

## Pantheon Report

Generated at 2019-02-20 07:23:08 (UTC).

Data path: India on *em1 (remote)* → AWS India 1 on *ens5 (local)*.

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against **nets.org.sg** and have been applied to correct the timestamps in logs.

### System info:

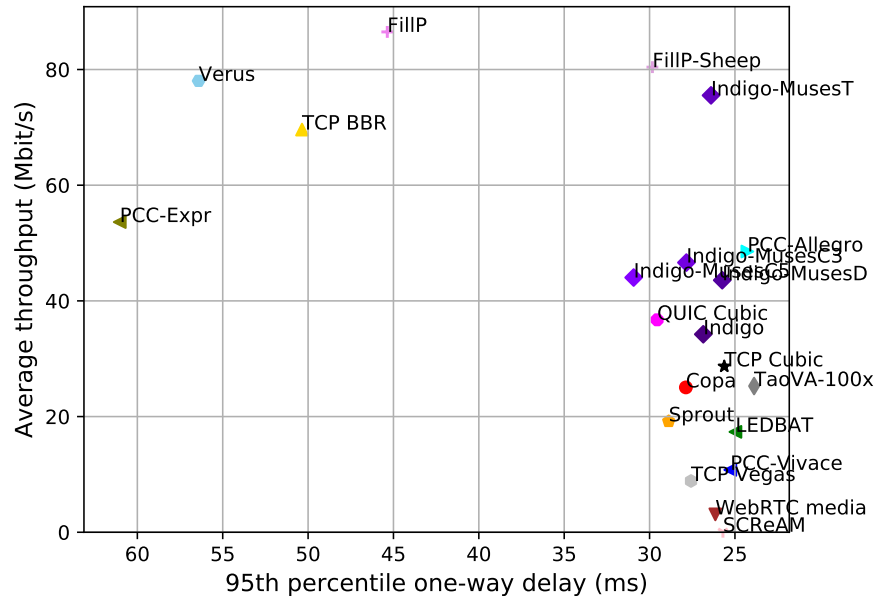
Linux 4.15.0-1031-aws  
net.core.default\_qdisc = fq  
net.core.rmem\_default = 16777216  
net.core.rmem\_max = 536870912  
net.core.wmem\_default = 16777216  
net.core.wmem\_max = 536870912  
net.ipv4.tcp\_rmem = 4096 16777216 536870912  
net.ipv4.tcp\_wmem = 4096 16777216 536870912

### Git summary:

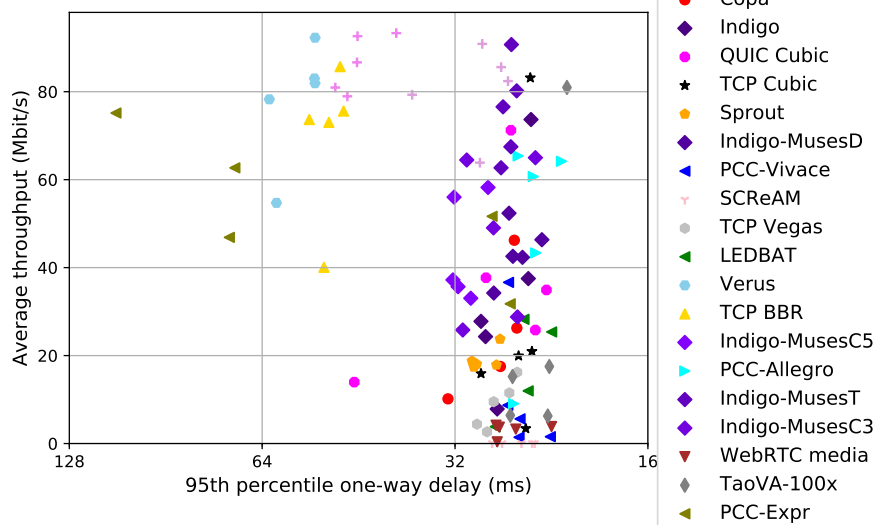
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee  
third\_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519  
third\_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9  
third\_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4  
third\_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d  
third\_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
third\_party/muses @ 5ce721187ad823da20955337730c746486ca4966  
third\_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd  
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42  
third\_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2  
M src/ScreamClient  
M src/ScreamServer  
third\_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26  
M src/examples/cellsim.cc  
M src/examples/sproutbt2.cc  
M src/network/sproutconn.cc  
third\_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494  
M src/verus.hpp  
M tools/plot.py  
third\_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4

third\_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from India to AWS India 1, 5 runs of 30s each per scheme  
(mean of all runs by scheme)



test from India to AWS India 1, 5 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	5	69.62	50.36	7.49
Copa	4	25.04	27.87	2.25
TCP Cubic	5	28.68	25.62	2.39
FillP	5	86.50	45.36	6.88
FillP-Sheep	5	80.41	29.83	4.01
Indigo	5	34.23	26.86	4.86
Indigo-MusesC3	5	46.62	27.84	4.15
Indigo-MusesC5	5	44.03	30.93	5.50
Indigo-MusesD	5	43.57	25.75	2.55
Indigo-MusesT	5	75.53	26.40	2.26
LEDBAT	4	17.36	24.97	2.00
PCC-Allegro	5	48.54	24.27	7.12
PCC-Expr	5	53.63	61.03	9.23
QUIC Cubic	5	36.73	29.56	3.63
SCReAM	5	0.09	25.70	4.71
Sprout	5	19.18	28.88	6.65
TaoVA-100x	5	25.28	23.88	5.19
TCP Vegas	5	8.86	27.57	2.59
Verus	5	78.04	56.41	5.81
PCC-Vivace	5	10.79	25.27	6.86
WebRTC media	5	3.09	26.15	10.87



Run 1: Statistics of TCP BBR

Start at: 2019-02-20 05:26:36

End at: 2019-02-20 05:27:06

Local clock offset: -0.939 ms

Remote clock offset: -2.88 ms

# Below is generated by plot.py at 2019-02-20 07:16:05

# Datalink statistics

-- Total of 1 flow:

Average throughput: 73.03 Mbit/s

95th percentile per-packet one-way delay: 50.360 ms

Loss rate: 6.21%

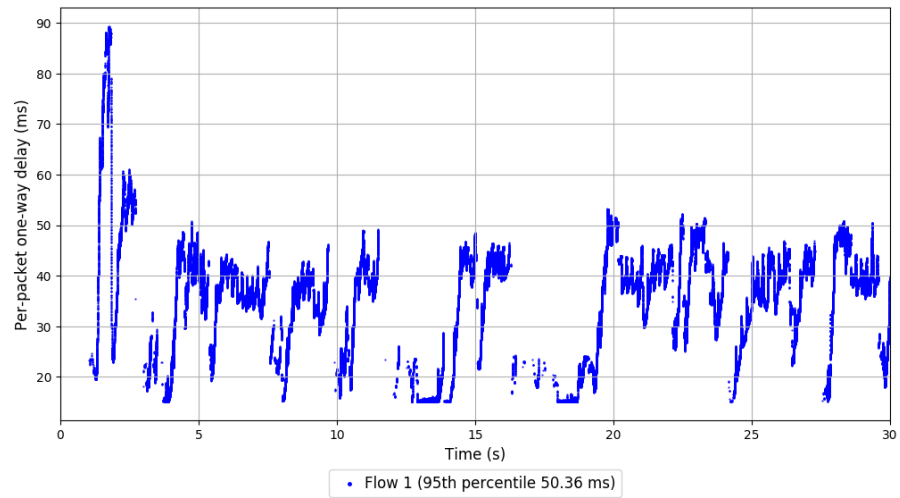
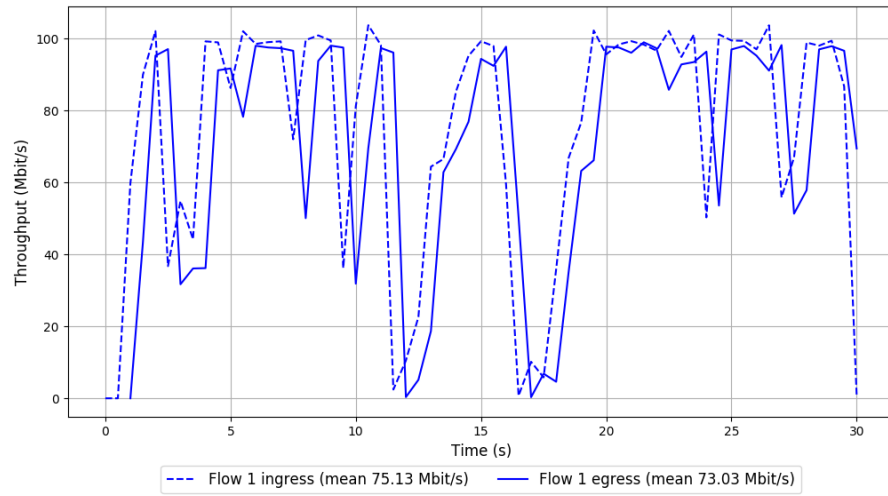
-- Flow 1:

Average throughput: 73.03 Mbit/s

95th percentile per-packet one-way delay: 50.360 ms

Loss rate: 6.21%

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

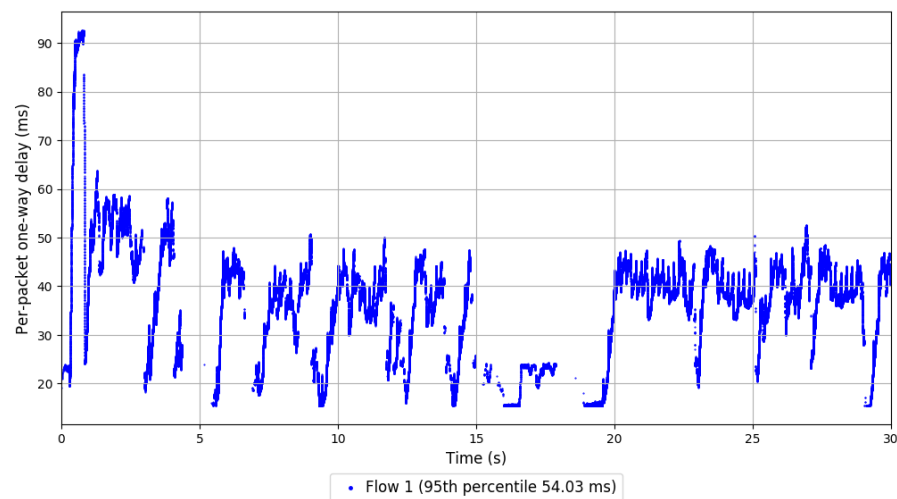
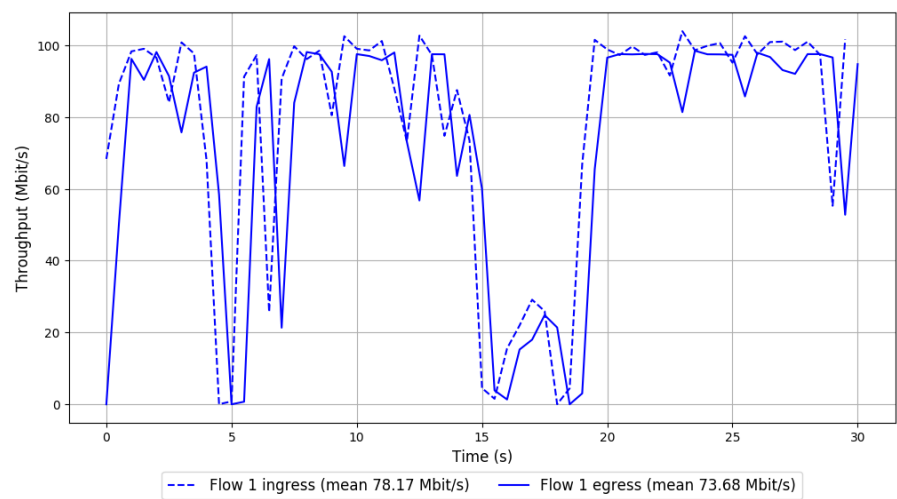


Run 2: Statistics of TCP BBR

Start at: 2019-02-20 05:52:13  
End at: 2019-02-20 05:52:43  
Local clock offset: -2.539 ms  
Remote clock offset: -3.575 ms

# Below is generated by plot.py at 2019-02-20 07:16:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 73.68 Mbit/s  
95th percentile per-packet one-way delay: 54.033 ms  
Loss rate: 5.83%  
-- Flow 1:  
Average throughput: 73.68 Mbit/s  
95th percentile per-packet one-way delay: 54.033 ms  
Loss rate: 5.83%

Run 2: Report of TCP BBR — Data Link

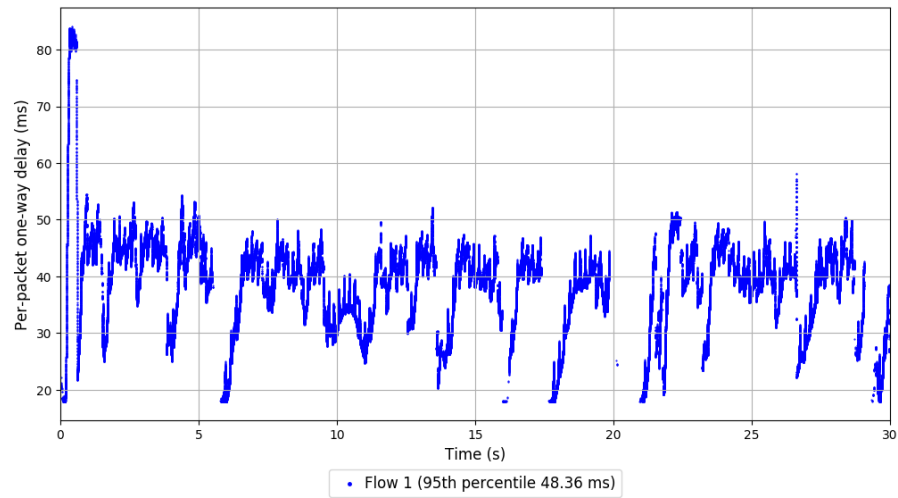
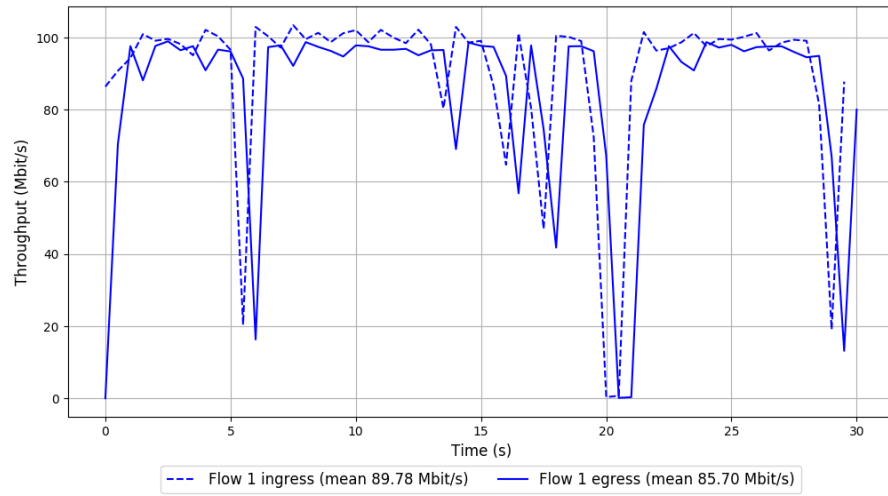


Run 3: Statistics of TCP BBR

Start at: 2019-02-20 06:17:34  
End at: 2019-02-20 06:18:04  
Local clock offset: -0.651 ms  
Remote clock offset: -3.298 ms

# Below is generated by plot.py at 2019-02-20 07:16:17  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 85.70 Mbit/s  
95th percentile per-packet one-way delay: 48.361 ms  
Loss rate: 4.64%  
-- Flow 1:  
Average throughput: 85.70 Mbit/s  
95th percentile per-packet one-way delay: 48.361 ms  
Loss rate: 4.64%

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



Run 4: Statistics of TCP BBR

Start at: 2019-02-20 06:43:08

End at: 2019-02-20 06:43:39

Local clock offset: 0.845 ms

Remote clock offset: -4.108 ms

# Below is generated by plot.py at 2019-02-20 07:16:17

# Datalink statistics

-- Total of 1 flow:

Average throughput: 40.08 Mbit/s

95th percentile per-packet one-way delay: 51.258 ms

Loss rate: 10.98%

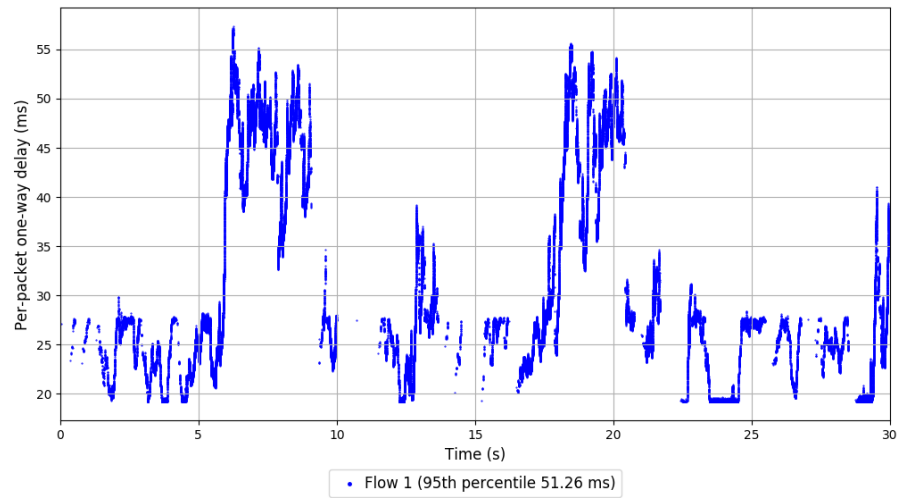
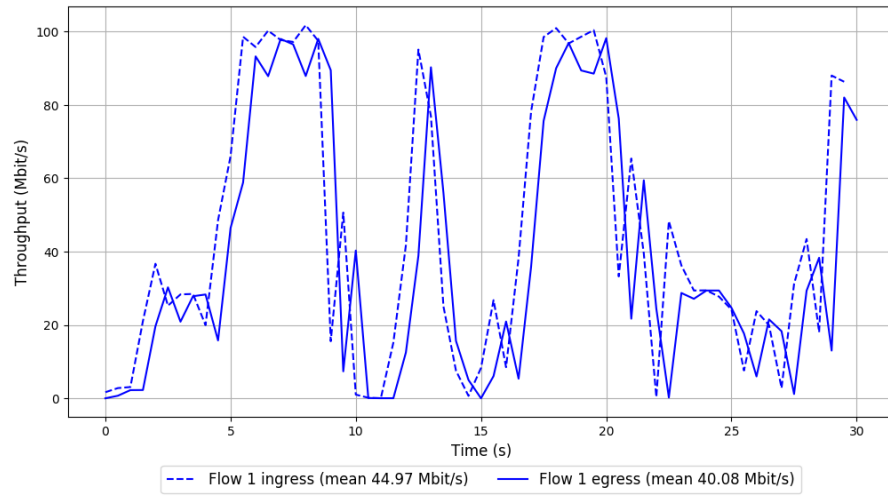
-- Flow 1:

Average throughput: 40.08 Mbit/s

95th percentile per-packet one-way delay: 51.258 ms

Loss rate: 10.98%

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





Run 5: Statistics of TCP BBR

Start at: 2019-02-20 07:10:54

End at: 2019-02-20 07:11:24

Local clock offset: -0.889 ms

Remote clock offset: -2.133 ms

# Below is generated by plot.py at 2019-02-20 07:16:17

# Datalink statistics

-- Total of 1 flow:

Average throughput: 75.60 Mbit/s

95th percentile per-packet one-way delay: 47.766 ms

Loss rate: 9.80%

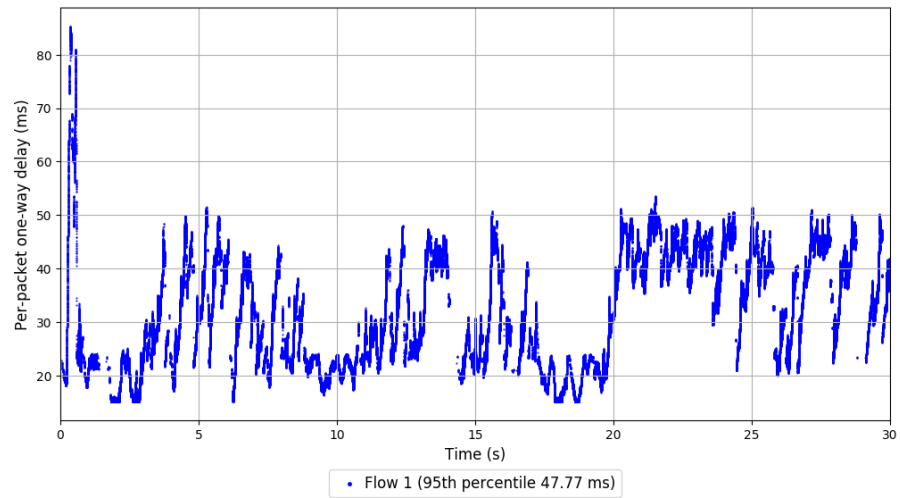
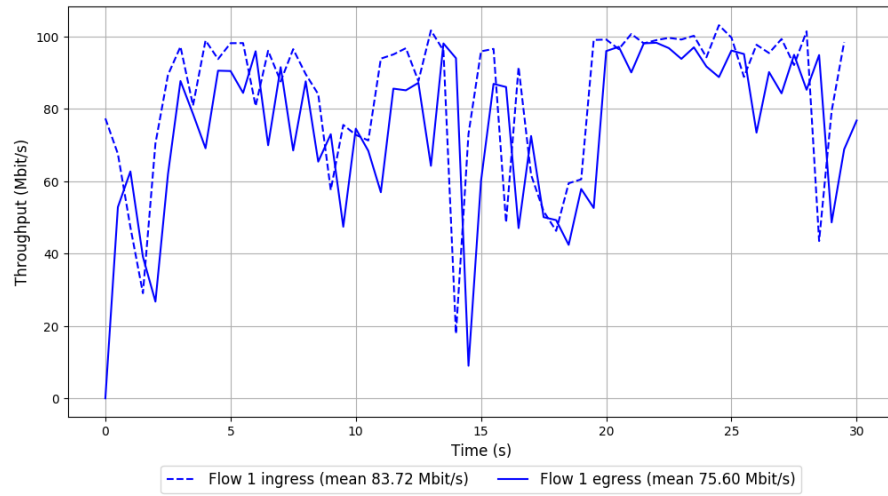
-- Flow 1:

Average throughput: 75.60 Mbit/s

95th percentile per-packet one-way delay: 47.766 ms

Loss rate: 9.80%

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

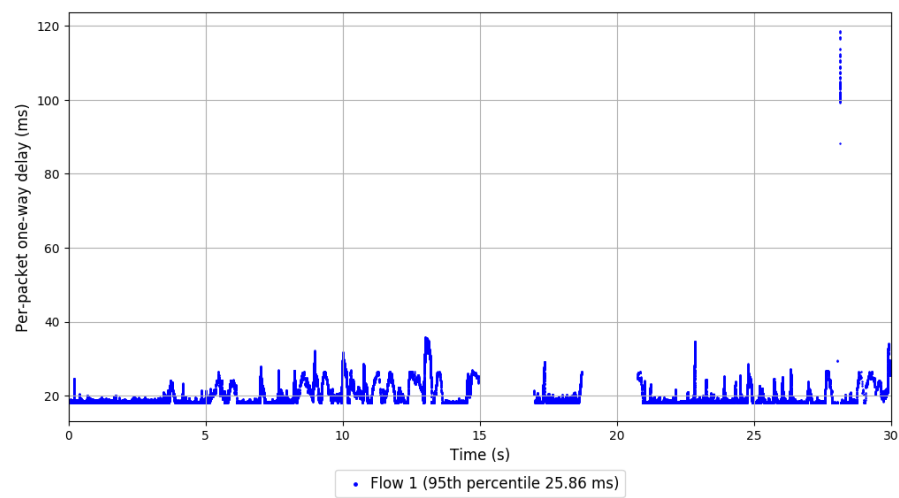
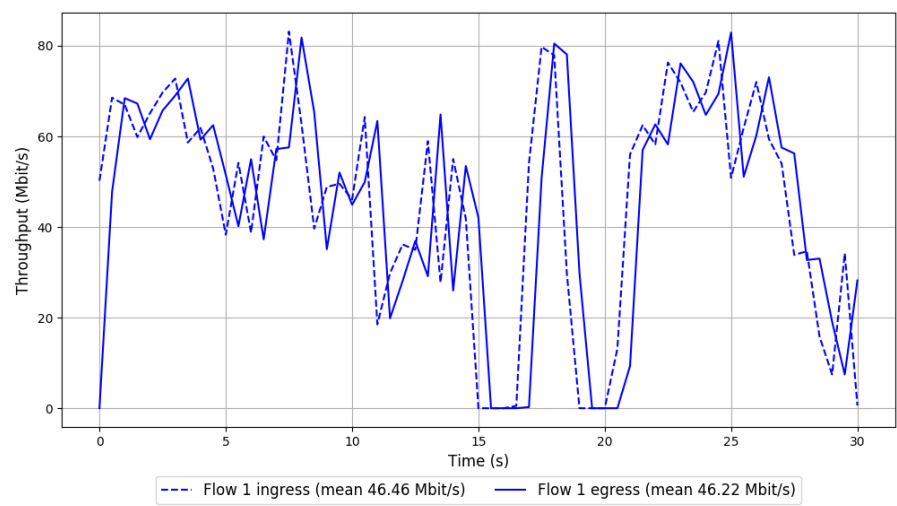


Run 1: Statistics of Copa

Start at: 2019-02-20 05:25:14  
End at: 2019-02-20 05:25:44  
Local clock offset: 1.137 ms  
Remote clock offset: -3.859 ms

# Below is generated by plot.py at 2019-02-20 07:16:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 46.22 Mbit/s  
95th percentile per-packet one-way delay: 25.859 ms  
Loss rate: 0.60%  
-- Flow 1:  
Average throughput: 46.22 Mbit/s  
95th percentile per-packet one-way delay: 25.859 ms  
Loss rate: 0.60%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

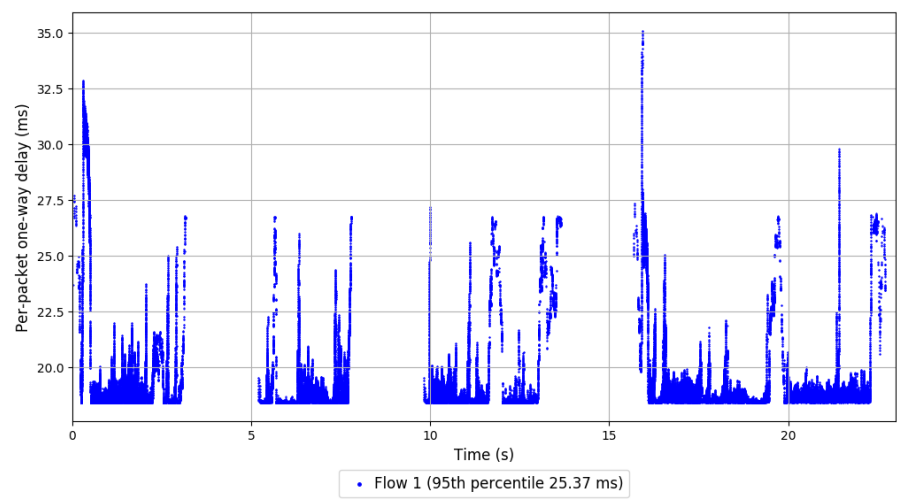
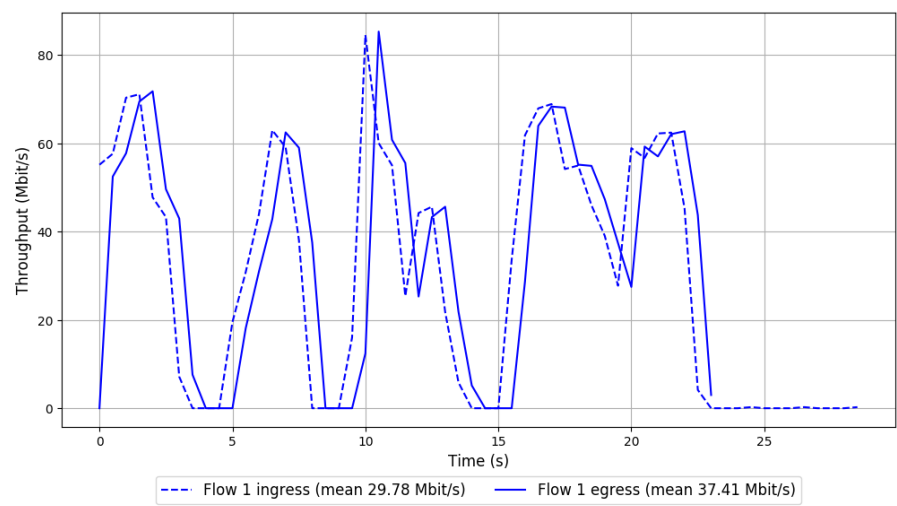
Start at: 2019-02-20 05:50:56

End at: 2019-02-20 05:51:26

Local clock offset: 0.861 ms

Remote clock offset: -3.208 ms

Run 2: Report of Copa — Data Link

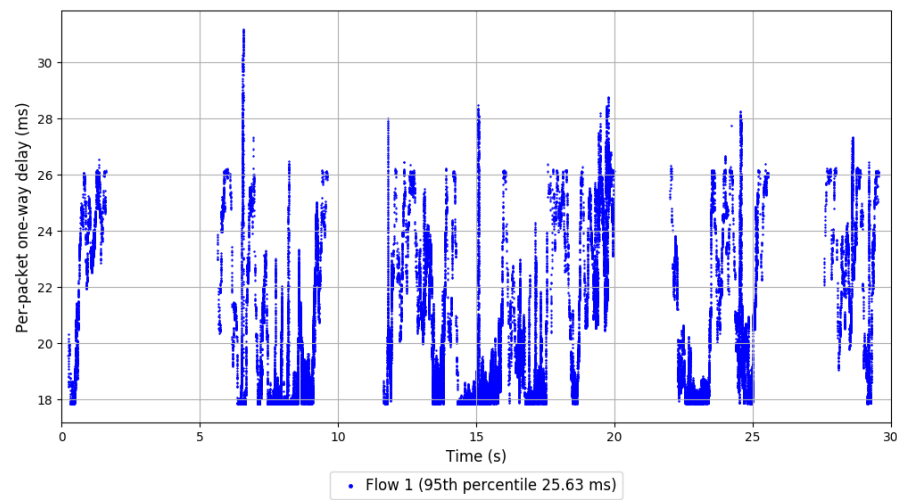
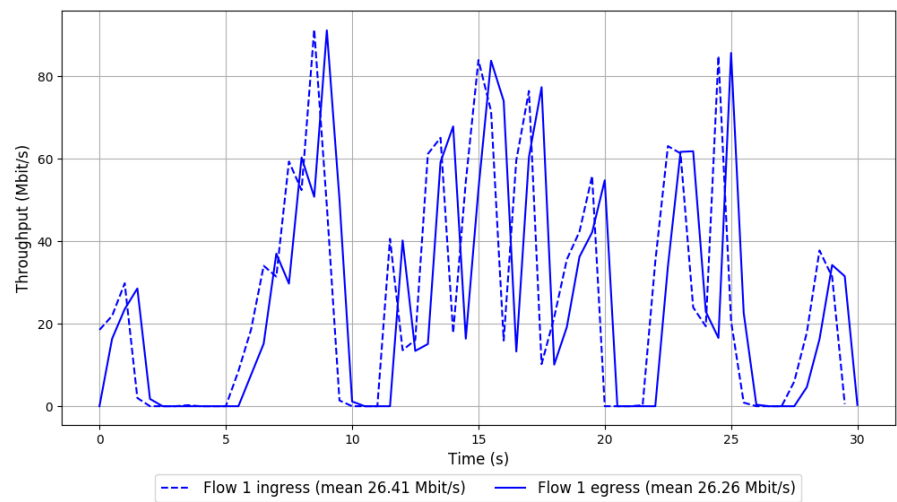


Run 3: Statistics of Copa

Start at: 2019-02-20 06:16:22  
End at: 2019-02-20 06:16:52  
Local clock offset: -0.443 ms  
Remote clock offset: -3.072 ms

# Below is generated by plot.py at 2019-02-20 07:16:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 26.26 Mbit/s  
95th percentile per-packet one-way delay: 25.627 ms  
Loss rate: 1.35%  
-- Flow 1:  
Average throughput: 26.26 Mbit/s  
95th percentile per-packet one-way delay: 25.627 ms  
Loss rate: 1.35%

Run 3: Report of Copa — Data Link



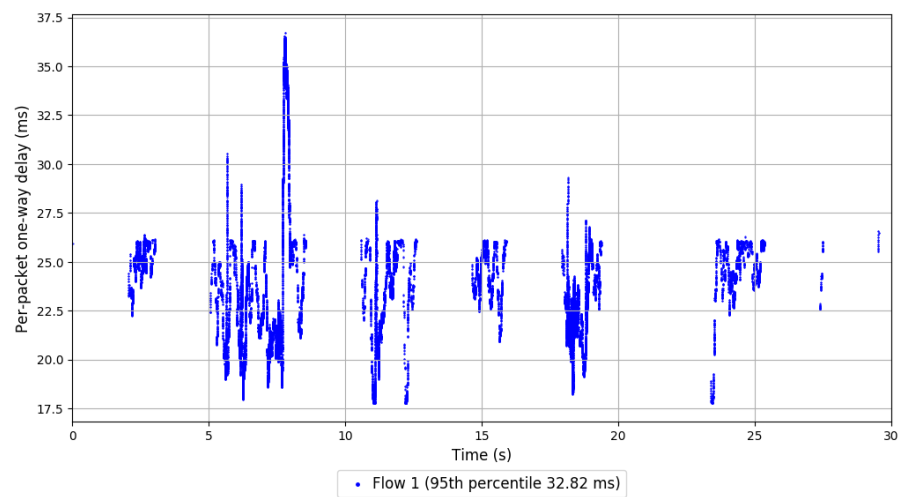
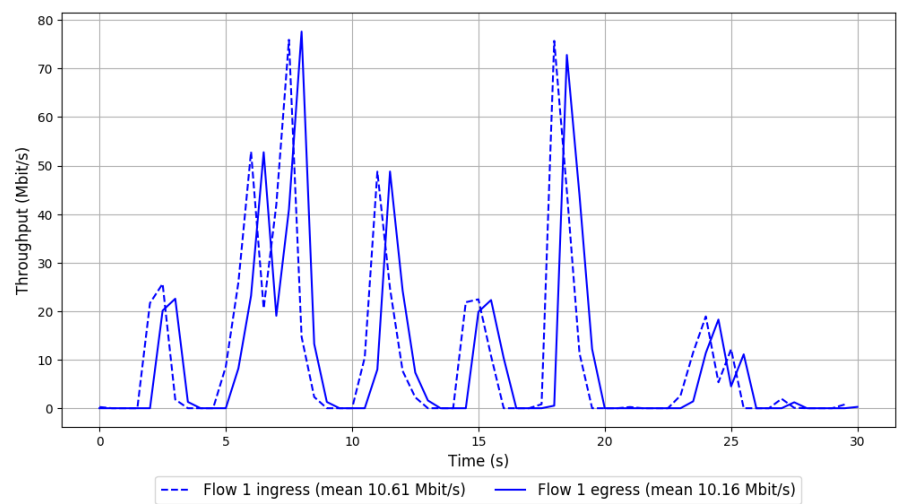


Run 4: Statistics of Copa

Start at: 2019-02-20 06:41:52  
End at: 2019-02-20 06:42:22  
Local clock offset: 0.743 ms  
Remote clock offset: -2.752 ms

# Below is generated by plot.py at 2019-02-20 07:16:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 10.16 Mbit/s  
95th percentile per-packet one-way delay: 32.823 ms  
Loss rate: 4.30%  
-- Flow 1:  
Average throughput: 10.16 Mbit/s  
95th percentile per-packet one-way delay: 32.823 ms  
Loss rate: 4.30%

Run 4: Report of Copa — Data Link

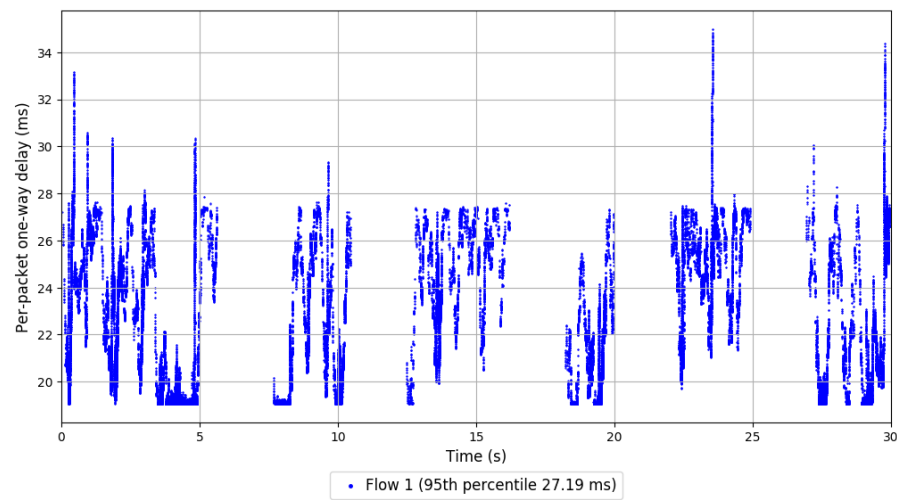
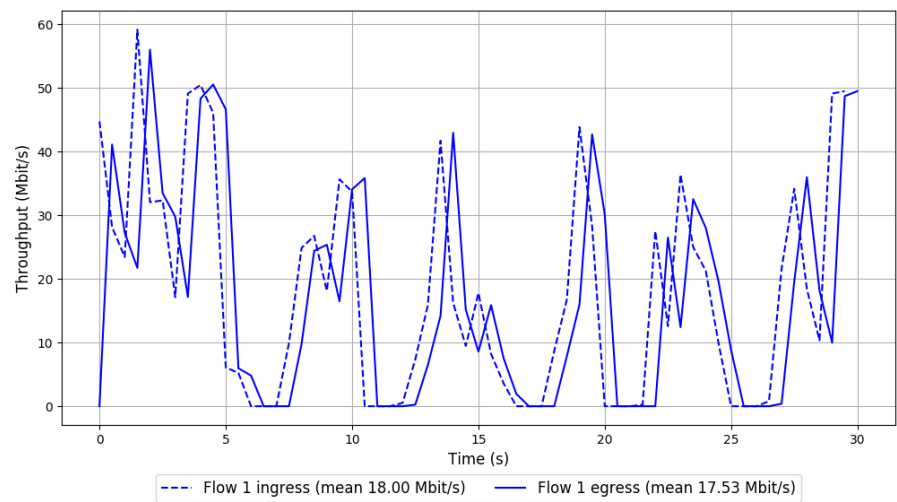


Run 5: Statistics of Copa

Start at: 2019-02-20 07:09:37  
End at: 2019-02-20 07:10:07  
Local clock offset: 3.093 ms  
Remote clock offset: -2.056 ms

# Below is generated by plot.py at 2019-02-20 07:16:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 17.53 Mbit/s  
95th percentile per-packet one-way delay: 27.186 ms  
Loss rate: 2.74%  
-- Flow 1:  
Average throughput: 17.53 Mbit/s  
95th percentile per-packet one-way delay: 27.186 ms  
Loss rate: 2.74%

Run 5: Report of Copa — Data Link

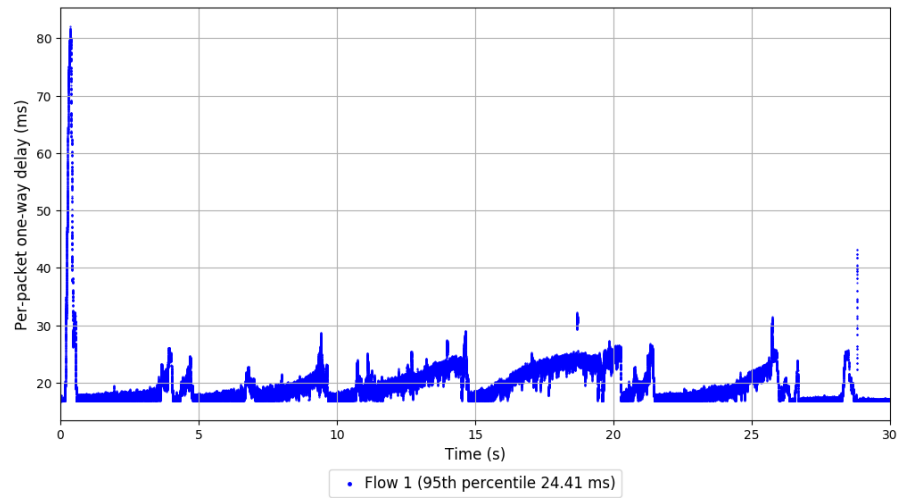
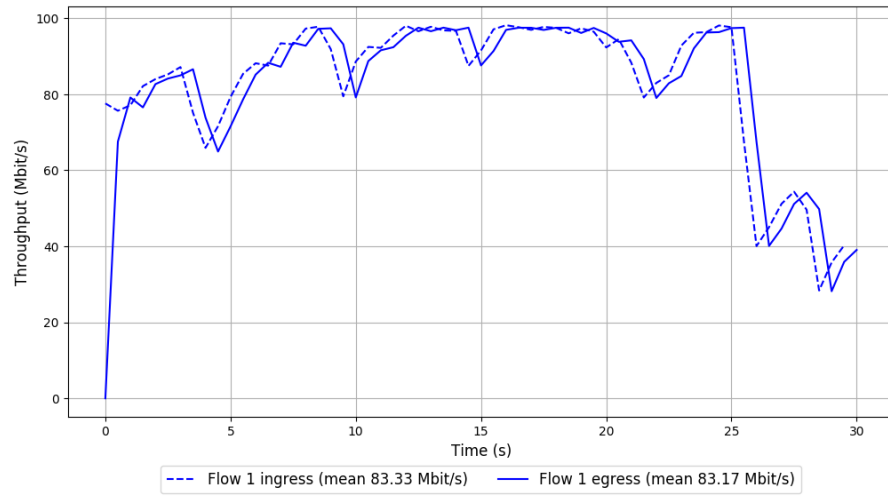


Run 1: Statistics of TCP Cubic

Start at: 2019-02-20 05:10:43  
End at: 2019-02-20 05:11:13  
Local clock offset: -1.048 ms  
Remote clock offset: -5.205 ms

# Below is generated by plot.py at 2019-02-20 07:16:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 83.17 Mbit/s  
95th percentile per-packet one-way delay: 24.414 ms  
Loss rate: 0.28%  
-- Flow 1:  
Average throughput: 83.17 Mbit/s  
95th percentile per-packet one-way delay: 24.414 ms  
Loss rate: 0.28%

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

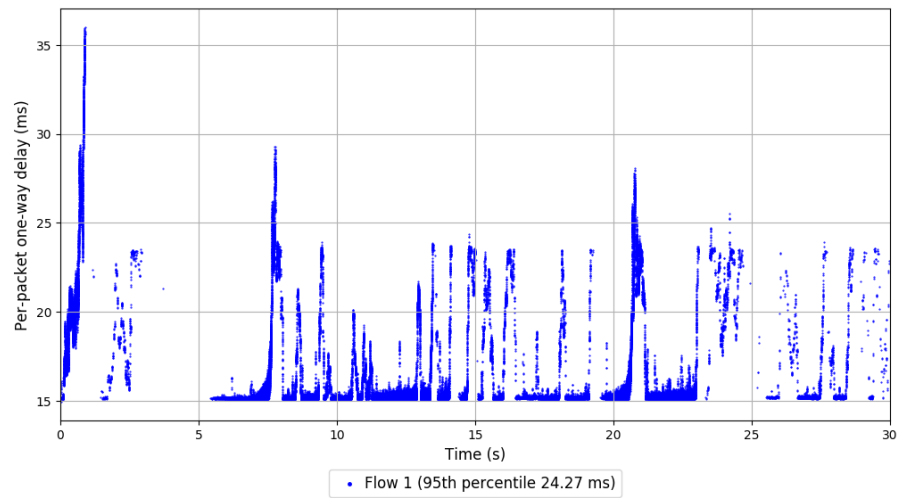
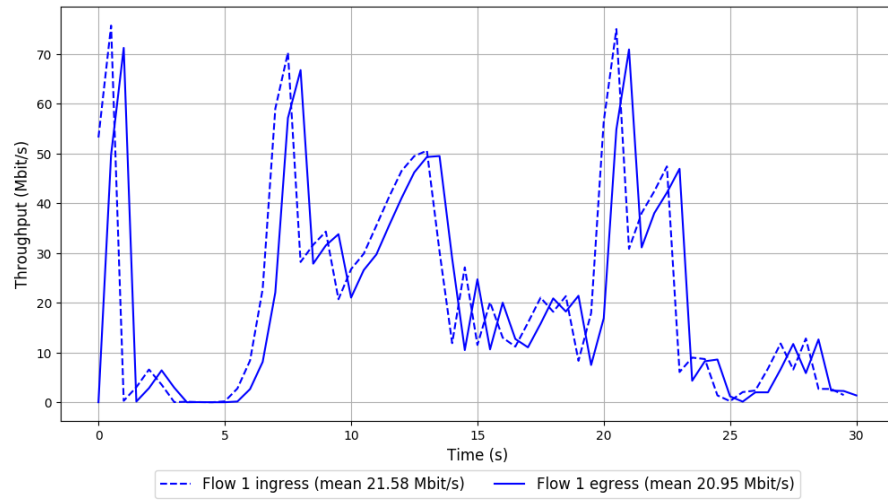


Run 2: Statistics of TCP Cubic

Start at: 2019-02-20 05:36:15  
End at: 2019-02-20 05:36:45  
Local clock offset: -1.737 ms  
Remote clock offset: -3.181 ms

# Below is generated by plot.py at 2019-02-20 07:16:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 20.95 Mbit/s  
95th percentile per-packet one-way delay: 24.275 ms  
Loss rate: 2.98%  
-- Flow 1:  
Average throughput: 20.95 Mbit/s  
95th percentile per-packet one-way delay: 24.275 ms  
Loss rate: 2.98%

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



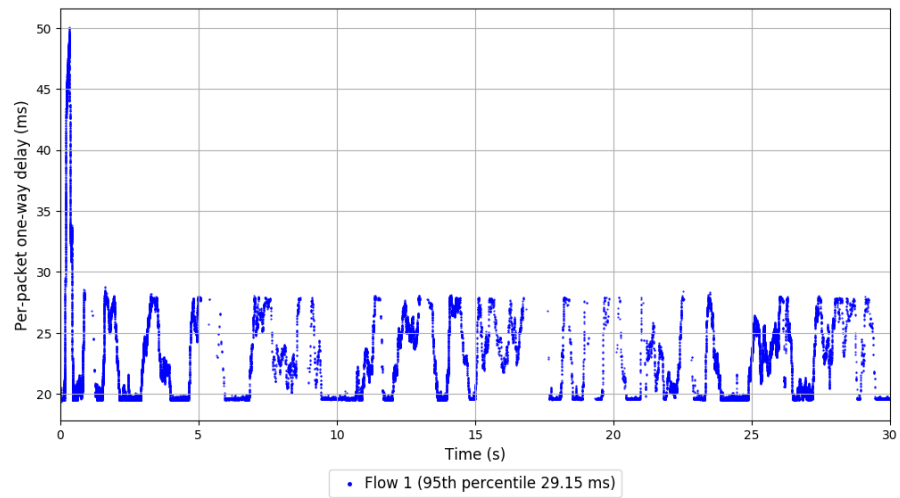
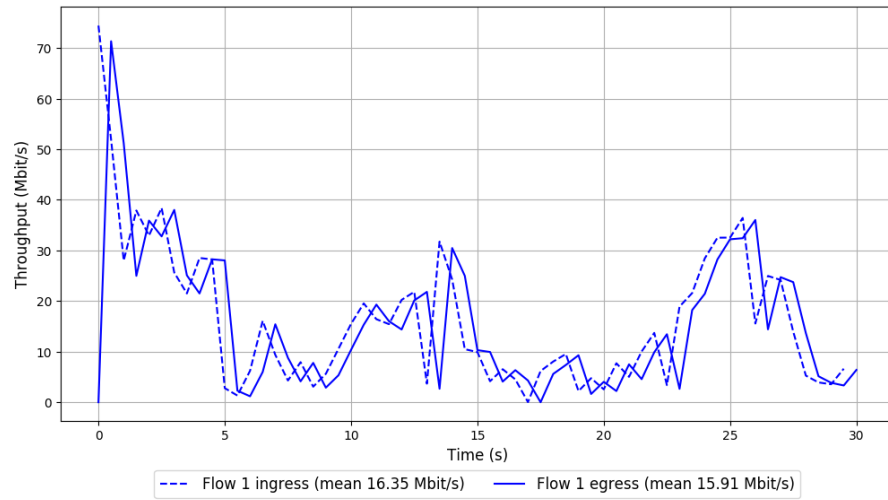


Run 3: Statistics of TCP Cubic

Start at: 2019-02-20 06:01:51  
End at: 2019-02-20 06:02:21  
Local clock offset: 0.962 ms  
Remote clock offset: -3.805 ms

# Below is generated by plot.py at 2019-02-20 07:16:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 15.91 Mbit/s  
95th percentile per-packet one-way delay: 29.150 ms  
Loss rate: 2.79%  
-- Flow 1:  
Average throughput: 15.91 Mbit/s  
95th percentile per-packet one-way delay: 29.150 ms  
Loss rate: 2.79%

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

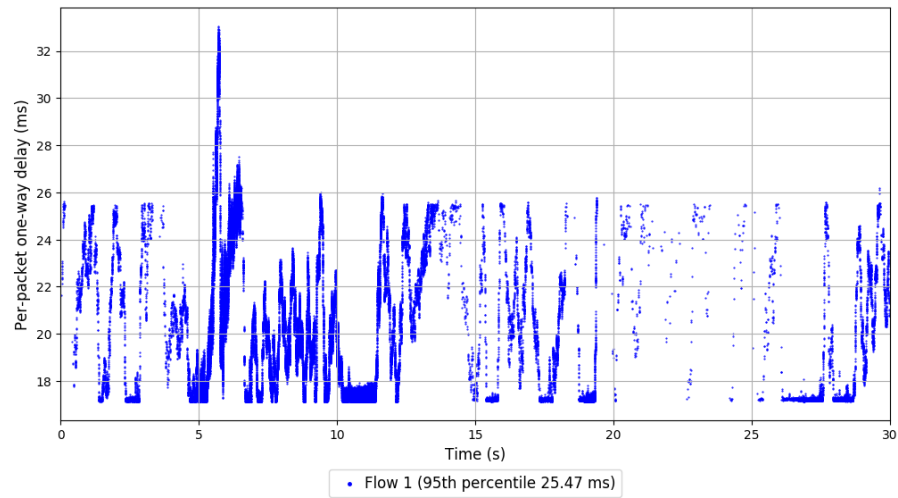
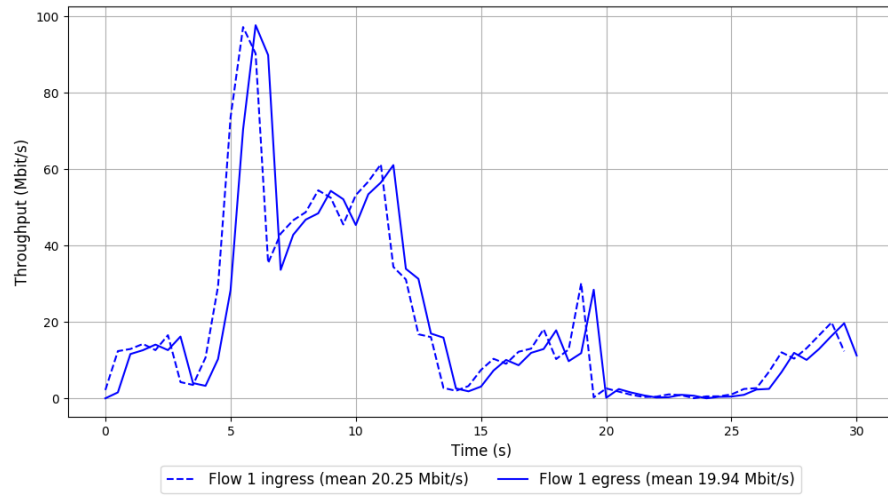


Run 4: Statistics of TCP Cubic

Start at: 2019-02-20 06:27:10  
End at: 2019-02-20 06:27:40  
Local clock offset: -1.312 ms  
Remote clock offset: -2.834 ms

# Below is generated by plot.py at 2019-02-20 07:16:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 19.94 Mbit/s  
95th percentile per-packet one-way delay: 25.468 ms  
Loss rate: 1.63%  
-- Flow 1:  
Average throughput: 19.94 Mbit/s  
95th percentile per-packet one-way delay: 25.468 ms  
Loss rate: 1.63%

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

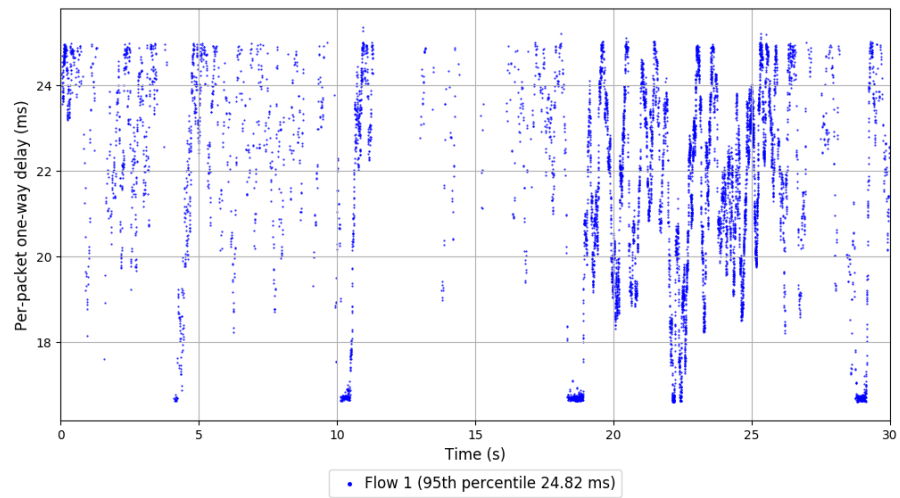
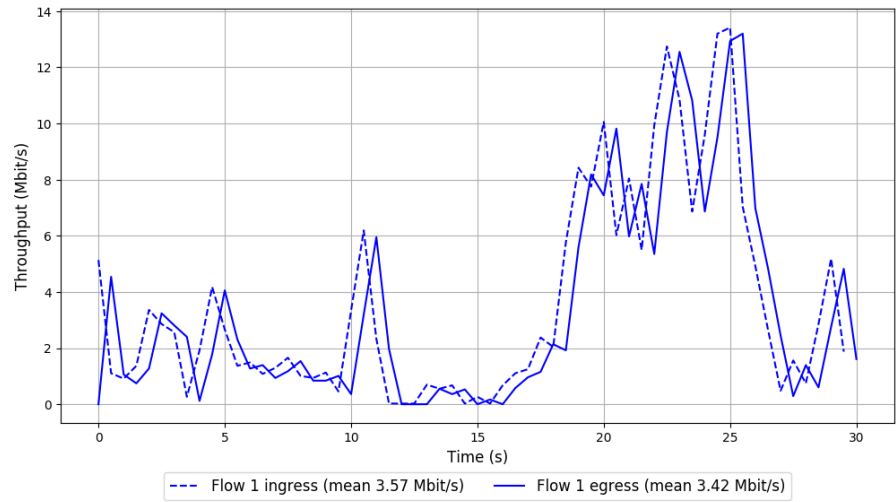


Run 5: Statistics of TCP Cubic

Start at: 2019-02-20 06:52:55  
End at: 2019-02-20 06:53:25  
Local clock offset: -0.928 ms  
Remote clock offset: -3.525 ms

# Below is generated by plot.py at 2019-02-20 07:16:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 3.42 Mbit/s  
95th percentile per-packet one-way delay: 24.818 ms  
Loss rate: 4.28%  
-- Flow 1:  
Average throughput: 3.42 Mbit/s  
95th percentile per-packet one-way delay: 24.818 ms  
Loss rate: 4.28%

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

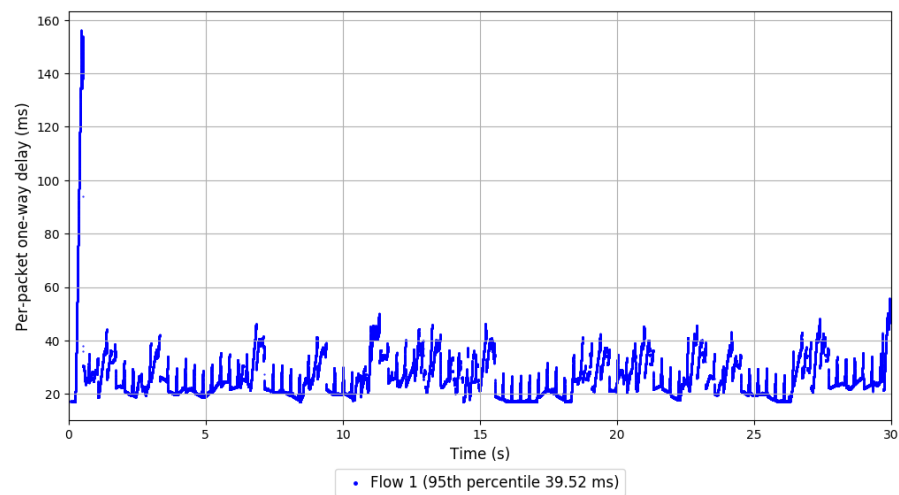
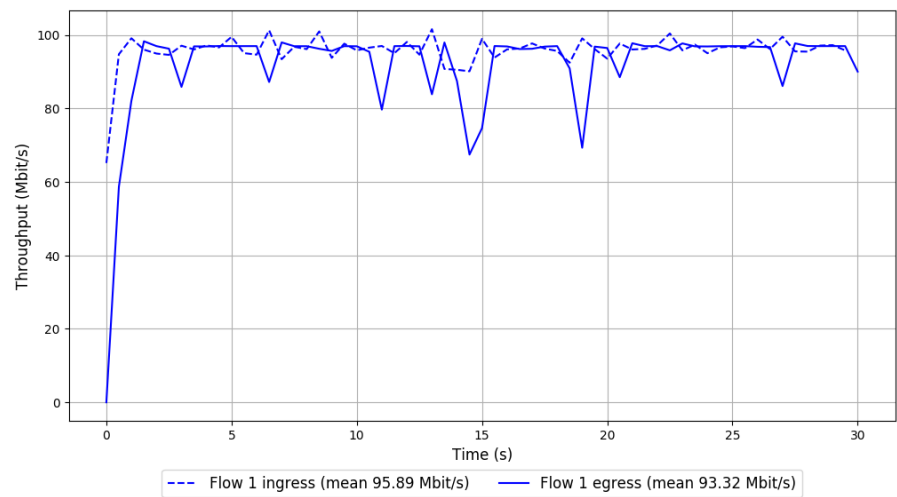


Run 1: Statistics of FillP

Start at: 2019-02-20 05:14:17  
End at: 2019-02-20 05:14:47  
Local clock offset: -0.042 ms  
Remote clock offset: -4.485 ms

# Below is generated by plot.py at 2019-02-20 07:17:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.32 Mbit/s  
95th percentile per-packet one-way delay: 39.525 ms  
Loss rate: 2.77%  
-- Flow 1:  
Average throughput: 93.32 Mbit/s  
95th percentile per-packet one-way delay: 39.525 ms  
Loss rate: 2.77%

Run 1: Report of FillP — Data Link



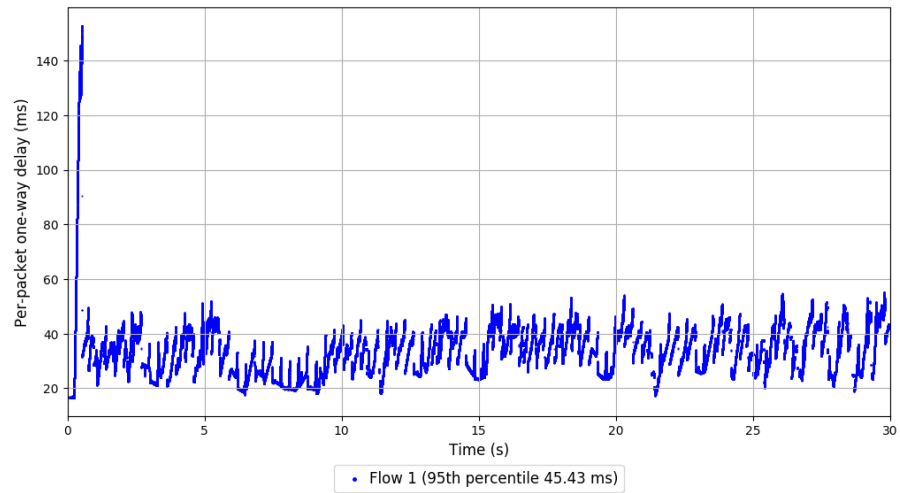
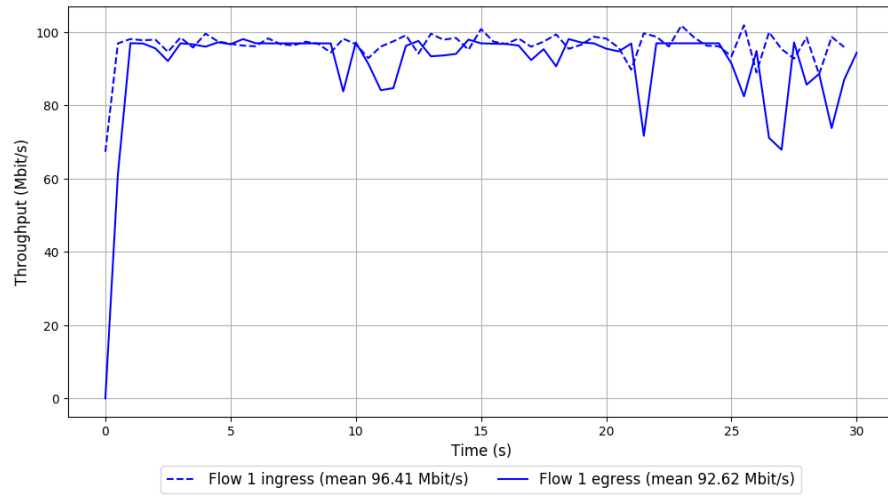


Run 2: Statistics of FillP

Start at: 2019-02-20 05:39:42  
End at: 2019-02-20 05:40:12  
Local clock offset: -1.256 ms  
Remote clock offset: -4.172 ms

# Below is generated by plot.py at 2019-02-20 07:17:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 92.62 Mbit/s  
95th percentile per-packet one-way delay: 45.433 ms  
Loss rate: 4.01%  
-- Flow 1:  
Average throughput: 92.62 Mbit/s  
95th percentile per-packet one-way delay: 45.433 ms  
Loss rate: 4.01%

## Run 2: Report of FillP — Data Link

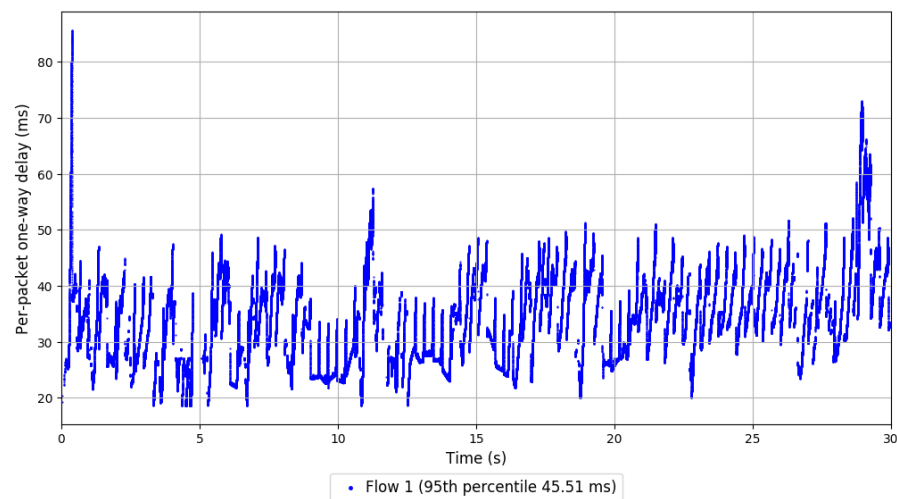
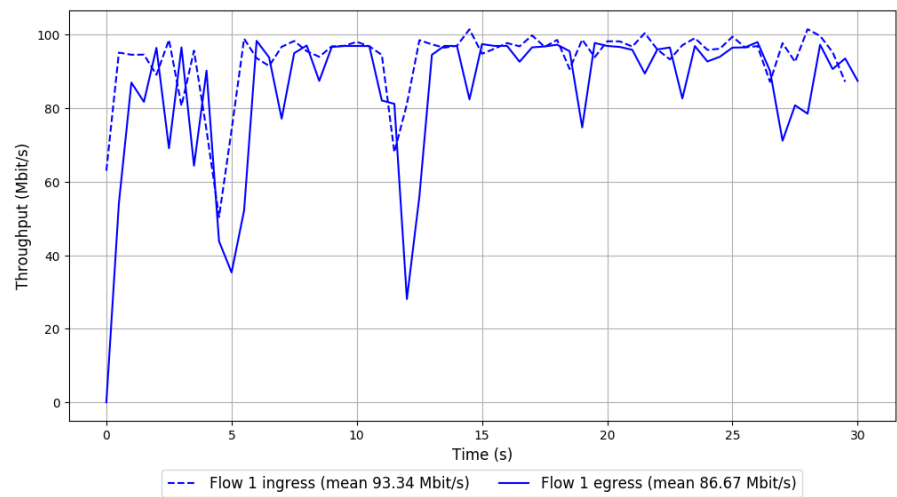


Run 3: Statistics of FillP

Start at: 2019-02-20 06:05:25  
End at: 2019-02-20 06:05:55  
Local clock offset: -0.053 ms  
Remote clock offset: -3.999 ms

# Below is generated by plot.py at 2019-02-20 07:17:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 86.67 Mbit/s  
95th percentile per-packet one-way delay: 45.513 ms  
Loss rate: 7.23%  
-- Flow 1:  
Average throughput: 86.67 Mbit/s  
95th percentile per-packet one-way delay: 45.513 ms  
Loss rate: 7.23%

Run 3: Report of FillP — Data Link

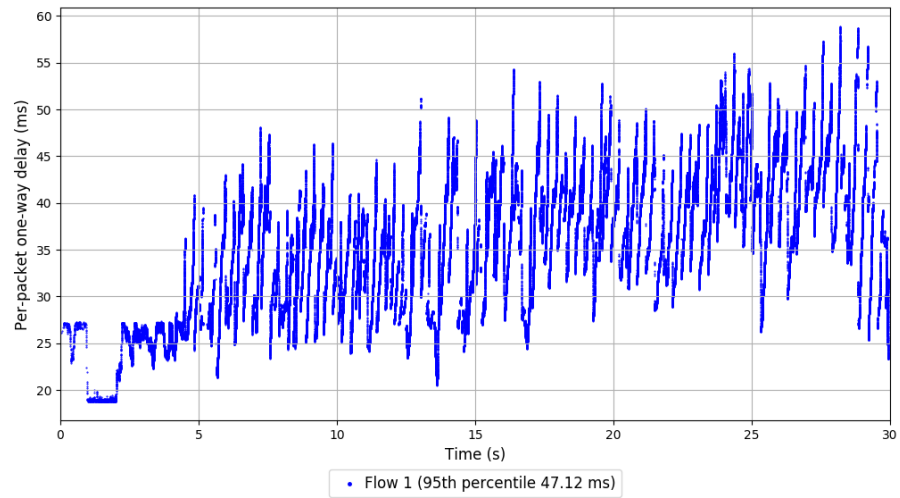
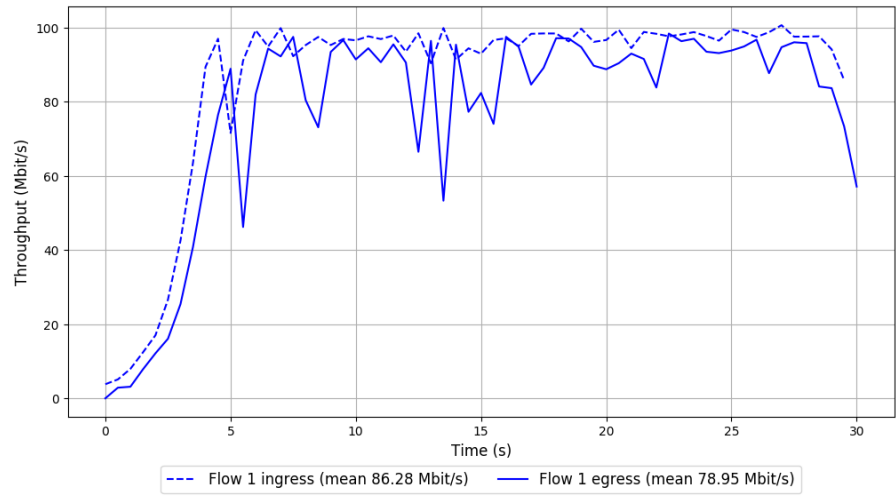


Run 4: Statistics of FillP

Start at: 2019-02-20 06:30:38  
End at: 2019-02-20 06:31:08  
Local clock offset: -0.622 ms  
Remote clock offset: -4.077 ms

# Below is generated by plot.py at 2019-02-20 07:17:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 78.95 Mbit/s  
95th percentile per-packet one-way delay: 47.121 ms  
Loss rate: 8.59%  
-- Flow 1:  
Average throughput: 78.95 Mbit/s  
95th percentile per-packet one-way delay: 47.121 ms  
Loss rate: 8.59%

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

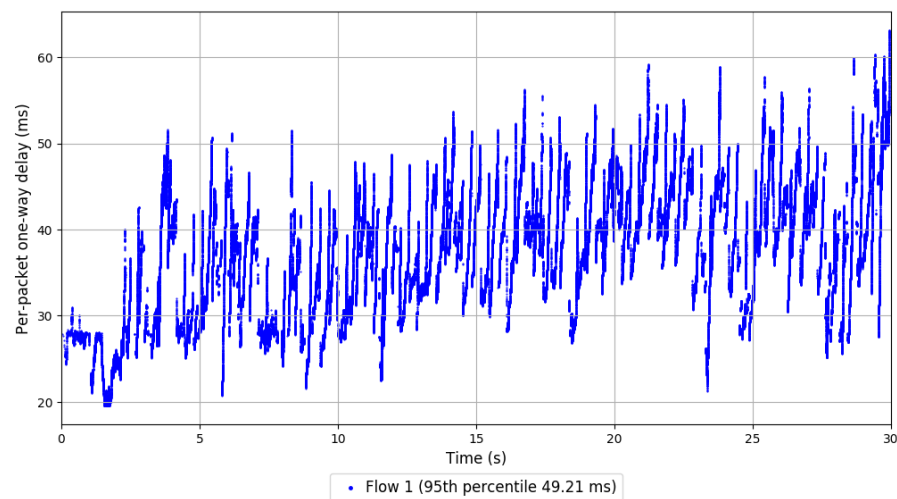
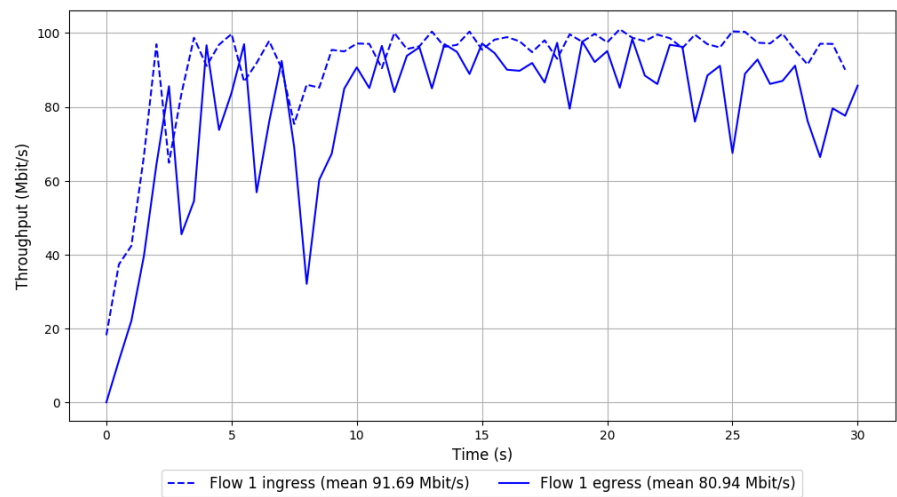


Run 5: Statistics of FillP

Start at: 2019-02-20 06:56:25  
End at: 2019-02-20 06:56:55  
Local clock offset: -4.635 ms  
Remote clock offset: -10.43 ms

# Below is generated by plot.py at 2019-02-20 07:17:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 80.94 Mbit/s  
95th percentile per-packet one-way delay: 49.210 ms  
Loss rate: 11.82%  
-- Flow 1:  
Average throughput: 80.94 Mbit/s  
95th percentile per-packet one-way delay: 49.210 ms  
Loss rate: 11.82%

Run 5: Report of FillP — Data Link



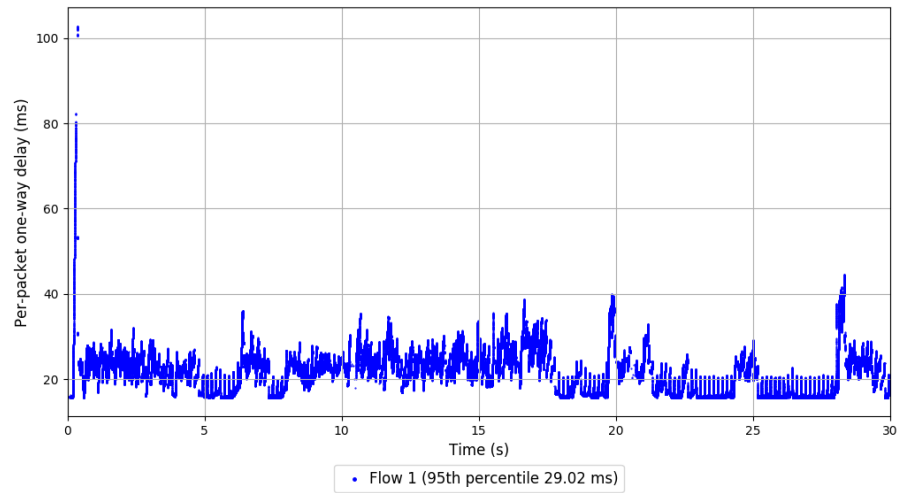
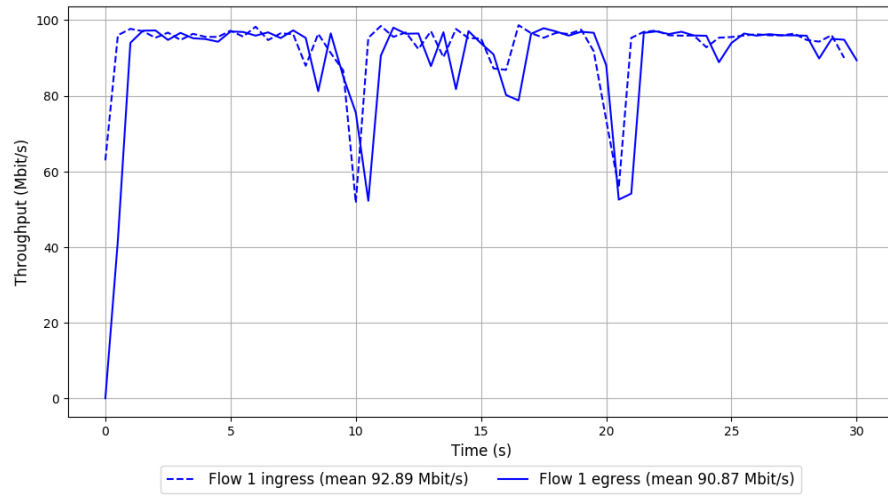


Run 1: Statistics of FillP-Sheep

Start at: 2019-02-20 05:08:15  
End at: 2019-02-20 05:08:45  
Local clock offset: -1.304 ms  
Remote clock offset: -4.388 ms

# Below is generated by plot.py at 2019-02-20 07:17:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 90.87 Mbit/s  
95th percentile per-packet one-way delay: 29.016 ms  
Loss rate: 2.24%  
-- Flow 1:  
Average throughput: 90.87 Mbit/s  
95th percentile per-packet one-way delay: 29.016 ms  
Loss rate: 2.24%

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

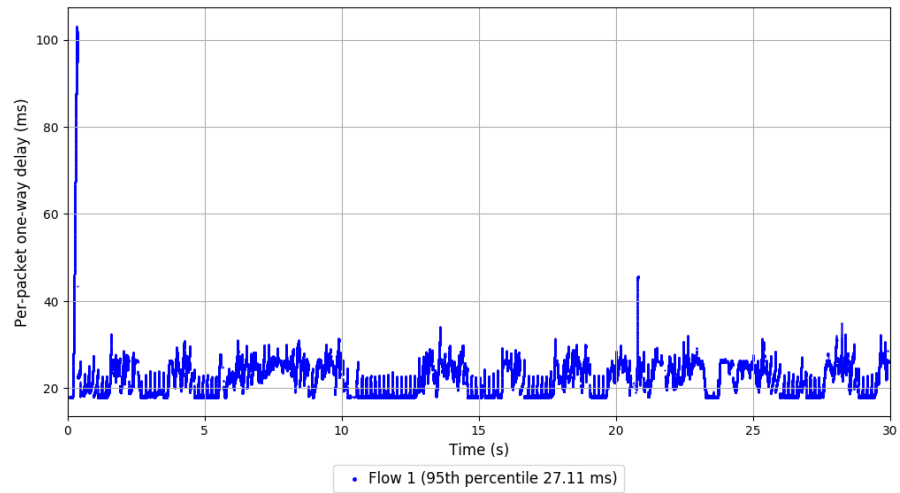
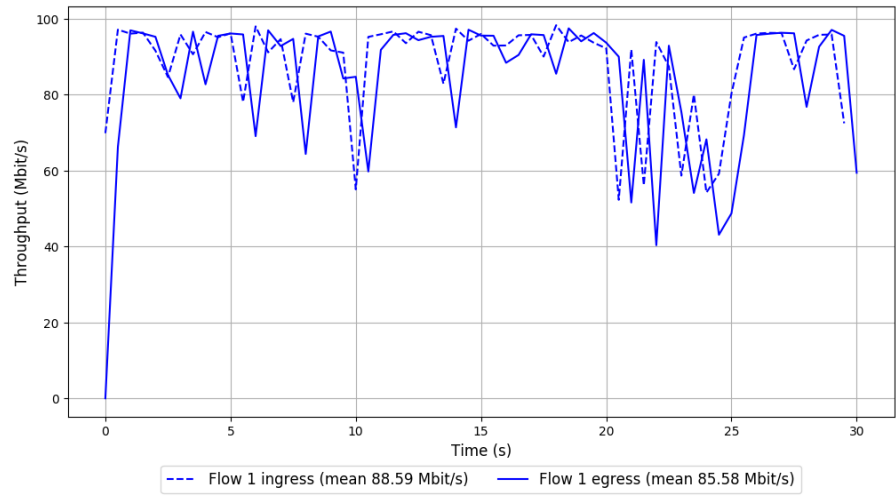


Run 2: Statistics of FillP-Sheep

Start at: 2019-02-20 05:33:46  
End at: 2019-02-20 05:34:16  
Local clock offset: 0.007 ms  
Remote clock offset: -4.407 ms

# Below is generated by plot.py at 2019-02-20 07:17:41  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 85.58 Mbit/s  
95th percentile per-packet one-way delay: 27.111 ms  
Loss rate: 3.54%  
-- Flow 1:  
Average throughput: 85.58 Mbit/s  
95th percentile per-packet one-way delay: 27.111 ms  
Loss rate: 3.54%

## Run 2: Report of FillP-Sheep — Data Link

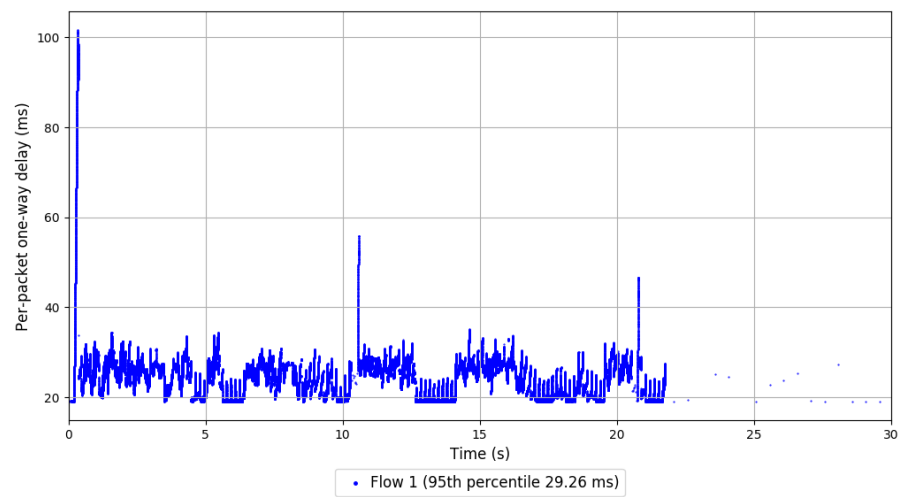
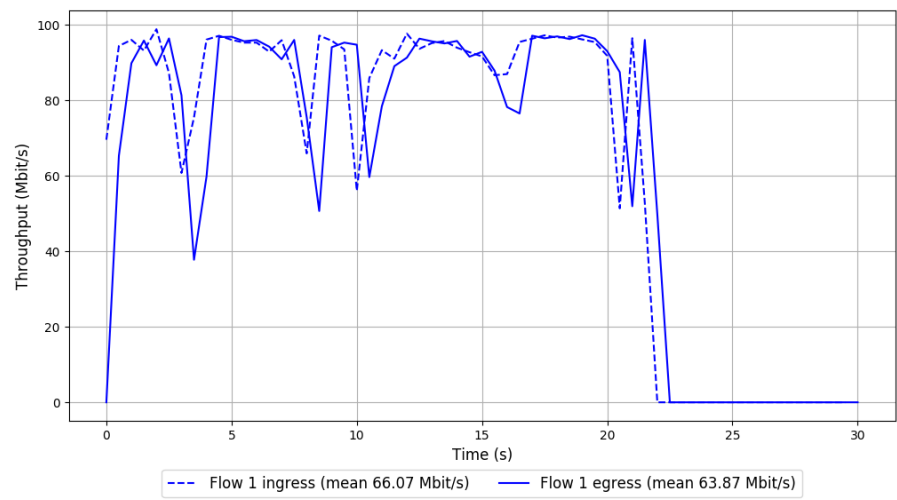


Run 3: Statistics of FillP-Sheep

Start at: 2019-02-20 05:59:24  
End at: 2019-02-20 05:59:54  
Local clock offset: 0.501 ms  
Remote clock offset: -3.915 ms

# Below is generated by plot.py at 2019-02-20 07:17:56  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 63.87 Mbit/s  
95th percentile per-packet one-way delay: 29.261 ms  
Loss rate: 3.34%  
-- Flow 1:  
Average throughput: 63.87 Mbit/s  
95th percentile per-packet one-way delay: 29.261 ms  
Loss rate: 3.34%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-02-20 06:24:47

End at: 2019-02-20 06:25:17

Local clock offset: -2.995 ms

Remote clock offset: -4.07 ms

# Below is generated by plot.py at 2019-02-20 07:18:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 82.41 Mbit/s

95th percentile per-packet one-way delay: 26.453 ms

Loss rate: 4.34%

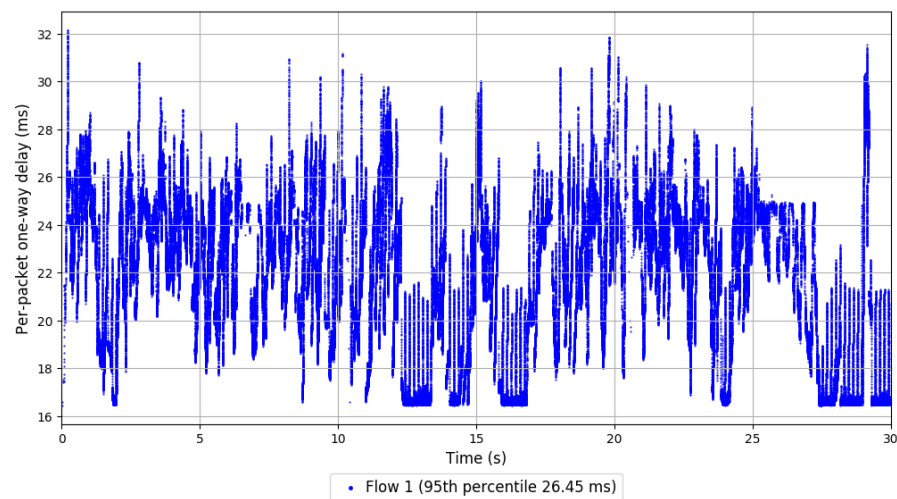
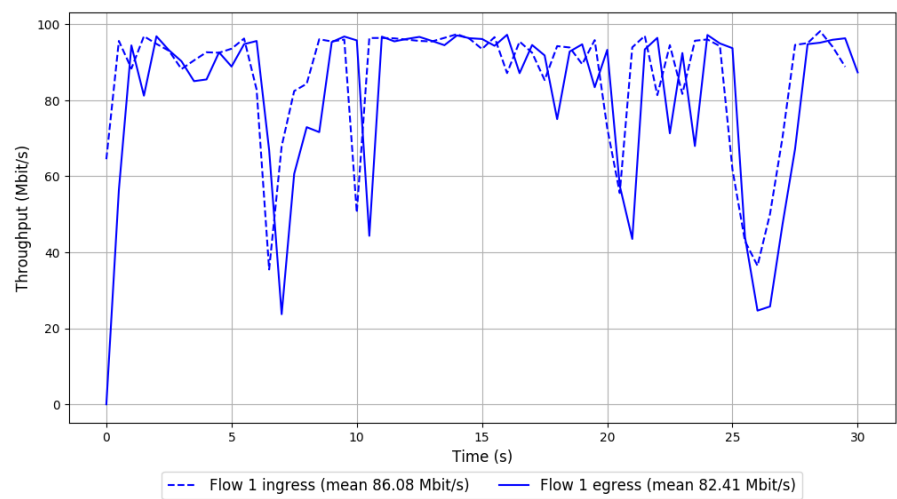
-- Flow 1:

Average throughput: 82.41 Mbit/s

95th percentile per-packet one-way delay: 26.453 ms

Loss rate: 4.34%

Run 4: Report of FillP-Sheep — Data Link





Run 5: Statistics of FillP-Sheep

Start at: 2019-02-20 06:50:24

End at: 2019-02-20 06:50:54

Local clock offset: 1.243 ms

Remote clock offset: -2.62 ms

# Below is generated by plot.py at 2019-02-20 07:18:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 79.30 Mbit/s

95th percentile per-packet one-way delay: 37.328 ms

Loss rate: 6.60%

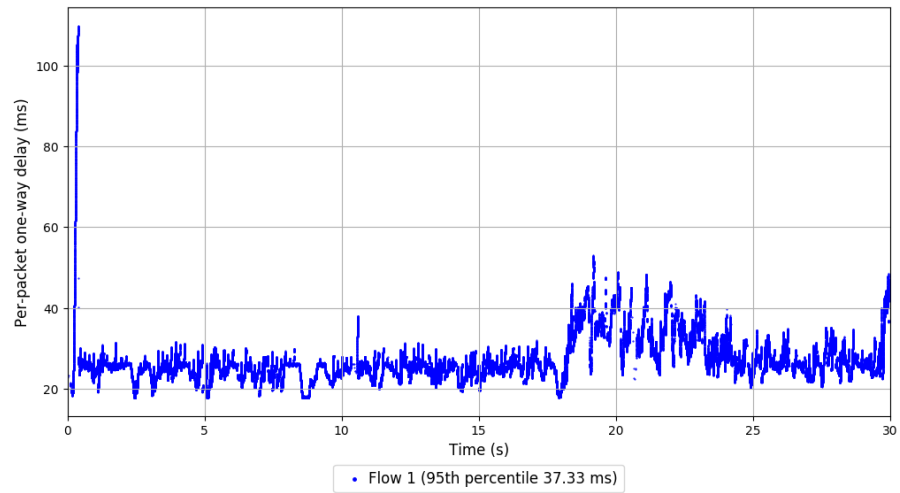
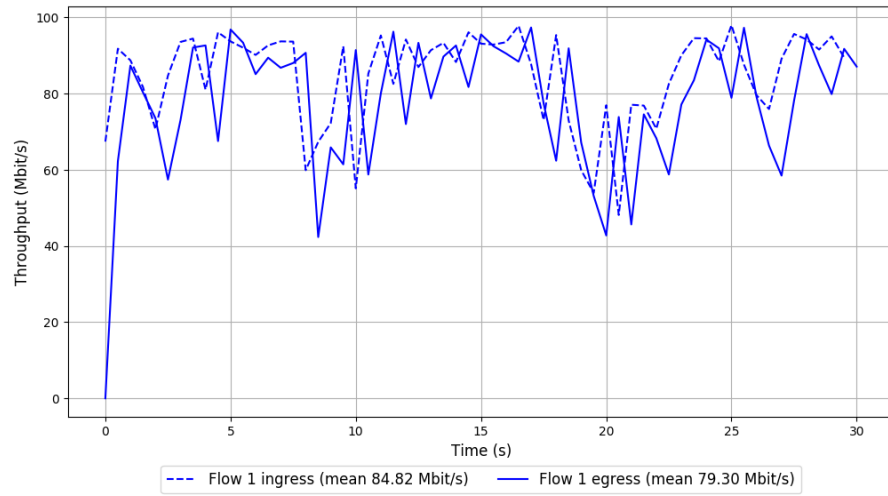
-- Flow 1:

Average throughput: 79.30 Mbit/s

95th percentile per-packet one-way delay: 37.328 ms

Loss rate: 6.60%

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

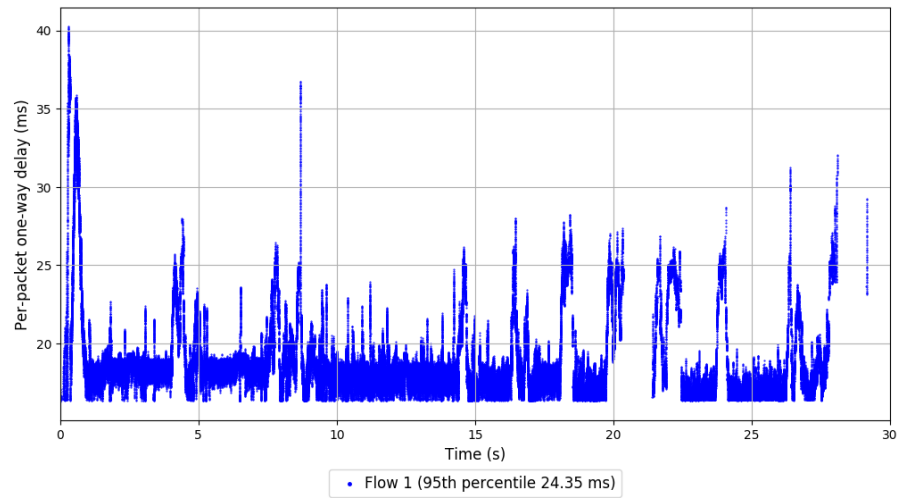
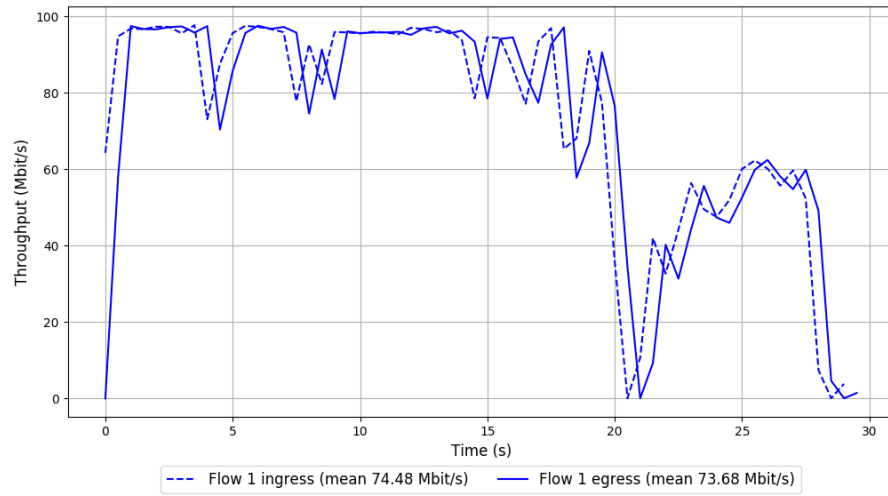


Run 1: Statistics of Indigo

Start at: 2019-02-20 05:23:49  
End at: 2019-02-20 05:24:19  
Local clock offset: -1.413 ms  
Remote clock offset: -4.712 ms

# Below is generated by plot.py at 2019-02-20 07:18:47  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 73.68 Mbit/s  
95th percentile per-packet one-way delay: 24.353 ms  
Loss rate: 1.16%  
-- Flow 1:  
Average throughput: 73.68 Mbit/s  
95th percentile per-packet one-way delay: 24.353 ms  
Loss rate: 1.16%

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

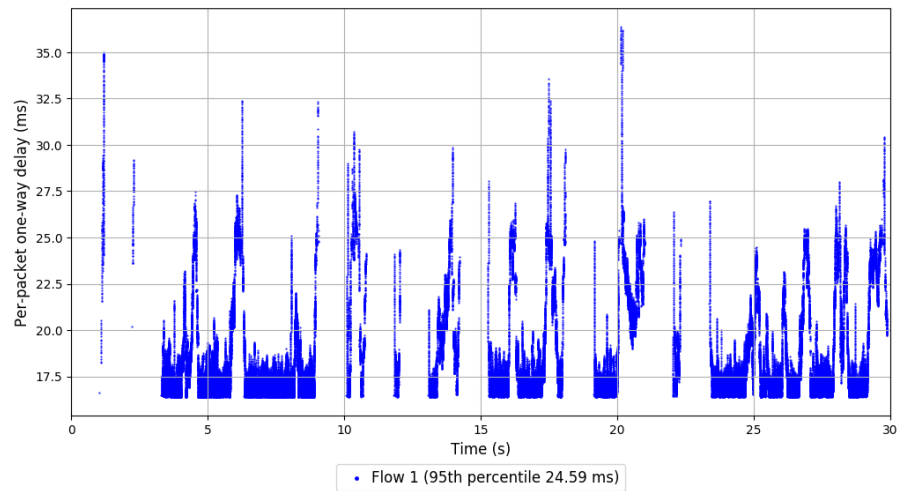
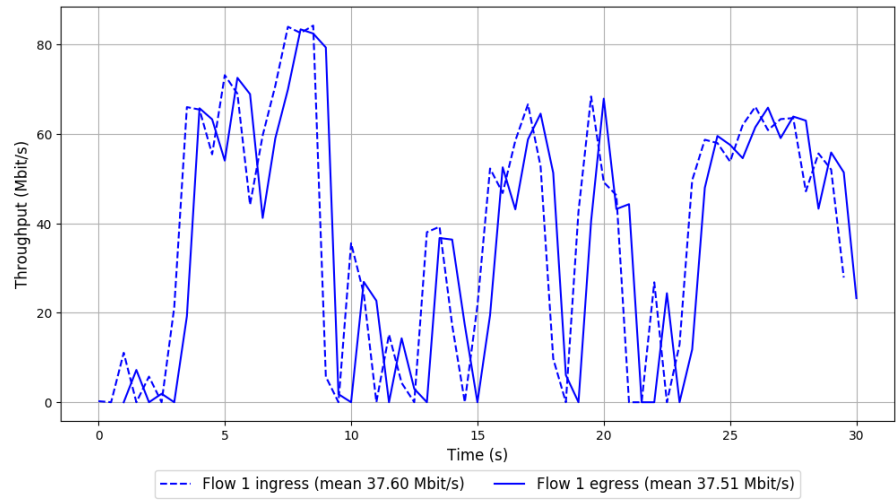


Run 2: Statistics of Indigo

Start at: 2019-02-20 05:49:31  
End at: 2019-02-20 05:50:01  
Local clock offset: -0.652 ms  
Remote clock offset: -2.761 ms

# Below is generated by plot.py at 2019-02-20 07:18:47  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 37.51 Mbit/s  
95th percentile per-packet one-way delay: 24.592 ms  
Loss rate: 3.72%  
-- Flow 1:  
Average throughput: 37.51 Mbit/s  
95th percentile per-packet one-way delay: 24.592 ms  
Loss rate: 3.72%

## Run 2: Report of Indigo — Data Link

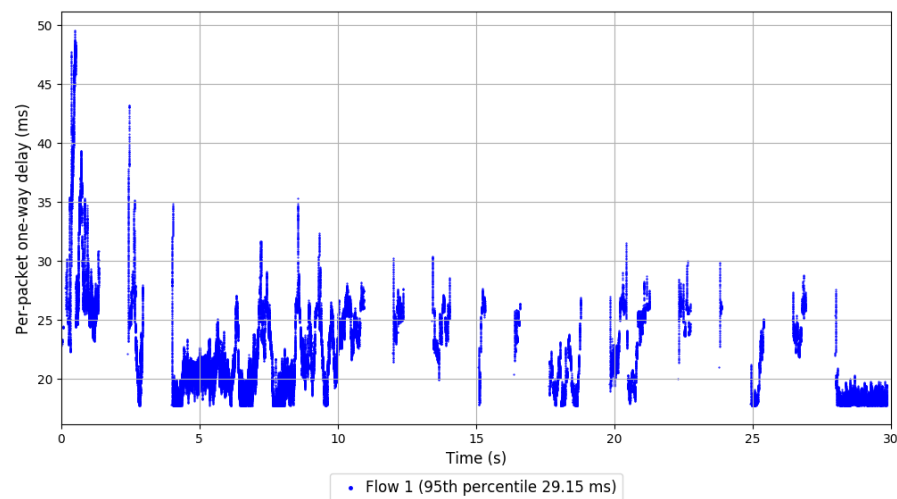
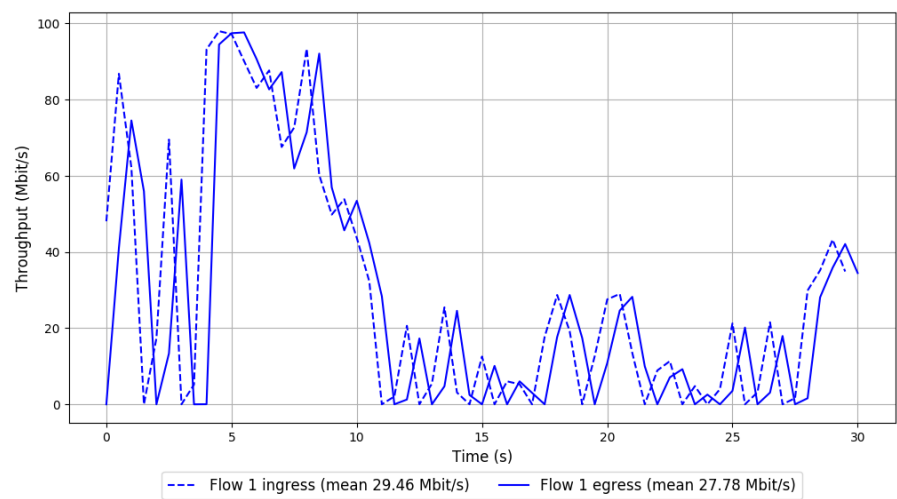


Run 3: Statistics of Indigo

Start at: 2019-02-20 06:15:08  
End at: 2019-02-20 06:15:38  
Local clock offset: -0.579 ms  
Remote clock offset: -3.102 ms

# Below is generated by plot.py at 2019-02-20 07:18:47  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 27.78 Mbit/s  
95th percentile per-packet one-way delay: 29.151 ms  
Loss rate: 5.76%  
-- Flow 1:  
Average throughput: 27.78 Mbit/s  
95th percentile per-packet one-way delay: 29.151 ms  
Loss rate: 5.76%

Run 3: Report of Indigo — Data Link



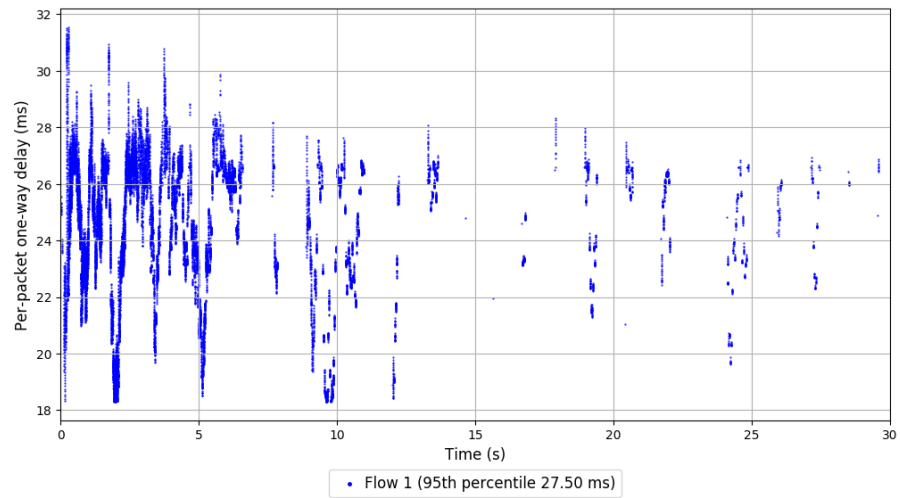
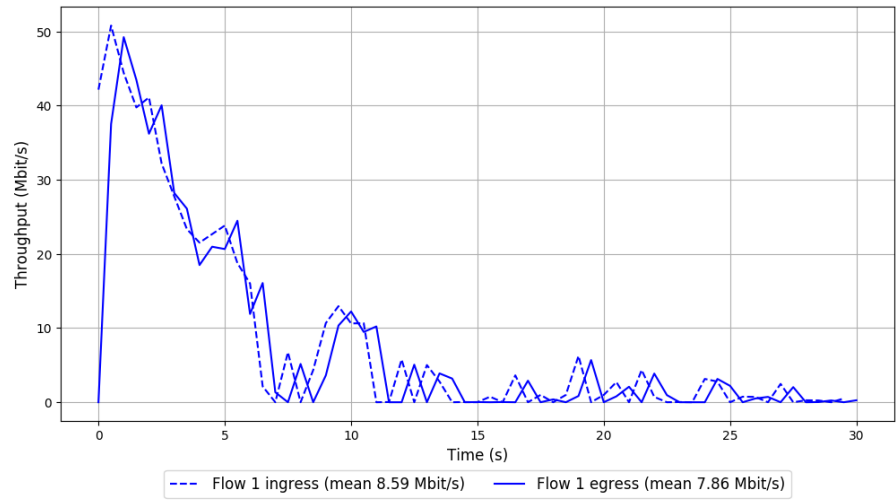


Run 4: Statistics of Indigo

Start at: 2019-02-20 06:40:36  
End at: 2019-02-20 06:41:06  
Local clock offset: 0.737 ms  
Remote clock offset: -3.193 ms

# Below is generated by plot.py at 2019-02-20 07:18:47  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 7.86 Mbit/s  
95th percentile per-packet one-way delay: 27.500 ms  
Loss rate: 8.59%  
-- Flow 1:  
Average throughput: 7.86 Mbit/s  
95th percentile per-packet one-way delay: 27.500 ms  
Loss rate: 8.59%

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



Run 5: Statistics of Indigo

Start at: 2019-02-20 07:08:23

End at: 2019-02-20 07:08:53

Local clock offset: 1.887 ms

Remote clock offset: -3.199 ms

# Below is generated by plot.py at 2019-02-20 07:18:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 24.31 Mbit/s

95th percentile per-packet one-way delay: 28.679 ms

Loss rate: 5.08%

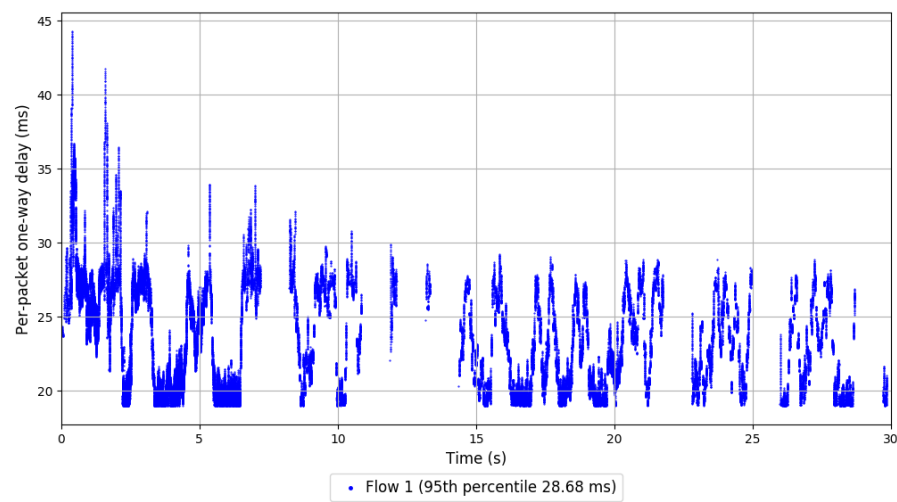
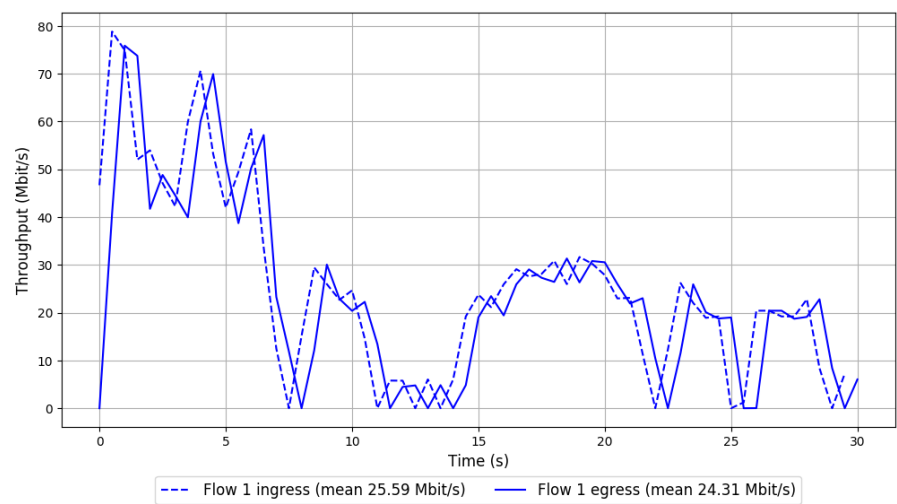
-- Flow 1:

Average throughput: 24.31 Mbit/s

95th percentile per-packet one-way delay: 28.679 ms

Loss rate: 5.08%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-02-20 05:16:35

End at: 2019-02-20 05:17:05

Local clock offset: 2.117 ms

Remote clock offset: -5.997 ms

# Below is generated by plot.py at 2019-02-20 07:18:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 64.47 Mbit/s

95th percentile per-packet one-way delay: 30.683 ms

Loss rate: 3.83%

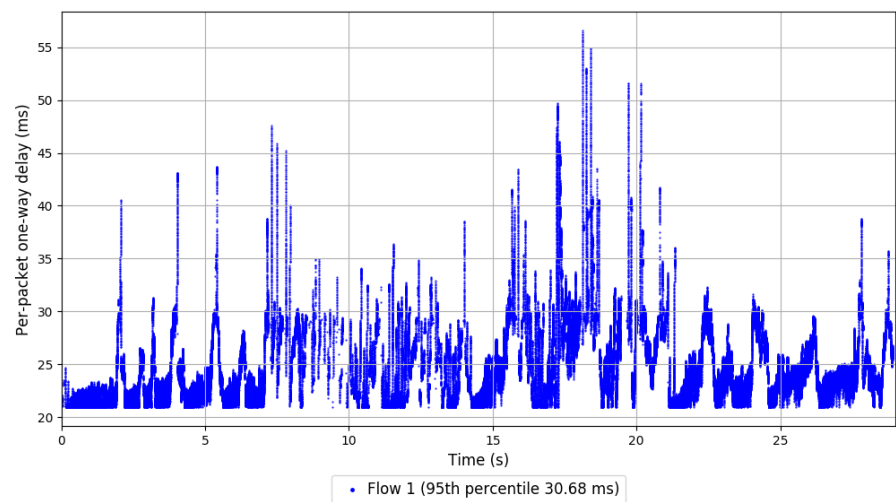
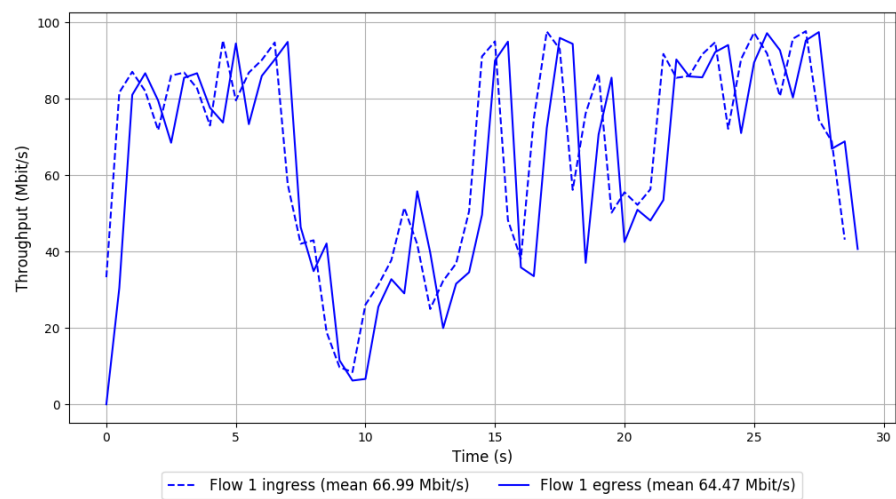
-- Flow 1:

Average throughput: 64.47 Mbit/s

95th percentile per-packet one-way delay: 30.683 ms

Loss rate: 3.83%

Run 1: Report of Indigo-MusesC3 — Data Link

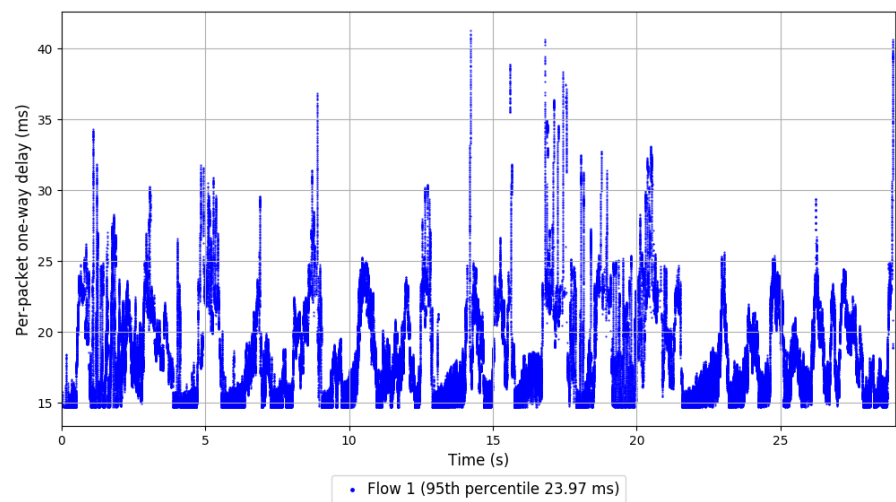
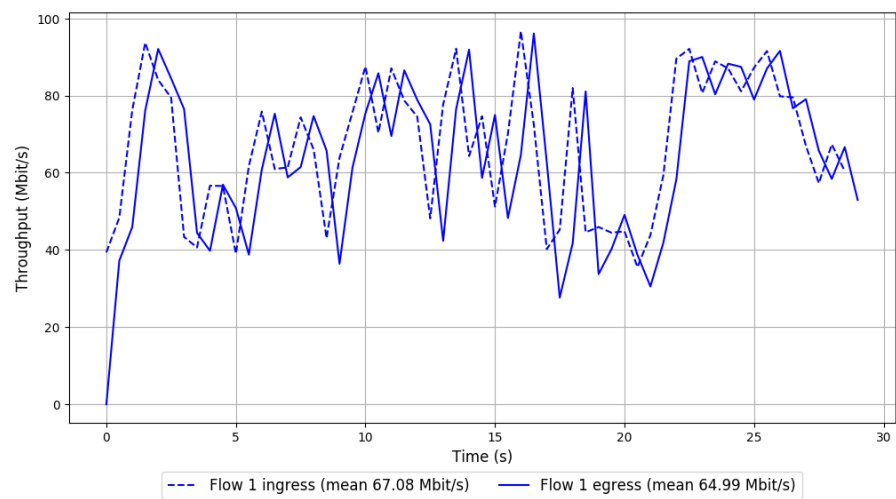


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-02-20 05:42:14  
End at: 2019-02-20 05:42:44  
Local clock offset: -8.857 ms  
Remote clock offset: -9.624 ms

# Below is generated by plot.py at 2019-02-20 07:18:47  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 64.99 Mbit/s  
95th percentile per-packet one-way delay: 23.973 ms  
Loss rate: 3.20%  
-- Flow 1:  
Average throughput: 64.99 Mbit/s  
95th percentile per-packet one-way delay: 23.973 ms  
Loss rate: 3.20%

Run 2: Report of Indigo-MusesC3 — Data Link



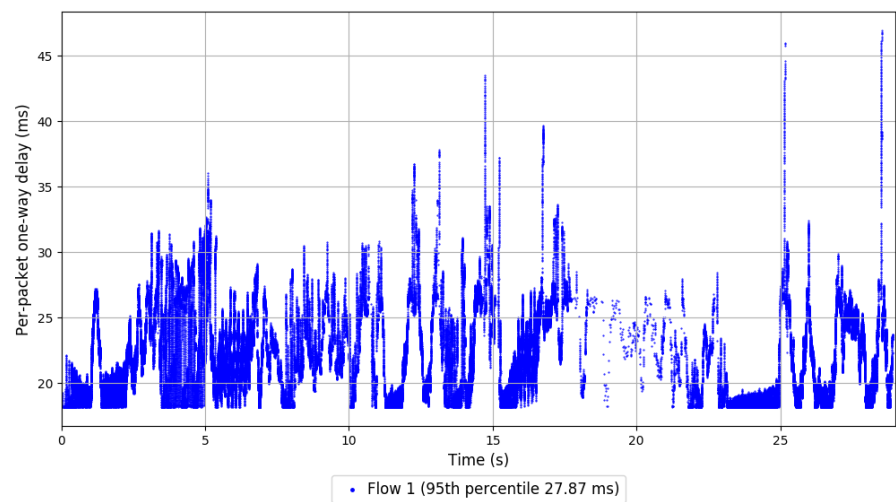
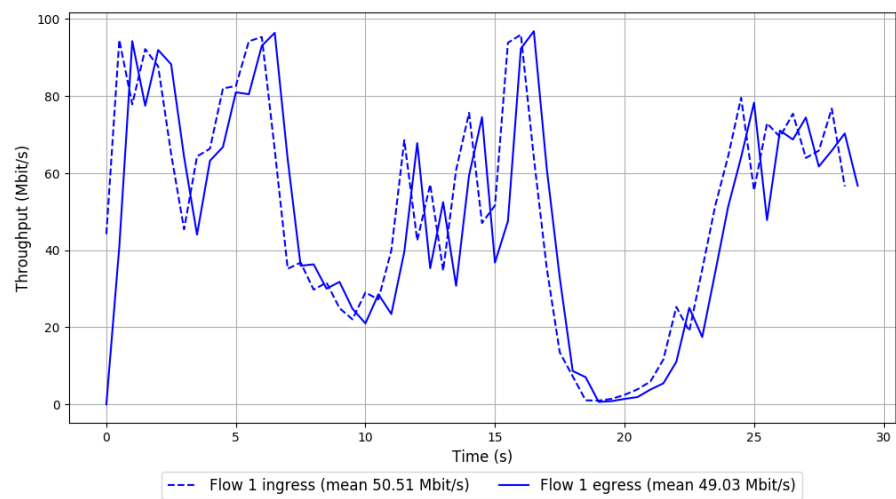


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-02-20 06:08:12  
End at: 2019-02-20 06:08:42  
Local clock offset: 0.668 ms  
Remote clock offset: -2.555 ms

# Below is generated by plot.py at 2019-02-20 07:18:47  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 49.03 Mbit/s  
95th percentile per-packet one-way delay: 27.872 ms  
Loss rate: 3.01%  
-- Flow 1:  
Average throughput: 49.03 Mbit/s  
95th percentile per-packet one-way delay: 27.872 ms  
Loss rate: 3.01%

Run 3: Report of Indigo-MusesC3 — Data Link

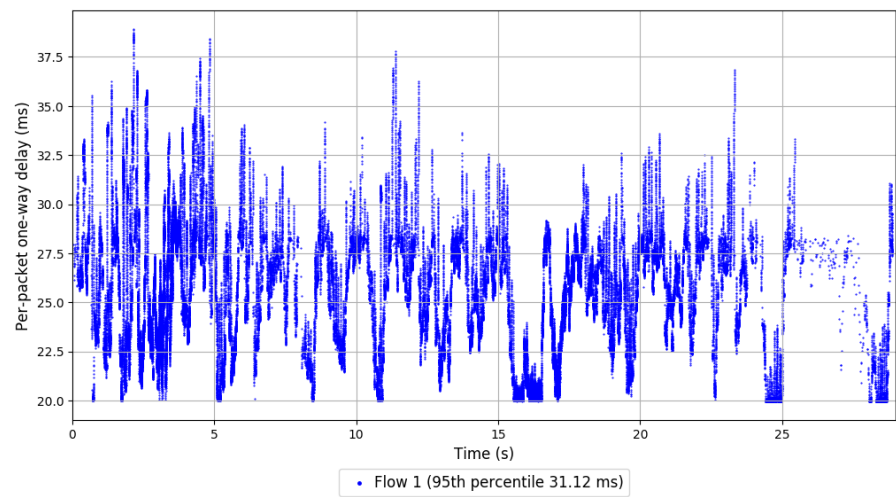
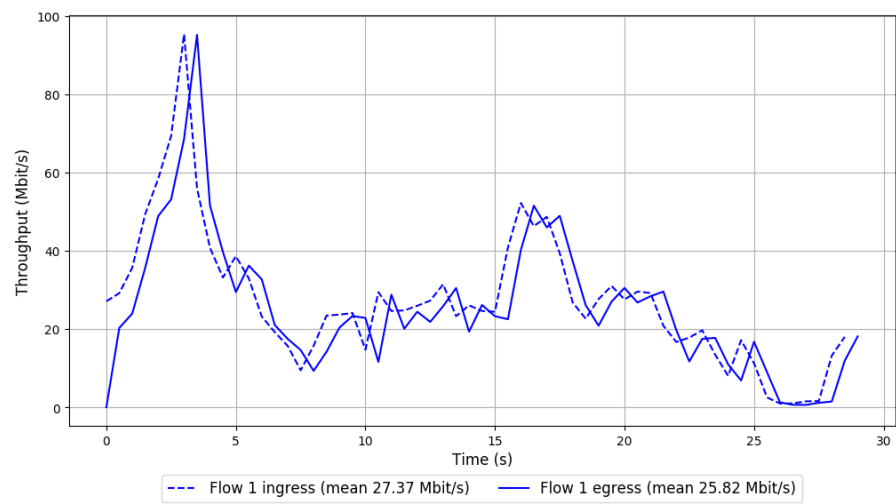


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-02-20 06:33:24  
End at: 2019-02-20 06:33:54  
Local clock offset: 0.241 ms  
Remote clock offset: -4.769 ms

# Below is generated by plot.py at 2019-02-20 07:18:47  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 25.82 Mbit/s  
95th percentile per-packet one-way delay: 31.123 ms  
Loss rate: 5.75%  
-- Flow 1:  
Average throughput: 25.82 Mbit/s  
95th percentile per-packet one-way delay: 31.123 ms  
Loss rate: 5.75%

Run 4: Report of Indigo-MusesC3 — Data Link

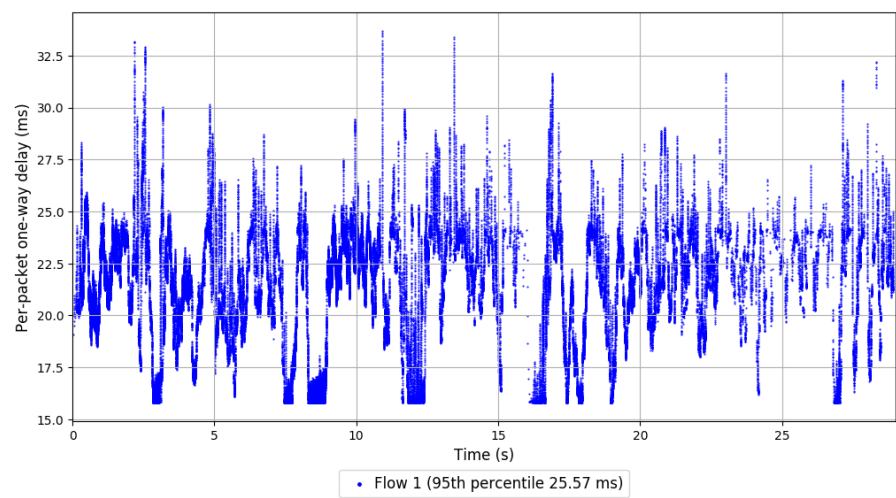
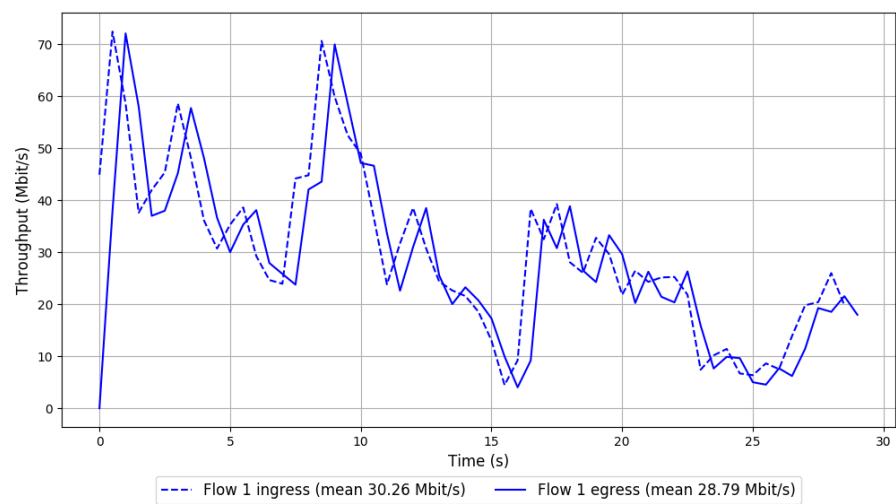


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-02-20 06:59:14  
End at: 2019-02-20 06:59:44  
Local clock offset: -1.125 ms  
Remote clock offset: -3.044 ms

# Below is generated by plot.py at 2019-02-20 07:18:47  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 28.79 Mbit/s  
95th percentile per-packet one-way delay: 25.568 ms  
Loss rate: 4.97%  
-- Flow 1:  
Average throughput: 28.79 Mbit/s  
95th percentile per-packet one-way delay: 25.568 ms  
Loss rate: 4.97%

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-02-20 05:15:26

End at: 2019-02-20 05:15:56

Local clock offset: 1.981 ms

Remote clock offset: -6.271 ms

# Below is generated by plot.py at 2019-02-20 07:18:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 37.21 Mbit/s

95th percentile per-packet one-way delay: 32.241 ms

Loss rate: 4.50%

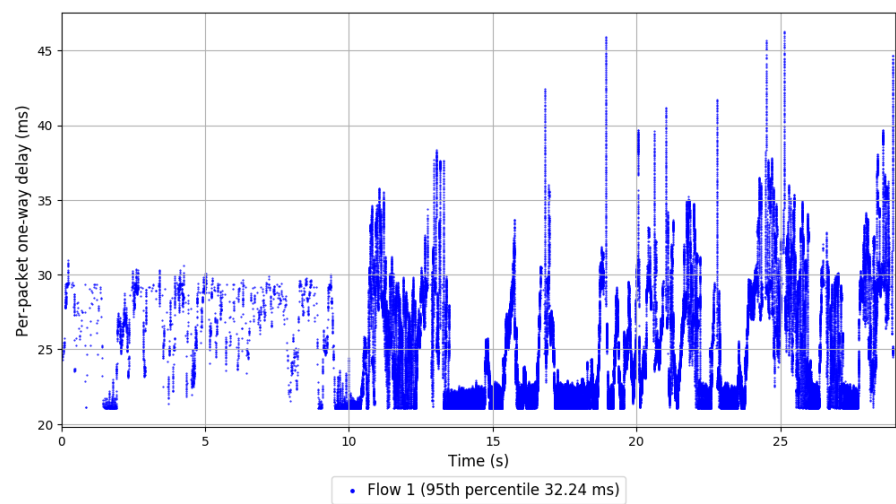
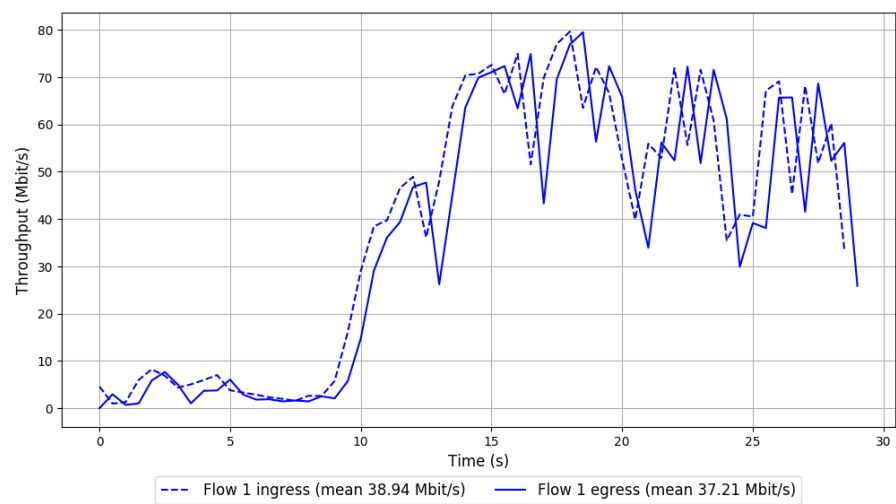
-- Flow 1:

Average throughput: 37.21 Mbit/s

95th percentile per-packet one-way delay: 32.241 ms

Loss rate: 4.50%

Run 1: Report of Indigo-MusesC5 — Data Link



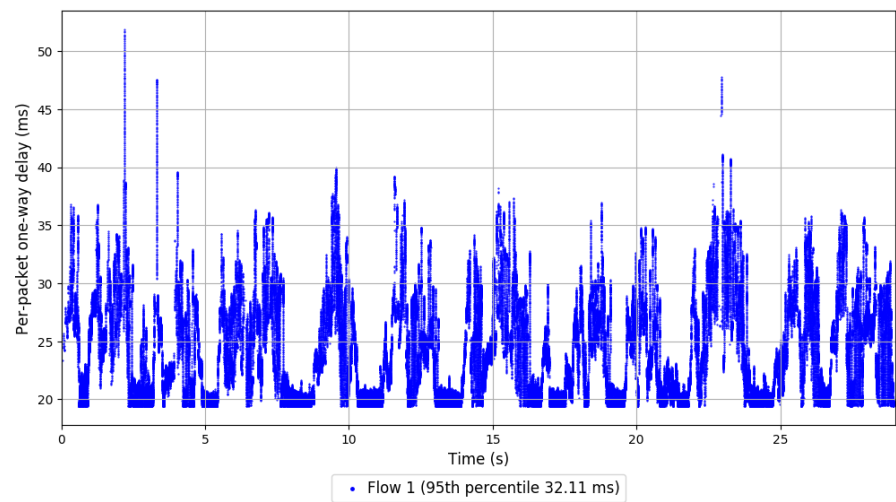
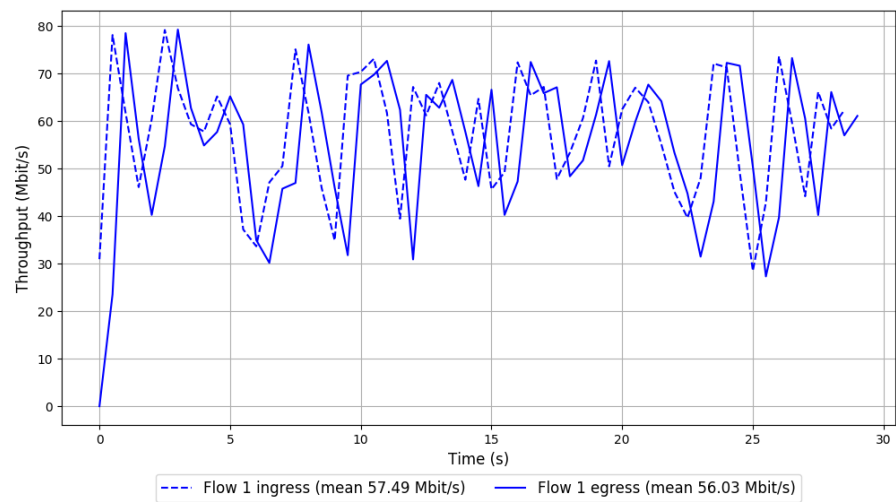


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-02-20 05:41:03  
End at: 2019-02-20 05:41:33  
Local clock offset: 1.28 ms  
Remote clock offset: -4.274 ms

# Below is generated by plot.py at 2019-02-20 07:19:08  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 56.03 Mbit/s  
95th percentile per-packet one-way delay: 32.110 ms  
Loss rate: 2.64%  
-- Flow 1:  
Average throughput: 56.03 Mbit/s  
95th percentile per-packet one-way delay: 32.110 ms  
Loss rate: 2.64%

Run 2: Report of Indigo-MusesC5 — Data Link

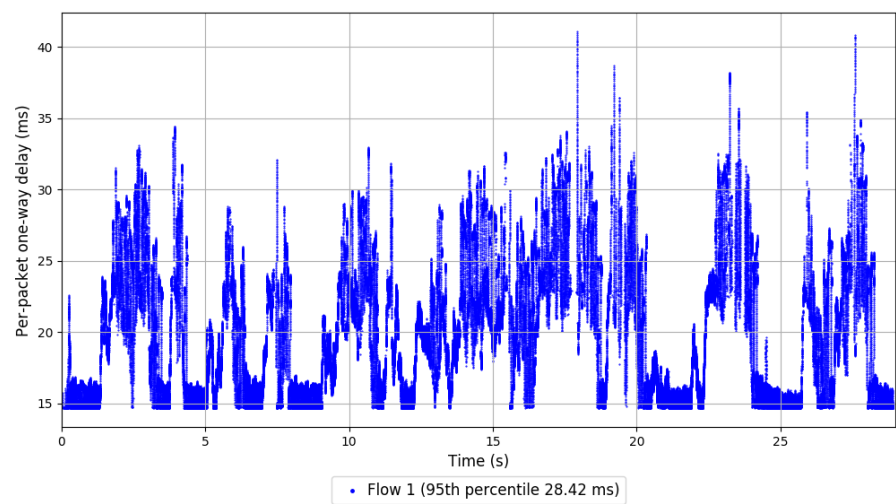
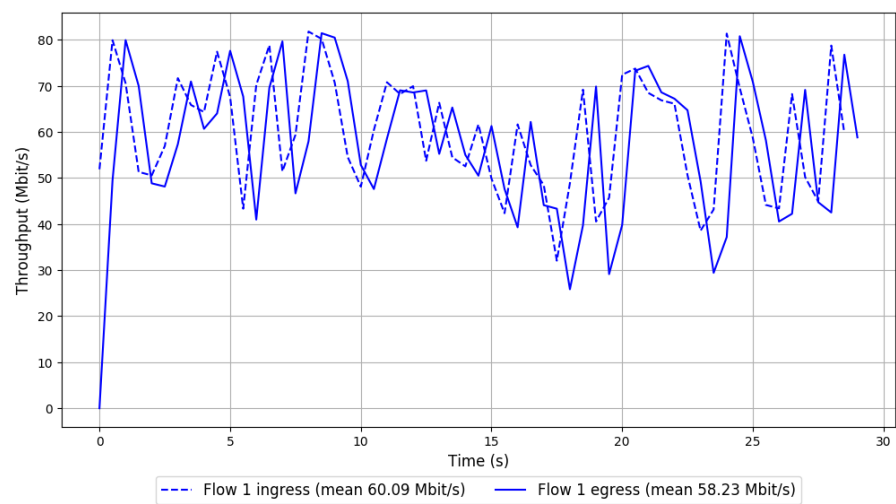


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-02-20 06:06:51  
End at: 2019-02-20 06:07:21  
Local clock offset: -2.859 ms  
Remote clock offset: -2.676 ms

# Below is generated by plot.py at 2019-02-20 07:19:15  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 58.23 Mbit/s  
95th percentile per-packet one-way delay: 28.422 ms  
Loss rate: 3.17%  
-- Flow 1:  
Average throughput: 58.23 Mbit/s  
95th percentile per-packet one-way delay: 28.422 ms  
Loss rate: 3.17%

Run 3: Report of Indigo-MusesC5 — Data Link



Run 4: Statistics of Indigo-MusesC5

Start at: 2019-02-20 06:32:12

End at: 2019-02-20 06:32:42

Local clock offset: -1.568 ms

Remote clock offset: -3.278 ms

# Below is generated by plot.py at 2019-02-20 07:19:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 33.04 Mbit/s

95th percentile per-packet one-way delay: 30.239 ms

Loss rate: 6.33%

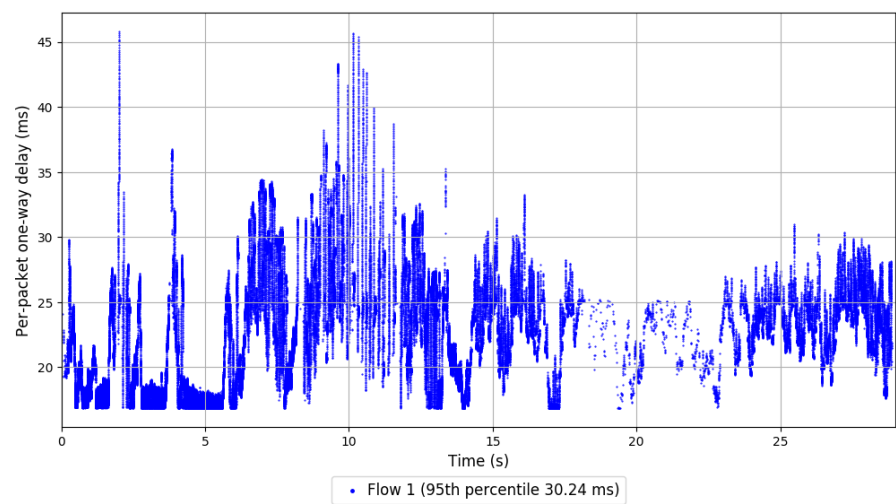
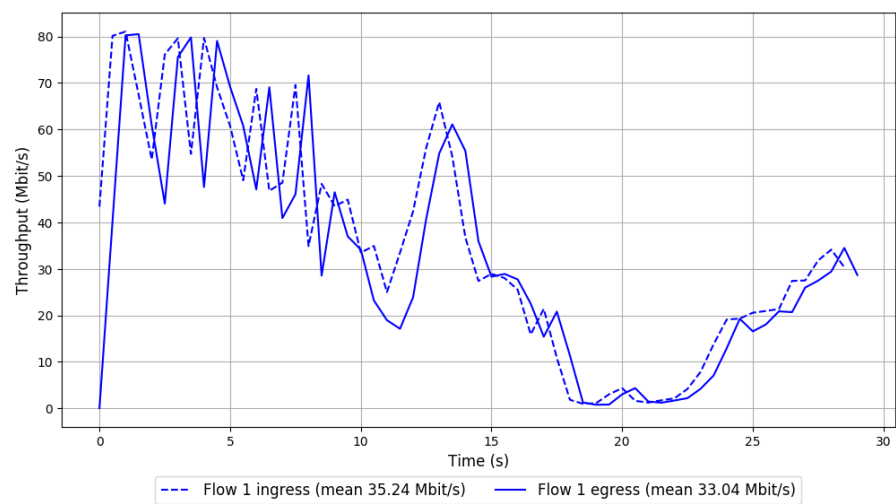
-- Flow 1:

Average throughput: 33.04 Mbit/s

95th percentile per-packet one-way delay: 30.239 ms

Loss rate: 6.33%

Run 4: Report of Indigo-MusesC5 — Data Link

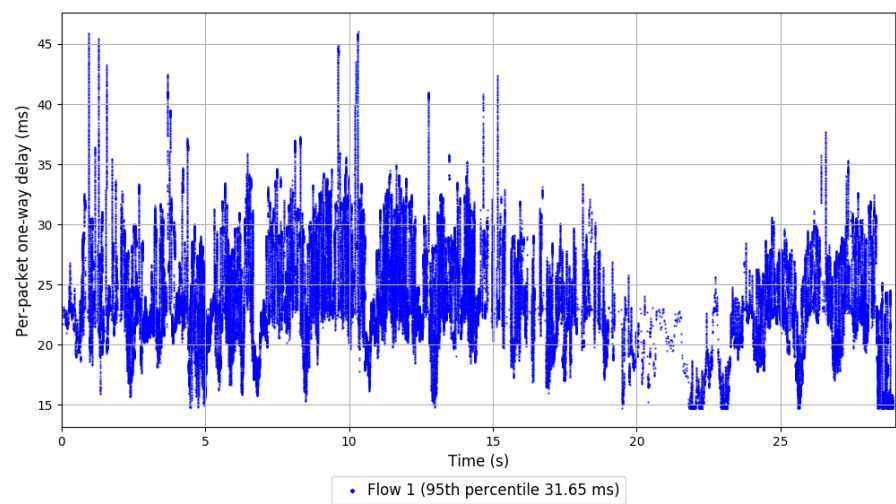
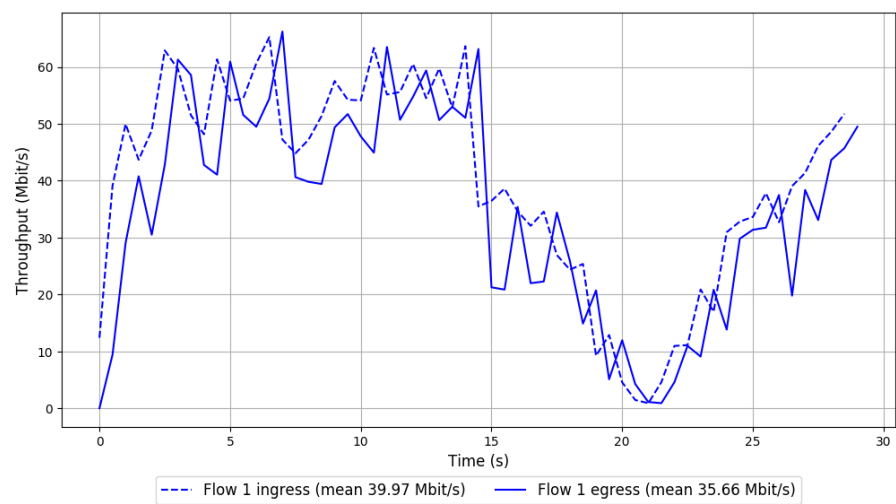


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-02-20 06:58:04  
End at: 2019-02-20 06:58:34  
Local clock offset: -1.114 ms  
Remote clock offset: -1.938 ms

# Below is generated by plot.py at 2019-02-20 07:19:15  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 35.66 Mbit/s  
95th percentile per-packet one-way delay: 31.653 ms  
Loss rate: 10.86%  
-- Flow 1:  
Average throughput: 35.66 Mbit/s  
95th percentile per-packet one-way delay: 31.653 ms  
Loss rate: 10.86%

Run 5: Report of Indigo-MusesC5 — Data Link



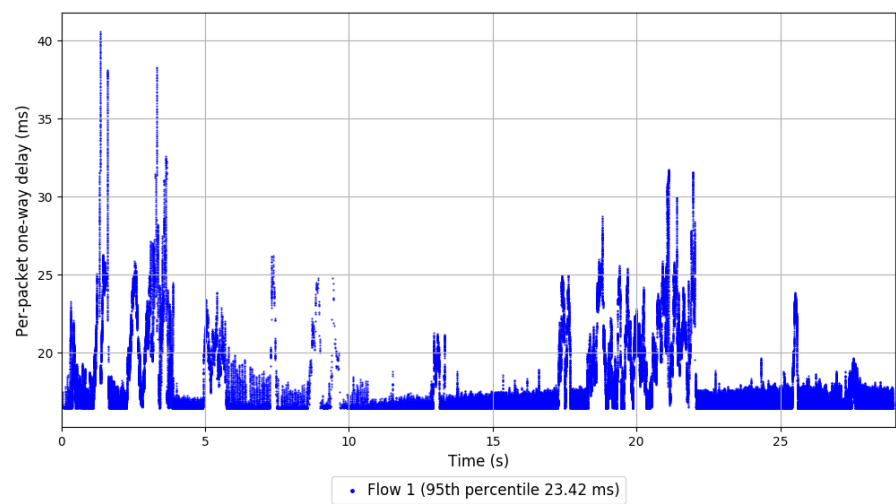
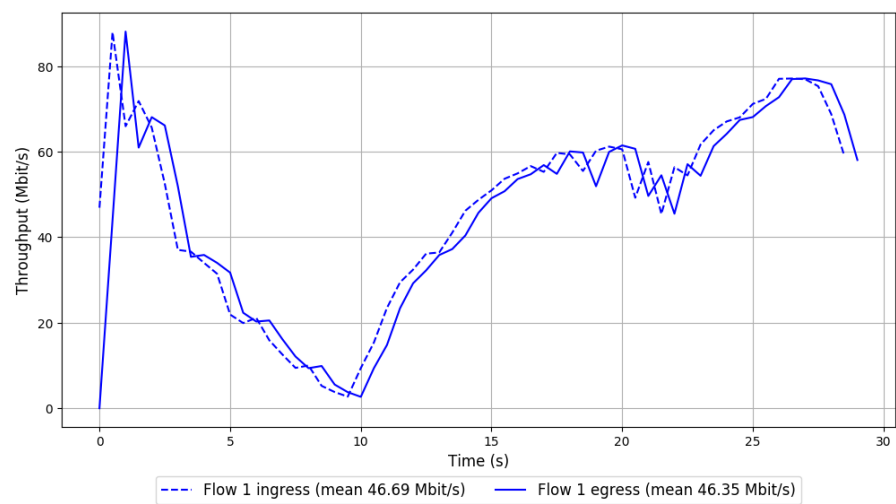


```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-02-20 05:09:33
End at: 2019-02-20 05:10:03
Local clock offset: -1.588 ms
Remote clock offset: -5.343 ms

# Below is generated by plot.py at 2019-02-20 07:19:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.35 Mbit/s
95th percentile per-packet one-way delay: 23.420 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 46.35 Mbit/s
95th percentile per-packet one-way delay: 23.420 ms
Loss rate: 0.83%
```

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-02-20 05:35:03

End at: 2019-02-20 05:35:33

Local clock offset: 0.591 ms

Remote clock offset: -2.683 ms

# Below is generated by plot.py at 2019-02-20 07:19:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 42.34 Mbit/s

95th percentile per-packet one-way delay: 25.114 ms

Loss rate: 2.41%

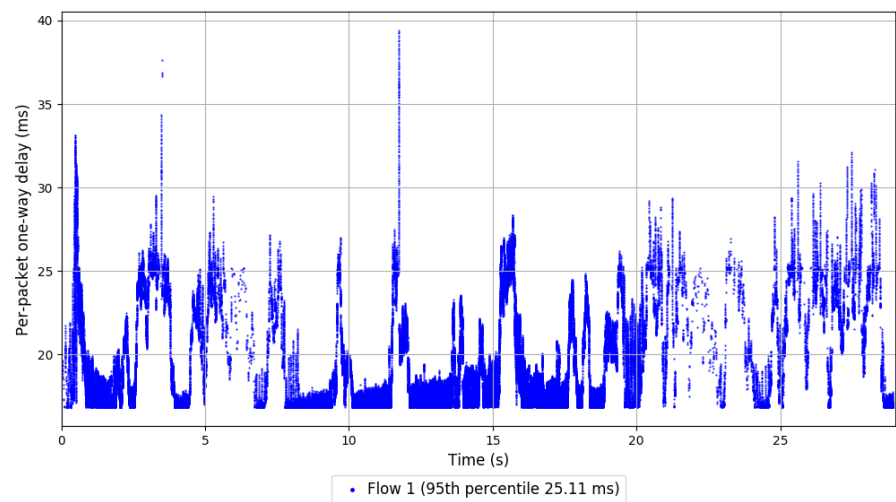
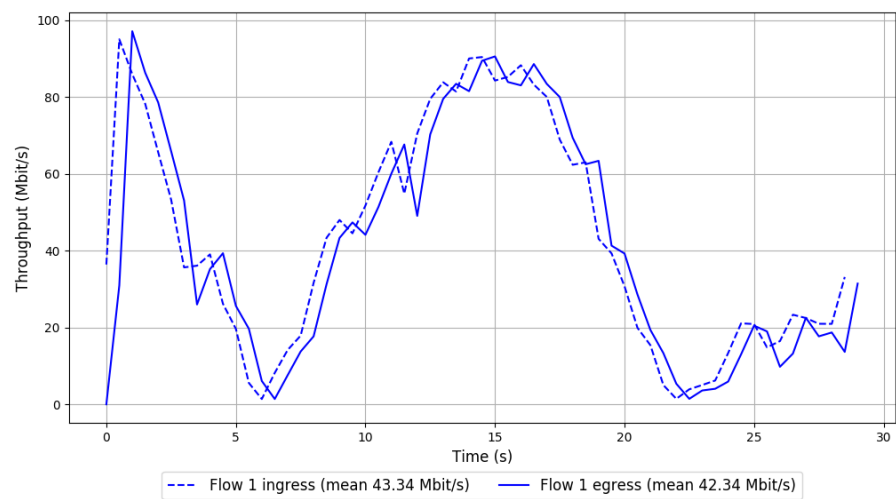
-- Flow 1:

Average throughput: 42.34 Mbit/s

95th percentile per-packet one-way delay: 25.114 ms

Loss rate: 2.41%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-02-20 06:00:34

End at: 2019-02-20 06:01:04

Local clock offset: -1.937 ms

Remote clock offset: -3.947 ms

# Below is generated by plot.py at 2019-02-20 07:19:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 42.57 Mbit/s

95th percentile per-packet one-way delay: 25.994 ms

Loss rate: 3.32%

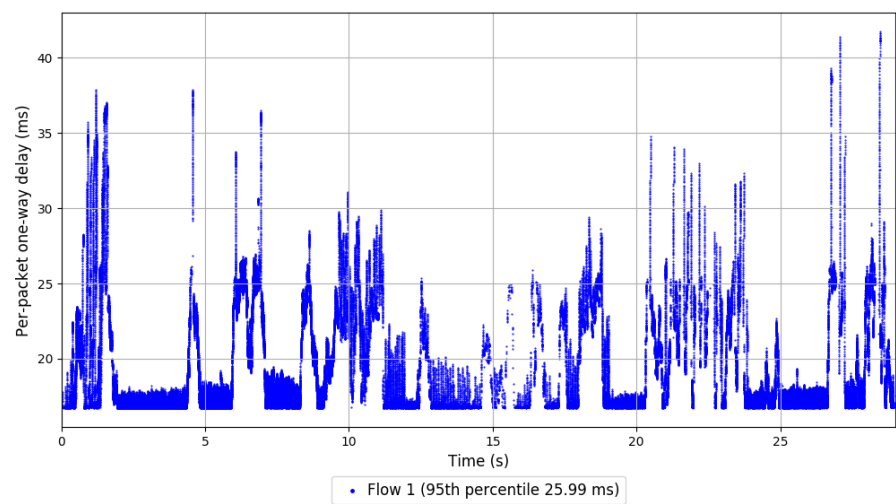
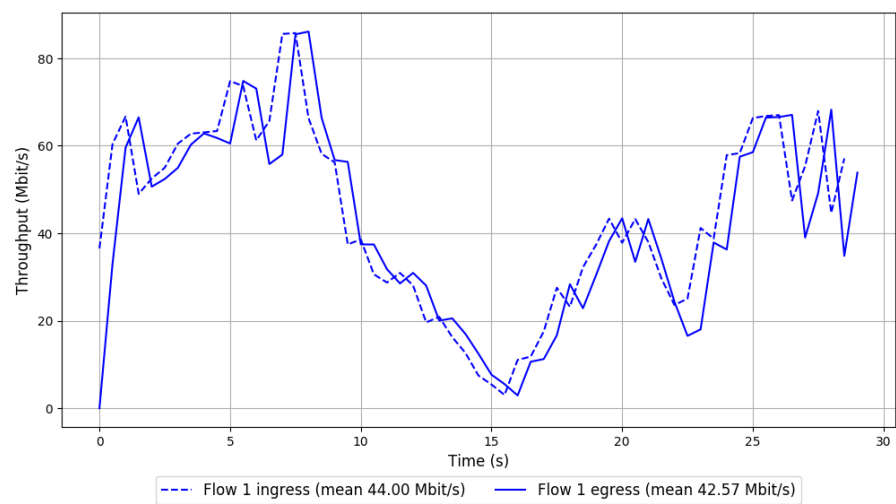
-- Flow 1:

Average throughput: 42.57 Mbit/s

95th percentile per-packet one-way delay: 25.994 ms

Loss rate: 3.32%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-02-20 06:25:59

End at: 2019-02-20 06:26:29

Local clock offset: -2.564 ms

Remote clock offset: -3.2 ms

# Below is generated by plot.py at 2019-02-20 07:19:28

# Datalink statistics

-- Total of 1 flow:

Average throughput: 52.37 Mbit/s

95th percentile per-packet one-way delay: 26.356 ms

Loss rate: 2.36%

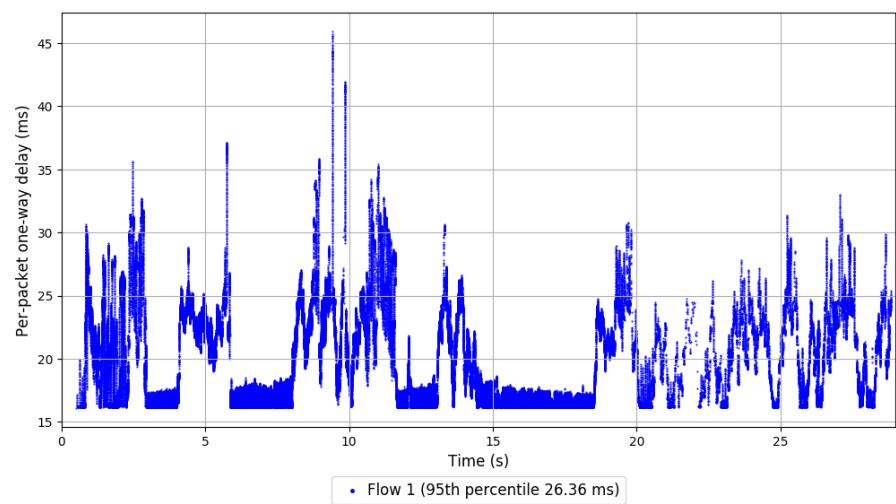
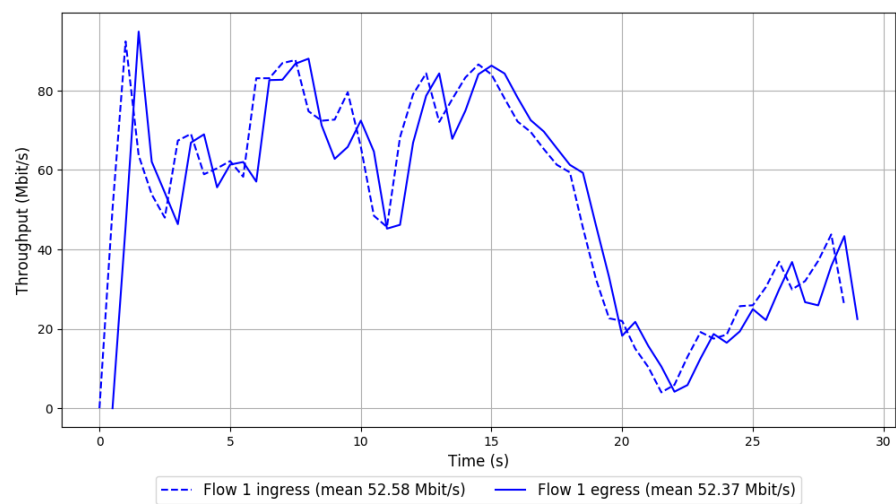
-- Flow 1:

Average throughput: 52.37 Mbit/s

95th percentile per-packet one-way delay: 26.356 ms

Loss rate: 2.36%

Run 4: Report of Indigo-MusesD — Data Link





Run 5: Statistics of Indigo-MusesD

Start at: 2019-02-20 06:51:42

End at: 2019-02-20 06:52:12

Local clock offset: 0.854 ms

Remote clock offset: -2.75 ms

# Below is generated by plot.py at 2019-02-20 07:19:28

# Datalink statistics

-- Total of 1 flow:

Average throughput: 34.22 Mbit/s

95th percentile per-packet one-way delay: 27.842 ms

Loss rate: 3.85%

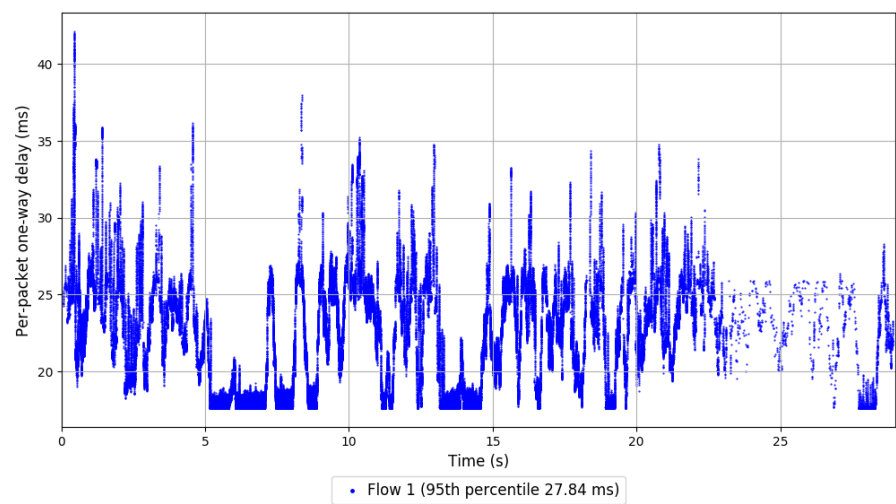
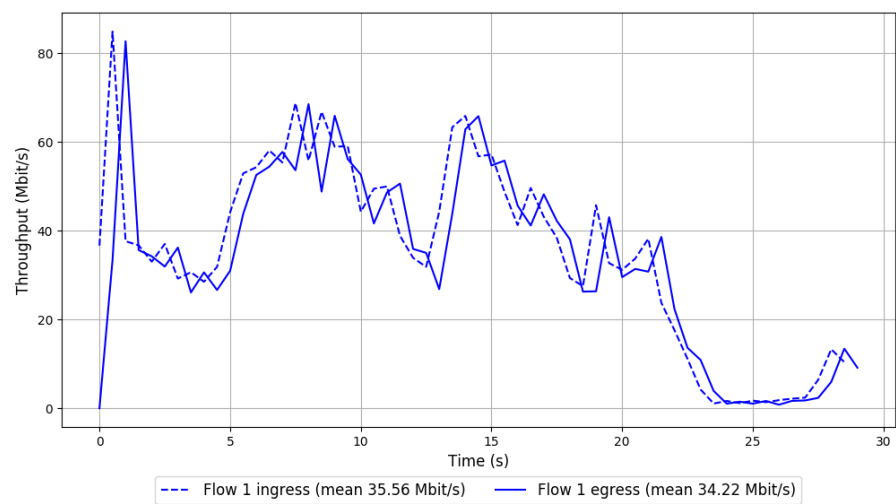
-- Flow 1:

Average throughput: 34.22 Mbit/s

95th percentile per-packet one-way delay: 27.842 ms

Loss rate: 3.85%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

Start at: 2019-02-20 05:06:55

End at: 2019-02-20 05:07:25

Local clock offset: 1.675 ms

Remote clock offset: -4.784 ms

# Below is generated by plot.py at 2019-02-20 07:20:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 90.72 Mbit/s

95th percentile per-packet one-way delay: 26.131 ms

Loss rate: 0.75%

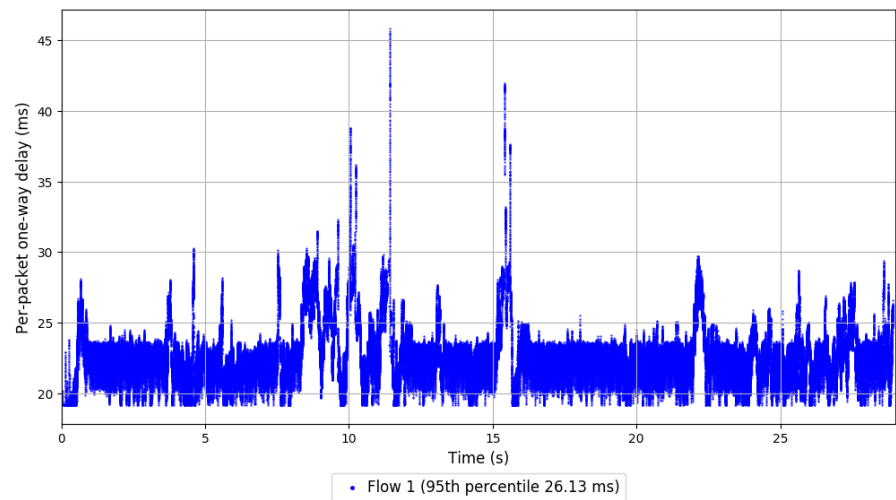
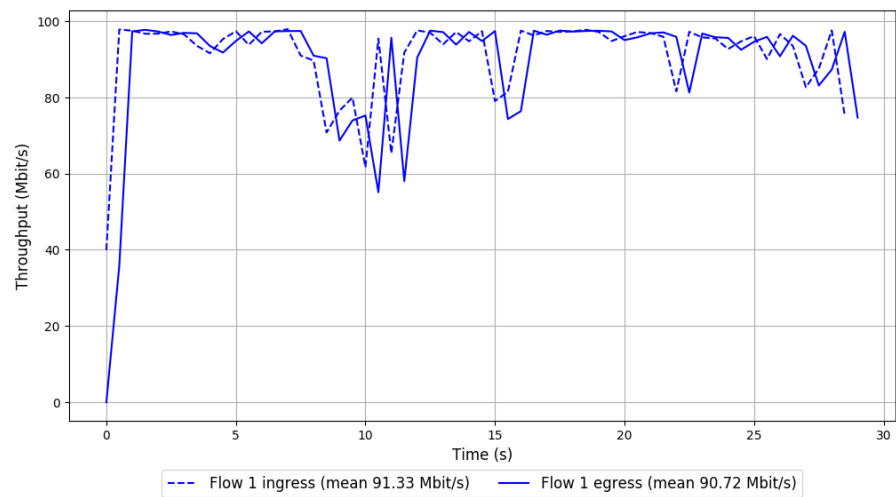
-- Flow 1:

Average throughput: 90.72 Mbit/s

95th percentile per-packet one-way delay: 26.131 ms

Loss rate: 0.75%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-02-20 05:32:33

End at: 2019-02-20 05:33:03

Local clock offset: 1.658 ms

Remote clock offset: -3.532 ms

# Below is generated by plot.py at 2019-02-20 07:20:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 76.56 Mbit/s

95th percentile per-packet one-way delay: 26.928 ms

Loss rate: 1.67%

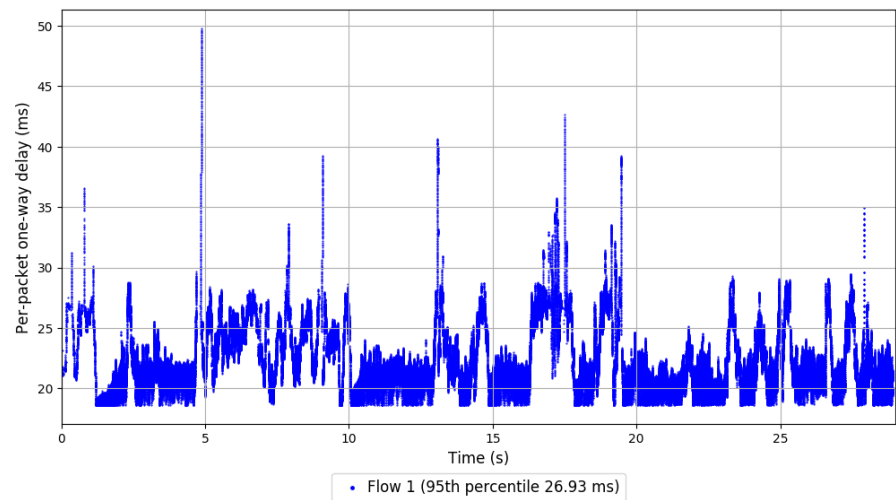
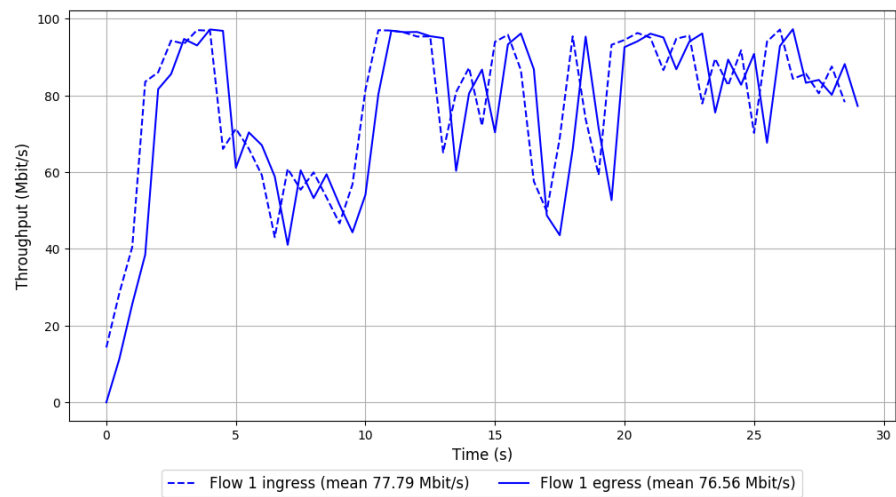
-- Flow 1:

Average throughput: 76.56 Mbit/s

95th percentile per-packet one-way delay: 26.928 ms

Loss rate: 1.67%

Run 2: Report of Indigo-MusesT — Data Link

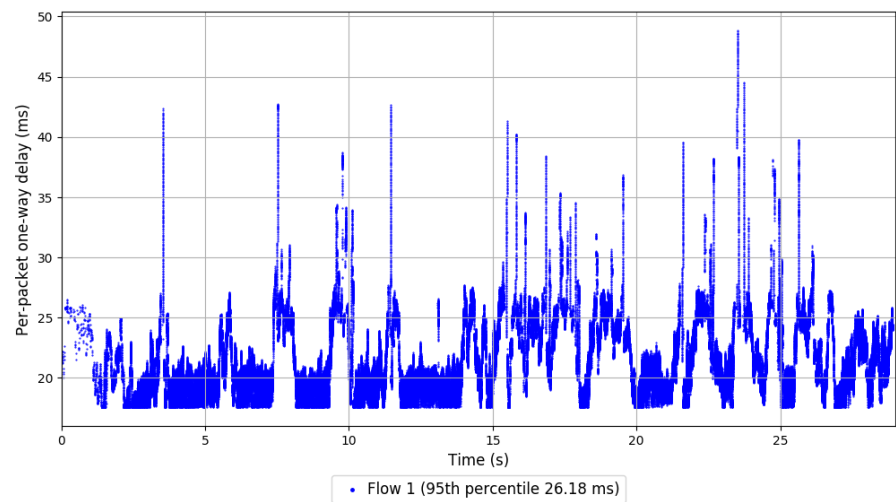
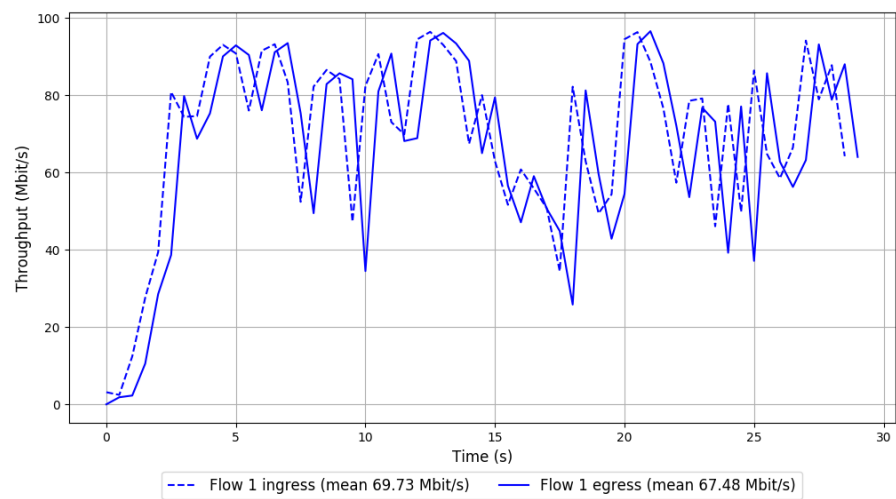


Run 3: Statistics of Indigo-MusesT

Start at: 2019-02-20 05:58:07  
End at: 2019-02-20 05:58:37  
Local clock offset: 0.135 ms  
Remote clock offset: -2.768 ms

# Below is generated by plot.py at 2019-02-20 07:20:13  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 67.48 Mbit/s  
95th percentile per-packet one-way delay: 26.182 ms  
Loss rate: 3.32%  
-- Flow 1:  
Average throughput: 67.48 Mbit/s  
95th percentile per-packet one-way delay: 26.182 ms  
Loss rate: 3.32%

Run 3: Report of Indigo-MusesT — Data Link



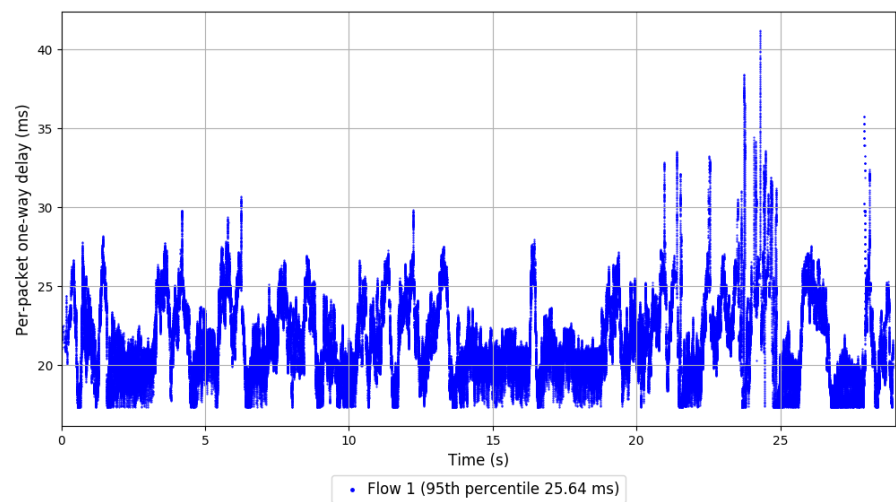
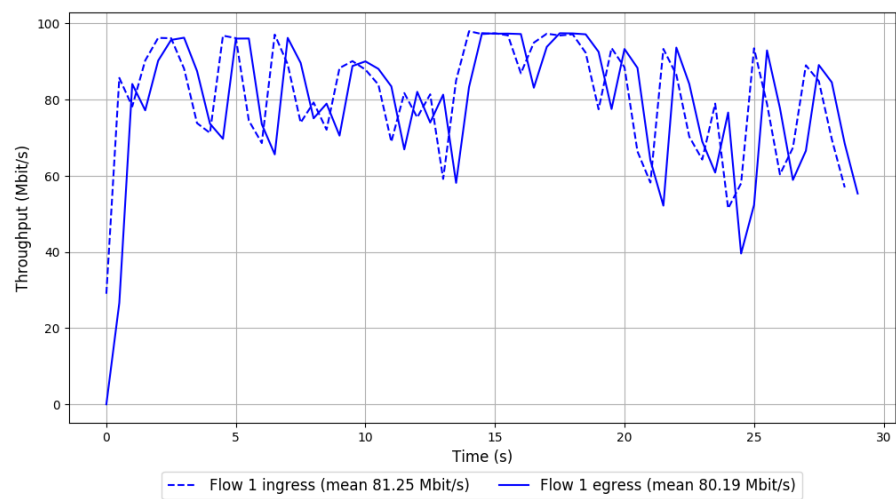


Run 4: Statistics of Indigo-MusesT

Start at: 2019-02-20 06:23:30  
End at: 2019-02-20 06:24:00  
Local clock offset: -0.279 ms  
Remote clock offset: -2.145 ms

# Below is generated by plot.py at 2019-02-20 07:20:22  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 80.19 Mbit/s  
95th percentile per-packet one-way delay: 25.642 ms  
Loss rate: 1.40%  
-- Flow 1:  
Average throughput: 80.19 Mbit/s  
95th percentile per-packet one-way delay: 25.642 ms  
Loss rate: 1.40%

Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MusesT

Start at: 2019-02-20 06:49:06

End at: 2019-02-20 06:49:36

Local clock offset: 1.545 ms

Remote clock offset: -2.15 ms

# Below is generated by plot.py at 2019-02-20 07:20:22

# Datalink statistics

-- Total of 1 flow:

Average throughput: 62.70 Mbit/s

95th percentile per-packet one-way delay: 27.124 ms

Loss rate: 4.17%

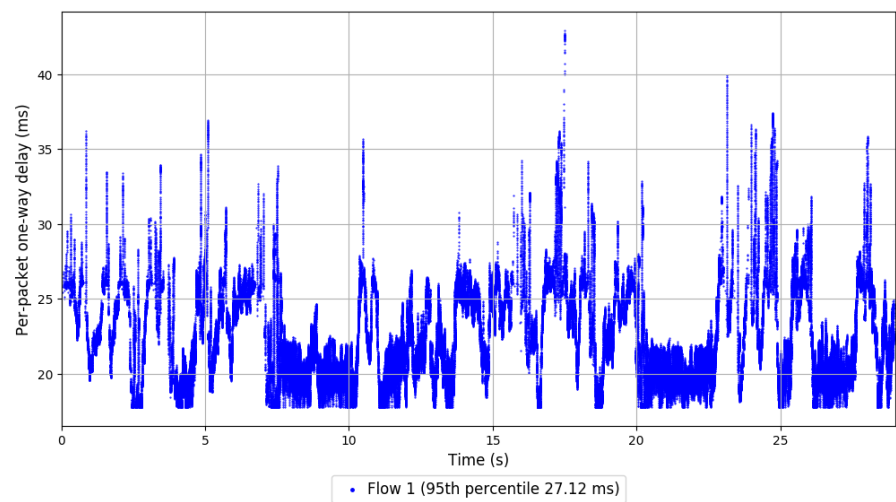
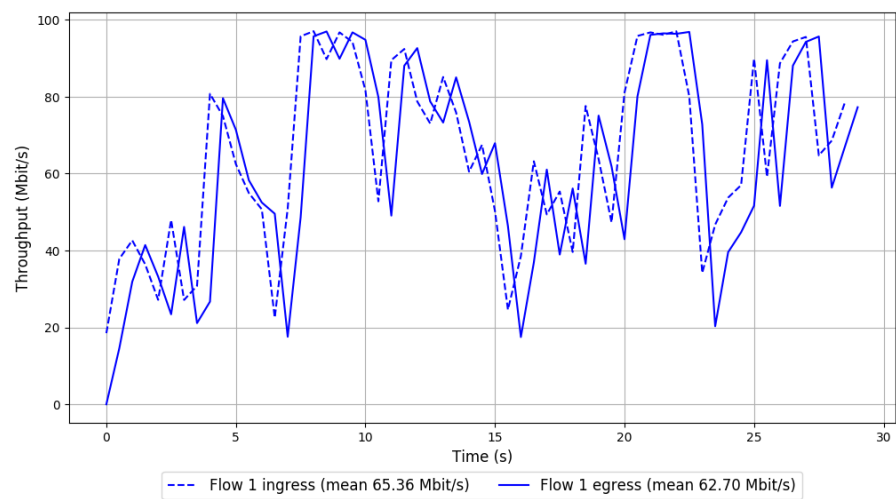
-- Flow 1:

Average throughput: 62.70 Mbit/s

95th percentile per-packet one-way delay: 27.124 ms

Loss rate: 4.17%

Run 5: Report of Indigo-MusesT — Data Link



Run 1: Statistics of LEDBAT

Start at: 2019-02-20 05:27:54

End at: 2019-02-20 05:28:24

Local clock offset: 0.556 ms

Remote clock offset: -3.344 ms

# Below is generated by plot.py at 2019-02-20 07:20:22

# Datalink statistics

-- Total of 1 flow:

Average throughput: 11.97 Mbit/s

95th percentile per-packet one-way delay: 24.608 ms

Loss rate: 2.64%

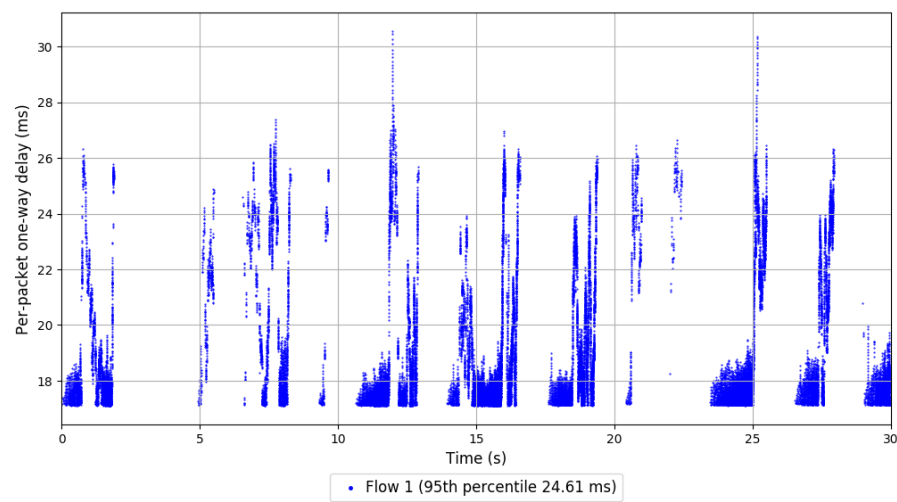
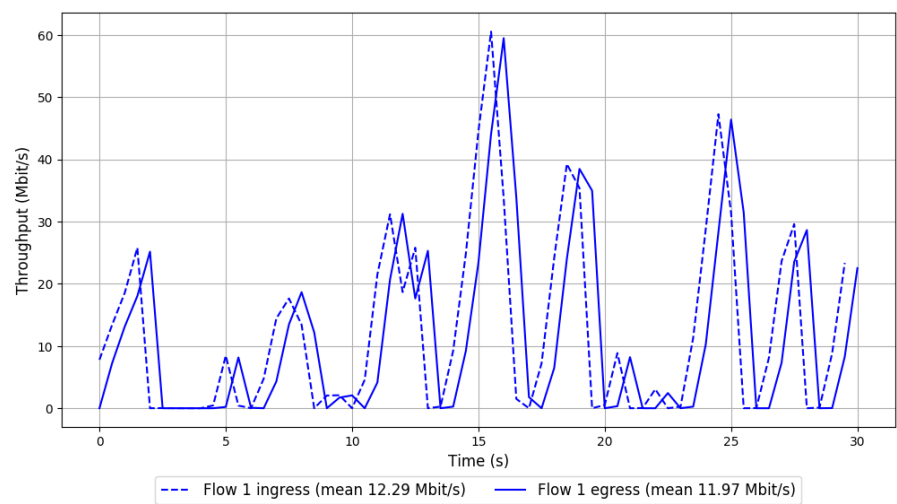
-- Flow 1:

Average throughput: 11.97 Mbit/s

95th percentile per-packet one-way delay: 24.608 ms

Loss rate: 2.64%

Run 1: Report of LEDBAT — Data Link

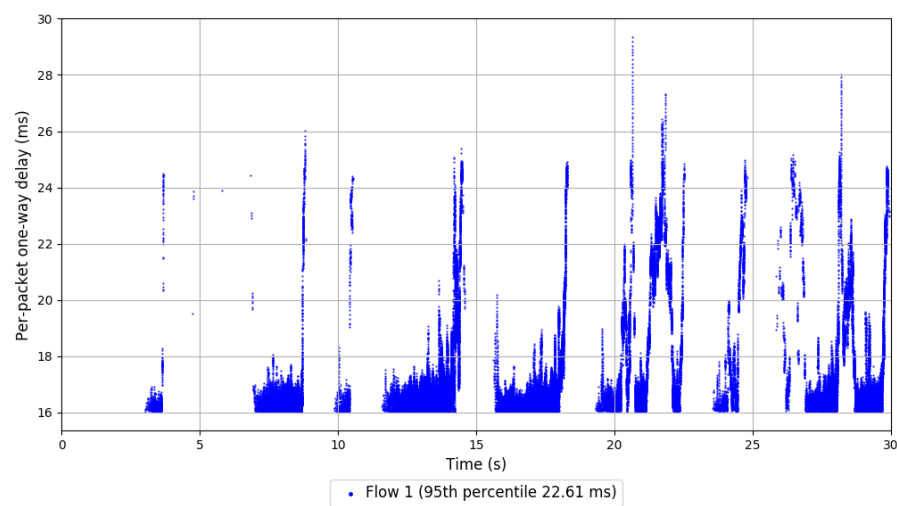
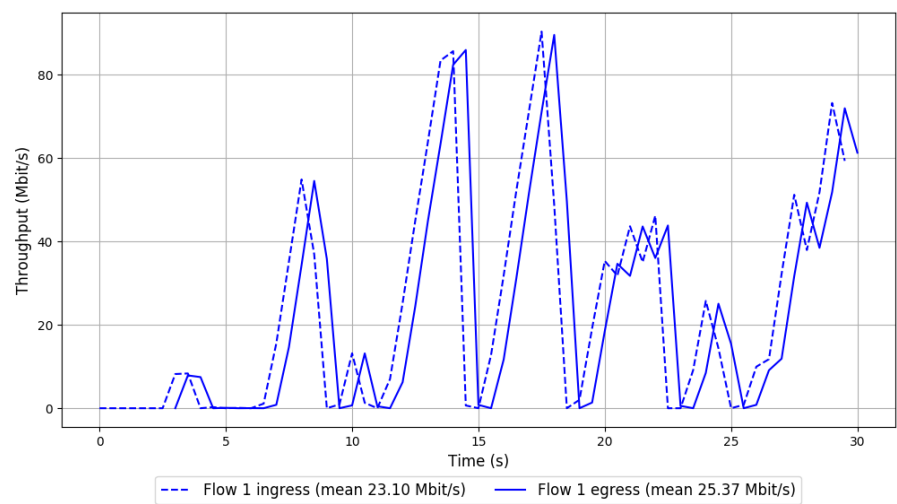


Run 2: Statistics of LEDBAT

Start at: 2019-02-20 05:53:25  
End at: 2019-02-20 05:53:55  
Local clock offset: -2.721 ms  
Remote clock offset: -4.296 ms

# Below is generated by plot.py at 2019-02-20 07:20:22  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 25.37 Mbit/s  
95th percentile per-packet one-way delay: 22.614 ms  
Loss rate: 1.17%  
-- Flow 1:  
Average throughput: 25.37 Mbit/s  
95th percentile per-packet one-way delay: 22.614 ms  
Loss rate: 1.17%

Run 2: Report of LEDBAT — Data Link



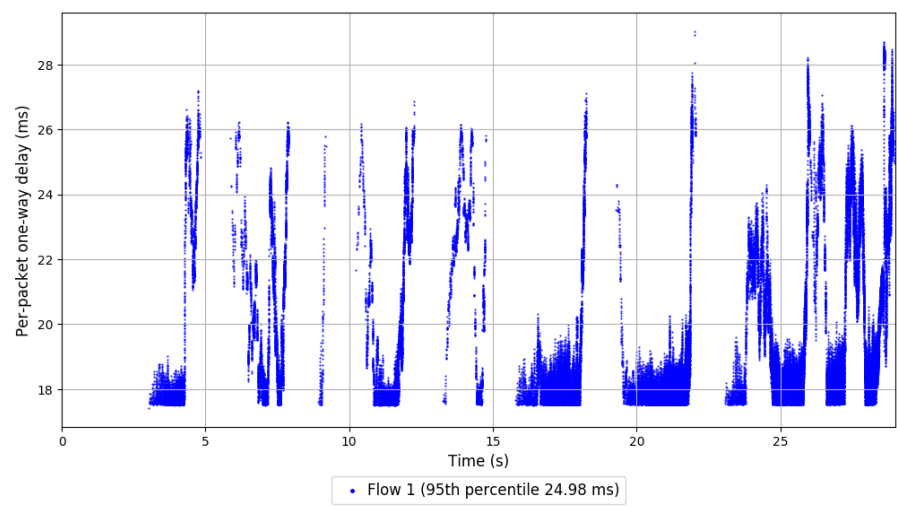
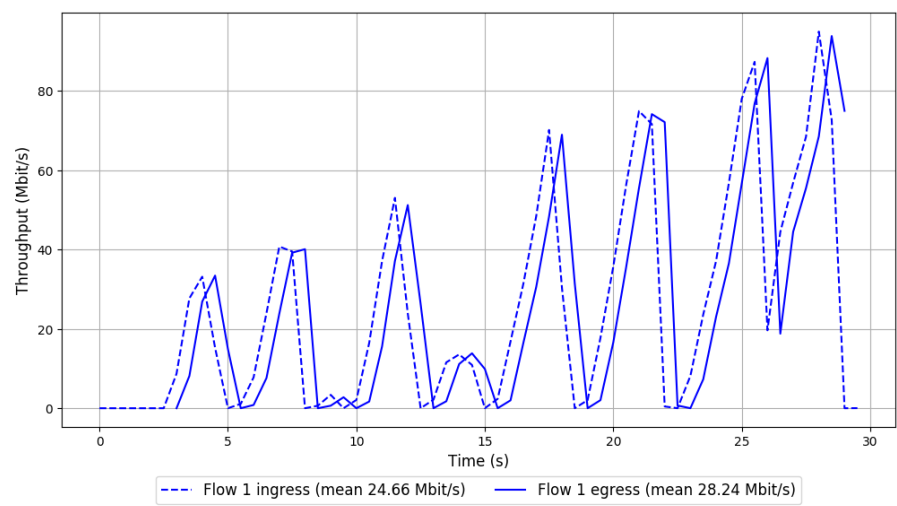


Run 3: Statistics of LEDBAT

Start at: 2019-02-20 06:18:53  
End at: 2019-02-20 06:19:23  
Local clock offset: -1.003 ms  
Remote clock offset: -3.217 ms

# Below is generated by plot.py at 2019-02-20 07:20:22  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 28.24 Mbit/s  
95th percentile per-packet one-way delay: 24.978 ms  
Loss rate: 0.88%  
-- Flow 1:  
Average throughput: 28.24 Mbit/s  
95th percentile per-packet one-way delay: 24.978 ms  
Loss rate: 0.88%

Run 3: Report of LEDBAT — Data Link

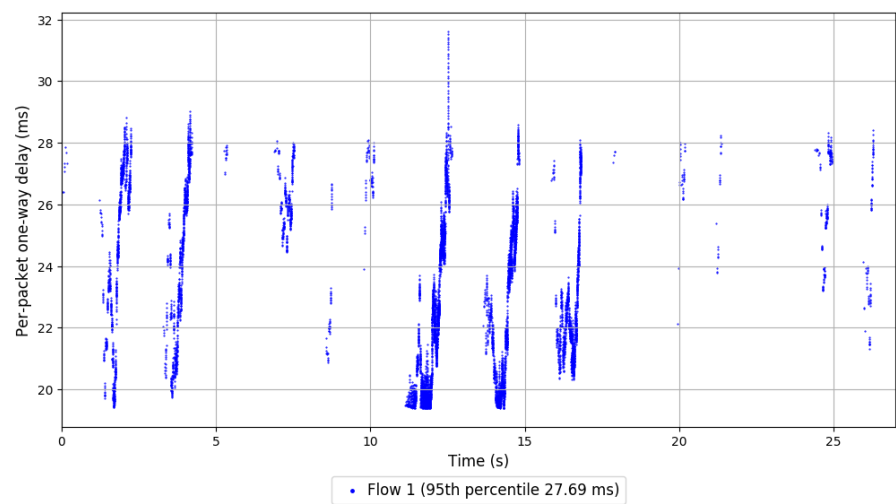
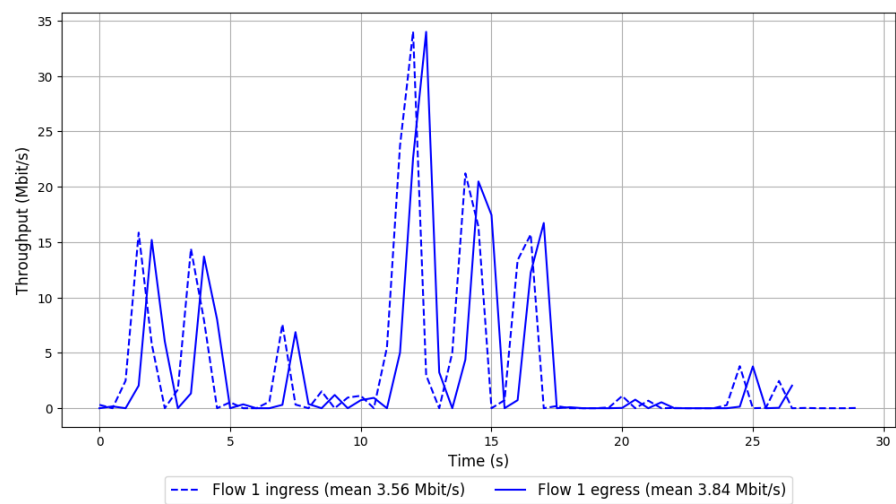


Run 4: Statistics of LEDBAT

Start at: 2019-02-20 06:44:22  
End at: 2019-02-20 06:44:52  
Local clock offset: 2.299 ms  
Remote clock offset: -2.913 ms

# Below is generated by plot.py at 2019-02-20 07:20:22  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 3.84 Mbit/s  
95th percentile per-packet one-way delay: 27.691 ms  
Loss rate: 3.32%  
-- Flow 1:  
Average throughput: 3.84 Mbit/s  
95th percentile per-packet one-way delay: 27.691 ms  
Loss rate: 3.32%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

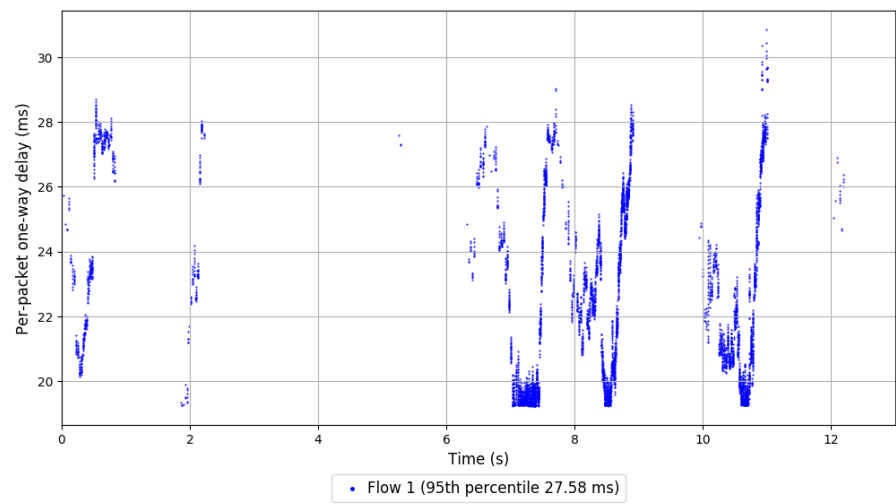
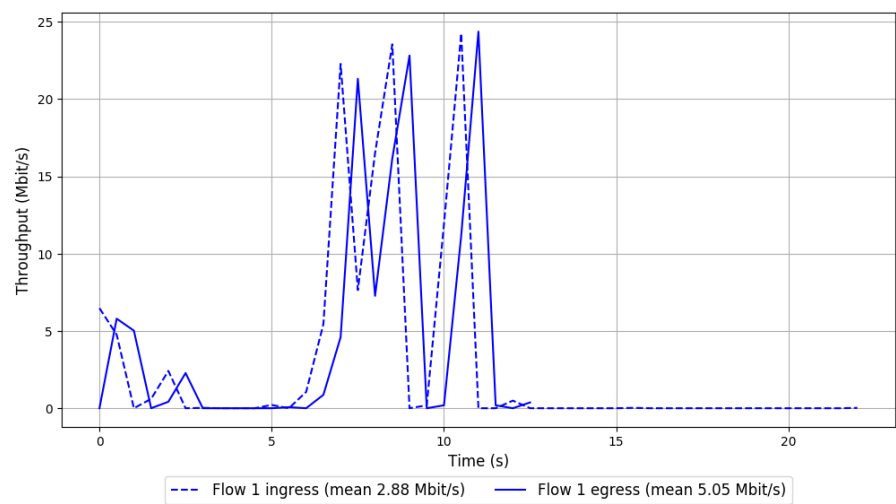
Start at: 2019-02-20 07:12:28

End at: 2019-02-20 07:12:58

Local clock offset: 2.097 ms

Remote clock offset: -3.217 ms

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-02-20 05:11:55

End at: 2019-02-20 05:12:25

Local clock offset: -0.955 ms

Remote clock offset: -4.123 ms

# Below is generated by plot.py at 2019-02-20 07:20:30

# Datalink statistics

-- Total of 1 flow:

Average throughput: 64.18 Mbit/s

95th percentile per-packet one-way delay: 21.829 ms

Loss rate: 0.31%

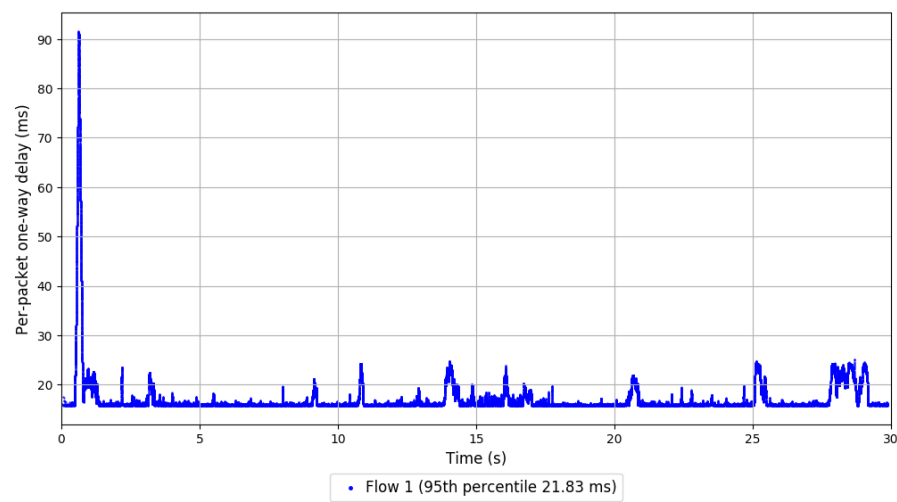
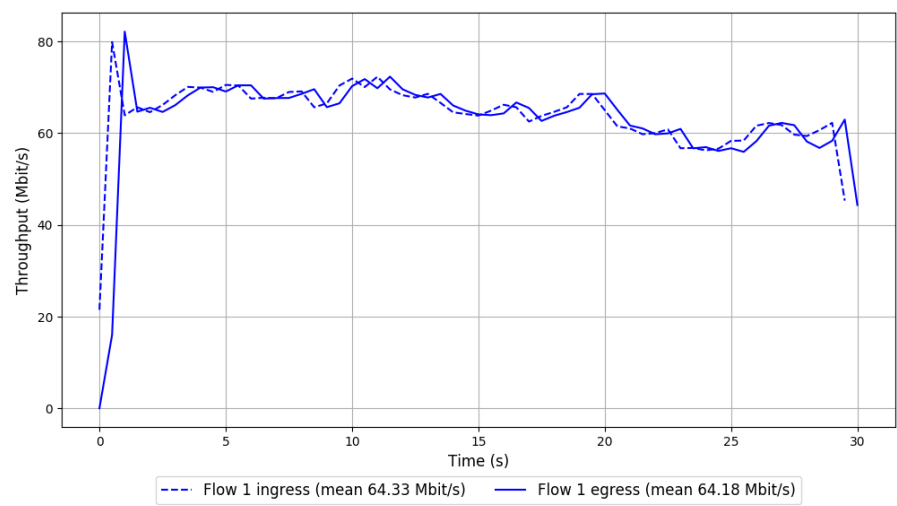
-- Flow 1:

Average throughput: 64.18 Mbit/s

95th percentile per-packet one-way delay: 21.829 ms

Loss rate: 0.31%

Run 1: Report of PCC-Allegro — Data Link





Run 2: Statistics of PCC-Allegro

Start at: 2019-02-20 05:37:26

End at: 2019-02-20 05:37:56

Local clock offset: 1.613 ms

Remote clock offset: -3.206 ms

# Below is generated by plot.py at 2019-02-20 07:20:30

# Datalink statistics

-- Total of 1 flow:

Average throughput: 9.05 Mbit/s

95th percentile per-packet one-way delay: 25.925 ms

Loss rate: 2.97%

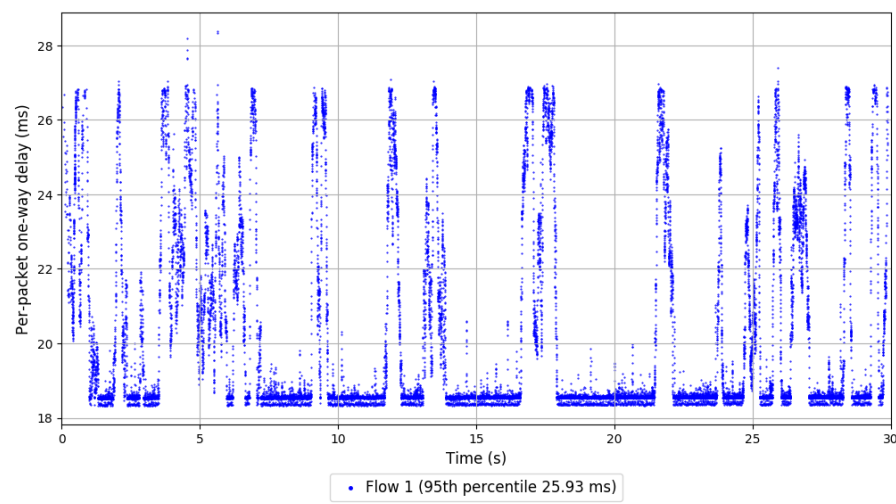
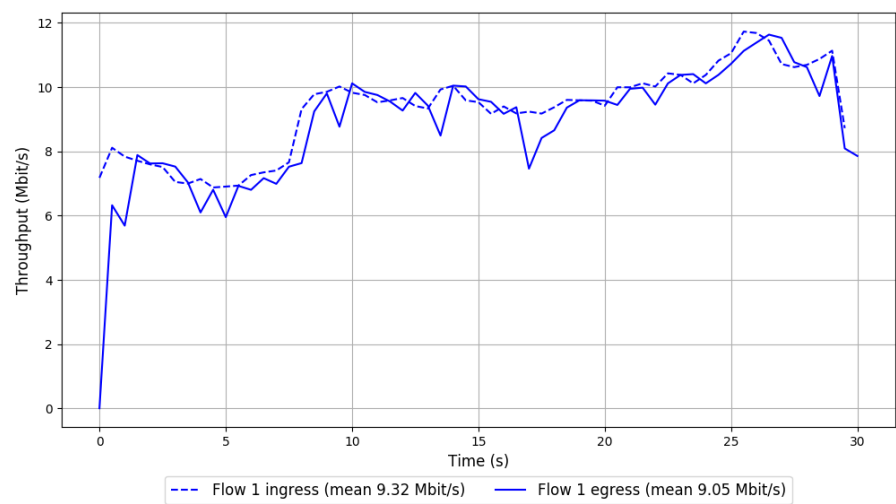
-- Flow 1:

Average throughput: 9.05 Mbit/s

95th percentile per-packet one-way delay: 25.925 ms

Loss rate: 2.97%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-02-20 06:02:58

End at: 2019-02-20 06:03:28

Local clock offset: -0.183 ms

Remote clock offset: -2.733 ms

# Below is generated by plot.py at 2019-02-20 07:20:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 65.39 Mbit/s

95th percentile per-packet one-way delay: 25.506 ms

Loss rate: 5.26%

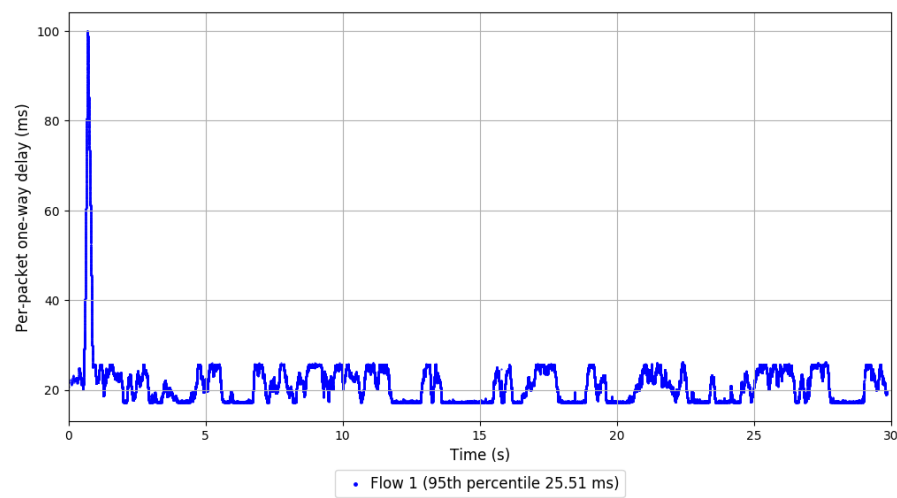
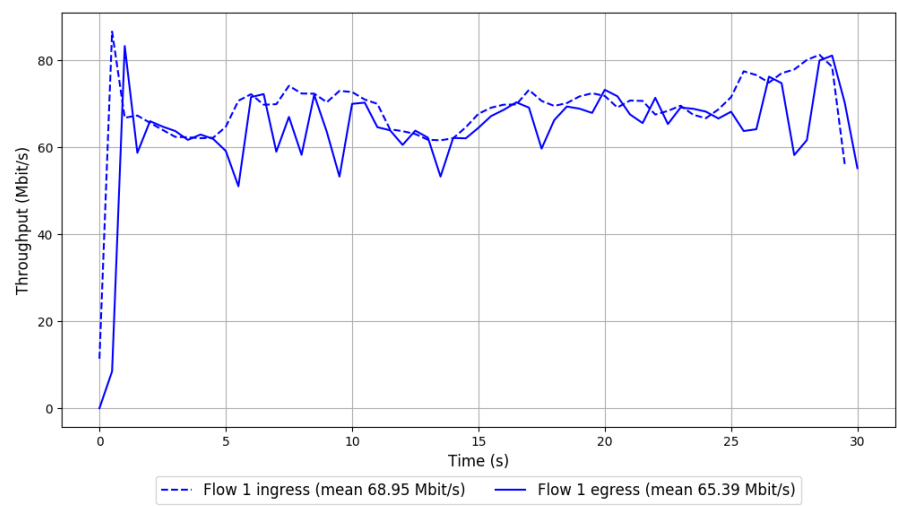
-- Flow 1:

Average throughput: 65.39 Mbit/s

95th percentile per-packet one-way delay: 25.506 ms

Loss rate: 5.26%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-02-20 06:28:18

End at: 2019-02-20 06:28:48

Local clock offset: -2.962 ms

Remote clock offset: -3.015 ms

# Below is generated by plot.py at 2019-02-20 07:20:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 43.35 Mbit/s

95th percentile per-packet one-way delay: 23.943 ms

Loss rate: 17.48%

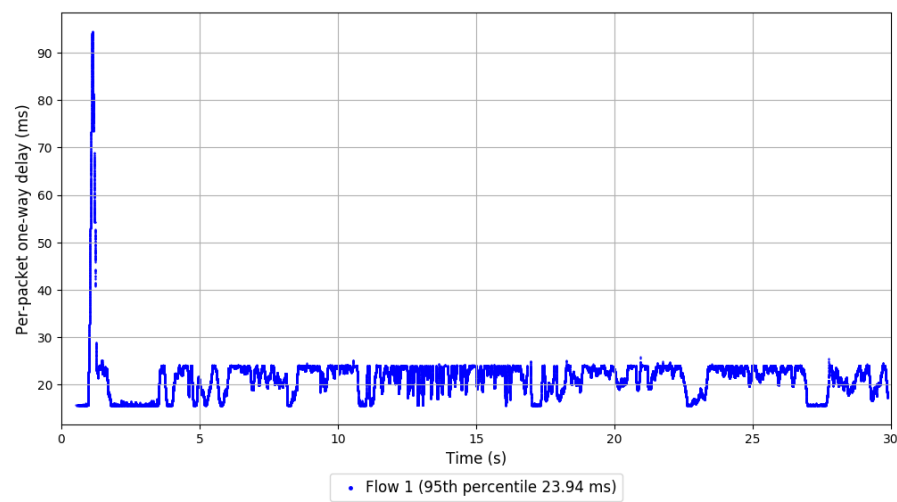
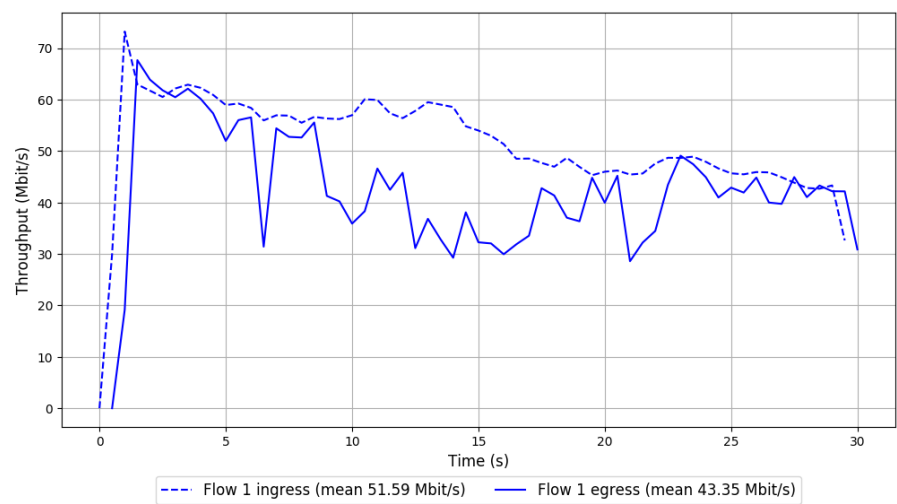
-- Flow 1:

Average throughput: 43.35 Mbit/s

95th percentile per-packet one-way delay: 23.943 ms

Loss rate: 17.48%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-02-20 06:54:01

End at: 2019-02-20 06:54:31

Local clock offset: -0.971 ms

Remote clock offset: -2.91 ms

# Below is generated by plot.py at 2019-02-20 07:20:51

# Datalink statistics

-- Total of 1 flow:

Average throughput: 60.71 Mbit/s

95th percentile per-packet one-way delay: 24.155 ms

Loss rate: 9.59%

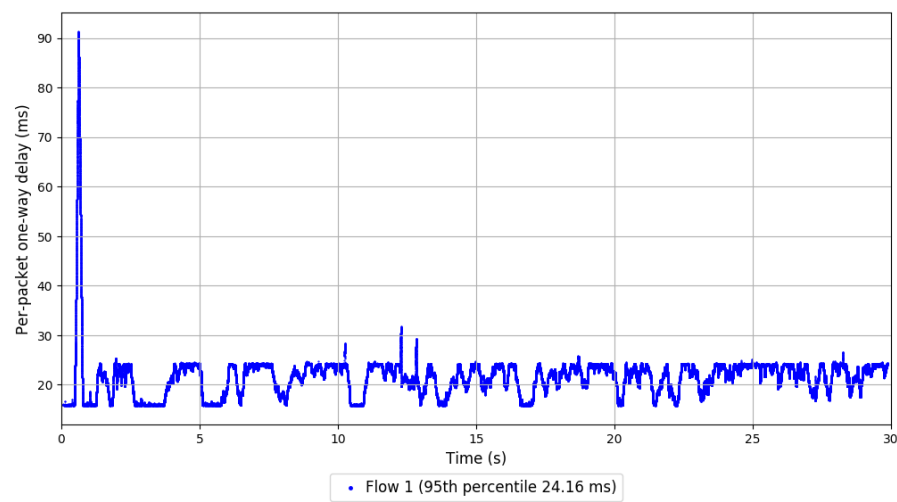
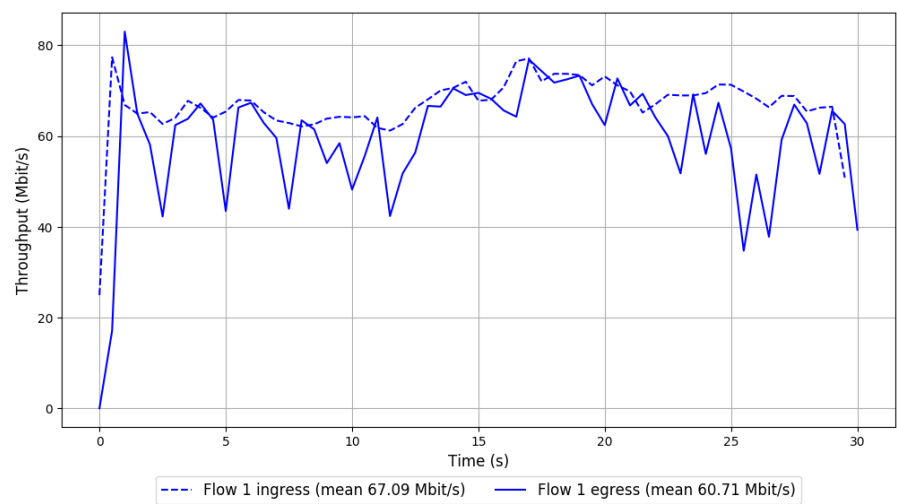
-- Flow 1:

Average throughput: 60.71 Mbit/s

95th percentile per-packet one-way delay: 24.155 ms

Loss rate: 9.59%

Run 5: Report of PCC-Allegro — Data Link



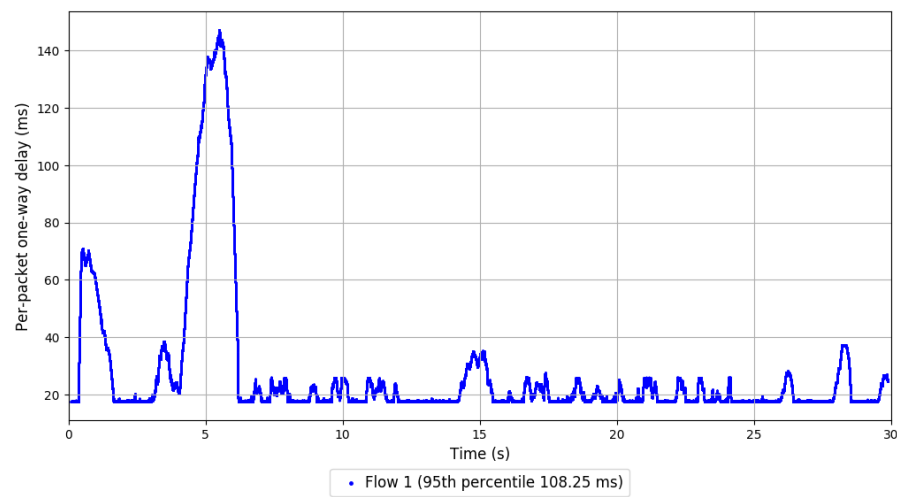
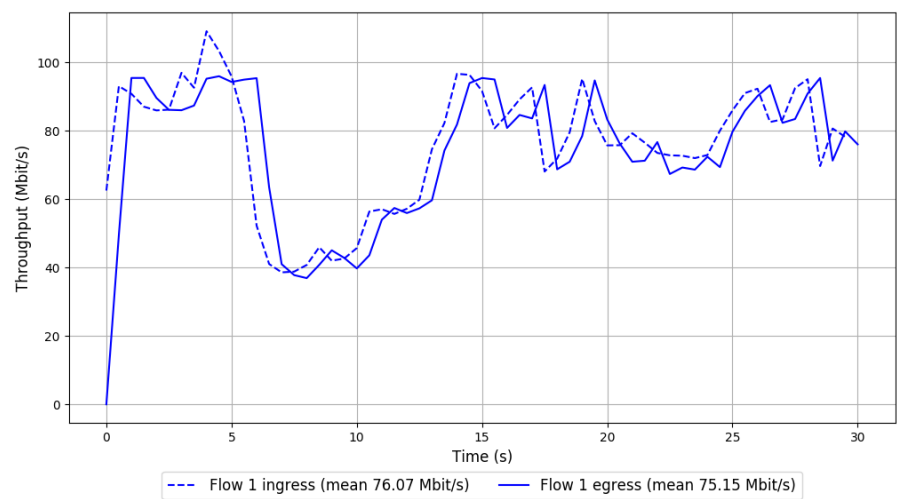


Run 1: Statistics of PCC-Expr

Start at: 2019-02-20 05:21:20  
End at: 2019-02-20 05:21:50  
Local clock offset: -0.792 ms  
Remote clock offset: -5.358 ms

# Below is generated by plot.py at 2019-02-20 07:22:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 75.15 Mbit/s  
95th percentile per-packet one-way delay: 108.255 ms  
Loss rate: 1.29%  
-- Flow 1:  
Average throughput: 75.15 Mbit/s  
95th percentile per-packet one-way delay: 108.255 ms  
Loss rate: 1.29%

Run 1: Report of PCC-Expr — Data Link

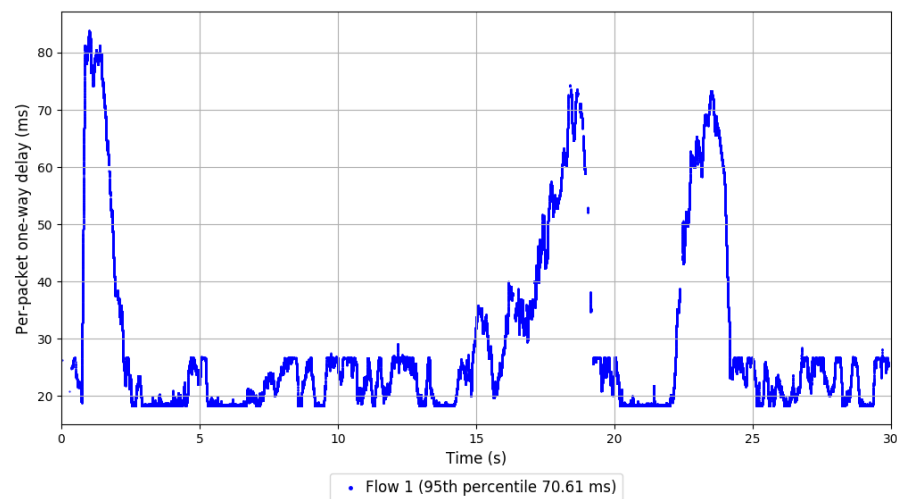
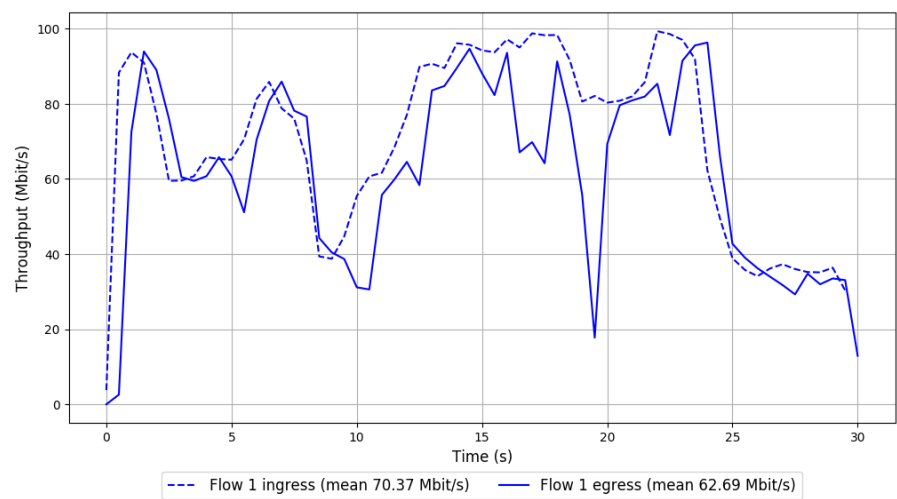


Run 2: Statistics of PCC-Expr

Start at: 2019-02-20 05:46:51  
End at: 2019-02-20 05:47:21  
Local clock offset: 0.759 ms  
Remote clock offset: -3.394 ms

# Below is generated by plot.py at 2019-02-20 07:22:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 62.69 Mbit/s  
95th percentile per-packet one-way delay: 70.611 ms  
Loss rate: 11.01%  
-- Flow 1:  
Average throughput: 62.69 Mbit/s  
95th percentile per-packet one-way delay: 70.611 ms  
Loss rate: 11.01%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2019-02-20 06:12:47

End at: 2019-02-20 06:13:17

Local clock offset: 0.212 ms

Remote clock offset: -3.78 ms

# Below is generated by plot.py at 2019-02-20 07:22:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 46.88 Mbit/s

95th percentile per-packet one-way delay: 72.027 ms

Loss rate: 10.52%

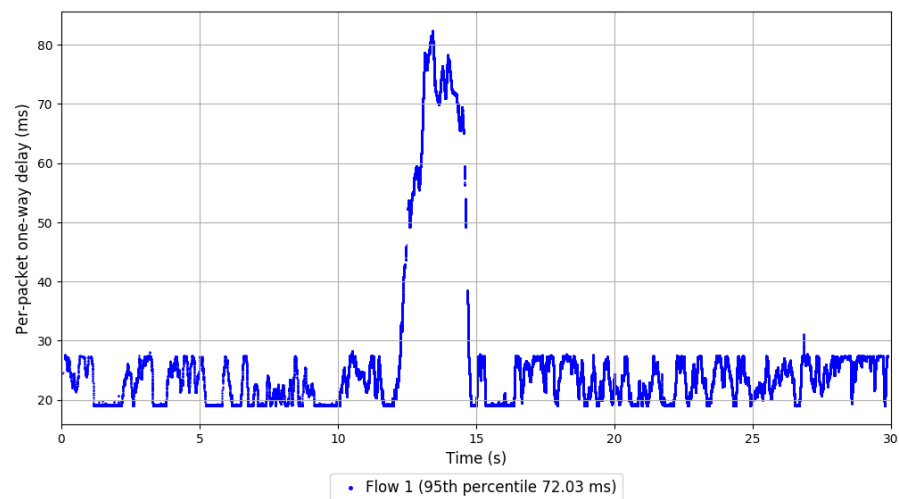
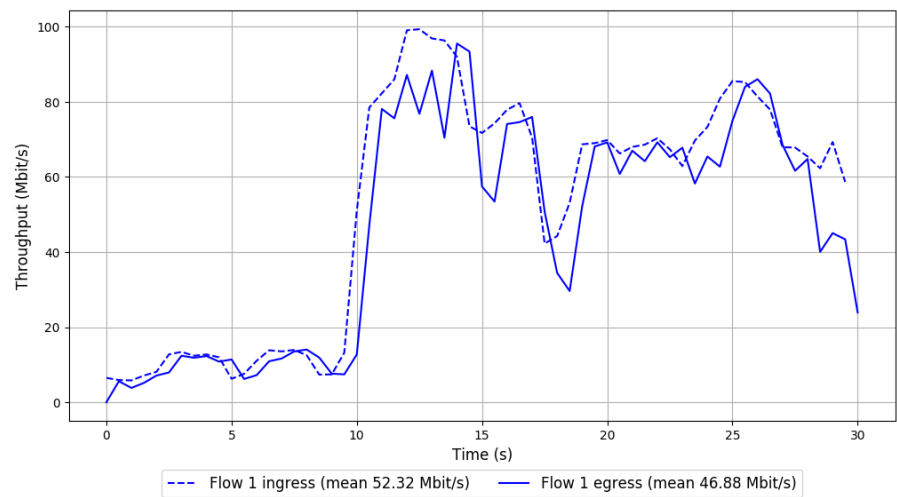
-- Flow 1:

Average throughput: 46.88 Mbit/s

95th percentile per-packet one-way delay: 72.027 ms

Loss rate: 10.52%

Run 3: Report of PCC-Expr — Data Link

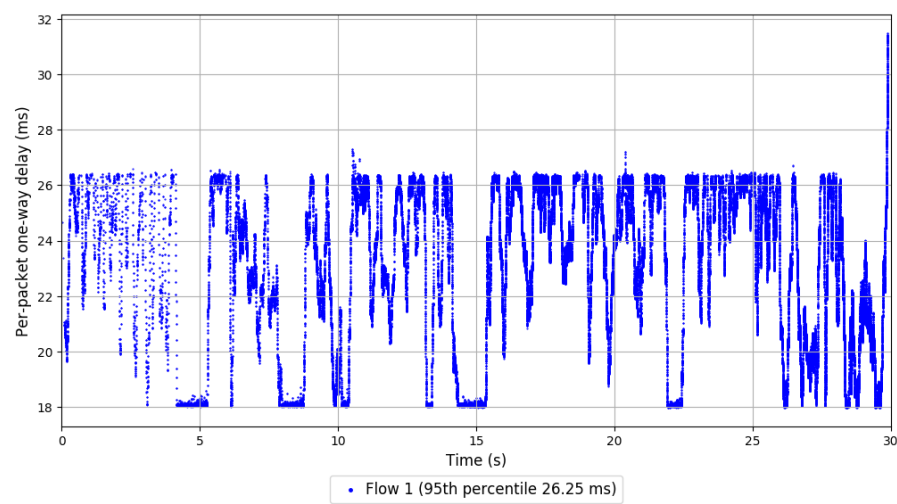
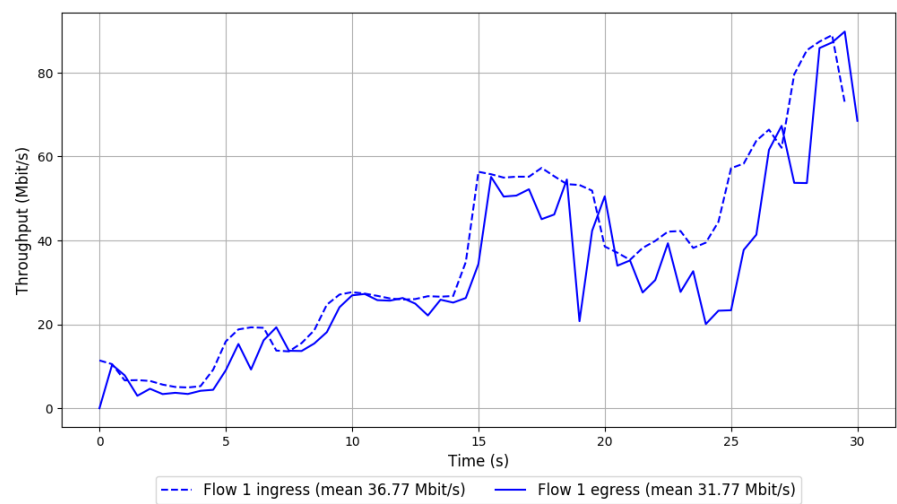


Run 4: Statistics of PCC-Expr

Start at: 2019-02-20 06:38:07  
End at: 2019-02-20 06:38:37  
Local clock offset: 1.245 ms  
Remote clock offset: -2.296 ms

# Below is generated by plot.py at 2019-02-20 07:22:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 31.77 Mbit/s  
95th percentile per-packet one-way delay: 26.247 ms  
Loss rate: 13.70%  
-- Flow 1:  
Average throughput: 31.77 Mbit/s  
95th percentile per-packet one-way delay: 26.247 ms  
Loss rate: 13.70%

Run 4: Report of PCC-Expr — Data Link





Run 5: Statistics of PCC-Expr

Start at: 2019-02-20 07:05:13

End at: 2019-02-20 07:05:43

Local clock offset: 1.674 ms

Remote clock offset: -4.23 ms

# Below is generated by plot.py at 2019-02-20 07:22:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 51.66 Mbit/s

95th percentile per-packet one-way delay: 28.014 ms

Loss rate: 9.64%

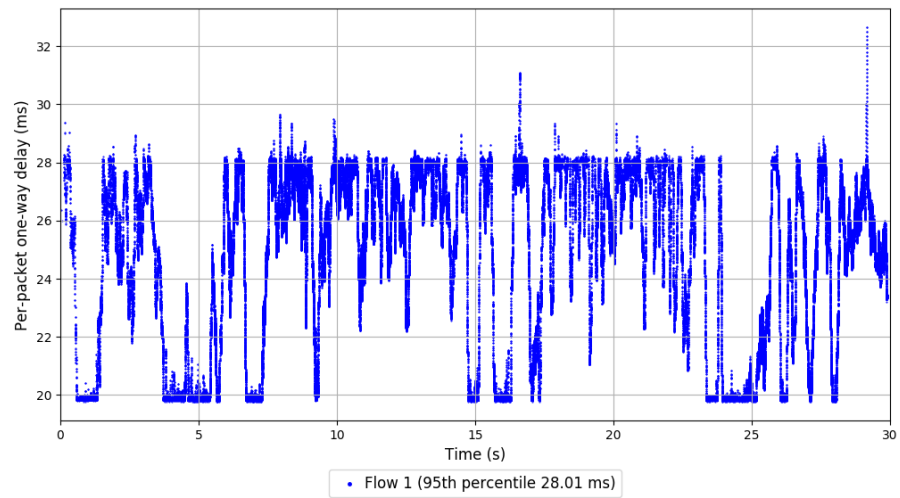
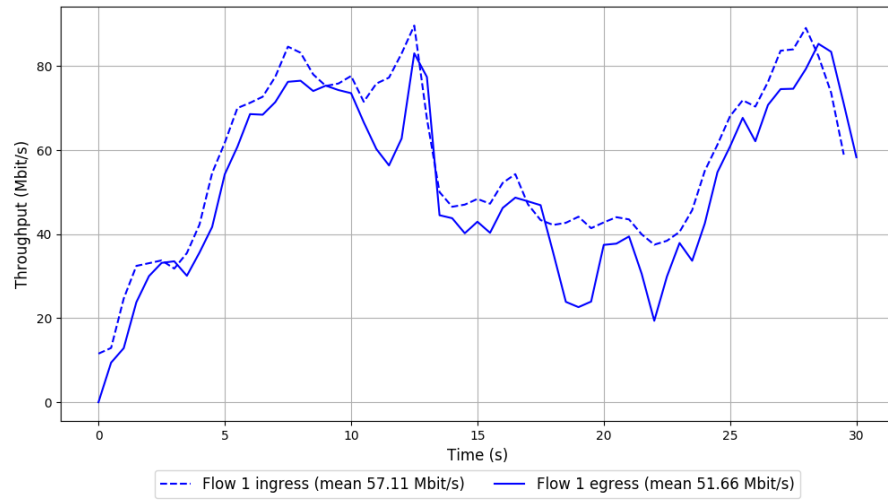
-- Flow 1:

Average throughput: 51.66 Mbit/s

95th percentile per-packet one-way delay: 28.014 ms

Loss rate: 9.64%

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



Run 1: Statistics of QUIC Cubic

Start at: 2019-02-20 05:13:05

End at: 2019-02-20 05:13:35

Local clock offset: -0.05 ms

Remote clock offset: -4.192 ms

# Below is generated by plot.py at 2019-02-20 07:22:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 71.24 Mbit/s

95th percentile per-packet one-way delay: 26.177 ms

Loss rate: 1.33%

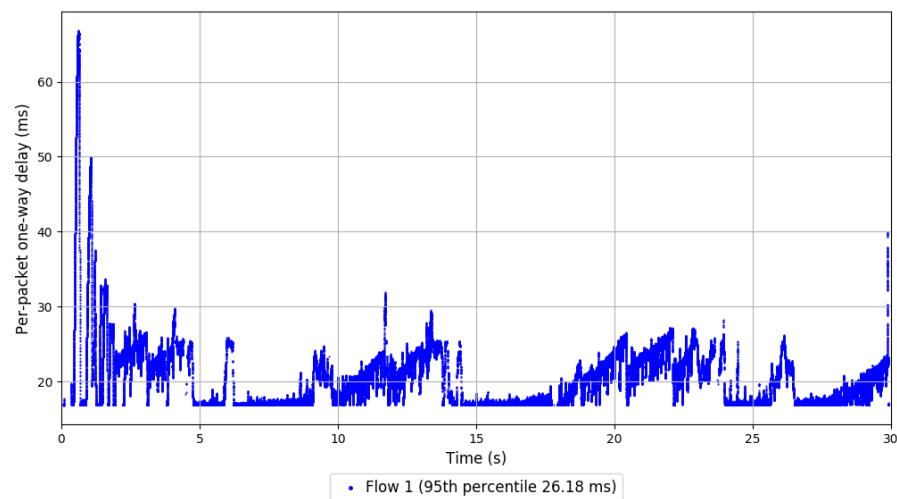
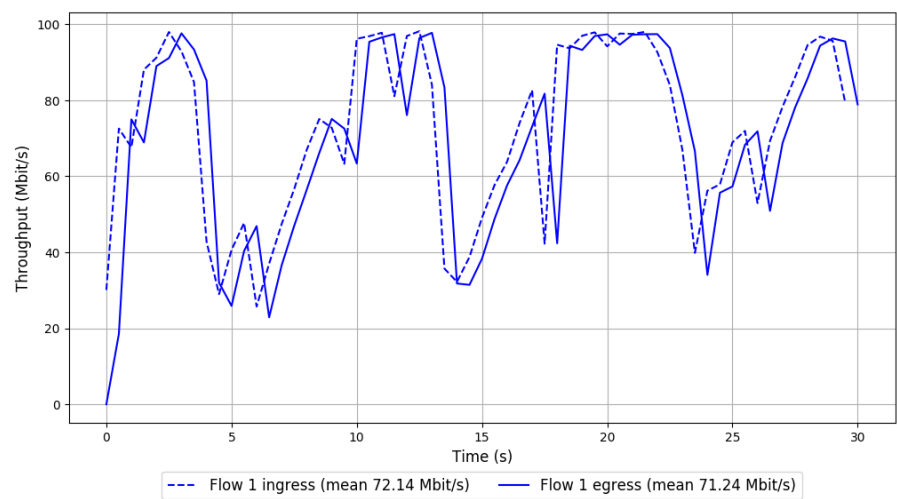
-- Flow 1:

Average throughput: 71.24 Mbit/s

95th percentile per-packet one-way delay: 26.177 ms

Loss rate: 1.33%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-02-20 05:38:33

End at: 2019-02-20 05:39:03

Local clock offset: -2.045 ms

Remote clock offset: -3.661 ms

# Below is generated by plot.py at 2019-02-20 07:22:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 34.92 Mbit/s

95th percentile per-packet one-way delay: 23.037 ms

Loss rate: 2.61%

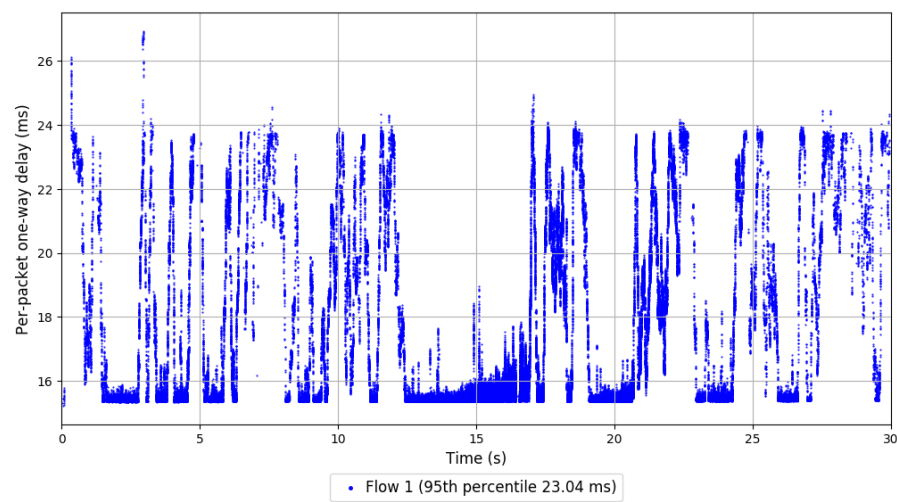
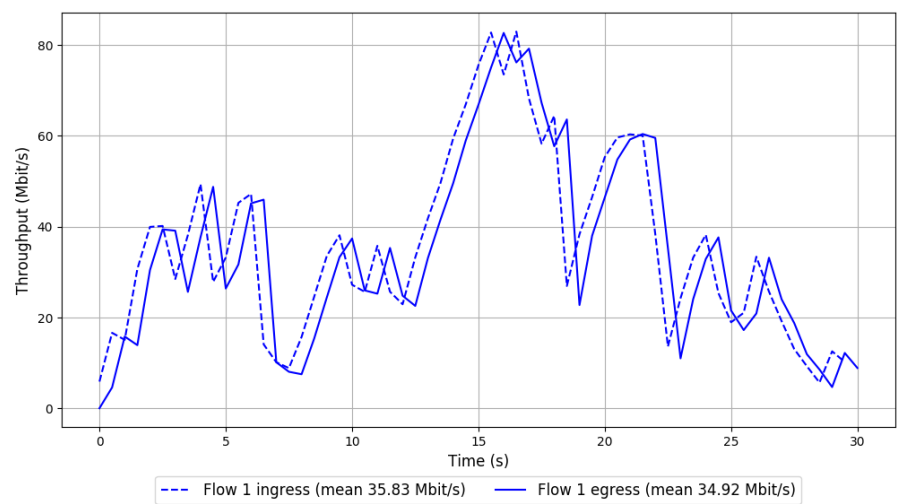
-- Flow 1:

Average throughput: 34.92 Mbit/s

95th percentile per-packet one-way delay: 23.037 ms

Loss rate: 2.61%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-02-20 06:04:14

End at: 2019-02-20 06:04:44

Local clock offset: 1.502 ms

Remote clock offset: -4.113 ms

# Below is generated by plot.py at 2019-02-20 07:22:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 37.70 Mbit/s

95th percentile per-packet one-way delay: 28.631 ms

Loss rate: 3.85%

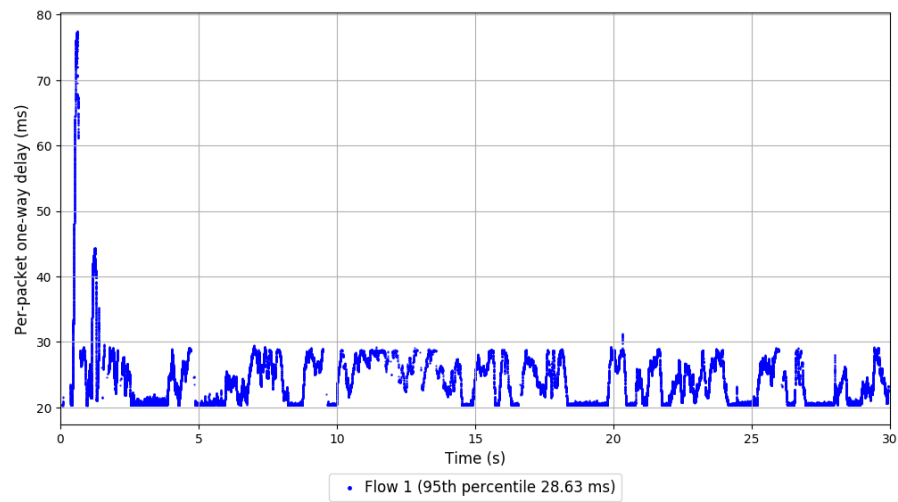
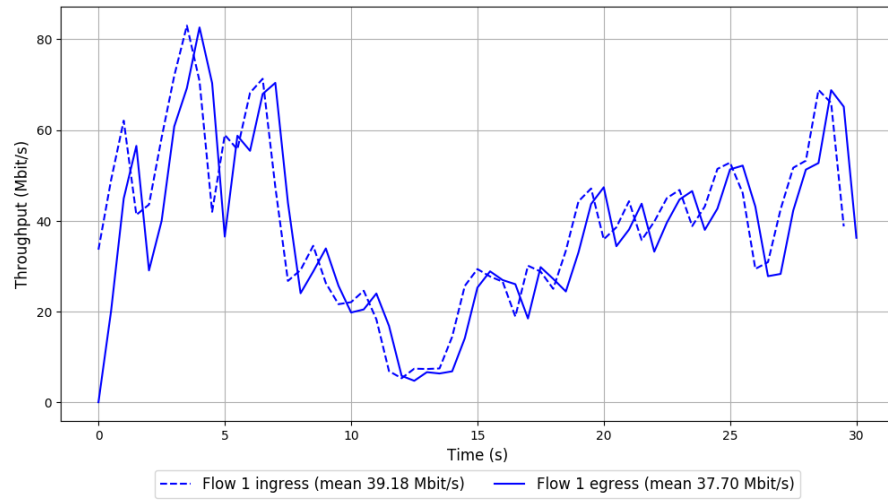
-- Flow 1:

Average throughput: 37.70 Mbit/s

95th percentile per-packet one-way delay: 28.631 ms

Loss rate: 3.85%

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





Run 4: Statistics of QUIC Cubic

Start at: 2019-02-20 06:29:29

End at: 2019-02-20 06:29:59

Local clock offset: -3.037 ms

Remote clock offset: -3.364 ms

# Below is generated by plot.py at 2019-02-20 07:22:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 25.81 Mbit/s

95th percentile per-packet one-way delay: 23.975 ms

Loss rate: 4.15%

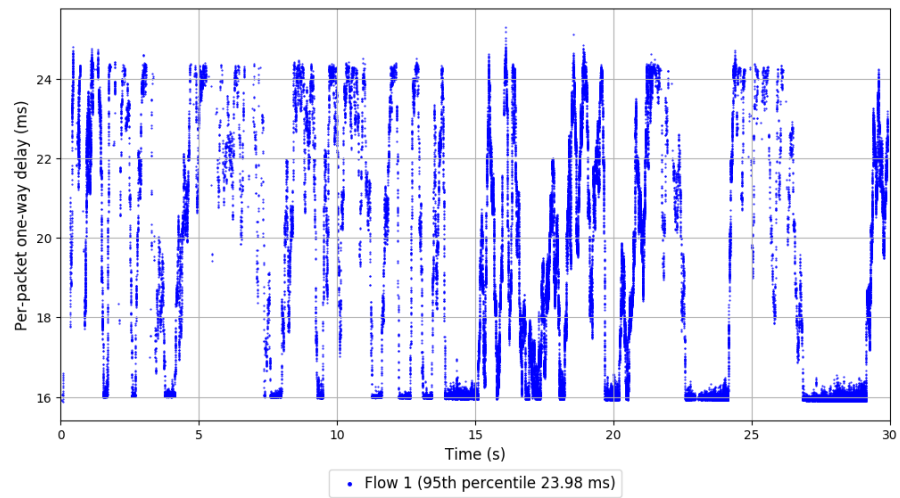
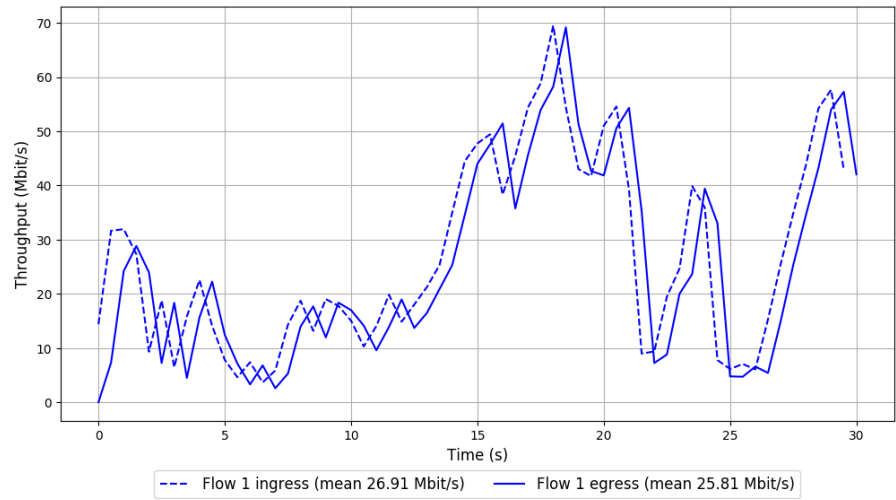
-- Flow 1:

Average throughput: 25.81 Mbit/s

95th percentile per-packet one-way delay: 23.975 ms

Loss rate: 4.15%

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



Run 5: Statistics of QUIC Cubic

Start at: 2019-02-20 06:55:15

End at: 2019-02-20 06:55:45

Local clock offset: -1.264 ms

Remote clock offset: -3.891 ms

# Below is generated by plot.py at 2019-02-20 07:22:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 13.97 Mbit/s

95th percentile per-packet one-way delay: 45.963 ms

Loss rate: 6.22%

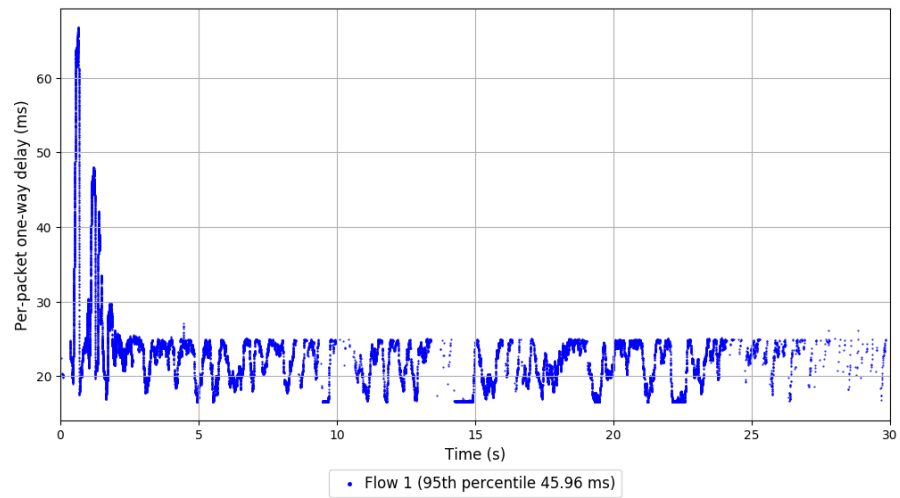
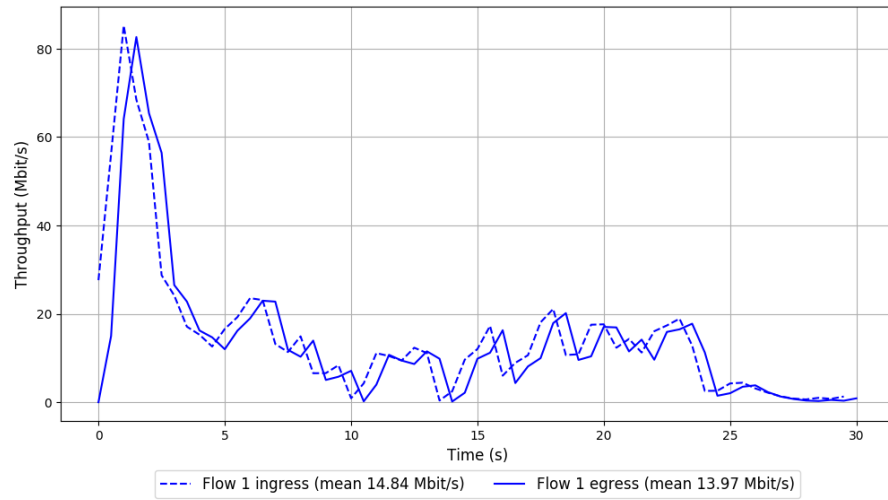
-- Flow 1:

Average throughput: 13.97 Mbit/s

95th percentile per-packet one-way delay: 45.963 ms

Loss rate: 6.22%

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

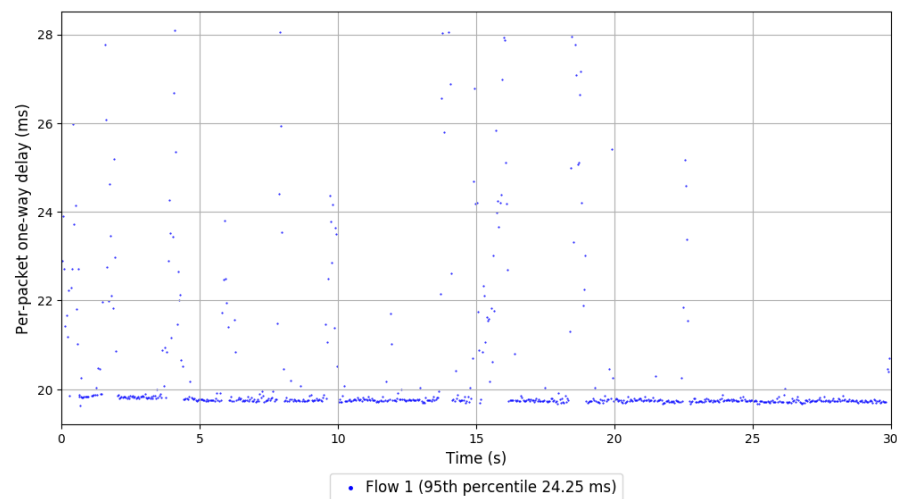
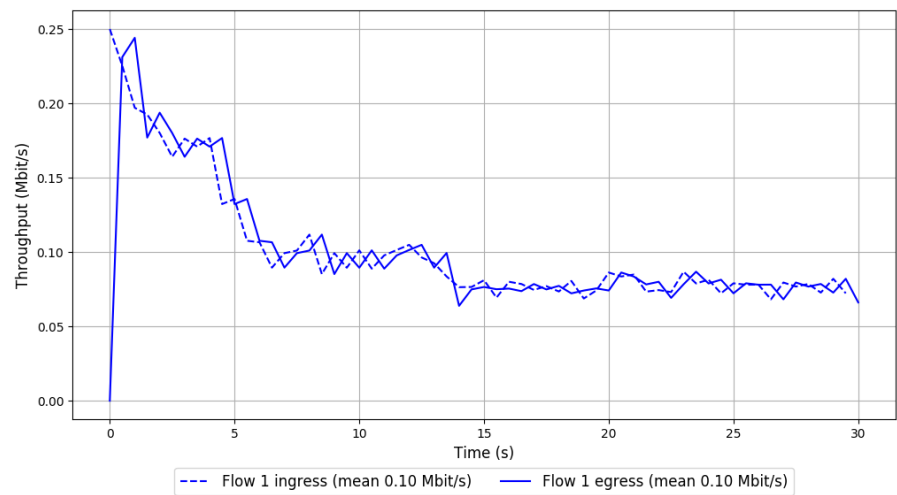


Run 1: Statistics of SCReAM

Start at: 2019-02-20 05:04:34  
End at: 2019-02-20 05:05:04  
Local clock offset: 1.706 ms  
Remote clock offset: -5.316 ms

# Below is generated by plot.py at 2019-02-20 07:22:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.10 Mbit/s  
95th percentile per-packet one-way delay: 24.251 ms  
Loss rate: 0.86%  
-- Flow 1:  
Average throughput: 0.10 Mbit/s  
95th percentile per-packet one-way delay: 24.251 ms  
Loss rate: 0.86%

Run 1: Report of SReAM — Data Link

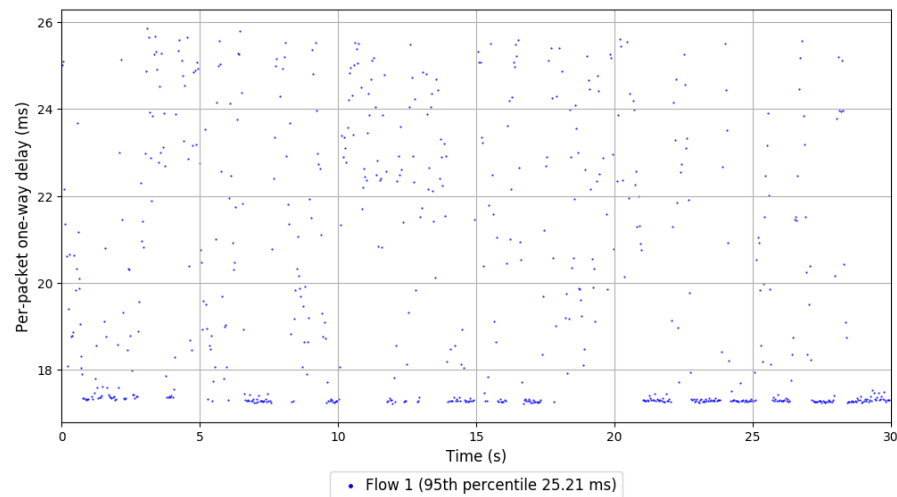
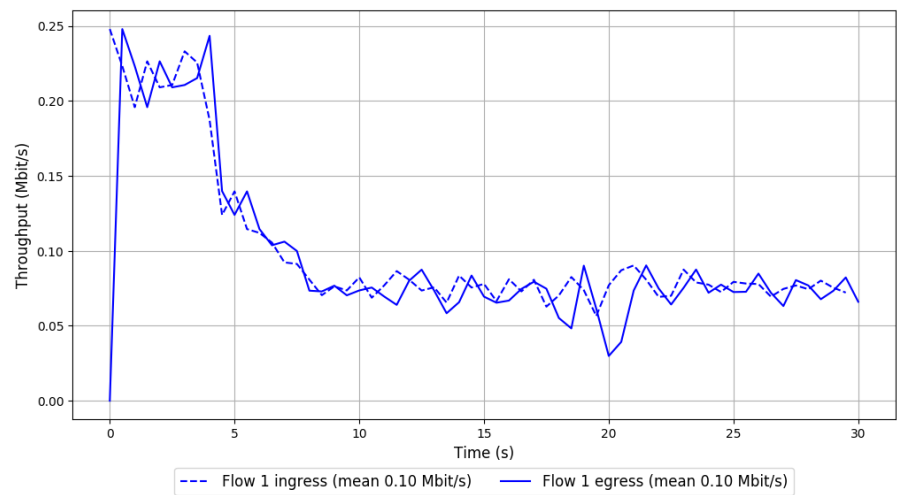


Run 2: Statistics of SCReAM

Start at: 2019-02-20 05:30:11  
End at: 2019-02-20 05:30:41  
Local clock offset: -0.0 ms  
Remote clock offset: -4.012 ms

# Below is generated by plot.py at 2019-02-20 07:22:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.10 Mbit/s  
95th percentile per-packet one-way delay: 25.208 ms  
Loss rate: 4.55%  
-- Flow 1:  
Average throughput: 0.10 Mbit/s  
95th percentile per-packet one-way delay: 25.208 ms  
Loss rate: 4.55%

Run 2: Report of SReAM — Data Link



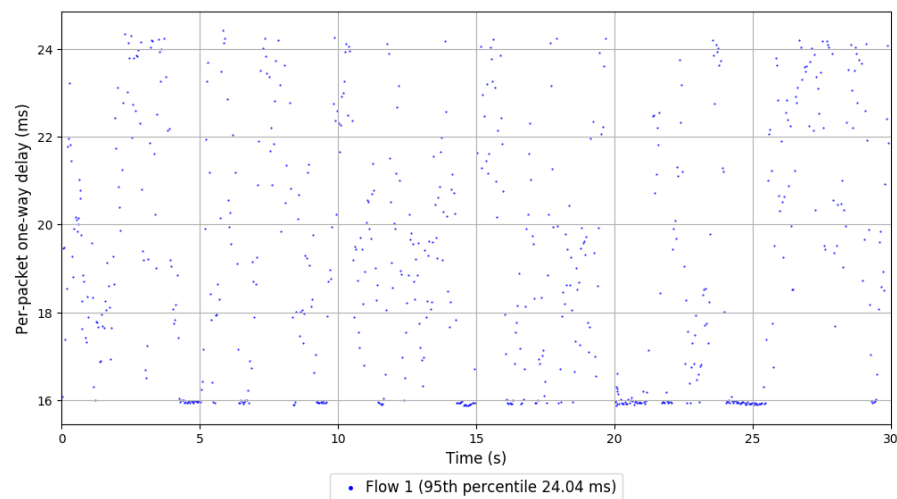
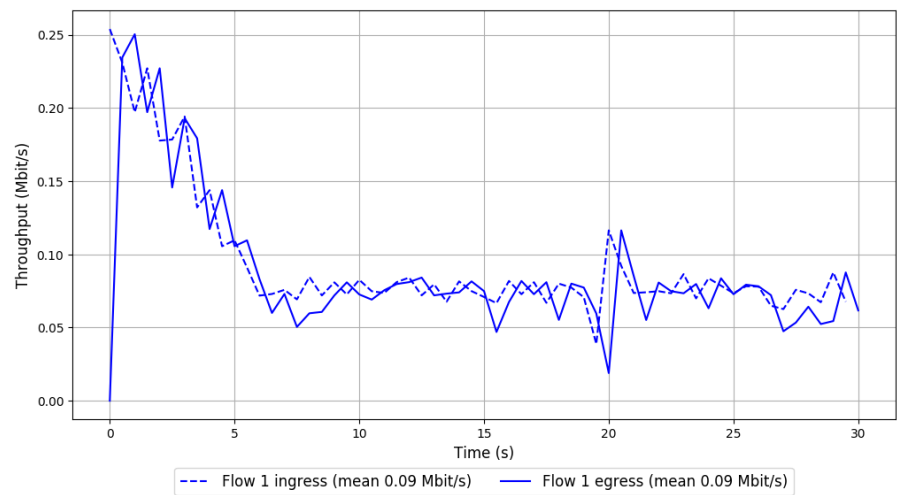


Run 3: Statistics of SCReAM

Start at: 2019-02-20 05:55:40  
End at: 2019-02-20 05:56:10  
Local clock offset: -1.939 ms  
Remote clock offset: -3.372 ms

# Below is generated by plot.py at 2019-02-20 07:22:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.09 Mbit/s  
95th percentile per-packet one-way delay: 24.036 ms  
Loss rate: 5.54%  
-- Flow 1:  
Average throughput: 0.09 Mbit/s  
95th percentile per-packet one-way delay: 24.036 ms  
Loss rate: 5.54%

Run 3: Report of SReAM — Data Link

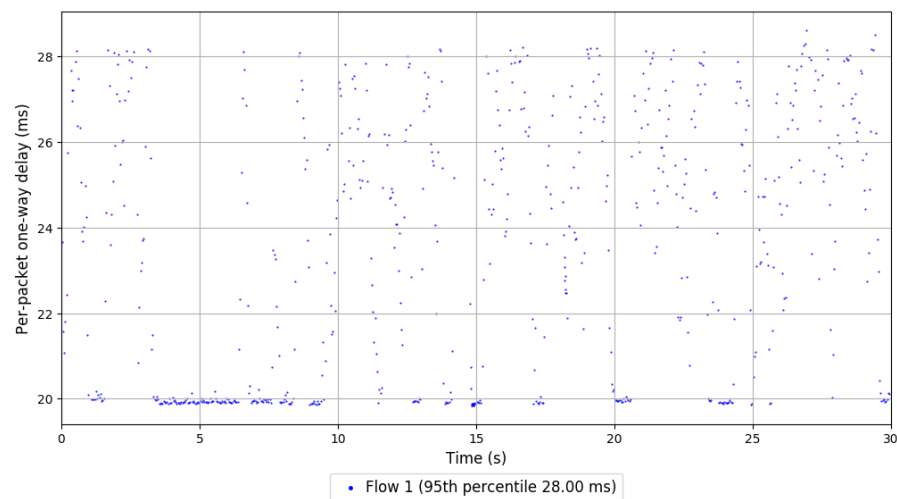
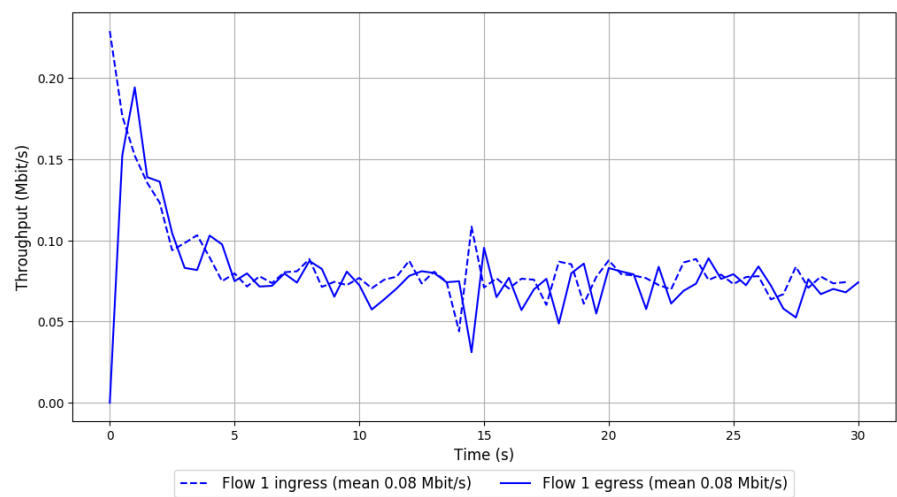


Run 4: Statistics of SCReAM

Start at: 2019-02-20 06:21:09  
End at: 2019-02-20 06:21:39  
Local clock offset: 0.723 ms  
Remote clock offset: -3.855 ms

# Below is generated by plot.py at 2019-02-20 07:22:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.08 Mbit/s  
95th percentile per-packet one-way delay: 28.005 ms  
Loss rate: 6.13%  
-- Flow 1:  
Average throughput: 0.08 Mbit/s  
95th percentile per-packet one-way delay: 28.005 ms  
Loss rate: 6.13%

Run 4: Report of SReAM — Data Link

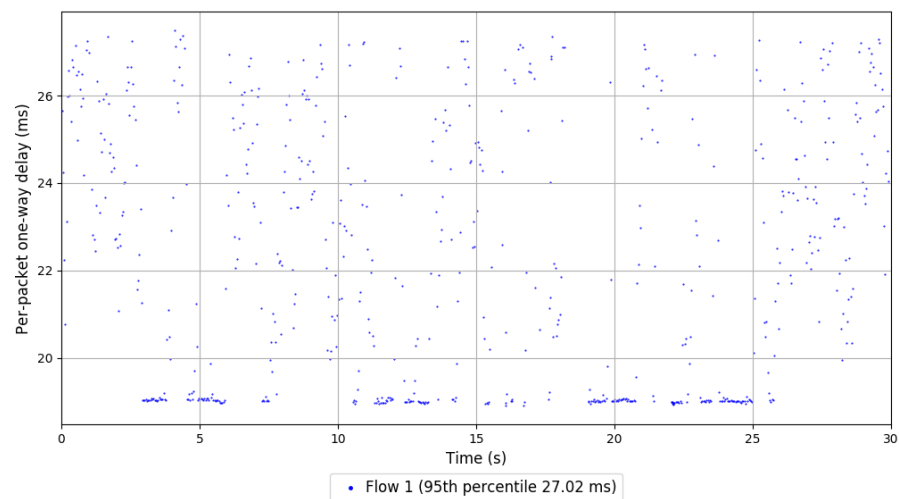
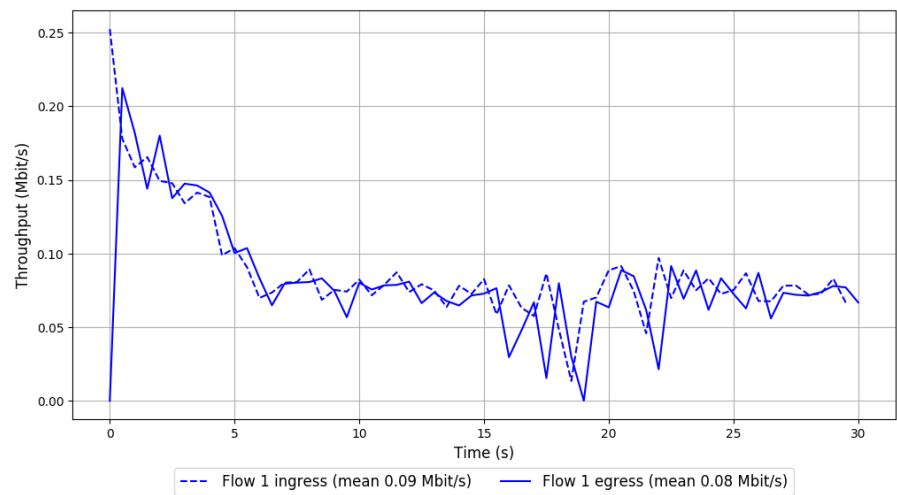


Run 5: Statistics of SCReAM

Start at: 2019-02-20 06:46:37  
End at: 2019-02-20 06:47:07  
Local clock offset: 2.366 ms  
Remote clock offset: -2.552 ms

# Below is generated by plot.py at 2019-02-20 07:22:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.08 Mbit/s  
95th percentile per-packet one-way delay: 27.017 ms  
Loss rate: 6.46%  
-- Flow 1:  
Average throughput: 0.08 Mbit/s  
95th percentile per-packet one-way delay: 27.017 ms  
Loss rate: 6.46%

Run 5: Report of SReAM — Data Link

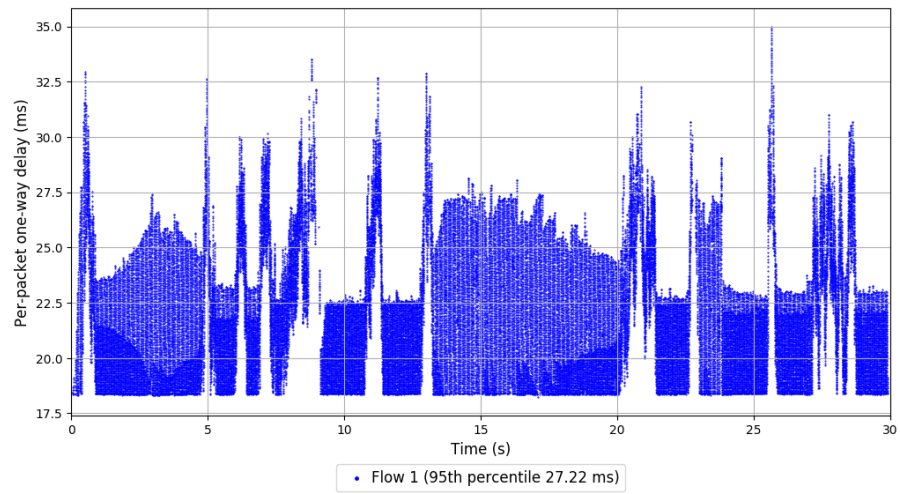
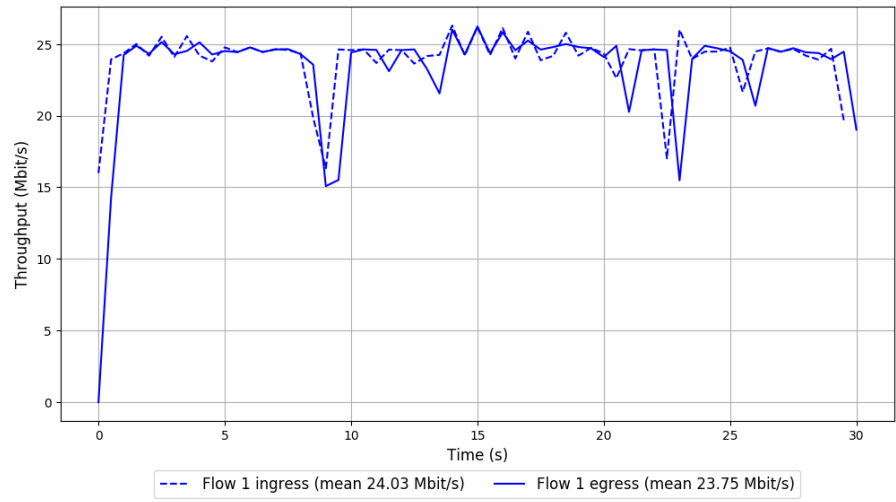


Run 1: Statistics of Sprout

Start at: 2019-02-20 05:22:43  
End at: 2019-02-20 05:23:13  
Local clock offset: 2.332 ms  
Remote clock offset: -2.933 ms

# Below is generated by plot.py at 2019-02-20 07:22:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 23.75 Mbit/s  
95th percentile per-packet one-way delay: 27.218 ms  
Loss rate: 1.23%  
-- Flow 1:  
Average throughput: 23.75 Mbit/s  
95th percentile per-packet one-way delay: 27.218 ms  
Loss rate: 1.23%

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



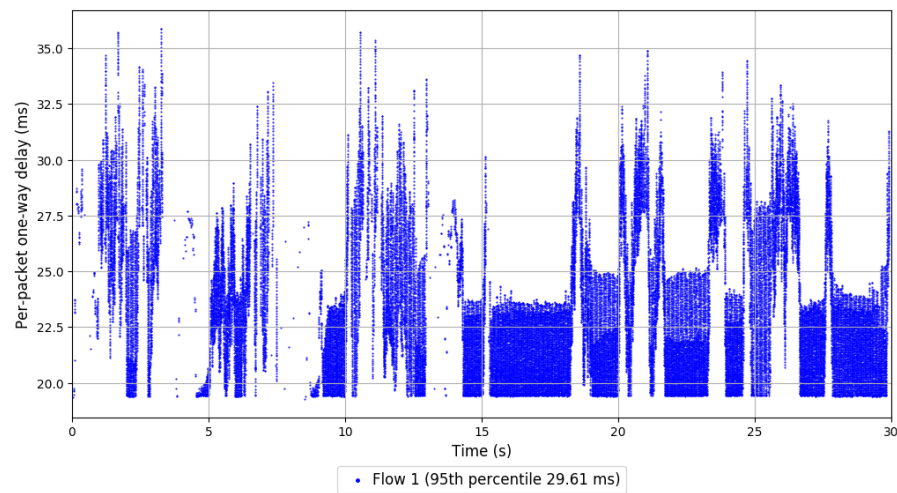
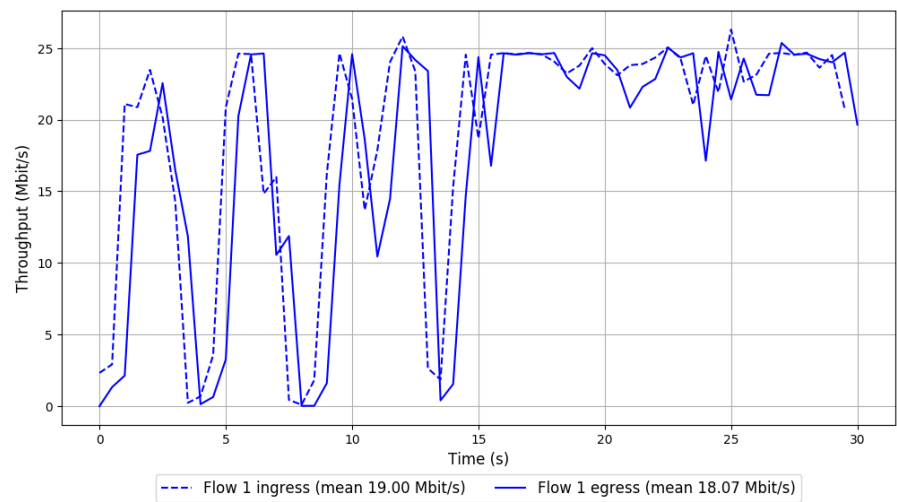


Run 2: Statistics of Sprout

Start at: 2019-02-20 05:48:21  
End at: 2019-02-20 05:48:51  
Local clock offset: 1.445 ms  
Remote clock offset: -3.685 ms

# Below is generated by plot.py at 2019-02-20 07:22:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 18.07 Mbit/s  
95th percentile per-packet one-way delay: 29.605 ms  
Loss rate: 5.01%  
-- Flow 1:  
Average throughput: 18.07 Mbit/s  
95th percentile per-packet one-way delay: 29.605 ms  
Loss rate: 5.01%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2019-02-20 06:14:01

End at: 2019-02-20 06:14:31

Local clock offset: 0.182 ms

Remote clock offset: -3.31 ms

# Below is generated by plot.py at 2019-02-20 07:22:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 18.78 Mbit/s

95th percentile per-packet one-way delay: 30.101 ms

Loss rate: 7.27%

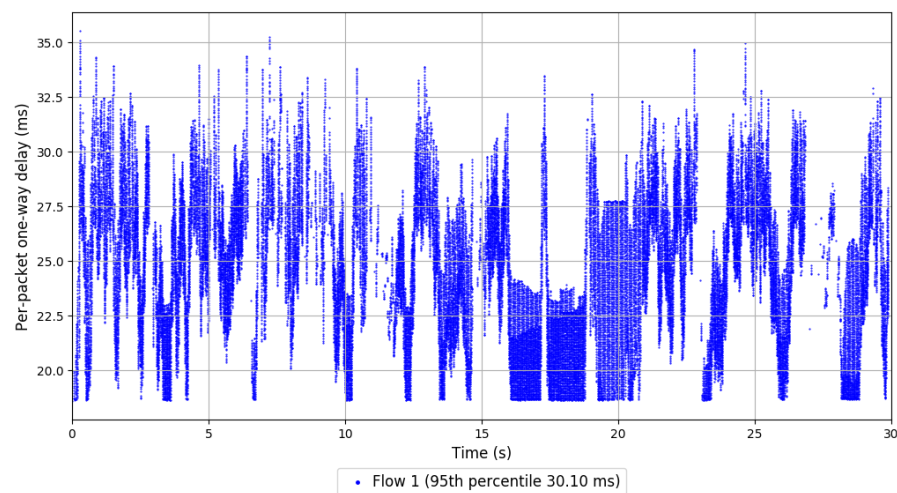
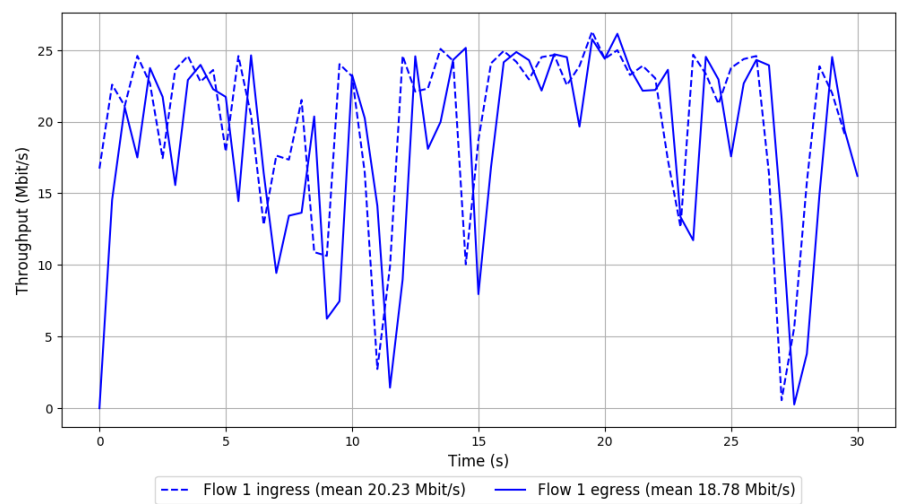
-- Flow 1:

Average throughput: 18.78 Mbit/s

95th percentile per-packet one-way delay: 30.101 ms

Loss rate: 7.27%

Run 3: Report of Sprout — Data Link

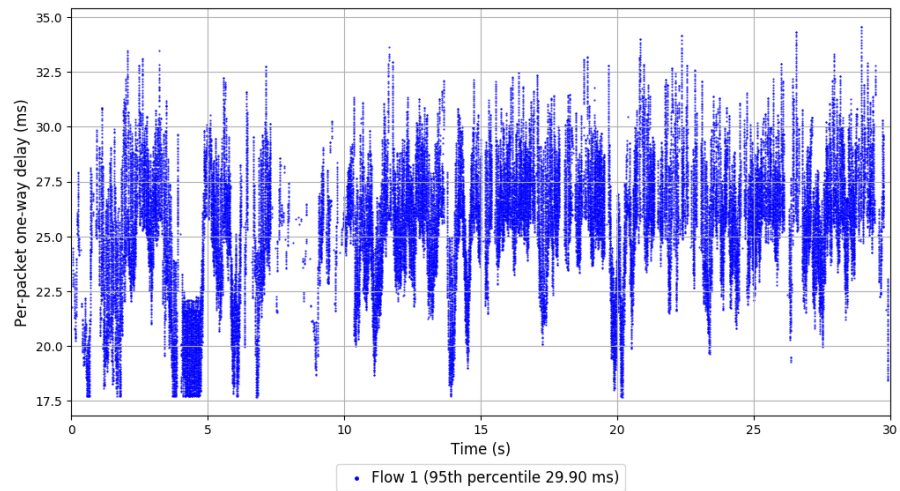
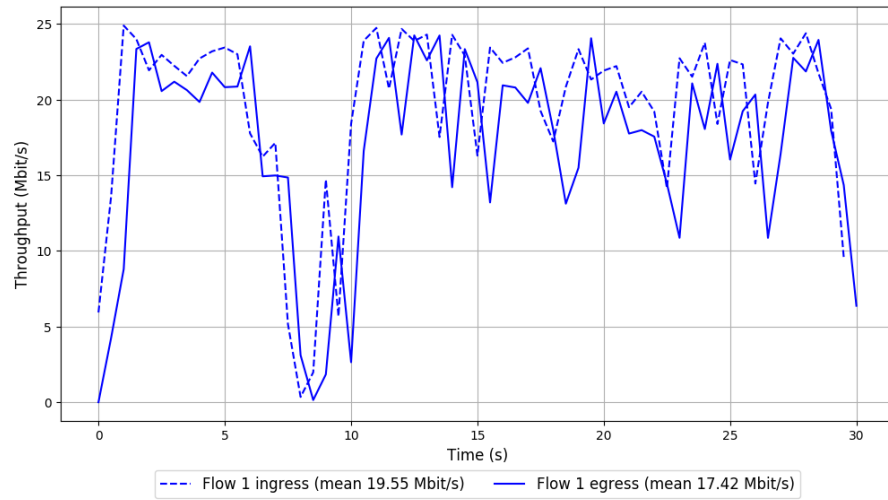


Run 4: Statistics of Sprout

Start at: 2019-02-20 06:39:23  
End at: 2019-02-20 06:39:53  
Local clock offset: 0.249 ms  
Remote clock offset: -2.961 ms

# Below is generated by plot.py at 2019-02-20 07:22:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 17.42 Mbit/s  
95th percentile per-packet one-way delay: 29.899 ms  
Loss rate: 11.03%  
-- Flow 1:  
Average throughput: 17.42 Mbit/s  
95th percentile per-packet one-way delay: 29.899 ms  
Loss rate: 11.03%

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

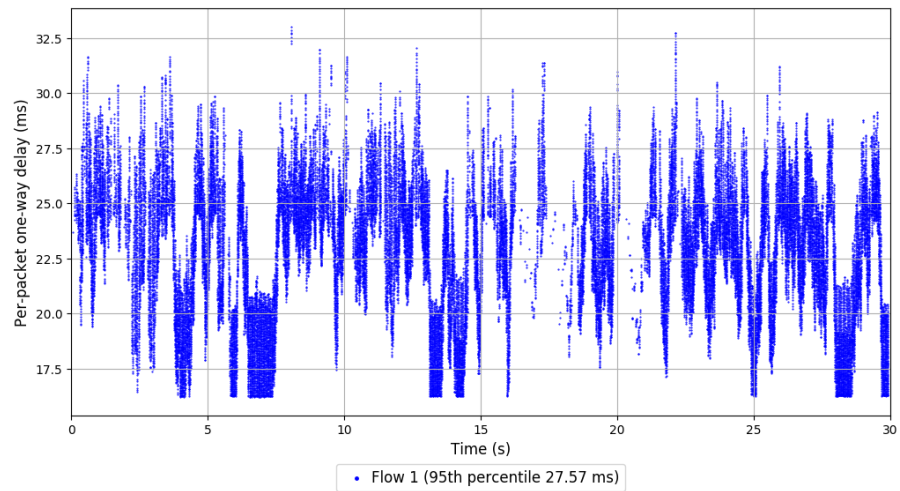
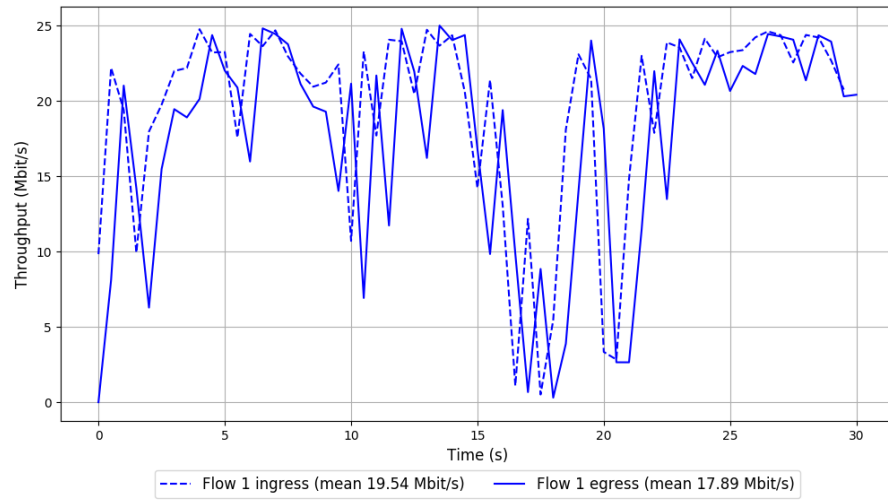


Run 5: Statistics of Sprout

Start at: 2019-02-20 07:07:13  
End at: 2019-02-20 07:07:43  
Local clock offset: -0.38 ms  
Remote clock offset: -2.658 ms

# Below is generated by plot.py at 2019-02-20 07:22:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 17.89 Mbit/s  
95th percentile per-packet one-way delay: 27.575 ms  
Loss rate: 8.69%  
-- Flow 1:  
Average throughput: 17.89 Mbit/s  
95th percentile per-packet one-way delay: 27.575 ms  
Loss rate: 8.69%

## Run 5: Report of Sprout — Data Link





Run 1: Statistics of TaoVA-100x

Start at: 2019-02-20 05:18:53

End at: 2019-02-20 05:19:23

Local clock offset: 0.432 ms

Remote clock offset: -4.595 ms

# Below is generated by plot.py at 2019-02-20 07:23:07

# Datalink statistics

-- Total of 1 flow:

Average throughput: 80.97 Mbit/s

95th percentile per-packet one-way delay: 21.403 ms

Loss rate: 0.18%

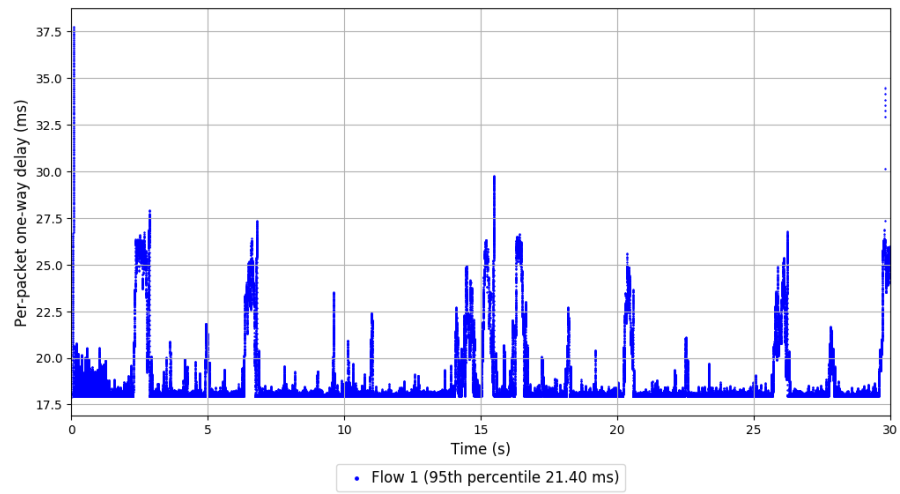
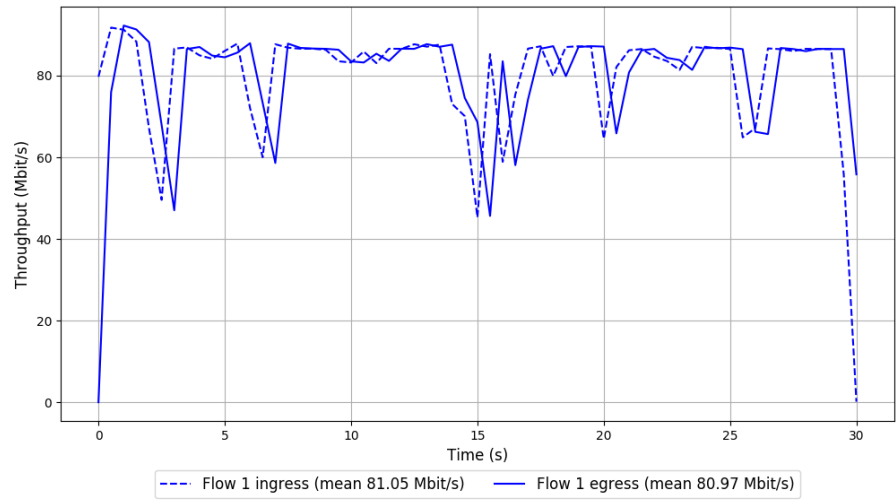
-- Flow 1:

Average throughput: 80.97 Mbit/s

95th percentile per-packet one-way delay: 21.403 ms

Loss rate: 0.18%

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

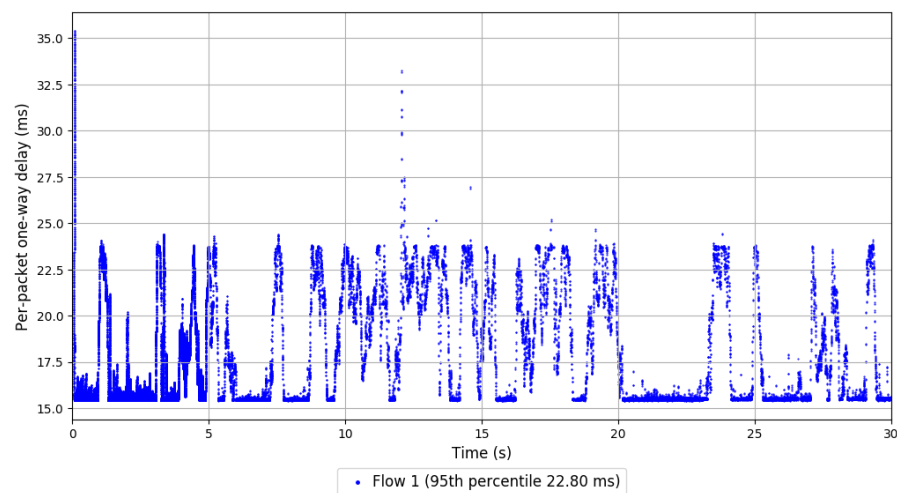
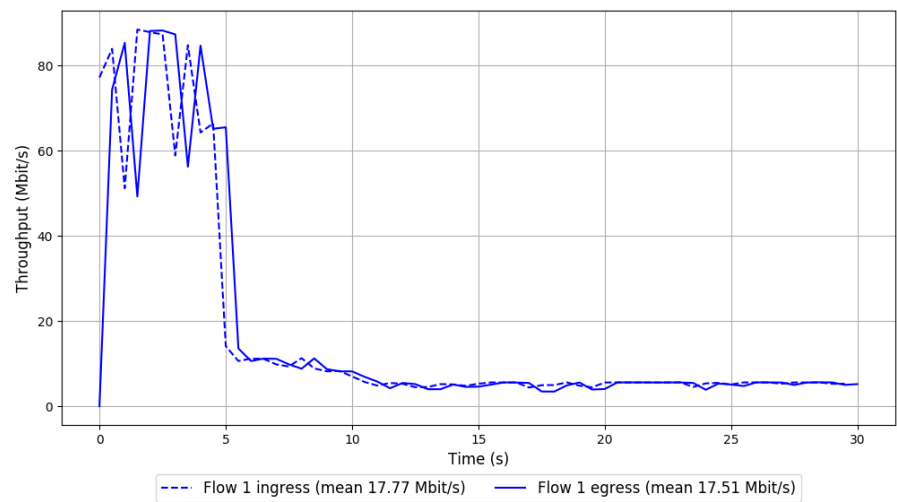


Run 2: Statistics of TaoVA-100x

Start at: 2019-02-20 05:44:35  
End at: 2019-02-20 05:45:05  
Local clock offset: -2.268 ms  
Remote clock offset: -3.656 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 17.51 Mbit/s  
95th percentile per-packet one-way delay: 22.802 ms  
Loss rate: 1.54%  
-- Flow 1:  
Average throughput: 17.51 Mbit/s  
95th percentile per-packet one-way delay: 22.802 ms  
Loss rate: 1.54%

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

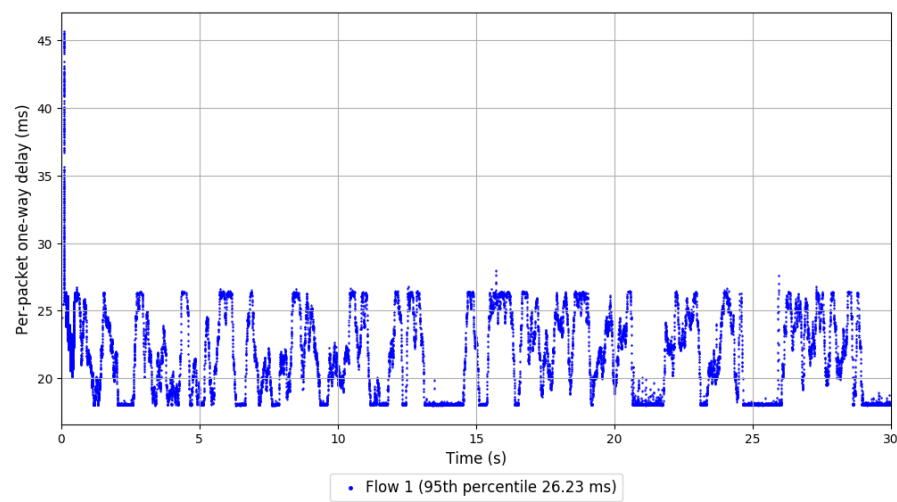
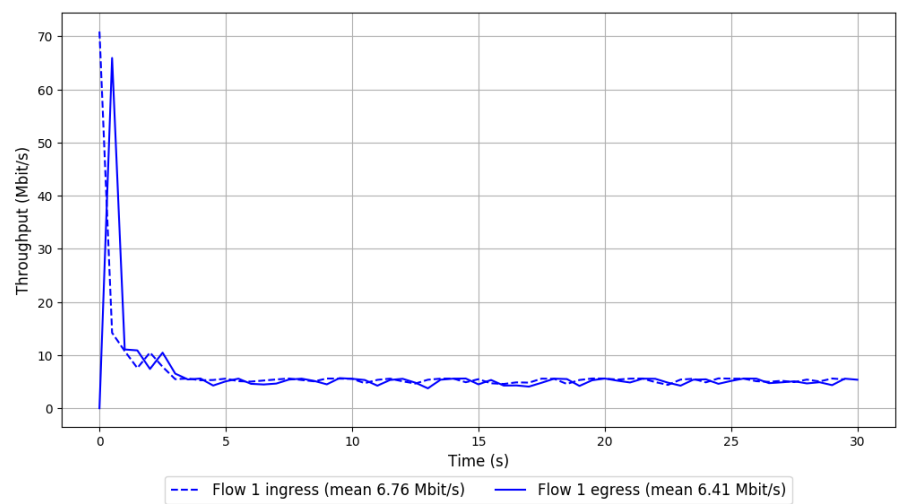


Run 3: Statistics of TaoVA-100x

Start at: 2019-02-20 06:10:31  
End at: 2019-02-20 06:11:01  
Local clock offset: -2.015 ms  
Remote clock offset: -5.058 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 6.41 Mbit/s  
95th percentile per-packet one-way delay: 26.235 ms  
Loss rate: 5.37%  
-- Flow 1:  
Average throughput: 6.41 Mbit/s  
95th percentile per-packet one-way delay: 26.235 ms  
Loss rate: 5.37%

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

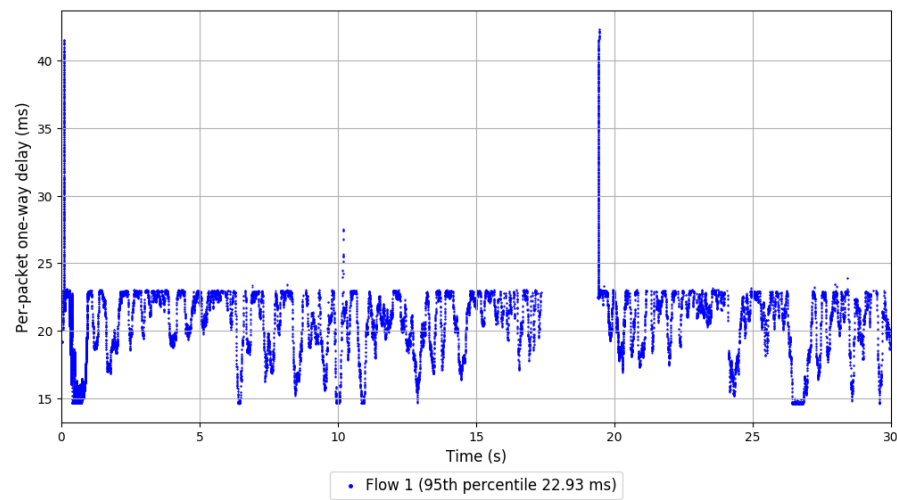
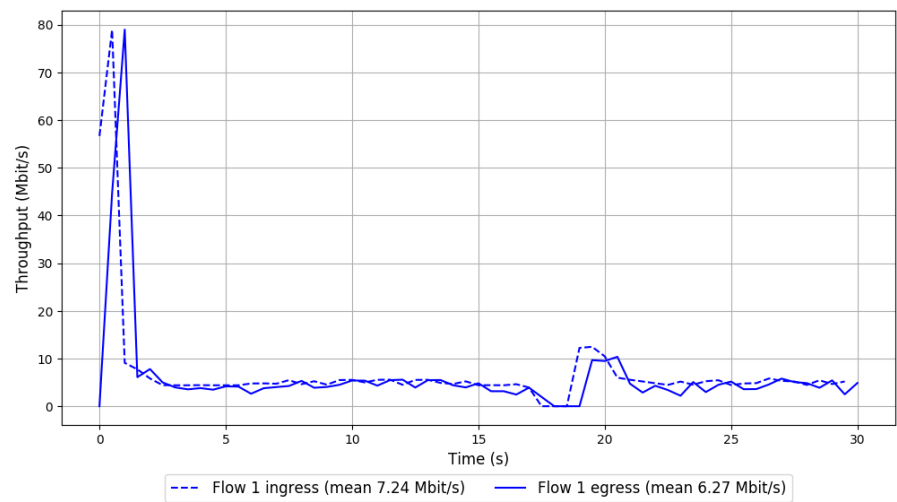


Run 4: Statistics of TaoVA-100x

Start at: 2019-02-20 06:35:47  
End at: 2019-02-20 06:36:17  
Local clock offset: -2.182 ms  
Remote clock offset: -2.111 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 6.27 Mbit/s  
95th percentile per-packet one-way delay: 22.928 ms  
Loss rate: 13.51%  
-- Flow 1:  
Average throughput: 6.27 Mbit/s  
95th percentile per-packet one-way delay: 22.928 ms  
Loss rate: 13.51%

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





Run 5: Statistics of TaoVA-100x

Start at: 2019-02-20 07:02:48

End at: 2019-02-20 07:03:18

Local clock offset: 0.619 ms

Remote clock offset: -3.281 ms

# Below is generated by plot.py at 2019-02-20 07:23:07

# Datalink statistics

-- Total of 1 flow:

Average throughput: 15.23 Mbit/s

95th percentile per-packet one-way delay: 26.027 ms

Loss rate: 5.35%

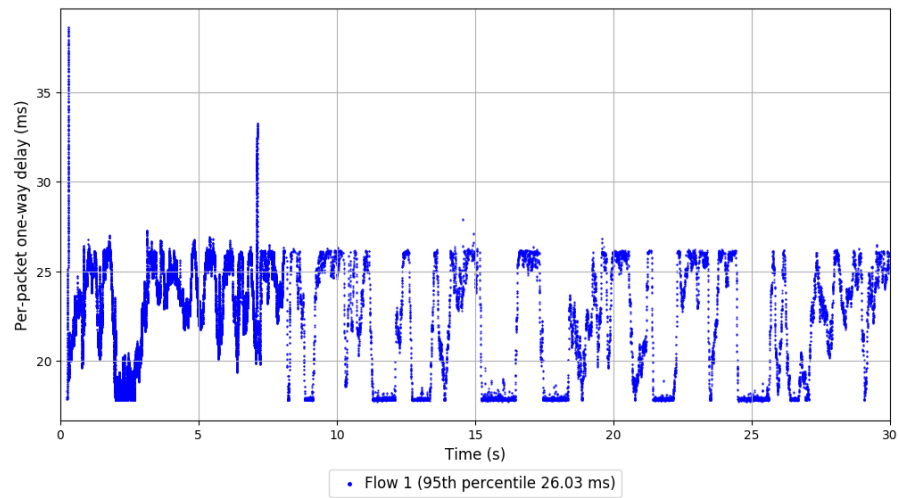
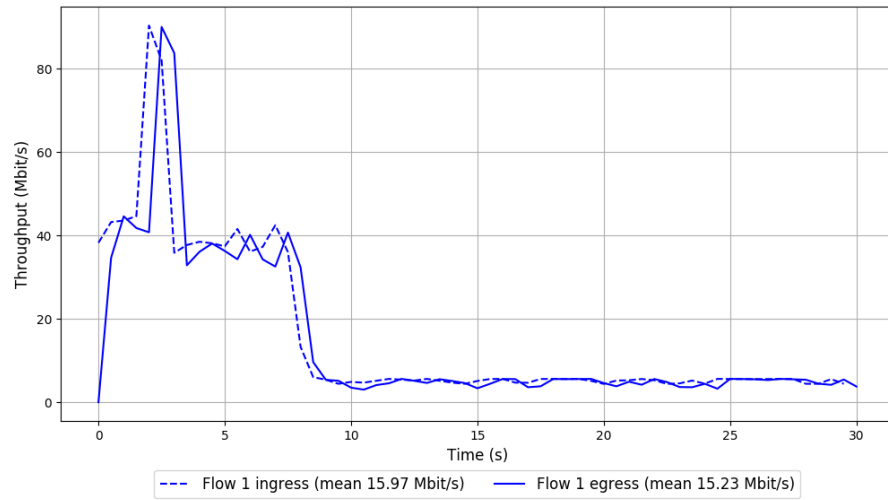
-- Flow 1:

Average throughput: 15.23 Mbit/s

95th percentile per-packet one-way delay: 26.027 ms

Loss rate: 5.35%

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

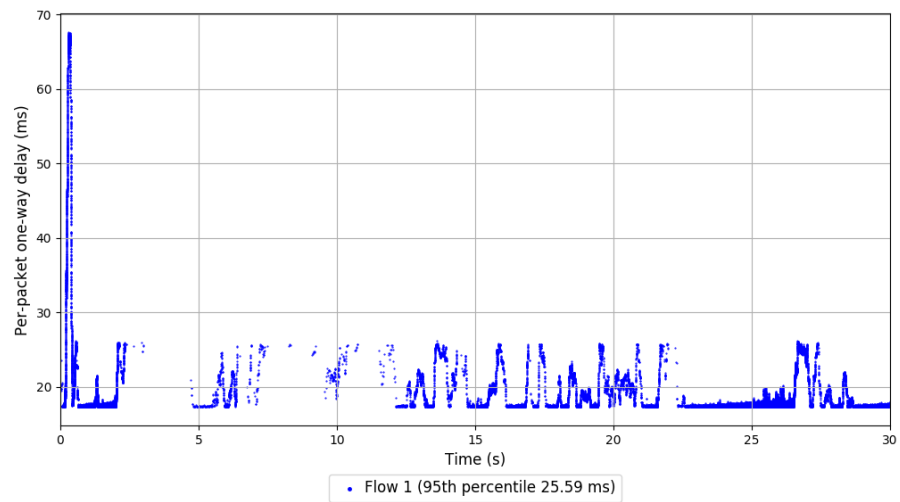
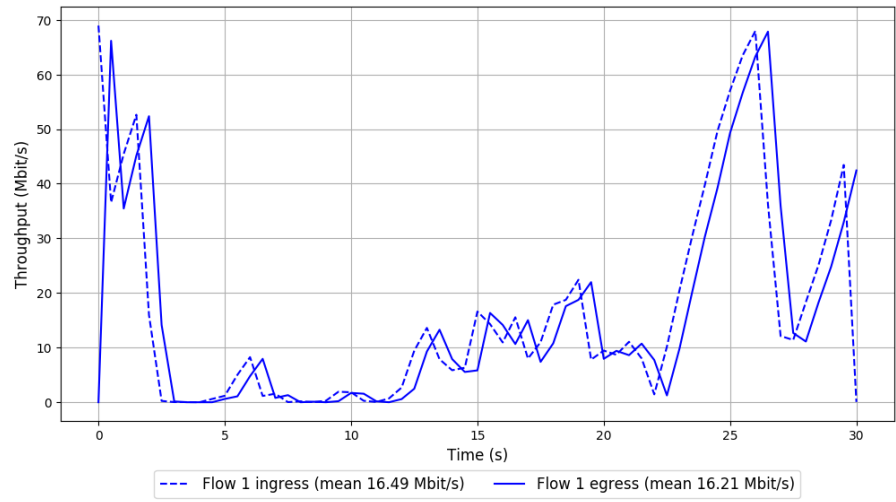


Run 1: Statistics of TCP Vegas

Start at: 2019-02-20 05:17:48  
End at: 2019-02-20 05:18:18  
Local clock offset: -0.929 ms  
Remote clock offset: -5.359 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 16.21 Mbit/s  
95th percentile per-packet one-way delay: 25.592 ms  
Loss rate: 1.80%  
-- Flow 1:  
Average throughput: 16.21 Mbit/s  
95th percentile per-packet one-way delay: 25.592 ms  
Loss rate: 1.80%

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



Run 2: Statistics of TCP Vegas

Start at: 2019-02-20 05:43:26

End at: 2019-02-20 05:43:56

Local clock offset: 1.211 ms

Remote clock offset: -3.89 ms

# Below is generated by plot.py at 2019-02-20 07:23:07

# Datalink statistics

-- Total of 1 flow:

Average throughput: 11.52 Mbit/s

95th percentile per-packet one-way delay: 26.327 ms

Loss rate: 1.72%

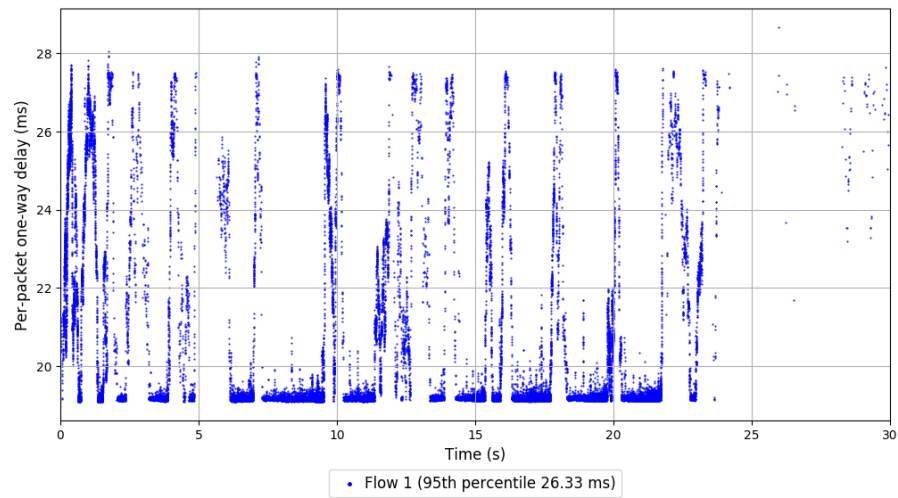
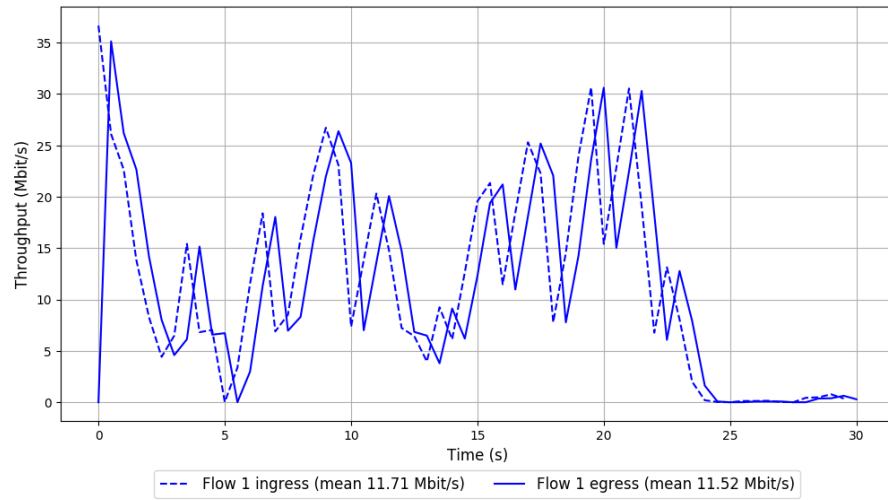
-- Flow 1:

Average throughput: 11.52 Mbit/s

95th percentile per-packet one-way delay: 26.327 ms

Loss rate: 1.72%

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

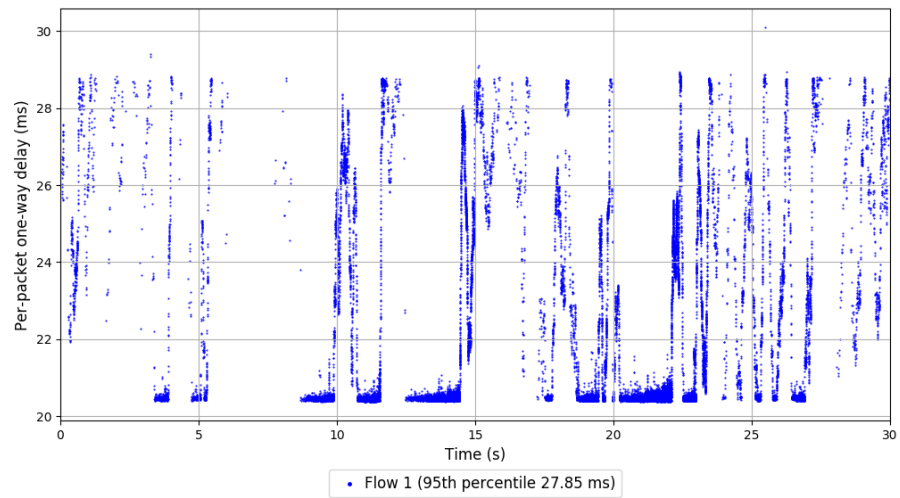
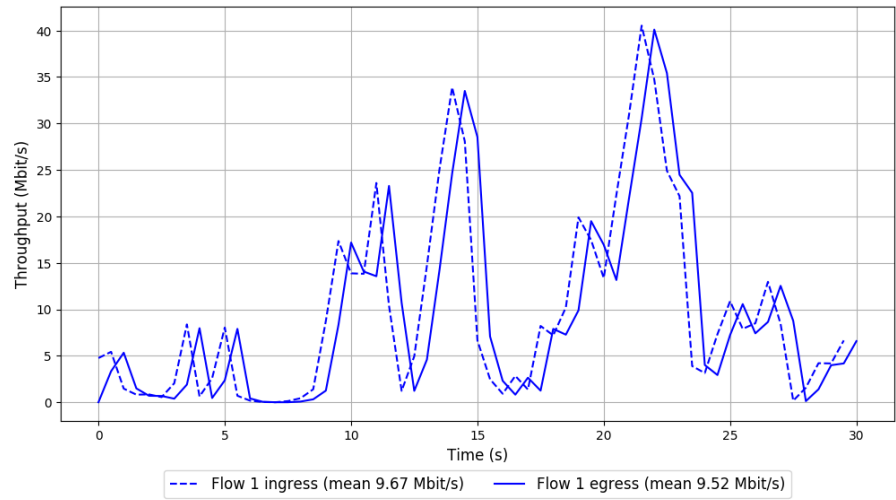


Run 3: Statistics of TCP Vegas

Start at: 2019-02-20 06:09:24  
End at: 2019-02-20 06:09:54  
Local clock offset: -0.09 ms  
Remote clock offset: -5.507 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 9.52 Mbit/s  
95th percentile per-packet one-way delay: 27.849 ms  
Loss rate: 1.63%  
-- Flow 1:  
Average throughput: 9.52 Mbit/s  
95th percentile per-packet one-way delay: 27.849 ms  
Loss rate: 1.63%

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



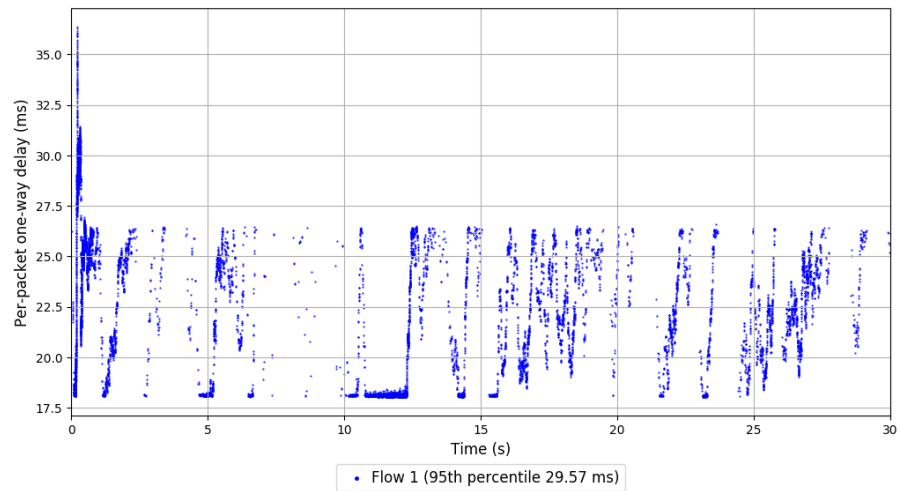
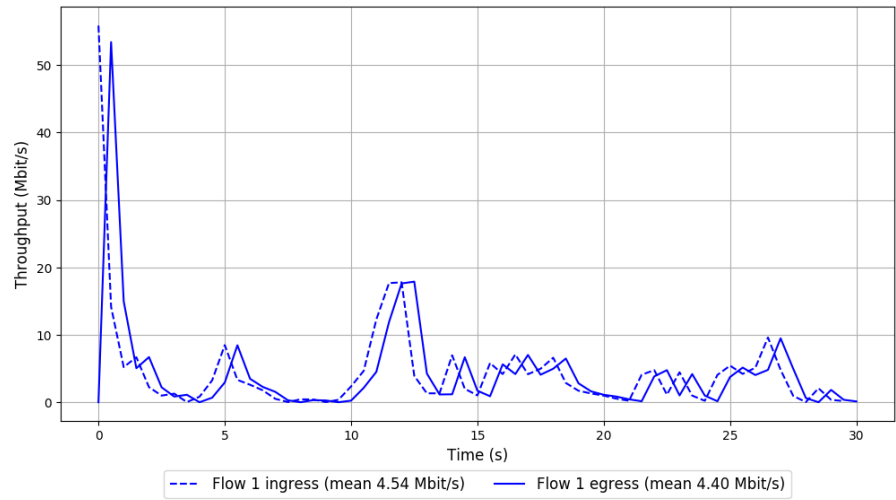


Run 4: Statistics of TCP Vegas

Start at: 2019-02-20 06:34:38  
End at: 2019-02-20 06:35:08  
Local clock offset: 0.856 ms  
Remote clock offset: -2.332 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.40 Mbit/s  
95th percentile per-packet one-way delay: 29.572 ms  
Loss rate: 3.12%  
-- Flow 1:  
Average throughput: 4.40 Mbit/s  
95th percentile per-packet one-way delay: 29.572 ms  
Loss rate: 3.12%

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

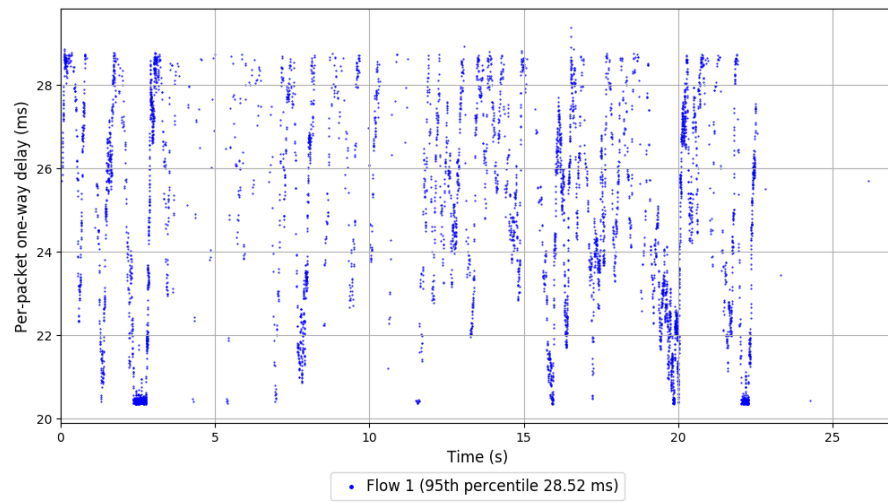
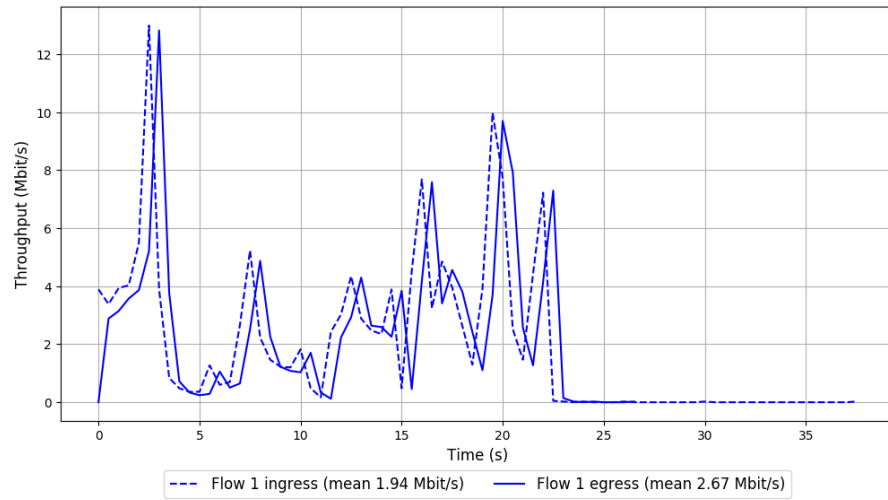


Run 5: Statistics of TCP Vegas

Start at: 2019-02-20 07:00:25  
End at: 2019-02-20 07:00:55  
Local clock offset: 2.43 ms  
Remote clock offset: -4.003 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.67 Mbit/s  
95th percentile per-packet one-way delay: 28.522 ms  
Loss rate: 4.68%  
-- Flow 1:  
Average throughput: 2.67 Mbit/s  
95th percentile per-packet one-way delay: 28.522 ms  
Loss rate: 4.68%

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

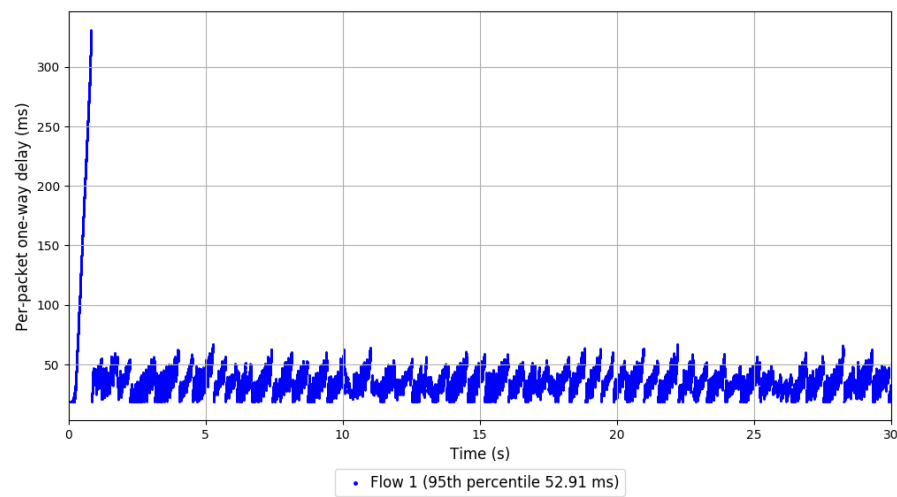
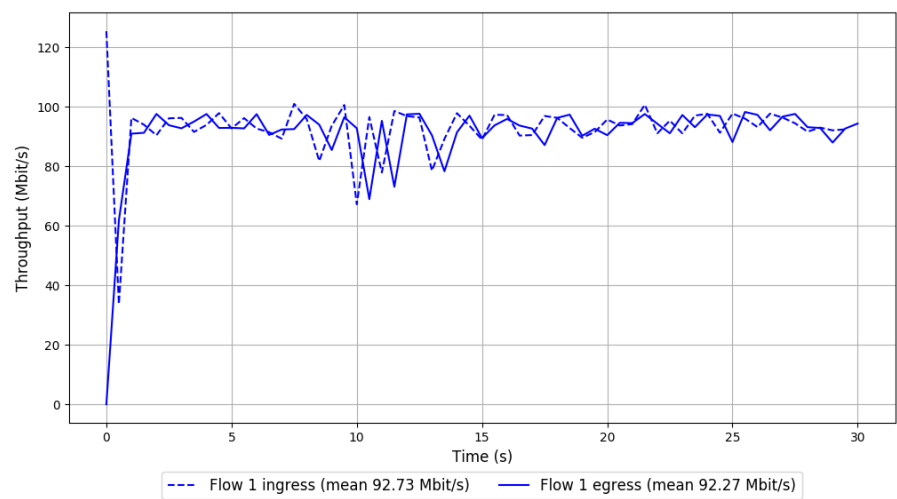


Run 1: Statistics of Verus

Start at: 2019-02-20 05:05:39  
End at: 2019-02-20 05:06:09  
Local clock offset: 1.399 ms  
Remote clock offset: -4.421 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 92.27 Mbit/s  
95th percentile per-packet one-way delay: 52.915 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 92.27 Mbit/s  
95th percentile per-packet one-way delay: 52.915 ms  
Loss rate: 0.57%

Run 1: Report of Verus — Data Link

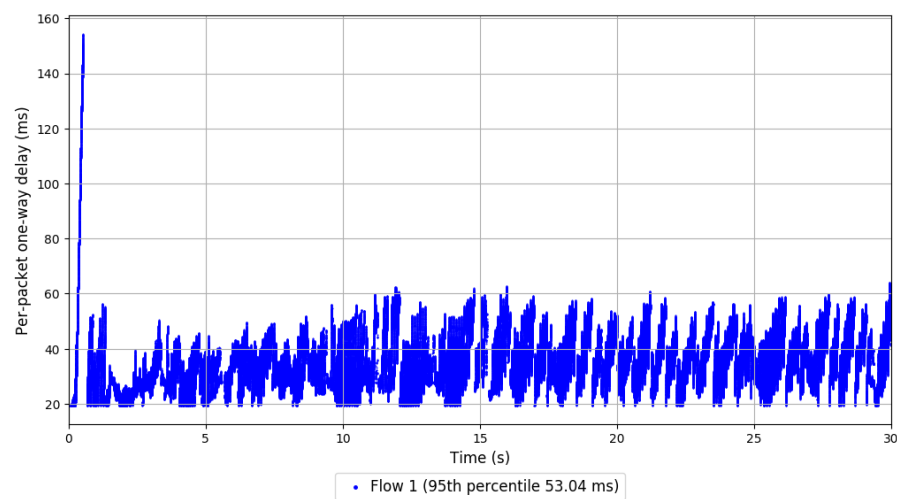
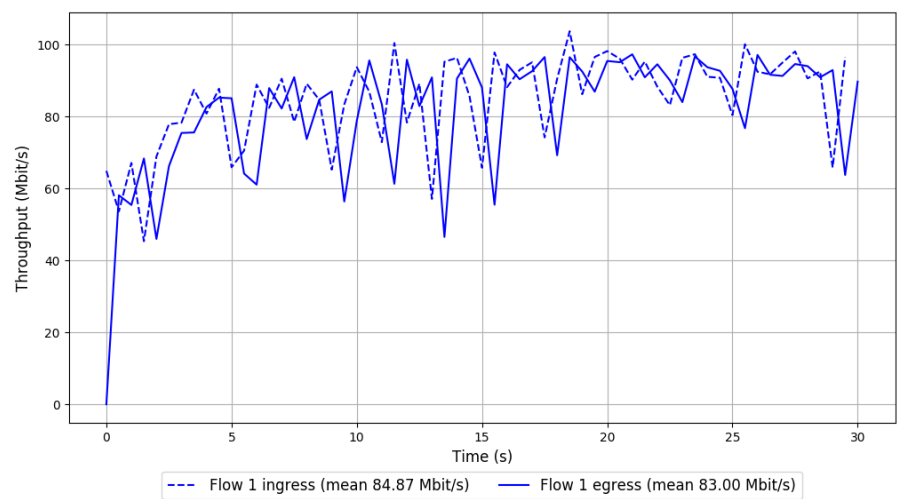


Run 2: Statistics of Verus

Start at: 2019-02-20 05:31:16  
End at: 2019-02-20 05:31:46  
Local clock offset: 1.706 ms  
Remote clock offset: -4.231 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 83.00 Mbit/s  
95th percentile per-packet one-way delay: 53.039 ms  
Loss rate: 2.28%  
-- Flow 1:  
Average throughput: 83.00 Mbit/s  
95th percentile per-packet one-way delay: 53.039 ms  
Loss rate: 2.28%

Run 2: Report of Verus — Data Link



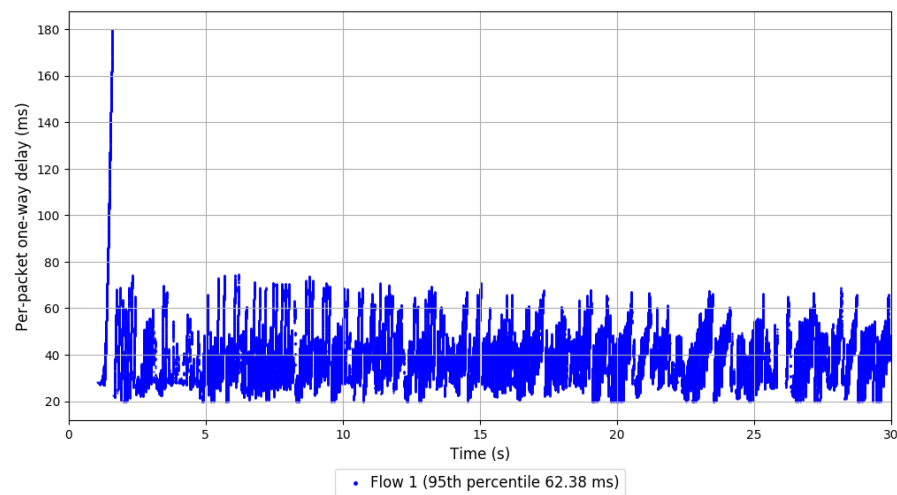
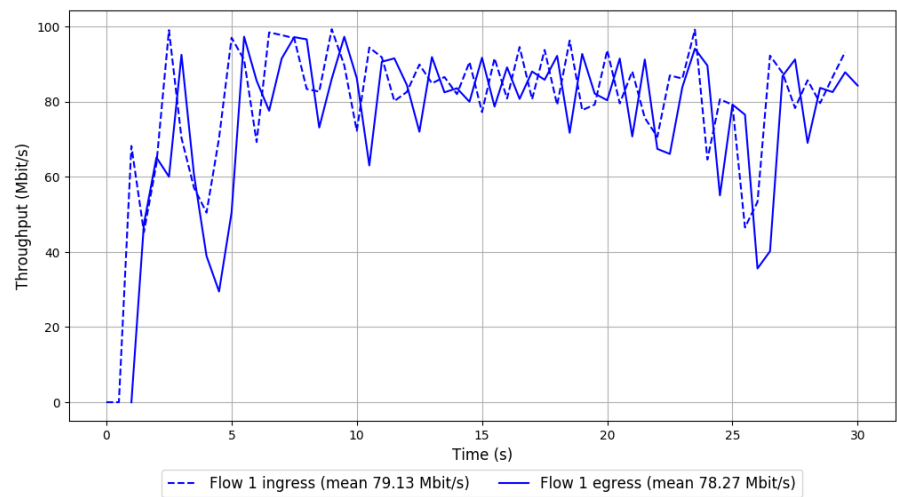


Run 3: Statistics of Verus

Start at: 2019-02-20 05:56:45  
End at: 2019-02-20 05:57:15  
Local clock offset: 0.8 ms  
Remote clock offset: -4.387 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 78.27 Mbit/s  
95th percentile per-packet one-way delay: 62.377 ms  
Loss rate: 4.45%  
-- Flow 1:  
Average throughput: 78.27 Mbit/s  
95th percentile per-packet one-way delay: 62.377 ms  
Loss rate: 4.45%

Run 3: Report of Verus — Data Link

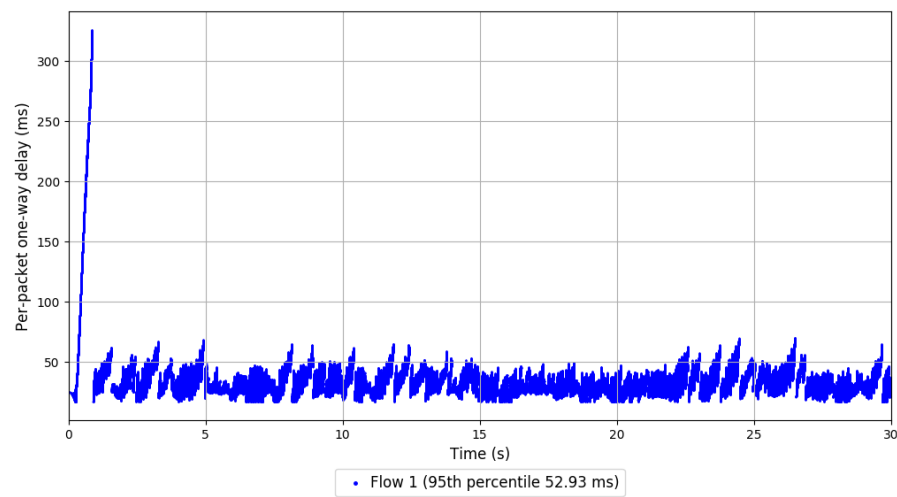
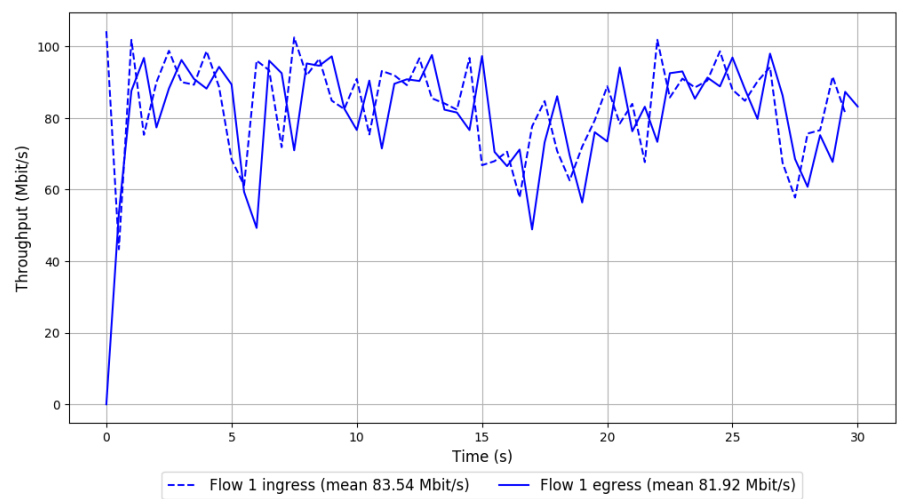


Run 4: Statistics of Verus

Start at: 2019-02-20 06:22:14  
End at: 2019-02-20 06:22:44  
Local clock offset: -0.871 ms  
Remote clock offset: -2.374 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 81.92 Mbit/s  
95th percentile per-packet one-way delay: 52.927 ms  
Loss rate: 2.03%  
-- Flow 1:  
Average throughput: 81.92 Mbit/s  
95th percentile per-packet one-way delay: 52.927 ms  
Loss rate: 2.03%

Run 4: Report of Verus — Data Link

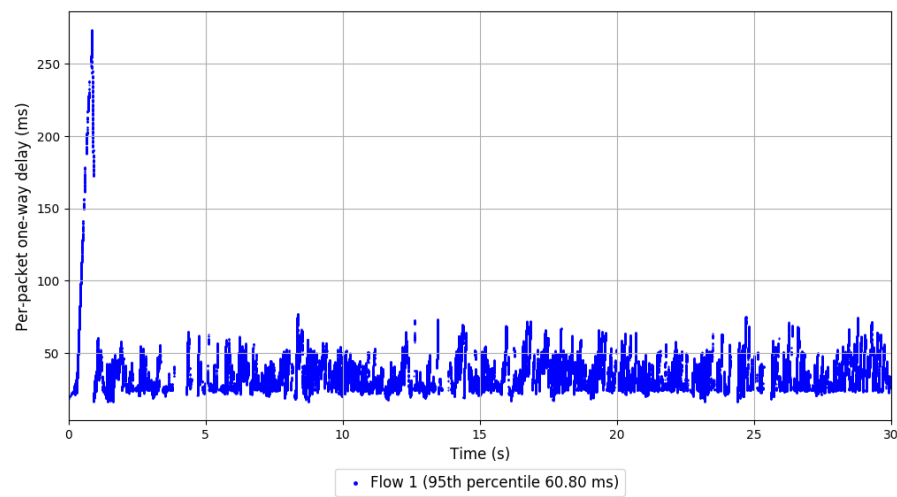
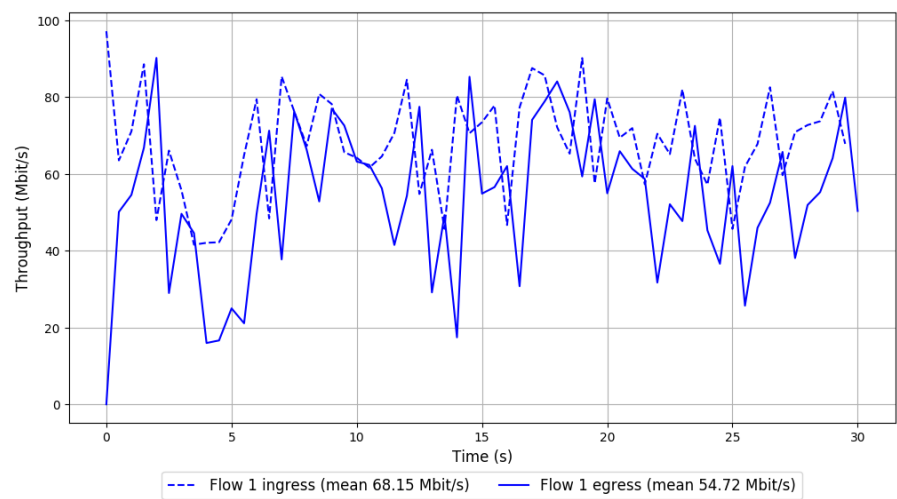


Run 5: Statistics of Verus

Start at: 2019-02-20 06:47:42  
End at: 2019-02-20 06:48:12  
Local clock offset: -0.811 ms  
Remote clock offset: -3.044 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 54.72 Mbit/s  
95th percentile per-packet one-way delay: 60.799 ms  
Loss rate: 19.73%  
-- Flow 1:  
Average throughput: 54.72 Mbit/s  
95th percentile per-packet one-way delay: 60.799 ms  
Loss rate: 19.73%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-02-20 05:20:11

End at: 2019-02-20 05:20:41

Local clock offset: 1.9 ms

Remote clock offset: -4.45 ms

# Below is generated by plot.py at 2019-02-20 07:23:07

# Datalink statistics

-- Total of 1 flow:

Average throughput: 36.65 Mbit/s

95th percentile per-packet one-way delay: 26.407 ms

Loss rate: 1.98%

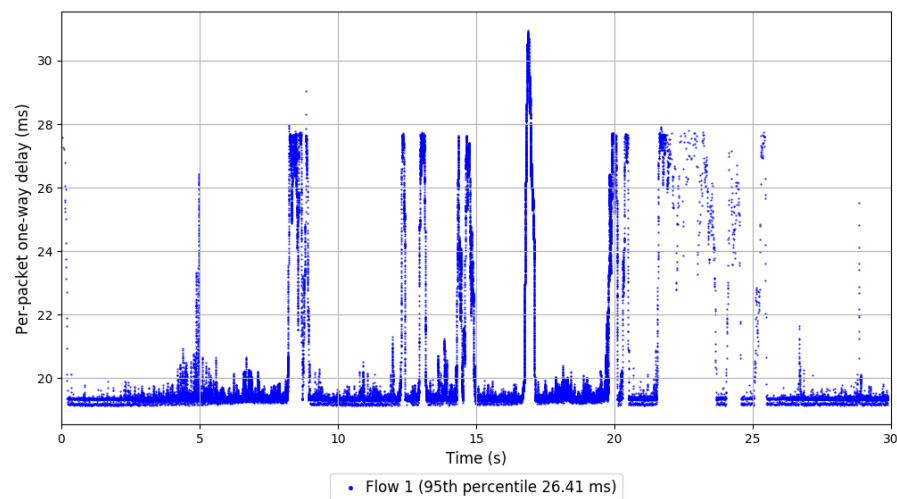
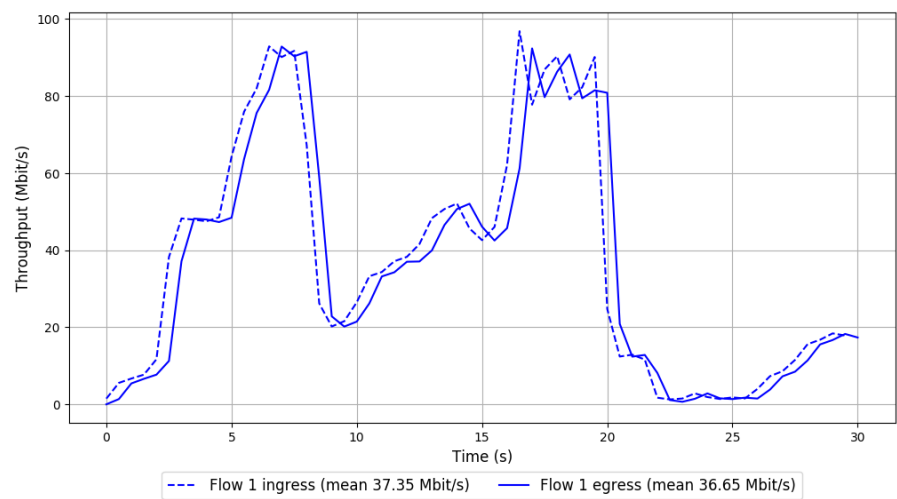
-- Flow 1:

Average throughput: 36.65 Mbit/s

95th percentile per-packet one-way delay: 26.407 ms

Loss rate: 1.98%

Run 1: Report of PCC-Vivace — Data Link





Run 2: Statistics of PCC-Vivace

Start at: 2019-02-20 05:45:44

End at: 2019-02-20 05:46:14

Local clock offset: 0.309 ms

Remote clock offset: -3.146 ms

# Below is generated by plot.py at 2019-02-20 07:23:07

# Datalink statistics

-- Total of 1 flow:

Average throughput: 5.61 Mbit/s

95th percentile per-packet one-way delay: 25.336 ms

Loss rate: 3.43%

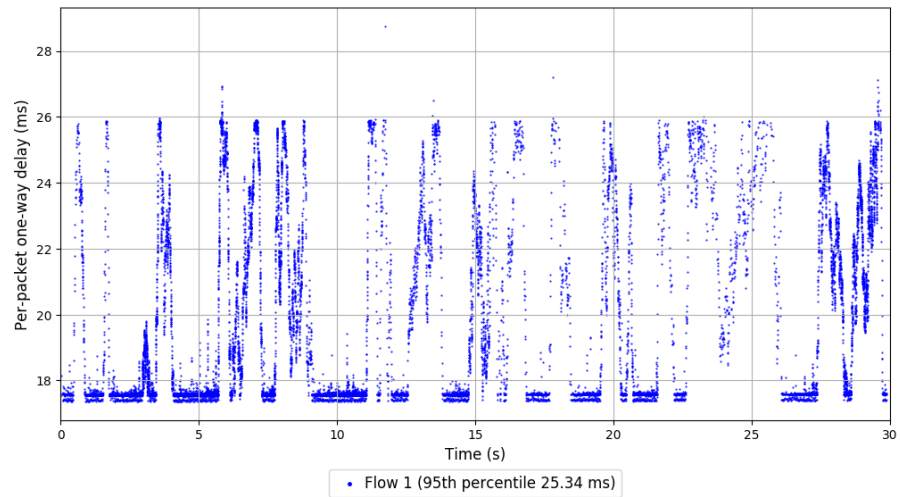
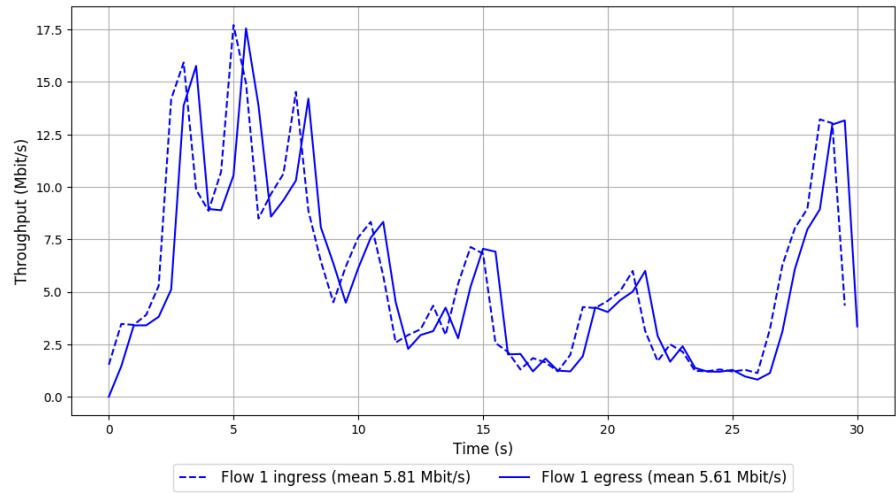
-- Flow 1:

Average throughput: 5.61 Mbit/s

95th percentile per-packet one-way delay: 25.336 ms

Loss rate: 3.43%

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

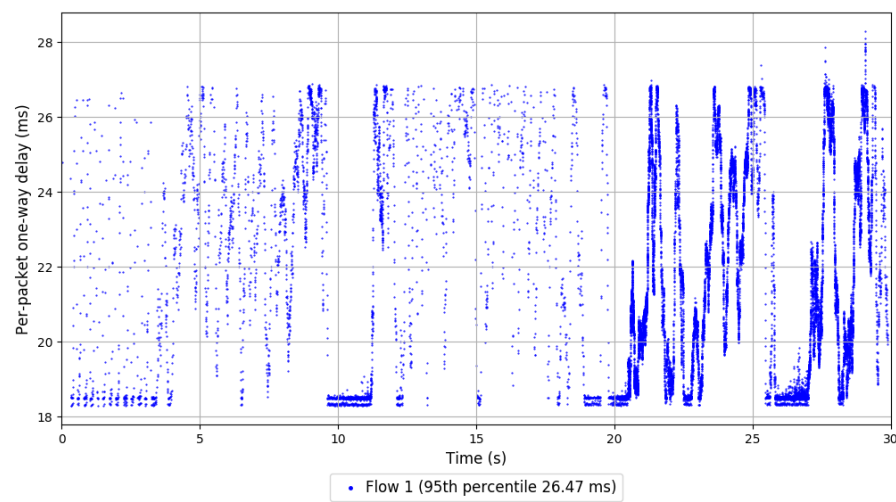
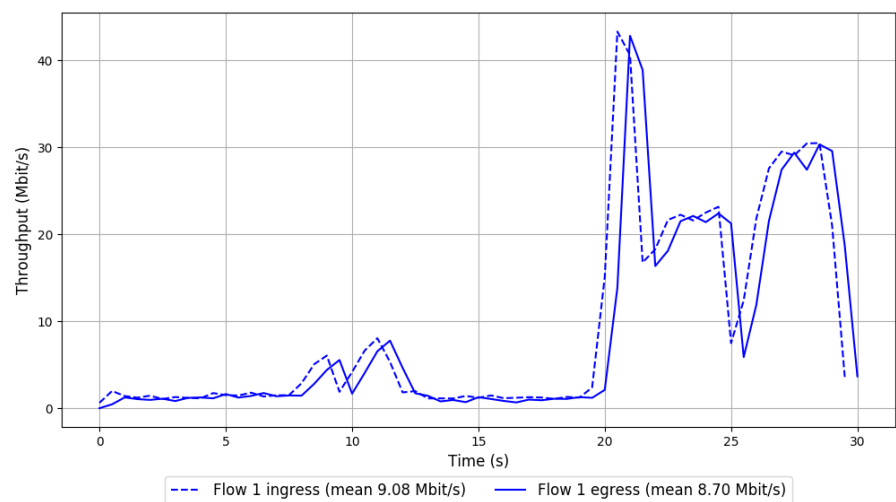


Run 3: Statistics of PCC-Vivace

Start at: 2019-02-20 06:11:38  
End at: 2019-02-20 06:12:08  
Local clock offset: -0.143 ms  
Remote clock offset: -3.585 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 8.70 Mbit/s  
95th percentile per-packet one-way delay: 26.474 ms  
Loss rate: 4.30%  
-- Flow 1:  
Average throughput: 8.70 Mbit/s  
95th percentile per-packet one-way delay: 26.474 ms  
Loss rate: 4.30%

Run 3: Report of PCC-Vivace — Data Link

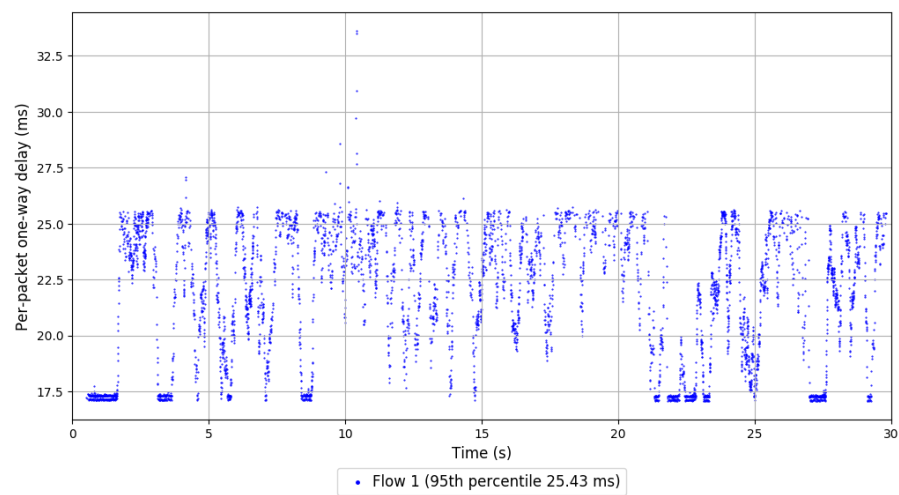
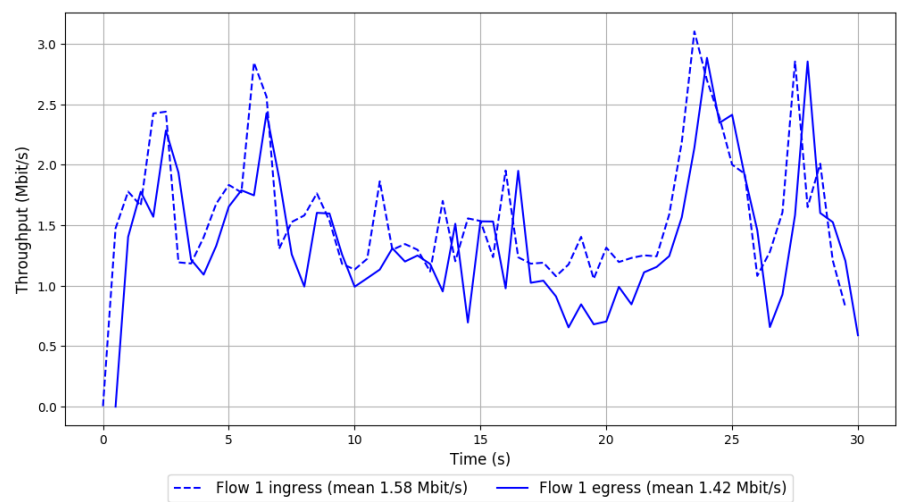


Run 4: Statistics of PCC-Vivace

Start at: 2019-02-20 06:37:00  
End at: 2019-02-20 06:37:30  
Local clock offset: 0.235 ms  
Remote clock offset: -2.442 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 1.42 Mbit/s  
95th percentile per-packet one-way delay: 25.429 ms  
Loss rate: 12.26%  
-- Flow 1:  
Average throughput: 1.42 Mbit/s  
95th percentile per-packet one-way delay: 25.429 ms  
Loss rate: 12.26%

Run 4: Report of PCC-Vivace — Data Link

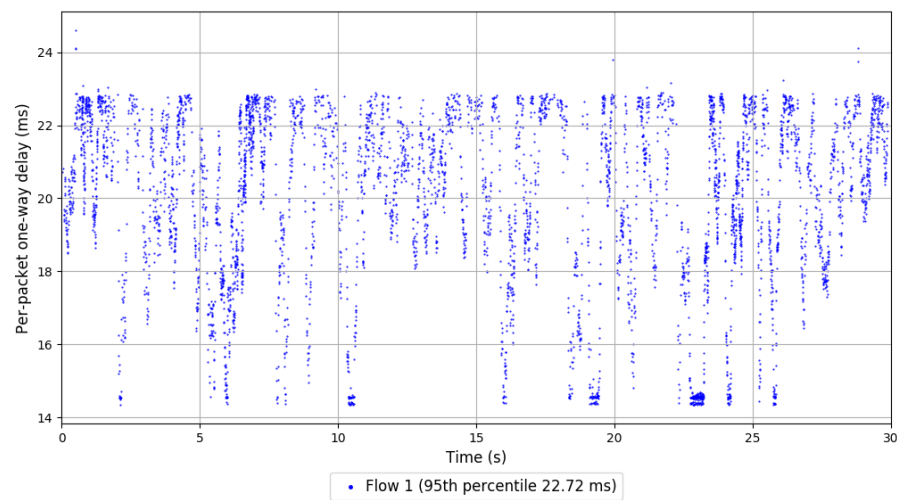
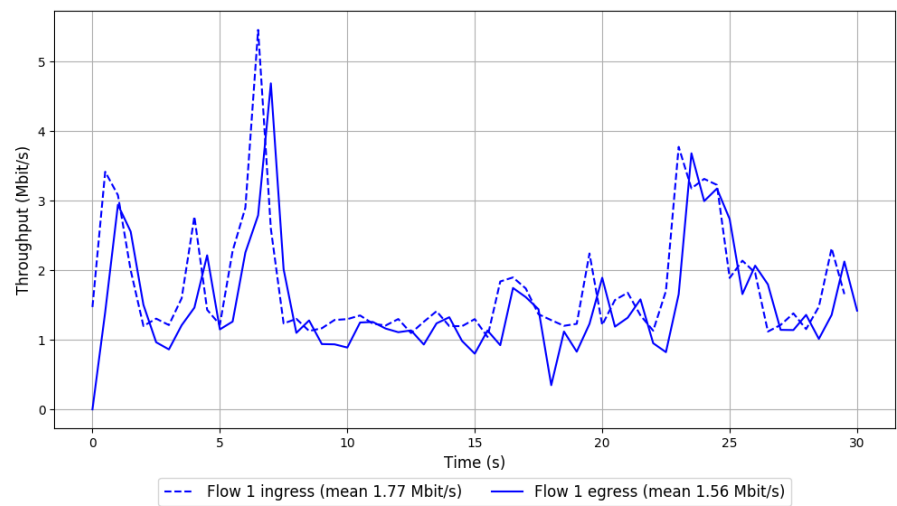


Run 5: Statistics of PCC-Vivace

Start at: 2019-02-20 07:04:06  
End at: 2019-02-20 07:04:37  
Local clock offset: -1.229 ms  
Remote clock offset: -1.851 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 1.56 Mbit/s  
95th percentile per-packet one-way delay: 22.723 ms  
Loss rate: 12.35%  
-- Flow 1:  
Average throughput: 1.56 Mbit/s  
95th percentile per-packet one-way delay: 22.723 ms  
Loss rate: 12.35%

Run 5: Report of PCC-Vivace — Data Link





Run 1: Statistics of WebRTC media

Start at: 2019-02-20 05:29:05

End at: 2019-02-20 05:29:35

Local clock offset: 2.107 ms

Remote clock offset: -4.415 ms

# Below is generated by plot.py at 2019-02-20 07:23:07

# Datalink statistics

-- Total of 1 flow:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 27.613 ms

Loss rate: 4.94%

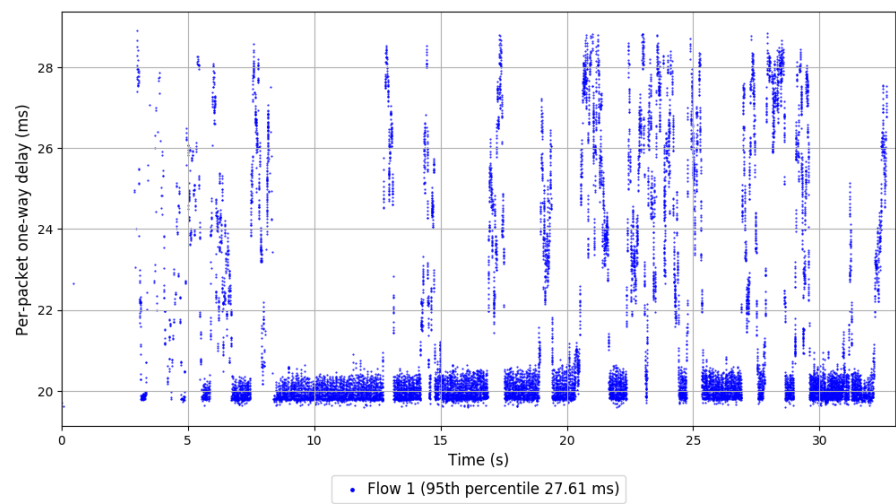
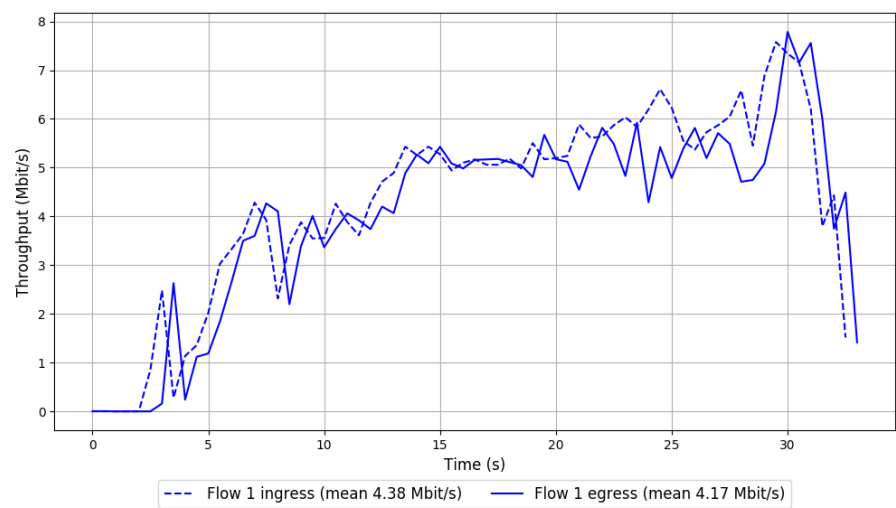
-- Flow 1:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 27.613 ms

Loss rate: 4.94%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-02-20 05:54:33

End at: 2019-02-20 05:55:03

Local clock offset: -0.154 ms

Remote clock offset: -3.44 ms

# Below is generated by plot.py at 2019-02-20 07:23:07

# Datalink statistics

-- Total of 1 flow:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 25.719 ms

Loss rate: 2.95%

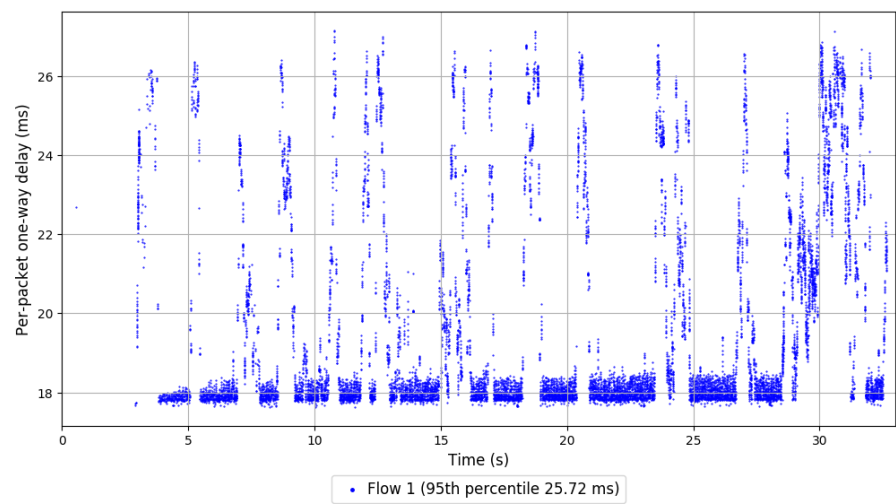
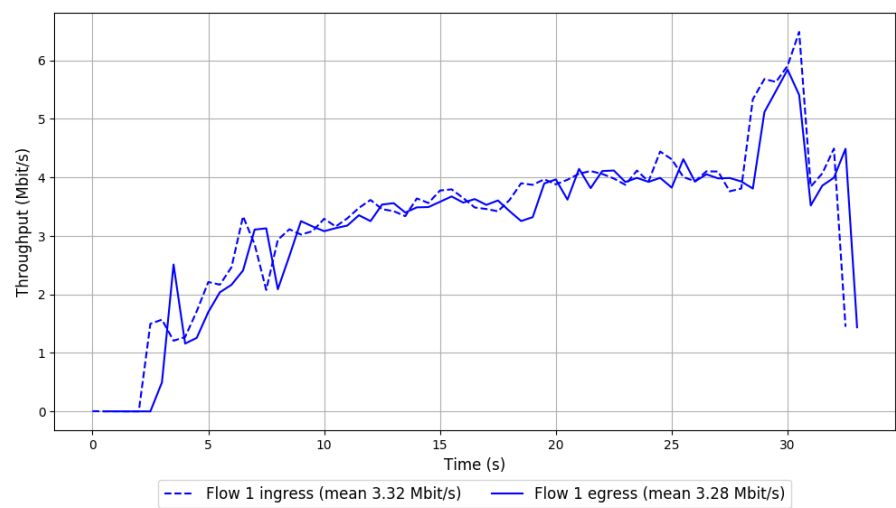
-- Flow 1:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 25.719 ms

Loss rate: 2.95%

Run 2: Report of WebRTC media — Data Link

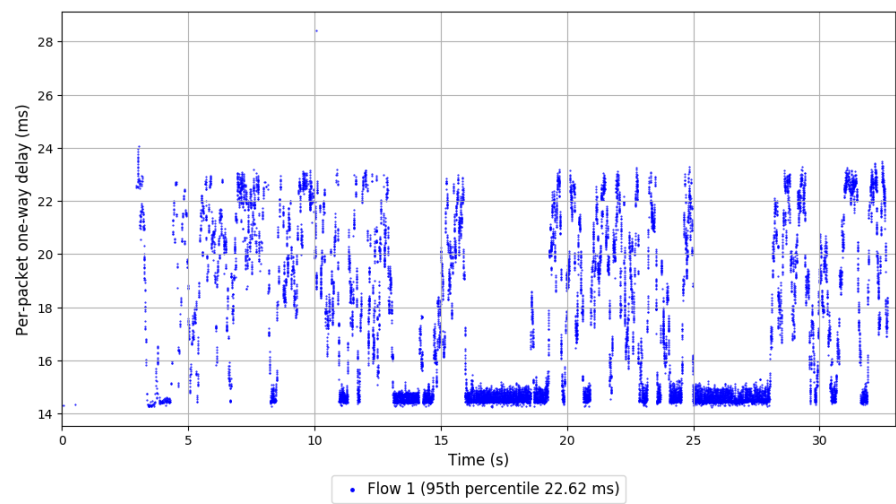
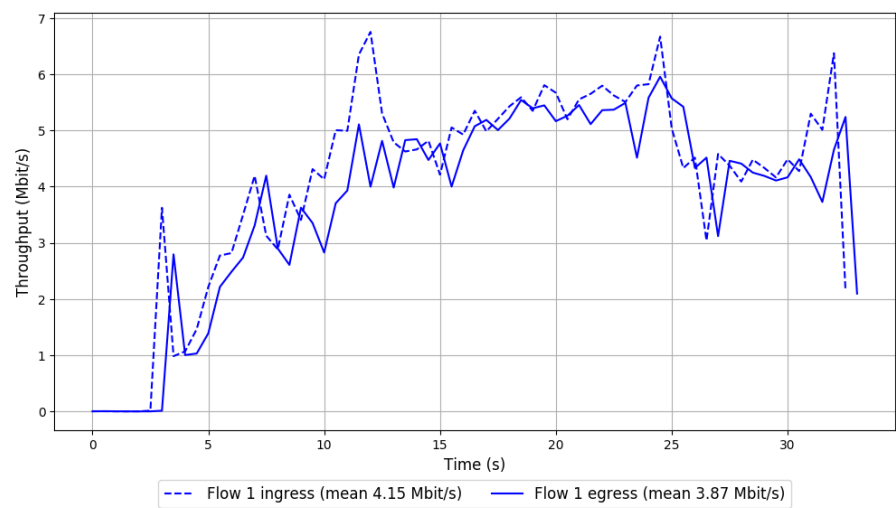


Run 3: Statistics of WebRTC media

Start at: 2019-02-20 06:20:03  
End at: 2019-02-20 06:20:33  
Local clock offset: -3.646 ms  
Remote clock offset: -2.707 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 3.87 Mbit/s  
95th percentile per-packet one-way delay: 22.624 ms  
Loss rate: 6.92%  
-- Flow 1:  
Average throughput: 3.87 Mbit/s  
95th percentile per-packet one-way delay: 22.624 ms  
Loss rate: 6.92%

Run 3: Report of WebRTC media — Data Link

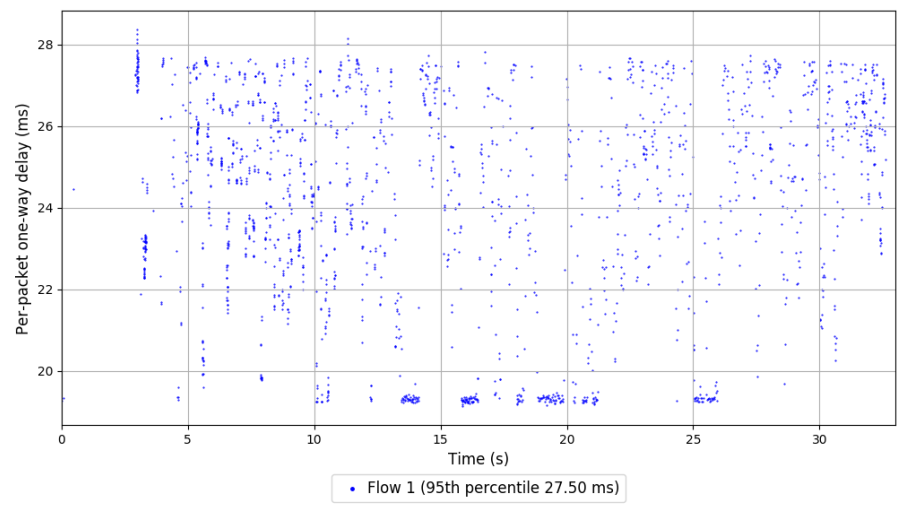
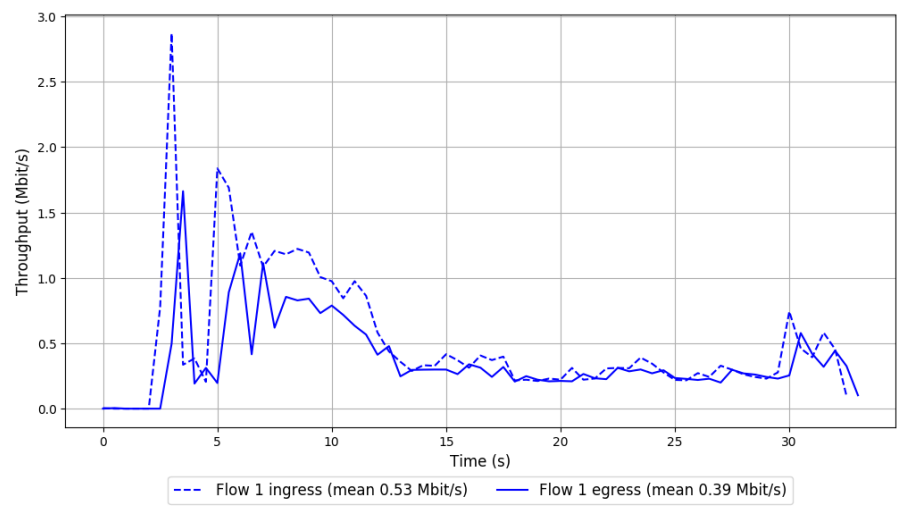


Run 4: Statistics of WebRTC media

Start at: 2019-02-20 06:45:30  
End at: 2019-02-20 06:46:00  
Local clock offset: 1.976 ms  
Remote clock offset: -3.164 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.39 Mbit/s  
95th percentile per-packet one-way delay: 27.497 ms  
Loss rate: 27.62%  
-- Flow 1:  
Average throughput: 0.39 Mbit/s  
95th percentile per-packet one-way delay: 27.497 ms  
Loss rate: 27.62%

Run 4: Report of WebRTC media — Data Link





Run 5: Statistics of WebRTC media

Start at: 2019-02-20 07:13:34  
End at: 2019-02-20 07:14:05  
Local clock offset: 2.008 ms  
Remote clock offset: -3.063 ms

# Below is generated by plot.py at 2019-02-20 07:23:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 3.73 Mbit/s  
95th percentile per-packet one-way delay: 27.292 ms  
Loss rate: 11.90%  
-- Flow 1:  
Average throughput: 3.73 Mbit/s  
95th percentile per-packet one-way delay: 27.292 ms  
Loss rate: 11.90%

Run 5: Report of WebRTC media — Data Link

