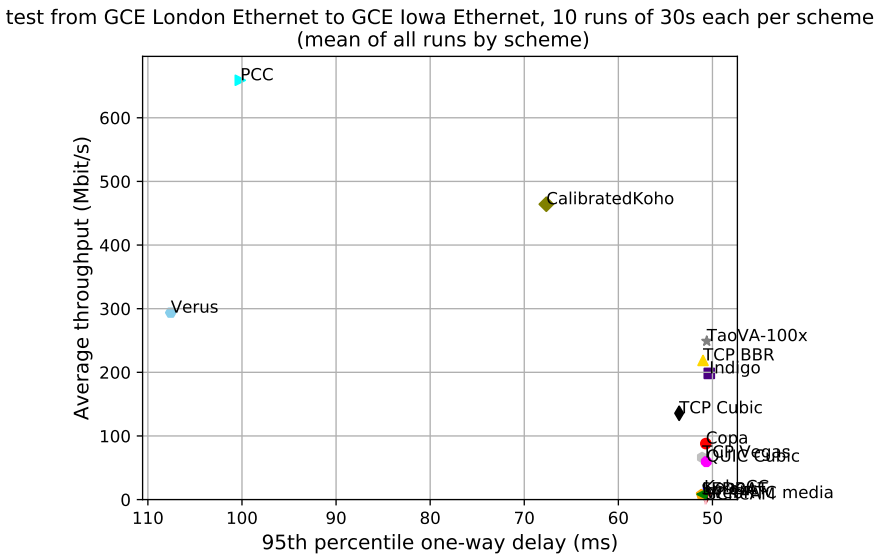
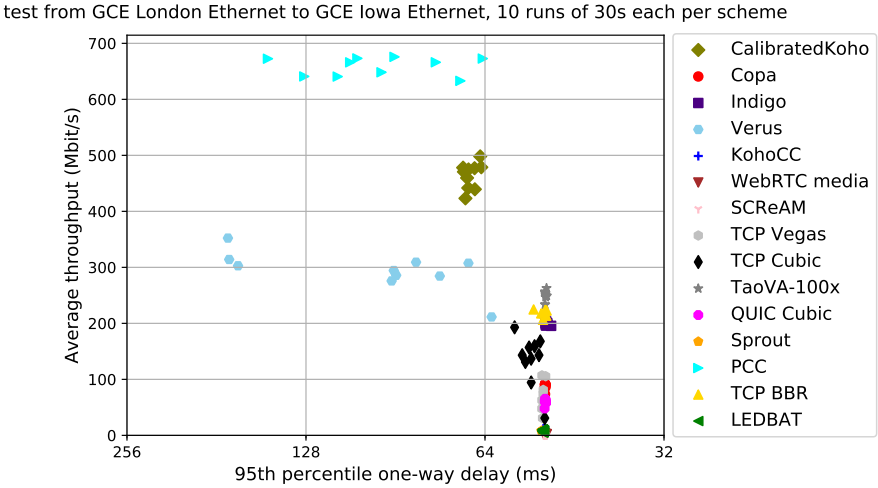
Pantheon Report

Generated at 2017-09-18 07:29:43 (UTC).
Data path: GCE London Ethernet (*remote*) →GCE Iowa Ethernet (*local*).
Repeated the test of 15 congestion control schemes 10 times.
Each test lasted for 30 seconds running 1 flow.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (`fq`), and other schemes with the default Linux qdisc (`pfifo_fast`).

```
Git summary:
branch: master @ 57453dc11f8da93a2e03eea75289fea01b816298
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```


test from GCE London Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
PCC
CalibratedKoho
Verus
TaoVA-100x
TCP BBR
Indigo
TCP Cubic
Copa
TCP Vegas
QUIC Cubic
WebRTC media
0
100
200
300
400
500
600
110
100
90
80
70
60
50


test from GCE London Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
0
100
200
300
400
500
600
700
256
128
64
32
CalibratedKoho
Copa
Indigo
Verus
KohoCC
WebRTC media
SCReAM
TCP Vegas
TCP Cubic
TaoVA-100x
QUIC Cubic
Sprout
PCC
TCP BBR
LEDBAT

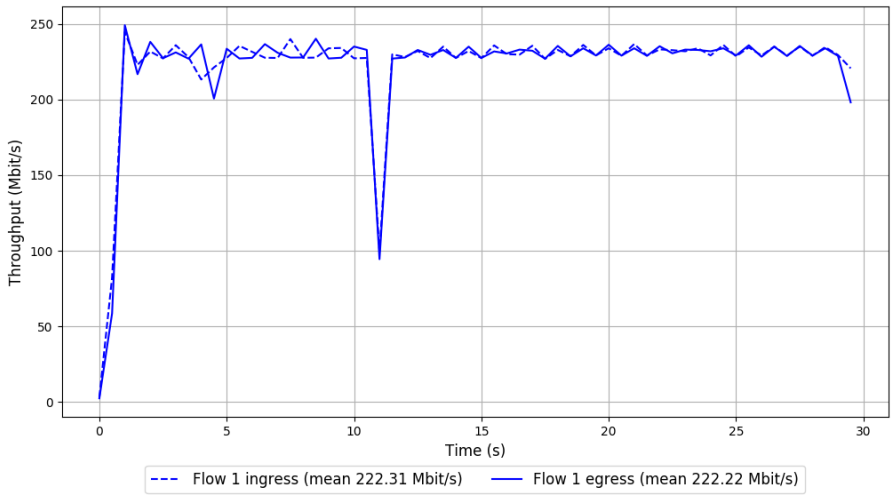
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	218.70	51.00	0.35
CalibratedKoho	10	464.15	67.66	0.41
Copa	10	88.03	50.70	0.38
TCP Cubic	10	135.64	53.54	0.41
Indigo	10	198.30	50.34	0.34
KohoCC	5	11.71	50.90	0.35
LEDBAT	10	8.32	51.10	0.52
PCC	10	658.95	100.18	0.83
QUIC Cubic	9	59.62	50.65	0.56
SCReAM	10	0.22	50.73	0.31
Sprout	7	7.96	51.18	0.33
TaoVA-100x	10	249.08	50.61	0.41
TCP Vegas	10	66.18	51.10	0.31
Verus	10	293.76	107.57	0.62
WebRTC media	10	2.35	50.68	0.47

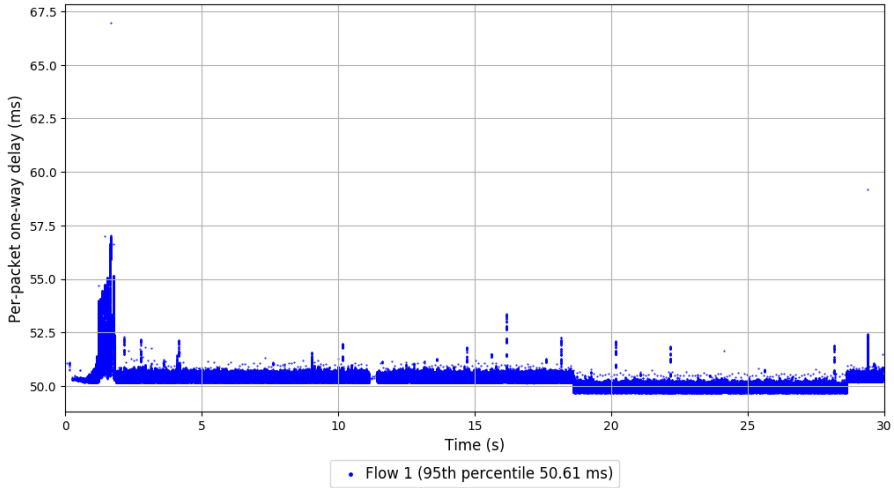
```
Run 1: Statistics of TCP BBR

Start at: 2017-09-18 02:30:53
End at: 2017-09-18 02:31:23

# Below is generated by plot.py at 2017-09-18 06:36:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.22 Mbit/s
95th percentile per-packet one-way delay: 50.607 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 222.22 Mbit/s
95th percentile per-packet one-way delay: 50.607 ms
Loss rate: 0.35%
```

Run 1: Report of TCP BBR — Data Link



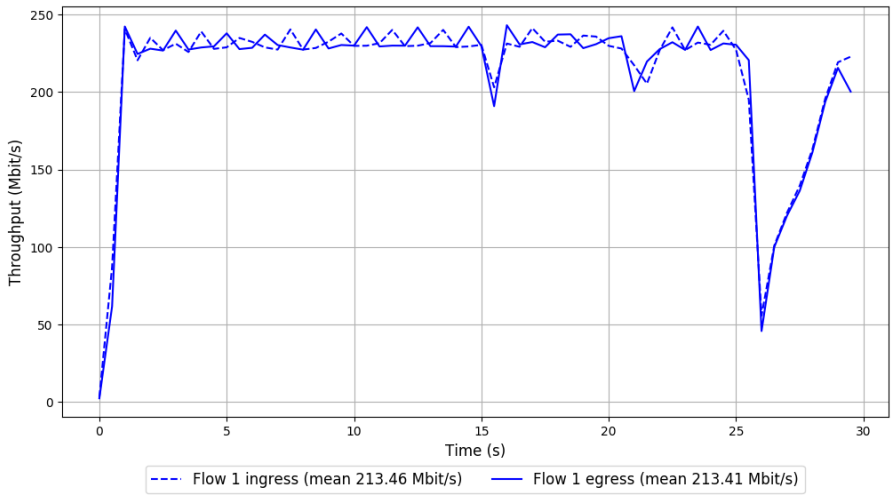


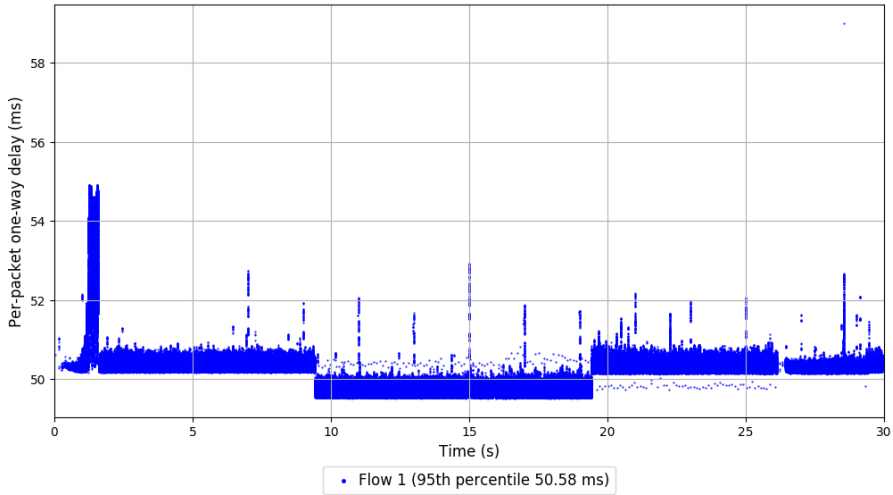
```
Run 2: Statistics of TCP BBR

Start at: 2017-09-18 02:42:32
End at: 2017-09-18 02:43:02

# Below is generated by plot.py at 2017-09-18 06:36:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.41 Mbit/s
95th percentile per-packet one-way delay: 50.578 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 213.41 Mbit/s
95th percentile per-packet one-way delay: 50.578 ms
Loss rate: 0.36%
```

Run 2: Report of TCP BBR — Data Link



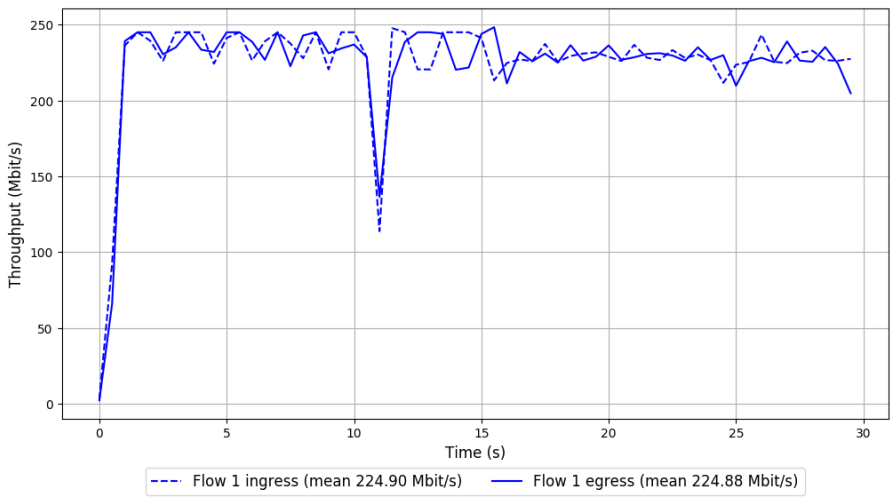


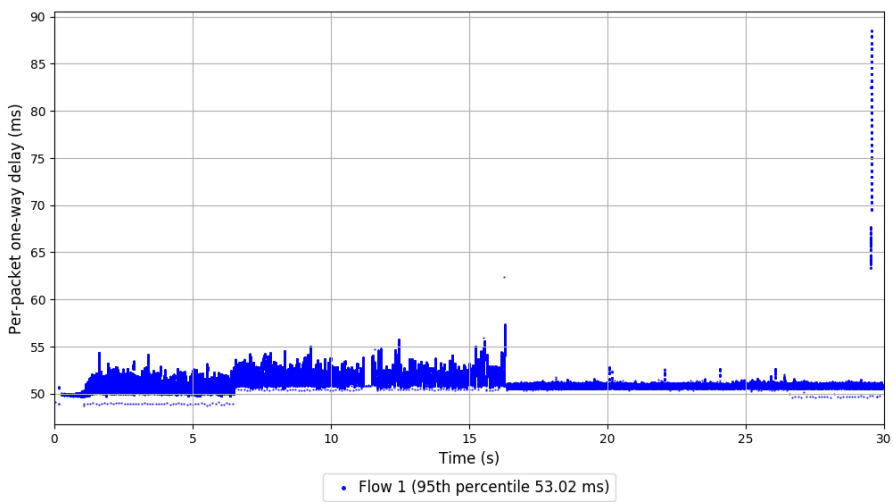
```
Run 3: Statistics of TCP BBR

Start at: 2017-09-18 02:54:05
End at: 2017-09-18 02:54:35

# Below is generated by plot.py at 2017-09-18 06:36:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.88 Mbit/s
95th percentile per-packet one-way delay: 53.017 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 224.88 Mbit/s
95th percentile per-packet one-way delay: 53.017 ms
Loss rate: 0.34%
```

Run 3: Report of TCP BBR — Data Link



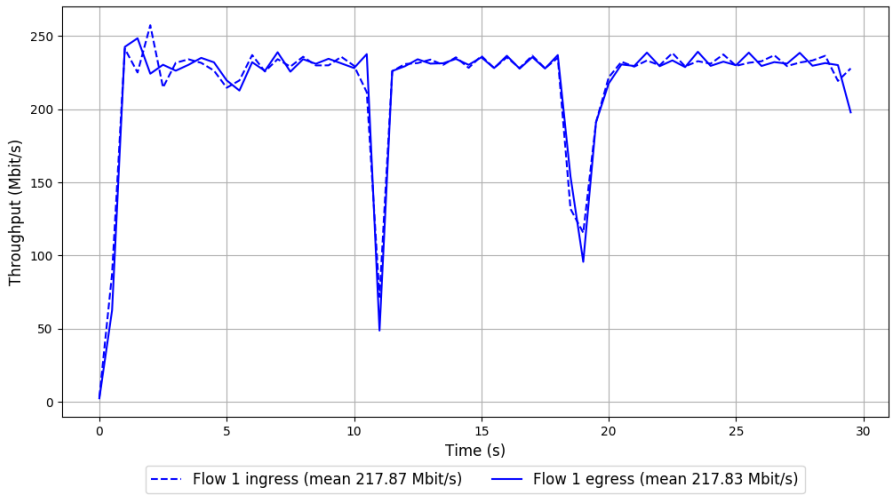


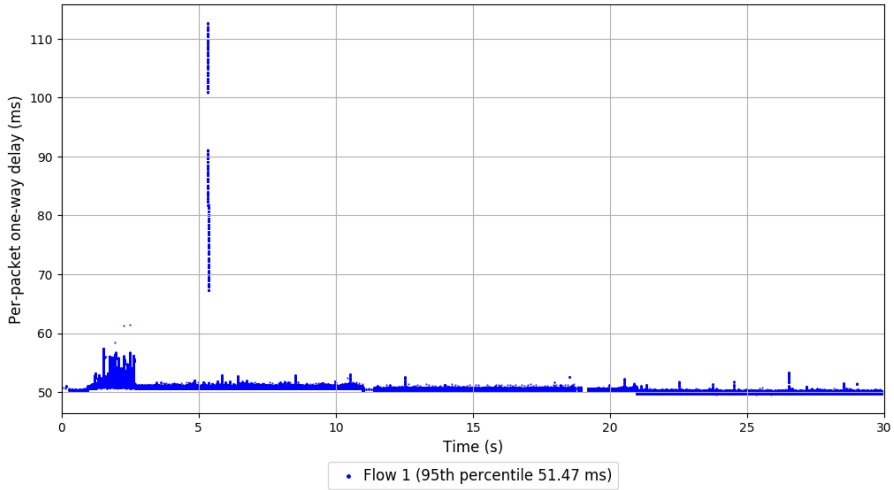
```
Run 4: Statistics of TCP BBR

Start at: 2017-09-18 03:05:41
End at: 2017-09-18 03:06:11

# Below is generated by plot.py at 2017-09-18 06:36:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.83 Mbit/s
95th percentile per-packet one-way delay: 51.472 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 217.83 Mbit/s
95th percentile per-packet one-way delay: 51.472 ms
Loss rate: 0.35%
```

Run 4: Report of TCP BBR — Data Link



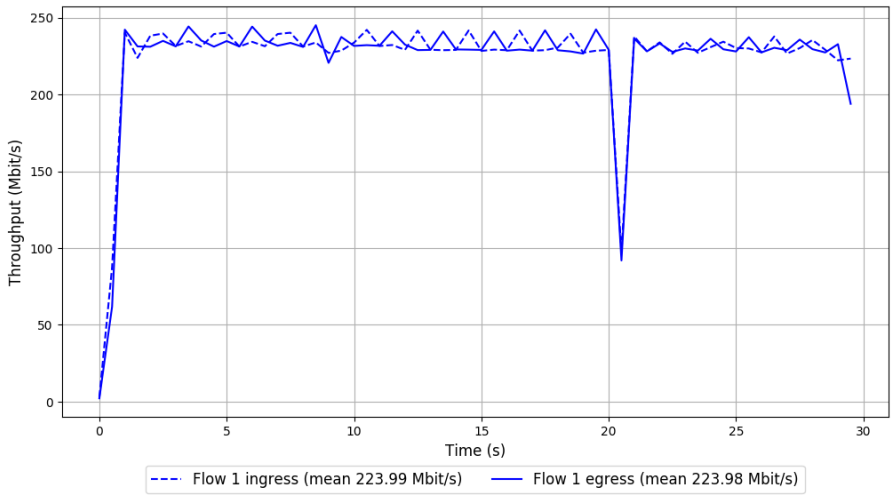


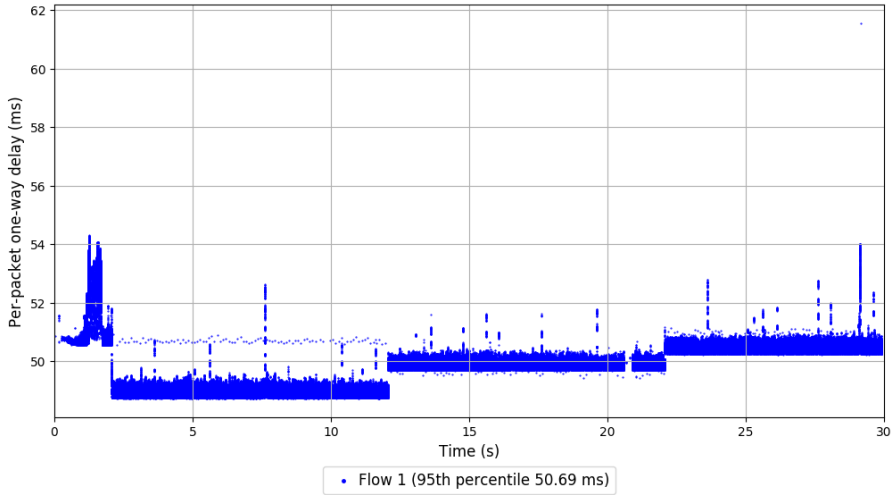
```
Run 5: Statistics of TCP BBR

Start at: 2017-09-18 03:17:10
End at: 2017-09-18 03:17:40

# Below is generated by plot.py at 2017-09-18 06:36:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.98 Mbit/s
95th percentile per-packet one-way delay: 50.686 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 223.98 Mbit/s
95th percentile per-packet one-way delay: 50.686 ms
Loss rate: 0.34%
```

Run 5: Report of TCP BBR — Data Link



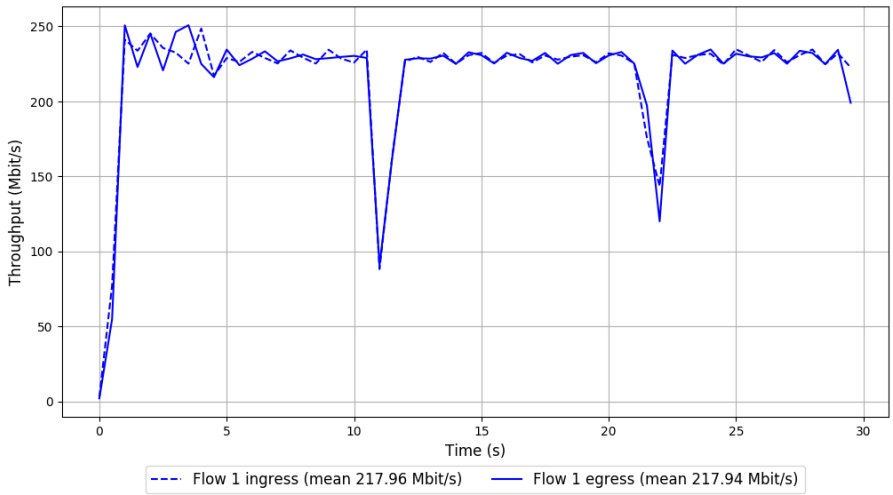


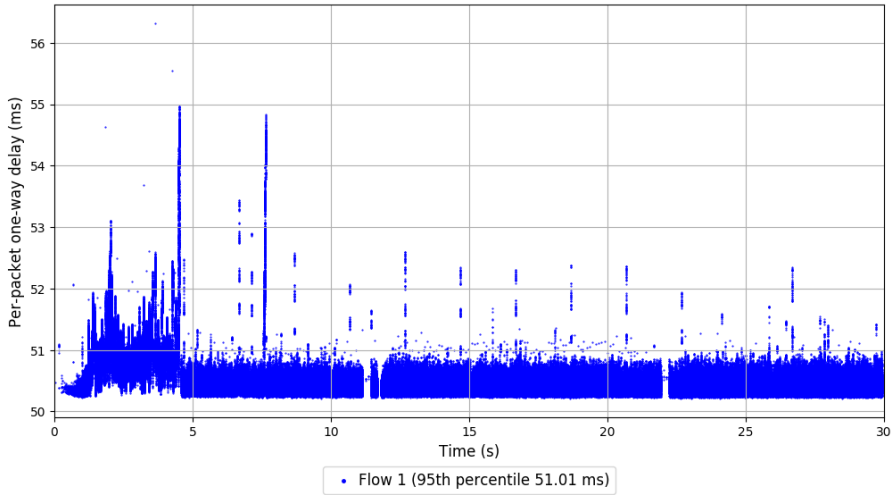
```
Run 6: Statistics of TCP BBR

Start at: 2017-09-18 03:28:41
End at: 2017-09-18 03:29:11

# Below is generated by plot.py at 2017-09-18 06:36:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.94 Mbit/s
95th percentile per-packet one-way delay: 51.009 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 217.94 Mbit/s
95th percentile per-packet one-way delay: 51.009 ms
Loss rate: 0.34%
```

Run 6: Report of TCP BBR — Data Link



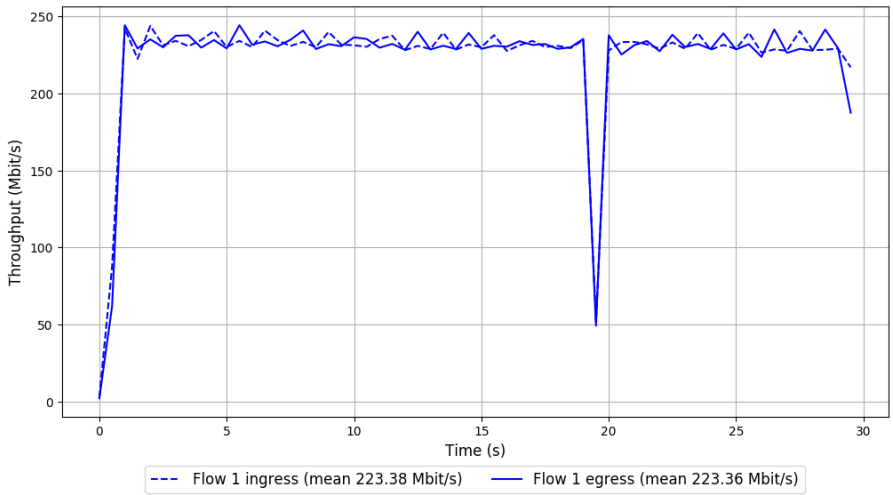


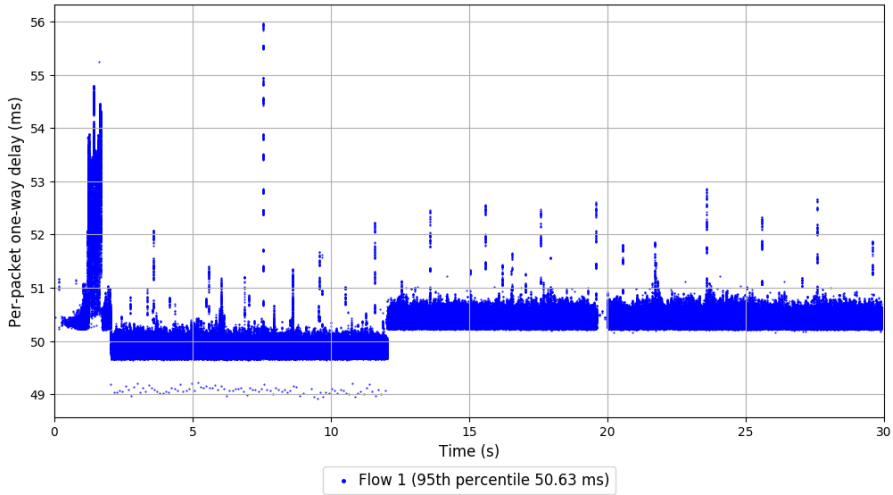
```
Run 7: Statistics of TCP BBR

Start at: 2017-09-18 03:40:10
End at: 2017-09-18 03:40:40

# Below is generated by plot.py at 2017-09-18 06:36:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.36 Mbit/s
95th percentile per-packet one-way delay: 50.629 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 223.36 Mbit/s
95th percentile per-packet one-way delay: 50.629 ms
Loss rate: 0.35%
```

Run 7: Report of TCP BBR — Data Link



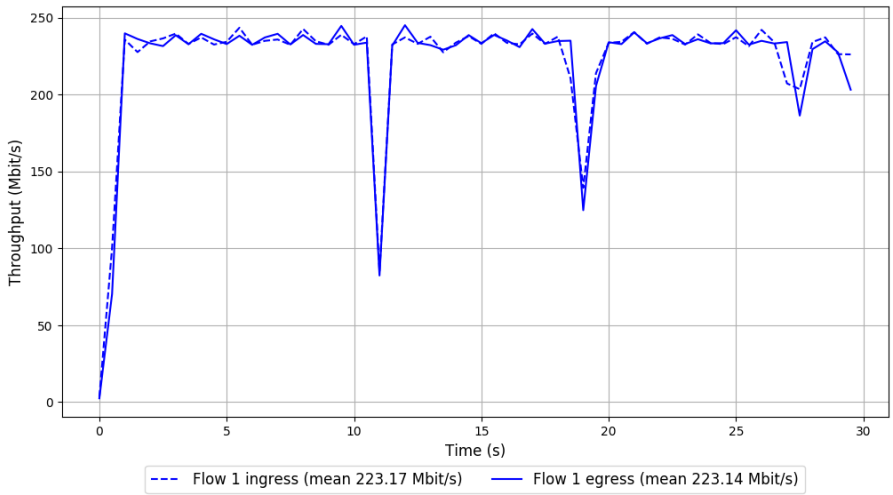


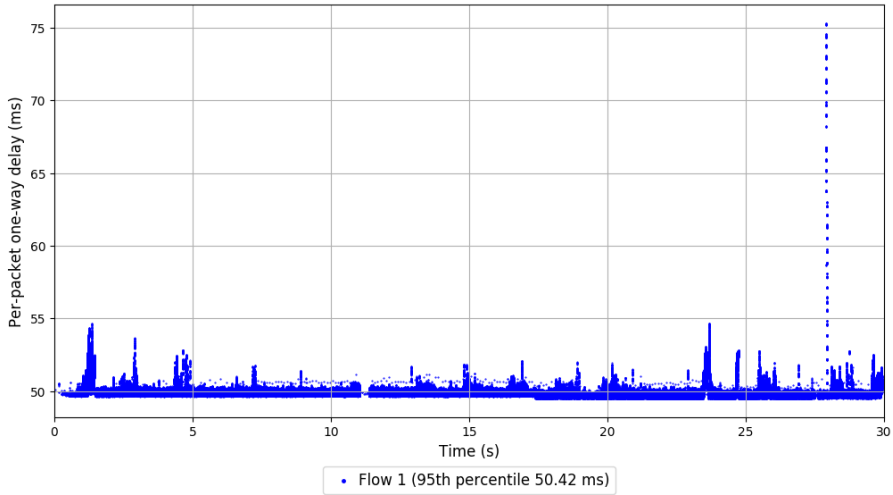
```
Run 8: Statistics of TCP BBR

Start at: 2017-09-18 03:51:44
End at: 2017-09-18 03:52:14

# Below is generated by plot.py at 2017-09-18 06:36:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.14 Mbit/s
95th percentile per-packet one-way delay: 50.416 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 223.14 Mbit/s
95th percentile per-packet one-way delay: 50.416 ms
Loss rate: 0.35%
```

Run 8: Report of TCP BBR — Data Link



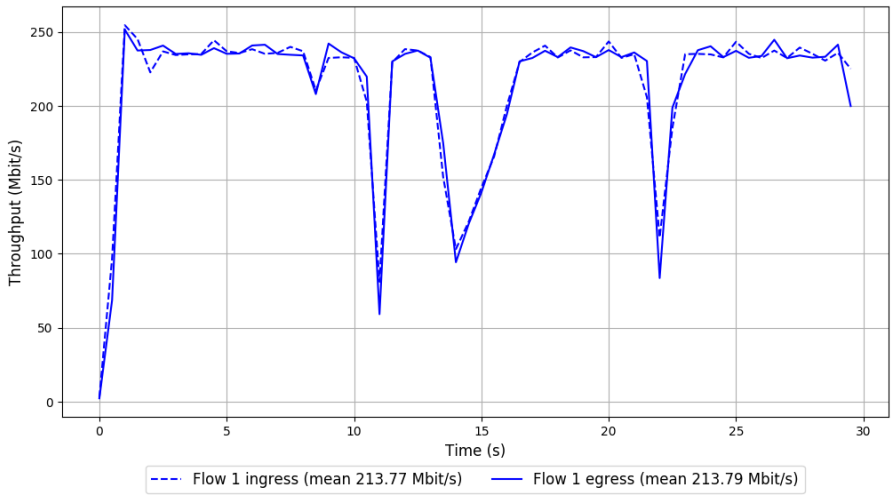


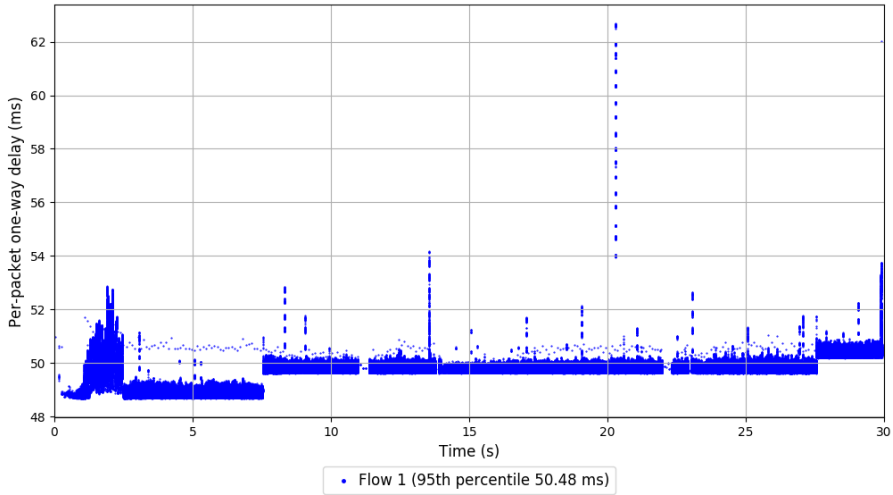
```
Run 9: Statistics of TCP BBR

Start at: 2017-09-18 04:03:24
End at: 2017-09-18 04:03:54

# Below is generated by plot.py at 2017-09-18 06:39:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.79 Mbit/s
95th percentile per-packet one-way delay: 50.478 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 213.79 Mbit/s
95th percentile per-packet one-way delay: 50.478 ms
Loss rate: 0.35%
```

Run 9: Report of TCP BBR — Data Link



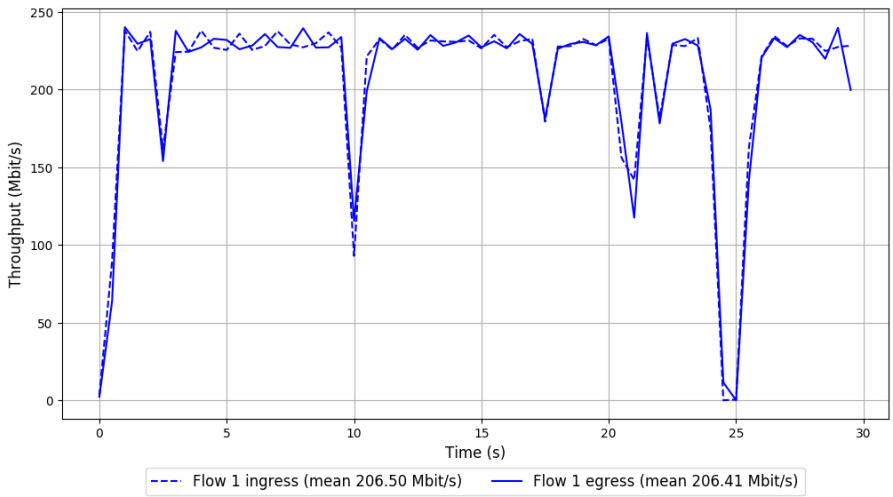


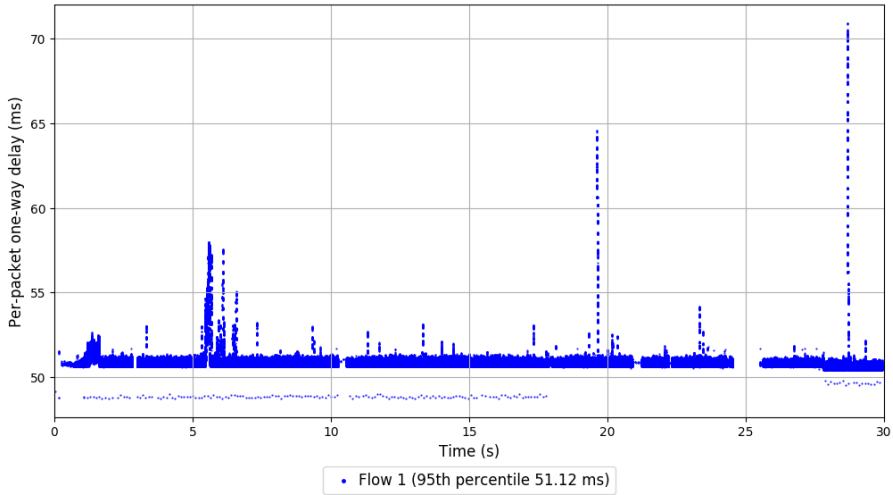
```
Run 10: Statistics of TCP BBR

Start at: 2017-09-18 04:14:54
End at: 2017-09-18 04:15:24

# Below is generated by plot.py at 2017-09-18 06:39:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 206.41 Mbit/s
95th percentile per-packet one-way delay: 51.123 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 206.41 Mbit/s
95th percentile per-packet one-way delay: 51.123 ms
Loss rate: 0.37%
```

Run 10: Report of TCP BBR — Data Link



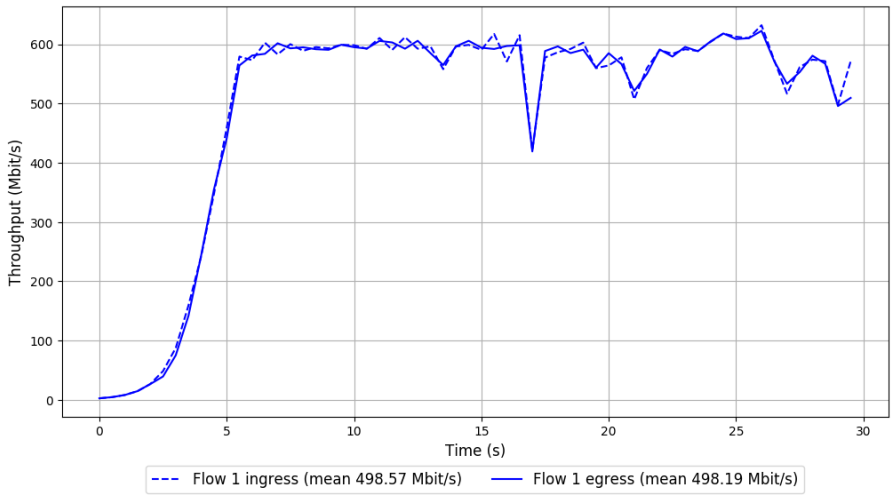


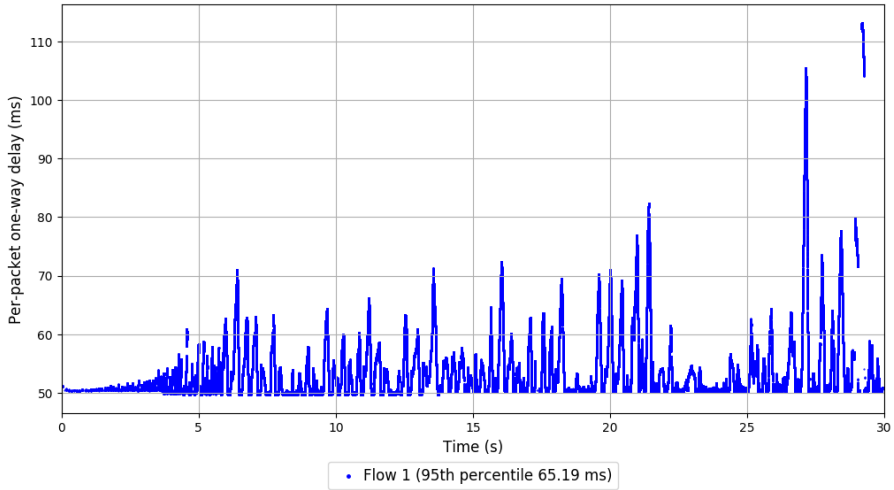
```
Run 1: Statistics of CalibratedKoho

Start at: 2017-09-18 02:32:18
End at: 2017-09-18 02:32:48

# Below is generated by plot.py at 2017-09-18 06:44:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 498.19 Mbit/s
95th percentile per-packet one-way delay: 65.195 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 498.19 Mbit/s
95th percentile per-packet one-way delay: 65.195 ms
Loss rate: 0.42%
```

Run 1: Report of CalibratedKoho — Data Link



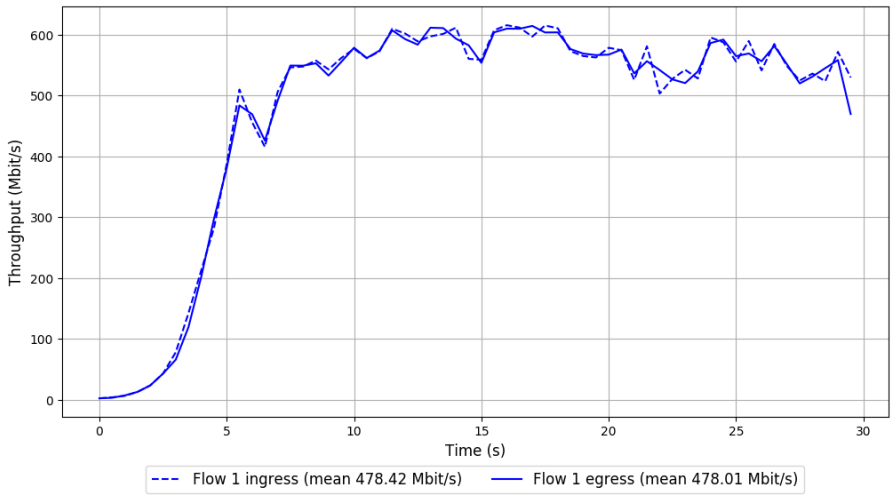


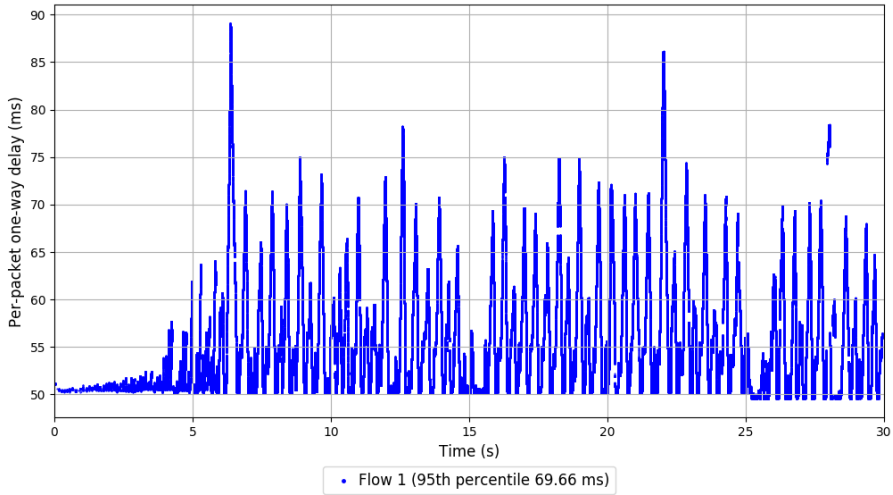
```
Run 2: Statistics of CalibratedKoho

Start at: 2017-09-18 02:43:56
End at: 2017-09-18 02:44:26

# Below is generated by plot.py at 2017-09-18 06:44:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 478.01 Mbit/s
95th percentile per-packet one-way delay: 69.656 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 478.01 Mbit/s
95th percentile per-packet one-way delay: 69.656 ms
Loss rate: 0.42%
```

Run 2: Report of CalibratedKoho — Data Link



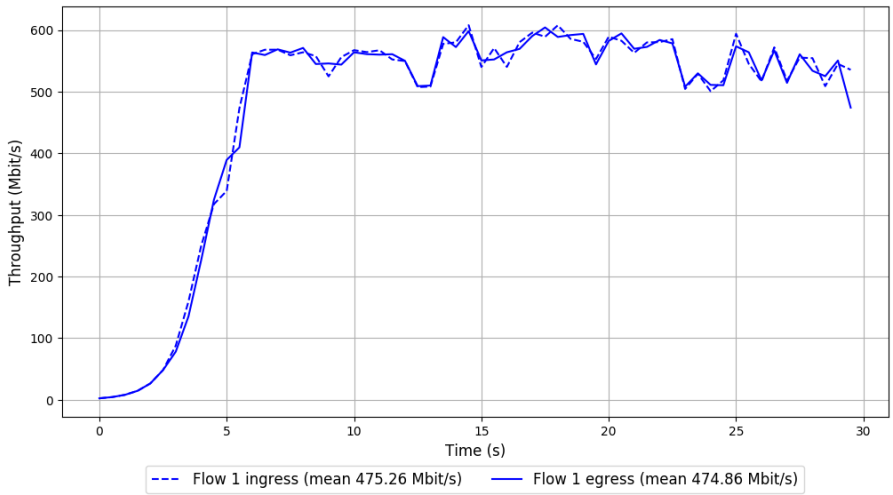


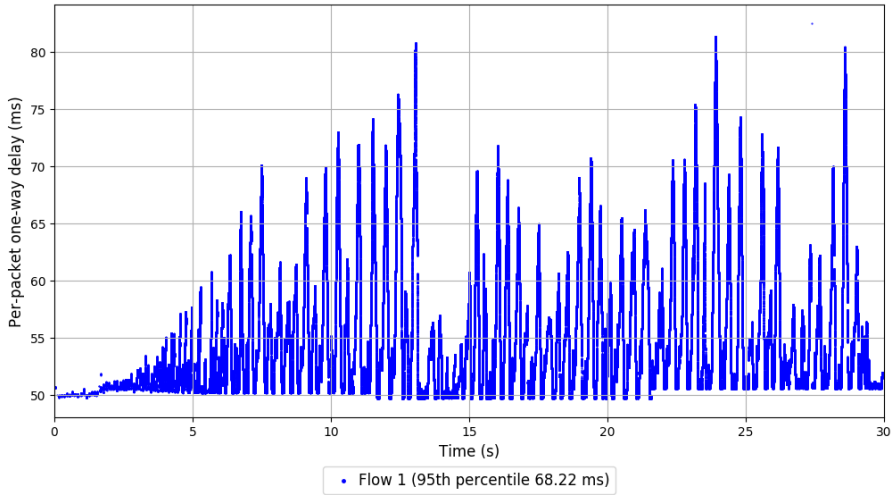
```
Run 3: Statistics of CalibratedKoho

Start at: 2017-09-18 02:55:30
End at: 2017-09-18 02:56:00

# Below is generated by plot.py at 2017-09-18 06:44:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 474.86 Mbit/s
95th percentile per-packet one-way delay: 68.217 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 474.86 Mbit/s
95th percentile per-packet one-way delay: 68.217 ms
Loss rate: 0.42%
```

Run 3: Report of CalibratedKoho — Data Link



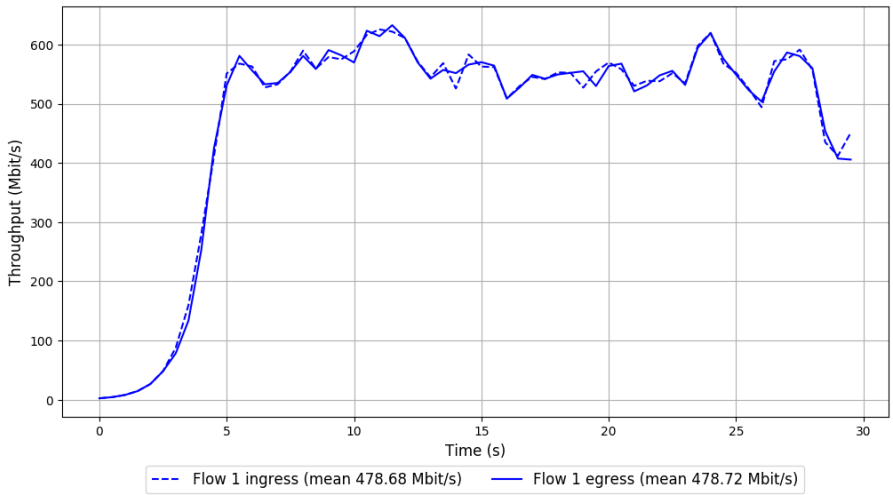


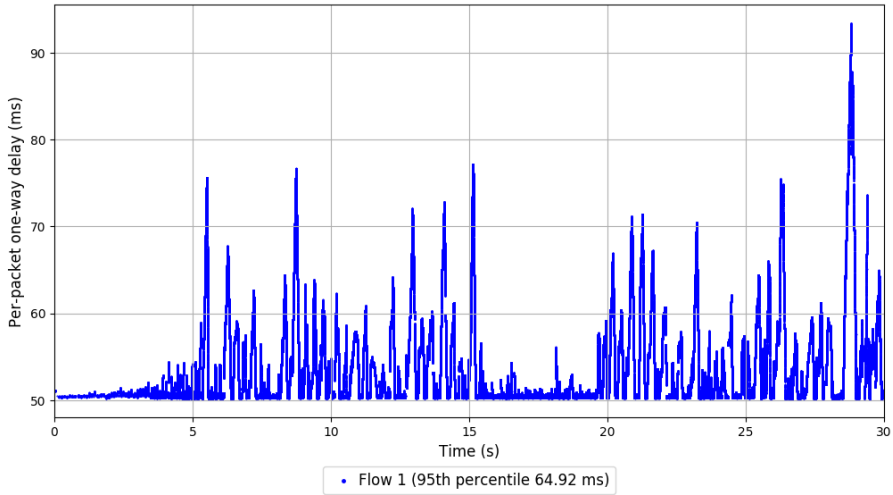
```
Run 4: Statistics of CalibratedKoho

Start at: 2017-09-18 03:07:05
End at: 2017-09-18 03:07:35

# Below is generated by plot.py at 2017-09-18 06:44:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 478.72 Mbit/s
95th percentile per-packet one-way delay: 64.921 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 478.72 Mbit/s
95th percentile per-packet one-way delay: 64.921 ms
Loss rate: 0.33%
```

Run 4: Report of CalibratedKoho — Data Link



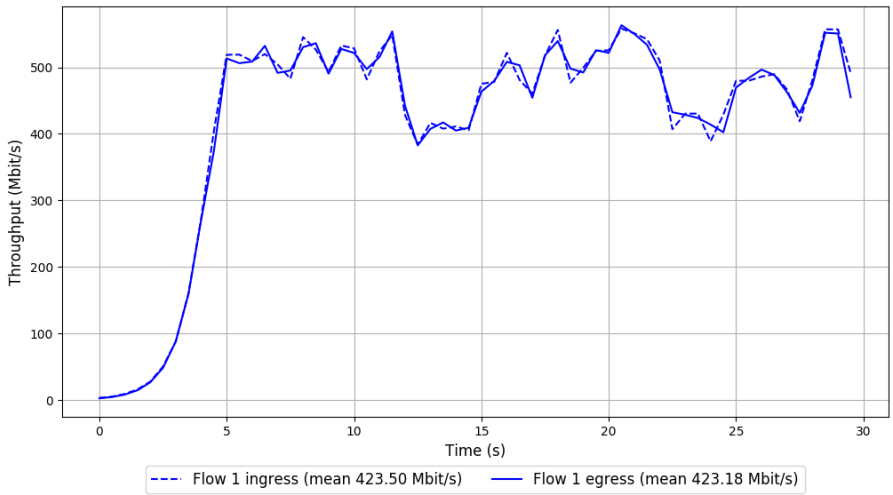


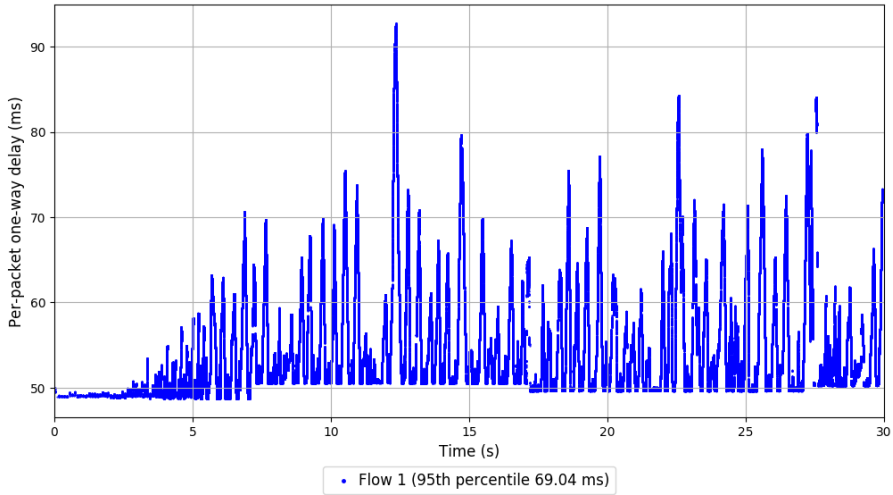
```
Run 5: Statistics of CalibratedKoho

Start at: 2017-09-18 03:18:34
End at: 2017-09-18 03:19:05

# Below is generated by plot.py at 2017-09-18 06:44:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 423.18 Mbit/s
95th percentile per-packet one-way delay: 69.037 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 423.18 Mbit/s
95th percentile per-packet one-way delay: 69.037 ms
Loss rate: 0.41%
```

Run 5: Report of CalibratedKoho — Data Link



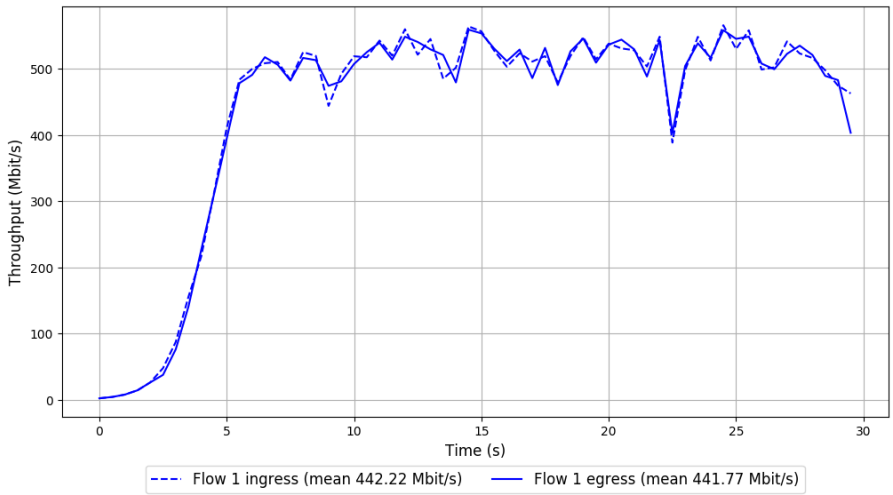


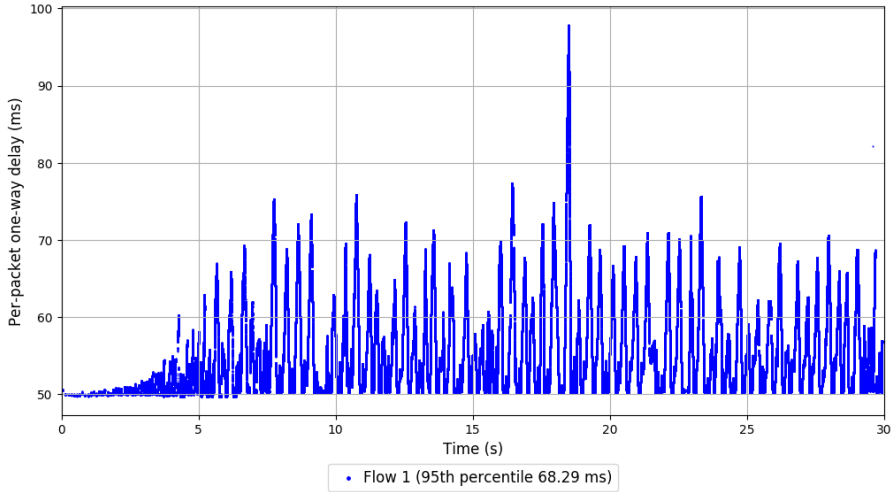
```
Run 6: Statistics of CalibratedKoho

Start at: 2017-09-18 03:30:05
End at: 2017-09-18 03:30:35

# Below is generated by plot.py at 2017-09-18 06:44:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 441.77 Mbit/s
95th percentile per-packet one-way delay: 68.293 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 441.77 Mbit/s
95th percentile per-packet one-way delay: 68.293 ms
Loss rate: 0.44%
```

Run 6: Report of CalibratedKoho — Data Link



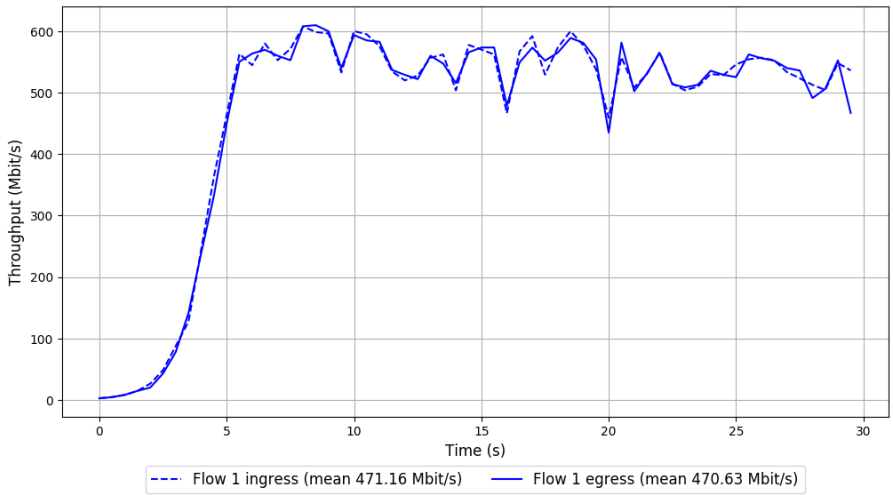


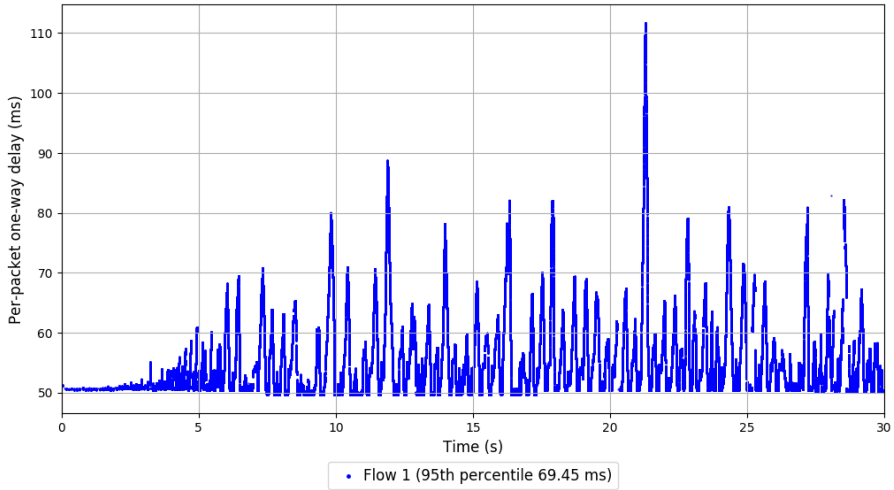
```
Run 7: Statistics of CalibratedKoho

Start at: 2017-09-18 03:41:34
End at: 2017-09-18 03:42:04

# Below is generated by plot.py at 2017-09-18 06:47:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 470.63 Mbit/s
95th percentile per-packet one-way delay: 69.447 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 470.63 Mbit/s
95th percentile per-packet one-way delay: 69.447 ms
Loss rate: 0.45%
```

Run 7: Report of CalibratedKoho — Data Link



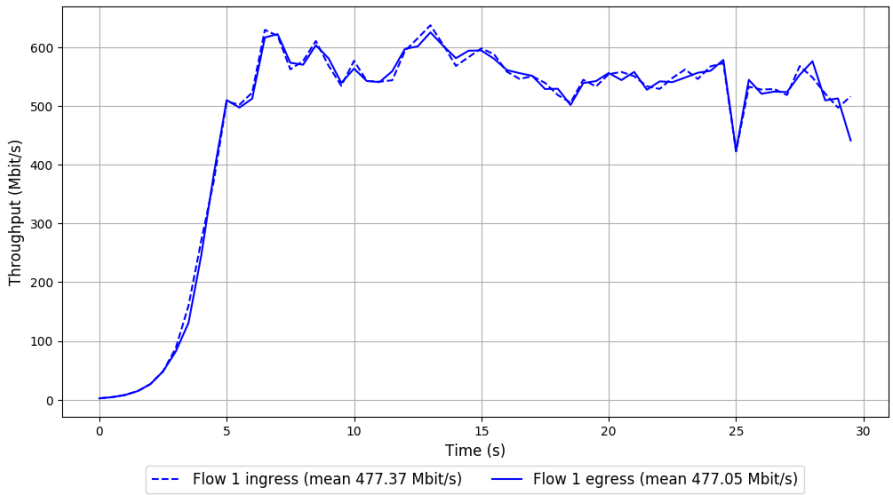


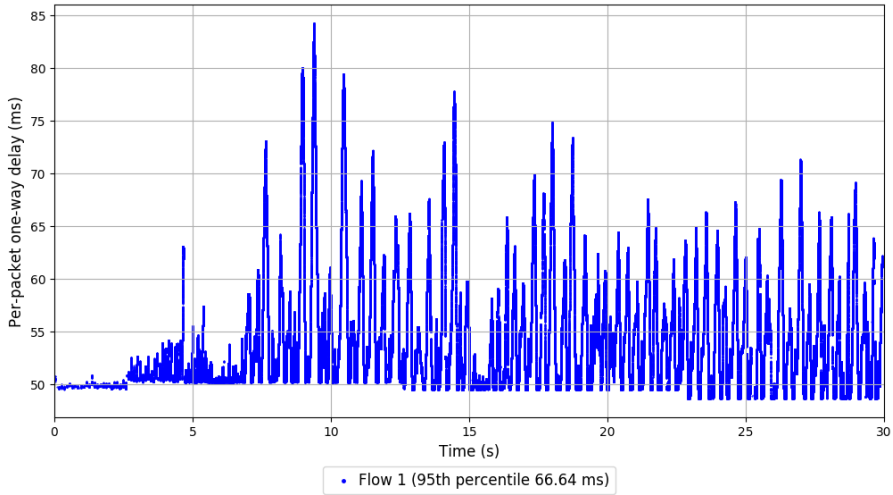
```
Run 8: Statistics of CalibratedKoho

Start at: 2017-09-18 03:53:09
End at: 2017-09-18 03:53:39

# Below is generated by plot.py at 2017-09-18 06:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 477.05 Mbit/s
95th percentile per-packet one-way delay: 66.639 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 477.05 Mbit/s
95th percentile per-packet one-way delay: 66.639 ms
Loss rate: 0.40%
```

Run 8: Report of CalibratedKoho — Data Link



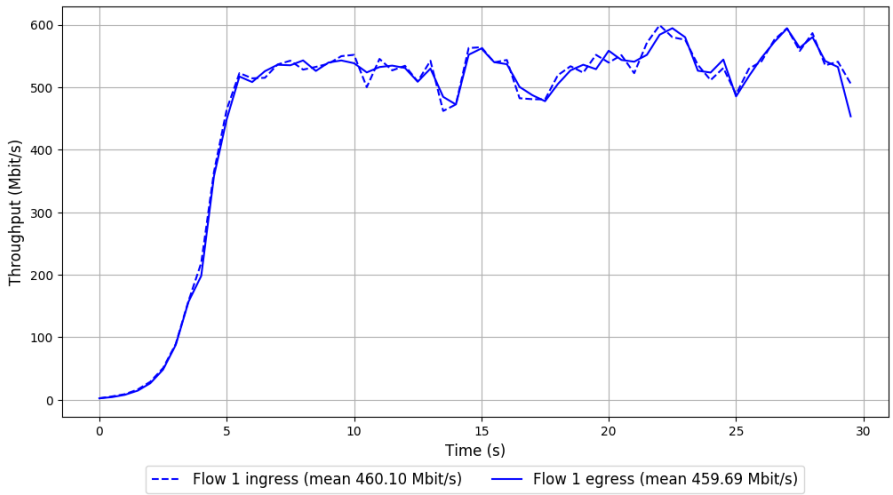


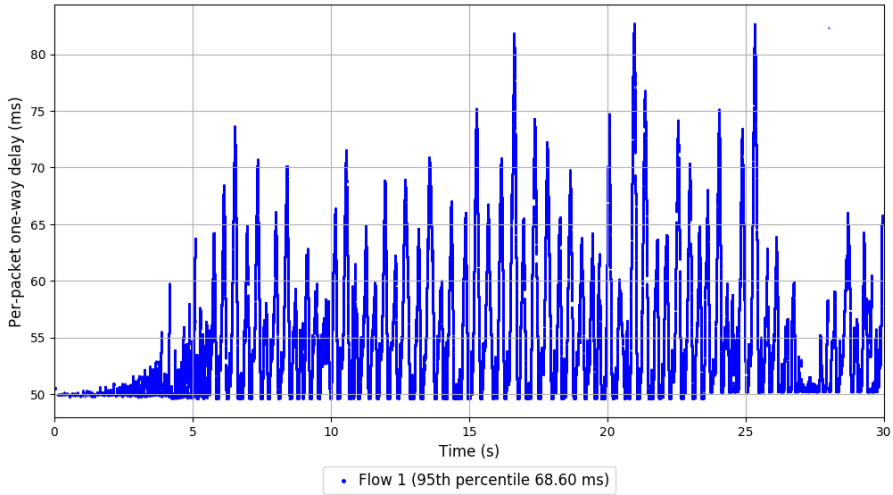
```
Run 9: Statistics of CalibratedKoho

Start at: 2017-09-18 04:04:48
End at: 2017-09-18 04:05:18

# Below is generated by plot.py at 2017-09-18 06:51:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 459.69 Mbit/s
95th percentile per-packet one-way delay: 68.598 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 459.69 Mbit/s
95th percentile per-packet one-way delay: 68.598 ms
Loss rate: 0.42%
```

Run 9: Report of CalibratedKoho — Data Link



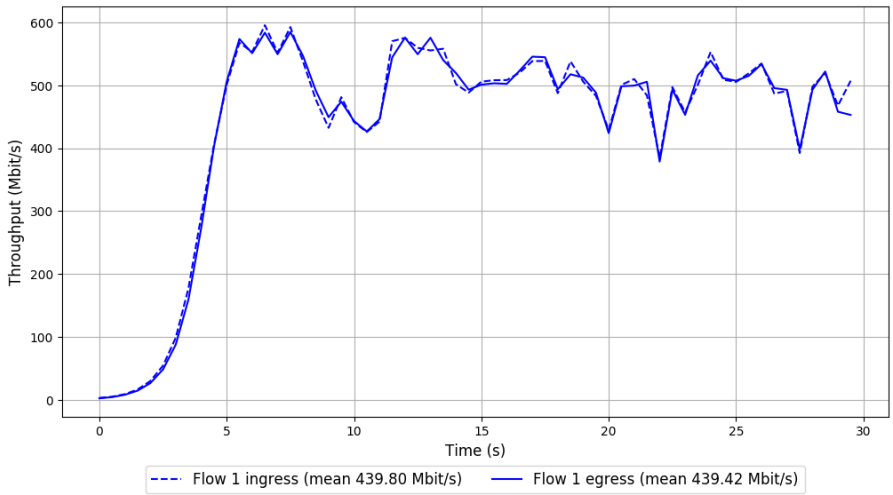


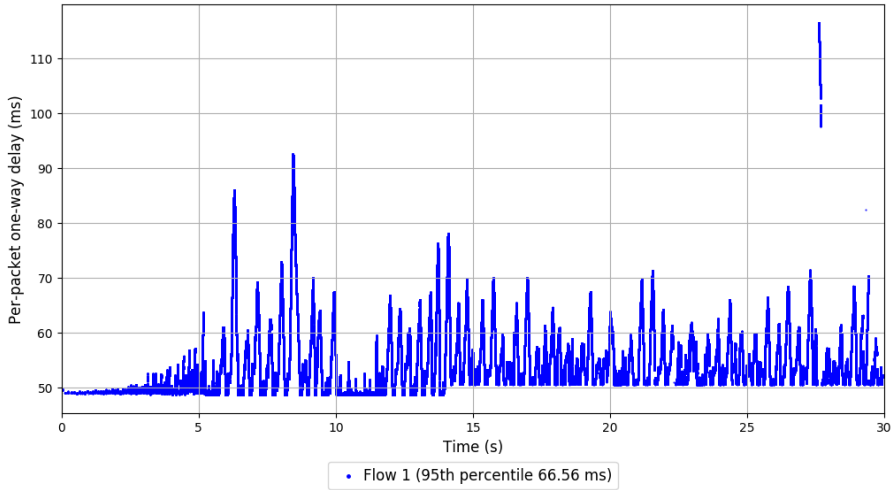
```
Run 10: Statistics of CalibratedKoho

Start at: 2017-09-18 04:16:18
End at: 2017-09-18 04:16:48

# Below is generated by plot.py at 2017-09-18 06:51:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 439.42 Mbit/s
95th percentile per-packet one-way delay: 66.565 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 439.42 Mbit/s
95th percentile per-packet one-way delay: 66.565 ms
Loss rate: 0.42%
```

Run 10: Report of CalibratedKoho — Data Link



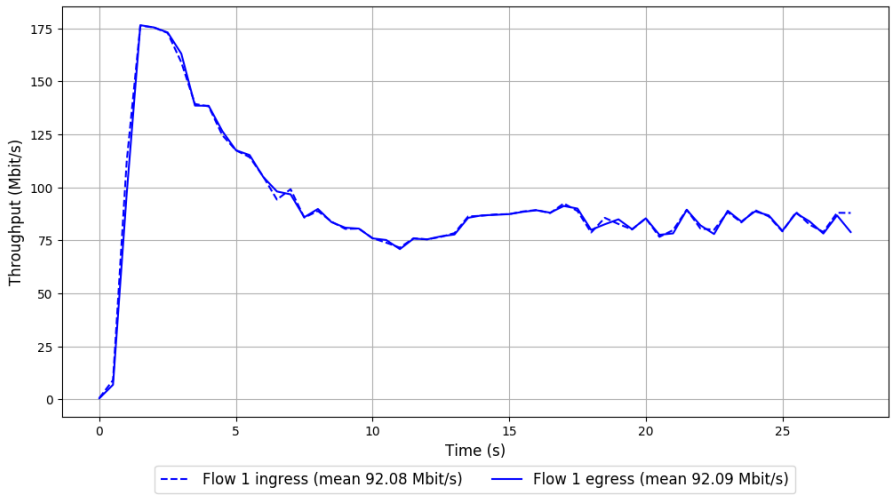


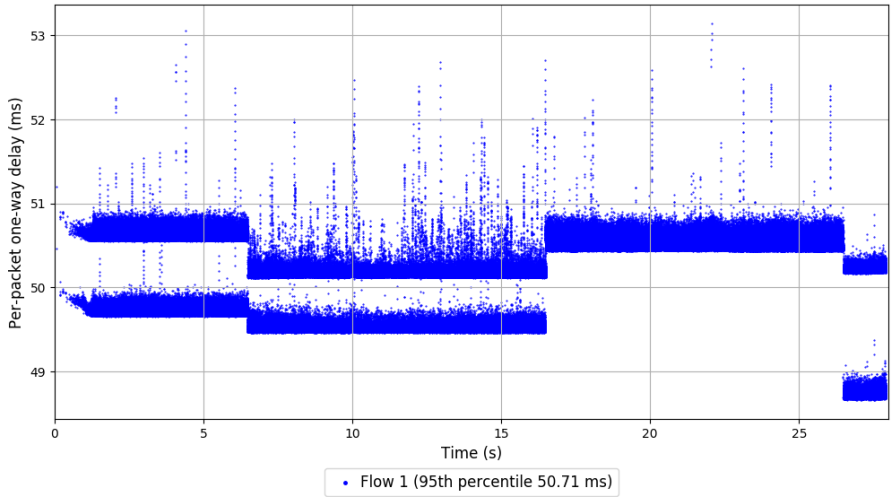
```
Run 1: Statistics of Copa

Start at: 2017-09-18 02:28:23
End at: 2017-09-18 02:28:53

# Below is generated by plot.py at 2017-09-18 06:51:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.09 Mbit/s
95th percentile per-packet one-way delay: 50.713 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 92.09 Mbit/s
95th percentile per-packet one-way delay: 50.713 ms
Loss rate: 0.36%
```

Run 1: Report of Copa — Data Link



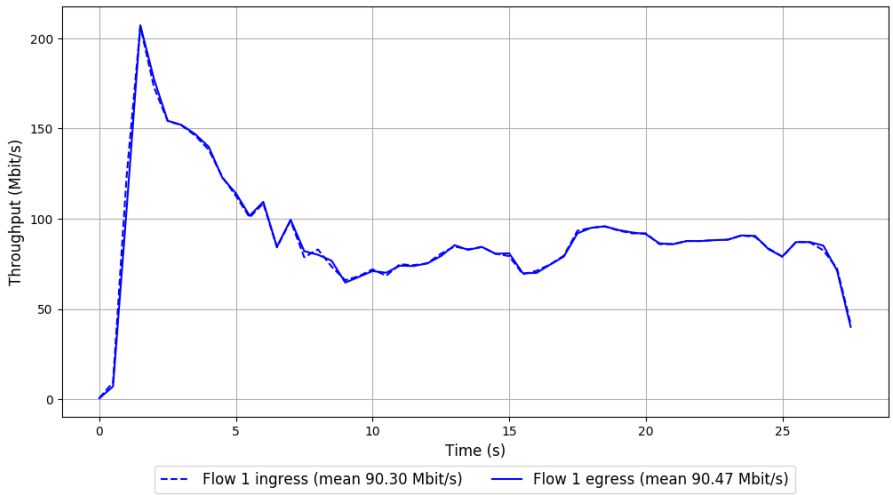


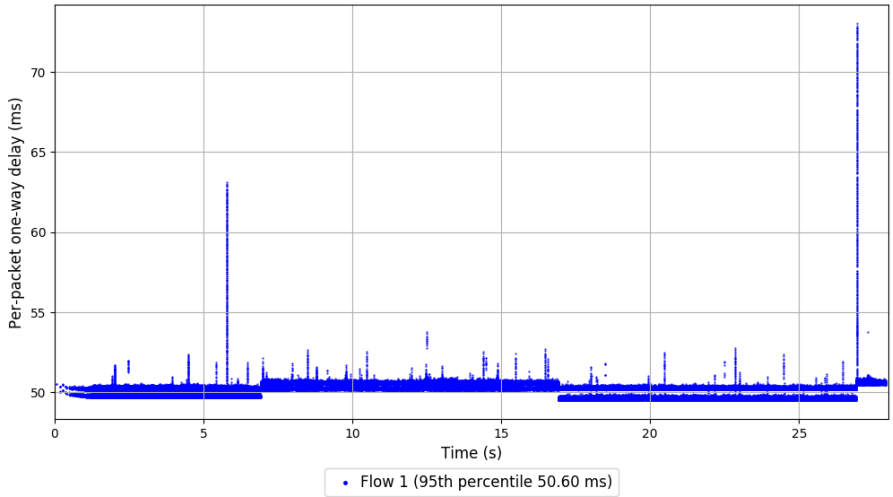
```
Run 2: Statistics of Copa

Start at: 2017-09-18 02:40:03
End at: 2017-09-18 02:40:33

# Below is generated by plot.py at 2017-09-18 06:51:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.47 Mbit/s
95th percentile per-packet one-way delay: 50.601 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 90.47 Mbit/s
95th percentile per-packet one-way delay: 50.601 ms
Loss rate: 0.18%
```

Run 2: Report of Copa — Data Link



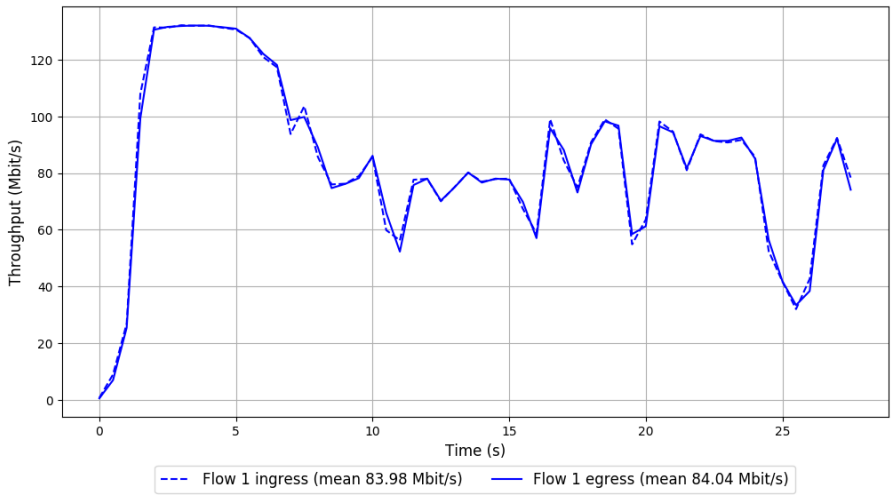


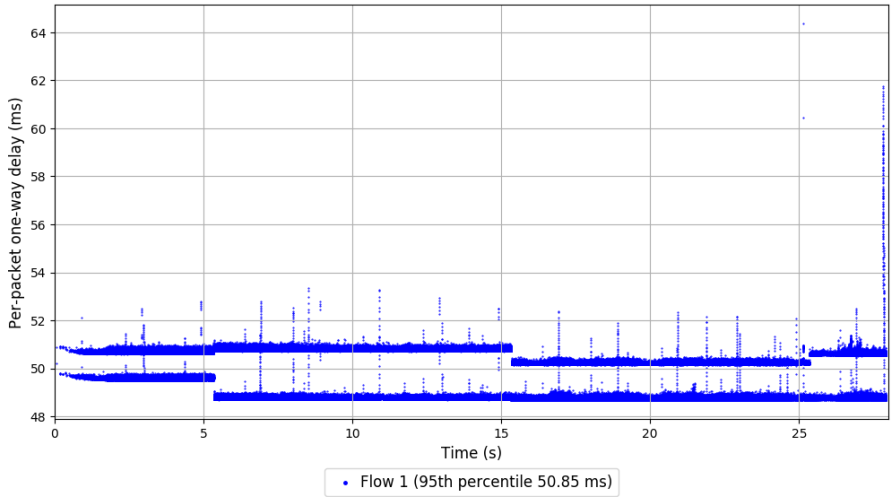
```
Run 3: Statistics of Copa

Start at: 2017-09-18 02:51:34
End at: 2017-09-18 02:52:04

# Below is generated by plot.py at 2017-09-18 06:51:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.04 Mbit/s
95th percentile per-packet one-way delay: 50.849 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 84.04 Mbit/s
95th percentile per-packet one-way delay: 50.849 ms
Loss rate: 0.29%
```

Run 3: Report of Copa — Data Link



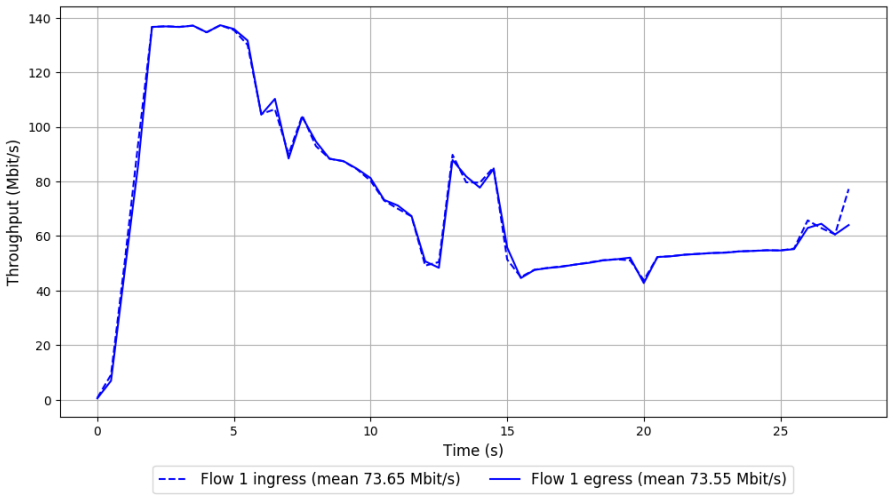


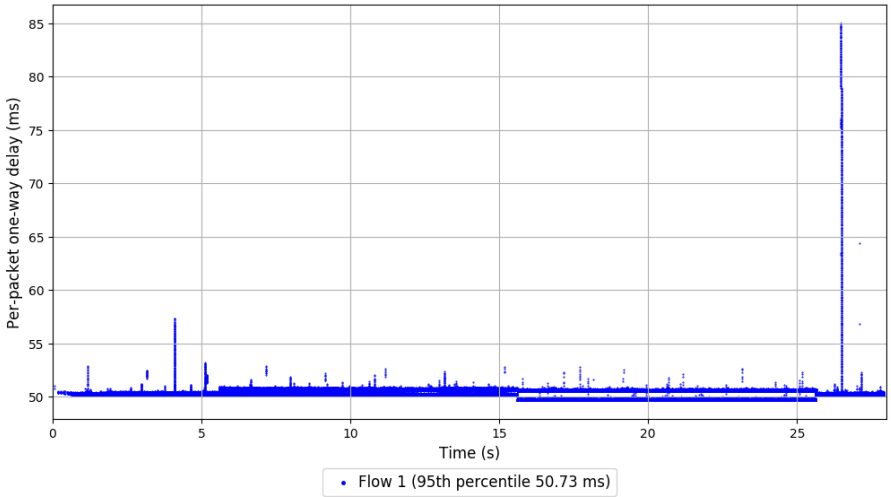
```
Run 4: Statistics of Copa

Start at: 2017-09-18 03:03:14
End at: 2017-09-18 03:03:44

# Below is generated by plot.py at 2017-09-18 06:51:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.55 Mbit/s
95th percentile per-packet one-way delay: 50.731 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 73.55 Mbit/s
95th percentile per-packet one-way delay: 50.731 ms
Loss rate: 0.49%
```

Run 4: Report of Copa — Data Link



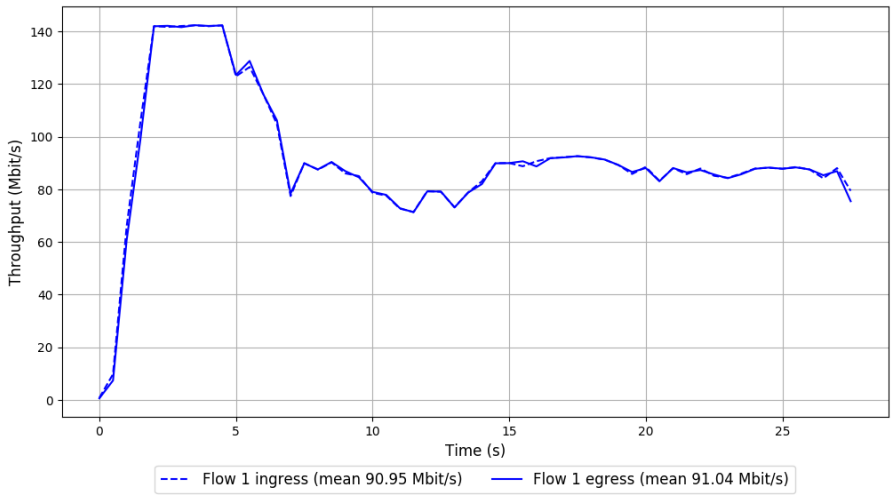


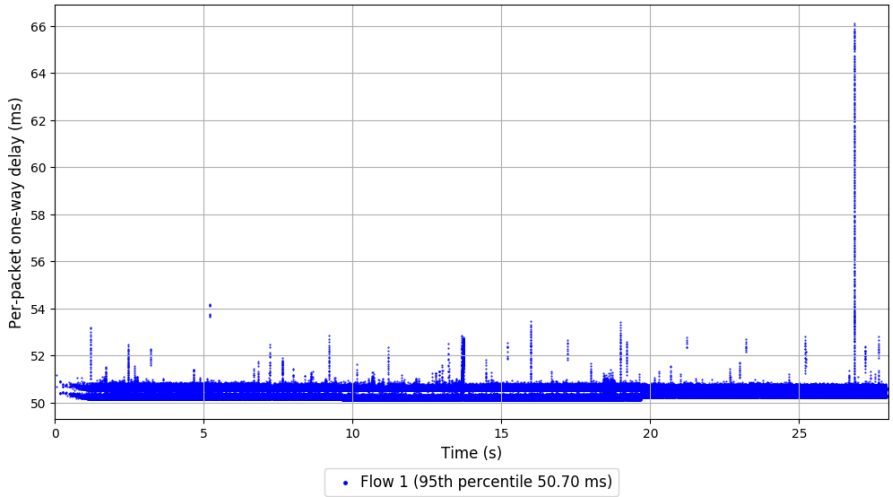
```
Run 5: Statistics of Copa

Start at: 2017-09-18 03:14:40
End at: 2017-09-18 03:15:10

# Below is generated by plot.py at 2017-09-18 06:51:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.04 Mbit/s
95th percentile per-packet one-way delay: 50.705 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 91.04 Mbit/s
95th percentile per-packet one-way delay: 50.705 ms
Loss rate: 0.25%
```

Run 5: Report of Copa — Data Link



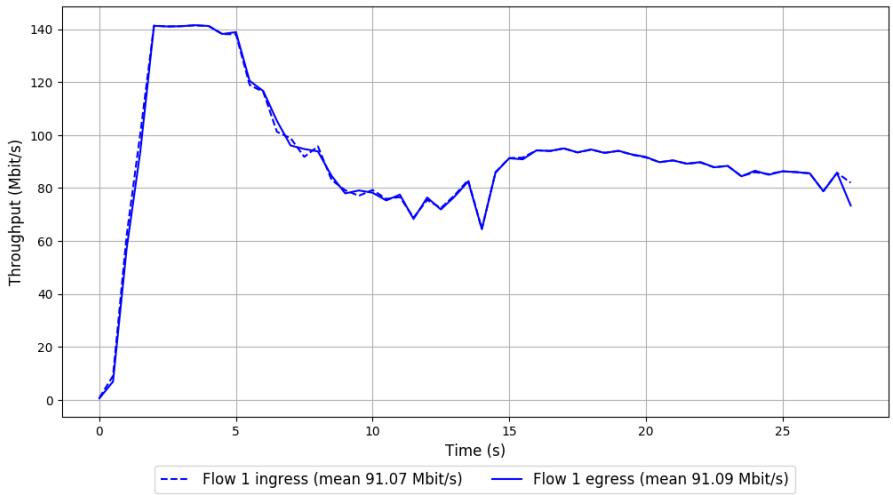


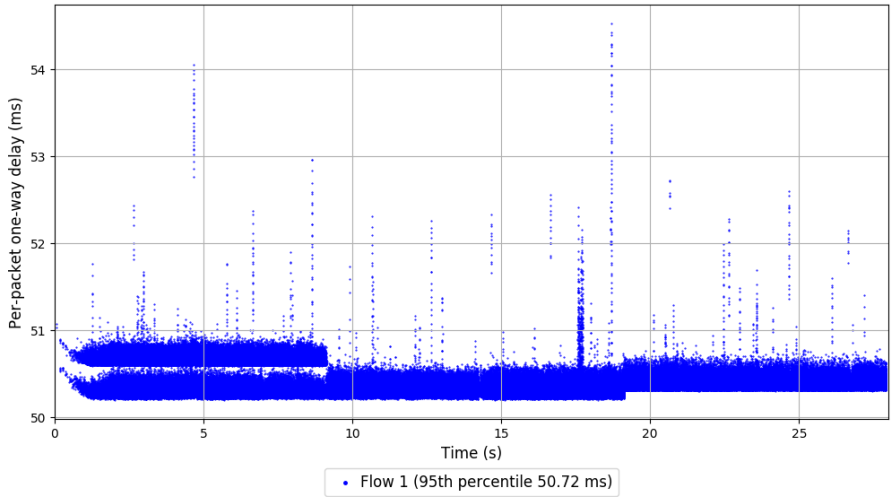
```
Run 6: Statistics of Copa

Start at: 2017-09-18 03:26:11
End at: 2017-09-18 03:26:41

# Below is generated by plot.py at 2017-09-18 06:51:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.09 Mbit/s
95th percentile per-packet one-way delay: 50.721 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 91.09 Mbit/s
95th percentile per-packet one-way delay: 50.721 ms
Loss rate: 0.34%
```

Run 6: Report of Copa — Data Link



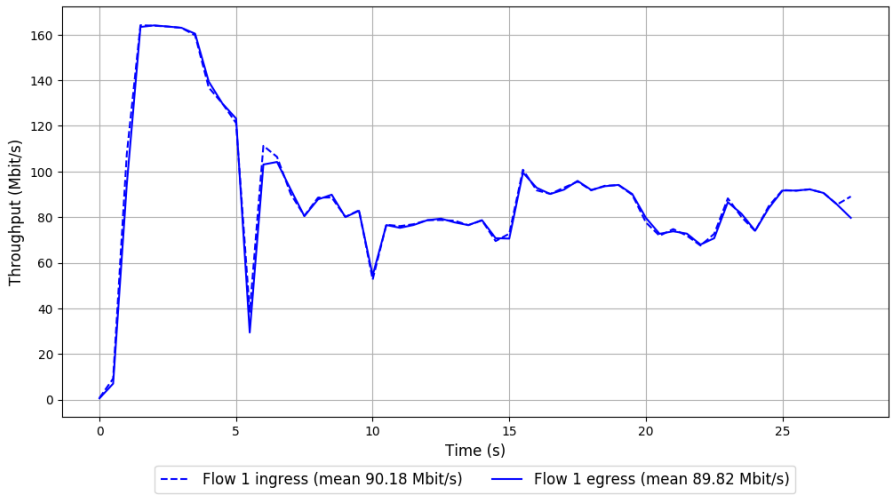


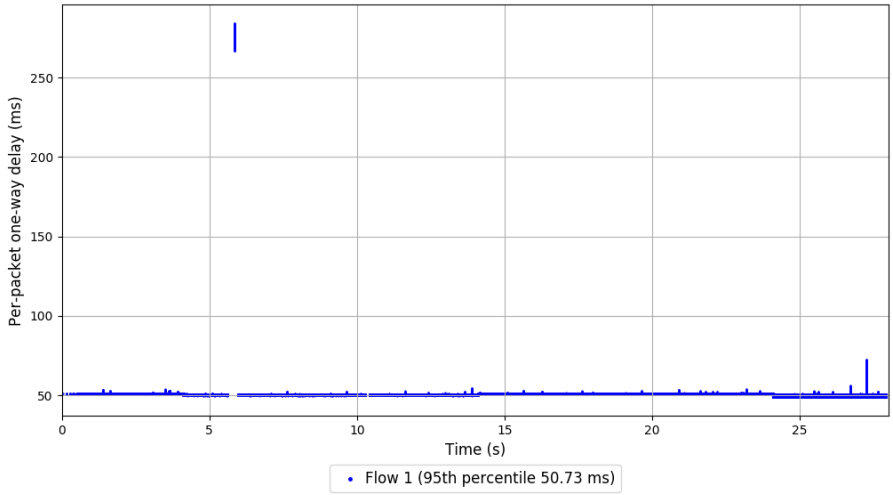
```
Run 7: Statistics of Copa

Start at: 2017-09-18 03:37:46
End at: 2017-09-18 03:38:16

# Below is generated by plot.py at 2017-09-18 06:51:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.82 Mbit/s
95th percentile per-packet one-way delay: 50.727 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 89.82 Mbit/s
95th percentile per-packet one-way delay: 50.727 ms
Loss rate: 0.77%
```

Run 7: Report of Copa — Data Link



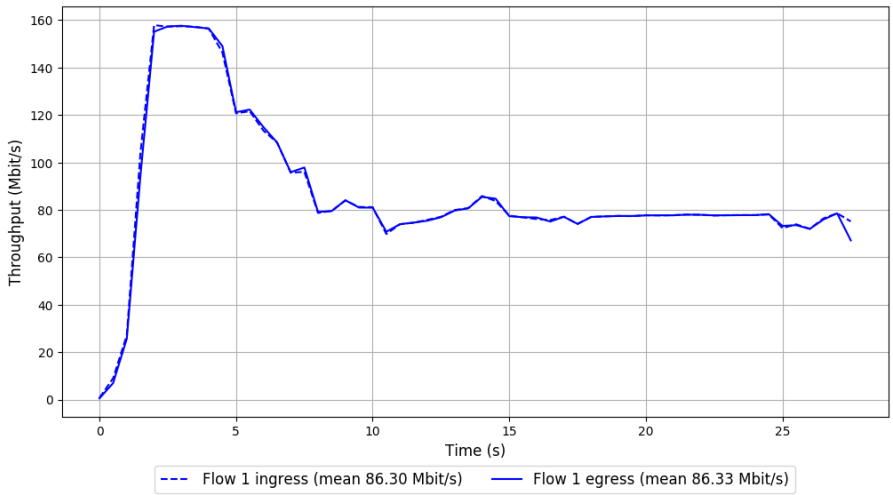


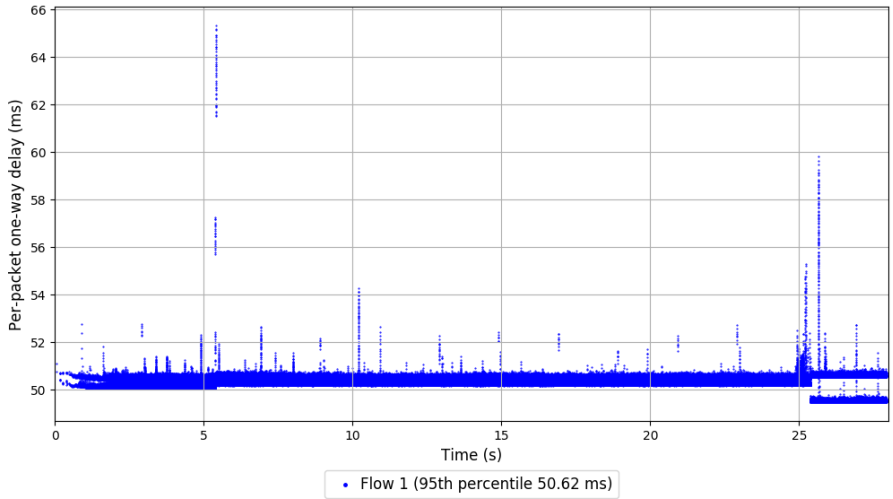
```
Run 8: Statistics of Copa

Start at: 2017-09-18 03:49:14
End at: 2017-09-18 03:49:44

# Below is generated by plot.py at 2017-09-18 06:51:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.33 Mbit/s
95th percentile per-packet one-way delay: 50.617 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 86.33 Mbit/s
95th percentile per-packet one-way delay: 50.617 ms
Loss rate: 0.32%
```

Run 8: Report of Copa — Data Link



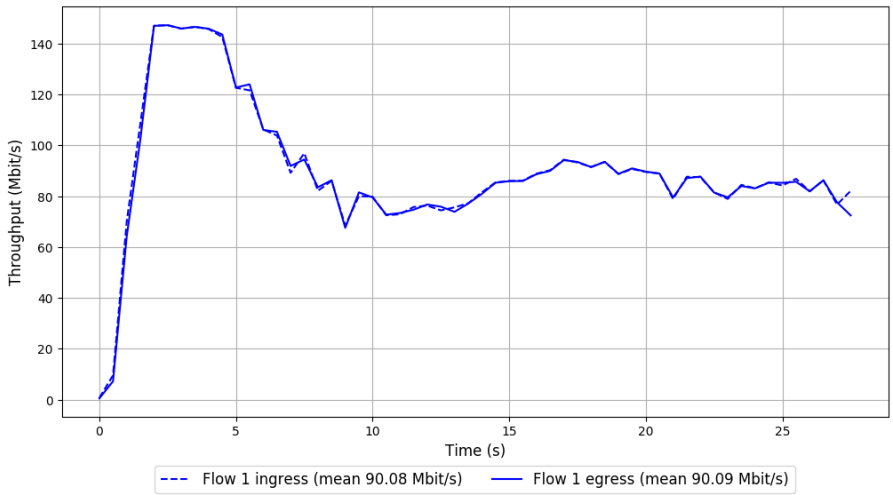


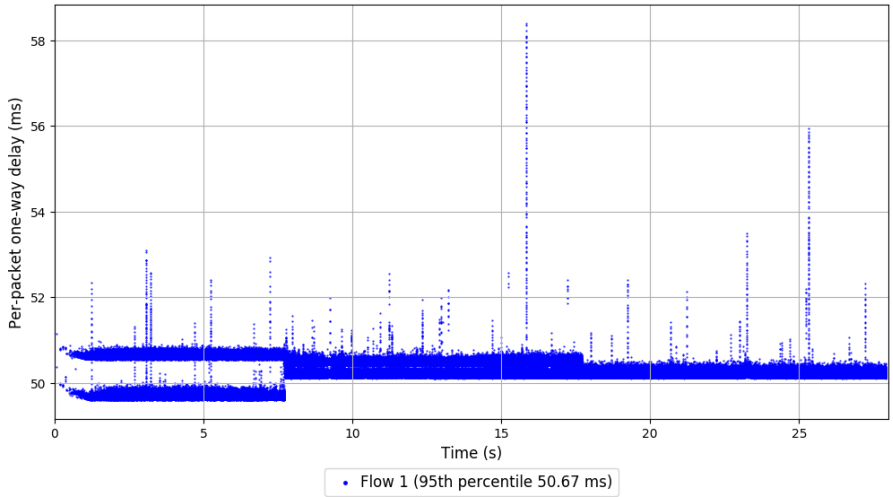
```
Run 9: Statistics of Copa

Start at: 2017-09-18 04:00:52
End at: 2017-09-18 04:01:22

# Below is generated by plot.py at 2017-09-18 06:51:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.09 Mbit/s
95th percentile per-packet one-way delay: 50.669 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 90.09 Mbit/s
95th percentile per-packet one-way delay: 50.669 ms
Loss rate: 0.35%
```

Run 9: Report of Copa — Data Link



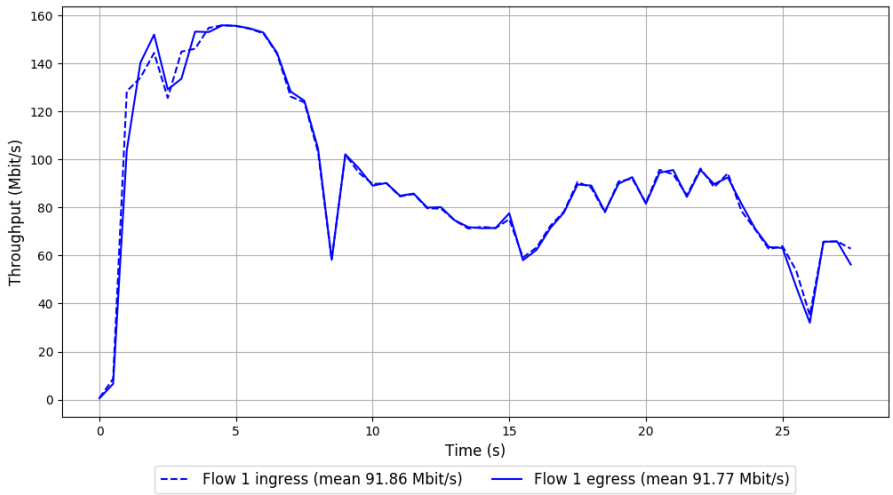


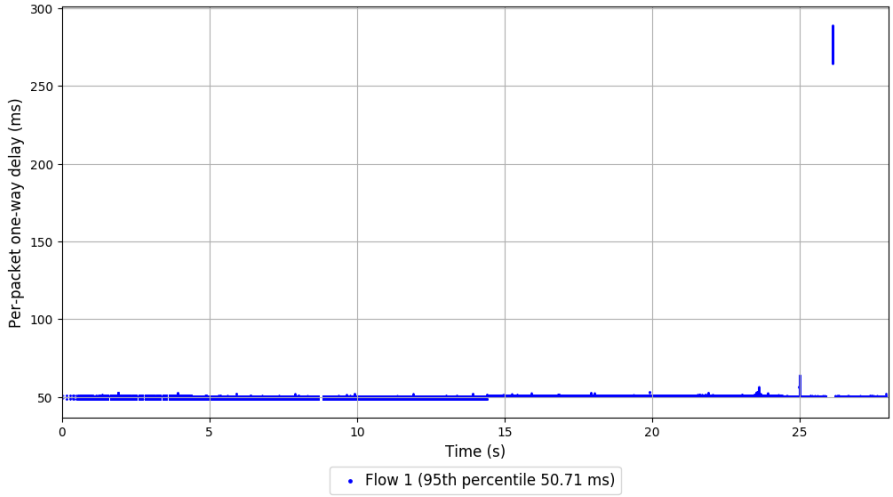
```
Run 10: Statistics of Copa

Start at: 2017-09-18 04:12:25
End at: 2017-09-18 04:12:55

# Below is generated by plot.py at 2017-09-18 06:51:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.77 Mbit/s
95th percentile per-packet one-way delay: 50.708 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 91.77 Mbit/s
95th percentile per-packet one-way delay: 50.708 ms
Loss rate: 0.45%
```

Run 10: Report of Copa — Data Link



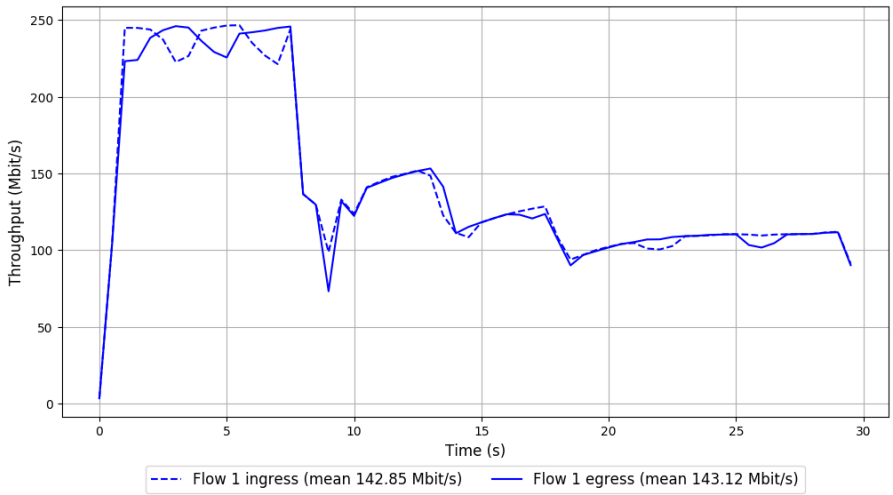


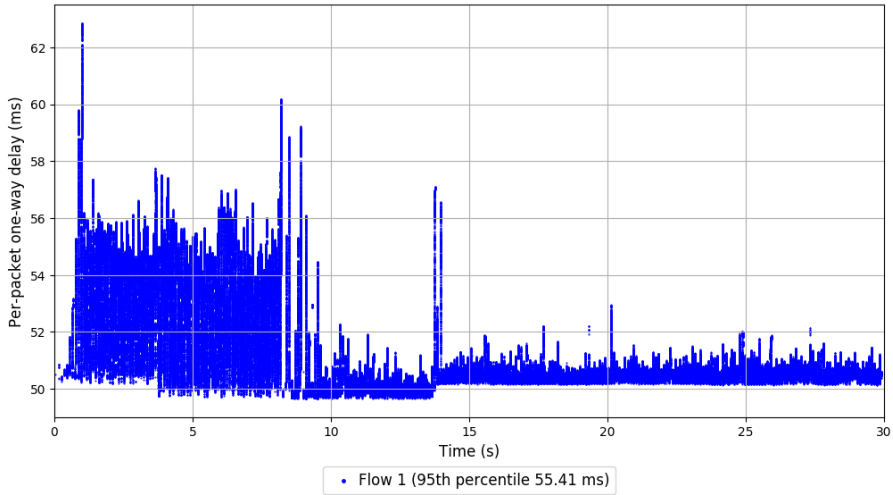
```
Run 1: Statistics of TCP Cubic

Start at: 2017-09-18 02:29:08
End at: 2017-09-18 02:29:38

# Below is generated by plot.py at 2017-09-18 06:51:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 143.12 Mbit/s
95th percentile per-packet one-way delay: 55.411 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 143.12 Mbit/s
95th percentile per-packet one-way delay: 55.411 ms
Loss rate: 0.27%
```

Run 1: Report of TCP Cubic — Data Link



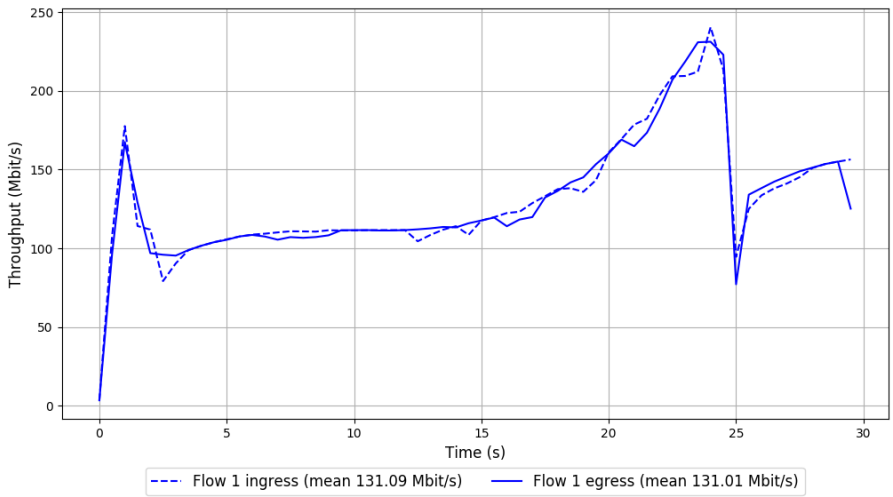


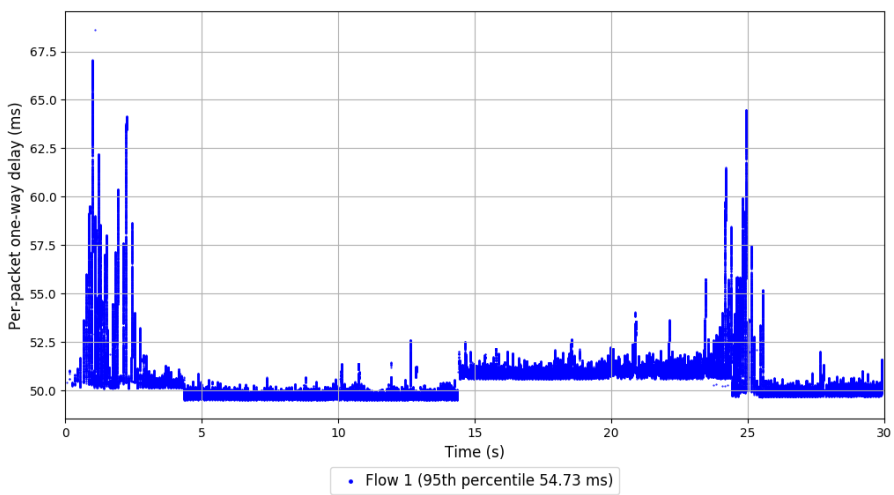
```
Run 2: Statistics of TCP Cubic

Start at: 2017-09-18 02:40:47
End at: 2017-09-18 02:41:17

# Below is generated by plot.py at 2017-09-18 06:51:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 131.01 Mbit/s
95th percentile per-packet one-way delay: 54.735 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 131.01 Mbit/s
95th percentile per-packet one-way delay: 54.735 ms
Loss rate: 0.40%
```

Run 2: Report of TCP Cubic — Data Link



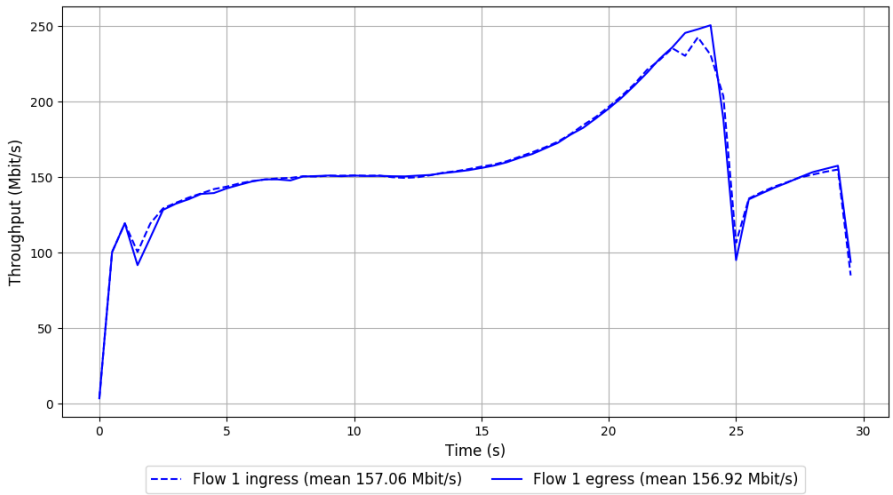


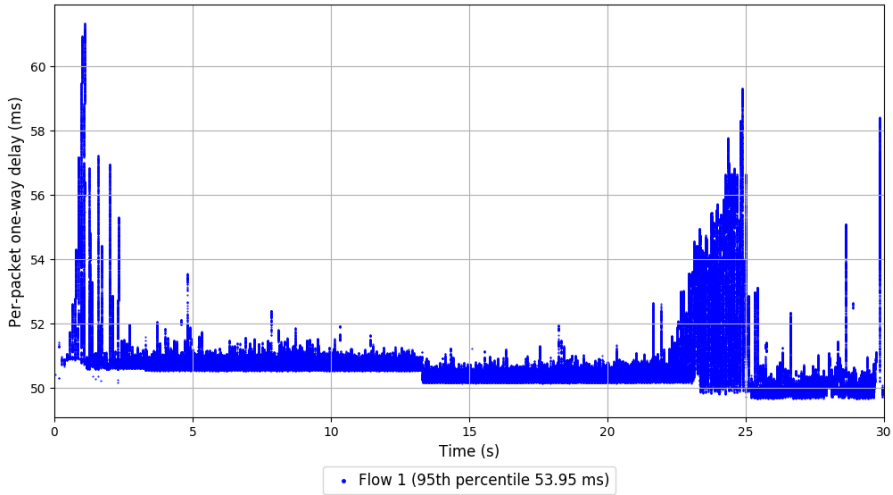
```
Run 3: Statistics of TCP Cubic

Start at: 2017-09-18 02:52:18
End at: 2017-09-18 02:52:48

# Below is generated by plot.py at 2017-09-18 06:52:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 156.92 Mbit/s
95th percentile per-packet one-way delay: 53.954 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 156.92 Mbit/s
95th percentile per-packet one-way delay: 53.954 ms
Loss rate: 0.15%
```

Run 3: Report of TCP Cubic — Data Link



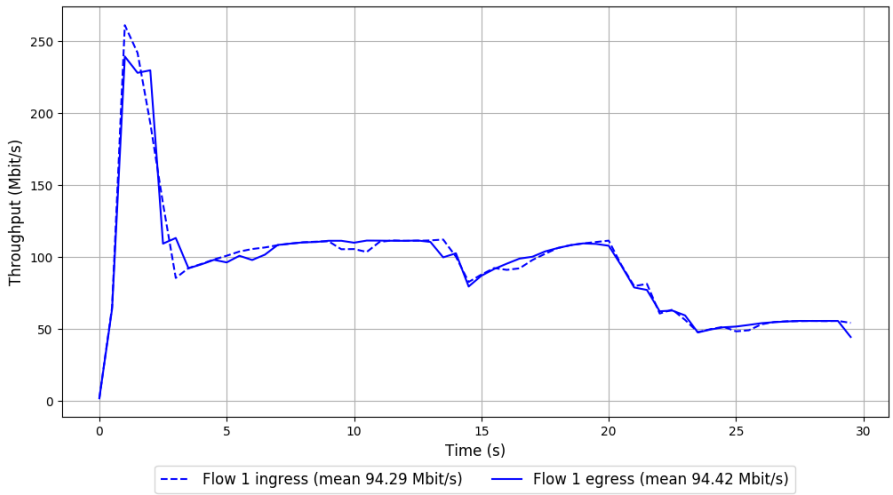


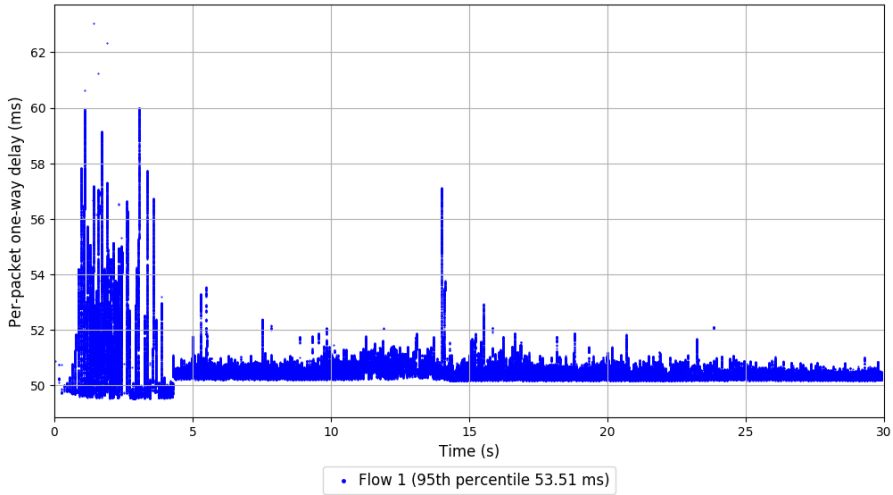
```
Run 4: Statistics of TCP Cubic

Start at: 2017-09-18 03:03:57
End at: 2017-09-18 03:04:27

# Below is generated by plot.py at 2017-09-18 06:52:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.42 Mbit/s
95th percentile per-packet one-way delay: 53.513 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 94.42 Mbit/s
95th percentile per-packet one-way delay: 53.513 ms
Loss rate: 0.20%
```

Run 4: Report of TCP Cubic — Data Link



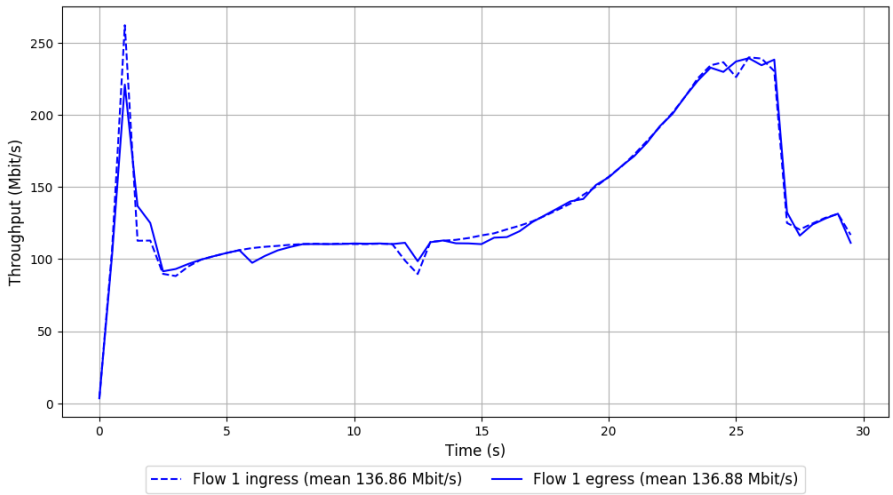


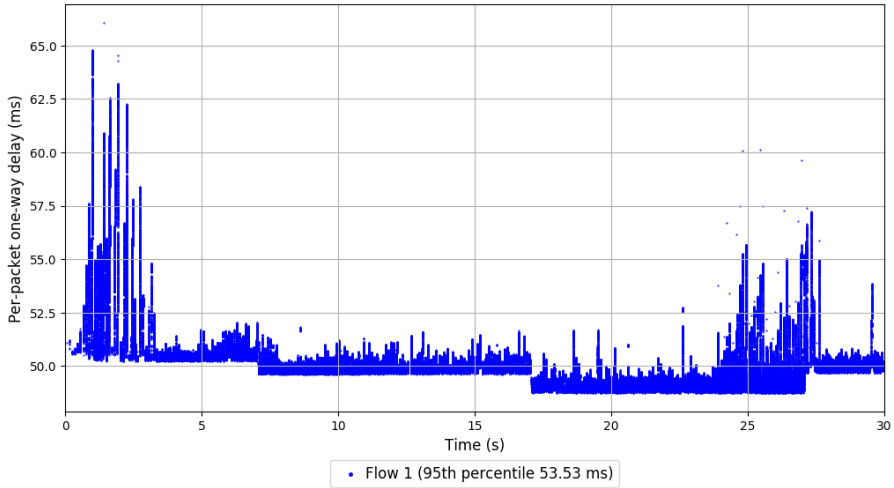
```
Run 5: Statistics of TCP Cubic

Start at: 2017-09-18 03:15:25
End at: 2017-09-18 03:15:55

# Below is generated by plot.py at 2017-09-18 06:52:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 136.88 Mbit/s
95th percentile per-packet one-way delay: 53.532 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 136.88 Mbit/s
95th percentile per-packet one-way delay: 53.532 ms
Loss rate: 0.32%
```

Run 5: Report of TCP Cubic — Data Link



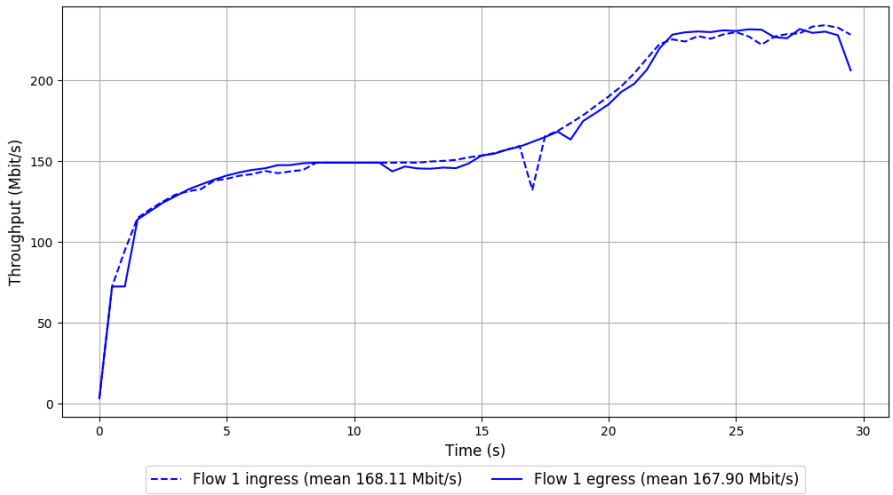


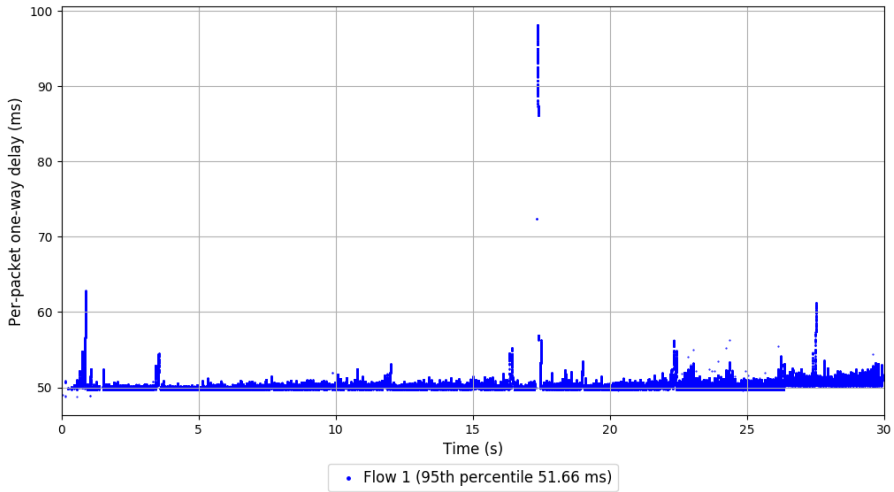
```
Run 6: Statistics of TCP Cubic

Start at: 2017-09-18 03:26:55
End at: 2017-09-18 03:27:25

# Below is generated by plot.py at 2017-09-18 06:53:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 167.90 Mbit/s
95th percentile per-packet one-way delay: 51.656 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 167.90 Mbit/s
95th percentile per-packet one-way delay: 51.656 ms
Loss rate: 0.46%
```

Run 6: Report of TCP Cubic — Data Link



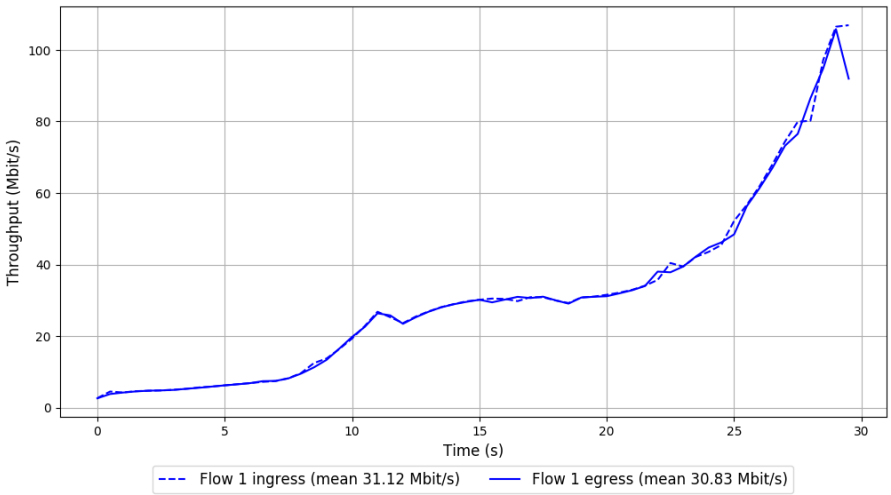


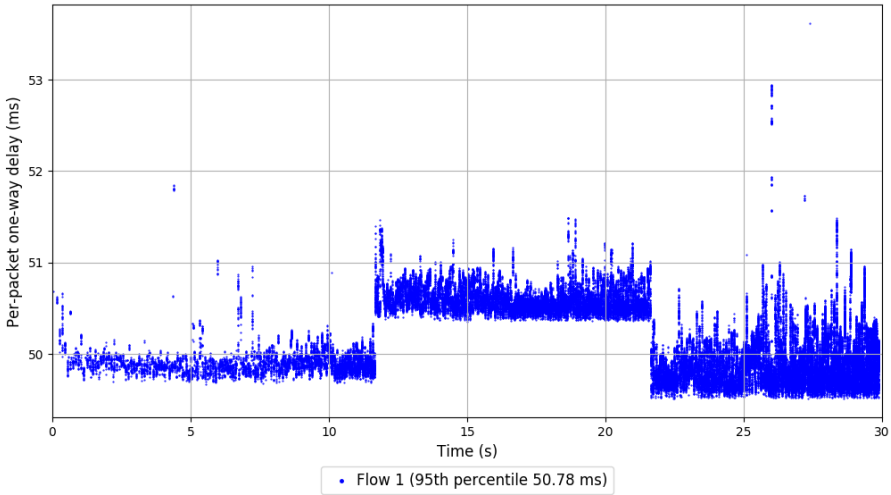
```
Run 7: Statistics of TCP Cubic

Start at: 2017-09-18 03:38:30
End at: 2017-09-18 03:39:00

# Below is generated by plot.py at 2017-09-18 06:53:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.83 Mbit/s
95th percentile per-packet one-way delay: 50.777 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 30.83 Mbit/s
95th percentile per-packet one-way delay: 50.777 ms
Loss rate: 1.30%
```

Run 7: Report of TCP Cubic — Data Link



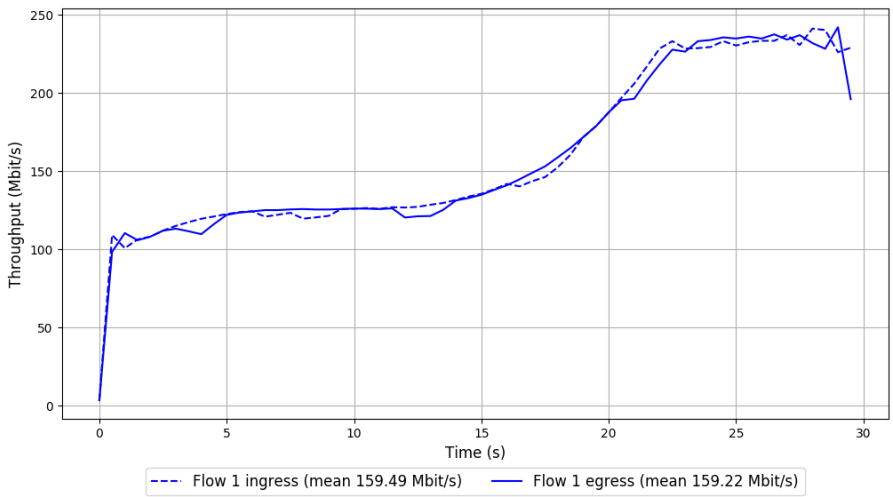


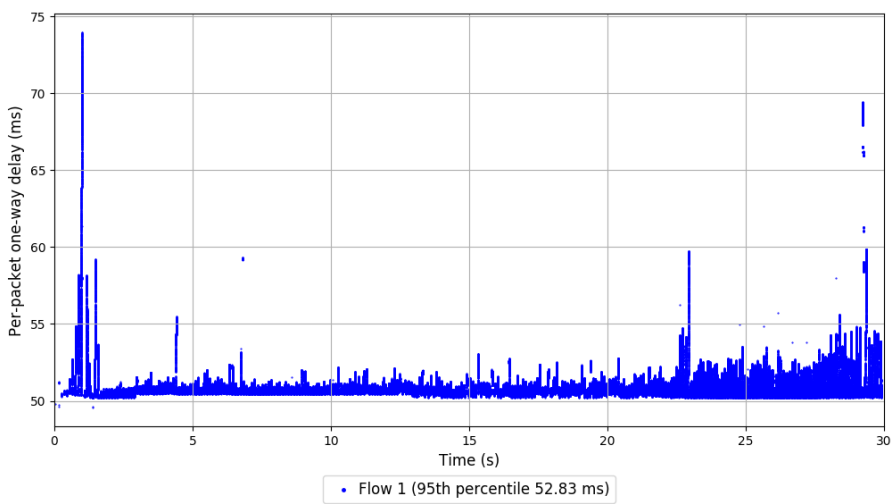
```
Run 8: Statistics of TCP Cubic

Start at: 2017-09-18 03:49:59
End at: 2017-09-18 03:50:29

# Below is generated by plot.py at 2017-09-18 06:53:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 159.22 Mbit/s
95th percentile per-packet one-way delay: 52.827 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 159.22 Mbit/s
95th percentile per-packet one-way delay: 52.827 ms
Loss rate: 0.51%
```

Run 8: Report of TCP Cubic — Data Link



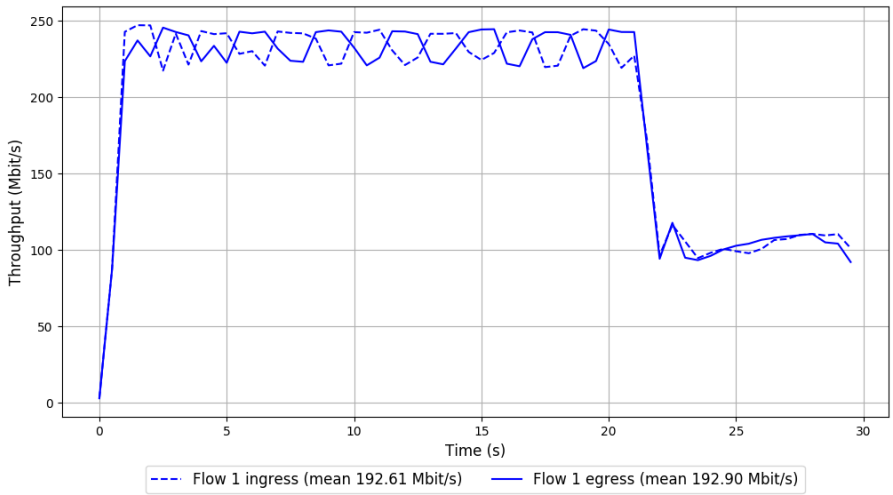


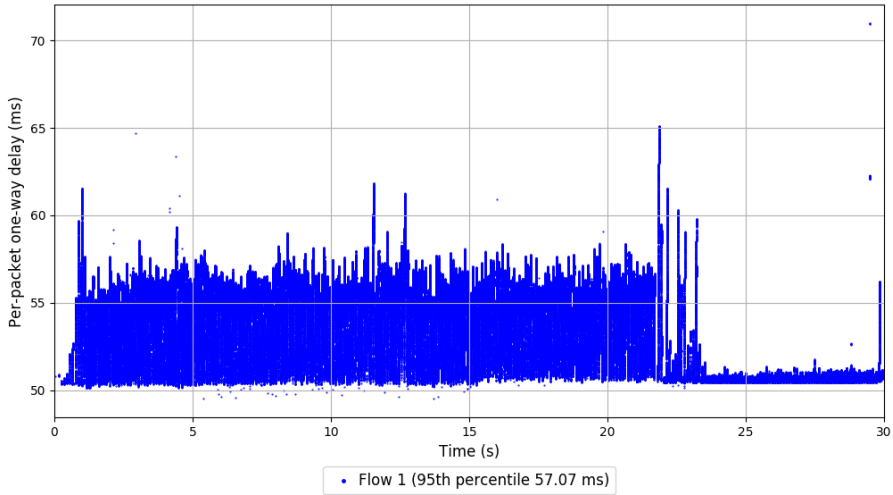
```
Run 9: Statistics of TCP Cubic

Start at: 2017-09-18 04:01:36
End at: 2017-09-18 04:02:06

# Below is generated by plot.py at 2017-09-18 06:54:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 192.90 Mbit/s
95th percentile per-packet one-way delay: 57.070 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 192.90 Mbit/s
95th percentile per-packet one-way delay: 57.070 ms
Loss rate: 0.18%
```

Run 9: Report of TCP Cubic — Data Link



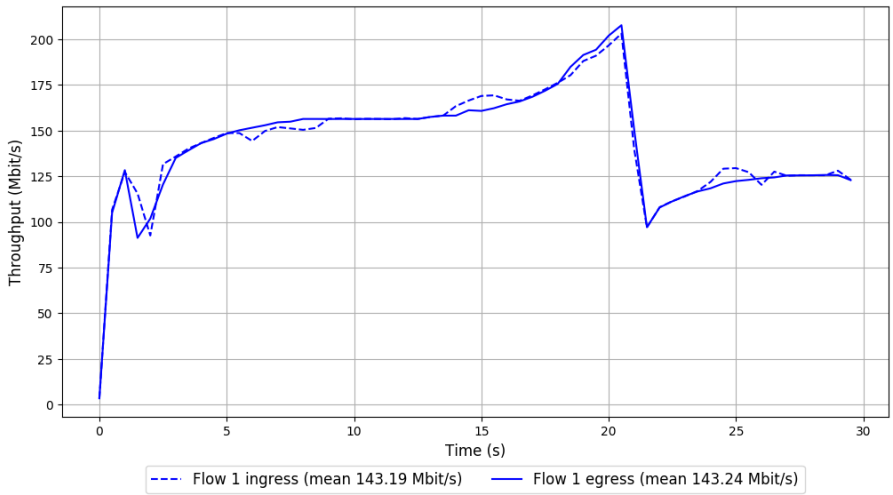


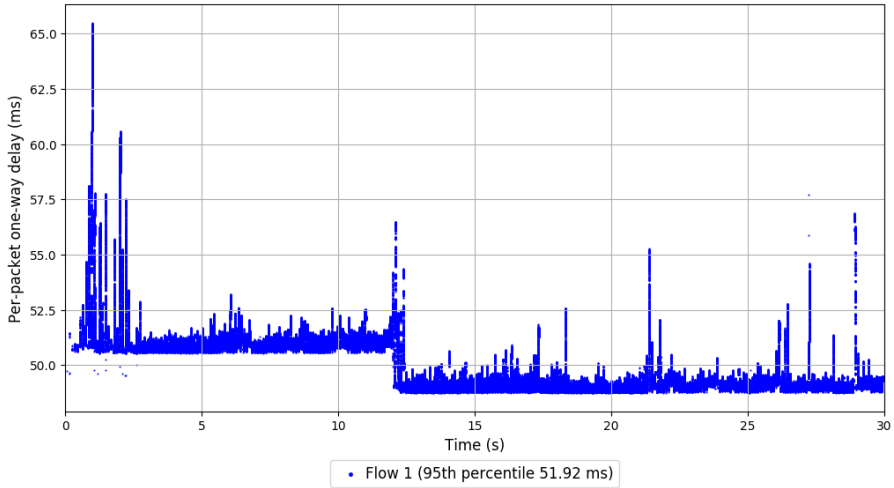
```
Run 10: Statistics of TCP Cubic

Start at: 2017-09-18 04:13:10
End at: 2017-09-18 04:13:40

# Below is generated by plot.py at 2017-09-18 06:54:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 143.24 Mbit/s
95th percentile per-packet one-way delay: 51.924 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 143.24 Mbit/s
95th percentile per-packet one-way delay: 51.924 ms
Loss rate: 0.30%
```

Run 10: Report of TCP Cubic — Data Link



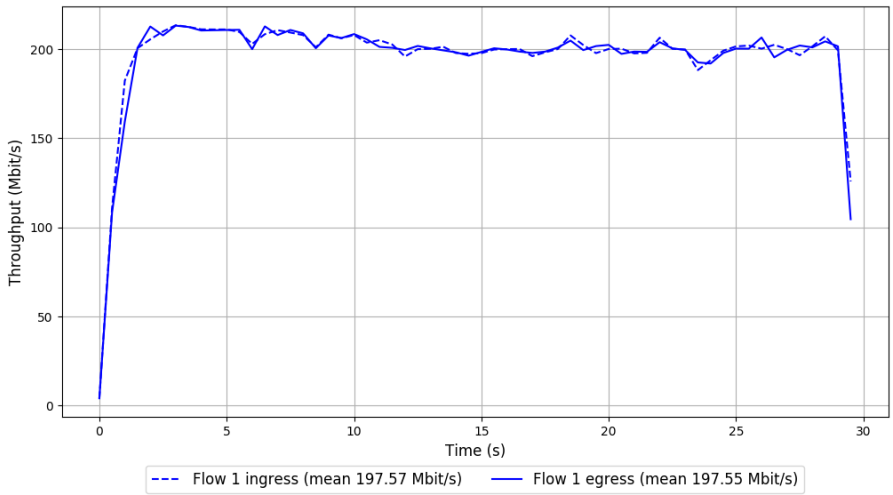


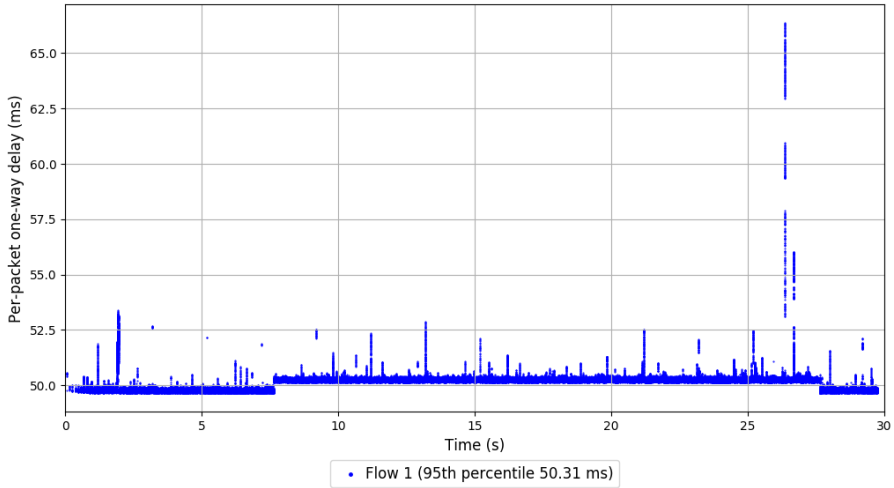
```
Run 1: Statistics of Indigo

Start at: 2017-09-18 02:35:44
End at: 2017-09-18 02:36:14

# Below is generated by plot.py at 2017-09-18 06:54:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 197.55 Mbit/s
95th percentile per-packet one-way delay: 50.308 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 197.55 Mbit/s
95th percentile per-packet one-way delay: 50.308 ms
Loss rate: 0.35%
```

Run 1: Report of Indigo — Data Link



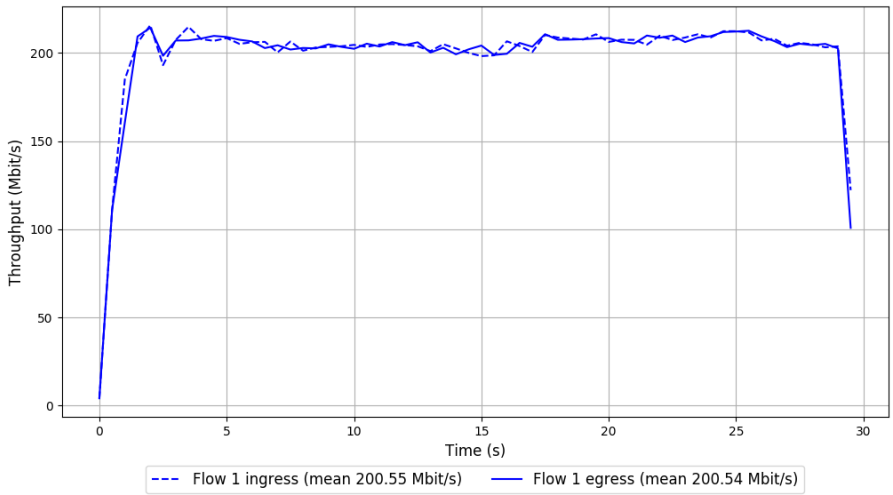


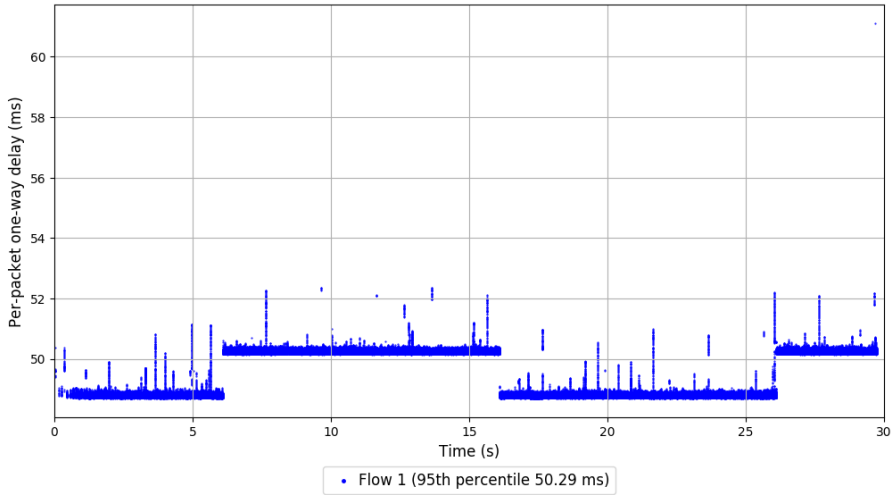
```
Run 2: Statistics of Indigo

Start at: 2017-09-18 02:47:15
End at: 2017-09-18 02:47:45

# Below is generated by plot.py at 2017-09-18 06:55:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 200.54 Mbit/s
95th percentile per-packet one-way delay: 50.293 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 200.54 Mbit/s
95th percentile per-packet one-way delay: 50.293 ms
Loss rate: 0.35%
```

Run 2: Report of Indigo — Data Link



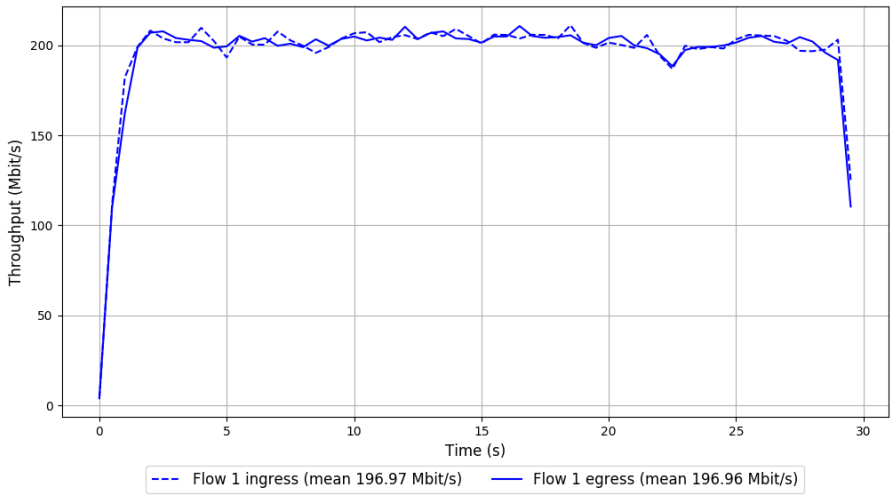


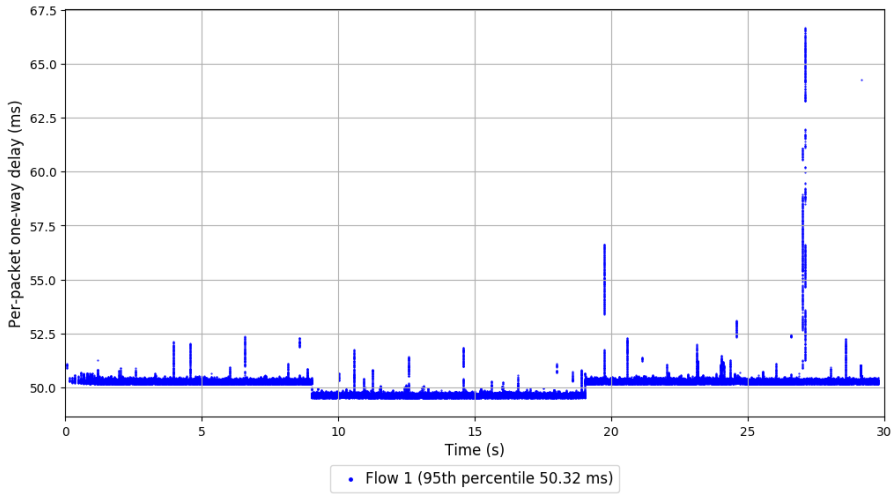
```
Run 3: Statistics of Indigo

Start at: 2017-09-18 02:58:52
End at: 2017-09-18 02:59:22

# Below is generated by plot.py at 2017-09-18 06:55:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 196.96 Mbit/s
95th percentile per-packet one-way delay: 50.316 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 196.96 Mbit/s
95th percentile per-packet one-way delay: 50.316 ms
Loss rate: 0.35%
```

Run 3: Report of Indigo — Data Link



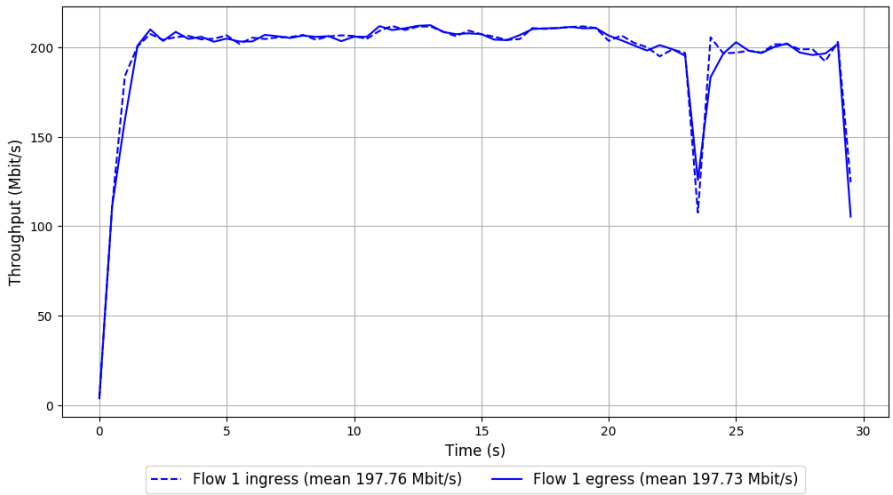


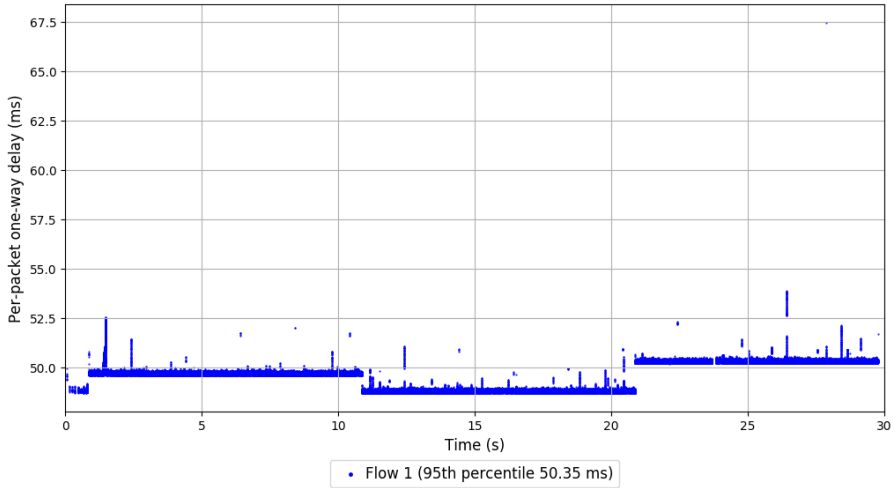
```
Run 4: Statistics of Indigo

Start at: 2017-09-18 03:10:21
End at: 2017-09-18 03:10:51

# Below is generated by plot.py at 2017-09-18 06:56:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 197.73 Mbit/s
95th percentile per-packet one-way delay: 50.353 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 197.73 Mbit/s
95th percentile per-packet one-way delay: 50.353 ms
Loss rate: 0.34%
```

Run 4: Report of Indigo — Data Link



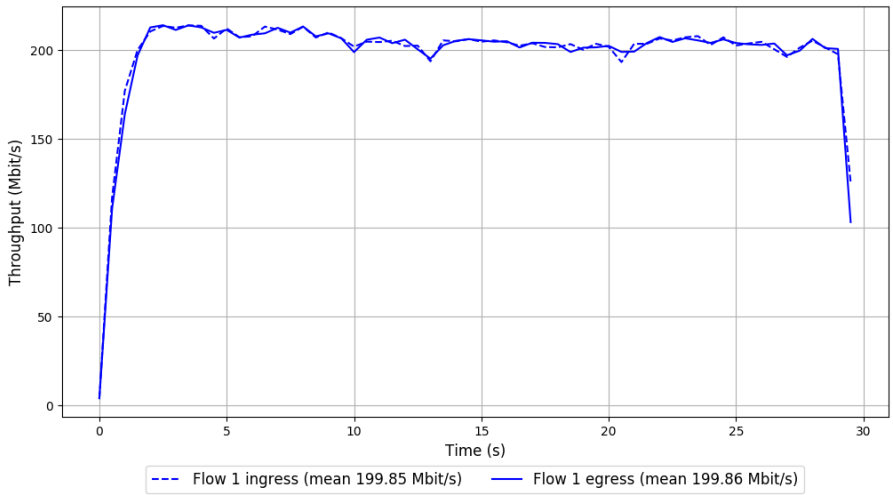


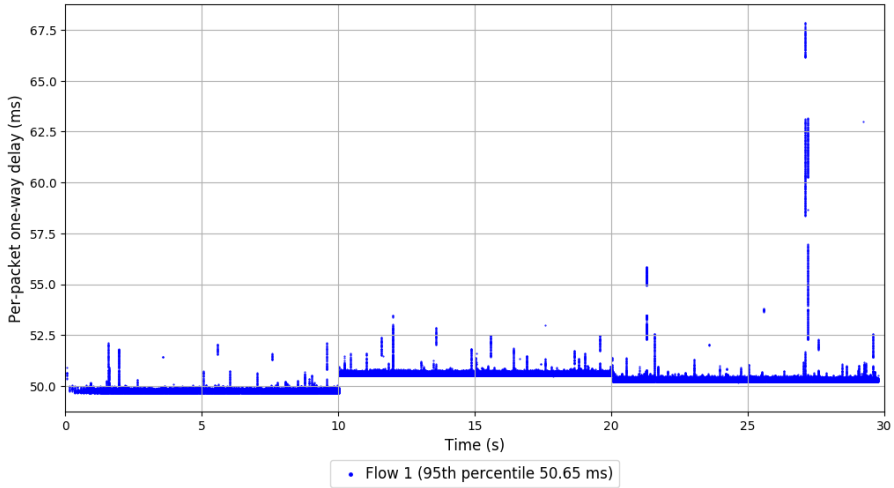
```
Run 5: Statistics of Indigo

Start at: 2017-09-18 03:21:51
End at: 2017-09-18 03:22:21

# Below is generated by plot.py at 2017-09-18 06:57:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 199.86 Mbit/s
95th percentile per-packet one-way delay: 50.649 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 199.86 Mbit/s
95th percentile per-packet one-way delay: 50.649 ms
Loss rate: 0.34%
```

Run 5: Report of Indigo — Data Link



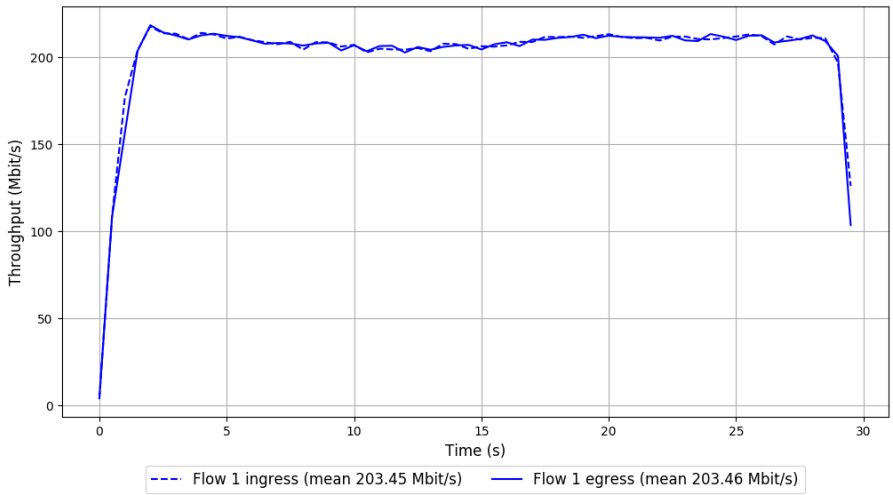


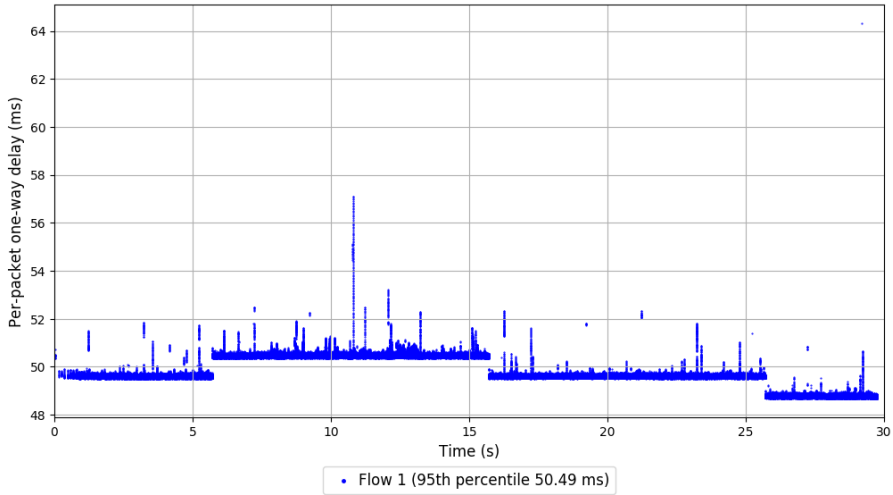
```
Run 6: Statistics of Indigo

Start at: 2017-09-18 03:33:26
End at: 2017-09-18 03:33:56

# Below is generated by plot.py at 2017-09-18 06:57:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.46 Mbit/s
95th percentile per-packet one-way delay: 50.495 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 203.46 Mbit/s
95th percentile per-packet one-way delay: 50.495 ms
Loss rate: 0.34%
```

Run 6: Report of Indigo — Data Link



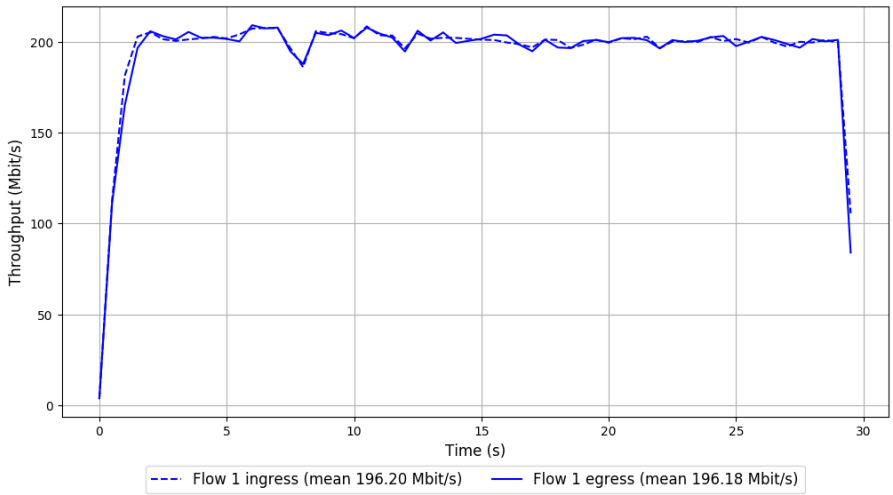


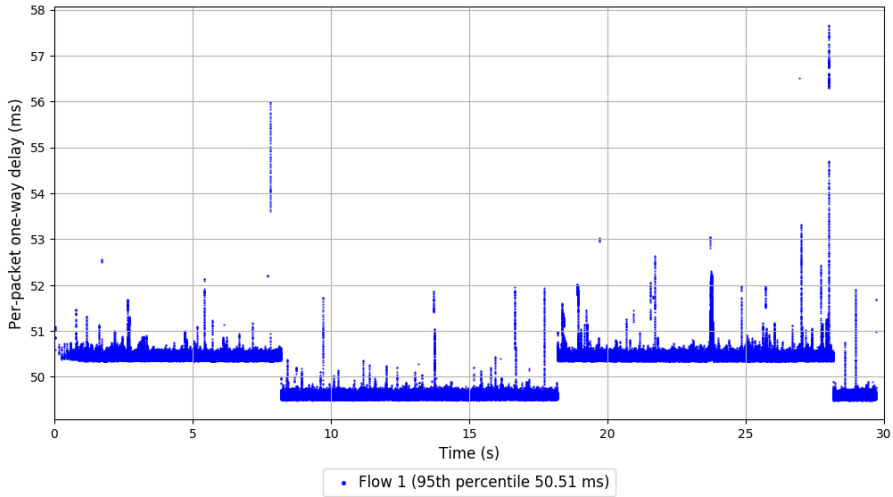
```
Run 7: Statistics of Indigo

Start at: 2017-09-18 03:44:53
End at: 2017-09-18 03:45:23

# Below is generated by plot.py at 2017-09-18 06:57:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 196.18 Mbit/s
95th percentile per-packet one-way delay: 50.507 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 196.18 Mbit/s
95th percentile per-packet one-way delay: 50.507 ms
Loss rate: 0.34%
```

Run 7: Report of Indigo — Data Link



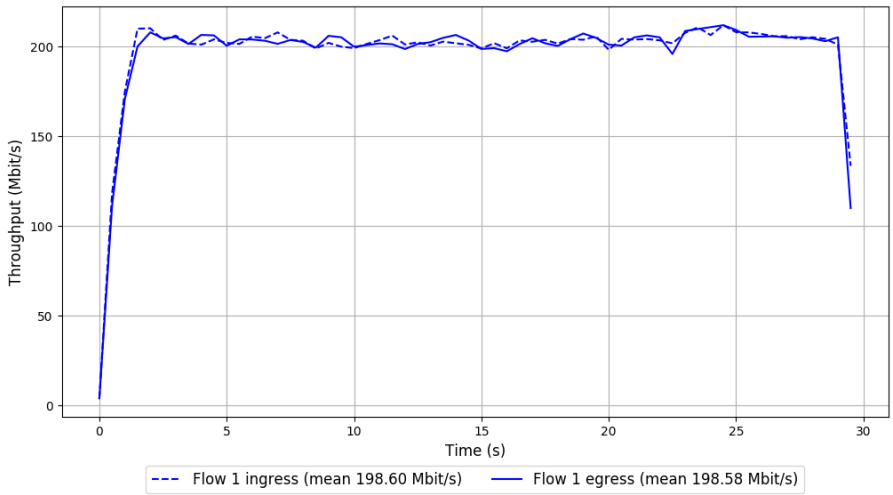


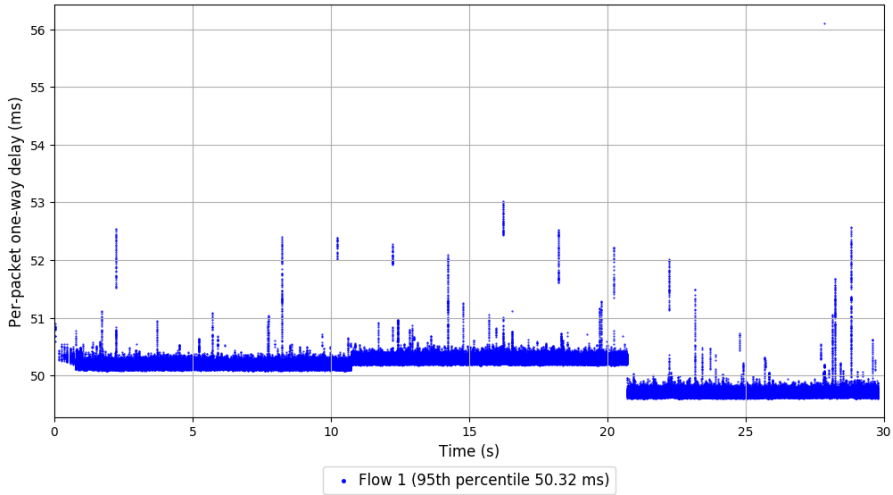
```
Run 8: Statistics of Indigo

Start at: 2017-09-18 03:56:31
End at: 2017-09-18 03:57:01

# Below is generated by plot.py at 2017-09-18 06:58:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 198.58 Mbit/s
95th percentile per-packet one-way delay: 50.323 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 198.58 Mbit/s
95th percentile per-packet one-way delay: 50.323 ms
Loss rate: 0.35%
```

Run 8: Report of Indigo — Data Link



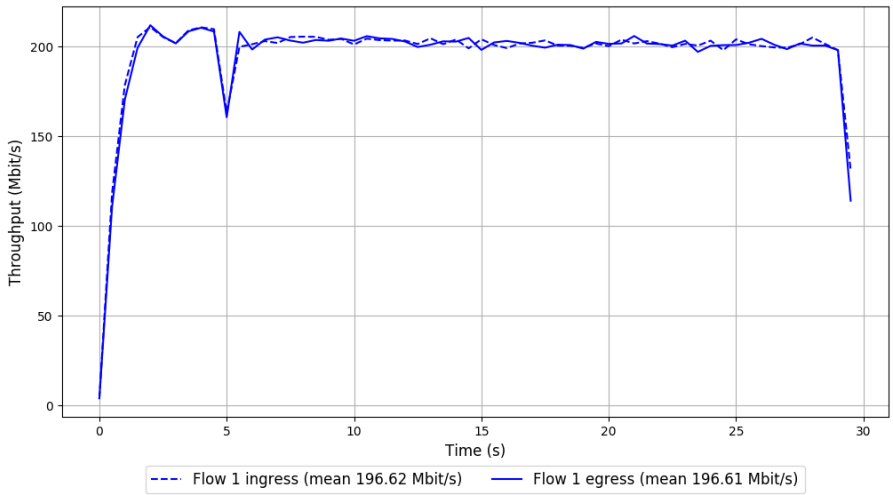


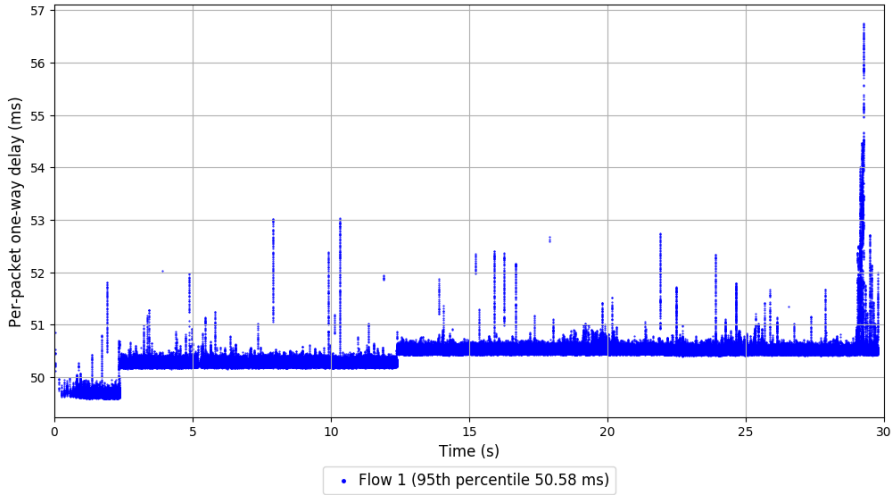
```
Run 9: Statistics of Indigo

Start at: 2017-09-18 04:08:09
End at: 2017-09-18 04:08:39

# Below is generated by plot.py at 2017-09-18 06:58:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 196.61 Mbit/s
95th percentile per-packet one-way delay: 50.575 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 196.61 Mbit/s
95th percentile per-packet one-way delay: 50.575 ms
Loss rate: 0.34%
```

Run 9: Report of Indigo — Data Link



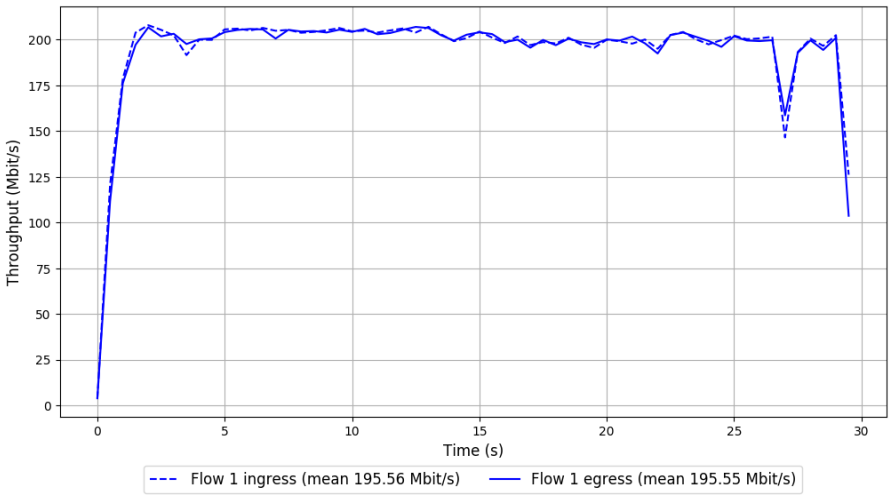


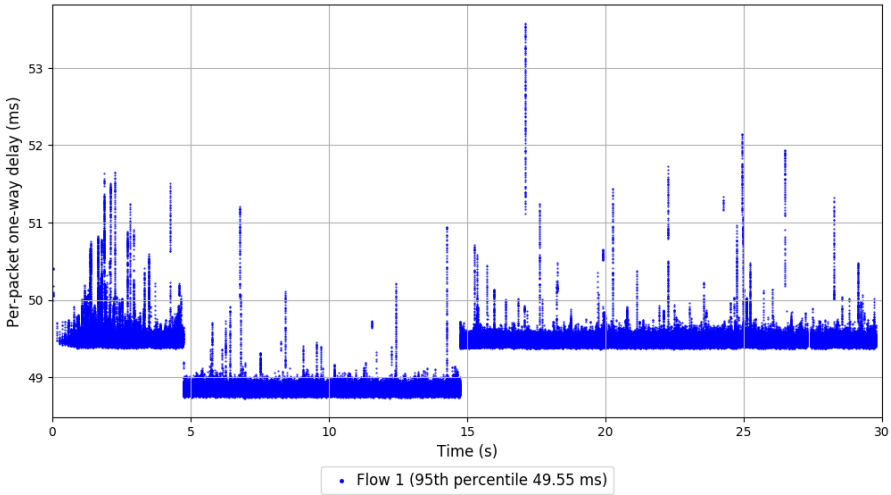
```
Run 10: Statistics of Indigo

Start at: 2017-09-18 04:19:37
End at: 2017-09-18 04:20:07

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 195.55 Mbit/s
95th percentile per-packet one-way delay: 49.545 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 195.55 Mbit/s
95th percentile per-packet one-way delay: 49.545 ms
Loss rate: 0.34%
```

Run 10: Report of Indigo — Data Link

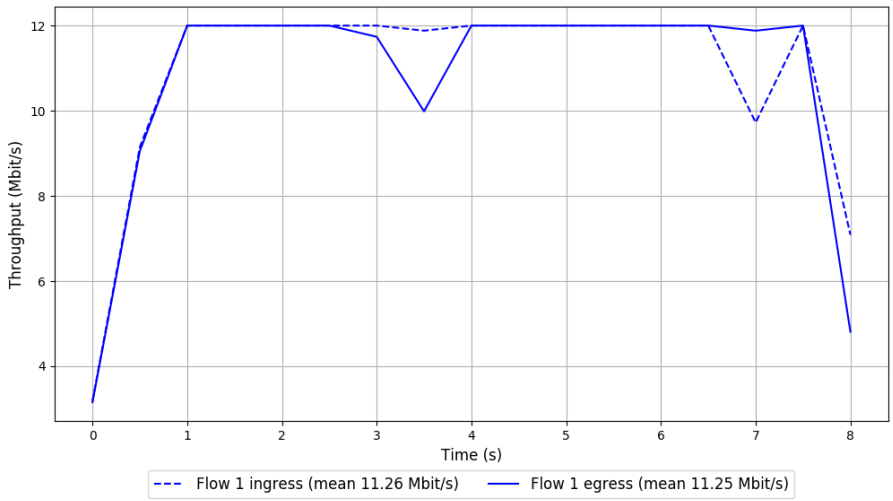


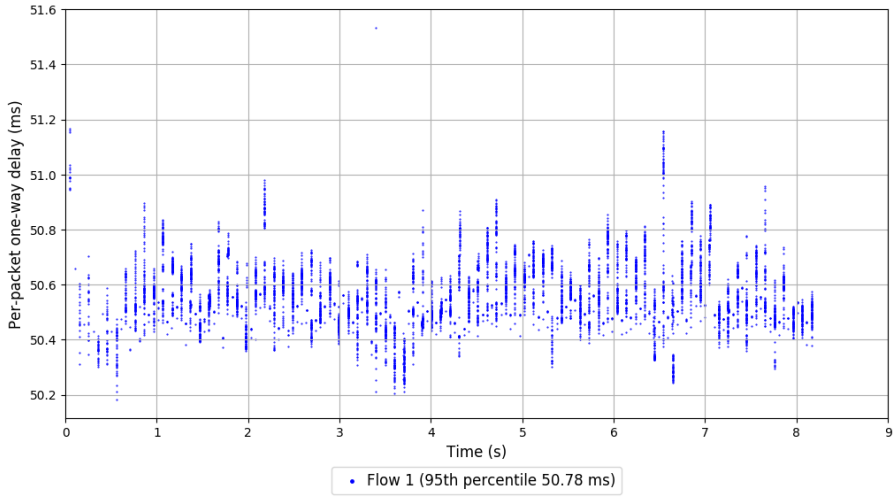


```
Run 1: Statistics of KohoCC

Start at: 2017-09-18 02:37:10
End at: 2017-09-18 02:37:40
```

Run 1: Report of KohoCC — Data Link



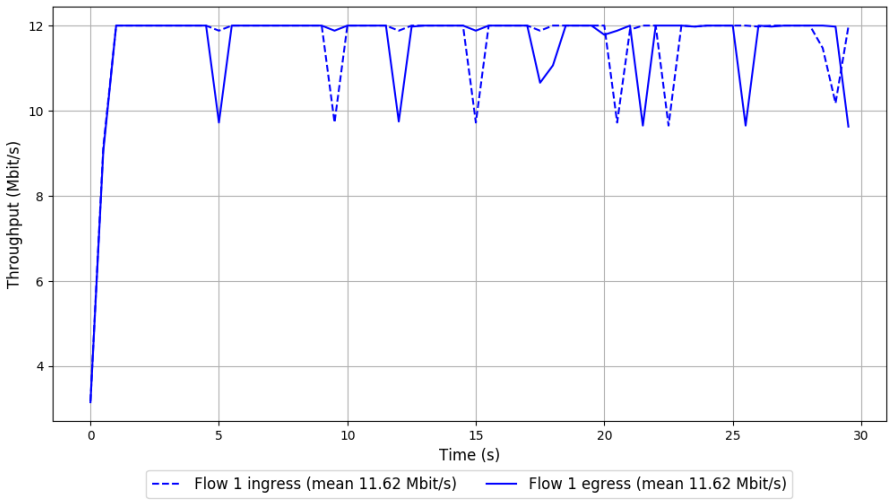


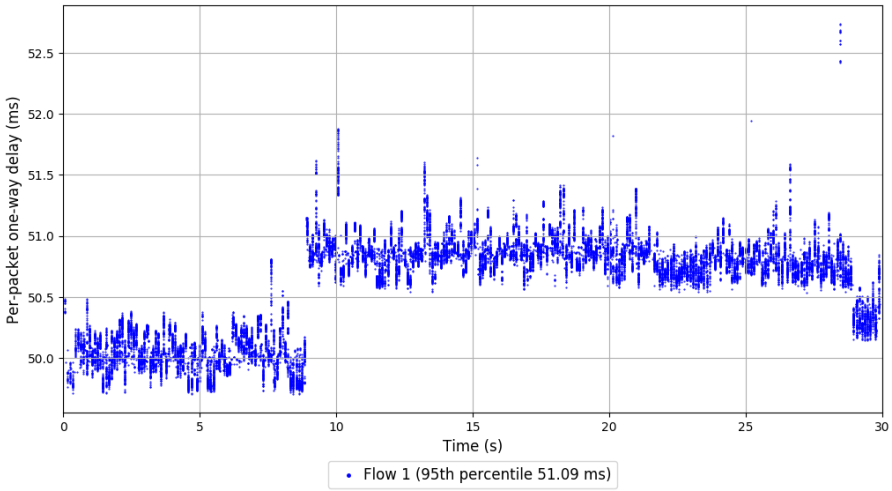
```
Run 2: Statistics of KohoCC

Start at: 2017-09-18 02:48:43
End at: 2017-09-18 02:49:13

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 51.090 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 51.090 ms
Loss rate: 0.38%
```

Run 2: Report of KohoCC — Data Link



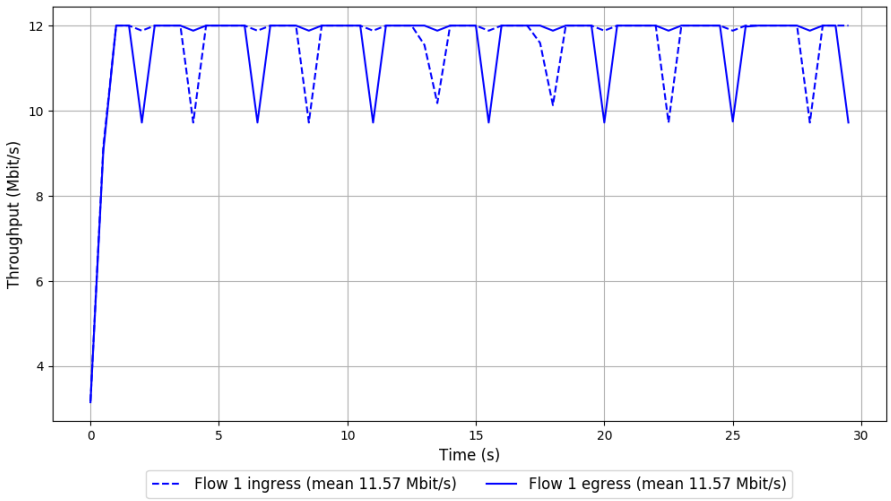


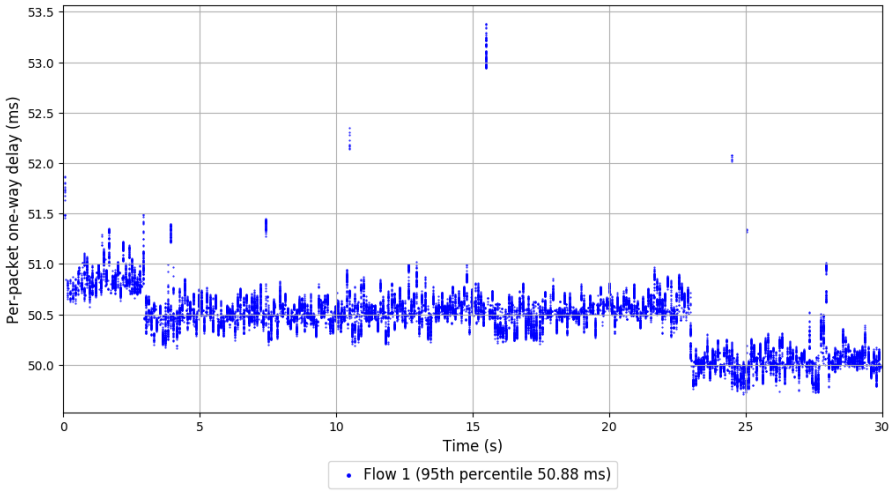
```
Run 3: Statistics of KohoCC

Start at: 2017-09-18 03:00:19
End at: 2017-09-18 03:00:49

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.57 Mbit/s
95th percentile per-packet one-way delay: 50.880 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 11.57 Mbit/s
95th percentile per-packet one-way delay: 50.880 ms
Loss rate: 0.35%
```

Run 3: Report of KohoCC — Data Link



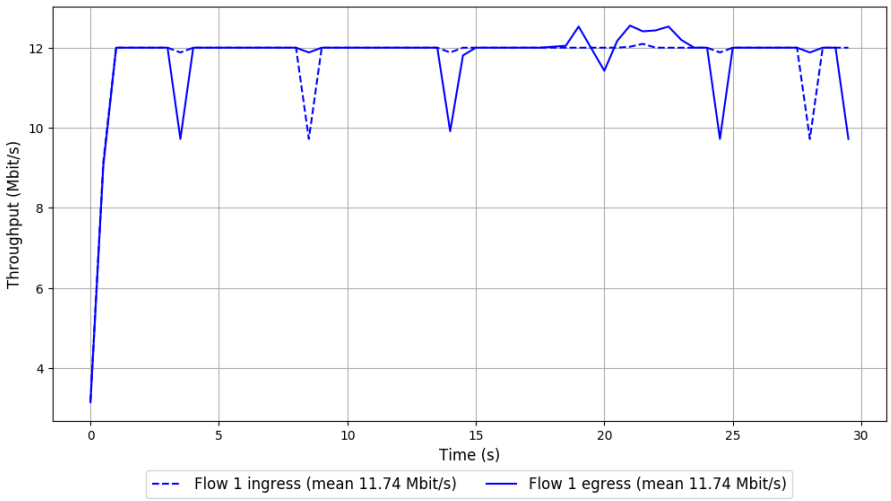


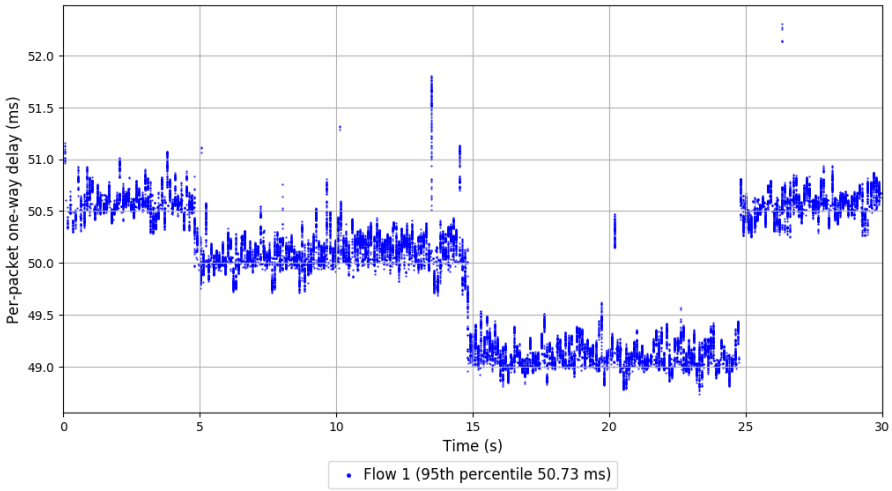
```
Run 4: Statistics of KohoCC

Start at: 2017-09-18 03:11:47
End at: 2017-09-18 03:12:17

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 50.725 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 50.725 ms
Loss rate: 0.34%
```

Run 4: Report of KohoCC — Data Link

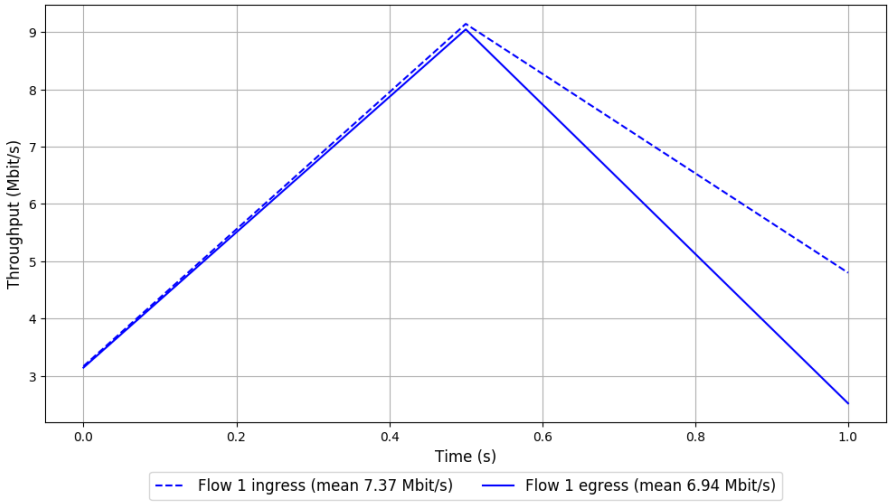


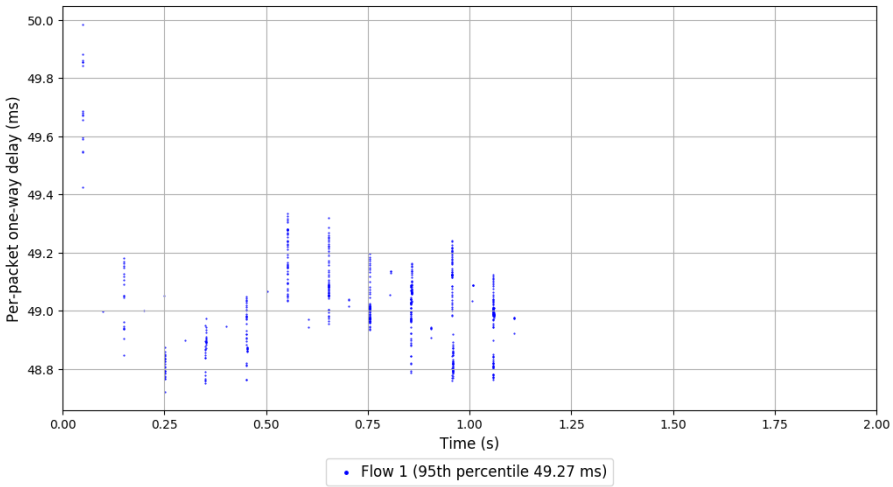


```
Run 5: Statistics of KohoCC

Start at: 2017-09-18 03:23:18
End at: 2017-09-18 03:23:48
```

Run 5: Report of KohoCC — Data Link



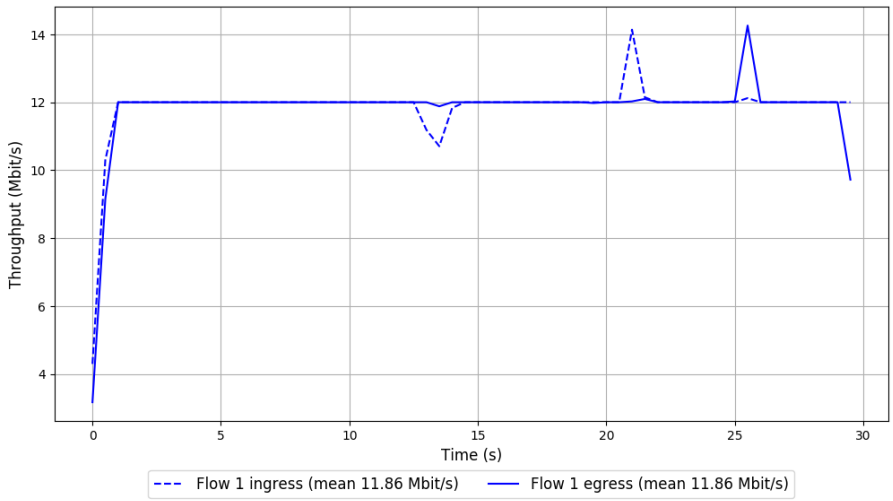


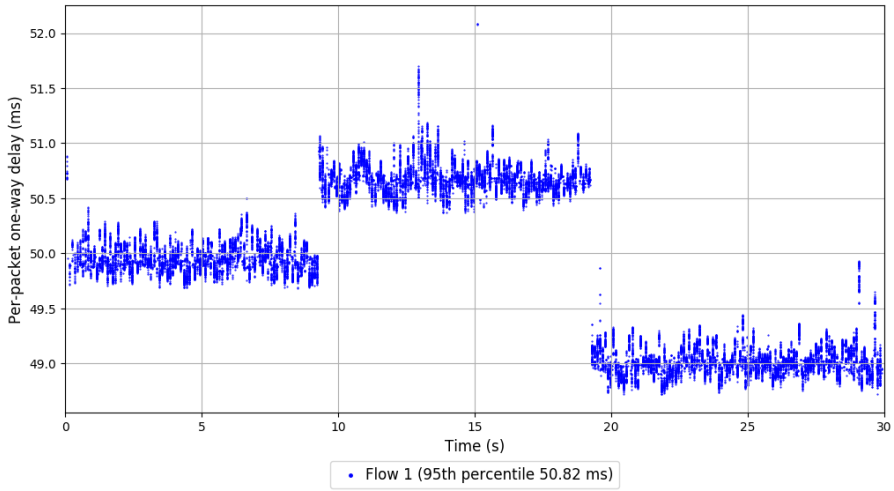
```
Run 6: Statistics of KohoCC

Start at: 2017-09-18 03:34:52
End at: 2017-09-18 03:35:22

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 50.824 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 50.824 ms
Loss rate: 0.34%
```

Run 6: Report of KohoCC — Data Link



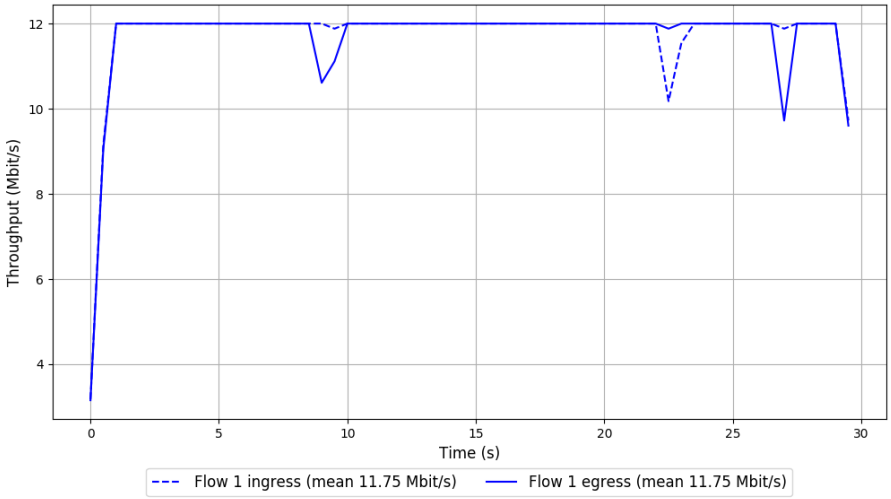


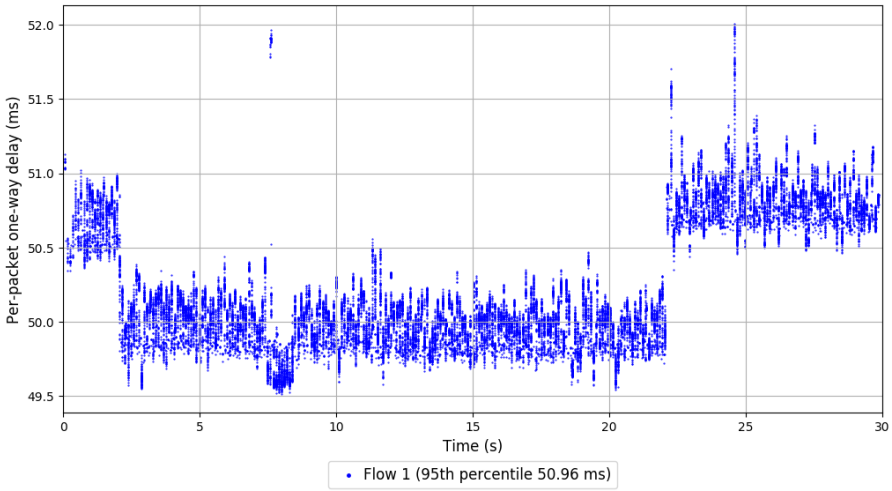
```
Run 7: Statistics of KohoCC

Start at: 2017-09-18 03:46:20
End at: 2017-09-18 03:46:50

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.75 Mbit/s
95th percentile per-packet one-way delay: 50.964 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 11.75 Mbit/s
95th percentile per-packet one-way delay: 50.964 ms
Loss rate: 0.34%
```

Run 7: Report of KohoCC — Data Link

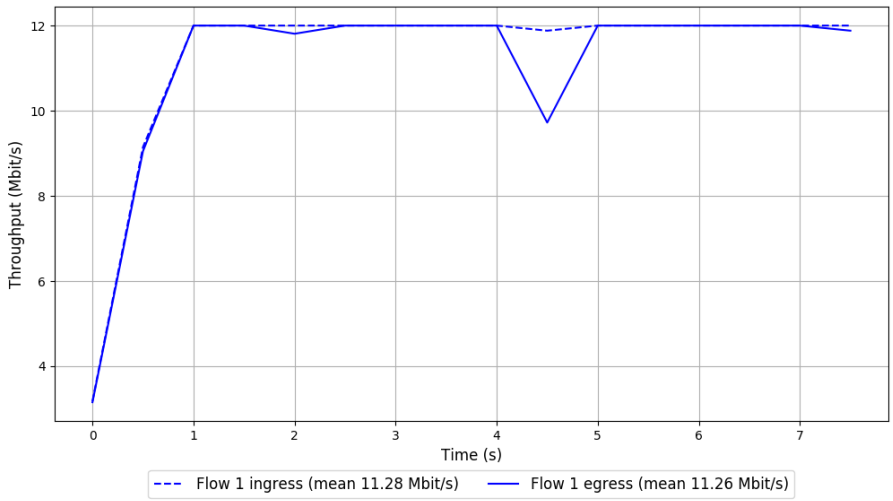


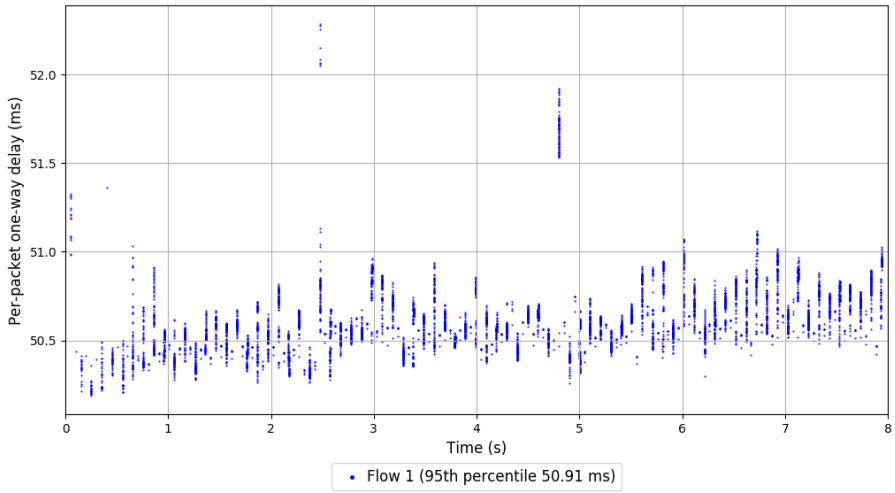


```
Run 8: Statistics of KohoCC

Start at: 2017-09-18 03:57:57
End at: 2017-09-18 03:58:27
```

Run 8: Report of KohoCC — Data Link

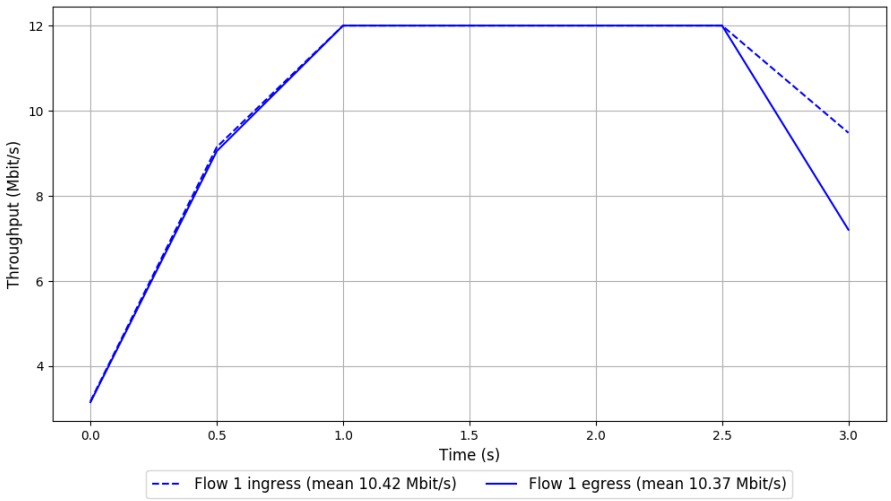


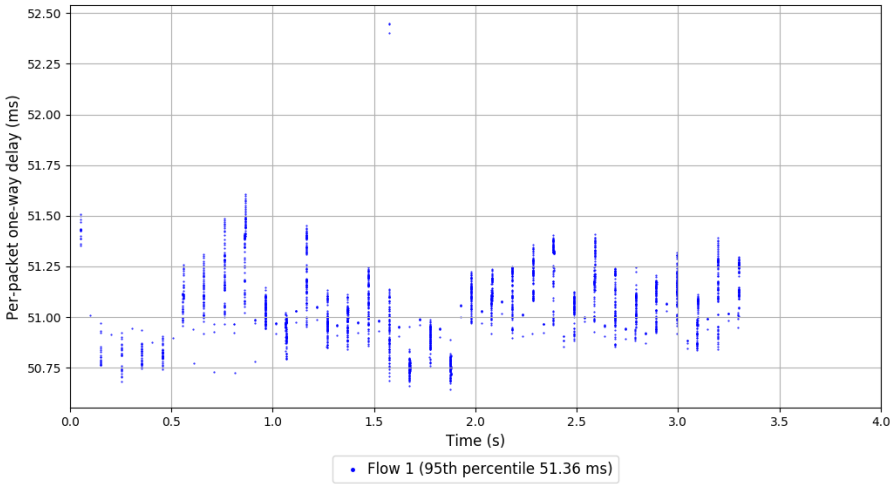


```
Run 9: Statistics of KohoCC

Start at: 2017-09-18 04:09:35
End at: 2017-09-18 04:10:05
```

Run 9: Report of KohoCC — Data Link

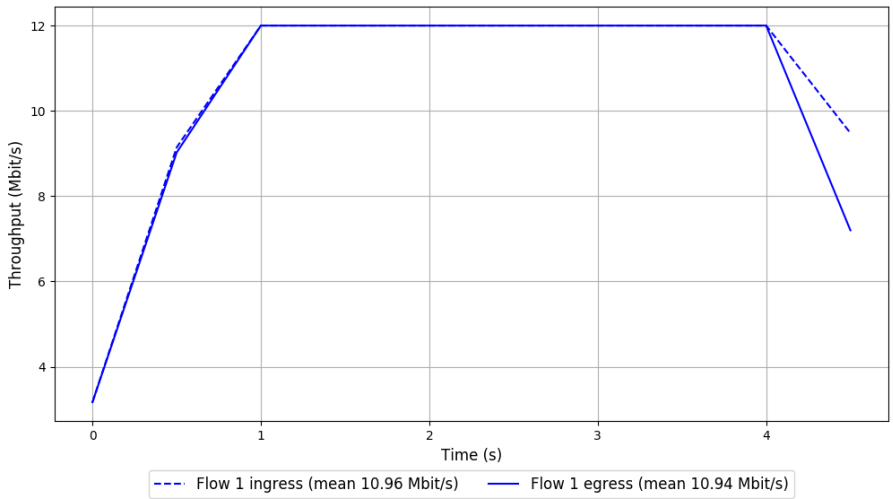


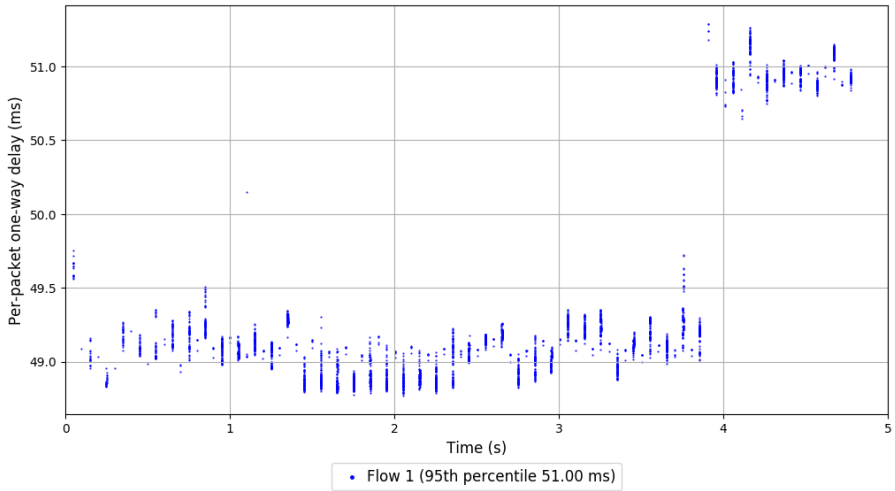


```
Run 10: Statistics of KohoCC

Start at: 2017-09-18 04:21:03
End at: 2017-09-18 04:21:33
```

Run 10: Report of KohoCC — Data Link



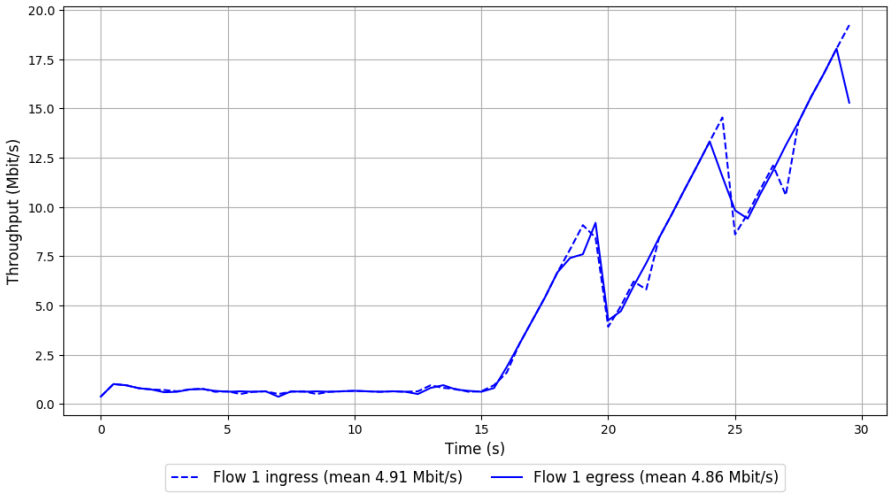


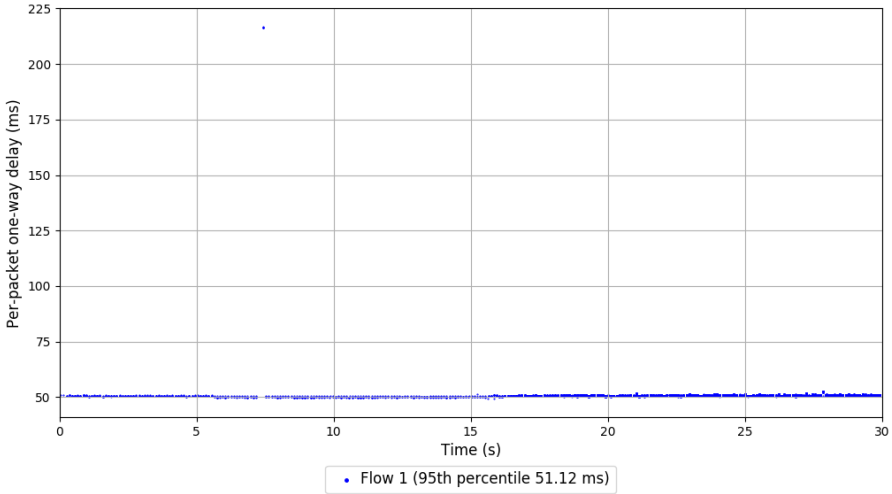
```
Run 1: Statistics of LEDBAT

Start at: 2017-09-18 02:27:46
End at: 2017-09-18 02:28:16

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.86 Mbit/s
95th percentile per-packet one-way delay: 51.121 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 4.86 Mbit/s
95th percentile per-packet one-way delay: 51.121 ms
Loss rate: 1.34%
```

Run 1: Report of LEDBAT — Data Link



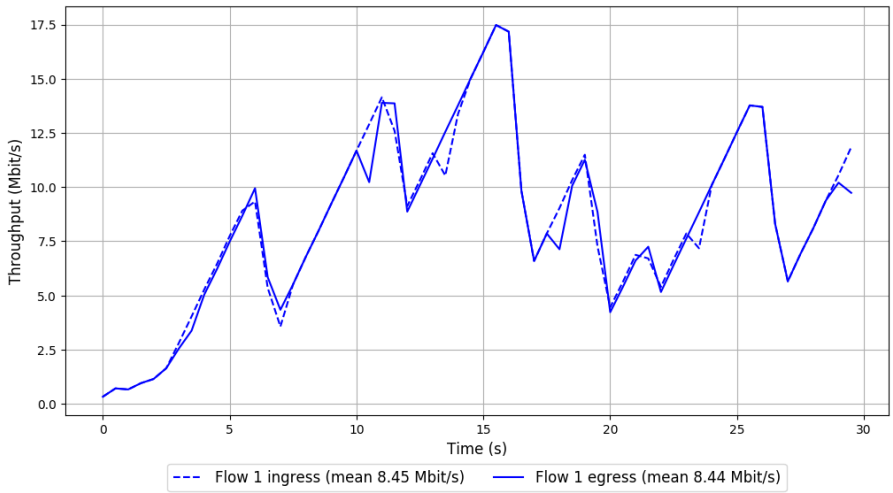


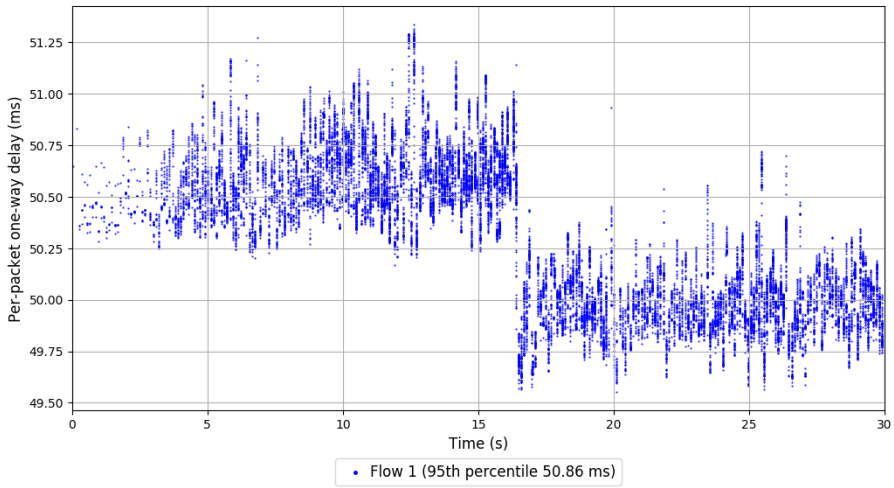
```
Run 2: Statistics of LEDBAT

Start at: 2017-09-18 02:39:25
End at: 2017-09-18 02:39:55

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.44 Mbit/s
95th percentile per-packet one-way delay: 50.863 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 8.44 Mbit/s
95th percentile per-packet one-way delay: 50.863 ms
Loss rate: 0.50%
```

Run 2: Report of LEDBAT — Data Link



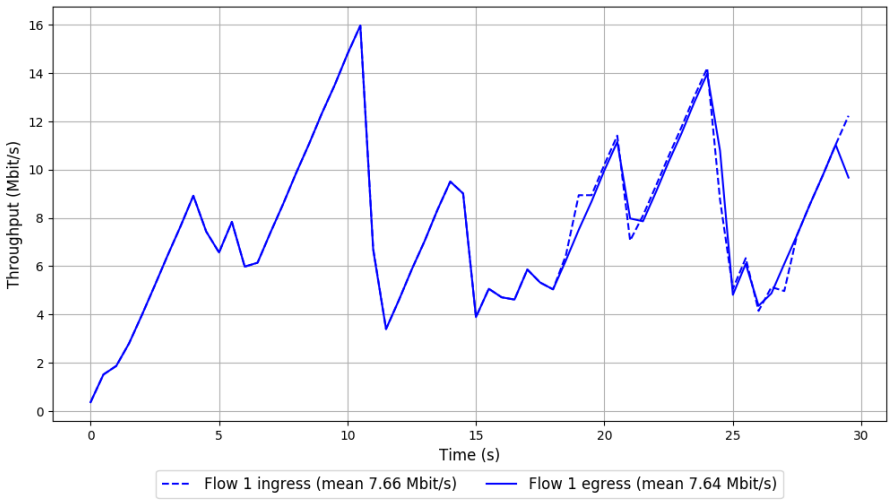


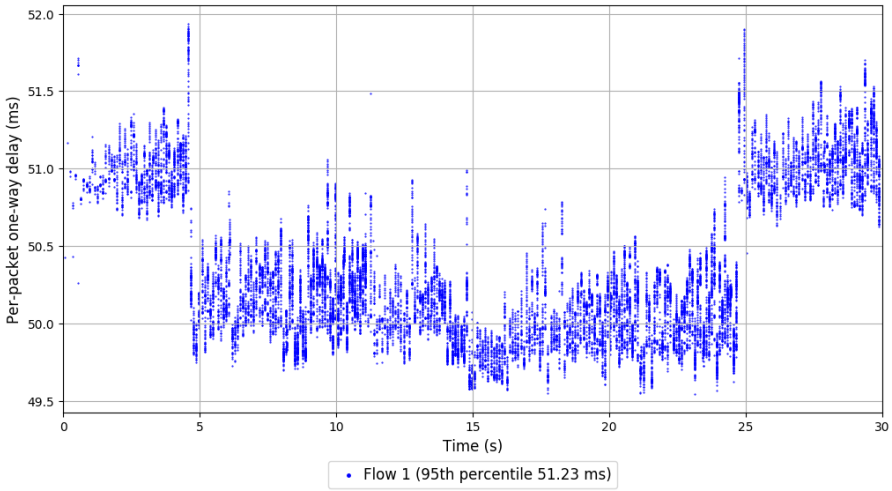
```
Run 3: Statistics of LEDBAT

Start at: 2017-09-18 02:50:57
End at: 2017-09-18 02:51:27

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 51.228 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 51.228 ms
Loss rate: 0.63%
```

Run 3: Report of LEDBAT — Data Link



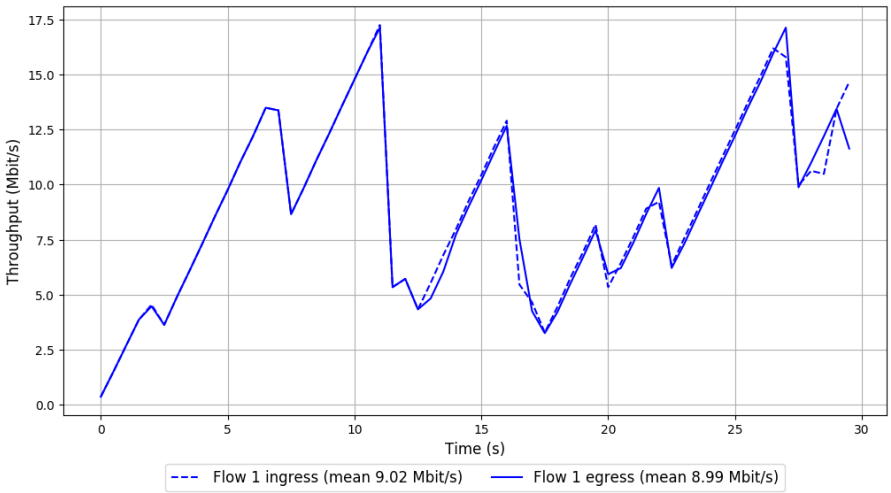


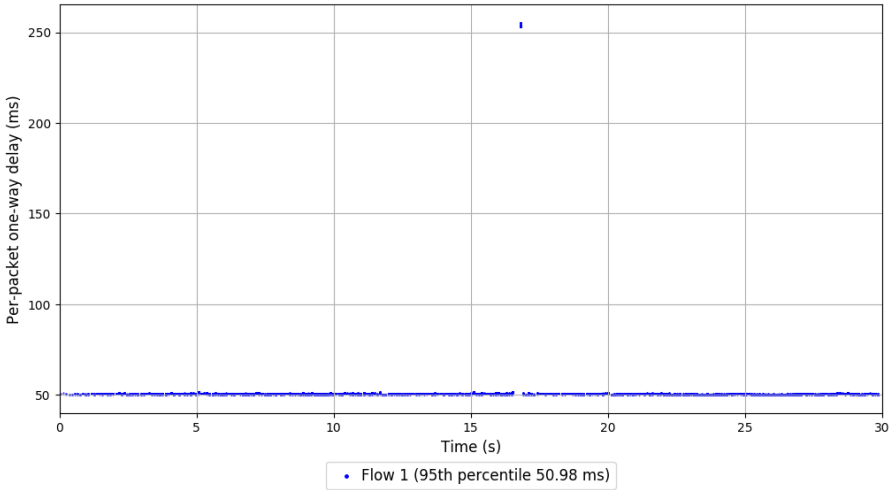
```
Run 4: Statistics of LEDBAT

Start at: 2017-09-18 03:02:37
End at: 2017-09-18 03:03:07

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.99 Mbit/s
95th percentile per-packet one-way delay: 50.984 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 8.99 Mbit/s
95th percentile per-packet one-way delay: 50.984 ms
Loss rate: 0.65%
```

Run 4: Report of LEDBAT — Data Link



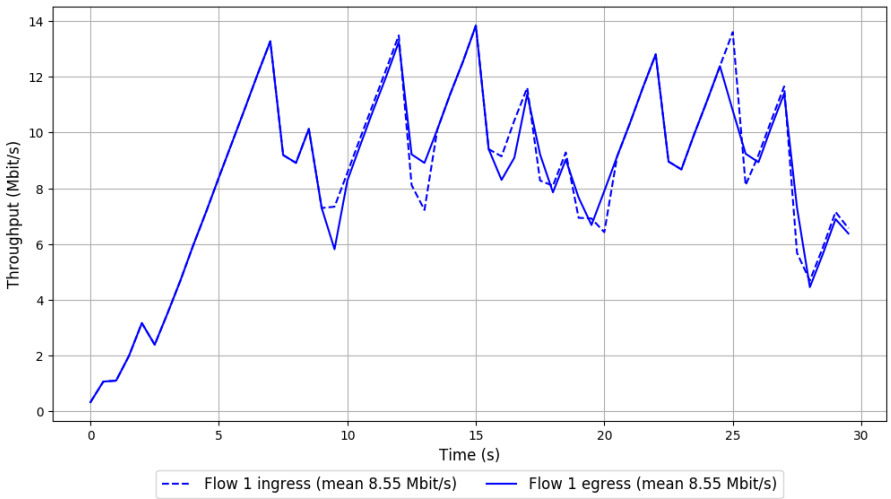


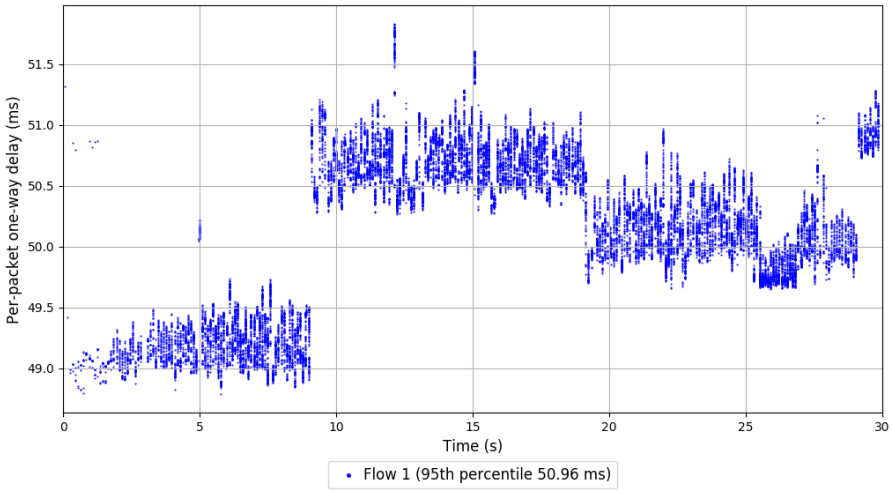
```
Run 5: Statistics of LEDBAT

Start at: 2017-09-18 03:14:03
End at: 2017-09-18 03:14:33

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.55 Mbit/s
95th percentile per-packet one-way delay: 50.963 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 8.55 Mbit/s
95th percentile per-packet one-way delay: 50.963 ms
Loss rate: 0.34%
```

Run 5: Report of LEDBAT — Data Link



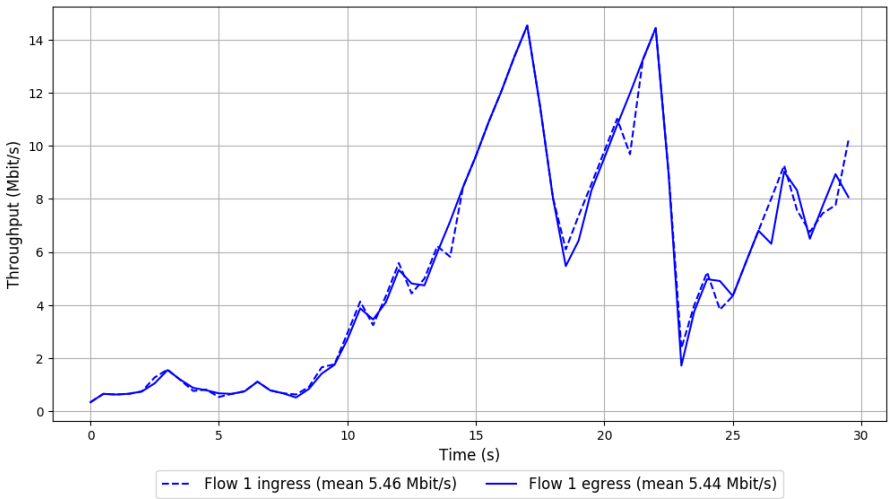


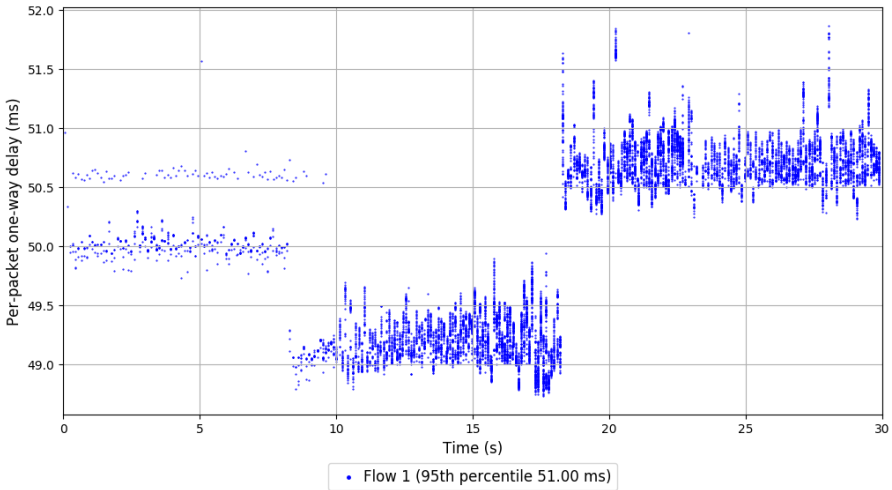
```
Run 6: Statistics of LEDBAT

Start at: 2017-09-18 03:25:33
End at: 2017-09-18 03:26:03

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.44 Mbit/s
95th percentile per-packet one-way delay: 50.998 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 5.44 Mbit/s
95th percentile per-packet one-way delay: 50.998 ms
Loss rate: 0.70%
```

Run 6: Report of LEDBAT — Data Link



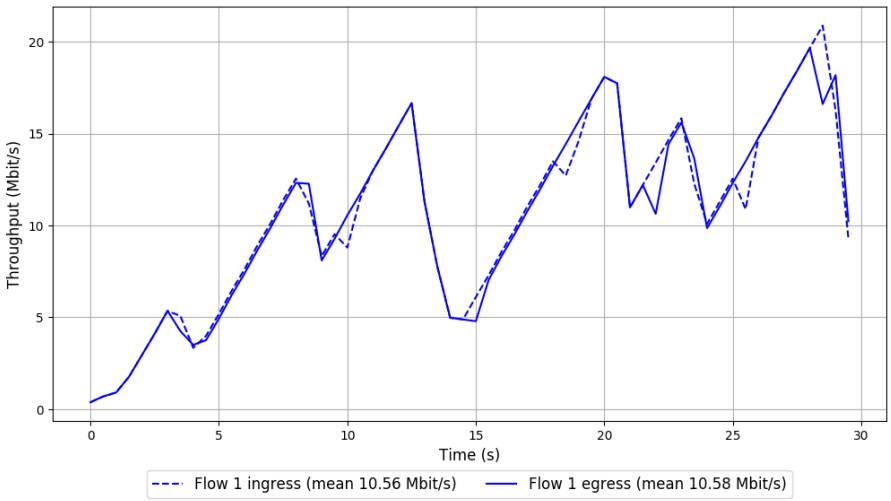


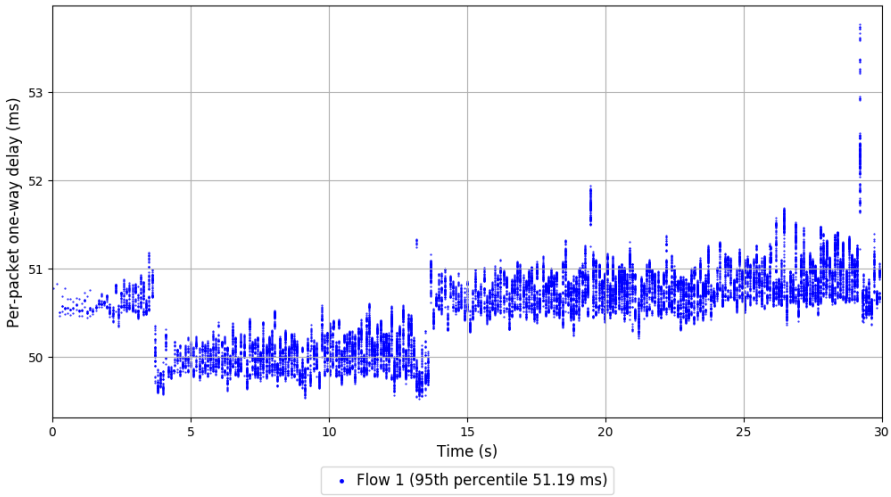
```
Run 7: Statistics of LEDBAT

Start at: 2017-09-18 03:37:08
End at: 2017-09-18 03:37:38

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.58 Mbit/s
95th percentile per-packet one-way delay: 51.188 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 10.58 Mbit/s
95th percentile per-packet one-way delay: 51.188 ms
Loss rate: 0.23%
```

Run 7: Report of LEDBAT — Data Link



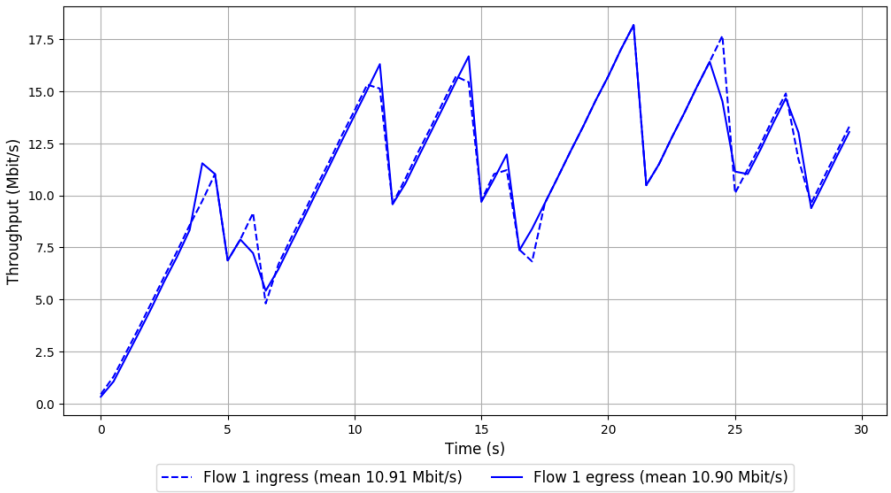


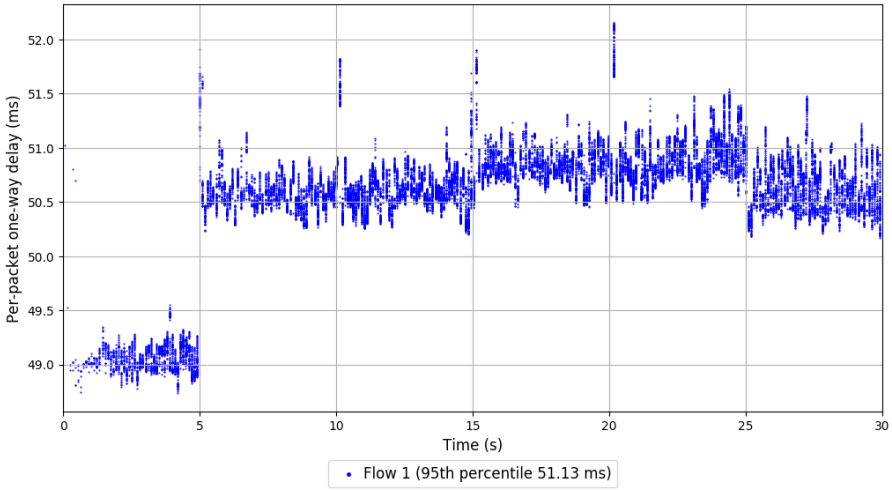
```
Run 8: Statistics of LEDBAT

Start at: 2017-09-18 03:48:37
End at: 2017-09-18 03:49:07

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.90 Mbit/s
95th percentile per-packet one-way delay: 51.129 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 10.90 Mbit/s
95th percentile per-packet one-way delay: 51.129 ms
Loss rate: 0.44%
```

Run 8: Report of LEDBAT — Data Link



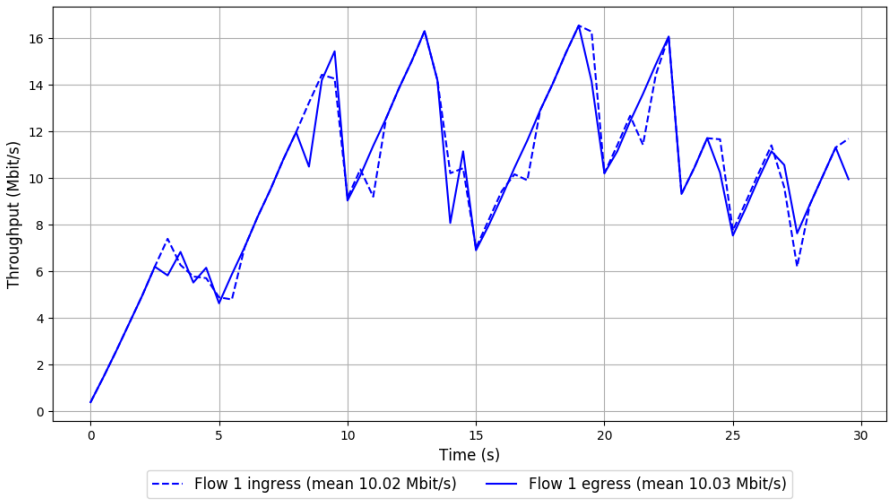


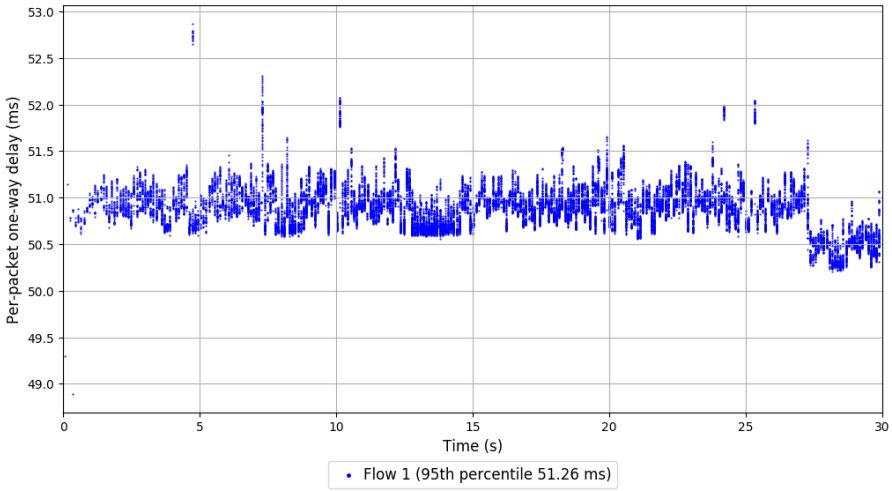
```
Run 9: Statistics of LEDBAT

Start at: 2017-09-18 04:00:14
End at: 2017-09-18 04:00:44

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.03 Mbit/s
95th percentile per-packet one-way delay: 51.256 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 10.03 Mbit/s
95th percentile per-packet one-way delay: 51.256 ms
Loss rate: 0.29%
```

Run 9: Report of LEDBAT — Data Link



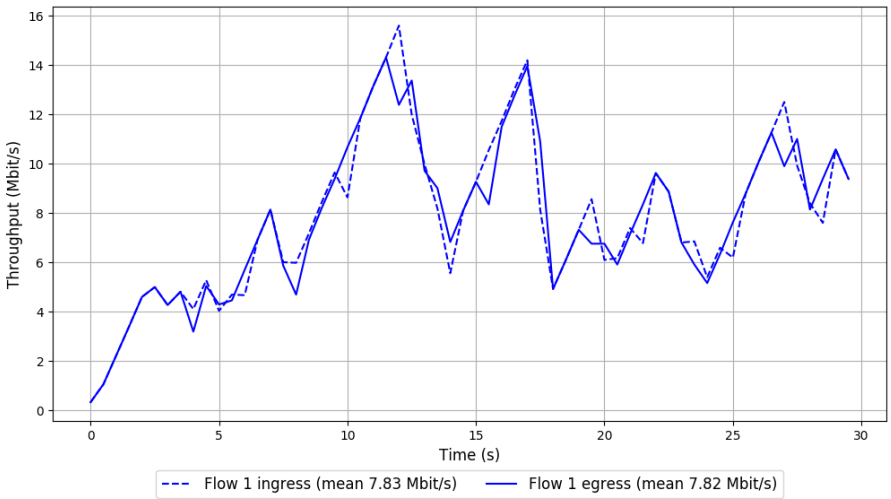


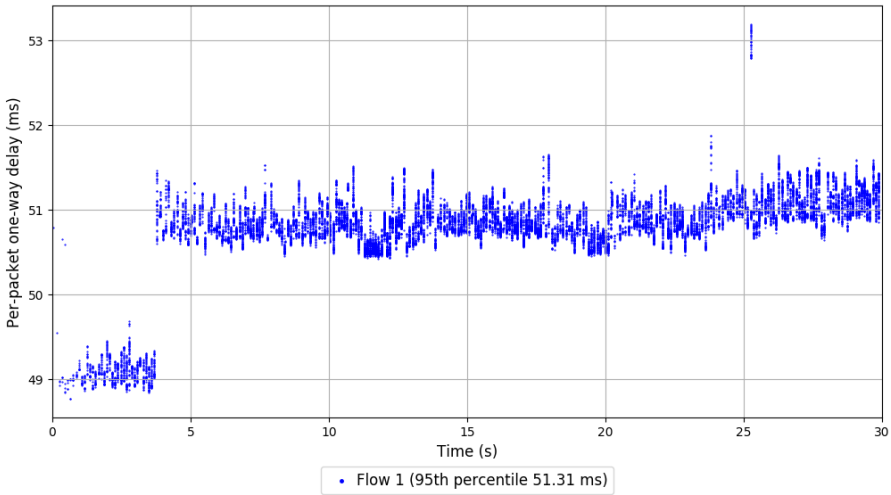
```
Run 10: Statistics of LEDBAT

Start at: 2017-09-18 04:11:48
End at: 2017-09-18 04:12:18

# Below is generated by plot.py at 2017-09-18 06:58:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 51.306 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 51.306 ms
Loss rate: 0.10%
```

Run 10: Report of LEDBAT — Data Link



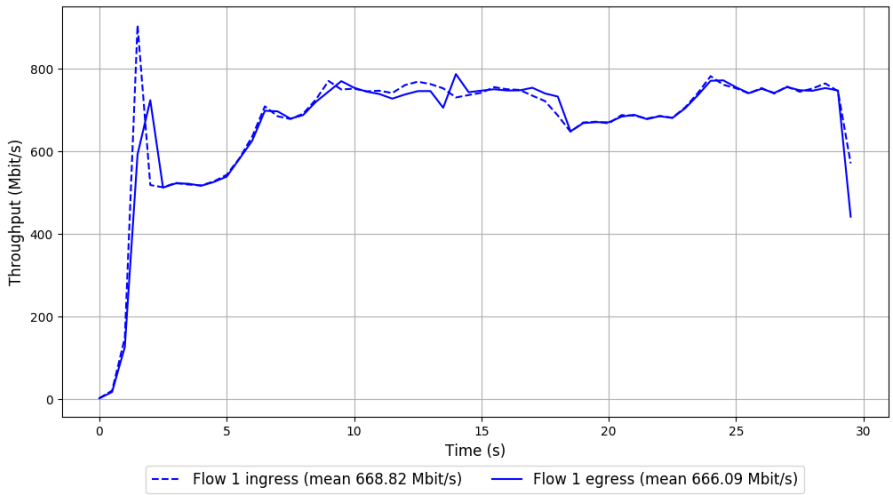


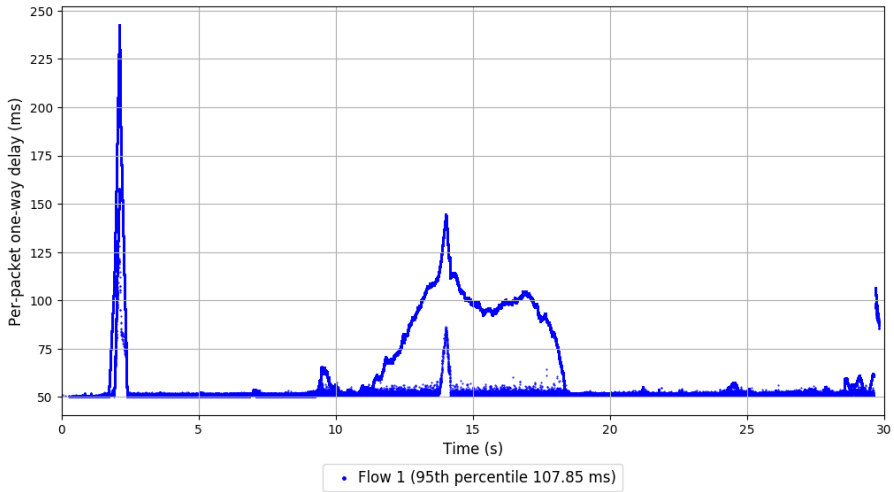
```
Run 1: Statistics of PCC

Start at: 2017-09-18 02:29:52
End at: 2017-09-18 02:30:22

# Below is generated by plot.py at 2017-09-18 07:08:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 666.09 Mbit/s
95th percentile per-packet one-way delay: 107.853 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 666.09 Mbit/s
95th percentile per-packet one-way delay: 107.853 ms
Loss rate: 0.75%
```

Run 1: Report of PCC — Data Link



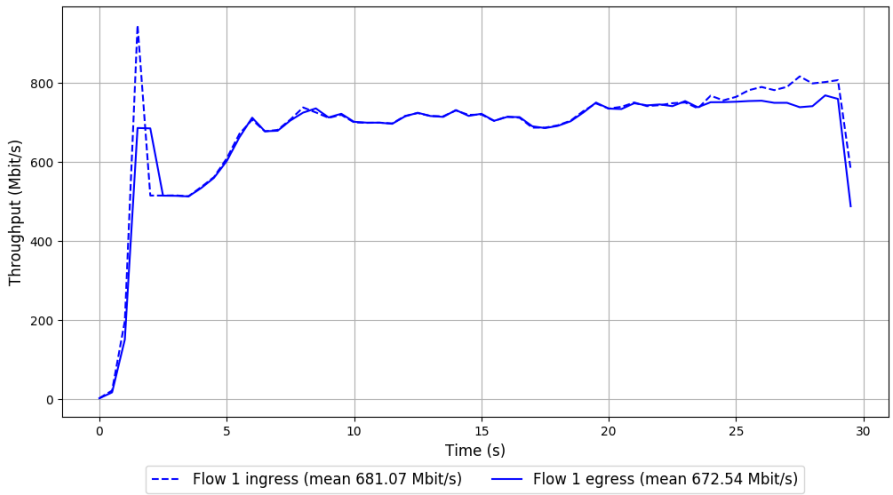


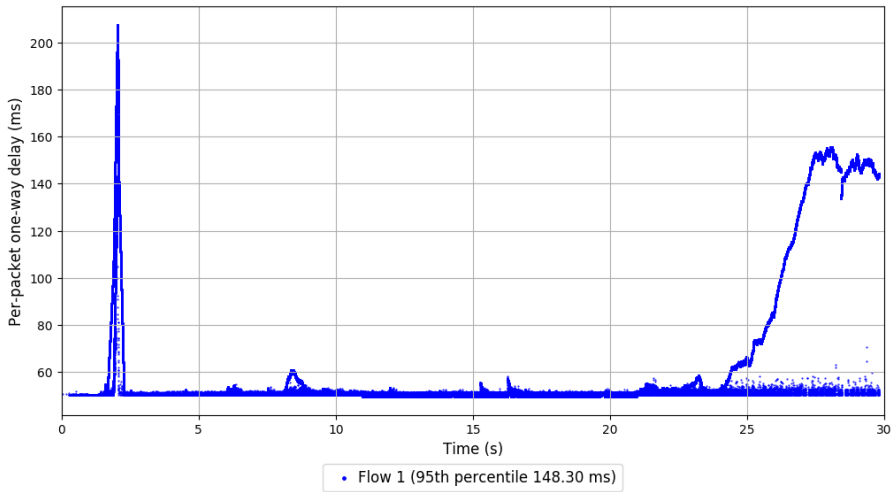
```
Run 2: Statistics of PCC

Start at: 2017-09-18 02:41:31
End at: 2017-09-18 02:42:01

# Below is generated by plot.py at 2017-09-18 07:08:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 672.54 Mbit/s
95th percentile per-packet one-way delay: 148.297 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 672.54 Mbit/s
95th percentile per-packet one-way delay: 148.297 ms
Loss rate: 1.59%
```

Run 2: Report of PCC — Data Link



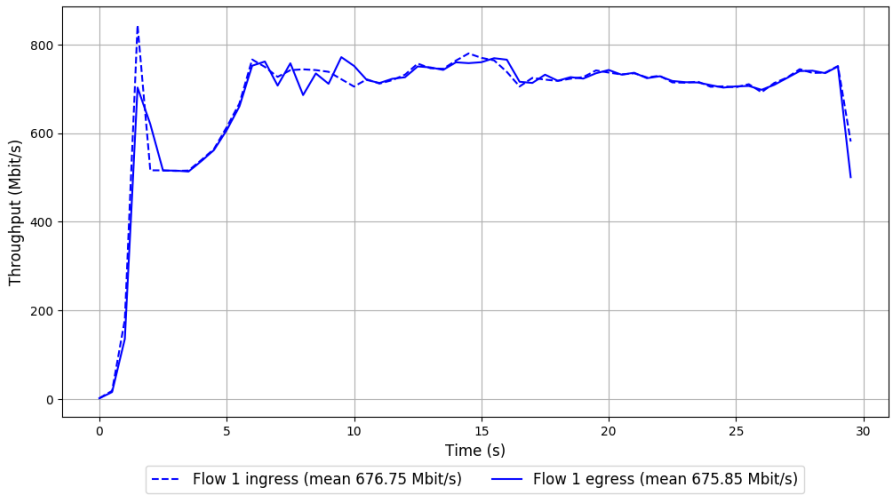


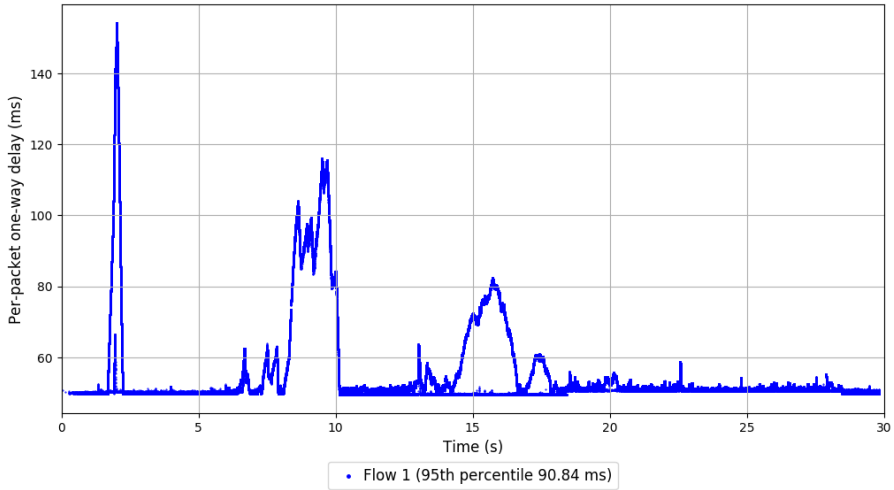
```
Run 3: Statistics of PCC

Start at: 2017-09-18 02:53:03
End at: 2017-09-18 02:53:33

# Below is generated by plot.py at 2017-09-18 07:08:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 675.85 Mbit/s
95th percentile per-packet one-way delay: 90.843 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 675.85 Mbit/s
95th percentile per-packet one-way delay: 90.843 ms
Loss rate: 0.47%
```

Run 3: Report of PCC — Data Link



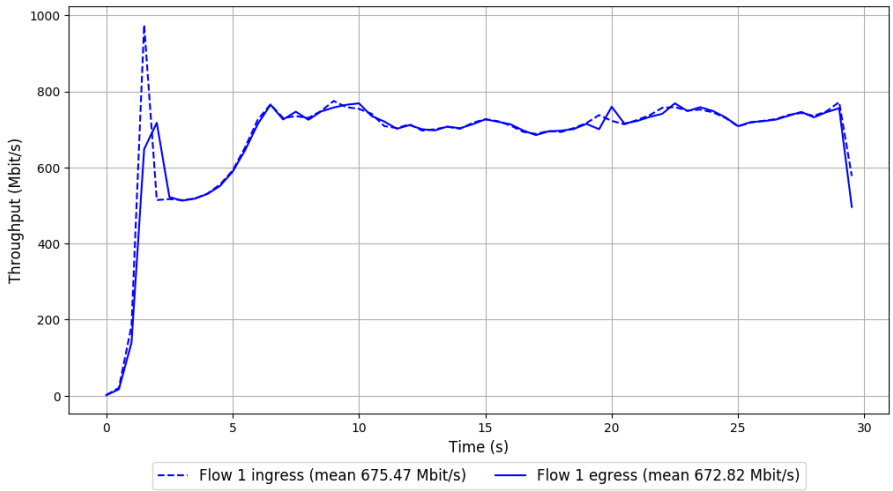


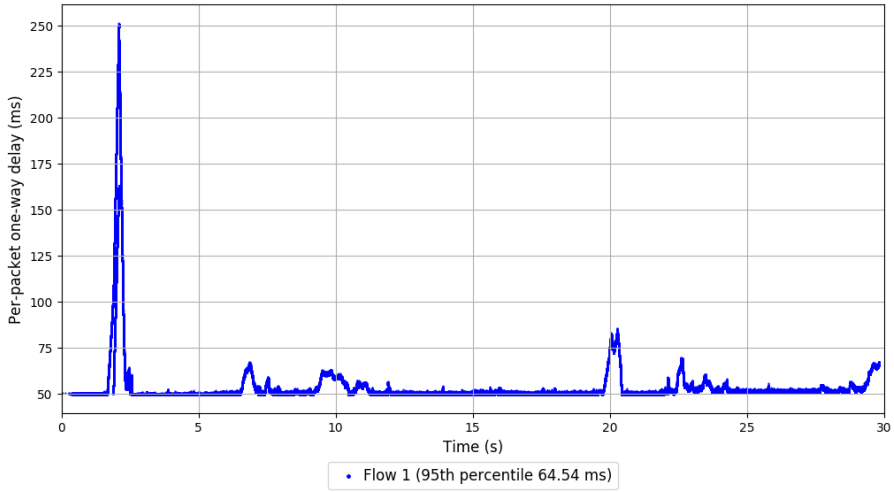
```
Run 4: Statistics of PCC

Start at: 2017-09-18 03:04:39
End at: 2017-09-18 03:05:09

# Below is generated by plot.py at 2017-09-18 07:08:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 672.82 Mbit/s
95th percentile per-packet one-way delay: 64.539 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 672.82 Mbit/s
95th percentile per-packet one-way delay: 64.539 ms
Loss rate: 0.73%
```

Run 4: Report of PCC — Data Link



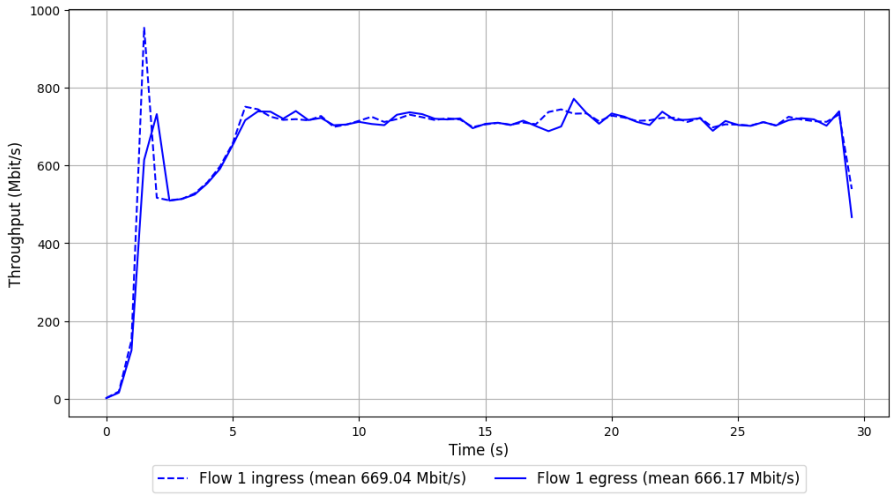


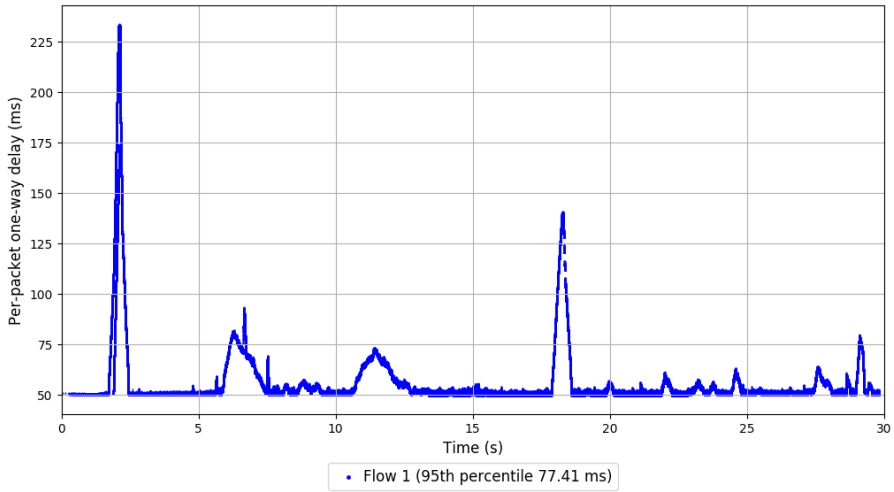
```
Run 5: Statistics of PCC

Start at: 2017-09-18 03:16:08
End at: 2017-09-18 03:16:38

# Below is generated by plot.py at 2017-09-18 07:08:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 666.17 Mbit/s
95th percentile per-packet one-way delay: 77.414 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 666.17 Mbit/s
95th percentile per-packet one-way delay: 77.414 ms
Loss rate: 0.76%
```

Run 5: Report of PCC — Data Link



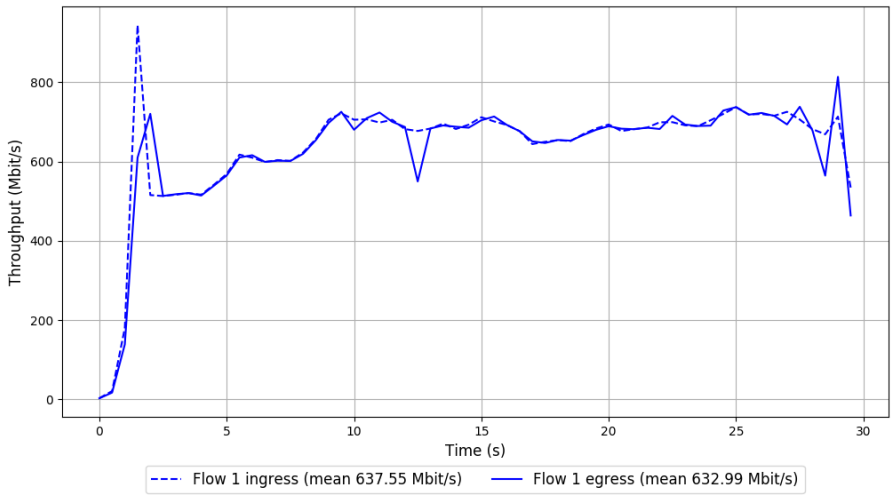


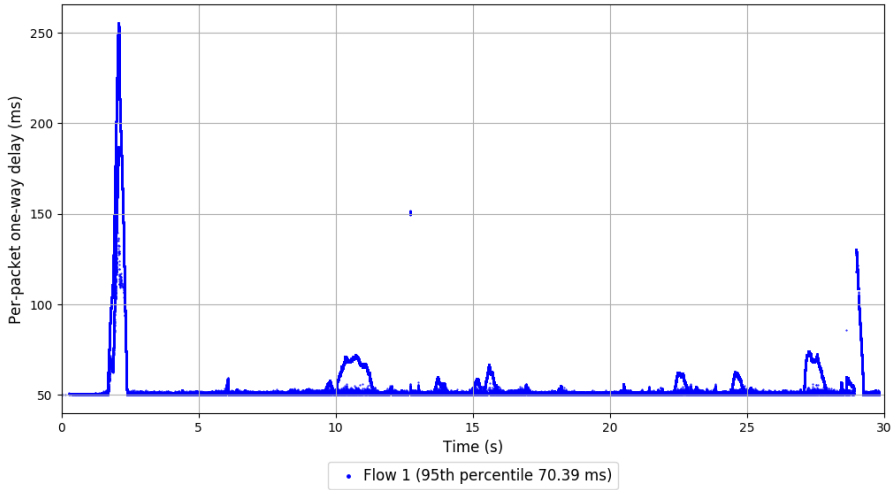
```
Run 6: Statistics of PCC

Start at: 2017-09-18 03:27:41
End at: 2017-09-18 03:28:11

# Below is generated by plot.py at 2017-09-18 07:08:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 632.99 Mbit/s
95th percentile per-packet one-way delay: 70.392 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 632.99 Mbit/s
95th percentile per-packet one-way delay: 70.392 ms
Loss rate: 1.05%
```

Run 6: Report of PCC — Data Link



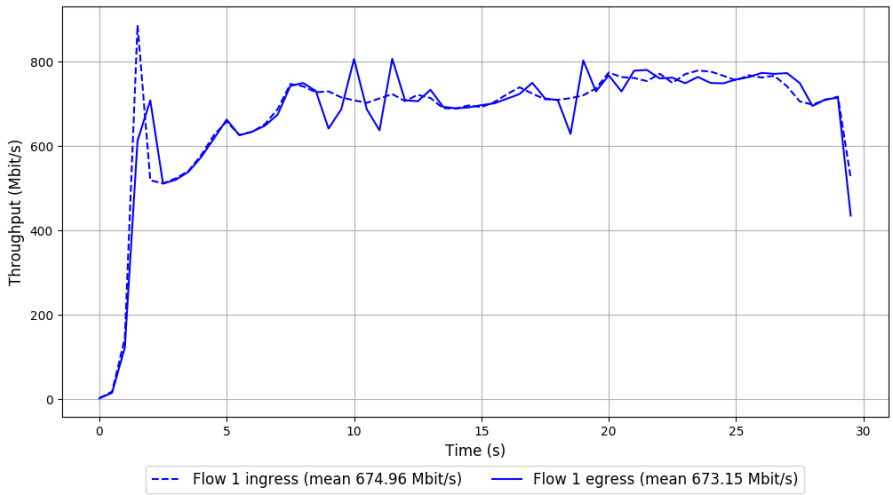


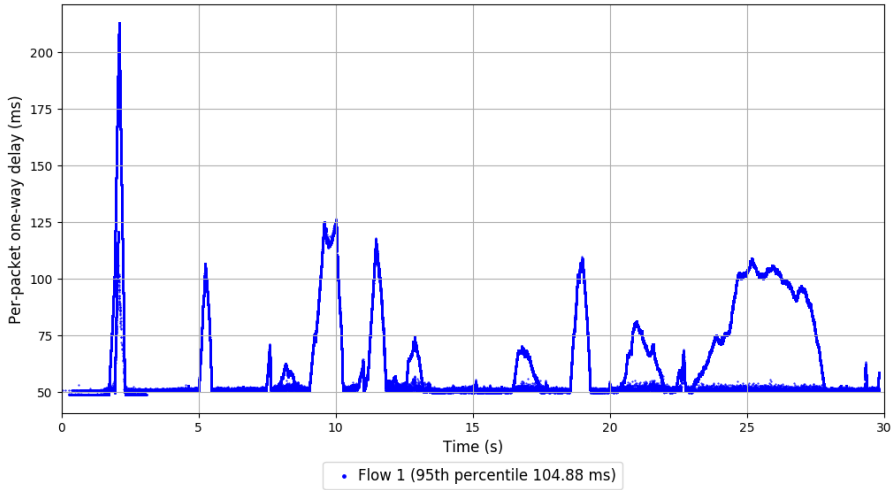
```
Run 7: Statistics of PCC

Start at: 2017-09-18 03:39:08
End at: 2017-09-18 03:39:38

# Below is generated by plot.py at 2017-09-18 07:09:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 673.15 Mbit/s
95th percentile per-packet one-way delay: 104.882 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 673.15 Mbit/s
95th percentile per-packet one-way delay: 104.882 ms
Loss rate: 0.61%
```

Run 7: Report of PCC — Data Link



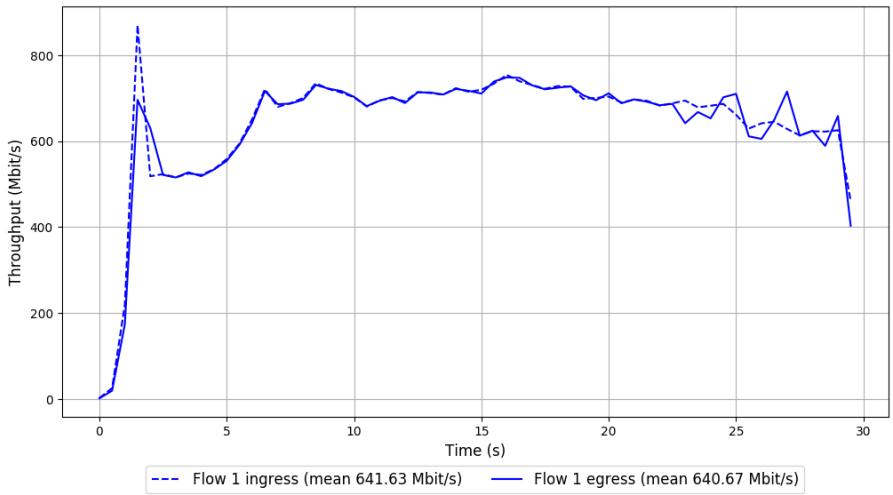


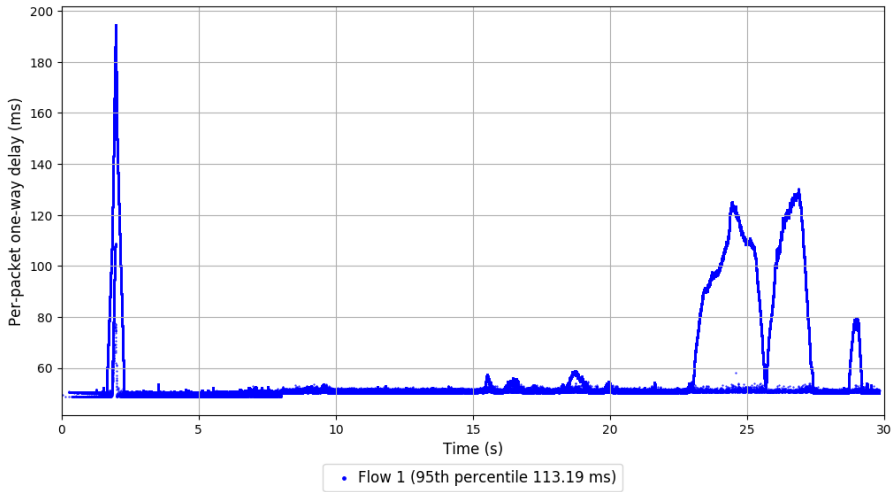
```
Run 8: Statistics of PCC

Start at: 2017-09-18 03:50:44
End at: 2017-09-18 03:51:14

# Below is generated by plot.py at 2017-09-18 07:09:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 640.67 Mbit/s
95th percentile per-packet one-way delay: 113.188 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 640.67 Mbit/s
95th percentile per-packet one-way delay: 113.188 ms
Loss rate: 0.48%
```

Run 8: Report of PCC — Data Link



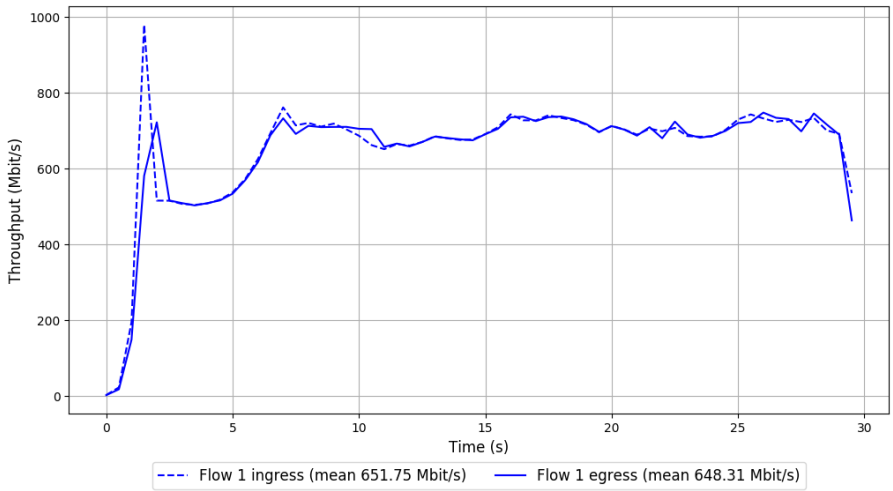


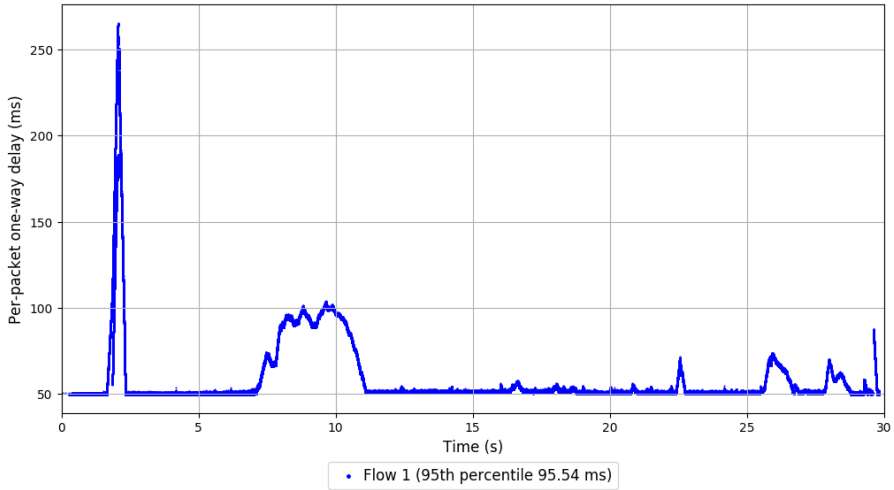
```
Run 9: Statistics of PCC

Start at: 2017-09-18 04:02:23
End at: 2017-09-18 04:02:53

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 648.31 Mbit/s
95th percentile per-packet one-way delay: 95.537 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 648.31 Mbit/s
95th percentile per-packet one-way delay: 95.537 ms
Loss rate: 0.86%
```

Run 9: Report of PCC — Data Link



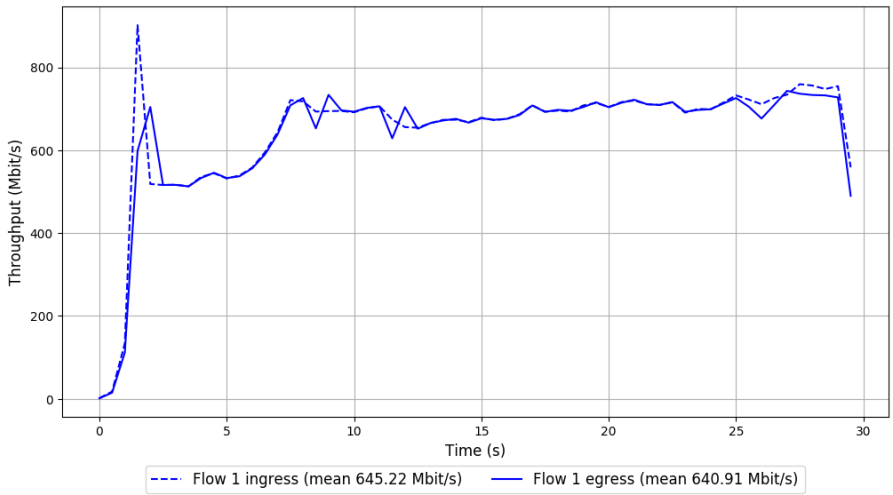


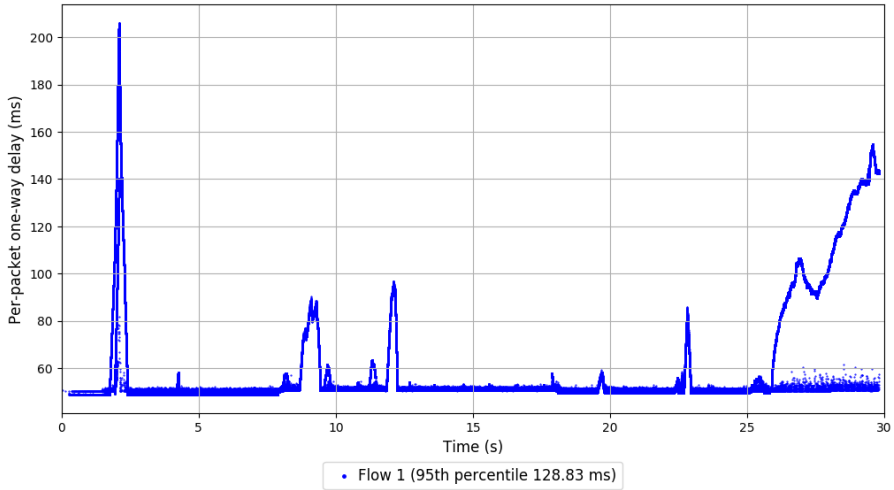
```
Run 10: Statistics of PCC

Start at: 2017-09-18 04:13:54
End at: 2017-09-18 04:14:24

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 640.91 Mbit/s
95th percentile per-packet one-way delay: 128.832 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 640.91 Mbit/s
95th percentile per-packet one-way delay: 128.832 ms
Loss rate: 1.00%
```

Run 10: Report of PCC — Data Link



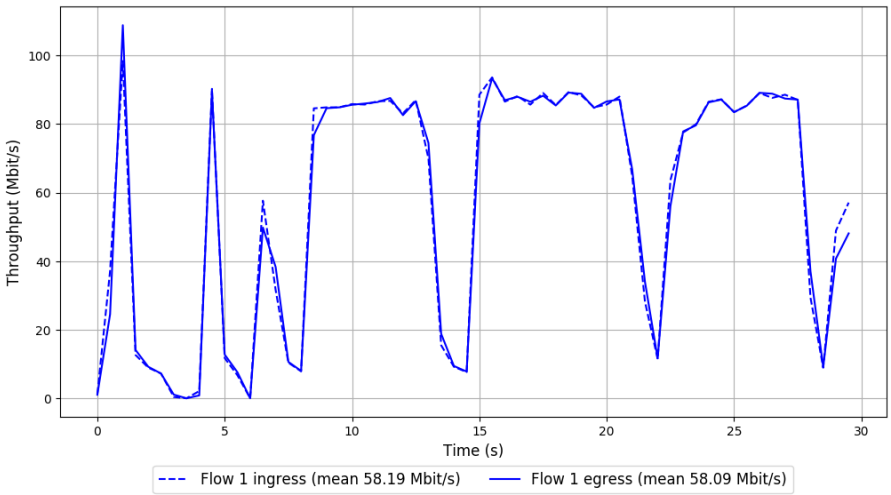


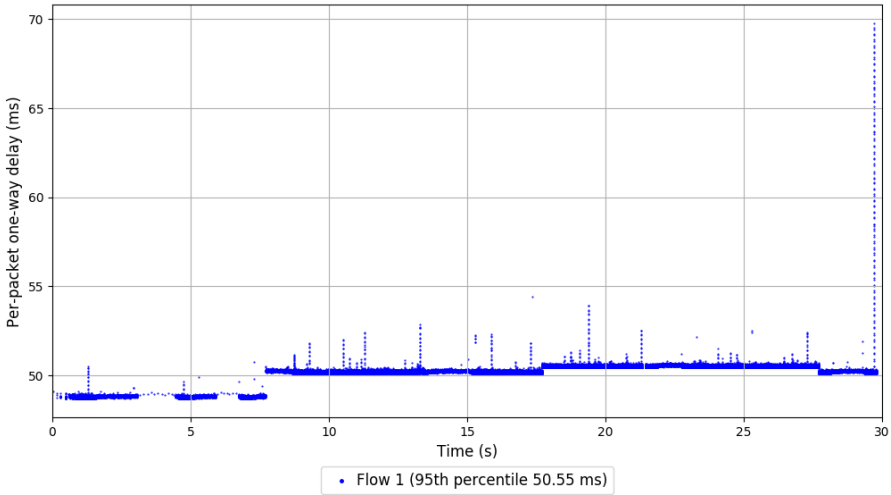
```
Run 1: Statistics of QUIC Cubic

Start at: 2017-09-18 02:35:04
End at: 2017-09-18 02:35:34

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.09 Mbit/s
95th percentile per-packet one-way delay: 50.545 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 58.09 Mbit/s
95th percentile per-packet one-way delay: 50.545 ms
Loss rate: 0.52%
```

Run 1: Report of QUIC Cubic — Data Link

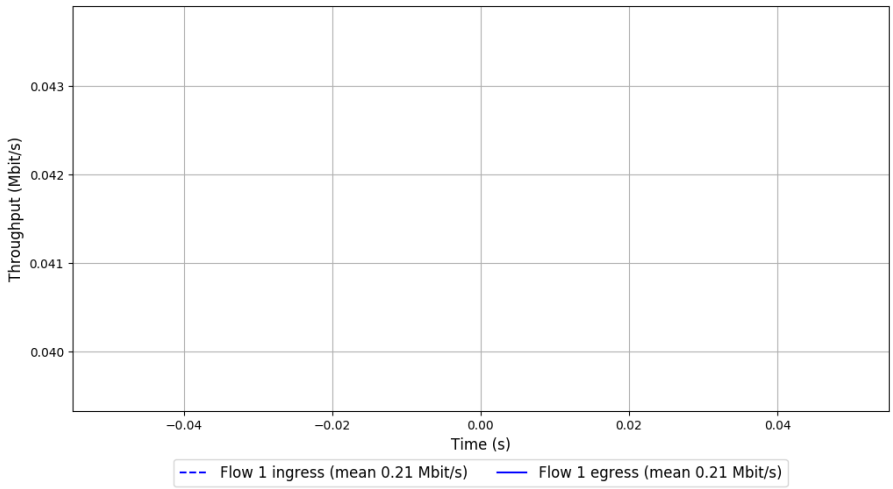


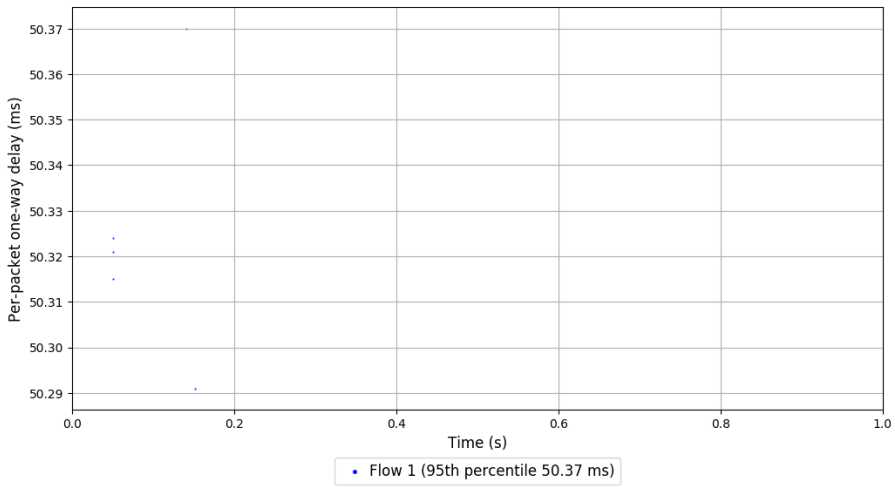


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-09-18 02:46:39
End at: 2017-09-18 02:47:09
```

Run 2: Report of QUIC Cubic — Data Link



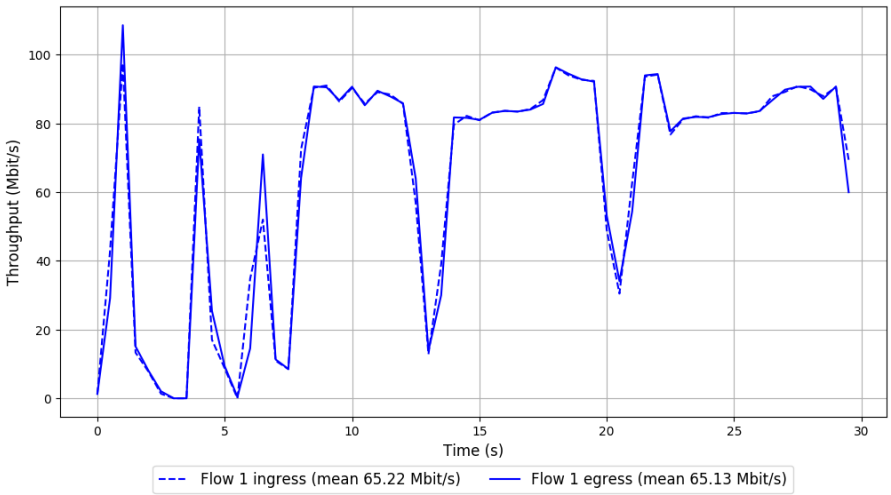


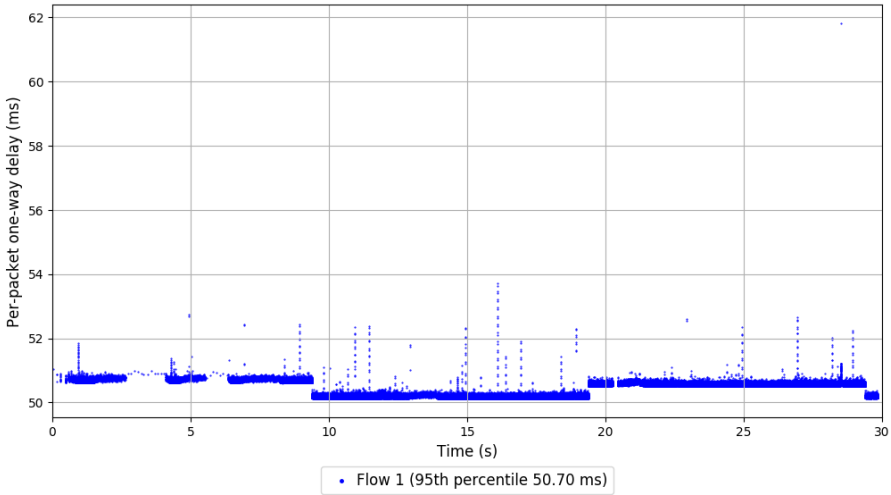
```
Run 3: Statistics of QUIC Cubic

Start at: 2017-09-18 02:58:12
End at: 2017-09-18 02:58:42

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.13 Mbit/s
95th percentile per-packet one-way delay: 50.701 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 65.13 Mbit/s
95th percentile per-packet one-way delay: 50.701 ms
Loss rate: 0.47%
```

Run 3: Report of QUIC Cubic — Data Link



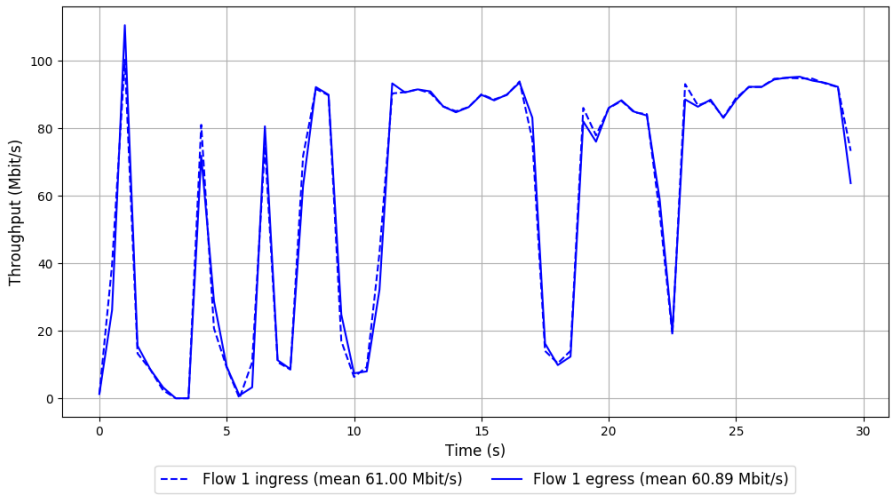


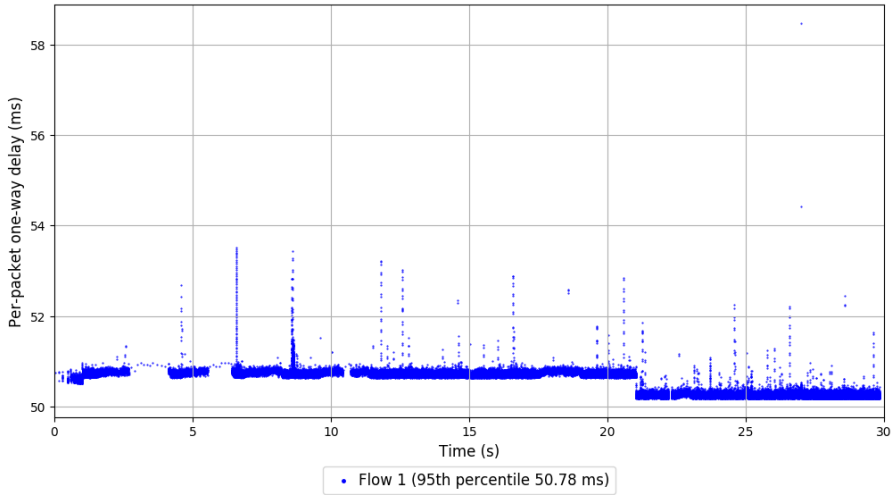
```
Run 4: Statistics of QUIC Cubic

Start at: 2017-09-18 03:09:41
End at: 2017-09-18 03:10:11

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.89 Mbit/s
95th percentile per-packet one-way delay: 50.778 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 60.89 Mbit/s
95th percentile per-packet one-way delay: 50.778 ms
Loss rate: 0.52%
```

Run 4: Report of QUIC Cubic — Data Link



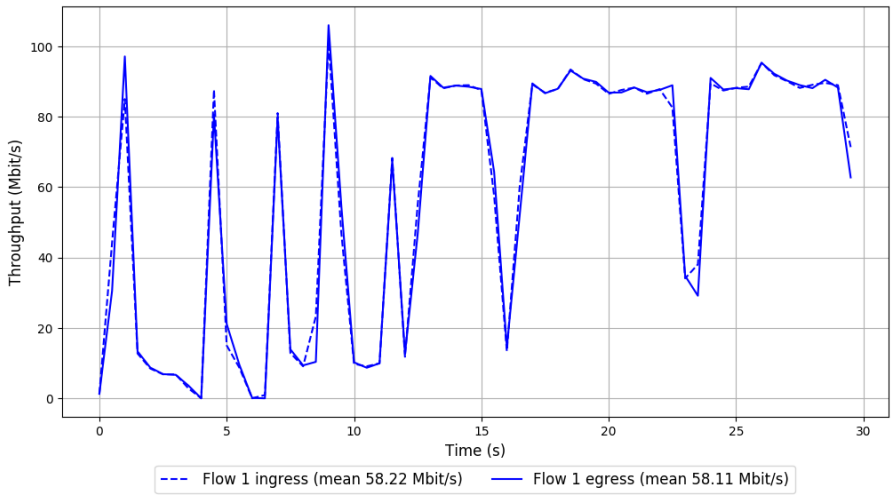


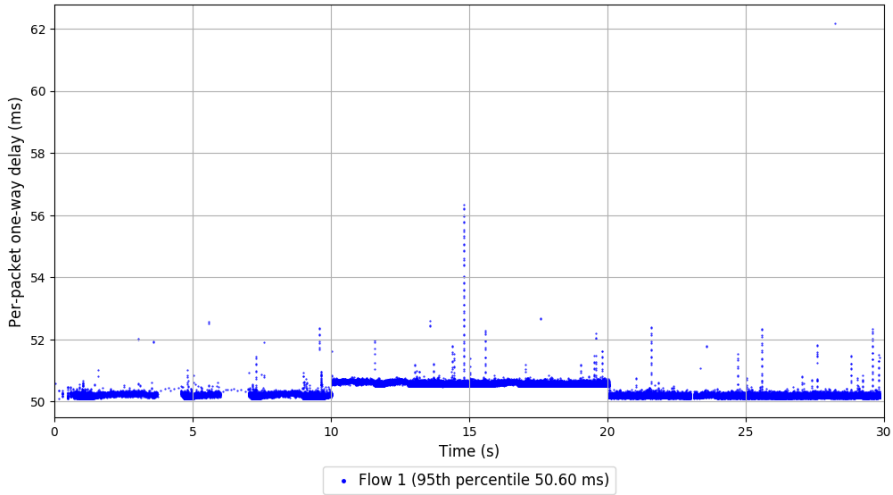
```
Run 5: Statistics of QUIC Cubic

Start at: 2017-09-18 03:21:12
End at: 2017-09-18 03:21:42

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.11 Mbit/s
95th percentile per-packet one-way delay: 50.596 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 58.11 Mbit/s
95th percentile per-packet one-way delay: 50.596 ms
Loss rate: 0.50%
```

Run 5: Report of QUIC Cubic — Data Link



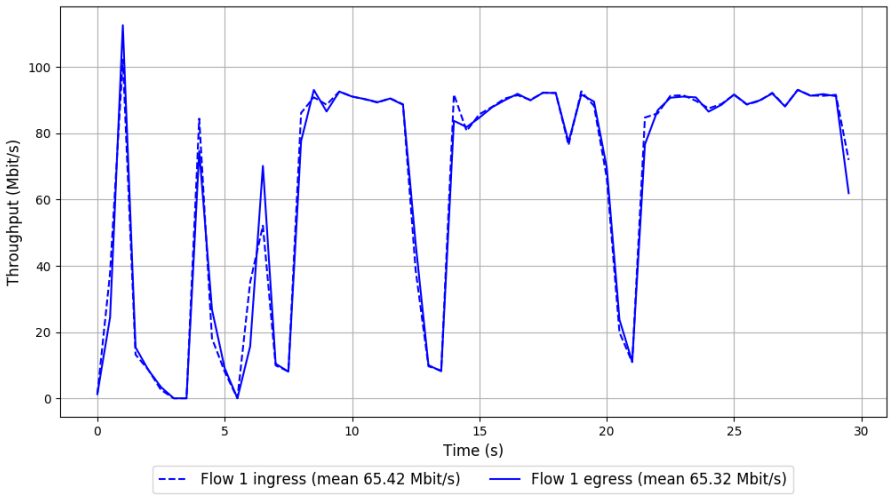


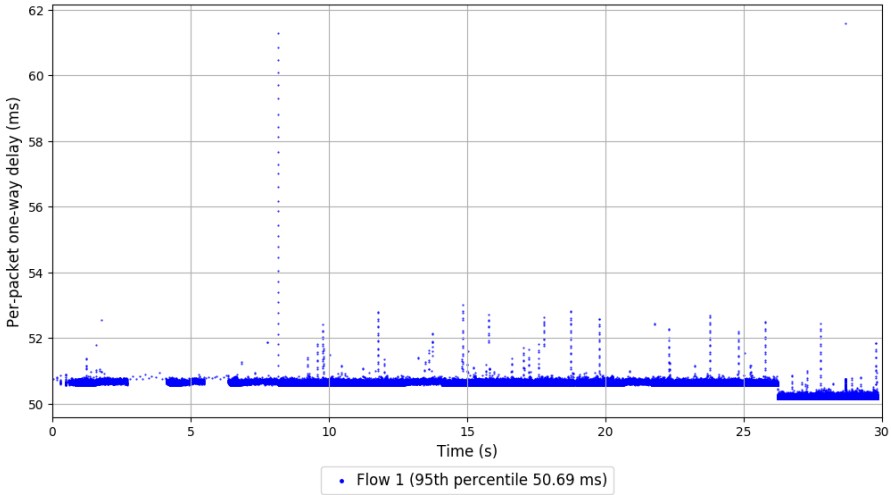
```
Run 6: Statistics of QUIC Cubic

Start at: 2017-09-18 03:32:45
End at: 2017-09-18 03:33:15

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.32 Mbit/s
95th percentile per-packet one-way delay: 50.688 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 65.32 Mbit/s
95th percentile per-packet one-way delay: 50.688 ms
Loss rate: 0.49%
```

Run 6: Report of QUIC Cubic — Data Link



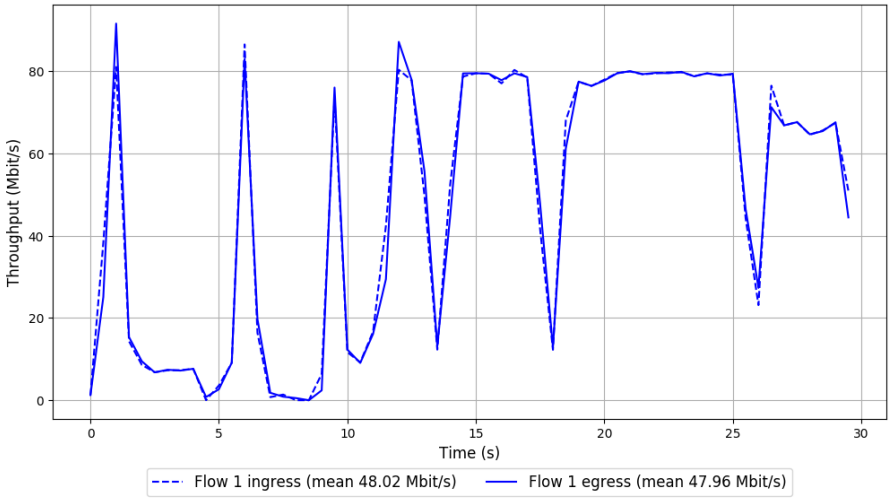


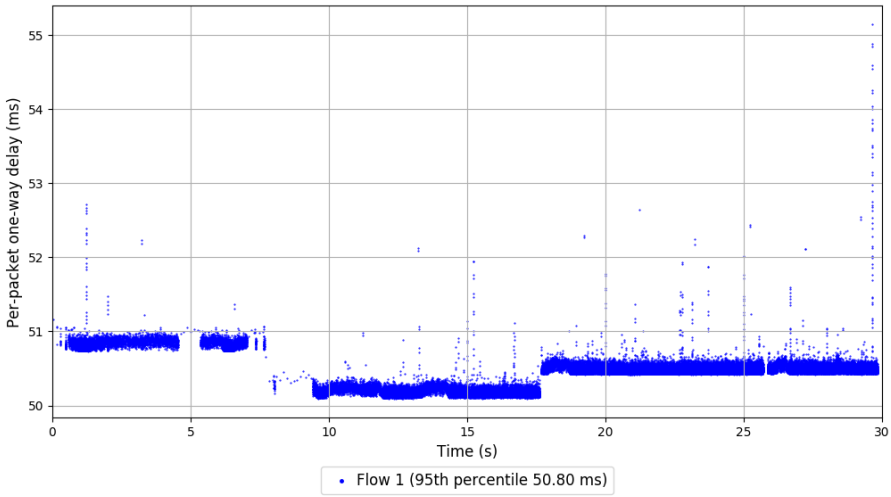
```
Run 7: Statistics of QUIC Cubic

Start at: 2017-09-18 03:44:14
End at: 2017-09-18 03:44:44

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.96 Mbit/s
95th percentile per-packet one-way delay: 50.804 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 47.96 Mbit/s
95th percentile per-packet one-way delay: 50.804 ms
Loss rate: 0.45%
```

Run 7: Report of QUIC Cubic — Data Link



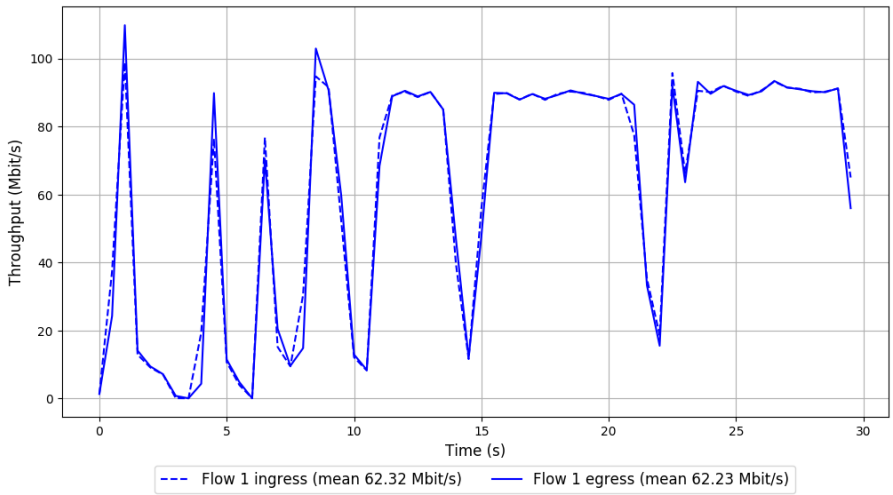


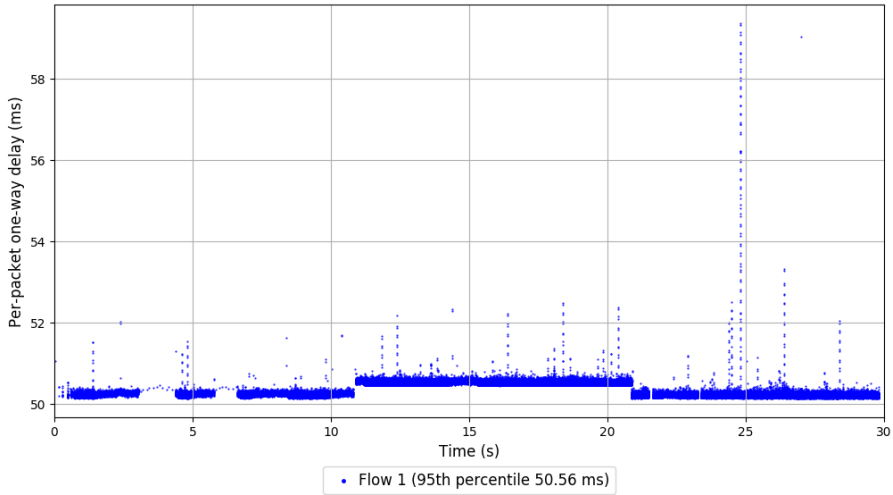
```
Run 8: Statistics of QUIC Cubic

Start at: 2017-09-18 03:55:51
End at: 2017-09-18 03:56:21

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.23 Mbit/s
95th percentile per-packet one-way delay: 50.556 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 62.23 Mbit/s
95th percentile per-packet one-way delay: 50.556 ms
Loss rate: 0.48%
```

Run 8: Report of QUIC Cubic — Data Link



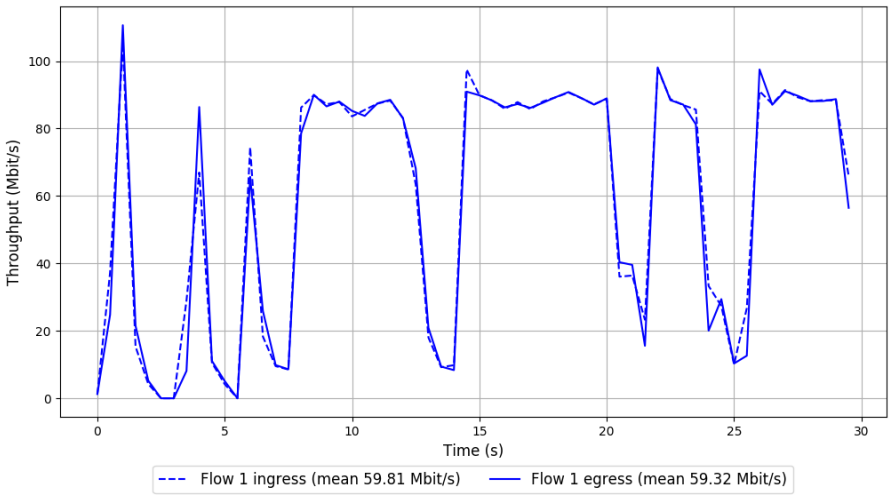


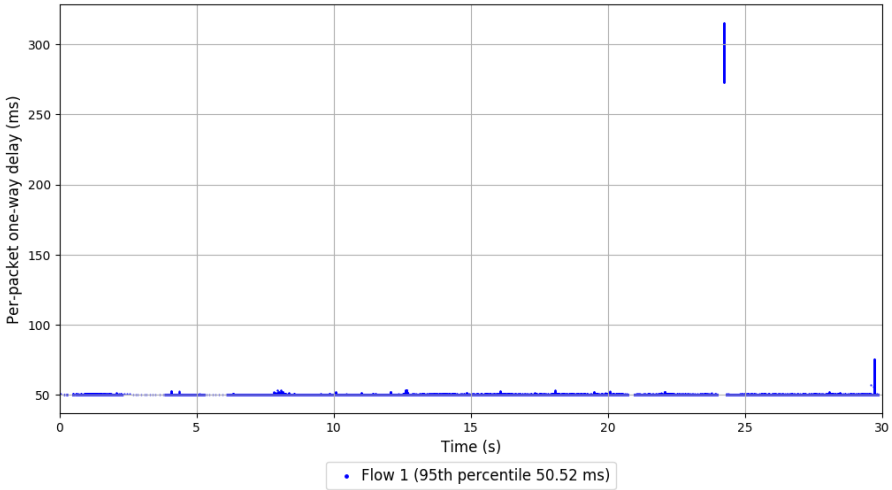
```
Run 9: Statistics of QUIC Cubic

Start at: 2017-09-18 04:07:29
End at: 2017-09-18 04:07:59

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.32 Mbit/s
95th percentile per-packet one-way delay: 50.524 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 59.32 Mbit/s
95th percentile per-packet one-way delay: 50.524 ms
Loss rate: 1.16%
```

Run 9: Report of QUIC Cubic — Data Link



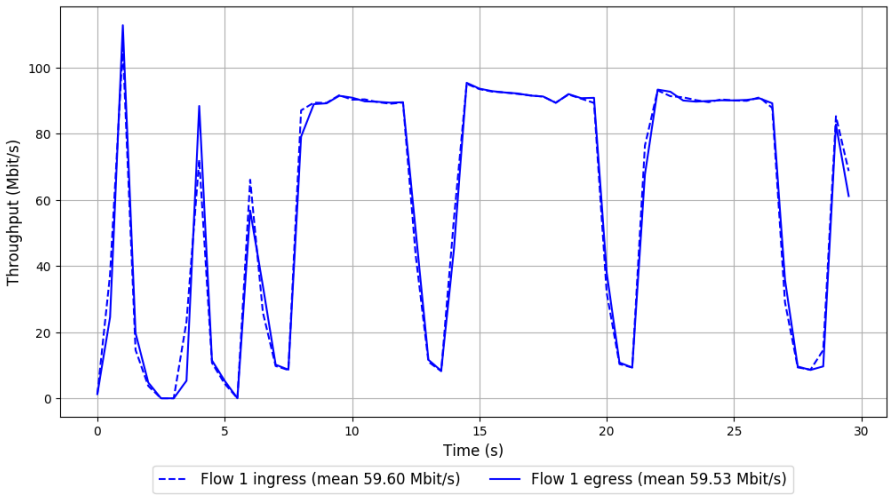


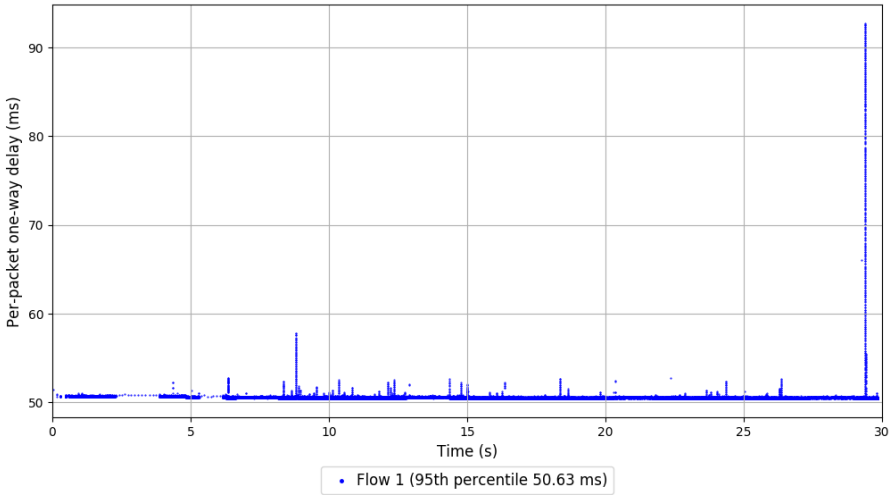
```
Run 10: Statistics of QUIC Cubic

Start at: 2017-09-18 04:18:57
End at: 2017-09-18 04:19:27

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.53 Mbit/s
95th percentile per-packet one-way delay: 50.627 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 59.53 Mbit/s
95th percentile per-packet one-way delay: 50.627 ms
Loss rate: 0.45%
```

Run 10: Report of QUIC Cubic — Data Link



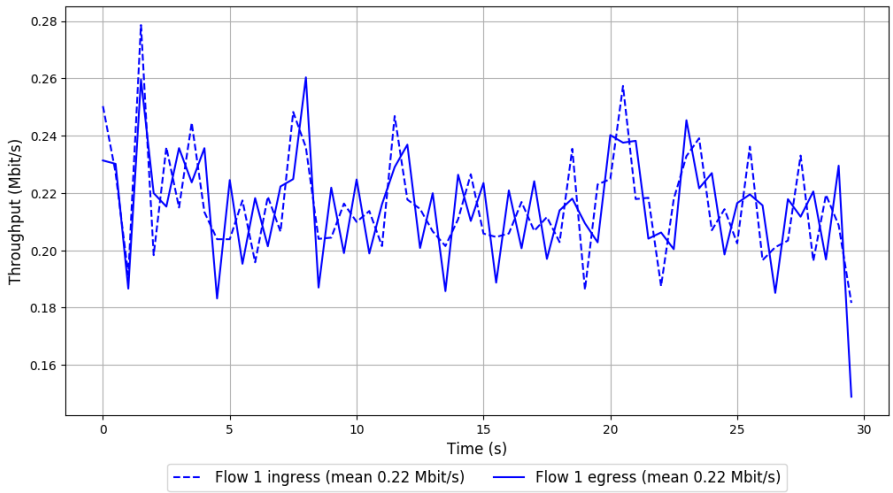


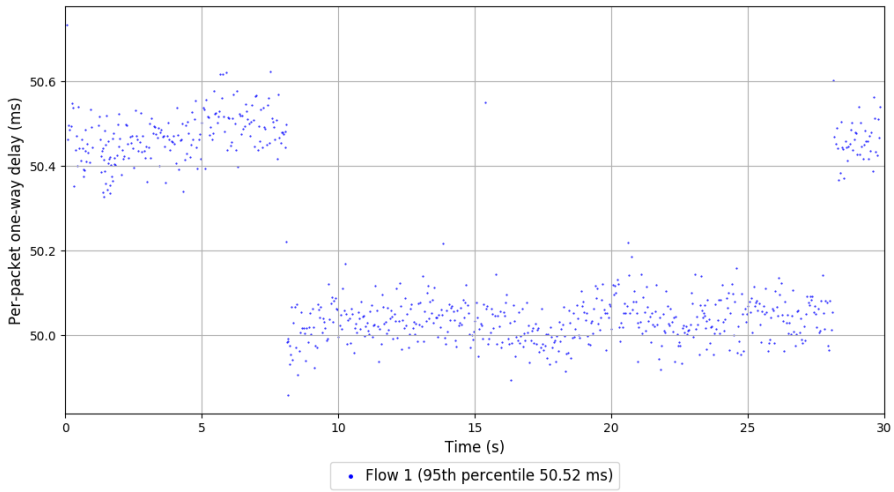
```
Run 1: Statistics of SCReAM

Start at: 2017-09-18 02:36:33
End at: 2017-09-18 02:37:03

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.523 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.523 ms
Loss rate: 0.38%
```

Run 1: Report of SCReAM — Data Link



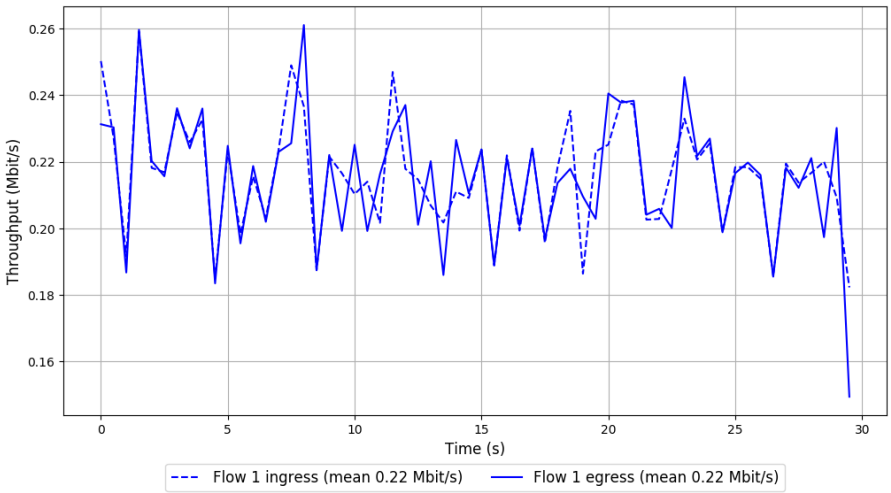


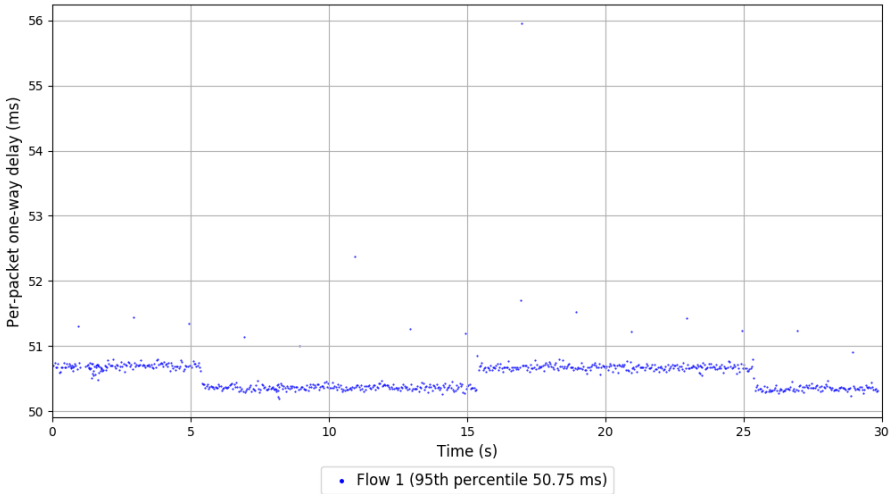
```
Run 2: Statistics of SCReAM

Start at: 2017-09-18 02:48:06
End at: 2017-09-18 02:48:36

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.752 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.752 ms
Loss rate: 0.38%
```

Run 2: Report of SCReAM — Data Link



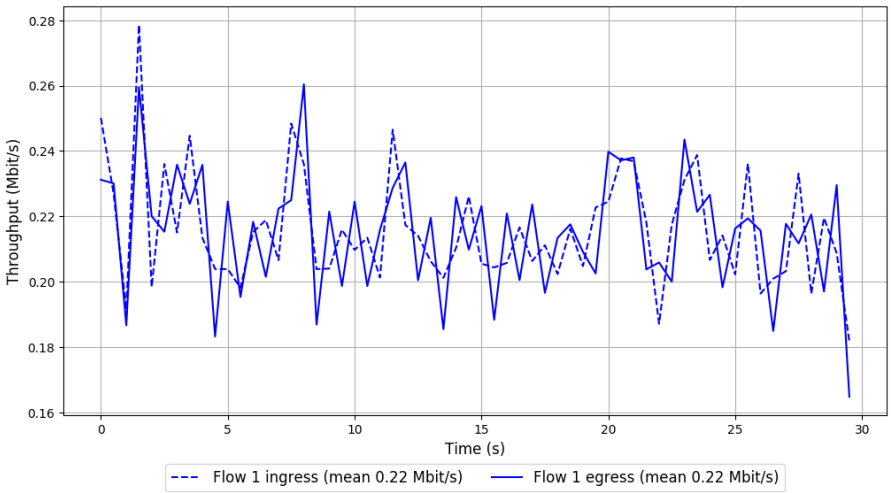


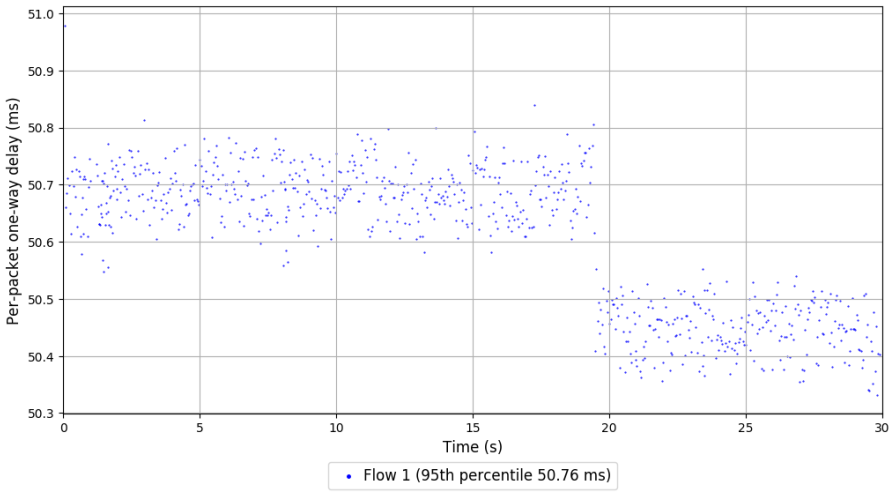
```
Run 3: Statistics of SCReAM

Start at: 2017-09-18 02:59:42
End at: 2017-09-18 03:00:12

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.756 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.756 ms
Loss rate: 0.26%
```

Run 3: Report of SCReAM — Data Link



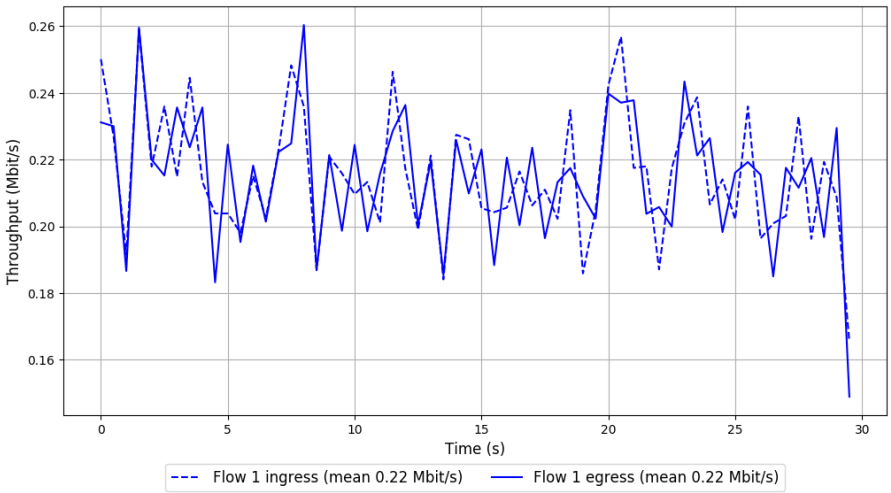


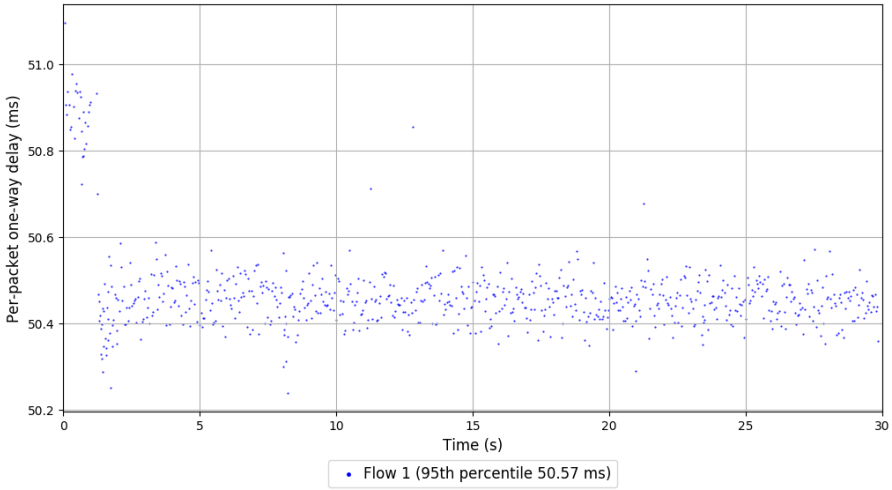
```
Run 4: Statistics of SCReAM

Start at: 2017-09-18 03:11:10
End at: 2017-09-18 03:11:40

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.569 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.569 ms
Loss rate: 0.25%
```

Run 4: Report of SCReAM — Data Link



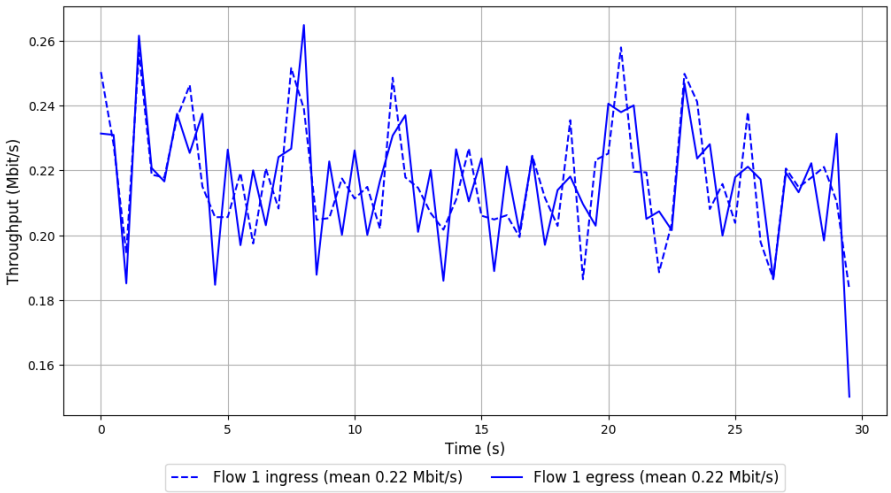


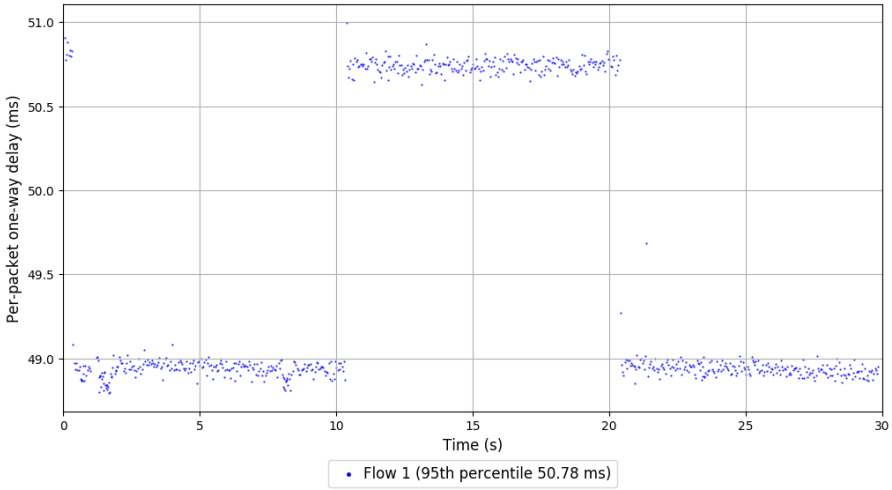
```
Run 5: Statistics of SCReAM

Start at: 2017-09-18 03:22:41
End at: 2017-09-18 03:23:11

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.784 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.784 ms
Loss rate: 0.38%
```

Run 5: Report of SCReAM — Data Link



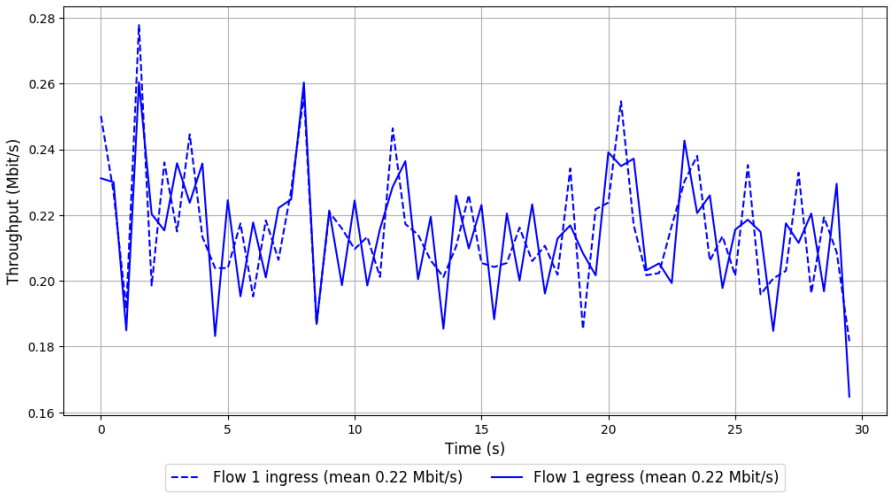


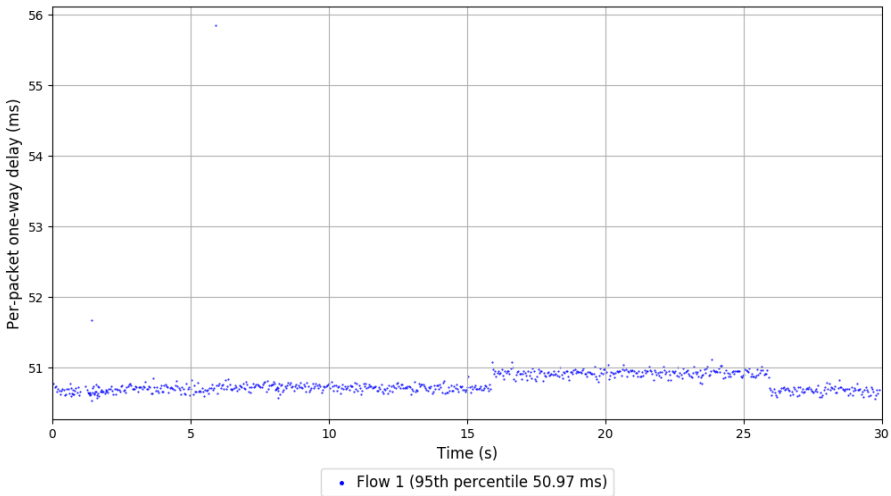
```
Run 6: Statistics of SCReAM

Start at: 2017-09-18 03:34:16
End at: 2017-09-18 03:34:46

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.968 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.968 ms
Loss rate: 0.26%
```

Run 6: Report of SCReAM — Data Link



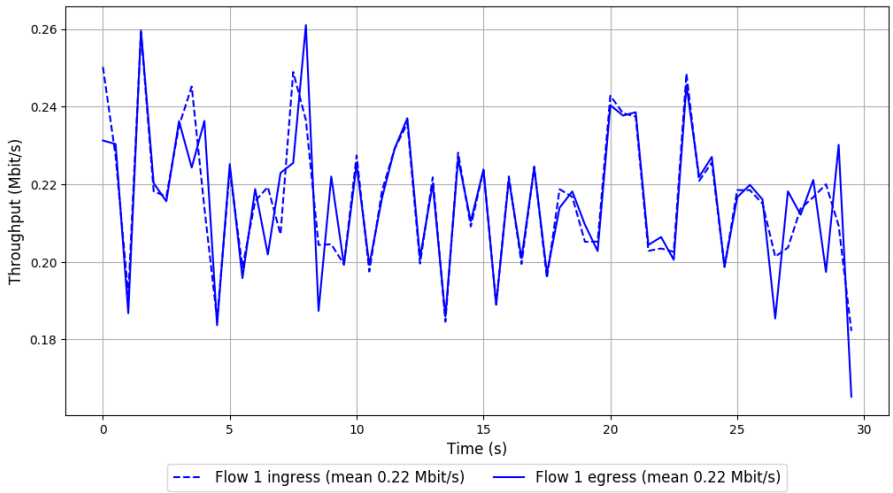


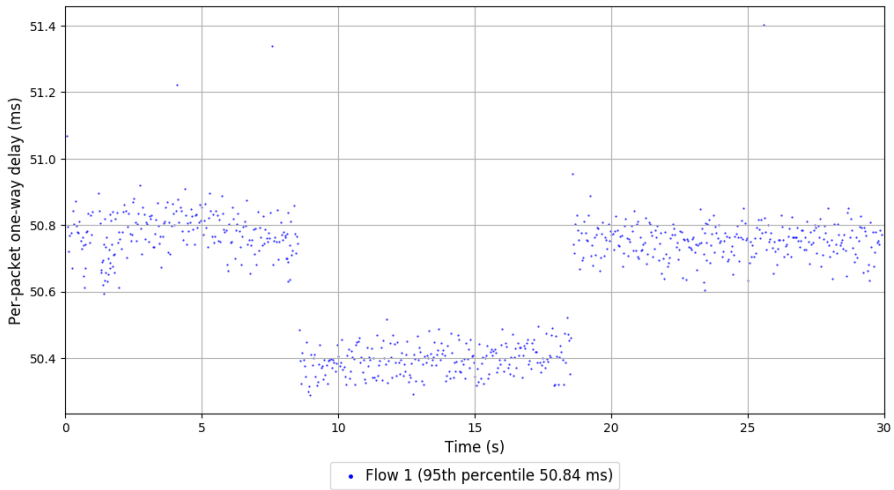
```
Run 7: Statistics of SCReAM

Start at: 2017-09-18 03:45:43
End at: 2017-09-18 03:46:13

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.842 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.842 ms
Loss rate: 0.26%
```

Run 7: Report of SCReAM — Data Link



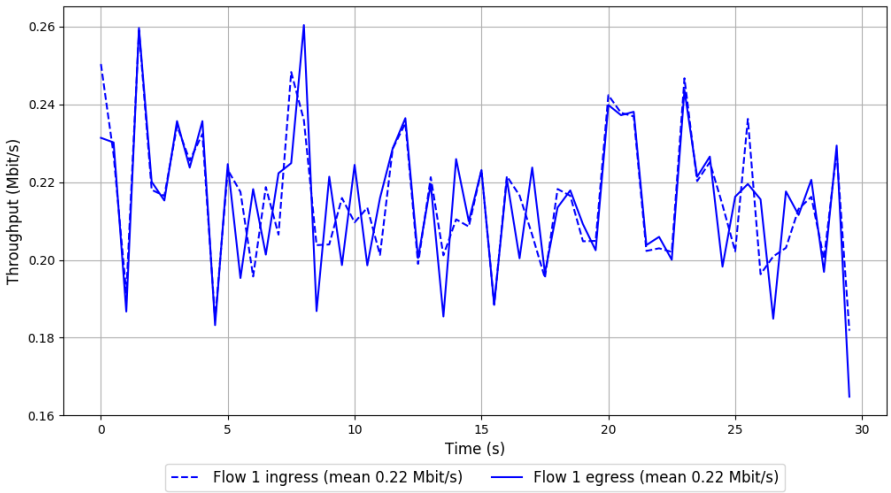


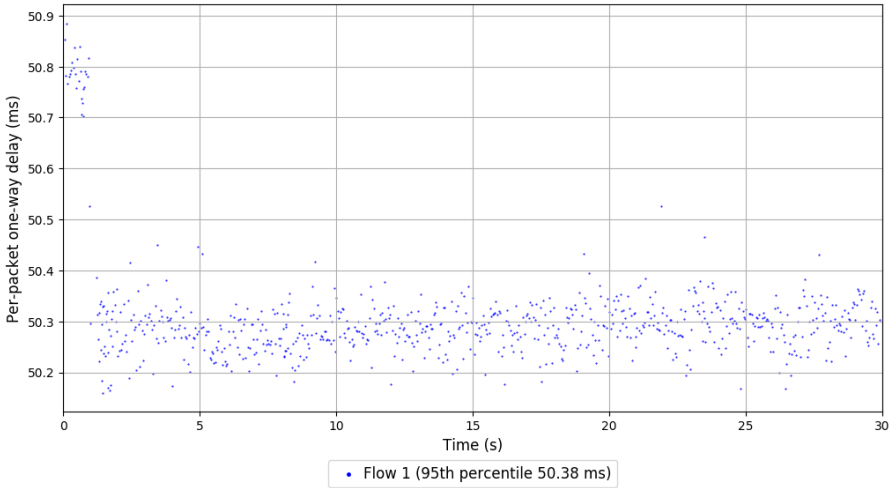
```
Run 8: Statistics of SCReAM

Start at: 2017-09-18 03:57:21
End at: 2017-09-18 03:57:51

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.384 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.384 ms
Loss rate: 0.26%
```

Run 8: Report of SCReAM — Data Link



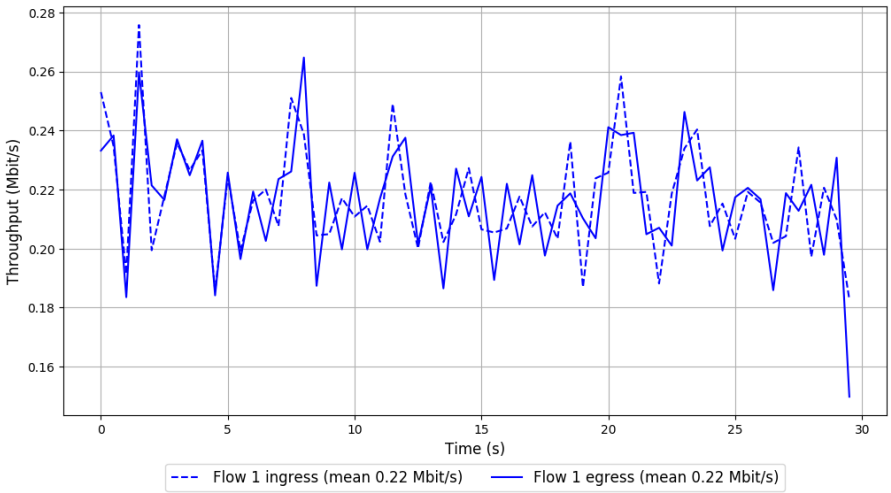


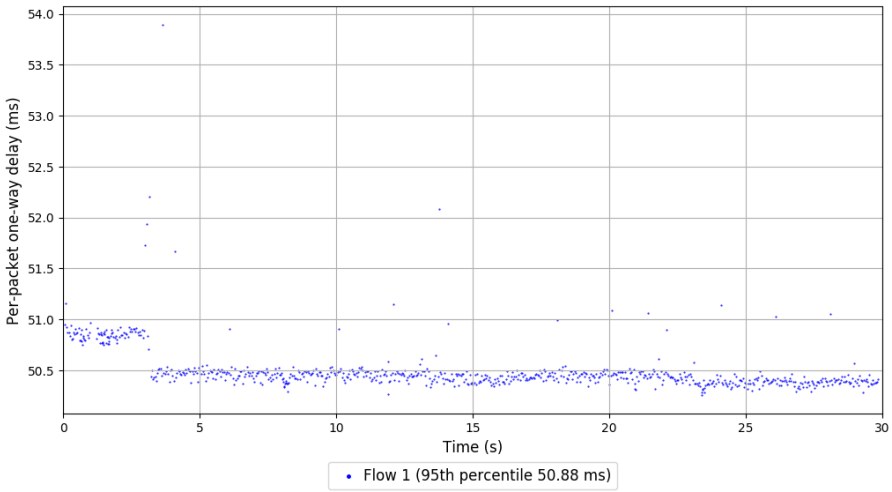
```
Run 9: Statistics of SCReAM

Start at: 2017-09-18 04:08:59
End at: 2017-09-18 04:09:29

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.884 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.884 ms
Loss rate: 0.38%
```

Run 9: Report of SCReAM — Data Link



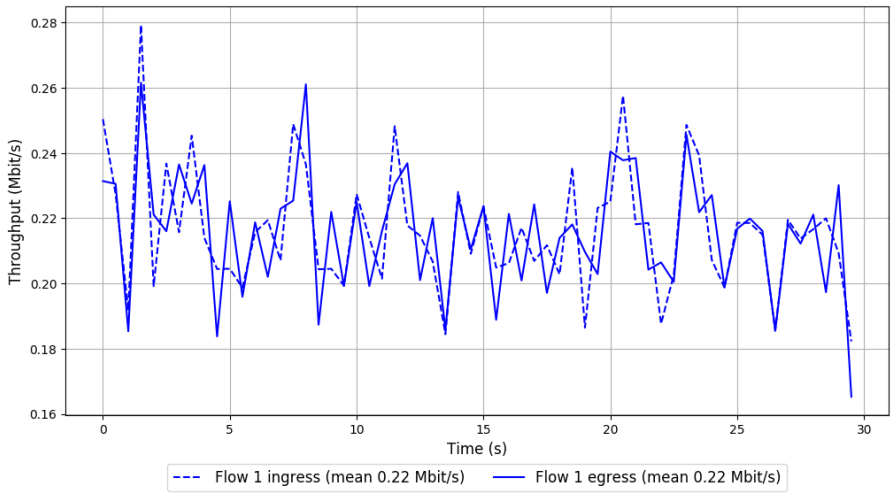


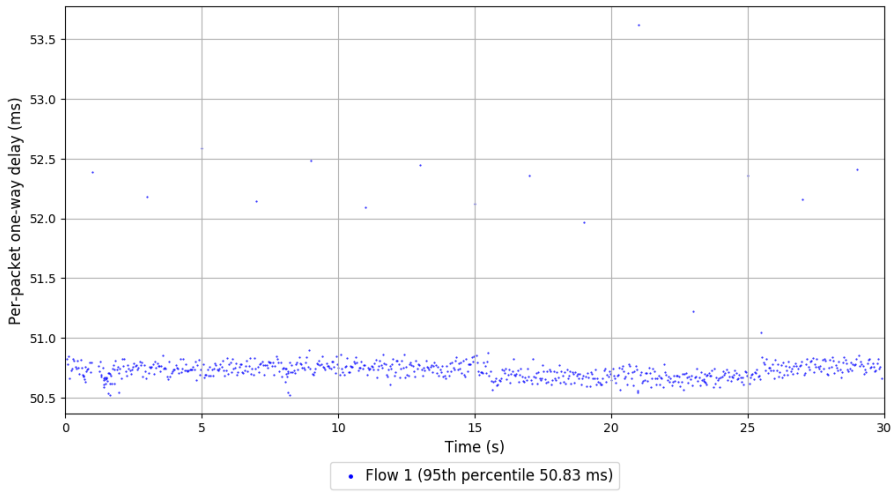
```
Run 10: Statistics of SCReAM

Start at: 2017-09-18 04:20:26
End at: 2017-09-18 04:20:56

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.832 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.832 ms
Loss rate: 0.26%
```

Run 10: Report of SCReAM — Data Link

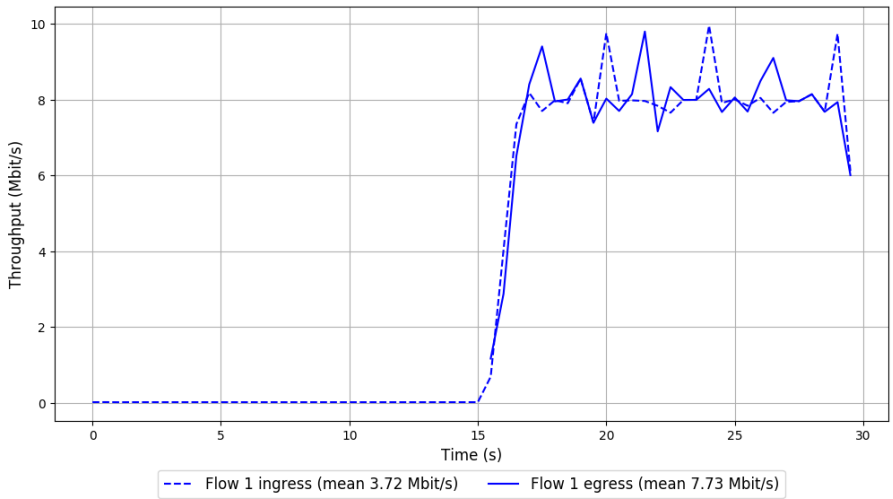


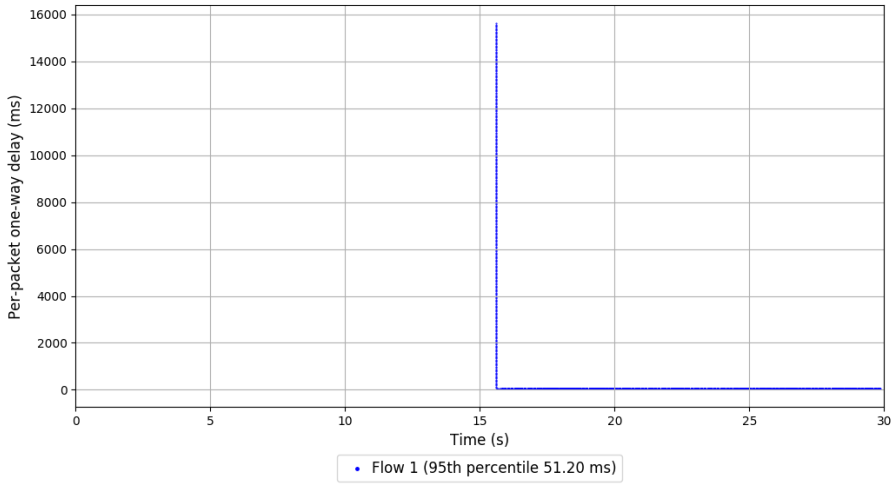


```
Run 1: Statistics of Sprout

Start at: 2017-09-18 02:34:27
End at: 2017-09-18 02:34:57
```

Run 1: Report of Sprout — Data Link



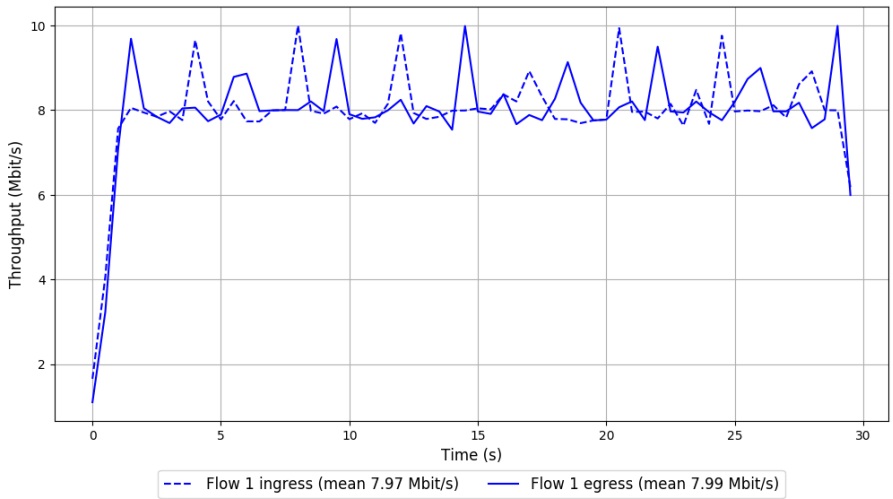


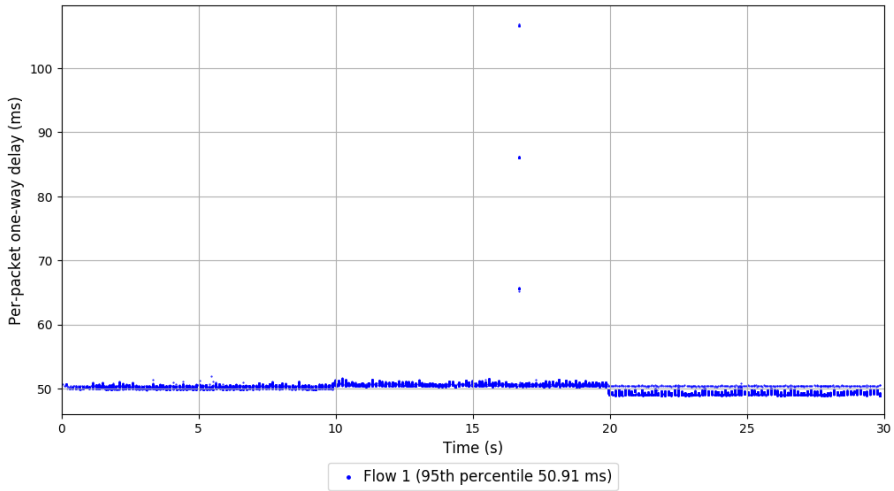
```
Run 2: Statistics of Sprout

Start at: 2017-09-18 02:46:02
End at: 2017-09-18 02:46:32

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 50.910 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 50.910 ms
Loss rate: 0.06%
```

Run 2: Report of Sprout — Data Link



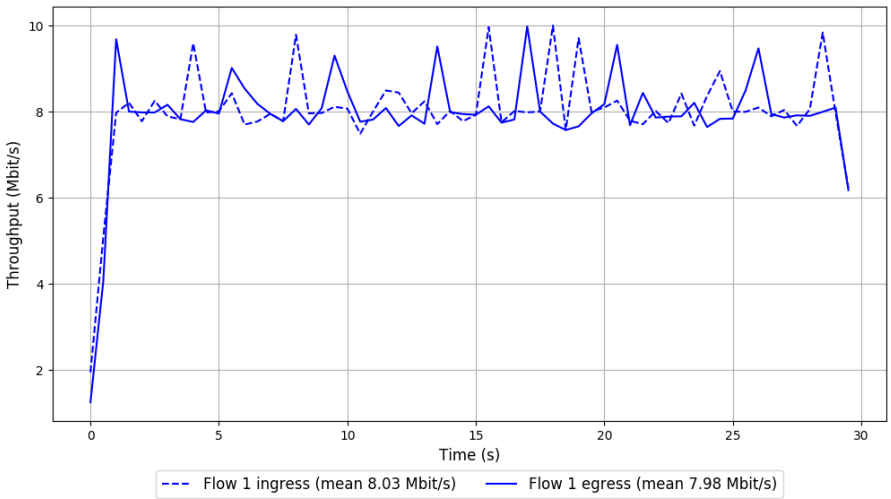


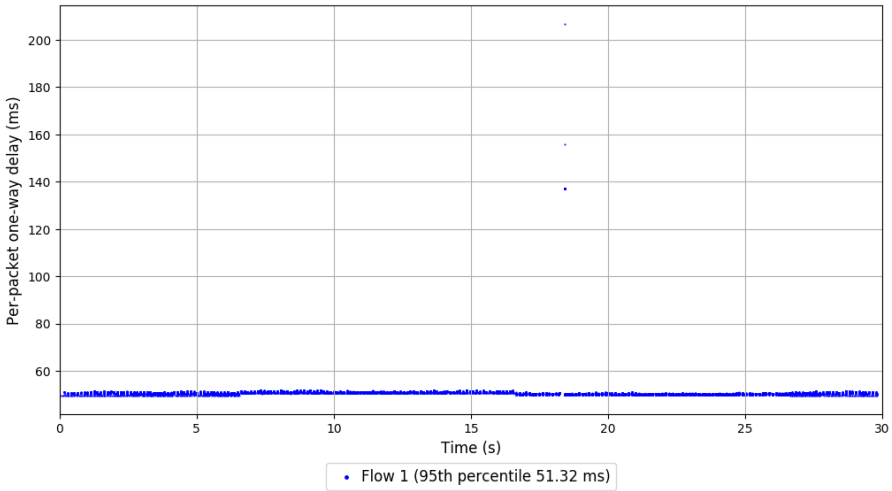
```
Run 3: Statistics of Sprout

Start at: 2017-09-18 02:57:35
End at: 2017-09-18 02:58:05

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.98 Mbit/s
95th percentile per-packet one-way delay: 51.318 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 7.98 Mbit/s
95th percentile per-packet one-way delay: 51.318 ms
Loss rate: 0.91%
```

Run 3: Report of Sprout — Data Link



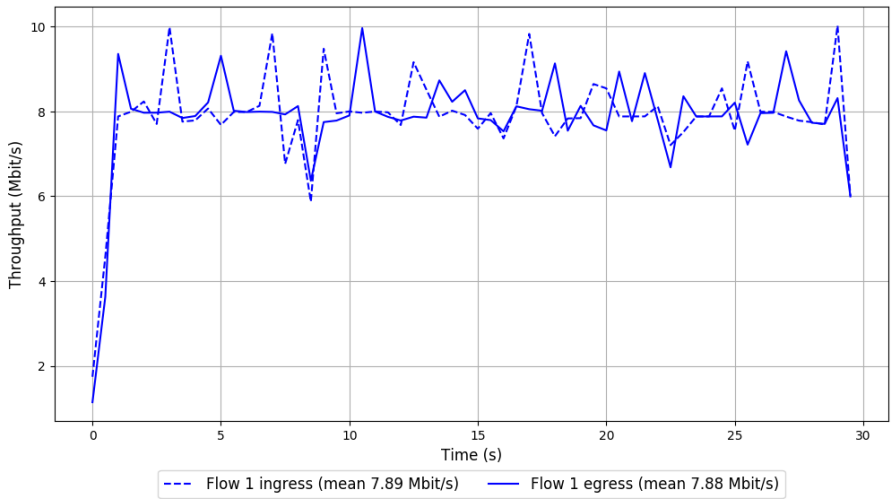


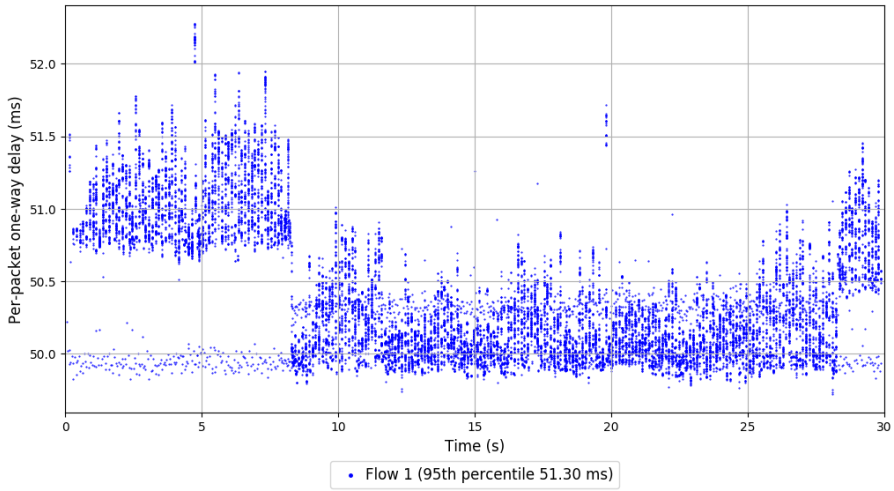
```
Run 4: Statistics of Sprout

Start at: 2017-09-18 03:09:03
End at: 2017-09-18 03:09:33

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.88 Mbit/s
95th percentile per-packet one-way delay: 51.297 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 7.88 Mbit/s
95th percentile per-packet one-way delay: 51.297 ms
Loss rate: 0.37%
```

Run 4: Report of Sprout — Data Link



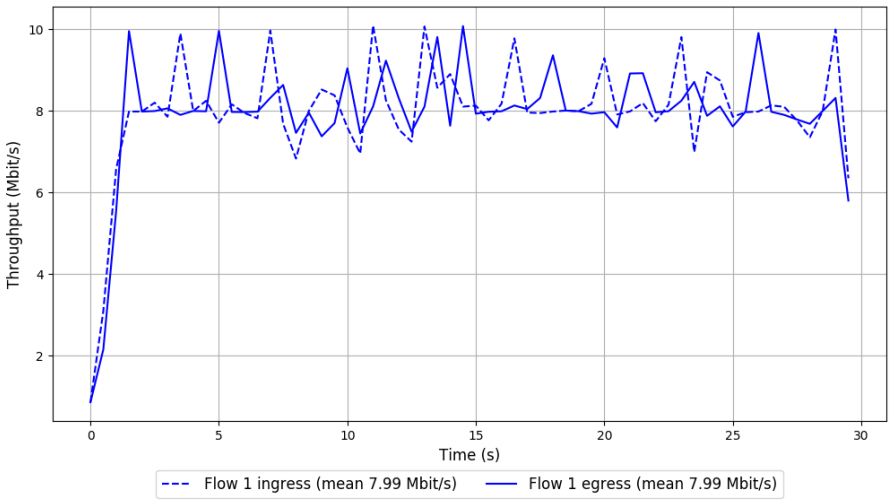


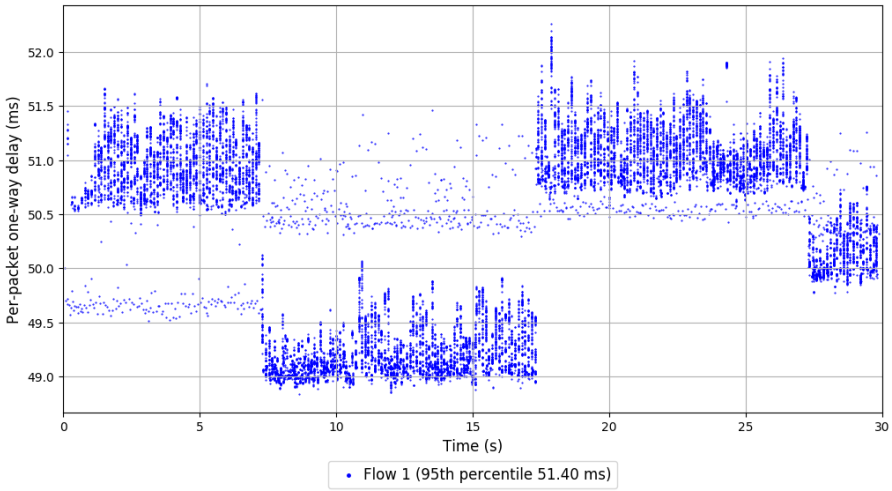
```
Run 5: Statistics of Sprout

Start at: 2017-09-18 03:20:34
End at: 2017-09-18 03:21:04

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 51.399 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 51.399 ms
Loss rate: 0.47%
```

Run 5: Report of Sprout — Data Link

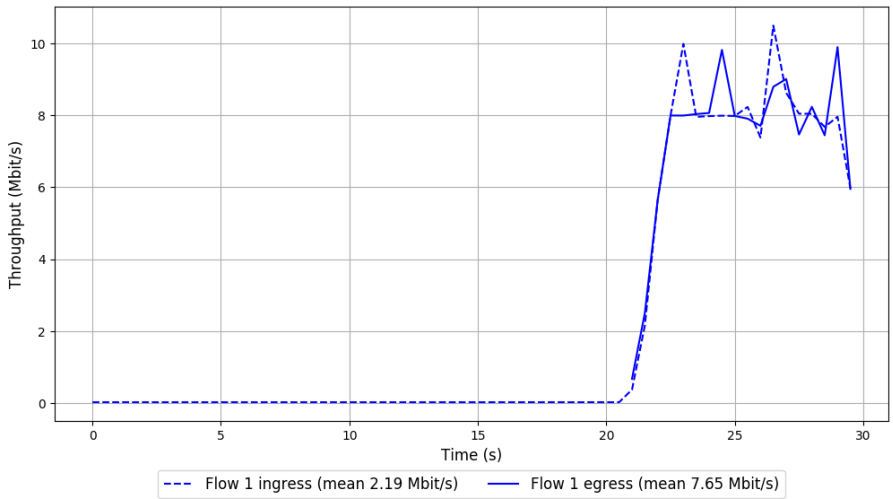


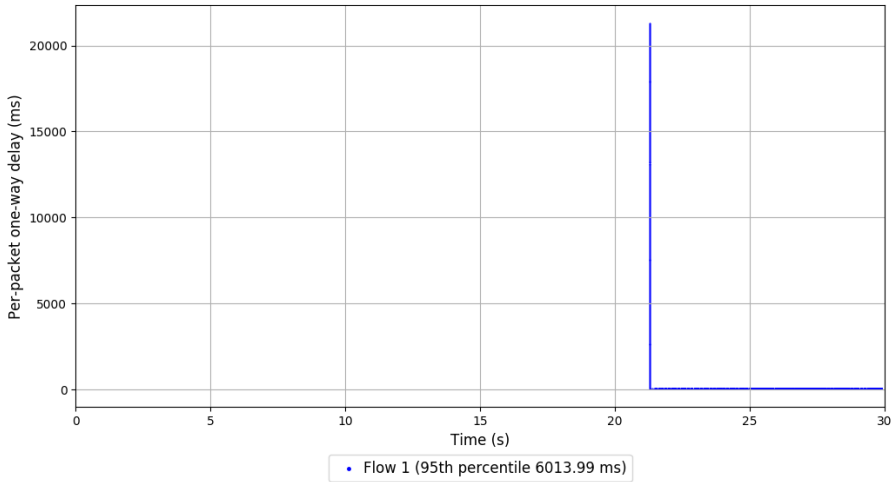


```
Run 6: Statistics of Sprout

Start at: 2017-09-18 03:32:09
End at: 2017-09-18 03:32:39
```

Run 6: Report of Sprout — Data Link



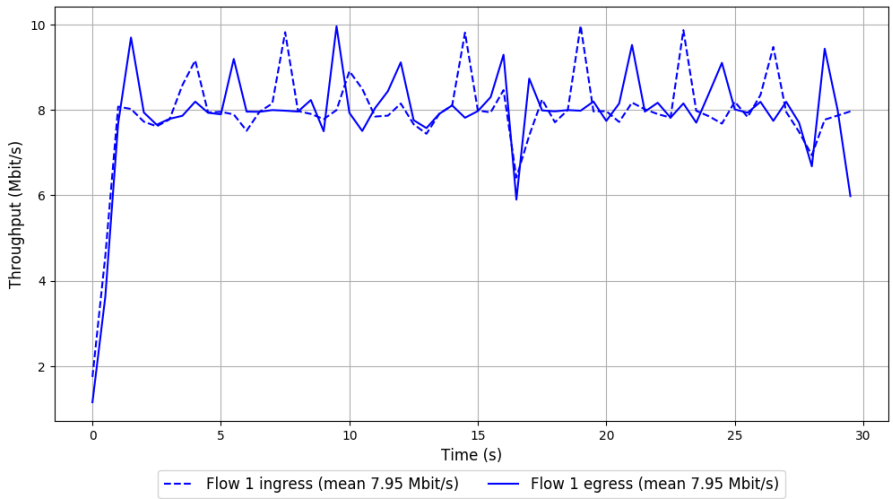


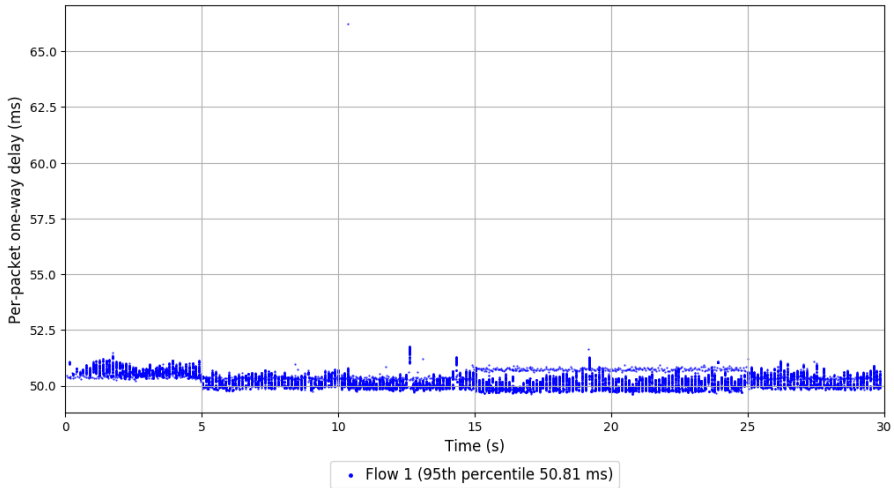
```
Run 7: Statistics of Sprout

Start at: 2017-09-18 03:43:37
End at: 2017-09-18 03:44:07

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.95 Mbit/s
95th percentile per-packet one-way delay: 50.813 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 7.95 Mbit/s
95th percentile per-packet one-way delay: 50.813 ms
Loss rate: 0.42%
```

Run 7: Report of Sprout — Data Link



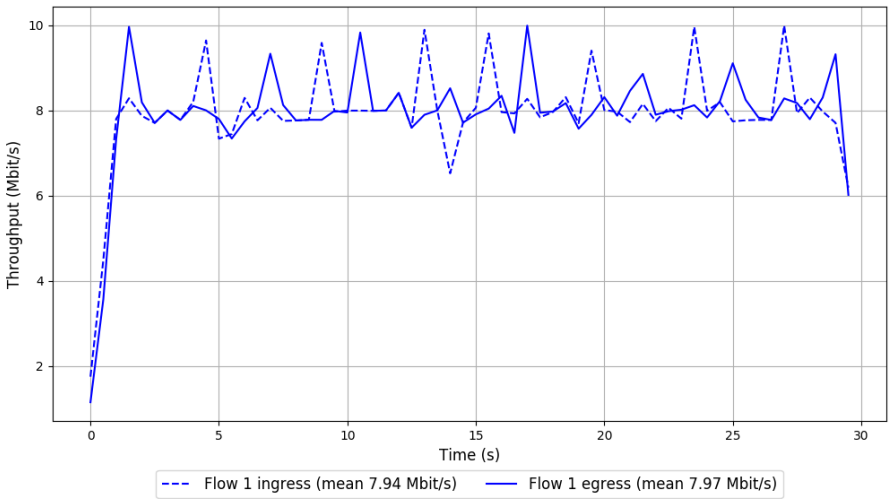


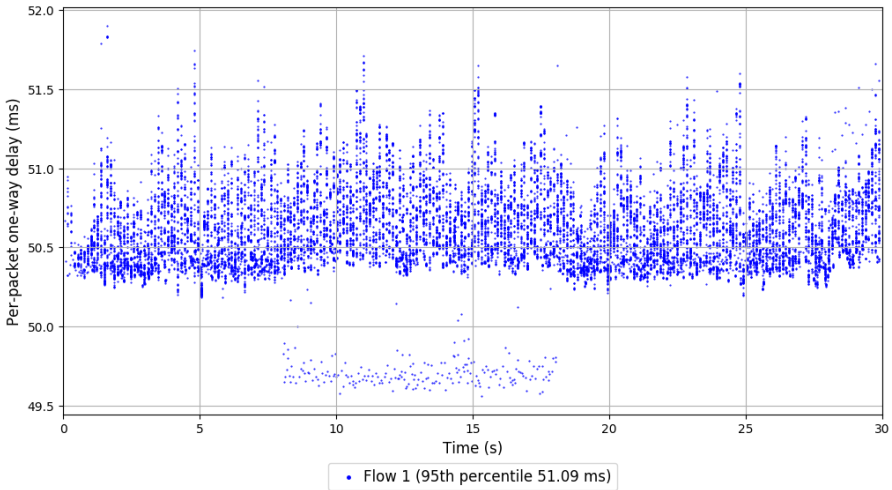
```
Run 8: Statistics of Sprout

Start at: 2017-09-18 03:55:14
End at: 2017-09-18 03:55:44

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.97 Mbit/s
95th percentile per-packet one-way delay: 51.091 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 7.97 Mbit/s
95th percentile per-packet one-way delay: 51.091 ms
Loss rate: 0.06%
```

Run 8: Report of Sprout — Data Link



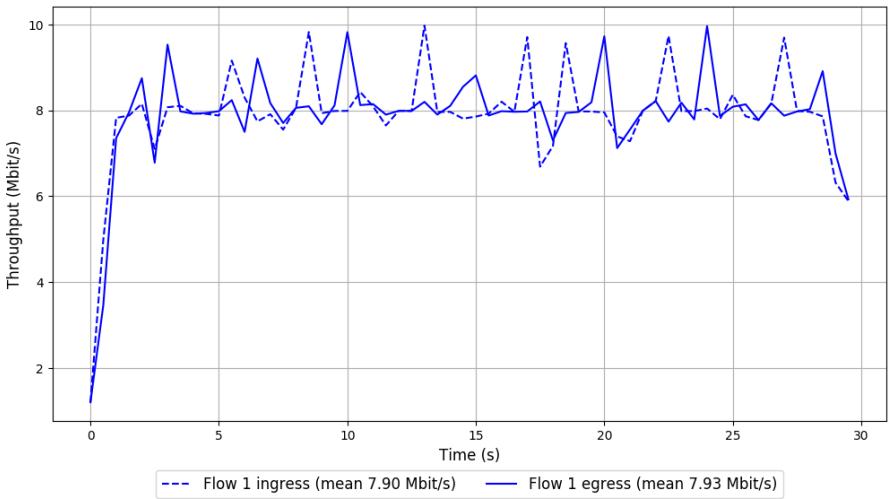


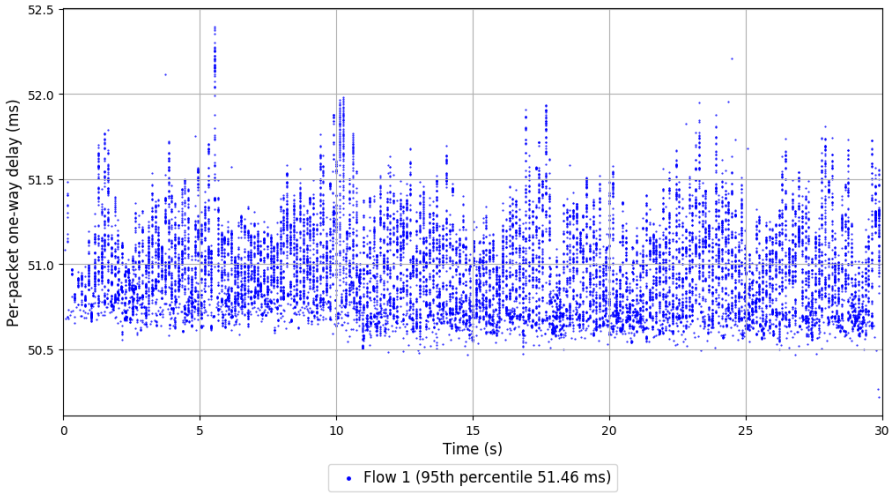
```
Run 9: Statistics of Sprout

Start at: 2017-09-18 04:06:52
End at: 2017-09-18 04:07:22

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.93 Mbit/s
95th percentile per-packet one-way delay: 51.457 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 7.93 Mbit/s
95th percentile per-packet one-way delay: 51.457 ms
Loss rate: 0.02%
```

Run 9: Report of Sprout — Data Link

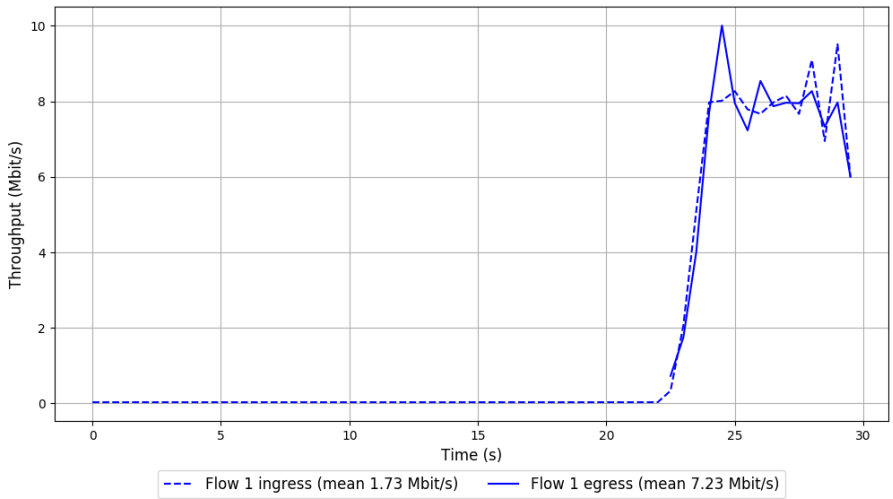


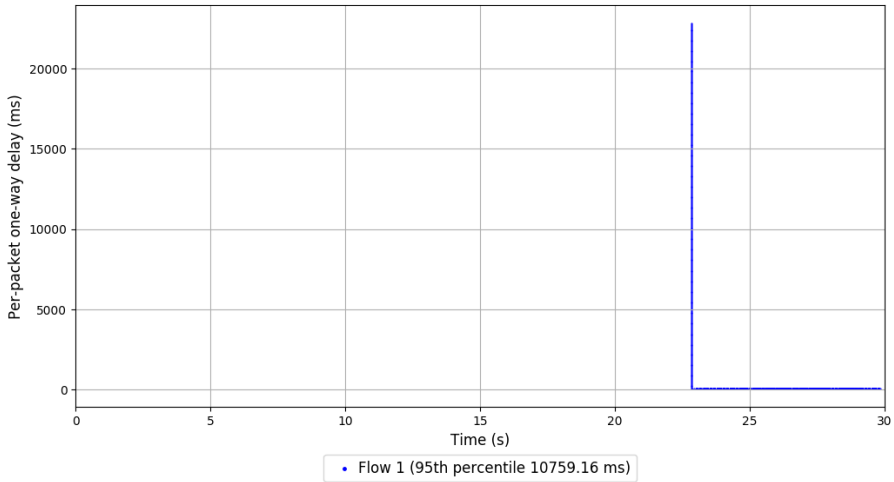


```
Run 10: Statistics of Sprout

Start at: 2017-09-18 04:18:20
End at: 2017-09-18 04:18:50
```

Run 10: Report of Sprout — Data Link



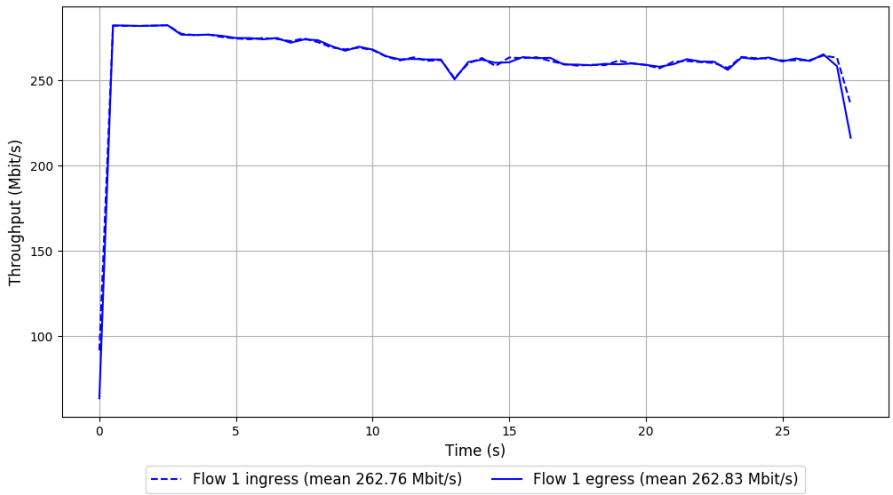


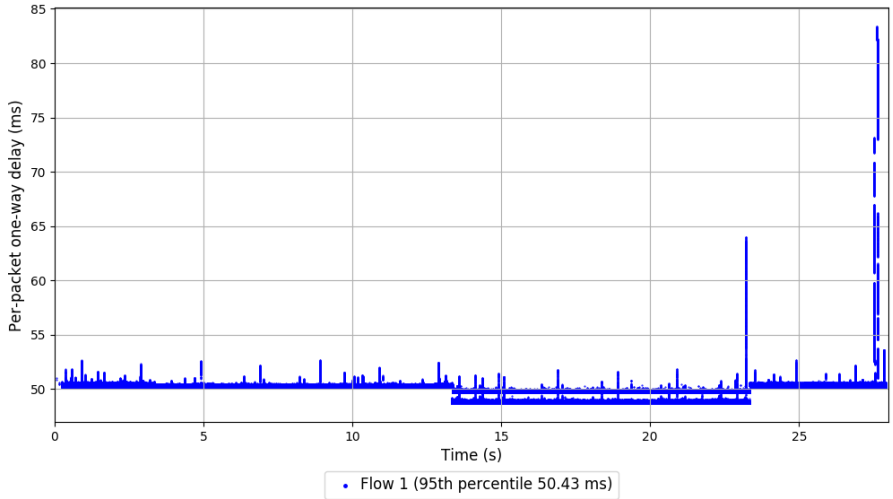
```
Run 1: Statistics of TaoVA-100x

Start at: 2017-09-18 02:26:46
End at: 2017-09-18 02:27:16

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 262.83 Mbit/s
95th percentile per-packet one-way delay: 50.434 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 262.83 Mbit/s
95th percentile per-packet one-way delay: 50.434 ms
Loss rate: 0.34%
```

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



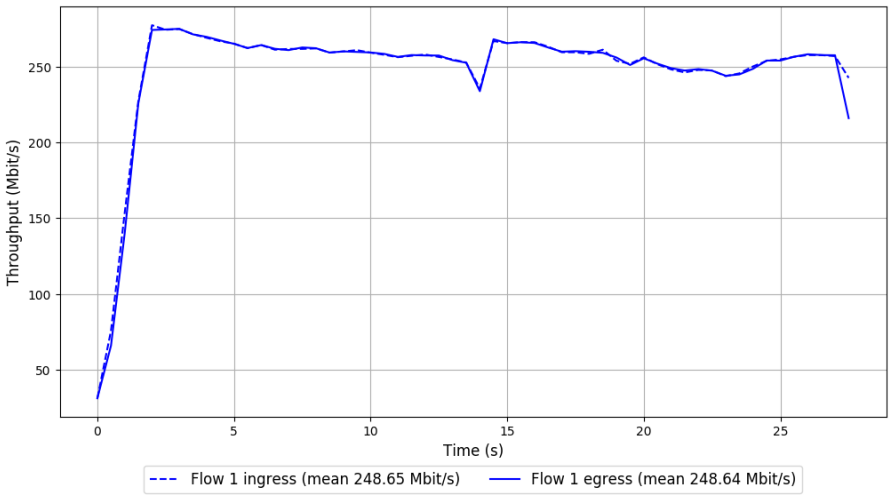


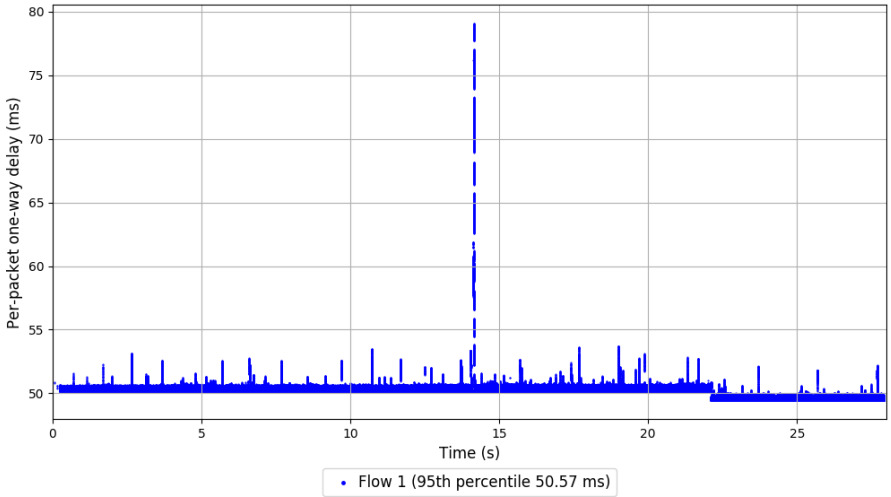
```
Run 2: Statistics of TaoVA-100x

Start at: 2017-09-18 02:38:27
End at: 2017-09-18 02:38:58

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 248.64 Mbit/s
95th percentile per-packet one-way delay: 50.572 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 248.64 Mbit/s
95th percentile per-packet one-way delay: 50.572 ms
Loss rate: 0.37%
```

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



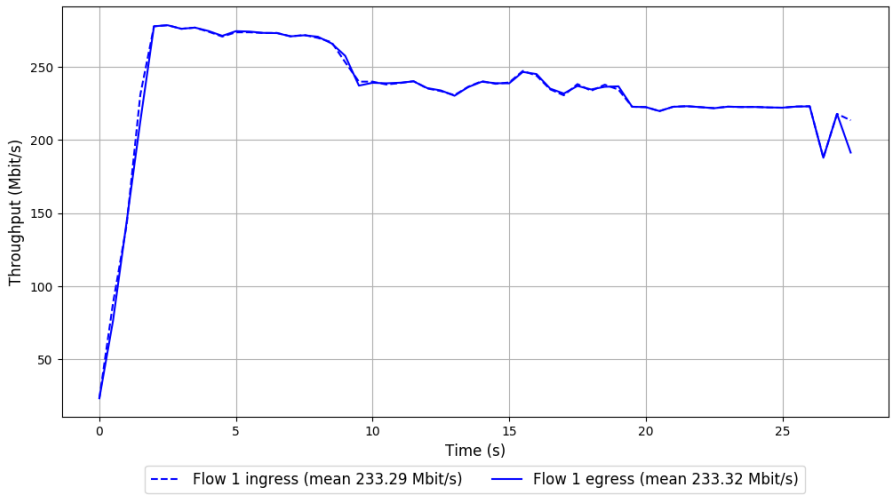


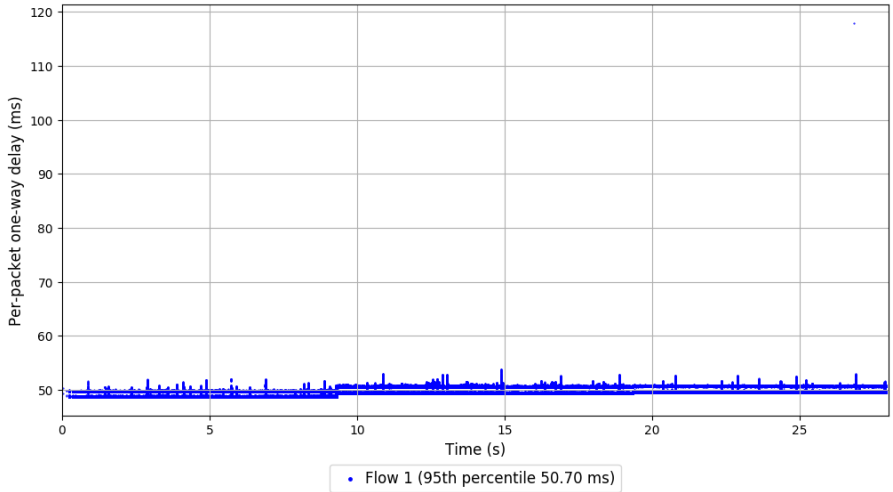
```
Run 3: Statistics of TaoVA-100x

Start at: 2017-09-18 02:50:00
End at: 2017-09-18 02:50:30

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 233.32 Mbit/s
95th percentile per-packet one-way delay: 50.695 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 233.32 Mbit/s
95th percentile per-packet one-way delay: 50.695 ms
Loss rate: 0.34%
```

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



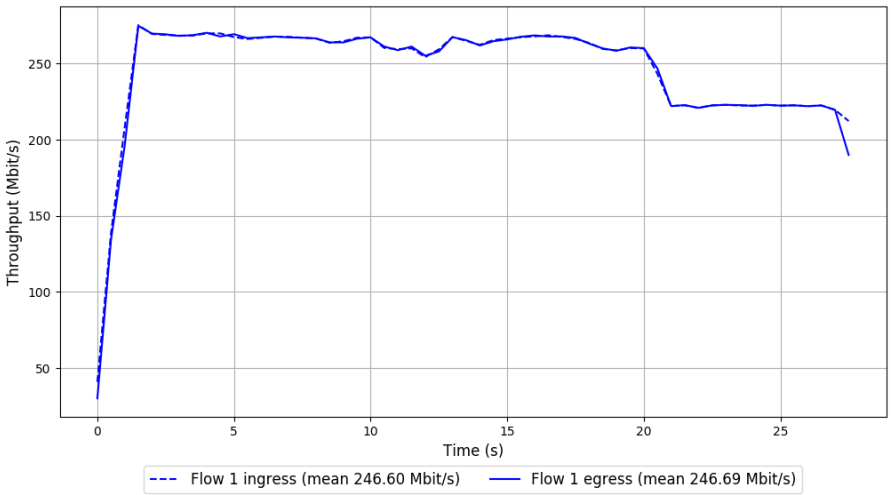


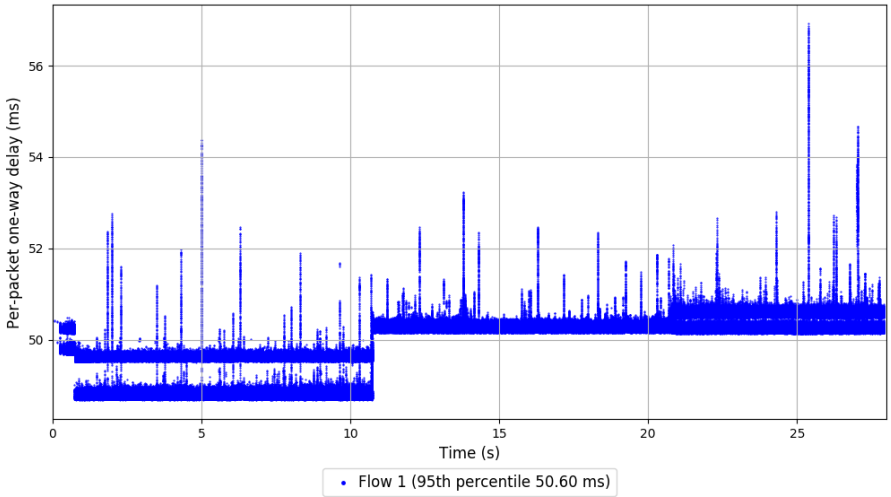
```
Run 4: Statistics of TaoVA-100x

Start at: 2017-09-18 03:01:39
End at: 2017-09-18 03:02:09

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 246.69 Mbit/s
95th percentile per-packet one-way delay: 50.597 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 246.69 Mbit/s
95th percentile per-packet one-way delay: 50.597 ms
Loss rate: 0.32%
```

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



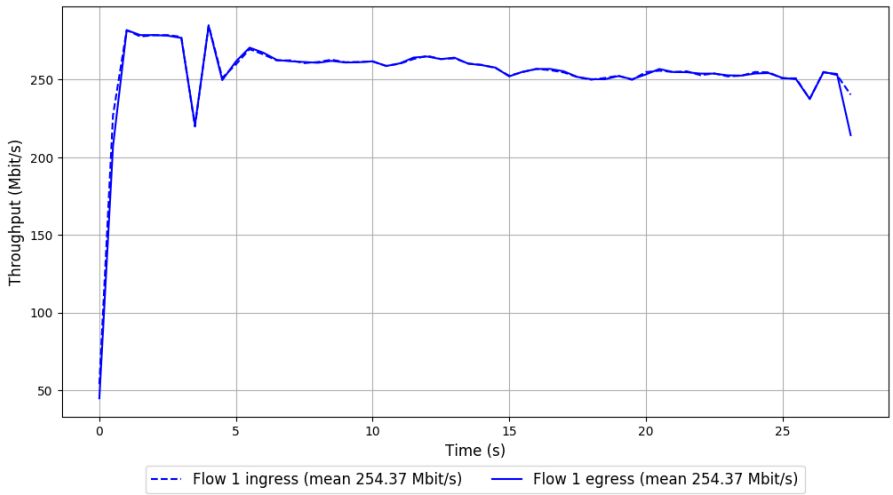


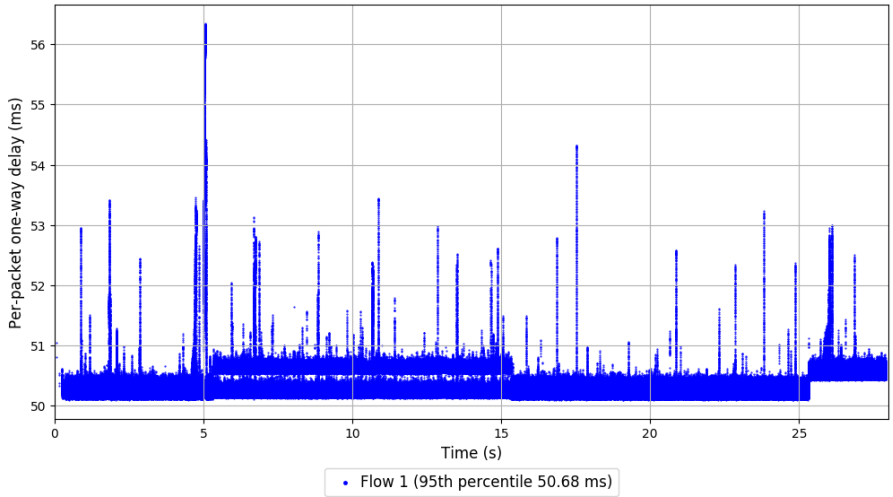
```
Run 5: Statistics of TaoVA-100x

Start at: 2017-09-18 03:13:04
End at: 2017-09-18 03:13:34

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 254.37 Mbit/s
95th percentile per-packet one-way delay: 50.681 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 254.37 Mbit/s
95th percentile per-packet one-way delay: 50.681 ms
Loss rate: 0.36%
```

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



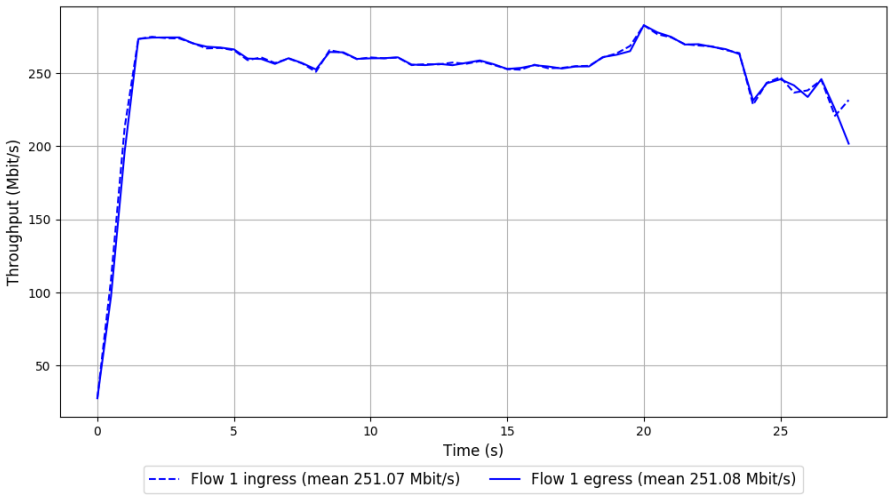


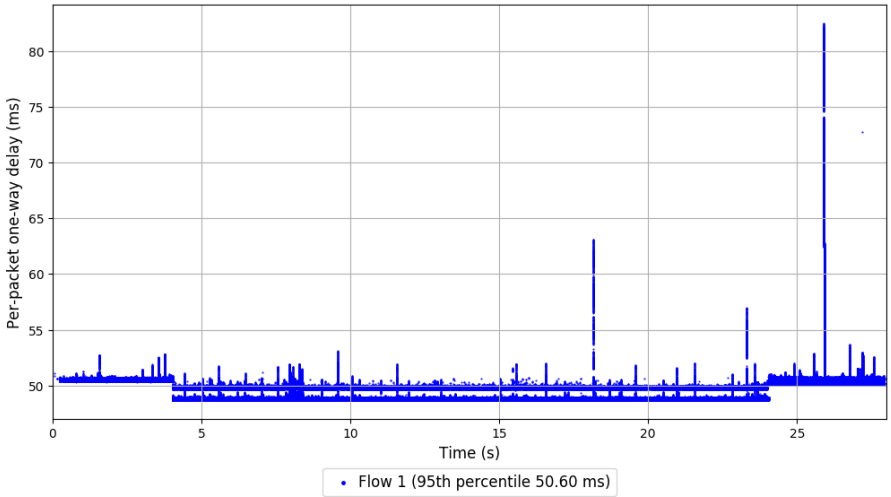
```
Run 6: Statistics of TaoVA-100x

Start at: 2017-09-18 03:24:36
End at: 2017-09-18 03:25:06

# Below is generated by plot.py at 2017-09-18 07:19:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 251.08 Mbit/s
95th percentile per-packet one-way delay: 50.605 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 251.08 Mbit/s
95th percentile per-packet one-way delay: 50.605 ms
Loss rate: 0.35%
```

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



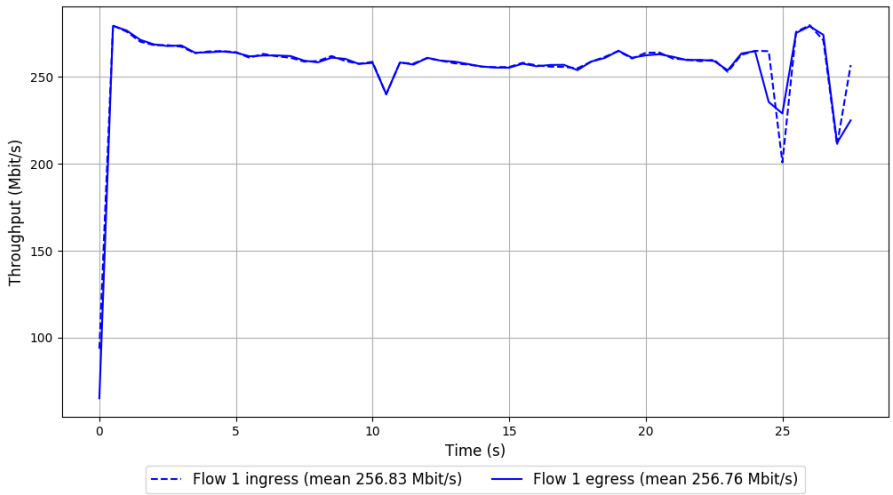


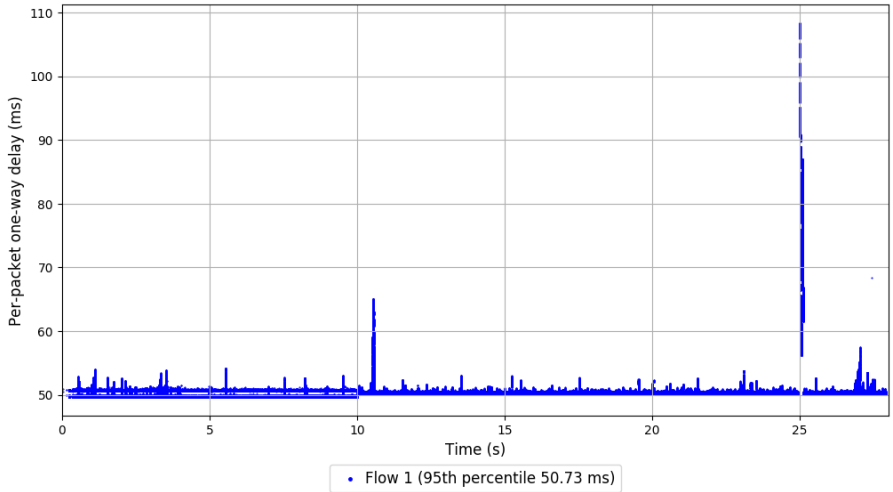
```
Run 7: Statistics of TaoVA-100x

Start at: 2017-09-18 03:36:10
End at: 2017-09-18 03:36:40

# Below is generated by plot.py at 2017-09-18 07:25:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 256.76 Mbit/s
95th percentile per-packet one-way delay: 50.732 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 256.76 Mbit/s
95th percentile per-packet one-way delay: 50.732 ms
Loss rate: 0.38%
```

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



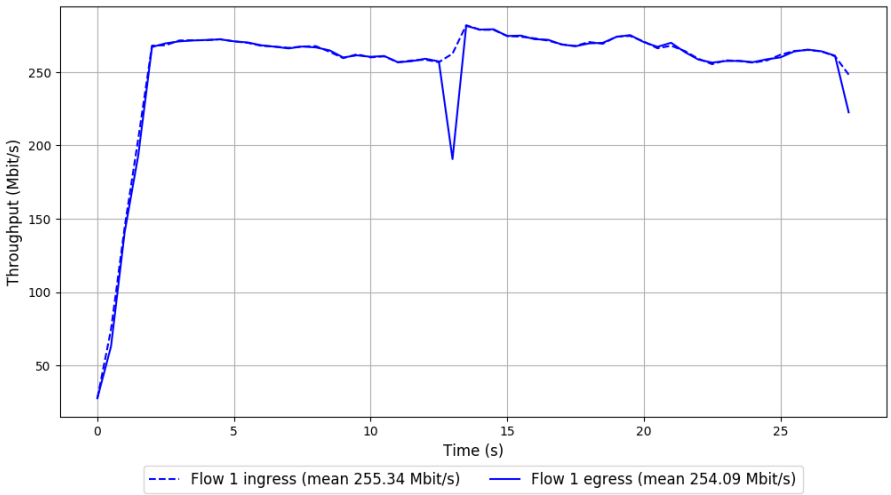


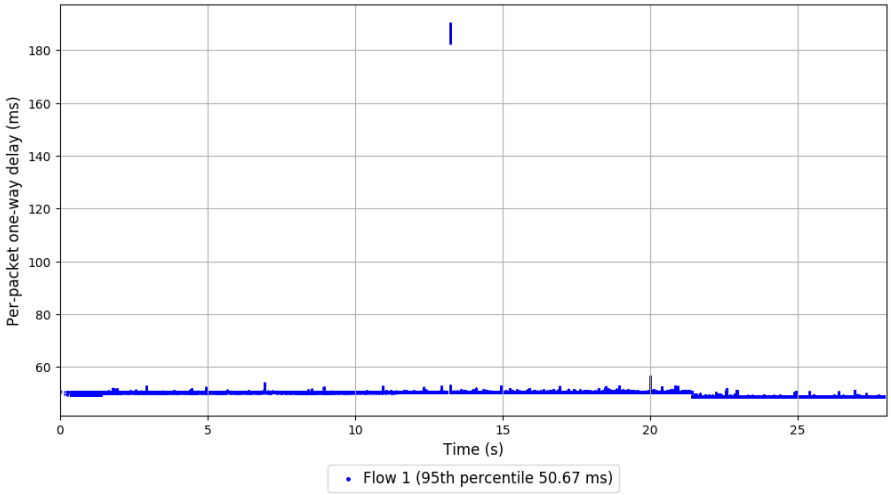
```
Run 8: Statistics of TaoVA-100x

Start at: 2017-09-18 03:47:38
End at: 2017-09-18 03:48:08

# Below is generated by plot.py at 2017-09-18 07:25:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 254.09 Mbit/s
95th percentile per-packet one-way delay: 50.668 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 254.09 Mbit/s
95th percentile per-packet one-way delay: 50.668 ms
Loss rate: 0.85%
```

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



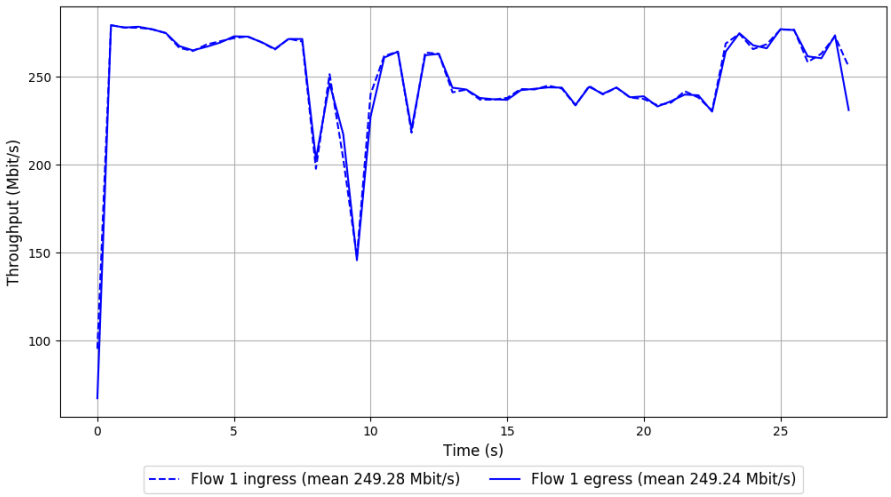


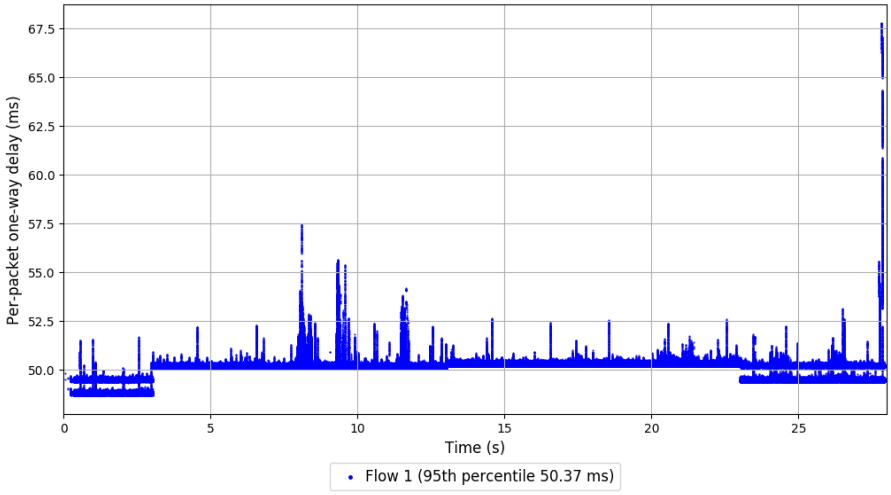
```
Run 9: Statistics of TaoVA-100x

Start at: 2017-09-18 03:59:17
End at: 2017-09-18 03:59:47

# Below is generated by plot.py at 2017-09-18 07:25:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 249.24 Mbit/s
95th percentile per-packet one-way delay: 50.367 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 249.24 Mbit/s
95th percentile per-packet one-way delay: 50.367 ms
Loss rate: 0.37%
```

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



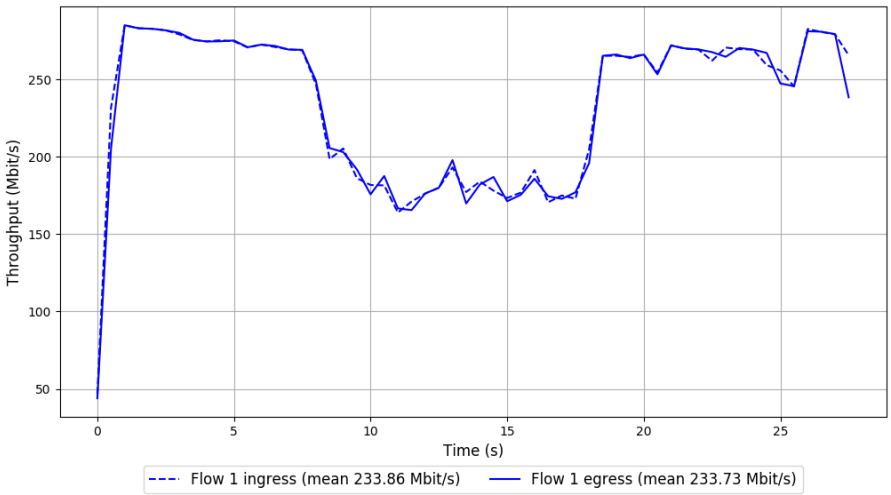


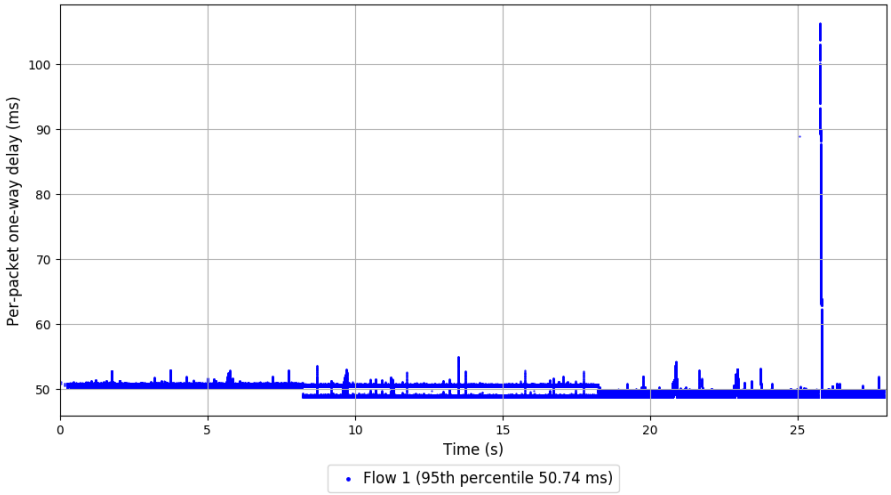
```
Run 10: Statistics of TaoVA-100x

Start at: 2017-09-18 04:10:51
End at: 2017-09-18 04:11:21

# Below is generated by plot.py at 2017-09-18 07:25:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 233.73 Mbit/s
95th percentile per-packet one-way delay: 50.740 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 233.73 Mbit/s
95th percentile per-packet one-way delay: 50.740 ms
Loss rate: 0.42%
```

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



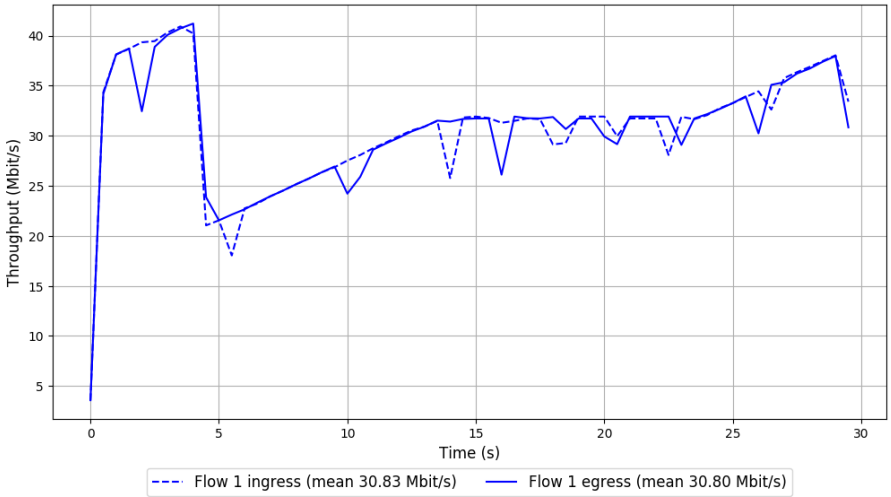


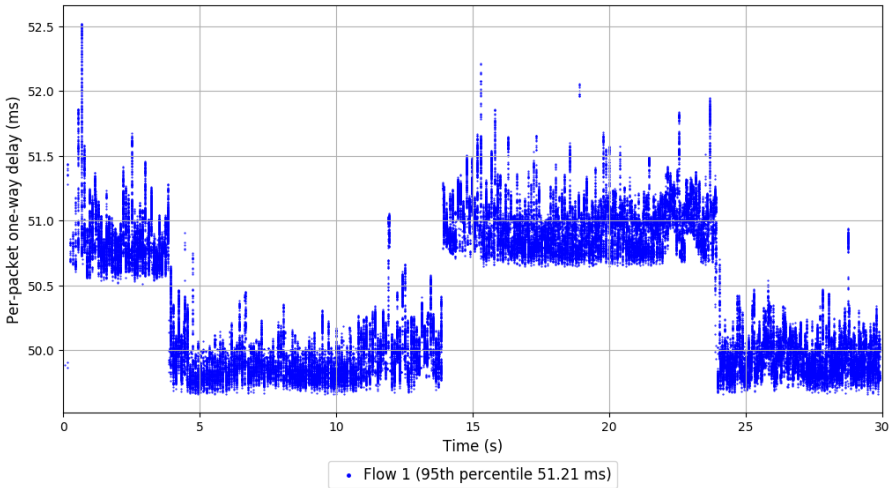
```
Run 1: Statistics of TCP Vegas

Start at: 2017-09-18 02:26:08
End at: 2017-09-18 02:26:38

# Below is generated by plot.py at 2017-09-18 07:25:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.80 Mbit/s
95th percentile per-packet one-way delay: 51.211 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 30.80 Mbit/s
95th percentile per-packet one-way delay: 51.211 ms
Loss rate: 0.43%
```

Run 1: Report of TCP Vegas — Data Link



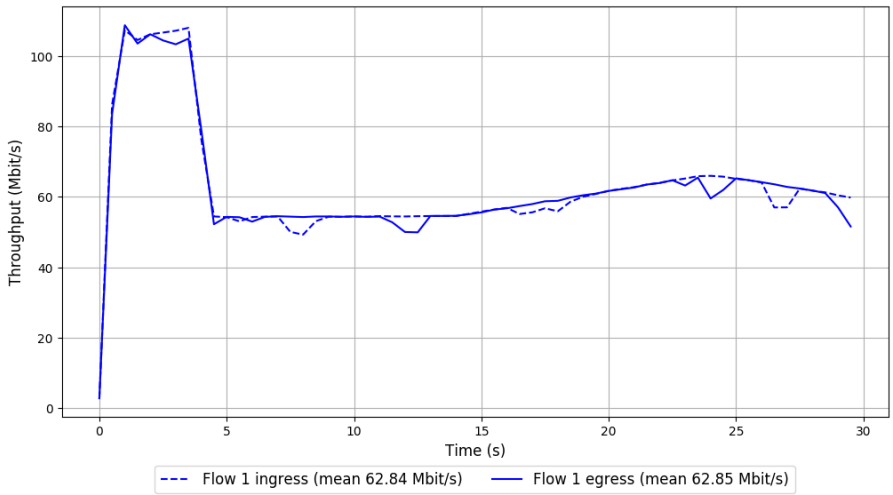


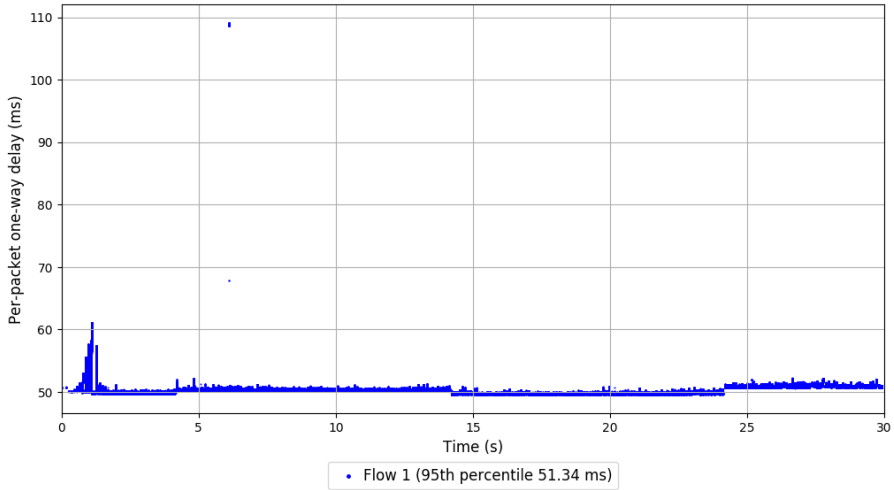
```
Run 2: Statistics of TCP Vegas

Start at: 2017-09-18 02:37:47
End at: 2017-09-18 02:38:17

# Below is generated by plot.py at 2017-09-18 07:25:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.85 Mbit/s
95th percentile per-packet one-way delay: 51.335 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 62.85 Mbit/s
95th percentile per-packet one-way delay: 51.335 ms
Loss rate: 0.32%
```

Run 2: Report of TCP Vegas — Data Link



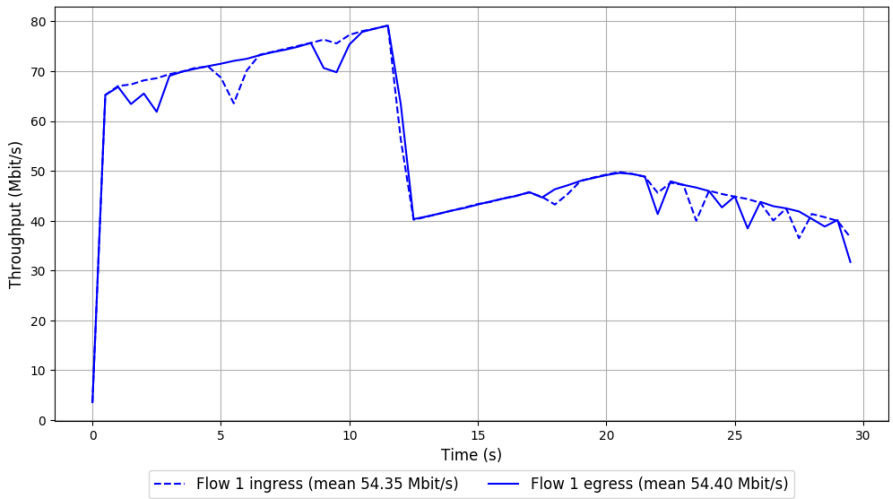


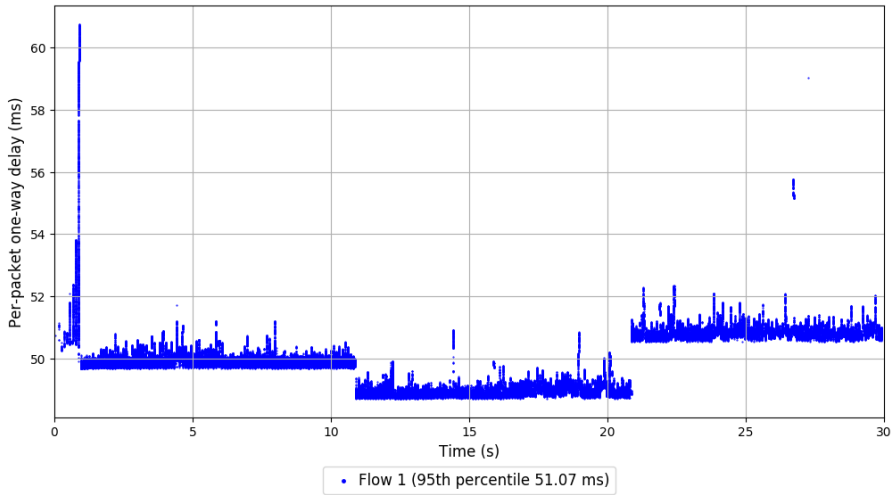
```
Run 3: Statistics of TCP Vegas

Start at: 2017-09-18 02:49:21
End at: 2017-09-18 02:49:51

# Below is generated by plot.py at 2017-09-18 07:25:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.40 Mbit/s
95th percentile per-packet one-way delay: 51.073 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 54.40 Mbit/s
95th percentile per-packet one-way delay: 51.073 ms
Loss rate: 0.24%
```

Run 3: Report of TCP Vegas — Data Link



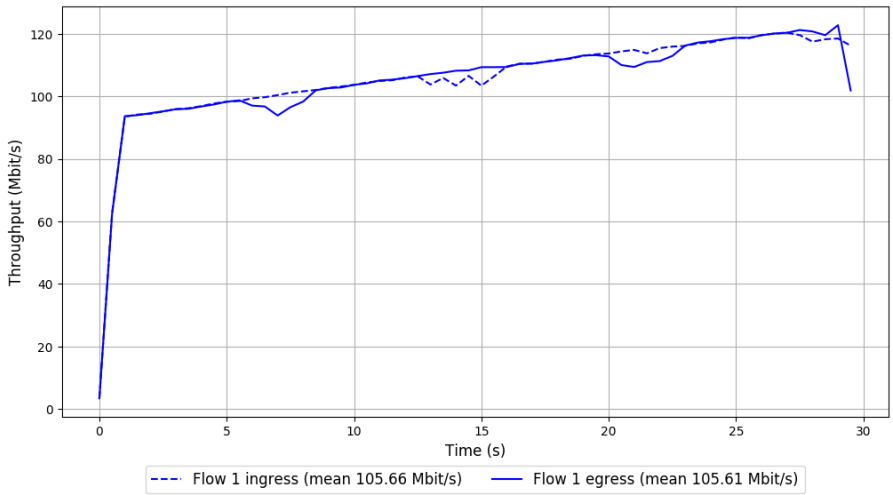


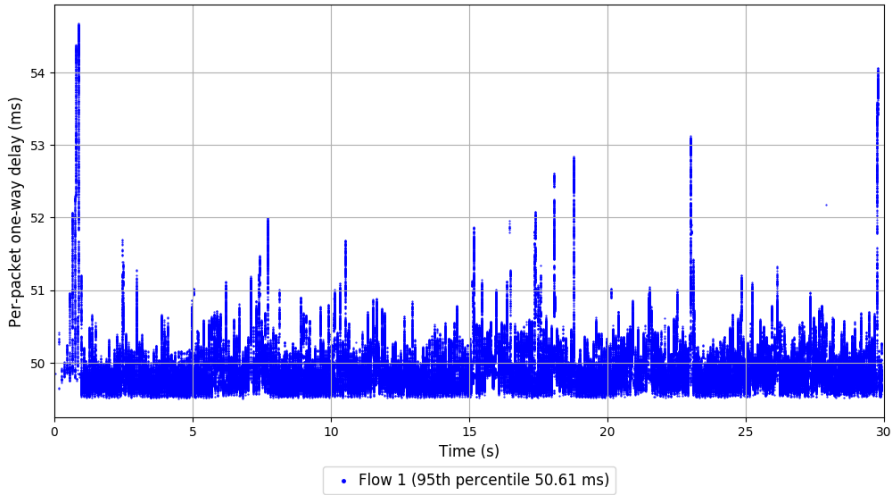
```
Run 4: Statistics of TCP Vegas

Start at: 2017-09-18 03:00:57
End at: 2017-09-18 03:01:27

# Below is generated by plot.py at 2017-09-18 07:25:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 105.61 Mbit/s
95th percentile per-packet one-way delay: 50.609 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 105.61 Mbit/s
95th percentile per-packet one-way delay: 50.609 ms
Loss rate: 0.39%
```

Run 4: Report of TCP Vegas — Data Link



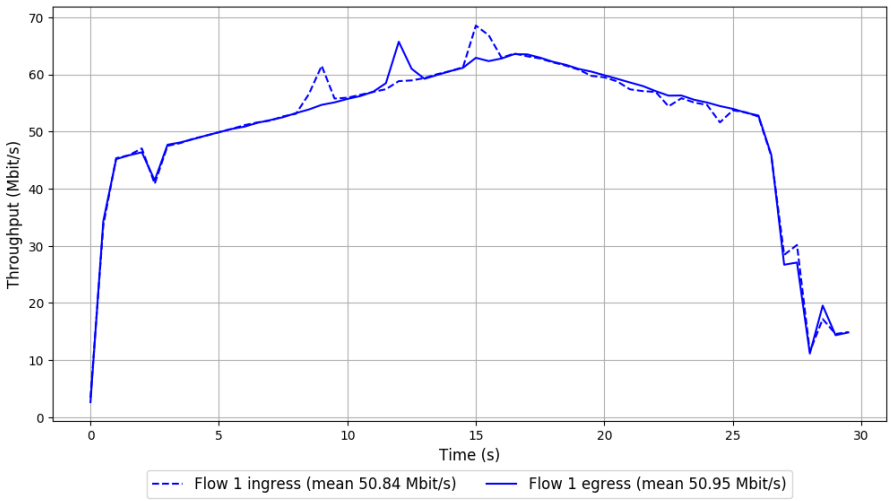


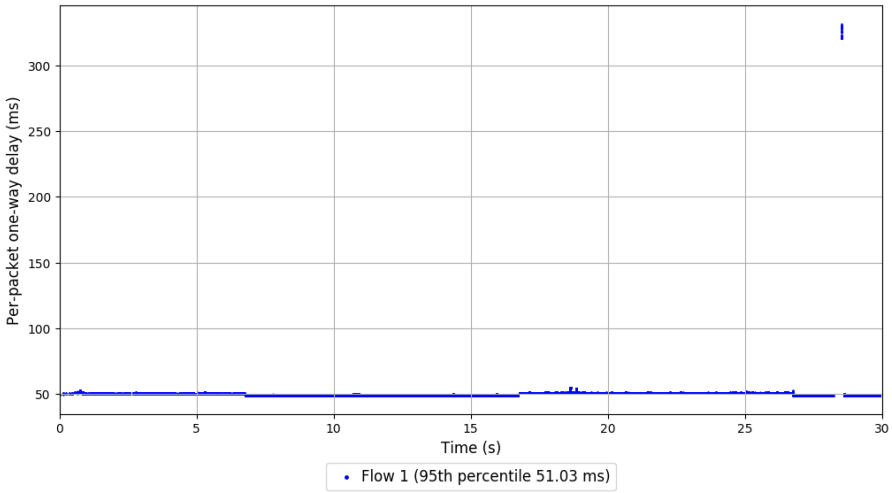
```
Run 5: Statistics of TCP Vegas

Start at: 2017-09-18 03:12:25
End at: 2017-09-18 03:12:55

# Below is generated by plot.py at 2017-09-18 07:25:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.95 Mbit/s
95th percentile per-packet one-way delay: 51.029 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 50.95 Mbit/s
95th percentile per-packet one-way delay: 51.029 ms
Loss rate: 0.12%
```

Run 5: Report of TCP Vegas — Data Link



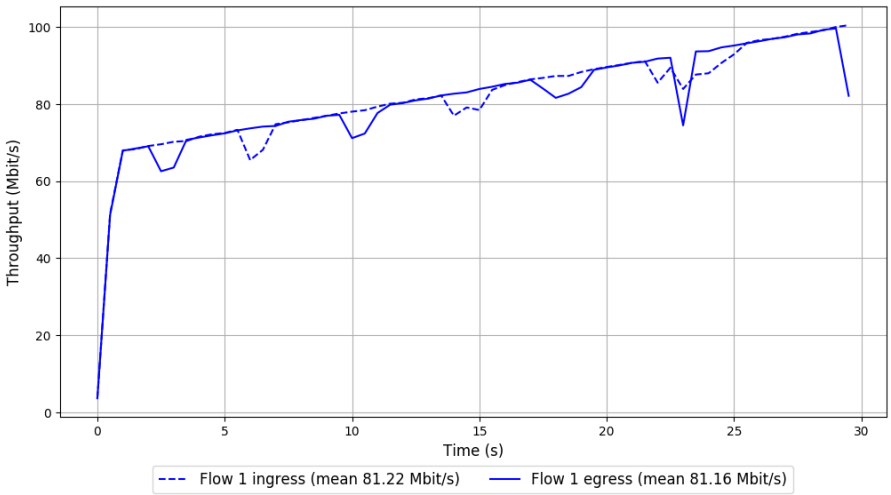


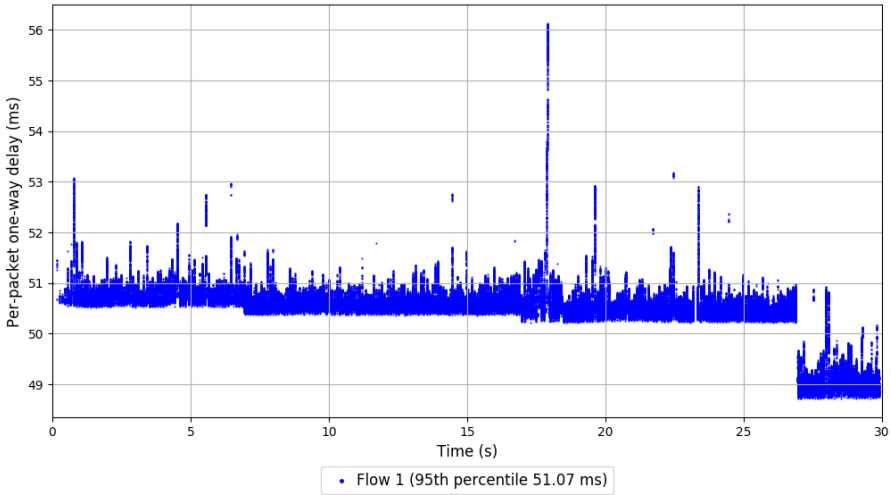
```
Run 6: Statistics of TCP Vegas

Start at: 2017-09-18 03:23:55
End at: 2017-09-18 03:24:25

# Below is generated by plot.py at 2017-09-18 07:25:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.16 Mbit/s
95th percentile per-packet one-way delay: 51.074 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 81.16 Mbit/s
95th percentile per-packet one-way delay: 51.074 ms
Loss rate: 0.41%
```

Run 6: Report of TCP Vegas — Data Link



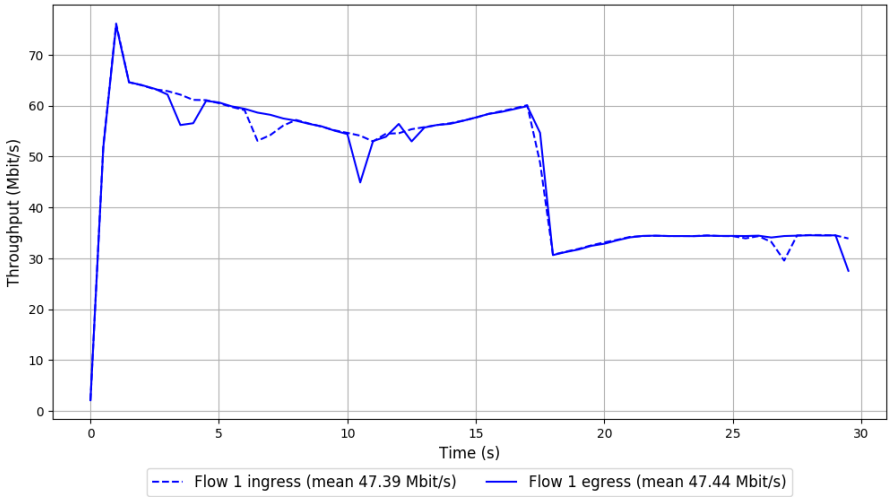


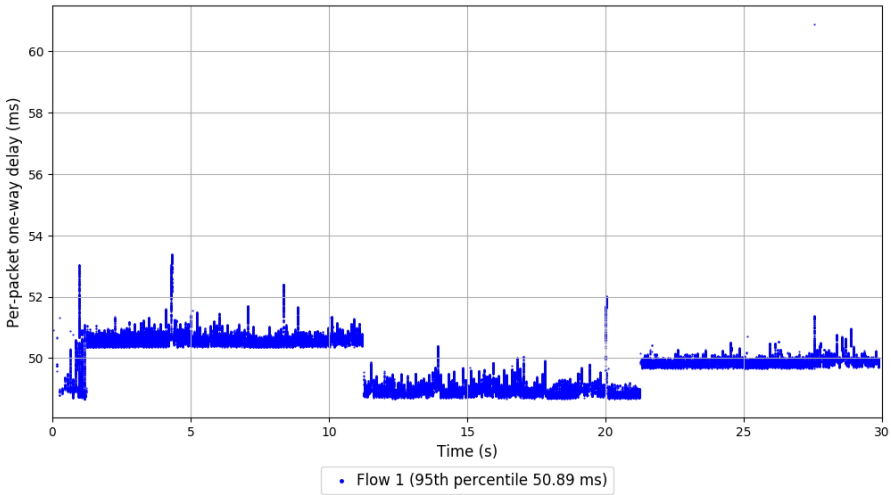
```
Run 7: Statistics of TCP Vegas

Start at: 2017-09-18 03:35:30
End at: 2017-09-18 03:36:00

# Below is generated by plot.py at 2017-09-18 07:25:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.44 Mbit/s
95th percentile per-packet one-way delay: 50.887 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 47.44 Mbit/s
95th percentile per-packet one-way delay: 50.887 ms
Loss rate: 0.24%
```

Run 7: Report of TCP Vegas — Data Link



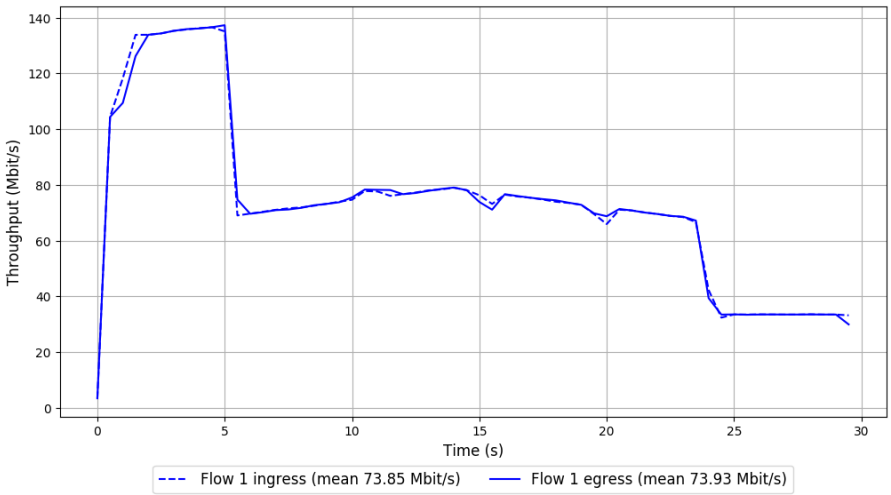


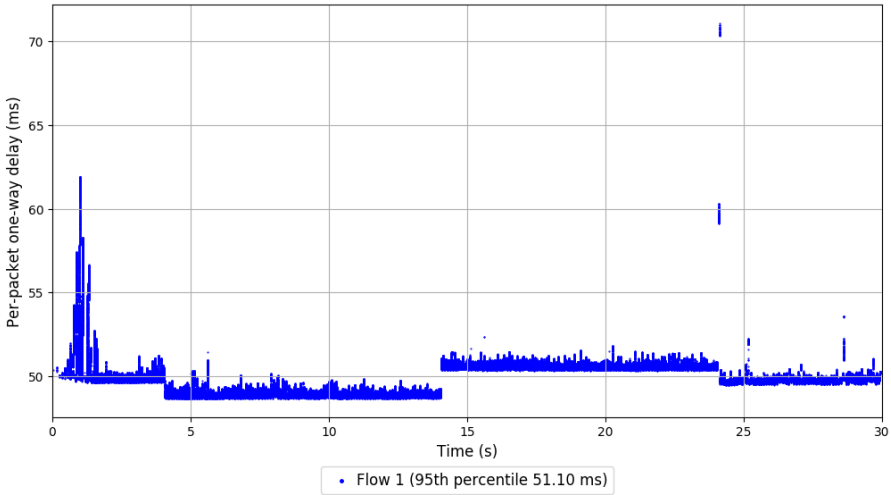
```
Run 8: Statistics of TCP Vegas

Start at: 2017-09-18 03:46:58
End at: 2017-09-18 03:47:28

# Below is generated by plot.py at 2017-09-18 07:25:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.93 Mbit/s
95th percentile per-packet one-way delay: 51.097 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 73.93 Mbit/s
95th percentile per-packet one-way delay: 51.097 ms
Loss rate: 0.23%
```

Run 8: Report of TCP Vegas — Data Link



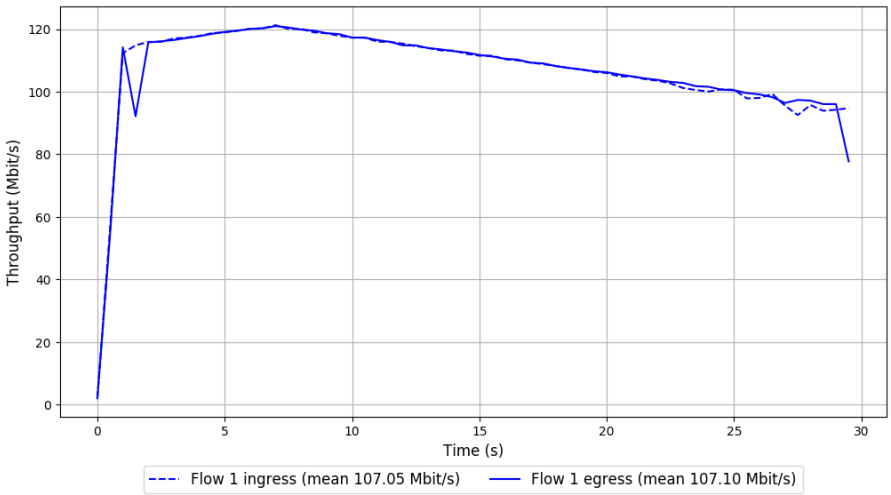


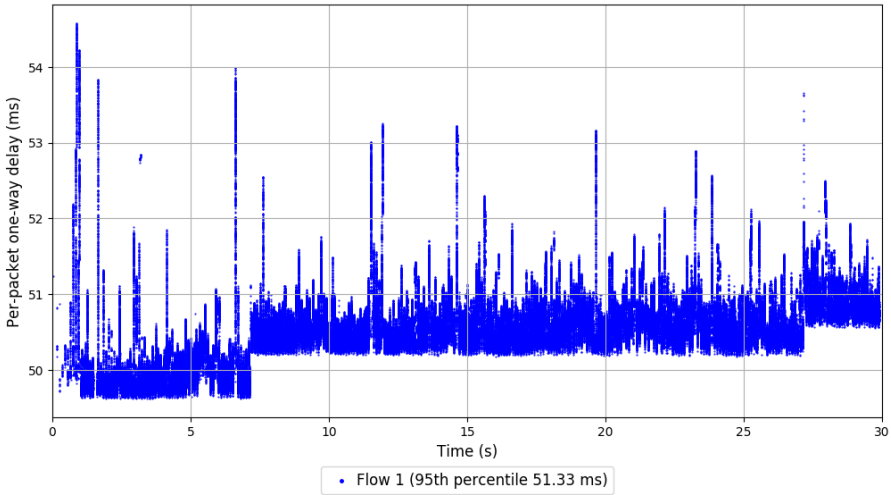
```
Run 9: Statistics of TCP Vegas

Start at: 2017-09-18 03:58:35
End at: 2017-09-18 03:59:05

# Below is generated by plot.py at 2017-09-18 07:25:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 107.10 Mbit/s
95th percentile per-packet one-way delay: 51.330 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 107.10 Mbit/s
95th percentile per-packet one-way delay: 51.330 ms
Loss rate: 0.30%
```

Run 9: Report of TCP Vegas — Data Link



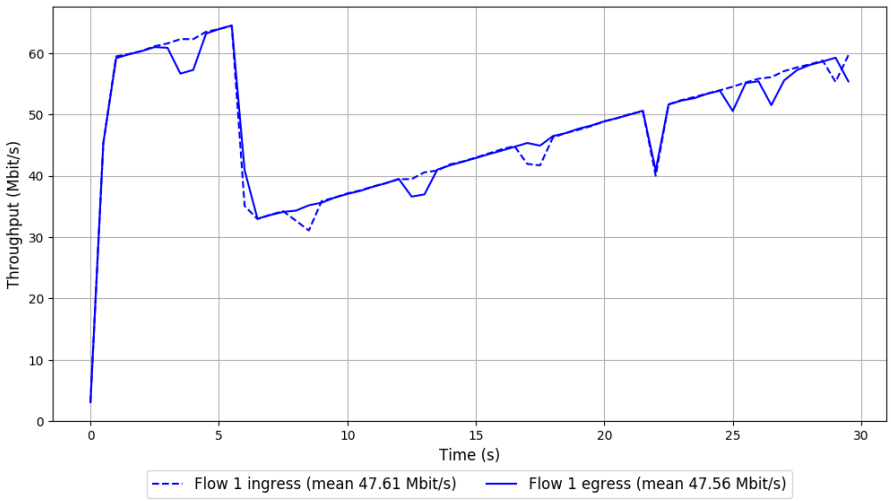


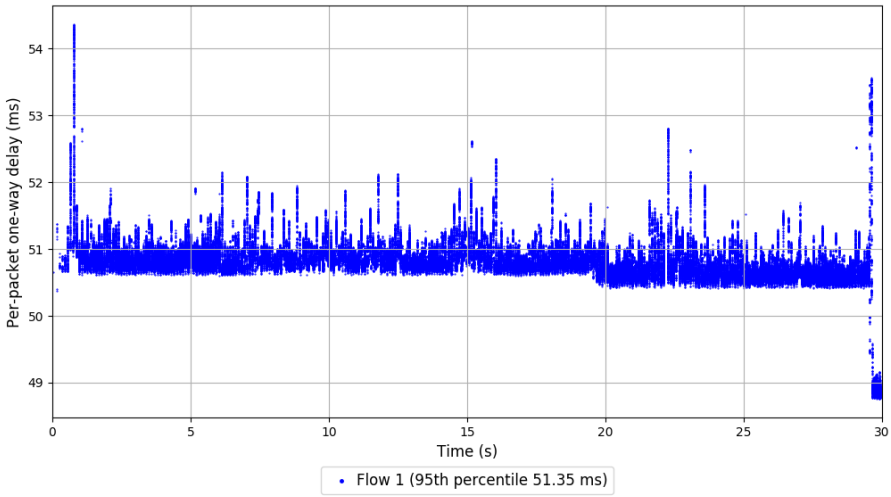
```
Run 10: Statistics of TCP Vegas

Start at: 2017-09-18 04:10:12
End at: 2017-09-18 04:10:42

# Below is generated by plot.py at 2017-09-18 07:25:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.56 Mbit/s
95th percentile per-packet one-way delay: 51.347 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 47.56 Mbit/s
95th percentile per-packet one-way delay: 51.347 ms
Loss rate: 0.43%
```

Run 10: Report of TCP Vegas — Data Link



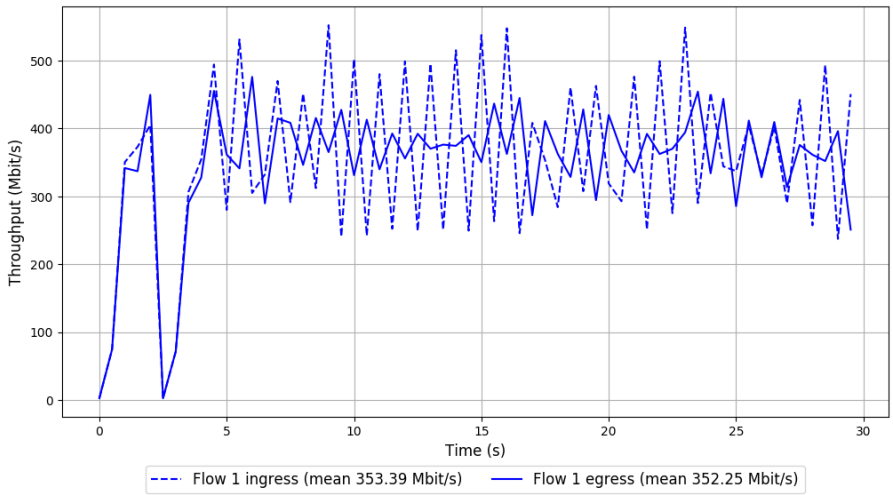


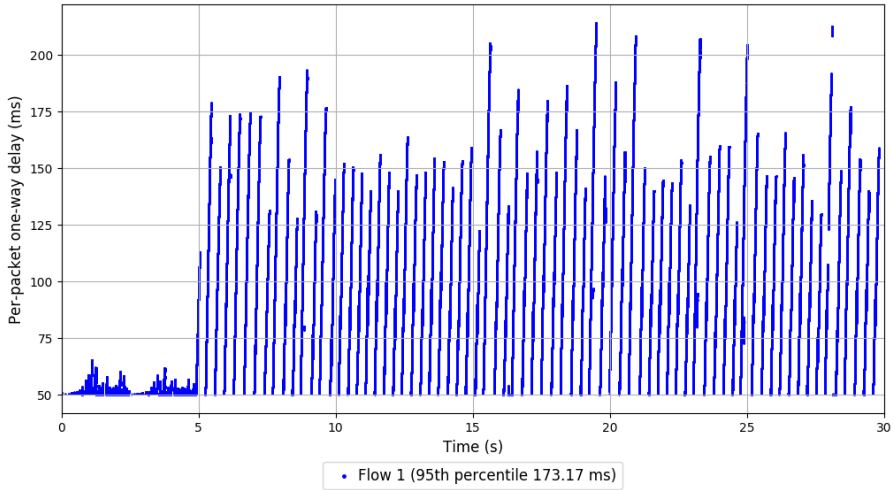
```
Run 1: Statistics of Verus

Start at: 2017-09-18 02:33:27
End at: 2017-09-18 02:33:57

# Below is generated by plot.py at 2017-09-18 07:26:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 352.25 Mbit/s
95th percentile per-packet one-way delay: 173.170 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 352.25 Mbit/s
95th percentile per-packet one-way delay: 173.170 ms
Loss rate: 1.04%
```

Run 1: Report of Verus — Data Link



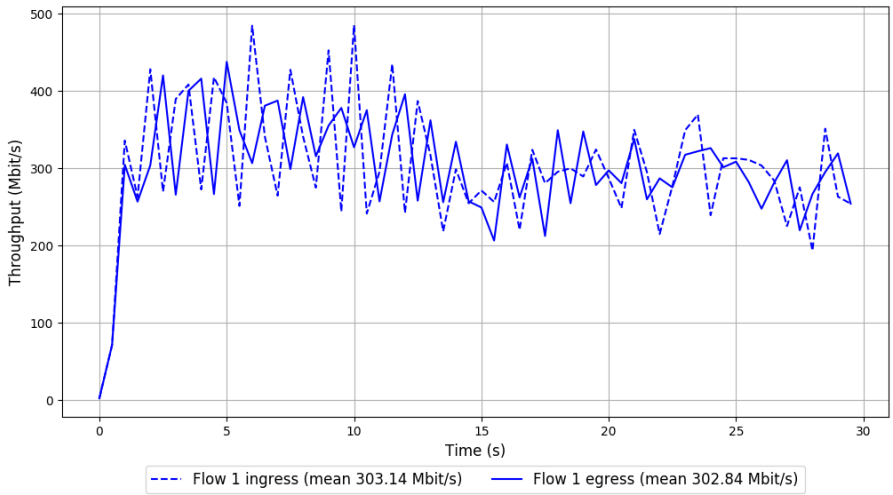


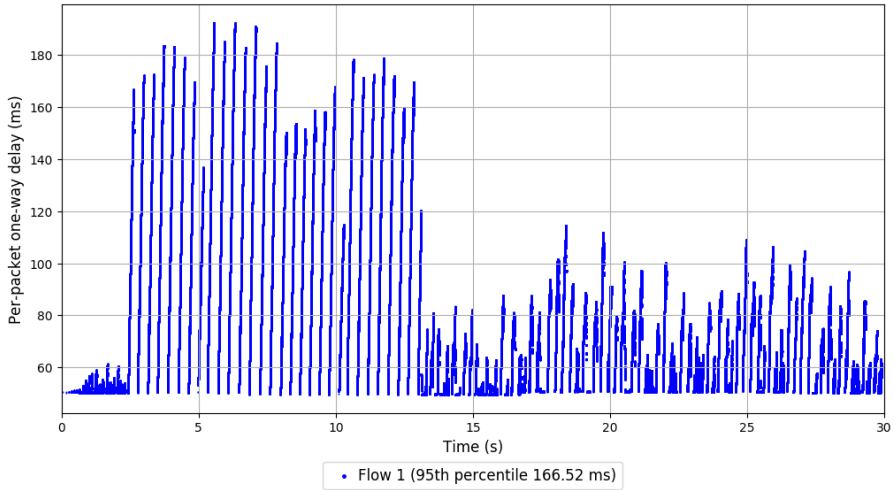
```
Run 2: Statistics of Verus

Start at: 2017-09-18 02:45:05
End at: 2017-09-18 02:45:35

# Below is generated by plot.py at 2017-09-18 07:26:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 302.84 Mbit/s
95th percentile per-packet one-way delay: 166.522 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 302.84 Mbit/s
95th percentile per-packet one-way delay: 166.522 ms
Loss rate: 0.08%
```

Run 2: Report of Verus — Data Link



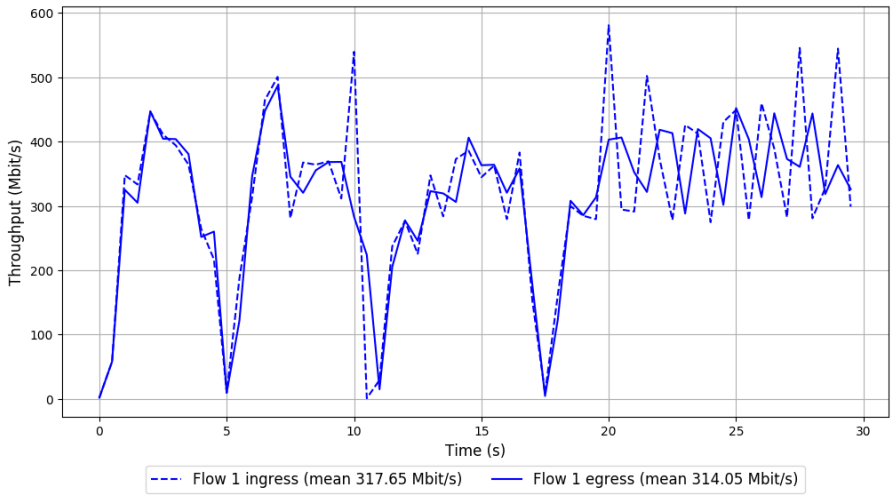


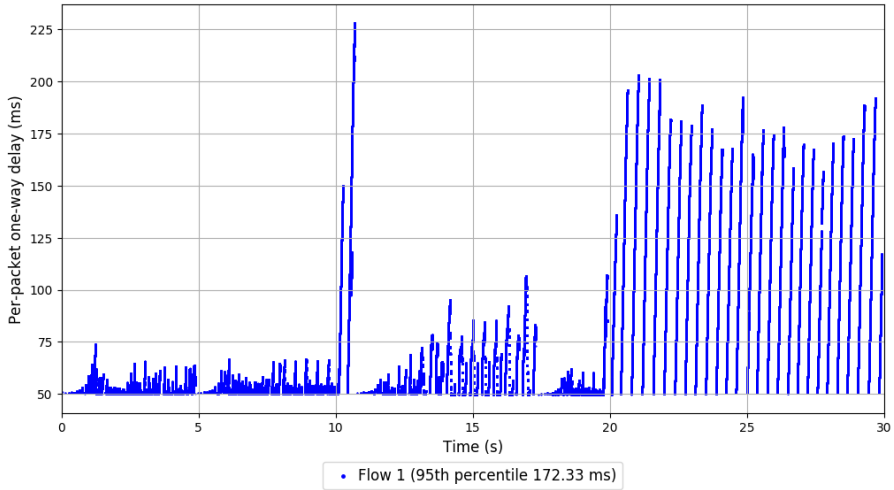
```
Run 3: Statistics of Verus

Start at: 2017-09-18 02:56:37
End at: 2017-09-18 02:57:07

# Below is generated by plot.py at 2017-09-18 07:27:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 314.05 Mbit/s
95th percentile per-packet one-way delay: 172.332 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 314.05 Mbit/s
95th percentile per-packet one-way delay: 172.332 ms
Loss rate: 1.17%
```

Run 3: Report of Verus — Data Link



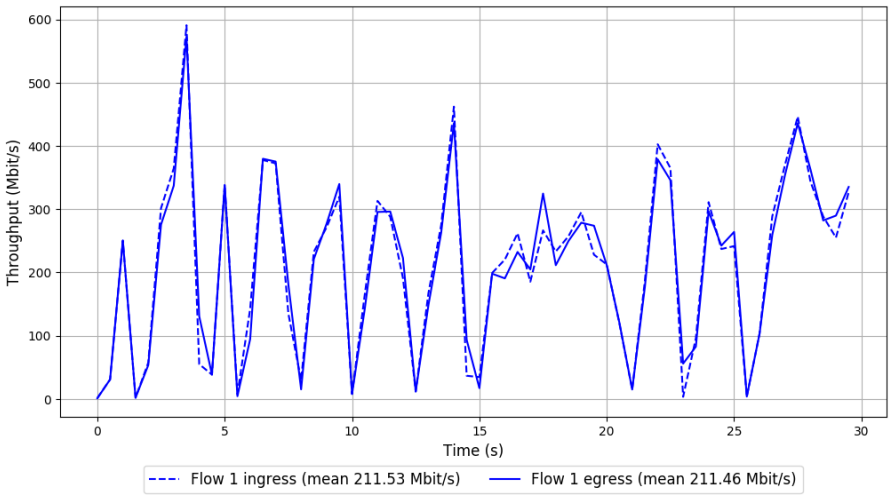


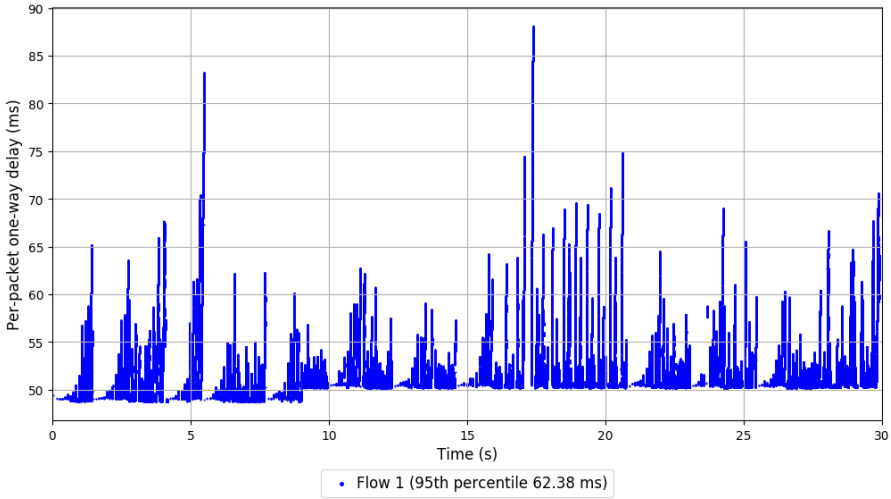
```
Run 4: Statistics of Verus

Start at: 2017-09-18 03:08:13
End at: 2017-09-18 03:08:43

# Below is generated by plot.py at 2017-09-18 07:27:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.46 Mbit/s
95th percentile per-packet one-way delay: 62.383 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 211.46 Mbit/s
95th percentile per-packet one-way delay: 62.383 ms
Loss rate: 0.00%
```

Run 4: Report of Verus — Data Link



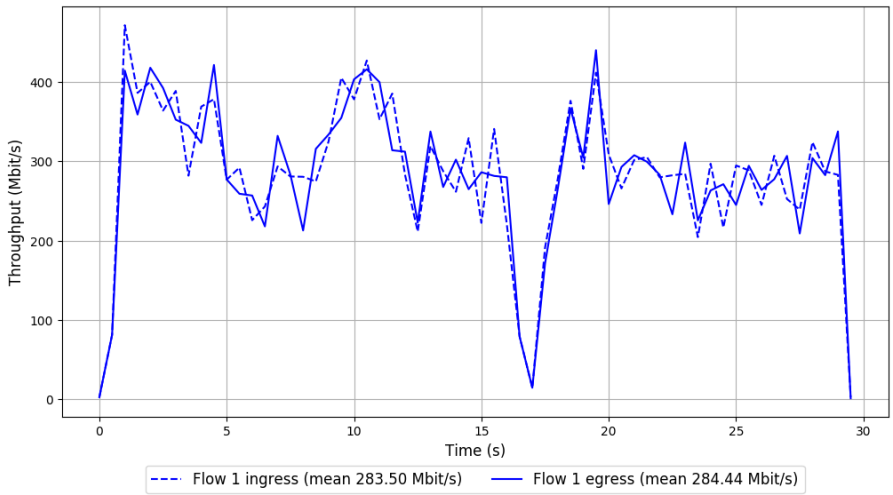


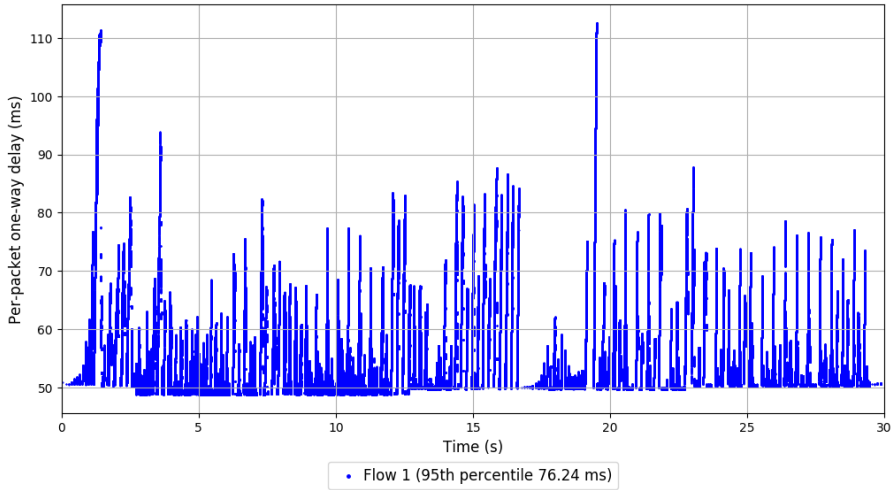
```
Run 5: Statistics of Verus

Start at: 2017-09-18 03:19:39
End at: 2017-09-18 03:20:09

# Below is generated by plot.py at 2017-09-18 07:29:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 284.44 Mbit/s
95th percentile per-packet one-way delay: 76.239 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 284.44 Mbit/s
95th percentile per-packet one-way delay: 76.239 ms
Loss rate: 0.01%
```

Run 5: Report of Verus — Data Link



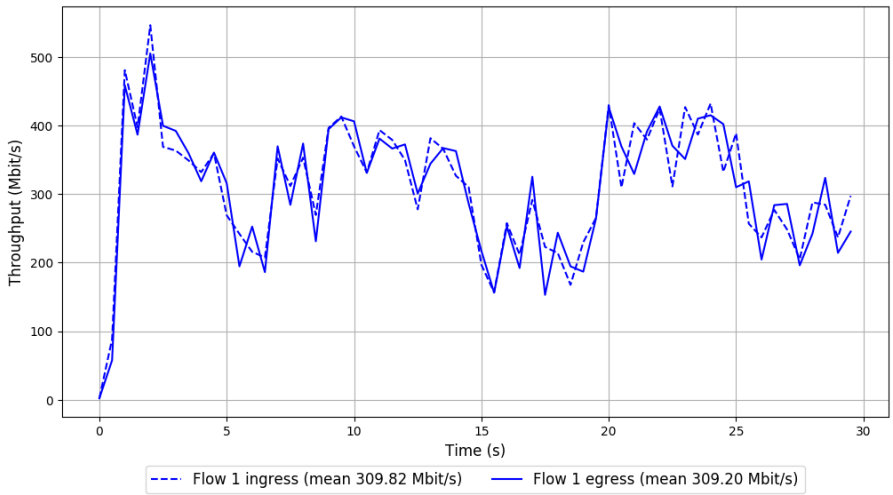


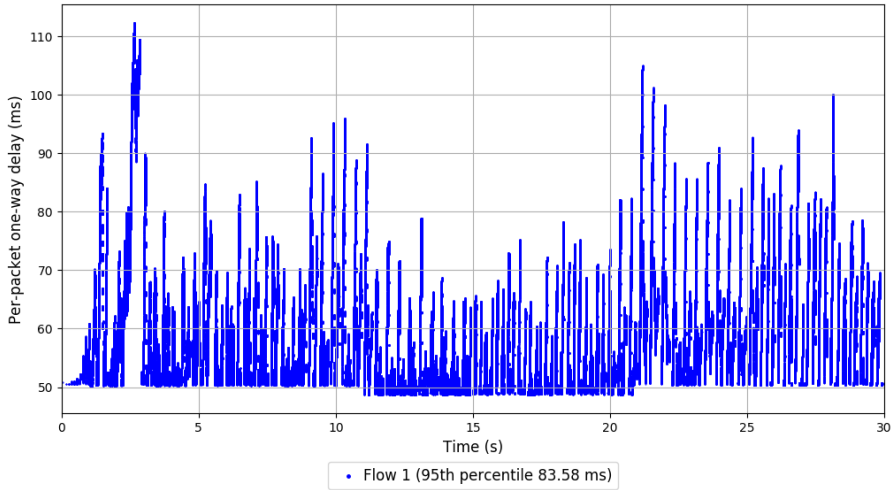
```
Run 6: Statistics of Verus

Start at: 2017-09-18 03:31:11
End at: 2017-09-18 03:31:41

# Below is generated by plot.py at 2017-09-18 07:29:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 309.20 Mbit/s
95th percentile per-packet one-way delay: 83.577 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 309.20 Mbit/s
95th percentile per-packet one-way delay: 83.577 ms
Loss rate: 0.52%
```

Run 6: Report of Verus — Data Link



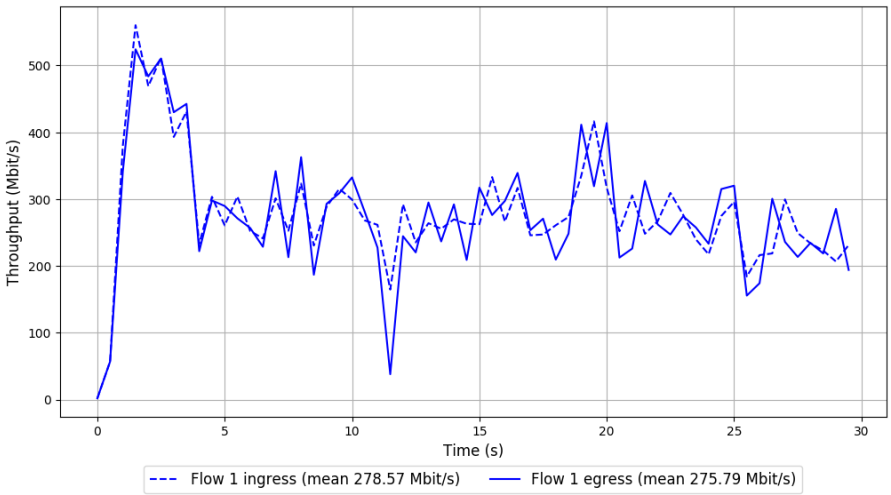


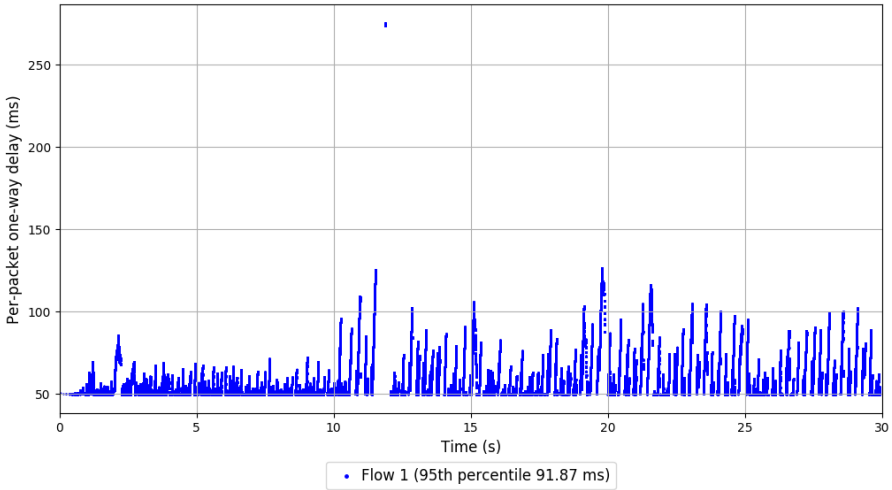
```
Run 7: Statistics of Verus

Start at: 2017-09-18 03:42:41
End at: 2017-09-18 03:43:12

# Below is generated by plot.py at 2017-09-18 07:29:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 275.79 Mbit/s
95th percentile per-packet one-way delay: 91.872 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 275.79 Mbit/s
95th percentile per-packet one-way delay: 91.872 ms
Loss rate: 1.33%
```

Run 7: Report of Verus — Data Link



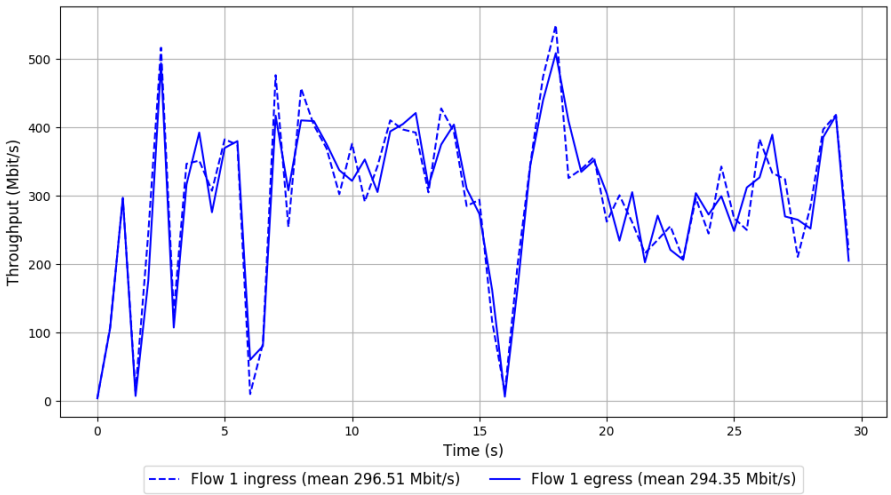


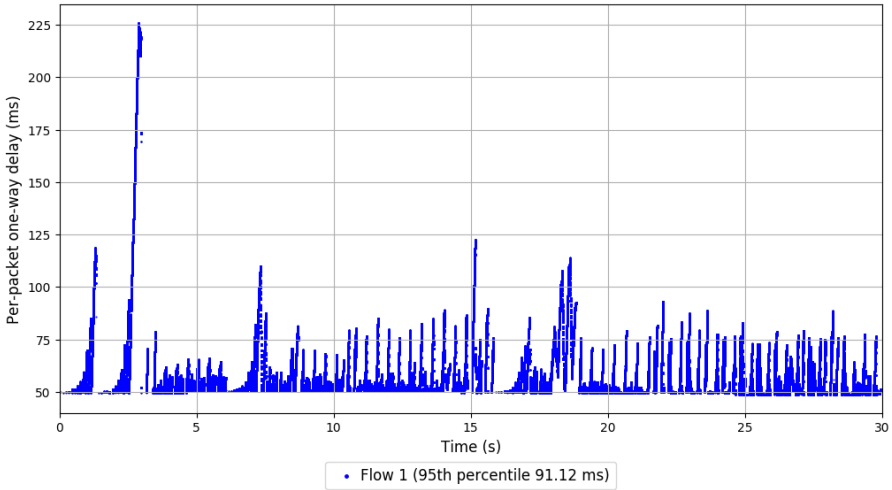
```
Run 8: Statistics of Verus

Start at: 2017-09-18 03:54:17
End at: 2017-09-18 03:54:47

# Below is generated by plot.py at 2017-09-18 07:29:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 294.35 Mbit/s
95th percentile per-packet one-way delay: 91.121 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 294.35 Mbit/s
95th percentile per-packet one-way delay: 91.121 ms
Loss rate: 0.90%
```

Run 8: Report of Verus — Data Link



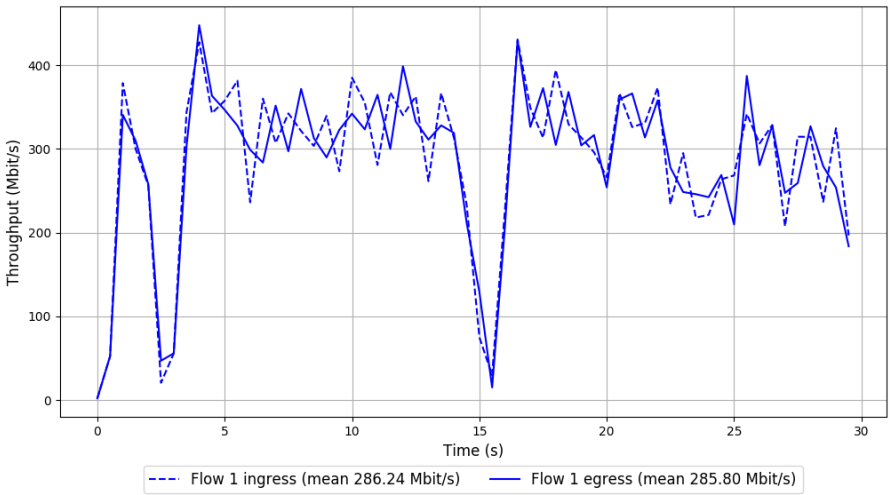


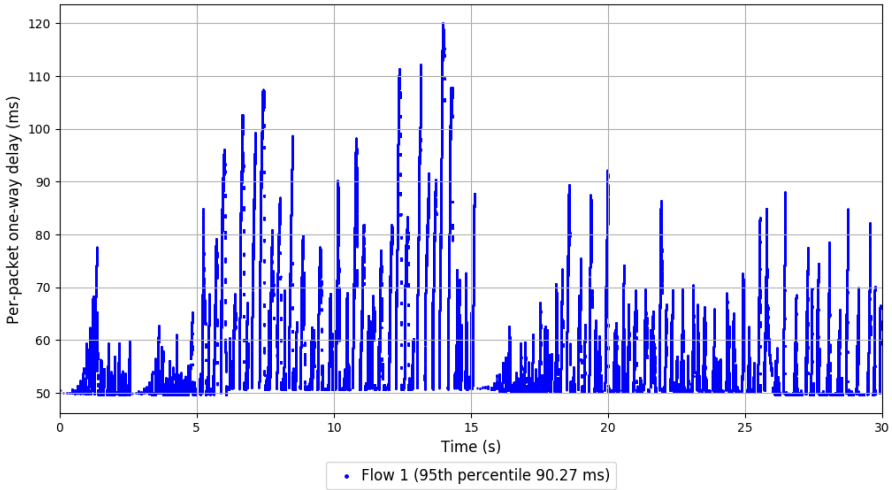
```
Run 9: Statistics of Verus

Start at: 2017-09-18 04:05:56
End at: 2017-09-18 04:06:26

# Below is generated by plot.py at 2017-09-18 07:29:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 285.80 Mbit/s
95th percentile per-packet one-way delay: 90.267 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 285.80 Mbit/s
95th percentile per-packet one-way delay: 90.267 ms
Loss rate: 0.49%
```

Run 9: Report of Verus — Data Link



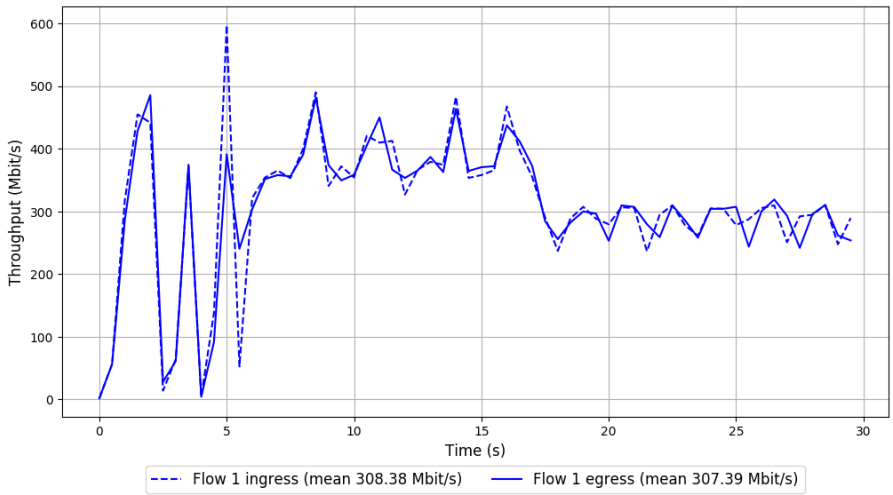


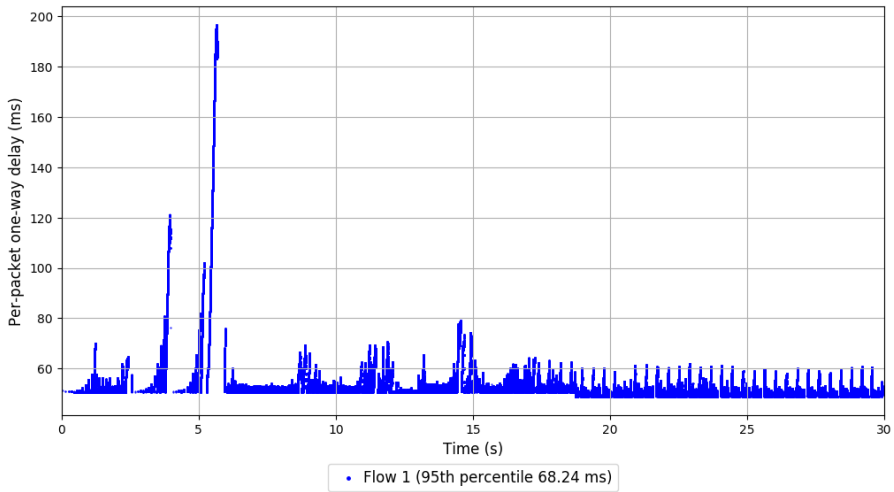
```
Run 10: Statistics of Verus

Start at: 2017-09-18 04:17:23
End at: 2017-09-18 04:17:53

# Below is generated by plot.py at 2017-09-18 07:29:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 307.39 Mbit/s
95th percentile per-packet one-way delay: 68.239 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 307.39 Mbit/s
95th percentile per-packet one-way delay: 68.239 ms
Loss rate: 0.65%
```

Run 10: Report of Verus — Data Link



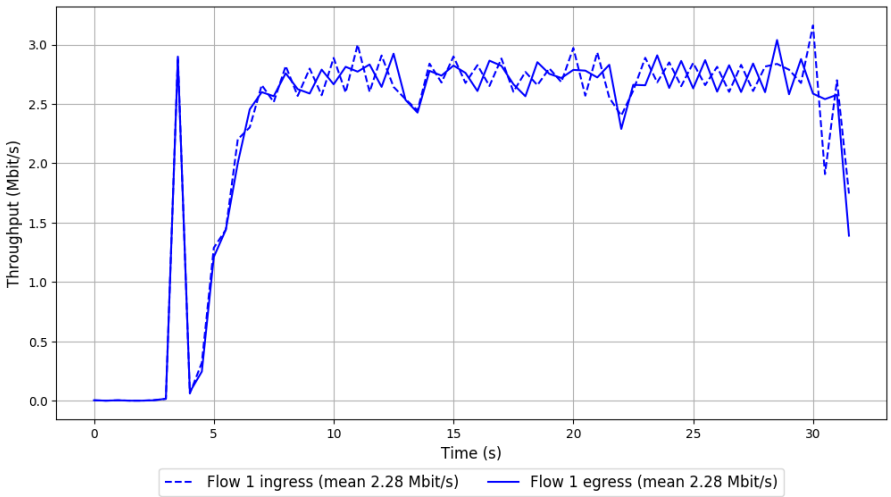


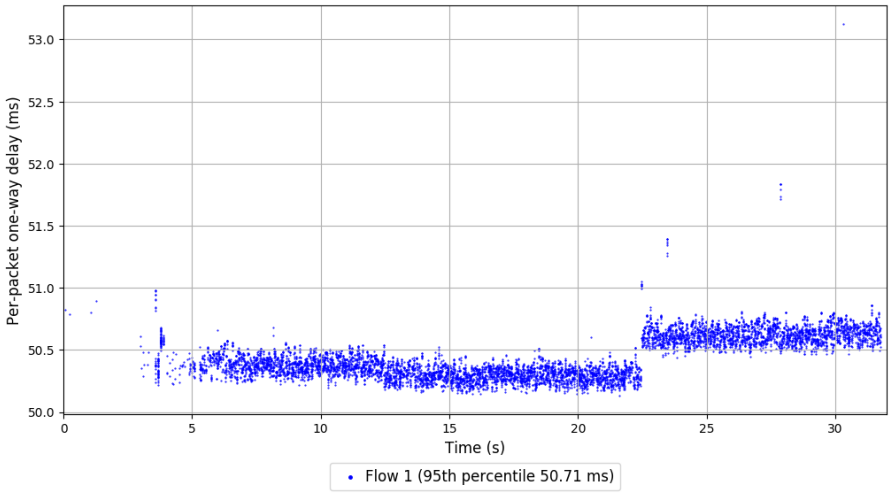
```
Run 1: Statistics of WebRTC media

Start at: 2017-09-18 02:31:41
End at: 2017-09-18 02:32:11

# Below is generated by plot.py at 2017-09-18 07:29:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.707 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.707 ms
Loss rate: 0.45%
```

Run 1: Report of WebRTC media — Data Link



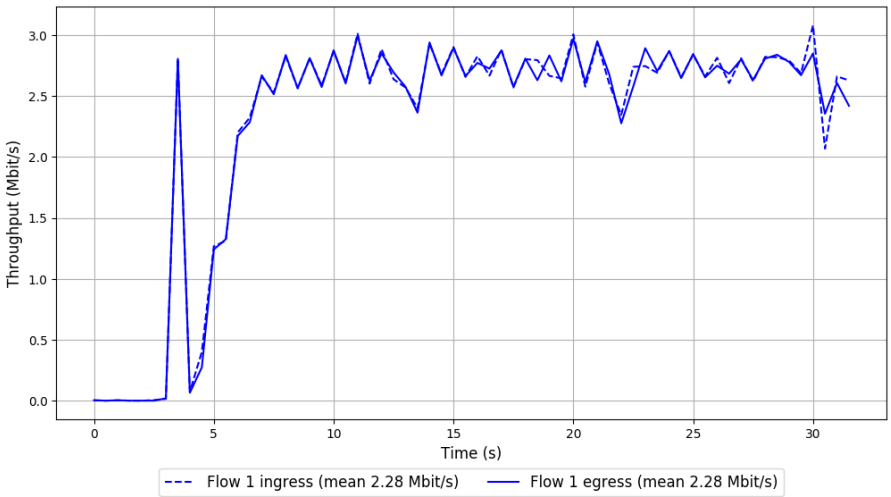


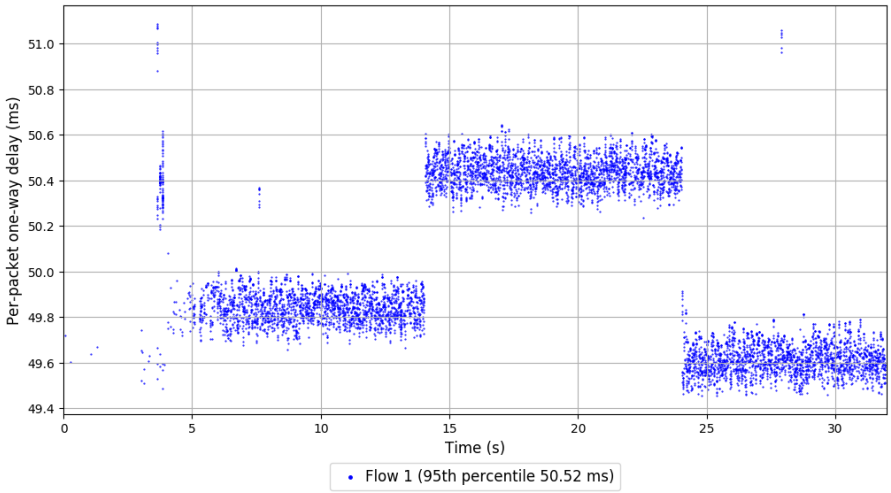
```
Run 2: Statistics of WebRTC media

Start at: 2017-09-18 02:43:20
End at: 2017-09-18 02:43:50

# Below is generated by plot.py at 2017-09-18 07:29:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.523 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.523 ms
Loss rate: 0.30%
```

Run 2: Report of WebRTC media — Data Link



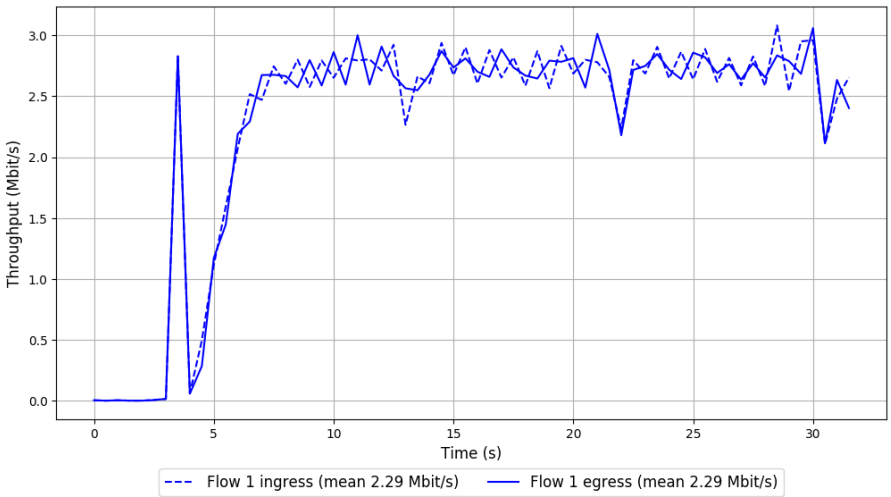


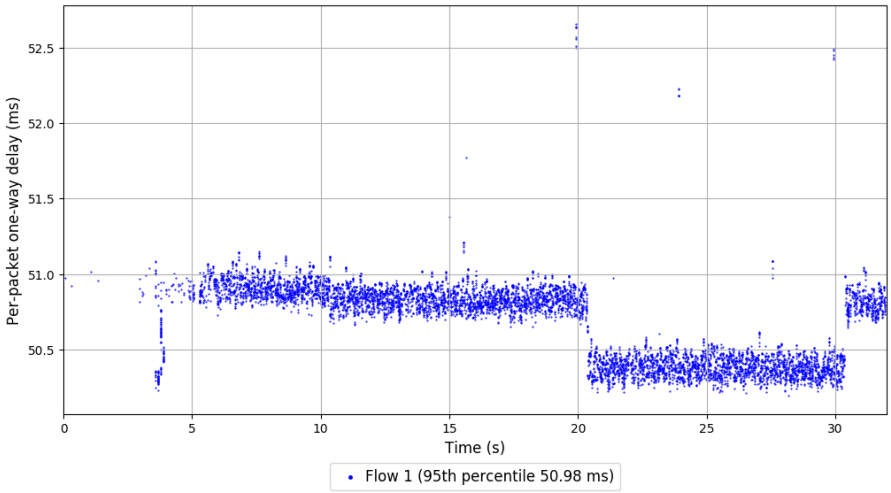
```
Run 3: Statistics of WebRTC media

Start at: 2017-09-18 02:54:53
End at: 2017-09-18 02:55:23

# Below is generated by plot.py at 2017-09-18 07:29:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.978 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.978 ms
Loss rate: 0.32%
```

Run 3: Report of WebRTC media — Data Link



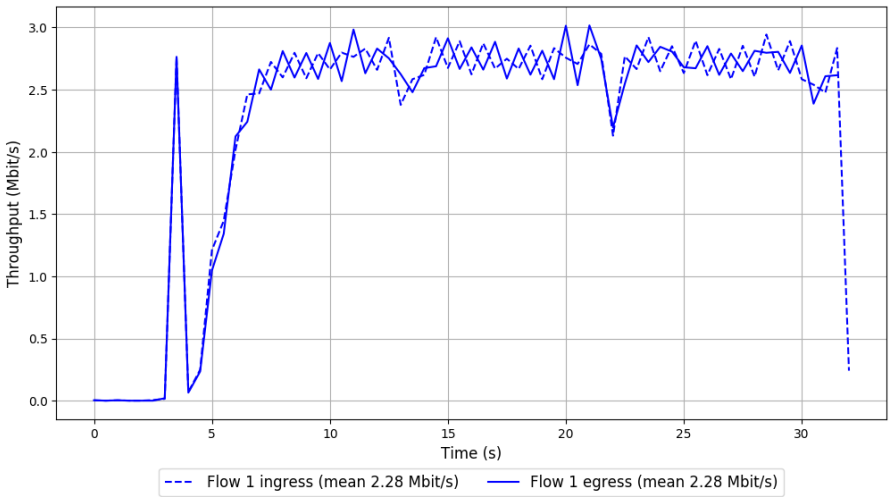


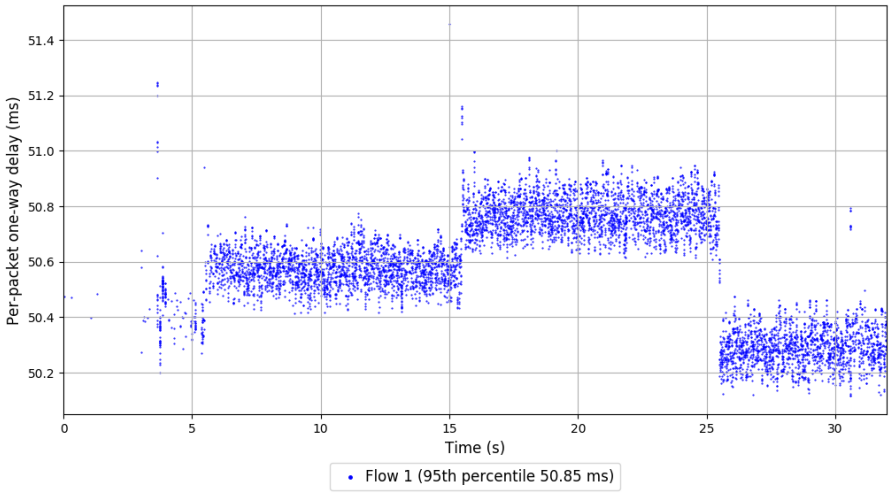
```
Run 4: Statistics of WebRTC media

Start at: 2017-09-18 03:06:28
End at: 2017-09-18 03:06:58

# Below is generated by plot.py at 2017-09-18 07:29:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.855 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.855 ms
Loss rate: 0.47%
```

Run 4: Report of WebRTC media — Data Link



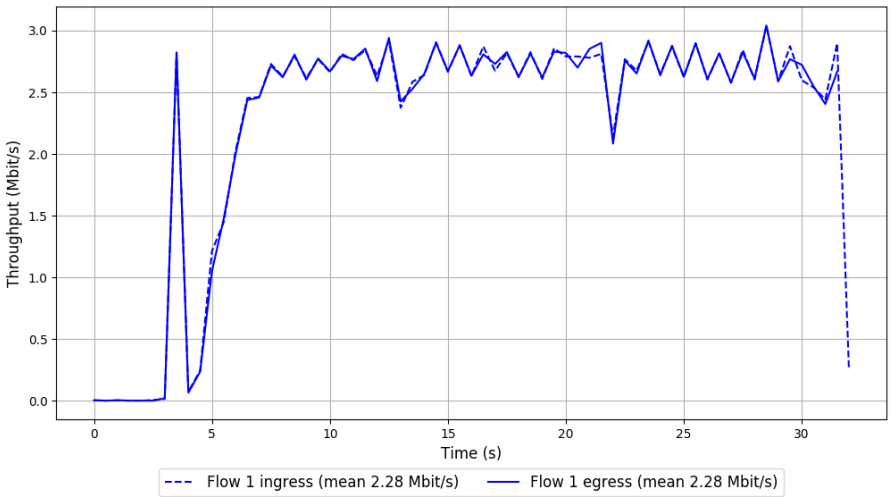


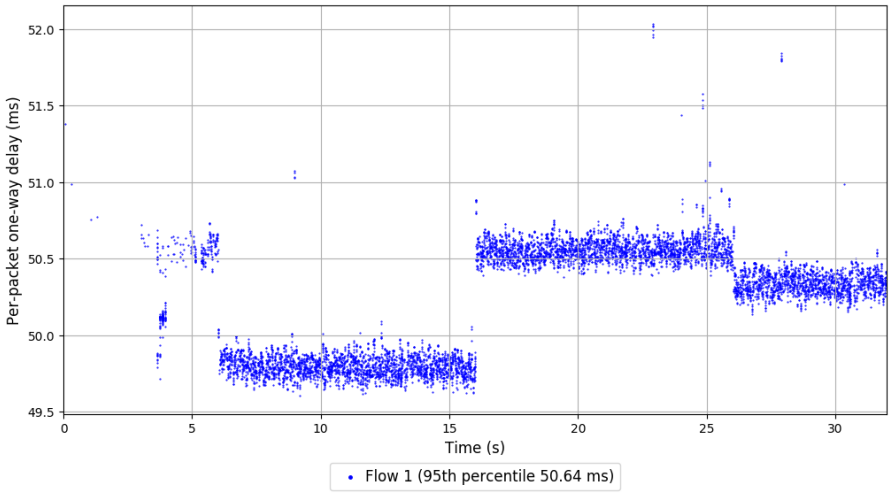
```
Run 5: Statistics of WebRTC media

Start at: 2017-09-18 03:17:58
End at: 2017-09-18 03:18:28

# Below is generated by plot.py at 2017-09-18 07:29:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.643 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.643 ms
Loss rate: 0.48%
```

Run 5: Report of WebRTC media — Data Link



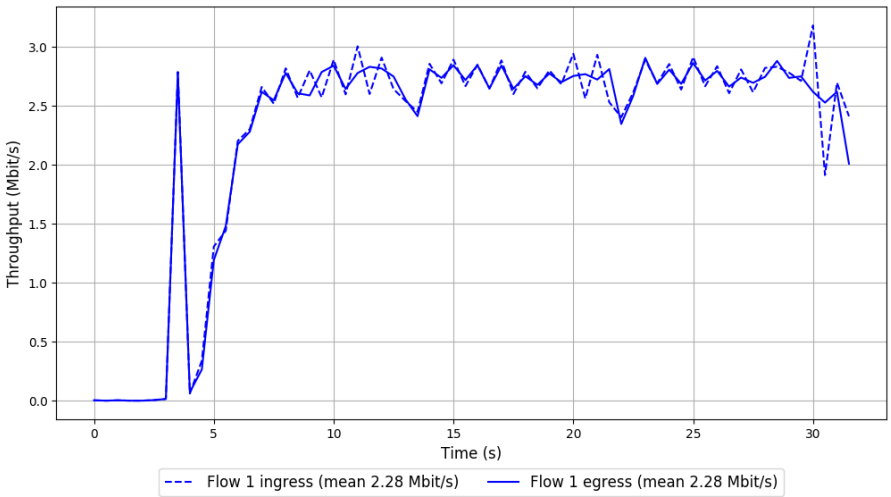


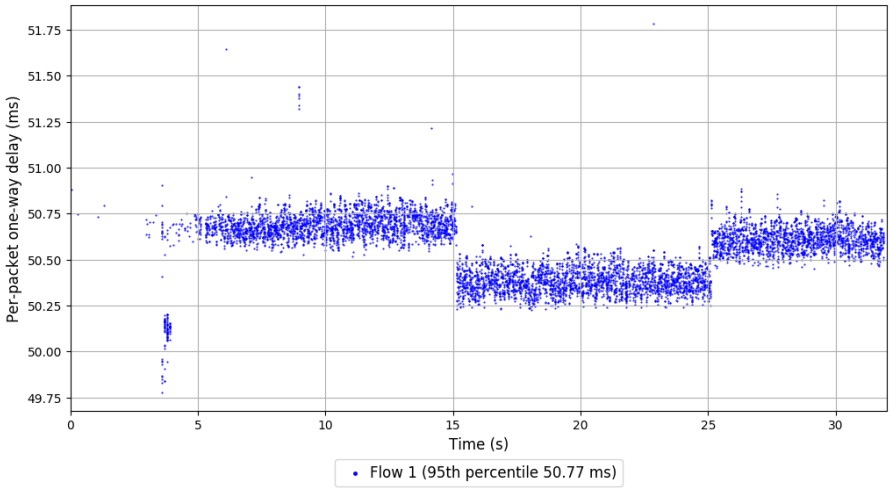
```
Run 6: Statistics of WebRTC media

Start at: 2017-09-18 03:29:28
End at: 2017-09-18 03:29:58

# Below is generated by plot.py at 2017-09-18 07:29:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.767 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.767 ms
Loss rate: 0.45%
```

Run 6: Report of WebRTC media — Data Link



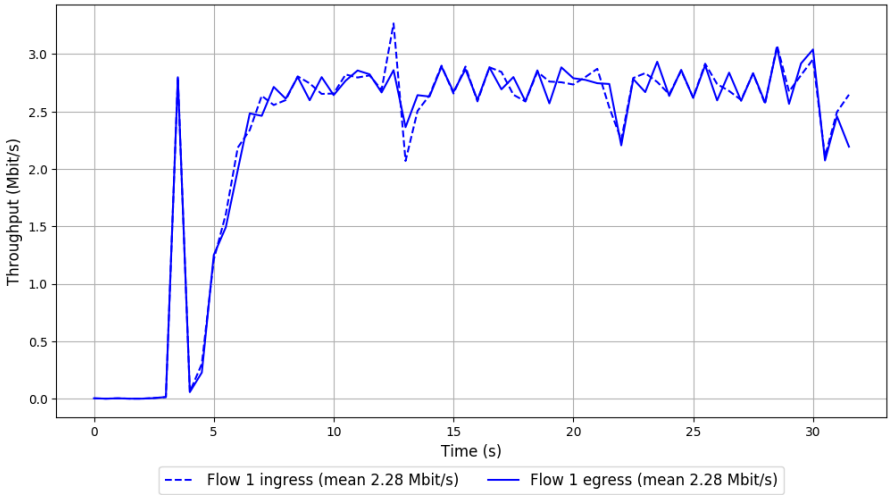


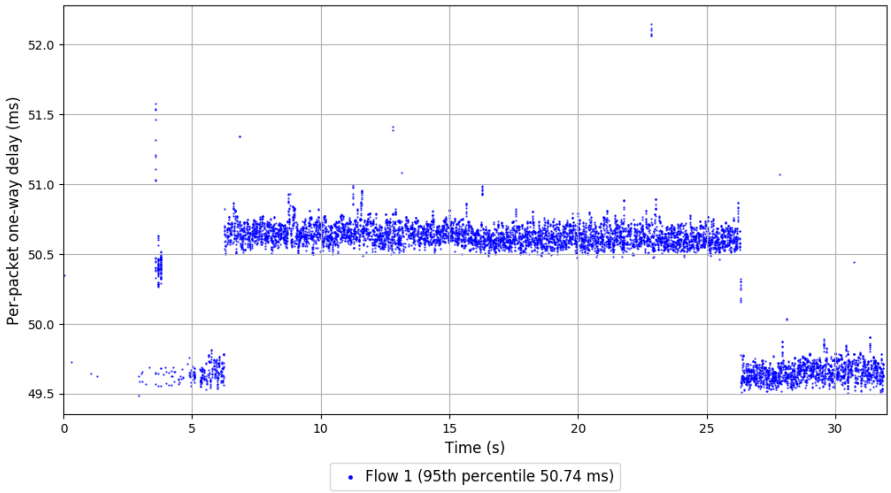
```
Run 7: Statistics of WebRTC media

Start at: 2017-09-18 03:40:57
End at: 2017-09-18 03:41:27

# Below is generated by plot.py at 2017-09-18 07:29:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.743 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.743 ms
Loss rate: 0.46%
```

Run 7: Report of WebRTC media — Data Link



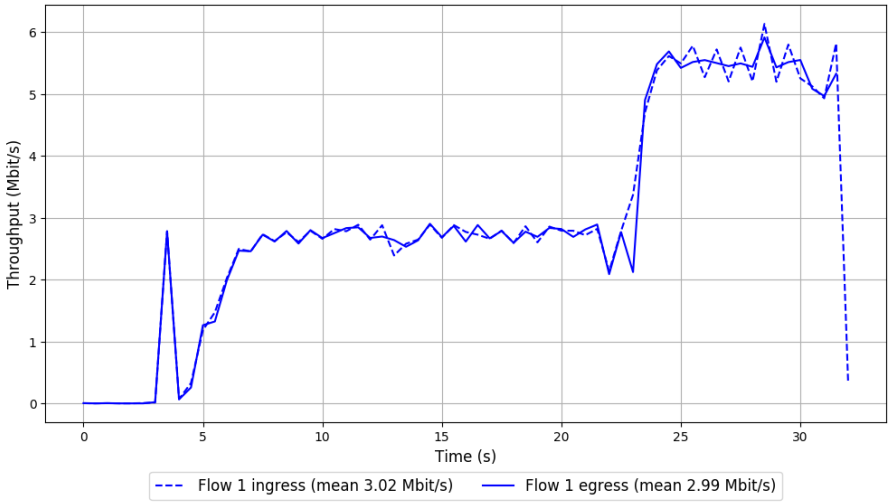


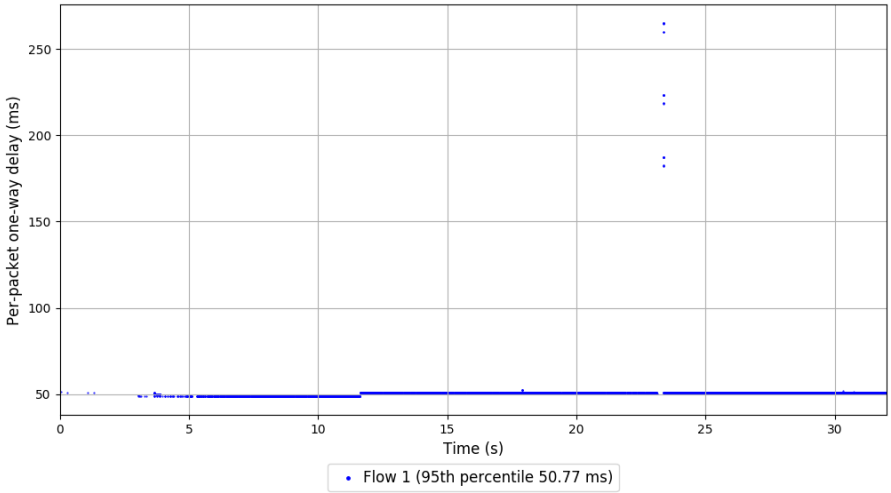
```
Run 8: Statistics of WebRTC media

Start at: 2017-09-18 03:52:32
End at: 2017-09-18 03:53:02

# Below is generated by plot.py at 2017-09-18 07:29:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.99 Mbit/s
95th percentile per-packet one-way delay: 50.773 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 2.99 Mbit/s
95th percentile per-packet one-way delay: 50.773 ms
Loss rate: 1.02%
```

Run 8: Report of WebRTC media — Data Link



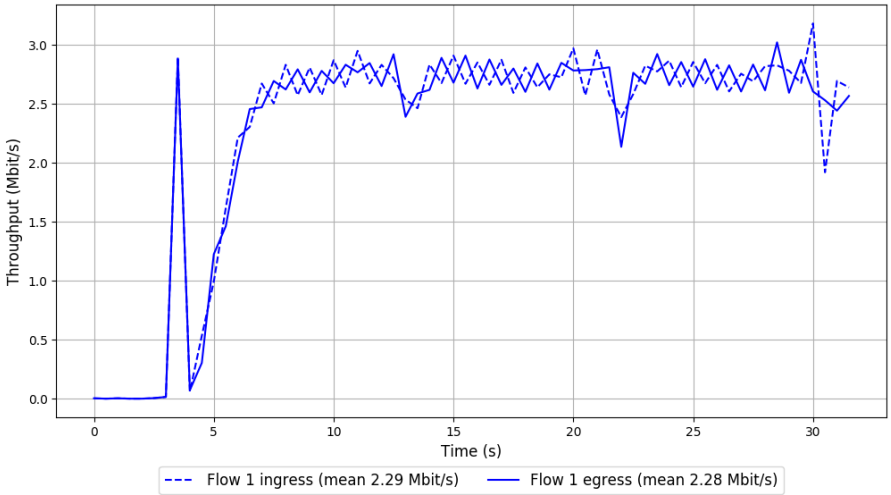


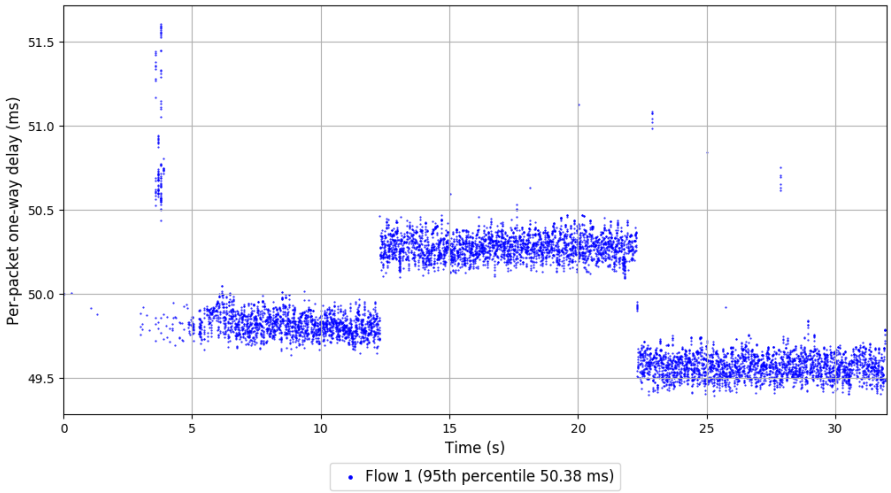
```
Run 9: Statistics of WebRTC media

Start at: 2017-09-18 04:04:11
End at: 2017-09-18 04:04:41

# Below is generated by plot.py at 2017-09-18 07:29:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.377 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.377 ms
Loss rate: 0.35%
```

Run 9: Report of WebRTC media — Data Link





```
Run 10: Statistics of WebRTC media

Start at: 2017-09-18 04:15:41
End at: 2017-09-18 04:16:11

# Below is generated by plot.py at 2017-09-18 07:29:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.456 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 50.456 ms
Loss rate: 0.45%
```

Run 10: Report of WebRTC media — Data Link