

## Pantheon Report

Generated at 2019-04-23 22:08:20 (UTC).

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

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

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

### System info:

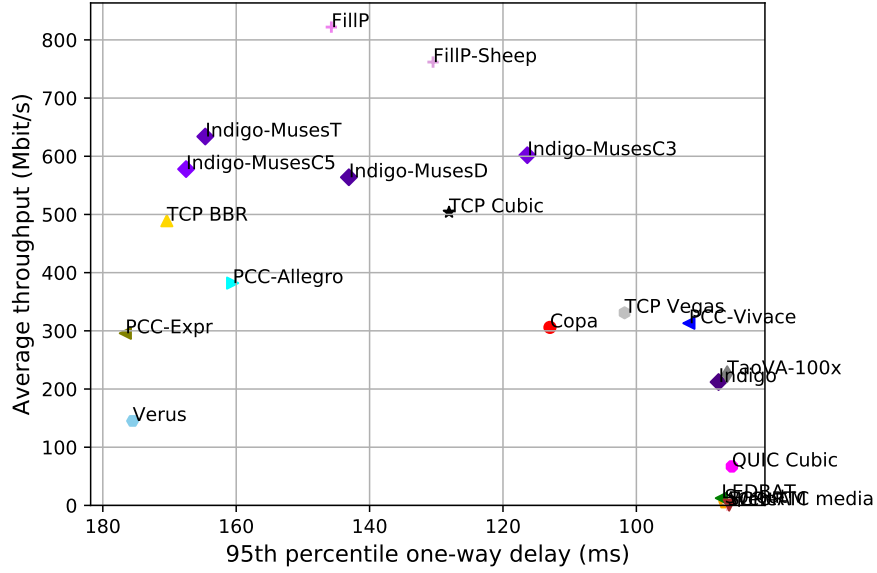
```
Linux 4.15.0-1028-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

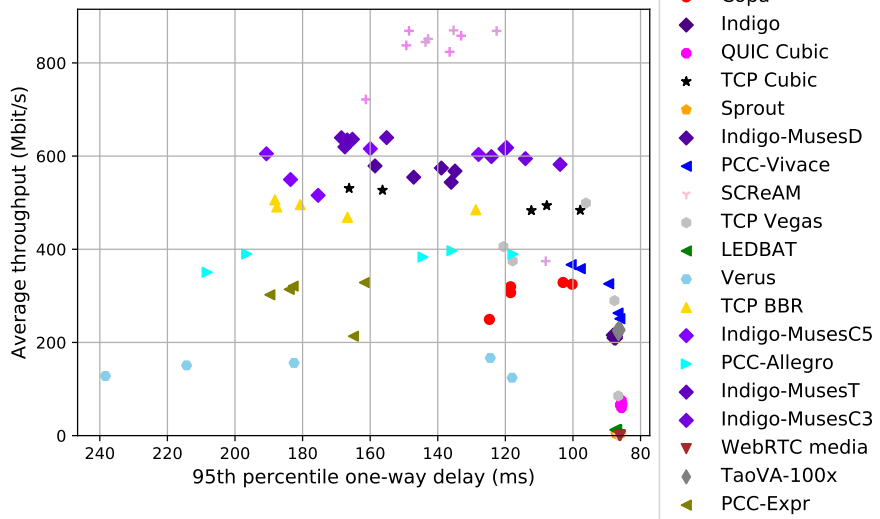
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/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)



test from GCE Iowa to GCE Sydney, 5 runs of 30s each per 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	489.28	170.40	1.11
Copa	5	305.92	112.96	0.64
TCP Cubic	5	503.71	128.09	0.62
FillP	5	822.02	145.73	2.46
FillP-Sheep	5	761.89	130.48	1.30
Indigo	4	212.03	87.68	0.60
Indigo-MusesC3	5	601.82	116.35	0.70
Indigo-MusesC5	5	577.93	167.52	1.19
Indigo-MusesD	5	563.90	143.11	0.72
Indigo-MusesT	5	633.92	164.64	0.81
LEDBAT	5	12.50	87.26	1.15
PCC-Allegro	5	382.04	160.53	3.08
PCC-Expr	5	295.79	176.63	2.02
QUIC Cubic	4	66.95	85.68	0.87
SReAM	5	0.22	86.34	0.54
Sprout	5	4.31	86.78	0.52
TaoVA-100x	5	225.45	86.39	0.59
TCP Vegas	5	331.00	101.77	0.50
Verus	5	145.16	175.53	2.97
PCC-Vivace	5	313.03	92.13	0.71
WebRTC media	4	0.54	86.09	0.23

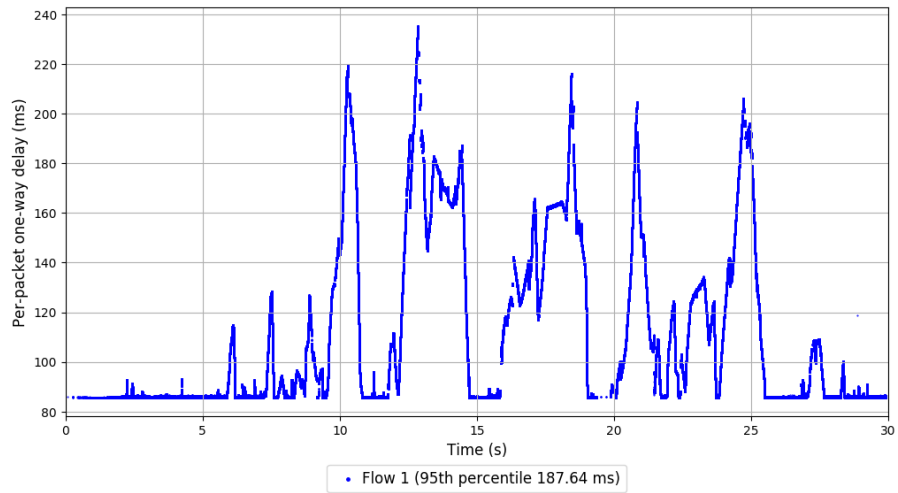
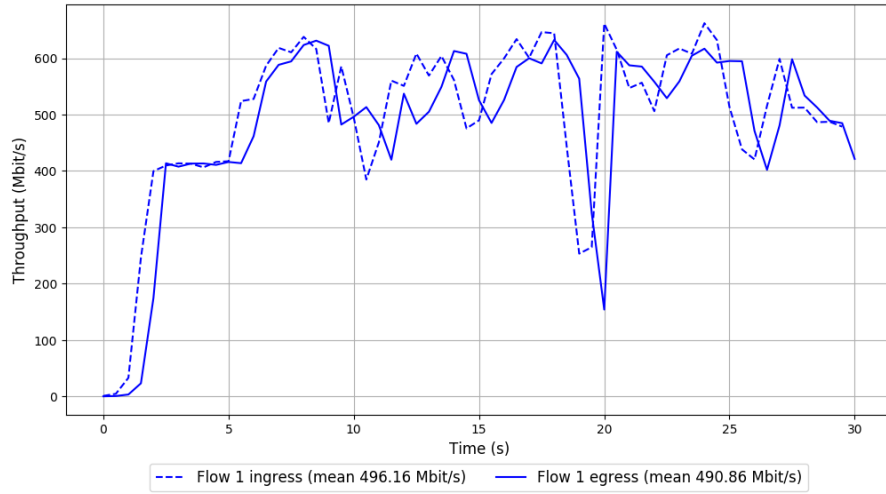


Run 1: Statistics of TCP BBR

Start at: 2019-04-23 18:10:50  
End at: 2019-04-23 18:11:20  
Local clock offset: 11.452 ms  
Remote clock offset: 17.512 ms

# Below is generated by plot.py at 2019-04-23 20:40:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 490.86 Mbit/s  
95th percentile per-packet one-way delay: 187.638 ms  
Loss rate: 1.53%  
-- Flow 1:  
Average throughput: 490.86 Mbit/s  
95th percentile per-packet one-way delay: 187.638 ms  
Loss rate: 1.53%

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

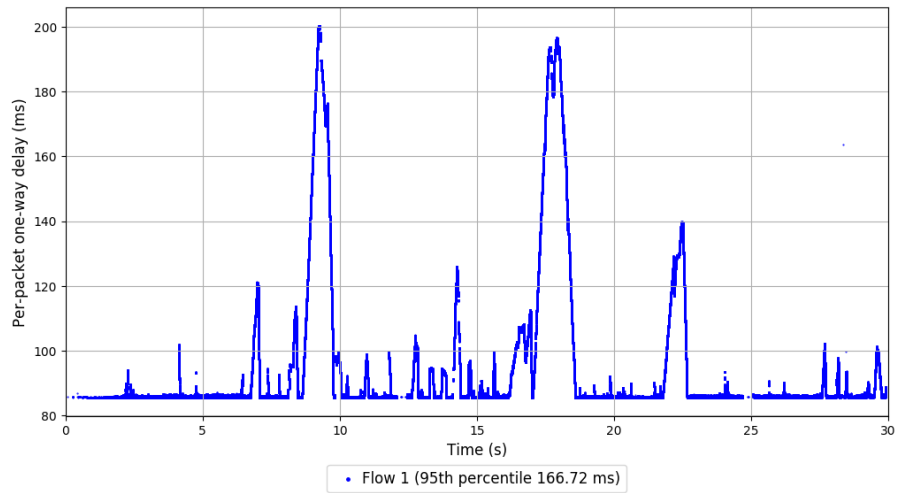
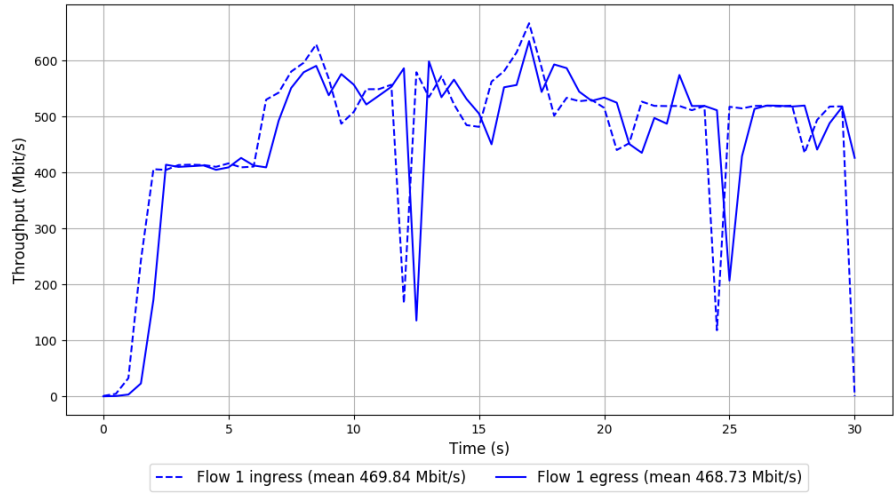


Run 2: Statistics of TCP BBR

Start at: 2019-04-23 18:42:01  
End at: 2019-04-23 18:42:31  
Local clock offset: 20.545 ms  
Remote clock offset: 30.954 ms

# Below is generated by plot.py at 2019-04-23 20:40:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 468.73 Mbit/s  
95th percentile per-packet one-way delay: 166.719 ms  
Loss rate: 0.81%  
-- Flow 1:  
Average throughput: 468.73 Mbit/s  
95th percentile per-packet one-way delay: 166.719 ms  
Loss rate: 0.81%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-04-23 19:13:23

End at: 2019-04-23 19:13:53

Local clock offset: 10.866 ms

Remote clock offset: 16.488 ms

# Below is generated by plot.py at 2019-04-23 20:41:11

# Datalink statistics

-- Total of 1 flow:

Average throughput: 506.07 Mbit/s

95th percentile per-packet one-way delay: 188.194 ms

Loss rate: 1.41%

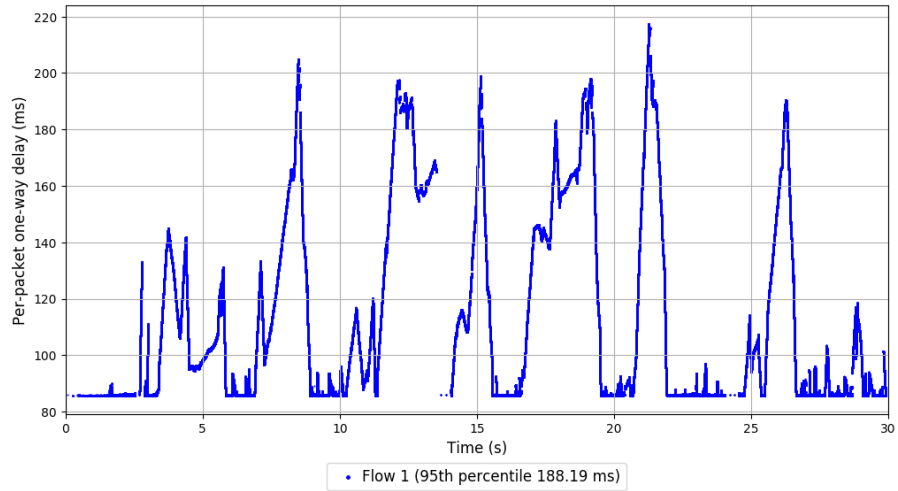
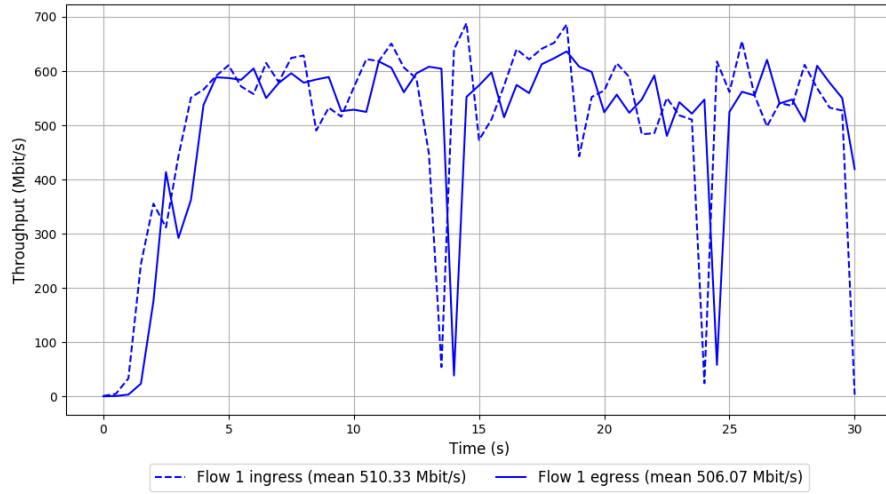
-- Flow 1:

Average throughput: 506.07 Mbit/s

95th percentile per-packet one-way delay: 188.194 ms

Loss rate: 1.41%

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



Run 4: Statistics of TCP BBR

Start at: 2019-04-23 19:44:38

End at: 2019-04-23 19:45:08

Local clock offset: 4.976 ms

Remote clock offset: 7.96 ms

# Below is generated by plot.py at 2019-04-23 20:41:11

# Datalink statistics

-- Total of 1 flow:

Average throughput: 495.89 Mbit/s

95th percentile per-packet one-way delay: 180.695 ms

Loss rate: 1.10%

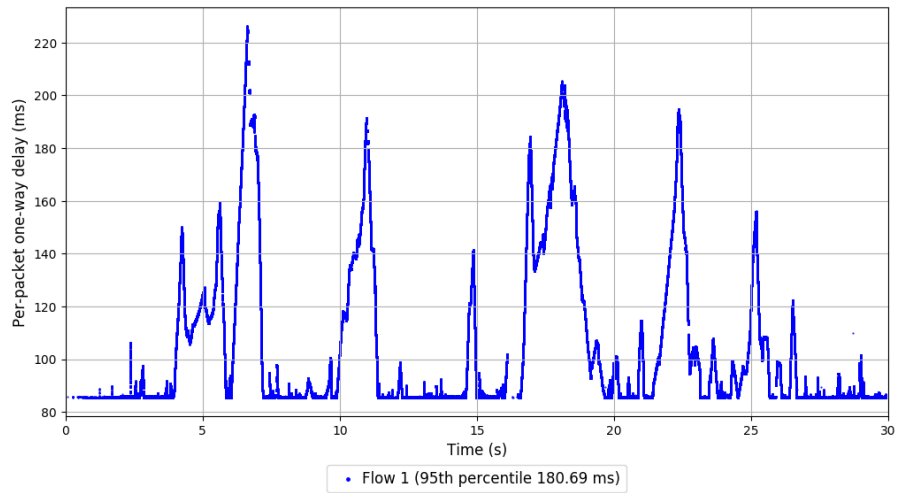
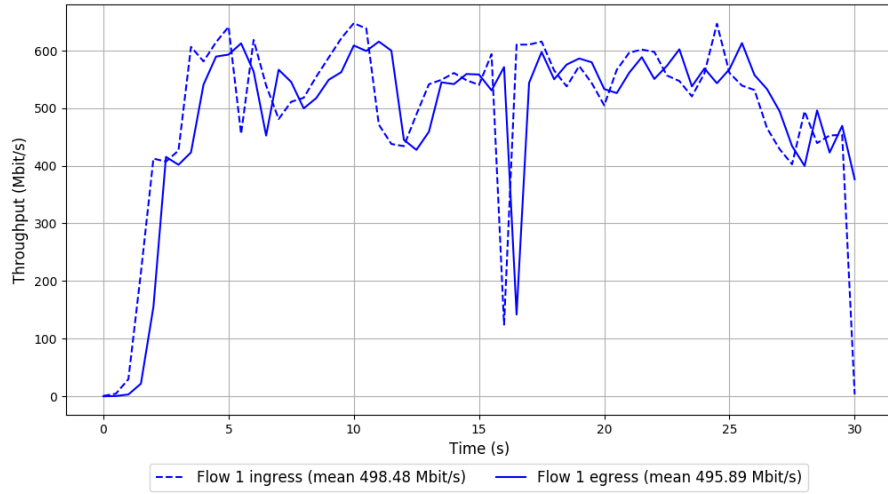
-- Flow 1:

Average throughput: 495.89 Mbit/s

95th percentile per-packet one-way delay: 180.695 ms

Loss rate: 1.10%

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





Run 5: Statistics of TCP BBR

Start at: 2019-04-23 20:15:35

End at: 2019-04-23 20:16:05

Local clock offset: 2.523 ms

Remote clock offset: 2.894 ms

# Below is generated by plot.py at 2019-04-23 20:41:11

# Datalink statistics

-- Total of 1 flow:

Average throughput: 484.84 Mbit/s

95th percentile per-packet one-way delay: 128.750 ms

Loss rate: 0.69%

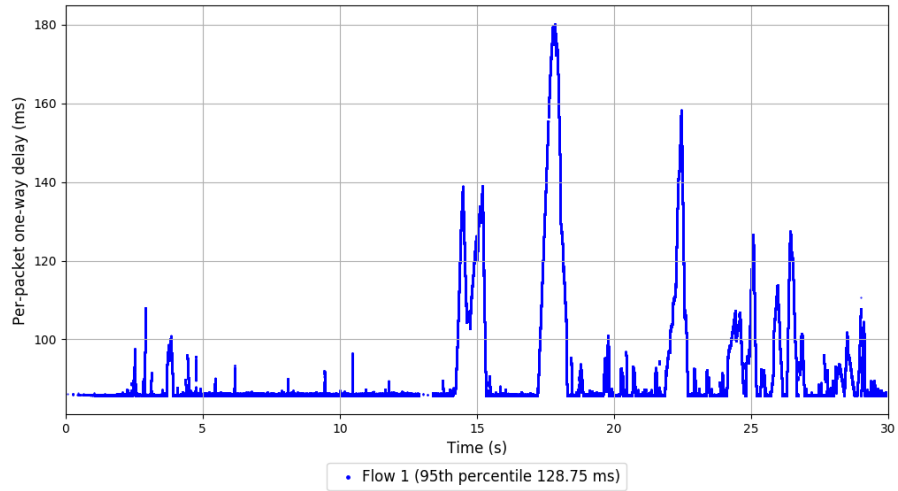
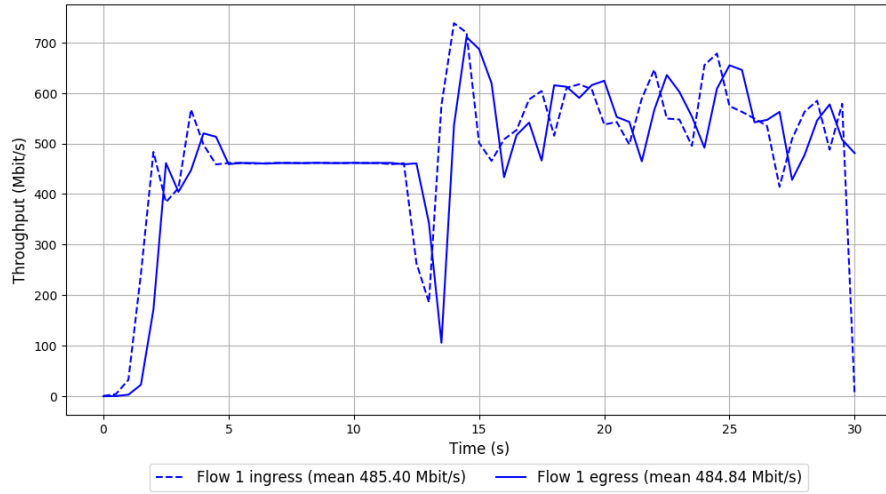
-- Flow 1:

Average throughput: 484.84 Mbit/s

95th percentile per-packet one-way delay: 128.750 ms

Loss rate: 0.69%

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

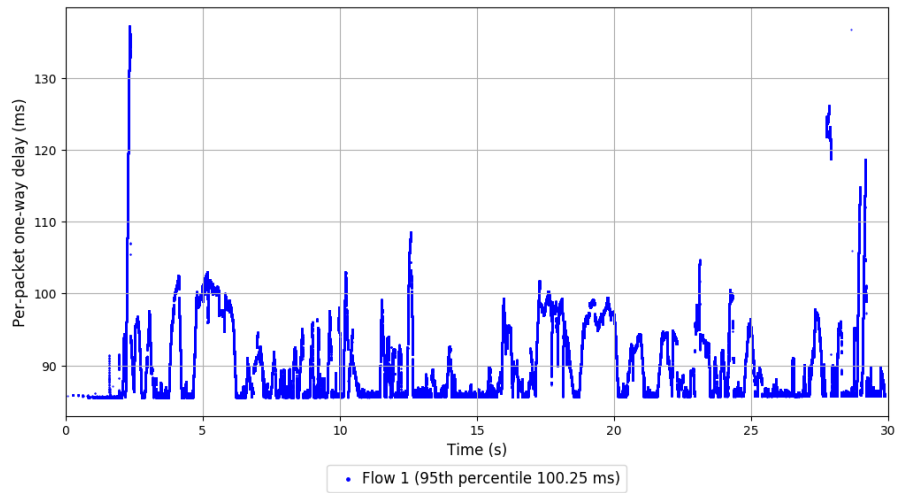
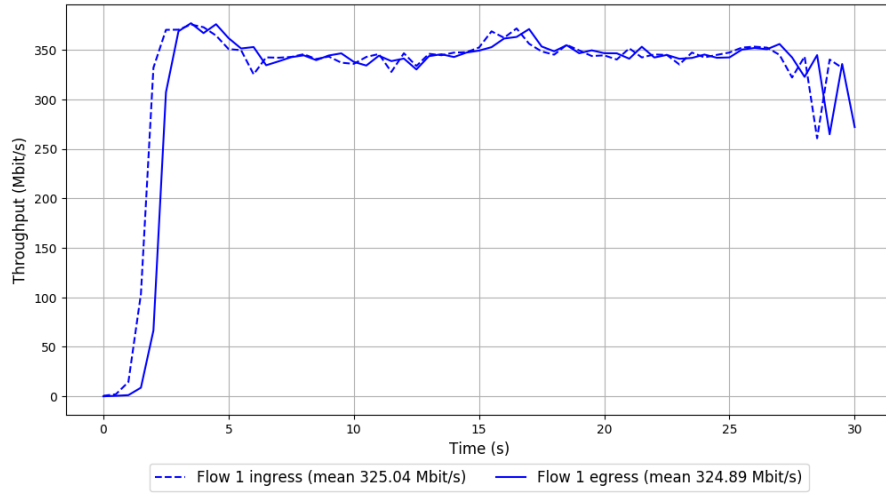


Run 1: Statistics of Copa

Start at: 2019-04-23 18:12:28  
End at: 2019-04-23 18:12:58  
Local clock offset: 12.851 ms  
Remote clock offset: 19.633 ms

# Below is generated by plot.py at 2019-04-23 20:42:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 324.89 Mbit/s  
95th percentile per-packet one-way delay: 100.250 ms  
Loss rate: 0.62%  
-- Flow 1:  
Average throughput: 324.89 Mbit/s  
95th percentile per-packet one-way delay: 100.250 ms  
Loss rate: 0.62%

### Run 1: Report of Copa — Data Link

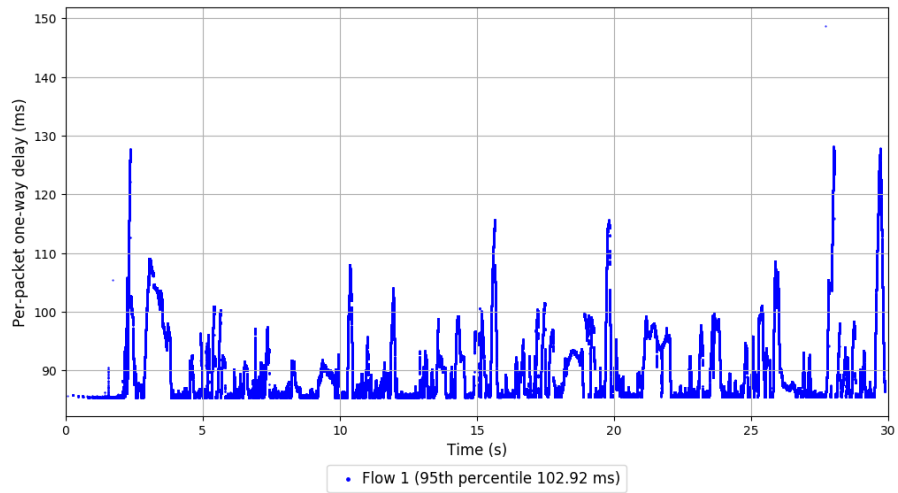
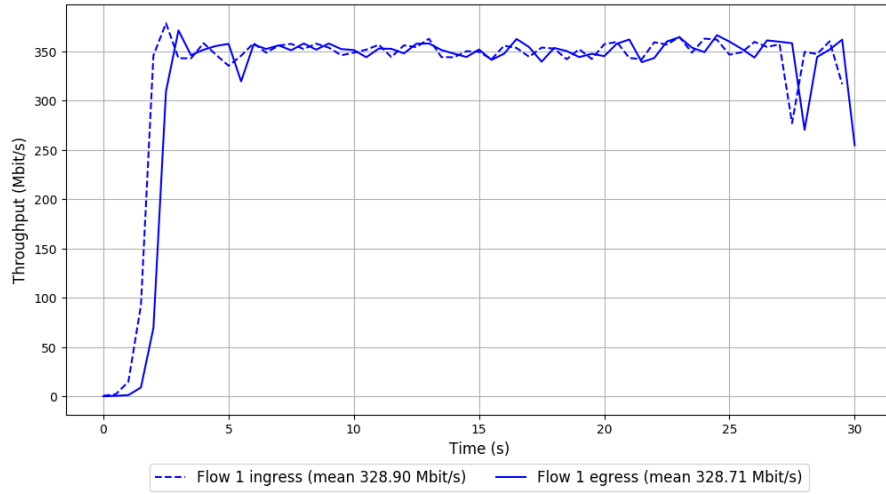


Run 2: Statistics of Copa

Start at: 2019-04-23 18:43:38  
End at: 2019-04-23 18:44:08  
Local clock offset: 21.351 ms  
Remote clock offset: 32.548 ms

# Below is generated by plot.py at 2019-04-23 20:42:33  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 328.71 Mbit/s  
95th percentile per-packet one-way delay: 102.921 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 328.71 Mbit/s  
95th percentile per-packet one-way delay: 102.921 ms  
Loss rate: 0.63%

## Run 2: Report of Copa — Data Link

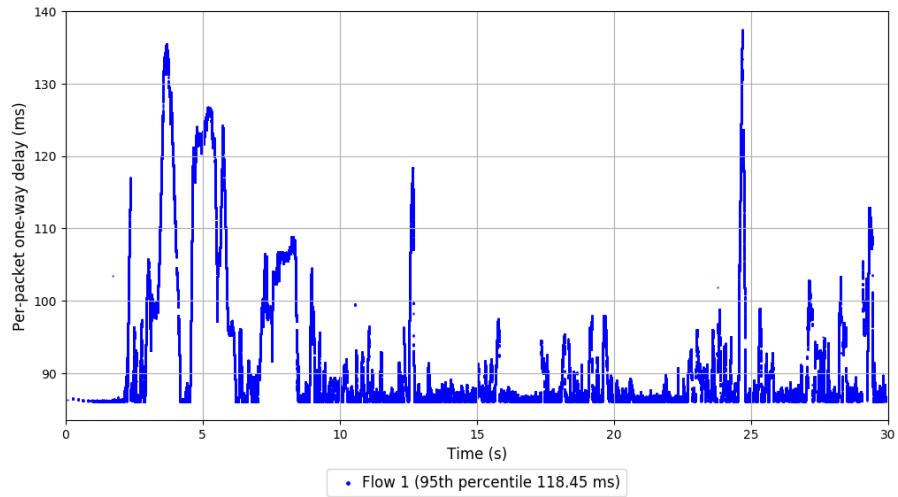
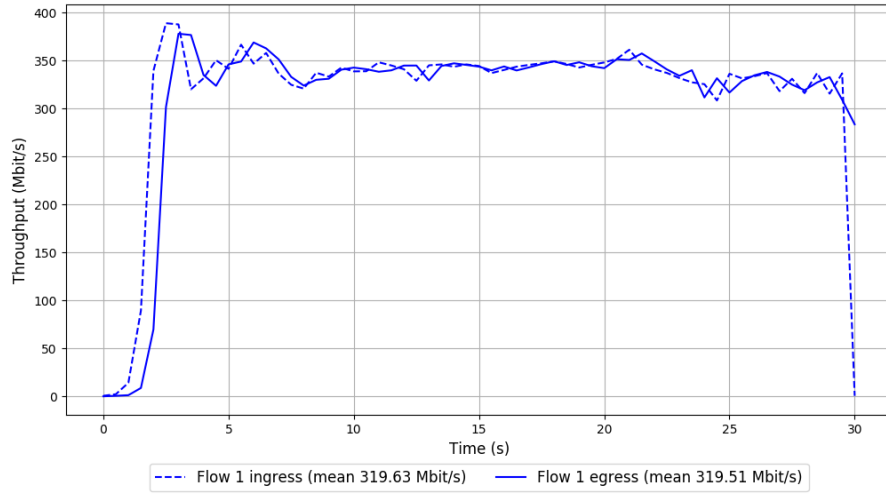


Run 3: Statistics of Copa

Start at: 2019-04-23 19:15:02  
End at: 2019-04-23 19:15:32  
Local clock offset: 11.189 ms  
Remote clock offset: 16.833 ms

# Below is generated by plot.py at 2019-04-23 20:42:33  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 319.51 Mbit/s  
95th percentile per-packet one-way delay: 118.451 ms  
Loss rate: 0.61%  
-- Flow 1:  
Average throughput: 319.51 Mbit/s  
95th percentile per-packet one-way delay: 118.451 ms  
Loss rate: 0.61%

### Run 3: Report of Copa — Data Link





Run 4: Statistics of Copa

Start at: 2019-04-23 19:46:17

End at: 2019-04-23 19:46:47

Local clock offset: 5.27 ms

Remote clock offset: 7.978 ms

# Below is generated by plot.py at 2019-04-23 20:48:05

# Datalink statistics

-- Total of 1 flow:

Average throughput: 249.40 Mbit/s

95th percentile per-packet one-way delay: 124.723 ms

Loss rate: 0.68%

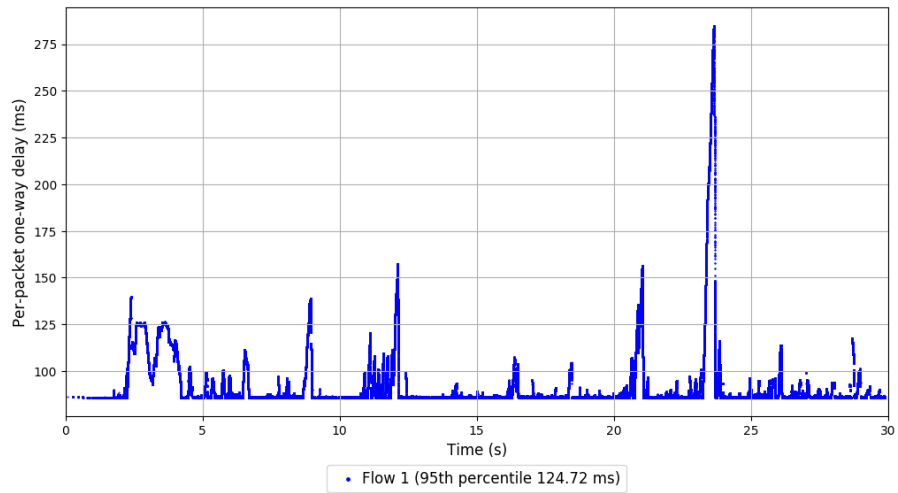
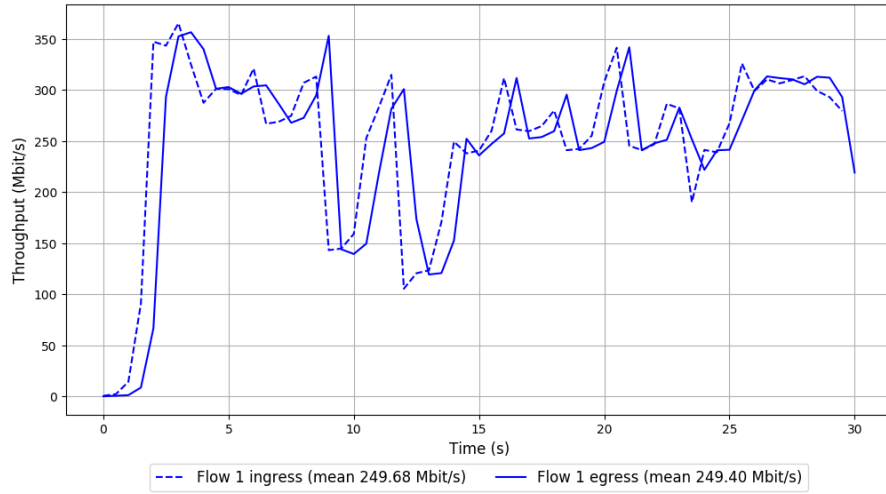
-- Flow 1:

Average throughput: 249.40 Mbit/s

95th percentile per-packet one-way delay: 124.723 ms

Loss rate: 0.68%

### Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-04-23 20:17:12

End at: 2019-04-23 20:17:42

Local clock offset: 2.638 ms

Remote clock offset: 2.674 ms

# Below is generated by plot.py at 2019-04-23 20:50:10

# Datalink statistics

-- Total of 1 flow:

Average throughput: 307.07 Mbit/s

95th percentile per-packet one-way delay: 118.445 ms

Loss rate: 0.66%

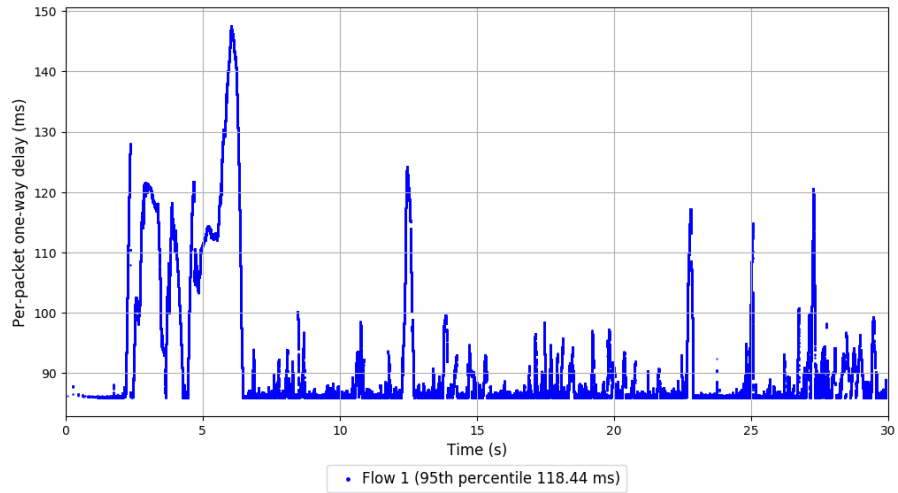
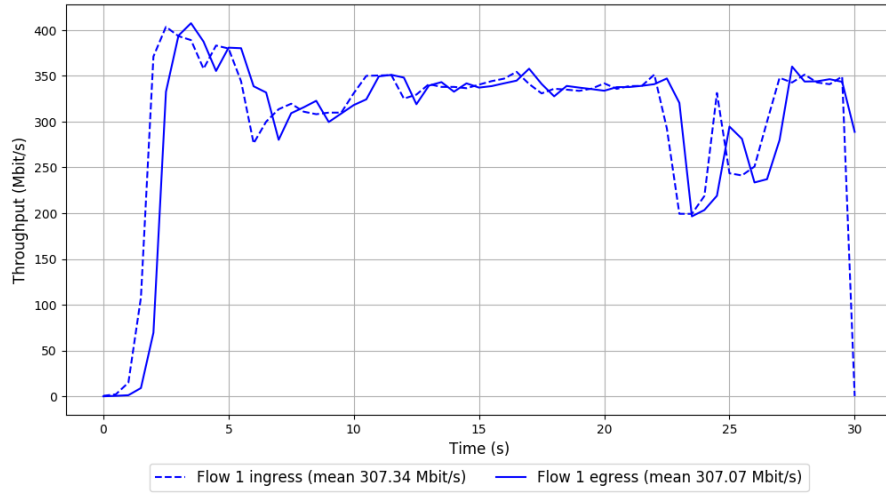
-- Flow 1:

Average throughput: 307.07 Mbit/s

95th percentile per-packet one-way delay: 118.445 ms

Loss rate: 0.66%

### Run 5: Report of Copa — Data Link

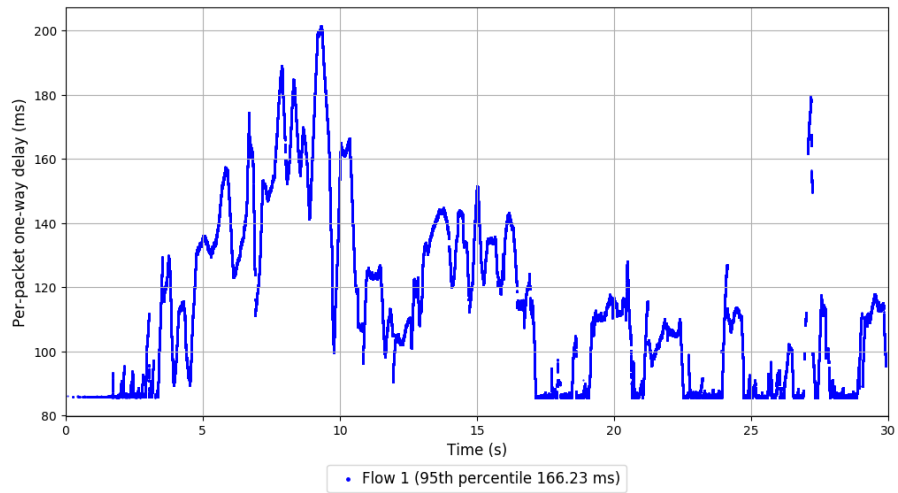
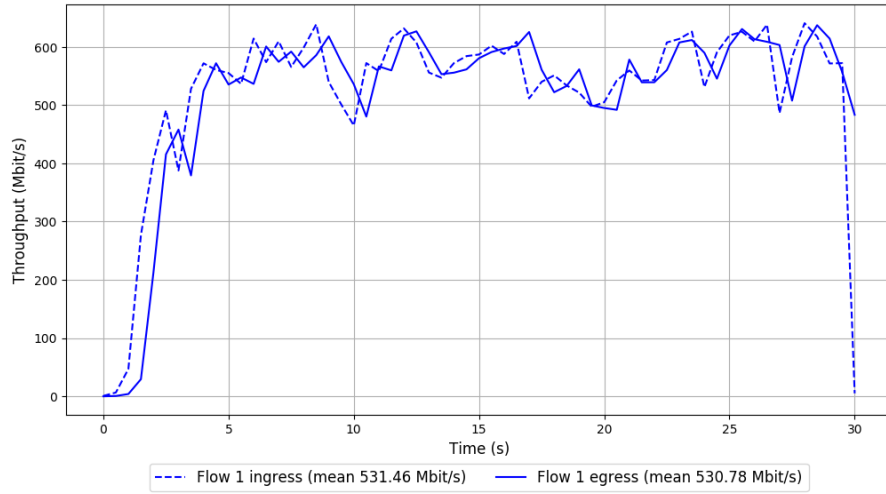


Run 1: Statistics of TCP Cubic

Start at: 2019-04-23 17:54:13  
End at: 2019-04-23 17:54:43  
Local clock offset: 6.584 ms  
Remote clock offset: 10.063 ms

# Below is generated by plot.py at 2019-04-23 20:50:11  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 530.78 Mbit/s  
95th percentile per-packet one-way delay: 166.227 ms  
Loss rate: 0.70%  
-- Flow 1:  
Average throughput: 530.78 Mbit/s  
95th percentile per-packet one-way delay: 166.227 ms  
Loss rate: 0.70%

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

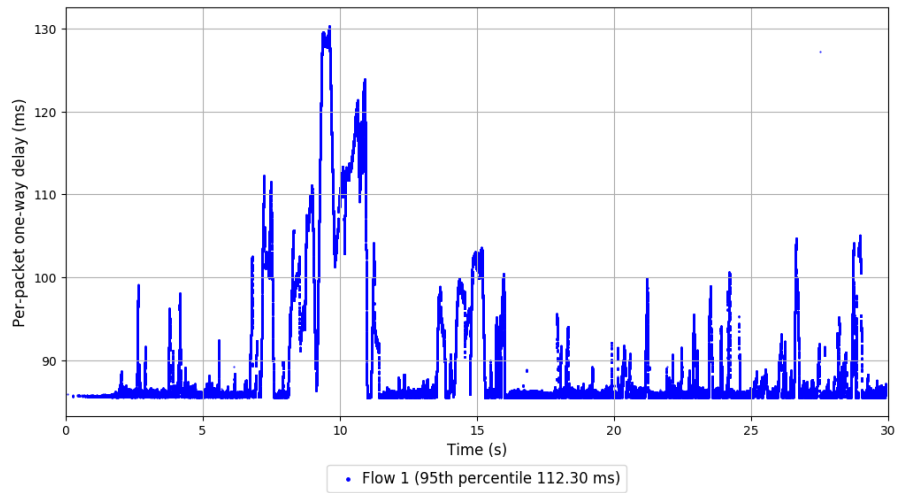
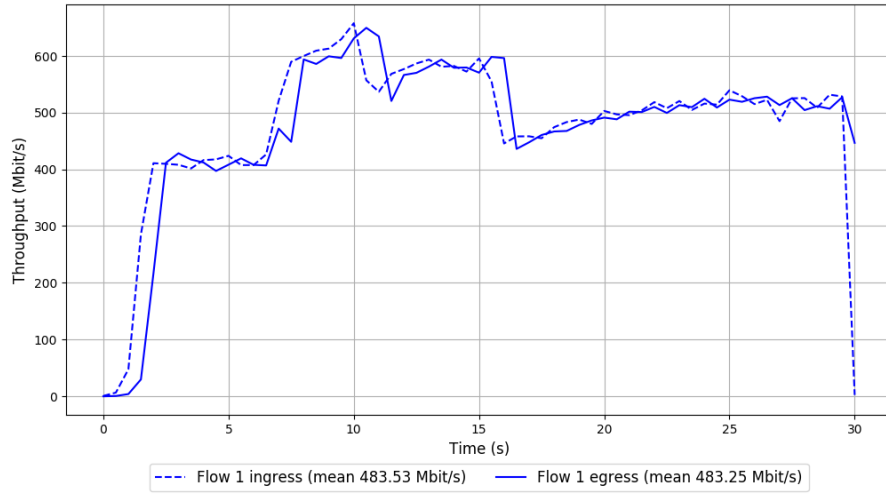


Run 2: Statistics of TCP Cubic

Start at: 2019-04-23 18:25:05  
End at: 2019-04-23 18:25:35  
Local clock offset: 14.214 ms  
Remote clock offset: 21.637 ms

# Below is generated by plot.py at 2019-04-23 20:50:11  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 483.25 Mbit/s  
95th percentile per-packet one-way delay: 112.299 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 483.25 Mbit/s  
95th percentile per-packet one-way delay: 112.299 ms  
Loss rate: 0.63%

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



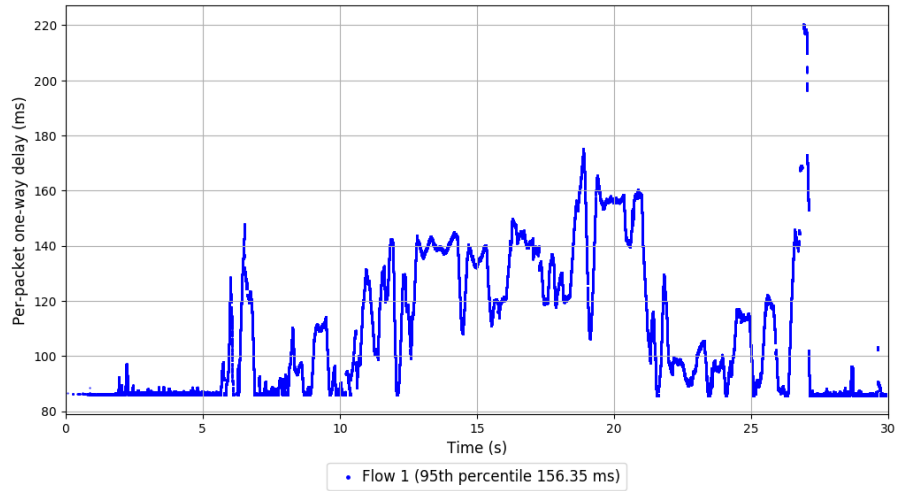
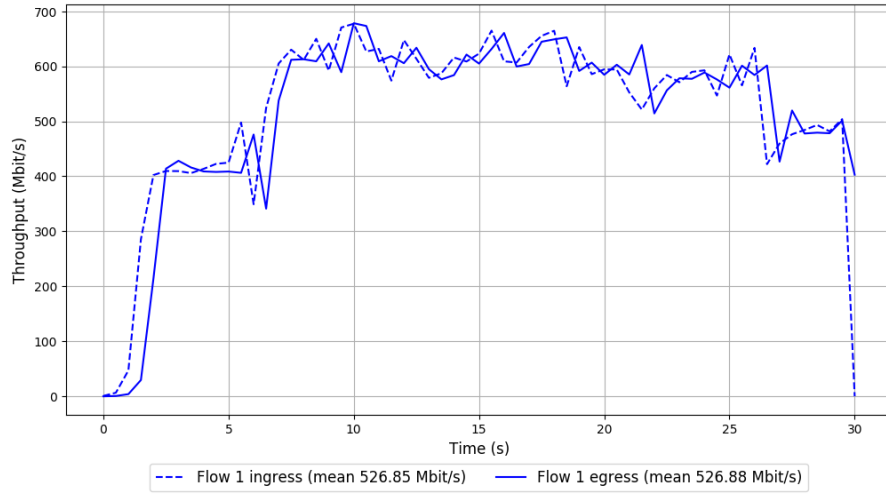


Run 3: Statistics of TCP Cubic

Start at: 2019-04-23 18:56:22  
End at: 2019-04-23 18:56:52  
Local clock offset: 21.042 ms  
Remote clock offset: 30.958 ms

# Below is generated by plot.py at 2019-04-23 20:50:11  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 526.88 Mbit/s  
95th percentile per-packet one-way delay: 156.348 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 526.88 Mbit/s  
95th percentile per-packet one-way delay: 156.348 ms  
Loss rate: 0.57%

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

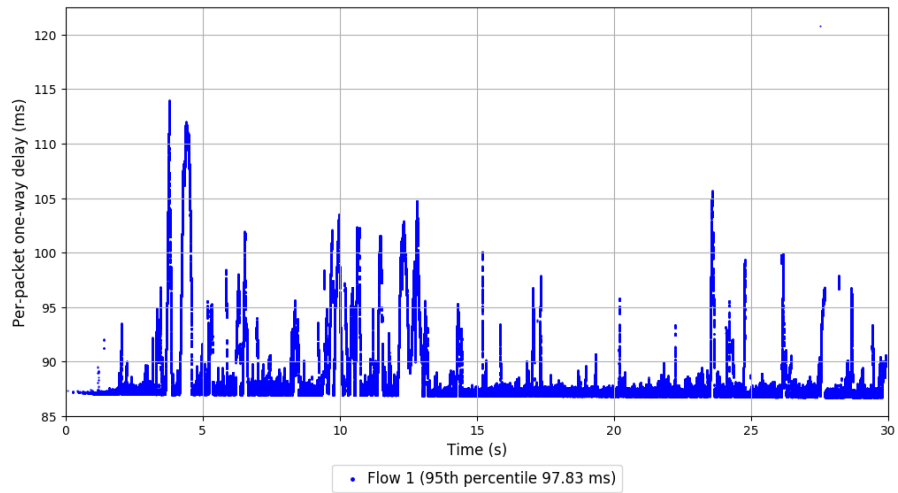
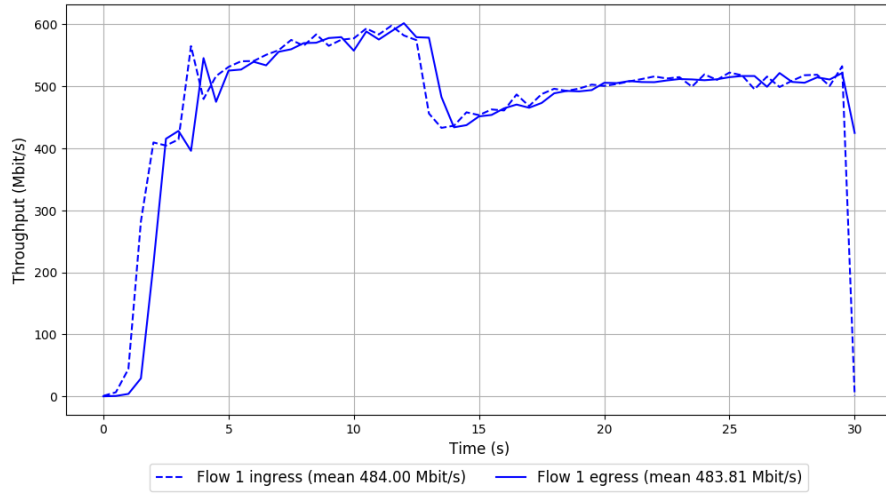


Run 4: Statistics of TCP Cubic

Start at: 2019-04-23 19:27:49  
End at: 2019-04-23 19:28:19  
Local clock offset: 14.111 ms  
Remote clock offset: 19.906 ms

```
# Below is generated by plot.py at 2019-04-23 20:50:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 483.81 Mbit/s
95th percentile per-packet one-way delay: 97.830 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 483.81 Mbit/s
95th percentile per-packet one-way delay: 97.830 ms
Loss rate: 0.62%
```

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



Run 5: Statistics of TCP Cubic

Start at: 2019-04-23 19:58:38

End at: 2019-04-23 19:59:08

Local clock offset: 6.486 ms

Remote clock offset: 9.897 ms

# Below is generated by plot.py at 2019-04-23 20:50:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 493.82 Mbit/s

95th percentile per-packet one-way delay: 107.749 ms

Loss rate: 0.60%

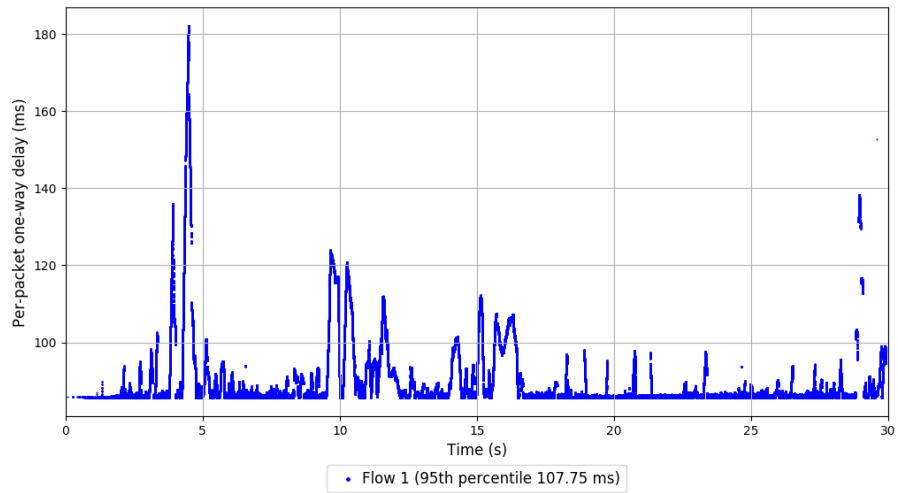
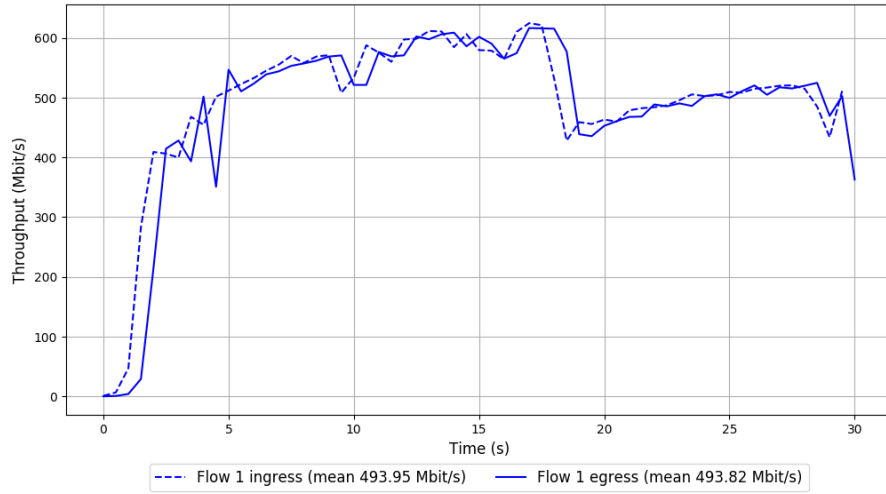
-- Flow 1:

Average throughput: 493.82 Mbit/s

95th percentile per-packet one-way delay: 107.749 ms

Loss rate: 0.60%

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



Run 1: Statistics of FillP

Start at: 2019-04-23 17:58:32

End at: 2019-04-23 17:59:02

Local clock offset: 8.737 ms

Remote clock offset: 13.074 ms

# Below is generated by plot.py at 2019-04-23 20:58:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 823.76 Mbit/s

95th percentile per-packet one-way delay: 136.479 ms

Loss rate: 1.06%

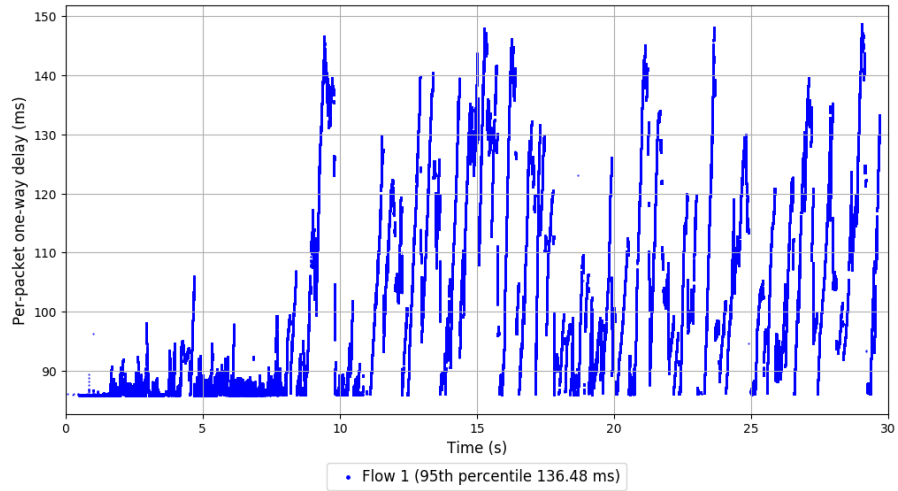
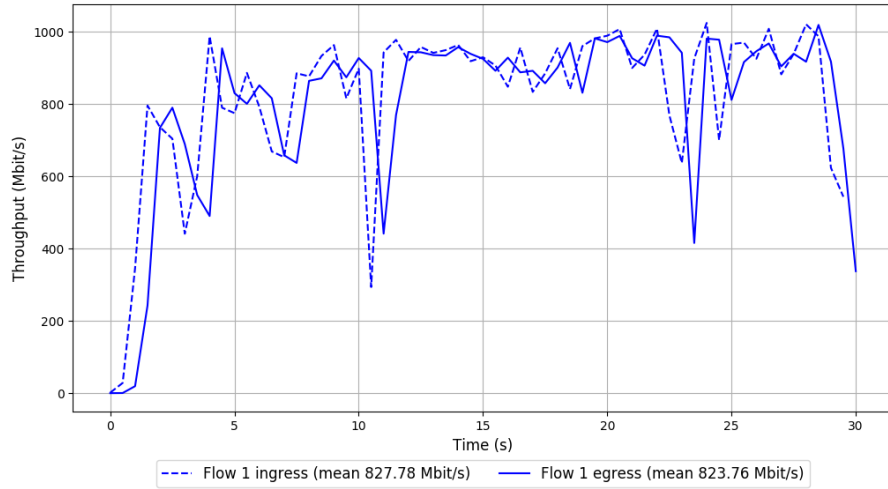
-- Flow 1:

Average throughput: 823.76 Mbit/s

95th percentile per-packet one-way delay: 136.479 ms

Loss rate: 1.06%

Run 1: Report of FillP — Data Link





Run 2: Statistics of FillP

Start at: 2019-04-23 18:29:43

End at: 2019-04-23 18:30:13

Local clock offset: 14.519 ms

Remote clock offset: 21.62 ms

# Below is generated by plot.py at 2019-04-23 21:04:03

# Datalink statistics

-- Total of 1 flow:

Average throughput: 721.59 Mbit/s

95th percentile per-packet one-way delay: 161.284 ms

Loss rate: 3.83%

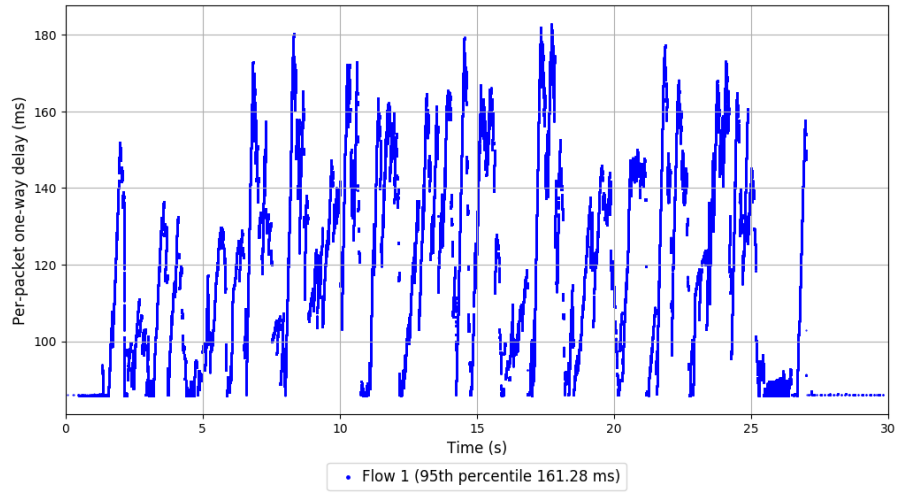
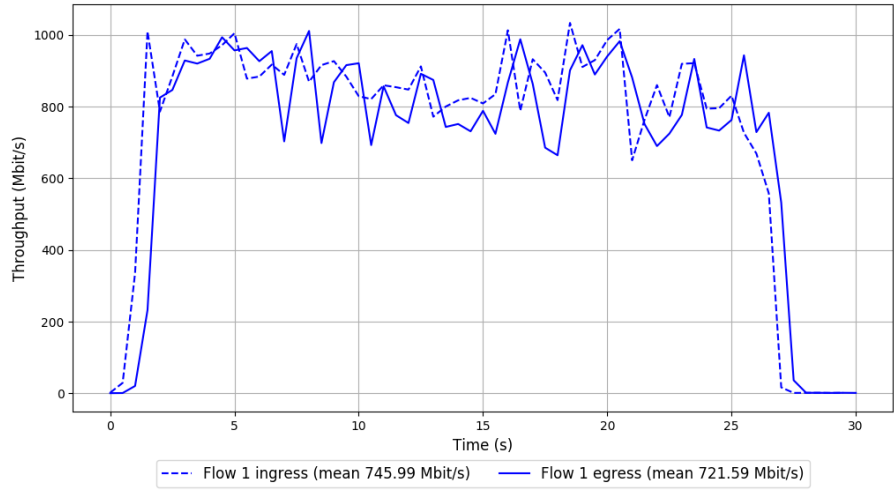
-- Flow 1:

Average throughput: 721.59 Mbit/s

95th percentile per-packet one-way delay: 161.284 ms

Loss rate: 3.83%

Run 2: Report of FillP — Data Link

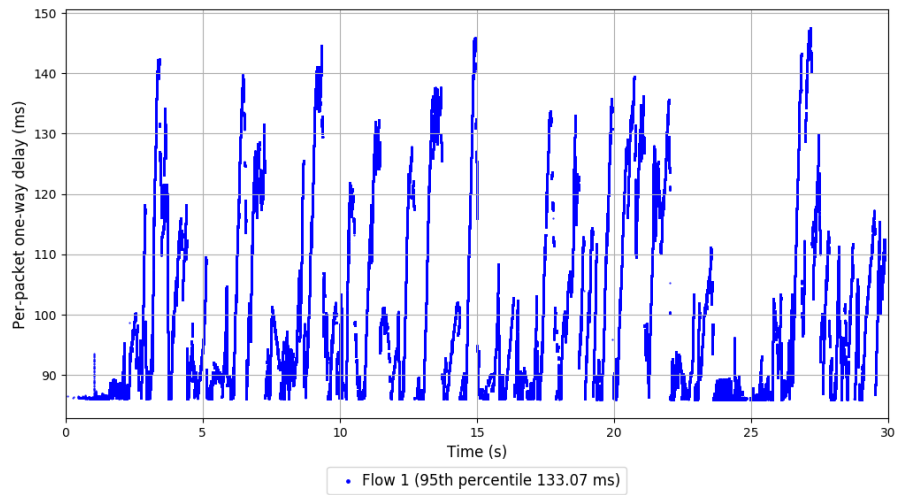
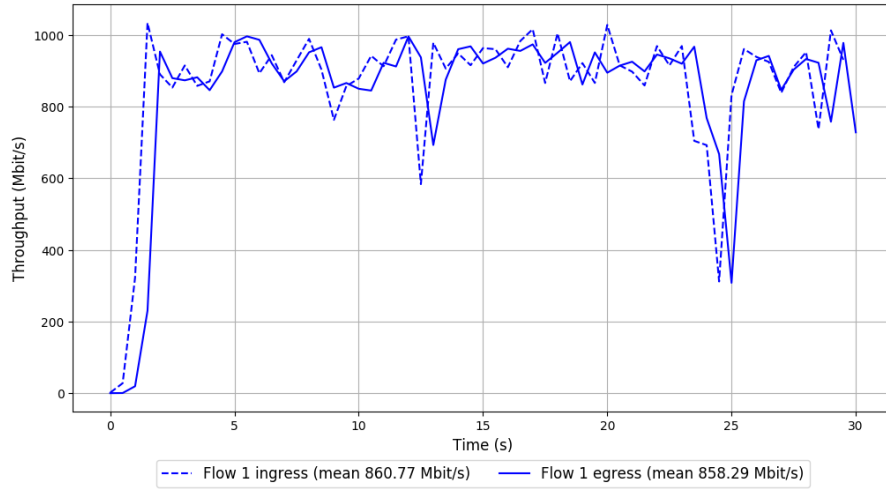


Run 3: Statistics of FillP

Start at: 2019-04-23 19:01:06  
End at: 2019-04-23 19:01:36  
Local clock offset: 14.636 ms  
Remote clock offset: 21.436 ms

# Below is generated by plot.py at 2019-04-23 21:06:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 858.29 Mbit/s  
95th percentile per-packet one-way delay: 133.075 ms  
Loss rate: 0.86%  
-- Flow 1:  
Average throughput: 858.29 Mbit/s  
95th percentile per-packet one-way delay: 133.075 ms  
Loss rate: 0.86%

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



Run 4: Statistics of FillP

Start at: 2019-04-23 19:32:32

End at: 2019-04-23 19:33:02

Local clock offset: 8.482 ms

Remote clock offset: 12.938 ms

# Below is generated by plot.py at 2019-04-23 21:07:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 868.86 Mbit/s

95th percentile per-packet one-way delay: 148.516 ms

Loss rate: 3.51%

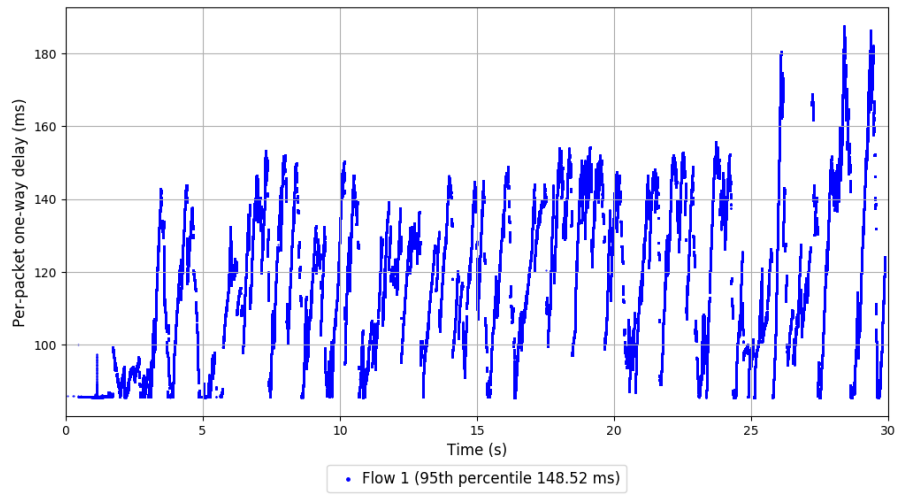
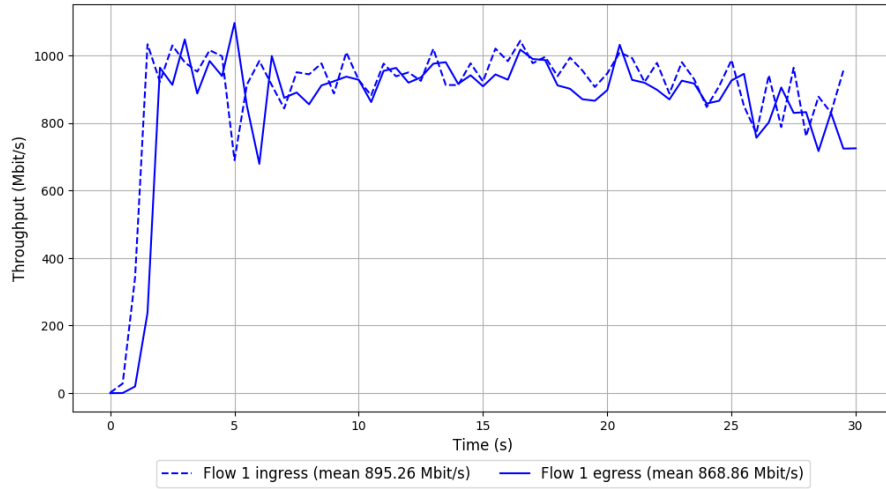
-- Flow 1:

Average throughput: 868.86 Mbit/s

95th percentile per-packet one-way delay: 148.516 ms

Loss rate: 3.51%

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



Run 5: Statistics of FillP

Start at: 2019-04-23 20:03:22

End at: 2019-04-23 20:03:52

Local clock offset: 5.31 ms

Remote clock offset: 8.293 ms

# Below is generated by plot.py at 2019-04-23 21:07:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 837.61 Mbit/s

95th percentile per-packet one-way delay: 149.310 ms

Loss rate: 3.03%

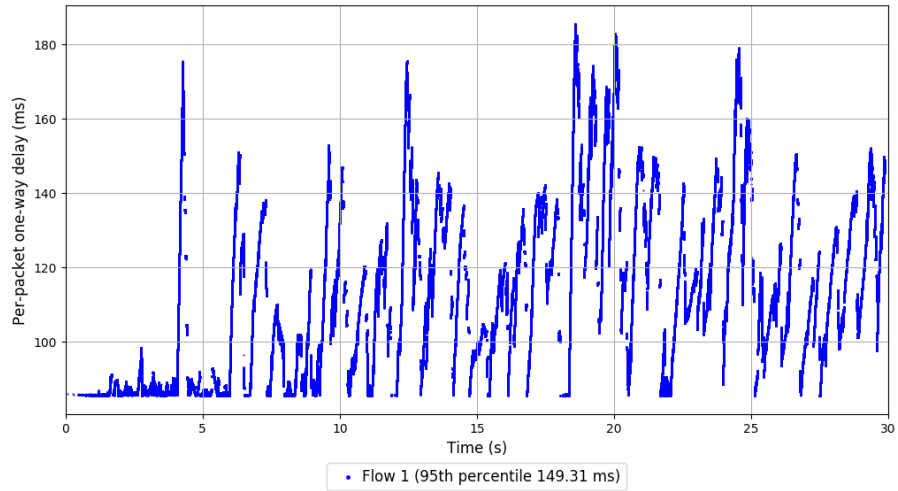
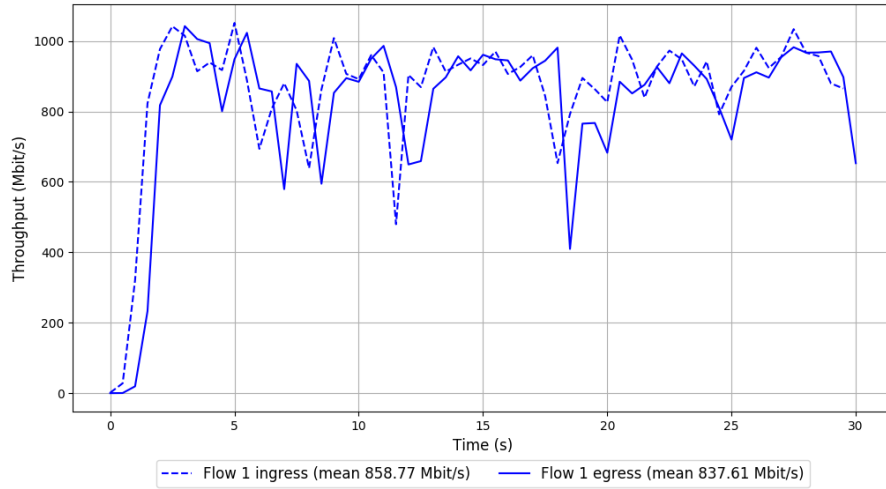
-- Flow 1:

Average throughput: 837.61 Mbit/s

95th percentile per-packet one-way delay: 149.310 ms

Loss rate: 3.03%

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



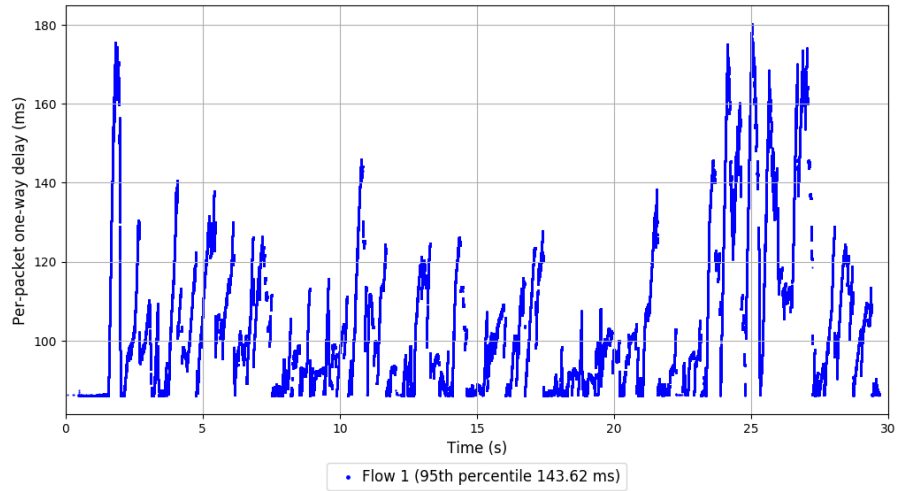
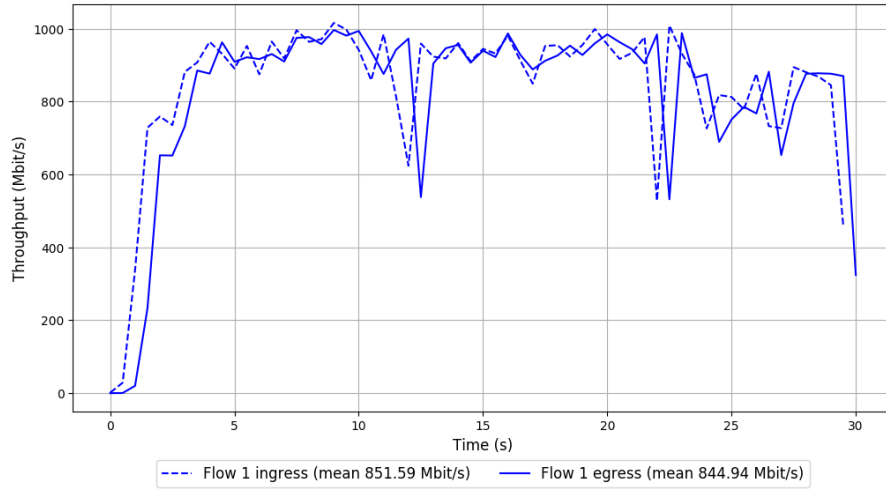


Run 1: Statistics of FillP-Sheep

Start at: 2019-04-23 18:07:56  
End at: 2019-04-23 18:08:26  
Local clock offset: 10.173 ms  
Remote clock offset: 14.846 ms

# Below is generated by plot.py at 2019-04-23 21:07:43  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 844.94 Mbit/s  
95th percentile per-packet one-way delay: 143.622 ms  
Loss rate: 1.32%  
-- Flow 1:  
Average throughput: 844.94 Mbit/s  
95th percentile per-packet one-way delay: 143.622 ms  
Loss rate: 1.32%

Run 1: Report of FillP-Sheep — Data Link

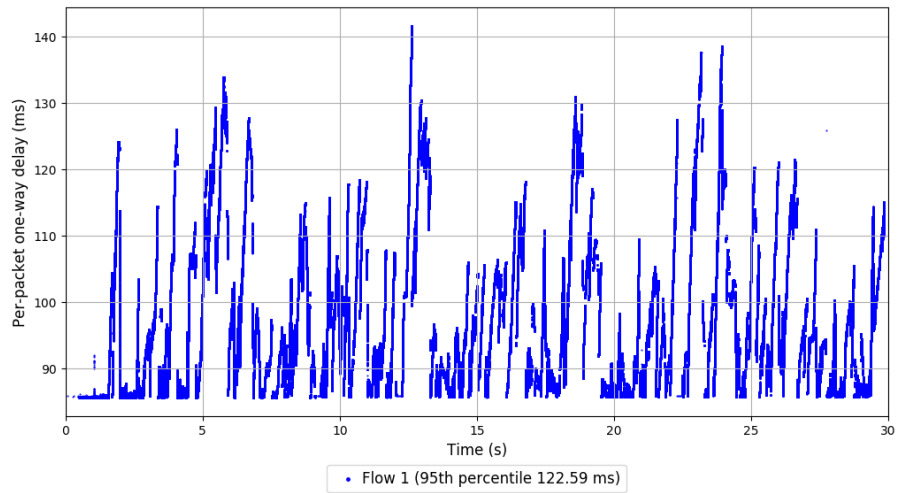
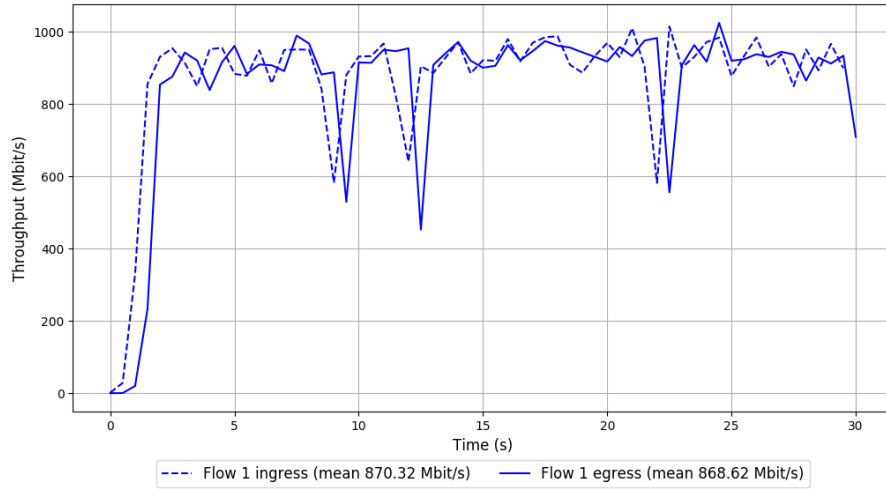


Run 2: Statistics of FillP-Sheep

Start at: 2019-04-23 18:39:06  
End at: 2019-04-23 18:39:36  
Local clock offset: 18.621 ms  
Remote clock offset: 27.971 ms

# Below is generated by plot.py at 2019-04-23 21:08:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 868.62 Mbit/s  
95th percentile per-packet one-way delay: 122.587 ms  
Loss rate: 0.77%  
-- Flow 1:  
Average throughput: 868.62 Mbit/s  
95th percentile per-packet one-way delay: 122.587 ms  
Loss rate: 0.77%

Run 2: Report of FillP-Sheep — Data Link

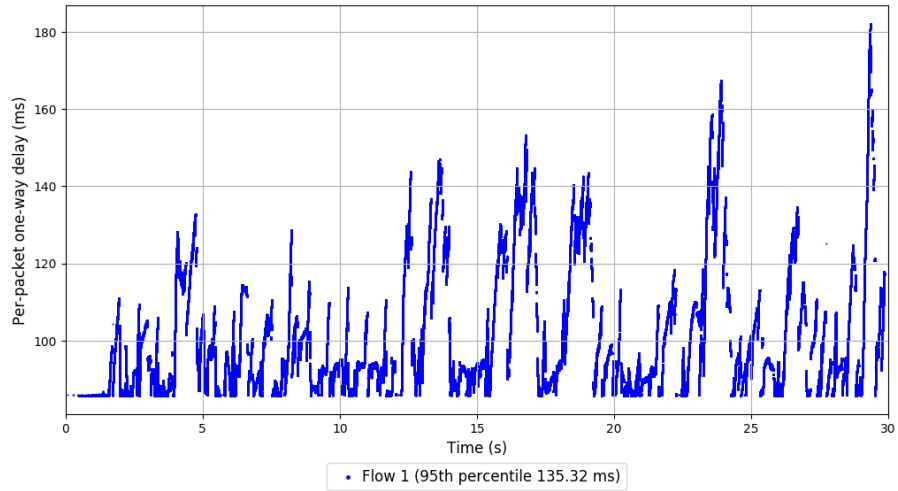
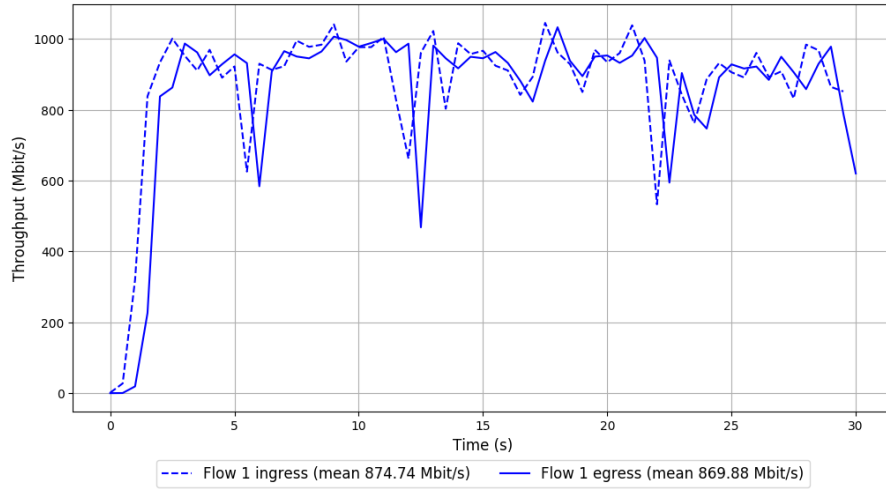


Run 3: Statistics of FillP-Sheep

Start at: 2019-04-23 19:10:27  
End at: 2019-04-23 19:10:57  
Local clock offset: 10.456 ms  
Remote clock offset: 16.291 ms

# Below is generated by plot.py at 2019-04-23 21:08:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 869.88 Mbit/s  
95th percentile per-packet one-way delay: 135.322 ms  
Loss rate: 1.13%  
-- Flow 1:  
Average throughput: 869.88 Mbit/s  
95th percentile per-packet one-way delay: 135.322 ms  
Loss rate: 1.13%

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



Run 4: Statistics of FillP-Sheep

Start at: 2019-04-23 19:42:03

End at: 2019-04-23 19:42:33

Local clock offset: 5.659 ms

Remote clock offset: 8.167 ms

# Below is generated by plot.py at 2019-04-23 21:08:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 374.49 Mbit/s

95th percentile per-packet one-way delay: 108.048 ms

Loss rate: 1.63%

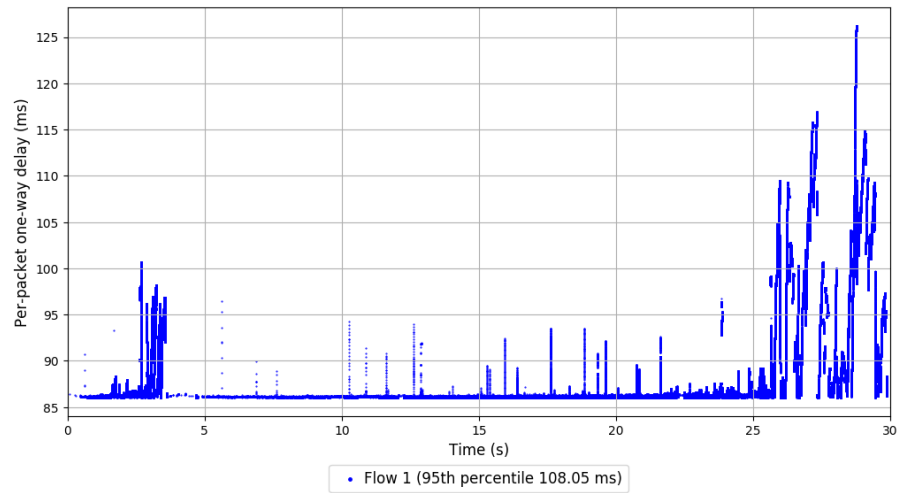
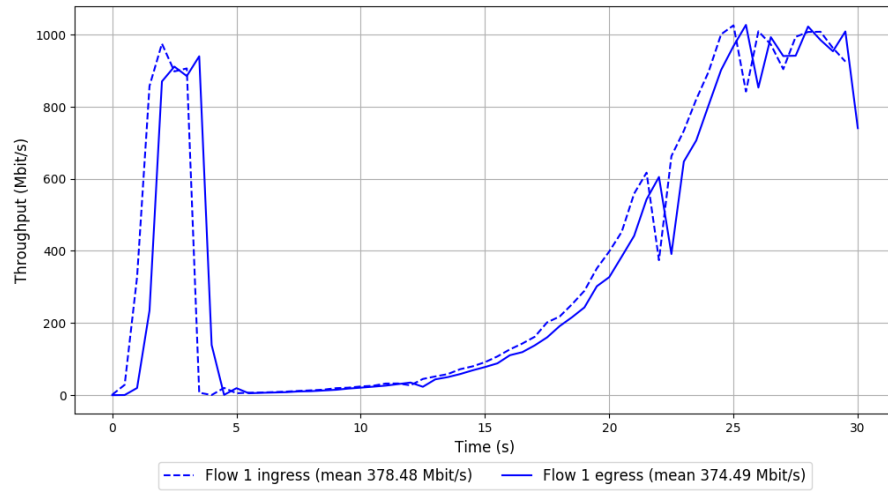
-- Flow 1:

Average throughput: 374.49 Mbit/s

95th percentile per-packet one-way delay: 108.048 ms

Loss rate: 1.63%

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





Run 5: Statistics of FillP-Sheep

Start at: 2019-04-23 20:12:39

End at: 2019-04-23 20:13:09

Local clock offset: 2.668 ms

Remote clock offset: 3.51 ms

# Below is generated by plot.py at 2019-04-23 21:22:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 851.50 Mbit/s

95th percentile per-packet one-way delay: 142.841 ms

Loss rate: 1.66%

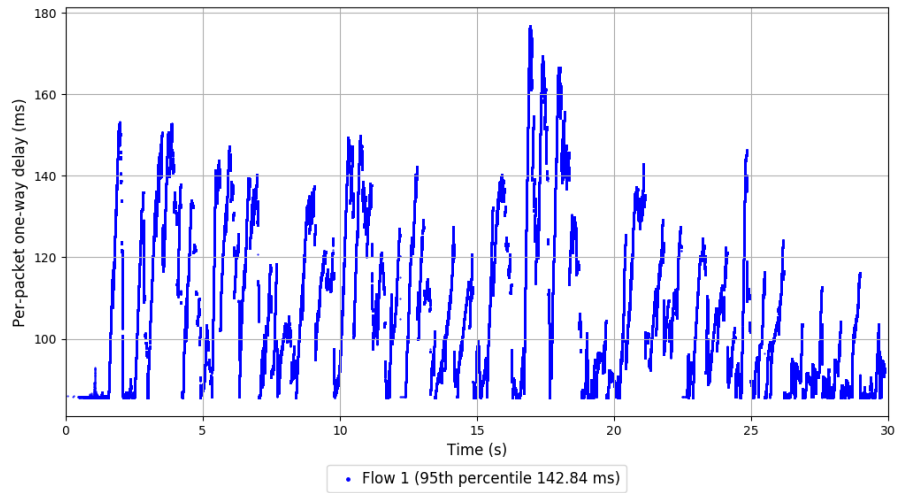
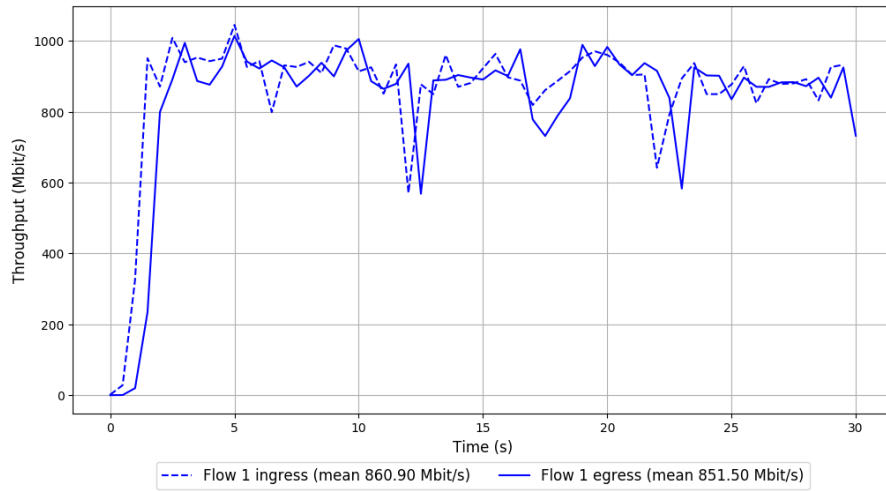
-- Flow 1:

Average throughput: 851.50 Mbit/s

95th percentile per-packet one-way delay: 142.841 ms

Loss rate: 1.66%

Run 5: Report of FillP-Sheep — Data Link



Run 1: Statistics of Indigo

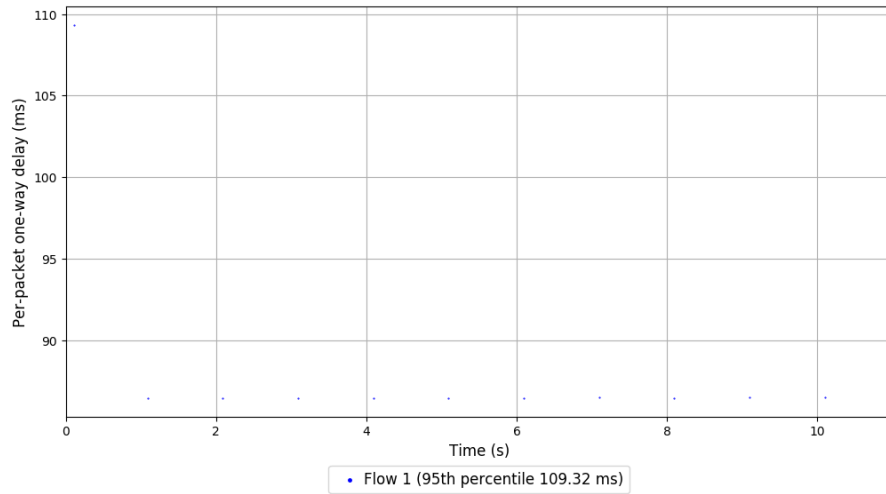
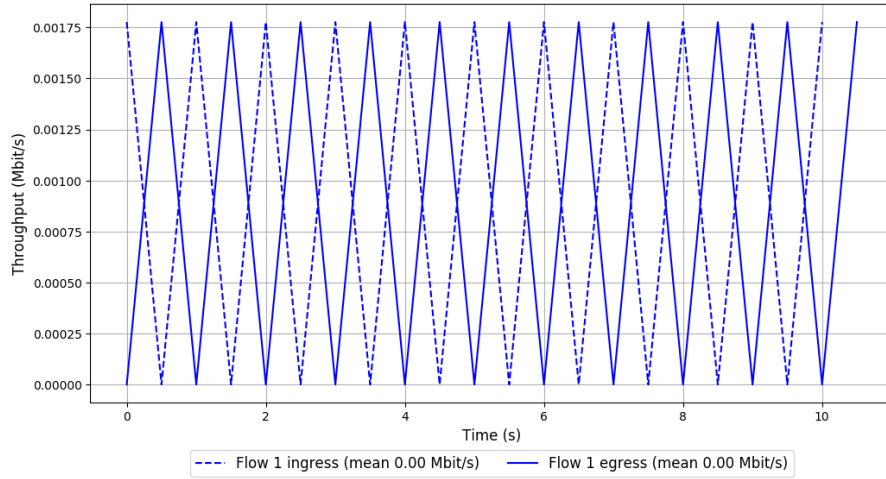
Start at: 2019-04-23 17:55:49

End at: 2019-04-23 17:56:19

Local clock offset: 6.537 ms

Remote clock offset: 9.589 ms

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

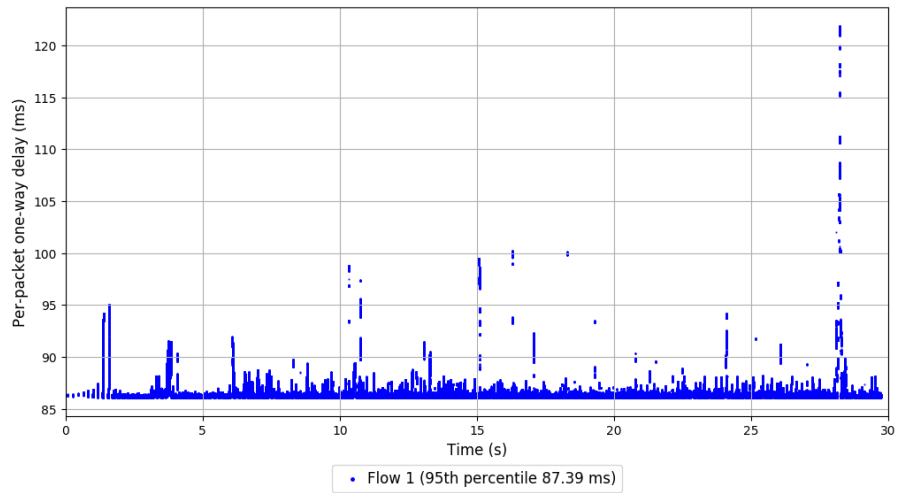
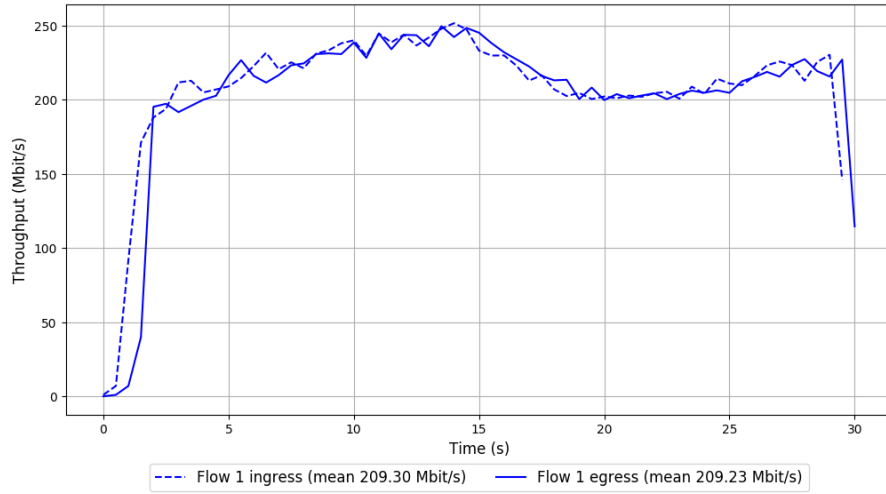


Run 2: Statistics of Indigo

Start at: 2019-04-23 18:26:38  
End at: 2019-04-23 18:27:08  
Local clock offset: 14.192 ms  
Remote clock offset: 21.206 ms

# Below is generated by plot.py at 2019-04-23 21:22:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 209.23 Mbit/s  
95th percentile per-packet one-way delay: 87.394 ms  
Loss rate: 0.61%  
-- Flow 1:  
Average throughput: 209.23 Mbit/s  
95th percentile per-packet one-way delay: 87.394 ms  
Loss rate: 0.61%

## Run 2: Report of Indigo — Data Link

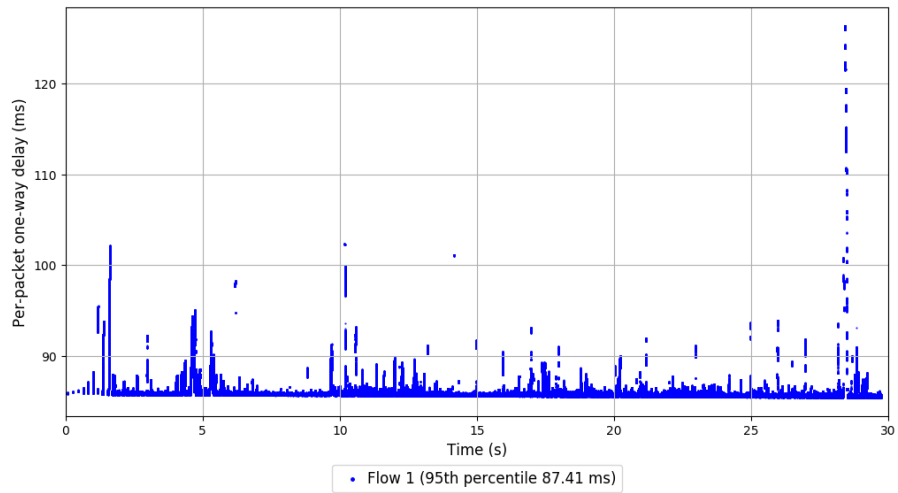
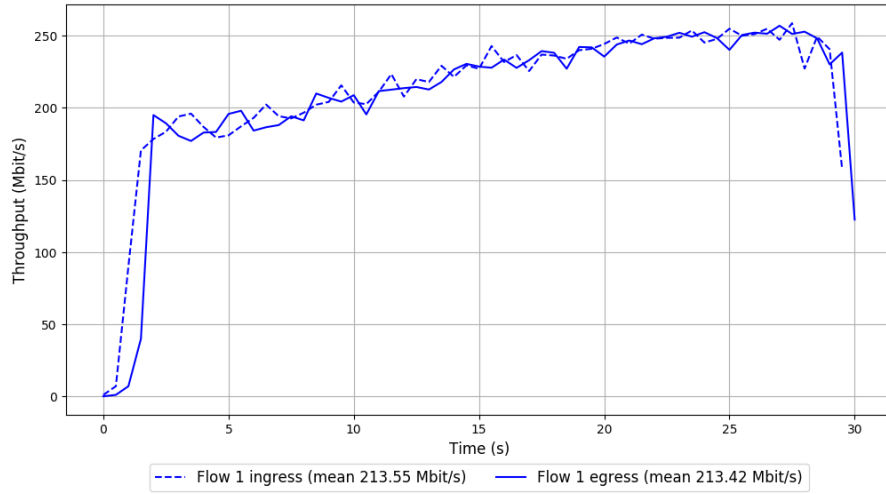


Run 3: Statistics of Indigo

Start at: 2019-04-23 18:57:58  
End at: 2019-04-23 18:58:28  
Local clock offset: 17.879 ms  
Remote clock offset: 26.805 ms

```
# Below is generated by plot.py at 2019-04-23 21:22:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.42 Mbit/s
95th percentile per-packet one-way delay: 87.409 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 213.42 Mbit/s
95th percentile per-packet one-way delay: 87.409 ms
Loss rate: 0.64%
```

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





Run 4: Statistics of Indigo

Start at: 2019-04-23 19:29:23

End at: 2019-04-23 19:29:53

Local clock offset: 11.877 ms

Remote clock offset: 17.071 ms

# Below is generated by plot.py at 2019-04-23 21:22:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 215.82 Mbit/s

95th percentile per-packet one-way delay: 88.060 ms

Loss rate: 0.55%

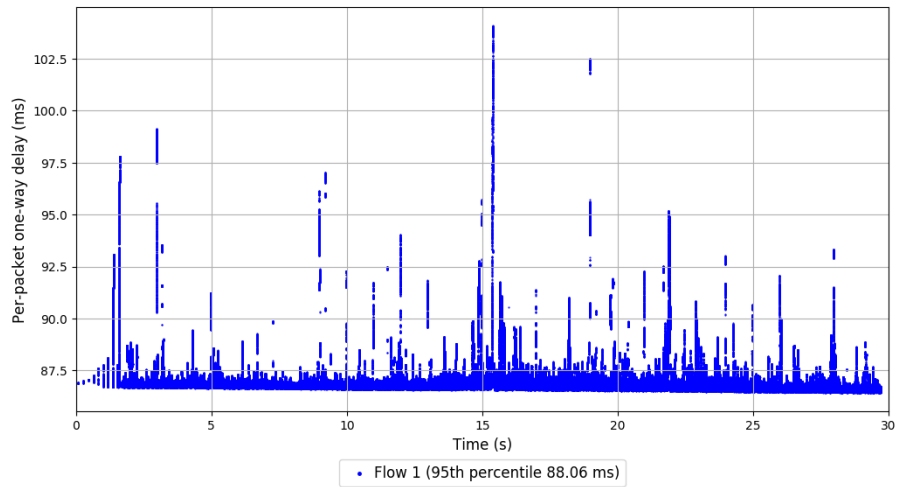
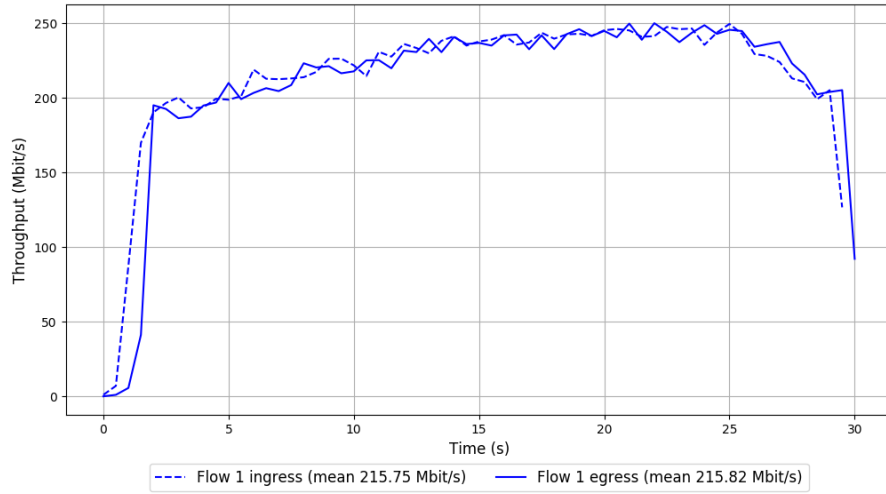
-- Flow 1:

Average throughput: 215.82 Mbit/s

95th percentile per-packet one-way delay: 88.060 ms

Loss rate: 0.55%

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



Run 5: Statistics of Indigo

Start at: 2019-04-23 20:00:13

End at: 2019-04-23 20:00:43

Local clock offset: 7.121 ms

Remote clock offset: 10.258 ms

# Below is generated by plot.py at 2019-04-23 21:22:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 209.64 Mbit/s

95th percentile per-packet one-way delay: 87.847 ms

Loss rate: 0.59%

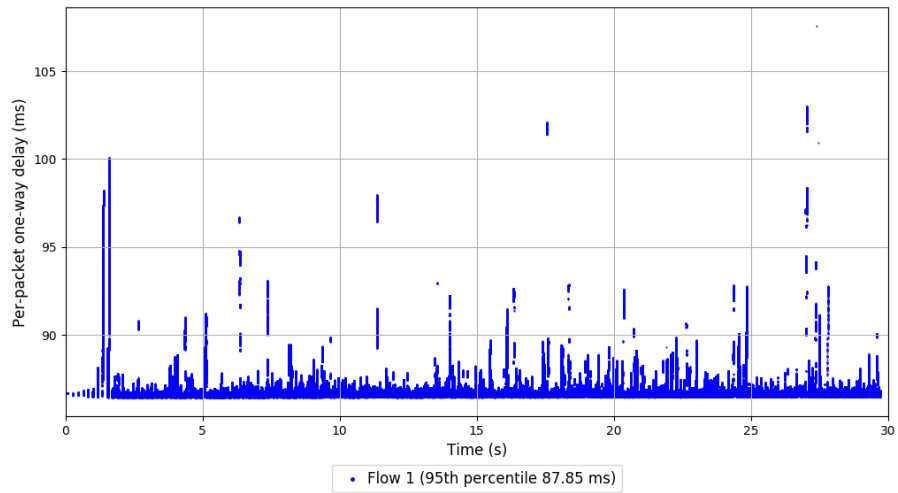
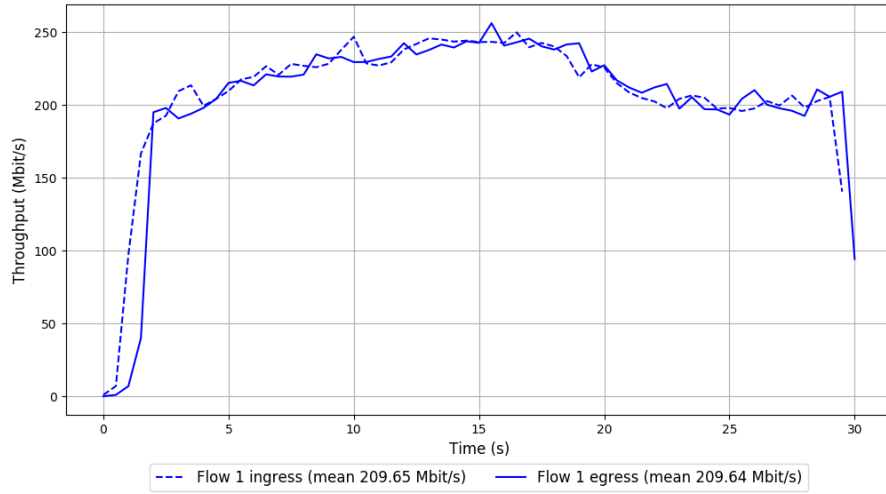
-- Flow 1:

Average throughput: 209.64 Mbit/s

95th percentile per-packet one-way delay: 87.847 ms

Loss rate: 0.59%

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

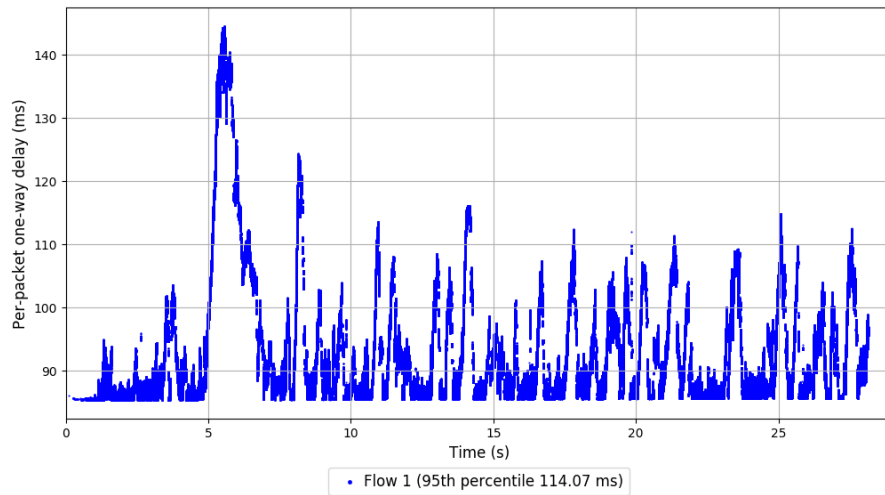
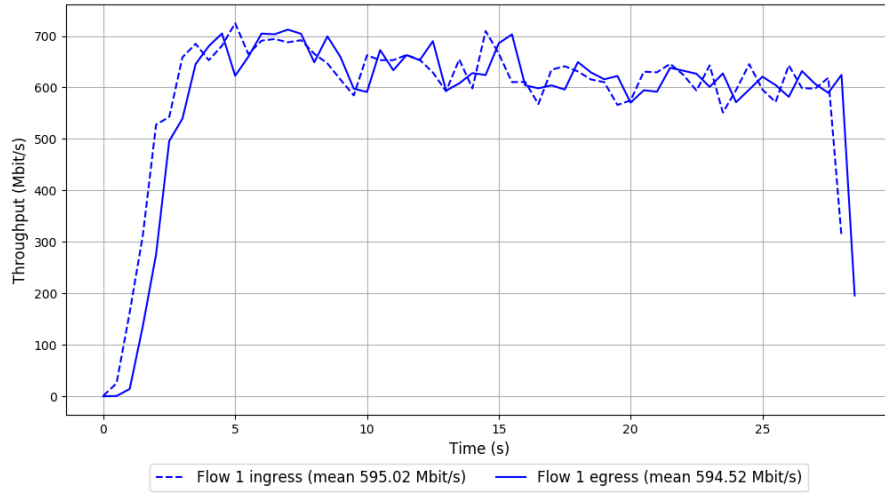


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-04-23 18:00:15  
End at: 2019-04-23 18:00:45  
Local clock offset: 10.353 ms  
Remote clock offset: 16.215 ms

# Below is generated by plot.py at 2019-04-23 21:22:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 594.52 Mbit/s  
95th percentile per-packet one-way delay: 114.066 ms  
Loss rate: 0.70%  
-- Flow 1:  
Average throughput: 594.52 Mbit/s  
95th percentile per-packet one-way delay: 114.066 ms  
Loss rate: 0.70%

### Run 1: Report of Indigo-MusesC3 — Data Link

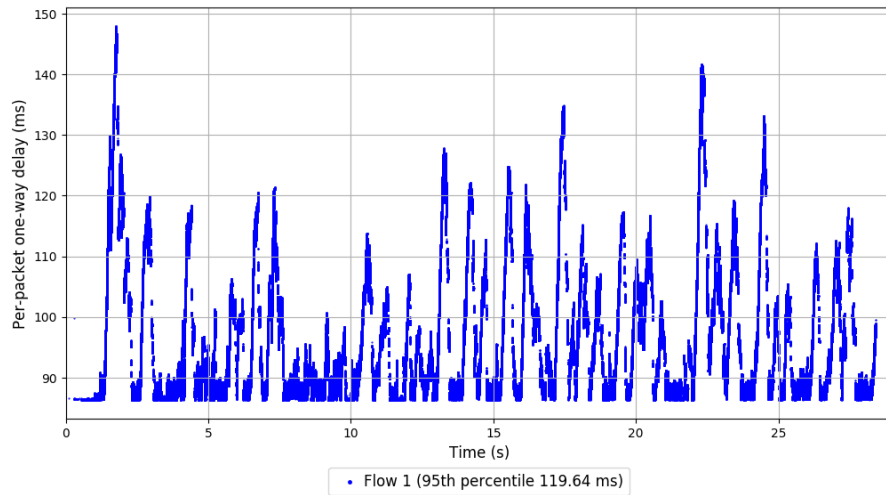
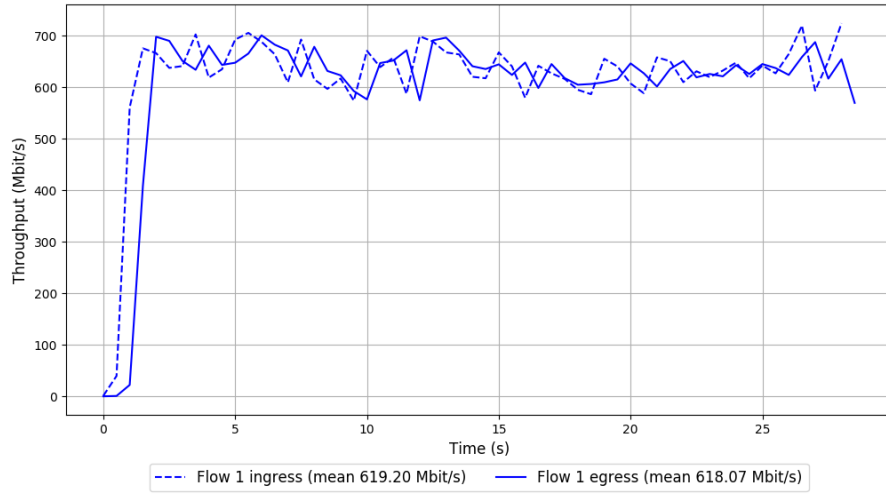


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-04-23 18:31:22  
End at: 2019-04-23 18:31:52  
Local clock offset: 14.996 ms  
Remote clock offset: 22.213 ms

# Below is generated by plot.py at 2019-04-23 21:22:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 618.07 Mbit/s  
95th percentile per-packet one-way delay: 119.645 ms  
Loss rate: 0.79%  
-- Flow 1:  
Average throughput: 618.07 Mbit/s  
95th percentile per-packet one-way delay: 119.645 ms  
Loss rate: 0.79%

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



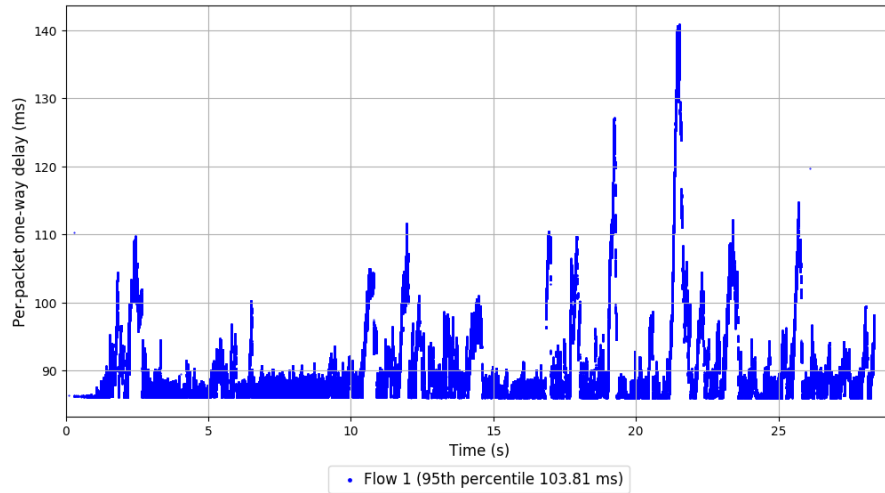
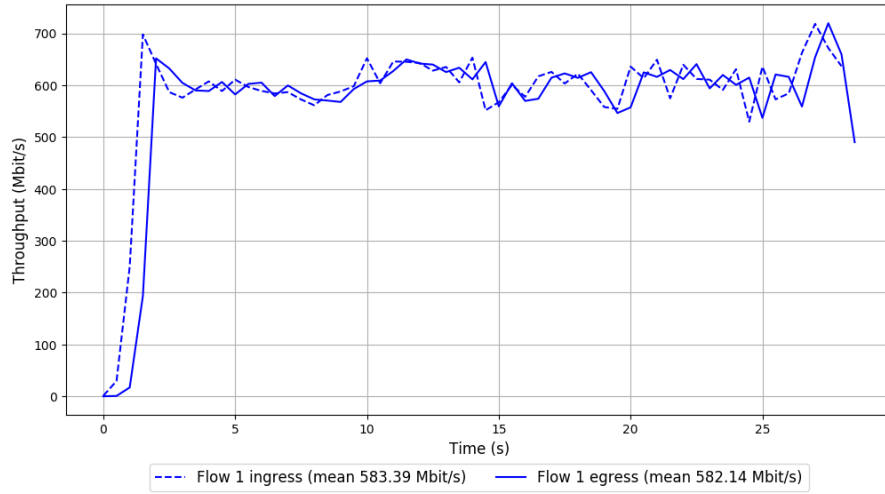


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-04-23 19:02:51  
End at: 2019-04-23 19:03:21  
Local clock offset: 13.515 ms  
Remote clock offset: 19.615 ms

# Below is generated by plot.py at 2019-04-23 21:22:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 582.14 Mbit/s  
95th percentile per-packet one-way delay: 103.805 ms  
Loss rate: 0.82%  
-- Flow 1:  
Average throughput: 582.14 Mbit/s  
95th percentile per-packet one-way delay: 103.805 ms  
Loss rate: 0.82%

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

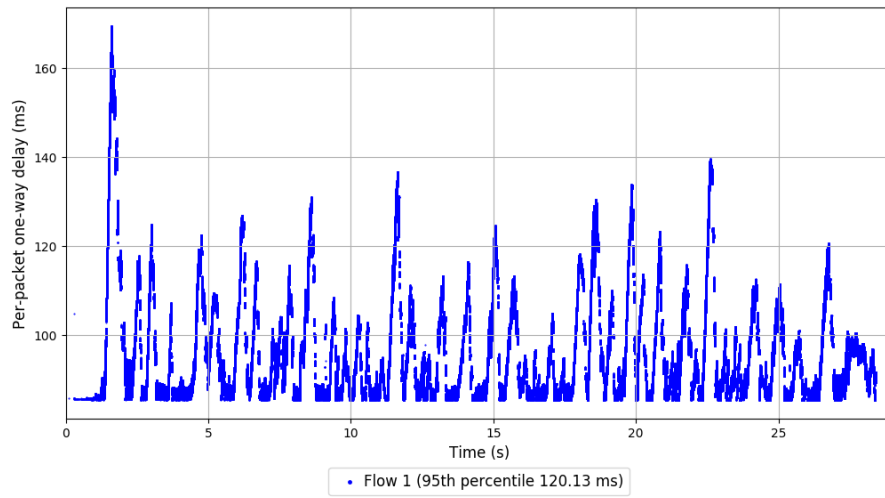
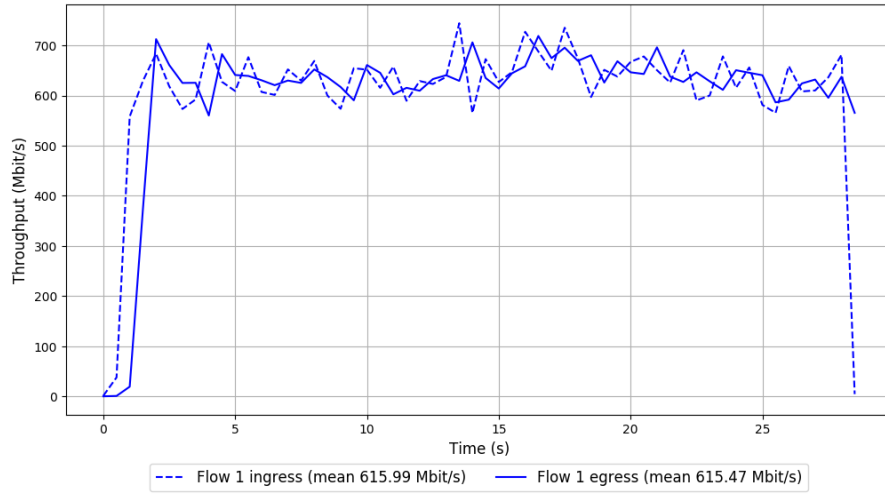


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-04-23 19:34:19  
End at: 2019-04-23 19:34:49  
Local clock offset: 7.436 ms  
Remote clock offset: 11.458 ms

# Below is generated by plot.py at 2019-04-23 21:23:24  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 615.47 Mbit/s  
95th percentile per-packet one-way delay: 120.127 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 615.47 Mbit/s  
95th percentile per-packet one-way delay: 120.127 ms  
Loss rate: 0.69%

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



Run 5: Statistics of Indigo-MusesC3

Start at: 2019-04-23 20:05:06

End at: 2019-04-23 20:05:36

Local clock offset: 4.679 ms

Remote clock offset: 6.896 ms

# Below is generated by plot.py at 2019-04-23 21:23:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 598.90 Mbit/s

95th percentile per-packet one-way delay: 124.127 ms

Loss rate: 0.48%

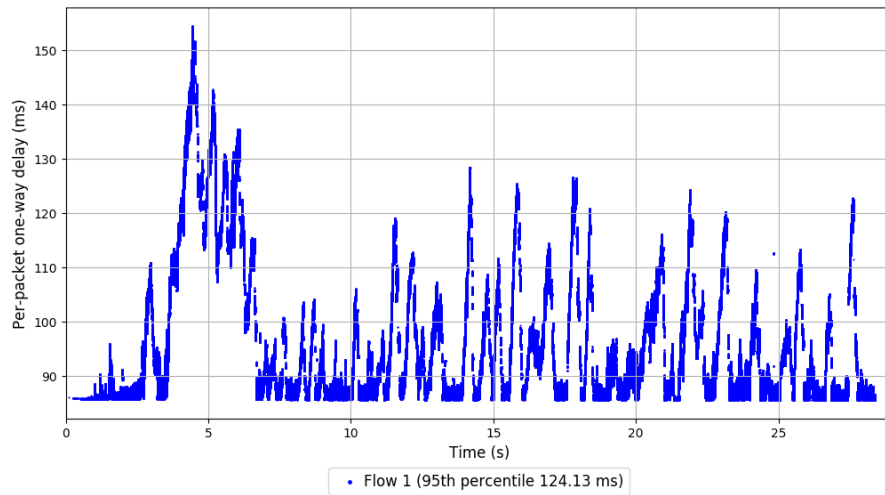
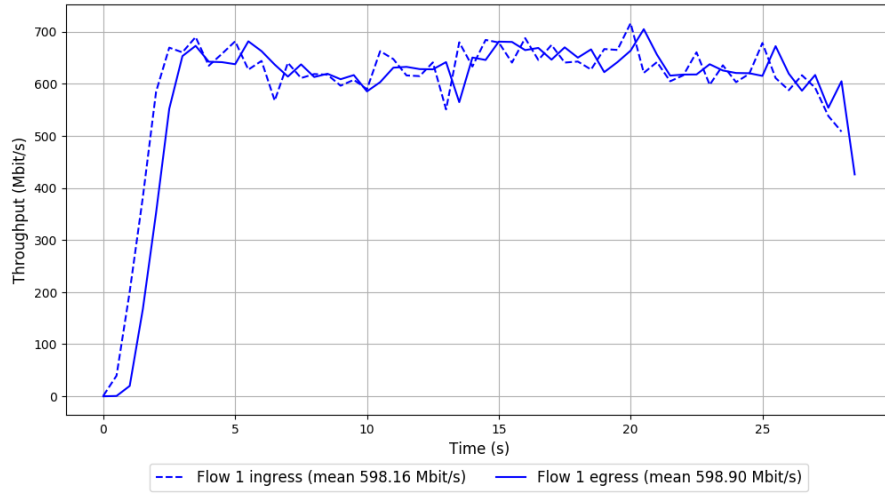
-- Flow 1:

Average throughput: 598.90 Mbit/s

95th percentile per-packet one-way delay: 124.127 ms

Loss rate: 0.48%

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



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-04-23 17:56:58

End at: 2019-04-23 17:57:28

Local clock offset: 6.963 ms

Remote clock offset: 10.801 ms

# Below is generated by plot.py at 2019-04-23 21:23:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 515.76 Mbit/s

95th percentile per-packet one-way delay: 175.405 ms

Loss rate: 1.28%

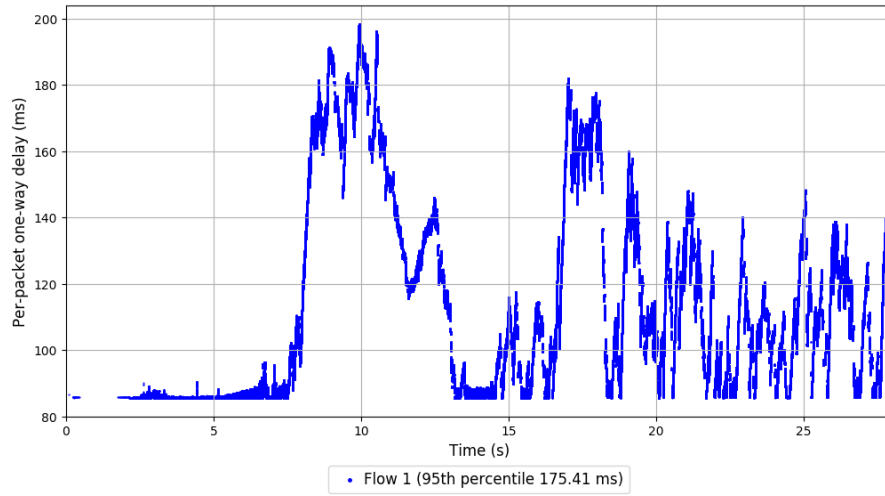
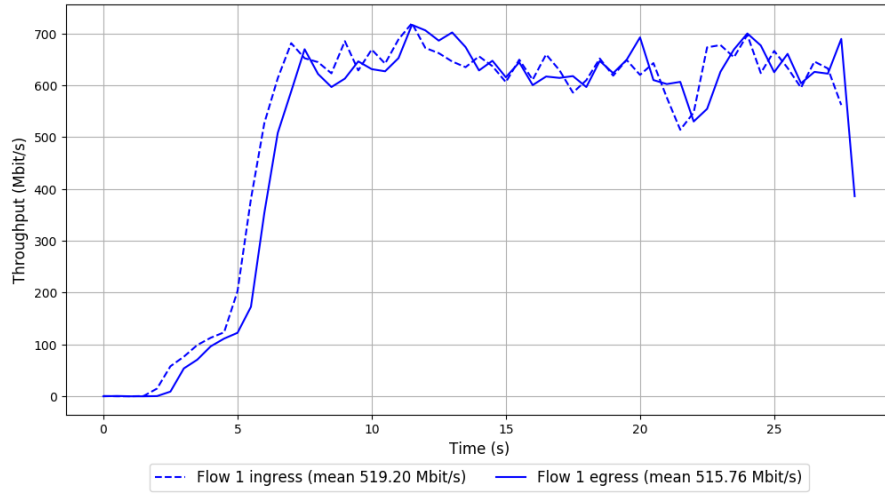
-- Flow 1:

Average throughput: 515.76 Mbit/s

95th percentile per-packet one-way delay: 175.405 ms

Loss rate: 1.28%

# Run 1: Report of Indigo-MusesC5 — Data Link





Run 2: Statistics of Indigo-MusesC5

Start at: 2019-04-23 18:28:07

End at: 2019-04-23 18:28:37

Local clock offset: 14.226 ms

Remote clock offset: 21.269 ms

# Below is generated by plot.py at 2019-04-23 21:23:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 549.71 Mbit/s

95th percentile per-packet one-way delay: 183.573 ms

Loss rate: 1.16%

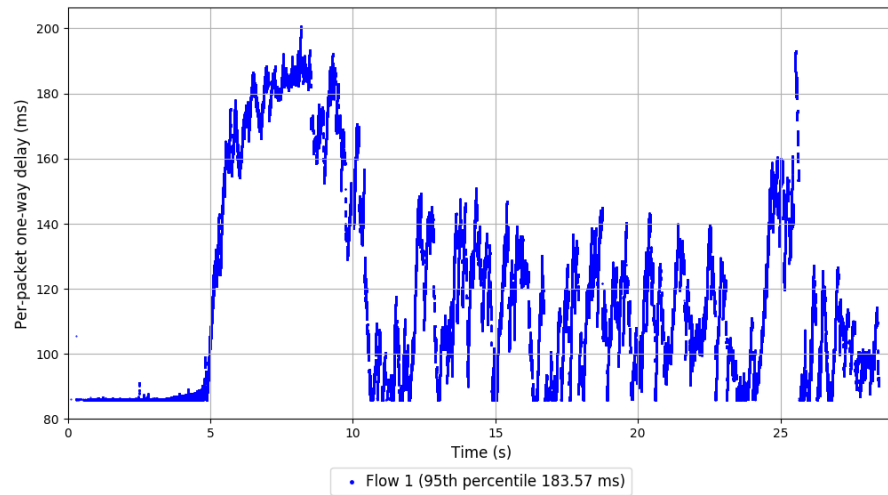
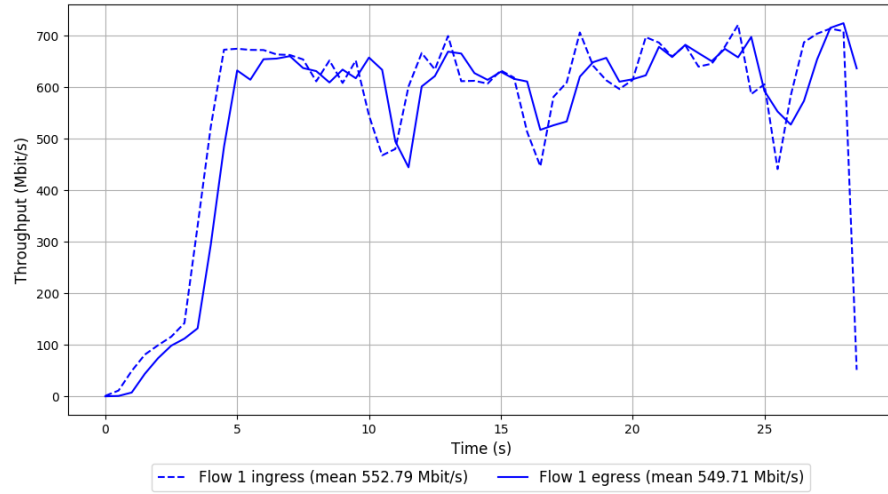
-- Flow 1:

Average throughput: 549.71 Mbit/s

95th percentile per-packet one-way delay: 183.573 ms

Loss rate: 1.16%

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

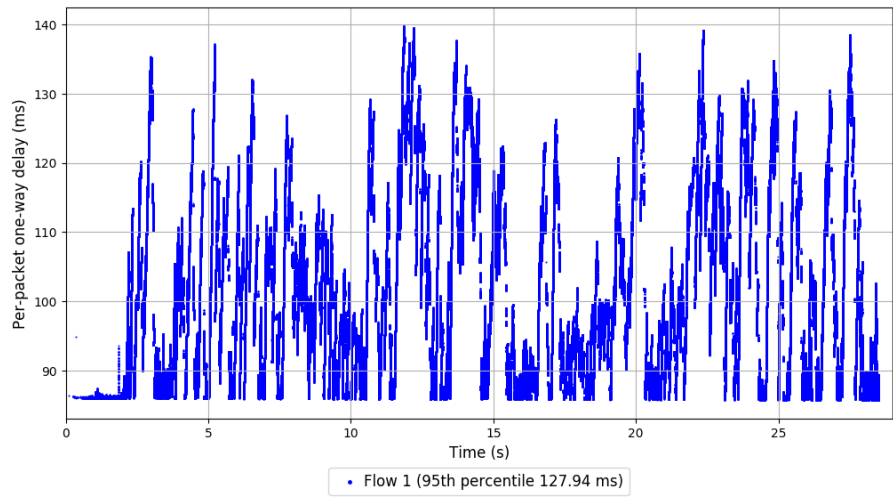
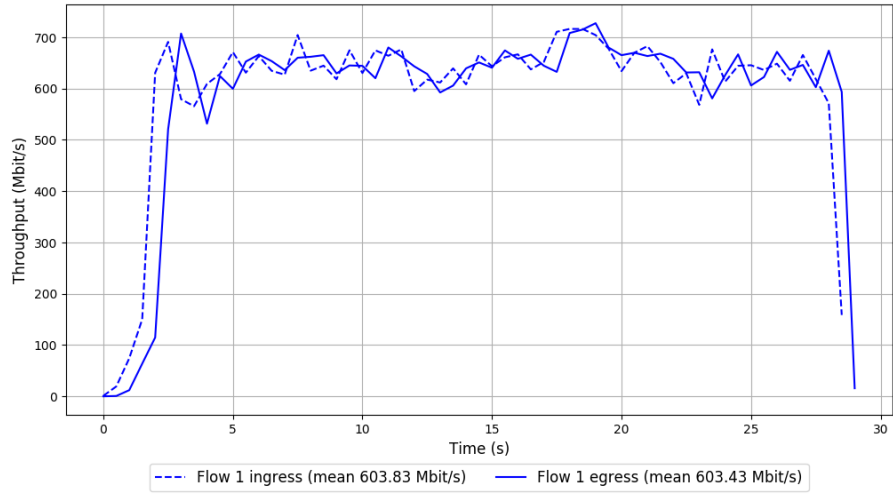


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-04-23 18:59:28  
End at: 2019-04-23 18:59:58  
Local clock offset: 16.014 ms  
Remote clock offset: 24.048 ms

# Below is generated by plot.py at 2019-04-23 21:27:41  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 603.43 Mbit/s  
95th percentile per-packet one-way delay: 127.935 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 603.43 Mbit/s  
95th percentile per-packet one-way delay: 127.935 ms  
Loss rate: 0.69%

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

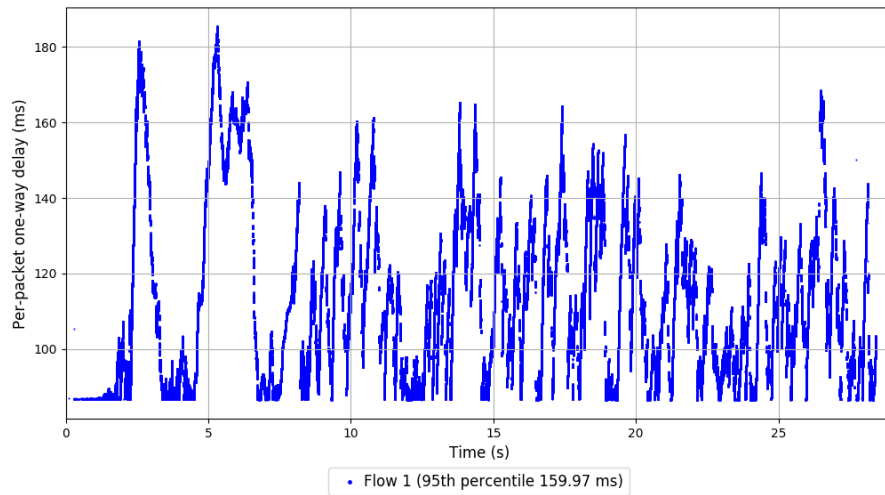
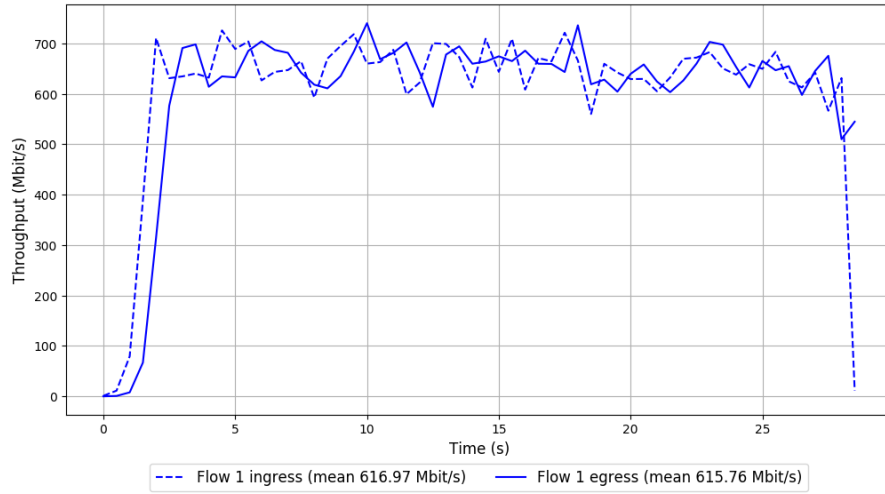


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-04-23 19:30:53  
End at: 2019-04-23 19:31:23  
Local clock offset: 10.583 ms  
Remote clock offset: 15.079 ms

```
# Below is generated by plot.py at 2019-04-23 21:28:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 615.76 Mbit/s
95th percentile per-packet one-way delay: 159.967 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 615.76 Mbit/s
95th percentile per-packet one-way delay: 159.967 ms
Loss rate: 0.81%
```

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



Run 5: Statistics of Indigo-MusesC5

Start at: 2019-04-23 20:01:43

End at: 2019-04-23 20:02:13

Local clock offset: 6.644 ms

Remote clock offset: 9.902 ms

# Below is generated by plot.py at 2019-04-23 21:28:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 604.98 Mbit/s

95th percentile per-packet one-way delay: 190.704 ms

Loss rate: 2.03%

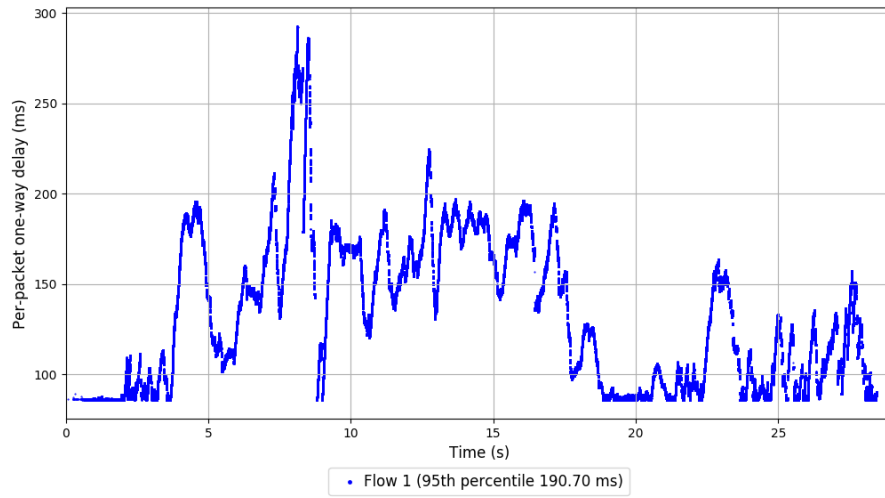
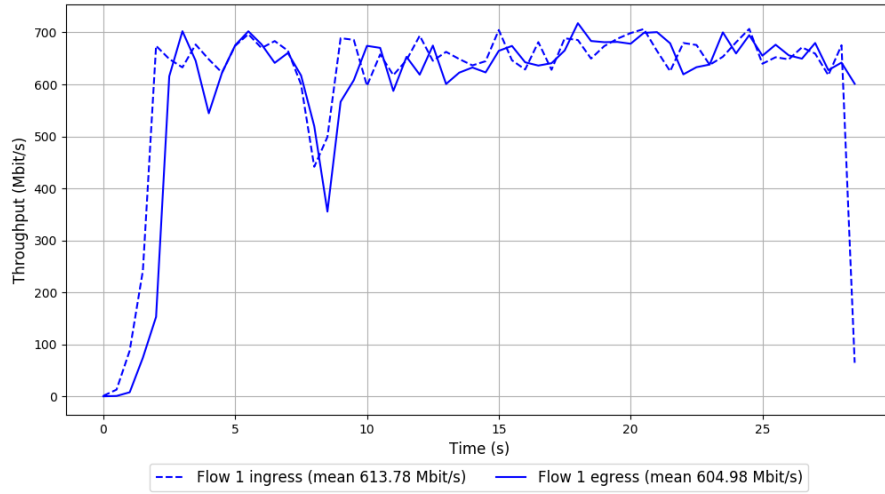
-- Flow 1:

Average throughput: 604.98 Mbit/s

95th percentile per-packet one-way delay: 190.704 ms

Loss rate: 2.03%

Run 5: Report of Indigo-MusesC5 — Data Link



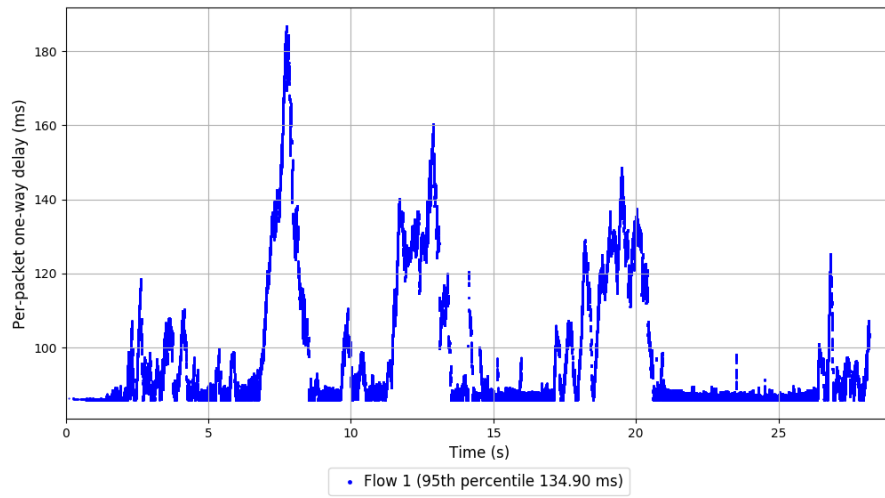
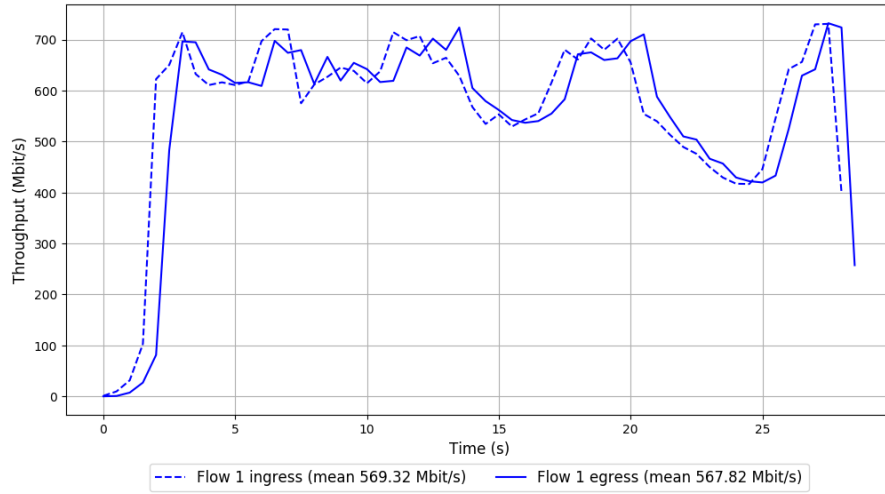


Run 1: Statistics of Indigo-MusesD

Start at: 2019-04-23 18:04:49  
End at: 2019-04-23 18:05:19  
Local clock offset: 9.706 ms  
Remote clock offset: 14.516 ms

# Below is generated by plot.py at 2019-04-23 21:31:41  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 567.82 Mbit/s  
95th percentile per-packet one-way delay: 134.897 ms  
Loss rate: 0.87%  
-- Flow 1:  
Average throughput: 567.82 Mbit/s  
95th percentile per-packet one-way delay: 134.897 ms  
Loss rate: 0.87%

Run 1: Report of Indigo-MusesD — Data Link

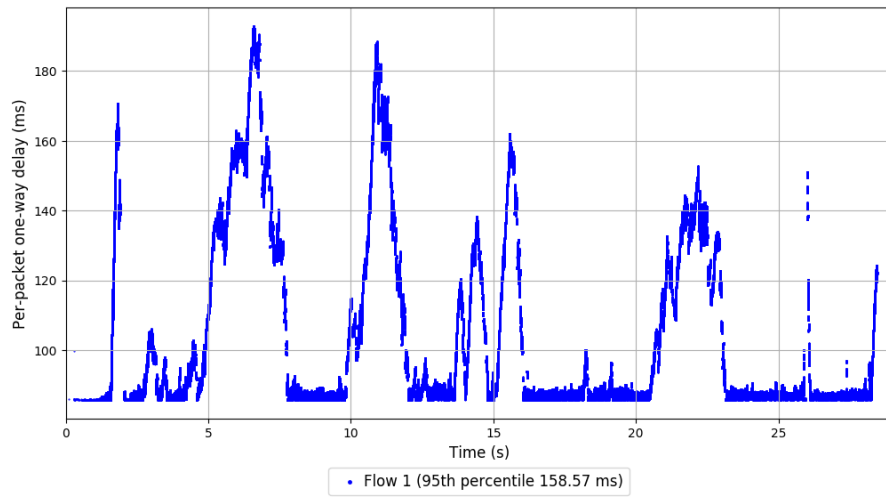
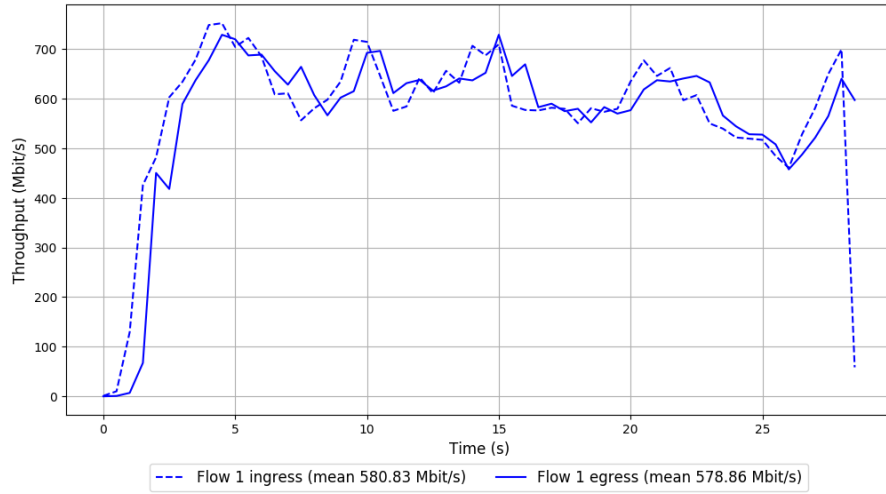


Run 2: Statistics of Indigo-MusesD

Start at: 2019-04-23 18:35:58  
End at: 2019-04-23 18:36:28  
Local clock offset: 16.872 ms  
Remote clock offset: 25.324 ms

# Below is generated by plot.py at 2019-04-23 21:32:36  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 578.86 Mbit/s  
95th percentile per-packet one-way delay: 158.566 ms  
Loss rate: 0.94%  
-- Flow 1:  
Average throughput: 578.86 Mbit/s  
95th percentile per-packet one-way delay: 158.566 ms  
Loss rate: 0.94%

Run 2: Report of Indigo-MusesD — Data Link

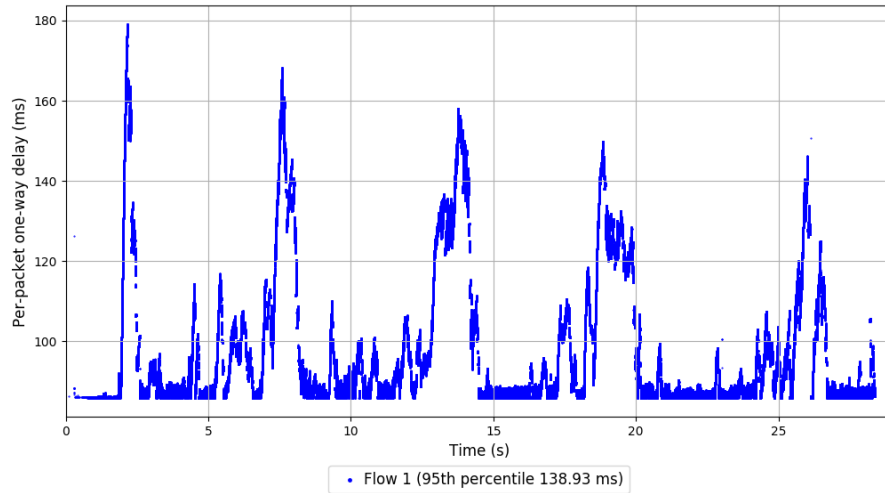
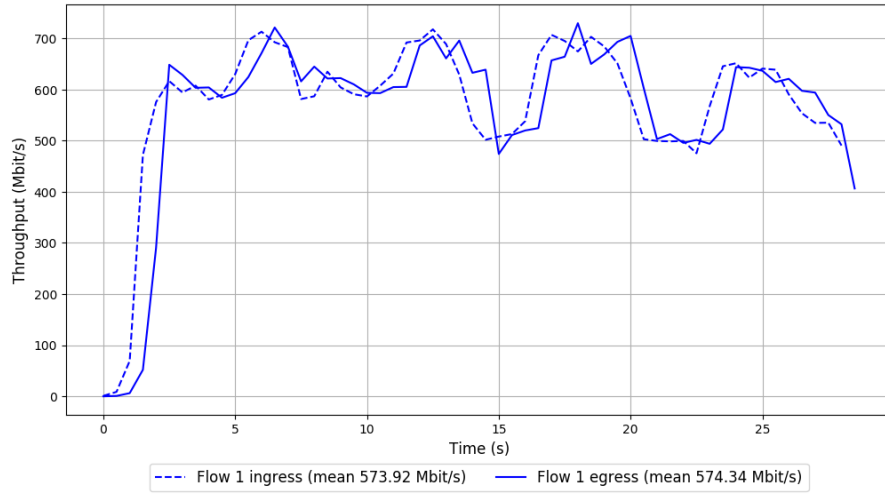


Run 3: Statistics of Indigo-MusesD

Start at: 2019-04-23 19:07:21  
End at: 2019-04-23 19:07:51  
Local clock offset: 11.229 ms  
Remote clock offset: 16.734 ms

# Below is generated by plot.py at 2019-04-23 21:33:08  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 574.34 Mbit/s  
95th percentile per-packet one-way delay: 138.928 ms  
Loss rate: 0.53%  
-- Flow 1:  
Average throughput: 574.34 Mbit/s  
95th percentile per-packet one-way delay: 138.928 ms  
Loss rate: 0.53%

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



Run 4: Statistics of Indigo-MusesD

Start at: 2019-04-23 19:38:57

End at: 2019-04-23 19:39:27

Local clock offset: 6.072 ms

Remote clock offset: 8.934 ms

# Below is generated by plot.py at 2019-04-23 21:33:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 543.80 Mbit/s

95th percentile per-packet one-way delay: 136.024 ms

Loss rate: 0.73%

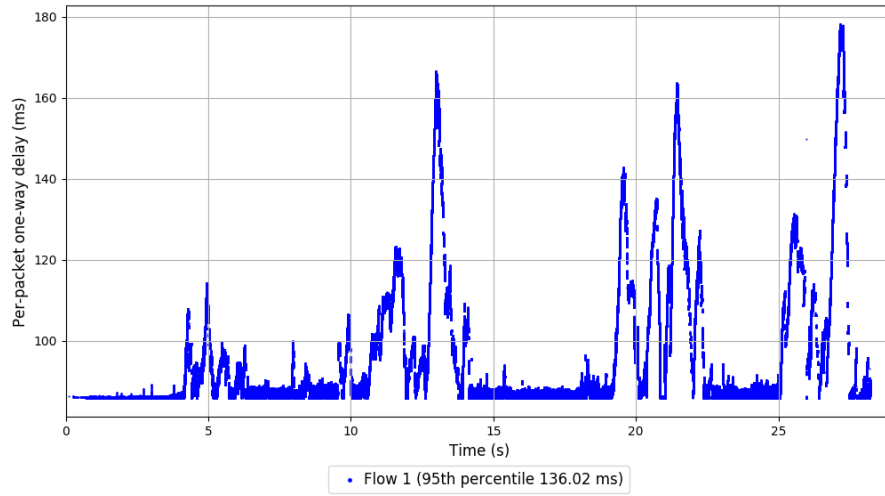
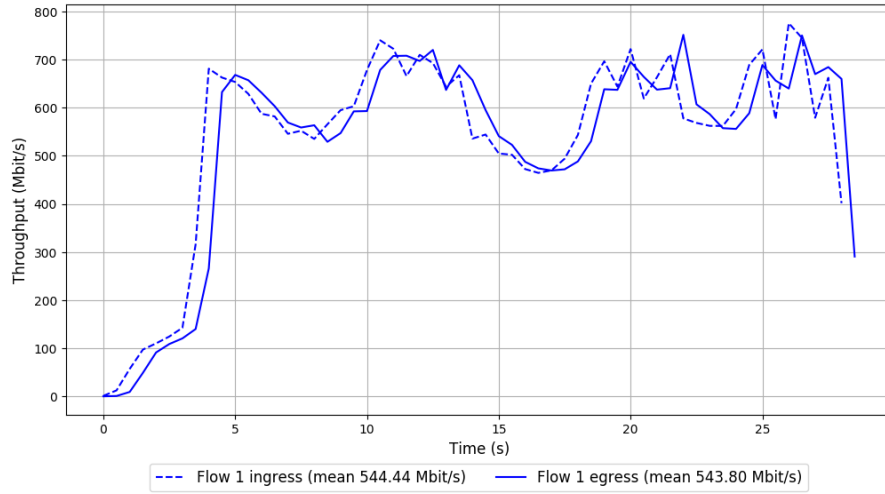
-- Flow 1:

Average throughput: 543.80 Mbit/s

95th percentile per-packet one-way delay: 136.024 ms

Loss rate: 0.73%

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





Run 5: Statistics of Indigo-MusesD

Start at: 2019-04-23 20:09:32

End at: 2019-04-23 20:10:02

Local clock offset: 3.326 ms

Remote clock offset: 4.517 ms

# Below is generated by plot.py at 2019-04-23 21:33:19

# Datalink statistics

-- Total of 1 flow:

Average throughput: 554.68 Mbit/s

95th percentile per-packet one-way delay: 147.127 ms

Loss rate: 0.55%

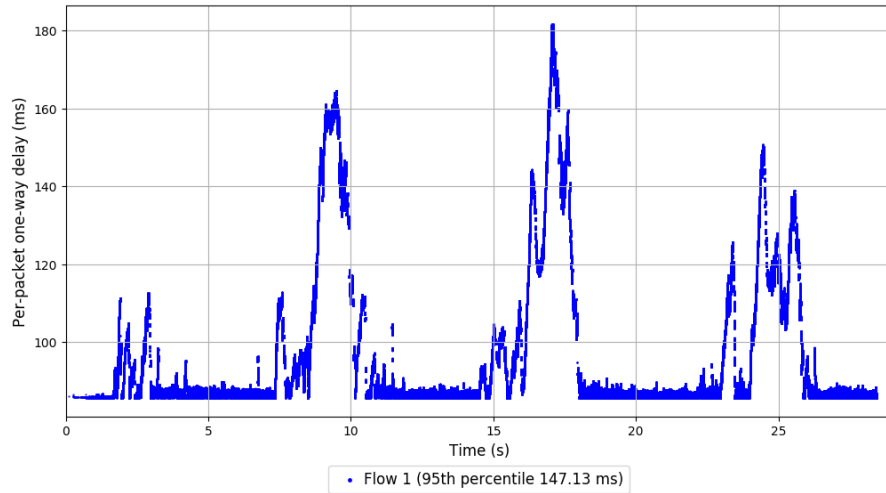
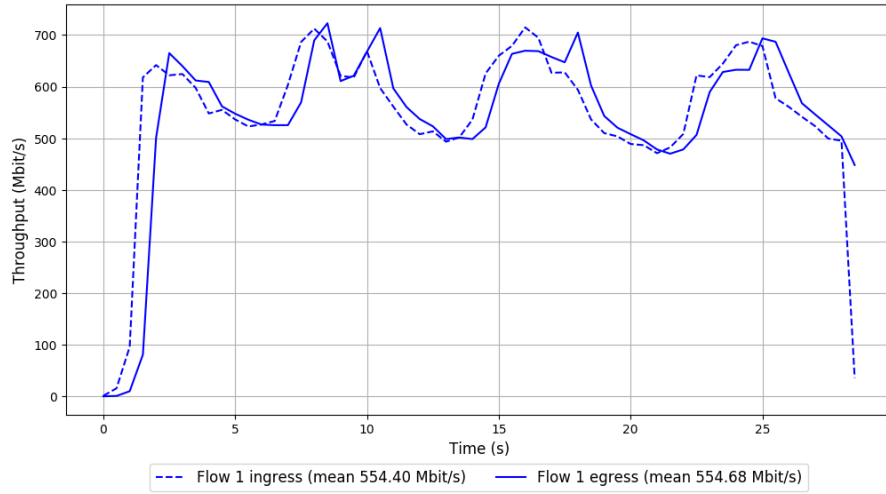
-- Flow 1:

Average throughput: 554.68 Mbit/s

95th percentile per-packet one-way delay: 147.127 ms

Loss rate: 0.55%

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

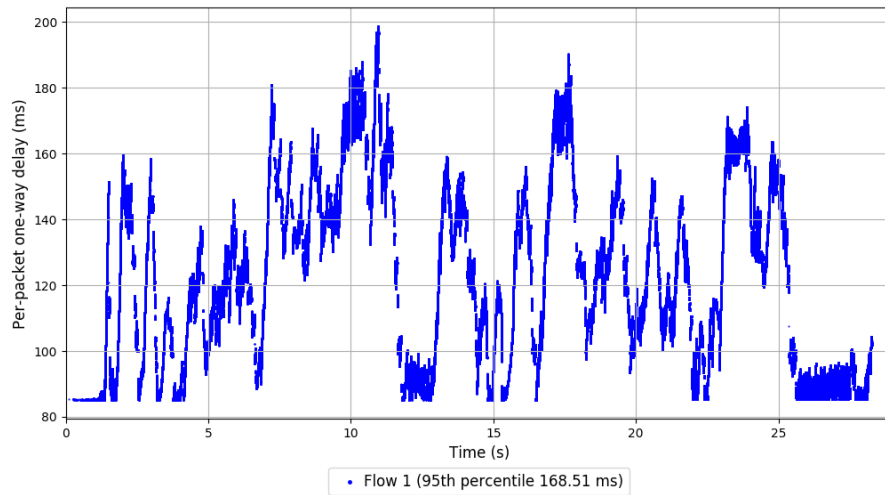
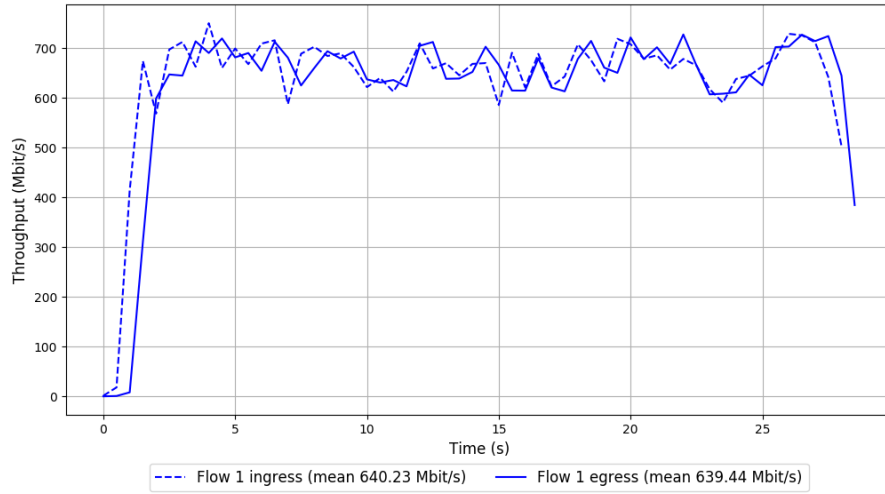


Run 1: Statistics of Indigo-MuseST

Start at: 2019-04-23 18:15:16  
End at: 2019-04-23 18:15:46  
Local clock offset: 14.988 ms  
Remote clock offset: 23.617 ms

# Below is generated by plot.py at 2019-04-23 21:38:47  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 639.44 Mbit/s  
95th percentile per-packet one-way delay: 168.510 ms  
Loss rate: 0.73%  
-- Flow 1:  
Average throughput: 639.44 Mbit/s  
95th percentile per-packet one-way delay: 168.510 ms  
Loss rate: 0.73%

Run 1: Report of Indigo-MusesT — Data Link

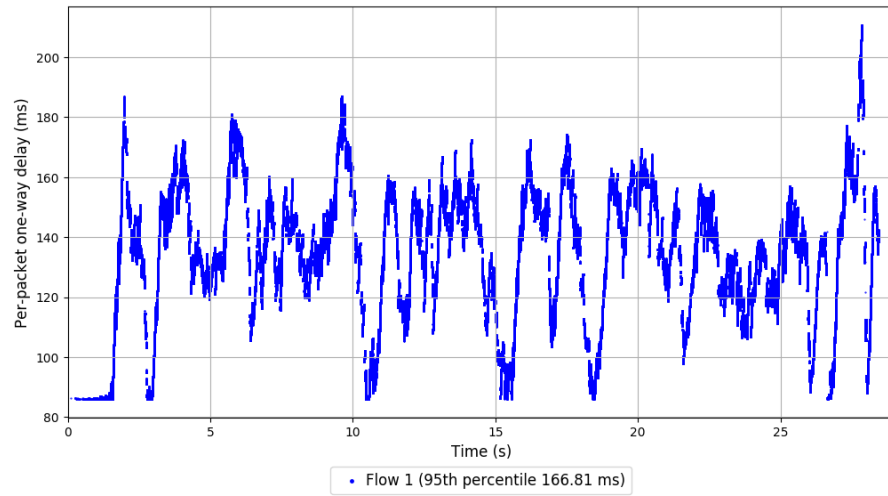
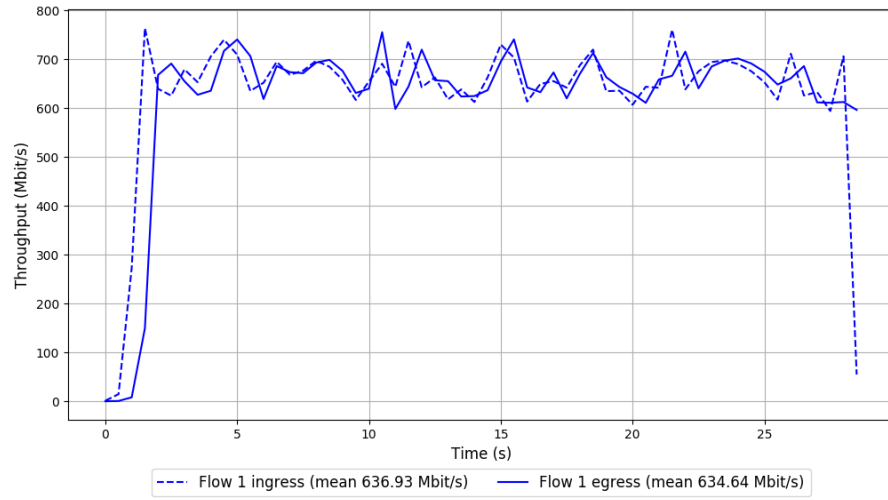


Run 2: Statistics of Indigo-MuseST

Start at: 2019-04-23 18:46:26  
End at: 2019-04-23 18:46:56  
Local clock offset: 23.979 ms  
Remote clock offset: 35.547 ms

# Below is generated by plot.py at 2019-04-23 21:39:13  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 634.64 Mbit/s  
95th percentile per-packet one-way delay: 166.809 ms  
Loss rate: 0.96%  
-- Flow 1:  
Average throughput: 634.64 Mbit/s  
95th percentile per-packet one-way delay: 166.809 ms  
Loss rate: 0.96%

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



Run 3: Statistics of Indigo-MuseST

Start at: 2019-04-23 19:17:51

End at: 2019-04-23 19:18:21

Local clock offset: 11.695 ms

Remote clock offset: 17.69 ms

# Below is generated by plot.py at 2019-04-23 21:39:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 619.76 Mbit/s

95th percentile per-packet one-way delay: 167.486 ms

Loss rate: 0.73%

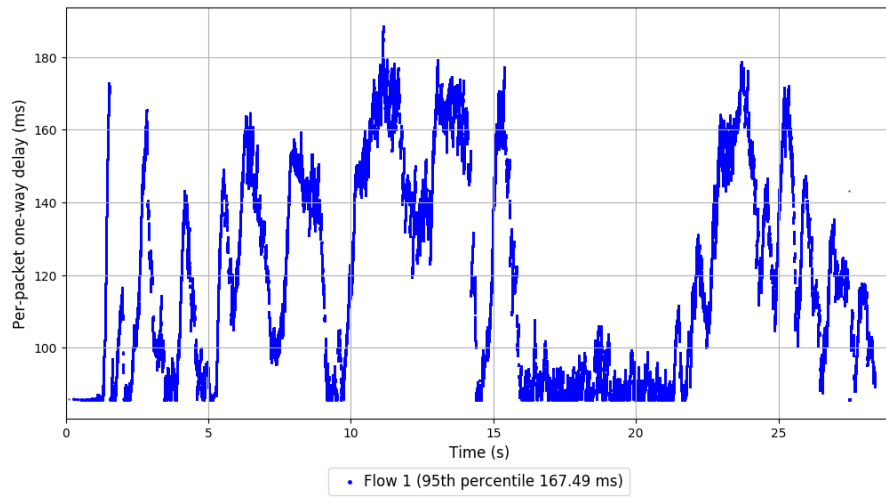
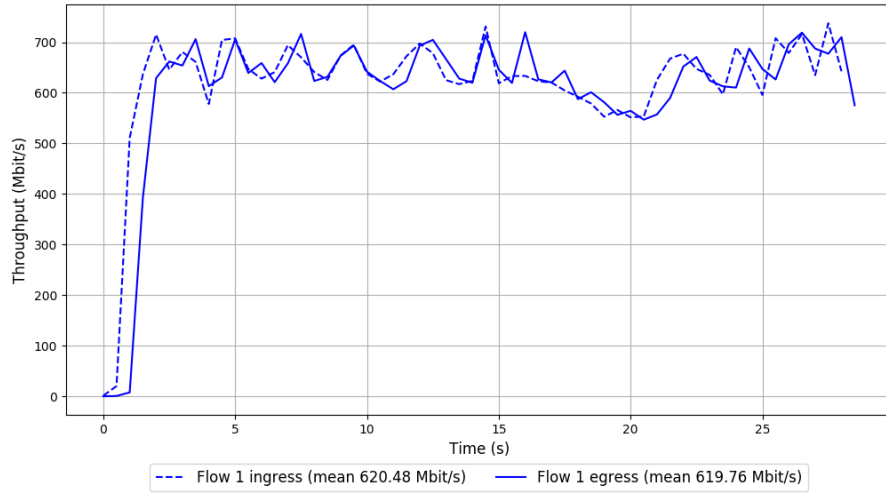
-- Flow 1:

Average throughput: 619.76 Mbit/s

95th percentile per-packet one-way delay: 167.486 ms

Loss rate: 0.73%

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





Run 4: Statistics of Indigo-MuseST

Start at: 2019-04-23 19:48:58

End at: 2019-04-23 19:49:28

Local clock offset: 5.383 ms

Remote clock offset: 8.134 ms

# Below is generated by plot.py at 2019-04-23 21:41:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 639.66 Mbit/s

95th percentile per-packet one-way delay: 155.139 ms

Loss rate: 0.83%

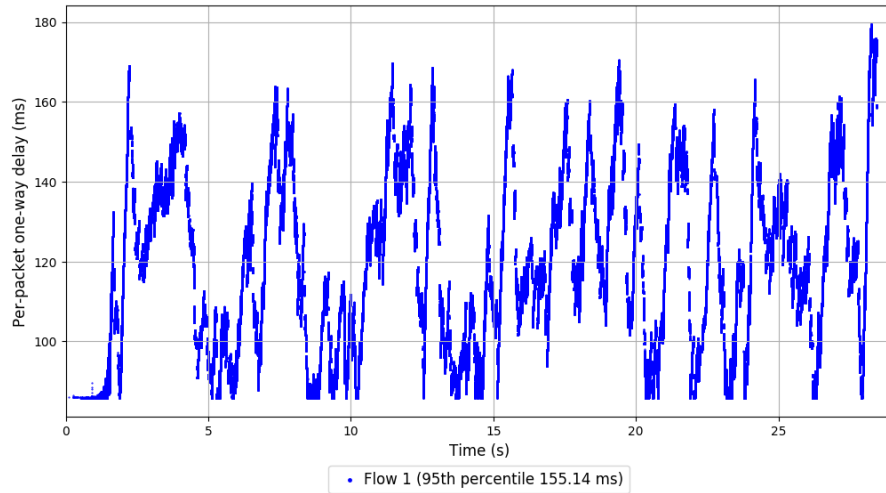
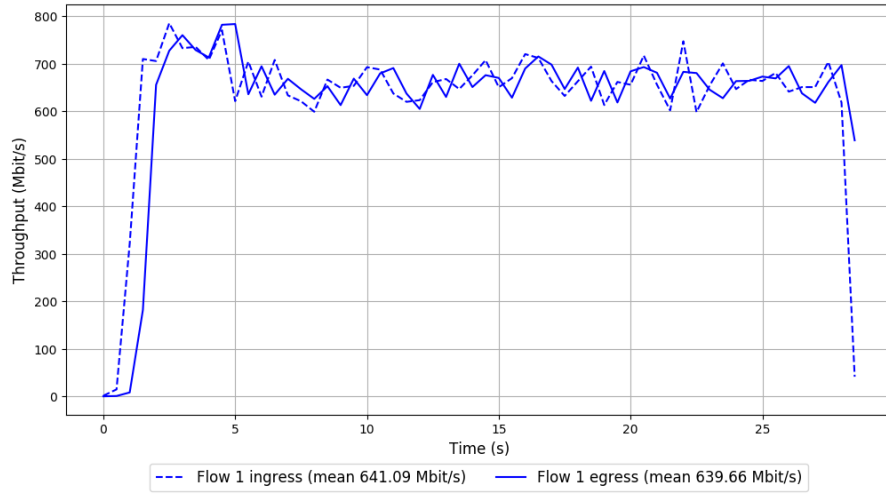
-- Flow 1:

Average throughput: 639.66 Mbit/s

95th percentile per-packet one-way delay: 155.139 ms

Loss rate: 0.83%

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



Run 5: Statistics of Indigo-MuseST

Start at: 2019-04-23 20:20:00

End at: 2019-04-23 20:20:30

Local clock offset: 2.741 ms

Remote clock offset: 2.397 ms

# Below is generated by plot.py at 2019-04-23 21:43:53

# Datalink statistics

-- Total of 1 flow:

Average throughput: 636.09 Mbit/s

95th percentile per-packet one-way delay: 165.250 ms

Loss rate: 0.82%

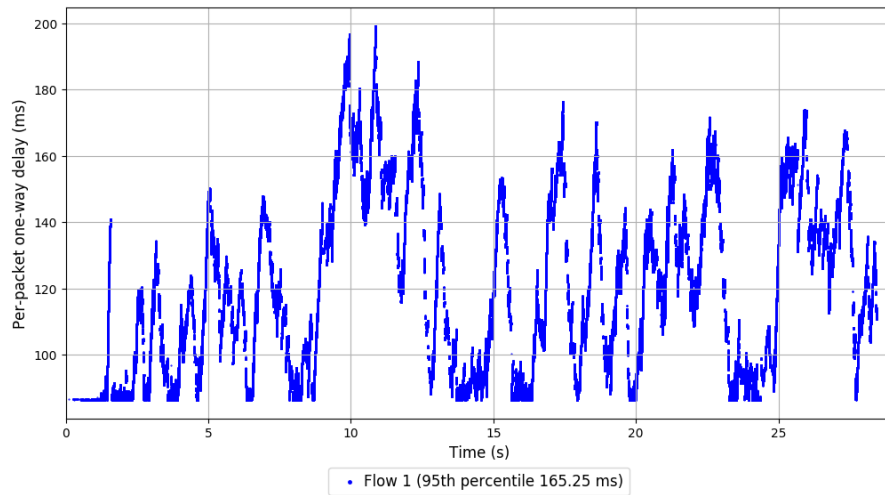
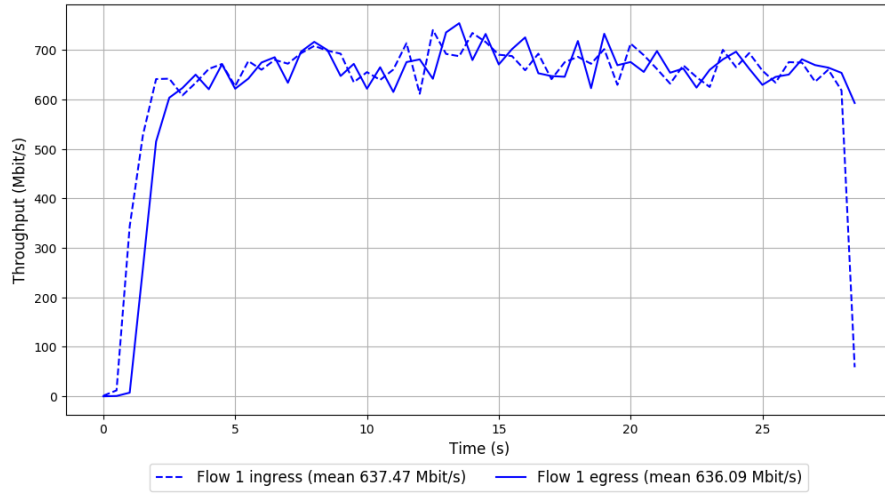
-- Flow 1:

Average throughput: 636.09 Mbit/s

95th percentile per-packet one-way delay: 165.250 ms

Loss rate: 0.82%

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

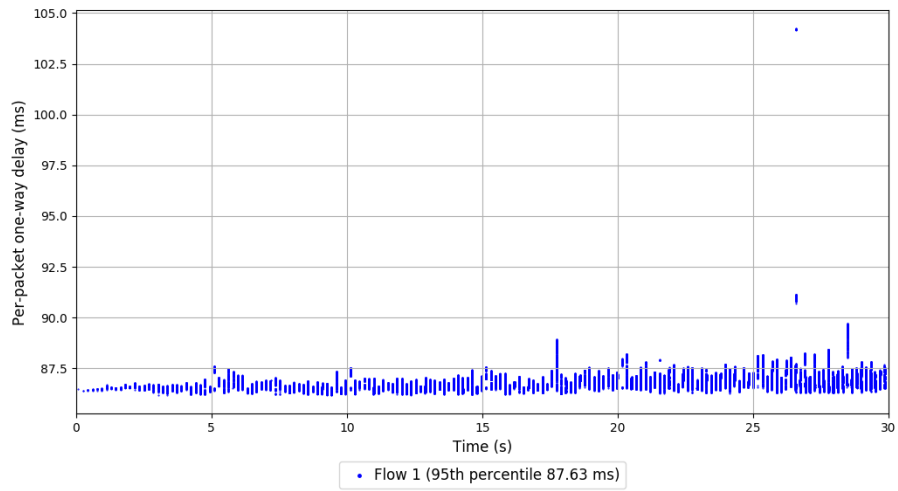
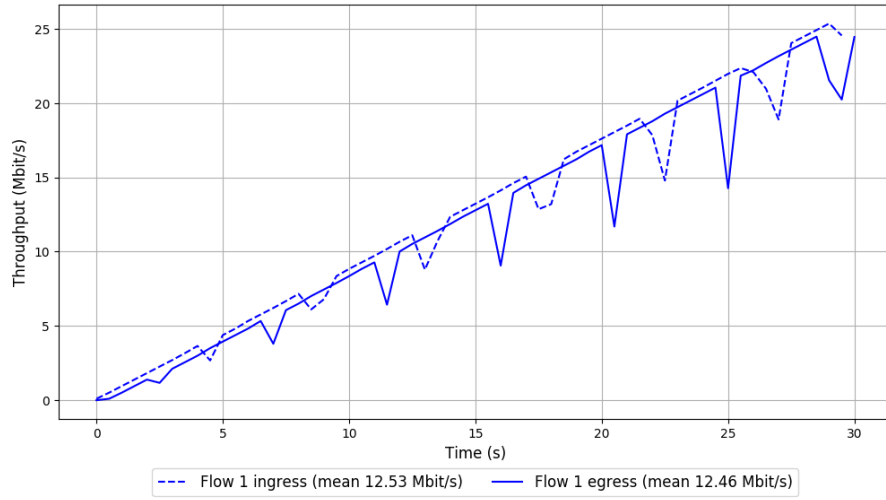


Run 1: Statistics of LEDBAT

Start at: 2019-04-23 18:09:40  
End at: 2019-04-23 18:10:10  
Local clock offset: 10.864 ms  
Remote clock offset: 16.213 ms

# Below is generated by plot.py at 2019-04-23 21:43:53  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 12.46 Mbit/s  
95th percentile per-packet one-way delay: 87.626 ms  
Loss rate: 1.15%  
-- Flow 1:  
Average throughput: 12.46 Mbit/s  
95th percentile per-packet one-way delay: 87.626 ms  
Loss rate: 1.15%

Run 1: Report of LEDBAT — Data Link

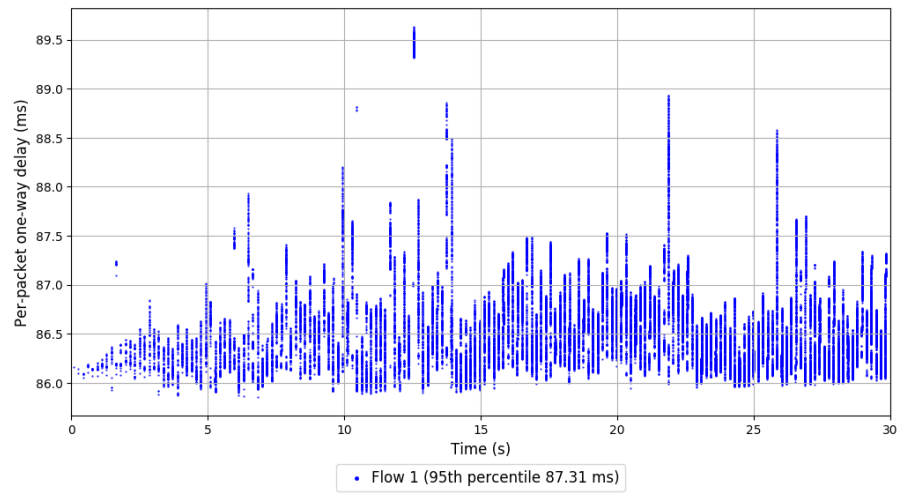
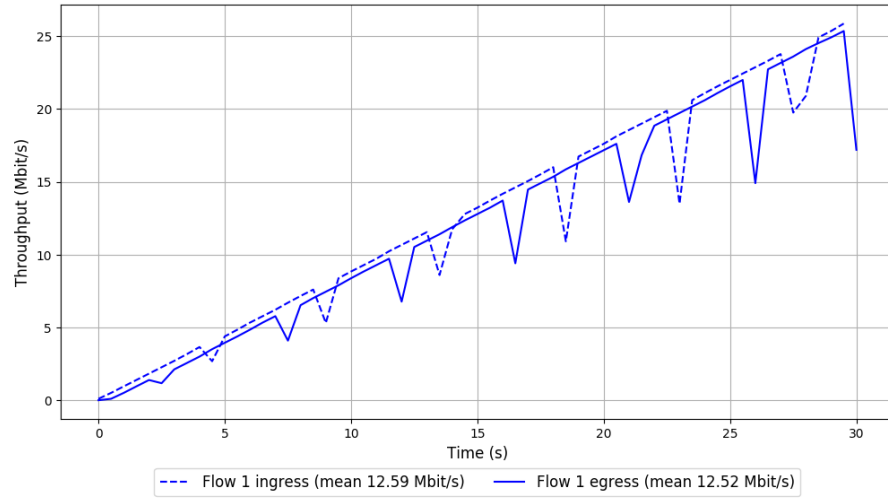


Run 2: Statistics of LEDBAT

Start at: 2019-04-23 18:40:51  
End at: 2019-04-23 18:41:21  
Local clock offset: 19.822 ms  
Remote clock offset: 29.616 ms

# Below is generated by plot.py at 2019-04-23 21:43:53  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 12.52 Mbit/s  
95th percentile per-packet one-way delay: 87.305 ms  
Loss rate: 1.15%  
-- Flow 1:  
Average throughput: 12.52 Mbit/s  
95th percentile per-packet one-way delay: 87.305 ms  
Loss rate: 1.15%

## Run 2: Report of LEDBAT — Data Link



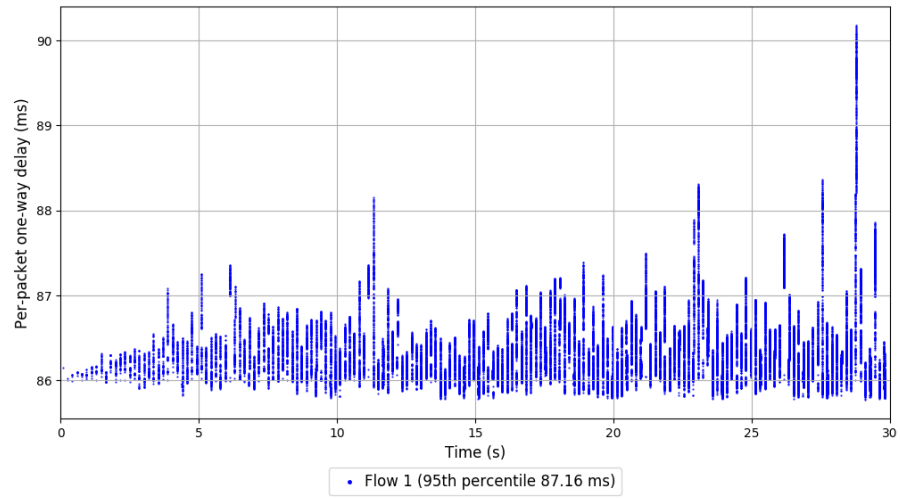
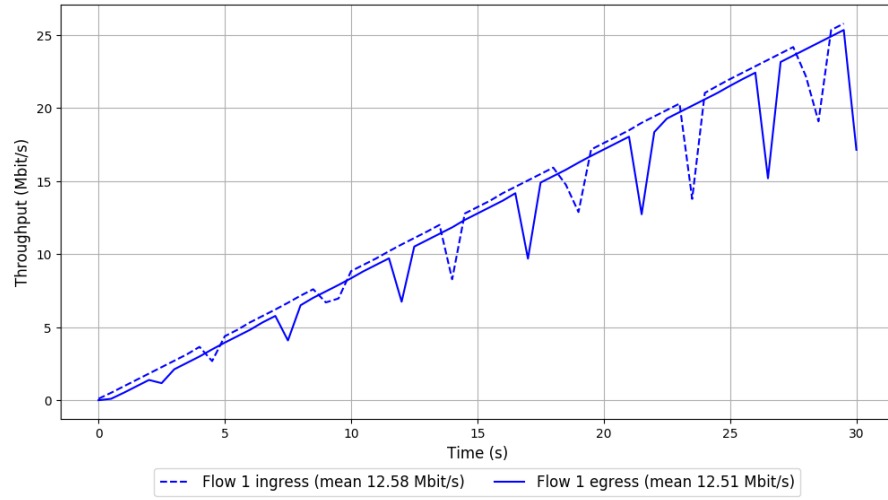


Run 3: Statistics of LEDBAT

Start at: 2019-04-23 19:12:12  
End at: 2019-04-23 19:12:42  
Local clock offset: 10.906 ms  
Remote clock offset: 16.353 ms

# Below is generated by plot.py at 2019-04-23 21:43:53  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 12.51 Mbit/s  
95th percentile per-packet one-way delay: 87.156 ms  
Loss rate: 1.15%  
-- Flow 1:  
Average throughput: 12.51 Mbit/s  
95th percentile per-packet one-way delay: 87.156 ms  
Loss rate: 1.15%

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



Run 4: Statistics of LEDBAT

Start at: 2019-04-23 19:43:28

End at: 2019-04-23 19:43:58

Local clock offset: 5.287 ms

Remote clock offset: 8.02 ms

# Below is generated by plot.py at 2019-04-23 21:43:53

# Datalink statistics

-- Total of 1 flow:

Average throughput: 12.51 Mbit/s

95th percentile per-packet one-way delay: 87.130 ms

Loss rate: 1.15%

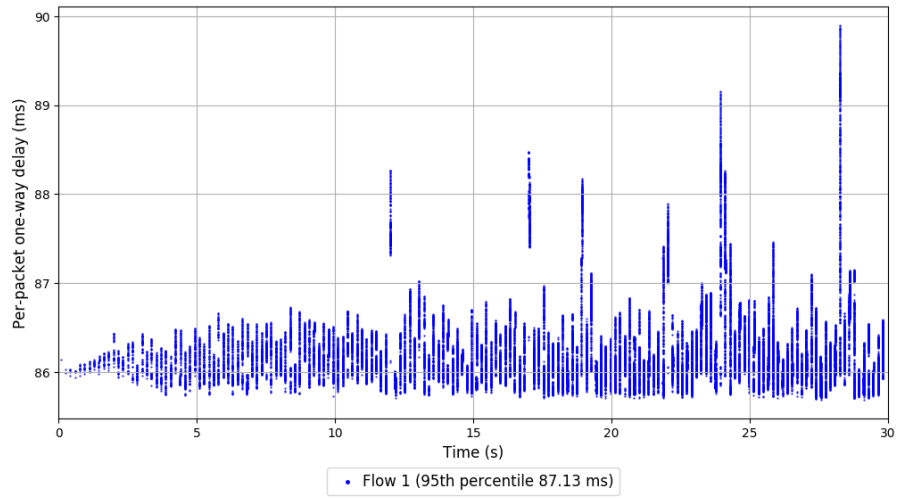
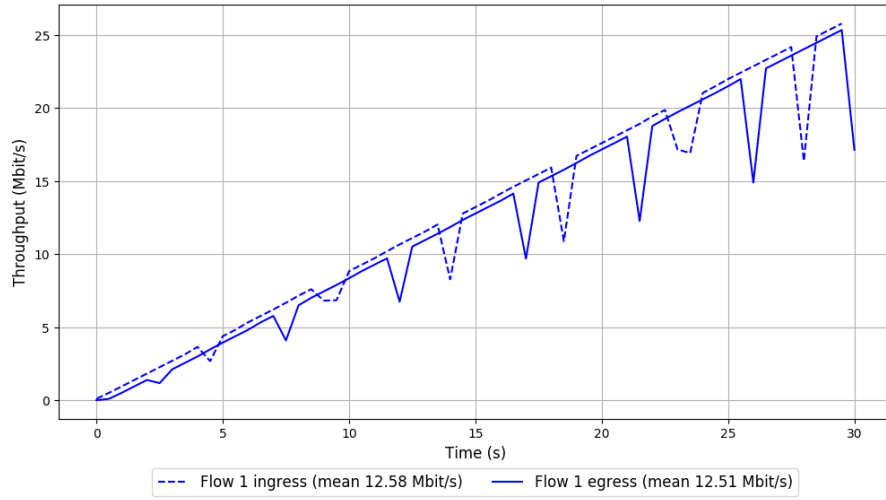
-- Flow 1:

Average throughput: 12.51 Mbit/s

95th percentile per-packet one-way delay: 87.130 ms

Loss rate: 1.15%

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



Run 5: Statistics of LEDBAT

Start at: 2019-04-23 20:14:24

End at: 2019-04-23 20:14:54

Local clock offset: 2.552 ms

Remote clock offset: 3.064 ms

# Below is generated by plot.py at 2019-04-23 21:43:53

# Datalink statistics

-- Total of 1 flow:

Average throughput: 12.50 Mbit/s

95th percentile per-packet one-way delay: 87.082 ms

Loss rate: 1.15%

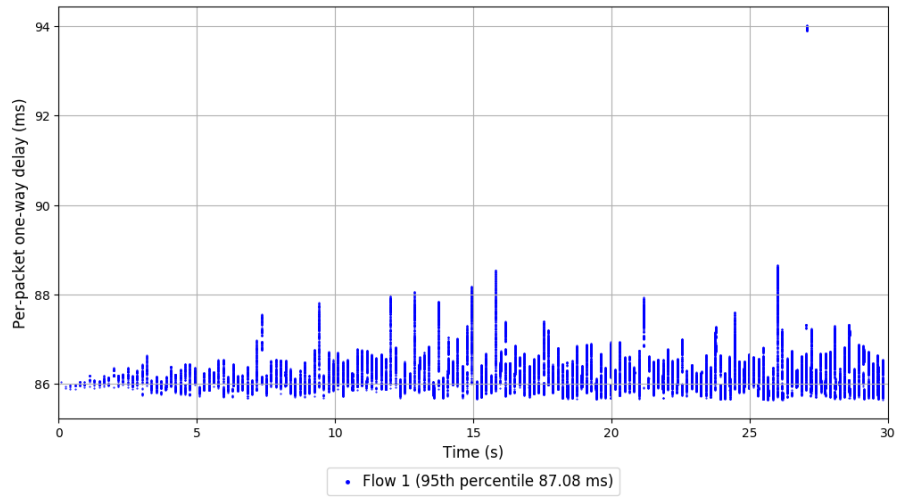
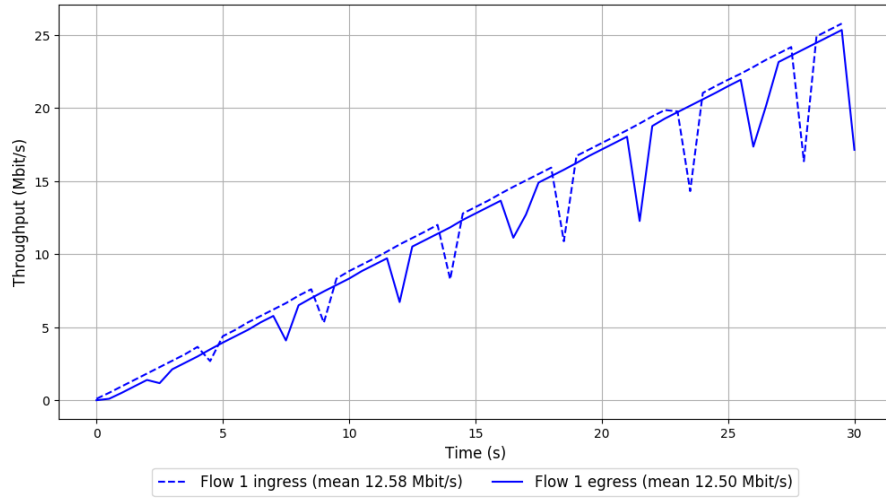
-- Flow 1:

Average throughput: 12.50 Mbit/s

95th percentile per-packet one-way delay: 87.082 ms

Loss rate: 1.15%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-04-23 17:52:39

End at: 2019-04-23 17:53:09

Local clock offset: 7.681 ms

Remote clock offset: 11.353 ms

# Below is generated by plot.py at 2019-04-23 21:45:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 350.56 Mbit/s

95th percentile per-packet one-way delay: 208.251 ms

Loss rate: 10.36%

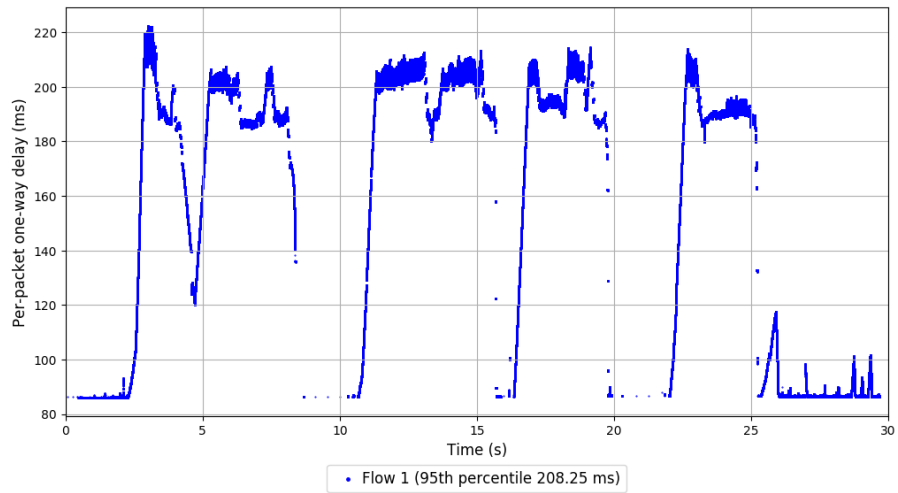
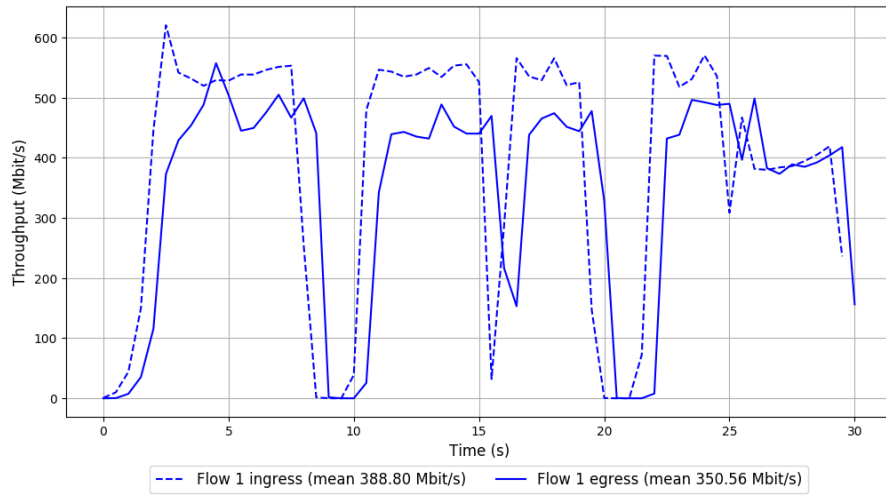
-- Flow 1:

Average throughput: 350.56 Mbit/s

95th percentile per-packet one-way delay: 208.251 ms

Loss rate: 10.36%

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





Run 2: Statistics of PCC-Allegro

Start at: 2019-04-23 18:23:30  
End at: 2019-04-23 18:24:00  
Local clock offset: 15.047 ms  
Remote clock offset: 22.333 ms

# Below is generated by plot.py at 2019-04-23 21:46:18

# Datalink statistics

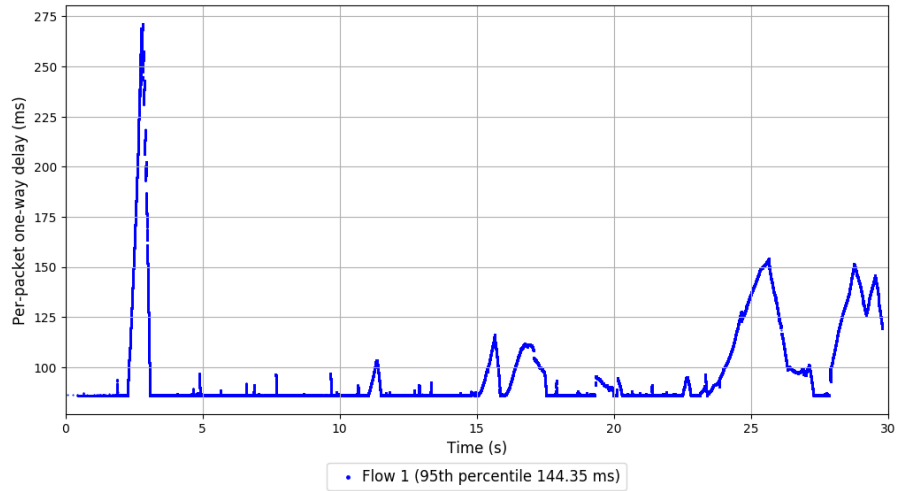
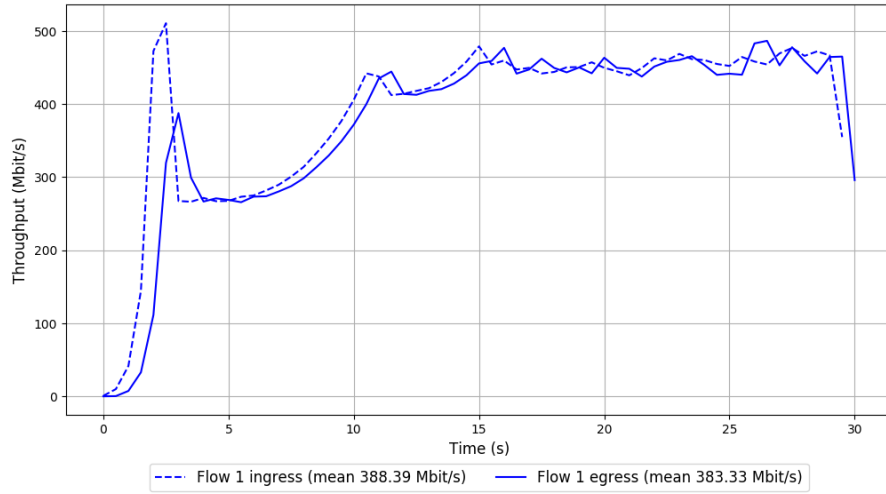
-- Total of 1 flow:

Average throughput: 383.33 Mbit/s  
95th percentile per-packet one-way delay: 144.350 ms  
Loss rate: 1.87%

-- Flow 1:

Average throughput: 383.33 Mbit/s  
95th percentile per-packet one-way delay: 144.350 ms  
Loss rate: 1.87%

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



Run 3: Statistics of PCC-Allegro

Start at: 2019-04-23 18:54:46

End at: 2019-04-23 18:55:16

Local clock offset: 24.033 ms

Remote clock offset: 35.376 ms

# Below is generated by plot.py at 2019-04-23 21:46:42

# Datalink statistics

-- Total of 1 flow:

Average throughput: 396.95 Mbit/s

95th percentile per-packet one-way delay: 135.799 ms

Loss rate: 0.96%

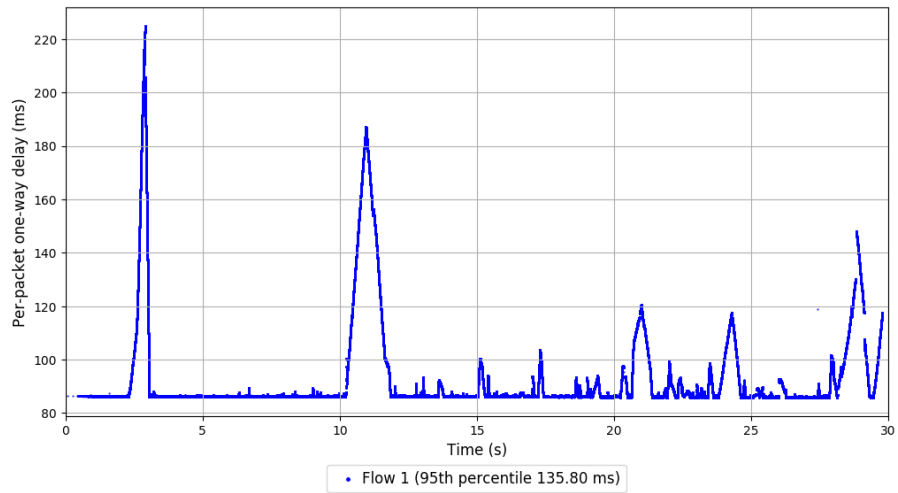
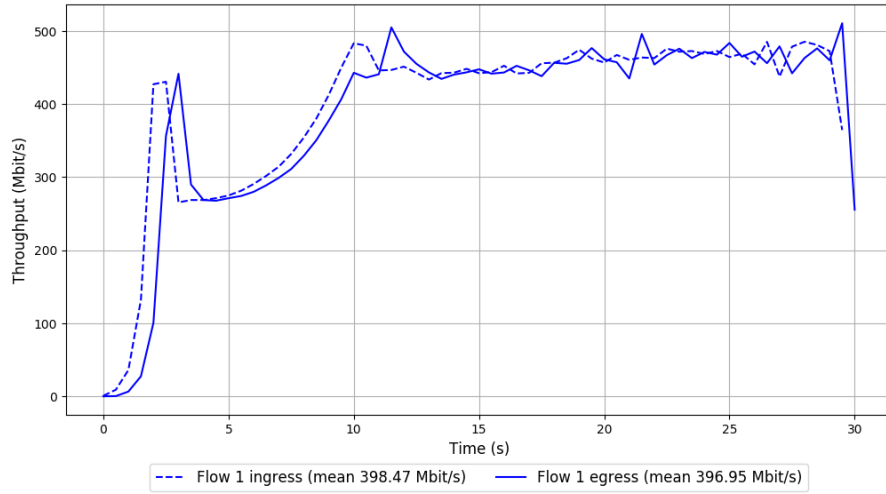
-- Flow 1:

Average throughput: 396.95 Mbit/s

95th percentile per-packet one-way delay: 135.799 ms

Loss rate: 0.96%

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



Run 4: Statistics of PCC-Allegro

Start at: 2019-04-23 19:26:15

End at: 2019-04-23 19:26:45

Local clock offset: 13.875 ms

Remote clock offset: 21.416 ms

# Below is generated by plot.py at 2019-04-23 21:52:04

# Datalink statistics

-- Total of 1 flow:

Average throughput: 389.40 Mbit/s

95th percentile per-packet one-way delay: 117.758 ms

Loss rate: 0.93%

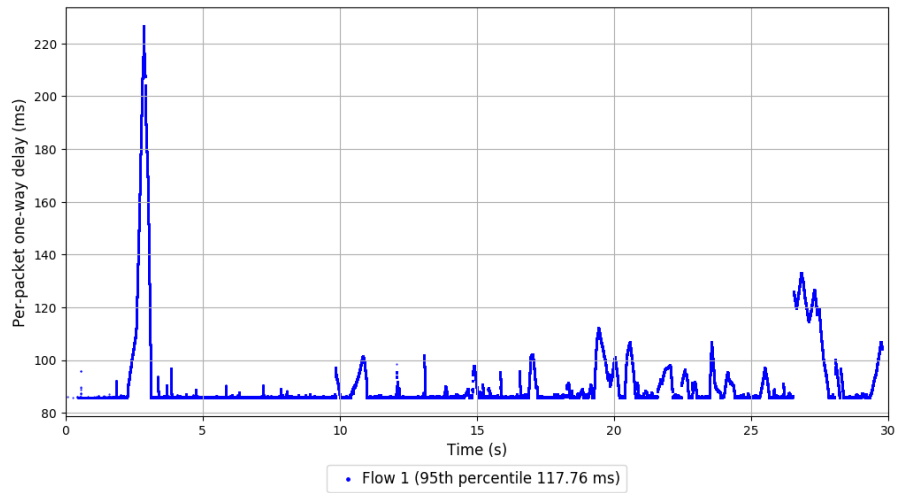
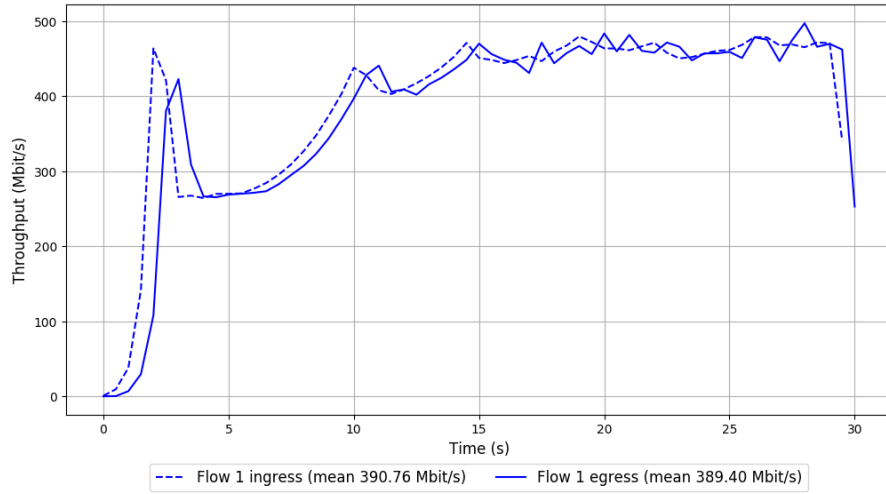
-- Flow 1:

Average throughput: 389.40 Mbit/s

95th percentile per-packet one-way delay: 117.758 ms

Loss rate: 0.93%

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



Run 5: Statistics of PCC-Allegro

Start at: 2019-04-23 19:57:03

End at: 2019-04-23 19:57:33

Local clock offset: 6.119 ms

Remote clock offset: 9.528 ms

# Below is generated by plot.py at 2019-04-23 21:52:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 389.94 Mbit/s

95th percentile per-packet one-way delay: 196.510 ms

Loss rate: 1.30%

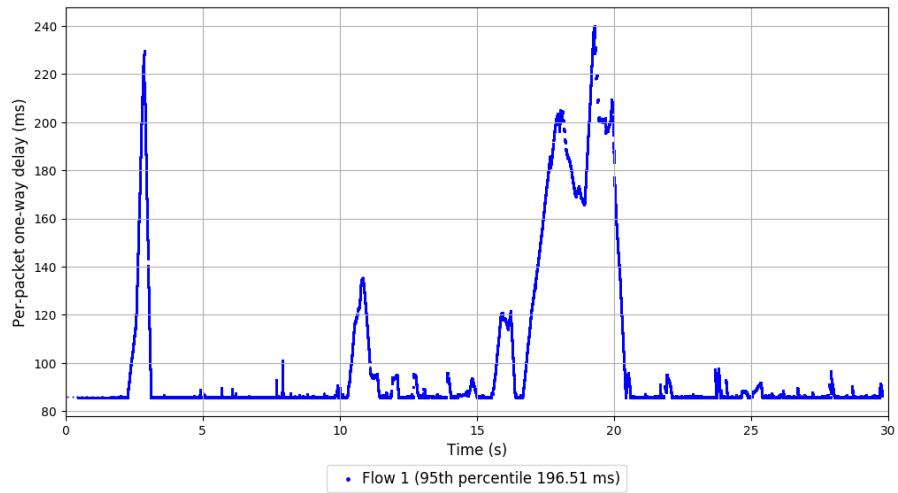
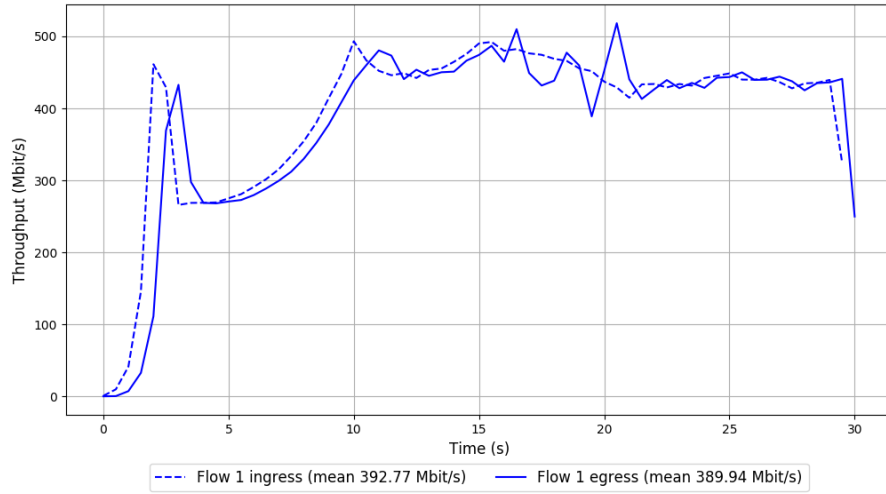
-- Flow 1:

Average throughput: 389.94 Mbit/s

95th percentile per-packet one-way delay: 196.510 ms

Loss rate: 1.30%

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





Run 1: Statistics of PCC-Expr

Start at: 2019-04-23 17:47:23

End at: 2019-04-23 17:47:53

Local clock offset: 2.733 ms

Remote clock offset: 4.306 ms

# Below is generated by plot.py at 2019-04-23 21:52:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 213.40 Mbit/s

95th percentile per-packet one-way delay: 164.958 ms

Loss rate: 2.03%

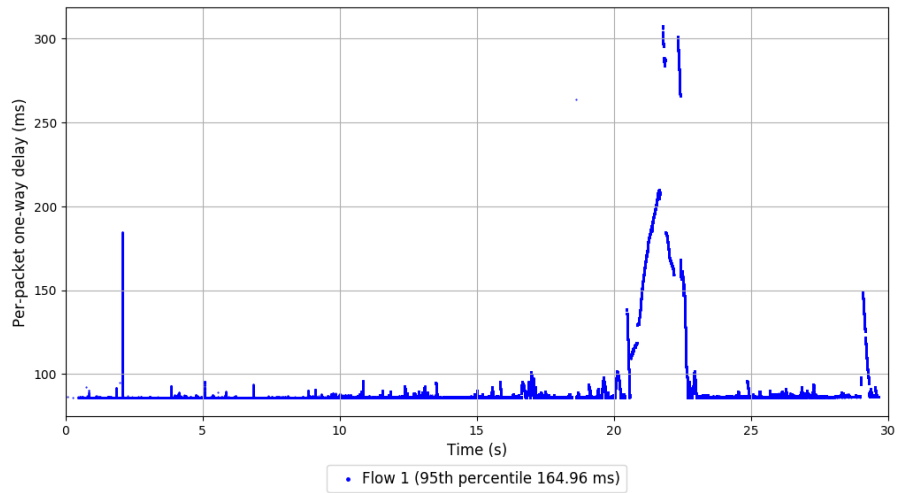
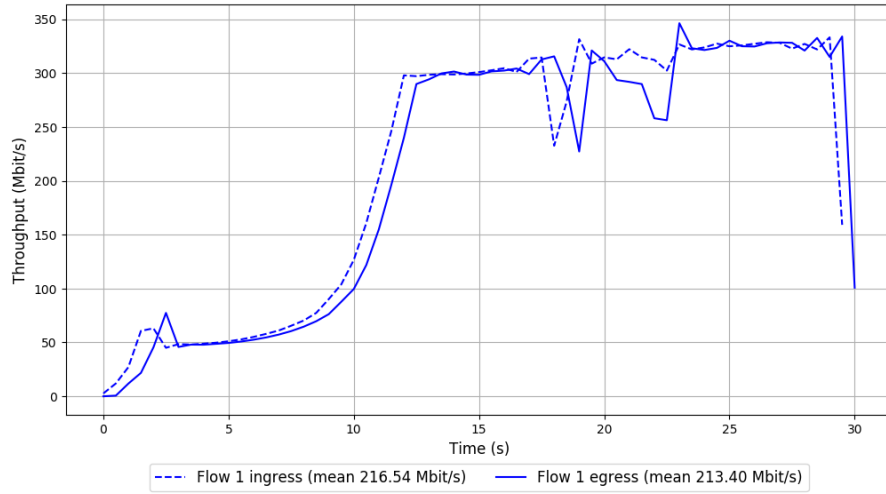
-- Flow 1:

Average throughput: 213.40 Mbit/s

95th percentile per-packet one-way delay: 164.958 ms

Loss rate: 2.03%

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

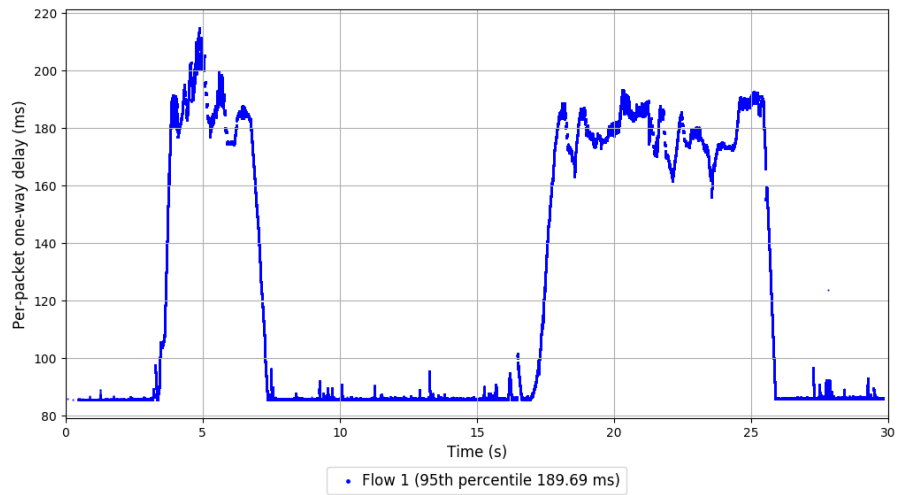
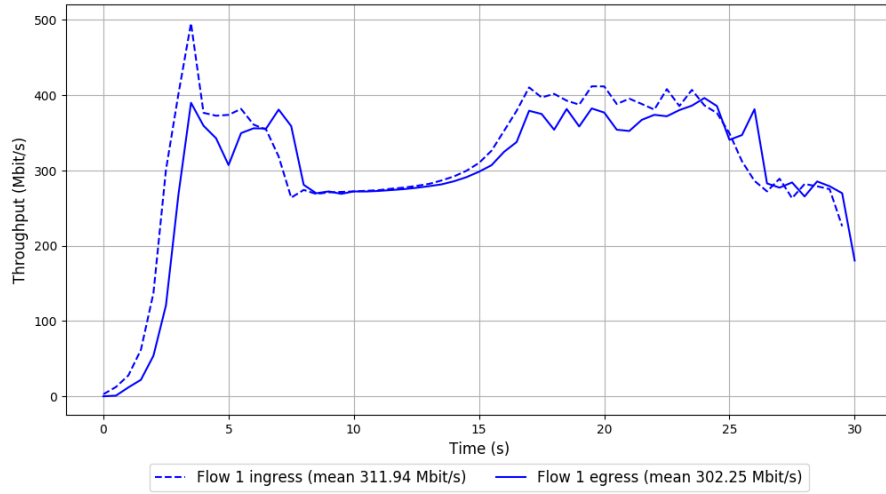


Run 2: Statistics of PCC-Expr

Start at: 2019-04-23 18:18:05  
End at: 2019-04-23 18:18:35  
Local clock offset: 18.507 ms  
Remote clock offset: 27.931 ms

# Below is generated by plot.py at 2019-04-23 21:52:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 302.25 Mbit/s  
95th percentile per-packet one-way delay: 189.687 ms  
Loss rate: 3.66%  
-- Flow 1:  
Average throughput: 302.25 Mbit/s  
95th percentile per-packet one-way delay: 189.687 ms  
Loss rate: 3.66%

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

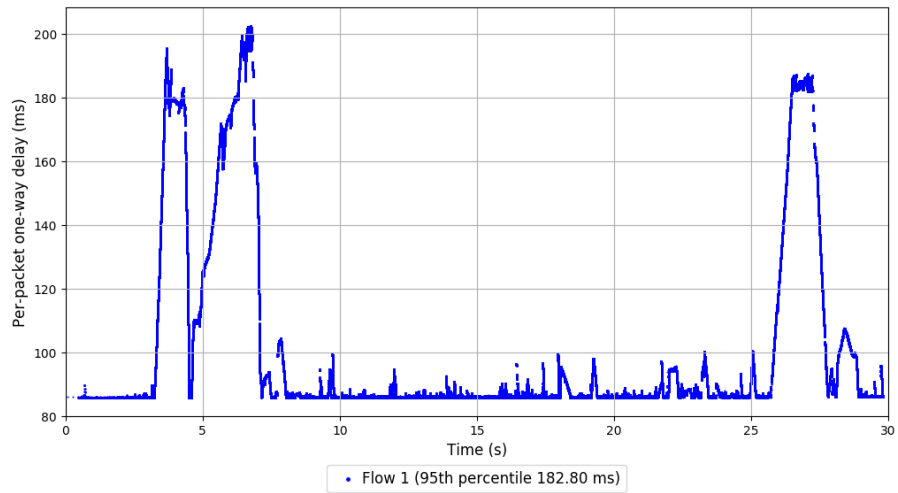
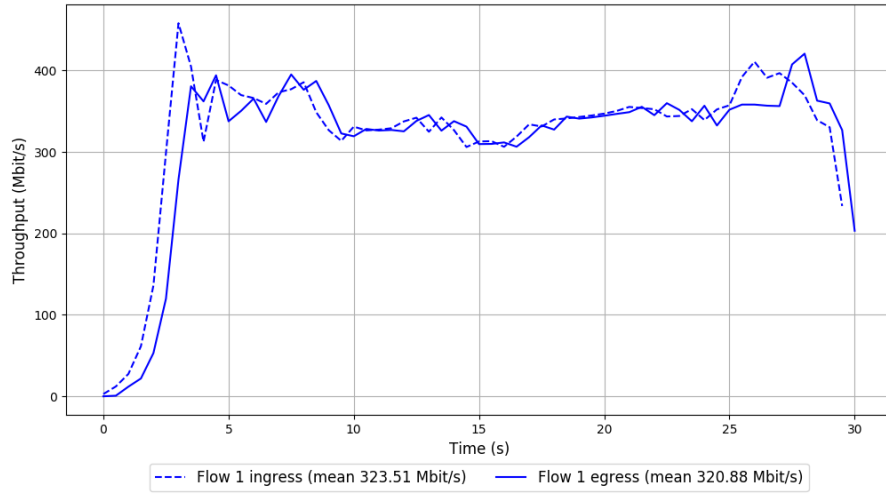


Run 3: Statistics of PCC-Expr

Start at: 2019-04-23 18:49:15  
End at: 2019-04-23 18:49:45  
Local clock offset: 25.743 ms  
Remote clock offset: 38.826 ms

# Below is generated by plot.py at 2019-04-23 21:54:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 320.88 Mbit/s  
95th percentile per-packet one-way delay: 182.796 ms  
Loss rate: 1.46%  
-- Flow 1:  
Average throughput: 320.88 Mbit/s  
95th percentile per-packet one-way delay: 182.796 ms  
Loss rate: 1.46%

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

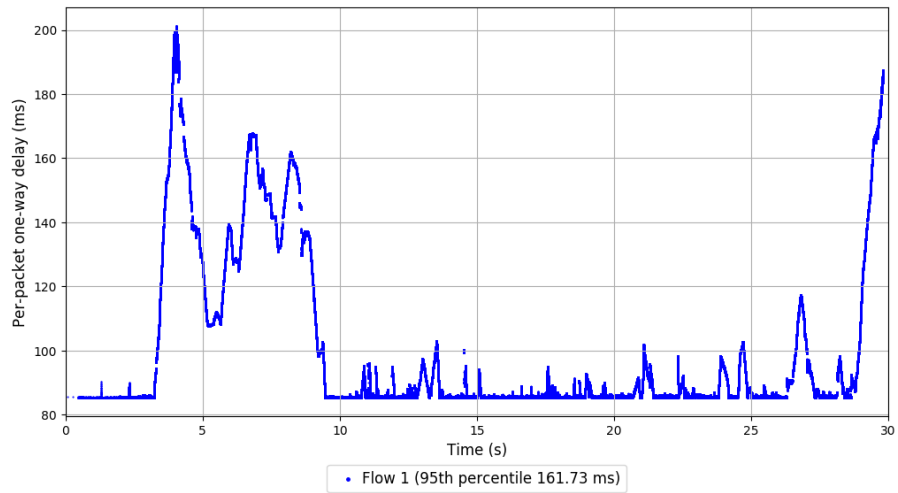
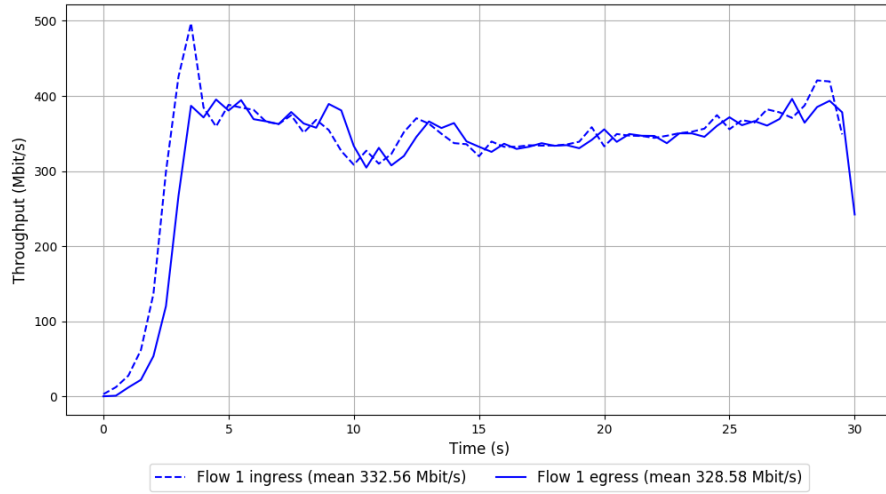


Run 4: Statistics of PCC-Expr

Start at: 2019-04-23 19:20:38  
End at: 2019-04-23 19:21:08  
Local clock offset: 12.048 ms  
Remote clock offset: 18.747 ms

# Below is generated by plot.py at 2019-04-23 21:56:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 328.58 Mbit/s  
95th percentile per-packet one-way delay: 161.730 ms  
Loss rate: 1.77%  
-- Flow 1:  
Average throughput: 328.58 Mbit/s  
95th percentile per-packet one-way delay: 161.730 ms  
Loss rate: 1.77%

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





Run 5: Statistics of PCC-Expr

Start at: 2019-04-23 19:51:48

End at: 2019-04-23 19:52:18

Local clock offset: 5.974 ms

Remote clock offset: 8.497 ms

# Below is generated by plot.py at 2019-04-23 21:56:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 313.84 Mbit/s

95th percentile per-packet one-way delay: 183.960 ms

Loss rate: 1.18%

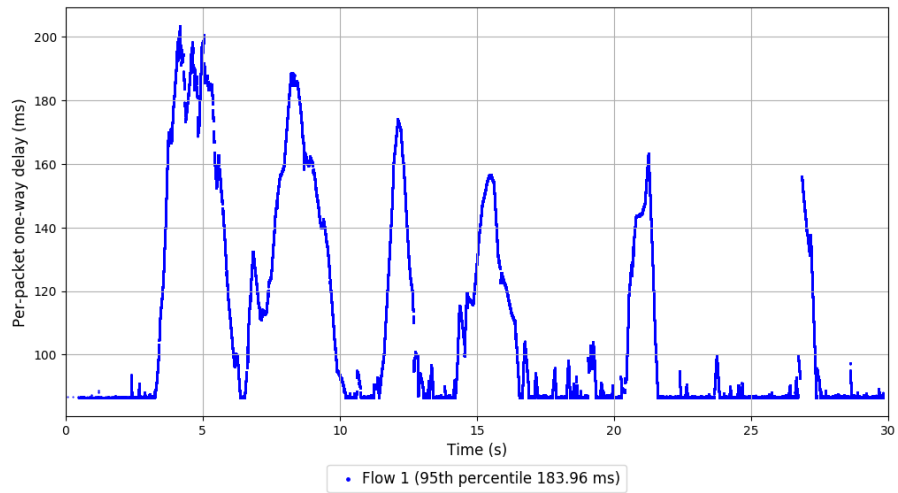
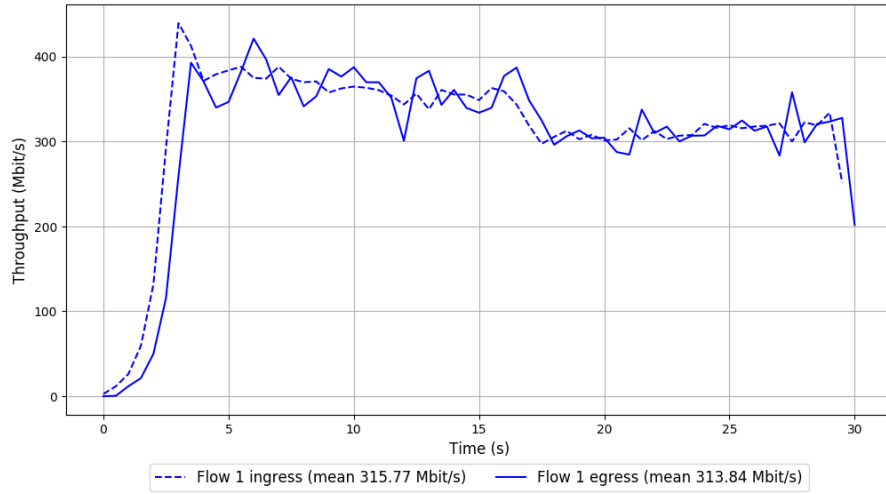
-- Flow 1:

Average throughput: 313.84 Mbit/s

95th percentile per-packet one-way delay: 183.960 ms

Loss rate: 1.18%

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



Run 1: Statistics of QUIC Cubic

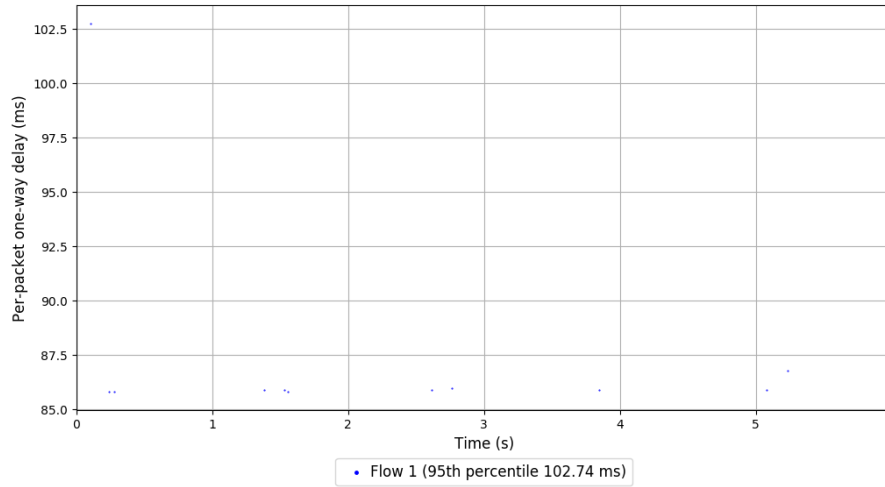
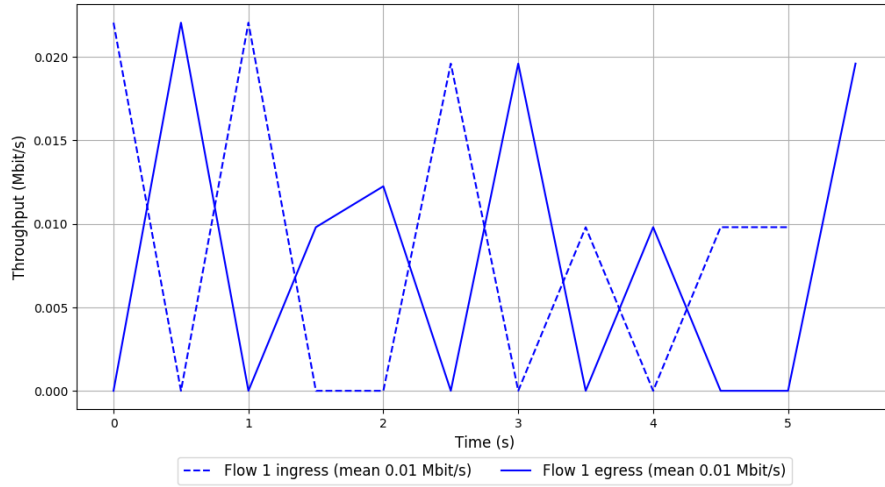
Start at: 2019-04-23 17:51:31

End at: 2019-04-23 17:52:01

Local clock offset: 5.292 ms

Remote clock offset: 8.625 ms

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



Run 2: Statistics of QUIC Cubic

Start at: 2019-04-23 18:22:17

End at: 2019-04-23 18:22:47

Local clock offset: 15.283 ms

Remote clock offset: 23.515 ms

# Below is generated by plot.py at 2019-04-23 21:56:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 66.90 Mbit/s

95th percentile per-packet one-way delay: 85.462 ms

Loss rate: 0.88%

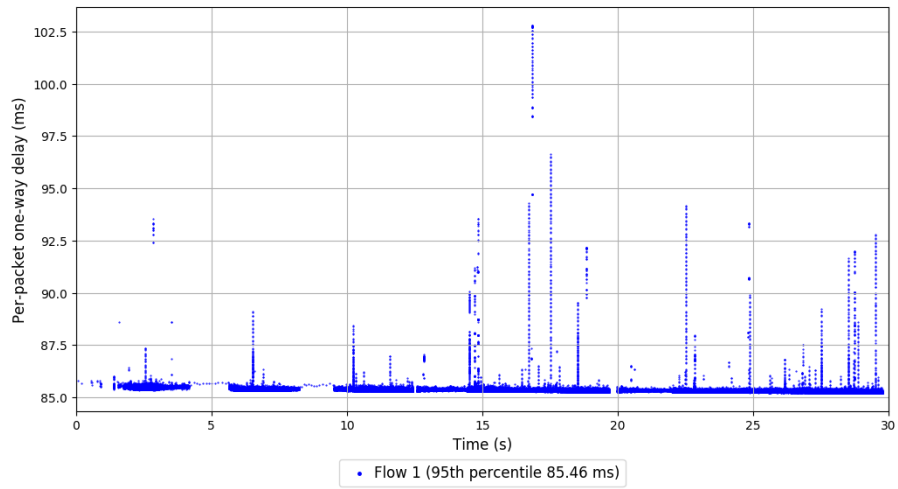
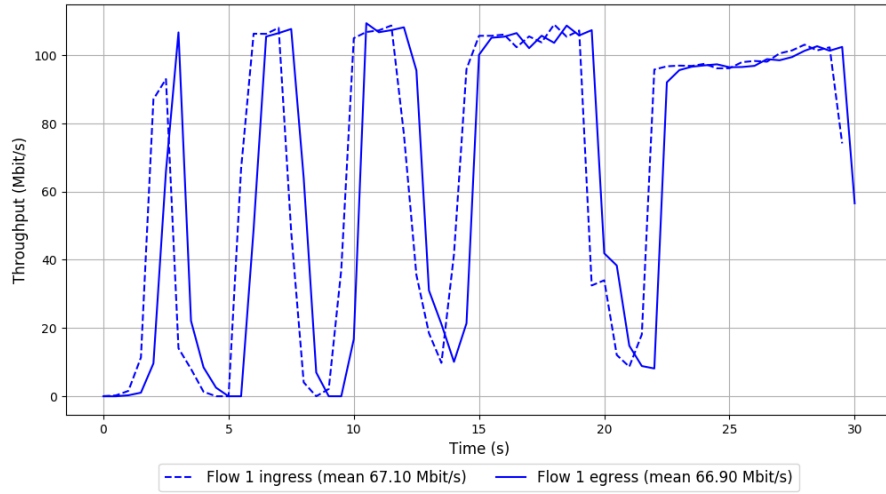
-- Flow 1:

Average throughput: 66.90 Mbit/s

95th percentile per-packet one-way delay: 85.462 ms

Loss rate: 0.88%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-04-23 18:53:33

End at: 2019-04-23 18:54:03

Local clock offset: 26.763 ms

Remote clock offset: 40.203 ms

# Below is generated by plot.py at 2019-04-23 21:56:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 75.41 Mbit/s

95th percentile per-packet one-way delay: 85.624 ms

Loss rate: 0.79%

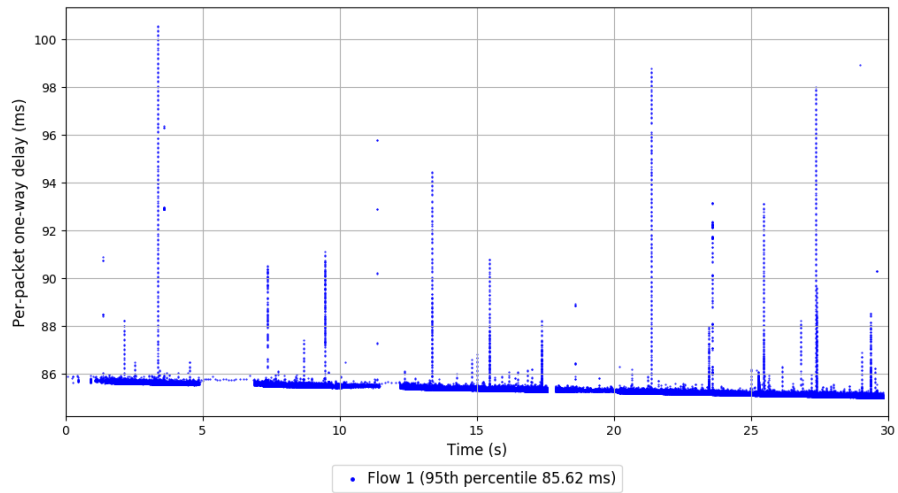
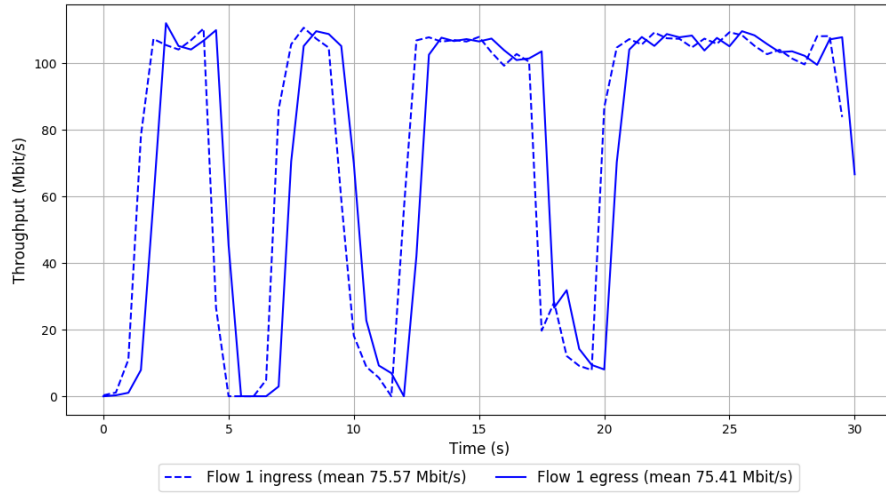
-- Flow 1:

Average throughput: 75.41 Mbit/s

95th percentile per-packet one-way delay: 85.624 ms

Loss rate: 0.79%

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





Run 4: Statistics of QUIC Cubic

Start at: 2019-04-23 19:25:02

End at: 2019-04-23 19:25:32

Local clock offset: 13.787 ms

Remote clock offset: 20.757 ms

# Below is generated by plot.py at 2019-04-23 21:56:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 65.80 Mbit/s

95th percentile per-packet one-way delay: 86.004 ms

Loss rate: 0.92%

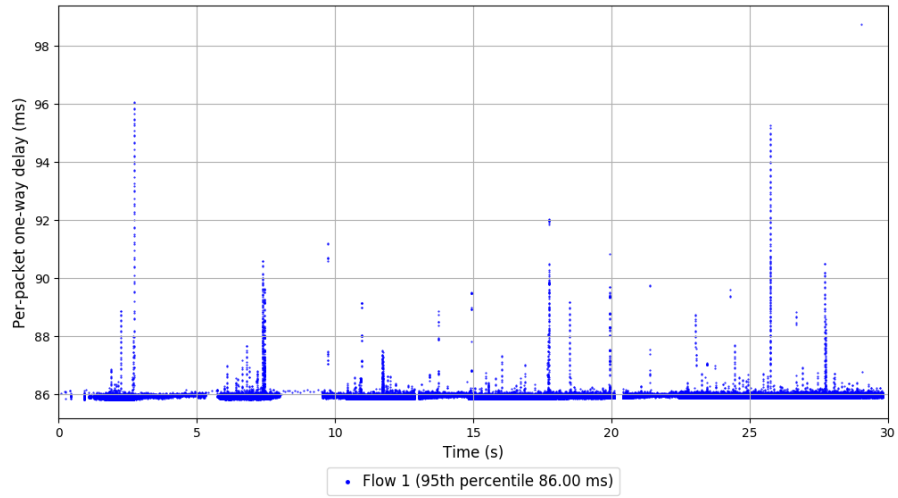
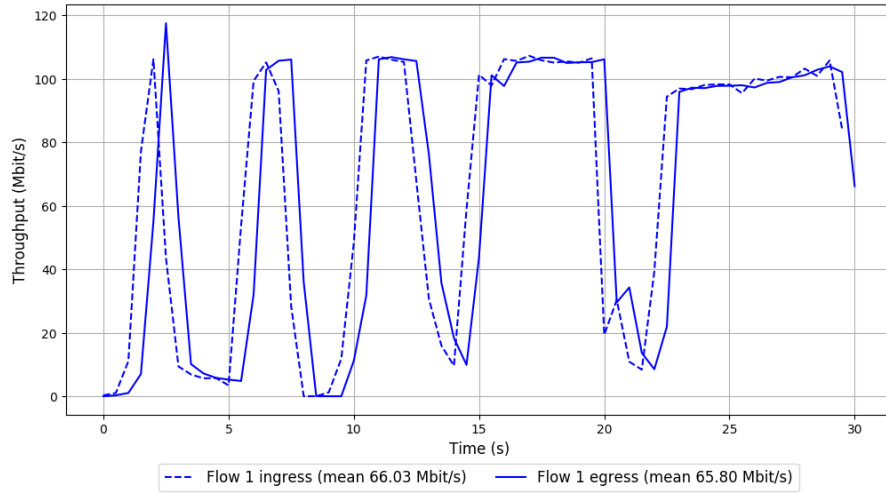
-- Flow 1:

Average throughput: 65.80 Mbit/s

95th percentile per-packet one-way delay: 86.004 ms

Loss rate: 0.92%

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



Run 5: Statistics of QUIC Cubic

Start at: 2019-04-23 19:55:50

End at: 2019-04-23 19:56:20

Local clock offset: 5.831 ms

Remote clock offset: 9.243 ms

# Below is generated by plot.py at 2019-04-23 21:56:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 59.68 Mbit/s

95th percentile per-packet one-way delay: 85.623 ms

Loss rate: 0.89%

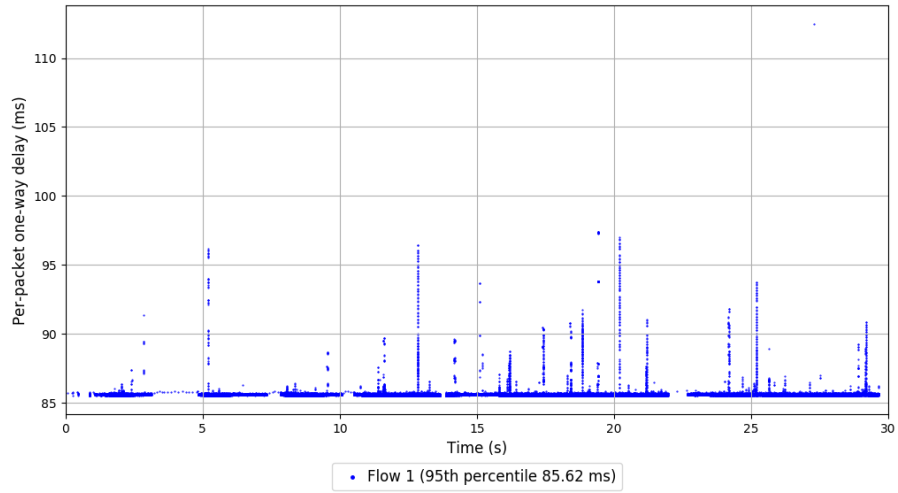
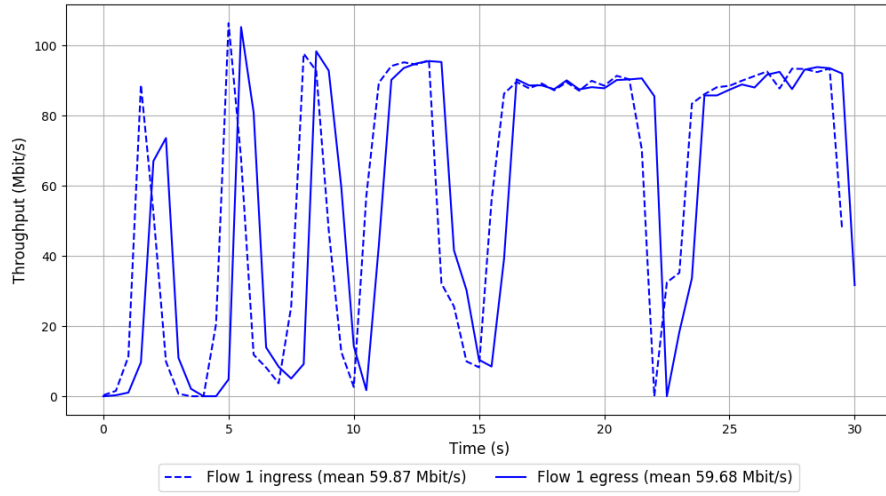
-- Flow 1:

Average throughput: 59.68 Mbit/s

95th percentile per-packet one-way delay: 85.623 ms

Loss rate: 0.89%

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



Run 1: Statistics of SCReAM

Start at: 2019-04-23 17:46:13

End at: 2019-04-23 17:46:43

Local clock offset: 2.064 ms

Remote clock offset: 3.642 ms

# Below is generated by plot.py at 2019-04-23 21:56:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.978 ms

Loss rate: 0.52%

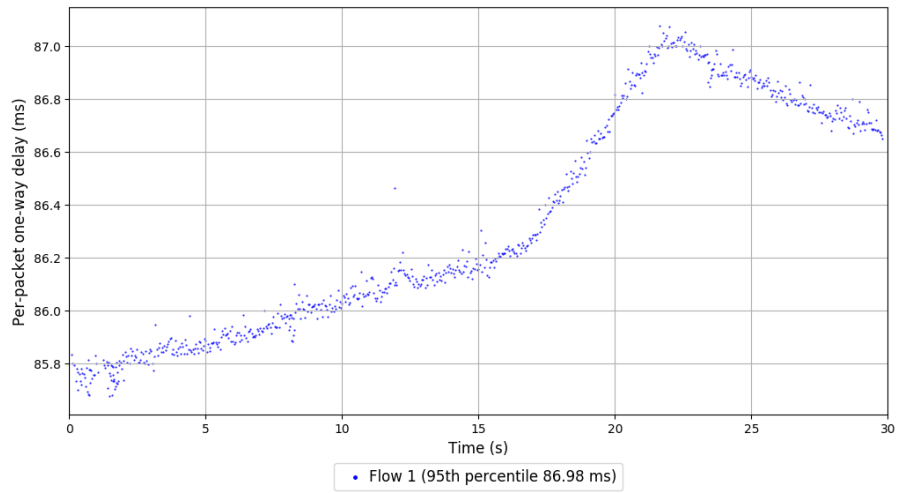
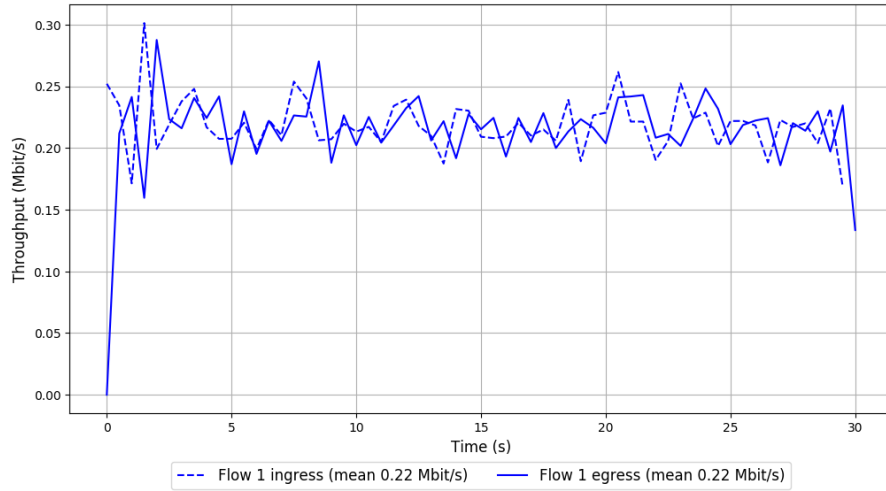
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.978 ms

Loss rate: 0.52%

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

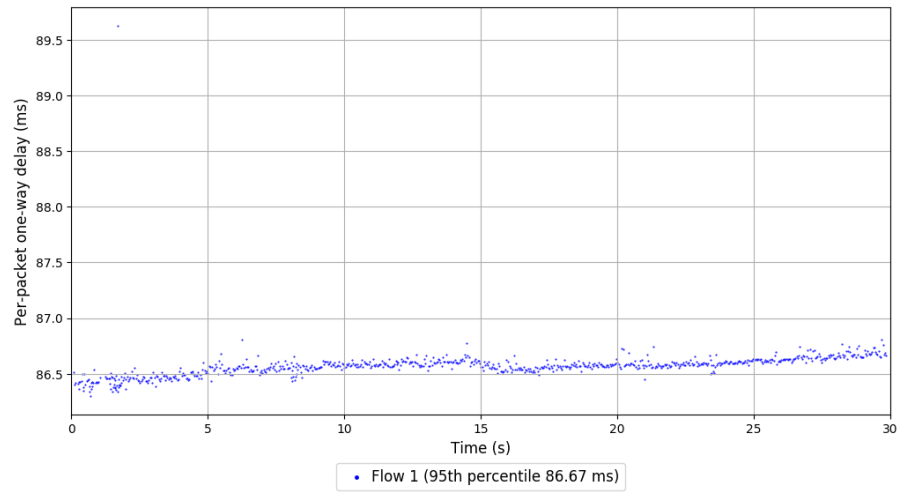
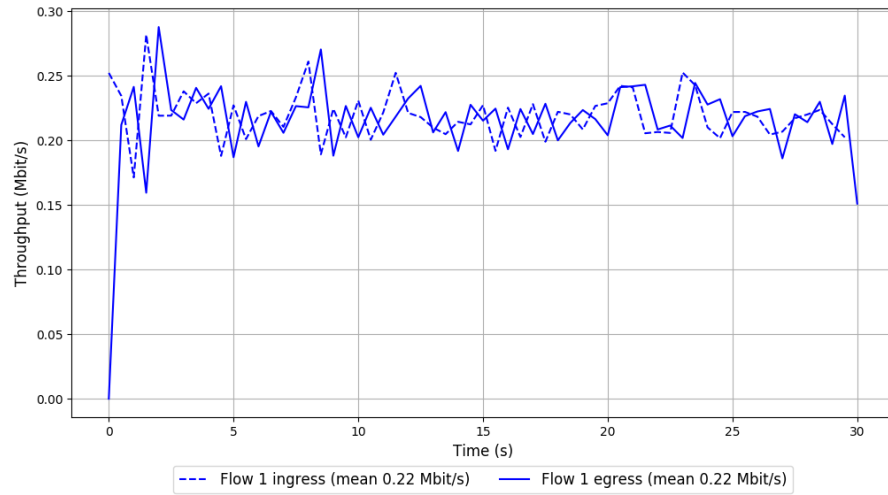


Run 2: Statistics of SCReAM

Start at: 2019-04-23 18:16:56  
End at: 2019-04-23 18:17:26  
Local clock offset: 17.629 ms  
Remote clock offset: 26.172 ms

# Below is generated by plot.py at 2019-04-23 21:56:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.675 ms  
Loss rate: 0.64%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.675 ms  
Loss rate: 0.64%

## Run 2: Report of SCReAM — Data Link



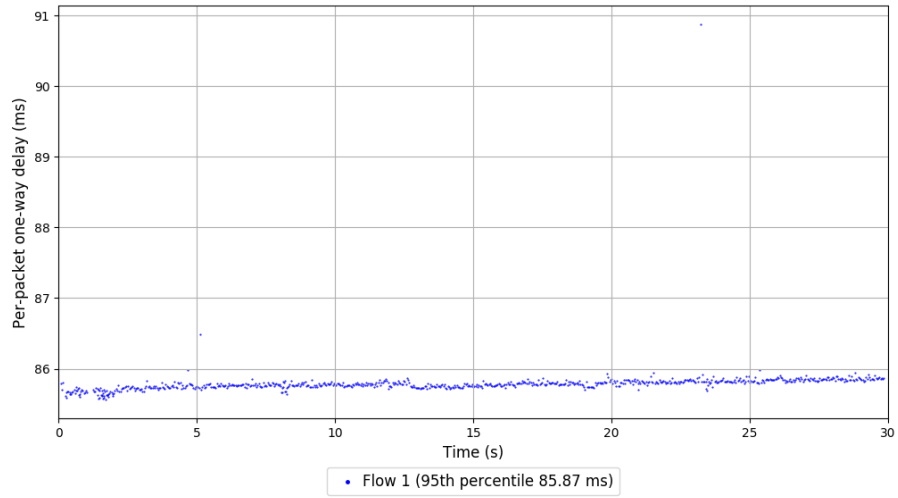
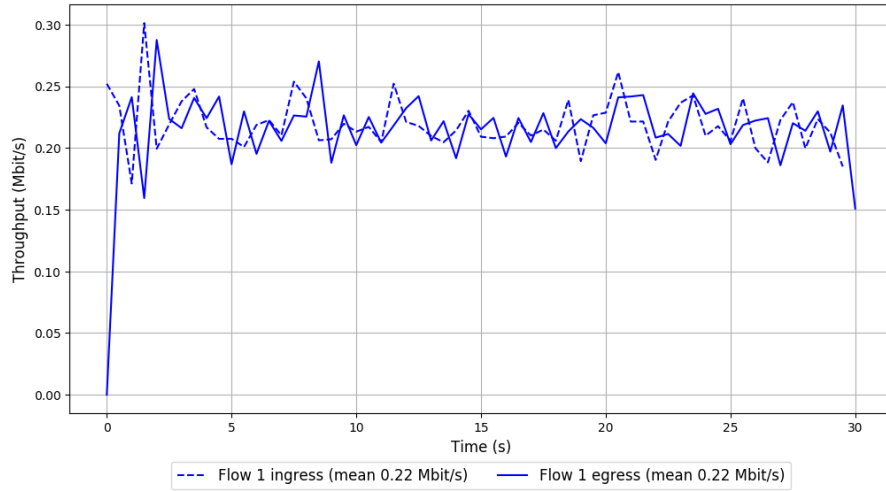


Run 3: Statistics of SCReAM

Start at: 2019-04-23 18:48:06  
End at: 2019-04-23 18:48:36  
Local clock offset: 24.918 ms  
Remote clock offset: 37.595 ms

# Below is generated by plot.py at 2019-04-23 21:56:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 85.869 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 85.869 ms  
Loss rate: 0.51%

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

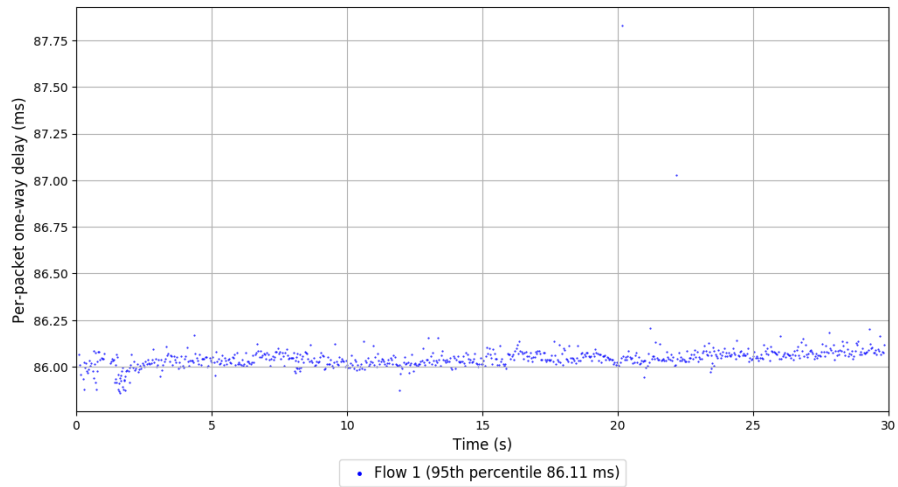
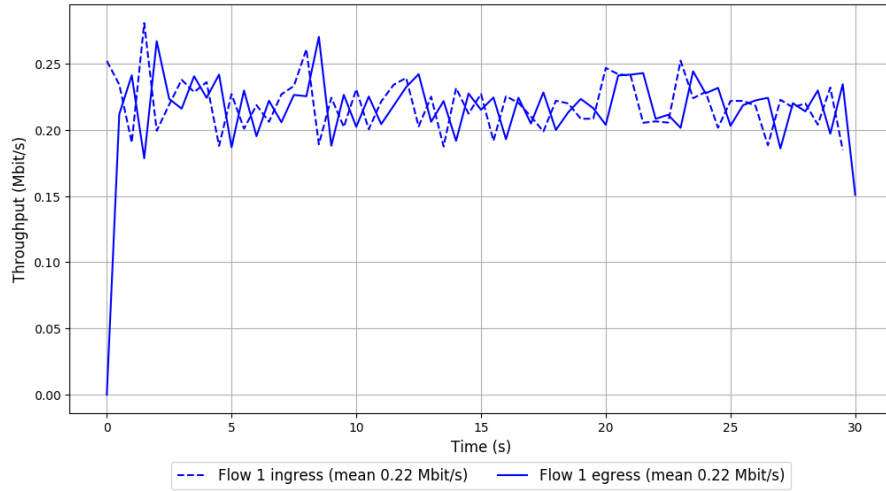


Run 4: Statistics of SCReAM

Start at: 2019-04-23 19:19:29  
End at: 2019-04-23 19:19:59  
Local clock offset: 12.118 ms  
Remote clock offset: 18.269 ms

# Below is generated by plot.py at 2019-04-23 21:56:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.112 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.112 ms  
Loss rate: 0.51%

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



Run 5: Statistics of SCReAM

Start at: 2019-04-23 19:50:39

End at: 2019-04-23 19:51:09

Local clock offset: 5.521 ms

Remote clock offset: 8.318 ms

# Below is generated by plot.py at 2019-04-23 21:56:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.084 ms

Loss rate: 0.51%

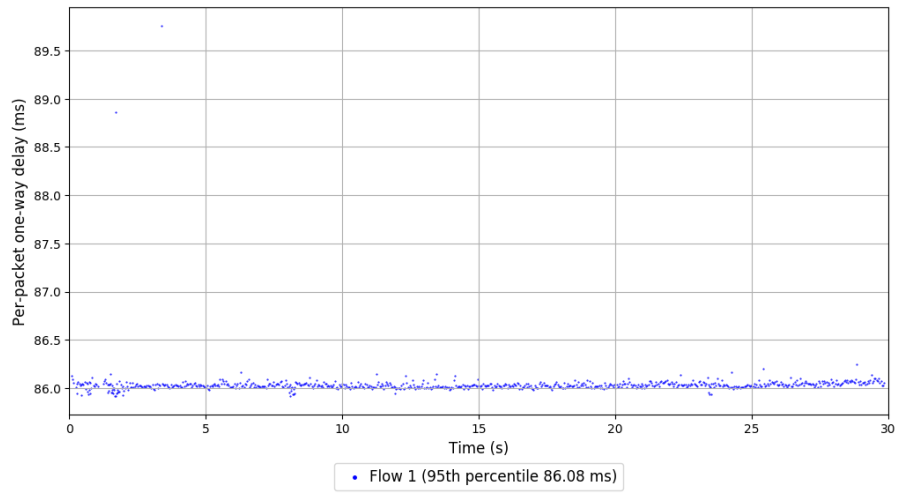
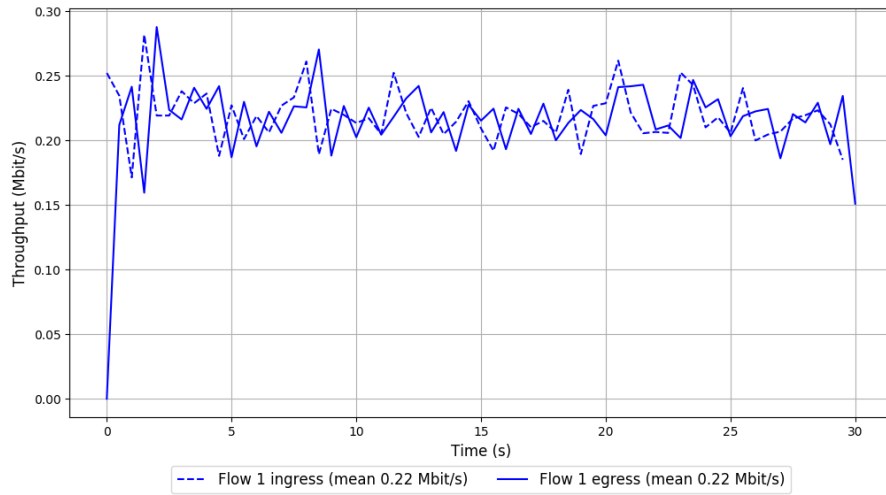
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.084 ms

Loss rate: 0.51%

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



Run 1: Statistics of Sprout

Start at: 2019-04-23 17:48:53

End at: 2019-04-23 17:49:23

Local clock offset: 5.085 ms

Remote clock offset: 8.531 ms

# Below is generated by plot.py at 2019-04-23 21:56:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 4.60 Mbit/s

95th percentile per-packet one-way delay: 85.801 ms

Loss rate: 0.10%

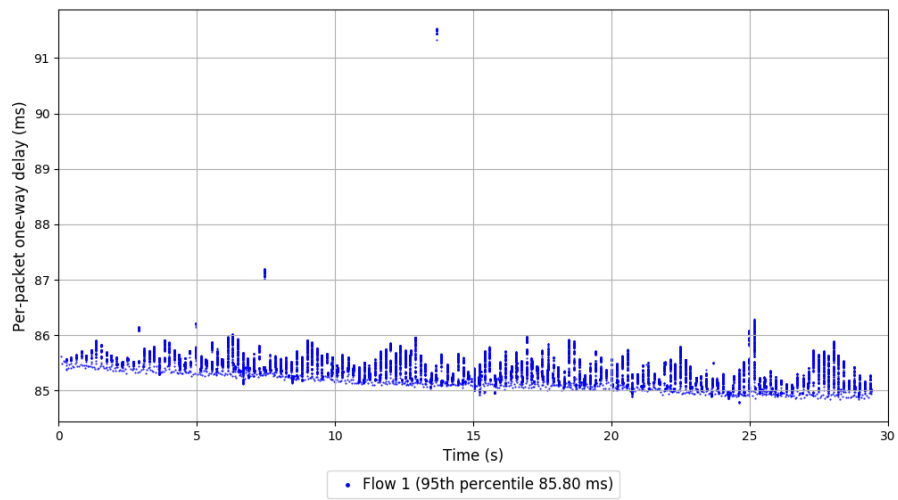
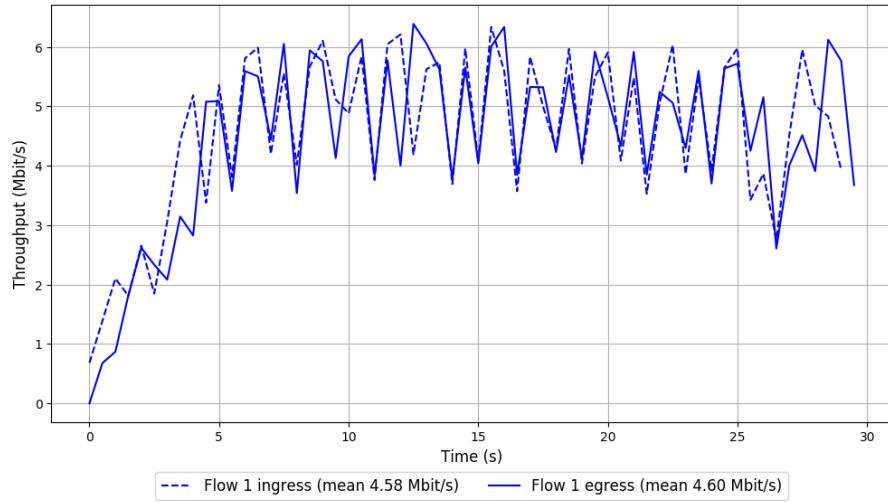
-- Flow 1:

Average throughput: 4.60 Mbit/s

95th percentile per-packet one-way delay: 85.801 ms

Loss rate: 0.10%

Run 1: Report of Sprout — Data Link



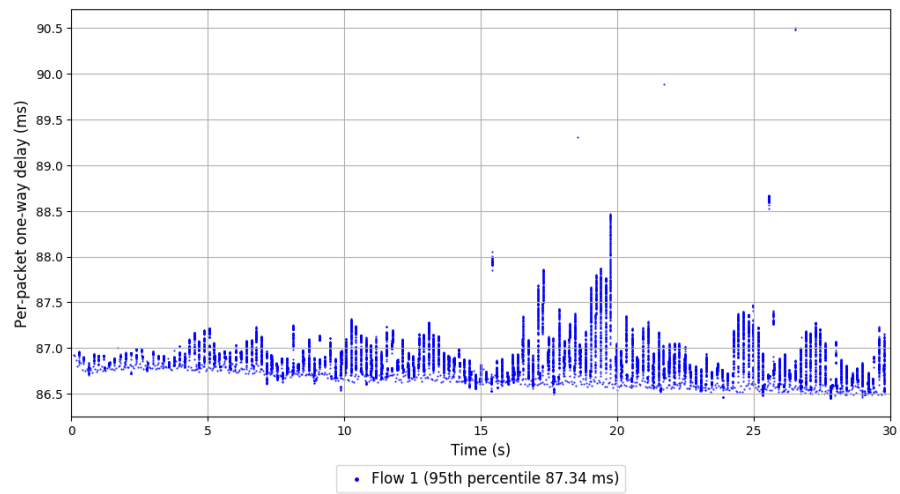
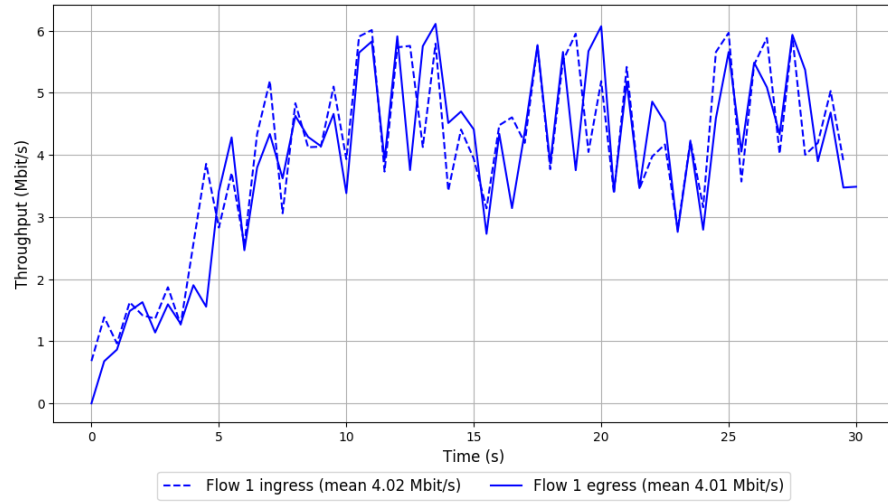


Run 2: Statistics of Sprout

Start at: 2019-04-23 18:19:43  
End at: 2019-04-23 18:20:13  
Local clock offset: 18.662 ms  
Remote clock offset: 26.755 ms

```
# Below is generated by plot.py at 2019-04-23 21:56:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 87.337 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 87.337 ms
Loss rate: 0.88%
```

## Run 2: Report of Sprout — Data Link

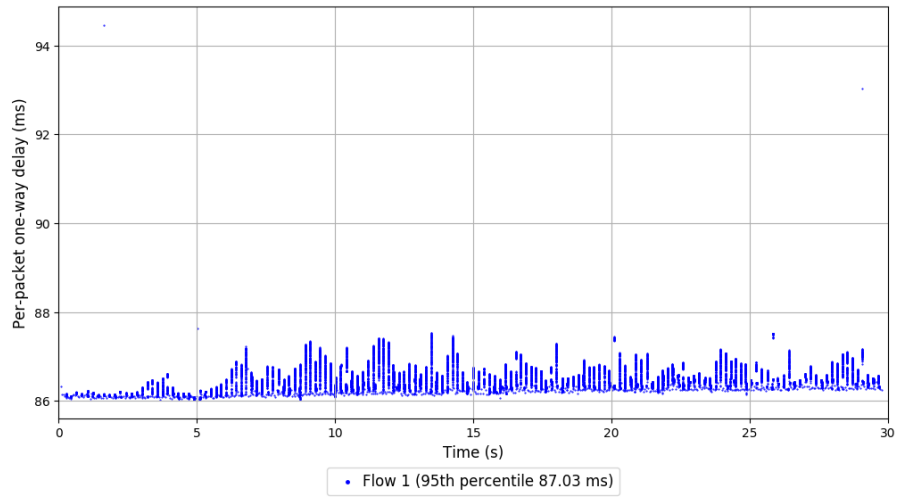
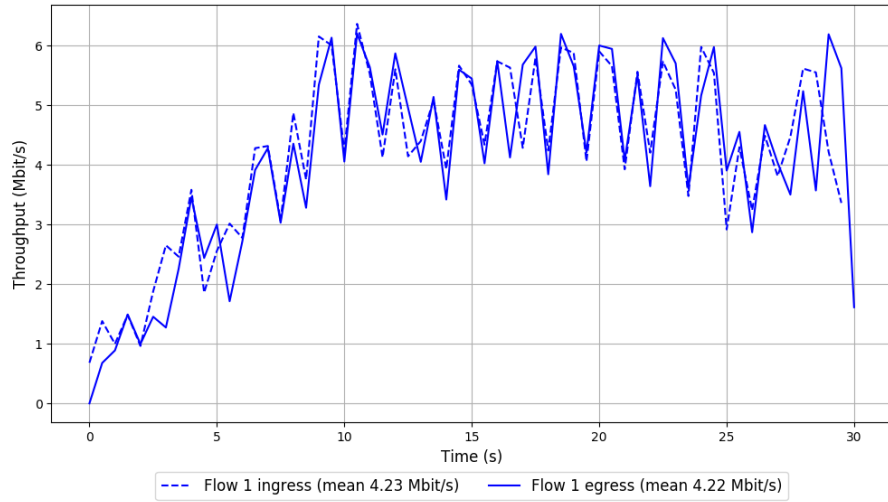


Run 3: Statistics of Sprout

Start at: 2019-04-23 18:50:54  
End at: 2019-04-23 18:51:24  
Local clock offset: 27.494 ms  
Remote clock offset: 40.817 ms

# Below is generated by plot.py at 2019-04-23 21:56:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.22 Mbit/s  
95th percentile per-packet one-way delay: 87.025 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 4.22 Mbit/s  
95th percentile per-packet one-way delay: 87.025 ms  
Loss rate: 0.69%

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



Run 4: Statistics of Sprout

Start at: 2019-04-23 19:22:18

End at: 2019-04-23 19:22:48

Local clock offset: 13.165 ms

Remote clock offset: 19.46 ms

# Below is generated by plot.py at 2019-04-23 21:56:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 4.59 Mbit/s

95th percentile per-packet one-way delay: 86.905 ms

Loss rate: 0.58%

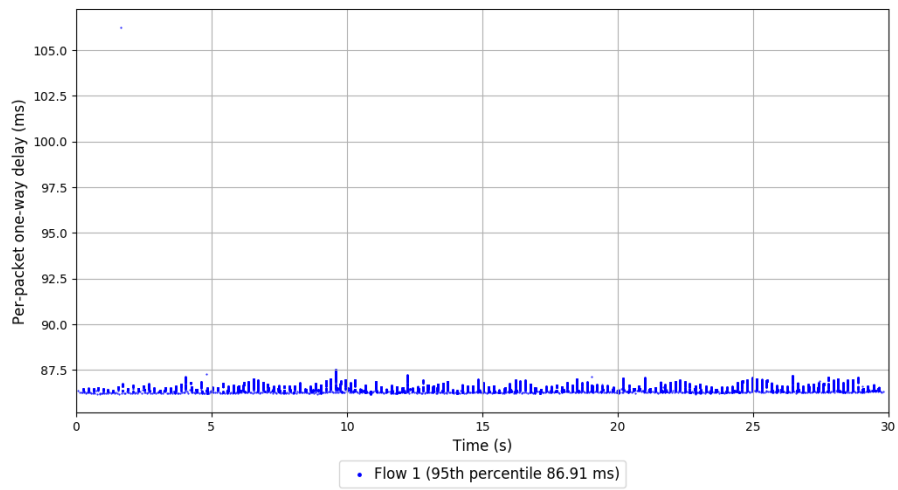
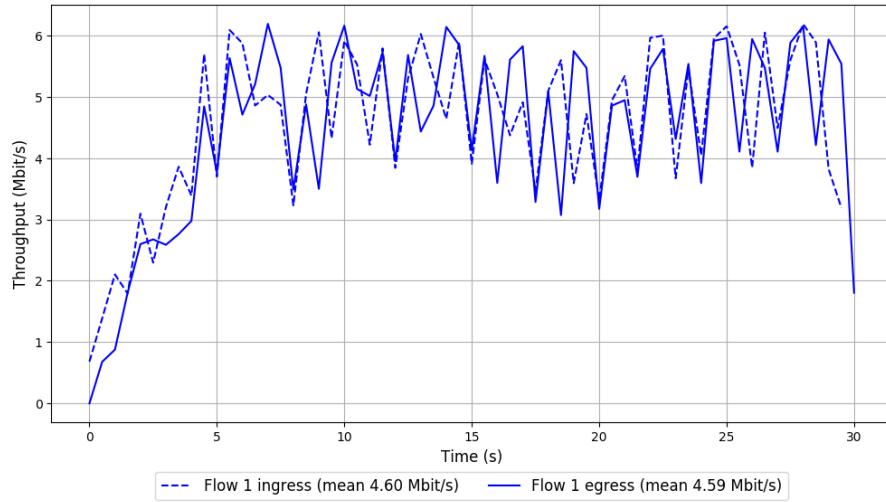
-- Flow 1:

Average throughput: 4.59 Mbit/s

95th percentile per-packet one-way delay: 86.905 ms

Loss rate: 0.58%

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



Run 5: Statistics of Sprout

Start at: 2019-04-23 19:53:26

End at: 2019-04-23 19:53:56

Local clock offset: 5.965 ms

Remote clock offset: 8.806 ms

# Below is generated by plot.py at 2019-04-23 21:56:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 86.812 ms

Loss rate: 0.34%

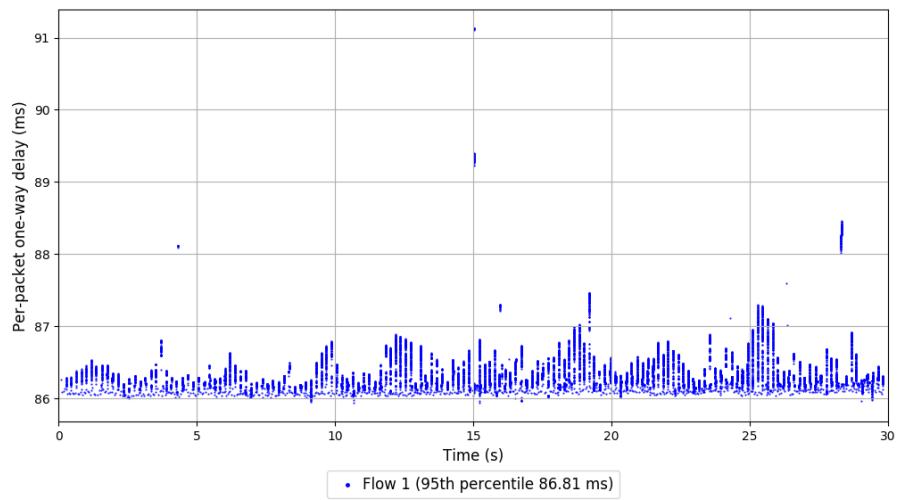
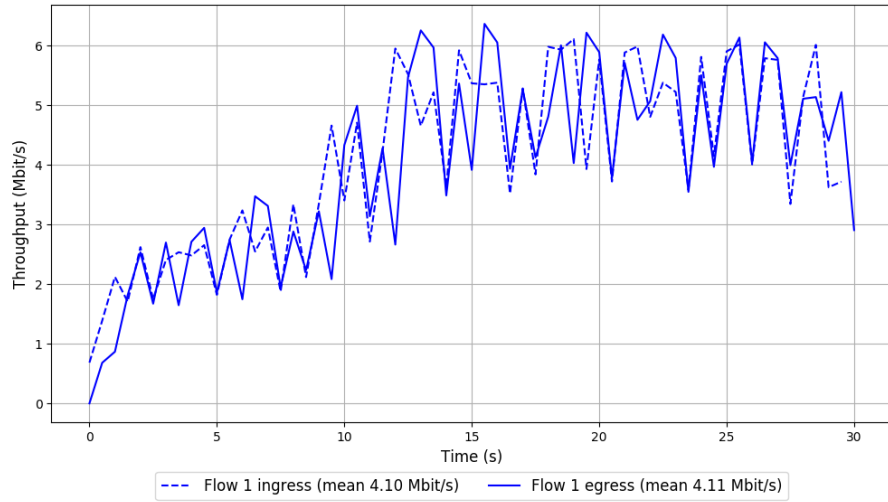
-- Flow 1:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 86.812 ms

Loss rate: 0.34%

Run 5: Report of Sprout — Data Link





Run 1: Statistics of TaoVA-100x

Start at: 2019-04-23 18:06:25

End at: 2019-04-23 18:06:55

Local clock offset: 9.194 ms

Remote clock offset: 14.222 ms

# Below is generated by plot.py at 2019-04-23 21:57:55

# Datalink statistics

-- Total of 1 flow:

Average throughput: 226.15 Mbit/s

95th percentile per-packet one-way delay: 86.046 ms

Loss rate: 0.62%

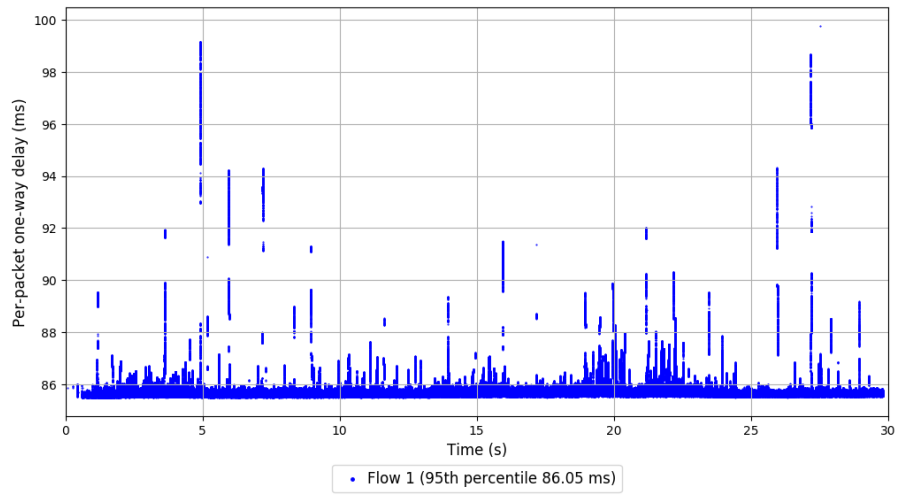
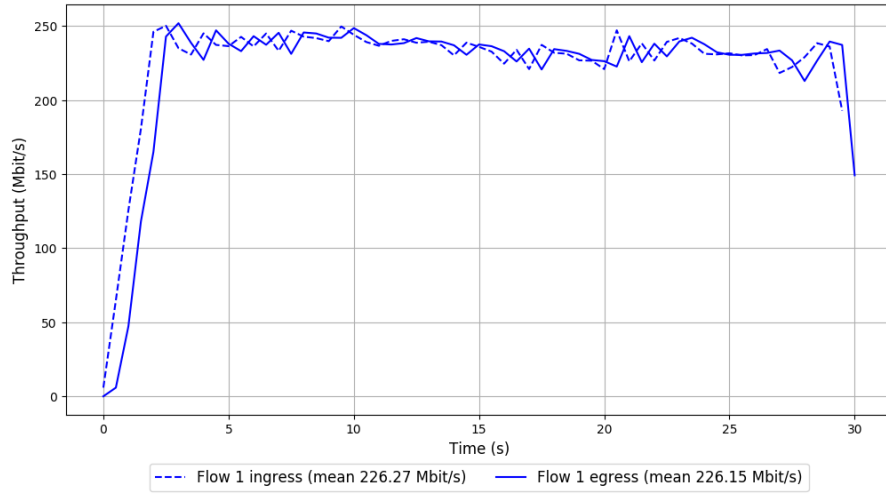
-- Flow 1:

Average throughput: 226.15 Mbit/s

95th percentile per-packet one-way delay: 86.046 ms

Loss rate: 0.62%

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

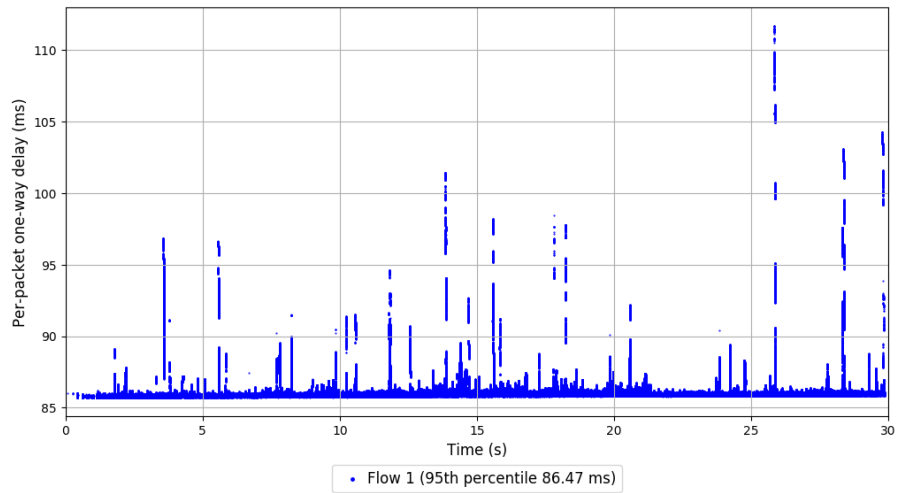
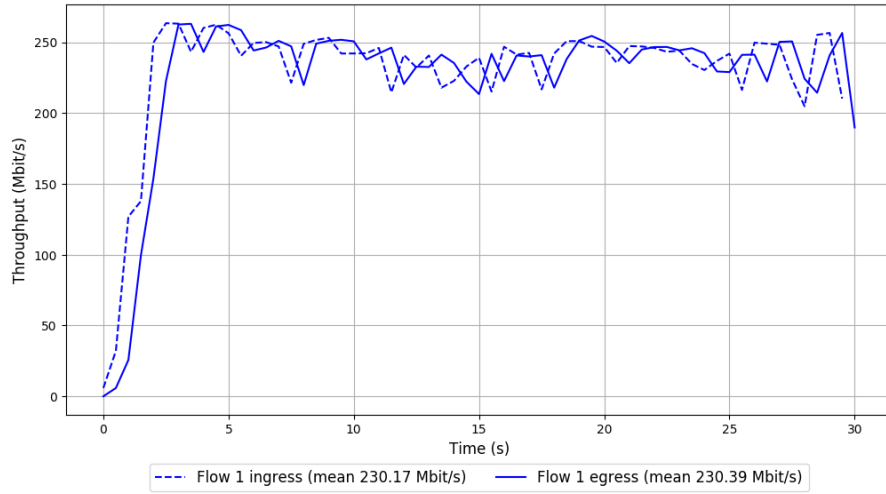


Run 2: Statistics of TaoVA-100x

Start at: 2019-04-23 18:37:35  
End at: 2019-04-23 18:38:05  
Local clock offset: 17.696 ms  
Remote clock offset: 26.621 ms

# Below is generated by plot.py at 2019-04-23 21:58:15  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 230.39 Mbit/s  
95th percentile per-packet one-way delay: 86.475 ms  
Loss rate: 0.48%  
-- Flow 1:  
Average throughput: 230.39 Mbit/s  
95th percentile per-packet one-way delay: 86.475 ms  
Loss rate: 0.48%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-04-23 19:08:58

End at: 2019-04-23 19:09:28

Local clock offset: 10.948 ms

Remote clock offset: 16.371 ms

# Below is generated by plot.py at 2019-04-23 21:59:37

# Datalink statistics

-- Total of 1 flow:

Average throughput: 218.64 Mbit/s

95th percentile per-packet one-way delay: 86.534 ms

Loss rate: 0.63%

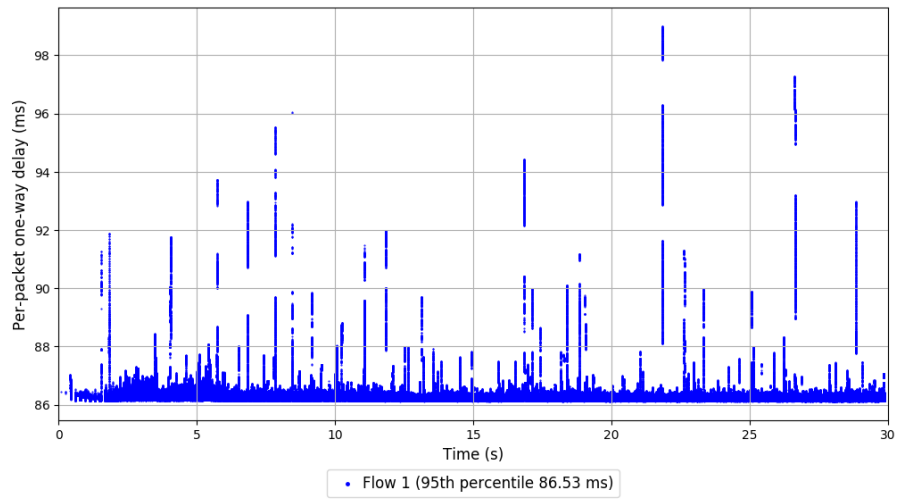
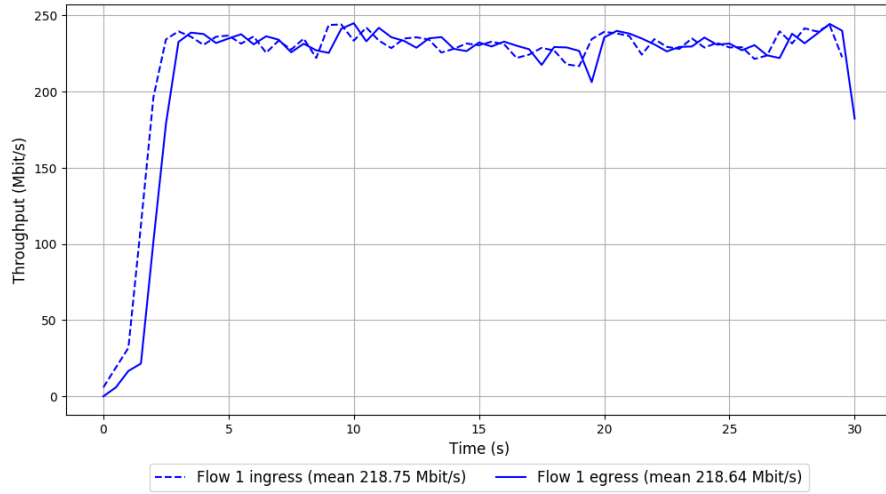
-- Flow 1:

Average throughput: 218.64 Mbit/s

95th percentile per-packet one-way delay: 86.534 ms

Loss rate: 0.63%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-04-23 19:40:32

End at: 2019-04-23 19:41:02

Local clock offset: 5.404 ms

Remote clock offset: 8.458 ms

# Below is generated by plot.py at 2019-04-23 21:59:56

# Datalink statistics

-- Total of 1 flow:

Average throughput: 226.89 Mbit/s

95th percentile per-packet one-way delay: 85.835 ms

Loss rate: 0.57%

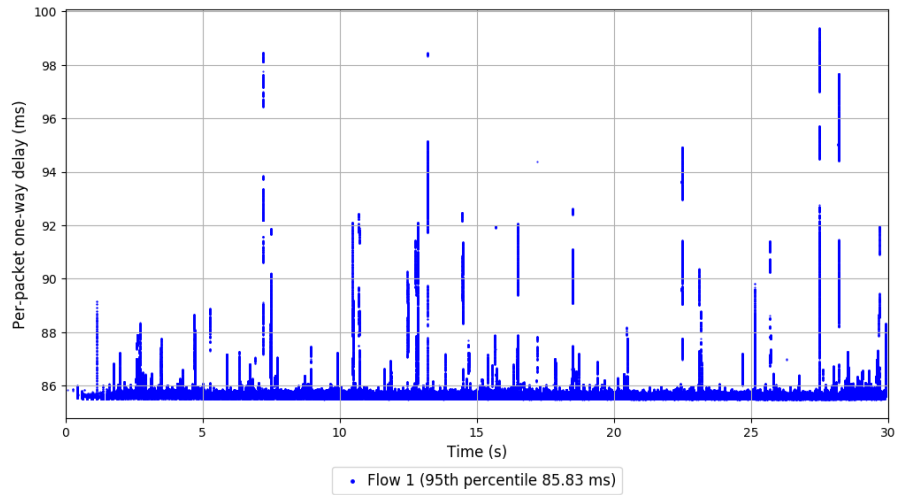
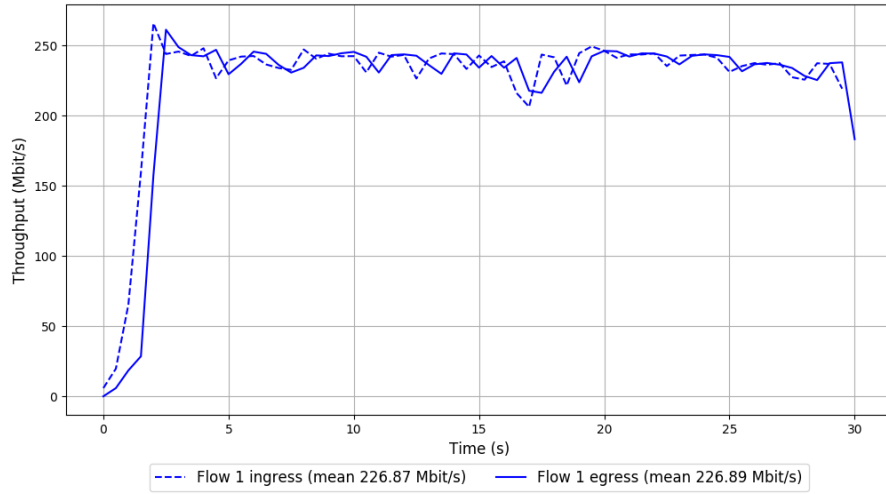
-- Flow 1:

Average throughput: 226.89 Mbit/s

95th percentile per-packet one-way delay: 85.835 ms

Loss rate: 0.57%

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





Run 5: Statistics of TaoVA-100x

Start at: 2019-04-23 20:11:08

End at: 2019-04-23 20:11:38

Local clock offset: 3.407 ms

Remote clock offset: 3.939 ms

# Below is generated by plot.py at 2019-04-23 22:00:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 225.20 Mbit/s

95th percentile per-packet one-way delay: 87.041 ms

Loss rate: 0.64%

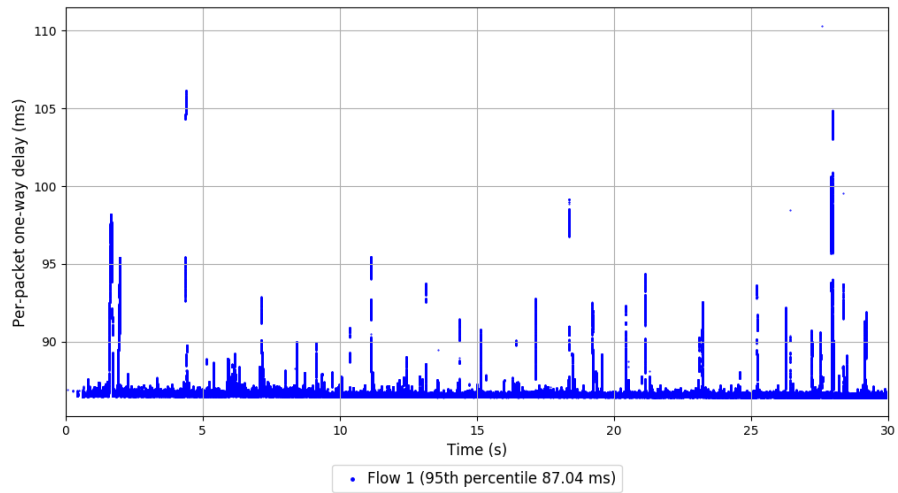
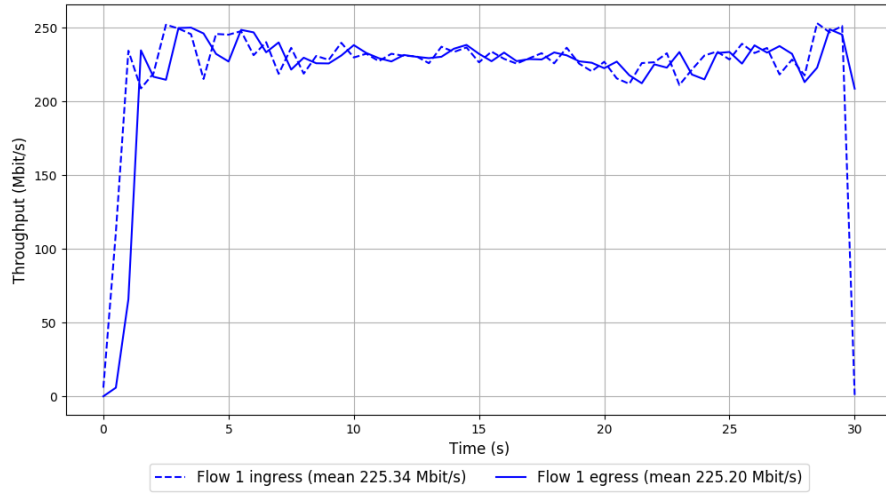
-- Flow 1:

Average throughput: 225.20 Mbit/s

95th percentile per-packet one-way delay: 87.041 ms

Loss rate: 0.64%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-04-23 17:50:02

End at: 2019-04-23 17:50:32

Local clock offset: 4.137 ms

Remote clock offset: 6.313 ms

# Below is generated by plot.py at 2019-04-23 22:01:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 374.95 Mbit/s

95th percentile per-packet one-way delay: 117.838 ms

Loss rate: 0.51%

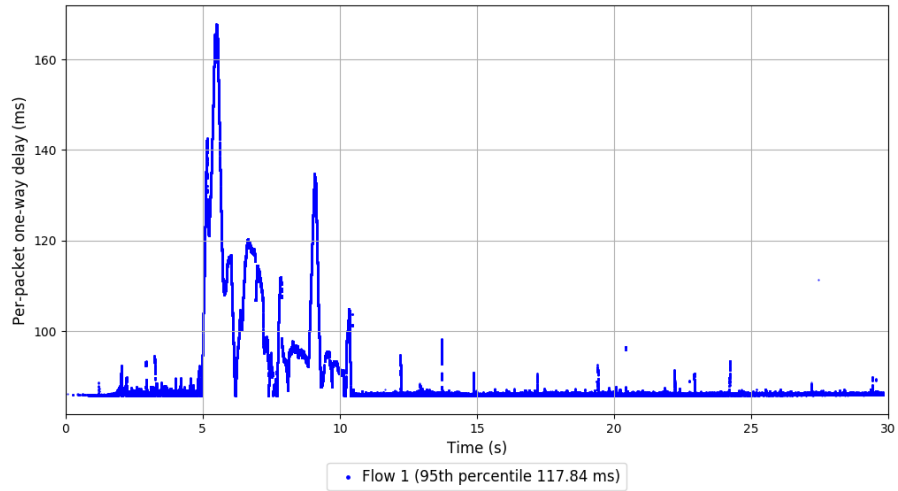
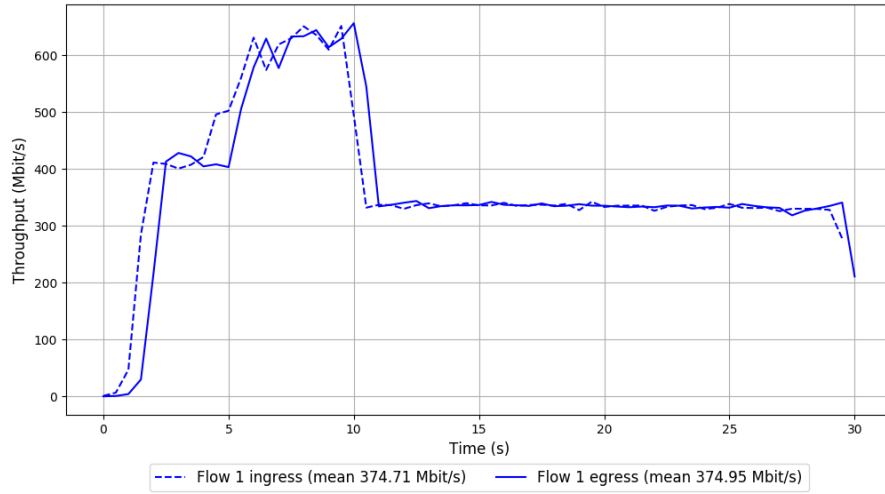
-- Flow 1:

Average throughput: 374.95 Mbit/s

95th percentile per-packet one-way delay: 117.838 ms

Loss rate: 0.51%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-04-23 18:20:53  
End at: 2019-04-23 18:21:23  
Local clock offset: 16.987 ms  
Remote clock offset: 25.084 ms

# Below is generated by plot.py at 2019-04-23 22:02:03

# Datalink statistics

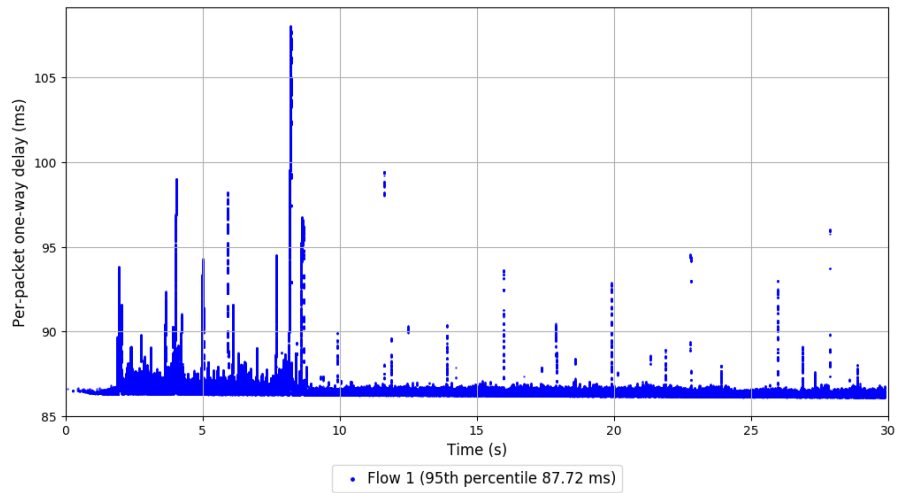
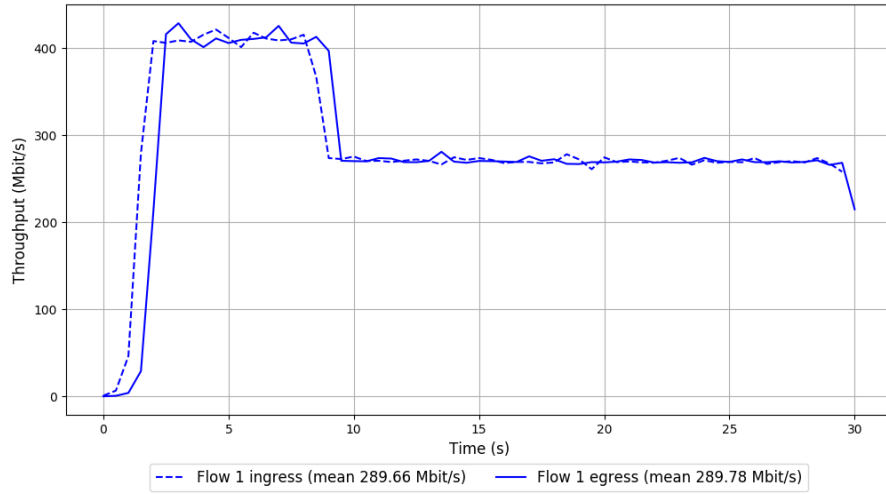
-- Total of 1 flow:

Average throughput: 289.78 Mbit/s  
95th percentile per-packet one-way delay: 87.716 ms  
Loss rate: 0.54%

-- Flow 1:

Average throughput: 289.78 Mbit/s  
95th percentile per-packet one-way delay: 87.716 ms  
Loss rate: 0.54%

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



Run 3: Statistics of TCP Vegas

Start at: 2019-04-23 18:52:03

End at: 2019-04-23 18:52:33

Local clock offset: 28.26 ms

Remote clock offset: 42.195 ms

# Below is generated by plot.py at 2019-04-23 22:04:49

# Datalink statistics

-- Total of 1 flow:

Average throughput: 405.74 Mbit/s

95th percentile per-packet one-way delay: 120.557 ms

Loss rate: 0.48%

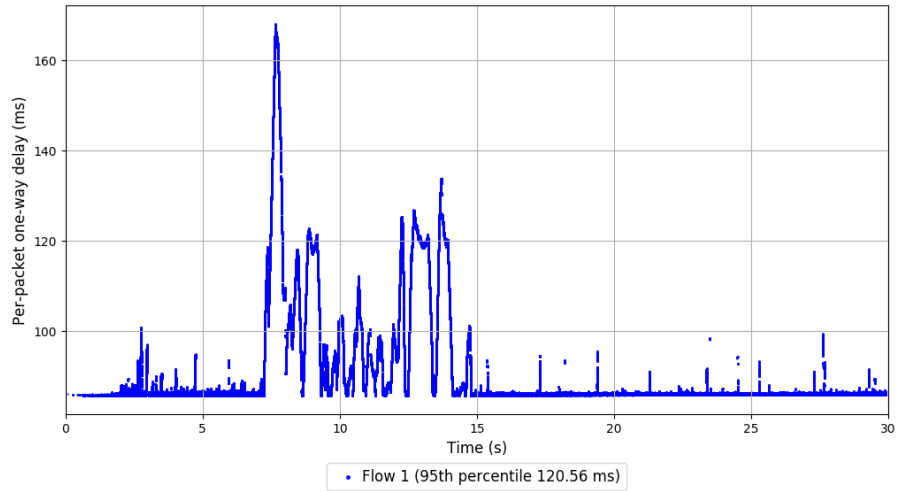
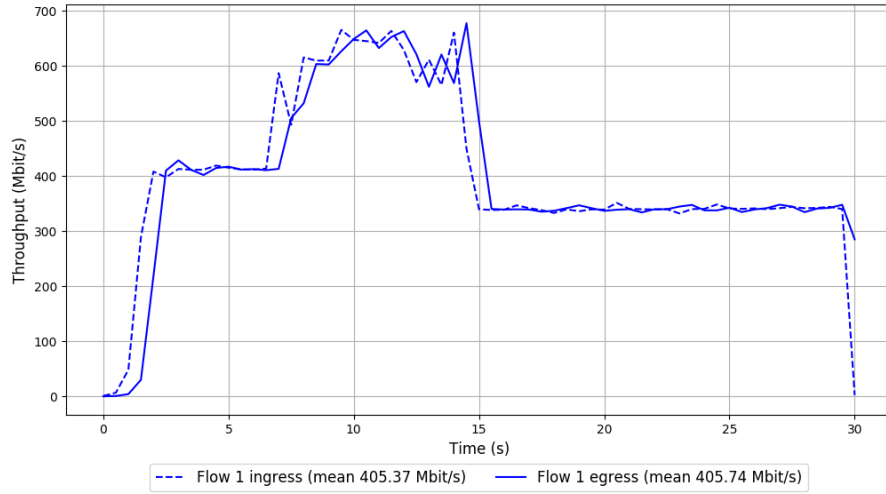
-- Flow 1:

Average throughput: 405.74 Mbit/s

95th percentile per-packet one-way delay: 120.557 ms

Loss rate: 0.48%

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





Run 4: Statistics of TCP Vegas

Start at: 2019-04-23 19:23:27  
End at: 2019-04-23 19:23:57  
Local clock offset: 13.206 ms  
Remote clock offset: 20.093 ms

# Below is generated by plot.py at 2019-04-23 22:06:33

# Datalink statistics

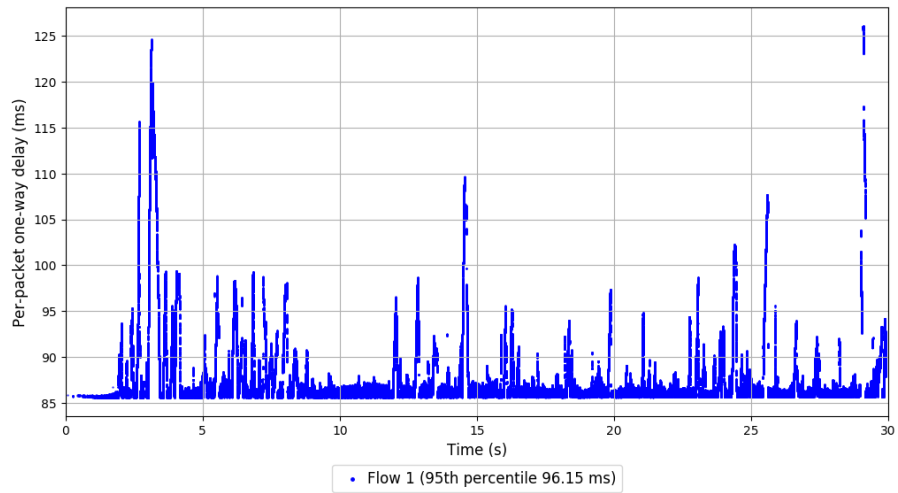
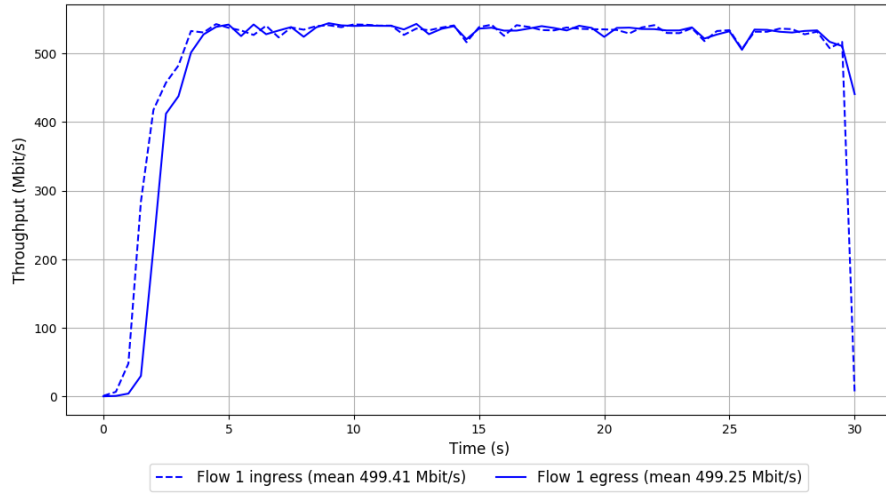
-- Total of 1 flow:

Average throughput: 499.25 Mbit/s  
95th percentile per-packet one-way delay: 96.152 ms  
Loss rate: 0.61%

-- Flow 1:

Average throughput: 499.25 Mbit/s  
95th percentile per-packet one-way delay: 96.152 ms  
Loss rate: 0.61%

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



Run 5: Statistics of TCP Vegas

Start at: 2019-04-23 19:54:36

End at: 2019-04-23 19:55:06

Local clock offset: 5.655 ms

Remote clock offset: 8.989 ms

# Below is generated by plot.py at 2019-04-23 22:06:33

# Datalink statistics

-- Total of 1 flow:

Average throughput: 85.26 Mbit/s

95th percentile per-packet one-way delay: 86.584 ms

Loss rate: 0.35%

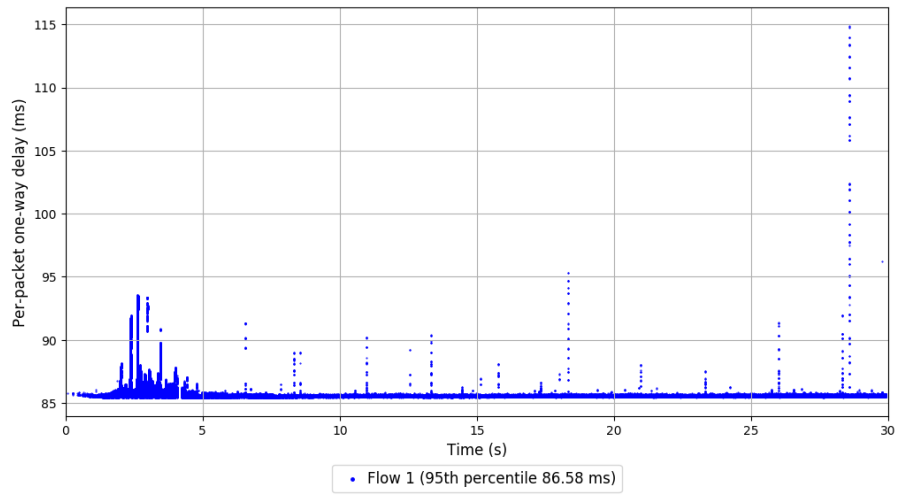
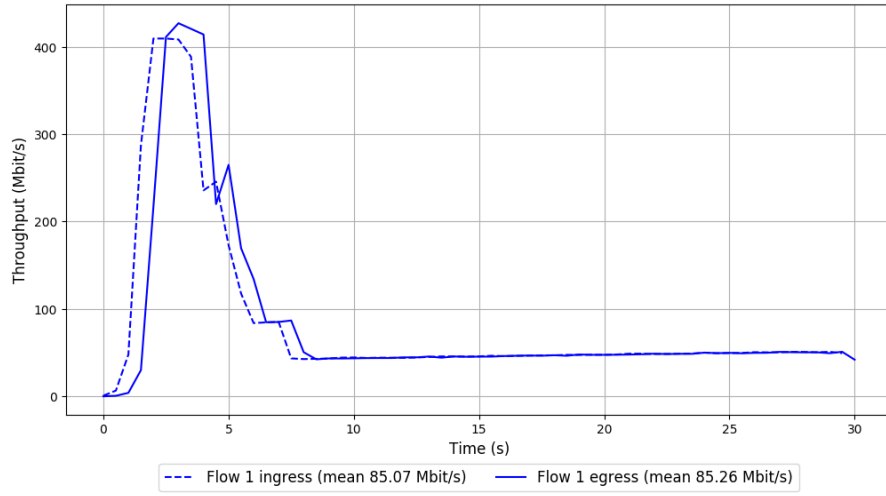
-- Flow 1:

Average throughput: 85.26 Mbit/s

95th percentile per-packet one-way delay: 86.584 ms

Loss rate: 0.35%

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

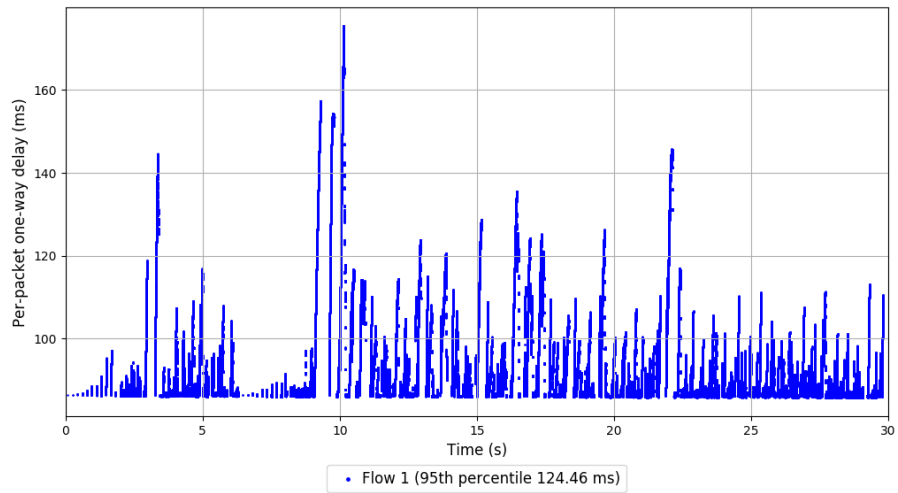
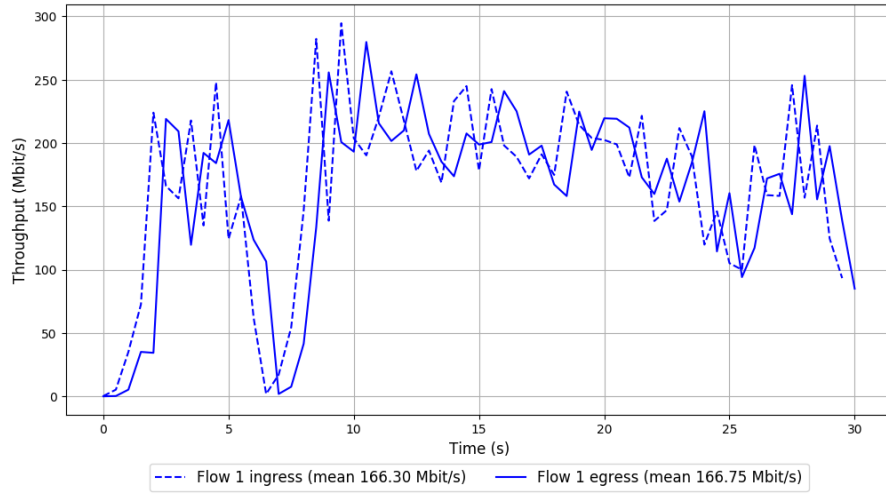


Run 1: Statistics of Verus

Start at: 2019-04-23 18:01:53  
End at: 2019-04-23 18:02:23  
Local clock offset: 12.851 ms  
Remote clock offset: 18.778 ms

# Below is generated by plot.py at 2019-04-23 22:06:33  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 166.75 Mbit/s  
95th percentile per-packet one-way delay: 124.462 ms  
Loss rate: 0.41%  
-- Flow 1:  
Average throughput: 166.75 Mbit/s  
95th percentile per-packet one-way delay: 124.462 ms  
Loss rate: 0.41%

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

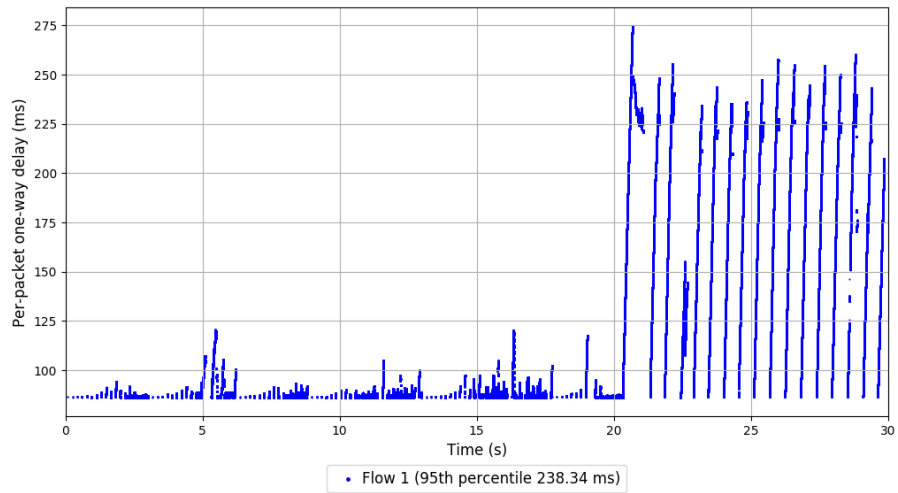
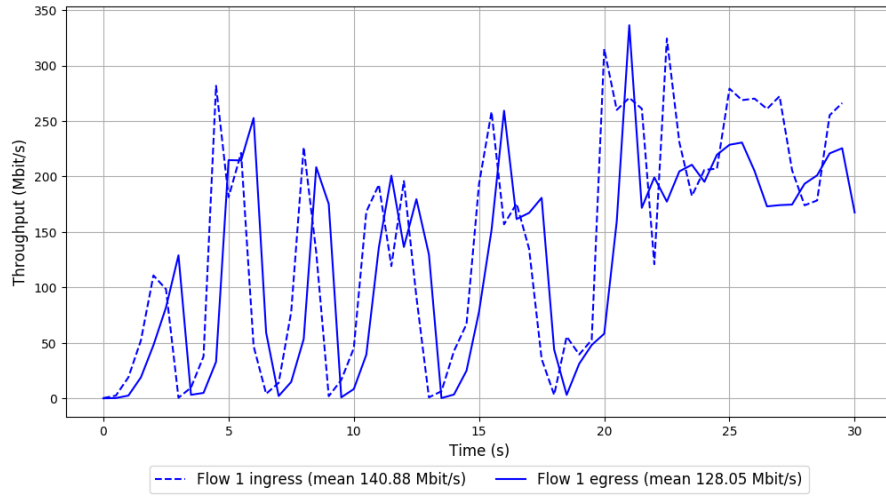


Run 2: Statistics of Verus

Start at: 2019-04-23 18:33:01  
End at: 2019-04-23 18:33:31  
Local clock offset: 15.766 ms  
Remote clock offset: 23.209 ms

# Below is generated by plot.py at 2019-04-23 22:06:33  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 128.05 Mbit/s  
95th percentile per-packet one-way delay: 238.335 ms  
Loss rate: 8.97%  
-- Flow 1:  
Average throughput: 128.05 Mbit/s  
95th percentile per-packet one-way delay: 238.335 ms  
Loss rate: 8.97%

## Run 2: Report of Verus — Data Link



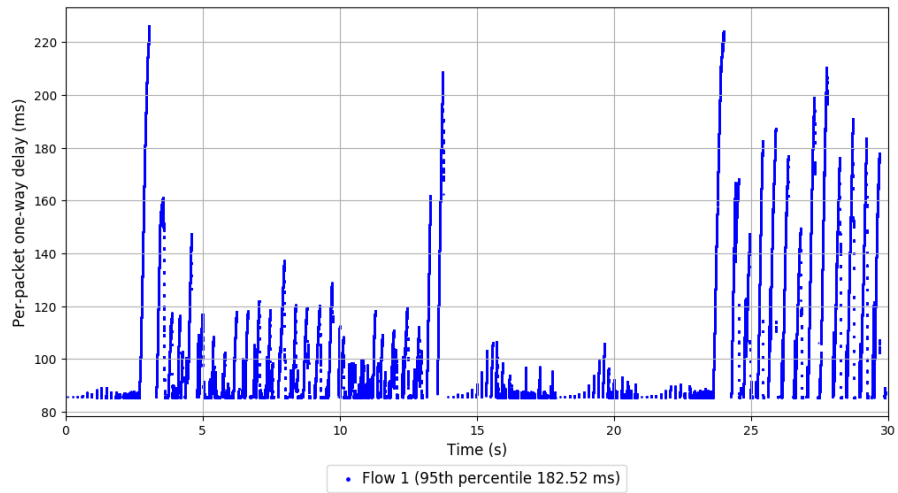
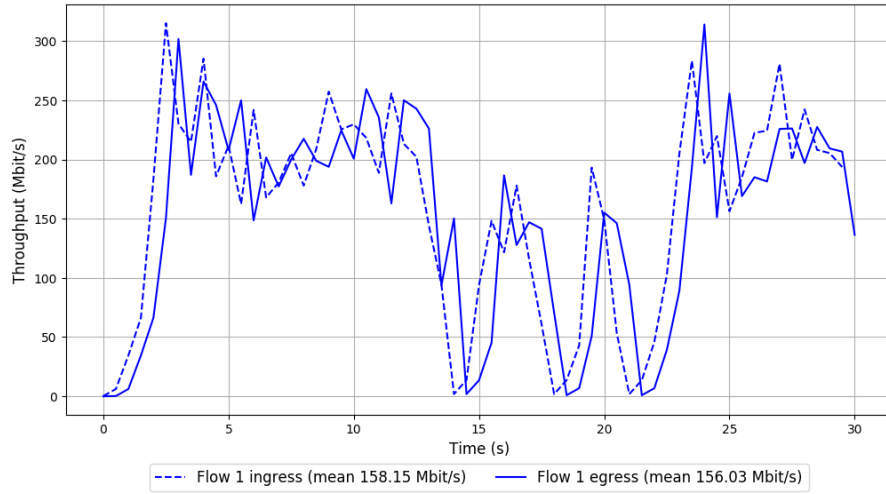


Run 3: Statistics of Verus

Start at: 2019-04-23 19:04:29  
End at: 2019-04-23 19:04:59  
Local clock offset: 11.931 ms  
Remote clock offset: 18.228 ms

# Below is generated by plot.py at 2019-04-23 22:06:33  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 156.03 Mbit/s  
95th percentile per-packet one-way delay: 182.520 ms  
Loss rate: 1.90%  
-- Flow 1:  
Average throughput: 156.03 Mbit/s  
95th percentile per-packet one-way delay: 182.520 ms  
Loss rate: 1.90%

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



Run 4: Statistics of Verus

Start at: 2019-04-23 19:35:58

End at: 2019-04-23 19:36:28

Local clock offset: 7.071 ms

Remote clock offset: 10.342 ms

# Below is generated by plot.py at 2019-04-23 22:06:33

# Datalink statistics

-- Total of 1 flow:

Average throughput: 150.72 Mbit/s

95th percentile per-packet one-way delay: 214.317 ms

Loss rate: 3.47%

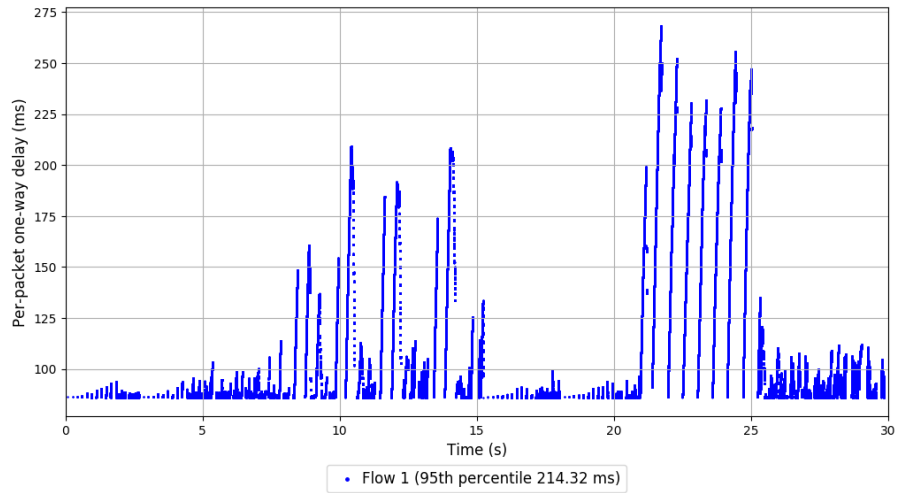
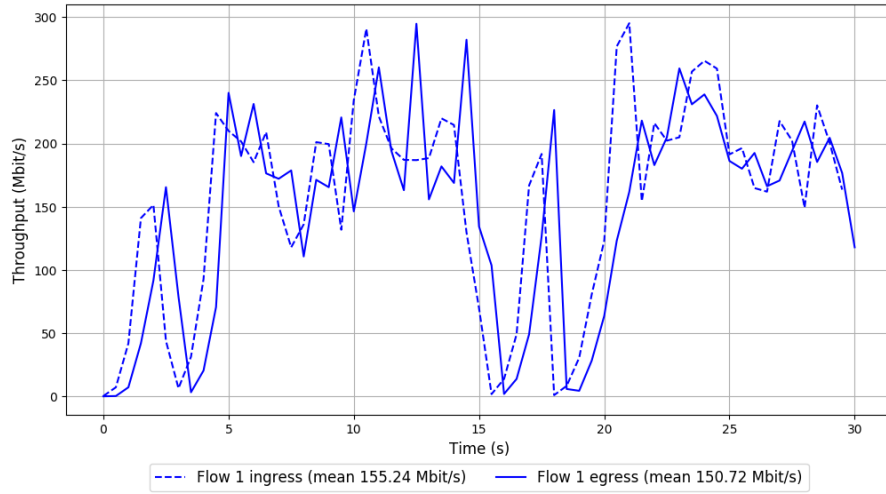
-- Flow 1:

Average throughput: 150.72 Mbit/s

95th percentile per-packet one-way delay: 214.317 ms

Loss rate: 3.47%

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



Run 5: Statistics of Verus

Start at: 2019-04-23 20:06:45

End at: 2019-04-23 20:07:15

Local clock offset: 3.985 ms

Remote clock offset: 5.835 ms

# Below is generated by plot.py at 2019-04-23 22:06:33

# Datalink statistics

-- Total of 1 flow:

Average throughput: 124.26 Mbit/s

95th percentile per-packet one-way delay: 117.999 ms

Loss rate: 0.12%

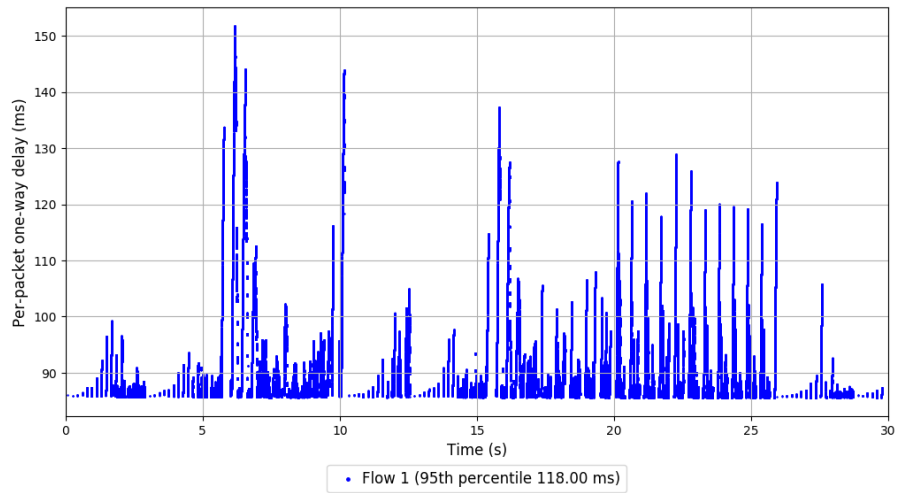
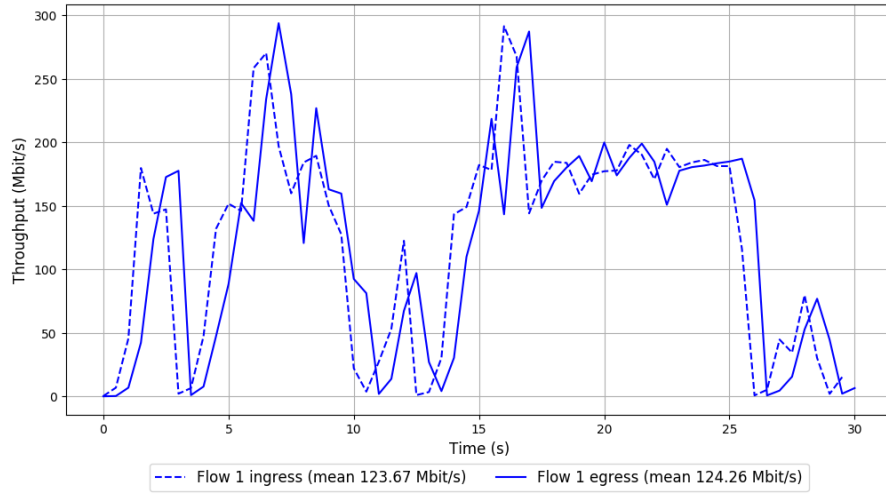
-- Flow 1:

Average throughput: 124.26 Mbit/s

95th percentile per-packet one-way delay: 117.999 ms

Loss rate: 0.12%

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



Run 1: Statistics of PCC-Vivace

Start at: 2019-04-23 18:03:18

End at: 2019-04-23 18:03:48

Local clock offset: 10.804 ms

Remote clock offset: 15.794 ms

# Below is generated by plot.py at 2019-04-23 22:07:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 325.89 Mbit/s

95th percentile per-packet one-way delay: 89.438 ms

Loss rate: 0.57%

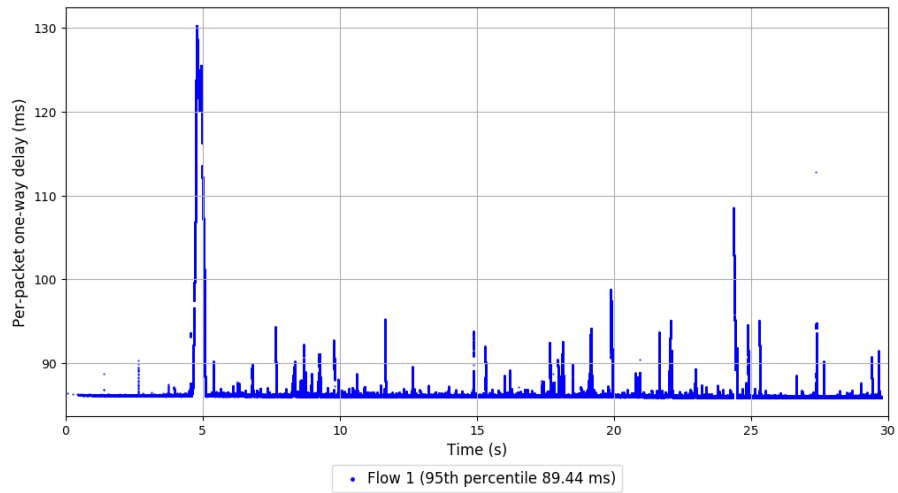
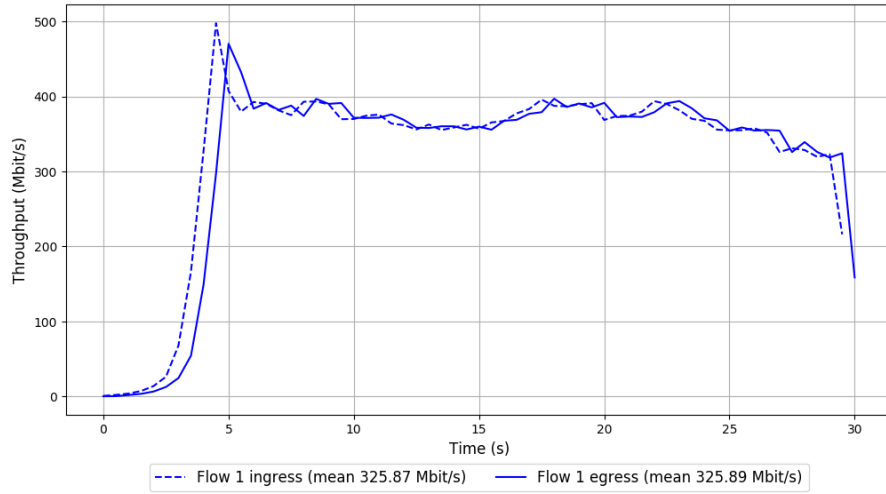
-- Flow 1:

Average throughput: 325.89 Mbit/s

95th percentile per-packet one-way delay: 89.438 ms

Loss rate: 0.57%

Run 1: Report of PCC-Vivace — Data Link





Run 2: Statistics of PCC-Vivace

Start at: 2019-04-23 18:34:23

End at: 2019-04-23 18:34:53

Local clock offset: 15.575 ms

Remote clock offset: 24.054 ms

# Below is generated by plot.py at 2019-04-23 22:08:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 366.92 Mbit/s

95th percentile per-packet one-way delay: 100.542 ms

Loss rate: 0.62%

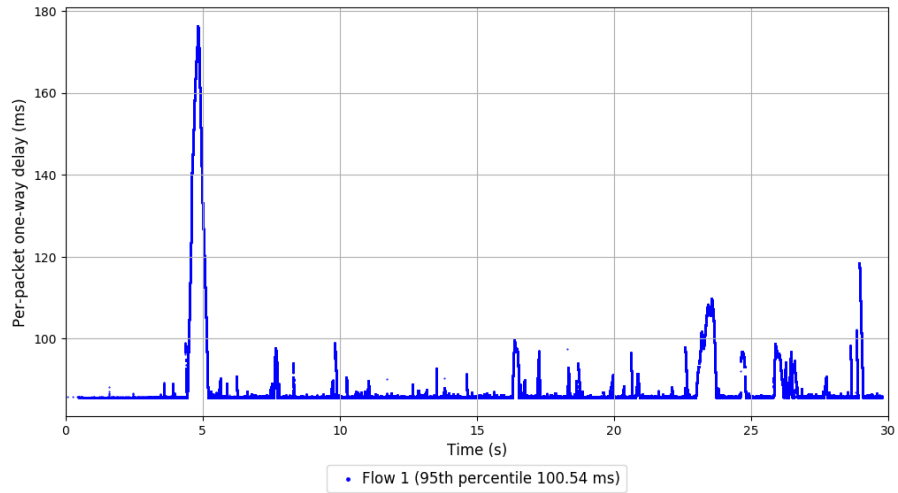
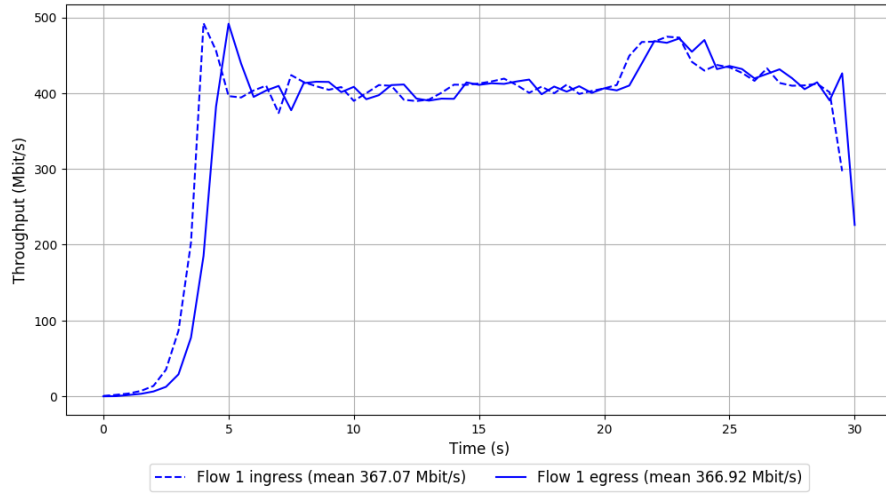
-- Flow 1:

Average throughput: 366.92 Mbit/s

95th percentile per-packet one-way delay: 100.542 ms

Loss rate: 0.62%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-04-23 19:05:53

End at: 2019-04-23 19:06:23

Local clock offset: 11.626 ms

Remote clock offset: 17.43 ms

# Below is generated by plot.py at 2019-04-23 22:08:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 263.01 Mbit/s

95th percentile per-packet one-way delay: 86.671 ms

Loss rate: 0.93%

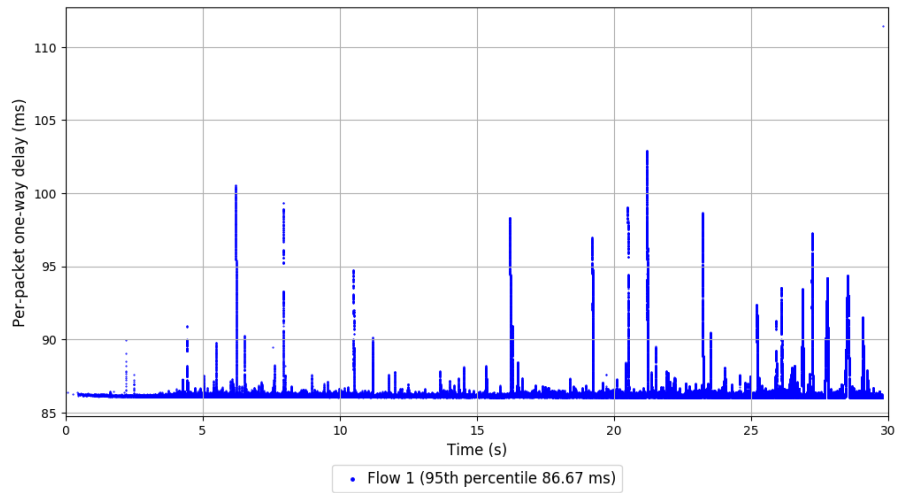
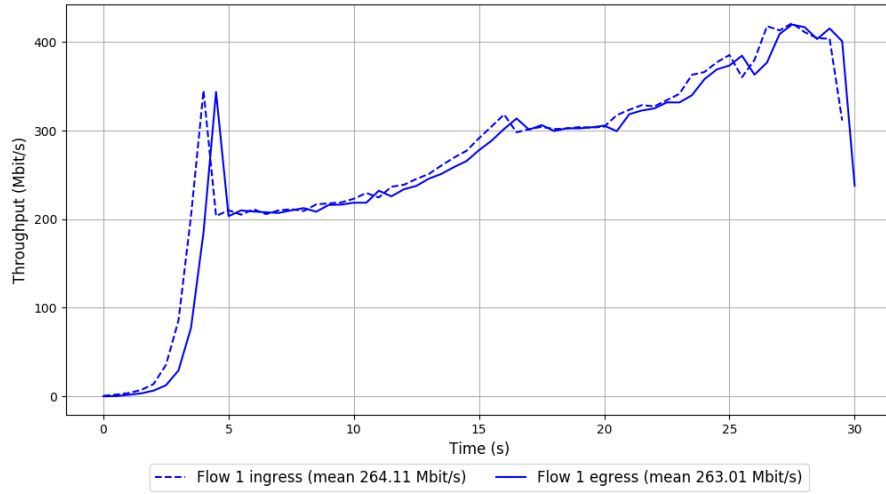
-- Flow 1:

Average throughput: 263.01 Mbit/s

95th percentile per-packet one-way delay: 86.671 ms

Loss rate: 0.93%

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



Run 4: Statistics of PCC-Vivace

Start at: 2019-04-23 19:37:23

End at: 2019-04-23 19:37:53

Local clock offset: 6.52 ms

Remote clock offset: 9.473 ms

# Below is generated by plot.py at 2019-04-23 22:08:18

# Datalink statistics

-- Total of 1 flow:

Average throughput: 358.32 Mbit/s

95th percentile per-packet one-way delay: 97.841 ms

Loss rate: 0.68%

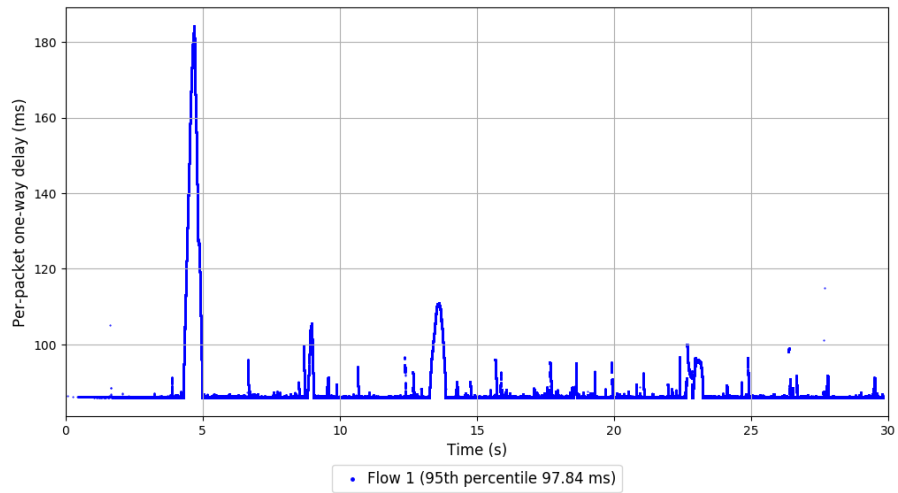
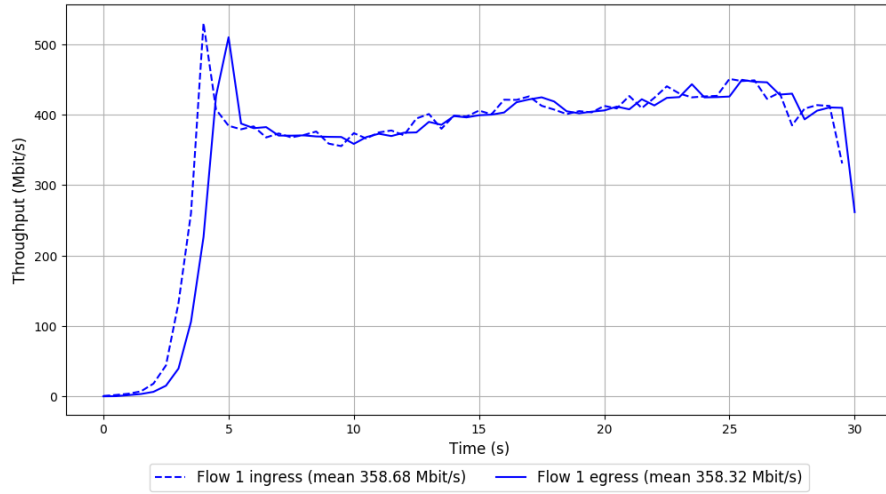
-- Flow 1:

Average throughput: 358.32 Mbit/s

95th percentile per-packet one-way delay: 97.841 ms

Loss rate: 0.68%

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



Run 5: Statistics of PCC-Vivace

Start at: 2019-04-23 20:08:06

End at: 2019-04-23 20:08:36

Local clock offset: 3.637 ms

Remote clock offset: 5.179 ms

# Below is generated by plot.py at 2019-04-23 22:08:18

# Datalink statistics

-- Total of 1 flow:

Average throughput: 251.01 Mbit/s

95th percentile per-packet one-way delay: 86.134 ms

Loss rate: 0.76%

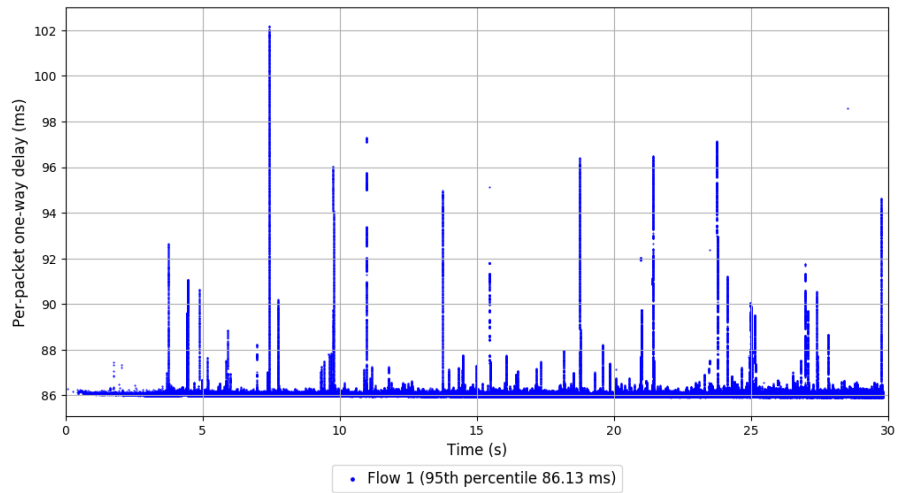
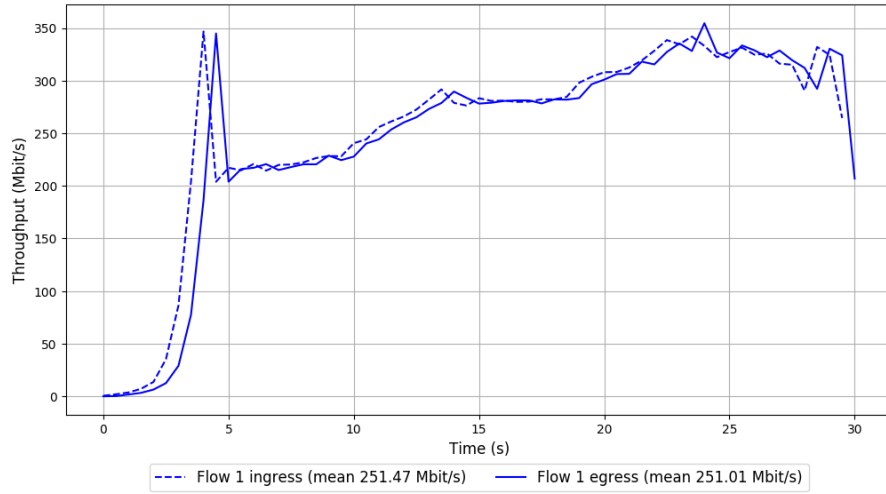
-- Flow 1:

Average throughput: 251.01 Mbit/s

95th percentile per-packet one-way delay: 86.134 ms

Loss rate: 0.76%

Run 5: Report of PCC-Vivace — Data Link



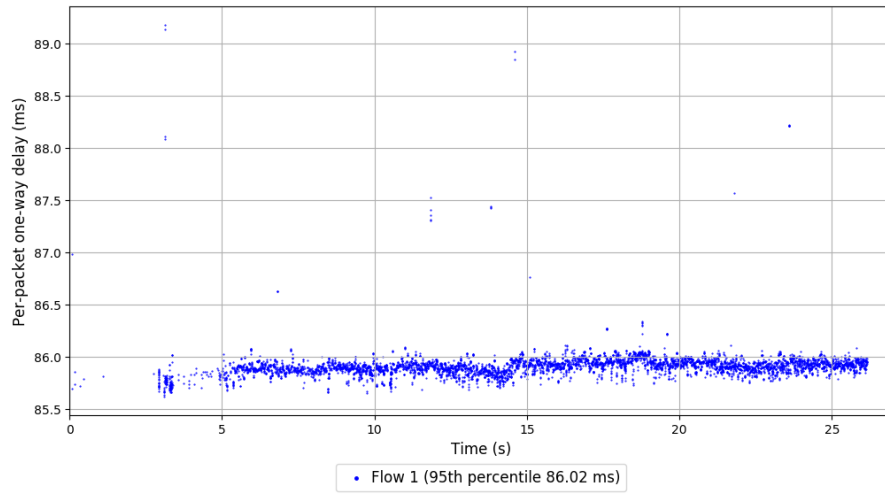
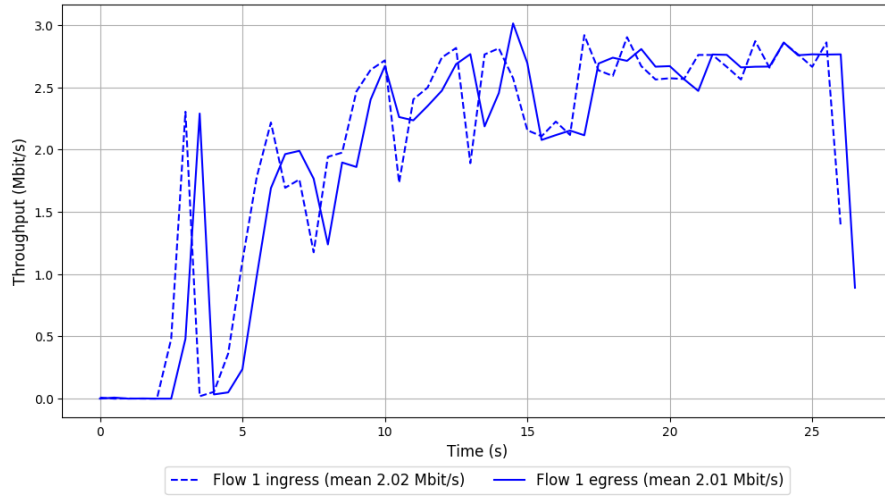


Run 1: Statistics of WebRTC media

Start at: 2019-04-23 18:14:07  
End at: 2019-04-23 18:14:37  
Local clock offset: 14.277 ms  
Remote clock offset: 21.804 ms

# Below is generated by plot.py at 2019-04-23 22:08:18  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.01 Mbit/s  
95th percentile per-packet one-way delay: 86.015 ms  
Loss rate: 0.93%  
-- Flow 1:  
Average throughput: 2.01 Mbit/s  
95th percentile per-packet one-way delay: 86.015 ms  
Loss rate: 0.93%

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

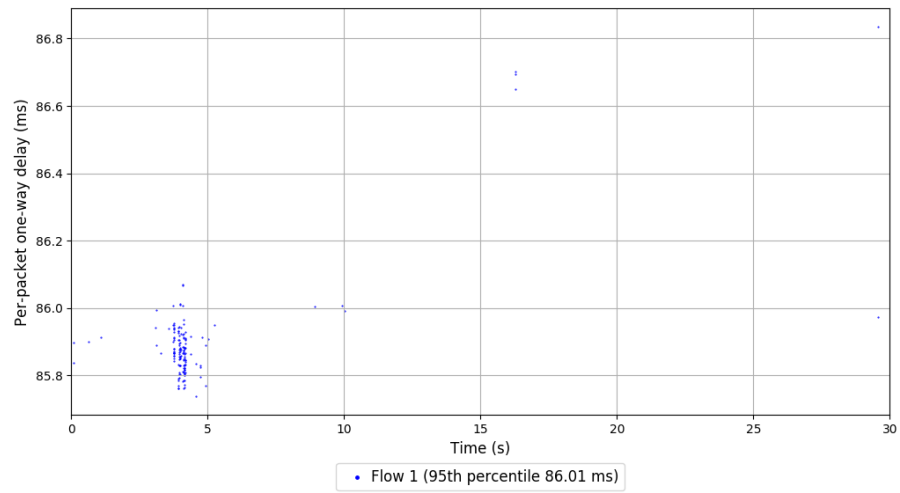
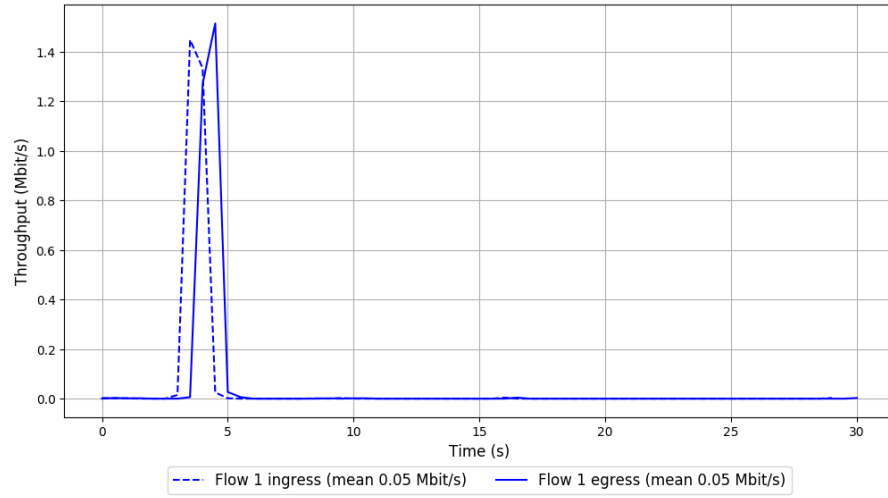


Run 2: Statistics of WebRTC media

Start at: 2019-04-23 18:45:18  
End at: 2019-04-23 18:45:48  
Local clock offset: 22.425 ms  
Remote clock offset: 34.254 ms

# Below is generated by plot.py at 2019-04-23 22:08:18  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 86.008 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 86.008 ms  
Loss rate: 0.00%

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

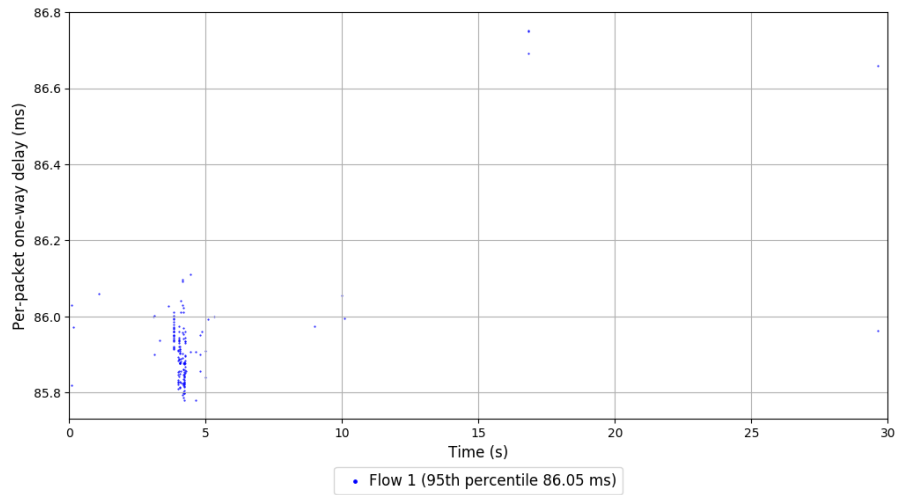
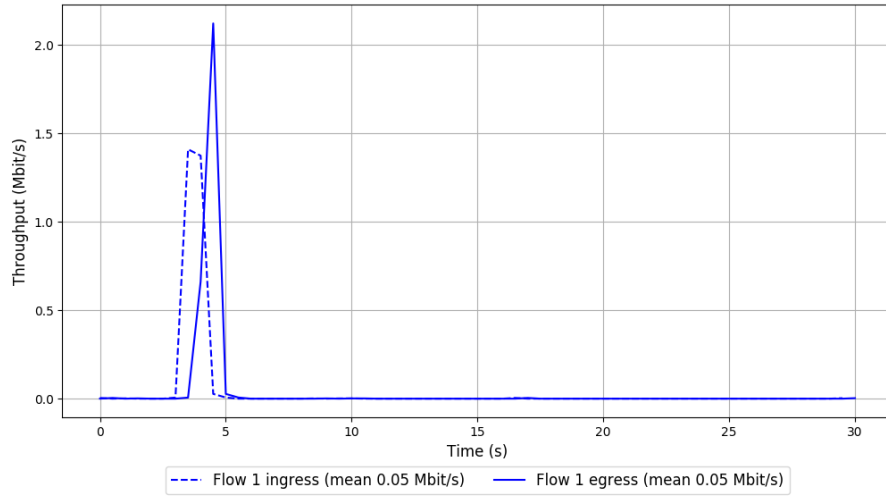


Run 3: Statistics of WebRTC media

Start at: 2019-04-23 19:16:42  
End at: 2019-04-23 19:17:12  
Local clock offset: 11.42 ms  
Remote clock offset: 17.289 ms

```
# Below is generated by plot.py at 2019-04-23 22:08:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.054 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.054 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of WebRTC media

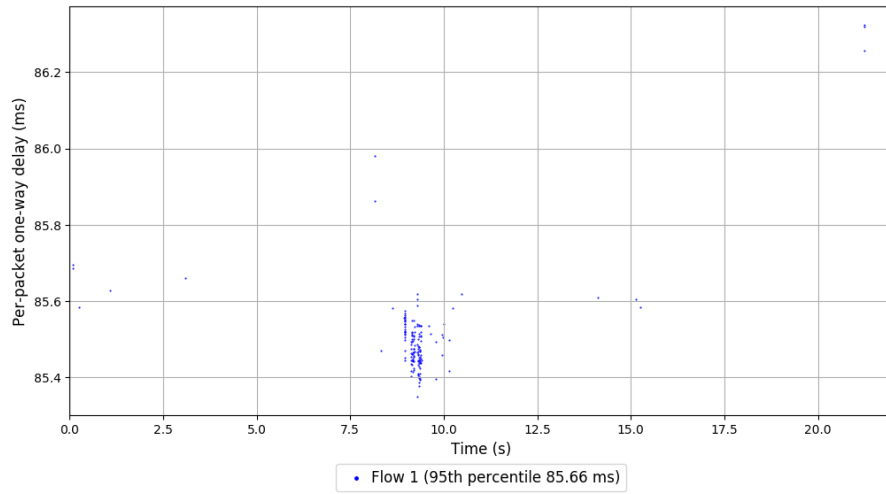
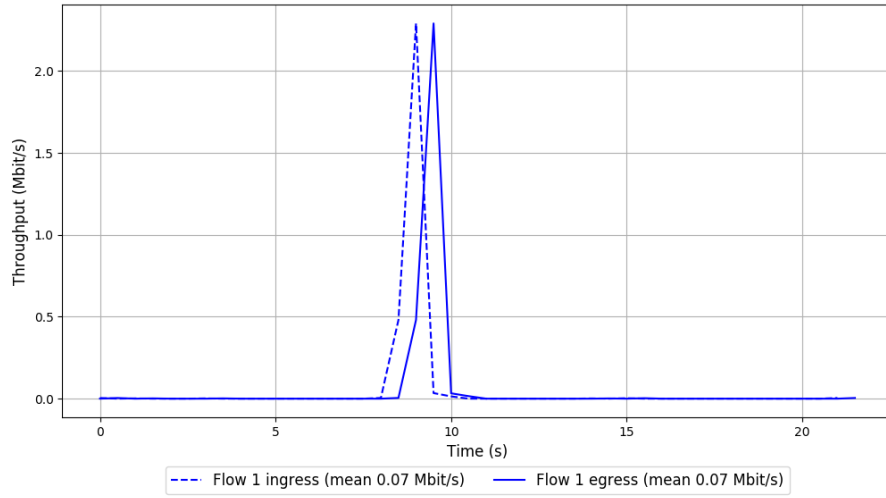
Start at: 2019-04-23 19:47:49

End at: 2019-04-23 19:48:20

Local clock offset: 4.895 ms

Remote clock offset: 8.028 ms

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





Run 5: Statistics of WebRTC media

Start at: 2019-04-23 20:18:51

End at: 2019-04-23 20:19:21

Local clock offset: 2.585 ms

Remote clock offset: 2.503 ms

# Below is generated by plot.py at 2019-04-23 22:08:18

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.272 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.272 ms

Loss rate: 0.00%

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

