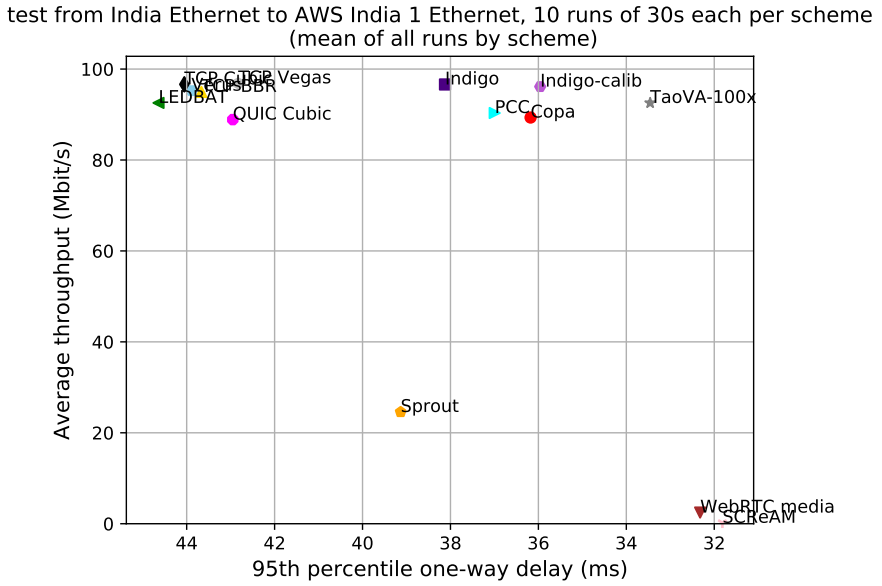
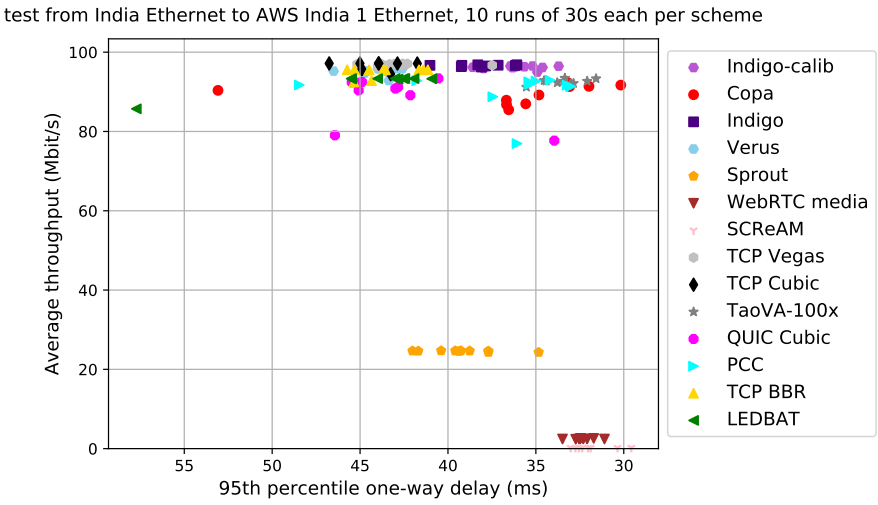
# Pantheon Report

Generated at 2017-11-16 02:22:09 (UTC).
Data path: India Ethernet (*remote*) →AWS India 1 Ethernet (*local*).
Repeated the test of 14 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 `nets.org.sg` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: indigos @ f54f2953f2a9765c9ffa988d13de5a9471790eb0
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
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 India Ethernet to AWS India 1 Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
Indigo
Indigo-calib
TaoVA-100x
PCC
Copa
QUIC Cubic
LEDBAT
Sprout
WebRTC media
SCReAM


test from India Ethernet to AWS India 1 Ethernet, 10 runs of 30s each per scheme
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
Indigo-calib
Copa
Indigo
Verus
Sprout
WebRTC media
SCReAM
TCP Vegas
TCP Cubic
TaoVA-100x
QUIC Cubic
PCC
TCP BBR
LEDBAT

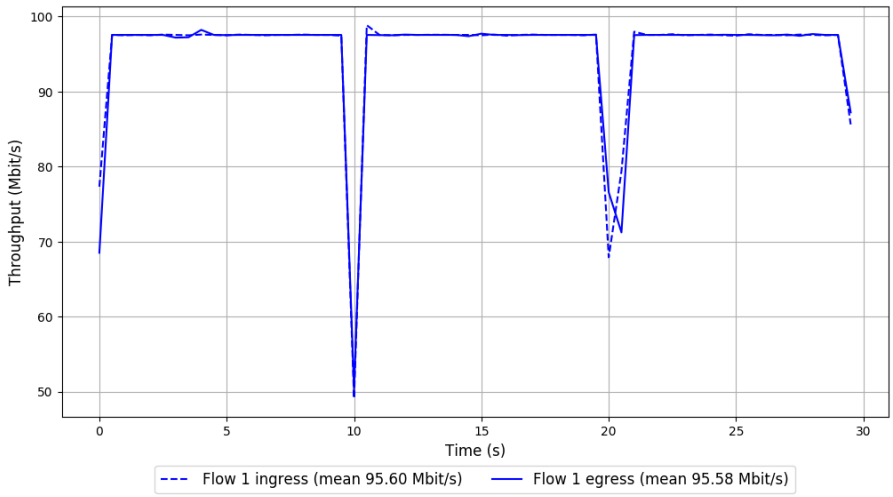
| scheme | # runs | mean avg tput (Mbit/s) flow 1 | mean 95th-%ile delay (ms) flow 1 | mean loss rate (%) flow 1 |
|---|---|---|---|---|
| TCP BBR | 10 | 94.98 | 43.67 | 0.12 |
| TCP Cubic | 8 | 96.64 | 44.05 | 0.12 |
| LEDBAT | 10 | 92.56 | 44.64 | 0.13 |
| PCC | 10 | 90.34 | 36.99 | 0.09 |
| QUIC Cubic | 10 | 88.89 | 42.95 | 0.11 |
| SCReAM | 8 | 0.21 | 31.81 | 0.07 |
| WebRTC media | 9 | 2.45 | 32.32 | 0.10 |
| Sprout | 10 | 24.58 | 39.13 | 0.08 |
| TaoVA-100x | 10 | 92.55 | 33.46 | 0.10 |
| TCP Vegas | 10 | 96.87 | 42.83 | 0.08 |
| Verus | 10 | 95.25 | 43.89 | 0.12 |
| Copa | 10 | 89.34 | 36.18 | 0.10 |
| Indigo | 9 | 96.61 | 38.12 | 0.10 |
| Indigo-calib | 10 | 96.14 | 35.96 | 0.10 |

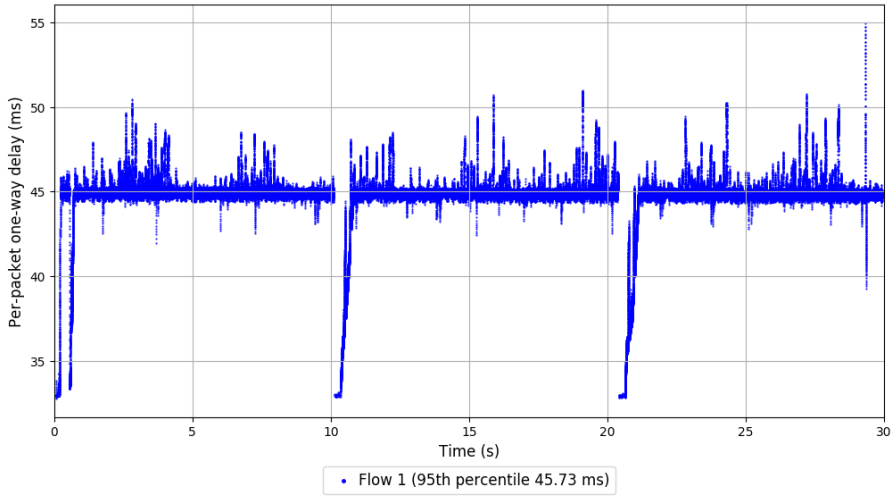
```
Run 1: Statistics of TCP BBR

Start at: 2017-11-15 20:15:36
End at: 2017-11-15 20:16:06
Local clock offset: -3.74 ms
Remote clock offset: -15.054 ms

# Below is generated by plot.py at 2017-11-16 02:01:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.58 Mbit/s
95th percentile per-packet one-way delay: 45.734 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.58 Mbit/s
95th percentile per-packet one-way delay: 45.734 ms
Loss rate: 0.12%
```

Run 1: Report of TCP BBR — Data Link



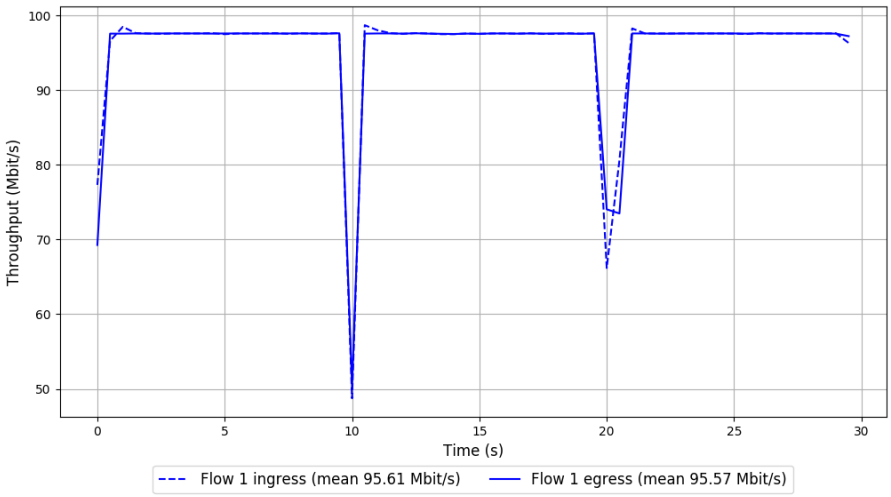



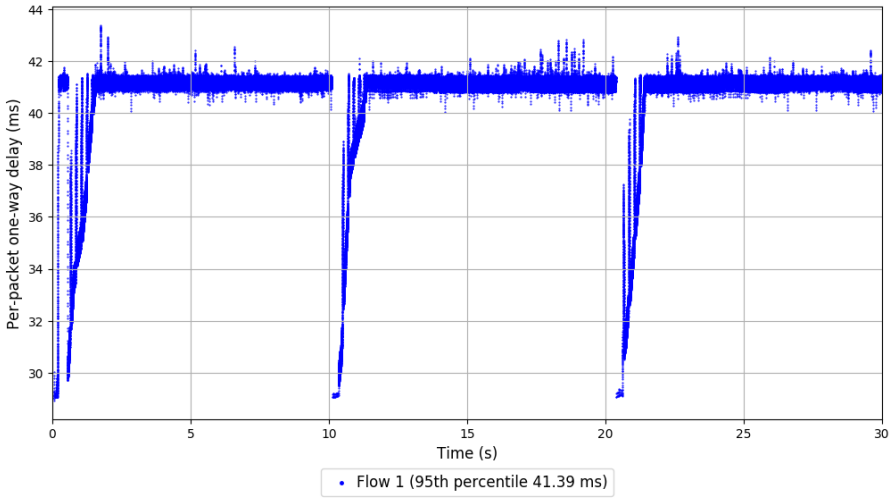
```
Run 2: Statistics of TCP BBR

Start at: 2017-11-15 20:34:06
End at: 2017-11-15 20:34:36
Local clock offset: -11.28 ms
Remote clock offset: -13.49 ms

# Below is generated by plot.py at 2017-11-16 02:01:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.57 Mbit/s
95th percentile per-packet one-way delay: 41.393 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.57 Mbit/s
95th percentile per-packet one-way delay: 41.393 ms
Loss rate: 0.12%
```

Run 2: Report of TCP BBR — Data Link



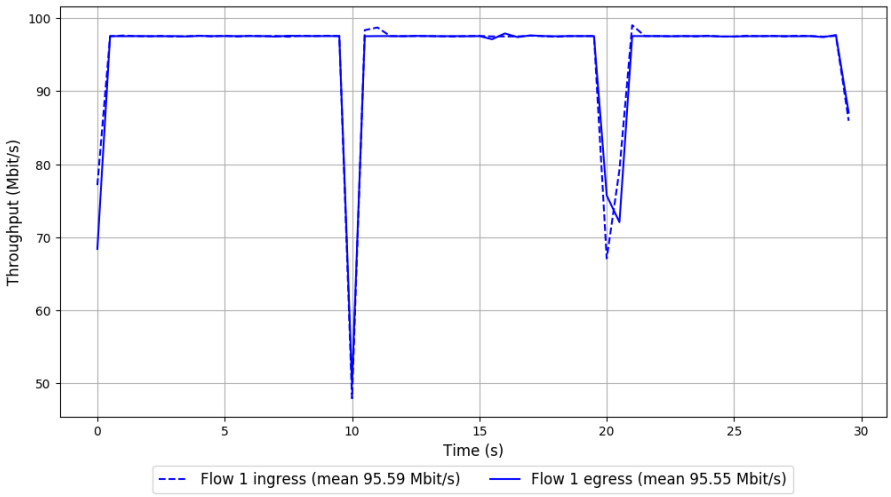



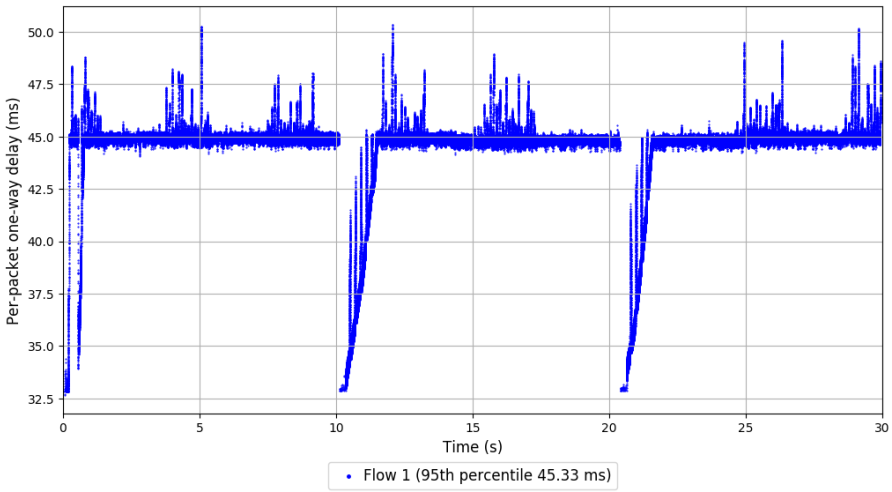
```
Run 3: Statistics of TCP BBR

Start at: 2017-11-15 20:52:01
End at: 2017-11-15 20:52:31
Local clock offset: -6.953 ms
Remote clock offset: -15.605 ms

# Below is generated by plot.py at 2017-11-16 02:01:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 45.326 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 45.326 ms
Loss rate: 0.13%
```

Run 3: Report of TCP BBR — Data Link



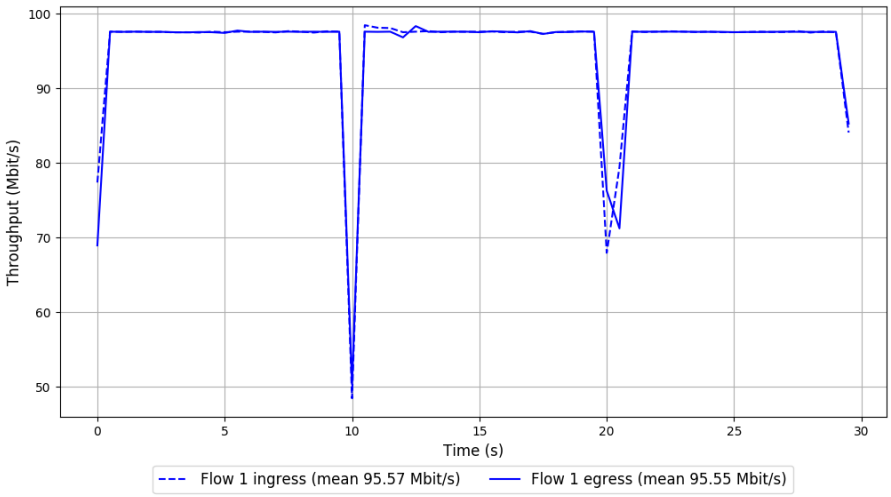



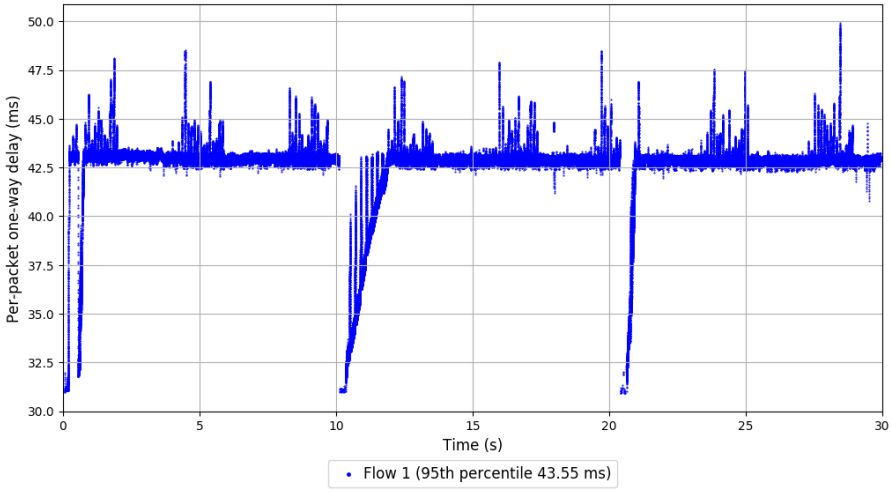
```
Run 4: Statistics of TCP BBR

Start at: 2017-11-15 21:09:26
End at: 2017-11-15 21:09:56
Local clock offset: -15.896 ms
Remote clock offset: -15.621 ms

# Below is generated by plot.py at 2017-11-16 02:01:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 43.555 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 43.555 ms
Loss rate: 0.12%
```

Run 4: Report of TCP BBR — Data Link



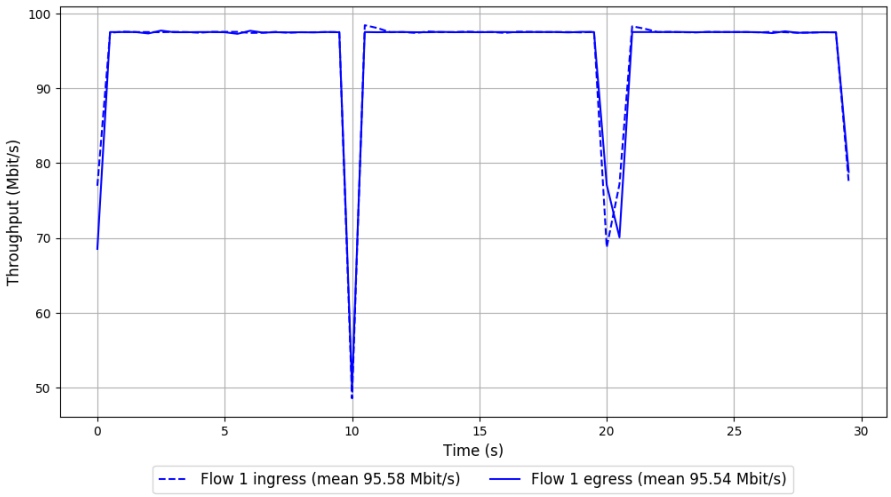



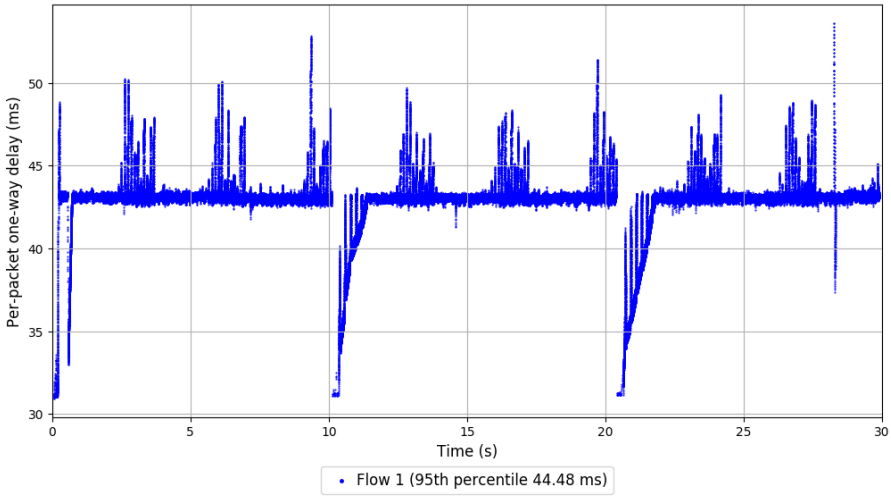
```
Run 5: Statistics of TCP BBR

Start at: 2017-11-15 21:26:48
End at: 2017-11-15 21:27:18
Local clock offset: -15.982 ms
Remote clock offset: -16.363 ms

# Below is generated by plot.py at 2017-11-16 02:01:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.54 Mbit/s
95th percentile per-packet one-way delay: 44.484 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.54 Mbit/s
95th percentile per-packet one-way delay: 44.484 ms
Loss rate: 0.12%
```

Run 5: Report of TCP BBR — Data Link



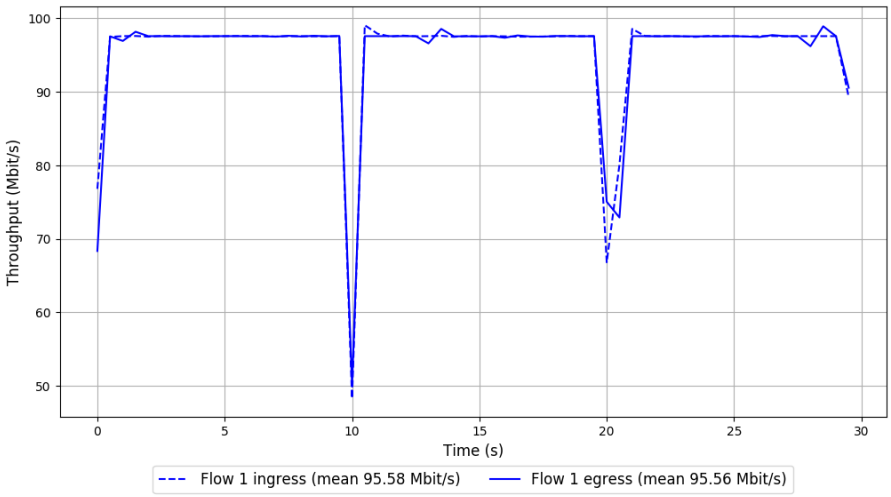



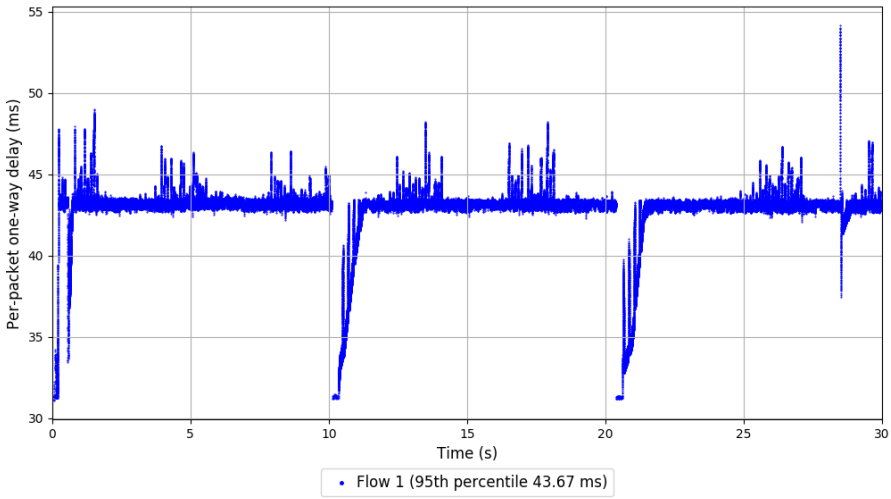
```
Run 6: Statistics of TCP BBR

Start at: 2017-11-15 21:44:31
End at: 2017-11-15 21:45:01
Local clock offset: -17.176 ms
Remote clock offset: -18.244 ms

# Below is generated by plot.py at 2017-11-16 02:01:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.56 Mbit/s
95th percentile per-packet one-way delay: 43.669 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.56 Mbit/s
95th percentile per-packet one-way delay: 43.669 ms
Loss rate: 0.12%
```

Run 6: Report of TCP BBR — Data Link



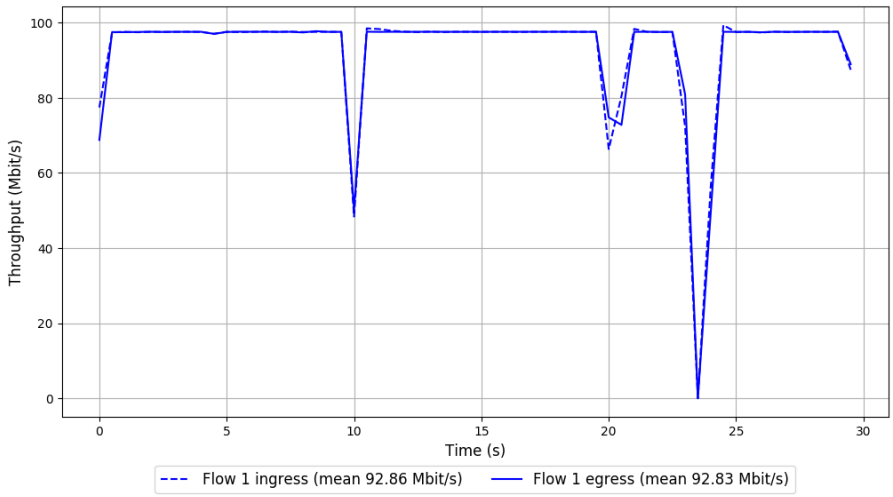



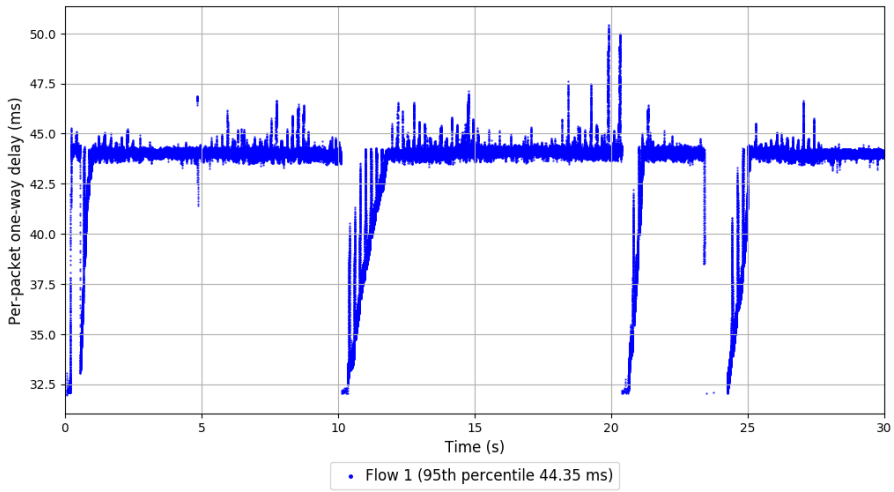
```
Run 7: Statistics of TCP BBR

Start at: 2017-11-15 22:02:00
End at: 2017-11-15 22:02:30
Local clock offset: -12.457 ms
Remote clock offset: -19.045 ms

# Below is generated by plot.py at 2017-11-16 02:01:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.83 Mbit/s
95th percentile per-packet one-way delay: 44.348 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 92.83 Mbit/s
95th percentile per-packet one-way delay: 44.348 ms
Loss rate: 0.13%
```

Run 7: Report of TCP BBR — Data Link



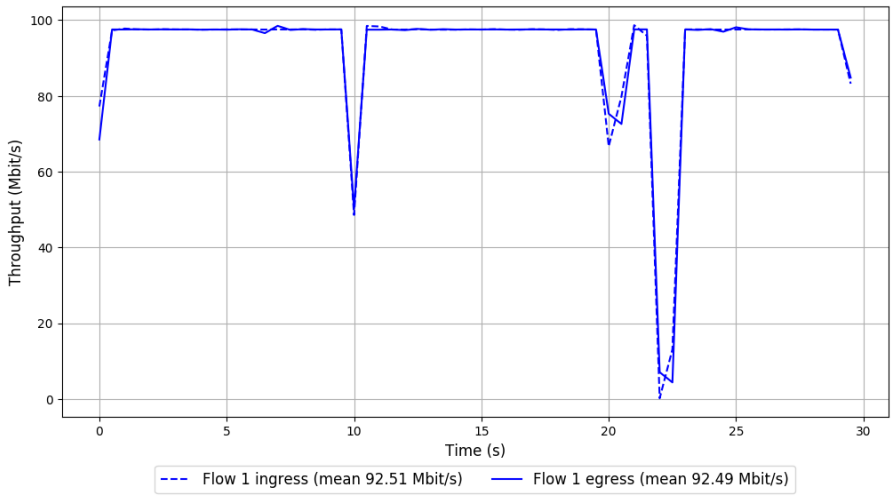



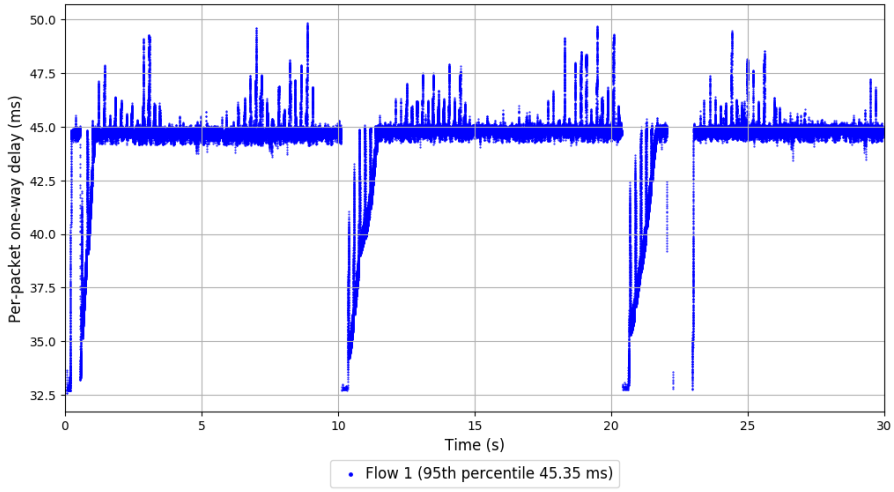
```
Run 8: Statistics of TCP BBR

Start at: 2017-11-15 22:19:34
End at: 2017-11-15 22:20:04
Local clock offset: -10.303 ms
Remote clock offset: -18.93 ms

# Below is generated by plot.py at 2017-11-16 02:01:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.49 Mbit/s
95th percentile per-packet one-way delay: 45.351 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 92.49 Mbit/s
95th percentile per-packet one-way delay: 45.351 ms
Loss rate: 0.13%
```

Run 8: Report of TCP BBR — Data Link



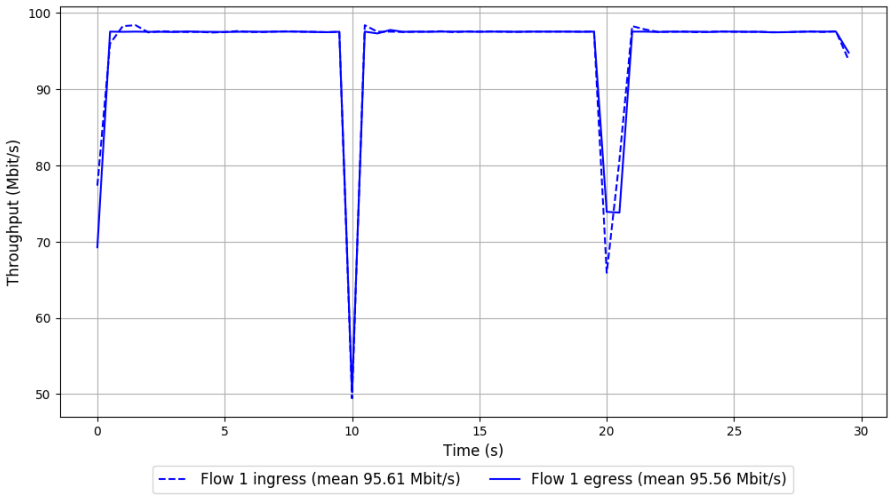



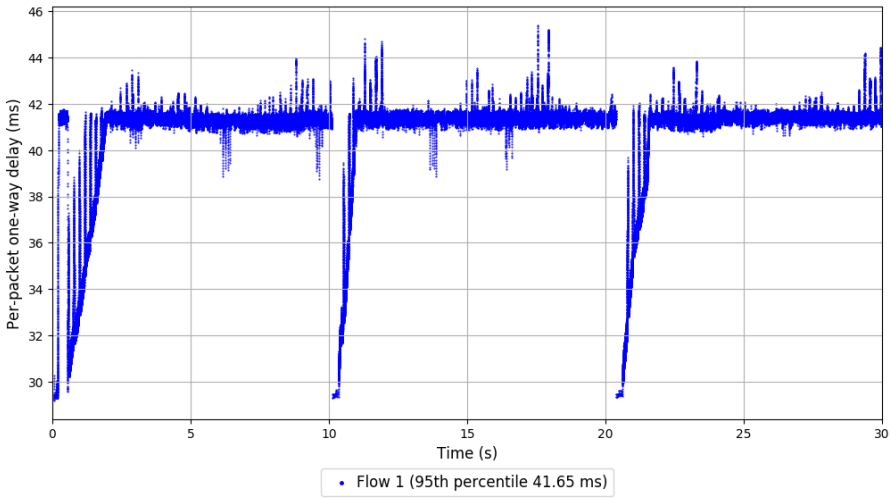
```
Run 9: Statistics of TCP BBR

Start at: 2017-11-15 22:37:03
End at: 2017-11-15 22:37:33
Local clock offset: -15.363 ms
Remote clock offset: -19.18 ms

# Below is generated by plot.py at 2017-11-16 02:02:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.56 Mbit/s
95th percentile per-packet one-way delay: 41.652 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.56 Mbit/s
95th percentile per-packet one-way delay: 41.652 ms
Loss rate: 0.12%
```

Run 9: Report of TCP BBR — Data Link



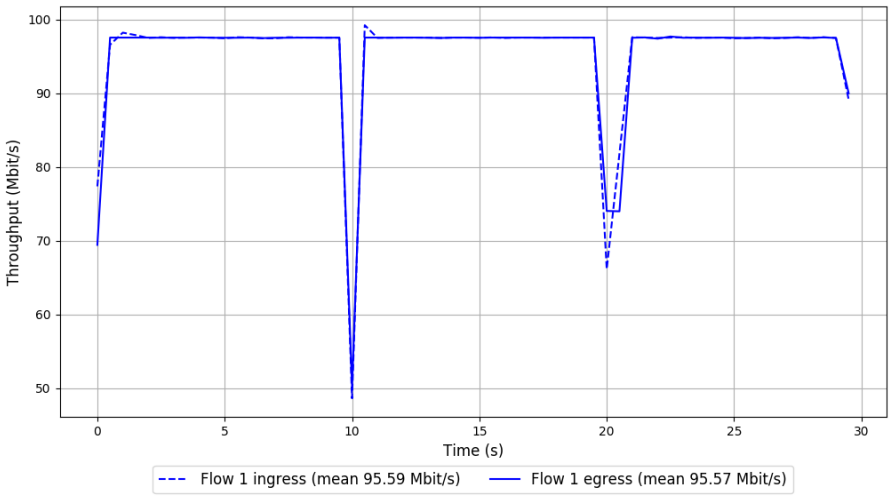



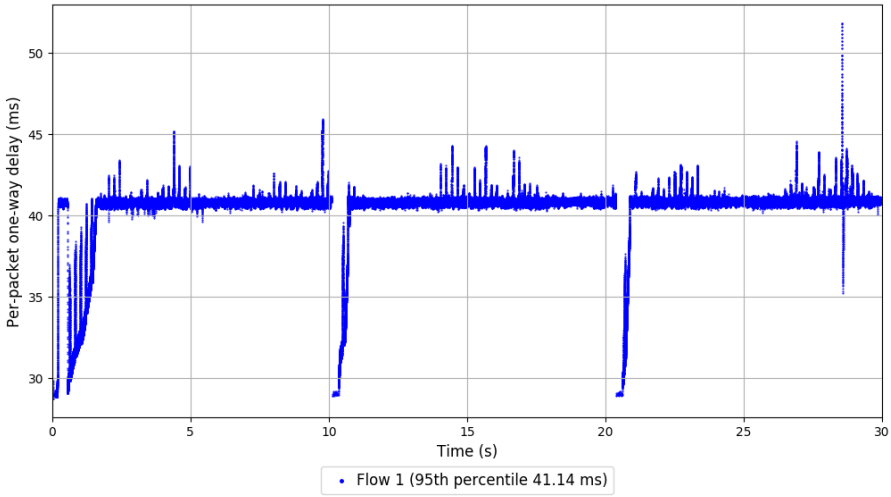
```
Run 10: Statistics of TCP BBR

Start at: 2017-11-15 22:54:21
End at: 2017-11-15 22:54:51
Local clock offset: -16.937 ms
Remote clock offset: -18.39 ms

# Below is generated by plot.py at 2017-11-16 02:02:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.57 Mbit/s
95th percentile per-packet one-way delay: 41.144 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.57 Mbit/s
95th percentile per-packet one-way delay: 41.144 ms
Loss rate: 0.12%
```

Run 10: Report of TCP BBR — Data Link



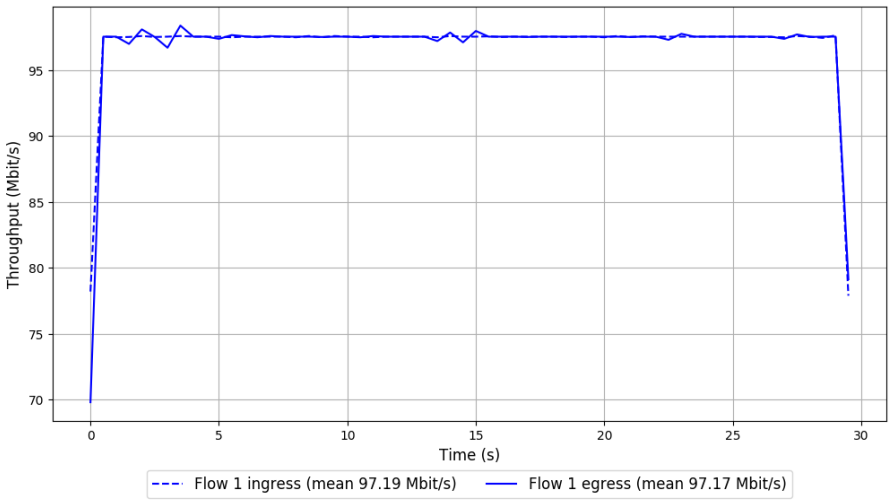



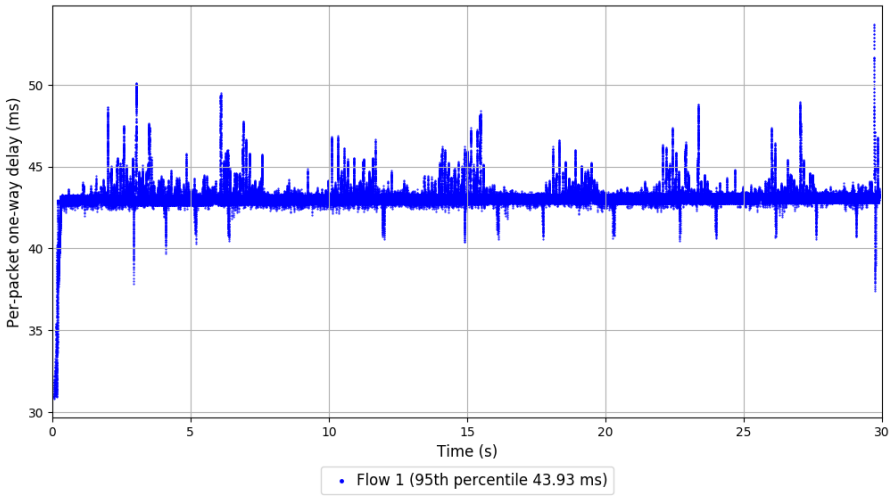
```
Run 1: Statistics of TCP Cubic

Start at: 2017-11-15 20:18:30
End at: 2017-11-15 20:19:00
Local clock offset: -5.244 ms
Remote clock offset: -14.591 ms

# Below is generated by plot.py at 2017-11-16 02:02:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.17 Mbit/s
95th percentile per-packet one-way delay: 43.933 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 97.17 Mbit/s
95th percentile per-packet one-way delay: 43.933 ms
Loss rate: 0.12%
```

Run 1: Report of TCP Cubic — Data Link

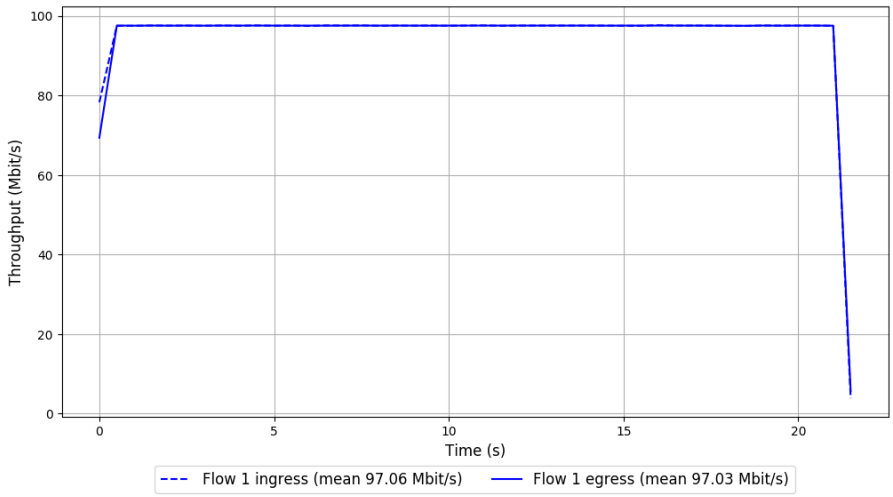


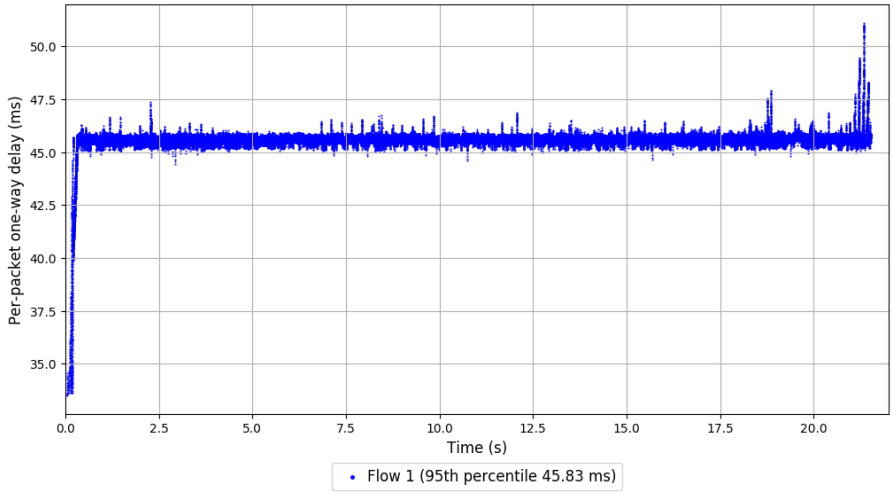



```
Run 2: Statistics of TCP Cubic

Start at: 2017-11-15 20:36:26
End at: 2017-11-15 20:36:56
Local clock offset: -8.221 ms
Remote clock offset: -14.856 ms
```

Run 2: Report of TCP Cubic — Data Link

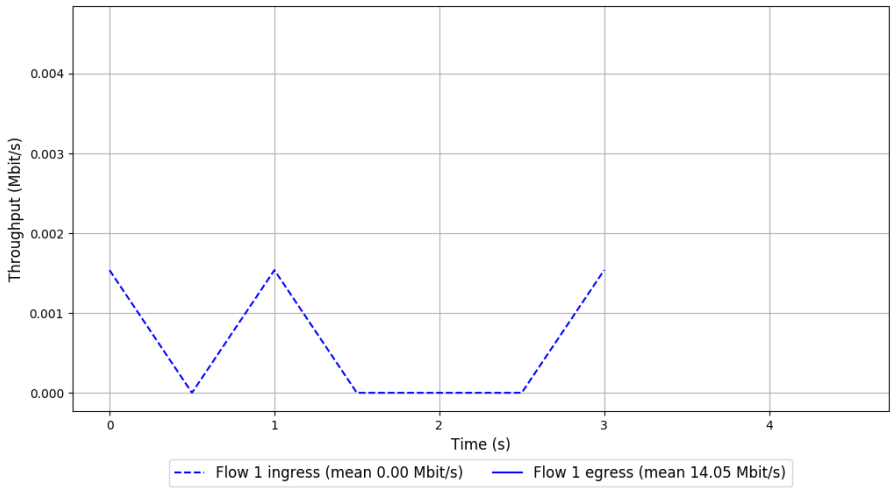


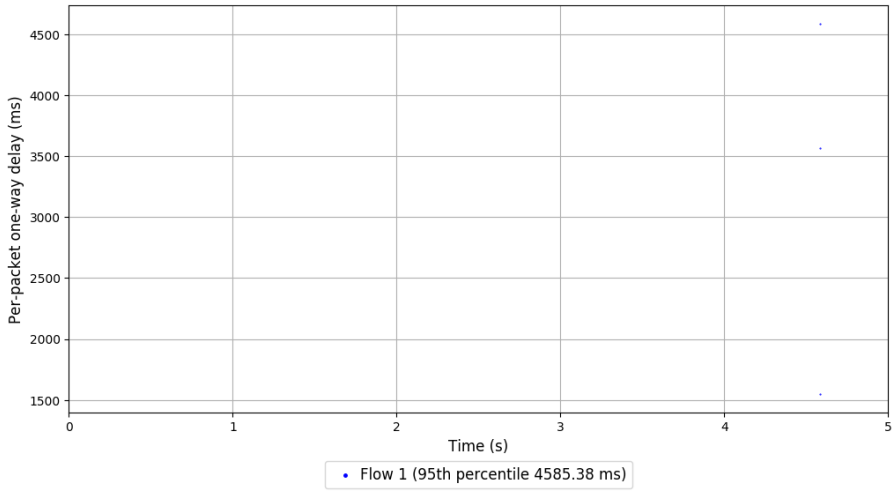



```
Run 3: Statistics of TCP Cubic

Start at: 2017-11-15 20:54:35
End at: 2017-11-15 20:55:05
Local clock offset: -6.764 ms
Remote clock offset: -15.402 ms
```

Run 3: Report of TCP Cubic — Data Link



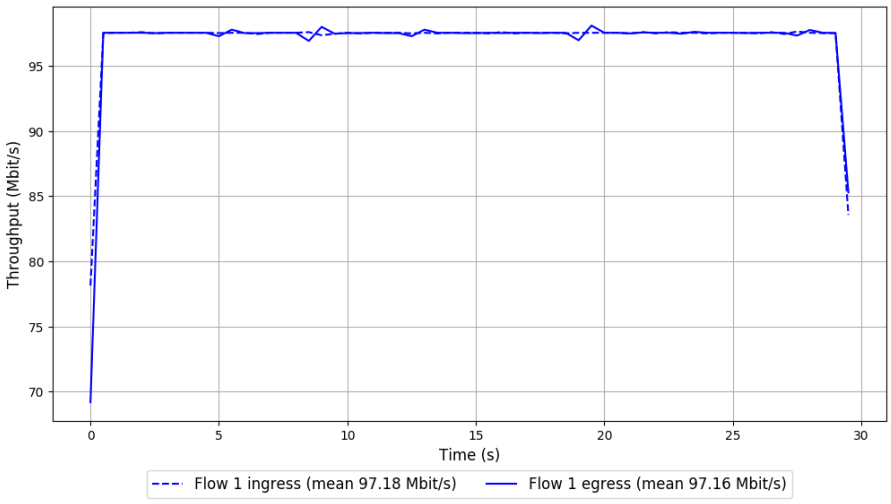



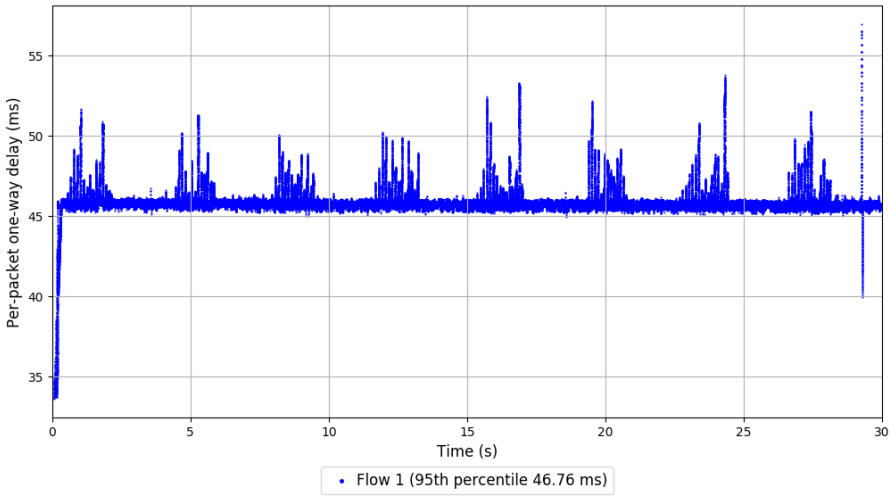
```
Run 4: Statistics of TCP Cubic

Start at: 2017-11-15 21:11:51
End at: 2017-11-15 21:12:21
Local clock offset: -14.14 ms
Remote clock offset: -17.288 ms

# Below is generated by plot.py at 2017-11-16 02:02:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.16 Mbit/s
95th percentile per-packet one-way delay: 46.757 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 97.16 Mbit/s
95th percentile per-packet one-way delay: 46.757 ms
Loss rate: 0.12%
```

Run 4: Report of TCP Cubic — Data Link



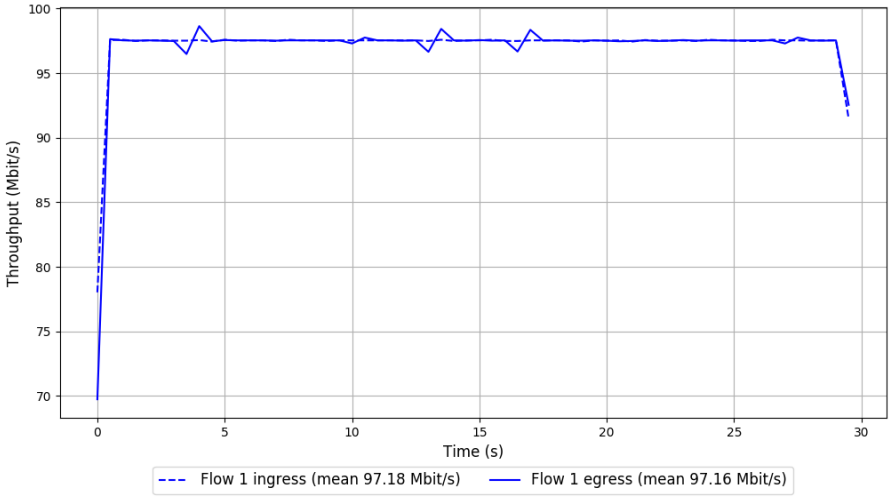



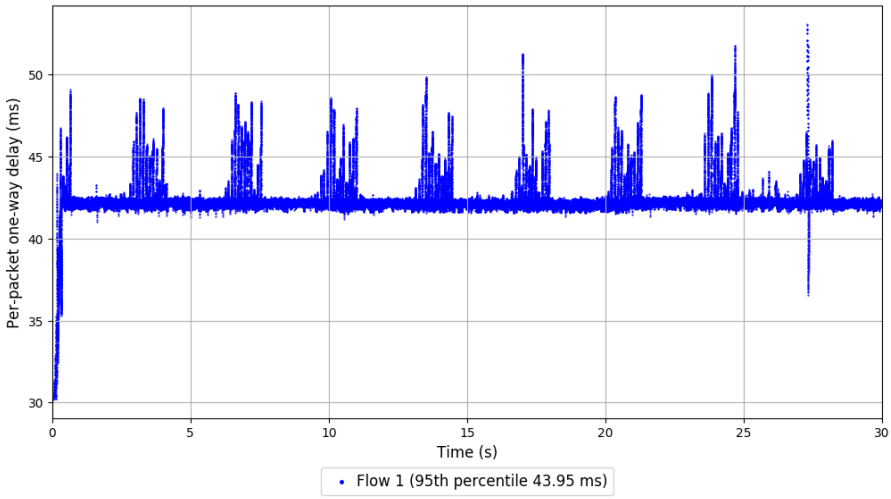
```
Run 5: Statistics of TCP Cubic

Start at: 2017-11-15 21:29:23
End at: 2017-11-15 21:29:53
Local clock offset: -17.299 ms
Remote clock offset: -16.395 ms

# Below is generated by plot.py at 2017-11-16 02:02:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.16 Mbit/s
95th percentile per-packet one-way delay: 43.948 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 97.16 Mbit/s
95th percentile per-packet one-way delay: 43.948 ms
Loss rate: 0.12%
```

Run 5: Report of TCP Cubic — Data Link



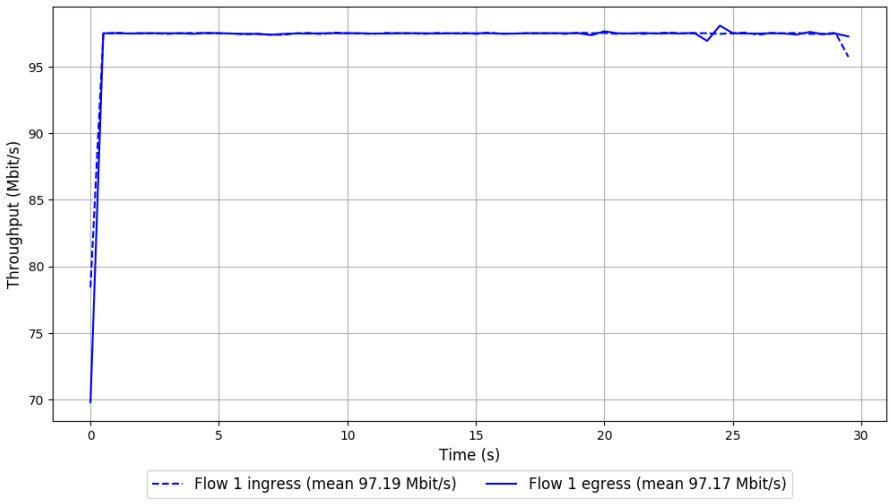



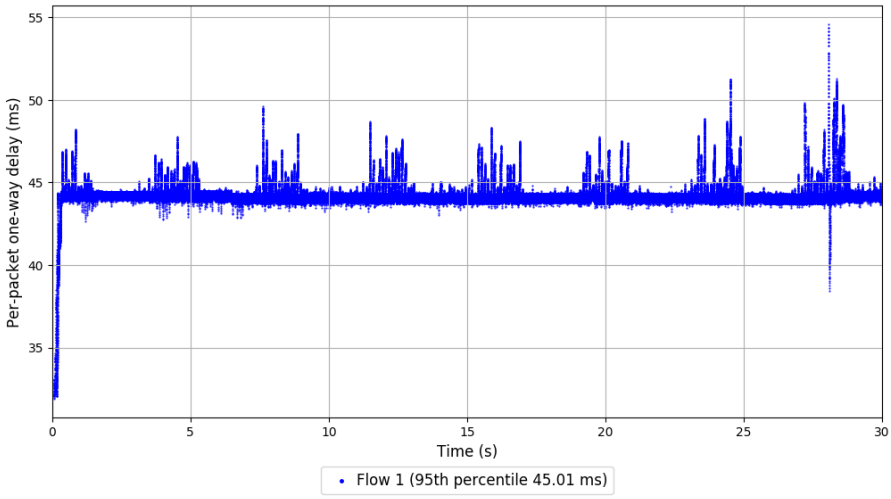
```
Run 6: Statistics of TCP Cubic

Start at: 2017-11-15 21:47:00
End at: 2017-11-15 21:47:30
Local clock offset: -15.987 ms
Remote clock offset: -18.228 ms

# Below is generated by plot.py at 2017-11-16 02:02:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.17 Mbit/s
95th percentile per-packet one-way delay: 45.008 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 97.17 Mbit/s
95th percentile per-packet one-way delay: 45.008 ms
Loss rate: 0.12%
```

Run 6: Report of TCP Cubic — Data Link



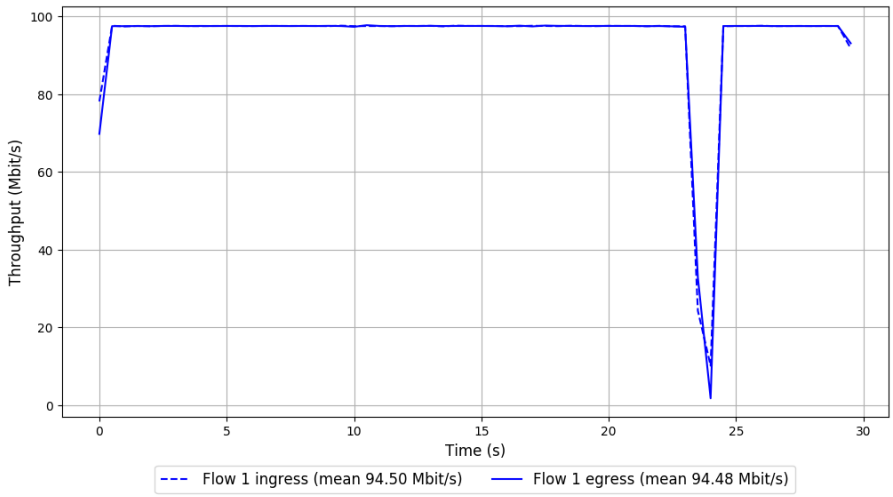



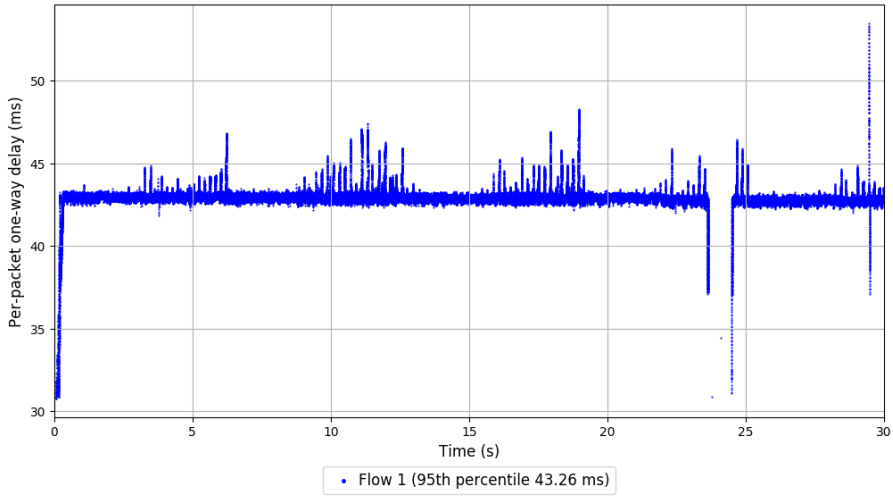
```
Run 7: Statistics of TCP Cubic

Start at: 2017-11-15 22:04:29
End at: 2017-11-15 22:04:59
Local clock offset: -12.064 ms
Remote clock offset: -17.887 ms

# Below is generated by plot.py at 2017-11-16 02:02:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.48 Mbit/s
95th percentile per-packet one-way delay: 43.263 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.48 Mbit/s
95th percentile per-packet one-way delay: 43.263 ms
Loss rate: 0.12%
```

Run 7: Report of TCP Cubic — Data Link



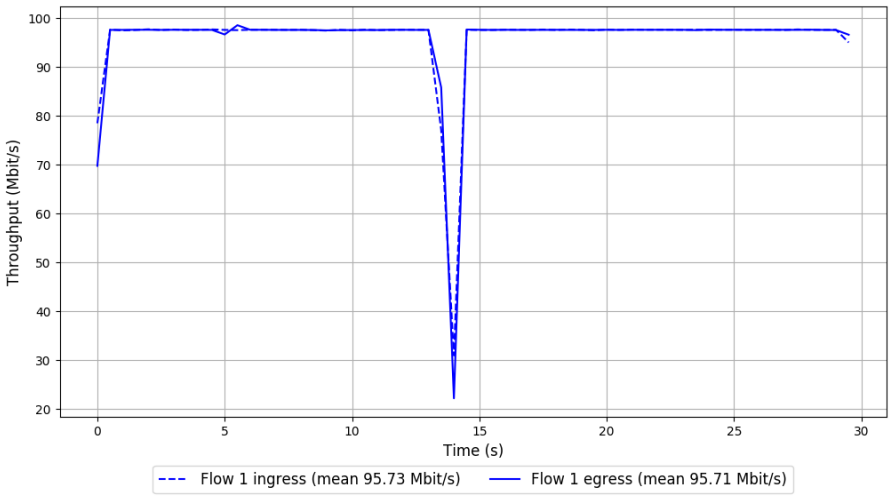



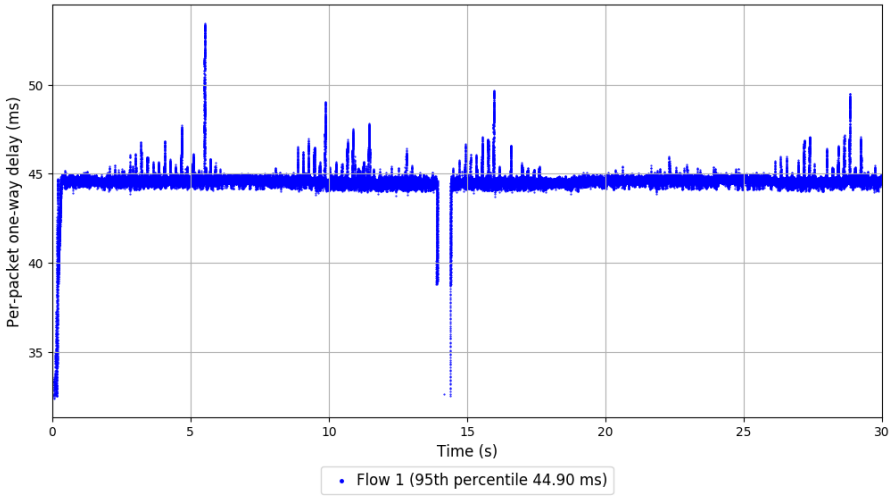
```
Run 8: Statistics of TCP Cubic

Start at: 2017-11-15 22:22:18
End at: 2017-11-15 22:22:48
Local clock offset: -12.158 ms
Remote clock offset: -20.487 ms

# Below is generated by plot.py at 2017-11-16 02:03:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 44.902 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 44.902 ms
Loss rate: 0.12%
```

Run 8: Report of TCP Cubic — Data Link



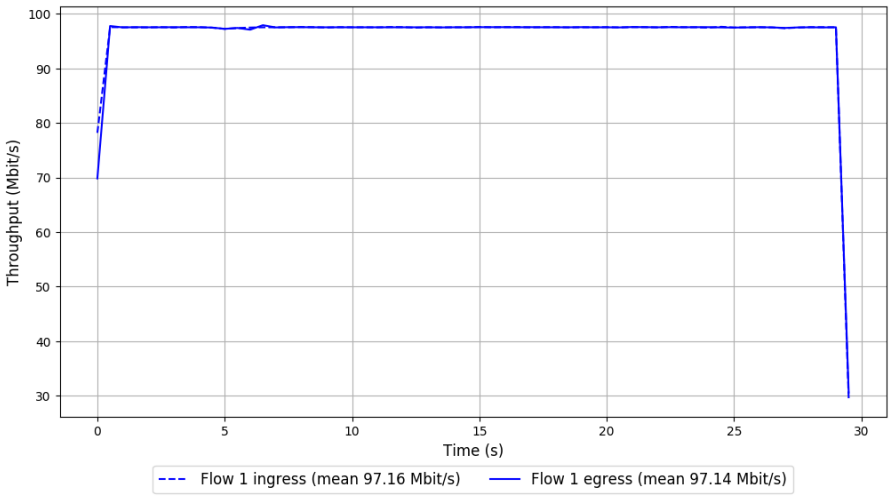



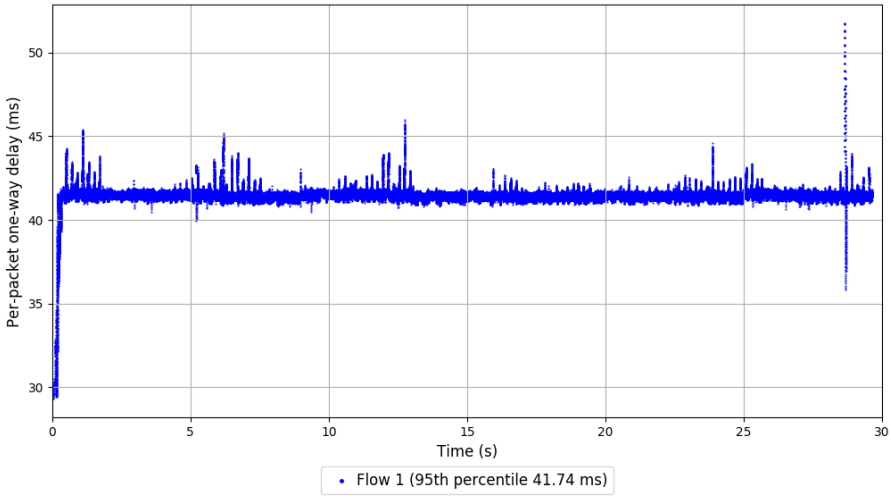
```
Run 9: Statistics of TCP Cubic

Start at: 2017-11-15 22:39:29
End at: 2017-11-15 22:39:59
Local clock offset: -15.322 ms
Remote clock offset: -19.032 ms

# Below is generated by plot.py at 2017-11-16 02:04:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.14 Mbit/s
95th percentile per-packet one-way delay: 41.743 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 97.14 Mbit/s
95th percentile per-packet one-way delay: 41.743 ms
Loss rate: 0.12%
```

Run 9: Report of TCP Cubic — Data Link



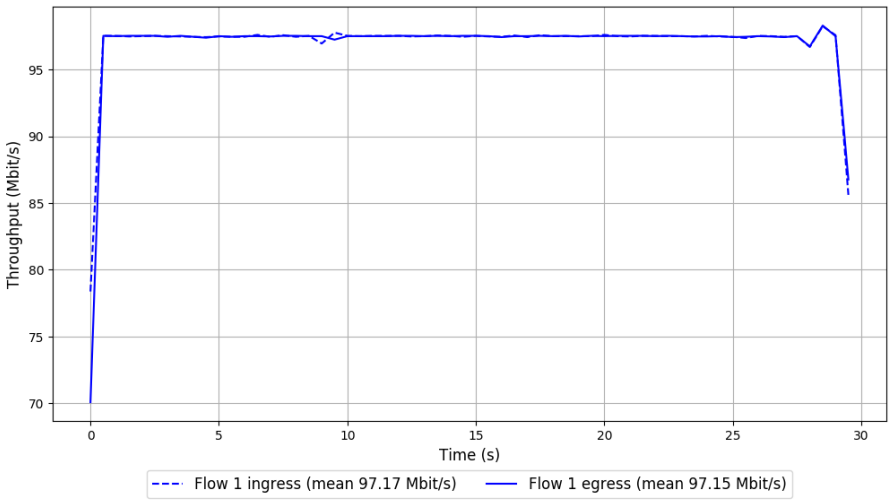



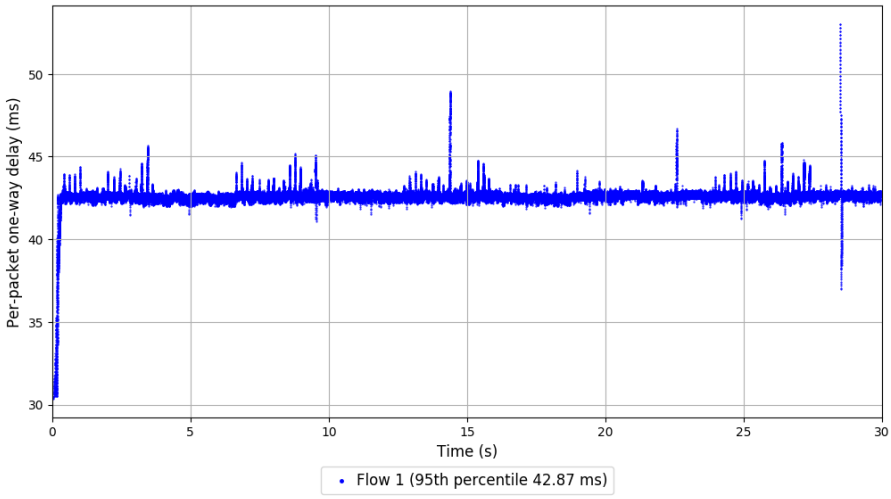
```
Run 10: Statistics of TCP Cubic

Start at: 2017-11-15 22:56:50
End at: 2017-11-15 22:57:20
Local clock offset: -17.052 ms
Remote clock offset: -19.754 ms

# Below is generated by plot.py at 2017-11-16 02:04:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.15 Mbit/s
95th percentile per-packet one-way delay: 42.873 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 97.15 Mbit/s
95th percentile per-packet one-way delay: 42.873 ms
Loss rate: 0.12%
```

Run 10: Report of TCP Cubic — Data Link



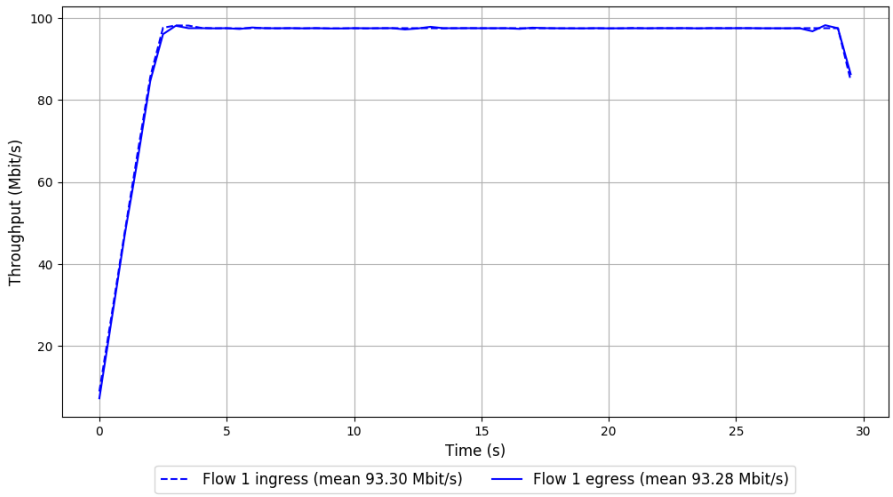



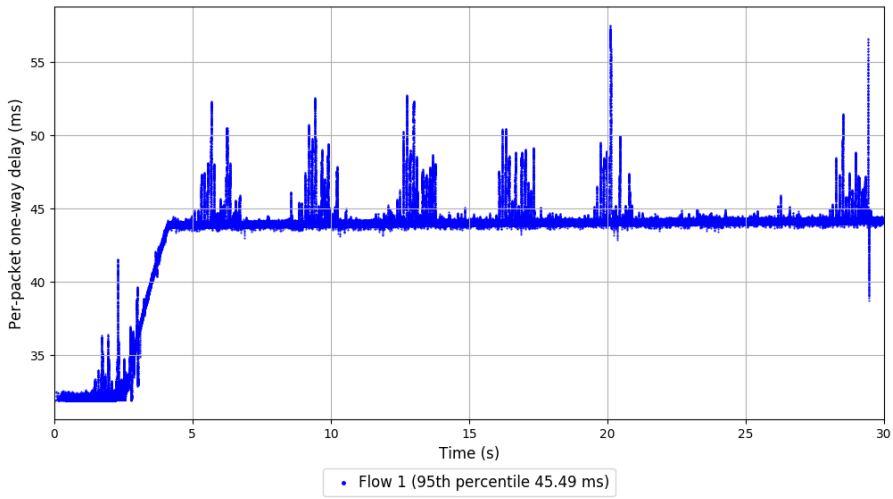
```
Run 1: Statistics of LEDBAT

Start at: 2017-11-15 20:25:25
End at: 2017-11-15 20:25:55
Local clock offset: -7.315 ms
Remote clock offset: -14.013 ms

# Below is generated by plot.py at 2017-11-16 02:04:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.28 Mbit/s
95th percentile per-packet one-way delay: 45.486 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 93.28 Mbit/s
95th percentile per-packet one-way delay: 45.486 ms
Loss rate: 0.13%
```

Run 1: Report of LEDBAT — Data Link



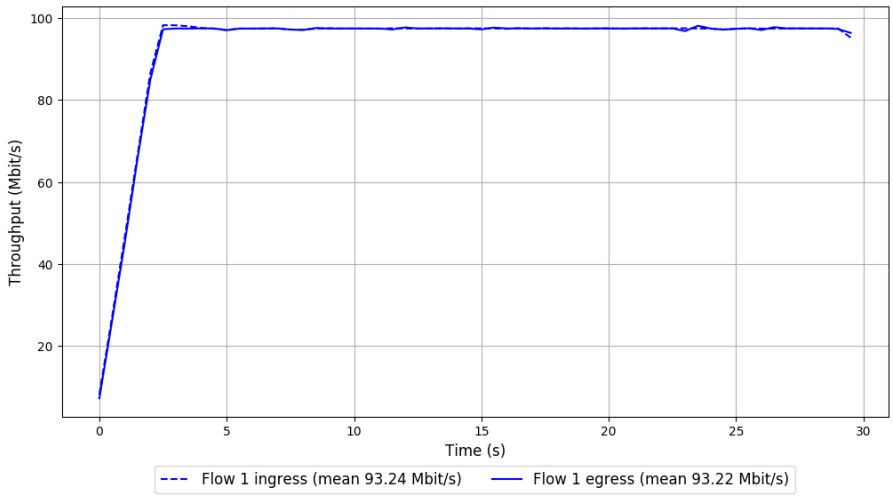



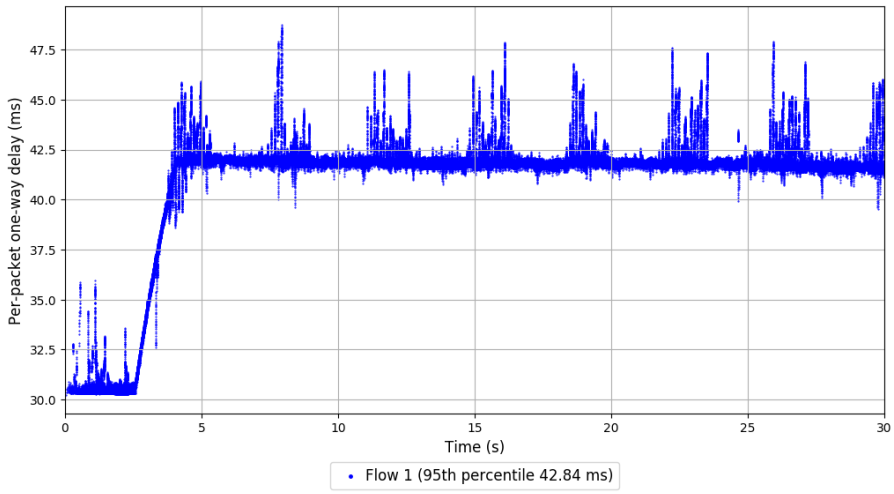
```
Run 2: Statistics of LEDBAT

Start at: 2017-11-15 20:43:19
End at: 2017-11-15 20:43:49
Local clock offset: -11.304 ms
Remote clock offset: -14.651 ms

# Below is generated by plot.py at 2017-11-16 02:04:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.22 Mbit/s
95th percentile per-packet one-way delay: 42.838 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 93.22 Mbit/s
95th percentile per-packet one-way delay: 42.838 ms
Loss rate: 0.13%
```

Run 2: Report of LEDBAT — Data Link



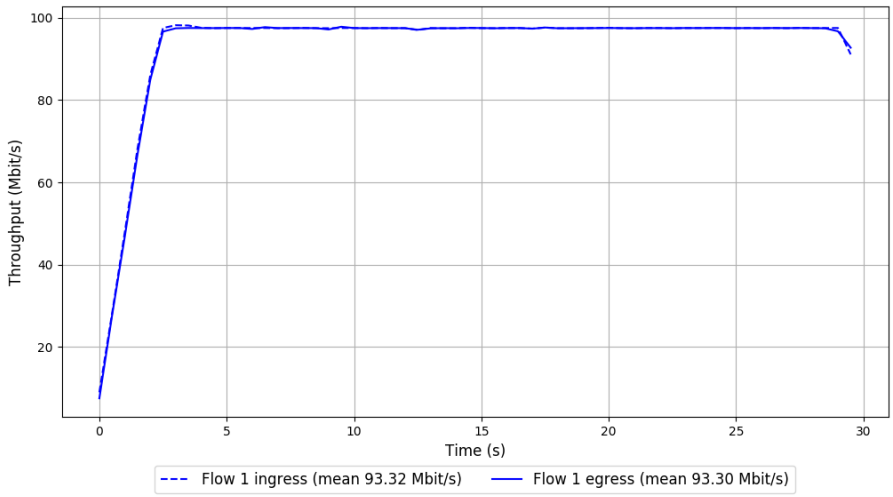



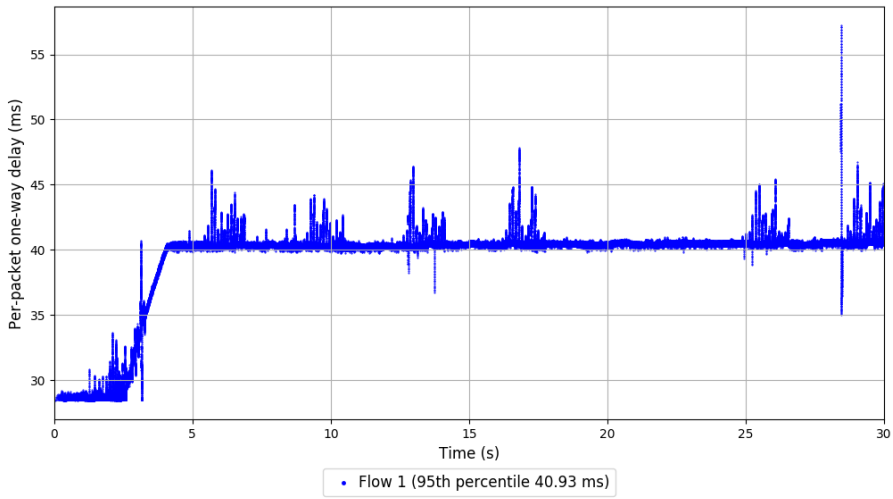
```
Run 3: Statistics of LEDBAT

Start at: 2017-11-15 21:00:46
End at: 2017-11-15 21:01:16
Local clock offset: -12.978 ms
Remote clock offset: -14.462 ms

# Below is generated by plot.py at 2017-11-16 02:04:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.30 Mbit/s
95th percentile per-packet one-way delay: 40.929 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 93.30 Mbit/s
95th percentile per-packet one-way delay: 40.929 ms
Loss rate: 0.13%
```

Run 3: Report of LEDBAT — Data Link



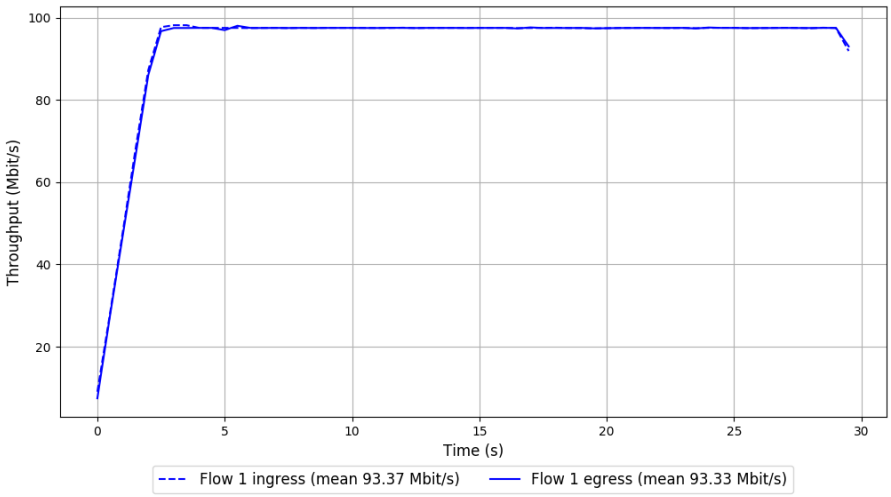



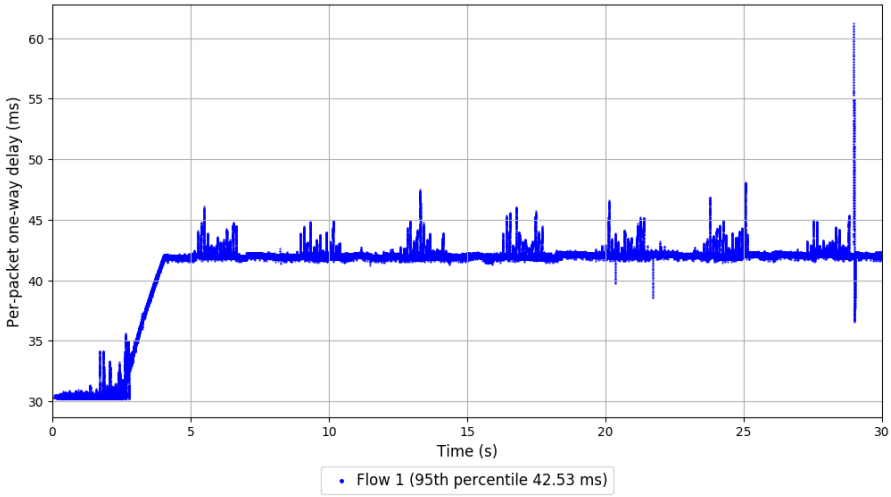
```
Run 4: Statistics of LEDBAT

Start at: 2017-11-15 21:18:16
End at: 2017-11-15 21:18:46
Local clock offset: -15.895 ms
Remote clock offset: -16.502 ms

# Below is generated by plot.py at 2017-11-16 02:04:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.33 Mbit/s
95th percentile per-packet one-way delay: 42.530 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 93.33 Mbit/s
95th percentile per-packet one-way delay: 42.530 ms
Loss rate: 0.13%
```

Run 4: Report of LEDBAT — Data Link



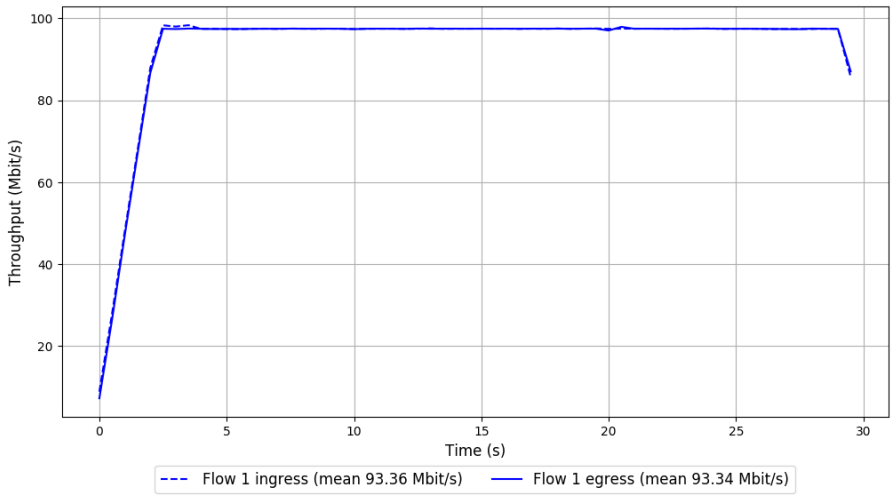



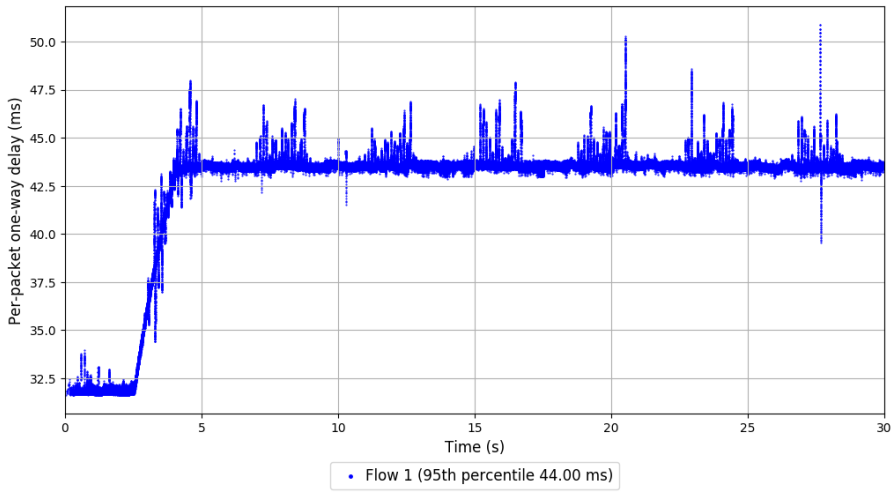
```
Run 5: Statistics of LEDBAT

Start at: 2017-11-15 21:35:57
End at: 2017-11-15 21:36:27
Local clock offset: -15.122 ms
Remote clock offset: -16.449 ms

# Below is generated by plot.py at 2017-11-16 02:04:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.34 Mbit/s
95th percentile per-packet one-way delay: 44.003 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 93.34 Mbit/s
95th percentile per-packet one-way delay: 44.003 ms
Loss rate: 0.13%
```

Run 5: Report of LEDBAT — Data Link



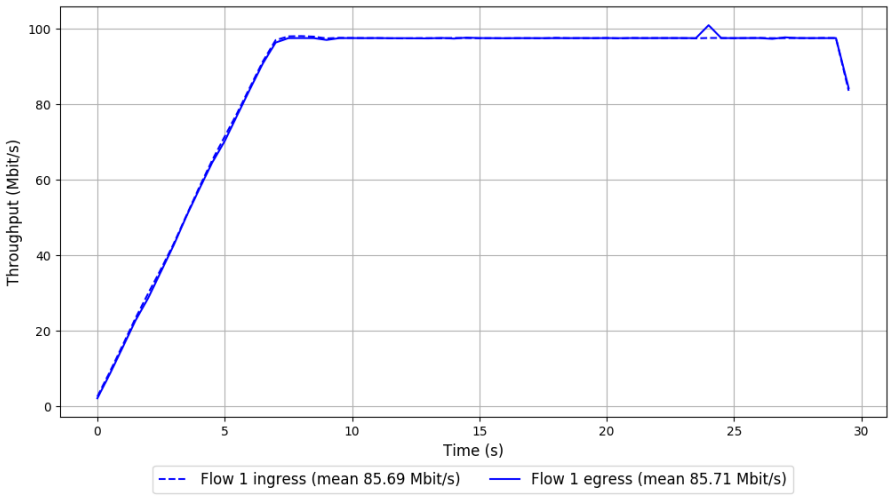



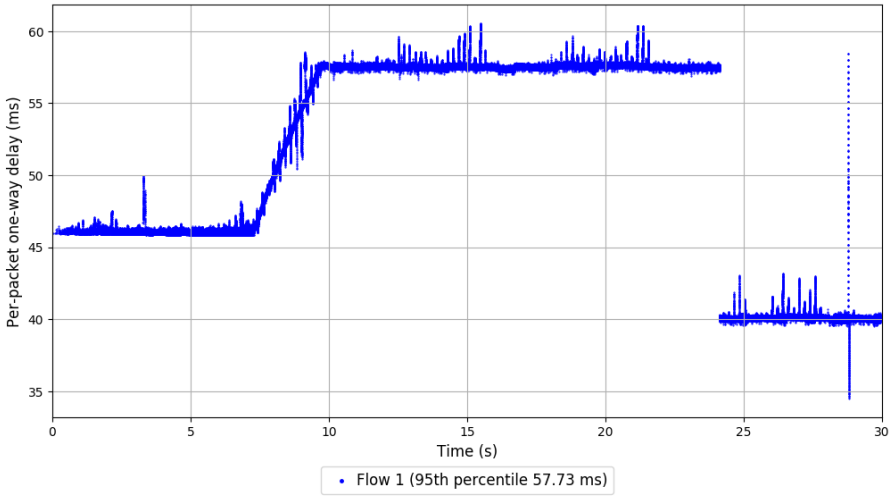
```
Run 6: Statistics of LEDBAT

Start at: 2017-11-15 21:53:29
End at: 2017-11-15 21:53:59
Local clock offset: -18.234 ms
Remote clock offset: -17.904 ms

# Below is generated by plot.py at 2017-11-16 02:04:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.71 Mbit/s
95th percentile per-packet one-way delay: 57.730 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 85.71 Mbit/s
95th percentile per-packet one-way delay: 57.730 ms
Loss rate: 0.14%
```

Run 6: Report of LEDBAT — Data Link



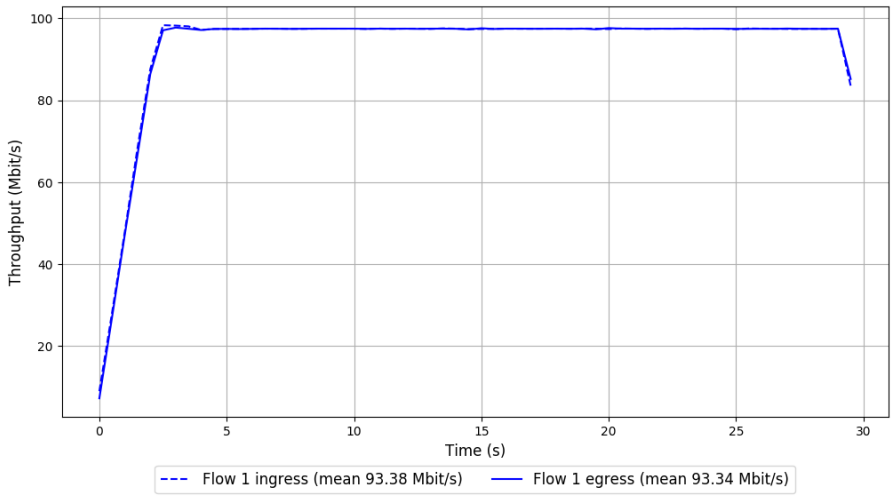



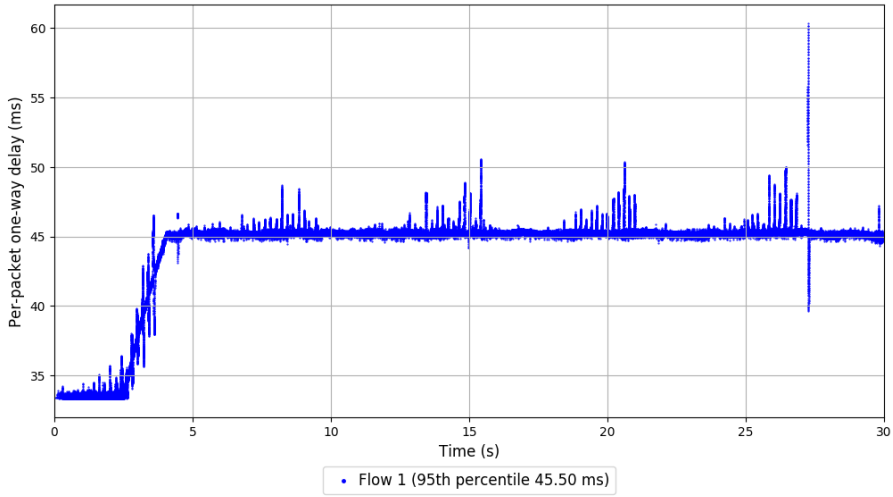
```
Run 7: Statistics of LEDBAT

Start at: 2017-11-15 22:10:55
End at: 2017-11-15 22:11:25
Local clock offset: -11.393 ms
Remote clock offset: -20.243 ms

# Below is generated by plot.py at 2017-11-16 02:05:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.34 Mbit/s
95th percentile per-packet one-way delay: 45.503 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 93.34 Mbit/s
95th percentile per-packet one-way delay: 45.503 ms
Loss rate: 0.13%
```

Run 7: Report of LEDBAT — Data Link



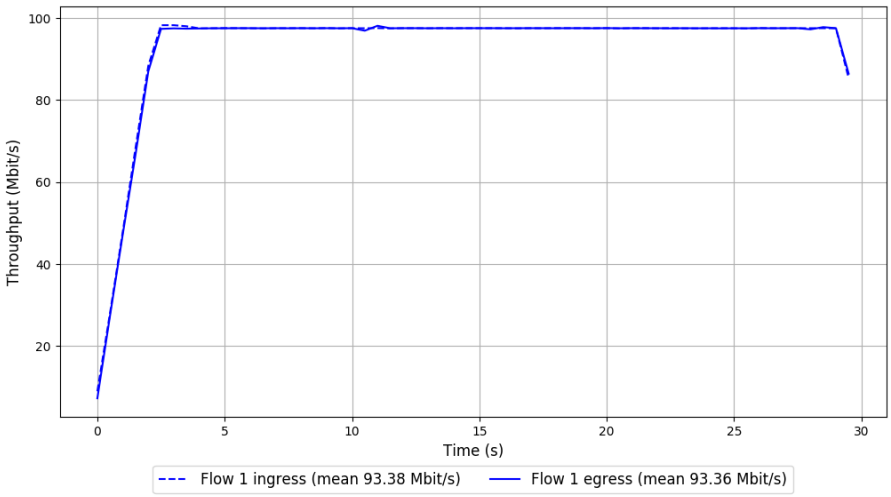



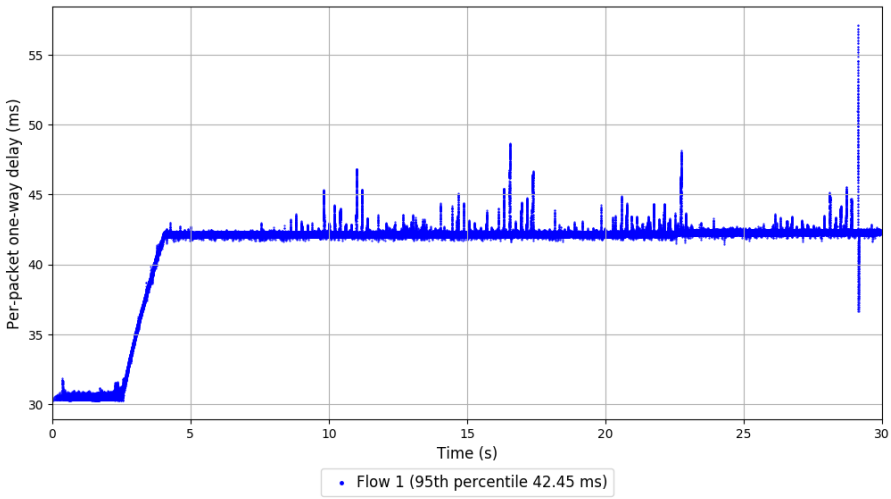
```
Run 8: Statistics of LEDBAT

Start at: 2017-11-15 22:28:38
End at: 2017-11-15 22:29:08
Local clock offset: -12.594 ms
Remote clock offset: -17.995 ms

# Below is generated by plot.py at 2017-11-16 02:05:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.36 Mbit/s
95th percentile per-packet one-way delay: 42.454 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 93.36 Mbit/s
95th percentile per-packet one-way delay: 42.454 ms
Loss rate: 0.13%
```

Run 8: Report of LEDBAT — Data Link



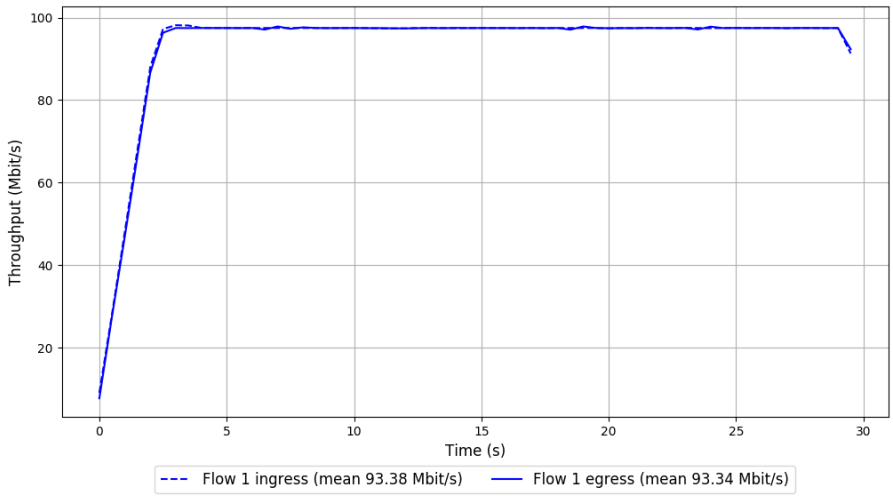



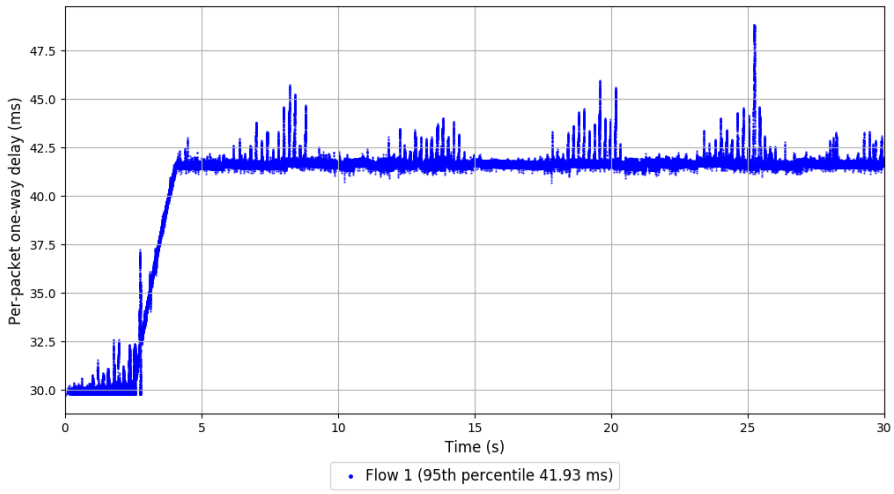
```
Run 9: Statistics of LEDBAT

Start at: 2017-11-15 22:45:46
End at: 2017-11-15 22:46:16
Local clock offset: -16.848 ms
Remote clock offset: -20.531 ms

# Below is generated by plot.py at 2017-11-16 02:05:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.34 Mbit/s
95th percentile per-packet one-way delay: 41.931 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 93.34 Mbit/s
95th percentile per-packet one-way delay: 41.931 ms
Loss rate: 0.13%
```

Run 9: Report of LEDBAT — Data Link



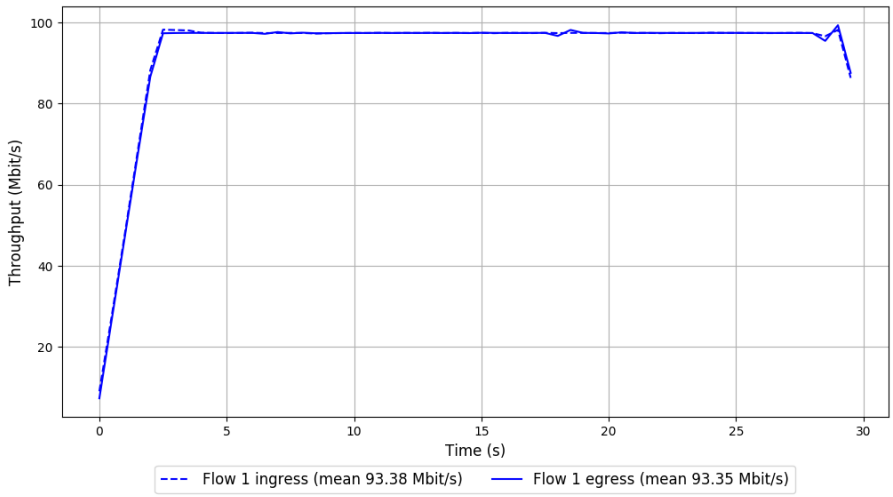



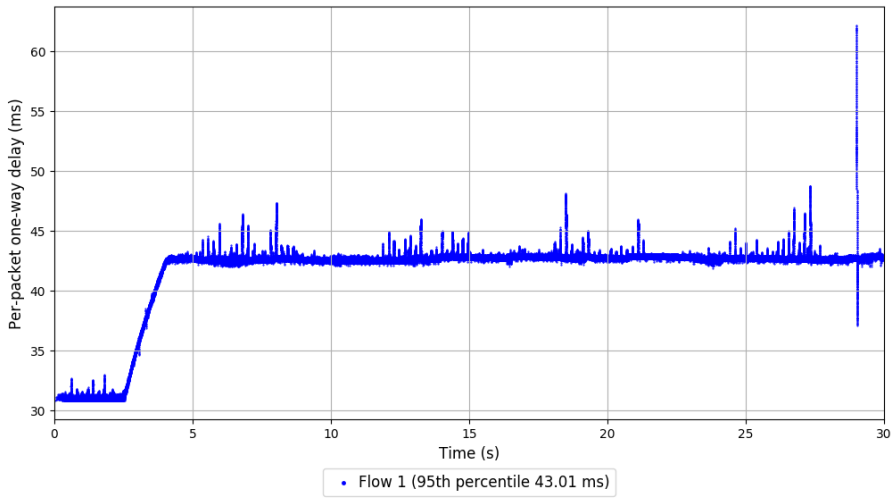
```
Run 10: Statistics of LEDBAT

Start at: 2017-11-15 23:03:18
End at: 2017-11-15 23:03:48
Local clock offset: -18.885 ms
Remote clock offset: -20.986 ms

# Below is generated by plot.py at 2017-11-16 02:05:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.35 Mbit/s
95th percentile per-packet one-way delay: 43.010 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 93.35 Mbit/s
95th percentile per-packet one-way delay: 43.010 ms
Loss rate: 0.13%
```

Run 10: Report of LEDBAT — Data Link



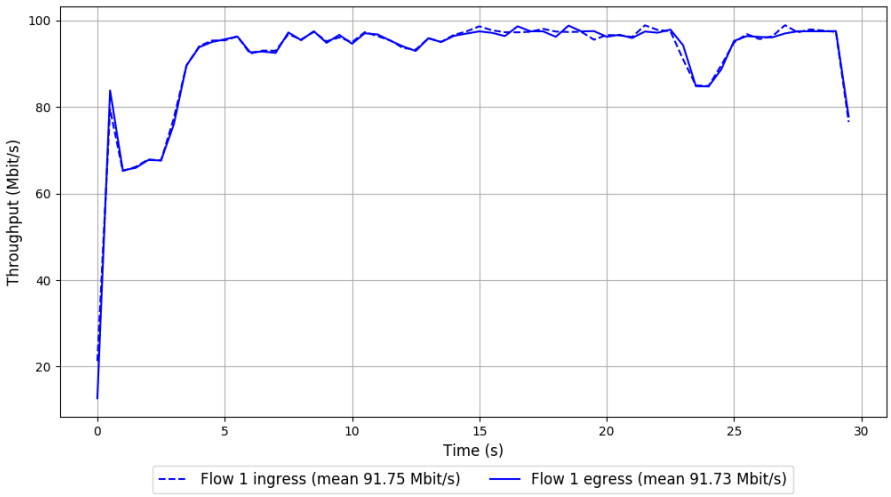



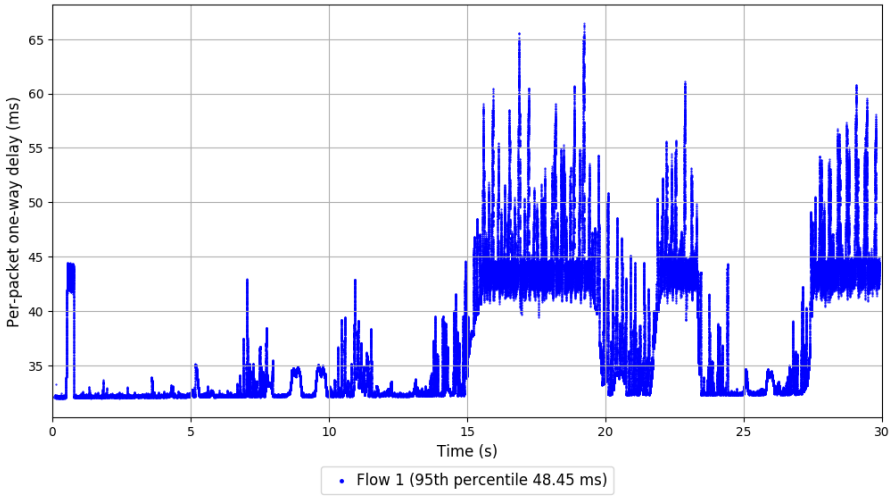
```
Run 1: Statistics of PCC

Start at: 2017-11-15 20:28:07
End at: 2017-11-15 20:28:37
Local clock offset: -10.012 ms
Remote clock offset: -15.161 ms

# Below is generated by plot.py at 2017-11-16 02:05:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.73 Mbit/s
95th percentile per-packet one-way delay: 48.453 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 91.73 Mbit/s
95th percentile per-packet one-way delay: 48.453 ms
Loss rate: 0.13%
```

Run 1: Report of PCC — Data Link



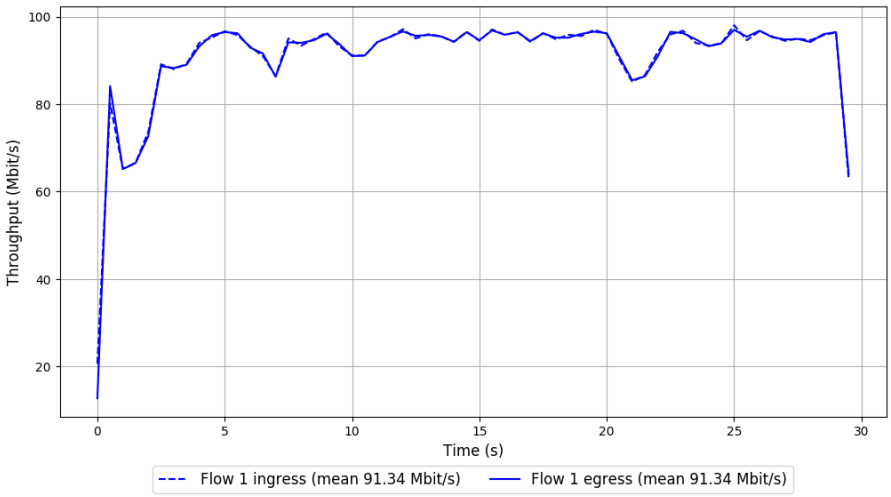



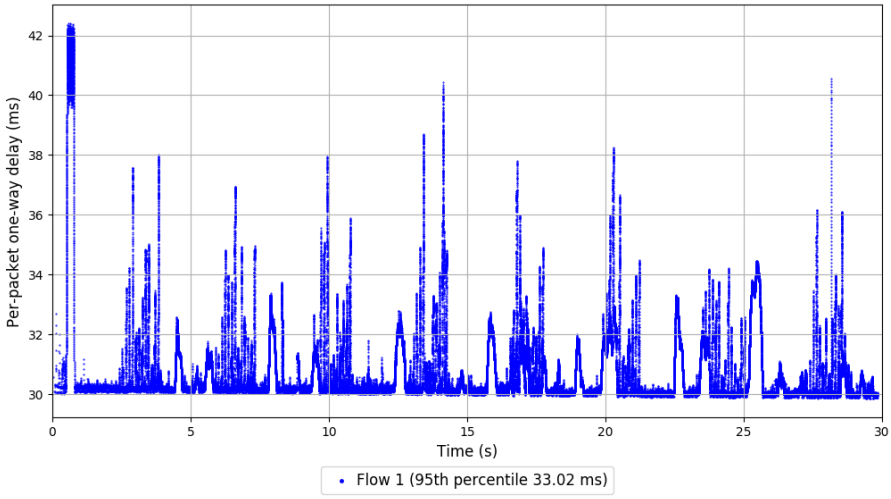
```
Run 2: Statistics of PCC

Start at: 2017-11-15 20:45:57
End at: 2017-11-15 20:46:27
Local clock offset: -10.266 ms
Remote clock offset: -15.481 ms

# Below is generated by plot.py at 2017-11-16 02:05:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.34 Mbit/s
95th percentile per-packet one-way delay: 33.019 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 91.34 Mbit/s
95th percentile per-packet one-way delay: 33.019 ms
Loss rate: 0.08%
```

Run 2: Report of PCC — Data Link



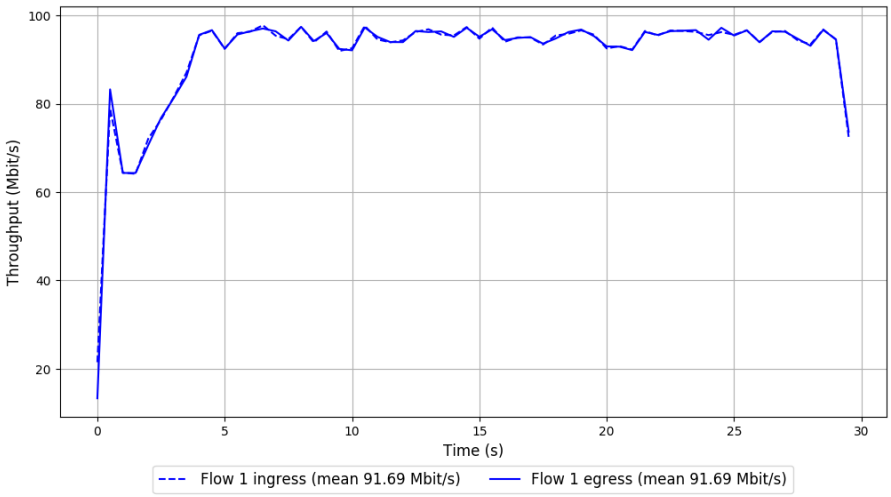



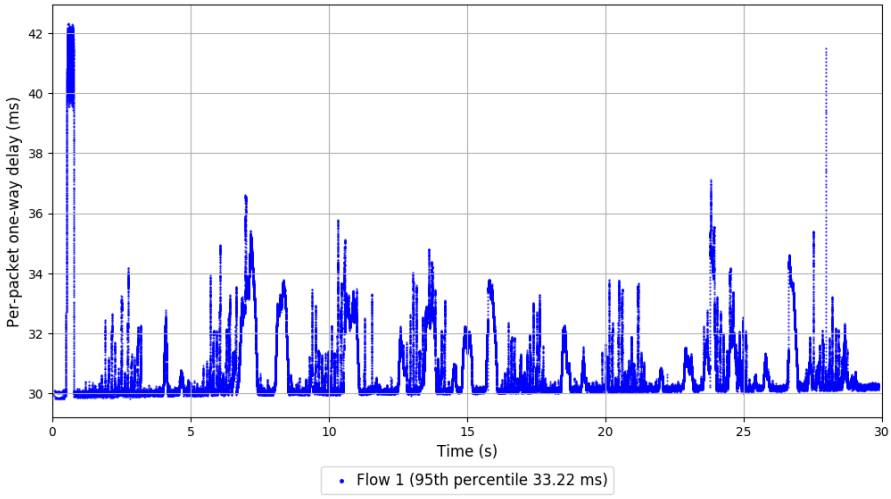
```
Run 3: Statistics of PCC

Start at: 2017-11-15 21:03:20
End at: 2017-11-15 21:03:50
Local clock offset: -13.351 ms
Remote clock offset: -15.333 ms

# Below is generated by plot.py at 2017-11-16 02:05:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 33.224 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 33.224 ms
Loss rate: 0.09%
```

Run 3: Report of PCC — Data Link



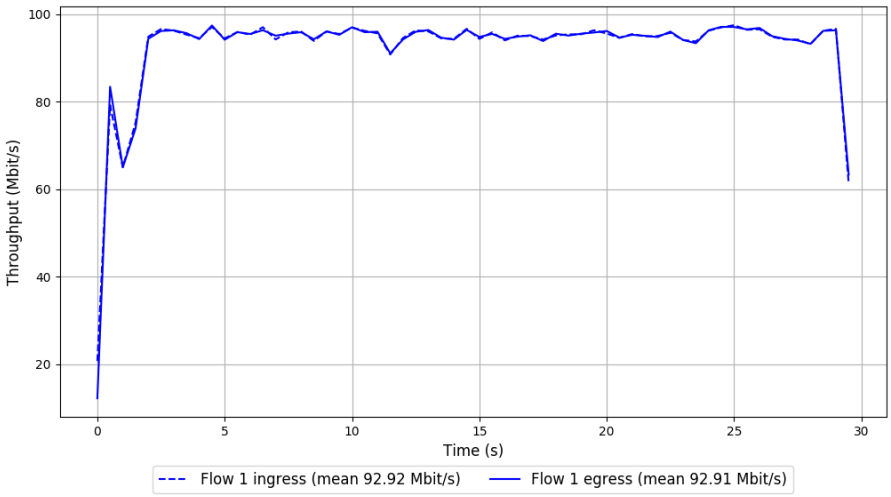



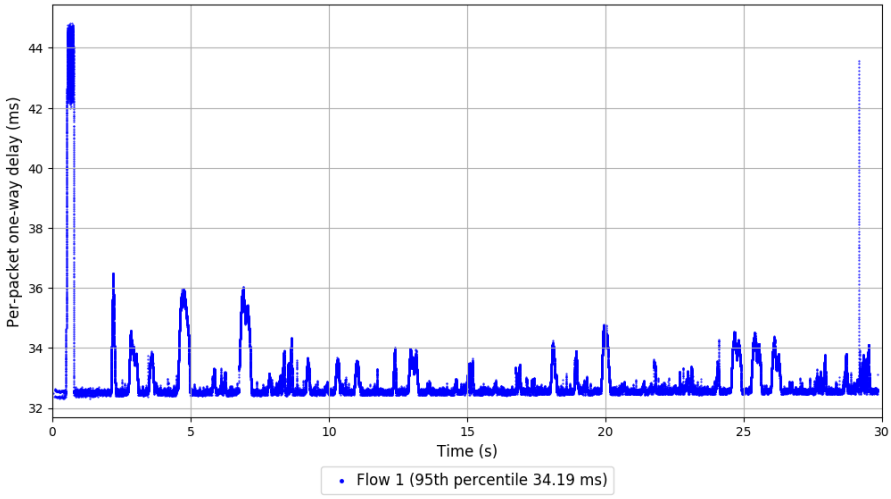
```
Run 4: Statistics of PCC

Start at: 2017-11-15 21:20:49
End at: 2017-11-15 21:21:19
Local clock offset: -12.654 ms
Remote clock offset: -15.41 ms

# Below is generated by plot.py at 2017-11-16 02:06:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.91 Mbit/s
95th percentile per-packet one-way delay: 34.190 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 92.91 Mbit/s
95th percentile per-packet one-way delay: 34.190 ms
Loss rate: 0.08%
```

Run 4: Report of PCC — Data Link



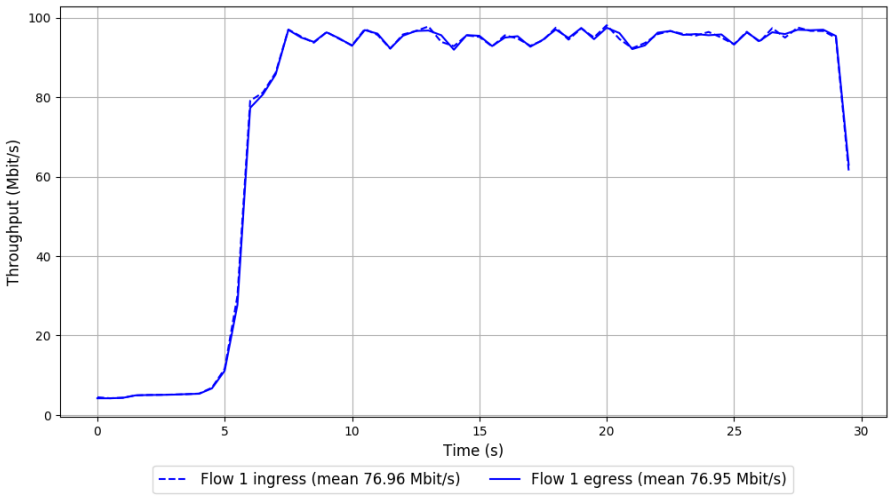



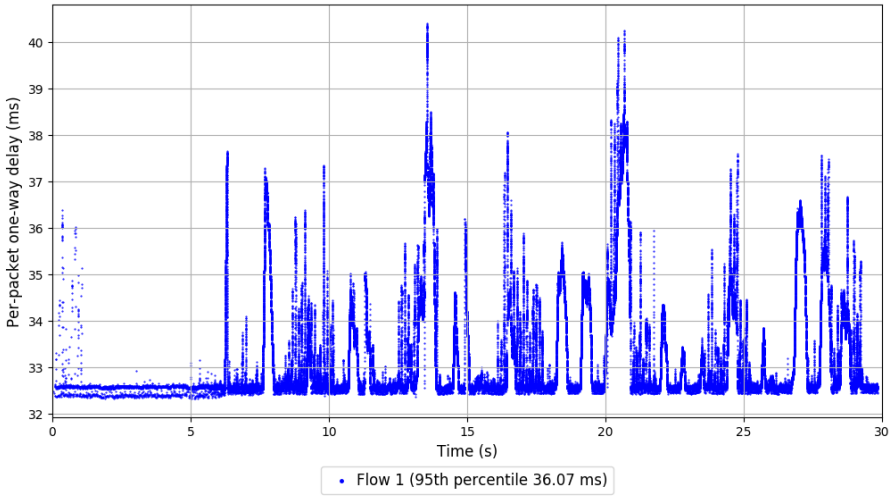
```
Run 5: Statistics of PCC

Start at: 2017-11-15 21:38:29
End at: 2017-11-15 21:38:59
Local clock offset: -14.667 ms
Remote clock offset: -16.713 ms

# Below is generated by plot.py at 2017-11-16 02:06:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.95 Mbit/s
95th percentile per-packet one-way delay: 36.071 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 76.95 Mbit/s
95th percentile per-packet one-way delay: 36.071 ms
Loss rate: 0.10%
```

Run 5: Report of PCC — Data Link



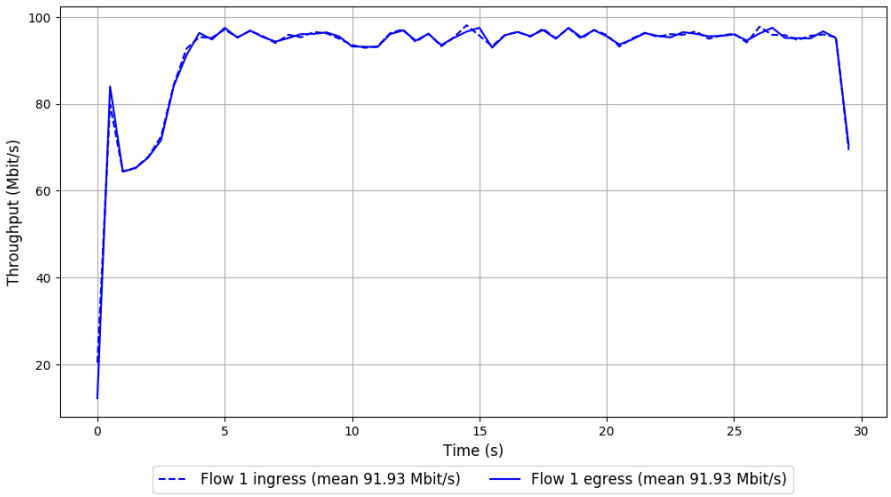



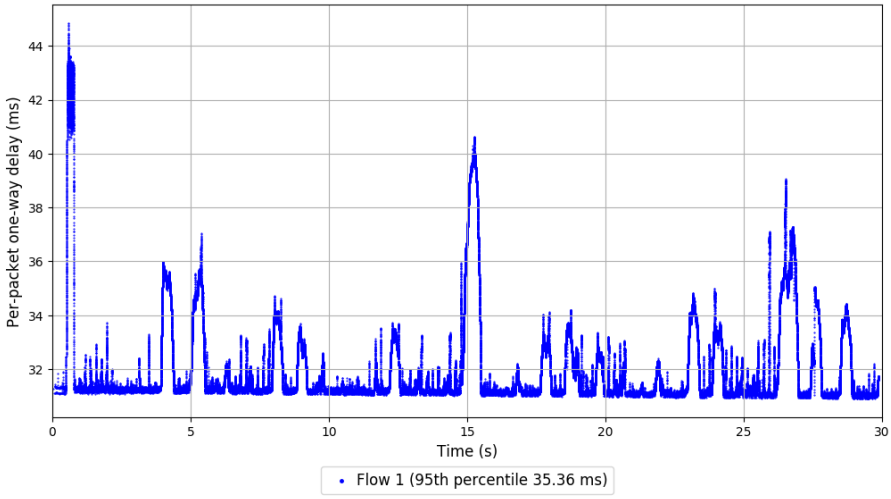
```
Run 6: Statistics of PCC

Start at: 2017-11-15 21:56:05
End at: 2017-11-15 21:56:35
Local clock offset: -16.308 ms
Remote clock offset: -20.196 ms

# Below is generated by plot.py at 2017-11-16 02:07:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.93 Mbit/s
95th percentile per-packet one-way delay: 35.356 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 91.93 Mbit/s
95th percentile per-packet one-way delay: 35.356 ms
Loss rate: 0.09%
```

Run 6: Report of PCC — Data Link



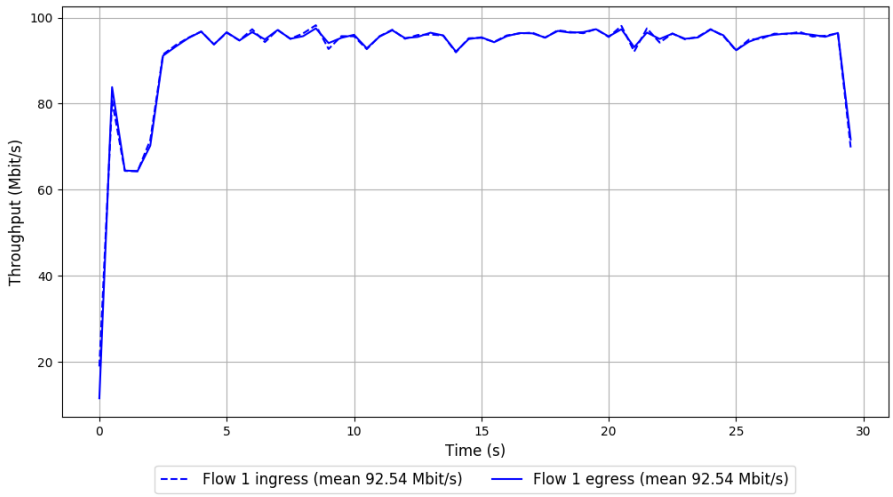



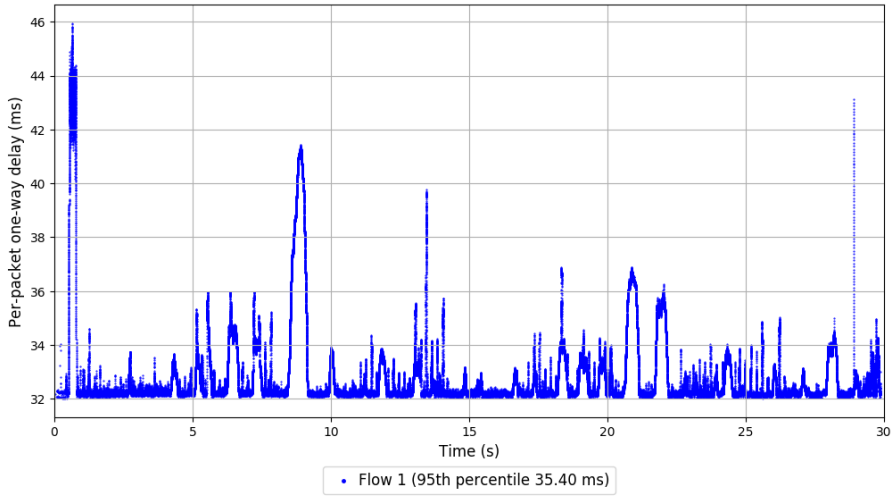
```
Run 7: Statistics of PCC

Start at: 2017-11-15 22:13:27
End at: 2017-11-15 22:13:57
Local clock offset: -12.997 ms
Remote clock offset: -20.665 ms

# Below is generated by plot.py at 2017-11-16 02:07:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.54 Mbit/s
95th percentile per-packet one-way delay: 35.403 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 92.54 Mbit/s
95th percentile per-packet one-way delay: 35.403 ms
Loss rate: 0.08%
```

Run 7: Report of PCC — Data Link



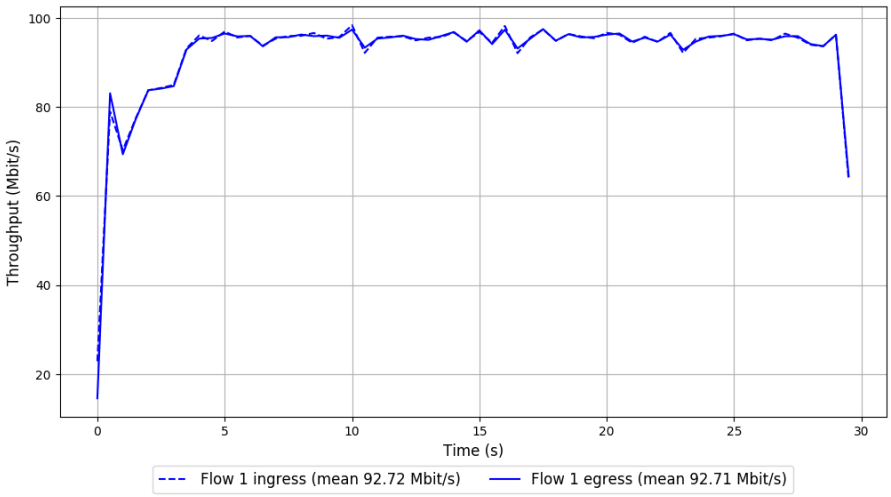



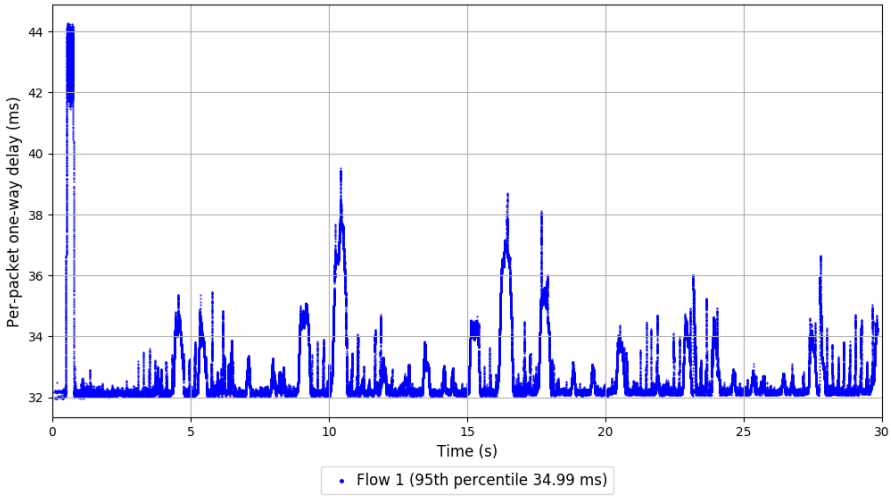
```
Run 8: Statistics of PCC

Start at: 2017-11-15 22:31:10
End at: 2017-11-15 22:31:40
Local clock offset: -13.26 ms
Remote clock offset: -20.288 ms

# Below is generated by plot.py at 2017-11-16 02:07:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.71 Mbit/s
95th percentile per-packet one-way delay: 34.993 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 92.71 Mbit/s
95th percentile per-packet one-way delay: 34.993 ms
Loss rate: 0.09%
```

Run 8: Report of PCC — Data Link



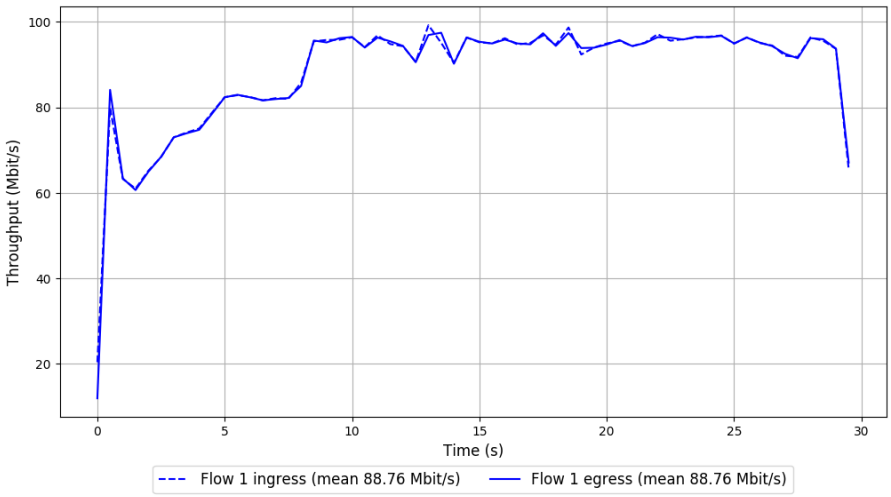



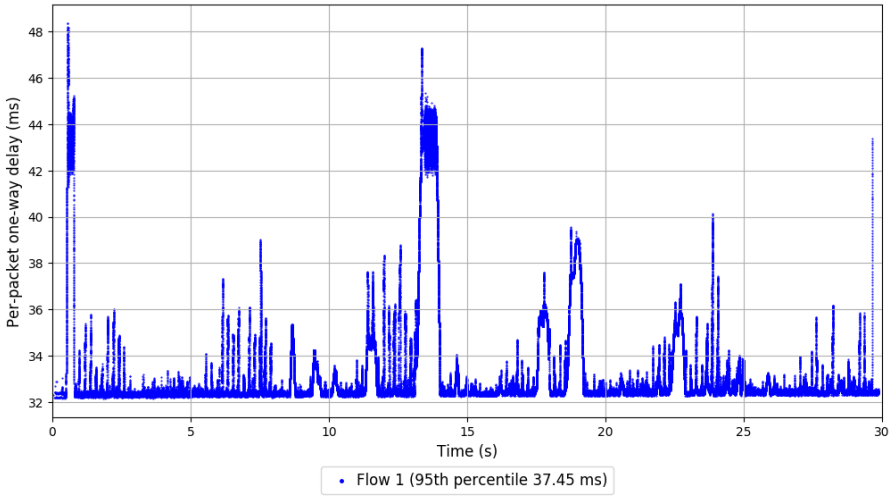
```
Run 9: Statistics of PCC

Start at: 2017-11-15 22:48:21
End at: 2017-11-15 22:48:51
Local clock offset: -14.288 ms
Remote clock offset: -20.25 ms

# Below is generated by plot.py at 2017-11-16 02:07:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.76 Mbit/s
95th percentile per-packet one-way delay: 37.448 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 88.76 Mbit/s
95th percentile per-packet one-way delay: 37.448 ms
Loss rate: 0.08%
```

Run 9: Report of PCC — Data Link



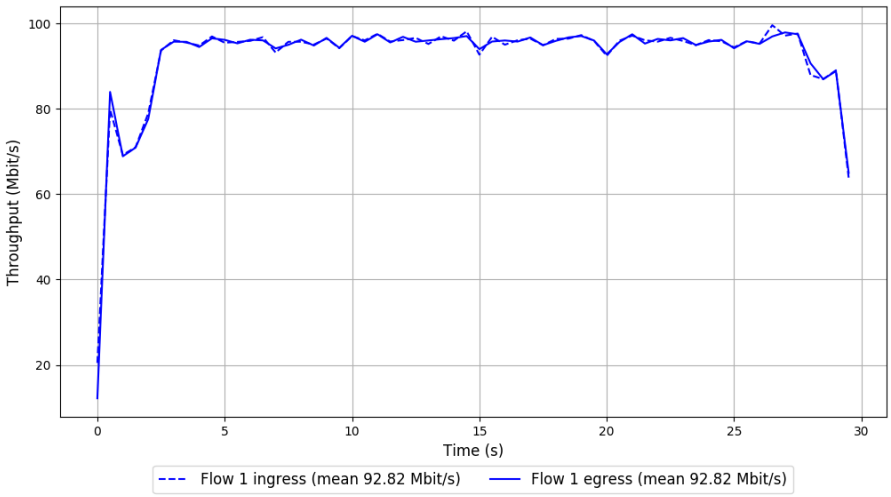



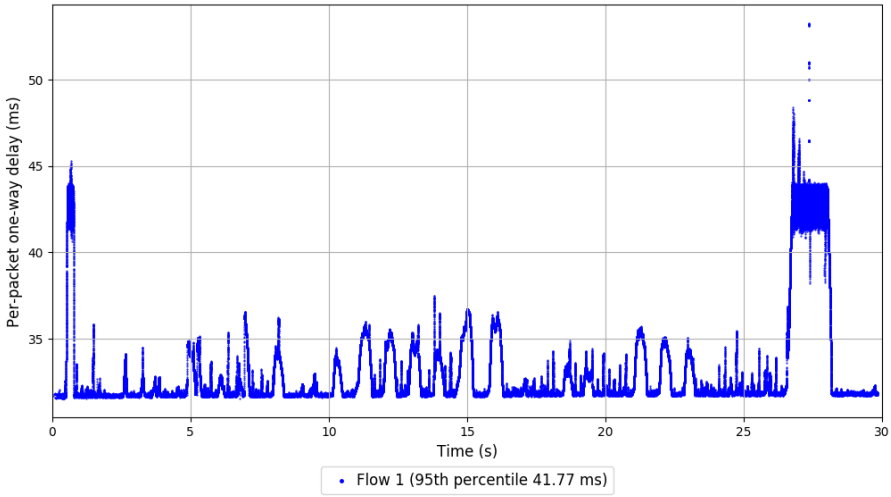
```
Run 10: Statistics of PCC

Start at: 2017-11-15 23:05:48
End at: 2017-11-15 23:06:18
Local clock offset: -18.473 ms
Remote clock offset: -20.966 ms

# Below is generated by plot.py at 2017-11-16 02:07:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 41.773 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 41.773 ms
Loss rate: 0.08%
```

Run 10: Report of PCC — Data Link



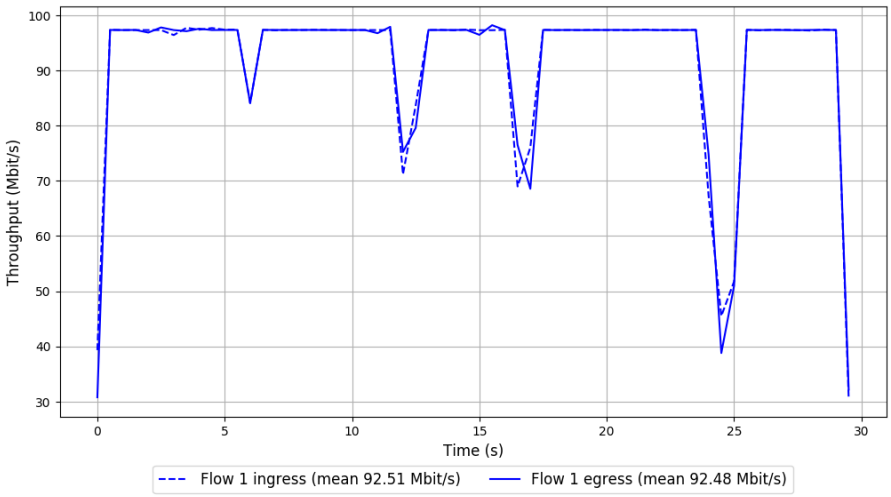



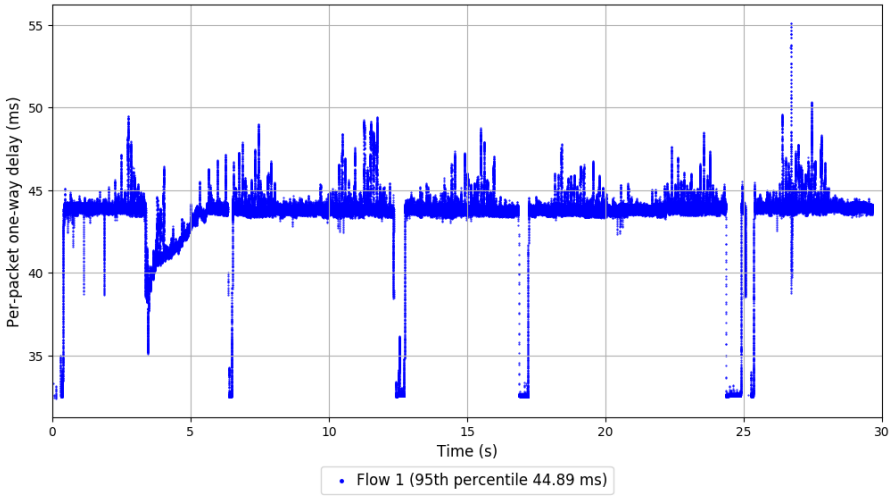
```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-15 20:17:05
End at: 2017-11-15 20:17:36
Local clock offset: -5.3 ms
Remote clock offset: -16.465 ms

# Below is generated by plot.py at 2017-11-16 02:07:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.48 Mbit/s
95th percentile per-packet one-way delay: 44.888 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 92.48 Mbit/s
95th percentile per-packet one-way delay: 44.888 ms
Loss rate: 0.13%
```

Run 1: Report of QUIC Cubic — Data Link



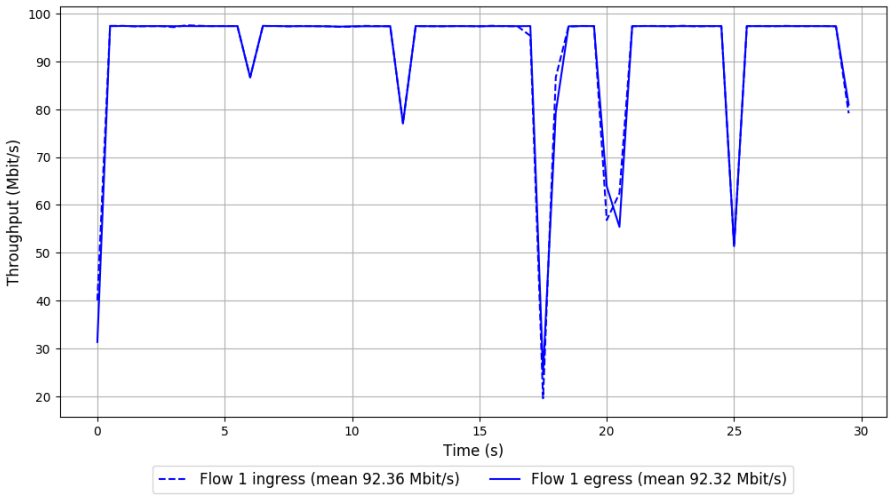



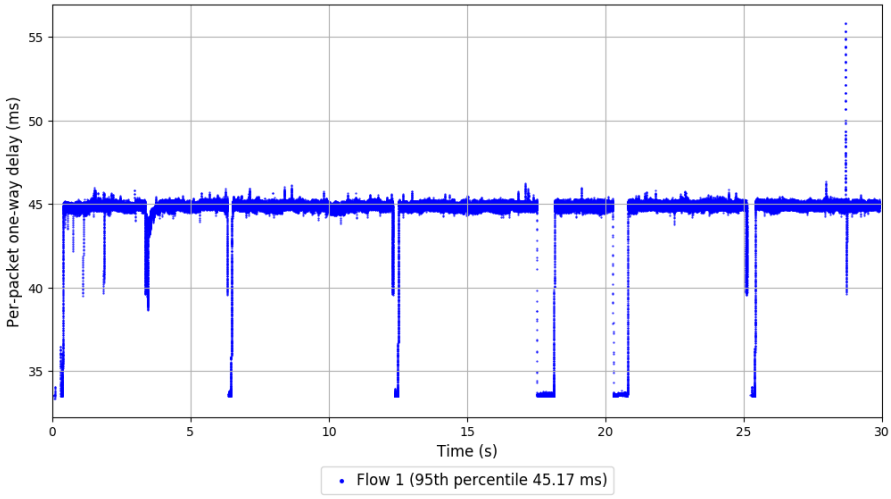
```
Run 2: Statistics of QUIC Cubic

Start at: 2017-11-15 20:35:16
End at: 2017-11-15 20:35:46
Local clock offset: -8.377 ms
Remote clock offset: -15.016 ms

# Below is generated by plot.py at 2017-11-16 02:07:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.32 Mbit/s
95th percentile per-packet one-way delay: 45.174 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 92.32 Mbit/s
95th percentile per-packet one-way delay: 45.174 ms
Loss rate: 0.13%
```

Run 2: Report of QUIC Cubic — Data Link



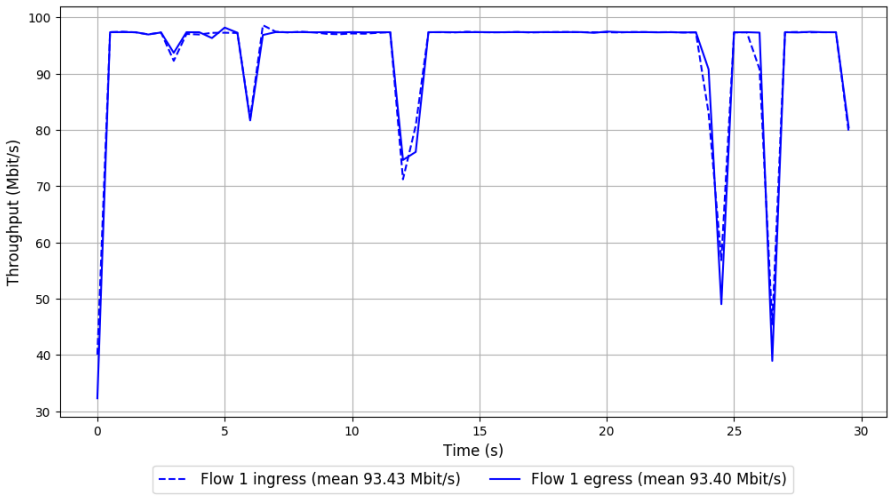



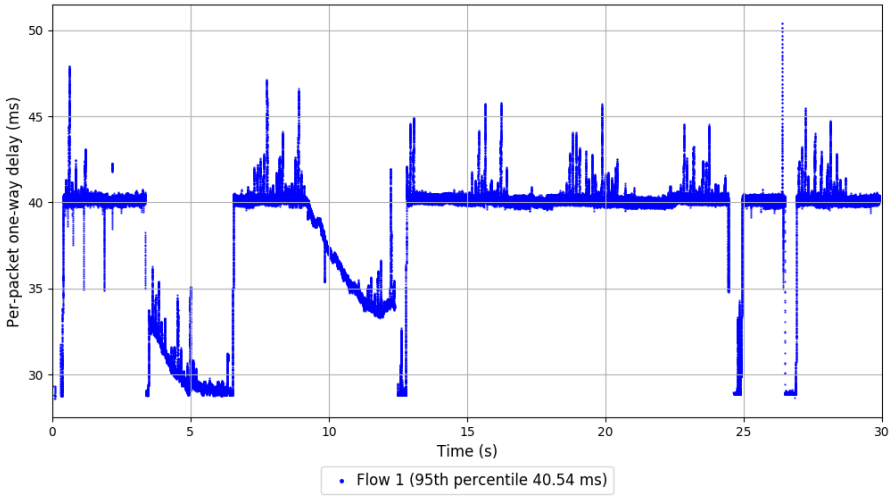
```
Run 3: Statistics of QUIC Cubic

Start at: 2017-11-15 20:53:17
End at: 2017-11-15 20:53:47
Local clock offset: -9.364 ms
Remote clock offset: -13.811 ms

# Below is generated by plot.py at 2017-11-16 02:08:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.40 Mbit/s
95th percentile per-packet one-way delay: 40.544 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 93.40 Mbit/s
95th percentile per-packet one-way delay: 40.544 ms
Loss rate: 0.13%
```

Run 3: Report of QUIC Cubic — Data Link



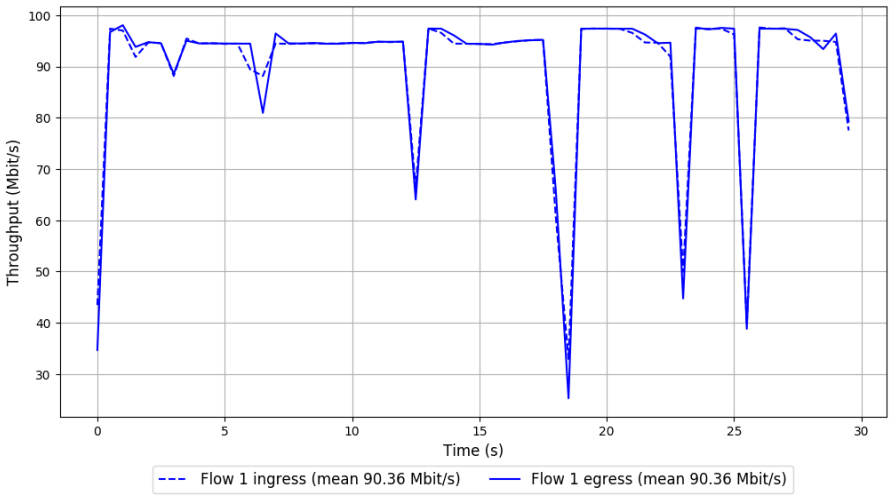



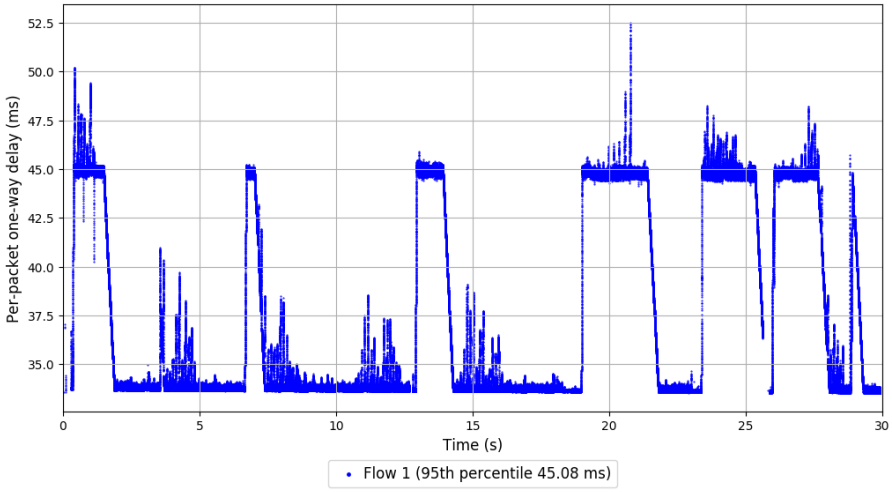
```
Run 4: Statistics of QUIC Cubic

Start at: 2017-11-15 21:10:39
End at: 2017-11-15 21:11:10
Local clock offset: -14.714 ms
Remote clock offset: -17.486 ms

# Below is generated by plot.py at 2017-11-16 02:08:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.36 Mbit/s
95th percentile per-packet one-way delay: 45.080 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 90.36 Mbit/s
95th percentile per-packet one-way delay: 45.080 ms
Loss rate: 0.09%
```

Run 4: Report of QUIC Cubic — Data Link



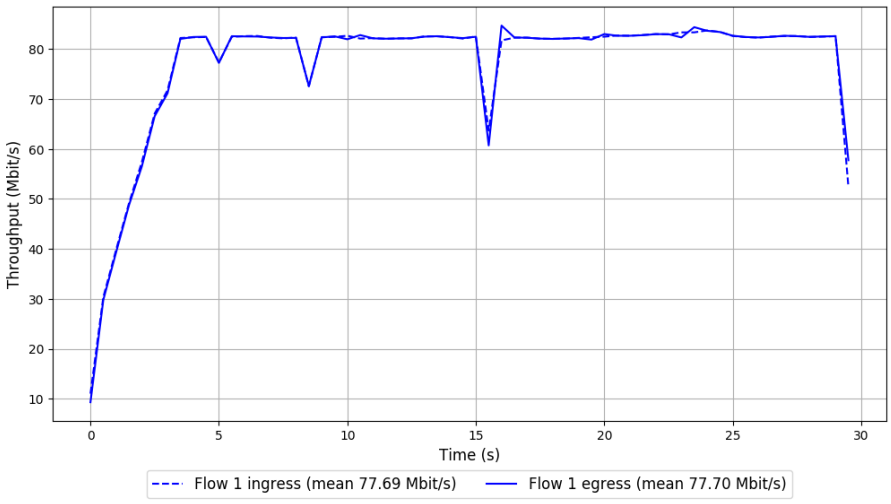



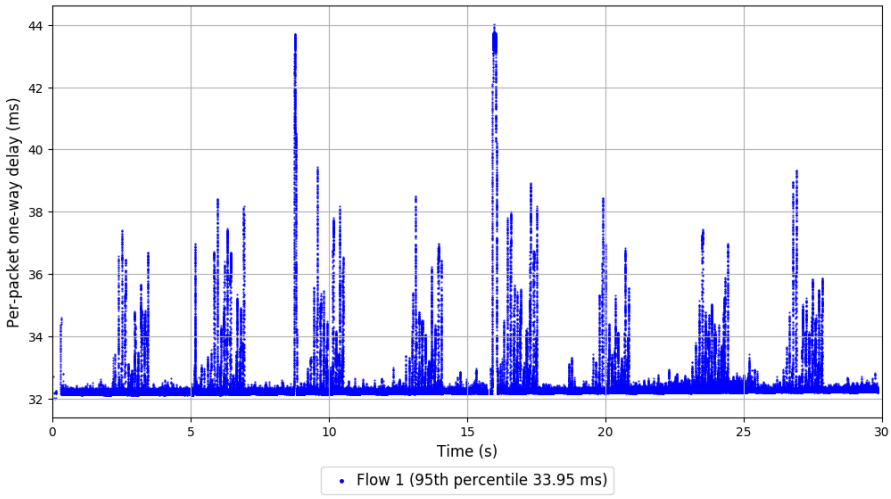
```
Run 5: Statistics of QUIC Cubic

Start at: 2017-11-15 21:28:07
End at: 2017-11-15 21:28:37
Local clock offset: -15.778 ms
Remote clock offset: -17.038 ms

# Below is generated by plot.py at 2017-11-16 02:08:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.70 Mbit/s
95th percentile per-packet one-way delay: 33.952 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 77.70 Mbit/s
95th percentile per-packet one-way delay: 33.952 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link



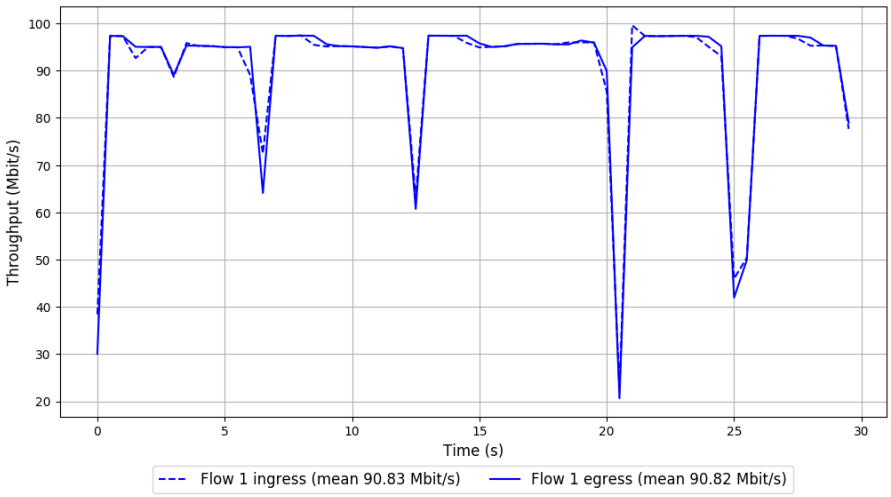



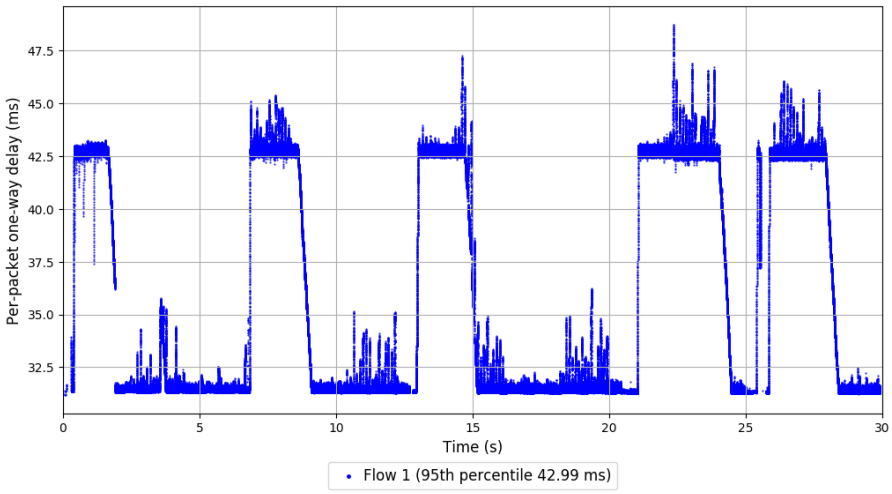
```
Run 6: Statistics of QUIC Cubic

Start at: 2017-11-15 21:45:46
End at: 2017-11-15 21:46:16
Local clock offset: -16.837 ms
Remote clock offset: -18.249 ms

# Below is generated by plot.py at 2017-11-16 02:08:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.82 Mbit/s
95th percentile per-packet one-way delay: 42.992 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 90.82 Mbit/s
95th percentile per-packet one-way delay: 42.992 ms
Loss rate: 0.09%
```

Run 6: Report of QUIC Cubic — Data Link



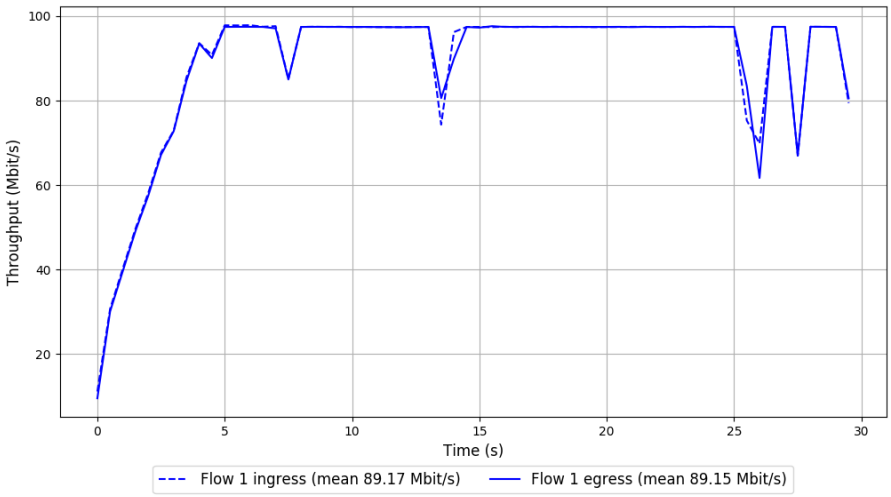



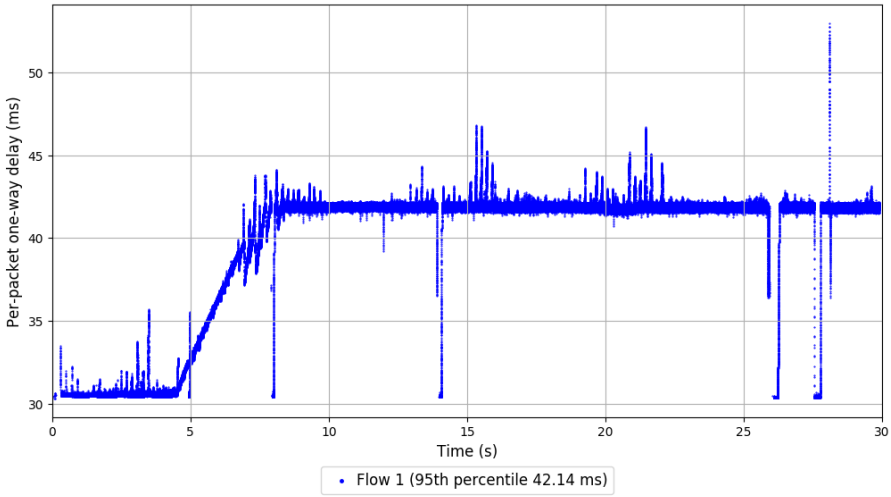
```
Run 7: Statistics of QUIC Cubic

Start at: 2017-11-15 22:03:13
End at: 2017-11-15 22:03:43
Local clock offset: -13.967 ms
Remote clock offset: -19.176 ms

# Below is generated by plot.py at 2017-11-16 02:08:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.15 Mbit/s
95th percentile per-packet one-way delay: 42.140 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 89.15 Mbit/s
95th percentile per-packet one-way delay: 42.140 ms
Loss rate: 0.13%
```

Run 7: Report of QUIC Cubic — Data Link



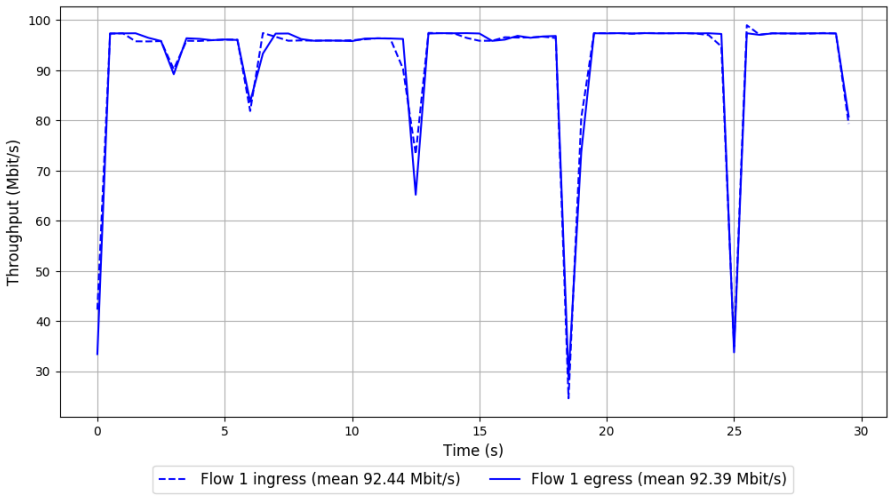



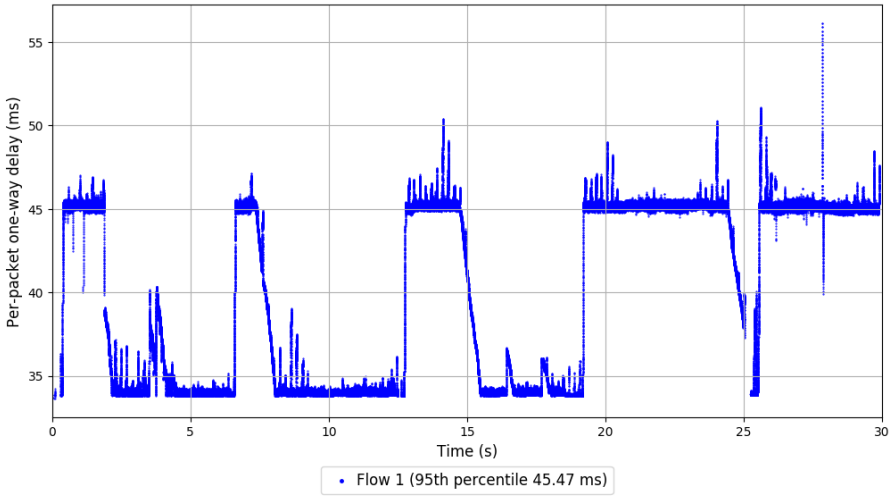
```
Run 8: Statistics of QUIC Cubic

Start at: 2017-11-15 22:20:59
End at: 2017-11-15 22:21:29
Local clock offset: -10.713 ms
Remote clock offset: -20.406 ms

# Below is generated by plot.py at 2017-11-16 02:08:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.39 Mbit/s
95th percentile per-packet one-way delay: 45.473 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 92.39 Mbit/s
95th percentile per-packet one-way delay: 45.473 ms
Loss rate: 0.13%
```

Run 8: Report of QUIC Cubic — Data Link



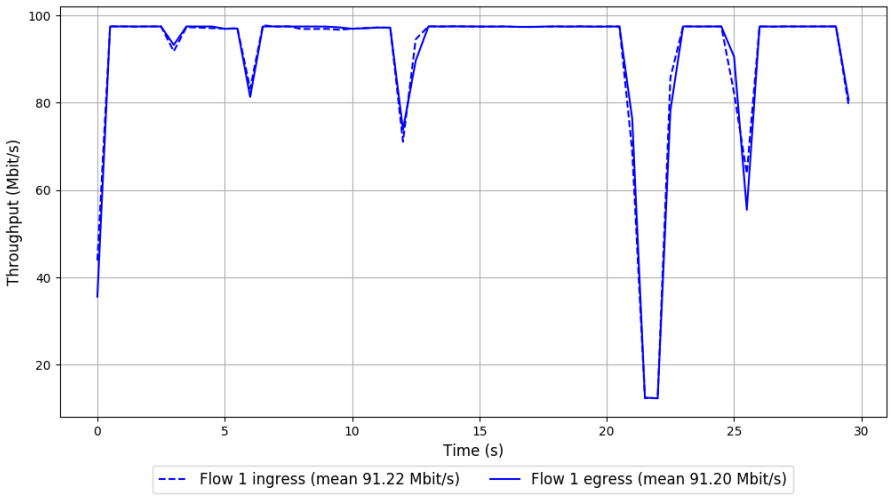



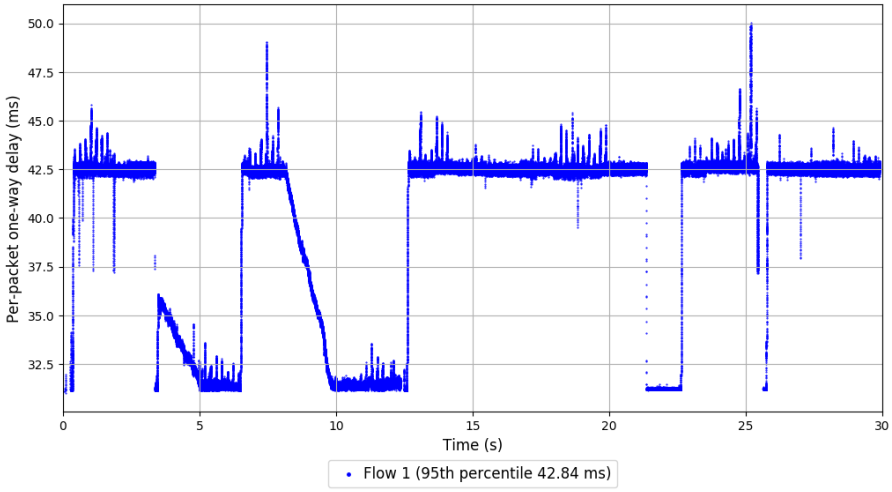
```
Run 9: Statistics of QUIC Cubic

Start at: 2017-11-15 22:38:15
End at: 2017-11-15 22:38:45
Local clock offset: -12.704 ms
Remote clock offset: -18.28 ms

# Below is generated by plot.py at 2017-11-16 02:08:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.20 Mbit/s
95th percentile per-packet one-way delay: 42.837 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 91.20 Mbit/s
95th percentile per-packet one-way delay: 42.837 ms
Loss rate: 0.13%
```

Run 9: Report of QUIC Cubic — Data Link



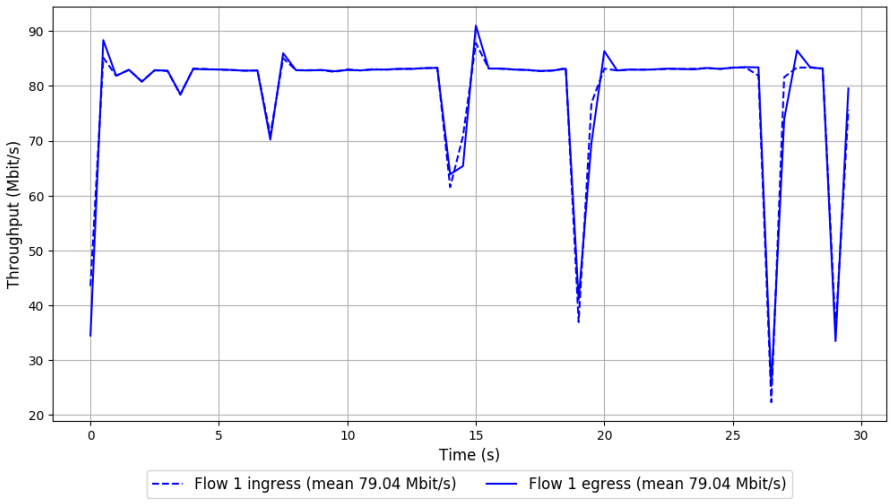



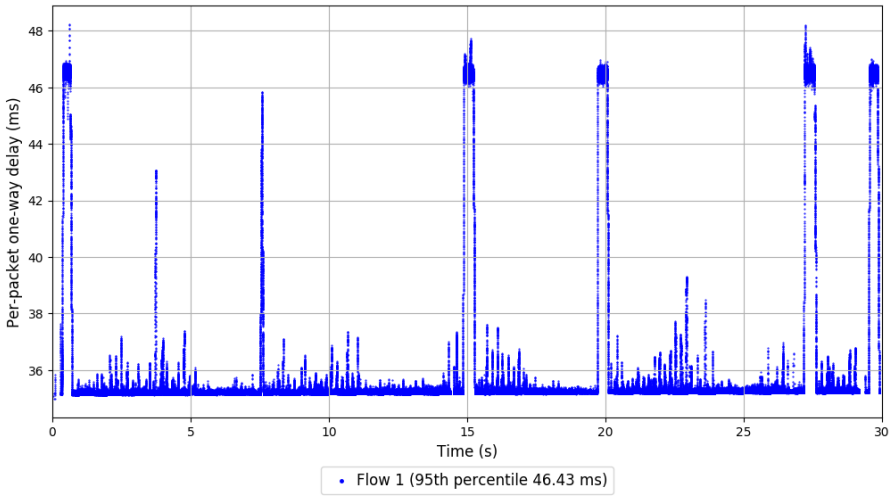
```
Run 10: Statistics of QUIC Cubic

Start at: 2017-11-15 22:55:35
End at: 2017-11-15 22:56:05
Local clock offset: -16.456 ms
Remote clock offset: -23.978 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.04 Mbit/s
95th percentile per-packet one-way delay: 46.431 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 79.04 Mbit/s
95th percentile per-packet one-way delay: 46.431 ms
Loss rate: 0.09%
```

Run 10: Report of QUIC Cubic — Data Link

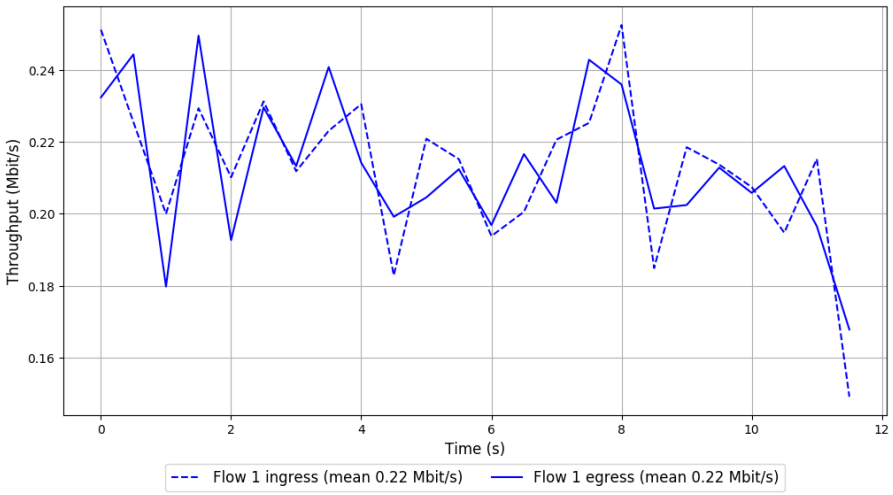


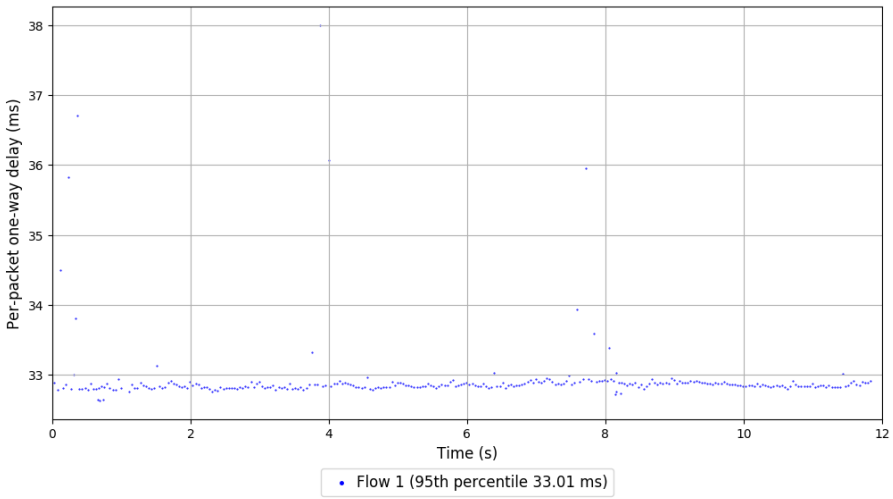



```
Run 1: Statistics of SCReAM

Start at: 2017-11-15 20:29:27
End at: 2017-11-15 20:29:58
Local clock offset: -10.751 ms
Remote clock offset: -15.39 ms
```

Run 1: Report of SCReAM — Data Link



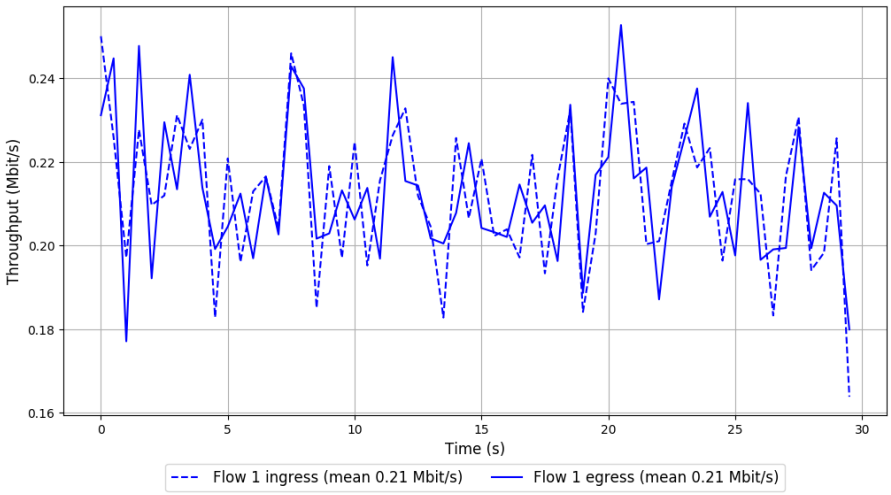



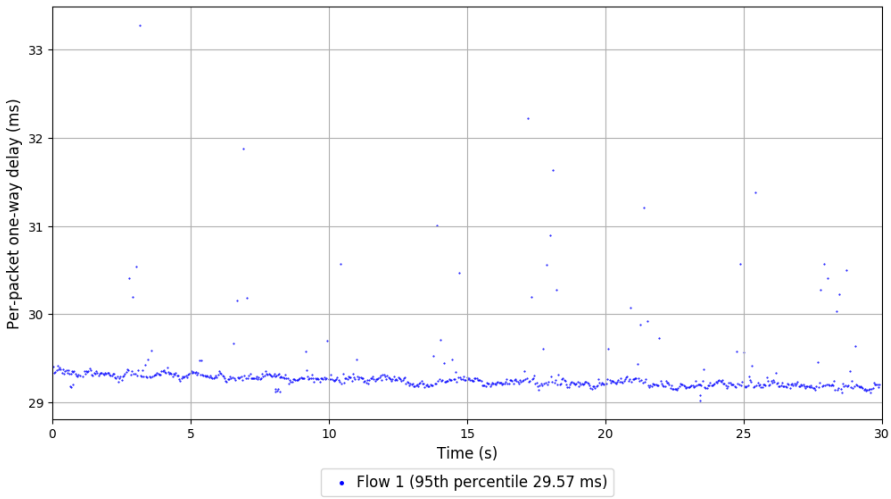
```
Run 2: Statistics of SCReAM

Start at: 2017-11-15 20:47:09
End at: 2017-11-15 20:47:39
Local clock offset: -9.749 ms
Remote clock offset: -14.566 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 29.571 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 29.571 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link



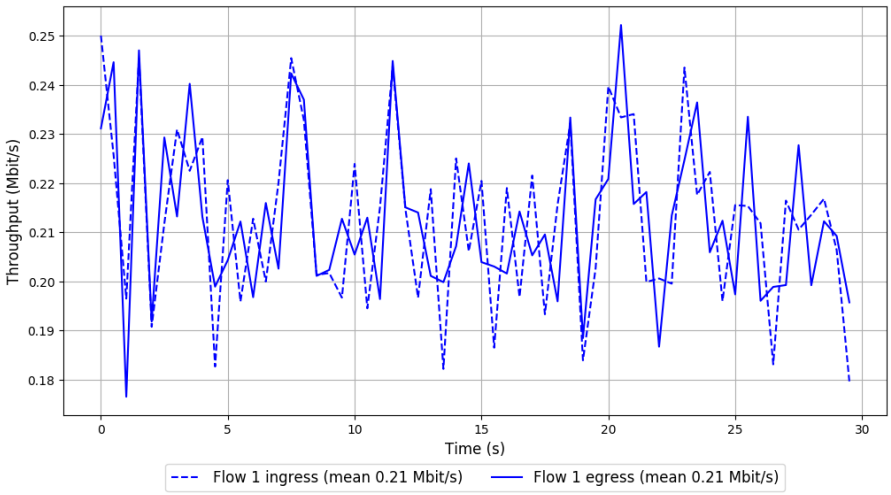



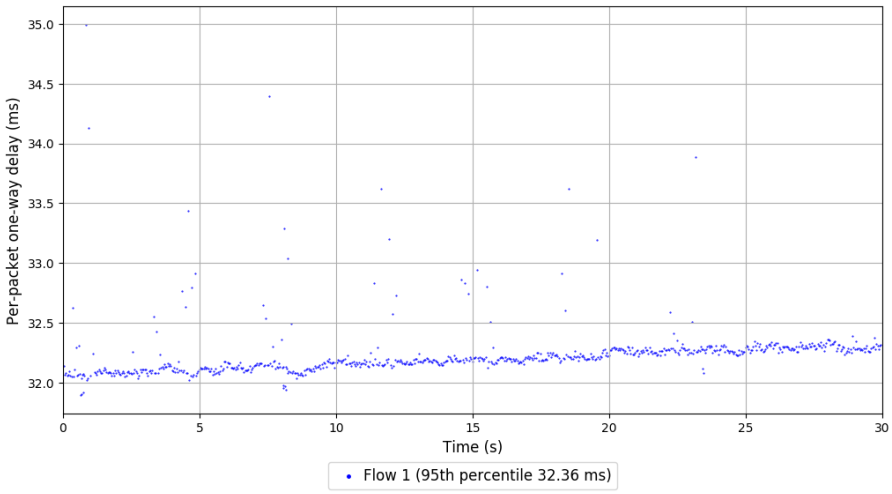
```
Run 3: Statistics of SCReAM

Start at: 2017-11-15 21:04:36
End at: 2017-11-15 21:05:06
Local clock offset: -12.271 ms
Remote clock offset: -15.682 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 32.360 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 32.360 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link



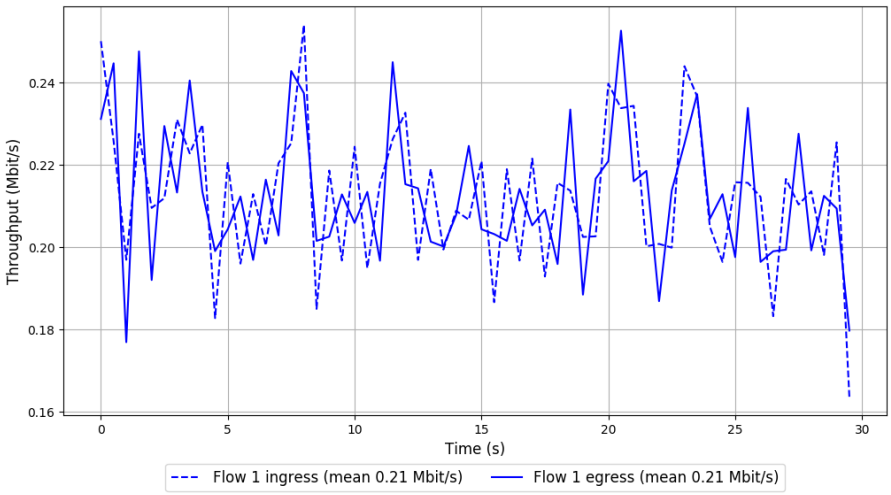



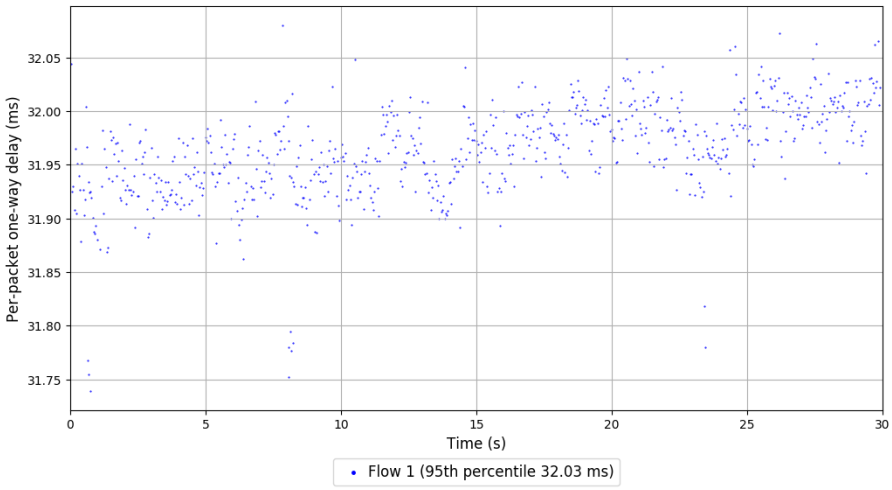
```
Run 4: Statistics of SCReAM

Start at: 2017-11-15 21:21:59
End at: 2017-11-15 21:22:29
Local clock offset: -13.818 ms
Remote clock offset: -15.793 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 32.026 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 32.026 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link



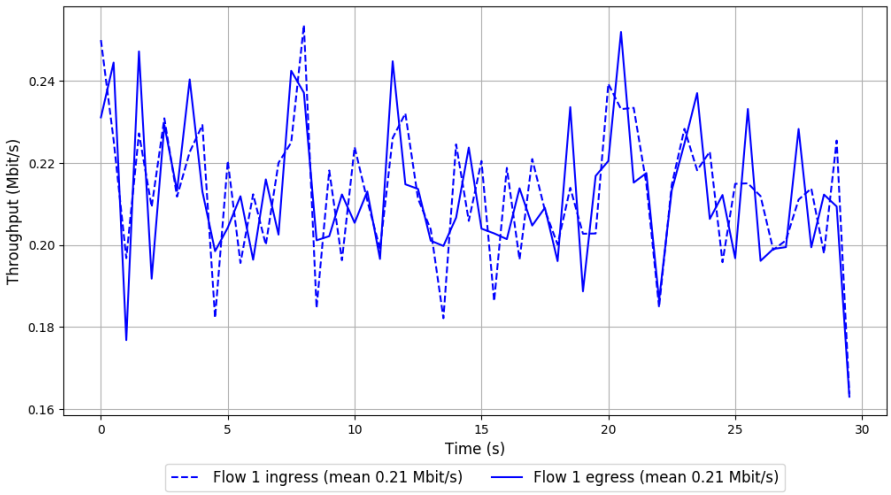



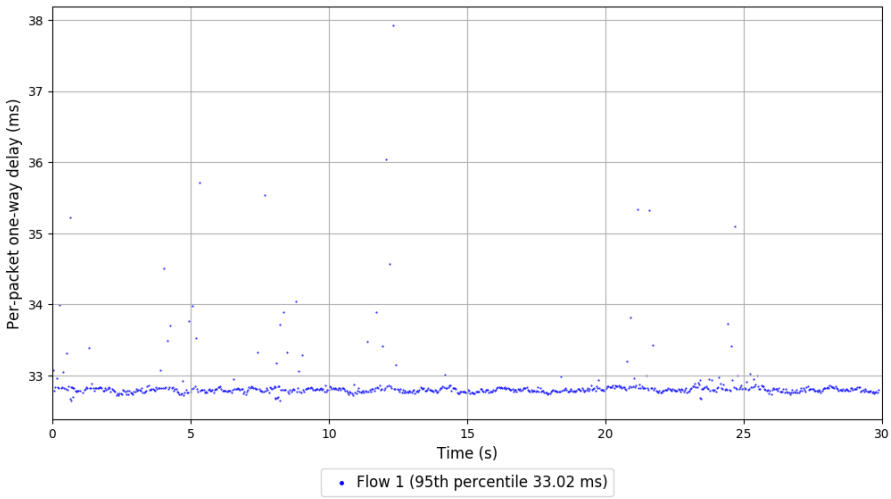
```
Run 5: Statistics of SCReAM

Start at: 2017-11-15 21:39:40
End at: 2017-11-15 21:40:10
Local clock offset: -15.296 ms
Remote clock offset: -17.511 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.019 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.019 ms
Loss rate: 0.13%
```

Run 5: Report of SCReAM — Data Link



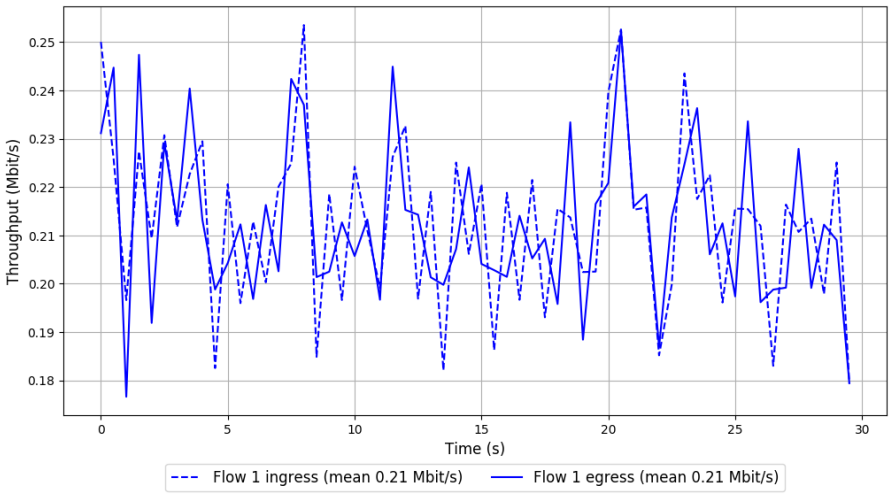



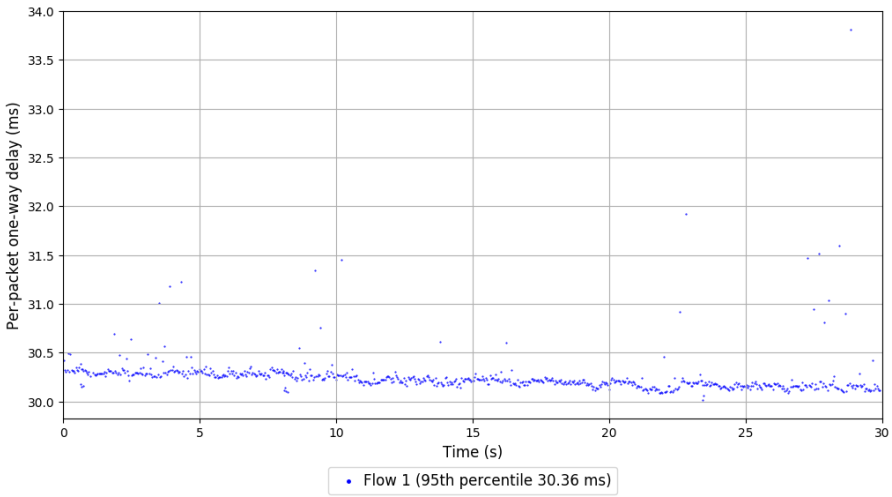
```
Run 6: Statistics of SCReAM

Start at: 2017-11-15 21:57:17
End at: 2017-11-15 21:57:47
Local clock offset: -14.766 ms
Remote clock offset: -18.221 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.356 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.356 ms
Loss rate: 0.13%
```

Run 6: Report of SCReAM — Data Link

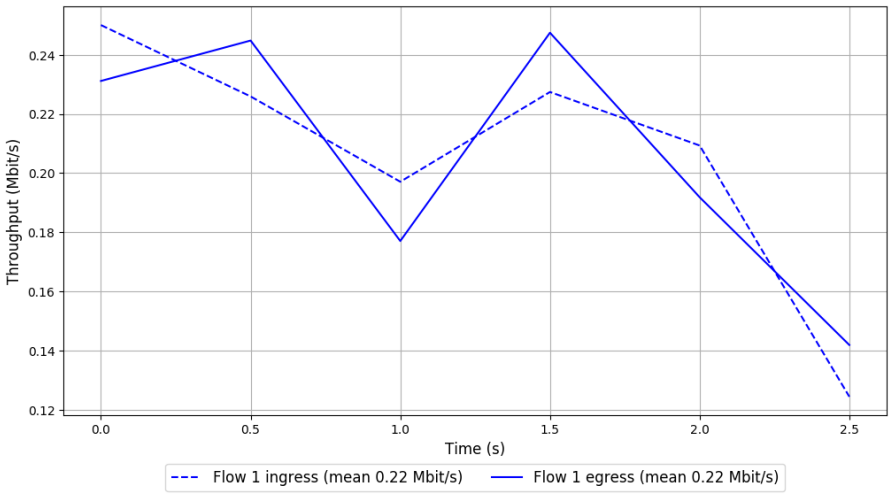


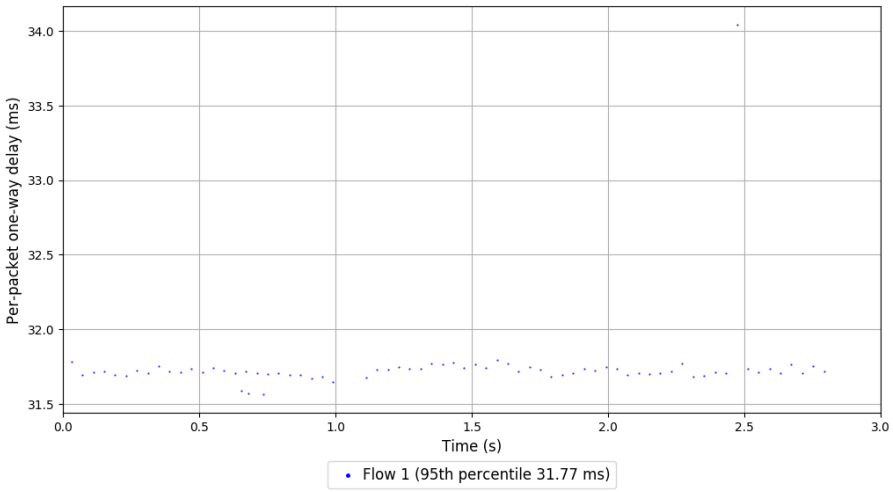



```
Run 7: Statistics of SCReAM

Start at: 2017-11-15 22:14:50
End at: 2017-11-15 22:15:20
Local clock offset: -11.546 ms
Remote clock offset: -18.882 ms
```

Run 7: Report of SCReAM — Data Link



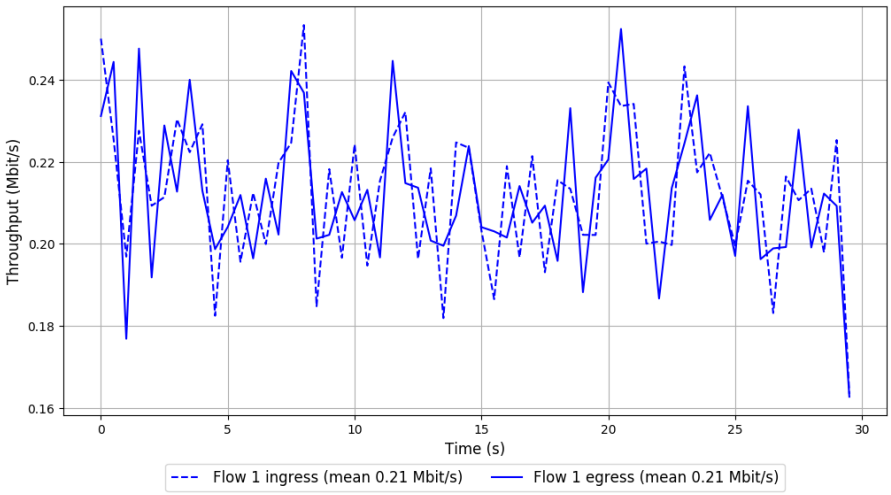



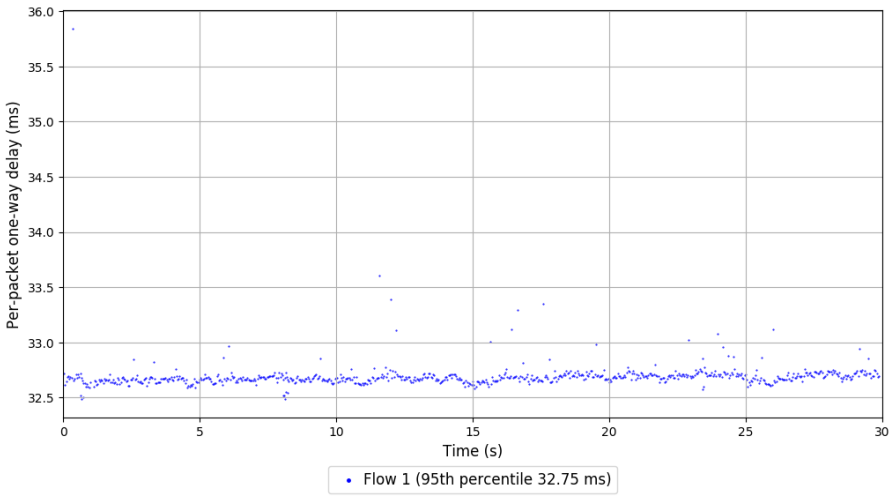
```
Run 8: Statistics of SCReAM

Start at: 2017-11-15 22:32:21
End at: 2017-11-15 22:32:51
Local clock offset: -12.801 ms
Remote clock offset: -20.135 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 32.751 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 32.751 ms
Loss rate: 0.13%
```

Run 8: Report of SCReAM — Data Link



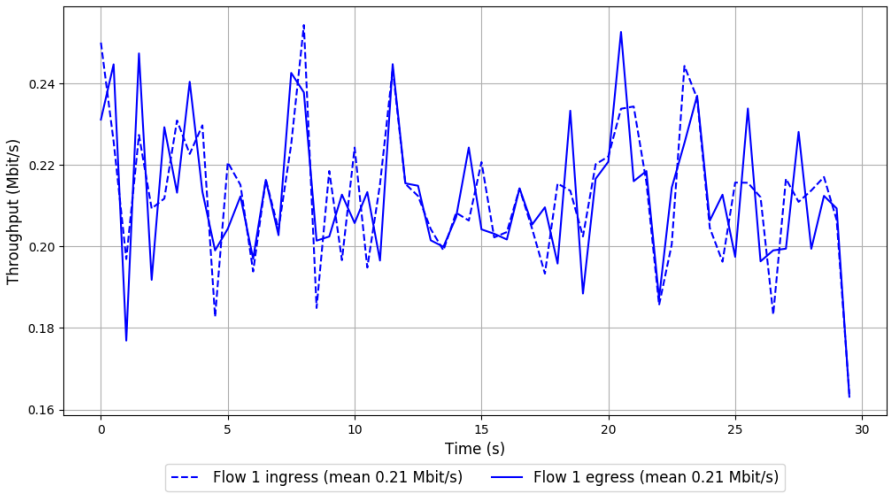



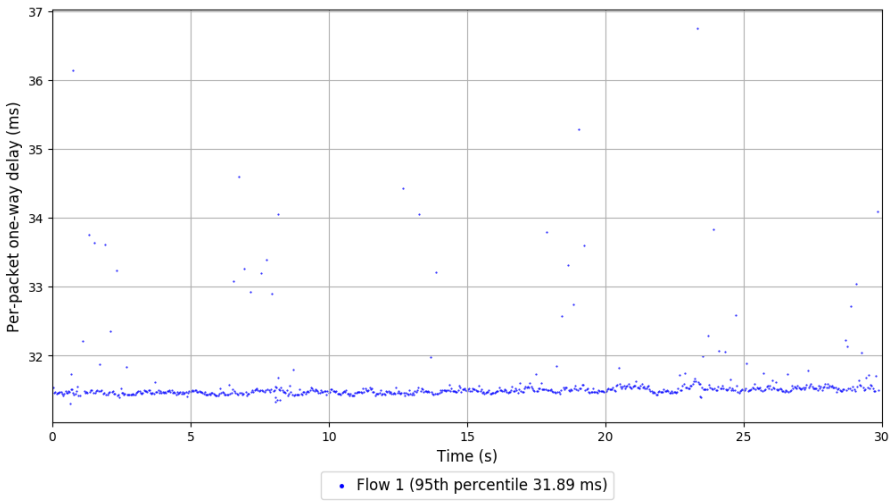
```
Run 9: Statistics of SCReAM

Start at: 2017-11-15 22:49:32
End at: 2017-11-15 22:50:02
Local clock offset: -14.087 ms
Remote clock offset: -18.923 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 31.887 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 31.887 ms
Loss rate: 0.13%
```

Run 9: Report of SCReAM — Data Link



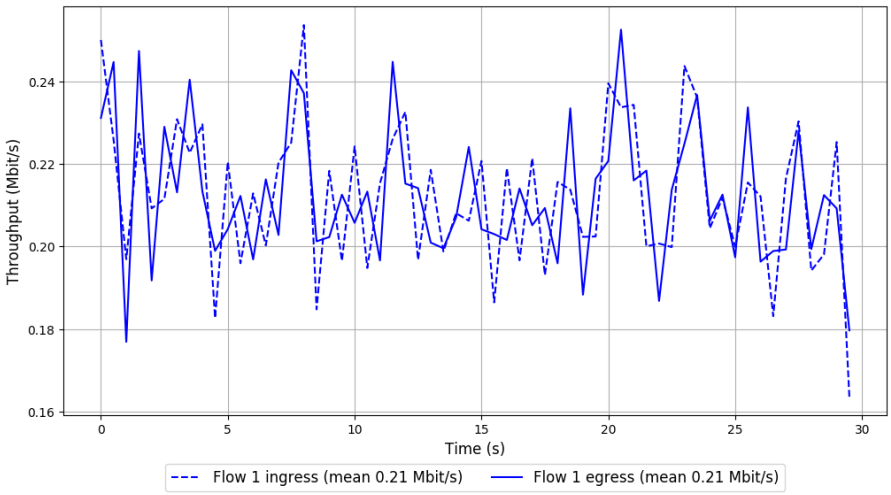



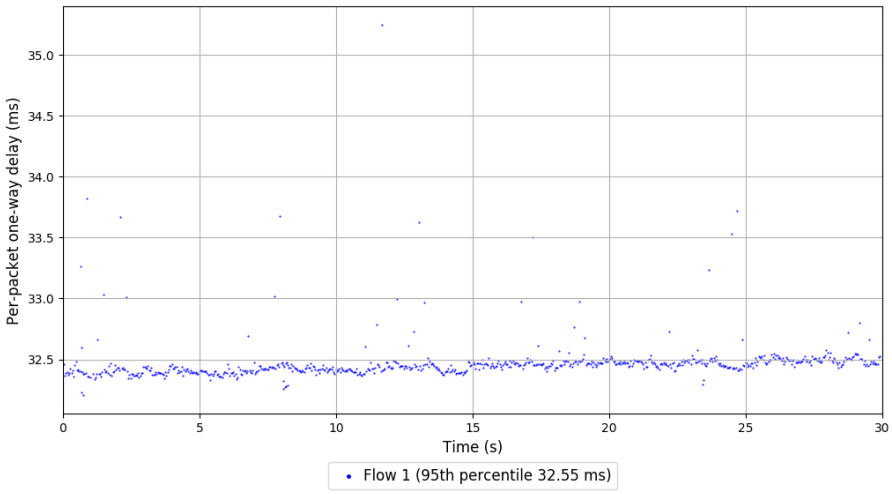
```
Run 10: Statistics of SCReAM

Start at: 2017-11-15 23:07:00
End at: 2017-11-15 23:07:30
Local clock offset: -17.006 ms
Remote clock offset: -19.831 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 32.547 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 32.547 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link



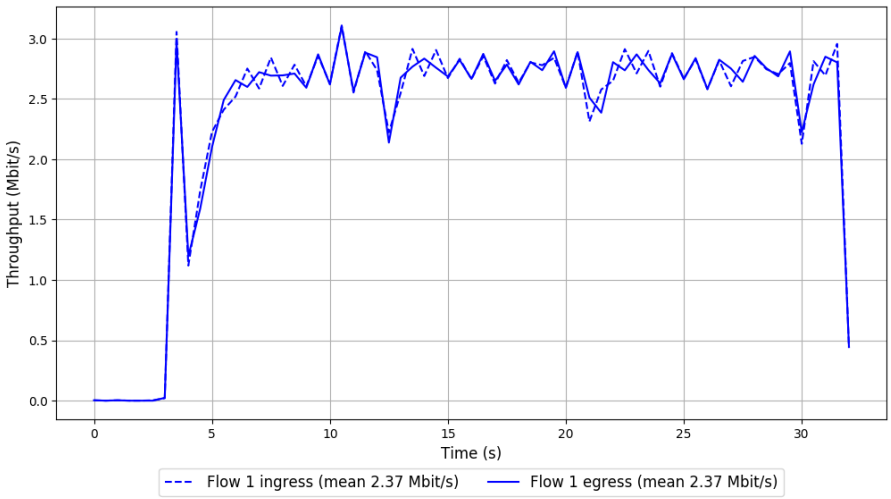



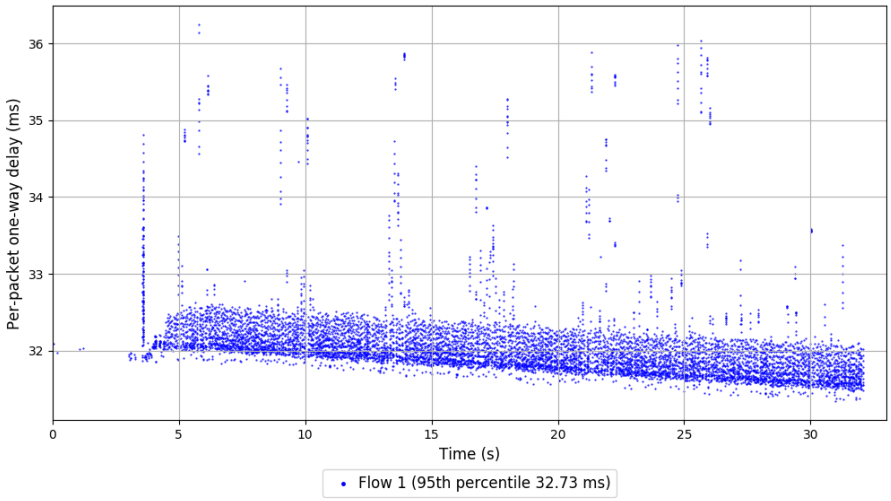
```
Run 1: Statistics of WebRTC media

Start at: 2017-11-15 20:13:04
End at: 2017-11-15 20:13:34
Local clock offset: -5.886 ms
Remote clock offset: -14.412 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 32.734 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 32.734 ms
Loss rate: 0.14%
```

Run 1: Report of WebRTC media — Data Link



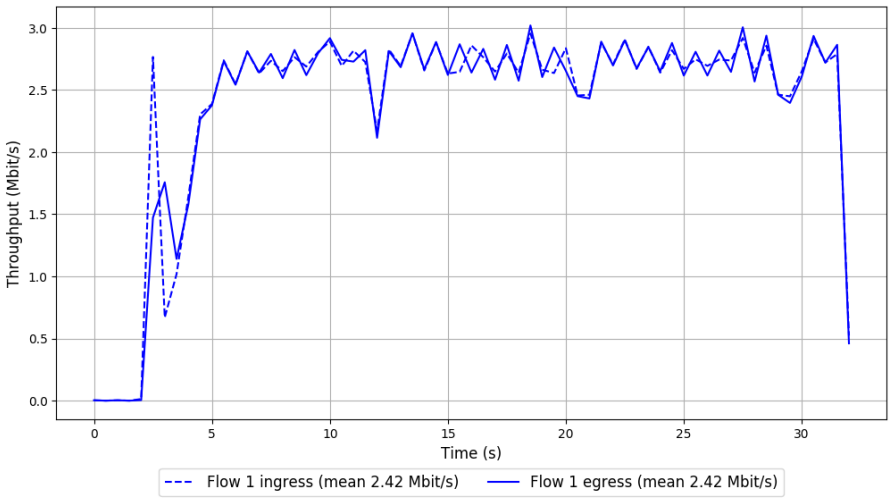



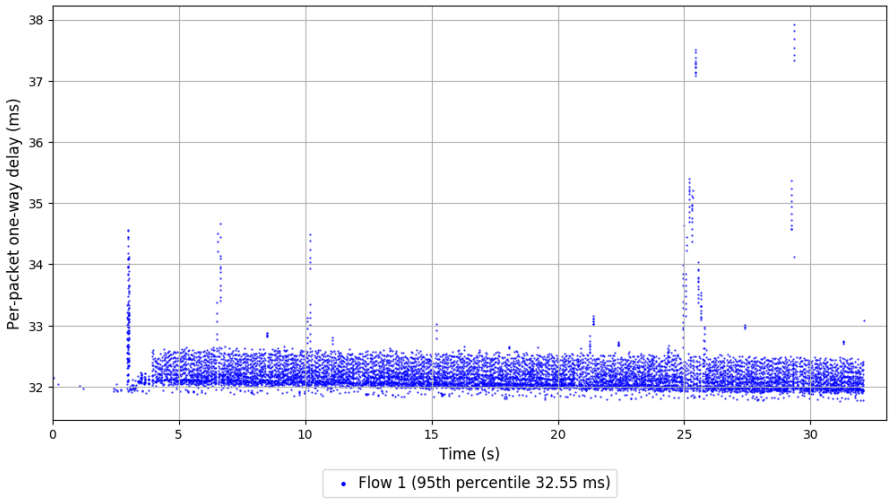
```
Run 2: Statistics of WebRTC media

Start at: 2017-11-15 20:31:46
End at: 2017-11-15 20:32:16
Local clock offset: -9.511 ms
Remote clock offset: -14.333 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 32.548 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 32.548 ms
Loss rate: 0.13%
```

Run 2: Report of WebRTC media — Data Link



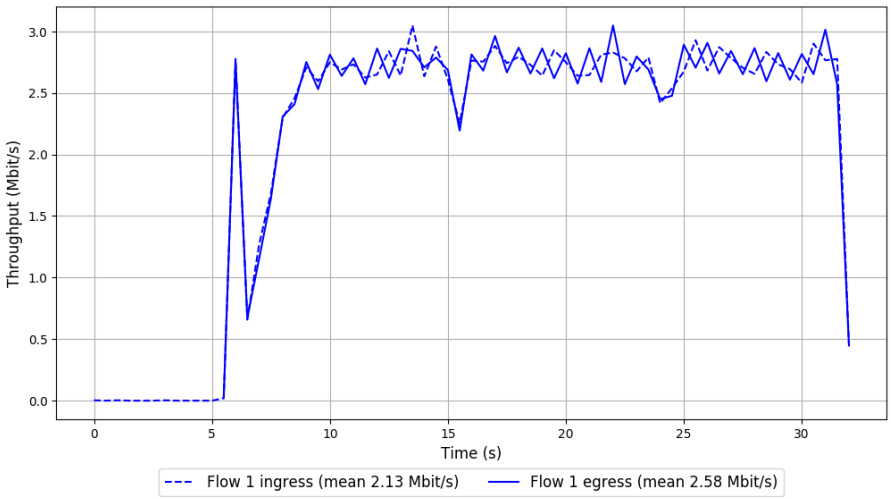



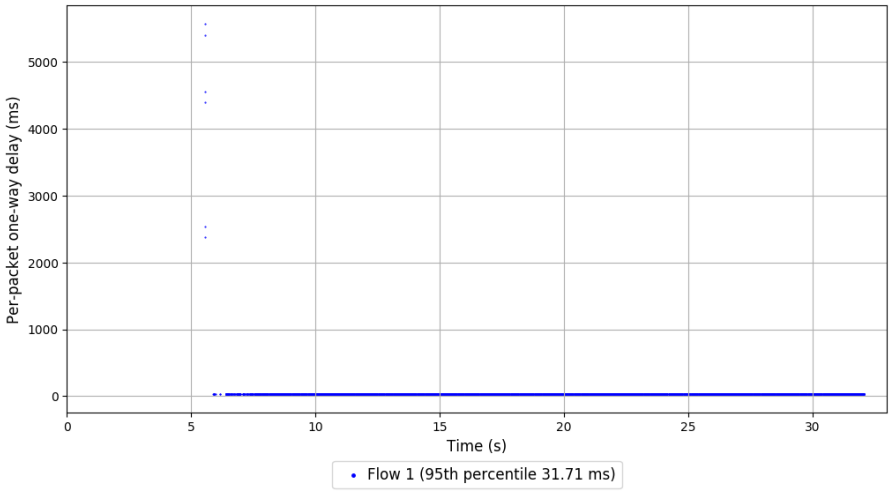
```
Run 3: Statistics of WebRTC media

Start at: 2017-11-15 20:49:30
End at: 2017-11-15 20:50:00
Local clock offset: -7.852 ms
Remote clock offset: -14.532 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 31.712 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 31.712 ms
Loss rate: 0.15%
```

Run 3: Report of WebRTC media — Data Link

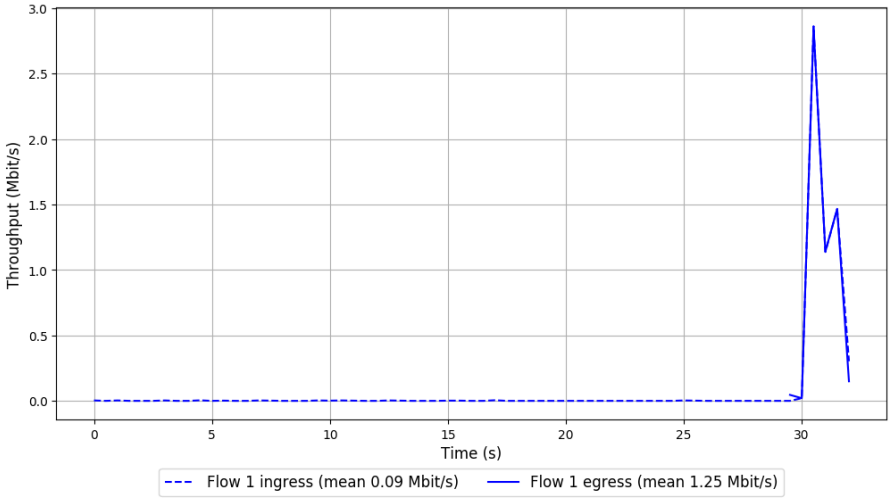


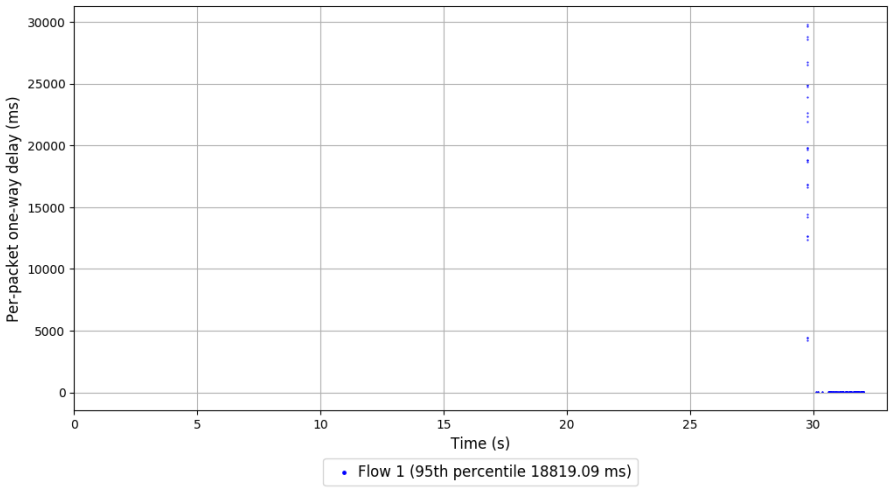



```
Run 4: Statistics of WebRTC media

Start at: 2017-11-15 21:06:59
End at: 2017-11-15 21:07:29
Local clock offset: -16.027 ms
Remote clock offset: -16.076 ms
```

Run 4: Report of WebRTC media — Data Link



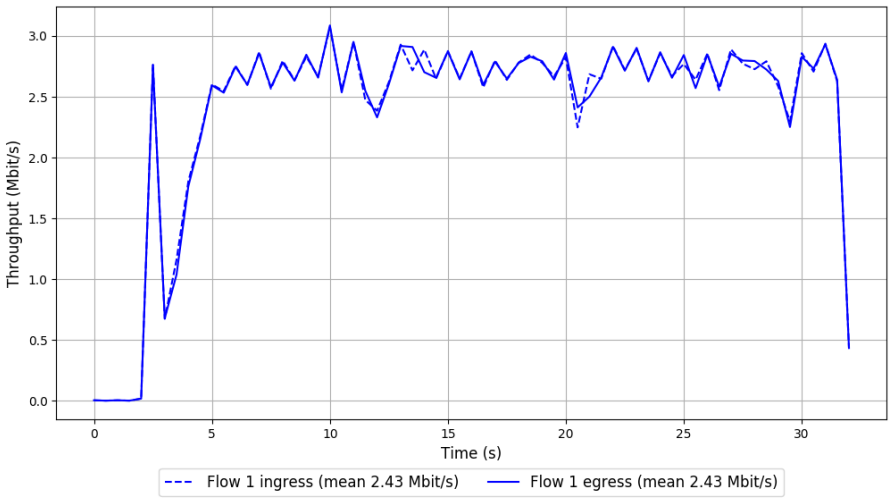



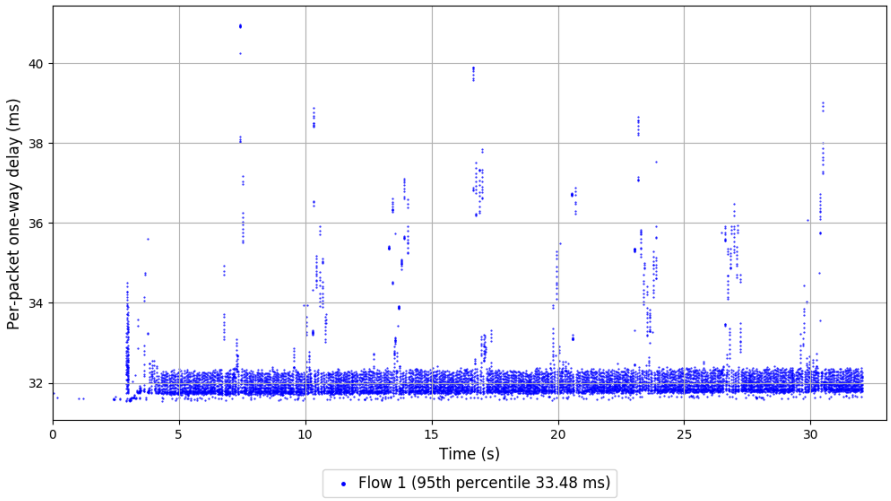
```
Run 5: Statistics of WebRTC media

Start at: 2017-11-15 21:24:20
End at: 2017-11-15 21:24:50
Local clock offset: -16.741 ms
Remote clock offset: -18.146 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 33.484 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 33.484 ms
Loss rate: 0.14%
```

Run 5: Report of WebRTC media — Data Link



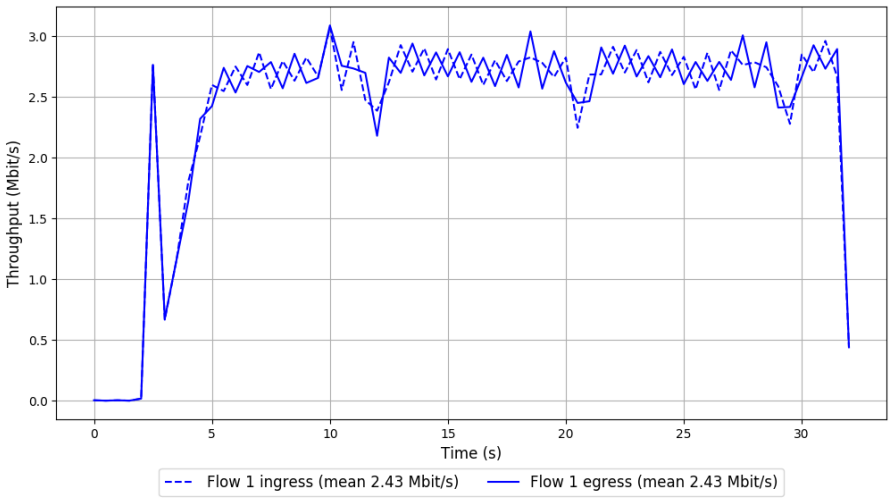



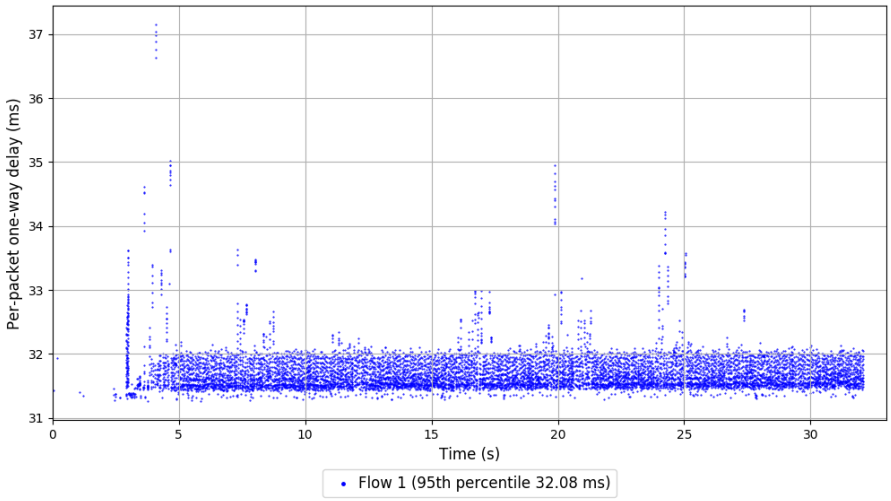
```
Run 6: Statistics of WebRTC media

Start at: 2017-11-15 21:42:05
End at: 2017-11-15 21:42:35
Local clock offset: -23.274 ms
Remote clock offset: -24.086 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 32.083 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 32.083 ms
Loss rate: 0.00%
```

Run 6: Report of WebRTC media — Data Link



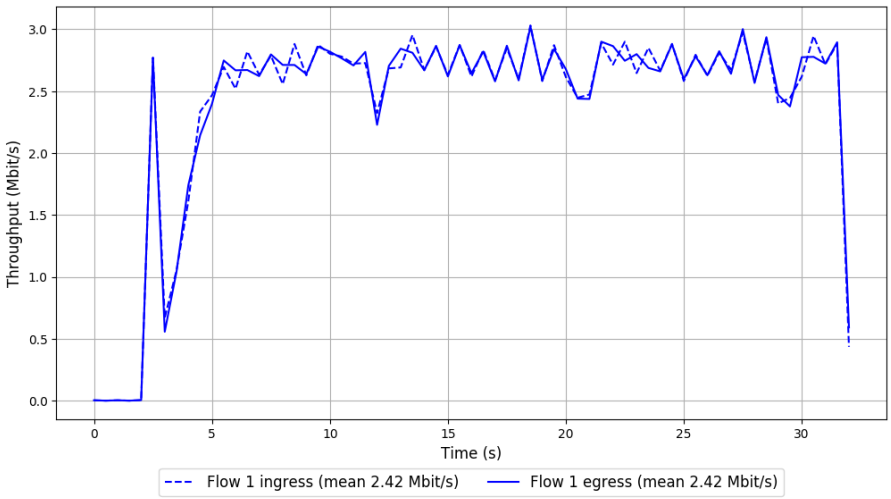



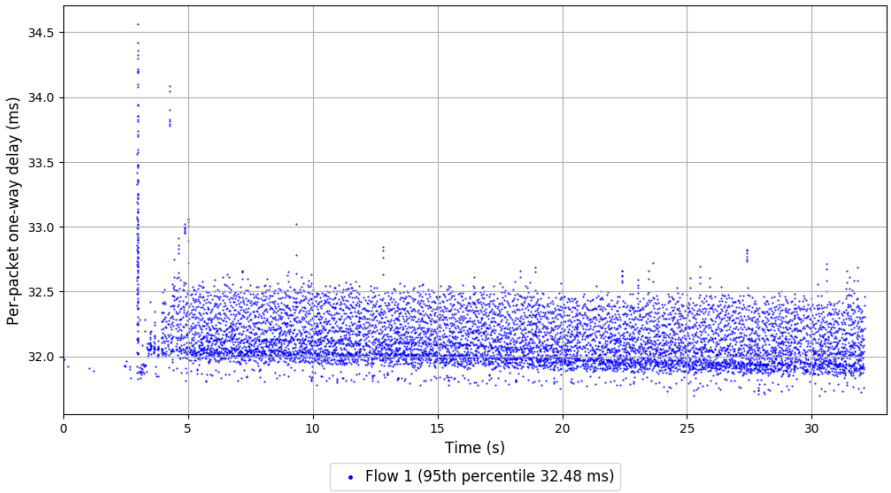
```
Run 7: Statistics of WebRTC media

Start at: 2017-11-15 21:59:40
End at: 2017-11-15 22:00:10
Local clock offset: -12.118 ms
Remote clock offset: -18.154 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 32.477 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 32.477 ms
Loss rate: 0.04%
```

Run 7: Report of WebRTC media — Data Link



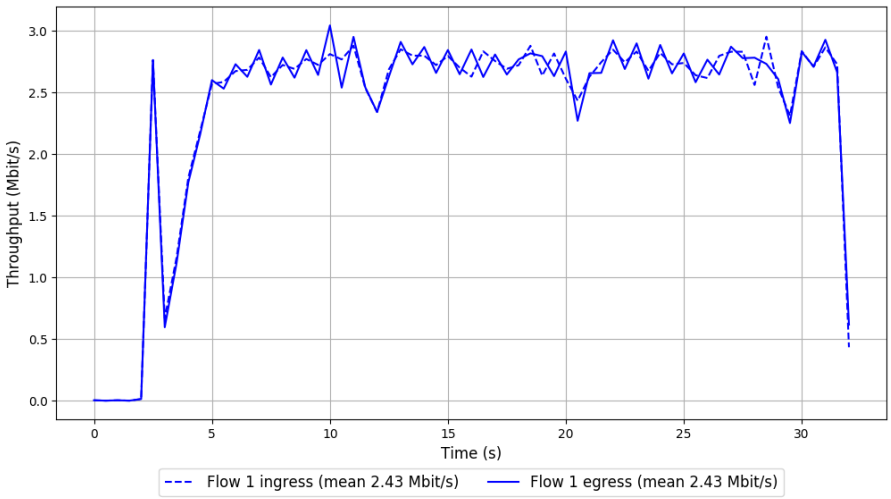



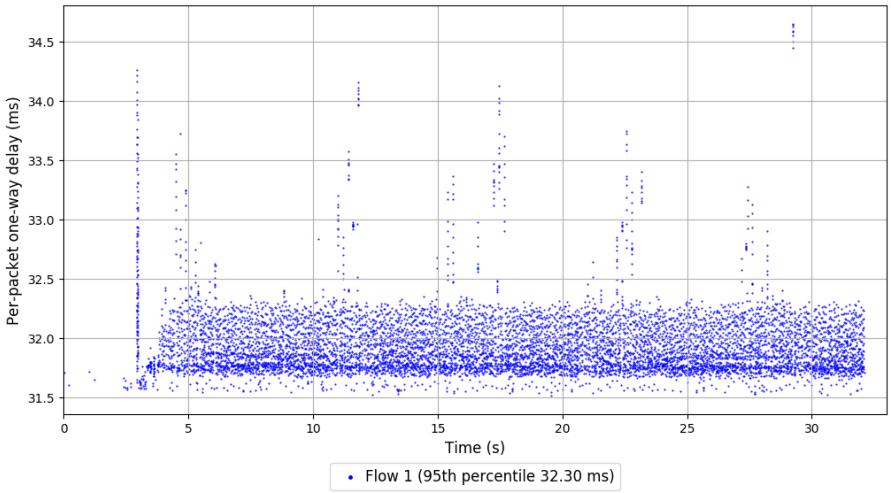
```
Run 8: Statistics of WebRTC media

Start at: 2017-11-15 22:17:11
End at: 2017-11-15 22:17:41
Local clock offset: -11.857 ms
Remote clock offset: -19.413 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 32.300 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 32.300 ms
Loss rate: 0.02%
```

Run 8: Report of WebRTC media — Data Link



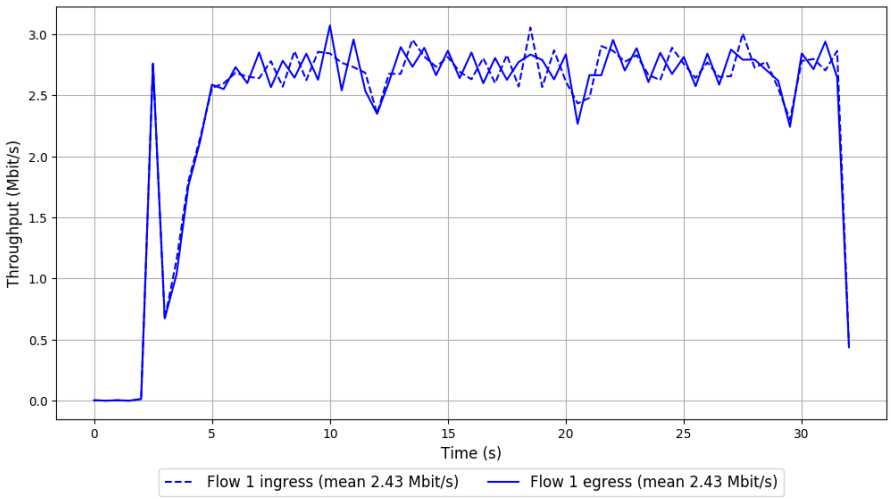



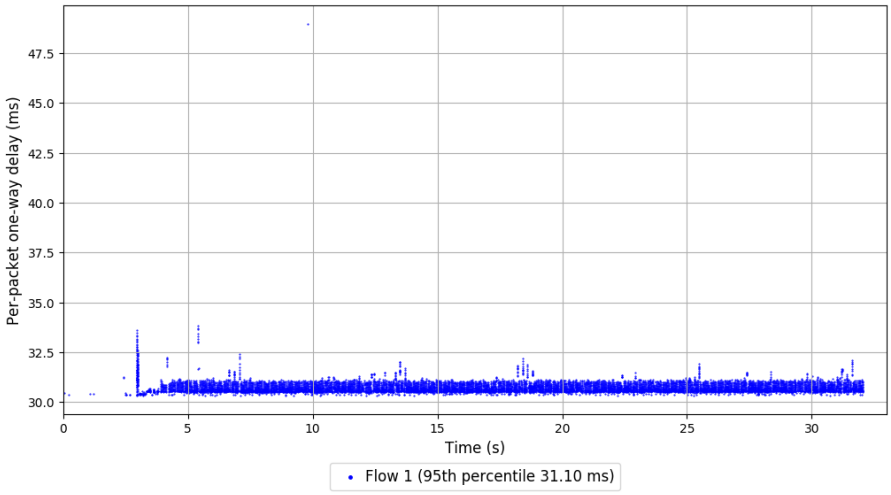
```
Run 9: Statistics of WebRTC media

Start at: 2017-11-15 22:34:40
End at: 2017-11-15 22:35:10
Local clock offset: -14.05 ms
Remote clock offset: -19.192 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 31.098 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 31.098 ms
Loss rate: 0.15%
```

Run 9: Report of WebRTC media — Data Link



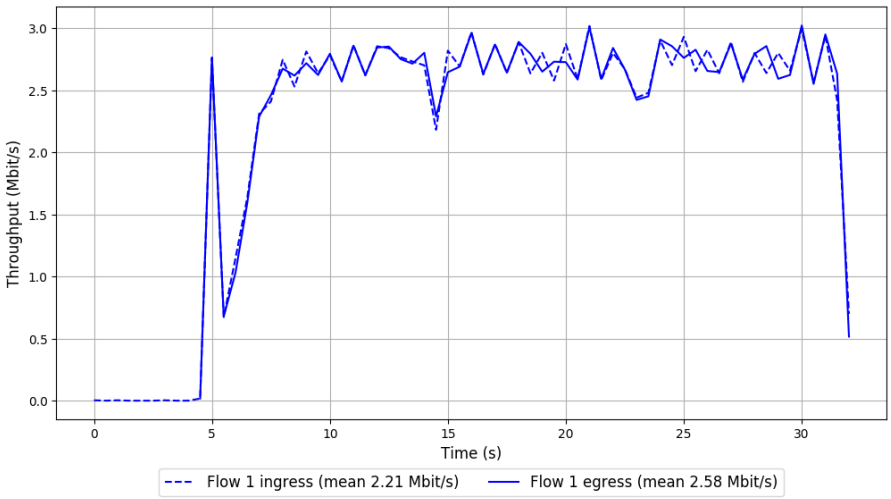



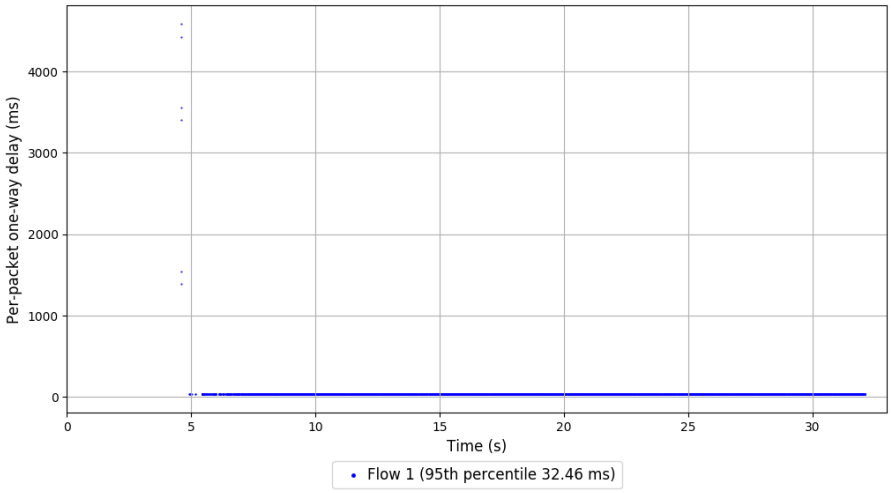
```
Run 10: Statistics of WebRTC media

Start at: 2017-11-15 22:51:55
End at: 2017-11-15 22:52:25
Local clock offset: -15.055 ms
Remote clock offset: -19.907 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 32.457 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 32.457 ms
Loss rate: 0.13%
```

Run 10: Report of WebRTC media — Data Link



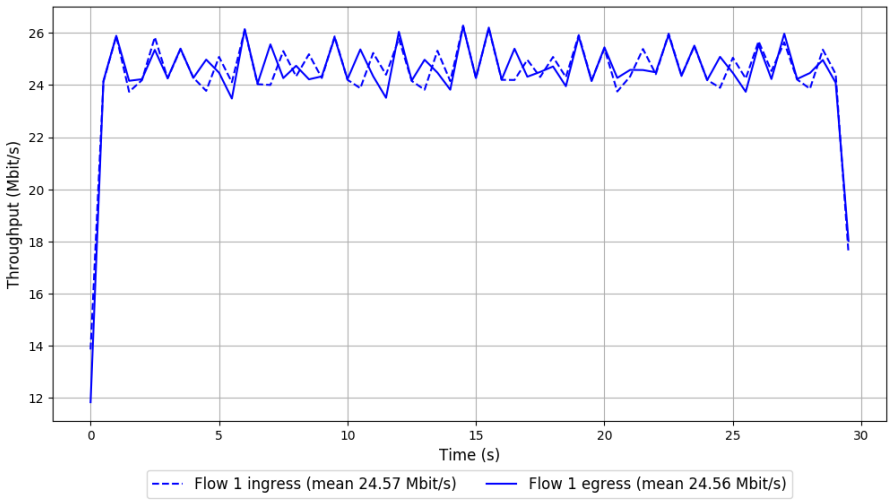



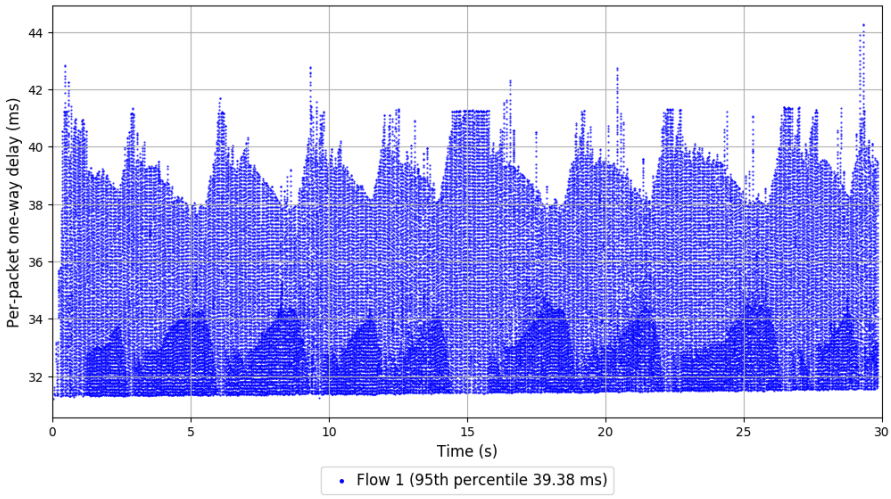
```
Run 1: Statistics of Sprout

Start at: 2017-11-15 20:19:49
End at: 2017-11-15 20:20:19
Local clock offset: -4.204 ms
Remote clock offset: -13.373 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.56 Mbit/s
95th percentile per-packet one-way delay: 39.377 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 24.56 Mbit/s
95th percentile per-packet one-way delay: 39.377 ms
Loss rate: 0.11%
```

Run 1: Report of Sprout — Data Link



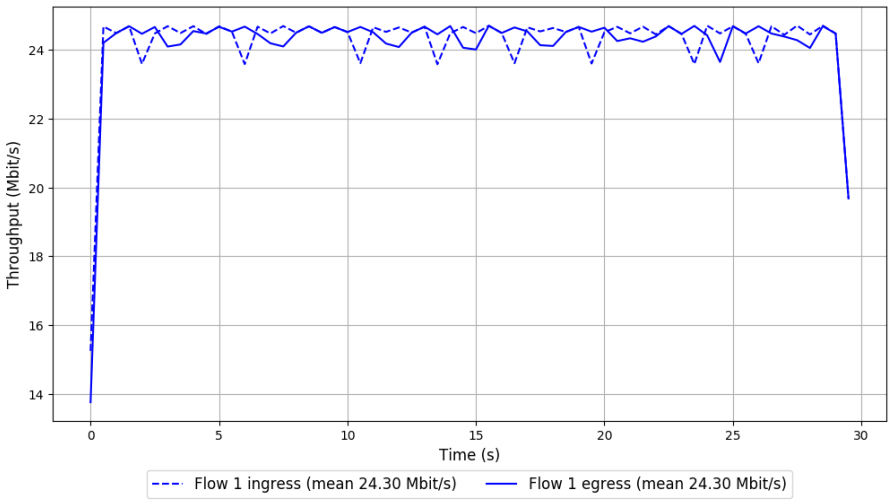



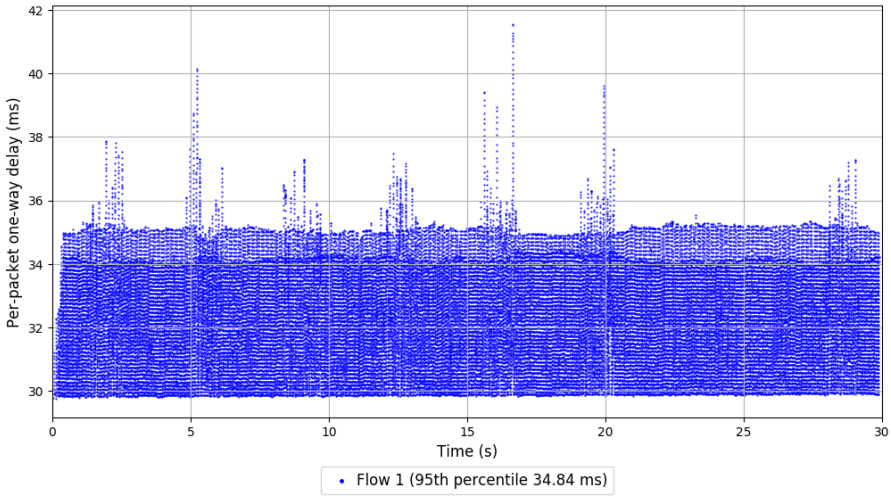
```
Run 2: Statistics of Sprout

Start at: 2017-11-15 20:37:43
End at: 2017-11-15 20:38:13
Local clock offset: -10.833 ms
Remote clock offset: -13.488 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.30 Mbit/s
95th percentile per-packet one-way delay: 34.841 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.30 Mbit/s
95th percentile per-packet one-way delay: 34.841 ms
Loss rate: 0.14%
```

Run 2: Report of Sprout — Data Link



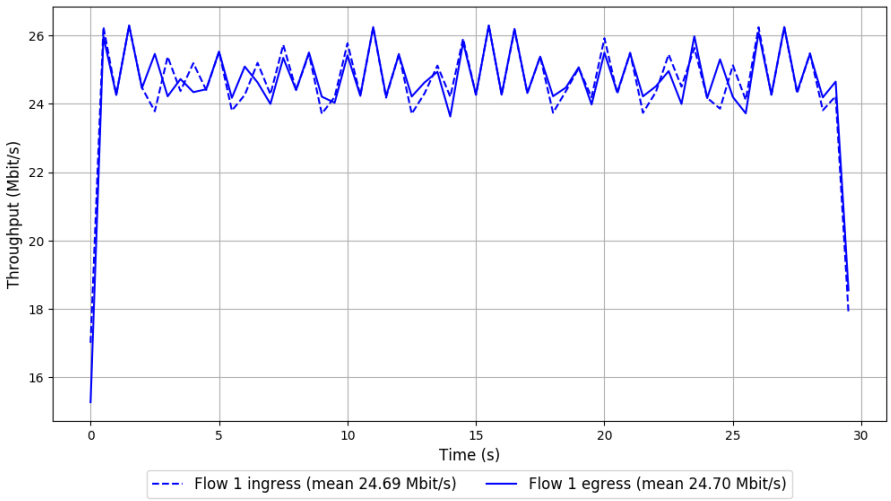



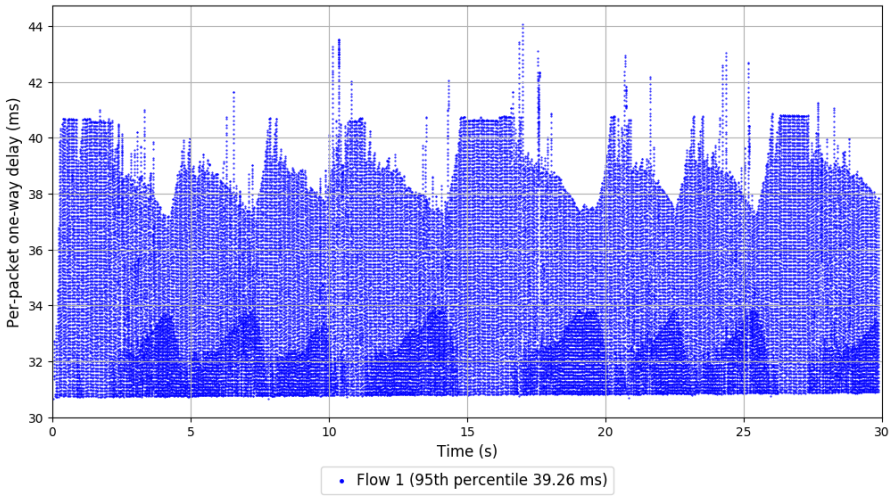
```
Run 3: Statistics of Sprout

Start at: 2017-11-15 20:55:40
End at: 2017-11-15 20:56:10
Local clock offset: -10.023 ms
Remote clock offset: -15.838 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 39.264 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 39.264 ms
Loss rate: 0.03%
```

Run 3: Report of Sprout — Data Link



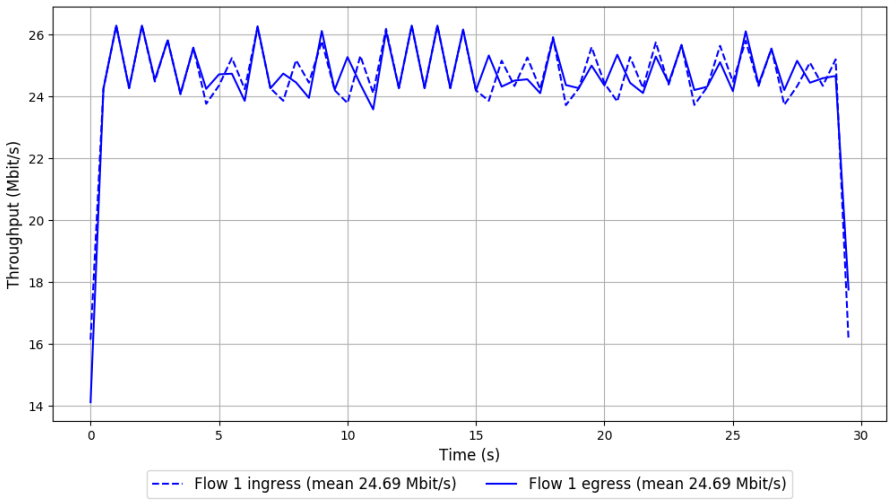



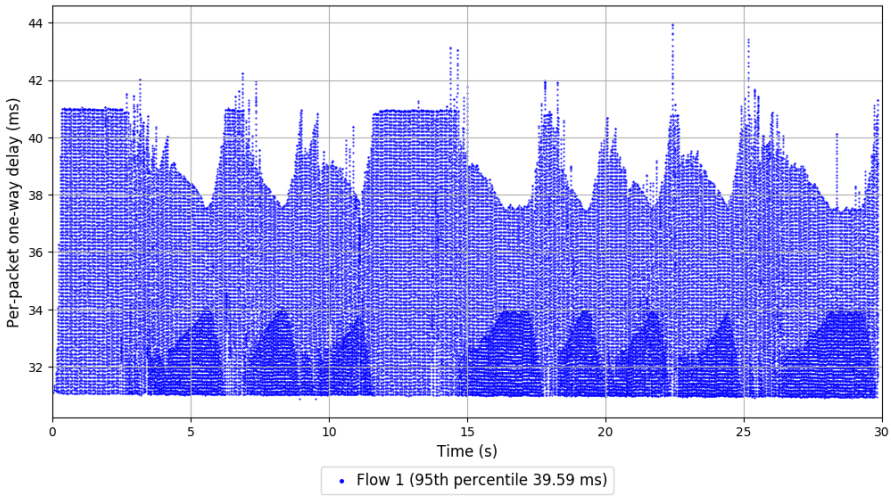
```
Run 4: Statistics of Sprout

Start at: 2017-11-15 21:13:03
End at: 2017-11-15 21:13:33
Local clock offset: -14.204 ms
Remote clock offset: -14.977 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.69 Mbit/s
95th percentile per-packet one-way delay: 39.585 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.69 Mbit/s
95th percentile per-packet one-way delay: 39.585 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link



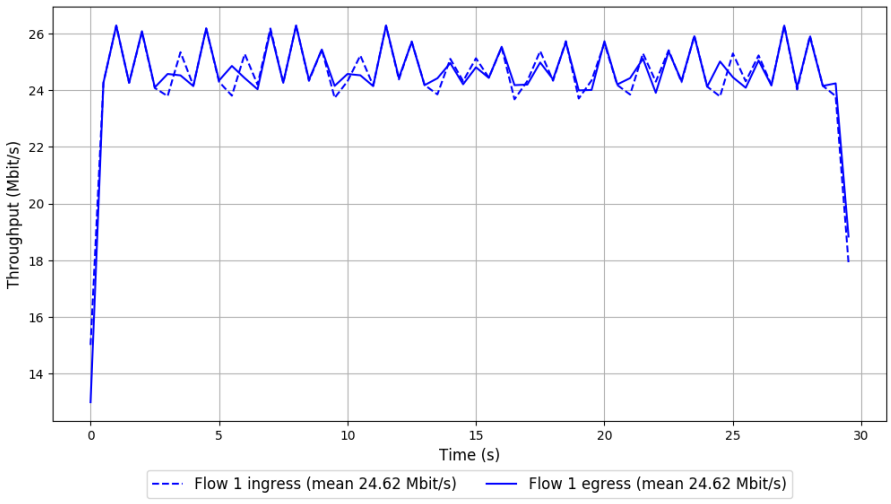



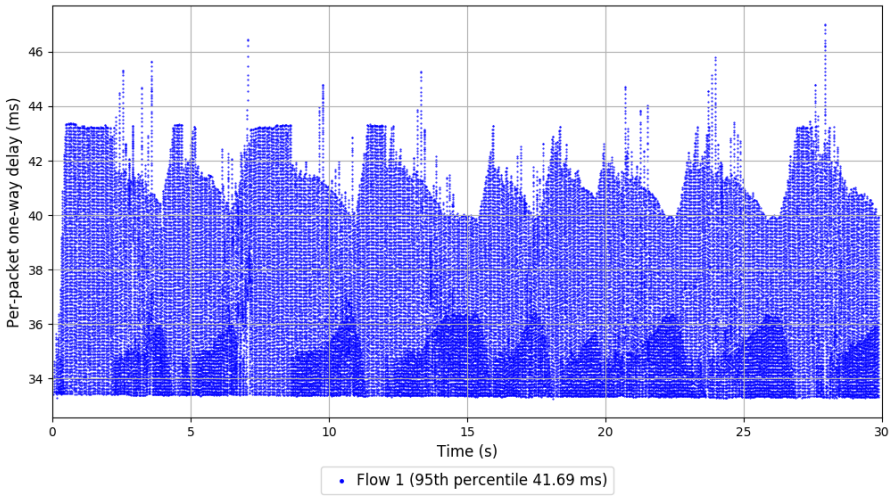
```
Run 5: Statistics of Sprout

Start at: 2017-11-15 21:30:44
End at: 2017-11-15 21:31:14
Local clock offset: -14.447 ms
Remote clock offset: -17.054 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 41.692 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 41.692 ms
Loss rate: 0.04%
```

Run 5: Report of Sprout — Data Link



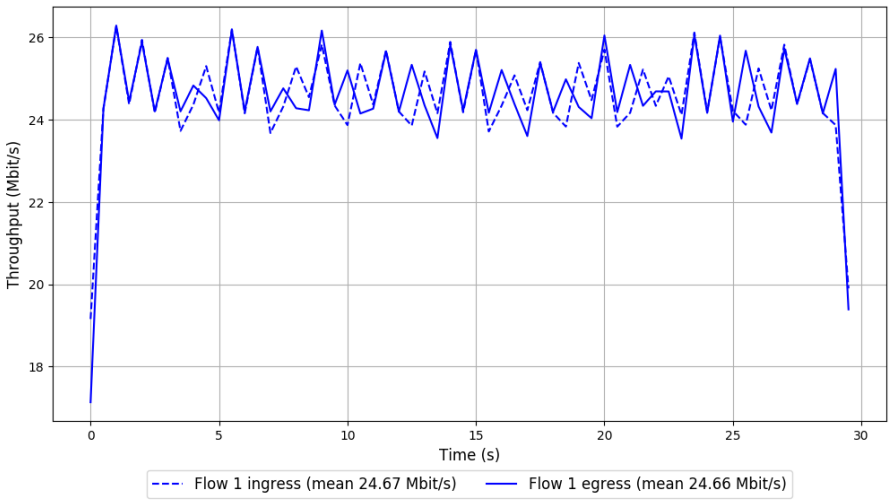



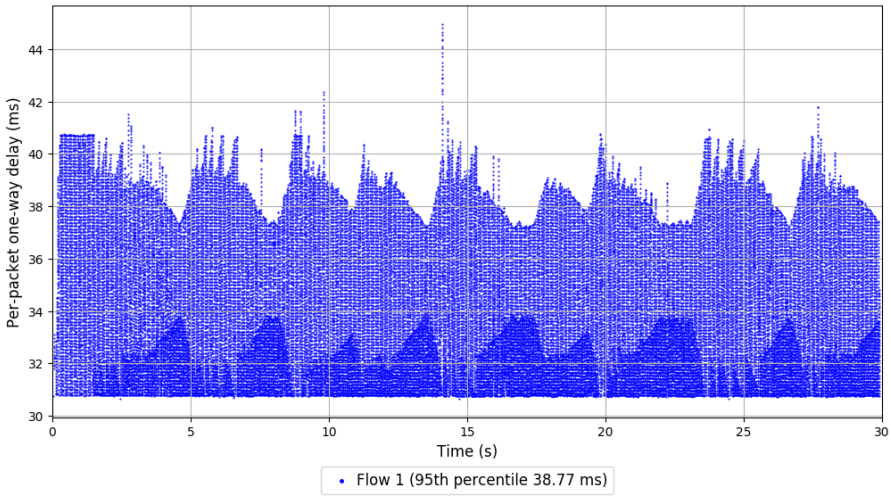
```
Run 6: Statistics of Sprout

Start at: 2017-11-15 21:48:24
End at: 2017-11-15 21:48:54
Local clock offset: -17.363 ms
Remote clock offset: -18.369 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.66 Mbit/s
95th percentile per-packet one-way delay: 38.766 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 24.66 Mbit/s
95th percentile per-packet one-way delay: 38.766 ms
Loss rate: 0.08%
```

Run 6: Report of Sprout — Data Link



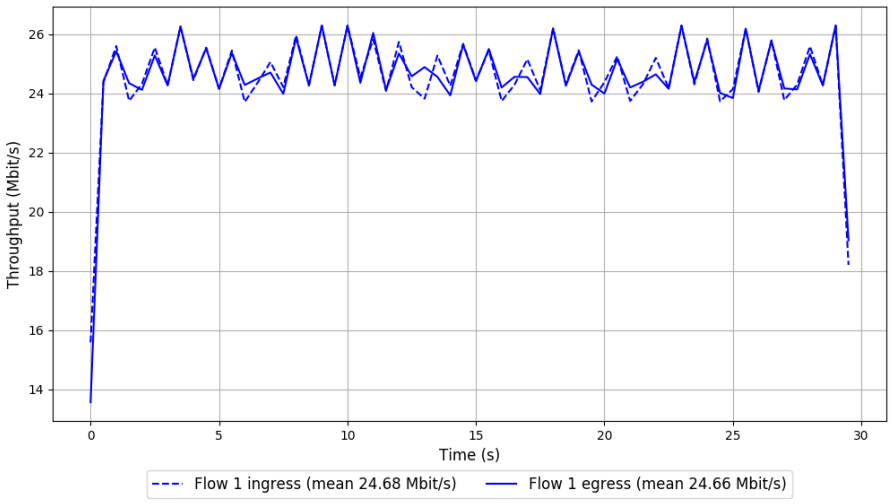



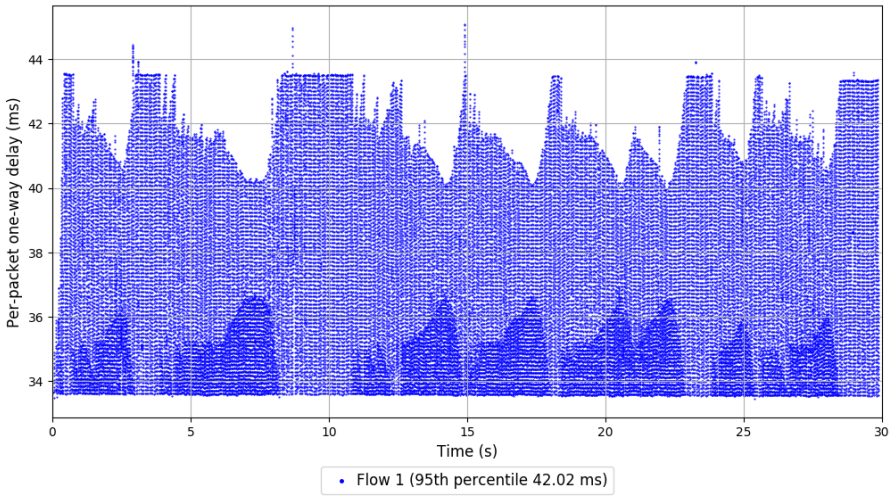
```
Run 7: Statistics of Sprout

Start at: 2017-11-15 22:05:41
End at: 2017-11-15 22:06:11
Local clock offset: -11.264 ms
Remote clock offset: -19.98 ms

# Below is generated by plot.py at 2017-11-16 02:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.66 Mbit/s
95th percentile per-packet one-way delay: 42.017 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 24.66 Mbit/s
95th percentile per-packet one-way delay: 42.017 ms
Loss rate: 0.08%
```

Run 7: Report of Sprout — Data Link



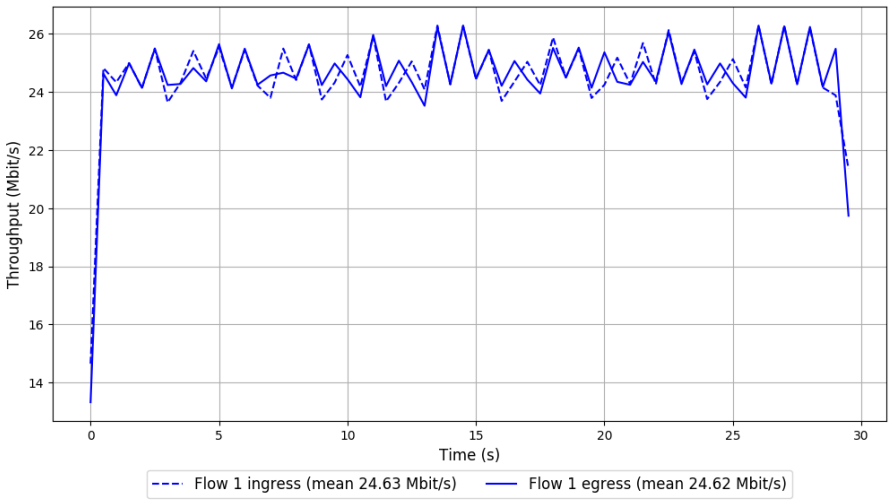



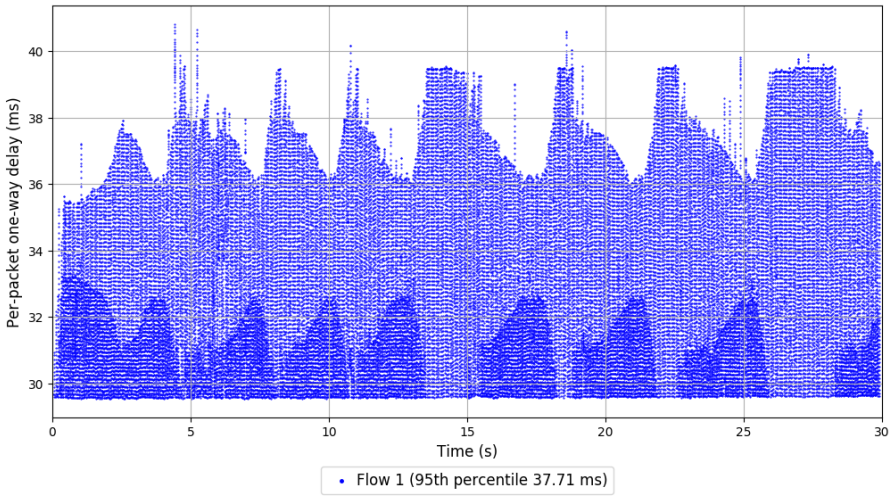
```
Run 8: Statistics of Sprout

Start at: 2017-11-15 22:23:34
End at: 2017-11-15 22:24:04
Local clock offset: -13.656 ms
Remote clock offset: -18.903 ms

# Below is generated by plot.py at 2017-11-16 02:09:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 37.706 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 37.706 ms
Loss rate: 0.13%
```

Run 8: Report of Sprout — Data Link



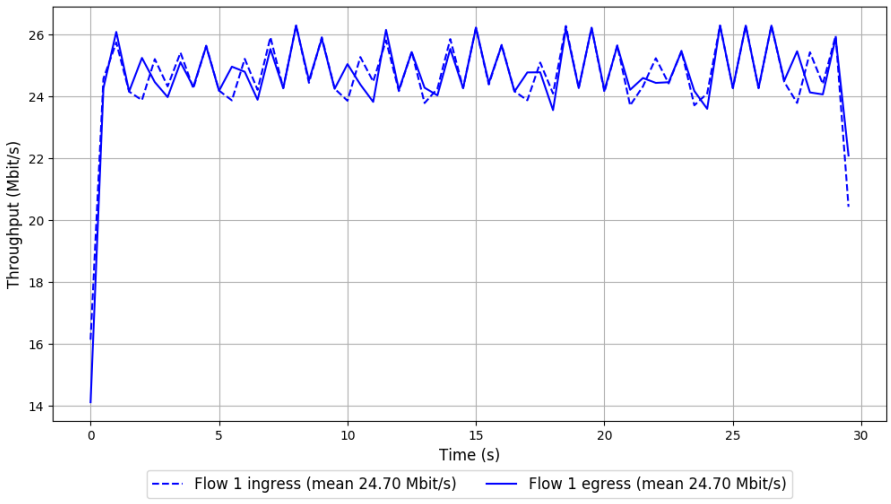



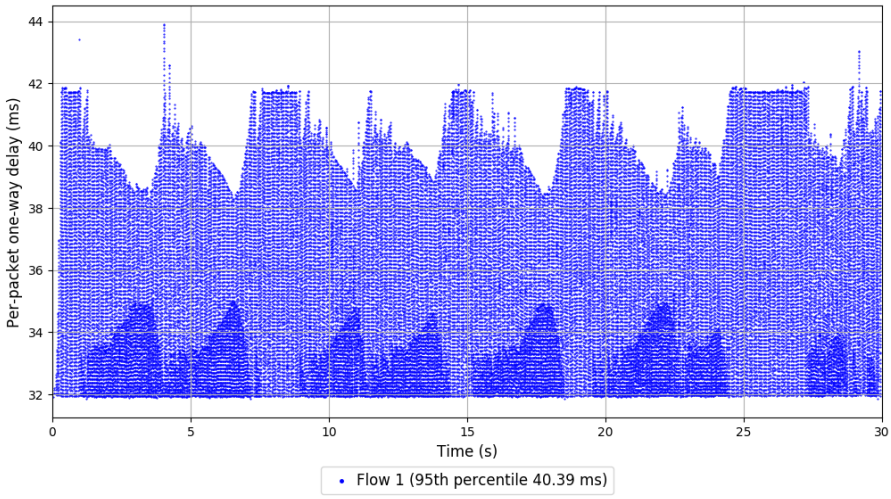
```
Run 9: Statistics of Sprout

Start at: 2017-11-15 22:40:42
End at: 2017-11-15 22:41:12
Local clock offset: -13.386 ms
Remote clock offset: -19.446 ms

# Below is generated by plot.py at 2017-11-16 02:09:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 40.387 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 40.387 ms
Loss rate: 0.02%
```

Run 9: Report of Sprout — Data Link



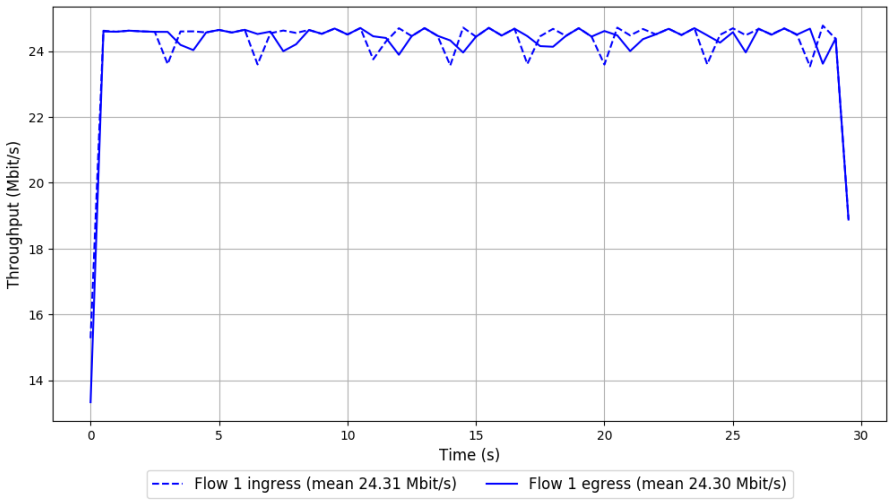



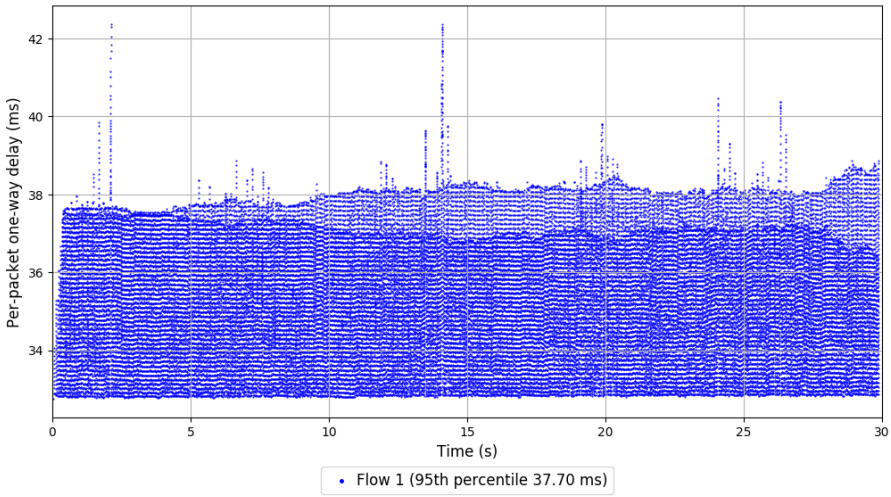
```
Run 10: Statistics of Sprout

Start at: 2017-11-15 22:58:04
End at: 2017-11-15 22:58:34
Local clock offset: -15.554 ms
Remote clock offset: -20.367 ms

# Below is generated by plot.py at 2017-11-16 02:09:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.30 Mbit/s
95th percentile per-packet one-way delay: 37.698 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.30 Mbit/s
95th percentile per-packet one-way delay: 37.698 ms
Loss rate: 0.14%
```

Run 10: Report of Sprout — Data Link



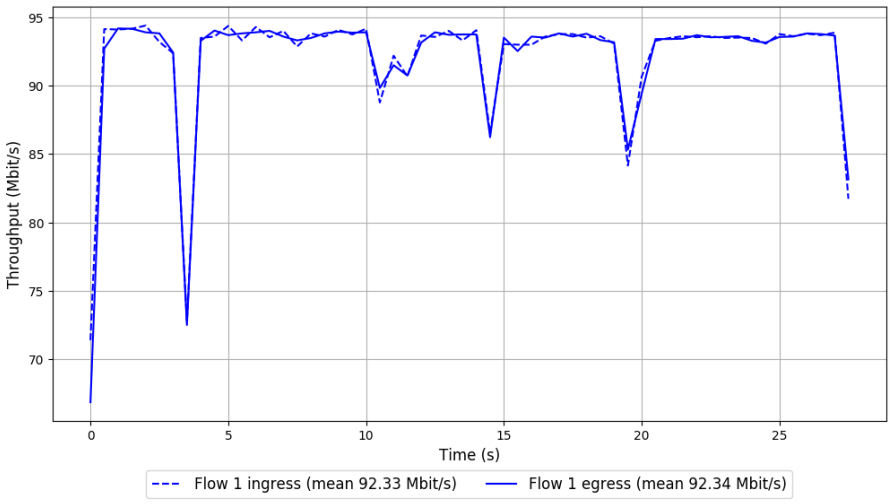



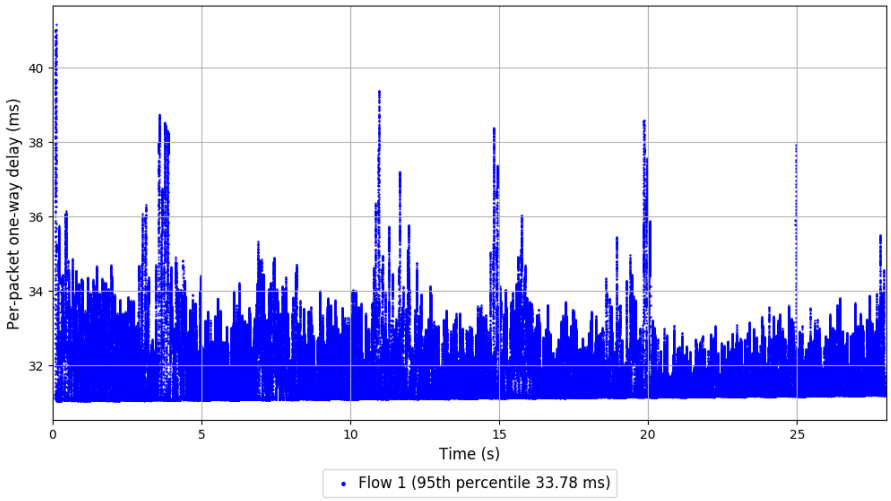
```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-15 20:22:23
End at: 2017-11-15 20:22:53
Local clock offset: -7.792 ms
Remote clock offset: -15.37 ms

# Below is generated by plot.py at 2017-11-16 02:11:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.34 Mbit/s
95th percentile per-packet one-way delay: 33.780 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 92.34 Mbit/s
95th percentile per-packet one-way delay: 33.780 ms
Loss rate: 0.09%
```

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



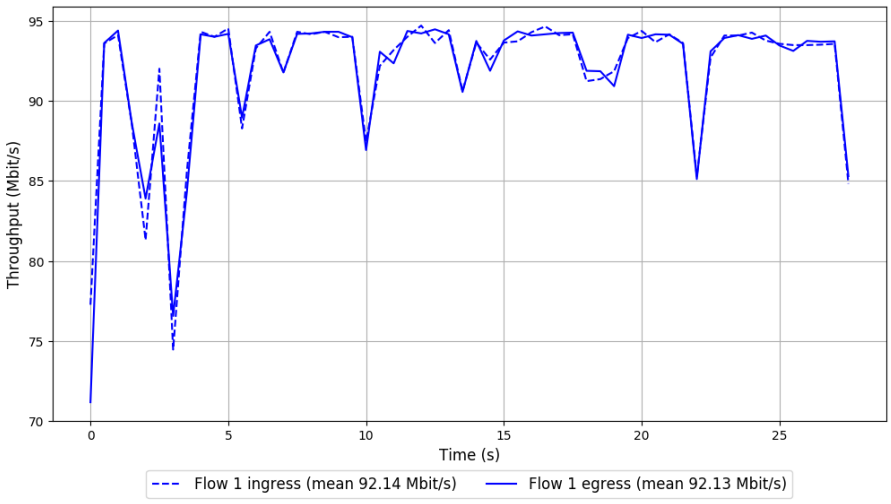



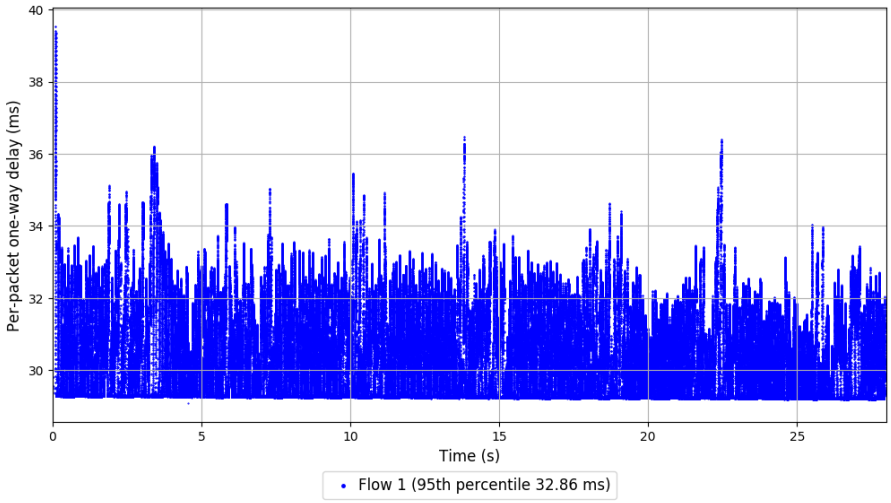
```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-15 20:40:26
End at: 2017-11-15 20:40:56
Local clock offset: -11.516 ms
Remote clock offset: -13.749 ms

# Below is generated by plot.py at 2017-11-16 02:11:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.13 Mbit/s
95th percentile per-packet one-way delay: 32.856 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 92.13 Mbit/s
95th percentile per-packet one-way delay: 32.856 ms
Loss rate: 0.10%
```

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



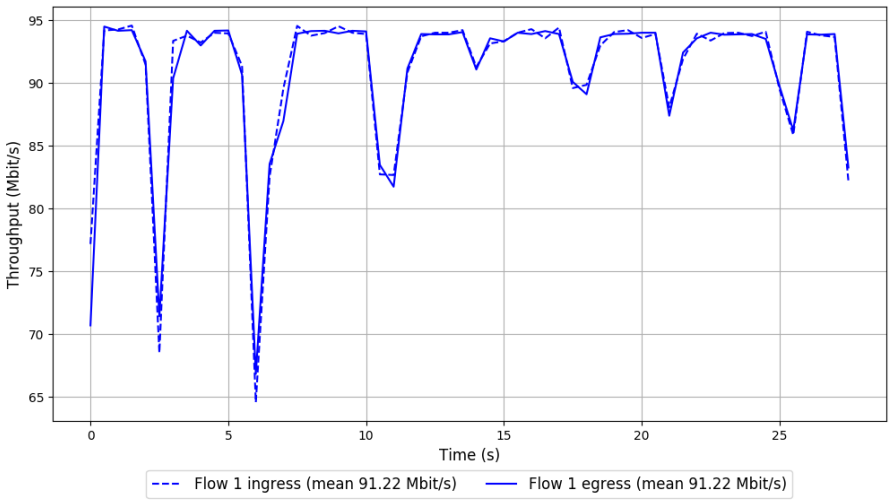



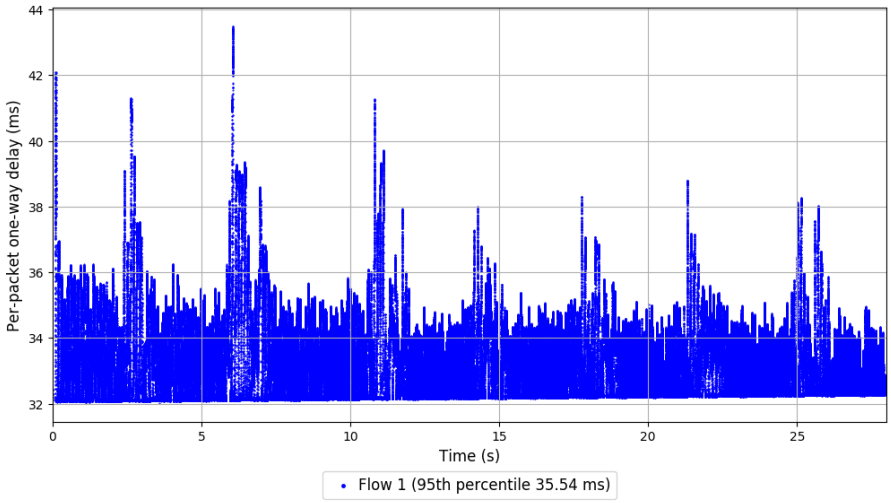
```
Run 3: Statistics of TaoVA-100x

Start at: 2017-11-15 20:58:04
End at: 2017-11-15 20:58:34
Local clock offset: -10.981 ms
Remote clock offset: -17.235 ms

# Below is generated by plot.py at 2017-11-16 02:11:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.22 Mbit/s
95th percentile per-packet one-way delay: 35.539 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 91.22 Mbit/s
95th percentile per-packet one-way delay: 35.539 ms
Loss rate: 0.10%
```

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



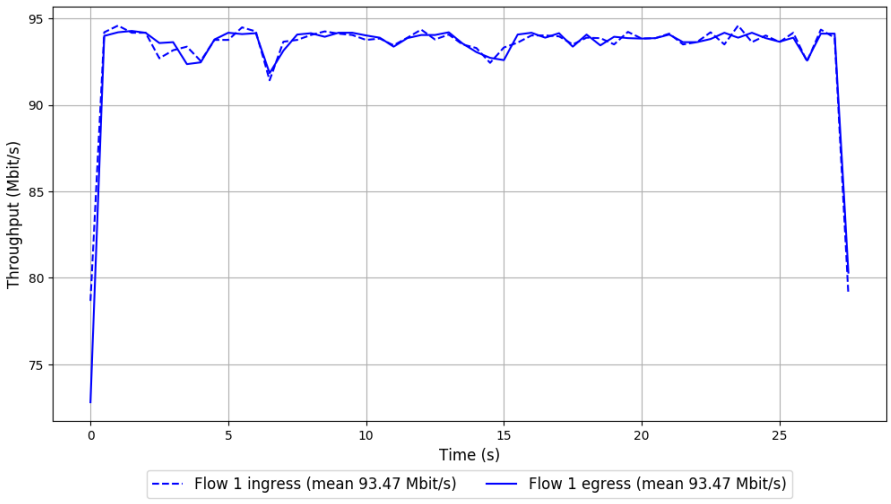



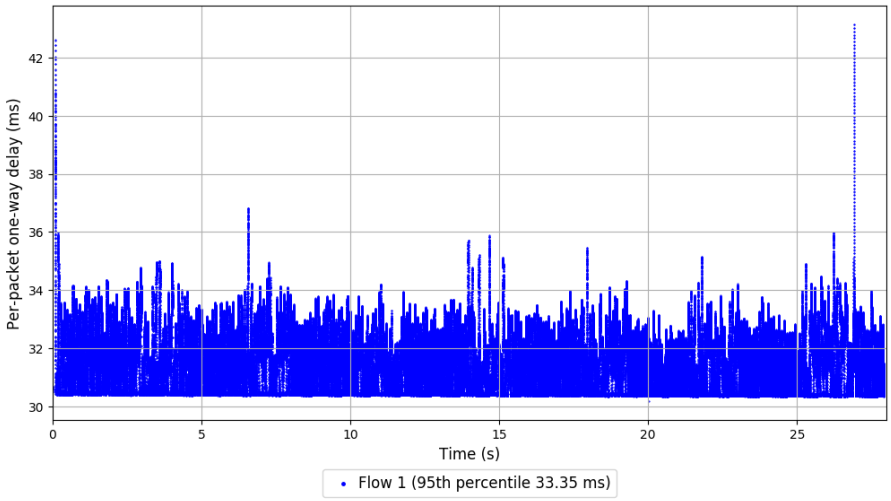
```
Run 4: Statistics of TaoVA-100x

Start at: 2017-11-15 21:15:32
End at: 2017-11-15 21:16:02
Local clock offset: -16.501 ms
Remote clock offset: -17.092 ms

# Below is generated by plot.py at 2017-11-16 02:11:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.47 Mbit/s
95th percentile per-packet one-way delay: 33.352 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 93.47 Mbit/s
95th percentile per-packet one-way delay: 33.352 ms
Loss rate: 0.09%
```

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



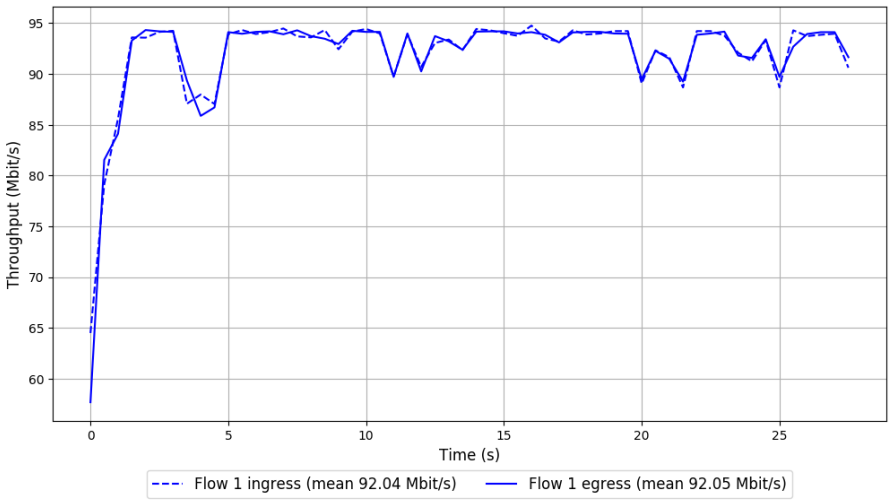



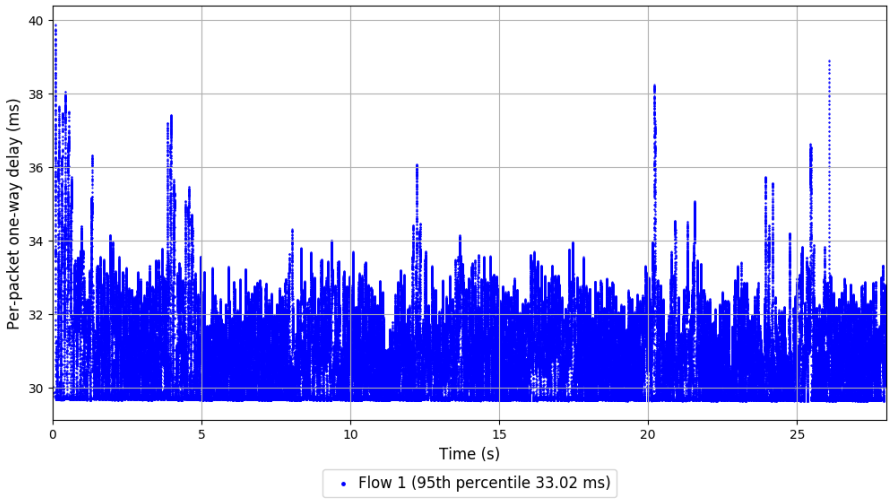
```
Run 5: Statistics of TaoVA-100x

Start at: 2017-11-15 21:33:12
End at: 2017-11-15 21:33:42
Local clock offset: -18.225 ms
Remote clock offset: -17.507 ms

# Below is generated by plot.py at 2017-11-16 02:11:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.05 Mbit/s
95th percentile per-packet one-way delay: 33.023 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 92.05 Mbit/s
95th percentile per-packet one-way delay: 33.023 ms
Loss rate: 0.09%
```

Run 5: Report of TaoVA-100x — Data Link



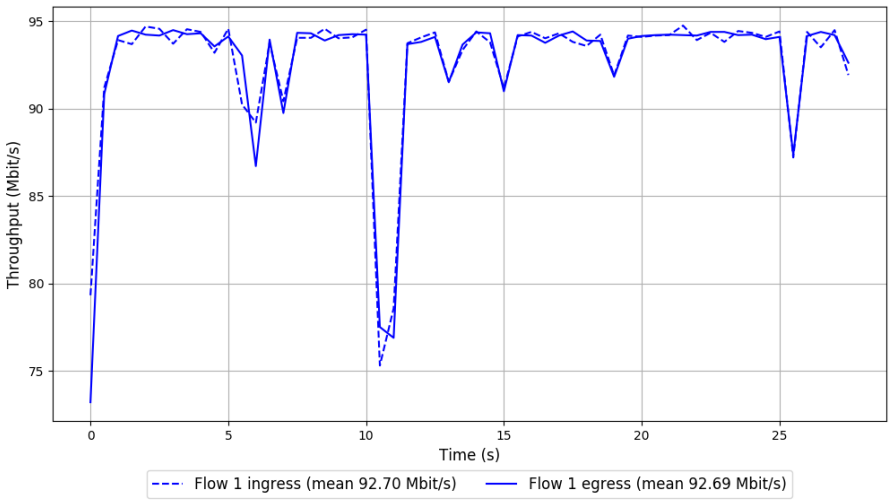



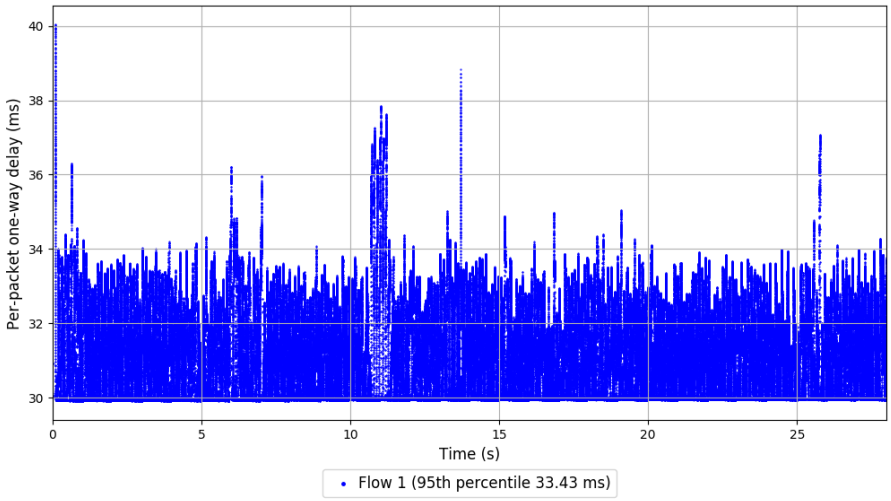
```
Run 6: Statistics of TaoVA-100x

Start at: 2017-11-15 21:50:43
End at: 2017-11-15 21:51:13
Local clock offset: -19.117 ms
Remote clock offset: -19.271 ms

# Below is generated by plot.py at 2017-11-16 02:11:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.69 Mbit/s
95th percentile per-packet one-way delay: 33.430 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 92.69 Mbit/s
95th percentile per-packet one-way delay: 33.430 ms
Loss rate: 0.10%
```

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



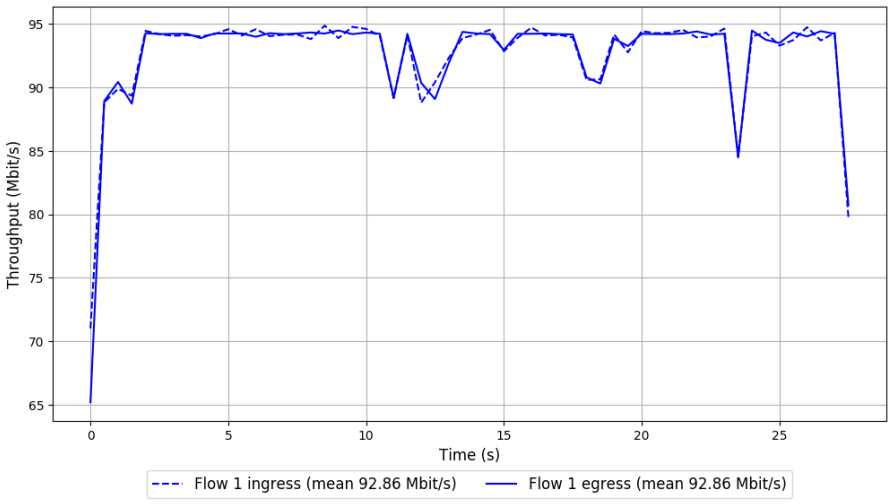



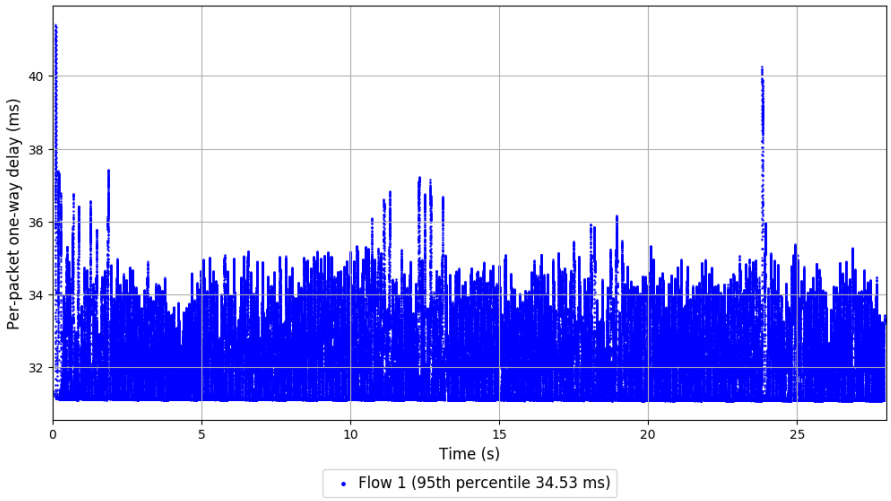
```
Run 7: Statistics of TaoVA-100x

Start at: 2017-11-15 22:08:07
End at: 2017-11-15 22:08:37
Local clock offset: -11.066 ms
Remote clock offset: -17.533 ms

# Below is generated by plot.py at 2017-11-16 02:11:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.86 Mbit/s
95th percentile per-packet one-way delay: 34.531 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 92.86 Mbit/s
95th percentile per-packet one-way delay: 34.531 ms
Loss rate: 0.09%
```

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



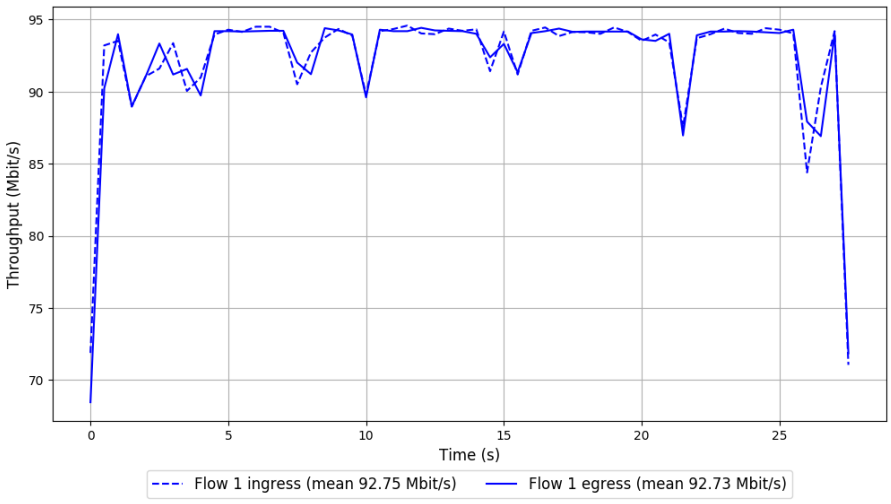



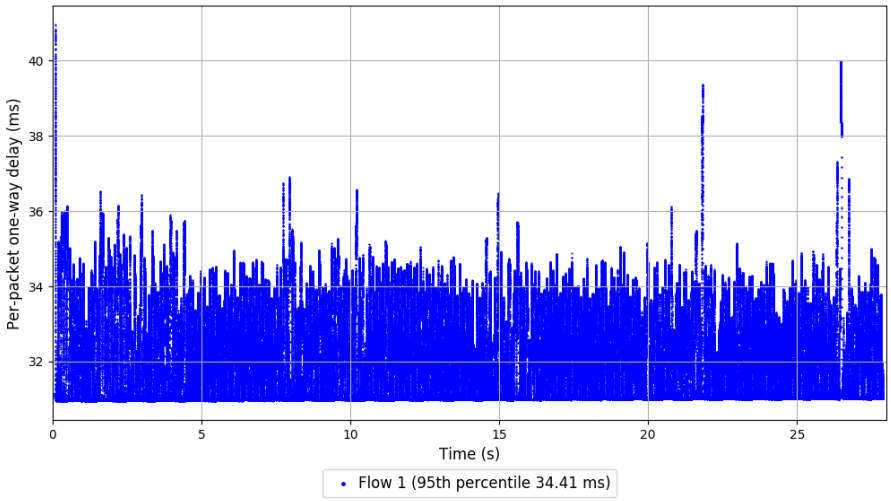
```
Run 8: Statistics of TaoVA-100x

Start at: 2017-11-15 22:25:58
End at: 2017-11-15 22:26:28
Local clock offset: -13.498 ms
Remote clock offset: -19.823 ms

# Below is generated by plot.py at 2017-11-16 02:11:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.73 Mbit/s
95th percentile per-packet one-way delay: 34.413 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 92.73 Mbit/s
95th percentile per-packet one-way delay: 34.413 ms
Loss rate: 0.10%
```

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



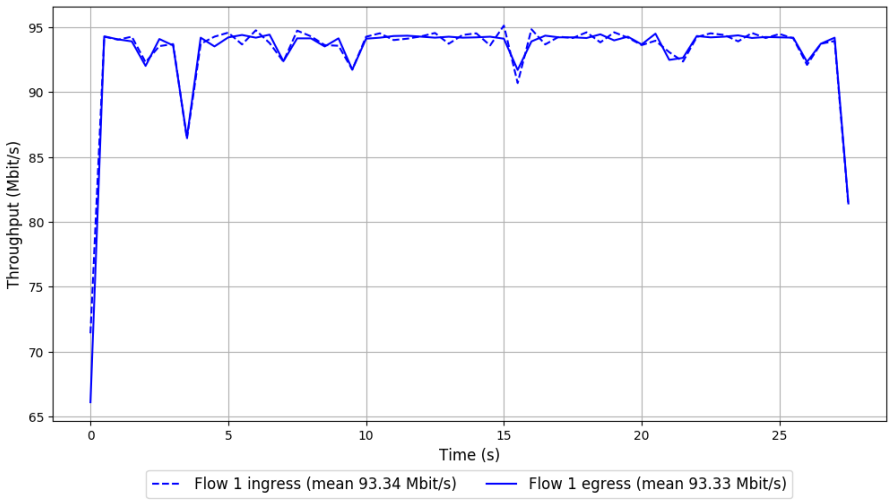



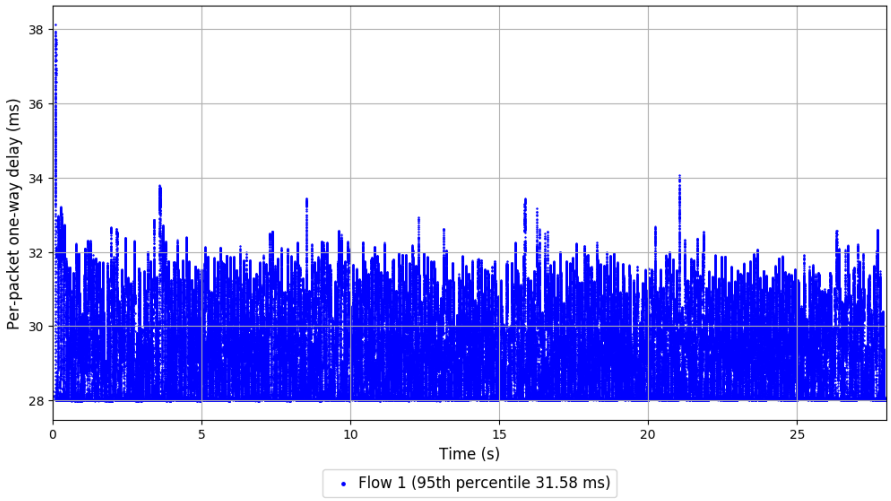
```
Run 9: Statistics of TaoVA-100x

Start at: 2017-11-15 22:43:02
End at: 2017-11-15 22:43:32
Local clock offset: -16.925 ms
Remote clock offset: -18.958 ms

# Below is generated by plot.py at 2017-11-16 02:13:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.33 Mbit/s
95th percentile per-packet one-way delay: 31.576 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 93.33 Mbit/s
95th percentile per-packet one-way delay: 31.576 ms
Loss rate: 0.10%
```

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



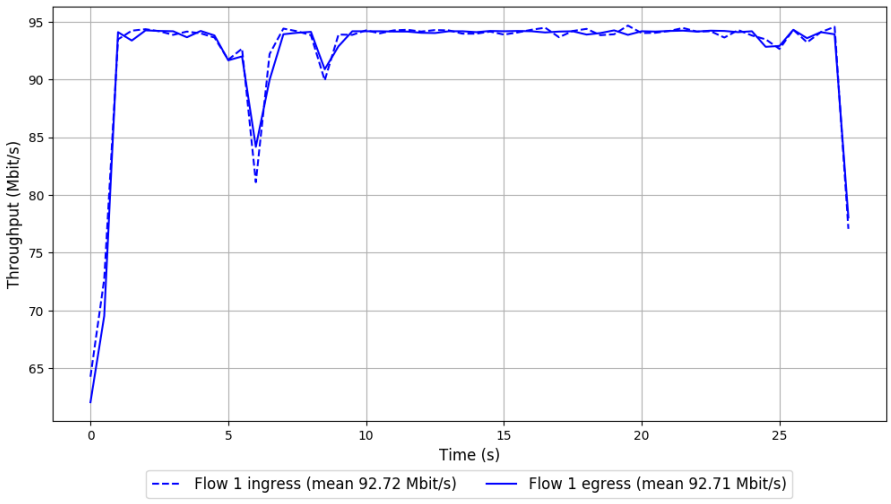



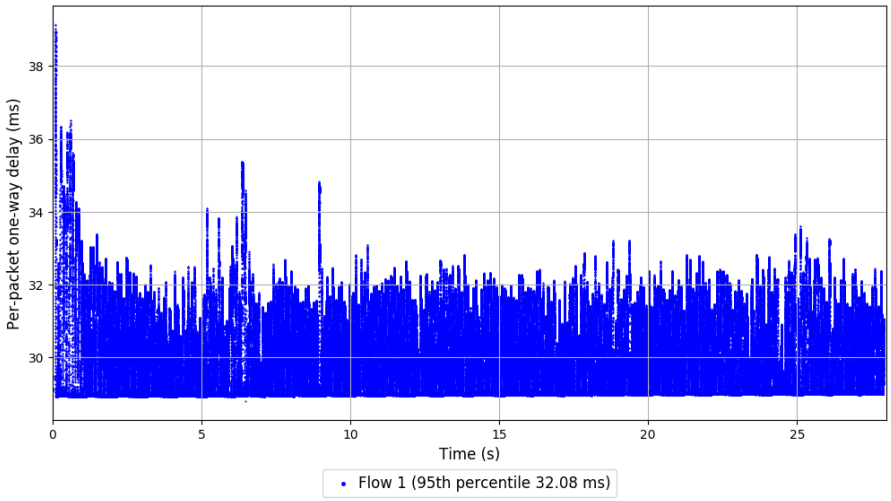
```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-15 23:00:33
End at: 2017-11-15 23:01:03
Local clock offset: -18.471 ms
Remote clock offset: -19.108 ms

# Below is generated by plot.py at 2017-11-16 02:13:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.71 Mbit/s
95th percentile per-packet one-way delay: 32.081 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 92.71 Mbit/s
95th percentile per-packet one-way delay: 32.081 ms
Loss rate: 0.10%
```

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



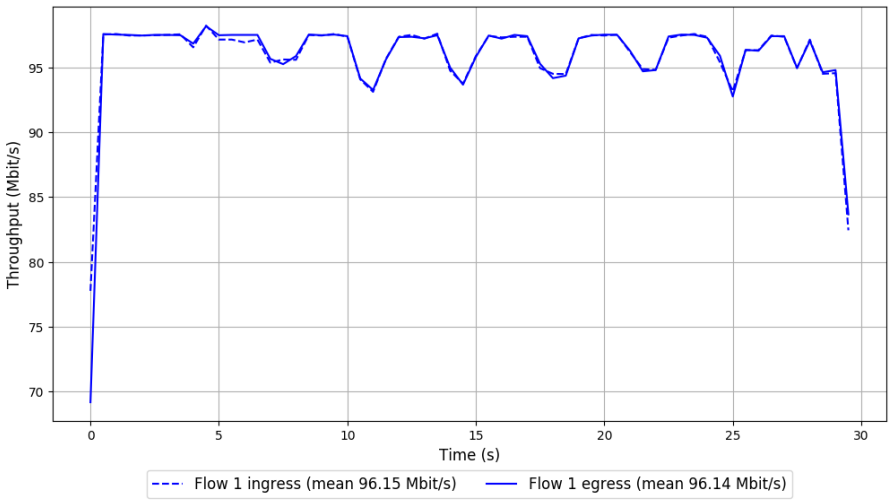



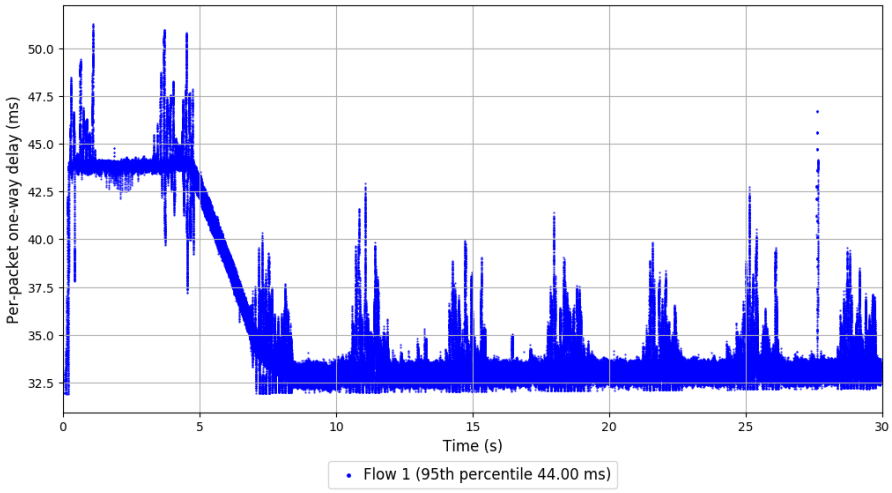
```
Run 1: Statistics of TCP Vegas

Start at: 2017-11-15 20:26:44
End at: 2017-11-15 20:27:14
Local clock offset: -10.412 ms
Remote clock offset: -16.235 ms

# Below is generated by plot.py at 2017-11-16 02:13:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.14 Mbit/s
95th percentile per-packet one-way delay: 43.998 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 96.14 Mbit/s
95th percentile per-packet one-way delay: 43.998 ms
Loss rate: 0.09%
```

Run 1: Report of TCP Vegas — Data Link



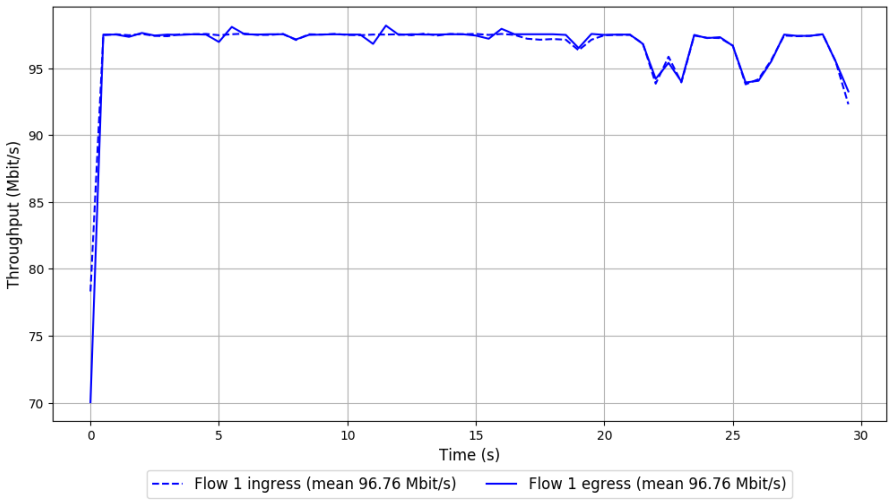



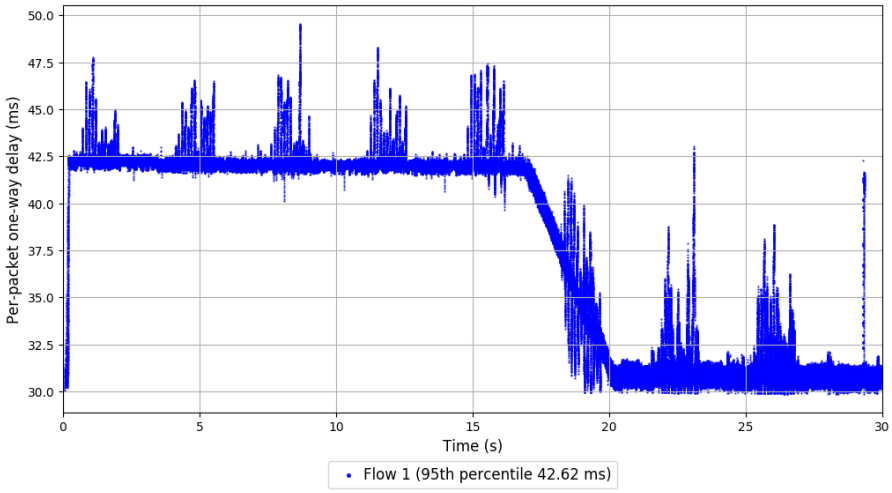
```
Run 2: Statistics of TCP Vegas

Start at: 2017-11-15 20:44:43
End at: 2017-11-15 20:45:13
Local clock offset: -10.714 ms
Remote clock offset: -15.145 ms

# Below is generated by plot.py at 2017-11-16 02:13:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.76 Mbit/s
95th percentile per-packet one-way delay: 42.619 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 96.76 Mbit/s
95th percentile per-packet one-way delay: 42.619 ms
Loss rate: 0.09%
```

Run 2: Report of TCP Vegas — Data Link



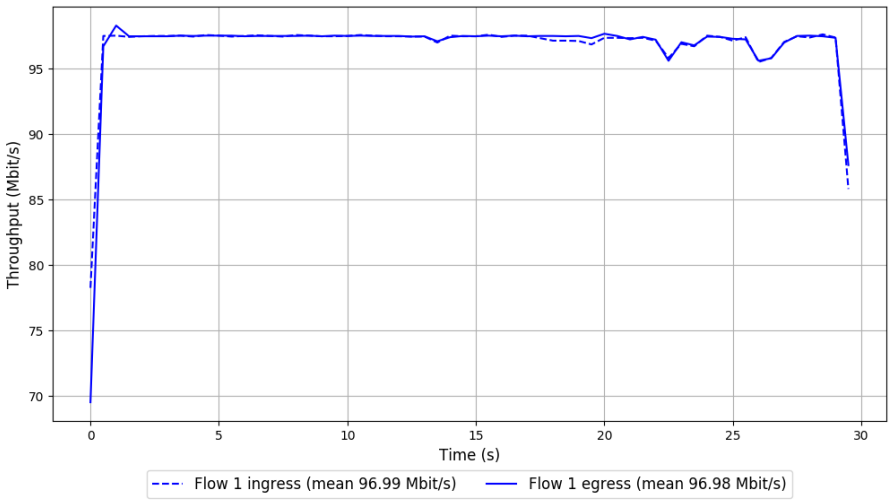



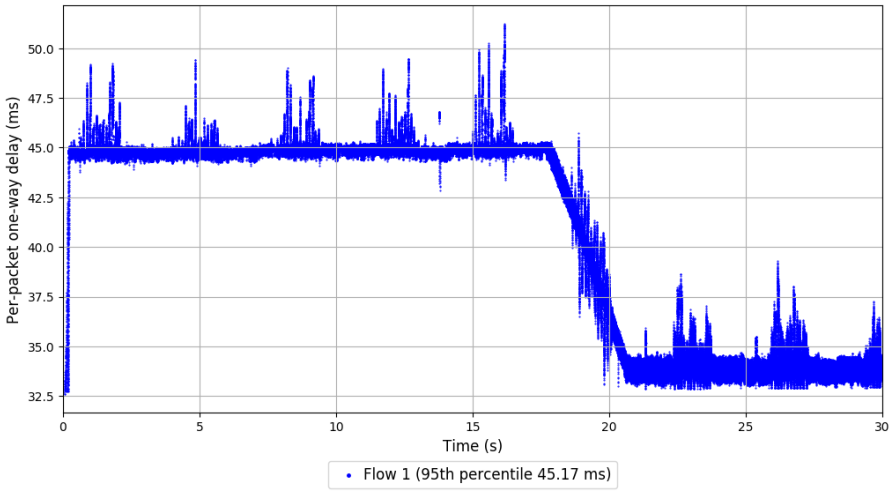
```
Run 3: Statistics of TCP Vegas

Start at: 2017-11-15 21:02:05
End at: 2017-11-15 21:02:35
Local clock offset: -10.789 ms
Remote clock offset: -16.032 ms

# Below is generated by plot.py at 2017-11-16 02:13:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.98 Mbit/s
95th percentile per-packet one-way delay: 45.167 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 96.98 Mbit/s
95th percentile per-packet one-way delay: 45.167 ms
Loss rate: 0.08%
```

Run 3: Report of TCP Vegas — Data Link



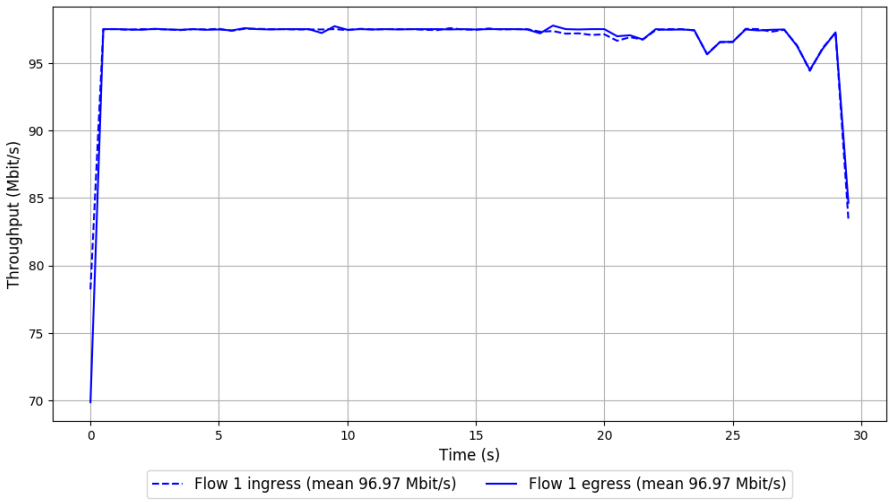



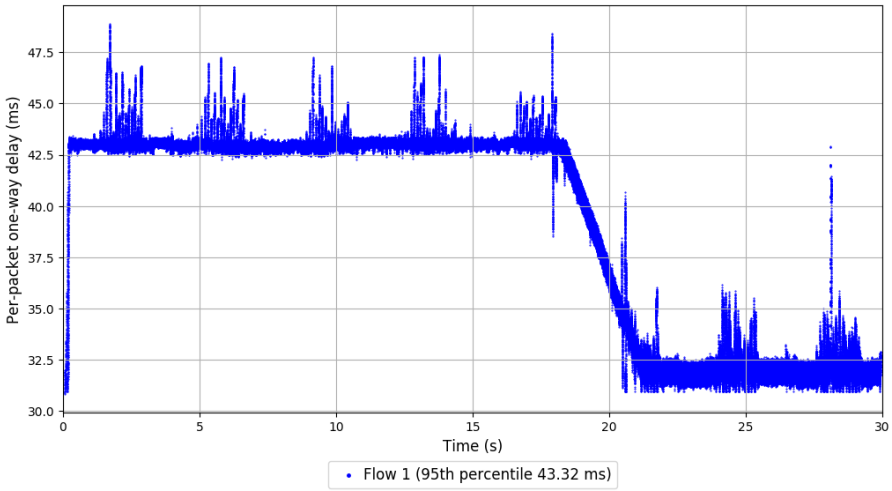
```
Run 4: Statistics of TCP Vegas

Start at: 2017-11-15 21:19:33
End at: 2017-11-15 21:20:03
Local clock offset: -16.507 ms
Remote clock offset: -17.762 ms

# Below is generated by plot.py at 2017-11-16 02:13:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.97 Mbit/s
95th percentile per-packet one-way delay: 43.319 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 96.97 Mbit/s
95th percentile per-packet one-way delay: 43.319 ms
Loss rate: 0.09%
```

Run 4: Report of TCP Vegas — Data Link



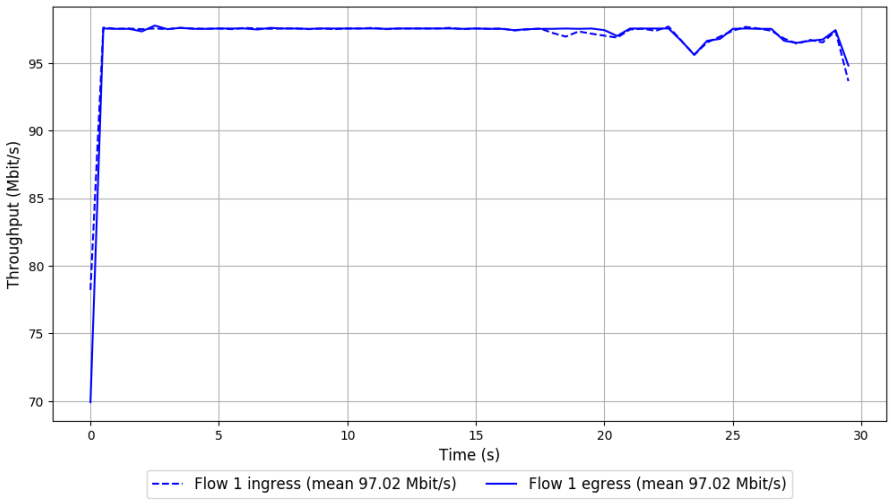



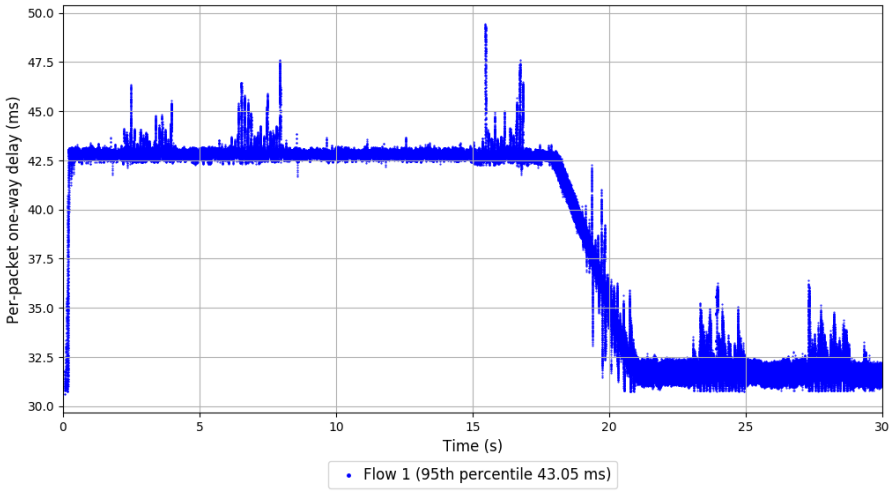
```
Run 5: Statistics of TCP Vegas

Start at: 2017-11-15 21:37:13
End at: 2017-11-15 21:37:43
Local clock offset: -18.173 ms
Remote clock offset: -18.496 ms

# Below is generated by plot.py at 2017-11-16 02:13:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.02 Mbit/s
95th percentile per-packet one-way delay: 43.051 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.02 Mbit/s
95th percentile per-packet one-way delay: 43.051 ms
Loss rate: 0.08%
```

Run 5: Report of TCP Vegas — Data Link



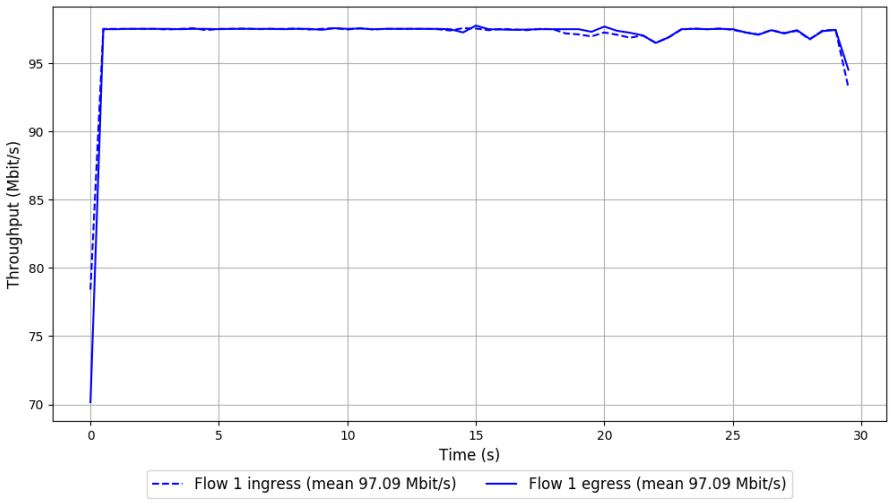



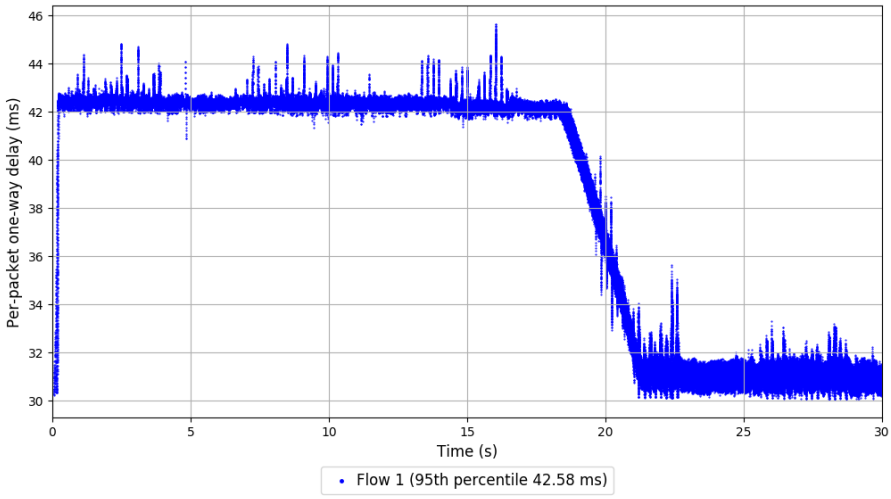
```
Run 6: Statistics of TCP Vegas

Start at: 2017-11-15 21:54:49
End at: 2017-11-15 21:55:19
Local clock offset: -15.164 ms
Remote clock offset: -17.463 ms

# Below is generated by plot.py at 2017-11-16 02:13:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.09 Mbit/s
95th percentile per-packet one-way delay: 42.579 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.09 Mbit/s
95th percentile per-packet one-way delay: 42.579 ms
Loss rate: 0.08%
```

Run 6: Report of TCP Vegas — Data Link



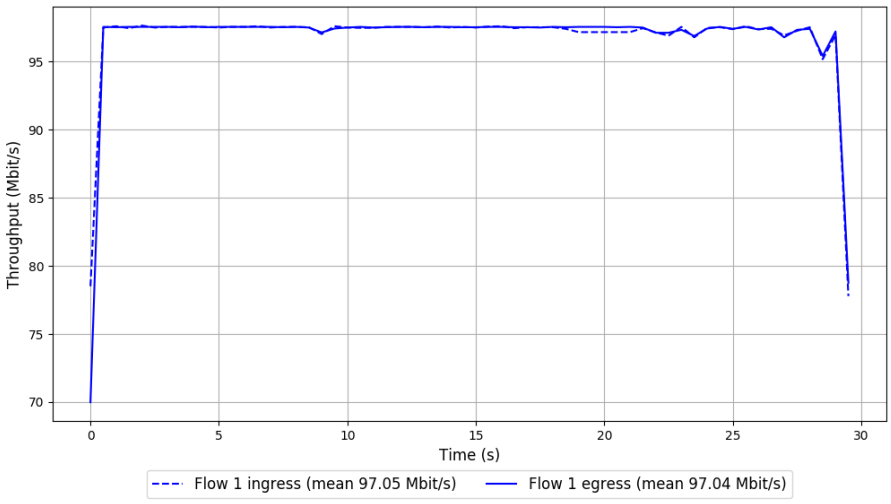



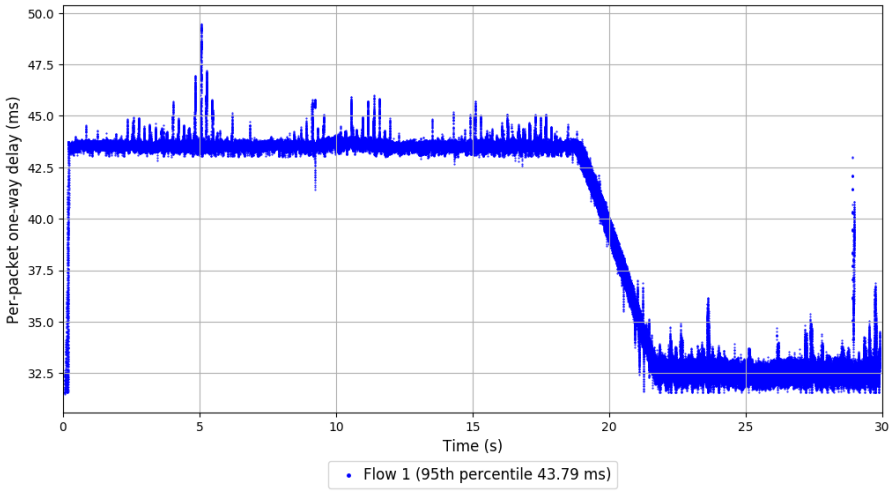
```
Run 7: Statistics of TCP Vegas

Start at: 2017-11-15 22:12:15
End at: 2017-11-15 22:12:45
Local clock offset: -10.873 ms
Remote clock offset: -17.911 ms

# Below is generated by plot.py at 2017-11-16 02:14:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.04 Mbit/s
95th percentile per-packet one-way delay: 43.794 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 97.04 Mbit/s
95th percentile per-packet one-way delay: 43.794 ms
Loss rate: 0.09%
```

Run 7: Report of TCP Vegas — Data Link



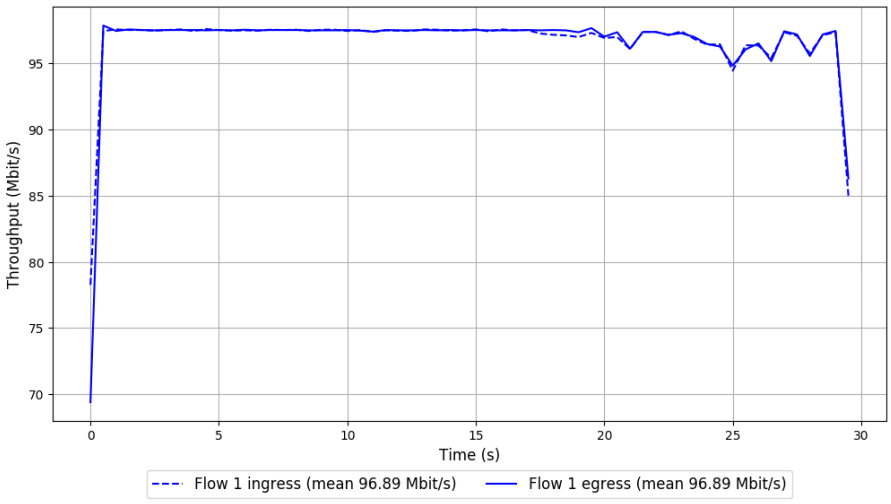



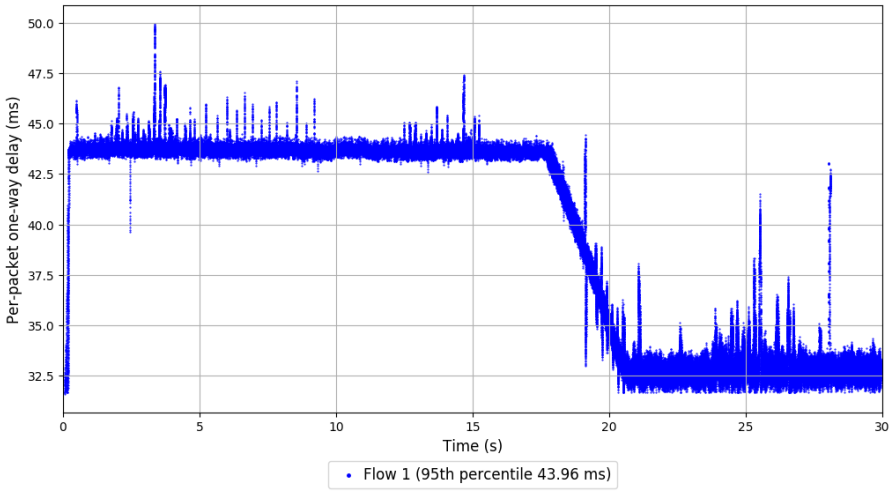
```
Run 8: Statistics of TCP Vegas

Start at: 2017-11-15 22:29:56
End at: 2017-11-15 22:30:26
Local clock offset: -13.395 ms
Remote clock offset: -20.063 ms

# Below is generated by plot.py at 2017-11-16 02:14:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.89 Mbit/s
95th percentile per-packet one-way delay: 43.960 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 96.89 Mbit/s
95th percentile per-packet one-way delay: 43.960 ms
Loss rate: 0.09%
```

Run 8: Report of TCP Vegas — Data Link



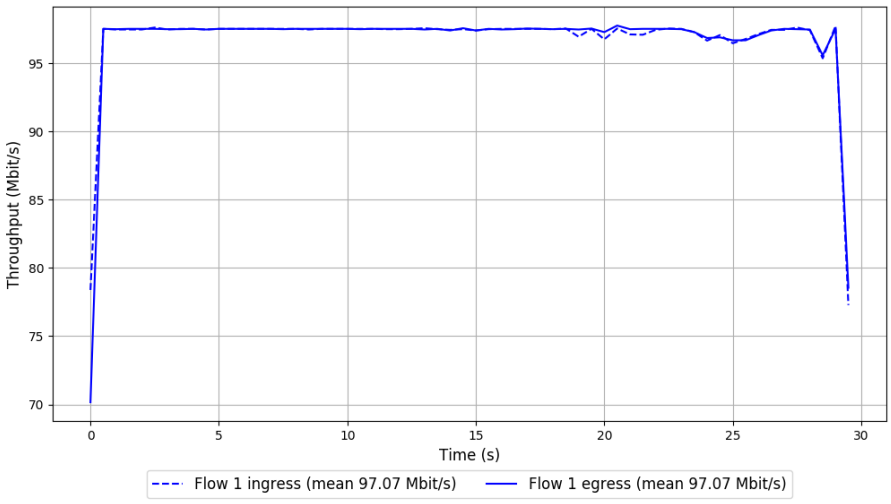



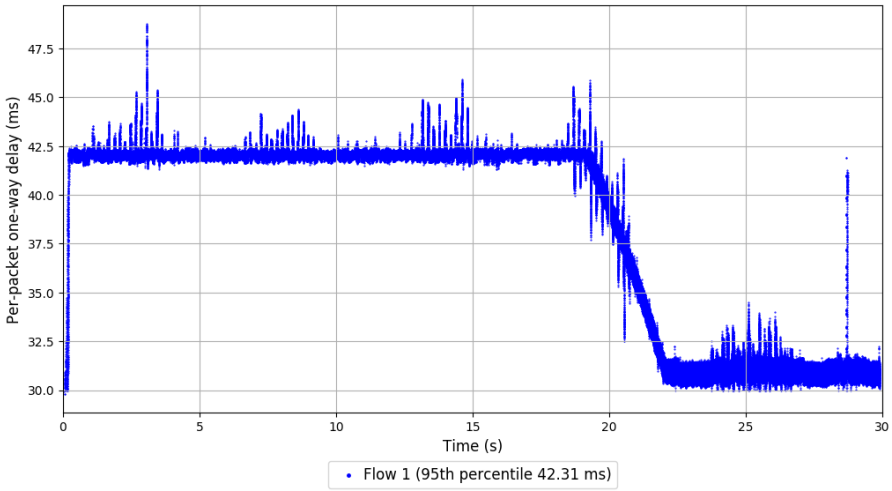
```
Run 9: Statistics of TCP Vegas

Start at: 2017-11-15 22:47:05
End at: 2017-11-15 22:47:35
Local clock offset: -15.123 ms
Remote clock offset: -18.862 ms

# Below is generated by plot.py at 2017-11-16 02:14:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.07 Mbit/s
95th percentile per-packet one-way delay: 42.312 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.07 Mbit/s
95th percentile per-packet one-way delay: 42.312 ms
Loss rate: 0.08%
```

Run 9: Report of TCP Vegas — Data Link



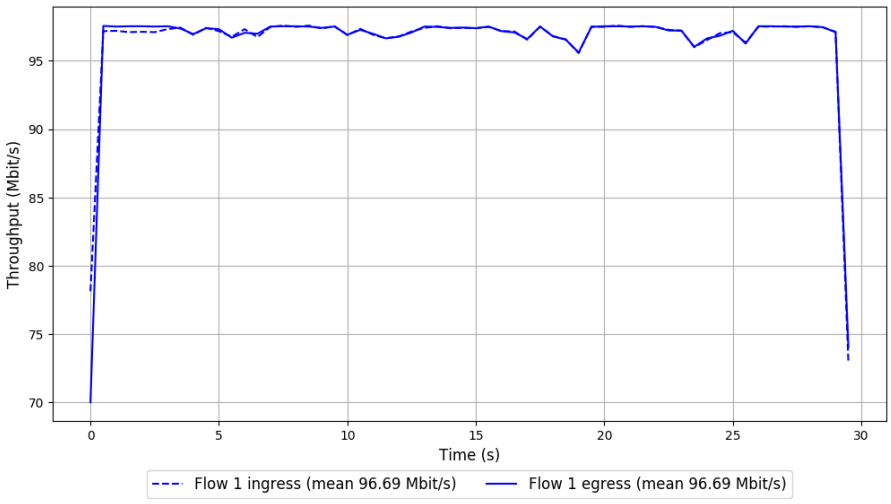



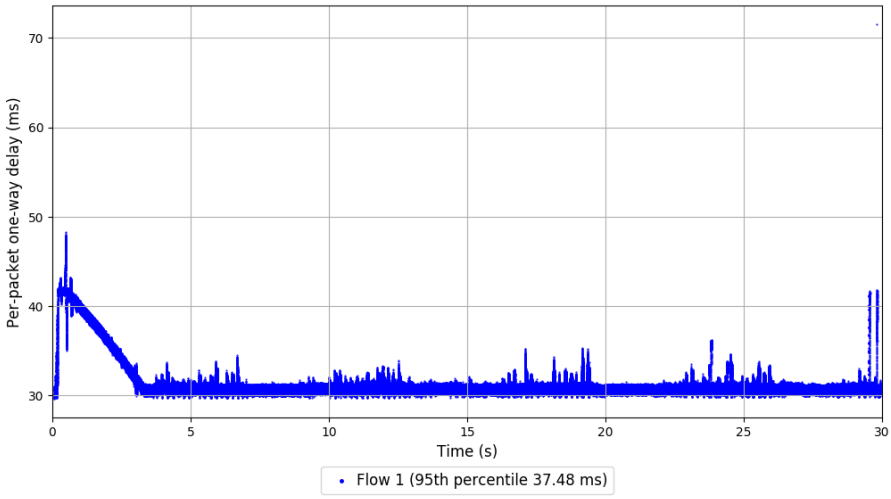
```
Run 10: Statistics of TCP Vegas

Start at: 2017-11-15 23:04:35
End at: 2017-11-15 23:05:05
Local clock offset: -19.297 ms
Remote clock offset: -19.995 ms

# Below is generated by plot.py at 2017-11-16 02:14:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.69 Mbit/s
95th percentile per-packet one-way delay: 37.482 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 96.69 Mbit/s
95th percentile per-packet one-way delay: 37.482 ms
Loss rate: 0.08%
```

Run 10: Report of TCP Vegas — Data Link



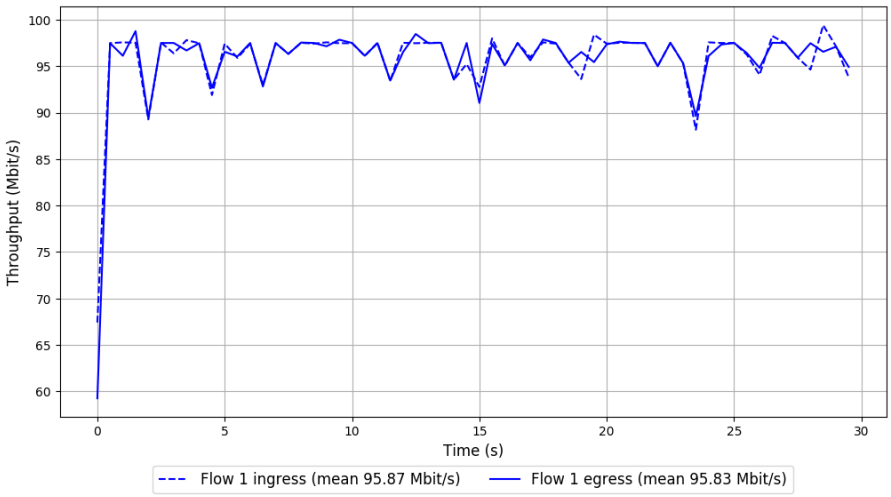



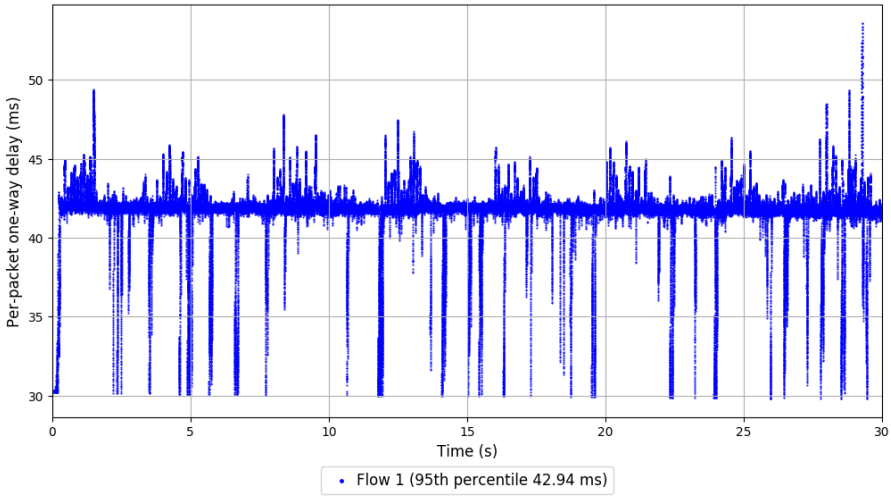
```
Run 1: Statistics of Verus

Start at: 2017-11-15 20:14:09
End at: 2017-11-15 20:14:39
Local clock offset: -5.722 ms
Remote clock offset: -13.489 ms

# Below is generated by plot.py at 2017-11-16 02:14:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.83 Mbit/s
95th percentile per-packet one-way delay: 42.935 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.83 Mbit/s
95th percentile per-packet one-way delay: 42.935 ms
Loss rate: 0.12%
```

Run 1: Report of Verus — Data Link



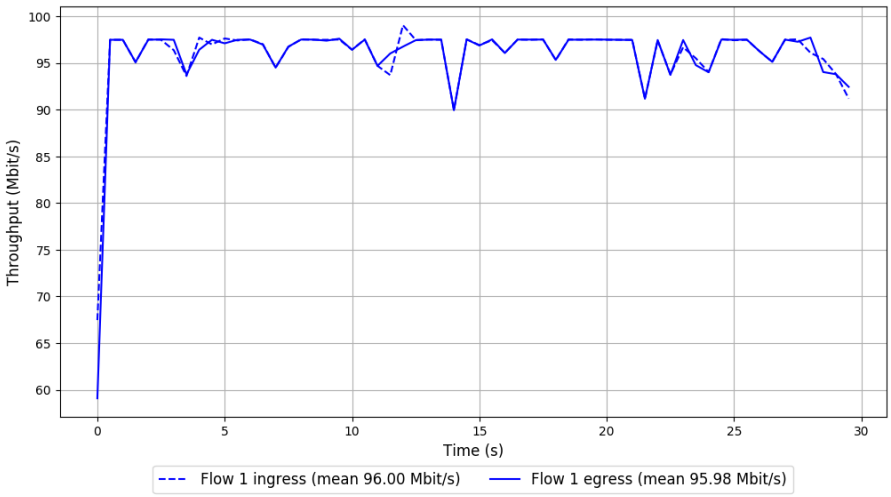



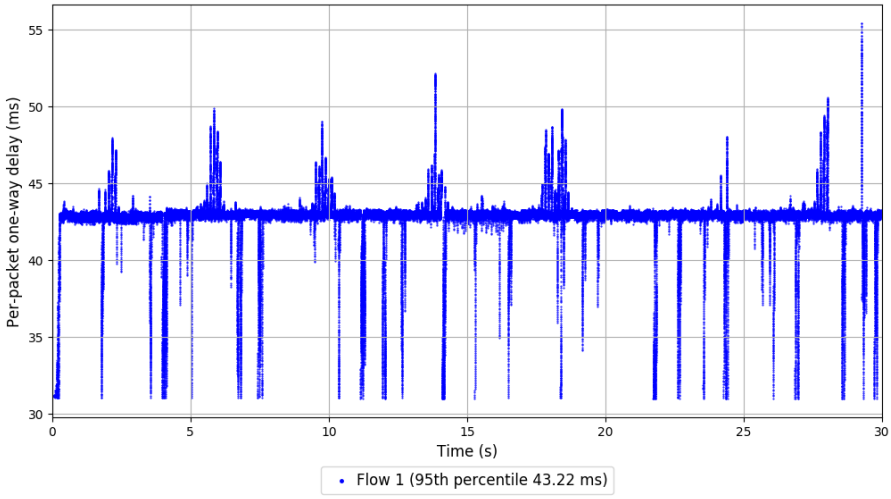
```
Run 2: Statistics of Verus

Start at: 2017-11-15 20:32:52
End at: 2017-11-15 20:33:22
Local clock offset: -10.595 ms
Remote clock offset: -14.687 ms

# Below is generated by plot.py at 2017-11-16 02:14:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.98 Mbit/s
95th percentile per-packet one-way delay: 43.217 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.98 Mbit/s
95th percentile per-packet one-way delay: 43.217 ms
Loss rate: 0.12%
```

Run 2: Report of Verus — Data Link



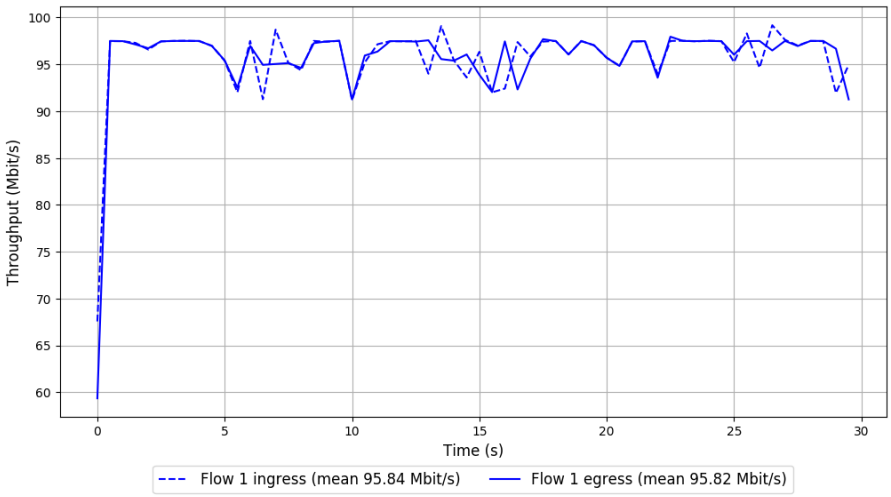



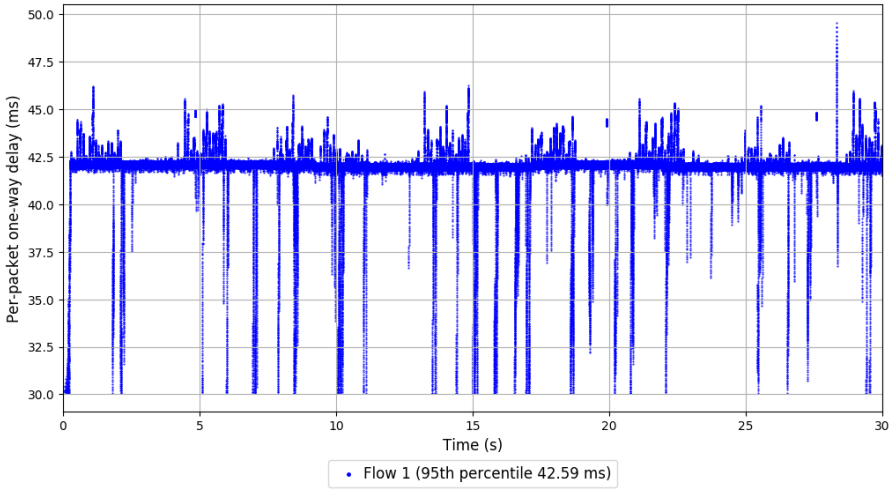
```
Run 3: Statistics of Verus

Start at: 2017-11-15 20:50:37
End at: 2017-11-15 20:51:07
Local clock offset: -8.868 ms
Remote clock offset: -14.8 ms

# Below is generated by plot.py at 2017-11-16 02:15:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.82 Mbit/s
95th percentile per-packet one-way delay: 42.594 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.82 Mbit/s
95th percentile per-packet one-way delay: 42.594 ms
Loss rate: 0.12%
```

Run 3: Report of Verus — Data Link



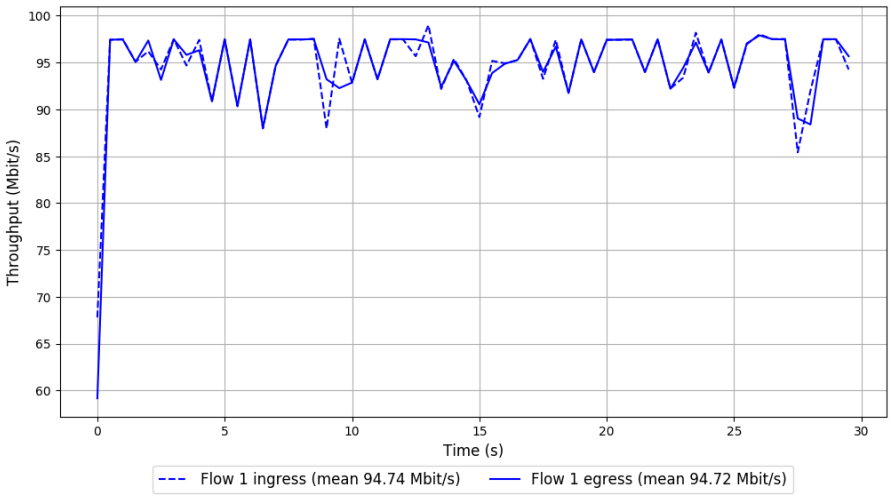



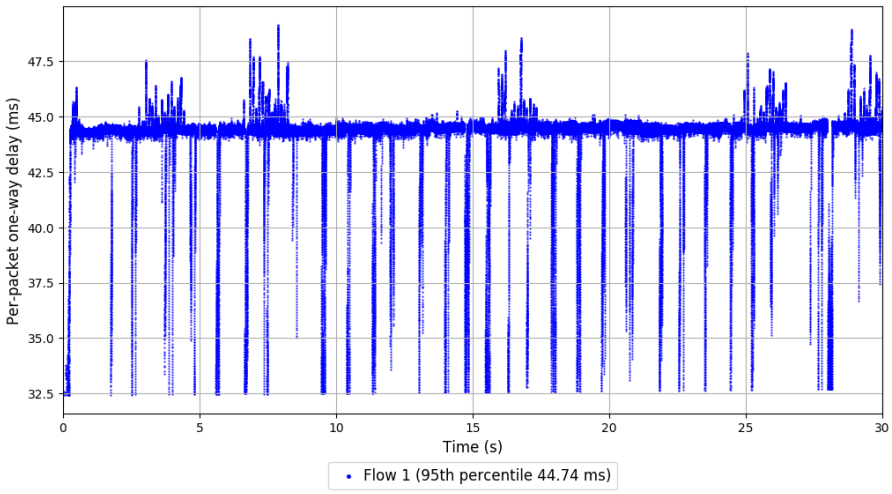
```
Run 4: Statistics of Verus

Start at: 2017-11-15 21:08:04
End at: 2017-11-15 21:08:34
Local clock offset: -15.172 ms
Remote clock offset: -17.087 ms

# Below is generated by plot.py at 2017-11-16 02:15:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.72 Mbit/s
95th percentile per-packet one-way delay: 44.736 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 94.72 Mbit/s
95th percentile per-packet one-way delay: 44.736 ms
Loss rate: 0.13%
```

Run 4: Report of Verus — Data Link



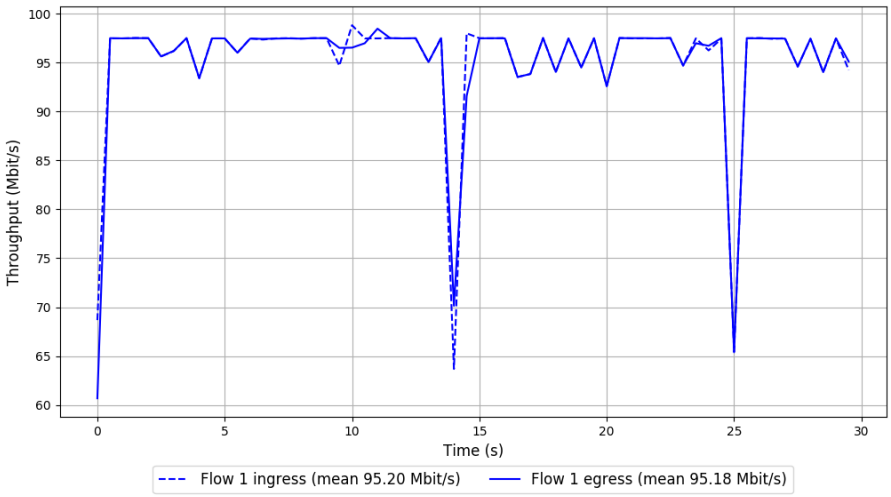



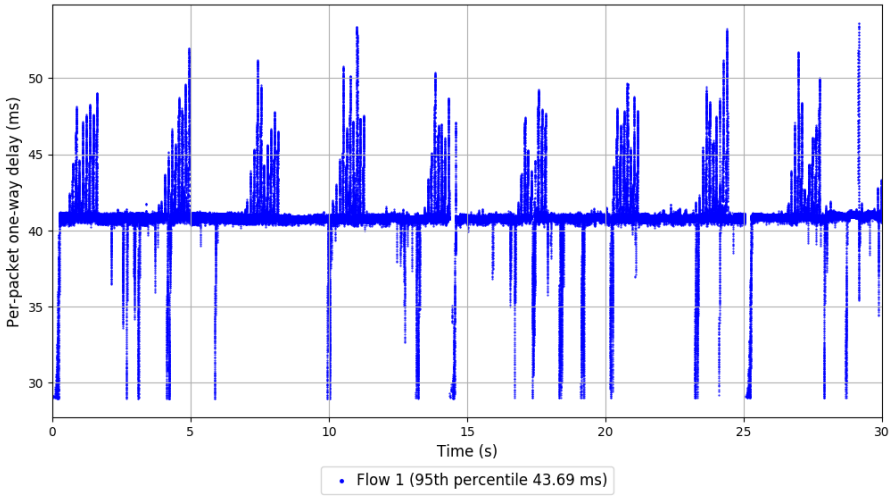
```
Run 5: Statistics of Verus

Start at: 2017-11-15 21:25:26
End at: 2017-11-15 21:25:56
Local clock offset: -17.948 ms
Remote clock offset: -16.415 ms

# Below is generated by plot.py at 2017-11-16 02:15:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.18 Mbit/s
95th percentile per-packet one-way delay: 43.690 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.18 Mbit/s
95th percentile per-packet one-way delay: 43.690 ms
Loss rate: 0.12%
```

Run 5: Report of Verus — Data Link



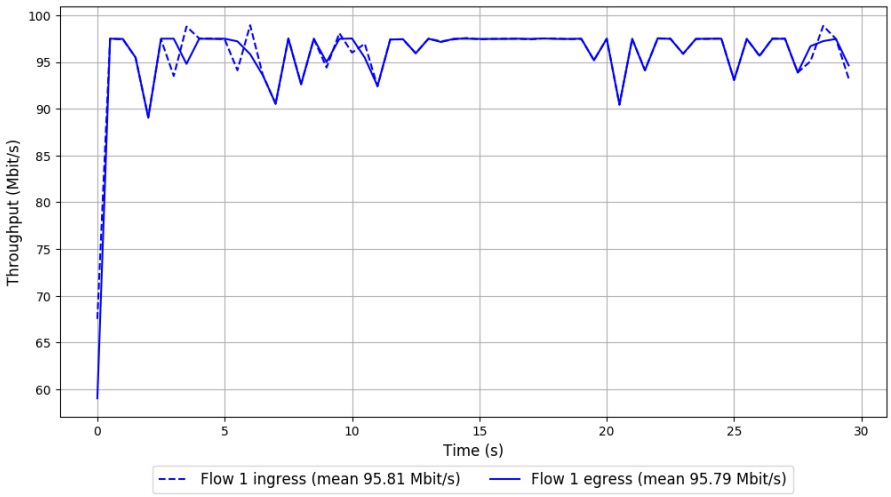



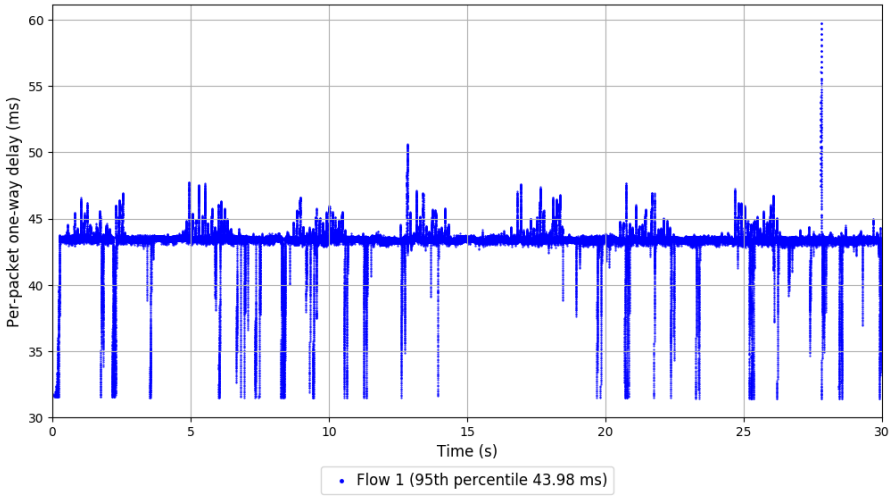
```
Run 6: Statistics of Verus

Start at: 2017-11-15 21:43:10
End at: 2017-11-15 21:43:40
Local clock offset: -16.0 ms
Remote clock offset: -17.045 ms

# Below is generated by plot.py at 2017-11-16 02:15:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.79 Mbit/s
95th percentile per-packet one-way delay: 43.982 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.79 Mbit/s
95th percentile per-packet one-way delay: 43.982 ms
Loss rate: 0.12%
```

Run 6: Report of Verus — Data Link



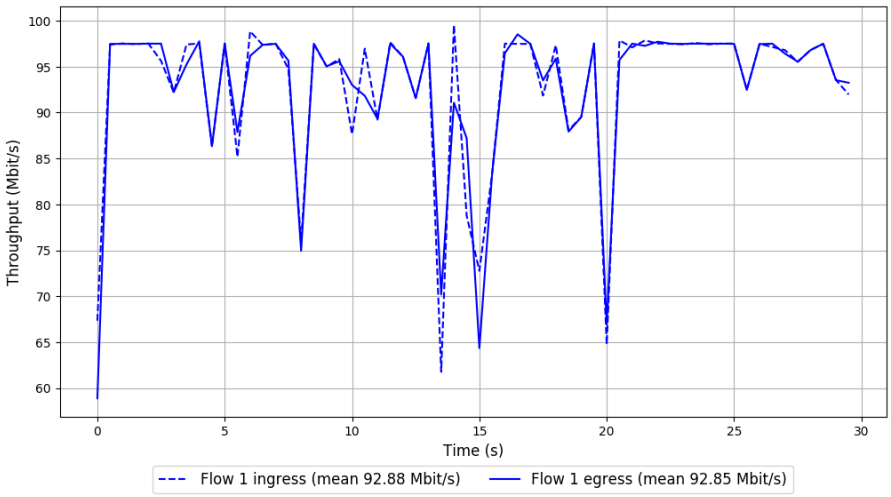



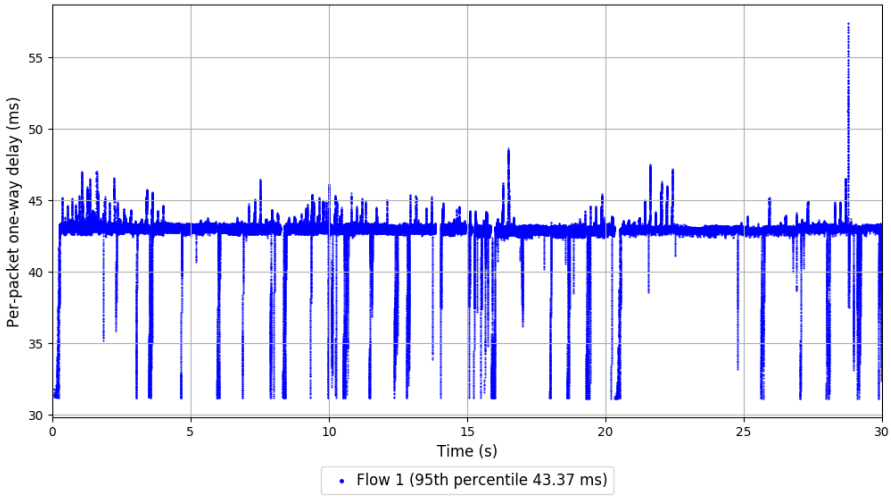
```
Run 7: Statistics of Verus

Start at: 2017-11-15 22:00:44
End at: 2017-11-15 22:01:14
Local clock offset: -14.593 ms
Remote clock offset: -20.107 ms

# Below is generated by plot.py at 2017-11-16 02:15:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.85 Mbit/s
95th percentile per-packet one-way delay: 43.368 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 92.85 Mbit/s
95th percentile per-packet one-way delay: 43.368 ms
Loss rate: 0.13%
```

Run 7: Report of Verus — Data Link



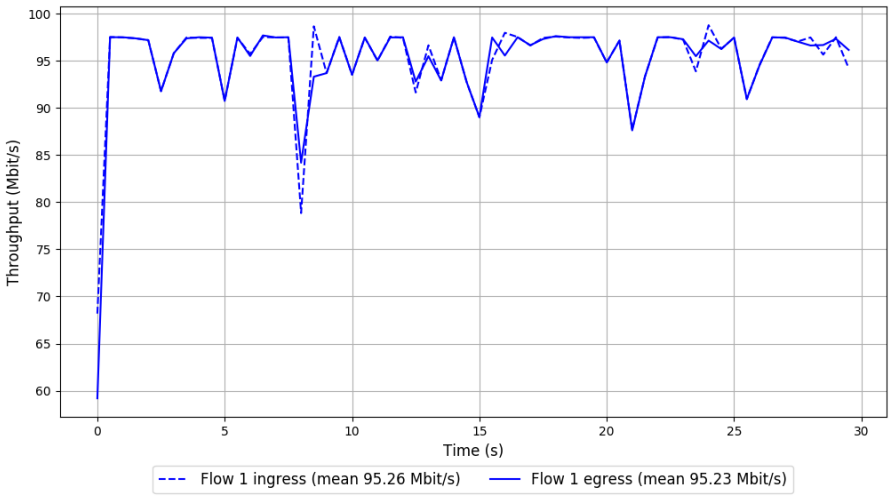



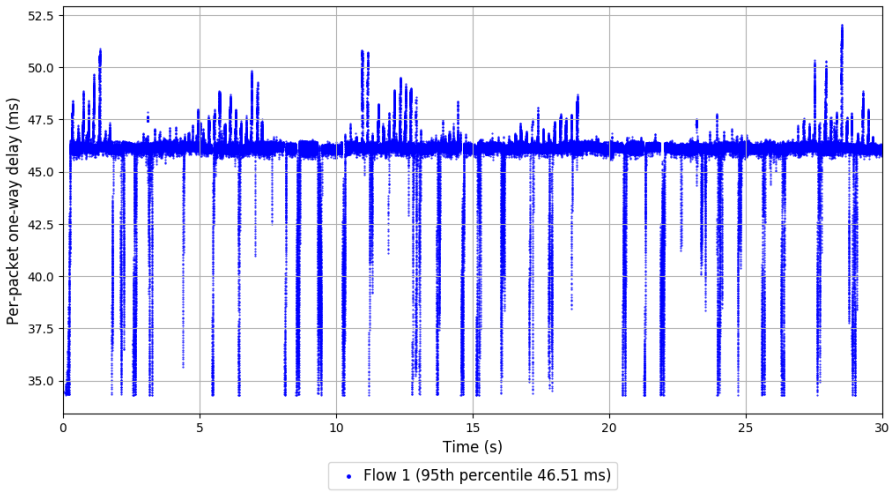
```
Run 8: Statistics of Verus

Start at: 2017-11-15 22:18:16
End at: 2017-11-15 22:18:46
Local clock offset: -8.956 ms
Remote clock offset: -19.155 ms

# Below is generated by plot.py at 2017-11-16 02:16:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.23 Mbit/s
95th percentile per-packet one-way delay: 46.505 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.23 Mbit/s
95th percentile per-packet one-way delay: 46.505 ms
Loss rate: 0.12%
```

Run 8: Report of Verus — Data Link



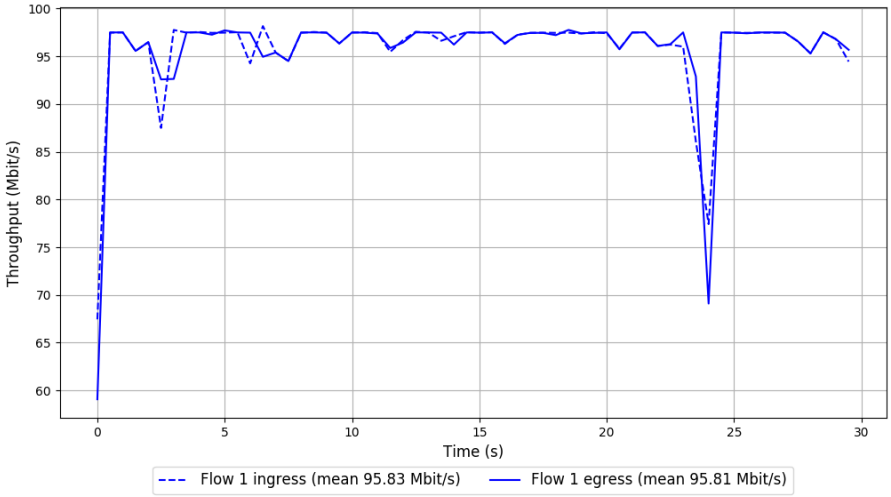



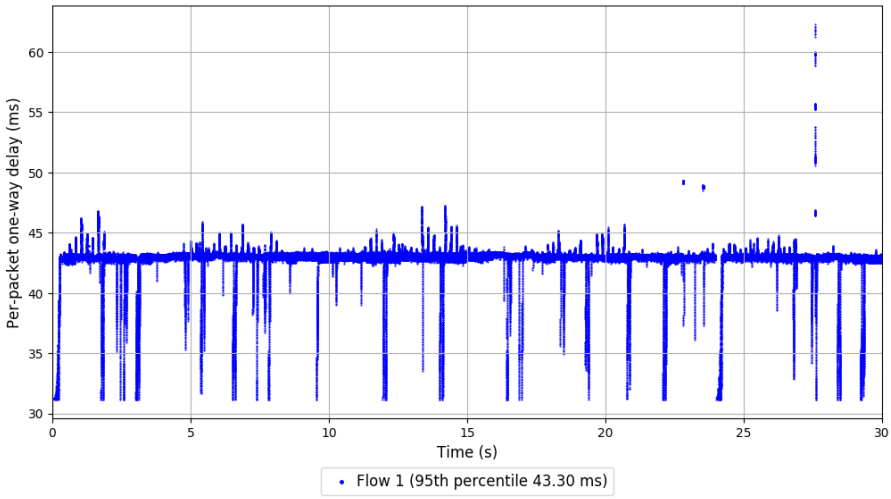
```
Run 9: Statistics of Verus

Start at: 2017-11-15 22:35:45
End at: 2017-11-15 22:36:15
Local clock offset: -13.224 ms
Remote clock offset: -18.946 ms

# Below is generated by plot.py at 2017-11-16 02:16:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 43.304 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 43.304 ms
Loss rate: 0.12%
```

Run 9: Report of Verus — Data Link



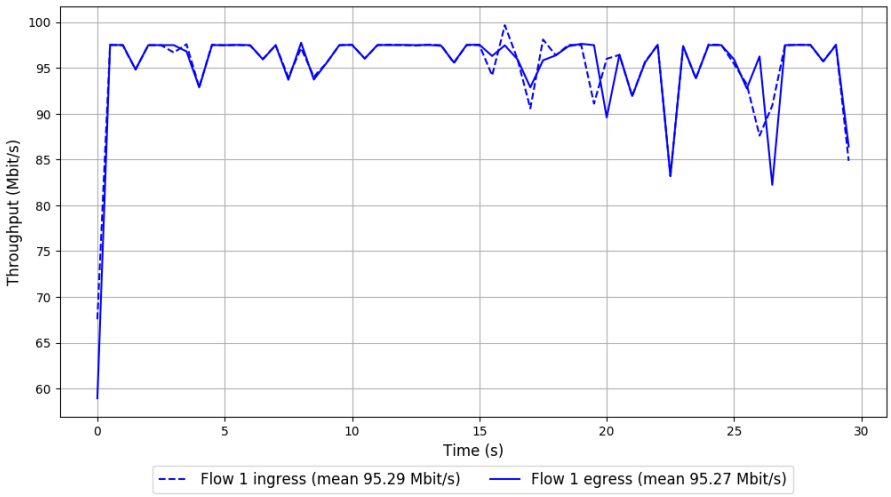



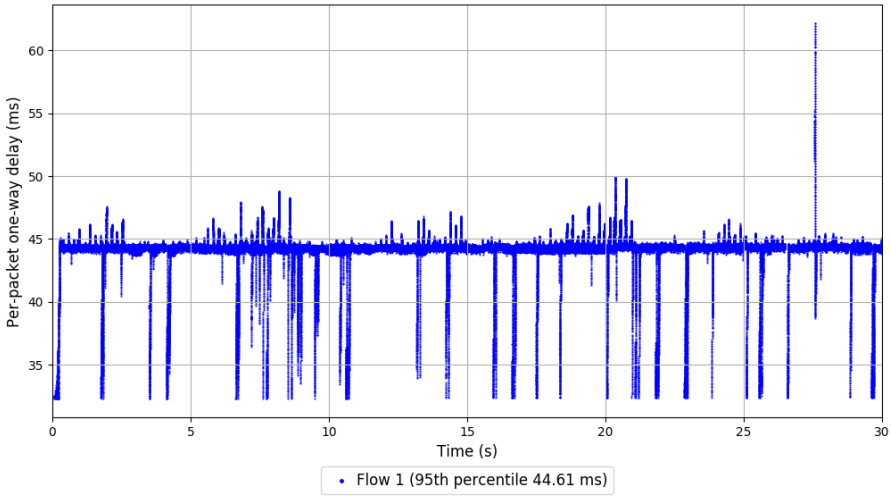
```
Run 10: Statistics of Verus

Start at: 2017-11-15 22:53:00
End at: 2017-11-15 22:53:30
Local clock offset: -15.563 ms
Remote clock offset: -20.731 ms

# Below is generated by plot.py at 2017-11-16 02:16:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 44.607 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 44.607 ms
Loss rate: 0.12%
```

Run 10: Report of Verus — Data Link



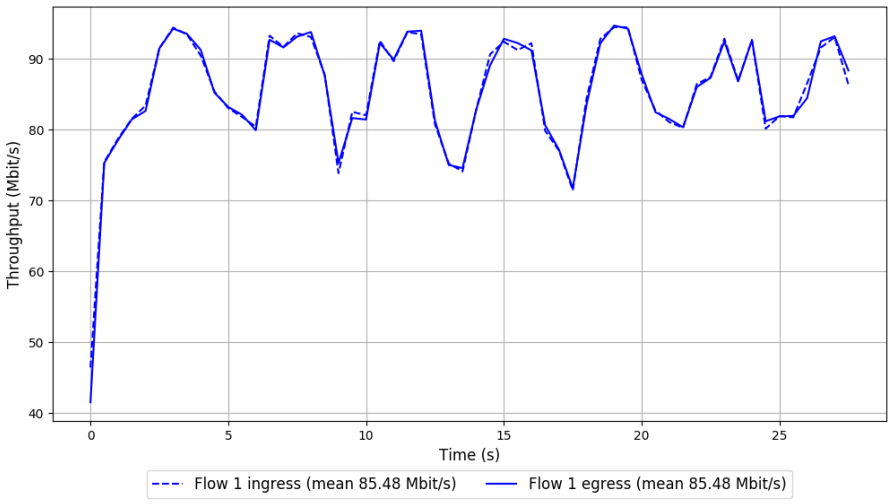



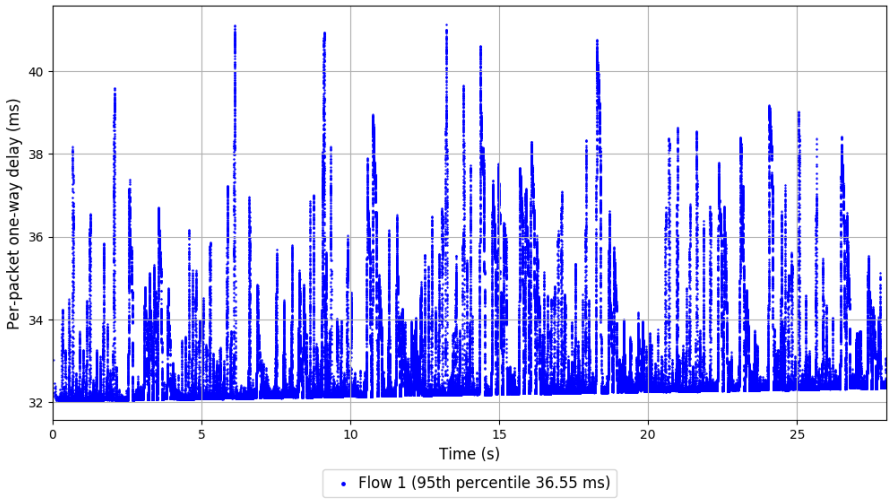
```
Run 1: Statistics of Copa

Start at: 2017-11-15 20:24:00
End at: 2017-11-15 20:24:30
Local clock offset: -6.704 ms
Remote clock offset: -14.444 ms

# Below is generated by plot.py at 2017-11-16 02:17:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.48 Mbit/s
95th percentile per-packet one-way delay: 36.546 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 85.48 Mbit/s
95th percentile per-packet one-way delay: 36.546 ms
Loss rate: 0.09%
```

Run 1: Report of Copa — Data Link



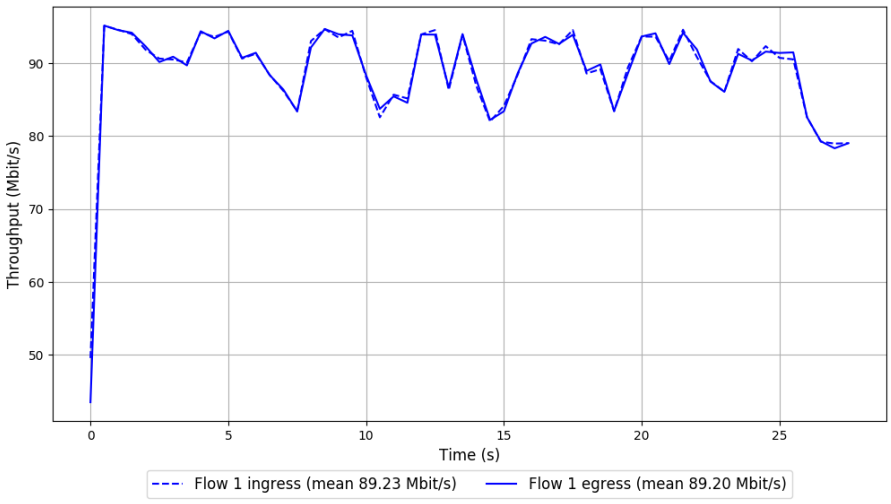



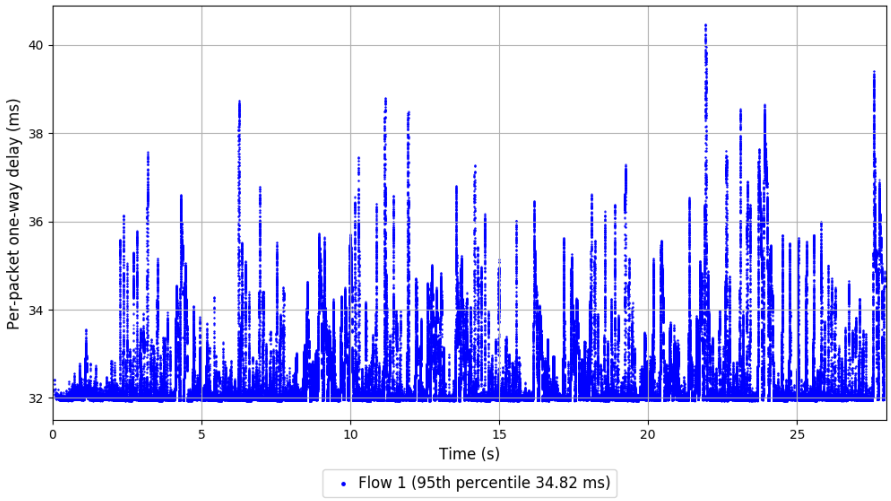
```
Run 2: Statistics of Copa

Start at: 2017-11-15 20:41:53
End at: 2017-11-15 20:42:23
Local clock offset: -9.675 ms
Remote clock offset: -14.742 ms

# Below is generated by plot.py at 2017-11-16 02:17:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.20 Mbit/s
95th percentile per-packet one-way delay: 34.824 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 89.20 Mbit/s
95th percentile per-packet one-way delay: 34.824 ms
Loss rate: 0.11%
```

Run 2: Report of Copa — Data Link



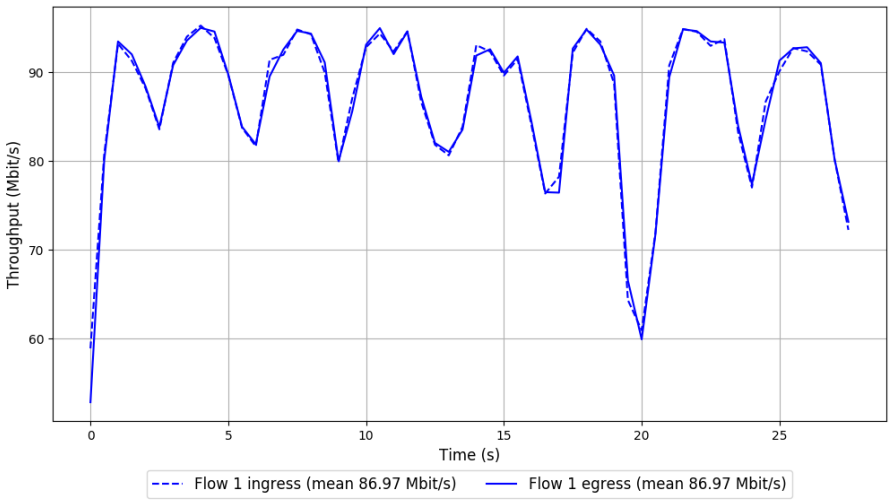



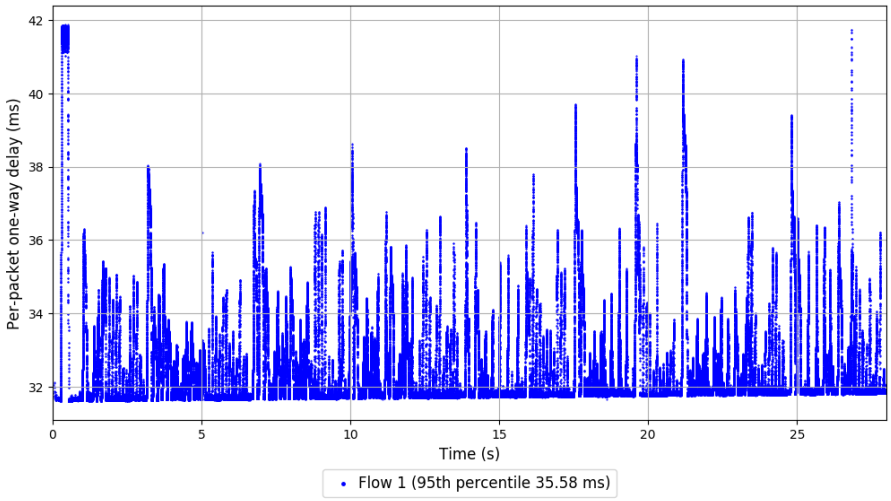
```
Run 3: Statistics of Copa

Start at: 2017-11-15 20:59:29
End at: 2017-11-15 20:59:59
Local clock offset: -10.859 ms
Remote clock offset: -16.055 ms

# Below is generated by plot.py at 2017-11-16 02:18:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.97 Mbit/s
95th percentile per-packet one-way delay: 35.577 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 86.97 Mbit/s
95th percentile per-packet one-way delay: 35.577 ms
Loss rate: 0.08%
```

Run 3: Report of Copa — Data Link



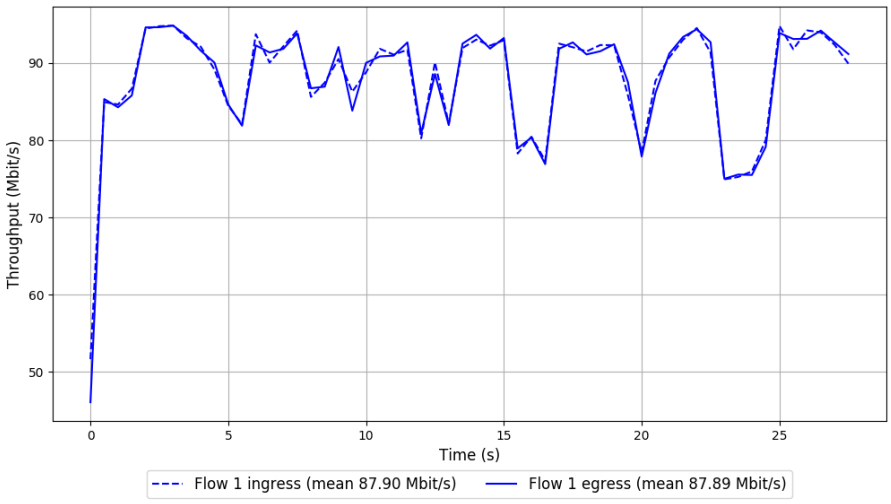



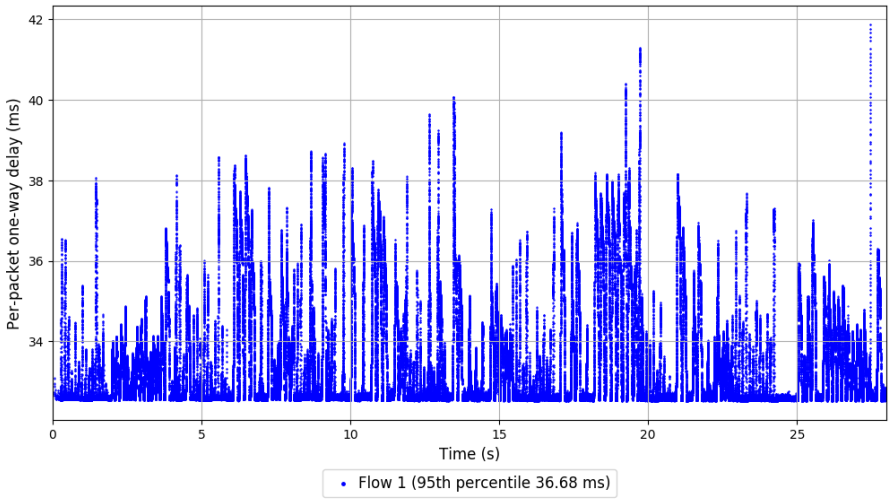
```
Run 4: Statistics of Copa

Start at: 2017-11-15 21:16:53
End at: 2017-11-15 21:17:23
Local clock offset: -14.3 ms
Remote clock offset: -17.192 ms

# Below is generated by plot.py at 2017-11-16 02:18:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.89 Mbit/s
95th percentile per-packet one-way delay: 36.678 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 87.89 Mbit/s
95th percentile per-packet one-way delay: 36.678 ms
Loss rate: 0.10%
```

Run 4: Report of Copa — Data Link



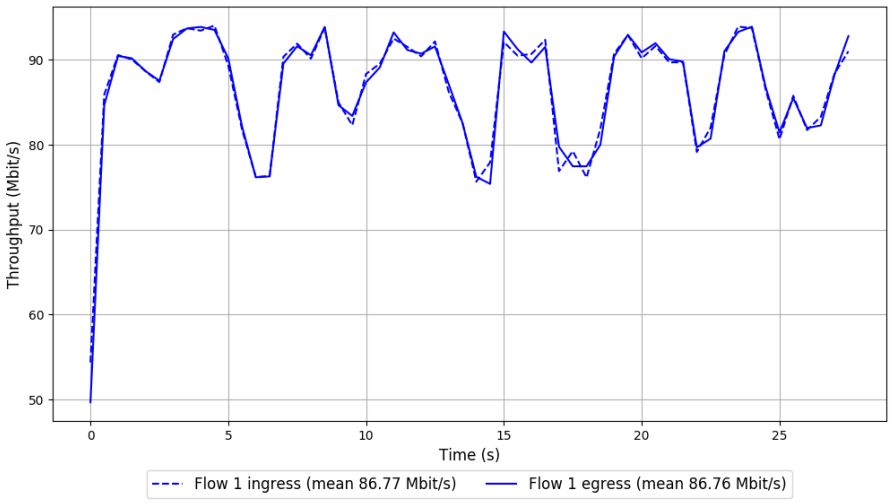



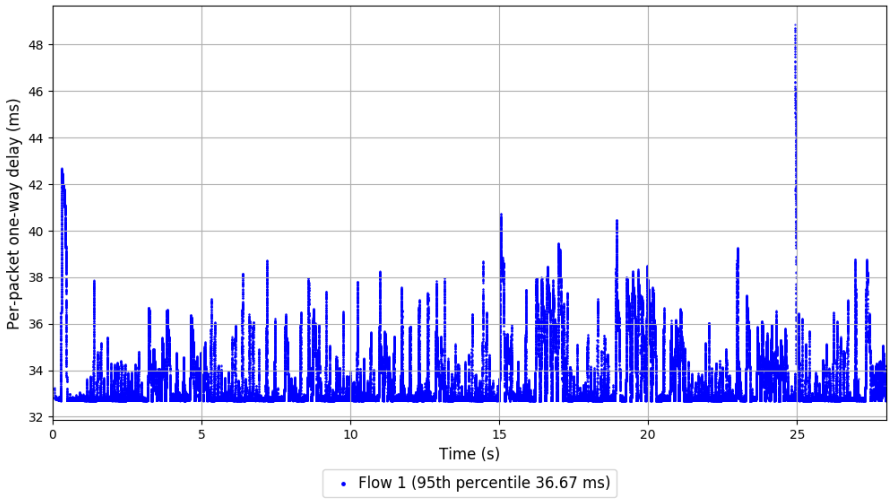
```
Run 5: Statistics of Copa

Start at: 2017-11-15 21:34:30
End at: 2017-11-15 21:35:00
Local clock offset: -15.209 ms
Remote clock offset: -17.601 ms

# Below is generated by plot.py at 2017-11-16 02:18:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.76 Mbit/s
95th percentile per-packet one-way delay: 36.670 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 86.76 Mbit/s
95th percentile per-packet one-way delay: 36.670 ms
Loss rate: 0.10%
```

Run 5: Report of Copa — Data Link



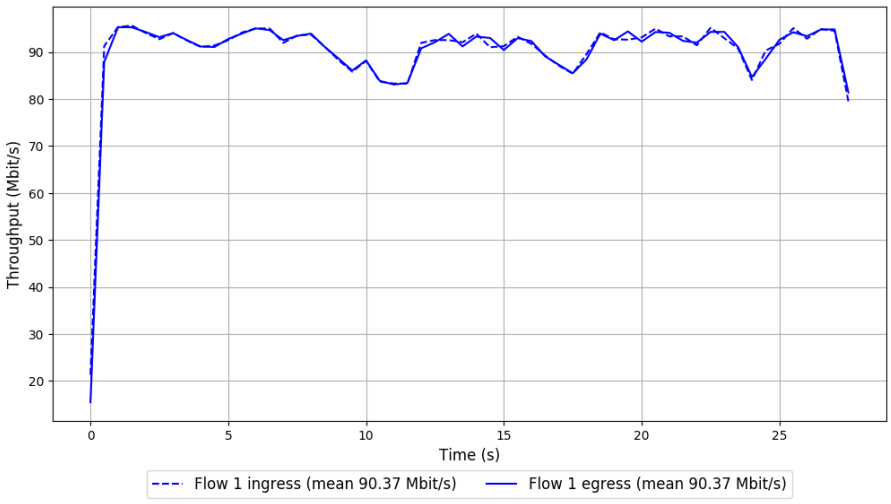



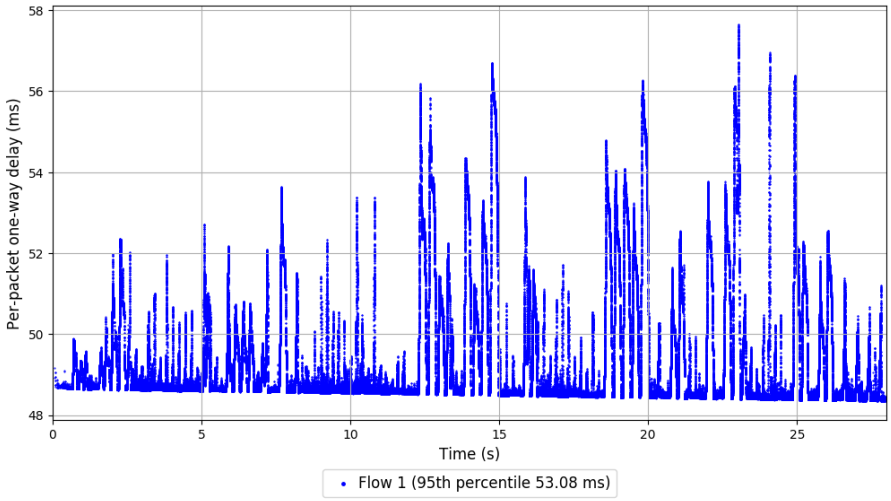
```
Run 6: Statistics of Copa

Start at: 2017-11-15 21:52:05
End at: 2017-11-15 21:52:35
Local clock offset: -15.535 ms
Remote clock offset: -18.545 ms

# Below is generated by plot.py at 2017-11-16 02:18:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.37 Mbit/s
95th percentile per-packet one-way delay: 53.082 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 90.37 Mbit/s
95th percentile per-packet one-way delay: 53.082 ms
Loss rate: 0.14%
```

Run 6: Report of Copa — Data Link



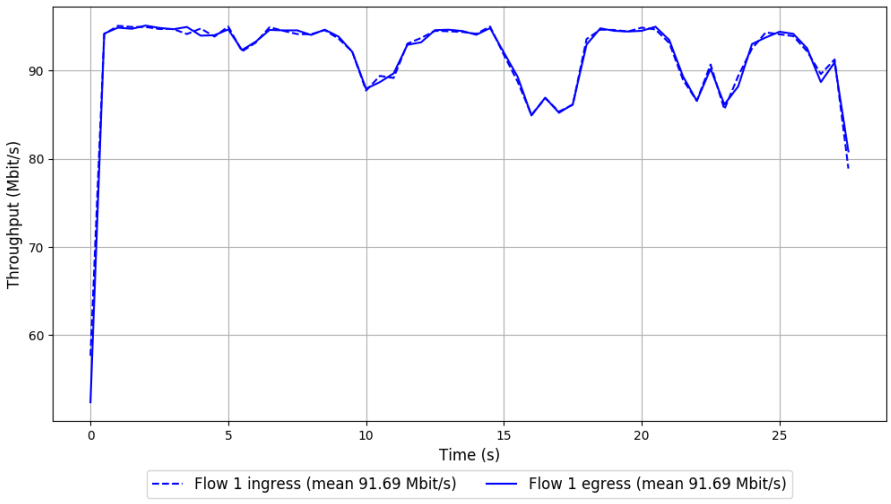



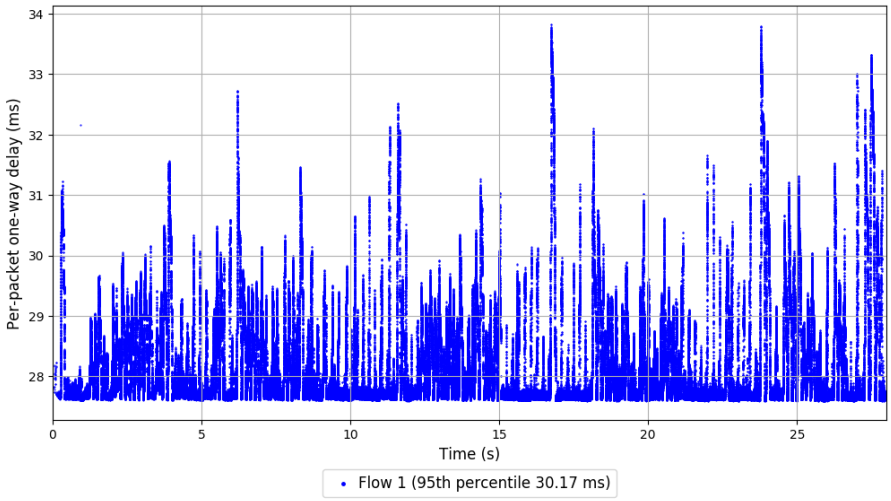
```
Run 7: Statistics of Copa

Start at: 2017-11-15 22:09:30
End at: 2017-11-15 22:10:00
Local clock offset: -14.244 ms
Remote clock offset: -17.326 ms

# Below is generated by plot.py at 2017-11-16 02:18:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 30.169 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 30.169 ms
Loss rate: 0.08%
```

Run 7: Report of Copa — Data Link



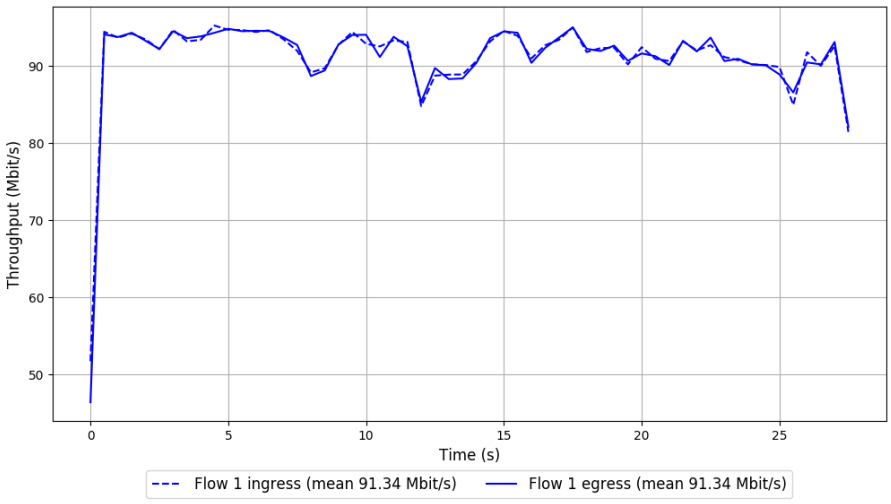



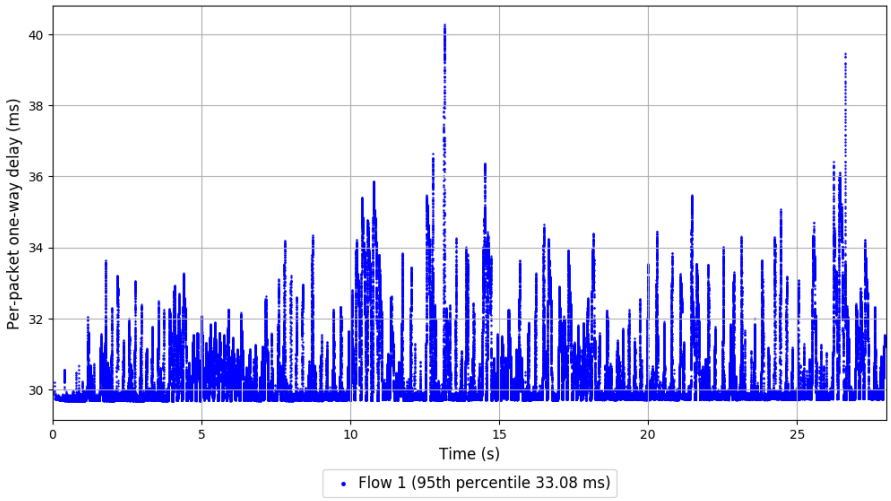
```
Run 8: Statistics of Copa

Start at: 2017-11-15 22:27:17
End at: 2017-11-15 22:27:47
Local clock offset: -15.32 ms
Remote clock offset: -20.222 ms

# Below is generated by plot.py at 2017-11-16 02:18:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.34 Mbit/s
95th percentile per-packet one-way delay: 33.079 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 91.34 Mbit/s
95th percentile per-packet one-way delay: 33.079 ms
Loss rate: 0.10%
```

Run 8: Report of Copa — Data Link



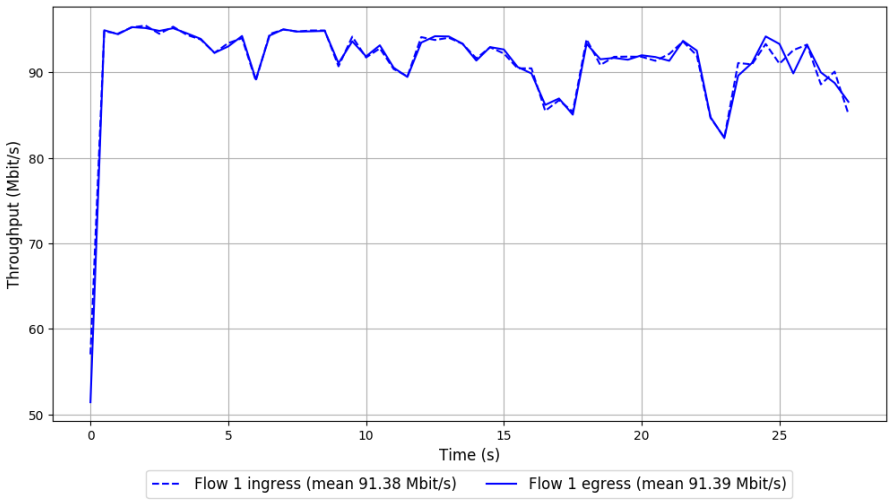



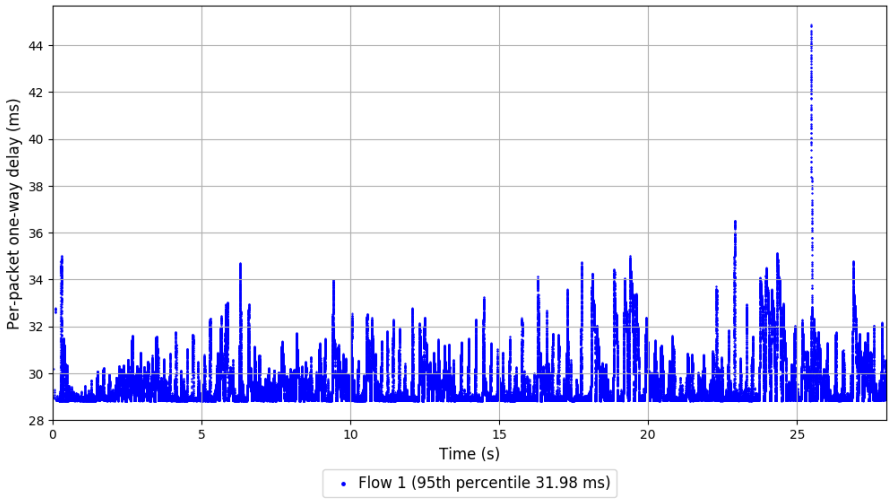
```
Run 9: Statistics of Copa

Start at: 2017-11-15 22:44:22
End at: 2017-11-15 22:44:52
Local clock offset: -16.046 ms
Remote clock offset: -18.858 ms

# Below is generated by plot.py at 2017-11-16 02:19:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.39 Mbit/s
95th percentile per-packet one-way delay: 31.979 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 91.39 Mbit/s
95th percentile per-packet one-way delay: 31.979 ms
Loss rate: 0.08%
```

Run 9: Report of Copa — Data Link



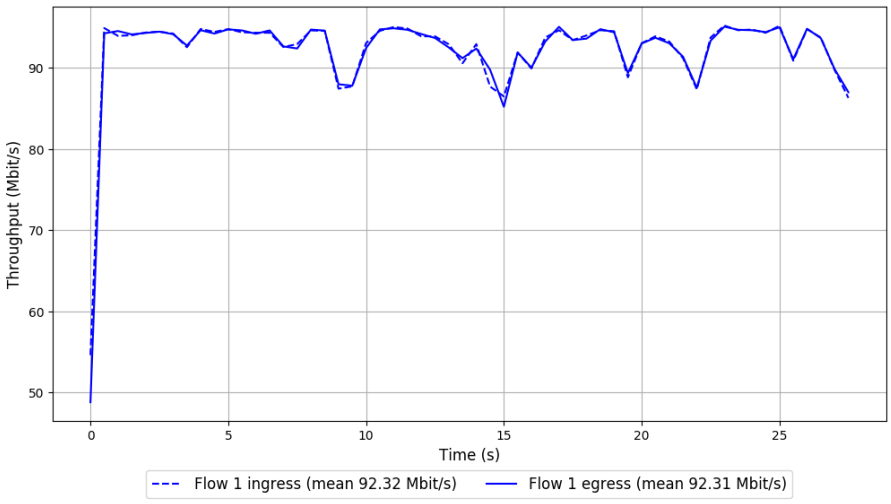



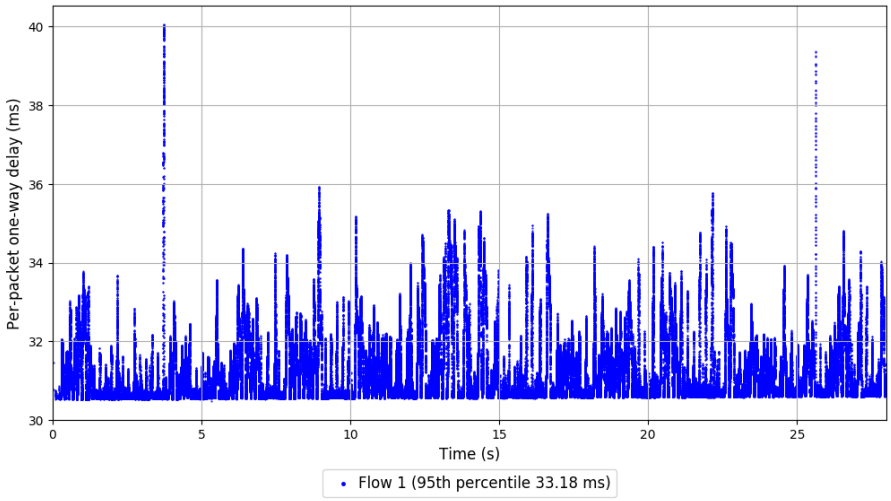
```
Run 10: Statistics of Copa

Start at: 2017-11-15 23:01:58
End at: 2017-11-15 23:02:28
Local clock offset: -17.121 ms
Remote clock offset: -19.176 ms

# Below is generated by plot.py at 2017-11-16 02:19:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.31 Mbit/s
95th percentile per-packet one-way delay: 33.176 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 92.31 Mbit/s
95th percentile per-packet one-way delay: 33.176 ms
Loss rate: 0.10%
```

Run 10: Report of Copa — Data Link



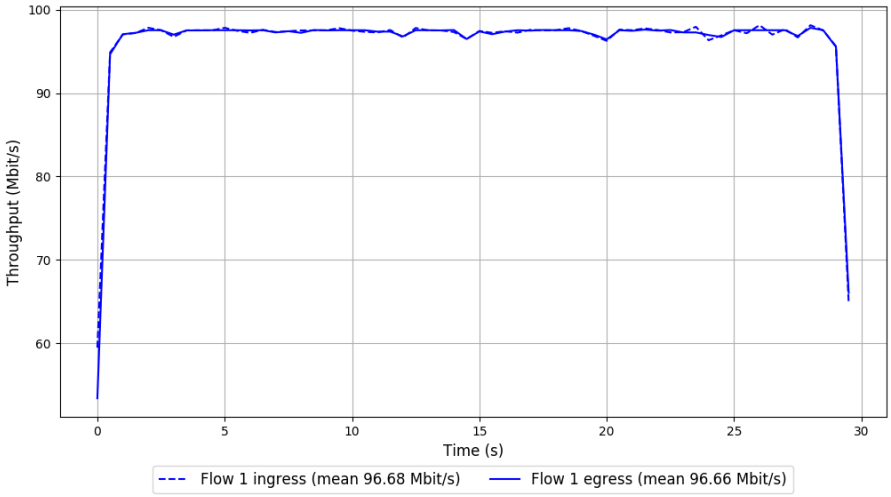



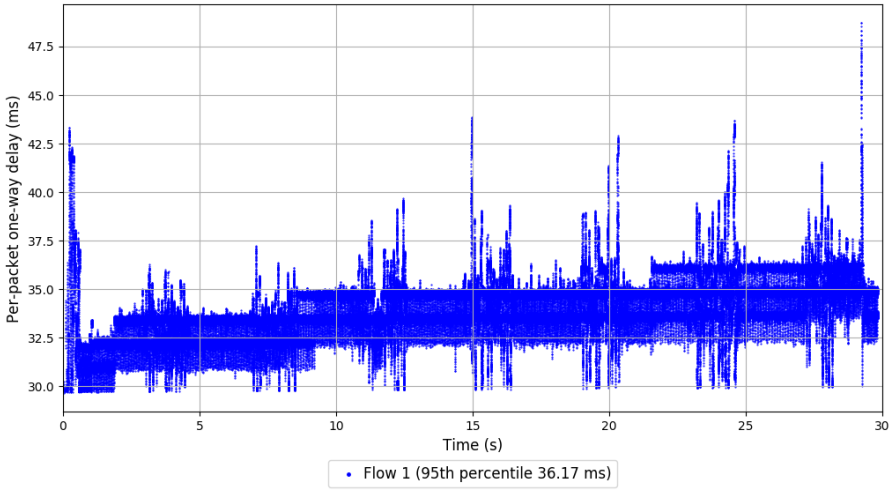
```
Run 1: Statistics of Indigo

Start at: 2017-11-15 20:20:59
End at: 2017-11-15 20:21:29
Local clock offset: -6.649 ms
Remote clock offset: -13.654 ms

# Below is generated by plot.py at 2017-11-16 02:19:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.66 Mbit/s
95th percentile per-packet one-way delay: 36.168 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.66 Mbit/s
95th percentile per-packet one-way delay: 36.168 ms
Loss rate: 0.10%
```

Run 1: Report of Indigo — Data Link



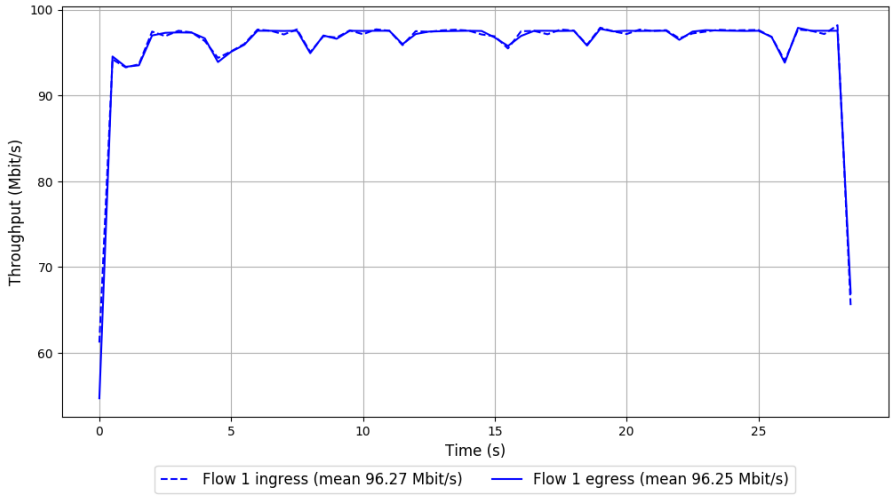



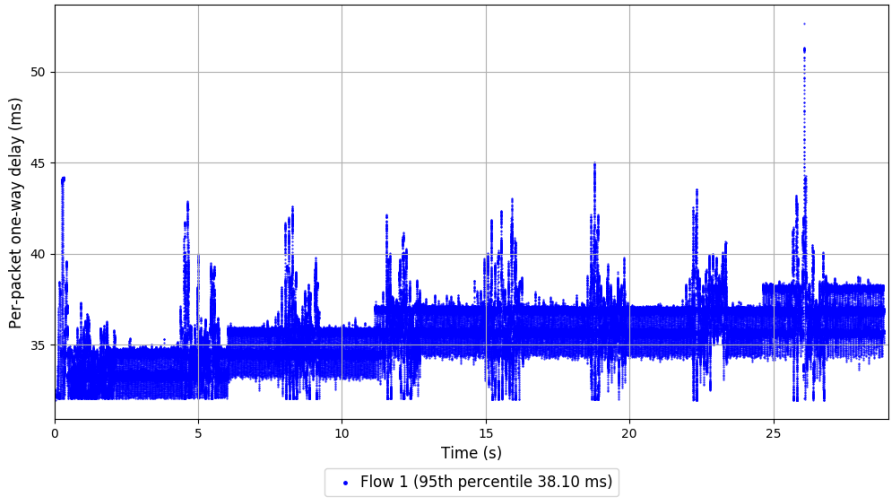
```
Run 2: Statistics of Indigo

Start at: 2017-11-15 20:38:52
End at: 2017-11-15 20:39:22
Local clock offset: -9.161 ms
Remote clock offset: -13.809 ms

# Below is generated by plot.py at 2017-11-16 02:19:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.25 Mbit/s
95th percentile per-packet one-way delay: 38.096 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 96.25 Mbit/s
95th percentile per-packet one-way delay: 38.096 ms
Loss rate: 0.11%
```

Run 2: Report of Indigo — Data Link



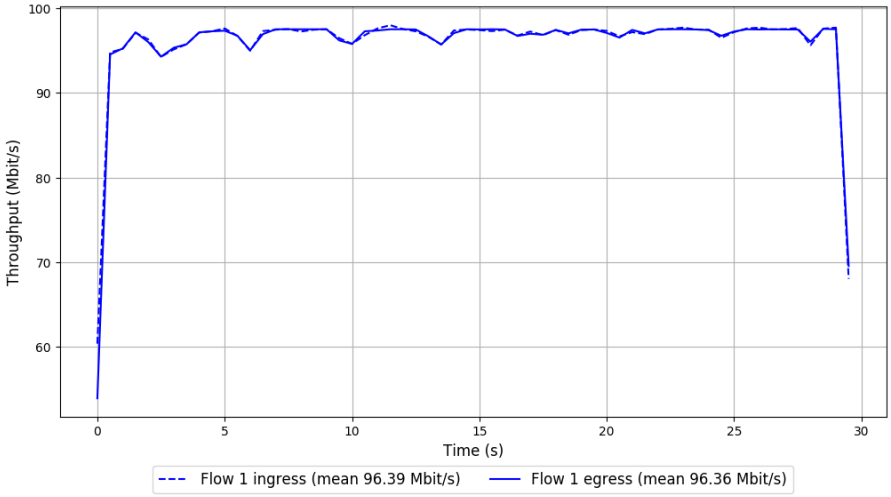



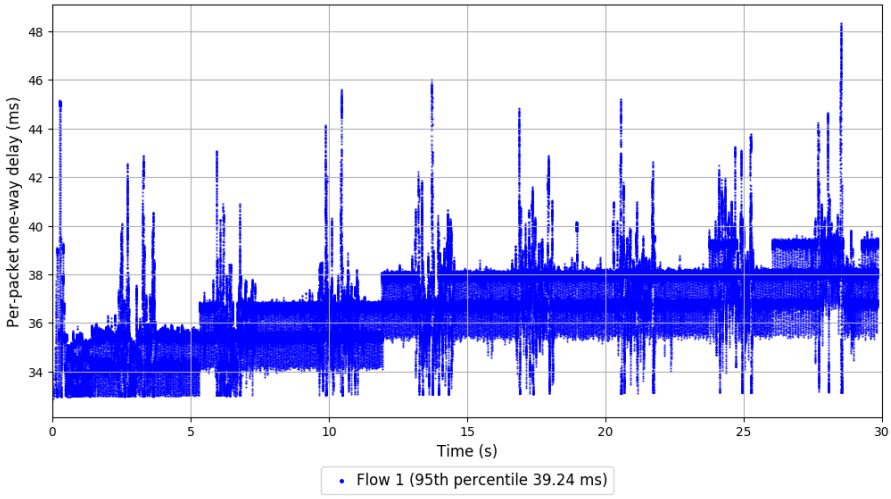
```
Run 3: Statistics of Indigo

Start at: 2017-11-15 20:56:49
End at: 2017-11-15 20:57:19
Local clock offset: -8.675 ms
Remote clock offset: -16.378 ms

# Below is generated by plot.py at 2017-11-16 02:19:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.36 Mbit/s
95th percentile per-packet one-way delay: 39.241 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.36 Mbit/s
95th percentile per-packet one-way delay: 39.241 ms
Loss rate: 0.10%
```

Run 3: Report of Indigo — Data Link



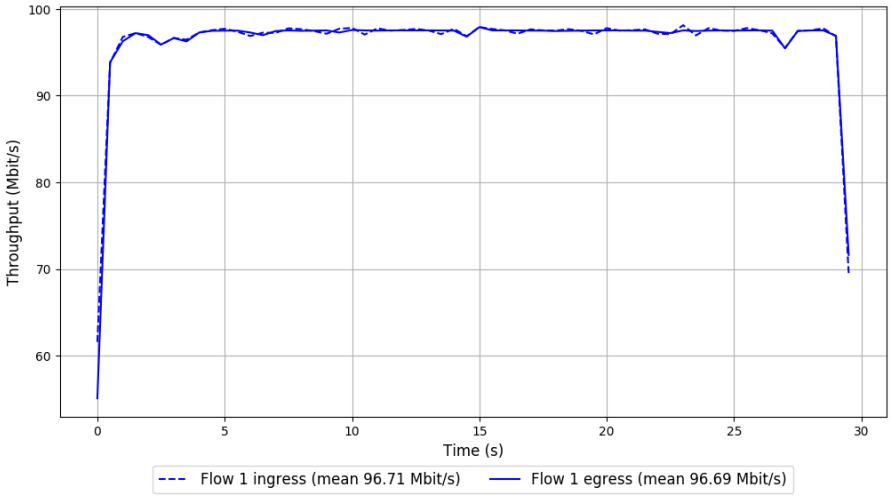



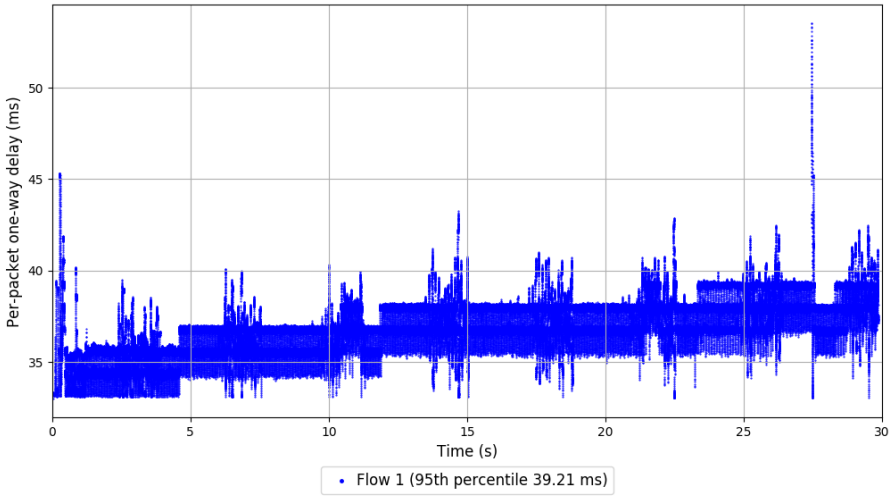
```
Run 4: Statistics of Indigo

Start at: 2017-11-15 21:14:11
End at: 2017-11-15 21:14:41
Local clock offset: -13.812 ms
Remote clock offset: -16.899 ms

# Below is generated by plot.py at 2017-11-16 02:19:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.69 Mbit/s
95th percentile per-packet one-way delay: 39.209 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 96.69 Mbit/s
95th percentile per-packet one-way delay: 39.209 ms
Loss rate: 0.09%
```

Run 4: Report of Indigo — Data Link



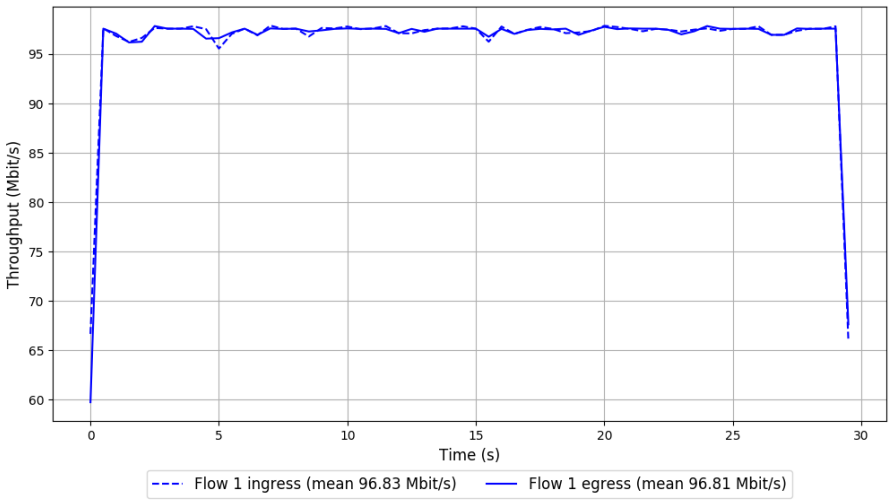



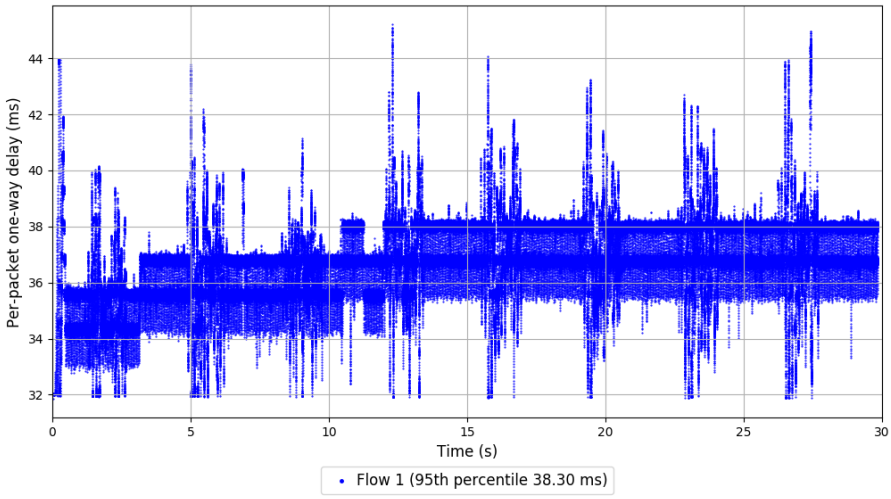
```
Run 5: Statistics of Indigo

Start at: 2017-11-15 21:31:52
End at: 2017-11-15 21:32:22
Local clock offset: -15.917 ms
Remote clock offset: -17.316 ms

# Below is generated by plot.py at 2017-11-16 02:19:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.81 Mbit/s
95th percentile per-packet one-way delay: 38.303 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.81 Mbit/s
95th percentile per-packet one-way delay: 38.303 ms
Loss rate: 0.10%
```

Run 5: Report of Indigo — Data Link



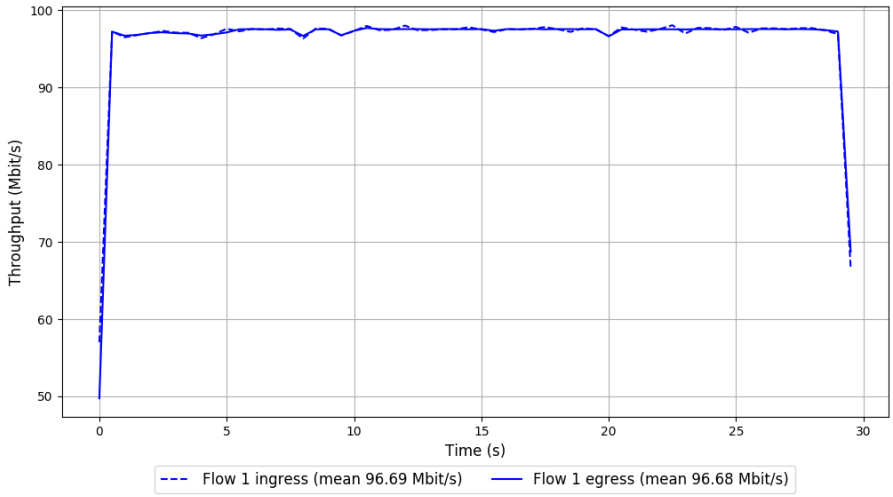



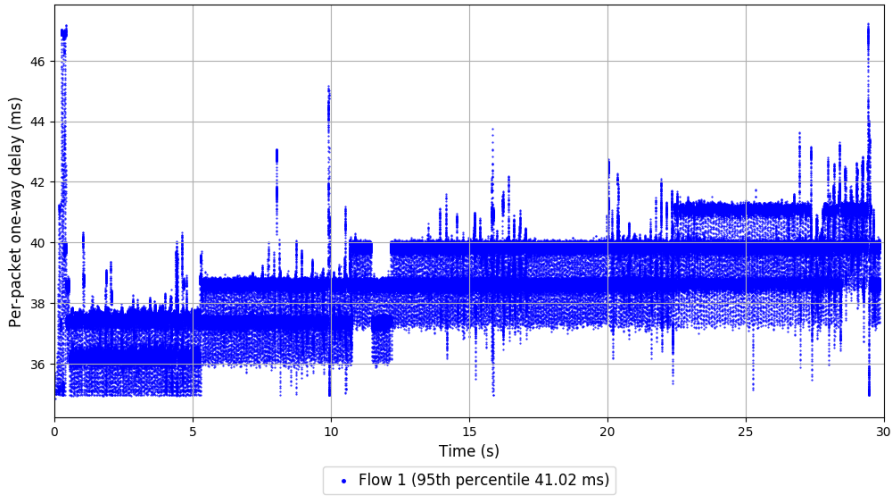
```
Run 6: Statistics of Indigo

Start at: 2017-11-15 21:49:31
End at: 2017-11-15 21:50:01
Local clock offset: -14.862 ms
Remote clock offset: -20.106 ms

# Below is generated by plot.py at 2017-11-16 02:19:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.68 Mbit/s
95th percentile per-packet one-way delay: 41.024 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.68 Mbit/s
95th percentile per-packet one-way delay: 41.024 ms
Loss rate: 0.10%
```

Run 6: Report of Indigo — Data Link



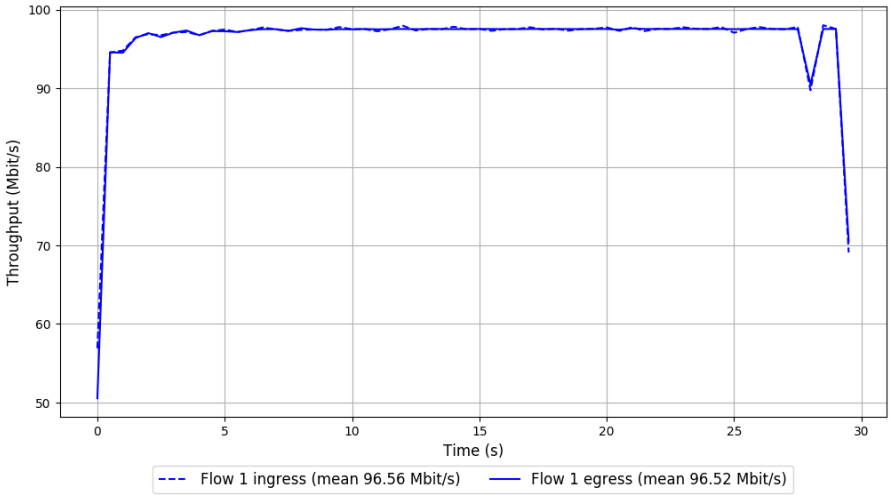



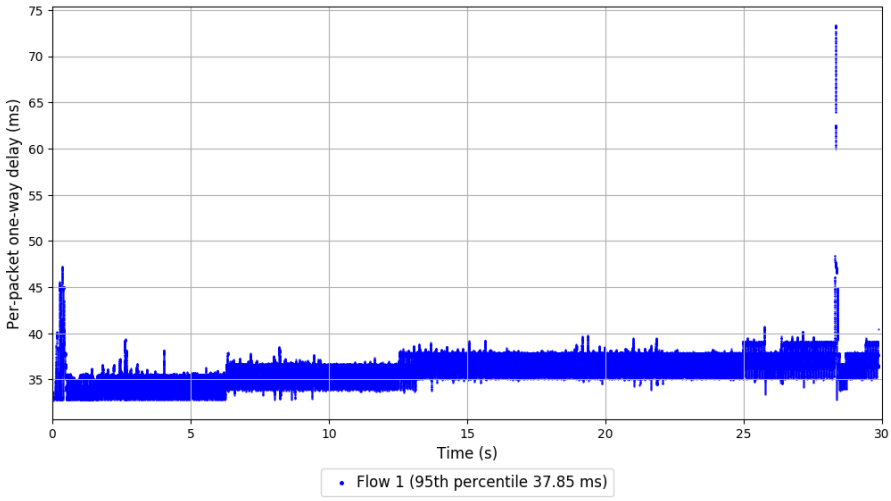
```
Run 7: Statistics of Indigo

Start at: 2017-11-15 22:06:48
End at: 2017-11-15 22:07:18
Local clock offset: -10.495 ms
Remote clock offset: -18.602 ms

# Below is generated by plot.py at 2017-11-16 02:20:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.52 Mbit/s
95th percentile per-packet one-way delay: 37.852 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.52 Mbit/s
95th percentile per-packet one-way delay: 37.852 ms
Loss rate: 0.10%
```

Run 7: Report of Indigo — Data Link



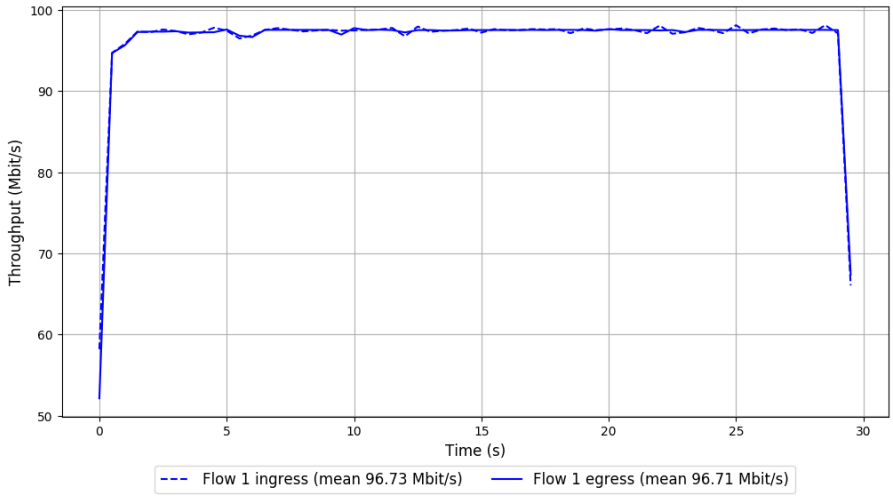



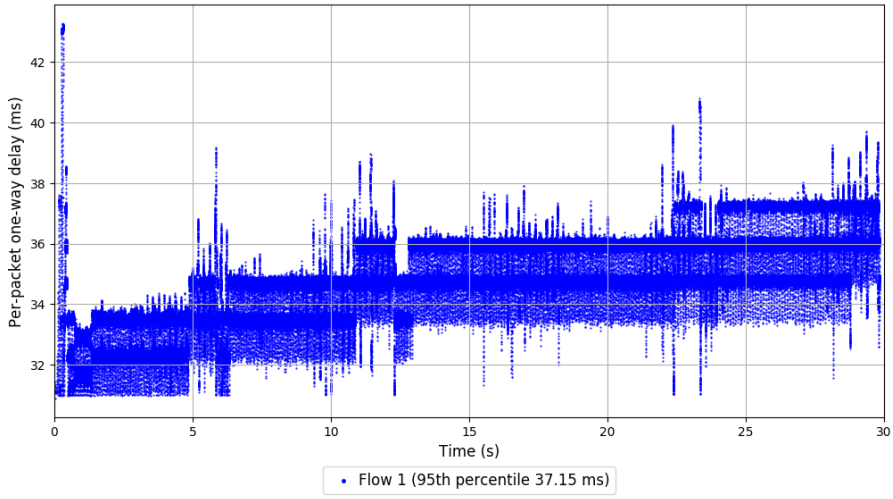
```
Run 8: Statistics of Indigo

Start at: 2017-11-15 22:24:41
End at: 2017-11-15 22:25:11
Local clock offset: -13.319 ms
Remote clock offset: -19.884 ms

# Below is generated by plot.py at 2017-11-16 02:20:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.71 Mbit/s
95th percentile per-packet one-way delay: 37.146 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.71 Mbit/s
95th percentile per-packet one-way delay: 37.146 ms
Loss rate: 0.10%
```

Run 8: Report of Indigo — Data Link

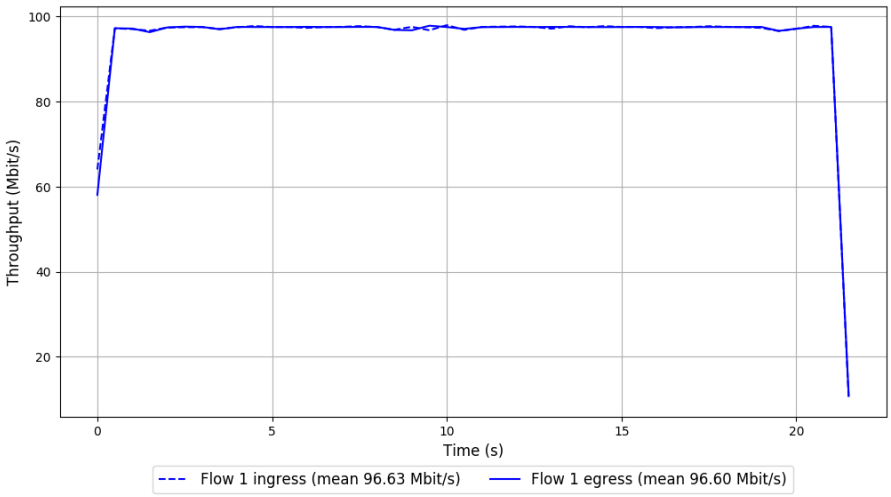


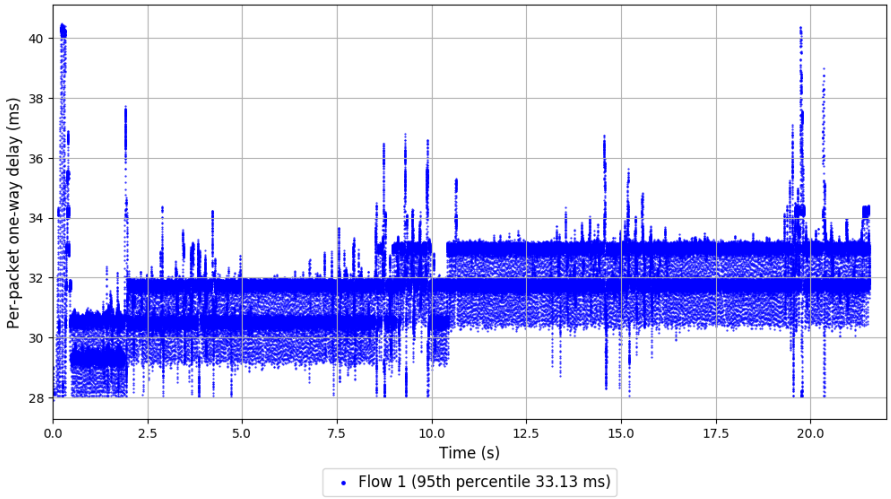



```
Run 9: Statistics of Indigo

Start at: 2017-11-15 22:41:48
End at: 2017-11-15 22:42:18
Local clock offset: -16.117 ms
Remote clock offset: -18.241 ms
```

Run 9: Report of Indigo — Data Link



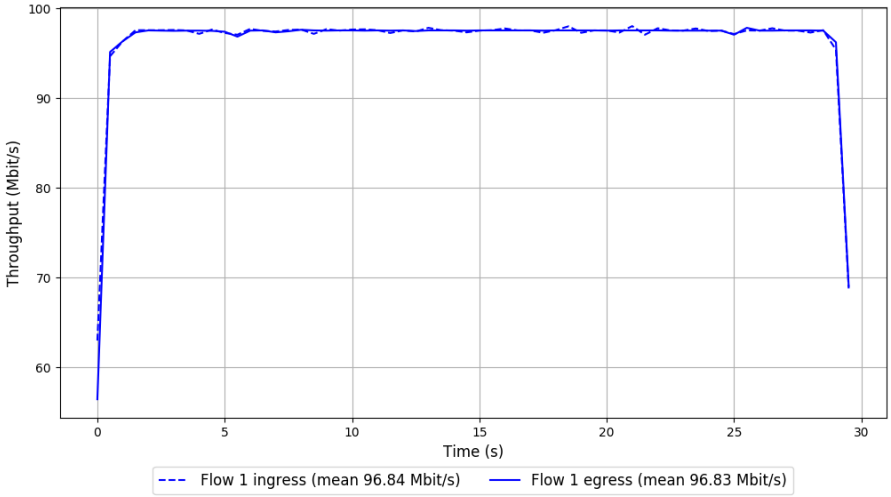



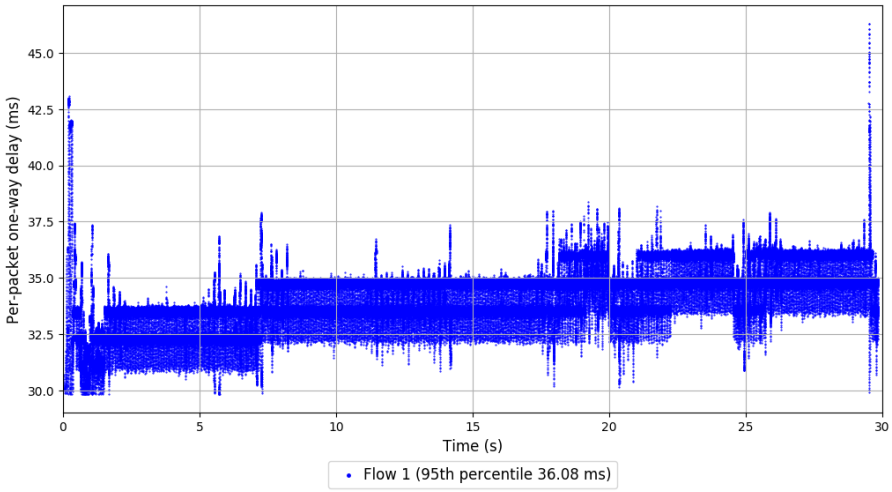
```
Run 10: Statistics of Indigo

Start at: 2017-11-15 22:59:12
End at: 2017-11-15 22:59:42
Local clock offset: -17.449 ms
Remote clock offset: -19.205 ms

# Below is generated by plot.py at 2017-11-16 02:21:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.83 Mbit/s
95th percentile per-packet one-way delay: 36.080 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.83 Mbit/s
95th percentile per-packet one-way delay: 36.080 ms
Loss rate: 0.10%
```

Run 10: Report of Indigo — Data Link



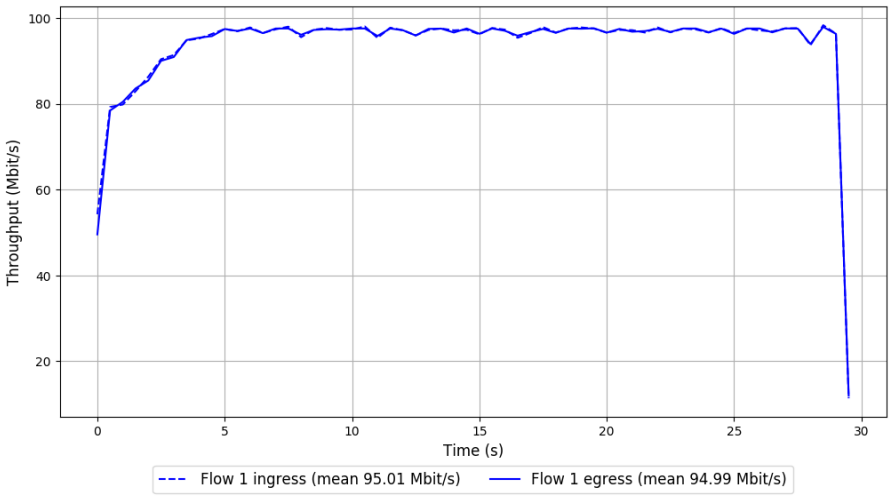



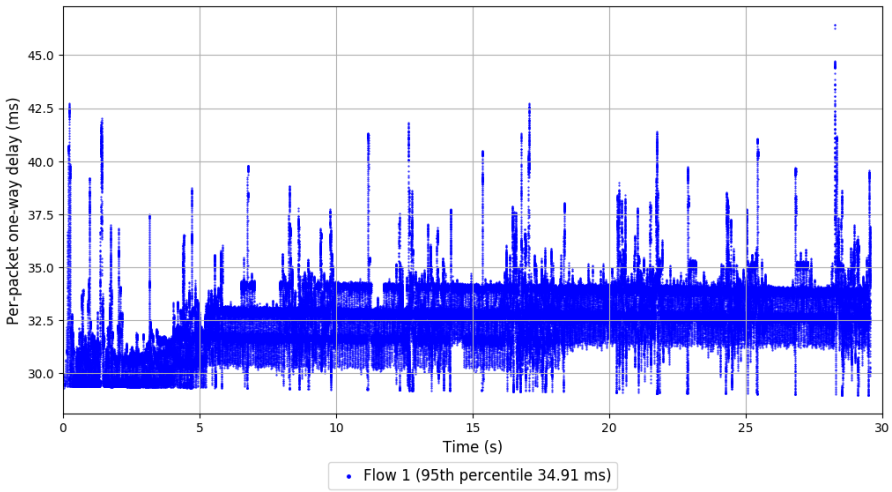
```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-15 20:11:30
End at: 2017-11-15 20:12:00
Local clock offset: -9.191 ms
Remote clock offset: -13.971 ms

# Below is generated by plot.py at 2017-11-16 02:21:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.99 Mbit/s
95th percentile per-packet one-way delay: 34.915 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 94.99 Mbit/s
95th percentile per-packet one-way delay: 34.915 ms
Loss rate: 0.11%
```

Run 1: Report of Indigo-calib — Data Link



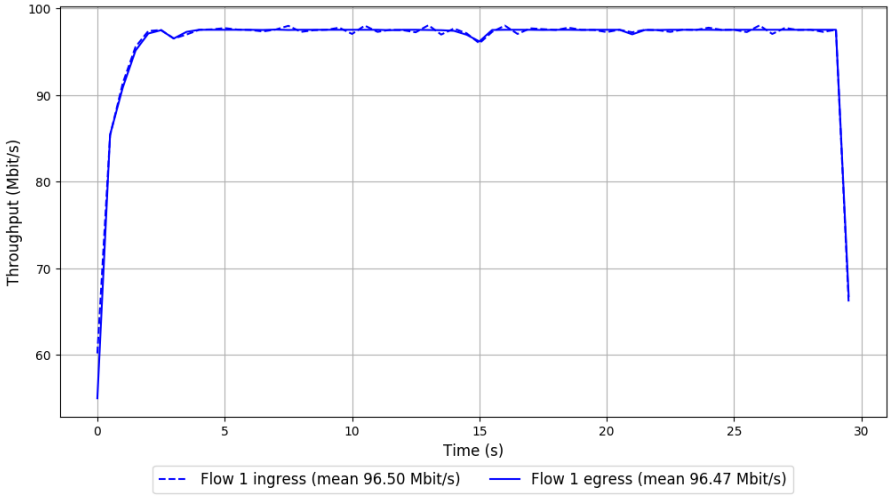



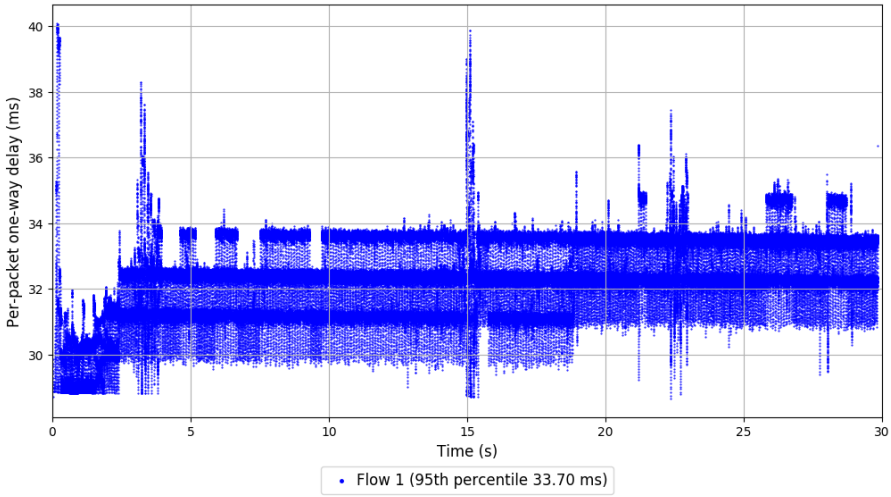
```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-15 20:30:32
End at: 2017-11-15 20:31:02
Local clock offset: -13.398 ms
Remote clock offset: -14.417 ms

# Below is generated by plot.py at 2017-11-16 02:21:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.47 Mbit/s
95th percentile per-packet one-way delay: 33.704 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.47 Mbit/s
95th percentile per-packet one-way delay: 33.704 ms
Loss rate: 0.10%
```

Run 2: Report of Indigo-calib — Data Link



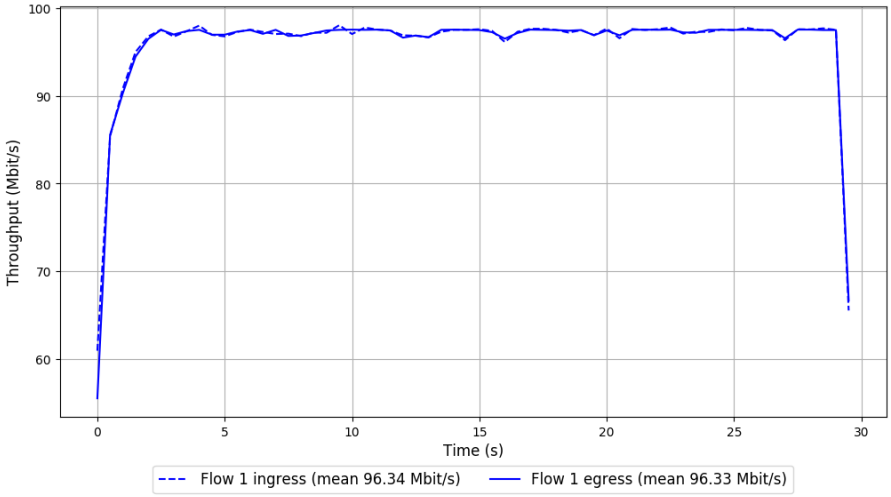



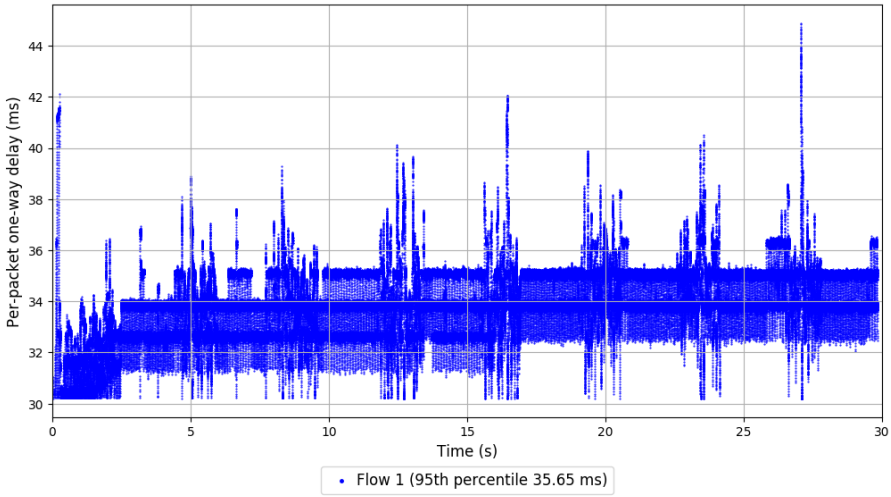
```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-15 20:48:13
End at: 2017-11-15 20:48:43
Local clock offset: -9.96 ms
Remote clock offset: -15.907 ms

# Below is generated by plot.py at 2017-11-16 02:21:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.33 Mbit/s
95th percentile per-packet one-way delay: 35.653 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.33 Mbit/s
95th percentile per-packet one-way delay: 35.653 ms
Loss rate: 0.10%
```

Run 3: Report of Indigo-calib — Data Link



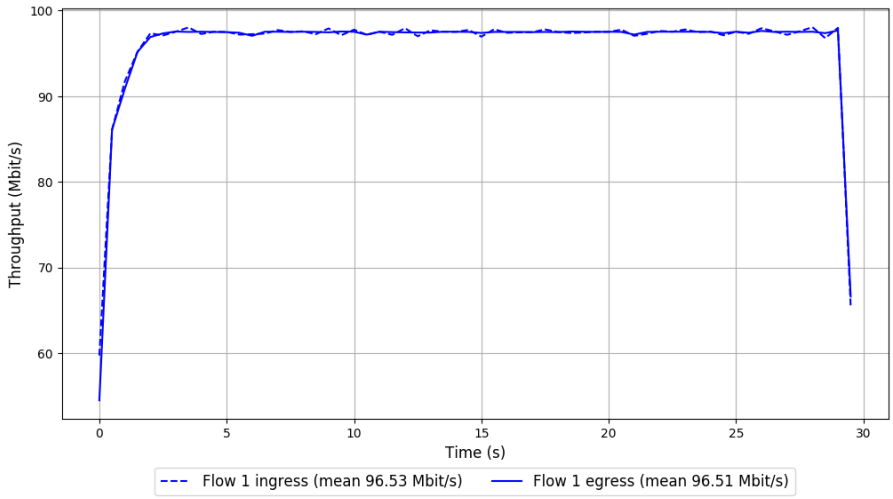



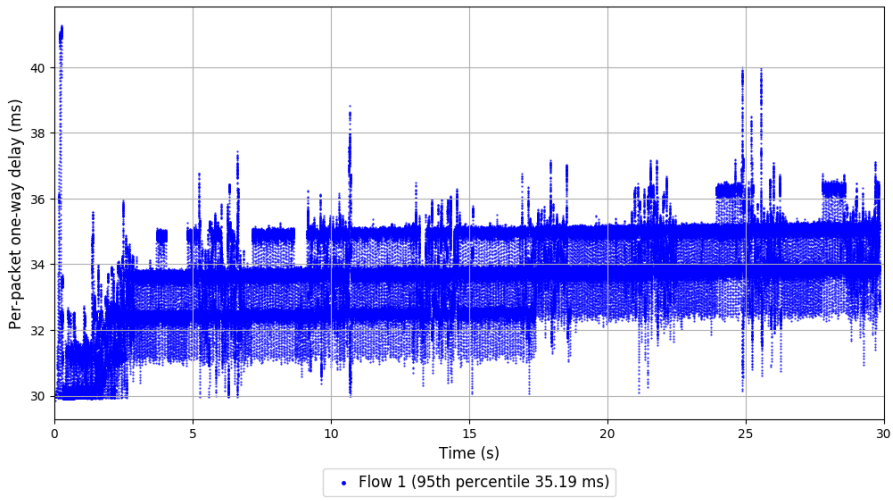
```
Run 4: Statistics of Indigo-calib

Start at: 2017-11-15 21:05:41
End at: 2017-11-15 21:06:11
Local clock offset: -14.973 ms
Remote clock offset: -15.719 ms

# Below is generated by plot.py at 2017-11-16 02:21:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.51 Mbit/s
95th percentile per-packet one-way delay: 35.186 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.51 Mbit/s
95th percentile per-packet one-way delay: 35.186 ms
Loss rate: 0.10%
```

Run 4: Report of Indigo-calib — Data Link



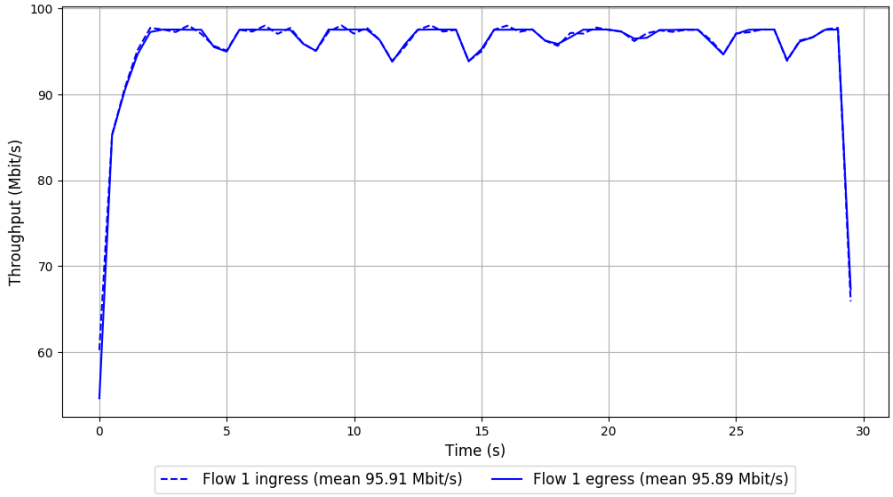



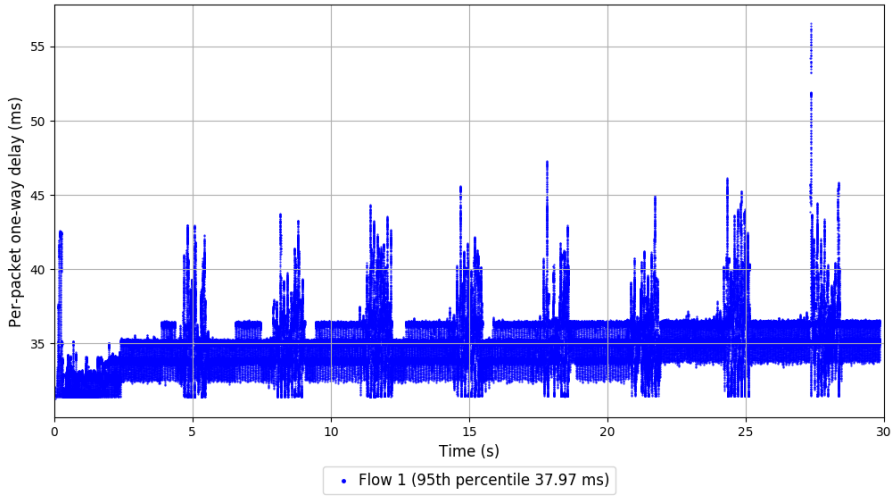
```
Run 5: Statistics of Indigo-calib

Start at: 2017-11-15 21:23:04
End at: 2017-11-15 21:23:34
Local clock offset: -14.98 ms
Remote clock offset: -16.289 ms

# Below is generated by plot.py at 2017-11-16 02:21:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.89 Mbit/s
95th percentile per-packet one-way delay: 37.973 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 95.89 Mbit/s
95th percentile per-packet one-way delay: 37.973 ms
Loss rate: 0.10%
```

Run 5: Report of Indigo-calib — Data Link



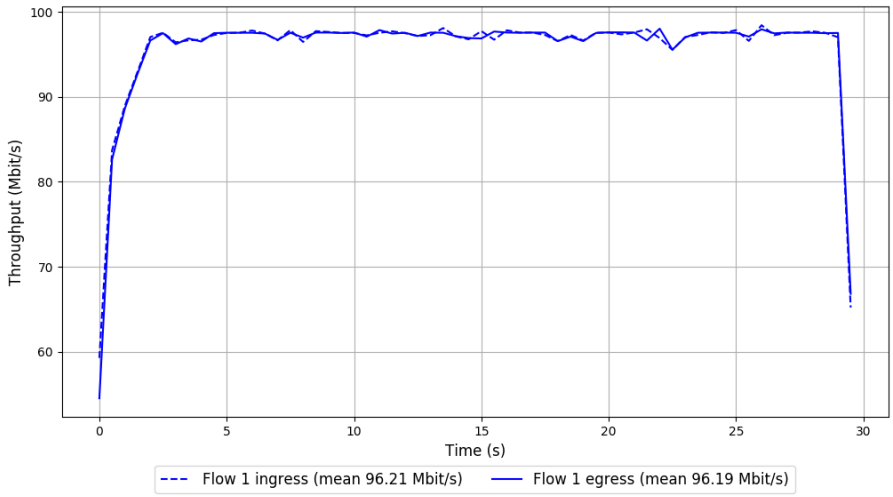



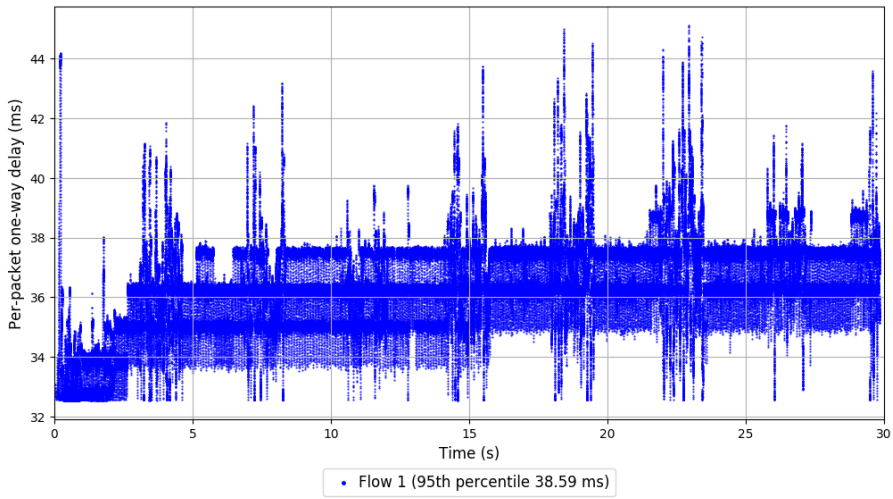
```
Run 6: Statistics of Indigo-calib

Start at: 2017-11-15 21:40:45
End at: 2017-11-15 21:41:15
Local clock offset: -16.447 ms
Remote clock offset: -18.409 ms

# Below is generated by plot.py at 2017-11-16 02:21:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.19 Mbit/s
95th percentile per-packet one-way delay: 38.590 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 96.19 Mbit/s
95th percentile per-packet one-way delay: 38.590 ms
Loss rate: 0.09%
```

Run 6: Report of Indigo-calib — Data Link



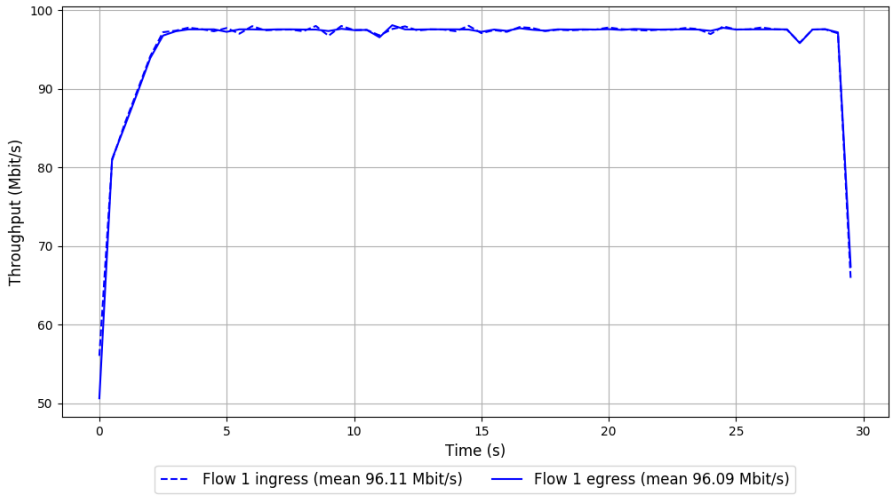



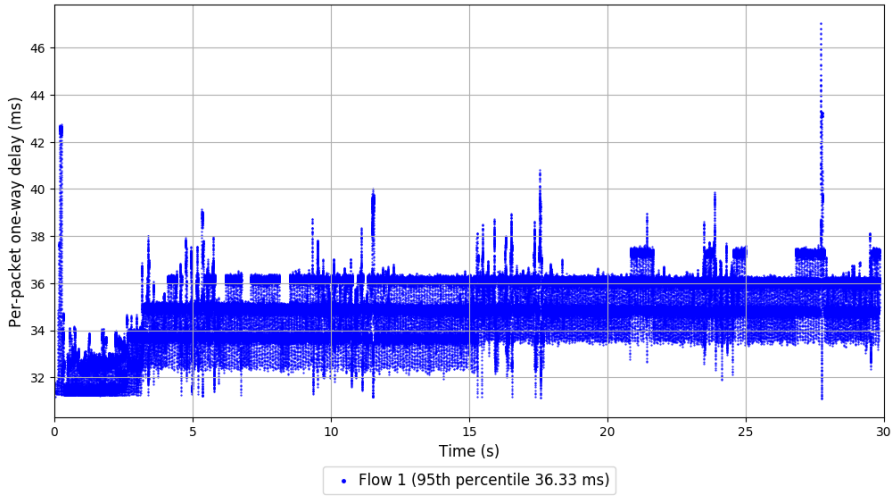
```
Run 7: Statistics of Indigo-calib

Start at: 2017-11-15 21:58:22
End at: 2017-11-15 21:58:52
Local clock offset: -13.358 ms
Remote clock offset: -18.209 ms

# Below is generated by plot.py at 2017-11-16 02:21:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.09 Mbit/s
95th percentile per-packet one-way delay: 36.329 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 96.09 Mbit/s
95th percentile per-packet one-way delay: 36.329 ms
Loss rate: 0.09%
```

Run 7: Report of Indigo-calib — Data Link



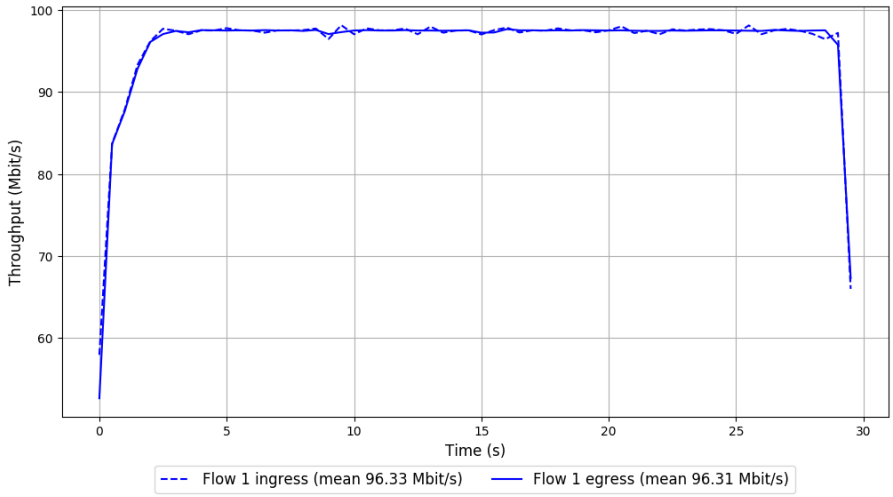



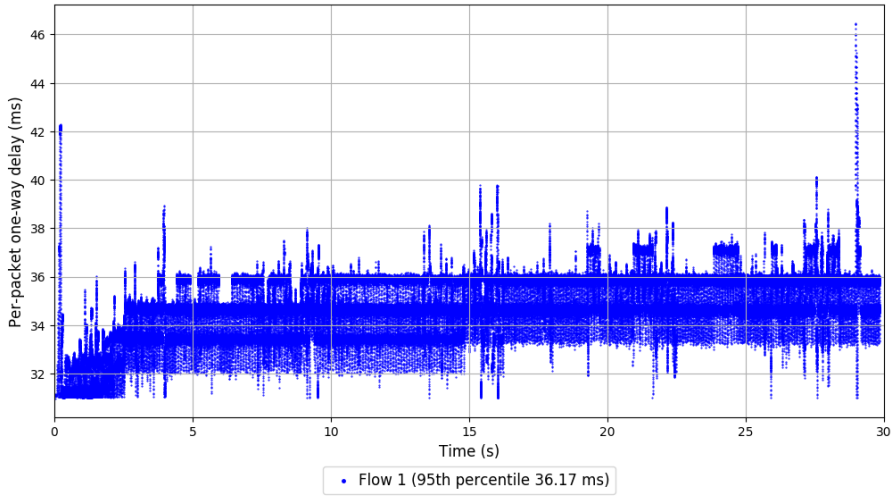
```
Run 8: Statistics of Indigo-calib

Start at: 2017-11-15 22:15:55
End at: 2017-11-15 22:16:25
Local clock offset: -11.26 ms
Remote clock offset: -18.019 ms

# Below is generated by plot.py at 2017-11-16 02:22:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.31 Mbit/s
95th percentile per-packet one-way delay: 36.169 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.31 Mbit/s
95th percentile per-packet one-way delay: 36.169 ms
Loss rate: 0.10%
```

Run 8: Report of Indigo-calib — Data Link



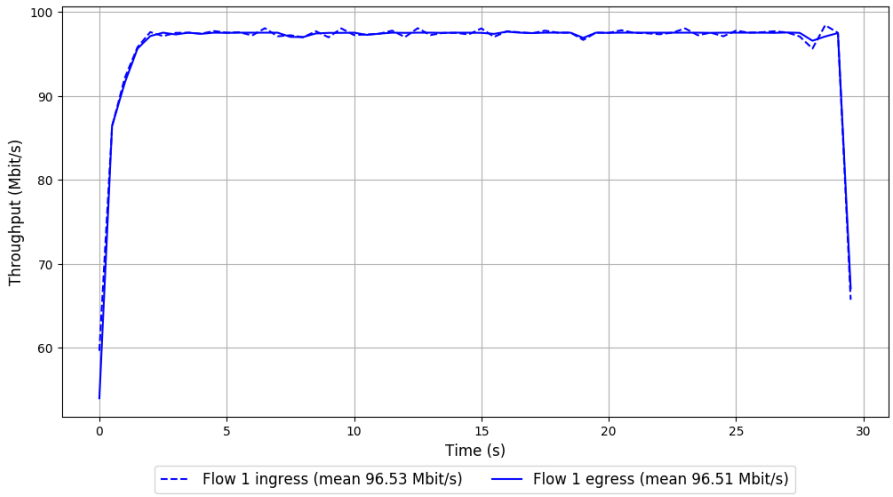



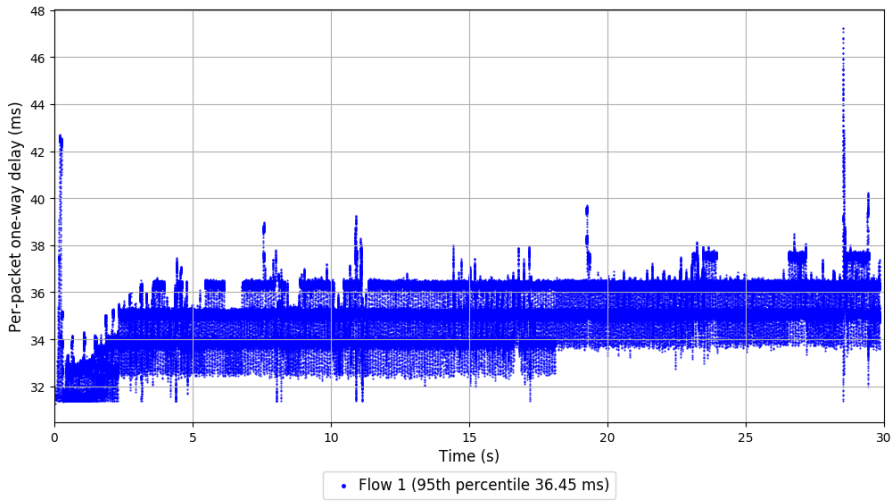
```
Run 9: Statistics of Indigo-calib

Start at: 2017-11-15 22:33:25
End at: 2017-11-15 22:33:55
Local clock offset: -14.744 ms
Remote clock offset: -20.728 ms

# Below is generated by plot.py at 2017-11-16 02:22:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.51 Mbit/s
95th percentile per-packet one-way delay: 36.451 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.51 Mbit/s
95th percentile per-packet one-way delay: 36.451 ms
Loss rate: 0.10%
```

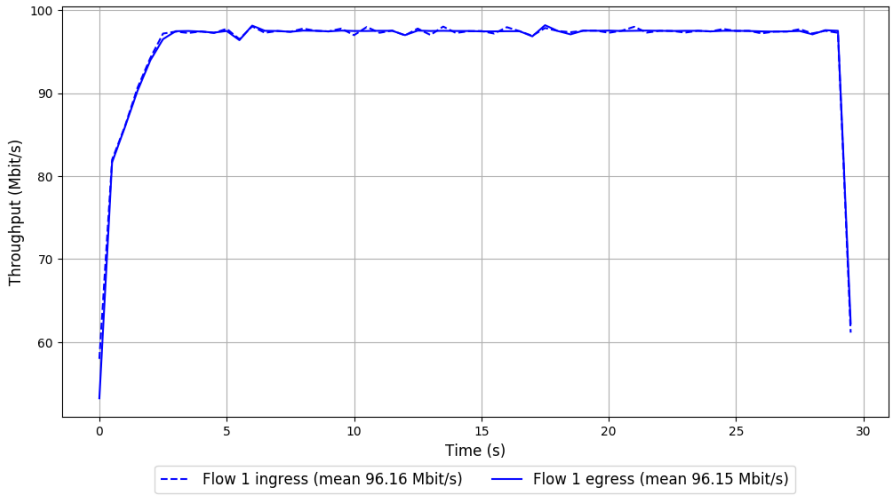
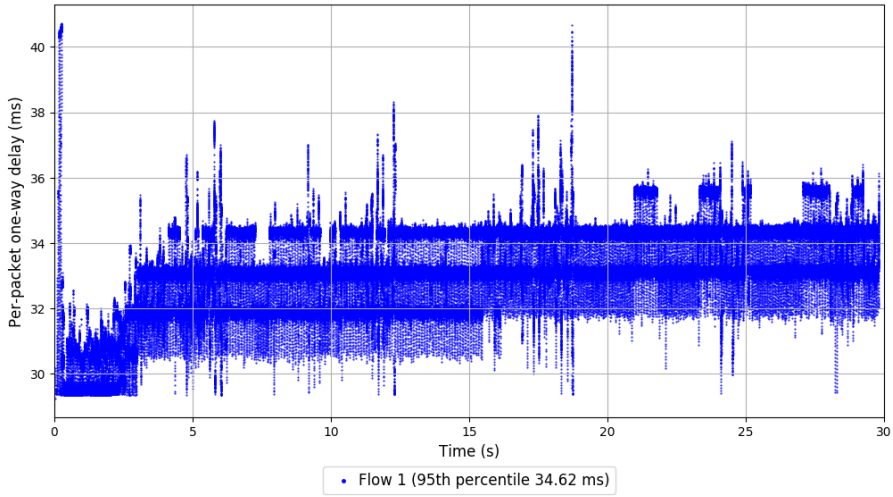
Run 9: Report of Indigo-calib — Data Link



```
Run 10: Statistics of Indigo-calib

Start at: 2017-11-15 22:50:37
End at: 2017-11-15 22:51:07
Local clock offset: -17.058 ms
Remote clock offset: -19.627 ms

# Below is generated by plot.py at 2017-11-16 02:22:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.15 Mbit/s
95th percentile per-packet one-way delay: 34.621 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 96.15 Mbit/s
95th percentile per-packet one-way delay: 34.621 ms
Loss rate: 0.09%
```

Run 10: Report of Indigo-calib — Data Link