

## Pantheon Report

Generated at 2018-06-29 19:25:58 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

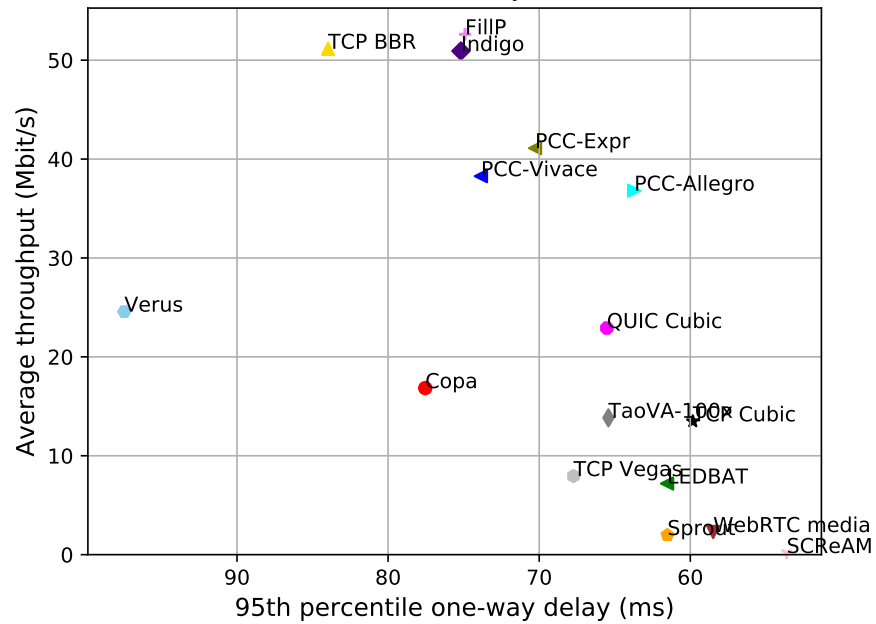
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

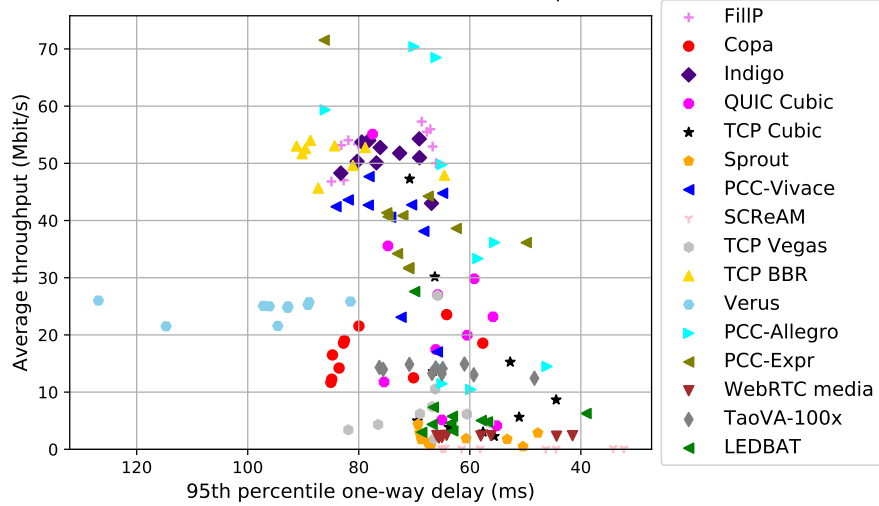
Git summary:

```
branch: master @ 715dc5f09d172e419699f6f17f1cb4c45064f212
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ 30060ab034deb3424347f5cc3db86198eac35d2a
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf5e58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
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-quirk @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webRTC @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS Korea to China, 10 runs of 30s each per scheme  
(mean of all runs by scheme)



test from AWS Korea to China, 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	9	51.15	83.98	11.05
Copa	10	16.84	77.54	3.81
TCP Cubic	10	13.48	59.83	1.07
FillP	10	52.61	74.91	28.30
FillP-Sheep	0	N/A	N/A	N/A
Indigo	10	50.92	75.18	1.59
LEDBAT	10	7.19	61.54	0.40
PCC-Allegro	10	36.80	63.71	2.01
PCC-Expr	10	41.10	70.28	15.70
QUIC Cubic	10	22.91	65.53	1.30
SCReAM	10	0.16	53.62	0.28
Sprout	9	1.98	61.52	0.97
TaoVA-100x	10	13.83	65.42	1.88
TCP Vegas	9	7.94	67.73	1.32
Verus	10	24.57	97.46	80.05
PCC-Vivace	10	38.27	73.86	1.04
WebRTC media	9	2.29	58.49	0.31

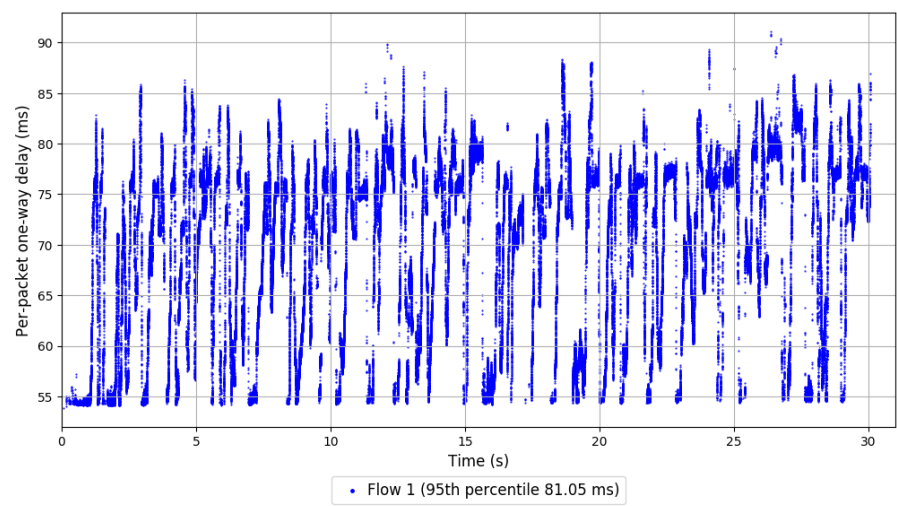
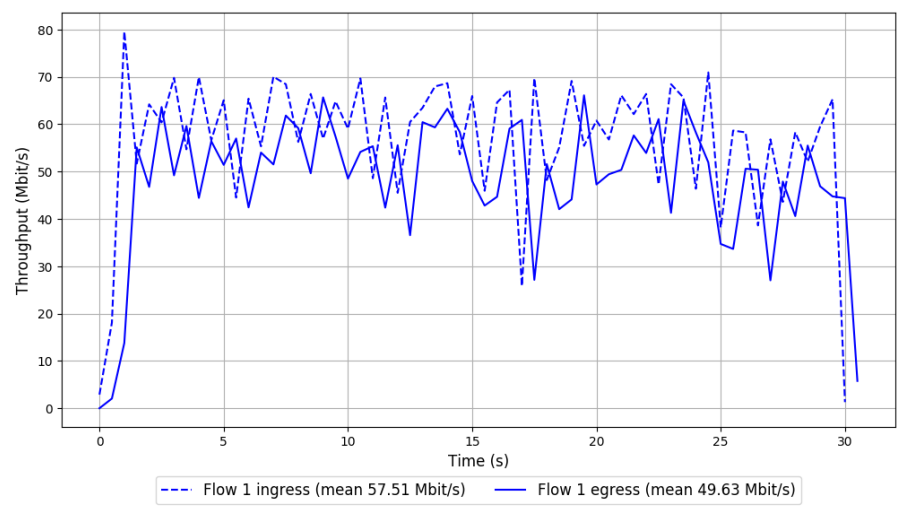
Run 1: Statistics of TCP BBR

Start at: 2018-06-29 12:58:30  
End at: 2018-06-29 12:59:00  
Local clock offset: -2.593 ms  
Remote clock offset: -20.512 ms

# Below is generated by plot.py at 2018-06-29 19:17:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 49.63 Mbit/s  
95th percentile per-packet one-way delay: 81.054 ms  
Loss rate: 13.70%  
-- Flow 1:  
Average throughput: 49.63 Mbit/s  
95th percentile per-packet one-way delay: 81.054 ms  
Loss rate: 13.70%



Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

/home/ubuntu/pantheon/data/2018-06-29T12-47-AWS-Korea-to-China-10-runs/bbr\_stats\_run2.log d

Run 2: Report of TCP BBR — Data Link

Figure is missing

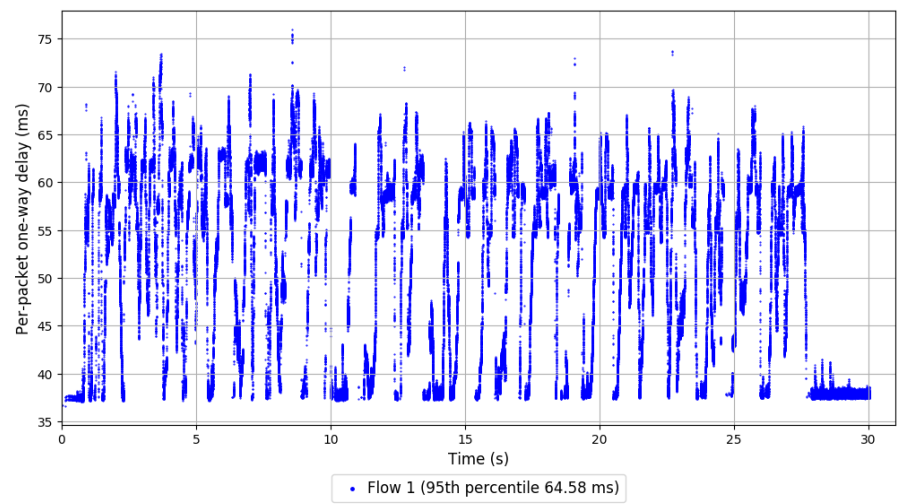
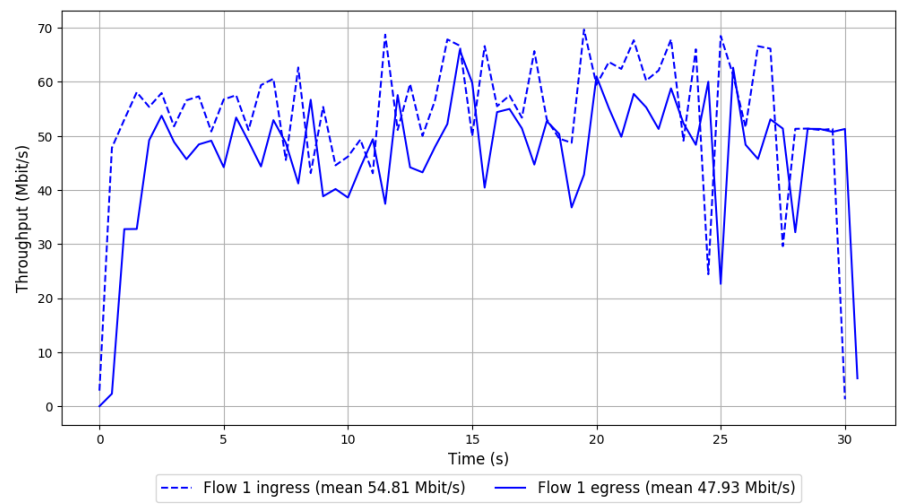
Figure is missing

Run 3: Statistics of TCP BBR

Start at: 2018-06-29 14:15:52  
End at: 2018-06-29 14:16:22  
Local clock offset: -3.01 ms  
Remote clock offset: -37.398 ms

# Below is generated by plot.py at 2018-06-29 19:17:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 47.93 Mbit/s  
95th percentile per-packet one-way delay: 64.575 ms  
Loss rate: 12.55%  
-- Flow 1:  
Average throughput: 47.93 Mbit/s  
95th percentile per-packet one-way delay: 64.575 ms  
Loss rate: 12.55%

Run 3: Report of TCP BBR — Data Link

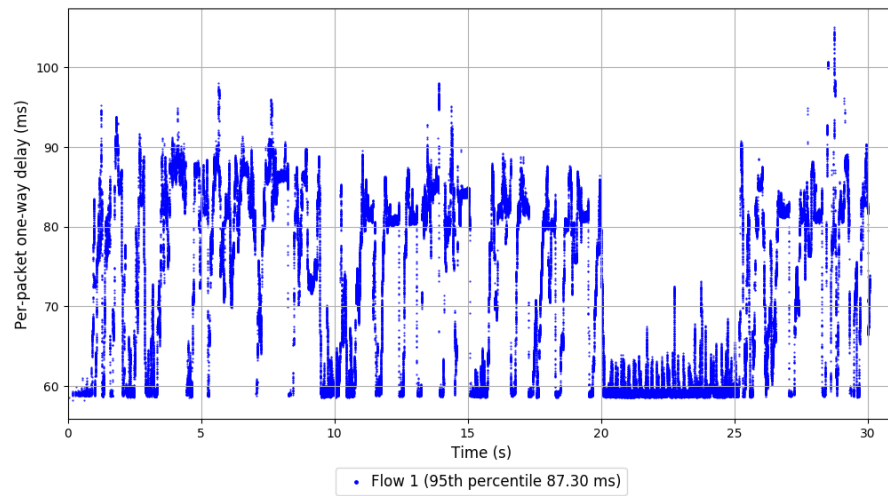
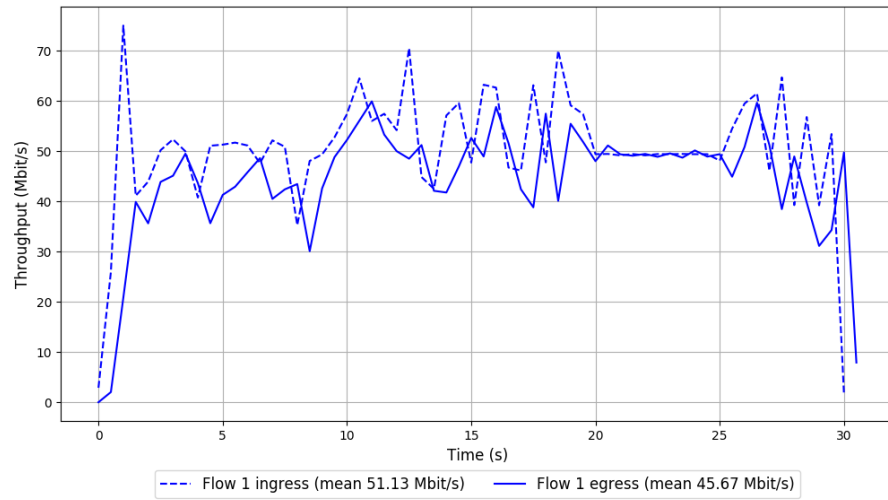


Run 4: Statistics of TCP BBR

Start at: 2018-06-29 14:55:53  
End at: 2018-06-29 14:56:23  
Local clock offset: 6.738 ms  
Remote clock offset: -15.966 ms

# Below is generated by plot.py at 2018-06-29 19:17:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 45.67 Mbit/s  
95th percentile per-packet one-way delay: 87.299 ms  
Loss rate: 10.67%  
-- Flow 1:  
Average throughput: 45.67 Mbit/s  
95th percentile per-packet one-way delay: 87.299 ms  
Loss rate: 10.67%

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



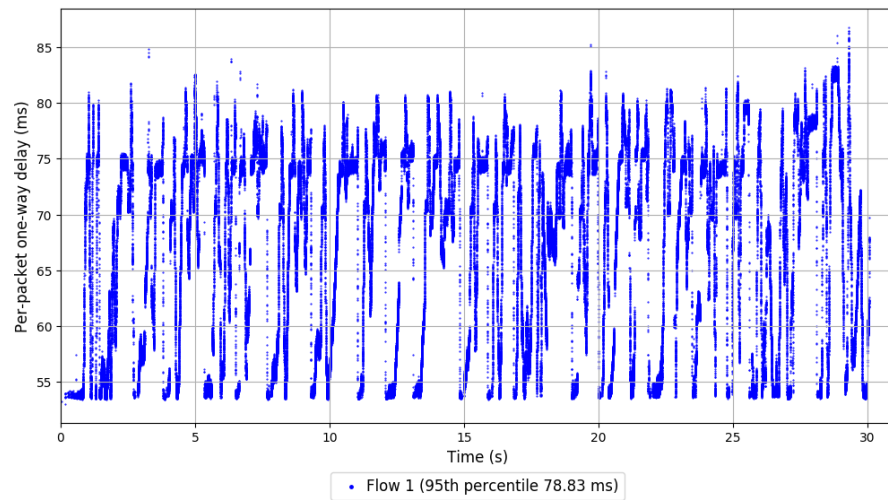
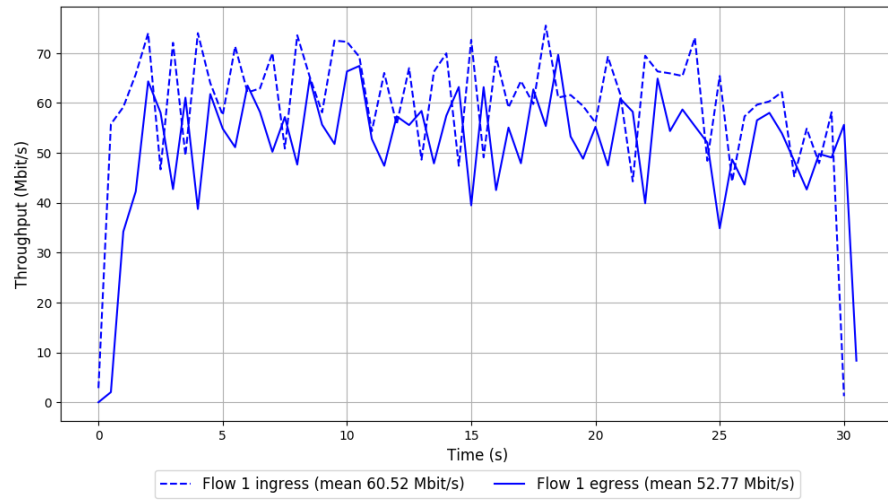
Run 5: Statistics of TCP BBR

Start at: 2018-06-29 15:31:31  
End at: 2018-06-29 15:32:01  
Local clock offset: 8.931 ms  
Remote clock offset: -20.132 ms

# Below is generated by plot.py at 2018-06-29 19:17:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 52.77 Mbit/s  
95th percentile per-packet one-way delay: 78.826 ms  
Loss rate: 12.79%  
-- Flow 1:  
Average throughput: 52.77 Mbit/s  
95th percentile per-packet one-way delay: 78.826 ms  
Loss rate: 12.79%



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

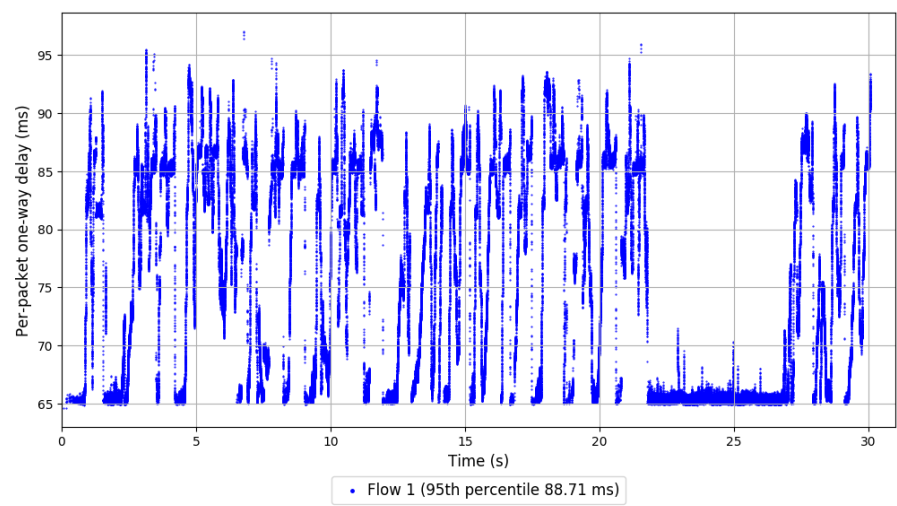
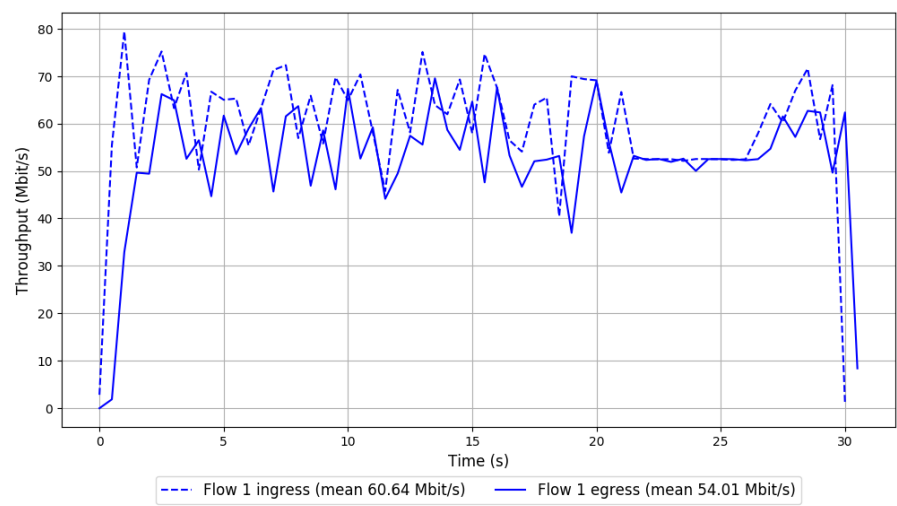


Run 6: Statistics of TCP BBR

Start at: 2018-06-29 16:09:12  
End at: 2018-06-29 16:09:42  
Local clock offset: 4.19 ms  
Remote clock offset: -10.916 ms

# Below is generated by plot.py at 2018-06-29 19:17:41  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 54.01 Mbit/s  
95th percentile per-packet one-way delay: 88.706 ms  
Loss rate: 10.92%  
-- Flow 1:  
Average throughput: 54.01 Mbit/s  
95th percentile per-packet one-way delay: 88.706 ms  
Loss rate: 10.92%

Run 6: Report of TCP BBR — Data Link

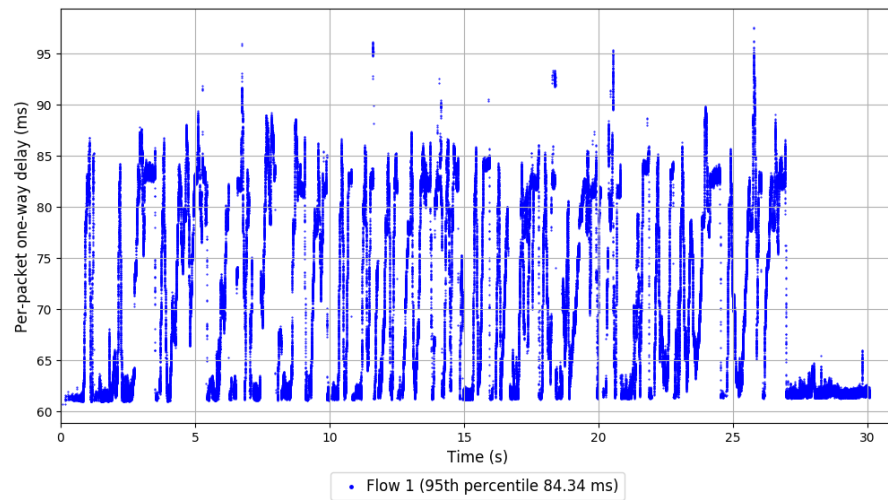
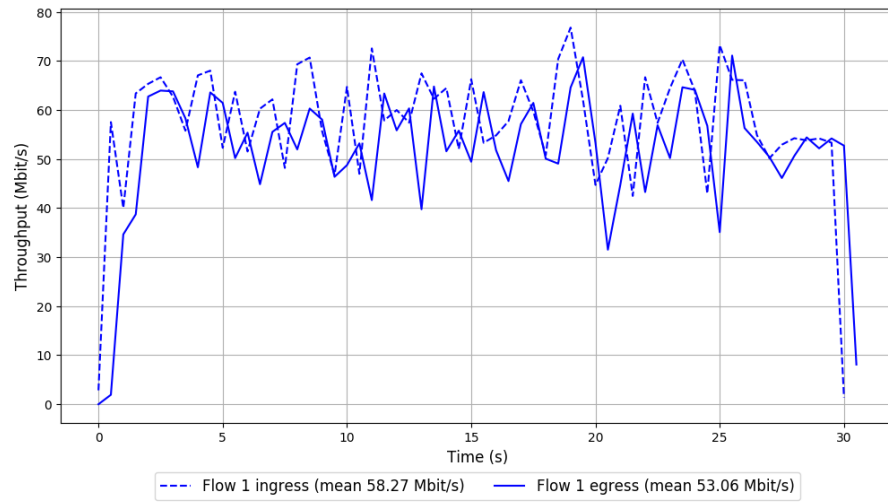


Run 7: Statistics of TCP BBR

Start at: 2018-06-29 16:45:25  
End at: 2018-06-29 16:45:56  
Local clock offset: -6.54 ms  
Remote clock offset: -14.499 ms

# Below is generated by plot.py at 2018-06-29 19:17:41  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 53.06 Mbit/s  
95th percentile per-packet one-way delay: 84.342 ms  
Loss rate: 8.94%  
-- Flow 1:  
Average throughput: 53.06 Mbit/s  
95th percentile per-packet one-way delay: 84.342 ms  
Loss rate: 8.94%

### Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-06-29 17:23:21

End at: 2018-06-29 17:23:51

Local clock offset: 5.191 ms

Remote clock offset: -11.698 ms

# Below is generated by plot.py at 2018-06-29 19:17:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 52.58 Mbit/s

95th percentile per-packet one-way delay: 89.595 ms

Loss rate: 8.50%

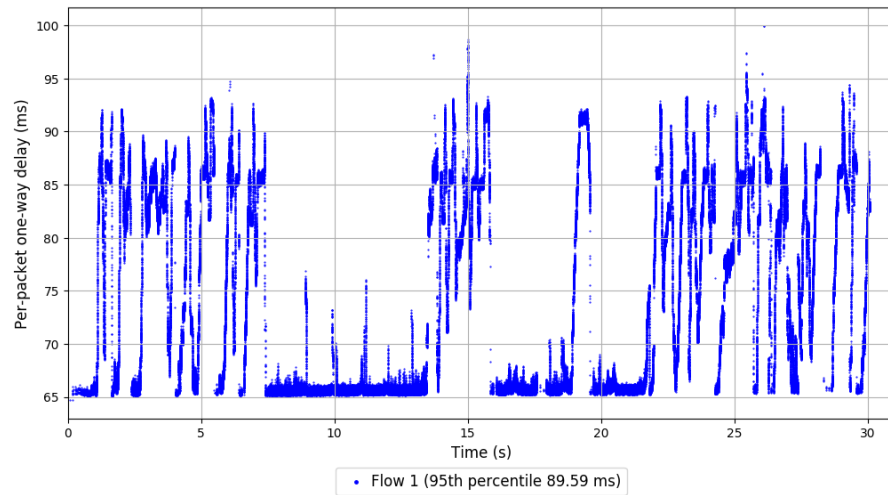
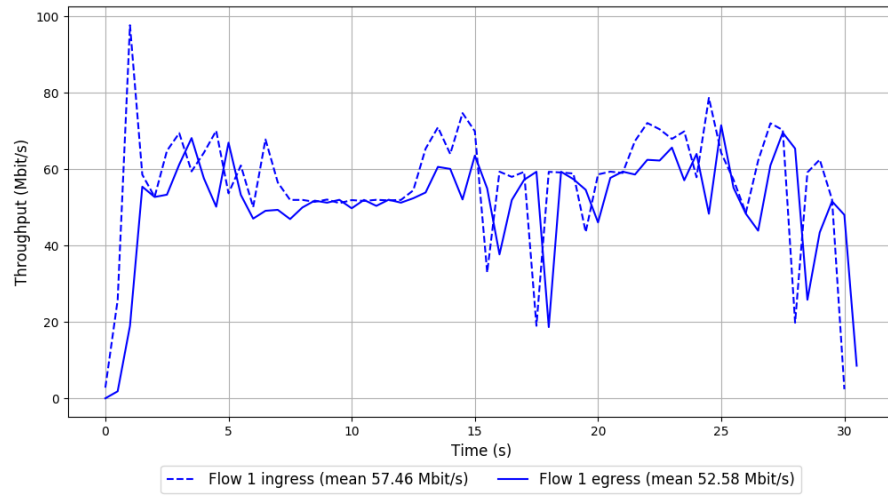
-- Flow 1:

Average throughput: 52.58 Mbit/s

95th percentile per-packet one-way delay: 89.595 ms

Loss rate: 8.50%

# Run 8: Report of TCP BBR — Data Link



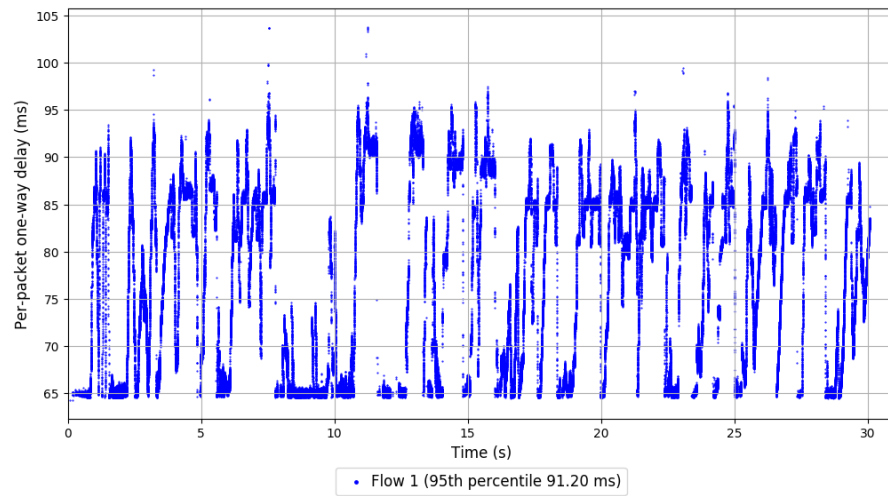
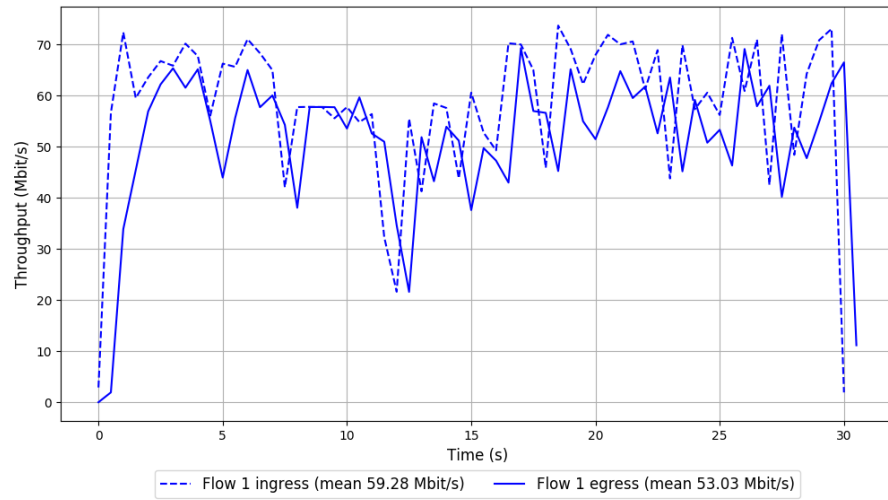
Run 9: Statistics of TCP BBR

Start at: 2018-06-29 18:02:50  
End at: 2018-06-29 18:03:20  
Local clock offset: 4.989 ms  
Remote clock offset: -11.244 ms

# Below is generated by plot.py at 2018-06-29 19:17:41  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 53.03 Mbit/s  
95th percentile per-packet one-way delay: 91.197 ms  
Loss rate: 10.55%  
-- Flow 1:  
Average throughput: 53.03 Mbit/s  
95th percentile per-packet one-way delay: 91.197 ms  
Loss rate: 10.55%



### Run 9: Report of TCP BBR — Data Link

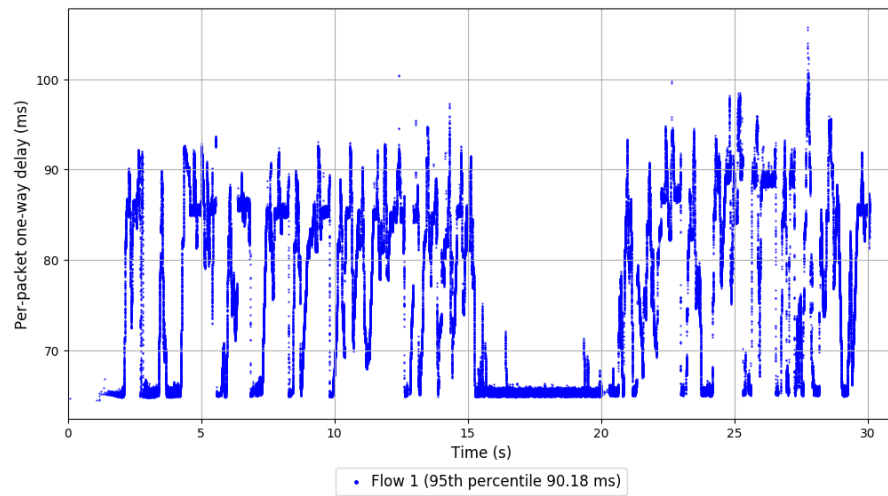
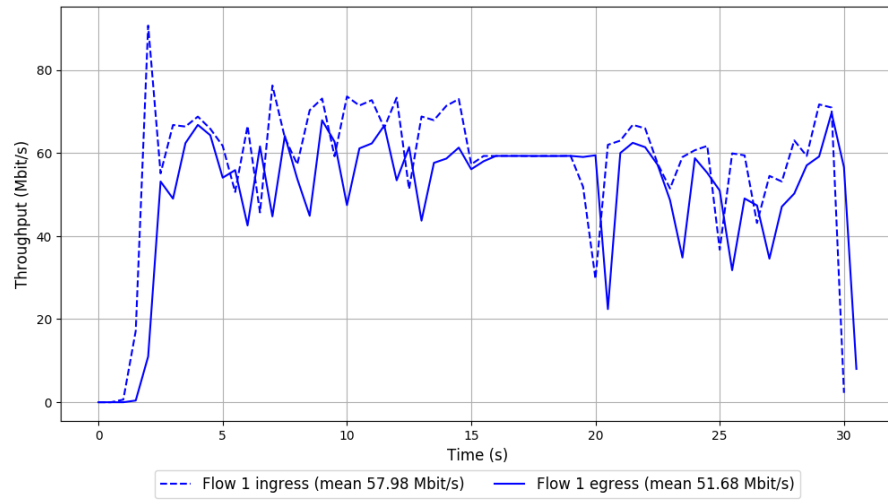


Run 10: Statistics of TCP BBR

Start at: 2018-06-29 18:45:44  
End at: 2018-06-29 18:46:14  
Local clock offset: -1.517 ms  
Remote clock offset: -10.917 ms

# Below is generated by plot.py at 2018-06-29 19:18:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 51.68 Mbit/s  
95th percentile per-packet one-way delay: 90.181 ms  
Loss rate: 10.85%  
-- Flow 1:  
Average throughput: 51.68 Mbit/s  
95th percentile per-packet one-way delay: 90.181 ms  
Loss rate: 10.85%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-06-29 13:04:24

End at: 2018-06-29 13:04:54

Local clock offset: 0.822 ms

Remote clock offset: -9.207 ms

# Below is generated by plot.py at 2018-06-29 19:18:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 21.56 Mbit/s

95th percentile per-packet one-way delay: 79.968 ms

Loss rate: 1.81%

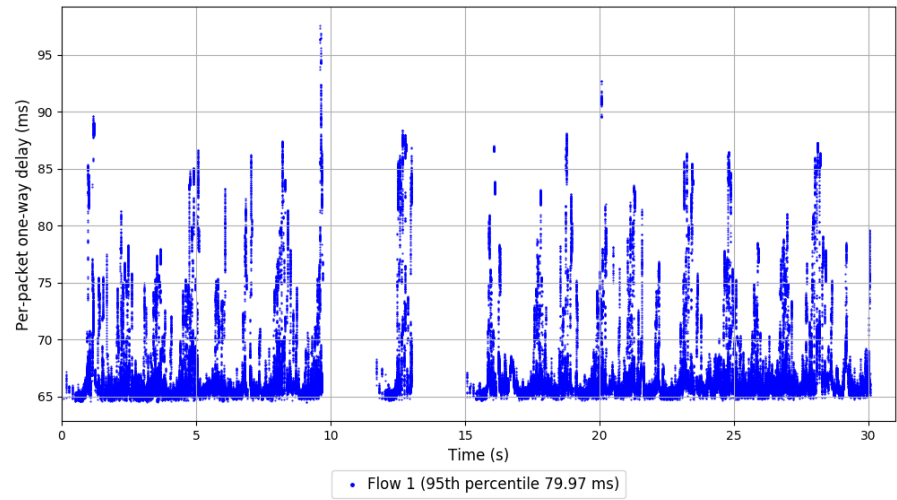
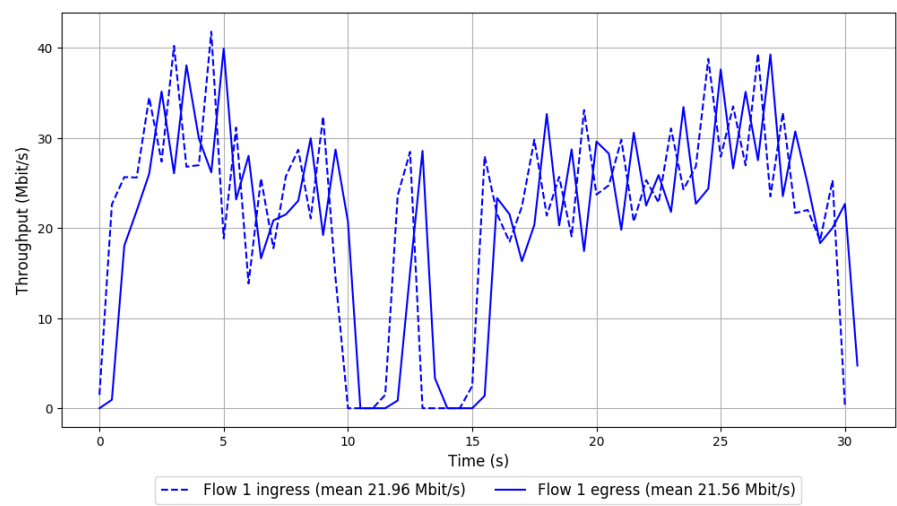
-- Flow 1:

Average throughput: 21.56 Mbit/s

95th percentile per-packet one-way delay: 79.968 ms

Loss rate: 1.81%

Run 1: Report of Copa — Data Link

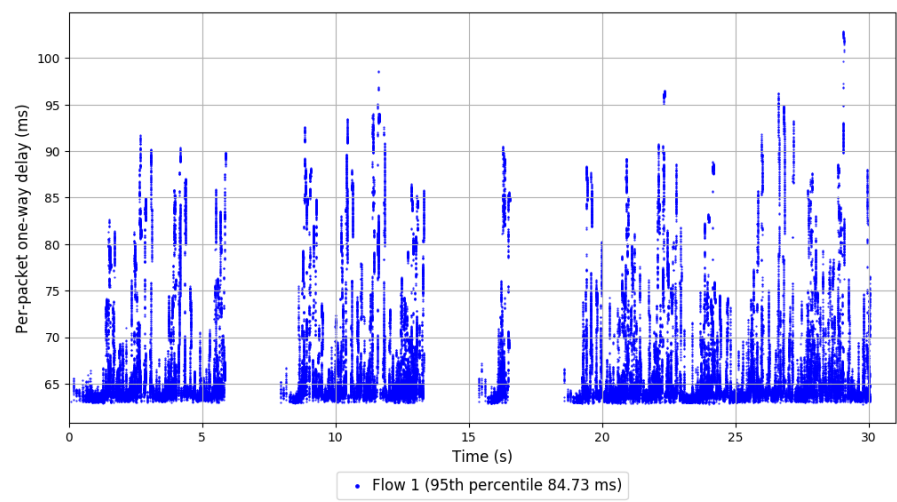
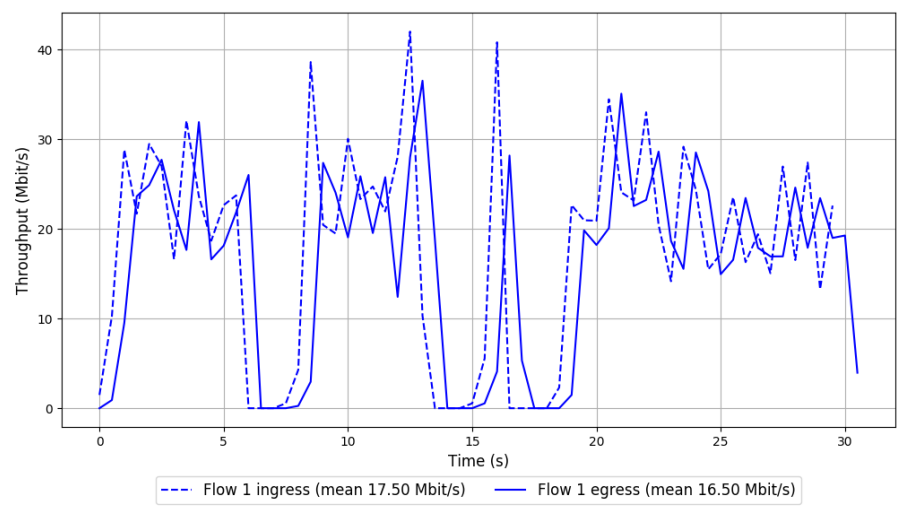


Run 2: Statistics of Copa

Start at: 2018-06-29 13:42:28  
End at: 2018-06-29 13:42:58  
Local clock offset: -2.415 ms  
Remote clock offset: -11.991 ms

# Below is generated by plot.py at 2018-06-29 19:18:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 16.50 Mbit/s  
95th percentile per-packet one-way delay: 84.735 ms  
Loss rate: 5.69%  
-- Flow 1:  
Average throughput: 16.50 Mbit/s  
95th percentile per-packet one-way delay: 84.735 ms  
Loss rate: 5.69%

Run 2: Report of Copa — Data Link



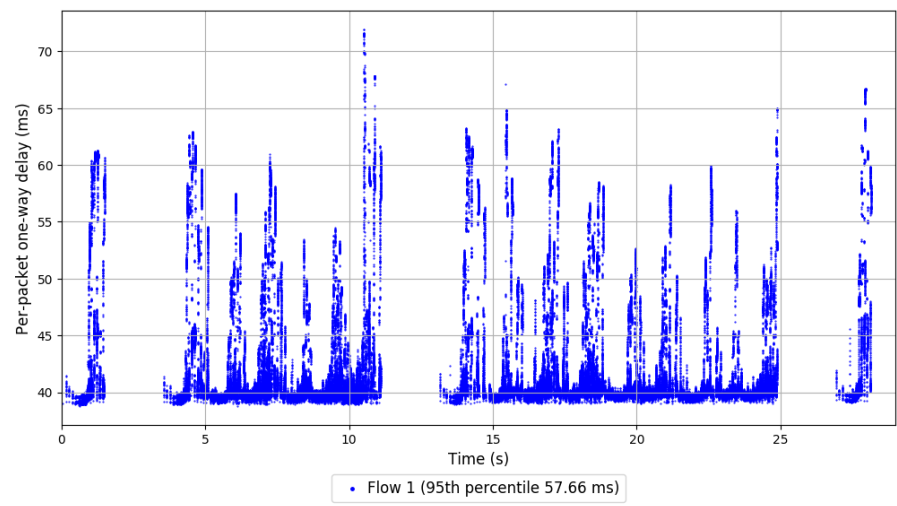
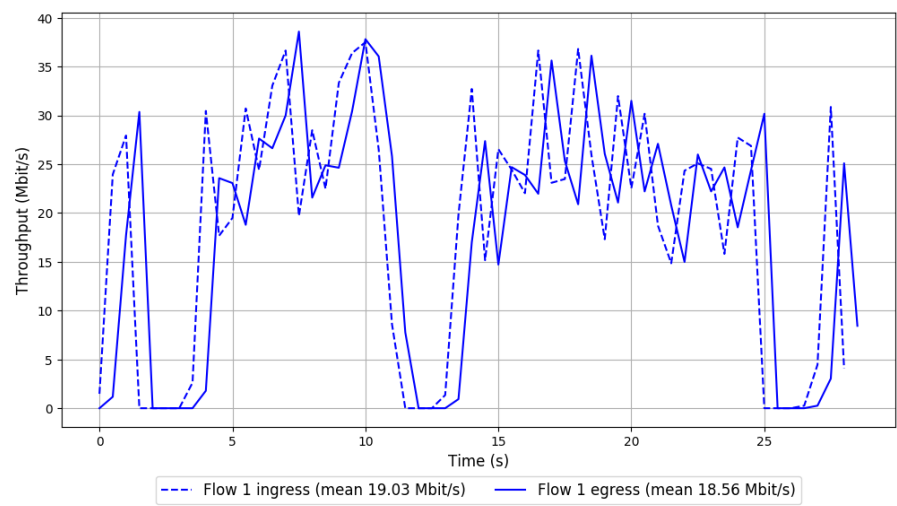
Run 3: Statistics of Copa

Start at: 2018-06-29 14:21:25  
End at: 2018-06-29 14:21:55  
Local clock offset: 0.53 ms  
Remote clock offset: -35.258 ms

# Below is generated by plot.py at 2018-06-29 19:18:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 18.56 Mbit/s  
95th percentile per-packet one-way delay: 57.659 ms  
Loss rate: 2.41%  
-- Flow 1:  
Average throughput: 18.56 Mbit/s  
95th percentile per-packet one-way delay: 57.659 ms  
Loss rate: 2.41%



Run 3: Report of Copa — Data Link

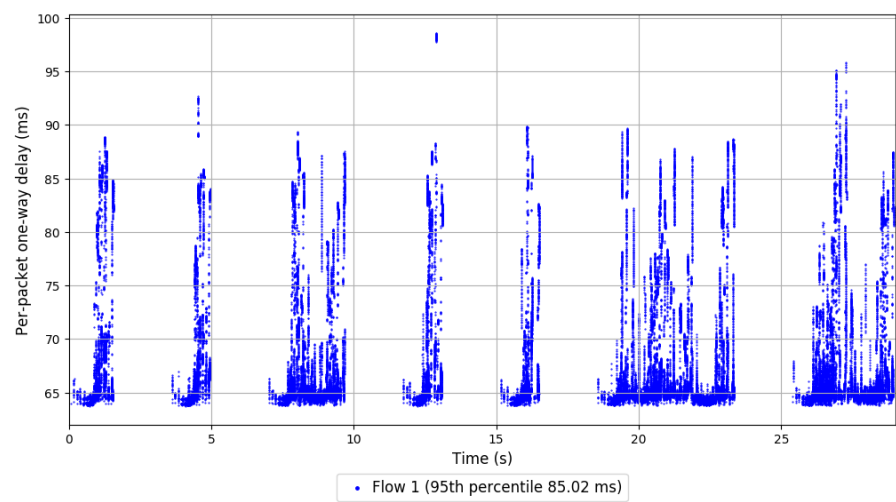
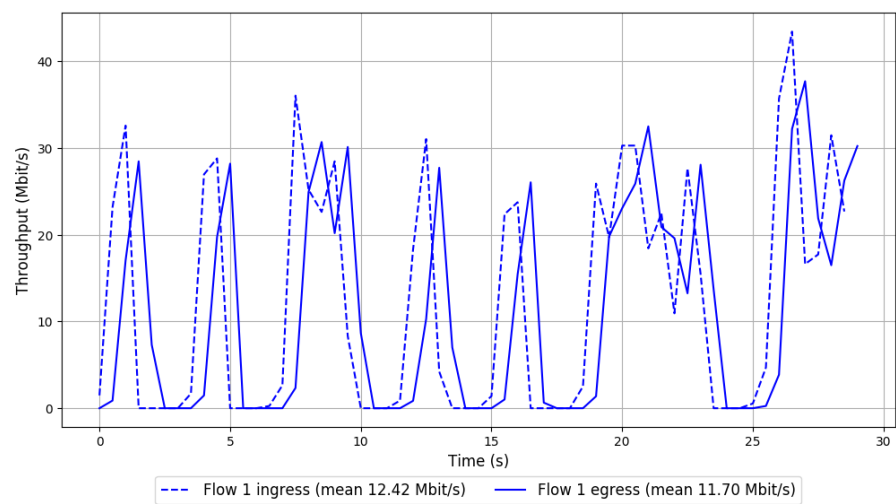


Run 4: Statistics of Copa

Start at: 2018-06-29 15:01:12  
End at: 2018-06-29 15:01:42  
Local clock offset: 7.433 ms  
Remote clock offset: -10.124 ms

# Below is generated by plot.py at 2018-06-29 19:18:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 11.70 Mbit/s  
95th percentile per-packet one-way delay: 85.022 ms  
Loss rate: 5.68%  
-- Flow 1:  
Average throughput: 11.70 Mbit/s  
95th percentile per-packet one-way delay: 85.022 ms  
Loss rate: 5.68%

Run 4: Report of Copa — Data Link

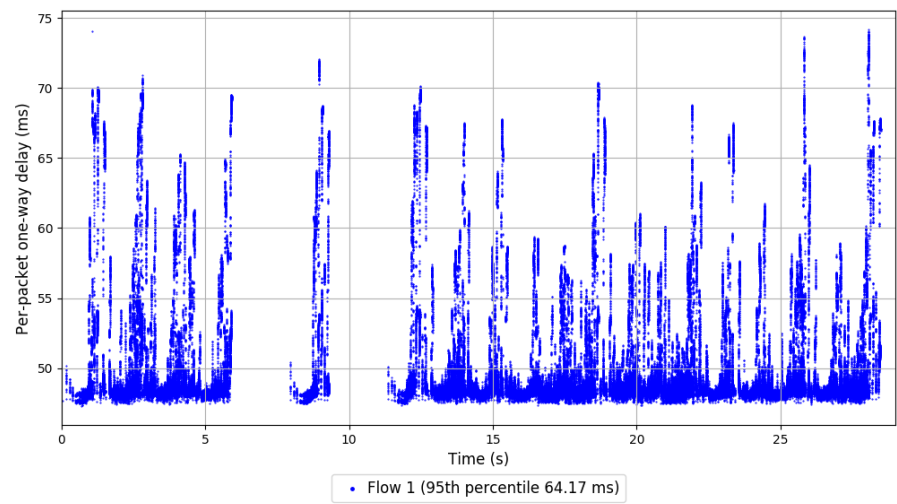
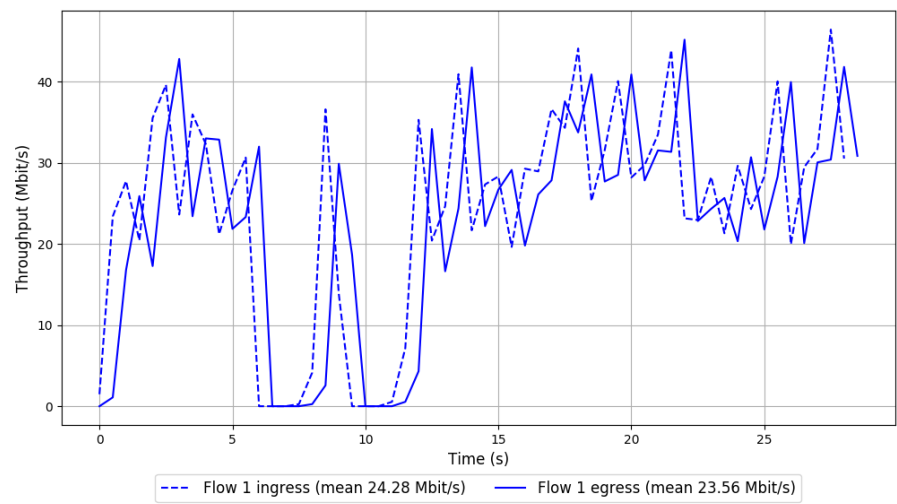


Run 5: Statistics of Copa

Start at: 2018-06-29 15:37:13  
End at: 2018-06-29 15:37:43  
Local clock offset: 9.124 ms  
Remote clock offset: -25.923 ms

# Below is generated by plot.py at 2018-06-29 19:18:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 23.56 Mbit/s  
95th percentile per-packet one-way delay: 64.167 ms  
Loss rate: 2.91%  
-- Flow 1:  
Average throughput: 23.56 Mbit/s  
95th percentile per-packet one-way delay: 64.167 ms  
Loss rate: 2.91%

Run 5: Report of Copa — Data Link

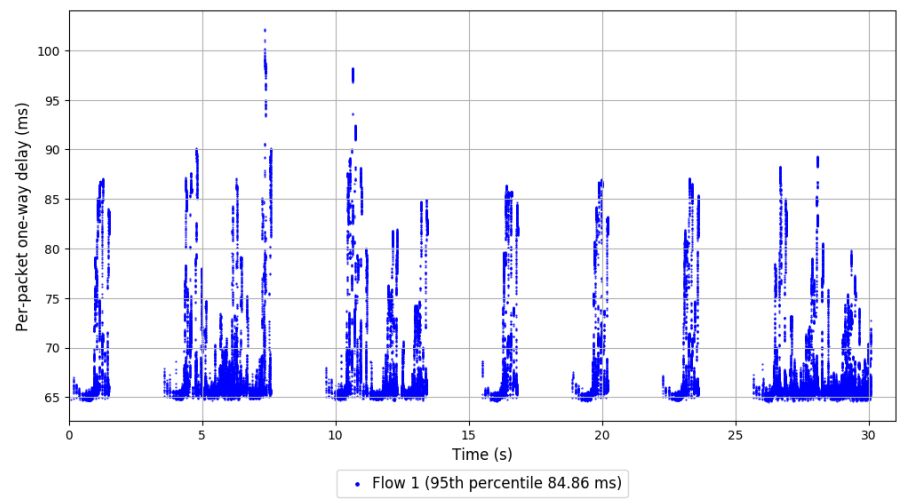
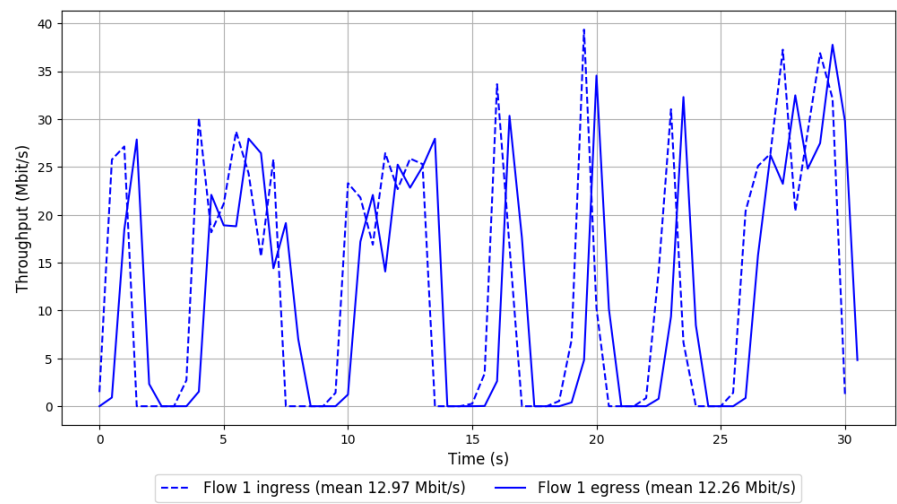


Run 6: Statistics of Copa

Start at: 2018-06-29 16:14:53  
End at: 2018-06-29 16:15:23  
Local clock offset: 4.013 ms  
Remote clock offset: -11.34 ms

# Below is generated by plot.py at 2018-06-29 19:18:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 12.26 Mbit/s  
95th percentile per-packet one-way delay: 84.864 ms  
Loss rate: 5.42%  
-- Flow 1:  
Average throughput: 12.26 Mbit/s  
95th percentile per-packet one-way delay: 84.864 ms  
Loss rate: 5.42%

Run 6: Report of Copa — Data Link



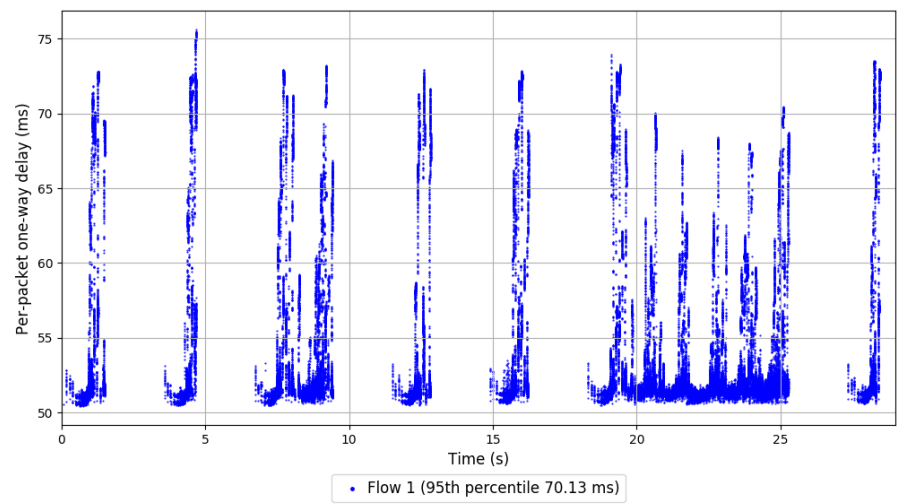
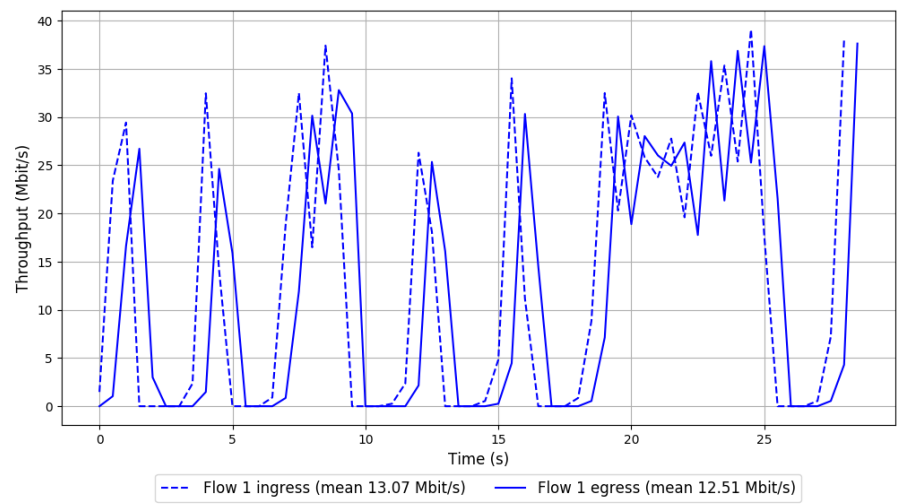
Run 7: Statistics of Copa

Start at: 2018-06-29 16:51:07  
End at: 2018-06-29 16:51:37  
Local clock offset: -3.154 ms  
Remote clock offset: -24.39 ms

# Below is generated by plot.py at 2018-06-29 19:18:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 12.51 Mbit/s  
95th percentile per-packet one-way delay: 70.130 ms  
Loss rate: 4.28%  
-- Flow 1:  
Average throughput: 12.51 Mbit/s  
95th percentile per-packet one-way delay: 70.130 ms  
Loss rate: 4.28%



Run 7: Report of Copa — Data Link

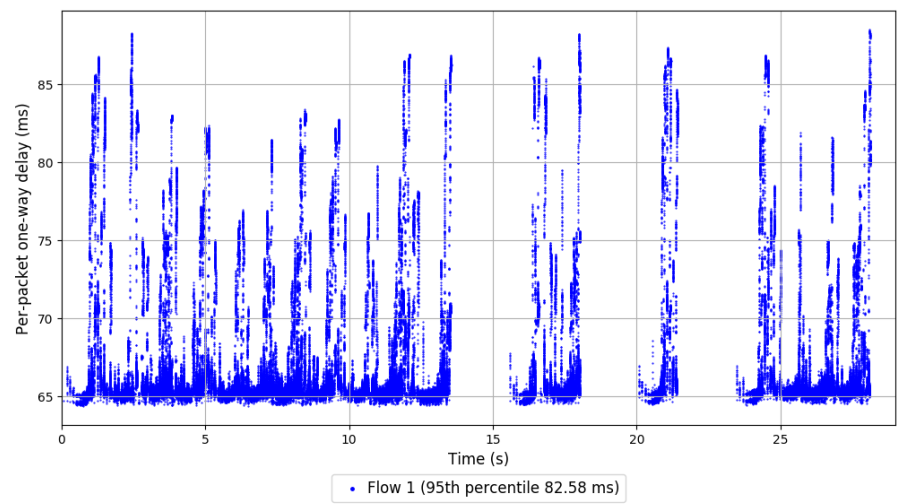
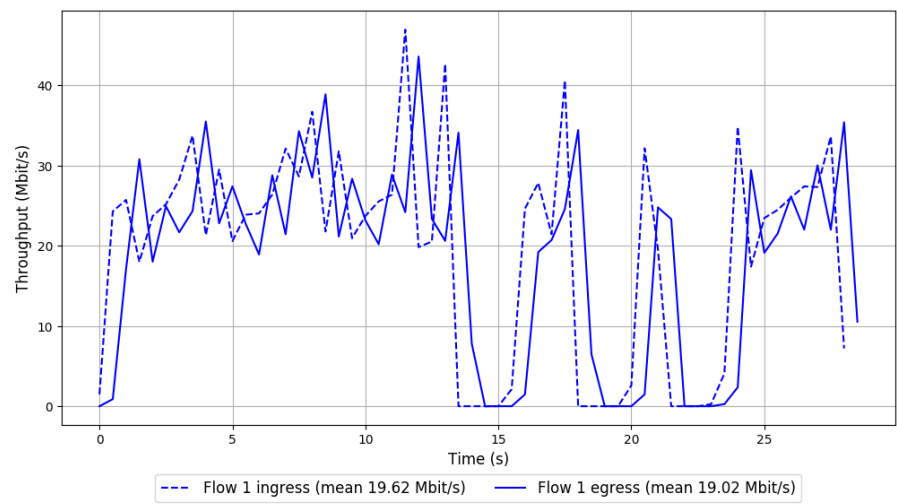


Run 8: Statistics of Copa

Start at: 2018-06-29 17:29:11  
End at: 2018-06-29 17:29:41  
Local clock offset: 7.116 ms  
Remote clock offset: -11.988 ms

# Below is generated by plot.py at 2018-06-29 19:18:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 19.02 Mbit/s  
95th percentile per-packet one-way delay: 82.579 ms  
Loss rate: 3.00%  
-- Flow 1:  
Average throughput: 19.02 Mbit/s  
95th percentile per-packet one-way delay: 82.579 ms  
Loss rate: 3.00%

Run 8: Report of Copa — Data Link

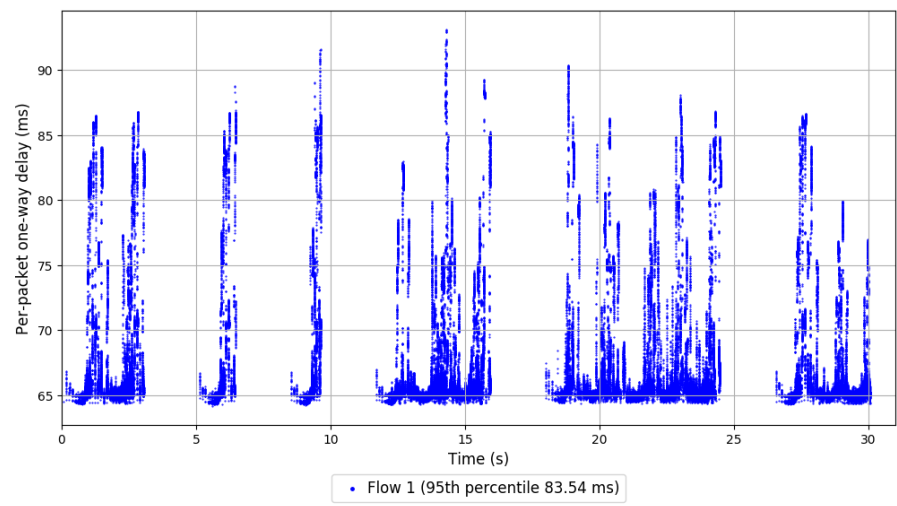
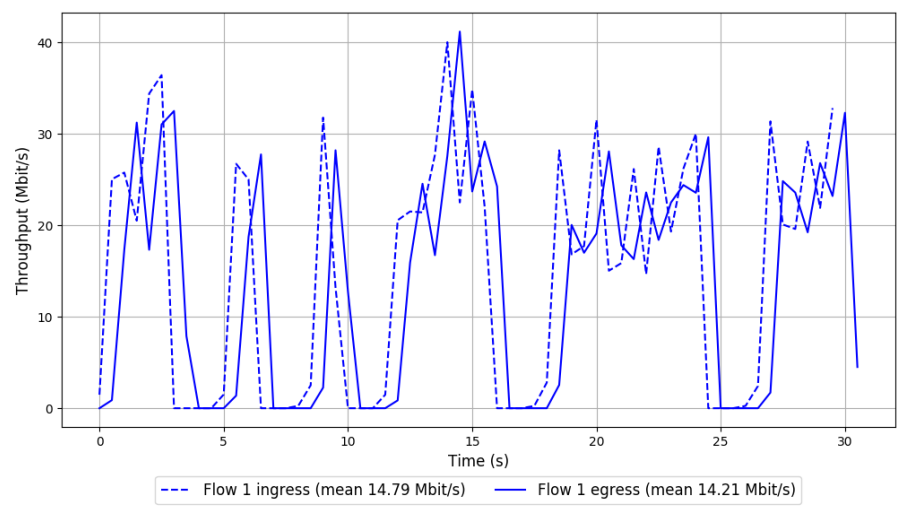


Run 9: Statistics of Copa

Start at: 2018-06-29 18:08:41  
End at: 2018-06-29 18:09:11  
Local clock offset: 4.571 ms  
Remote clock offset: -11.348 ms

# Below is generated by plot.py at 2018-06-29 19:18:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 14.21 Mbit/s  
95th percentile per-packet one-way delay: 83.544 ms  
Loss rate: 3.96%  
-- Flow 1:  
Average throughput: 14.21 Mbit/s  
95th percentile per-packet one-way delay: 83.544 ms  
Loss rate: 3.96%

Run 9: Report of Copa — Data Link

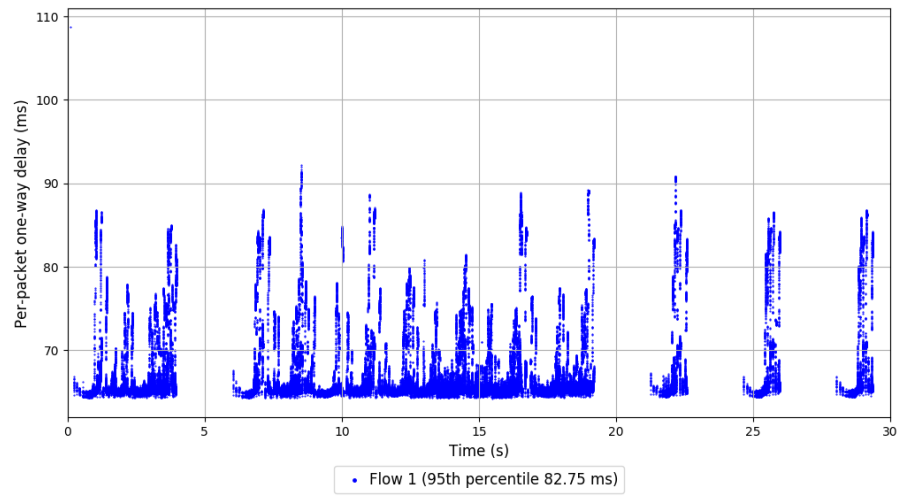
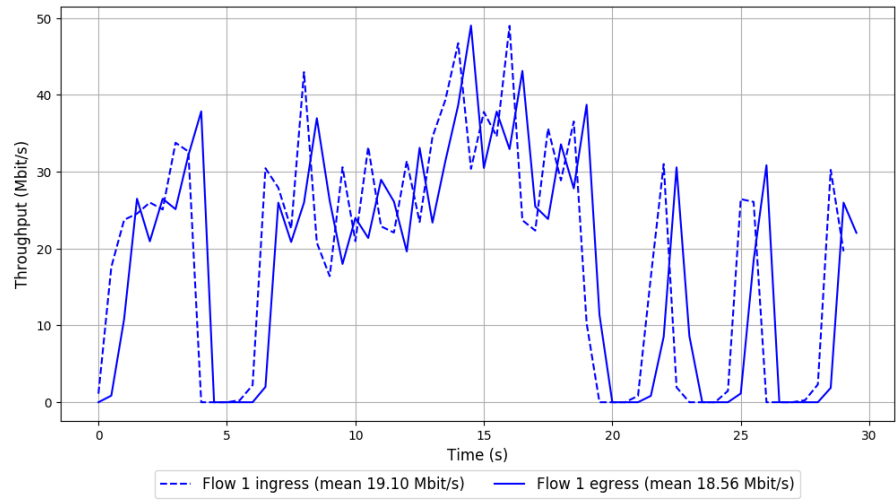


Run 10: Statistics of Copa

Start at: 2018-06-29 18:51:17  
End at: 2018-06-29 18:51:47  
Local clock offset: -0.424 ms  
Remote clock offset: -11.221 ms

# Below is generated by plot.py at 2018-06-29 19:18:30  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 18.56 Mbit/s  
95th percentile per-packet one-way delay: 82.752 ms  
Loss rate: 2.90%  
-- Flow 1:  
Average throughput: 18.56 Mbit/s  
95th percentile per-packet one-way delay: 82.752 ms  
Loss rate: 2.90%

# Run 10: Report of Copa — Data Link



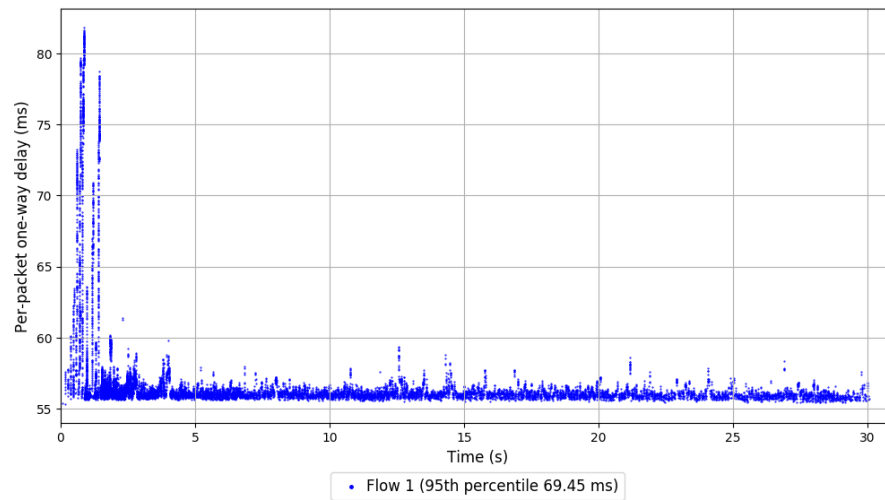
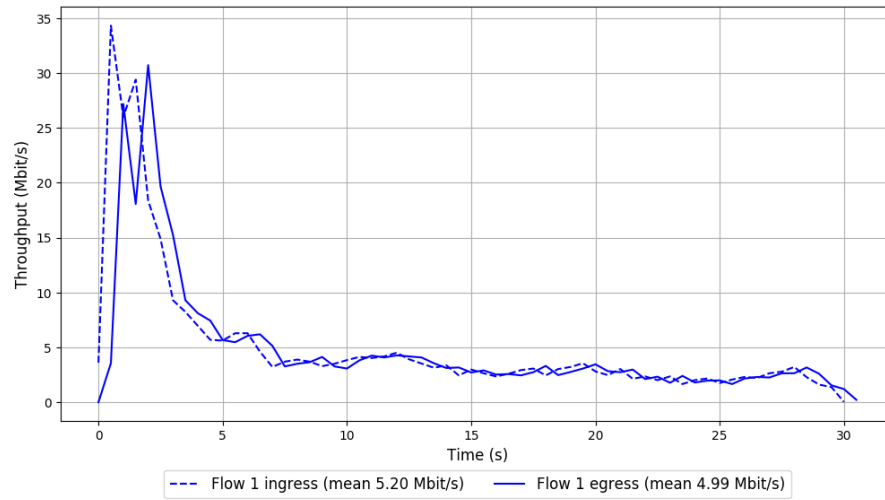
Run 1: Statistics of TCP Cubic

Start at: 2018-06-29 13:18:04  
End at: 2018-06-29 13:18:34  
Local clock offset: 2.765 ms  
Remote clock offset: -19.052 ms

# Below is generated by plot.py at 2018-06-29 19:18:30  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.99 Mbit/s  
95th percentile per-packet one-way delay: 69.447 ms  
Loss rate: 4.02%  
-- Flow 1:  
Average throughput: 4.99 Mbit/s  
95th percentile per-packet one-way delay: 69.447 ms  
Loss rate: 4.02%



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

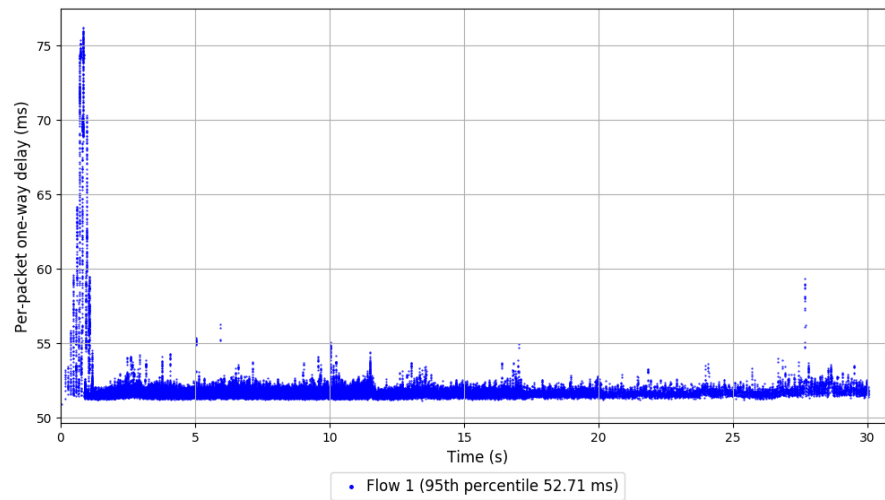
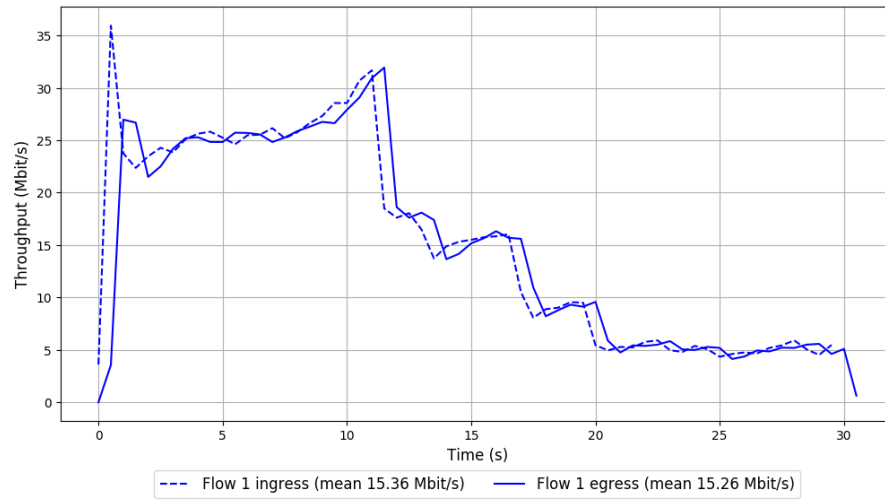


Run 2: Statistics of TCP Cubic

Start at: 2018-06-29 13:54:26  
End at: 2018-06-29 13:54:56  
Local clock offset: -2.844 ms  
Remote clock offset: -22.912 ms

# Below is generated by plot.py at 2018-06-29 19:18:30  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 15.26 Mbit/s  
95th percentile per-packet one-way delay: 52.714 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 15.26 Mbit/s  
95th percentile per-packet one-way delay: 52.714 ms  
Loss rate: 0.63%

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

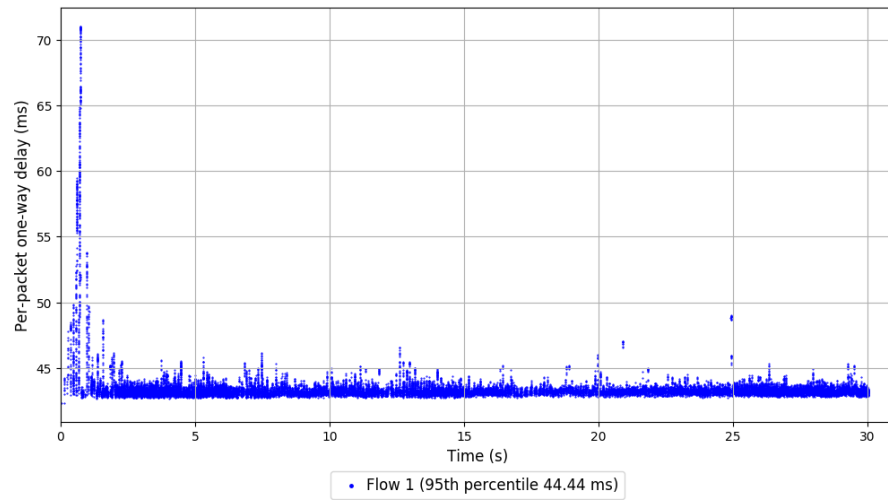
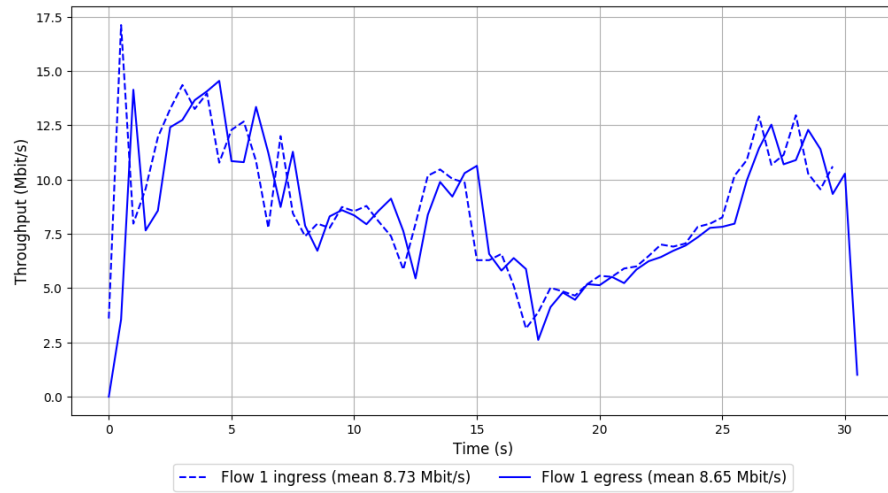


Run 3: Statistics of TCP Cubic

Start at: 2018-06-29 14:34:22  
End at: 2018-06-29 14:34:52  
Local clock offset: 3.984 ms  
Remote clock offset: -32.356 ms

# Below is generated by plot.py at 2018-06-29 19:18:30  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 8.65 Mbit/s  
95th percentile per-packet one-way delay: 44.439 ms  
Loss rate: 0.83%  
-- Flow 1:  
Average throughput: 8.65 Mbit/s  
95th percentile per-packet one-way delay: 44.439 ms  
Loss rate: 0.83%

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

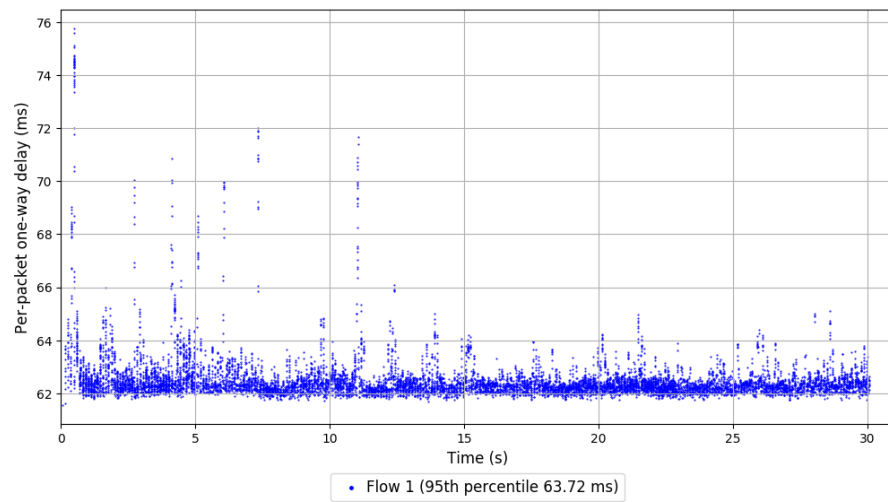
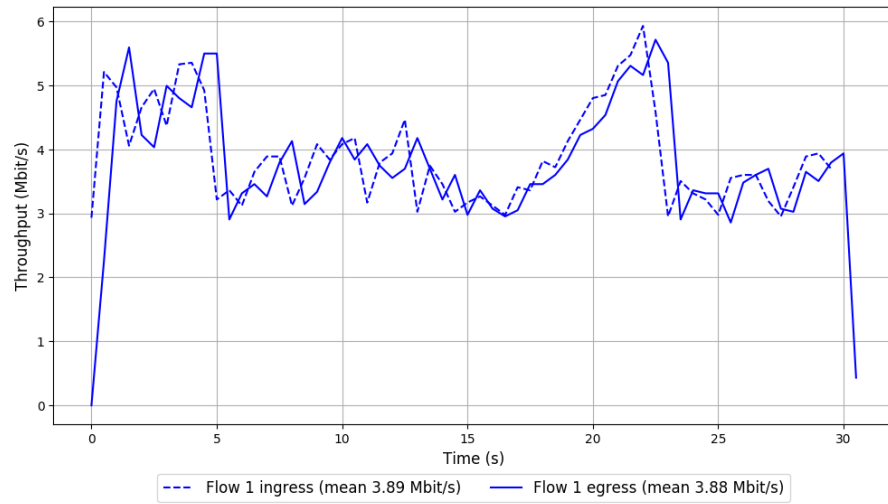


Run 4: Statistics of TCP Cubic

Start at: 2018-06-29 15:12:55  
End at: 2018-06-29 15:13:25  
Local clock offset: 8.67 ms  
Remote clock offset: -11.898 ms

# Below is generated by plot.py at 2018-06-29 19:18:30  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 3.88 Mbit/s  
95th percentile per-packet one-way delay: 63.723 ms  
Loss rate: 0.38%  
-- Flow 1:  
Average throughput: 3.88 Mbit/s  
95th percentile per-packet one-way delay: 63.723 ms  
Loss rate: 0.38%

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



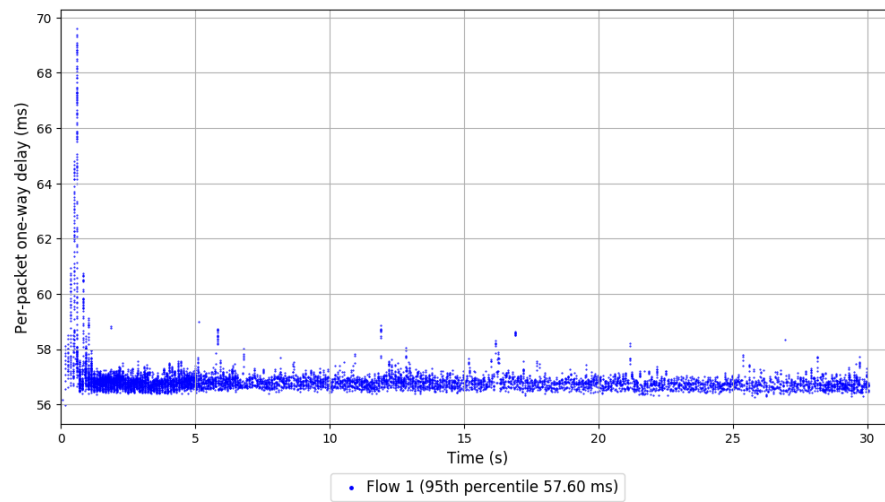
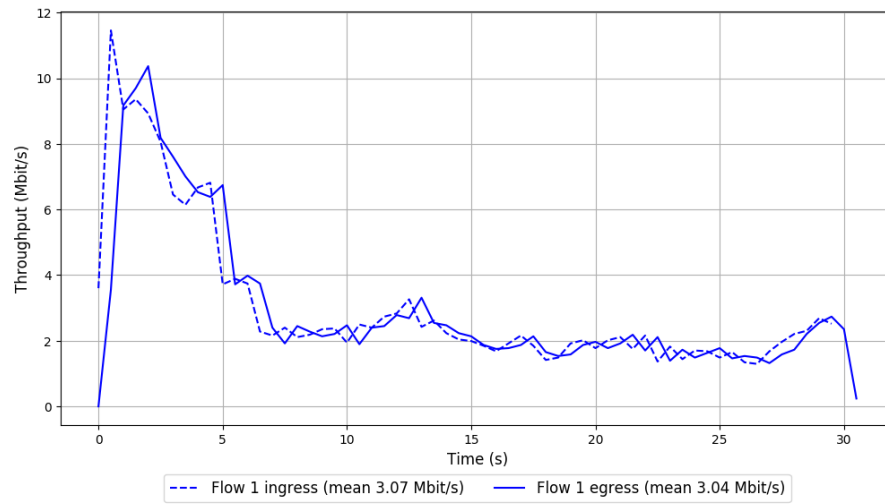
Run 5: Statistics of TCP Cubic

Start at: 2018-06-29 15:49:13  
End at: 2018-06-29 15:49:43  
Local clock offset: 8.019 ms  
Remote clock offset: -17.327 ms

# Below is generated by plot.py at 2018-06-29 19:18:30  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 3.04 Mbit/s  
95th percentile per-packet one-way delay: 57.602 ms  
Loss rate: 0.88%  
-- Flow 1:  
Average throughput: 3.04 Mbit/s  
95th percentile per-packet one-way delay: 57.602 ms  
Loss rate: 0.88%



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

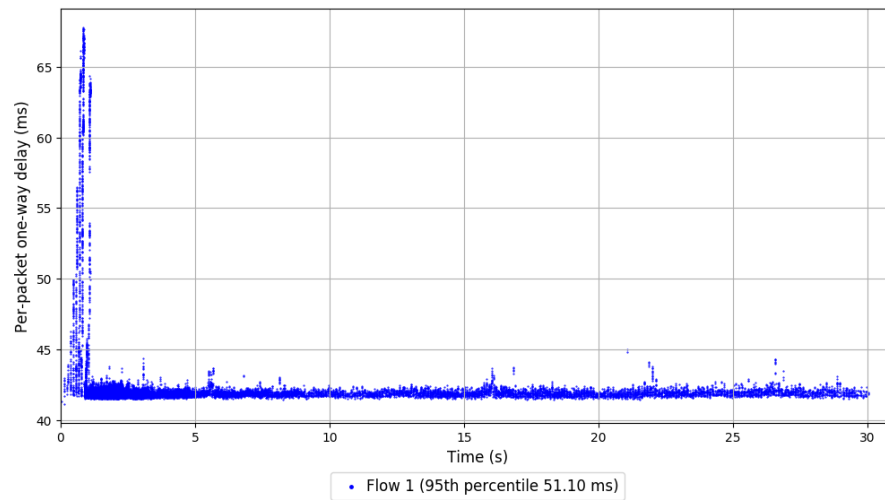
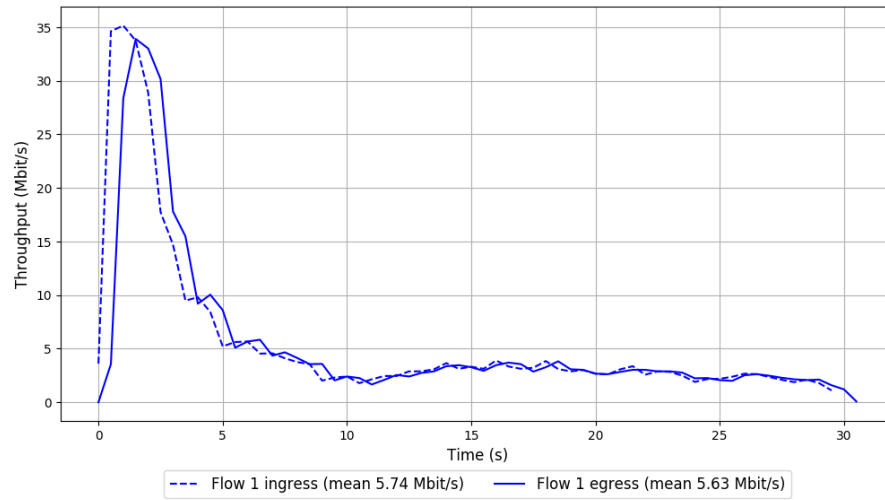


Run 6: Statistics of TCP Cubic

Start at: 2018-06-29 16:26:34  
End at: 2018-06-29 16:27:04  
Local clock offset: -2.443 ms  
Remote clock offset: -35.277 ms

# Below is generated by plot.py at 2018-06-29 19:18:30  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 5.63 Mbit/s  
95th percentile per-packet one-way delay: 51.104 ms  
Loss rate: 1.95%  
-- Flow 1:  
Average throughput: 5.63 Mbit/s  
95th percentile per-packet one-way delay: 51.104 ms  
Loss rate: 1.95%

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

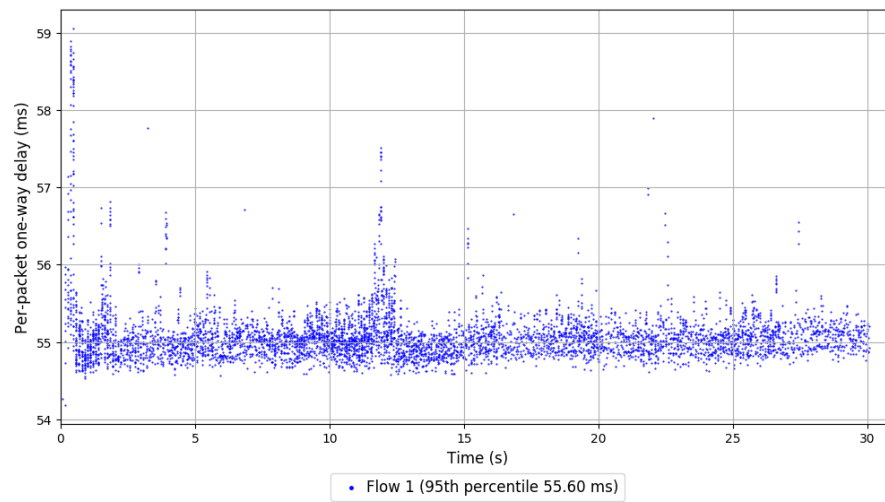
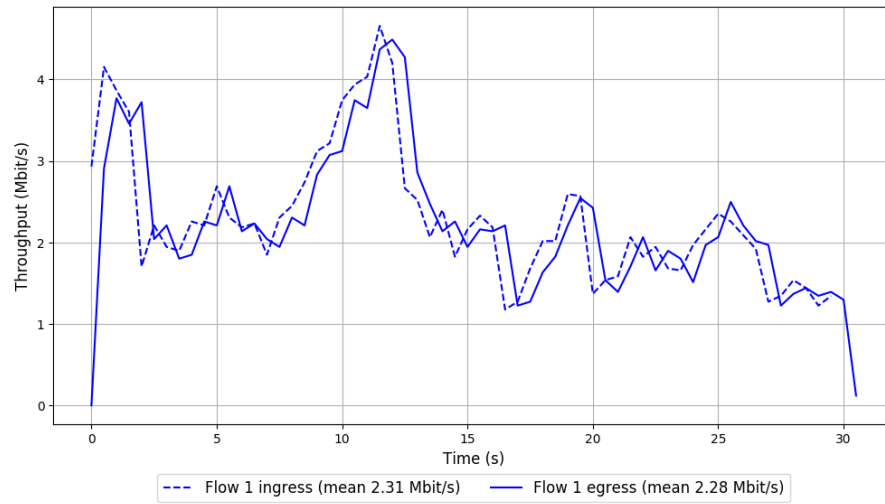


Run 7: Statistics of TCP Cubic

Start at: 2018-06-29 17:03:20  
End at: 2018-06-29 17:03:50  
Local clock offset: -0.128 ms  
Remote clock offset: -20.698 ms

# Below is generated by plot.py at 2018-06-29 19:18:30  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.28 Mbit/s  
95th percentile per-packet one-way delay: 55.600 ms  
Loss rate: 0.99%  
-- Flow 1:  
Average throughput: 2.28 Mbit/s  
95th percentile per-packet one-way delay: 55.600 ms  
Loss rate: 0.99%

### Run 7: Report of TCP Cubic — Data Link

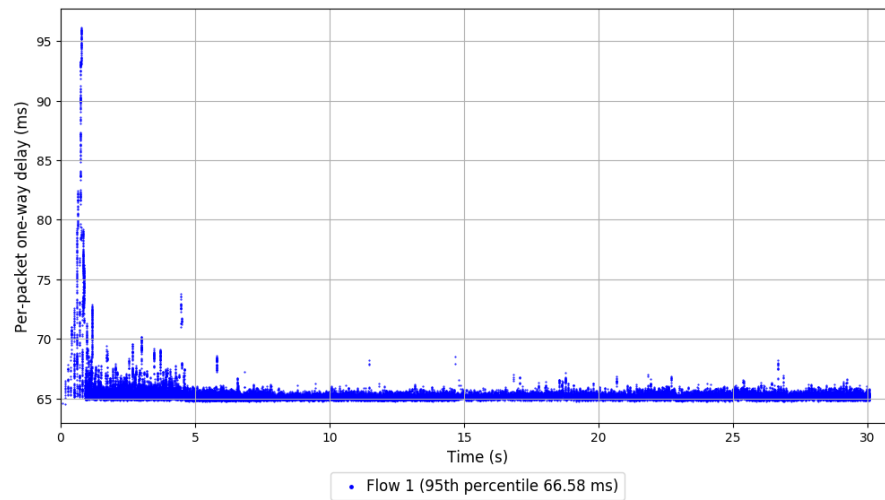
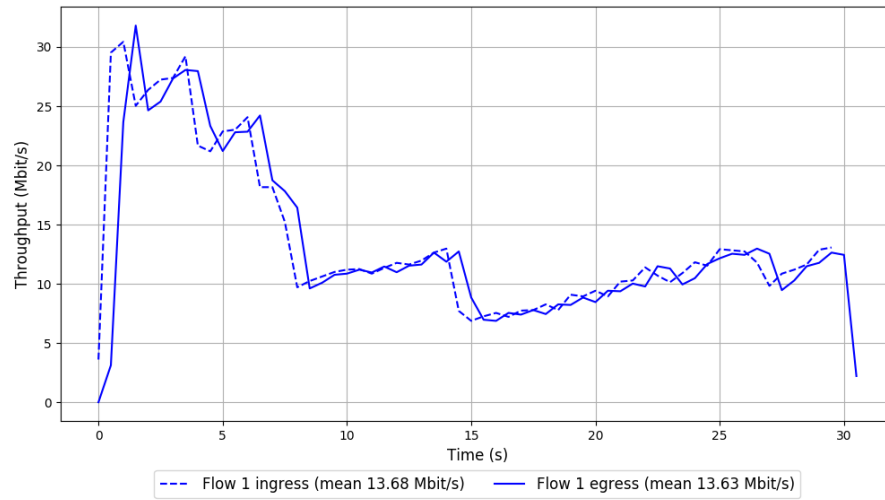


Run 8: Statistics of TCP Cubic

Start at: 2018-06-29 17:42:01  
End at: 2018-06-29 17:42:31  
Local clock offset: 9.335 ms  
Remote clock offset: -12.406 ms

# Below is generated by plot.py at 2018-06-29 19:18:30  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 13.63 Mbit/s  
95th percentile per-packet one-way delay: 66.582 ms  
Loss rate: 0.35%  
-- Flow 1:  
Average throughput: 13.63 Mbit/s  
95th percentile per-packet one-way delay: 66.582 ms  
Loss rate: 0.35%

## Run 8: Report of TCP Cubic — Data Link



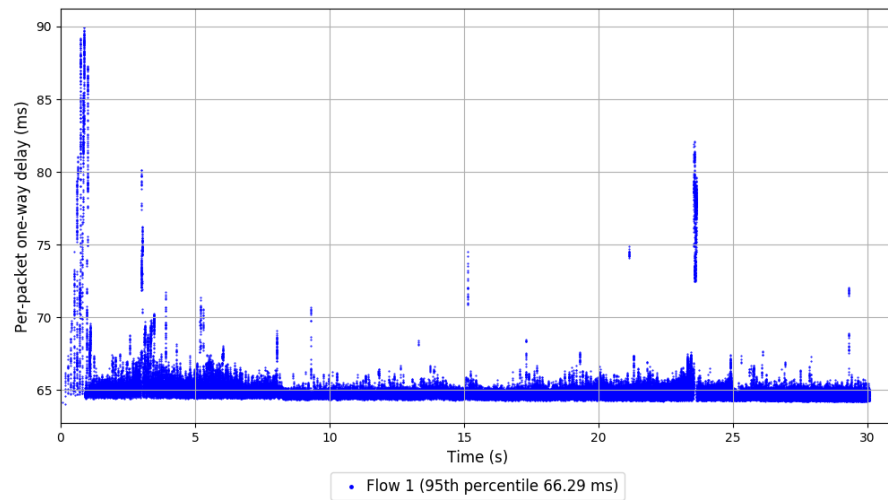
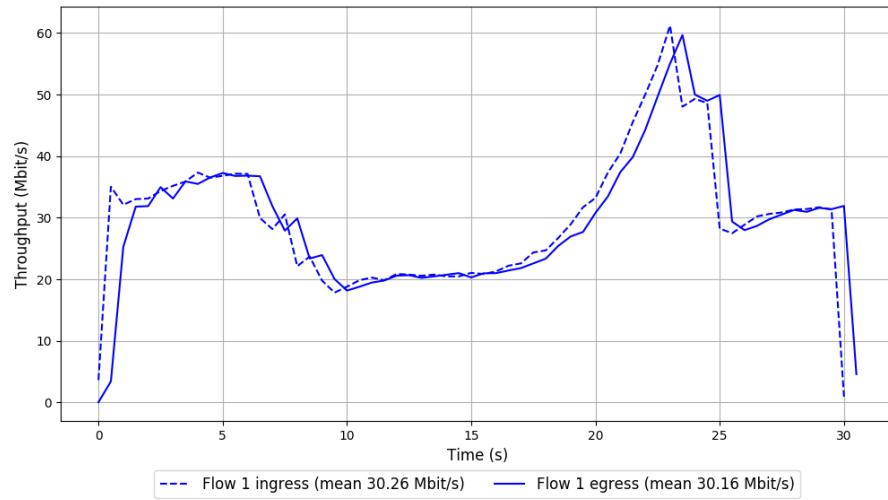
Run 9: Statistics of TCP Cubic

Start at: 2018-06-29 18:20:58  
End at: 2018-06-29 18:21:28  
Local clock offset: 2.081 ms  
Remote clock offset: -11.149 ms

# Below is generated by plot.py at 2018-06-29 19:18:41  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 30.16 Mbit/s  
95th percentile per-packet one-way delay: 66.293 ms  
Loss rate: 0.34%  
-- Flow 1:  
Average throughput: 30.16 Mbit/s  
95th percentile per-packet one-way delay: 66.293 ms  
Loss rate: 0.34%



### Run 9: Report of TCP Cubic — Data Link

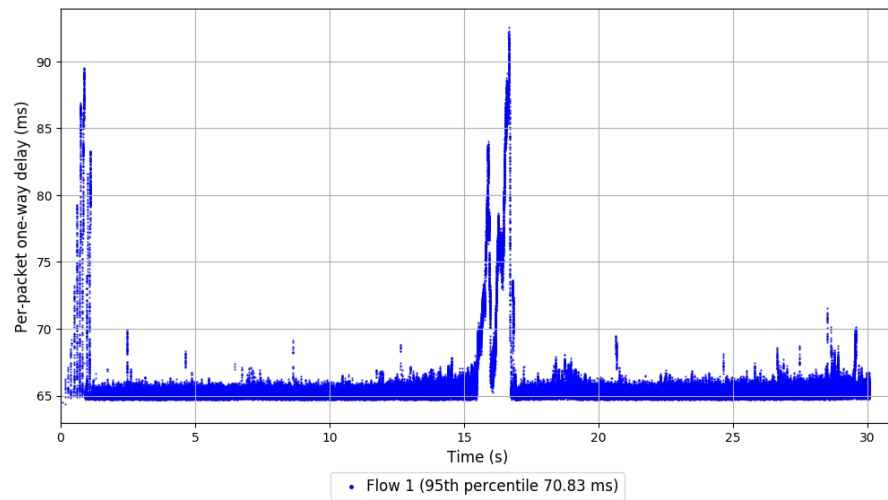
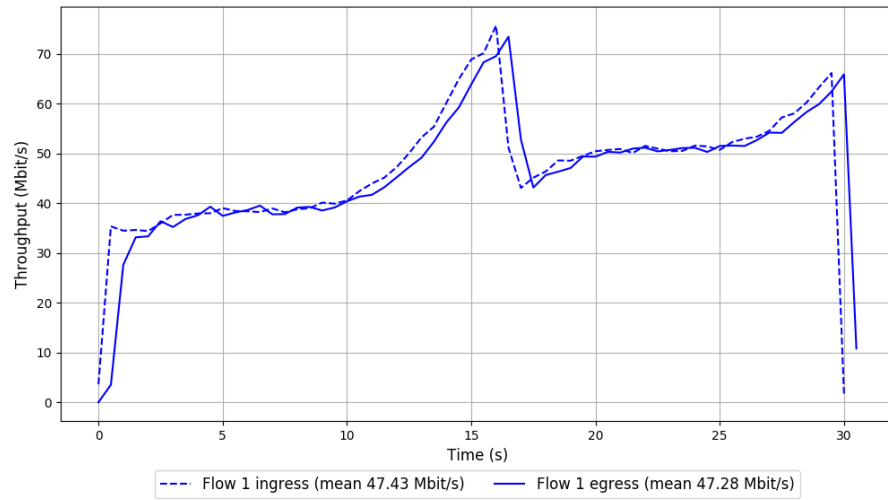


Run 10: Statistics of TCP Cubic

Start at: 2018-06-29 19:04:11  
End at: 2018-06-29 19:04:41  
Local clock offset: 0.34 ms  
Remote clock offset: -12.03 ms

# Below is generated by plot.py at 2018-06-29 19:18:53  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 47.28 Mbit/s  
95th percentile per-packet one-way delay: 70.833 ms  
Loss rate: 0.32%  
-- Flow 1:  
Average throughput: 47.28 Mbit/s  
95th percentile per-packet one-way delay: 70.833 ms  
Loss rate: 0.32%

# Run 10: Report of TCP Cubic — Data Link

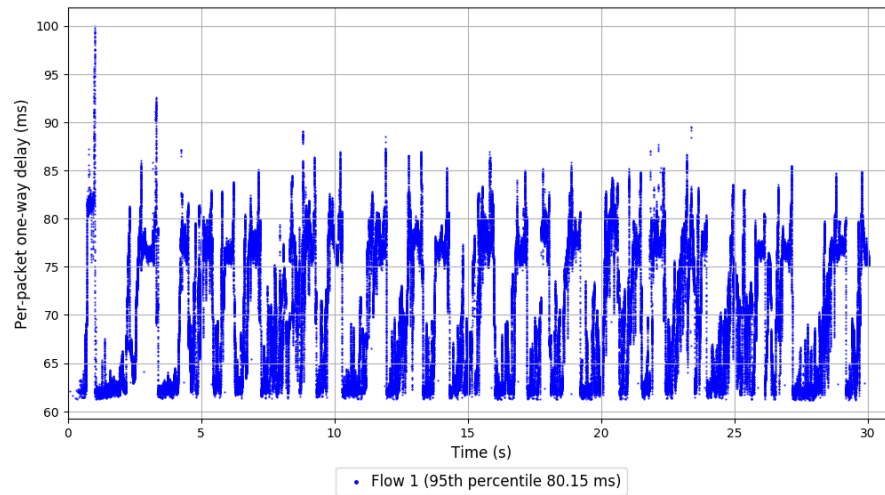
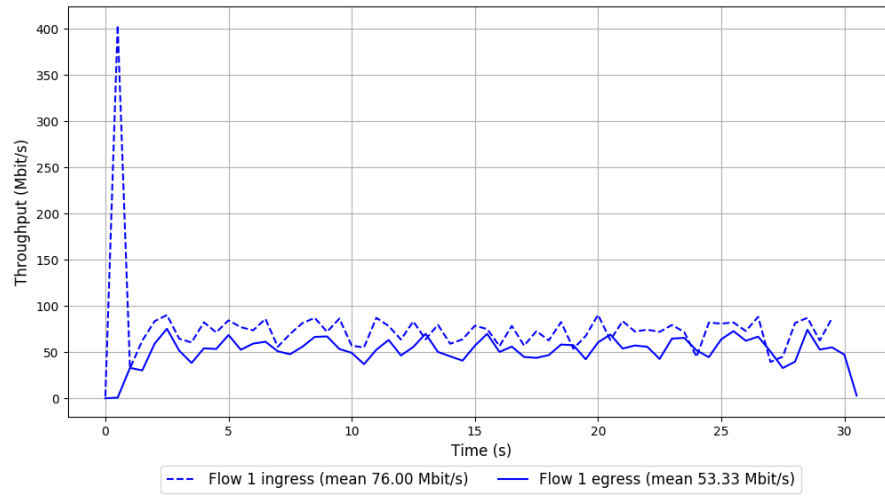


Run 1: Statistics of FillP

Start at: 2018-06-29 13:22:02  
End at: 2018-06-29 13:22:32  
Local clock offset: 0.541 ms  
Remote clock offset: -13.002 ms

# Below is generated by plot.py at 2018-06-29 19:19:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 53.33 Mbit/s  
95th percentile per-packet one-way delay: 80.147 ms  
Loss rate: 29.82%  
-- Flow 1:  
Average throughput: 53.33 Mbit/s  
95th percentile per-packet one-way delay: 80.147 ms  
Loss rate: 29.82%

## Run 1: Report of FillP — Data Link

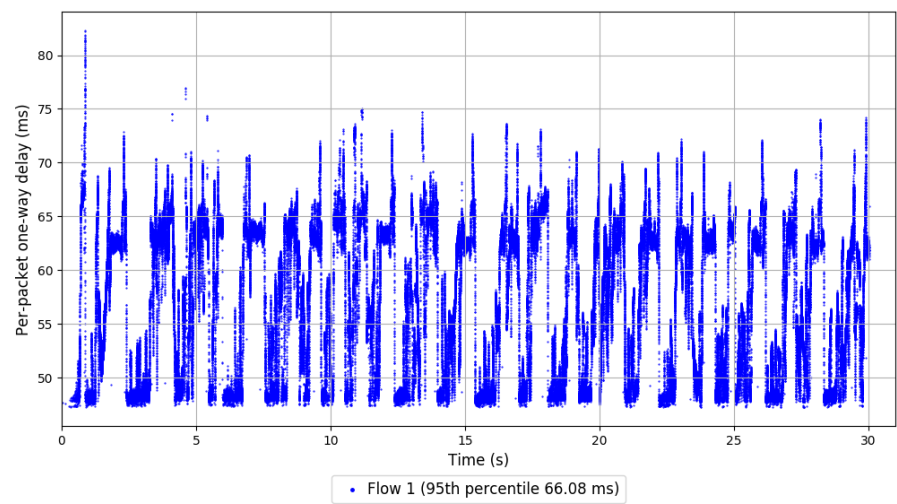
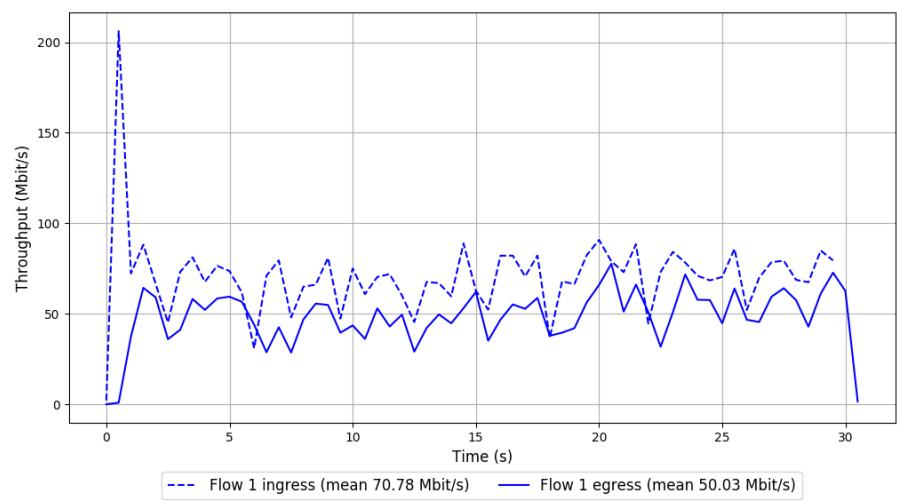


Run 2: Statistics of FillP

Start at: 2018-06-29 13:58:48  
End at: 2018-06-29 13:59:18  
Local clock offset: -2.885 ms  
Remote clock offset: -26.449 ms

# Below is generated by plot.py at 2018-06-29 19:19:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 50.03 Mbit/s  
95th percentile per-packet one-way delay: 66.085 ms  
Loss rate: 29.31%  
-- Flow 1:  
Average throughput: 50.03 Mbit/s  
95th percentile per-packet one-way delay: 66.085 ms  
Loss rate: 29.31%

Run 2: Report of FillP — Data Link



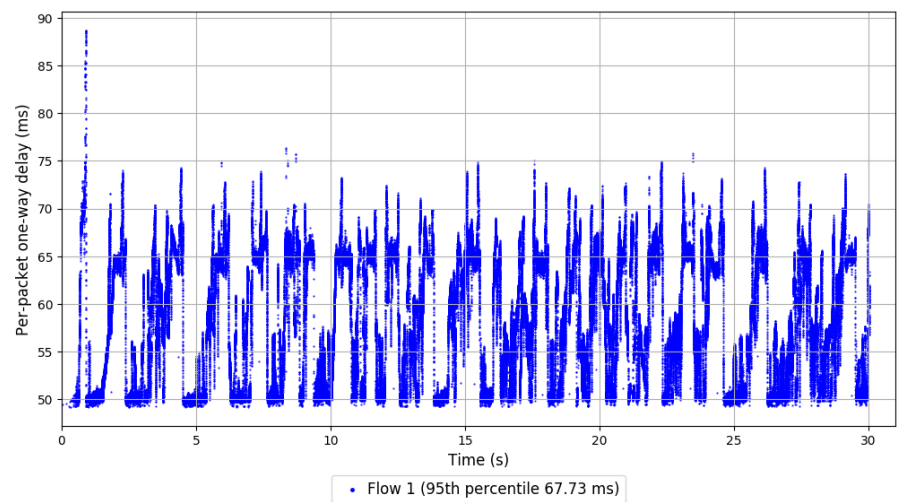
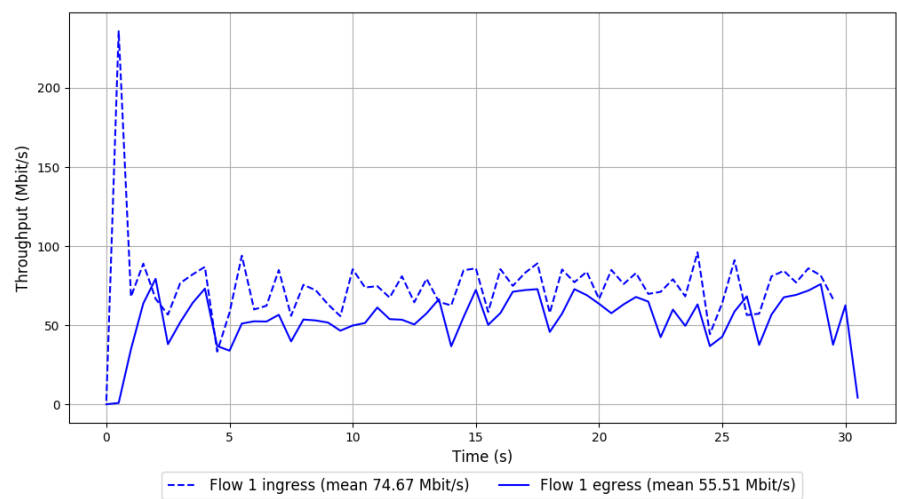
Run 3: Statistics of FillP

Start at: 2018-06-29 14:38:24  
End at: 2018-06-29 14:38:54  
Local clock offset: 4.485 ms  
Remote clock offset: -25.206 ms

# Below is generated by plot.py at 2018-06-29 19:19:22  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 55.51 Mbit/s  
95th percentile per-packet one-way delay: 67.726 ms  
Loss rate: 25.64%  
-- Flow 1:  
Average throughput: 55.51 Mbit/s  
95th percentile per-packet one-way delay: 67.726 ms  
Loss rate: 25.64%



Run 3: Report of FillP — Data Link

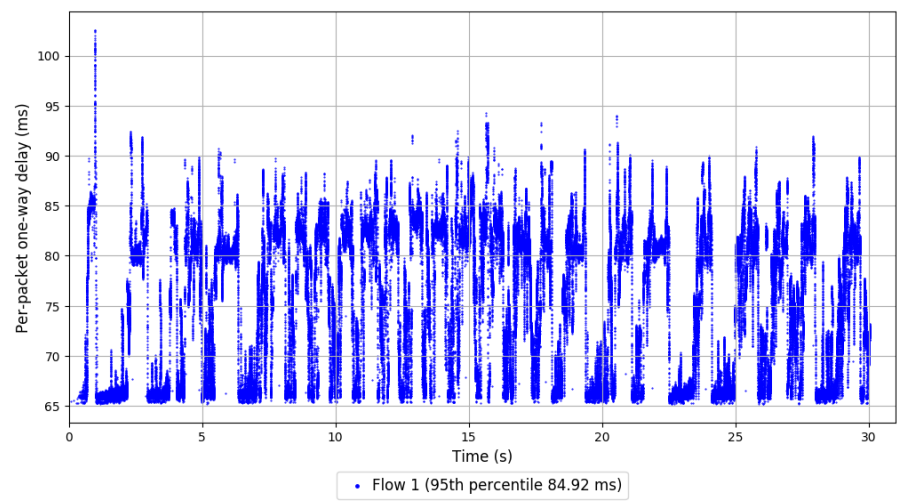
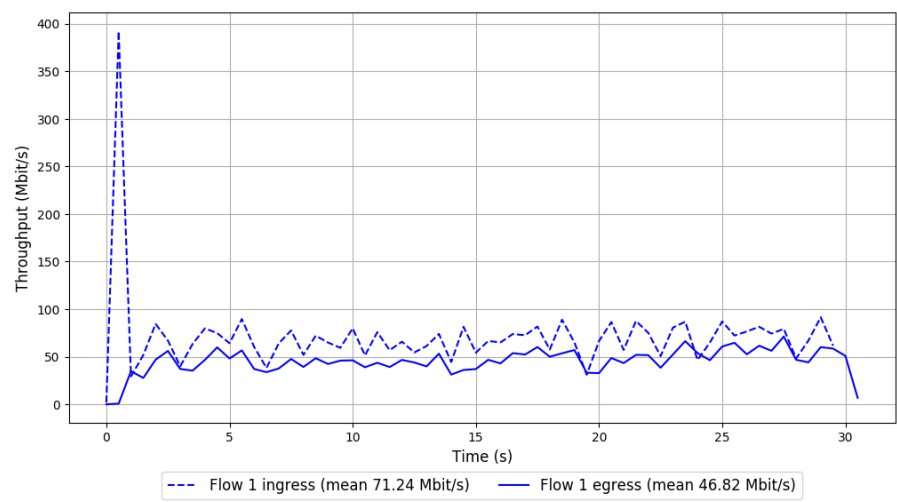


Run 4: Statistics of FillP

Start at: 2018-06-29 15:16:48  
End at: 2018-06-29 15:17:18  
Local clock offset: 8.902 ms  
Remote clock offset: -7.881 ms

# Below is generated by plot.py at 2018-06-29 19:19:22  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 46.82 Mbit/s  
95th percentile per-packet one-way delay: 84.920 ms  
Loss rate: 34.25%  
-- Flow 1:  
Average throughput: 46.82 Mbit/s  
95th percentile per-packet one-way delay: 84.920 ms  
Loss rate: 34.25%

Run 4: Report of FillP — Data Link

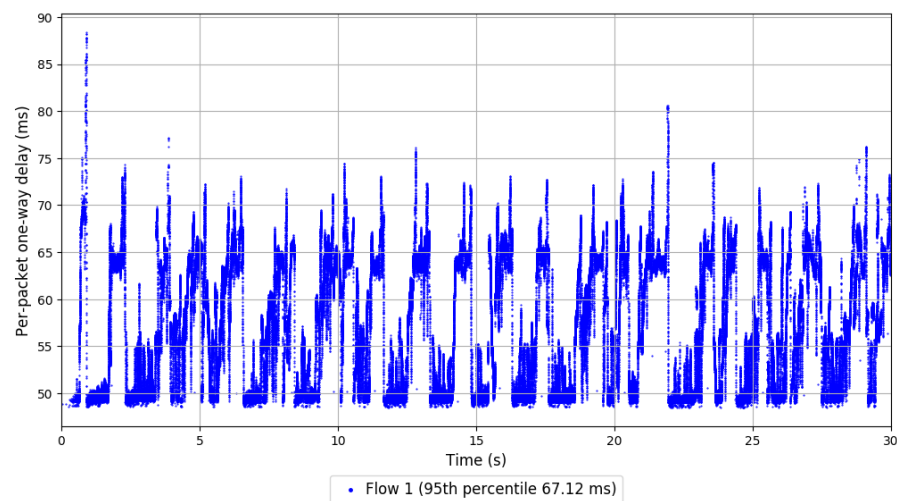
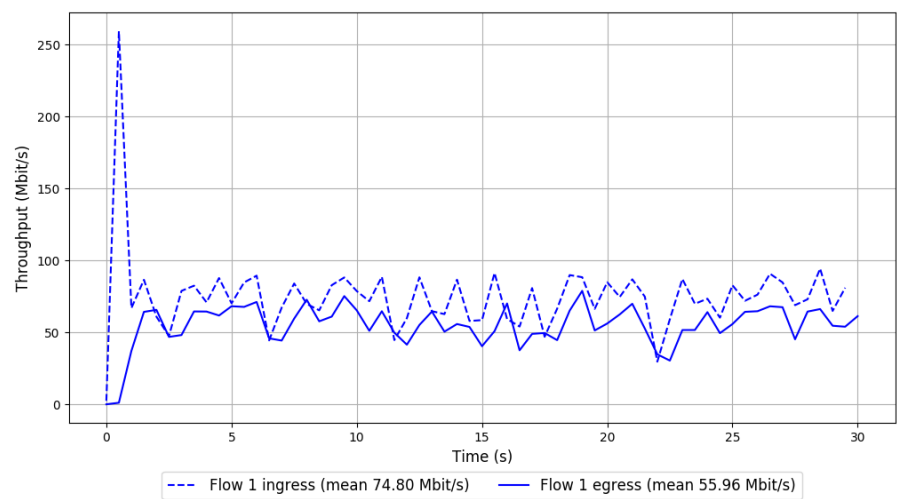


Run 5: Statistics of FillP

Start at: 2018-06-29 15:53:05  
End at: 2018-06-29 15:53:35  
Local clock offset: 6.581 ms  
Remote clock offset: -24.514 ms

# Below is generated by plot.py at 2018-06-29 19:19:29  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 55.96 Mbit/s  
95th percentile per-packet one-way delay: 67.118 ms  
Loss rate: 25.17%  
-- Flow 1:  
Average throughput: 55.96 Mbit/s  
95th percentile per-packet one-way delay: 67.118 ms  
Loss rate: 25.17%

Run 5: Report of FillP — Data Link

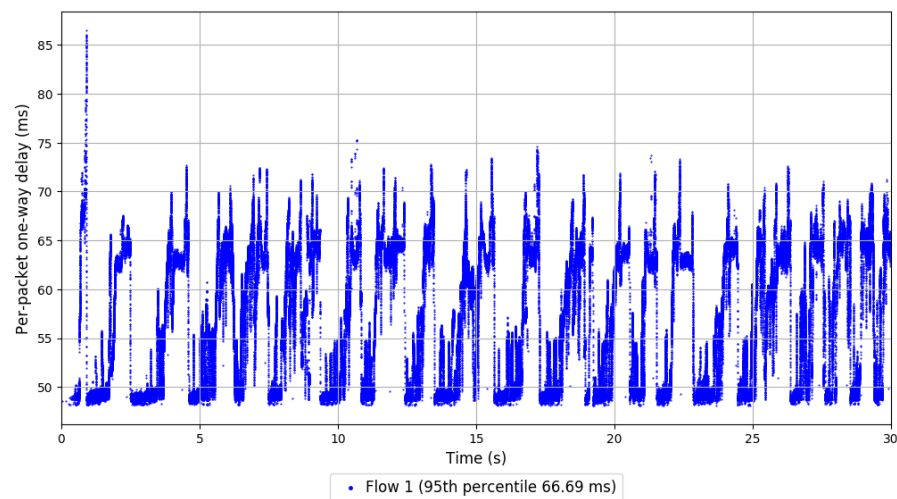
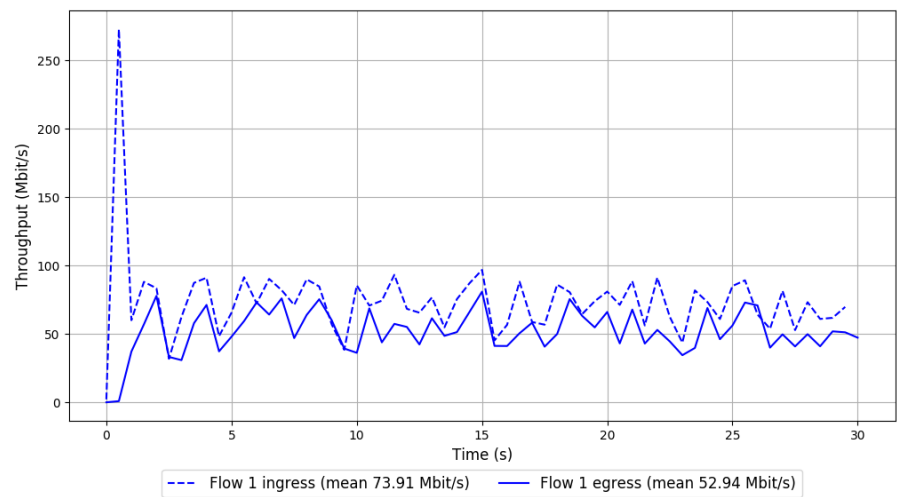


Run 6: Statistics of FillP

Start at: 2018-06-29 16:30:30  
End at: 2018-06-29 16:31:00  
Local clock offset: -3.755 ms  
Remote clock offset: -28.169 ms

# Below is generated by plot.py at 2018-06-29 19:19:29  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 52.94 Mbit/s  
95th percentile per-packet one-way delay: 66.687 ms  
Loss rate: 28.37%  
-- Flow 1:  
Average throughput: 52.94 Mbit/s  
95th percentile per-packet one-way delay: 66.687 ms  
Loss rate: 28.37%

Run 6: Report of FillP — Data Link



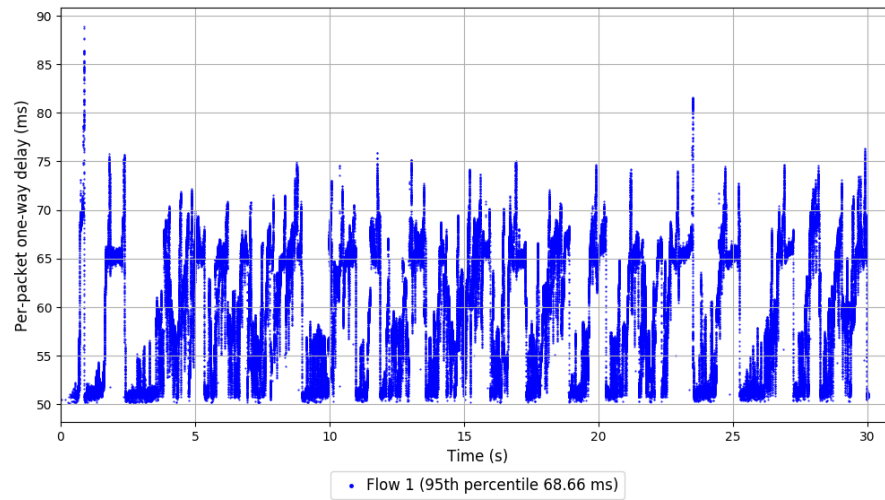
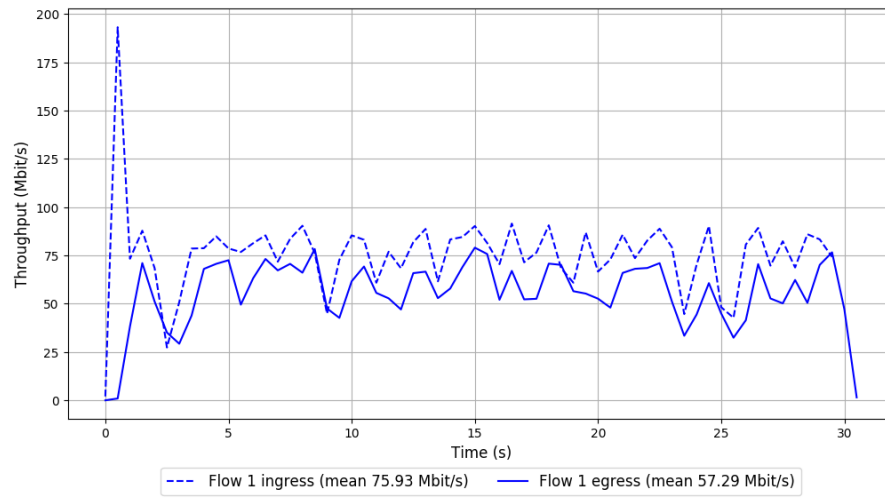
Run 7: Statistics of FillP

Start at: 2018-06-29 17:07:11  
End at: 2018-06-29 17:07:41  
Local clock offset: 0.301 ms  
Remote clock offset: -24.285 ms

# Below is generated by plot.py at 2018-06-29 19:19:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 57.29 Mbit/s  
95th percentile per-packet one-way delay: 68.656 ms  
Loss rate: 24.54%  
-- Flow 1:  
Average throughput: 57.29 Mbit/s  
95th percentile per-packet one-way delay: 68.656 ms  
Loss rate: 24.54%



## Run 7: Report of FillP — Data Link

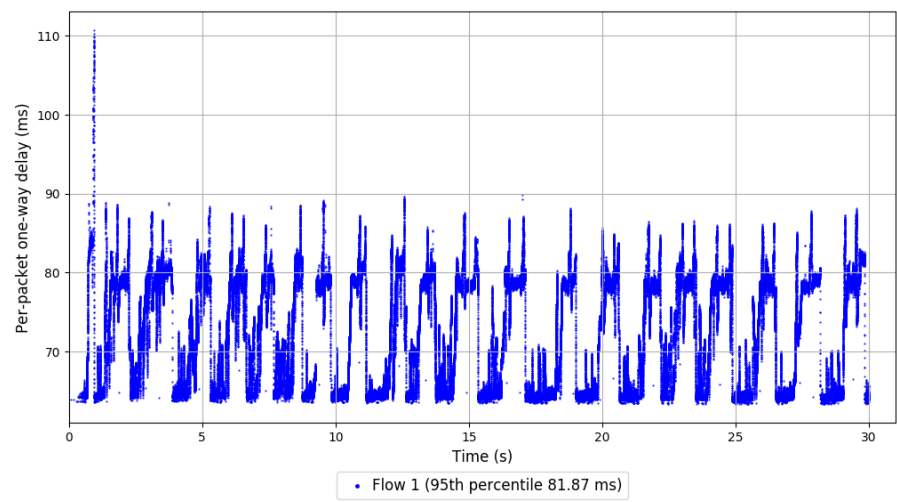
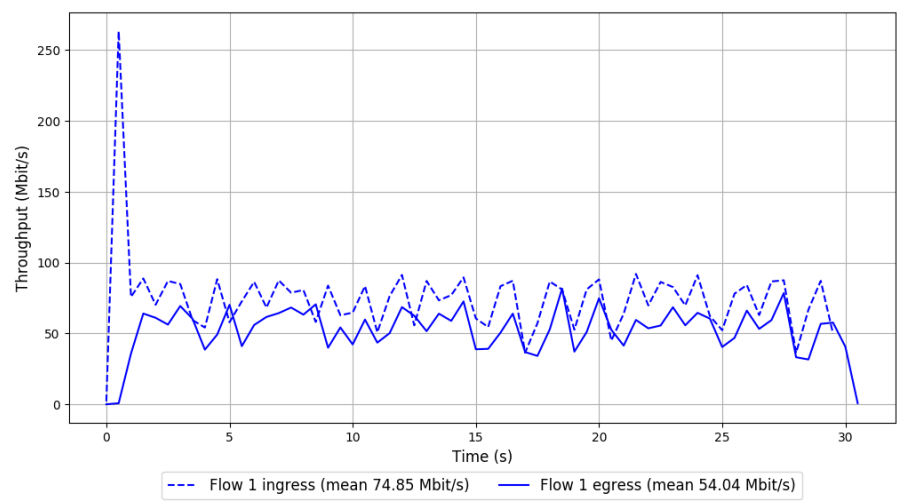


Run 8: Statistics of FillP

Start at: 2018-06-29 17:46:14  
End at: 2018-06-29 17:46:44  
Local clock offset: 9.451 ms  
Remote clock offset: -11.869 ms

# Below is generated by plot.py at 2018-06-29 19:20:00  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 54.04 Mbit/s  
95th percentile per-packet one-way delay: 81.870 ms  
Loss rate: 27.80%  
-- Flow 1:  
Average throughput: 54.04 Mbit/s  
95th percentile per-packet one-way delay: 81.870 ms  
Loss rate: 27.80%

Run 8: Report of FillP — Data Link

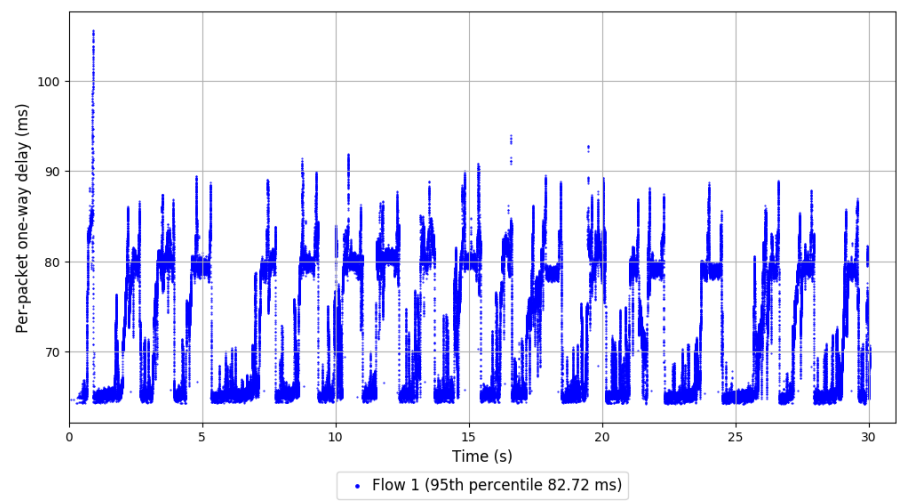
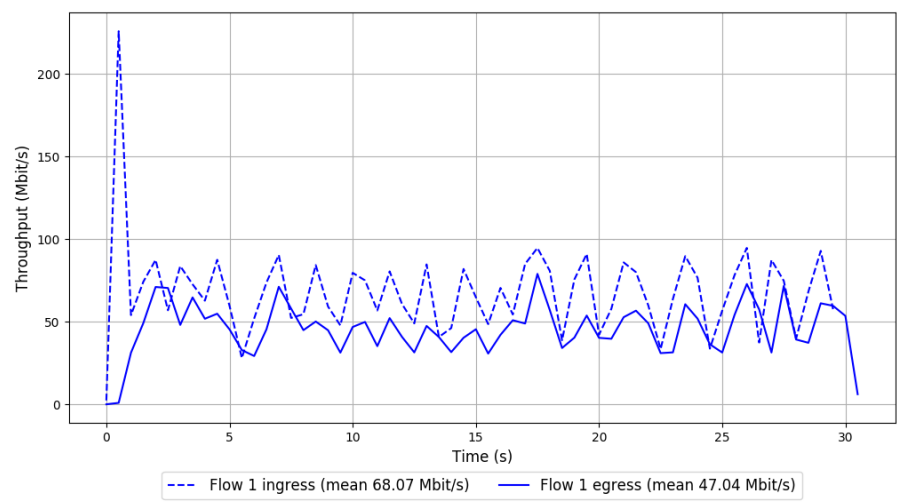


Run 9: Statistics of FillP

Start at: 2018-06-29 18:25:50  
End at: 2018-06-29 18:26:21  
Local clock offset: 0.765 ms  
Remote clock offset: -10.974 ms

# Below is generated by plot.py at 2018-06-29 19:20:08  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 47.04 Mbit/s  
95th percentile per-packet one-way delay: 82.718 ms  
Loss rate: 30.88%  
-- Flow 1:  
Average throughput: 47.04 Mbit/s  
95th percentile per-packet one-way delay: 82.718 ms  
Loss rate: 30.88%

Run 9: Report of FillP — Data Link

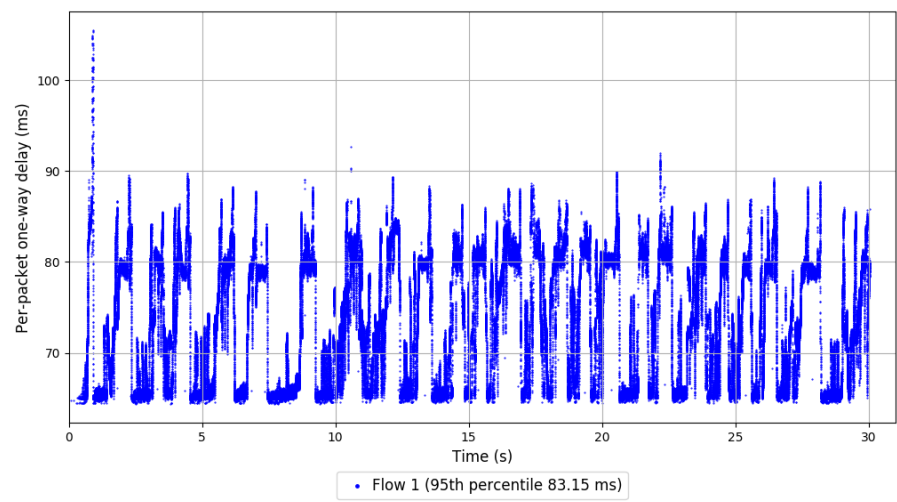
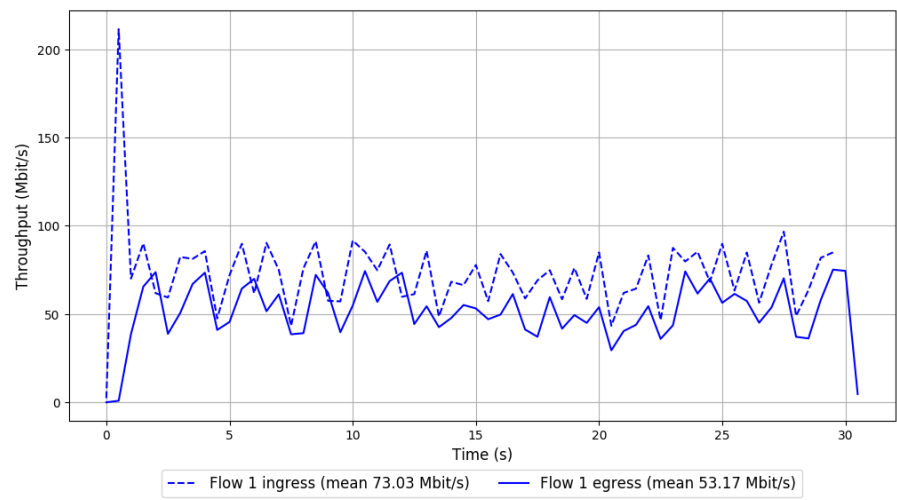


Run 10: Statistics of FillP

Start at: 2018-06-29 19:09:44  
End at: 2018-06-29 19:10:14  
Local clock offset: 0.451 ms  
Remote clock offset: -12.185 ms

# Below is generated by plot.py at 2018-06-29 19:20:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 53.17 Mbit/s  
95th percentile per-packet one-way delay: 83.150 ms  
Loss rate: 27.18%  
-- Flow 1:  
Average throughput: 53.17 Mbit/s  
95th percentile per-packet one-way delay: 83.150 ms  
Loss rate: 27.18%

Run 10: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2018-06-29 13:20:47

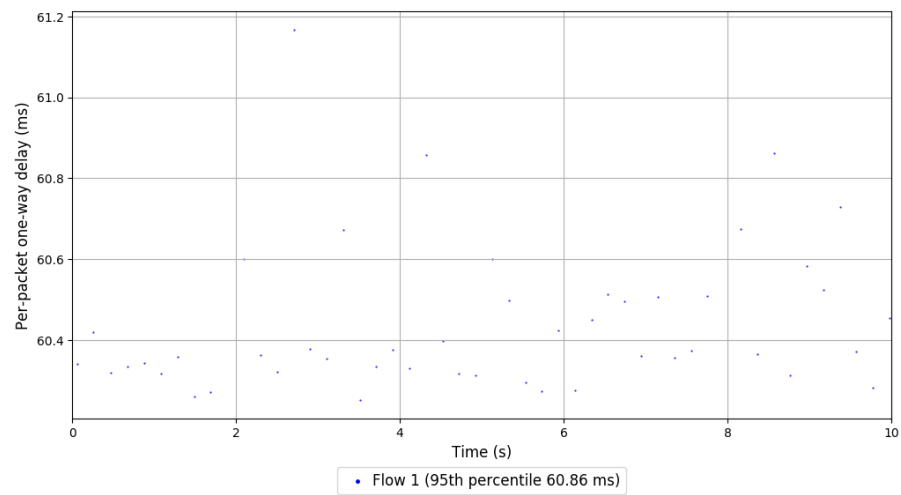
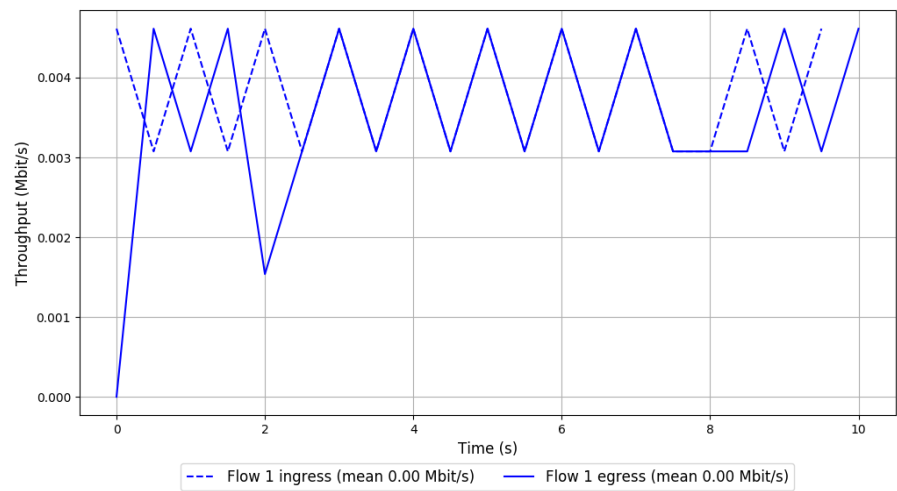
End at: 2018-06-29 13:21:17

Local clock offset: 1.124 ms

Remote clock offset: -14.114 ms



Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

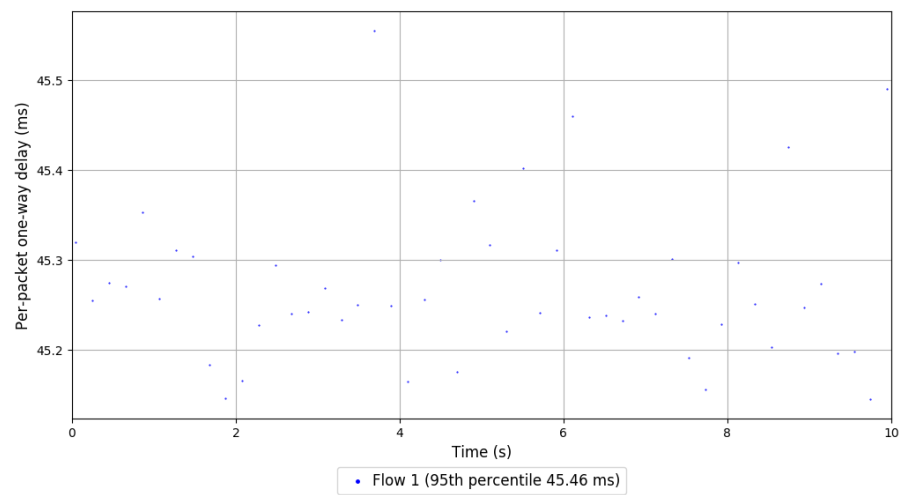
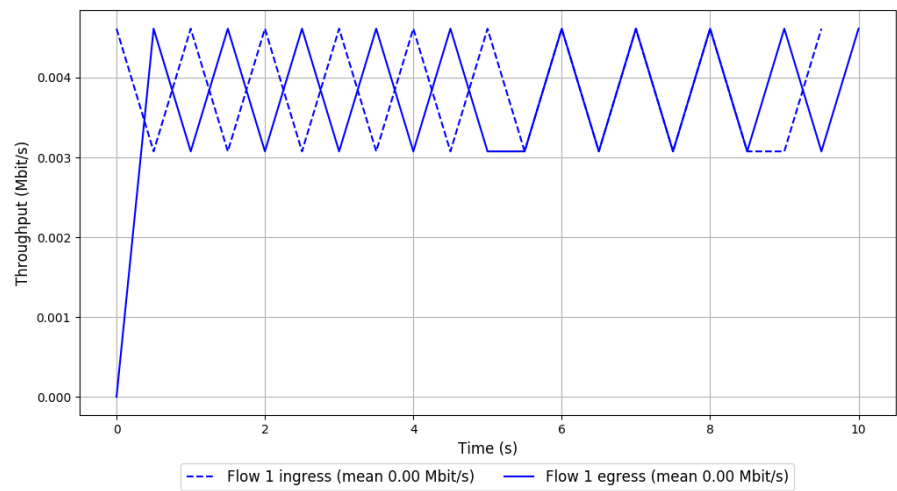
Start at: 2018-06-29 13:57:33

End at: 2018-06-29 13:58:03

Local clock offset: -2.879 ms

Remote clock offset: -28.767 ms

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

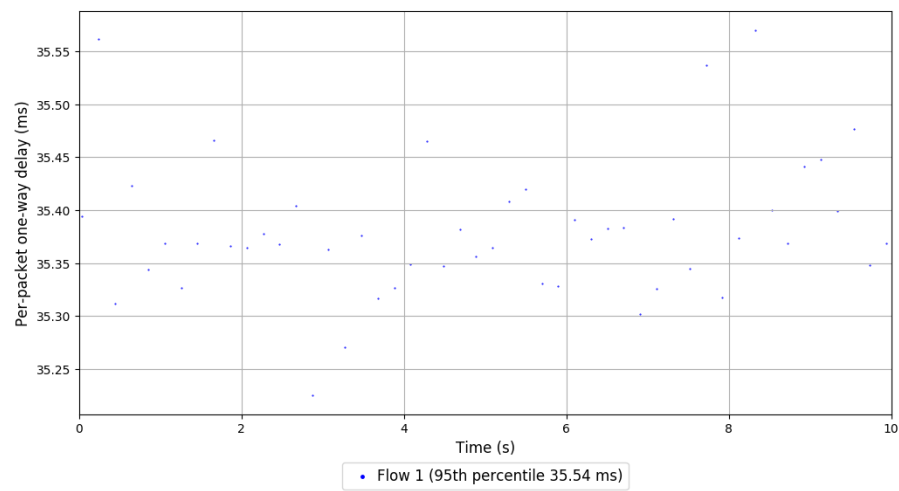
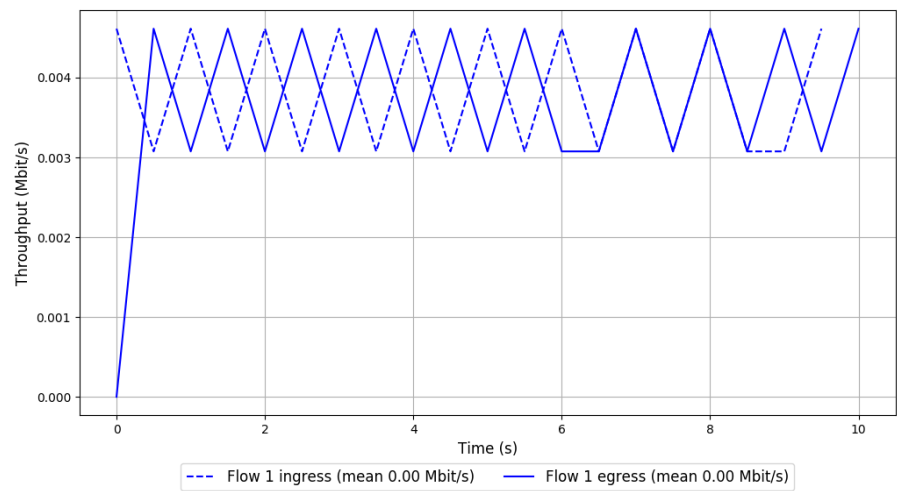
Start at: 2018-06-29 14:37:09

End at: 2018-06-29 14:37:39

Local clock offset: 4.177 ms

Remote clock offset: -39.664 ms

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

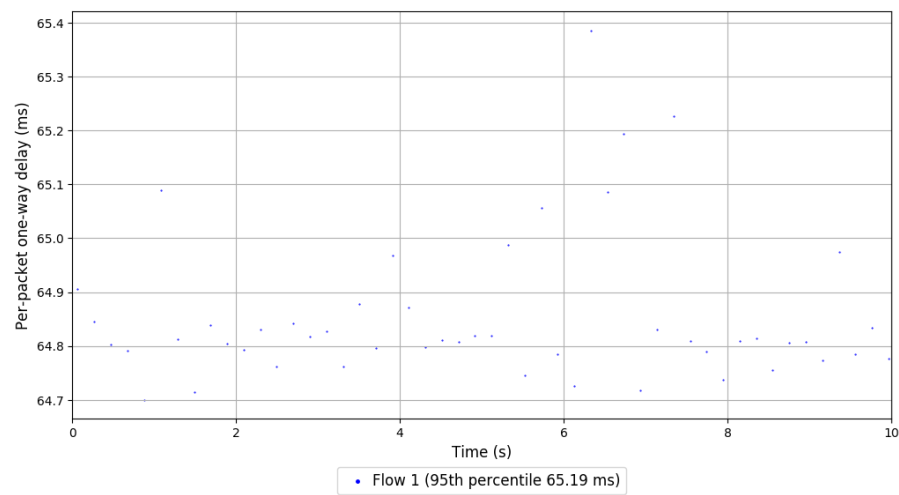
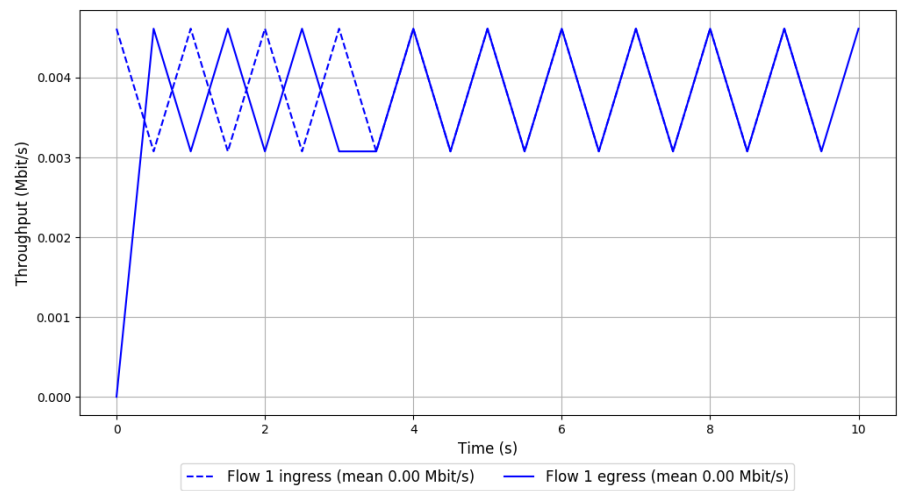
Start at: 2018-06-29 15:15:33

End at: 2018-06-29 15:16:03

Local clock offset: 9.076 ms

Remote clock offset: -8.132 ms

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2018-06-29 15:51:50

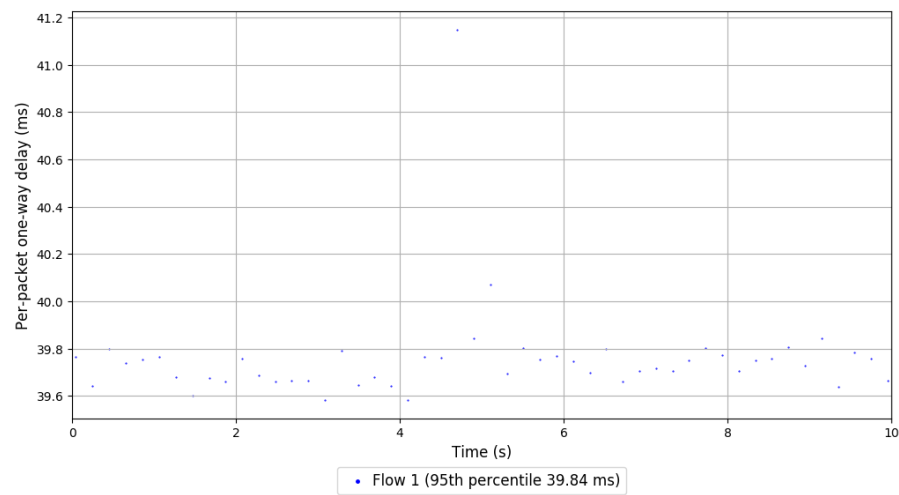
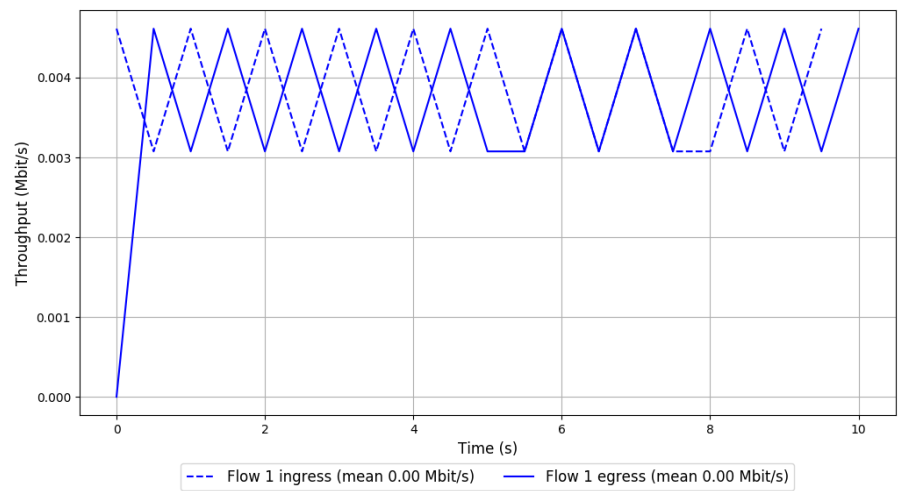
End at: 2018-06-29 15:52:20

Local clock offset: 7.071 ms

Remote clock offset: -33.433 ms



Run 5: Report of FillP-Sheep — Data Link



Run 6: Statistics of FillP-Sheep

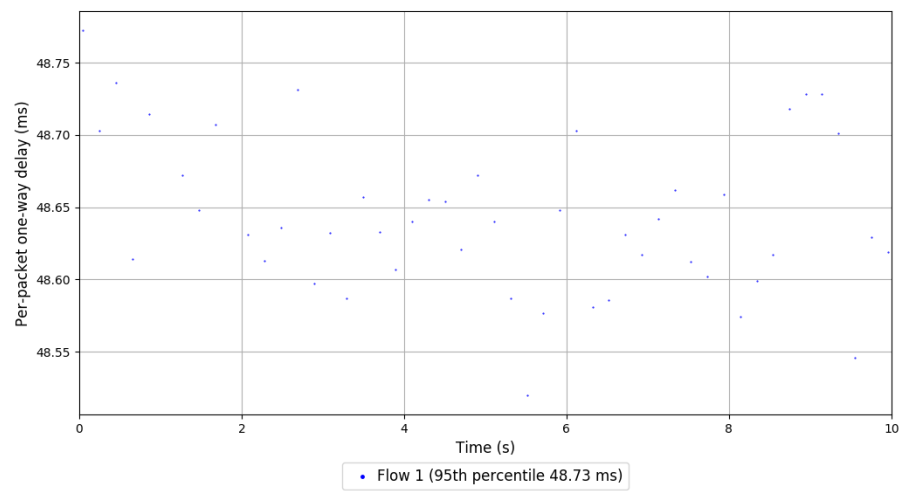
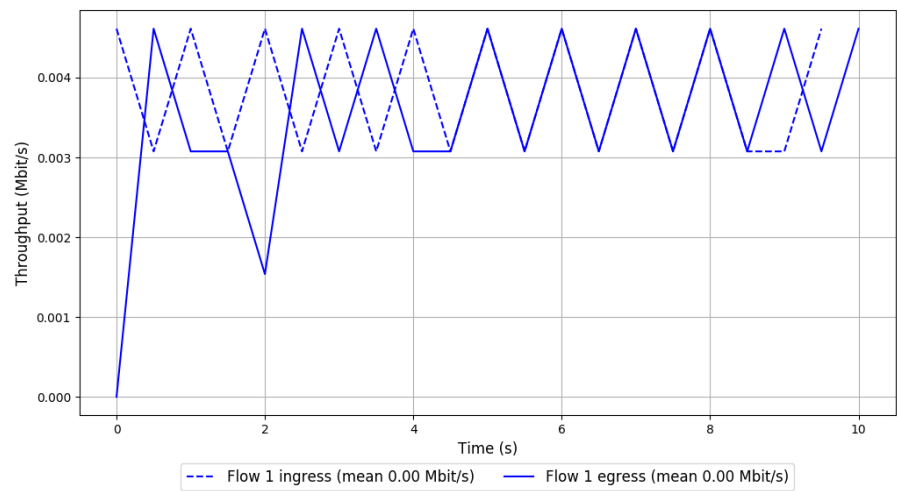
Start at: 2018-06-29 16:29:14

End at: 2018-06-29 16:29:44

Local clock offset: -3.23 ms

Remote clock offset: -27.621 ms

Run 6: Report of FillP-Sheep — Data Link



Run 7: Statistics of FillP-Sheep

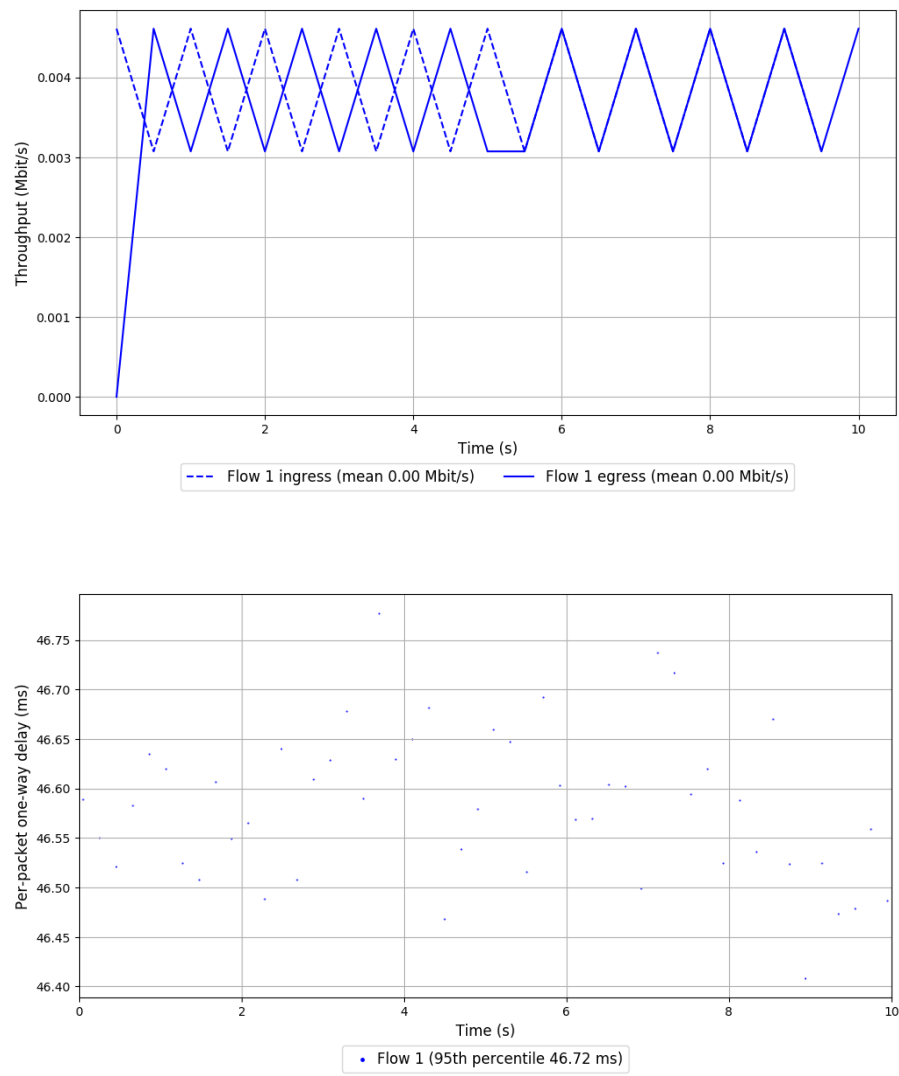
Start at: 2018-06-29 17:05:57

End at: 2018-06-29 17:06:27

Local clock offset: 0.348 ms

Remote clock offset: -27.965 ms

Run 7: Report of FillP-Sheep — Data Link



Run 8: Statistics of FillP-Sheep

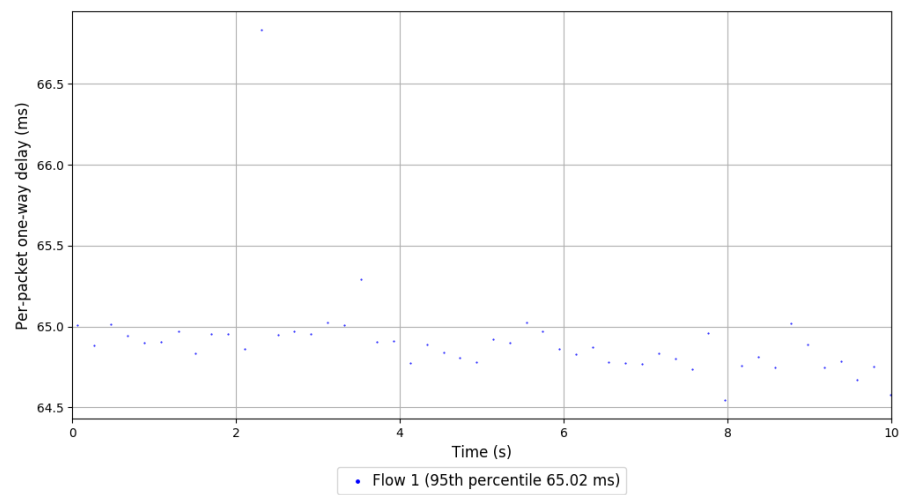
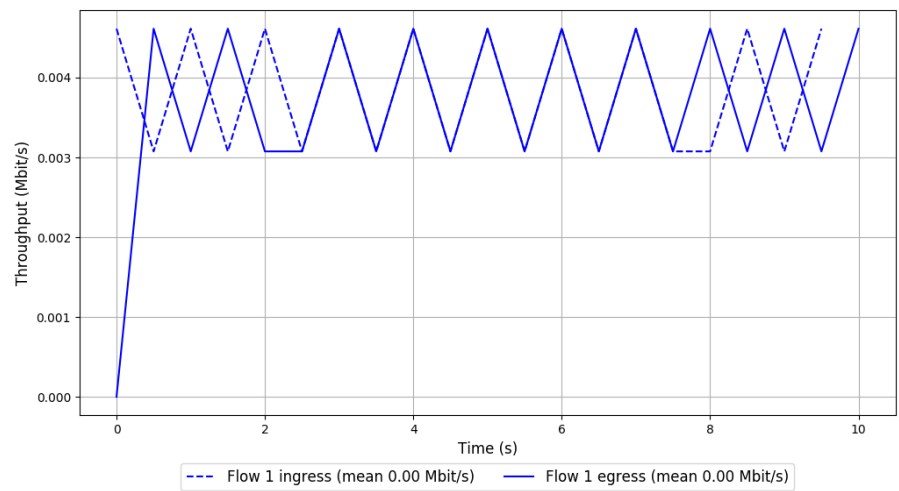
Start at: 2018-06-29 17:44:59

End at: 2018-06-29 17:45:29

Local clock offset: 9.552 ms

Remote clock offset: -11.829 ms

Run 8: Report of FillP-Sheep — Data Link



Run 9: Statistics of FillP-Sheep

Start at: 2018-06-29 18:24:36

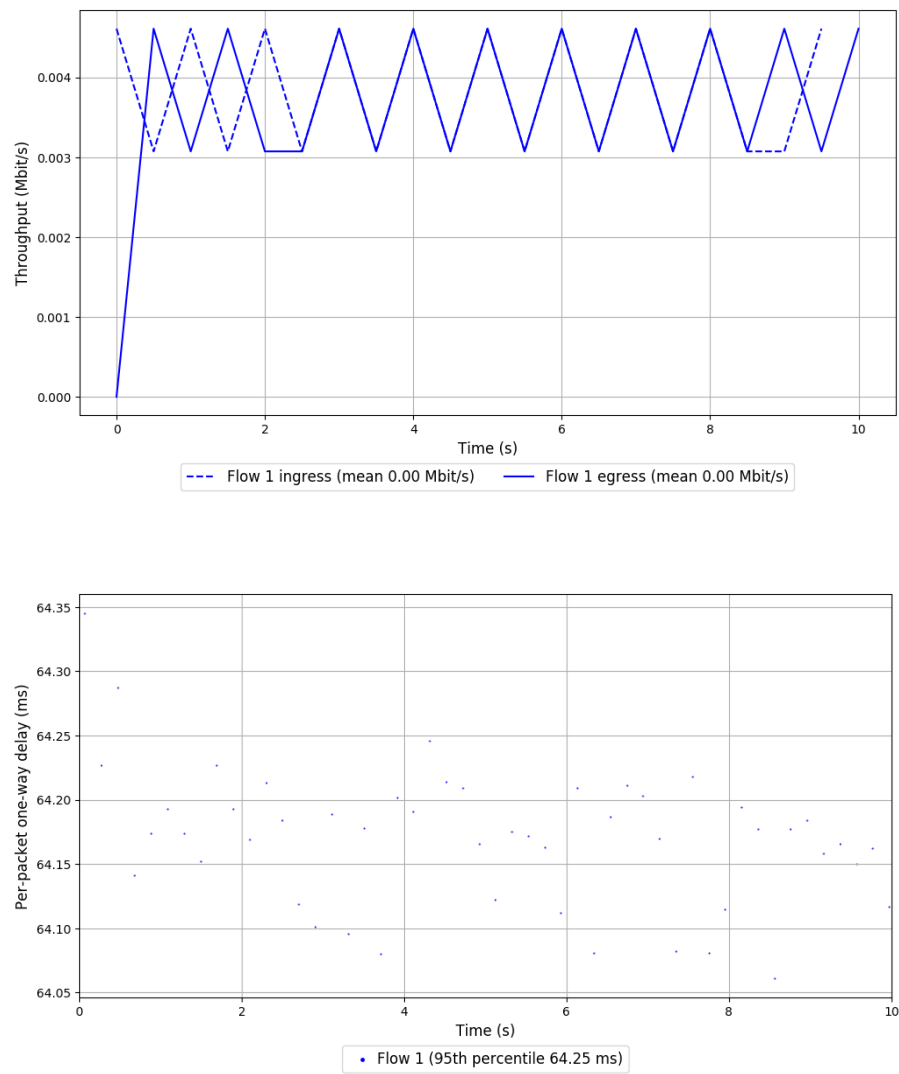
End at: 2018-06-29 18:25:06

Local clock offset: 1.245 ms

Remote clock offset: -11.027 ms



Run 9: Report of FillP-Sheep — Data Link



Run 10: Statistics of FillP-Sheep

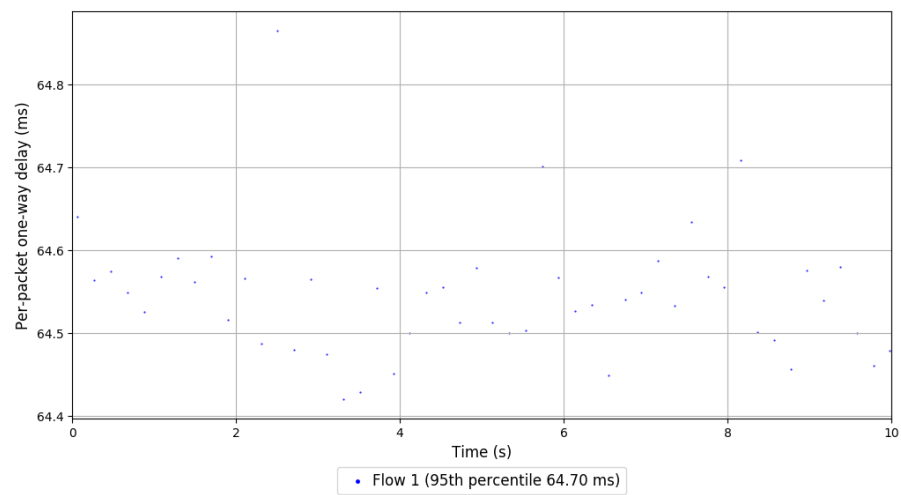
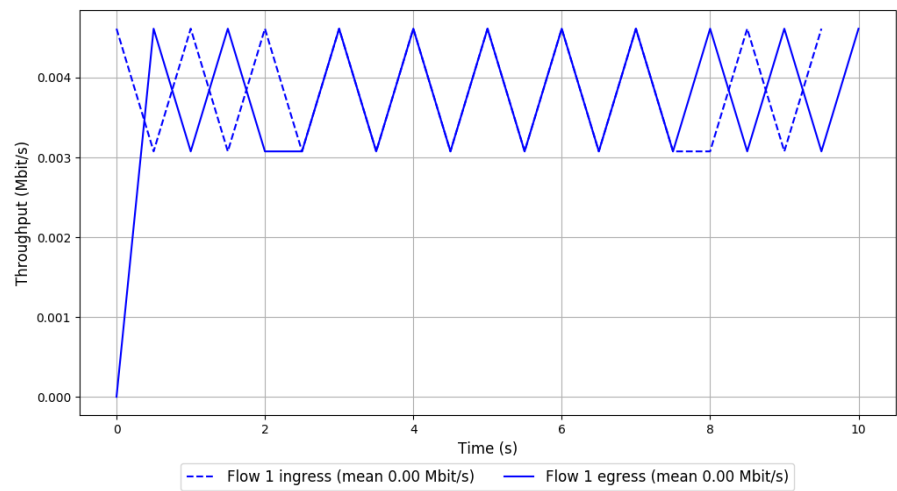
Start at: 2018-06-29 19:08:29

End at: 2018-06-29 19:08:59

Local clock offset: 0.455 ms

Remote clock offset: -12.215 ms

Run 10: Report of FillP-Sheep — Data Link

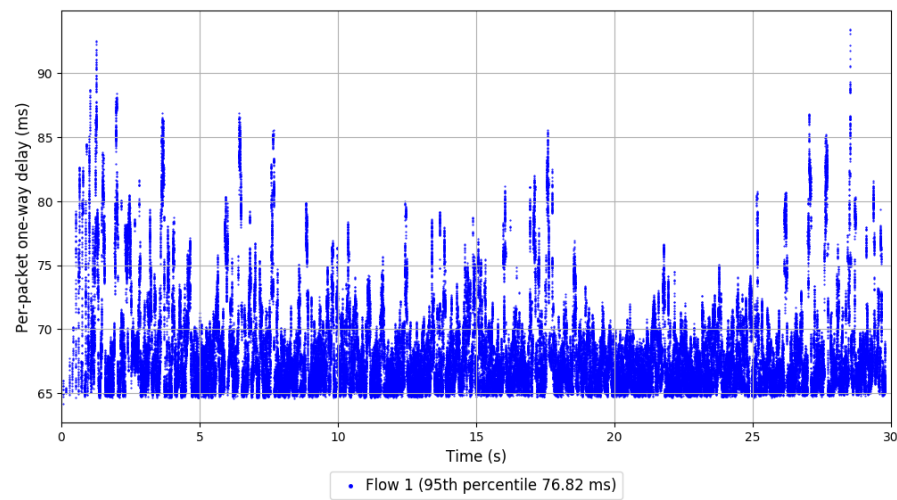
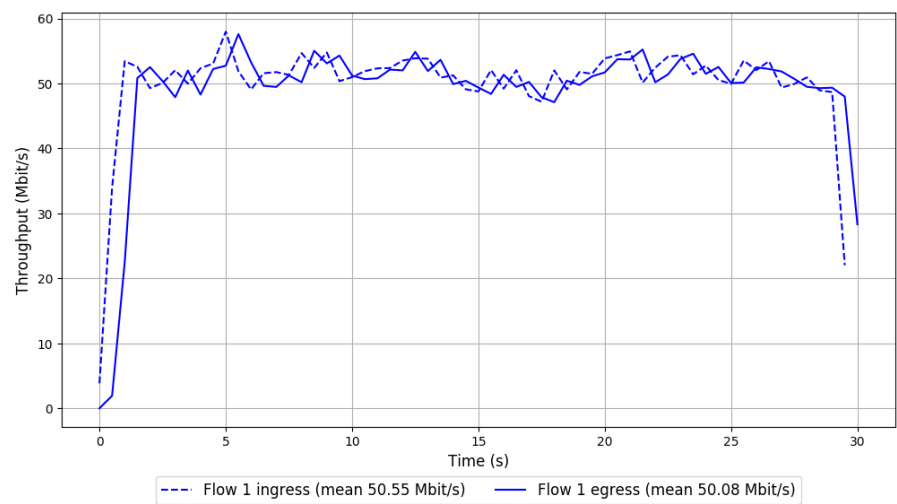


```
Run 1: Statistics of Indigo

Start at: 2018-06-29 13:14:19
End at: 2018-06-29 13:14:49
Local clock offset: 3.969 ms
Remote clock offset: -10.264 ms

# Below is generated by plot.py at 2018-06-29 19:20:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.08 Mbit/s
95th percentile per-packet one-way delay: 76.822 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 50.08 Mbit/s
95th percentile per-packet one-way delay: 76.822 ms
Loss rate: 0.93%
```

Run 1: Report of Indigo — Data Link

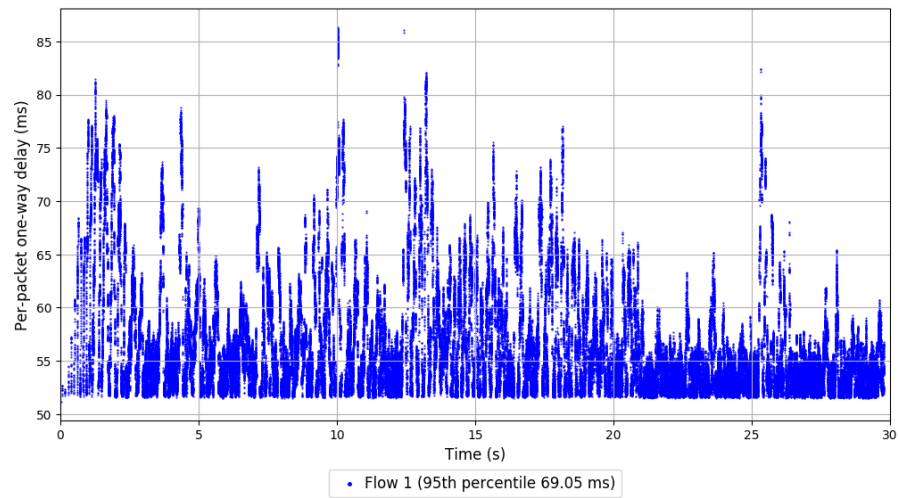
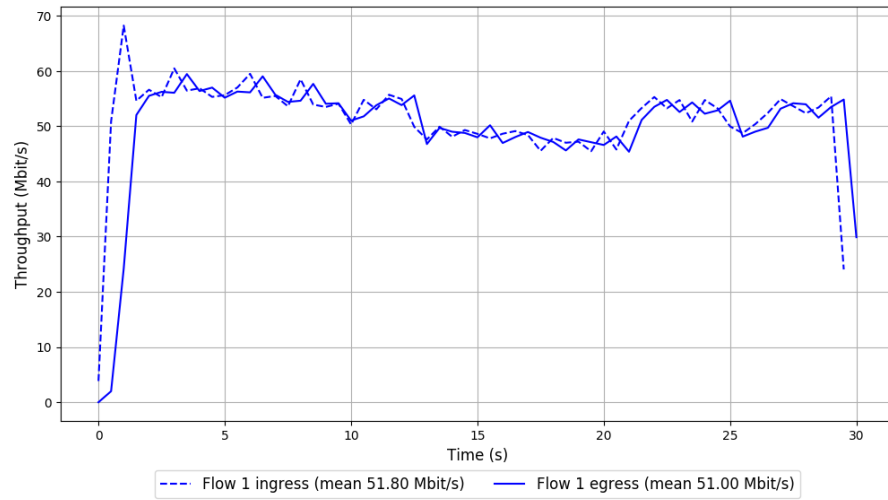


Run 2: Statistics of Indigo

Start at: 2018-06-29 13:50:43  
End at: 2018-06-29 13:51:13  
Local clock offset: -2.785 ms  
Remote clock offset: -23.184 ms

# Below is generated by plot.py at 2018-06-29 19:20:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 51.00 Mbit/s  
95th percentile per-packet one-way delay: 69.052 ms  
Loss rate: 1.55%  
-- Flow 1:  
Average throughput: 51.00 Mbit/s  
95th percentile per-packet one-way delay: 69.052 ms  
Loss rate: 1.55%

## Run 2: Report of Indigo — Data Link



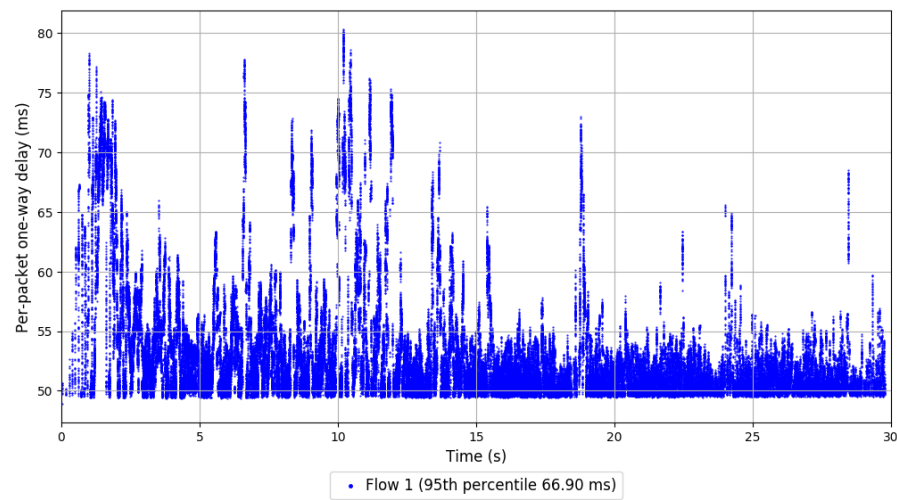
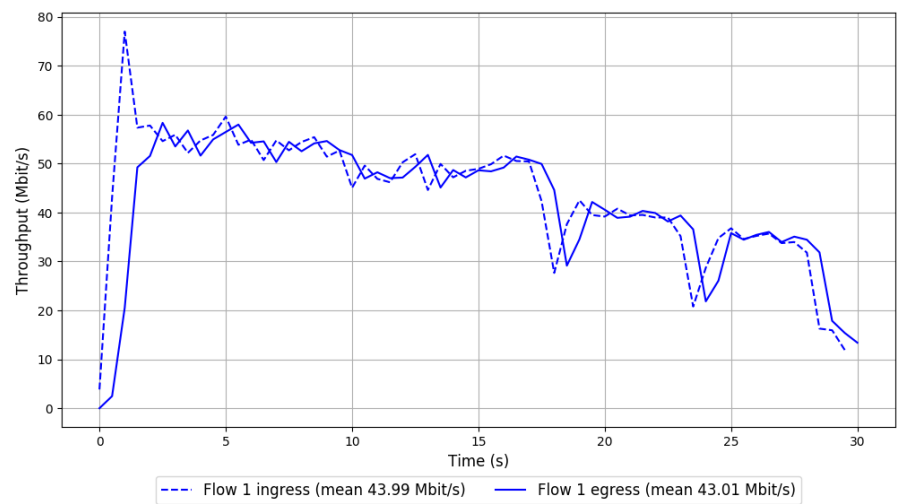
Run 3: Statistics of Indigo

Start at: 2018-06-29 14:30:05  
End at: 2018-06-29 14:30:35  
Local clock offset: 2.926 ms  
Remote clock offset: -25.865 ms

# Below is generated by plot.py at 2018-06-29 19:20:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 43.01 Mbit/s  
95th percentile per-packet one-way delay: 66.898 ms  
Loss rate: 2.24%  
-- Flow 1:  
Average throughput: 43.01 Mbit/s  
95th percentile per-packet one-way delay: 66.898 ms  
Loss rate: 2.24%



Run 3: Report of Indigo — Data Link

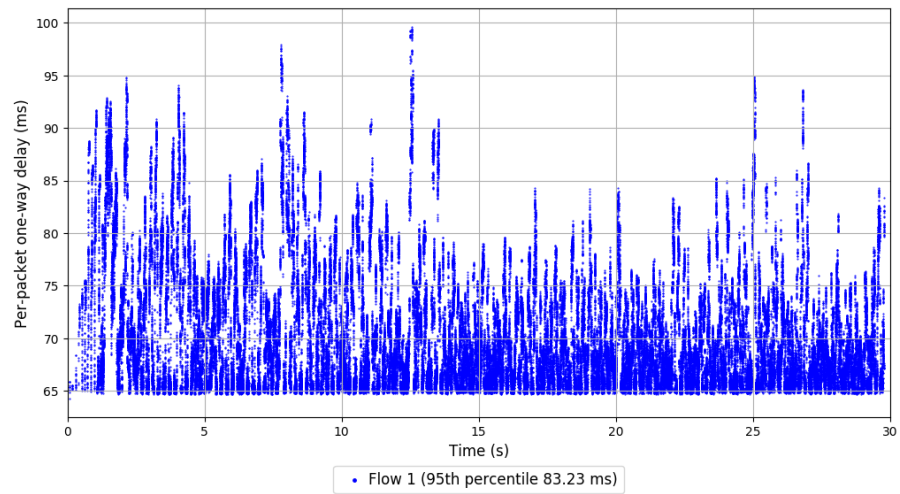
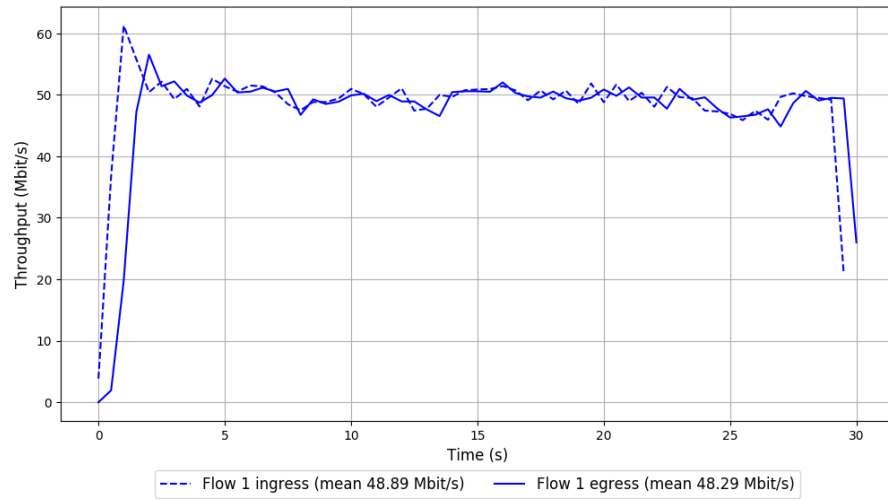


Run 4: Statistics of Indigo

Start at: 2018-06-29 15:09:13  
End at: 2018-06-29 15:09:43  
Local clock offset: 8.293 ms  
Remote clock offset: -9.328 ms

# Below is generated by plot.py at 2018-06-29 19:20:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 48.29 Mbit/s  
95th percentile per-packet one-way delay: 83.229 ms  
Loss rate: 1.21%  
-- Flow 1:  
Average throughput: 48.29 Mbit/s  
95th percentile per-packet one-way delay: 83.229 ms  
Loss rate: 1.21%

#### Run 4: Report of Indigo — Data Link

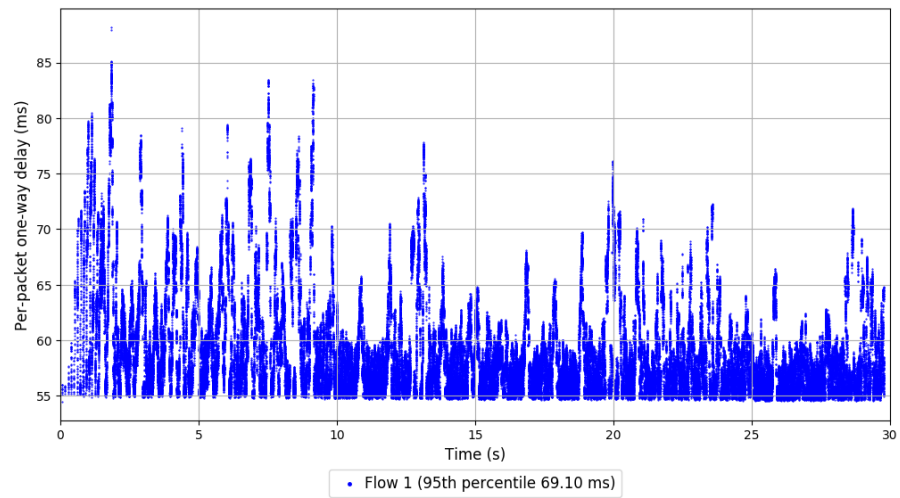
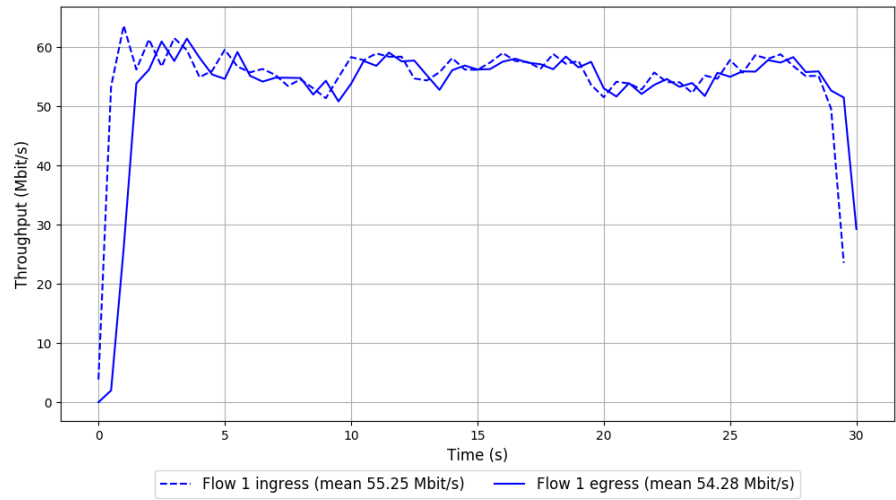


Run 5: Statistics of Indigo

Start at: 2018-06-29 15:45:26  
End at: 2018-06-29 15:45:56  
Local clock offset: 9.819 ms  
Remote clock offset: -18.782 ms

# Below is generated by plot.py at 2018-06-29 19:20:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 54.28 Mbit/s  
95th percentile per-packet one-way delay: 69.097 ms  
Loss rate: 1.74%  
-- Flow 1:  
Average throughput: 54.28 Mbit/s  
95th percentile per-packet one-way delay: 69.097 ms  
Loss rate: 1.74%

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

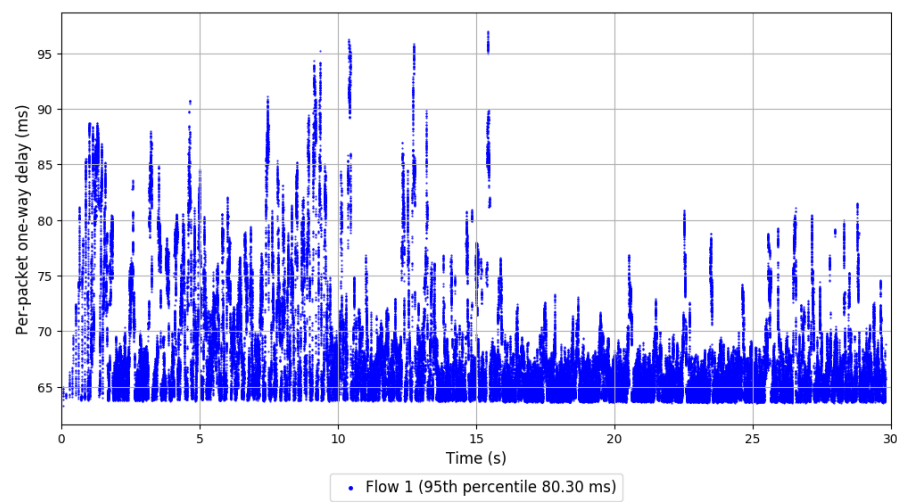
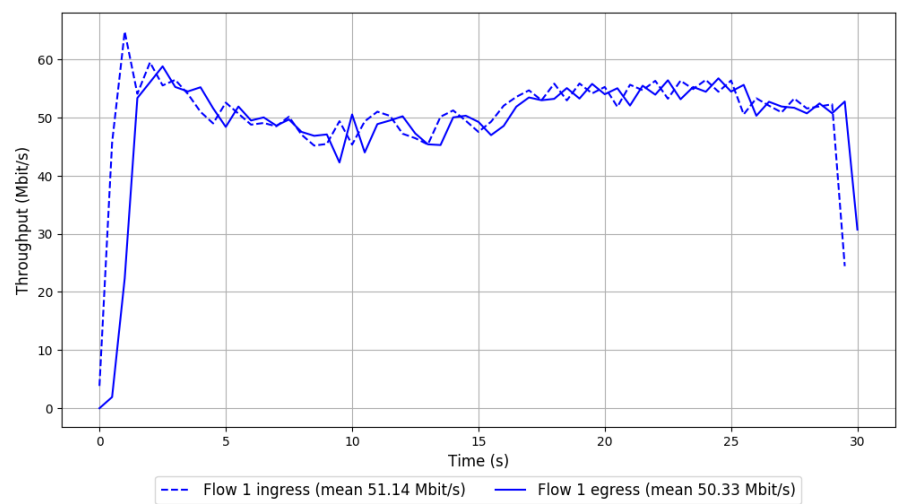


Run 6: Statistics of Indigo

Start at: 2018-06-29 16:22:52  
End at: 2018-06-29 16:23:22  
Local clock offset: -0.844 ms  
Remote clock offset: -12.738 ms

# Below is generated by plot.py at 2018-06-29 19:20:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 50.33 Mbit/s  
95th percentile per-packet one-way delay: 80.301 ms  
Loss rate: 1.57%  
-- Flow 1:  
Average throughput: 50.33 Mbit/s  
95th percentile per-packet one-way delay: 80.301 ms  
Loss rate: 1.57%

Run 6: Report of Indigo — Data Link



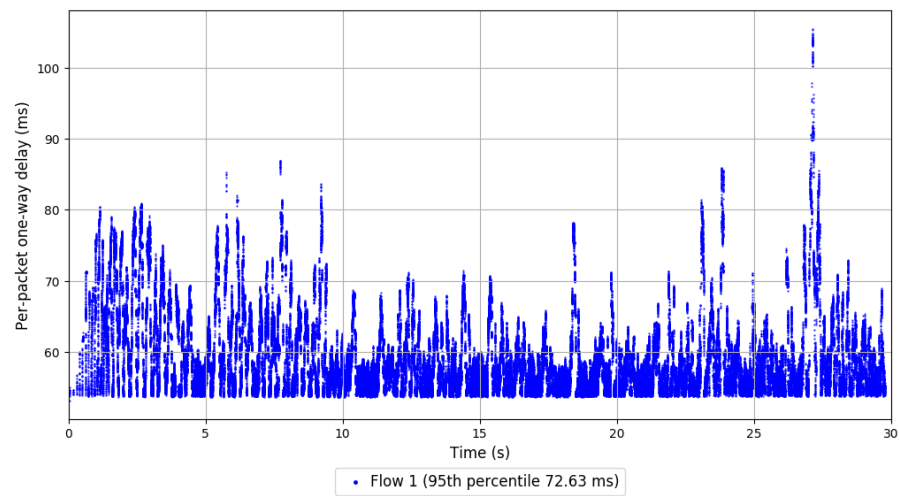
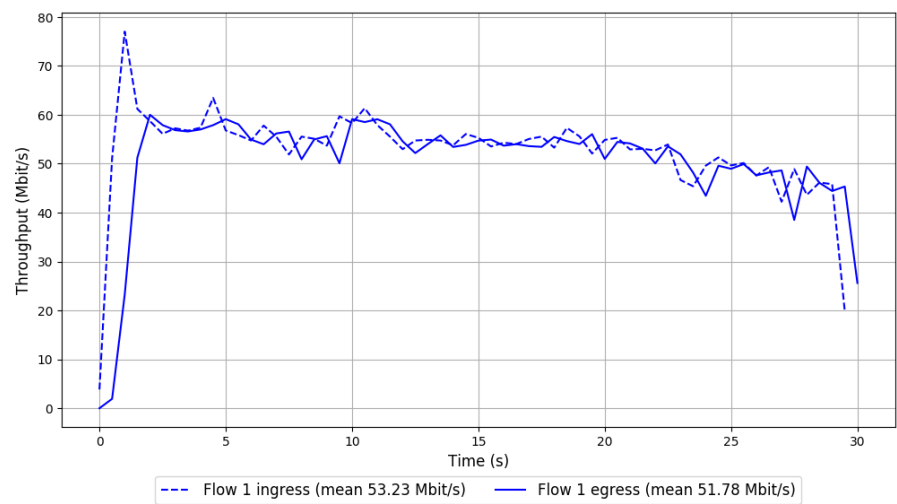
Run 7: Statistics of Indigo

Start at: 2018-06-29 16:59:36  
End at: 2018-06-29 17:00:06  
Local clock offset: -0.768 ms  
Remote clock offset: -21.701 ms

# Below is generated by plot.py at 2018-06-29 19:20:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 51.78 Mbit/s  
95th percentile per-packet one-way delay: 72.628 ms  
Loss rate: 2.73%  
-- Flow 1:  
Average throughput: 51.78 Mbit/s  
95th percentile per-packet one-way delay: 72.628 ms  
Loss rate: 2.73%



Run 7: Report of Indigo — Data Link

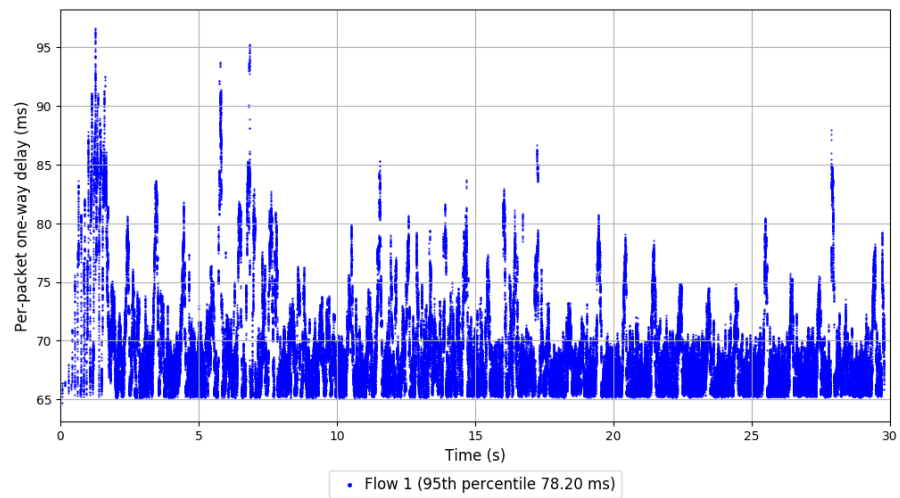
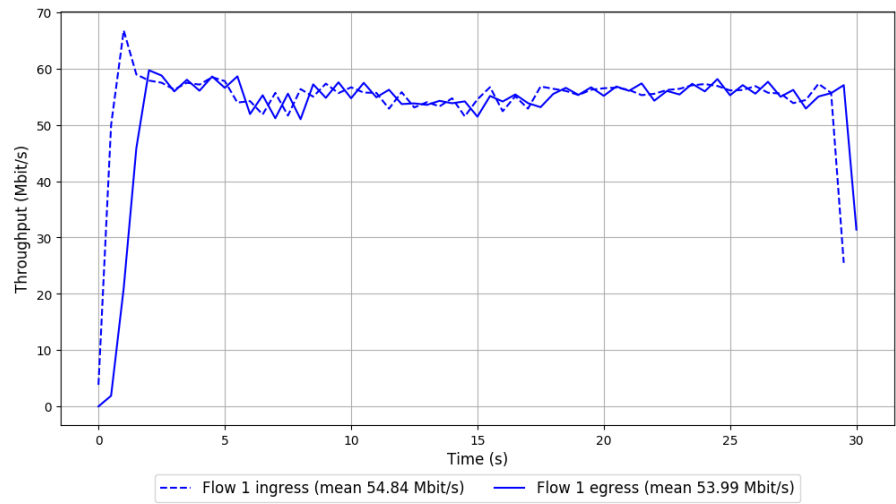


Run 8: Statistics of Indigo

Start at: 2018-06-29 17:38:16  
End at: 2018-06-29 17:38:46  
Local clock offset: 8.615 ms  
Remote clock offset: -12.387 ms

# Below is generated by plot.py at 2018-06-29 19:20:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 53.99 Mbit/s  
95th percentile per-packet one-way delay: 78.196 ms  
Loss rate: 1.54%  
-- Flow 1:  
Average throughput: 53.99 Mbit/s  
95th percentile per-packet one-way delay: 78.196 ms  
Loss rate: 1.54%

### Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-06-29 18:17:03

End at: 2018-06-29 18:17:34

Local clock offset: 3.692 ms

Remote clock offset: -11.301 ms

# Below is generated by plot.py at 2018-06-29 19:20:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 52.77 Mbit/s

95th percentile per-packet one-way delay: 76.139 ms

Loss rate: 0.71%

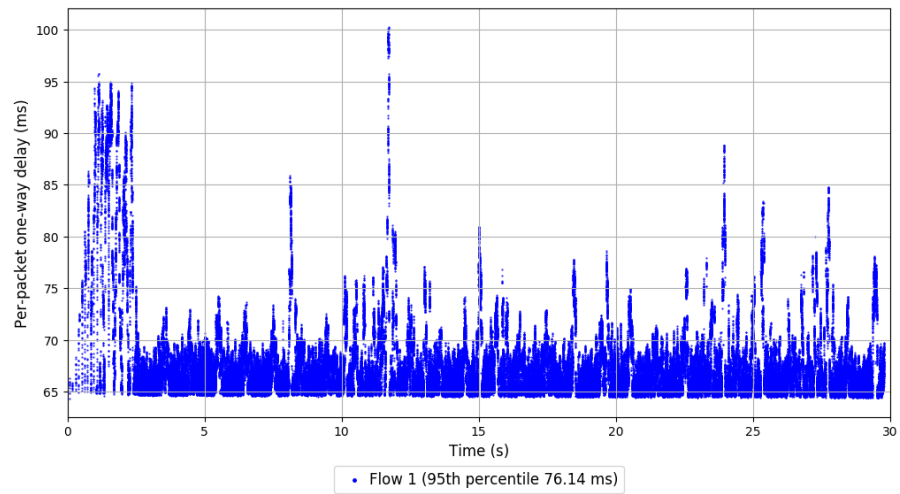
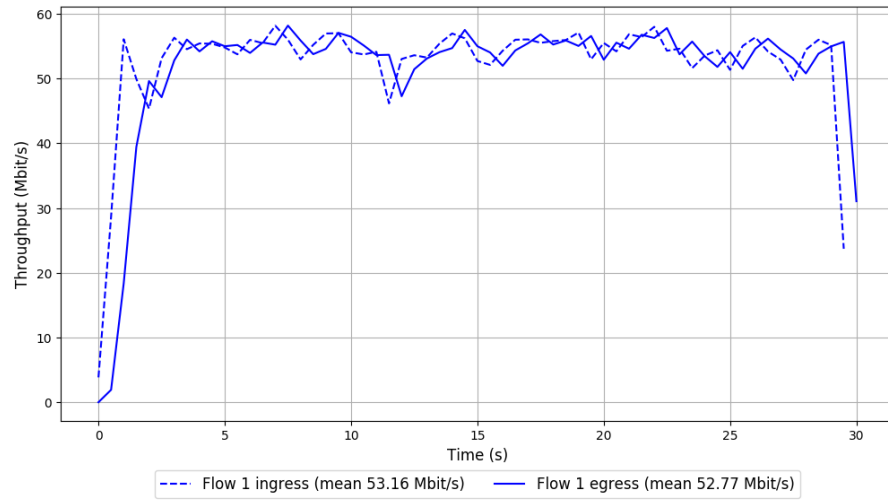
-- Flow 1:

Average throughput: 52.77 Mbit/s

95th percentile per-packet one-way delay: 76.139 ms

Loss rate: 0.71%

### Run 9: Report of Indigo — Data Link

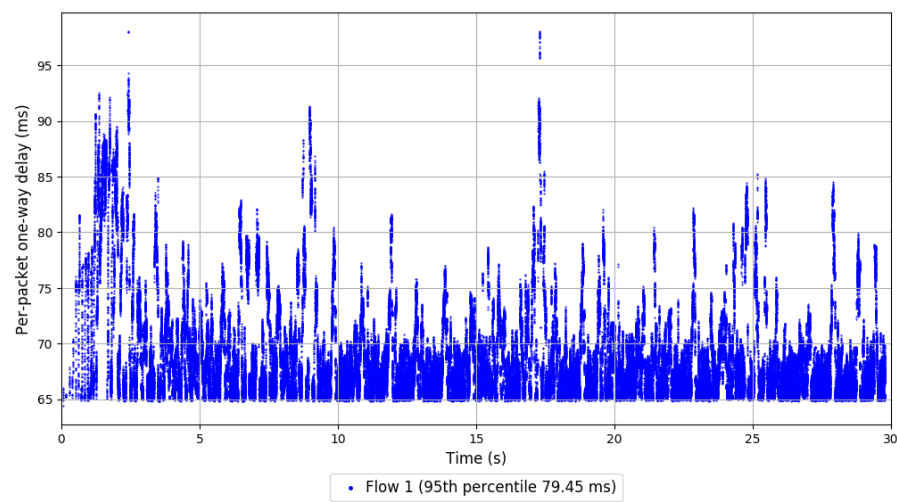
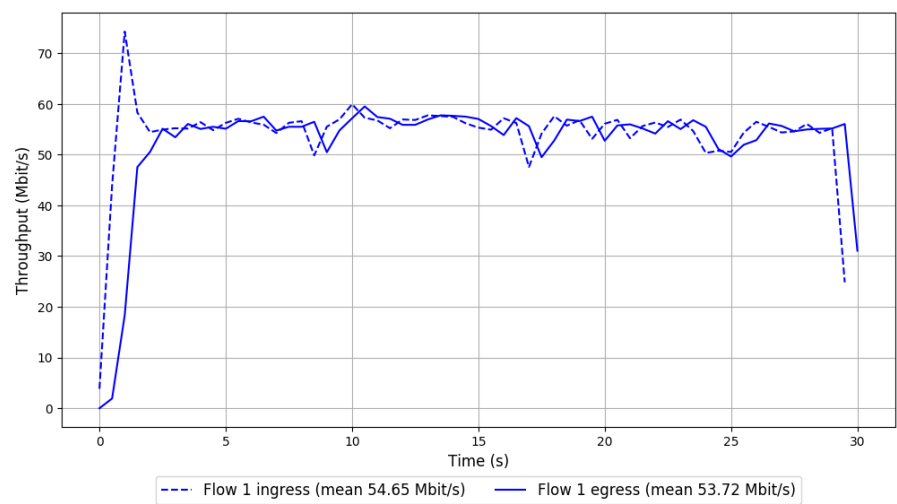


Run 10: Statistics of Indigo

Start at: 2018-06-29 19:00:23  
End at: 2018-06-29 19:00:53  
Local clock offset: 0.311 ms  
Remote clock offset: -11.963 ms

# Below is generated by plot.py at 2018-06-29 19:20:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 53.72 Mbit/s  
95th percentile per-packet one-way delay: 79.447 ms  
Loss rate: 1.70%  
-- Flow 1:  
Average throughput: 53.72 Mbit/s  
95th percentile per-packet one-way delay: 79.447 ms  
Loss rate: 1.70%

Run 10: Report of Indigo — Data Link



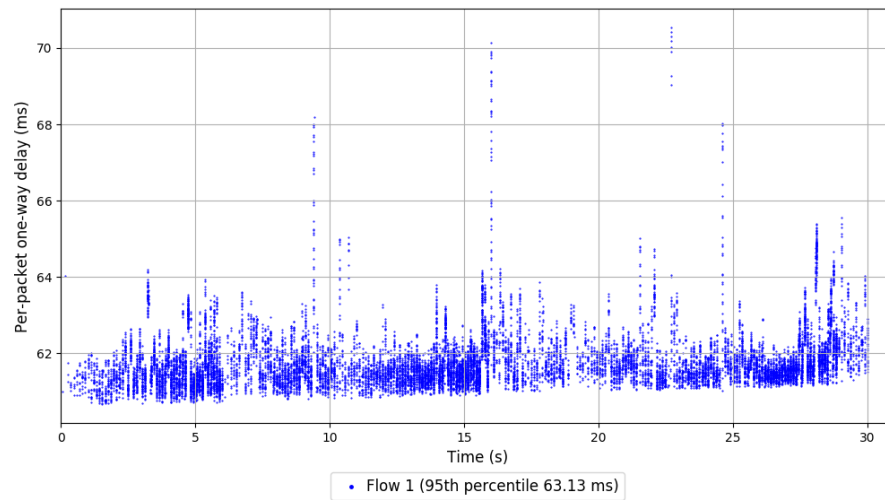
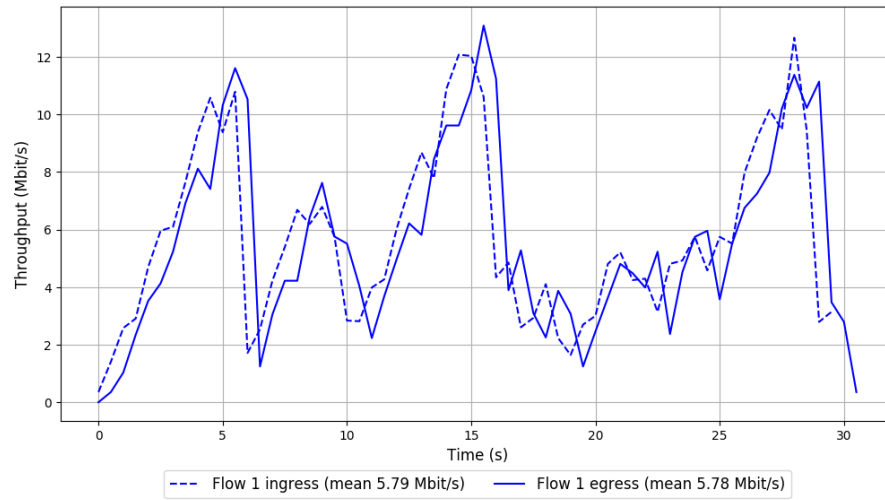
Run 1: Statistics of LEDBAT

Start at: 2018-06-29 12:53:24  
End at: 2018-06-29 12:53:54  
Local clock offset: -7.548 ms  
Remote clock offset: -14.18 ms

# Below is generated by plot.py at 2018-06-29 19:20:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 5.78 Mbit/s  
95th percentile per-packet one-way delay: 63.135 ms  
Loss rate: 0.24%  
-- Flow 1:  
Average throughput: 5.78 Mbit/s  
95th percentile per-packet one-way delay: 63.135 ms  
Loss rate: 0.24%



# Run 1: Report of LEDBAT — Data Link

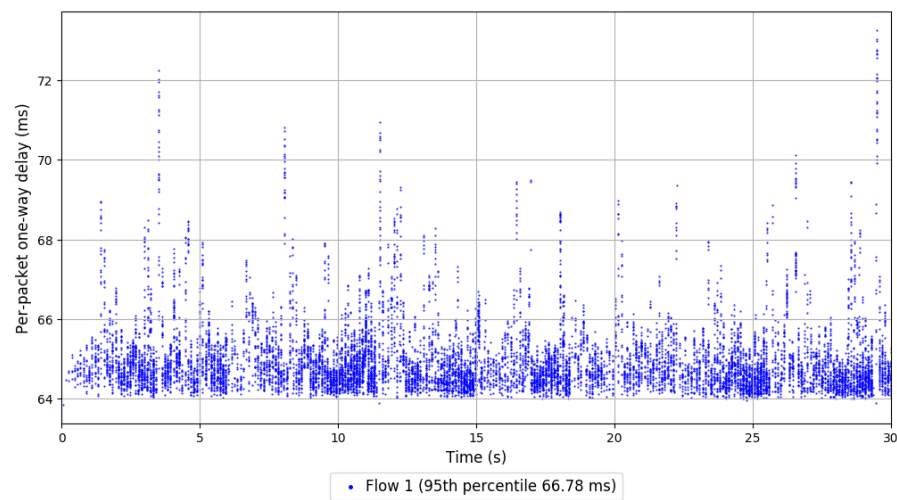
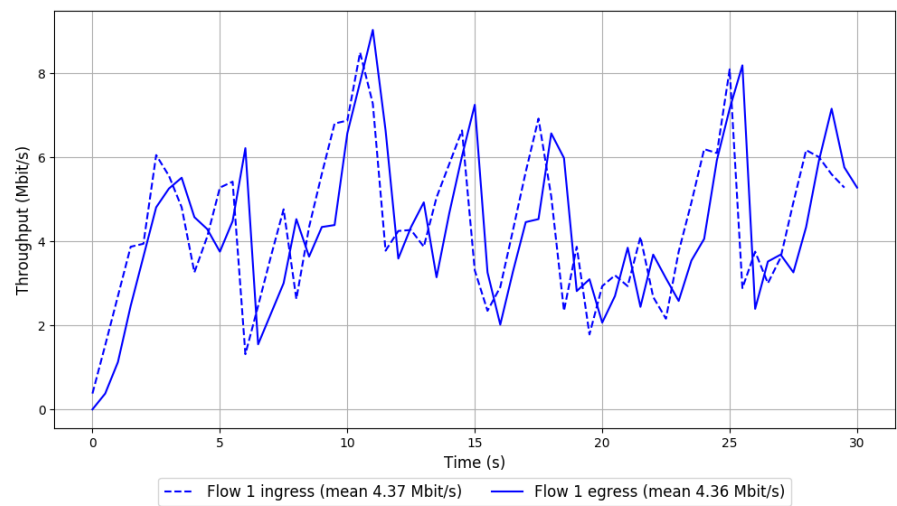


Run 2: Statistics of LEDBAT

Start at: 2018-06-29 13:32:15  
End at: 2018-06-29 13:32:45  
Local clock offset: -1.779 ms  
Remote clock offset: -11.217 ms

# Below is generated by plot.py at 2018-06-29 19:20:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.36 Mbit/s  
95th percentile per-packet one-way delay: 66.785 ms  
Loss rate: 0.28%  
-- Flow 1:  
Average throughput: 4.36 Mbit/s  
95th percentile per-packet one-way delay: 66.785 ms  
Loss rate: 0.28%

Run 2: Report of LEDBAT — Data Link

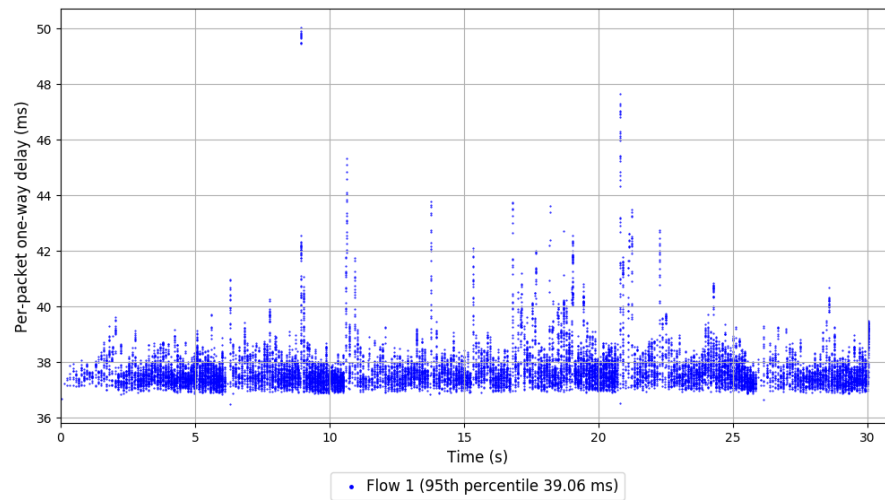
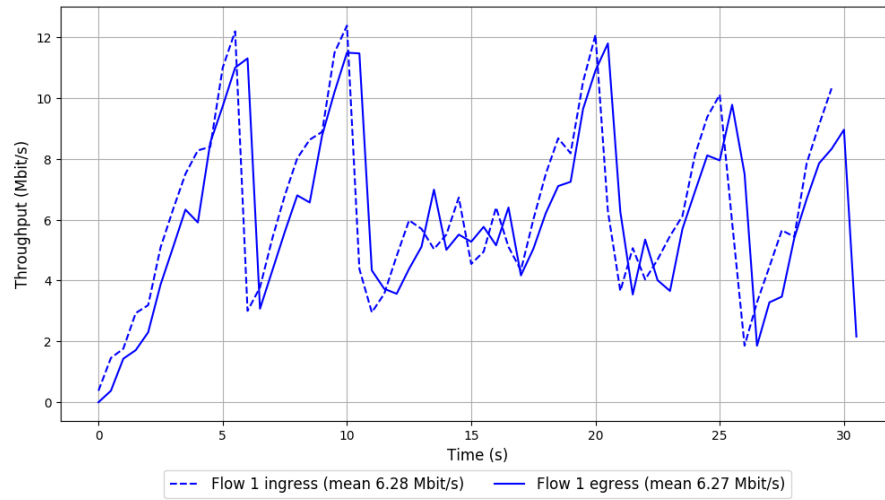


Run 3: Statistics of LEDBAT

Start at: 2018-06-29 14:10:36  
End at: 2018-06-29 14:11:06  
Local clock offset: -2.891 ms  
Remote clock offset: -36.904 ms

# Below is generated by plot.py at 2018-06-29 19:20:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 6.27 Mbit/s  
95th percentile per-packet one-way delay: 39.056 ms  
Loss rate: 0.17%  
-- Flow 1:  
Average throughput: 6.27 Mbit/s  
95th percentile per-packet one-way delay: 39.056 ms  
Loss rate: 0.17%

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

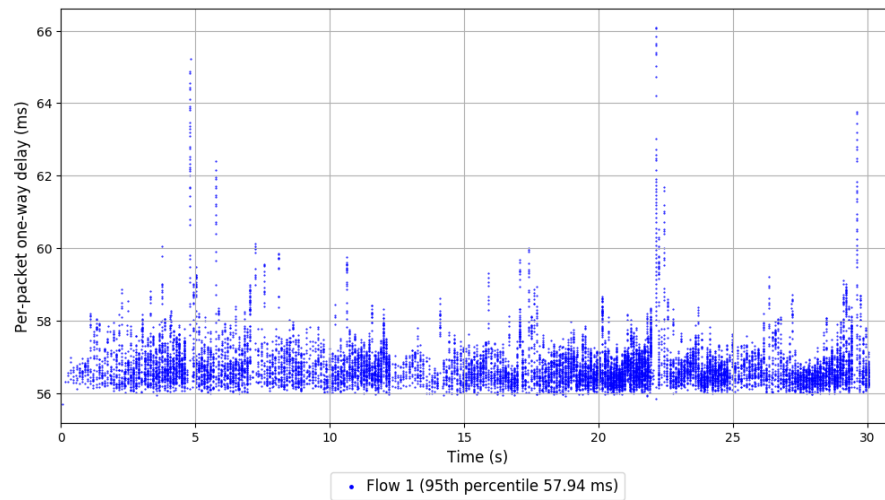
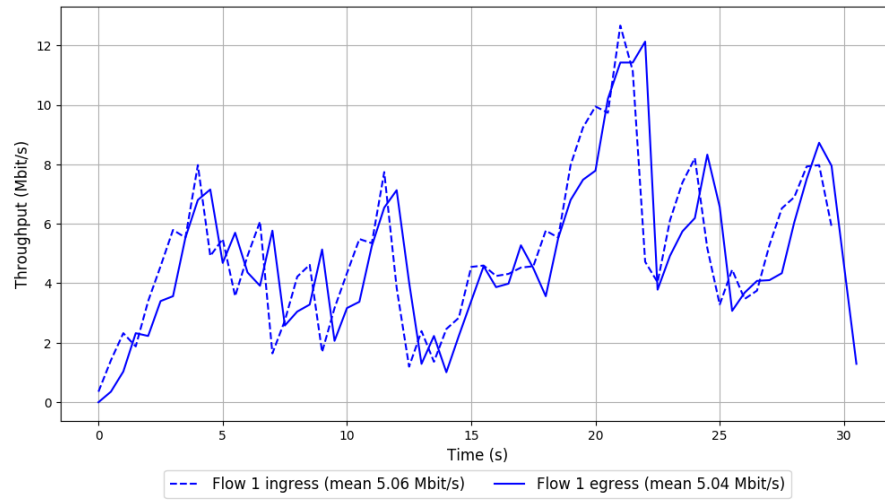


Run 4: Statistics of LEDBAT

Start at: 2018-06-29 14:49:52  
End at: 2018-06-29 14:50:23  
Local clock offset: 5.995 ms  
Remote clock offset: -19.371 ms

# Below is generated by plot.py at 2018-06-29 19:20:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 5.04 Mbit/s  
95th percentile per-packet one-way delay: 57.936 ms  
Loss rate: 0.38%  
-- Flow 1:  
Average throughput: 5.04 Mbit/s  
95th percentile per-packet one-way delay: 57.936 ms  
Loss rate: 0.38%

#### Run 4: Report of LEDBAT — Data Link



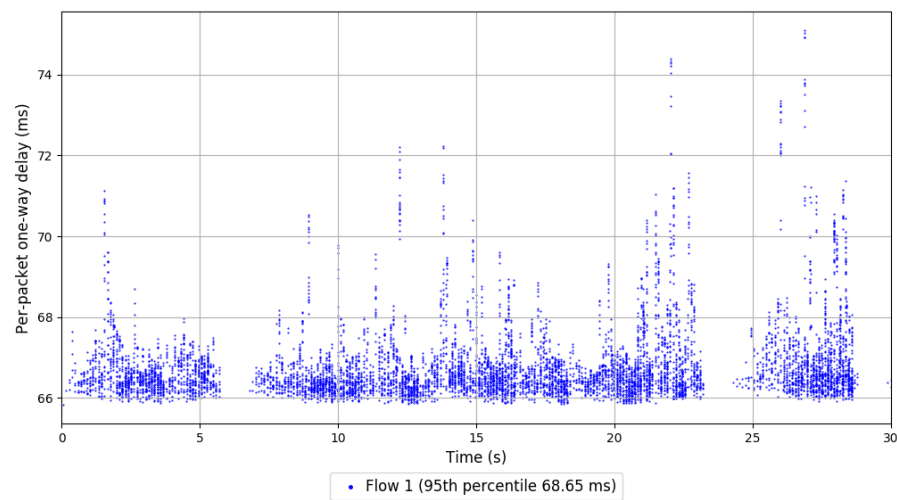
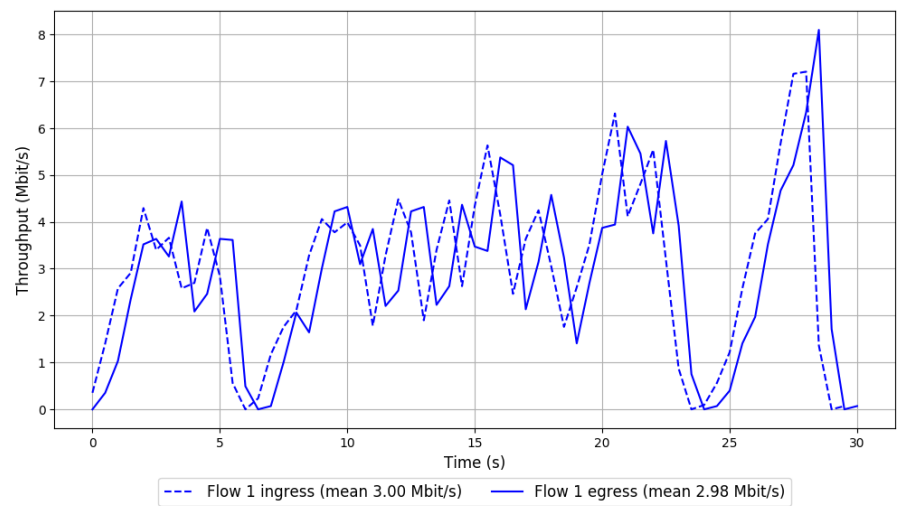
Run 5: Statistics of LEDBAT

Start at: 2018-06-29 15:26:32  
End at: 2018-06-29 15:27:02  
Local clock offset: 8.896 ms  
Remote clock offset: -7.663 ms

# Below is generated by plot.py at 2018-06-29 19:20:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.98 Mbit/s  
95th percentile per-packet one-way delay: 68.651 ms  
Loss rate: 0.87%  
-- Flow 1:  
Average throughput: 2.98 Mbit/s  
95th percentile per-packet one-way delay: 68.651 ms  
Loss rate: 0.87%



Run 5: Report of LEDBAT — Data Link

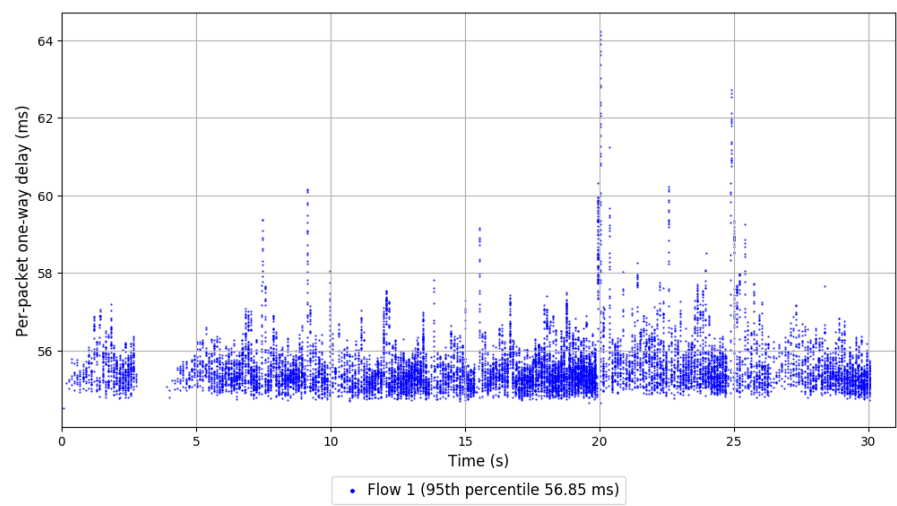
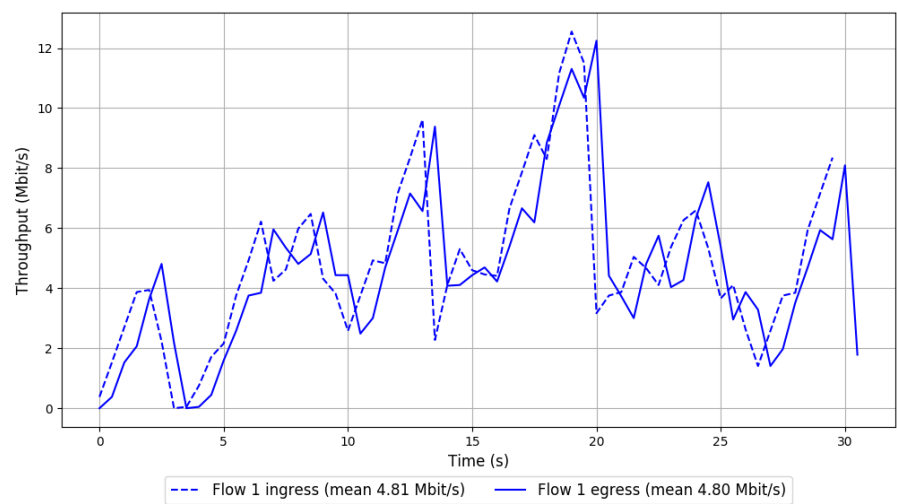


Run 6: Statistics of LEDBAT

Start at: 2018-06-29 16:04:35  
End at: 2018-06-29 16:05:05  
Local clock offset: 4.604 ms  
Remote clock offset: -20.26 ms

# Below is generated by plot.py at 2018-06-29 19:20:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.80 Mbit/s  
95th percentile per-packet one-way delay: 56.851 ms  
Loss rate: 0.37%  
-- Flow 1:  
Average throughput: 4.80 Mbit/s  
95th percentile per-packet one-way delay: 56.851 ms  
Loss rate: 0.37%

Run 6: Report of LEDBAT — Data Link

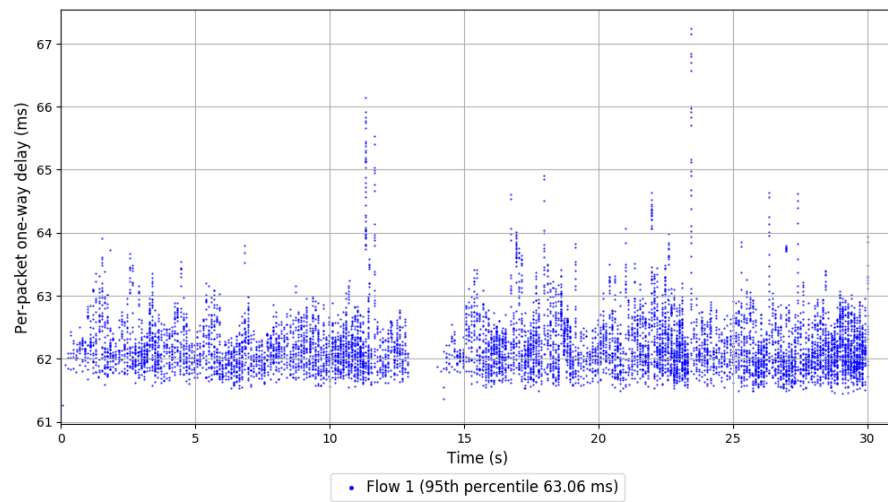
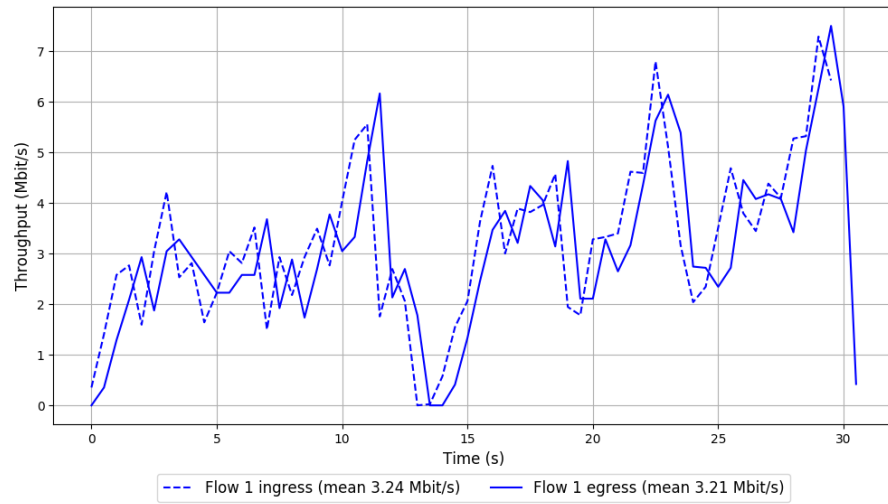


Run 7: Statistics of LEDBAT

Start at: 2018-06-29 16:41:12  
End at: 2018-06-29 16:41:42  
Local clock offset: -5.729 ms  
Remote clock offset: -13.717 ms

# Below is generated by plot.py at 2018-06-29 19:20:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 3.21 Mbit/s  
95th percentile per-packet one-way delay: 63.056 ms  
Loss rate: 0.89%  
-- Flow 1:  
Average throughput: 3.21 Mbit/s  
95th percentile per-packet one-way delay: 63.056 ms  
Loss rate: 0.89%

## Run 7: Report of LEDBAT — Data Link

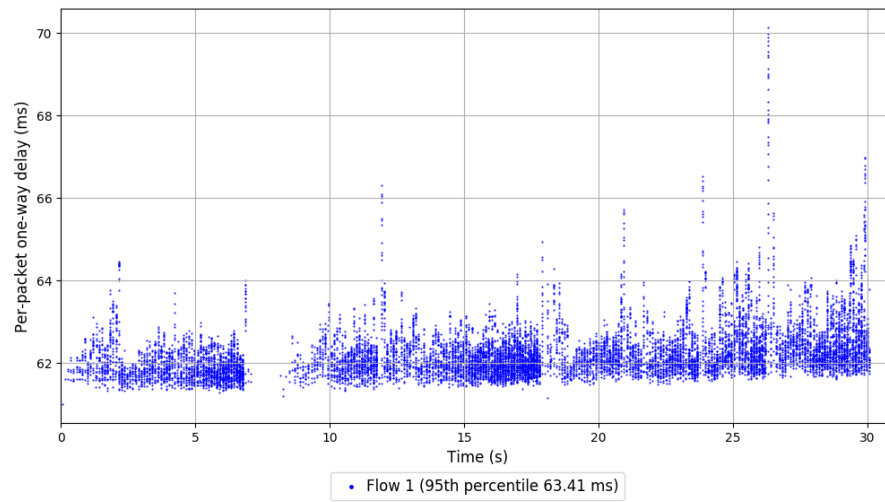
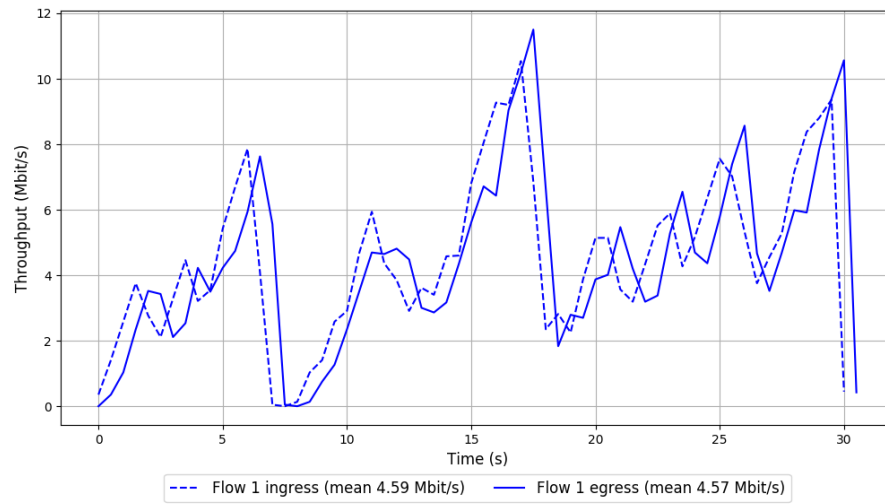


Run 8: Statistics of LEDBAT

Start at: 2018-06-29 17:17:32  
End at: 2018-06-29 17:18:02  
Local clock offset: 2.215 ms  
Remote clock offset: -15.143 ms

# Below is generated by plot.py at 2018-06-29 19:20:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.57 Mbit/s  
95th percentile per-packet one-way delay: 63.408 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 4.57 Mbit/s  
95th percentile per-packet one-way delay: 63.408 ms  
Loss rate: 0.52%

### Run 8: Report of LEDBAT — Data Link



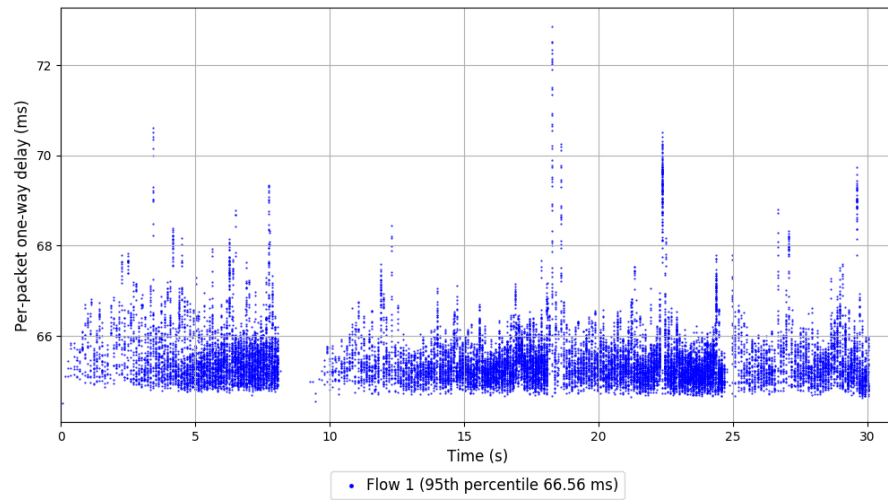
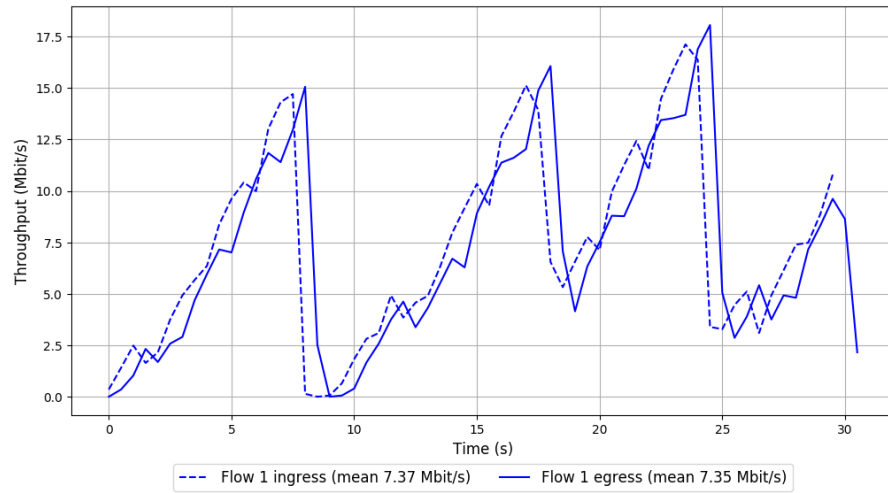
Run 9: Statistics of LEDBAT

Start at: 2018-06-29 17:57:57  
End at: 2018-06-29 17:58:27  
Local clock offset: 5.53 ms  
Remote clock offset: -11.282 ms

# Below is generated by plot.py at 2018-06-29 19:20:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 7.35 Mbit/s  
95th percentile per-packet one-way delay: 66.560 ms  
Loss rate: 0.22%  
-- Flow 1:  
Average throughput: 7.35 Mbit/s  
95th percentile per-packet one-way delay: 66.560 ms  
Loss rate: 0.22%



### Run 9: Report of LEDBAT — Data Link

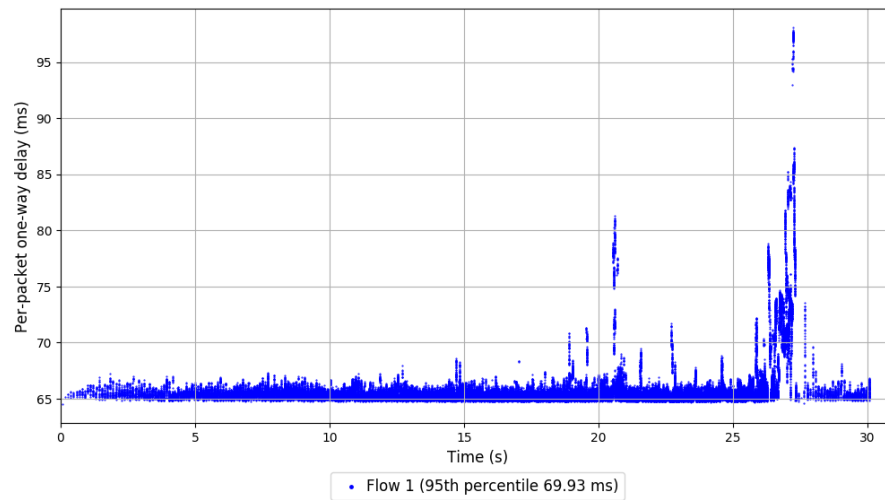
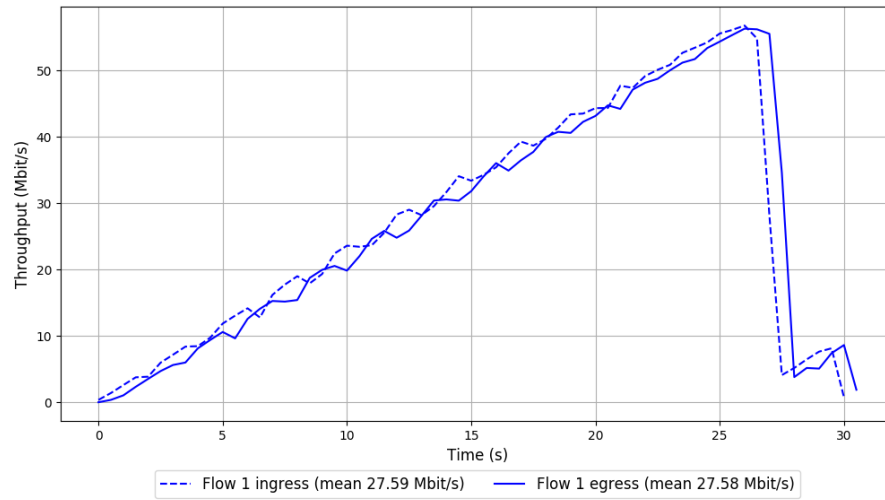


Run 10: Statistics of LEDBAT

Start at: 2018-06-29 18:38:25  
End at: 2018-06-29 18:38:55  
Local clock offset: -0.979 ms  
Remote clock offset: -10.926 ms

# Below is generated by plot.py at 2018-06-29 19:20:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 27.58 Mbit/s  
95th percentile per-packet one-way delay: 69.930 ms  
Loss rate: 0.05%  
-- Flow 1:  
Average throughput: 27.58 Mbit/s  
95th percentile per-packet one-way delay: 69.930 ms  
Loss rate: 0.05%

## Run 10: Report of LEDBAT — Data Link

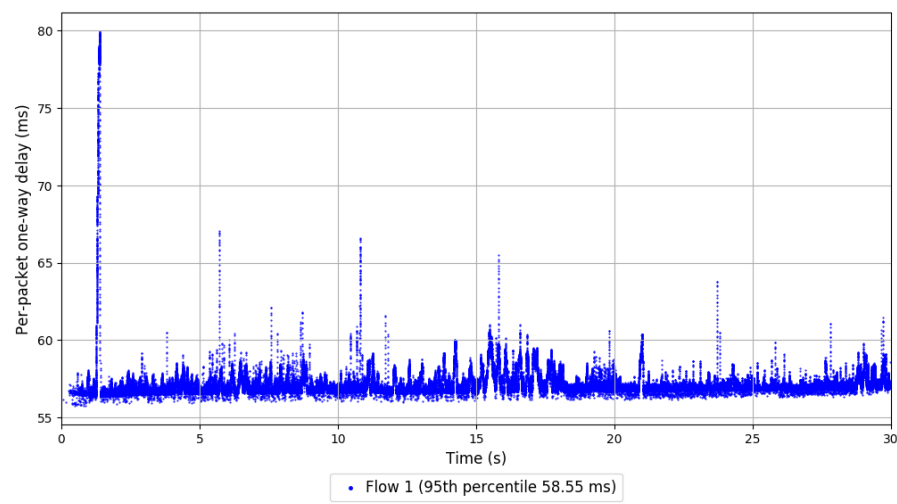
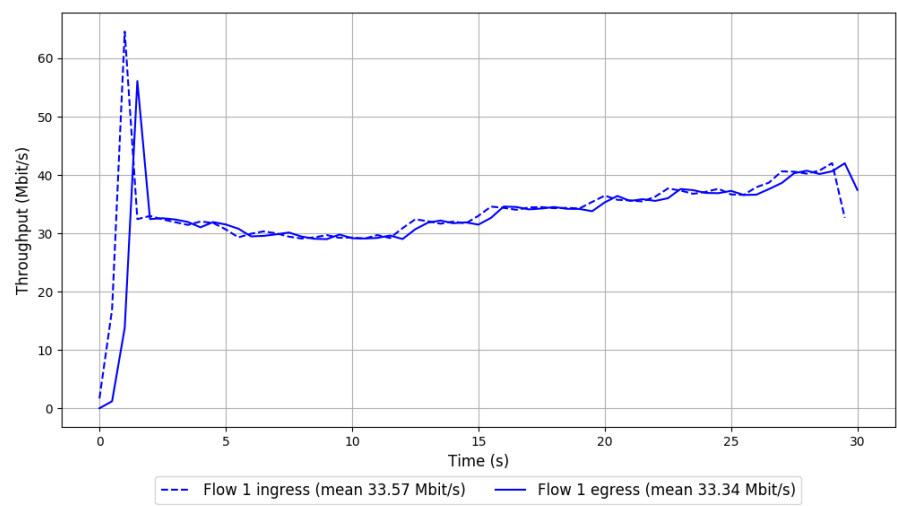


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-29 12:54:51
End at: 2018-06-29 12:55:21
Local clock offset: -6.075 ms
Remote clock offset: -18.525 ms

# Below is generated by plot.py at 2018-06-29 19:21:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.34 Mbit/s
95th percentile per-packet one-way delay: 58.548 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 33.34 Mbit/s
95th percentile per-packet one-way delay: 58.548 ms
Loss rate: 0.65%
```

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-06-29 13:33:40

End at: 2018-06-29 13:34:10

Local clock offset: -1.969 ms

Remote clock offset: -11.095 ms

# Below is generated by plot.py at 2018-06-29 19:21:27

# Datalink statistics

-- Total of 1 flow:

Average throughput: 59.34 Mbit/s

95th percentile per-packet one-way delay: 86.036 ms

Loss rate: 11.61%

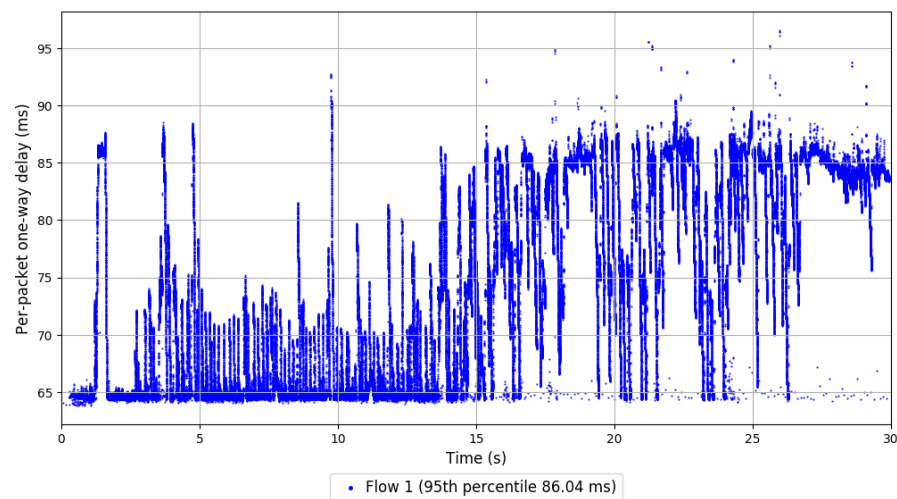
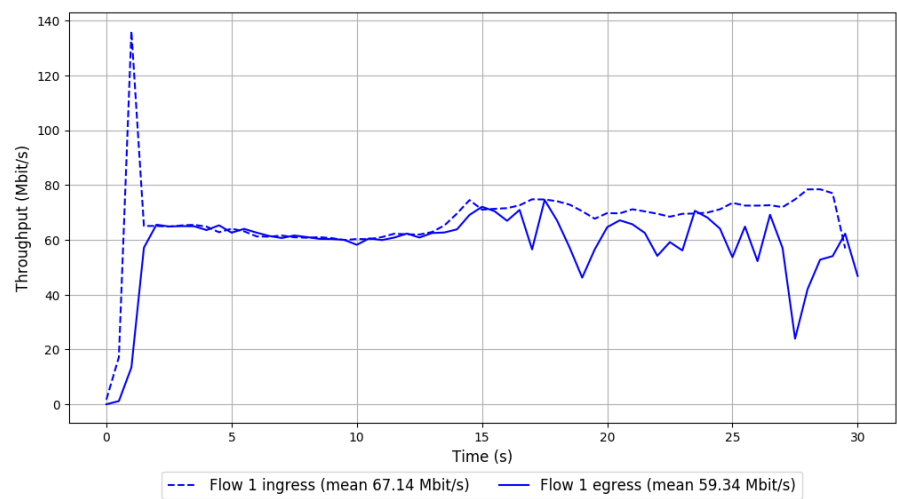
-- Flow 1:

Average throughput: 59.34 Mbit/s

95th percentile per-packet one-way delay: 86.036 ms

Loss rate: 11.61%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-06-29 14:12:07

End at: 2018-06-29 14:12:37

Local clock offset: -3.071 ms

Remote clock offset: -28.561 ms

# Below is generated by plot.py at 2018-06-29 19:21:27

# Datalink statistics

-- Total of 1 flow:

Average throughput: 14.49 Mbit/s

95th percentile per-packet one-way delay: 46.092 ms

Loss rate: 0.14%

-- Flow 1:

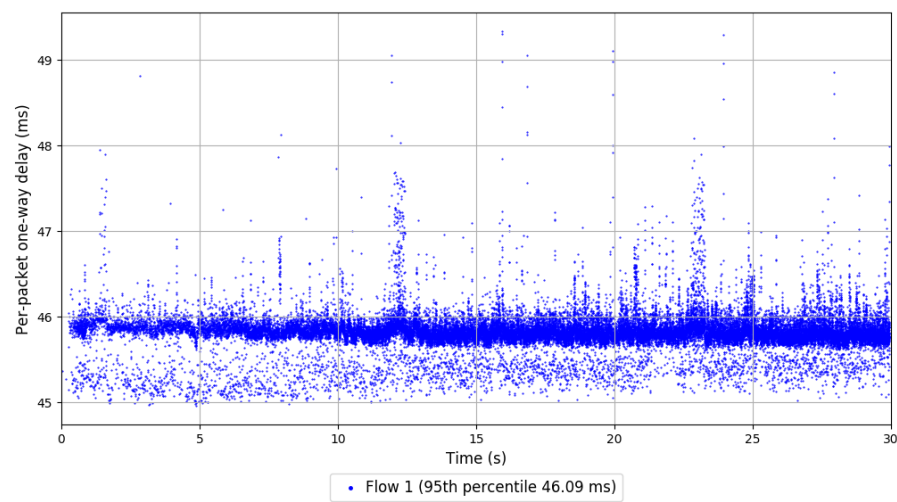
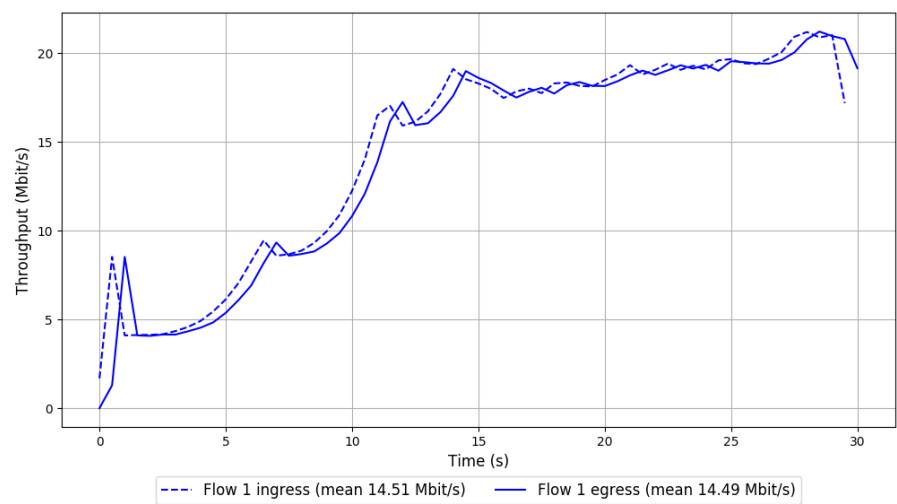
Average throughput: 14.49 Mbit/s

95th percentile per-packet one-way delay: 46.092 ms

Loss rate: 0.14%



Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-06-29 14:51:20

End at: 2018-06-29 14:51:50

Local clock offset: 6.344 ms

Remote clock offset: -22.039 ms

# Below is generated by plot.py at 2018-06-29 19:21:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 68.49 Mbit/s

95th percentile per-packet one-way delay: 66.079 ms

Loss rate: 2.55%

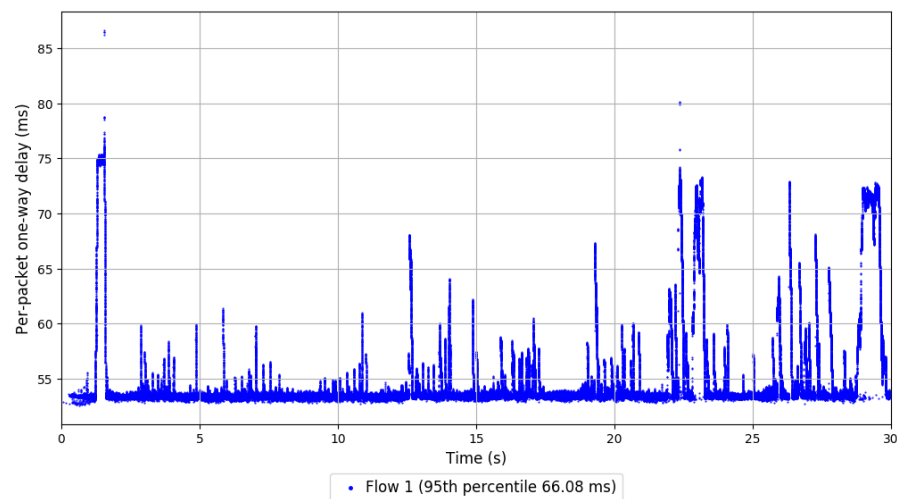
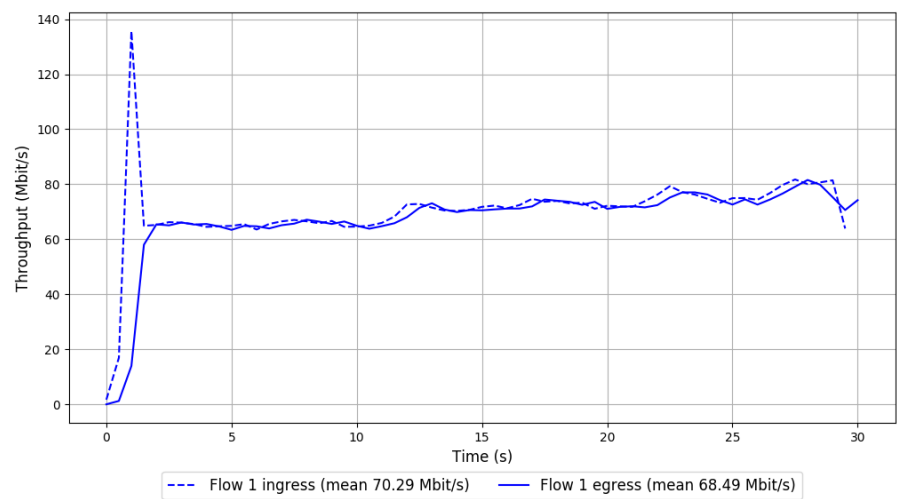
-- Flow 1:

Average throughput: 68.49 Mbit/s

95th percentile per-packet one-way delay: 66.079 ms

Loss rate: 2.55%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-06-29 15:27:54

End at: 2018-06-29 15:28:24

Local clock offset: 8.894 ms

Remote clock offset: -18.535 ms

# Below is generated by plot.py at 2018-06-29 19:21:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 36.15 Mbit/s

95th percentile per-packet one-way delay: 55.526 ms

Loss rate: 1.20%

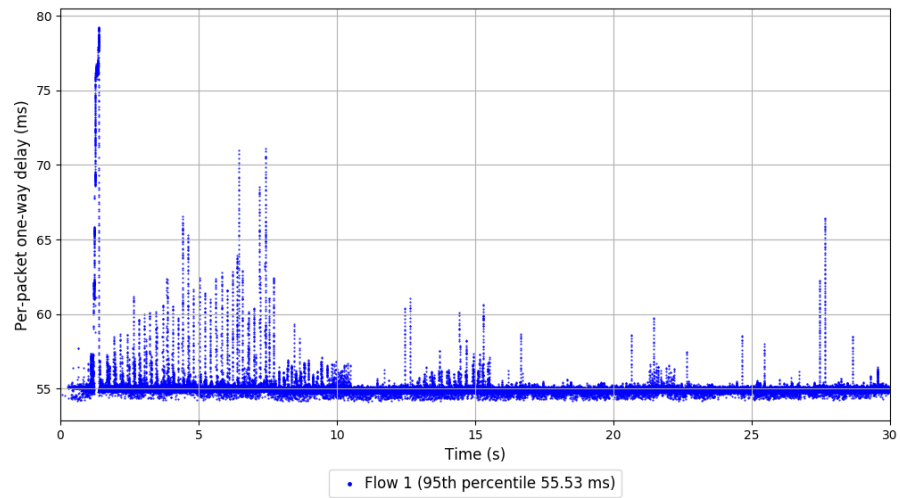
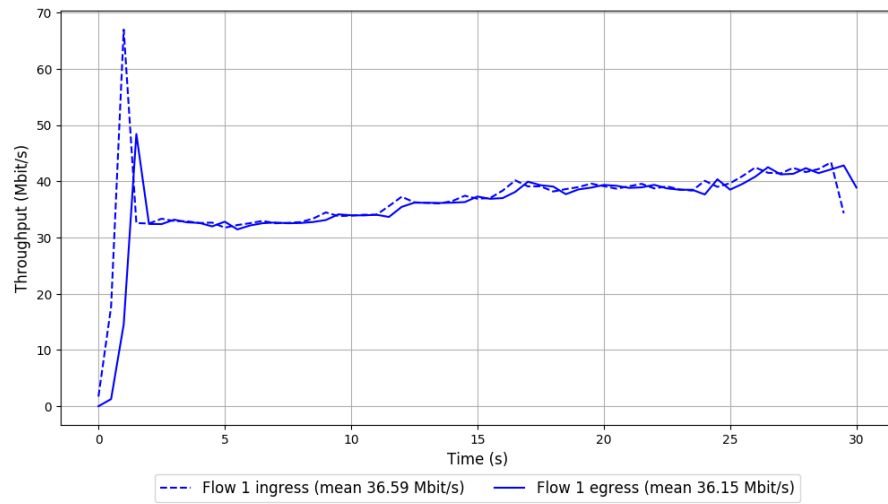
-- Flow 1:

Average throughput: 36.15 Mbit/s

95th percentile per-packet one-way delay: 55.526 ms

Loss rate: 1.20%

### Run 5: Report of PCC-Allegro — Data Link



Run 6: Statistics of PCC-Allegro

Start at: 2018-06-29 16:06:03

End at: 2018-06-29 16:06:33

Local clock offset: 4.422 ms

Remote clock offset: -10.954 ms

# Below is generated by plot.py at 2018-06-29 19:21:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 14.12 Mbit/s

95th percentile per-packet one-way delay: 64.964 ms

Loss rate: 0.70%

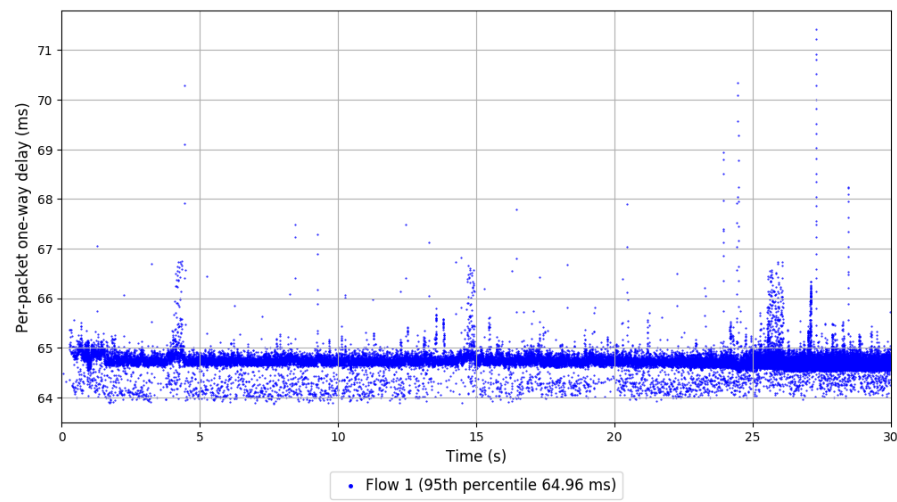
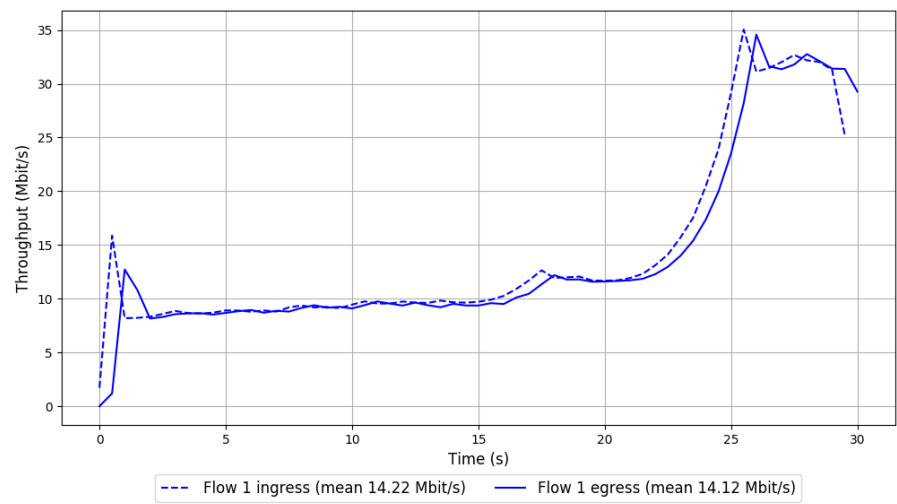
-- Flow 1:

Average throughput: 14.12 Mbit/s

95th percentile per-packet one-way delay: 64.964 ms

Loss rate: 0.70%

Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

Start at: 2018-06-29 16:42:34

End at: 2018-06-29 16:43:04

Local clock offset: -6.097 ms

Remote clock offset: -15.827 ms

# Below is generated by plot.py at 2018-06-29 19:21:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 10.45 Mbit/s

95th percentile per-packet one-way delay: 59.819 ms

Loss rate: 0.81%

-- Flow 1:

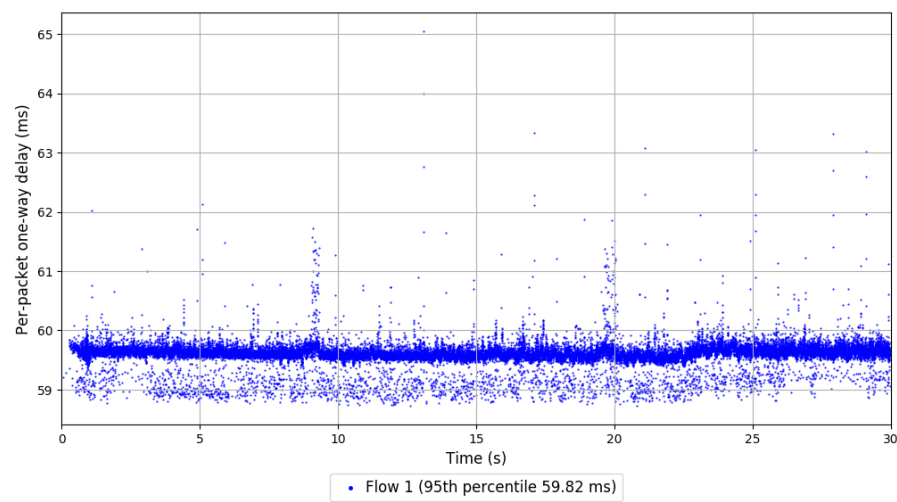
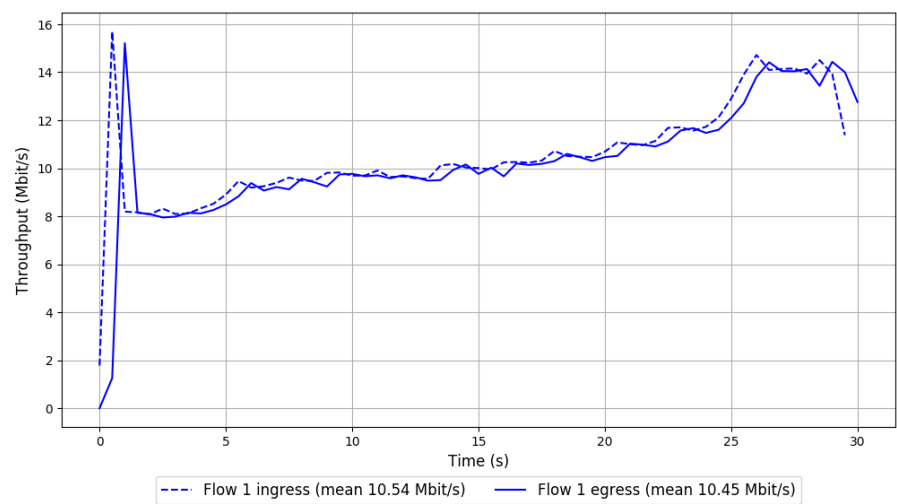
Average throughput: 10.45 Mbit/s

95th percentile per-packet one-way delay: 59.819 ms

Loss rate: 0.81%



Run 7: Report of PCC-Allegro — Data Link



Run 8: Statistics of PCC-Allegro

Start at: 2018-06-29 17:19:00

End at: 2018-06-29 17:19:30

Local clock offset: 2.859 ms

Remote clock offset: -11.58 ms

# Below is generated by plot.py at 2018-06-29 19:21:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 70.38 Mbit/s

95th percentile per-packet one-way delay: 70.046 ms

Loss rate: 2.33%

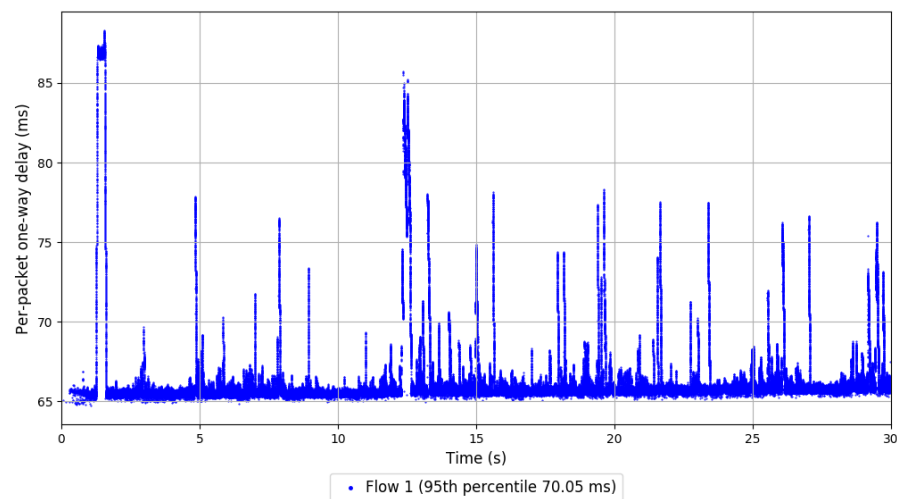
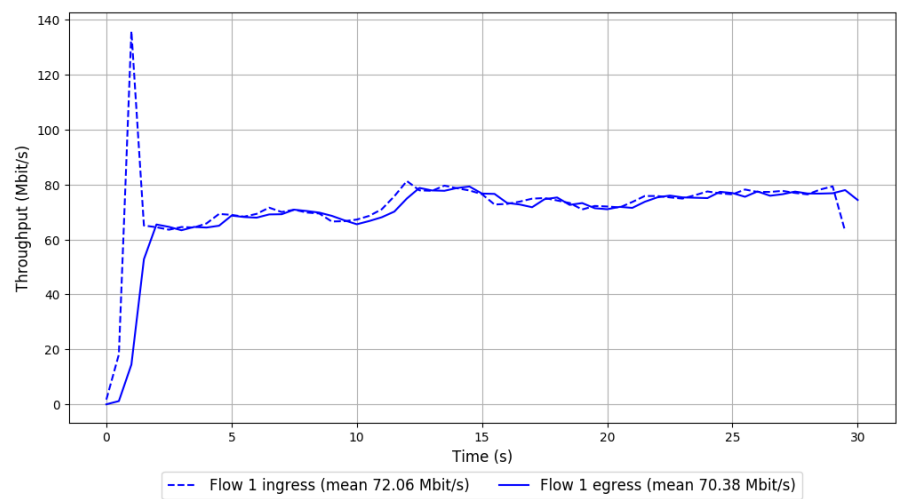
-- Flow 1:

Average throughput: 70.38 Mbit/s

95th percentile per-packet one-way delay: 70.046 ms

Loss rate: 2.33%

Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-06-29 17:59:31

End at: 2018-06-29 18:00:01

Local clock offset: 5.21 ms

Remote clock offset: -11.269 ms

# Below is generated by plot.py at 2018-06-29 19:21:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 11.47 Mbit/s

95th percentile per-packet one-way delay: 65.001 ms

Loss rate: 0.13%

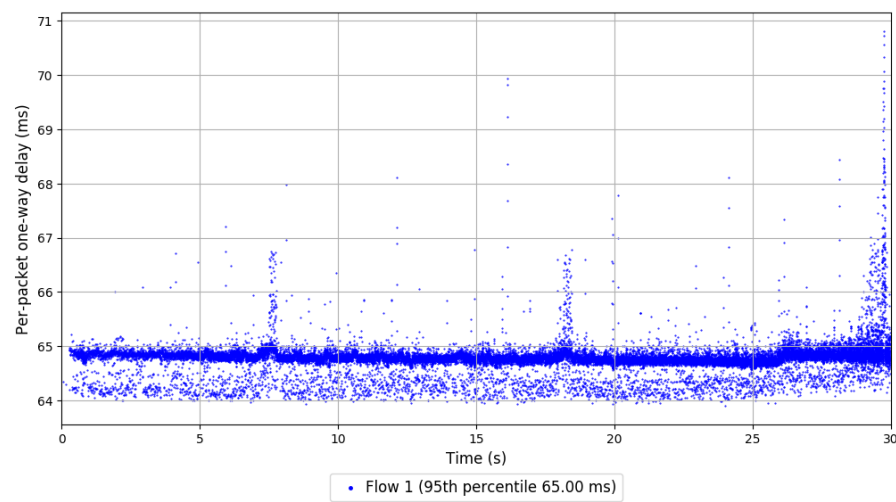
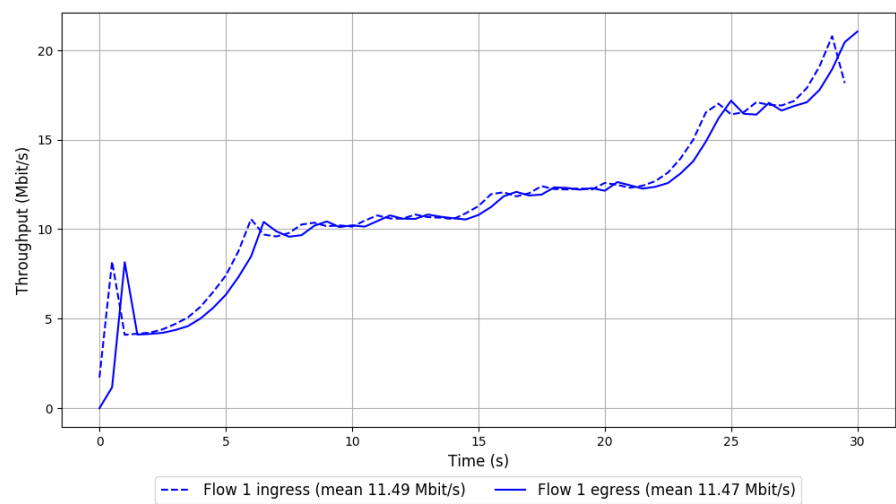
-- Flow 1:

Average throughput: 11.47 Mbit/s

95th percentile per-packet one-way delay: 65.001 ms

Loss rate: 0.13%

Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-06-29 18:40:53

End at: 2018-06-29 18:41:23

Local clock offset: -1.05 ms

Remote clock offset: -10.994 ms

# Below is generated by plot.py at 2018-06-29 19:21:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 49.80 Mbit/s

95th percentile per-packet one-way delay: 65.007 ms

Loss rate: 0.01%

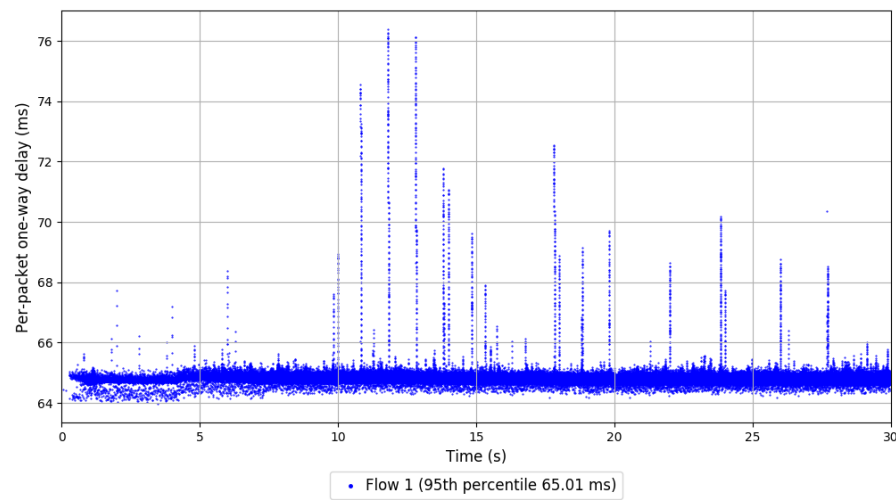
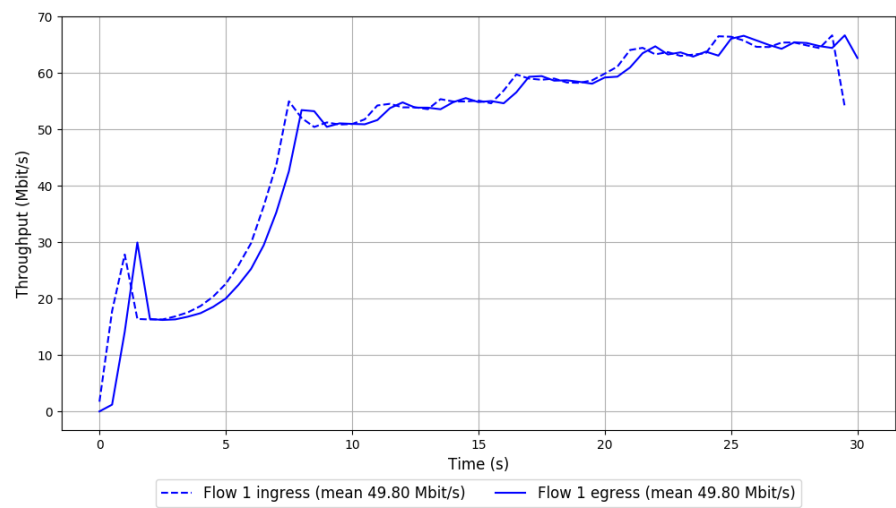
-- Flow 1:

Average throughput: 49.80 Mbit/s

95th percentile per-packet one-way delay: 65.007 ms

Loss rate: 0.01%

Run 10: Report of PCC-Allegro — Data Link



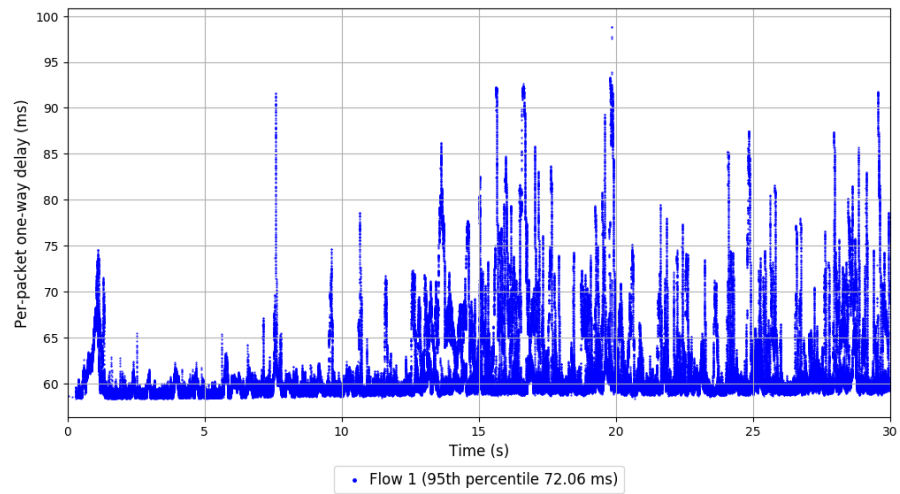
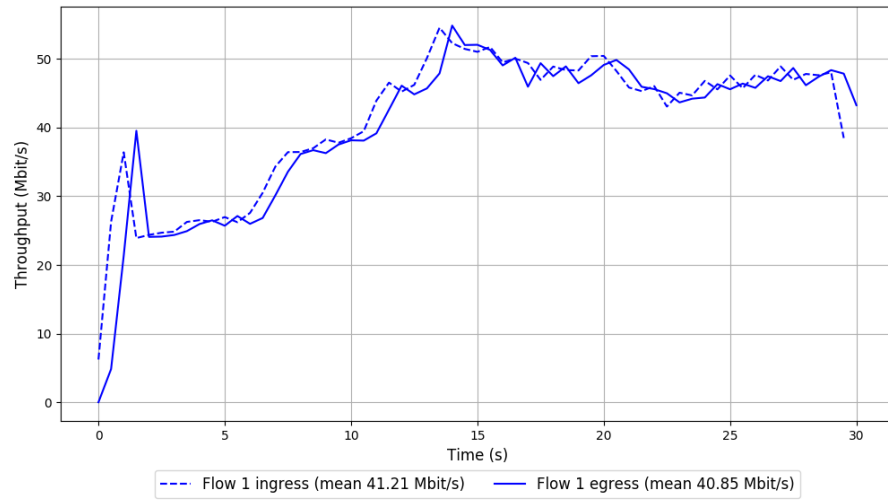
```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-29 13:07:01
End at: 2018-06-29 13:07:31
Local clock offset: 2.101 ms
Remote clock offset: -15.089 ms

# Below is generated by plot.py at 2018-06-29 19:22:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.85 Mbit/s
95th percentile per-packet one-way delay: 72.061 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 40.85 Mbit/s
95th percentile per-packet one-way delay: 72.061 ms
Loss rate: 0.86%
```



# Run 1: Report of PCC-Expr — Data Link

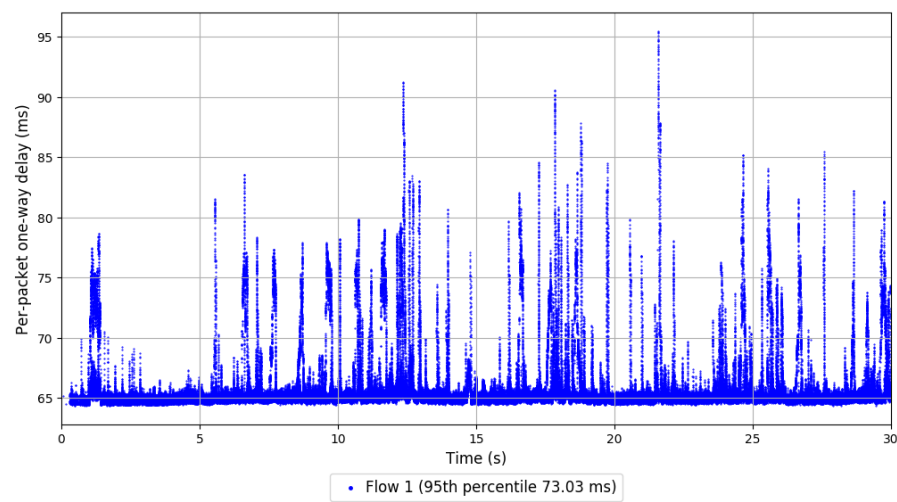
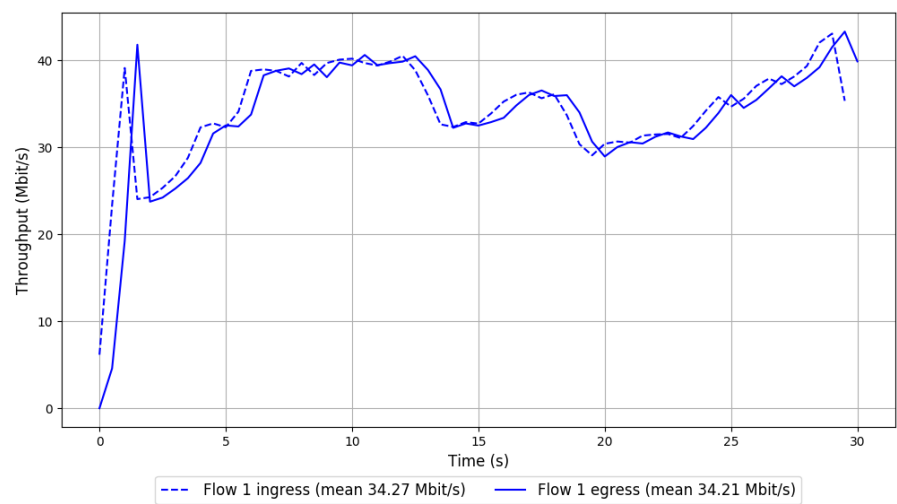


Run 2: Statistics of PCC-Expr

Start at: 2018-06-29 13:44:40  
End at: 2018-06-29 13:45:10  
Local clock offset: -2.58 ms  
Remote clock offset: -10.573 ms

# Below is generated by plot.py at 2018-06-29 19:22:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 34.21 Mbit/s  
95th percentile per-packet one-way delay: 73.025 ms  
Loss rate: 0.17%  
-- Flow 1:  
Average throughput: 34.21 Mbit/s  
95th percentile per-packet one-way delay: 73.025 ms  
Loss rate: 0.17%

Run 2: Report of PCC-Expr — Data Link

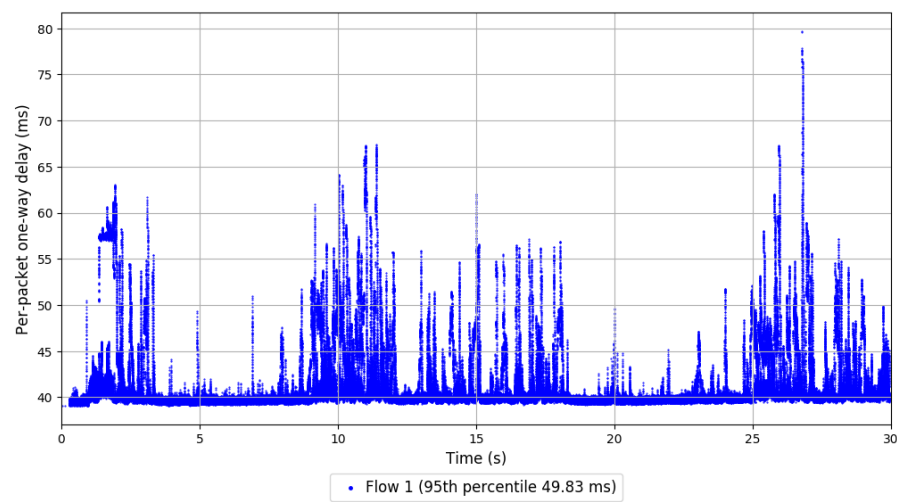
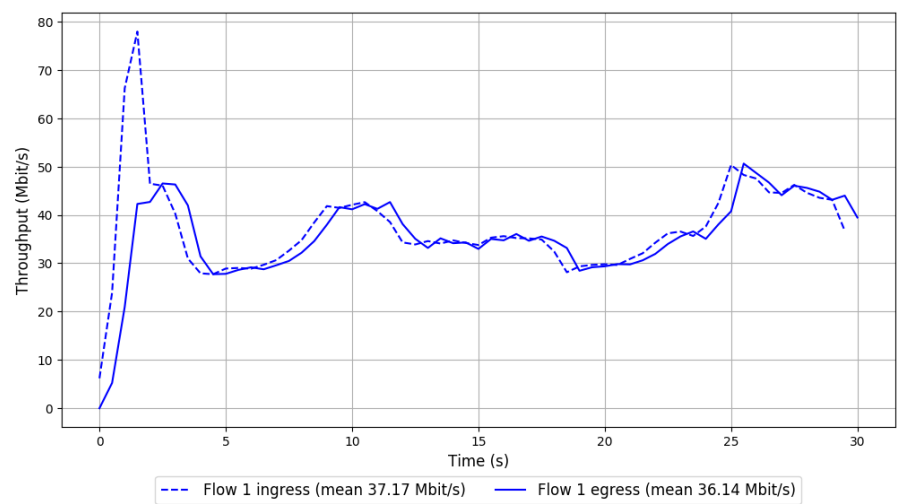


Run 3: Statistics of PCC-Expr

Start at: 2018-06-29 14:23:47  
End at: 2018-06-29 14:24:17  
Local clock offset: 1.327 ms  
Remote clock offset: -35.075 ms

# Below is generated by plot.py at 2018-06-29 19:22:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 36.14 Mbit/s  
95th percentile per-packet one-way delay: 49.833 ms  
Loss rate: 2.78%  
-- Flow 1:  
Average throughput: 36.14 Mbit/s  
95th percentile per-packet one-way delay: 49.833 ms  
Loss rate: 2.78%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-06-29 15:03:02

End at: 2018-06-29 15:03:32

Local clock offset: 7.506 ms

Remote clock offset: -8.443 ms

# Below is generated by plot.py at 2018-06-29 19:22:04

# Datalink statistics

-- Total of 1 flow:

Average throughput: 31.77 Mbit/s

95th percentile per-packet one-way delay: 70.993 ms

Loss rate: 0.44%

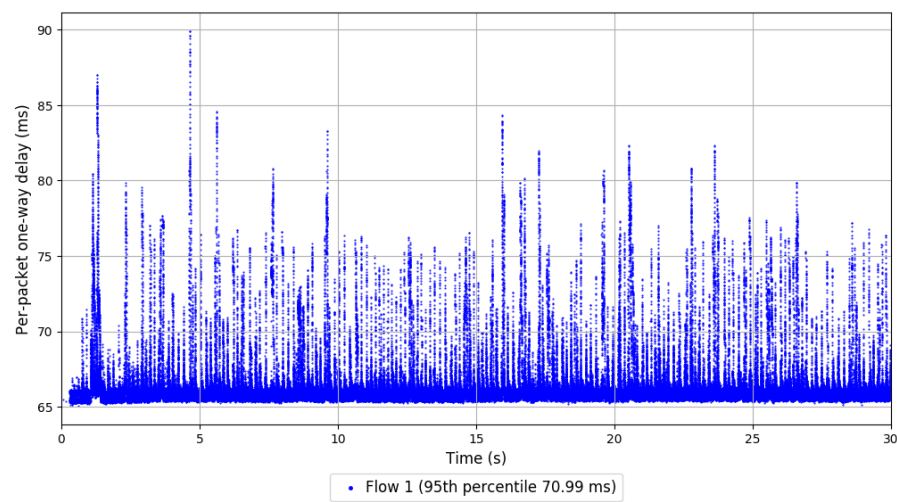
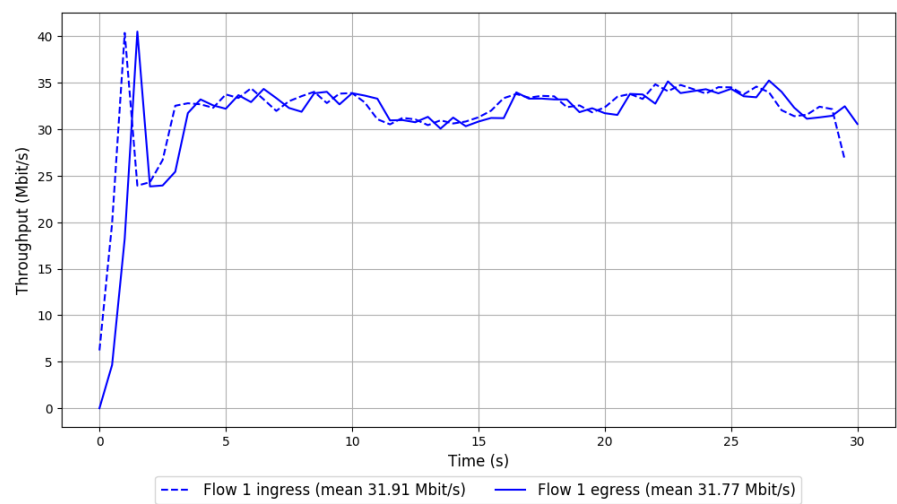
-- Flow 1:

Average throughput: 31.77 Mbit/s

95th percentile per-packet one-way delay: 70.993 ms

Loss rate: 0.44%

Run 4: Report of PCC-Expr — Data Link



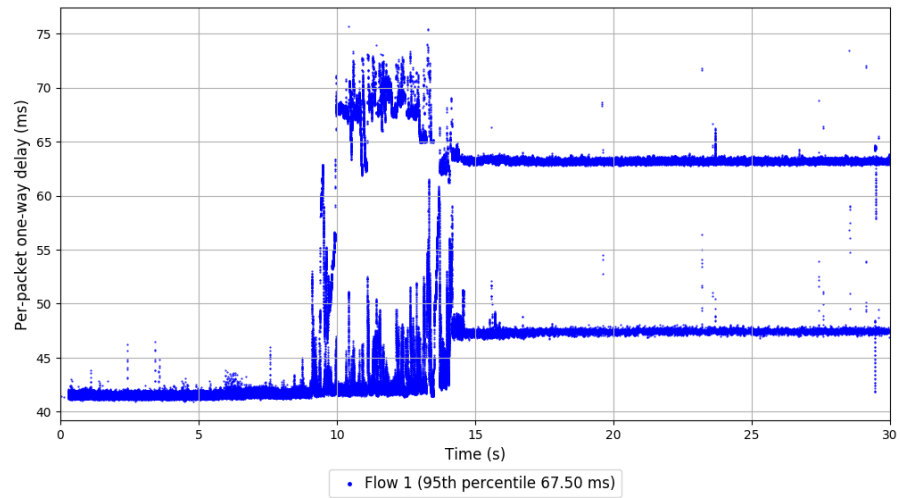
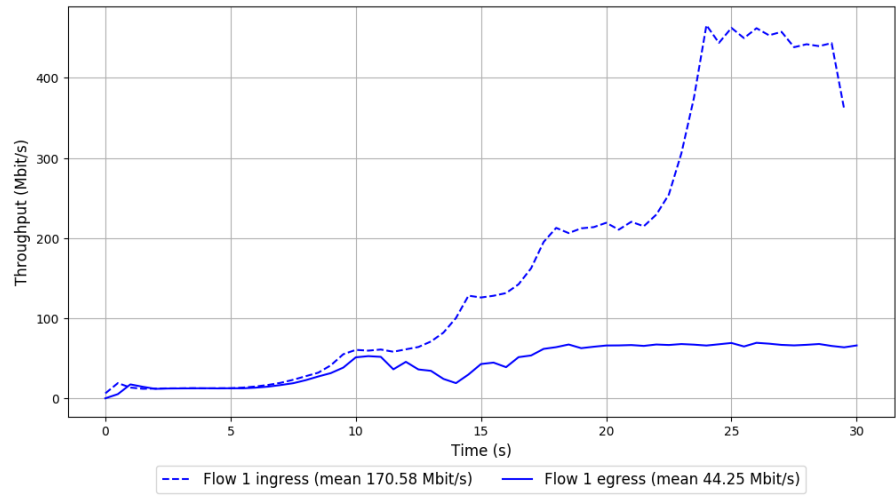
Run 5: Statistics of PCC-Expr

Start at: 2018-06-29 15:39:47  
End at: 2018-06-29 15:40:17  
Local clock offset: 9.42 ms  
Remote clock offset: -32.138 ms

# Below is generated by plot.py at 2018-06-29 19:23:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 44.25 Mbit/s  
95th percentile per-packet one-way delay: 67.496 ms  
Loss rate: 74.04%  
-- Flow 1:  
Average throughput: 44.25 Mbit/s  
95th percentile per-packet one-way delay: 67.496 ms  
Loss rate: 74.04%



## Run 5: Report of PCC-Expr — Data Link

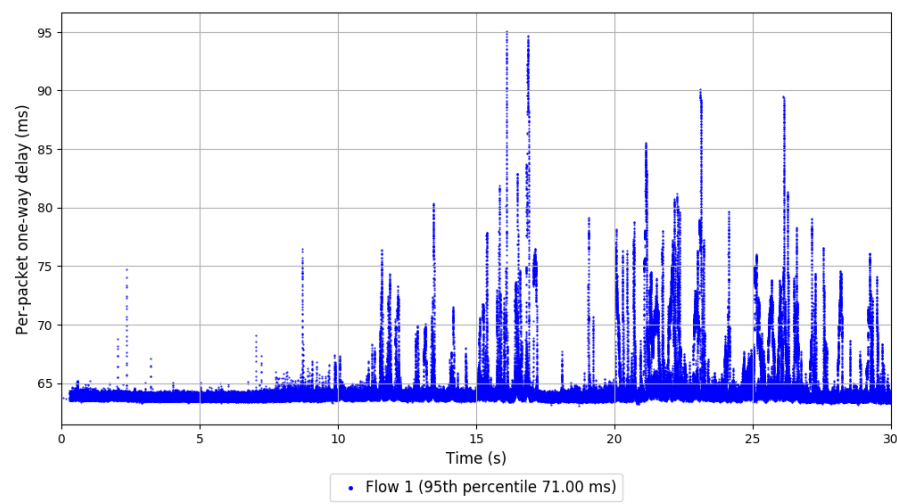
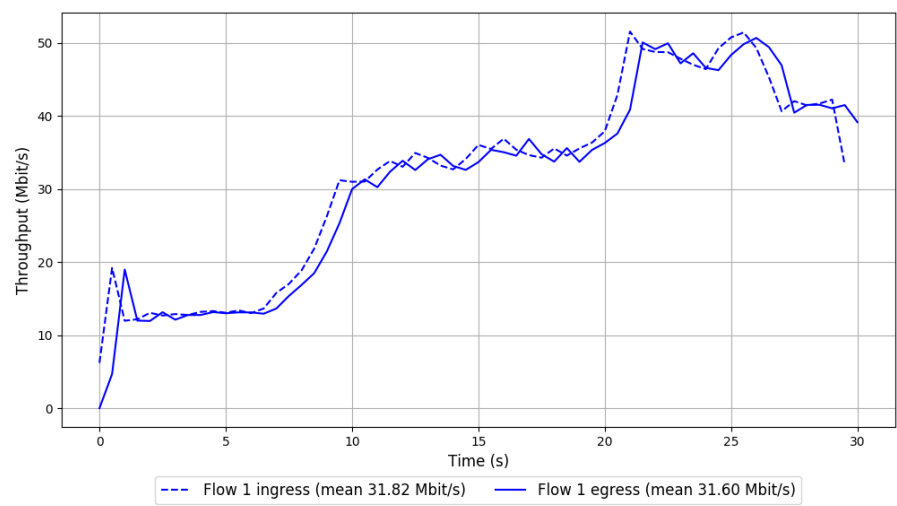


Run 6: Statistics of PCC-Expr

Start at: 2018-06-29 16:16:48  
End at: 2018-06-29 16:17:18  
Local clock offset: 3.186 ms  
Remote clock offset: -11.719 ms

# Below is generated by plot.py at 2018-06-29 19:23:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 31.60 Mbit/s  
95th percentile per-packet one-way delay: 71.003 ms  
Loss rate: 0.70%  
-- Flow 1:  
Average throughput: 31.60 Mbit/s  
95th percentile per-packet one-way delay: 71.003 ms  
Loss rate: 0.70%

Run 6: Report of PCC-Expr — Data Link

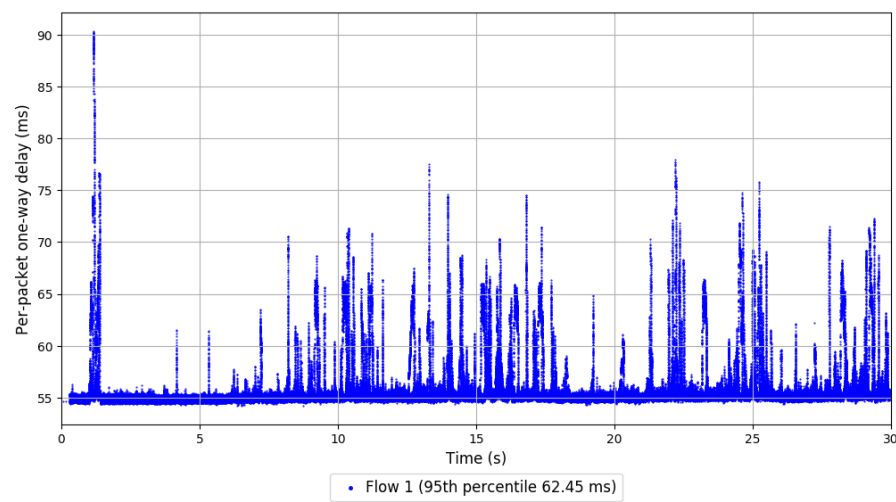
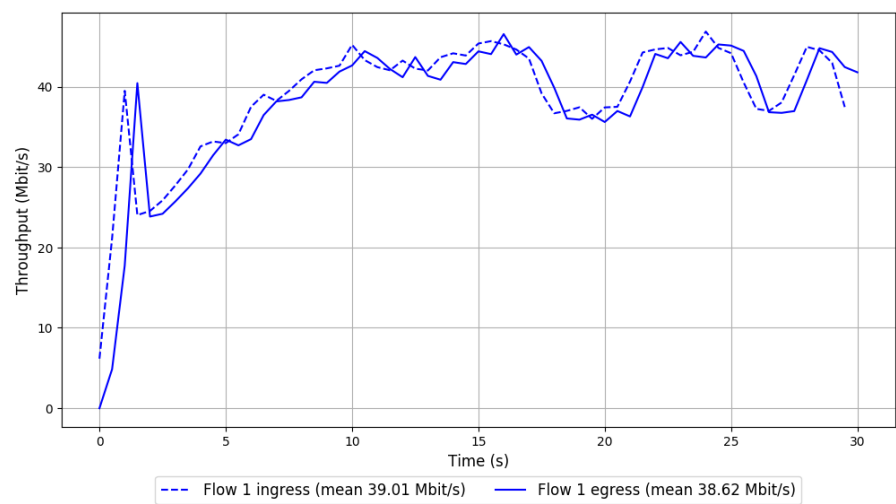


Run 7: Statistics of PCC-Expr

Start at: 2018-06-29 16:53:02  
End at: 2018-06-29 16:53:32  
Local clock offset: -2.286 ms  
Remote clock offset: -20.552 ms

# Below is generated by plot.py at 2018-06-29 19:23:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 38.62 Mbit/s  
95th percentile per-packet one-way delay: 62.445 ms  
Loss rate: 1.00%  
-- Flow 1:  
Average throughput: 38.62 Mbit/s  
95th percentile per-packet one-way delay: 62.445 ms  
Loss rate: 1.00%

Run 7: Report of PCC-Expr — Data Link

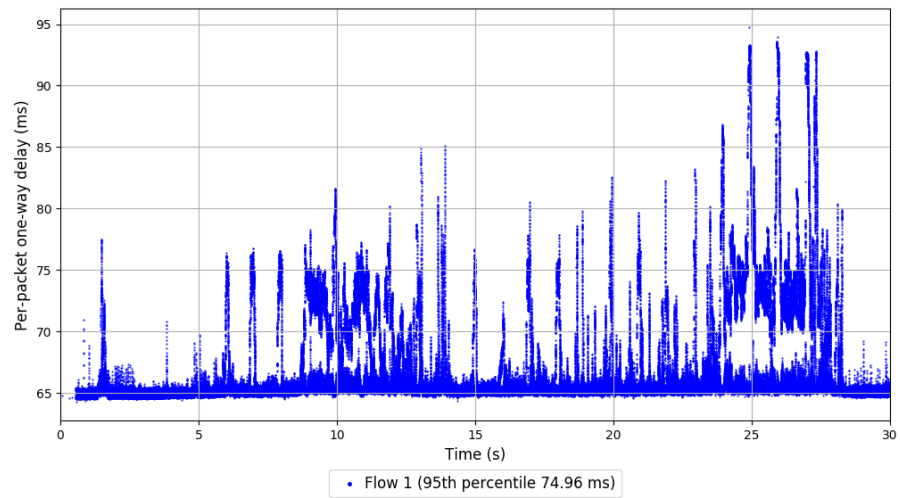
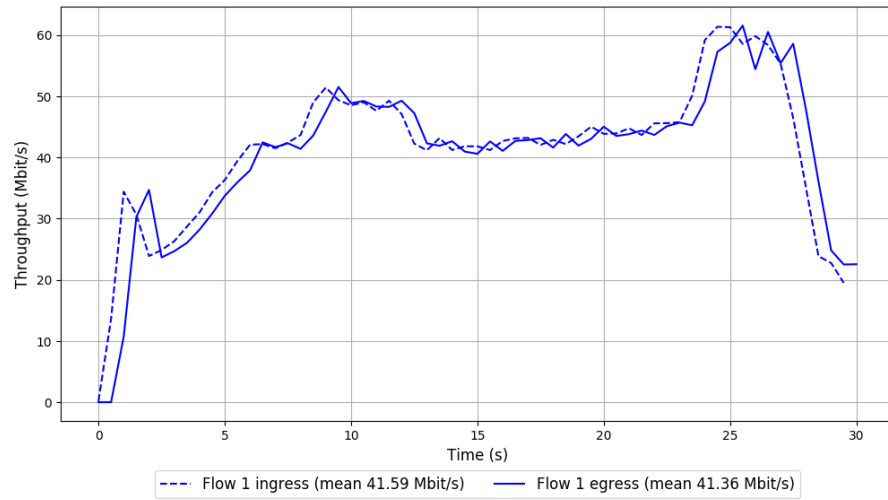


Run 8: Statistics of PCC-Expr

Start at: 2018-06-29 17:31:30  
End at: 2018-06-29 17:32:00  
Local clock offset: 7.513 ms  
Remote clock offset: -12.121 ms

# Below is generated by plot.py at 2018-06-29 19:23:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 41.36 Mbit/s  
95th percentile per-packet one-way delay: 74.962 ms  
Loss rate: 0.54%  
-- Flow 1:  
Average throughput: 41.36 Mbit/s  
95th percentile per-packet one-way delay: 74.962 ms  
Loss rate: 0.54%

# Run 8: Report of PCC-Expr — Data Link



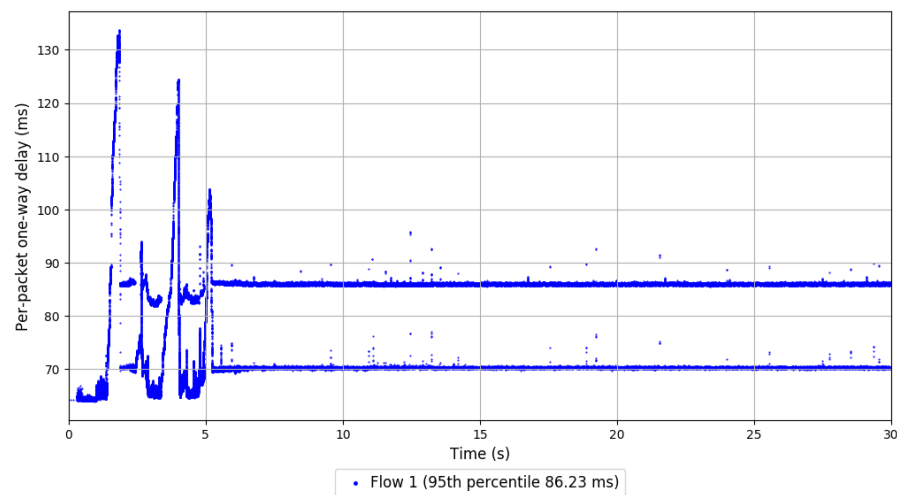
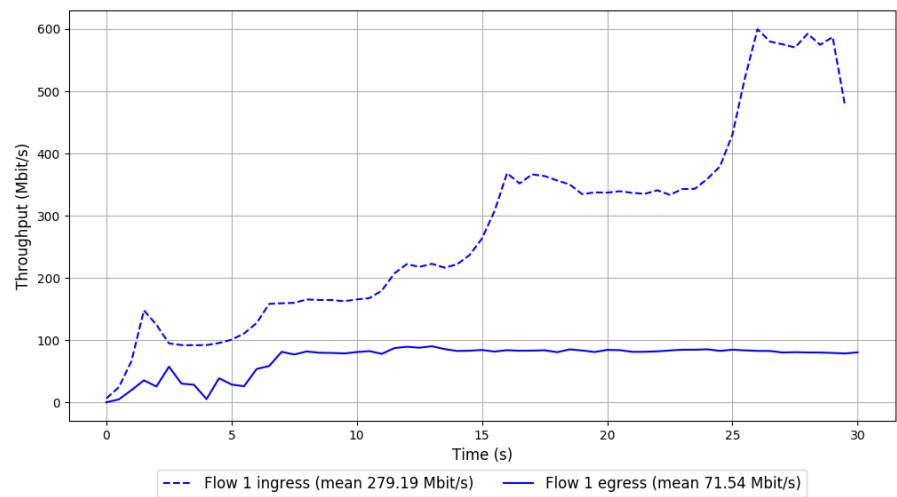
Run 9: Statistics of PCC-Expr

Start at: 2018-06-29 18:10:46  
End at: 2018-06-29 18:11:16  
Local clock offset: 4.563 ms  
Remote clock offset: -11.324 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 71.54 Mbit/s  
95th percentile per-packet one-way delay: 86.229 ms  
Loss rate: 74.36%  
-- Flow 1:  
Average throughput: 71.54 Mbit/s  
95th percentile per-packet one-way delay: 86.229 ms  
Loss rate: 74.36%



Run 9: Report of PCC-Expr — Data Link

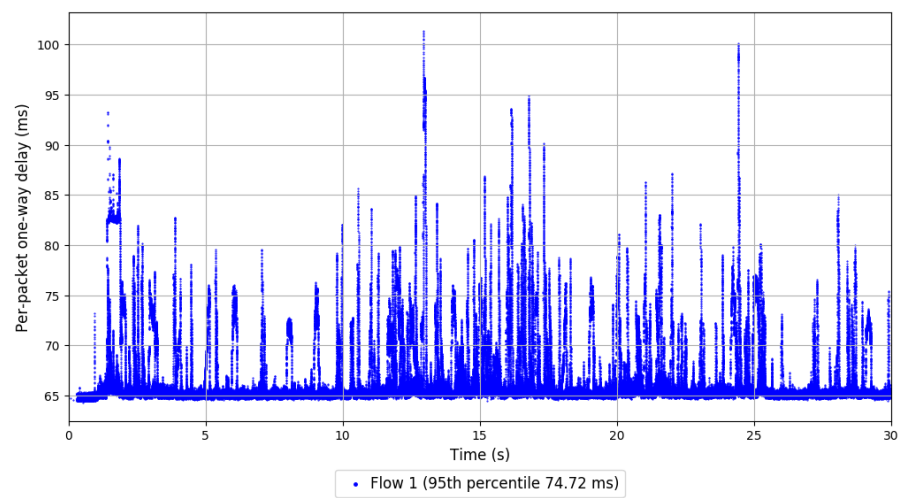
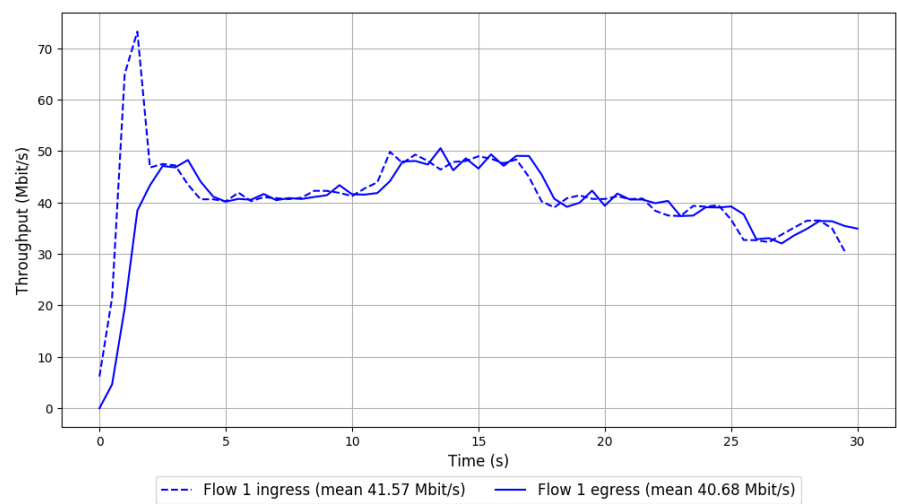


Run 10: Statistics of PCC-Expr

Start at: 2018-06-29 18:53:40  
End at: 2018-06-29 18:54:10  
Local clock offset: -0.134 ms  
Remote clock offset: -11.463 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 40.68 Mbit/s  
95th percentile per-packet one-way delay: 74.724 ms  
Loss rate: 2.15%  
-- Flow 1:  
Average throughput: 40.68 Mbit/s  
95th percentile per-packet one-way delay: 74.724 ms  
Loss rate: 2.15%

Run 10: Report of PCC-Expr — Data Link

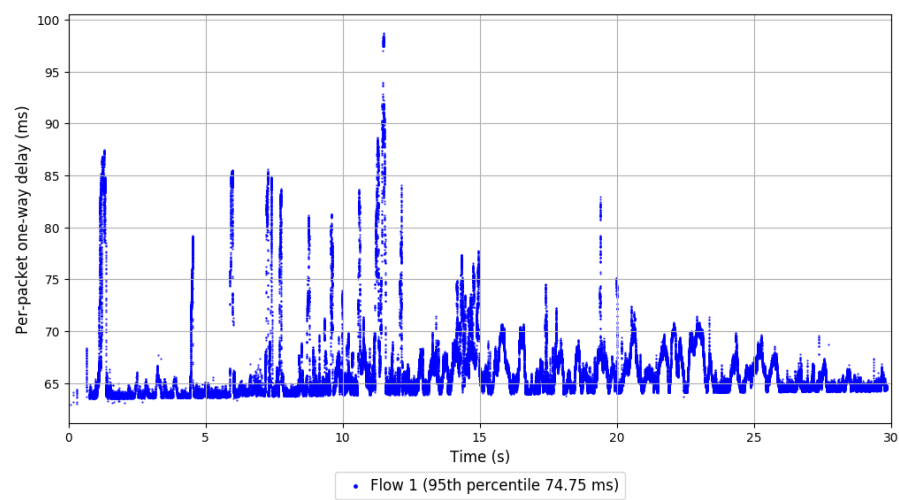
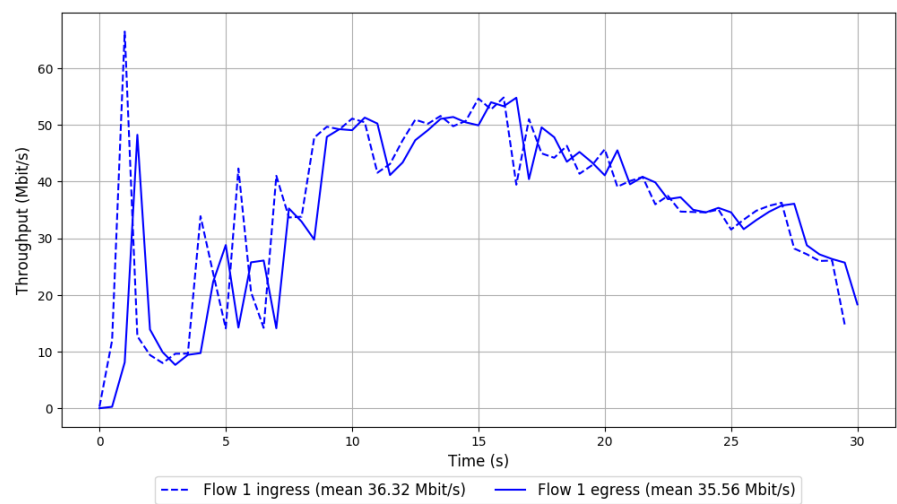


Run 1: Statistics of QUIC Cubic

Start at: 2018-06-29 12:50:47  
End at: 2018-06-29 12:51:17  
Local clock offset: -11.814 ms  
Remote clock offset: -11.588 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 35.56 Mbit/s  
95th percentile per-packet one-way delay: 74.750 ms  
Loss rate: 2.08%  
-- Flow 1:  
Average throughput: 35.56 Mbit/s  
95th percentile per-packet one-way delay: 74.750 ms  
Loss rate: 2.08%

Run 1: Report of QUIC Cubic — Data Link

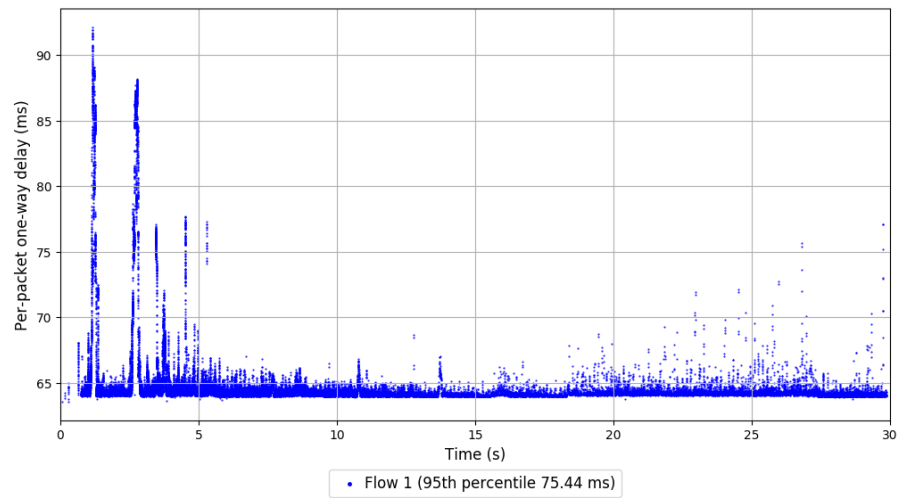
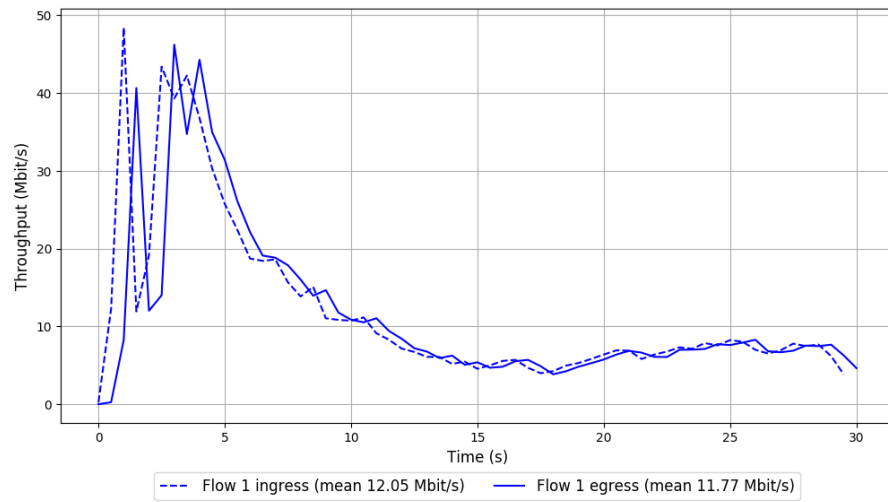


Run 2: Statistics of QUIC Cubic

Start at: 2018-06-29 13:30:34  
End at: 2018-06-29 13:31:04  
Local clock offset: -1.669 ms  
Remote clock offset: -11.546 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 11.77 Mbit/s  
95th percentile per-packet one-way delay: 75.440 ms  
Loss rate: 2.31%  
-- Flow 1:  
Average throughput: 11.77 Mbit/s  
95th percentile per-packet one-way delay: 75.440 ms  
Loss rate: 2.31%

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



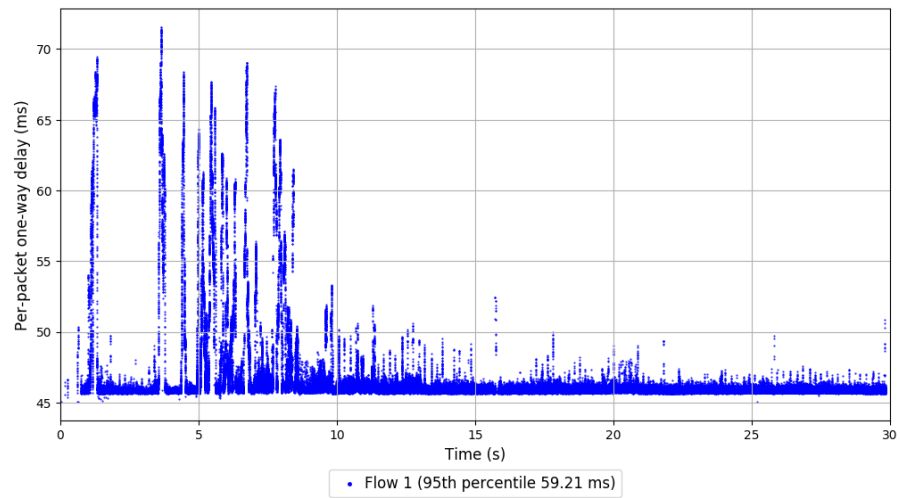
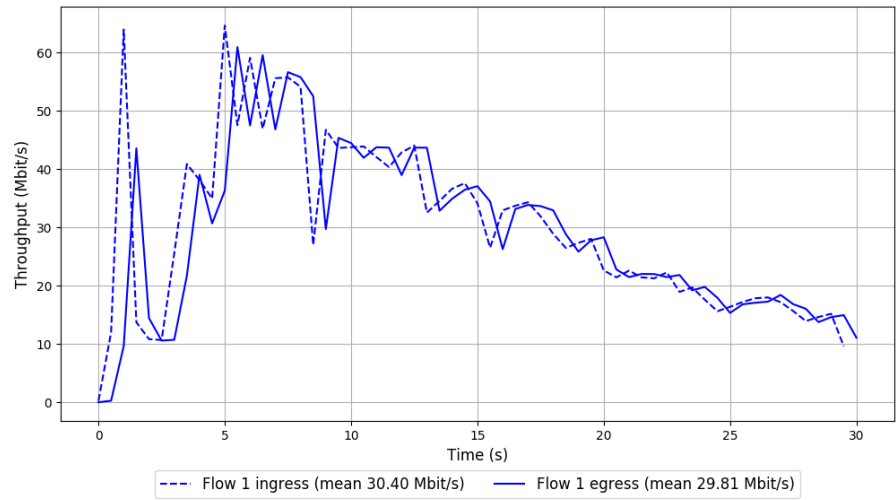
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-29 14:08:17  
End at: 2018-06-29 14:08:47  
Local clock offset: -2.91 ms  
Remote clock offset: -28.039 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 29.81 Mbit/s  
95th percentile per-packet one-way delay: 59.211 ms  
Loss rate: 1.91%  
-- Flow 1:  
Average throughput: 29.81 Mbit/s  
95th percentile per-packet one-way delay: 59.211 ms  
Loss rate: 1.91%



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

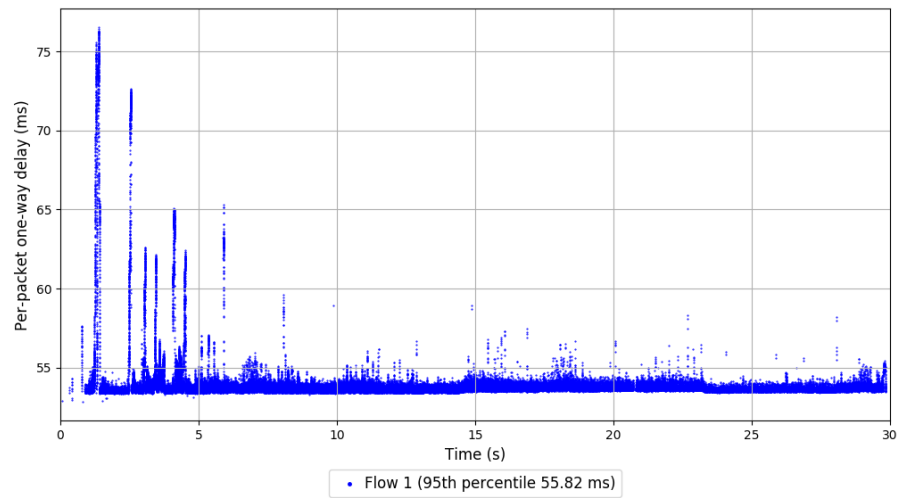
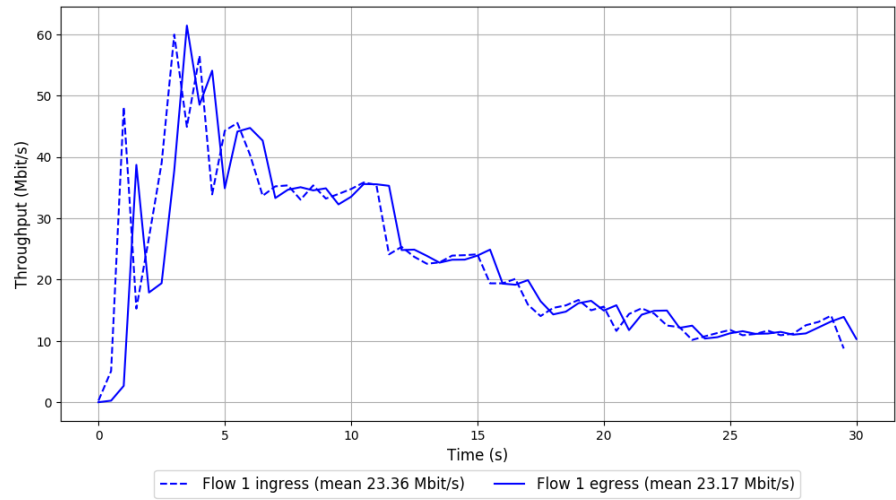


Run 4: Statistics of QUIC Cubic

Start at: 2018-06-29 14:47:39  
End at: 2018-06-29 14:48:09  
Local clock offset: 5.544 ms  
Remote clock offset: -21.844 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 23.17 Mbit/s  
95th percentile per-packet one-way delay: 55.816 ms  
Loss rate: 0.84%  
-- Flow 1:  
Average throughput: 23.17 Mbit/s  
95th percentile per-packet one-way delay: 55.816 ms  
Loss rate: 0.84%

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

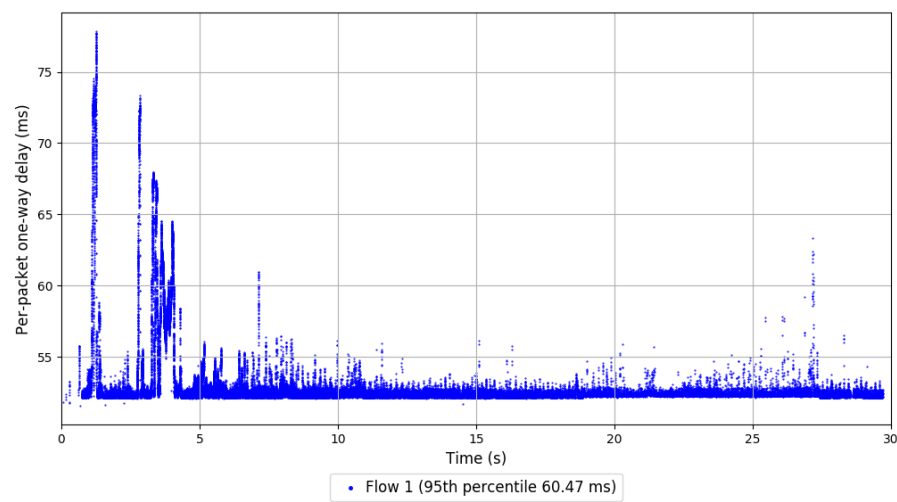
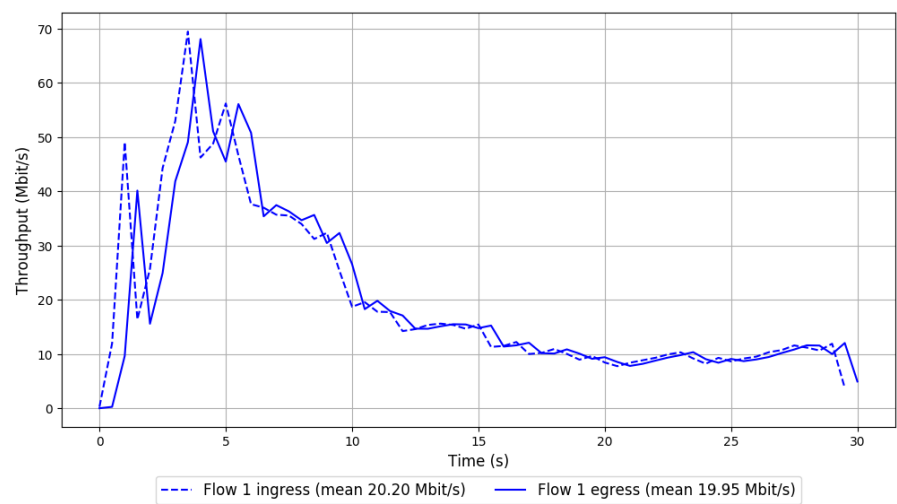


Run 5: Statistics of QUIC Cubic

Start at: 2018-06-29 15:24:34  
End at: 2018-06-29 15:25:04  
Local clock offset: 8.649 ms  
Remote clock offset: -21.196 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 19.95 Mbit/s  
95th percentile per-packet one-way delay: 60.467 ms  
Loss rate: 1.24%  
-- Flow 1:  
Average throughput: 19.95 Mbit/s  
95th percentile per-packet one-way delay: 60.467 ms  
Loss rate: 1.24%

Run 5: Report of QUIC Cubic — Data Link

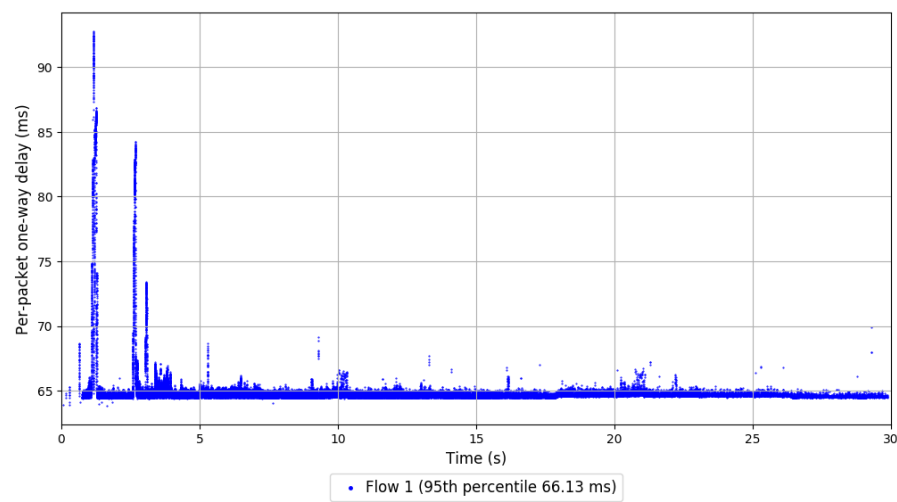
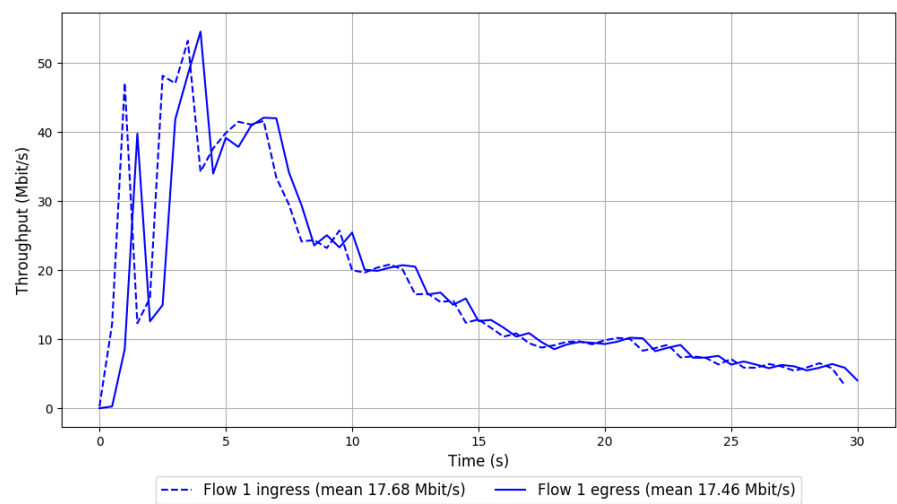


Run 6: Statistics of QUIC Cubic

Start at: 2018-06-29 16:02:38  
End at: 2018-06-29 16:03:08  
Local clock offset: 4.82 ms  
Remote clock offset: -10.089 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 17.46 Mbit/s  
95th percentile per-packet one-way delay: 66.132 ms  
Loss rate: 1.28%  
-- Flow 1:  
Average throughput: 17.46 Mbit/s  
95th percentile per-packet one-way delay: 66.132 ms  
Loss rate: 1.28%

Run 6: Report of QUIC Cubic — Data Link



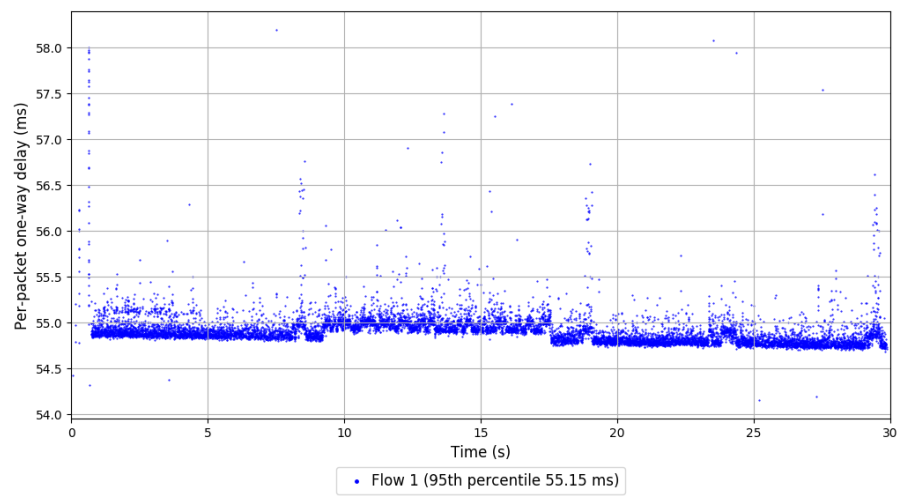
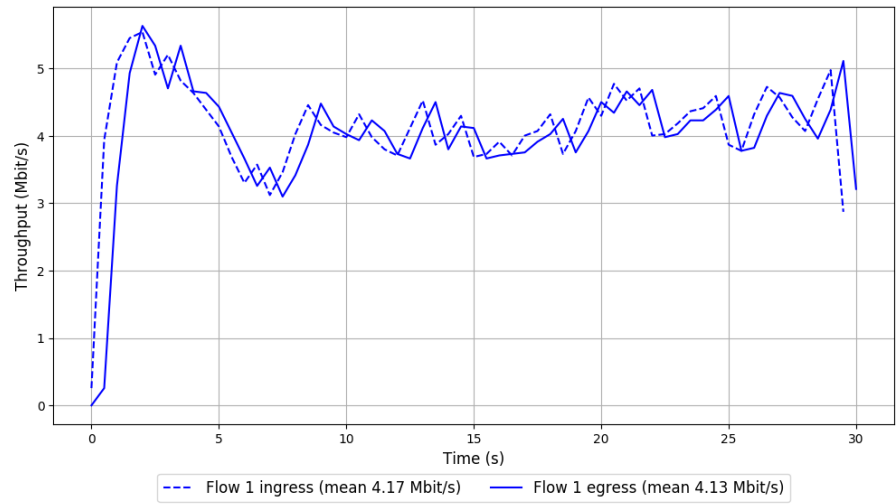
Run 7: Statistics of QUIC Cubic

Start at: 2018-06-29 16:39:48  
End at: 2018-06-29 16:40:18  
Local clock offset: -5.627 ms  
Remote clock offset: -20.594 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.13 Mbit/s  
95th percentile per-packet one-way delay: 55.145 ms  
Loss rate: 1.00%  
-- Flow 1:  
Average throughput: 4.13 Mbit/s  
95th percentile per-packet one-way delay: 55.145 ms  
Loss rate: 1.00%



### Run 7: Report of QUIC Cubic — Data Link

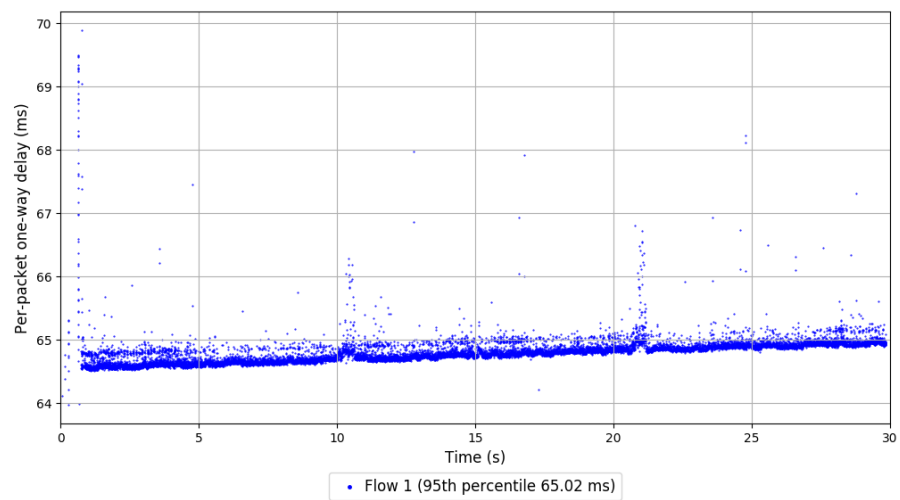
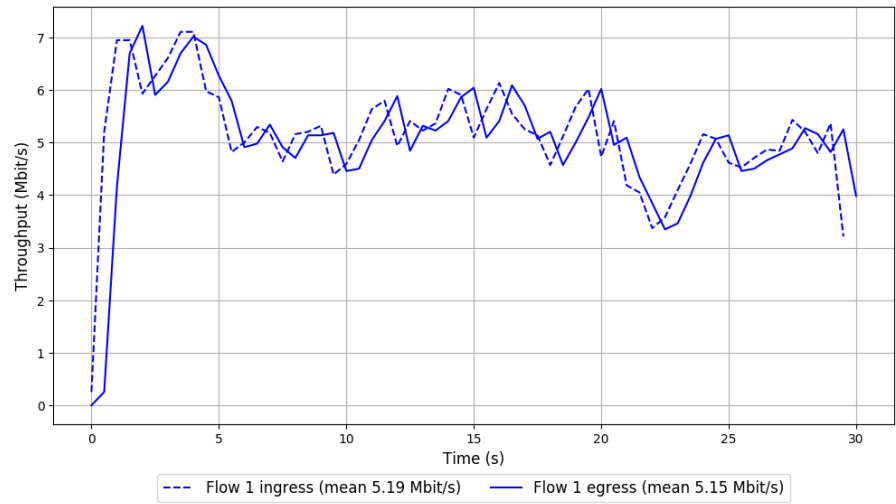


Run 8: Statistics of QUIC Cubic

Start at: 2018-06-29 17:16:06  
End at: 2018-06-29 17:16:36  
Local clock offset: 1.003 ms  
Remote clock offset: -12.018 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 5.15 Mbit/s  
95th percentile per-packet one-way delay: 65.016 ms  
Loss rate: 0.82%  
-- Flow 1:  
Average throughput: 5.15 Mbit/s  
95th percentile per-packet one-way delay: 65.016 ms  
Loss rate: 0.82%

## Run 8: Report of QUIC Cubic — Data Link

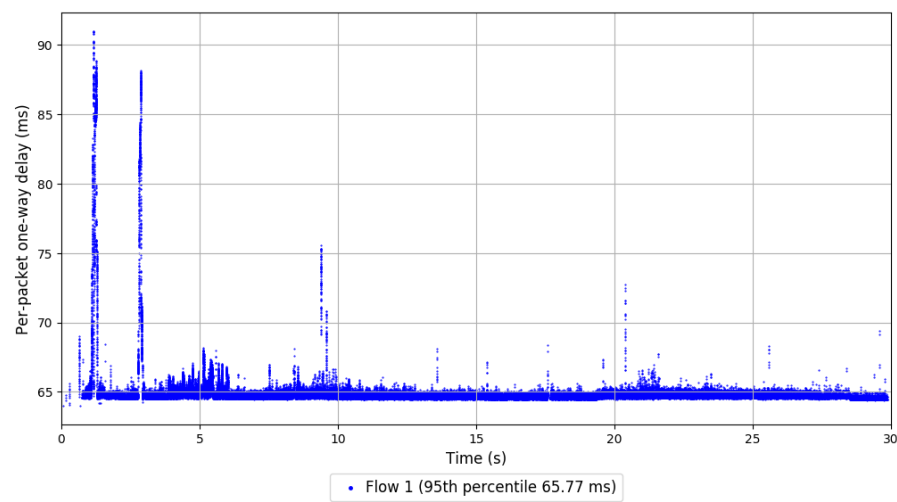
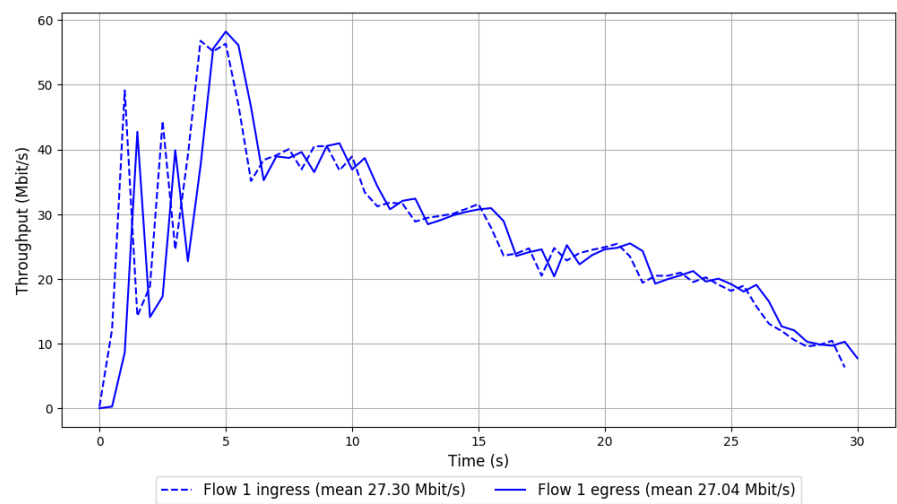


Run 9: Statistics of QUIC Cubic

Start at: 2018-06-29 17:55:38  
End at: 2018-06-29 17:56:08  
Local clock offset: 6.025 ms  
Remote clock offset: -11.449 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 27.04 Mbit/s  
95th percentile per-packet one-way delay: 65.771 ms  
Loss rate: 0.96%  
-- Flow 1:  
Average throughput: 27.04 Mbit/s  
95th percentile per-packet one-way delay: 65.771 ms  
Loss rate: 0.96%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-06-29 18:35:03

End at: 2018-06-29 18:35:33

Local clock offset: -0.571 ms

Remote clock offset: -10.938 ms

# Below is generated by plot.py at 2018-06-29 19:24:52

# Datalink statistics

-- Total of 1 flow:

Average throughput: 55.11 Mbit/s

95th percentile per-packet one-way delay: 77.510 ms

Loss rate: 0.52%

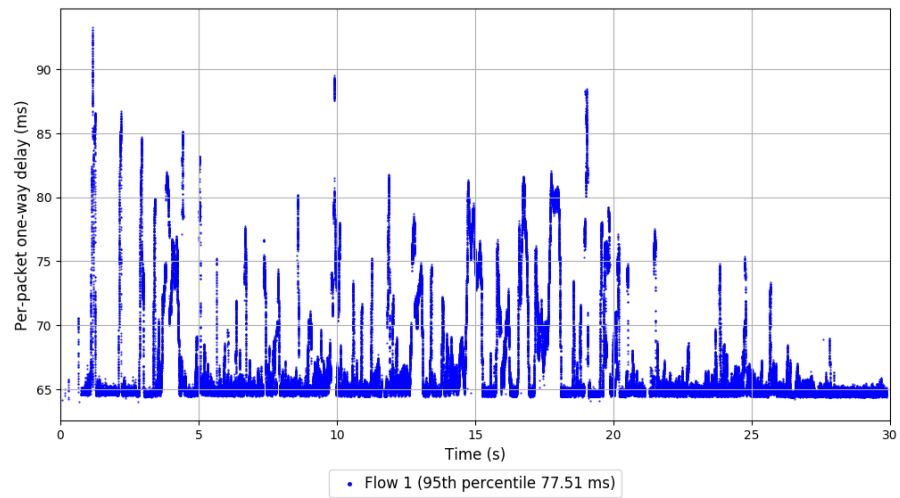
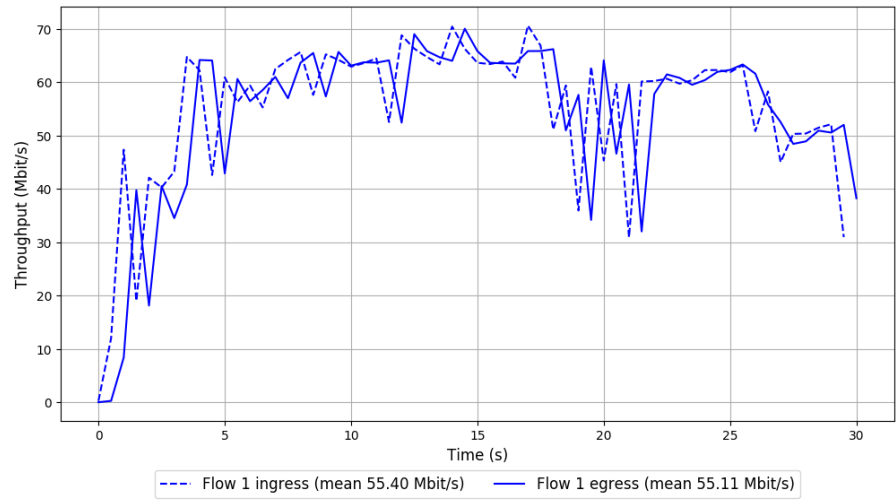
-- Flow 1:

Average throughput: 55.11 Mbit/s

95th percentile per-packet one-way delay: 77.510 ms

Loss rate: 0.52%

### Run 10: Report of QUIC Cubic — Data Link



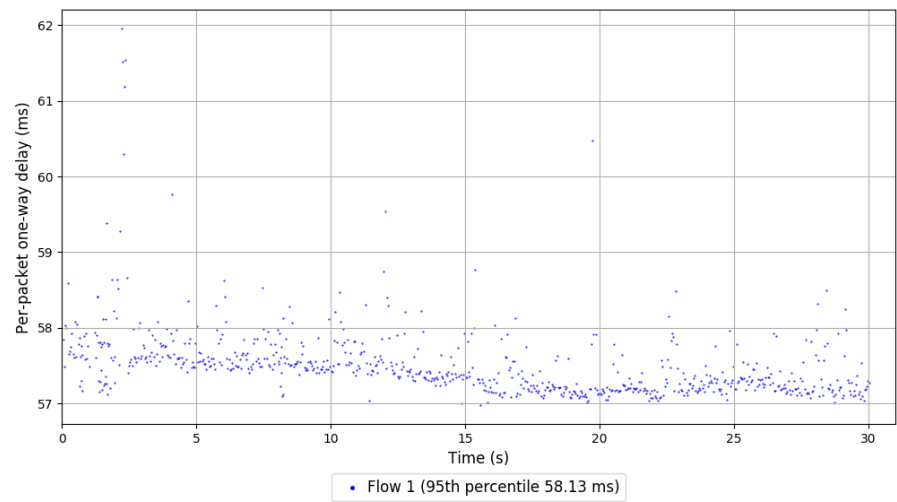
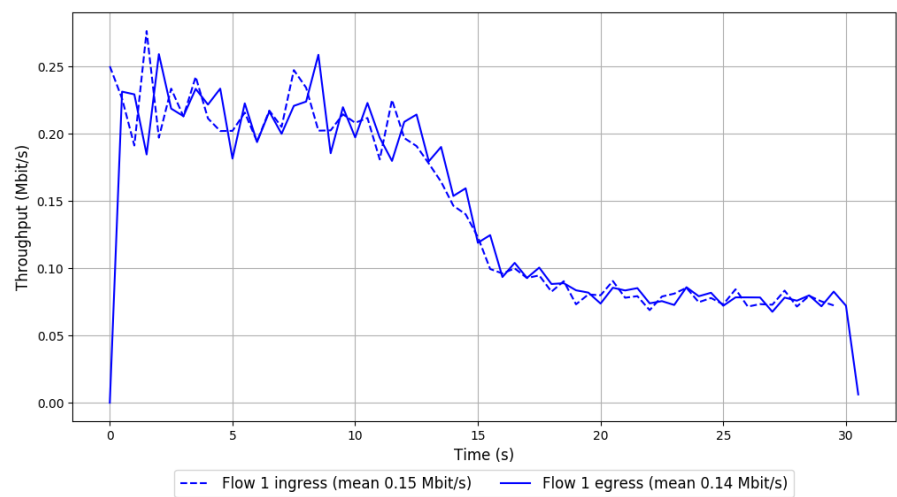
```
Run 1: Statistics of SCReAM

Start at: 2018-06-29 13:19:31
End at: 2018-06-29 13:20:01
Local clock offset: 1.835 ms
Remote clock offset: -17.414 ms

# Below is generated by plot.py at 2018-06-29 19:24:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 58.131 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 58.131 ms
Loss rate: 0.45%
```



Run 1: Report of SReAM — Data Link

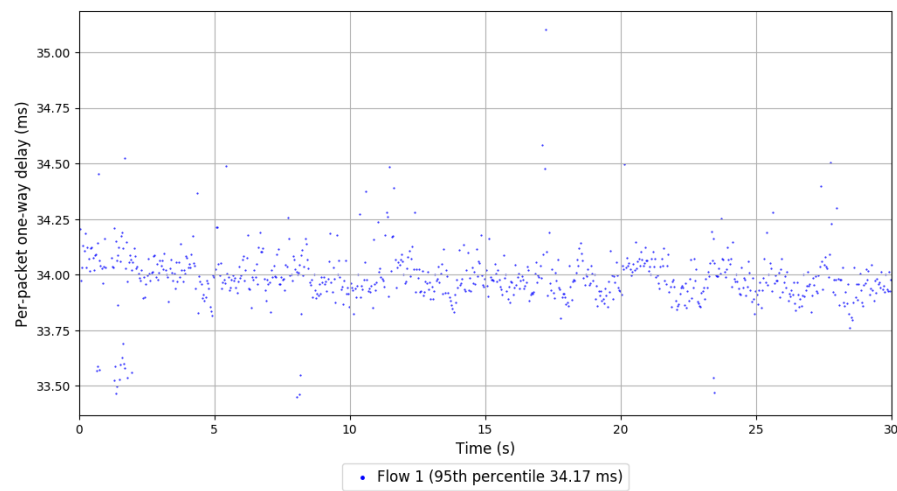
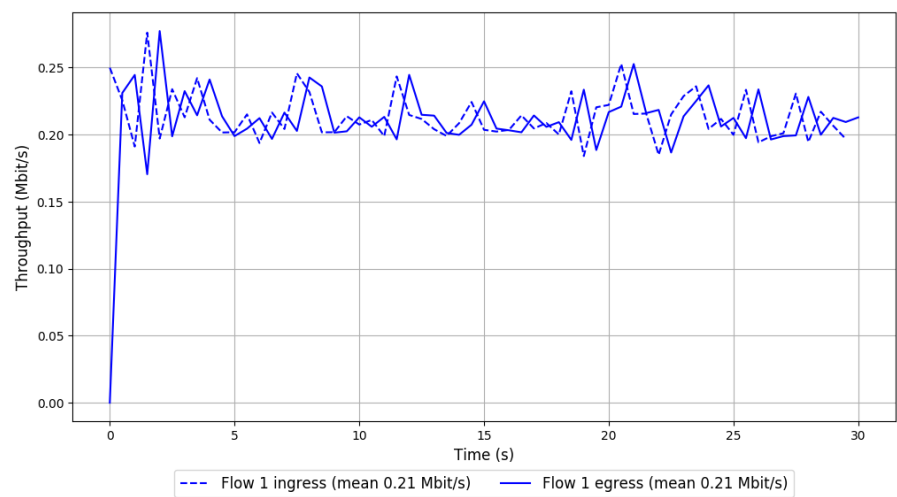


Run 2: Statistics of SCReAM

Start at: 2018-06-29 13:56:17  
End at: 2018-06-29 13:56:47  
Local clock offset: -2.877 ms  
Remote clock offset: -40.265 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 34.175 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 34.175 ms  
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

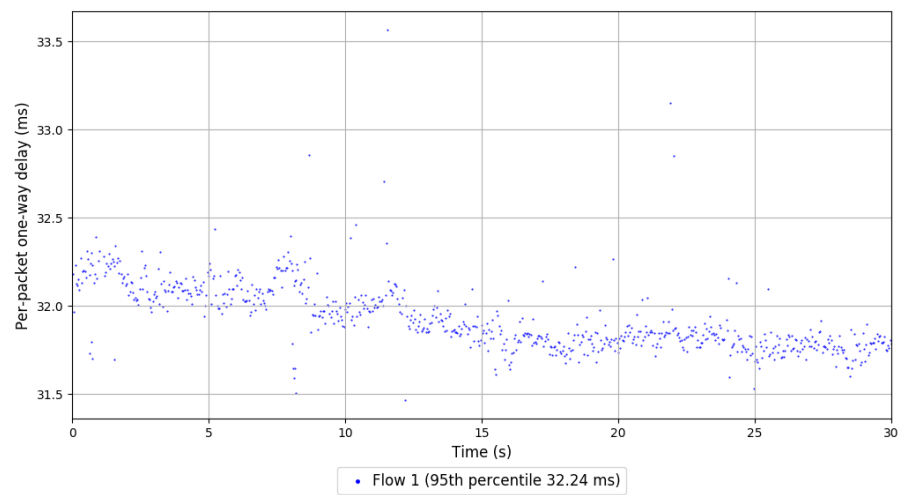
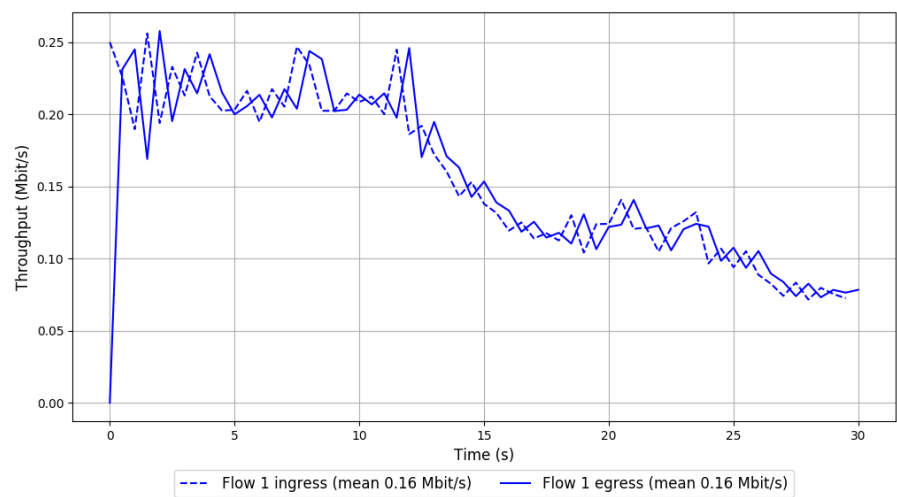


Run 3: Statistics of SCReAM

Start at: 2018-06-29 14:35:53  
End at: 2018-06-29 14:36:23  
Local clock offset: 4.115 ms  
Remote clock offset: -43.359 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.16 Mbit/s  
95th percentile per-packet one-way delay: 32.239 ms  
Loss rate: 0.30%  
-- Flow 1:  
Average throughput: 0.16 Mbit/s  
95th percentile per-packet one-way delay: 32.239 ms  
Loss rate: 0.30%

Run 3: Report of SReAM — Data Link

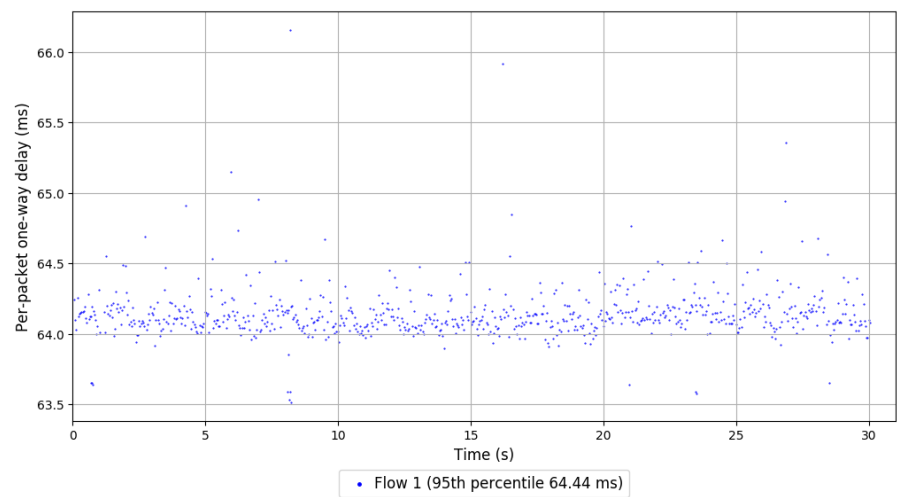
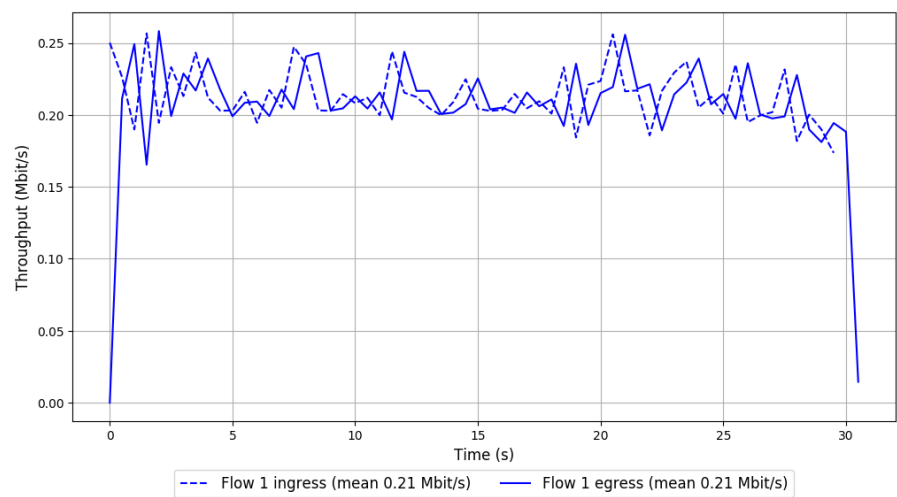


Run 4: Statistics of SCReAM

Start at: 2018-06-29 15:14:18  
End at: 2018-06-29 15:14:48  
Local clock offset: 8.869 ms  
Remote clock offset: -9.547 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 64.440 ms  
Loss rate: 0.12%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 64.440 ms  
Loss rate: 0.12%

Run 4: Report of SReAM — Data Link



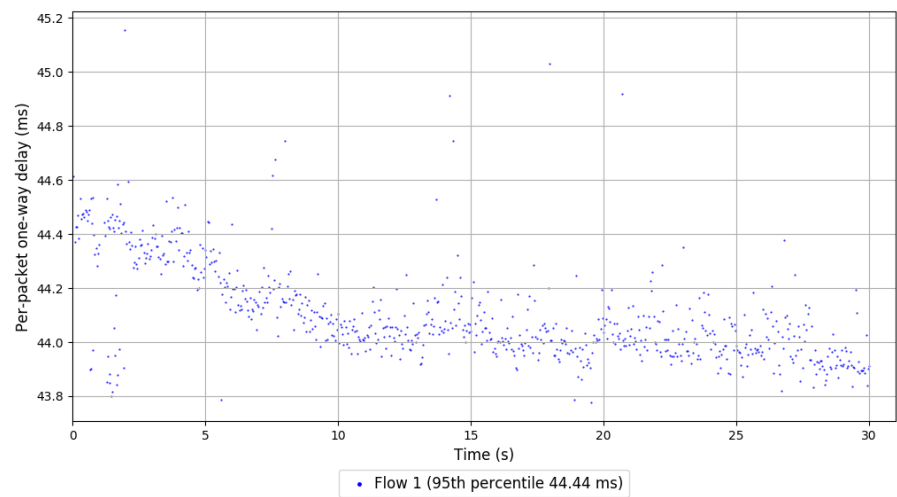
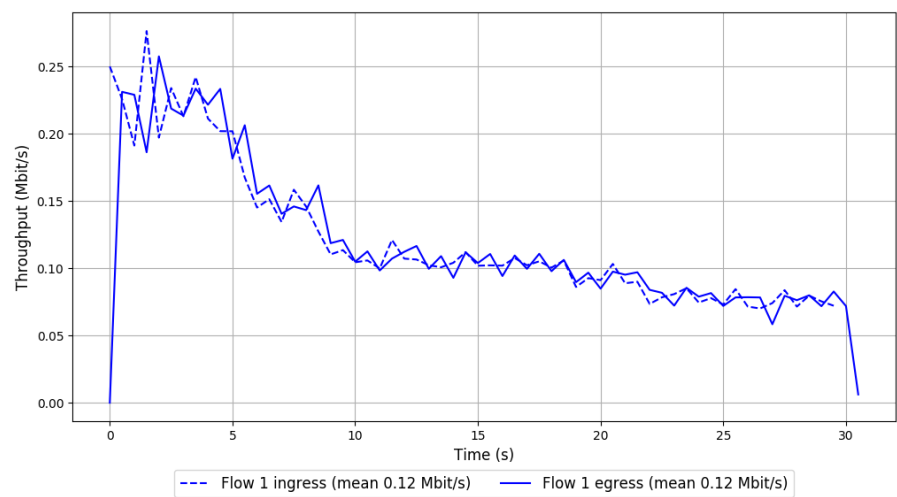
Run 5: Statistics of SCReAM

Start at: 2018-06-29 15:50:34  
End at: 2018-06-29 15:51:04  
Local clock offset: 7.325 ms  
Remote clock offset: -29.405 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.12 Mbit/s  
95th percentile per-packet one-way delay: 44.443 ms  
Loss rate: 0.42%  
-- Flow 1:  
Average throughput: 0.12 Mbit/s  
95th percentile per-packet one-way delay: 44.443 ms  
Loss rate: 0.42%



Run 5: Report of SReAM — Data Link

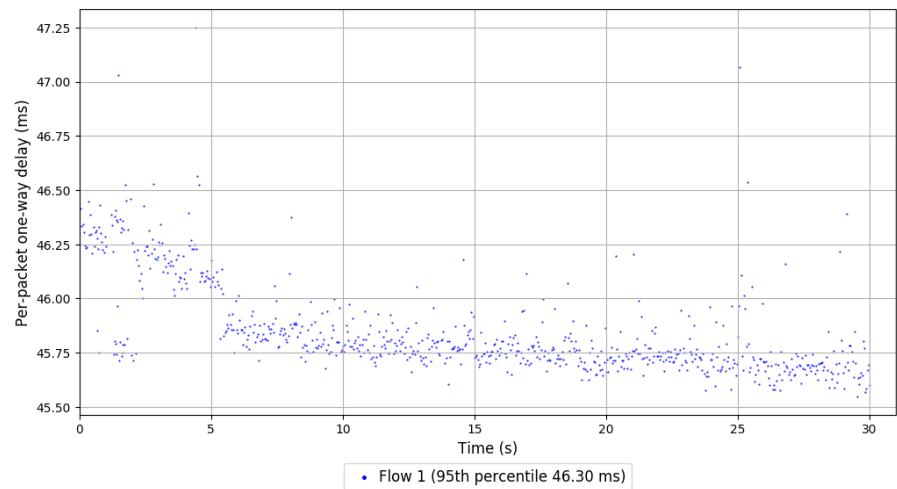
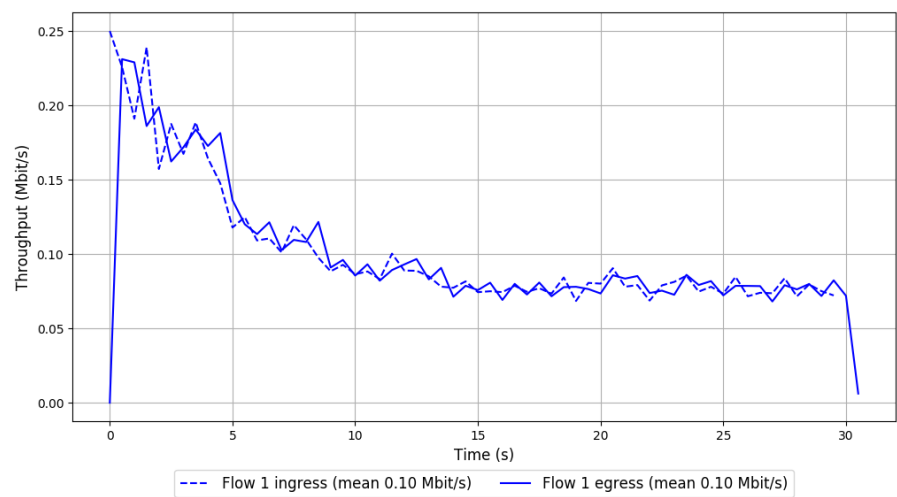


Run 6: Statistics of SCReAM

Start at: 2018-06-29 16:27:59  
End at: 2018-06-29 16:28:29  
Local clock offset: -2.934 ms  
Remote clock offset: -30.595 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.10 Mbit/s  
95th percentile per-packet one-way delay: 46.305 ms  
Loss rate: 0.97%  
-- Flow 1:  
Average throughput: 0.10 Mbit/s  
95th percentile per-packet one-way delay: 46.305 ms  
Loss rate: 0.97%

Run 6: Report of SReAM — Data Link

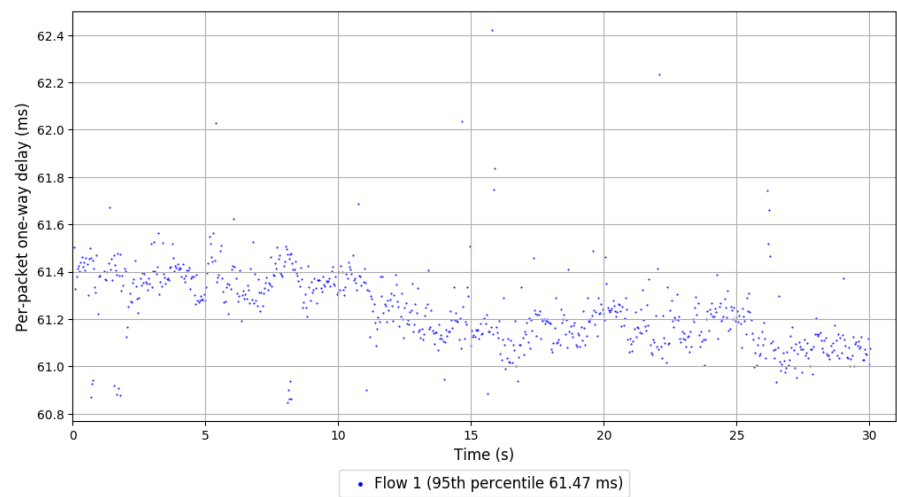
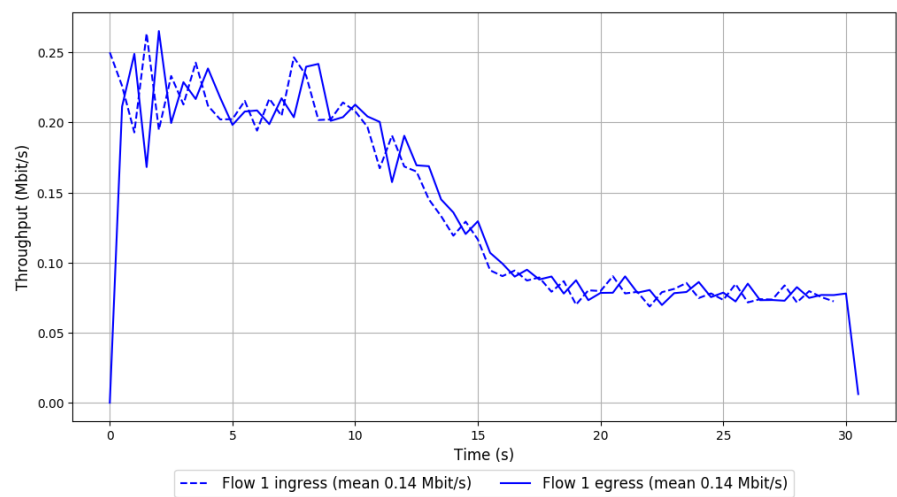


Run 7: Statistics of SCReAM

Start at: 2018-06-29 17:04:40  
End at: 2018-06-29 17:05:10  
Local clock offset: 0.219 ms  
Remote clock offset: -13.591 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 61.468 ms  
Loss rate: 0.29%  
-- Flow 1:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 61.468 ms  
Loss rate: 0.29%

Run 7: Report of SReAM — Data Link

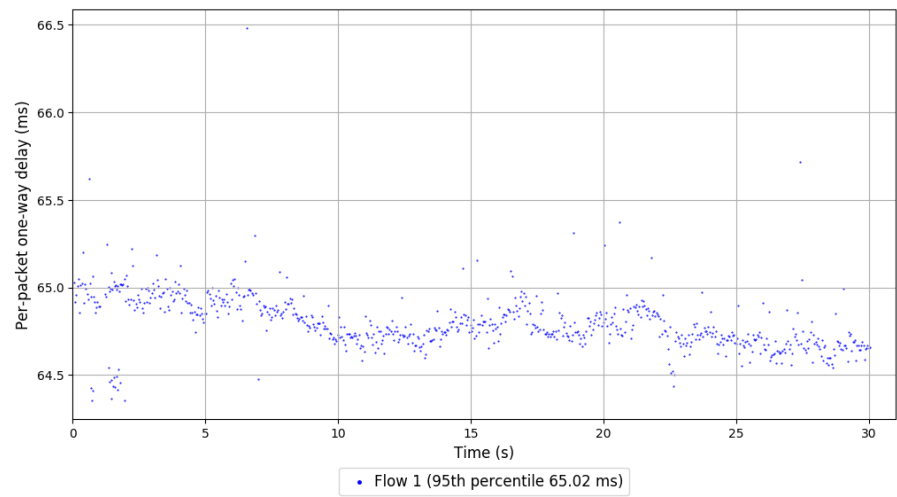
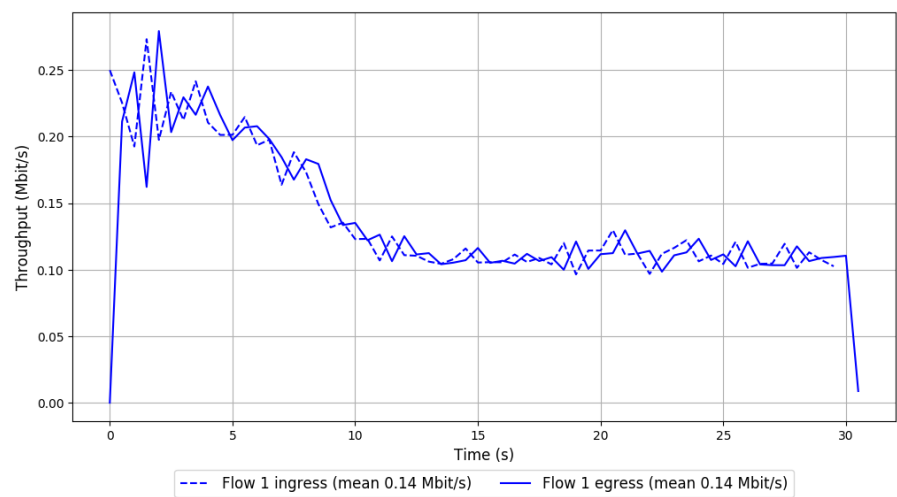


Run 8: Statistics of SCReAM

Start at: 2018-06-29 17:43:43  
End at: 2018-06-29 17:44:13  
Local clock offset: 9.514 ms  
Remote clock offset: -12.187 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 65.020 ms  
Loss rate: 0.20%  
-- Flow 1:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 65.020 ms  
Loss rate: 0.20%

Run 8: Report of SReAM — Data Link



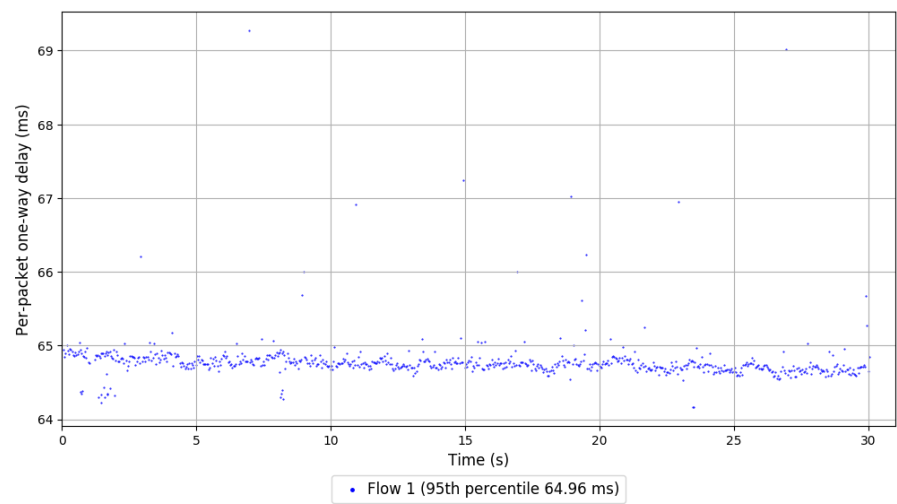
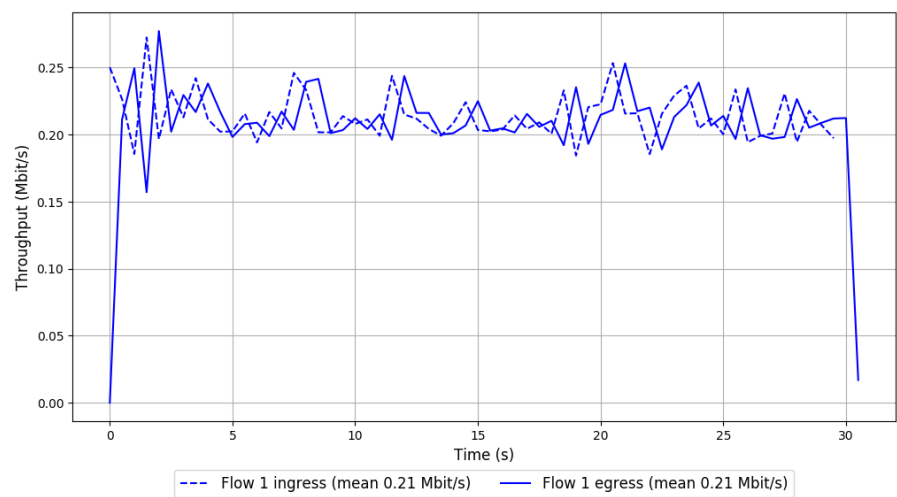
Run 9: Statistics of SCReAM

Start at: 2018-06-29 18:23:20  
End at: 2018-06-29 18:23:50  
Local clock offset: 1.251 ms  
Remote clock offset: -11.008 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 64.963 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 64.963 ms  
Loss rate: 0.00%



Run 9: Report of SReAM — Data Link

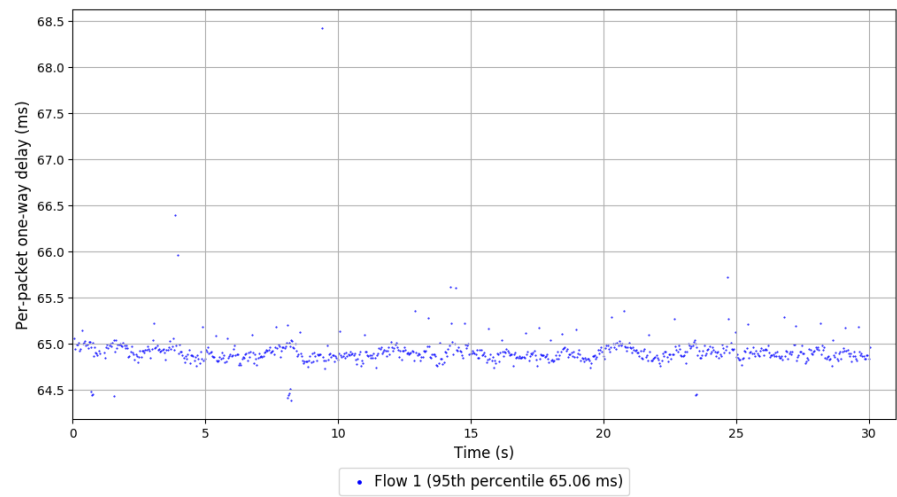
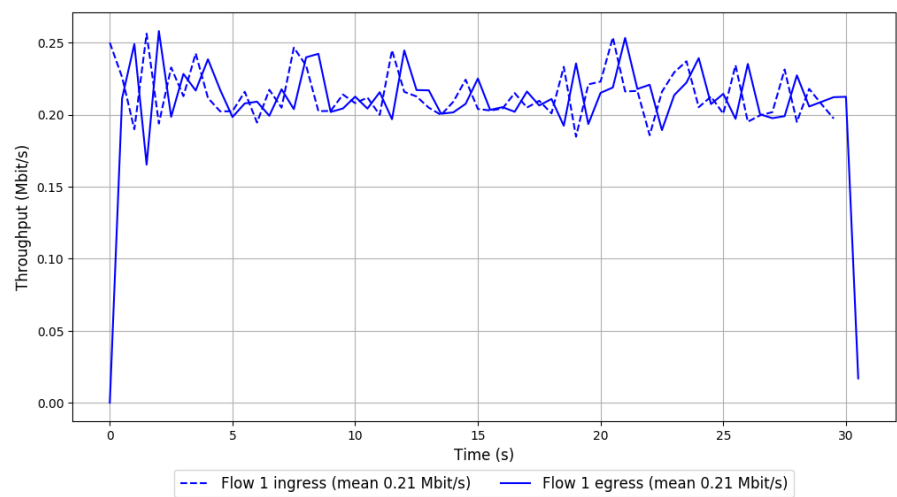


Run 10: Statistics of SReAM

Start at: 2018-06-29 19:07:14  
End at: 2018-06-29 19:07:44  
Local clock offset: 0.305 ms  
Remote clock offset: -12.186 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 65.055 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 65.055 ms  
Loss rate: 0.00%

Run 10: Report of SCReAM — Data Link



Run 1: Statistics of Sprout

/home/ubuntu/pantheon/data/2018-06-29T12-47-AWS-Korea-to-China-10-runs/sprout\_stats\_run1.log

Run 1: Report of Sprout — Data Link

Figure is missing

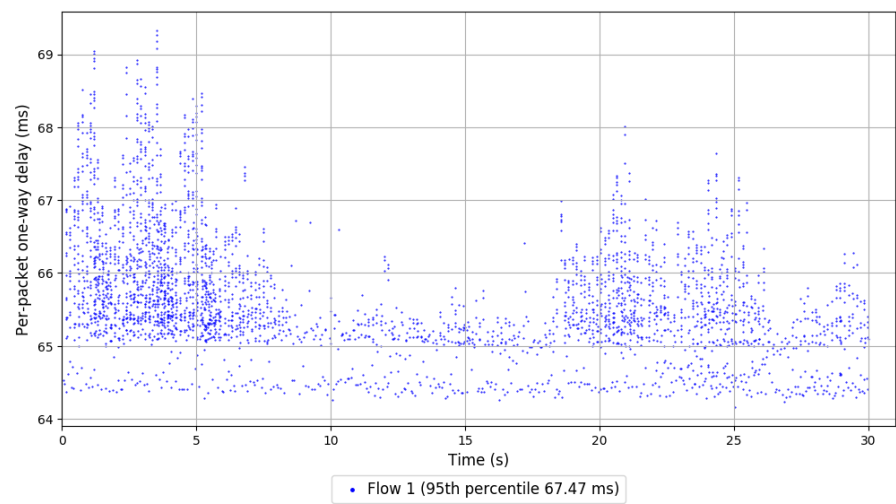
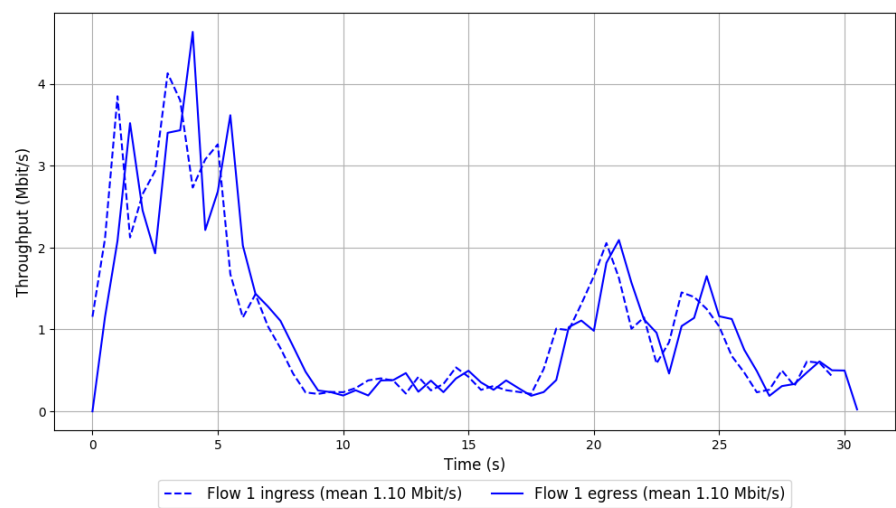
Figure is missing

Run 2: Statistics of Sprout

Start at: 2018-06-29 13:48:03  
End at: 2018-06-29 13:48:33  
Local clock offset: -2.706 ms  
Remote clock offset: -10.184 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 1.10 Mbit/s  
95th percentile per-packet one-way delay: 67.475 ms  
Loss rate: 0.38%  
-- Flow 1:  
Average throughput: 1.10 Mbit/s  
95th percentile per-packet one-way delay: 67.475 ms  
Loss rate: 0.38%

Run 2: Report of Sprout — Data Link



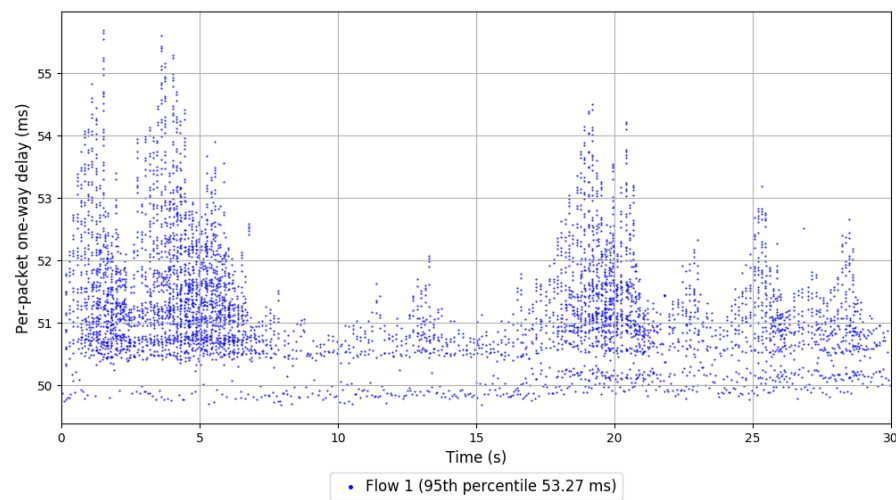
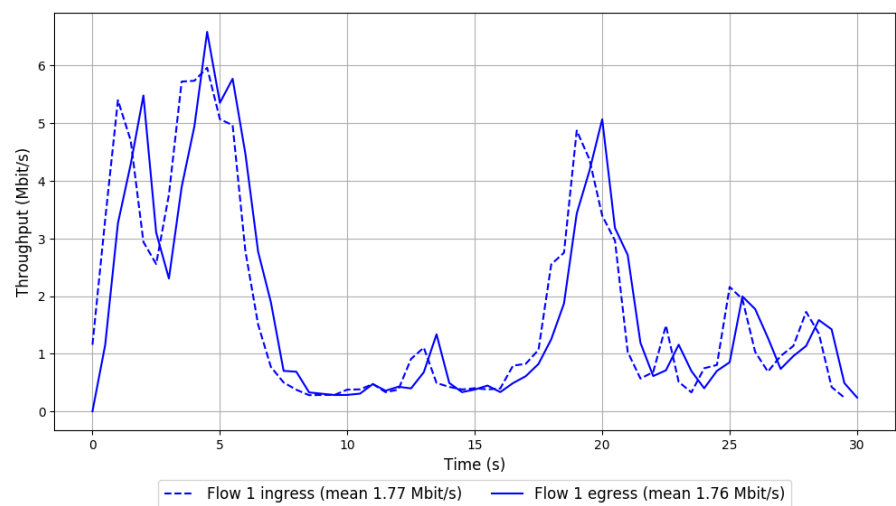
Run 3: Statistics of Sprout

Start at: 2018-06-29 14:27:23  
End at: 2018-06-29 14:27:53  
Local clock offset: 2.286 ms  
Remote clock offset: -24.724 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 1.76 Mbit/s  
95th percentile per-packet one-way delay: 53.267 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 1.76 Mbit/s  
95th percentile per-packet one-way delay: 53.267 ms  
Loss rate: 0.51%



Run 3: Report of Sprout — Data Link

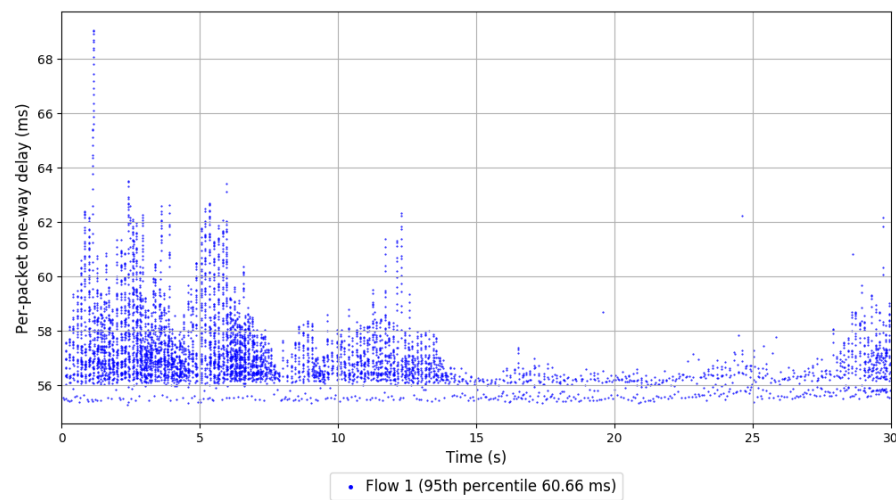
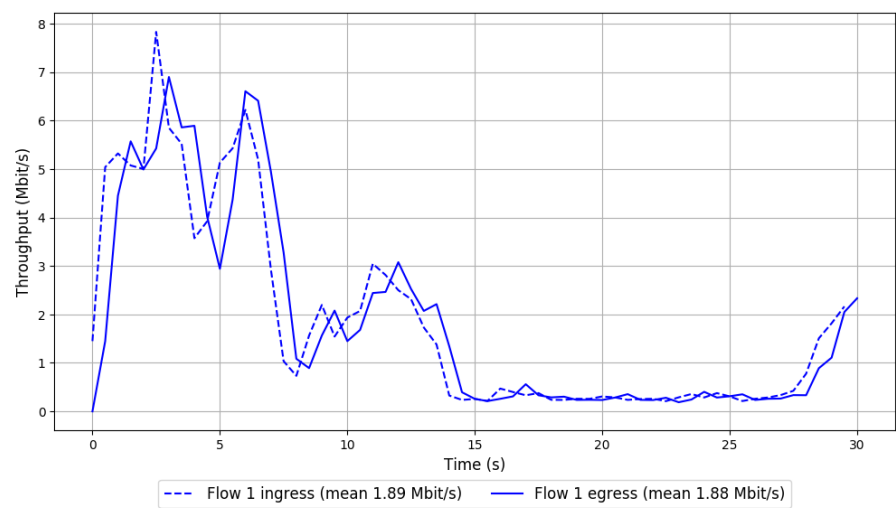


Run 4: Statistics of Sprout

Start at: 2018-06-29 15:06:31  
End at: 2018-06-29 15:07:01  
Local clock offset: 8.122 ms  
Remote clock offset: -18.055 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 1.88 Mbit/s  
95th percentile per-packet one-way delay: 60.655 ms  
Loss rate: 0.28%  
-- Flow 1:  
Average throughput: 1.88 Mbit/s  
95th percentile per-packet one-way delay: 60.655 ms  
Loss rate: 0.28%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-06-29 15:42:44

End at: 2018-06-29 15:43:14

Local clock offset: 9.6 ms

Remote clock offset: -31.517 ms

# Below is generated by plot.py at 2018-06-29 19:24:52

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 47.743 ms

Loss rate: 1.62%

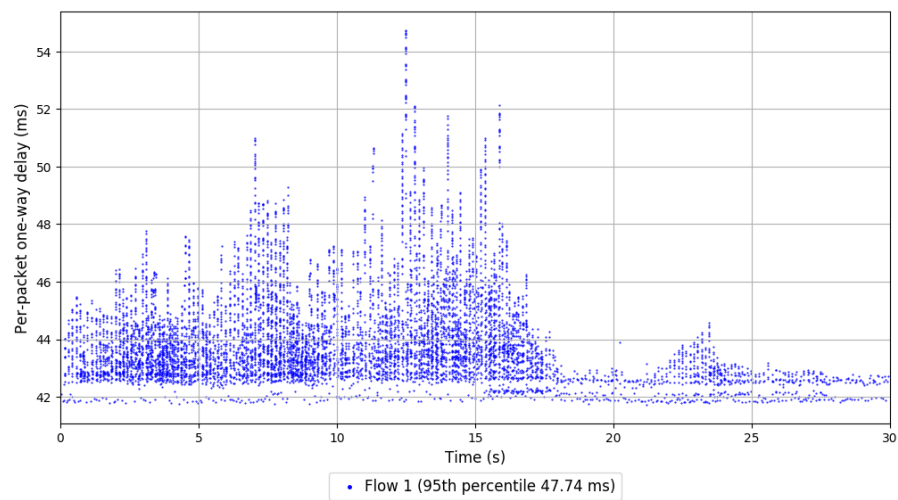
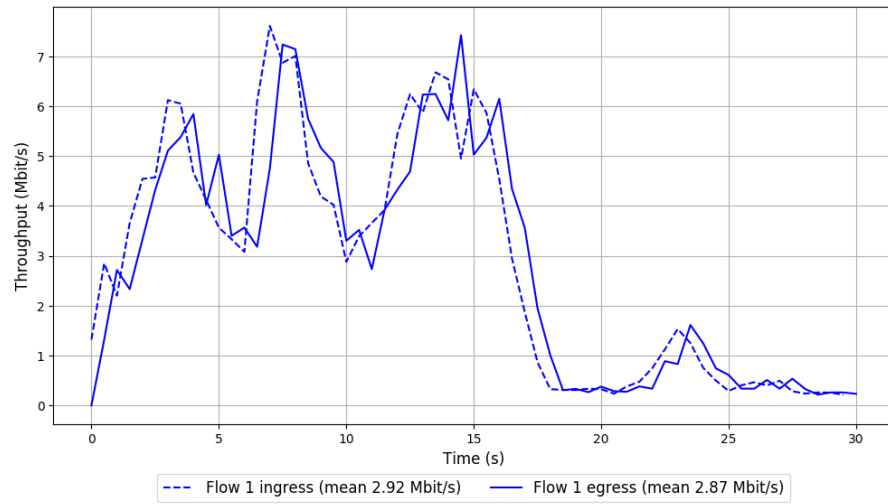
-- Flow 1:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 47.743 ms

Loss rate: 1.62%

## Run 5: Report of Sprout — Data Link

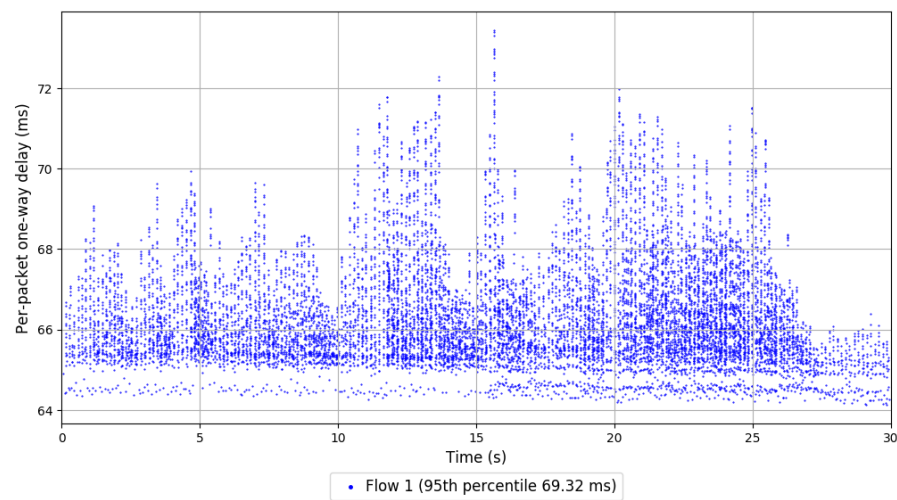
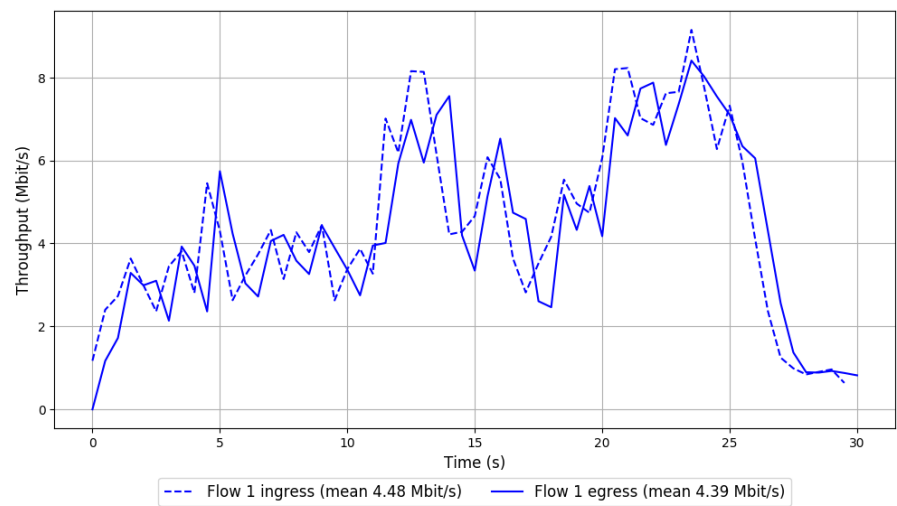


Run 6: Statistics of Sprout

Start at: 2018-06-29 16:20:10  
End at: 2018-06-29 16:20:40  
Local clock offset: 0.726 ms  
Remote clock offset: -11.269 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.39 Mbit/s  
95th percentile per-packet one-way delay: 69.319 ms  
Loss rate: 1.93%  
-- Flow 1:  
Average throughput: 4.39 Mbit/s  
95th percentile per-packet one-way delay: 69.319 ms  
Loss rate: 1.93%

Run 6: Report of Sprout — Data Link



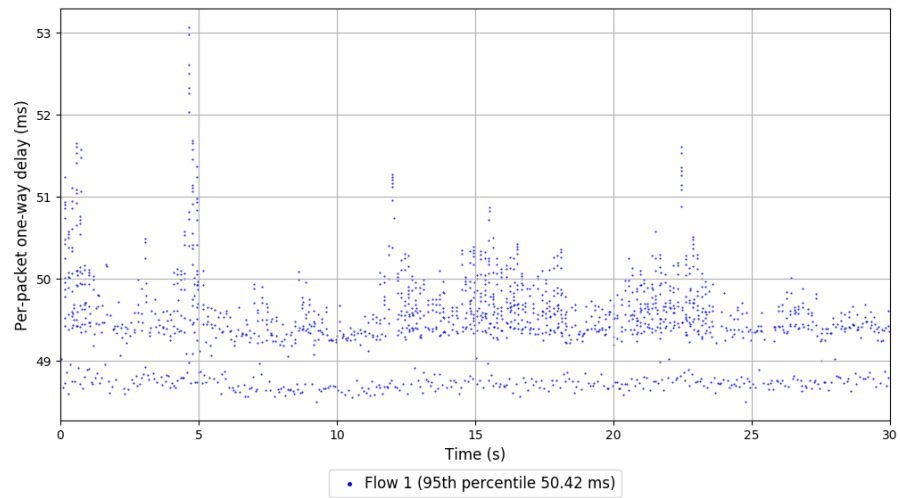
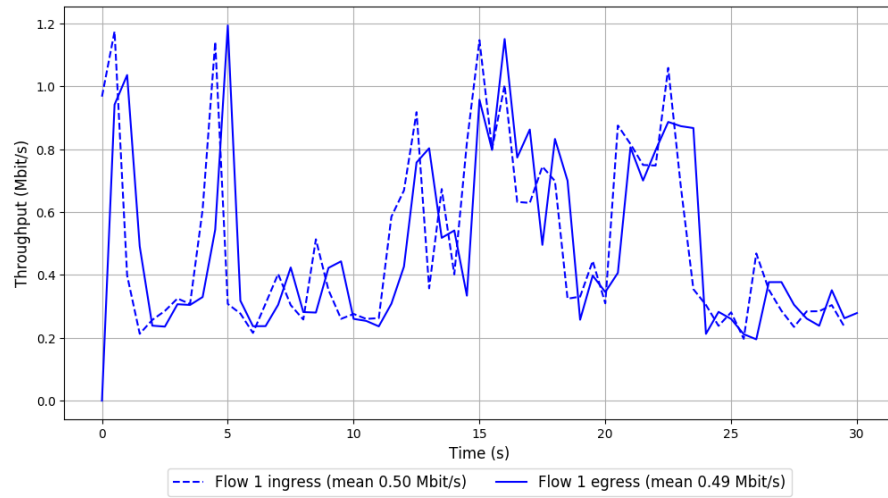
Run 7: Statistics of Sprout

Start at: 2018-06-29 16:56:59  
End at: 2018-06-29 16:57:29  
Local clock offset: -1.204 ms  
Remote clock offset: -26.085 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.49 Mbit/s  
95th percentile per-packet one-way delay: 50.421 ms  
Loss rate: 1.31%  
-- Flow 1:  
Average throughput: 0.49 Mbit/s  
95th percentile per-packet one-way delay: 50.421 ms  
Loss rate: 1.31%



## Run 7: Report of Sprout — Data Link

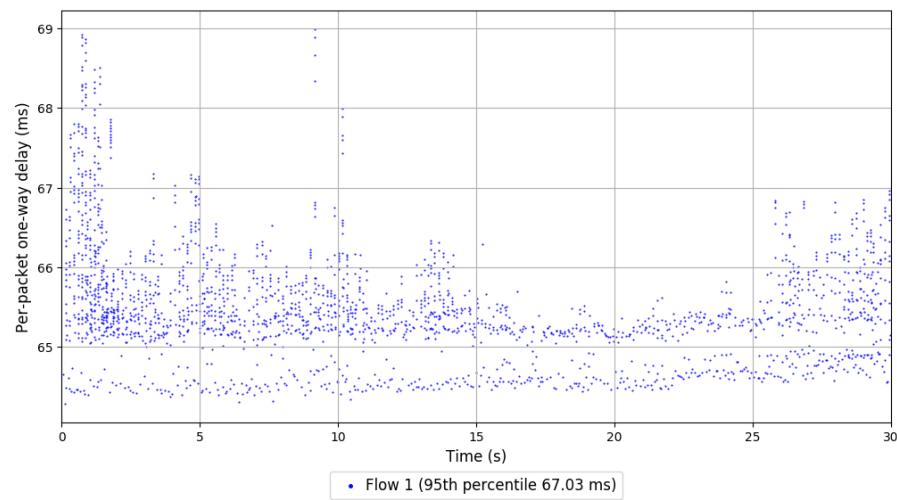
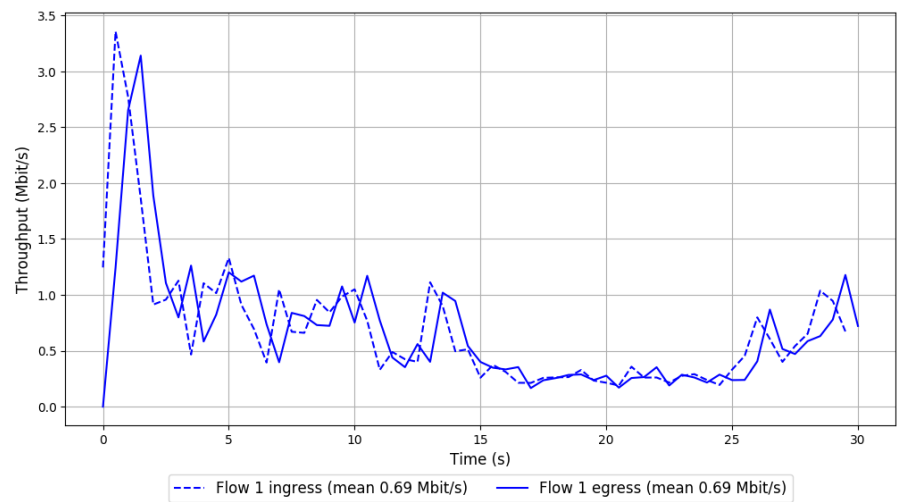


Run 8: Statistics of Sprout

Start at: 2018-06-29 17:35:35  
End at: 2018-06-29 17:36:05  
Local clock offset: 8.293 ms  
Remote clock offset: -12.323 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.69 Mbit/s  
95th percentile per-packet one-way delay: 67.025 ms  
Loss rate: 0.23%  
-- Flow 1:  
Average throughput: 0.69 Mbit/s  
95th percentile per-packet one-way delay: 67.025 ms  
Loss rate: 0.23%

Run 8: Report of Sprout — Data Link

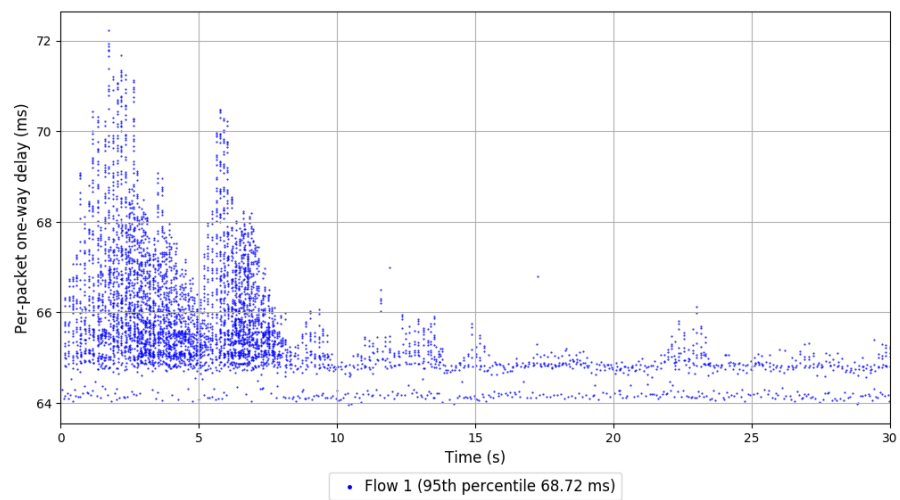
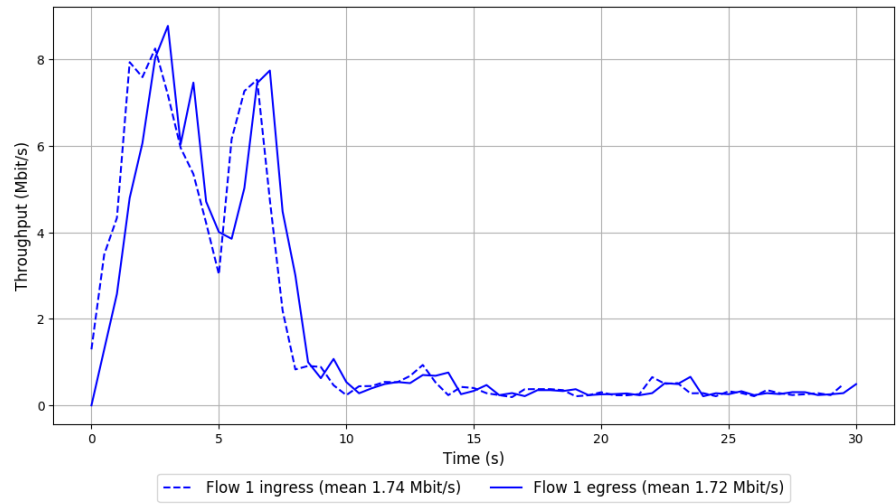


Run 9: Statistics of Sprout

Start at: 2018-06-29 18:14:23  
End at: 2018-06-29 18:14:53  
Local clock offset: 4.429 ms  
Remote clock offset: -11.384 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 1.72 Mbit/s  
95th percentile per-packet one-way delay: 68.721 ms  
Loss rate: 0.97%  
-- Flow 1:  
Average throughput: 1.72 Mbit/s  
95th percentile per-packet one-way delay: 68.721 ms  
Loss rate: 0.97%

### Run 9: Report of Sprout — Data Link

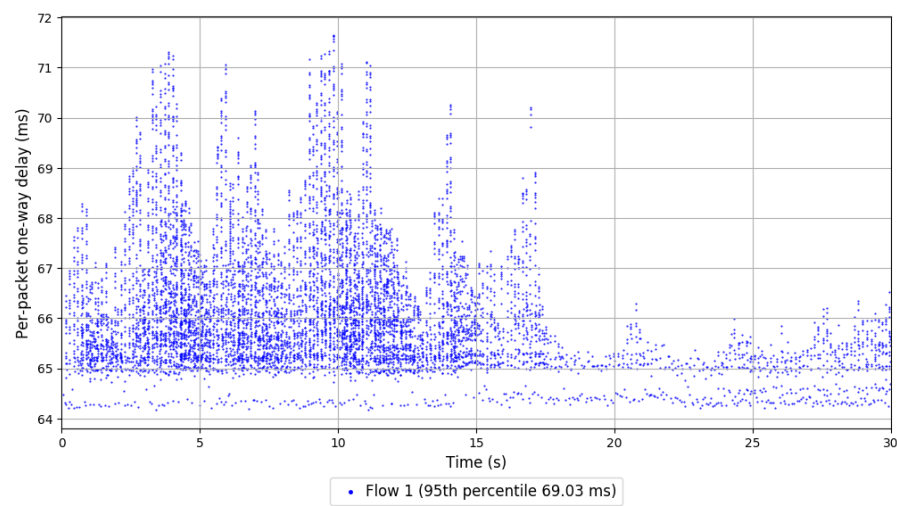
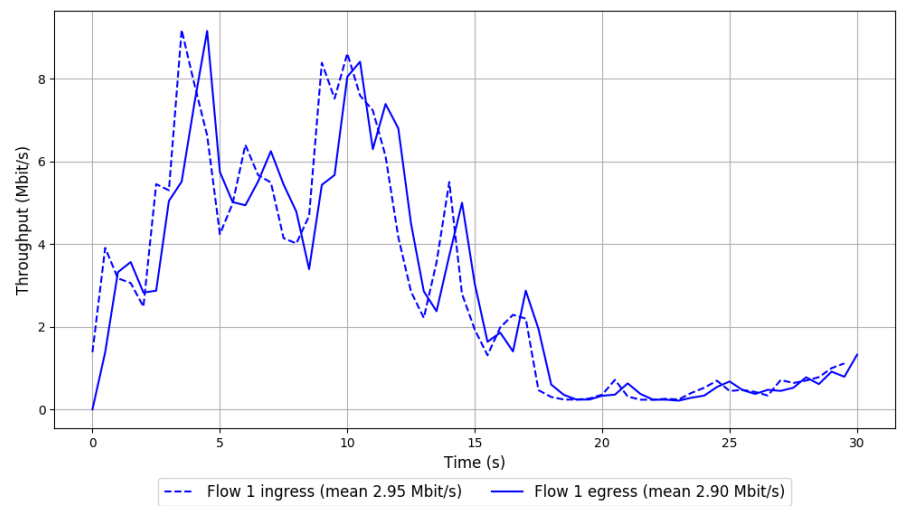


Run 10: Statistics of Sprout

Start at: 2018-06-29 18:57:43  
End at: 2018-06-29 18:58:13  
Local clock offset: 0.174 ms  
Remote clock offset: -11.808 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.90 Mbit/s  
95th percentile per-packet one-way delay: 69.035 ms  
Loss rate: 1.51%  
-- Flow 1:  
Average throughput: 2.90 Mbit/s  
95th percentile per-packet one-way delay: 69.035 ms  
Loss rate: 1.51%

Run 10: Report of Sprout — Data Link



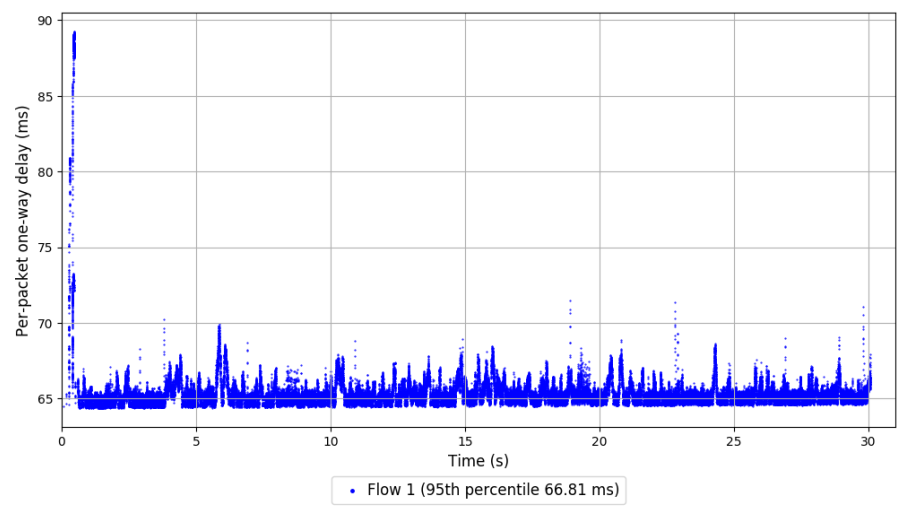
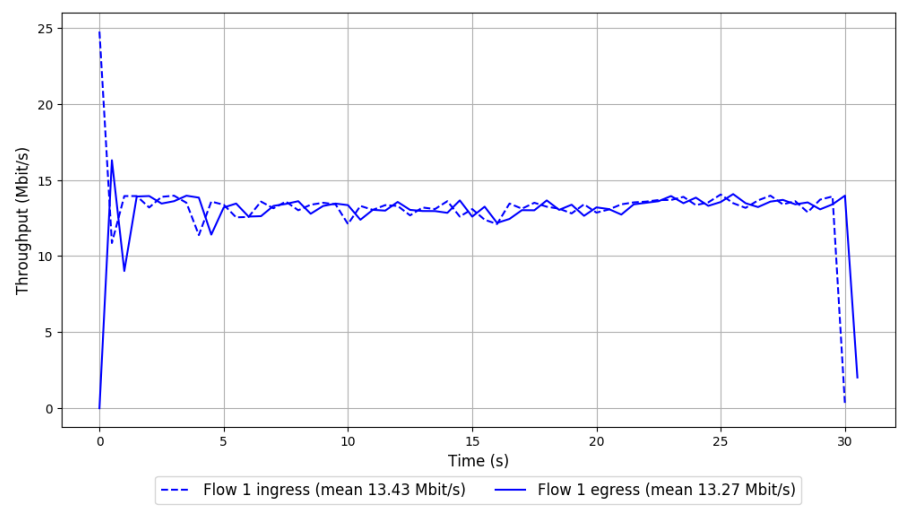
```
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-29 13:02:08
End at: 2018-06-29 13:02:38
Local clock offset: -0.111 ms
Remote clock offset: -9.175 ms

# Below is generated by plot.py at 2018-06-29 19:24:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.27 Mbit/s
95th percentile per-packet one-way delay: 66.810 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 13.27 Mbit/s
95th percentile per-packet one-way delay: 66.810 ms
Loss rate: 1.24%
```



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

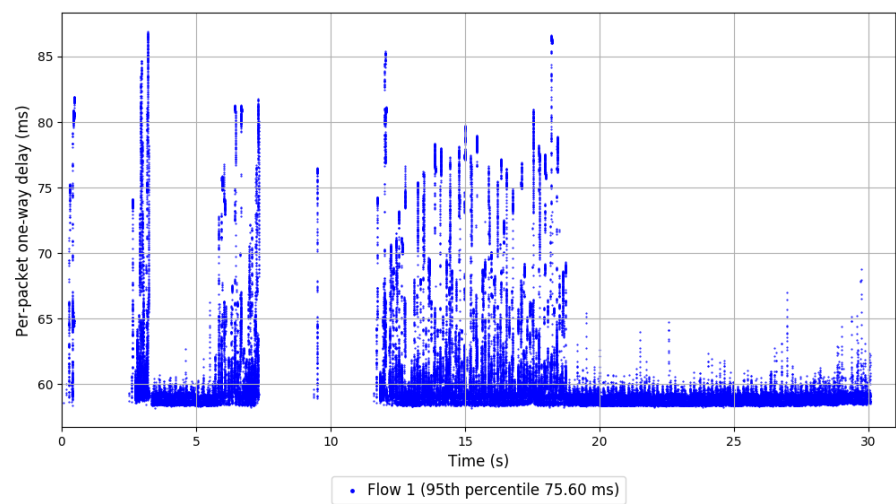
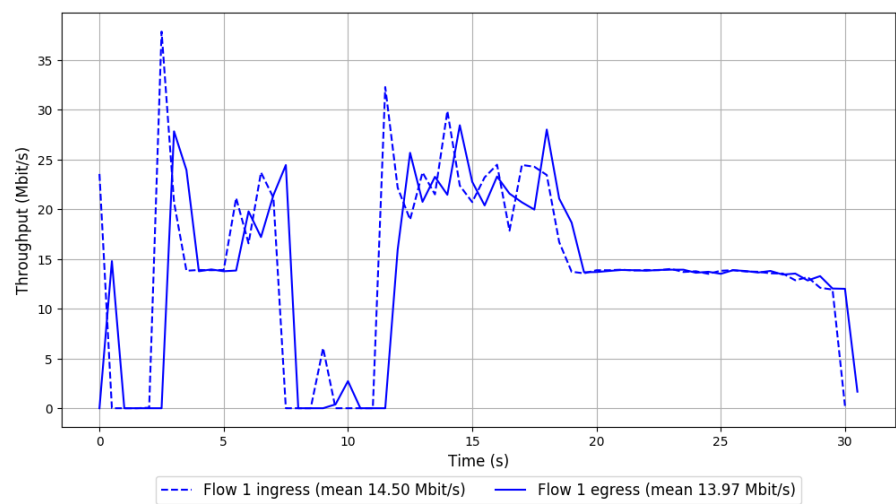


Run 2: Statistics of TaoVA-100x

Start at: 2018-06-29 13:40:24  
End at: 2018-06-29 13:40:54  
Local clock offset: -2.45 ms  
Remote clock offset: -16.845 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 13.97 Mbit/s  
95th percentile per-packet one-way delay: 75.596 ms  
Loss rate: 3.60%  
-- Flow 1:  
Average throughput: 13.97 Mbit/s  
95th percentile per-packet one-way delay: 75.596 ms  
Loss rate: 3.60%

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

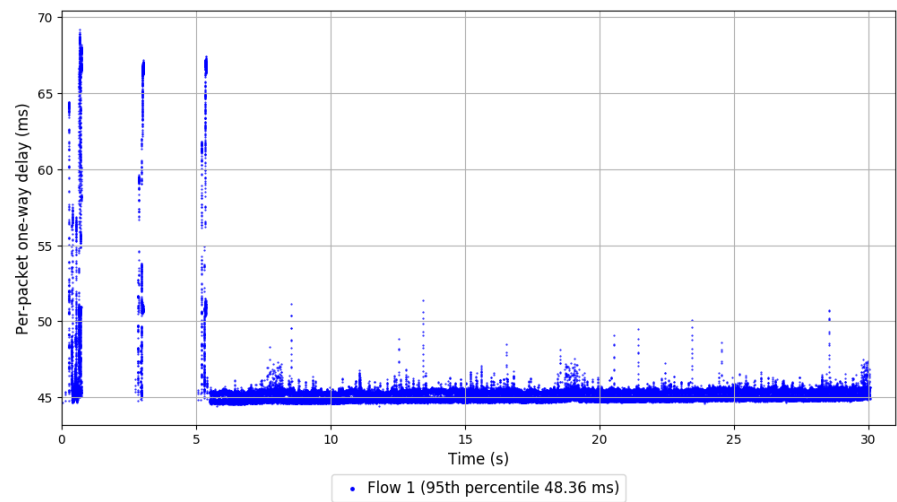
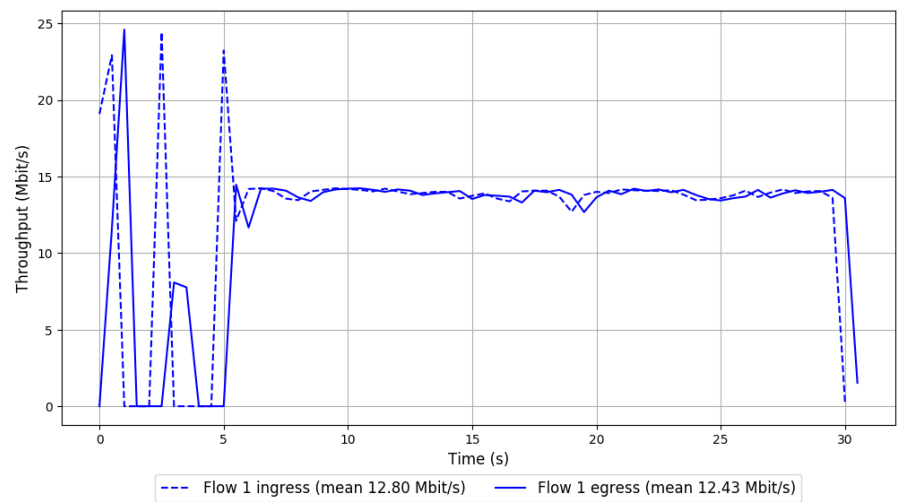


Run 3: Statistics of TaoVA-100x

Start at: 2018-06-29 14:19:18  
End at: 2018-06-29 14:19:48  
Local clock offset: -0.66 ms  
Remote clock offset: -29.427 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 12.43 Mbit/s  
95th percentile per-packet one-way delay: 48.356 ms  
Loss rate: 2.94%  
-- Flow 1:  
Average throughput: 12.43 Mbit/s  
95th percentile per-packet one-way delay: 48.356 ms  
Loss rate: 2.94%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-06-29 14:59:10

End at: 2018-06-29 14:59:40

Local clock offset: 7.182 ms

Remote clock offset: -11.18 ms

# Below is generated by plot.py at 2018-06-29 19:24:52

# Datalink statistics

-- Total of 1 flow:

Average throughput: 14.32 Mbit/s

95th percentile per-packet one-way delay: 76.278 ms

Loss rate: 1.53%

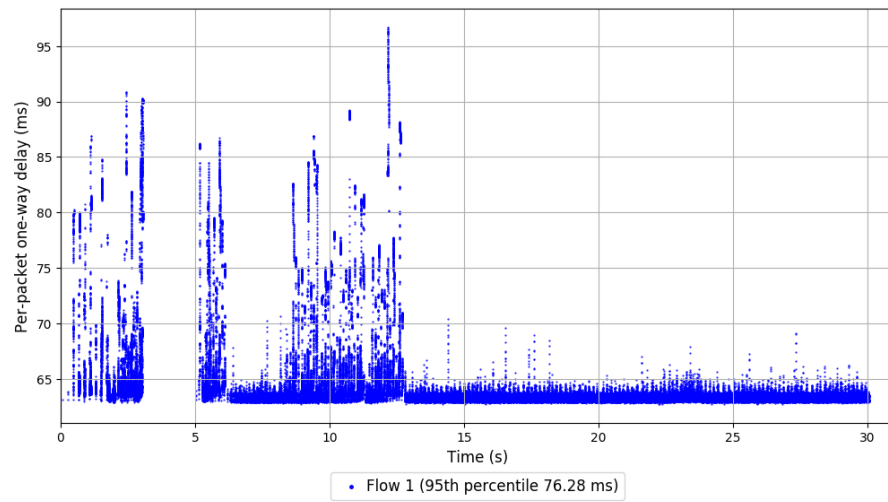
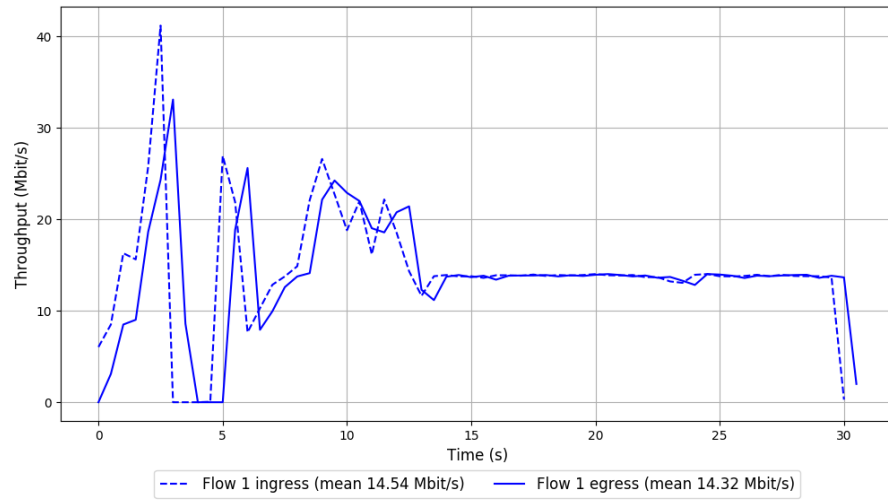
-- Flow 1:

Average throughput: 14.32 Mbit/s

95th percentile per-packet one-way delay: 76.278 ms

Loss rate: 1.53%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-06-29 15:35:07

End at: 2018-06-29 15:35:37

Local clock offset: 9.252 ms

Remote clock offset: -18.26 ms

# Below is generated by plot.py at 2018-06-29 19:24:52

# Datalink statistics

-- Total of 1 flow:

Average throughput: 14.91 Mbit/s

95th percentile per-packet one-way delay: 60.955 ms

Loss rate: 1.06%

-- Flow 1:

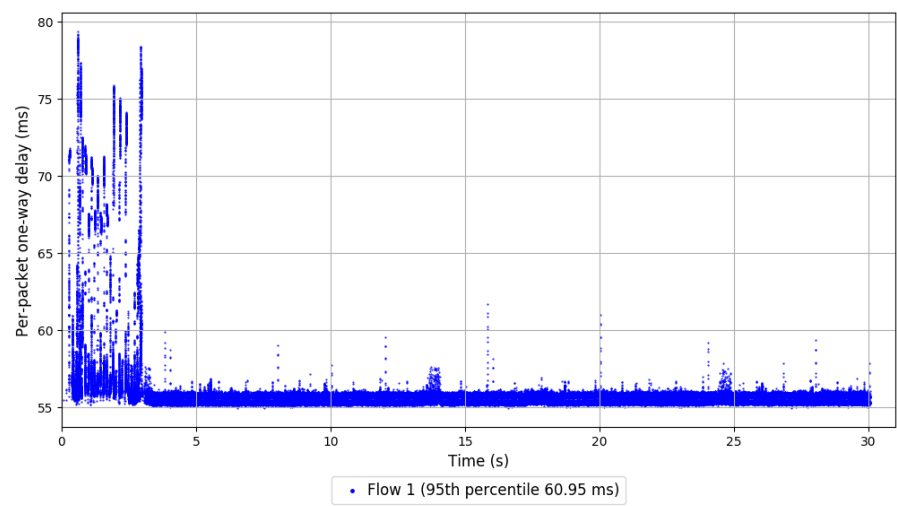
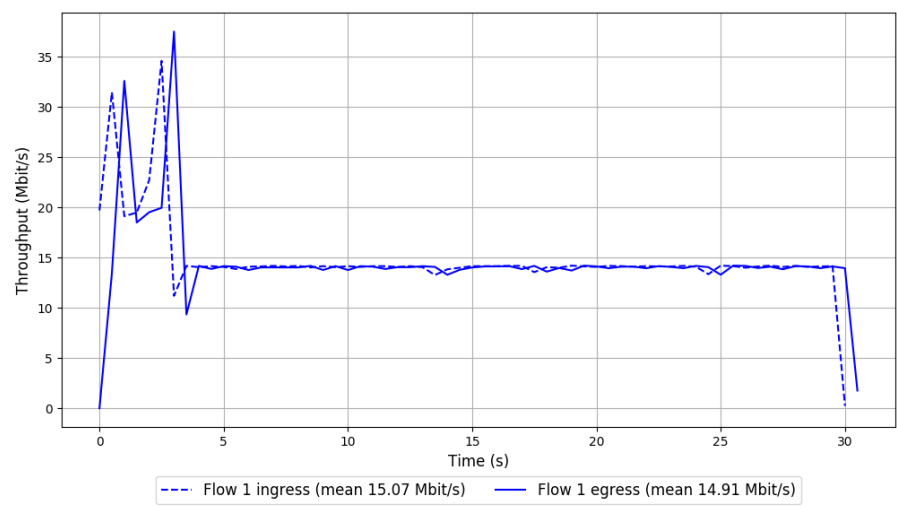
Average throughput: 14.91 Mbit/s

95th percentile per-packet one-way delay: 60.955 ms

Loss rate: 1.06%



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

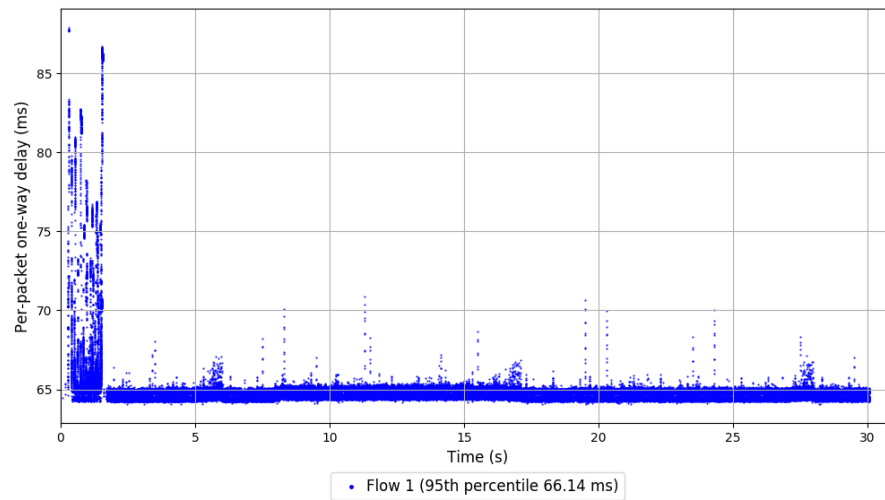
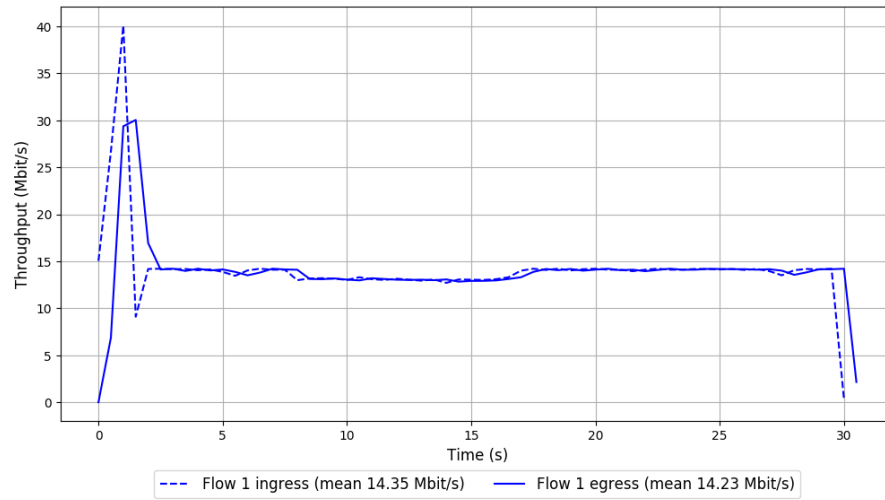


Run 6: Statistics of TaoVA-100x

Start at: 2018-06-29 16:12:48  
End at: 2018-06-29 16:13:18  
Local clock offset: 4.157 ms  
Remote clock offset: -11.122 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 14.23 Mbit/s  
95th percentile per-packet one-way delay: 66.135 ms  
Loss rate: 0.83%  
-- Flow 1:  
Average throughput: 14.23 Mbit/s  
95th percentile per-packet one-way delay: 66.135 ms  
Loss rate: 0.83%

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

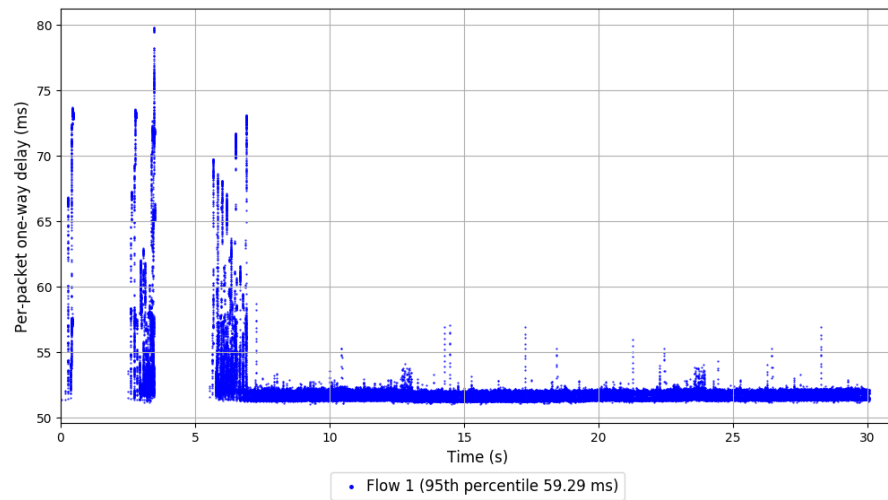
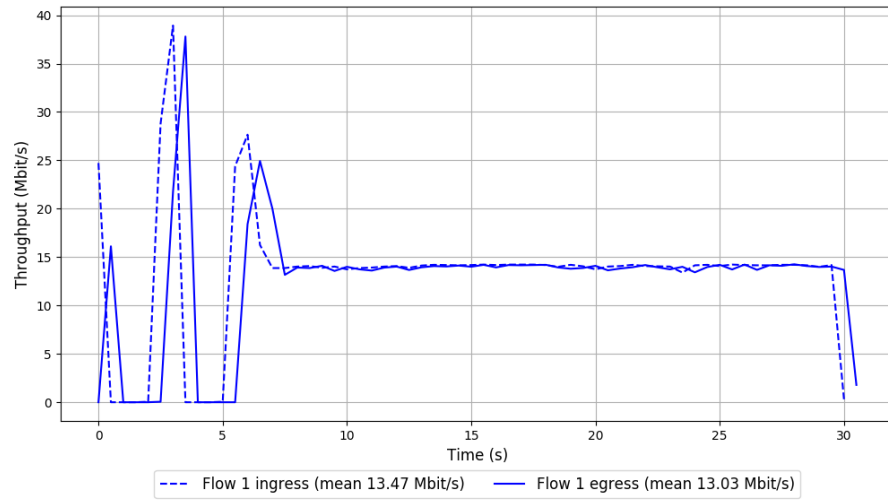


Run 7: Statistics of TaoVA-100x

Start at: 2018-06-29 16:48:53  
End at: 2018-06-29 16:49:23  
Local clock offset: -4.326 ms  
Remote clock offset: -23.753 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 13.03 Mbit/s  
95th percentile per-packet one-way delay: 59.291 ms  
Loss rate: 3.26%  
-- Flow 1:  
Average throughput: 13.03 Mbit/s  
95th percentile per-packet one-way delay: 59.291 ms  
Loss rate: 3.26%

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

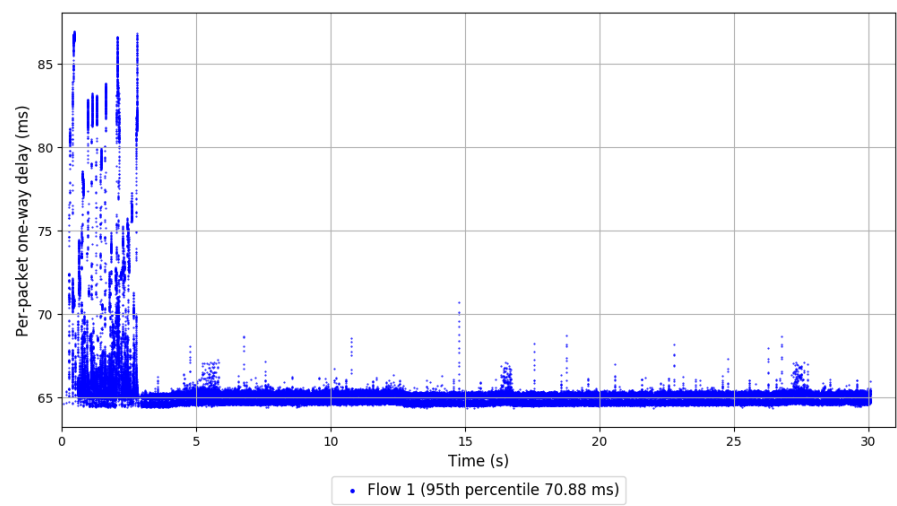
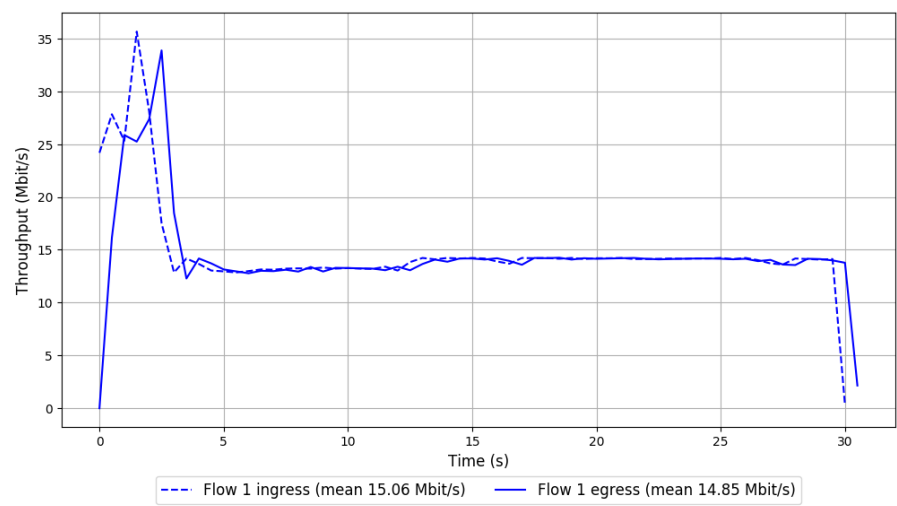


Run 8: Statistics of TaoVA-100x

Start at: 2018-06-29 17:26:53  
End at: 2018-06-29 17:27:23  
Local clock offset: 6.254 ms  
Remote clock offset: -11.907 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 14.85 Mbit/s  
95th percentile per-packet one-way delay: 70.876 ms  
Loss rate: 1.42%  
-- Flow 1:  
Average throughput: 14.85 Mbit/s  
95th percentile per-packet one-way delay: 70.876 ms  
Loss rate: 1.42%

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



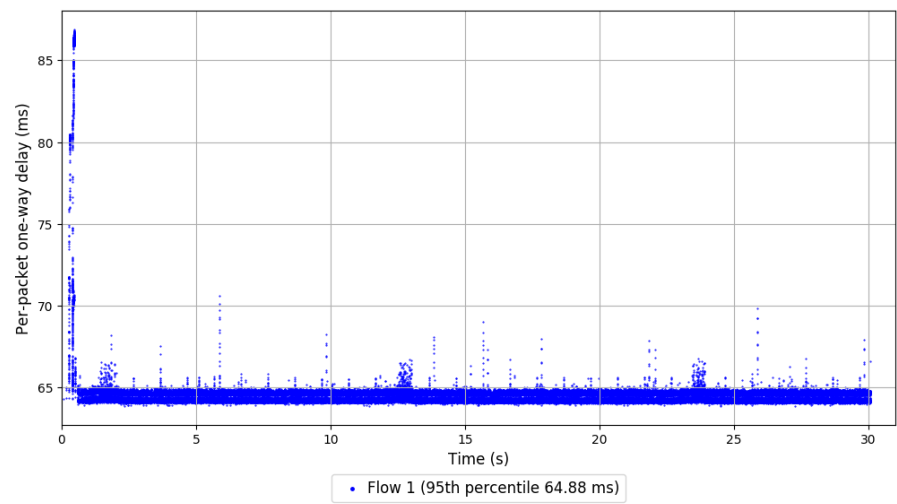
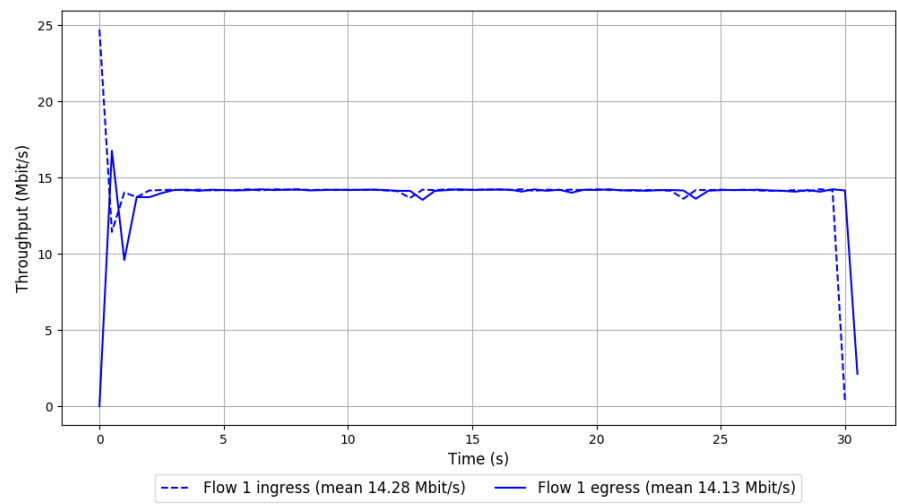
Run 9: Statistics of TaoVA-100x

Start at: 2018-06-29 18:06:22  
End at: 2018-06-29 18:06:52  
Local clock offset: 4.817 ms  
Remote clock offset: -11.247 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 14.13 Mbit/s  
95th percentile per-packet one-way delay: 64.879 ms  
Loss rate: 1.07%  
-- Flow 1:  
Average throughput: 14.13 Mbit/s  
95th percentile per-packet one-way delay: 64.879 ms  
Loss rate: 1.07%



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



Run 10: Statistics of TaoVA-100x

Start at: 2018-06-29 18:49:09

End at: 2018-06-29 18:49:39

Local clock offset: -0.643 ms

Remote clock offset: -10.982 ms

# Below is generated by plot.py at 2018-06-29 19:24:52

# Datalink statistics

-- Total of 1 flow:

Average throughput: 13.21 Mbit/s

95th percentile per-packet one-way delay: 65.022 ms

Loss rate: 1.87%

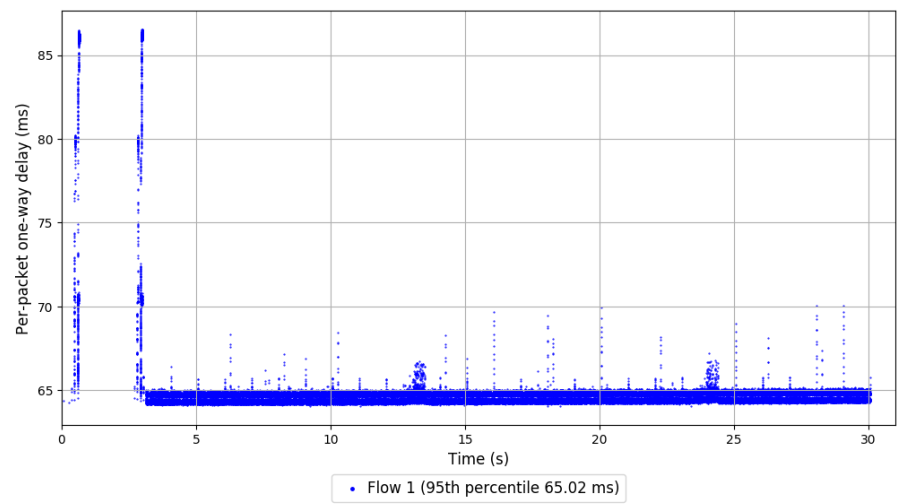
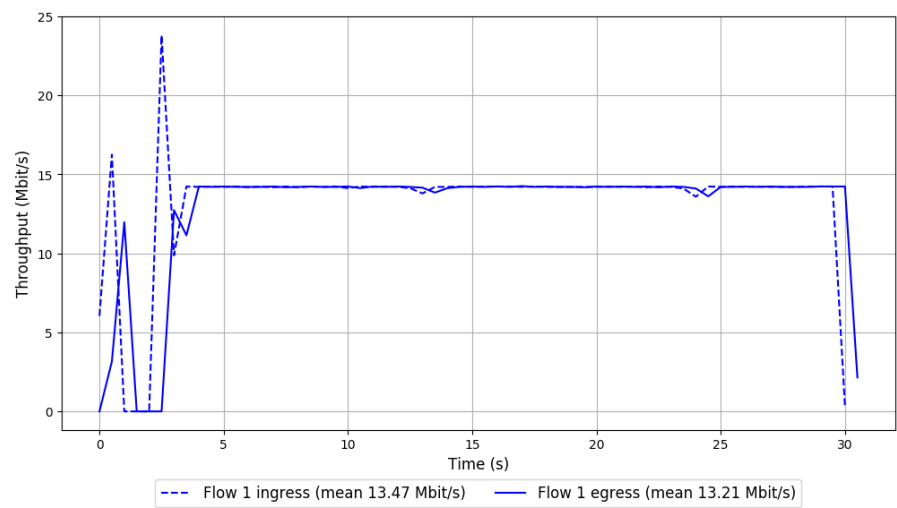
-- Flow 1:

Average throughput: 13.21 Mbit/s

95th percentile per-packet one-way delay: 65.022 ms

Loss rate: 1.87%

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

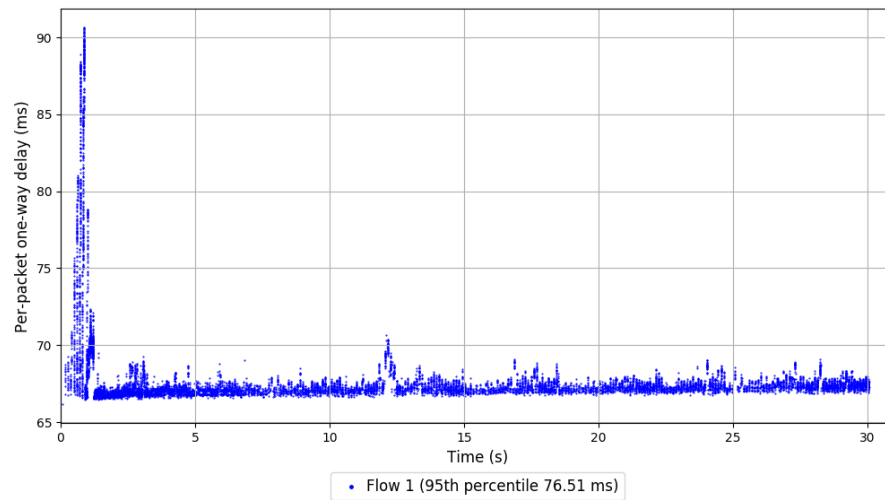
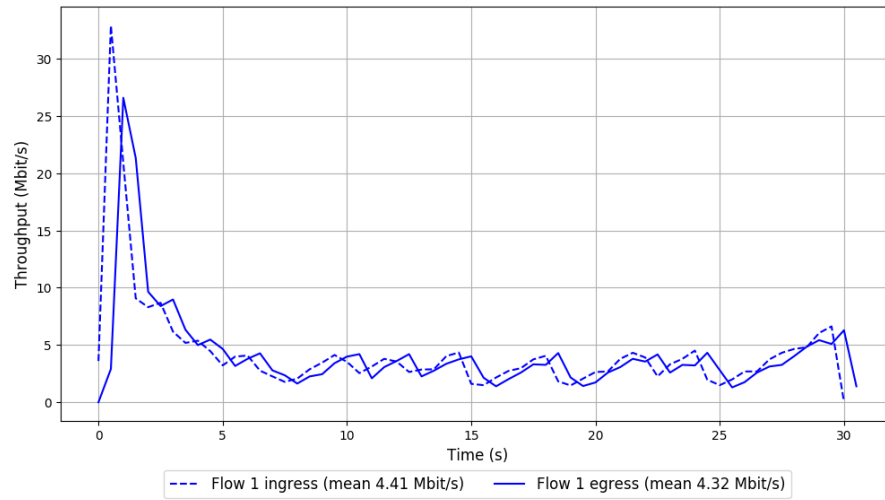


Run 1: Statistics of TCP Vegas

Start at: 2018-06-29 12:57:03  
End at: 2018-06-29 12:57:33  
Local clock offset: -3.764 ms  
Remote clock offset: -8.162 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.32 Mbit/s  
95th percentile per-packet one-way delay: 76.510 ms  
Loss rate: 2.07%  
-- Flow 1:  
Average throughput: 4.32 Mbit/s  
95th percentile per-packet one-way delay: 76.510 ms  
Loss rate: 2.07%

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

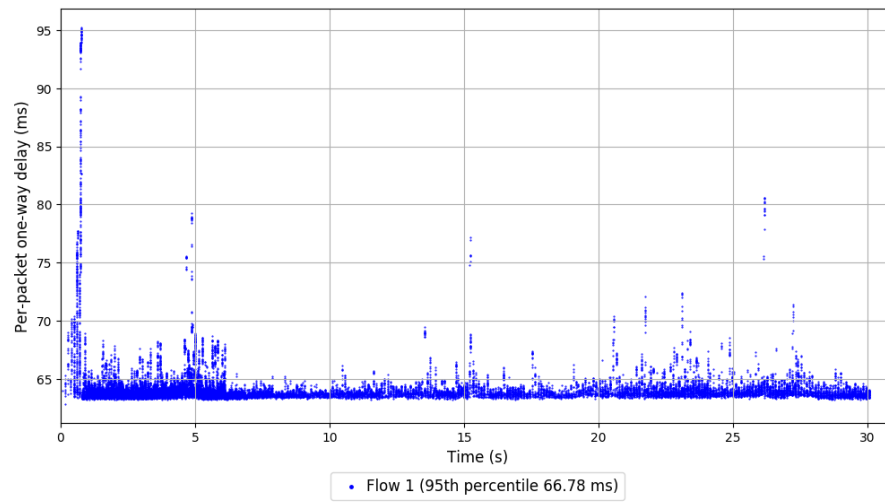
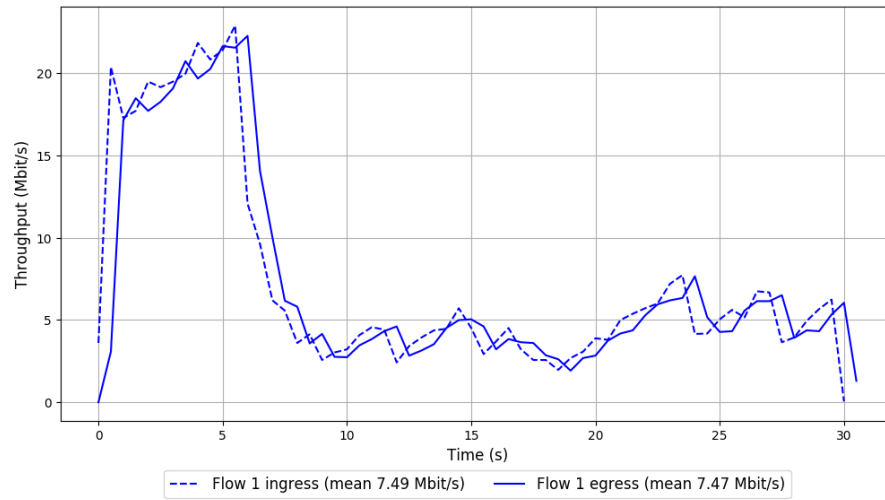


Run 2: Statistics of TCP Vegas

Start at: 2018-06-29 13:36:33  
End at: 2018-06-29 13:37:03  
Local clock offset: -2.294 ms  
Remote clock offset: -12.619 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 7.47 Mbit/s  
95th percentile per-packet one-way delay: 66.783 ms  
Loss rate: 0.33%  
-- Flow 1:  
Average throughput: 7.47 Mbit/s  
95th percentile per-packet one-way delay: 66.783 ms  
Loss rate: 0.33%

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



Run 3: Statistics of TCP Vegas

/home/ubuntu/pantheon/data/2018-06-29T12-47-AWS-Korea-to-China-10-runs/vegas\_stats\_run3.log



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

Figure is missing

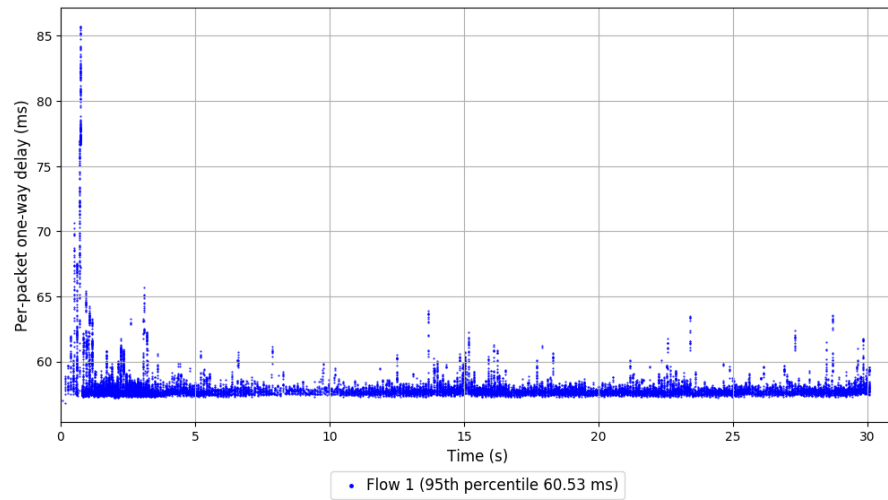
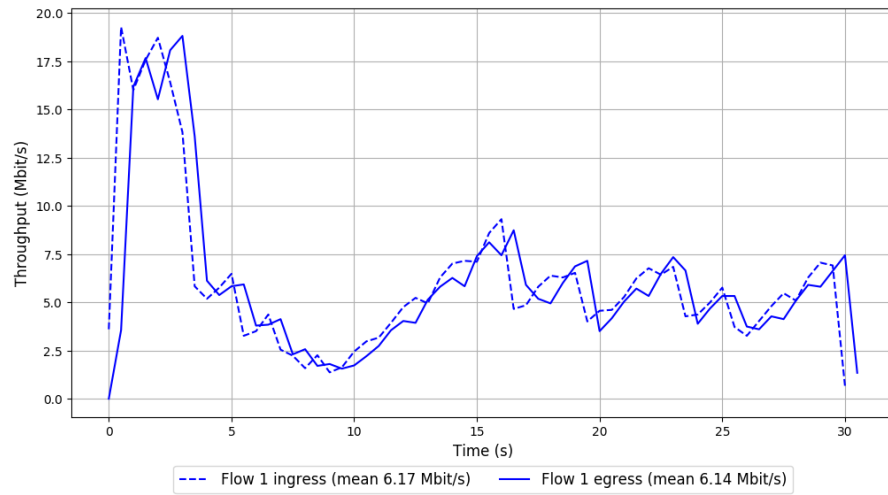
Figure is missing

Run 4: Statistics of TCP Vegas

Start at: 2018-06-29 14:54:24  
End at: 2018-06-29 14:54:54  
Local clock offset: 6.755 ms  
Remote clock offset: -17.231 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 6.14 Mbit/s  
95th percentile per-packet one-way delay: 60.532 ms  
Loss rate: 0.41%  
-- Flow 1:  
Average throughput: 6.14 Mbit/s  
95th percentile per-packet one-way delay: 60.532 ms  
Loss rate: 0.41%

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

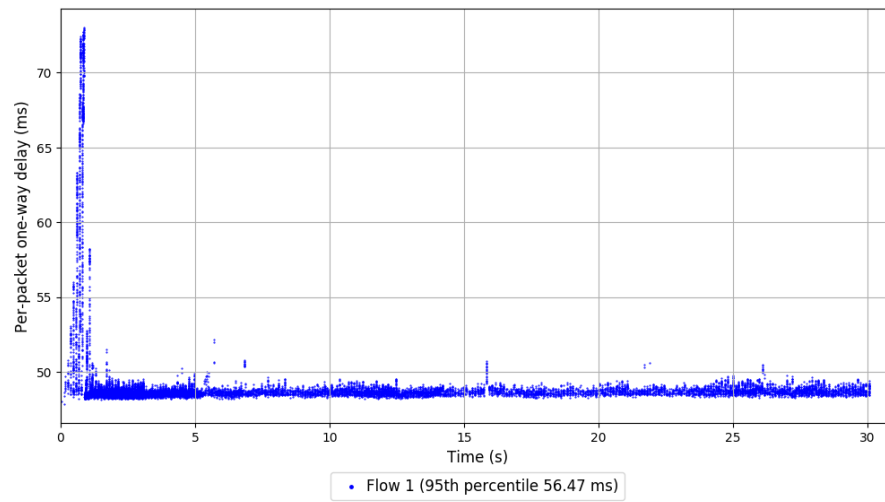
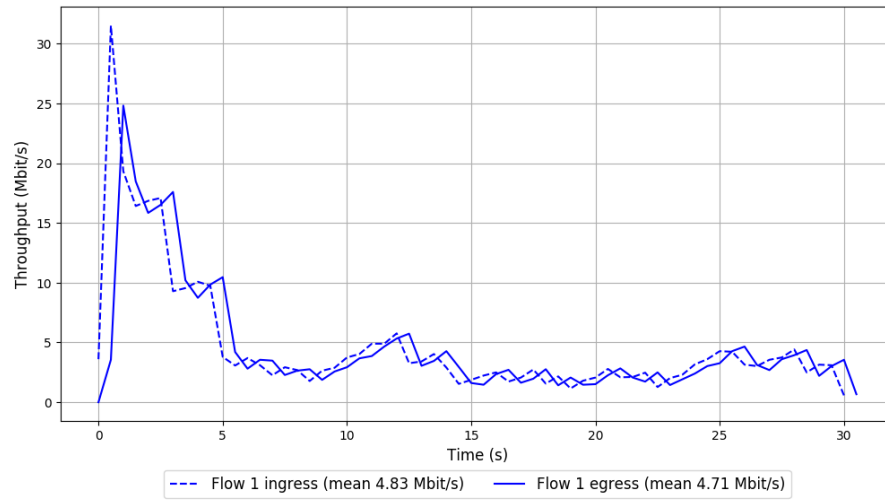


Run 5: Statistics of TCP Vegas

Start at: 2018-06-29 15:30:05  
End at: 2018-06-29 15:30:35  
Local clock offset: 8.728 ms  
Remote clock offset: -25.452 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.71 Mbit/s  
95th percentile per-packet one-way delay: 56.467 ms  
Loss rate: 2.60%  
-- Flow 1:  
Average throughput: 4.71 Mbit/s  
95th percentile per-packet one-way delay: 56.467 ms  
Loss rate: 2.60%

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

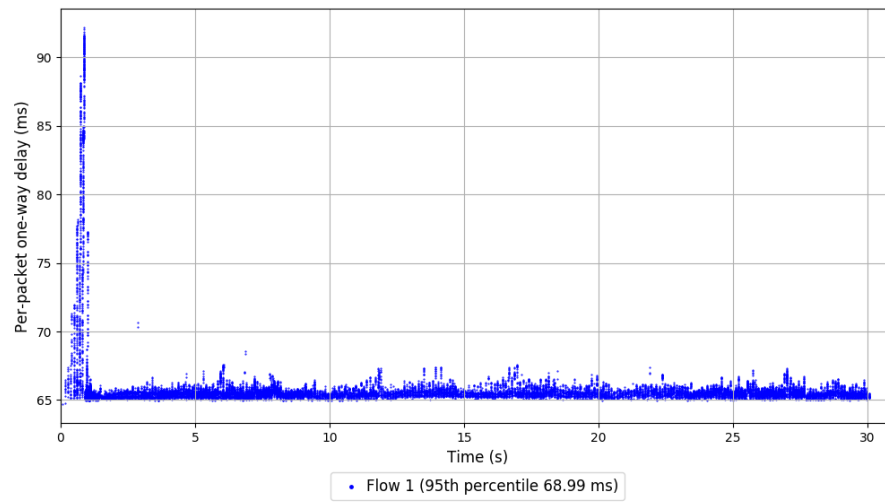
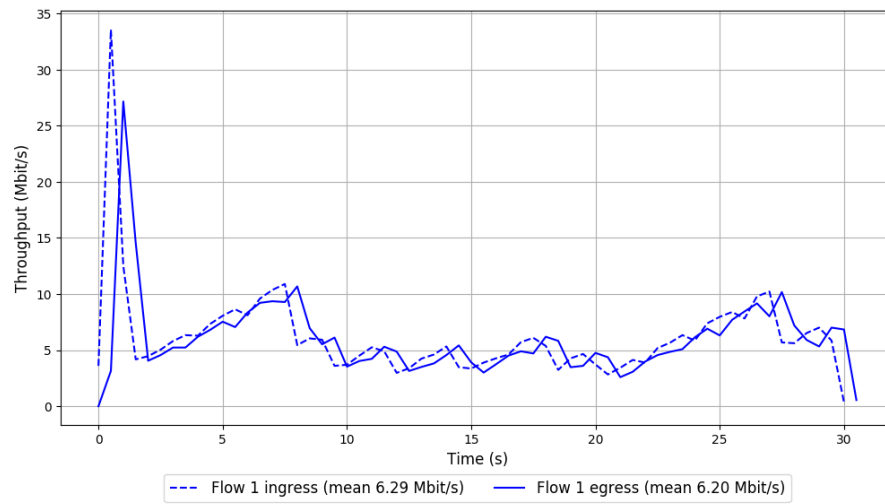


Run 6: Statistics of TCP Vegas

Start at: 2018-06-29 16:07:44  
End at: 2018-06-29 16:08:14  
Local clock offset: 4.279 ms  
Remote clock offset: -10.713 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 6.20 Mbit/s  
95th percentile per-packet one-way delay: 68.986 ms  
Loss rate: 1.35%  
-- Flow 1:  
Average throughput: 6.20 Mbit/s  
95th percentile per-packet one-way delay: 68.986 ms  
Loss rate: 1.35%

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



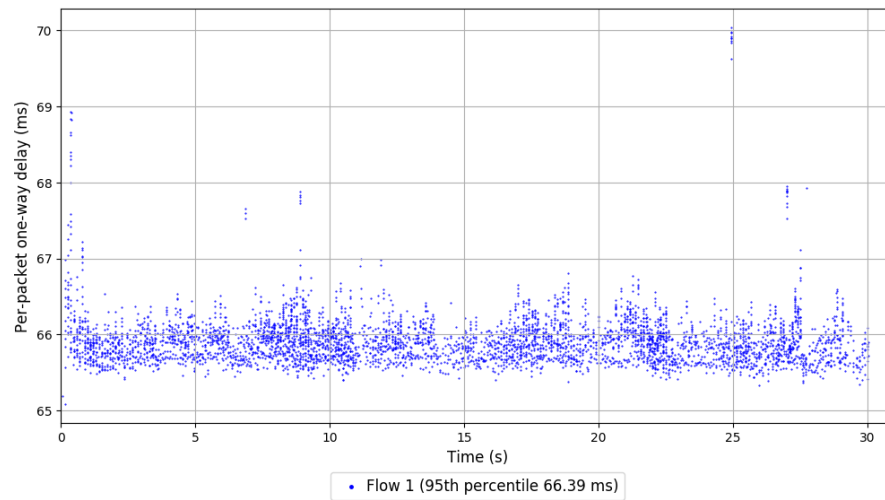
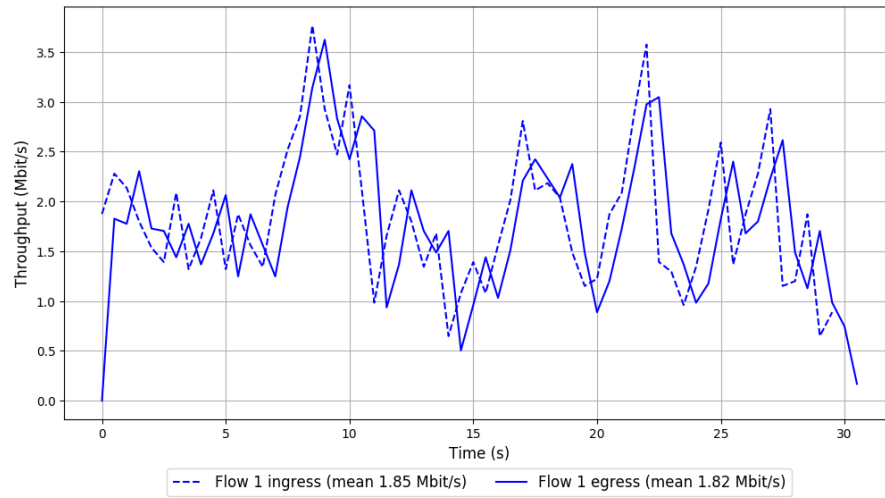
Run 7: Statistics of TCP Vegas

Start at: 2018-06-29 16:44:06  
End at: 2018-06-29 16:44:36  
Local clock offset: -6.338 ms  
Remote clock offset: -9.712 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 1.82 Mbit/s  
95th percentile per-packet one-way delay: 66.391 ms  
Loss rate: 1.26%  
-- Flow 1:  
Average throughput: 1.82 Mbit/s  
95th percentile per-packet one-way delay: 66.391 ms  
Loss rate: 1.26%



## Run 7: Report of TCP Vegas — Data Link

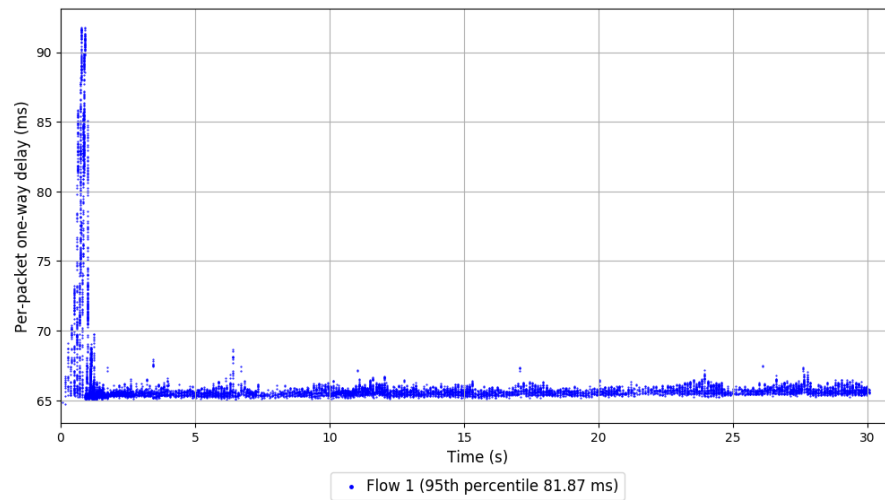
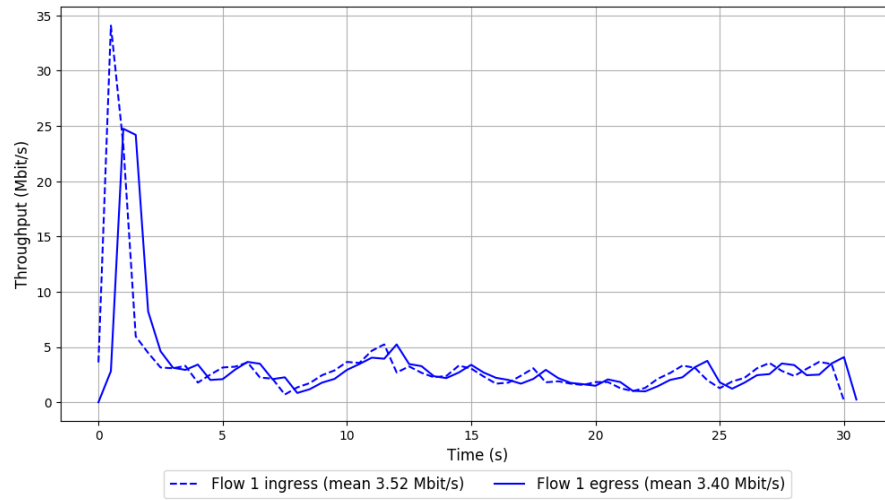


Run 8: Statistics of TCP Vegas

Start at: 2018-06-29 17:22:00  
End at: 2018-06-29 17:22:30  
Local clock offset: 4.748 ms  
Remote clock offset: -11.616 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 3.40 Mbit/s  
95th percentile per-packet one-way delay: 81.874 ms  
Loss rate: 3.45%  
-- Flow 1:  
Average throughput: 3.40 Mbit/s  
95th percentile per-packet one-way delay: 81.874 ms  
Loss rate: 3.45%

# Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-06-29 18:01:10

End at: 2018-06-29 18:01:40

Local clock offset: 5.075 ms

Remote clock offset: -11.3 ms

# Below is generated by plot.py at 2018-06-29 19:24:52

# Datalink statistics

-- Total of 1 flow:

Average throughput: 10.55 Mbit/s

95th percentile per-packet one-way delay: 66.225 ms

Loss rate: 0.18%

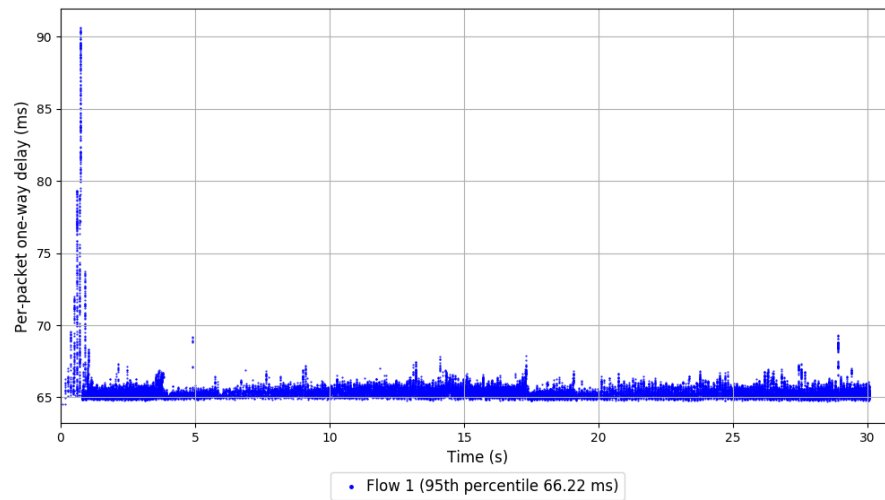
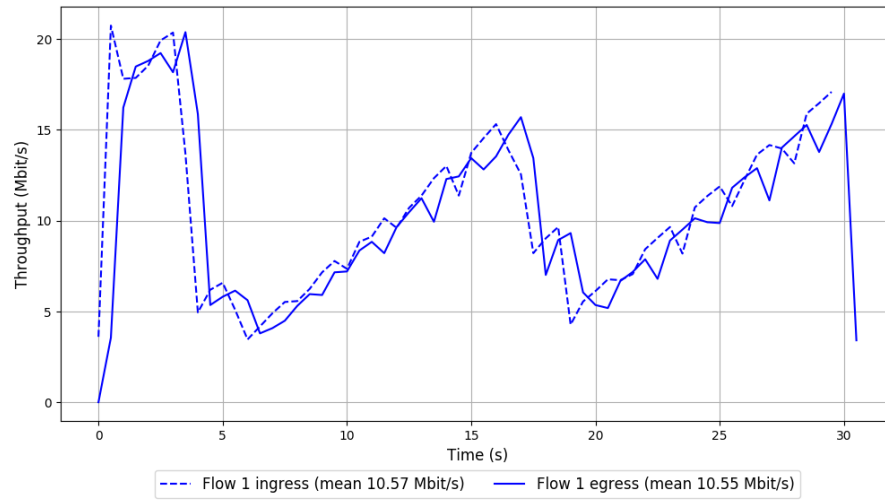
-- Flow 1:

Average throughput: 10.55 Mbit/s

95th percentile per-packet one-way delay: 66.225 ms

Loss rate: 0.18%

### Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-06-29 18:43:27

End at: 2018-06-29 18:43:57

Local clock offset: -1.369 ms

Remote clock offset: -10.945 ms

# Below is generated by plot.py at 2018-06-29 19:24:52

# Datalink statistics

-- Total of 1 flow:

Average throughput: 26.87 Mbit/s

95th percentile per-packet one-way delay: 65.792 ms

Loss rate: 0.27%

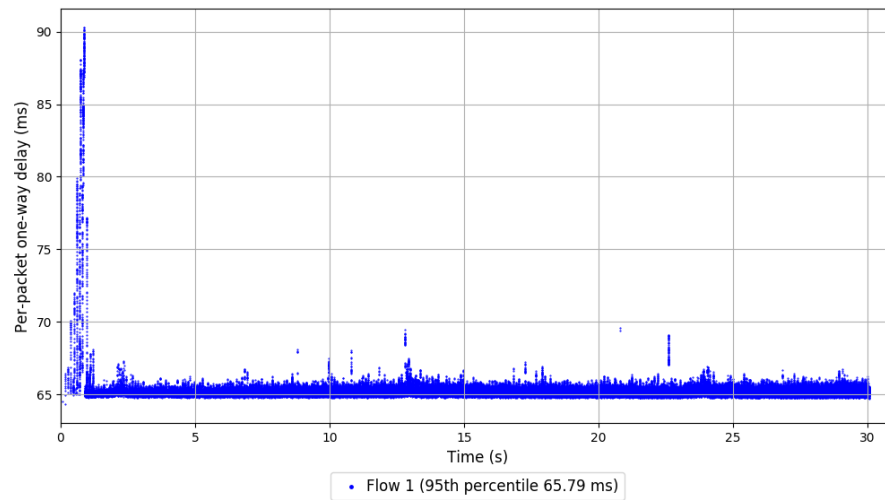
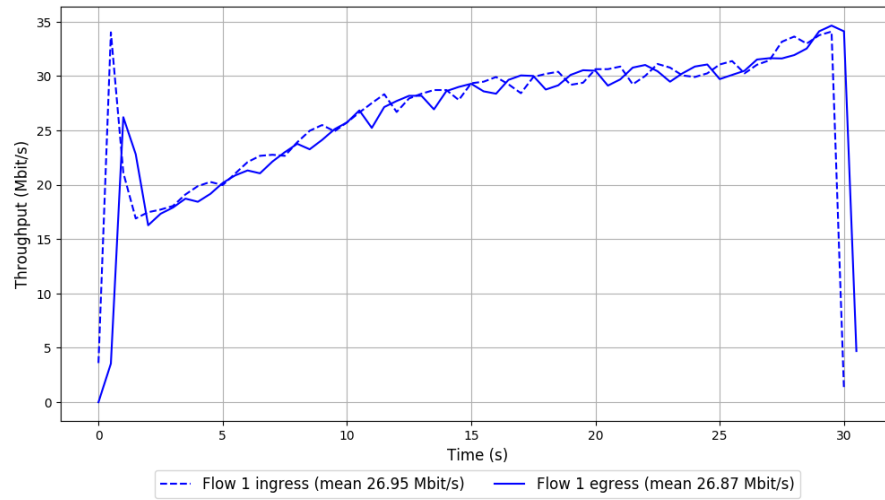
-- Flow 1:

Average throughput: 26.87 Mbit/s

95th percentile per-packet one-way delay: 65.792 ms

Loss rate: 0.27%

# Run 10: Report of TCP Vegas — Data Link



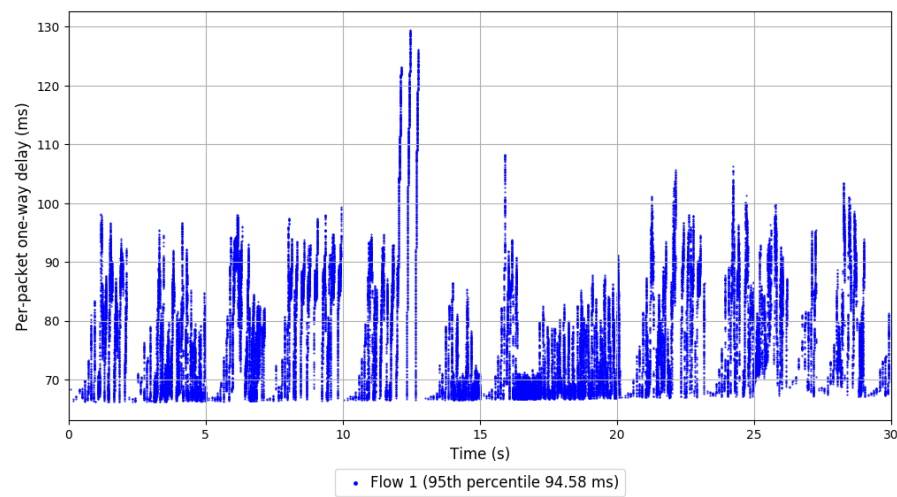
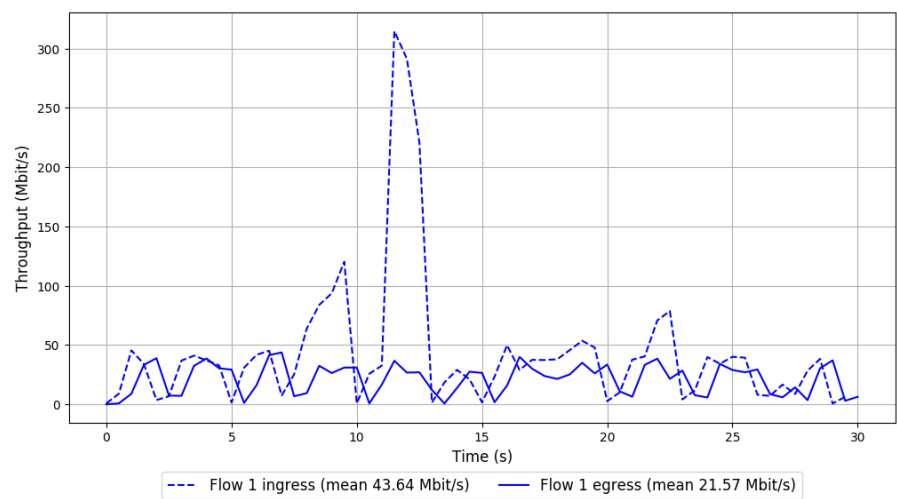
Run 1: Statistics of Verus

Start at: 2018-06-29 12:48:32  
End at: 2018-06-29 12:49:02  
Local clock offset: -15.682 ms  
Remote clock offset: -9.153 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 21.57 Mbit/s  
95th percentile per-packet one-way delay: 94.583 ms  
Loss rate: 50.54%  
-- Flow 1:  
Average throughput: 21.57 Mbit/s  
95th percentile per-packet one-way delay: 94.583 ms  
Loss rate: 50.54%



Run 1: Report of Verus — Data Link

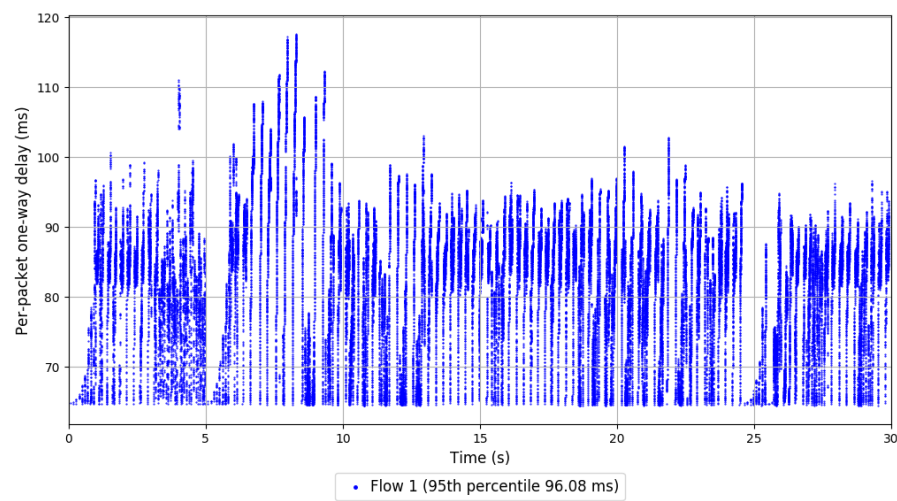
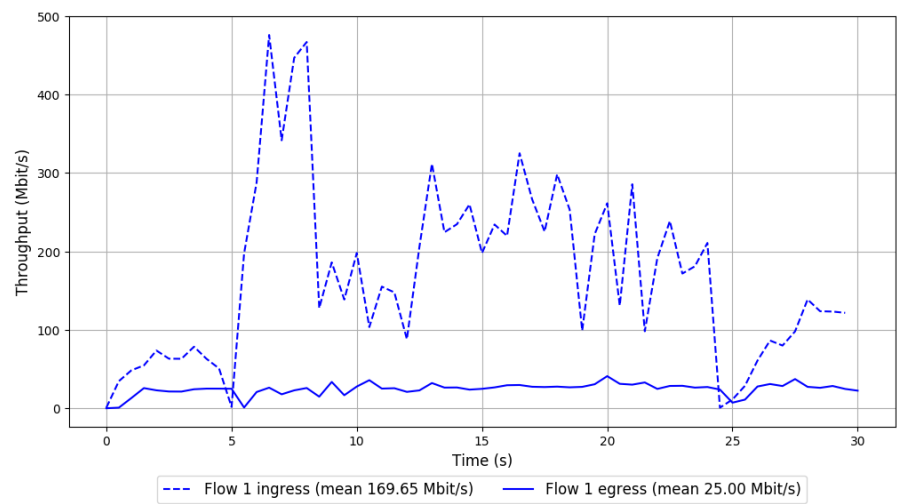


Run 2: Statistics of Verus

Start at: 2018-06-29 13:27:55  
End at: 2018-06-29 13:28:25  
Local clock offset: -1.116 ms  
Remote clock offset: -10.765 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 25.00 Mbit/s  
95th percentile per-packet one-way delay: 96.082 ms  
Loss rate: 85.25%  
-- Flow 1:  
Average throughput: 25.00 Mbit/s  
95th percentile per-packet one-way delay: 96.082 ms  
Loss rate: 85.25%

Run 2: Report of Verus — Data Link

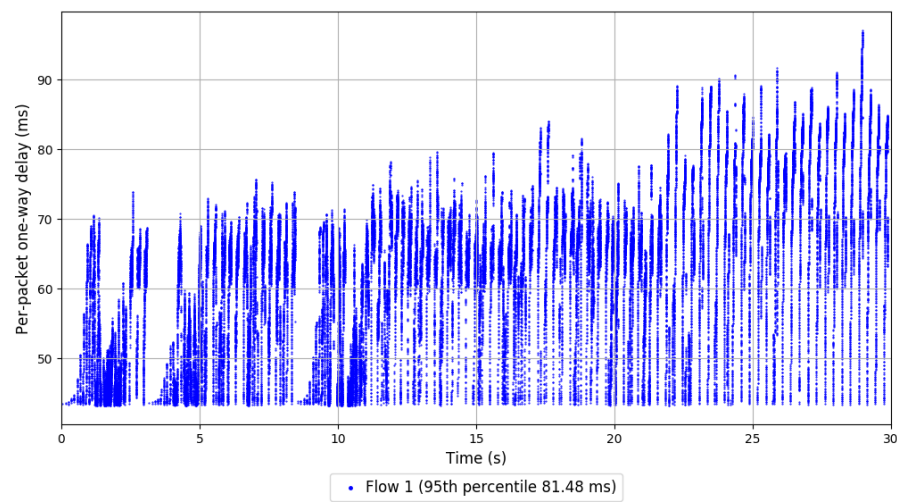
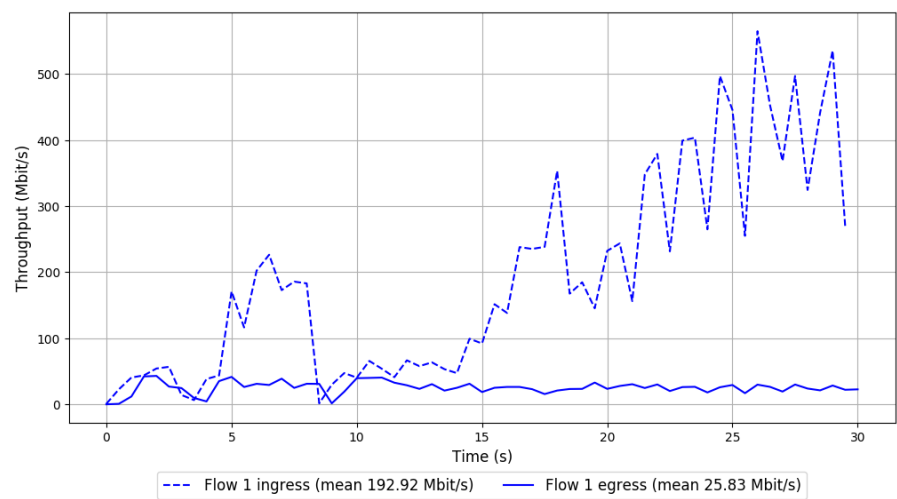


Run 3: Statistics of Verus

Start at: 2018-06-29 14:05:41  
End at: 2018-06-29 14:06:11  
Local clock offset: -2.912 ms  
Remote clock offset: -30.887 ms

# Below is generated by plot.py at 2018-06-29 19:24:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 25.83 Mbit/s  
95th percentile per-packet one-way delay: 81.485 ms  
Loss rate: 86.60%  
-- Flow 1:  
Average throughput: 25.83 Mbit/s  
95th percentile per-packet one-way delay: 81.485 ms  
Loss rate: 86.60%

Run 3: Report of Verus — Data Link

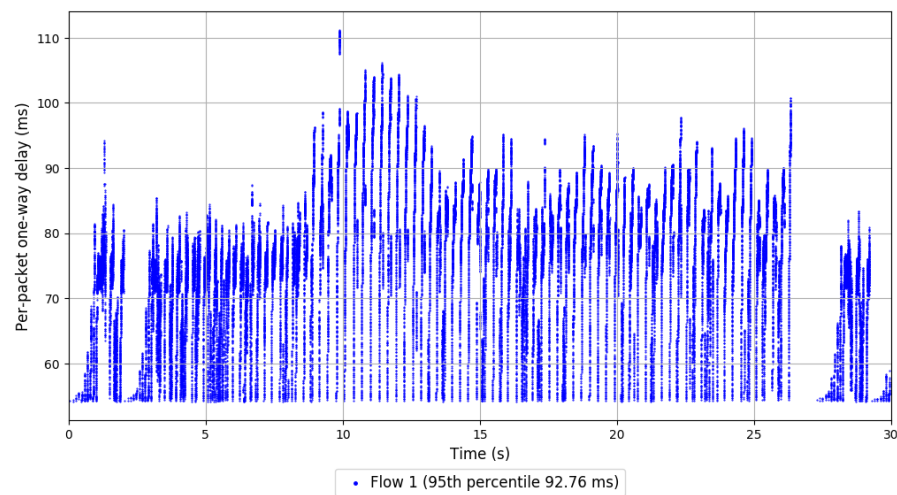
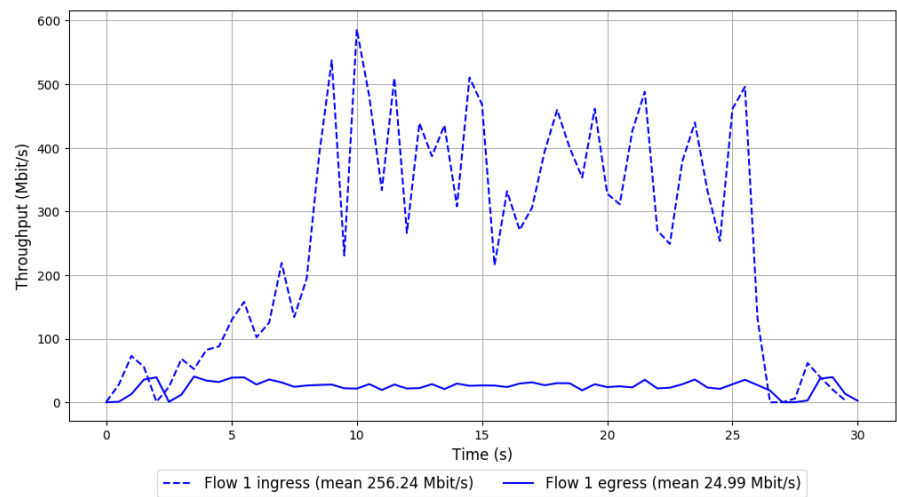


Run 4: Statistics of Verus

Start at: 2018-06-29 14:45:03  
End at: 2018-06-29 14:45:33  
Local clock offset: 5.3 ms  
Remote clock offset: -21.253 ms

# Below is generated by plot.py at 2018-06-29 19:25:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.99 Mbit/s  
95th percentile per-packet one-way delay: 92.762 ms  
Loss rate: 90.25%  
-- Flow 1:  
Average throughput: 24.99 Mbit/s  
95th percentile per-packet one-way delay: 92.762 ms  
Loss rate: 90.25%

Run 4: Report of Verus — Data Link



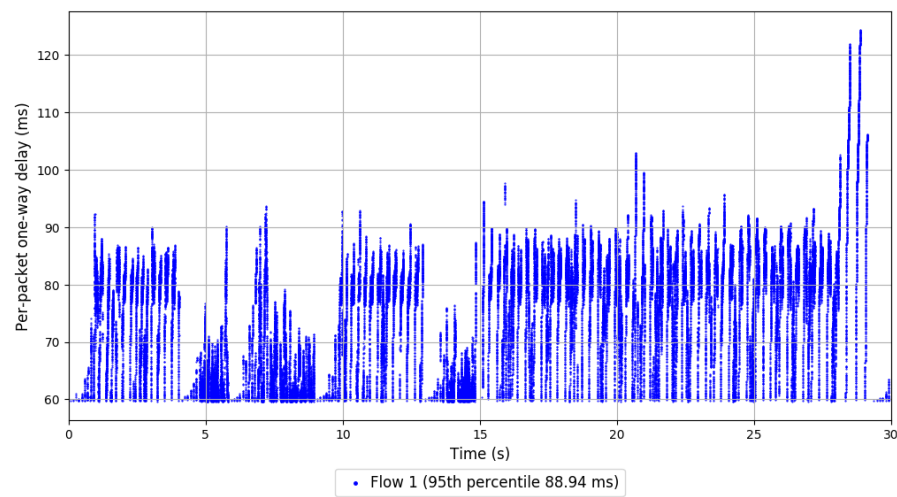
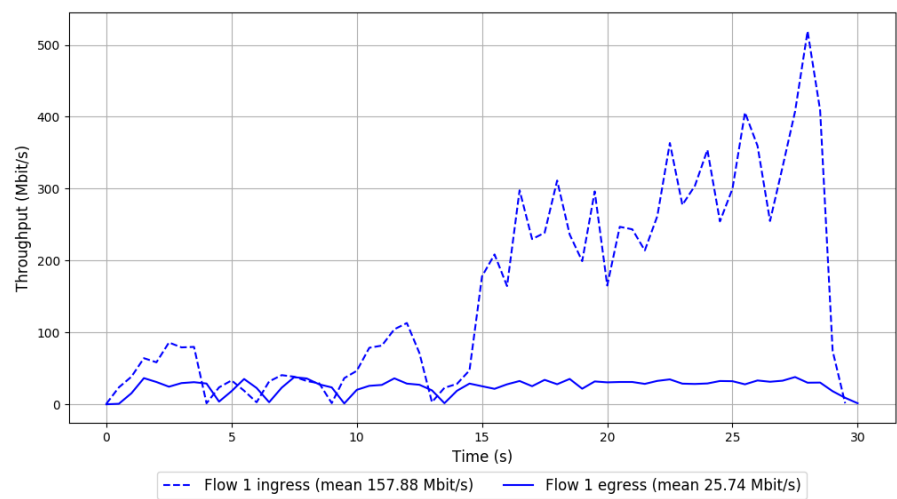
Run 5: Statistics of Verus

Start at: 2018-06-29 15:22:03  
End at: 2018-06-29 15:22:33  
Local clock offset: 8.559 ms  
Remote clock offset: -14.036 ms

# Below is generated by plot.py at 2018-06-29 19:25:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 25.74 Mbit/s  
95th percentile per-packet one-way delay: 88.944 ms  
Loss rate: 83.70%  
-- Flow 1:  
Average throughput: 25.74 Mbit/s  
95th percentile per-packet one-way delay: 88.944 ms  
Loss rate: 83.70%



Run 5: Report of Verus — Data Link

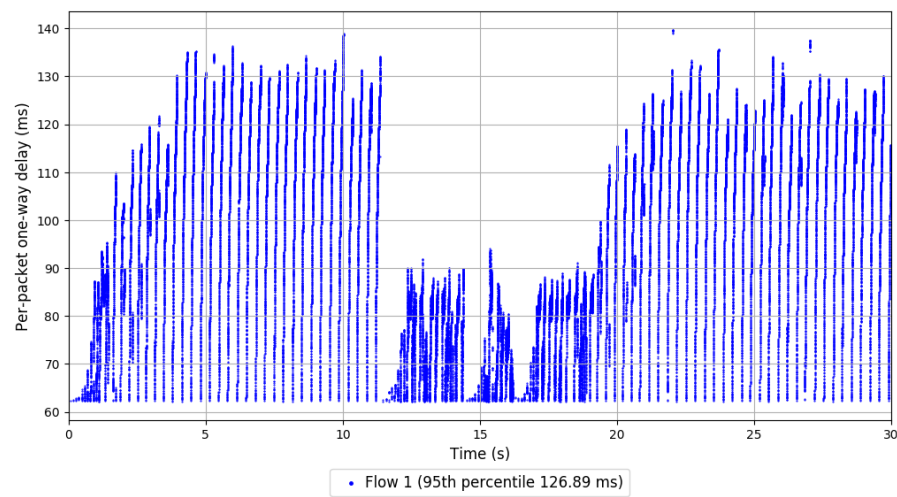
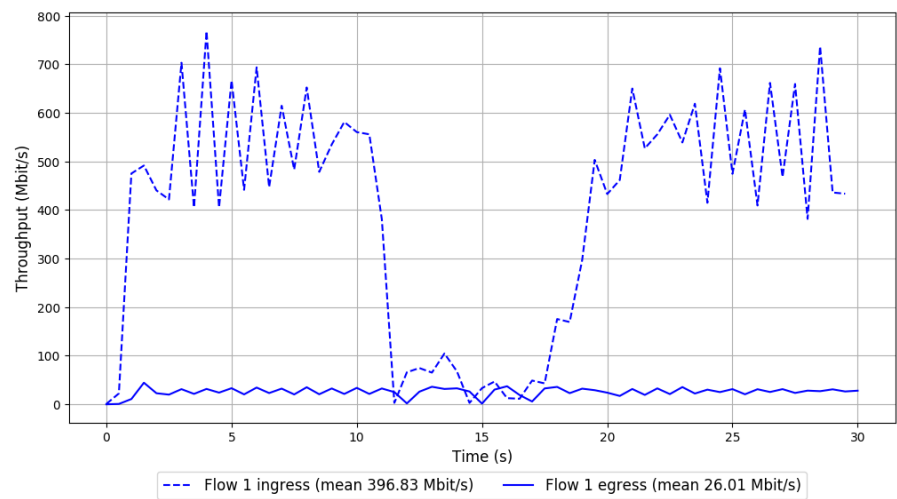


Run 6: Statistics of Verus

Start at: 2018-06-29 16:00:05  
End at: 2018-06-29 16:00:35  
Local clock offset: 5.0 ms  
Remote clock offset: -12.145 ms

# Below is generated by plot.py at 2018-06-29 19:25:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 26.01 Mbit/s  
95th percentile per-packet one-way delay: 126.895 ms  
Loss rate: 93.43%  
-- Flow 1:  
Average throughput: 26.01 Mbit/s  
95th percentile per-packet one-way delay: 126.895 ms  
Loss rate: 93.43%

Run 6: Report of Verus — Data Link

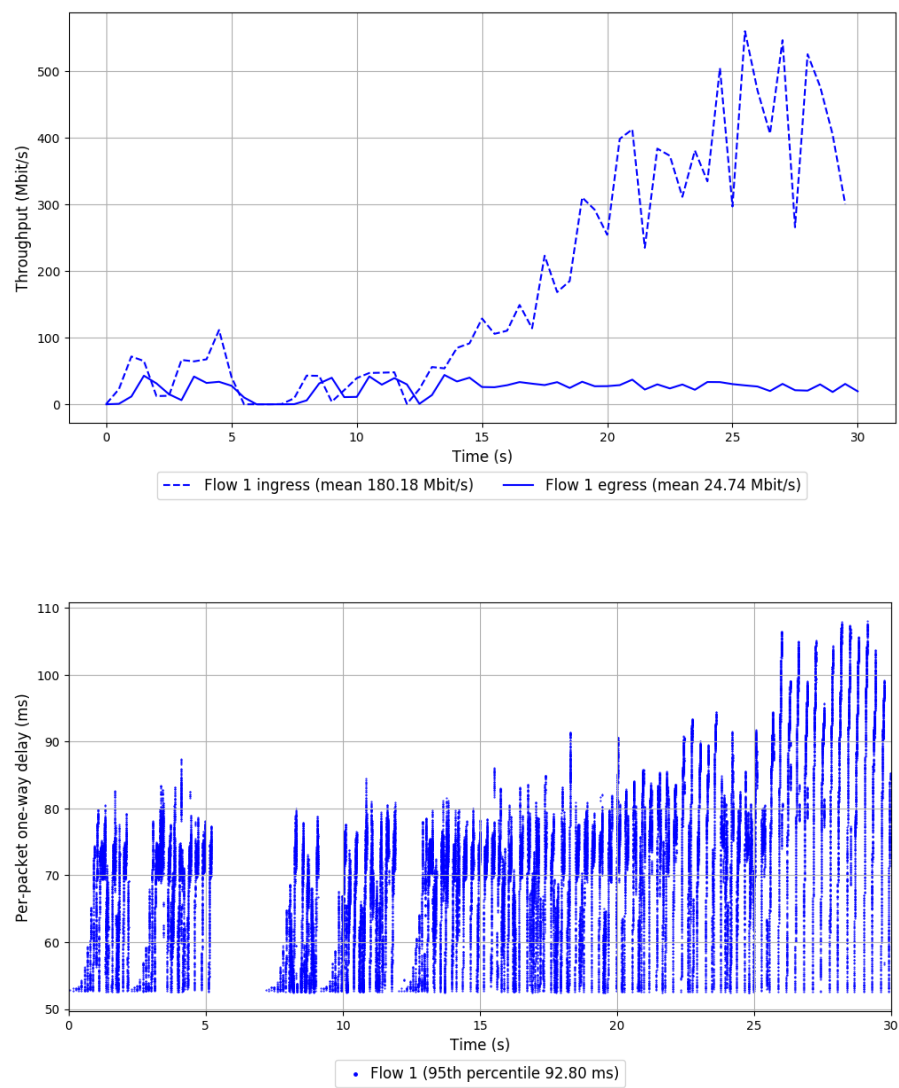


Run 7: Statistics of Verus

Start at: 2018-06-29 16:37:14  
End at: 2018-06-29 16:37:44  
Local clock offset: -5.287 ms  
Remote clock offset: -23.688 ms

# Below is generated by plot.py at 2018-06-29 19:25:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.74 Mbit/s  
95th percentile per-packet one-way delay: 92.797 ms  
Loss rate: 86.25%  
-- Flow 1:  
Average throughput: 24.74 Mbit/s  
95th percentile per-packet one-way delay: 92.797 ms  
Loss rate: 86.25%

Run 7: Report of Verus — Data Link

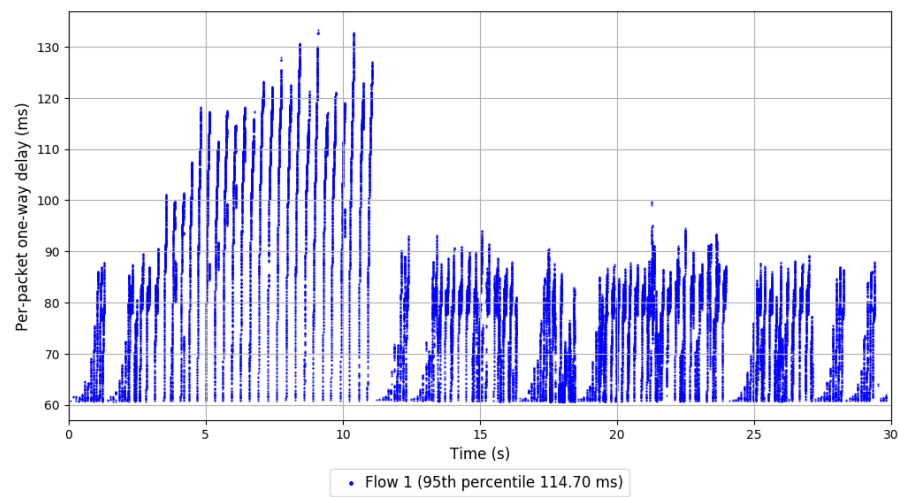
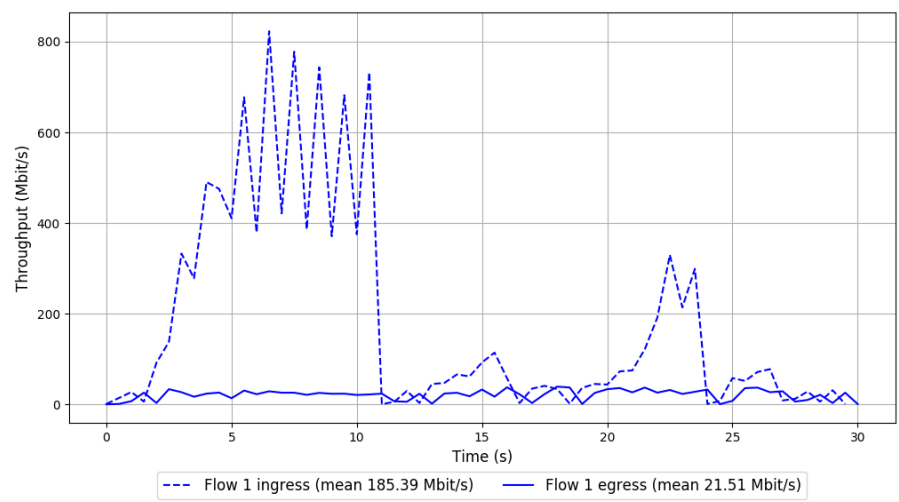


Run 8: Statistics of Verus

Start at: 2018-06-29 17:13:50  
End at: 2018-06-29 17:14:20  
Local clock offset: 0.58 ms  
Remote clock offset: -15.449 ms

# Below is generated by plot.py at 2018-06-29 19:25:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 21.51 Mbit/s  
95th percentile per-packet one-way delay: 114.704 ms  
Loss rate: 88.40%  
-- Flow 1:  
Average throughput: 21.51 Mbit/s  
95th percentile per-packet one-way delay: 114.704 ms  
Loss rate: 88.40%

Run 8: Report of Verus — Data Link



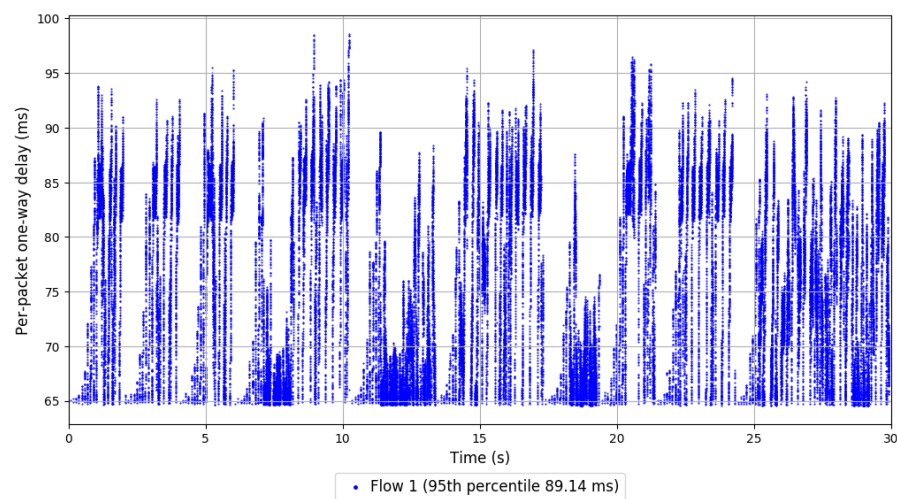
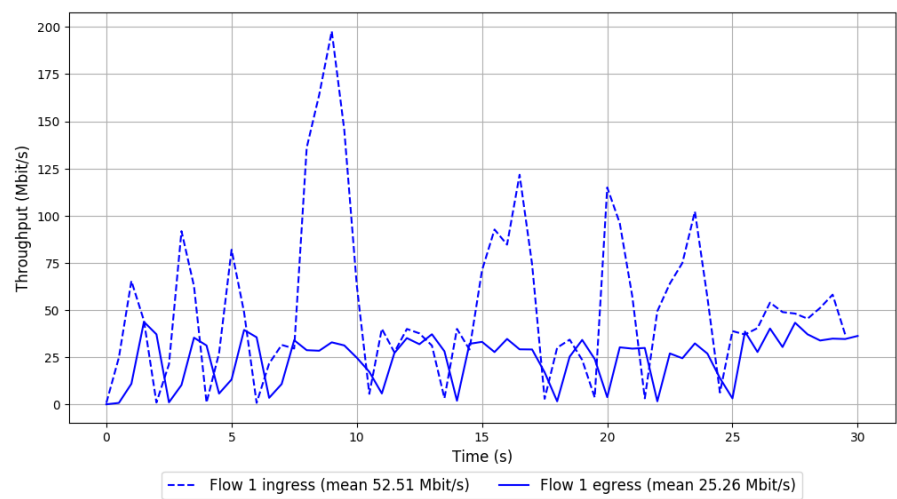
Run 9: Statistics of Verus

Start at: 2018-06-29 17:53:09  
End at: 2018-06-29 17:53:39  
Local clock offset: 6.443 ms  
Remote clock offset: -11.452 ms

# Below is generated by plot.py at 2018-06-29 19:25:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 25.26 Mbit/s  
95th percentile per-packet one-way delay: 89.139 ms  
Loss rate: 51.89%  
-- Flow 1:  
Average throughput: 25.26 Mbit/s  
95th percentile per-packet one-way delay: 89.139 ms  
Loss rate: 51.89%



Run 9: Report of Verus — Data Link

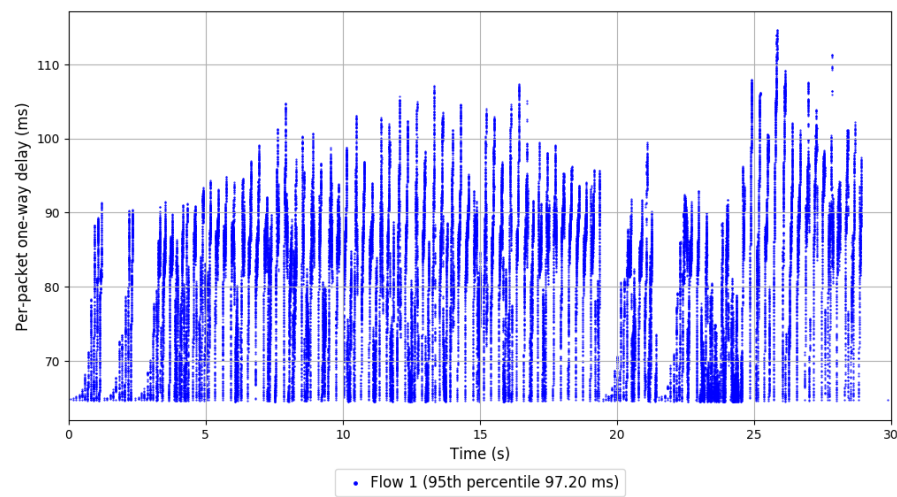
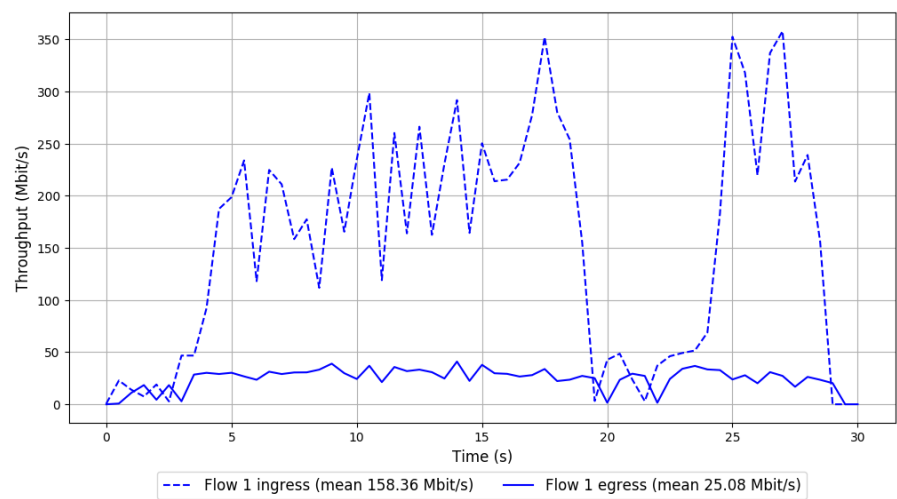


Run 10: Statistics of Verus

Start at: 2018-06-29 18:32:31  
End at: 2018-06-29 18:33:01  
Local clock offset: -0.41 ms  
Remote clock offset: -10.999 ms

# Below is generated by plot.py at 2018-06-29 19:25:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 25.08 Mbit/s  
95th percentile per-packet one-way delay: 97.196 ms  
Loss rate: 84.16%  
-- Flow 1:  
Average throughput: 25.08 Mbit/s  
95th percentile per-packet one-way delay: 97.196 ms  
Loss rate: 84.16%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-06-29 13:25:22

End at: 2018-06-29 13:25:52

Local clock offset: -0.474 ms

Remote clock offset: -24.47 ms

# Below is generated by plot.py at 2018-06-29 19:25:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 23.09 Mbit/s

95th percentile per-packet one-way delay: 72.380 ms

Loss rate: 0.91%

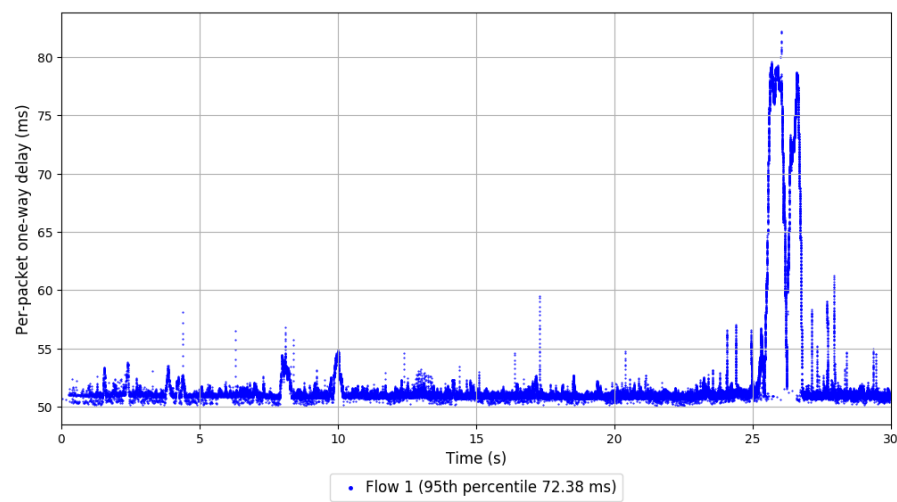
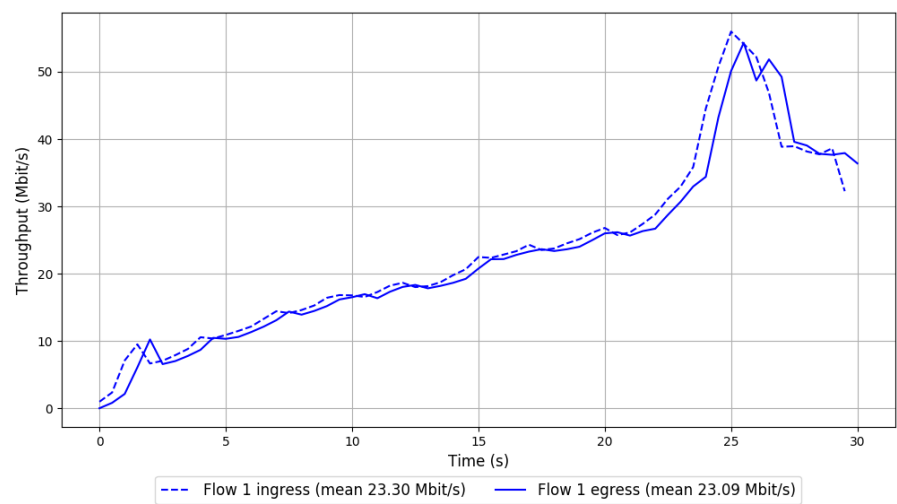
-- Flow 1:

Average throughput: 23.09 Mbit/s

95th percentile per-packet one-way delay: 72.380 ms

Loss rate: 0.91%

Run 1: Report of PCC-Vivace — Data Link

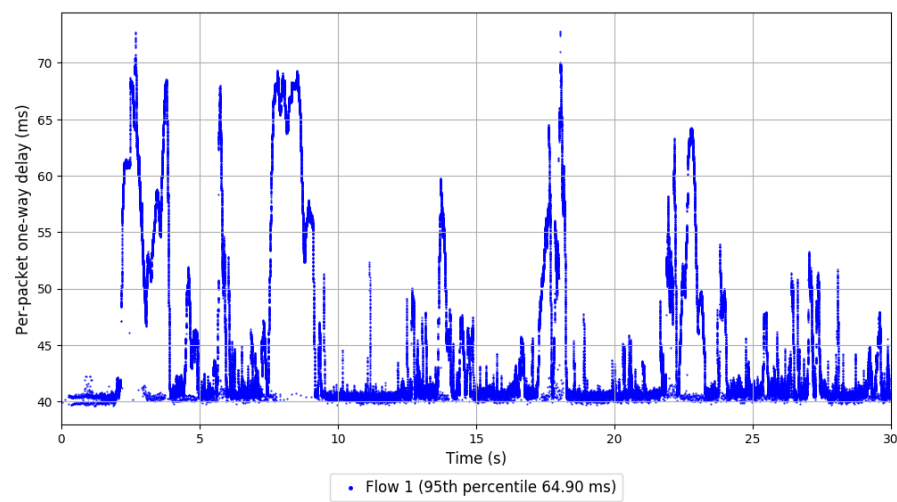
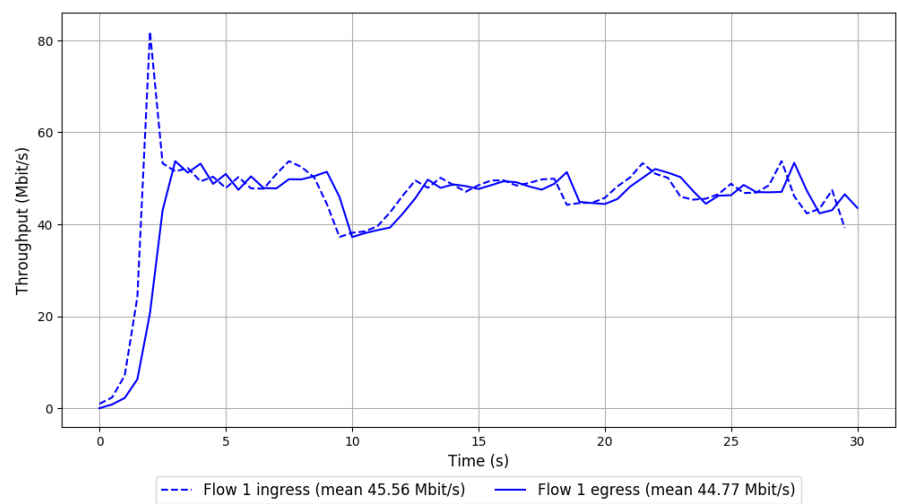


Run 2: Statistics of PCC-Vivace

Start at: 2018-06-29 14:02:05  
End at: 2018-06-29 14:02:35  
Local clock offset: -3.102 ms  
Remote clock offset: -33.903 ms

# Below is generated by plot.py at 2018-06-29 19:25:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 44.77 Mbit/s  
95th percentile per-packet one-way delay: 64.901 ms  
Loss rate: 1.75%  
-- Flow 1:  
Average throughput: 44.77 Mbit/s  
95th percentile per-packet one-way delay: 64.901 ms  
Loss rate: 1.75%

Run 2: Report of PCC-Vivace — Data Link



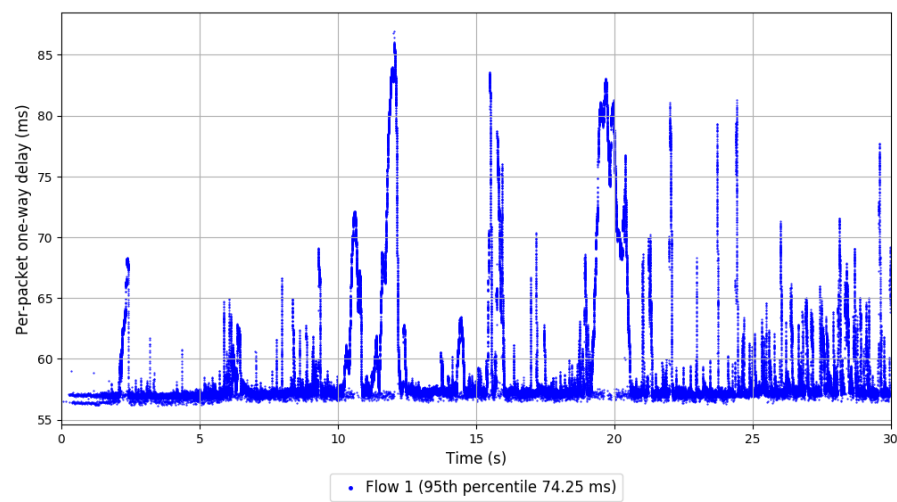
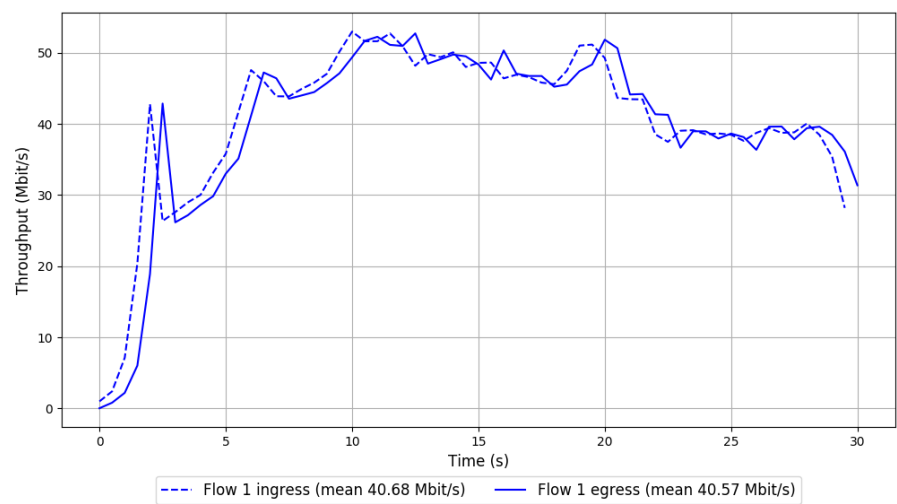
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-29 14:41:39  
End at: 2018-06-29 14:42:09  
Local clock offset: 5.011 ms  
Remote clock offset: -18.123 ms

# Below is generated by plot.py at 2018-06-29 19:25:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 40.57 Mbit/s  
95th percentile per-packet one-way delay: 74.247 ms  
Loss rate: 0.27%  
-- Flow 1:  
Average throughput: 40.57 Mbit/s  
95th percentile per-packet one-way delay: 74.247 ms  
Loss rate: 0.27%



Run 3: Report of PCC-Vivace — Data Link

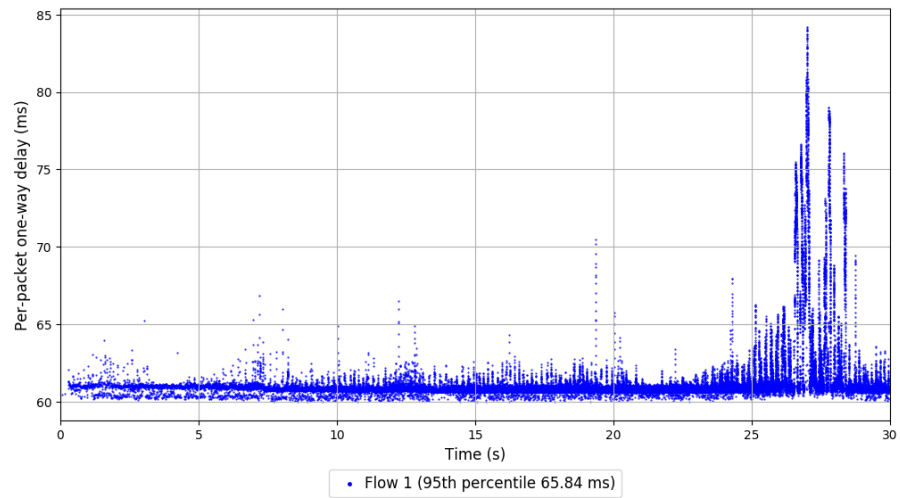
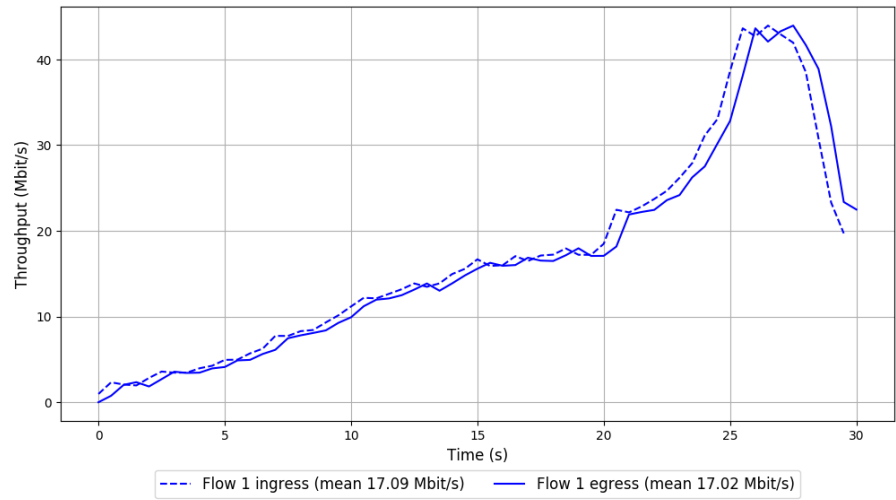


Run 4: Statistics of PCC-Vivace

Start at: 2018-06-29 15:19:55  
End at: 2018-06-29 15:20:25  
Local clock offset: 8.594 ms  
Remote clock offset: -12.823 ms

# Below is generated by plot.py at 2018-06-29 19:25:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 17.02 Mbit/s  
95th percentile per-packet one-way delay: 65.840 ms  
Loss rate: 0.39%  
-- Flow 1:  
Average throughput: 17.02 Mbit/s  
95th percentile per-packet one-way delay: 65.840 ms  
Loss rate: 0.39%

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

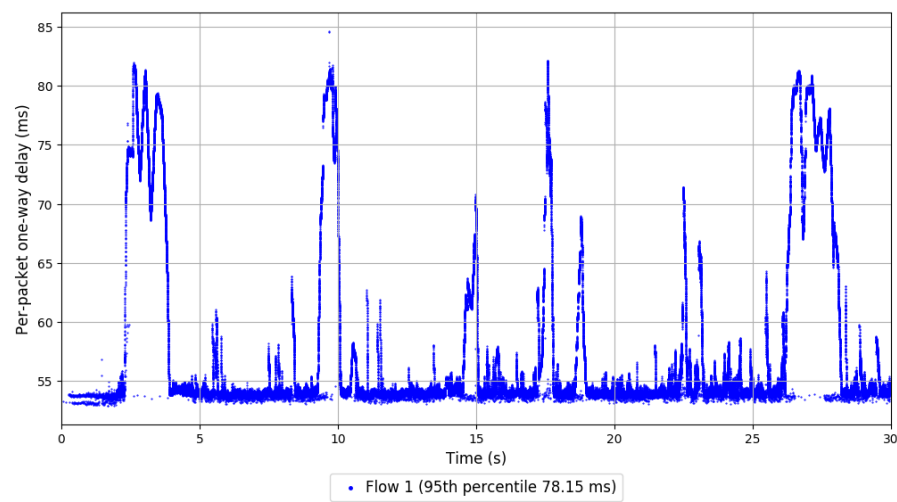
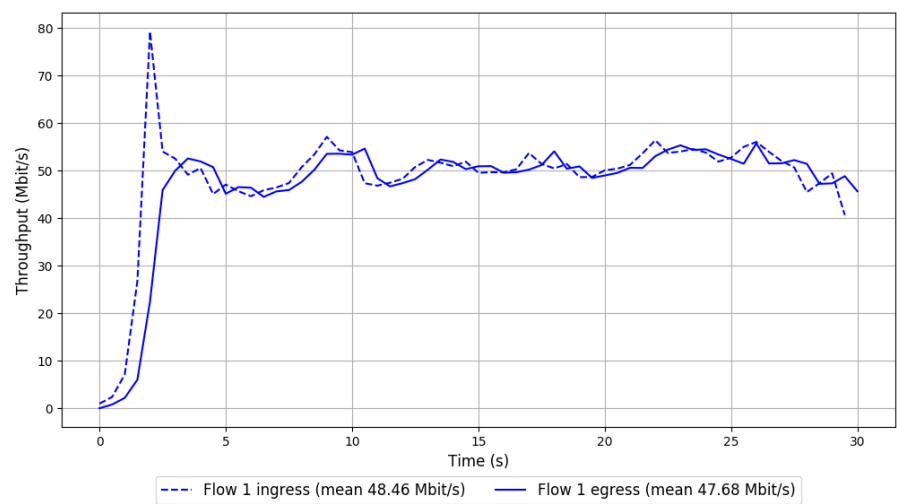


Run 5: Statistics of PCC-Vivace

Start at: 2018-06-29 15:56:22  
End at: 2018-06-29 15:56:52  
Local clock offset: 5.62 ms  
Remote clock offset: -20.499 ms

# Below is generated by plot.py at 2018-06-29 19:25:45  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 47.68 Mbit/s  
95th percentile per-packet one-way delay: 78.149 ms  
Loss rate: 1.61%  
-- Flow 1:  
Average throughput: 47.68 Mbit/s  
95th percentile per-packet one-way delay: 78.149 ms  
Loss rate: 1.61%

Run 5: Report of PCC-Vivace — Data Link

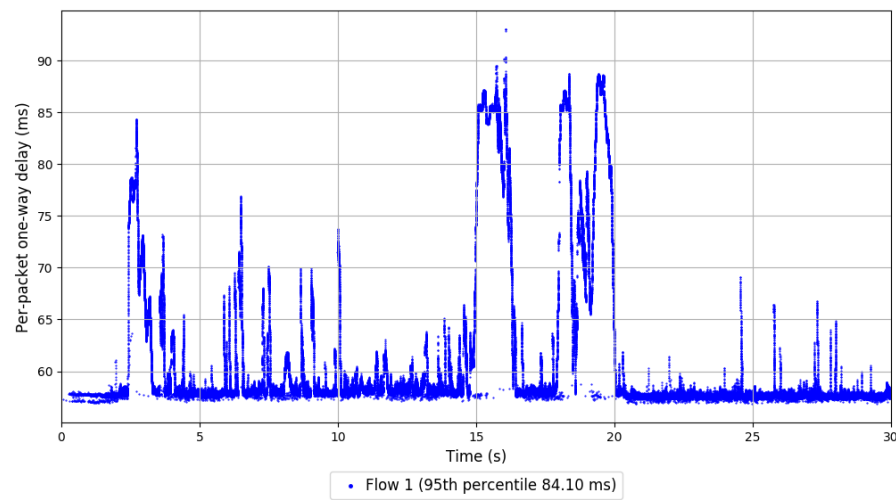
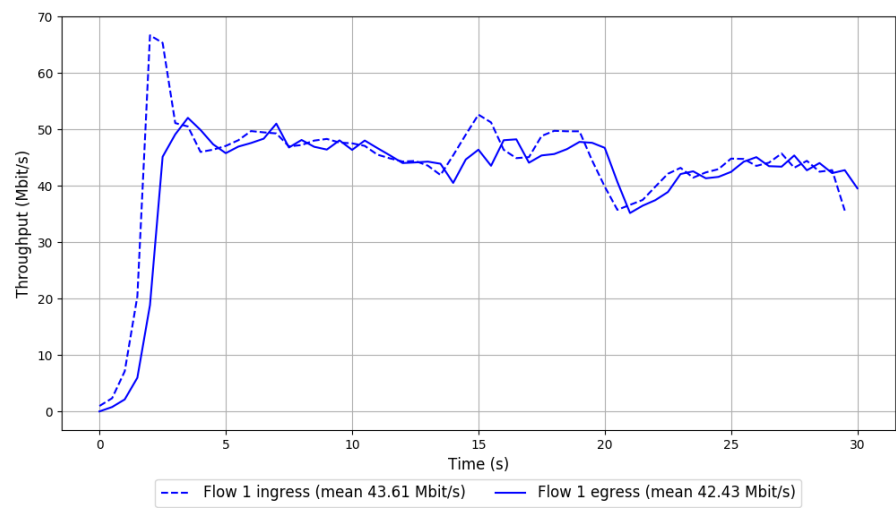


Run 6: Statistics of PCC-Vivace

Start at: 2018-06-29 16:33:53  
End at: 2018-06-29 16:34:23  
Local clock offset: -4.664 ms  
Remote clock offset: -19.225 ms

# Below is generated by plot.py at 2018-06-29 19:25:45  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 42.43 Mbit/s  
95th percentile per-packet one-way delay: 84.097 ms  
Loss rate: 2.72%  
-- Flow 1:  
Average throughput: 42.43 Mbit/s  
95th percentile per-packet one-way delay: 84.097 ms  
Loss rate: 2.72%

Run 6: Report of PCC-Vivace — Data Link



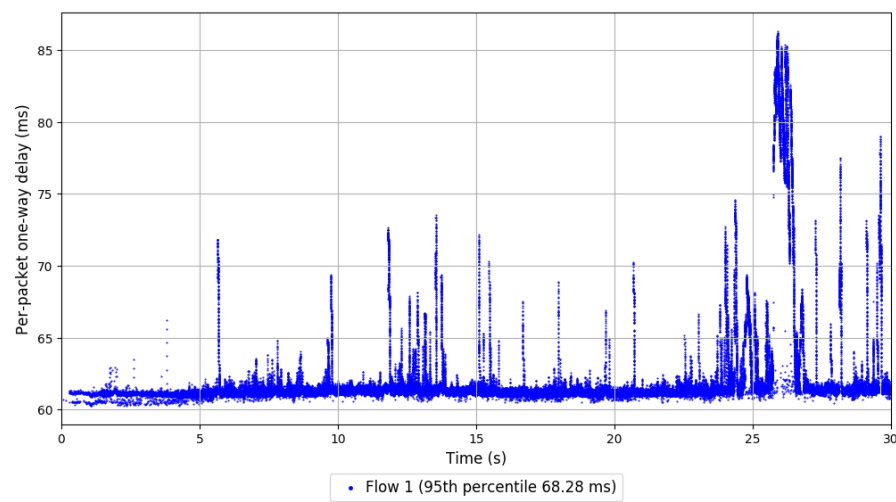
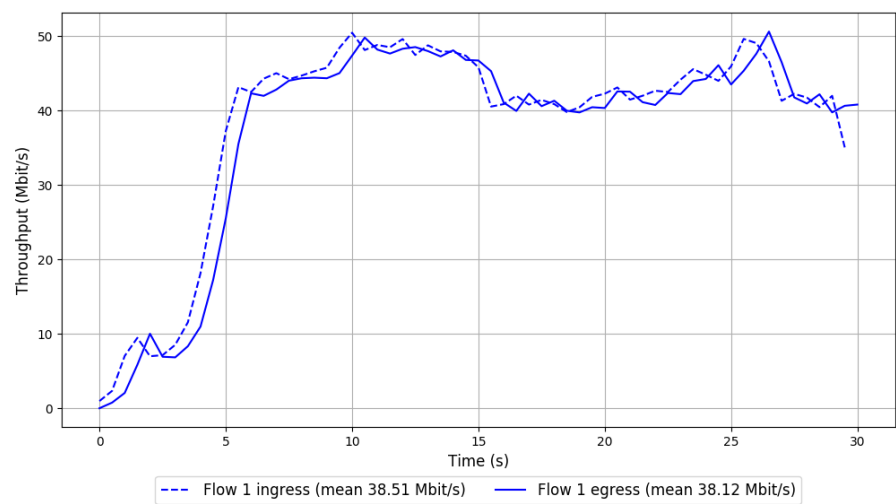
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-29 17:10:43  
End at: 2018-06-29 17:11:13  
Local clock offset: 0.461 ms  
Remote clock offset: -14.595 ms

# Below is generated by plot.py at 2018-06-29 19:25:45  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 38.12 Mbit/s  
95th percentile per-packet one-way delay: 68.284 ms  
Loss rate: 1.00%  
-- Flow 1:  
Average throughput: 38.12 Mbit/s  
95th percentile per-packet one-way delay: 68.284 ms  
Loss rate: 1.00%



Run 7: Report of PCC-Vivace — Data Link

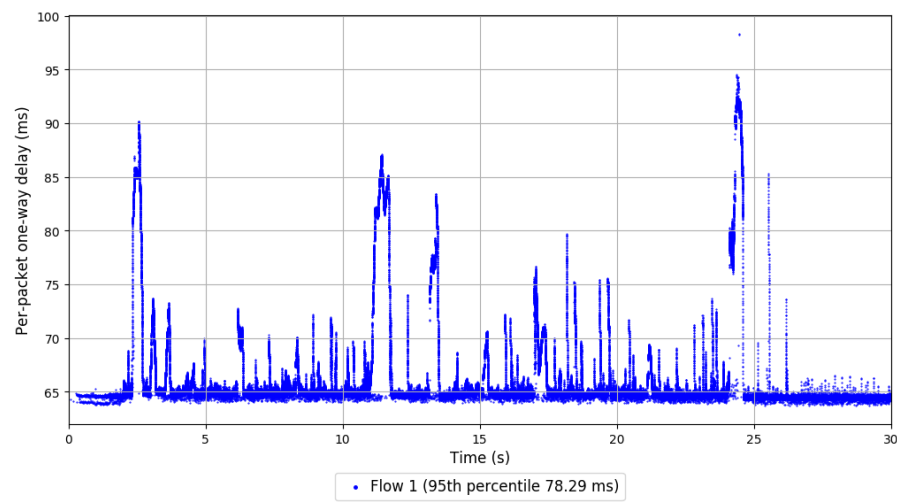
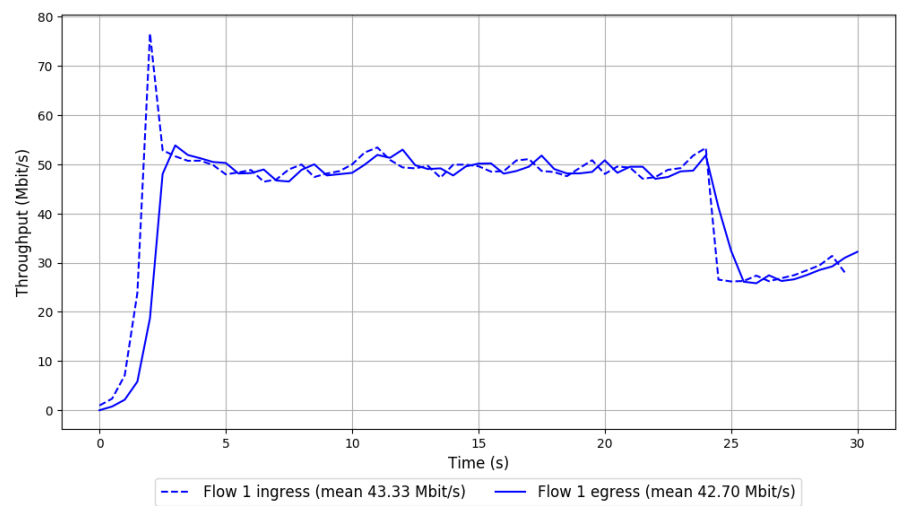


Run 8: Statistics of PCC-Vivace

Start at: 2018-06-29 17:49:41  
End at: 2018-06-29 17:50:11  
Local clock offset: 7.807 ms  
Remote clock offset: -11.645 ms

# Below is generated by plot.py at 2018-06-29 19:25:53  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 42.70 Mbit/s  
95th percentile per-packet one-way delay: 78.289 ms  
Loss rate: 1.47%  
-- Flow 1:  
Average throughput: 42.70 Mbit/s  
95th percentile per-packet one-way delay: 78.289 ms  
Loss rate: 1.47%

Run 8: Report of PCC-Vivace — Data Link

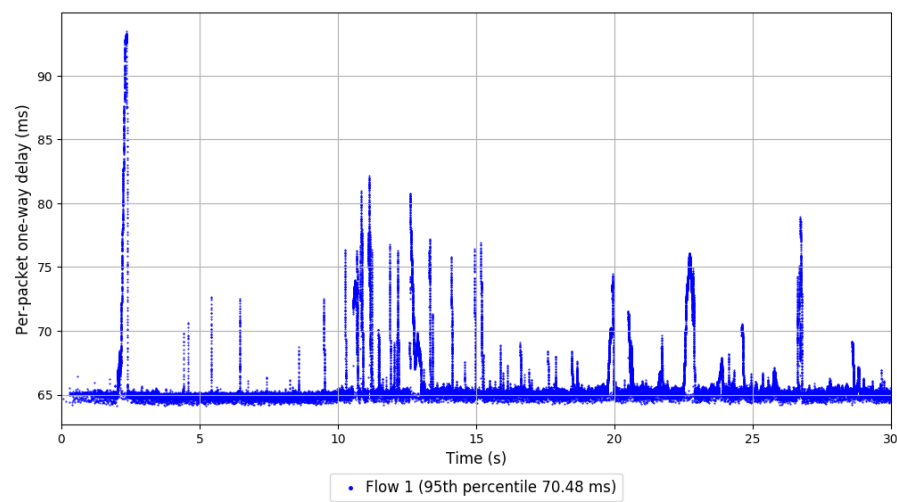
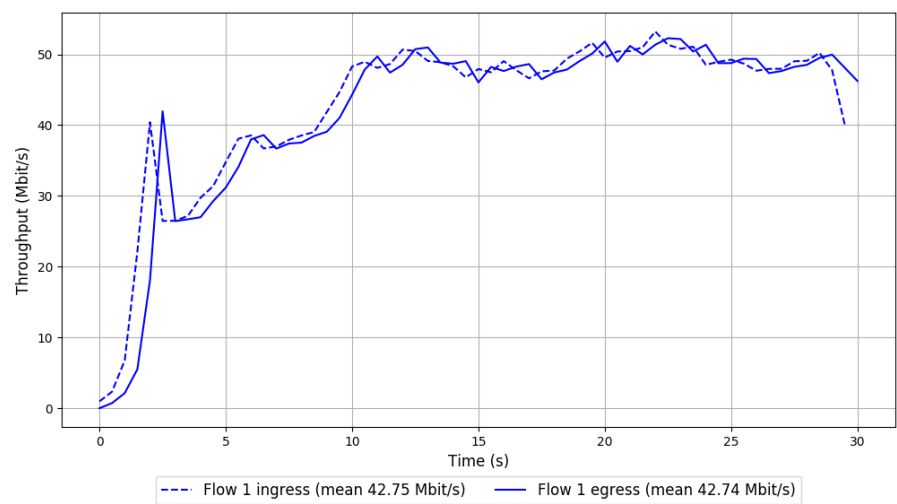


Run 9: Statistics of PCC-Vivace

Start at: 2018-06-29 18:29:03  
End at: 2018-06-29 18:29:33  
Local clock offset: 0.205 ms  
Remote clock offset: -11.013 ms

# Below is generated by plot.py at 2018-06-29 19:25:56  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 42.74 Mbit/s  
95th percentile per-packet one-way delay: 70.481 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 42.74 Mbit/s  
95th percentile per-packet one-way delay: 70.481 ms  
Loss rate: 0.03%

Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-06-29 19:13:03

End at: 2018-06-29 19:13:33

Local clock offset: 0.593 ms

Remote clock offset: -12.316 ms

# Below is generated by plot.py at 2018-06-29 19:25:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 43.61 Mbit/s

95th percentile per-packet one-way delay: 81.896 ms

Loss rate: 0.25%

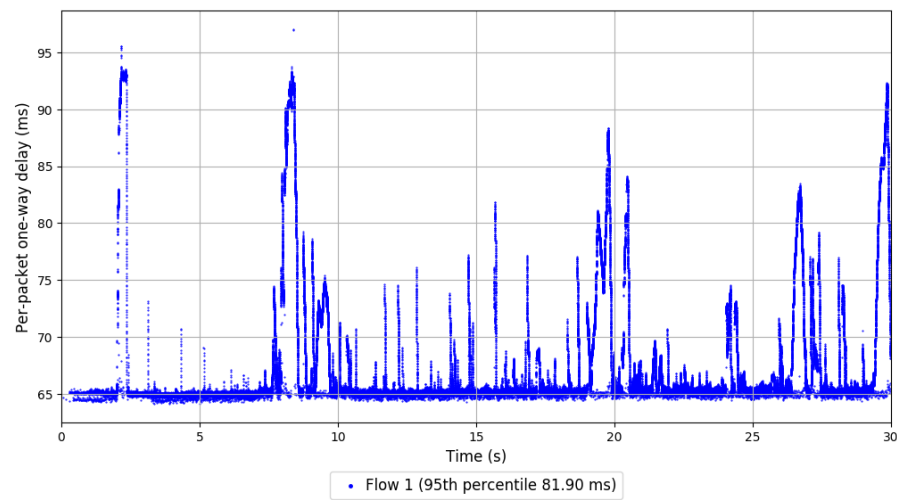
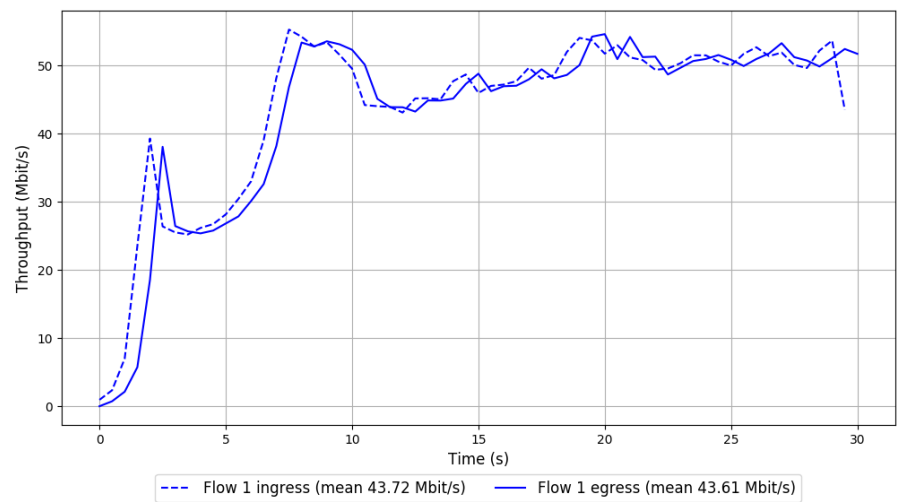
-- Flow 1:

Average throughput: 43.61 Mbit/s

95th percentile per-packet one-way delay: 81.896 ms

Loss rate: 0.25%

Run 10: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

/home/ubuntu/pantheon/data/2018-06-29T12-47-AWS-Korea-to-China-10-runs/webrtc\_stats\_run1.log



Run 1: Report of WebRTC media — Data Link

Figure is missing

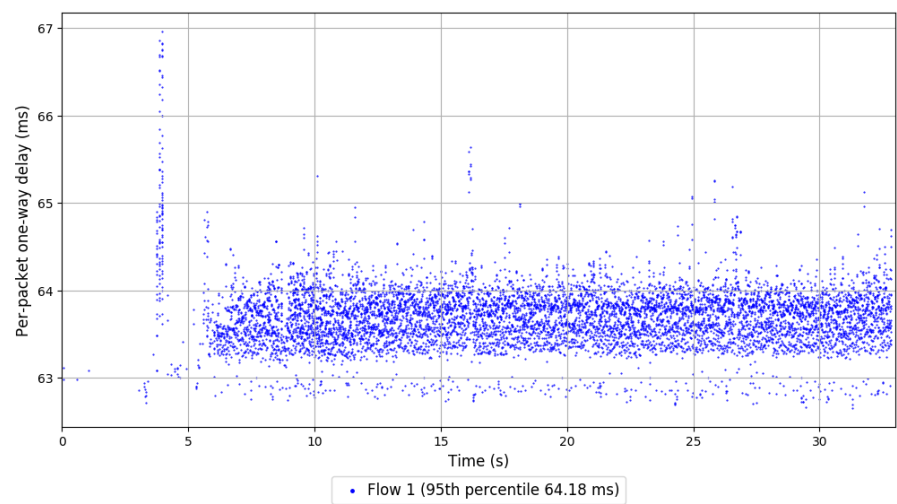
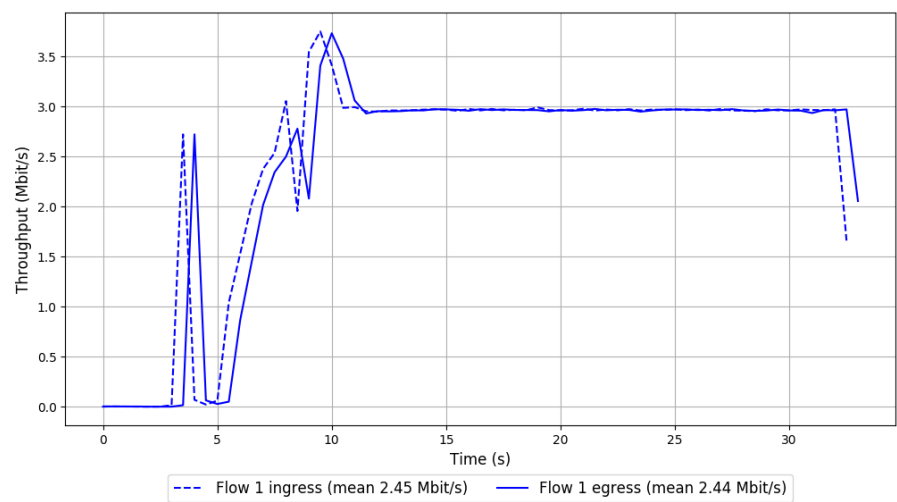
Figure is missing

Run 2: Statistics of WebRTC media

Start at: 2018-06-29 13:49:22  
End at: 2018-06-29 13:49:52  
Local clock offset: -2.632 ms  
Remote clock offset: -11.375 ms

# Below is generated by plot.py at 2018-06-29 19:25:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.44 Mbit/s  
95th percentile per-packet one-way delay: 64.179 ms  
Loss rate: 0.18%  
-- Flow 1:  
Average throughput: 2.44 Mbit/s  
95th percentile per-packet one-way delay: 64.179 ms  
Loss rate: 0.18%

Run 2: Report of WebRTC media — Data Link

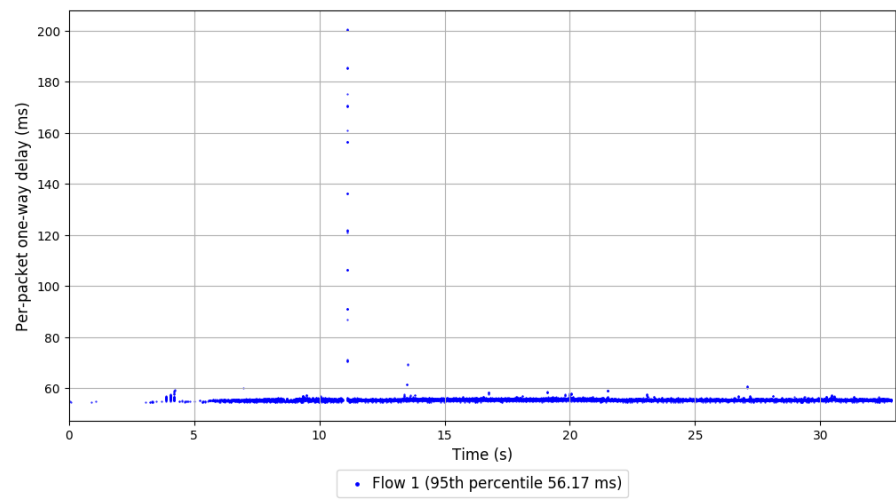
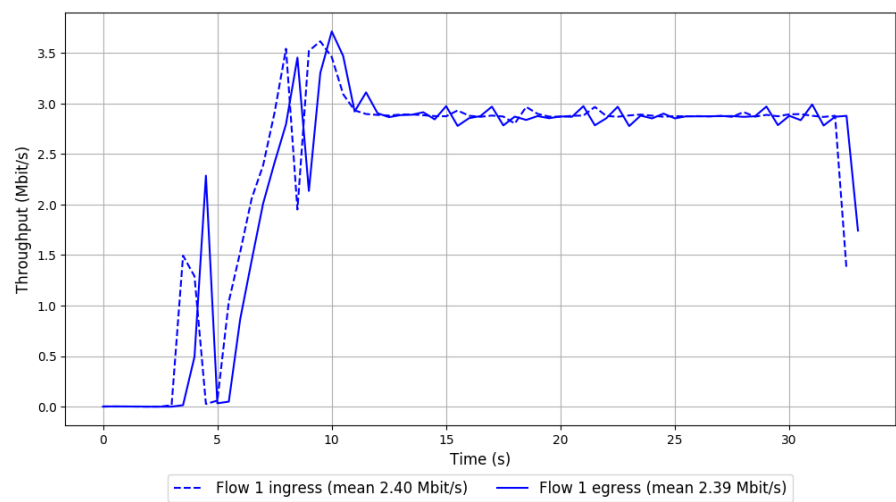


Run 3: Statistics of WebRTC media

Start at: 2018-06-29 14:28:43  
End at: 2018-06-29 14:29:13  
Local clock offset: 2.767 ms  
Remote clock offset: -19.972 ms

# Below is generated by plot.py at 2018-06-29 19:25:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.39 Mbit/s  
95th percentile per-packet one-way delay: 56.172 ms  
Loss rate: 0.30%  
-- Flow 1:  
Average throughput: 2.39 Mbit/s  
95th percentile per-packet one-way delay: 56.172 ms  
Loss rate: 0.30%

Run 3: Report of WebRTC media — Data Link

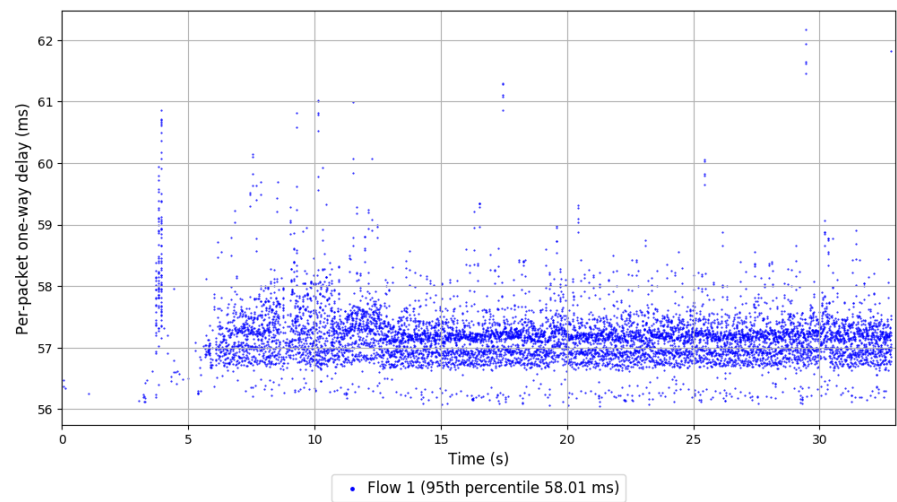
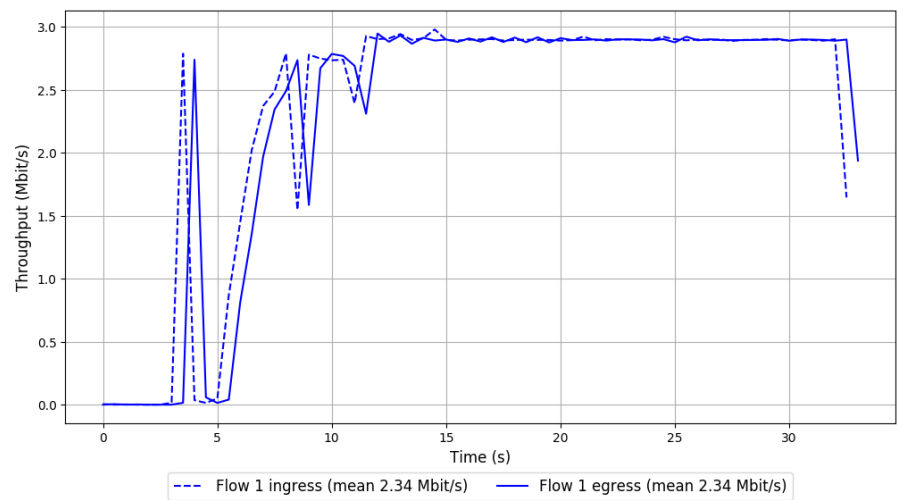


Run 4: Statistics of WebRTC media

Start at: 2018-06-29 15:07:52  
End at: 2018-06-29 15:08:22  
Local clock offset: 8.276 ms  
Remote clock offset: -16.927 ms

# Below is generated by plot.py at 2018-06-29 19:25:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.34 Mbit/s  
95th percentile per-packet one-way delay: 58.006 ms  
Loss rate: 0.21%  
-- Flow 1:  
Average throughput: 2.34 Mbit/s  
95th percentile per-packet one-way delay: 58.006 ms  
Loss rate: 0.21%

Run 4: Report of WebRTC media — Data Link



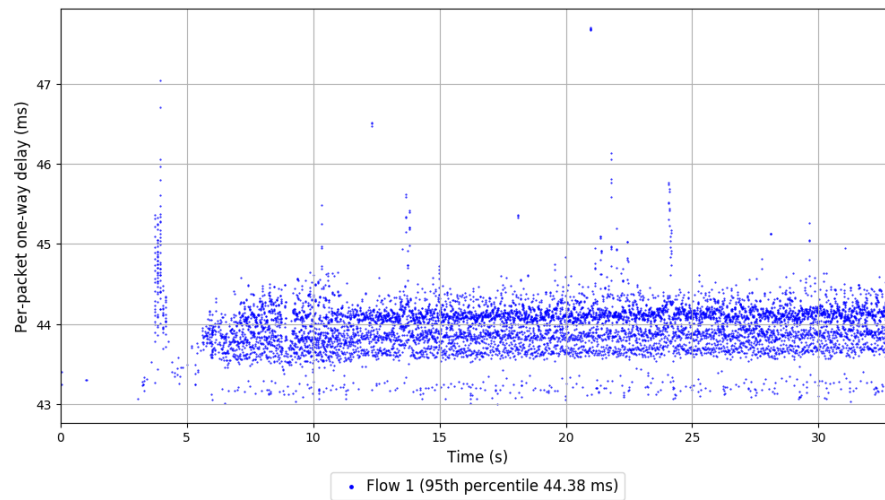
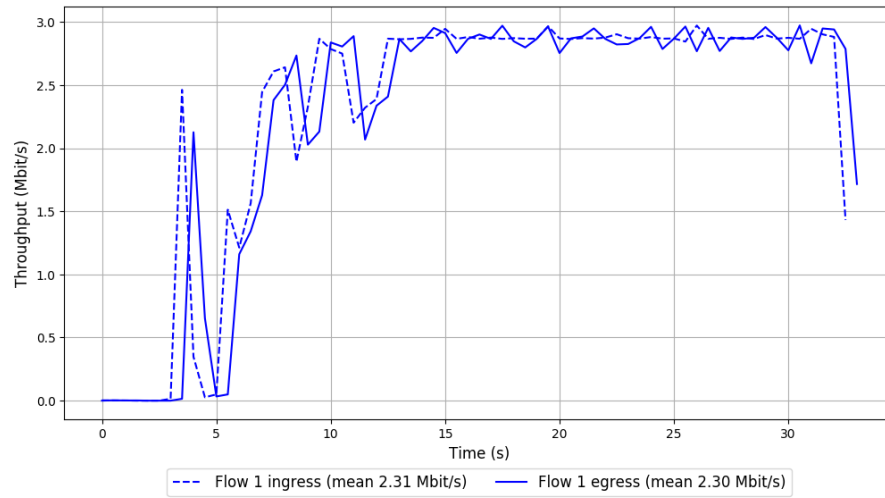
Run 5: Statistics of WebRTC media

Start at: 2018-06-29 15:44:06  
End at: 2018-06-29 15:44:36  
Local clock offset: 9.574 ms  
Remote clock offset: -30.532 ms

# Below is generated by plot.py at 2018-06-29 19:25:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.30 Mbit/s  
95th percentile per-packet one-way delay: 44.376 ms  
Loss rate: 0.40%  
-- Flow 1:  
Average throughput: 2.30 Mbit/s  
95th percentile per-packet one-way delay: 44.376 ms  
Loss rate: 0.40%



### Run 5: Report of WebRTC media — Data Link

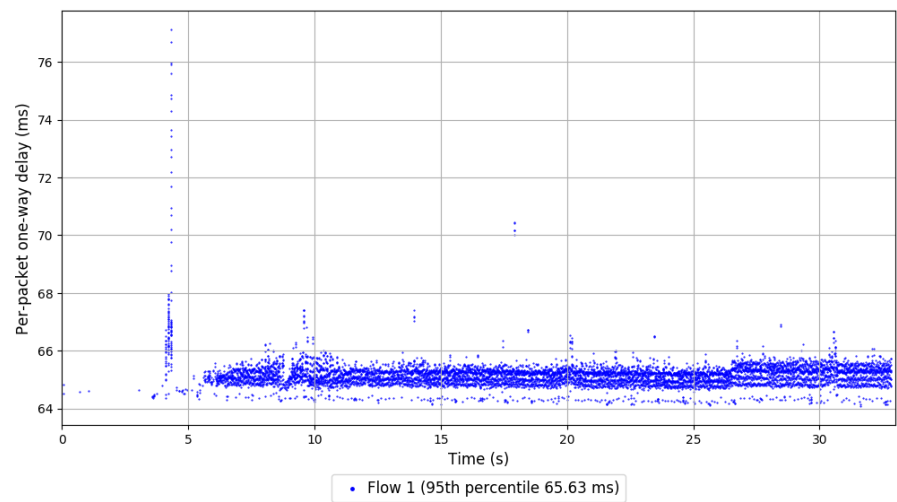
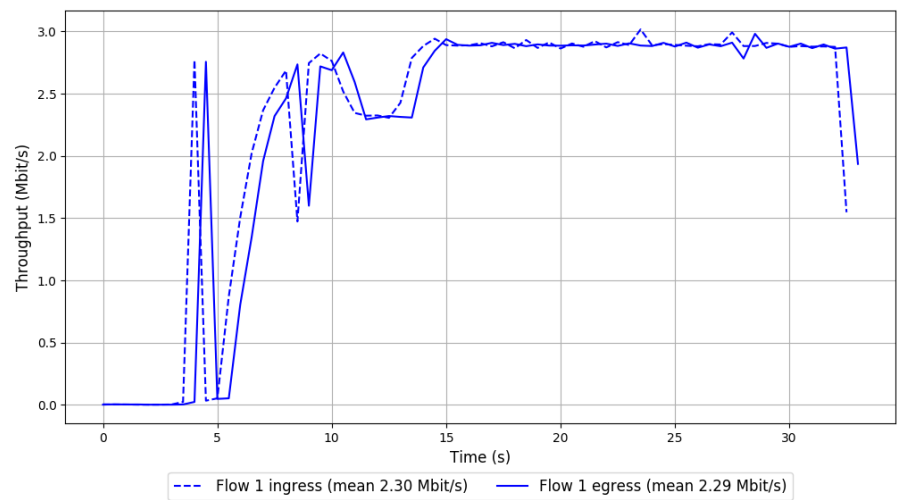


Run 6: Statistics of WebRTC media

Start at: 2018-06-29 16:21:32  
End at: 2018-06-29 16:22:02  
Local clock offset: -0.178 ms  
Remote clock offset: -11.205 ms

# Below is generated by plot.py at 2018-06-29 19:25:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.29 Mbit/s  
95th percentile per-packet one-way delay: 65.634 ms  
Loss rate: 0.31%  
-- Flow 1:  
Average throughput: 2.29 Mbit/s  
95th percentile per-packet one-way delay: 65.634 ms  
Loss rate: 0.31%

Run 6: Report of WebRTC media — Data Link

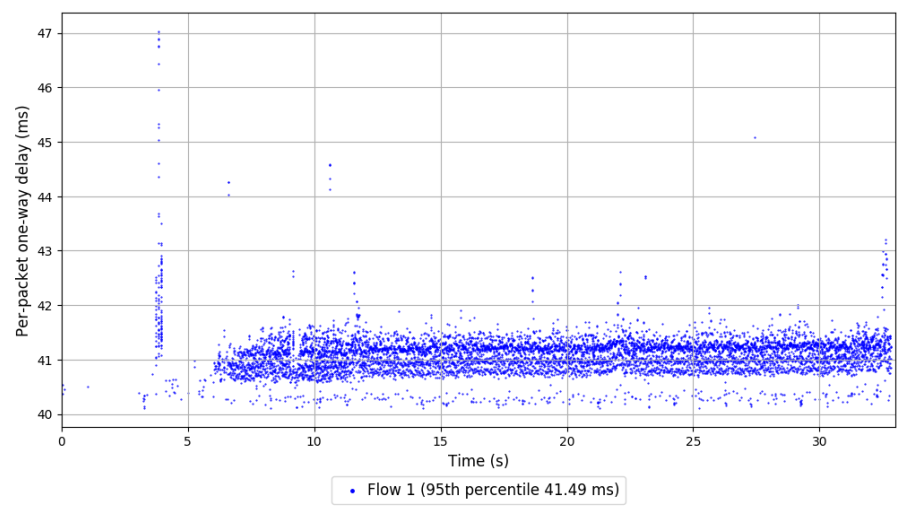
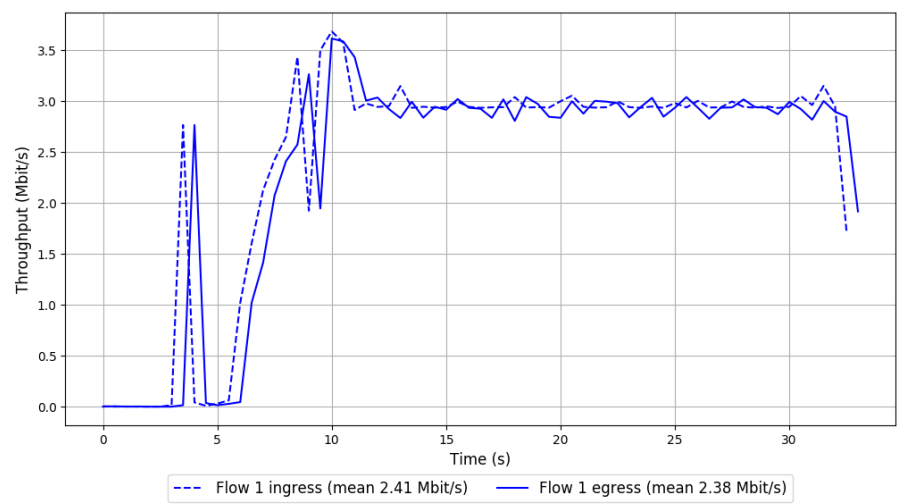


Run 7: Statistics of WebRTC media

Start at: 2018-06-29 16:58:15  
End at: 2018-06-29 16:58:45  
Local clock offset: -0.718 ms  
Remote clock offset: -34.397 ms

# Below is generated by plot.py at 2018-06-29 19:25:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.38 Mbit/s  
95th percentile per-packet one-way delay: 41.492 ms  
Loss rate: 1.18%  
-- Flow 1:  
Average throughput: 2.38 Mbit/s  
95th percentile per-packet one-way delay: 41.492 ms  
Loss rate: 1.18%

Run 7: Report of WebRTC media — Data Link

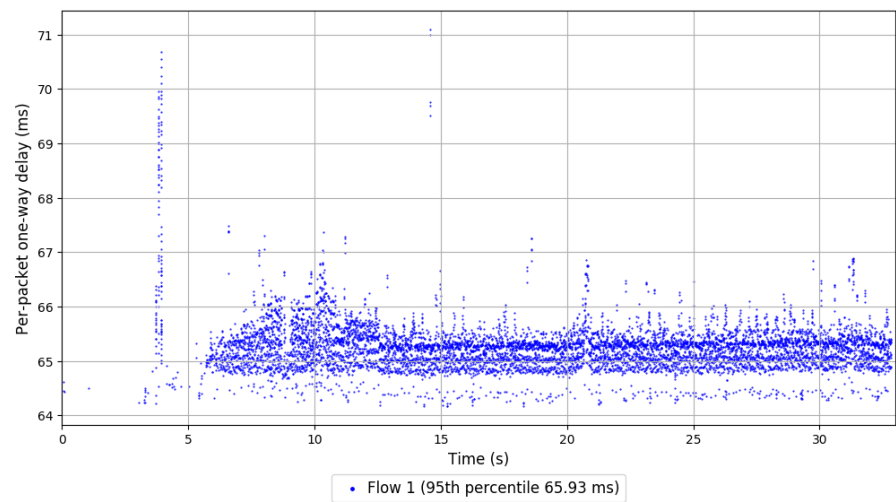
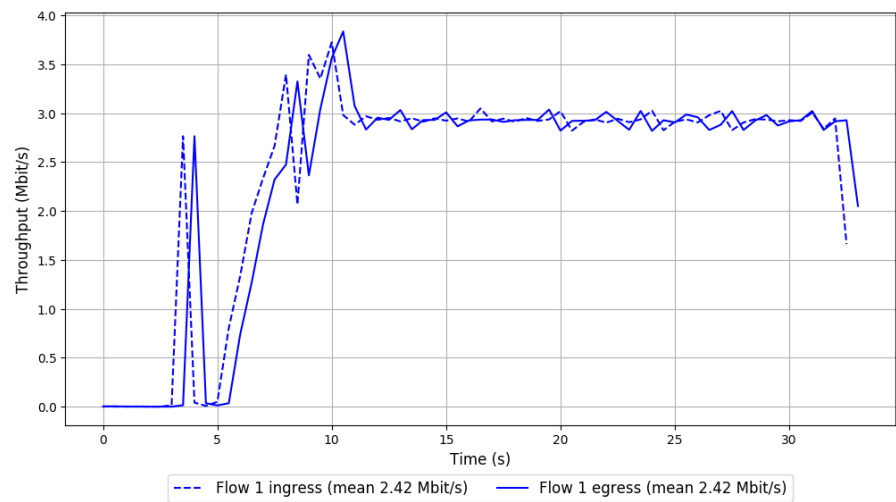


Run 8: Statistics of WebRTC media

Start at: 2018-06-29 17:36:56  
End at: 2018-06-29 17:37:26  
Local clock offset: 8.404 ms  
Remote clock offset: -12.353 ms

# Below is generated by plot.py at 2018-06-29 19:25:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.42 Mbit/s  
95th percentile per-packet one-way delay: 65.932 ms  
Loss rate: 0.20%  
-- Flow 1:  
Average throughput: 2.42 Mbit/s  
95th percentile per-packet one-way delay: 65.932 ms  
Loss rate: 0.20%

Run 8: Report of WebRTC media — Data Link



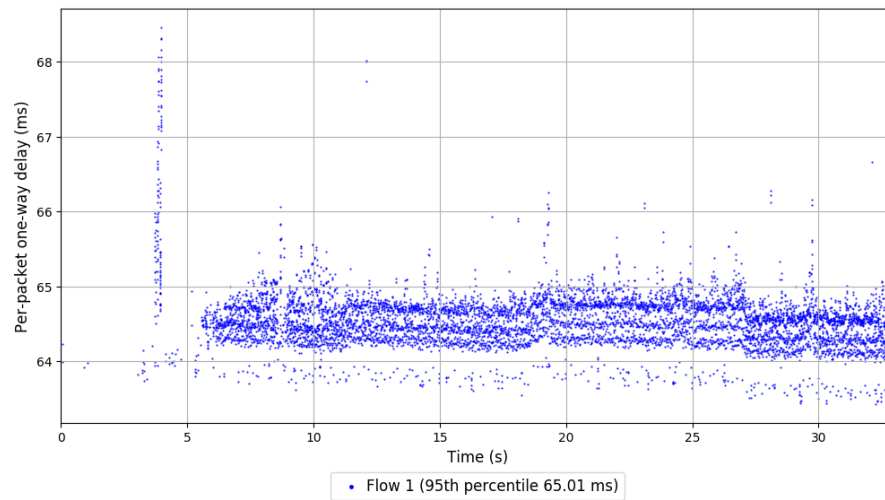
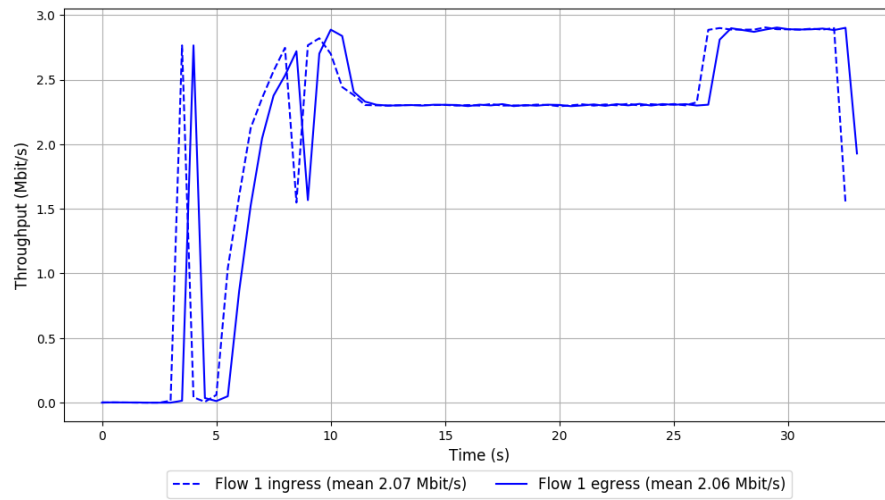
Run 9: Statistics of WebRTC media

Start at: 2018-06-29 18:15:42  
End at: 2018-06-29 18:16:12  
Local clock offset: 4.352 ms  
Remote clock offset: -11.39 ms

# Below is generated by plot.py at 2018-06-29 19:25:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.06 Mbit/s  
95th percentile per-packet one-way delay: 65.011 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 2.06 Mbit/s  
95th percentile per-packet one-way delay: 65.011 ms  
Loss rate: 0.03%



### Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-06-29 18:59:03  
End at: 2018-06-29 18:59:33  
Local clock offset: 0.347 ms  
Remote clock offset: -11.855 ms

# Below is generated by plot.py at 2018-06-29 19:25:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 1.97 Mbit/s  
95th percentile per-packet one-way delay: 65.568 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.97 Mbit/s  
95th percentile per-packet one-way delay: 65.568 ms  
Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

