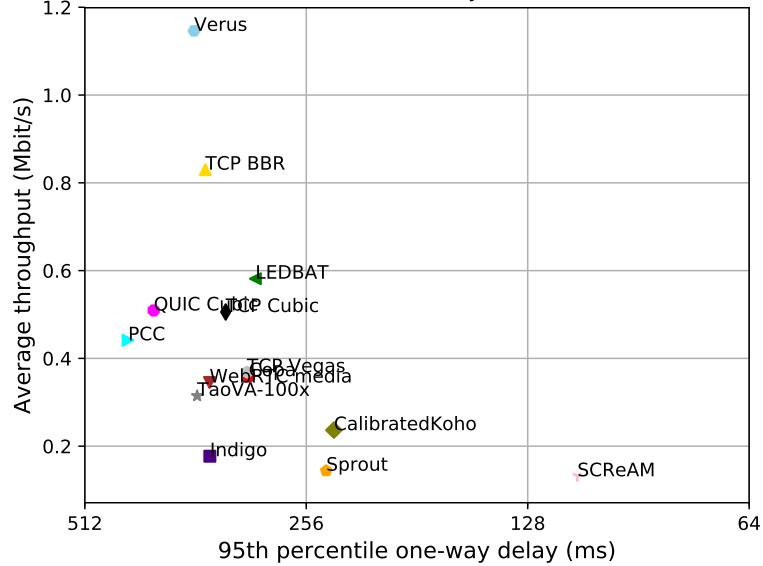


## Pantheon Report

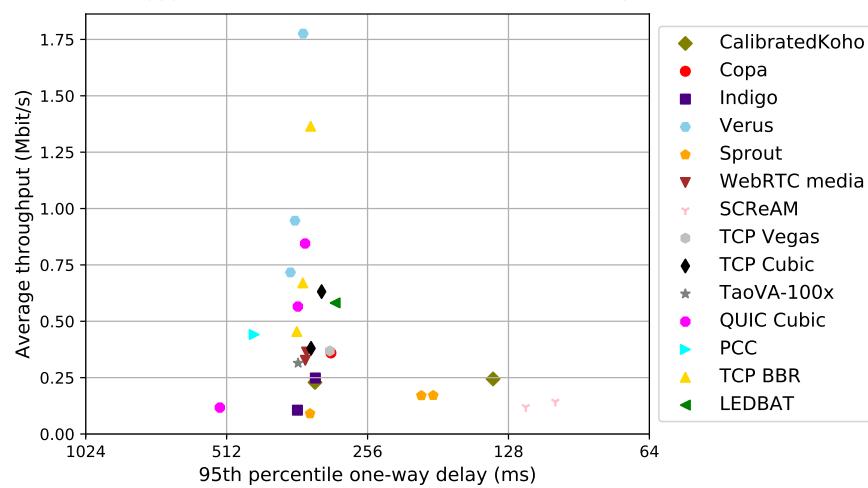
Generated at 2017-10-12 19:26:08 (UTC).  
Data path: India ppp0 (*remote*) → AWS India 1 Ethernet (*local*).  
Repeated the test of 14 congestion control schemes 3 times.  
Each test lasted for 30 seconds running 1 flow.  
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).  
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo\_fast**).  
NTP offsets were measured against **nets.org.sg** and have been applied to correct the timestamps in logs.

Git summary:  
branch: **indigos** @ 45998d6404be7c5106956530acb9cfc43bd06e7d  
**third\_party/calibrated\_koho** @ 3cb73c0d1c0322cdfae446ea37a522e53227db50  
M **datagrump/sender.cc**  
**third\_party/genericCC** @ f7ca42f251bf49b432bb71de6d13fa903515c366  
**third\_party/indigo** @ b19f3730105f9aa95452552af924e3719b03cc55  
**third\_party/indigo-cellular** @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2  
**third\_party/indigo-no-calib** @ 7224f2202e8a044d8306fa0b983ad84360c53d89  
**third\_party/indigo-no-cwnd** @ 3e58442c04028a11d7b02456e137604633ba2d6c  
**third\_party/indigo-no-delivery-rate** @ 57caa40858b964906edff4876d5a7e5bfff666c5  
**third\_party/indigo-no-queuing-delay** @ 03455460fd1a8ffbdad86fabb936fdca204b80db  
**third\_party/indigo-no-send-rate** @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda  
**third\_party/koho\_cc** @ f0f2e693303aee82ea808e6928eac4f1083a6681  
M **datagrump/sender.cc**  
**third\_party/libutp** @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
**third\_party/pantheon-tunnel** @ baf443516dea3eeddeccaf9b916cc313273ca4f4  
**third\_party/pcc** @ 1afc958fa0d66d18b623c091a55fec872b4981e1  
M **receiver/src/buffer.h**  
M **receiver/src/core.cpp**  
M **sender/src/buffer.h**  
M **sender/src/core.cpp**  
**third\_party/proto-quic** @ 77961f1a82733a86b42f1bc8143ebc978f3cff42  
**third\_party/scream** @ c3370fd7bd17265a79aeb34e4016ad23f5965885  
**third\_party/sourdough** @ f1a14bffe749737437f61b1eaeb30b267cde681  
**third\_party/sprout** @ 6f2efe6e088d91066a9f023df375eee2665089ce  
M **src/examples/cellsim.cc**  
M **src/examples/sproutbt2.cc**  
M **src/network/sproutconn.cc**  
**third\_party/verus** @ d4b447ea74c6c60a261149af2629562939f9a494  
M **src/verus.hpp**  
M **tools/plot.py**  
**third\_party/webrtc** @ a488197ddd041ace68a42849b2540ad834825f42

test from India ppp0 to AWS India 1 Ethernet, 3 runs of 30s each per scheme  
(mean of all runs by scheme)



test from India ppp0 to AWS India 1 Ethernet, 3 runs of 30s each per scheme



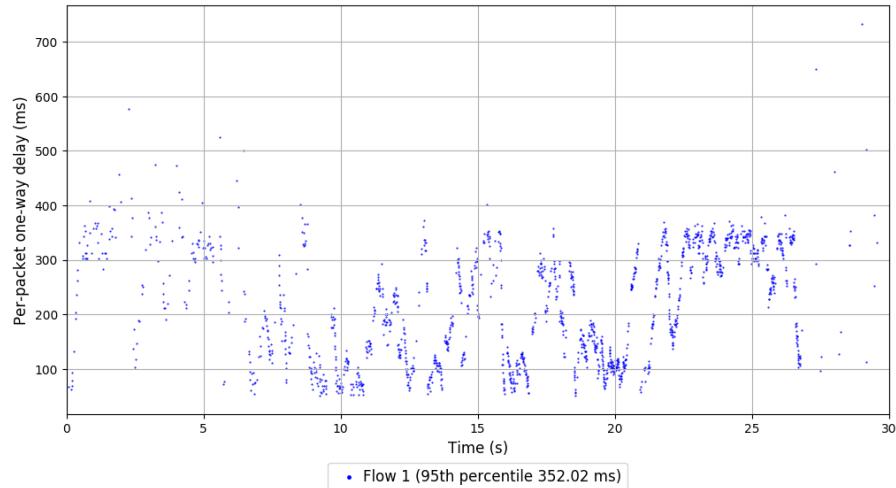
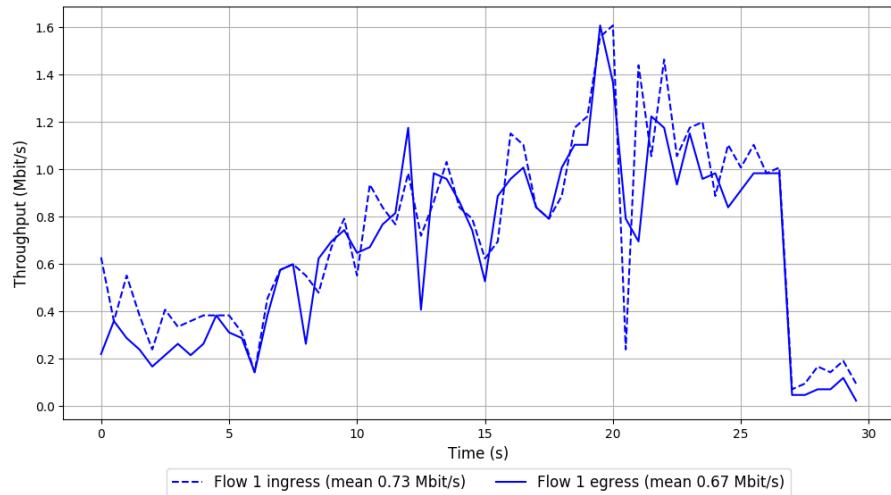
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	3	0.83	351.12	9.35
TCP Cubic	2	0.51	329.48	5.38
LEDBAT	1	0.58	300.27	2.31
PCC	1	0.44	447.20	96.75
QUIC Cubic	3	0.51	412.73	24.66
SCReAM	2	0.13	109.58	0.69
WebRTC media	2	0.34	346.63	9.25
Sprout	3	0.14	240.51	3.89
TaoVA-100x	1	0.31	360.26	65.86
TCP Vegas	1	0.37	308.29	5.03
Verus	3	1.15	363.78	33.92
Copa	1	0.36	306.57	7.22
CalibratedKoho	2	0.23	234.82	2.92
Indigo	2	0.18	346.21	19.42

Run 1: Statistics of TCP BBR

```
Start at: 2017-10-12 17:42:11
End at: 2017-10-12 17:42:41
Local clock offset: -0.055 ms
Remote clock offset: -12.184 ms

# Below is generated by plot.py at 2017-10-12 19:25:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 352.020 ms
Loss rate: 9.16%
-- Flow 1:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 352.020 ms
Loss rate: 9.16%
```

## Run 1: Report of TCP BBR — Data Link

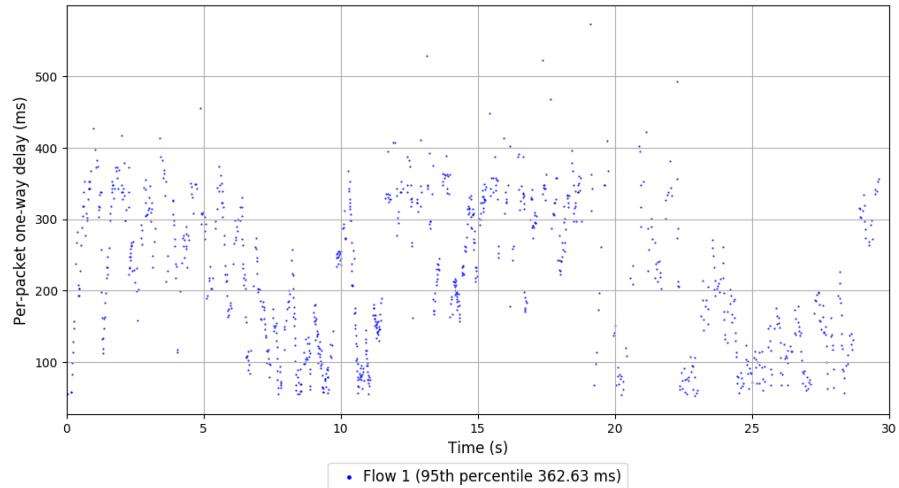
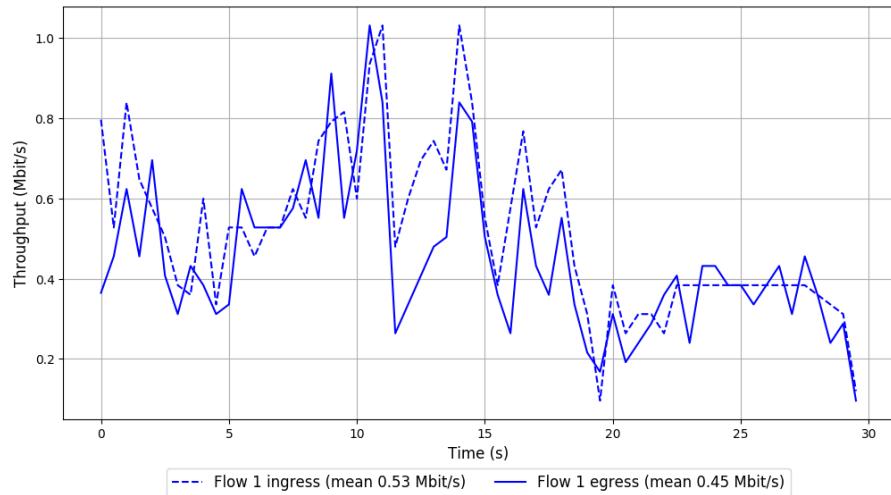


Run 2: Statistics of TCP BBR

```
Start at: 2017-10-12 17:57:49
End at: 2017-10-12 17:58:19
Local clock offset: -1.019 ms
Remote clock offset: -12.243 ms

# Below is generated by plot.py at 2017-10-12 19:25:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 362.634 ms
Loss rate: 13.64%
-- Flow 1:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 362.634 ms
Loss rate: 13.64%
```

## Run 2: Report of TCP BBR — Data Link

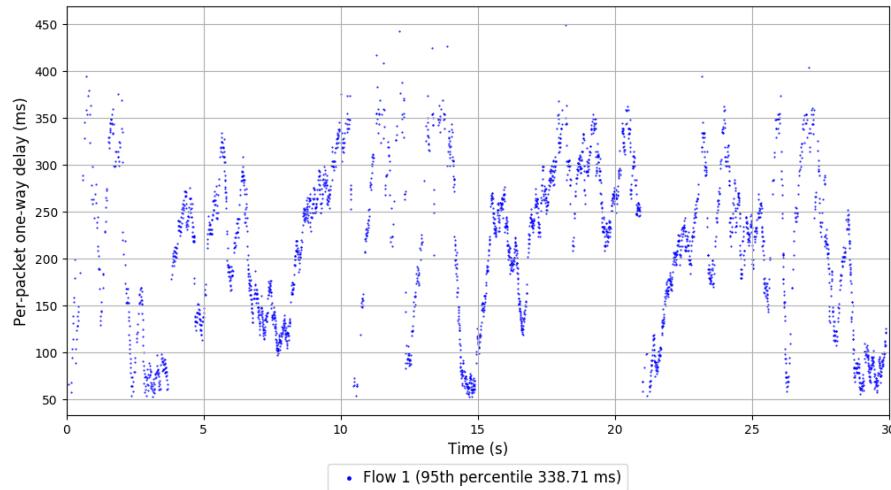
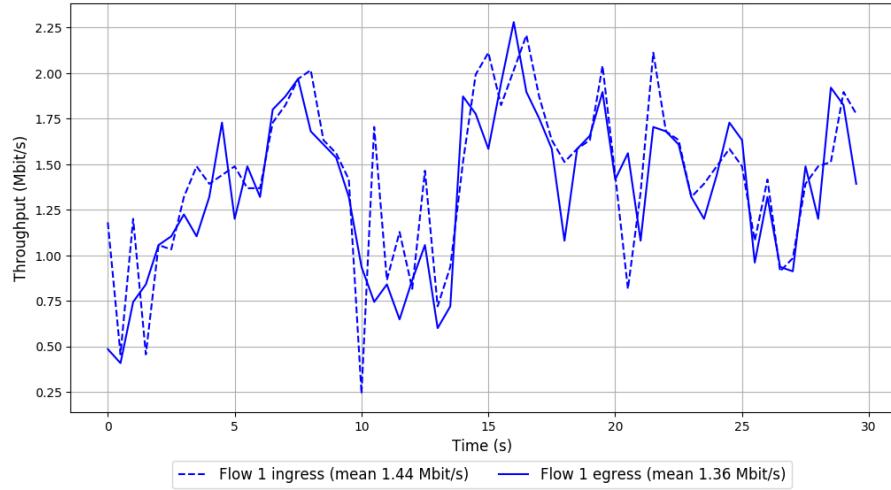


Run 3: Statistics of TCP BBR

```
Start at: 2017-10-12 18:17:19
End at: 2017-10-12 18:17:49
Local clock offset: 0.867 ms
Remote clock offset: -12.423 ms

# Below is generated by plot.py at 2017-10-12 19:25:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 338.714 ms
Loss rate: 5.25%
-- Flow 1:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 338.714 ms
Loss rate: 5.25%
```

### Run 3: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

/home/ubuntu/pantheon\_data/2017-10-12T17-25-India-ppp0-to-AWS-India-1-3-runs/default\_tcp\_st

Run 1: Report of TCP Cubic — Data Link

Figure is missing

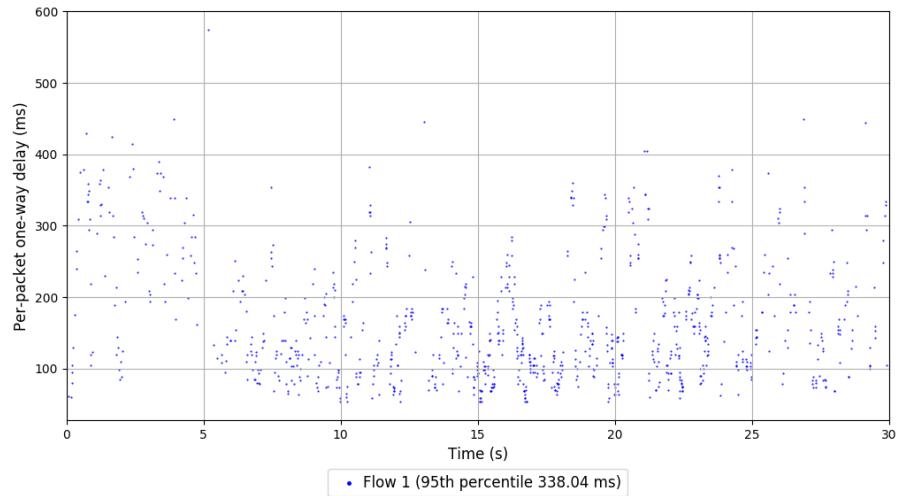
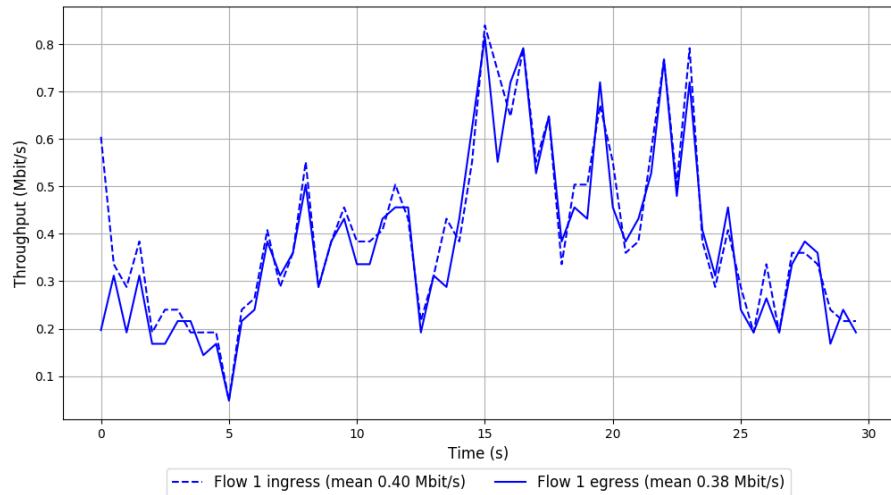
Figure is missing

Run 2: Statistics of TCP Cubic

```
Start at: 2017-10-12 17:53:17
End at: 2017-10-12 17:53:47
Local clock offset: 0.446 ms
Remote clock offset: -11.189 ms

# Below is generated by plot.py at 2017-10-12 19:25:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 338.042 ms
Loss rate: 6.06%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 338.042 ms
Loss rate: 6.06%
```

## Run 2: Report of TCP Cubic — Data Link

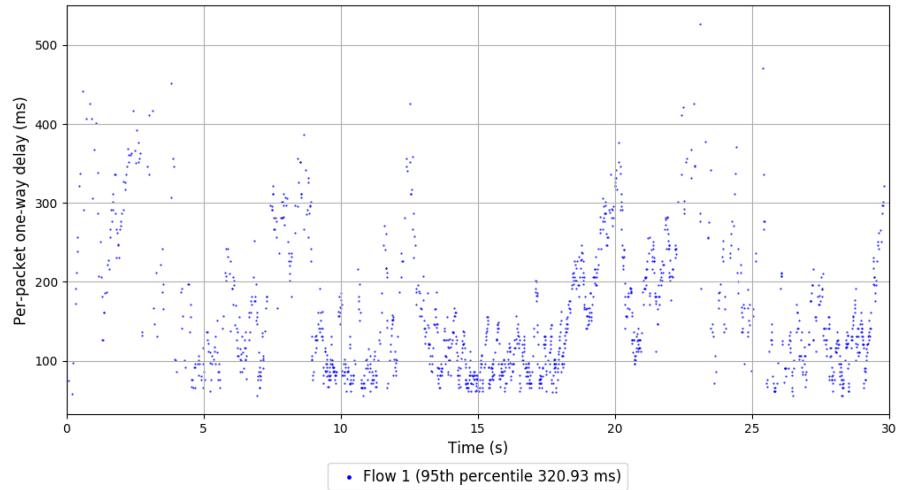
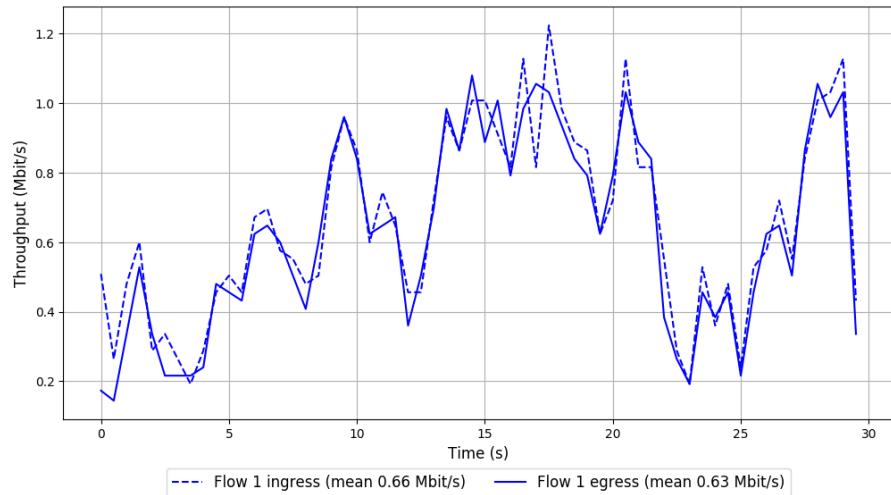


Run 3: Statistics of TCP Cubic

```
Start at: 2017-10-12 18:10:57
End at: 2017-10-12 18:11:27
Local clock offset: 2.714 ms
Remote clock offset: -11.752 ms

# Below is generated by plot.py at 2017-10-12 19:25:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 320.925 ms
Loss rate: 4.69%
-- Flow 1:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 320.925 ms
Loss rate: 4.69%
```

### Run 3: Report of TCP Cubic — Data Link

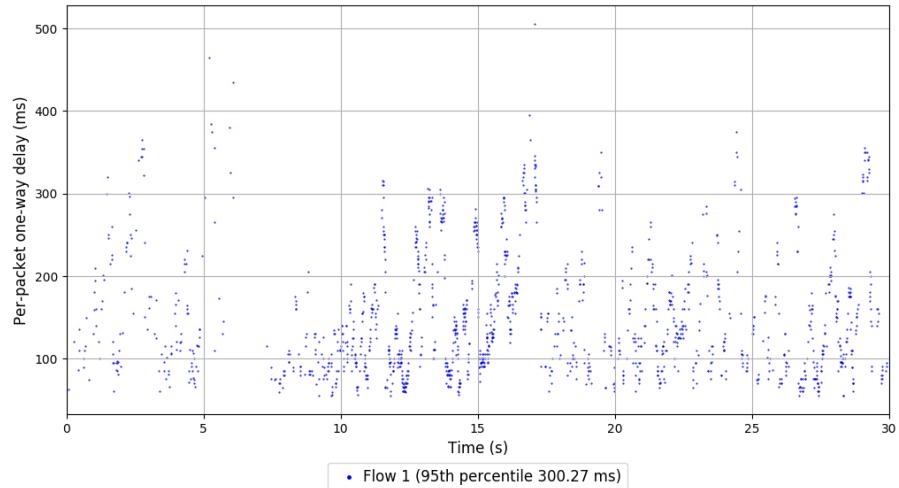
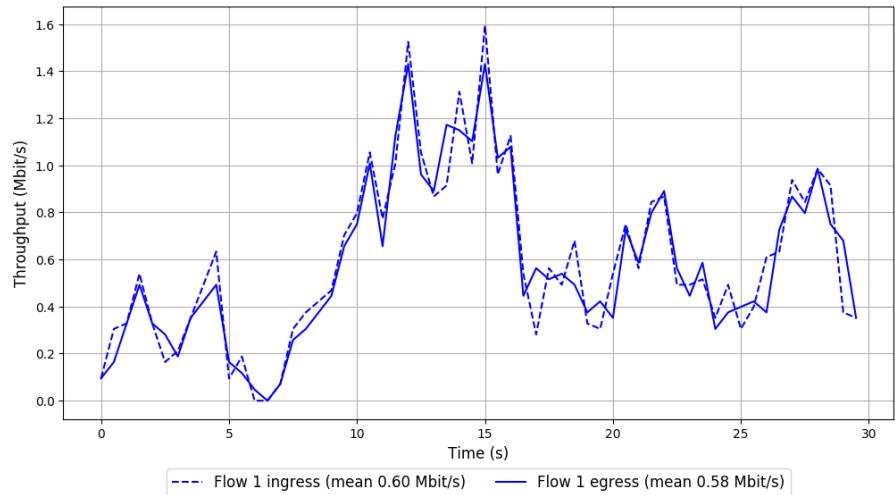


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2017-10-12 17:41:05
End at: 2017-10-12 17:41:35
Local clock offset: 2.19 ms
Remote clock offset: -12.364 ms

# Below is generated by plot.py at 2017-10-12 19:25:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 300.272 ms
Loss rate: 2.31%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 300.272 ms
Loss rate: 2.31%
```

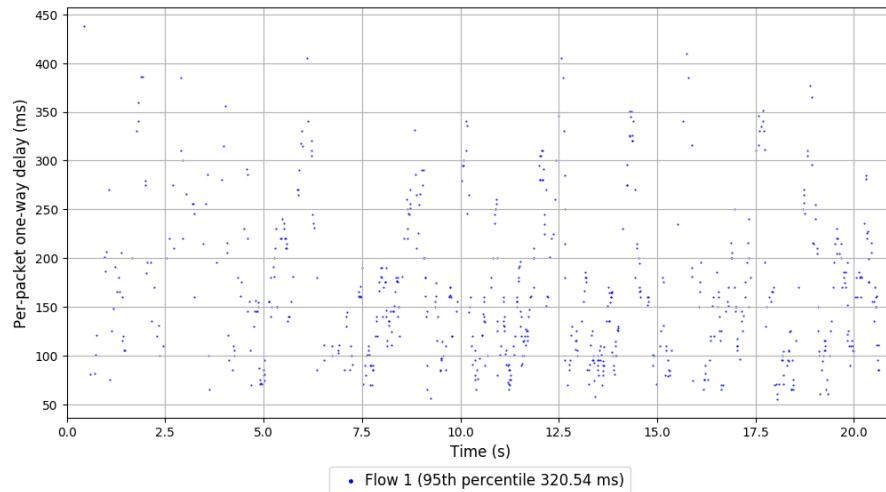
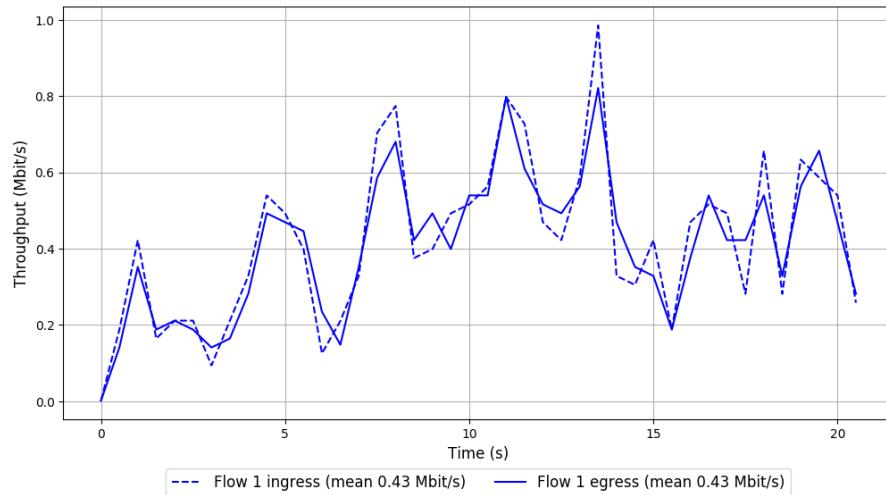
### Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-10-12 17:56:42  
End at: 2017-10-12 17:57:12  
Local clock offset: 1.7 ms  
Remote clock offset: -11.965 ms

## Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

/home/ubuntu/pantheon\_data/2017-10-12T17-25-India-ppp0-to-AWS-India-1-3-runs/ledbat\_stats\_ru

Run 3: Report of LEDBAT — Data Link

Figure is missing

Figure is missing

Run 1: Statistics of PCC

/home/ubuntu/pantheon\_data/2017-10-12T17-25-India-ppp0-to-AWS-India-1-3-runs/pcc\_stats\_run1

Run 1: Report of PCC — Data Link

Figure is missing

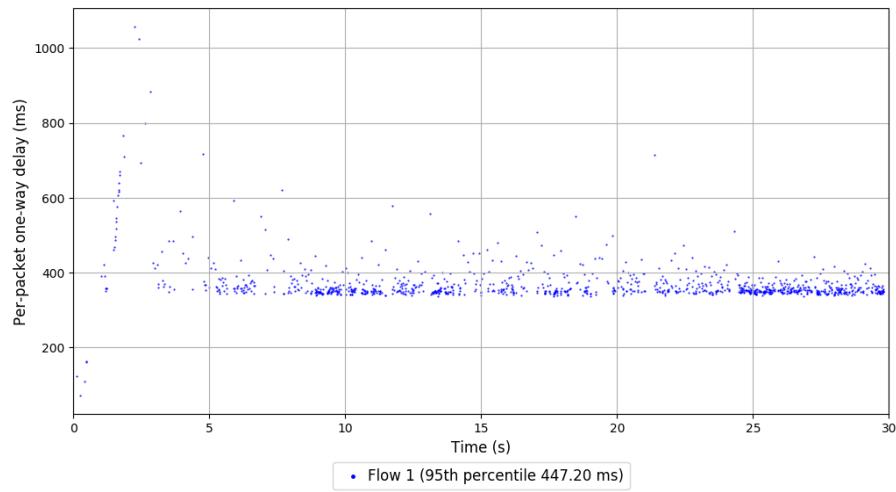
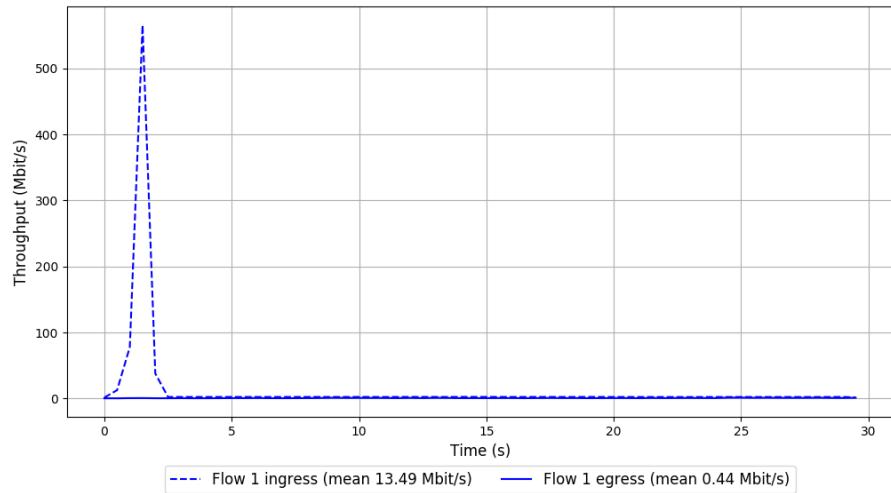
Figure is missing

Run 2: Statistics of PCC

```
Start at: 2017-10-12 17:55:34
End at: 2017-10-12 17:56:04
Local clock offset: 1.465 ms
Remote clock offset: -11.059 ms

# Below is generated by plot.py at 2017-10-12 19:26:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 447.203 ms
Loss rate: 96.75%
-- Flow 1:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 447.203 ms
Loss rate: 96.75%
```

## Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

/home/ubuntu/pantheon\_data/2017-10-12T17-25-India-ppp0-to-AWS-India-1-3-runs/pcc\_stats\_run3

Run 3: Report of PCC — Data Link

Figure is missing

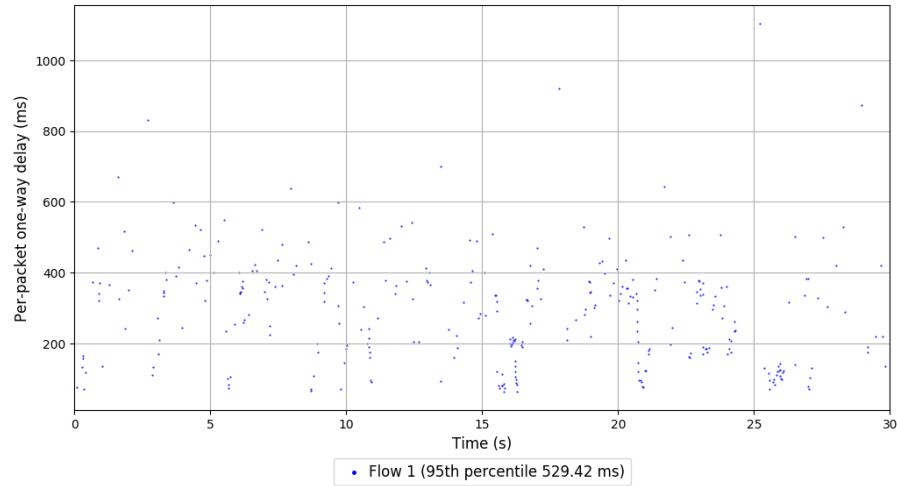
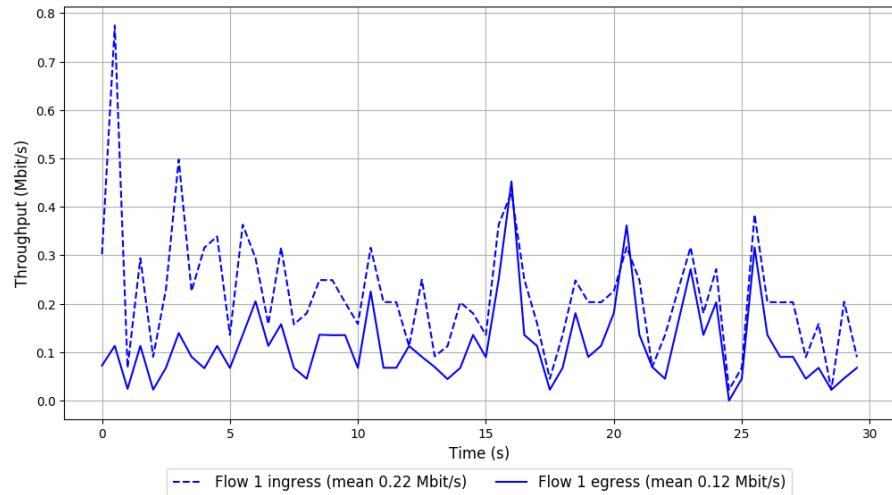
Figure is missing

```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2017-10-12 17:33:45
End at: 2017-10-12 17:34:15
Local clock offset: 1.611 ms
Remote clock offset: -11.6 ms

# Below is generated by plot.py at 2017-10-12 19:26:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 529.422 ms
Loss rate: 46.70%
-- Flow 1:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 529.422 ms
Loss rate: 46.70%
```

## Run 1: Report of QUIC Cubic — Data Link

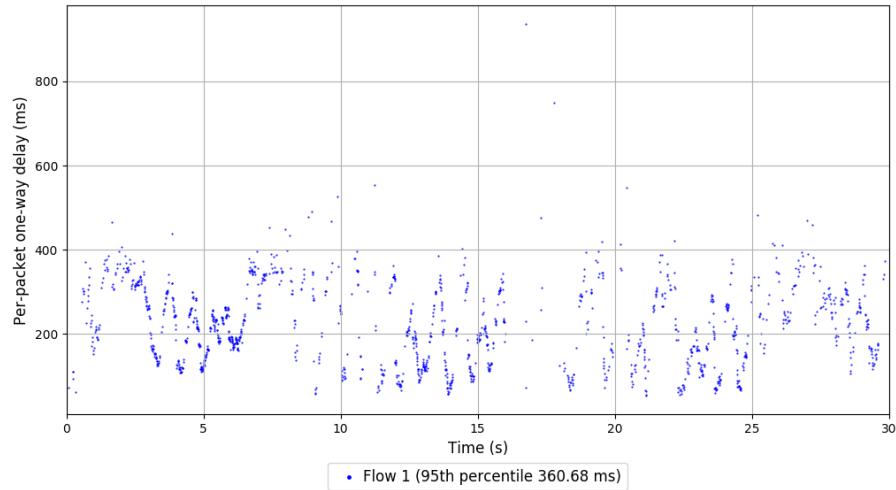
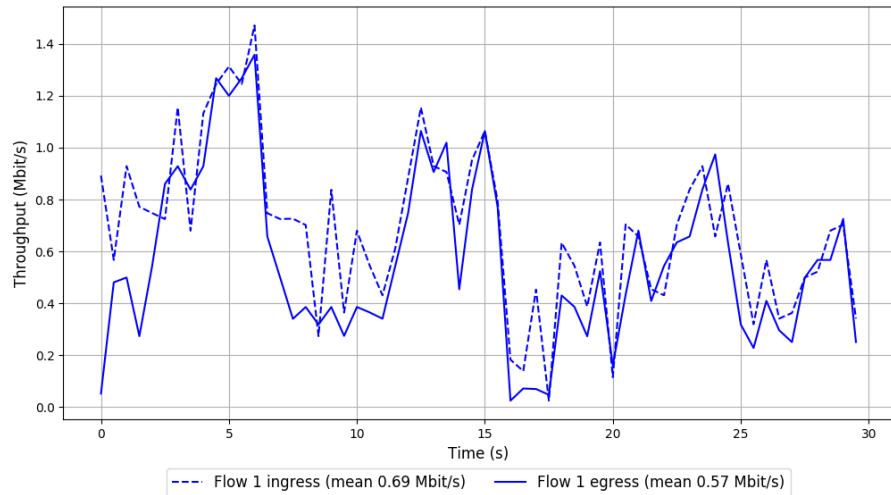


Run 2: Statistics of QUIC Cubic

```
Start at: 2017-10-12 17:51:04
End at: 2017-10-12 17:51:34
Local clock offset: 1.206 ms
Remote clock offset: -11.197 ms

# Below is generated by plot.py at 2017-10-12 19:26:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 360.682 ms
Loss rate: 18.06%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 360.682 ms
Loss rate: 18.06%
```

## Run 2: Report of QUIC Cubic — Data Link

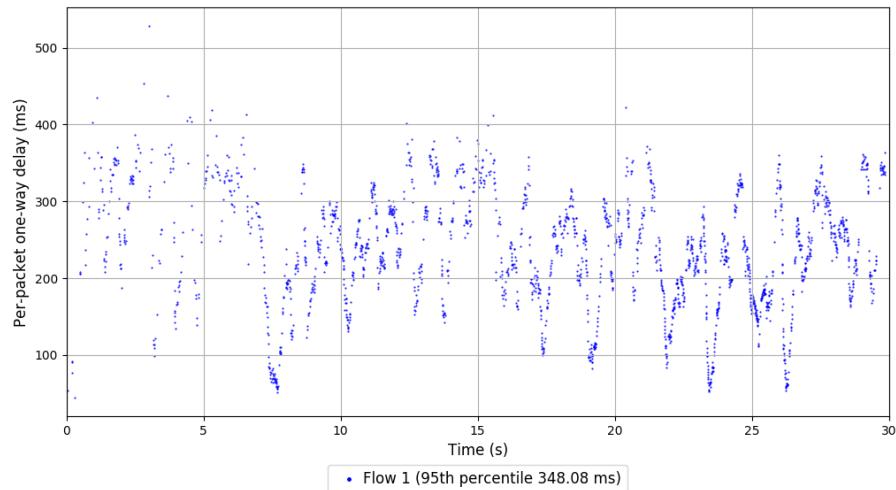
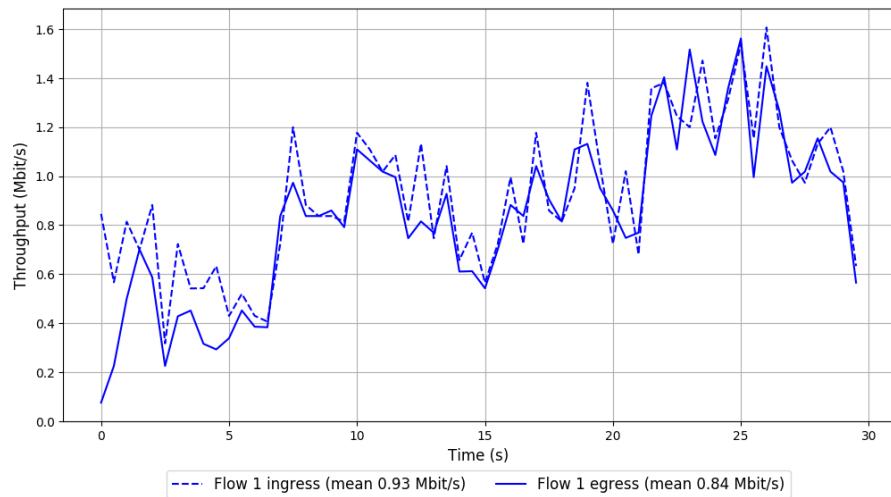


Run 3: Statistics of QUIC Cubic

```
Start at: 2017-10-12 18:08:40
End at: 2017-10-12 18:09:10
Local clock offset: -0.964 ms
Remote clock offset: -11.99 ms

# Below is generated by plot.py at 2017-10-12 19:26:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 348.078 ms
Loss rate: 9.22%
-- Flow 1:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 348.078 ms
Loss rate: 9.22%
```

Run 3: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

/home/ubuntu/pantheon\_data/2017-10-12T17-25-India-ppp0-to-AWS-India-1-3-runs/scream\_stats\_ru

Run 1: Report of SCReAM — Data Link

Figure is missing

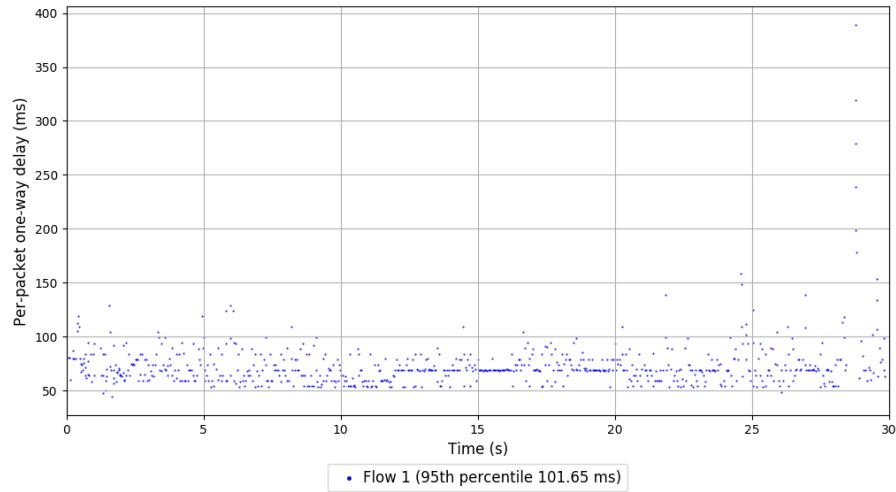
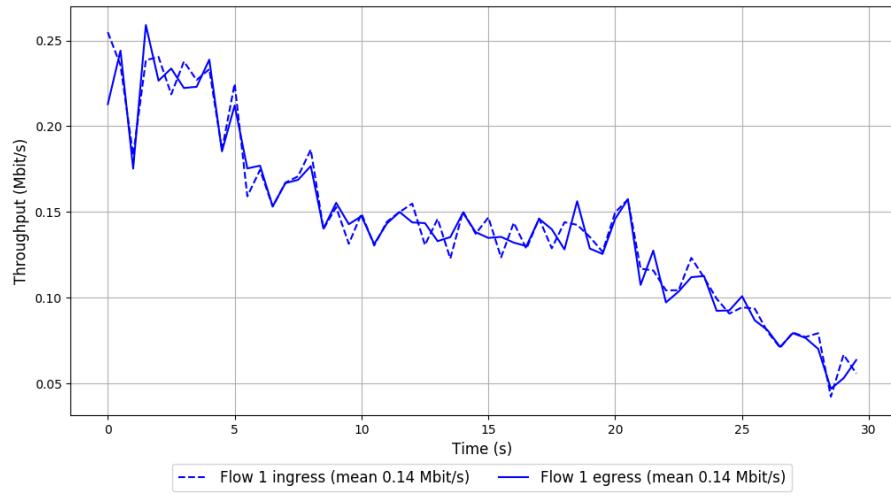
Figure is missing

Run 2: Statistics of SCReAM

```
Start at: 2017-10-12 17:48:51
End at: 2017-10-12 17:49:21
Local clock offset: 2.129 ms
Remote clock offset: -11.175 ms

# Below is generated by plot.py at 2017-10-12 19:26:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 101.646 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 101.646 ms
Loss rate: 0.82%
```

## Run 2: Report of SCReAM — Data Link

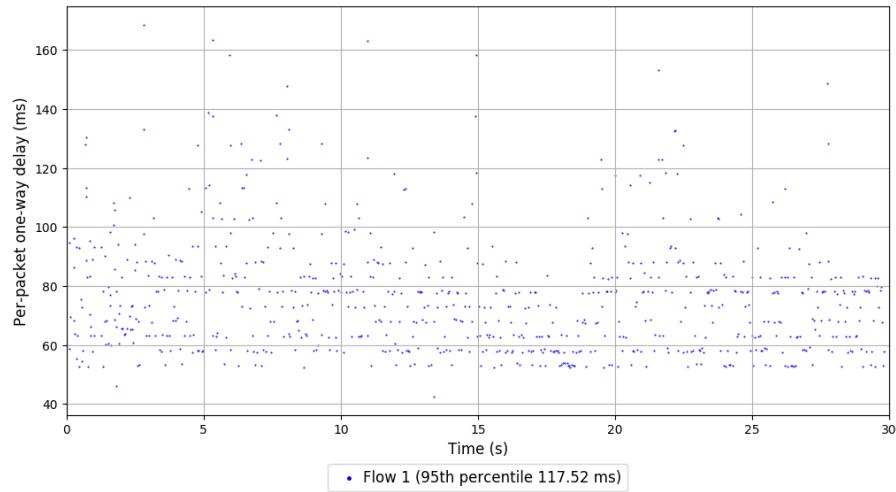
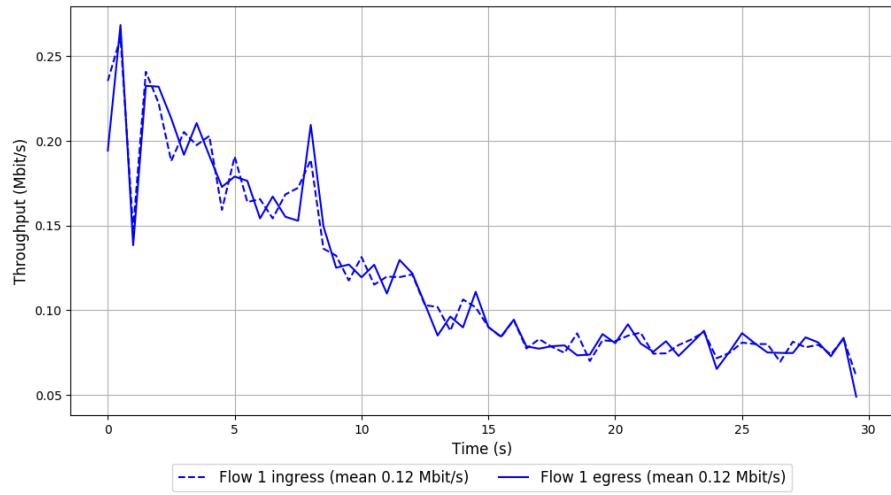


Run 3: Statistics of SCReAM

```
Start at: 2017-10-12 18:06:18
End at: 2017-10-12 18:06:48
Local clock offset: 1.656 ms
Remote clock offset: -10.924 ms

# Below is generated by plot.py at 2017-10-12 19:26:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 117.521 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 117.521 ms
Loss rate: 0.57%
```

### Run 3: Report of SCReAM — Data Link



Run 1: Statistics of WebRTC media

/home/ubuntu/pantheon\_data/2017-10-12T17-25-India-ppp0-to-AWS-India-1-3-runs/webrtc\_stats\_ru

Run 1: Report of WebRTC media — Data Link

Figure is missing

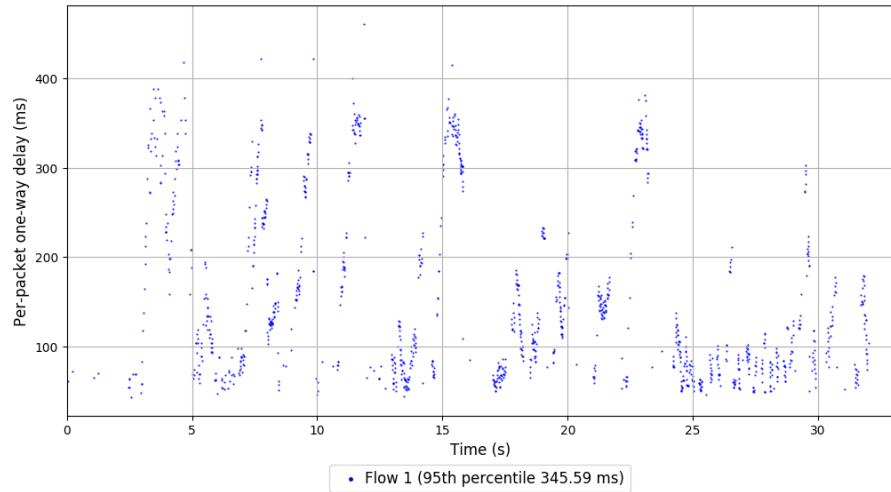
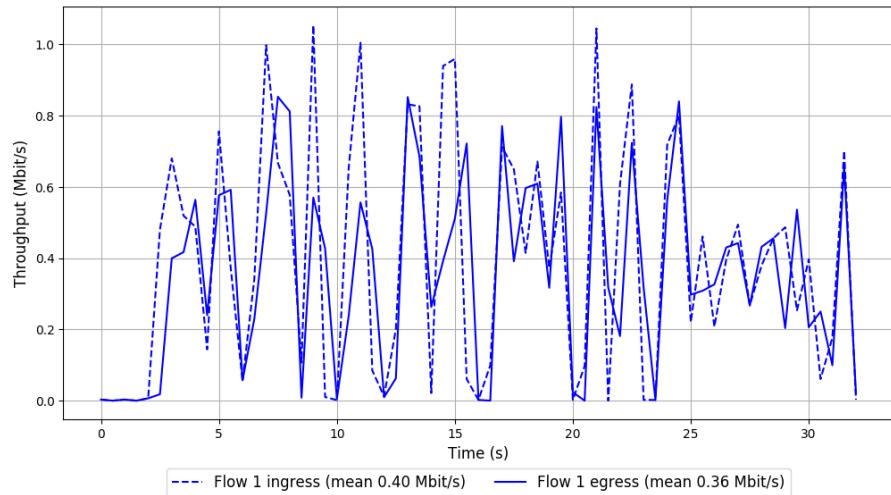
Figure is missing

Run 2: Statistics of WebRTC media

```
Start at: 2017-10-12 17:49:57
End at: 2017-10-12 17:50:27
Local clock offset: -0.686 ms
Remote clock offset: -11.136 ms

# Below is generated by plot.py at 2017-10-12 19:26:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 345.589 ms
Loss rate: 8.83%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 345.589 ms
Loss rate: 8.83%
```

## Run 2: Report of WebRTC media — Data Link

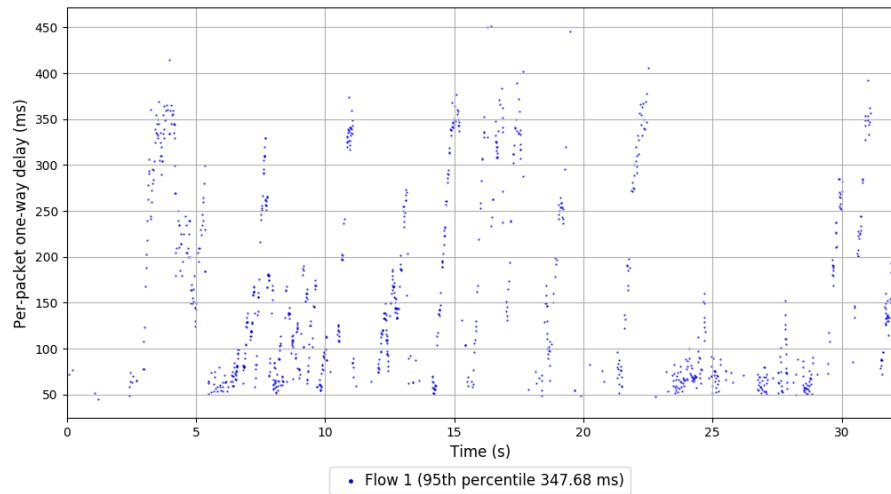
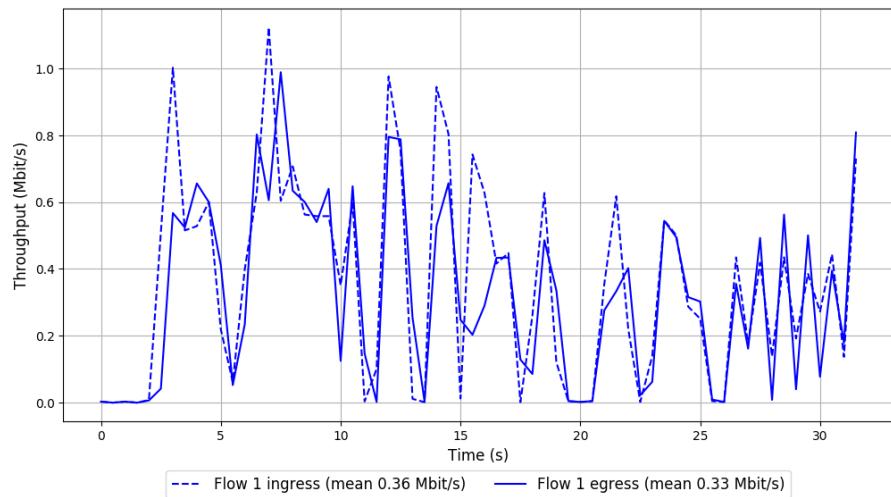


Run 3: Statistics of WebRTC media

```
Start at: 2017-10-12 18:07:29
End at: 2017-10-12 18:07:59
Local clock offset: -0.242 ms
Remote clock offset: -11.739 ms

# Below is generated by plot.py at 2017-10-12 19:26:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 347.675 ms
Loss rate: 9.66%
-- Flow 1:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 347.675 ms
Loss rate: 9.66%
```

### Run 3: Report of WebRTC media — Data Link

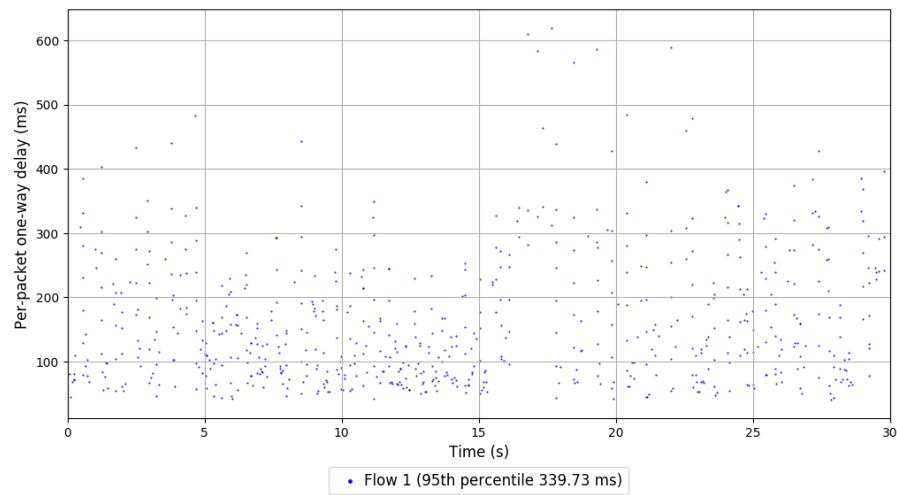
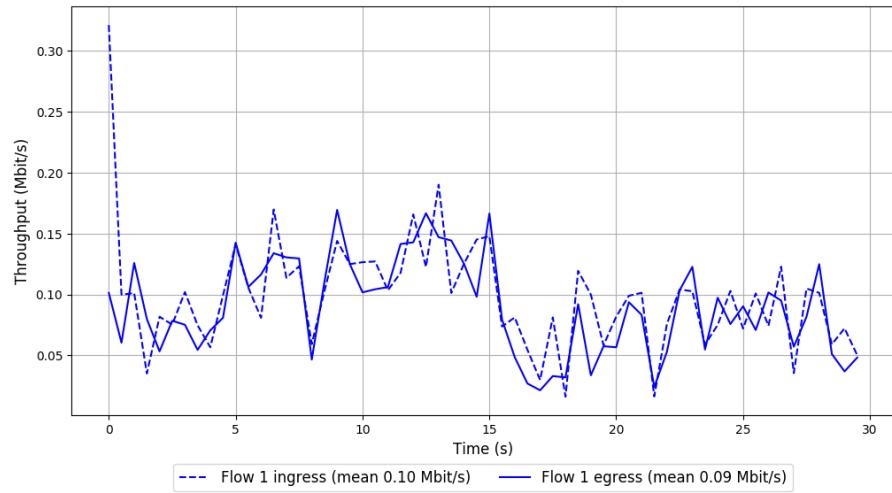


Run 1: Statistics of Sprout

```
Start at: 2017-10-12 17:34:50
End at: 2017-10-12 17:35:20
Local clock offset: 0.217 ms
Remote clock offset: -12.342 ms

# Below is generated by plot.py at 2017-10-12 19:26:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 339.733 ms
Loss rate: 8.95%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 339.733 ms
Loss rate: 8.95%
```

## Run 1: Report of Sprout — Data Link

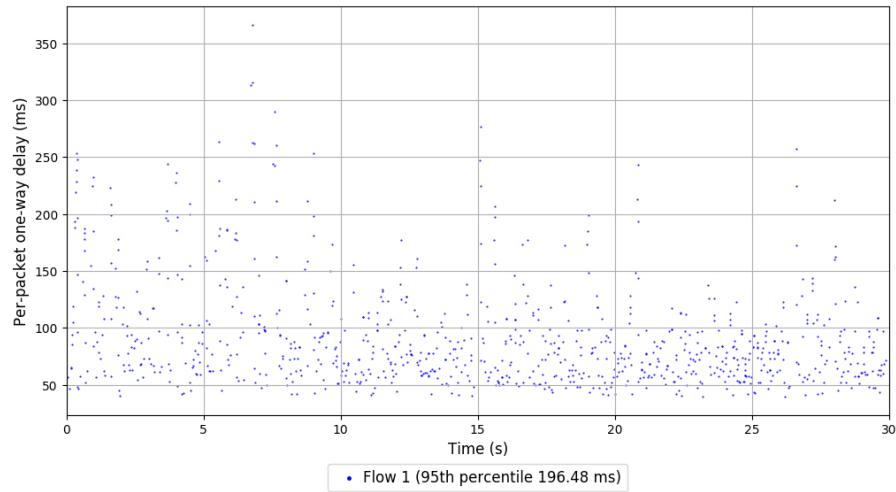
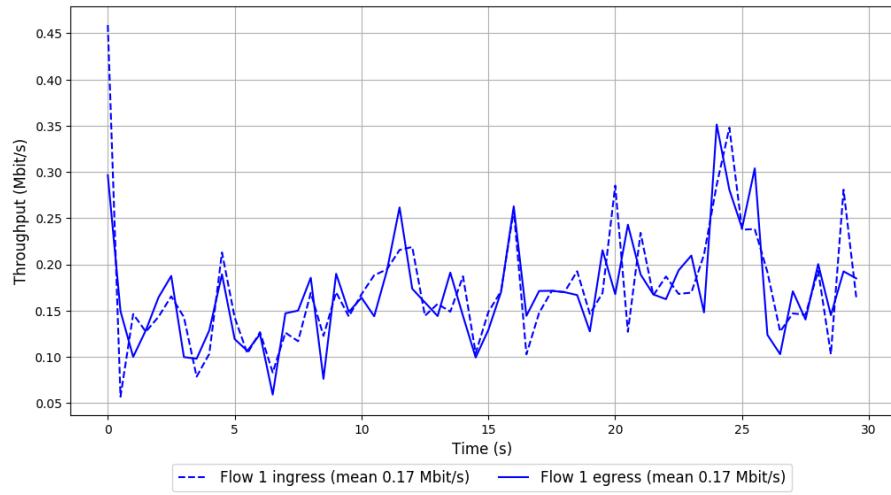


Run 2: Statistics of Sprout

```
Start at: 2017-10-12 17:52:10
End at: 2017-10-12 17:52:40
Local clock offset: -0.468 ms
Remote clock offset: -11.793 ms

# Below is generated by plot.py at 2017-10-12 19:26:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 196.482 ms
Loss rate: 1.81%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 196.482 ms
Loss rate: 1.81%
```

## Run 2: Report of Sprout — Data Link

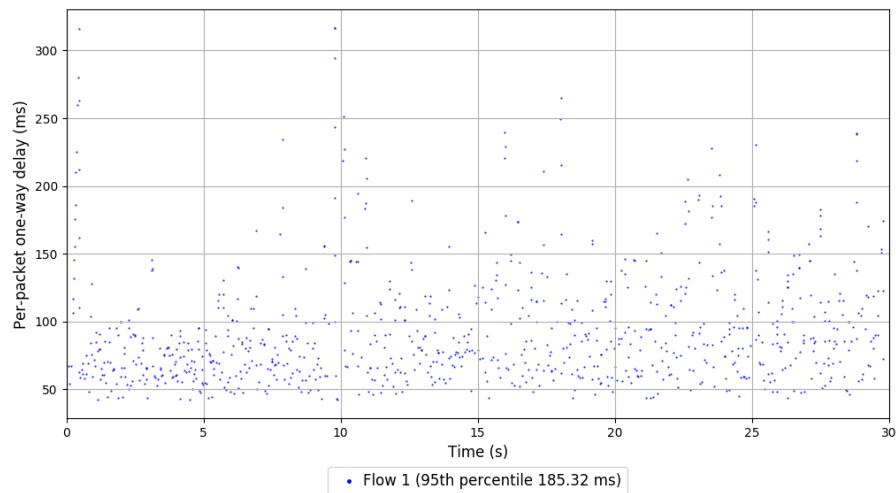
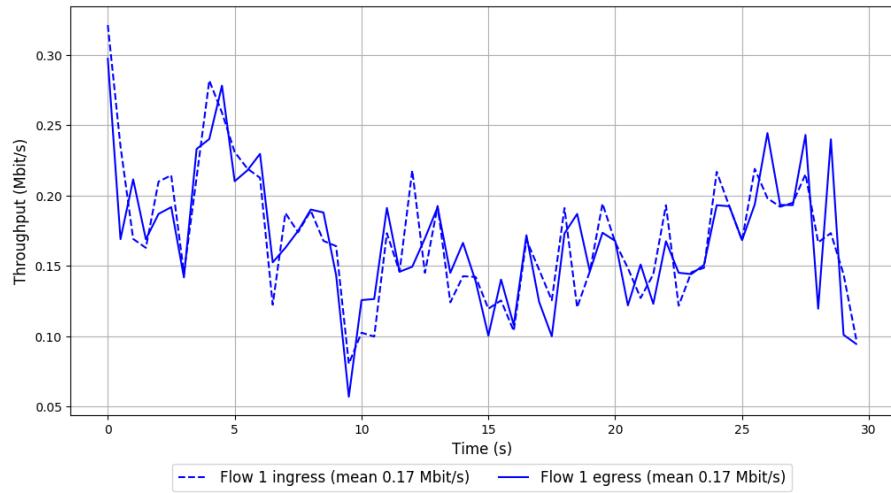


Run 3: Statistics of Sprout

```
Start at: 2017-10-12 18:09:50
End at: 2017-10-12 18:10:20
Local clock offset: 1.964 ms
Remote clock offset: -11.11 ms

# Below is generated by plot.py at 2017-10-12 19:26:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 185.323 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 185.323 ms
Loss rate: 0.90%
```

### Run 3: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

/home/ubuntu/pantheon\_data/2017-10-12T17-25-India-ppp0-to-AWS-India-1-3-runs/taova\_stats\_run

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

Figure is missing

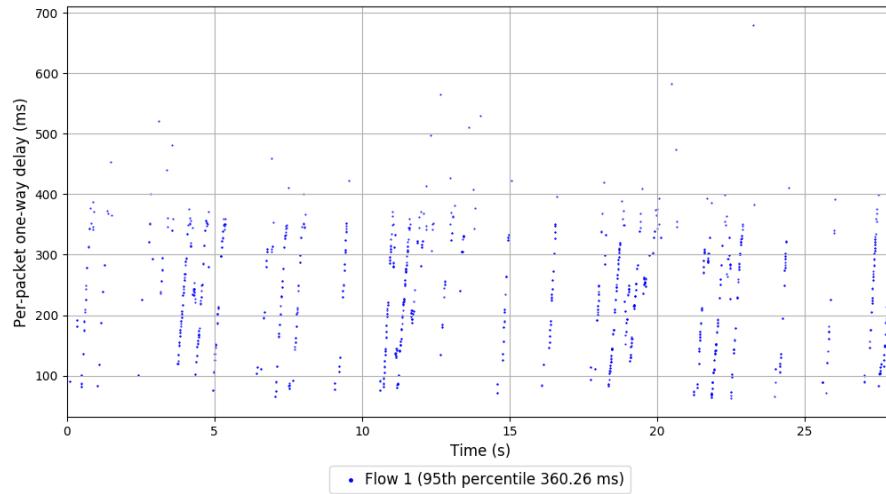
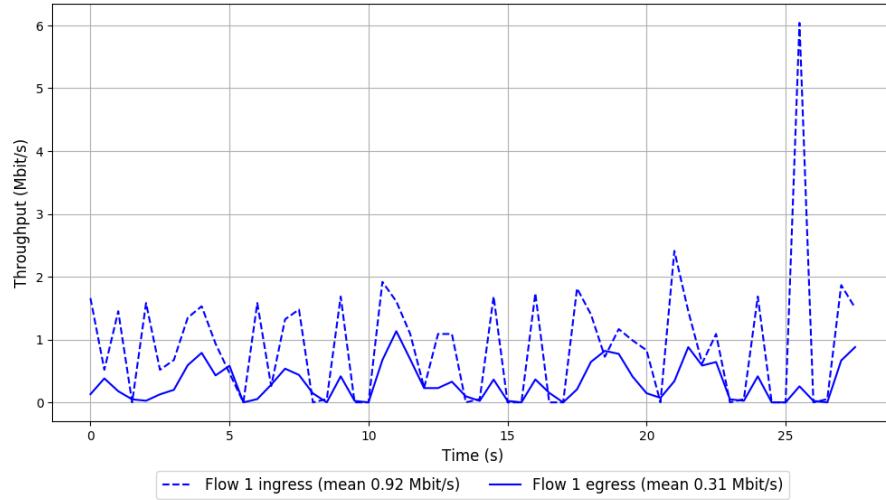
Figure is missing

Run 2: Statistics of TaoVA-100x

```
Start at: 2017-10-12 17:46:39
End at: 2017-10-12 17:47:09
Local clock offset: 0.147 ms
Remote clock offset: -12.108 ms

# Below is generated by plot.py at 2017-10-12 19:26:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 360.261 ms
Loss rate: 65.86%
-- Flow 1:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 360.261 ms
Loss rate: 65.86%
```

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



Run 3: Statistics of TaoVA-100x

/home/ubuntu/pantheon\_data/2017-10-12T17-25-India-ppp0-to-AWS-India-1-3-runs/taova\_stats\_run

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

Figure is missing

Figure is missing

Run 1: Statistics of TCP Vegas

/home/ubuntu/pantheon\_data/2017-10-12T17-25-India-ppp0-to-AWS-India-1-3-runs/vegas\_stats\_run

Run 1: Report of TCP Vegas — Data Link

Figure is missing

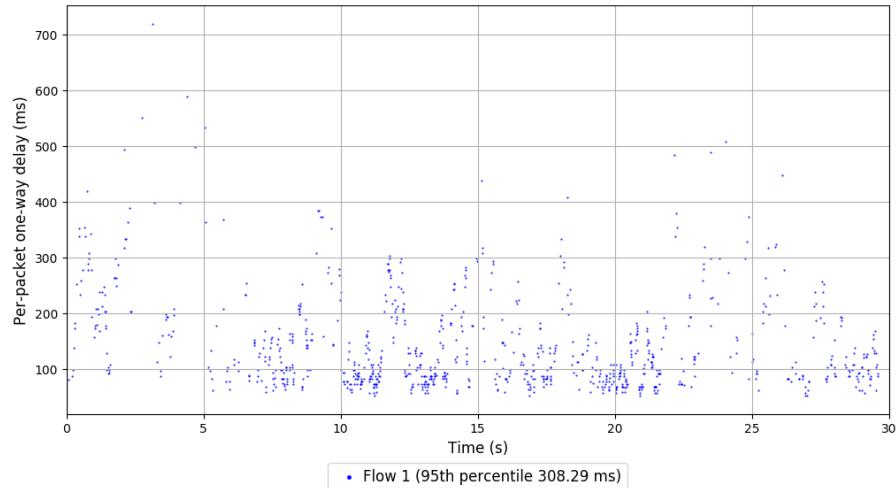
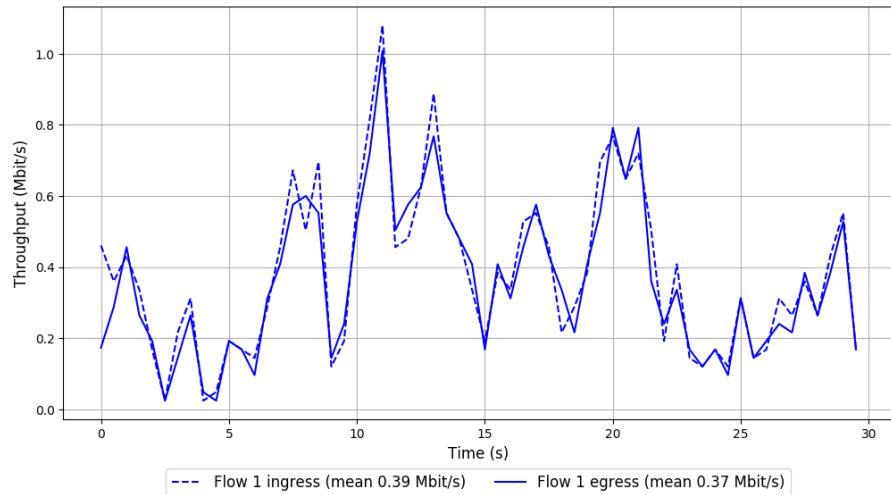
Figure is missing

Run 2: Statistics of TCP Vegas

```
Start at: 2017-10-12 17:54:23
End at: 2017-10-12 17:54:53
Local clock offset: -0.524 ms
Remote clock offset: -12.118 ms

# Below is generated by plot.py at 2017-10-12 19:26:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 308.292 ms
Loss rate: 5.03%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 308.292 ms
Loss rate: 5.03%
```

## Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

/home/ubuntu/pantheon\_data/2017-10-12T17-25-India-ppp0-to-AWS-India-1-3-runs/vegas\_stats\_run

Run 3: Report of TCP Vegas — Data Link

Figure is missing

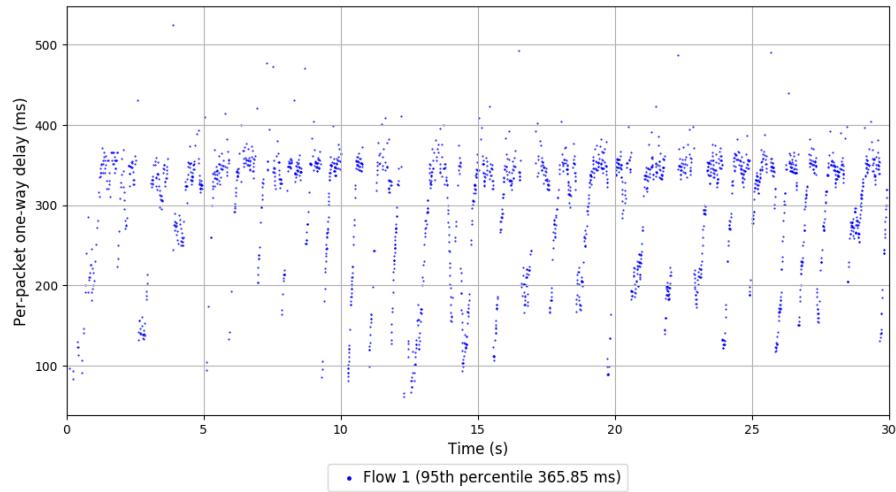
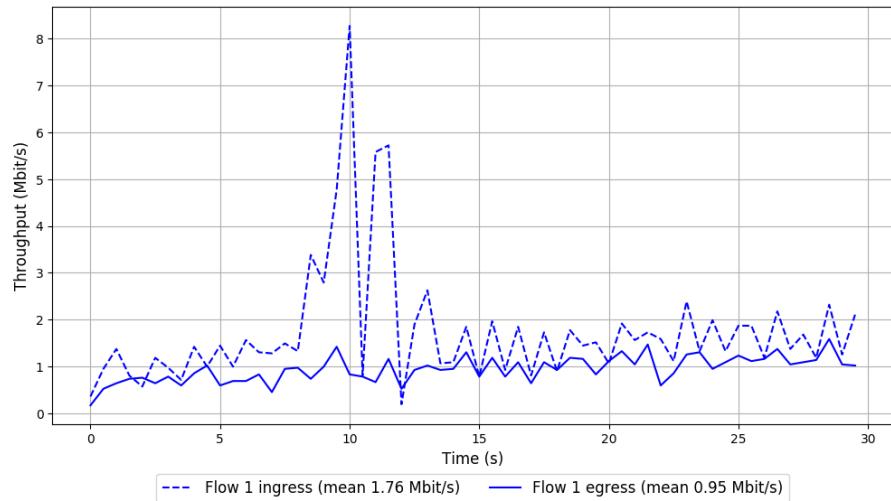
Figure is missing

Run 1: Statistics of Verus

```
Start at: 2017-10-12 17:43:18
End at: 2017-10-12 17:43:48
Local clock offset: 2.214 ms
Remote clock offset: -12.416 ms

# Below is generated by plot.py at 2017-10-12 19:26:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 365.854 ms
Loss rate: 46.44%
-- Flow 1:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 365.854 ms
Loss rate: 46.44%
```

## Run 1: Report of Verus — Data Link

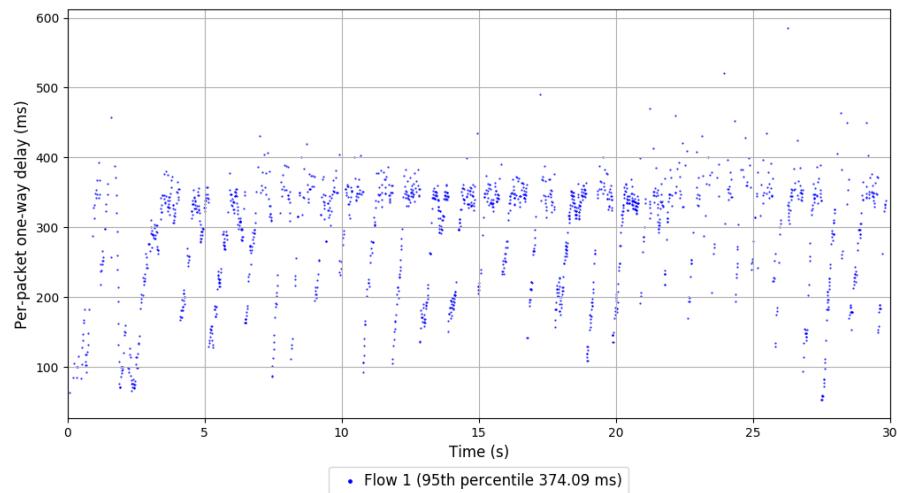
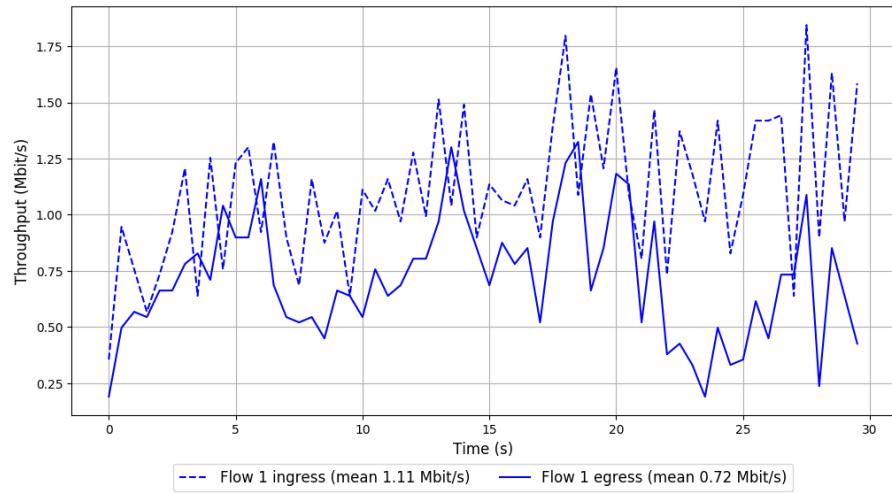


Run 2: Statistics of Verus

```
Start at: 2017-10-12 17:59:00
End at: 2017-10-12 17:59:30
Local clock offset: -0.156 ms
Remote clock offset: -11.996 ms

# Below is generated by plot.py at 2017-10-12 19:26:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 374.090 ms
Loss rate: 35.74%
-- Flow 1:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 374.090 ms
Loss rate: 35.74%
```

## Run 2: Report of Verus — Data Link

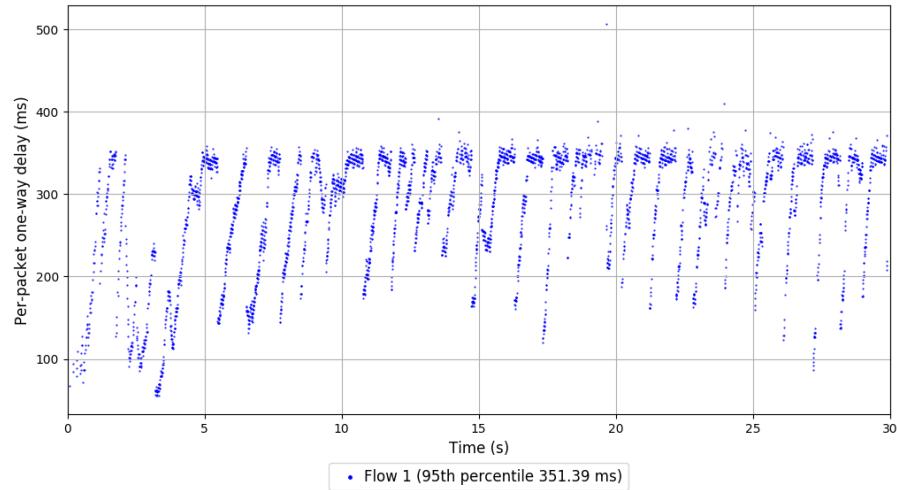
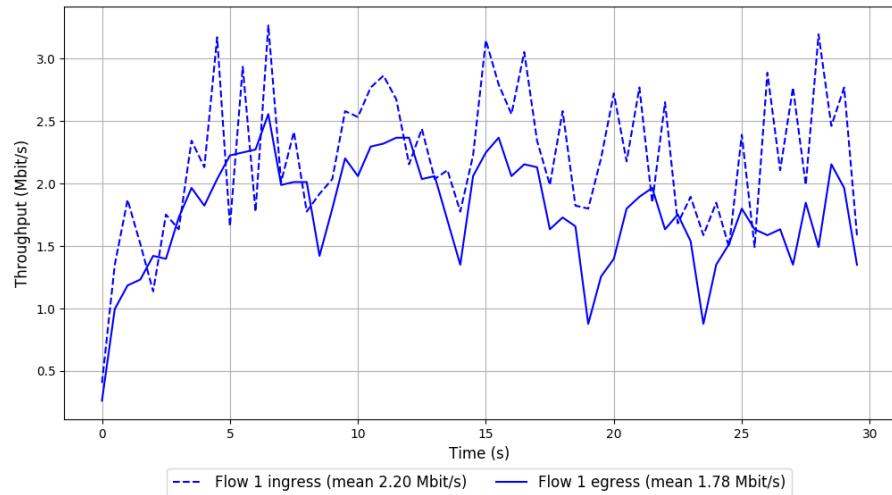


Run 3: Statistics of Verus

```
Start at: 2017-10-12 18:18:26
End at: 2017-10-12 18:18:56
Local clock offset: -0.681 ms
Remote clock offset: -12.626 ms

# Below is generated by plot.py at 2017-10-12 19:26:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 351.390 ms
Loss rate: 19.59%
-- Flow 1:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 351.390 ms
Loss rate: 19.59%
```

### Run 3: Report of Verus — Data Link

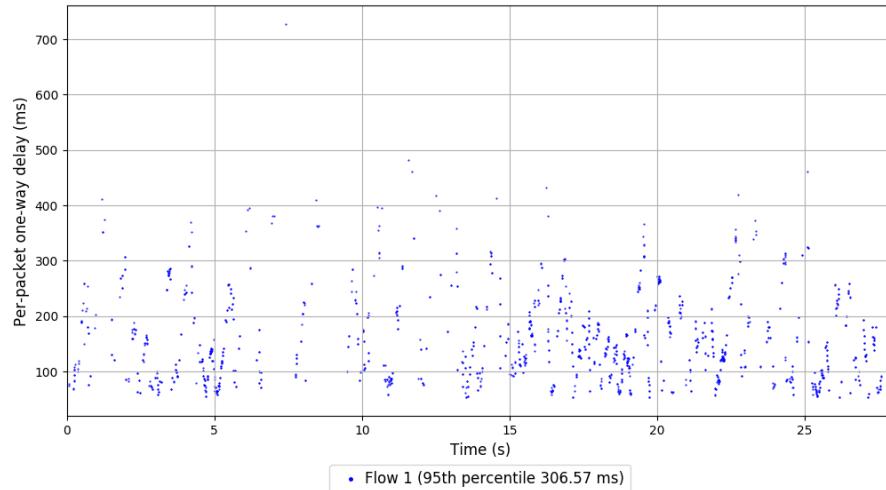
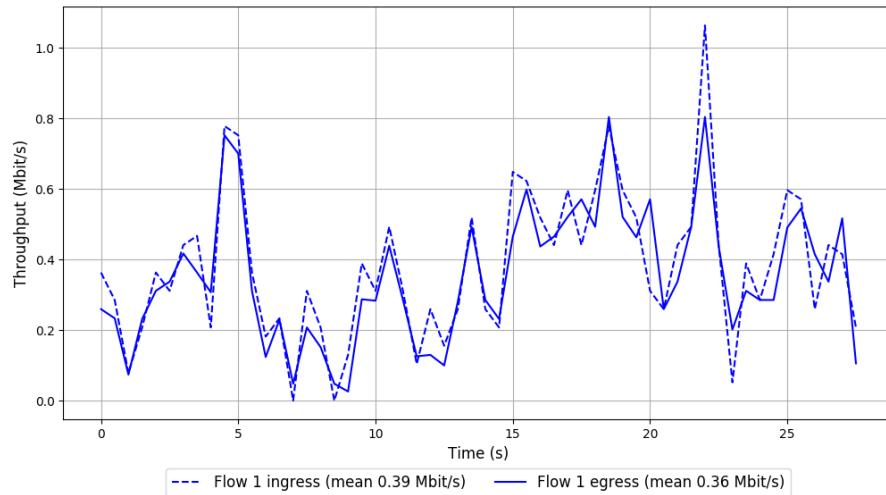


Run 1: Statistics of Copa

```
Start at: 2017-10-12 17:44:25
End at: 2017-10-12 17:44:55
Local clock offset: 2.383 ms
Remote clock offset: -11.218 ms

# Below is generated by plot.py at 2017-10-12 19:26:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 306.568 ms
Loss rate: 7.22%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 306.568 ms
Loss rate: 7.22%
```

## Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

/home/ubuntu/pantheon\_data/2017-10-12T17-25-India-ppp0-to-AWS-India-1-3-runs/copa\_stats\_run2

Run 2: Report of Copa — Data Link

Figure is missing

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Run 3: Statistics of Copa

/home/ubuntu/pantheon\_data/2017-10-12T17-25-India-ppp0-to-AWS-India-1-3-runs/copa\_stats\_run3

Run 3: Report of Copa — Data Link

Figure is missing

Figure is missing

Run 1: Statistics of CalibratedKoho

/home/ubuntu/pantheon\_data/2017-10-12T17-25-India-ppp0-to-AWS-India-1-3-runs/calibrated\_koho

Run 1: Report of CalibratedKoho — Data Link

Figure is missing

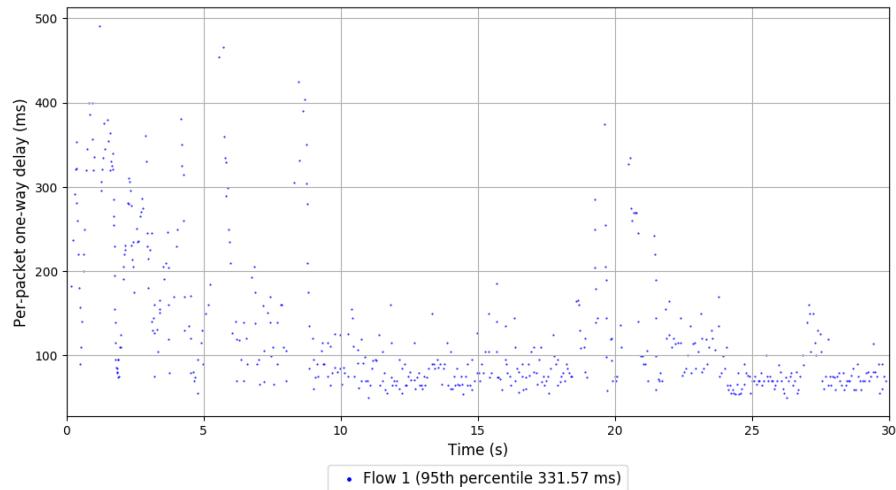
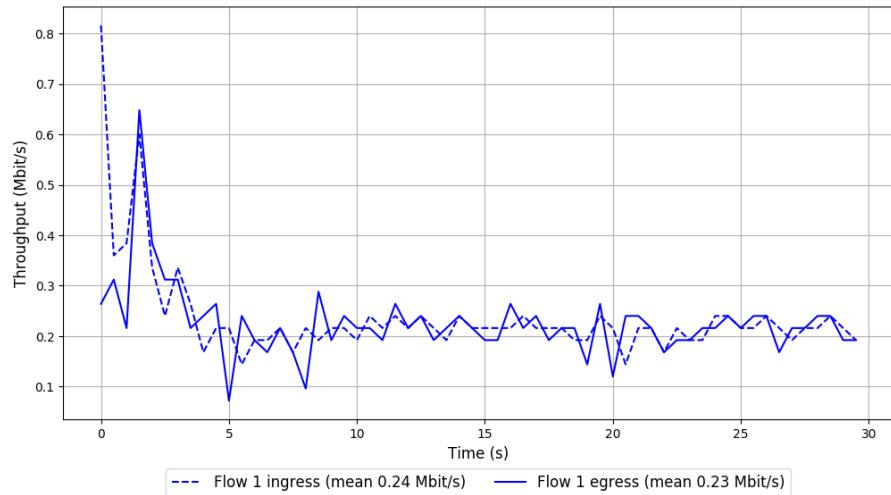
Figure is missing

```
Run 2: Statistics of CalibratedKoho
```

```
Start at: 2017-10-12 17:47:45
End at: 2017-10-12 17:48:15
Local clock offset: 0.144 ms
Remote clock offset: -11.345 ms

# Below is generated by plot.py at 2017-10-12 19:26:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 331.567 ms
Loss rate: 4.71%
-- Flow 1:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 331.567 ms
Loss rate: 4.71%
```

## Run 2: Report of CalibratedKoho — Data Link

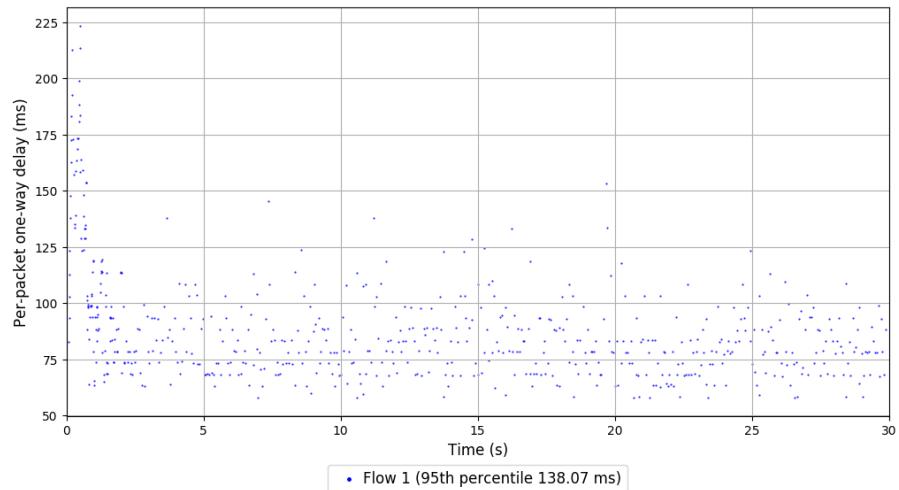
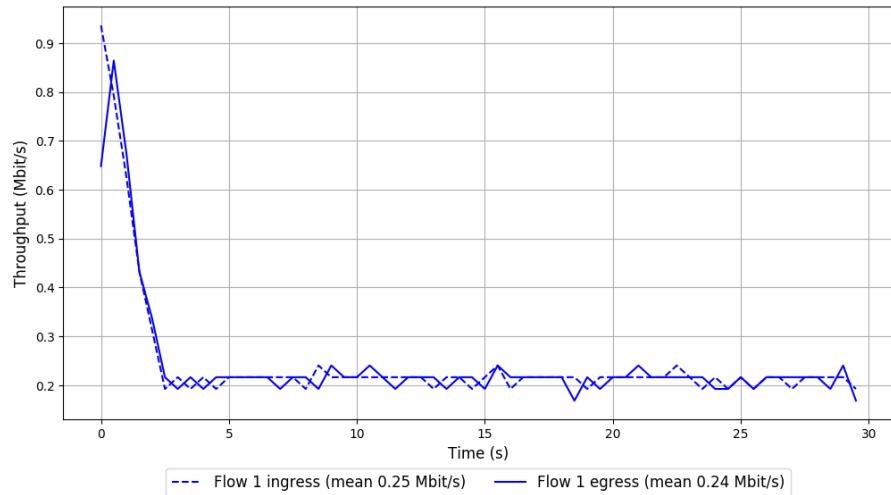


Run 3: Statistics of CalibratedKoho

```
Start at: 2017-10-12 18:05:12
End at: 2017-10-12 18:05:42
Local clock offset: 2.215 ms
Remote clock offset: -12.168 ms

# Below is generated by plot.py at 2017-10-12 19:26:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 138.067 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 138.067 ms
Loss rate: 1.14%
```

### Run 3: Report of CalibratedKoho — Data Link

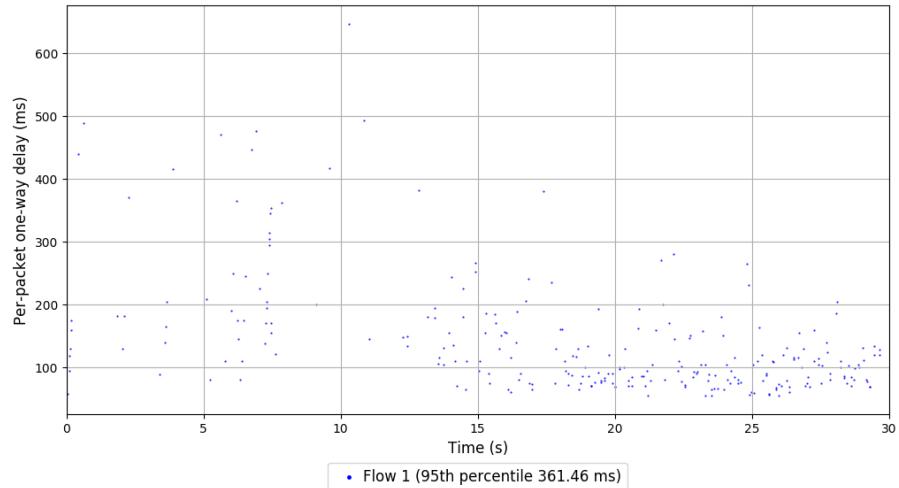
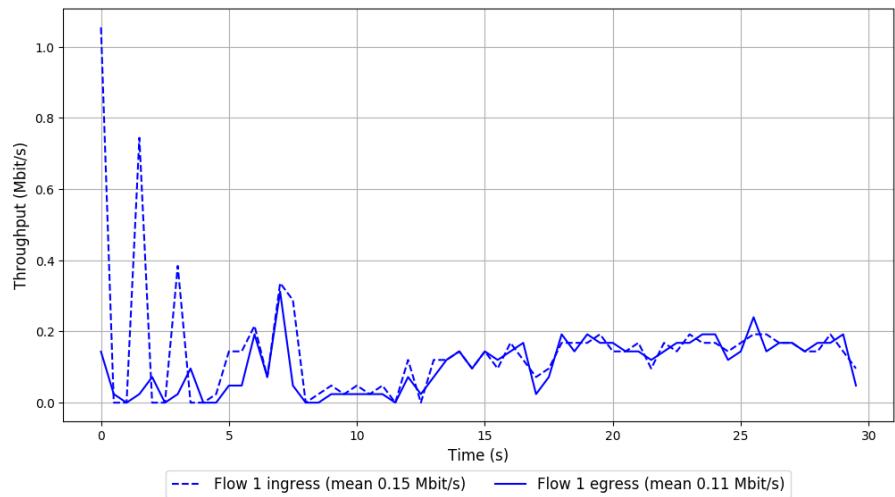


Run 1: Statistics of Indigo

```
Start at: 2017-10-12 17:26:29
End at: 2017-10-12 17:26:59
Local clock offset: 1.281 ms
Remote clock offset: -12.836 ms

# Below is generated by plot.py at 2017-10-12 19:26:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 361.459 ms
Loss rate: 28.49%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 361.459 ms
Loss rate: 28.49%
```

## Run 1: Report of Indigo — Data Link

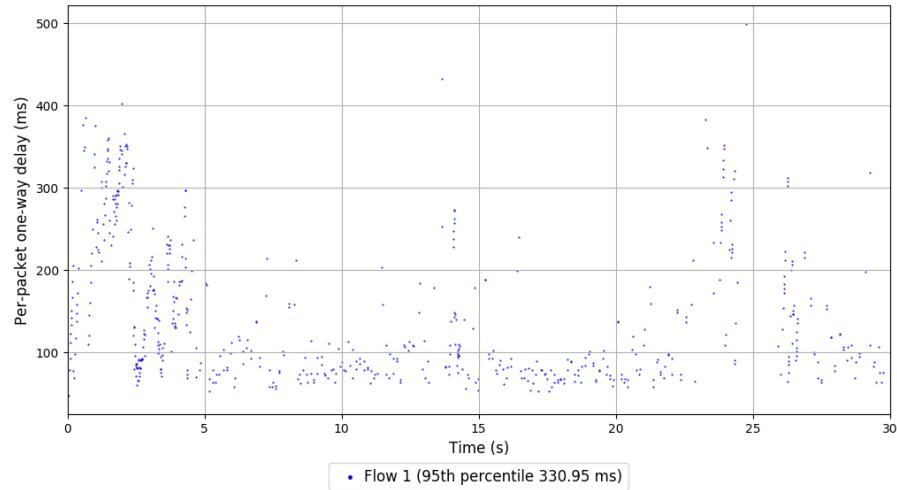
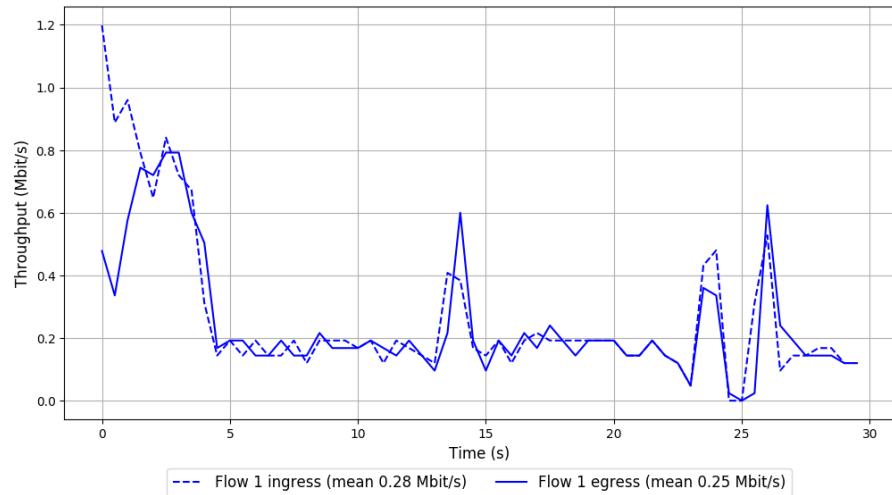


Run 2: Statistics of Indigo

```
Start at: 2017-10-12 17:45:33
End at: 2017-10-12 17:46:03
Local clock offset: 0.165 ms
Remote clock offset: -12.099 ms

# Below is generated by plot.py at 2017-10-12 19:26:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 330.954 ms
Loss rate: 10.35%
-- Flow 1:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 330.954 ms
Loss rate: 10.35%
```

## Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

/home/ubuntu/pantheon\_data/2017-10-12T17-25-India-ppp0-to-AWS-India-1-3-runs/indigo\_stats\_ru

Run 3: Report of Indigo — Data Link

Figure is missing

Figure is missing