Pantheon Report

Generated at 2017-09-03 11:40:43 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

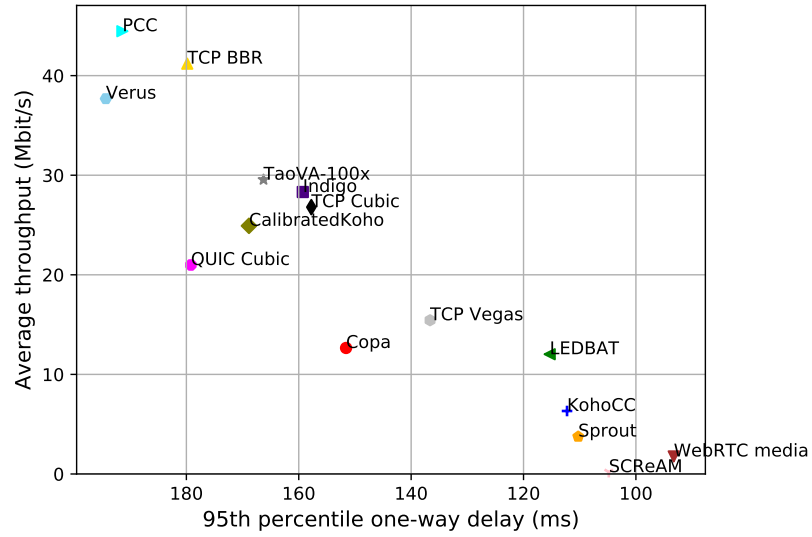Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

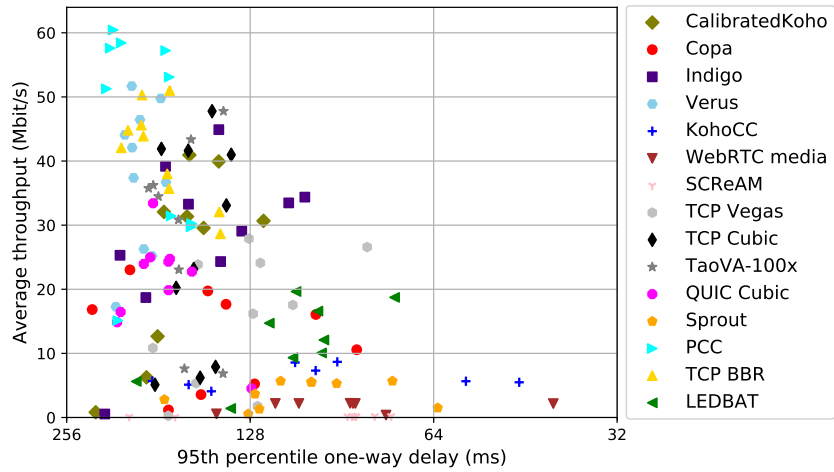NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ 2a98508c2457474d84cd2966a42b80b0bc62ecaf
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ 10192113fb6902d25c86e0e3e4c85d7a05e43d7e
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 China Ethernet to AWS Korea Ethernet, 10 runs of 30s each per scheme (mean of all runs by scheme)

test from China Ethernet to AWS Korea 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	41.20	179.84	8.38
CalibratedKoho	9	24.92	168.86	1.54
Copa	9	12.66	151.58	1.23
TCP Cubic	10	26.79	157.76	1.03
Indigo	10	28.31	159.28	1.43
KohoCC	8	6.32	112.26	0.75
LEDBAT	9	12.02	115.35	0.92
PCC	10	44.46	191.38	10.03
QUIC Cubic	10	20.99	179.20	2.33
SCReAM	10	0.19	104.83	0.71
Sprout	10	3.76	110.27	0.80
TaoVA-100x	9	29.55	166.27	1.44
TCP Vegas	10	15.44	136.64	1.44
Verus	10	37.69	194.33	6.53
WebRTC media	8	1.76	93.27	1.16

```
Run 1: Statistics of TCP BBR

Start at: 2017-09-03 05:33:41
End at: 2017-09-03 05:34:11
Local clock offset: -2.608 ms
Remote clock offset: 0.008 ms


# Below is generated by plot.py at 2017-09-03 11:36:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 42.07 Mbit/s
95th percentile per-packet one-way delay: 208.290 ms
Loss rate: 7.90%
-- Flow 1:
Average throughput: 42.07 Mbit/s
95th percentile per-packet one-way delay: 208.290 ms
Loss rate: 7.90%
```
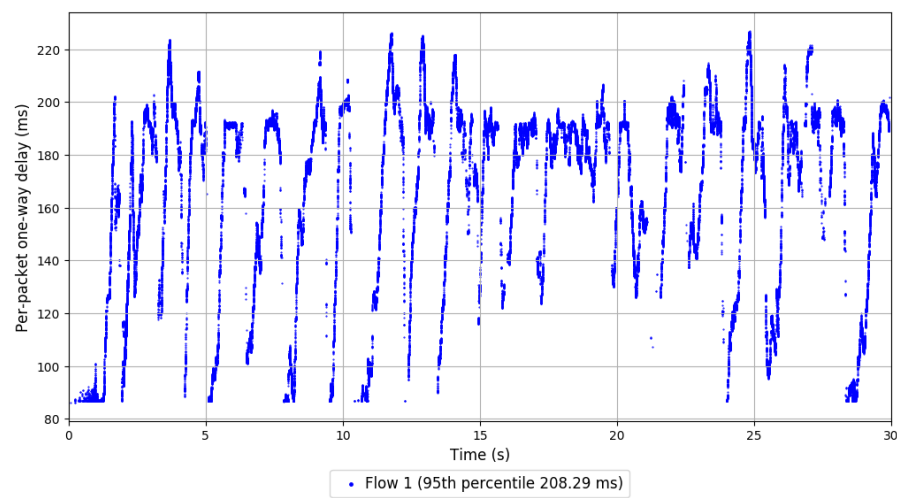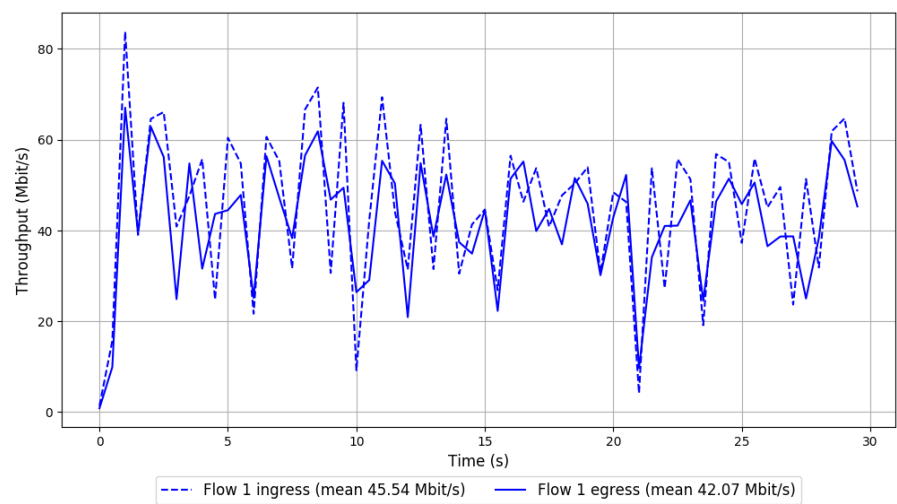
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2017-09-03 05:51:54
End at: 2017-09-03 05:52:24
Local clock offset: -2.729 ms
Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2017-09-03 11:36:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.87 Mbit/s
95th percentile per-packet one-way delay: 191.641 ms
Loss rate: 6.64%
-- Flow 1:
Average throughput: 43.87 Mbit/s
95th percentile per-packet one-way delay: 191.641 ms
Loss rate: 6.64%
```
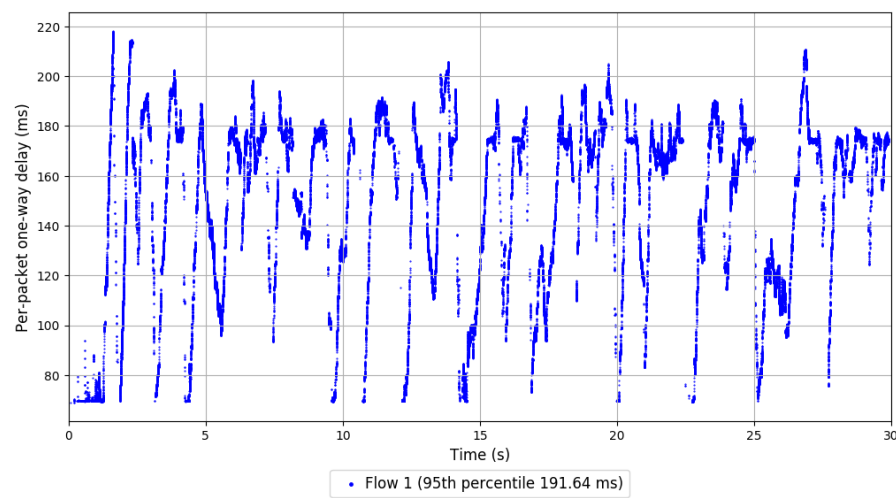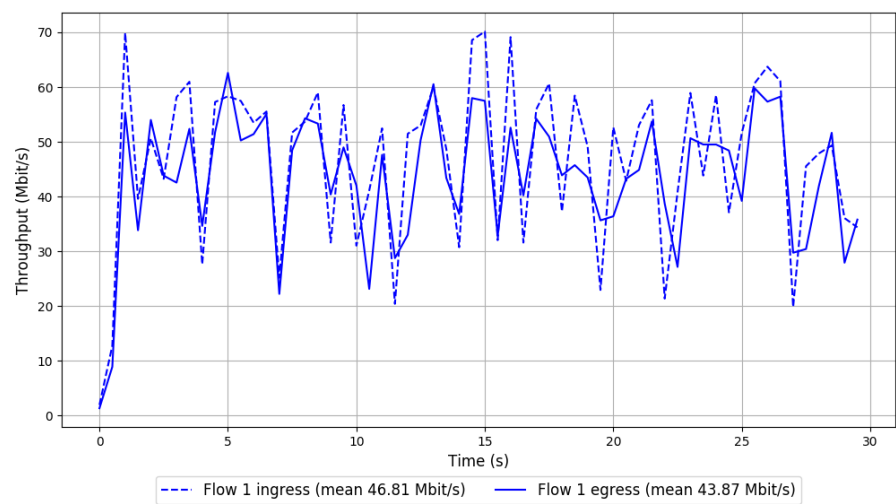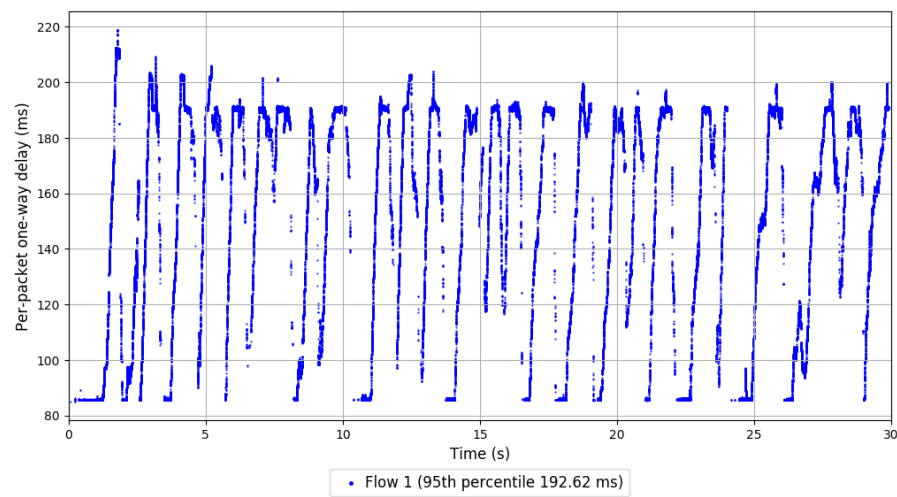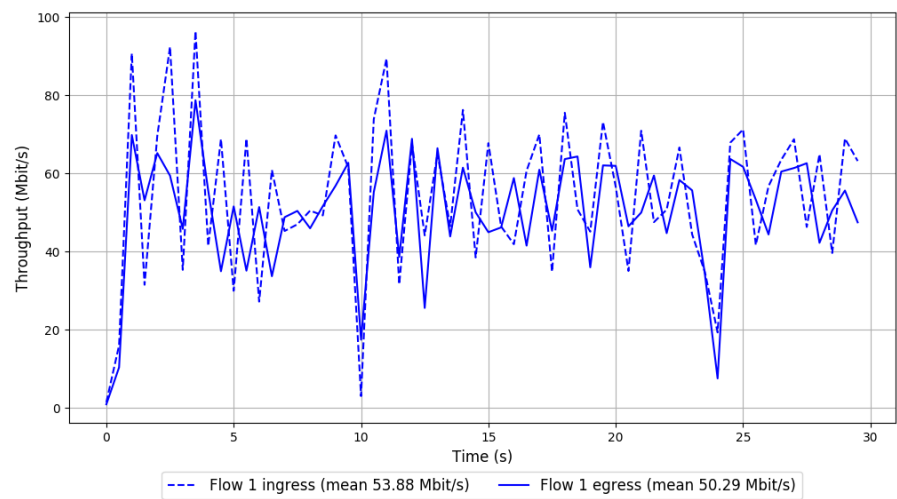
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2017-09-03 06:09:58
End at: 2017-09-03 06:10:28
Local clock offset: -3.796 ms
Remote clock offset: -0.194 ms


# Below is generated by plot.py at 2017-09-03 11:36:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.29 Mbit/s
95th percentile per-packet one-way delay: 192.622 ms
Loss rate: 7.08%
-- Flow 1:
Average throughput: 50.29 Mbit/s
95th percentile per-packet one-way delay: 192.622 ms
Loss rate: 7.08%
```
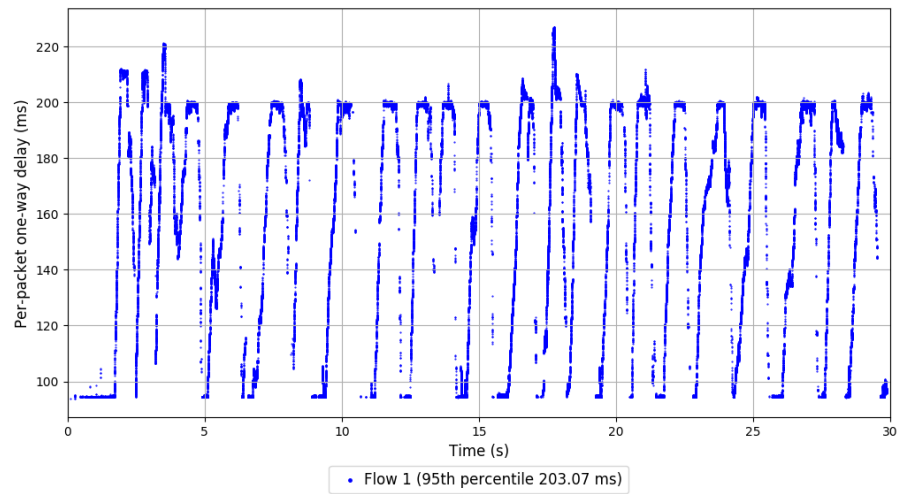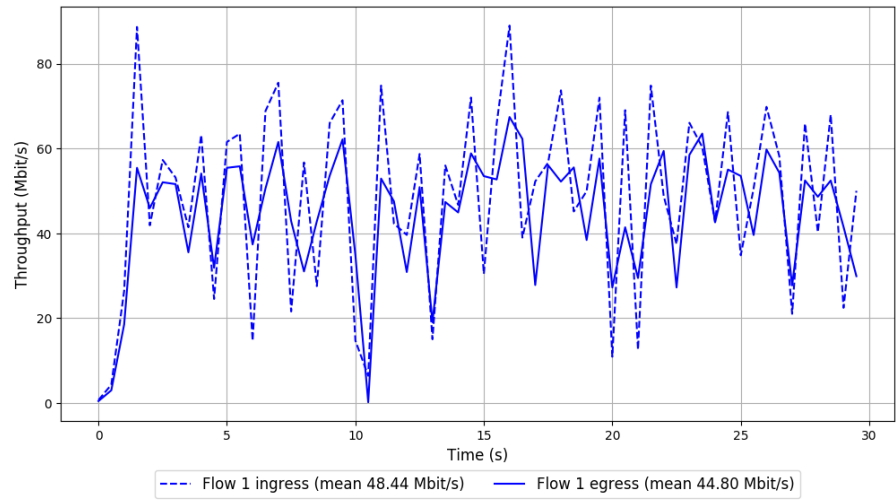
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2017-09-03 06:28:46
End at: 2017-09-03 06:29:16
Local clock offset: -3.504 ms
Remote clock offset: -25.873 ms


# Below is generated by plot.py at 2017-09-03 11:36:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.80 Mbit/s
95th percentile per-packet one-way delay: 203.073 ms
Loss rate: 8.02%
-- Flow 1:
Average throughput: 44.80 Mbit/s
95th percentile per-packet one-way delay: 203.073 ms
Loss rate: 8.02%
```
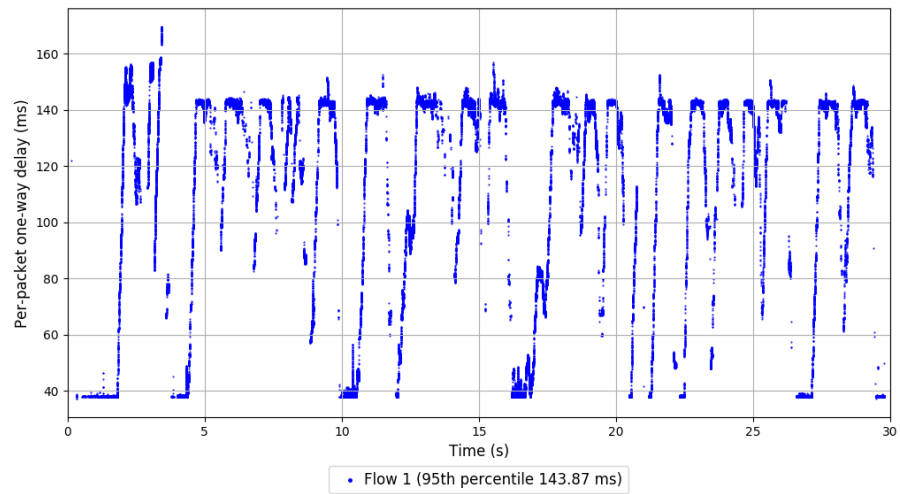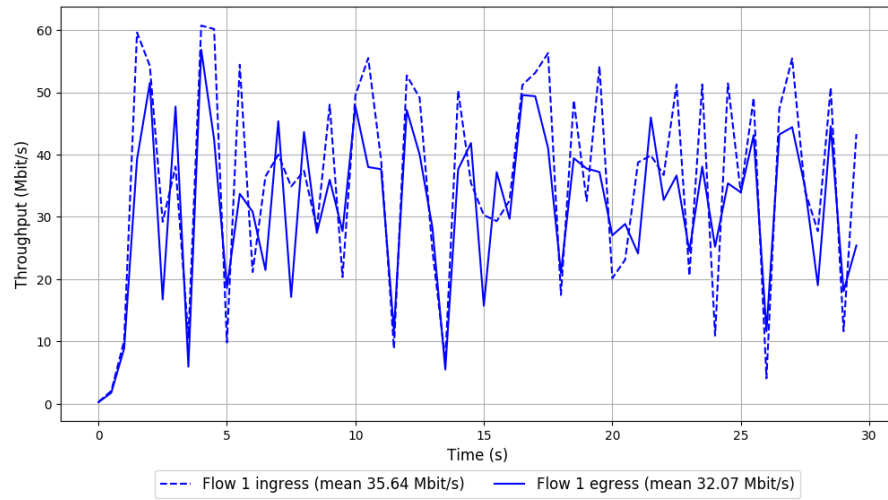
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 48.44 Mbit/s) —— Flow 1 egress (mean 44.80 Mbit/s)

• Flow 1 (95th percentile 203.07 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2017-09-03 06:47:29
End at: 2017-09-03 06:47:59
Local clock offset: -3.938 ms
Remote clock offset: 30.04 ms


# Below is generated by plot.py at 2017-09-03 11:36:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.07 Mbit/s
95th percentile per-packet one-way delay: 143.872 ms
Loss rate: 10.86%
-- Flow 1:
Average throughput: 32.07 Mbit/s
95th percentile per-packet one-way delay: 143.872 ms
Loss rate: 10.86%
```

Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 35.64 Mbit/s) ----   Flow 1 egress (mean 32.07 Mbit/s) ——
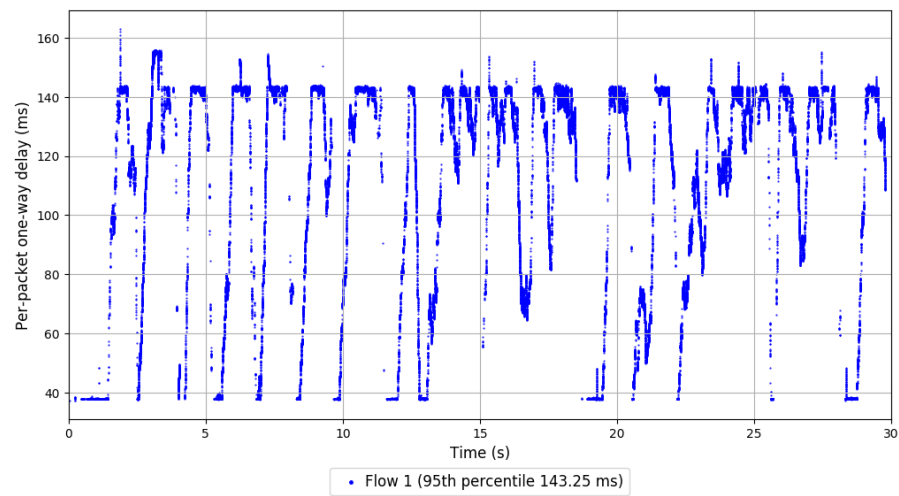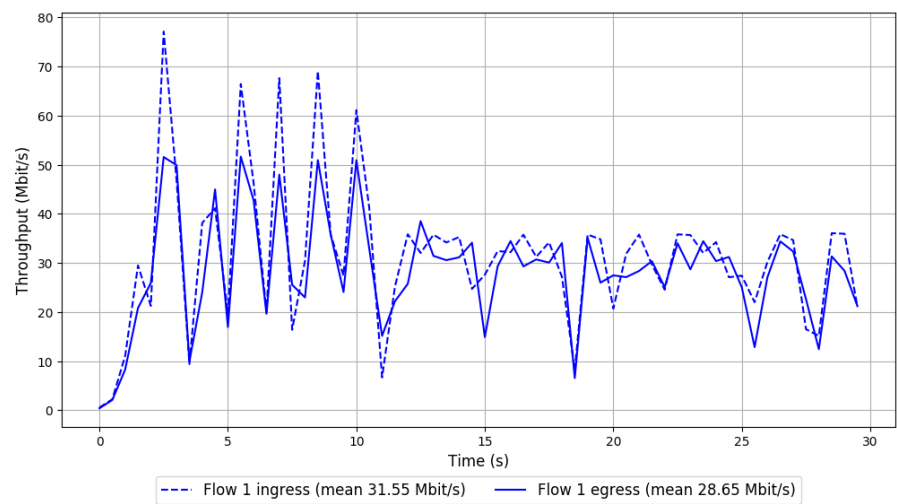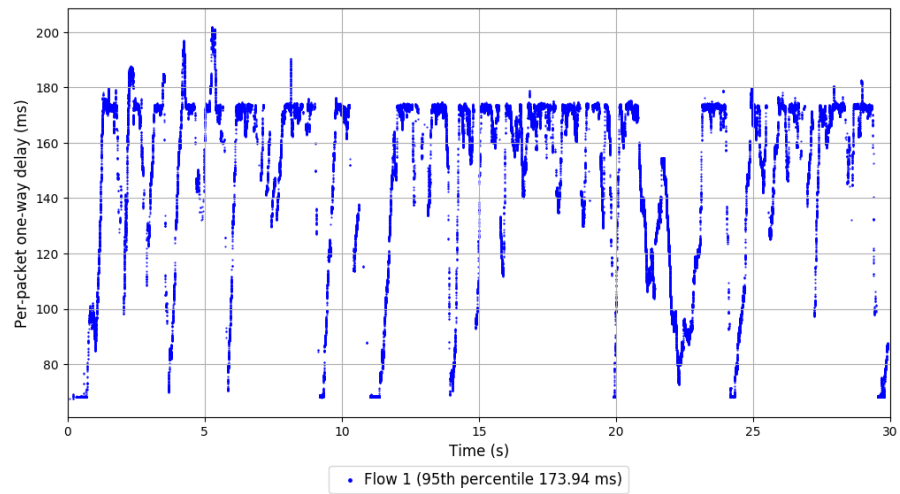

Flow 1 (95th percentile 143.87 ms)

13

```
Run 6: Statistics of TCP BBR

Start at: 2017-09-03 07:06:23
End at: 2017-09-03 07:06:53
Local clock offset: -3.694 ms
Remote clock offset: 30.187 ms

# Below is generated by plot.py at 2017-09-03 11:36:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.65 Mbit/s
95th percentile per-packet one-way delay: 143.253 ms
Loss rate: 9.83%
-- Flow 1:
Average throughput: 28.65 Mbit/s
95th percentile per-packet one-way delay: 143.253 ms
Loss rate: 9.83%
```

Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 31.55 Mbit/s) ----- Flow 1 egress (mean 28.65 Mbit/s)
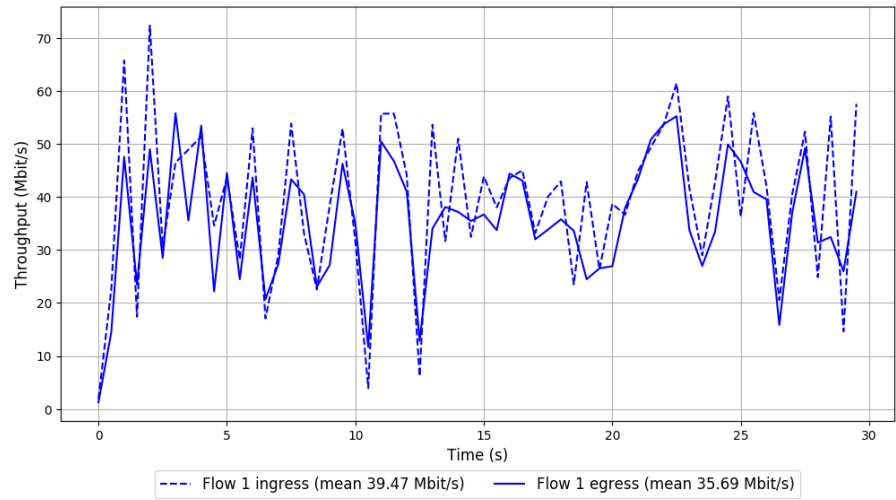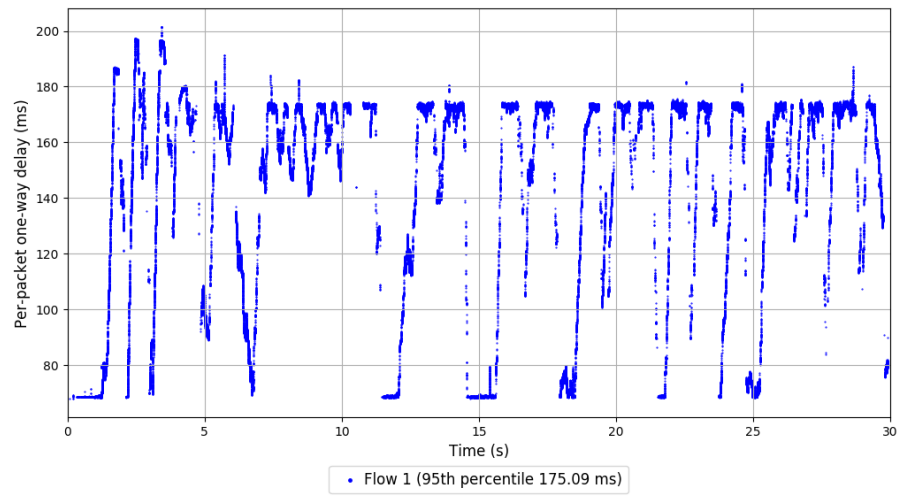

Flow 1 (95th percentile 143.25 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2017-09-03 07:24:46
End at: 2017-09-03 07:25:16
Local clock offset: -3.161 ms
Remote clock offset: -3.767 ms


# Below is generated by plot.py at 2017-09-03 11:36:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.69 Mbit/s
95th percentile per-packet one-way delay: 173.944 ms
Loss rate: 9.92%
-- Flow 1:
Average throughput: 35.69 Mbit/s
95th percentile per-packet one-way delay: 173.944 ms
Loss rate: 9.92%
```

Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 39.47 Mbit/s)   Flow 1 egress (mean 35.69 Mbit/s)
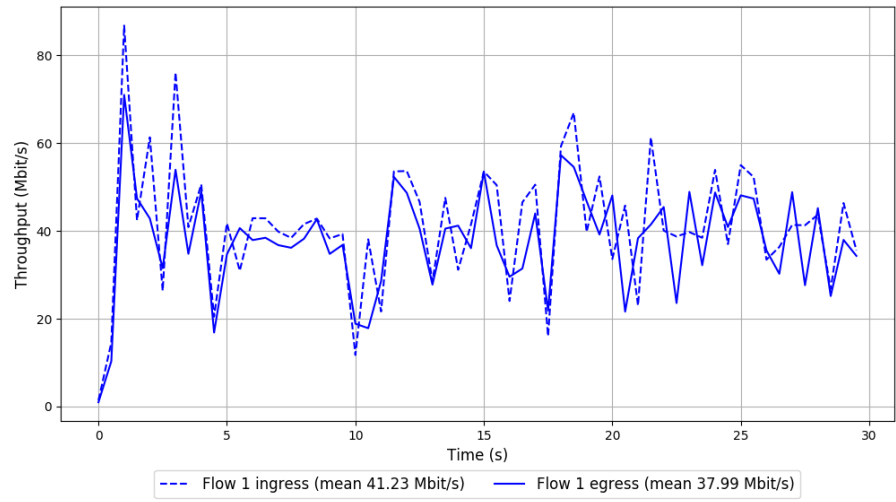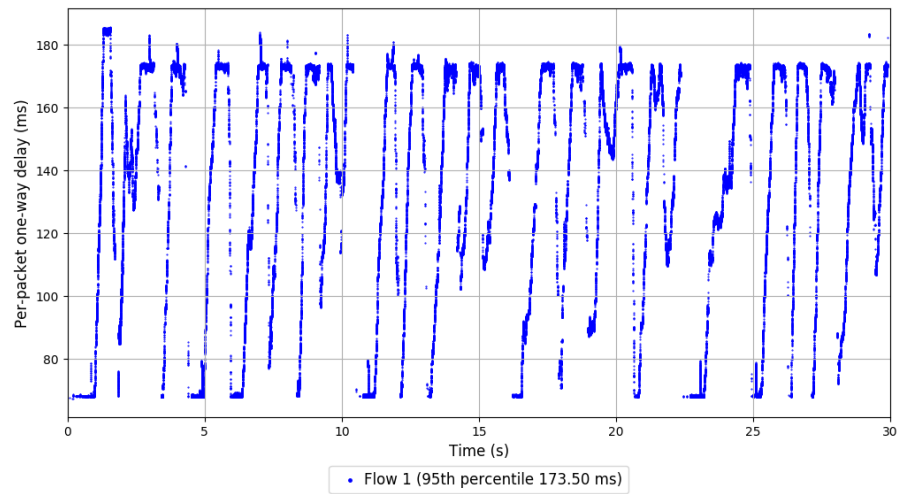

Flow 1 (95th percentile 173.94 ms)

```
Run 8: Statistics of TCP BBR

Start at: 2017-09-03 07:43:38
End at: 2017-09-03 07:44:08
Local clock offset: -2.622 ms
Remote clock offset: -3.833 ms


# Below is generated by plot.py at 2017-09-03 11:36:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.99 Mbit/s
95th percentile per-packet one-way delay: 175.087 ms
Loss rate: 8.27%
-- Flow 1:
Average throughput: 37.99 Mbit/s
95th percentile per-packet one-way delay: 175.087 ms
Loss rate: 8.27%
```

Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 41.23 Mbit/s) ----- Flow 1 egress (mean 37.99 Mbit/s)
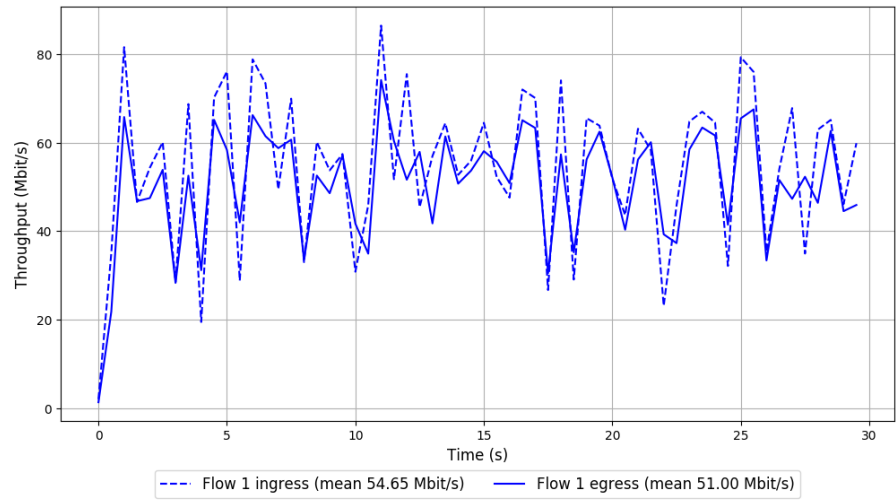

Flow 1 (95th percentile 175.09 ms)

```
Run 9: Statistics of TCP BBR

Start at: 2017-09-03 08:01:54
End at: 2017-09-03 08:02:24
Local clock offset: -2.101 ms
Remote clock offset: -4.025 ms


# Below is generated by plot.py at 2017-09-03 11:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.00 Mbit/s
95th percentile per-packet one-way delay: 173.503 ms
Loss rate: 7.05%
-- Flow 1:
Average throughput: 51.00 Mbit/s
95th percentile per-packet one-way delay: 173.503 ms
Loss rate: 7.05%
```
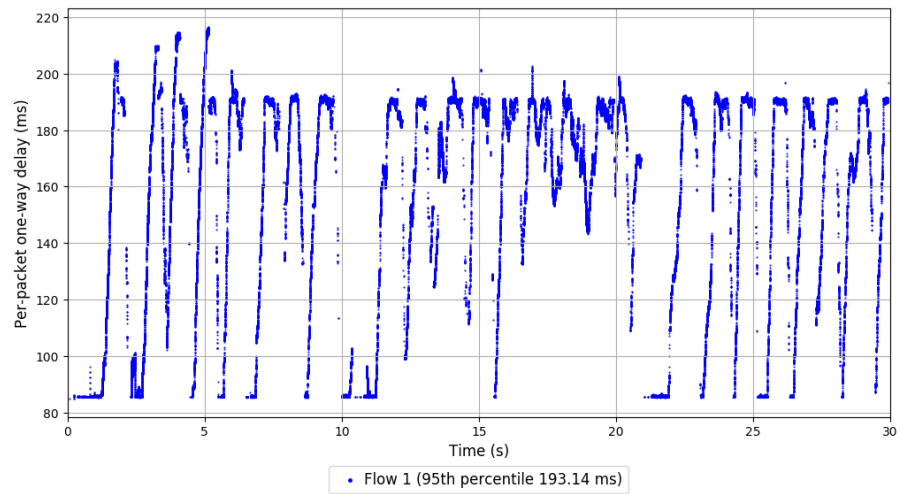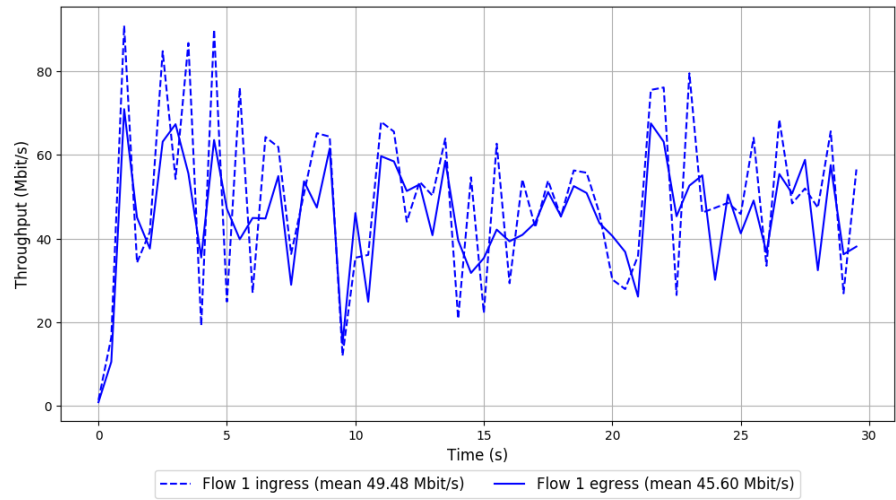
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 54.65 Mbit/s)   Flow 1 egress (mean 51.00 Mbit/s)

• Flow 1 (95th percentile 173.50 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2017-09-03 08:20:06
End at: 2017-09-03 08:20:36
Local clock offset: -2.368 ms
Remote clock offset: -3.102 ms


# Below is generated by plot.py at 2017-09-03 11:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.60 Mbit/s
95th percentile per-packet one-way delay: 193.137 ms
Loss rate: 8.21%
-- Flow 1:
Average throughput: 45.60 Mbit/s
95th percentile per-packet one-way delay: 193.137 ms
Loss rate: 8.21%
```
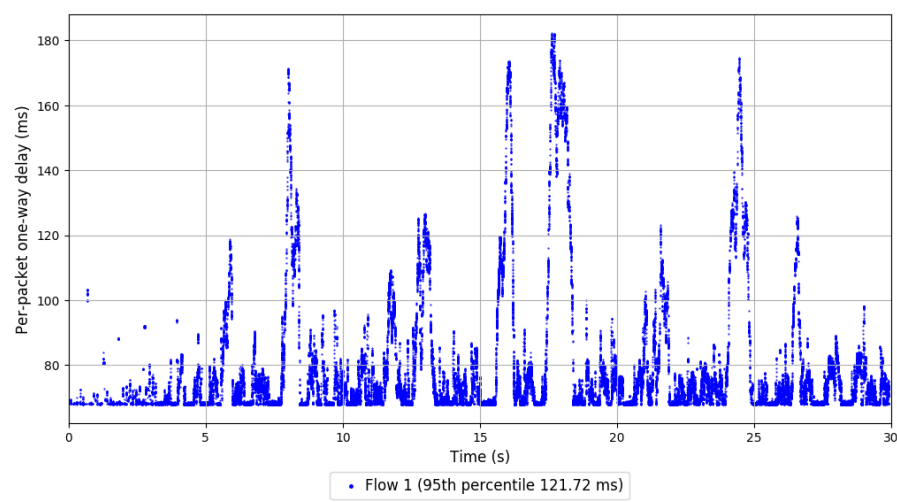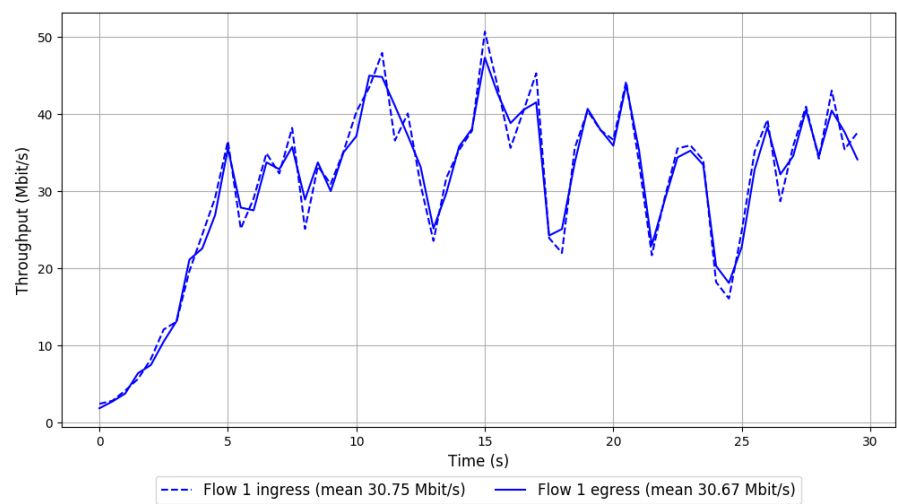
Run 10: Report of TCP BBR — Data Link

Flow 1 ingress (mean 49.48 Mbit/s)   Flow 1 egress (mean 45.60 Mbit/s)

Flow 1 (95th percentile 193.14 ms)

```
Run 1: Statistics of CalibratedKoho

Start at: 2017-09-03 05:25:18
End at: 2017-09-03 05:25:48
Local clock offset: -3.816 ms
Remote clock offset: 0.053 ms


# Below is generated by plot.py at 2017-09-03 11:36:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.67 Mbit/s
95th percentile per-packet one-way delay: 121.715 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 30.67 Mbit/s
95th percentile per-packet one-way delay: 121.715 ms
Loss rate: 0.65%
```

Run 1: Report of CalibratedKoho — Data Link

```
Run 2: Statistics of CalibratedKoho

Start at: 2017-09-03 05:43:23
End at: 2017-09-03 05:43:53
Local clock offset: -4.279 ms
Remote clock offset: 0.004 ms


# Below is generated by plot.py at 2017-09-03 11:36:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.94 Mbit/s
95th percentile per-packet one-way delay: 144.132 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 39.94 Mbit/s
95th percentile per-packet one-way delay: 144.132 ms
Loss rate: 0.56%
```
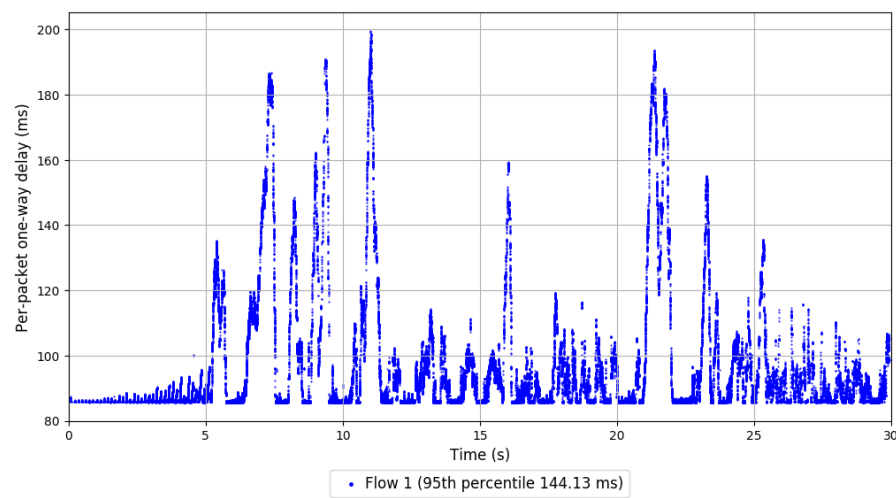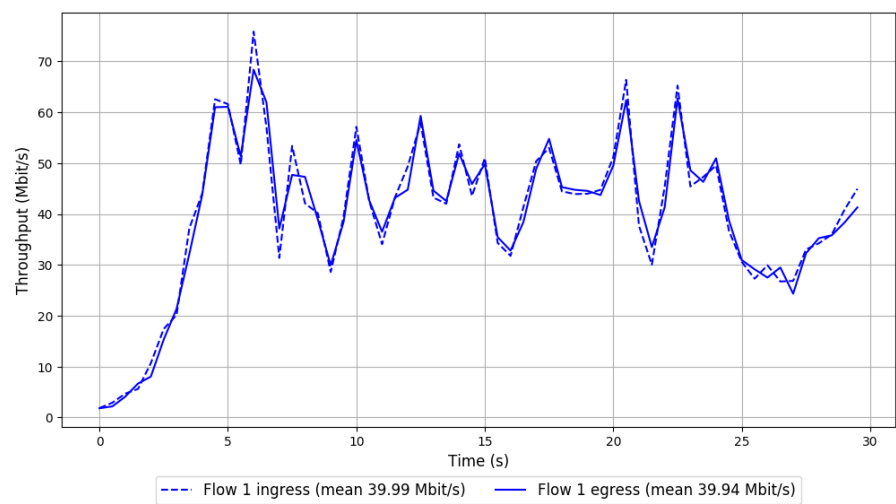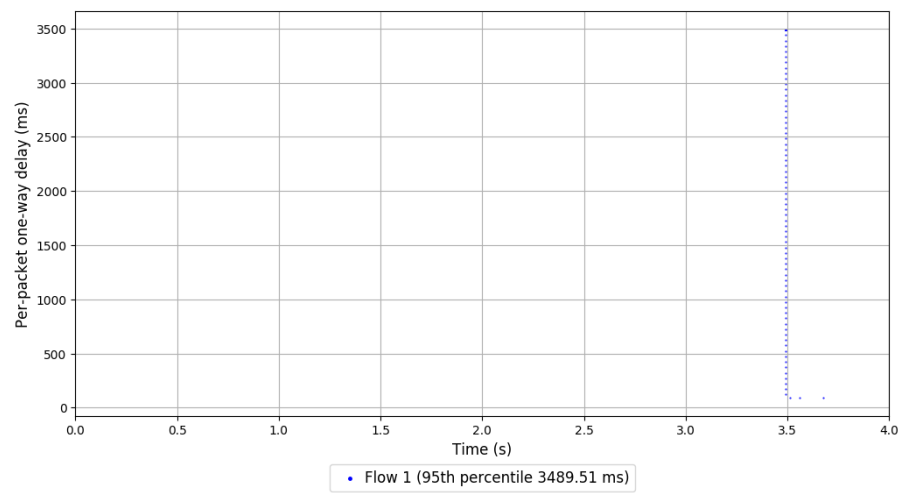
Run 2: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 39.99 Mbit/s) — — — —   Flow 1 egress (mean 39.94 Mbit/s) ———

• Flow 1 (95th percentile 144.13 ms)
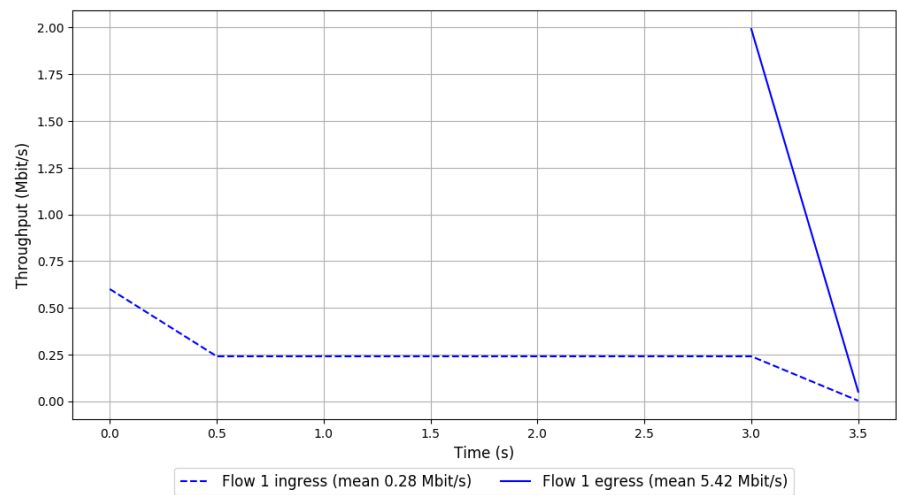
```
Run 3: Statistics of CalibratedKoho

Start at: 2017-09-03 06:01:32
End at: 2017-09-03 06:02:02
Local clock offset: 20.155 ms
Remote clock offset: -0.288 ms
```
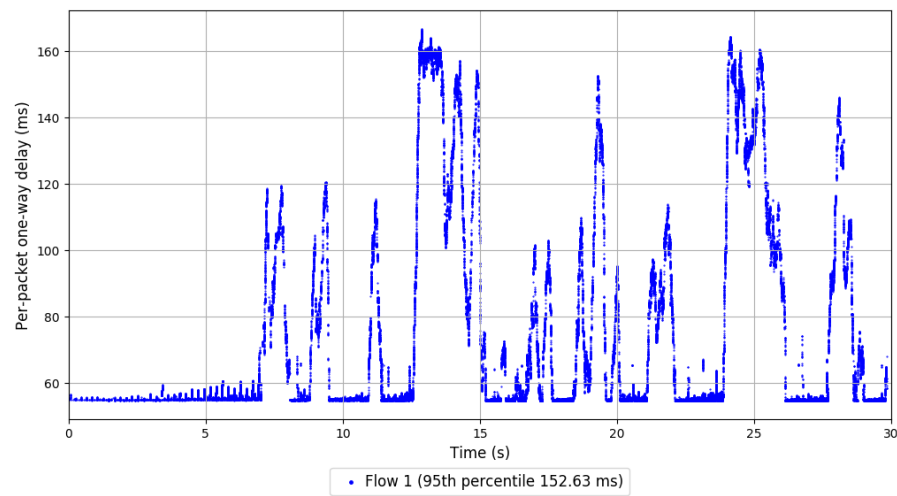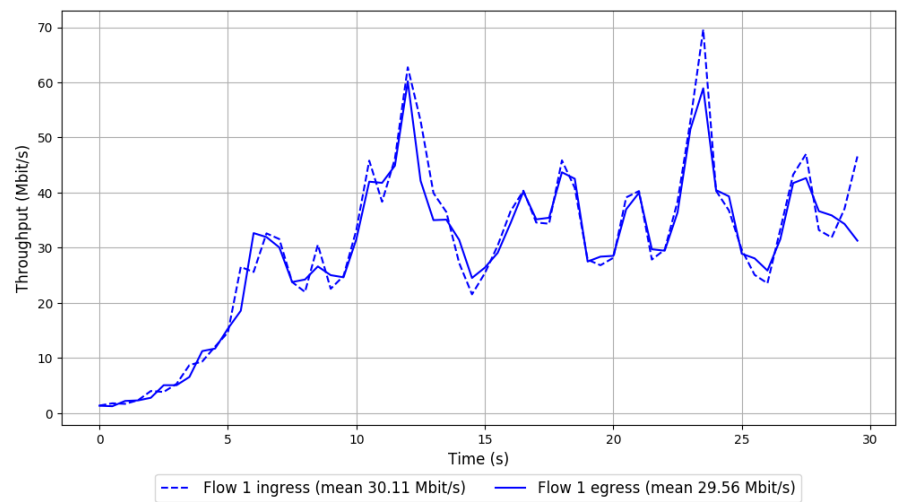
Run 3: Report of CalibratedKoho — Data Link

```
Run 4: Statistics of CalibratedKoho

Start at: 2017-09-03 06:19:56
End at: 2017-09-03 06:20:26
Local clock offset: -3.51 ms
Remote clock offset: 30.245 ms


# Below is generated by plot.py at 2017-09-03 11:36:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 29.56 Mbit/s
95th percentile per-packet one-way delay: 152.628 ms
Loss rate: 2.47%
-- Flow 1:
Average throughput: 29.56 Mbit/s
95th percentile per-packet one-way delay: 152.628 ms
Loss rate: 2.47%
```
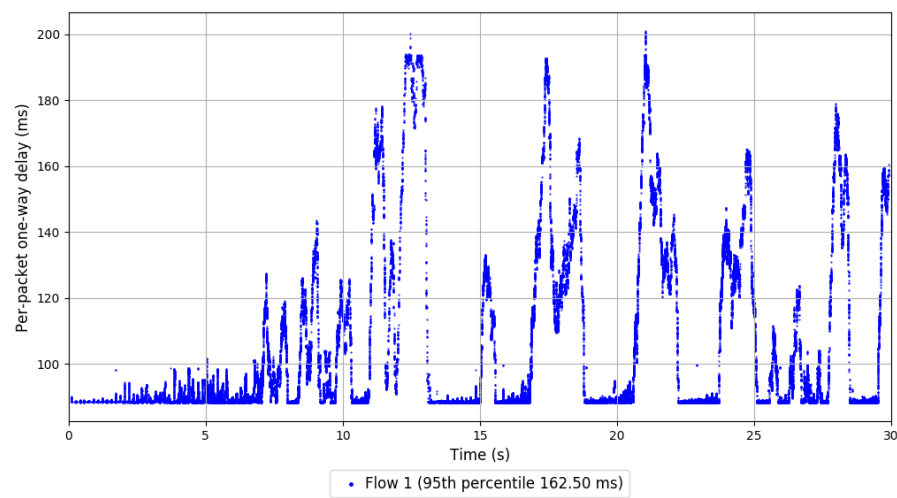
Run 4: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 30.11 Mbit/s)   Flow 1 egress (mean 29.56 Mbit/s)
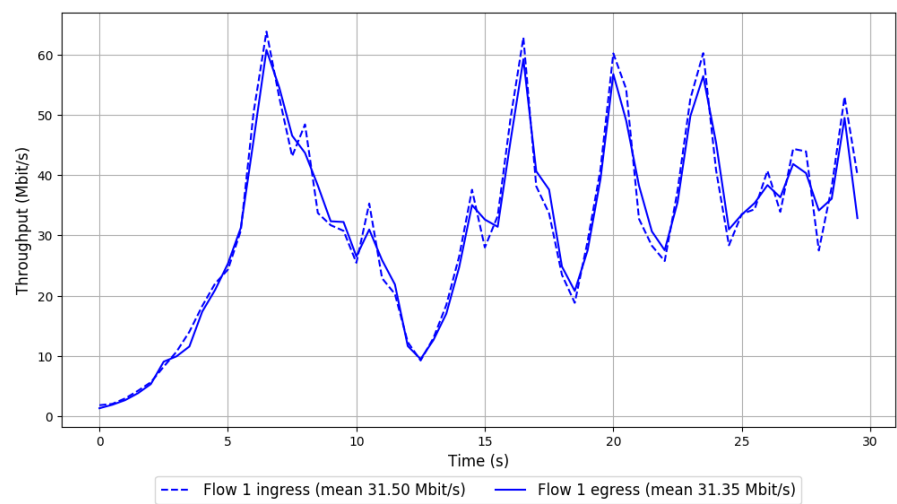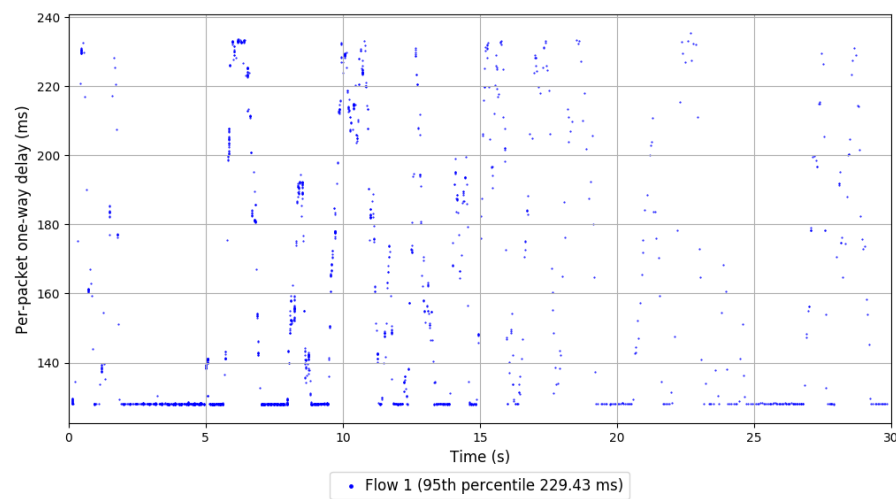

Flow 1 (95th percentile 152.63 ms)

```
Run 5: Statistics of CalibratedKoho

Start at: 2017-09-03 06:38:43
End at: 2017-09-03 06:39:13
Local clock offset: -3.774 ms
Remote clock offset: -20.275 ms


# Below is generated by plot.py at 2017-09-03 11:36:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.35 Mbit/s
95th percentile per-packet one-way delay: 162.496 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 31.35 Mbit/s
95th percentile per-packet one-way delay: 162.496 ms
Loss rate: 1.05%
```

Run 5: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 31.50 Mbit/s) — Flow 1 egress (mean 31.35 Mbit/s)
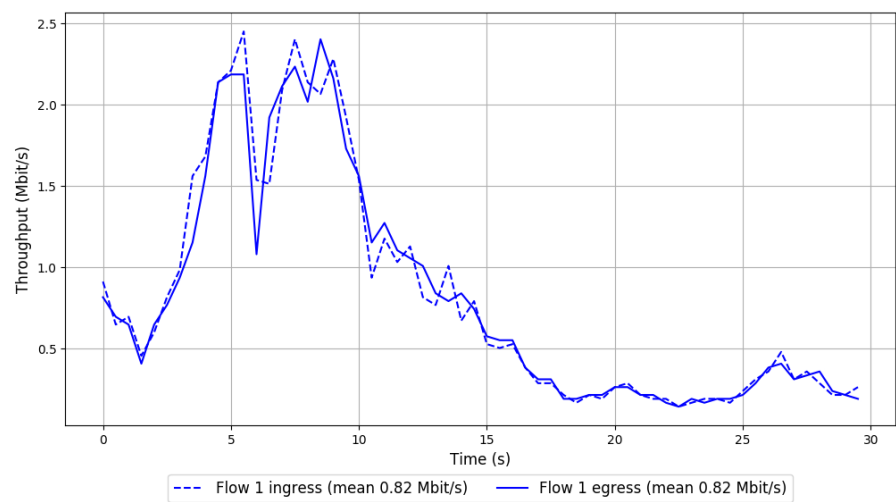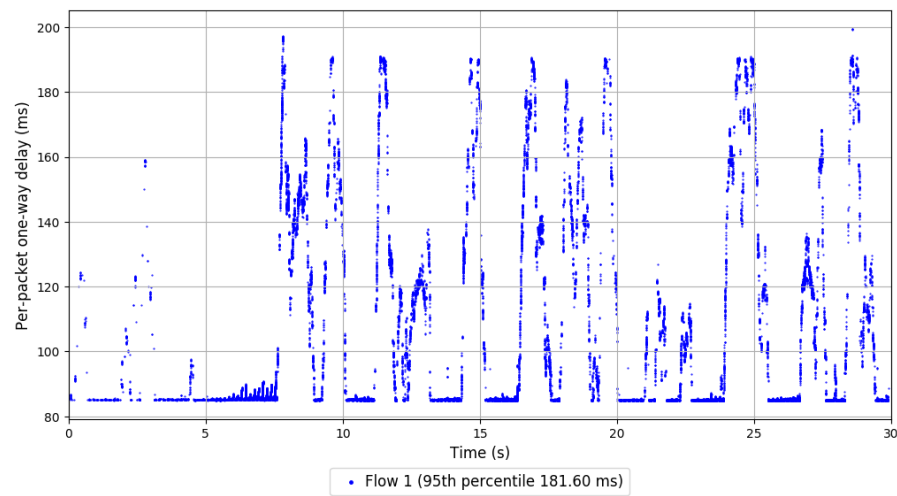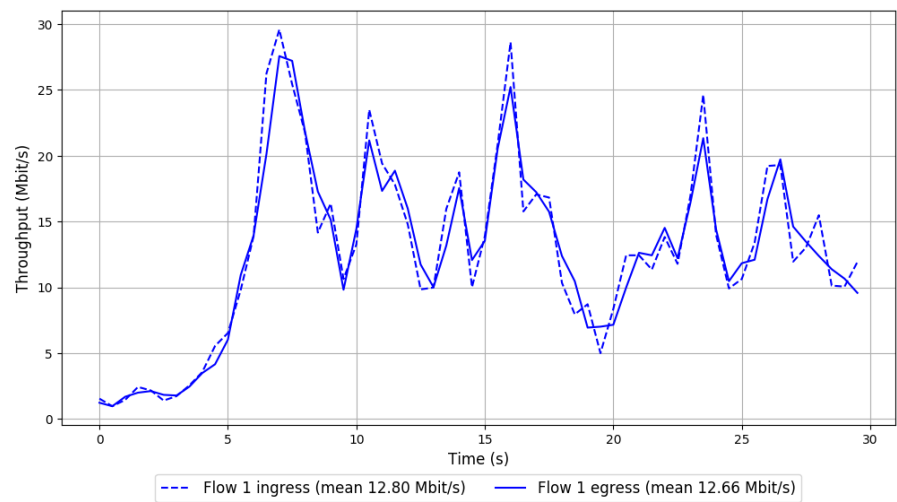

Flow 1 (95th percentile 162.50 ms)

```
Run 6: Statistics of CalibratedKoho

Start at: 2017-09-03 06:57:40
End at: 2017-09-03 06:58:10
Local clock offset: -3.981 ms
Remote clock offset: -42.663 ms


# Below is generated by plot.py at 2017-09-03 11:36:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.82 Mbit/s
95th percentile per-packet one-way delay: 229.434 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 0.82 Mbit/s
95th percentile per-packet one-way delay: 229.434 ms
Loss rate: 1.41%
```

Run 6: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 0.82 Mbit/s)   Flow 1 egress (mean 0.82 Mbit/s)
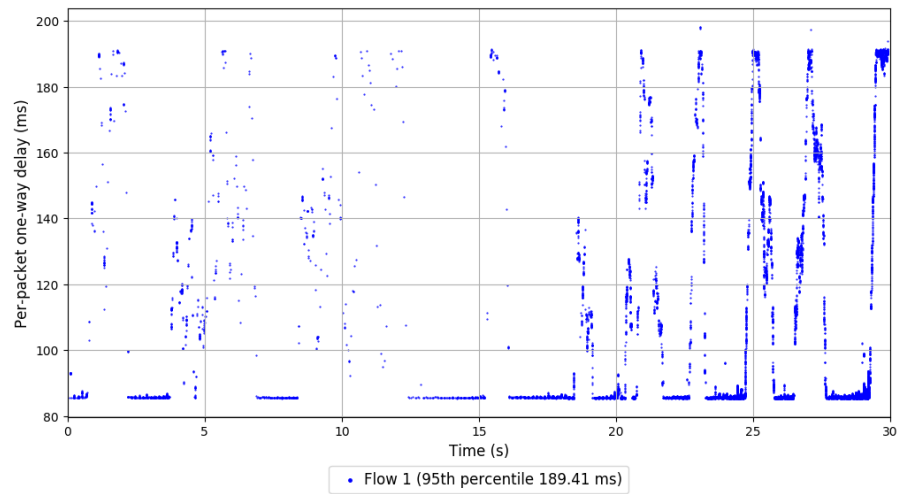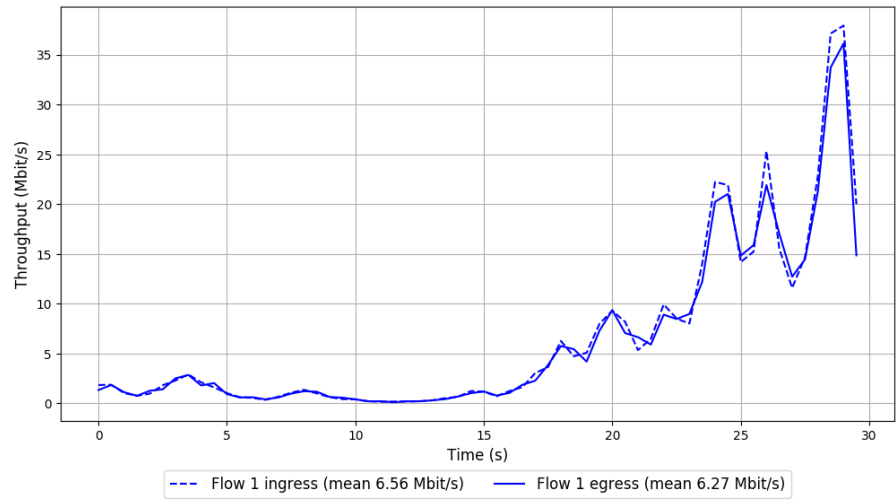

Flow 1 (95th percentile 229.43 ms)

```
Run 7: Statistics of CalibratedKoho

Start at: 2017-09-03 07:16:22
End at: 2017-09-03 07:16:52
Local clock offset: -3.507 ms
Remote clock offset: -1.885 ms


# Below is generated by plot.py at 2017-09-03 11:36:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.66 Mbit/s
95th percentile per-packet one-way delay: 181.600 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 12.66 Mbit/s
95th percentile per-packet one-way delay: 181.600 ms
Loss rate: 1.53%
```

Run 7: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 12.80 Mbit/s) --- Flow 1 egress (mean 12.66 Mbit/s)
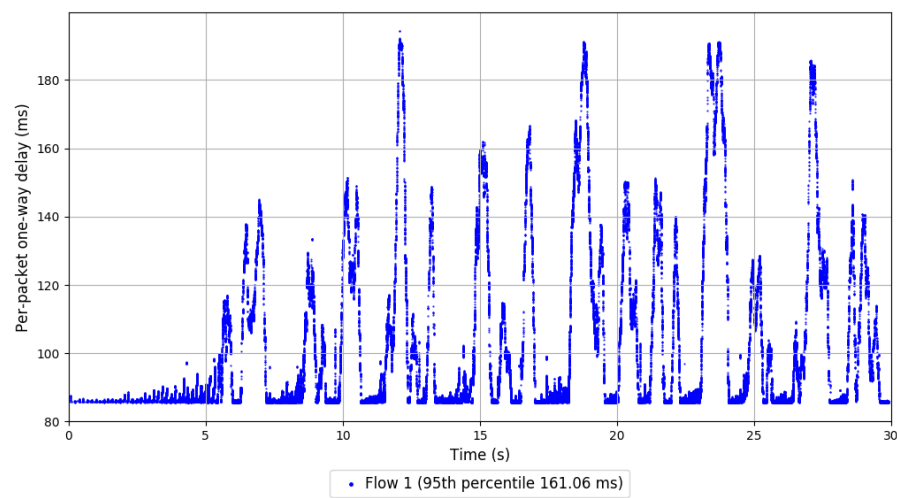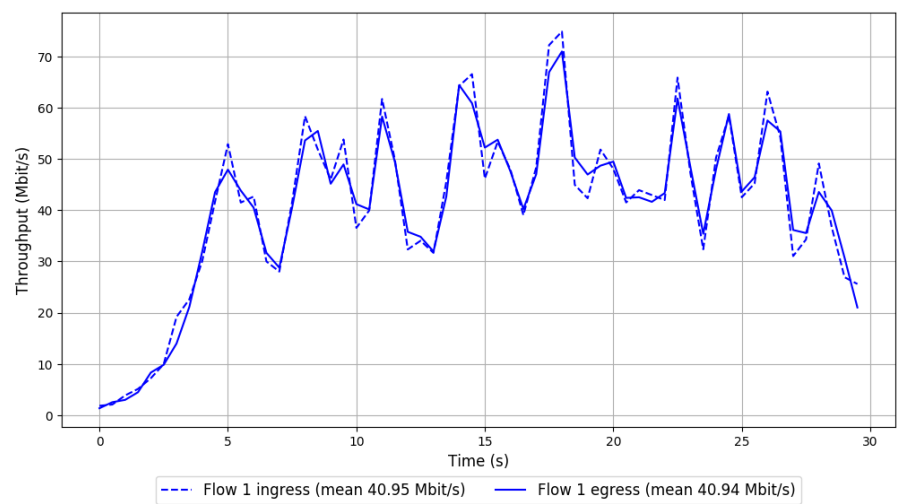

Flow 1 (95th percentile 181.60 ms)

```
Run 8: Statistics of CalibratedKoho

Start at: 2017-09-03 07:35:03
End at: 2017-09-03 07:35:33
Local clock offset: -2.856 ms
Remote clock offset: -3.733 ms


# Below is generated by plot.py at 2017-09-03 11:36:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 189.408 ms
Loss rate: 4.85%
-- Flow 1:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 189.408 ms
Loss rate: 4.85%
```
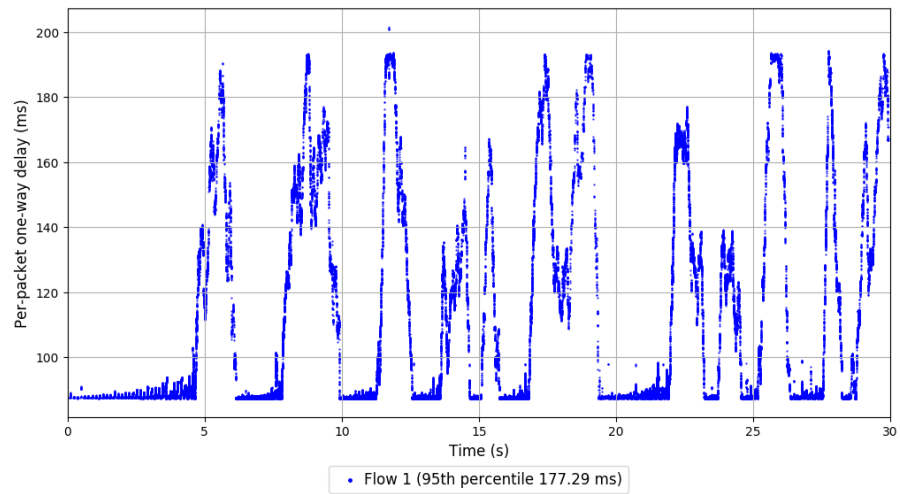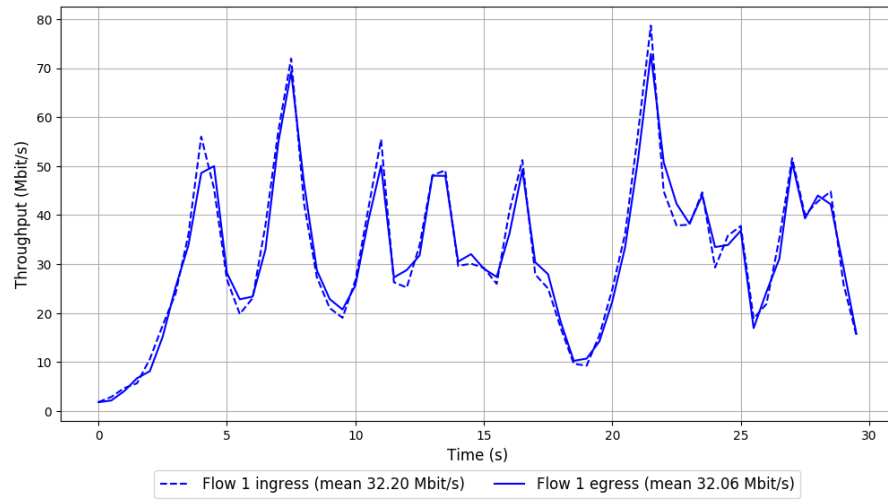
Run 8: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 6.56 Mbit/s) --- Flow 1 egress (mean 6.27 Mbit/s)

• Flow 1 (95th percentile 189.41 ms)

```
Run 9: Statistics of CalibratedKoho

Start at: 2017-09-03 07:53:25
End at: 2017-09-03 07:53:55
Local clock offset: -2.214 ms
Remote clock offset: -4.071 ms


# Below is generated by plot.py at 2017-09-03 11:36:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.94 Mbit/s
95th percentile per-packet one-way delay: 161.057 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 40.94 Mbit/s
95th percentile per-packet one-way delay: 161.057 ms
Loss rate: 0.53%
```

Run 9: Report of CalibratedKoho — Data Link

```
Run 10: Statistics of CalibratedKoho

Start at: 2017-09-03 08:11:42
End at: 2017-09-03 08:12:12
Local clock offset: -0.697 ms
Remote clock offset: -3.639 ms


# Below is generated by plot.py at 2017-09-03 11:36:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.06 Mbit/s
95th percentile per-packet one-way delay: 177.295 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 32.06 Mbit/s
95th percentile per-packet one-way delay: 177.295 ms
Loss rate: 0.83%
```

Run 10: Report of CalibratedKoho — Data Link

```
Run 1: Statistics of Copa

Start at: 2017-09-03 05:20:24
End at: 2017-09-03 05:20:54
Local clock offset: -2.477 ms
Remote clock offset: -0.11 ms


# Below is generated by plot.py at 2017-09-03 11:36:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.07 Mbit/s
95th percentile per-packet one-way delay: 99.861 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 16.07 Mbit/s
95th percentile per-packet one-way delay: 99.861 ms
Loss rate: 0.61%
```
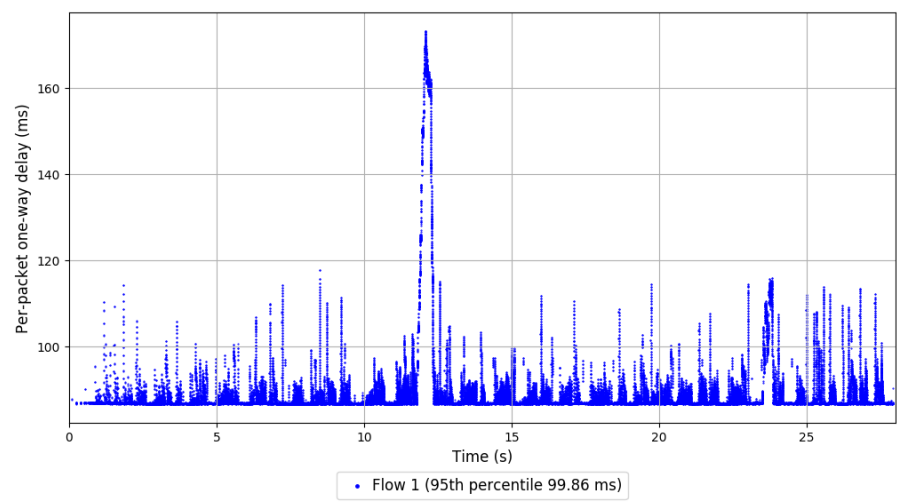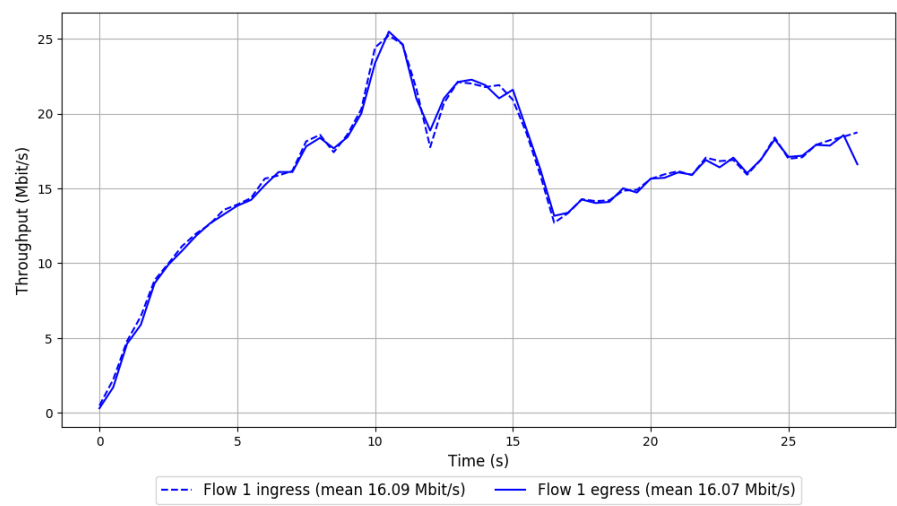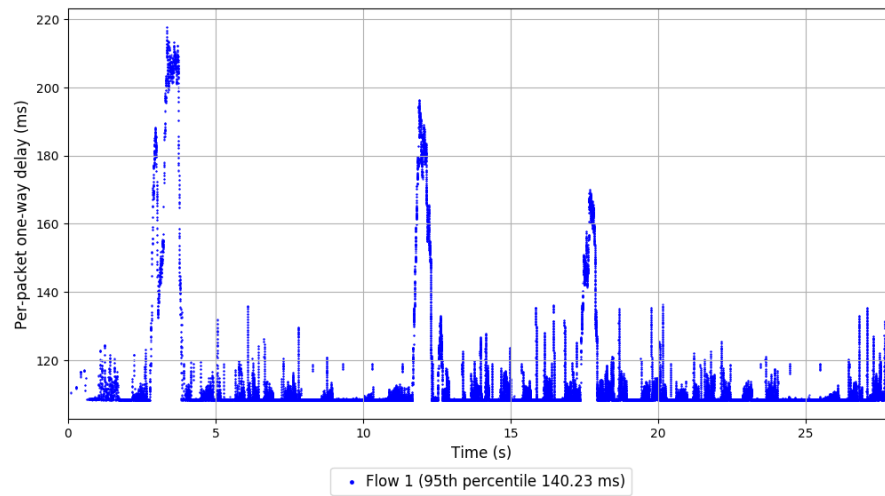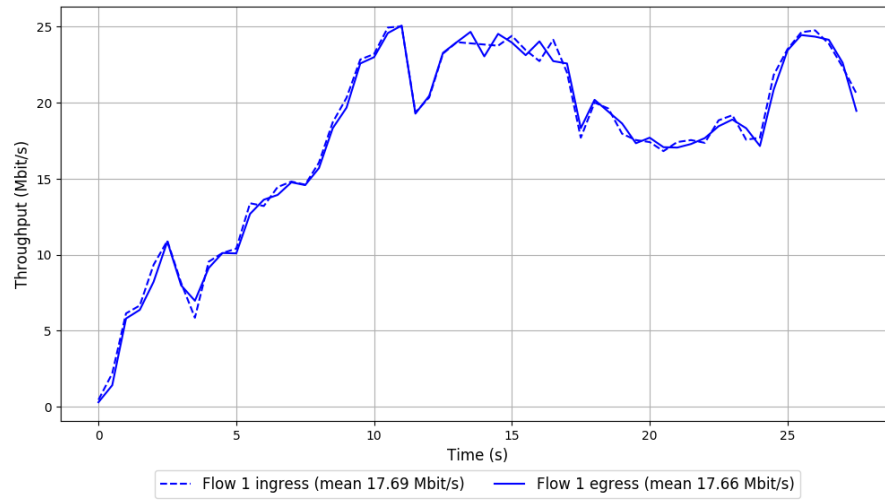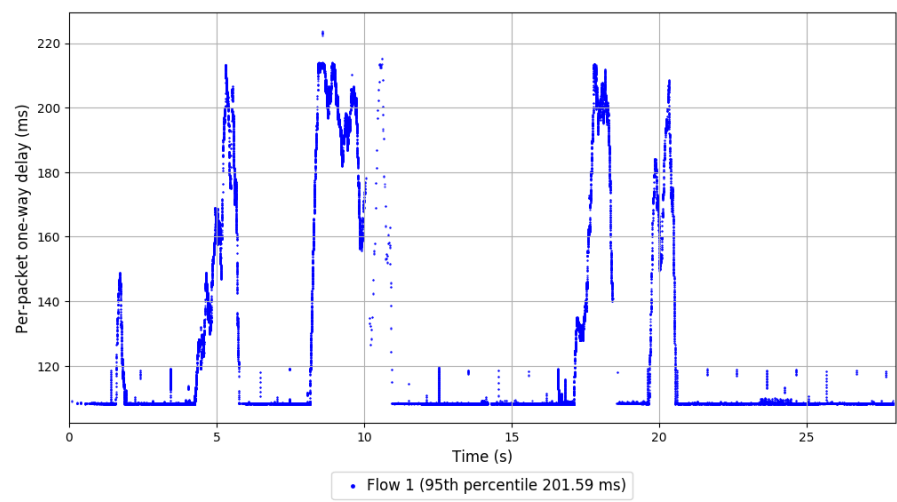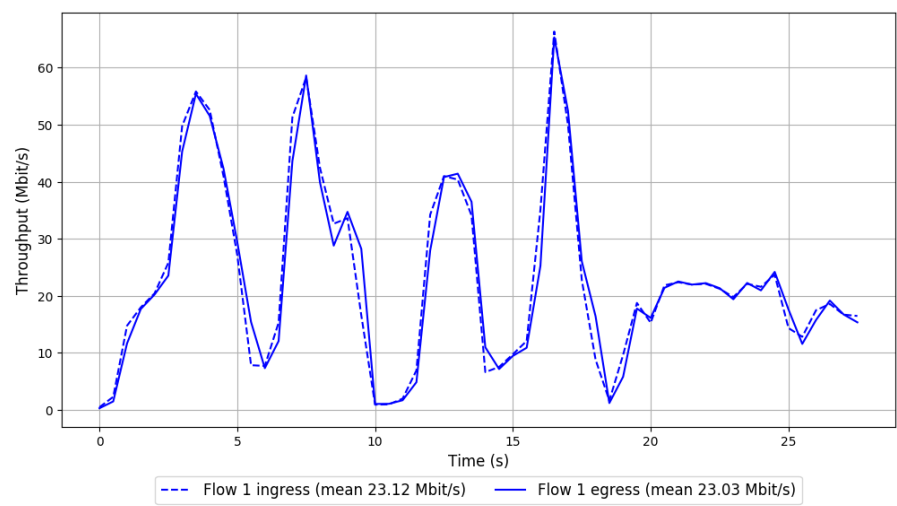
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 16.09 Mbit/s) ----- Flow 1 egress (mean 16.07 Mbit/s)

Flow 1 (95th percentile 99.86 ms)

```
Run 2: Statistics of Copa

Start at: 2017-09-03 05:38:31
End at: 2017-09-03 05:39:01
Local clock offset: 18.935 ms
Remote clock offset: -0.005 ms


# Below is generated by plot.py at 2017-09-03 11:36:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.66 Mbit/s
95th percentile per-packet one-way delay: 140.230 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 17.66 Mbit/s
95th percentile per-packet one-way delay: 140.230 ms
Loss rate: 0.65%
```

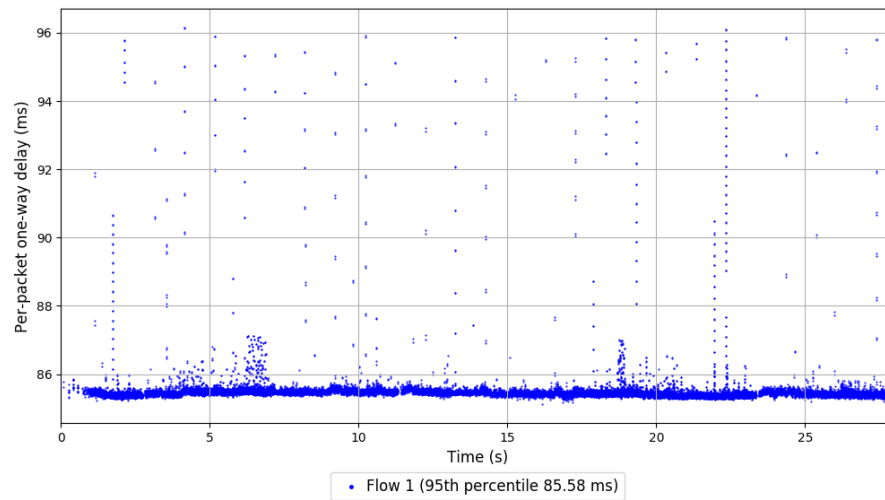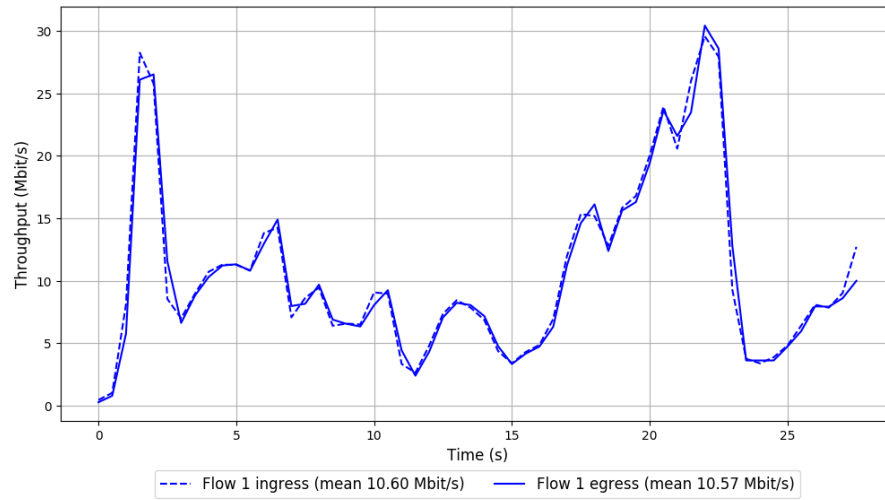Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2017-09-03 05:56:41
End at: 2017-09-03 05:57:11
Local clock offset: 18.677 ms
Remote clock offset: -0.344 ms


# Below is generated by plot.py at 2017-09-03 11:37:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.03 Mbit/s
95th percentile per-packet one-way delay: 201.587 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 23.03 Mbit/s
95th percentile per-packet one-way delay: 201.587 ms
Loss rate: 0.87%
```

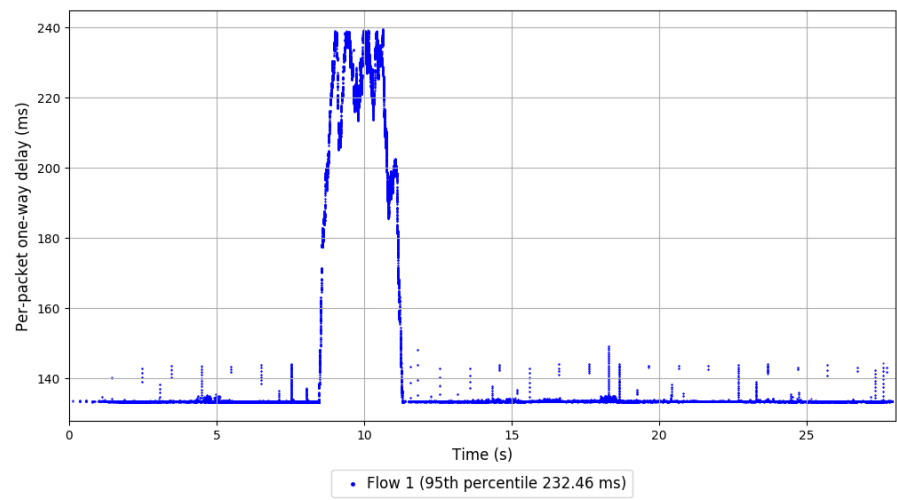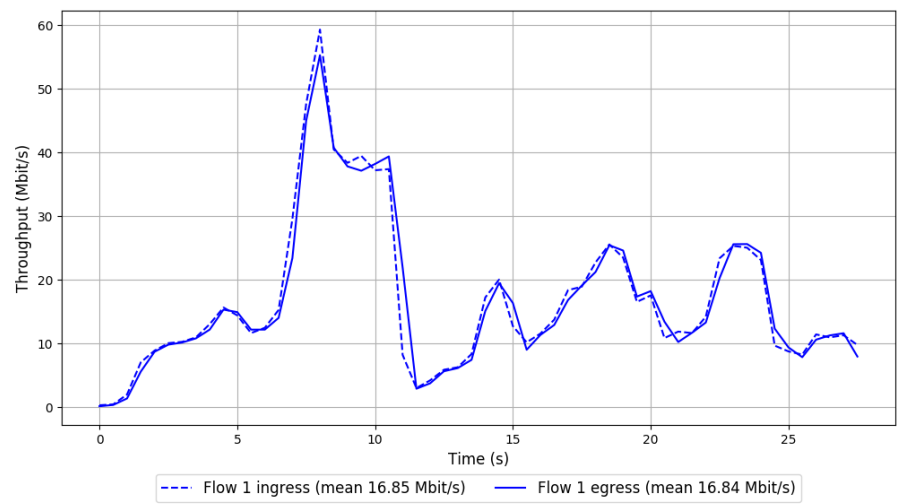Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 23.12 Mbit/s)   Flow 1 egress (mean 23.03 Mbit/s)

Flow 1 (95th percentile 201.59 ms)

49

```
Run 4: Statistics of Copa

Start at: 2017-09-03 06:14:54
End at: 2017-09-03 06:15:24
Local clock offset: -3.678 ms
Remote clock offset: -0.042 ms


# Below is generated by plot.py at 2017-09-03 11:37:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.57 Mbit/s
95th percentile per-packet one-way delay: 85.585 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 10.57 Mbit/s
95th percentile per-packet one-way delay: 85.585 ms
Loss rate: 0.88%
```
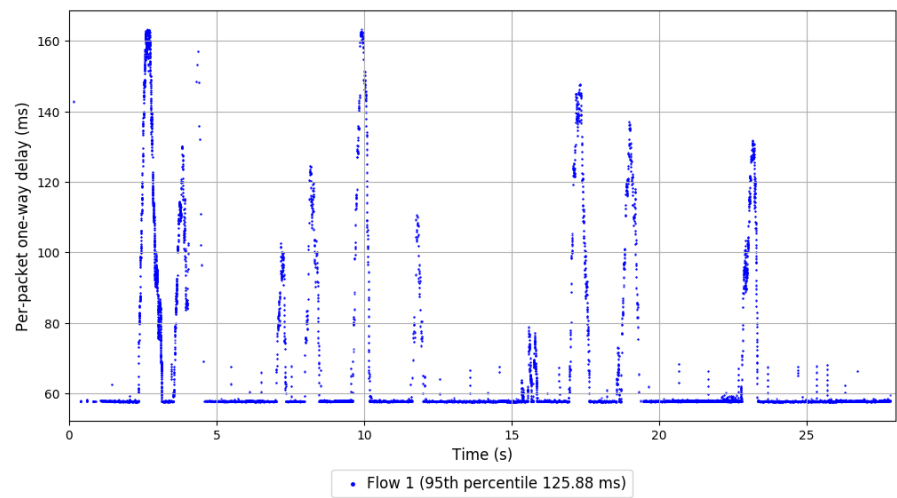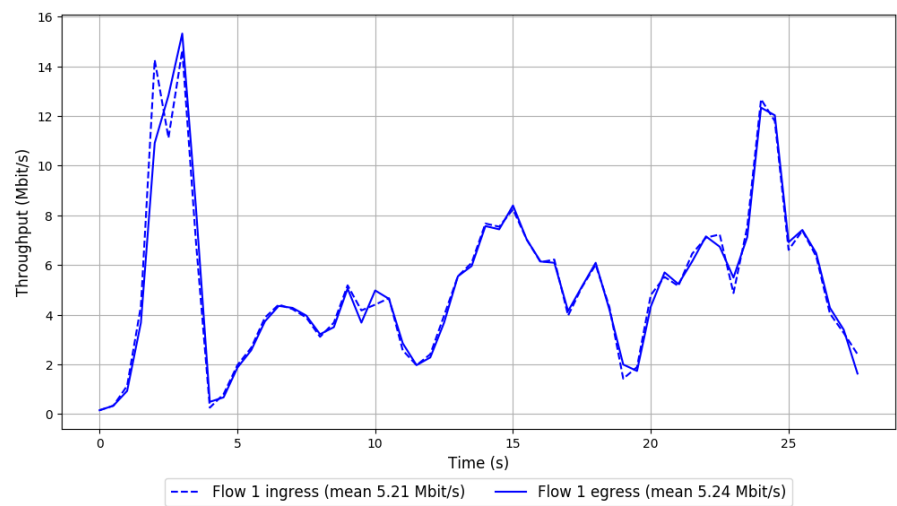
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2017-09-03 06:33:44
End at: 2017-09-03 06:34:14
Local clock offset: 18.211 ms
Remote clock offset: -25.976 ms


# Below is generated by plot.py at 2017-09-03 11:37:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.84 Mbit/s
95th percentile per-packet one-way delay: 232.461 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 16.84 Mbit/s
95th percentile per-packet one-way delay: 232.461 ms
Loss rate: 0.75%
```
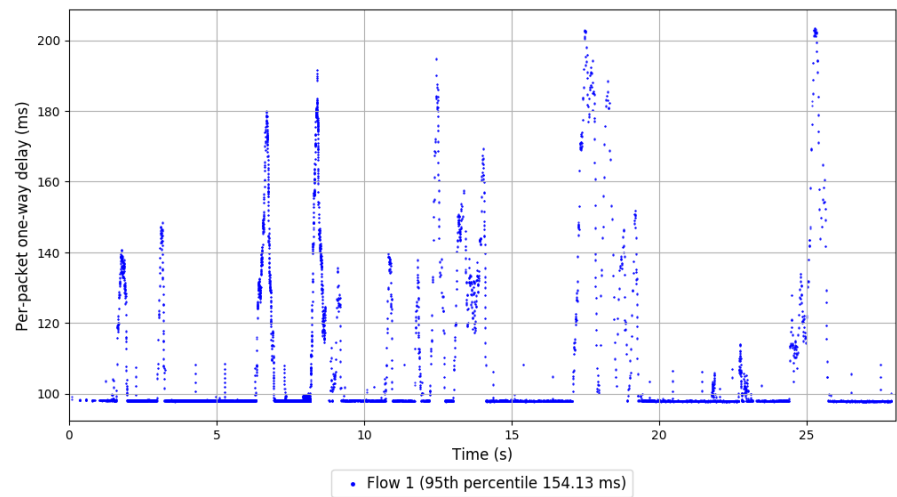
Run 5: Report of Copa — Data Link

```
Run 6: Statistics of Copa

Start at: 2017-09-03 06:52:32
End at: 2017-09-03 06:53:02
Local clock offset: 16.138 ms
Remote clock offset: 30.212 ms


# Below is generated by plot.py at 2017-09-03 11:37:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.24 Mbit/s
95th percentile per-packet one-way delay: 125.881 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 5.24 Mbit/s
95th percentile per-packet one-way delay: 125.881 ms
Loss rate: 0.49%
```

Run 6: Report of Copa — Data Link

Flow 1 ingress (mean 5.21 Mbit/s)   —— Flow 1 egress (mean 5.24 Mbit/s)

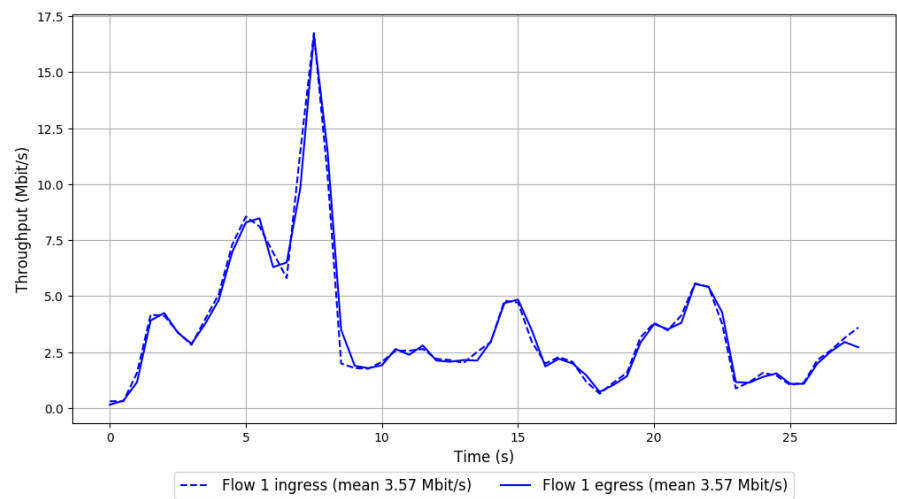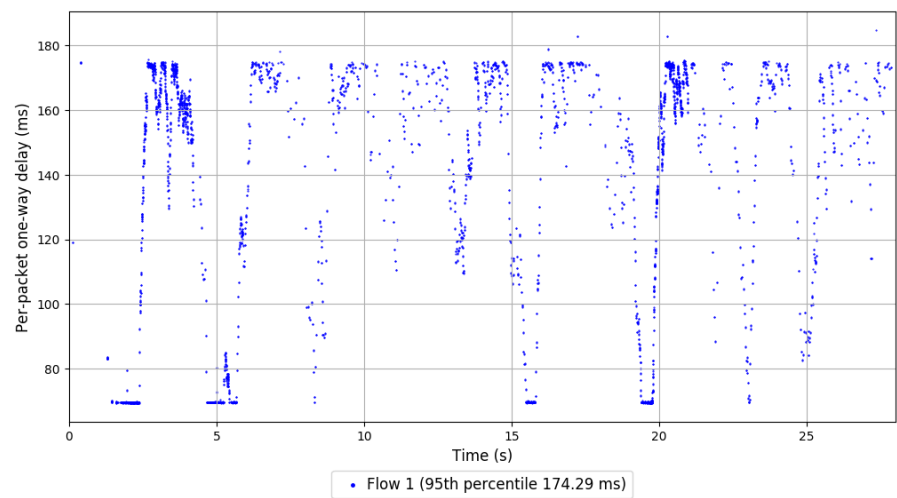• Flow 1 (95th percentile 125.88 ms)

```
Run 7: Statistics of Copa

Start at: 2017-09-03 07:11:24
End at: 2017-09-03 07:11:54
Local clock offset: -2.271 ms
Remote clock offset: -28.778 ms


# Below is generated by plot.py at 2017-09-03 11:37:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.57 Mbit/s
95th percentile per-packet one-way delay: 154.126 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 3.57 Mbit/s
95th percentile per-packet one-way delay: 154.126 ms
Loss rate: 0.82%
```

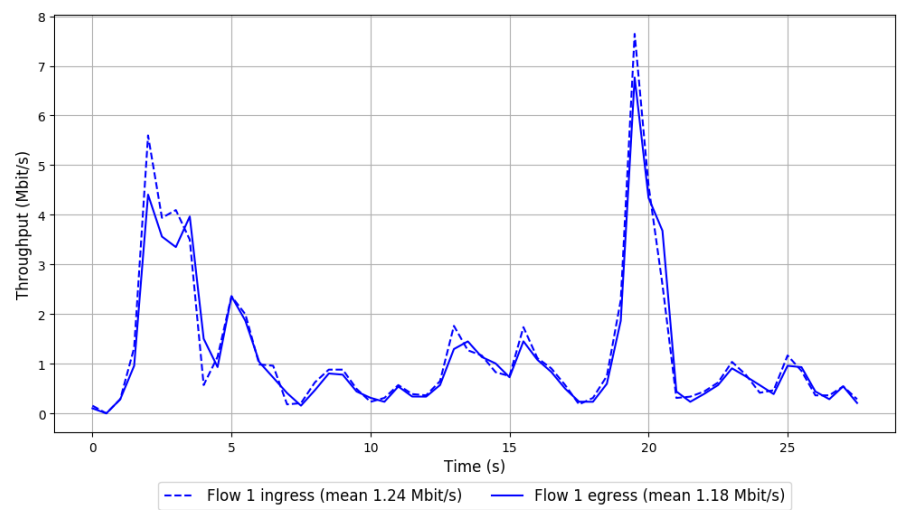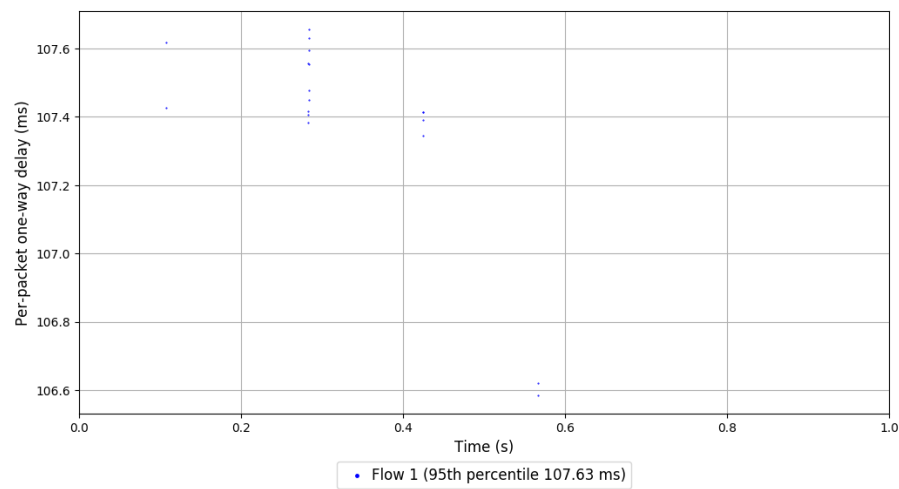Run 7: Report of Copa — Data Link

```
Run 8: Statistics of Copa

Start at: 2017-09-03 07:29:48
End at: 2017-09-03 07:30:18
Local clock offset: -1.535 ms
Remote clock offset: -3.915 ms


# Below is generated by plot.py at 2017-09-03 11:37:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 174.290 ms
Loss rate: 5.62%
-- Flow 1:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 174.290 ms
Loss rate: 5.62%
```

Run 8: Report of Copa — Data Link

Flow 1 ingress (mean 1.24 Mbit/s) --- Flow 1 egress (mean 1.18 Mbit/s)

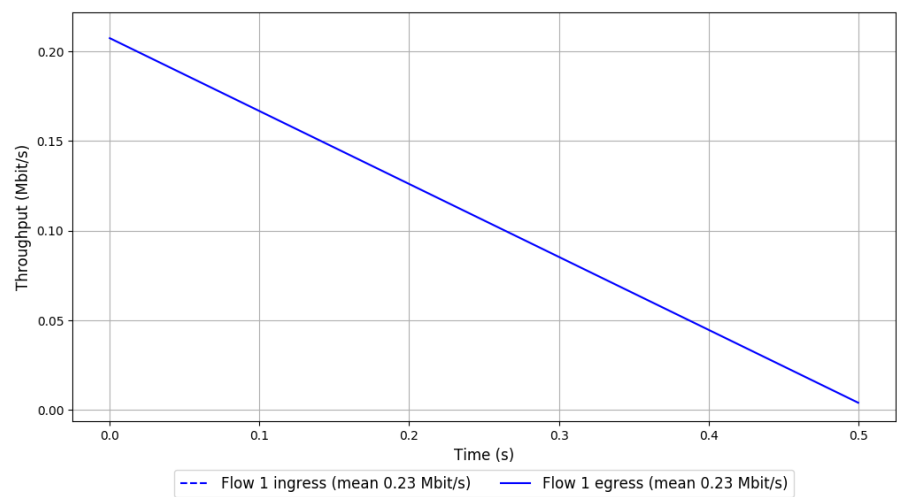Flow 1 (95th percentile 174.29 ms)

```
Run 9: Statistics of Copa

Start at: 2017-09-03 07:48:28
End at: 2017-09-03 07:48:58
Local clock offset: 18.941 ms
Remote clock offset: -4.331 ms
```

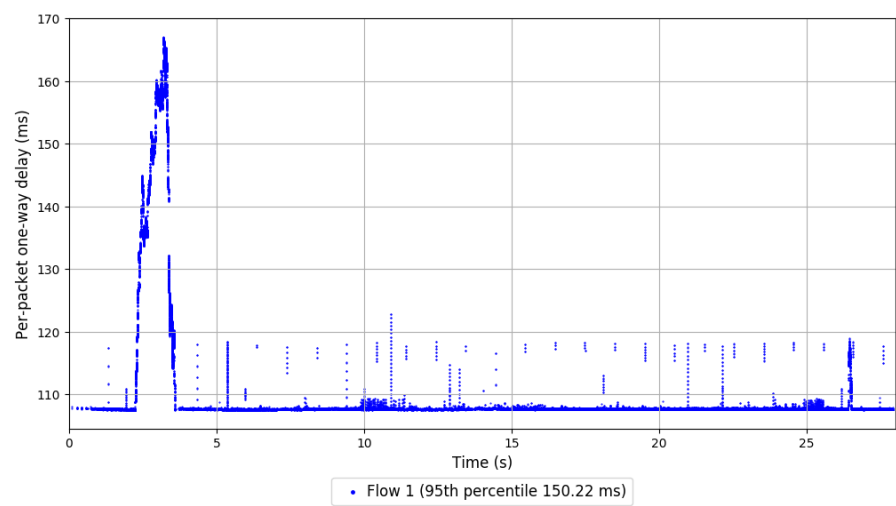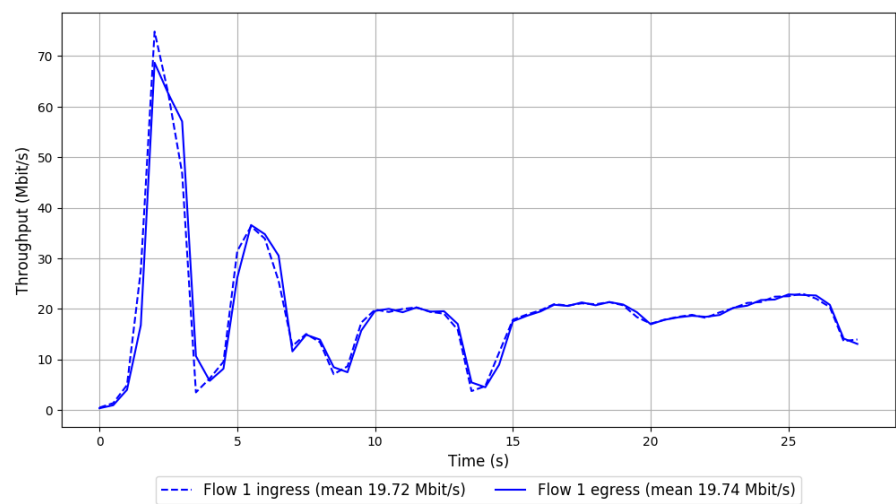Run 9: Report of Copa — Data Link

Flow 1 ingress (mean 0.23 Mbit/s) --- Flow 1 egress (mean 0.23 Mbit/s)

Flow 1 (95th percentile 107.63 ms)

```
Run 10: Statistics of Copa

Start at: 2017-09-03 08:06:45
End at: 2017-09-03 08:07:15
Local clock offset: 19.748 ms
Remote clock offset: -3.819 ms


# Below is generated by plot.py at 2017-09-03 11:37:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.74 Mbit/s
95th percentile per-packet one-way delay: 150.217 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 19.74 Mbit/s
95th percentile per-packet one-way delay: 150.217 ms
Loss rate: 0.37%
```

Run 10: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2017-09-03 05:32:29
End at: 2017-09-03 05:32:59
Local clock offset: -4.114 ms
Remote clock offset: 0.121 ms


# Below is generated by plot.py at 2017-09-03 11:37:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.22 Mbit/s
95th percentile per-packet one-way delay: 169.275 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 20.22 Mbit/s
95th percentile per-packet one-way delay: 169.275 ms
Loss rate: 1.21%
```
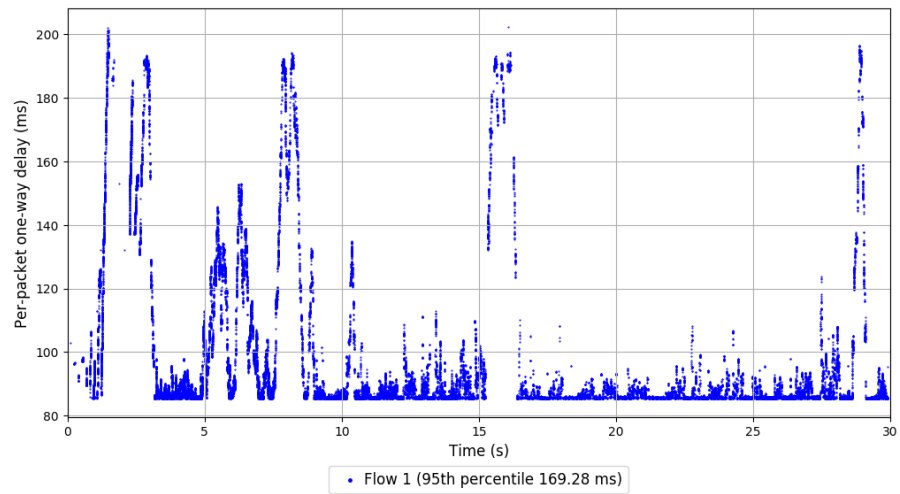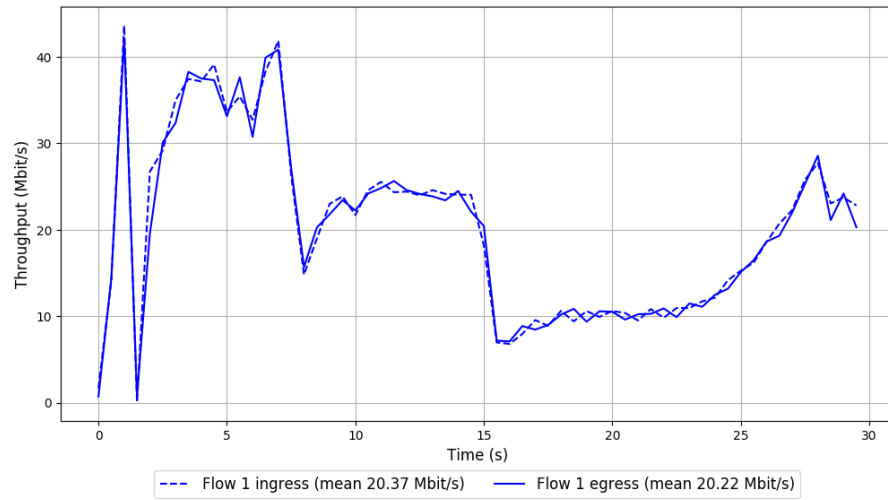
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2017-09-03 05:50:41
End at: 2017-09-03 05:51:11
Local clock offset: 17.926 ms
Remote clock offset: -0.18 ms


# Below is generated by plot.py at 2017-09-03 11:37:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.08 Mbit/s
95th percentile per-packet one-way delay: 140.037 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 33.08 Mbit/s
95th percentile per-packet one-way delay: 140.037 ms
Loss rate: 0.71%
```
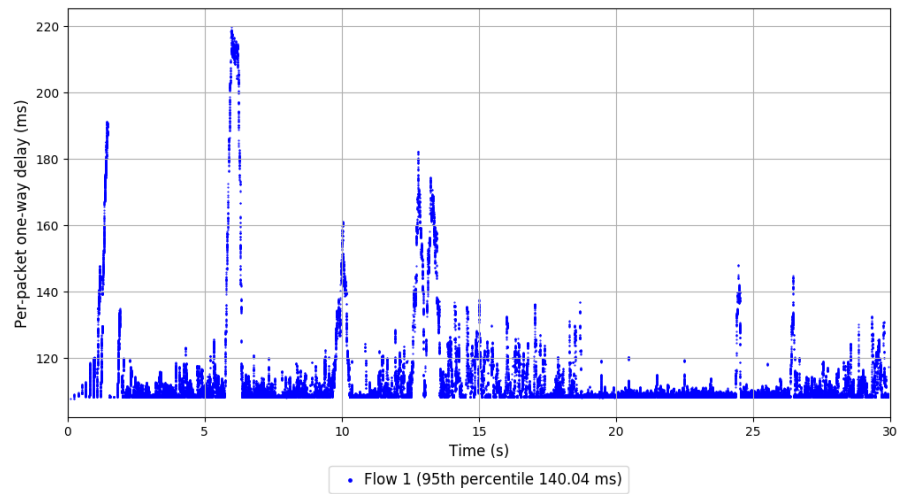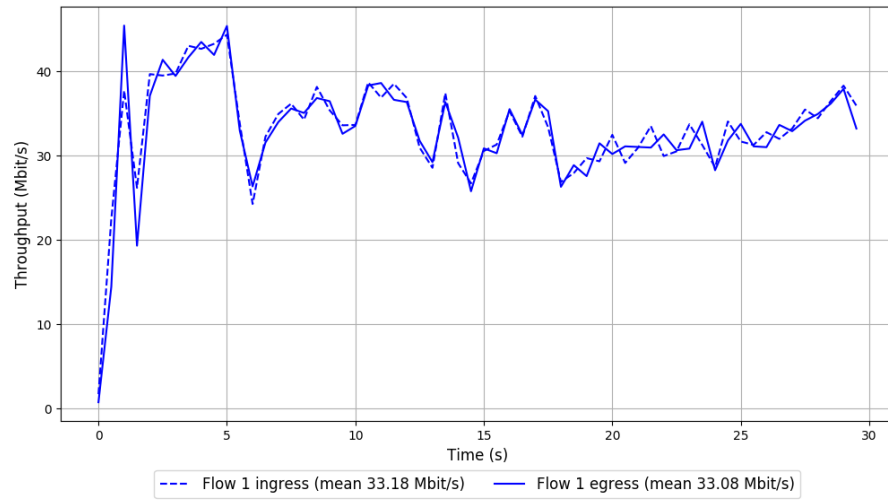
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 33.18 Mbit/s)   Flow 1 egress (mean 33.08 Mbit/s)
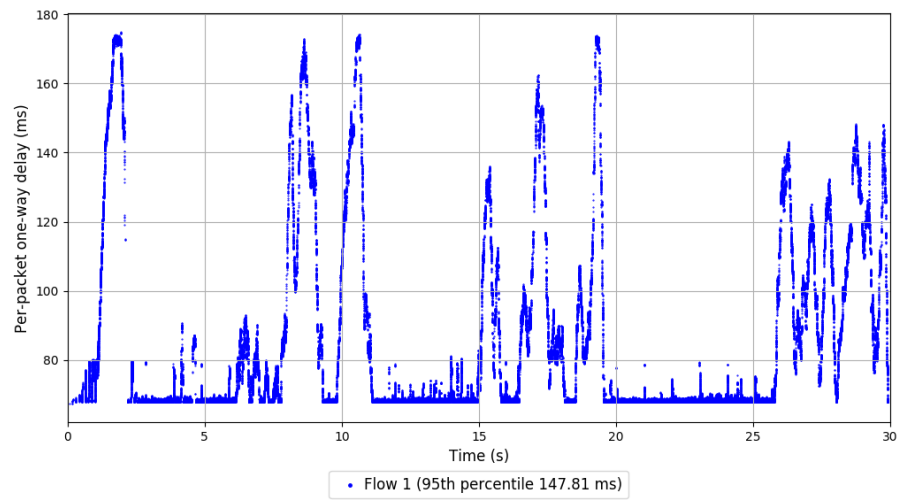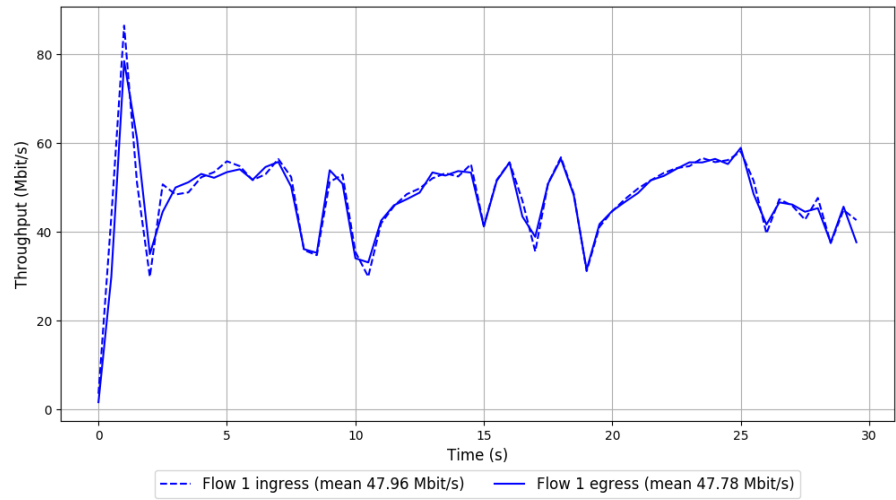

Flow 1 (95th percentile 140.04 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2017-09-03 06:08:45
End at: 2017-09-03 06:09:15
Local clock offset: -3.671 ms
Remote clock offset: -0.194 ms


# Below is generated by plot.py at 2017-09-03 11:37:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.78 Mbit/s
95th percentile per-packet one-way delay: 147.809 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 47.78 Mbit/s
95th percentile per-packet one-way delay: 147.809 ms
Loss rate: 0.75%
```
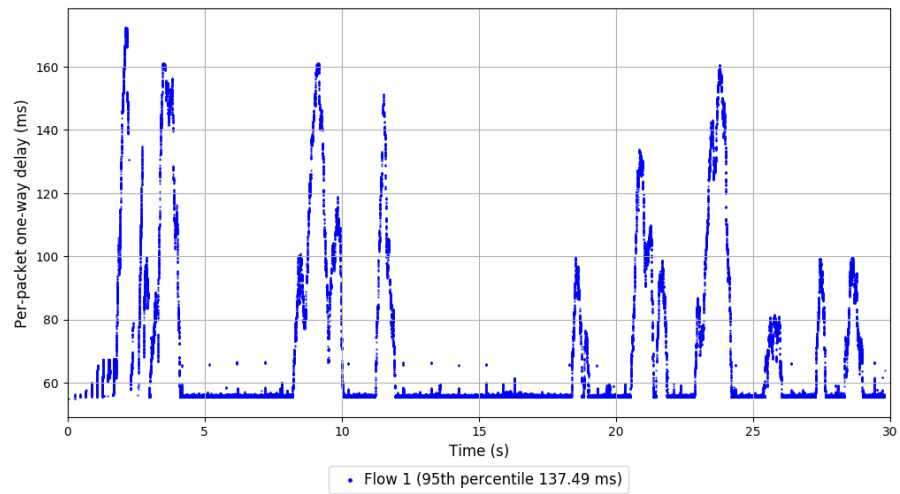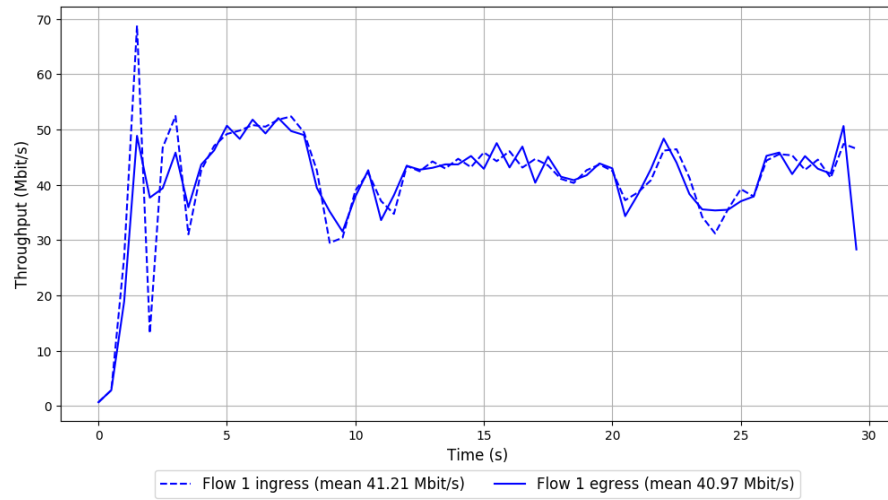
Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2017-09-03 06:27:30
End at: 2017-09-03 06:28:00
Local clock offset: -3.497 ms
Remote clock offset: 30.352 ms


# Below is generated by plot.py at 2017-09-03 11:37:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.97 Mbit/s
95th percentile per-packet one-way delay: 137.486 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 40.97 Mbit/s
95th percentile per-packet one-way delay: 137.486 ms
Loss rate: 1.19%
```

Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 41.21 Mbit/s) ----   Flow 1 egress (mean 40.97 Mbit/s)
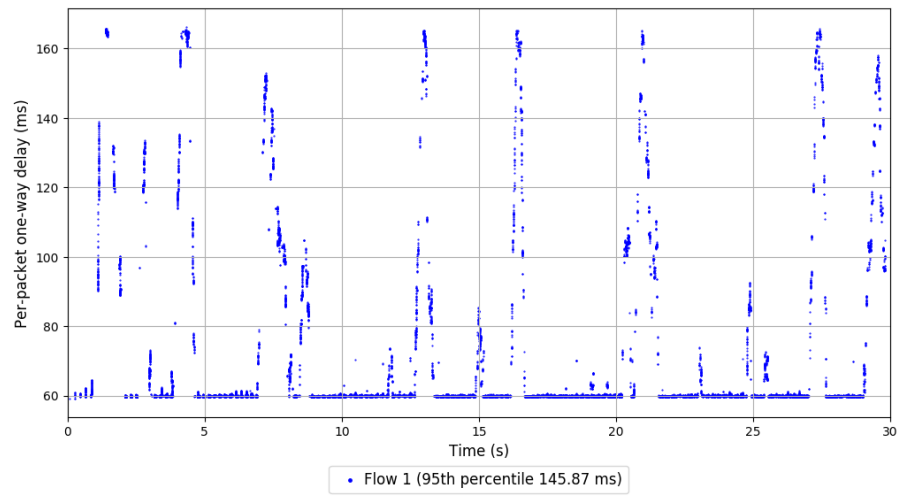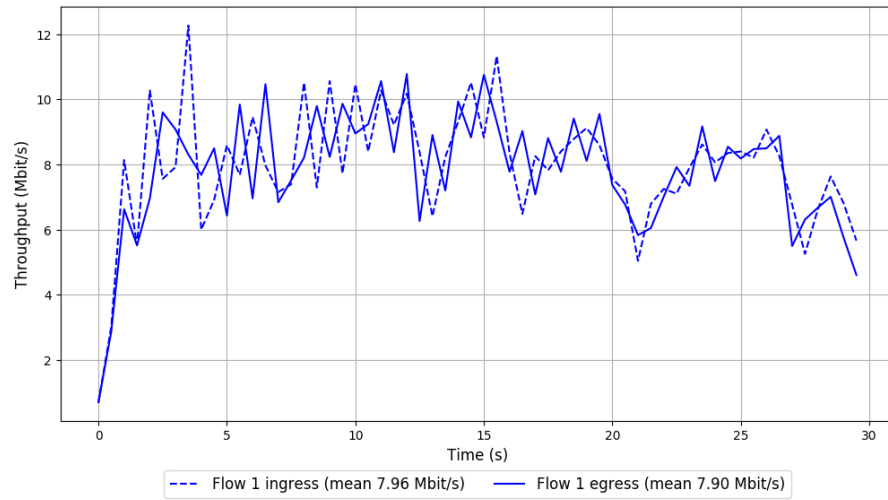

Flow 1 (95th percentile 137.49 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2017-09-03 06:46:15
End at: 2017-09-03 06:46:45
Local clock offset: 18.142 ms
Remote clock offset: 30.204 ms


# Below is generated by plot.py at 2017-09-03 11:37:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.90 Mbit/s
95th percentile per-packet one-way delay: 145.874 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 7.90 Mbit/s
95th percentile per-packet one-way delay: 145.874 ms
Loss rate: 1.37%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 7.96 Mbit/s) --- Flow 1 egress (mean 7.90 Mbit/s)

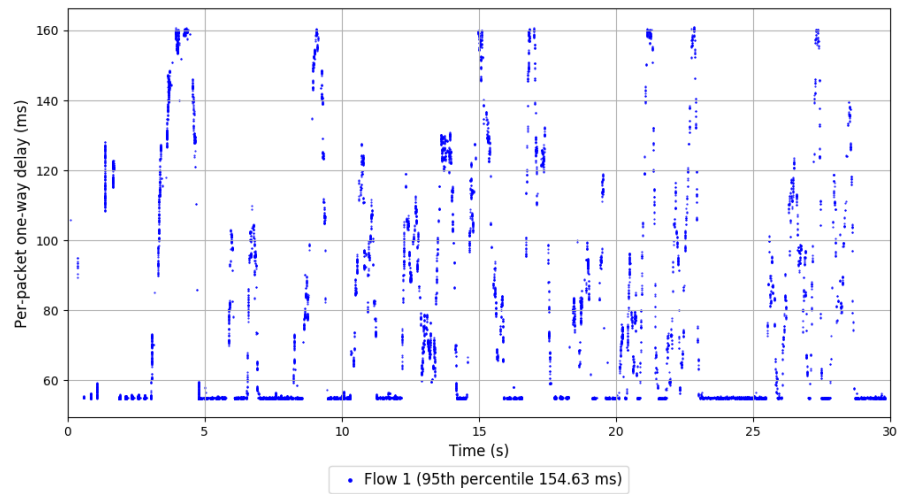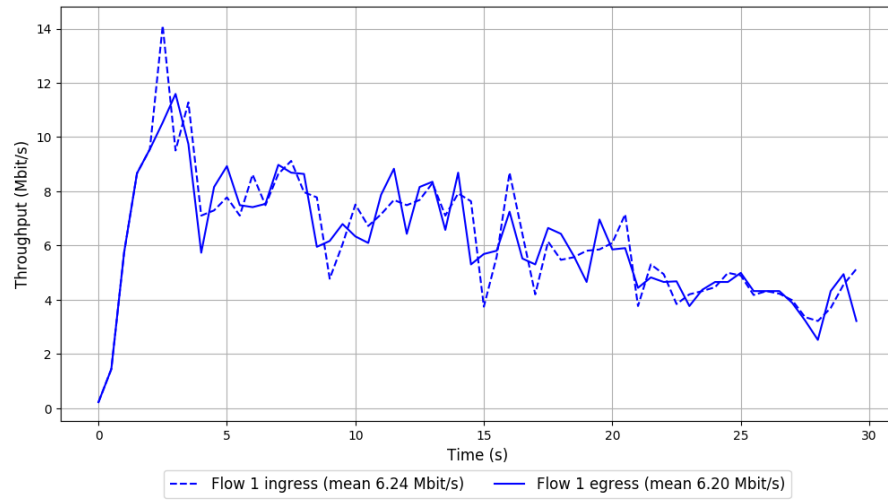· Flow 1 (95th percentile 145.87 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2017-09-03 07:05:08
End at: 2017-09-03 07:05:38
Local clock offset: -3.672 ms
Remote clock offset: 30.244 ms


# Below is generated by plot.py at 2017-09-03 11:37:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.20 Mbit/s
95th percentile per-packet one-way delay: 154.627 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 6.20 Mbit/s
95th percentile per-packet one-way delay: 154.627 ms
Loss rate: 1.39%
```
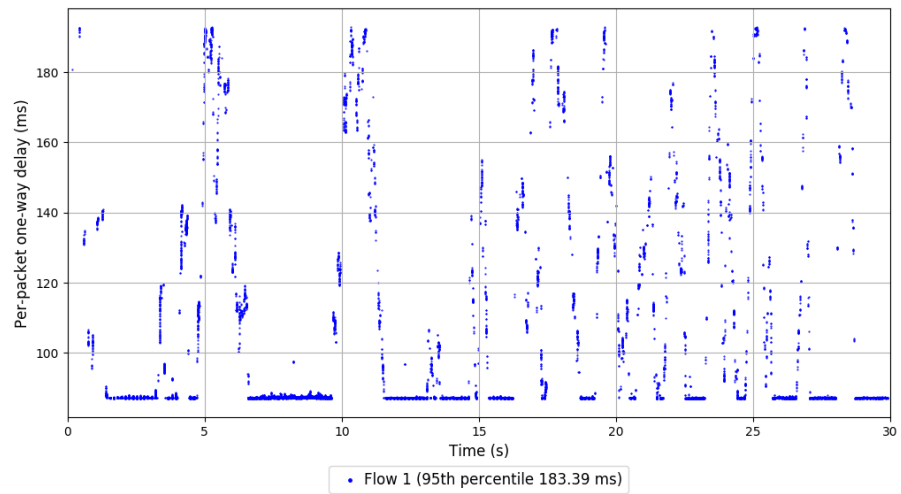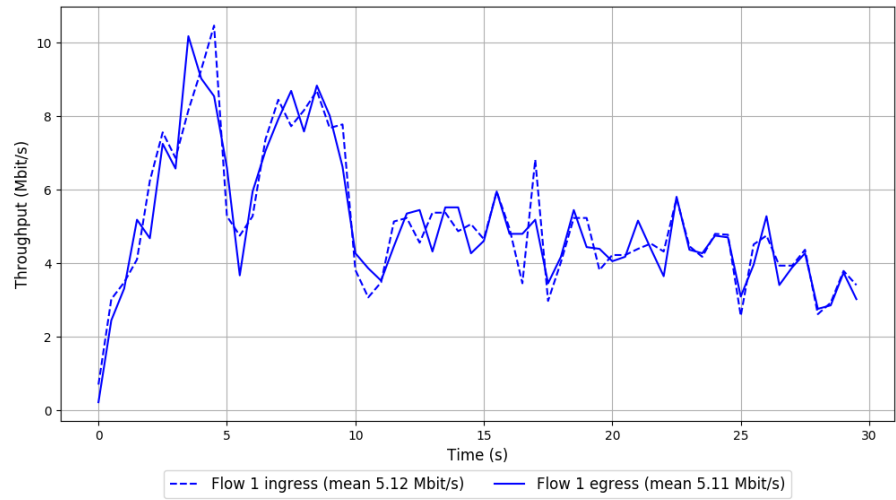
Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2017-09-03 07:23:35
End at: 2017-09-03 07:24:05
Local clock offset: -1.811 ms
Remote clock offset: -3.646 ms


# Below is generated by plot.py at 2017-09-03 11:37:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.11 Mbit/s
95th percentile per-packet one-way delay: 183.386 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 5.11 Mbit/s
95th percentile per-packet one-way delay: 183.386 ms
Loss rate: 0.92%
```
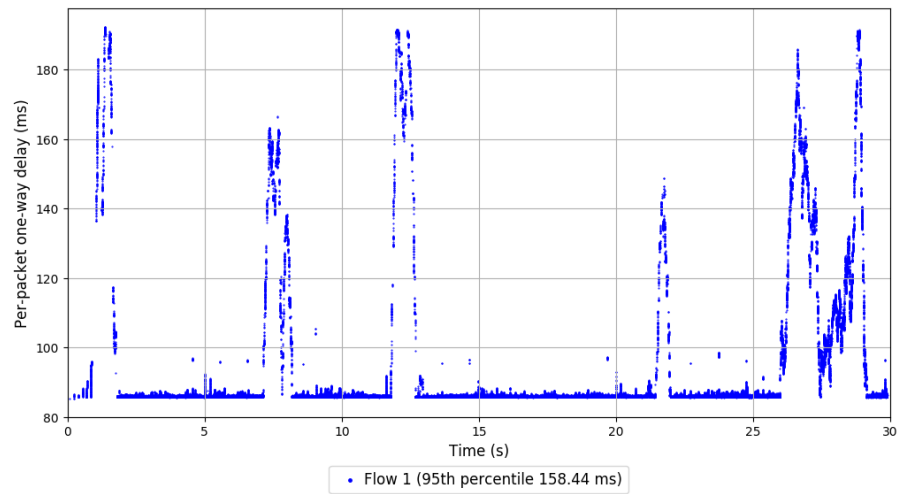
Run 7: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 5.12 Mbit/s) --- Flow 1 egress (mean 5.11 Mbit/s)

Flow 1 (95th percentile 183.39 ms)

```
Run 8: Statistics of TCP Cubic

Start at: 2017-09-03 07:42:25
End at: 2017-09-03 07:42:55
Local clock offset: -2.663 ms
Remote clock offset: -3.93 ms


# Below is generated by plot.py at 2017-09-03 11:37:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.16 Mbit/s
95th percentile per-packet one-way delay: 158.440 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 23.16 Mbit/s
95th percentile per-packet one-way delay: 158.440 ms
Loss rate: 1.37%
```
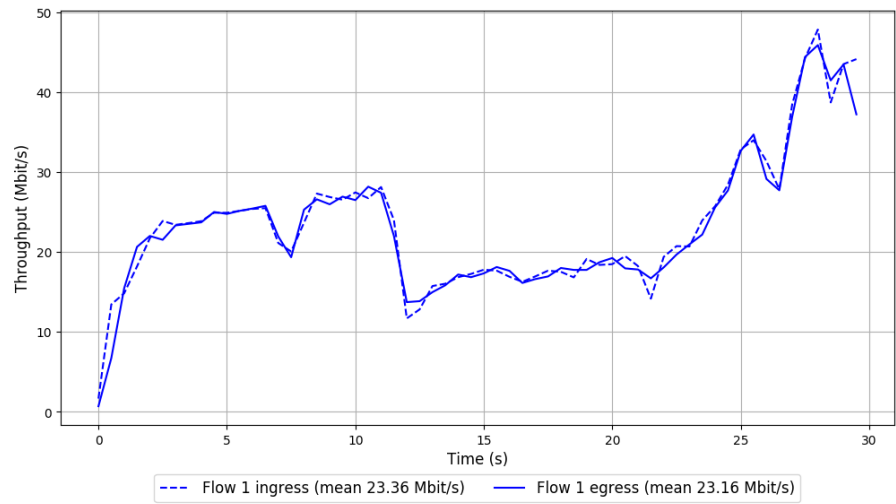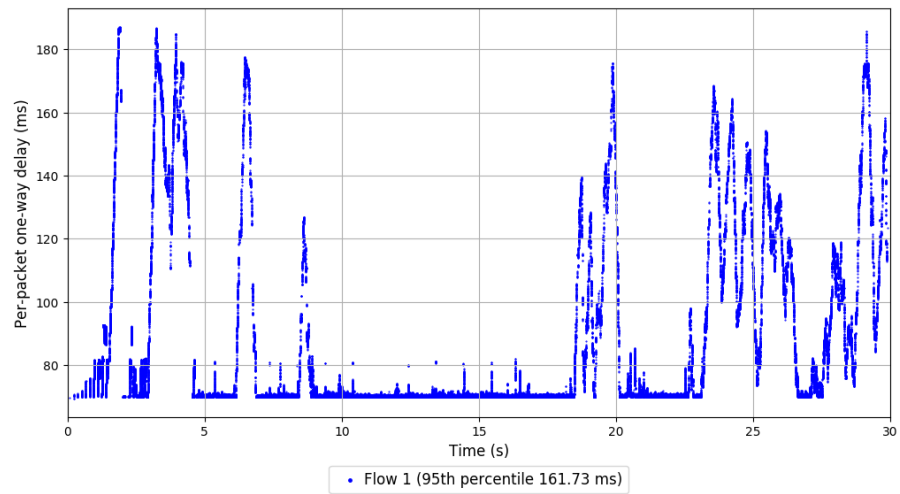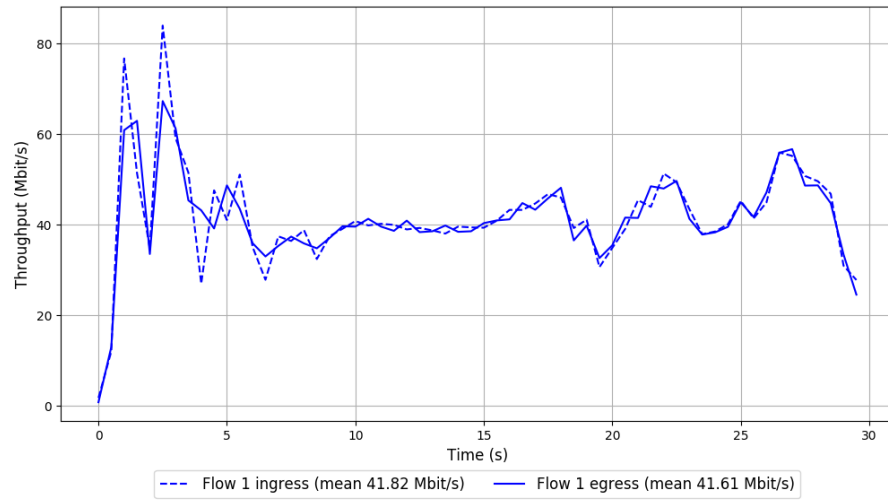
Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2017-09-03 08:00:41
End at: 2017-09-03 08:01:11
Local clock offset: -0.656 ms
Remote clock offset: -4.181 ms


# Below is generated by plot.py at 2017-09-03 11:37:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.61 Mbit/s
95th percentile per-packet one-way delay: 161.728 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 41.61 Mbit/s
95th percentile per-packet one-way delay: 161.728 ms
Loss rate: 0.85%
```
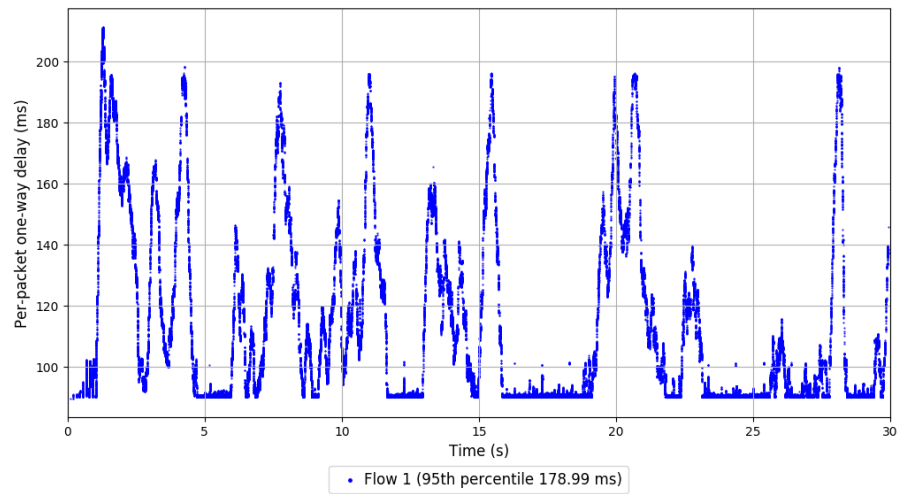
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 41.82 Mbit/s) — — — Flow 1 egress (mean 41.61 Mbit/s) ————

Flow 1 (95th percentile 161.73 ms)

```
Run 10: Statistics of TCP Cubic

Start at: 2017-09-03 08:18:53
End at: 2017-09-03 08:19:23
Local clock offset: 19.366 ms
Remote clock offset: -3.133 ms


# Below is generated by plot.py at 2017-09-03 11:37:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.90 Mbit/s
95th percentile per-packet one-way delay: 178.987 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 41.90 Mbit/s
95th percentile per-packet one-way delay: 178.987 ms
Loss rate: 0.56%
```
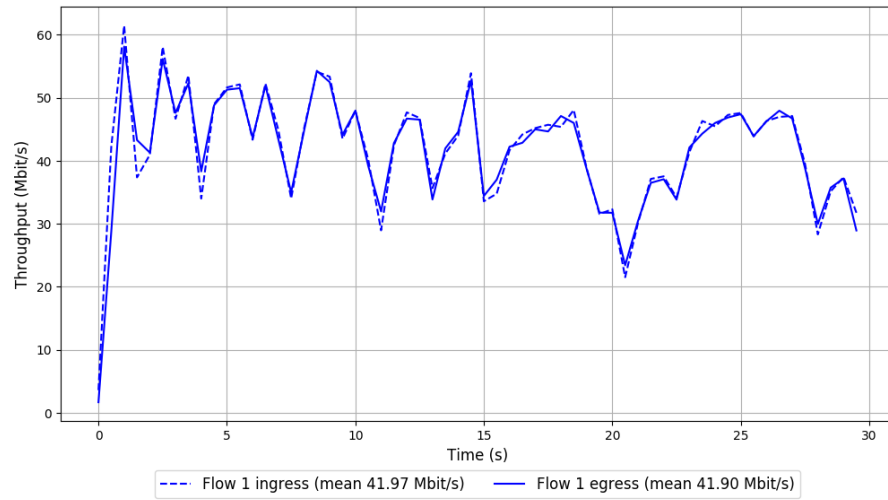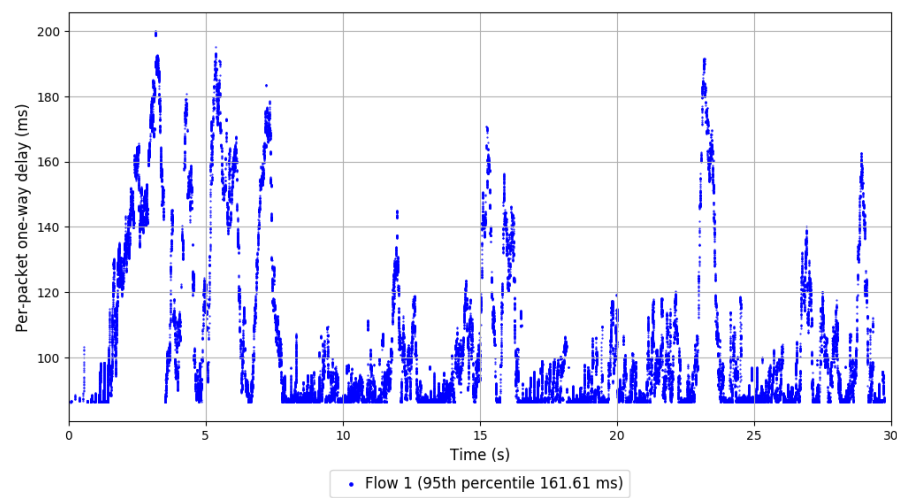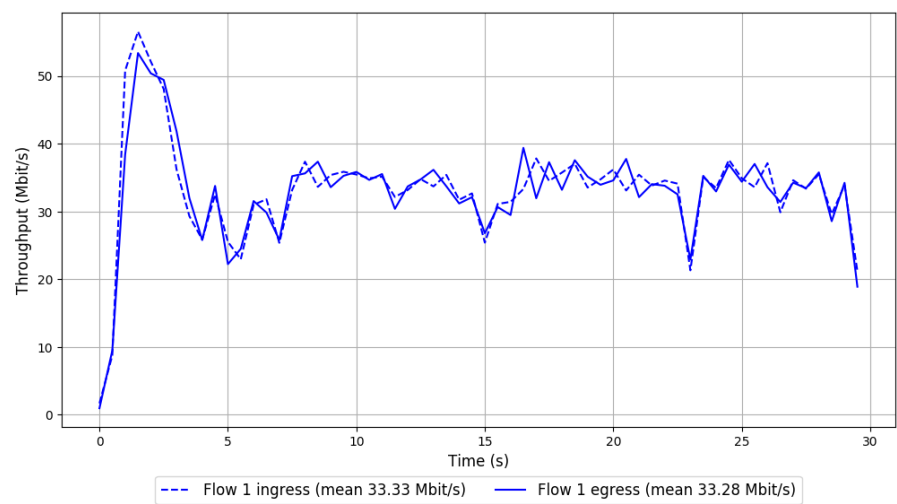
Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of Indigo

Start at: 2017-09-03 05:21:41
End at: 2017-09-03 05:22:11
Local clock offset: -2.434 ms
Remote clock offset: -0.042 ms


# Below is generated by plot.py at 2017-09-03 11:37:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.28 Mbit/s
95th percentile per-packet one-way delay: 161.608 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 33.28 Mbit/s
95th percentile per-packet one-way delay: 161.608 ms
Loss rate: 0.60%
```

Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2017-09-03 05:39:43
End at: 2017-09-03 05:40:13
Local clock offset: -4.291 ms
Remote clock offset: -0.02 ms


# Below is generated by plot.py at 2017-09-03 11:37:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.47 Mbit/s
95th percentile per-packet one-way delay: 110.658 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 33.47 Mbit/s
95th percentile per-packet one-way delay: 110.658 ms
Loss rate: 0.47%
```
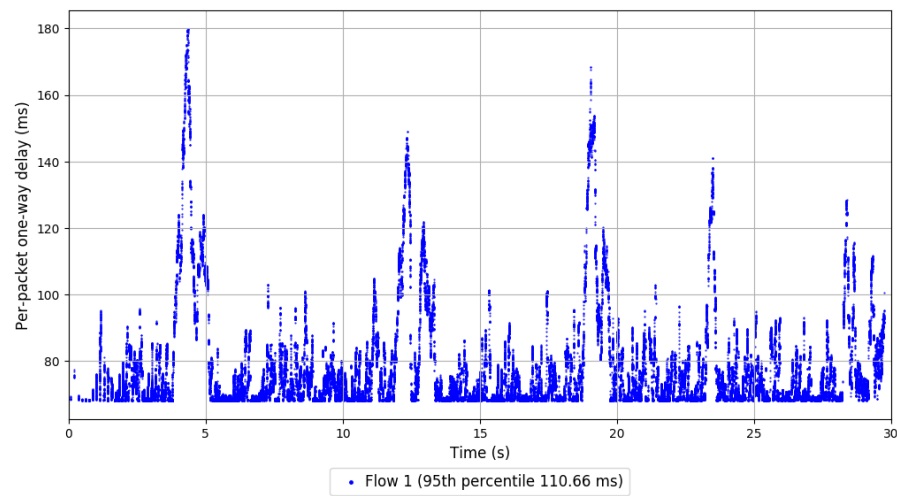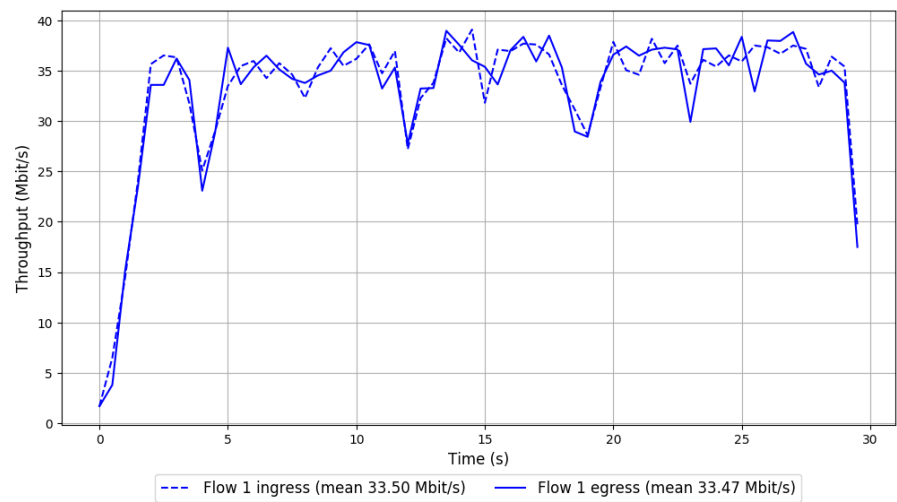
Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 33.50 Mbit/s) ---- Flow 1 egress (mean 33.47 Mbit/s)

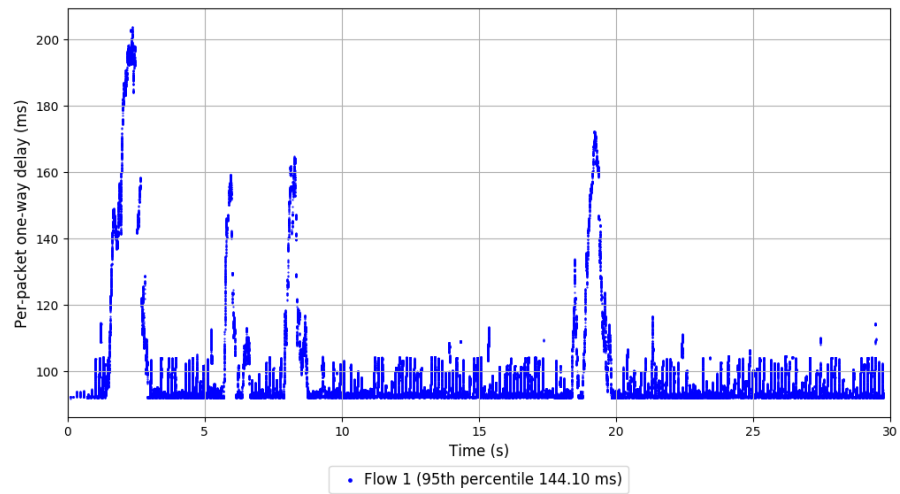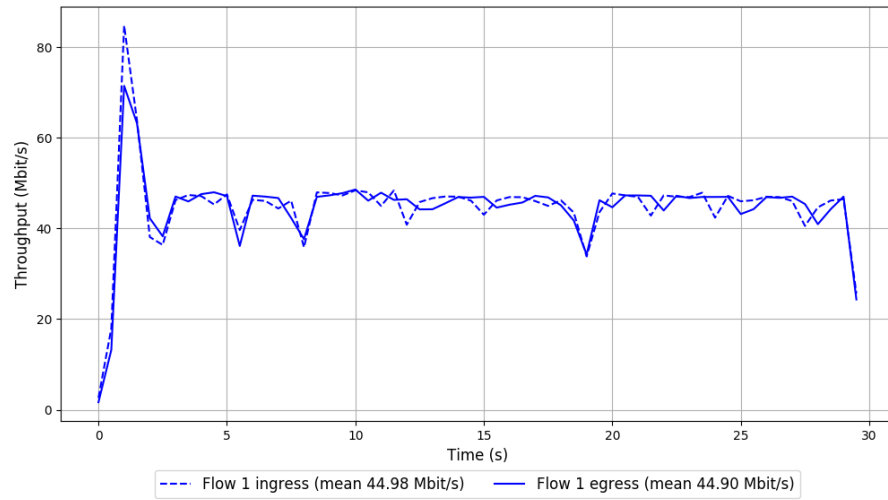• Flow 1 (95th percentile 110.66 ms)

```
Run 3: Statistics of Indigo

Start at: 2017-09-03 05:57:54
End at: 2017-09-03 05:58:24
Local clock offset: 19.977 ms
Remote clock offset: -0.333 ms


# Below is generated by plot.py at 2017-09-03 11:37:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.90 Mbit/s
95th percentile per-packet one-way delay: 144.105 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 44.90 Mbit/s
95th percentile per-packet one-way delay: 144.105 ms
Loss rate: 0.57%
```

Run 3: Report of Indigo — Data Link

Flow 1 ingress (mean 44.98 Mbit/s) ---- Flow 1 egress (mean 44.90 Mbit/s) ——

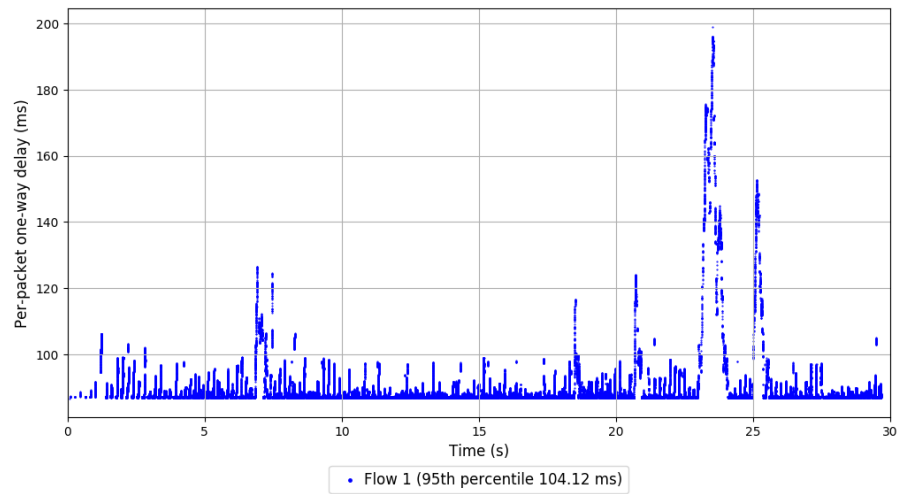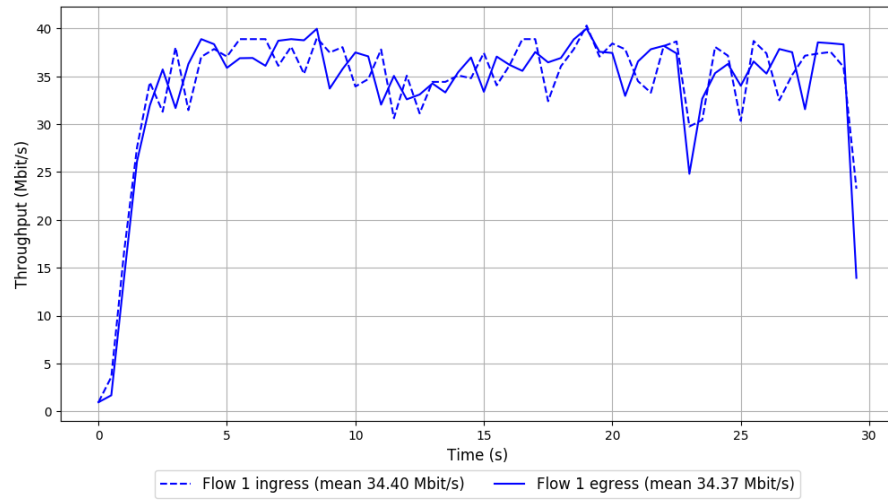

• Flow 1 (95th percentile 144.10 ms)

```
Run 4: Statistics of Indigo

Start at: 2017-09-03 06:16:08
End at: 2017-09-03 06:16:38
Local clock offset: -2.114 ms
Remote clock offset: -0.187 ms

# Below is generated by plot.py at 2017-09-03 11:37:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.37 Mbit/s
95th percentile per-packet one-way delay: 104.119 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 34.37 Mbit/s
95th percentile per-packet one-way delay: 104.119 ms
Loss rate: 0.66%
```

Run 4: Report of Indigo — Data Link

Flow 1 ingress (mean 34.40 Mbit/s)   Flow 1 egress (mean 34.37 Mbit/s)
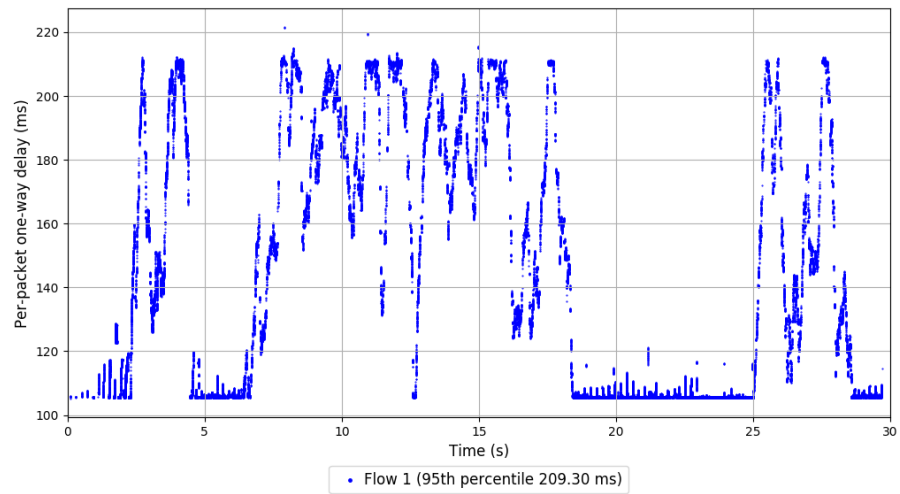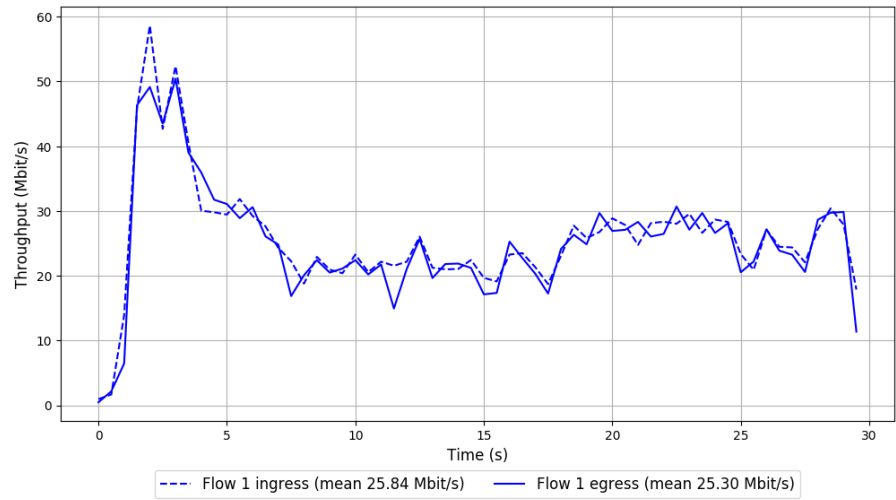

• Flow 1 (95th percentile 104.12 ms)

```
Run 5: Statistics of Indigo

Start at: 2017-09-03 06:34:59
End at: 2017-09-03 06:35:29
Local clock offset: -3.722 ms
Remote clock offset: -19.723 ms


# Below is generated by plot.py at 2017-09-03 11:37:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.30 Mbit/s
95th percentile per-packet one-way delay: 209.297 ms
Loss rate: 2.73%
-- Flow 1:
Average throughput: 25.30 Mbit/s
95th percentile per-packet one-way delay: 209.297 ms
Loss rate: 2.73%
```

Run 5: Report of Indigo — Data Link

Flow 1 ingress (mean 25.84 Mbit/s)   Flow 1 egress (mean 25.30 Mbit/s)

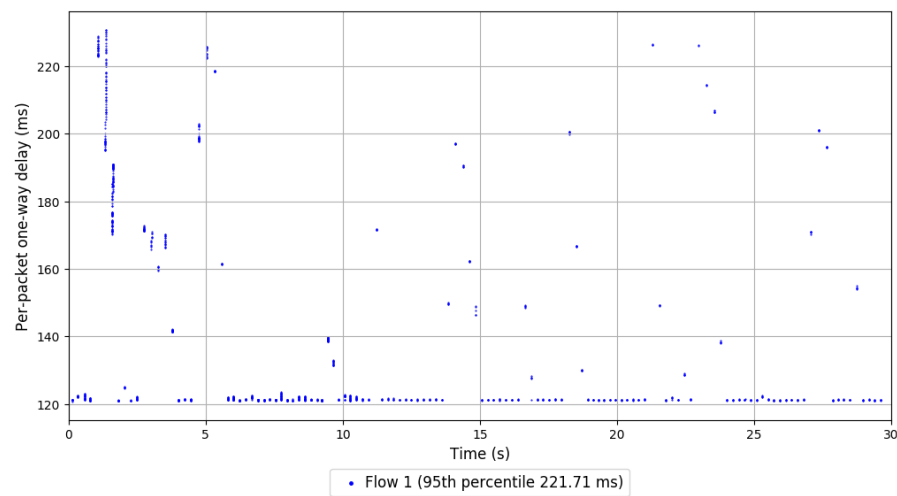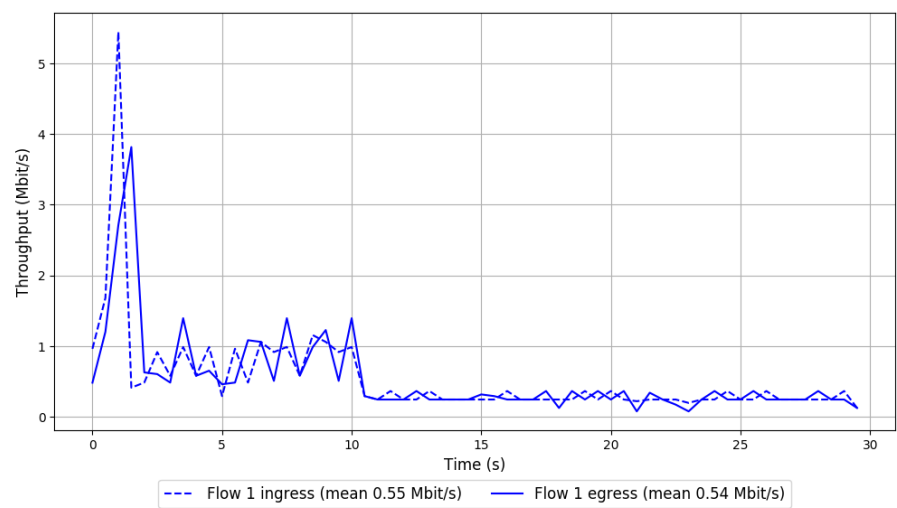• Flow 1 (95th percentile 209.30 ms)

```
Run 6: Statistics of Indigo

Start at: 2017-09-03 06:53:52
End at: 2017-09-03 06:54:22
Local clock offset: 15.208 ms
Remote clock offset: -34.12 ms


# Below is generated by plot.py at 2017-09-03 11:37:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 221.708 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 221.708 ms
Loss rate: 1.33%
```

Run 6: Report of Indigo — Data Link

Flow 1 ingress (mean 0.55 Mbit/s) --- Flow 1 egress (mean 0.54 Mbit/s)

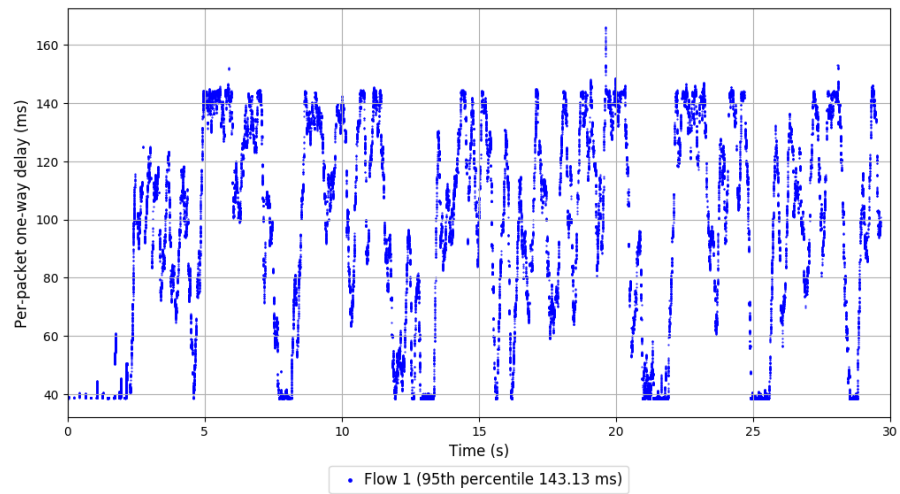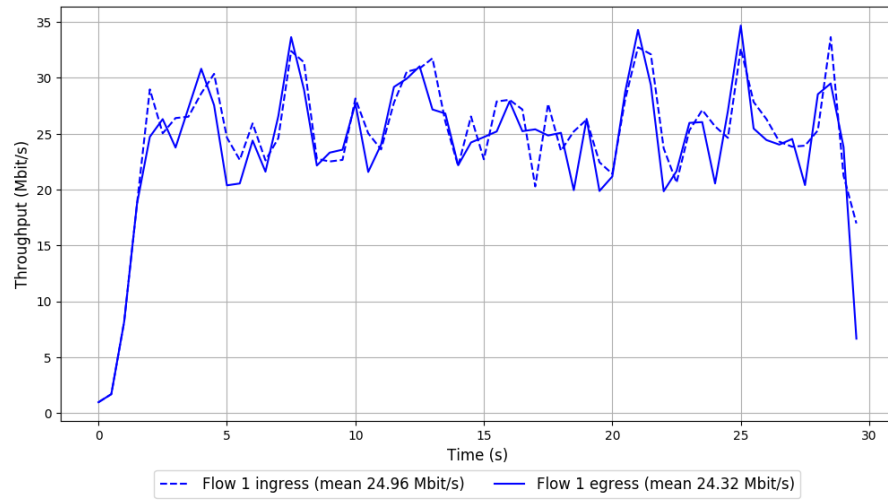• Flow 1 (95th percentile 221.71 ms)

```
Run 7: Statistics of Indigo

Start at: 2017-09-03 07:12:38
End at: 2017-09-03 07:13:08
Local clock offset: -2.399 ms
Remote clock offset: 29.729 ms


# Below is generated by plot.py at 2017-09-03 11:37:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.32 Mbit/s
95th percentile per-packet one-way delay: 143.129 ms
Loss rate: 3.25%
-- Flow 1:
Average throughput: 24.32 Mbit/s
95th percentile per-packet one-way delay: 143.129 ms
Loss rate: 3.25%
```

Run 7: Report of Indigo — Data Link

Flow 1 ingress (mean 24.96 Mbit/s) --- Flow 1 egress (mean 24.32 Mbit/s)

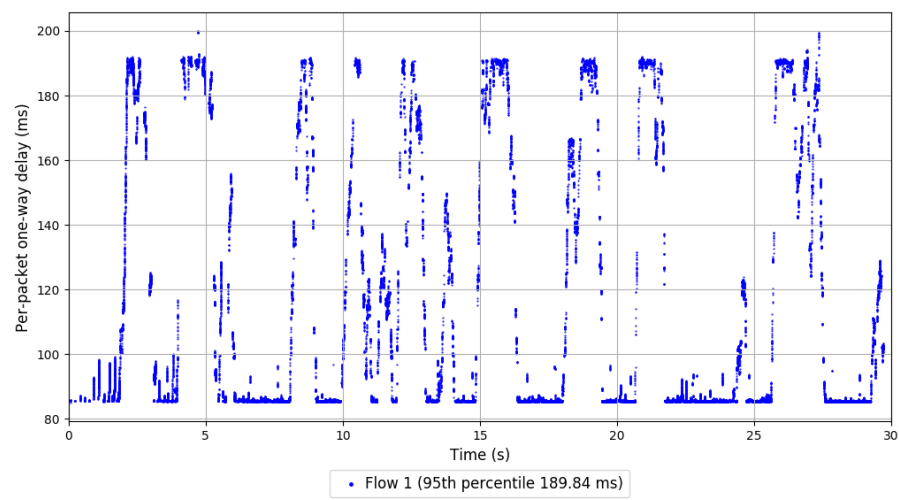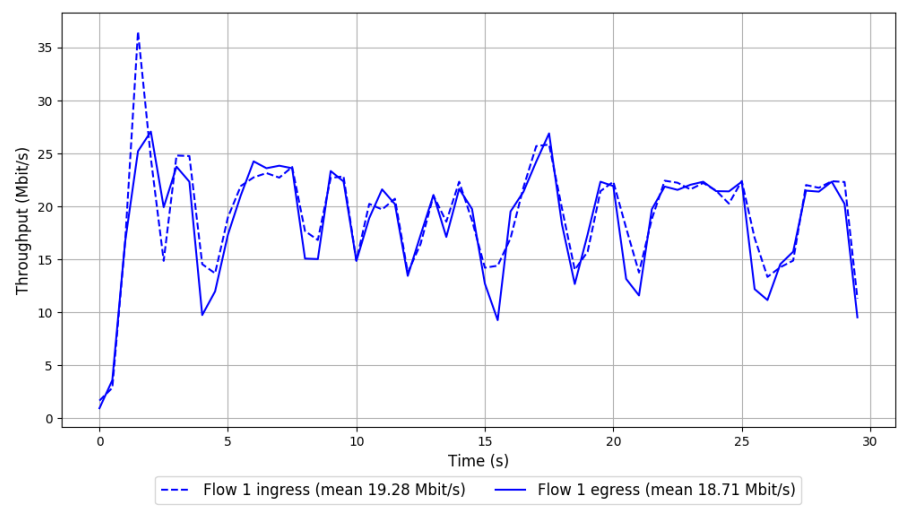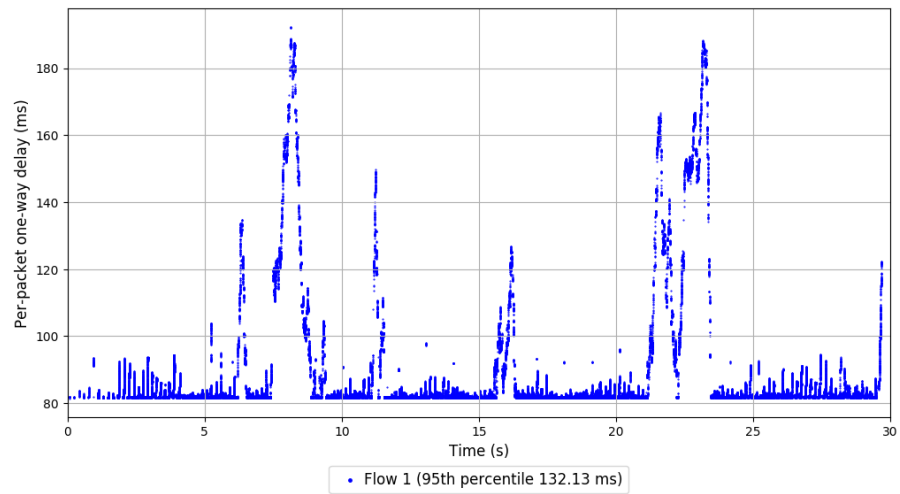Flow 1 (95th percentile 143.13 ms)

```
Run 8: Statistics of Indigo

Start at: 2017-09-03 07:31:04
End at: 2017-09-03 07:31:34
Local clock offset: -3.075 ms
Remote clock offset: -4.228 ms


# Below is generated by plot.py at 2017-09-03 11:37:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.71 Mbit/s
95th percentile per-packet one-way delay: 189.836 ms
Loss rate: 3.47%
-- Flow 1:
Average throughput: 18.71 Mbit/s
95th percentile per-packet one-way delay: 189.836 ms
Loss rate: 3.47%
```

Run 8: Report of Indigo — Data Link

Flow 1 ingress (mean 19.28 Mbit/s) --- Flow 1 egress (mean 18.71 Mbit/s)

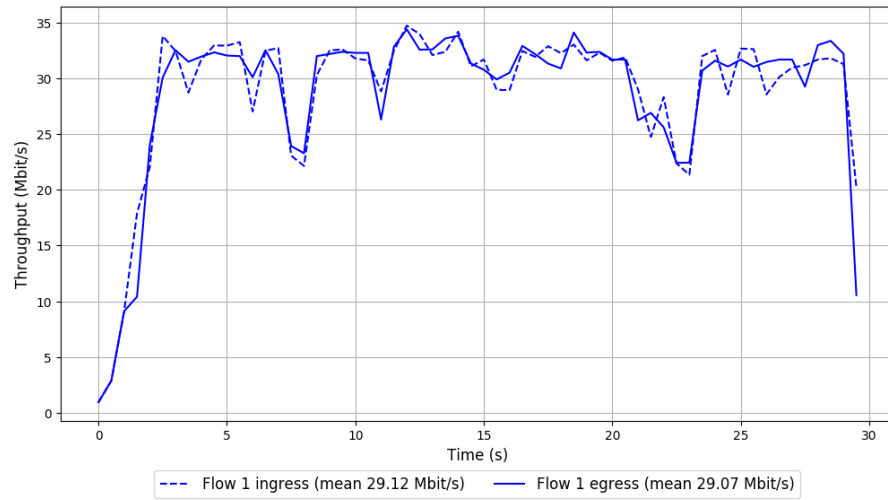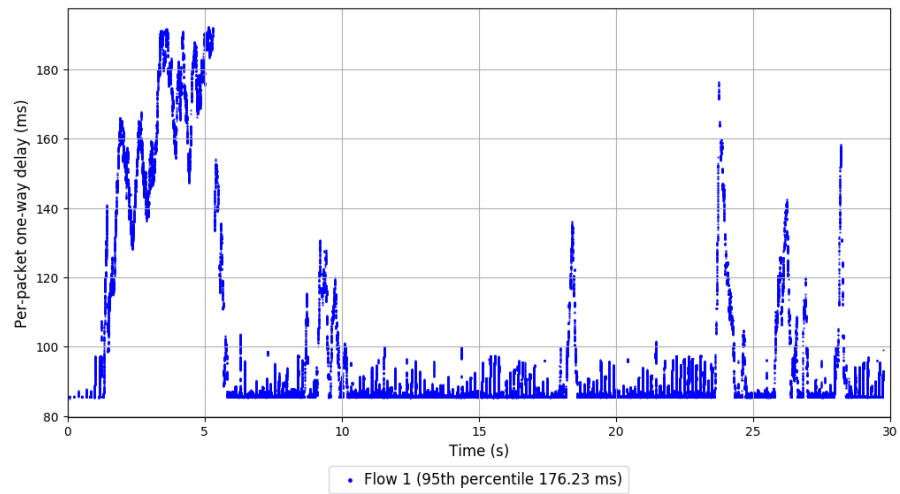Flow 1 (95th percentile 189.84 ms)

```
Run 9: Statistics of Indigo

Start at: 2017-09-03 07:49:39
End at: 2017-09-03 07:50:09
Local clock offset: -2.39 ms
Remote clock offset: -0.276 ms


# Below is generated by plot.py at 2017-09-03 11:37:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 29.07 Mbit/s
95th percentile per-packet one-way delay: 132.134 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 29.07 Mbit/s
95th percentile per-packet one-way delay: 132.134 ms
Loss rate: 0.69%
```
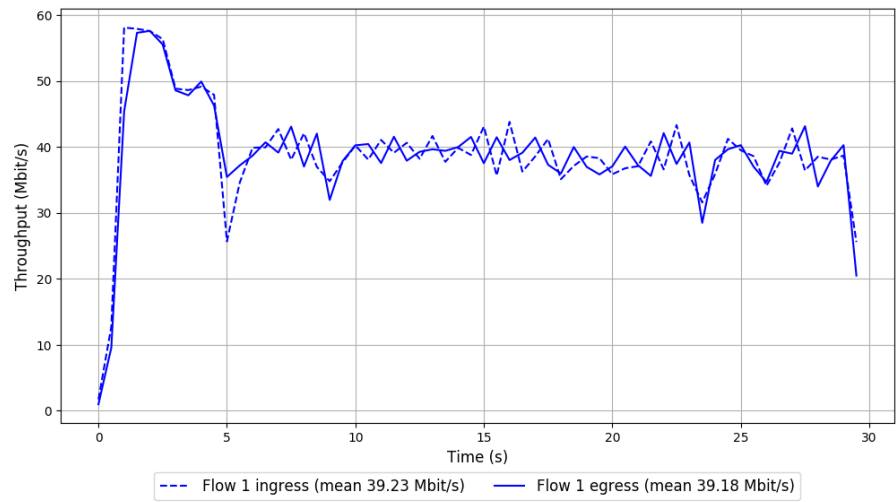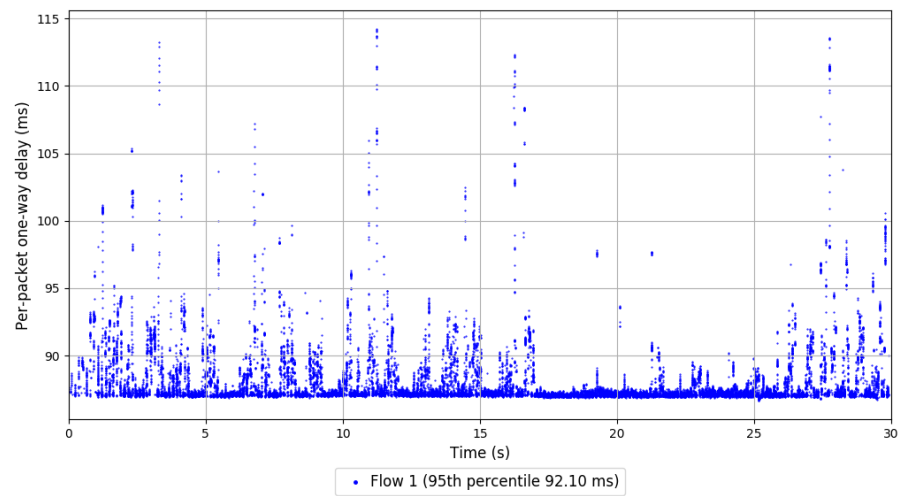
Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2017-09-03 08:07:57
End at: 2017-09-03 08:08:27
Local clock offset: -2.043 ms
Remote clock offset: -3.732 ms


# Below is generated by plot.py at 2017-09-03 11:37:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.18 Mbit/s
95th percentile per-packet one-way delay: 176.232 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 39.18 Mbit/s
95th percentile per-packet one-way delay: 176.232 ms
Loss rate: 0.57%
```

Run 10: Report of Indigo — Data Link

Flow 1 ingress (mean 39.23 Mbit/s) --- Flow 1 egress (mean 39.18 Mbit/s)

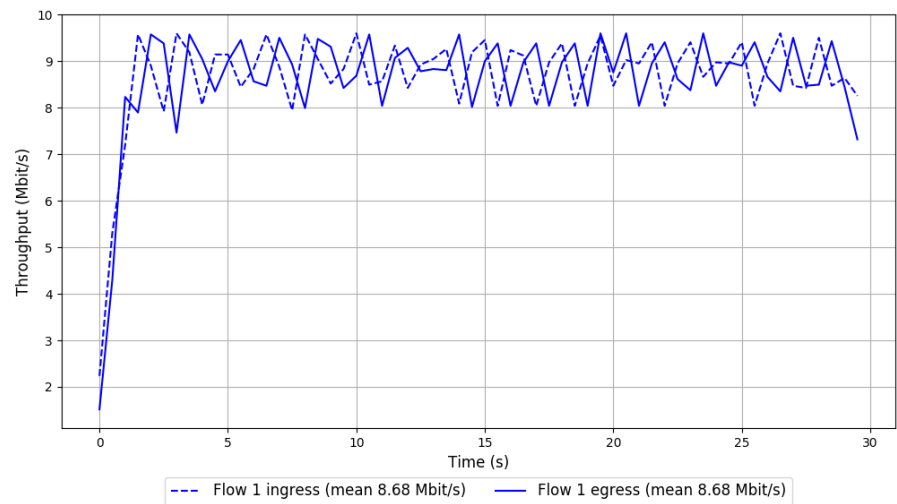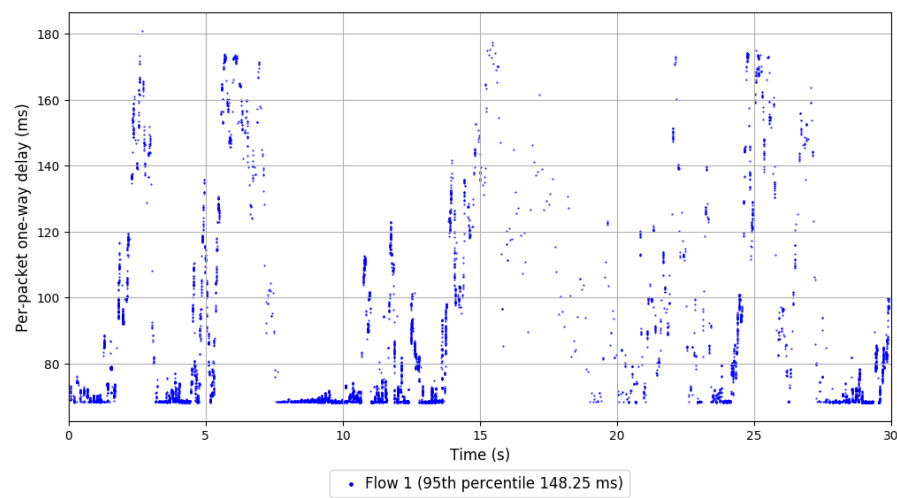• Flow 1 (95th percentile 176.23 ms)

```
Run 1: Statistics of KohoCC

Start at: 2017-09-03 05:34:55
End at: 2017-09-03 05:35:25
Local clock offset: -2.704 ms
Remote clock offset: -0.016 ms


# Below is generated by plot.py at 2017-09-03 11:37:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.68 Mbit/s
95th percentile per-packet one-way delay: 92.104 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 8.68 Mbit/s
95th percentile per-packet one-way delay: 92.104 ms
Loss rate: 0.48%
```

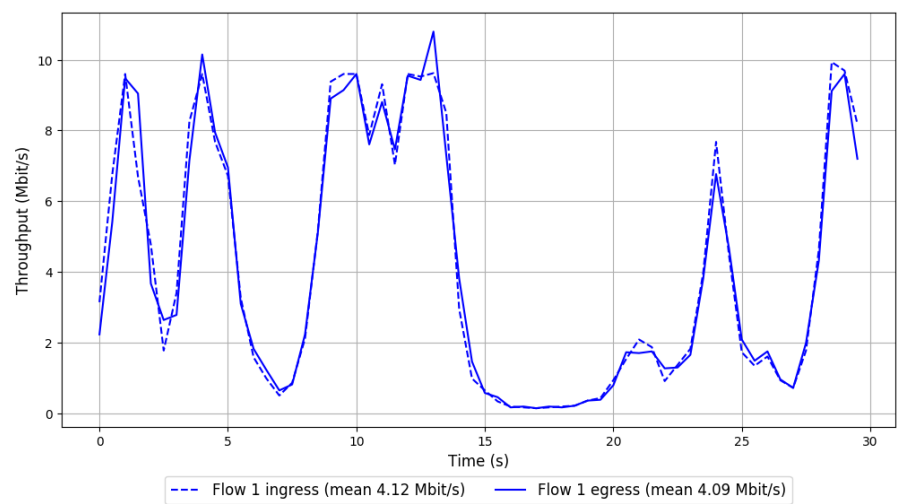Run 1: Report of KohoCC — Data Link

```
Run 2: Statistics of KohoCC

Start at: 2017-09-03 05:53:07
End at: 2017-09-03 05:53:37
Local clock offset: -4.121 ms
Remote clock offset: -0.214 ms


# Below is generated by plot.py at 2017-09-03 11:37:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 148.245 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 148.245 ms
Loss rate: 1.25%
```

Run 2: Report of KohoCC — Data Link
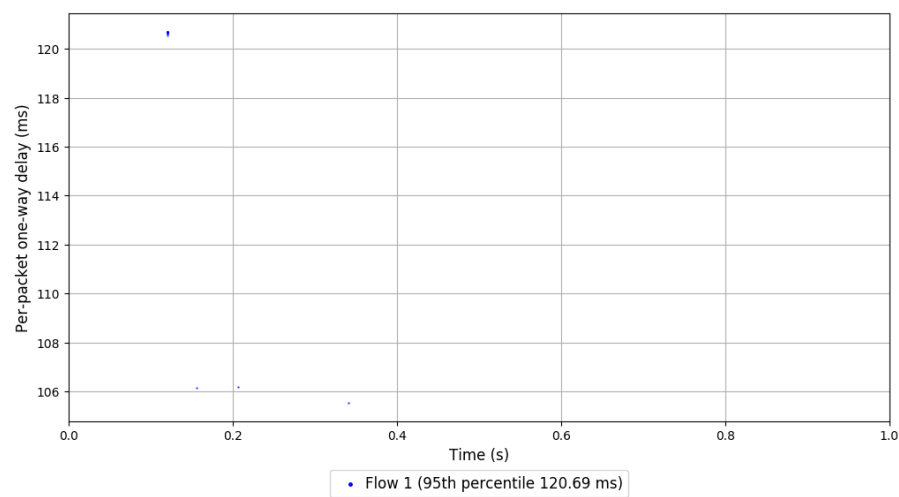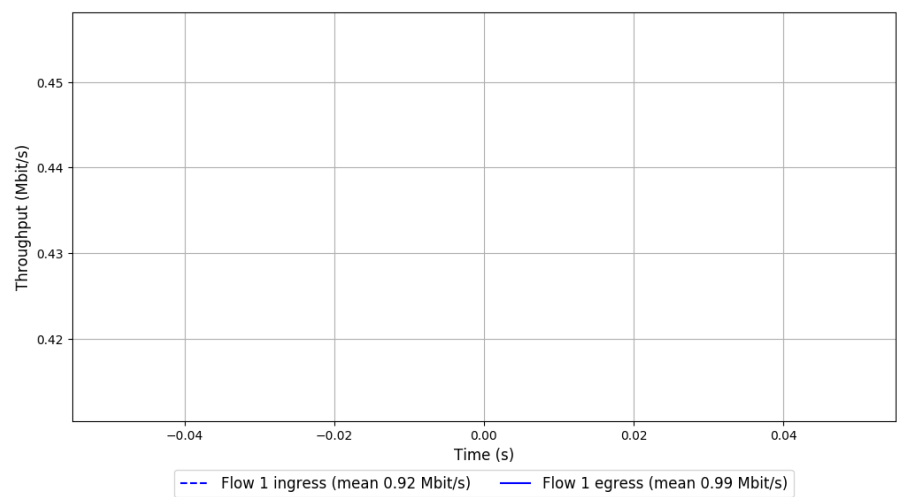
```
Run 3: Statistics of KohoCC

Start at: 2017-09-03 06:11:13
End at: 2017-09-03 06:11:43
Local clock offset: 16.532 ms
Remote clock offset: -0.022 ms
```
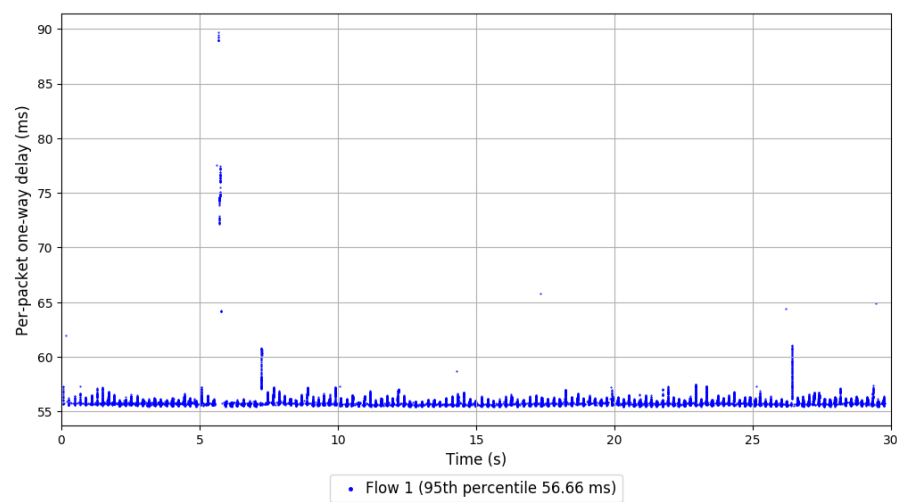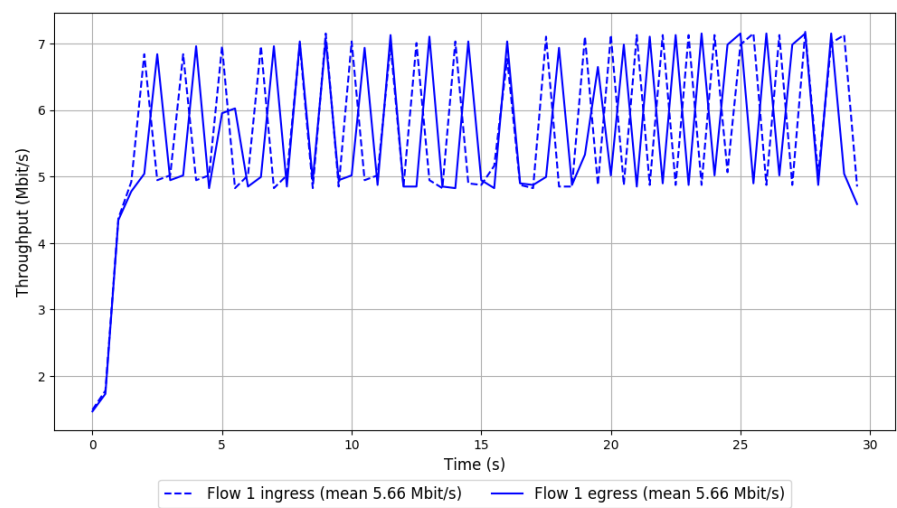
Run 3: Report of KohoCC — Data Link

Flow 1 ingress (mean 0.92 Mbit/s)   Flow 1 egress (mean 0.99 Mbit/s)

Flow 1 (95th percentile 120.69 ms)

```
Run 4: Statistics of KohoCC

Start at: 2017-09-03 06:30:02
End at: 2017-09-03 06:30:32
Local clock offset: -3.527 ms
Remote clock offset: 30.402 ms


# Below is generated by plot.py at 2017-09-03 11:37:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.66 Mbit/s
95th percentile per-packet one-way delay: 56.657 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 5.66 Mbit/s
95th percentile per-packet one-way delay: 56.657 ms
Loss rate: 0.71%
```

Run 4: Report of KohoCC — Data Link

Flow 1 ingress (mean 5.66 Mbit/s) — — — Flow 1 egress (mean 5.66 Mbit/s)

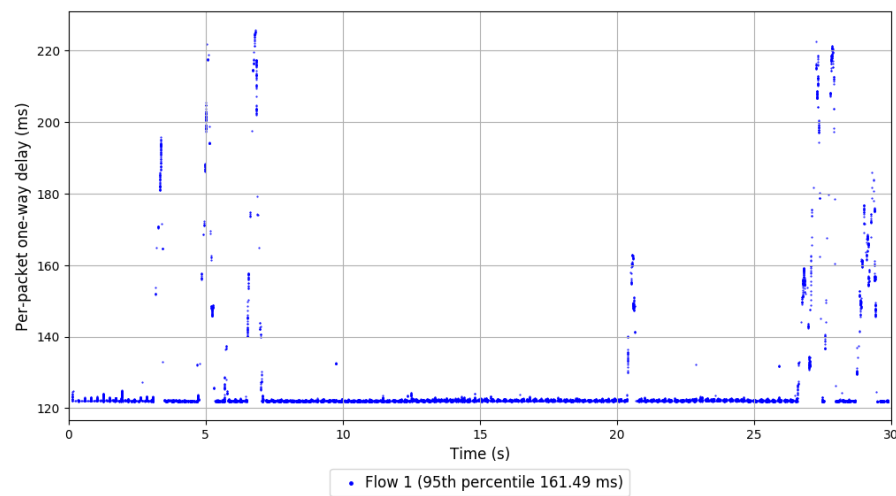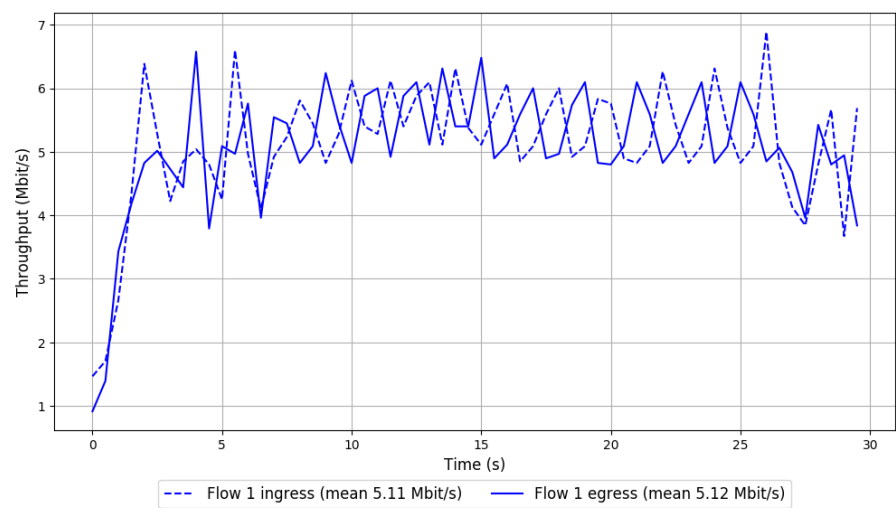• Flow 1 (95th percentile 56.66 ms)

```
Run 5: Statistics of KohoCC

Start at: 2017-09-03 06:48:47
End at: 2017-09-03 06:49:17
Local clock offset: -3.764 ms
Remote clock offset: -36.79 ms


# Below is generated by plot.py at 2017-09-03 11:37:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 161.487 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 161.487 ms
Loss rate: 0.74%
```

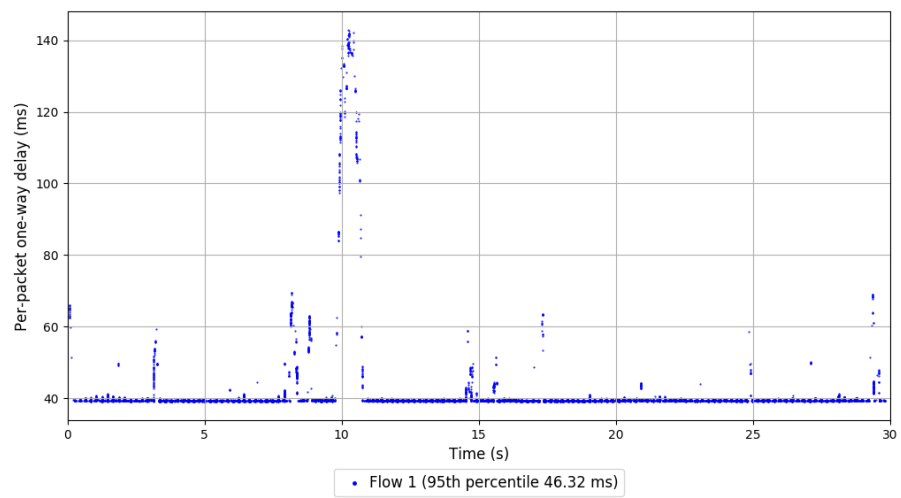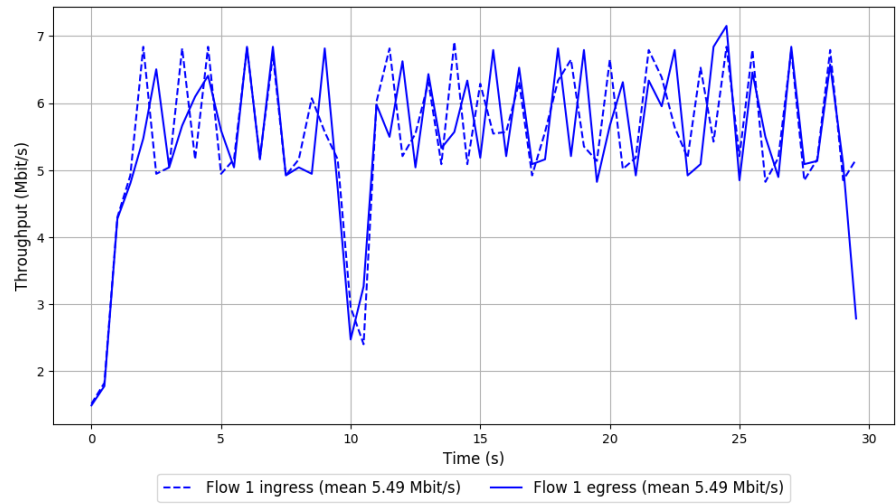Run 5: Report of KohoCC — Data Link

```
Run 6: Statistics of KohoCC

Start at: 2017-09-03 07:07:40
End at: 2017-09-03 07:08:10
Local clock offset: -2.282 ms
Remote clock offset: 30.056 ms

# Below is generated by plot.py at 2017-09-03 11:37:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.49 Mbit/s
95th percentile per-packet one-way delay: 46.324 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 5.49 Mbit/s
95th percentile per-packet one-way delay: 46.324 ms
Loss rate: 0.73%
```

Run 6: Report of KohoCC — Data Link

Flow 1 ingress (mean 5.49 Mbit/s) --- Flow 1 egress (mean 5.49 Mbit/s)

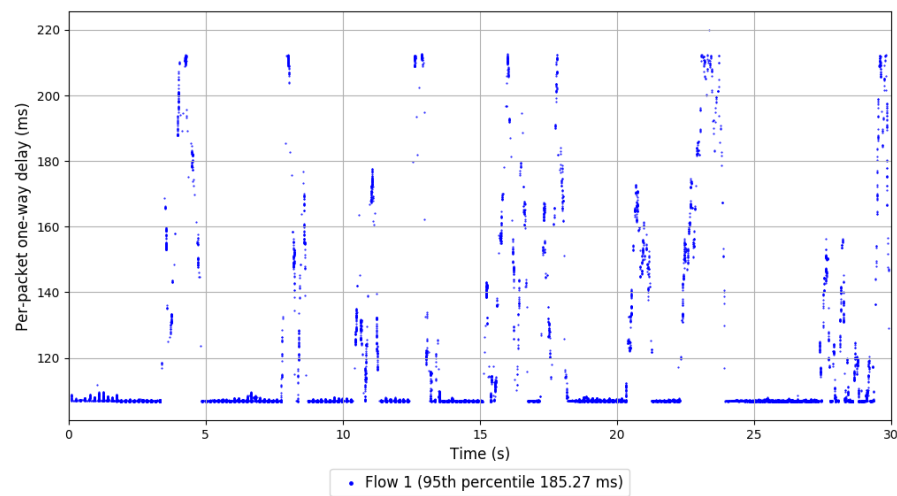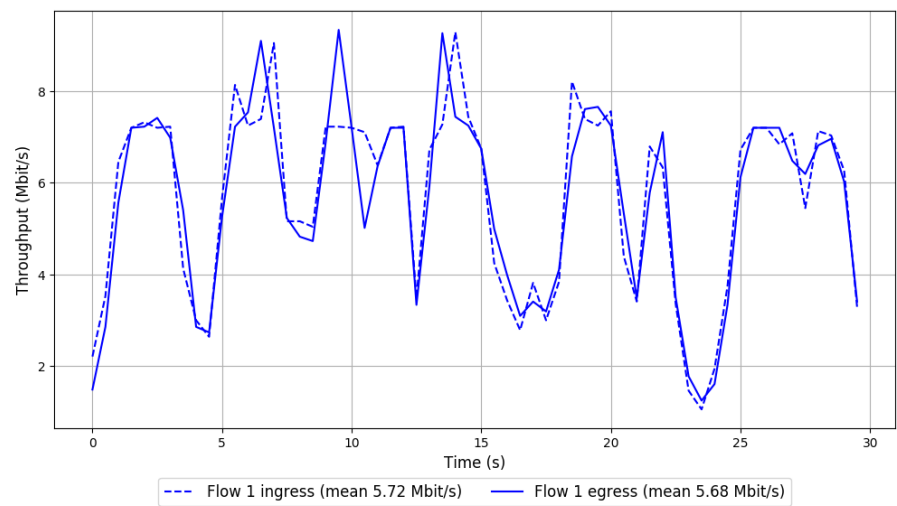Flow 1 (95th percentile 46.32 ms)

```
Run 7: Statistics of KohoCC

Start at: 2017-09-03 07:26:08
End at: 2017-09-03 07:26:38
Local clock offset: 17.746 ms
Remote clock offset: -3.859 ms


# Below is generated by plot.py at 2017-09-03 11:37:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.68 Mbit/s
95th percentile per-packet one-way delay: 185.266 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 5.68 Mbit/s
95th percentile per-packet one-way delay: 185.266 ms
Loss rate: 1.13%
```

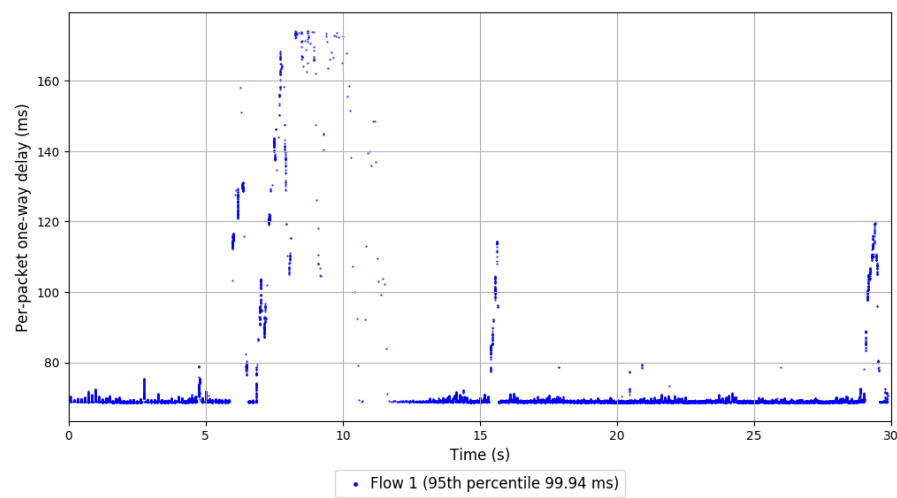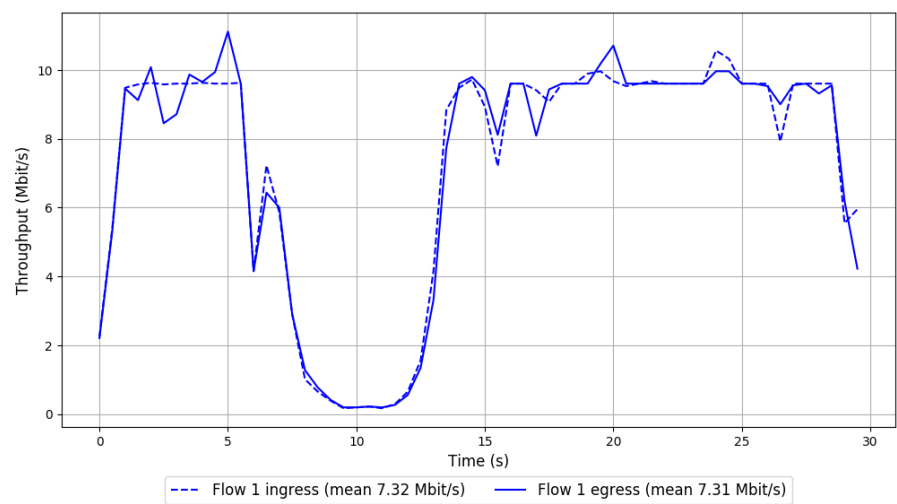# Run 7: Report of KohoCC — Data Link

```
Run 8: Statistics of KohoCC

Start at: 2017-09-03 07:44:52
End at: 2017-09-03 07:45:22
Local clock offset: -2.426 ms
Remote clock offset: -4.023 ms


# Below is generated by plot.py at 2017-09-03 11:38:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.31 Mbit/s
95th percentile per-packet one-way delay: 99.945 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 7.31 Mbit/s
95th percentile per-packet one-way delay: 99.945 ms
Loss rate: 0.54%
```

Run 8: Report of KohoCC — Data Link

Flow 1 ingress (mean 7.32 Mbit/s) Flow 1 egress (mean 7.31 Mbit/s)

Flow 1 (95th percentile 99.94 ms)

```
Run 9: Statistics of KohoCC

Start at: 2017-09-03 08:03:08
End at: 2017-09-03 08:03:38
Local clock offset: 19.318 ms
Remote clock offset: -4.031 ms


# Below is generated by plot.py at 2017-09-03 11:38:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.57 Mbit/s
95th percentile per-packet one-way delay: 108.020 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 8.57 Mbit/s
95th percentile per-packet one-way delay: 108.020 ms
Loss rate: 0.46%
```
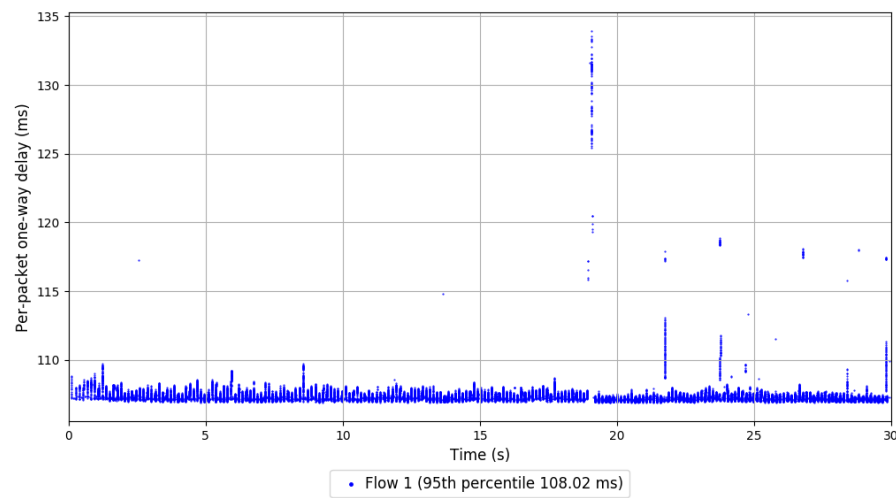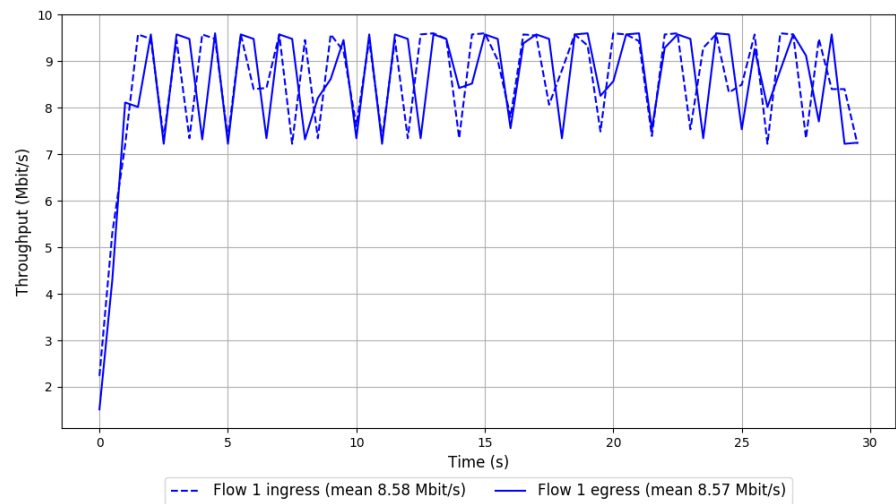
Run 9: Report of KohoCC — Data Link

Flow 1 ingress (mean 8.58 Mbit/s)   Flow 1 egress (mean 8.57 Mbit/s)

Flow 1 (95th percentile 108.02 ms)

Run 10: Statistics of KohoCC

Start at: 2017-09-03 08:21:20
End at: 2017-09-03 08:21:50
Local clock offset: -2.443 ms
Remote clock offset: -3.272 ms

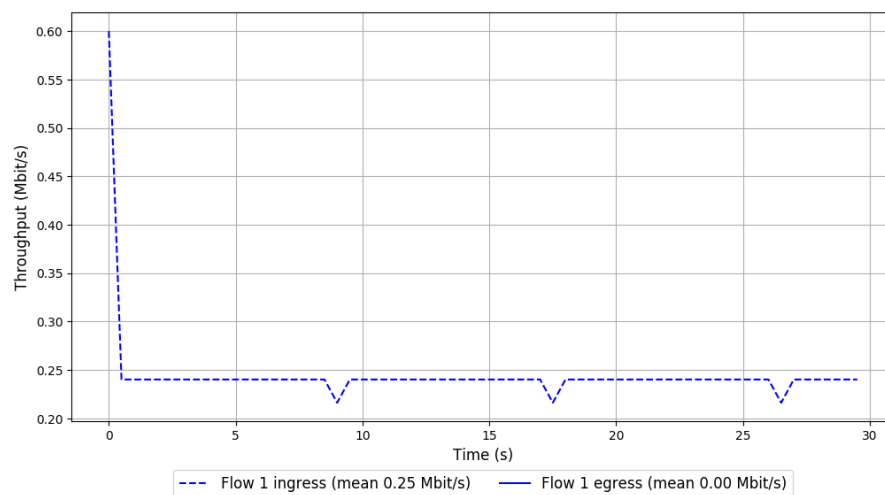Run 10: Report of KohoCC — Data Link

Figure is missing

```
Run 1: Statistics of LEDBAT

Start at: 2017-09-03 05:26:31
End at: 2017-09-03 05:27:01
Local clock offset: -3.897 ms
Remote clock offset: 0.064 ms


# Below is generated by plot.py at 2017-09-03 11:38:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.59 Mbit/s
95th percentile per-packet one-way delay: 99.096 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 16.59 Mbit/s
95th percentile per-packet one-way delay: 99.096 ms
Loss rate: 0.29%
```
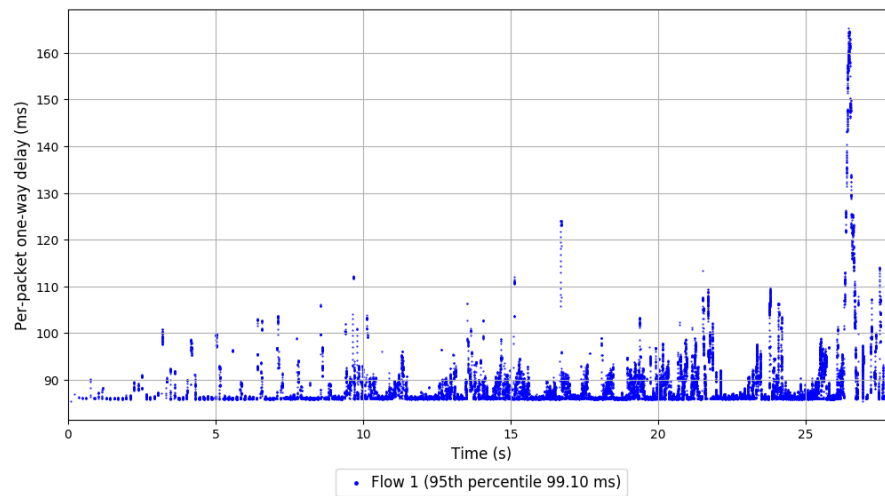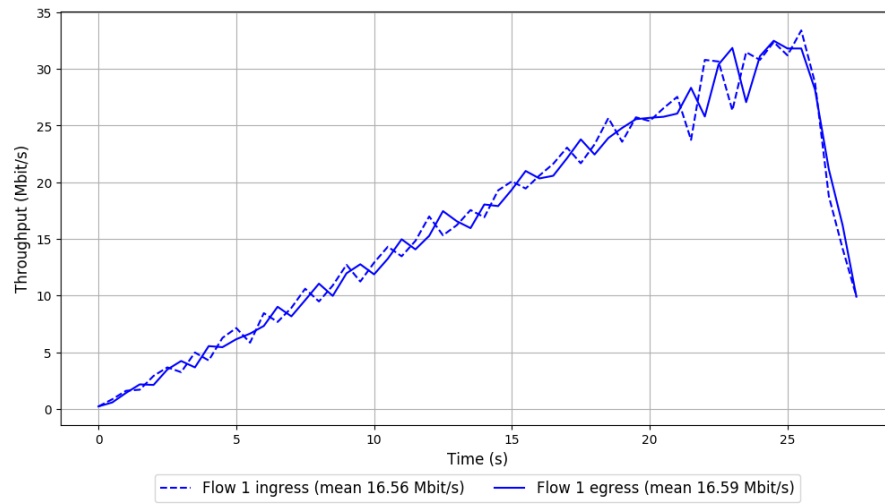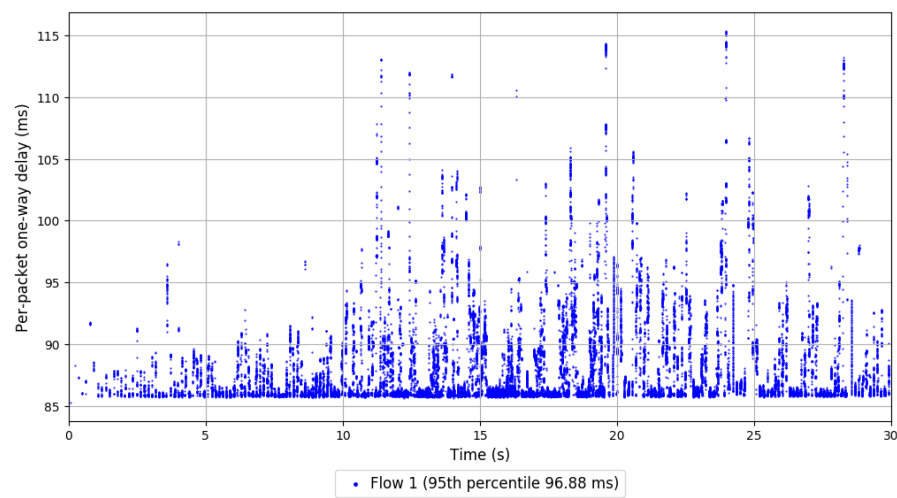
Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 16.56 Mbit/s)   Flow 1 egress (mean 16.59 Mbit/s)

Flow 1 (95th percentile 99.10 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2017-09-03 05:44:39
End at: 2017-09-03 05:45:09
Local clock offset: -4.441 ms
Remote clock offset: 0.037 ms


# Below is generated by plot.py at 2017-09-03 11:38:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.10 Mbit/s
95th percentile per-packet one-way delay: 96.882 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 12.10 Mbit/s
95th percentile per-packet one-way delay: 96.882 ms
Loss rate: 0.37%
```
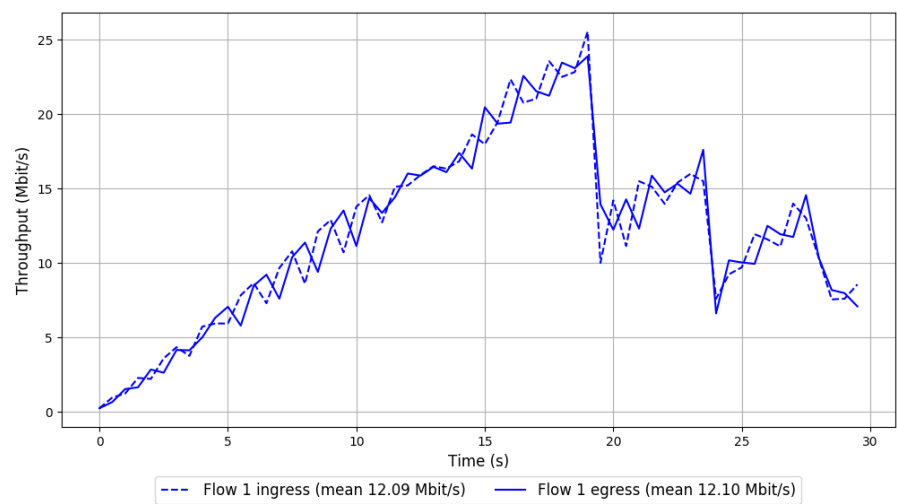
Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 12.09 Mbit/s)   Flow 1 egress (mean 12.10 Mbit/s)

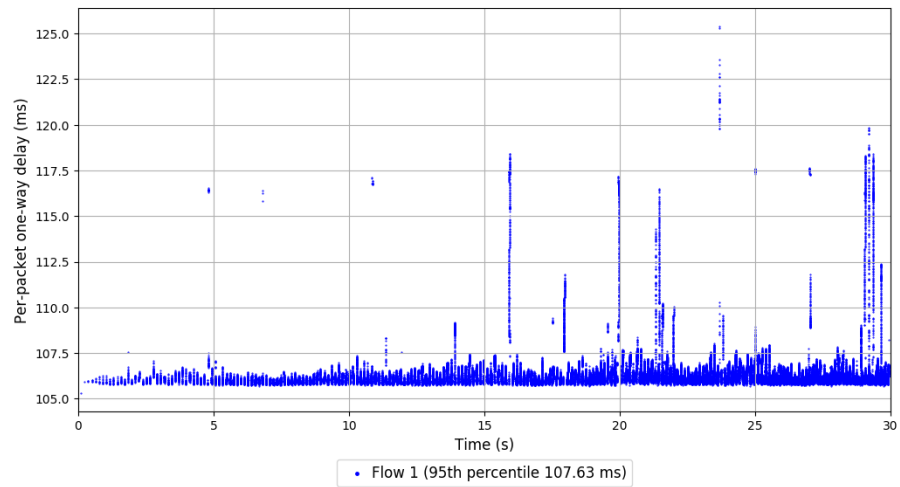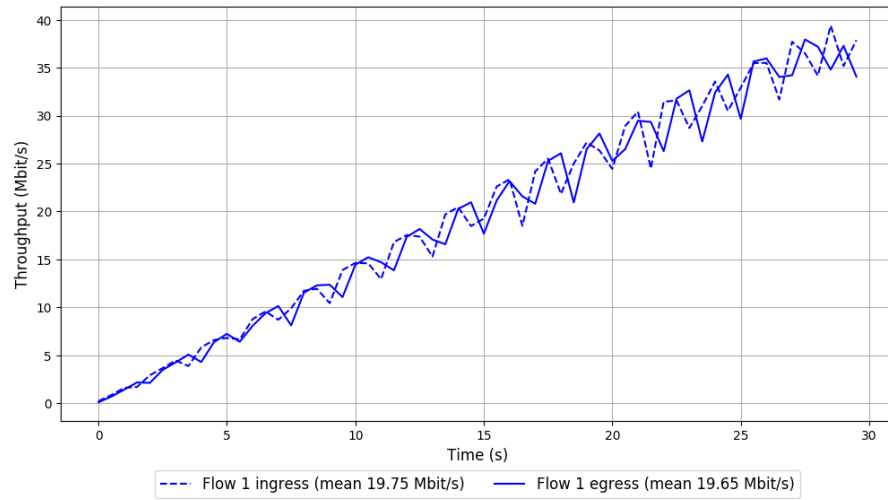Flow 1 (95th percentile 96.88 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2017-09-03 06:02:42
End at: 2017-09-03 06:03:12
Local clock offset: 16.774 ms
Remote clock offset: -0.265 ms


# Below is generated by plot.py at 2017-09-03 11:38:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.65 Mbit/s
95th percentile per-packet one-way delay: 107.634 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 19.65 Mbit/s
95th percentile per-packet one-way delay: 107.634 ms
Loss rate: 0.89%
```
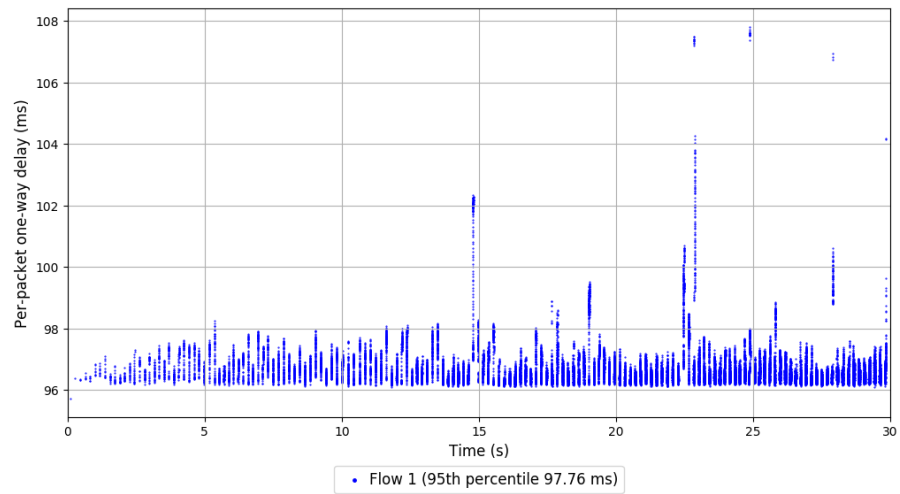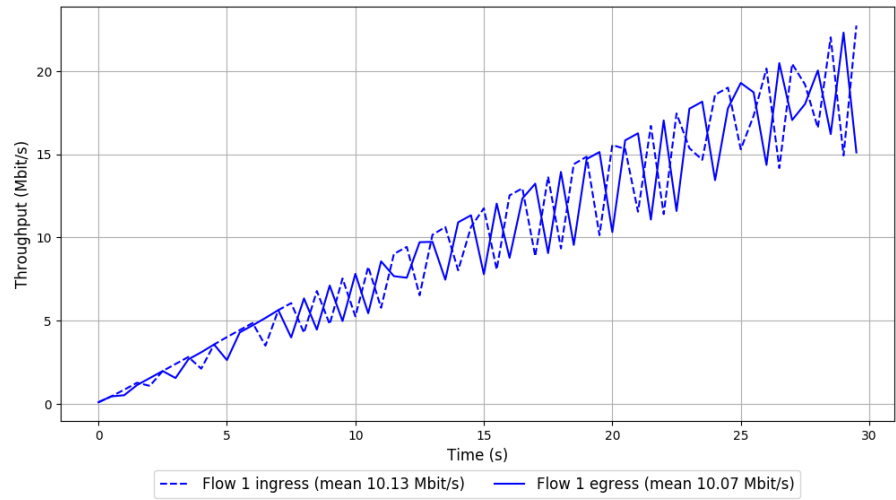
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2017-09-03 06:21:12
End at: 2017-09-03 06:21:42
Local clock offset: -3.541 ms
Remote clock offset: -28.638 ms

# Below is generated by plot.py at 2017-09-03 11:38:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.07 Mbit/s
95th percentile per-packet one-way delay: 97.760 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 10.07 Mbit/s
95th percentile per-packet one-way delay: 97.760 ms
Loss rate: 1.26%
```

Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 10.13 Mbit/s) ----   Flow 1 egress (mean 10.07 Mbit/s) ——
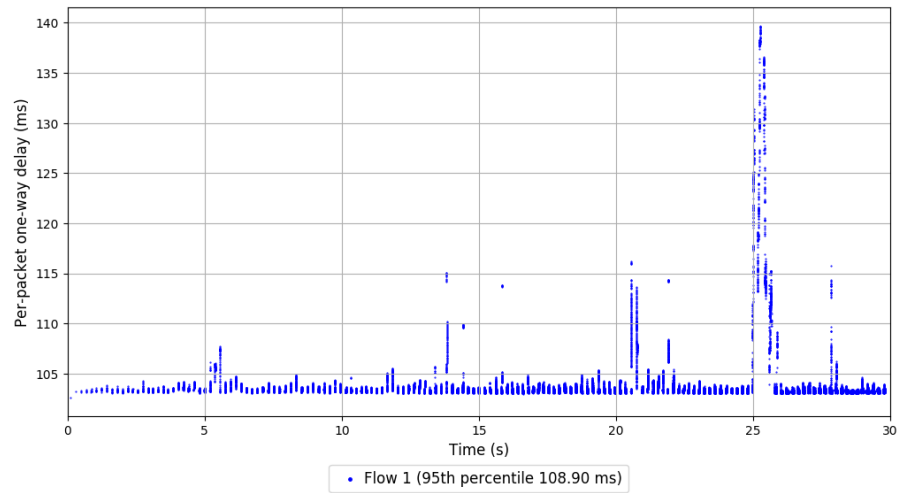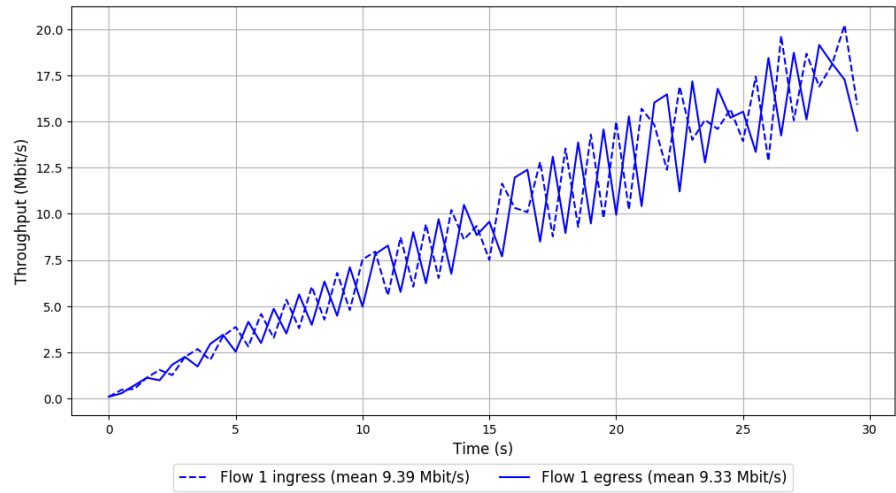

Flow 1 (95th percentile 97.76 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2017-09-03 06:39:59
End at: 2017-09-03 06:40:29
Local clock offset: -3.803 ms
Remote clock offset: -35.459 ms

# Below is generated by plot.py at 2017-09-03 11:38:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.33 Mbit/s
95th percentile per-packet one-way delay: 108.902 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 9.33 Mbit/s
95th percentile per-packet one-way delay: 108.902 ms
Loss rate: 1.30%
```

Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 9.39 Mbit/s)   Flow 1 egress (mean 9.33 Mbit/s)

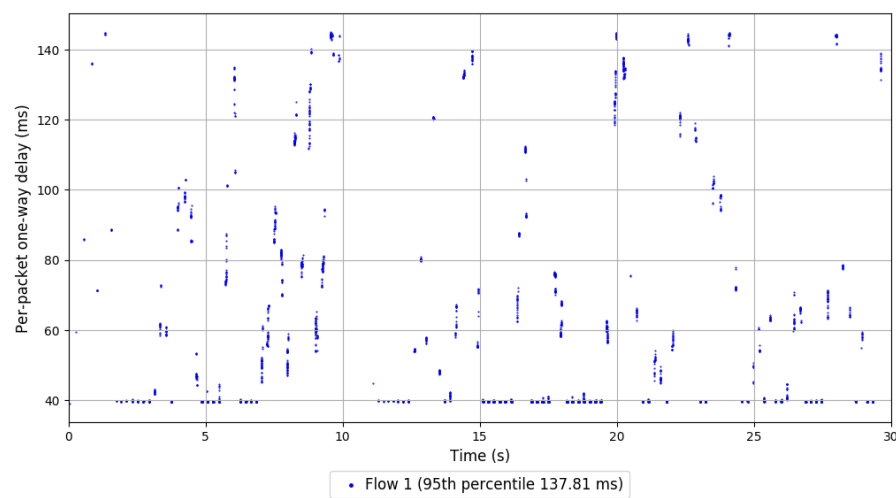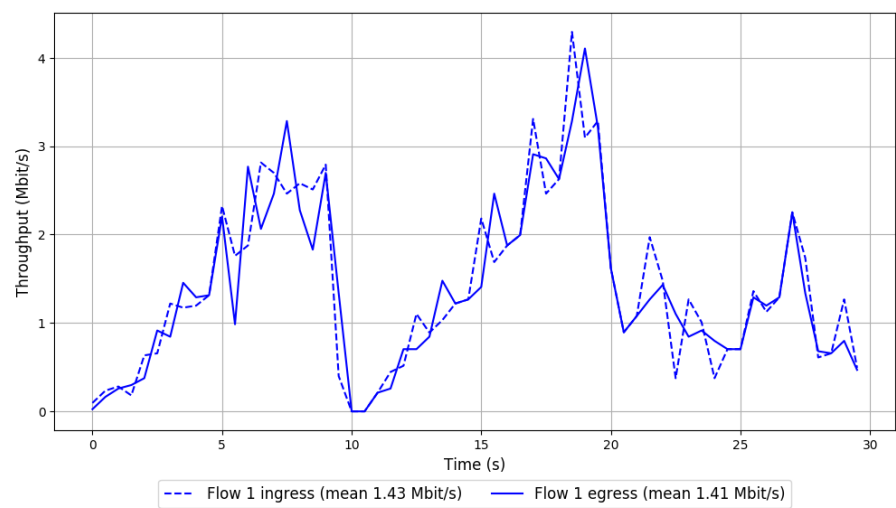Flow 1 (95th percentile 108.90 ms)

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```
Run 6: Statistics of LEDBAT

Start at: 2017-09-03 06:58:54
End at: 2017-09-03 06:59:24
Local clock offset: -2.61 ms
Remote clock offset: 30.063 ms


# Below is generated by plot.py at 2017-09-03 11:38:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 137.807 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 137.807 ms
Loss rate: 1.60%
```

Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 1.43 Mbit/s) ---- Flow 1 egress (mean 1.41 Mbit/s)

• Flow 1 (95th percentile 137.81 ms)
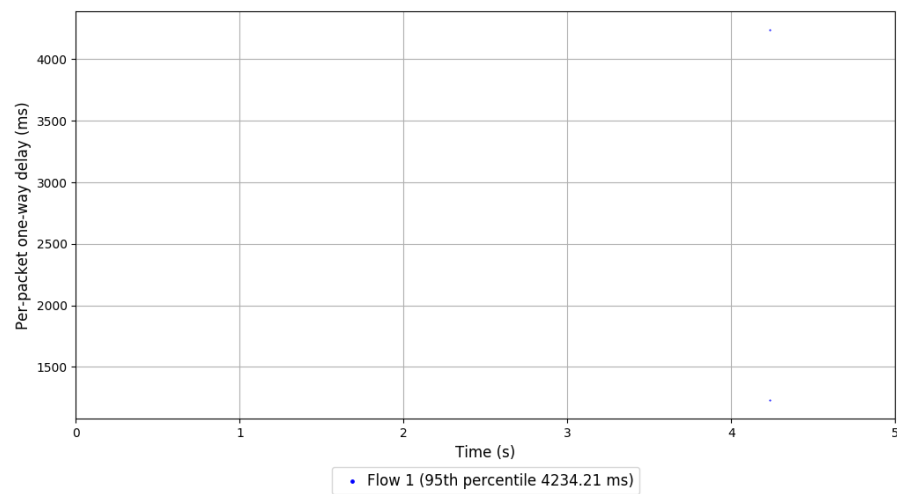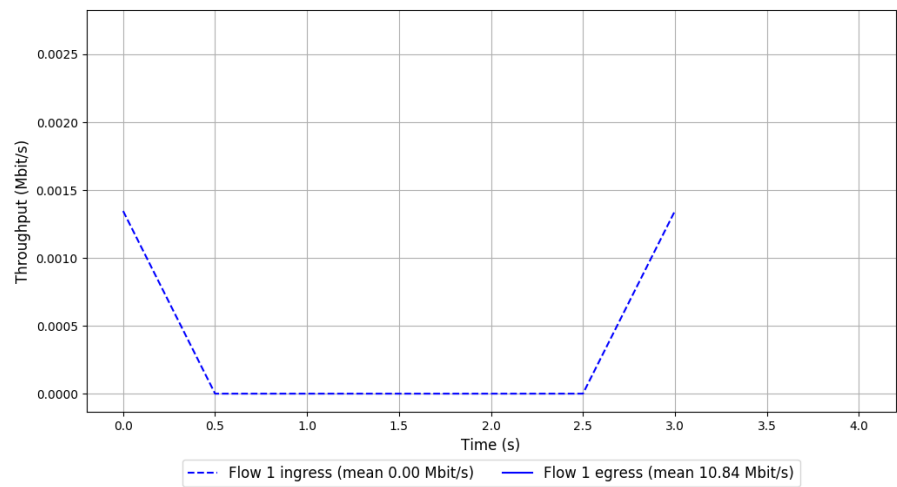
Run 7: Statistics of LEDBAT

Start at: 2017-09-03 07:17:34
End at: 2017-09-03 07:18:04
Local clock offset: -3.358 ms
Remote clock offset: -2.252 ms
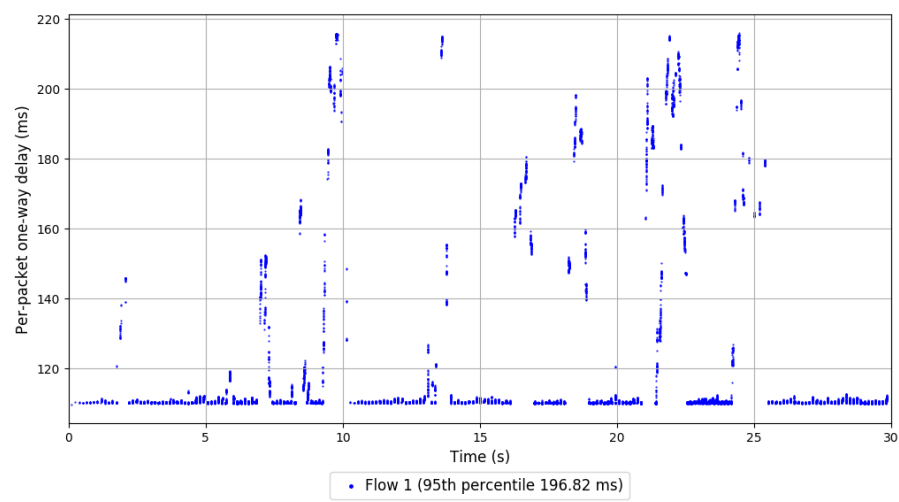
Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.00 Mbit/s) — Flow 1 egress (mean 10.84 Mbit/s)
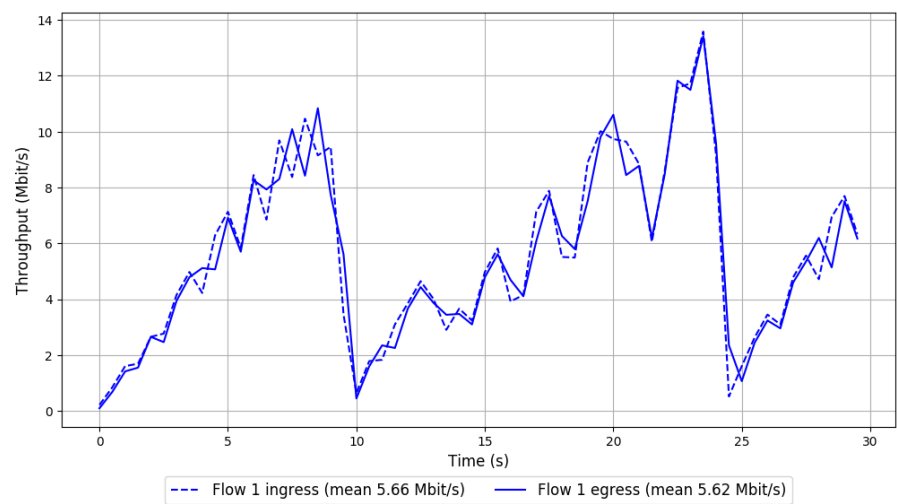

• Flow 1 (95th percentile 4234.21 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2017-09-03 07:36:18
End at: 2017-09-03 07:36:48
Local clock offset: 21.688 ms
Remote clock offset: -3.857 ms


# Below is generated by plot.py at 2017-09-03 11:38:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 196.816 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 196.816 ms
Loss rate: 1.06%
```

Run 8: Report of LEDBAT — Data Link

Flow 1 ingress (mean 5.66 Mbit/s) --- Flow 1 egress (mean 5.62 Mbit/s)

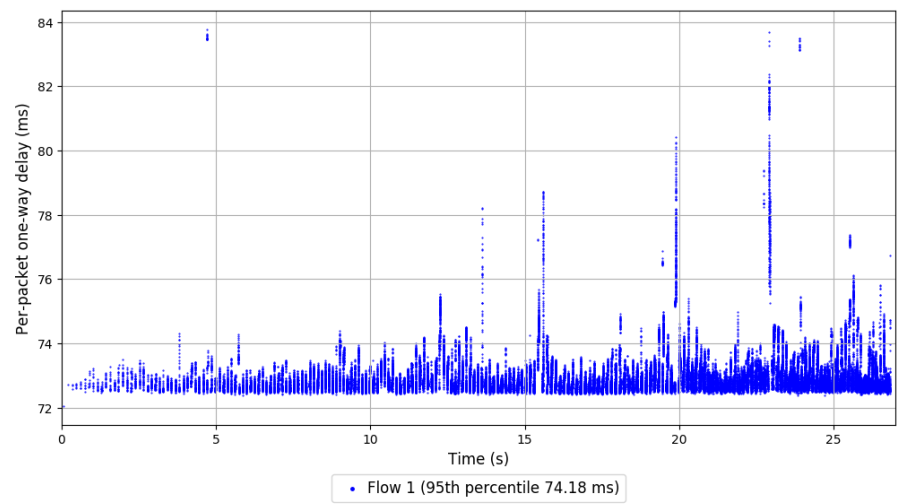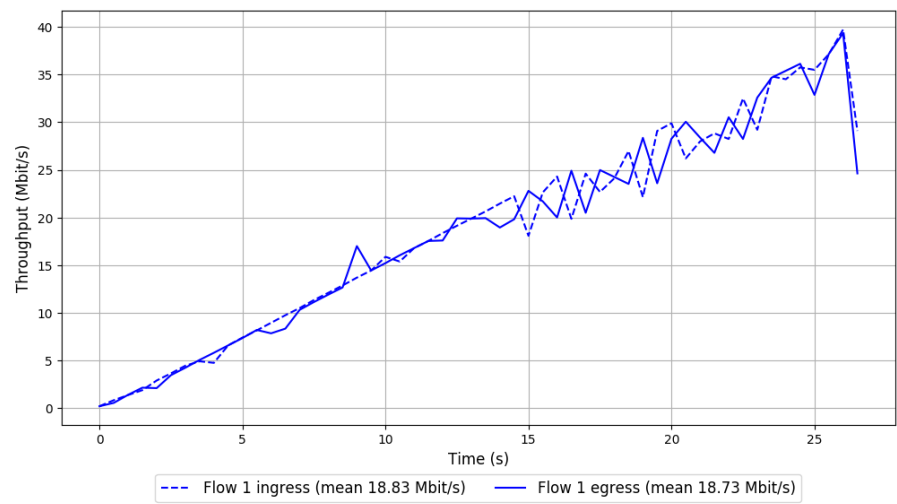Flow 1 (95th percentile 196.82 ms)

```
Run 9: Statistics of LEDBAT

Start at: 2017-09-03 07:54:39
End at: 2017-09-03 07:55:09
Local clock offset: 2.029 ms
Remote clock offset: -4.307 ms


# Below is generated by plot.py at 2017-09-03 11:38:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.73 Mbit/s
95th percentile per-packet one-way delay: 74.180 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 18.73 Mbit/s
95th percentile per-packet one-way delay: 74.180 ms
Loss rate: 0.97%
```

Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 18.83 Mbit/s) --- Flow 1 egress (mean 18.73 Mbit/s)
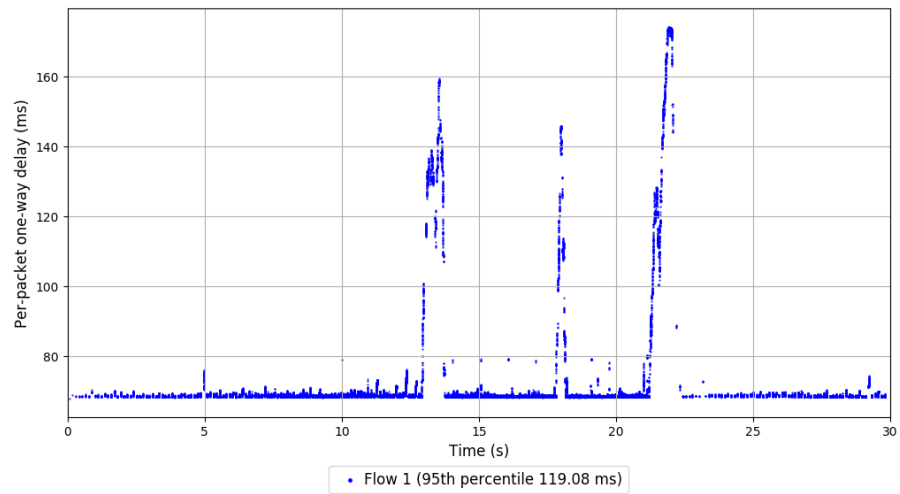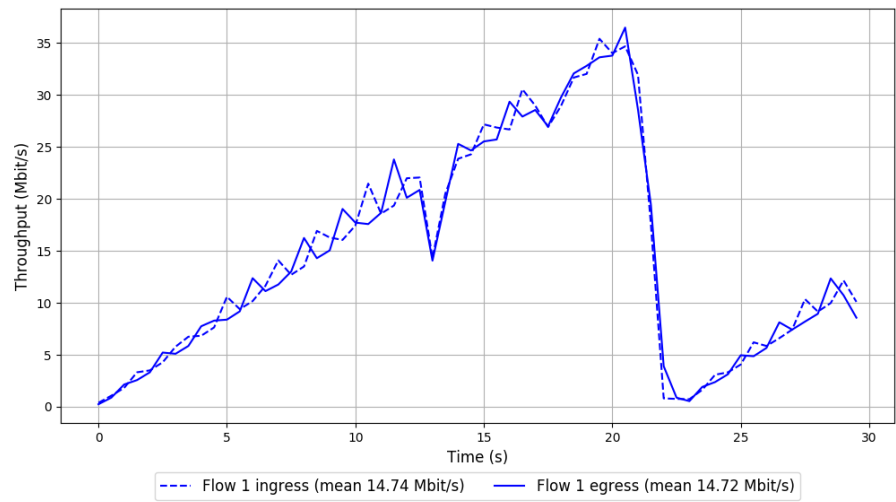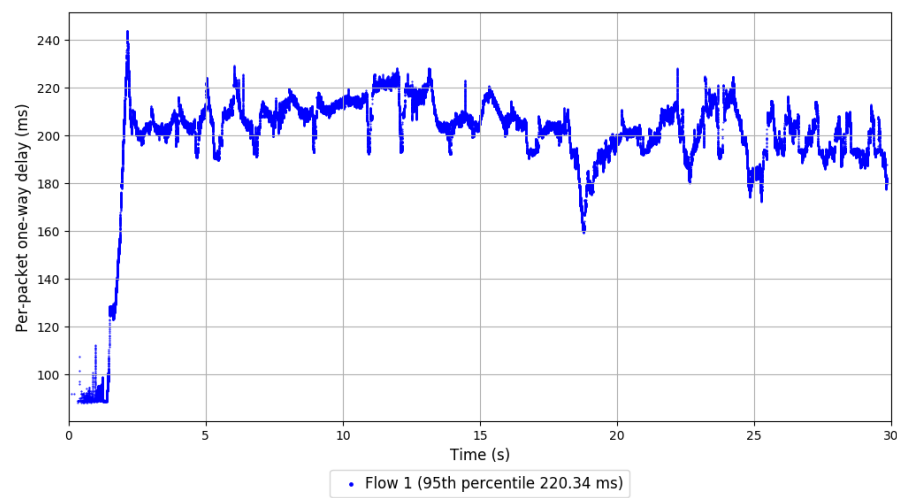

Flow 1 (95th percentile 74.18 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2017-09-03 08:12:56
End at: 2017-09-03 08:13:26
Local clock offset: -2.102 ms
Remote clock offset: -3.476 ms


# Below is generated by plot.py at 2017-09-03 11:38:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.72 Mbit/s
95th percentile per-packet one-way delay: 119.082 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 14.72 Mbit/s
95th percentile per-packet one-way delay: 119.082 ms
Loss rate: 0.54%
```
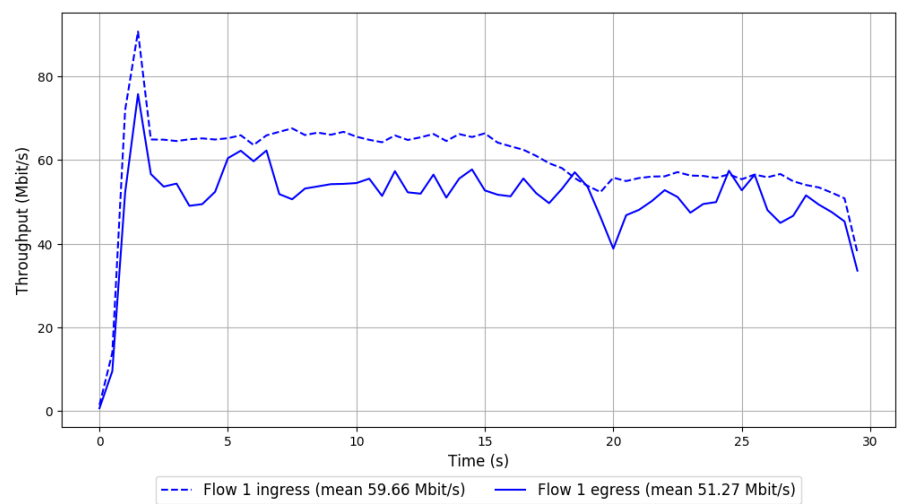
Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC

Start at: 2017-09-03 05:24:05
End at: 2017-09-03 05:24:35
Local clock offset: 17.184 ms
Remote clock offset: 0.004 ms


# Below is generated by plot.py at 2017-09-03 11:38:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.27 Mbit/s
95th percentile per-packet one-way delay: 220.337 ms
Loss rate: 14.41%
-- Flow 1:
Average throughput: 51.27 Mbit/s
95th percentile per-packet one-way delay: 220.337 ms
Loss rate: 14.41%
```
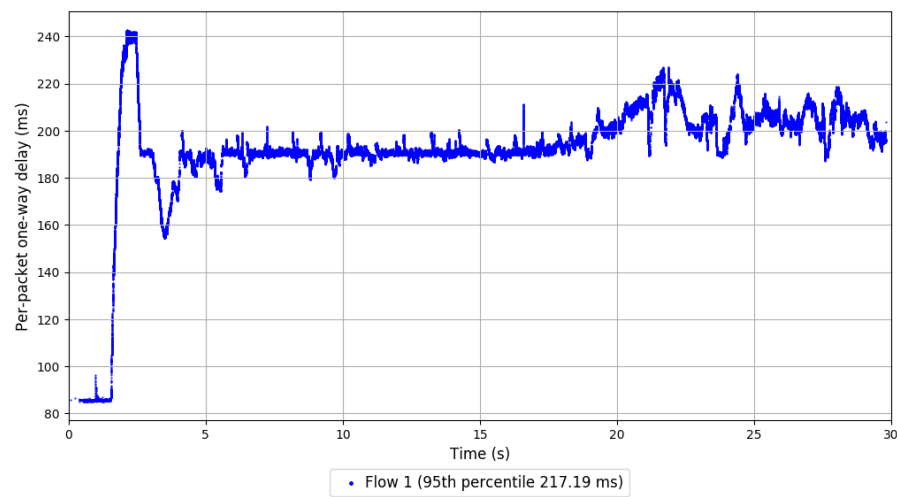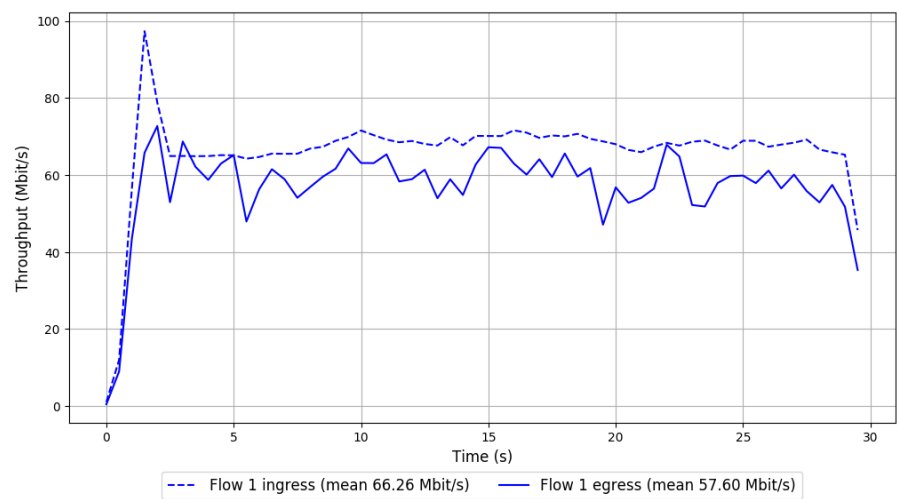
Run 1: Report of PCC — Data Link

Flow 1 ingress (mean 59.66 Mbit/s)   Flow 1 egress (mean 51.27 Mbit/s)

Flow 1 (95th percentile 220.34 ms)

```
Run 2: Statistics of PCC

Start at: 2017-09-03 05:42:09
End at: 2017-09-03 05:42:39
Local clock offset: -4.237 ms
Remote clock offset: -0.13 ms


# Below is generated by plot.py at 2017-09-03 11:38:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.60 Mbit/s
95th percentile per-packet one-way delay: 217.195 ms
Loss rate: 13.46%
-- Flow 1:
Average throughput: 57.60 Mbit/s
95th percentile per-packet one-way delay: 217.195 ms
Loss rate: 13.46%
```

Run 2: Report of PCC — Data Link

Flow 1 ingress (mean 66.26 Mbit/s)   Flow 1 egress (mean 57.60 Mbit/s)

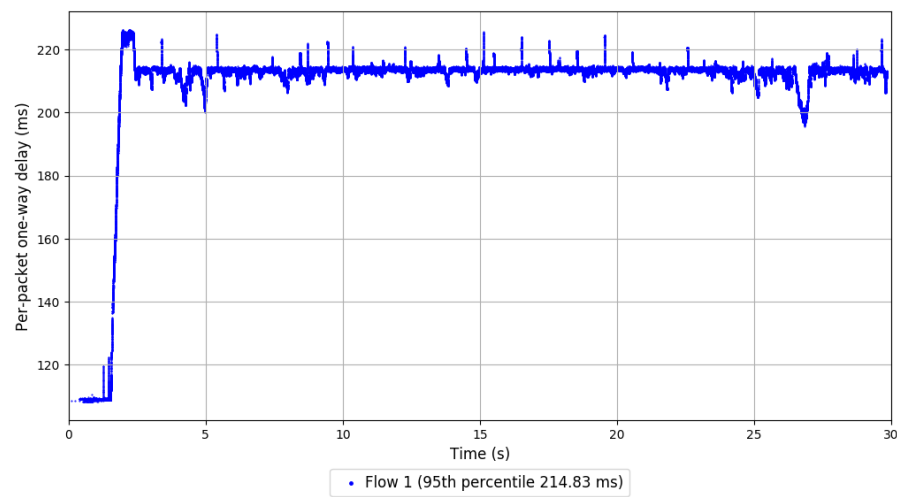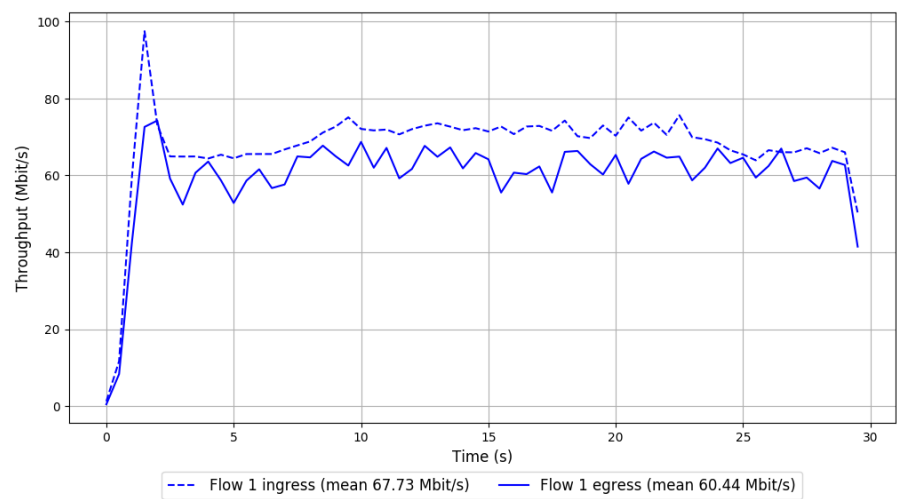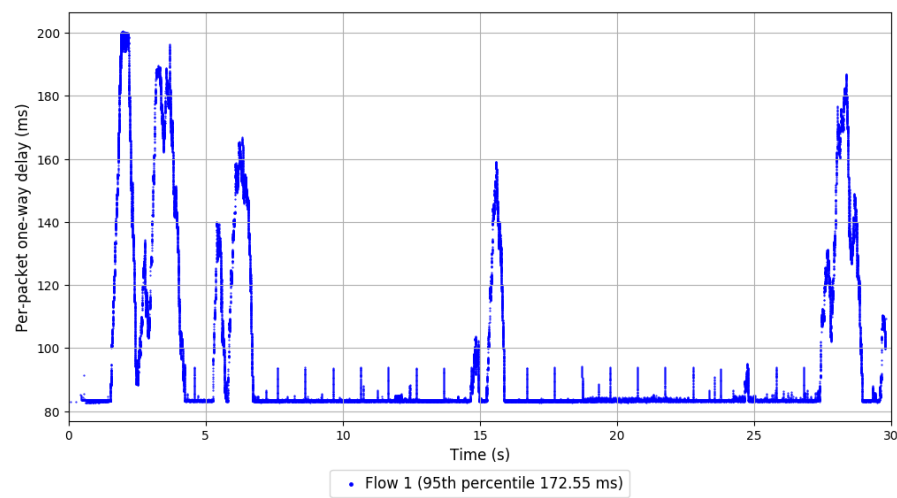Flow 1 (95th percentile 217.19 ms)

```
Run 3: Statistics of PCC

Start at: 2017-09-03 06:00:19
End at: 2017-09-03 06:00:49
Local clock offset: 19.472 ms
Remote clock offset: -0.439 ms


# Below is generated by plot.py at 2017-09-03 11:38:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.44 Mbit/s
95th percentile per-packet one-way delay: 214.832 ms
Loss rate: 11.16%
-- Flow 1:
Average throughput: 60.44 Mbit/s
95th percentile per-packet one-way delay: 214.832 ms
Loss rate: 11.16%
```

Run 3: Report of PCC — Data Link

Flow 1 ingress (mean 67.73 Mbit/s)   Flow 1 egress (mean 60.44 Mbit/s)

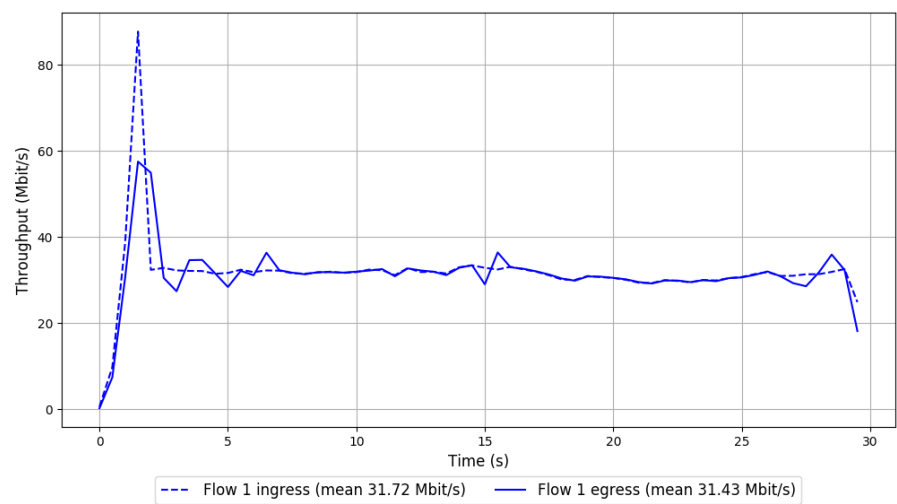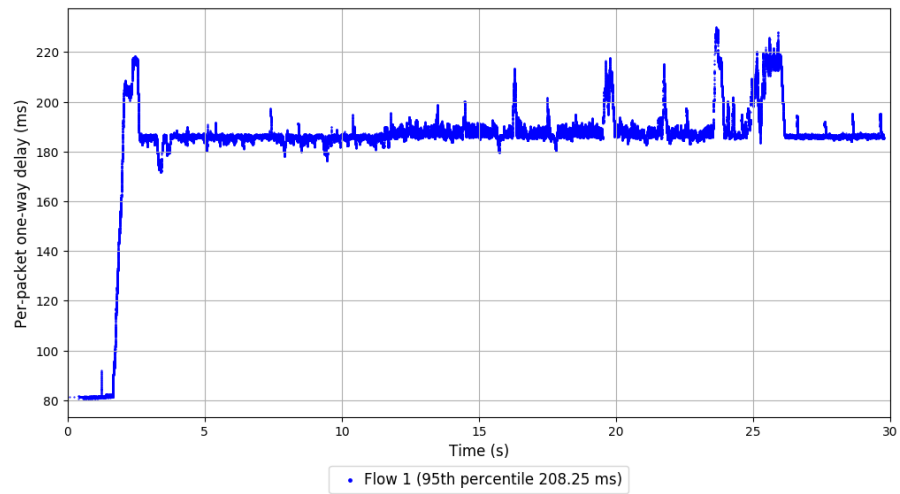Flow 1 (95th percentile 214.83 ms)

```
Run 4: Statistics of PCC

Start at: 2017-09-03 06:18:41
End at: 2017-09-03 06:19:11
Local clock offset: -2.152 ms
Remote clock offset: -14.386 ms


# Below is generated by plot.py at 2017-09-03 11:38:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.43 Mbit/s
95th percentile per-packet one-way delay: 172.549 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 31.43 Mbit/s
95th percentile per-packet one-way delay: 172.549 ms
Loss rate: 1.45%
```

Run 4: Report of PCC — Data Link

Flow 1 ingress (mean 31.72 Mbit/s)   Flow 1 egress (mean 31.43 Mbit/s)

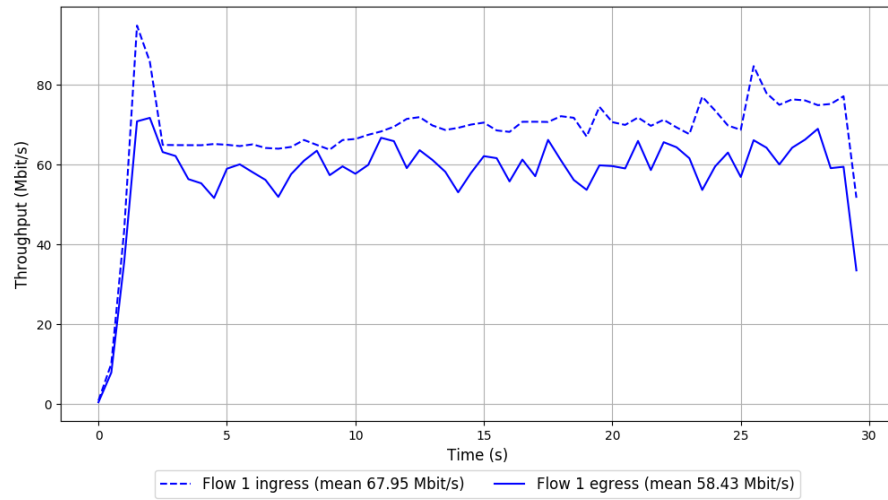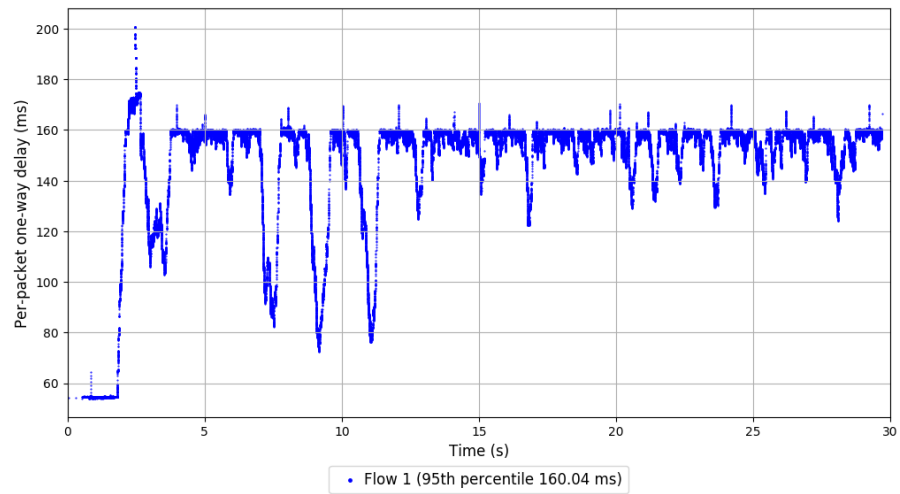Flow 1 (95th percentile 172.55 ms)

```
Run 5: Statistics of PCC

Start at: 2017-09-03 06:37:28
End at: 2017-09-03 06:37:58
Local clock offset: -3.795 ms
Remote clock offset: -13.291 ms


# Below is generated by plot.py at 2017-09-03 11:38:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.43 Mbit/s
95th percentile per-packet one-way delay: 208.252 ms
Loss rate: 14.48%
-- Flow 1:
Average throughput: 58.43 Mbit/s
95th percentile per-packet one-way delay: 208.252 ms
Loss rate: 14.48%
```

Run 5: Report of PCC — Data Link

Flow 1 ingress (mean 67.95 Mbit/s) --- Flow 1 egress (mean 58.43 Mbit/s)

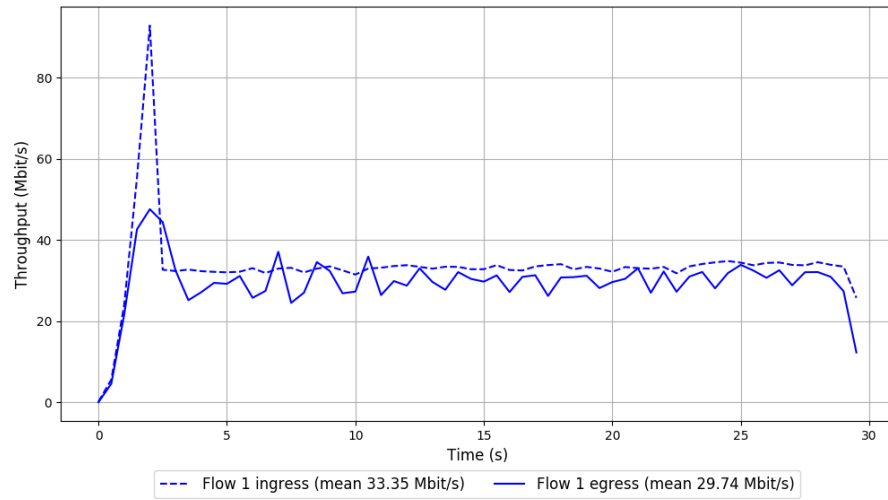• Flow 1 (95th percentile 208.25 ms)

```
Run 6: Statistics of PCC

Start at: 2017-09-03 06:56:22
End at: 2017-09-03 06:56:52
Local clock offset: -4.018 ms
Remote clock offset: 30.209 ms


# Below is generated by plot.py at 2017-09-03 11:38:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 29.74 Mbit/s
95th percentile per-packet one-way delay: 160.038 ms
Loss rate: 11.52%
-- Flow 1:
Average throughput: 29.74 Mbit/s
95th percentile per-packet one-way delay: 160.038 ms
Loss rate: 11.52%
```
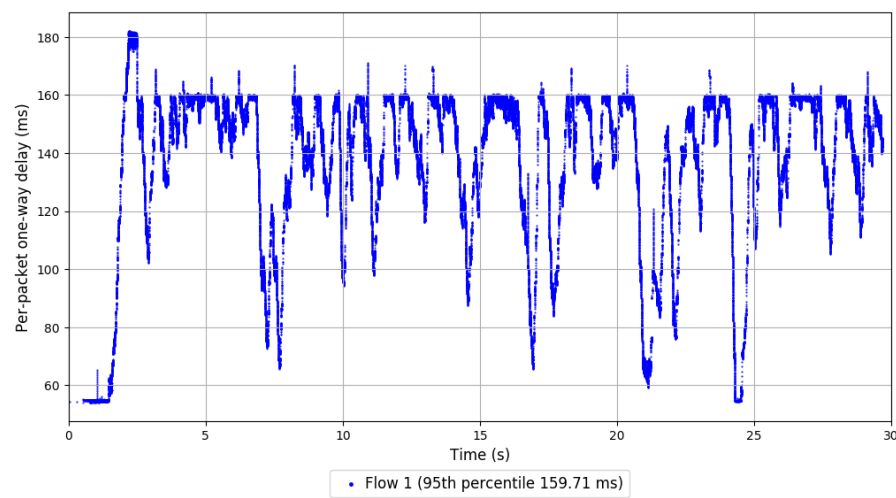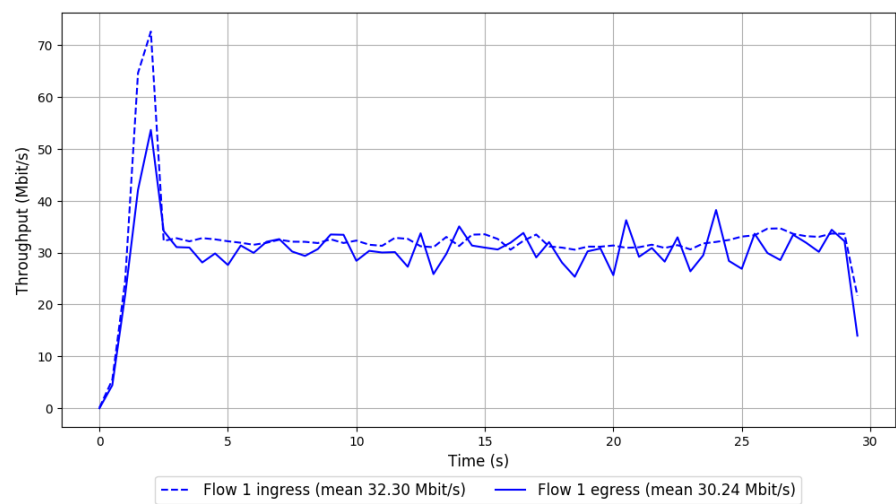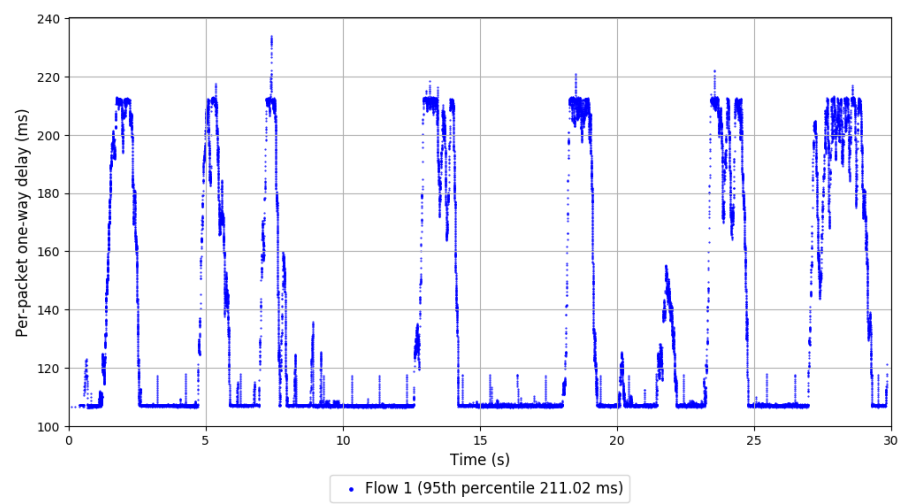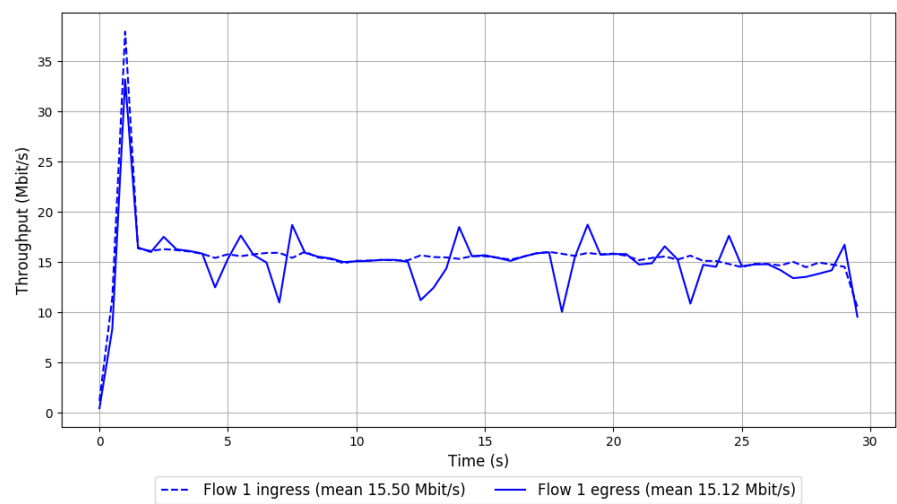
Run 6: Report of PCC — Data Link

Flow 1 ingress (mean 33.35 Mbit/s) --- Flow 1 egress (mean 29.74 Mbit/s)

Flow 1 (95th percentile 160.04 ms)

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```
Run 7: Statistics of PCC

Start at: 2017-09-03 07:15:08
End at: 2017-09-03 07:15:38
Local clock offset: -3.556 ms
Remote clock offset: 28.87 ms


# Below is generated by plot.py at 2017-09-03 11:38:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.24 Mbit/s
95th percentile per-packet one-way delay: 159.705 ms
Loss rate: 6.99%
-- Flow 1:
Average throughput: 30.24 Mbit/s
95th percentile per-packet one-way delay: 159.705 ms
Loss rate: 6.99%
```
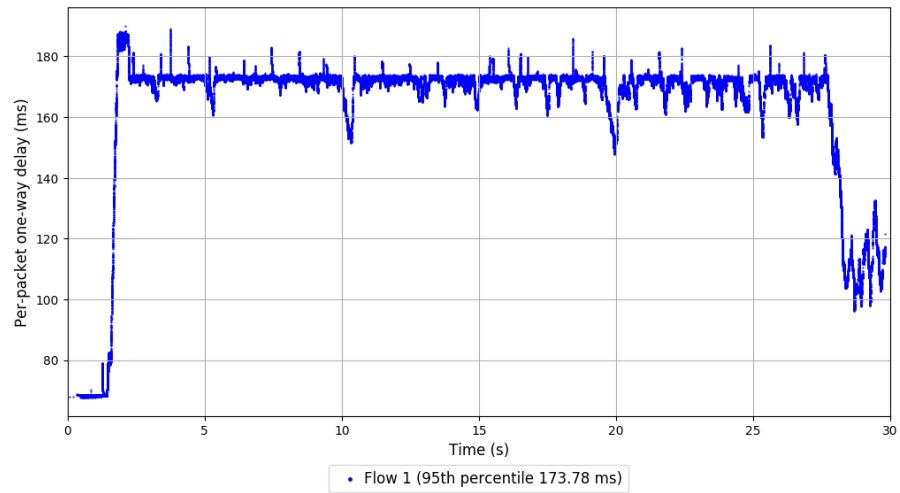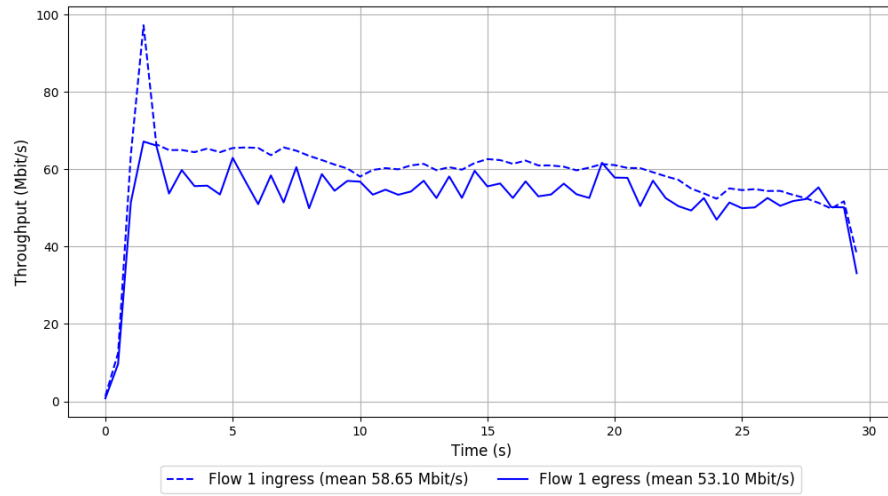
Run 7: Report of PCC — Data Link

```
Run 8: Statistics of PCC

Start at: 2017-09-03 07:33:44
End at: 2017-09-03 07:34:14
Local clock offset: 19.153 ms
Remote clock offset: -3.714 ms


# Below is generated by plot.py at 2017-09-03 11:38:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 15.12 Mbit/s
95th percentile per-packet one-way delay: 211.016 ms
Loss rate: 2.83%
-- Flow 1:
Average throughput: 15.12 Mbit/s
95th percentile per-packet one-way delay: 211.016 ms
Loss rate: 2.83%
```

Run 8: Report of PCC — Data Link

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```
Run 9: Statistics of PCC

Start at: 2017-09-03 07:52:11
End at: 2017-09-03 07:52:41
Local clock offset: -2.247 ms
Remote clock offset: -4.565 ms


# Below is generated by plot.py at 2017-09-03 11:38:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.10 Mbit/s
95th percentile per-packet one-way delay: 173.776 ms
Loss rate: 9.82%
-- Flow 1:
Average throughput: 53.10 Mbit/s
95th percentile per-packet one-way delay: 173.776 ms
Loss rate: 9.82%
```
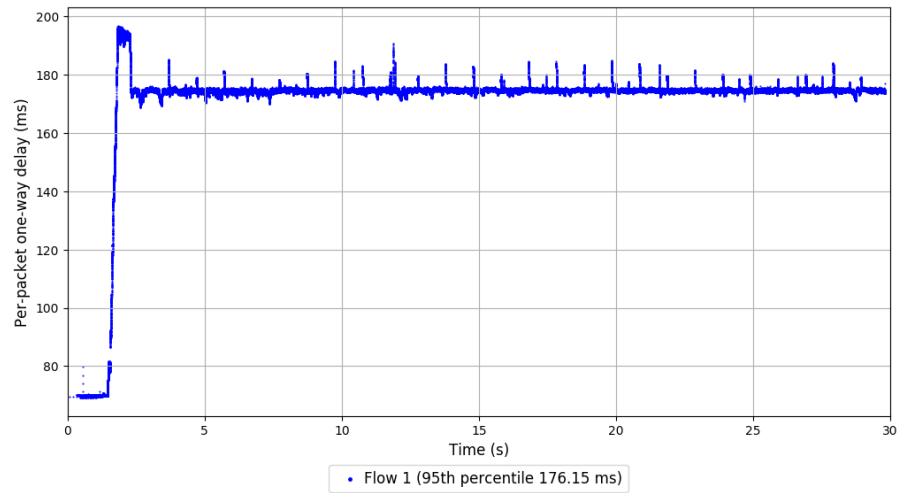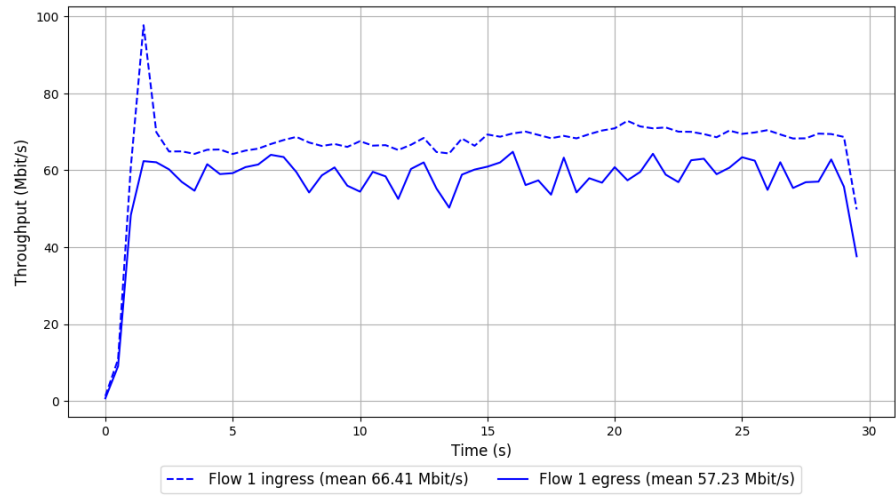
Run 9: Report of PCC — Data Link

Flow 1 ingress (mean 58.65 Mbit/s)   Flow 1 egress (mean 53.10 Mbit/s)

Flow 1 (95th percentile 173.78 ms)

```
Run 10: Statistics of PCC

Start at: 2017-09-03 08:10:22
End at: 2017-09-03 08:10:52
Local clock offset: -0.777 ms
Remote clock offset: -4.02 ms


# Below is generated by plot.py at 2017-09-03 11:38:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.23 Mbit/s
95th percentile per-packet one-way delay: 176.149 ms
Loss rate: 14.16%
-- Flow 1:
Average throughput: 57.23 Mbit/s
95th percentile per-packet one-way delay: 176.149 ms
Loss rate: 14.16%
```
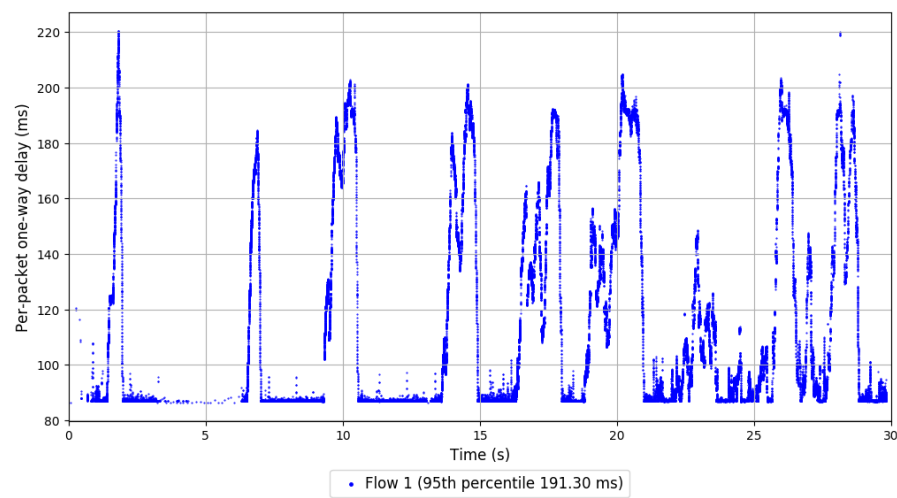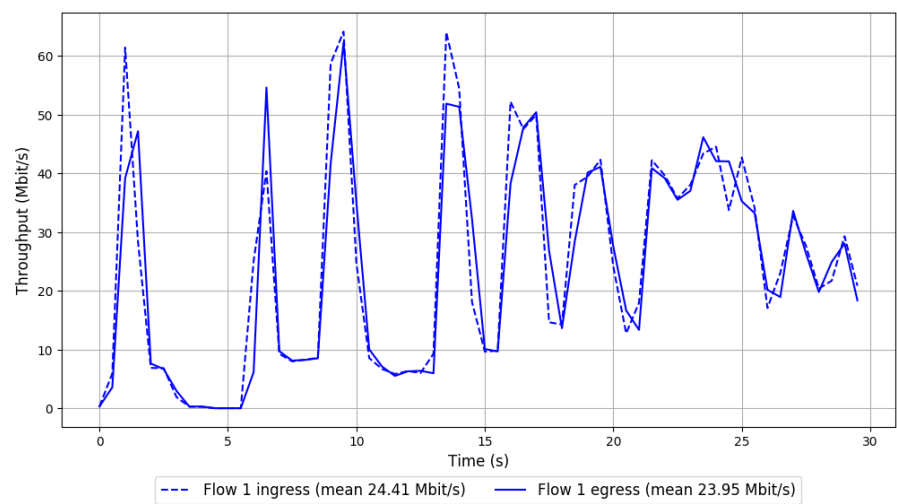
Run 10: Report of PCC — Data Link

Flow 1 ingress (mean 66.41 Mbit/s) ——— Flow 1 egress (mean 57.23 Mbit/s)

• Flow 1 (95th percentile 176.15 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2017-09-03 05:30:07
End at: 2017-09-03 05:30:37
Local clock offset: -2.559 ms
Remote clock offset: 0.178 ms


# Below is generated by plot.py at 2017-09-03 11:38:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.95 Mbit/s
95th percentile per-packet one-way delay: 191.301 ms
Loss rate: 2.29%
-- Flow 1:
Average throughput: 23.95 Mbit/s
95th percentile per-packet one-way delay: 191.301 ms
Loss rate: 2.29%
```

Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2017-09-03 05:48:18
End at: 2017-09-03 05:48:48
Local clock offset: -4.36 ms
Remote clock offset: 0.125 ms


# Below is generated by plot.py at 2017-09-03 11:38:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.86 Mbit/s
95th percentile per-packet one-way delay: 174.236 ms
Loss rate: 3.11%
-- Flow 1:
Average throughput: 19.86 Mbit/s
95th percentile per-packet one-way delay: 174.236 ms
Loss rate: 3.11%
```
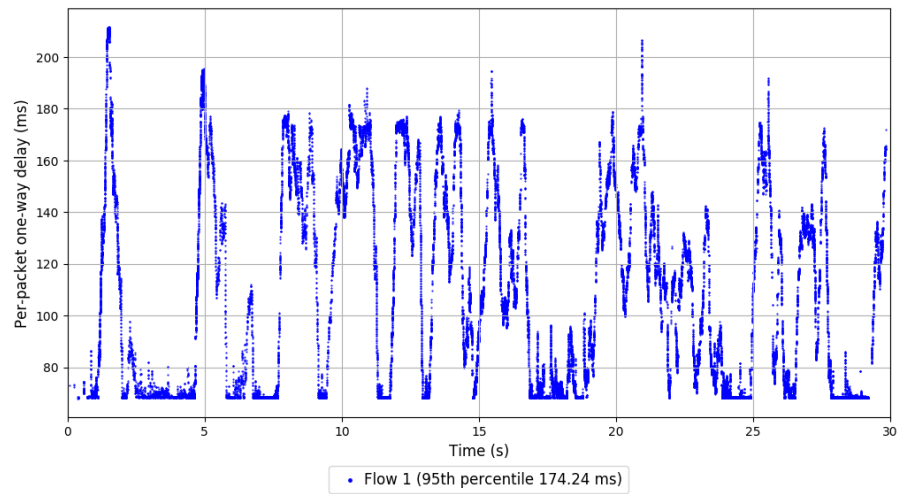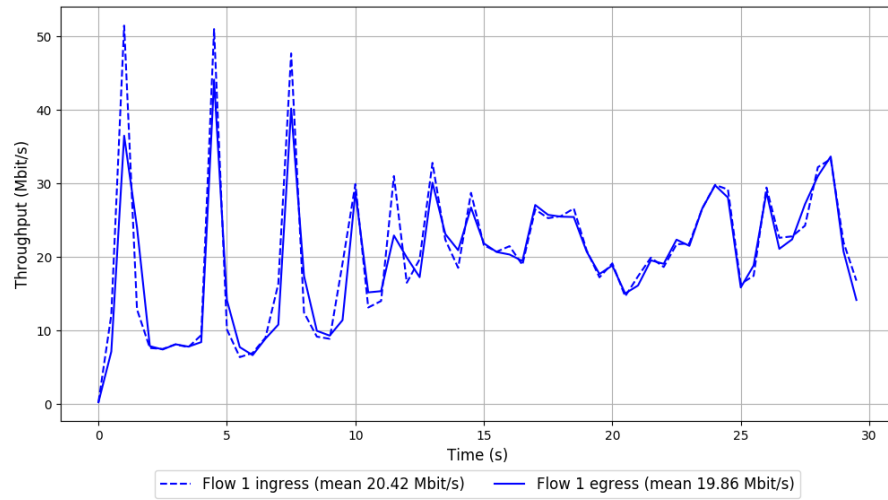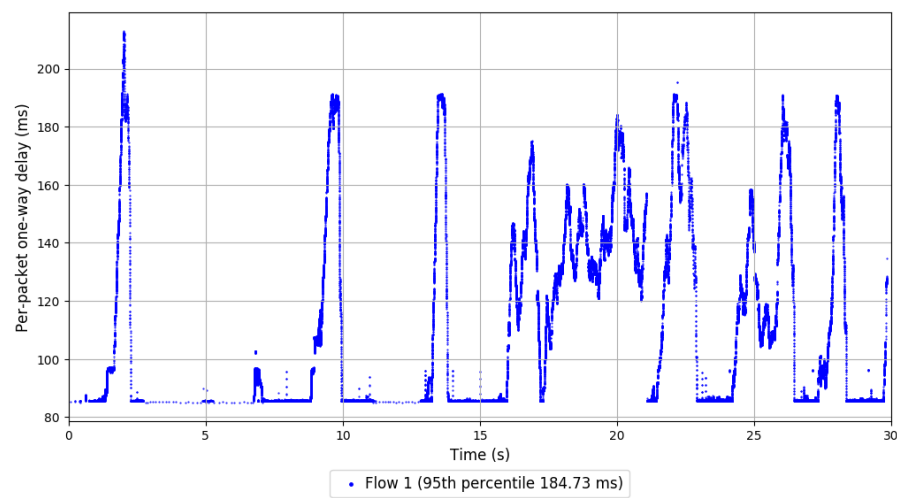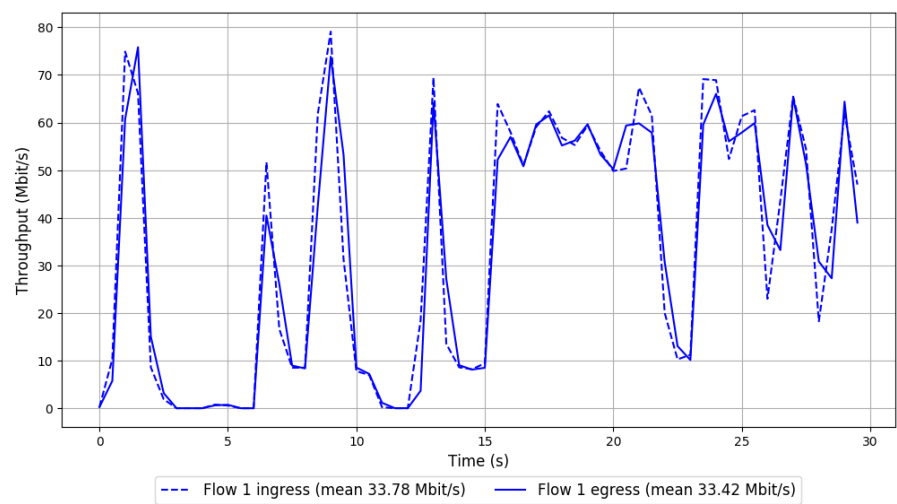
Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 20.42 Mbit/s) --- Flow 1 egress (mean 19.86 Mbit/s)
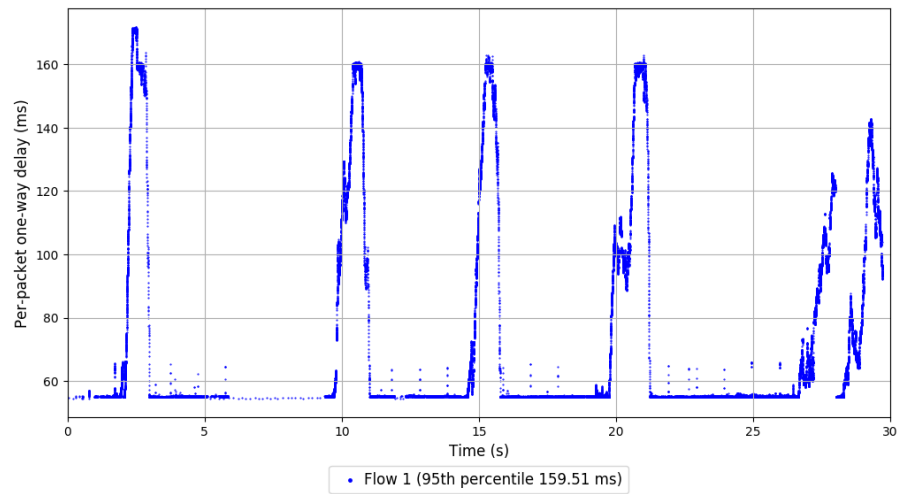

• Flow 1 (95th percentile 174.24 ms)

```
Run 3: Statistics of QUIC Cubic

Start at: 2017-09-03 06:06:23
End at: 2017-09-03 06:06:53
Local clock offset: -3.765 ms
Remote clock offset: -0.293 ms


# Below is generated by plot.py at 2017-09-03 11:38:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.42 Mbit/s
95th percentile per-packet one-way delay: 184.727 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 33.42 Mbit/s
95th percentile per-packet one-way delay: 184.727 ms
Loss rate: 1.52%
```

Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 33.78 Mbit/s)   Flow 1 egress (mean 33.42 Mbit/s)
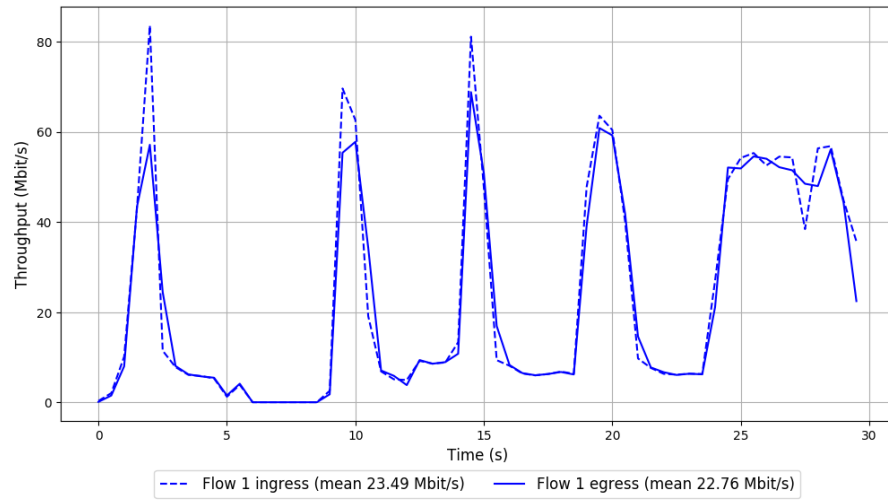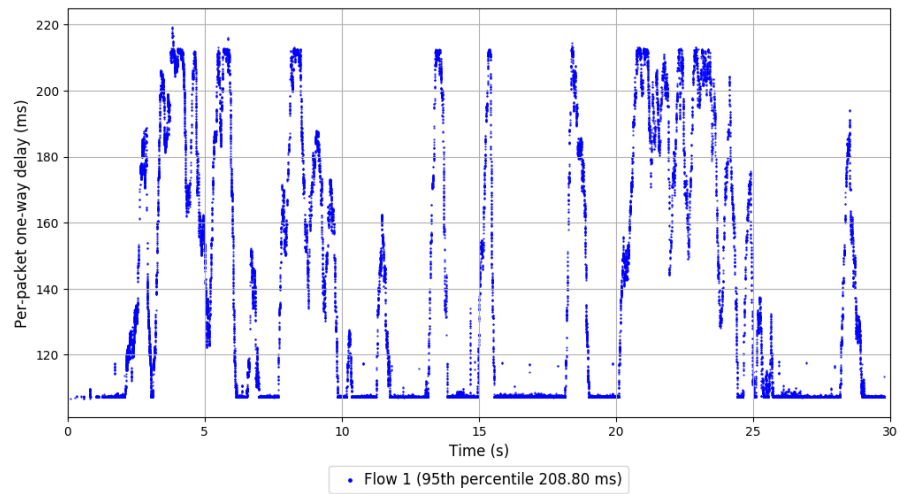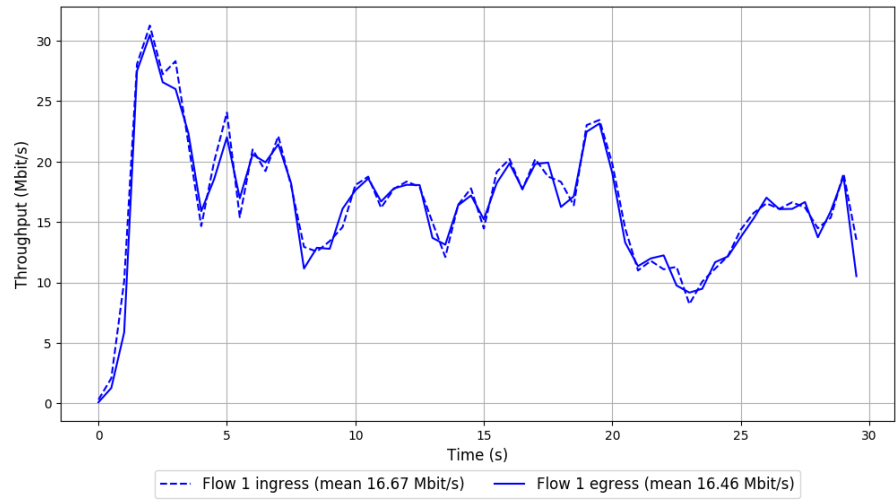

• Flow 1 (95th percentile 184.73 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2017-09-03 06:24:57
End at: 2017-09-03 06:25:27
Local clock offset: -3.489 ms
Remote clock offset: 30.364 ms


# Below is generated by plot.py at 2017-09-03 11:38:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.76 Mbit/s
95th percentile per-packet one-way delay: 159.510 ms
Loss rate: 3.73%
-- Flow 1:
Average throughput: 22.76 Mbit/s
95th percentile per-packet one-way delay: 159.510 ms
Loss rate: 3.73%
```

Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 23.49 Mbit/s)   ——— Flow 1 egress (mean 22.76 Mbit/s)

• Flow 1 (95th percentile 159.51 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2017-09-03 06:43:45
End at: 2017-09-03 06:44:15
Local clock offset: -3.869 ms
Remote clock offset: -39.581 ms


# Below is generated by plot.py at 2017-09-03 11:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.46 Mbit/s
95th percentile per-packet one-way delay: 208.801 ms
Loss rate: 1.82%
-- Flow 1:
Average throughput: 16.46 Mbit/s
95th percentile per-packet one-way delay: 208.801 ms
Loss rate: 1.82%
```
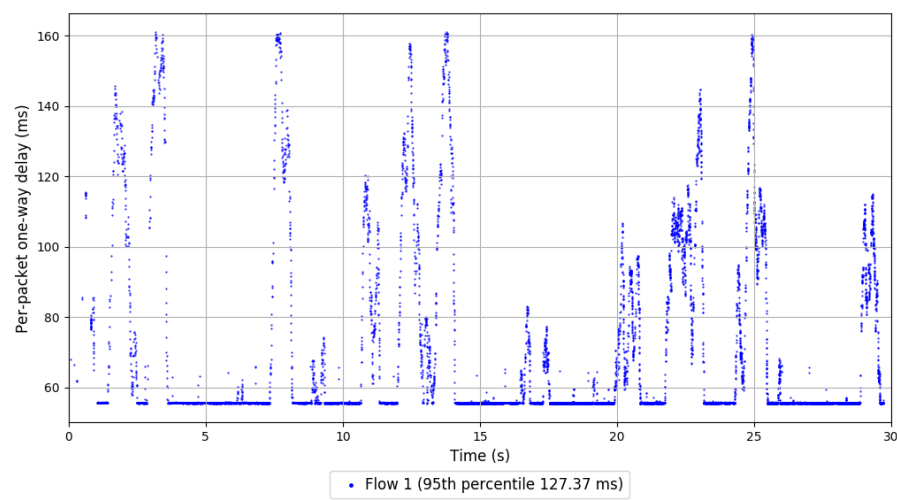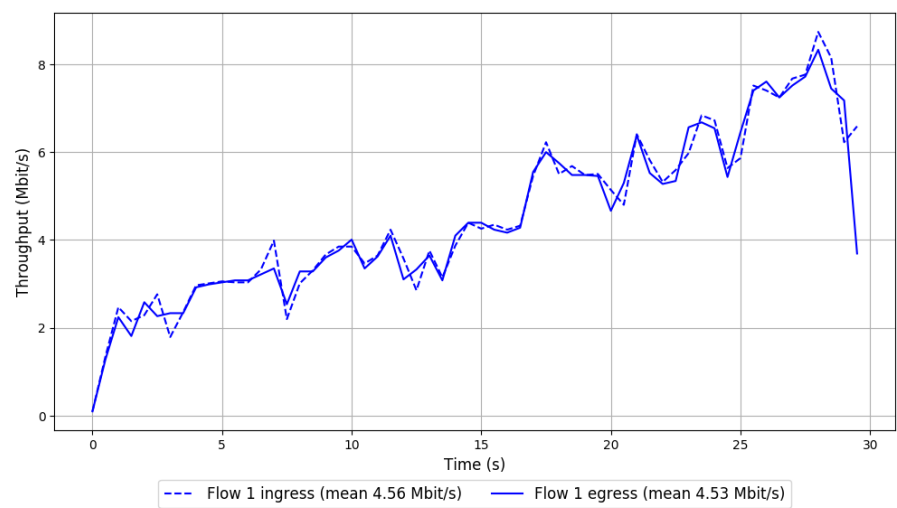
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 16.67 Mbit/s) ----- Flow 1 egress (mean 16.46 Mbit/s)
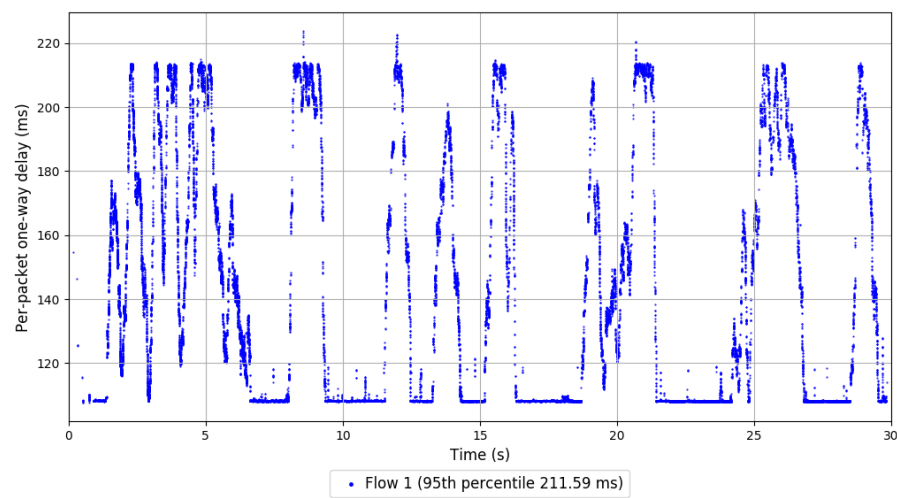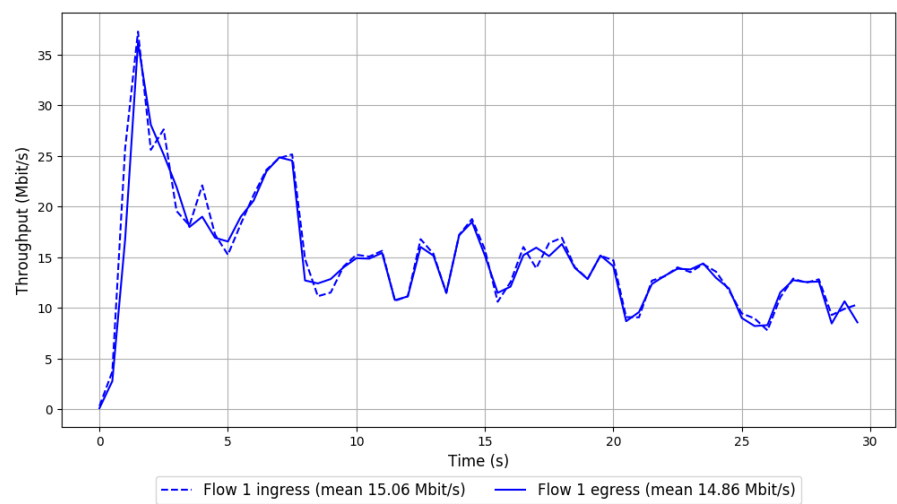

Flow 1 (95th percentile 208.80 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2017-09-03 07:02:39
End at: 2017-09-03 07:03:09
Local clock offset: -3.804 ms
Remote clock offset: 30.164 ms


# Below is generated by plot.py at 2017-09-03 11:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 127.374 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 127.374 ms
Loss rate: 1.48%
```

Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 4.56 Mbit/s) — — —   Flow 1 egress (mean 4.53 Mbit/s) ———

• Flow 1 (95th percentile 127.37 ms)

```
Run 7: Statistics of QUIC Cubic

Start at: 2017-09-03 07:21:09
End at: 2017-09-03 07:21:39
Local clock offset: 19.169 ms
Remote clock offset: -3.285 ms


# Below is generated by plot.py at 2017-09-03 11:38:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.86 Mbit/s
95th percentile per-packet one-way delay: 211.585 ms
Loss rate: 1.95%
-- Flow 1:
Average throughput: 14.86 Mbit/s
95th percentile per-packet one-way delay: 211.585 ms
Loss rate: 1.95%
```
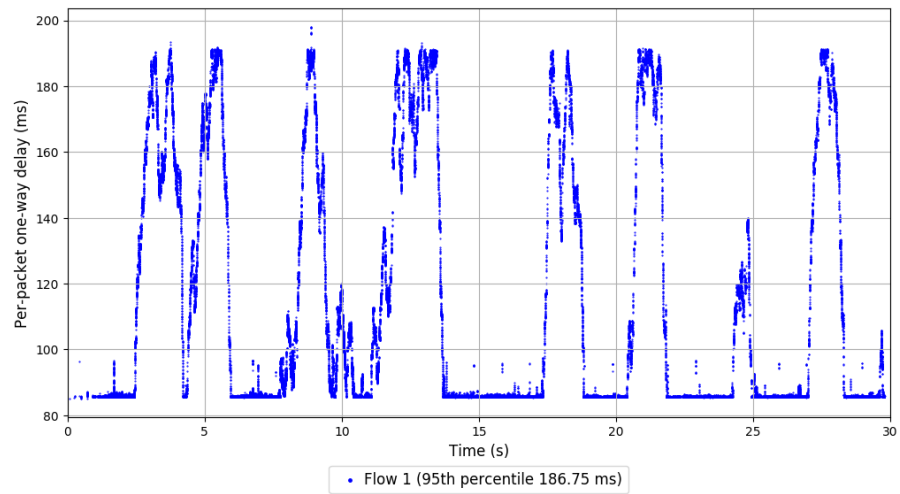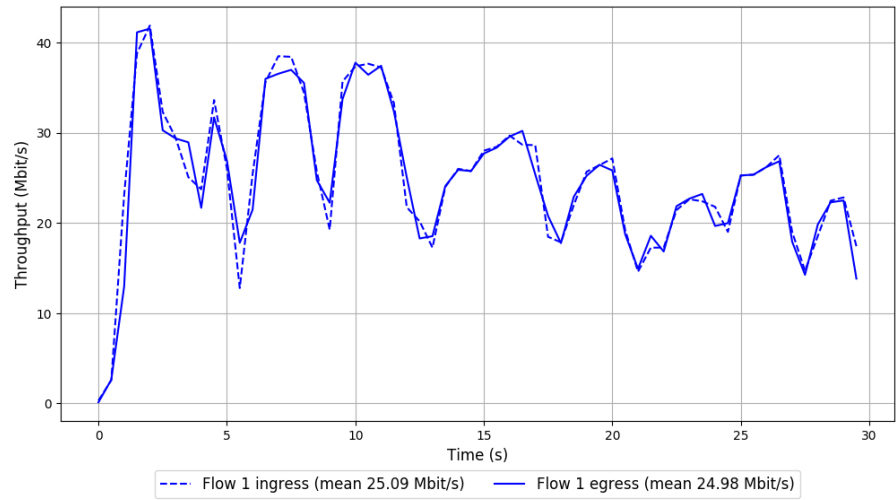
Run 7: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 15.06 Mbit/s) --- Flow 1 egress (mean 14.86 Mbit/s)
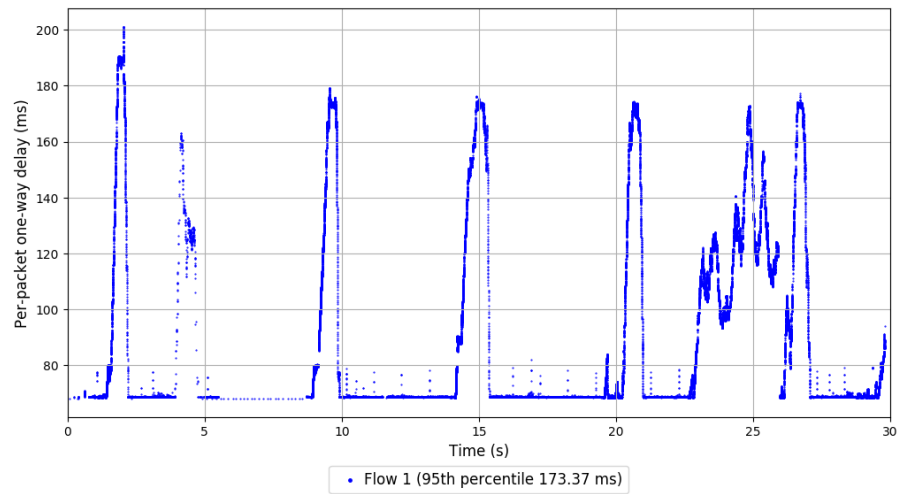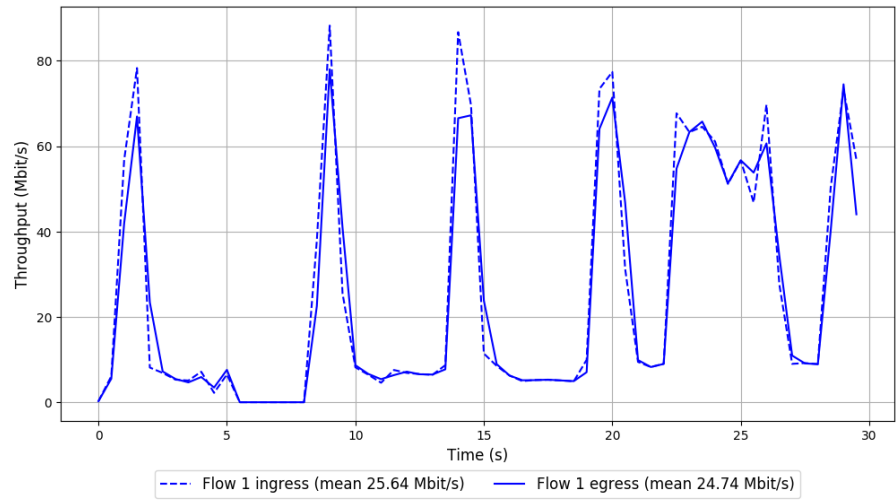

Flow 1 (95th percentile 211.59 ms)

```
Run 8: Statistics of QUIC Cubic

Start at: 2017-09-03 07:40:00
End at: 2017-09-03 07:40:30
Local clock offset: -2.659 ms
Remote clock offset: -3.88 ms


# Below is generated by plot.py at 2017-09-03 11:39:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.98 Mbit/s
95th percentile per-packet one-way delay: 186.747 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 24.98 Mbit/s
95th percentile per-packet one-way delay: 186.747 ms
Loss rate: 0.95%
```

Run 8: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 25.09 Mbit/s) — — — — Flow 1 egress (mean 24.98 Mbit/s)

• Flow 1 (95th percentile 186.75 ms)

```
Run 9: Statistics of QUIC Cubic

Start at: 2017-09-03 07:58:17
End at: 2017-09-03 07:58:47
Local clock offset: -2.256 ms
Remote clock offset: -4.327 ms


# Below is generated by plot.py at 2017-09-03 11:39:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 173.369 ms
Loss rate: 3.99%
-- Flow 1:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 173.369 ms
Loss rate: 3.99%
```
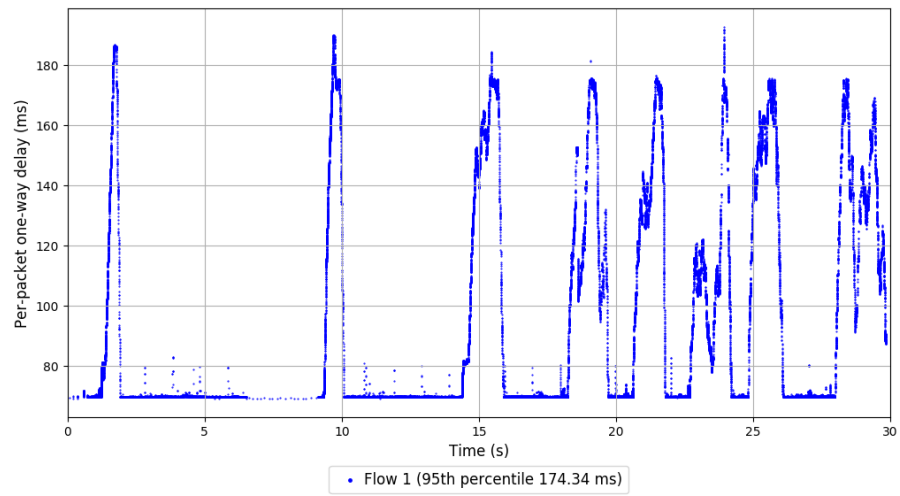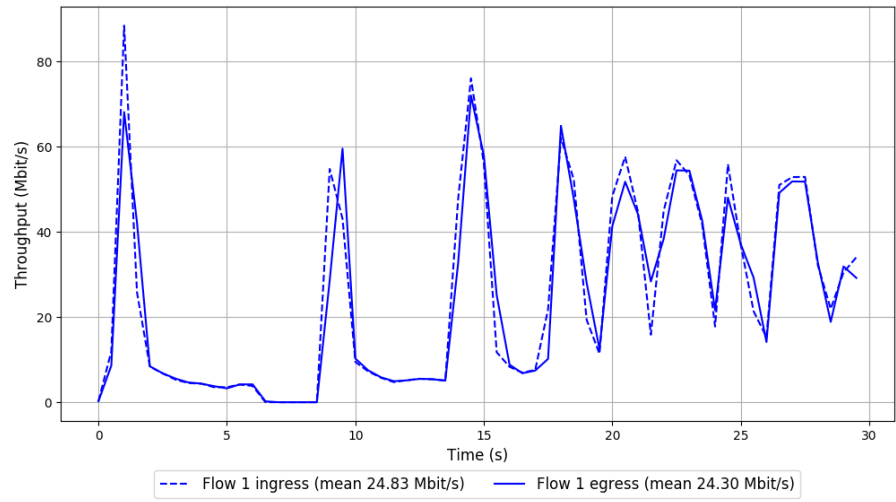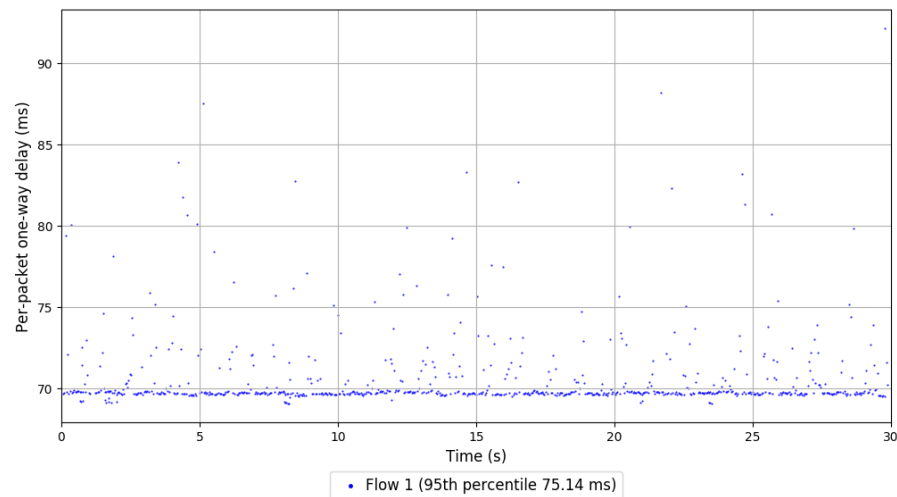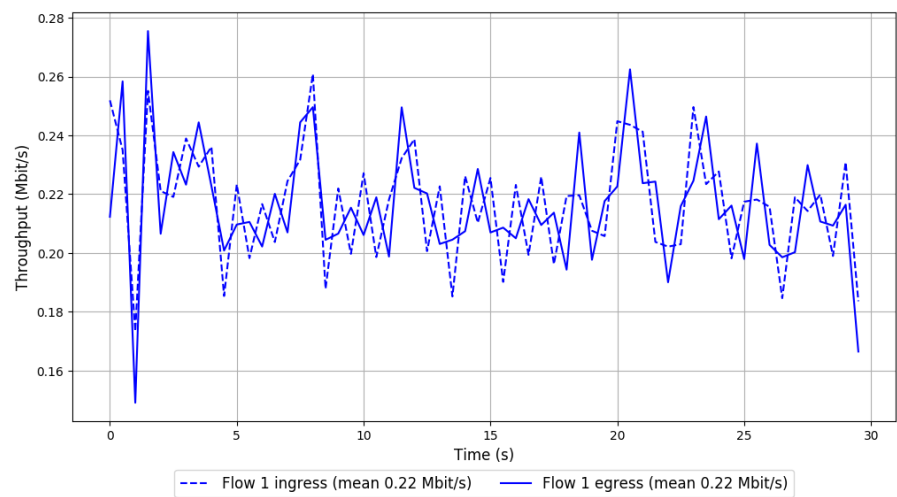
Run 9: Report of QUIC Cubic — Data Link

```
Run 10: Statistics of QUIC Cubic

Start at: 2017-09-03 08:16:31
End at: 2017-09-03 08:17:01
Local clock offset: -0.776 ms
Remote clock offset: -3.155 ms


# Below is generated by plot.py at 2017-09-03 11:39:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.30 Mbit/s
95th percentile per-packet one-way delay: 174.344 ms
Loss rate: 2.47%
-- Flow 1:
Average throughput: 24.30 Mbit/s
95th percentile per-packet one-way delay: 174.344 ms
Loss rate: 2.47%
```

Run 10: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 24.83 Mbit/s) --- Flow 1 egress (mean 24.30 Mbit/s) ——
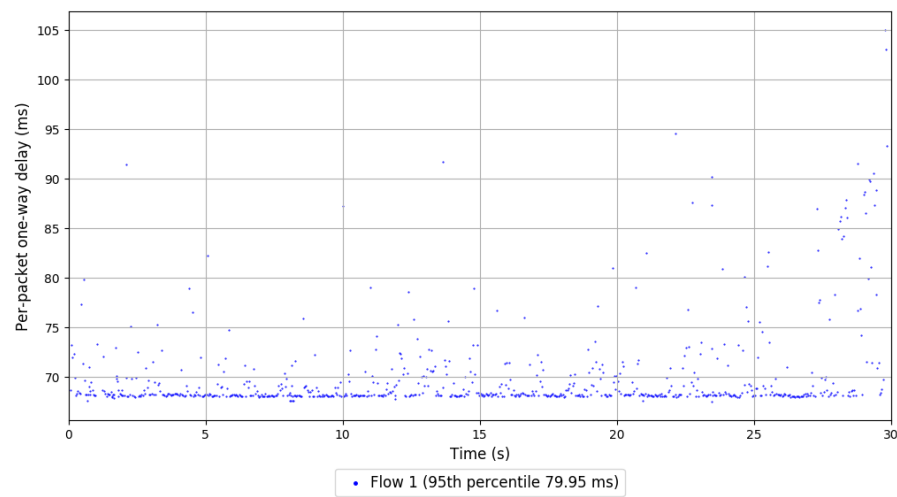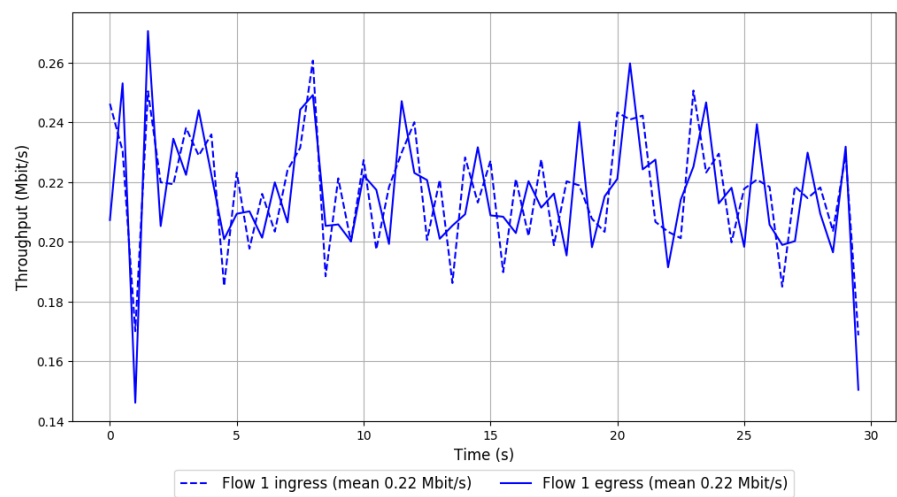

Flow 1 (95th percentile 174.34 ms)

```
Run 1: Statistics of SCReAM

Start at: 2017-09-03 05:19:14
End at: 2017-09-03 05:19:44
Local clock offset: -2.436 ms
Remote clock offset: -0.192 ms


# Below is generated by plot.py at 2017-09-03 11:39:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 75.143 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 75.143 ms
Loss rate: 0.38%
```

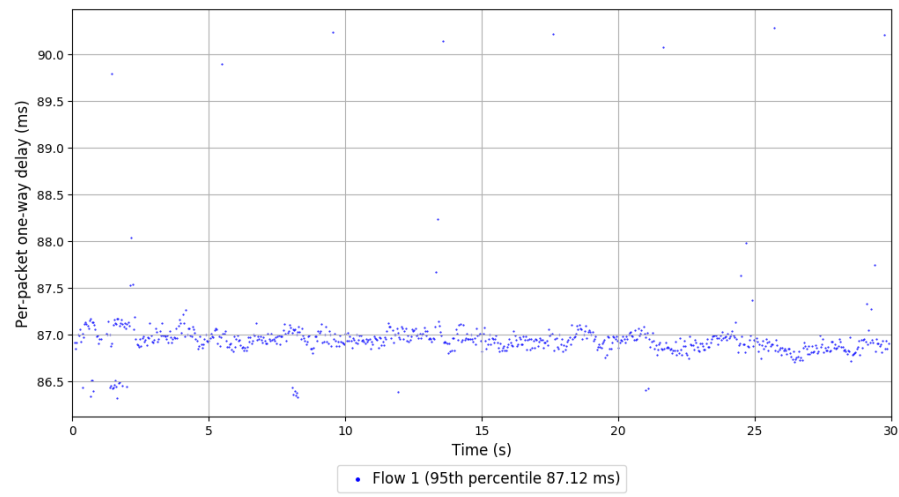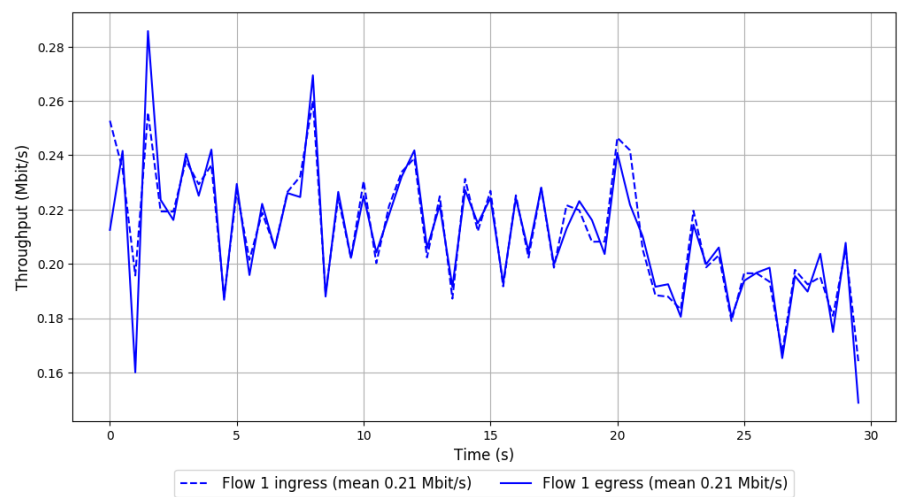# Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2017-09-03 05:37:21
End at: 2017-09-03 05:37:51
Local clock offset: -4.282 ms
Remote clock offset: -0.053 ms


# Below is generated by plot.py at 2017-09-03 11:39:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.950 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.950 ms
Loss rate: 0.39%
```

Run 2: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 79.95 ms)

```
Run 3: Statistics of SCReAM

Start at: 2017-09-03 05:55:32
End at: 2017-09-03 05:56:02
Local clock offset: -2.768 ms
Remote clock offset: -0.308 ms


# Below is generated by plot.py at 2017-09-03 11:39:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 87.125 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 87.125 ms
Loss rate: 0.50%
```
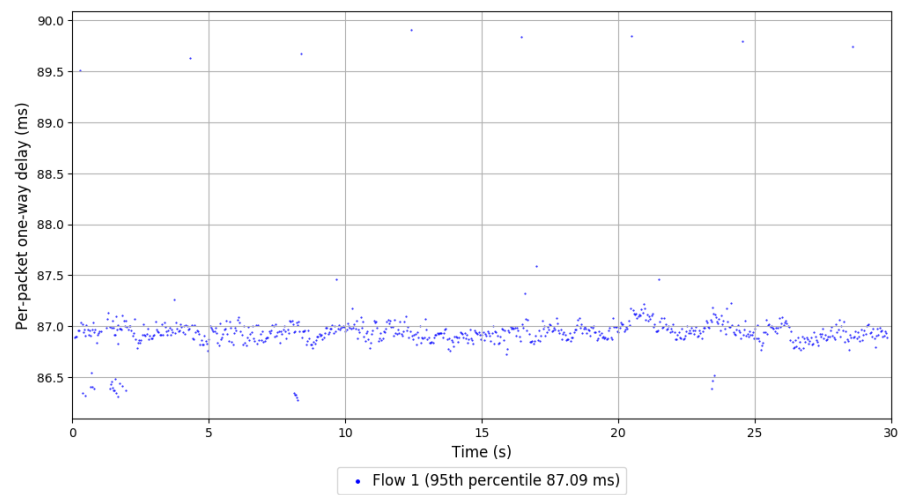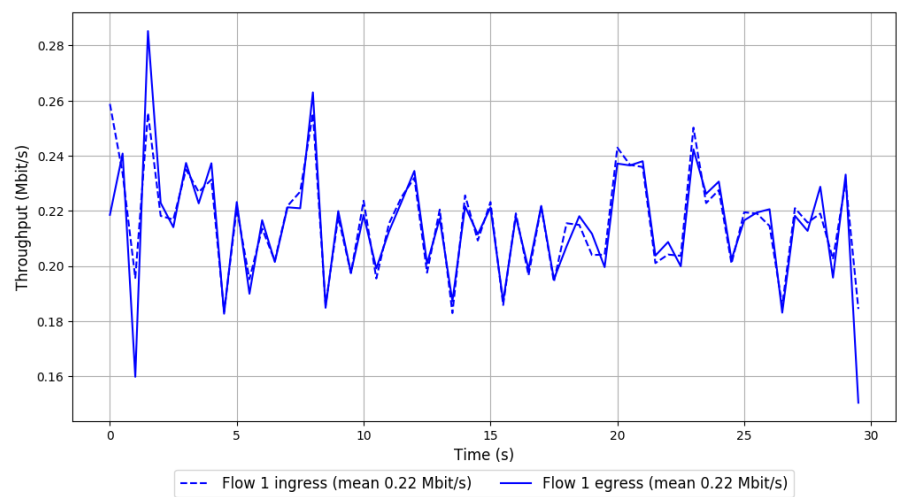
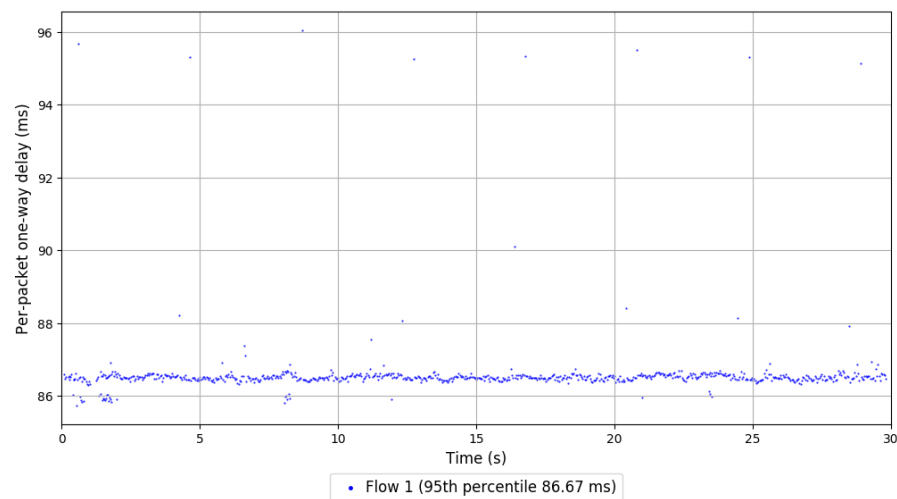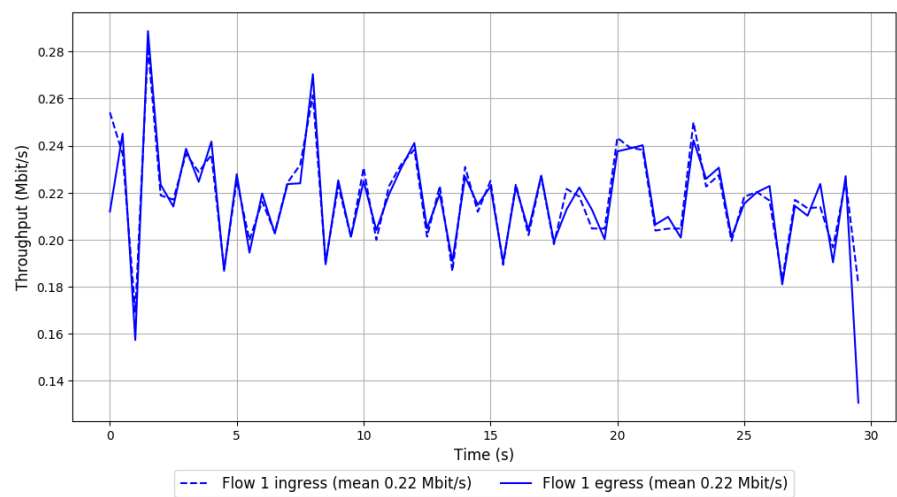# Run 3: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 87.12 ms)

```
Run 4: Statistics of SCReAM

Start at: 2017-09-03 06:13:45
End at: 2017-09-03 06:14:15
Local clock offset: -2.256 ms
Remote clock offset: 0.01 ms


# Below is generated by plot.py at 2017-09-03 11:39:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.094 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.094 ms
Loss rate: 0.52%
```
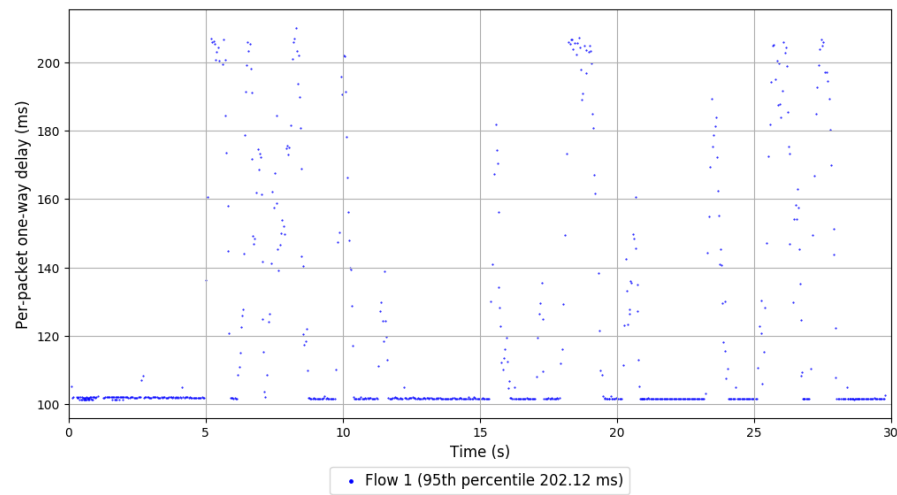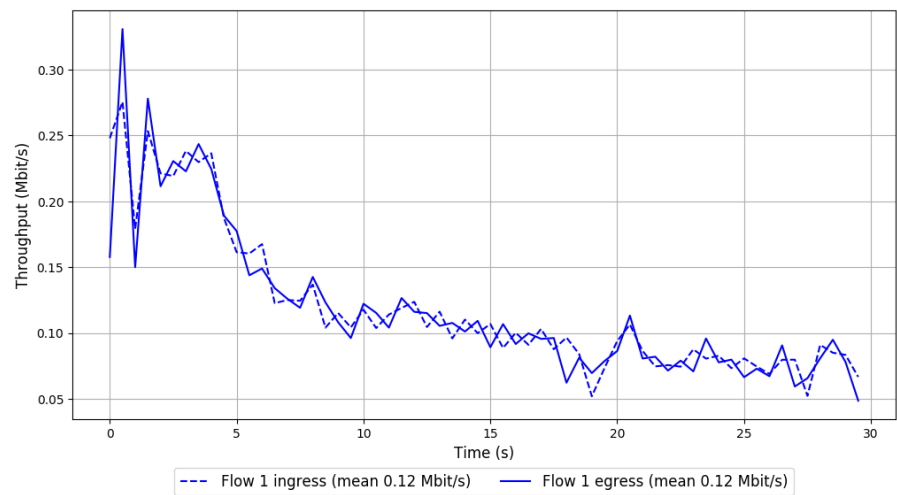
Run 4: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 87.09 ms)

```
Run 5: Statistics of SCReAM

Start at: 2017-09-03 06:32:32
End at: 2017-09-03 06:33:02
Local clock offset: -2.169 ms
Remote clock offset: -16.511 ms


# Below is generated by plot.py at 2017-09-03 11:39:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.675 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.675 ms
Loss rate: 0.63%
```

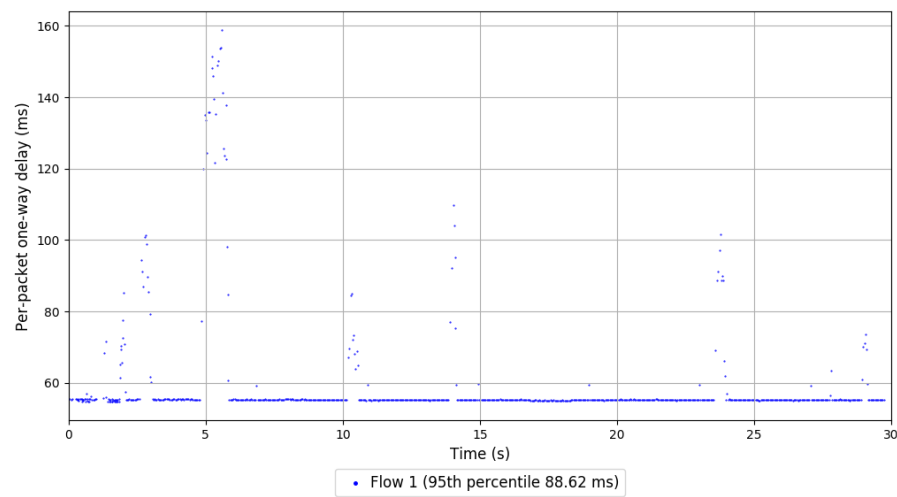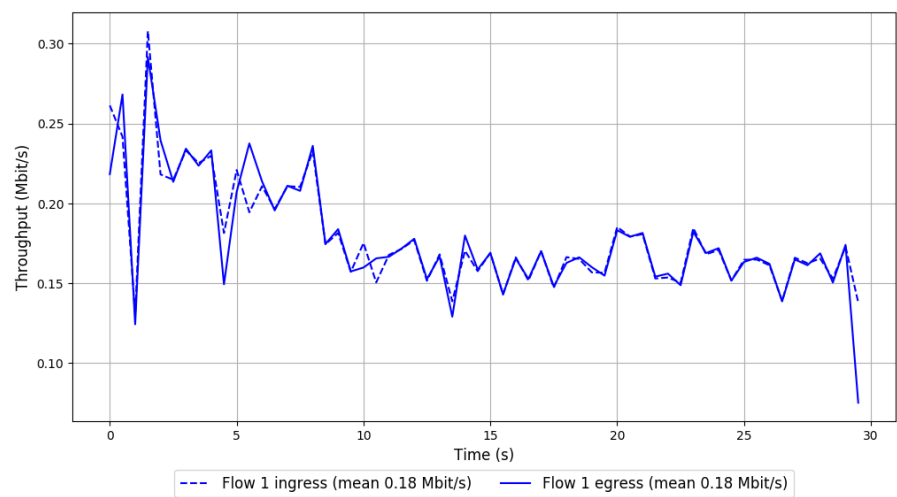Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2017-09-03 06:51:18
End at: 2017-09-03 06:51:48
Local clock offset: -2.466 ms
Remote clock offset: -32.474 ms

# Below is generated by plot.py at 2017-09-03 11:39:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 202.125 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 202.125 ms
Loss rate: 1.15%
```

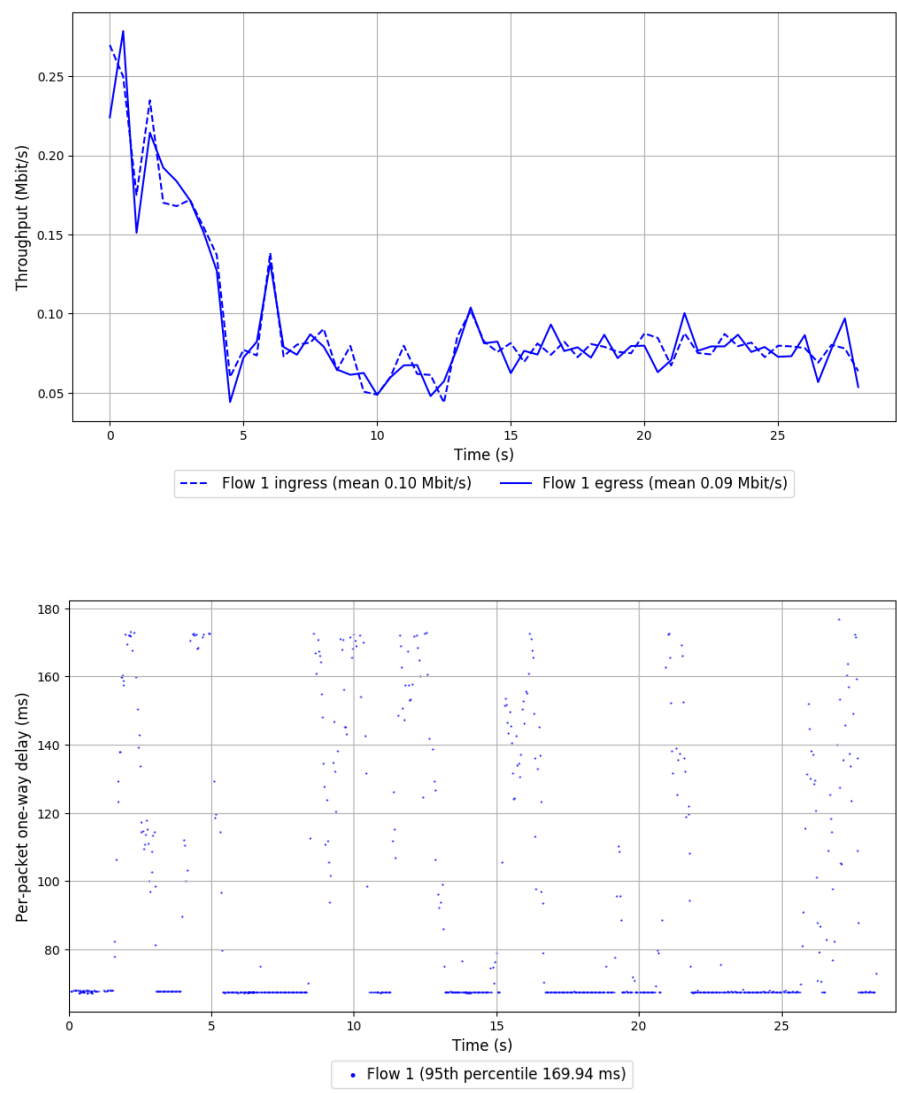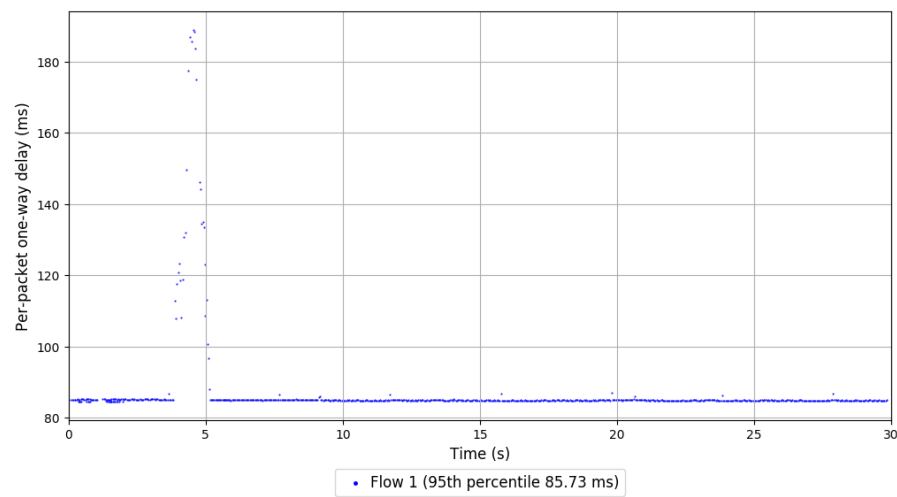## Run 6: Report of SCReAM — Data Link

195

```
Run 7: Statistics of SCReAM

Start at: 2017-09-03 07:10:10
End at: 2017-09-03 07:10:40
Local clock offset: -3.546 ms
Remote clock offset: 30.221 ms


# Below is generated by plot.py at 2017-09-03 11:39:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 88.622 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 88.622 ms
Loss rate: 0.70%
```

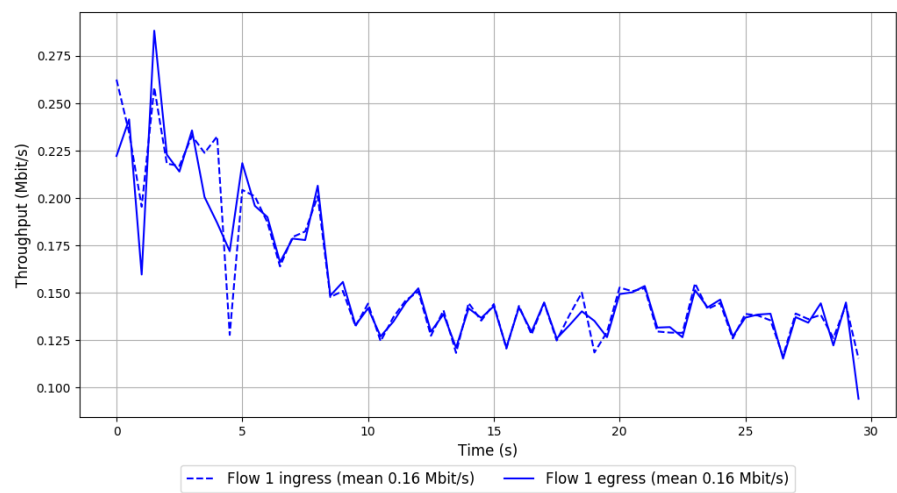# Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2017-09-03 07:28:36
End at: 2017-09-03 07:29:06
Local clock offset: -3.092 ms
Remote clock offset: -3.846 ms


# Below is generated by plot.py at 2017-09-03 11:39:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 169.945 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 169.945 ms
Loss rate: 1.71%
```

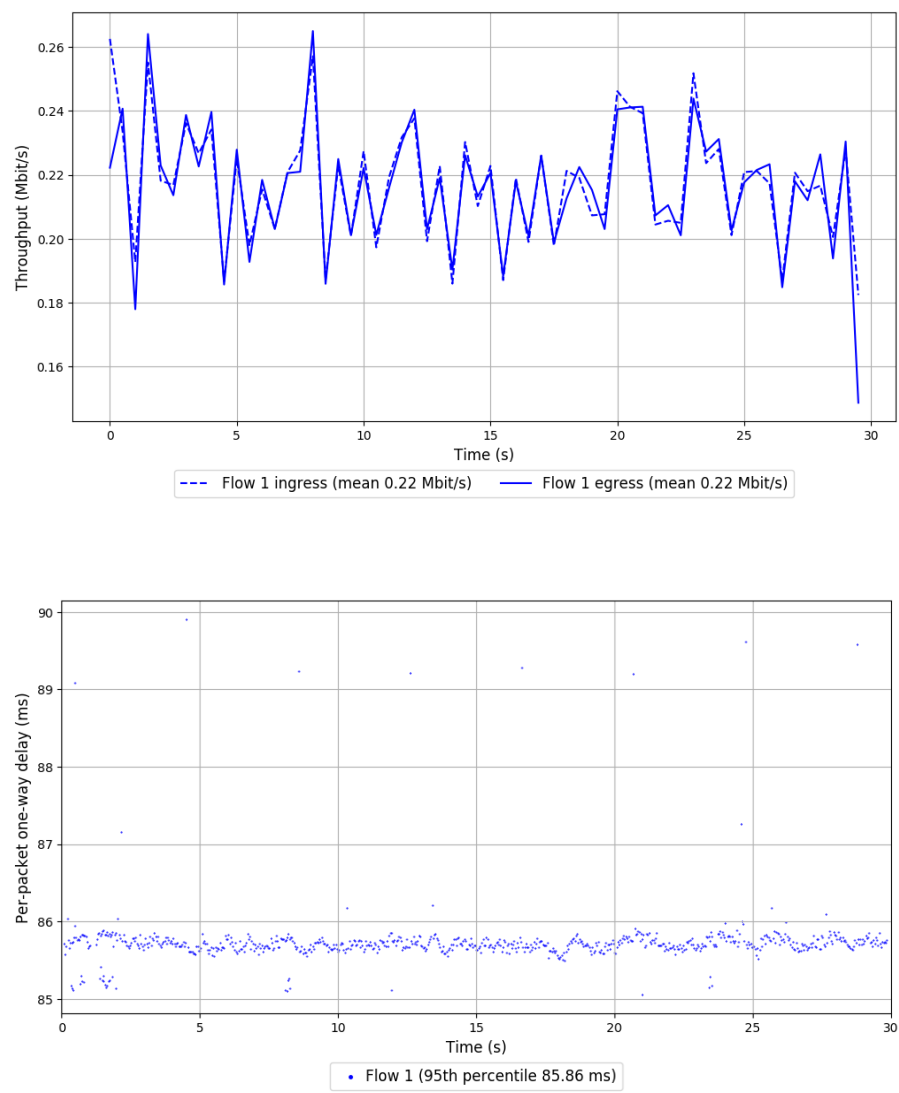# Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2017-09-03 07:47:18
End at: 2017-09-03 07:47:48
Local clock offset: -2.517 ms
Remote clock offset: -3.912 ms


# Below is generated by plot.py at 2017-09-03 11:39:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 85.730 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 85.730 ms
Loss rate: 0.63%
```
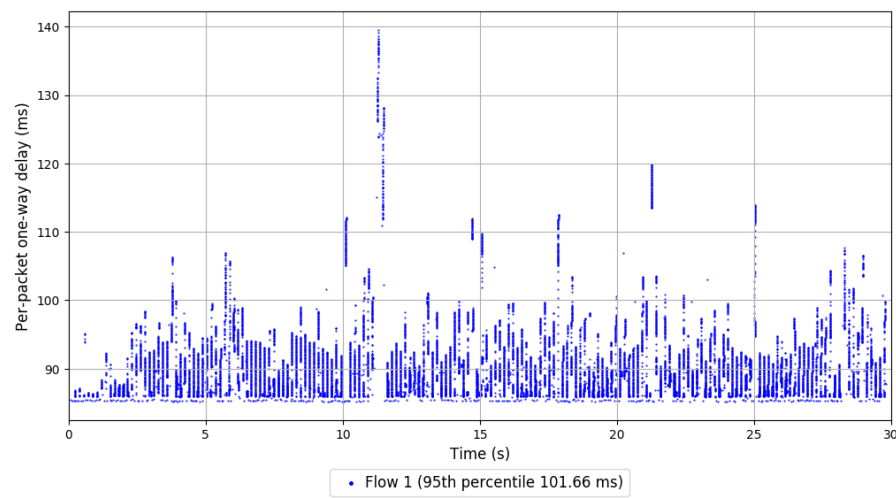
Run 9: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.16 Mbit/s)   Flow 1 egress (mean 0.16 Mbit/s)

Flow 1 (95th percentile 85.73 ms)

```
Run 10: Statistics of SCReAM

Start at: 2017-09-03 08:05:35
End at: 2017-09-03 08:06:05
Local clock offset: -1.938 ms
Remote clock offset: -3.884 ms


# Below is generated by plot.py at 2017-09-03 11:39:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.856 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.856 ms
Loss rate: 0.51%
```
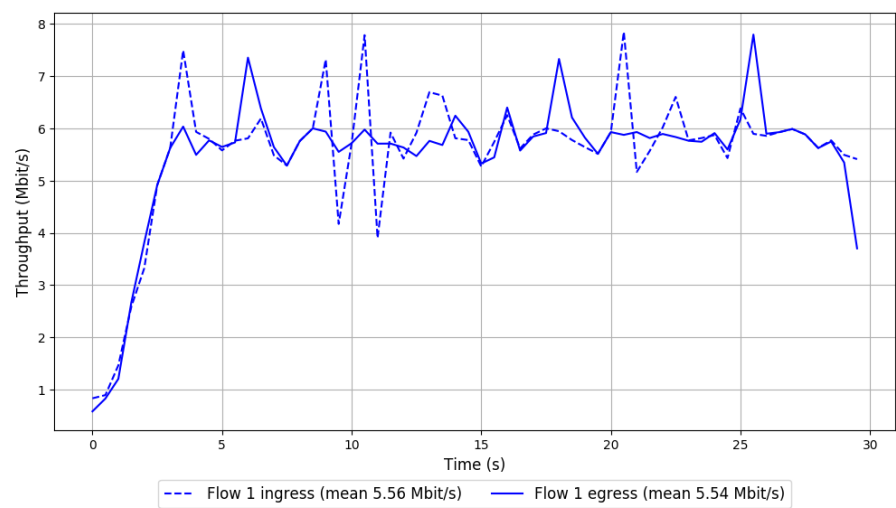
Run 10: Report of SCReAM — Data Link

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

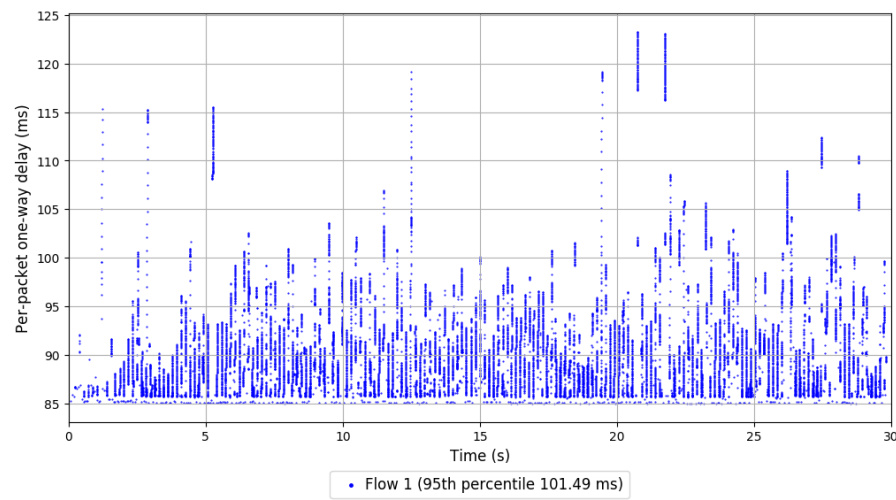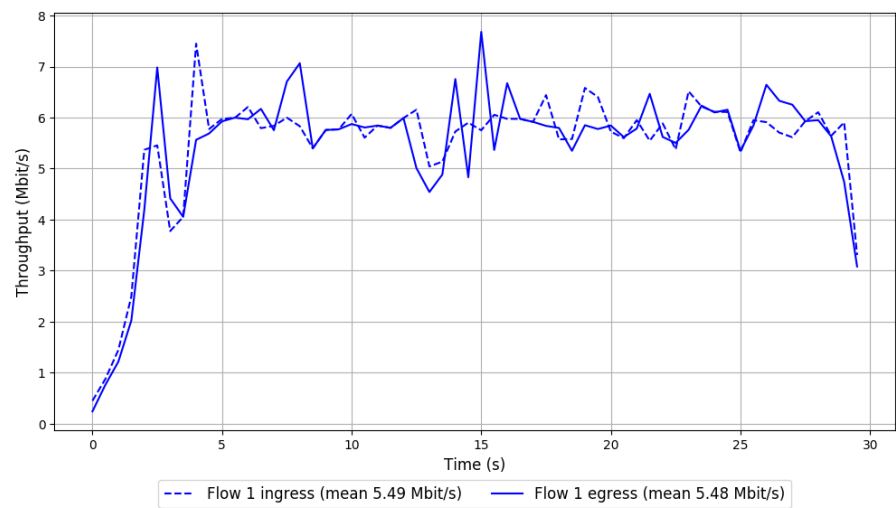Flow 1 (95th percentile 85.86 ms)

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```
Run 1: Statistics of Sprout

Start at: 2017-09-03 05:31:19
End at: 2017-09-03 05:31:49
Local clock offset: -4.024 ms
Remote clock offset: 0.194 ms


# Below is generated by plot.py at 2017-09-03 11:39:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.54 Mbit/s
95th percentile per-packet one-way delay: 101.658 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 5.54 Mbit/s
95th percentile per-packet one-way delay: 101.658 ms
Loss rate: 0.57%
```

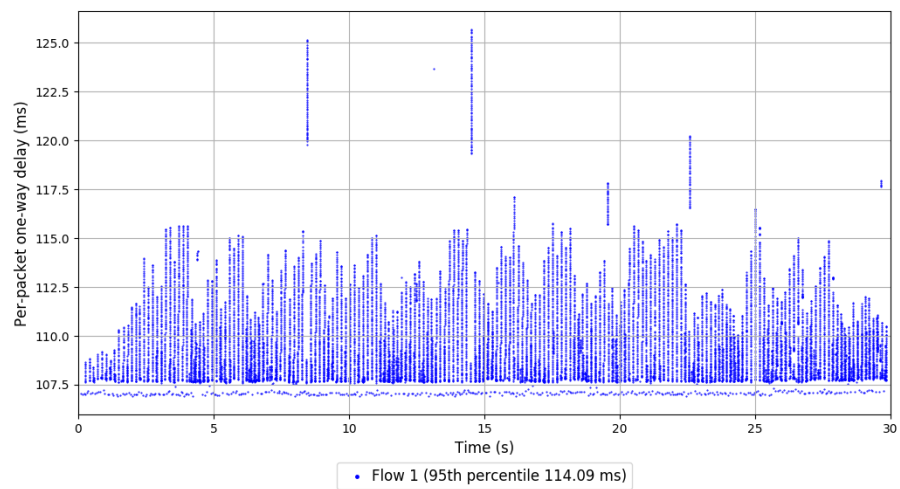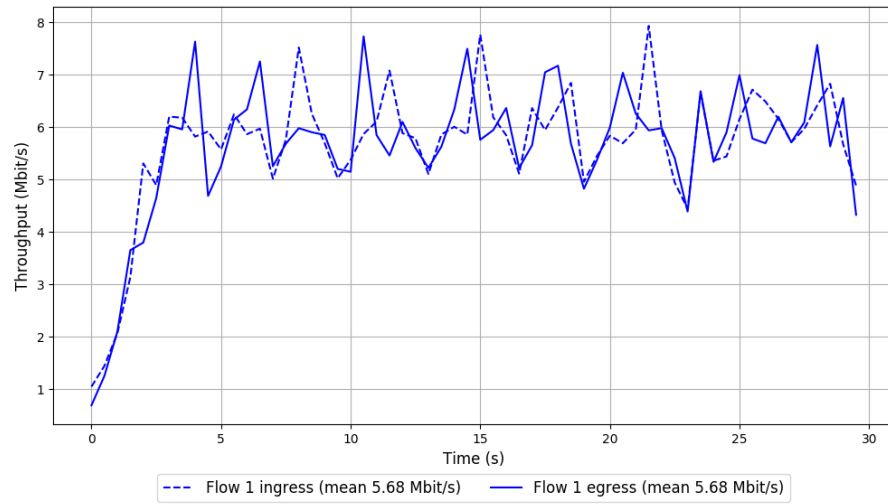Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2017-09-03 05:49:30
End at: 2017-09-03 05:50:00
Local clock offset: -4.225 ms
Remote clock offset: -0.052 ms


# Below is generated by plot.py at 2017-09-03 11:39:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.48 Mbit/s
95th percentile per-packet one-way delay: 101.491 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 5.48 Mbit/s
95th percentile per-packet one-way delay: 101.491 ms
Loss rate: 0.49%
```

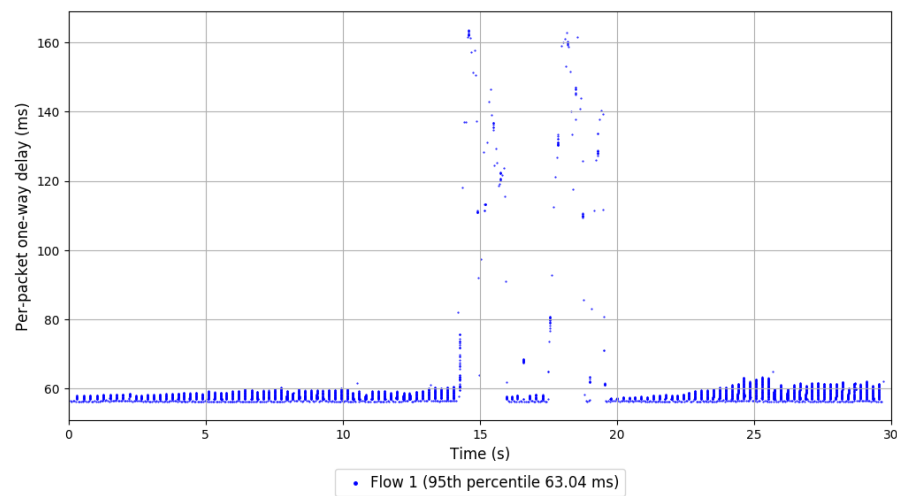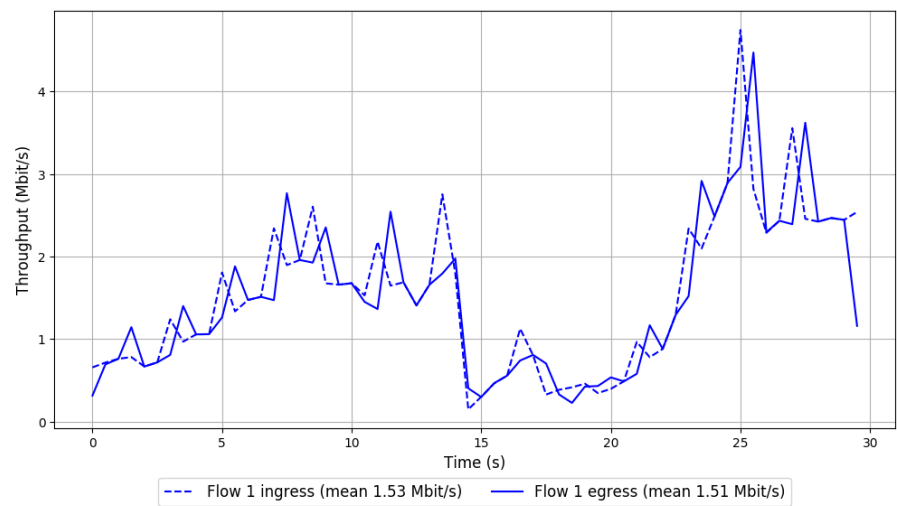Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2017-09-03 06:07:35
End at: 2017-09-03 06:08:05
Local clock offset: 18.276 ms
Remote clock offset: -0.188 ms


# Below is generated by plot.py at 2017-09-03 11:39:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.68 Mbit/s
95th percentile per-packet one-way delay: 114.093 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 5.68 Mbit/s
95th percentile per-packet one-way delay: 114.093 ms
Loss rate: 0.45%
```

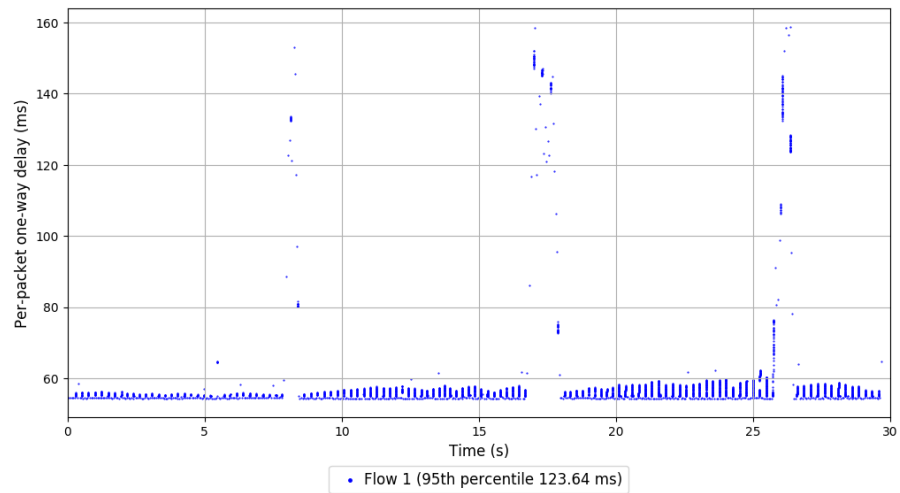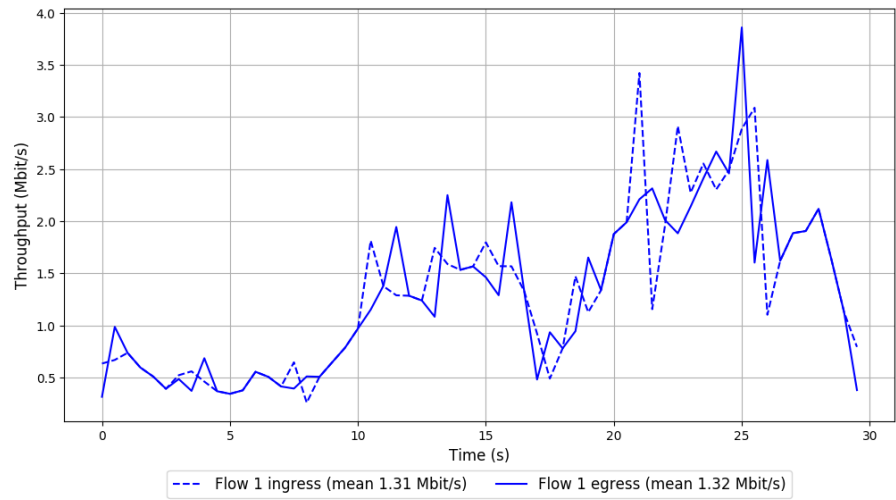## Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2017-09-03 06:26:12
End at: 2017-09-03 06:26:42
Local clock offset: -3.537 ms
Remote clock offset: 28.478 ms


# Below is generated by plot.py at 2017-09-03 11:39:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 63.039 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 63.039 ms
Loss rate: 2.15%
```

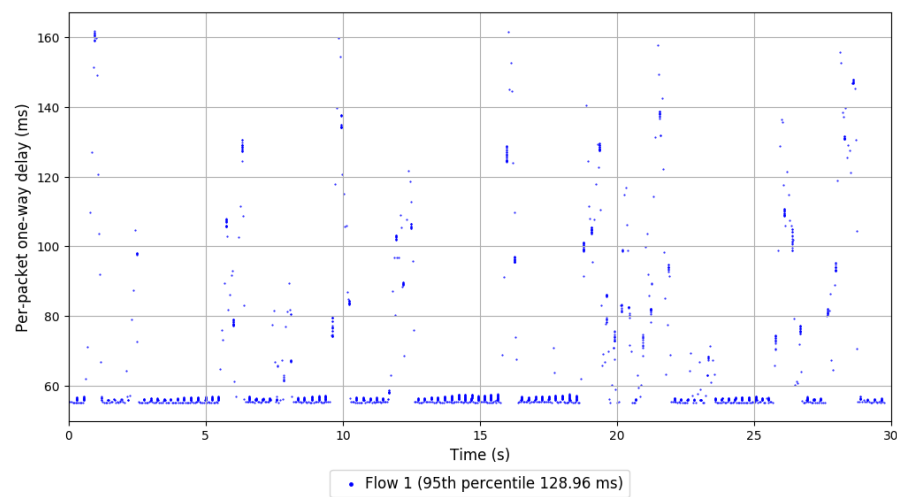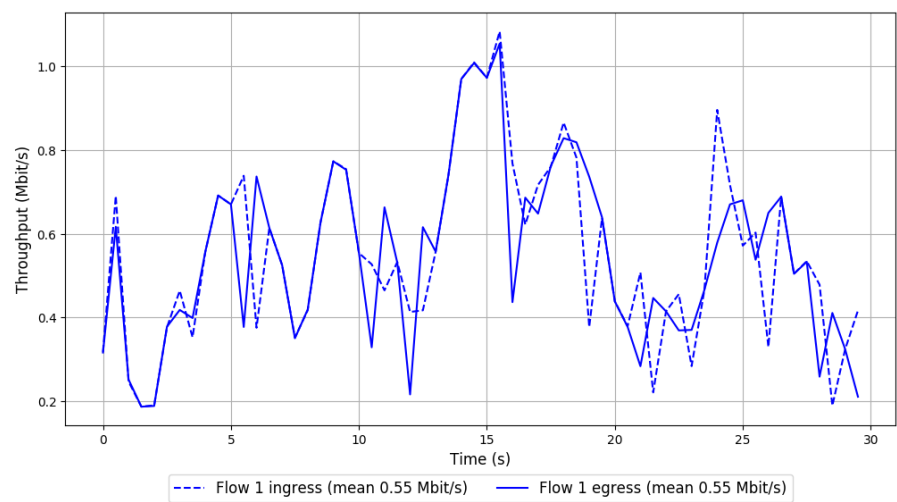Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2017-09-03 06:45:01
End at: 2017-09-03 06:45:31
Local clock offset: -3.754 ms
Remote clock offset: 30.198 ms


# Below is generated by plot.py at 2017-09-03 11:39:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 123.643 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 123.643 ms
Loss rate: 0.53%
```

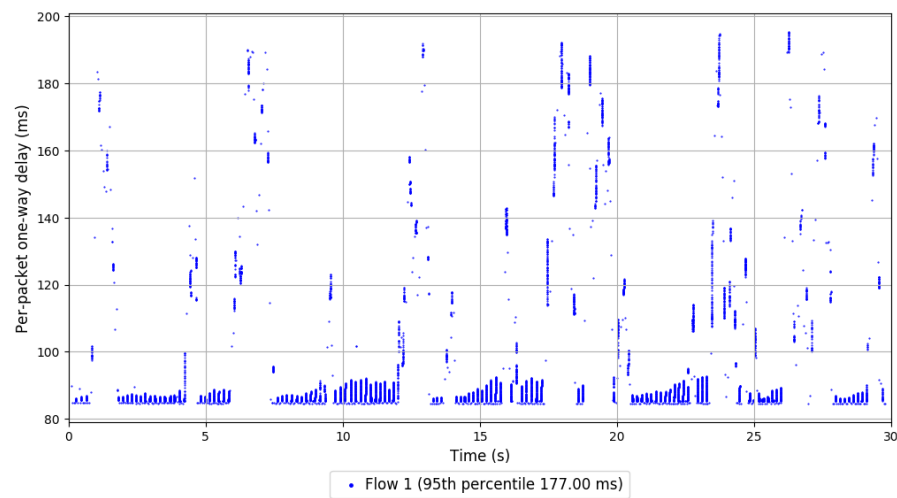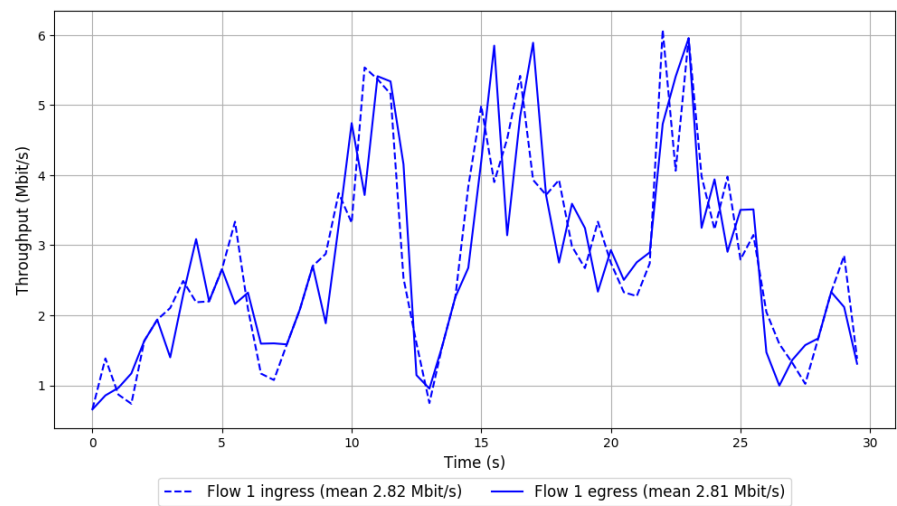## Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2017-09-03 07:03:54
End at: 2017-09-03 07:04:24
Local clock offset: -3.869 ms
Remote clock offset: 29.707 ms


# Below is generated by plot.py at 2017-09-03 11:39:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 128.955 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 128.955 ms
Loss rate: 0.85%
```

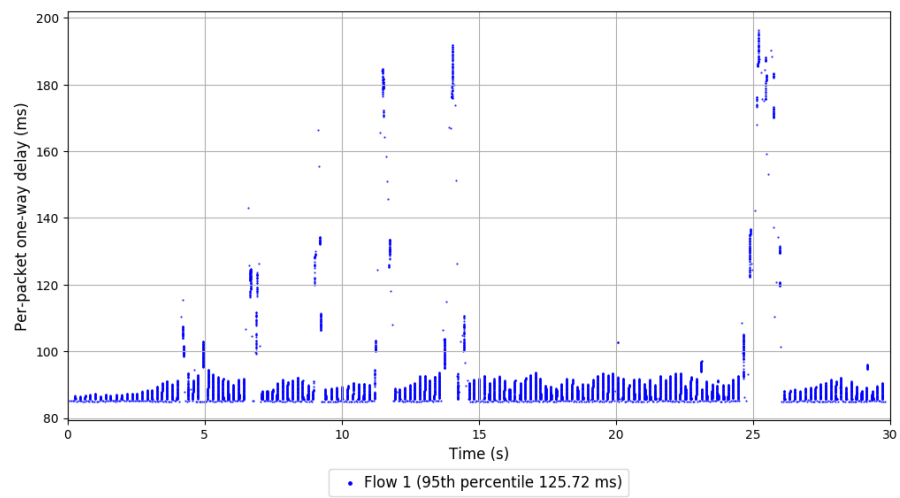Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2017-09-03 07:22:24
End at: 2017-09-03 07:22:54
Local clock offset: -3.285 ms
Remote clock offset: -3.295 ms


# Below is generated by plot.py at 2017-09-03 11:39:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.81 Mbit/s
95th percentile per-packet one-way delay: 176.998 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 2.81 Mbit/s
95th percentile per-packet one-way delay: 176.998 ms
Loss rate: 0.99%
```

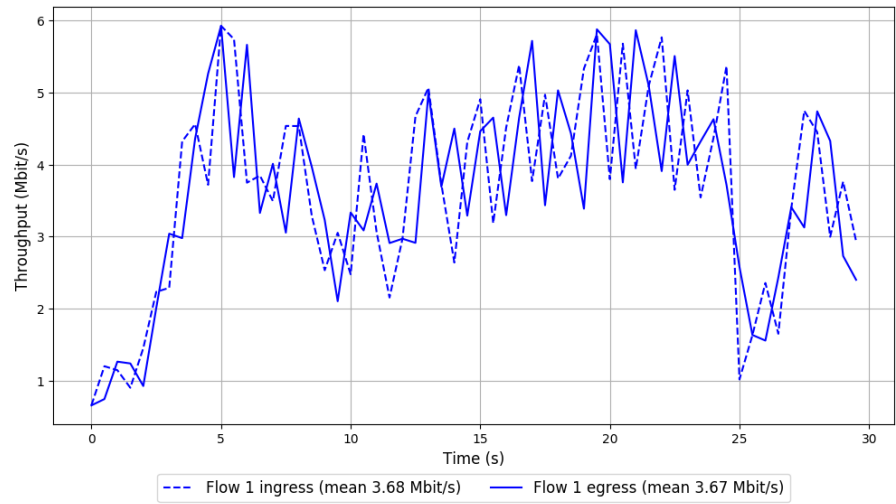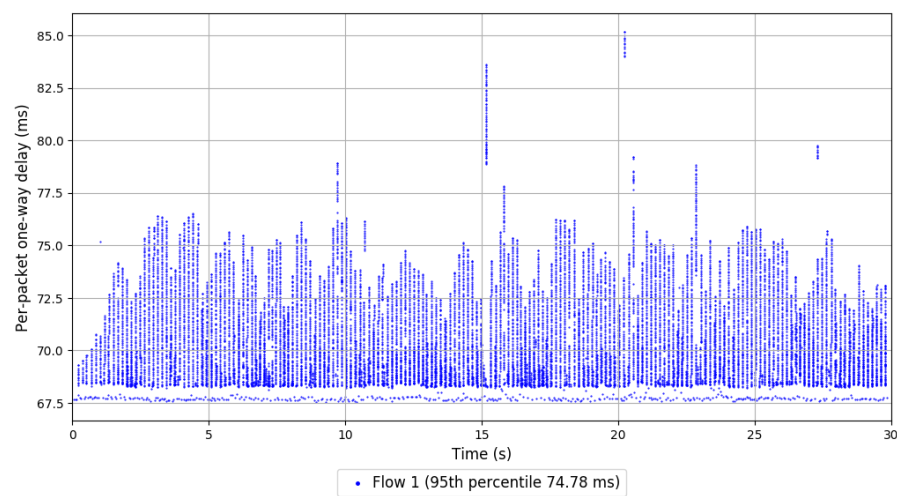Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2017-09-03 07:41:14
End at: 2017-09-03 07:41:44
Local clock offset: -2.537 ms
Remote clock offset: -3.779 ms


# Below is generated by plot.py at 2017-09-03 11:39:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 125.723 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 125.723 ms
Loss rate: 0.75%
```

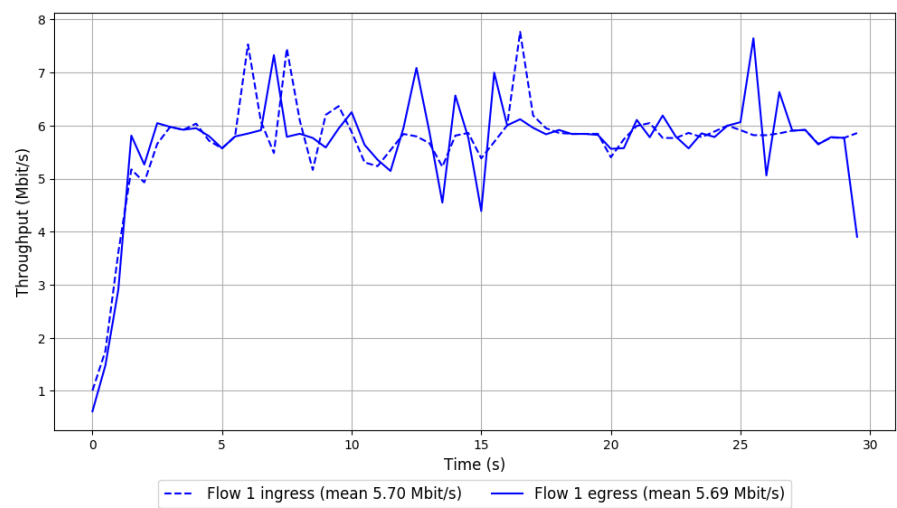## Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2017-09-03 07:59:30
End at: 2017-09-03 08:00:00
Local clock offset: -2.051 ms
Remote clock offset: -4.226 ms


# Below is generated by plot.py at 2017-09-03 11:39:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.69 Mbit/s
95th percentile per-packet one-way delay: 74.785 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 5.69 Mbit/s
95th percentile per-packet one-way delay: 74.785 ms
Loss rate: 0.58%
```

Run 9: Report of Sprout — Data Link

Flow 1 ingress (mean 5.70 Mbit/s)   Flow 1 egress (mean 5.69 Mbit/s)
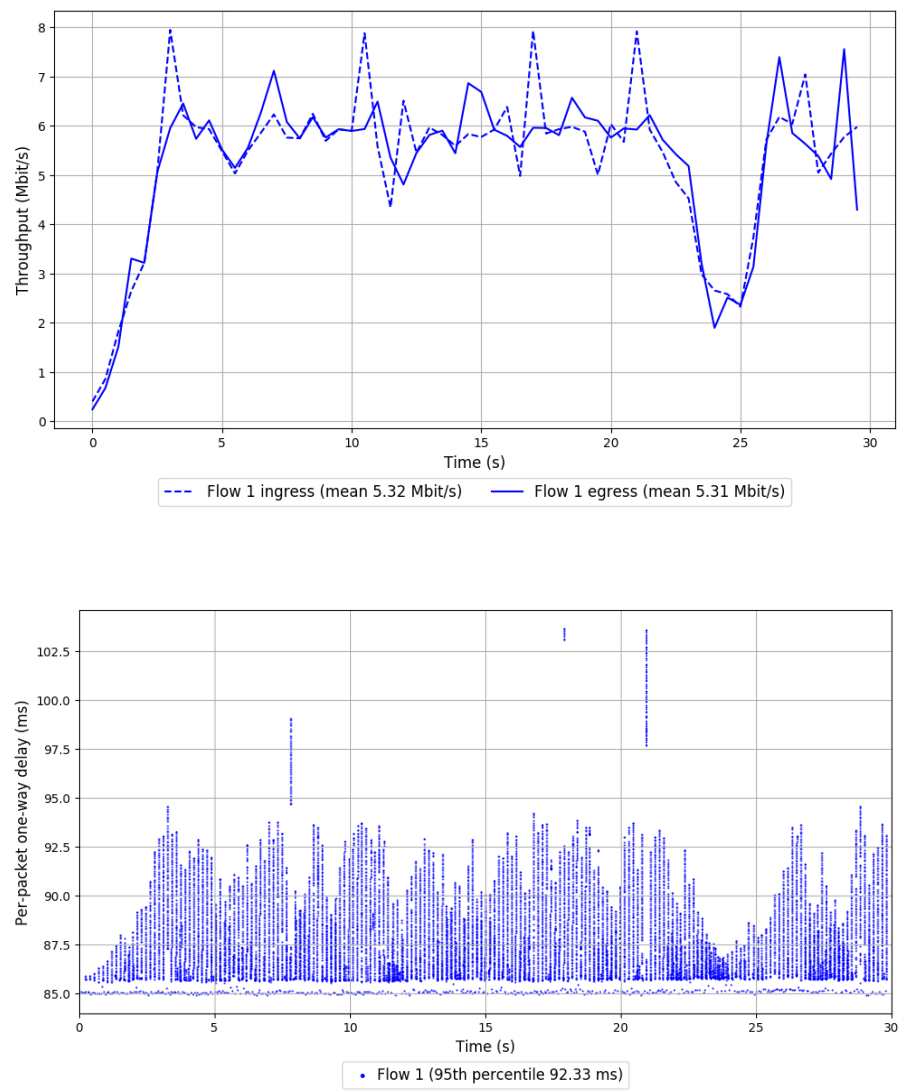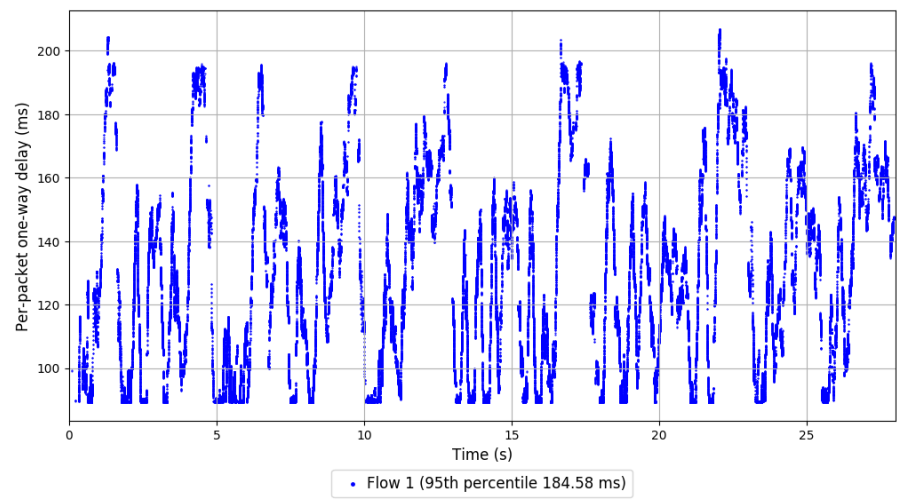

Flow 1 (95th percentile 74.78 ms)

```
Run 10: Statistics of Sprout

Start at: 2017-09-03 08:17:43
End at: 2017-09-03 08:18:13
Local clock offset: -2.305 ms
Remote clock offset: -3.184 ms


# Below is generated by plot.py at 2017-09-03 11:39:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.31 Mbit/s
95th percentile per-packet one-way delay: 92.330 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 5.31 Mbit/s
95th percentile per-packet one-way delay: 92.330 ms
Loss rate: 0.61%
```

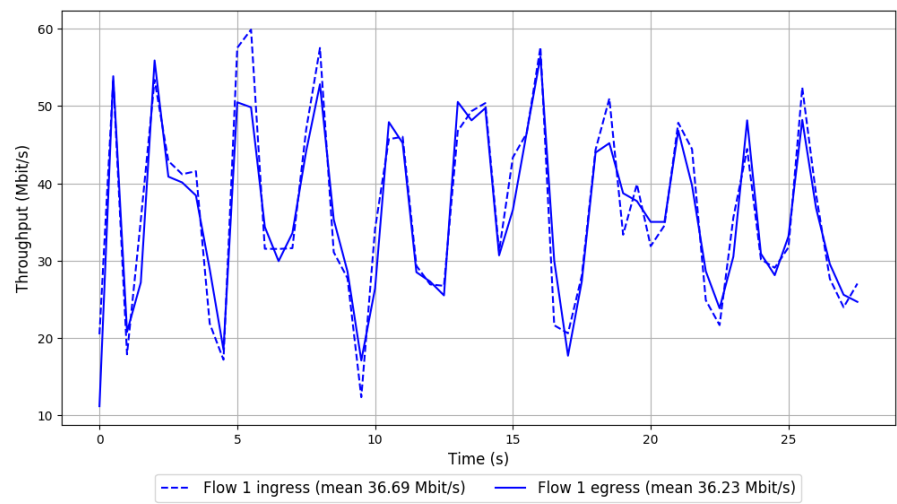## Run 10: Report of Sprout — Data Link

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

Start at: 2017-09-03 05:18:00
End at: 2017-09-03 05:18:30
Local clock offset: 17.797 ms
Remote clock offset: -0.114 ms


# Below is generated by plot.py at 2017-09-03 11:39:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.23 Mbit/s
95th percentile per-packet one-way delay: 184.583 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 36.23 Mbit/s
95th percentile per-packet one-way delay: 184.583 ms
Loss rate: 1.70%
```
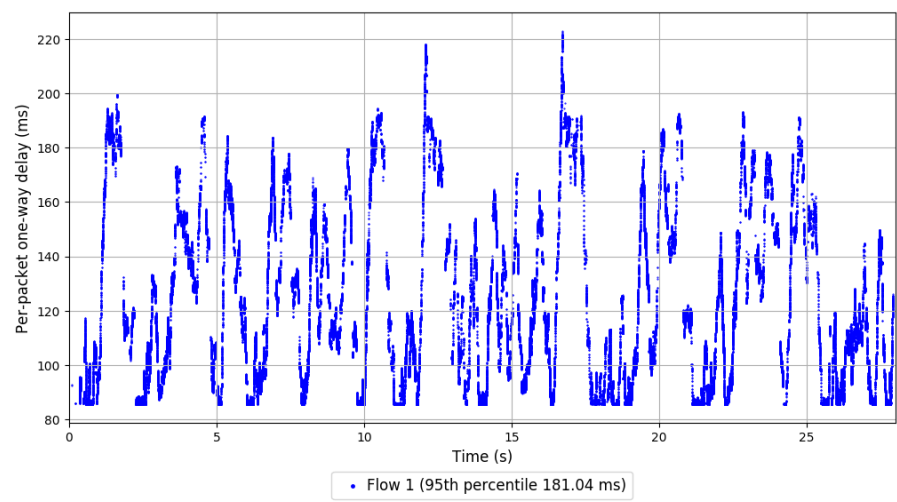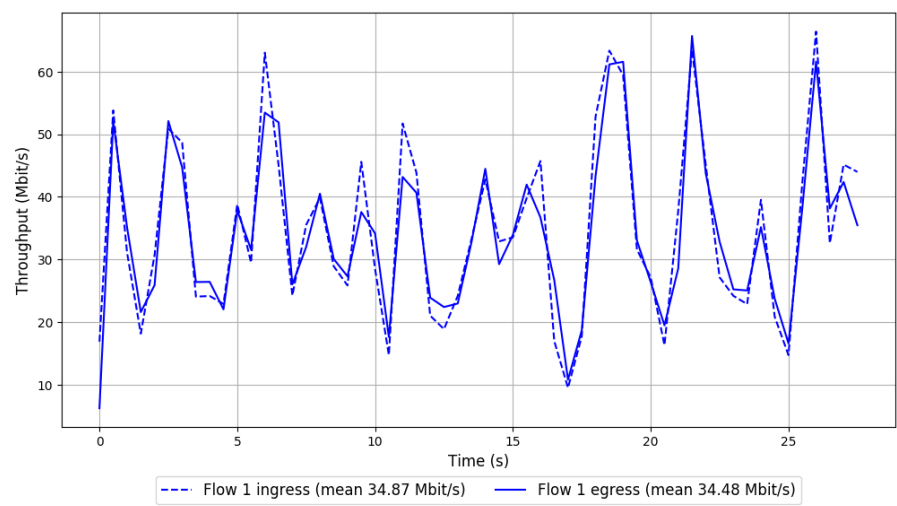
Run 1: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 36.69 Mbit/s) --- Flow 1 egress (mean 36.23 Mbit/s)

• Flow 1 (95th percentile 184.58 ms)

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

Start at: 2017-09-03 05:36:06
End at: 2017-09-03 05:36:36
Local clock offset: -4.067 ms
Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2017-09-03 11:39:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.48 Mbit/s
95th percentile per-packet one-way delay: 181.037 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 34.48 Mbit/s
95th percentile per-packet one-way delay: 181.037 ms
Loss rate: 1.59%
```
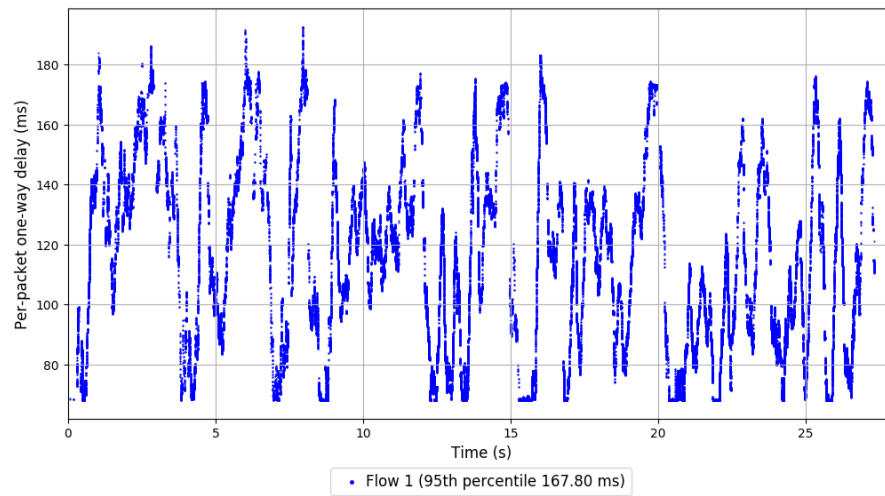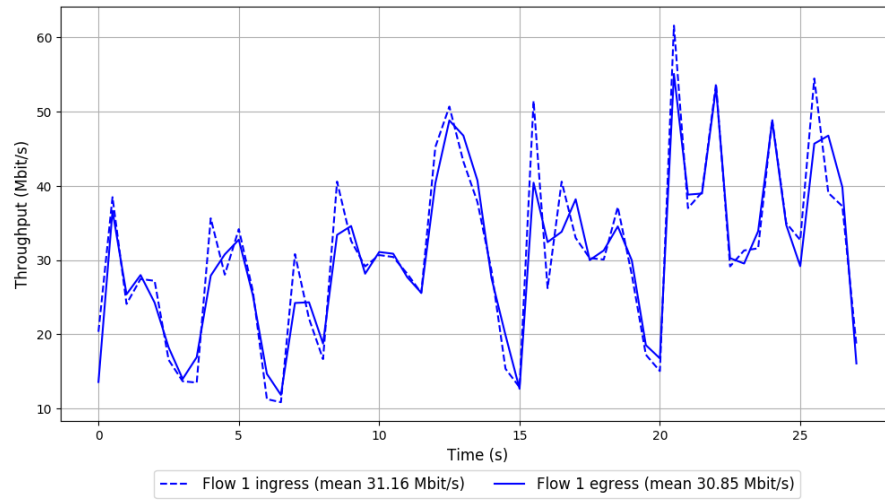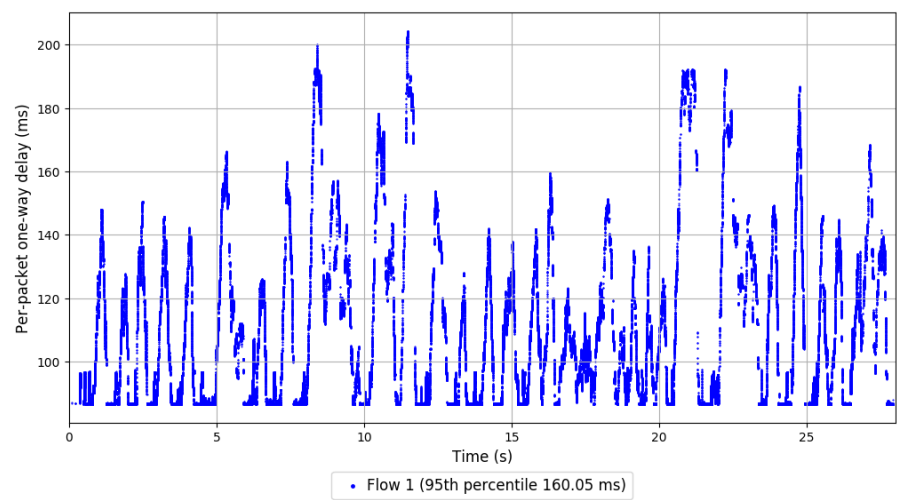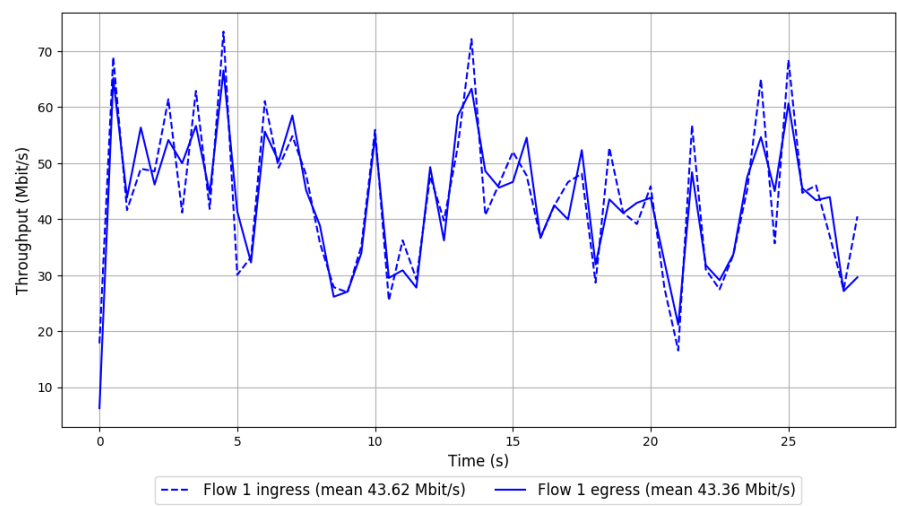
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 34.87 Mbit/s) ----- Flow 1 egress (mean 34.48 Mbit/s) ——

• Flow 1 (95th percentile 181.04 ms)

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

Start at: 2017-09-03 05:54:18
End at: 2017-09-03 05:54:48
Local clock offset: -4.1 ms
Remote clock offset: -0.321 ms


# Below is generated by plot.py at 2017-09-03 11:39:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.85 Mbit/s
95th percentile per-packet one-way delay: 167.798 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 30.85 Mbit/s
95th percentile per-packet one-way delay: 167.798 ms
Loss rate: 1.40%
```

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

Flow 1 ingress (mean 31.16 Mbit/s) --- Flow 1 egress (mean 30.85 Mbit/s)
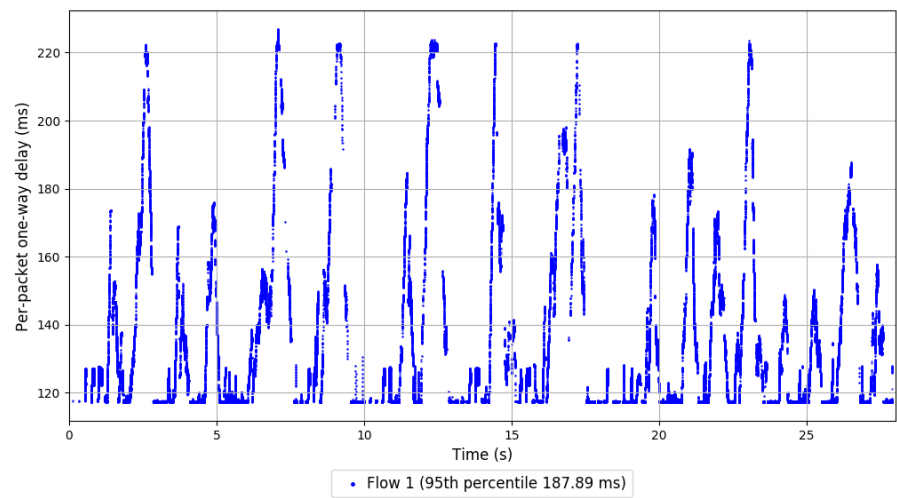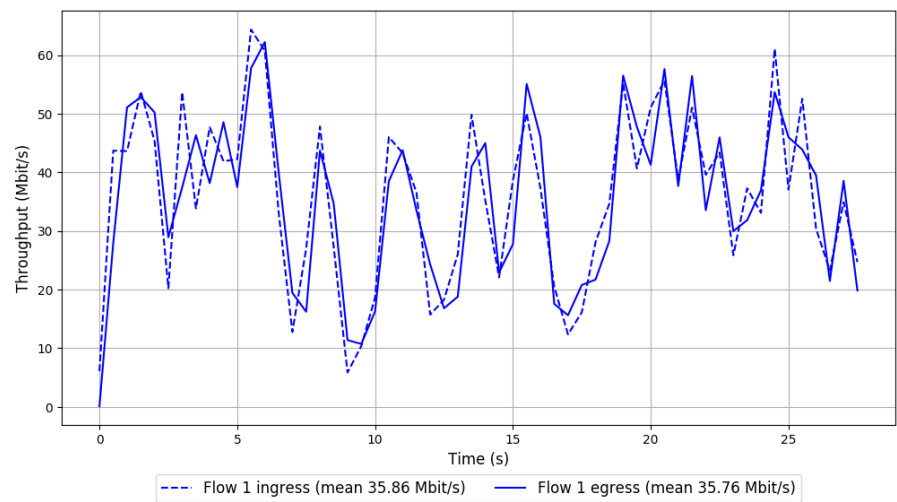

· Flow 1 (95th percentile 167.80 ms)

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

Start at: 2017-09-03 06:12:23
End at: 2017-09-03 06:12:53
Local clock offset: -2.148 ms
Remote clock offset: -0.103 ms


# Below is generated by plot.py at 2017-09-03 11:39:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.36 Mbit/s
95th percentile per-packet one-way delay: 160.053 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 43.36 Mbit/s
95th percentile per-packet one-way delay: 160.053 ms
Loss rate: 1.07%
```

Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-03 06:31:17
End at: 2017-09-03 06:31:47
Local clock offset: -2.114 ms
Remote clock offset: -30.262 ms


# Below is generated by plot.py at 2017-09-03 11:39:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.76 Mbit/s
95th percentile per-packet one-way delay: 187.892 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 35.76 Mbit/s
95th percentile per-packet one-way delay: 187.892 ms
Loss rate: 0.95%
```
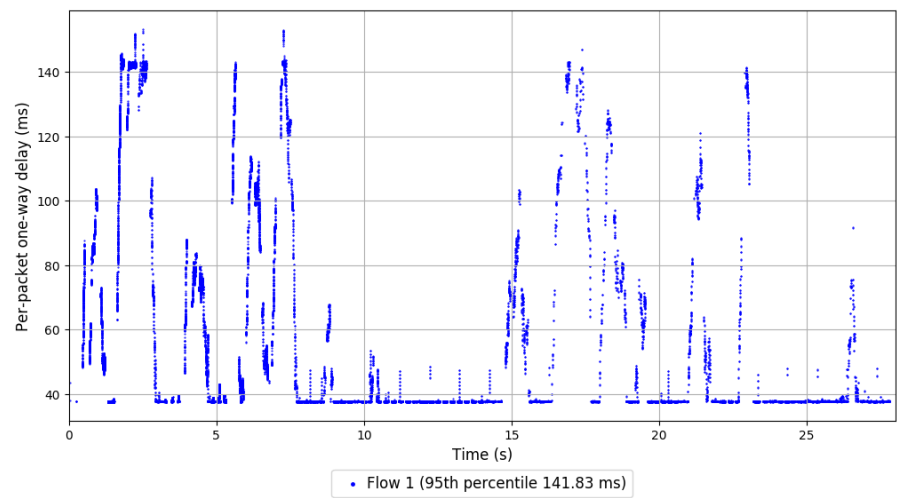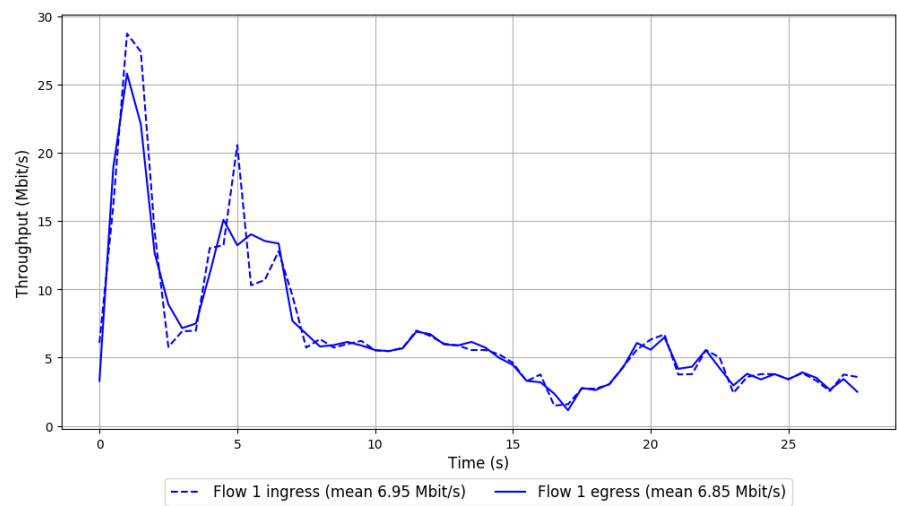
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 35.86 Mbit/s)   Flow 1 egress (mean 35.76 Mbit/s)
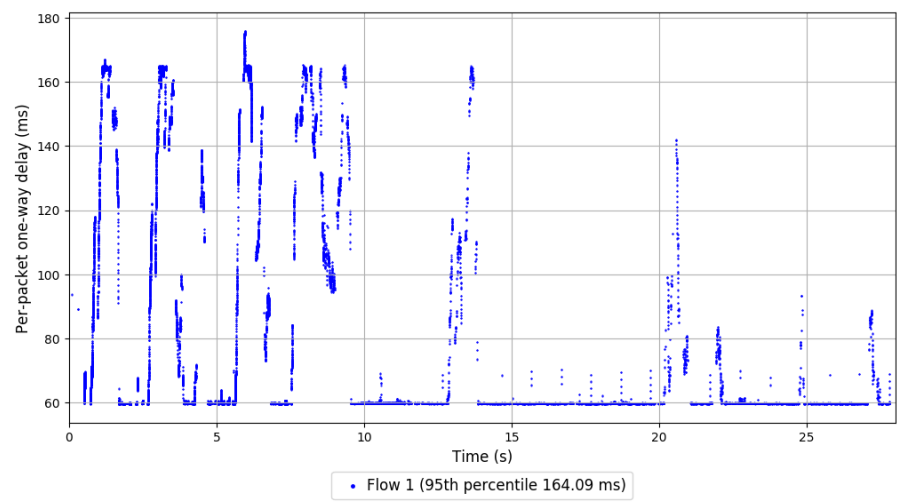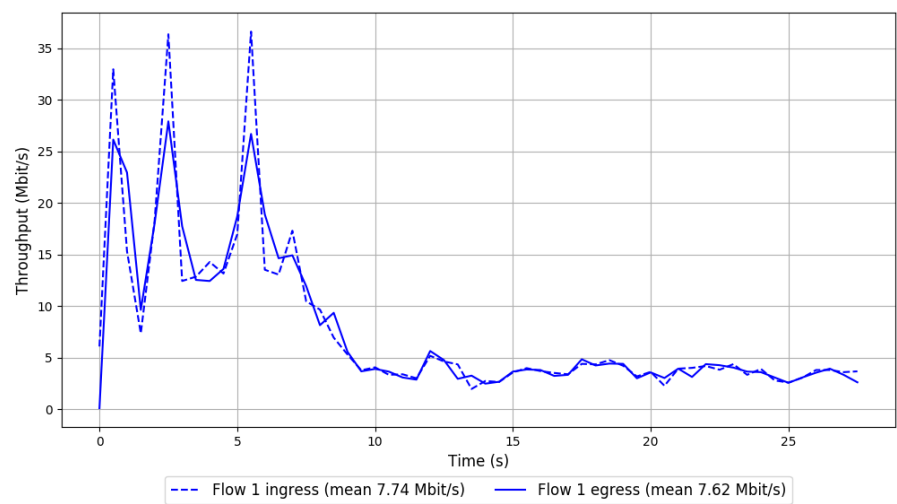

· Flow 1 (95th percentile 187.89 ms)

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

Start at: 2017-09-03 06:50:02
End at: 2017-09-03 06:50:32
Local clock offset: -3.995 ms
Remote clock offset: 30.196 ms


# Below is generated by plot.py at 2017-09-03 11:39:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.85 Mbit/s
95th percentile per-packet one-way delay: 141.827 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 6.85 Mbit/s
95th percentile per-packet one-way delay: 141.827 ms
Loss rate: 2.15%
```

Run 6: Report of TaoVA-100x — Data Link
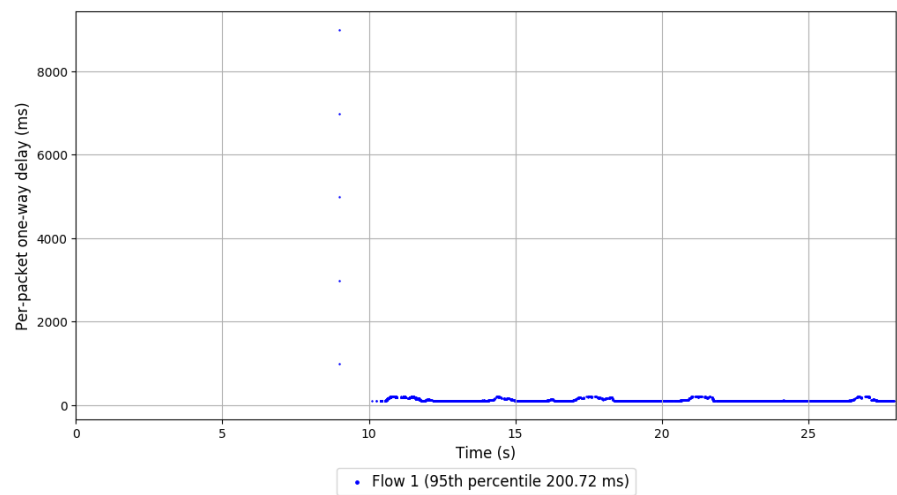
```
Run 7: Statistics of TaoVA-100x

Start at: 2017-09-03 07:08:55
End at: 2017-09-03 07:09:25
Local clock offset: 18.566 ms
Remote clock offset: 30.202 ms

# Below is generated by plot.py at 2017-09-03 11:39:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.62 Mbit/s
95th percentile per-packet one-way delay: 164.088 ms
Loss rate: 2.42%
-- Flow 1:
Average throughput: 7.62 Mbit/s
95th percentile per-packet one-way delay: 164.088 ms
Loss rate: 2.42%
```

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

Flow 1 ingress (mean 7.74 Mbit/s) --- Flow 1 egress (mean 7.62 Mbit/s)

• Flow 1 (95th percentile 164.09 ms)
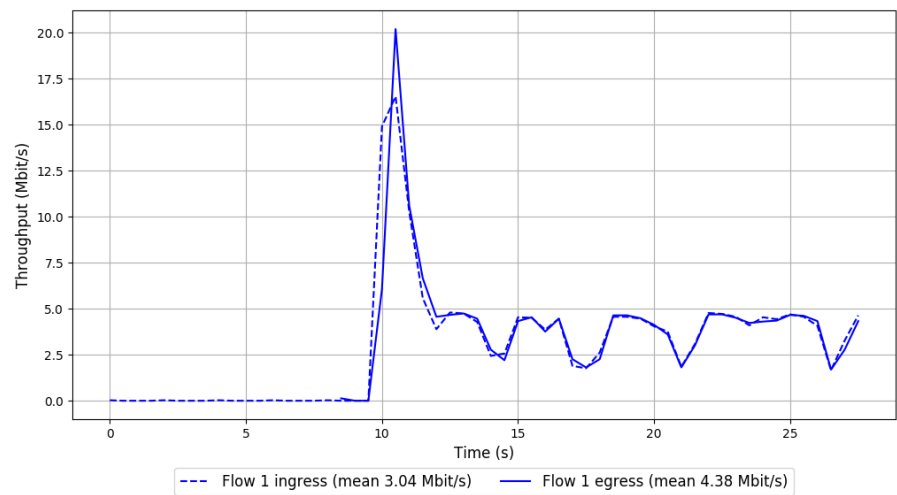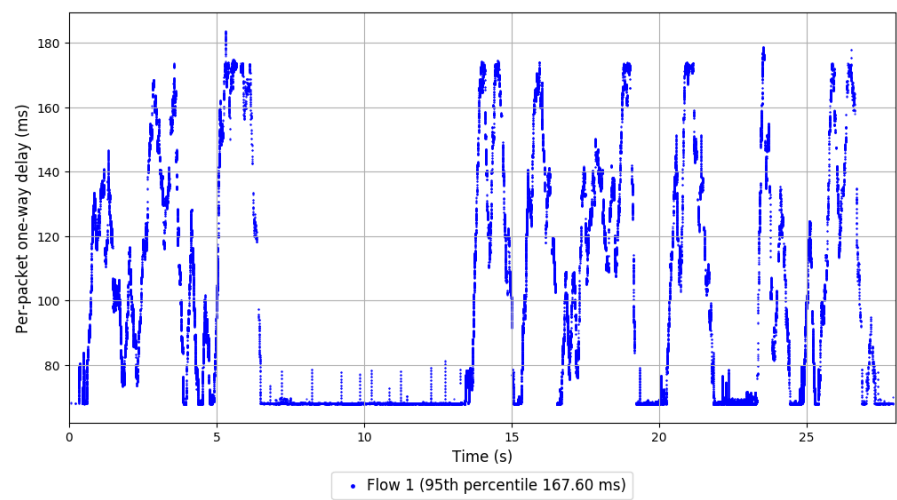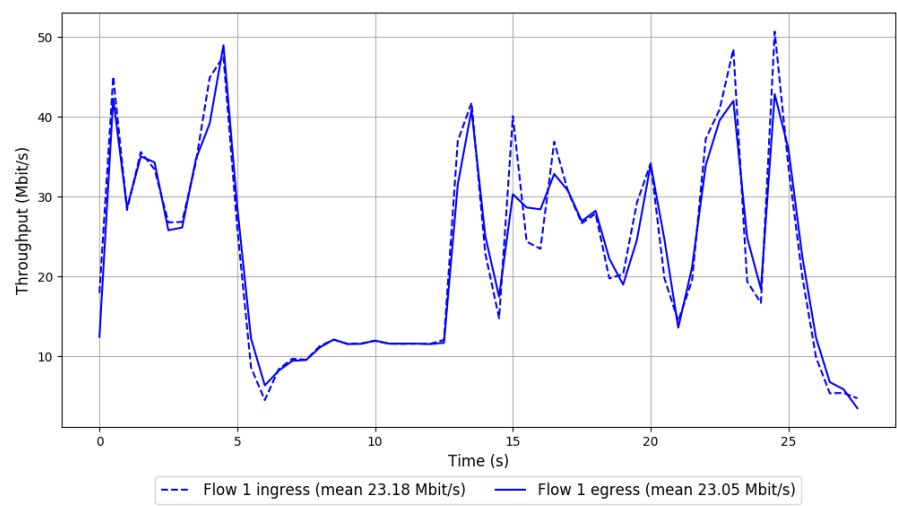
```
Run 8: Statistics of TaoVA-100x

Start at: 2017-09-03 07:27:21
End at: 2017-09-03 07:27:51
Local clock offset: -3.039 ms
Remote clock offset: -15.595 ms
```

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

Flow 1 ingress (mean 3.04 Mbit/s) --- Flow 1 egress (mean 4.38 Mbit/s)

Flow 1 (95th percentile 200.72 ms)

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

Start at: 2017-09-03 07:46:04
End at: 2017-09-03 07:46:34
Local clock offset: -2.406 ms
Remote clock offset: -4.06 ms


# Below is generated by plot.py at 2017-09-03 11:39:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.05 Mbit/s
95th percentile per-packet one-way delay: 167.599 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 23.05 Mbit/s
95th percentile per-packet one-way delay: 167.599 ms
Loss rate: 1.04%
```

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

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

Start at: 2017-09-03 08:04:20
End at: 2017-09-03 08:04:50
Local clock offset: -2.096 ms
Remote clock offset: -4.032 ms


# Below is generated by plot.py at 2017-09-03 11:39:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.78 Mbit/s
95th percentile per-packet one-way delay: 141.591 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 47.78 Mbit/s
95th percentile per-packet one-way delay: 141.591 ms
Loss rate: 0.61%
```
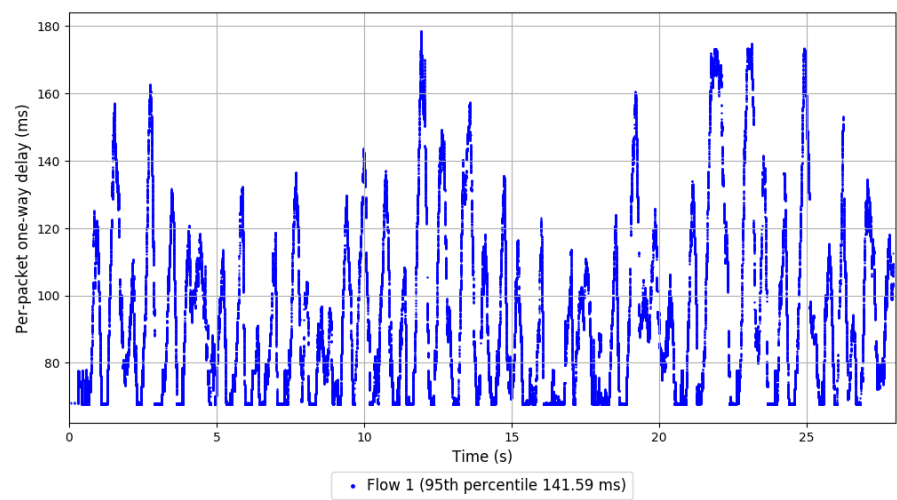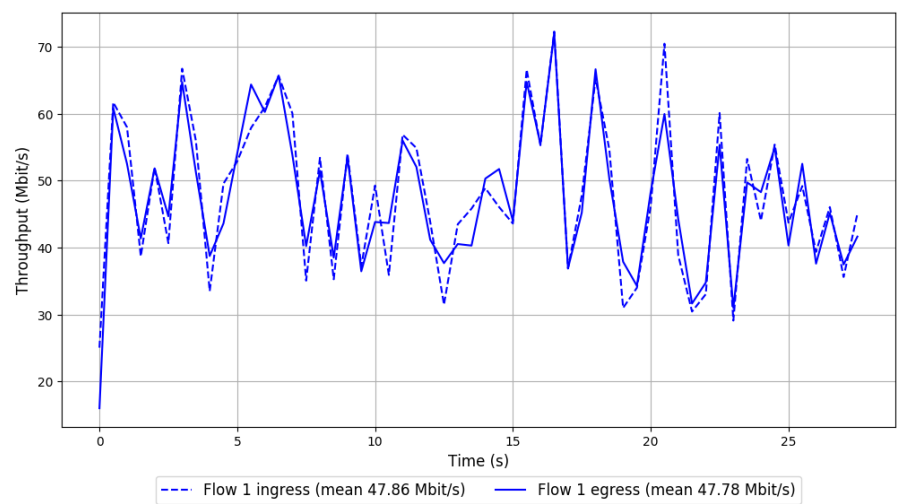
Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 47.86 Mbit/s) ----- Flow 1 egress (mean 47.78 Mbit/s) ———
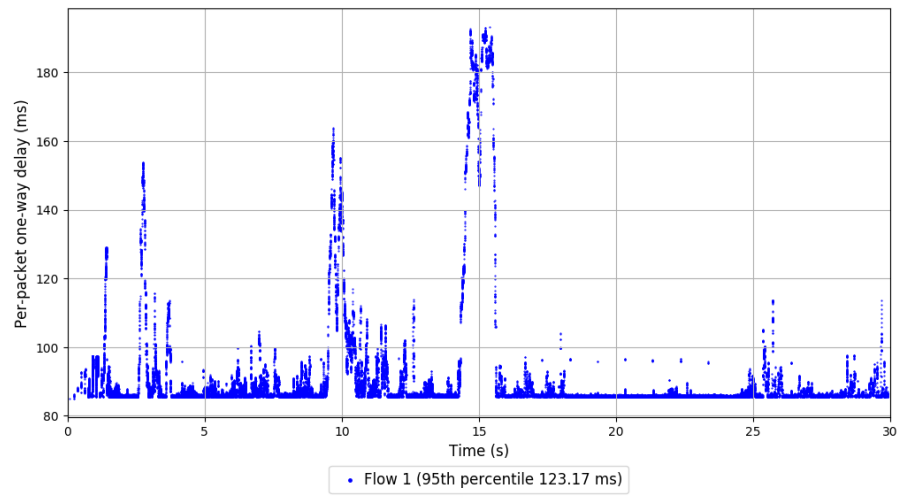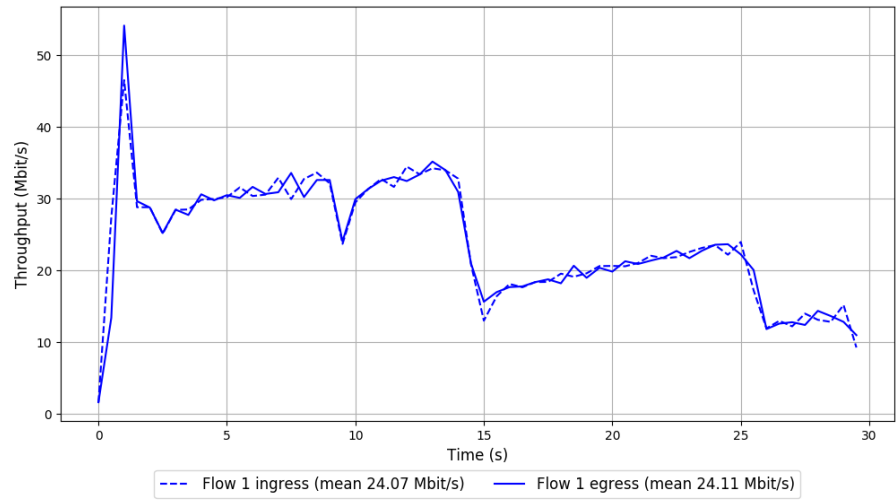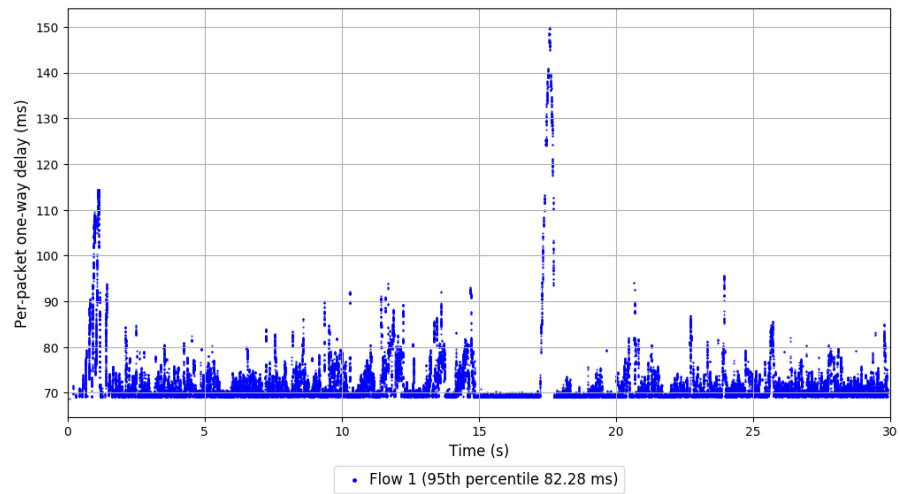

• Flow 1 (95th percentile 141.59 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2017-09-03 05:22:53
End at: 2017-09-03 05:23:24
Local clock offset: -3.907 ms
Remote clock offset: -0.044 ms


# Below is generated by plot.py at 2017-09-03 11:39:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.11 Mbit/s
95th percentile per-packet one-way delay: 123.170 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 24.11 Mbit/s
95th percentile per-packet one-way delay: 123.170 ms
Loss rate: 0.27%
```

Run 1: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 24.07 Mbit/s)   Flow 1 egress (mean 24.11 Mbit/s)

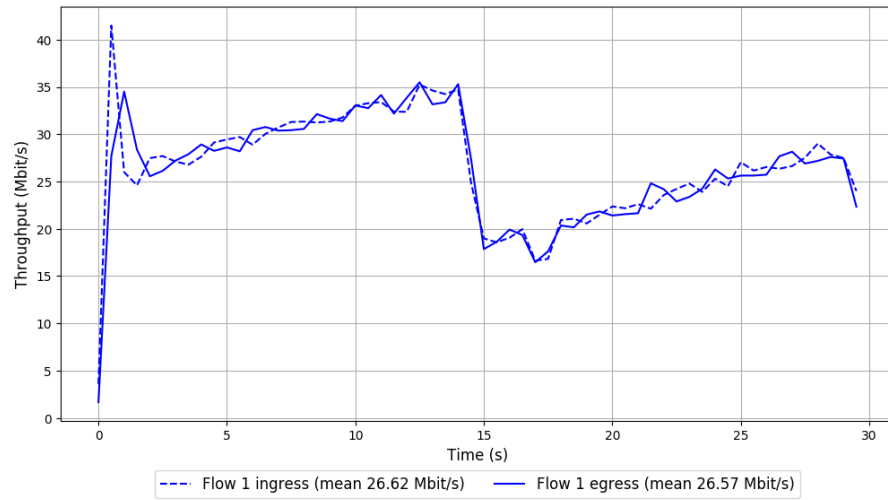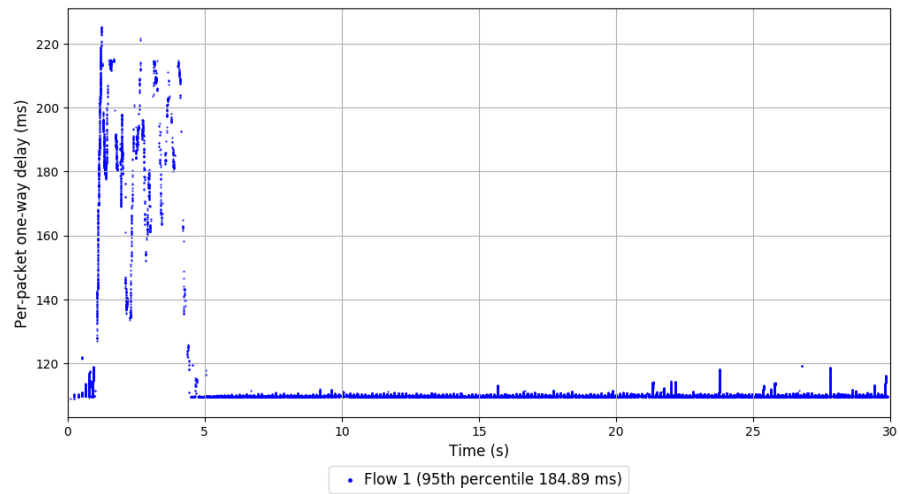

Flow 1 (95th percentile 123.17 ms)

```
Run 2: Statistics of TCP Vegas

Start at: 2017-09-03 05:40:57
End at: 2017-09-03 05:41:27
Local clock offset: -2.913 ms
Remote clock offset: -0.005 ms


# Below is generated by plot.py at 2017-09-03 11:39:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.57 Mbit/s
95th percentile per-packet one-way delay: 82.283 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 26.57 Mbit/s
95th percentile per-packet one-way delay: 82.283 ms
Loss rate: 0.54%
```
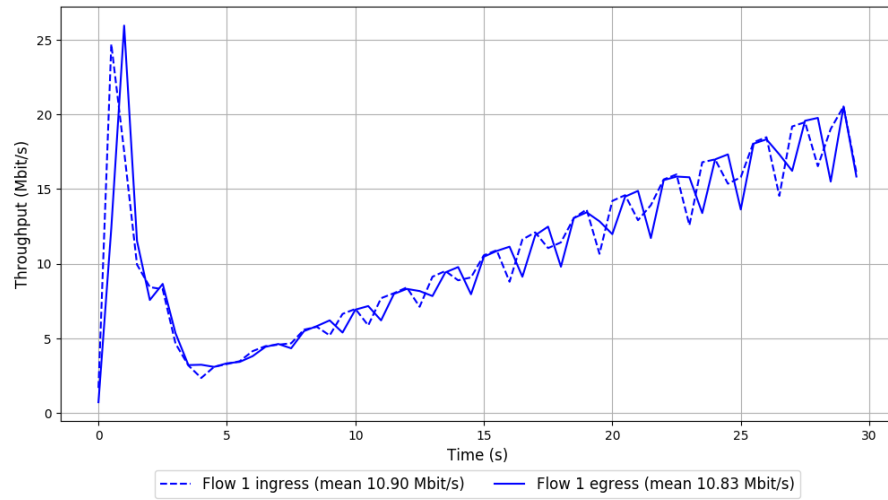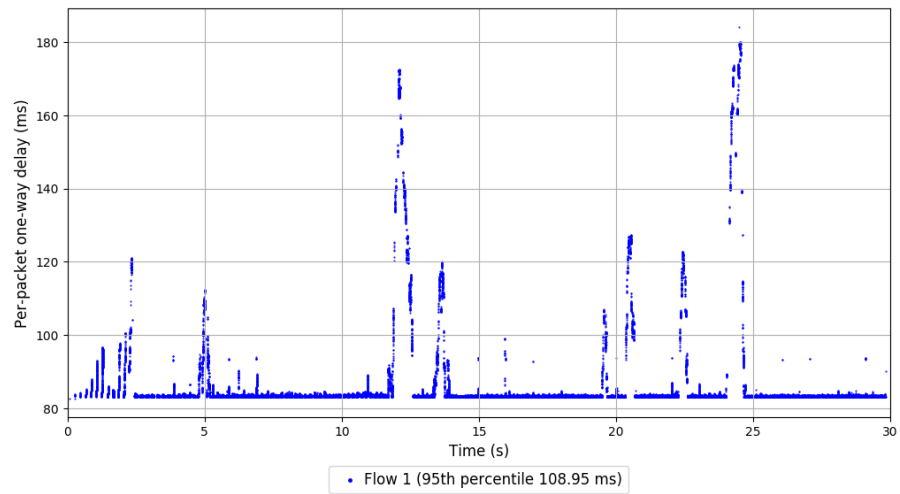
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2017-09-03 05:59:08
End at: 2017-09-03 05:59:38
Local clock offset: 19.594 ms
Remote clock offset: -0.345 ms


# Below is generated by plot.py at 2017-09-03 11:39:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.83 Mbit/s
95th percentile per-packet one-way delay: 184.890 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 10.83 Mbit/s
95th percentile per-packet one-way delay: 184.890 ms
Loss rate: 1.04%
```
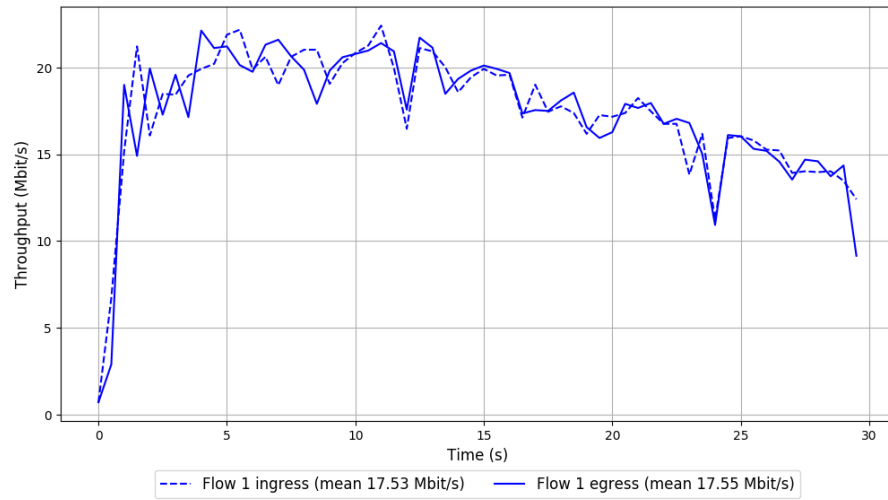
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2017-09-03 06:17:23
End at: 2017-09-03 06:17:53
Local clock offset: -2.032 ms
Remote clock offset: -13.589 ms


# Below is generated by plot.py at 2017-09-03 11:40:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.55 Mbit/s
95th percentile per-packet one-way delay: 108.949 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 17.55 Mbit/s
95th percentile per-packet one-way delay: 108.949 ms
Loss rate: 0.45%
```

Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 17.53 Mbit/s) —— Flow 1 egress (mean 17.55 Mbit/s)
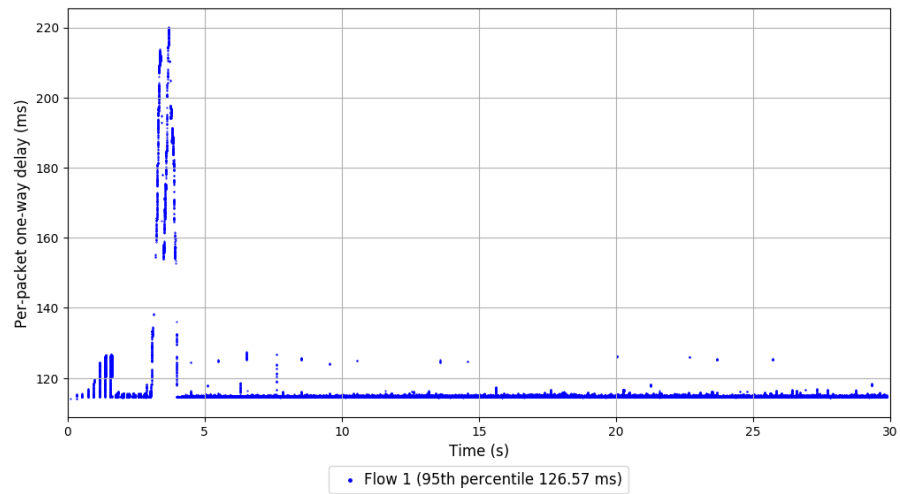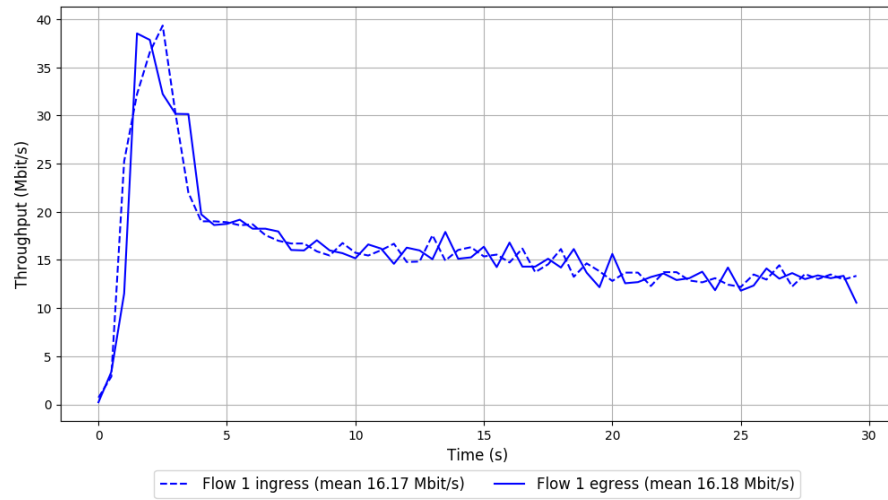

• Flow 1 (95th percentile 108.95 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2017-09-03 06:36:14
End at: 2017-09-03 06:36:44
Local clock offset: -3.606 ms
Remote clock offset: -28.99 ms


# Below is generated by plot.py at 2017-09-03 11:40:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.18 Mbit/s
95th percentile per-packet one-way delay: 126.573 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 16.18 Mbit/s
95th percentile per-packet one-way delay: 126.573 ms
Loss rate: 0.57%
```
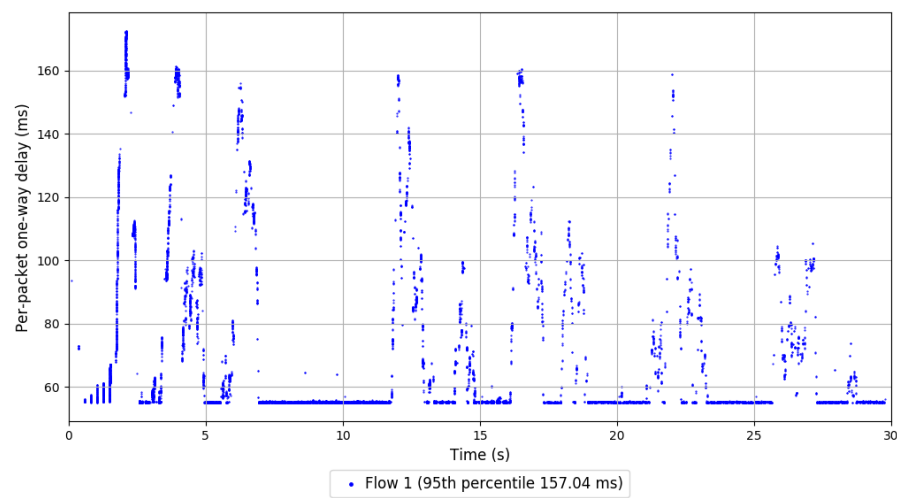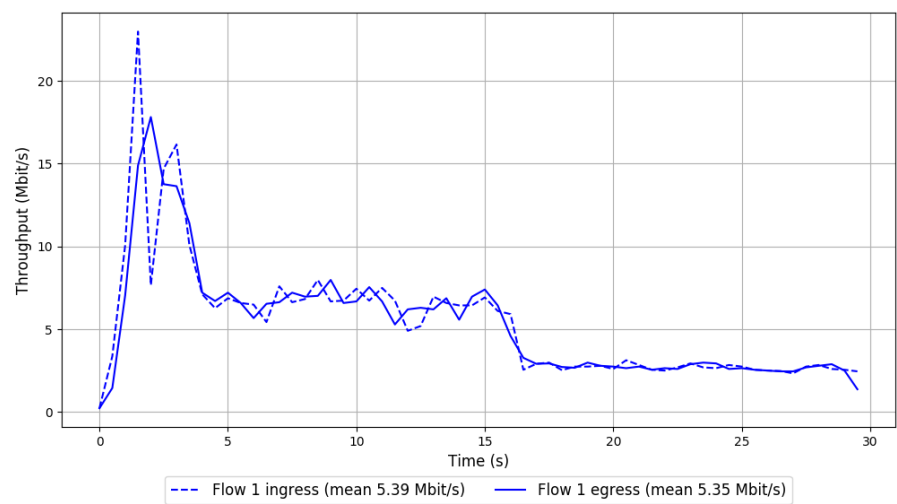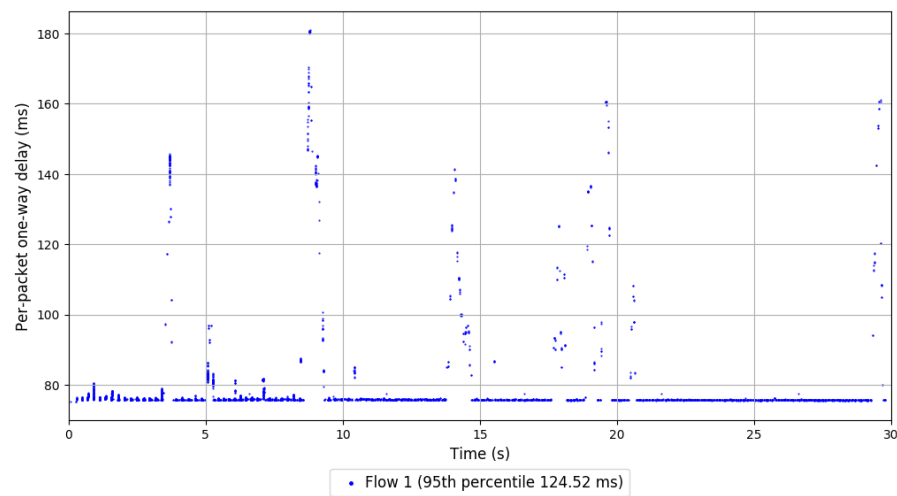
Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 16.17 Mbit/s)　　Flow 1 egress (mean 16.18 Mbit/s)

Flow 1 (95th percentile 126.57 ms)

```
Run 6: Statistics of TCP Vegas

Start at: 2017-09-03 06:55:07
End at: 2017-09-03 06:55:37
Local clock offset: -3.984 ms
Remote clock offset: 29.89 ms


# Below is generated by plot.py at 2017-09-03 11:40:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.35 Mbit/s
95th percentile per-packet one-way delay: 157.036 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 5.35 Mbit/s
95th percentile per-packet one-way delay: 157.036 ms
Loss rate: 1.56%
```

Run 6: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 5.39 Mbit/s)   Flow 1 egress (mean 5.35 Mbit/s)

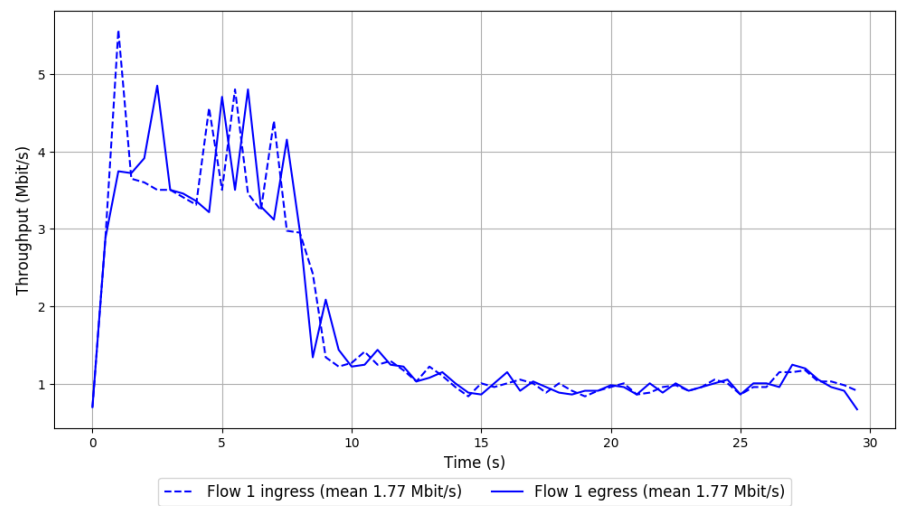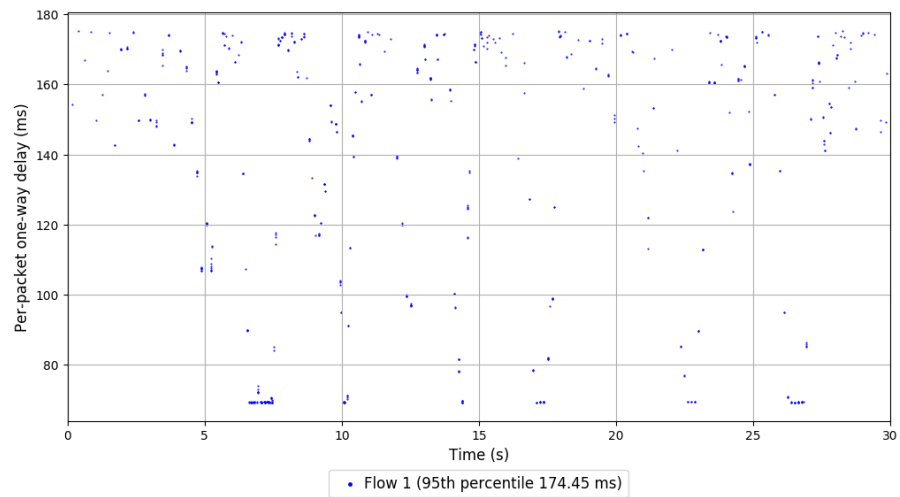Flow 1 (95th percentile 157.04 ms)

255

```
Run 7: Statistics of TCP Vegas

Start at: 2017-09-03 07:13:54
End at: 2017-09-03 07:14:24
Local clock offset: 16.688 ms
Remote clock offset: 29.191 ms


# Below is generated by plot.py at 2017-09-03 11:40:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 124.521 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 124.521 ms
Loss rate: 0.61%
```

Run 7: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 1.77 Mbit/s)   ——— Flow 1 egress (mean 1.77 Mbit/s)

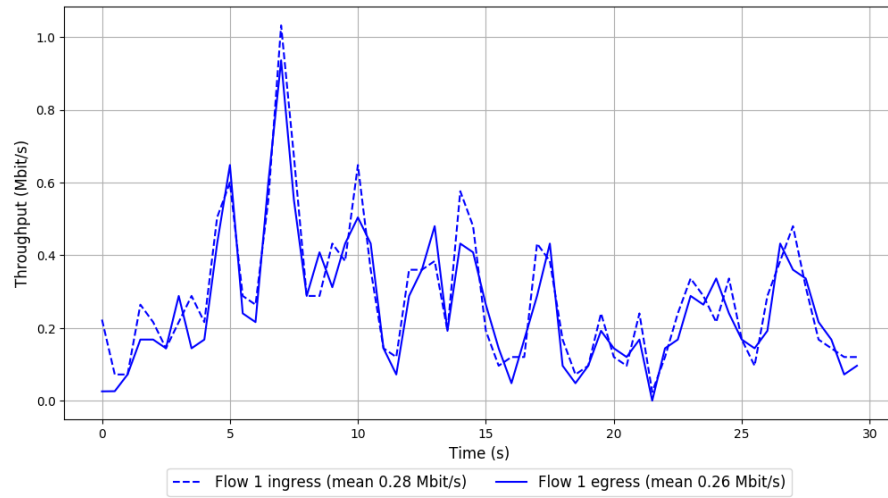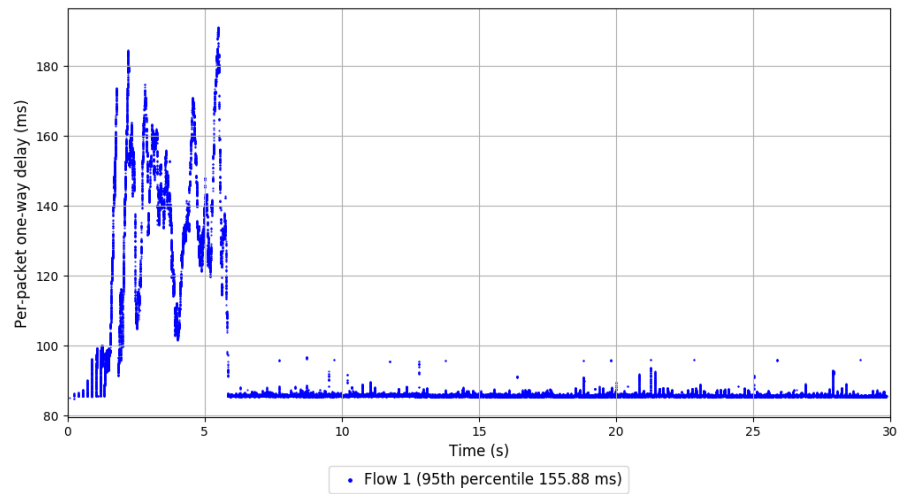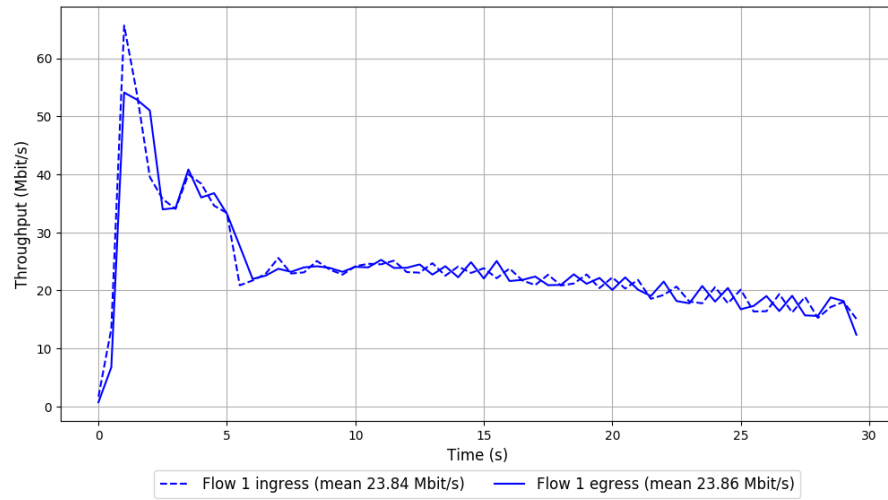
• Flow 1 (95th percentile 124.52 ms)

```
Run 8: Statistics of TCP Vegas

Start at: 2017-09-03 07:32:28
End at: 2017-09-03 07:32:58
Local clock offset: -1.374 ms
Remote clock offset: -3.776 ms


# Below is generated by plot.py at 2017-09-03 11:40:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 174.450 ms
Loss rate: 8.56%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 174.450 ms
Loss rate: 8.56%
```

Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2017-09-03 07:50:59
End at: 2017-09-03 07:51:29
Local clock offset: -2.312 ms
Remote clock offset: -4.057 ms


# Below is generated by plot.py at 2017-09-03 11:40:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.86 Mbit/s
95th percentile per-packet one-way delay: 155.879 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 23.86 Mbit/s
95th percentile per-packet one-way delay: 155.879 ms
Loss rate: 0.36%
```
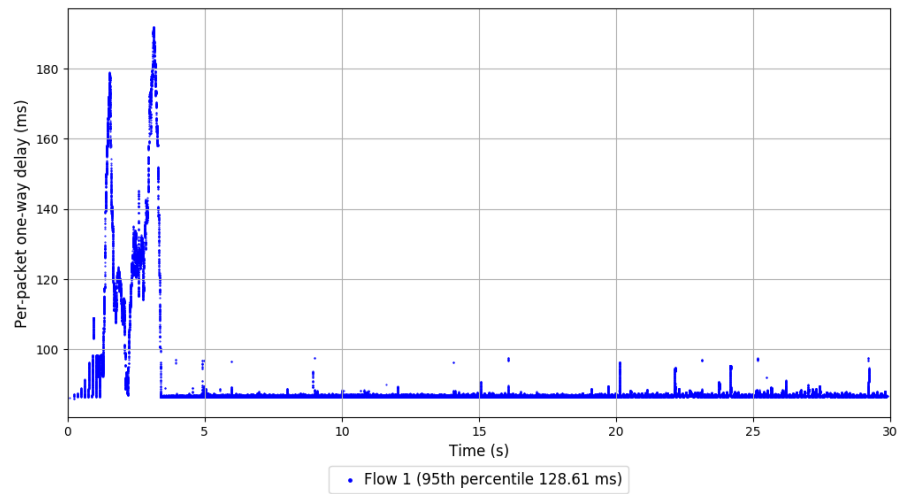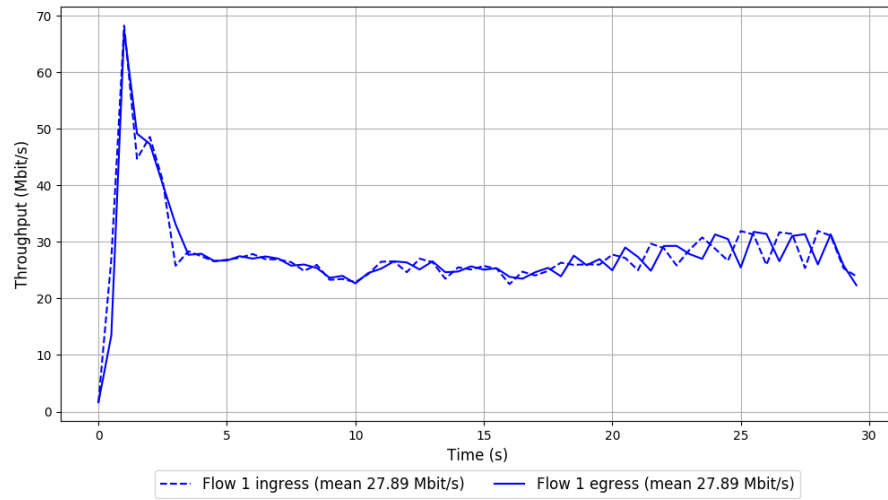
Run 9: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 23.84 Mbit/s) --- Flow 1 egress (mean 23.86 Mbit/s)

Flow 1 (95th percentile 155.88 ms)

```
Run 10: Statistics of TCP Vegas

Start at: 2017-09-03 08:09:11
End at: 2017-09-03 08:09:41
Local clock offset: -0.786 ms
Remote clock offset: -3.74 ms


# Below is generated by plot.py at 2017-09-03 11:40:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 27.89 Mbit/s
95th percentile per-packet one-way delay: 128.607 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 27.89 Mbit/s
95th percentile per-packet one-way delay: 128.607 ms
Loss rate: 0.48%
```

Run 10: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2017-09-03 05:27:43
End at: 2017-09-03 05:28:13
Local clock offset: -3.919 ms
Remote clock offset: 0.103 ms

# Below is generated by plot.py at 2017-09-03 11:40:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.69 Mbit/s
95th percentile per-packet one-way delay: 175.944 ms
Loss rate: 2.83%
-- Flow 1:
Average throughput: 36.69 Mbit/s
95th percentile per-packet one-way delay: 175.944 ms
Loss rate: 2.83%
```
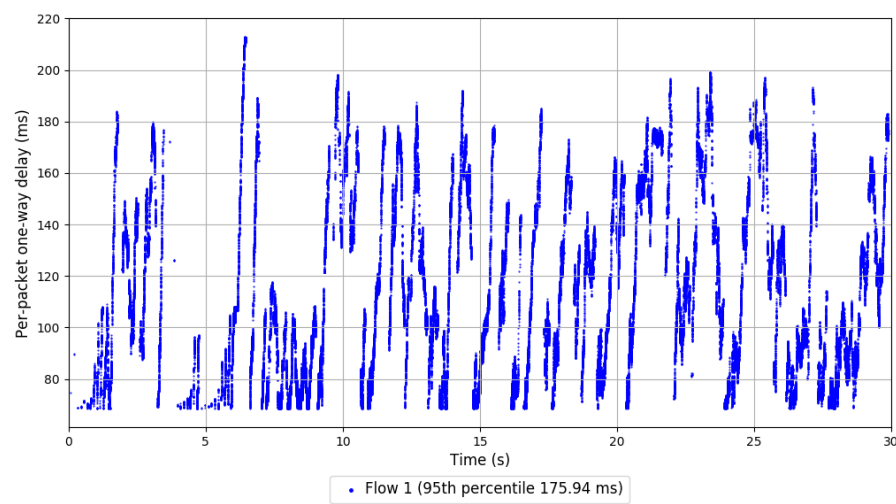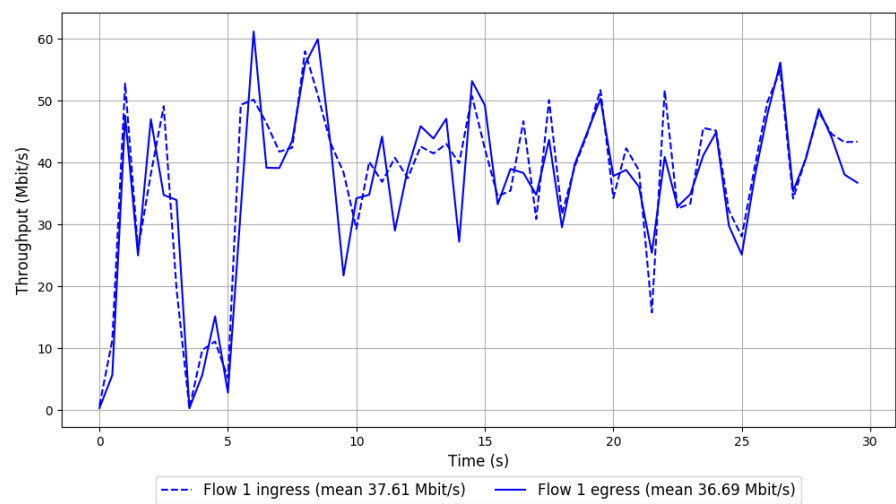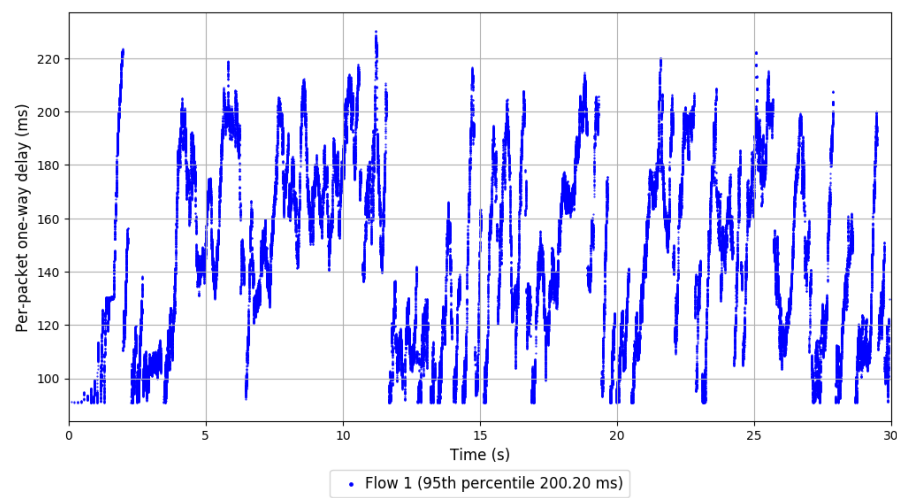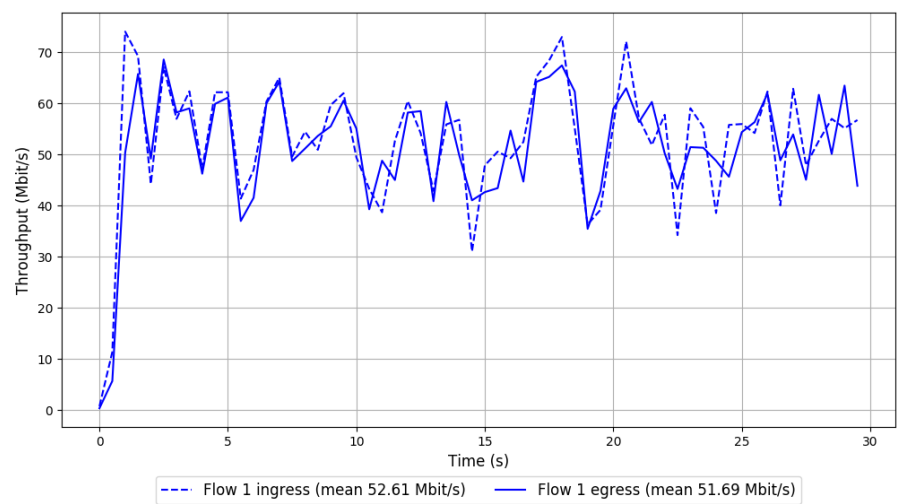
Run 1: Report of Verus — Data Link

Flow 1 ingress (mean 37.61 Mbit/s)   Flow 1 egress (mean 36.69 Mbit/s)
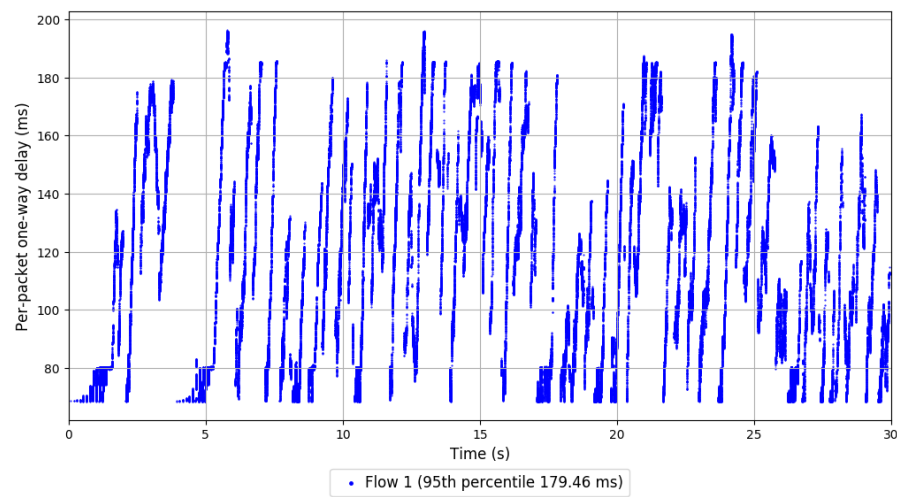

· Flow 1 (95th percentile 175.94 ms)

```
Run 2: Statistics of Verus

Start at: 2017-09-03 05:45:51
End at: 2017-09-03 05:46:21
Local clock offset: 18.412 ms
Remote clock offset: 0.068 ms


# Below is generated by plot.py at 2017-09-03 11:40:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.69 Mbit/s
95th percentile per-packet one-way delay: 200.197 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 51.69 Mbit/s
95th percentile per-packet one-way delay: 200.197 ms
Loss rate: 2.14%
```

Run 2: Report of Verus — Data Link

Flow 1 ingress (mean 52.61 Mbit/s) ----- Flow 1 egress (mean 51.69 Mbit/s)

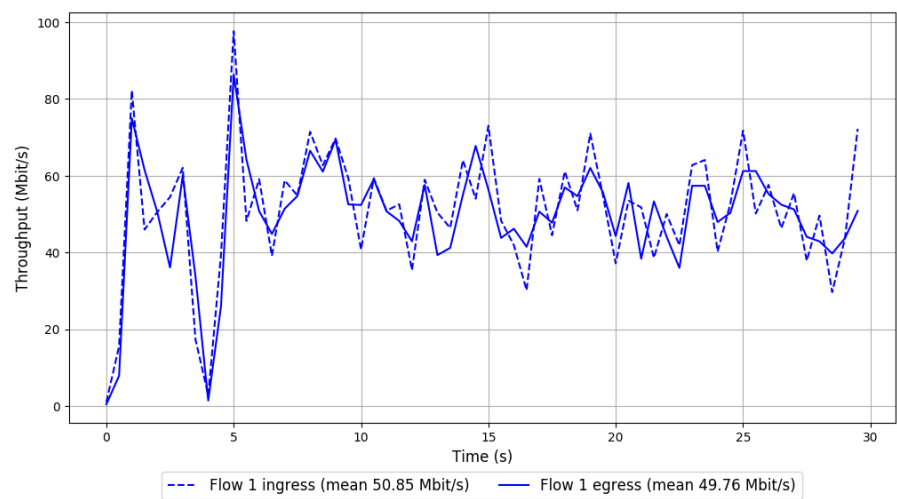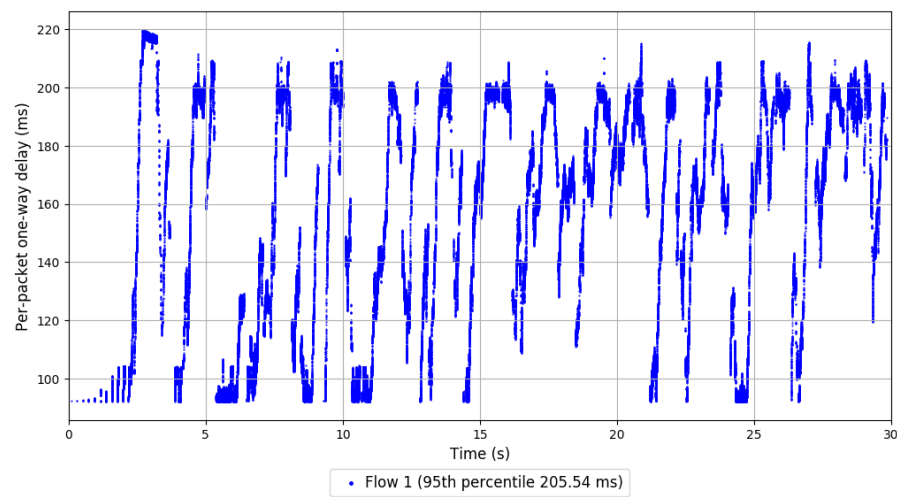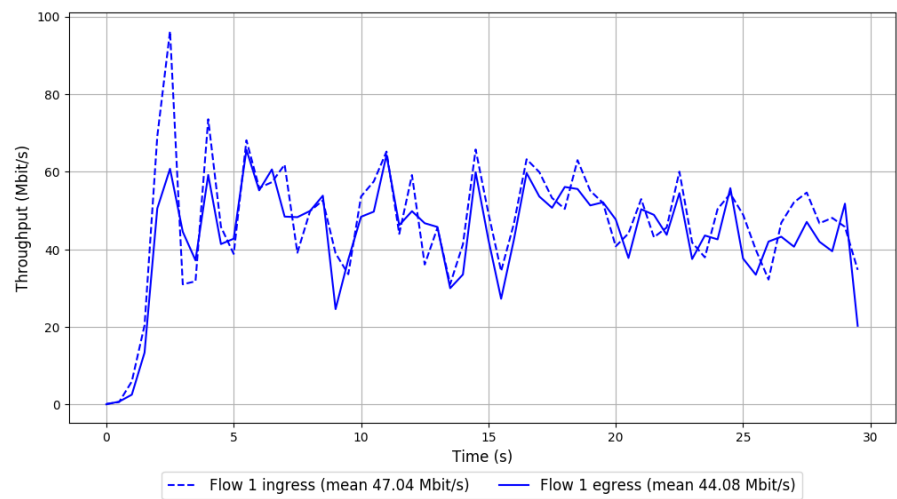• Flow 1 (95th percentile 200.20 ms)

```
Run 3: Statistics of Verus

Start at: 2017-09-03 06:03:53
End at: 2017-09-03 06:04:23
Local clock offset: -3.819 ms
Remote clock offset: -0.293 ms


# Below is generated by plot.py at 2017-09-03 11:40:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.76 Mbit/s
95th percentile per-packet one-way delay: 179.460 ms
Loss rate: 2.40%
-- Flow 1:
Average throughput: 49.76 Mbit/s
95th percentile per-packet one-way delay: 179.460 ms
Loss rate: 2.40%
```
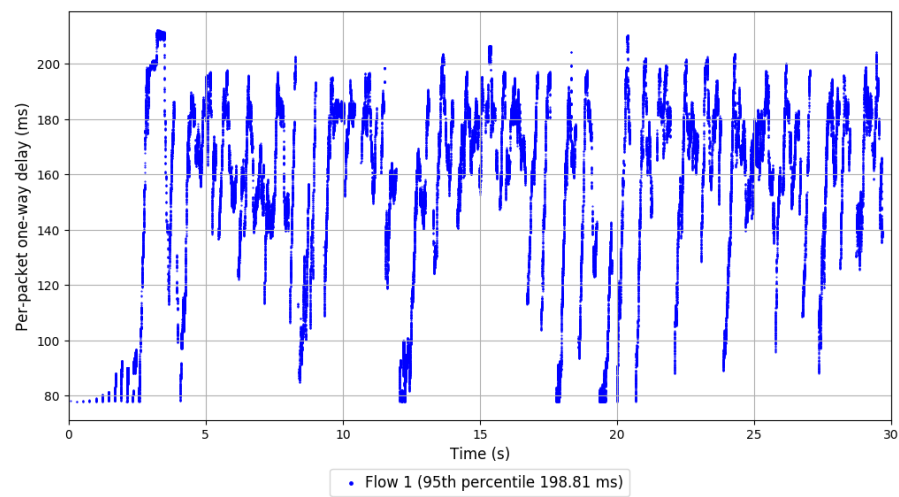
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2017-09-03 06:22:25
End at: 2017-09-03 06:22:55
Local clock offset: -3.482 ms
Remote clock offset: -6.715 ms


# Below is generated by plot.py at 2017-09-03 11:40:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.08 Mbit/s
95th percentile per-packet one-way delay: 205.542 ms
Loss rate: 6.93%
-- Flow 1:
Average throughput: 44.08 Mbit/s
95th percentile per-packet one-way delay: 205.542 ms
Loss rate: 6.93%
```

Run 4: Report of Verus — Data Link

Flow 1 ingress (mean 47.04 Mbit/s)   Flow 1 egress (mean 44.08 Mbit/s)

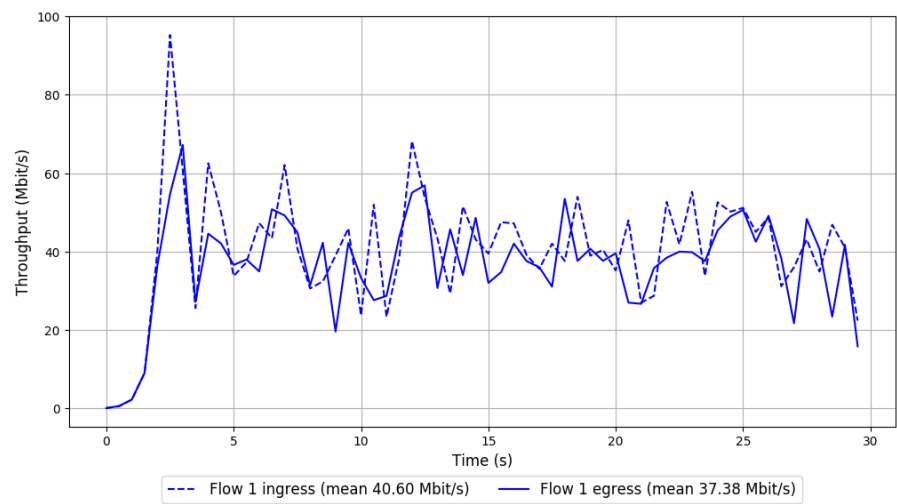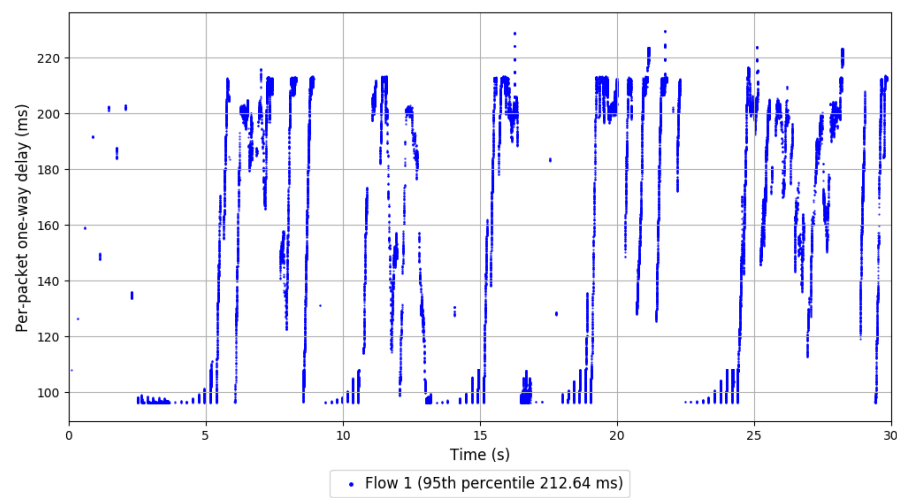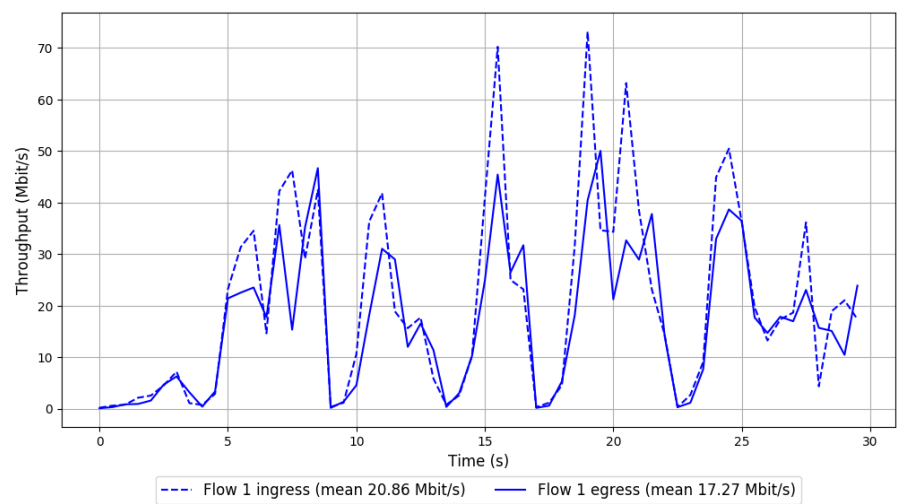• Flow 1 (95th percentile 205.54 ms)

```
Run 5: Statistics of Verus

Start at: 2017-09-03 06:41:13
End at: 2017-09-03 06:41:43
Local clock offset: 19.292 ms
Remote clock offset: 30.283 ms


# Below is generated by plot.py at 2017-09-03 11:40:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.38 Mbit/s
95th percentile per-packet one-way delay: 198.815 ms
Loss rate: 9.03%
-- Flow 1:
Average throughput: 37.38 Mbit/s
95th percentile per-packet one-way delay: 198.815 ms
Loss rate: 9.03%
```
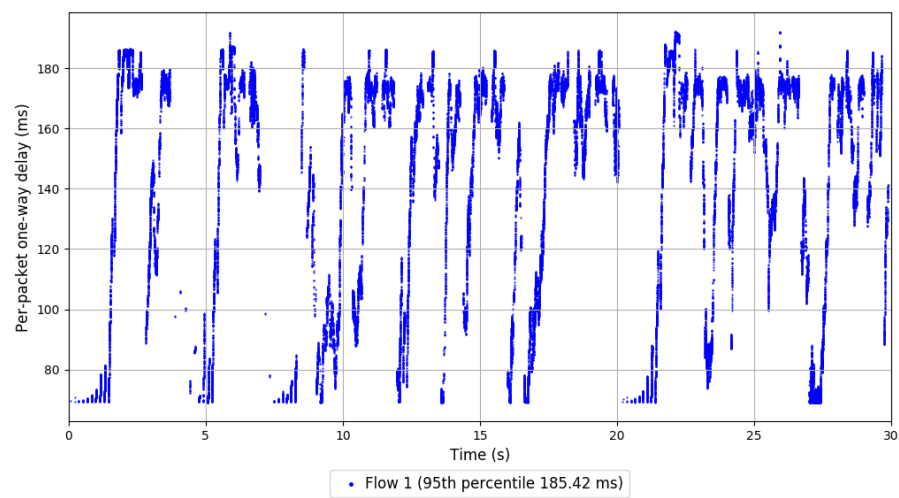
Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2017-09-03 07:00:09
End at: 2017-09-03 07:00:39
Local clock offset: -3.957 ms
Remote clock offset: -28.03 ms


# Below is generated by plot.py at 2017-09-03 11:40:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.27 Mbit/s
95th percentile per-packet one-way delay: 212.640 ms
Loss rate: 16.92%
-- Flow 1:
Average throughput: 17.27 Mbit/s
95th percentile per-packet one-way delay: 212.640 ms
Loss rate: 16.92%
```

Run 6: Report of Verus — Data Link

Flow 1 ingress (mean 20.86 Mbit/s)   Flow 1 egress (mean 17.27 Mbit/s)

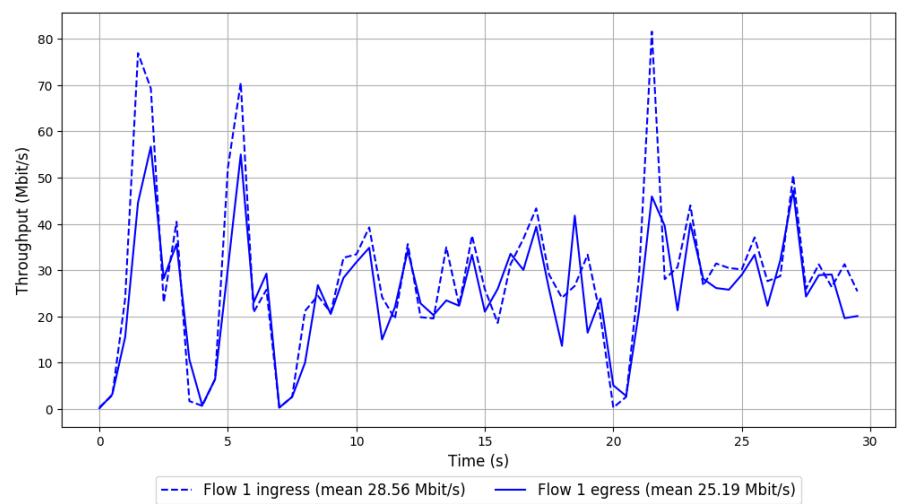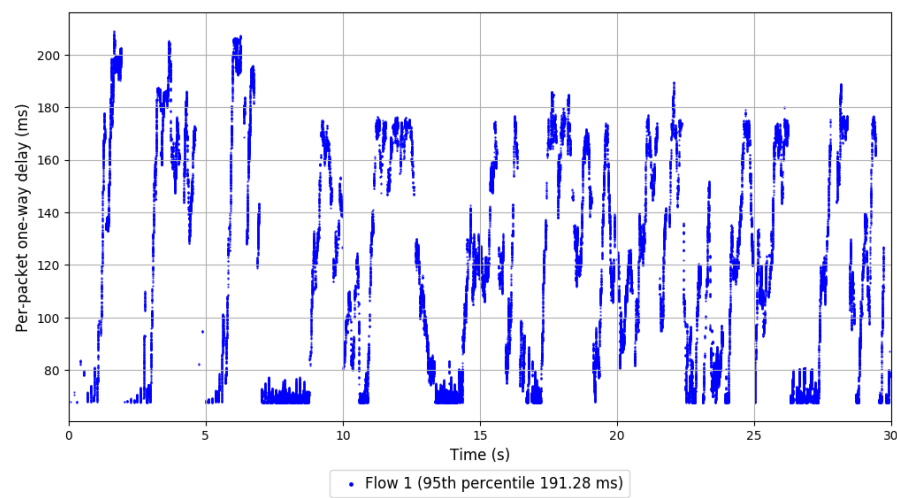

Flow 1 (95th percentile 212.64 ms)

```
Run 7: Statistics of Verus

Start at: 2017-09-03 07:18:45
End at: 2017-09-03 07:19:15
Local clock offset: -2.042 ms
Remote clock offset: -2.656 ms


# Below is generated by plot.py at 2017-09-03 11:40:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.19 Mbit/s
95th percentile per-packet one-way delay: 185.416 ms
Loss rate: 12.21%
-- Flow 1:
Average throughput: 25.19 Mbit/s
95th percentile per-packet one-way delay: 185.416 ms
Loss rate: 12.21%
```

Run 7: Report of Verus — Data Link

Flow 1 ingress (mean 28.56 Mbit/s) —— Flow 1 egress (mean 25.19 Mbit/s)

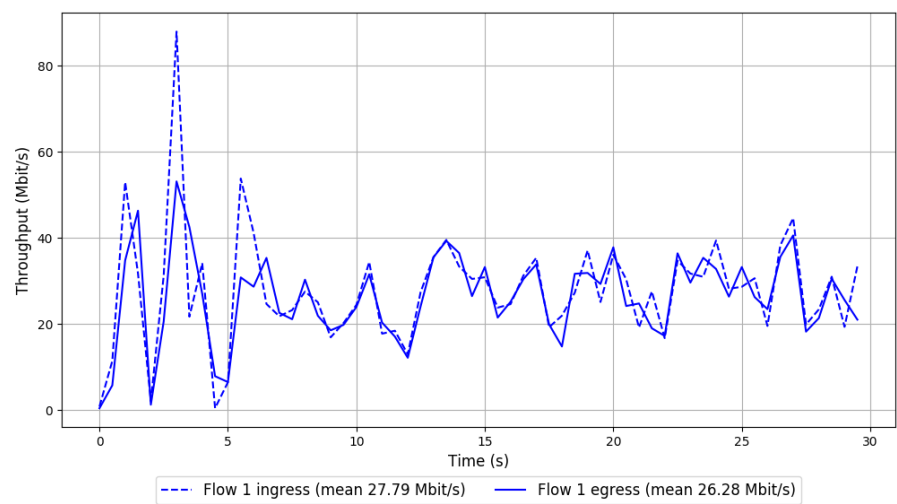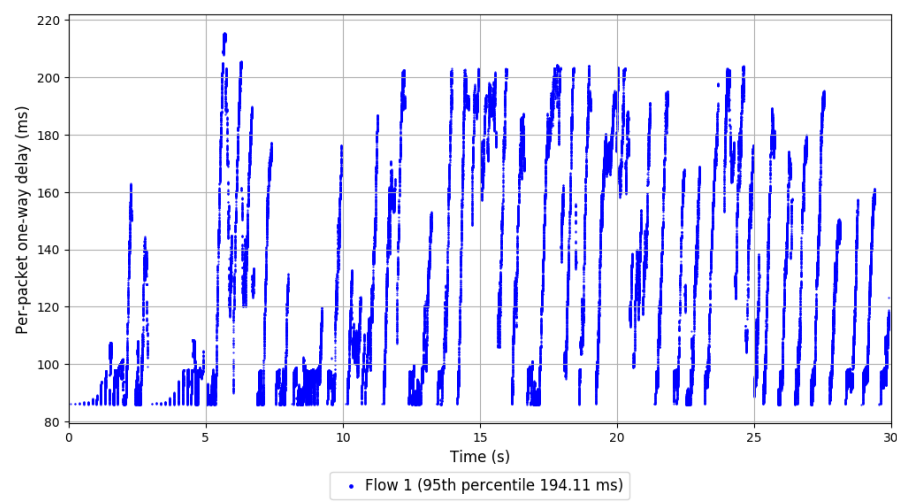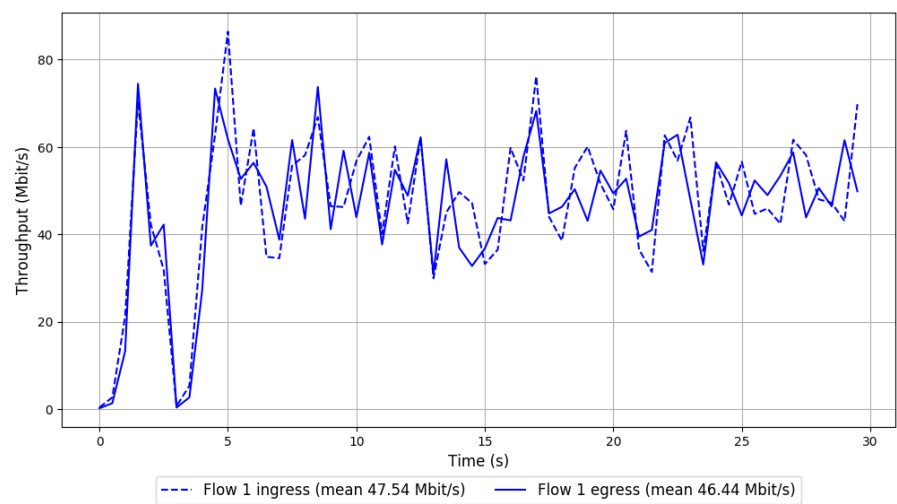· Flow 1 (95th percentile 185.42 ms)

```
Run 8: Statistics of Verus

Start at: 2017-09-03 07:37:31
End at: 2017-09-03 07:38:01
Local clock offset: -2.708 ms
Remote clock offset: -3.815 ms


# Below is generated by plot.py at 2017-09-03 11:40:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.28 Mbit/s
95th percentile per-packet one-way delay: 191.280 ms
Loss rate: 5.80%
-- Flow 1:
Average throughput: 26.28 Mbit/s
95th percentile per-packet one-way delay: 191.280 ms
Loss rate: 5.80%
```
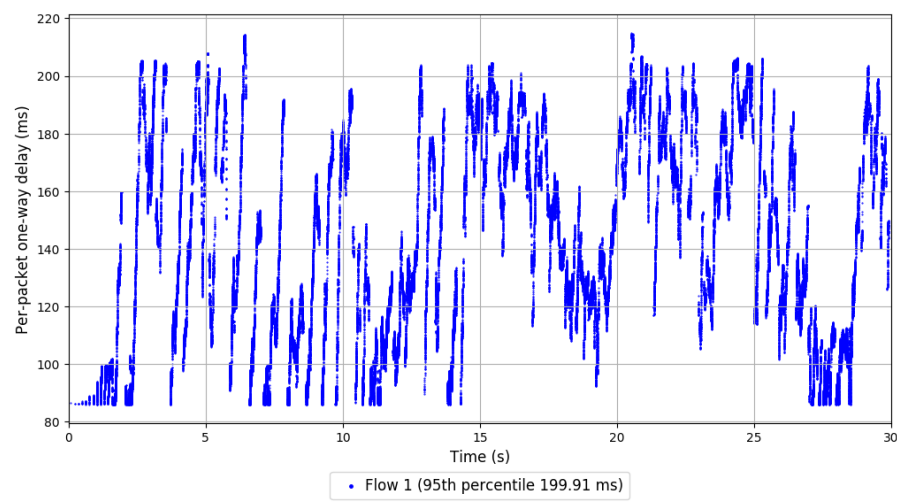
Run 8: Report of Verus — Data Link

```
Run 9: Statistics of Verus

Start at: 2017-09-03 07:55:51
End at: 2017-09-03 07:56:21
Local clock offset: -2.162 ms
Remote clock offset: -4.194 ms


# Below is generated by plot.py at 2017-09-03 11:40:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.44 Mbit/s
95th percentile per-packet one-way delay: 194.108 ms
Loss rate: 2.54%
-- Flow 1:
Average throughput: 46.44 Mbit/s
95th percentile per-packet one-way delay: 194.108 ms
Loss rate: 2.54%
```

Run 9: Report of Verus — Data Link

Flow 1 ingress (mean 47.54 Mbit/s) — Flow 1 egress (mean 46.44 Mbit/s)

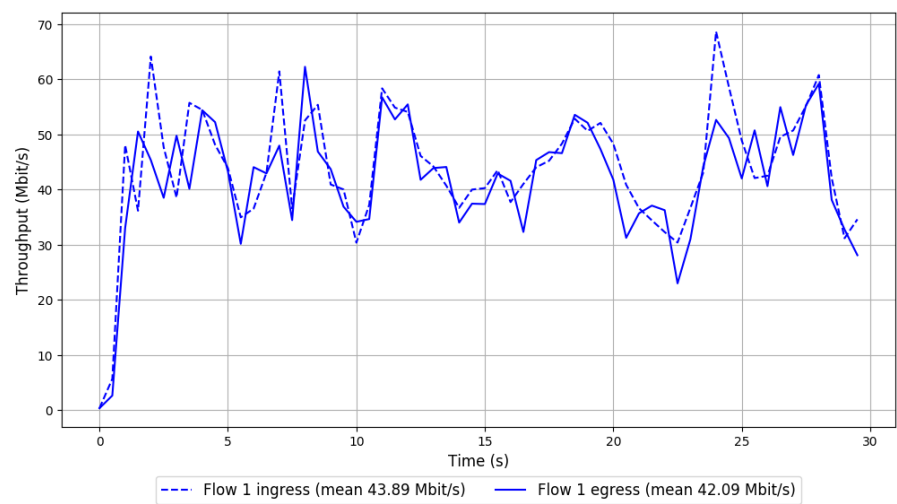• Flow 1 (95th percentile 194.11 ms)

```
Run 10: Statistics of Verus

Start at: 2017-09-03 08:14:07
End at: 2017-09-03 08:14:37
Local clock offset: -2.144 ms
Remote clock offset: -3.418 ms


# Below is generated by plot.py at 2017-09-03 11:40:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 42.09 Mbit/s
95th percentile per-packet one-way delay: 199.912 ms
Loss rate: 4.54%
-- Flow 1:
Average throughput: 42.09 Mbit/s
95th percentile per-packet one-way delay: 199.912 ms
Loss rate: 4.54%
```

Run 10: Report of Verus — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2017-09-03 05:28:57
End at: 2017-09-03 05:29:27
Local clock offset: -3.932 ms
Remote clock offset: 0.116 ms


# Below is generated by plot.py at 2017-09-03 11:40:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 76.619 ms
Loss rate: 5.19%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 76.619 ms
Loss rate: 5.19%
```
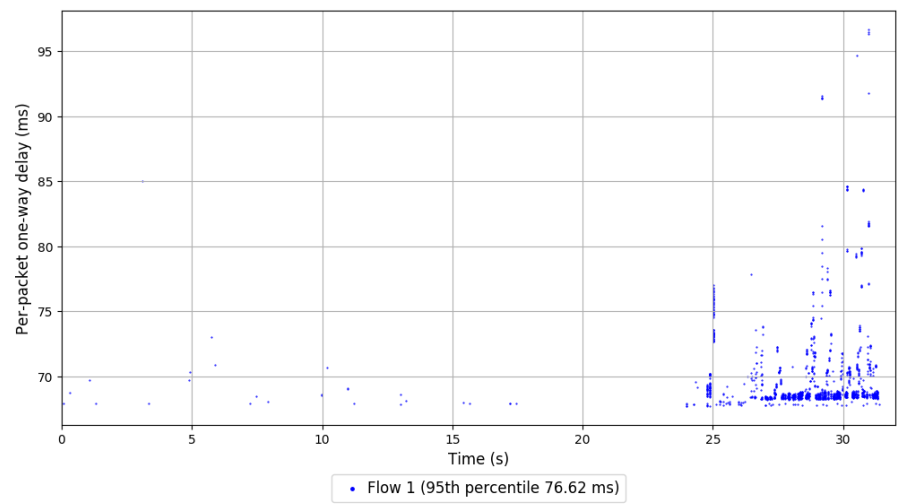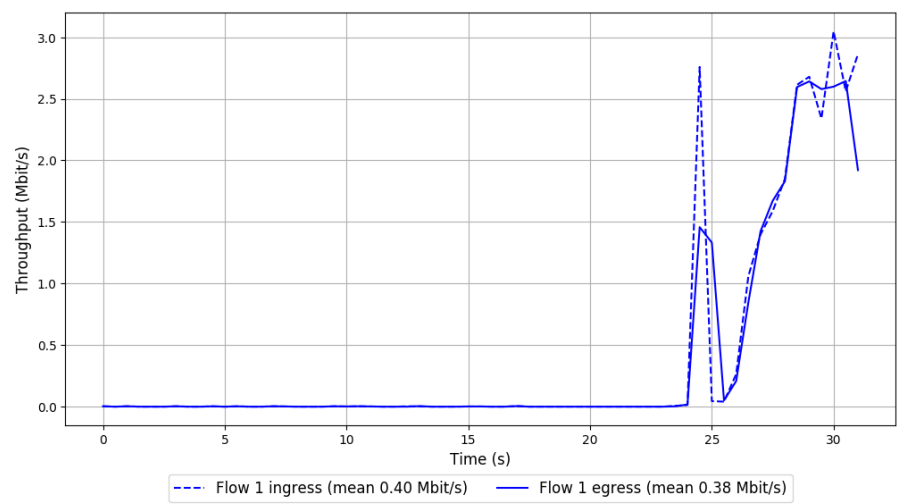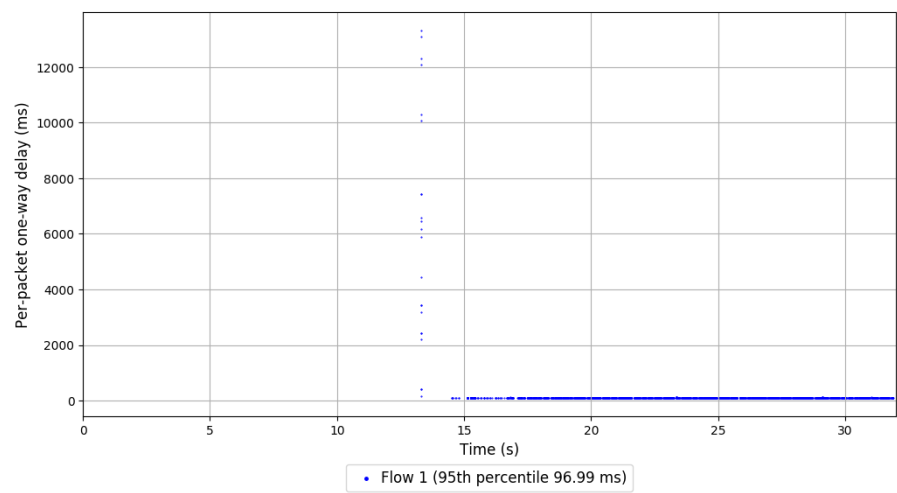
Run 1: Report of WebRTC media — Data Link
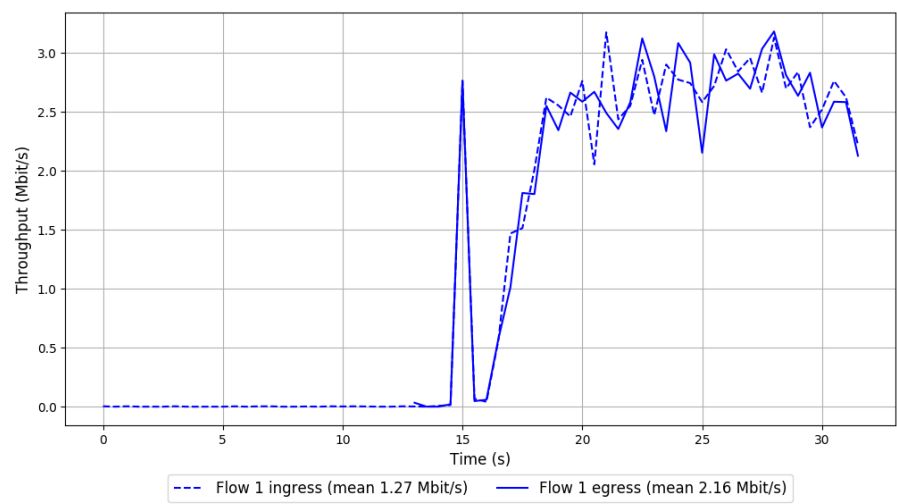
```
Run 2: Statistics of WebRTC media

Start at: 2017-09-03 05:47:08
End at: 2017-09-03 05:47:38
Local clock offset: 19.95 ms
Remote clock offset: 0.119 ms
```

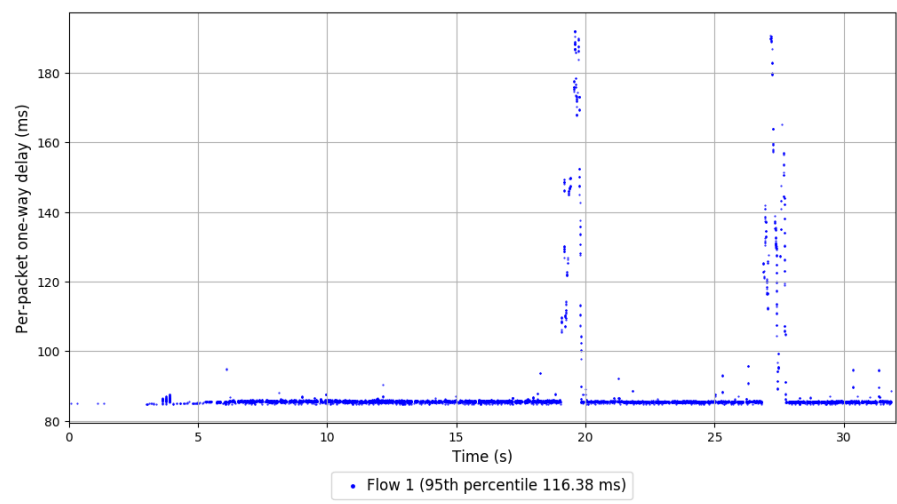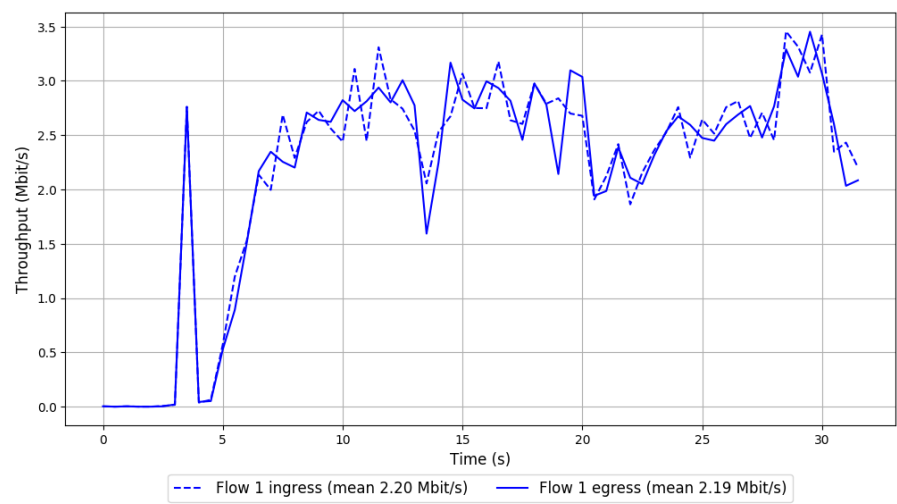Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2017-09-03 06:05:08
End at: 2017-09-03 06:05:38
Local clock offset: -3.782 ms
Remote clock offset: -0.223 ms


# Below is generated by plot.py at 2017-09-03 11:40:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 116.379 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 116.379 ms
Loss rate: 0.75%
```
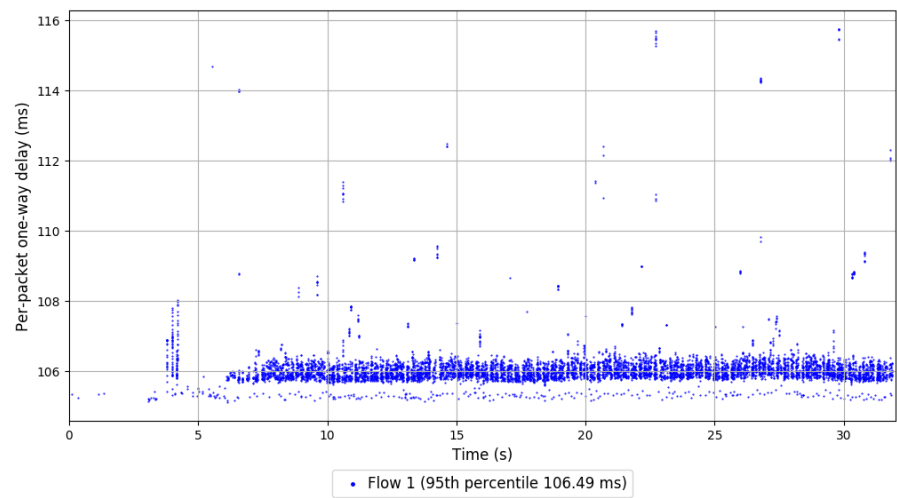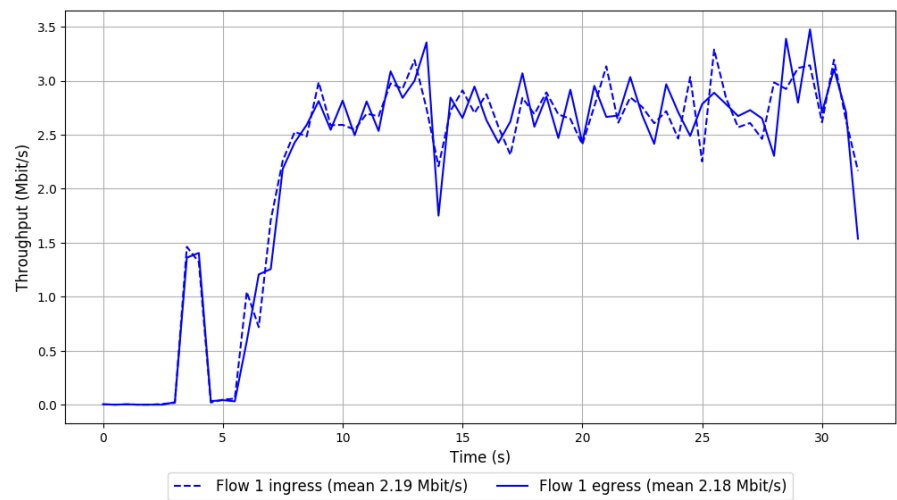
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2017-09-03 06:23:43
End at: 2017-09-03 06:24:13
Local clock offset: -1.936 ms
Remote clock offset: -35.952 ms


# Below is generated by plot.py at 2017-09-03 11:40:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 106.491 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 106.491 ms
Loss rate: 0.74%
```
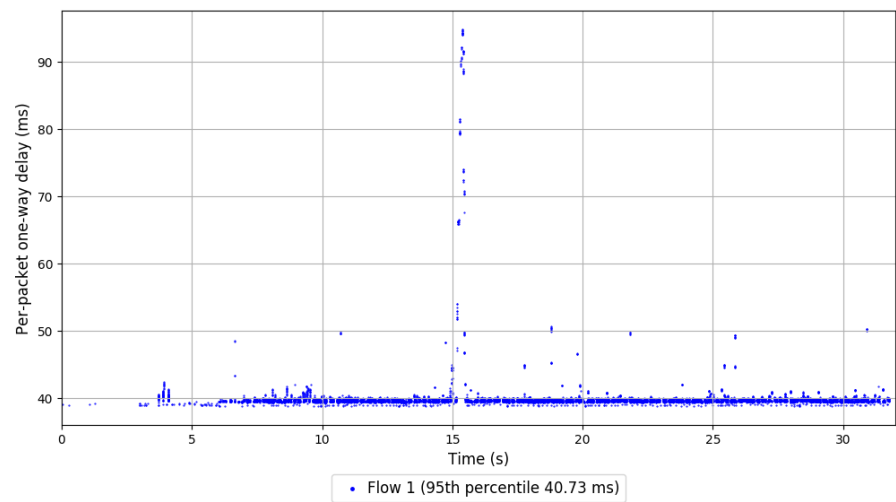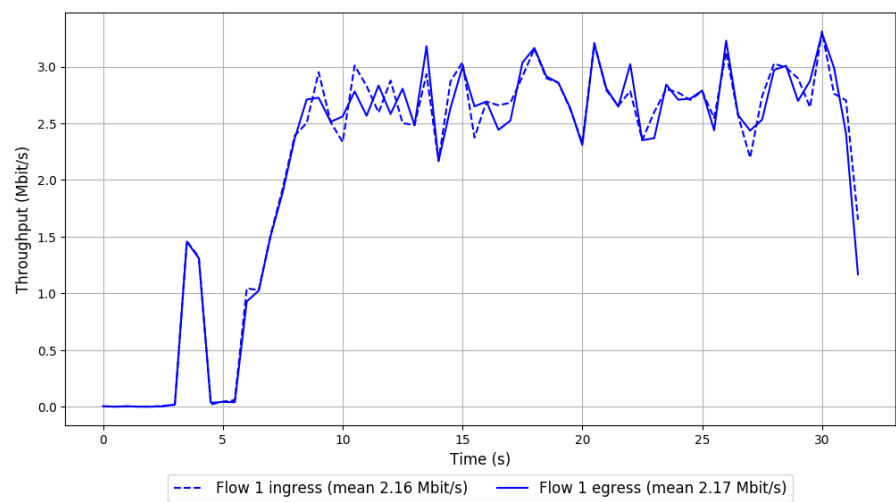
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2017-09-03 06:42:31
End at: 2017-09-03 06:43:01
Local clock offset: -2.4 ms
Remote clock offset: 30.124 ms


# Below is generated by plot.py at 2017-09-03 11:40:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 40.729 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 40.729 ms
Loss rate: 0.56%
```

Run 5: Report of WebRTC media — Data Link
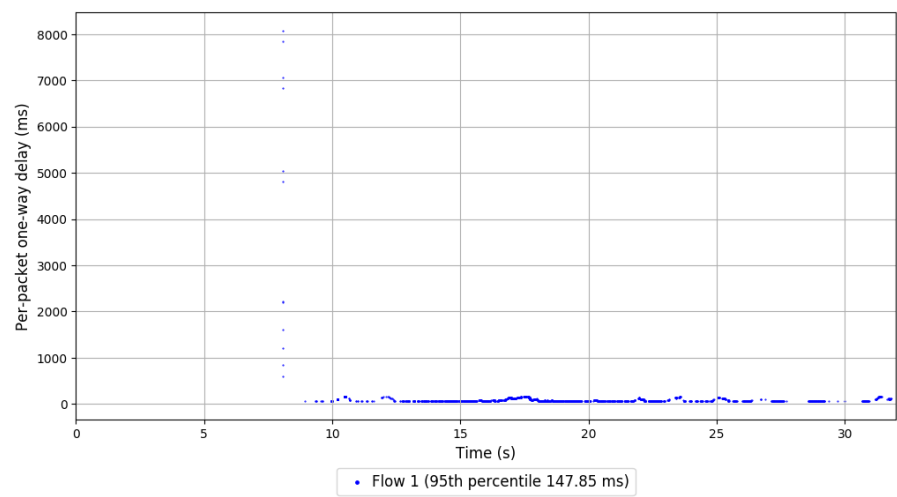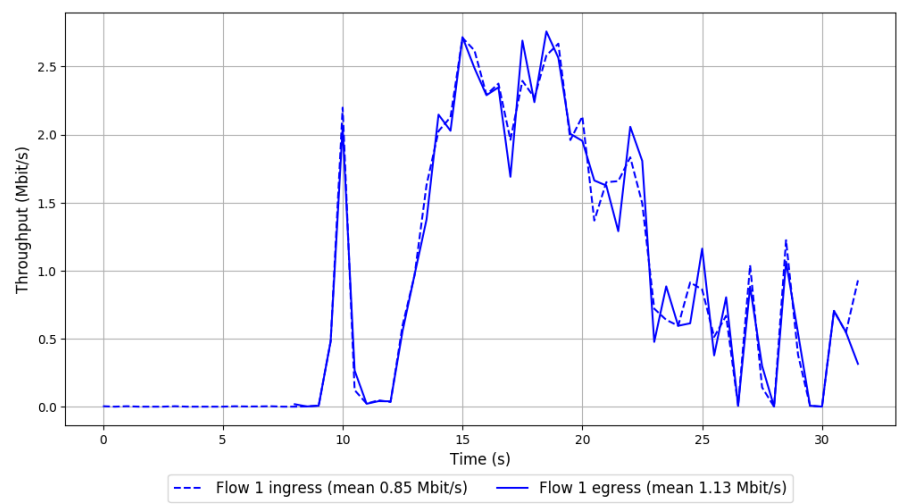
Run 6: Statistics of WebRTC media

Start at: 2017-09-03 07:01:25
End at: 2017-09-03 07:01:55
Local clock offset: 18.675 ms
Remote clock offset: 30.144 ms
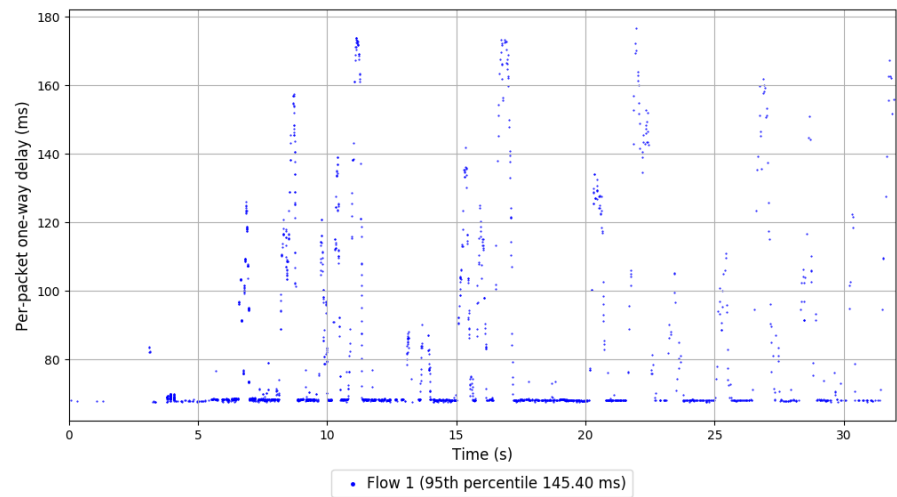
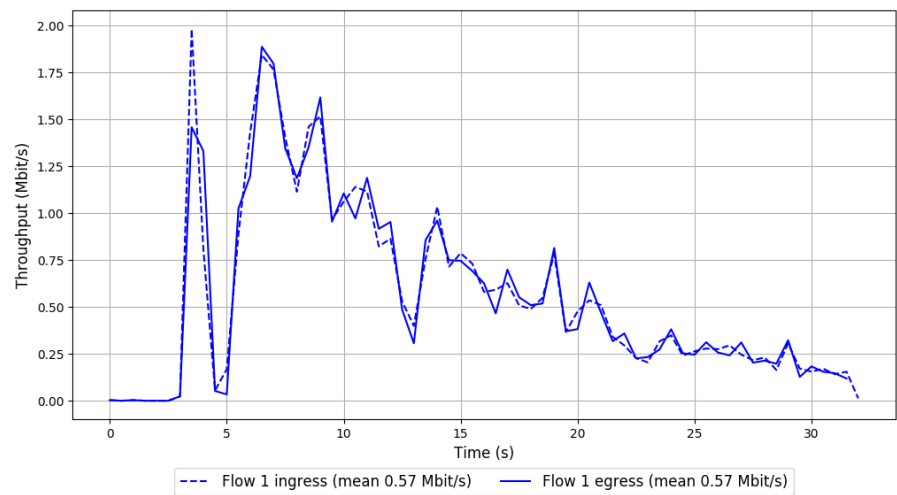Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2017-09-03 07:19:59
End at: 2017-09-03 07:20:29
Local clock offset: -3.384 ms
Remote clock offset: -2.838 ms


# Below is generated by plot.py at 2017-09-03 11:40:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 145.400 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 145.400 ms
Loss rate: 0.40%
```

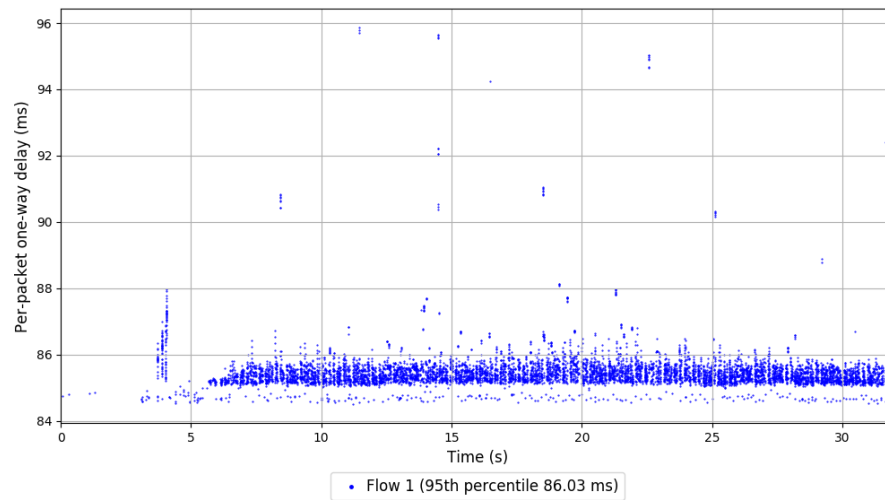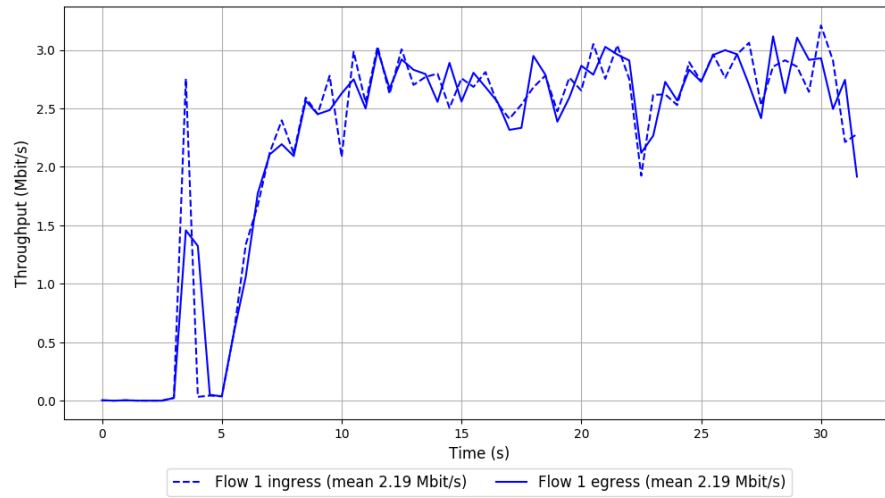Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2017-09-03 07:38:49
End at: 2017-09-03 07:39:19
Local clock offset: -2.612 ms
Remote clock offset: -3.813 ms


# Below is generated by plot.py at 2017-09-03 11:40:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 86.032 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 86.032 ms
Loss rate: 0.54%
```

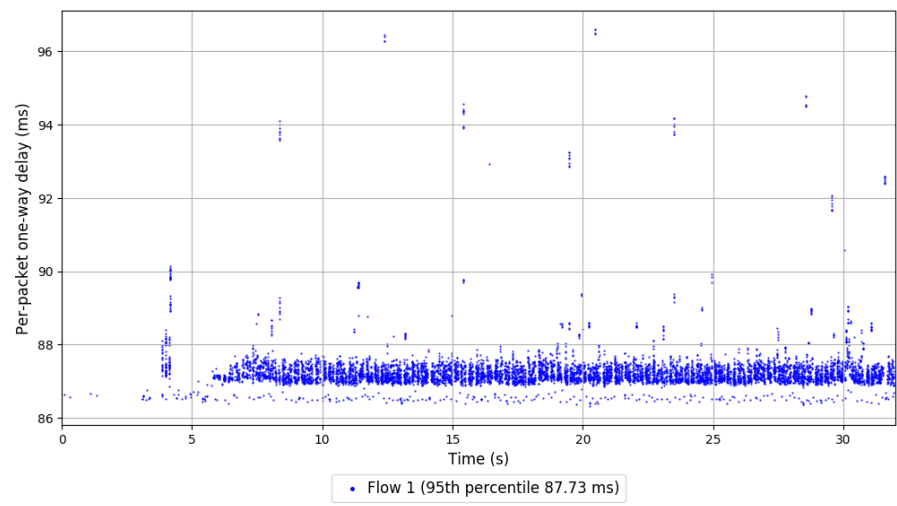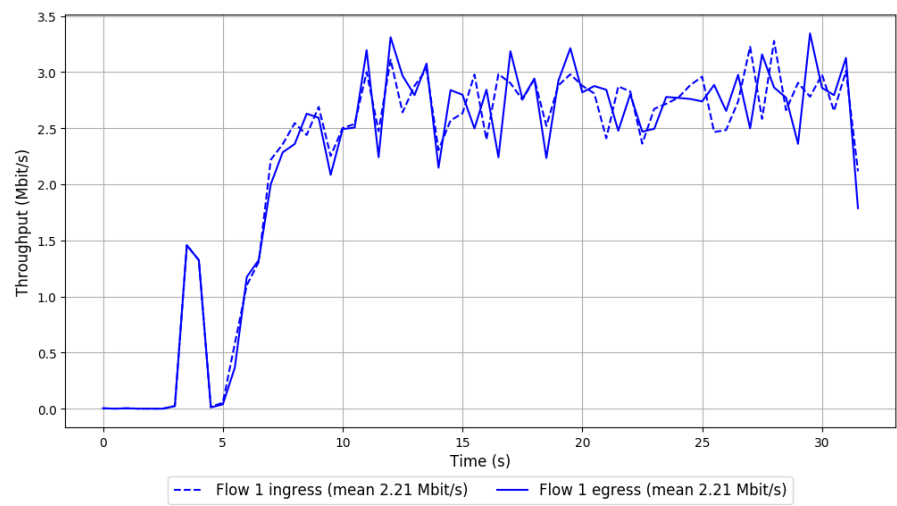Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2017-09-03 07:57:06
End at: 2017-09-03 07:57:36
Local clock offset: -0.724 ms
Remote clock offset: -4.226 ms


# Below is generated by plot.py at 2017-09-03 11:40:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 87.731 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 87.731 ms
Loss rate: 0.44%
```

Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2017-09-03 08:15:21
End at: 2017-09-03 08:15:51
Local clock offset: -2.174 ms
Remote clock offset: -3.46 ms


# Below is generated by plot.py at 2017-09-03 11:40:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 86.804 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 86.804 ms
Loss rate: 0.67%
```

Run 10: Report of WebRTC media — Data Link