow 1 (95th percentile 1776.33 ms)

```
Run 2: Statistics of Verus

Start at: Mon, 31 Jul 2017 22:34:16 +0000
End at: Mon, 31 Jul 2017 22:34:46 +0000
Local clock offset: -1.043 ms
Remote clock offset: 1.253 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:59:06 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.24 Mbit/s
95th percentile per-packet one-way delay: 1129.474 ms
Loss rate: 4.86%
-- Flow 1:
Average throughput: 8.24 Mbit/s
95th percentile per-packet one-way delay: 1129.474 ms
Loss rate: 4.86%
```
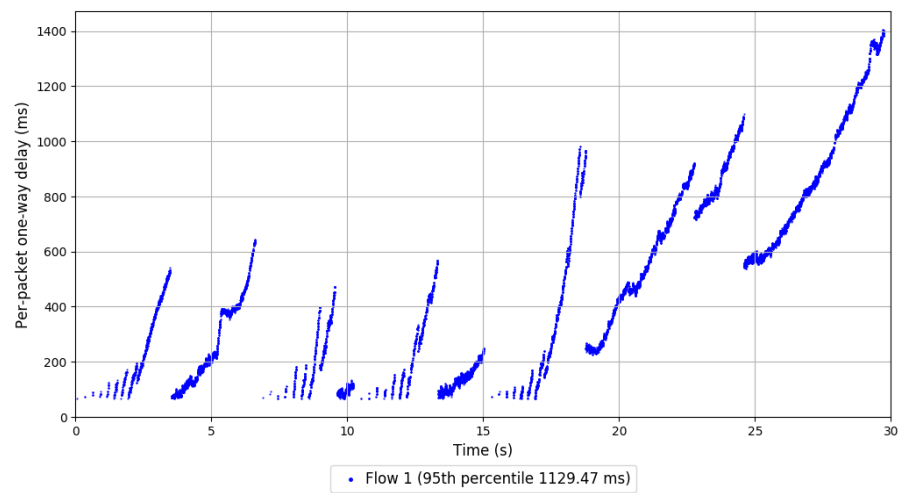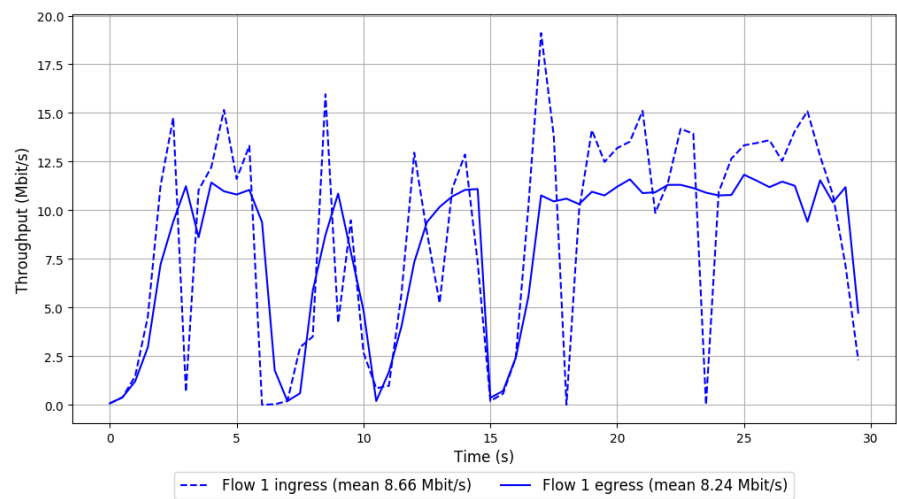
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: Mon, 31 Jul 2017 22:52:40 +0000
End at: Mon, 31 Jul 2017 22:53:11 +0000
Local clock offset: -1.282 ms
Remote clock offset: 1.013 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:59:07 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.96 Mbit/s
95th percentile per-packet one-way delay: 1663.229 ms
Loss rate: 2.44%
-- Flow 1:
Average throughput: 8.96 Mbit/s
95th percentile per-packet one-way delay: 1663.229 ms
Loss rate: 2.44%
```
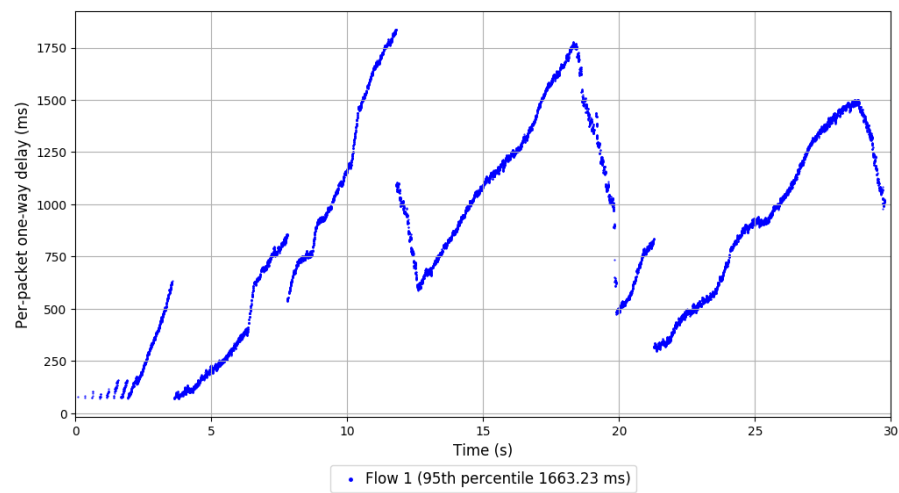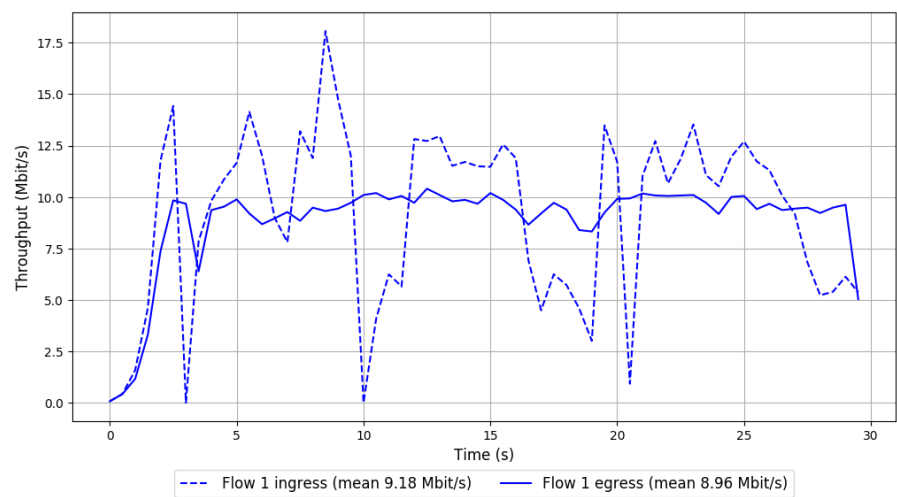
Run 3: Report of Verus — Data Link

```
Run 1: Statistics of WebRTC media

Start at: Mon, 31 Jul 2017 22:13:24 +0000
End at: Mon, 31 Jul 2017 22:13:54 +0000
Local clock offset: 0.085 ms
Remote clock offset: 2.787 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:59:07 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 92.269 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 92.269 ms
Loss rate: 0.00%
```
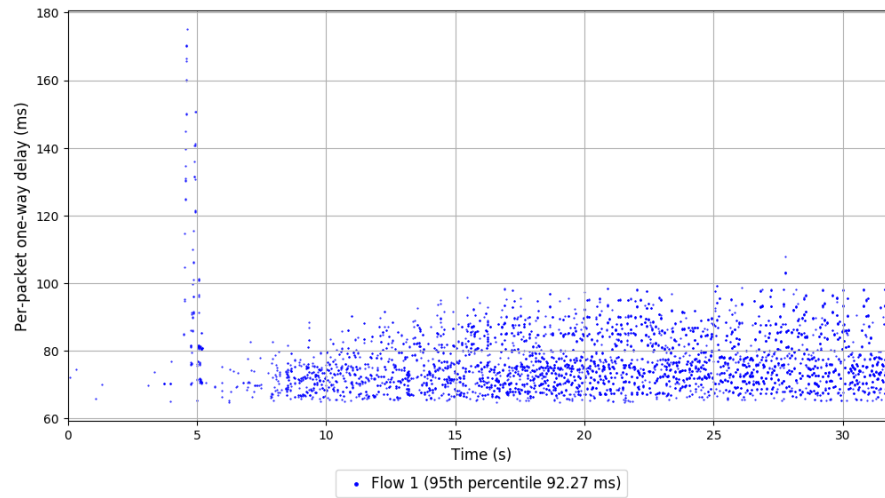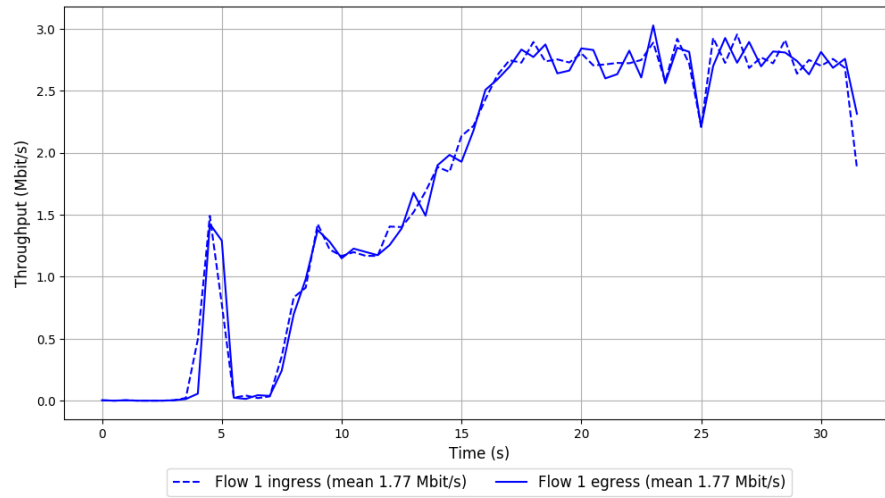
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: Mon, 31 Jul 2017 22:31:50 +0000
End at: Mon, 31 Jul 2017 22:32:20 +0000
Local clock offset: -0.135 ms
Remote clock offset: 0.054 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:59:08 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 94.062 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 94.062 ms
Loss rate: 0.11%
```
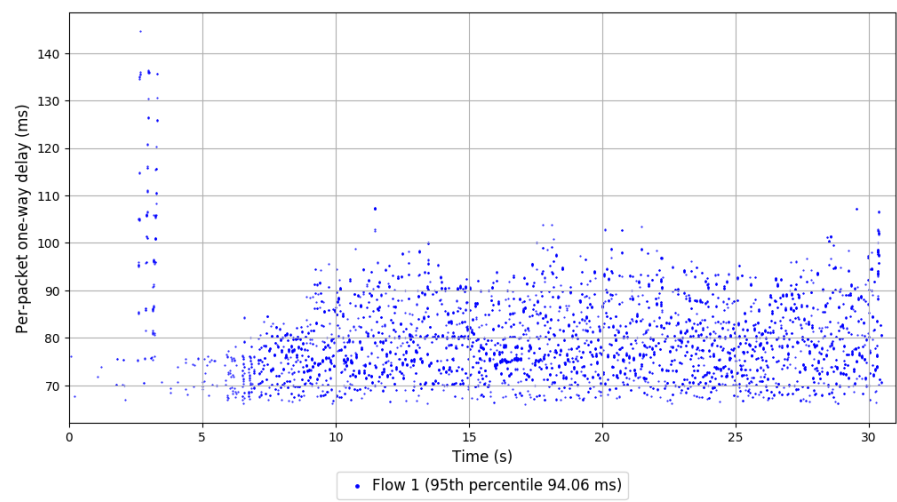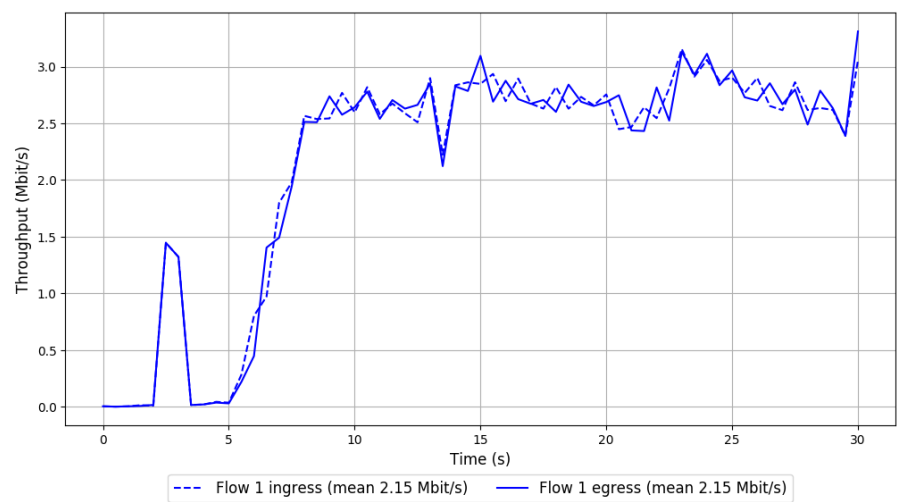
Run 2: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.15 Mbit/s)   Flow 1 egress (mean 2.15 Mbit/s)

Flow 1 (95th percentile 94.06 ms)

```
Run 3: Statistics of WebRTC media

Start at: Mon, 31 Jul 2017 22:50:14 +0000
End at: Mon, 31 Jul 2017 22:50:44 +0000
Local clock offset: -1.134 ms
Remote clock offset: 1.285 ms


# Below is generated by plot.py at Mon, 31 Jul 2017 23:59:09 +0000
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 98.133 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 98.133 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.10 Mbit/s)   Flow 1 egress (mean 2.10 Mbit/s)

Flow 1 (95th percentile 98.13 ms)