

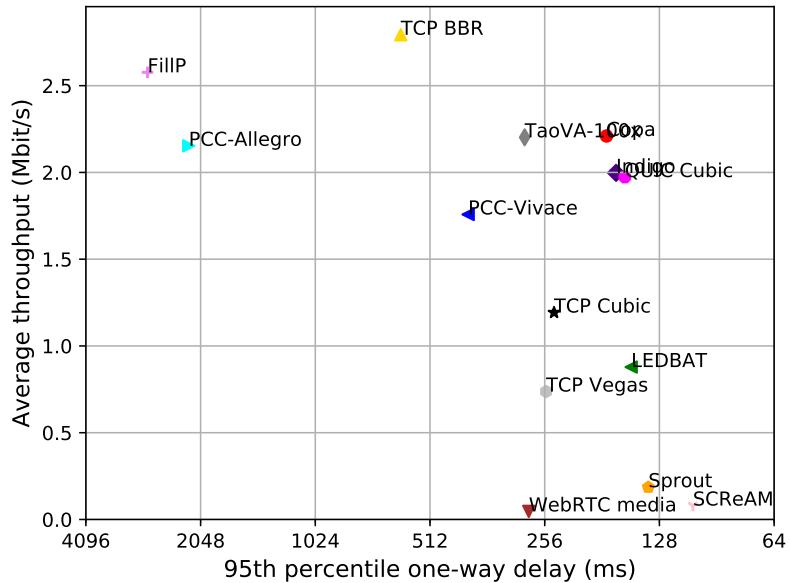
## Pantheon Report

Generated at 2018-05-24 03:18:30 (UTC).  
Data path: AWS Brazil 2 Ethernet (*local*) → Colombia ppp0 ppp0 (*remote*).  
Repeated the test of 16 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).  
NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.

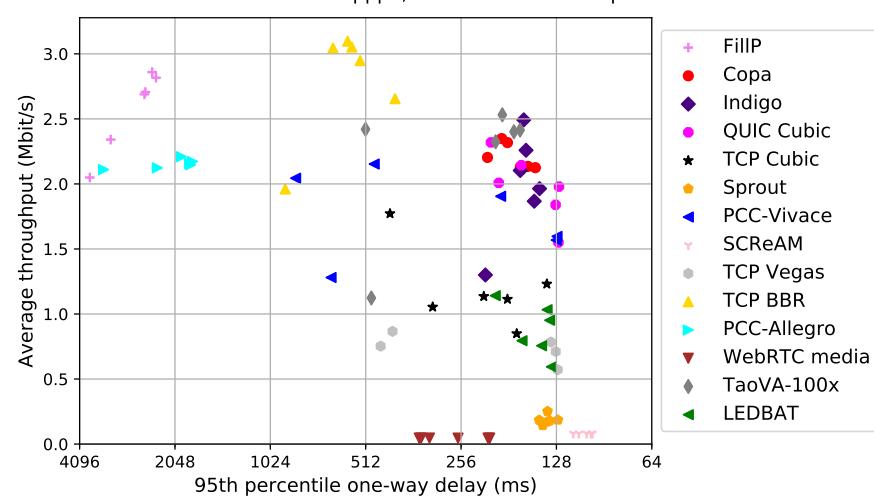
Git summary:

```
branch: master @ 0088822873ea99180f63545a341ef069f40efe59
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
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/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS Brazil 2 to Colombia ppp0, 10 runs of 30s each per scheme  
(mean of all runs by scheme)



test from AWS Brazil 2 to Colombia ppp0, 10 runs of 30s each per scheme



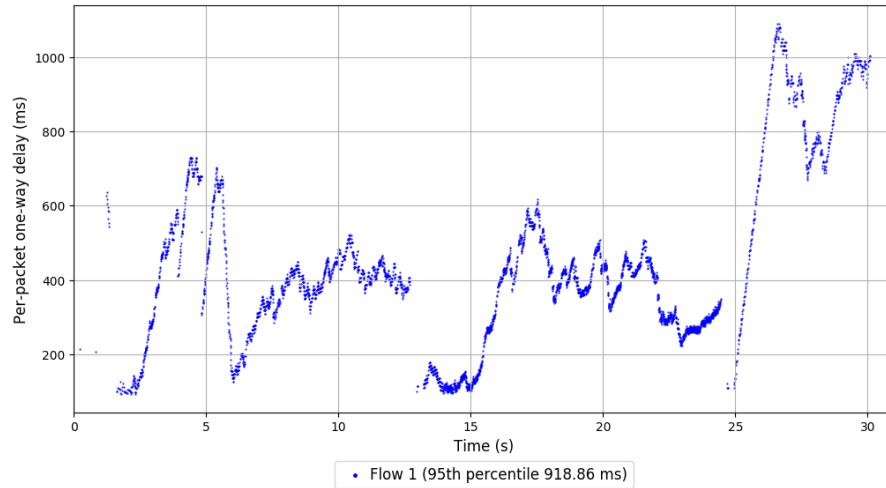
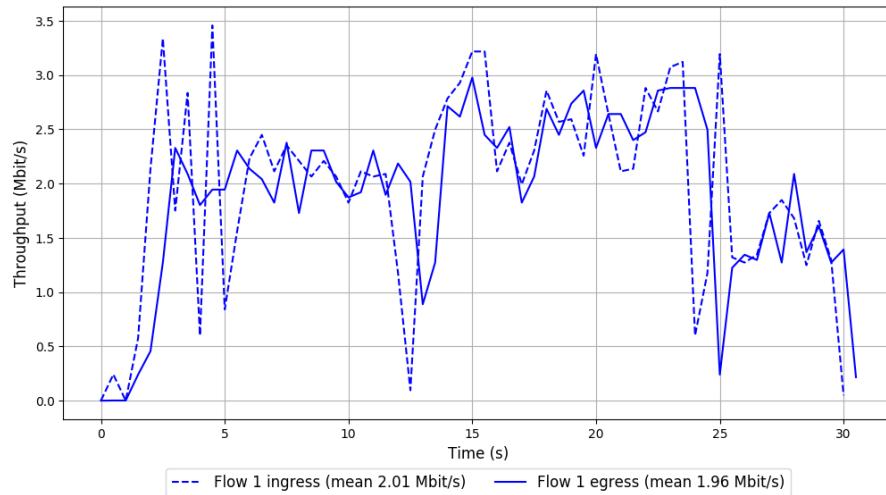
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	6	2.80	610.83	1.84
Copa	6	2.21	176.23	0.77
TCP Cubic	6	1.19	241.95	0.85
FillP	6	2.58	2822.43	78.41
Indigo	6	2.00	166.34	0.81
LEDBAT	6	0.88	151.84	0.97
PCC-Allegro	6	2.15	2200.16	33.05
PCC-Expr	0	N/A	N/A	N/A
QUIC Cubic	6	1.97	157.74	0.94
SCReAM	5	0.08	104.55	0.21
Sprout	6	0.18	136.87	0.75
TaoVA-100x	6	2.20	288.97	0.90
TCP Vegas	5	0.74	253.87	0.96
Verus	0	N/A	N/A	N/A
PCC-Vivace	6	1.76	406.66	1.78
WebRTC media	6	0.05	281.88	0.54

Run 1: Statistics of TCP BBR

```
Start at: 2018-05-23 23:53:16
End at: 2018-05-23 23:53:46
Local clock offset: -0.8 ms
Remote clock offset: 4.672 ms

# Below is generated by plot.py at 2018-05-24 03:17:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 918.861 ms
Loss rate: 2.63%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 918.861 ms
Loss rate: 2.63%
```

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

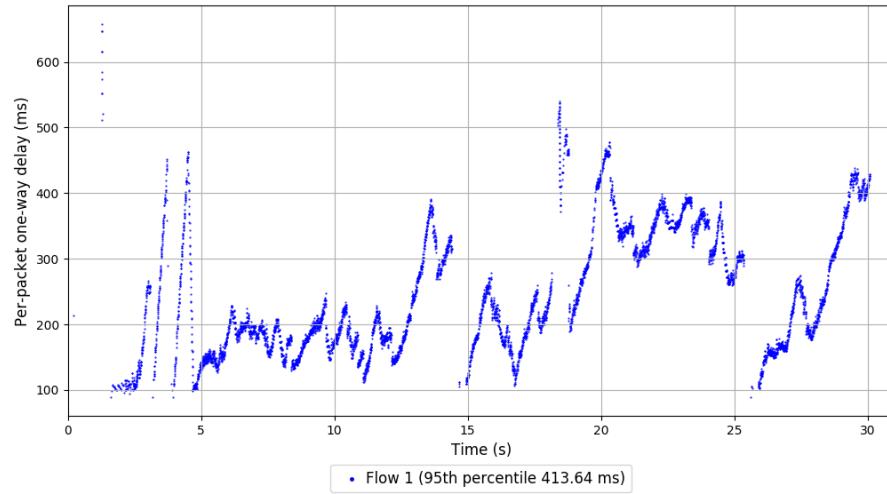
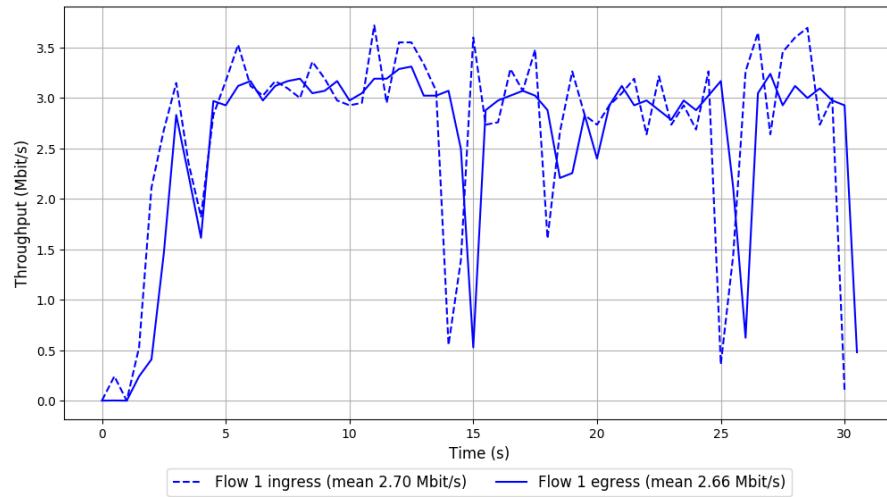


Run 2: Statistics of TCP BBR

```
Start at: 2018-05-24 00:11:15
End at: 2018-05-24 00:11:45
Local clock offset: -1.2 ms
Remote clock offset: 3.465 ms

# Below is generated by plot.py at 2018-05-24 03:17:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 413.638 ms
Loss rate: 2.06%
-- Flow 1:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 413.638 ms
Loss rate: 2.06%
```

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

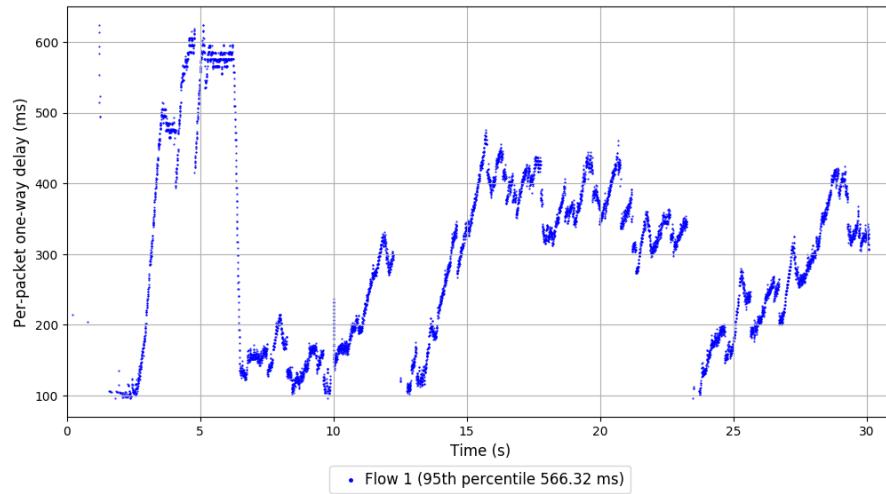
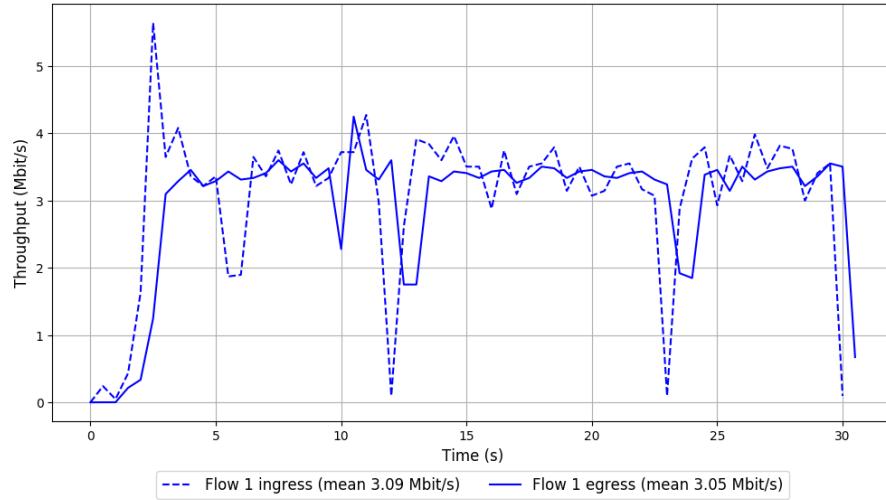


Run 3: Statistics of TCP BBR

```
Start at: 2018-05-24 00:29:13
End at: 2018-05-24 00:29:43
Local clock offset: -1.204 ms
Remote clock offset: 4.031 ms

# Below is generated by plot.py at 2018-05-24 03:17:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.05 Mbit/s
95th percentile per-packet one-way delay: 566.323 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 3.05 Mbit/s
95th percentile per-packet one-way delay: 566.323 ms
Loss rate: 1.72%
```

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

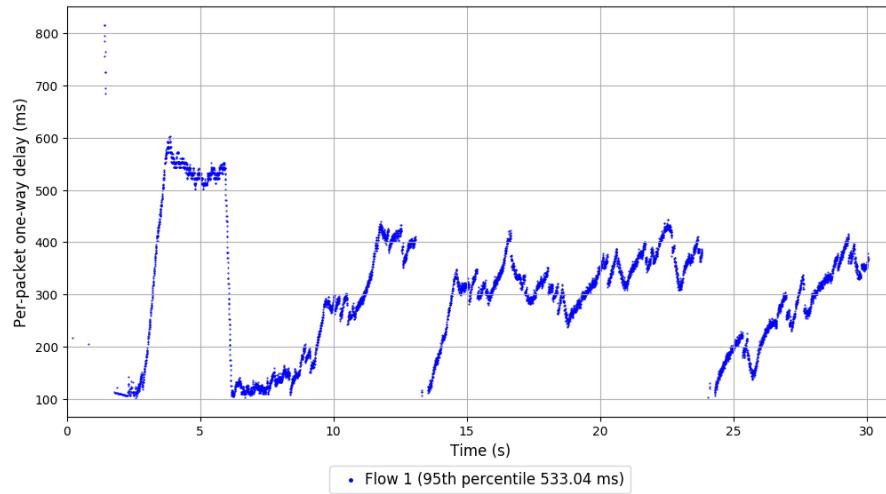
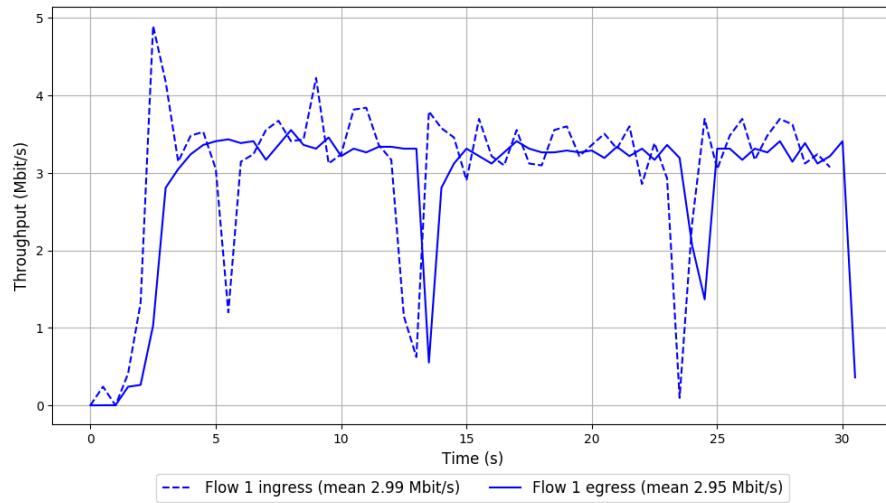


Run 4: Statistics of TCP BBR

```
Start at: 2018-05-24 00:47:12
End at: 2018-05-24 00:47:42
Local clock offset: -1.411 ms
Remote clock offset: 9.64 ms

# Below is generated by plot.py at 2018-05-24 03:17:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.95 Mbit/s
95th percentile per-packet one-way delay: 533.038 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 2.95 Mbit/s
95th percentile per-packet one-way delay: 533.038 ms
Loss rate: 1.68%
```

### Run 4: Report of TCP BBR — Data Link

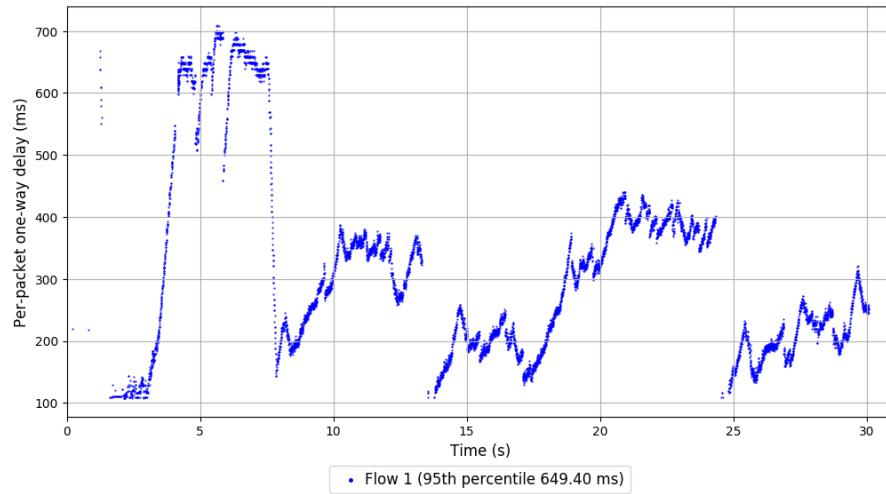
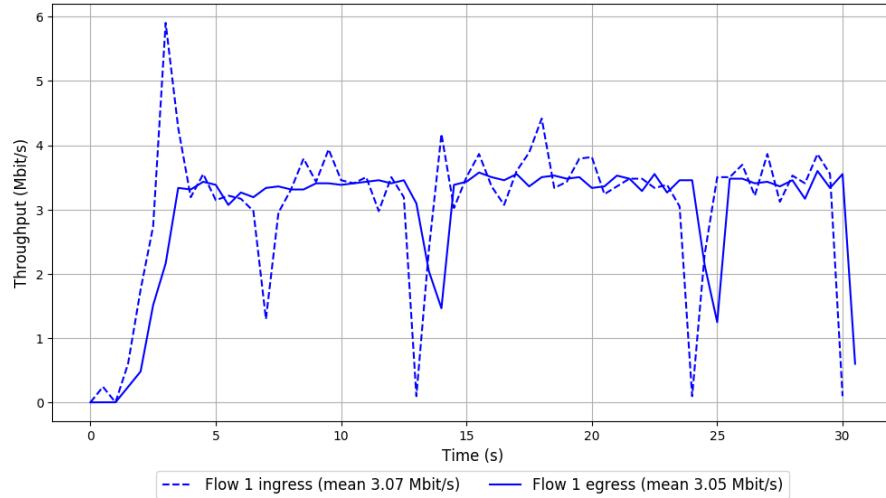


Run 5: Statistics of TCP BBR

```
Start at: 2018-05-24 01:05:12
End at: 2018-05-24 01:05:42
Local clock offset: -5.671 ms
Remote clock offset: 15.657 ms

# Below is generated by plot.py at 2018-05-24 03:17:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.05 Mbit/s
95th percentile per-packet one-way delay: 649.399 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 3.05 Mbit/s
95th percentile per-packet one-way delay: 649.399 ms
Loss rate: 1.31%
```

### Run 5: Report of TCP BBR — Data Link

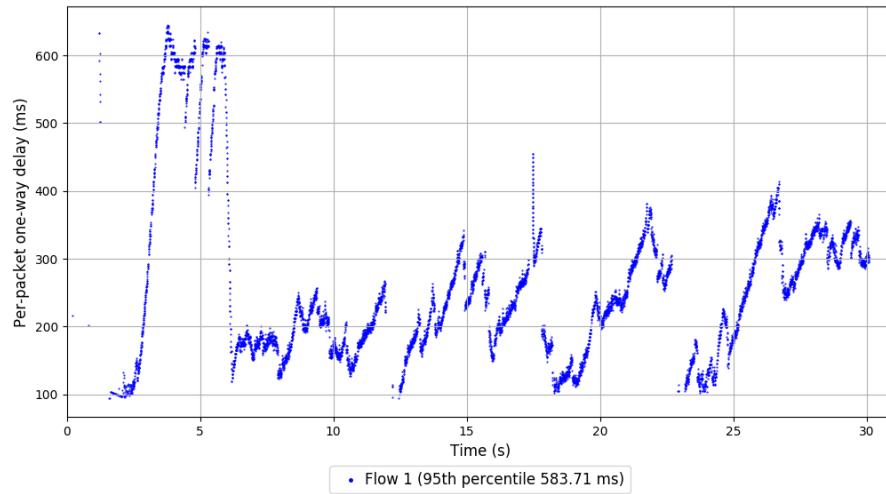
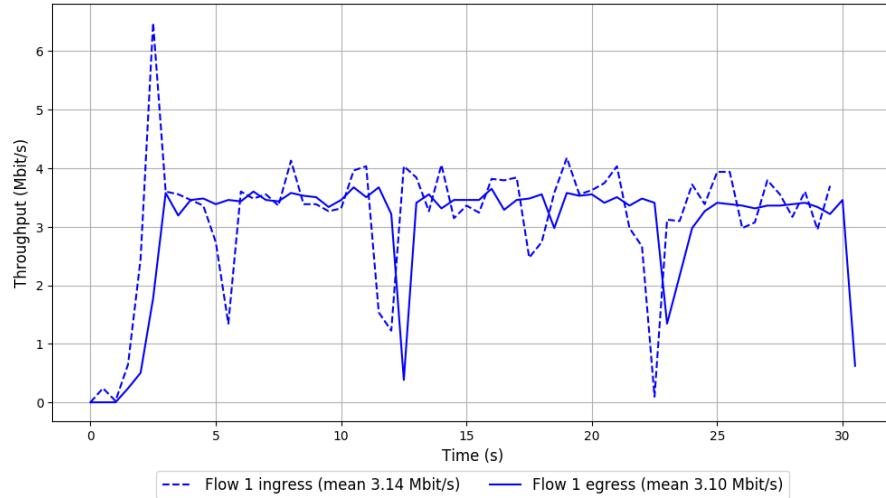


Run 6: Statistics of TCP BBR

```
Start at: 2018-05-24 01:23:16
End at: 2018-05-24 01:23:46
Local clock offset: -7.314 ms
Remote clock offset: 12.285 ms

# Below is generated by plot.py at 2018-05-24 03:17:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 583.714 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 583.714 ms
Loss rate: 1.65%
```

### Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/bbr\_stats\_

Run 7: Report of TCP BBR — Data Link

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Run 8: Statistics of TCP BBR

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/bbr\_stats\_

Run 8: Report of TCP BBR — Data Link

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Run 9: Statistics of TCP BBR

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/bbr\_stats\_

Run 9: Report of TCP BBR — Data Link

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Run 10: Statistics of TCP BBR

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/bbr\_stats\_

Run 10: Report of TCP BBR — Data Link

Figure is missing

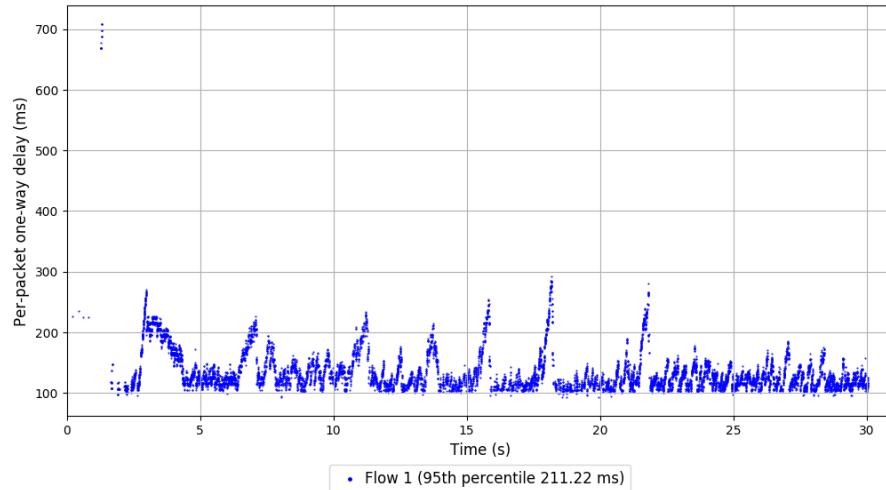
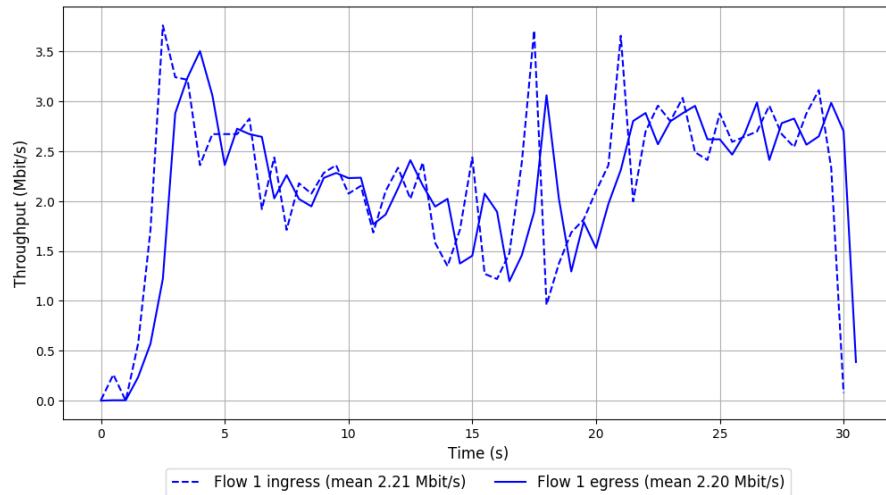
Figure is missing

Run 1: Statistics of Copa

```
Start at: 2018-05-24 00:06:45
End at: 2018-05-24 00:07:15
Local clock offset: -1.876 ms
Remote clock offset: 6.475 ms

# Below is generated by plot.py at 2018-05-24 03:17:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 211.222 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 211.222 ms
Loss rate: 0.77%
```

### Run 1: Report of Copa — Data Link

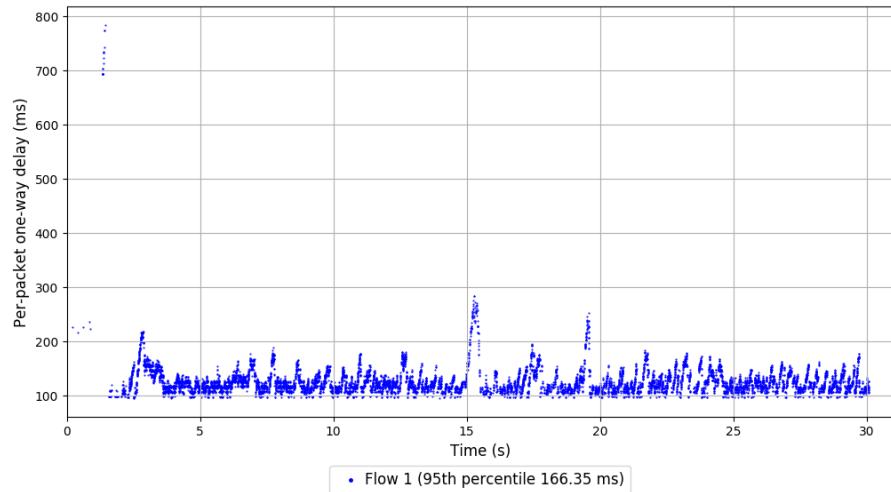
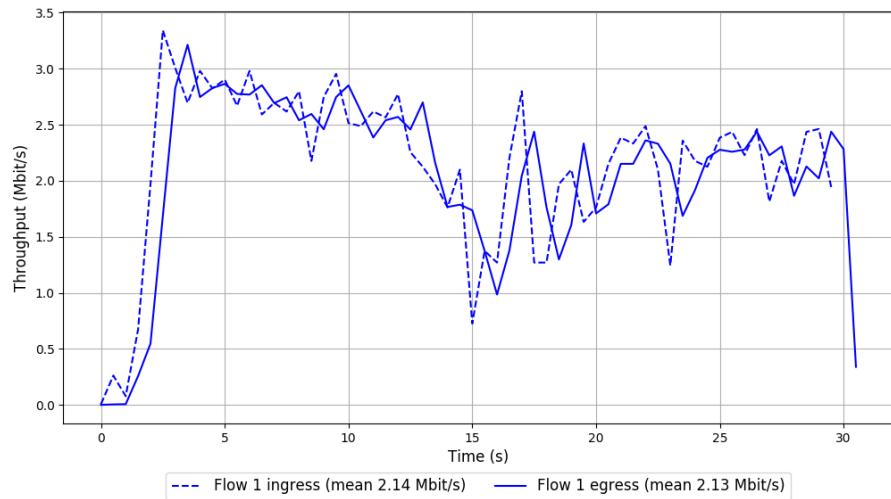


Run 2: Statistics of Copa

```
Start at: 2018-05-24 00:24:44
End at: 2018-05-24 00:25:14
Local clock offset: -2.613 ms
Remote clock offset: 6.833 ms

# Below is generated by plot.py at 2018-05-24 03:17:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 166.351 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 166.351 ms
Loss rate: 0.72%
```

## Run 2: Report of Copa — Data Link

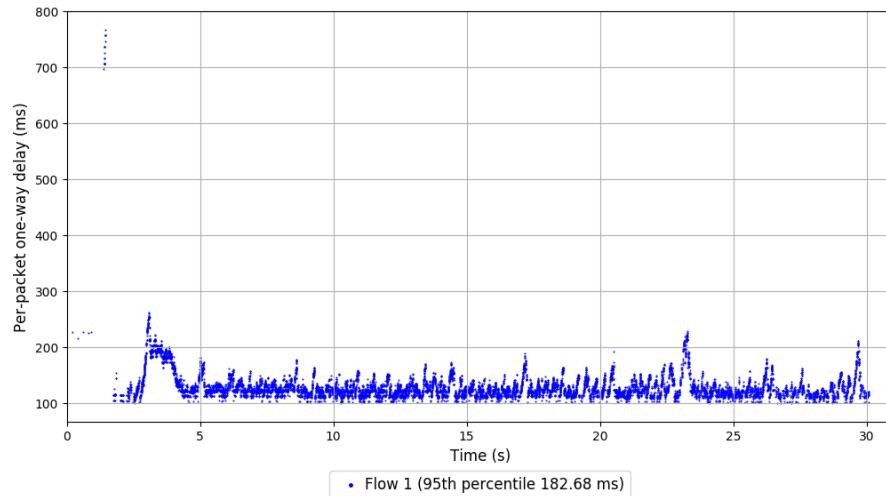
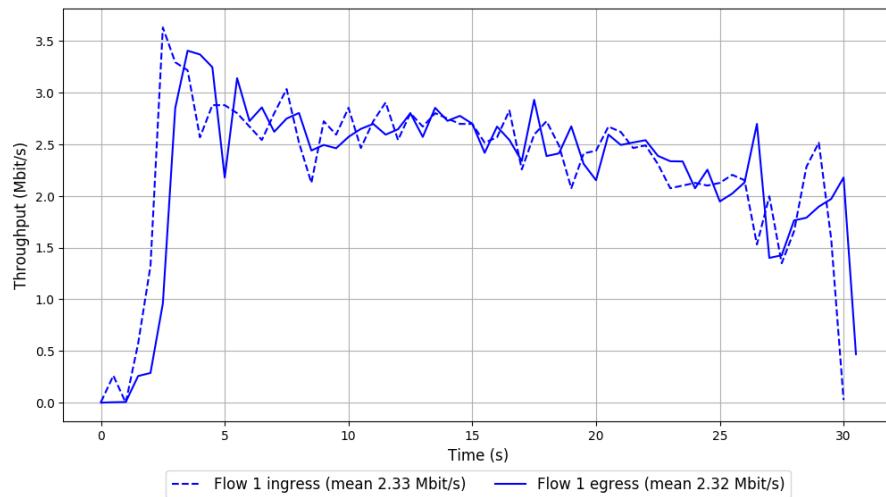


Run 3: Statistics of Copa

```
Start at: 2018-05-24 00:42:42
End at: 2018-05-24 00:43:12
Local clock offset: -2.218 ms
Remote clock offset: 7.651 ms

# Below is generated by plot.py at 2018-05-24 03:17:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 182.683 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 182.683 ms
Loss rate: 0.80%
```

### Run 3: Report of Copa — Data Link

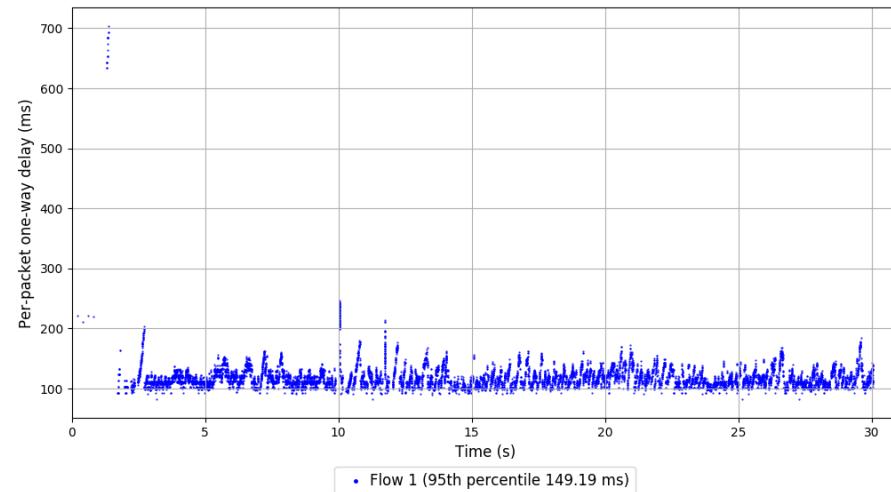
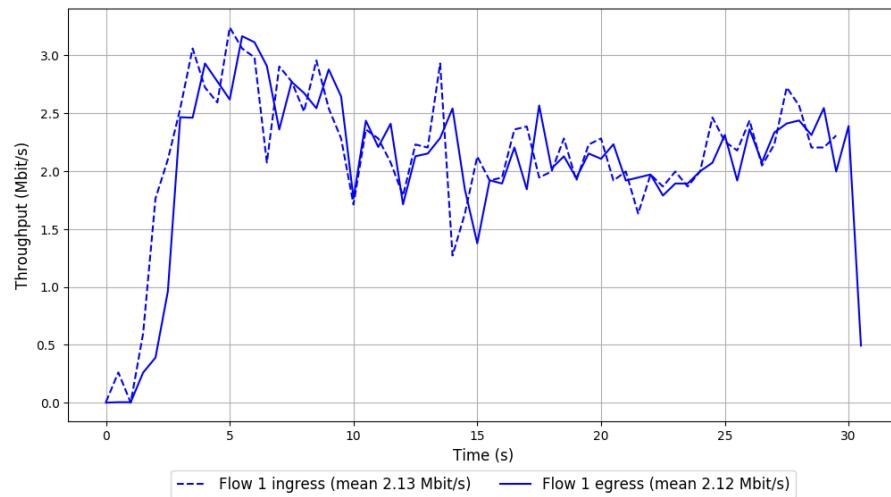


Run 4: Statistics of Copa

```
Start at: 2018-05-24 01:00:41
End at: 2018-05-24 01:01:11
Local clock offset: -3.537 ms
Remote clock offset: 9.355 ms

# Below is generated by plot.py at 2018-05-24 03:17:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 149.192 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 149.192 ms
Loss rate: 0.67%
```

## Run 4: Report of Copa — Data Link

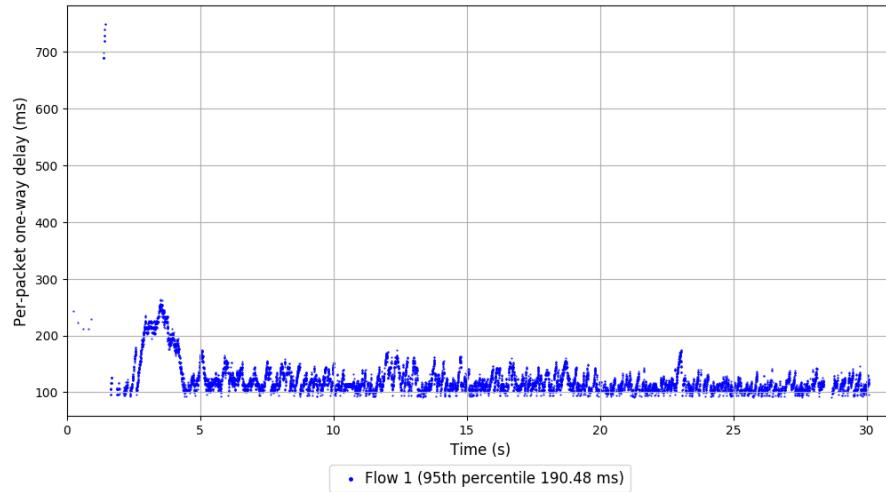
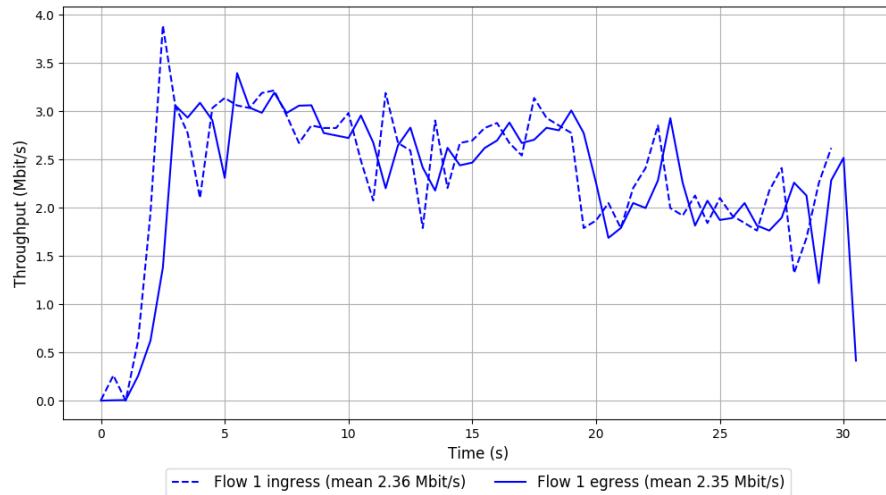


Run 5: Statistics of Copa

```
Start at: 2018-05-24 01:18:46
End at: 2018-05-24 01:19:17
Local clock offset: -7.714 ms
Remote clock offset: 11.966 ms

# Below is generated by plot.py at 2018-05-24 03:17:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 190.476 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 190.476 ms
Loss rate: 0.77%
```

### Run 5: Report of Copa — Data Link

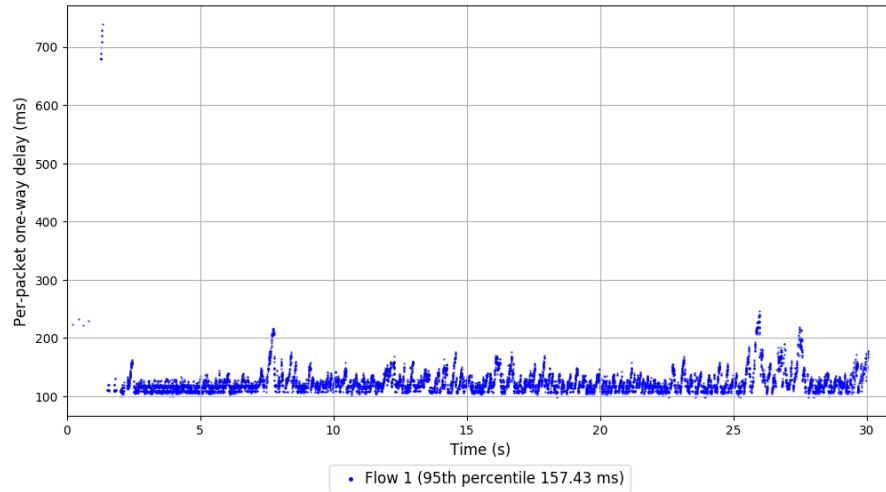
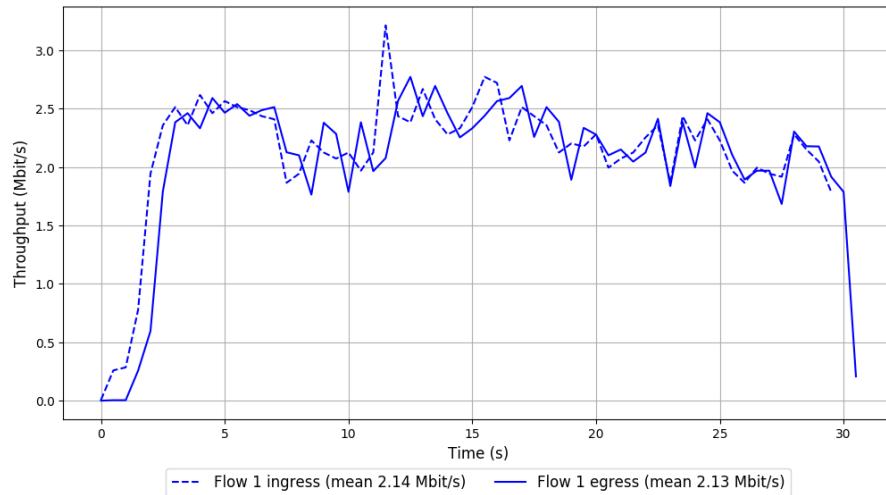


Run 6: Statistics of Copa

```
Start at: 2018-05-24 01:36:45
End at: 2018-05-24 01:37:15
Local clock offset: -7.381 ms
Remote clock offset: 6.003 ms

# Below is generated by plot.py at 2018-05-24 03:17:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 157.428 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 157.428 ms
Loss rate: 0.87%
```

## Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/copa\_stats

Run 7: Report of Copa — Data Link

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Figure is missing

Run 8: Statistics of Copa

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/copa\_stats

Run 8: Report of Copa — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of Copa

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/copa\_stats

Run 9: Report of Copa — Data Link

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Run 10: Statistics of Copa

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/copa\_stats

Run 10: Report of Copa — Data Link

Figure is missing

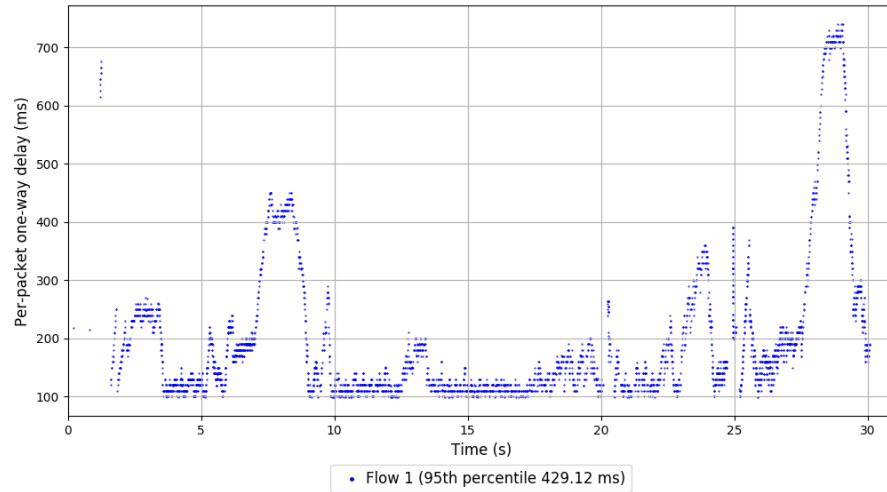
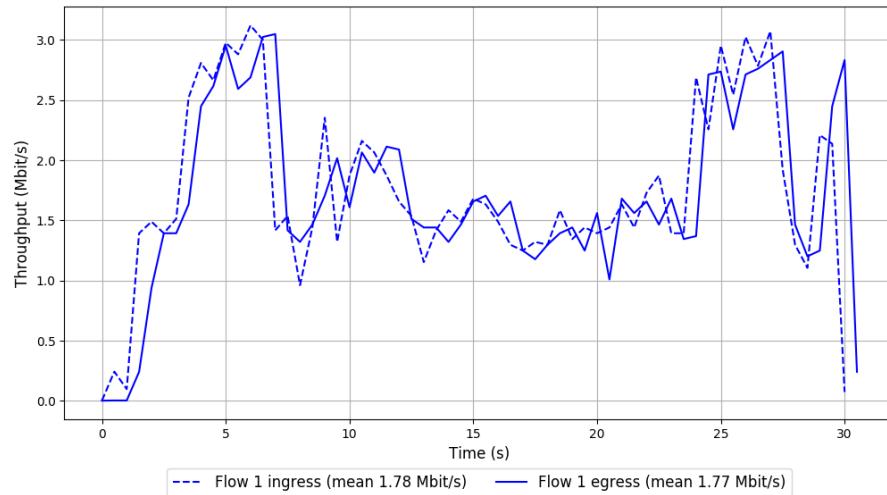
Figure is missing

```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2018-05-23 23:55:31
End at: 2018-05-23 23:56:01
Local clock offset: -0.687 ms
Remote clock offset: 7.441 ms

# Below is generated by plot.py at 2018-05-24 03:17:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 429.125 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 429.125 ms
Loss rate: 0.70%
```

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

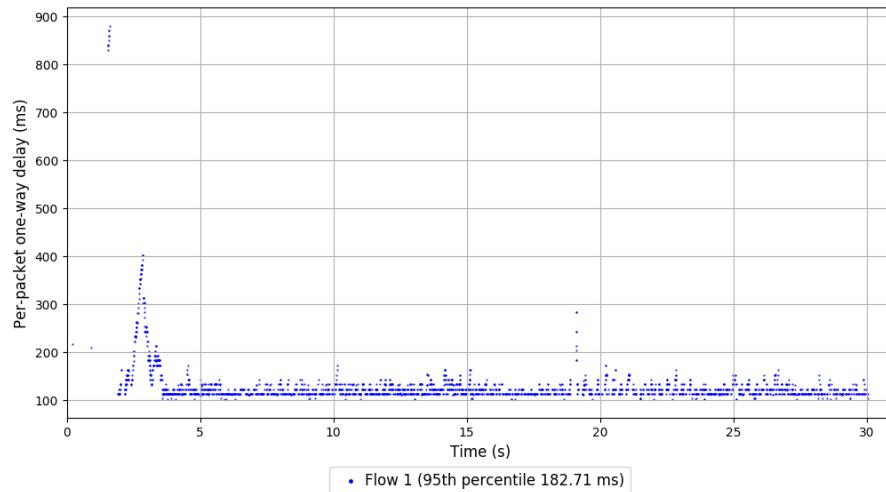
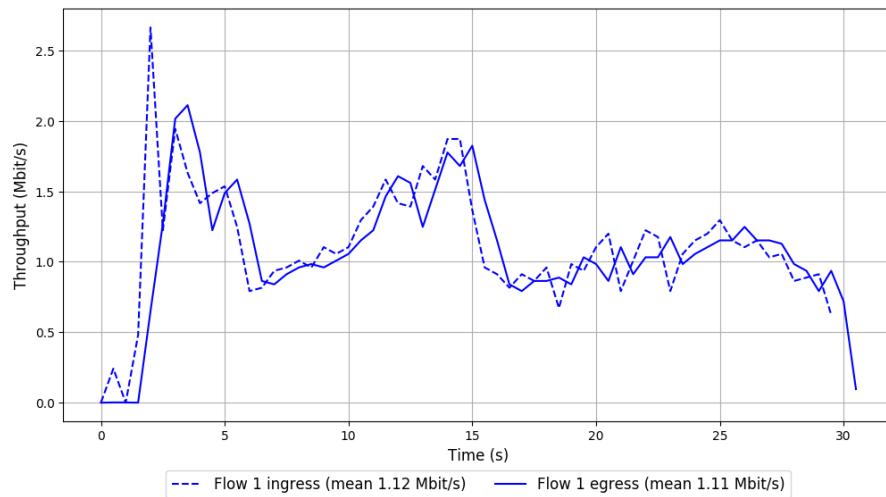


Run 2: Statistics of TCP Cubic

```
Start at: 2018-05-24 00:13:30
End at: 2018-05-24 00:14:00
Local clock offset: -1.199 ms
Remote clock offset: 7.374 ms

# Below is generated by plot.py at 2018-05-24 03:17:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 182.712 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 182.712 ms
Loss rate: 0.65%
```

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

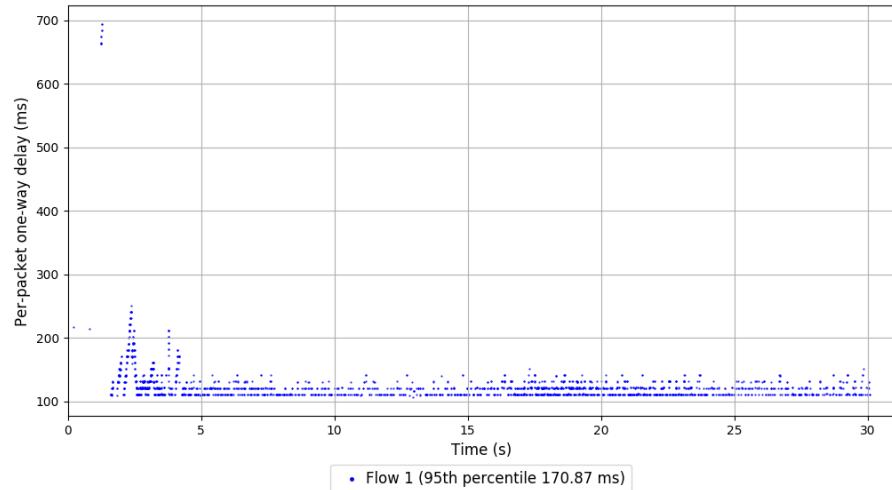
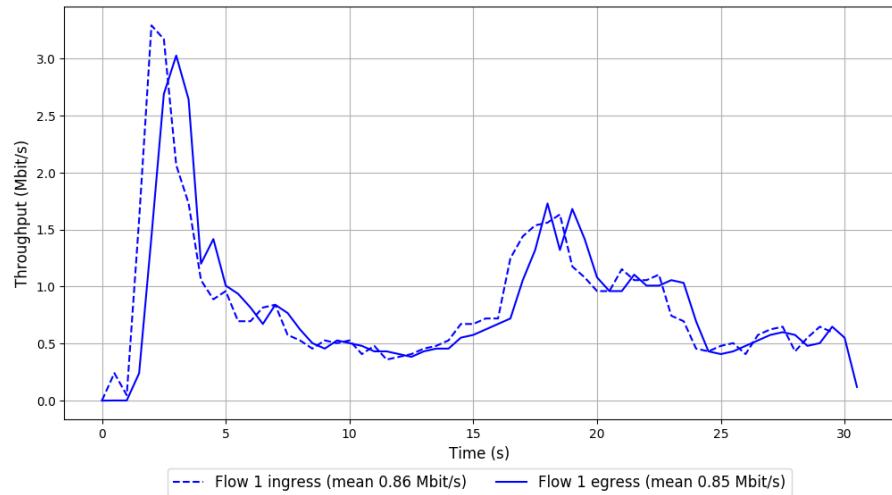


Run 3: Statistics of TCP Cubic

```
Start at: 2018-05-24 00:31:29
End at: 2018-05-24 00:31:59
Local clock offset: -2.085 ms
Remote clock offset: 6.961 ms

# Below is generated by plot.py at 2018-05-24 03:17:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 170.865 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 170.865 ms
Loss rate: 1.08%
```

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

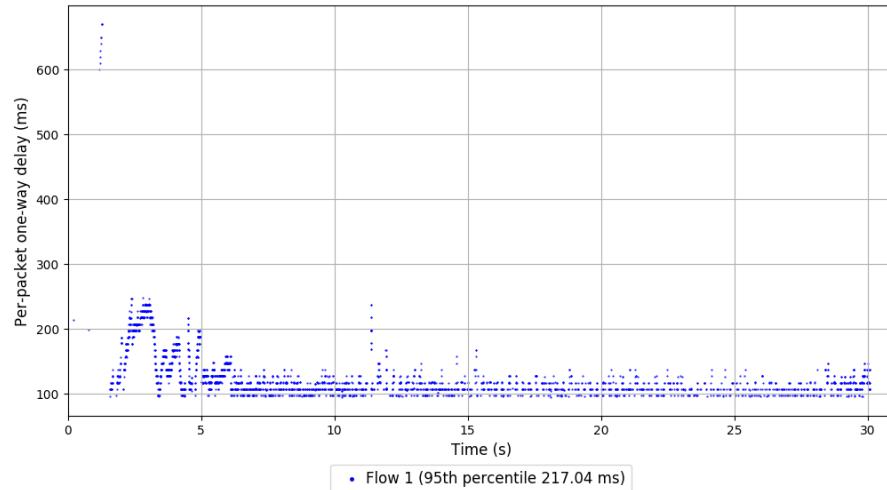
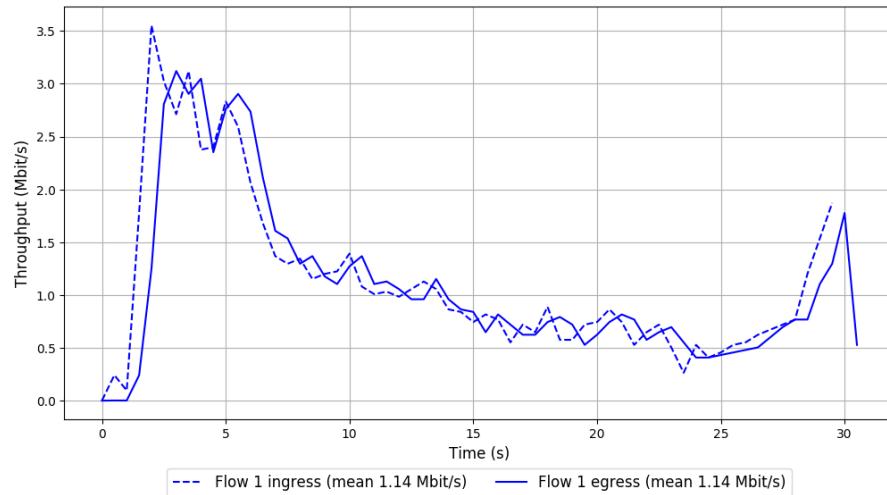


Run 4: Statistics of TCP Cubic

```
Start at: 2018-05-24 00:49:28
End at: 2018-05-24 00:49:58
Local clock offset: -2.201 ms
Remote clock offset: 7.04 ms

# Below is generated by plot.py at 2018-05-24 03:17:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 217.041 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 217.041 ms
Loss rate: 0.77%
```

### Run 4: Report of TCP Cubic — Data Link

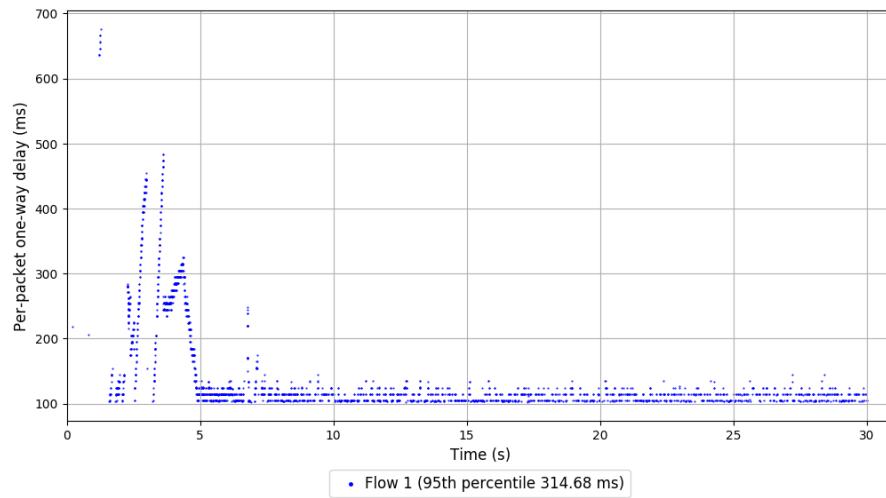
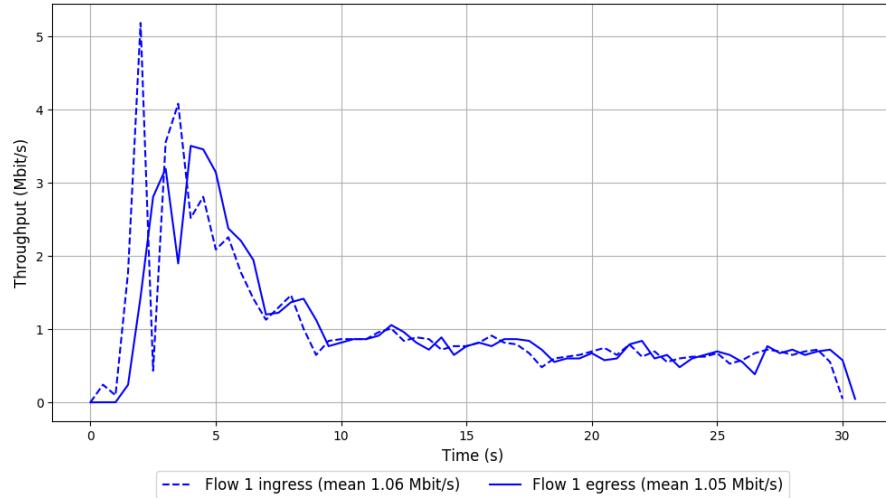


Run 5: Statistics of TCP Cubic

```
Start at: 2018-05-24 01:07:27
End at: 2018-05-24 01:07:57
Local clock offset: -5.414 ms
Remote clock offset: 15.028 ms

# Below is generated by plot.py at 2018-05-24 03:17:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 314.683 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 314.683 ms
Loss rate: 1.06%
```

### Run 5: Report of TCP Cubic — Data Link

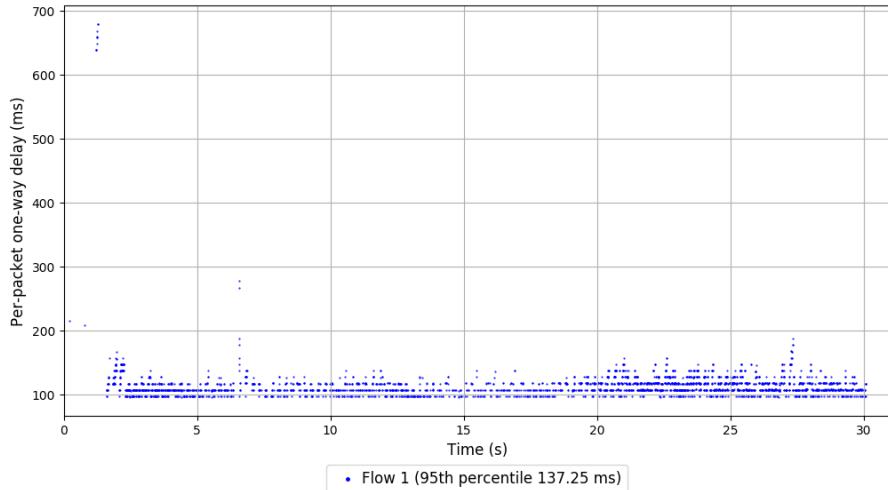
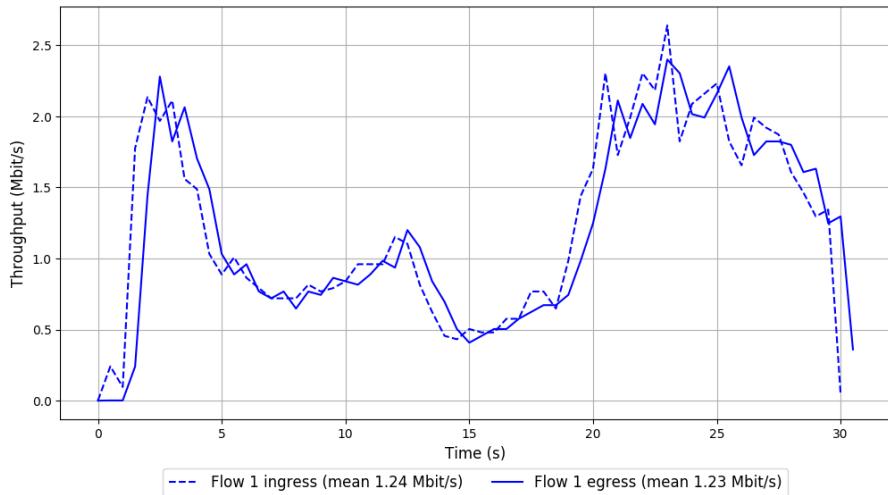


Run 6: Statistics of TCP Cubic

```
Start at: 2018-05-24 01:25:32
End at: 2018-05-24 01:26:02
Local clock offset: -8.237 ms
Remote clock offset: 8.356 ms

# Below is generated by plot.py at 2018-05-24 03:17:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 137.245 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 137.245 ms
Loss rate: 0.81%
```

### Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/cubic\_stat

Run 7: Report of TCP Cubic — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of TCP Cubic

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/cubic\_stat

Run 8: Report of TCP Cubic — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of TCP Cubic

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/cubic\_stat

Run 9: Report of TCP Cubic — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of TCP Cubic

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/cubic\_stat

Run 10: Report of TCP Cubic — Data Link

Figure is missing

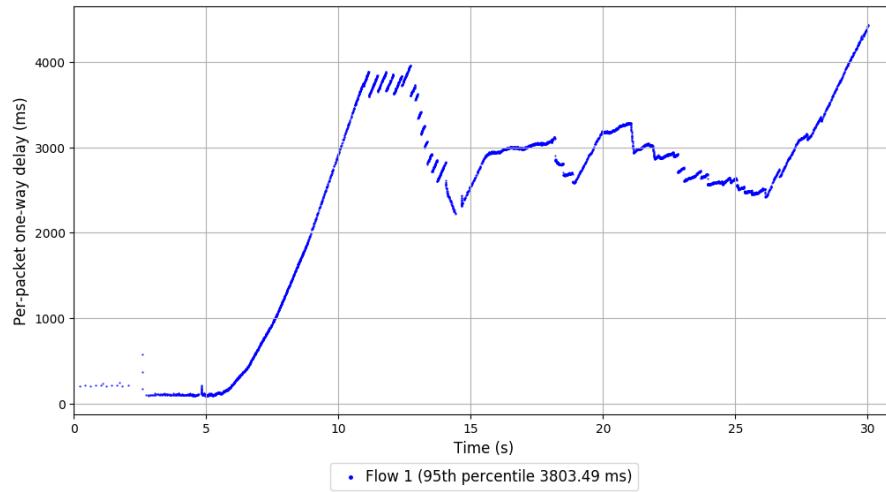
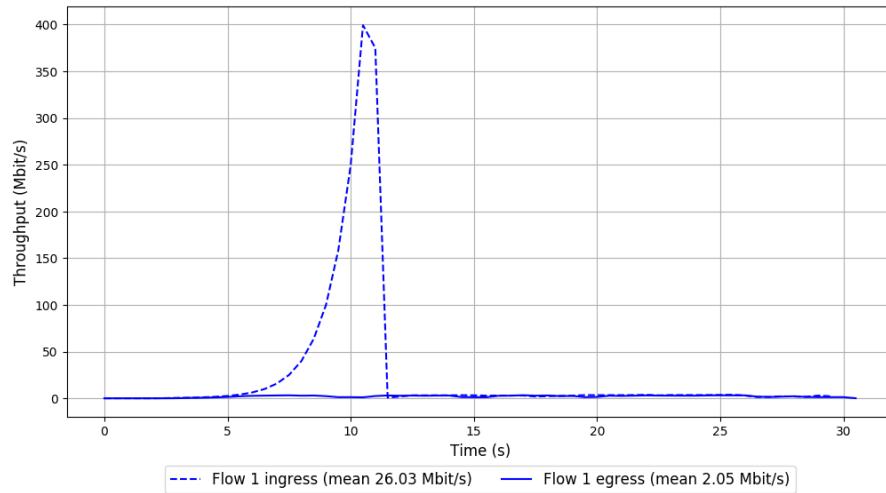
Figure is missing

```
Run 1: Statistics of FillP
```

```
Start at: 2018-05-24 00:01:07
End at: 2018-05-24 00:01:37
Local clock offset: -2.253 ms
Remote clock offset: 2.913 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 3803.487 ms
Loss rate: 92.16%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 3803.487 ms
Loss rate: 92.16%
```

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

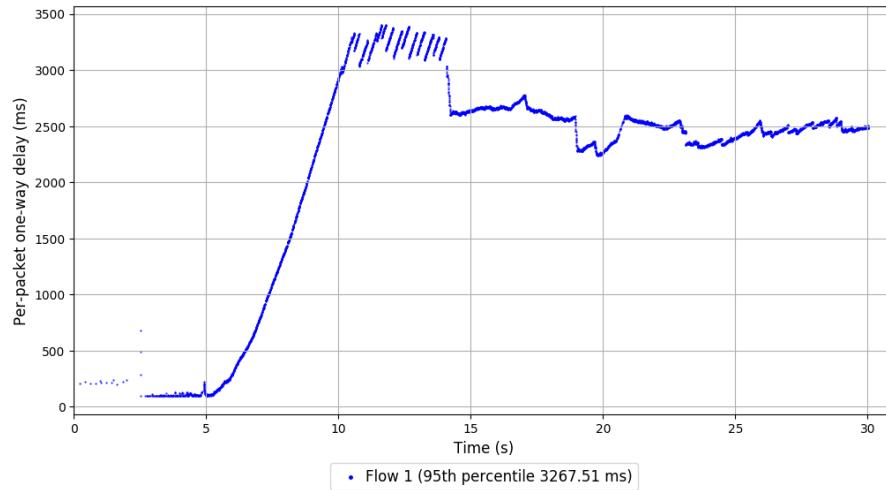
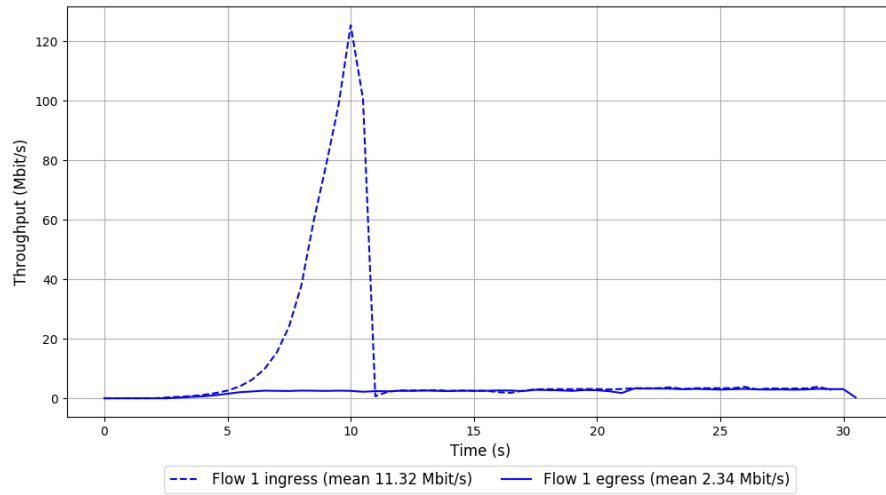


Run 2: Statistics of FillP

```
Start at: 2018-05-24 00:19:06
End at: 2018-05-24 00:19:36
Local clock offset: -1.929 ms
Remote clock offset: 6.841 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 3267.510 ms
Loss rate: 79.42%
-- Flow 1:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 3267.510 ms
Loss rate: 79.42%
```

## Run 2: Report of FillP — Data Link

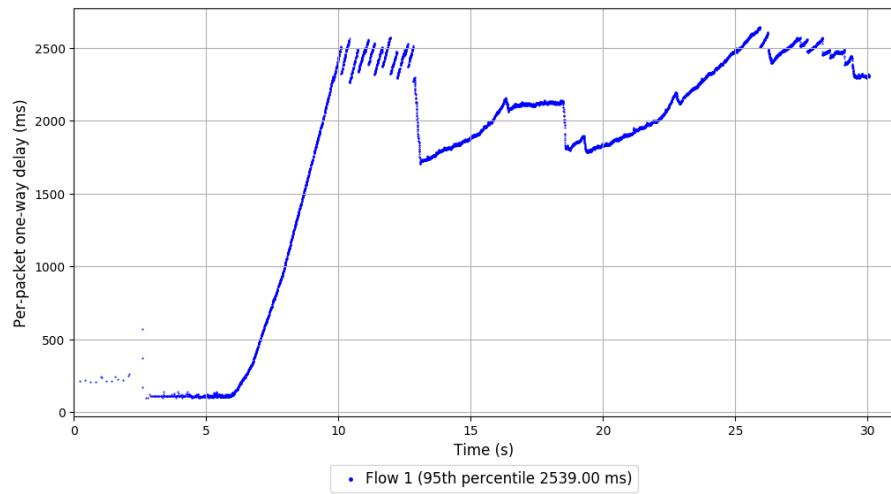
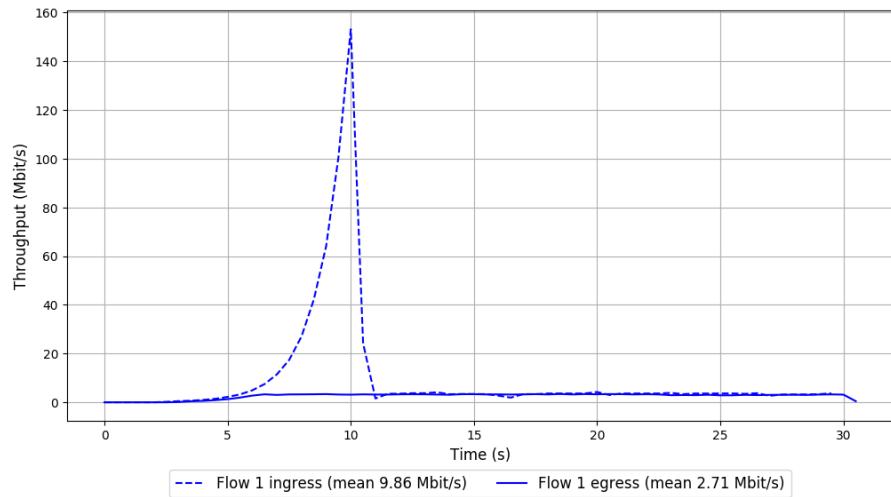


Run 3: Statistics of FillP

```
Start at: 2018-05-24 00:37:05
End at: 2018-05-24 00:37:35
Local clock offset: -2.223 ms
Remote clock offset: 8.621 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 2538.997 ms
Loss rate: 72.68%
-- Flow 1:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 2538.997 ms
Loss rate: 72.68%
```

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

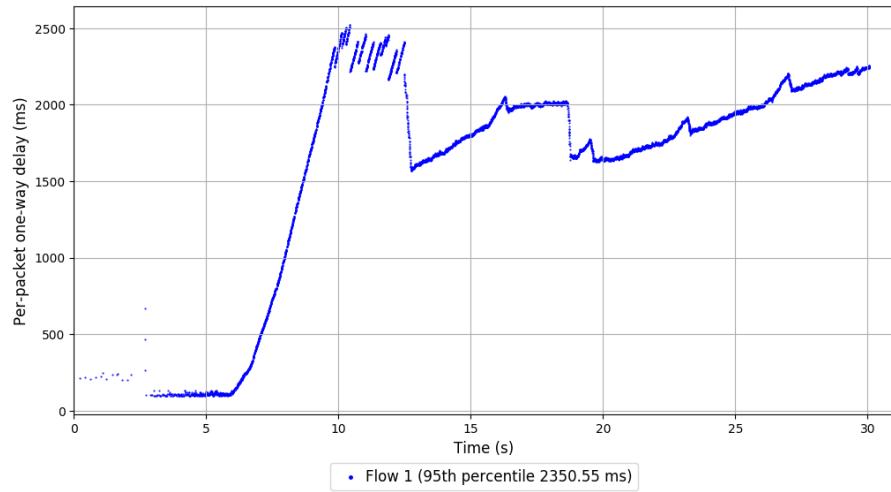
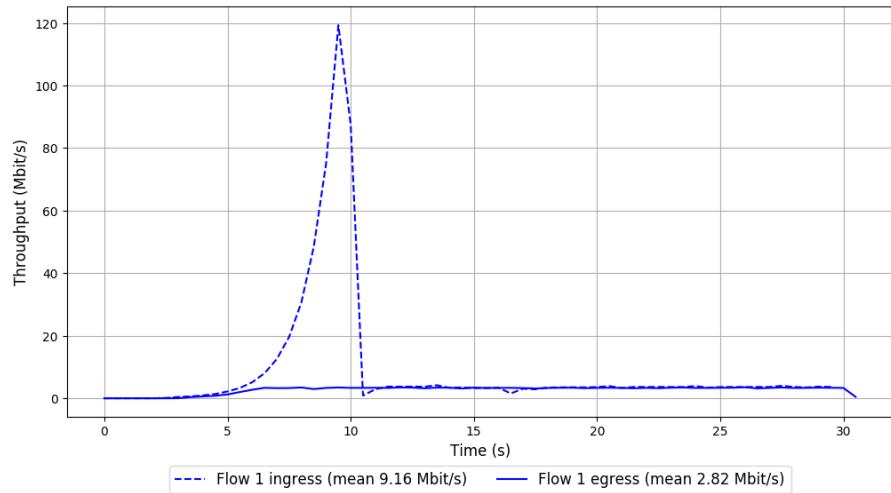


Run 4: Statistics of FillP

```
Start at: 2018-05-24 00:55:04
End at: 2018-05-24 00:55:34
Local clock offset: -1.273 ms
Remote clock offset: 12.716 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.82 Mbit/s
95th percentile per-packet one-way delay: 2350.552 ms
Loss rate: 69.37%
-- Flow 1:
Average throughput: 2.82 Mbit/s
95th percentile per-packet one-way delay: 2350.552 ms
Loss rate: 69.37%
```

## Run 4: Report of FillP — Data Link

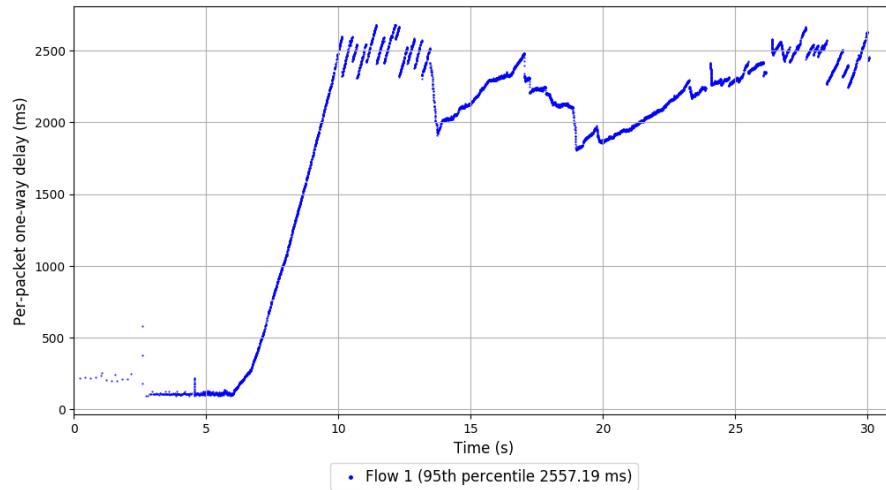
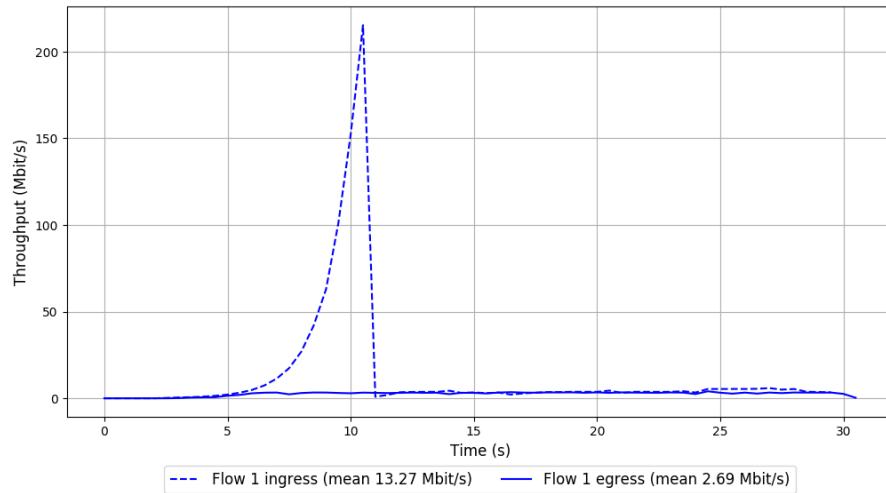


Run 5: Statistics of FillP

```
Start at: 2018-05-24 01:13:09
End at: 2018-05-24 01:13:39
Local clock offset: -7.957 ms
Remote clock offset: 11.816 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.69 Mbit/s
95th percentile per-packet one-way delay: 2557.192 ms
Loss rate: 79.83%
-- Flow 1:
Average throughput: 2.69 Mbit/s
95th percentile per-packet one-way delay: 2557.192 ms
Loss rate: 79.83%
```

### Run 5: Report of FillP — Data Link

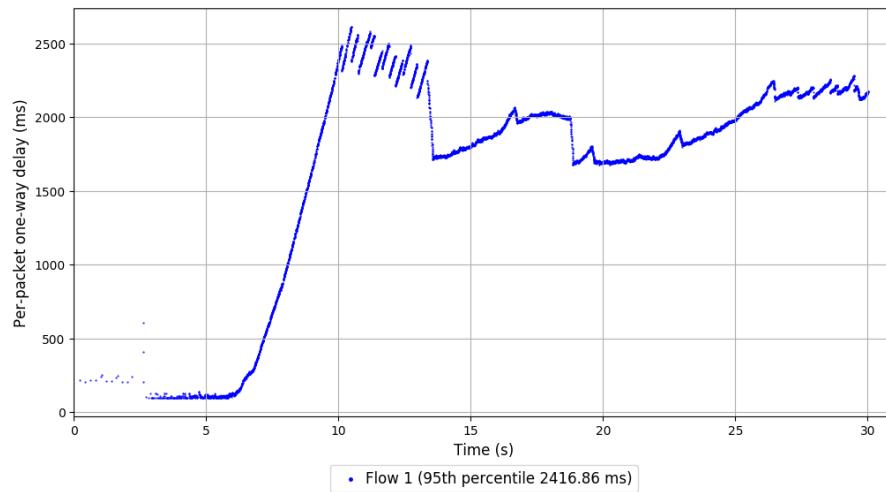
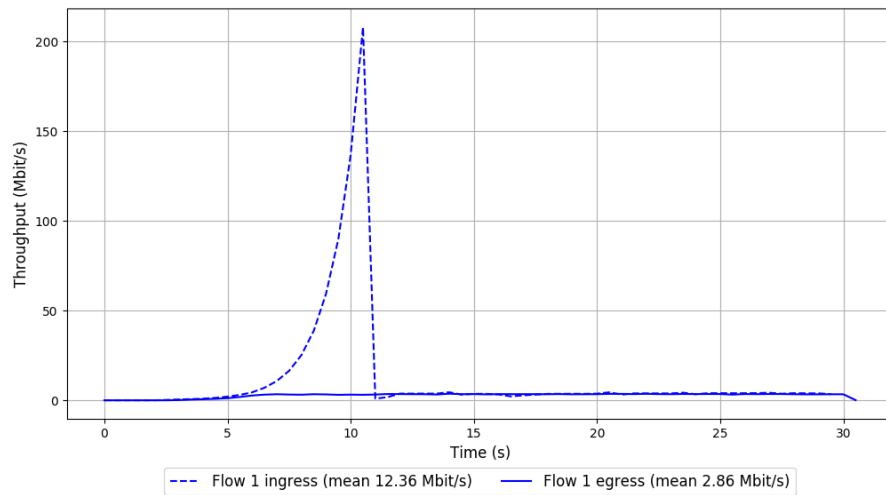


Run 6: Statistics of FillP

```
Start at: 2018-05-24 01:31:08
End at: 2018-05-24 01:31:38
Local clock offset: -8.402 ms
Remote clock offset: 6.141 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: 2416.864 ms
Loss rate: 76.98%
-- Flow 1:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: 2416.864 ms
Loss rate: 76.98%
```

## Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/fillp\_stat

Run 7: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of FillP

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/fillp\_stat

Run 8: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of FillP

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/fillp\_stat

Run 9: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of FillP

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/fillp\_stat

Run 10: Report of FillP — Data Link

Figure is missing

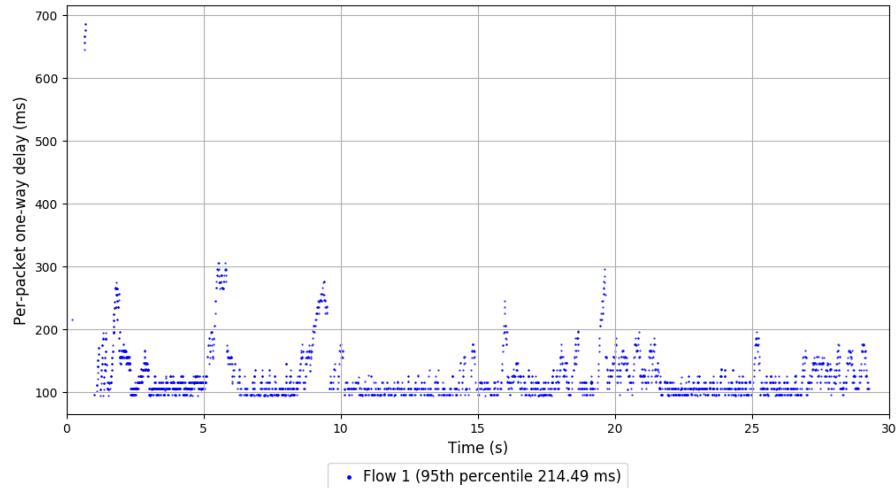
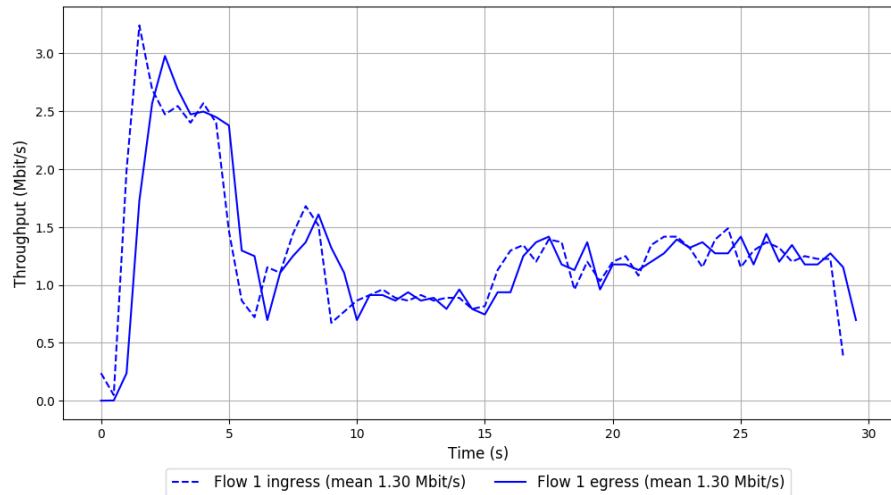
Figure is missing

Run 1: Statistics of Indigo

```
Start at: 2018-05-23 23:58:53
End at: 2018-05-23 23:59:23
Local clock offset: -0.381 ms
Remote clock offset: 4.136 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 214.487 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 214.487 ms
Loss rate: 0.66%
```

## Run 1: Report of Indigo — Data Link

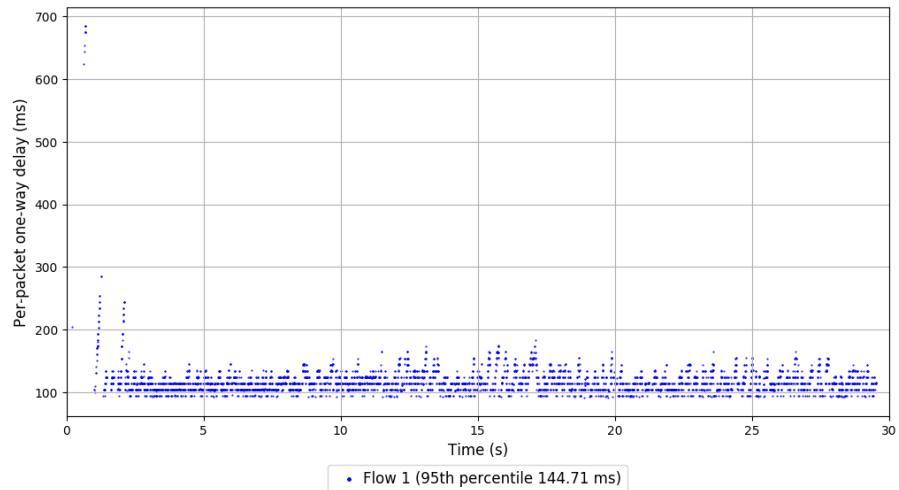
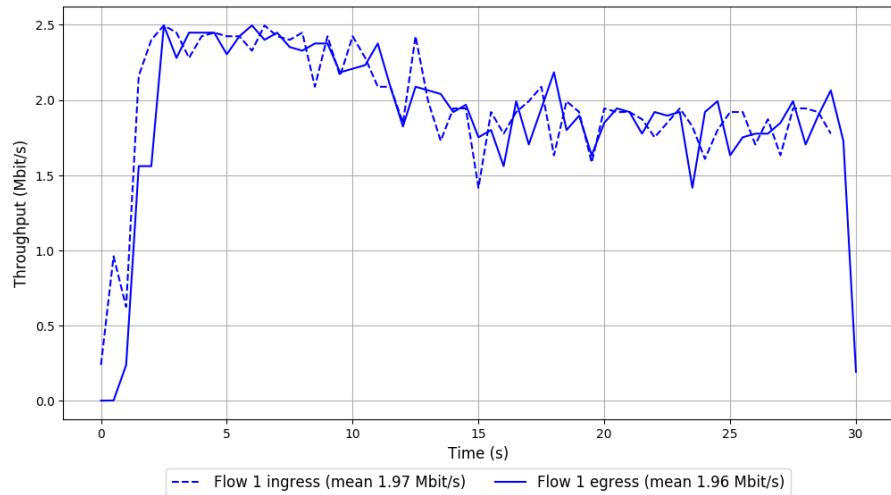


Run 2: Statistics of Indigo

```
Start at: 2018-05-24 00:16:51
End at: 2018-05-24 00:17:21
Local clock offset: -1.944 ms
Remote clock offset: 3.698 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 144.709 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 144.709 ms
Loss rate: 0.87%
```

## Run 2: Report of Indigo — Data Link

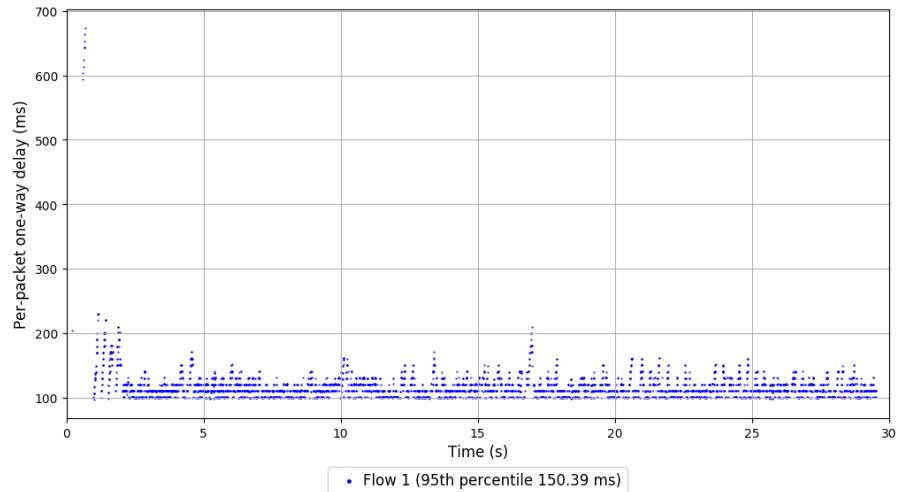
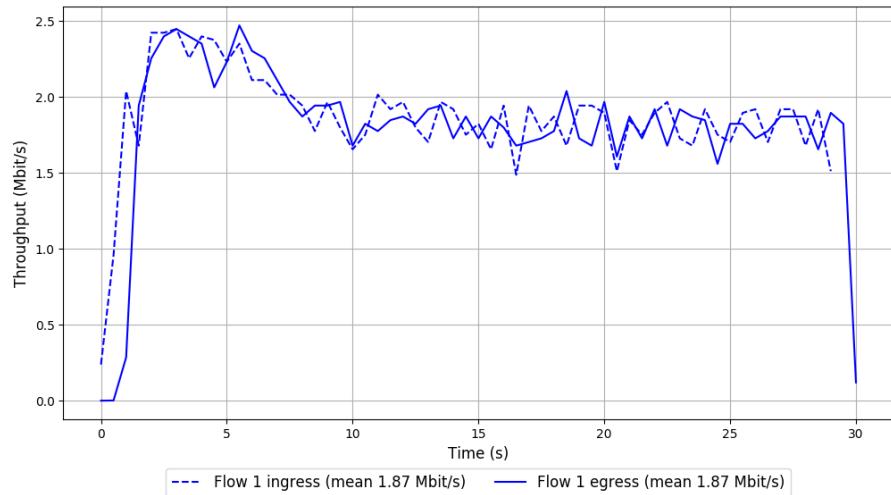


Run 3: Statistics of Indigo

```
Start at: 2018-05-24 00:34:50
End at: 2018-05-24 00:35:20
Local clock offset: -2.25 ms
Remote clock offset: 3.98 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 150.391 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 150.391 ms
Loss rate: 0.67%
```

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

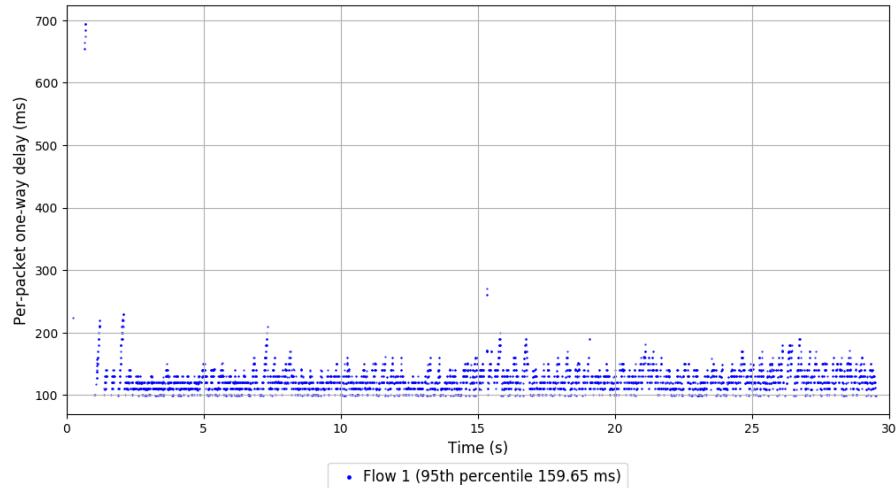
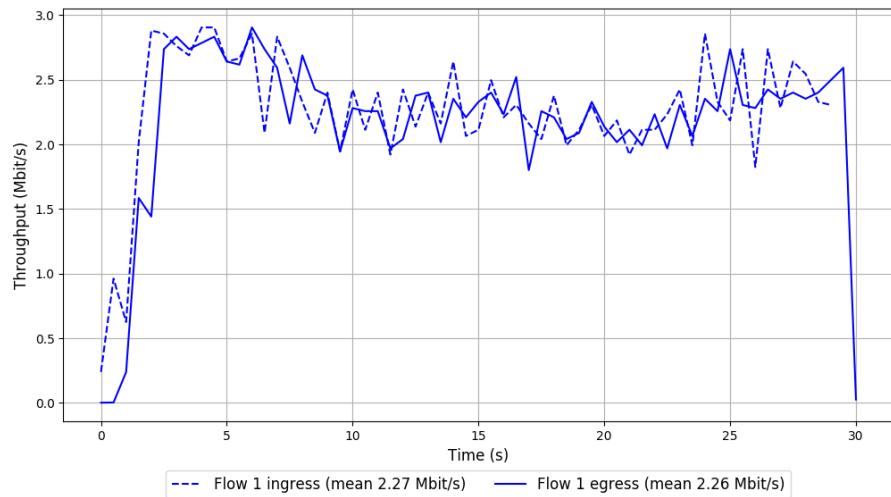


Run 4: Statistics of Indigo

```
Start at: 2018-05-24 00:52:49
End at: 2018-05-24 00:53:19
Local clock offset: -1.334 ms
Remote clock offset: 7.474 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 159.649 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 159.649 ms
Loss rate: 1.08%
```

## Run 4: Report of Indigo — Data Link

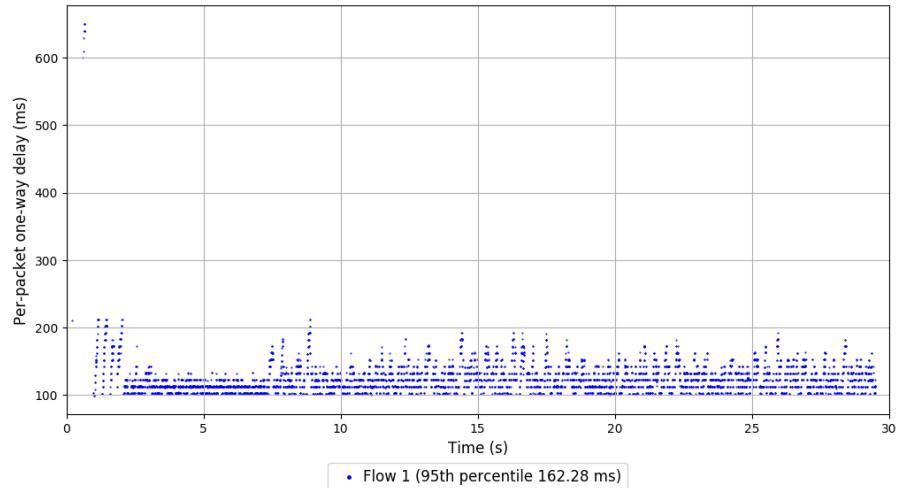
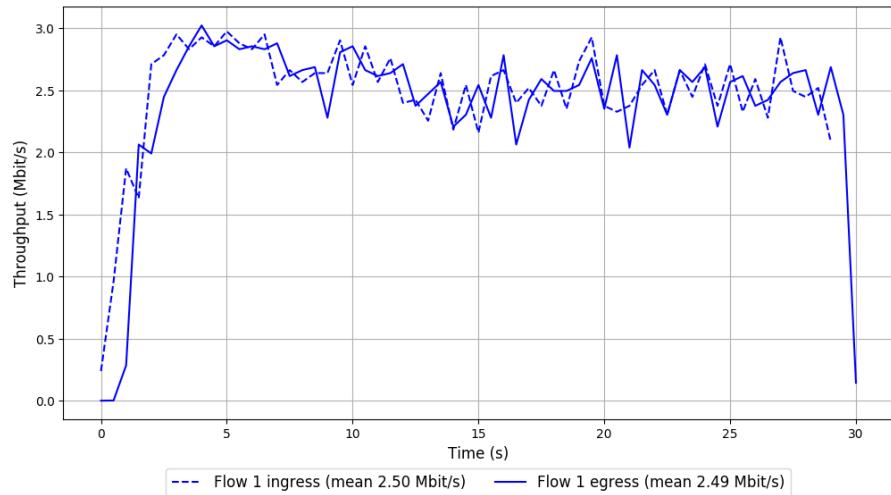


Run 5: Statistics of Indigo

```
Start at: 2018-05-24 01:10:48
End at: 2018-05-24 01:11:18
Local clock offset: -6.011 ms
Remote clock offset: 10.703 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 162.280 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 162.280 ms
Loss rate: 0.73%
```

## Run 5: Report of Indigo — Data Link

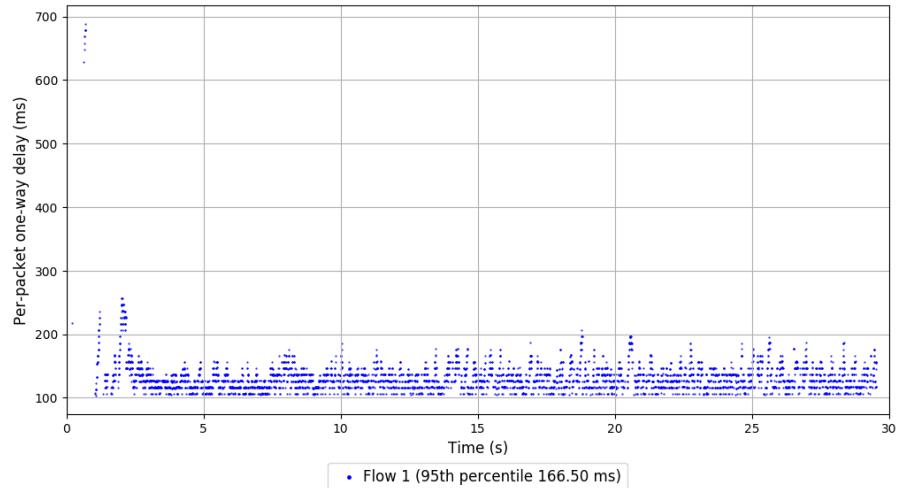
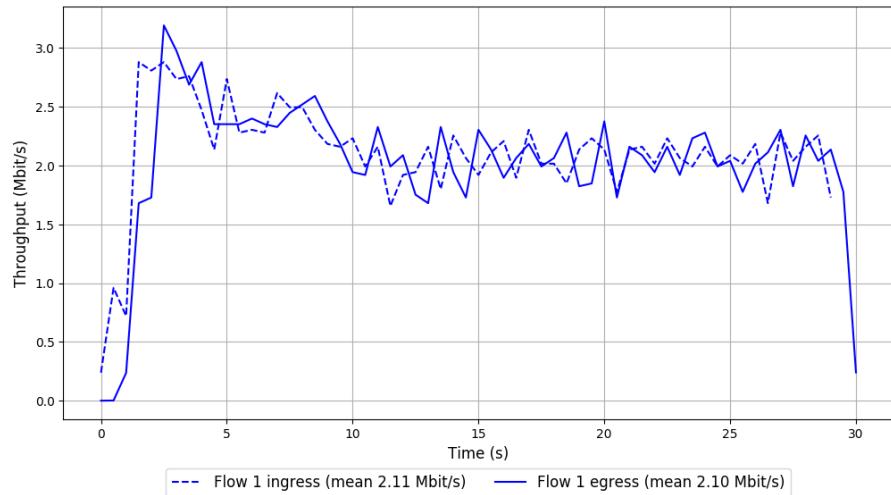


Run 6: Statistics of Indigo

```
Start at: 2018-05-24 01:28:53
End at: 2018-05-24 01:29:23
Local clock offset: -7.116 ms
Remote clock offset: 7.38 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 166.502 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 166.502 ms
Loss rate: 0.87%
```

## Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/indigo\_st

Run 7: Report of Indigo — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of Indigo

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/indigo\_st

Run 8: Report of Indigo — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of Indigo

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/indigo\_st

Run 9: Report of Indigo — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of Indigo

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/indigo\_st

Run 10: Report of Indigo — Data Link

Figure is missing

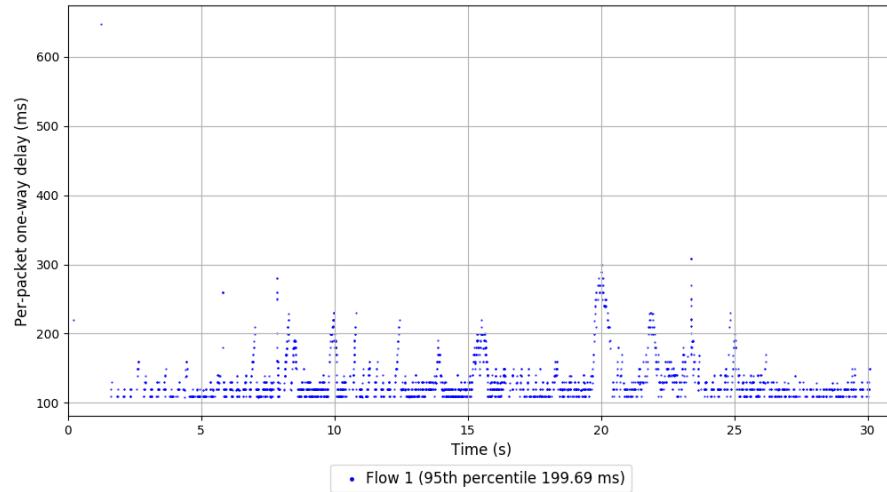
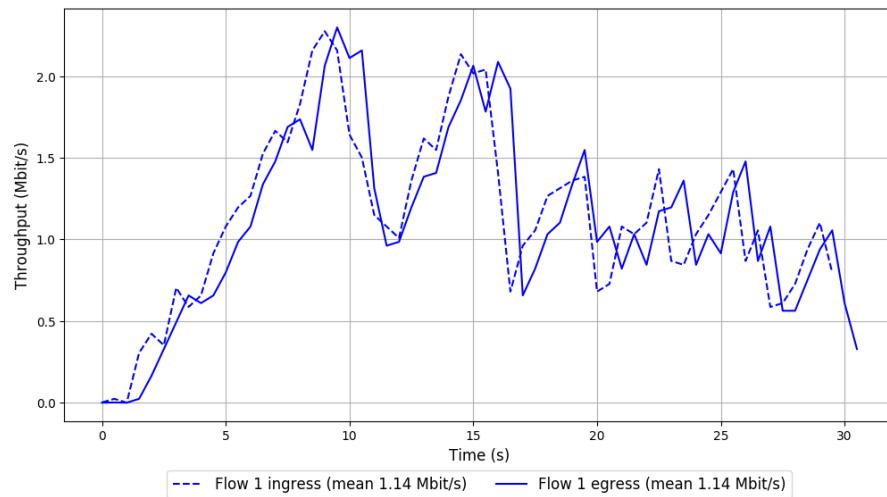
Figure is missing

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

```
Start at: 2018-05-24 00:02:15
End at: 2018-05-24 00:02:45
Local clock offset: -1.617 ms
Remote clock offset: 8.368 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 199.687 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 199.687 ms
Loss rate: 0.45%
```

Run 1: Report of LEDBAT — Data Link

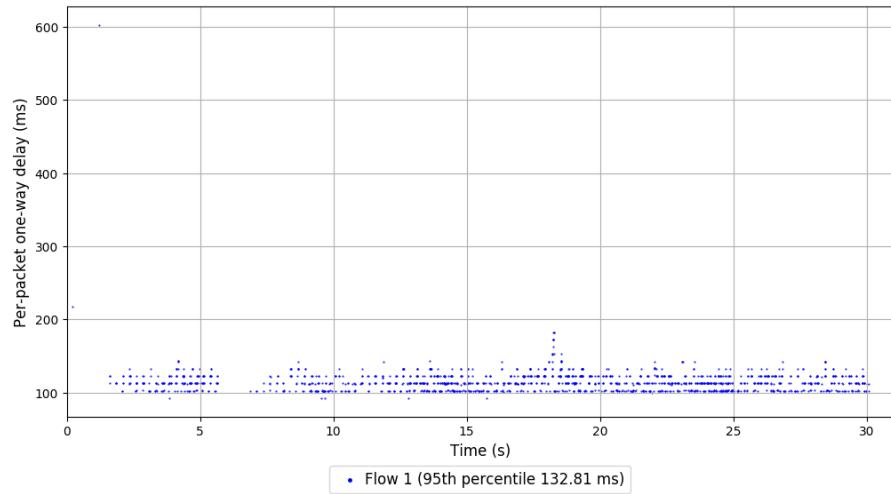
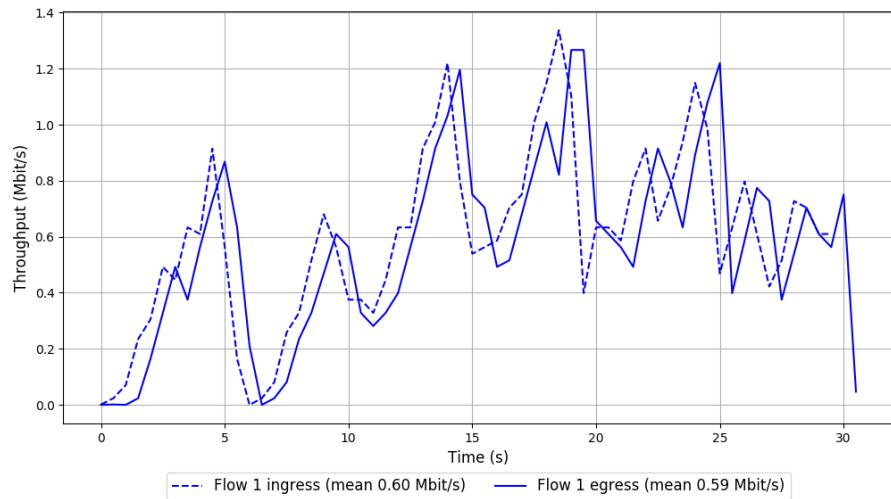


Run 2: Statistics of LEDBAT

```
Start at: 2018-05-24 00:20:14
End at: 2018-05-24 00:20:44
Local clock offset: -1.134 ms
Remote clock offset: 6.894 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 132.805 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 132.805 ms
Loss rate: 1.31%
```

## Run 2: Report of LEDBAT — Data Link

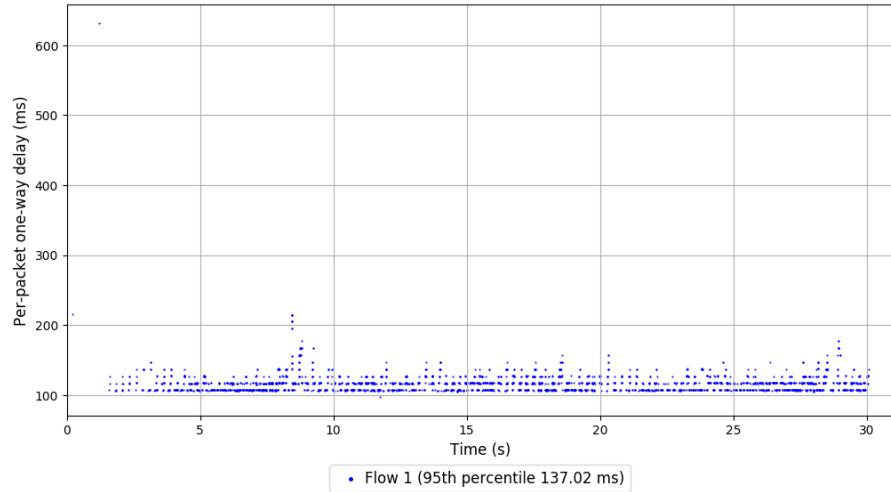
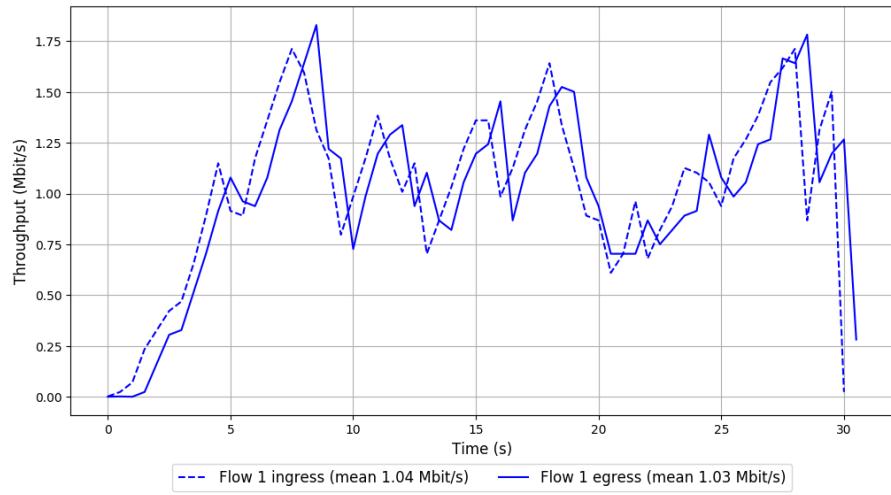


Run 3: Statistics of LEDBAT

```
Start at: 2018-05-24 00:38:13
End at: 2018-05-24 00:38:43
Local clock offset: -3.071 ms
Remote clock offset: 4.009 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 137.018 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 137.018 ms
Loss rate: 0.90%
```

Run 3: Report of LEDBAT — Data Link

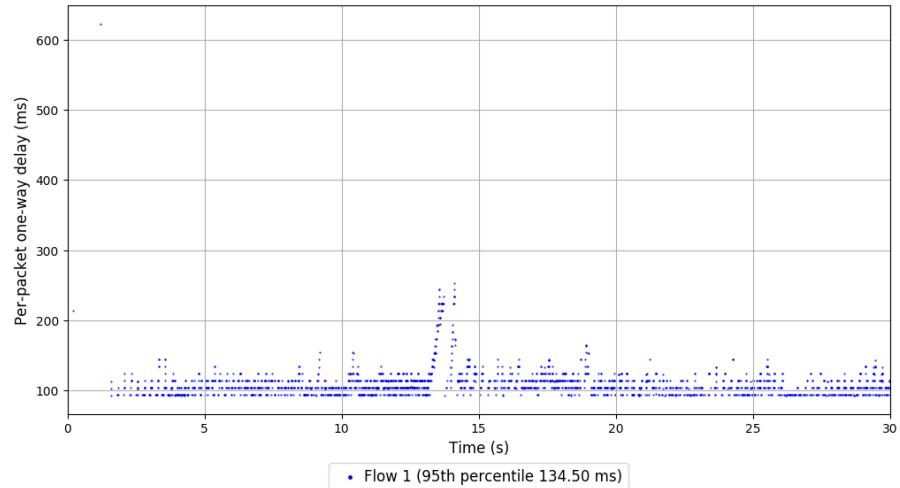
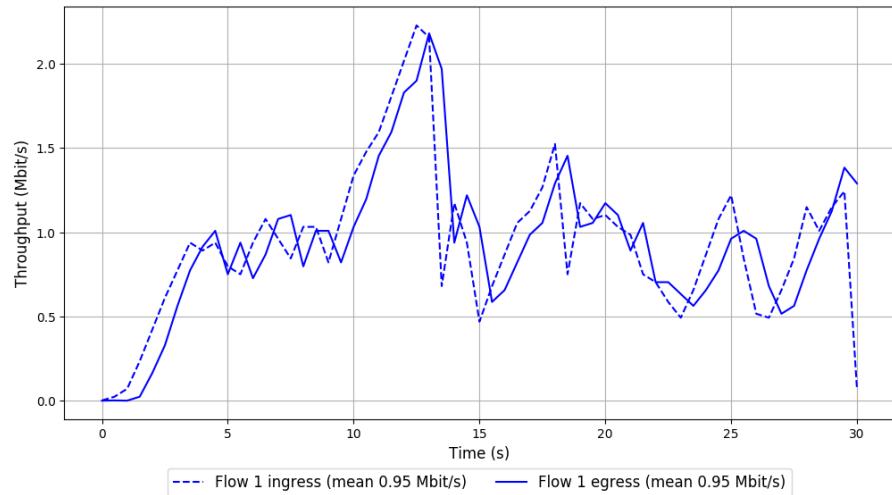


Run 4: Statistics of LEDBAT

```
Start at: 2018-05-24 00:56:12
End at: 2018-05-24 00:56:42
Local clock offset: -2.034 ms
Remote clock offset: 8.585 ms

# Below is generated by plot.py at 2018-05-24 03:17:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 134.503 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 134.503 ms
Loss rate: 0.78%
```

## Run 4: Report of LEDBAT — Data Link

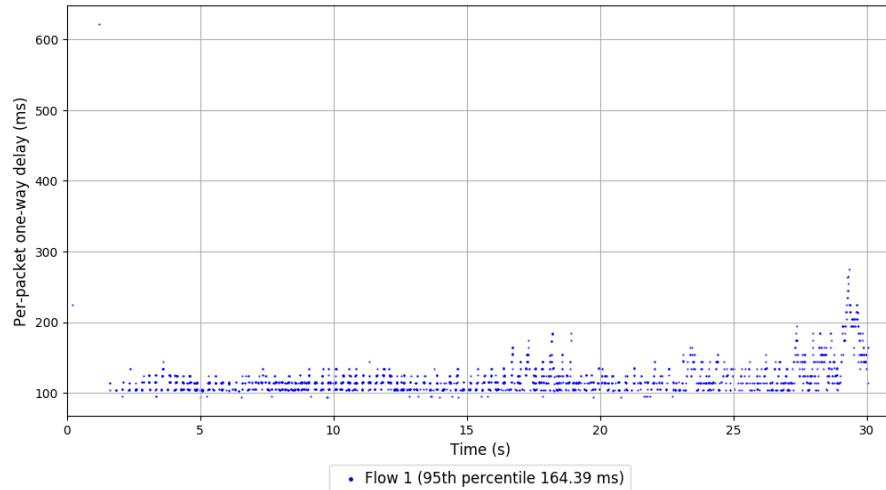
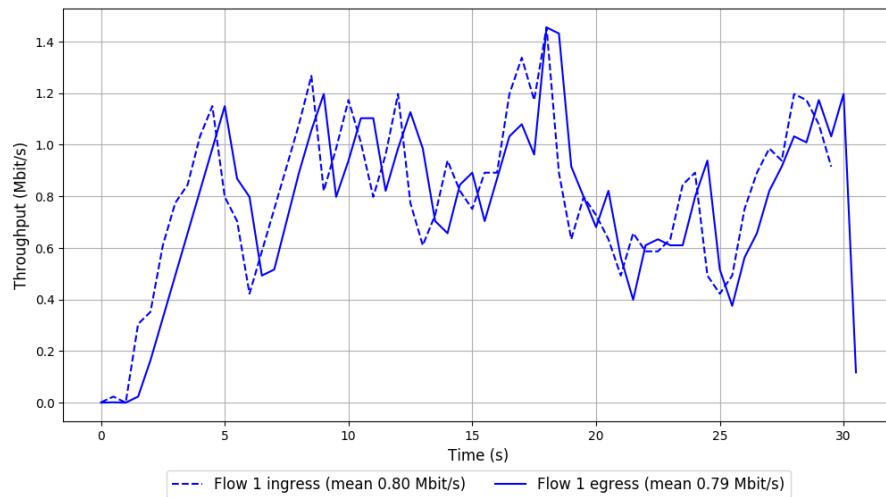


Run 5: Statistics of LEDBAT

```
Start at: 2018-05-24 01:14:17
End at: 2018-05-24 01:14:47
Local clock offset: -7.31 ms
Remote clock offset: 11.087 ms

# Below is generated by plot.py at 2018-05-24 03:17:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 164.394 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 164.394 ms
Loss rate: 0.88%
```

## Run 5: Report of LEDBAT — Data Link

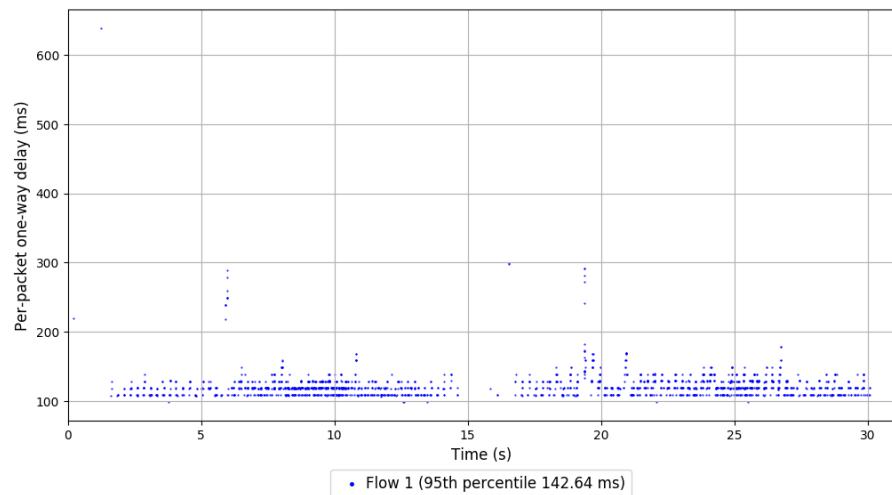
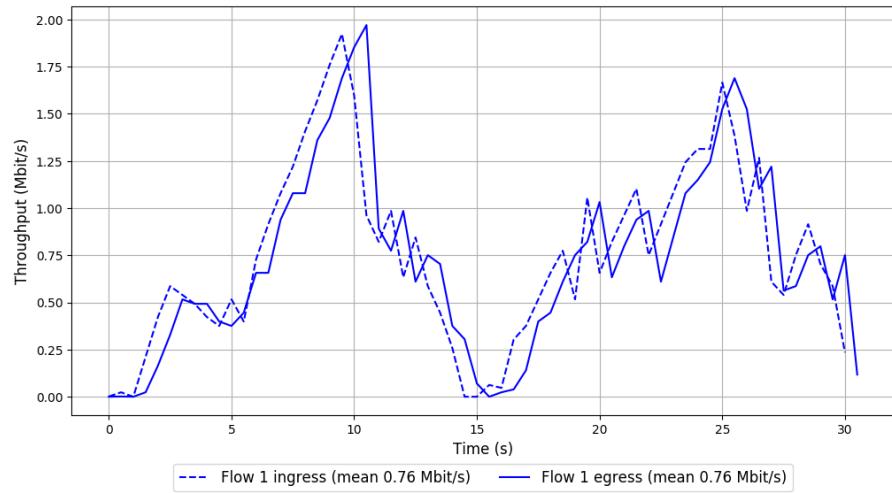


Run 6: Statistics of LEDBAT

```
Start at: 2018-05-24 01:32:15
End at: 2018-05-24 01:32:45
Local clock offset: -6.777 ms
Remote clock offset: 11.274 ms

# Below is generated by plot.py at 2018-05-24 03:17:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 142.641 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 142.641 ms
Loss rate: 1.48%
```

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/ledbat\_sta

Run 7: Report of LEDBAT — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of LEDBAT

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/ledbat\_sta

Run 8: Report of LEDBAT — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of LEDBAT

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/ledbat\_sta

Run 9: Report of LEDBAT — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of LEDBAT

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/ledbat\_sta

Run 10: Report of LEDBAT — Data Link

Figure is missing

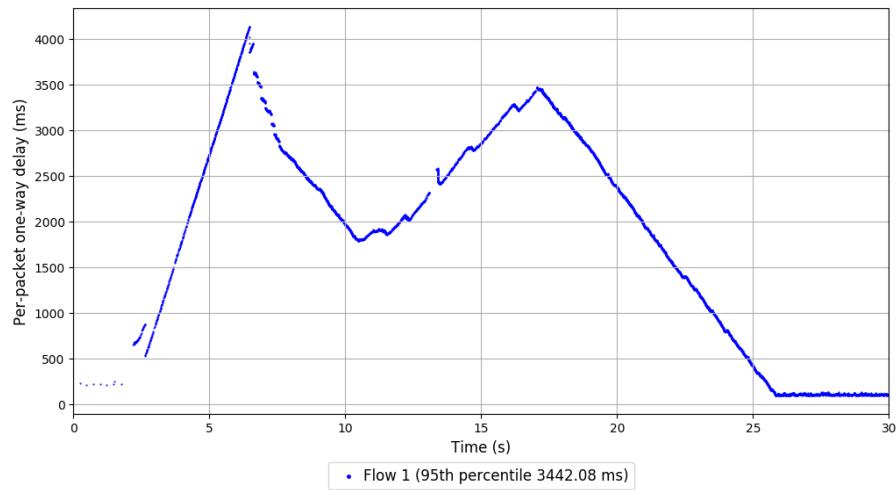
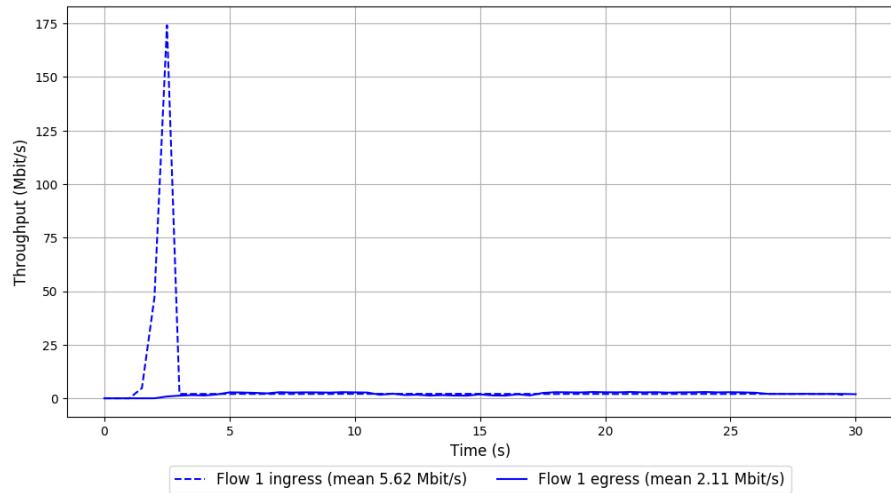
Figure is missing

Run 1: Statistics of PCC-Allegro

```
Start at: 2018-05-23 23:52:08
End at: 2018-05-23 23:52:38
Local clock offset: -0.871 ms
Remote clock offset: 7.839 ms

# Below is generated by plot.py at 2018-05-24 03:18:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 3442.079 ms
Loss rate: 62.65%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 3442.079 ms
Loss rate: 62.65%
```

Run 1: Report of PCC-Allegro — Data Link

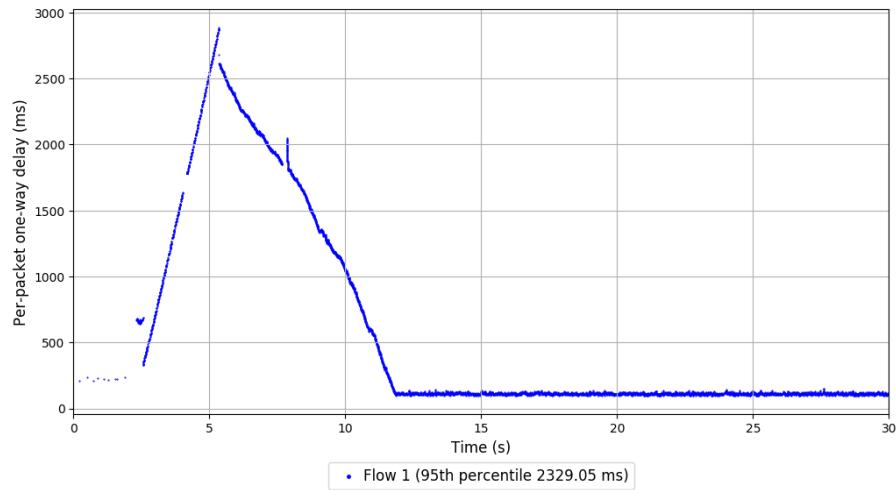
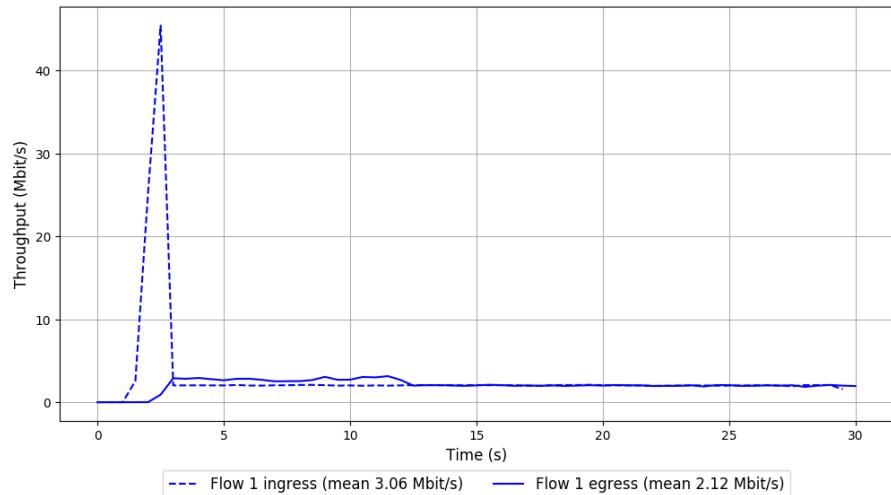


Run 2: Statistics of PCC-Allegro

```
Start at: 2018-05-24 00:10:07
End at: 2018-05-24 00:10:37
Local clock offset: -1.952 ms
Remote clock offset: 7.141 ms

# Below is generated by plot.py at 2018-05-24 03:18:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 2329.049 ms
Loss rate: 30.77%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 2329.049 ms
Loss rate: 30.77%
```

Run 2: Report of PCC-Allegro — Data Link

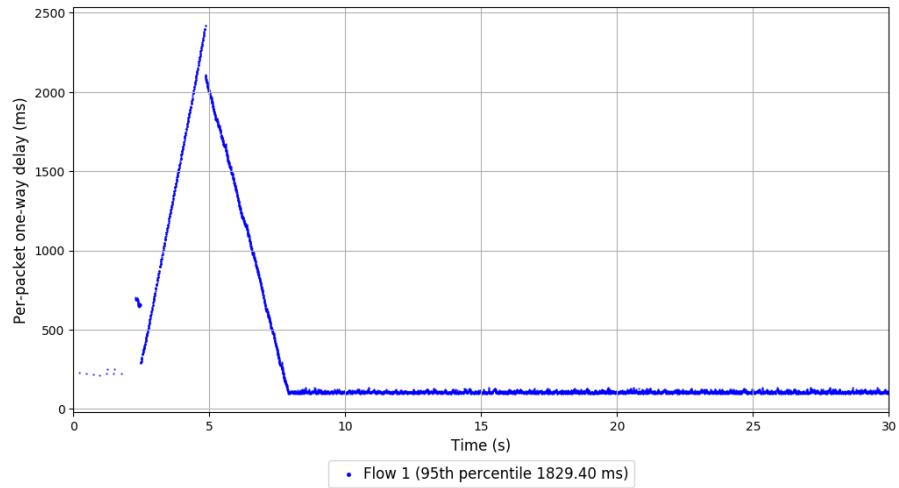
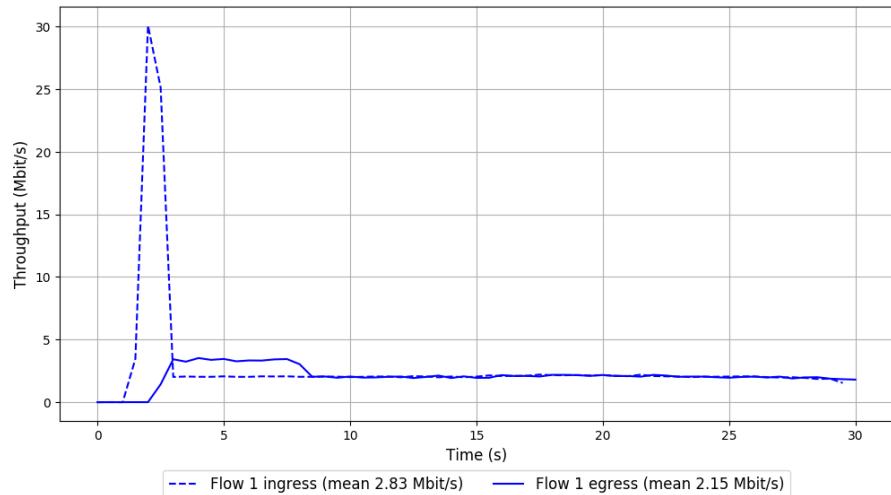


Run 3: Statistics of PCC-Allegro

```
Start at: 2018-05-24 00:28:06
End at: 2018-05-24 00:28:36
Local clock offset: -1.908 ms
Remote clock offset: 3.839 ms

# Below is generated by plot.py at 2018-05-24 03:18:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 1829.404 ms
Loss rate: 24.47%
-- Flow 1:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 1829.404 ms
Loss rate: 24.47%
```

Run 3: Report of PCC-Allegro — Data Link

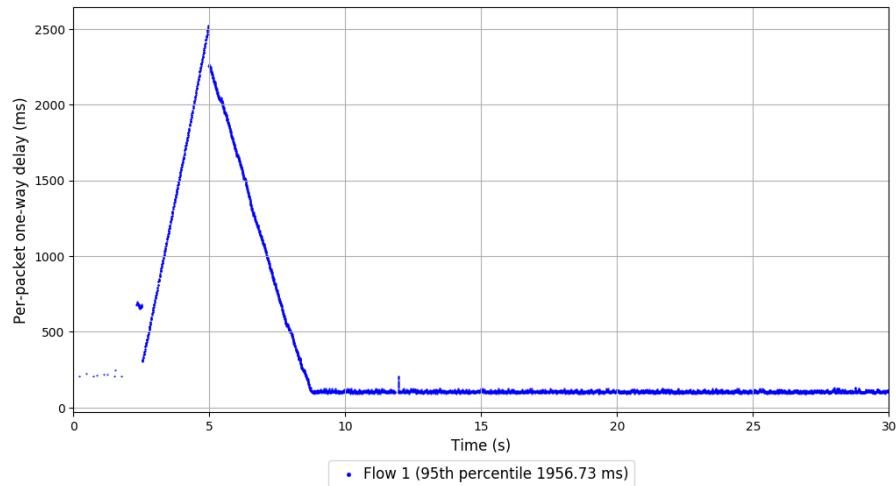
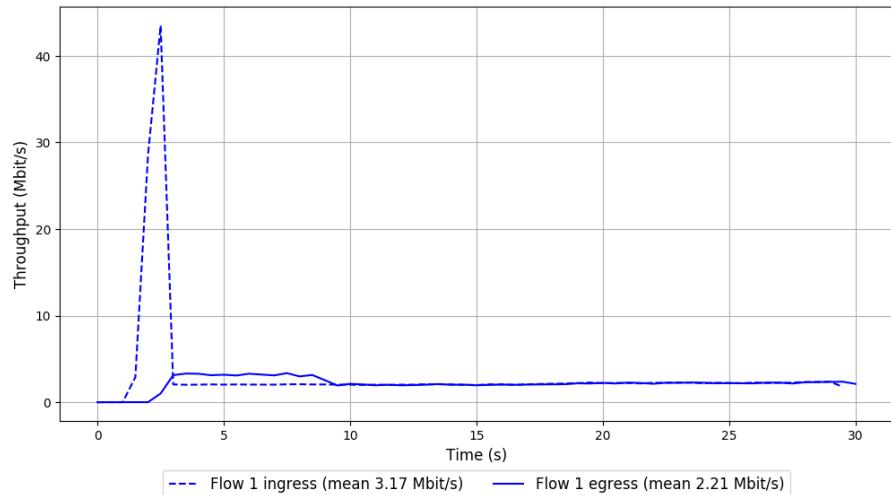


Run 4: Statistics of PCC-Allegro

```
Start at: 2018-05-24 00:46:05
End at: 2018-05-24 00:46:35
Local clock offset: -2.18 ms
Remote clock offset: 4.451 ms

# Below is generated by plot.py at 2018-05-24 03:18:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 1956.729 ms
Loss rate: 30.58%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 1956.729 ms
Loss rate: 30.58%
```

## Run 4: Report of PCC-Allegro — Data Link

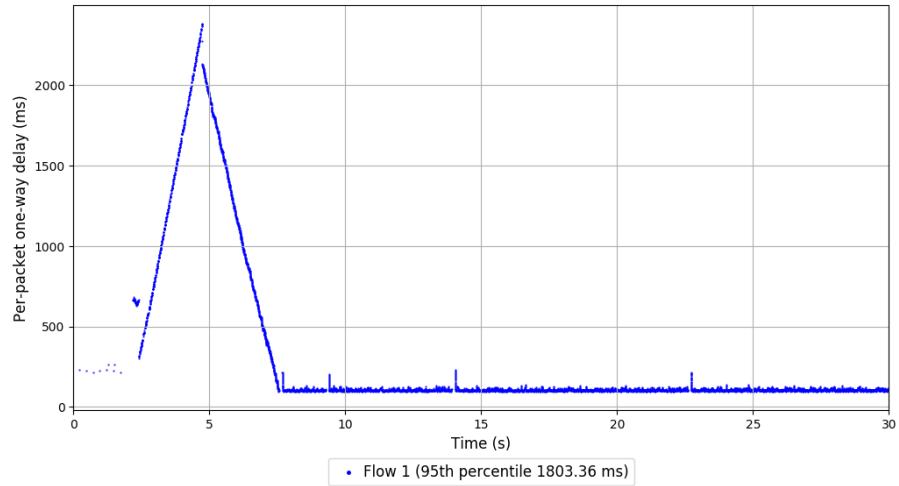
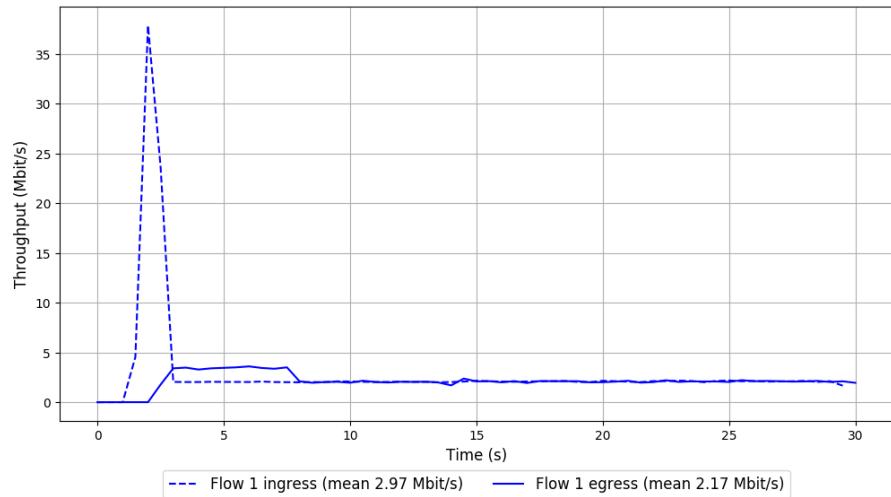


Run 5: Statistics of PCC-Allegro

```
Start at: 2018-05-24 01:04:04
End at: 2018-05-24 01:04:34
Local clock offset: -5.371 ms
Remote clock offset: 10.897 ms

# Below is generated by plot.py at 2018-05-24 03:18:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 1803.364 ms
Loss rate: 27.28%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 1803.364 ms
Loss rate: 27.28%
```

Run 5: Report of PCC-Allegro — Data Link

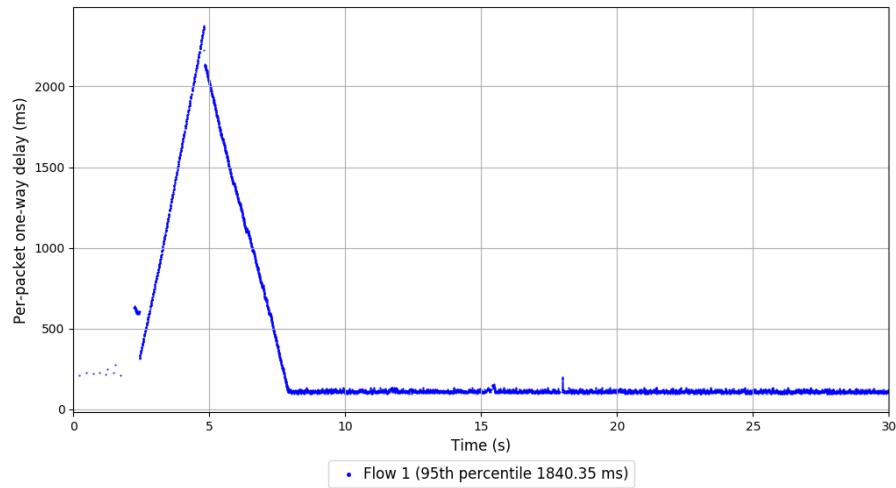
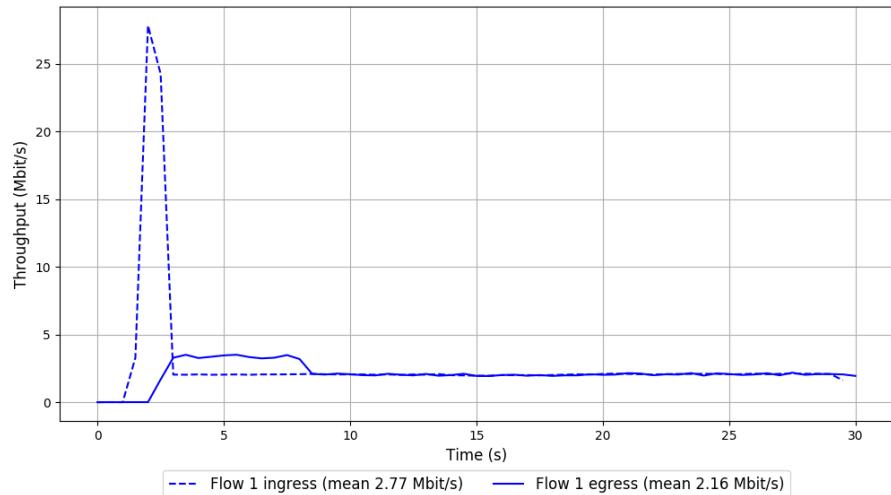


Run 6: Statistics of PCC-Allegro

```
Start at: 2018-05-24 01:22:09
End at: 2018-05-24 01:22:39
Local clock offset: -7.225 ms
Remote clock offset: 14.537 ms

# Below is generated by plot.py at 2018-05-24 03:18:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 1840.347 ms
Loss rate: 22.58%
-- Flow 1:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 1840.347 ms
Loss rate: 22.58%
```

Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/pcc\_stats\_

Run 7: Report of PCC-Allegro — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of PCC-Allegro

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/pcc\_stats\_

Run 8: Report of PCC-Allegro — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of PCC-Allegro

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/pcc\_stats\_

Run 9: Report of PCC-Allegro — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of PCC-Allegro

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/pcc\_stats\_

Run 10: Report of PCC-Allegro — Data Link

Figure is missing

Figure is missing

Run 1: Statistics of PCC-Expr

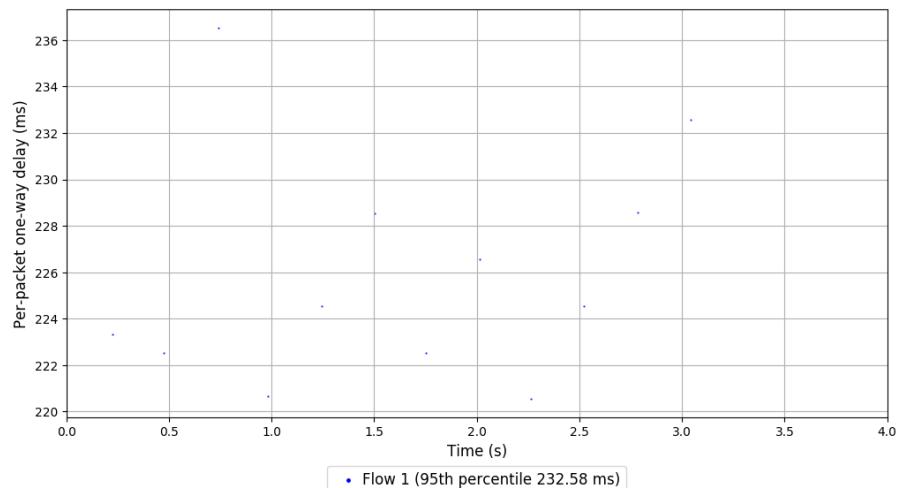
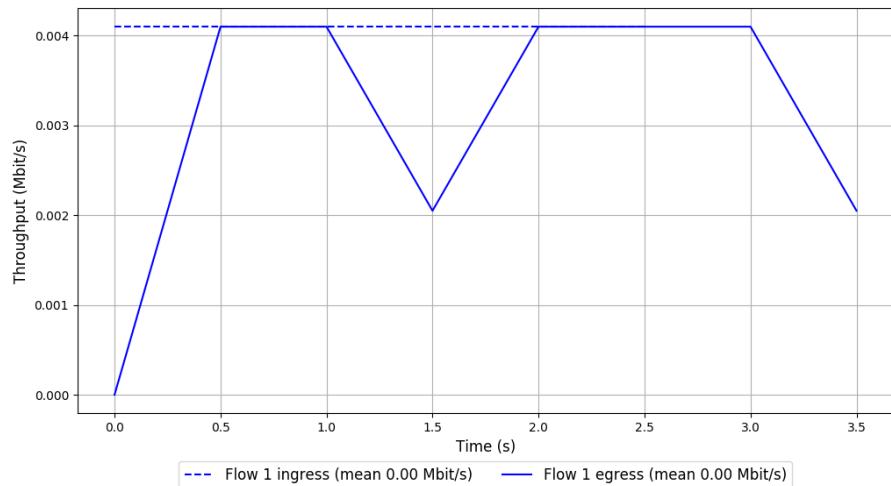
Start at: 2018-05-23 23:57:45

End at: 2018-05-23 23:58:15

Local clock offset: -0.94 ms

Remote clock offset: 7.062 ms

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

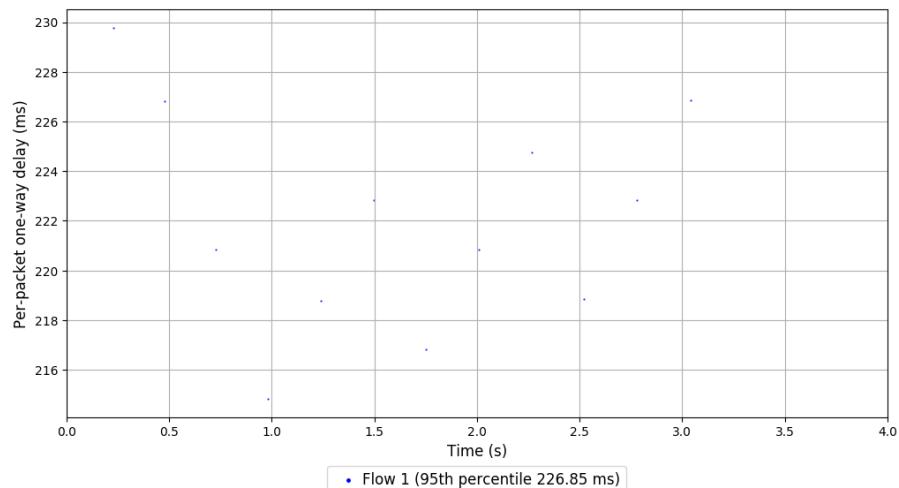
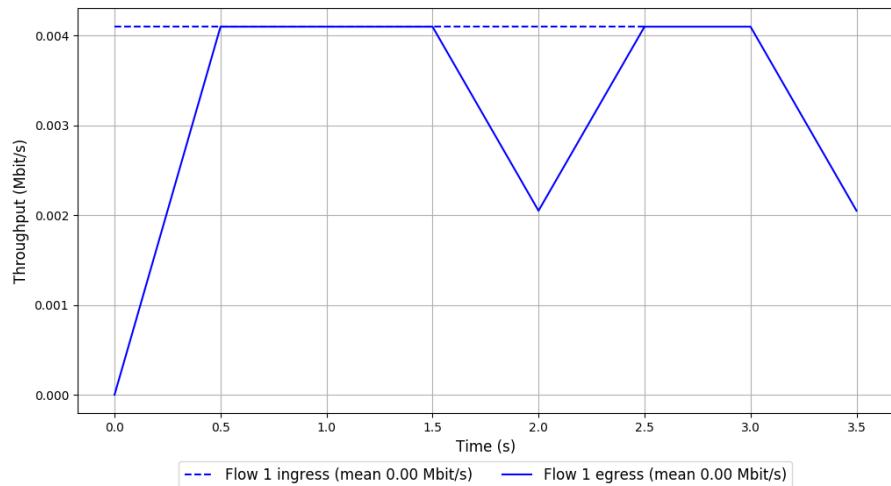
Start at: 2018-05-24 00:15:44

End at: 2018-05-24 00:16:14

Local clock offset: -2.729 ms

Remote clock offset: 7.485 ms

## Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

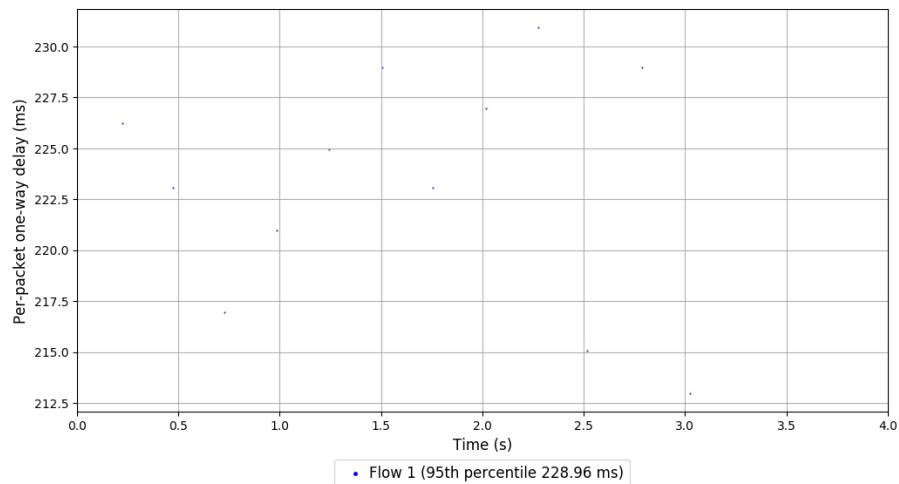
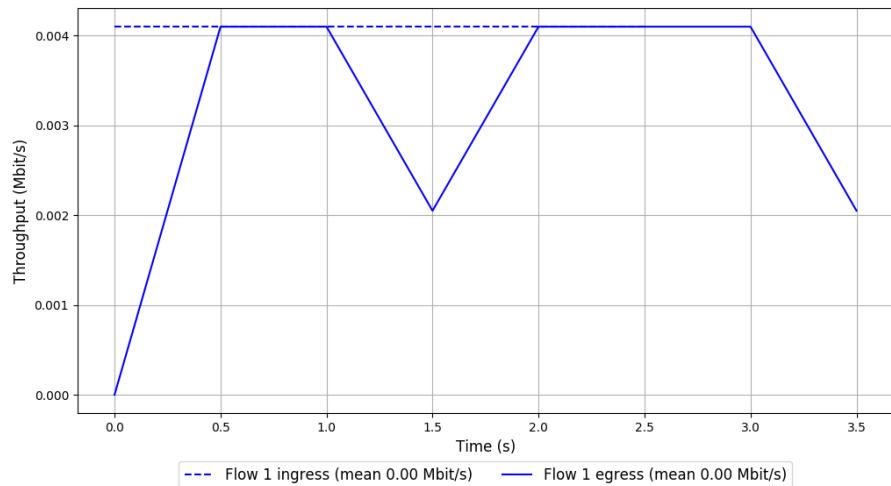
Start at: 2018-05-24 00:33:43

End at: 2018-05-24 00:34:13

Local clock offset: -2.929 ms

Remote clock offset: 4.104 ms

### Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

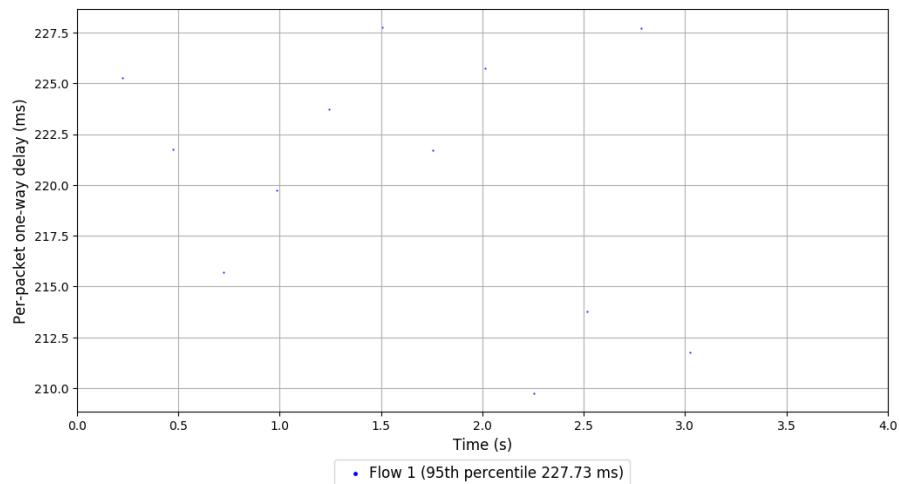
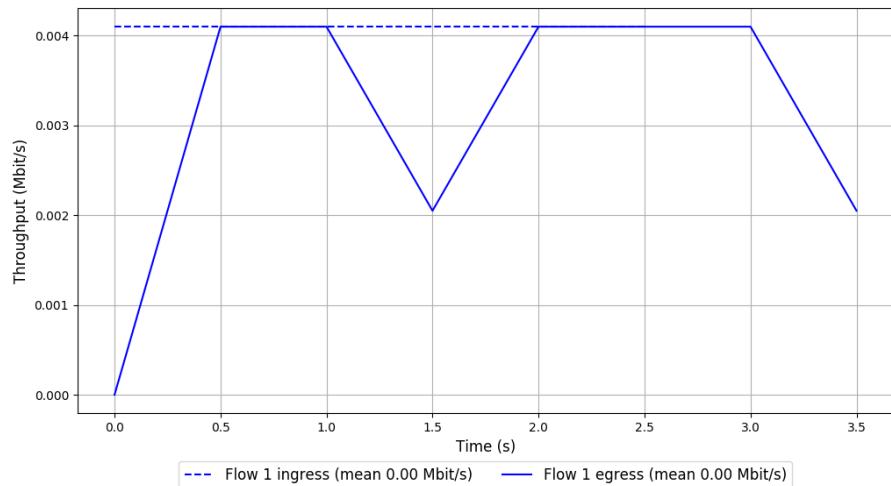
Start at: 2018-05-24 00:51:42

End at: 2018-05-24 00:52:12

Local clock offset: -2.13 ms

Remote clock offset: 8.006 ms

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

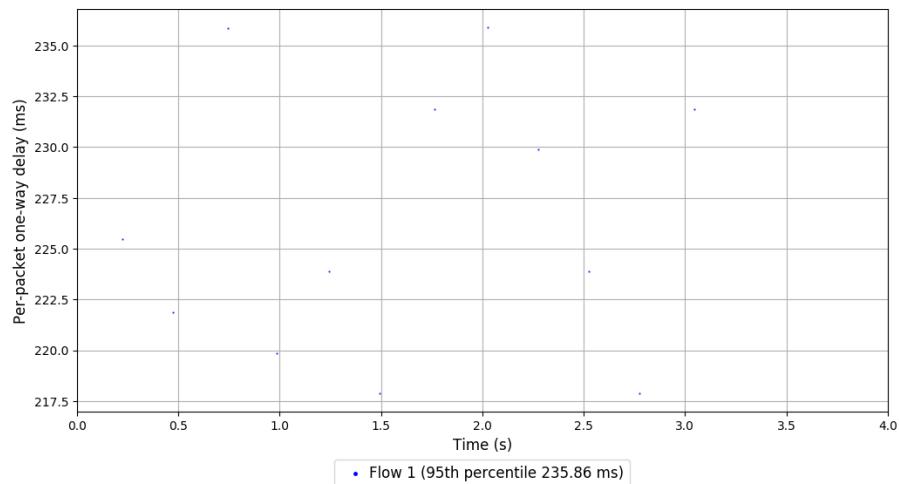
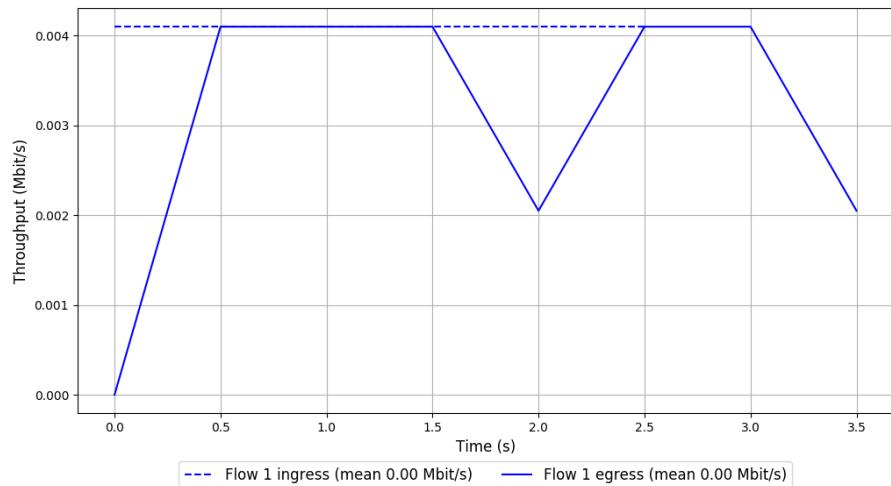
Start at: 2018-05-24 01:09:41

End at: 2018-05-24 01:10:11

Local clock offset: -6.615 ms

Remote clock offset: 11.44 ms

Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

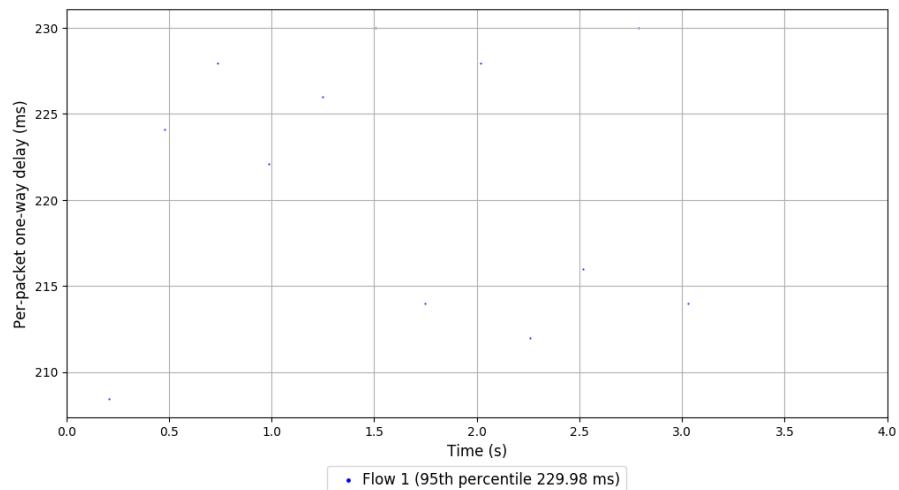
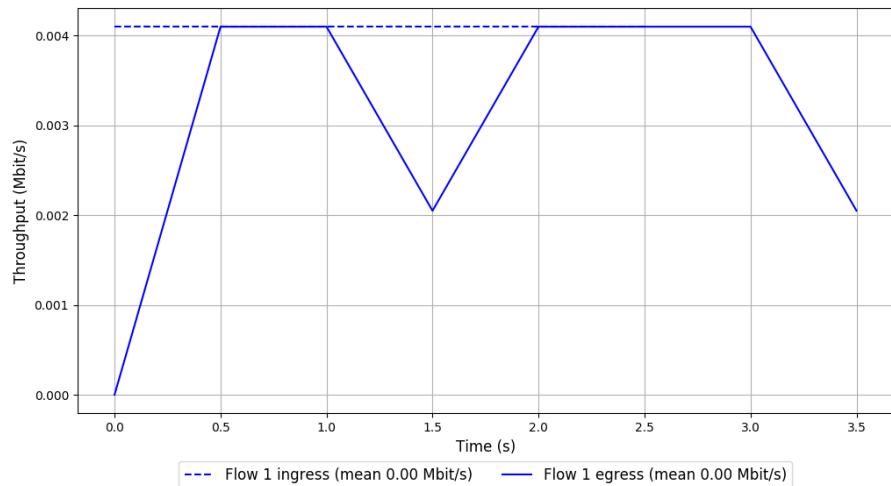
Start at: 2018-05-24 01:27:46

End at: 2018-05-24 01:28:16

Local clock offset: -8.109 ms

Remote clock offset: 10.56 ms

Run 6: Report of PCC-Expr — Data Link



Run 7: Statistics of PCC-Expr

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/pcc\_experi

Run 7: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of PCC-Expr

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/pcc\_experi

Run 8: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of PCC-Expr

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/pcc\_experi

Run 9: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of PCC-Expr

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/pcc\_experi

Run 10: Report of PCC-Expr — Data Link

Figure is missing

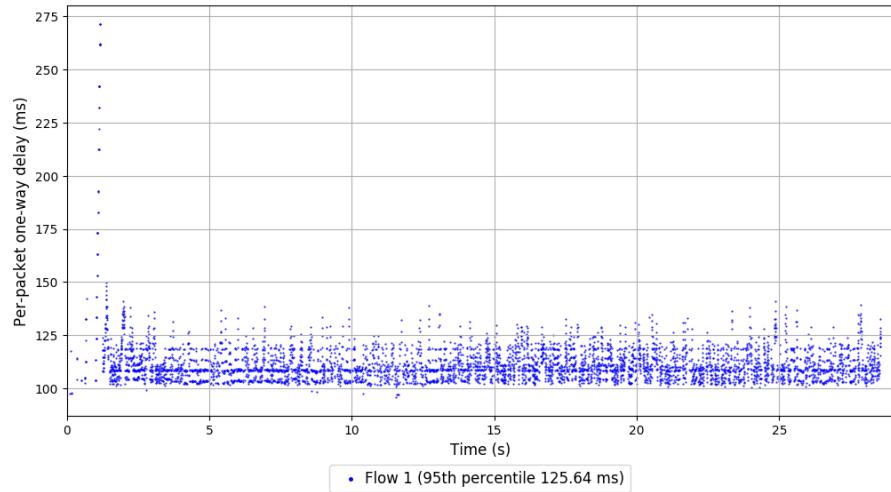
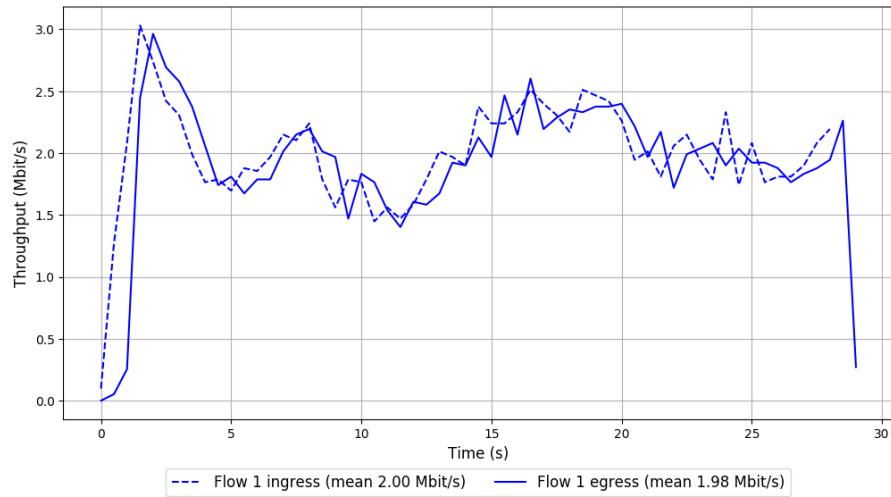
Figure is missing

Run 1: Statistics of QUIC Cubic

```
Start at: 2018-05-24 00:05:37
End at: 2018-05-24 00:06:07
Local clock offset: -1.876 ms
Remote clock offset: 6.506 ms

# Below is generated by plot.py at 2018-05-24 03:18:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 125.640 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 125.640 ms
Loss rate: 0.88%
```

Run 1: Report of QUIC Cubic — Data Link

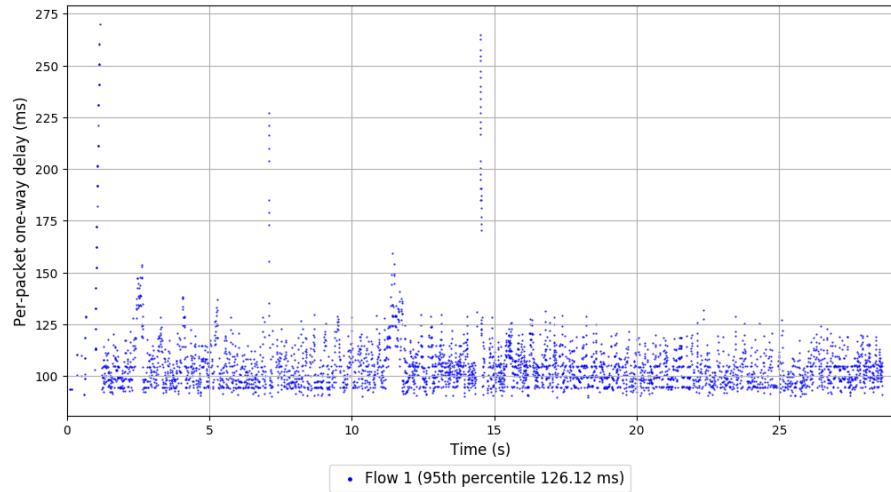
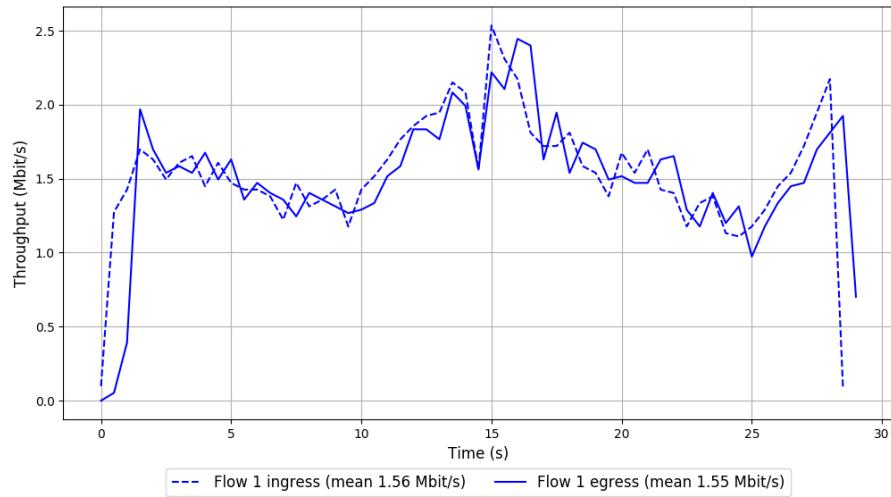


Run 2: Statistics of QUIC Cubic

```
Start at: 2018-05-24 00:23:36
End at: 2018-05-24 00:24:06
Local clock offset: -1.808 ms
Remote clock offset: 3.109 ms

# Below is generated by plot.py at 2018-05-24 03:18:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 126.124 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 126.124 ms
Loss rate: 0.99%
```

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

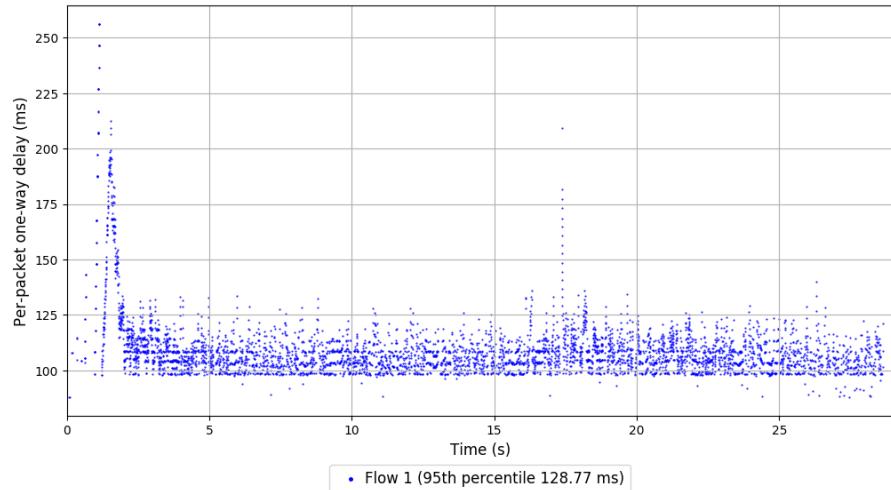
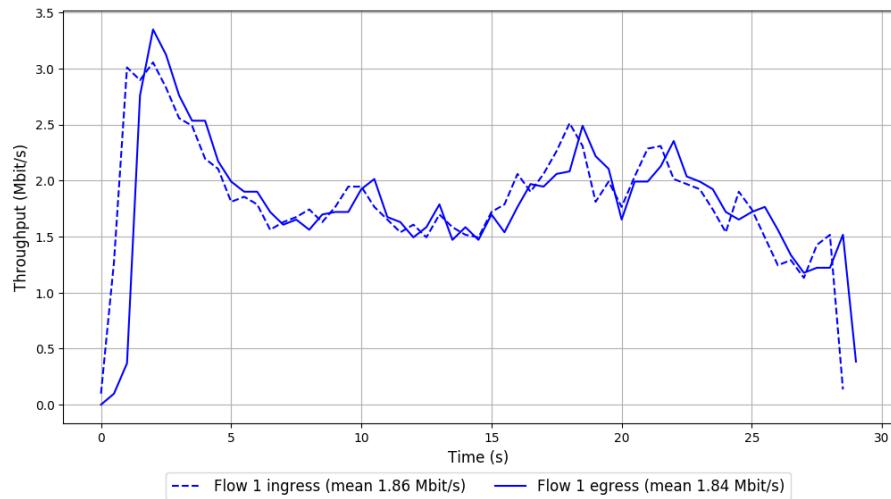


Run 3: Statistics of QUIC Cubic

```
Start at: 2018-05-24 00:41:35
End at: 2018-05-24 00:42:05
Local clock offset: -2.278 ms
Remote clock offset: 4.001 ms

# Below is generated by plot.py at 2018-05-24 03:18:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 128.769 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 128.769 ms
Loss rate: 1.00%
```

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

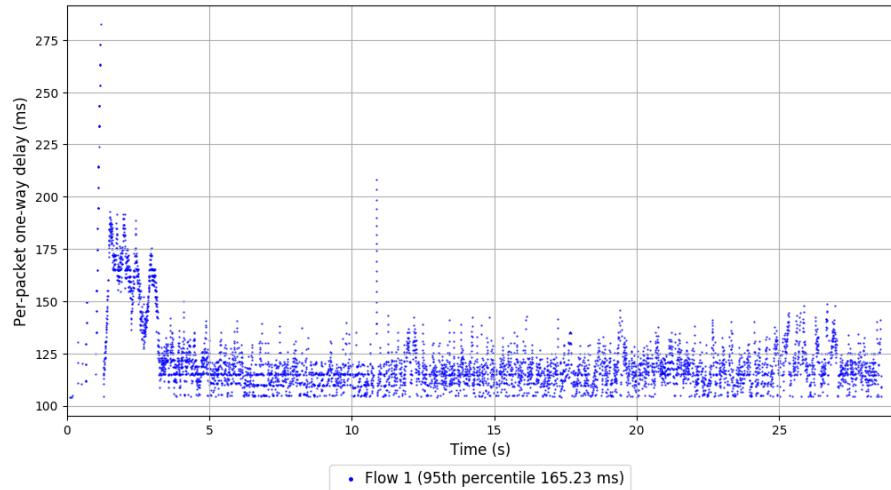
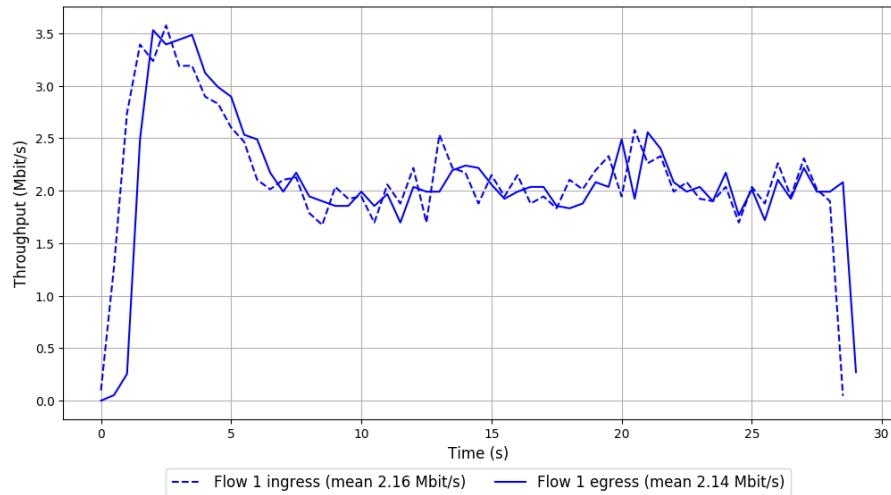


Run 4: Statistics of QUIC Cubic

```
Start at: 2018-05-24 00:59:34
End at: 2018-05-24 01:00:04
Local clock offset: -3.825 ms
Remote clock offset: 12.893 ms

# Below is generated by plot.py at 2018-05-24 03:18:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 165.234 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 165.234 ms
Loss rate: 0.92%
```

## Run 4: Report of QUIC Cubic — Data Link

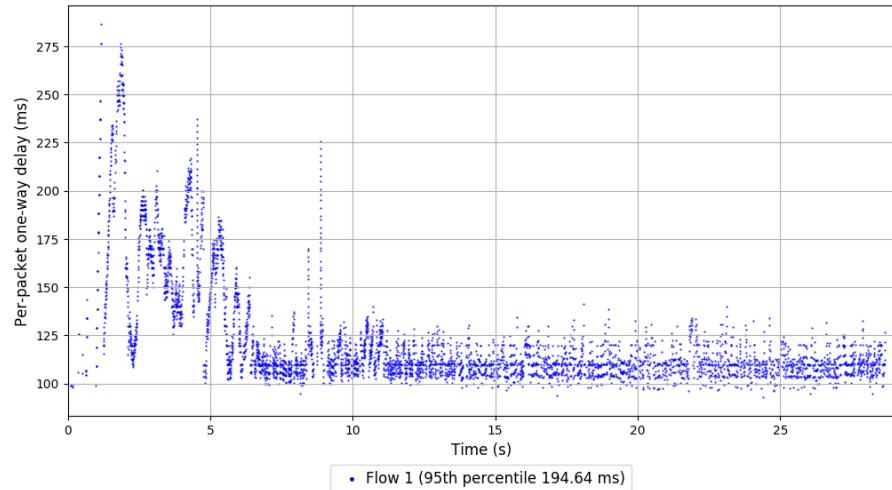
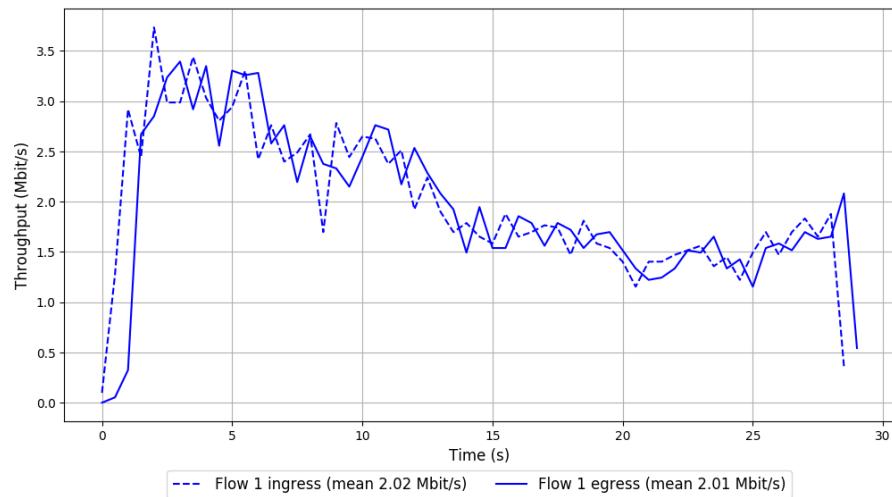


Run 5: Statistics of QUIC Cubic

```
Start at: 2018-05-24 01:17:39
End at: 2018-05-24 01:18:09
Local clock offset: -7.622 ms
Remote clock offset: 15.953 ms

# Below is generated by plot.py at 2018-05-24 03:18:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 194.644 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 194.644 ms
Loss rate: 0.84%
```

Run 5: Report of QUIC Cubic — Data Link

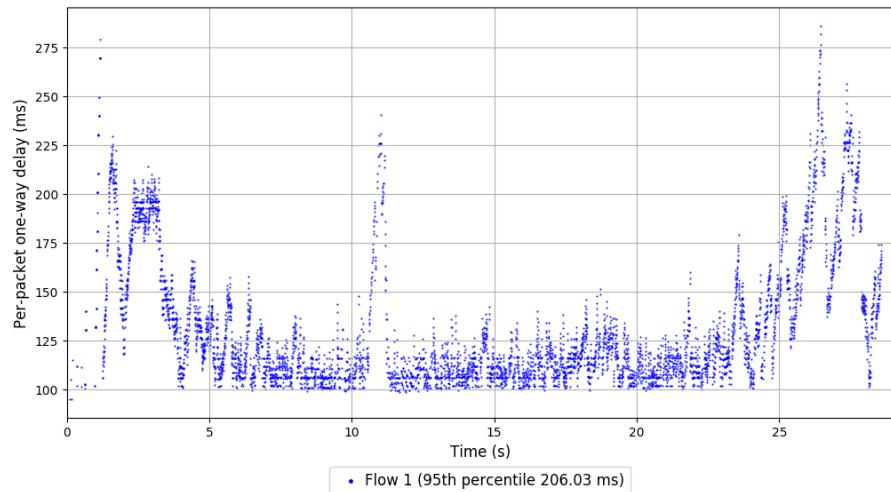
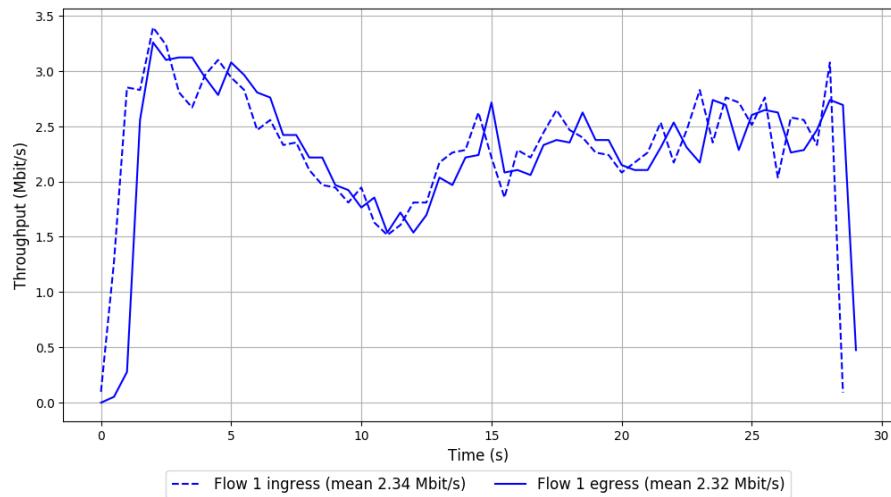


Run 6: Statistics of QUIC Cubic

```
Start at: 2018-05-24 01:35:38
End at: 2018-05-24 01:36:08
Local clock offset: -8.181 ms
Remote clock offset: 9.024 ms

# Below is generated by plot.py at 2018-05-24 03:18:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 206.028 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 206.028 ms
Loss rate: 1.02%
```

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/quic\_stats

Run 7: Report of QUIC Cubic — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of QUIC Cubic

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/quic\_stats

Run 8: Report of QUIC Cubic — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of QUIC Cubic

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/quic\_stats

Run 9: Report of QUIC Cubic — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of QUIC Cubic

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/quic\_stats

Run 10: Report of QUIC Cubic — Data Link

Figure is missing

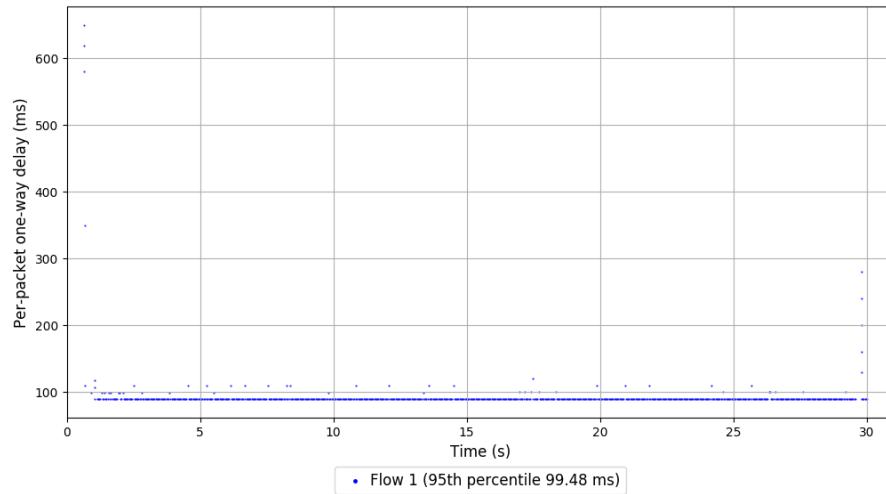
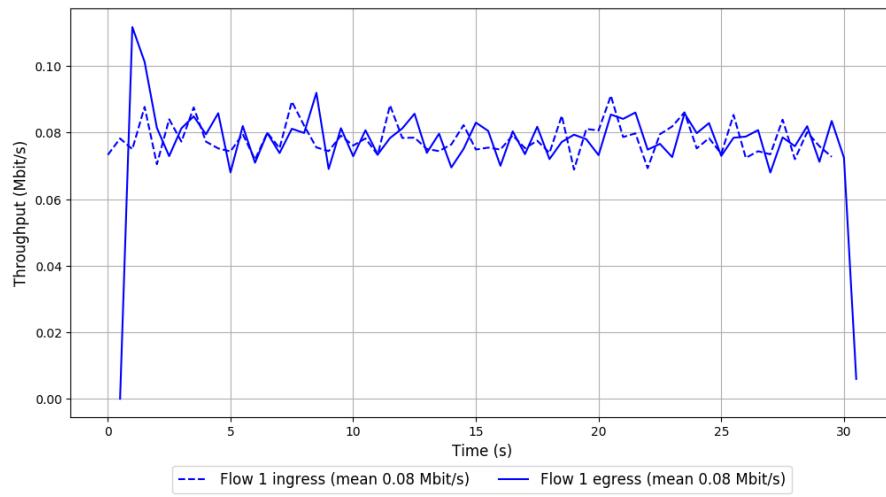
Figure is missing

Run 1: Statistics of SCReAM

```
Start at: 2018-05-24 00:09:00
End at: 2018-05-24 00:09:30
Local clock offset: -1.922 ms
Remote clock offset: 2.543 ms

# Below is generated by plot.py at 2018-05-24 03:18:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 99.482 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 99.482 ms
Loss rate: 0.13%
```

Run 1: Report of SCReAM — Data Link

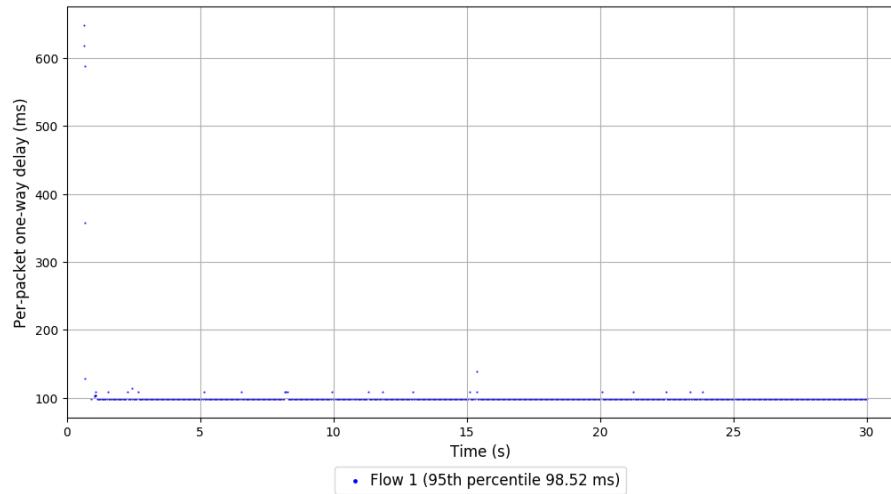
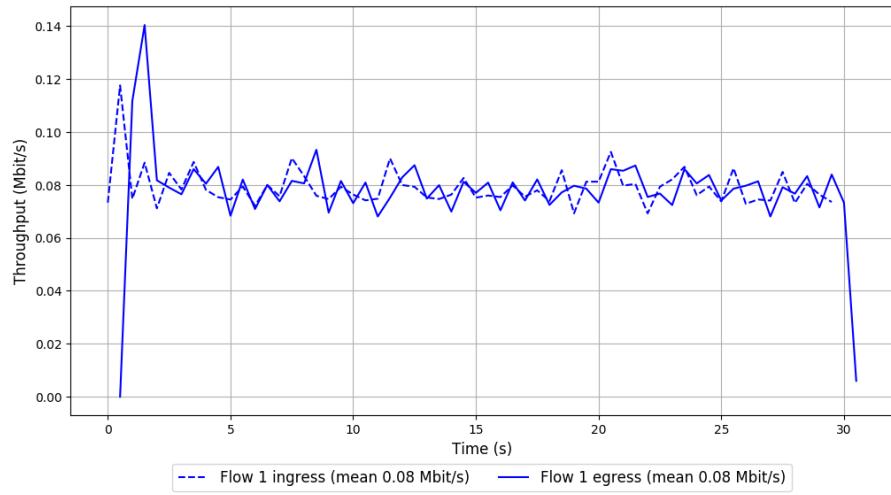


Run 2: Statistics of SCReAM

```
Start at: 2018-05-24 00:26:59
End at: 2018-05-24 00:27:29
Local clock offset: -1.041 ms
Remote clock offset: 8.645 ms

# Below is generated by plot.py at 2018-05-24 03:18:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 98.520 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 98.520 ms
Loss rate: 0.25%
```

Run 2: Report of SCReAM — Data Link

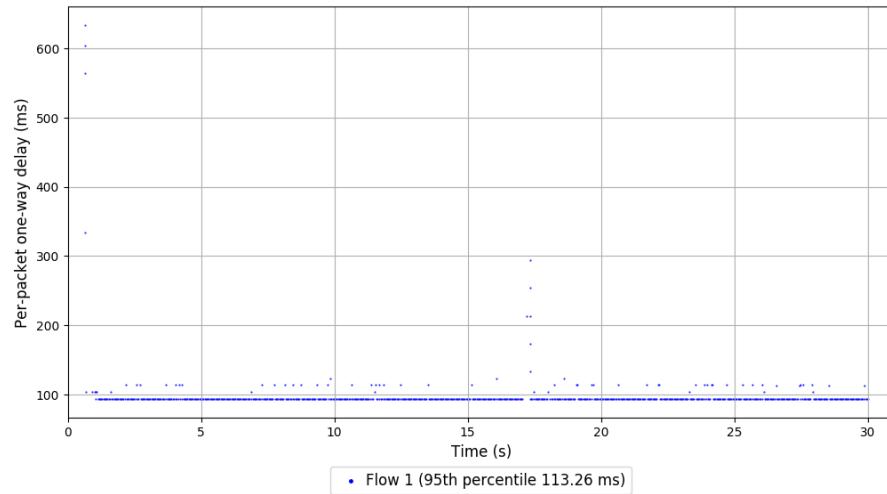
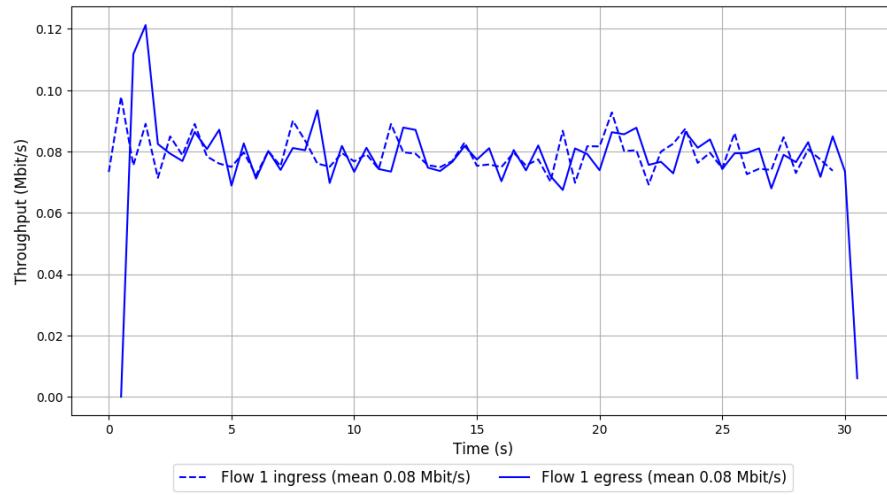


Run 3: Statistics of SCReAM

```
Start at: 2018-05-24 00:44:58
End at: 2018-05-24 00:45:28
Local clock offset: -2.257 ms
Remote clock offset: 3.607 ms

# Below is generated by plot.py at 2018-05-24 03:18:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 113.258 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 113.258 ms
Loss rate: 0.25%
```

Run 3: Report of SCReAM — Data Link

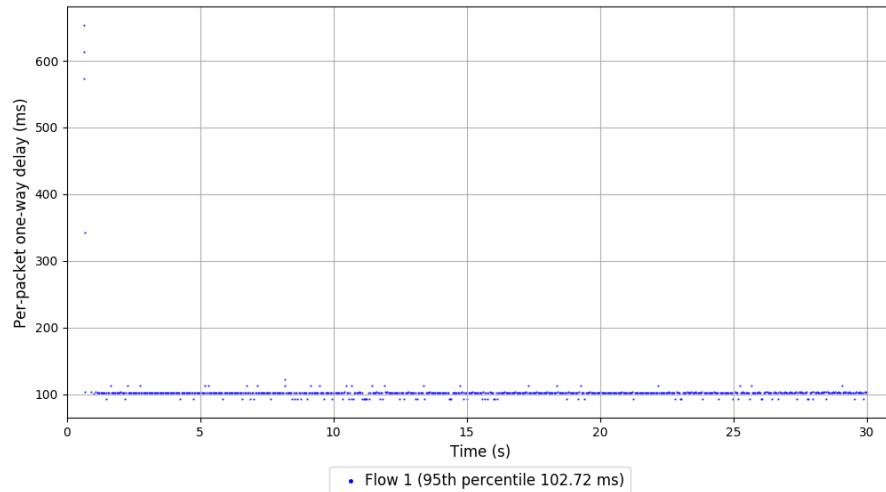
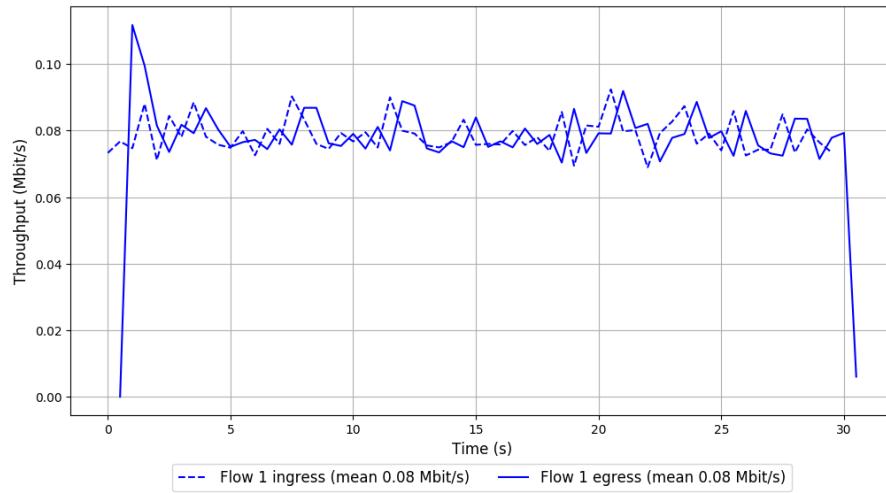


Run 4: Statistics of SCReAM

```
Start at: 2018-05-24 01:02:57
End at: 2018-05-24 01:03:27
Local clock offset: -4.294 ms
Remote clock offset: 9.634 ms

# Below is generated by plot.py at 2018-05-24 03:18:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 102.724 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 102.724 ms
Loss rate: 0.13%
```

Run 4: Report of SCReAM — Data Link

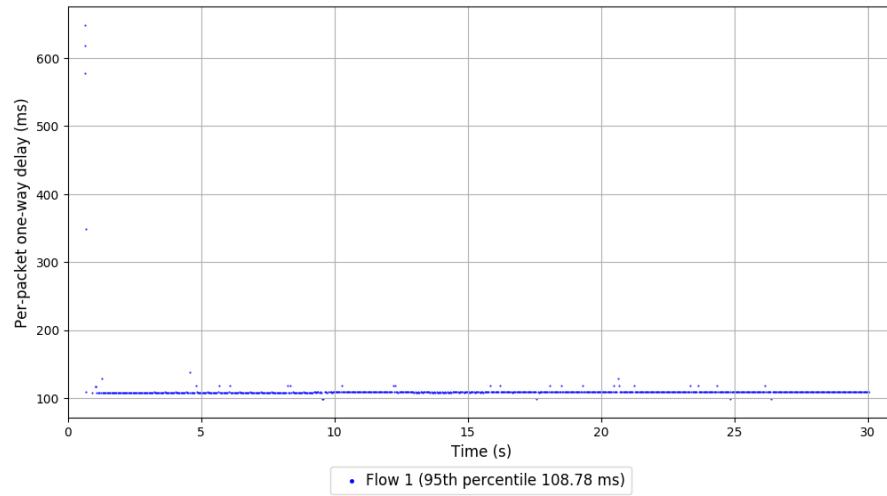
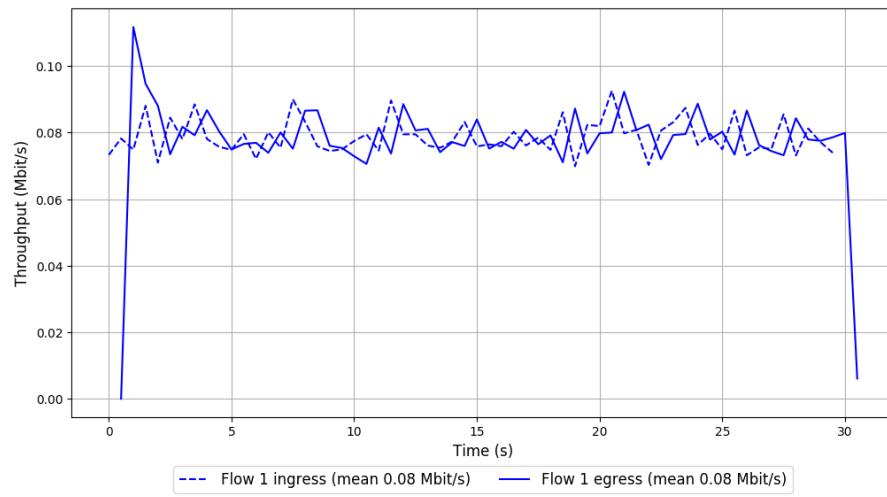


Run 5: Statistics of SCReAM

```
Start at: 2018-05-24 01:21:02
End at: 2018-05-24 01:21:32
Local clock offset: -7.907 ms
Remote clock offset: 14.444 ms

# Below is generated by plot.py at 2018-05-24 03:18:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 108.785 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 108.785 ms
Loss rate: 0.27%
```

Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SCReAM

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/scream\_st

Run 6: Report of SCReAM — Data Link

Figure is missing

Figure is missing

Run 7: Statistics of SCReAM

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/scream\_st

Run 7: Report of SCReAM — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of SCReAM

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/scream\_st

Run 8: Report of SCReAM — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of SCReAM

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/scream\_st

Run 9: Report of SCReAM — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of SCReAM

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/scream\_st

Run 10: Report of SCReAM — Data Link

Figure is missing

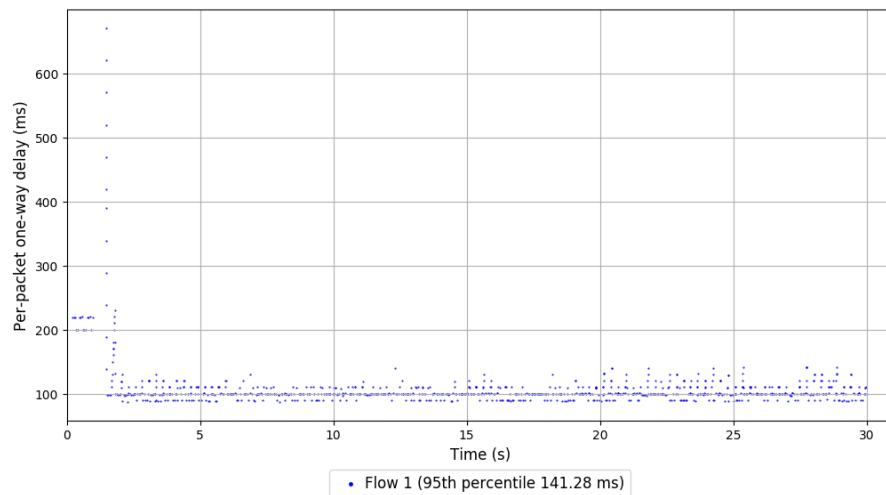
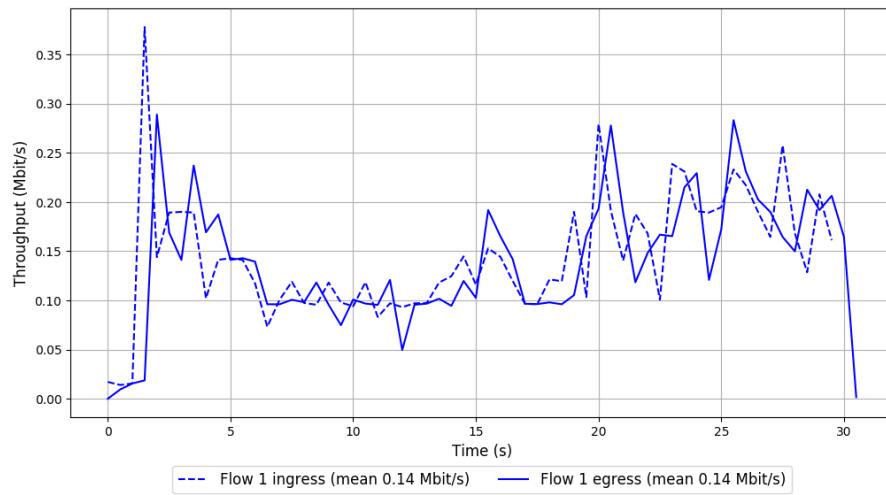
Figure is missing

Run 1: Statistics of Sprout

```
Start at: 2018-05-24 00:00:00
End at: 2018-05-24 00:00:30
Local clock offset: -1.295 ms
Remote clock offset: 3.916 ms

# Below is generated by plot.py at 2018-05-24 03:18:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 141.285 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 141.285 ms
Loss rate: 1.01%
```

Run 1: Report of Sprout — Data Link

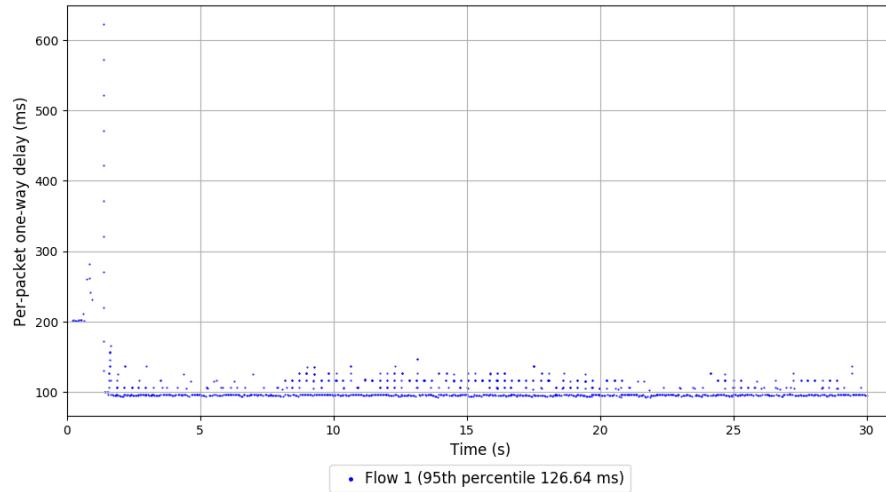
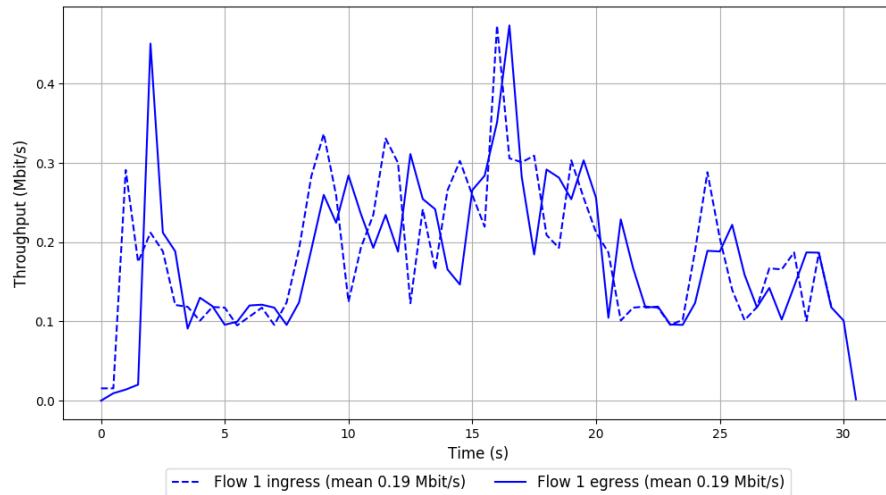


Run 2: Statistics of Sprout

```
Start at: 2018-05-24 00:17:59
End at: 2018-05-24 00:18:29
Local clock offset: -2.777 ms
Remote clock offset: 3.927 ms

# Below is generated by plot.py at 2018-05-24 03:18:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 126.643 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 126.643 ms
Loss rate: 1.21%
```

## Run 2: Report of Sprout — Data Link

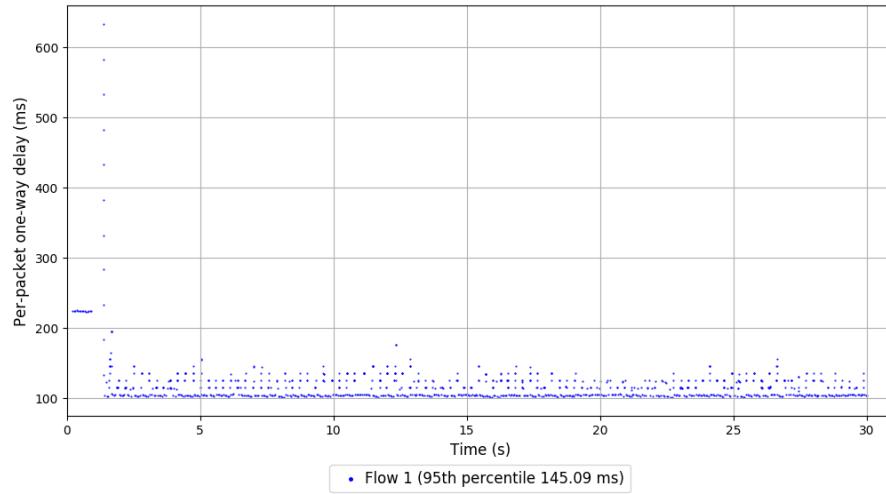
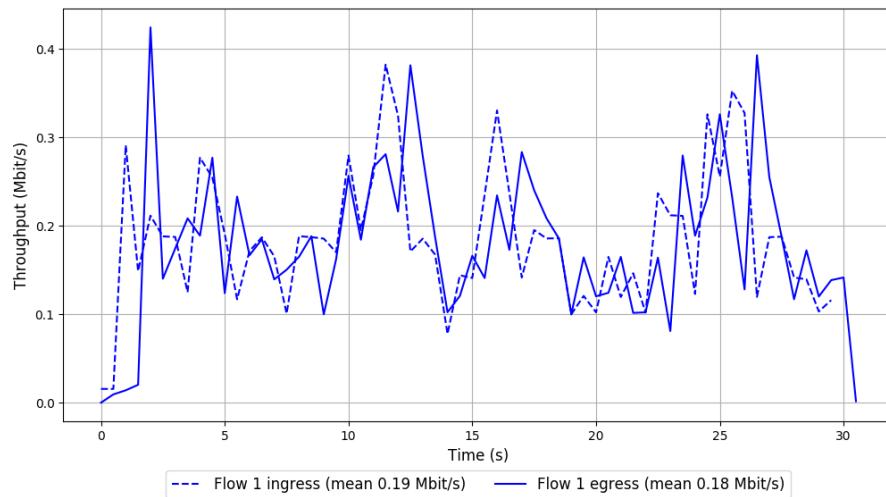


Run 3: Statistics of Sprout

```
Start at: 2018-05-24 00:35:58
End at: 2018-05-24 00:36:28
Local clock offset: -2.222 ms
Remote clock offset: 7.731 ms

# Below is generated by plot.py at 2018-05-24 03:18:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 145.093 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 145.093 ms
Loss rate: 0.87%
```

Run 3: Report of Sprout — Data Link

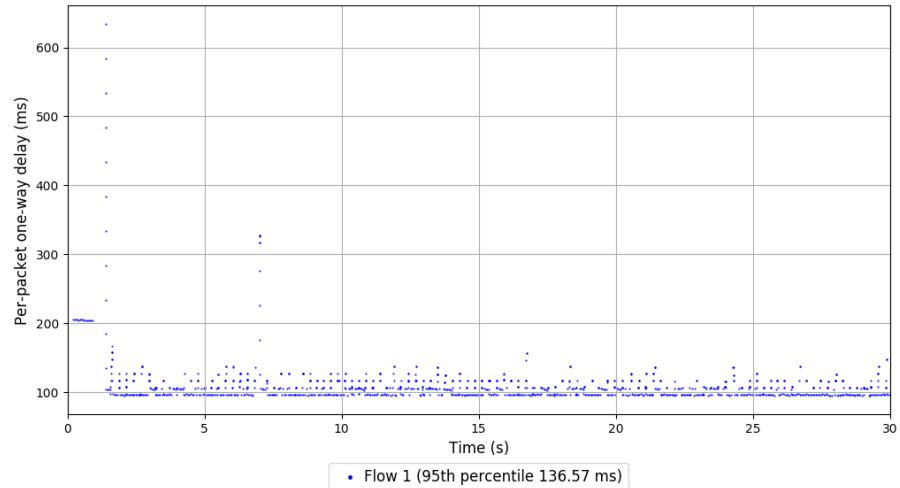
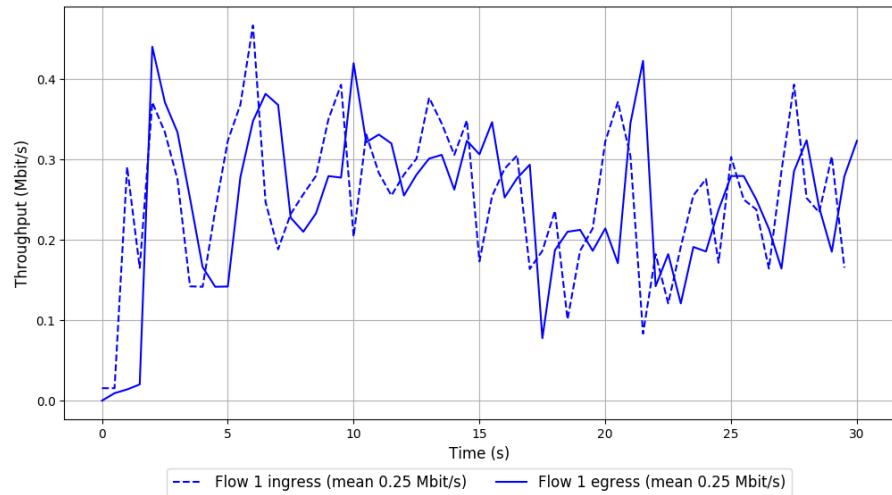


Run 4: Statistics of Sprout

```
Start at: 2018-05-24 00:53:57
End at: 2018-05-24 00:54:27
Local clock offset: -2.078 ms
Remote clock offset: 12.511 ms

# Below is generated by plot.py at 2018-05-24 03:18:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 136.571 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 136.571 ms
Loss rate: 0.67%
```

## Run 4: Report of Sprout — Data Link

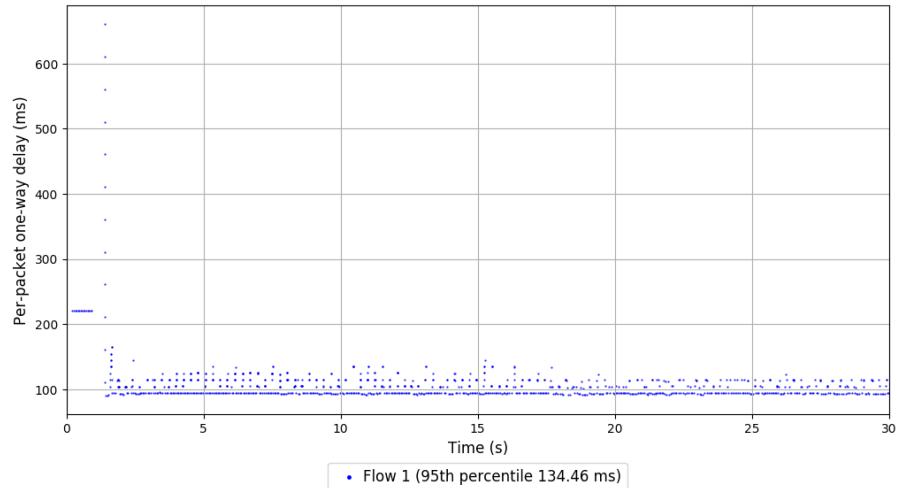
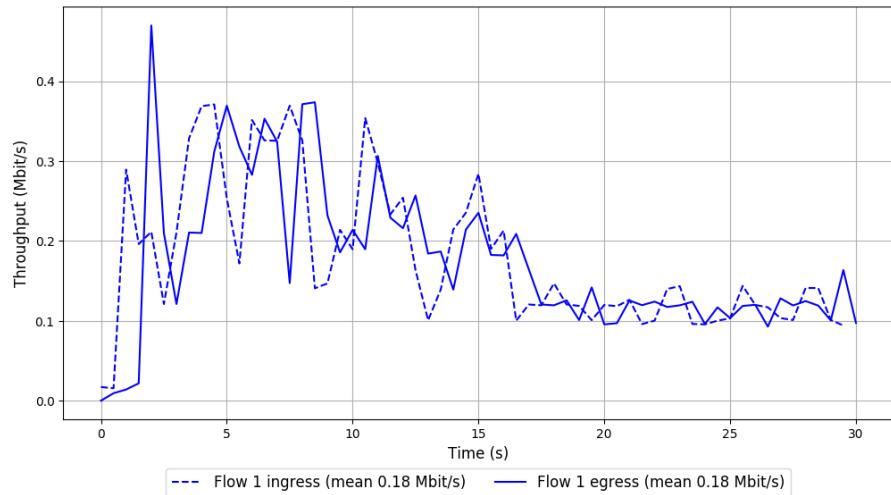


Run 5: Statistics of Sprout

```
Start at: 2018-05-24 01:12:01
End at: 2018-05-24 01:12:31
Local clock offset: -6.939 ms
Remote clock offset: 11.685 ms

# Below is generated by plot.py at 2018-05-24 03:18:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 134.464 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 134.464 ms
Loss rate: 0.70%
```

Run 5: Report of Sprout — Data Link

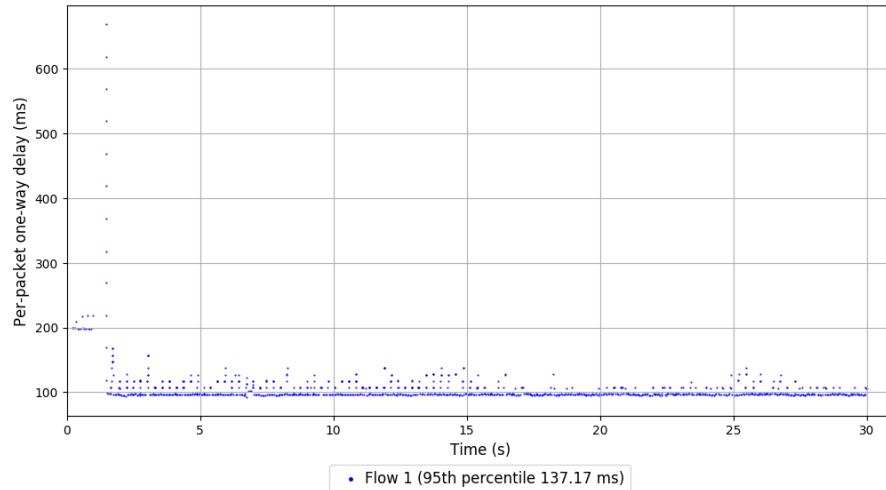
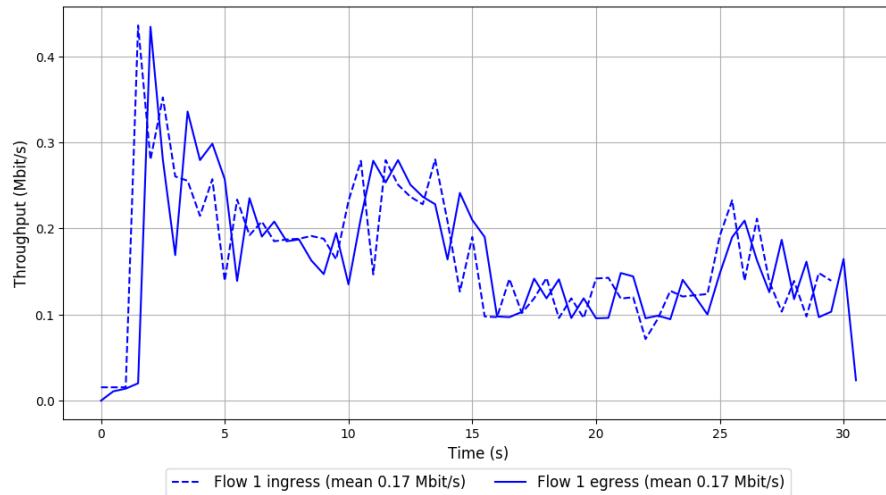


Run 6: Statistics of Sprout

```
Start at: 2018-05-24 01:30:00
End at: 2018-05-24 01:30:30
Local clock offset: -6.995 ms
Remote clock offset: 7.031 ms

# Below is generated by plot.py at 2018-05-24 03:18:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 137.174 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 137.174 ms
Loss rate: 0.05%
```

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/sprout\_st

Run 7: Report of Sprout — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of Sprout

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/sprout\_sta

Run 8: Report of Sprout — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of Sprout

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/sprout\_st

Run 9: Report of Sprout — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of Sprout

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/sprout\_st

Run 10: Report of Sprout — Data Link

Figure is missing

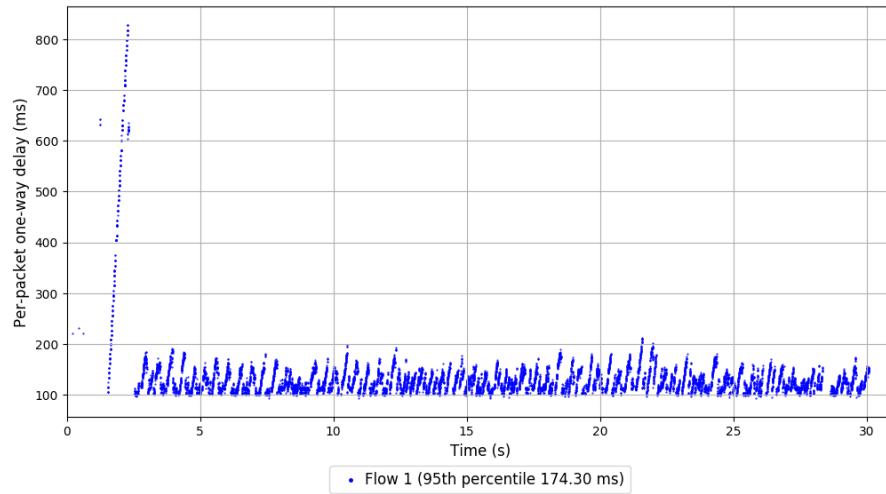
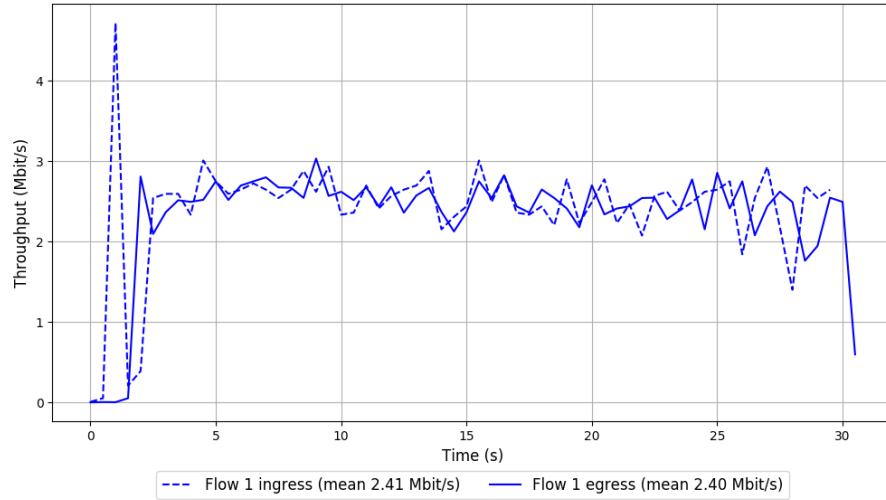
Figure is missing

Run 1: Statistics of TaoVA-100x

```
Start at: 2018-05-24 00:03:22
End at: 2018-05-24 00:03:52
Local clock offset: -0.912 ms
Remote clock offset: 6.653 ms

# Below is generated by plot.py at 2018-05-24 03:18:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 174.298 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 174.298 ms
Loss rate: 0.68%
```

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

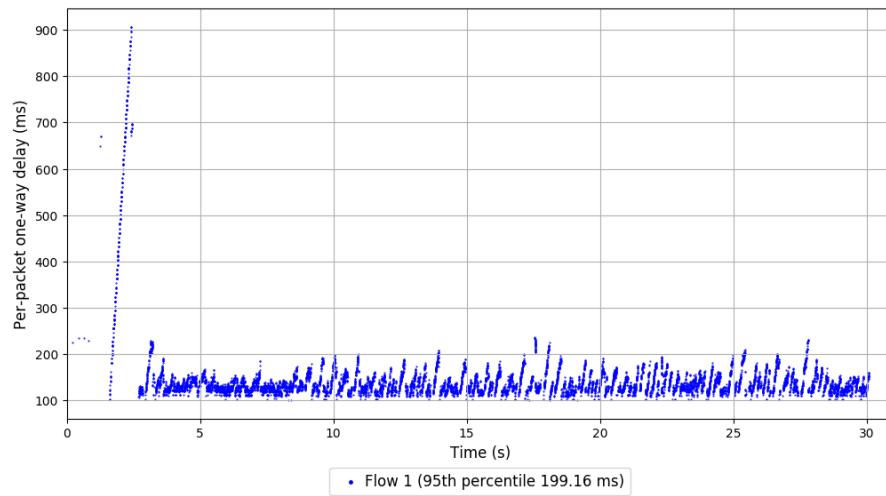
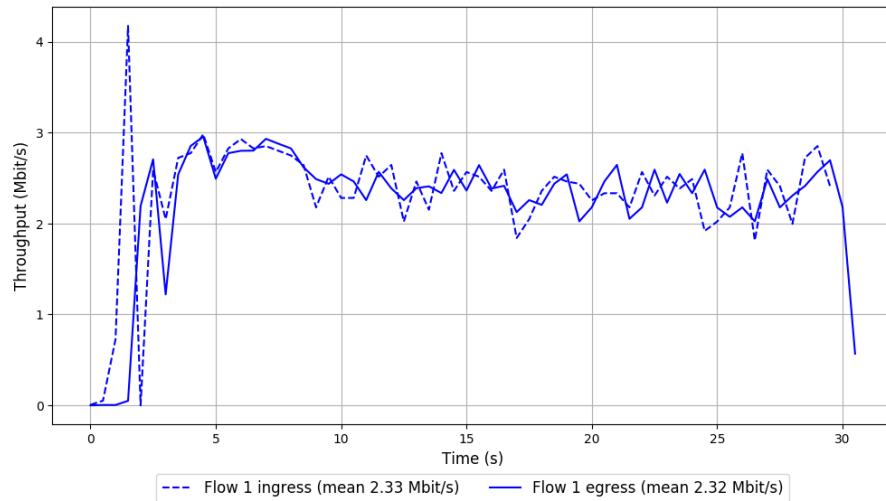


Run 2: Statistics of TaoVA-100x

```
Start at: 2018-05-24 00:21:21
End at: 2018-05-24 00:21:51
Local clock offset: -1.864 ms
Remote clock offset: 6.922 ms

# Below is generated by plot.py at 2018-05-24 03:18:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 199.156 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 199.156 ms
Loss rate: 0.80%
```

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

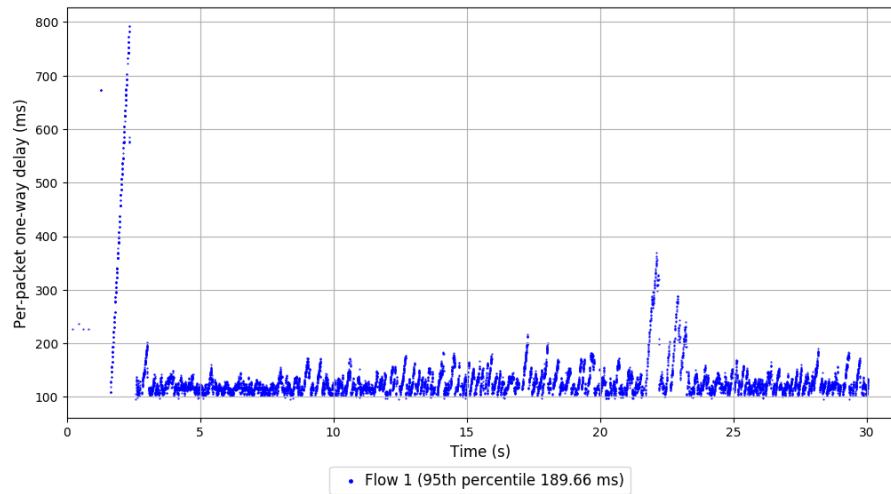
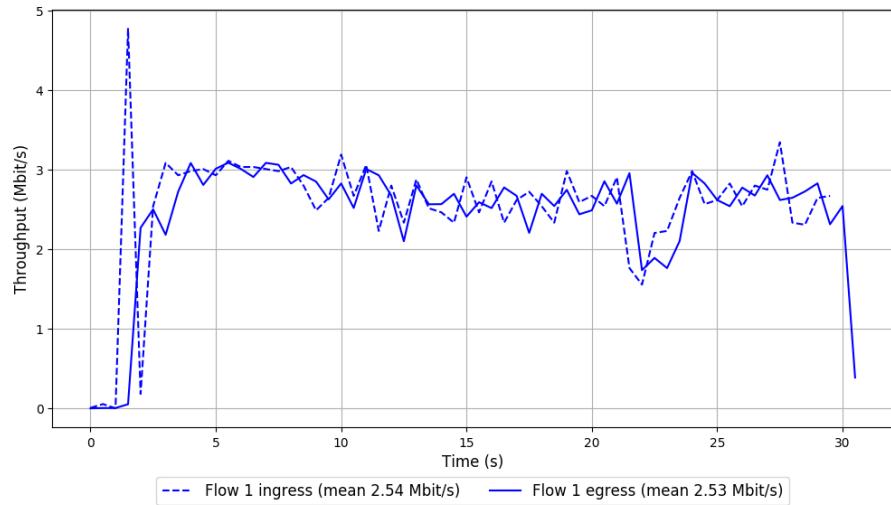


Run 3: Statistics of TaoVA-100x

```
Start at: 2018-05-24 00:39:20
End at: 2018-05-24 00:39:50
Local clock offset: -3.011 ms
Remote clock offset: 8.545 ms

# Below is generated by plot.py at 2018-05-24 03:18:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 189.665 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 189.665 ms
Loss rate: 0.84%
```

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

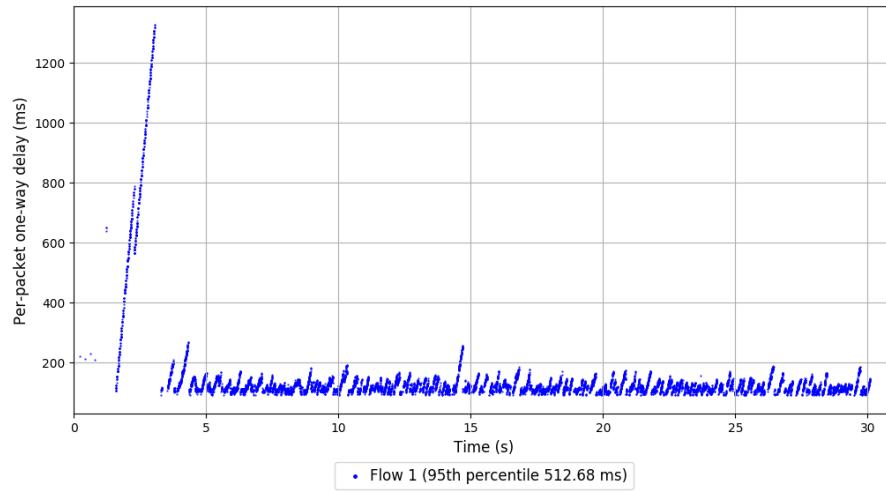
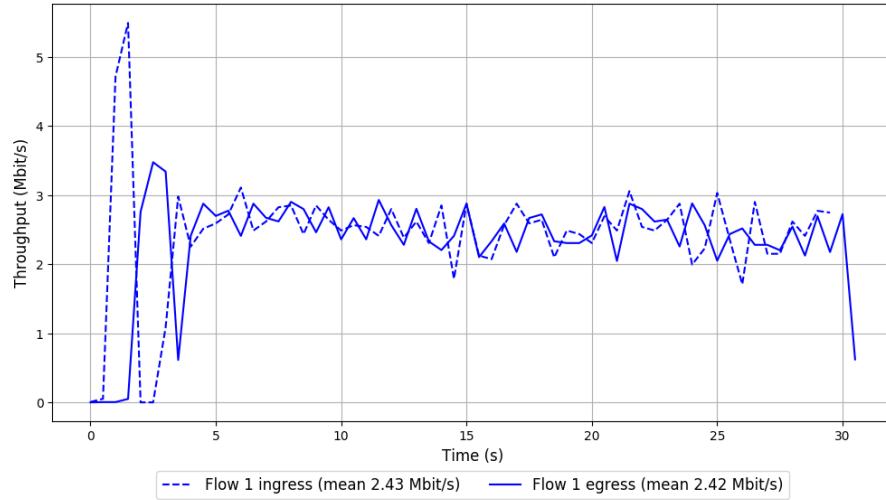


Run 4: Statistics of TaoVA-100x

```
Start at: 2018-05-24 00:57:19
End at: 2018-05-24 00:57:49
Local clock offset: -2.791 ms
Remote clock offset: 9.488 ms

# Below is generated by plot.py at 2018-05-24 03:18:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 512.682 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 512.682 ms
Loss rate: 0.98%
```

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

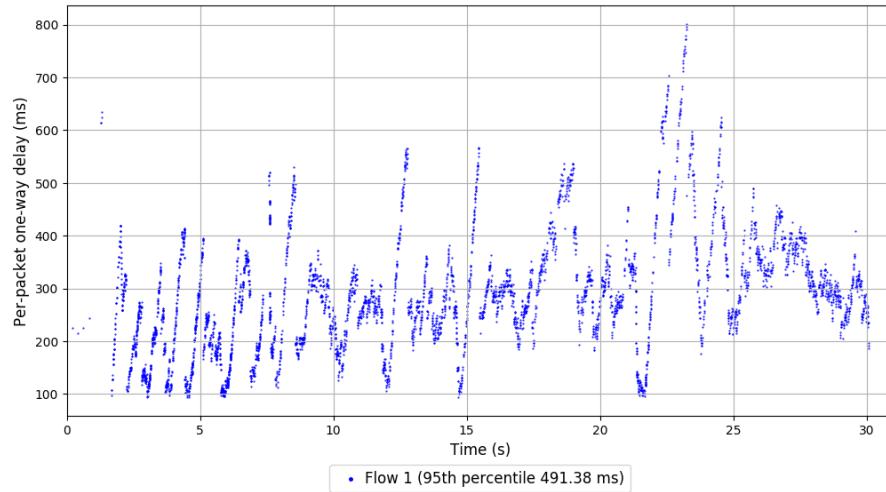
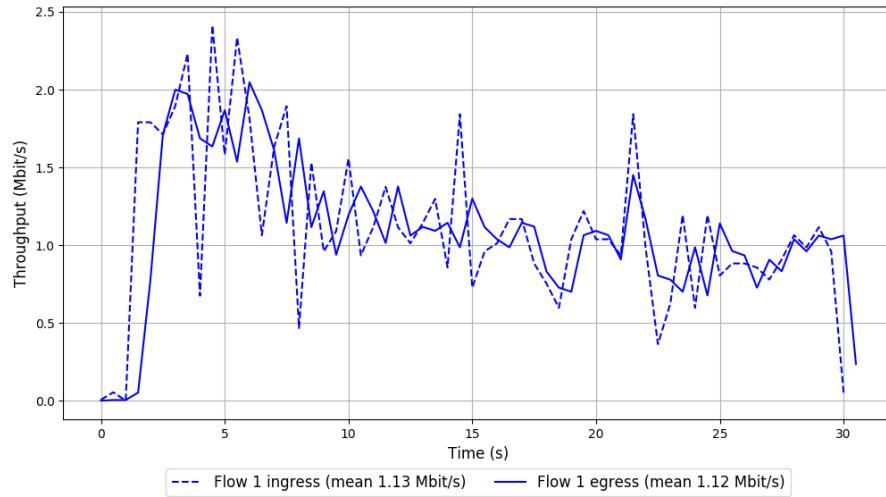


Run 5: Statistics of TaoVA-100x

```
Start at: 2018-05-24 01:15:24
End at: 2018-05-24 01:15:54
Local clock offset: -6.637 ms
Remote clock offset: 15.734 ms

# Below is generated by plot.py at 2018-05-24 03:18:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 491.375 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 491.375 ms
Loss rate: 1.00%
```

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

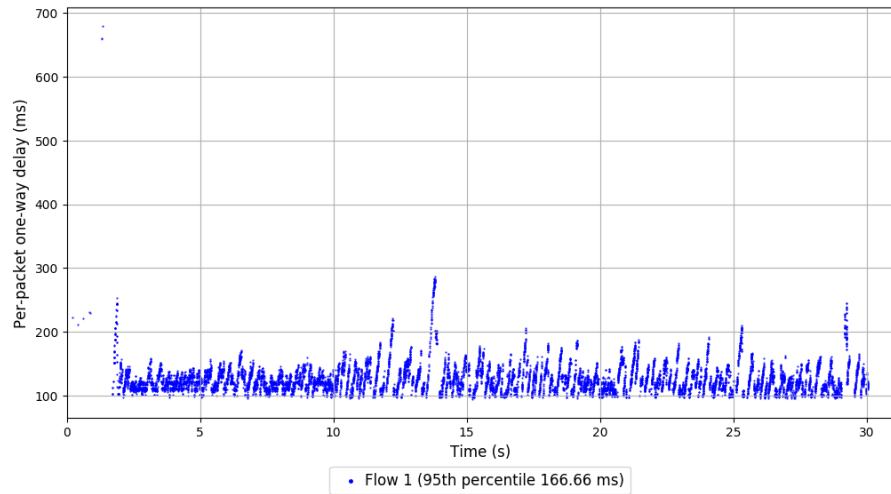
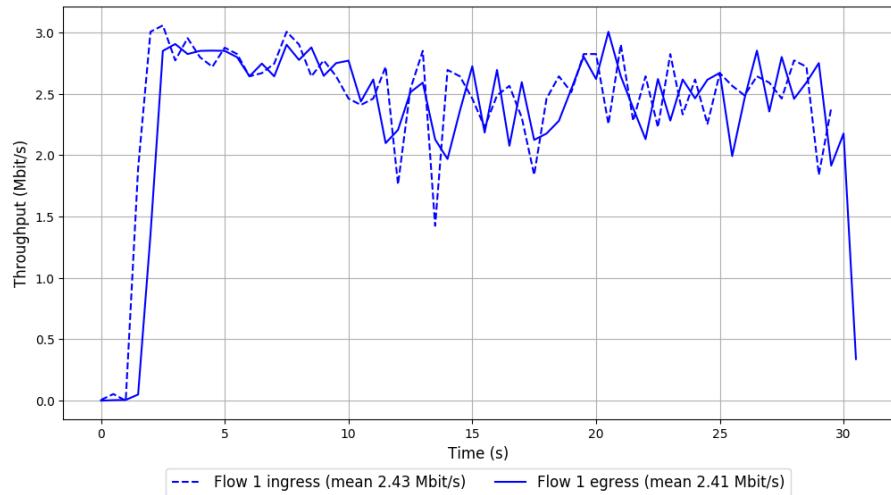


Run 6: Statistics of TaoVA-100x

```
Start at: 2018-05-24 01:33:23
End at: 2018-05-24 01:33:53
Local clock offset: -6.775 ms
Remote clock offset: 6.467 ms

# Below is generated by plot.py at 2018-05-24 03:18:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 166.657 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 166.657 ms
Loss rate: 1.10%
```

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



Run 7: Statistics of TaoVA-100x

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/taova\_stat

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

Figure is missing

Figure is missing

Run 8: Statistics of TaoVA-100x

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/taova\_stat

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

Figure is missing

Figure is missing

Run 9: Statistics of TaoVA-100x

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/taova\_stat

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

Figure is missing

Figure is missing

Run 10: Statistics of TaoVA-100x

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/taova\_stat

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

Figure is missing

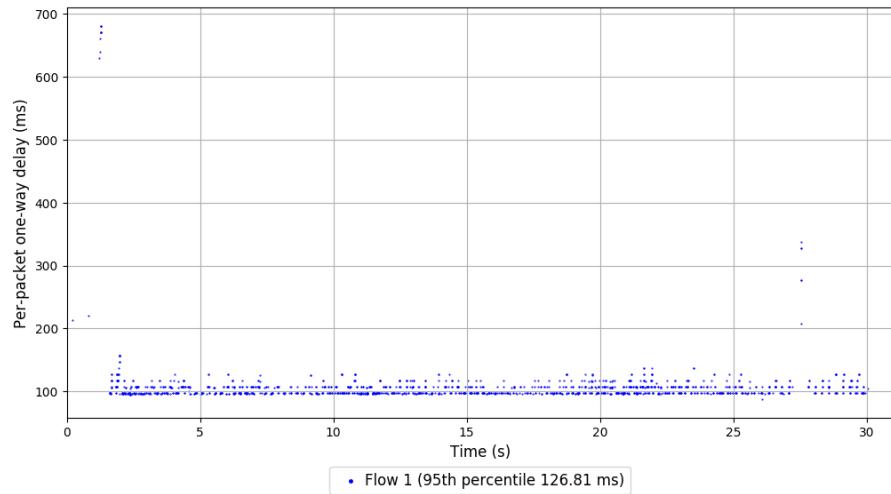
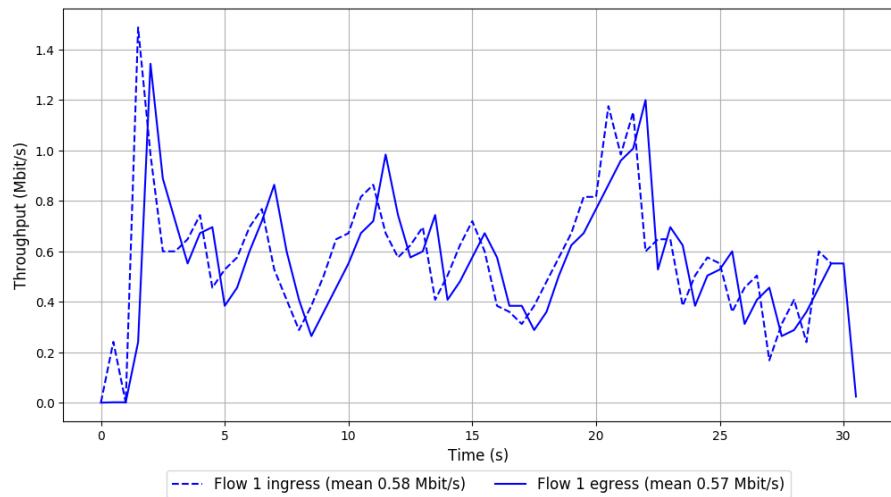
Figure is missing

Run 1: Statistics of TCP Vegas

```
Start at: 2018-05-24 00:07:52
End at: 2018-05-24 00:08:22
Local clock offset: -1.151 ms
Remote clock offset: 2.501 ms

# Below is generated by plot.py at 2018-05-24 03:18:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 126.815 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 126.815 ms
Loss rate: 1.18%
```

Run 1: Report of TCP Vegas — Data Link

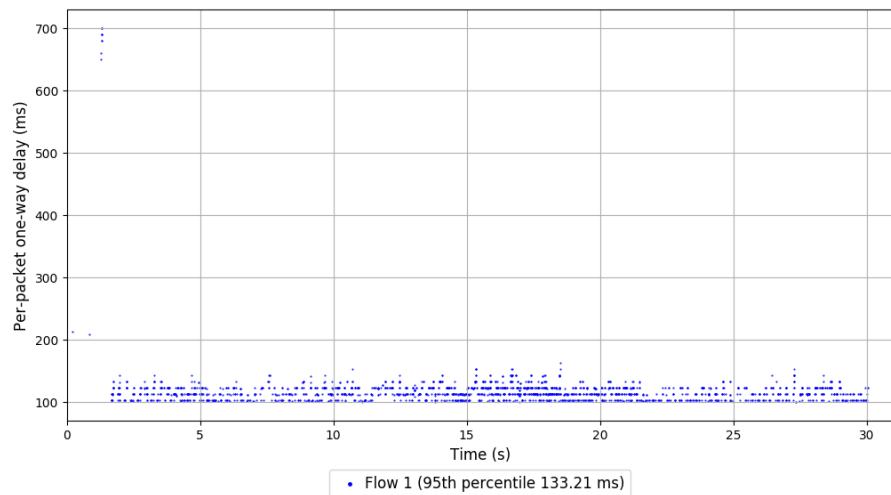
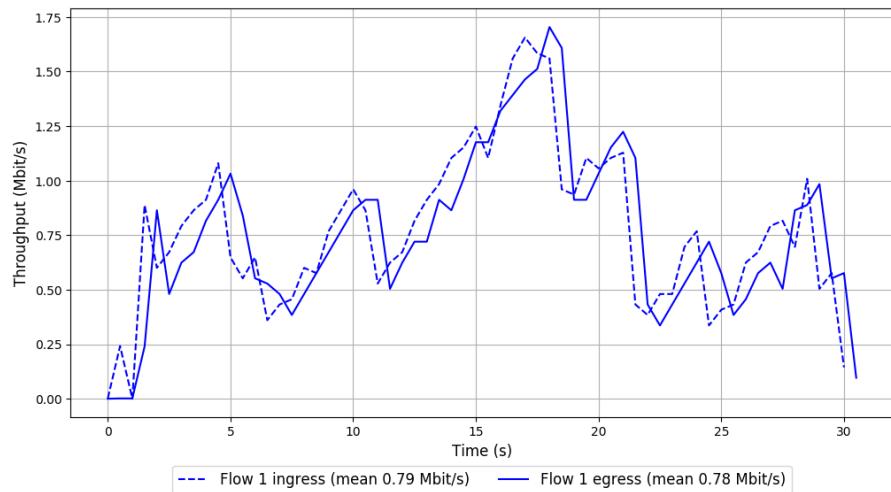


Run 2: Statistics of TCP Vegas

```
Start at: 2018-05-24 00:25:51
End at: 2018-05-24 00:26:21
Local clock offset: -1.73 ms
Remote clock offset: 3.055 ms

# Below is generated by plot.py at 2018-05-24 03:18:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 133.209 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 133.209 ms
Loss rate: 0.76%
```

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

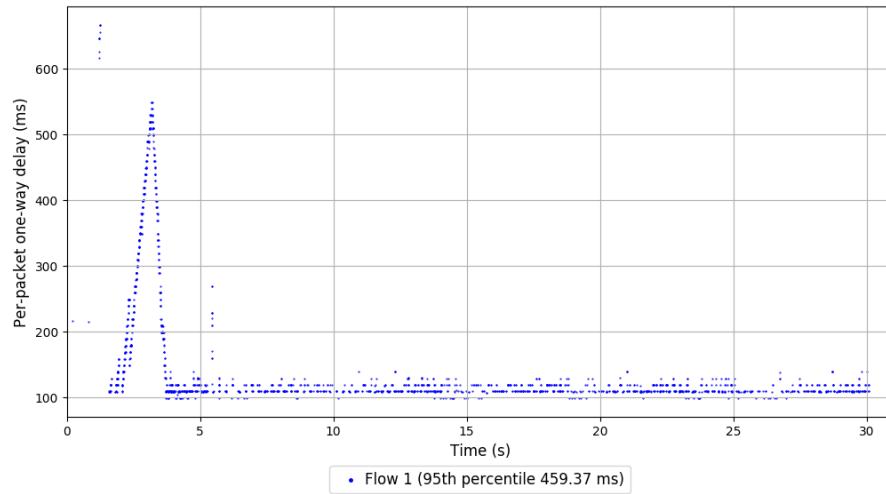
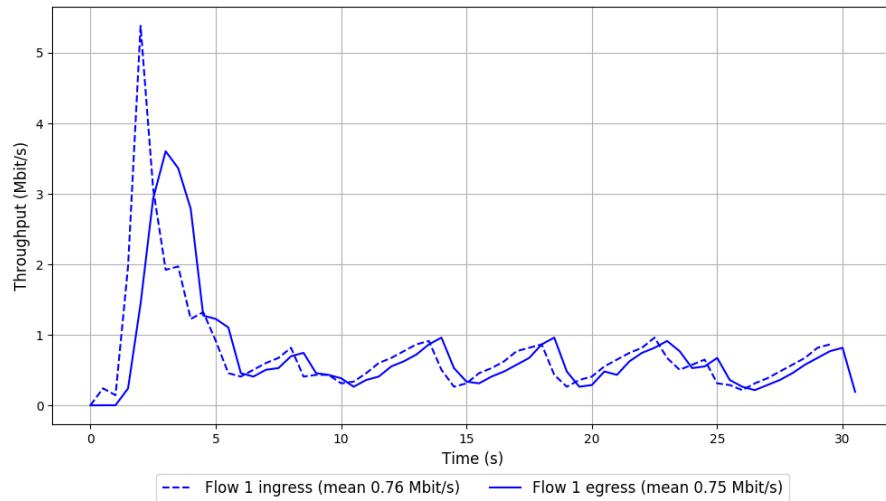


Run 3: Statistics of TCP Vegas

```
Start at: 2018-05-24 00:43:50
End at: 2018-05-24 00:44:20
Local clock offset: -1.44 ms
Remote clock offset: 6.845 ms

# Below is generated by plot.py at 2018-05-24 03:18:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 459.372 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 459.372 ms
Loss rate: 1.00%
```

Run 3: Report of TCP Vegas — Data Link

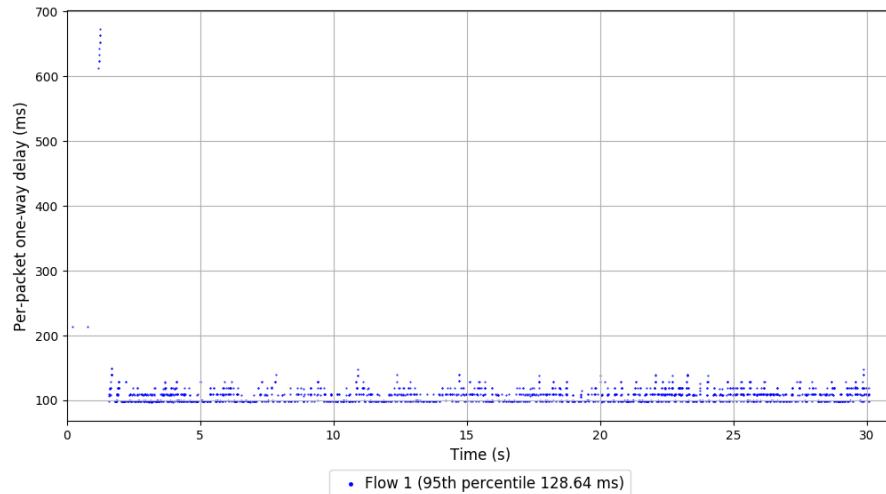
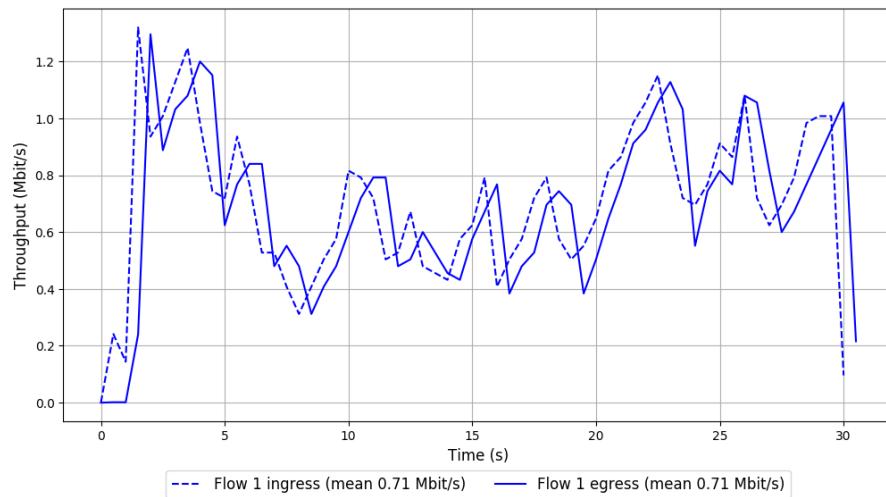


Run 4: Statistics of TCP Vegas

```
Start at: 2018-05-24 01:01:50
End at: 2018-05-24 01:02:20
Local clock offset: -4.73 ms
Remote clock offset: 9.668 ms

# Below is generated by plot.py at 2018-05-24 03:18:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 128.641 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 128.641 ms
Loss rate: 0.90%
```

Run 4: Report of TCP Vegas — Data Link

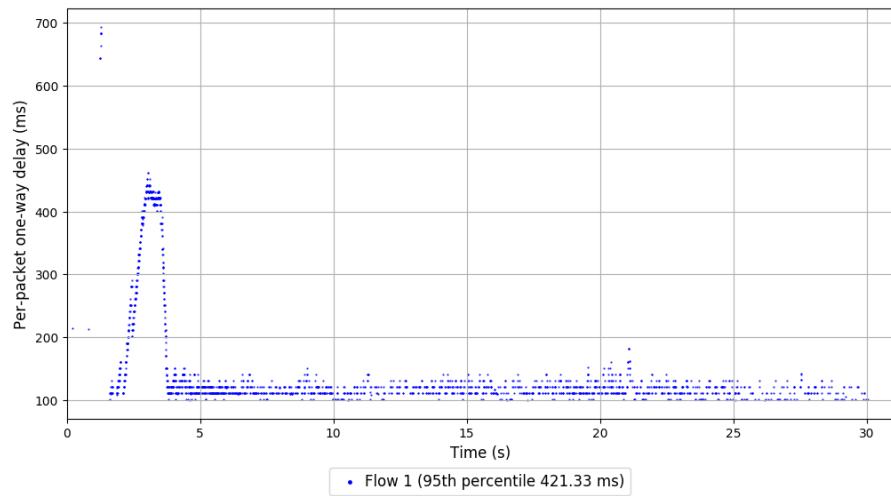
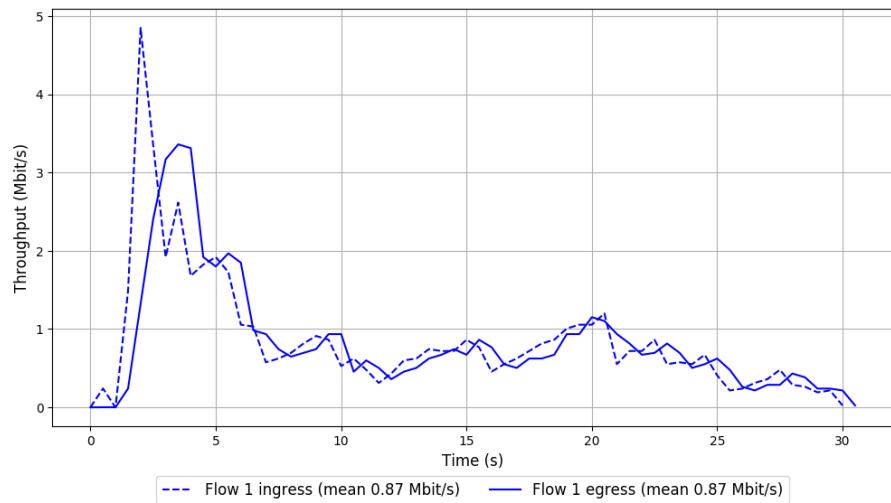


Run 5: Statistics of TCP Vegas

```
Start at: 2018-05-24 01:19:54
End at: 2018-05-24 01:20:24
Local clock offset: -7.876 ms
Remote clock offset: 11.217 ms

# Below is generated by plot.py at 2018-05-24 03:18:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 421.330 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 421.330 ms
Loss rate: 0.97%
```

### Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

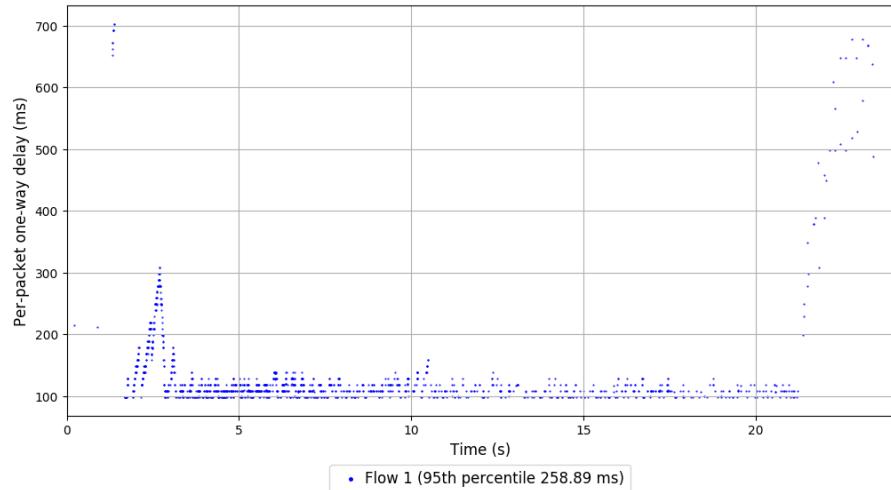
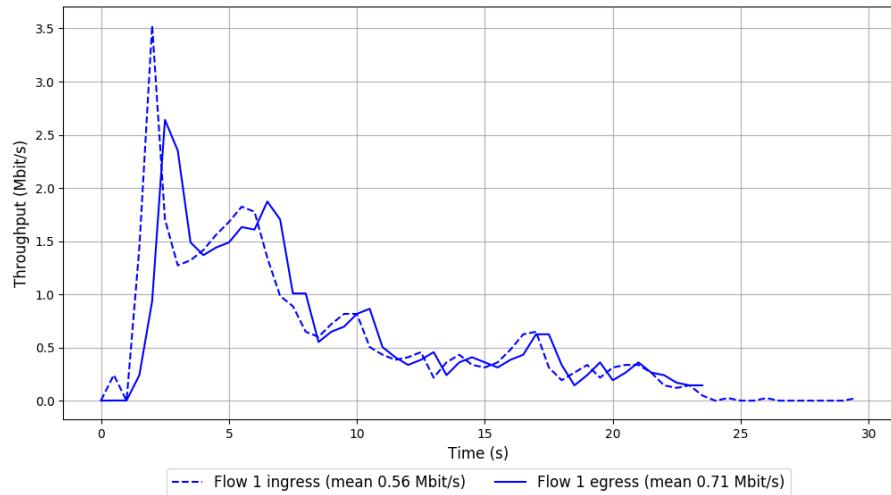
Start at: 2018-05-24 01:37:53

End at: 2018-05-24 01:38:23

Local clock offset: -8.124 ms

Remote clock offset: 4.938 ms

### Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/vegas\_stat

Run 7: Report of TCP Vegas — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of TCP Vegas

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/vegas\_stat

Run 8: Report of TCP Vegas — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of TCP Vegas

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/vegas\_stat

Run 9: Report of TCP Vegas — Data Link

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Figure is missing

Run 10: Statistics of TCP Vegas

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/vegas\_stat

Run 10: Report of TCP Vegas — Data Link

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Figure is missing

Run 1: Statistics of Verus

Start at: 2018-05-23 23:56:38

End at: 2018-05-23 23:57:08

Local clock offset: -0.771 ms

Remote clock offset: 3.381 ms

Run 1: Report of Verus — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of Verus

Start at: 2018-05-24 00:14:37  
End at: 2018-05-24 00:15:07  
Local clock offset: -1.964 ms  
Remote clock offset: 8.333 ms

Run 2: Report of Verus — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of Verus

Start at: 2018-05-24 00:32:36  
End at: 2018-05-24 00:33:06  
Local clock offset: -1.357 ms  
Remote clock offset: 4.053 ms

Run 3: Report of Verus — Data Link

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Figure is missing

Run 4: Statistics of Verus

Start at: 2018-05-24 00:50:35

End at: 2018-05-24 00:51:05

Local clock offset: -2.128 ms

Remote clock offset: 6.797 ms

Run 4: Report of Verus — Data Link

Figure is missing

Figure is missing

Run 5: Statistics of Verus

Start at: 2018-05-24 01:08:34

End at: 2018-05-24 01:09:04

Local clock offset: -5.639 ms

Remote clock offset: 11.278 ms

Run 5: Report of Verus — Data Link

Figure is missing

Figure is missing

Run 6: Statistics of Verus

Start at: 2018-05-24 01:26:39  
End at: 2018-05-24 01:27:09  
Local clock offset: -8.181 ms  
Remote clock offset: 11.801 ms

Run 6: Report of Verus — Data Link

Figure is missing

Figure is missing

Run 7: Statistics of Verus

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/verus\_stat

Run 7: Report of Verus — Data Link

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Figure is missing

Run 8: Statistics of Verus

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/verus\_stat

Run 8: Report of Verus — Data Link

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Figure is missing

Run 9: Statistics of Verus

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/verus\_stat

Run 9: Report of Verus — Data Link

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Run 10: Statistics of Verus

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/verus\_stat

Run 10: Report of Verus — Data Link

Figure is missing

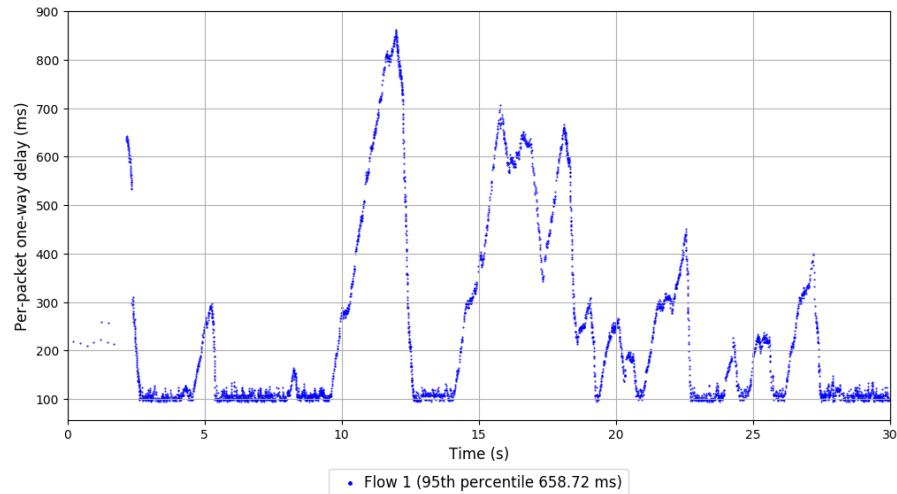
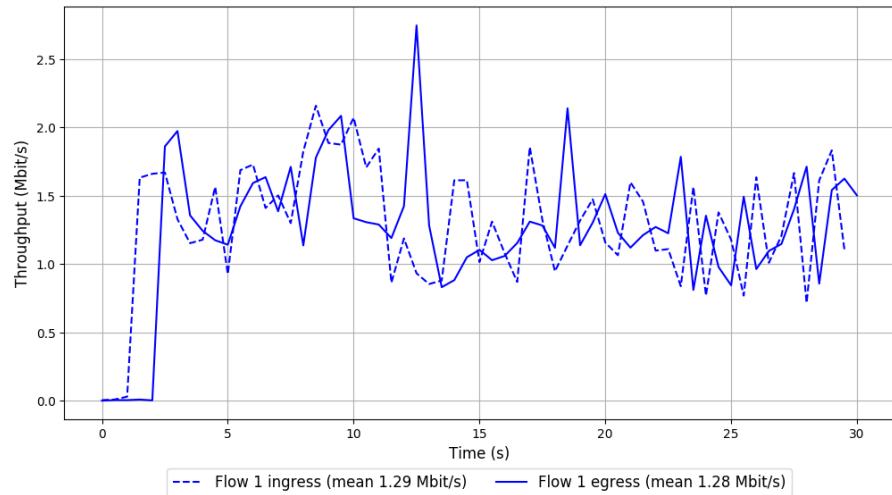
Figure is missing

Run 1: Statistics of PCC-Vivace

```
Start at: 2018-05-23 23:54:23
End at: 2018-05-23 23:54:53
Local clock offset: -1.556 ms
Remote clock offset: 3.657 ms

# Below is generated by plot.py at 2018-05-24 03:18:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 658.720 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 658.720 ms
Loss rate: 1.34%
```

Run 1: Report of PCC-Vivace — Data Link

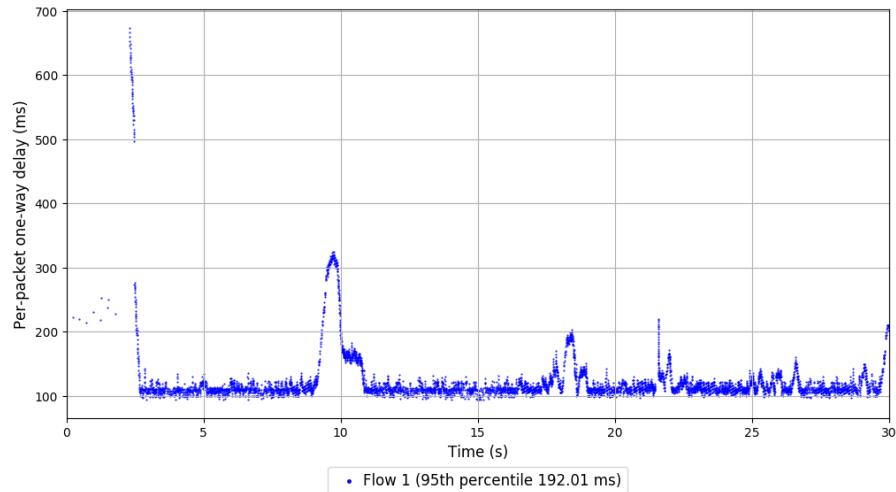
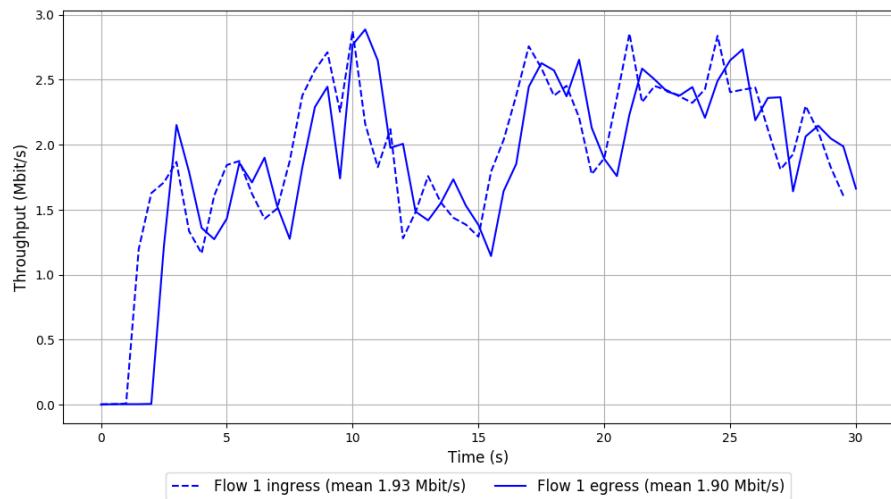


Run 2: Statistics of PCC-Vivace

```
Start at: 2018-05-24 00:12:22
End at: 2018-05-24 00:12:52
Local clock offset: -1.216 ms
Remote clock offset: 2.721 ms

# Below is generated by plot.py at 2018-05-24 03:18:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 192.008 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 192.008 ms
Loss rate: 1.71%
```

Run 2: Report of PCC-Vivace — Data Link

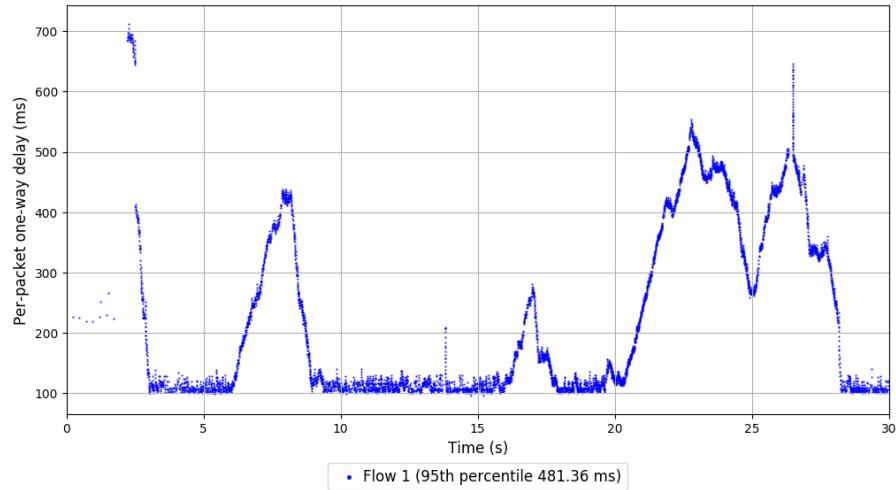
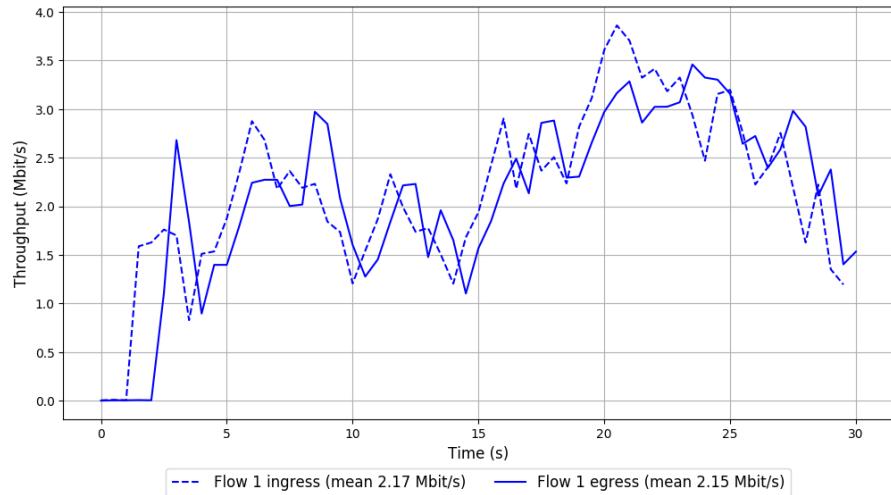


Run 3: Statistics of PCC-Vivace

```
Start at: 2018-05-24 00:30:21
End at: 2018-05-24 00:30:51
Local clock offset: -2.046 ms
Remote clock offset: 4.087 ms

# Below is generated by plot.py at 2018-05-24 03:18:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 481.357 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 481.357 ms
Loss rate: 1.34%
```

Run 3: Report of PCC-Vivace — Data Link

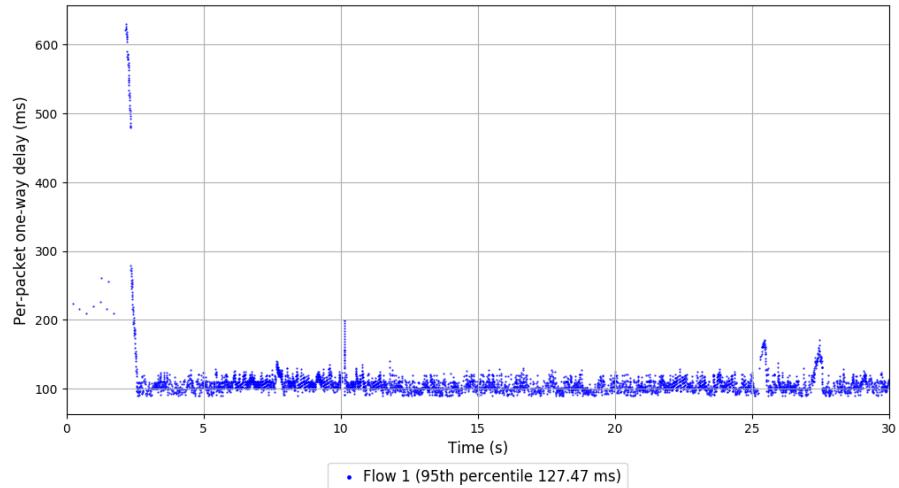
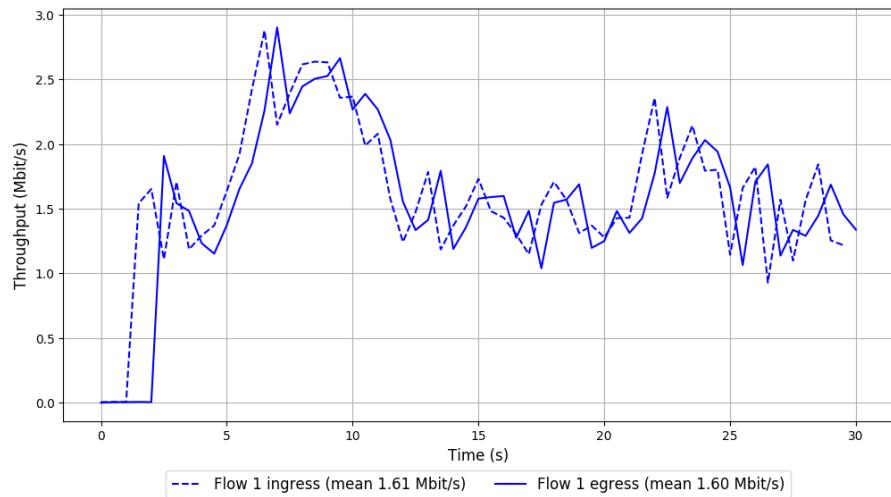


Run 4: Statistics of PCC-Vivace

```
Start at: 2018-05-24 00:48:20
End at: 2018-05-24 00:48:50
Local clock offset: -1.395 ms
Remote clock offset: 6.428 ms

# Below is generated by plot.py at 2018-05-24 03:18:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 127.467 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 127.467 ms
Loss rate: 1.50%
```

Run 4: Report of PCC-Vivace — Data Link

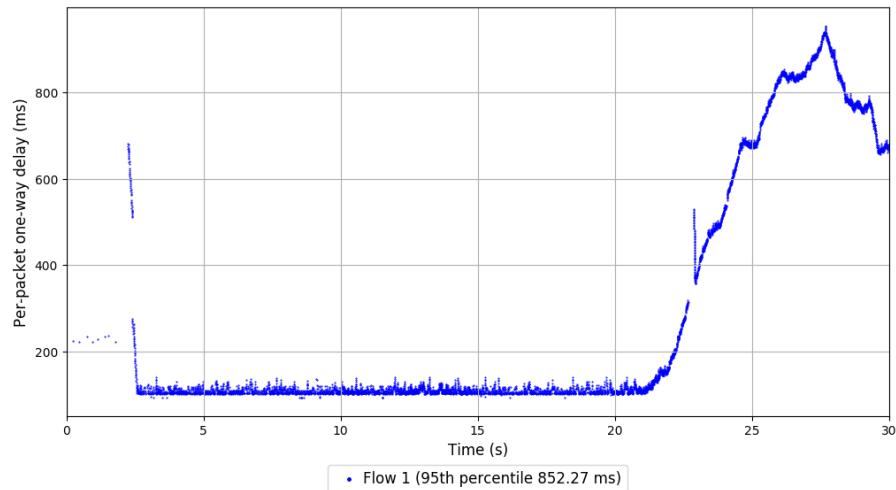
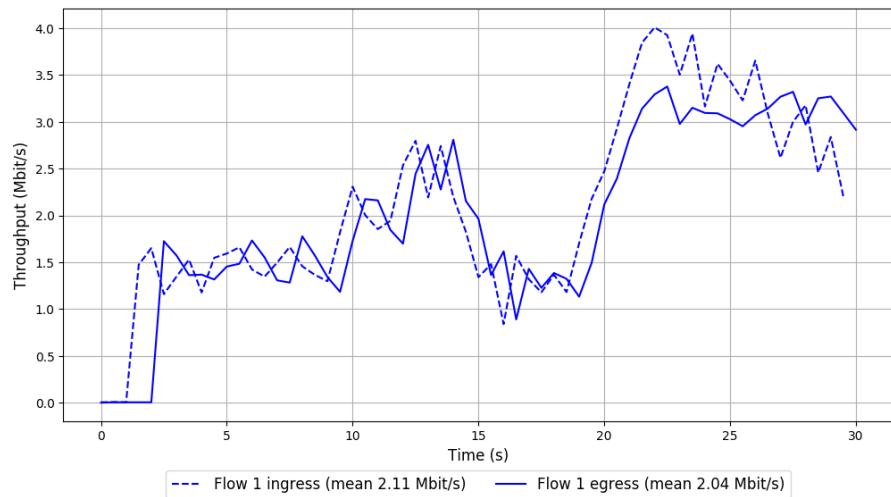


Run 5: Statistics of PCC-Vivace

```
Start at: 2018-05-24 01:06:19
End at: 2018-05-24 01:06:49
Local clock offset: -5.19 ms
Remote clock offset: 11.0 ms

# Below is generated by plot.py at 2018-05-24 03:18:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 852.270 ms
Loss rate: 3.50%
-- Flow 1:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 852.270 ms
Loss rate: 3.50%
```

Run 5: Report of PCC-Vivace — Data Link

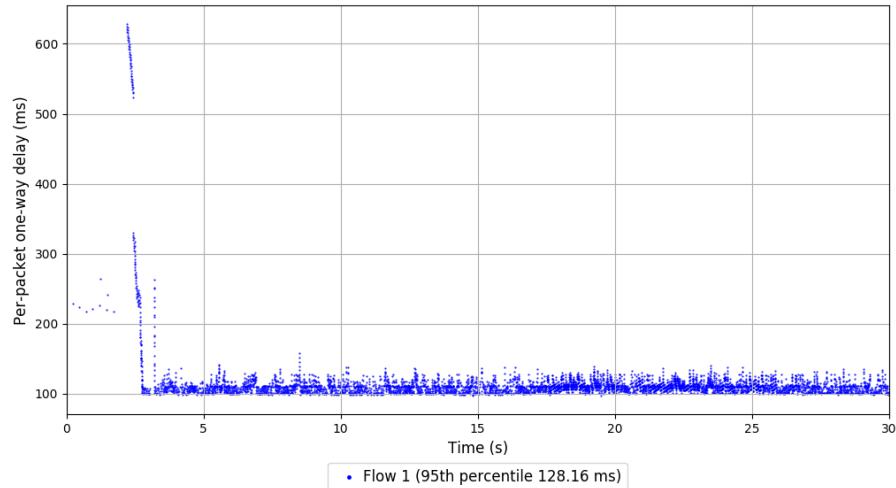
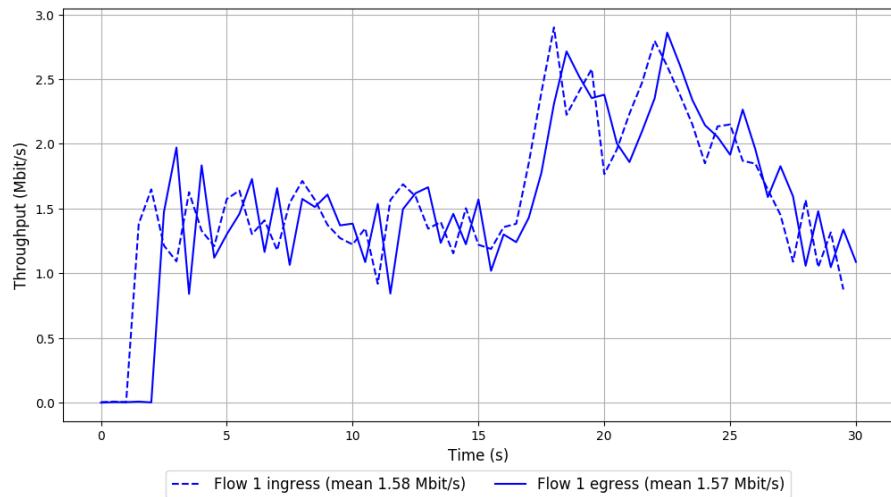


Run 6: Statistics of PCC-Vivace

```
Start at: 2018-05-24 01:24:24
End at: 2018-05-24 01:24:54
Local clock offset: -8.148 ms
Remote clock offset: 12.457 ms

# Below is generated by plot.py at 2018-05-24 03:18:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 128.157 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 128.157 ms
Loss rate: 1.26%
```

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/vivace\_st

Run 7: Report of PCC-Vivace — Data Link

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Run 8: Statistics of PCC-Vivace

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/vivace\_sta

Run 8: Report of PCC-Vivace — Data Link

Figure is missing

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Run 9: Statistics of PCC-Vivace

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/vivace\_sta

Run 9: Report of PCC-Vivace — Data Link

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Run 10: Statistics of PCC-Vivace

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/vivace\_st

Run 10: Report of PCC-Vivace — Data Link

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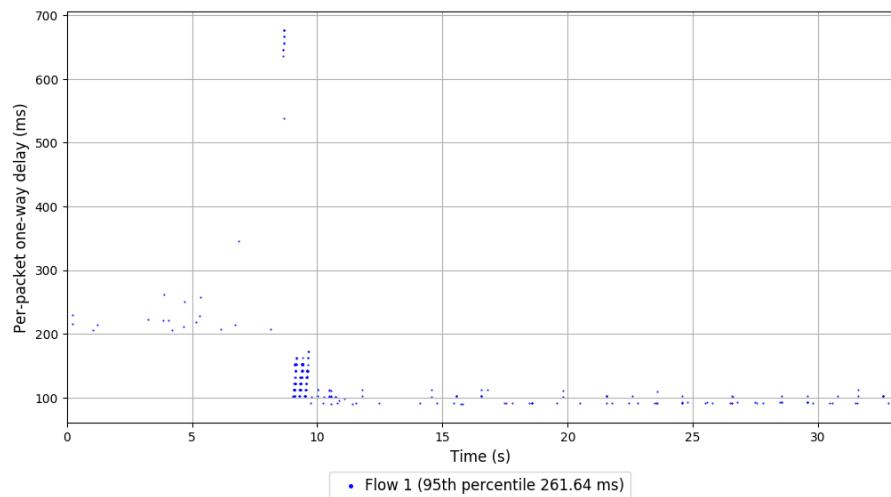
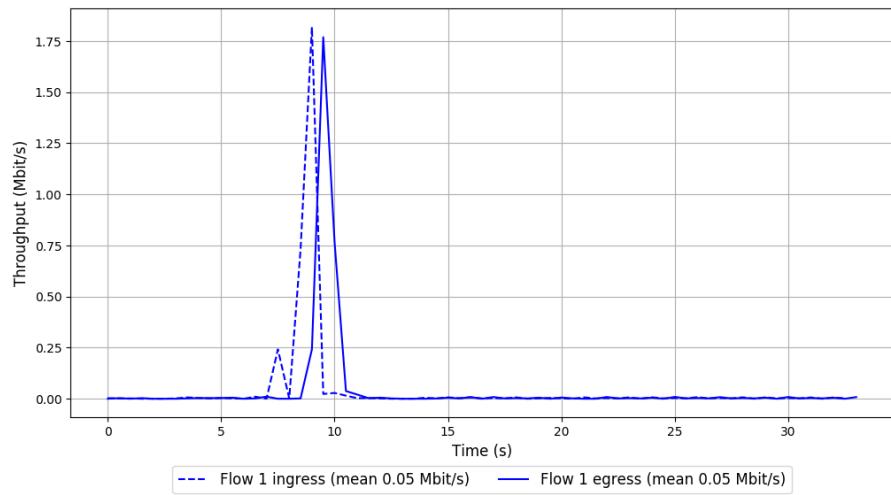
Figure is missing

```
Run 1: Statistics of WebRTC media
```

```
Start at: 2018-05-24 00:04:30
End at: 2018-05-24 00:05:00
Local clock offset: -1.006 ms
Remote clock offset: 3.546 ms

# Below is generated by plot.py at 2018-05-24 03:18:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 261.644 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 261.644 ms
Loss rate: 0.79%
```

Run 1: Report of WebRTC media — Data Link

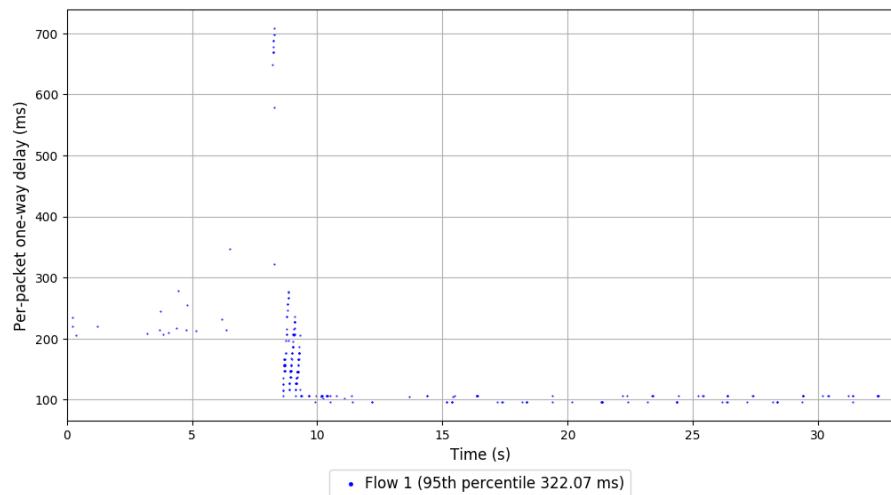
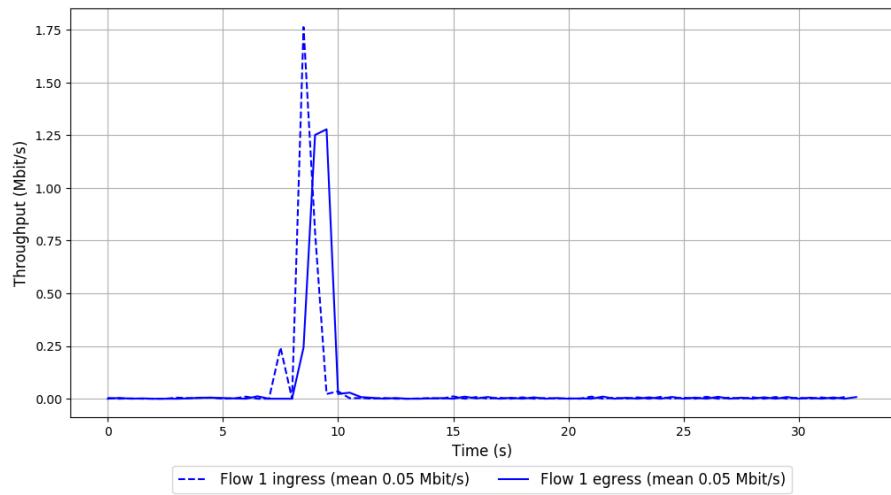


Run 2: Statistics of WebRTC media

```
Start at: 2018-05-24 00:22:29
End at: 2018-05-24 00:22:59
Local clock offset: -1.078 ms
Remote clock offset: 8.6 ms

# Below is generated by plot.py at 2018-05-24 03:18:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 322.069 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 322.069 ms
Loss rate: 0.79%
```

Run 2: Report of WebRTC media — Data Link

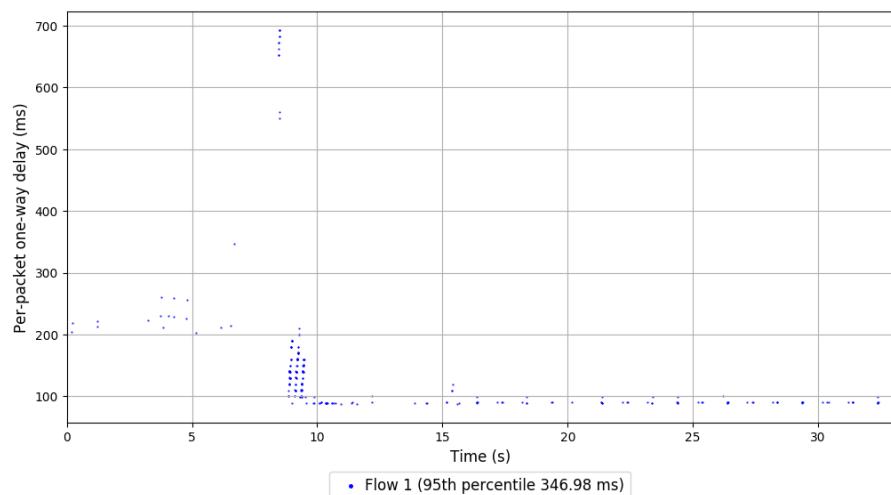
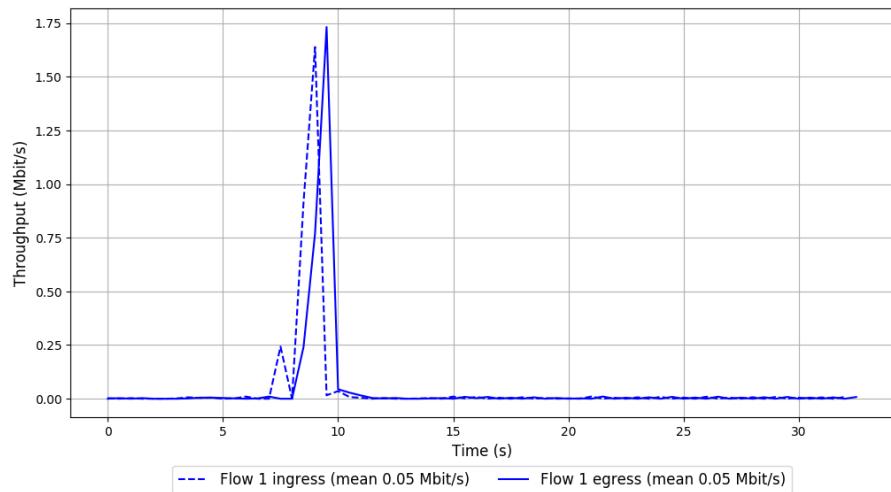


Run 3: Statistics of WebRTC media

```
Start at: 2018-05-24 00:40:28
End at: 2018-05-24 00:40:58
Local clock offset: -1.444 ms
Remote clock offset: 3.906 ms

# Below is generated by plot.py at 2018-05-24 03:18:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 346.977 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 346.977 ms
Loss rate: 0.79%
```

Run 3: Report of WebRTC media — Data Link

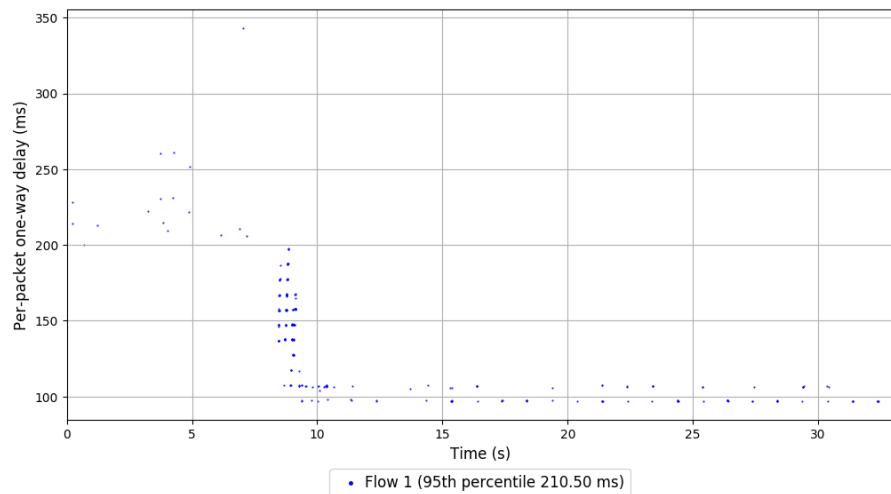
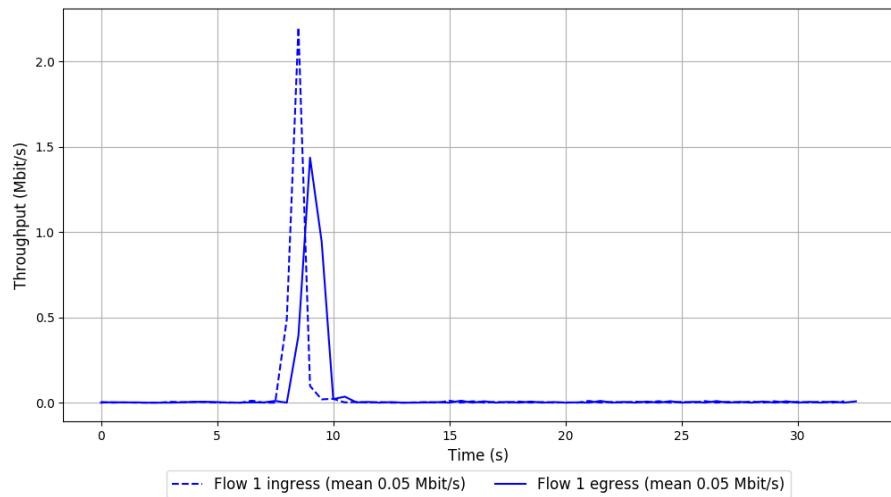


Run 4: Statistics of WebRTC media

```
Start at: 2018-05-24 00:58:27
End at: 2018-05-24 00:58:57
Local clock offset: -2.586 ms
Remote clock offset: 13.62 ms

# Below is generated by plot.py at 2018-05-24 03:18:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 210.501 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 210.501 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link

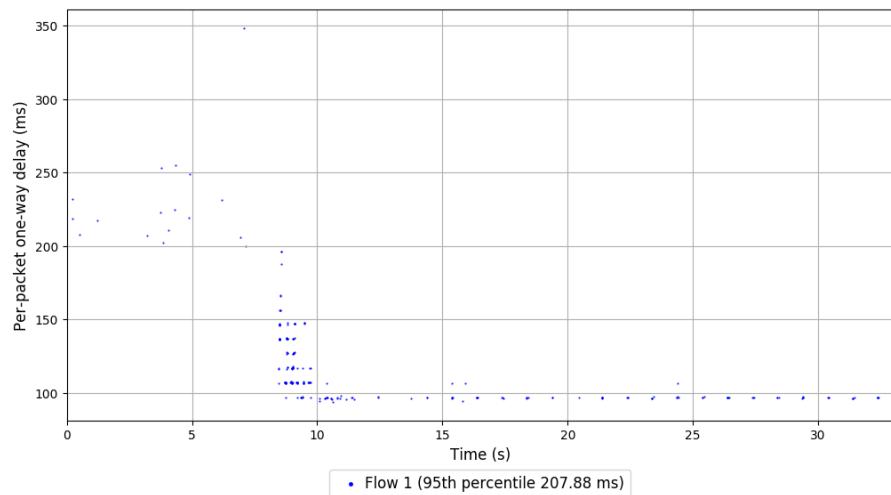
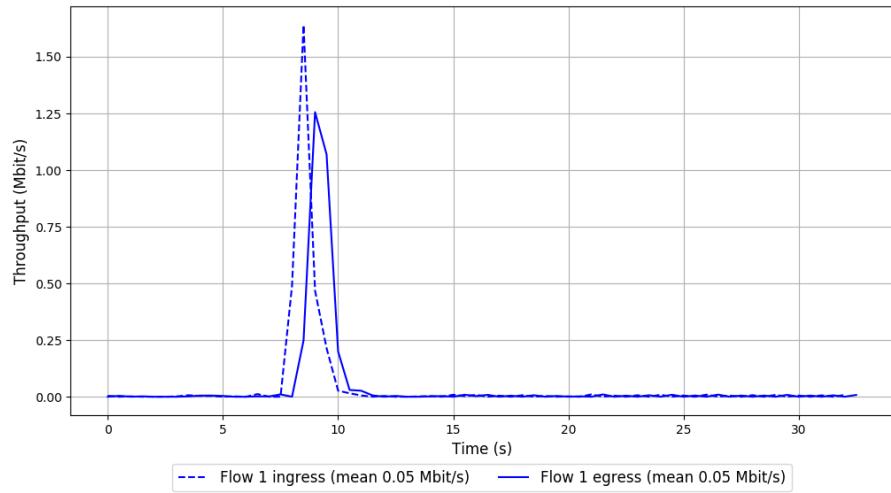


Run 5: Statistics of WebRTC media

```
Start at: 2018-05-24 01:16:32
End at: 2018-05-24 01:17:02
Local clock offset: -6.756 ms
Remote clock offset: 15.895 ms

# Below is generated by plot.py at 2018-05-24 03:18:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 207.884 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 207.884 ms
Loss rate: 0.85%
```

Run 5: Report of WebRTC media — Data Link

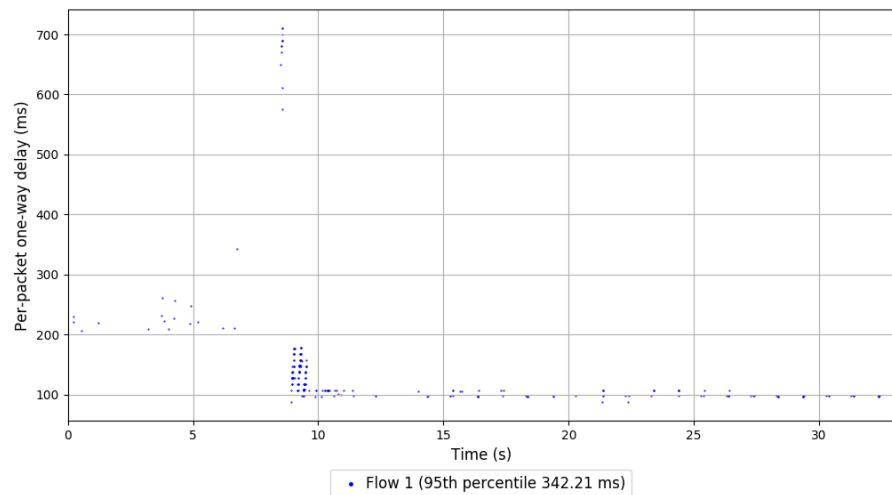
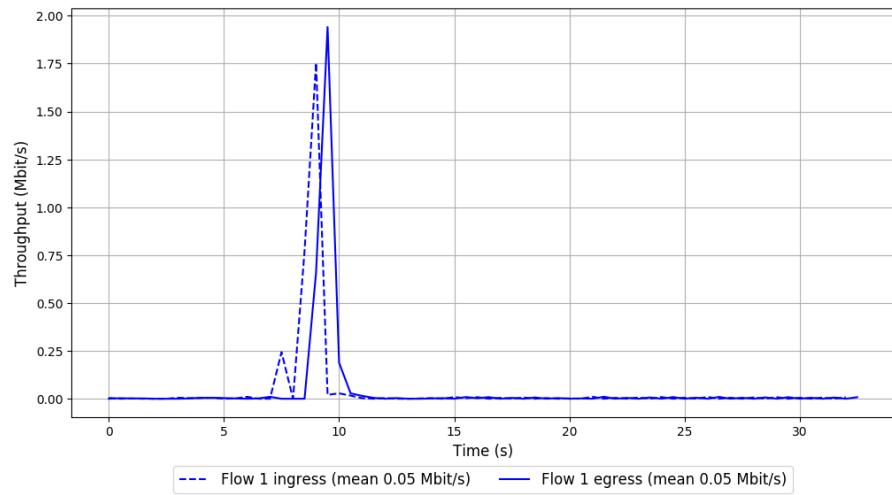


Run 6: Statistics of WebRTC media

```
Start at: 2018-05-24 01:34:31
End at: 2018-05-24 01:35:01
Local clock offset: -7.489 ms
Remote clock offset: 6.28 ms

# Below is generated by plot.py at 2018-05-24 03:18:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 342.207 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 342.207 ms
Loss rate: 0.00%
```

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/webrtc\_st

Run 7: Report of WebRTC media — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of WebRTC media

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/webrtc\_st

Run 8: Report of WebRTC media — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of WebRTC media

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/webrtc\_st

Run 9: Report of WebRTC media — Data Link

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Figure is missing

Run 10: Statistics of WebRTC media

/home/ubuntu/pantheon/data/2018-05-23T23-51-AWS-Brazil-2-to-Colombia-ppp0-10-runs/webrtc\_st

Run 10: Report of WebRTC media — Data Link

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