

## Pantheon Report

Generated at 2019-07-12 02:14:32 (UTC).

Data path: GCE Iowa on *ens4 (remote)* → GCE Sydney on *ens4 (local)*.

Repeated the test of 24 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against *time.google.com* and have been applied to correct the timestamps in logs.

### System info:

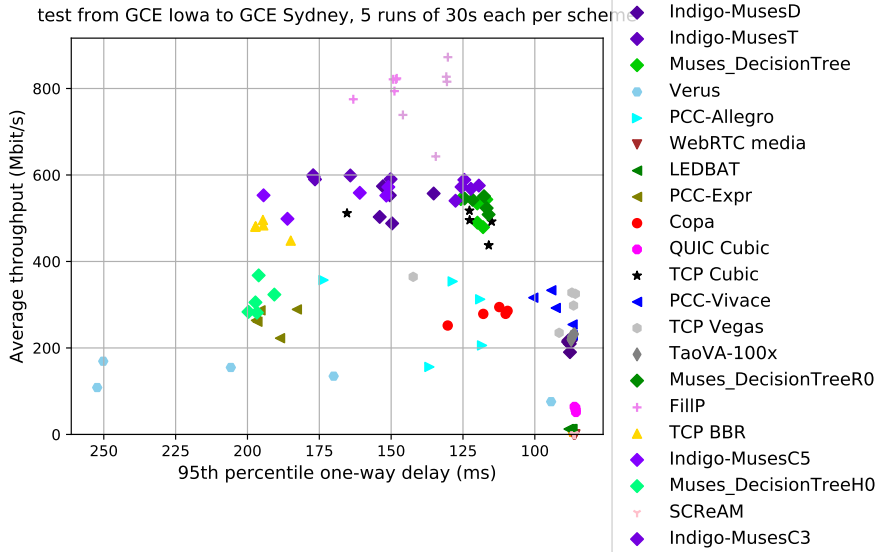
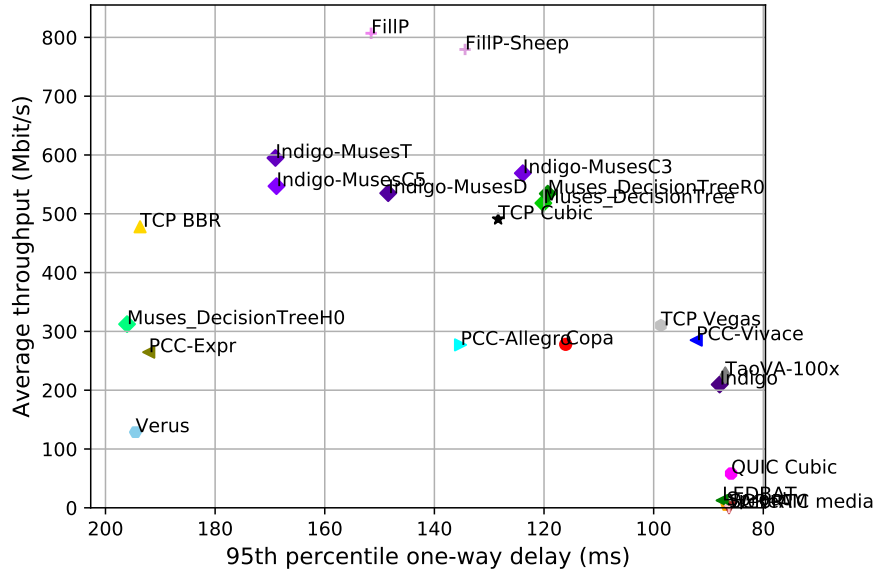
```
Linux 4.15.0-1034-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

```
branch: muses @ 2076e1149a241f3edb4365d686df32342bf9561f
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 8bb93ffff2b107204a92d8b72449fc0c55e15f00
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 GCE Iowa to GCE Sydney, 5 runs of 30s each per scheme  
 (mean of all runs by scheme)



scheme	# runs	mean avg tput (Mbit/s)	mean 95th-%ile delay (ms)	mean loss rate (%)
		flow 1	flow 1	flow 1
TCP BBR	5	477.92	193.69	1.40
Copa	5	277.98	116.05	0.74
TCP Cubic	5	490.85	128.37	0.56
FillP	5	806.97	151.54	2.38
FillP-Sheep	5	779.43	134.40	0.91
Indigo	5	209.63	87.97	0.71
Indigo-MusesC3	5	569.02	123.87	0.72
Indigo-MusesC5	5	547.00	168.81	1.35
Indigo-MusesD	5	535.04	148.43	0.66
Indigo-MusesT	5	594.94	169.00	0.92
LEDBAT	5	12.52	87.51	1.15
Muses_DecisionTree	5	518.15	120.12	0.97
Muses_DecisionTreeH0	5	312.35	196.07	9.82
Muses_DecisionTreeR0	5	534.23	119.32	0.81
PCC-Allegro	5	277.07	135.23	1.45
PCC-Expr	5	264.62	192.11	2.03
QUIC Cubic	5	58.25	85.87	0.93
SCReAM	5	0.22	86.24	0.54
Sprout	5	4.21	86.69	0.69
TaoVA-100x	5	225.43	86.94	0.89
TCP Vegas	5	310.17	98.68	0.55
Verus	5	128.65	194.52	3.06
PCC-Vivace	5	285.13	92.24	0.76
WebRTC media	5	0.05	86.25	0.00



Run 1: Statistics of TCP BBR

Start at: 2019-07-11 21:36:31

End at: 2019-07-11 21:37:01

Local clock offset: 0.691 ms

Remote clock offset: 0.89 ms

# Below is generated by plot.py at 2019-07-12 00:29:27

# Datalink statistics

-- Total of 1 flow:

Average throughput: 496.07 Mbit/s

95th percentile per-packet one-way delay: 194.627 ms

Loss rate: 1.55%

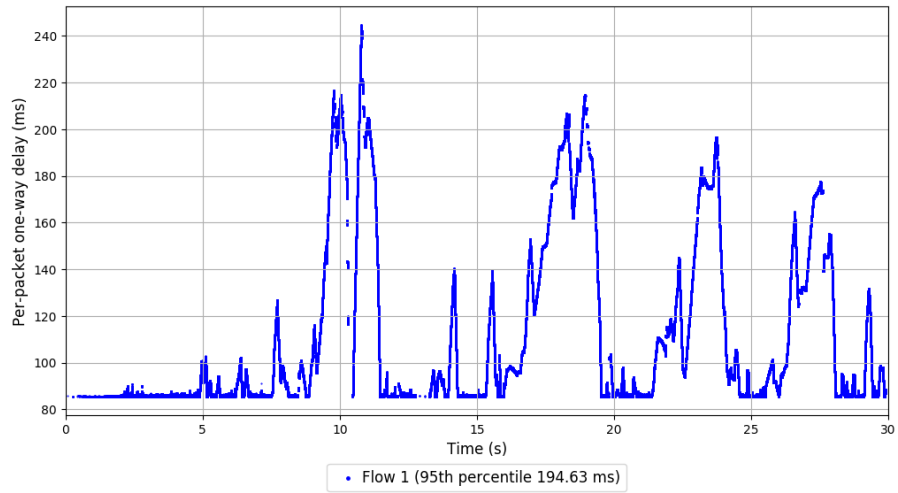
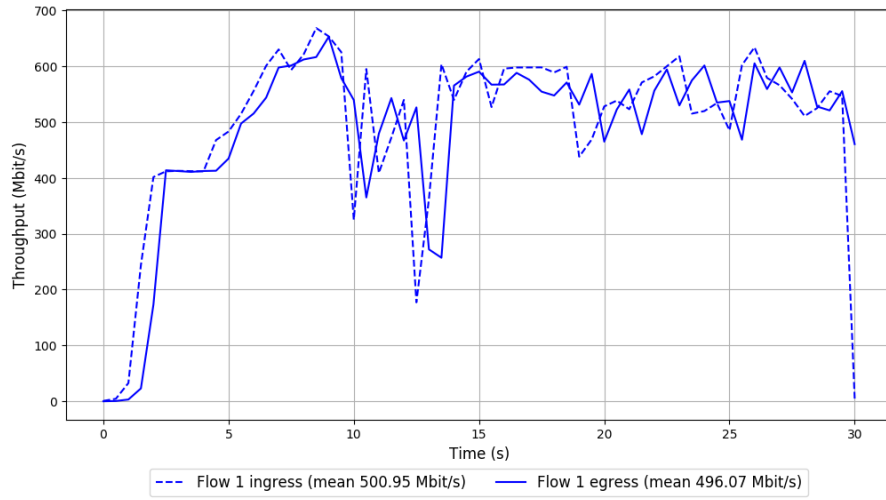
-- Flow 1:

Average throughput: 496.07 Mbit/s

95th percentile per-packet one-way delay: 194.627 ms

Loss rate: 1.55%

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



Run 2: Statistics of TCP BBR

Start at: 2019-07-11 22:12:02

End at: 2019-07-11 22:12:32

Local clock offset: 0.526 ms

Remote clock offset: 0.442 ms

# Below is generated by plot.py at 2019-07-12 00:29:27

# Datalink statistics

-- Total of 1 flow:

Average throughput: 481.56 Mbit/s

95th percentile per-packet one-way delay: 197.149 ms

Loss rate: 1.51%

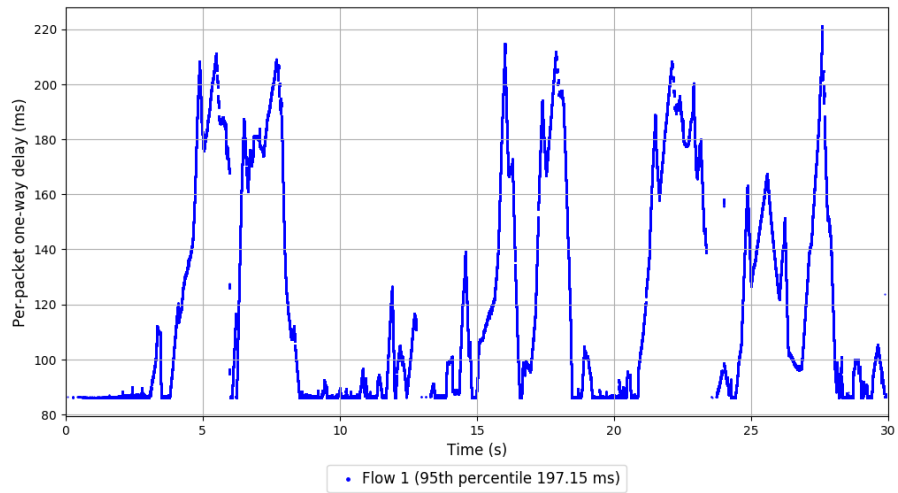
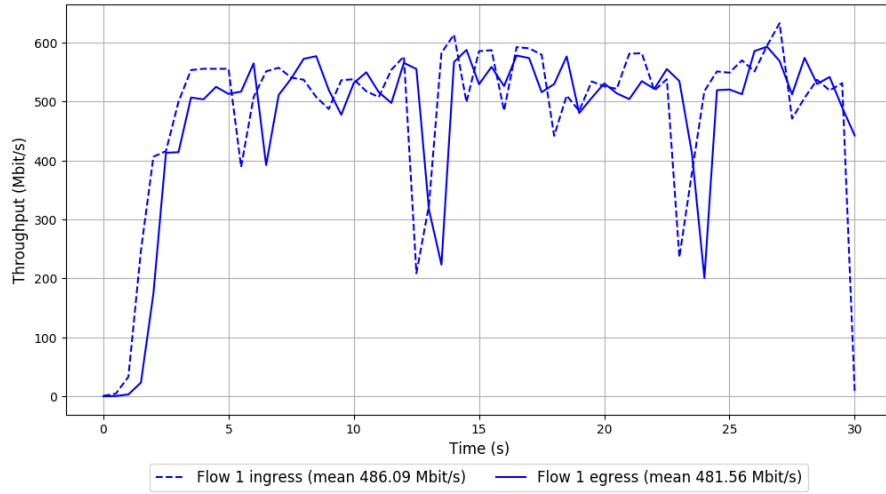
-- Flow 1:

Average throughput: 481.56 Mbit/s

95th percentile per-packet one-way delay: 197.149 ms

Loss rate: 1.51%

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



Run 3: Statistics of TCP BBR

Start at: 2019-07-11 22:47:35

End at: 2019-07-11 22:48:05

Local clock offset: 0.083 ms

Remote clock offset: 0.162 ms

# Below is generated by plot.py at 2019-07-12 00:29:27

# Datalink statistics

-- Total of 1 flow:

Average throughput: 480.20 Mbit/s

95th percentile per-packet one-way delay: 197.235 ms

Loss rate: 1.29%

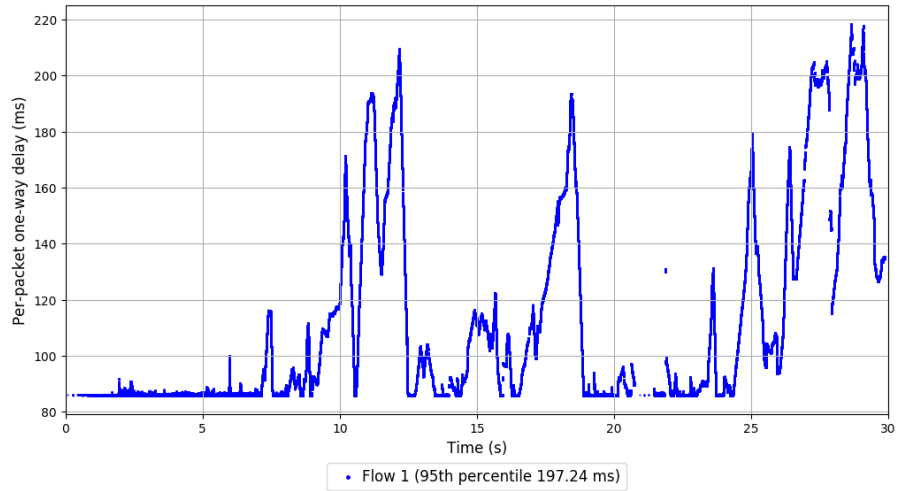
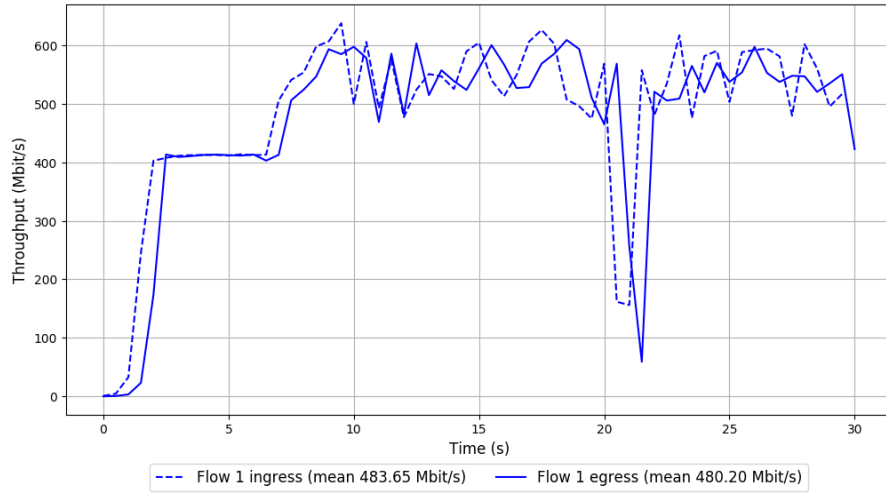
-- Flow 1:

Average throughput: 480.20 Mbit/s

95th percentile per-packet one-way delay: 197.235 ms

Loss rate: 1.29%

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



Run 4: Statistics of TCP BBR

Start at: 2019-07-11 23:22:57

End at: 2019-07-11 23:23:27

Local clock offset: -0.321 ms

Remote clock offset: 0.033 ms

# Below is generated by plot.py at 2019-07-12 00:29:27

# Datalink statistics

-- Total of 1 flow:

Average throughput: 483.51 Mbit/s

95th percentile per-packet one-way delay: 194.497 ms

Loss rate: 1.51%

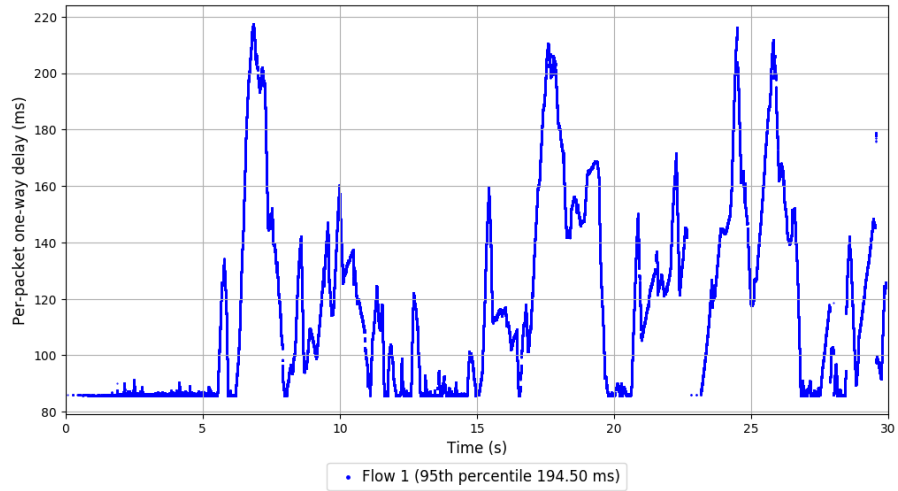
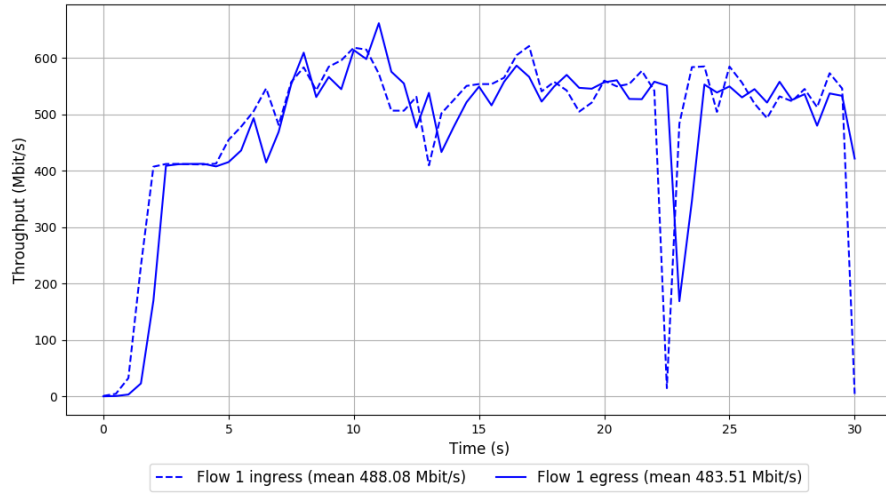
-- Flow 1:

Average throughput: 483.51 Mbit/s

95th percentile per-packet one-way delay: 194.497 ms

Loss rate: 1.51%

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





Run 5: Statistics of TCP BBR

Start at: 2019-07-11 23:58:34

End at: 2019-07-11 23:59:04

Local clock offset: -0.037 ms

Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2019-07-12 00:29:27

# Datalink statistics

-- Total of 1 flow:

Average throughput: 448.25 Mbit/s

95th percentile per-packet one-way delay: 184.939 ms

Loss rate: 1.15%

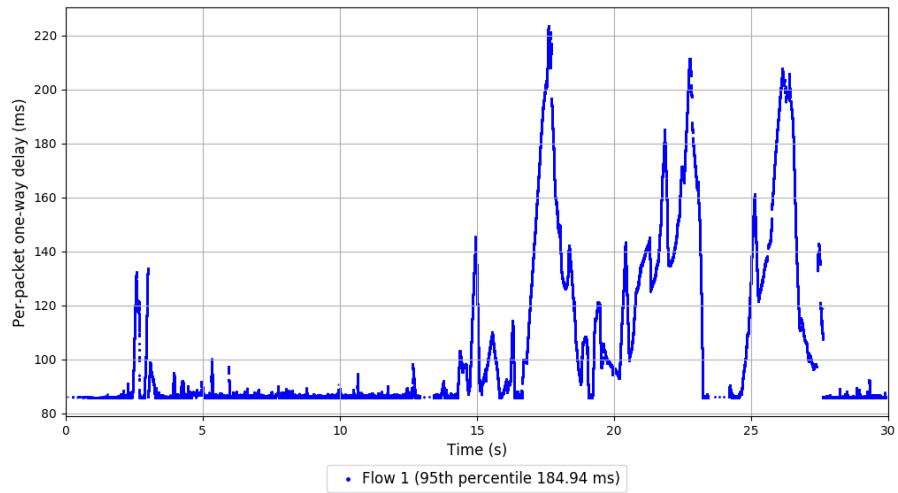
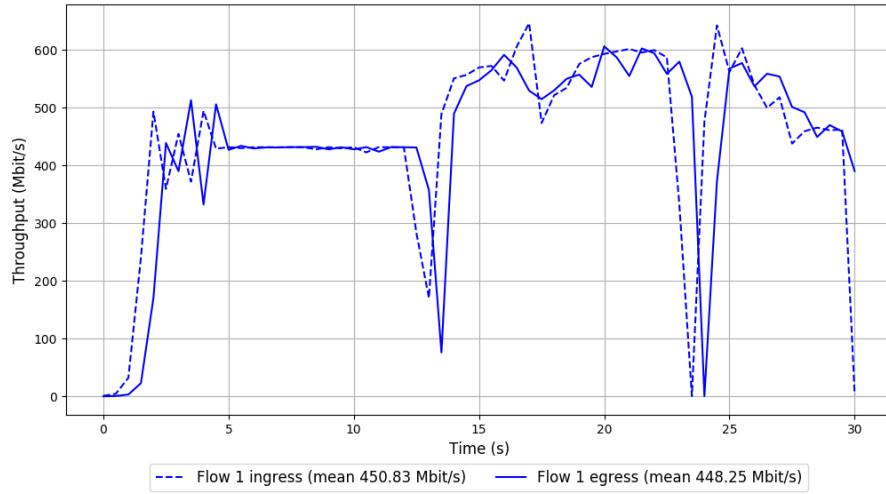
-- Flow 1:

Average throughput: 448.25 Mbit/s

95th percentile per-packet one-way delay: 184.939 ms

Loss rate: 1.15%

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



Run 1: Statistics of Copa

Start at: 2019-07-11 21:24:09

End at: 2019-07-11 21:24:39

Local clock offset: 2.877 ms

Remote clock offset: 1.6 ms

# Below is generated by plot.py at 2019-07-12 00:30:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 294.55 Mbit/s

95th percentile per-packet one-way delay: 112.364 ms

Loss rate: 0.71%

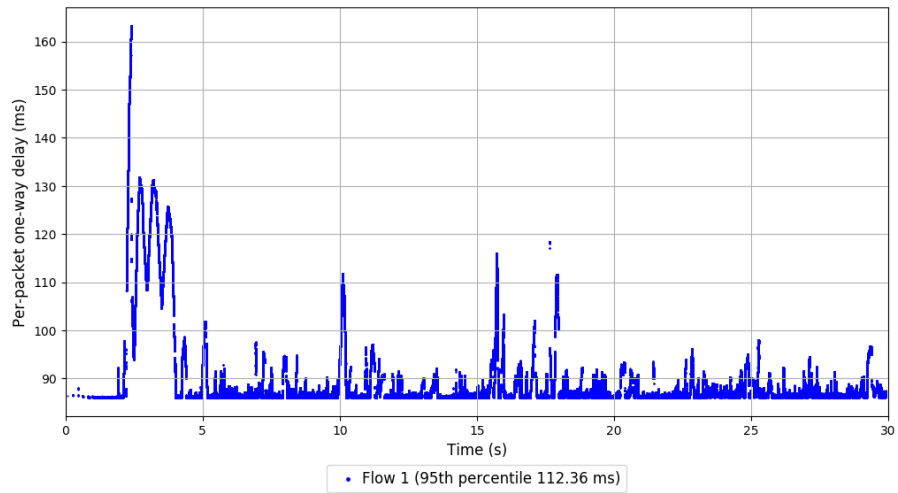
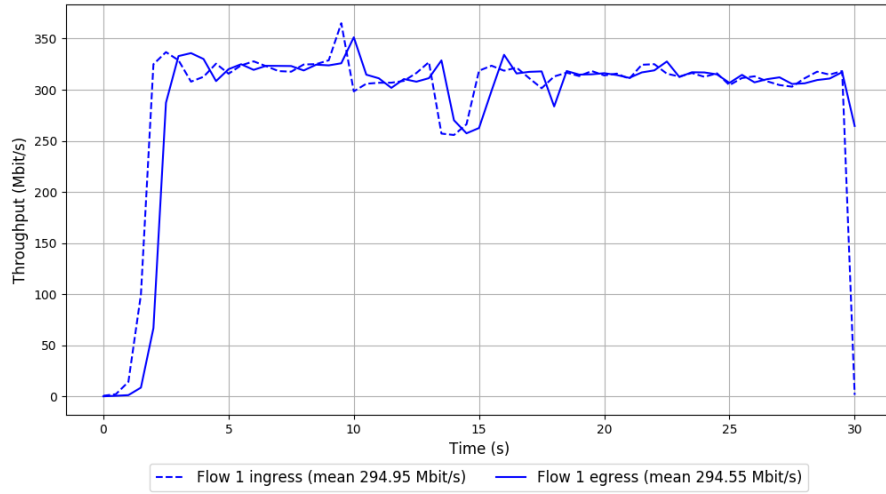
-- Flow 1:

Average throughput: 294.55 Mbit/s

95th percentile per-packet one-way delay: 112.364 ms

Loss rate: 0.71%

### Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-07-11 21:59:56

End at: 2019-07-11 22:00:26

Local clock offset: 0.292 ms

Remote clock offset: 0.667 ms

# Below is generated by plot.py at 2019-07-12 00:30:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 285.78 Mbit/s

95th percentile per-packet one-way delay: 109.483 ms

Loss rate: 0.45%

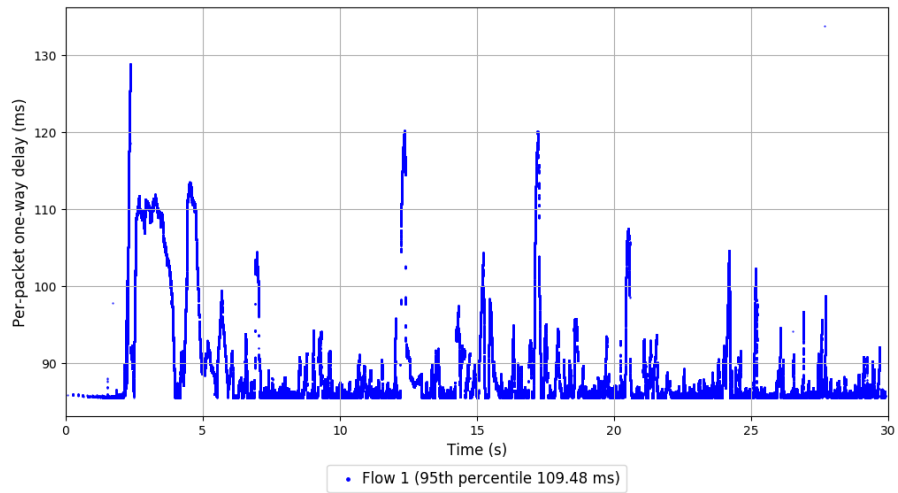
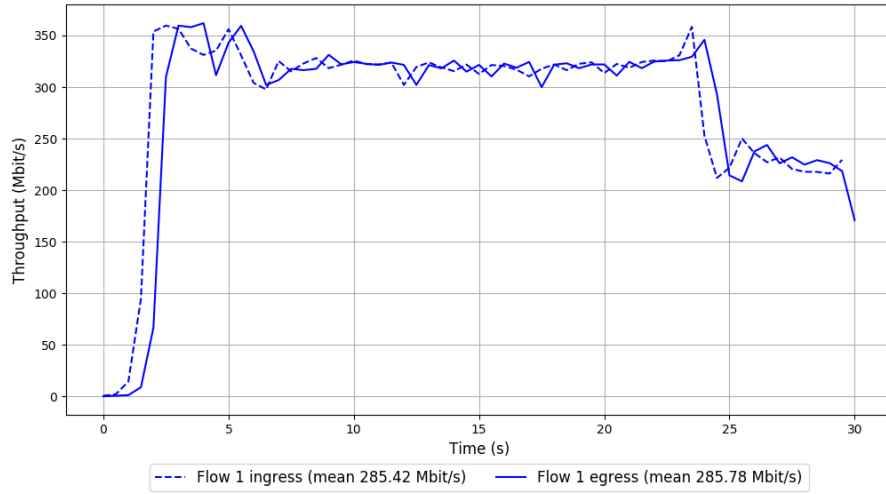
-- Flow 1:

Average throughput: 285.78 Mbit/s

95th percentile per-packet one-way delay: 109.483 ms

Loss rate: 0.45%

## Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2019-07-11 22:35:18

End at: 2019-07-11 22:35:48

Local clock offset: 0.148 ms

Remote clock offset: 0.271 ms

# Below is generated by plot.py at 2019-07-12 00:30:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 251.89 Mbit/s

95th percentile per-packet one-way delay: 130.314 ms

Loss rate: 0.80%

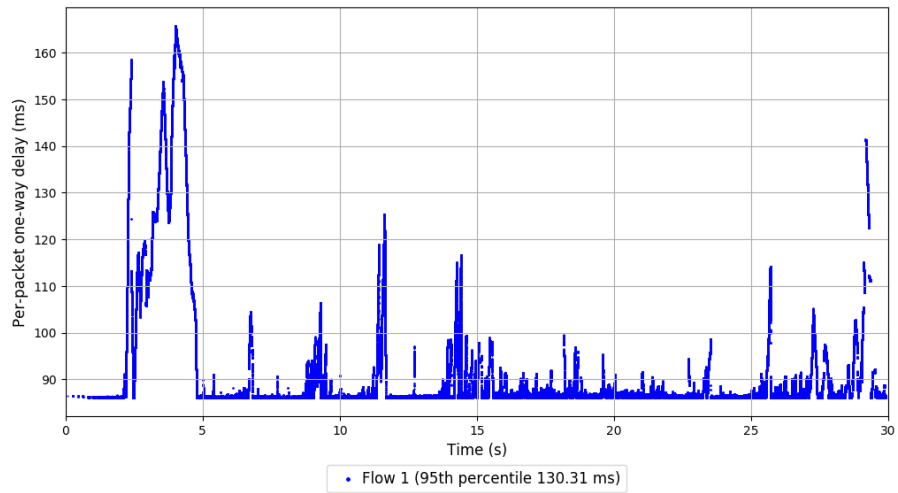
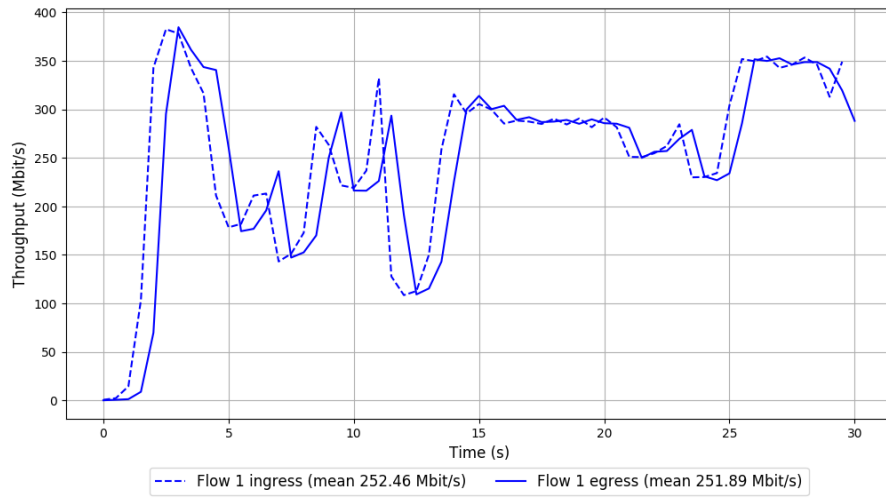
-- Flow 1:

Average throughput: 251.89 Mbit/s

95th percentile per-packet one-way delay: 130.314 ms

Loss rate: 0.80%

### Run 3: Report of Copa — Data Link





Run 4: Statistics of Copa

Start at: 2019-07-11 23:10:45

End at: 2019-07-11 23:11:15

Local clock offset: -0.378 ms

Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2019-07-12 00:37:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 278.92 Mbit/s

95th percentile per-packet one-way delay: 110.158 ms

Loss rate: 0.76%

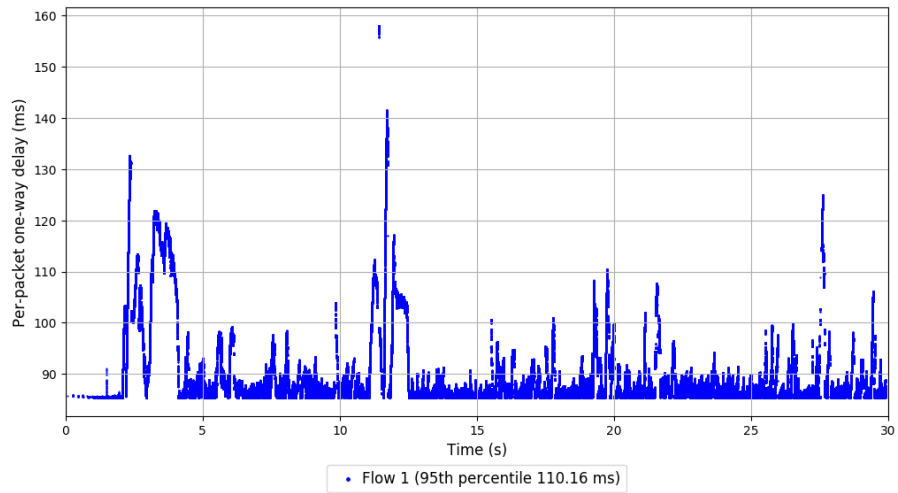
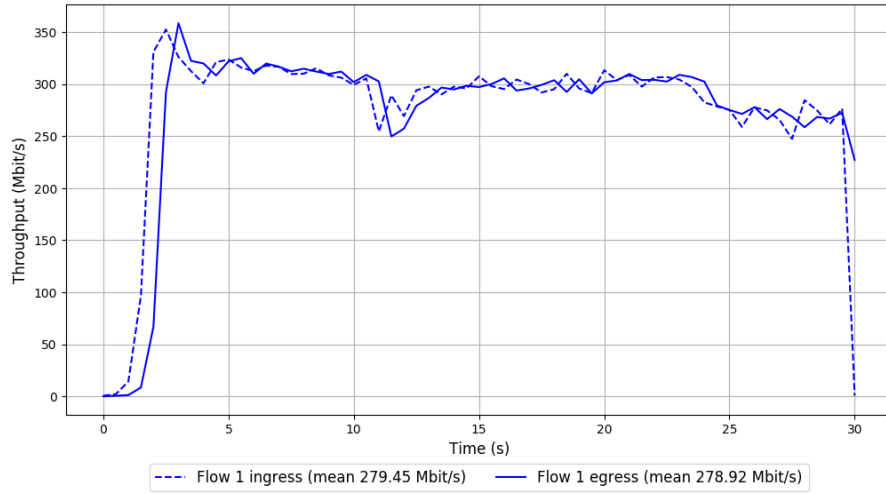
-- Flow 1:

Average throughput: 278.92 Mbit/s

95th percentile per-packet one-way delay: 110.158 ms

Loss rate: 0.76%

### Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-07-11 23:46:18

End at: 2019-07-11 23:46:48

Local clock offset: 0.374 ms

Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2019-07-12 00:38:11

# Datalink statistics

-- Total of 1 flow:

Average throughput: 278.76 Mbit/s

95th percentile per-packet one-way delay: 117.933 ms

Loss rate: 1.00%

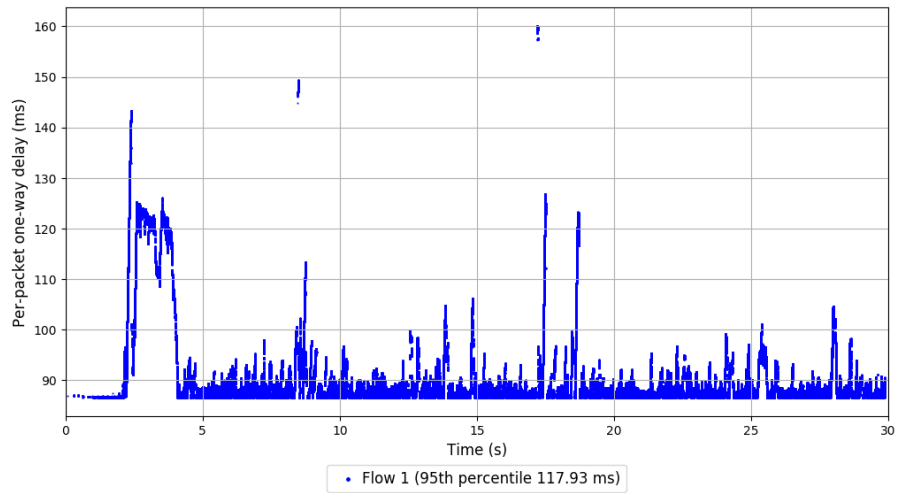
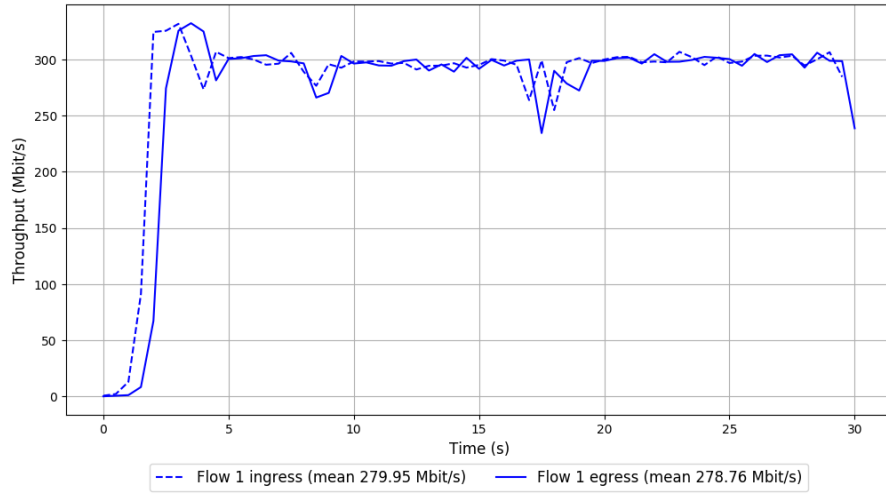
-- Flow 1:

Average throughput: 278.76 Mbit/s

95th percentile per-packet one-way delay: 117.933 ms

Loss rate: 1.00%

### Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-07-11 21:38:08

End at: 2019-07-11 21:38:38

Local clock offset: 0.968 ms

Remote clock offset: 0.879 ms

# Below is generated by plot.py at 2019-07-12 00:38:16

# Datalink statistics

-- Total of 1 flow:

Average throughput: 511.56 Mbit/s

95th percentile per-packet one-way delay: 165.353 ms

Loss rate: 0.55%

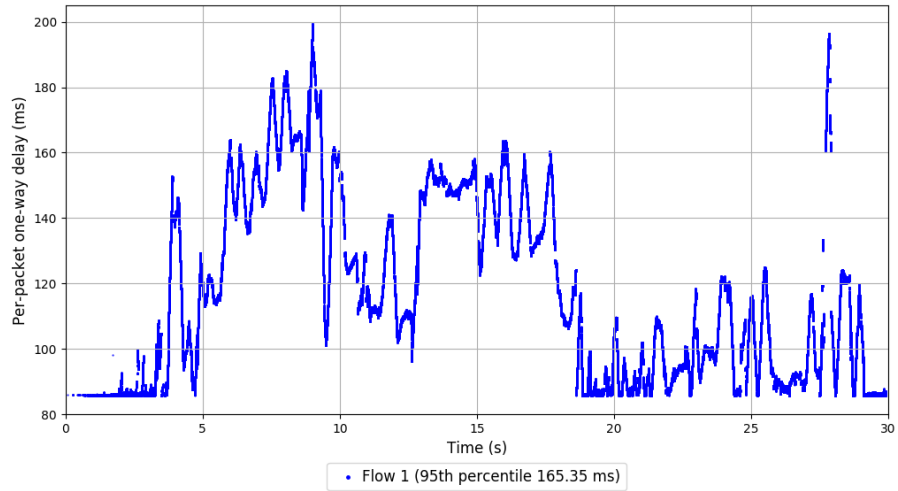
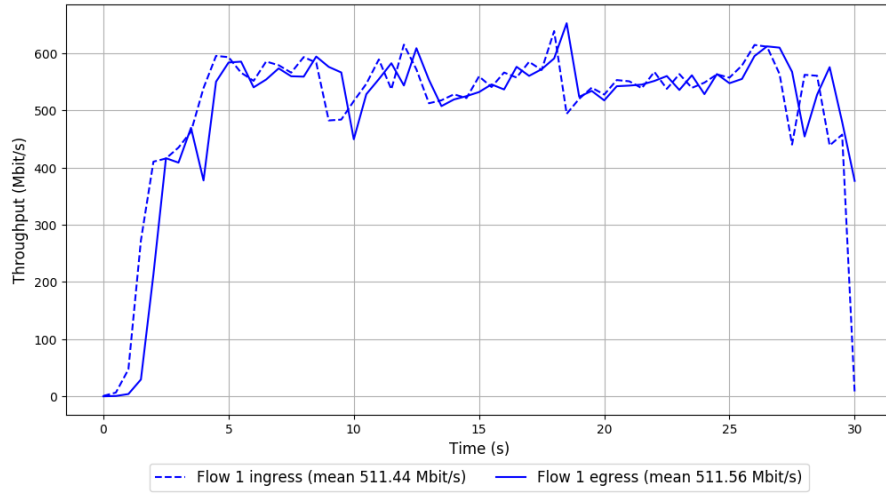
-- Flow 1:

Average throughput: 511.56 Mbit/s

95th percentile per-packet one-way delay: 165.353 ms

Loss rate: 0.55%

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



Run 2: Statistics of TCP Cubic

Start at: 2019-07-11 22:13:40

End at: 2019-07-11 22:14:11

Local clock offset: 0.292 ms

Remote clock offset: 0.422 ms

# Below is generated by plot.py at 2019-07-12 00:38:16

# Datalink statistics

-- Total of 1 flow:

Average throughput: 492.26 Mbit/s

95th percentile per-packet one-way delay: 115.036 ms

Loss rate: 0.69%

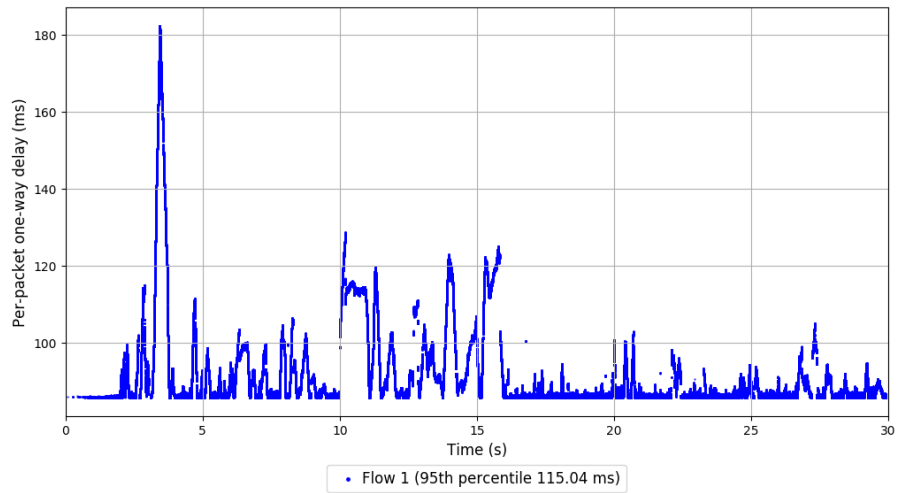
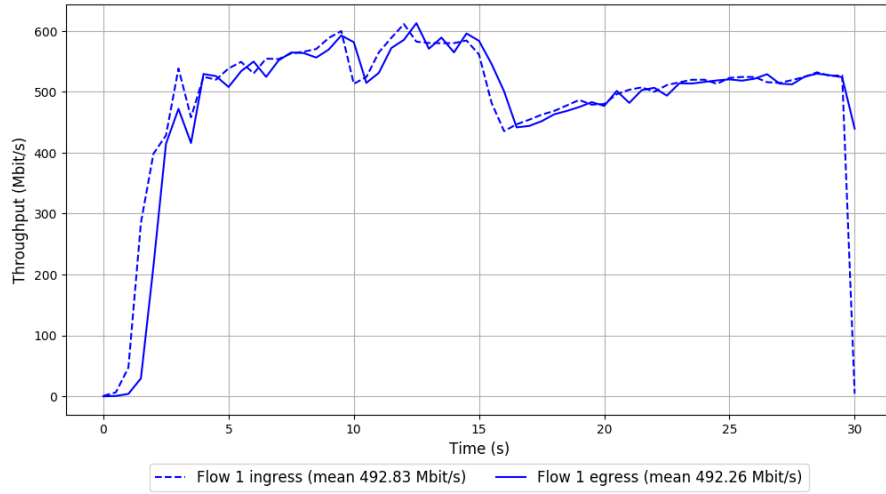
-- Flow 1:

Average throughput: 492.26 Mbit/s

95th percentile per-packet one-way delay: 115.036 ms

Loss rate: 0.69%

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





Run 3: Statistics of TCP Cubic

Start at: 2019-07-11 22:49:13

End at: 2019-07-11 22:49:43

Local clock offset: 0.481 ms

Remote clock offset: 0.165 ms

# Below is generated by plot.py at 2019-07-12 00:38:16

# Datalink statistics

-- Total of 1 flow:

Average throughput: 495.53 Mbit/s

95th percentile per-packet one-way delay: 122.688 ms

Loss rate: 0.53%

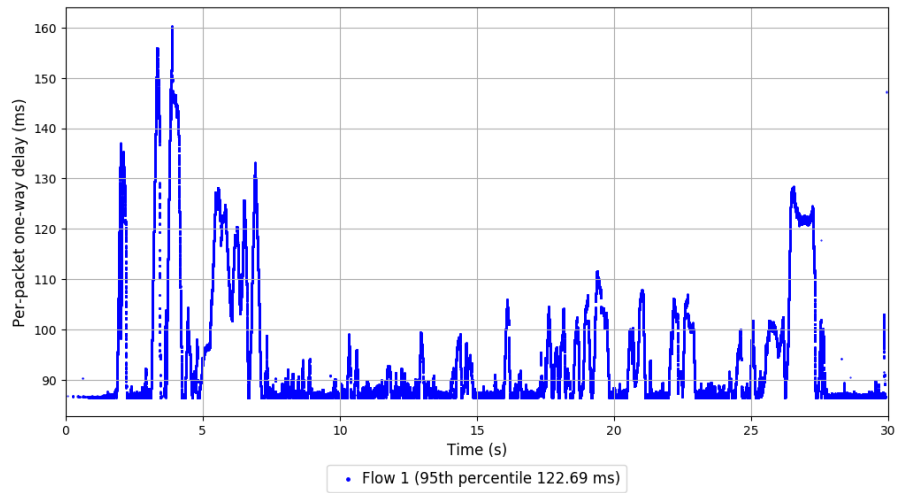
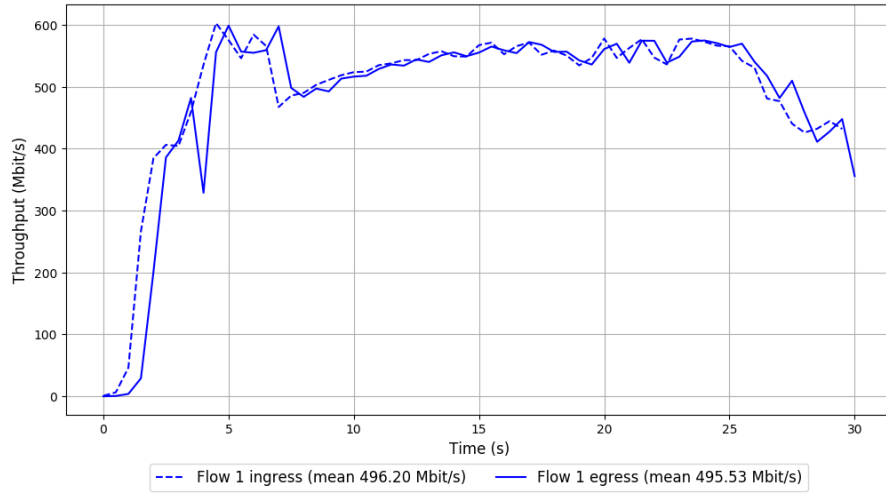
-- Flow 1:

Average throughput: 495.53 Mbit/s

95th percentile per-packet one-way delay: 122.688 ms

Loss rate: 0.53%

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



Run 4: Statistics of TCP Cubic

Start at: 2019-07-11 23:24:34

End at: 2019-07-11 23:25:04

Local clock offset: 0.337 ms

Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2019-07-12 00:38:16

# Datalink statistics

-- Total of 1 flow:

Average throughput: 437.42 Mbit/s

95th percentile per-packet one-way delay: 116.034 ms

Loss rate: 0.48%

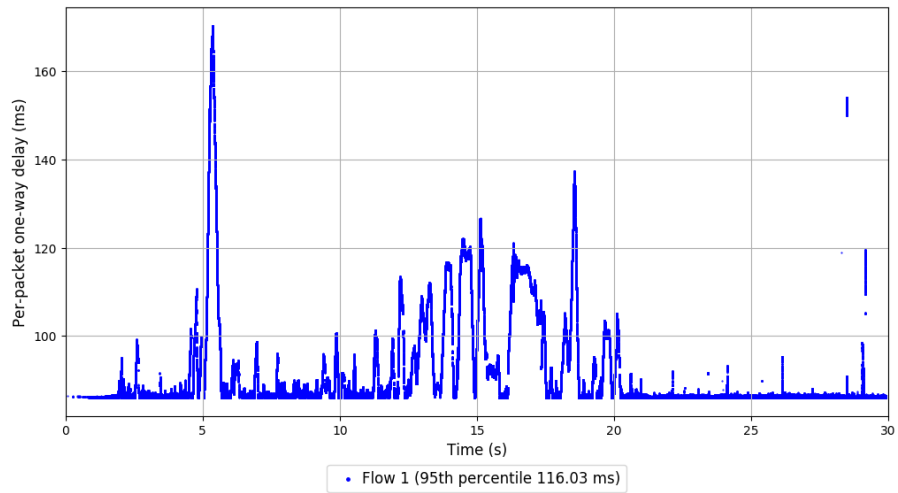
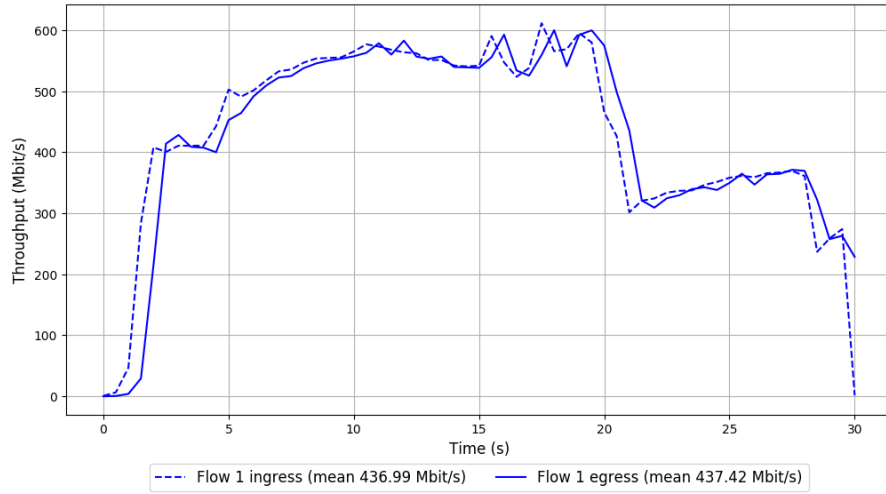
-- Flow 1:

Average throughput: 437.42 Mbit/s

95th percentile per-packet one-way delay: 116.034 ms

Loss rate: 0.48%

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



Run 5: Statistics of TCP Cubic

Start at: 2019-07-12 00:00:08

End at: 2019-07-12 00:00:38

Local clock offset: 0.349 ms

Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2019-07-12 00:39:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 517.48 Mbit/s

95th percentile per-packet one-way delay: 122.748 ms

Loss rate: 0.53%

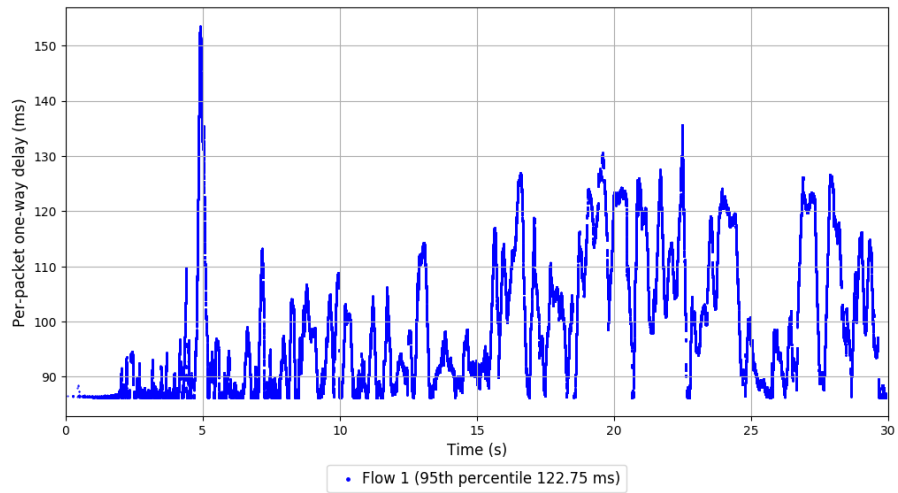
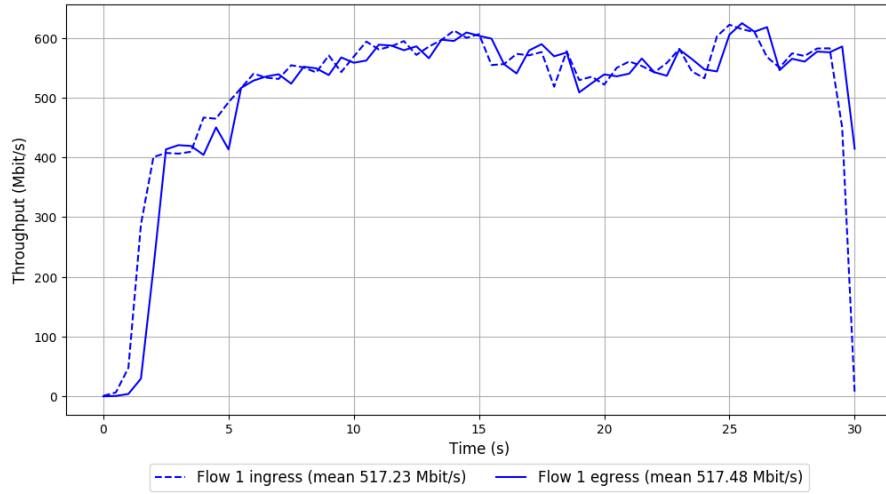
-- Flow 1:

Average throughput: 517.48 Mbit/s

95th percentile per-packet one-way delay: 122.748 ms

Loss rate: 0.53%

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



Run 1: Statistics of FillP

Start at: 2019-07-11 21:19:22

End at: 2019-07-11 21:19:52

Local clock offset: 4.21 ms

Remote clock offset: 2.534 ms

# Below is generated by plot.py at 2019-07-12 00:46:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 793.96 Mbit/s

95th percentile per-packet one-way delay: 148.848 ms

Loss rate: 1.62%

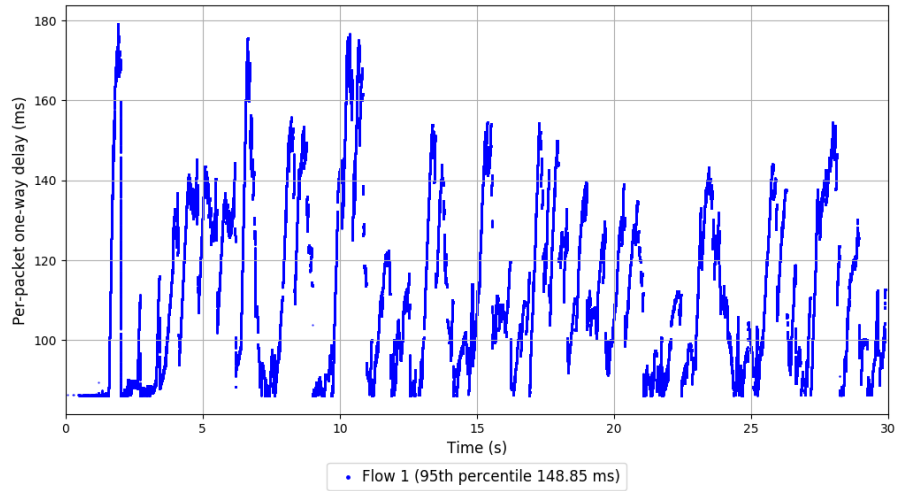
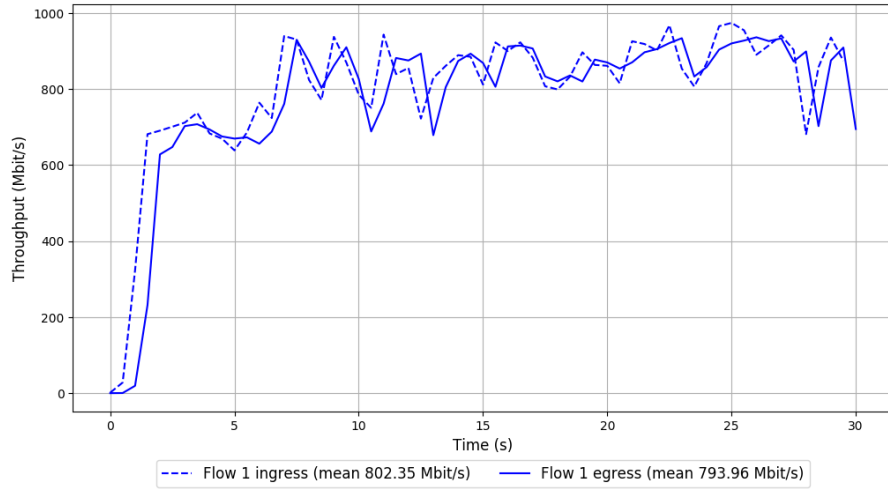
-- Flow 1:

Average throughput: 793.96 Mbit/s

95th percentile per-packet one-way delay: 148.848 ms

Loss rate: 1.62%

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





Run 2: Statistics of FillP

Start at: 2019-07-11 21:55:07

End at: 2019-07-11 21:55:37

Local clock offset: 0.636 ms

Remote clock offset: 0.97 ms

# Below is generated by plot.py at 2019-07-12 00:55:19

# Datalink statistics

-- Total of 1 flow:

Average throughput: 821.26 Mbit/s

95th percentile per-packet one-way delay: 149.293 ms

Loss rate: 2.23%

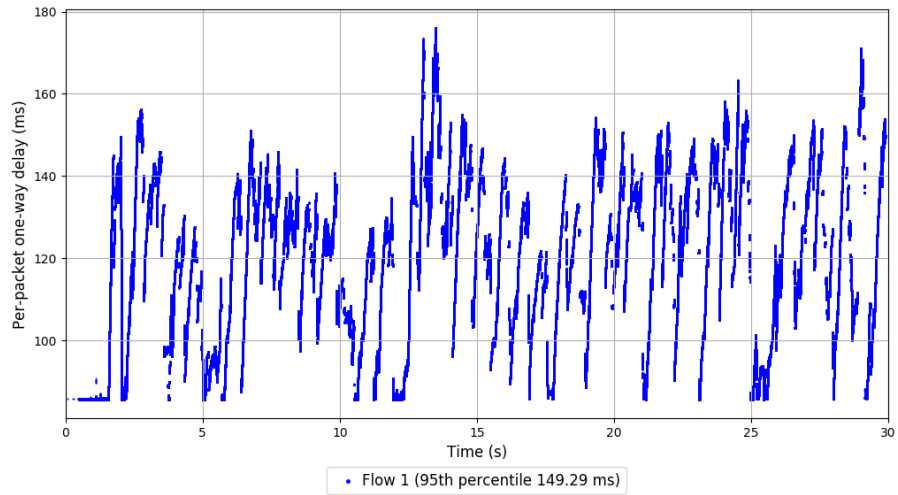
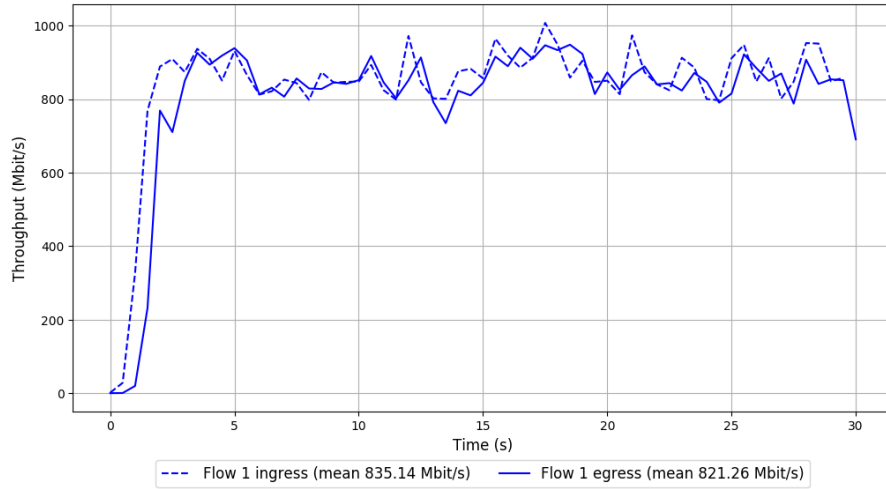
-- Flow 1:

Average throughput: 821.26 Mbit/s

95th percentile per-packet one-way delay: 149.293 ms

Loss rate: 2.23%

## Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2019-07-11 22:30:39

End at: 2019-07-11 22:31:09

Local clock offset: -0.127 ms

Remote clock offset: 0.424 ms

# Below is generated by plot.py at 2019-07-12 00:55:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 821.07 Mbit/s

95th percentile per-packet one-way delay: 148.343 ms

Loss rate: 1.97%

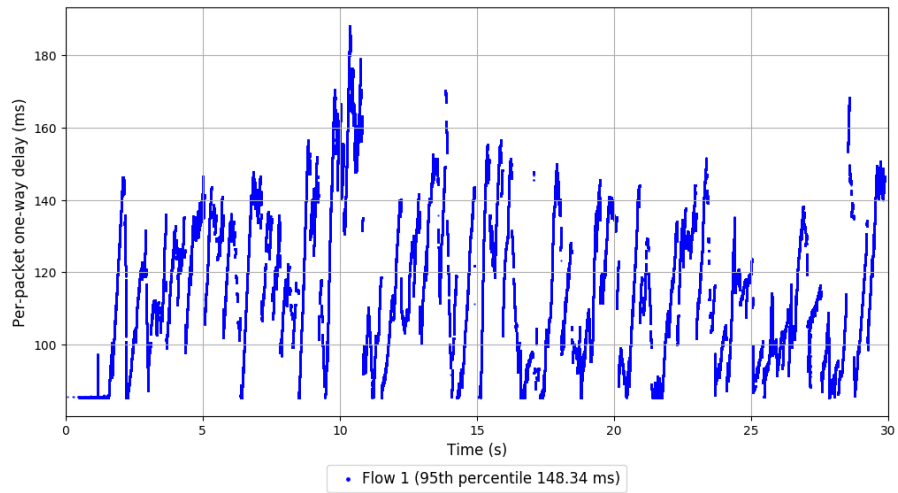
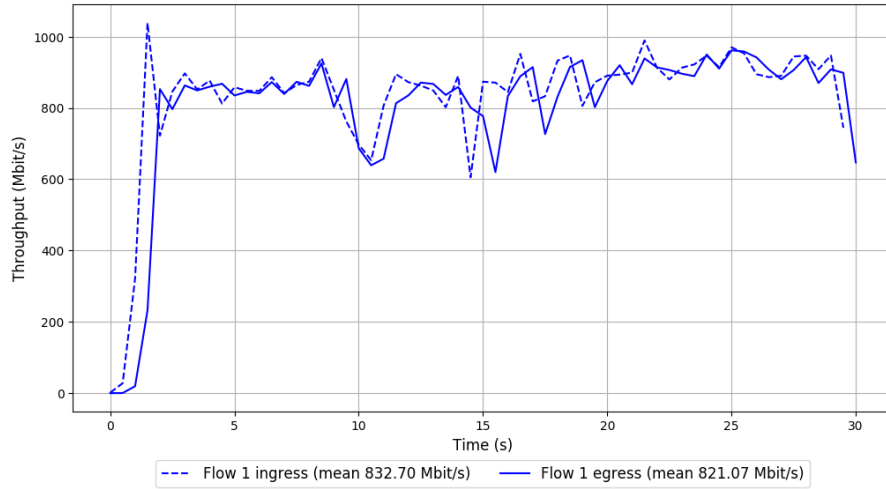
-- Flow 1:

Average throughput: 821.07 Mbit/s

95th percentile per-packet one-way delay: 148.343 ms

Loss rate: 1.97%

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



Run 4: Statistics of FillP

Start at: 2019-07-11 23:06:10

End at: 2019-07-11 23:06:40

Local clock offset: -0.156 ms

Remote clock offset: 0.121 ms

# Below is generated by plot.py at 2019-07-12 00:56:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 823.43 Mbit/s

95th percentile per-packet one-way delay: 148.047 ms

Loss rate: 1.56%

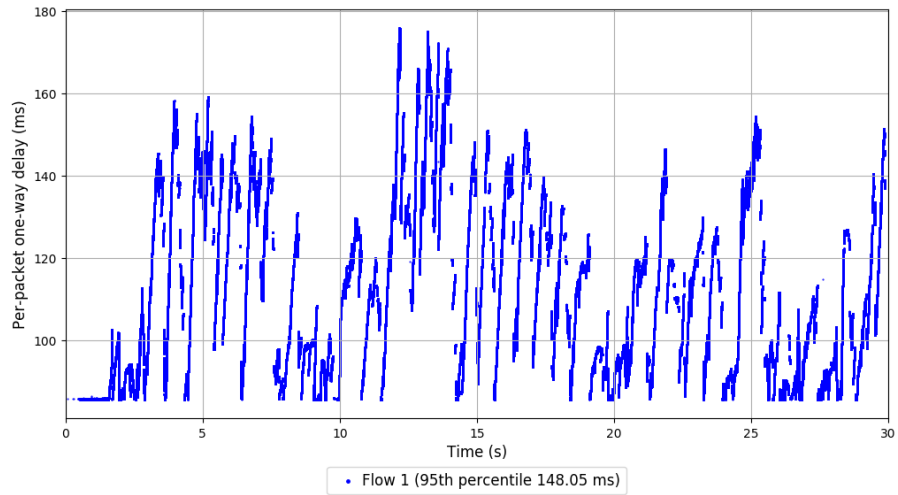
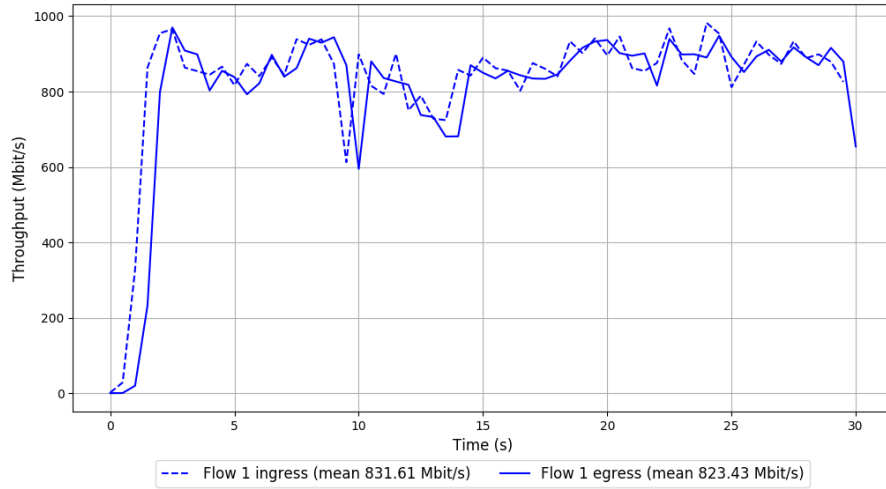
-- Flow 1:

Average throughput: 823.43 Mbit/s

95th percentile per-packet one-way delay: 148.047 ms

Loss rate: 1.56%

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



Run 5: Statistics of FillP

Start at: 2019-07-11 23:41:34

End at: 2019-07-11 23:42:04

Local clock offset: -0.045 ms

Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2019-07-12 00:56:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 775.15 Mbit/s

95th percentile per-packet one-way delay: 163.169 ms

Loss rate: 4.52%

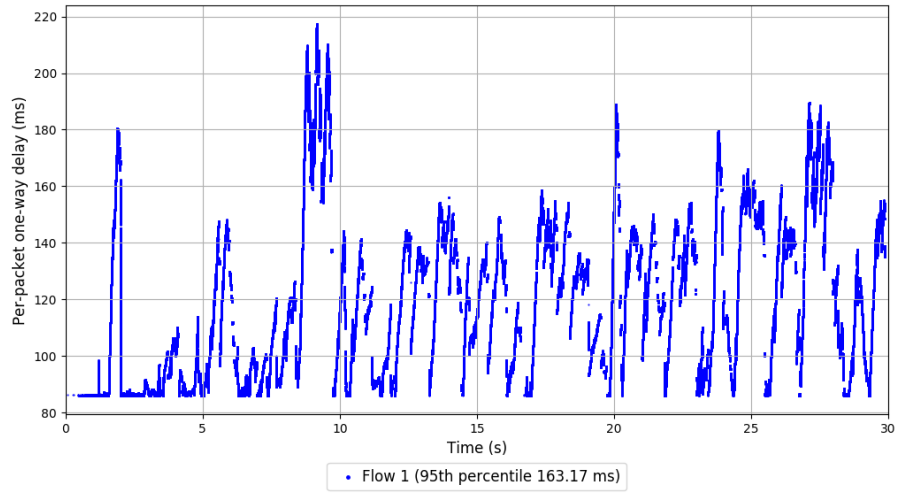
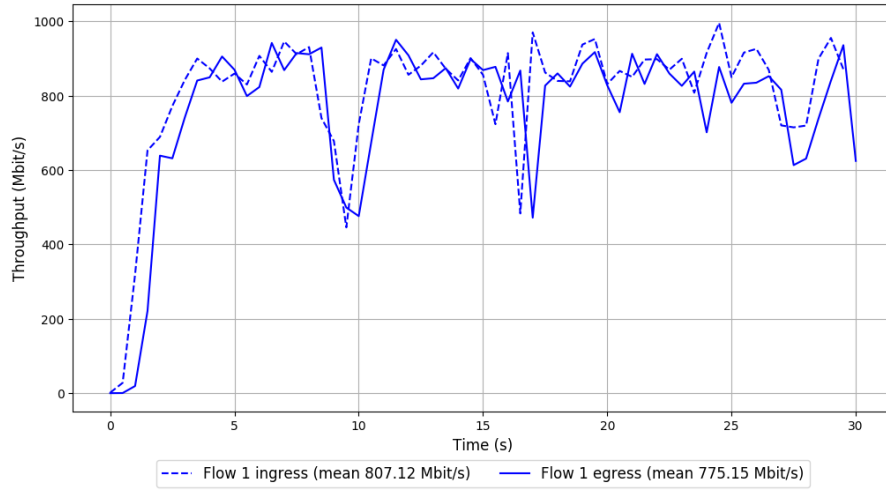
-- Flow 1:

Average throughput: 775.15 Mbit/s

95th percentile per-packet one-way delay: 163.169 ms

Loss rate: 4.52%

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





Run 1: Statistics of FillP-Sheep

Start at: 2019-07-11 21:14:23

End at: 2019-07-11 21:14:53

Local clock offset: 3.877 ms

Remote clock offset: 2.38 ms

# Below is generated by plot.py at 2019-07-12 00:56:05

# Datalink statistics

-- Total of 1 flow:

Average throughput: 827.20 Mbit/s

95th percentile per-packet one-way delay: 130.806 ms

Loss rate: 0.80%

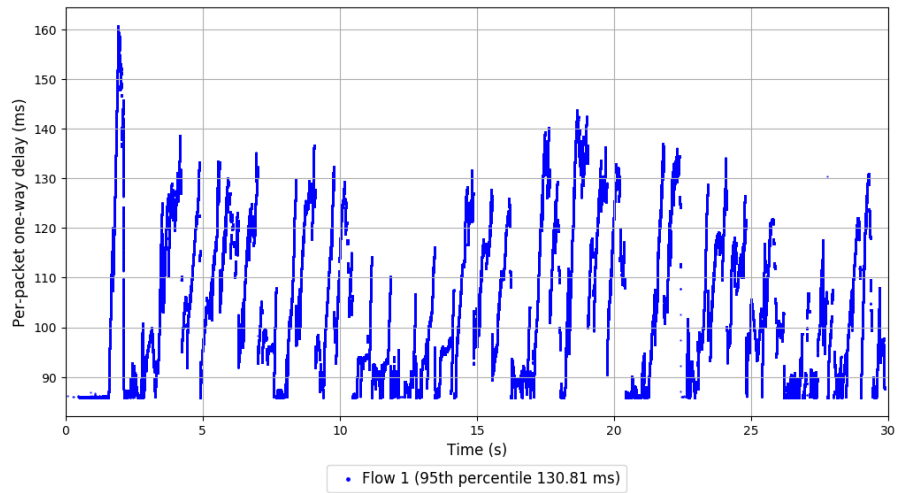
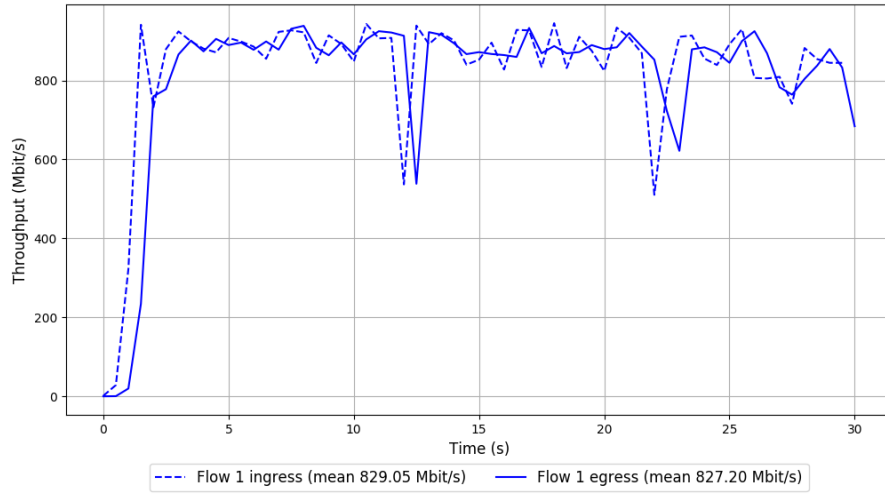
-- Flow 1:

Average throughput: 827.20 Mbit/s

95th percentile per-packet one-way delay: 130.806 ms

Loss rate: 0.80%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-07-11 21:50:07

End at: 2019-07-11 21:50:37

Local clock offset: 0.693 ms

Remote clock offset: 1.048 ms

# Below is generated by plot.py at 2019-07-12 00:56:05

# Datalink statistics

-- Total of 1 flow:

Average throughput: 815.74 Mbit/s

95th percentile per-packet one-way delay: 130.577 ms

Loss rate: 0.64%

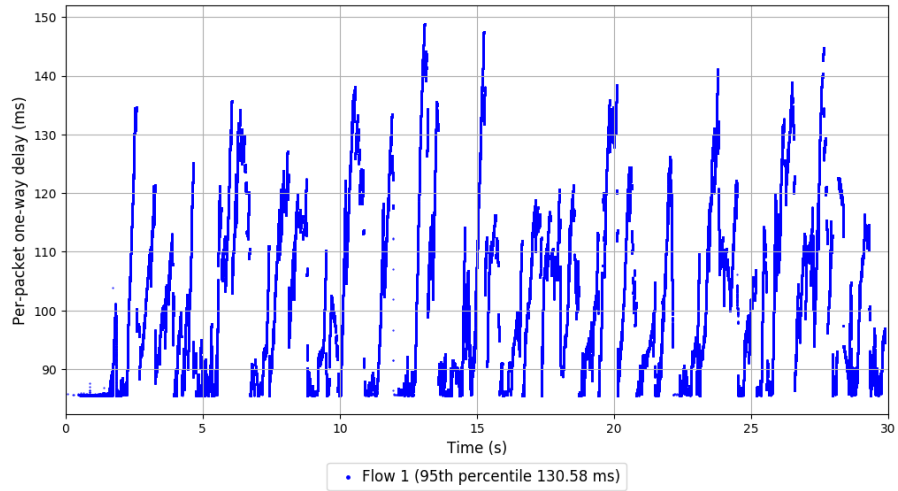
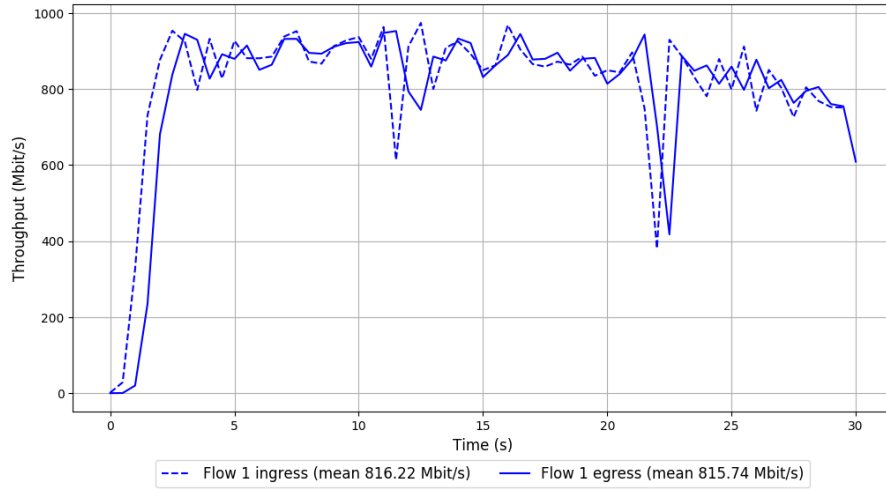
-- Flow 1:

Average throughput: 815.74 Mbit/s

95th percentile per-packet one-way delay: 130.577 ms

Loss rate: 0.64%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-07-11 22:25:45

End at: 2019-07-11 22:26:15

Local clock offset: 0.19 ms

Remote clock offset: 0.574 ms

# Below is generated by plot.py at 2019-07-12 00:56:05

# Datalink statistics

-- Total of 1 flow:

Average throughput: 738.89 Mbit/s

95th percentile per-packet one-way delay: 145.904 ms

Loss rate: 1.55%

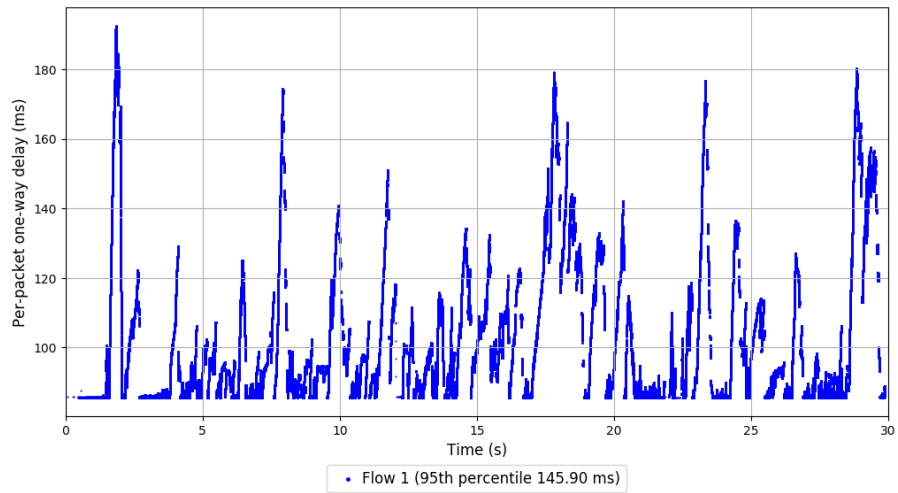
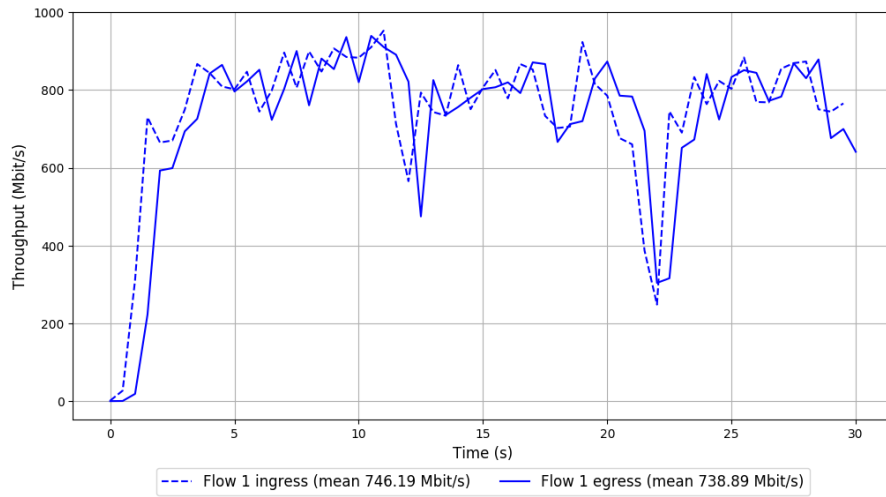
-- Flow 1:

Average throughput: 738.89 Mbit/s

95th percentile per-packet one-way delay: 145.904 ms

Loss rate: 1.55%

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



Run 4: Statistics of FillP-Sheep

Start at: 2019-07-11 23:01:19

End at: 2019-07-11 23:01:49

Local clock offset: 0.053 ms

Remote clock offset: 0.22 ms

# Below is generated by plot.py at 2019-07-12 01:03:05

# Datalink statistics

-- Total of 1 flow:

Average throughput: 642.89 Mbit/s

95th percentile per-packet one-way delay: 134.462 ms

Loss rate: 0.31%

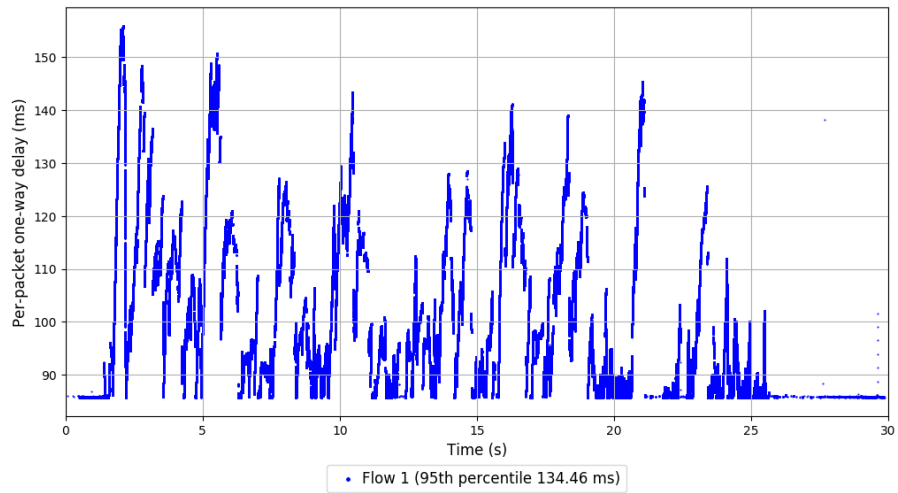
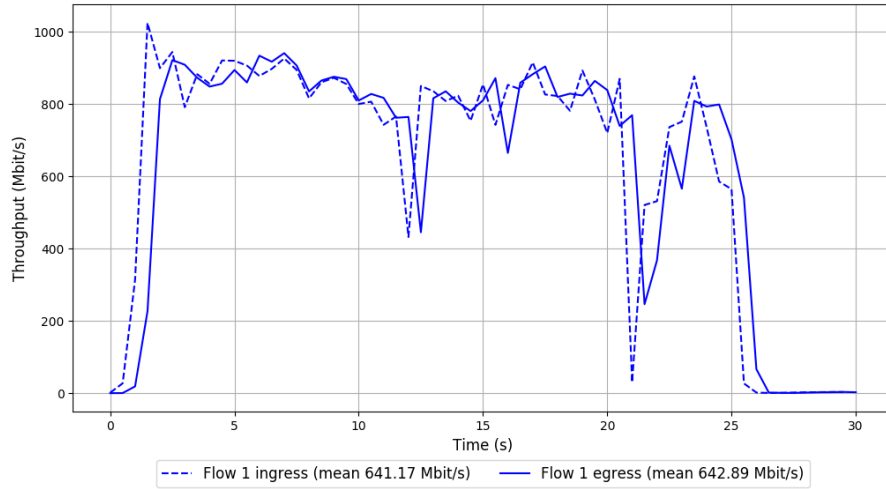
-- Flow 1:

Average throughput: 642.89 Mbit/s

95th percentile per-packet one-way delay: 134.462 ms

Loss rate: 0.31%

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





Run 5: Statistics of FillP-Sheep

Start at: 2019-07-11 23:36:31

End at: 2019-07-11 23:37:01

Local clock offset: 0.349 ms

Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2019-07-12 01:15:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 872.45 Mbit/s

95th percentile per-packet one-way delay: 130.261 ms

Loss rate: 1.23%

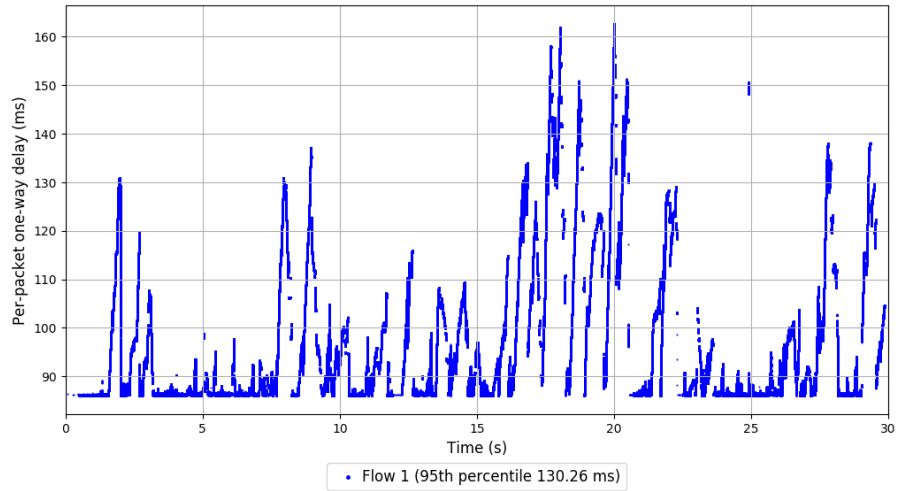
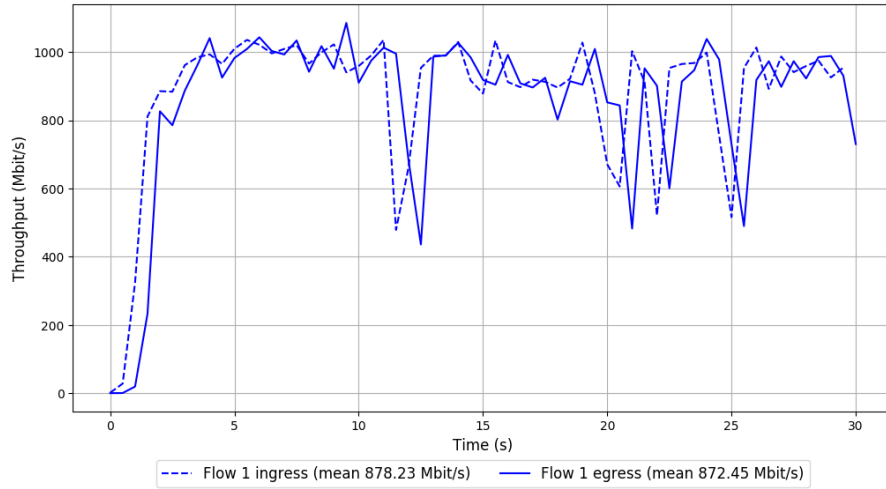
-- Flow 1:

Average throughput: 872.45 Mbit/s

95th percentile per-packet one-way delay: 130.261 ms

Loss rate: 1.23%

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



Run 1: Statistics of Indigo

Start at: 2019-07-11 21:39:44

End at: 2019-07-11 21:40:14

Local clock offset: 0.663 ms

Remote clock offset: 0.873 ms

# Below is generated by plot.py at 2019-07-12 01:15:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 217.06 Mbit/s

95th percentile per-packet one-way delay: 87.534 ms

Loss rate: 0.72%

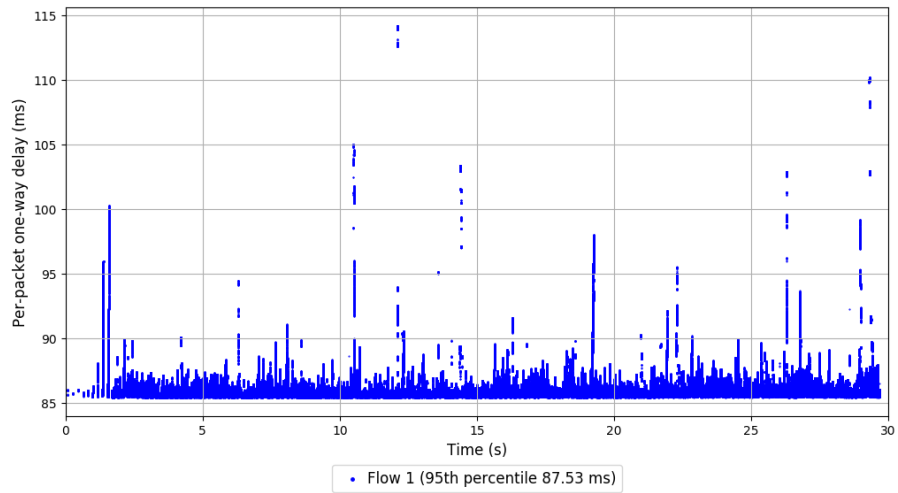
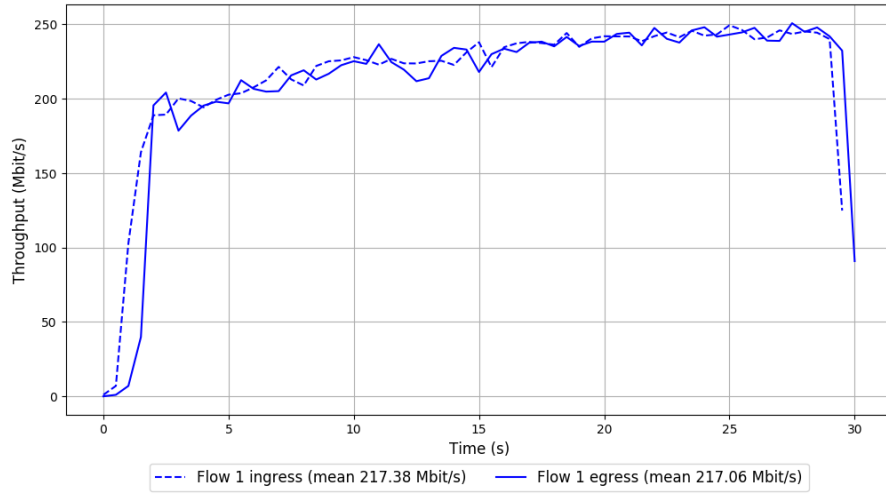
-- Flow 1:

Average throughput: 217.06 Mbit/s

95th percentile per-packet one-way delay: 87.534 ms

Loss rate: 0.72%

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



Run 2: Statistics of Indigo

Start at: 2019-07-11 22:15:16

End at: 2019-07-11 22:15:46

Local clock offset: 0.346 ms

Remote clock offset: 0.437 ms

# Below is generated by plot.py at 2019-07-12 01:15:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 213.97 Mbit/s

95th percentile per-packet one-way delay: 88.411 ms

Loss rate: 0.75%

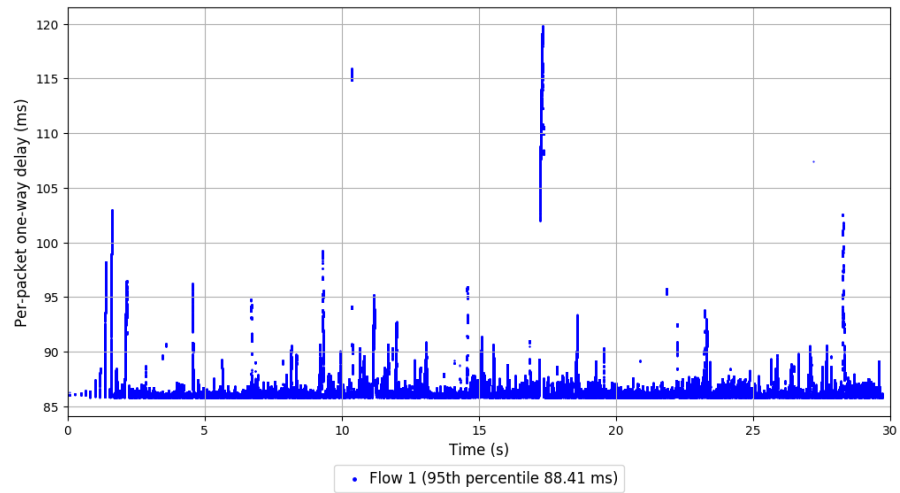
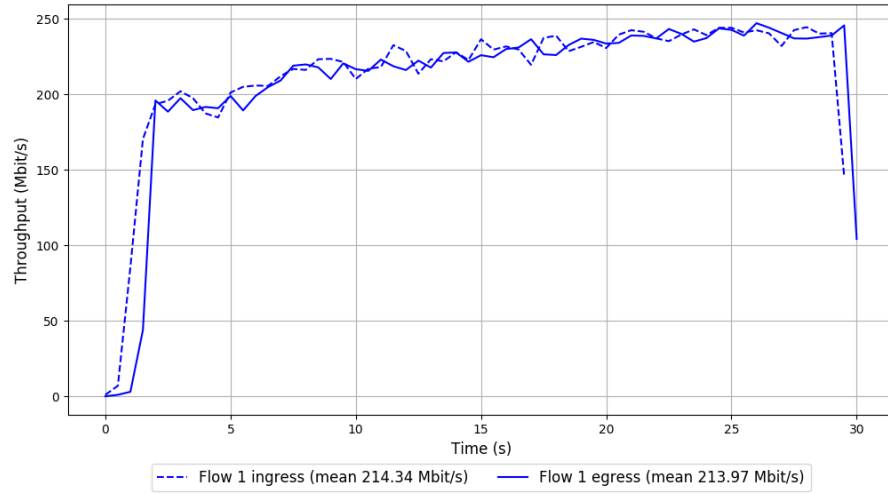
-- Flow 1:

Average throughput: 213.97 Mbit/s

95th percentile per-packet one-way delay: 88.411 ms

Loss rate: 0.75%

## Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-07-11 22:50:48

End at: 2019-07-11 22:51:18

Local clock offset: 0.09 ms

Remote clock offset: 0.159 ms

# Below is generated by plot.py at 2019-07-12 01:15:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 209.54 Mbit/s

95th percentile per-packet one-way delay: 87.844 ms

Loss rate: 0.62%

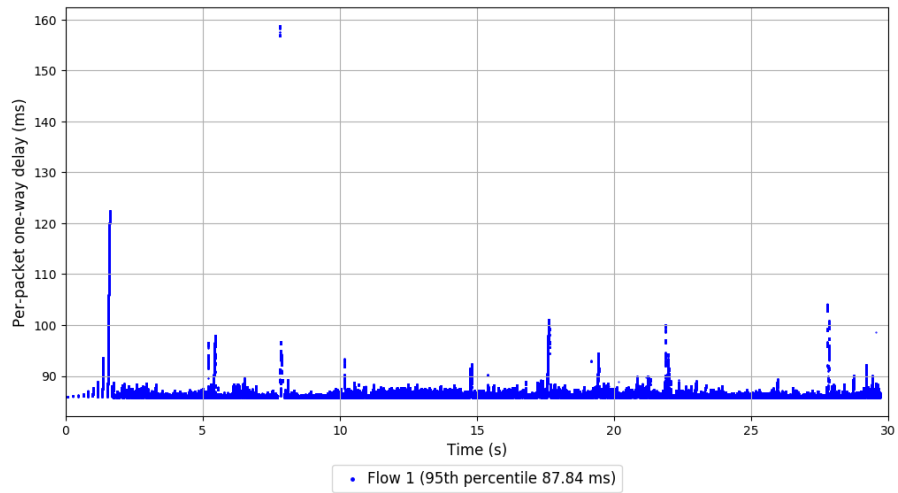
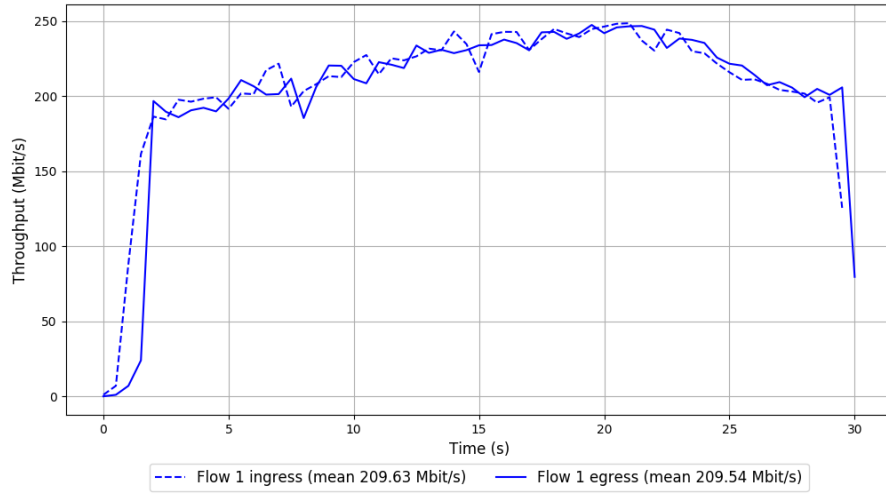
-- Flow 1:

Average throughput: 209.54 Mbit/s

95th percentile per-packet one-way delay: 87.844 ms

Loss rate: 0.62%

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





Run 4: Statistics of Indigo

Start at: 2019-07-11 23:26:06

End at: 2019-07-11 23:26:36

Local clock offset: 0.046 ms

Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2019-07-12 01:15:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 190.28 Mbit/s

95th percentile per-packet one-way delay: 87.769 ms

Loss rate: 0.82%

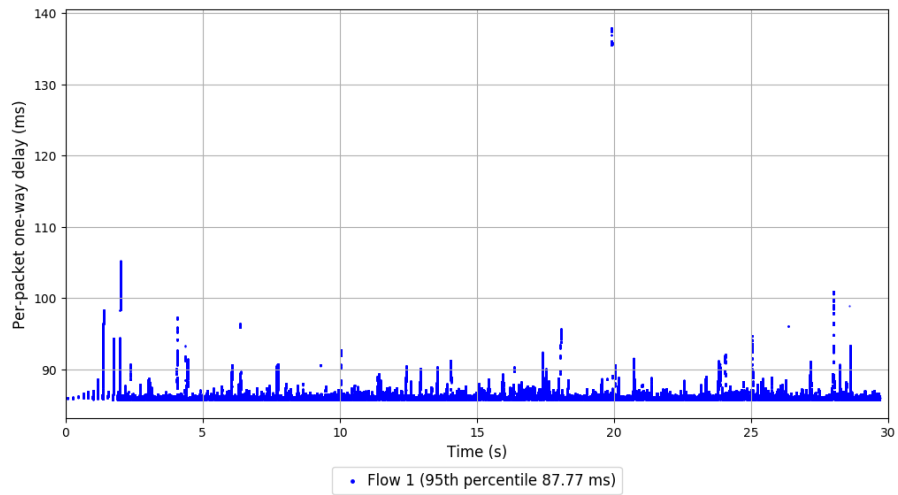
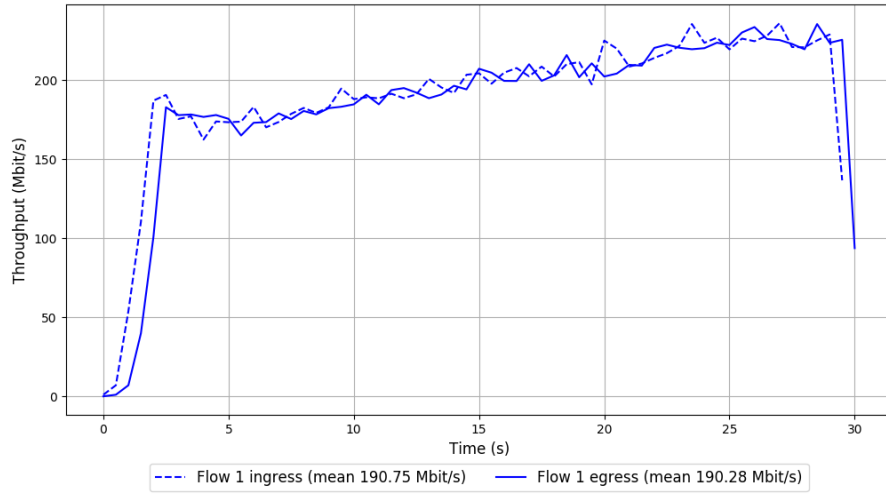
-- Flow 1:

Average throughput: 190.28 Mbit/s

95th percentile per-packet one-way delay: 87.769 ms

Loss rate: 0.82%

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



Run 5: Statistics of Indigo

Start at: 2019-07-12 00:01:45

End at: 2019-07-12 00:02:15

Local clock offset: -0.163 ms

Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2019-07-12 01:15:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 217.29 Mbit/s

95th percentile per-packet one-way delay: 88.276 ms

Loss rate: 0.63%

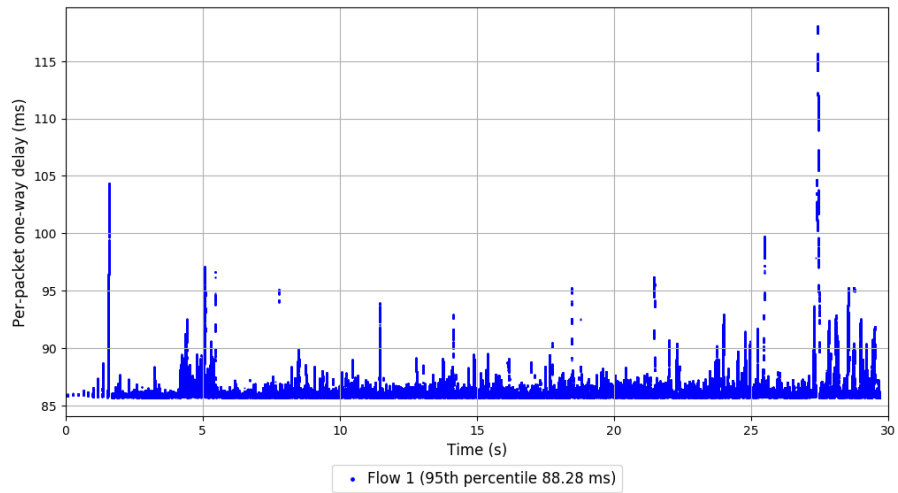
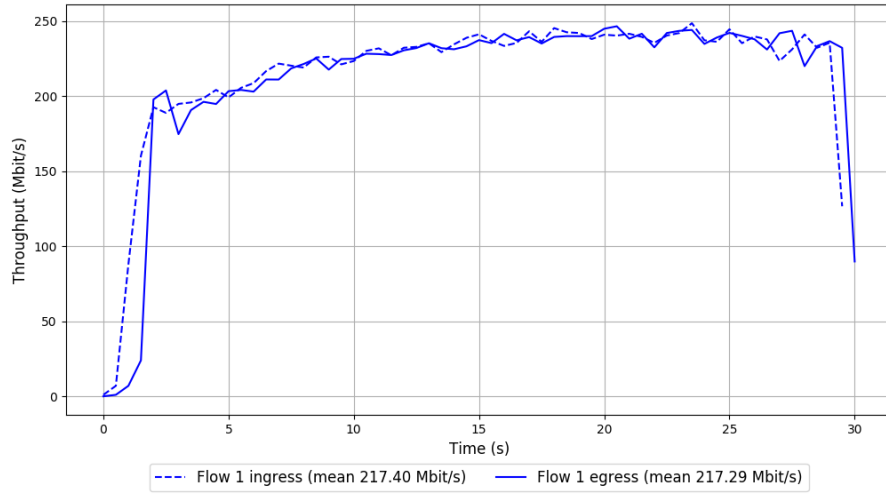
-- Flow 1:

Average throughput: 217.29 Mbit/s

95th percentile per-packet one-way delay: 88.276 ms

Loss rate: 0.63%

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



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-07-11 21:27:14

End at: 2019-07-11 21:27:44

Local clock offset: 1.561 ms

Remote clock offset: 1.245 ms

# Below is generated by plot.py at 2019-07-12 01:15:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 588.74 Mbit/s

95th percentile per-packet one-way delay: 124.536 ms

Loss rate: 0.72%

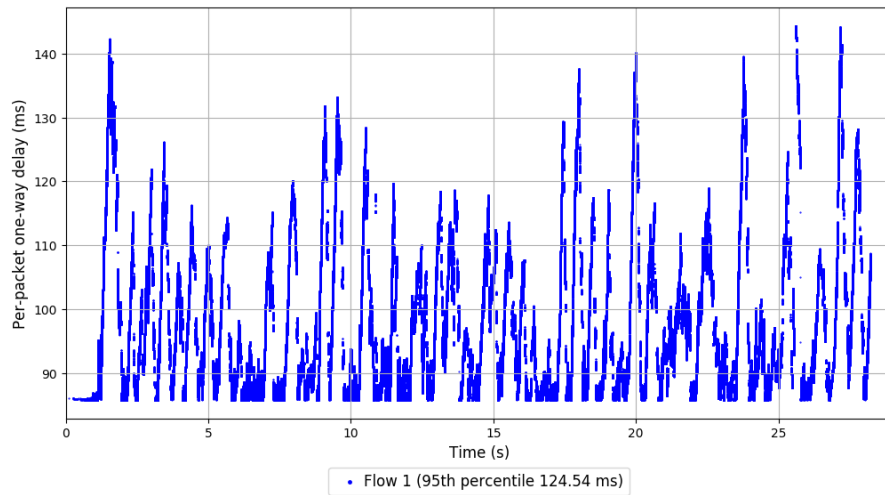
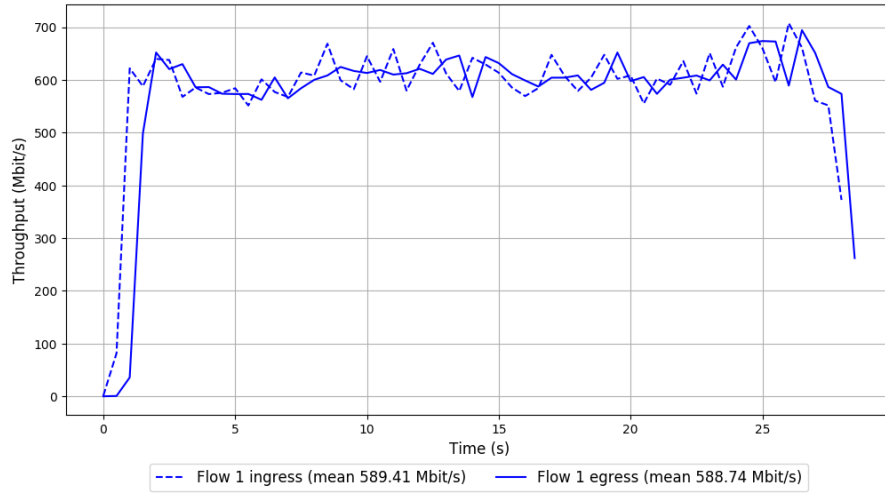
-- Flow 1:

Average throughput: 588.74 Mbit/s

95th percentile per-packet one-way delay: 124.536 ms

Loss rate: 0.72%

Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

Start at: 2019-07-11 22:02:55

End at: 2019-07-11 22:03:25

Local clock offset: 0.802 ms

Remote clock offset: 0.545 ms

# Below is generated by plot.py at 2019-07-12 01:15:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 572.40 Mbit/s

95th percentile per-packet one-way delay: 125.498 ms

Loss rate: 0.62%

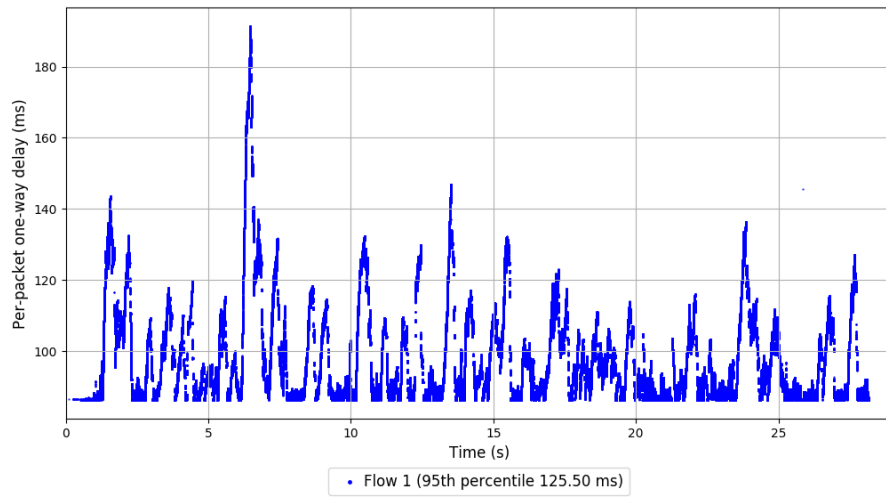
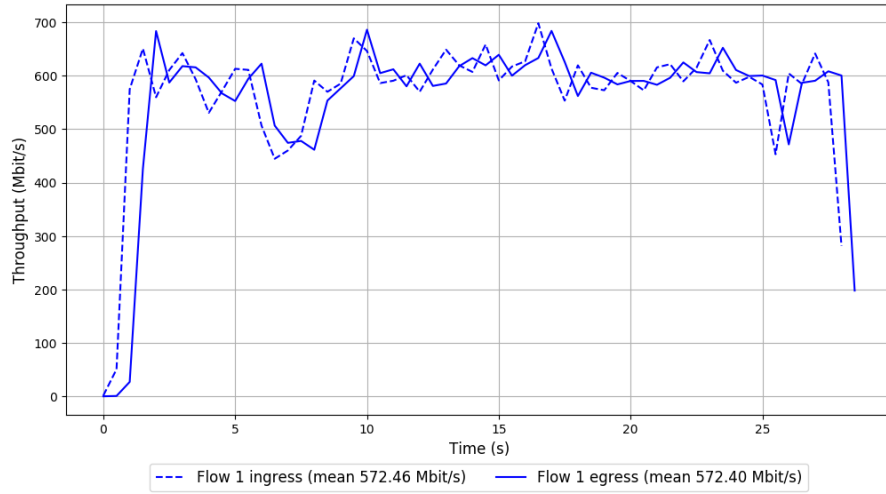
-- Flow 1:

Average throughput: 572.40 Mbit/s

95th percentile per-packet one-way delay: 125.498 ms

Loss rate: 0.62%

## Run 2: Report of Indigo-MusesC3 — Data Link





Run 3: Statistics of Indigo-MusesC3

Start at: 2019-07-11 22:38:18

End at: 2019-07-11 22:38:48

Local clock offset: 0.267 ms

Remote clock offset: 0.215 ms

# Below is generated by plot.py at 2019-07-12 01:15:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 575.49 Mbit/s

95th percentile per-packet one-way delay: 119.490 ms

Loss rate: 0.70%

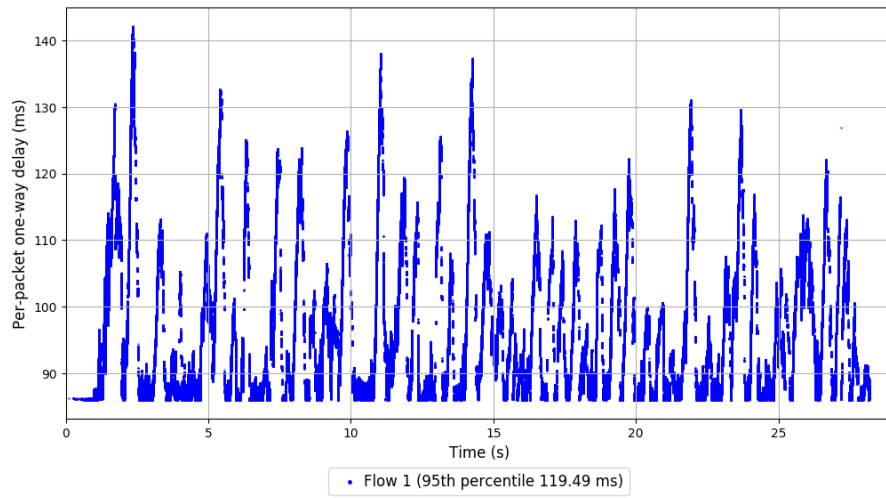
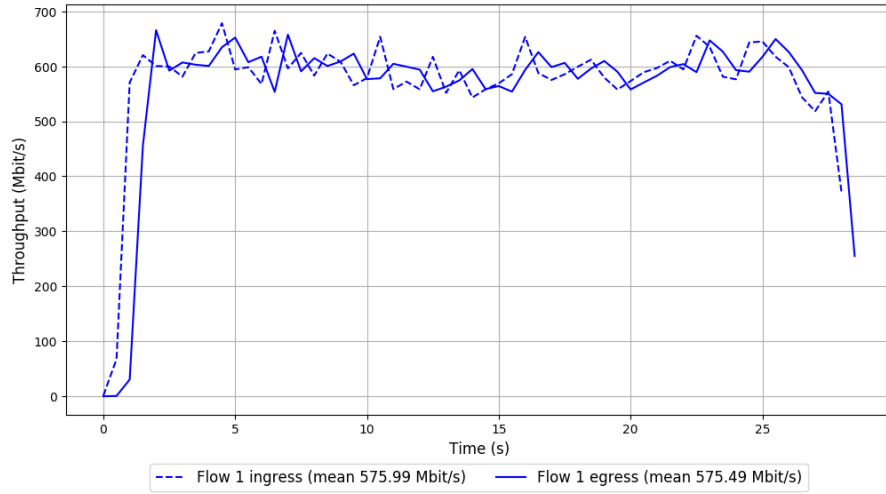
-- Flow 1:

Average throughput: 575.49 Mbit/s

95th percentile per-packet one-way delay: 119.490 ms

Loss rate: 0.70%

### Run 3: Report of Indigo-MusesC3 — Data Link



Run 4: Statistics of Indigo-MusesC3

Start at: 2019-07-11 23:13:47

End at: 2019-07-11 23:14:17

Local clock offset: 0.203 ms

Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2019-07-12 01:15:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 568.07 Mbit/s

95th percentile per-packet one-way delay: 122.246 ms

Loss rate: 0.78%

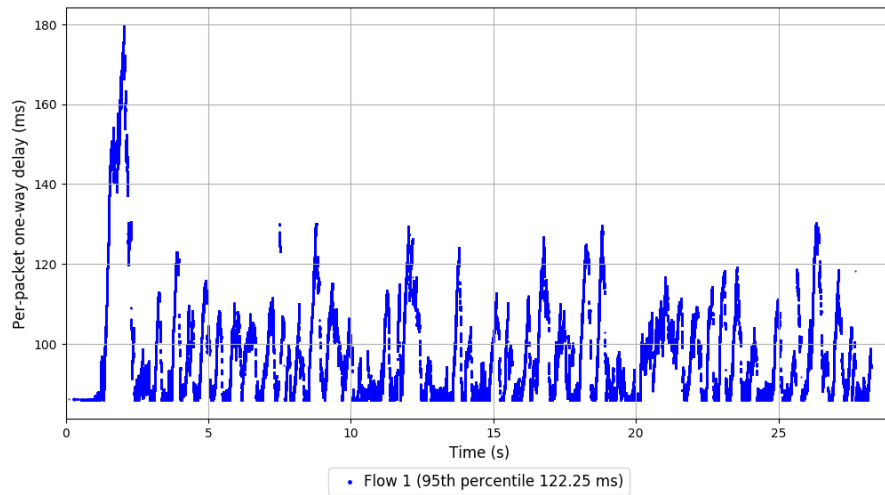
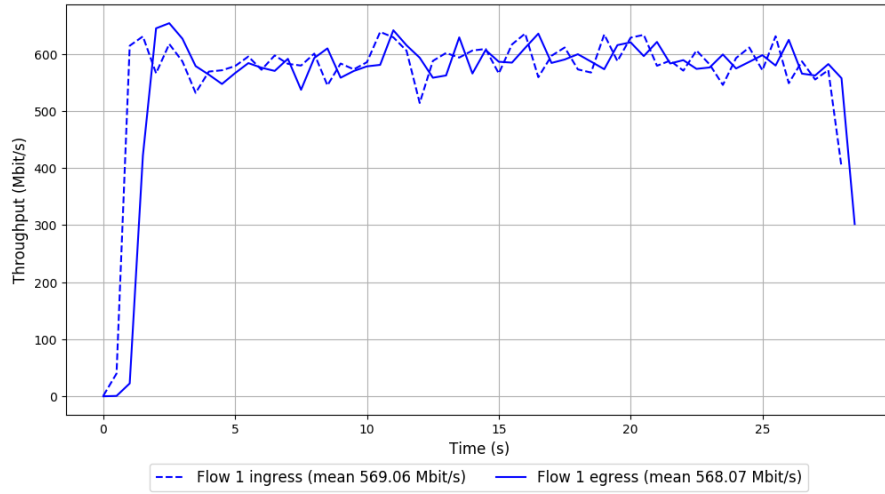
-- Flow 1:

Average throughput: 568.07 Mbit/s

95th percentile per-packet one-way delay: 122.246 ms

Loss rate: 0.78%

### Run 4: Report of Indigo-MusesC3 — Data Link



Run 5: Statistics of Indigo-MusesC3

Start at: 2019-07-11 23:49:19

End at: 2019-07-11 23:49:49

Local clock offset: -0.279 ms

Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2019-07-12 01:15:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 540.42 Mbit/s

95th percentile per-packet one-way delay: 127.594 ms

Loss rate: 0.76%

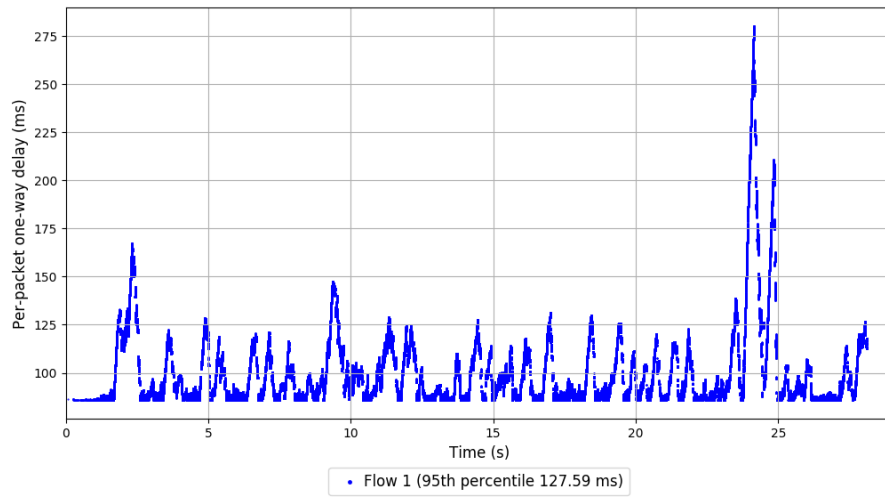
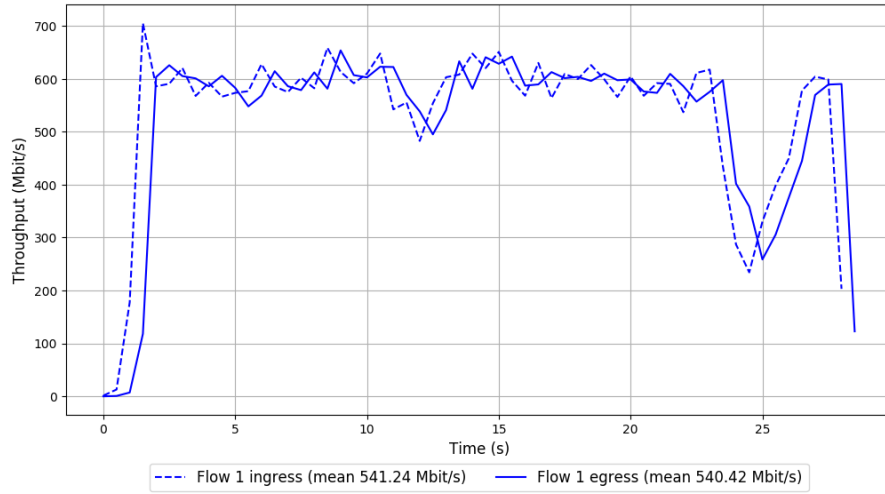
-- Flow 1:

Average throughput: 540.42 Mbit/s

95th percentile per-packet one-way delay: 127.594 ms

Loss rate: 0.76%

### Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-07-11 21:30:29

End at: 2019-07-11 21:30:59

Local clock offset: 1.454 ms

Remote clock offset: 1.038 ms

# Below is generated by plot.py at 2019-07-12 01:15:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 558.76 Mbit/s

95th percentile per-packet one-way delay: 160.911 ms

Loss rate: 0.90%

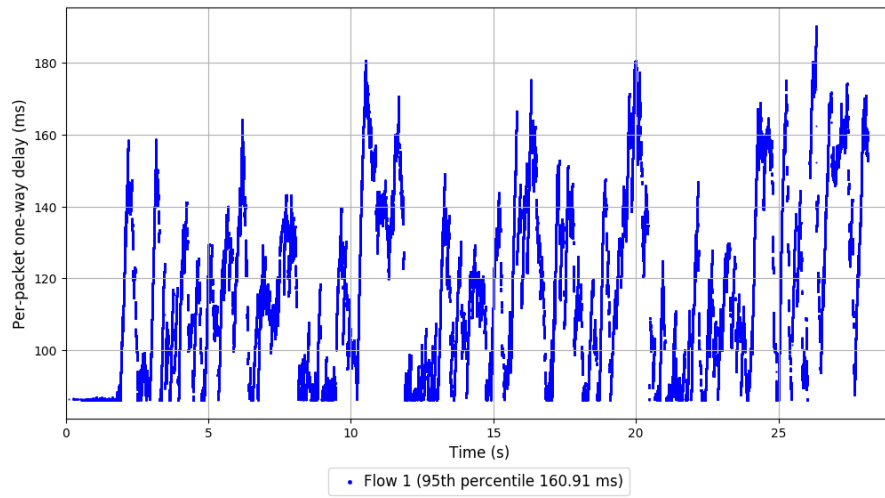
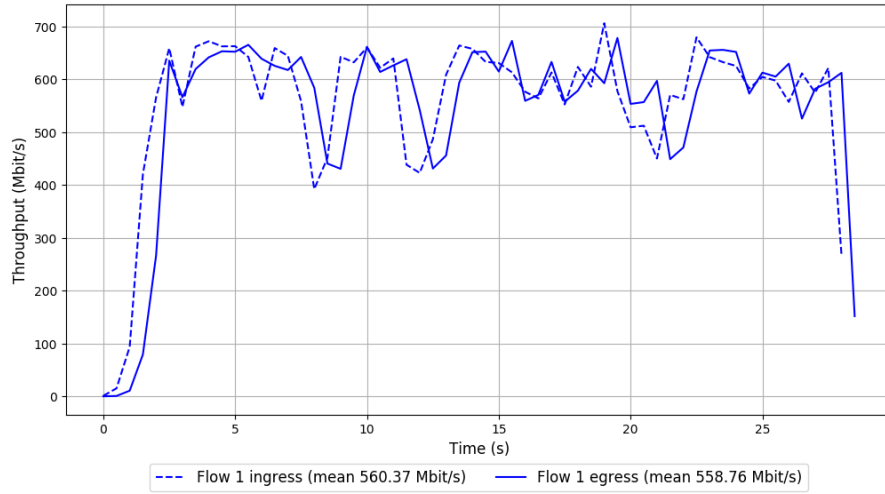
-- Flow 1:

Average throughput: 558.76 Mbit/s

95th percentile per-packet one-way delay: 160.911 ms

Loss rate: 0.90%

Run 1: Report of Indigo-MusesC5 — Data Link





Run 2: Statistics of Indigo-MusesC5

Start at: 2019-07-11 22:06:09

End at: 2019-07-11 22:06:39

Local clock offset: 0.334 ms

Remote clock offset: 0.491 ms

# Below is generated by plot.py at 2019-07-12 01:15:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 552.39 Mbit/s

95th percentile per-packet one-way delay: 151.676 ms

Loss rate: 0.88%

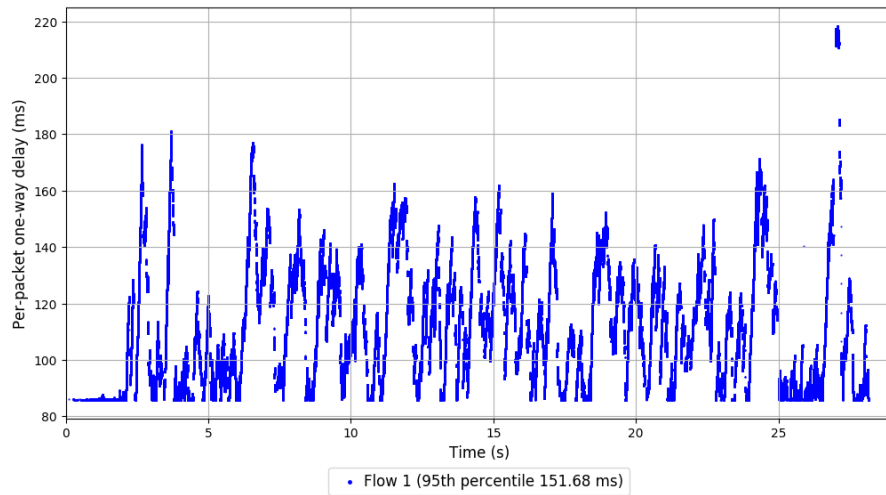
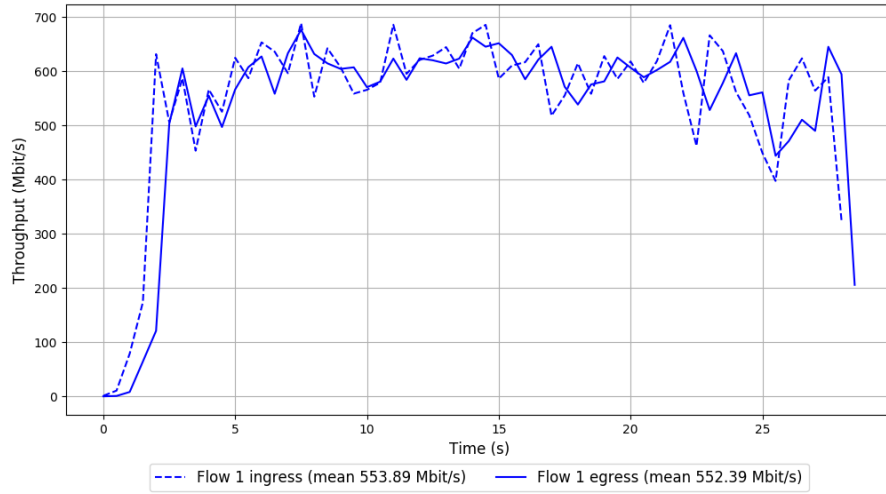
-- Flow 1:

Average throughput: 552.39 Mbit/s

95th percentile per-packet one-way delay: 151.676 ms

Loss rate: 0.88%

## Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

Start at: 2019-07-11 22:41:33

End at: 2019-07-11 22:42:03

Local clock offset: -0.166 ms

Remote clock offset: 0.203 ms

# Below is generated by plot.py at 2019-07-12 01:16:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 572.16 Mbit/s

95th percentile per-packet one-way delay: 150.983 ms

Loss rate: 1.01%

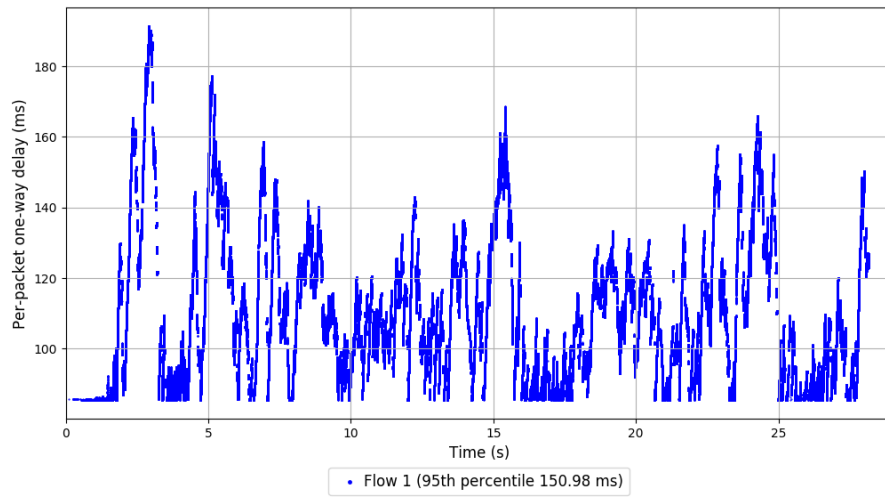
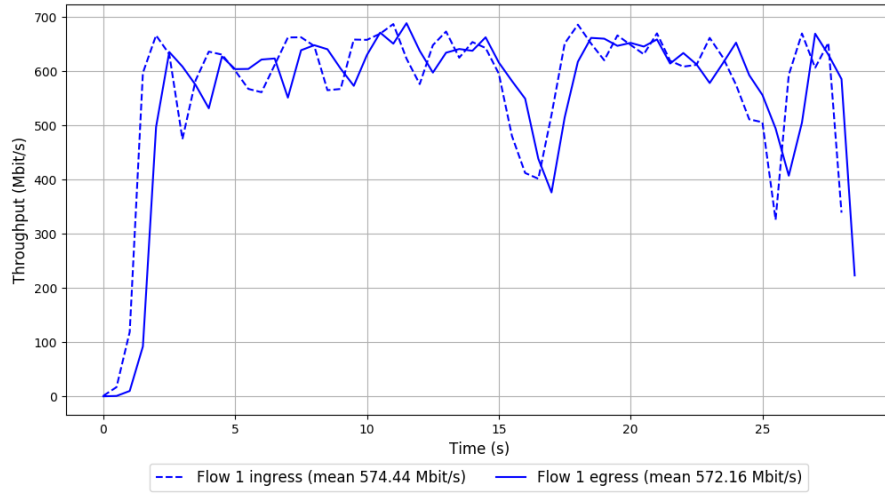
-- Flow 1:

Average throughput: 572.16 Mbit/s

95th percentile per-packet one-way delay: 150.983 ms

Loss rate: 1.01%

### Run 3: Report of Indigo-MusesC5 — Data Link



Run 4: Statistics of Indigo-MusesC5

Start at: 2019-07-11 23:17:01

End at: 2019-07-11 23:17:31

Local clock offset: -0.356 ms

Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2019-07-12 01:21:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 498.69 Mbit/s

95th percentile per-packet one-way delay: 186.088 ms

Loss rate: 1.30%

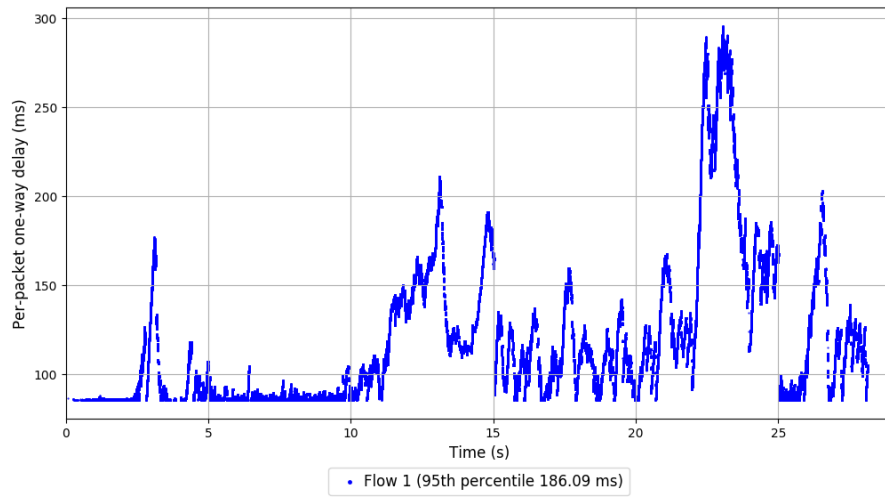
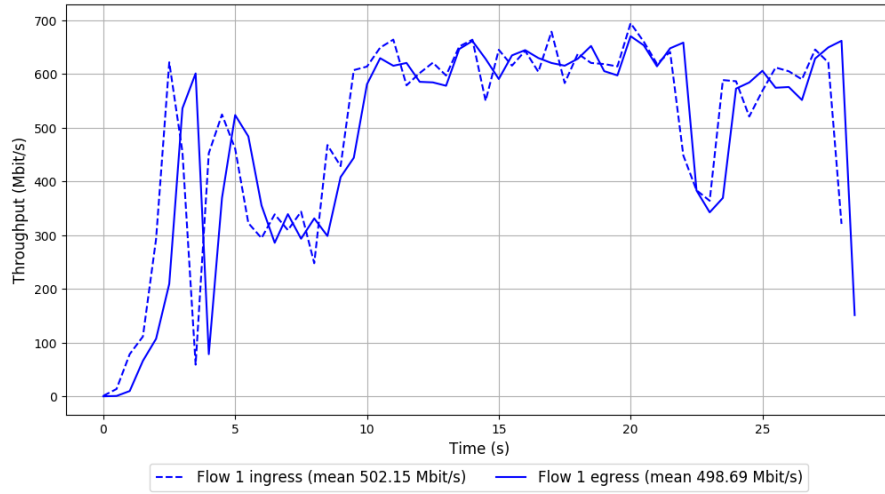
-- Flow 1:

Average throughput: 498.69 Mbit/s

95th percentile per-packet one-way delay: 186.088 ms

Loss rate: 1.30%

### Run 4: Report of Indigo-MusesC5 — Data Link



Run 5: Statistics of Indigo-MusesC5

Start at: 2019-07-11 23:52:31

End at: 2019-07-11 23:53:01

Local clock offset: -0.322 ms

Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2019-07-12 01:22:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 553.00 Mbit/s

95th percentile per-packet one-way delay: 194.404 ms

Loss rate: 2.64%

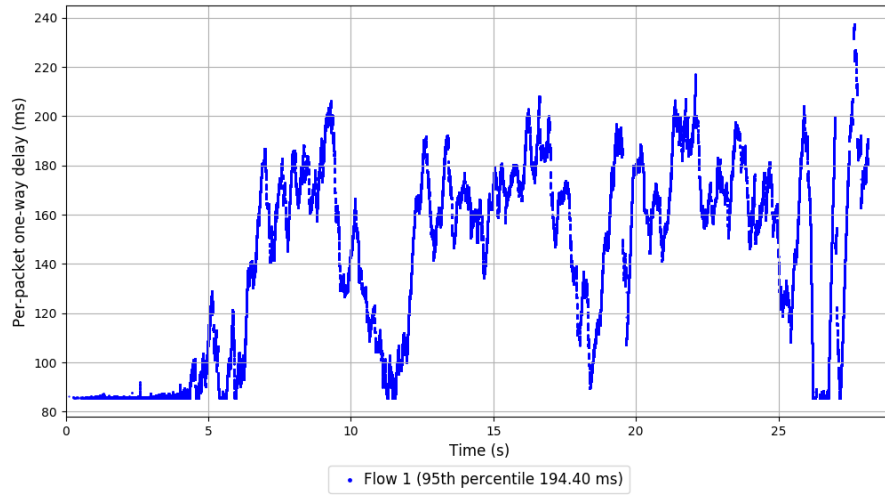
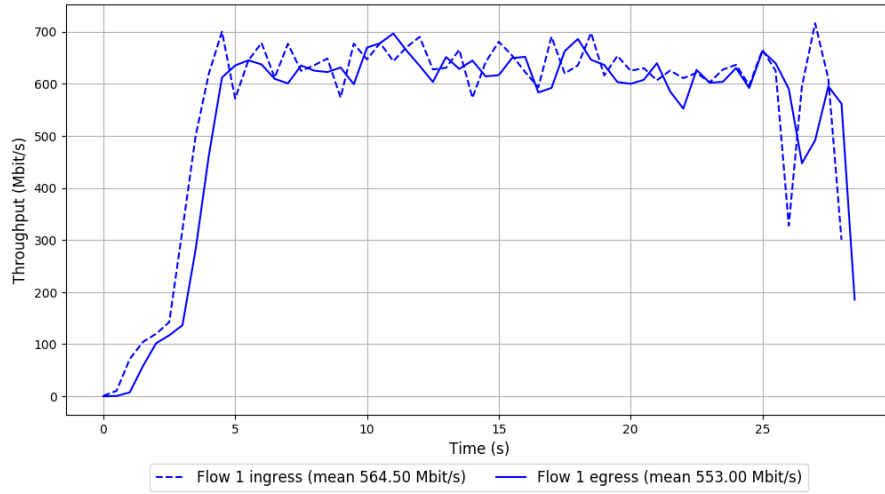
-- Flow 1:

Average throughput: 553.00 Mbit/s

95th percentile per-packet one-way delay: 194.404 ms

Loss rate: 2.64%

### Run 5: Report of Indigo-MusesC5 — Data Link





Run 1: Statistics of Indigo-MusesD

Start at: 2019-07-11 21:10:31

End at: 2019-07-11 21:11:01

Local clock offset: 3.64 ms

Remote clock offset: 2.3 ms

# Below is generated by plot.py at 2019-07-12 01:22:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 488.01 Mbit/s

95th percentile per-packet one-way delay: 149.654 ms

Loss rate: 0.57%

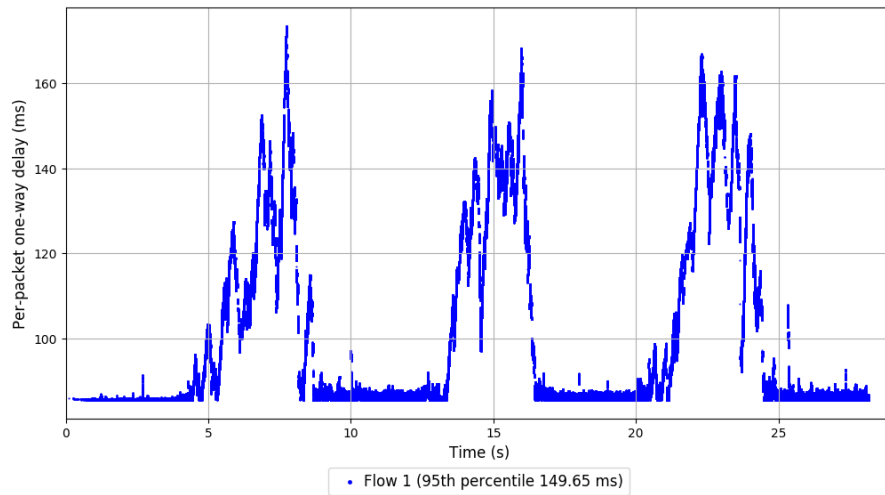
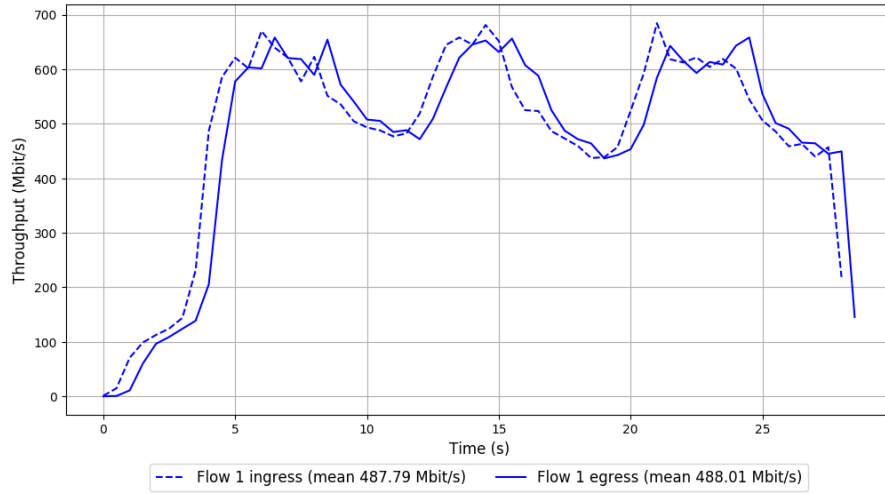
-- Flow 1:

Average throughput: 488.01 Mbit/s

95th percentile per-packet one-way delay: 149.654 ms

Loss rate: 0.57%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-07-11 21:46:11

End at: 2019-07-11 21:46:41

Local clock offset: 1.055 ms

Remote clock offset: 0.958 ms

# Below is generated by plot.py at 2019-07-12 01:23:06

# Datalink statistics

-- Total of 1 flow:

Average throughput: 553.00 Mbit/s

95th percentile per-packet one-way delay: 150.461 ms

Loss rate: 0.56%

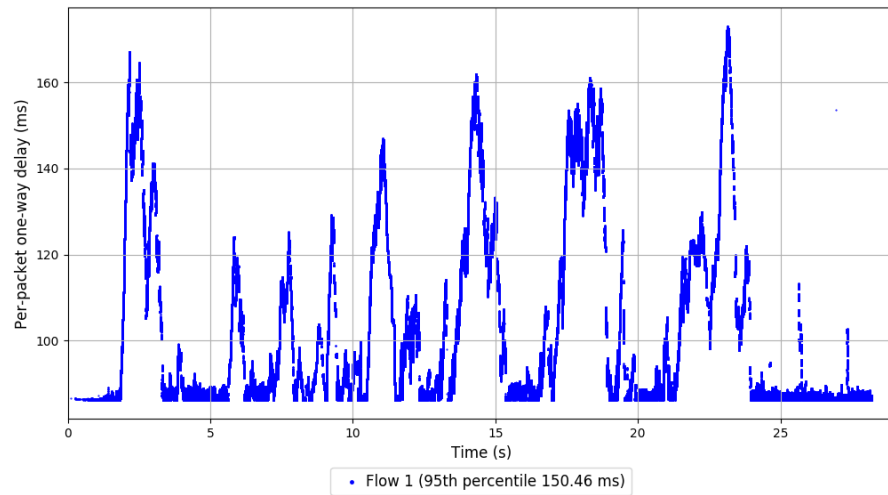
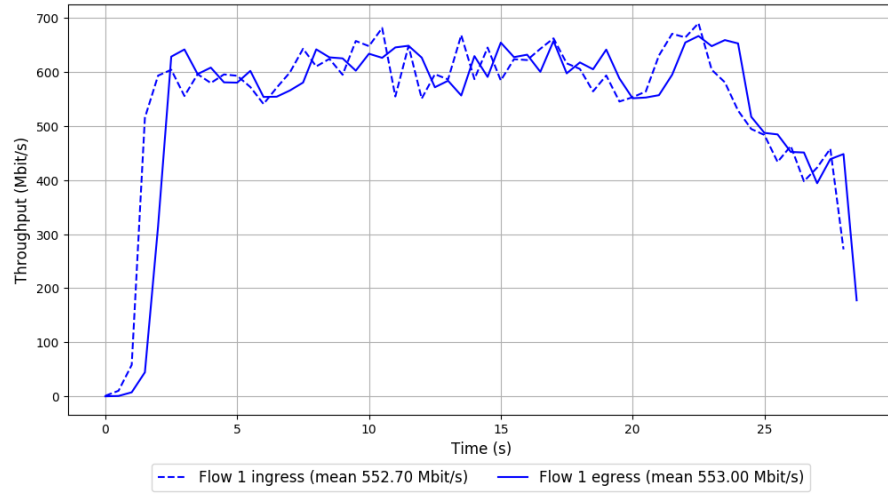
-- Flow 1:

Average throughput: 553.00 Mbit/s

95th percentile per-packet one-way delay: 150.461 ms

Loss rate: 0.56%

## Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-07-11 22:21:50

End at: 2019-07-11 22:22:20

Local clock offset: 0.173 ms

Remote clock offset: 0.512 ms

# Below is generated by plot.py at 2019-07-12 01:23:06

# Datalink statistics

-- Total of 1 flow:

Average throughput: 502.99 Mbit/s

95th percentile per-packet one-way delay: 153.978 ms

Loss rate: 1.02%

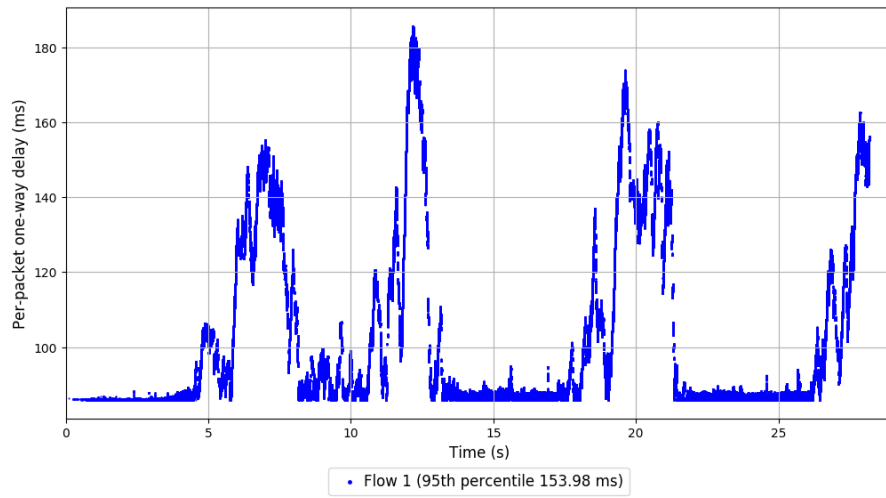
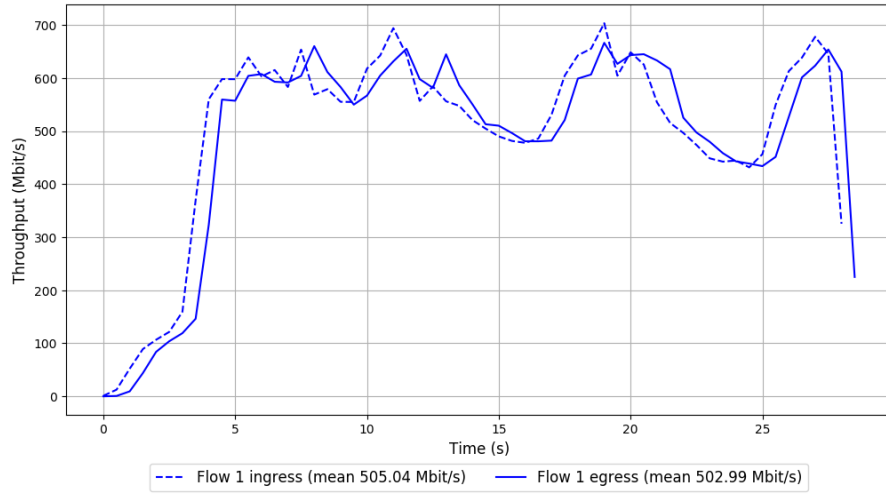
-- Flow 1:

Average throughput: 502.99 Mbit/s

95th percentile per-packet one-way delay: 153.978 ms

Loss rate: 1.02%

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



Run 4: Statistics of Indigo-MusesD

Start at: 2019-07-11 22:57:22

End at: 2019-07-11 22:57:52

Local clock offset: 0.361 ms

Remote clock offset: 0.186 ms

# Below is generated by plot.py at 2019-07-12 01:23:52

# Datalink statistics

-- Total of 1 flow:

Average throughput: 574.01 Mbit/s

95th percentile per-packet one-way delay: 152.848 ms

Loss rate: 0.48%

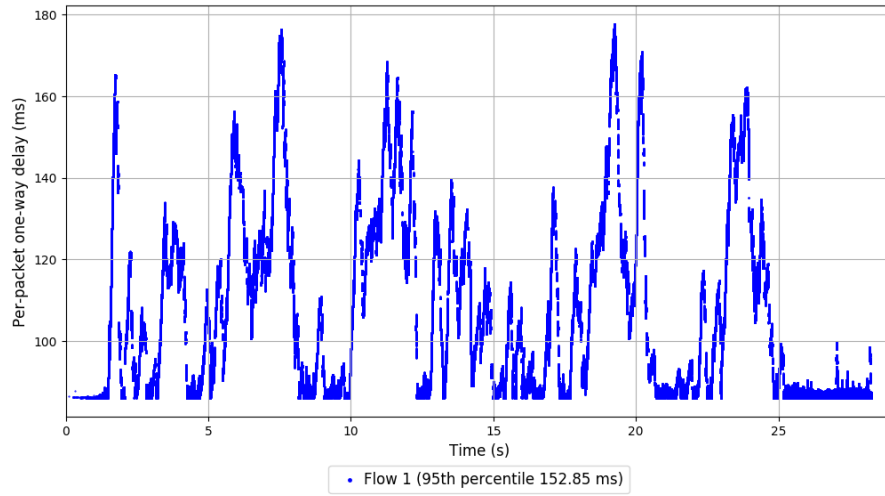
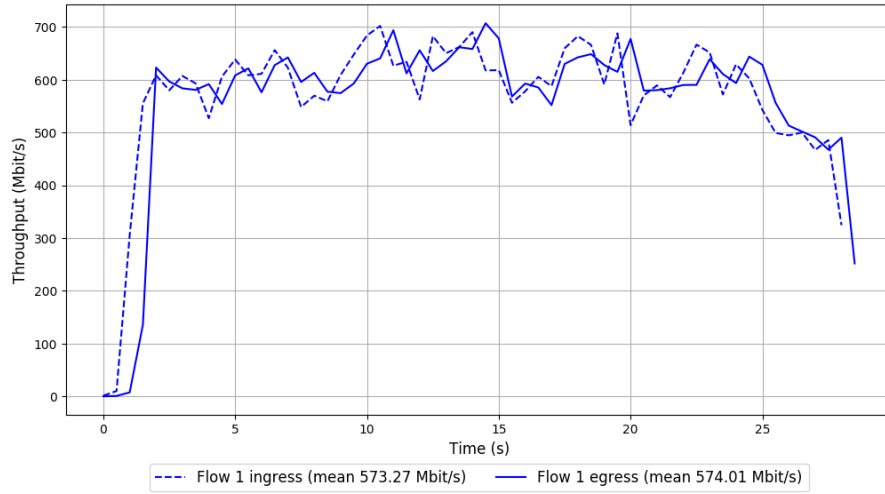
-- Flow 1:

Average throughput: 574.01 Mbit/s

95th percentile per-packet one-way delay: 152.848 ms

Loss rate: 0.48%

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





Run 5: Statistics of Indigo-MusesD

Start at: 2019-07-11 23:32:35

End at: 2019-07-11 23:33:05

Local clock offset: -0.184 ms

Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2019-07-12 01:25:18

# Datalink statistics

-- Total of 1 flow:

Average throughput: 557.17 Mbit/s

95th percentile per-packet one-way delay: 135.205 ms

Loss rate: 0.65%

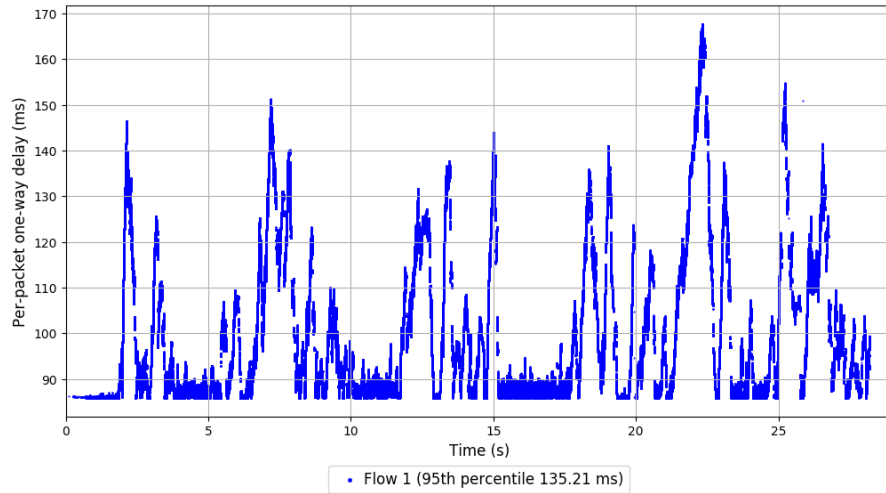
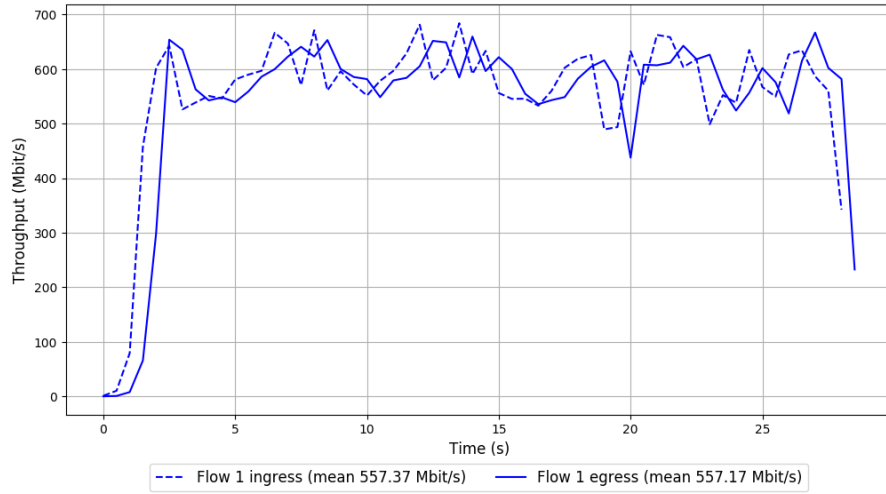
-- Flow 1:

Average throughput: 557.17 Mbit/s

95th percentile per-packet one-way delay: 135.205 ms

Loss rate: 0.65%

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



Run 1: Statistics of Indigo-MuseST

Start at: 2019-07-11 21:17:43

End at: 2019-07-11 21:18:13

Local clock offset: 4.514 ms

Remote clock offset: 2.483 ms

# Below is generated by plot.py at 2019-07-12 01:27:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 590.32 Mbit/s

95th percentile per-packet one-way delay: 150.185 ms

Loss rate: 0.80%

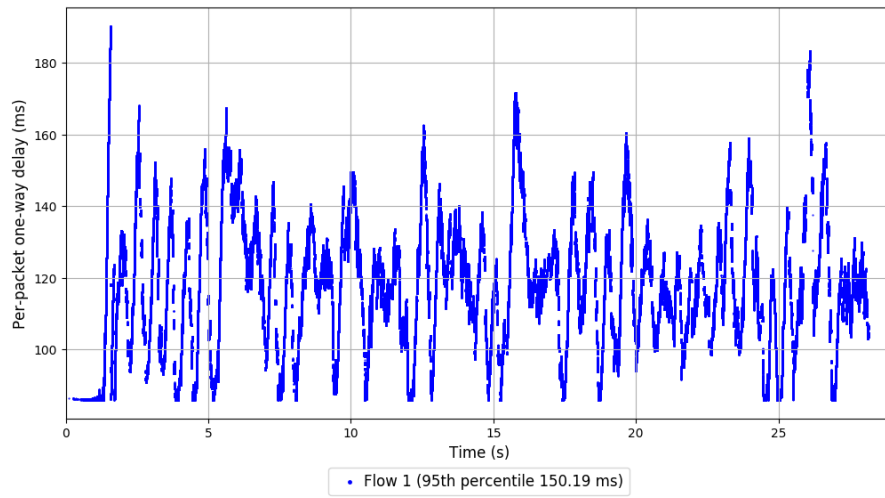
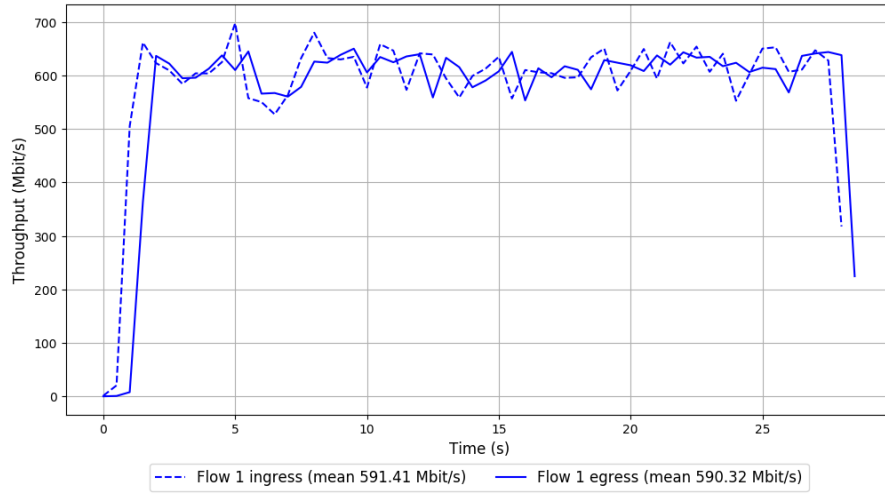
-- Flow 1:

Average throughput: 590.32 Mbit/s

95th percentile per-packet one-way delay: 150.185 ms

Loss rate: 0.80%

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



Run 2: Statistics of Indigo-MuseST

Start at: 2019-07-11 21:53:27

End at: 2019-07-11 21:53:57

Local clock offset: 1.366 ms

Remote clock offset: 1.112 ms

# Below is generated by plot.py at 2019-07-12 01:32:51

# Datalink statistics

-- Total of 1 flow:

Average throughput: 599.45 Mbit/s

95th percentile per-packet one-way delay: 177.136 ms

Loss rate: 0.91%

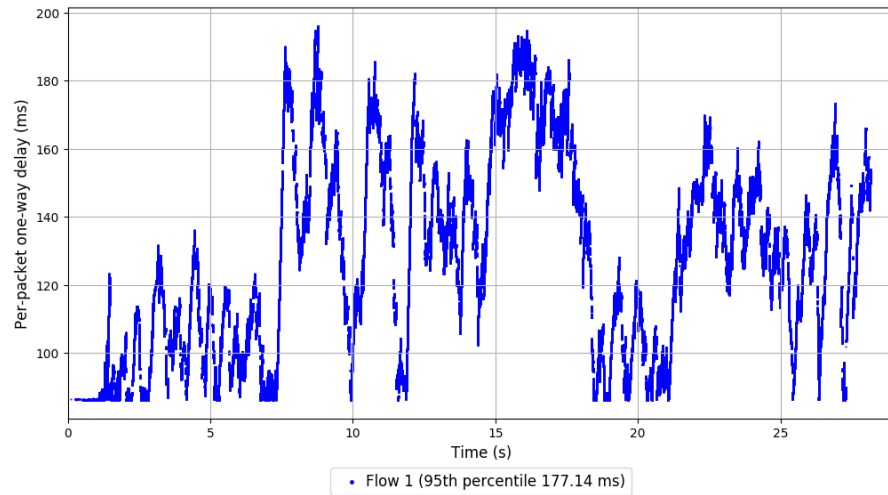
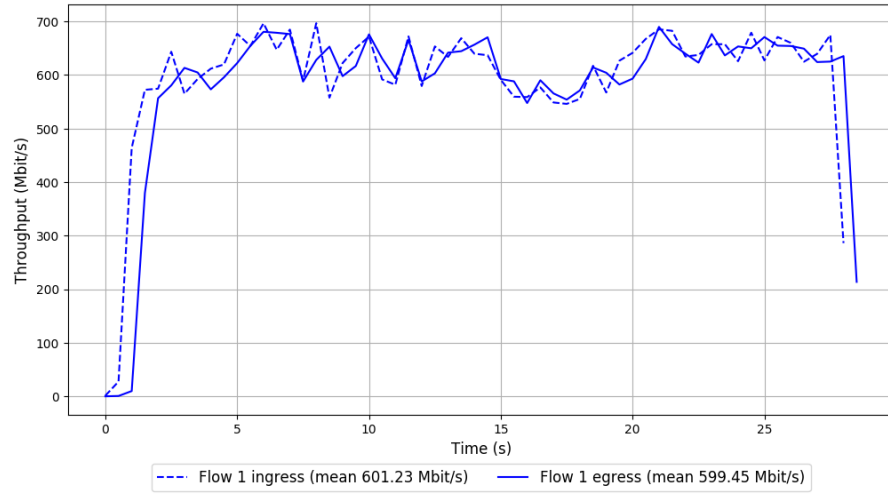
-- Flow 1:

Average throughput: 599.45 Mbit/s

95th percentile per-packet one-way delay: 177.136 ms

Loss rate: 0.91%

## Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MuseST

Start at: 2019-07-11 22:29:00

End at: 2019-07-11 22:29:30

Local clock offset: 0.581 ms

Remote clock offset: 0.528 ms

# Below is generated by plot.py at 2019-07-12 01:32:51

# Datalink statistics

-- Total of 1 flow:

Average throughput: 596.17 Mbit/s

95th percentile per-packet one-way delay: 176.978 ms

Loss rate: 1.05%

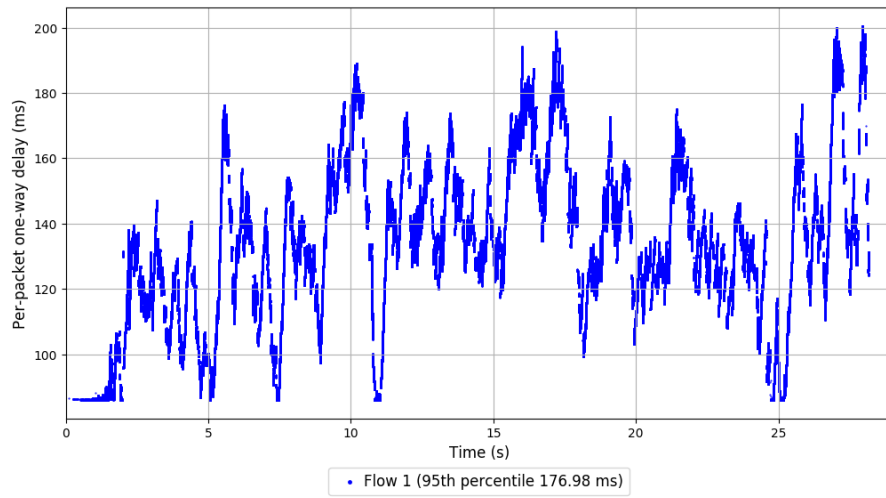
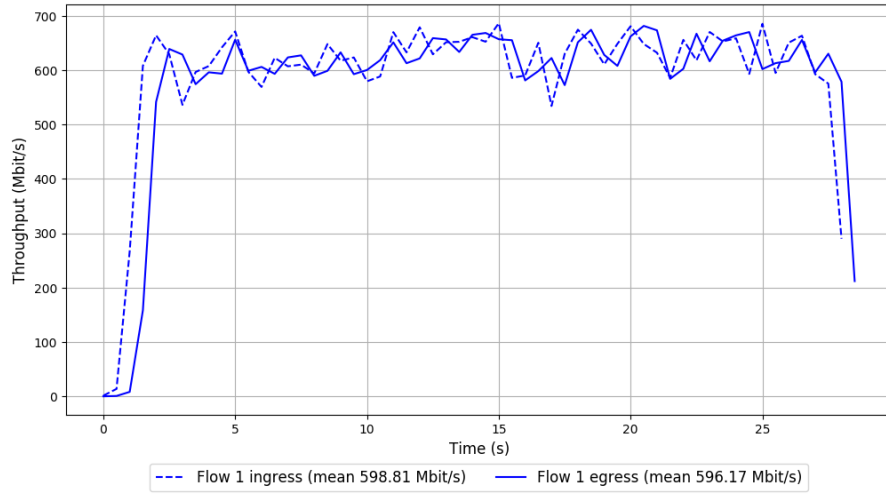
-- Flow 1:

Average throughput: 596.17 Mbit/s

95th percentile per-packet one-way delay: 176.978 ms

Loss rate: 1.05%

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





Run 4: Statistics of Indigo-MuseST

Start at: 2019-07-11 23:04:31

End at: 2019-07-11 23:05:01

Local clock offset: 0.426 ms

Remote clock offset: 0.14 ms

# Below is generated by plot.py at 2019-07-12 01:33:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 598.89 Mbit/s

95th percentile per-packet one-way delay: 164.192 ms

Loss rate: 0.89%

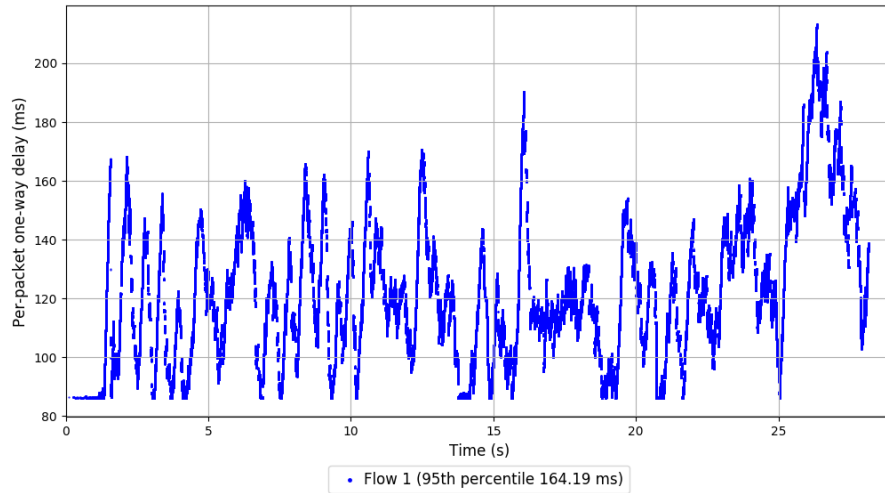
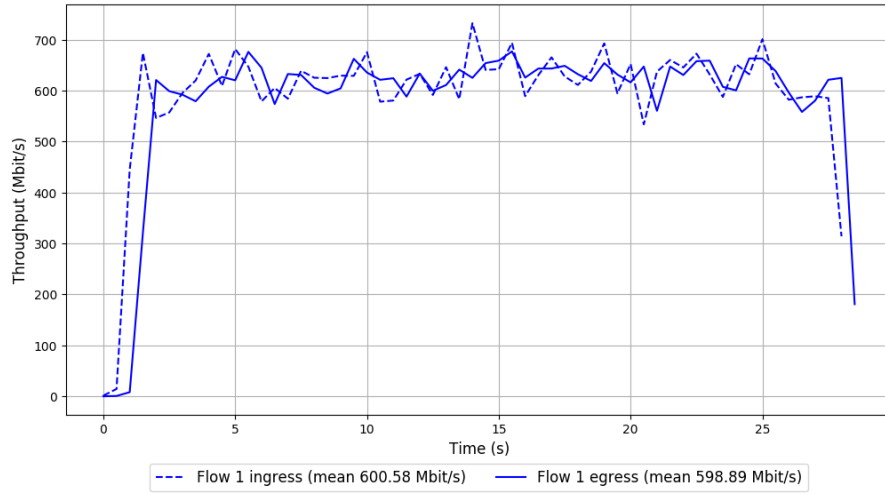
-- Flow 1:

Average throughput: 598.89 Mbit/s

95th percentile per-packet one-way delay: 164.192 ms

Loss rate: 0.89%

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



Run 5: Statistics of Indigo-MuseST

Start at: 2019-07-11 23:39:55

End at: 2019-07-11 23:40:25

Local clock offset: 0.234 ms

Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2019-07-12 01:33:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 589.87 Mbit/s

95th percentile per-packet one-way delay: 176.500 ms

Loss rate: 0.93%

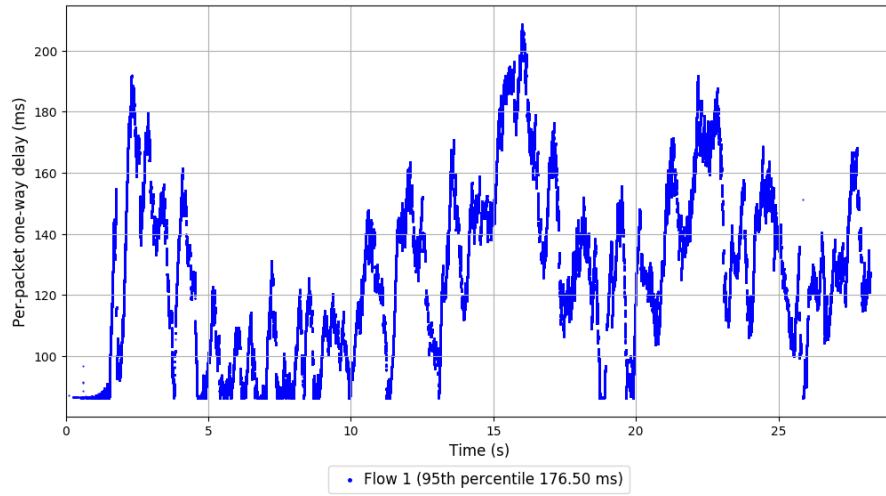
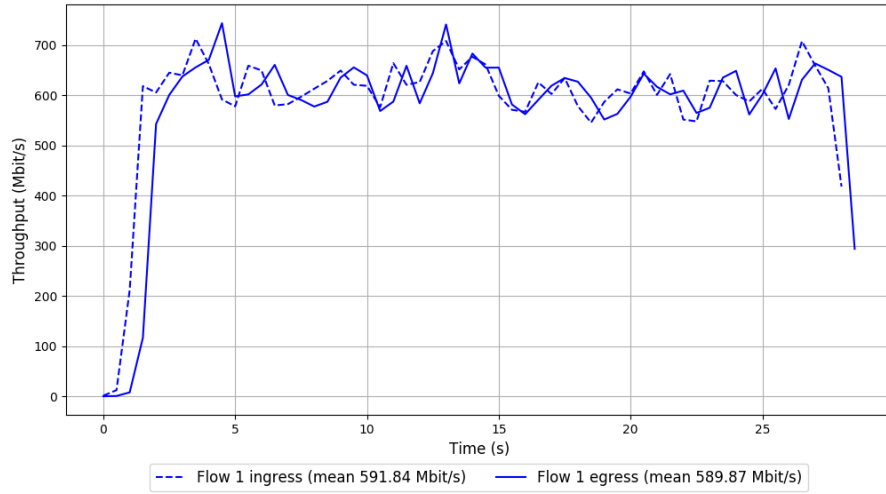
-- Flow 1:

Average throughput: 589.87 Mbit/s

95th percentile per-packet one-way delay: 176.500 ms

Loss rate: 0.93%

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



Run 1: Statistics of LEDBAT

Start at: 2019-07-11 21:12:04

End at: 2019-07-11 21:12:34

Local clock offset: 3.659 ms

Remote clock offset: 2.317 ms

# Below is generated by plot.py at 2019-07-12 01:33:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 12.53 Mbit/s

95th percentile per-packet one-way delay: 86.902 ms

Loss rate: 1.15%

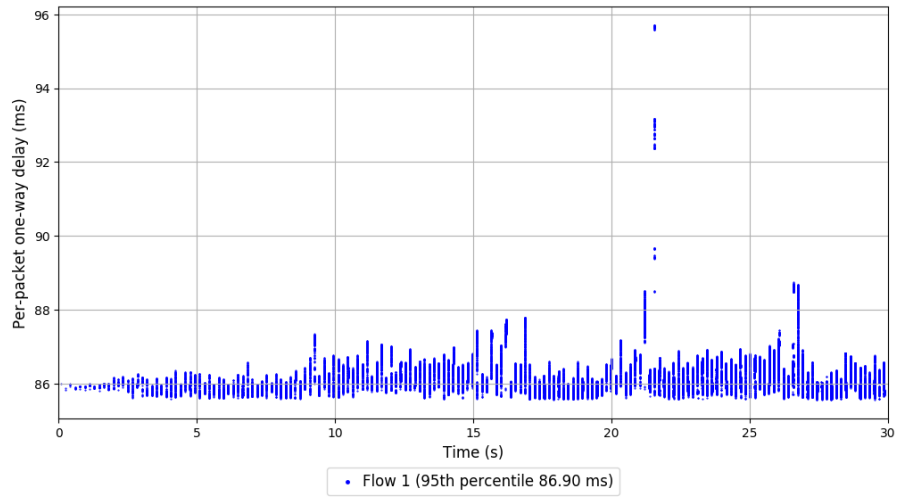
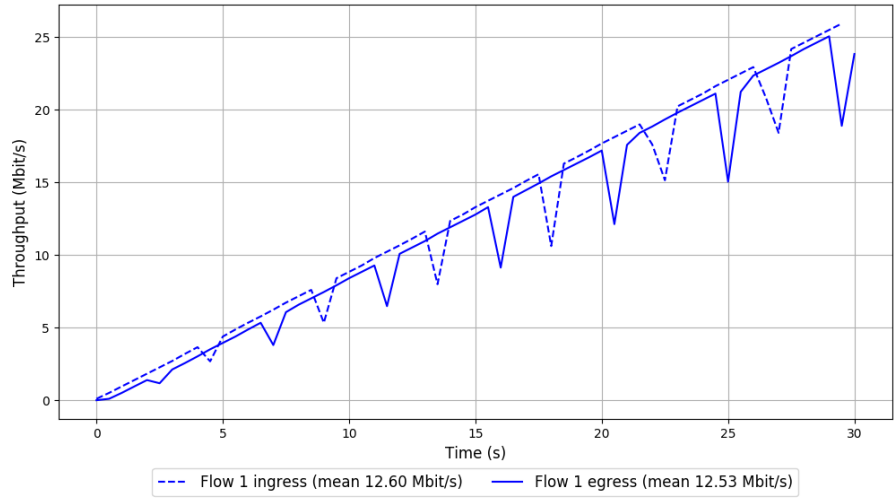
-- Flow 1:

Average throughput: 12.53 Mbit/s

95th percentile per-packet one-way delay: 86.902 ms

Loss rate: 1.15%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-07-11 21:47:48

End at: 2019-07-11 21:48:18

Local clock offset: 0.677 ms

Remote clock offset: 1.005 ms

# Below is generated by plot.py at 2019-07-12 01:33:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 12.54 Mbit/s

95th percentile per-packet one-way delay: 87.191 ms

Loss rate: 1.15%

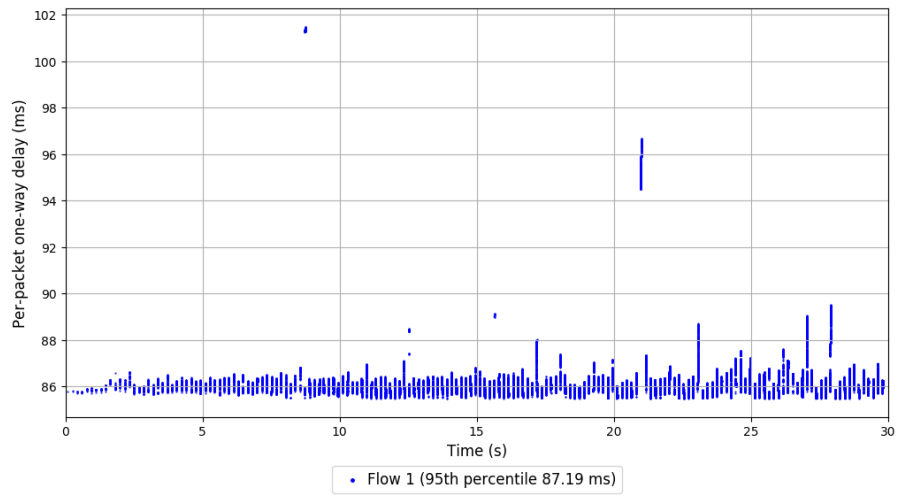
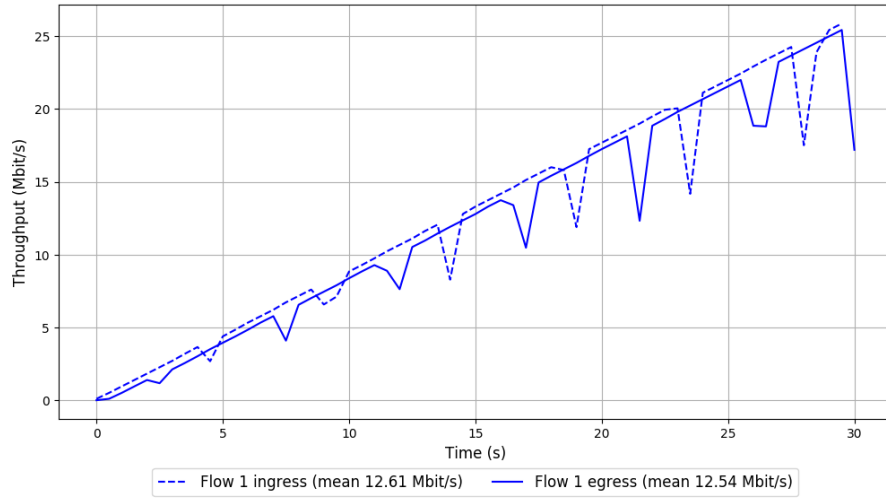
-- Flow 1:

Average throughput: 12.54 Mbit/s

95th percentile per-packet one-way delay: 87.191 ms

Loss rate: 1.15%

Run 2: Report of LEDBAT — Data Link





Run 3: Statistics of LEDBAT

Start at: 2019-07-11 22:23:25

End at: 2019-07-11 22:23:55

Local clock offset: 0.809 ms

Remote clock offset: 0.533 ms

# Below is generated by plot.py at 2019-07-12 01:33:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 12.50 Mbit/s

95th percentile per-packet one-way delay: 87.898 ms

Loss rate: 1.15%

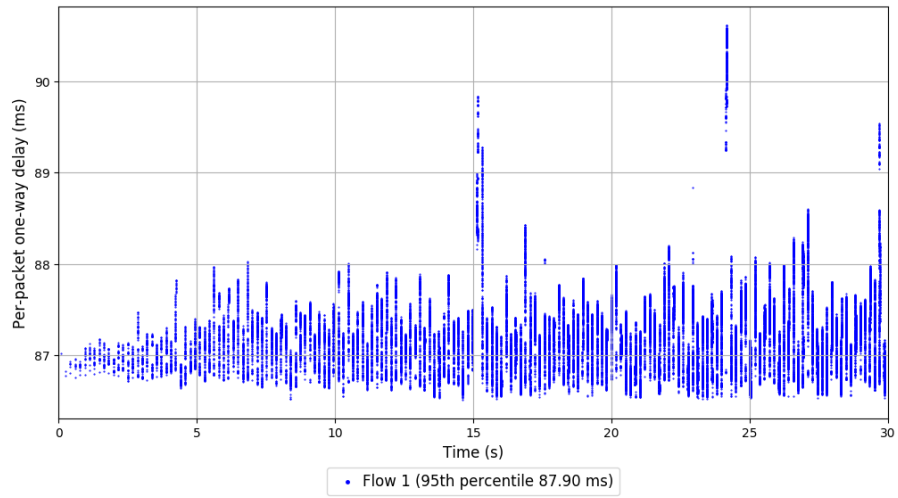
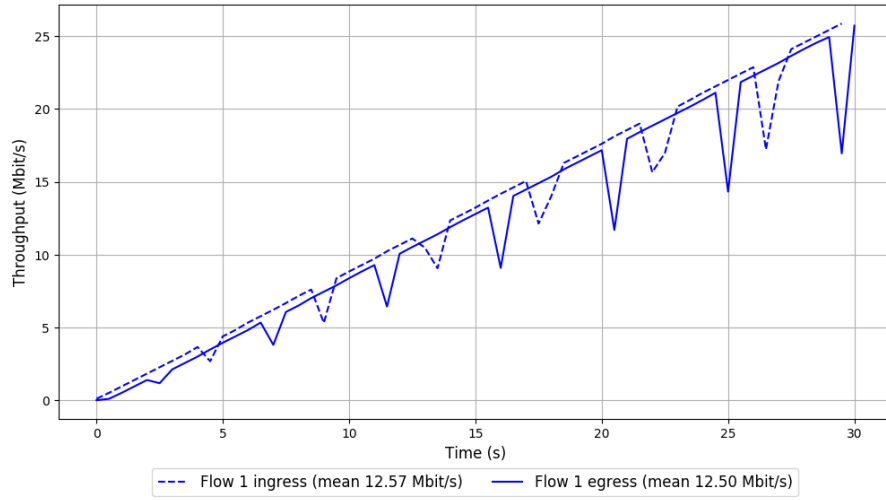
-- Flow 1:

Average throughput: 12.50 Mbit/s

95th percentile per-packet one-way delay: 87.898 ms

Loss rate: 1.15%

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



Run 4: Statistics of LEDBAT

Start at: 2019-07-11 22:58:59

End at: 2019-07-11 22:59:29

Local clock offset: 0.286 ms

Remote clock offset: 0.179 ms

# Below is generated by plot.py at 2019-07-12 01:33:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 12.53 Mbit/s

95th percentile per-packet one-way delay: 87.290 ms

Loss rate: 1.15%

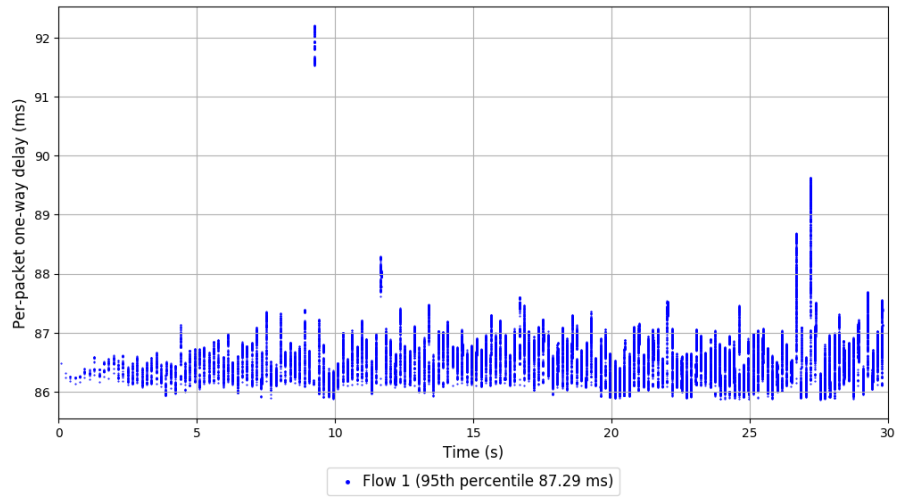
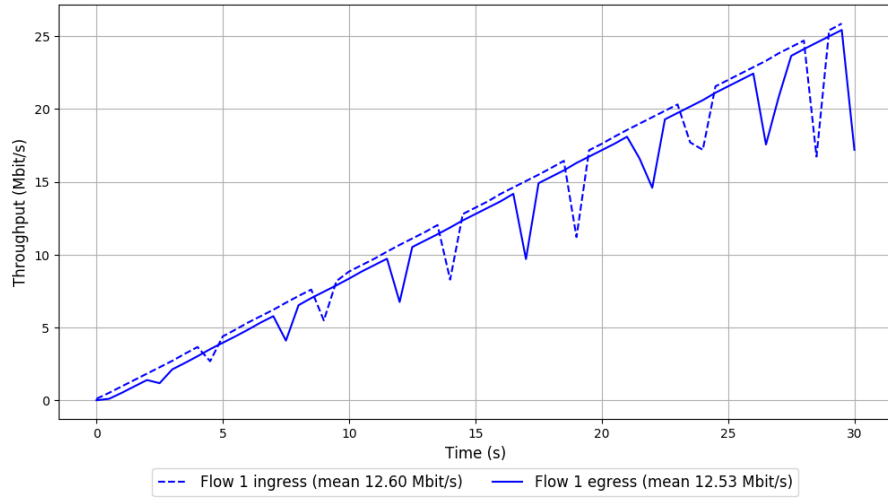
-- Flow 1:

Average throughput: 12.53 Mbit/s

95th percentile per-packet one-way delay: 87.290 ms

Loss rate: 1.15%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2019-07-11 23:34:12

End at: 2019-07-11 23:34:42

Local clock offset: 0.536 ms

Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2019-07-12 01:33:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 12.50 Mbit/s

95th percentile per-packet one-way delay: 88.259 ms

Loss rate: 1.15%

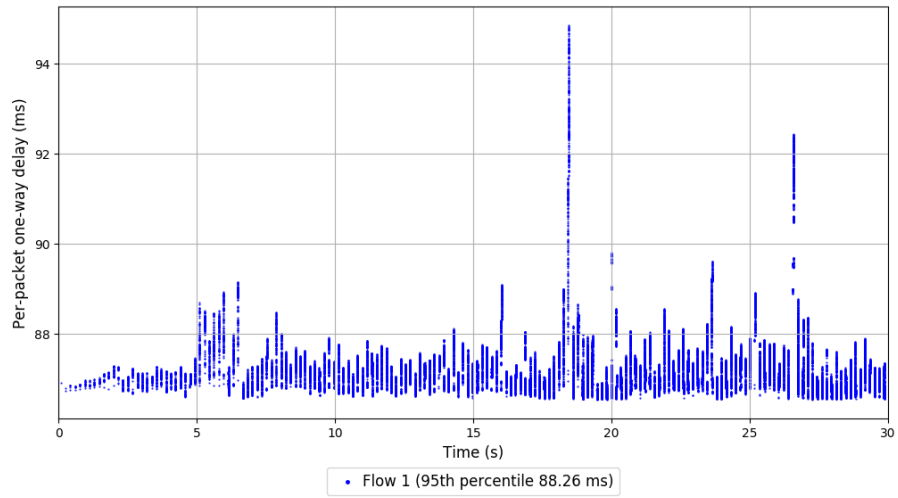
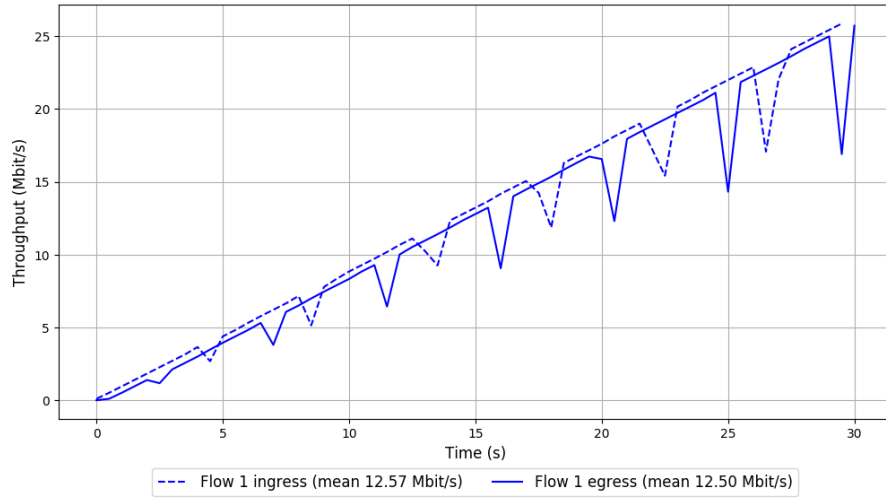
-- Flow 1:

Average throughput: 12.50 Mbit/s

95th percentile per-packet one-way delay: 88.259 ms

Loss rate: 1.15%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of Muses\\_DecisionTree

Start at: 2019-07-11 21:16:07

End at: 2019-07-11 21:16:37

Local clock offset: 4.39 ms

Remote clock offset: 2.43 ms

# Below is generated by plot.py at 2019-07-12 01:34:30

# Datalink statistics

-- Total of 1 flow:

Average throughput: 544.19 Mbit/s

95th percentile per-packet one-way delay: 125.739 ms

Loss rate: 1.06%

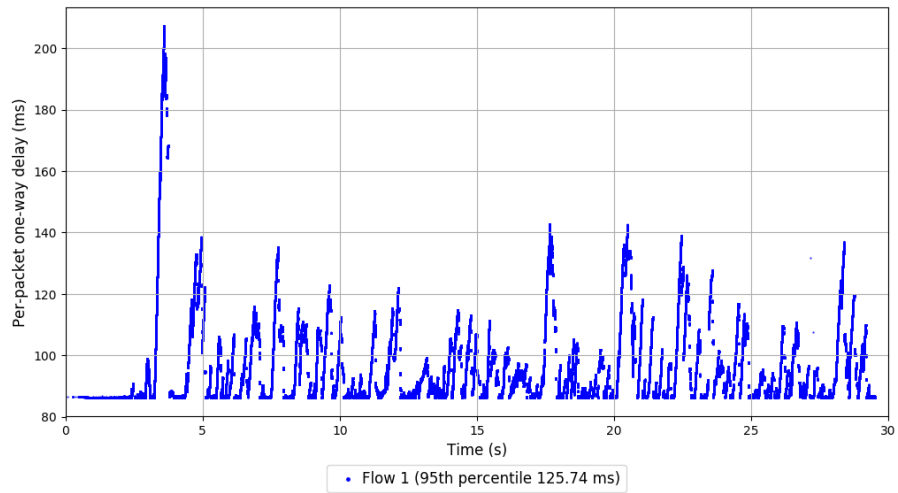
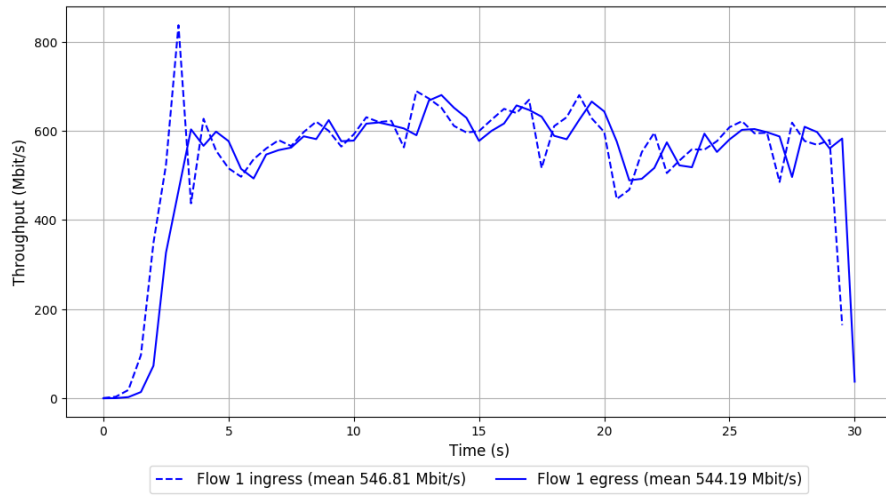
-- Flow 1:

Average throughput: 544.19 Mbit/s

95th percentile per-packet one-way delay: 125.739 ms

Loss rate: 1.06%

Run 1: Report of Muses\_DecisionTree — Data Link





Run 2: Statistics of Muses\\_DecisionTree

Start at: 2019-07-11 21:51:51

End at: 2019-07-11 21:52:21

Local clock offset: 1.397 ms

Remote clock offset: 1.081 ms

# Below is generated by plot.py at 2019-07-12 01:34:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 534.14 Mbit/s

95th percentile per-packet one-way delay: 120.013 ms

Loss rate: 1.00%

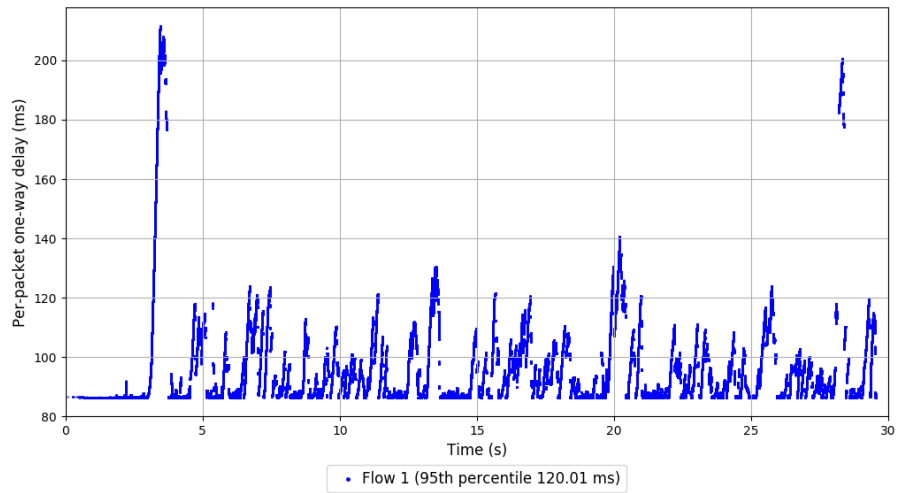
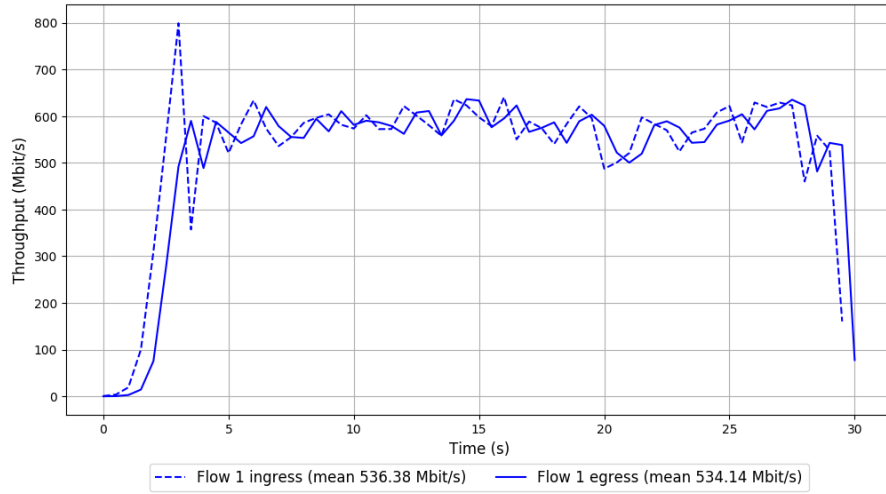
-- Flow 1:

Average throughput: 534.14 Mbit/s

95th percentile per-packet one-way delay: 120.013 ms

Loss rate: 1.00%

Run 2: Report of Muses\_DecisionTree — Data Link



Run 3: Statistics of Muses\\_DecisionTree

Start at: 2019-07-11 22:27:26

End at: 2019-07-11 22:27:56

Local clock offset: 0.146 ms

Remote clock offset: 0.597 ms

# Below is generated by plot.py at 2019-07-12 01:34:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 479.31 Mbit/s

95th percentile per-packet one-way delay: 118.009 ms

Loss rate: 0.94%

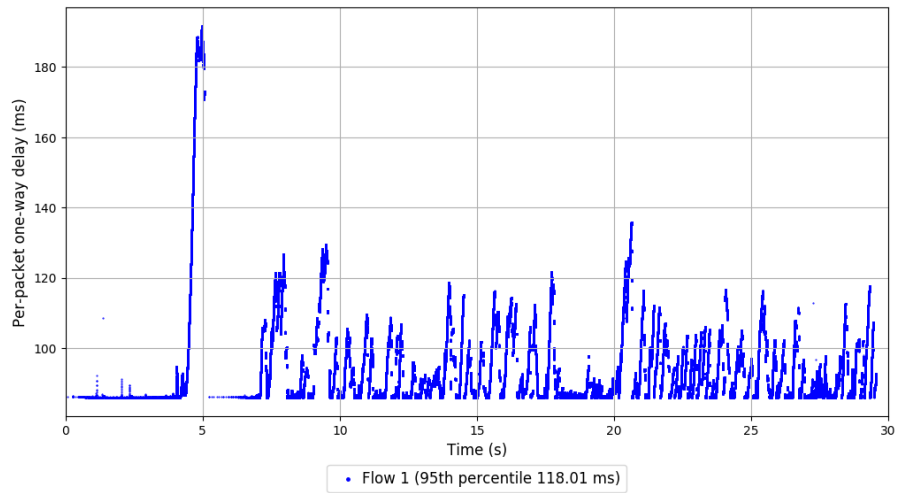
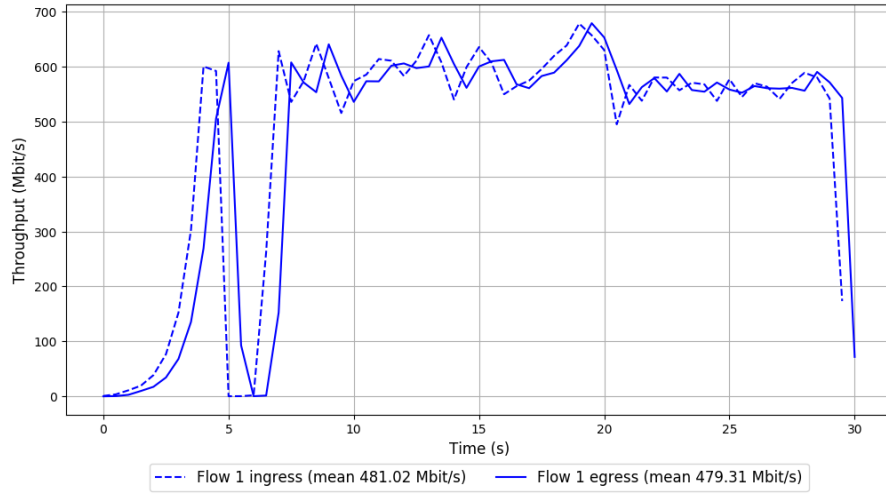
-- Flow 1:

Average throughput: 479.31 Mbit/s

95th percentile per-packet one-way delay: 118.009 ms

Loss rate: 0.94%

### Run 3: Report of Muses\_DecisionTree — Data Link



Run 4: Statistics of Muses\\_DecisionTree

Start at: 2019-07-11 23:02:56

End at: 2019-07-11 23:03:26

Local clock offset: 0.115 ms

Remote clock offset: 0.172 ms

# Below is generated by plot.py at 2019-07-12 01:38:04

# Datalink statistics

-- Total of 1 flow:

Average throughput: 489.75 Mbit/s

95th percentile per-packet one-way delay: 119.972 ms

Loss rate: 1.25%

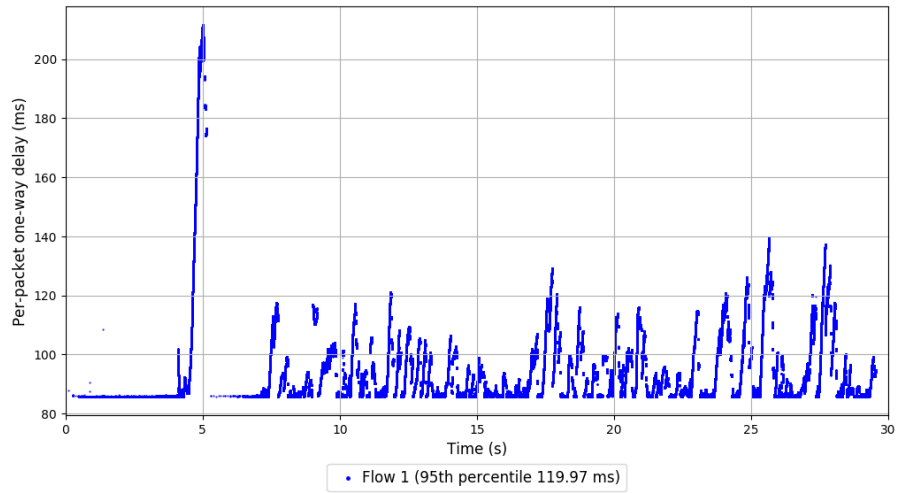
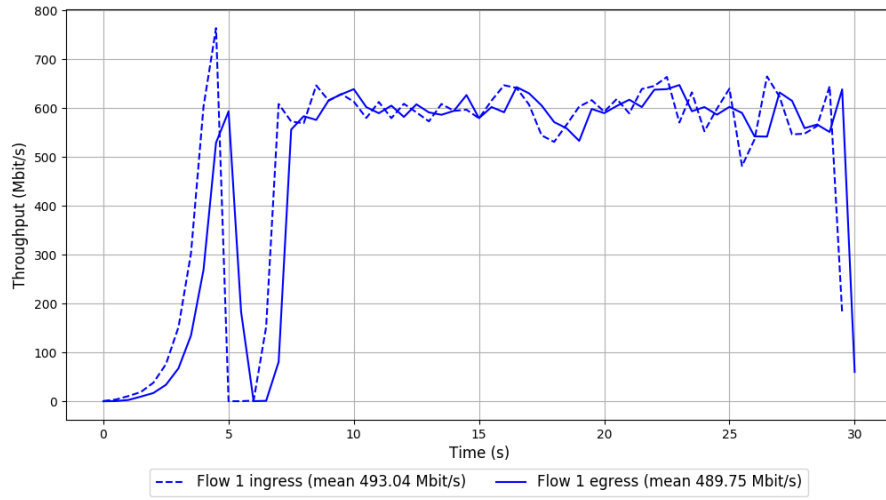
-- Flow 1:

Average throughput: 489.75 Mbit/s

95th percentile per-packet one-way delay: 119.972 ms

Loss rate: 1.25%

Run 4: Report of Muses\_DecisionTree — Data Link



Run 5: Statistics of Muses\\_DecisionTree

Start at: 2019-07-11 23:38:18

End at: 2019-07-11 23:38:48

Local clock offset: 0.213 ms

Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2019-07-12 01:42:25

# Datalink statistics

-- Total of 1 flow:

Average throughput: 543.36 Mbit/s

95th percentile per-packet one-way delay: 116.882 ms

Loss rate: 0.58%

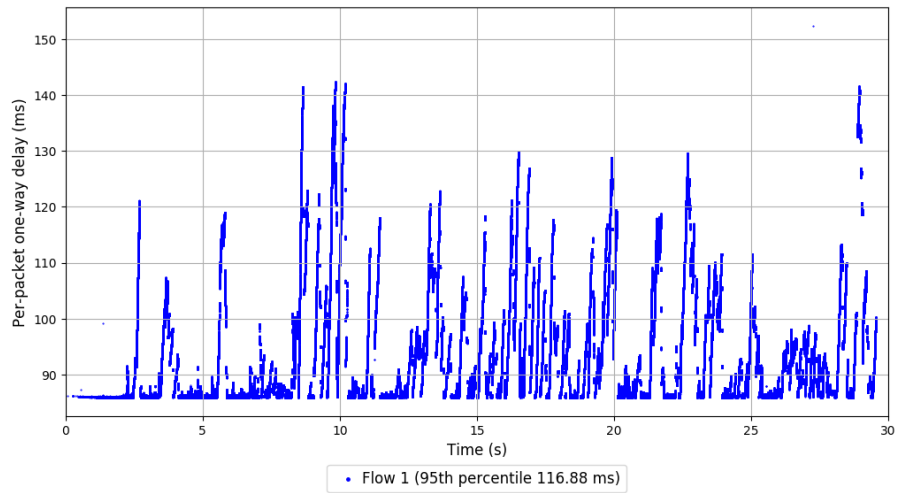
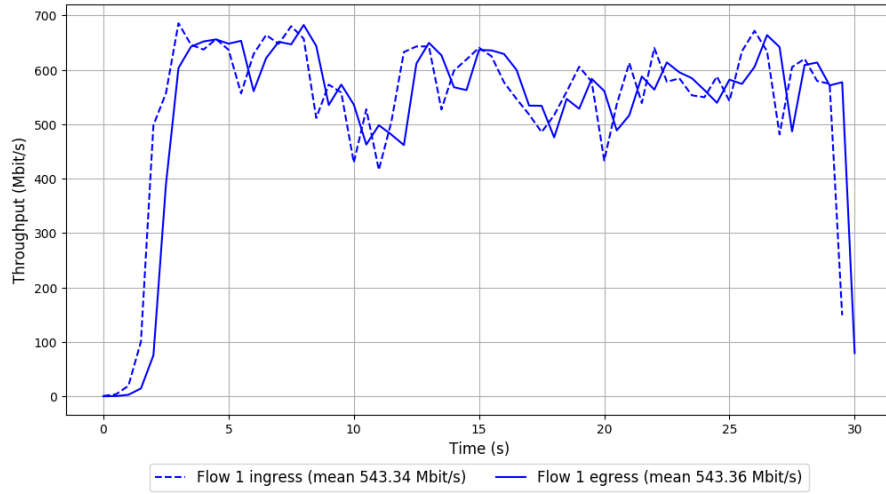
-- Flow 1:

Average throughput: 543.36 Mbit/s

95th percentile per-packet one-way delay: 116.882 ms

Loss rate: 0.58%

Run 5: Report of Muses\_DecisionTree — Data Link





Run 1: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-11 21:32:05

End at: 2019-07-11 21:32:35

Local clock offset: 0.921 ms

Remote clock offset: 1.0 ms

# Below is generated by plot.py at 2019-07-12 01:42:25

# Datalink statistics

-- Total of 1 flow:

Average throughput: 283.44 Mbit/s

95th percentile per-packet one-way delay: 199.651 ms

Loss rate: 13.71%

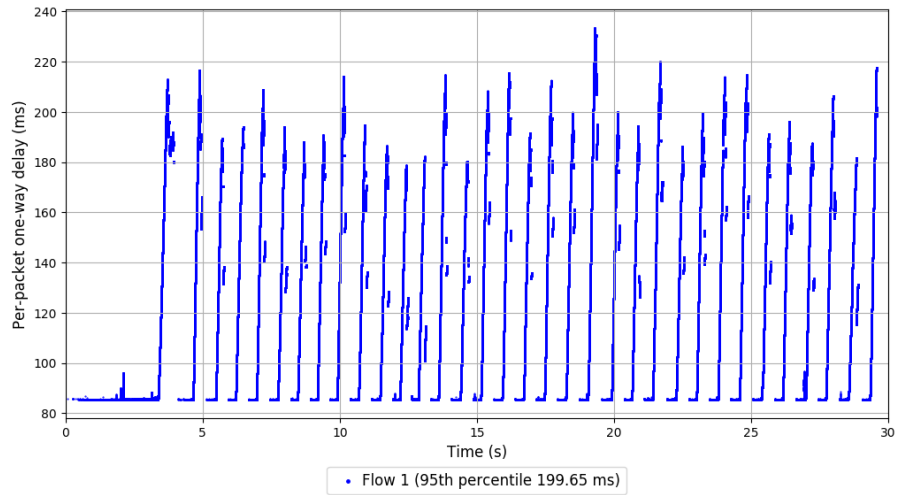
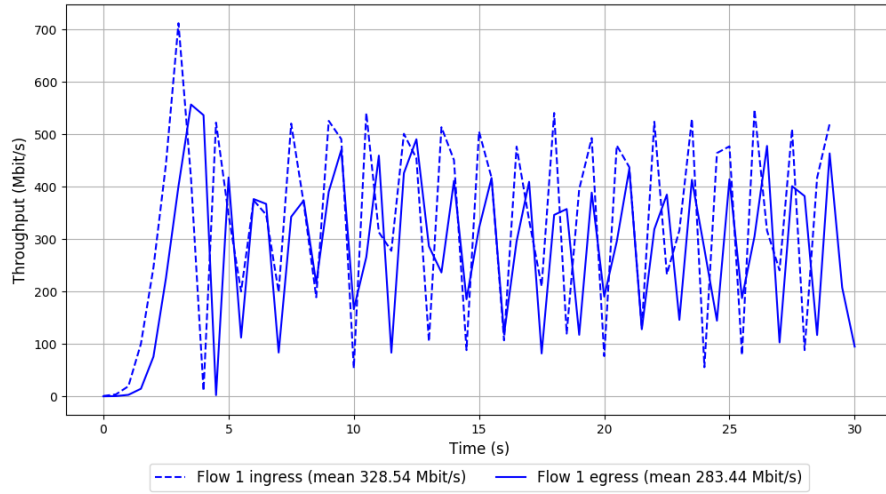
-- Flow 1:

Average throughput: 283.44 Mbit/s

95th percentile per-packet one-way delay: 199.651 ms

Loss rate: 13.71%

Run 1: Report of Muses\_DecisionTreeH0 — Data Link



Run 2: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-11 22:07:46

End at: 2019-07-11 22:08:16

Local clock offset: 0.337 ms

Remote clock offset: 0.471 ms

# Below is generated by plot.py at 2019-07-12 01:42:25

# Datalink statistics

-- Total of 1 flow:

Average throughput: 367.82 Mbit/s

95th percentile per-packet one-way delay: 196.104 ms

Loss rate: 7.74%

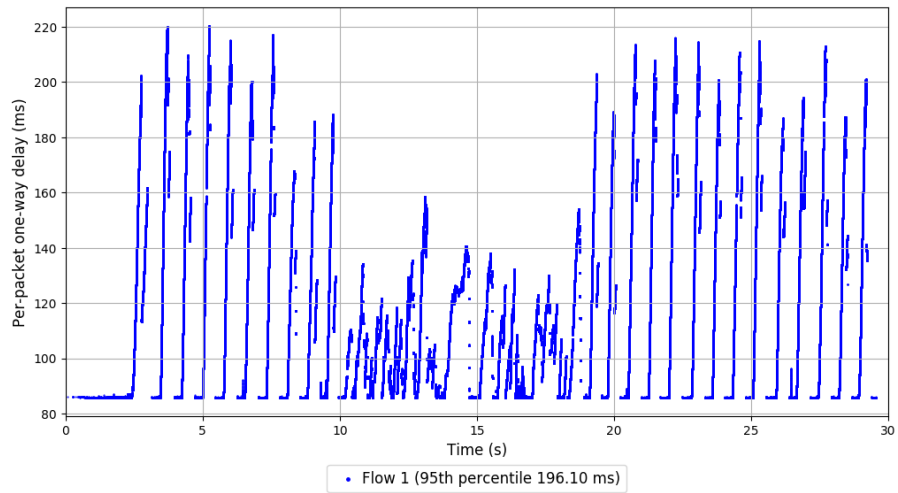
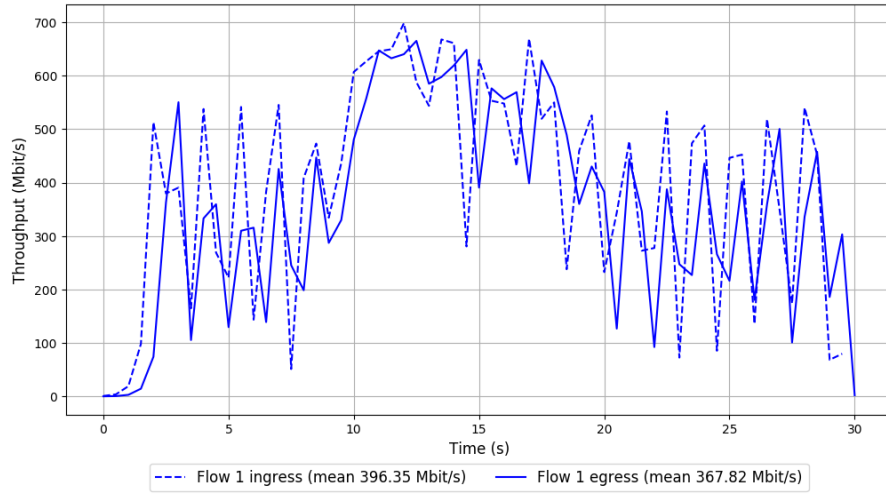
-- Flow 1:

Average throughput: 367.82 Mbit/s

95th percentile per-packet one-way delay: 196.104 ms

Loss rate: 7.74%

Run 2: Report of Muses\_DecisionTreeH0 — Data Link



Run 3: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-11 22:43:10

End at: 2019-07-11 22:43:41

Local clock offset: 0.07 ms

Remote clock offset: 0.173 ms

# Below is generated by plot.py at 2019-07-12 01:42:25

# Datalink statistics

-- Total of 1 flow:

Average throughput: 281.64 Mbit/s

95th percentile per-packet one-way delay: 196.704 ms

Loss rate: 11.83%

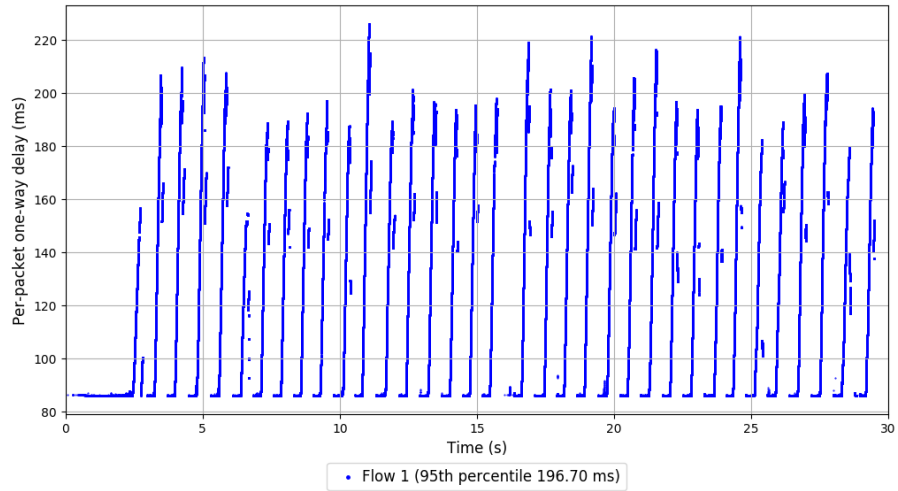
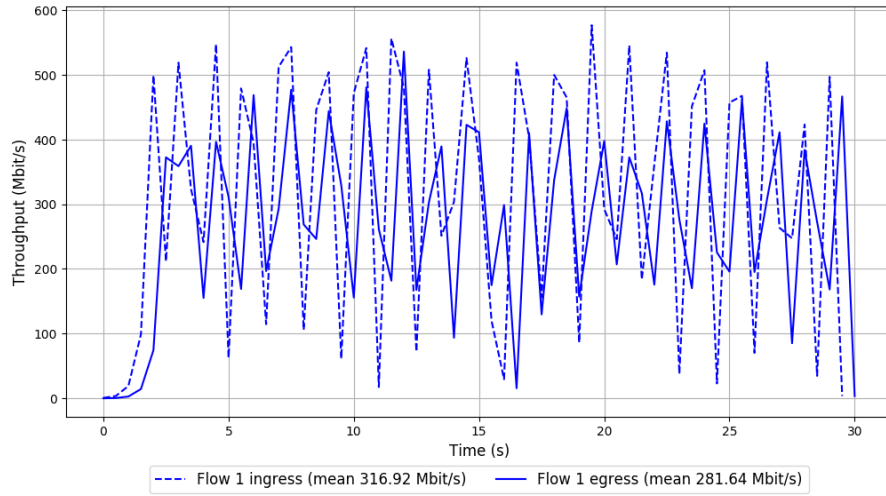
-- Flow 1:

Average throughput: 281.64 Mbit/s

95th percentile per-packet one-way delay: 196.704 ms

Loss rate: 11.83%

### Run 3: Report of Muses\_DecisionTreeH0 — Data Link



Run 4: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-11 23:18:34

End at: 2019-07-11 23:19:04

Local clock offset: 0.216 ms

Remote clock offset: 0.035 ms

# Below is generated by plot.py at 2019-07-12 01:42:25

# Datalink statistics

-- Total of 1 flow:

Average throughput: 305.38 Mbit/s

95th percentile per-packet one-way delay: 197.224 ms

Loss rate: 8.09%

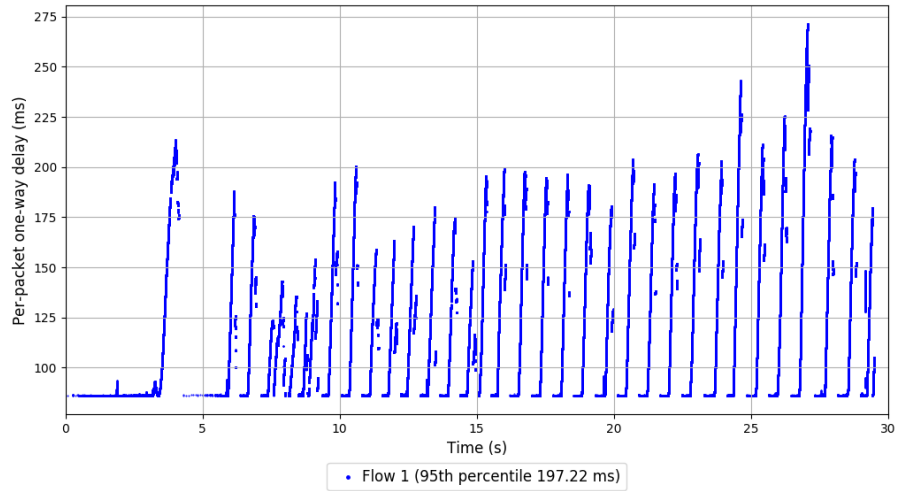
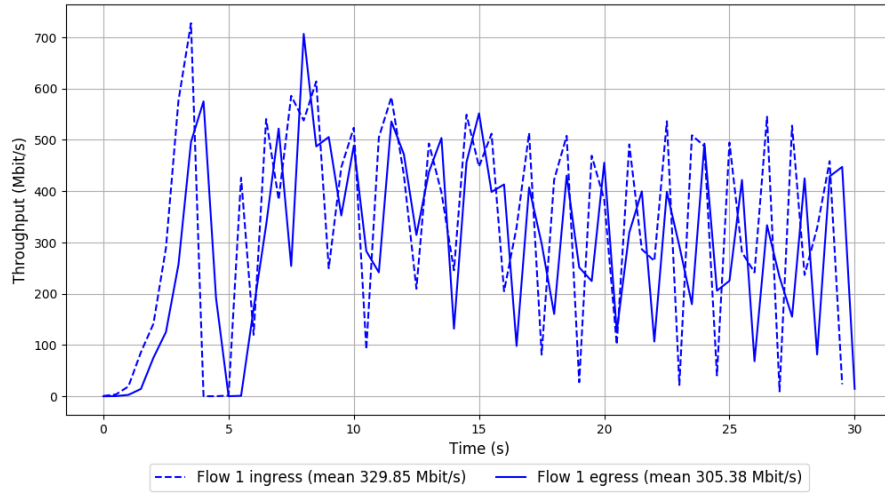
-- Flow 1:

Average throughput: 305.38 Mbit/s

95th percentile per-packet one-way delay: 197.224 ms

Loss rate: 8.09%

Run 4: Report of Muses\_DecisionTreeH0 — Data Link





Run 5: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-07-11 23:54:08

End at: 2019-07-11 23:54:38

Local clock offset: -0.066 ms

Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2019-07-12 01:42:25

# Datalink statistics

-- Total of 1 flow:

Average throughput: 323.45 Mbit/s

95th percentile per-packet one-way delay: 190.643 ms

Loss rate: 7.75%

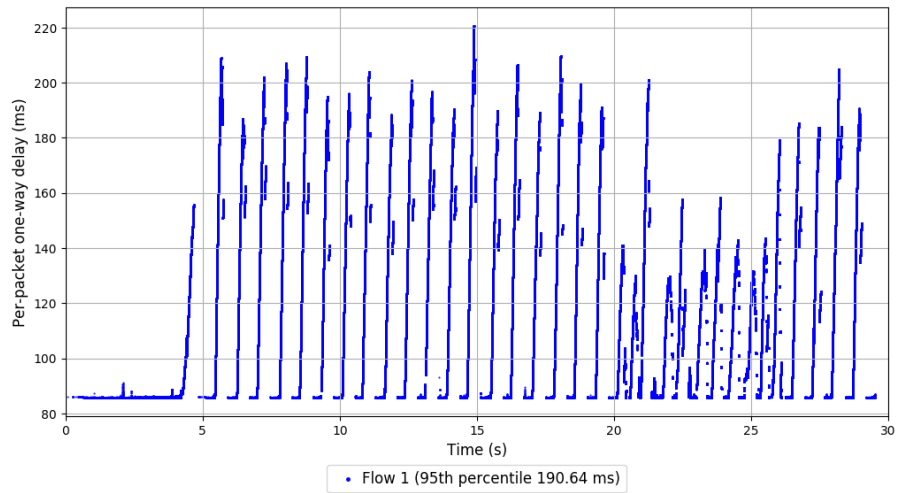
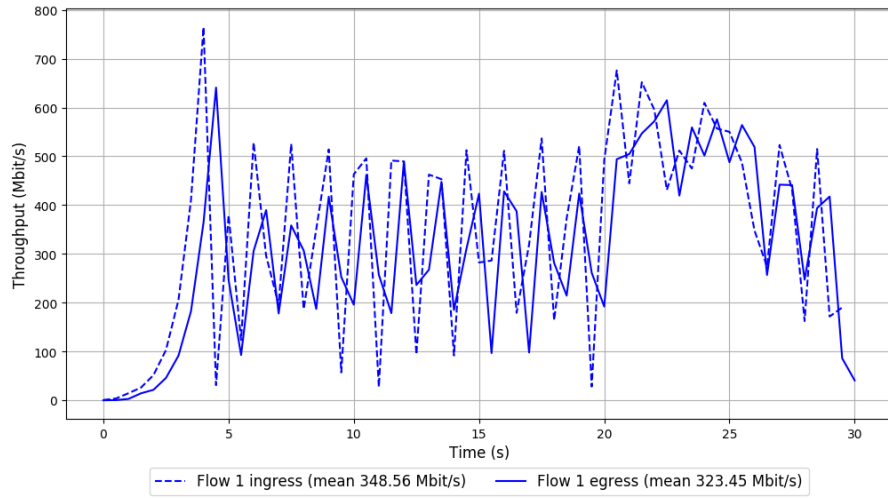
-- Flow 1:

Average throughput: 323.45 Mbit/s

95th percentile per-packet one-way delay: 190.643 ms

Loss rate: 7.75%

Run 5: Report of Muses\_DecisionTreeH0 — Data Link



Run 1: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-11 21:28:52

End at: 2019-07-11 21:29:22

Local clock offset: 1.733 ms

Remote clock offset: 1.164 ms

# Below is generated by plot.py at 2019-07-12 01:45:17

# Datalink statistics

-- Total of 1 flow:

Average throughput: 550.89 Mbit/s

95th percentile per-packet one-way delay: 117.679 ms

Loss rate: 0.66%

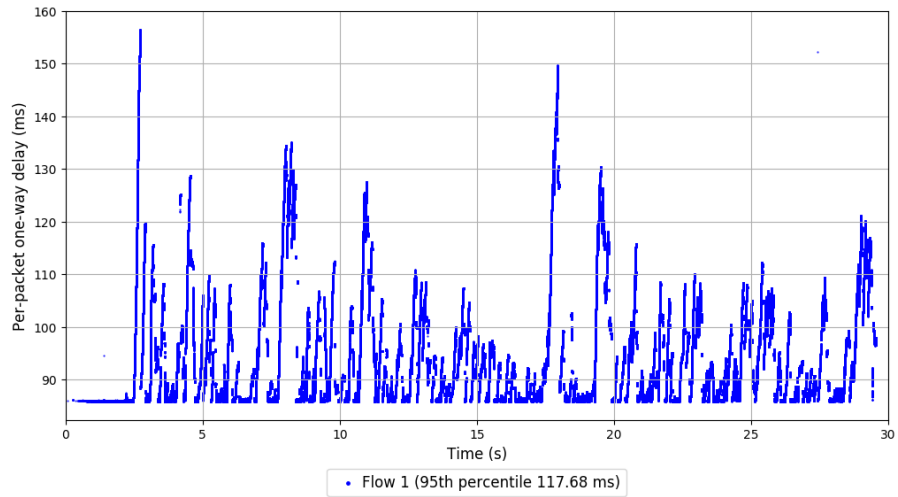
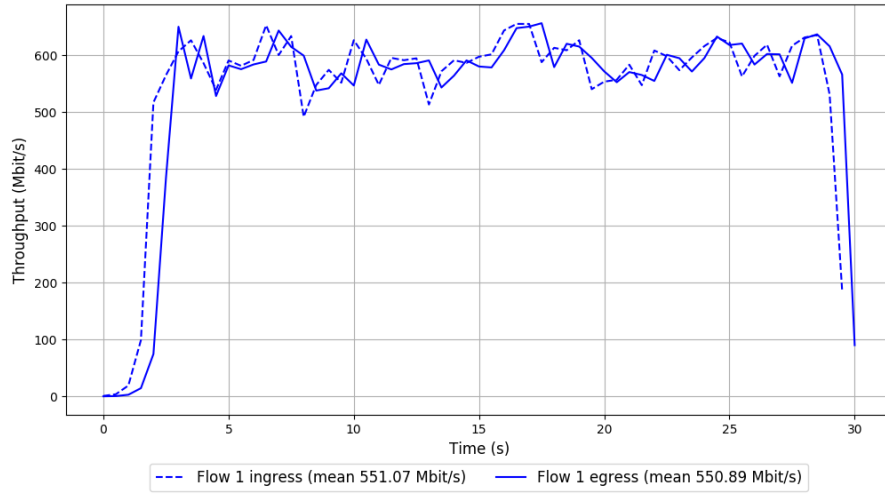
-- Flow 1:

Average throughput: 550.89 Mbit/s

95th percentile per-packet one-way delay: 117.679 ms

Loss rate: 0.66%

Run 1: Report of Muses\_DecisionTreeR0 — Data Link



Run 2: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-11 22:04:32

End at: 2019-07-11 22:05:02

Local clock offset: 0.092 ms

Remote clock offset: 0.489 ms

# Below is generated by plot.py at 2019-07-12 01:47:33

# Datalink statistics

-- Total of 1 flow:

Average throughput: 523.37 Mbit/s

95th percentile per-packet one-way delay: 116.754 ms

Loss rate: 0.98%

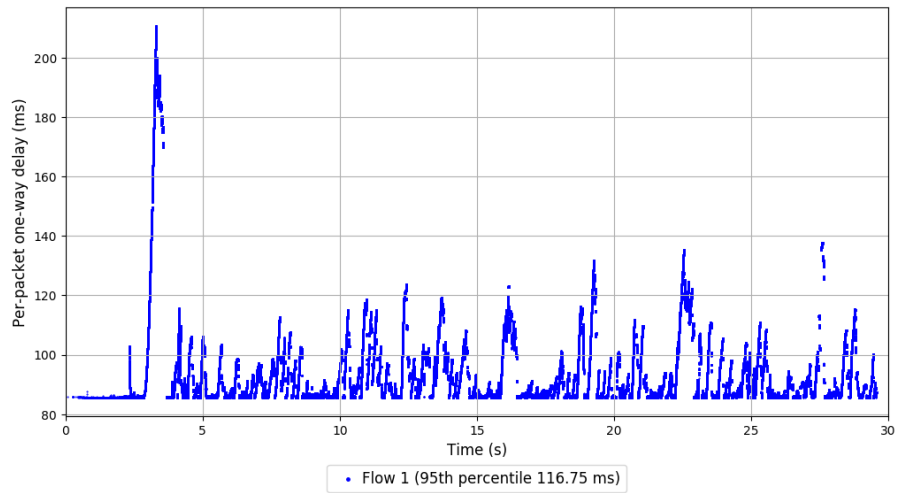
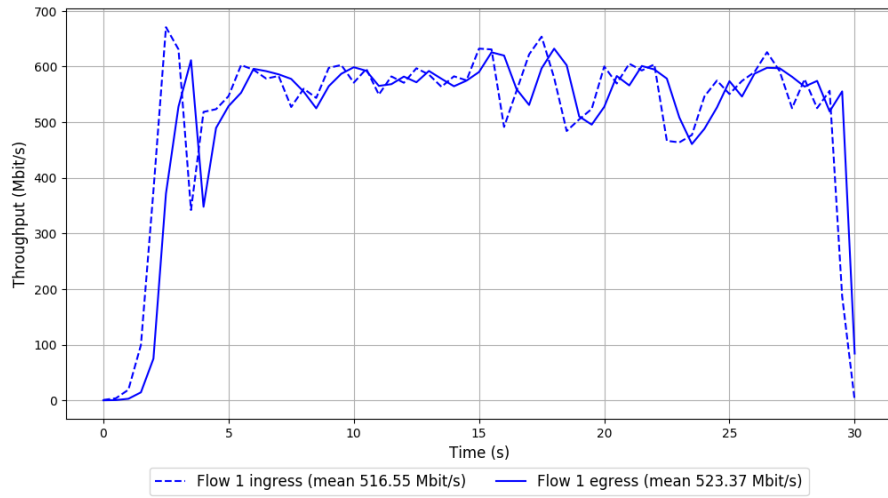
-- Flow 1:

Average throughput: 523.37 Mbit/s

95th percentile per-packet one-way delay: 116.754 ms

Loss rate: 0.98%

Run 2: Report of Muses\_DecisionTreeR0 — Data Link



Run 3: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-11 22:39:55

End at: 2019-07-11 22:40:26

Local clock offset: 0.102 ms

Remote clock offset: 0.188 ms

# Below is generated by plot.py at 2019-07-12 01:48:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 542.68 Mbit/s

95th percentile per-packet one-way delay: 121.662 ms

Loss rate: 0.63%

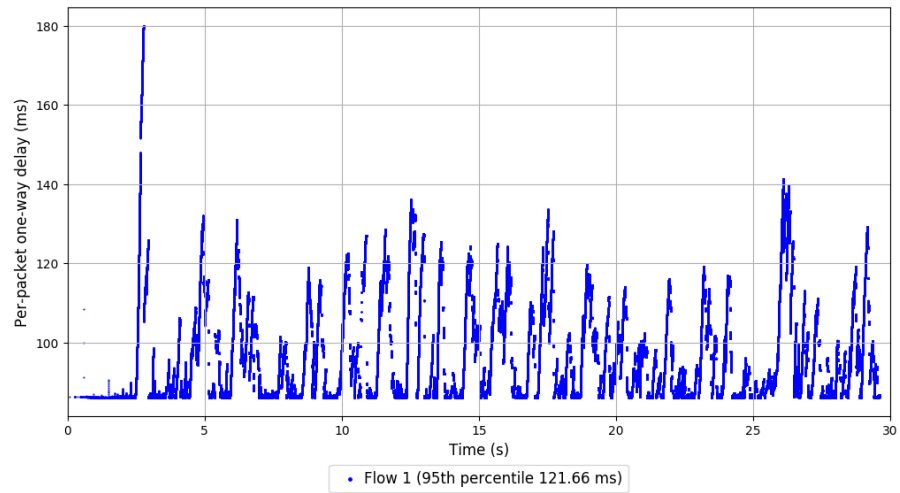
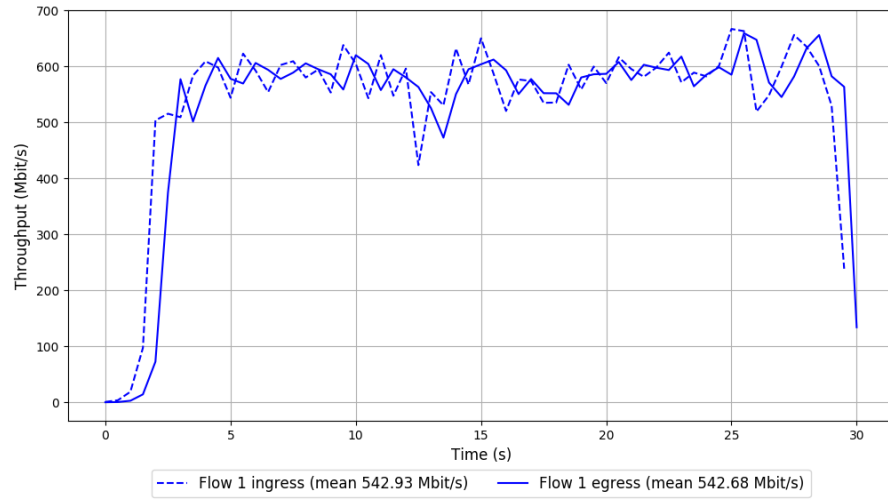
-- Flow 1:

Average throughput: 542.68 Mbit/s

95th percentile per-packet one-way delay: 121.662 ms

Loss rate: 0.63%

### Run 3: Report of Muses\_DecisionTreeR0 — Data Link





Run 4: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-11 23:15:24

End at: 2019-07-11 23:15:54

Local clock offset: 0.002 ms

Remote clock offset: 0.044 ms

# Below is generated by plot.py at 2019-07-12 01:48:35

# Datalink statistics

-- Total of 1 flow:

Average throughput: 545.60 Mbit/s

95th percentile per-packet one-way delay: 124.449 ms

Loss rate: 0.85%

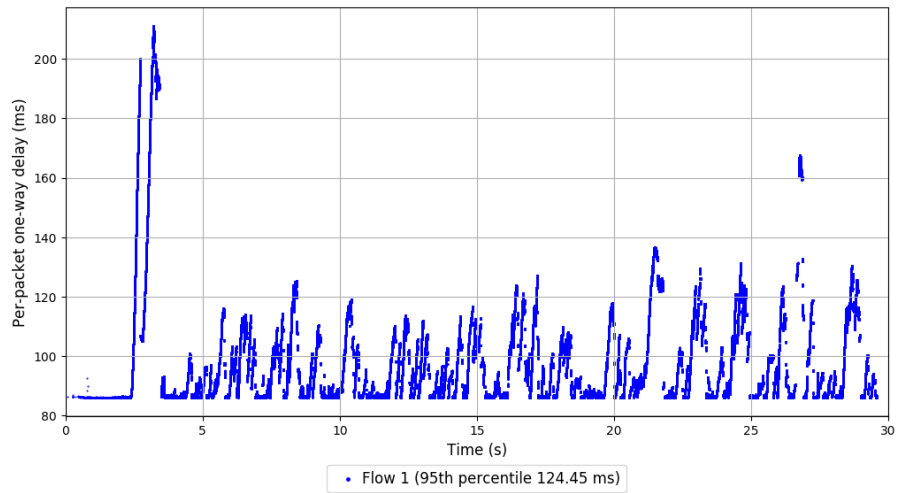
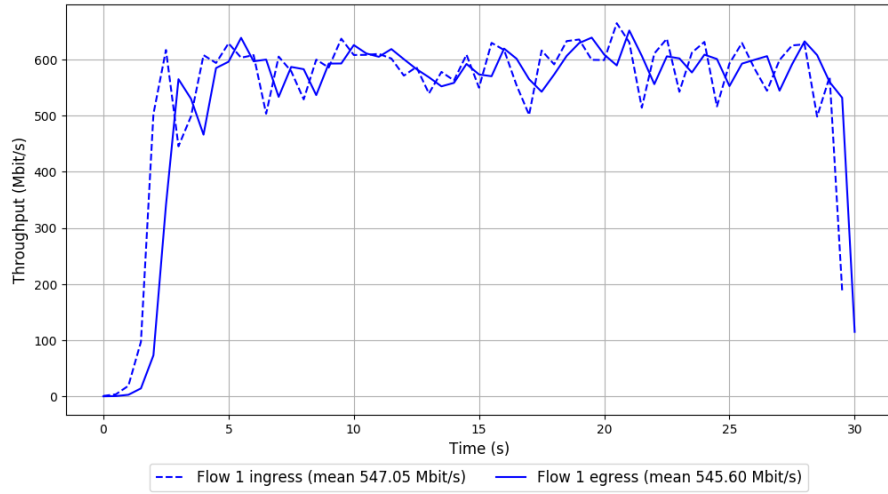
-- Flow 1:

Average throughput: 545.60 Mbit/s

95th percentile per-packet one-way delay: 124.449 ms

Loss rate: 0.85%

Run 4: Report of Muses\_DecisionTreeR0 — Data Link



Run 5: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-07-11 23:50:54

End at: 2019-07-11 23:51:25

Local clock offset: 0.01 ms

Remote clock offset: 0.018 ms

# Below is generated by plot.py at 2019-07-12 01:49:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 508.62 Mbit/s

95th percentile per-packet one-way delay: 116.080 ms

Loss rate: 0.95%

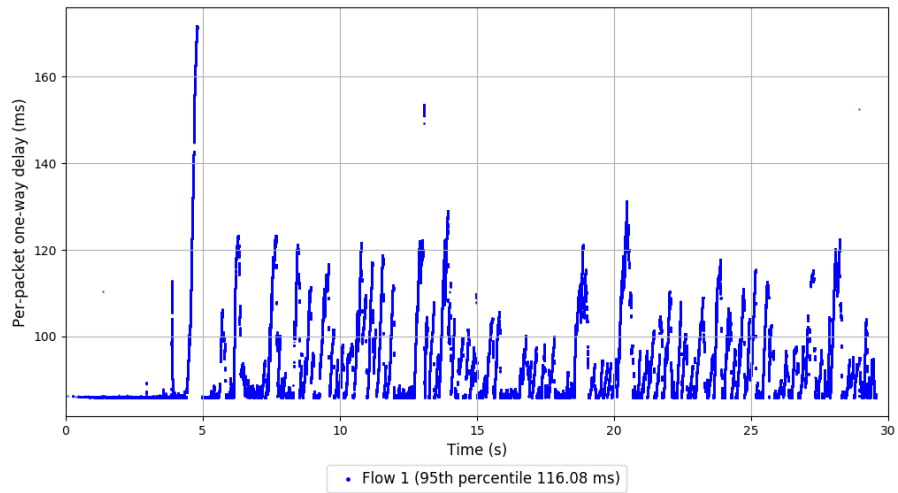
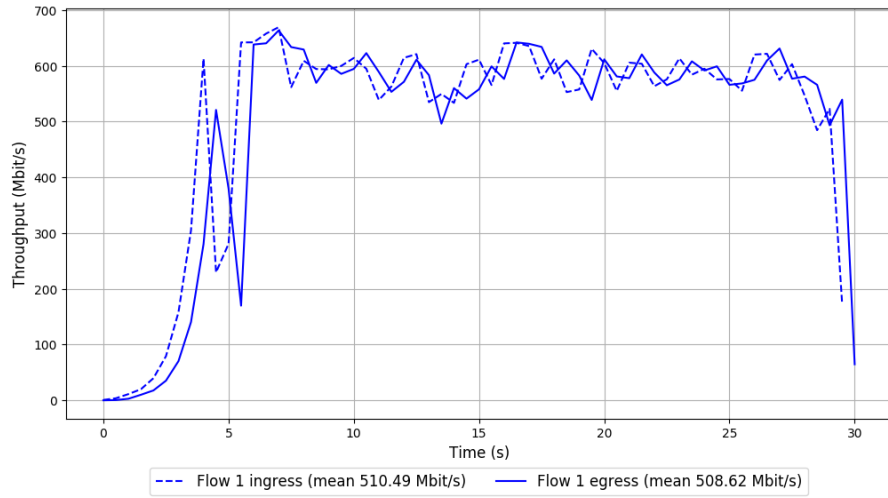
-- Flow 1:

Average throughput: 508.62 Mbit/s

95th percentile per-packet one-way delay: 116.080 ms

Loss rate: 0.95%

Run 5: Report of Muses\_DecisionTreeR0 — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-07-11 21:22:35

End at: 2019-07-11 21:23:05

Local clock offset: 3.303 ms

Remote clock offset: 1.796 ms

# Below is generated by plot.py at 2019-07-12 01:53:09

# Datalink statistics

-- Total of 1 flow:

Average throughput: 356.91 Mbit/s

95th percentile per-packet one-way delay: 173.520 ms

Loss rate: 1.79%

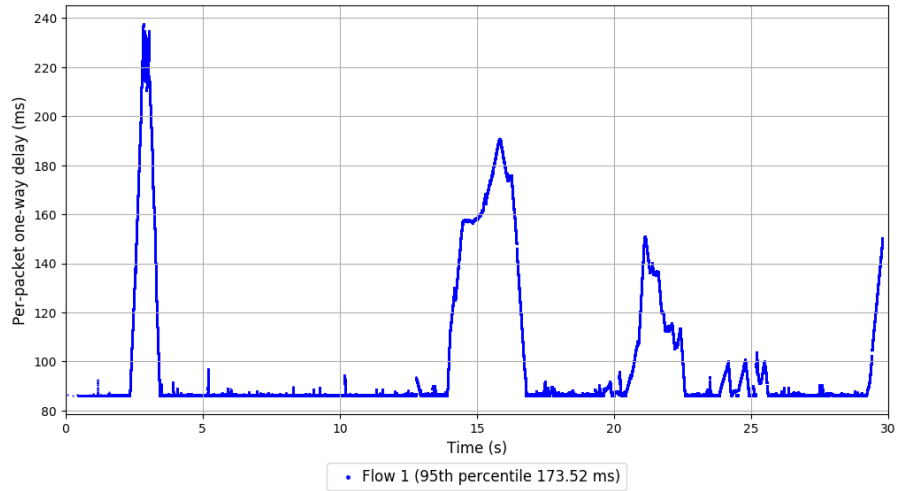
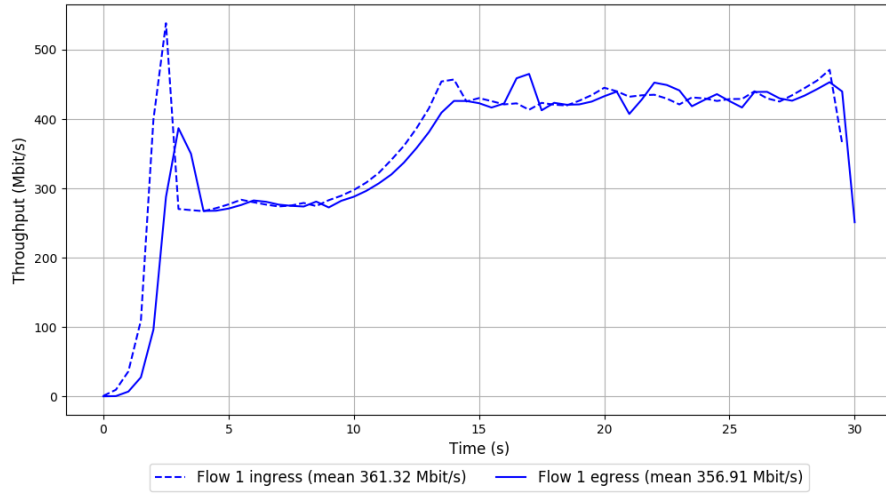
-- Flow 1:

Average throughput: 356.91 Mbit/s

95th percentile per-packet one-way delay: 173.520 ms

Loss rate: 1.79%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-07-11 21:58:23

End at: 2019-07-11 21:58:53

Local clock offset: 0.806 ms

Remote clock offset: 0.772 ms

# Below is generated by plot.py at 2019-07-12 01:53:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 353.88 Mbit/s

95th percentile per-packet one-way delay: 128.575 ms

Loss rate: 1.07%

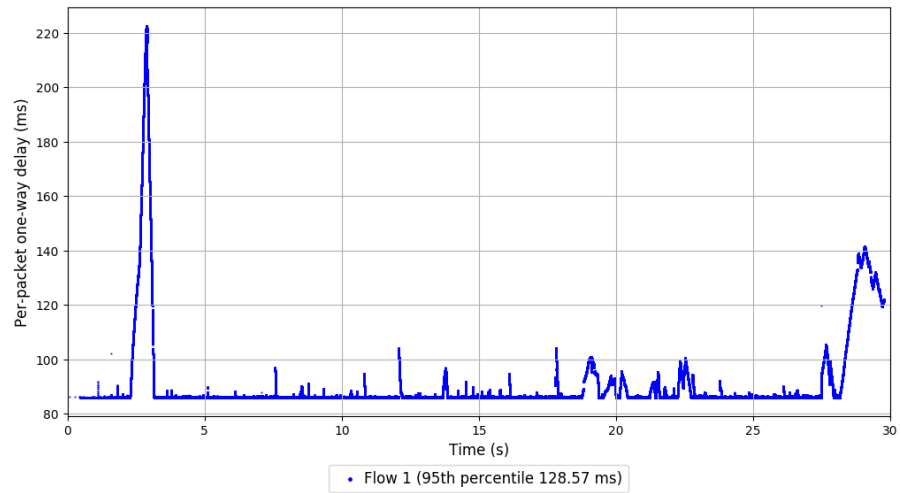
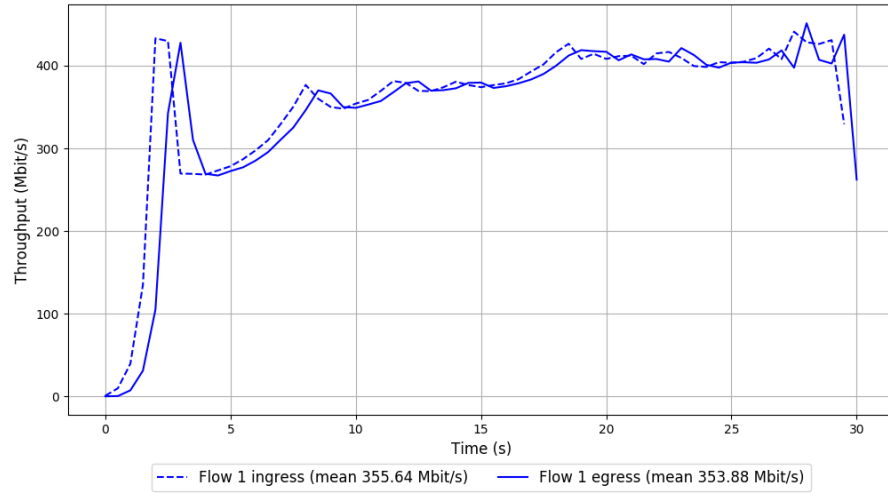
-- Flow 1:

Average throughput: 353.88 Mbit/s

95th percentile per-packet one-way delay: 128.575 ms

Loss rate: 1.07%

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





Run 3: Statistics of PCC-Allegro

Start at: 2019-07-11 22:33:54

End at: 2019-07-11 22:34:24

Local clock offset: -0.089 ms

Remote clock offset: 0.296 ms

# Below is generated by plot.py at 2019-07-12 01:53:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 205.87 Mbit/s

95th percentile per-packet one-way delay: 118.358 ms

Loss rate: 1.34%

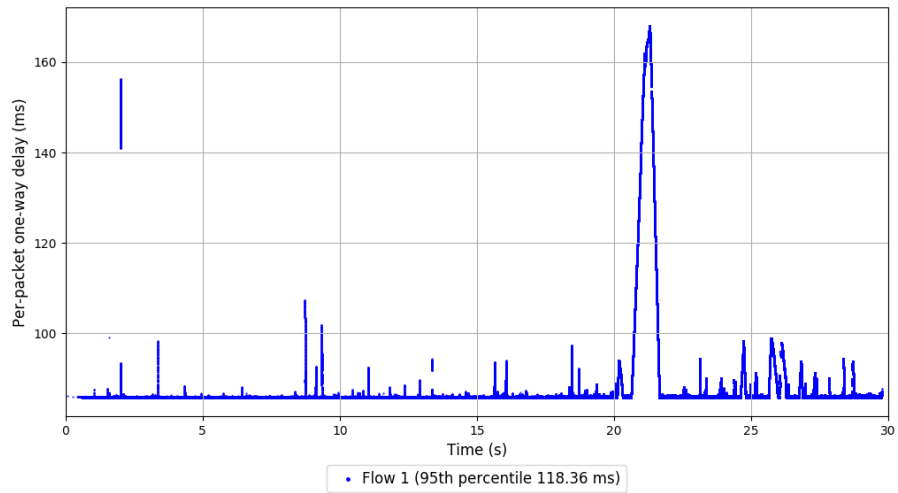
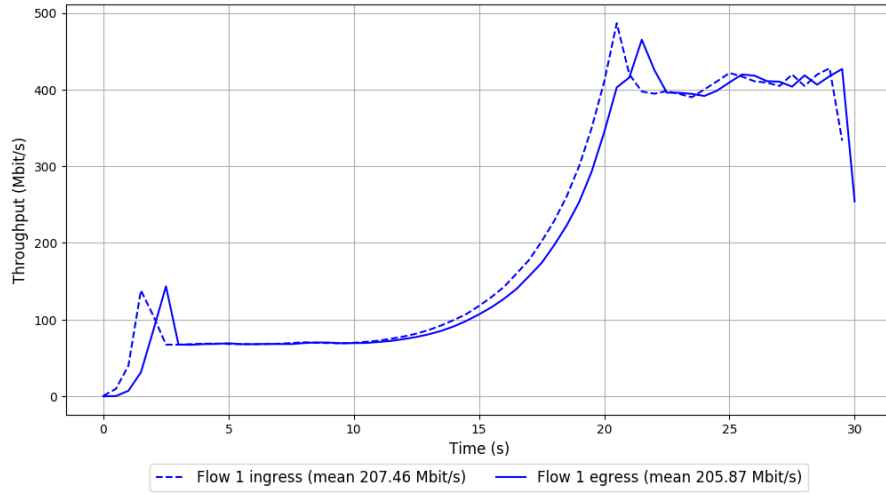
-- Flow 1:

Average throughput: 205.87 Mbit/s

95th percentile per-packet one-way delay: 118.358 ms

Loss rate: 1.34%

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



Run 4: Statistics of PCC-Allegro

Start at: 2019-07-11 23:09:25

End at: 2019-07-11 23:09:55

Local clock offset: 0.447 ms

Remote clock offset: 0.076 ms

# Below is generated by plot.py at 2019-07-12 01:53:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 156.16 Mbit/s

95th percentile per-packet one-way delay: 136.683 ms

Loss rate: 1.43%

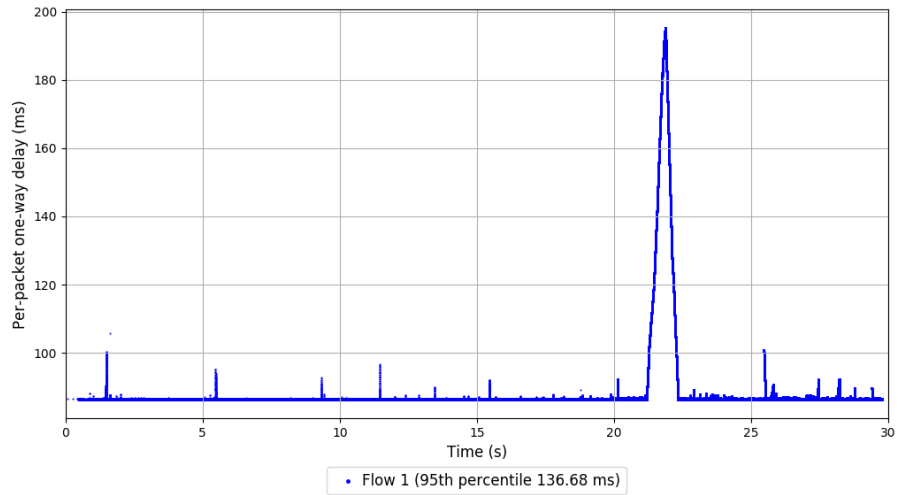
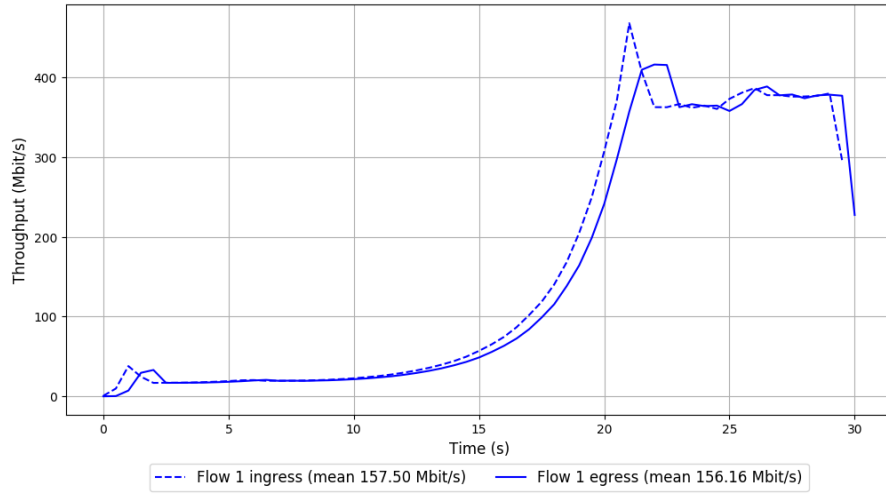
-- Flow 1:

Average throughput: 156.16 Mbit/s

95th percentile per-packet one-way delay: 136.683 ms

Loss rate: 1.43%

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



Run 5: Statistics of PCC-Allegro

Start at: 2019-07-11 23:44:47

End at: 2019-07-11 23:45:17

Local clock offset: -0.421 ms

Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-07-12 01:59:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 312.53 Mbit/s

95th percentile per-packet one-way delay: 119.008 ms

Loss rate: 1.63%

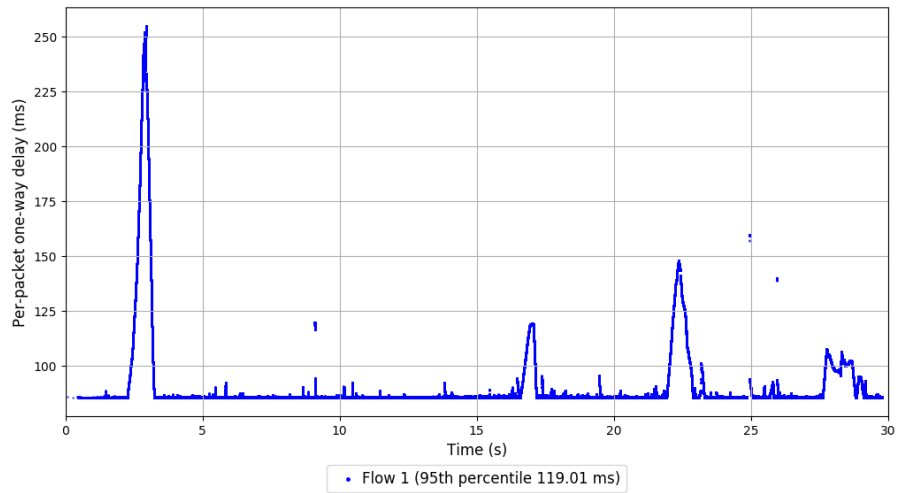
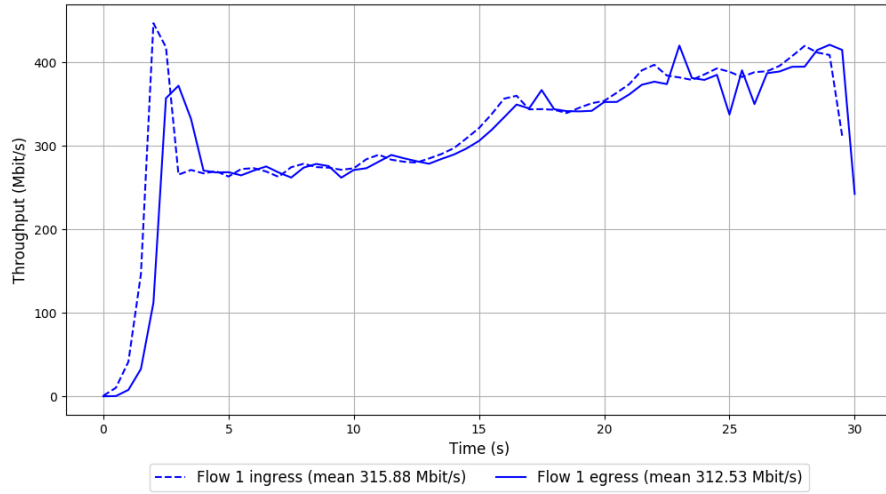
-- Flow 1:

Average throughput: 312.53 Mbit/s

95th percentile per-packet one-way delay: 119.008 ms

Loss rate: 1.63%

Run 5: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2019-07-11 21:33:30

End at: 2019-07-11 21:34:00

Local clock offset: 1.522 ms

Remote clock offset: 0.942 ms

# Below is generated by plot.py at 2019-07-12 01:59:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 263.73 Mbit/s

95th percentile per-packet one-way delay: 197.052 ms

Loss rate: 2.42%

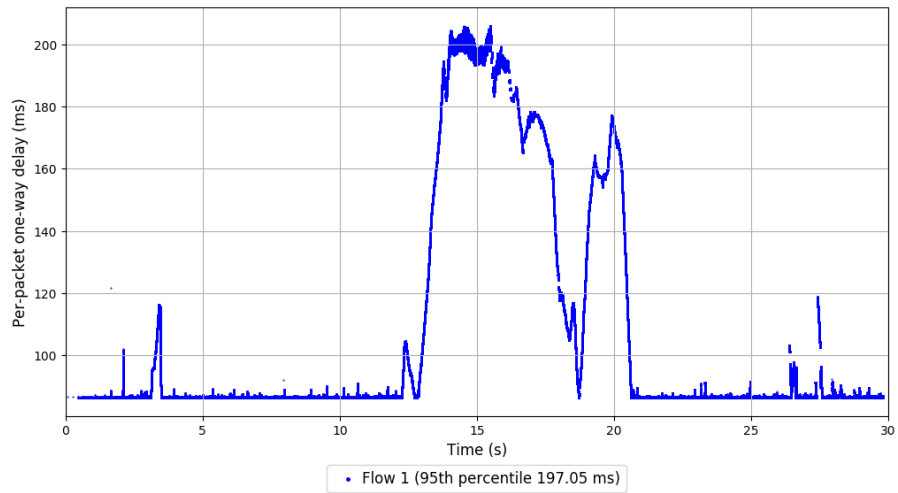
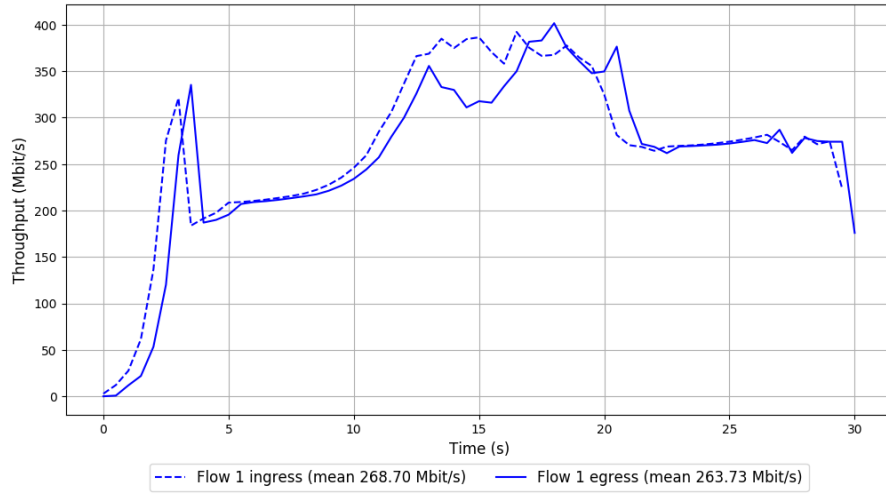
-- Flow 1:

Average throughput: 263.73 Mbit/s

95th percentile per-packet one-way delay: 197.052 ms

Loss rate: 2.42%

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





Run 2: Statistics of PCC-Expr

Start at: 2019-07-11 22:09:15

End at: 2019-07-11 22:09:45

Local clock offset: 0.602 ms

Remote clock offset: 0.449 ms

# Below is generated by plot.py at 2019-07-12 01:59:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 222.59 Mbit/s

95th percentile per-packet one-way delay: 188.668 ms

Loss rate: 1.32%

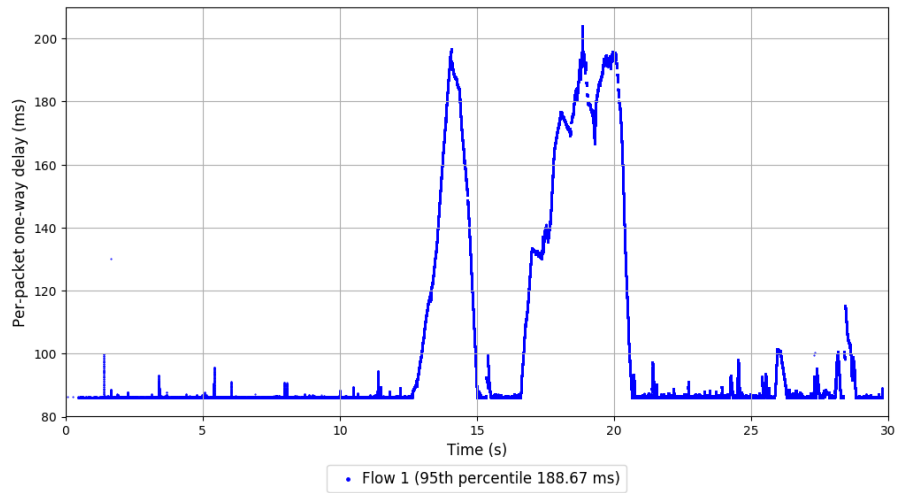
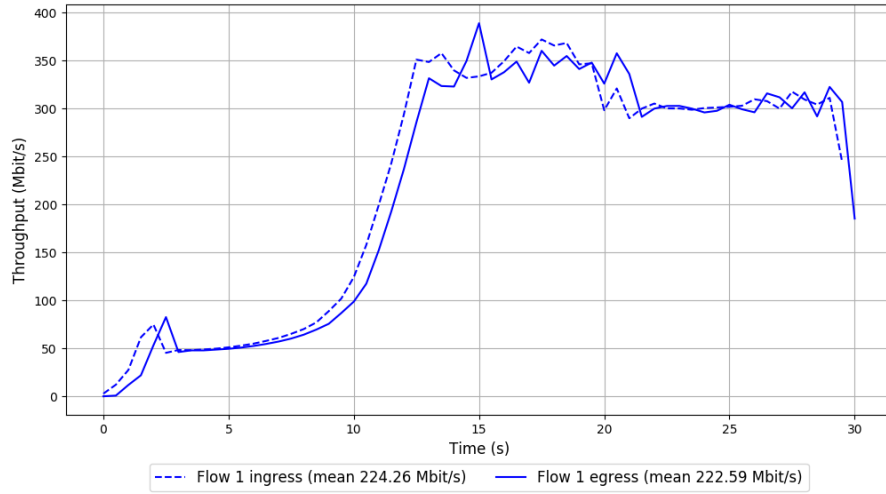
-- Flow 1:

Average throughput: 222.59 Mbit/s

95th percentile per-packet one-way delay: 188.668 ms

Loss rate: 1.32%

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



Run 3: Statistics of PCC-Expr

Start at: 2019-07-11 22:44:35

End at: 2019-07-11 22:45:05

Local clock offset: 0.059 ms

Remote clock offset: 0.155 ms

# Below is generated by plot.py at 2019-07-12 02:00:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 289.11 Mbit/s

95th percentile per-packet one-way delay: 182.815 ms

Loss rate: 1.72%

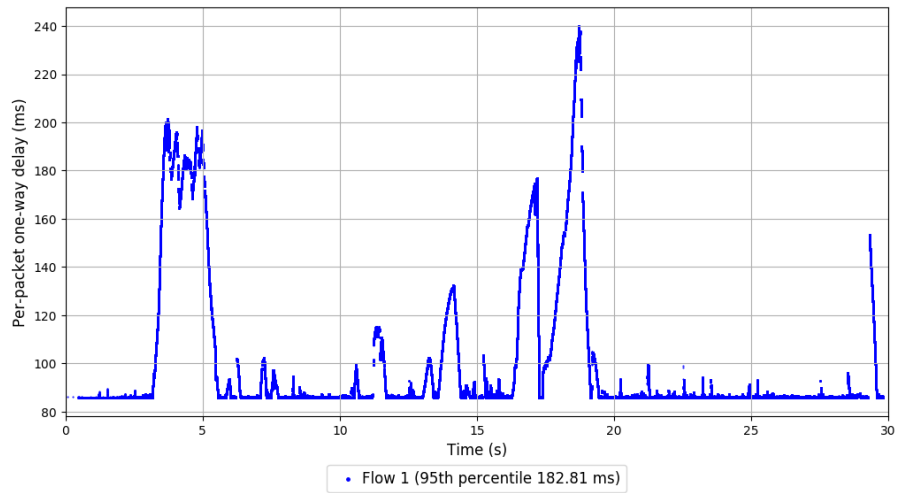
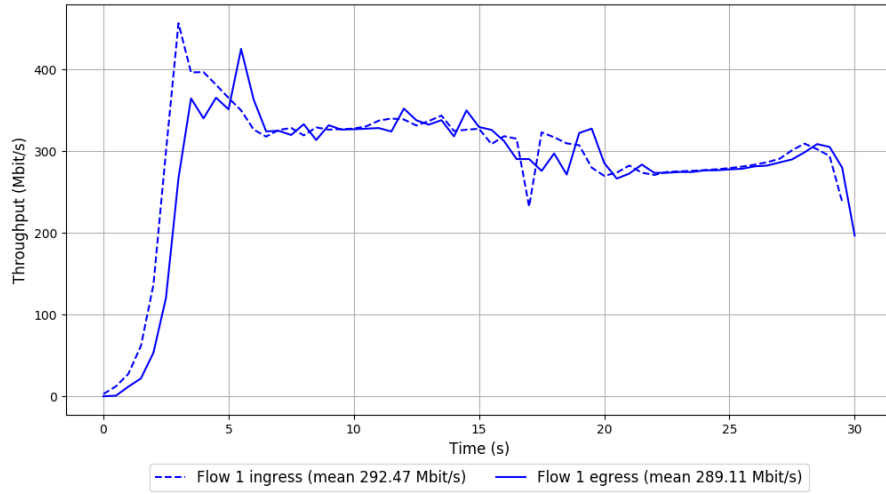
-- Flow 1:

Average throughput: 289.11 Mbit/s

95th percentile per-packet one-way delay: 182.815 ms

Loss rate: 1.72%

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



Run 4: Statistics of PCC-Expr

Start at: 2019-07-11 23:20:00

End at: 2019-07-11 23:20:30

Local clock offset: 0.23 ms

Remote clock offset: 0.063 ms

# Below is generated by plot.py at 2019-07-12 02:00:37

# Datalink statistics

-- Total of 1 flow:

Average throughput: 287.01 Mbit/s

95th percentile per-packet one-way delay: 195.477 ms

Loss rate: 3.28%

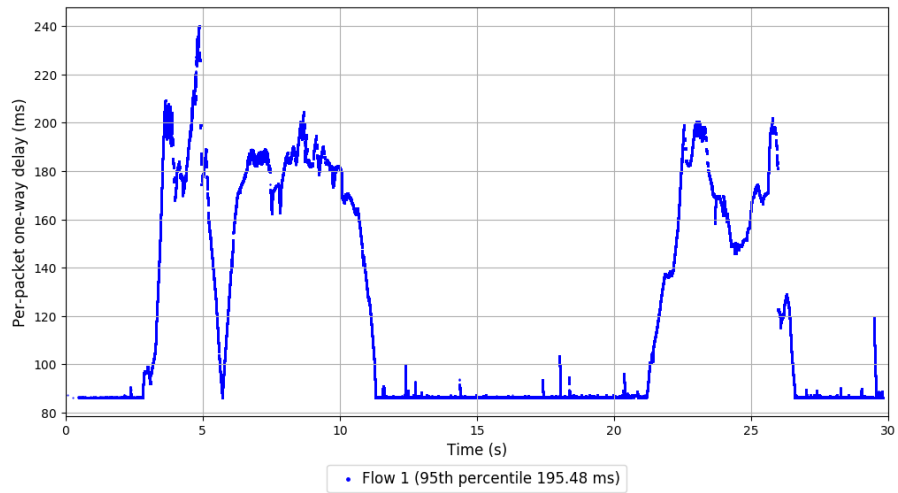
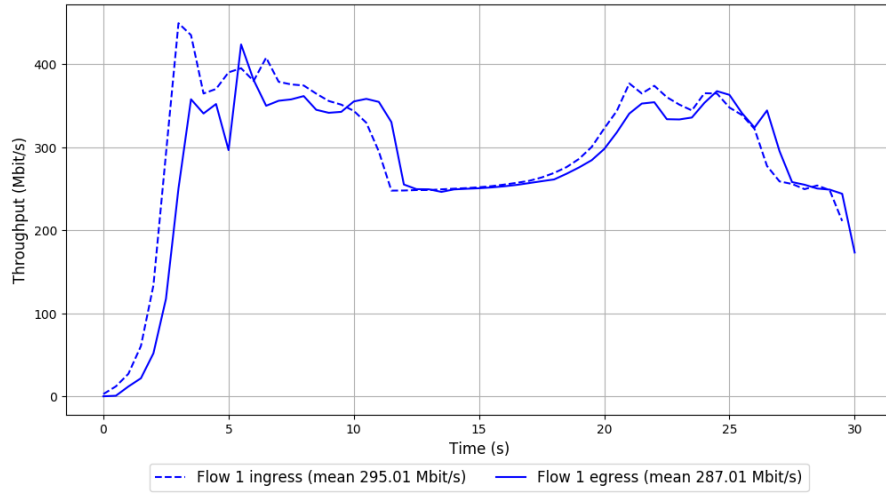
-- Flow 1:

Average throughput: 287.01 Mbit/s

95th percentile per-packet one-way delay: 195.477 ms

Loss rate: 3.28%

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



Run 5: Statistics of PCC-Expr

Start at: 2019-07-11 23:55:35

End at: 2019-07-11 23:56:05

Local clock offset: 0.351 ms

Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 260.68 Mbit/s

95th percentile per-packet one-way delay: 196.545 ms

Loss rate: 1.41%

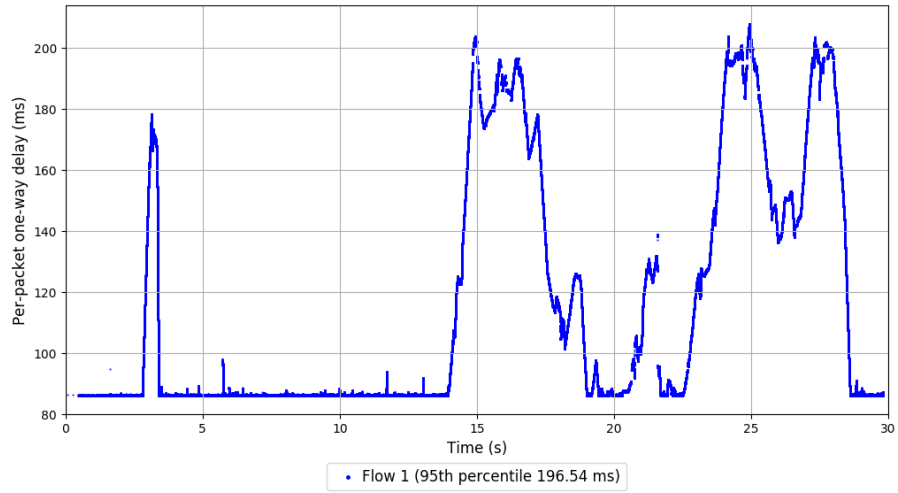
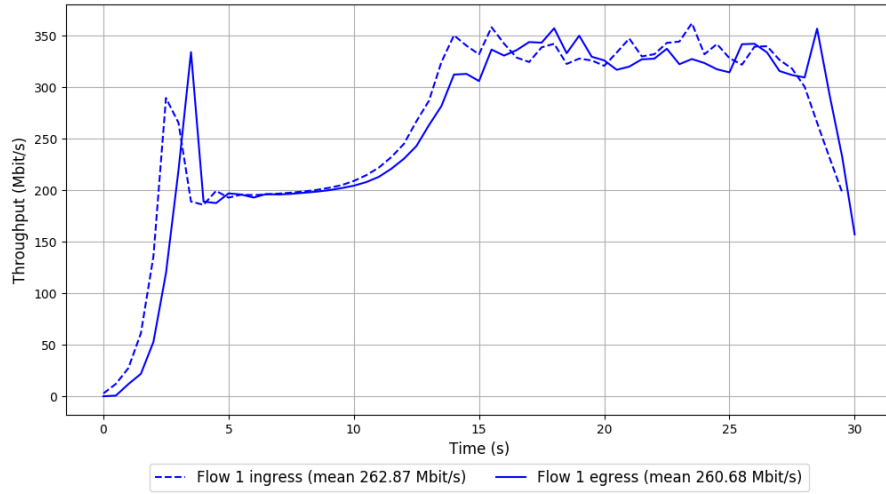
-- Flow 1:

Average throughput: 260.68 Mbit/s

95th percentile per-packet one-way delay: 196.545 ms

Loss rate: 1.41%

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





Run 1: Statistics of QUIC Cubic

Start at: 2019-07-11 21:41:14

End at: 2019-07-11 21:41:44

Local clock offset: 0.695 ms

Remote clock offset: 0.878 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 55.98 Mbit/s

95th percentile per-packet one-way delay: 85.738 ms

Loss rate: 0.99%

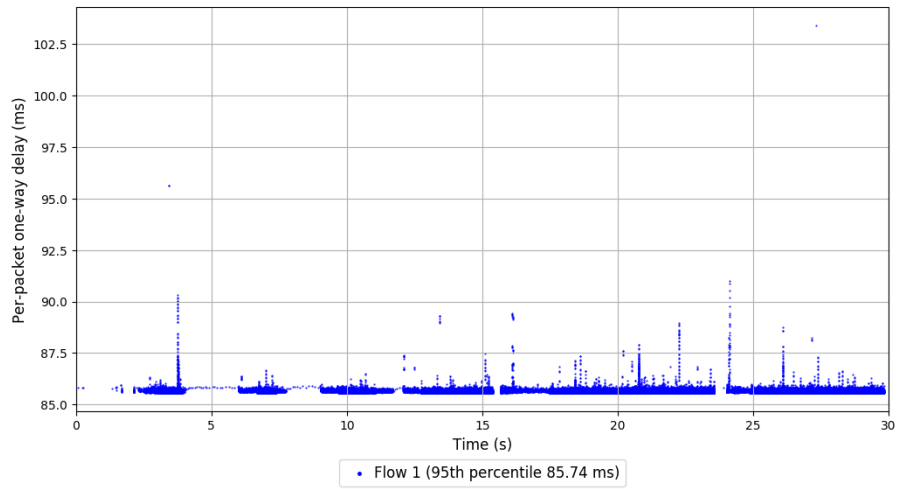
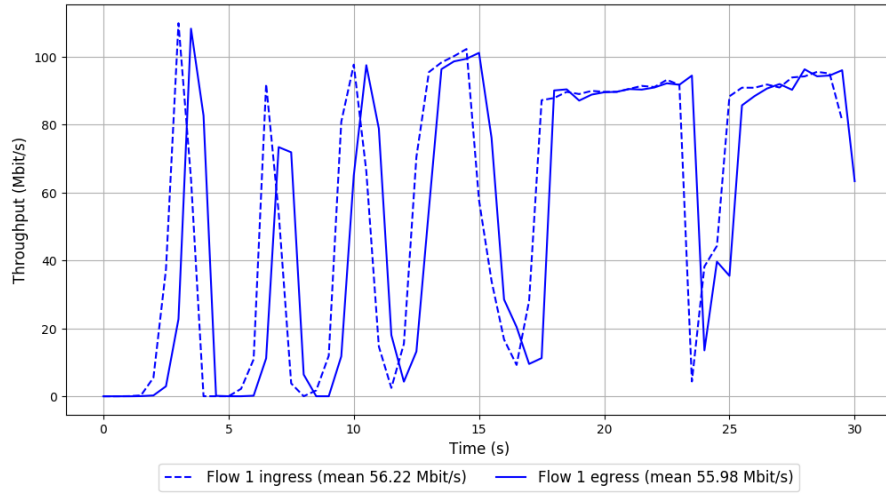
-- Flow 1:

Average throughput: 55.98 Mbit/s

95th percentile per-packet one-way delay: 85.738 ms

Loss rate: 0.99%

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



Run 2: Statistics of QUIC Cubic

Start at: 2019-07-11 22:16:46

End at: 2019-07-11 22:17:16

Local clock offset: 0.279 ms

Remote clock offset: 0.466 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 64.23 Mbit/s

95th percentile per-packet one-way delay: 86.202 ms

Loss rate: 0.92%

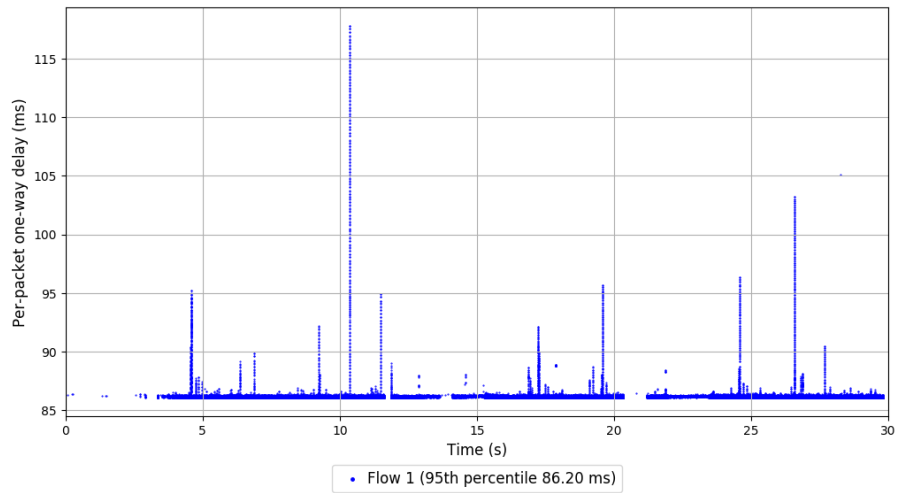
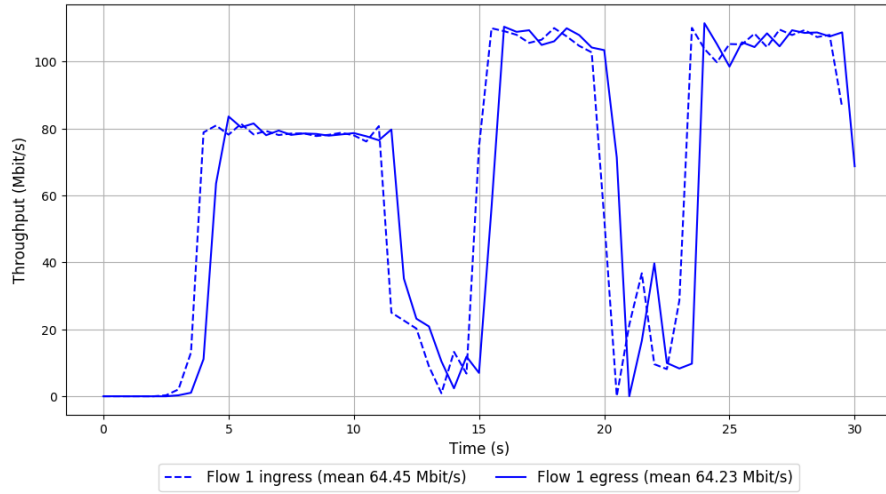
-- Flow 1:

Average throughput: 64.23 Mbit/s

95th percentile per-packet one-way delay: 86.202 ms

Loss rate: 0.92%

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



Run 3: Statistics of QUIC Cubic

Start at: 2019-07-11 22:52:18

End at: 2019-07-11 22:52:48

Local clock offset: 0.054 ms

Remote clock offset: 0.184 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 61.94 Mbit/s

95th percentile per-packet one-way delay: 85.844 ms

Loss rate: 0.97%

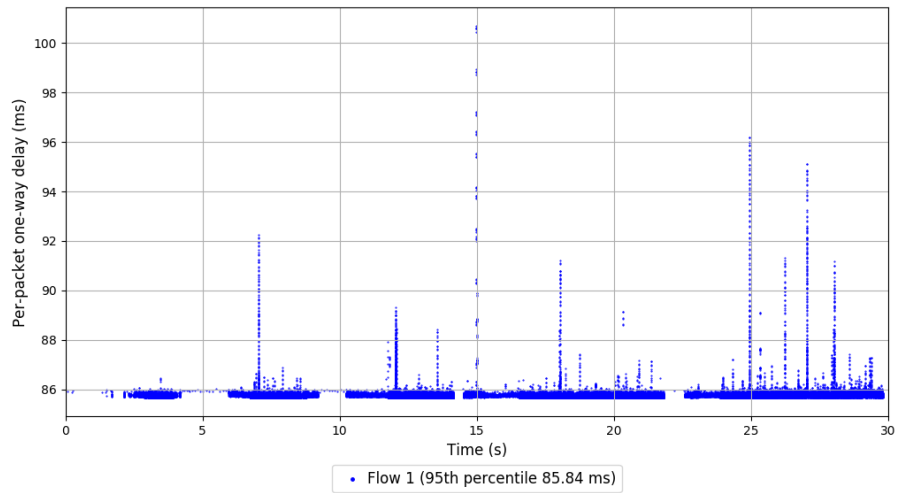
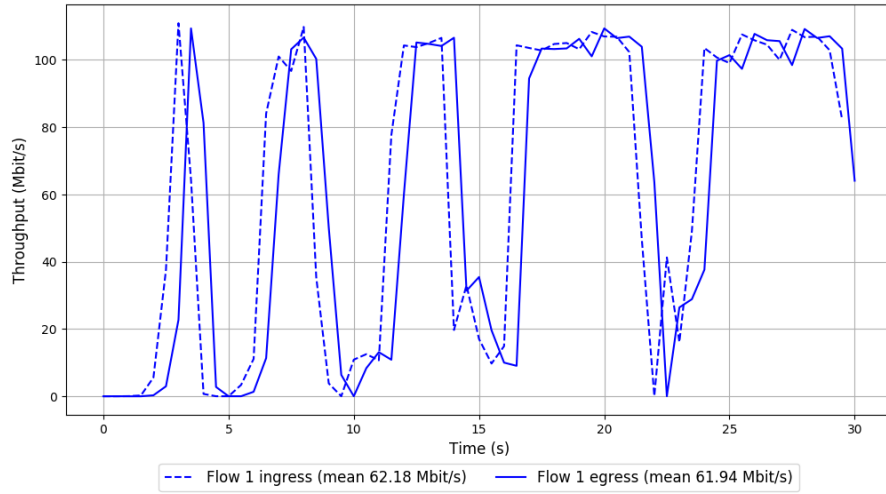
-- Flow 1:

Average throughput: 61.94 Mbit/s

95th percentile per-packet one-way delay: 85.844 ms

Loss rate: 0.97%

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



Run 4: Statistics of QUIC Cubic

Start at: 2019-07-11 23:27:34

End at: 2019-07-11 23:28:04

Local clock offset: -0.219 ms

Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 51.42 Mbit/s

95th percentile per-packet one-way delay: 85.681 ms

Loss rate: 0.89%

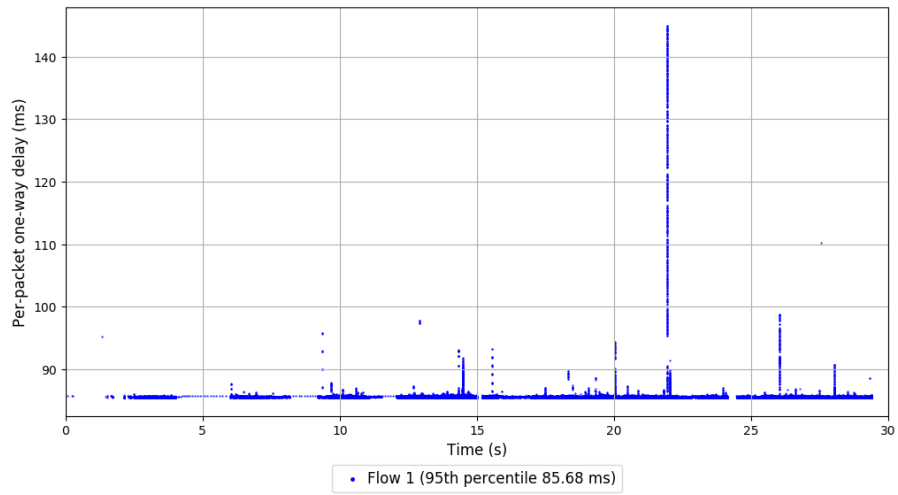
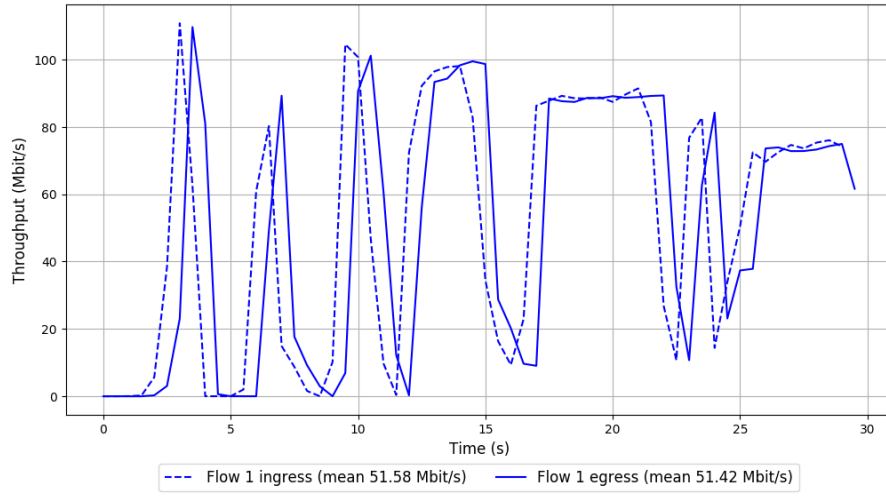
-- Flow 1:

Average throughput: 51.42 Mbit/s

95th percentile per-packet one-way delay: 85.681 ms

Loss rate: 0.89%

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





Run 5: Statistics of QUIC Cubic

Start at: 2019-07-12 00:03:16

End at: 2019-07-12 00:03:46

Local clock offset: -0.015 ms

Remote clock offset: 0.073 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 57.69 Mbit/s

95th percentile per-packet one-way delay: 85.892 ms

Loss rate: 0.90%

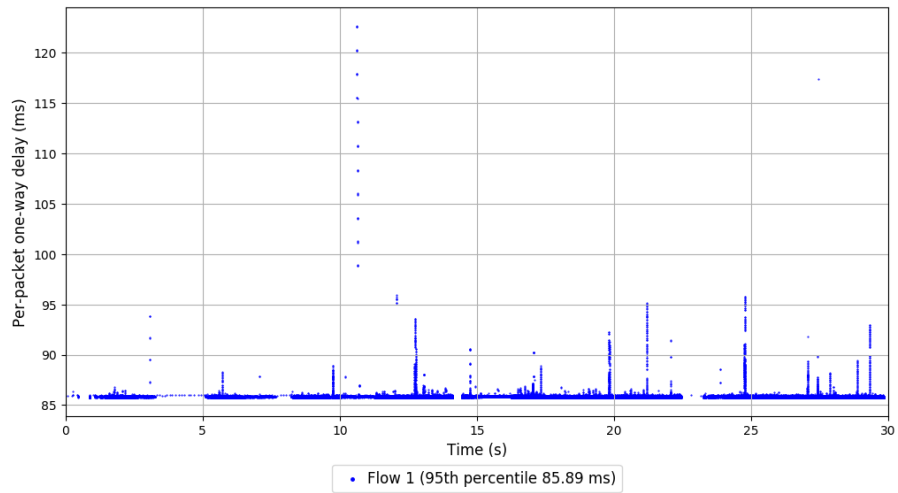
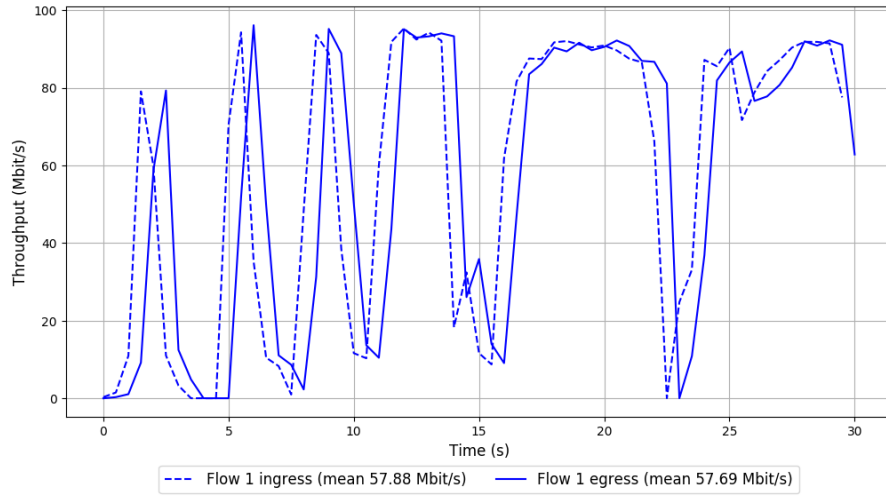
-- Flow 1:

Average throughput: 57.69 Mbit/s

95th percentile per-packet one-way delay: 85.892 ms

Loss rate: 0.90%

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



Run 1: Statistics of SCReAM

Start at: 2019-07-11 21:42:27

End at: 2019-07-11 21:42:57

Local clock offset: 1.352 ms

Remote clock offset: 0.902 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.601 ms

Loss rate: 0.51%

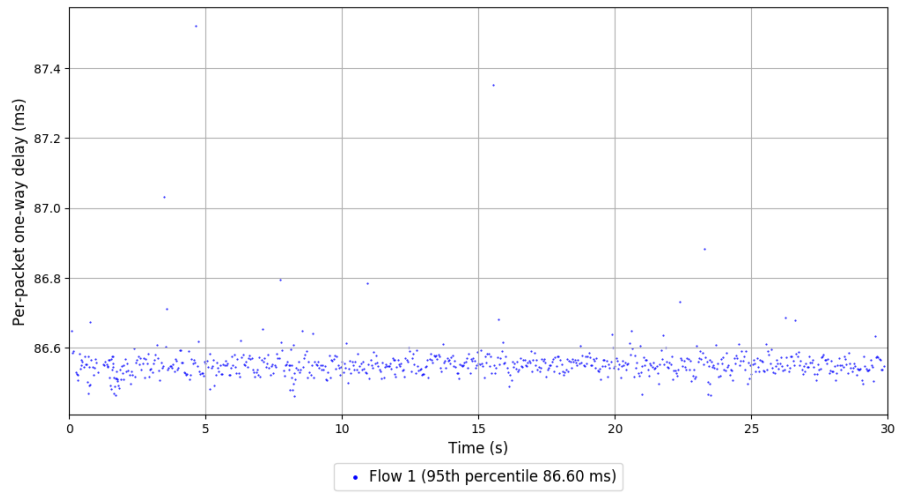
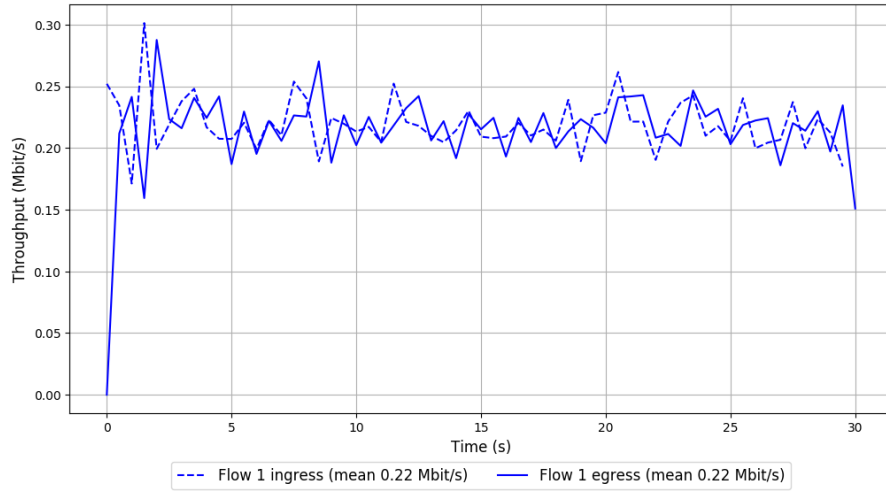
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.601 ms

Loss rate: 0.51%

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



Run 2: Statistics of SCReAM

Start at: 2019-07-11 22:17:59

End at: 2019-07-11 22:18:29

Local clock offset: 0.225 ms

Remote clock offset: 0.464 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.071 ms

Loss rate: 0.51%

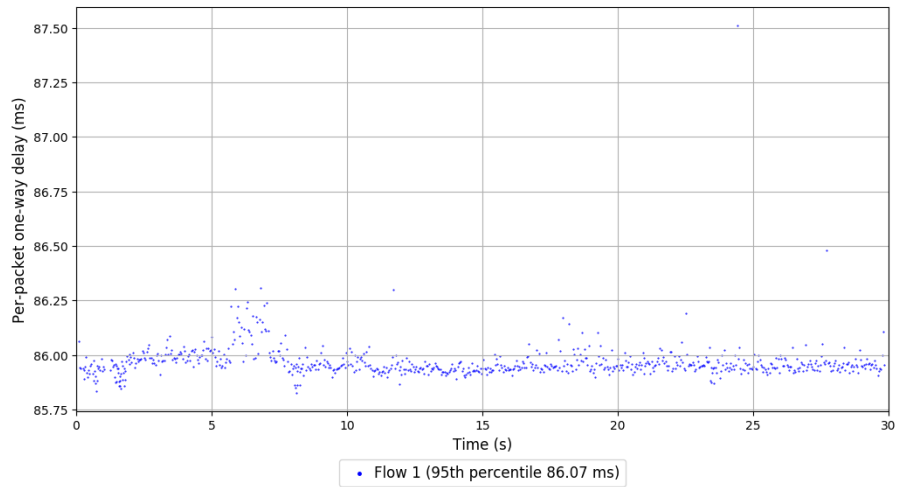
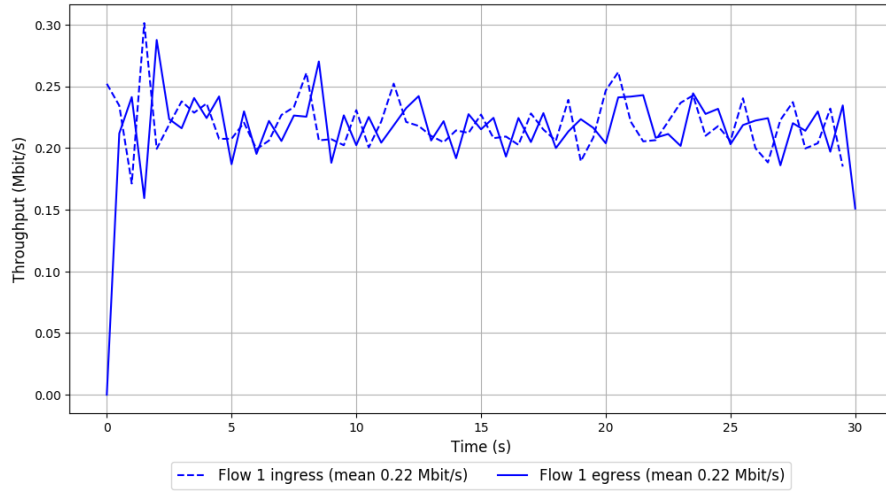
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.071 ms

Loss rate: 0.51%

## Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2019-07-11 22:53:31

End at: 2019-07-11 22:54:01

Local clock offset: 0.089 ms

Remote clock offset: 0.181 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.082 ms

Loss rate: 0.51%

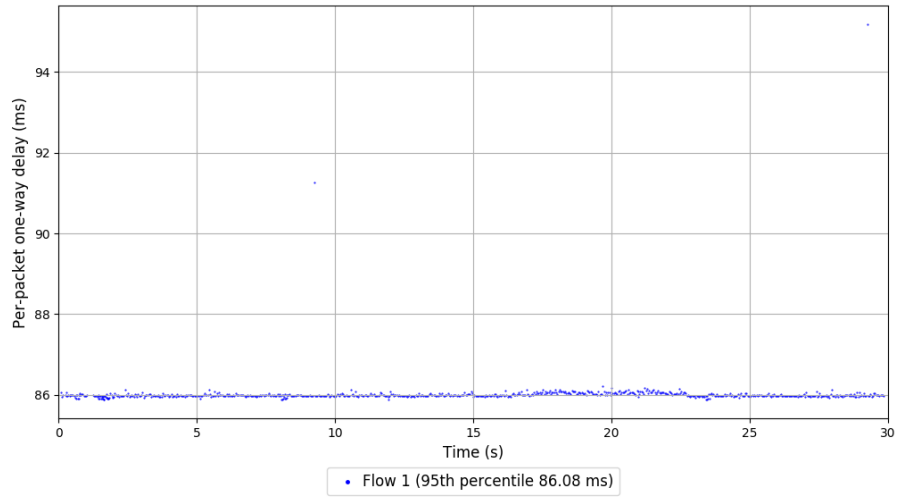
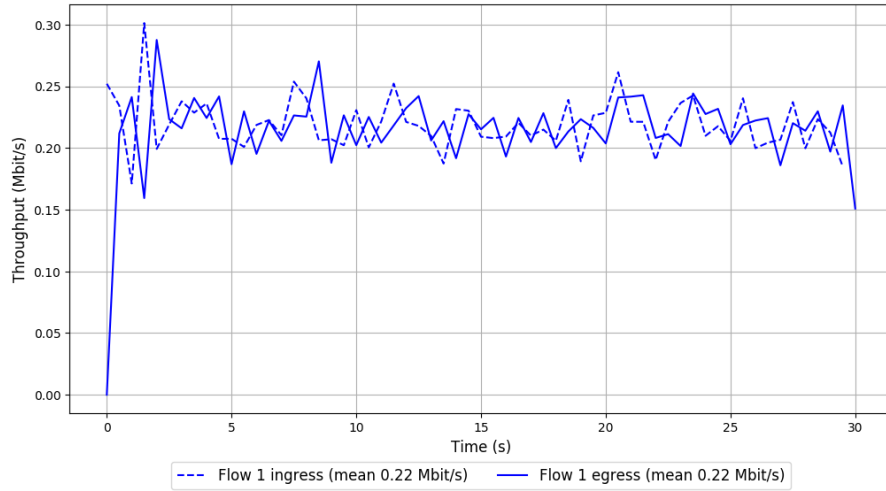
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.082 ms

Loss rate: 0.51%

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





Run 4: Statistics of SCReAM

Start at: 2019-07-11 23:28:46

End at: 2019-07-11 23:29:16

Local clock offset: 0.057 ms

Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.412 ms

Loss rate: 0.64%

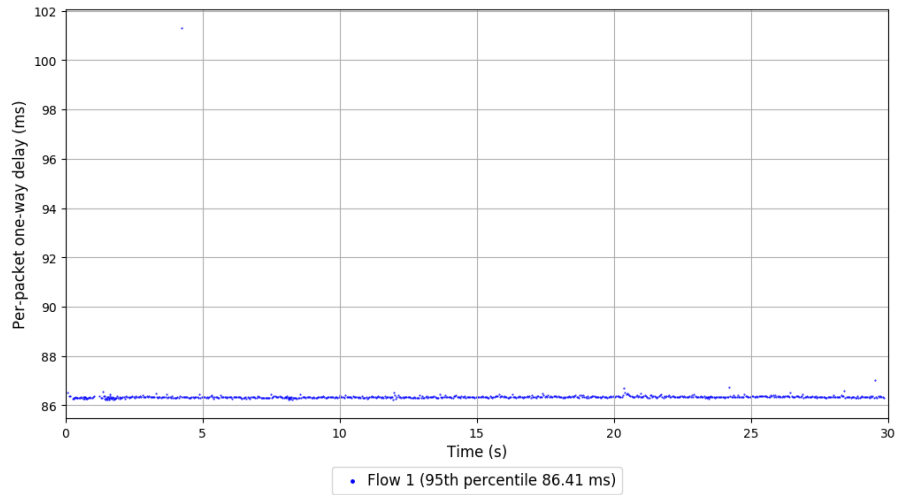
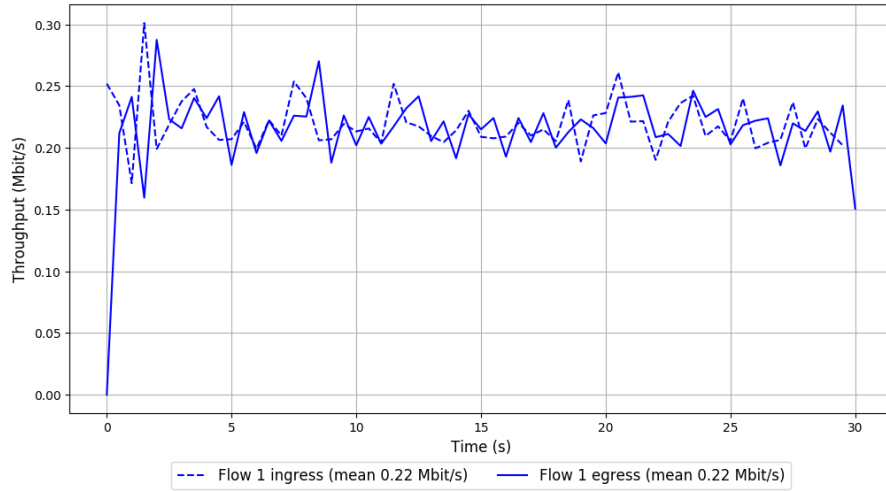
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.412 ms

Loss rate: 0.64%

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



Run 5: Statistics of SCReAM

Start at: 2019-07-12 00:04:28

End at: 2019-07-12 00:04:58

Local clock offset: -0.094 ms

Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.041 ms

Loss rate: 0.51%

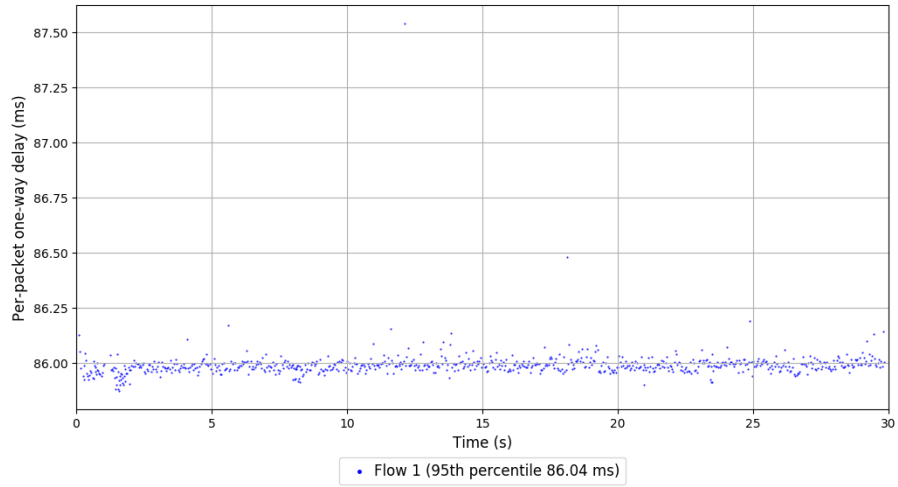
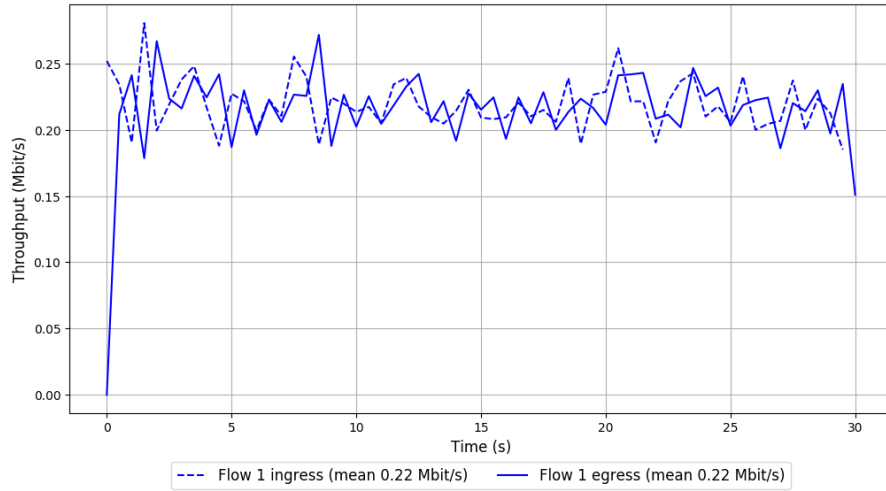
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.041 ms

Loss rate: 0.51%

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



Run 1: Statistics of Sprout

Start at: 2019-07-11 21:43:36

End at: 2019-07-11 21:44:06

Local clock offset: 0.461 ms

Remote clock offset: 0.919 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 86.309 ms

Loss rate: 0.78%

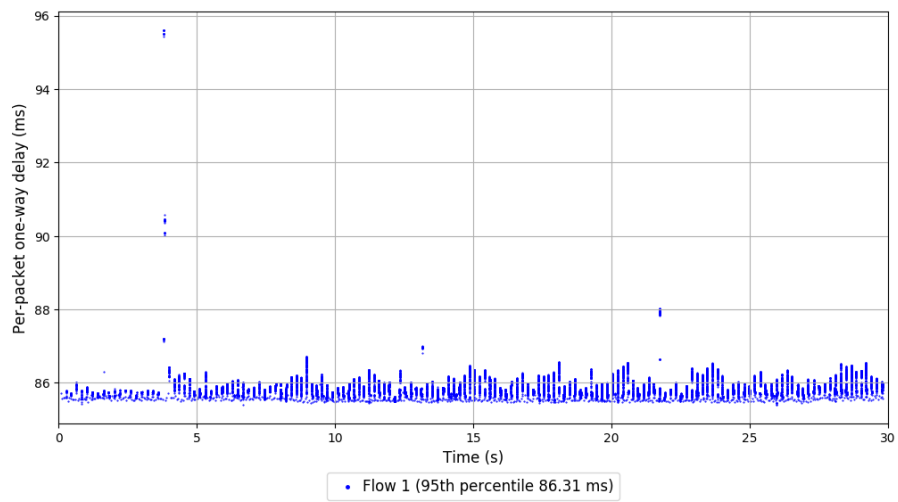
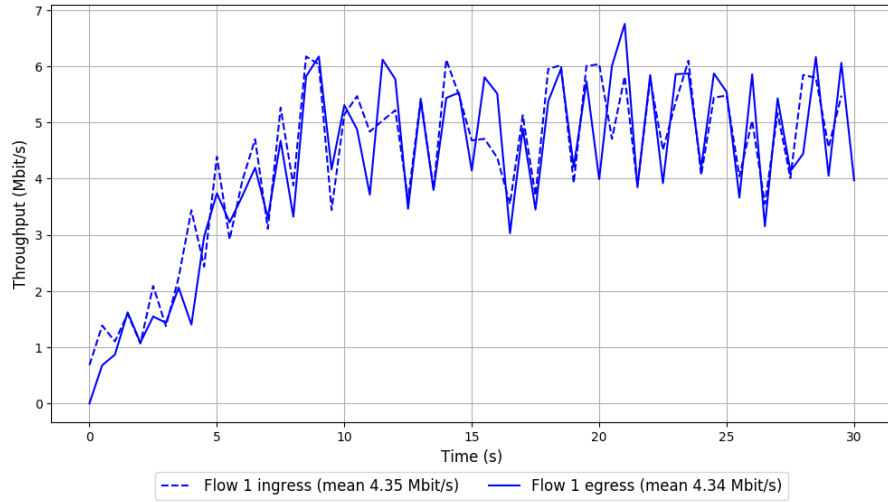
-- Flow 1:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 86.309 ms

Loss rate: 0.78%

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



Run 2: Statistics of Sprout

Start at: 2019-07-11 22:19:08

End at: 2019-07-11 22:19:38

Local clock offset: 0.551 ms

Remote clock offset: 0.485 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 86.818 ms

Loss rate: 0.73%

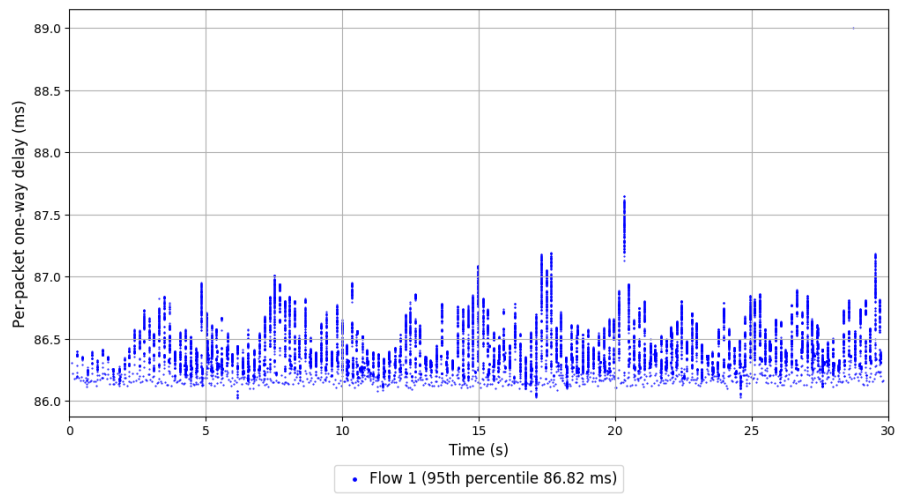
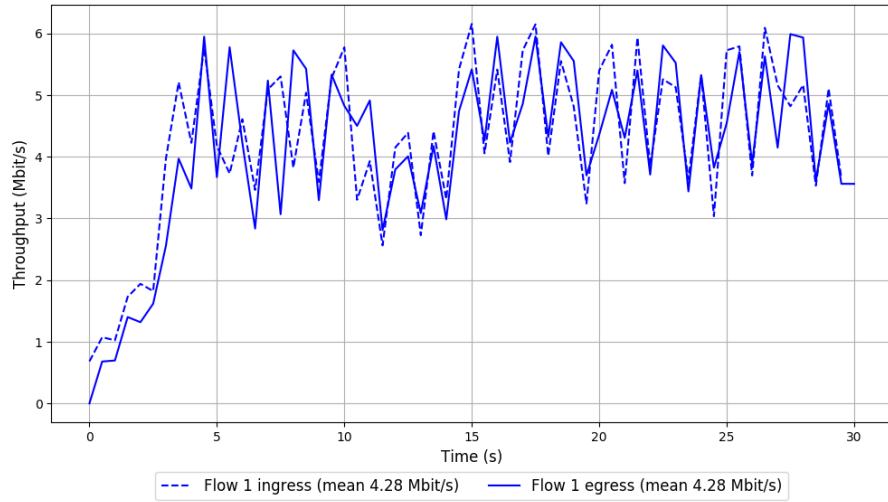
-- Flow 1:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 86.818 ms

Loss rate: 0.73%

Run 2: Report of Sprout — Data Link





Run 3: Statistics of Sprout

Start at: 2019-07-11 22:54:41

End at: 2019-07-11 22:55:11

Local clock offset: 0.104 ms

Remote clock offset: 0.163 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 86.647 ms

Loss rate: 0.48%

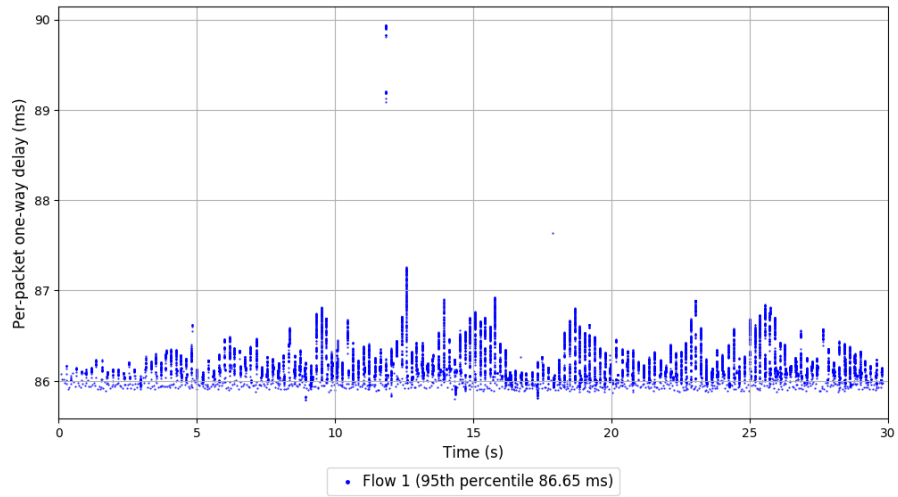
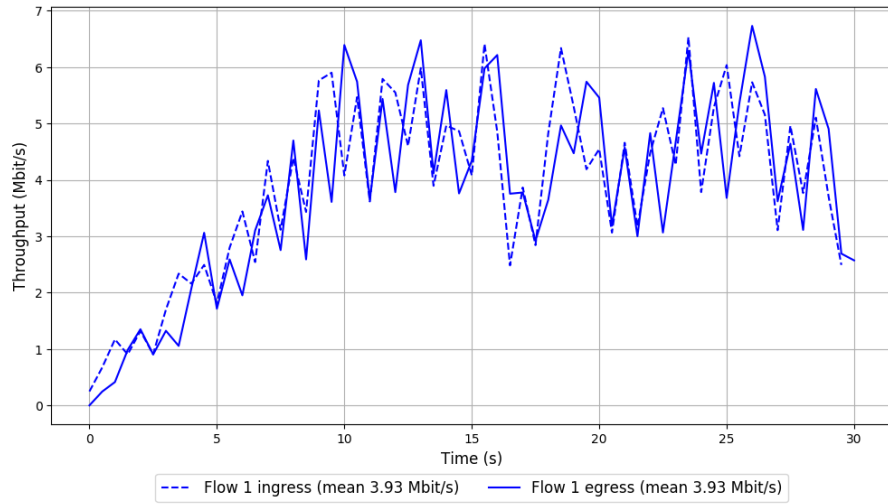
-- Flow 1:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 86.647 ms

Loss rate: 0.48%

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

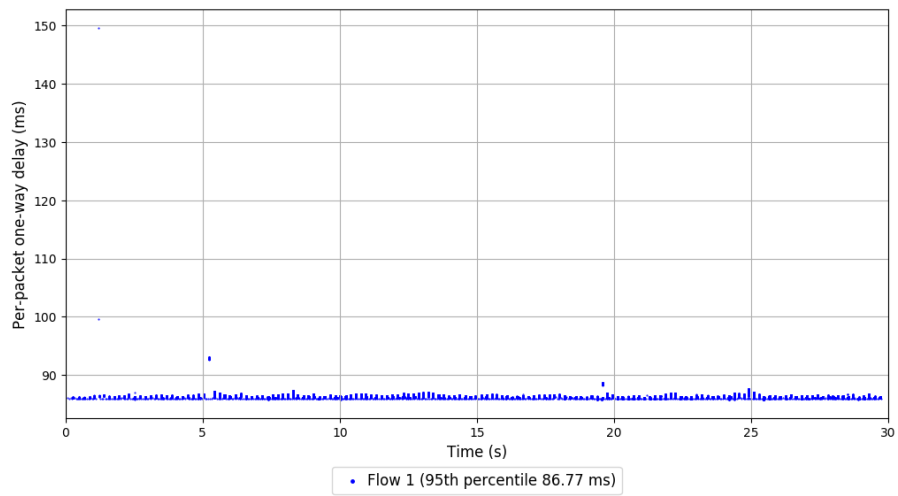
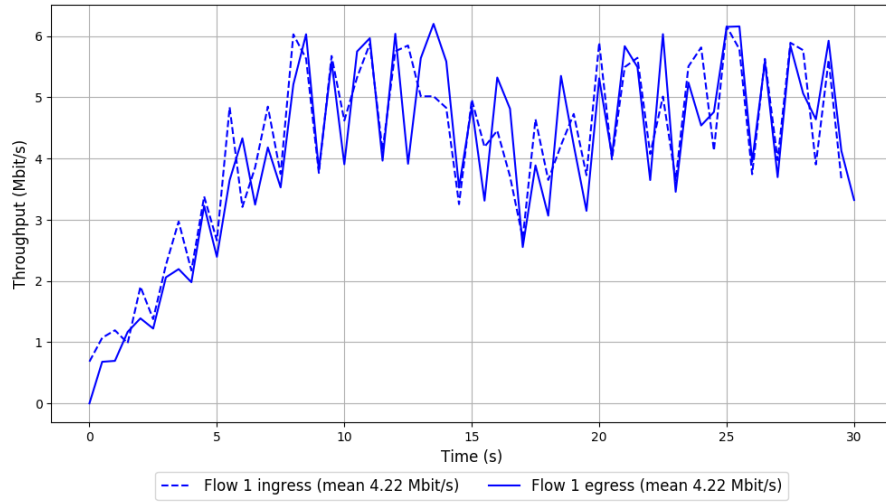


Run 4: Statistics of Sprout

Start at: 2019-07-11 23:29:55  
End at: 2019-07-11 23:30:25  
Local clock offset: 0.071 ms  
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2019-07-12 02:00:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.22 Mbit/s  
95th percentile per-packet one-way delay: 86.771 ms  
Loss rate: 0.73%  
-- Flow 1:  
Average throughput: 4.22 Mbit/s  
95th percentile per-packet one-way delay: 86.771 ms  
Loss rate: 0.73%

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



Run 5: Statistics of Sprout

Start at: 2019-07-12 00:05:37

End at: 2019-07-12 00:06:07

Local clock offset: -0.039 ms

Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2019-07-12 02:00:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 4.29 Mbit/s

95th percentile per-packet one-way delay: 86.895 ms

Loss rate: 0.71%

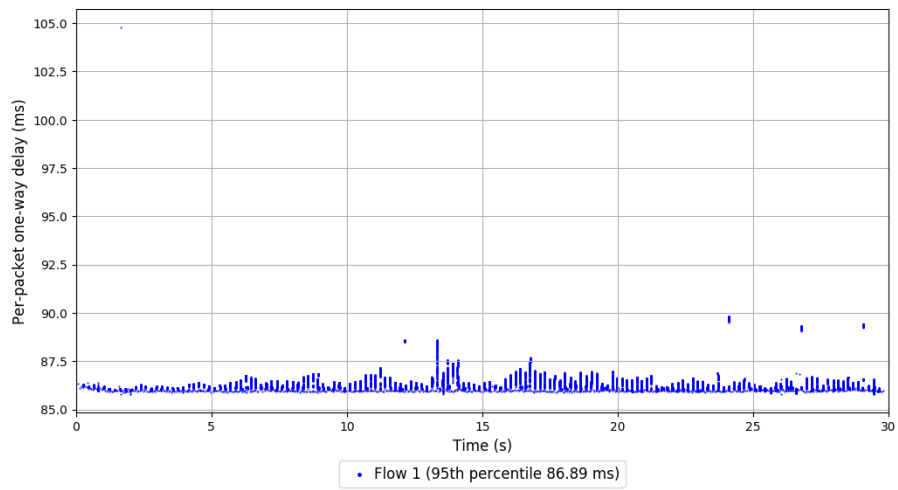
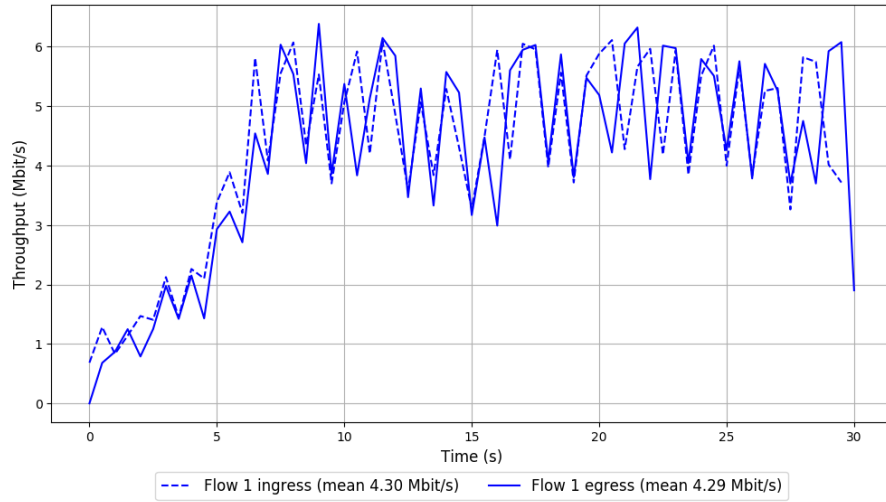
-- Flow 1:

Average throughput: 4.29 Mbit/s

95th percentile per-packet one-way delay: 86.895 ms

Loss rate: 0.71%

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2019-07-11 21:21:04

End at: 2019-07-11 21:21:34

Local clock offset: 3.727 ms

Remote clock offset: 2.139 ms

# Below is generated by plot.py at 2019-07-12 02:06:04

# Datalink statistics

-- Total of 1 flow:

Average throughput: 230.67 Mbit/s

95th percentile per-packet one-way delay: 86.531 ms

Loss rate: 0.63%

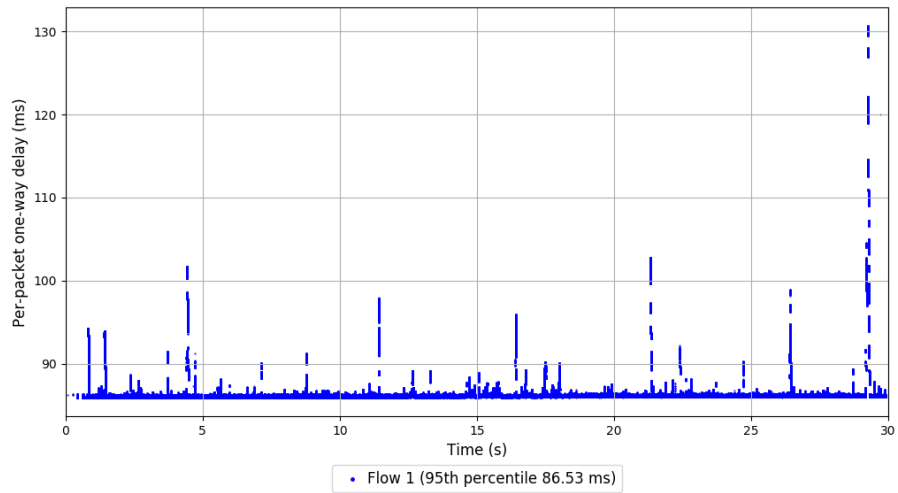
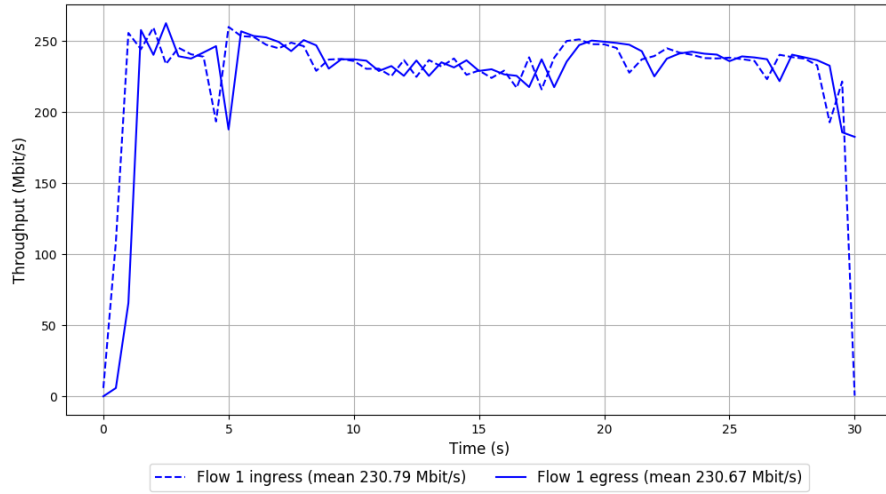
-- Flow 1:

Average throughput: 230.67 Mbit/s

95th percentile per-packet one-way delay: 86.531 ms

Loss rate: 0.63%

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





Run 2: Statistics of TaoVA-100x

Start at: 2019-07-11 21:56:51

End at: 2019-07-11 21:57:21

Local clock offset: 0.324 ms

Remote clock offset: 0.863 ms

# Below is generated by plot.py at 2019-07-12 02:06:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 232.00 Mbit/s

95th percentile per-packet one-way delay: 86.163 ms

Loss rate: 0.59%

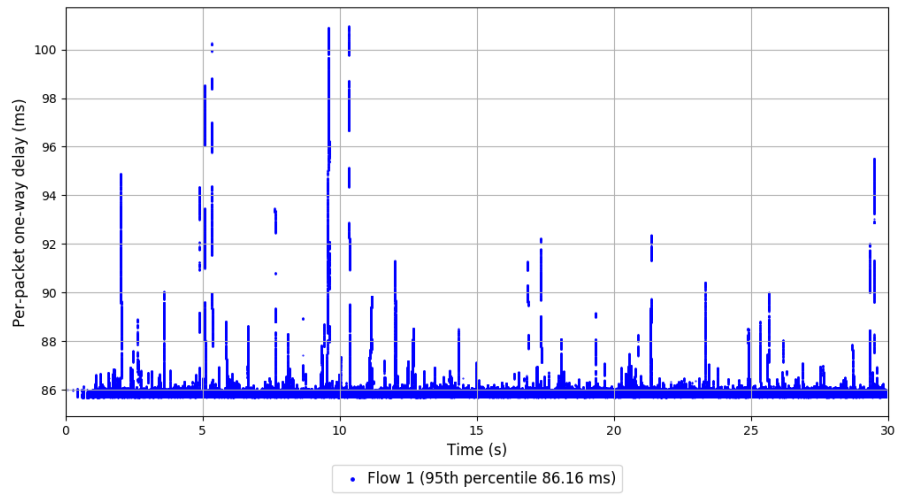
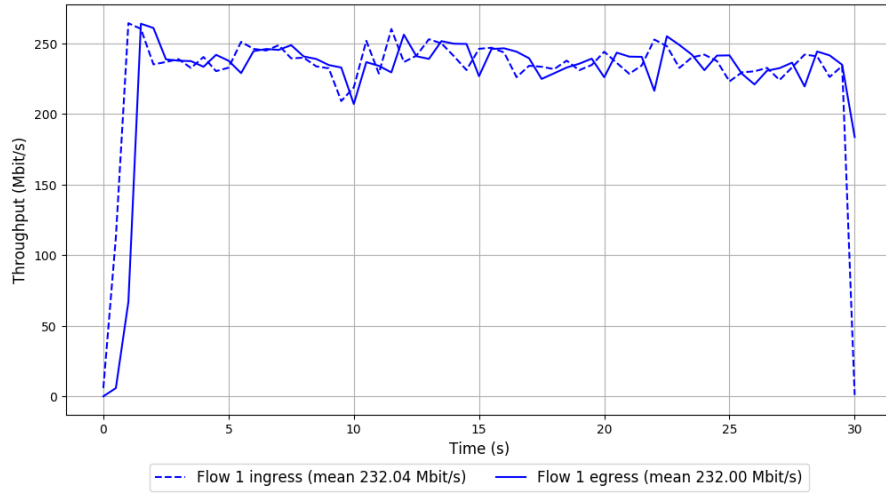
-- Flow 1:

Average throughput: 232.00 Mbit/s

95th percentile per-packet one-way delay: 86.163 ms

Loss rate: 0.59%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-07-11 22:32:24

End at: 2019-07-11 22:32:54

Local clock offset: 0.612 ms

Remote clock offset: 0.36 ms

# Below is generated by plot.py at 2019-07-12 02:06:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 218.50 Mbit/s

95th percentile per-packet one-way delay: 87.321 ms

Loss rate: 1.54%

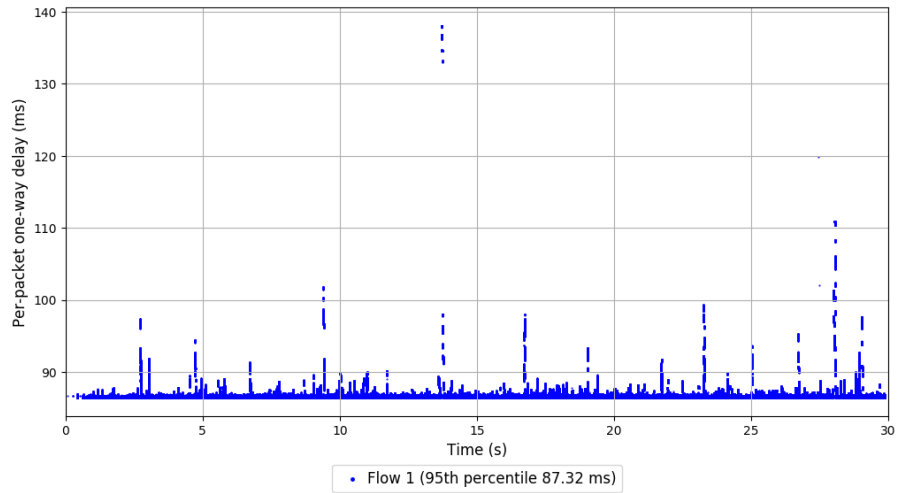
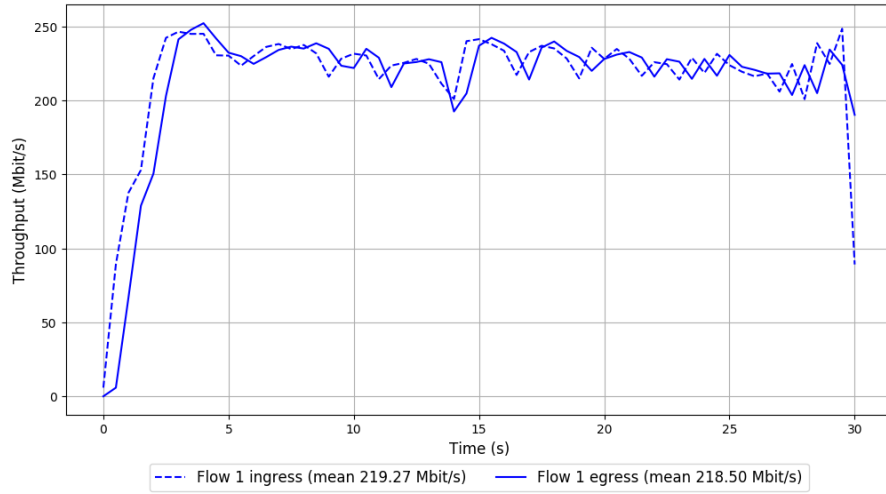
-- Flow 1:

Average throughput: 218.50 Mbit/s

95th percentile per-packet one-way delay: 87.321 ms

Loss rate: 1.54%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-07-11 23:07:54

End at: 2019-07-11 23:08:24

Local clock offset: 0.508 ms

Remote clock offset: 0.109 ms

# Below is generated by plot.py at 2019-07-12 02:06:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 226.04 Mbit/s

95th percentile per-packet one-way delay: 87.273 ms

Loss rate: 0.70%

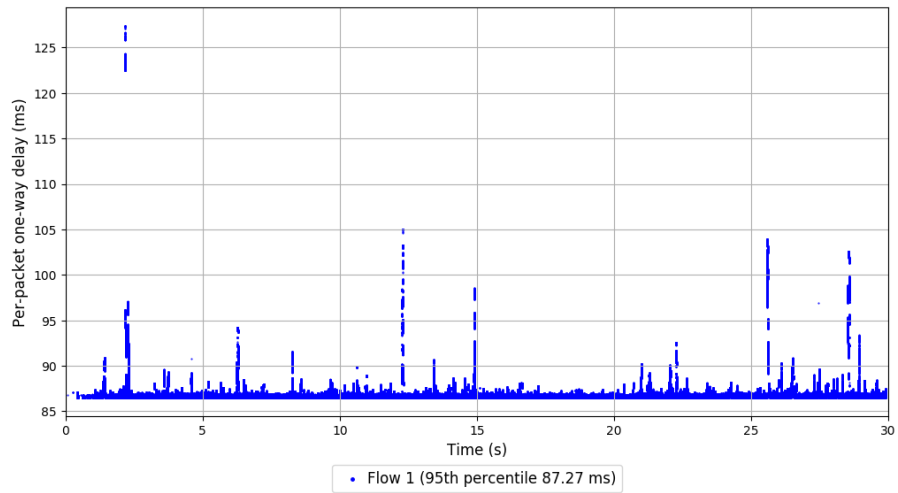
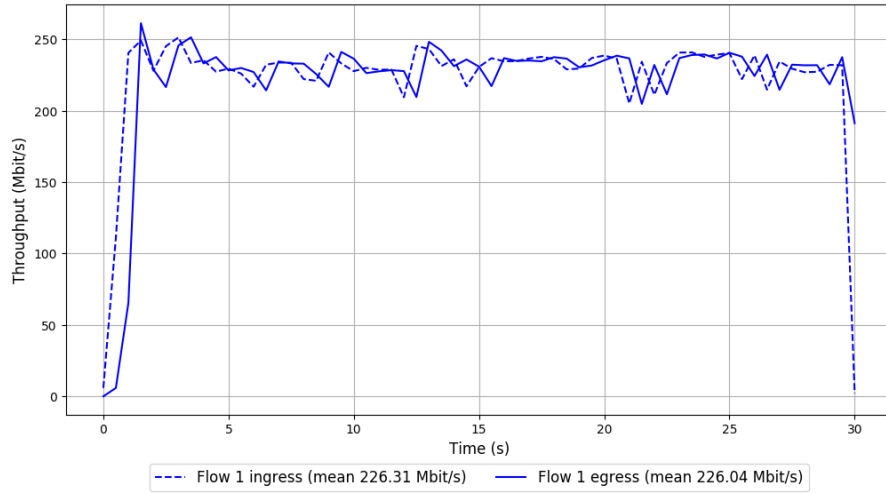
-- Flow 1:

Average throughput: 226.04 Mbit/s

95th percentile per-packet one-way delay: 87.273 ms

Loss rate: 0.70%

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



Run 5: Statistics of TaoVA-100x

Start at: 2019-07-11 23:43:17

End at: 2019-07-11 23:43:47

Local clock offset: 0.332 ms

Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2019-07-12 02:07:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 219.94 Mbit/s

95th percentile per-packet one-way delay: 87.400 ms

Loss rate: 1.00%

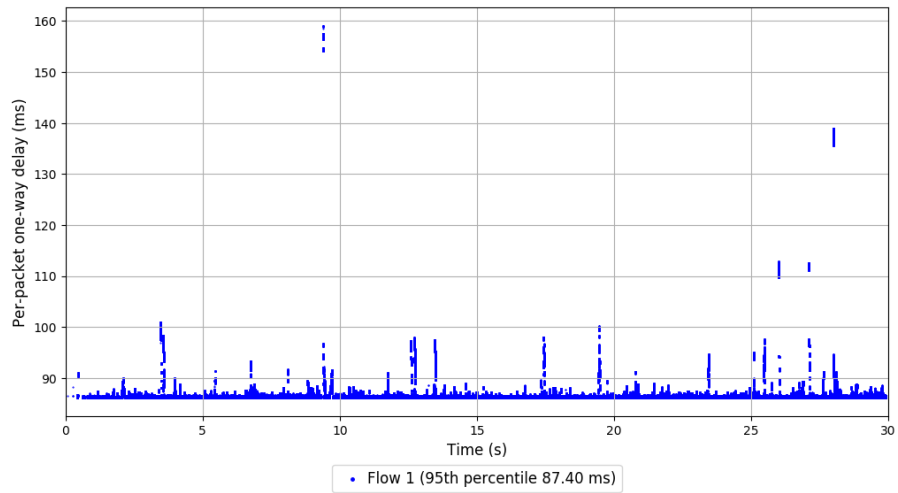
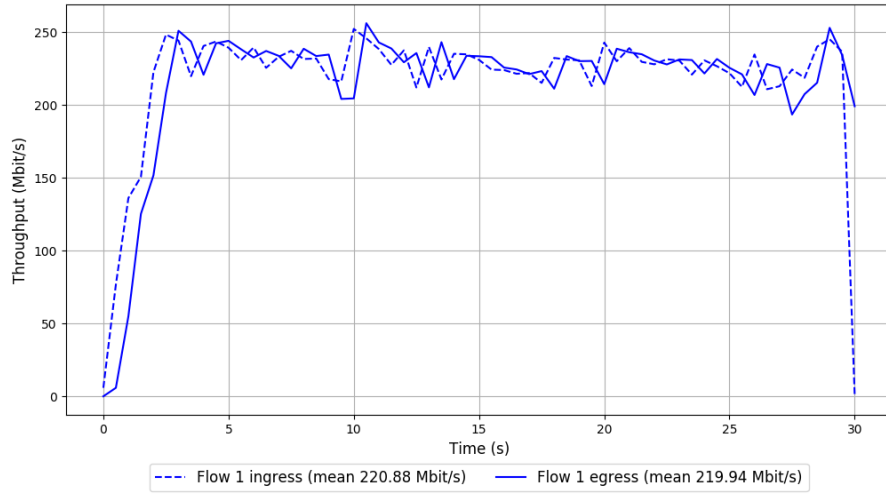
-- Flow 1:

Average throughput: 219.94 Mbit/s

95th percentile per-packet one-way delay: 87.400 ms

Loss rate: 1.00%

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





Run 1: Statistics of TCP Vegas

Start at: 2019-07-11 21:25:46

End at: 2019-07-11 21:26:16

Local clock offset: 1.841 ms

Remote clock offset: 1.413 ms

# Below is generated by plot.py at 2019-07-12 02:07:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 364.46 Mbit/s

95th percentile per-packet one-way delay: 142.327 ms

Loss rate: 0.61%

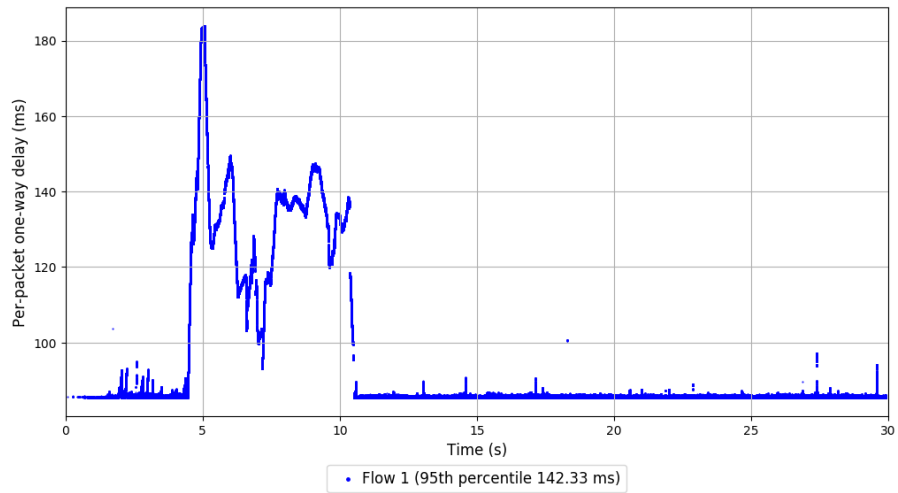
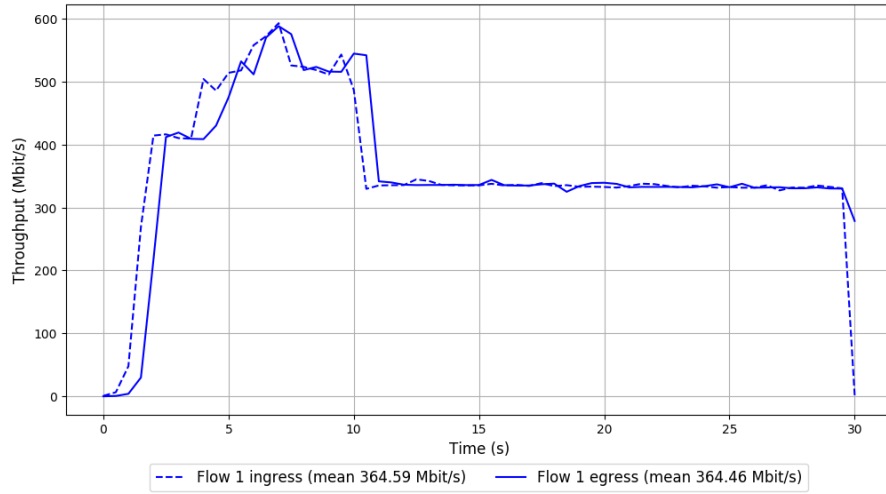
-- Flow 1:

Average throughput: 364.46 Mbit/s

95th percentile per-packet one-way delay: 142.327 ms

Loss rate: 0.61%

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



Run 2: Statistics of TCP Vegas

Start at: 2019-07-11 22:01:33

End at: 2019-07-11 22:02:03

Local clock offset: 0.417 ms

Remote clock offset: 0.567 ms

# Below is generated by plot.py at 2019-07-12 02:07:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 235.03 Mbit/s

95th percentile per-packet one-way delay: 91.536 ms

Loss rate: 0.35%

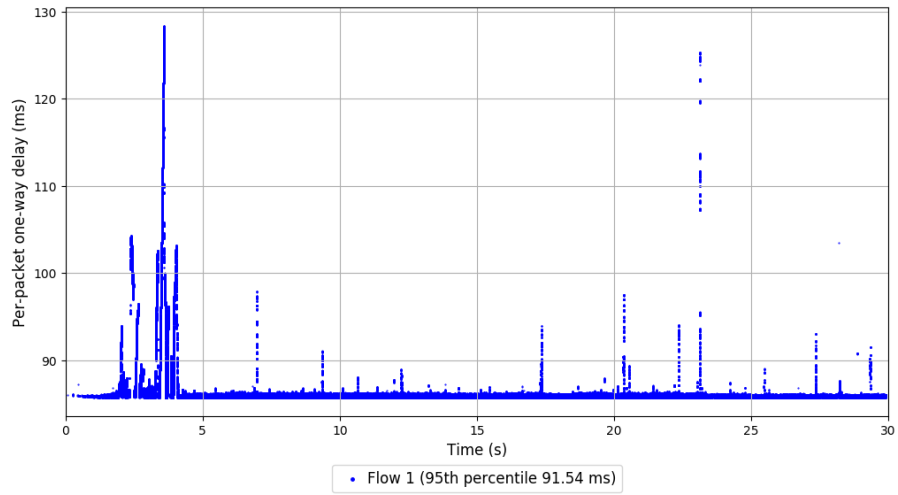
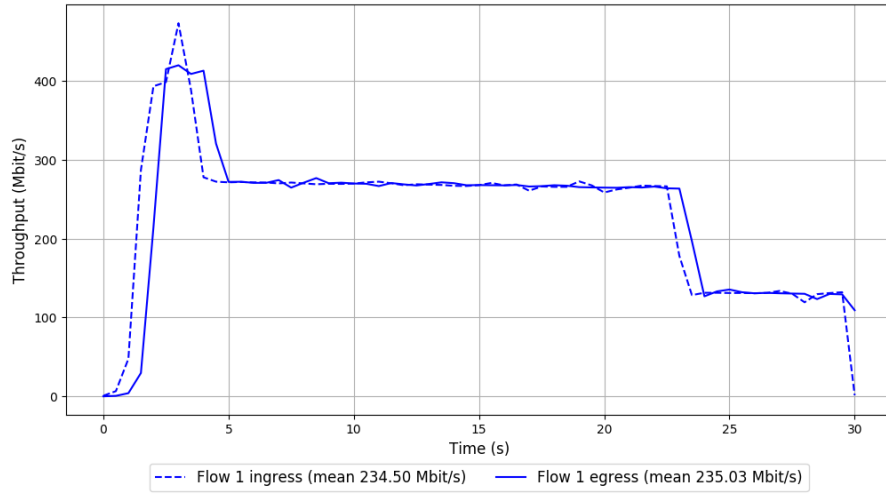
-- Flow 1:

Average throughput: 235.03 Mbit/s

95th percentile per-packet one-way delay: 91.536 ms

Loss rate: 0.35%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-07-11 22:36:51

End at: 2019-07-11 22:37:21

Local clock offset: 0.155 ms

Remote clock offset: 0.262 ms

# Below is generated by plot.py at 2019-07-12 02:07:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 328.01 Mbit/s

95th percentile per-packet one-way delay: 87.092 ms

Loss rate: 0.60%

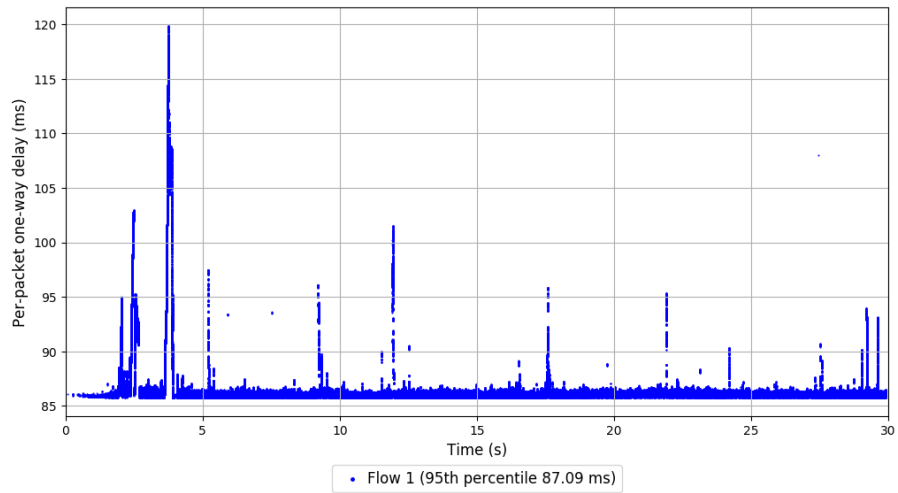
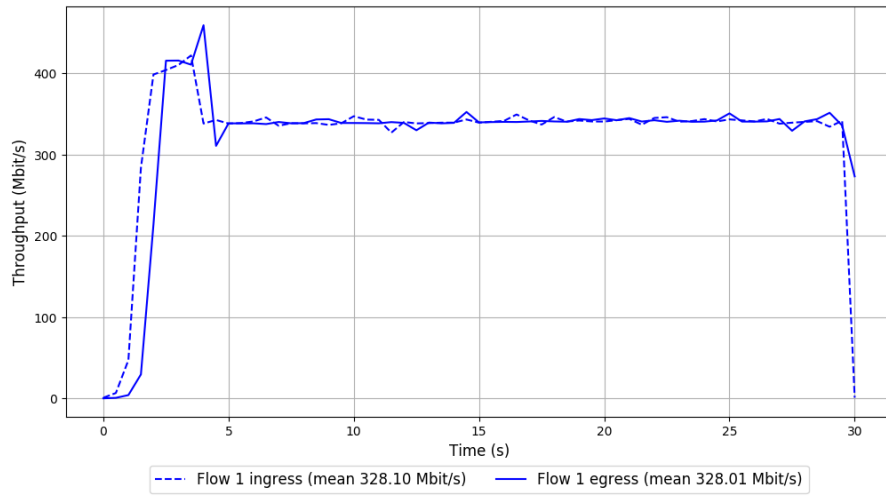
-- Flow 1:

Average throughput: 328.01 Mbit/s

95th percentile per-packet one-way delay: 87.092 ms

Loss rate: 0.60%

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



Run 4: Statistics of TCP Vegas

Start at: 2019-07-11 23:12:21

End at: 2019-07-11 23:12:51

Local clock offset: -0.387 ms

Remote clock offset: 0.078 ms

# Below is generated by plot.py at 2019-07-12 02:11:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 325.27 Mbit/s

95th percentile per-packet one-way delay: 85.900 ms

Loss rate: 0.62%

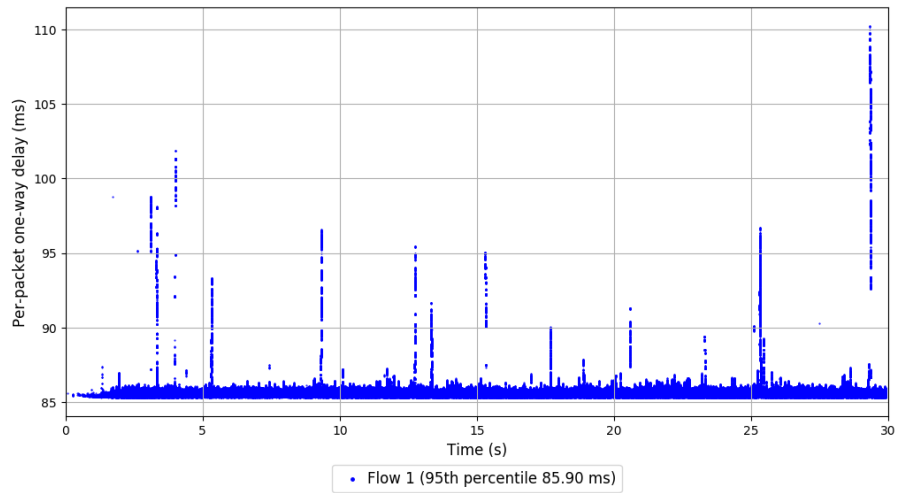
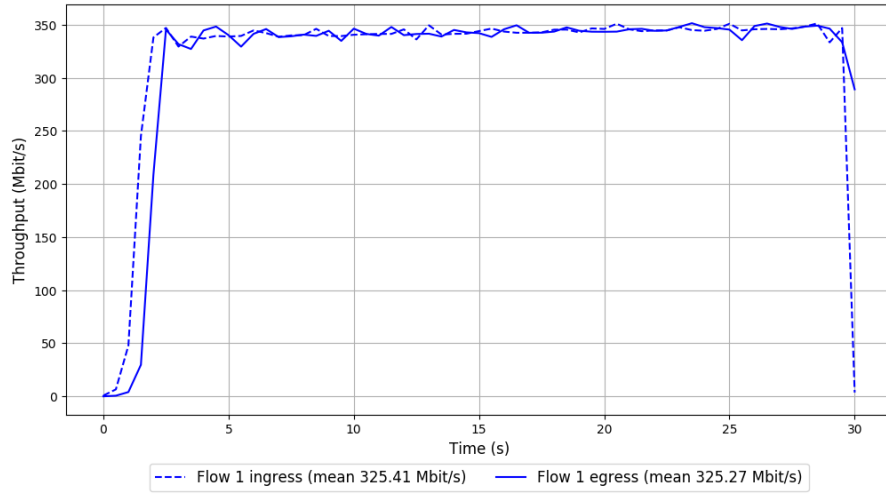
-- Flow 1:

Average throughput: 325.27 Mbit/s

95th percentile per-packet one-way delay: 85.900 ms

Loss rate: 0.62%

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





Run 5: Statistics of TCP Vegas

Start at: 2019-07-11 23:47:54

End at: 2019-07-11 23:48:24

Local clock offset: -0.282 ms

Remote clock offset: 0.048 ms

# Below is generated by plot.py at 2019-07-12 02:11:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 298.08 Mbit/s

95th percentile per-packet one-way delay: 86.529 ms

Loss rate: 0.55%

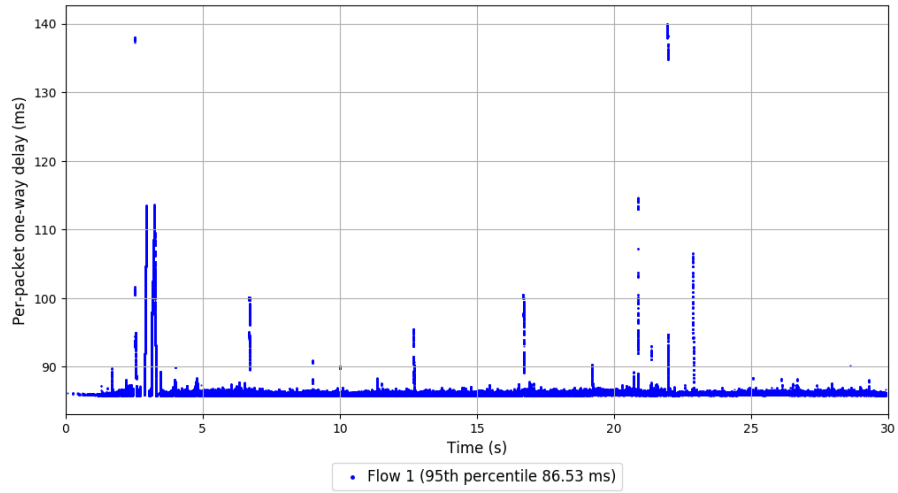
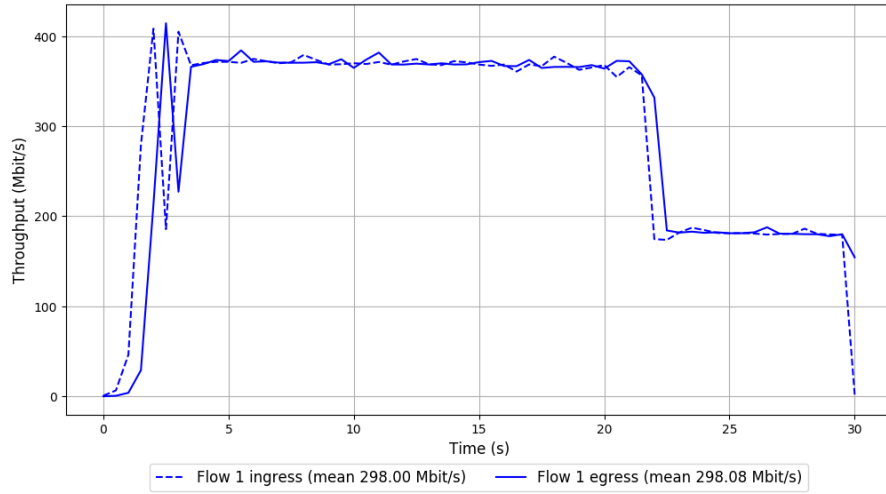
-- Flow 1:

Average throughput: 298.08 Mbit/s

95th percentile per-packet one-way delay: 86.529 ms

Loss rate: 0.55%

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



Run 1: Statistics of Verus

Start at: 2019-07-11 21:35:04

End at: 2019-07-11 21:35:34

Local clock offset: 1.269 ms

Remote clock offset: 0.88 ms

# Below is generated by plot.py at 2019-07-12 02:12:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 169.33 Mbit/s

95th percentile per-packet one-way delay: 250.194 ms

Loss rate: 8.72%

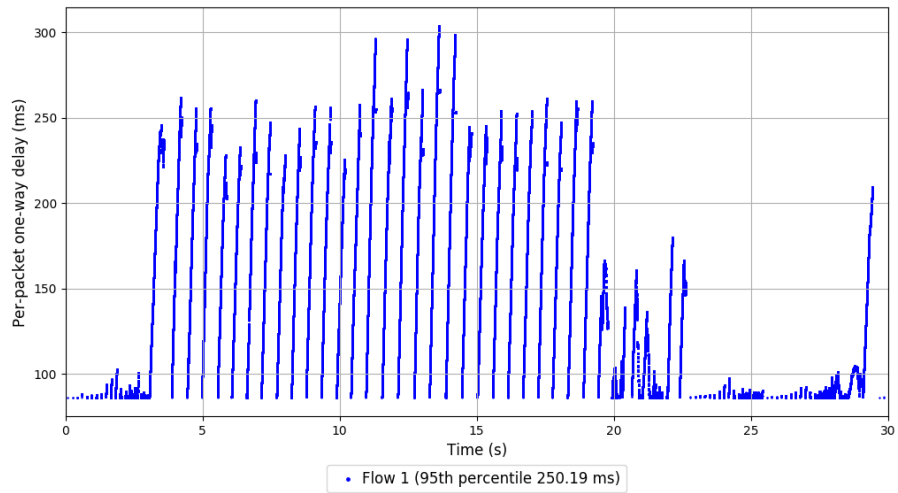
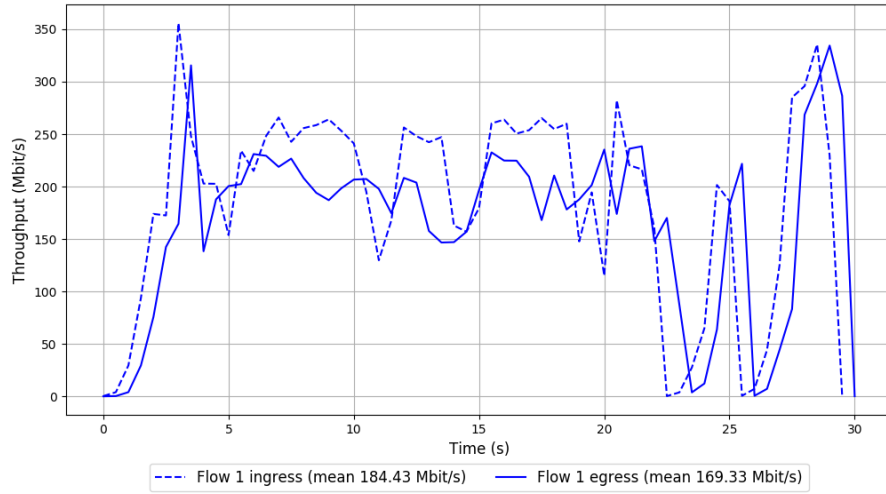
-- Flow 1:

Average throughput: 169.33 Mbit/s

95th percentile per-packet one-way delay: 250.194 ms

Loss rate: 8.72%

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



Run 2: Statistics of Verus

Start at: 2019-07-11 22:10:45

End at: 2019-07-11 22:11:15

Local clock offset: 0.354 ms

Remote clock offset: 0.449 ms

# Below is generated by plot.py at 2019-07-12 02:12:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 75.79 Mbit/s

95th percentile per-packet one-way delay: 94.325 ms

Loss rate: 0.25%

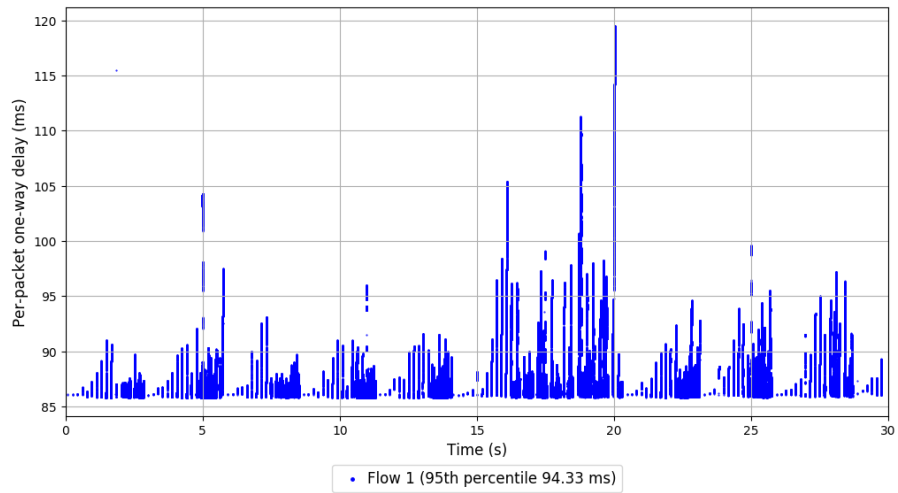
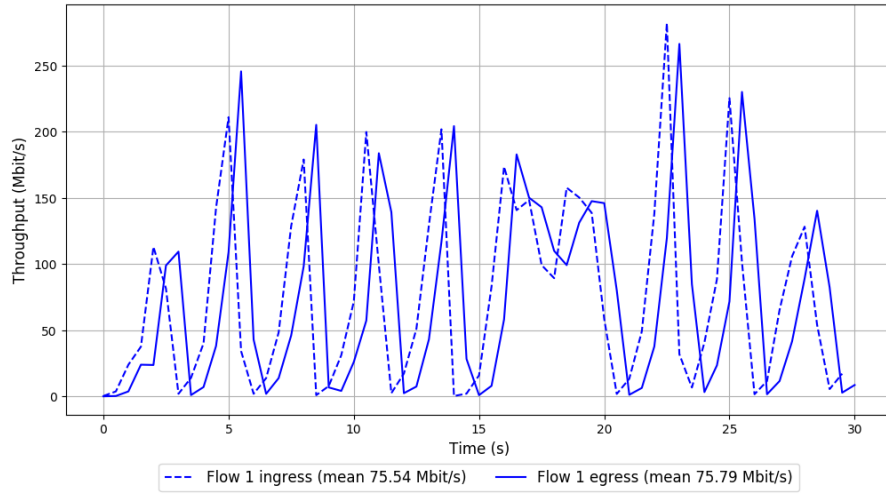
-- Flow 1:

Average throughput: 75.79 Mbit/s

95th percentile per-packet one-way delay: 94.325 ms

Loss rate: 0.25%

## Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2019-07-11 22:46:12

End at: 2019-07-11 22:46:42

Local clock offset: 0.321 ms

Remote clock offset: 0.201 ms

# Below is generated by plot.py at 2019-07-12 02:12:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 134.76 Mbit/s

95th percentile per-packet one-way delay: 170.003 ms

Loss rate: 0.48%

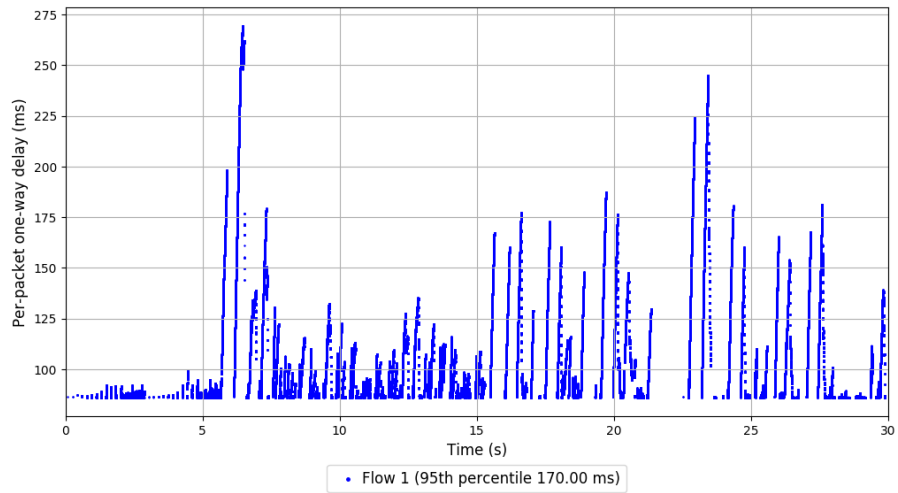
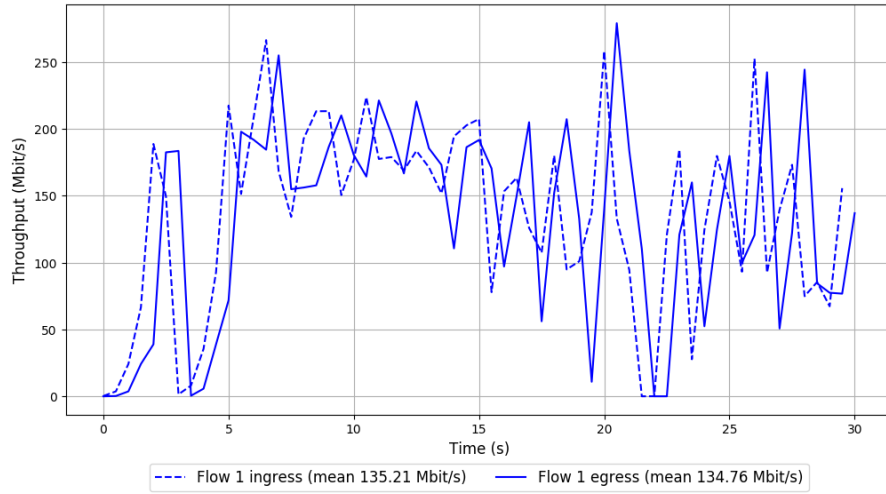
-- Flow 1:

Average throughput: 134.76 Mbit/s

95th percentile per-packet one-way delay: 170.003 ms

Loss rate: 0.48%

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





Run 4: Statistics of Verus

Start at: 2019-07-11 23:21:37

End at: 2019-07-11 23:22:07

Local clock offset: -0.194 ms

Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2019-07-12 02:12:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 108.48 Mbit/s

95th percentile per-packet one-way delay: 252.297 ms

Loss rate: 5.28%

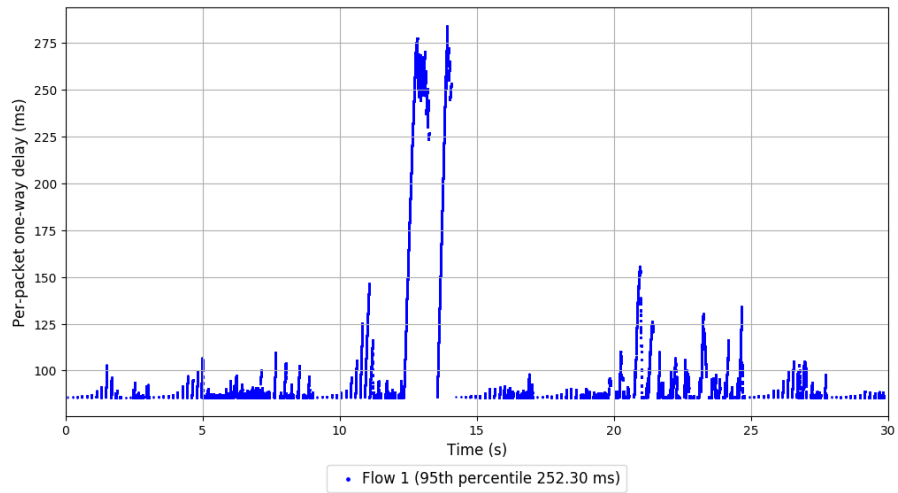
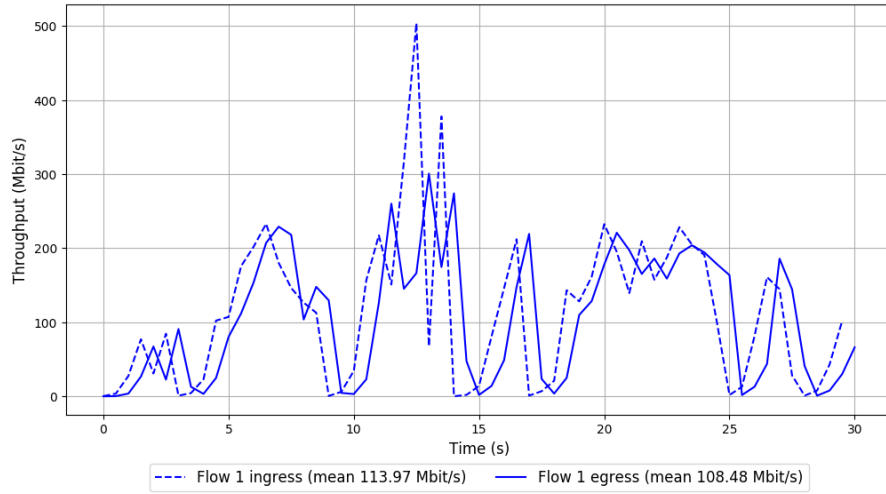
-- Flow 1:

Average throughput: 108.48 Mbit/s

95th percentile per-packet one-way delay: 252.297 ms

Loss rate: 5.28%

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



Run 5: Statistics of Verus

Start at: 2019-07-11 23:57:09

End at: 2019-07-11 23:57:39

Local clock offset: 0.322 ms

Remote clock offset: 0.032 ms

# Below is generated by plot.py at 2019-07-12 02:12:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 154.88 Mbit/s

95th percentile per-packet one-way delay: 205.792 ms

Loss rate: 0.57%

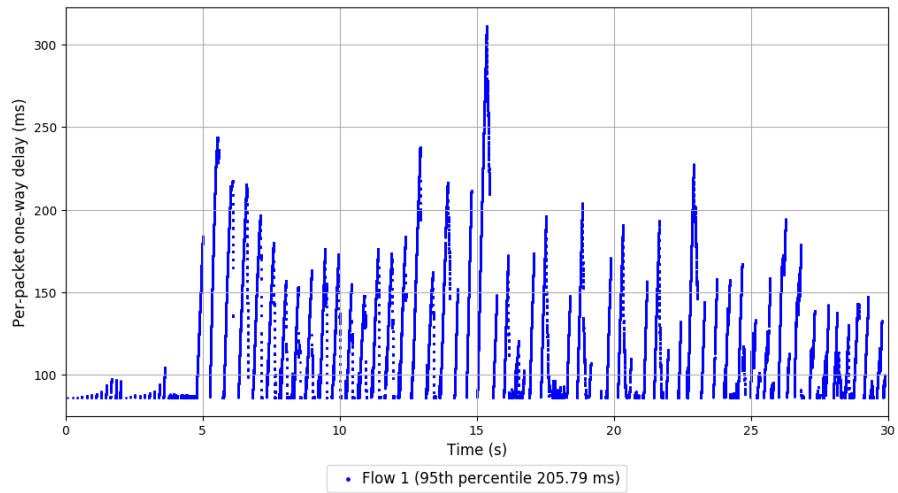
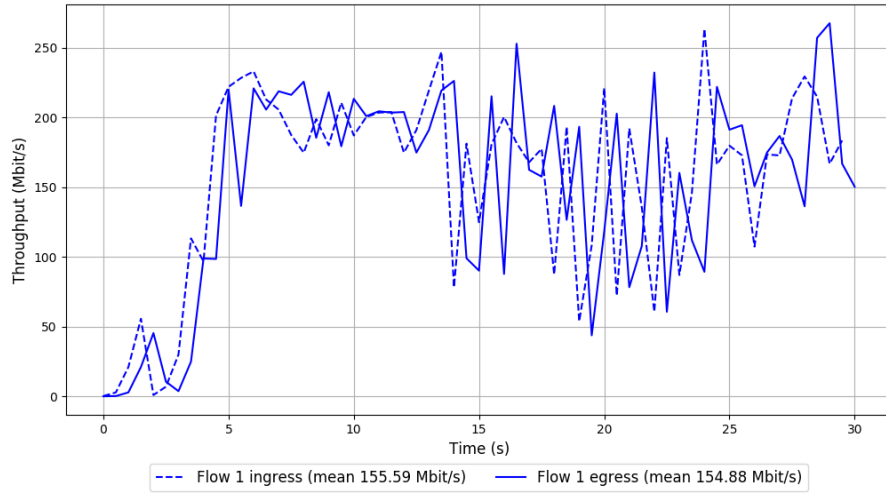
-- Flow 1:

Average throughput: 154.88 Mbit/s

95th percentile per-packet one-way delay: 205.792 ms

Loss rate: 0.57%

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



Run 1: Statistics of PCC-Vivace

Start at: 2019-07-11 21:44:46

End at: 2019-07-11 21:45:16

Local clock offset: 1.172 ms

Remote clock offset: 0.918 ms

# Below is generated by plot.py at 2019-07-12 02:12:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 229.33 Mbit/s

95th percentile per-packet one-way delay: 86.804 ms

Loss rate: 0.99%

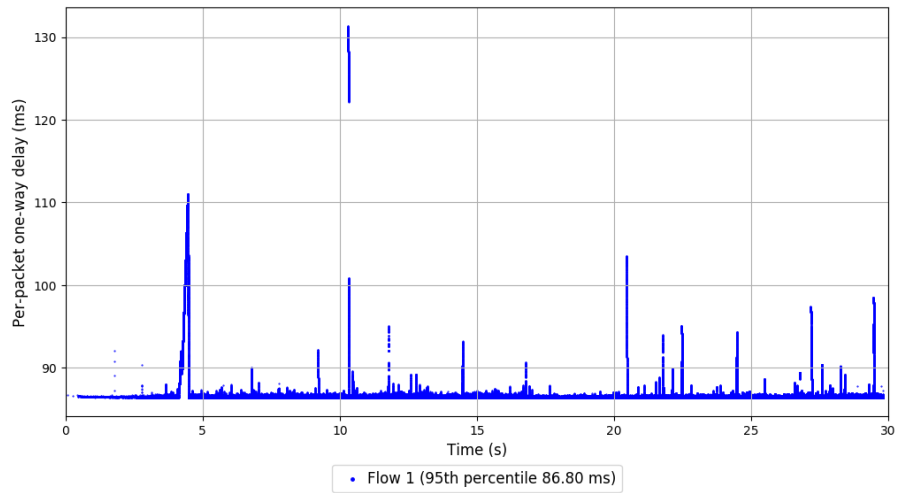
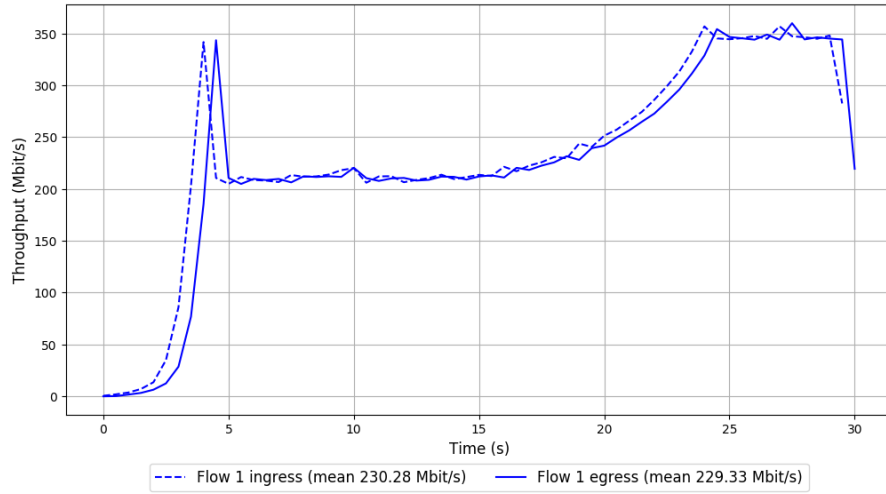
-- Flow 1:

Average throughput: 229.33 Mbit/s

95th percentile per-packet one-way delay: 86.804 ms

Loss rate: 0.99%

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



Run 2: Statistics of PCC-Vivace

Start at: 2019-07-11 22:20:18

End at: 2019-07-11 22:20:48

Local clock offset: 0.469 ms

Remote clock offset: 0.508 ms

# Below is generated by plot.py at 2019-07-12 02:13:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 333.33 Mbit/s

95th percentile per-packet one-way delay: 94.267 ms

Loss rate: 0.67%

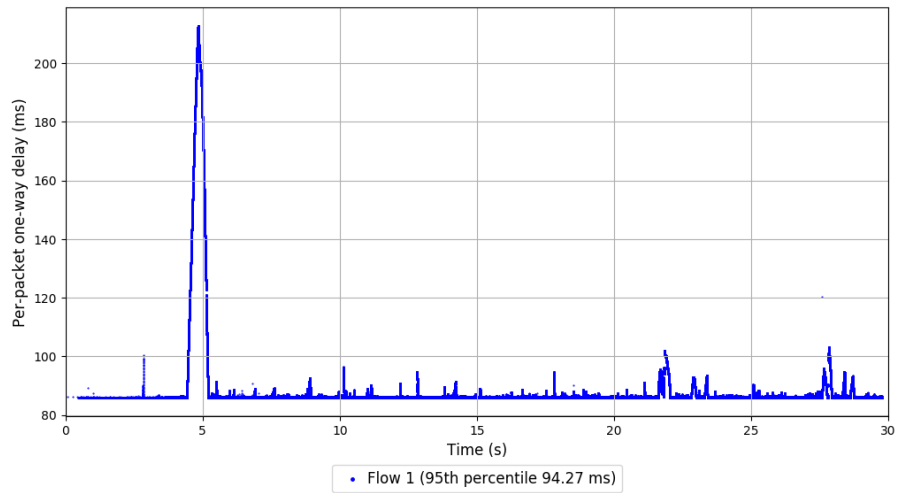
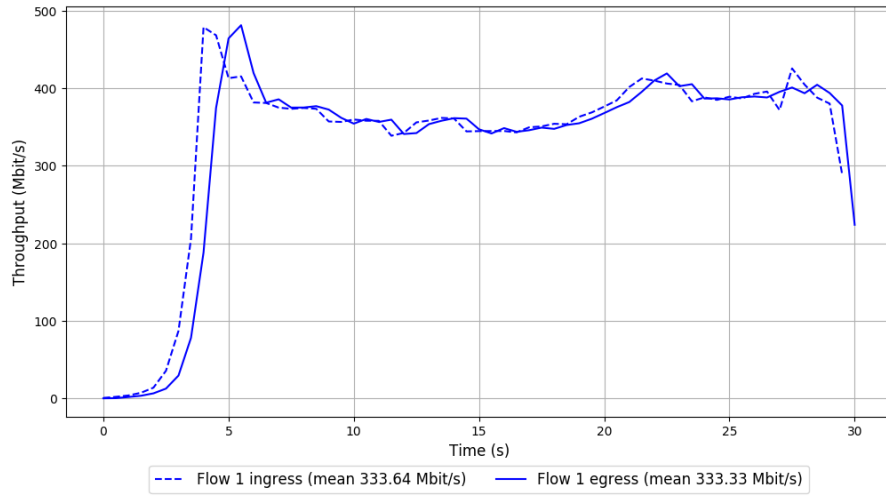
-- Flow 1:

Average throughput: 333.33 Mbit/s

95th percentile per-packet one-way delay: 94.267 ms

Loss rate: 0.67%

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





Run 3: Statistics of PCC-Vivace

Start at: 2019-07-11 22:55:50

End at: 2019-07-11 22:56:21

Local clock offset: -0.292 ms

Remote clock offset: 0.164 ms

# Below is generated by plot.py at 2019-07-12 02:14:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 316.27 Mbit/s

95th percentile per-packet one-way delay: 100.534 ms

Loss rate: 0.54%

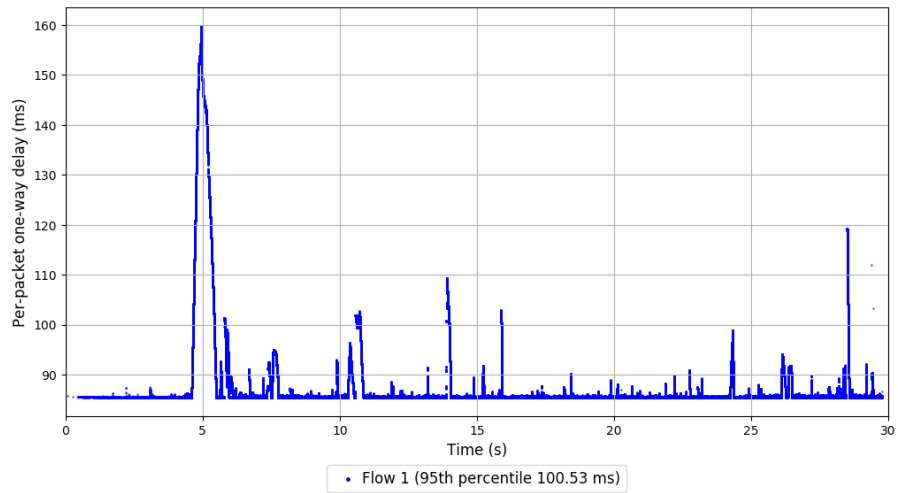
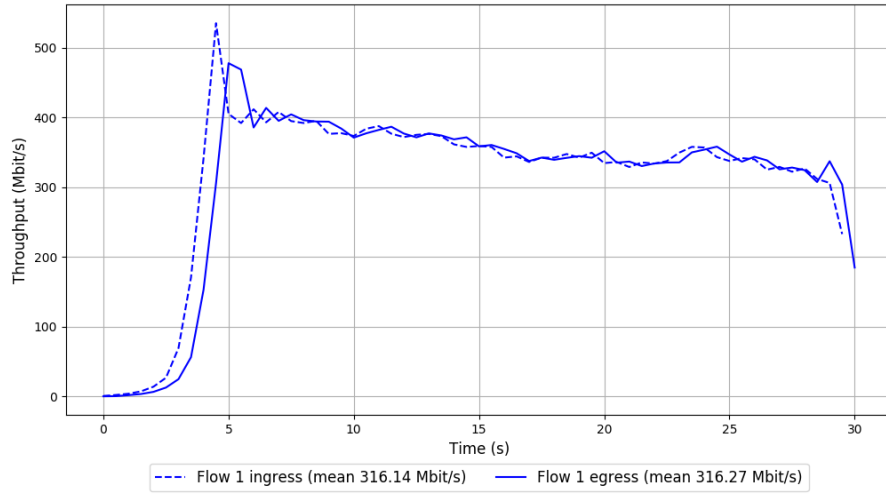
-- Flow 1:

Average throughput: 316.27 Mbit/s

95th percentile per-packet one-way delay: 100.534 ms

Loss rate: 0.54%

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



Run 4: Statistics of PCC-Vivace

Start at: 2019-07-11 23:31:05

End at: 2019-07-11 23:31:35

Local clock offset: 0.052 ms

Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2019-07-12 02:14:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 292.49 Mbit/s

95th percentile per-packet one-way delay: 92.718 ms

Loss rate: 0.80%

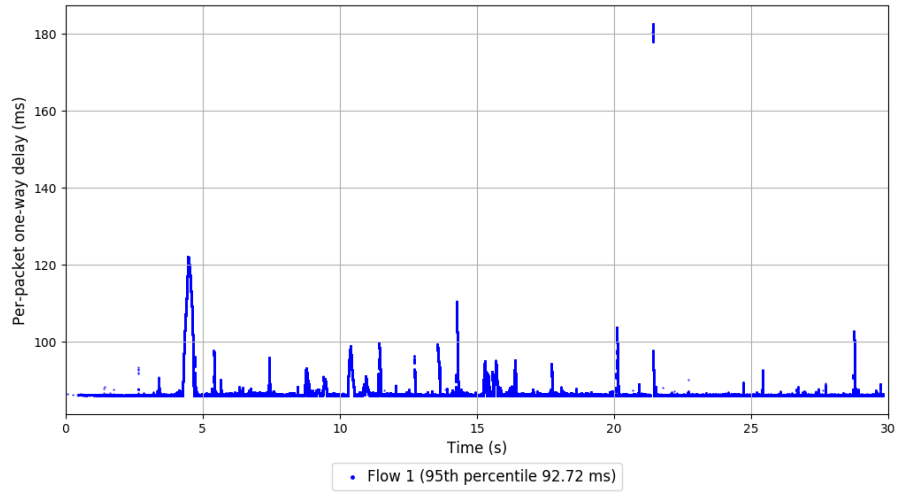
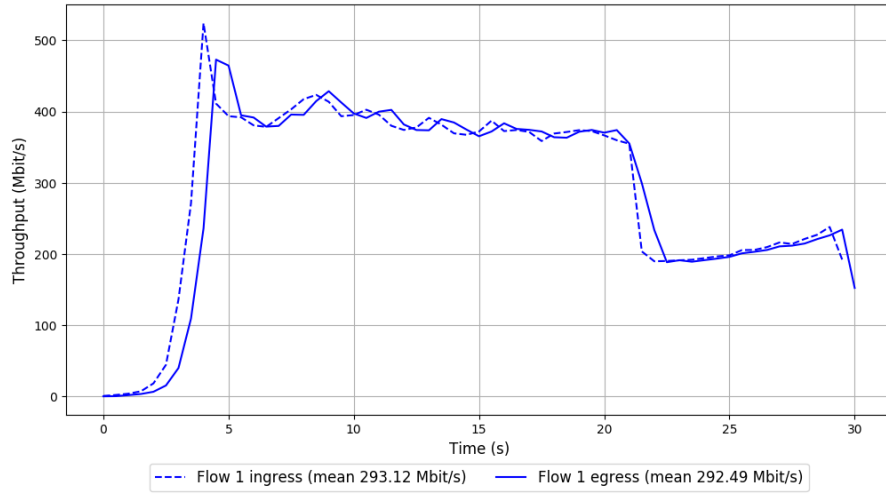
-- Flow 1:

Average throughput: 292.49 Mbit/s

95th percentile per-packet one-way delay: 92.718 ms

Loss rate: 0.80%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-07-12 00:06:47

End at: 2019-07-12 00:07:17

Local clock offset: -0.074 ms

Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2019-07-12 02:14:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 254.21 Mbit/s

95th percentile per-packet one-way delay: 86.870 ms

Loss rate: 0.78%

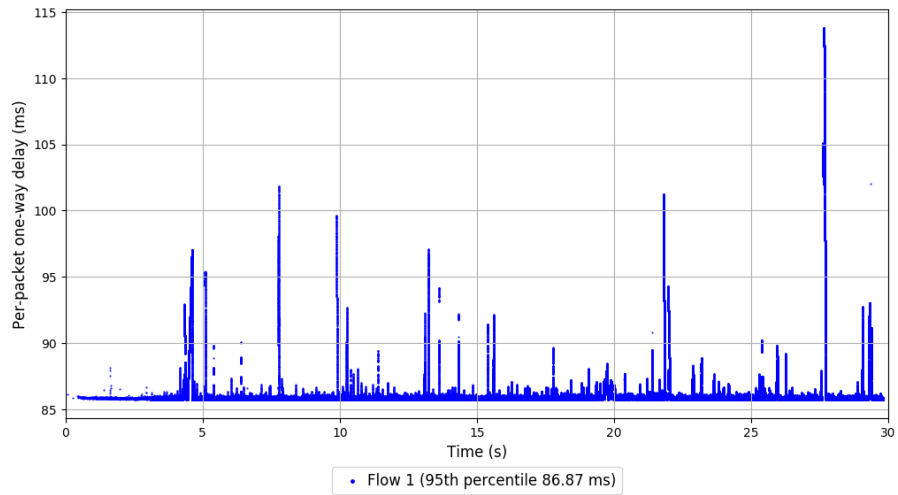
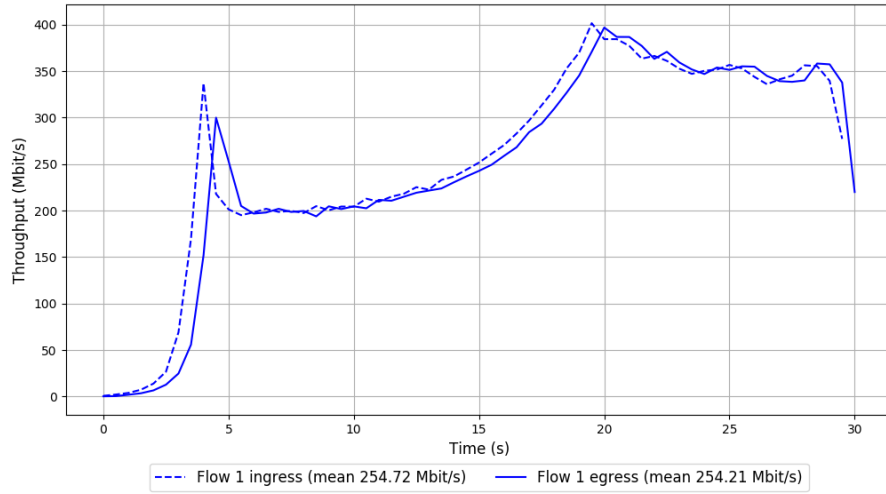
-- Flow 1:

Average throughput: 254.21 Mbit/s

95th percentile per-packet one-way delay: 86.870 ms

Loss rate: 0.78%

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



Run 1: Statistics of WebRTC media

Start at: 2019-07-11 21:13:15

End at: 2019-07-11 21:13:45

Local clock offset: 3.778 ms

Remote clock offset: 2.321 ms

# Below is generated by plot.py at 2019-07-12 02:14:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.888 ms

Loss rate: 0.00%

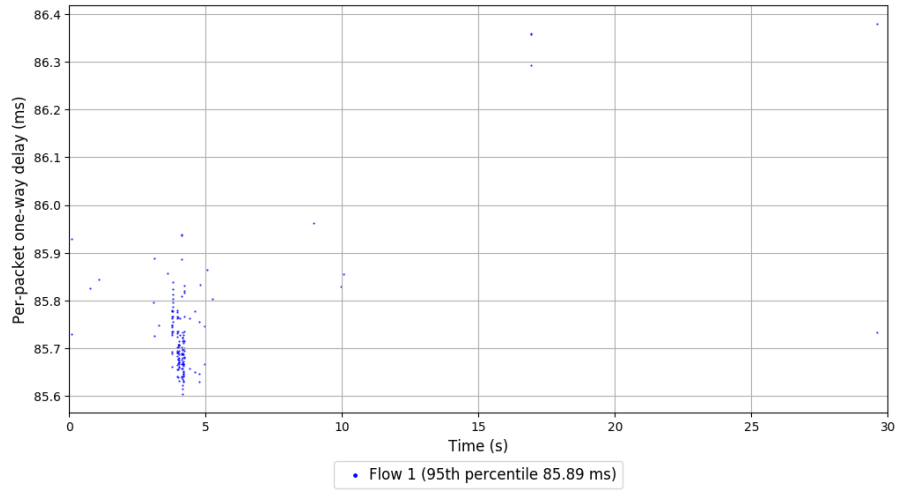
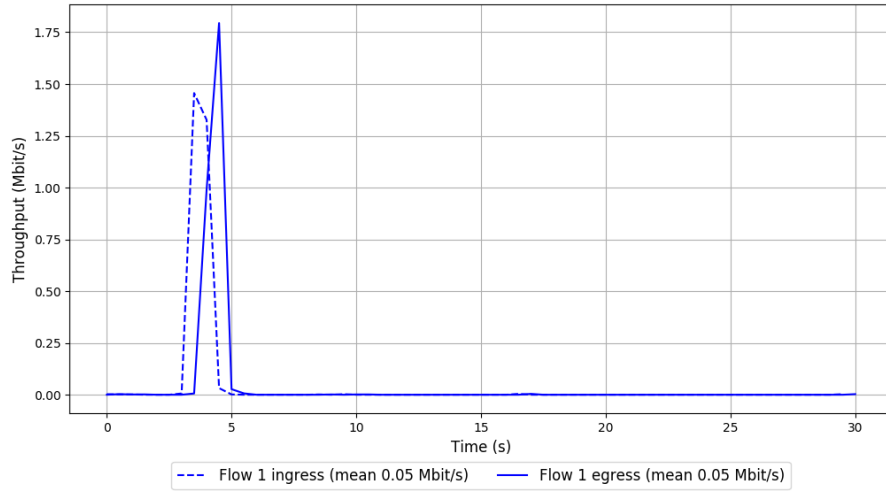
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.888 ms

Loss rate: 0.00%

### Run 1: Report of WebRTC media — Data Link





Run 2: Statistics of WebRTC media

Start at: 2019-07-11 21:48:58

End at: 2019-07-11 21:49:28

Local clock offset: 1.409 ms

Remote clock offset: 1.004 ms

# Below is generated by plot.py at 2019-07-12 02:14:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.588 ms

Loss rate: 0.00%

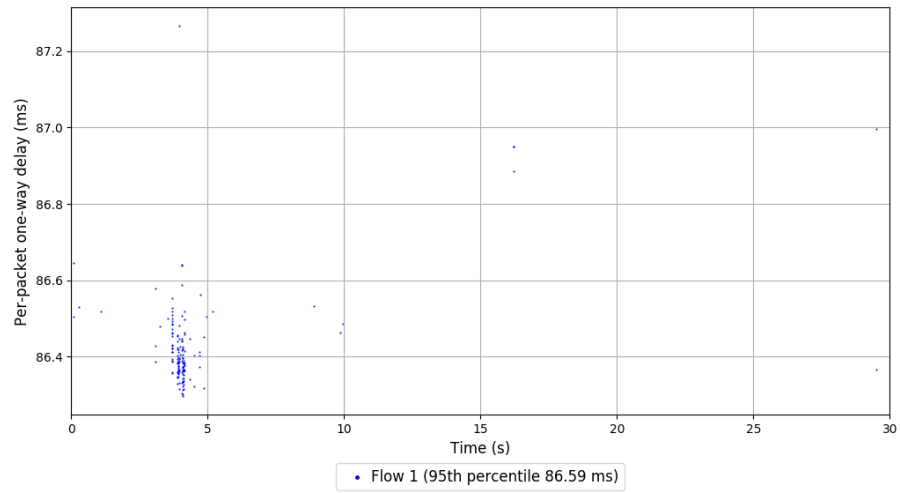
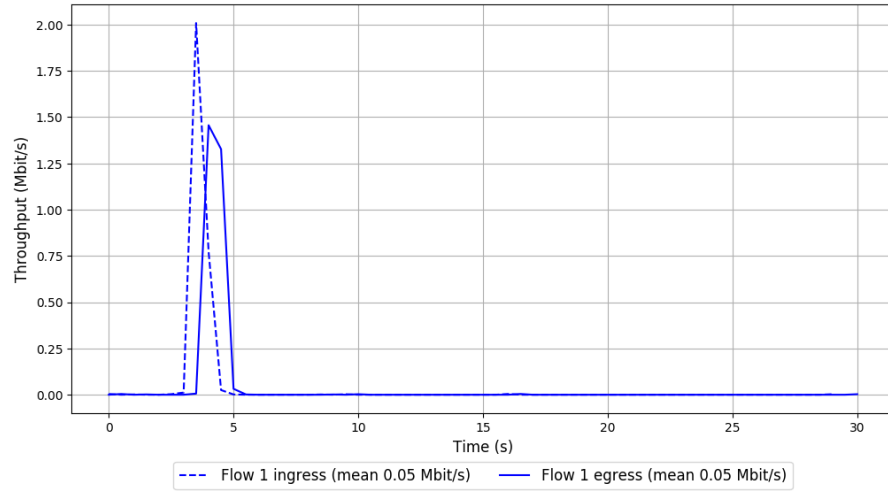
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.588 ms

Loss rate: 0.00%

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



Run 3: Statistics of WebRTC media

Start at: 2019-07-11 22:24:36

End at: 2019-07-11 22:25:06

Local clock offset: 0.746 ms

Remote clock offset: 0.585 ms

# Below is generated by plot.py at 2019-07-12 02:14:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.403 ms

Loss rate: 0.00%

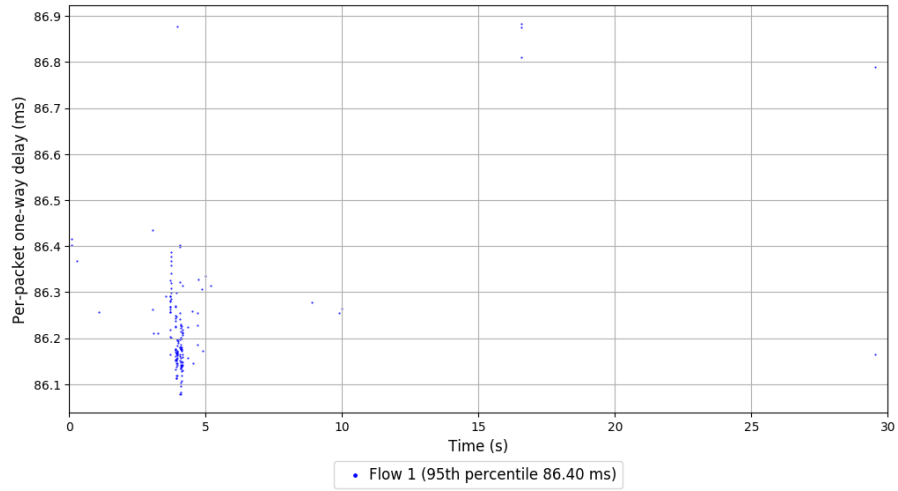
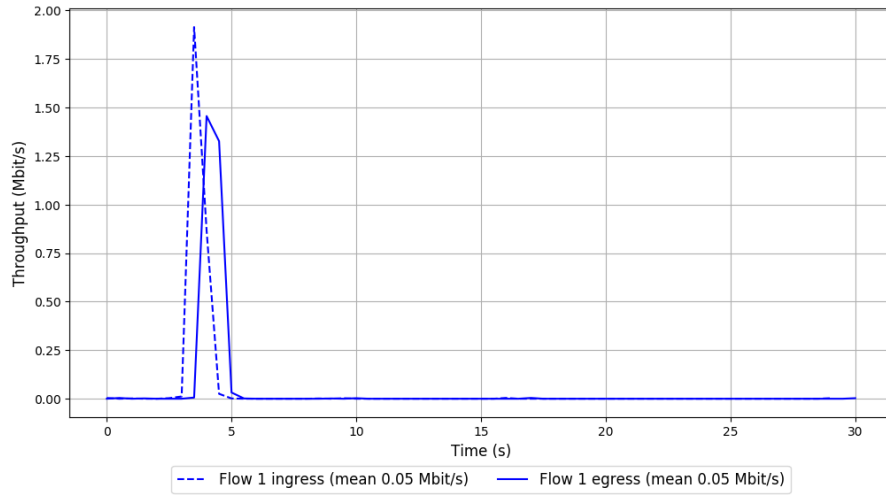
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.403 ms

Loss rate: 0.00%

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



Run 4: Statistics of WebRTC media

Start at: 2019-07-11 23:00:10

End at: 2019-07-11 23:00:40

Local clock offset: 0.348 ms

Remote clock offset: 0.185 ms

# Below is generated by plot.py at 2019-07-12 02:14:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.311 ms

Loss rate: 0.00%

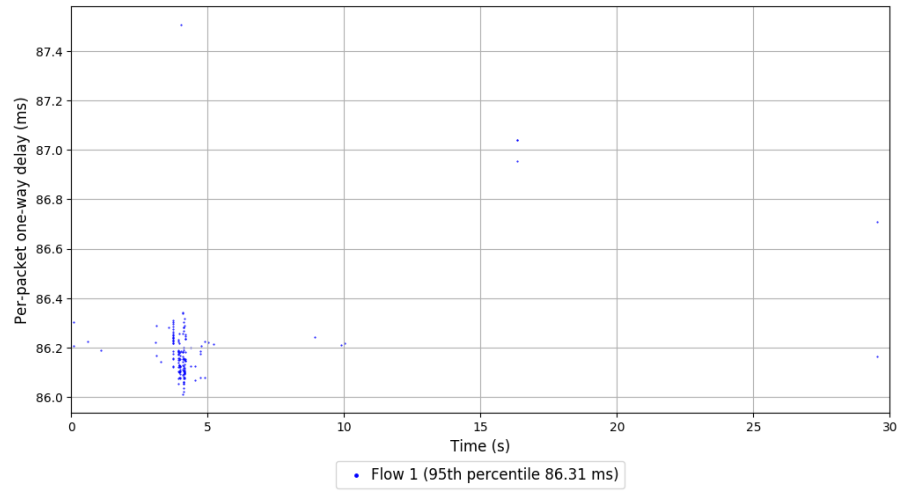
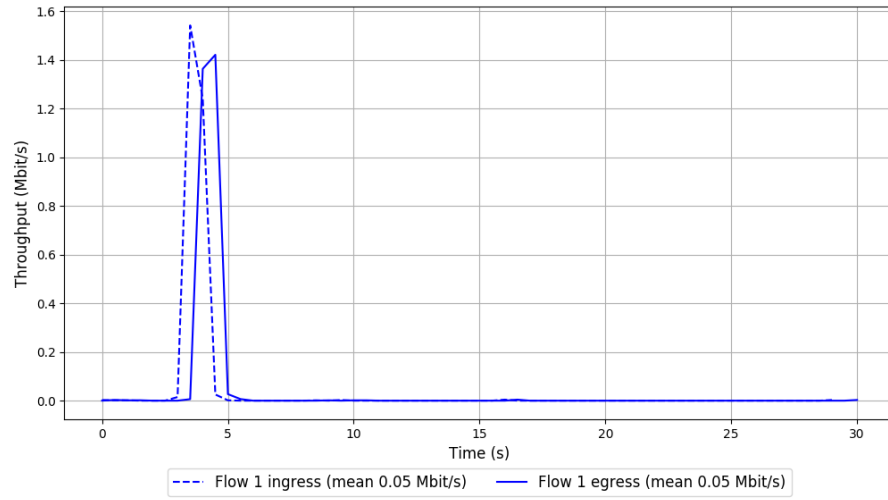
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.311 ms

Loss rate: 0.00%

### Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-07-11 23:35:23

End at: 2019-07-11 23:35:53

Local clock offset: -0.097 ms

Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2019-07-12 02:14:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.066 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.066 ms

Loss rate: 0.00%

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

