

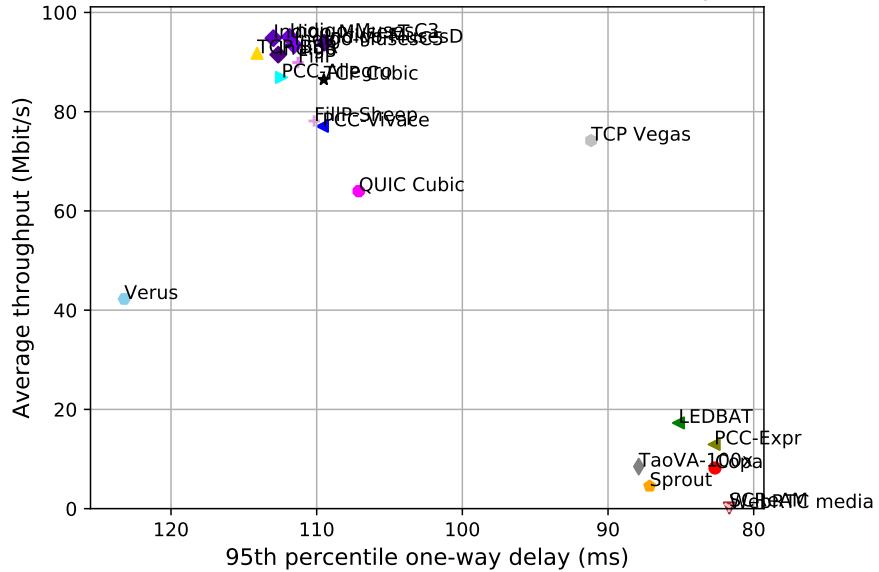
## Pantheon Report

Generated at 2019-06-27 10:07:37 (UTC).  
Data path: AWS Brazil 2 on `ens5` (*local*) → Colombia on `p4p1` (*remote*).  
Repeated the test of 22 congestion control schemes 5 times.  
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.  
NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.

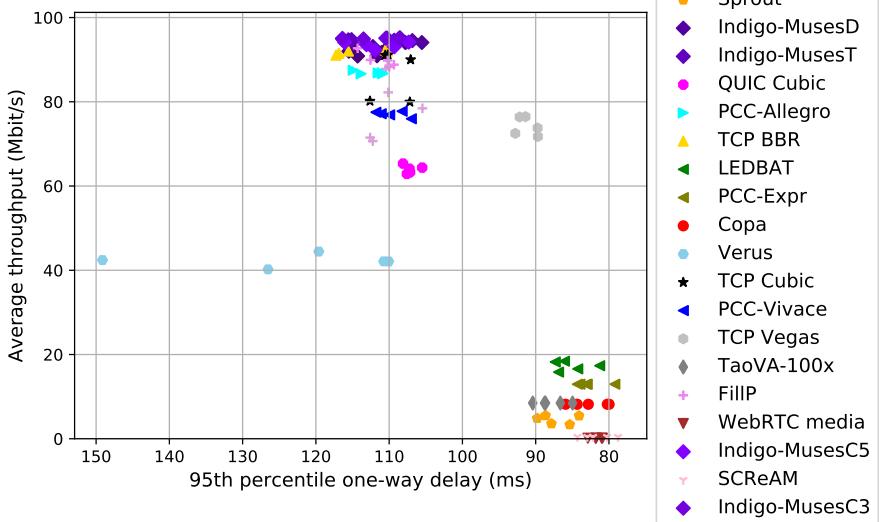
```
System info:  
Linux 4.15.0-1039-aws  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
  
Git summary:  
branch: muses @ c3953d08f32ec7ebbdede2d2f0cbdeed262571ef  
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519  
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9  
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4  
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d  
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966  
third_party/muses_dtree @ 11c9498ecb1596b02cc896791a02d03172af7ed  
M helpers/__init__.pyc  
M helpers/context.pyc  
M helpers/utils.pyc  
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd  
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1  
M receiver/src/buffer.h  
M receiver/src/core.cpp  
M sender/src/buffer.h  
M sender/src/core.cpp  
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab  
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42  
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2  
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 AWS Brazil 2 to Colombia, 5 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from AWS Brazil 2 to Colombia, 5 runs of 30s each per scheme  
 3 flows with 10s interval between flows



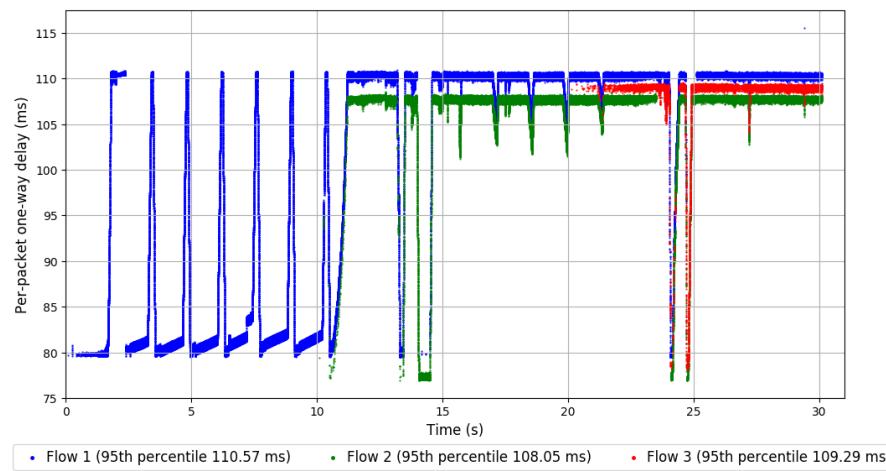
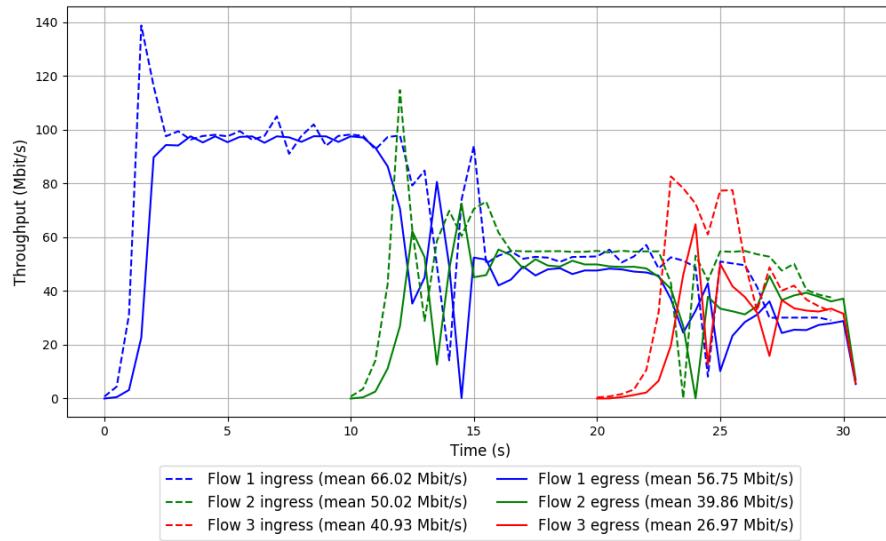
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	56.06	38.89	29.46	113.79	113.05	113.36	12.46	18.55	30.25
Copa	5	0.00	9.79	5.04	81.11	82.90	81.55	98.45	76.01	79.98
TCP Cubic	5	59.39	27.93	25.47	109.30	110.76	105.58	0.93	0.45	0.43
FillP	5	43.90	57.64	23.10	107.36	111.27	110.56	12.94	21.21	28.85
FillP-Sheep	5	21.33	73.77	23.33	107.56	110.28	110.53	7.59	5.89	13.39
Indigo	5	61.82	29.13	32.51	111.60	111.88	111.68	14.56	23.94	71.43
Indigo-MusesC3	5	50.64	51.23	37.17	110.49	112.27	111.06	1.06	1.86	4.04
Indigo-MusesC5	5	57.08	51.00	10.62	110.23	112.09	112.11	1.88	3.57	4.70
Indigo-MusesD	5	70.13	25.27	24.51	106.04	110.67	107.33	0.92	2.05	5.65
Indigo-MusesT	5	53.41	53.64	22.32	112.10	112.24	112.80	4.74	5.56	8.22
LEDBAT	5	11.34	7.03	3.85	84.94	85.06	84.60	0.01	0.01	0.00
Muses.DecisionTree	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCC-Allegro	5	78.64	9.53	5.83	112.01	111.40	111.46	2.73	4.45	5.17
PCC-Expr	5	7.36	5.81	5.21	82.73	82.37	82.36	58.78	31.99	33.04
QUIC Cubic	5	45.60	20.22	15.21	107.56	105.73	101.66	0.86	0.48	0.33
SCReAM	5	0.22	0.22	0.22	79.95	81.04	81.12	0.00	0.00	0.00
Sprout	5	2.74	1.74	2.00	87.40	85.94	84.34	0.00	0.00	0.00
TaoVA-100x	5	0.00	9.76	5.95	82.49	91.66	81.95	95.92	33.58	38.88
TCP Vegas	5	47.33	22.99	34.68	89.96	94.75	95.28	0.96	0.60	1.61
Verus	5	21.35	21.36	21.64	110.11	121.70	119.11	23.30	39.99	34.45
PCC-Vivace	5	65.79	12.48	9.01	109.45	110.54	108.71	0.30	0.71	0.69
WebRTC media	5	0.05	0.04	0.04	80.85	81.29	80.81	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-06-27 08:00:12
End at: 2019-06-27 08:00:42
Local clock offset: -6.915 ms
Remote clock offset: 54.817 ms

# Below is generated by plot.py at 2019-06-27 09:58:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.27 Mbit/s
95th percentile per-packet one-way delay: 110.527 ms
Loss rate: 18.22%
-- Flow 1:
Average throughput: 56.75 Mbit/s
95th percentile per-packet one-way delay: 110.574 ms
Loss rate: 13.95%
-- Flow 2:
Average throughput: 39.86 Mbit/s
95th percentile per-packet one-way delay: 108.045 ms
Loss rate: 20.20%
-- Flow 3:
Average throughput: 26.97 Mbit/s
95th percentile per-packet one-way delay: 109.293 ms
Loss rate: 34.12%
```

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

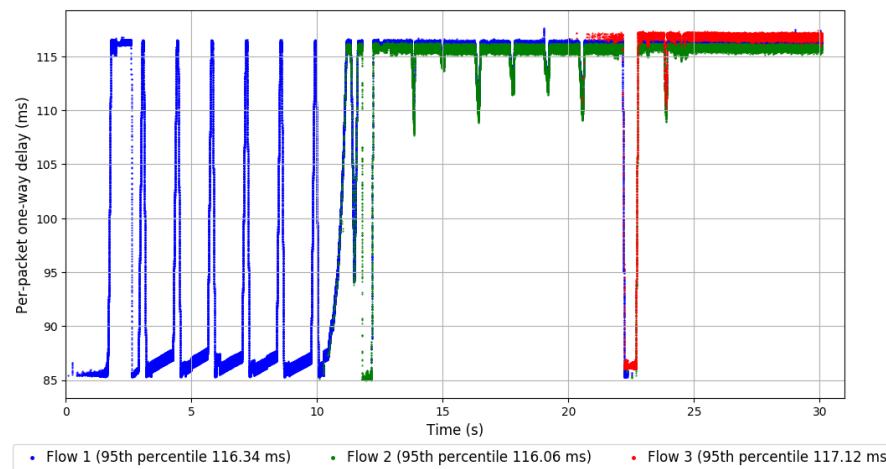
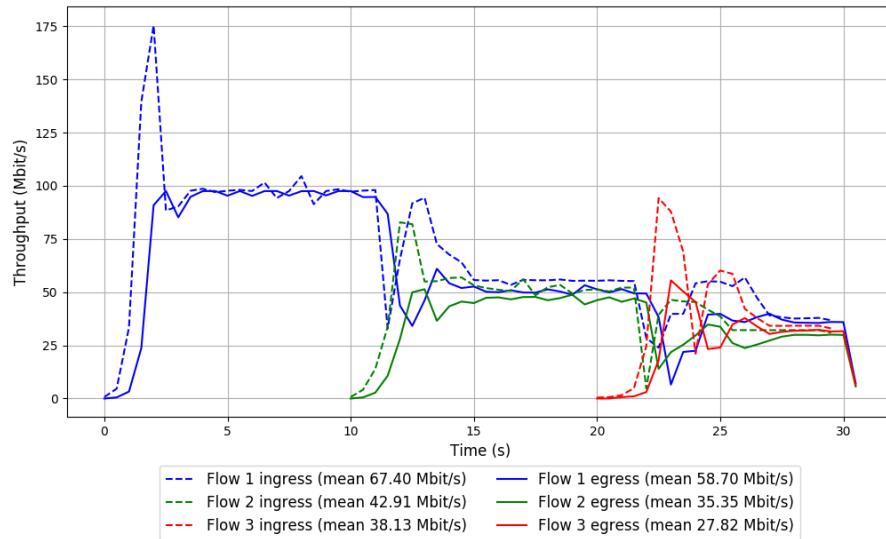


Run 2: Statistics of TCP BBR

```
Start at: 2019-06-27 08:28:10
End at: 2019-06-27 08:28:40
Local clock offset: -6.304 ms
Remote clock offset: 64.619 ms

# Below is generated by plot.py at 2019-06-27 09:58:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.51 Mbit/s
95th percentile per-packet one-way delay: 116.871 ms
Loss rate: 15.72%
-- Flow 1:
Average throughput: 58.70 Mbit/s
95th percentile per-packet one-way delay: 116.343 ms
Loss rate: 12.83%
-- Flow 2:
Average throughput: 35.35 Mbit/s
95th percentile per-packet one-way delay: 116.064 ms
Loss rate: 17.51%
-- Flow 3:
Average throughput: 27.82 Mbit/s
95th percentile per-packet one-way delay: 117.124 ms
Loss rate: 27.04%
```

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

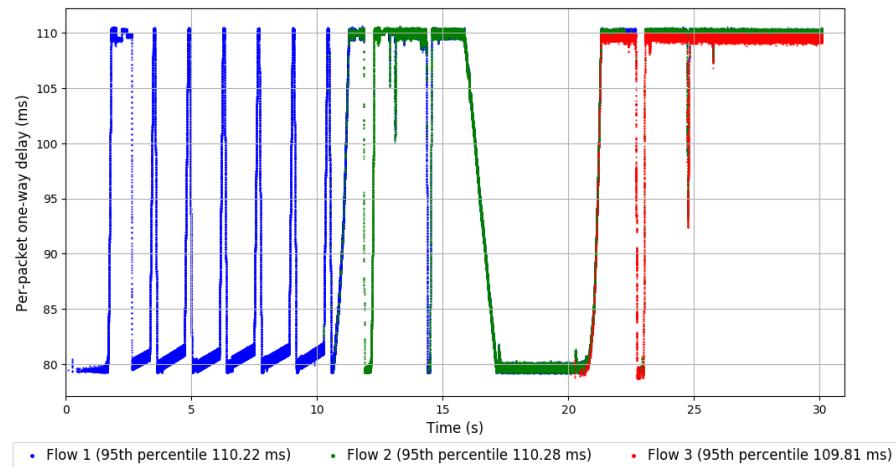
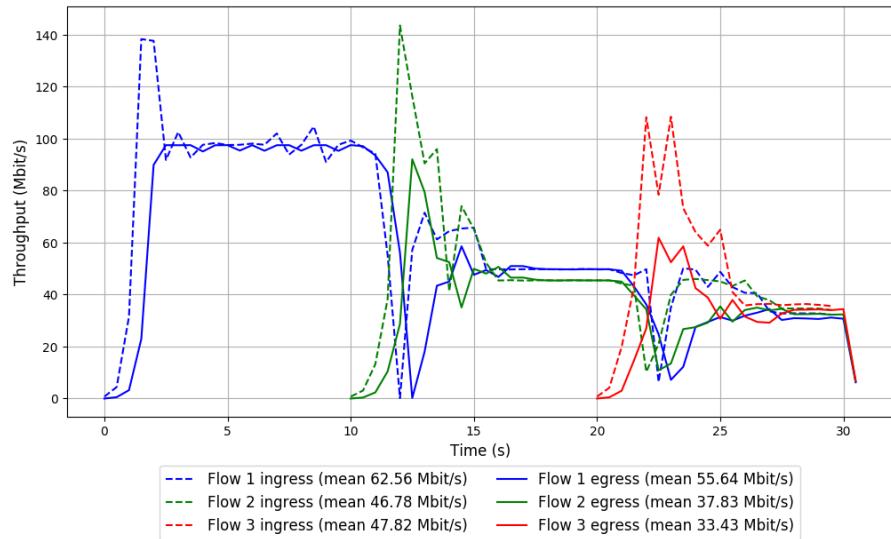


Run 3: Statistics of TCP BBR

```
Start at: 2019-06-27 08:56:05
End at: 2019-06-27 08:56:35
Local clock offset: -4.001 ms
Remote clock offset: 61.964 ms

# Below is generated by plot.py at 2019-06-27 09:58:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.00 Mbit/s
95th percentile per-packet one-way delay: 110.230 ms
Loss rate: 15.99%
-- Flow 1:
Average throughput: 55.64 Mbit/s
95th percentile per-packet one-way delay: 110.215 ms
Loss rate: 10.96%
-- Flow 2:
Average throughput: 37.83 Mbit/s
95th percentile per-packet one-way delay: 110.278 ms
Loss rate: 19.02%
-- Flow 3:
Average throughput: 33.43 Mbit/s
95th percentile per-packet one-way delay: 109.815 ms
Loss rate: 29.87%
```

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

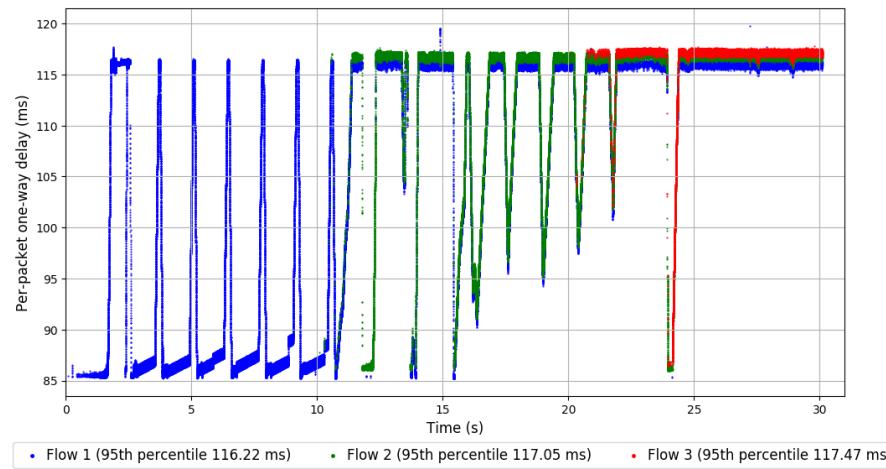
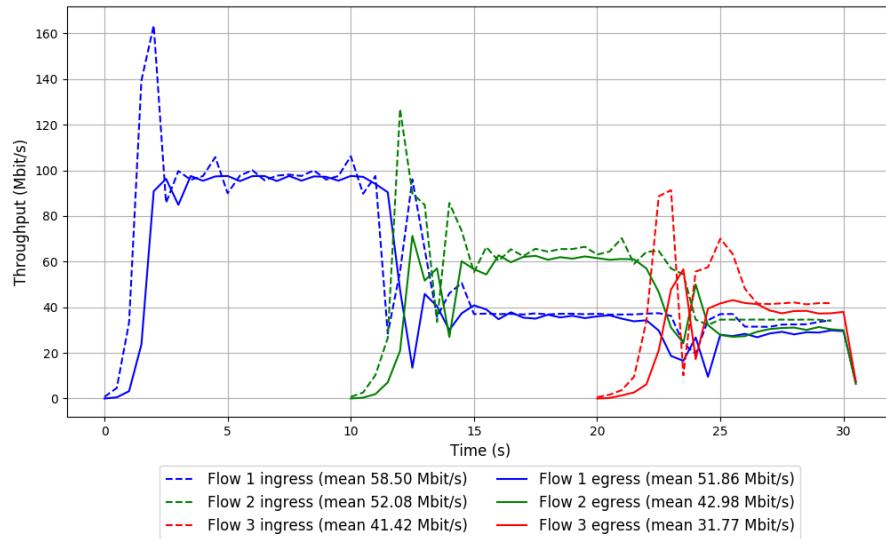


Run 4: Statistics of TCP BBR

```
Start at: 2019-06-27 09:24:01
End at: 2019-06-27 09:24:31
Local clock offset: -5.939 ms
Remote clock offset: 71.988 ms

# Below is generated by plot.py at 2019-06-27 09:58:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.06 Mbit/s
95th percentile per-packet one-way delay: 117.263 ms
Loss rate: 14.78%
-- Flow 1:
Average throughput: 51.86 Mbit/s
95th percentile per-packet one-way delay: 116.222 ms
Loss rate: 11.25%
-- Flow 2:
Average throughput: 42.98 Mbit/s
95th percentile per-packet one-way delay: 117.047 ms
Loss rate: 17.36%
-- Flow 3:
Average throughput: 31.77 Mbit/s
95th percentile per-packet one-way delay: 117.472 ms
Loss rate: 23.30%
```

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

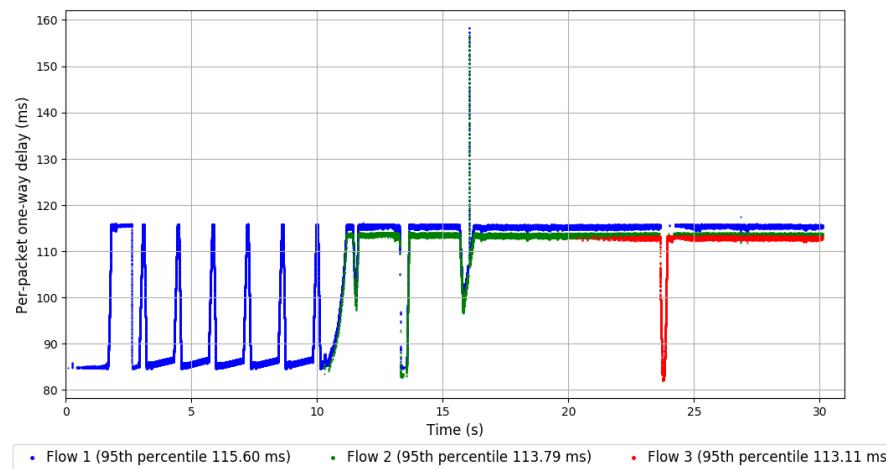
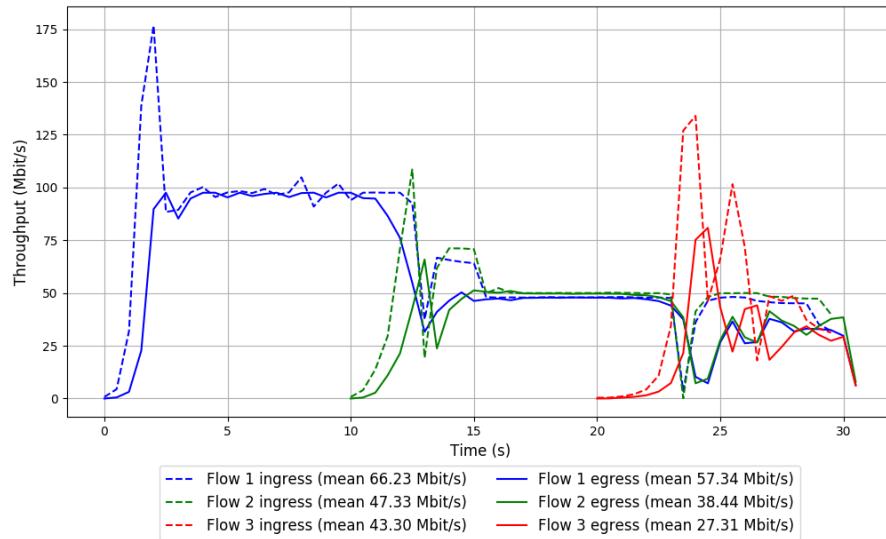


Run 5: Statistics of TCP BBR

```
Start at: 2019-06-27 09:51:59
End at: 2019-06-27 09:52:29
Local clock offset: -7.237 ms
Remote clock offset: 73.973 ms

# Below is generated by plot.py at 2019-06-27 09:58:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.04 Mbit/s
95th percentile per-packet one-way delay: 115.566 ms
Loss rate: 17.86%
-- Flow 1:
Average throughput: 57.34 Mbit/s
95th percentile per-packet one-way delay: 115.604 ms
Loss rate: 13.33%
-- Flow 2:
Average throughput: 38.44 Mbit/s
95th percentile per-packet one-way delay: 113.793 ms
Loss rate: 18.68%
-- Flow 3:
Average throughput: 27.31 Mbit/s
95th percentile per-packet one-way delay: 113.111 ms
Loss rate: 36.92%
```

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

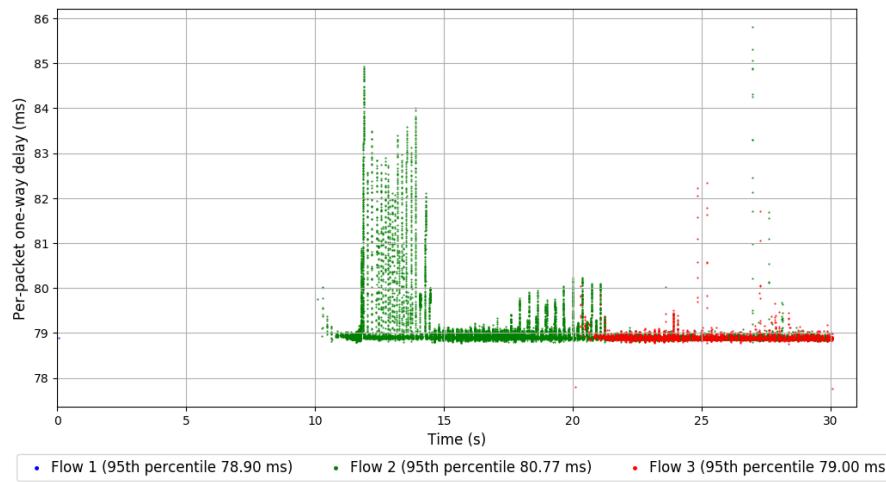
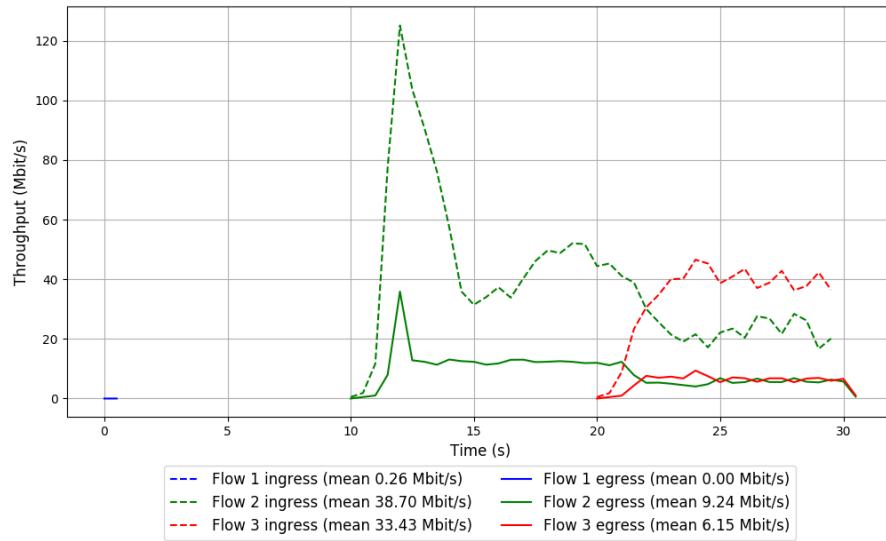


Run 1: Statistics of Copa

```
Start at: 2019-06-27 07:55:06
End at: 2019-06-27 07:55:36
Local clock offset: -6.963 ms
Remote clock offset: 54.242 ms

# Below is generated by plot.py at 2019-06-27 09:58:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 80.223 ms
Loss rate: 77.78%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 78.900 ms
Loss rate: 97.92%
-- Flow 2:
Average throughput: 9.24 Mbit/s
95th percentile per-packet one-way delay: 80.766 ms
Loss rate: 76.14%
-- Flow 3:
Average throughput: 6.15 Mbit/s
95th percentile per-packet one-way delay: 79.003 ms
Loss rate: 81.60%
```

## Run 1: Report of Copa — Data Link

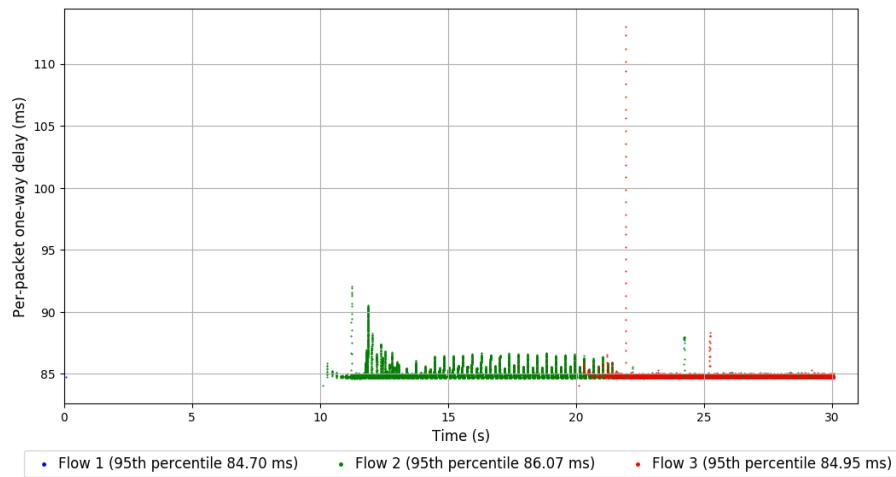
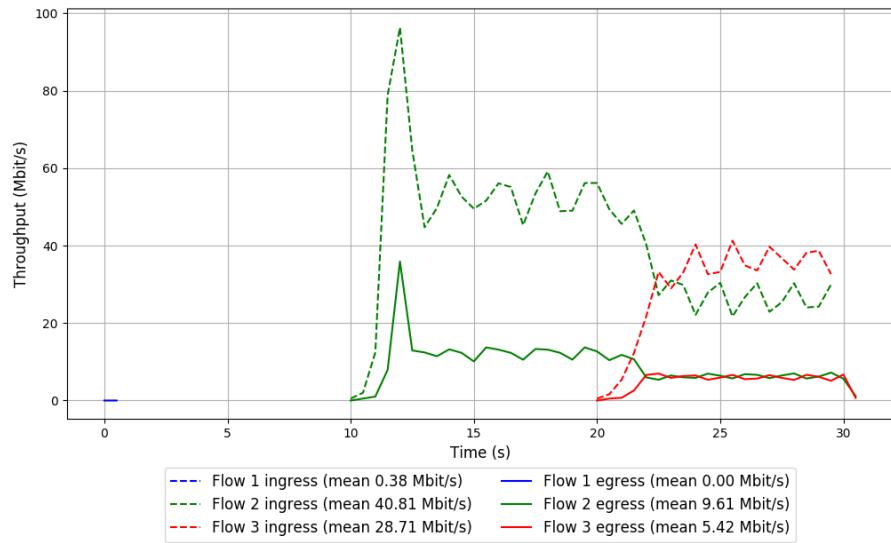


Run 2: Statistics of Copa

```
Start at: 2019-06-27 08:23:04
End at: 2019-06-27 08:23:34
Local clock offset: -6.174 ms
Remote clock offset: 64.278 ms

# Below is generated by plot.py at 2019-06-27 09:58:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 85.923 ms
Loss rate: 77.67%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 84.702 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 9.61 Mbit/s
95th percentile per-packet one-way delay: 86.074 ms
Loss rate: 76.46%
-- Flow 3:
Average throughput: 5.42 Mbit/s
95th percentile per-packet one-way delay: 84.953 ms
Loss rate: 81.11%
```

## Run 2: Report of Copa — Data Link

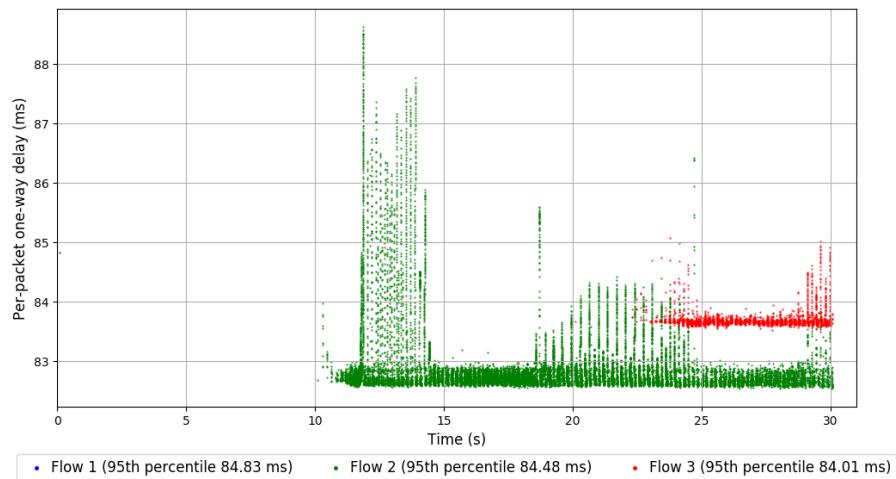
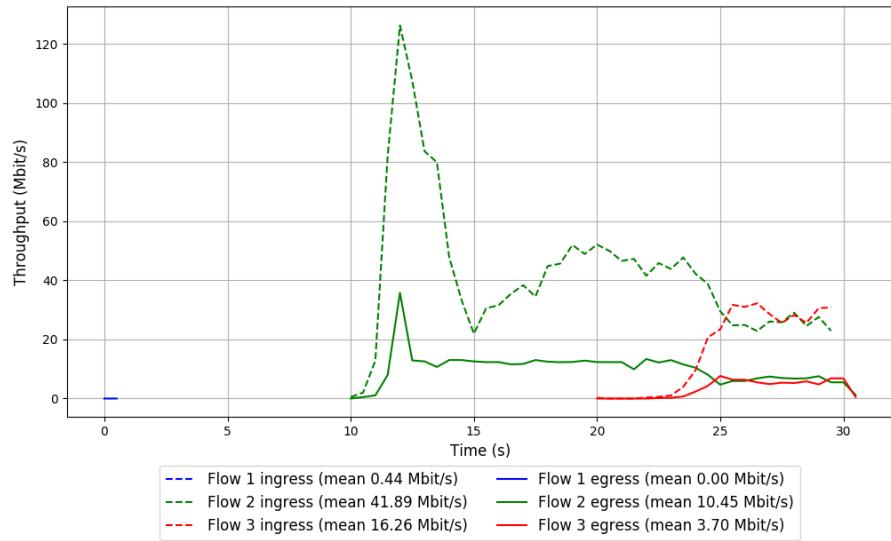


Run 3: Statistics of Copa

```
Start at: 2019-06-27 08:51:01
End at: 2019-06-27 08:51:31
Local clock offset: -5.157 ms
Remote clock offset: 65.104 ms

# Below is generated by plot.py at 2019-06-27 09:58:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 84.337 ms
Loss rate: 75.40%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 84.827 ms
Loss rate: 98.80%
-- Flow 2:
Average throughput: 10.45 Mbit/s
95th percentile per-packet one-way delay: 84.482 ms
Loss rate: 75.05%
-- Flow 3:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 84.010 ms
Loss rate: 77.23%
```

### Run 3: Report of Copa — Data Link

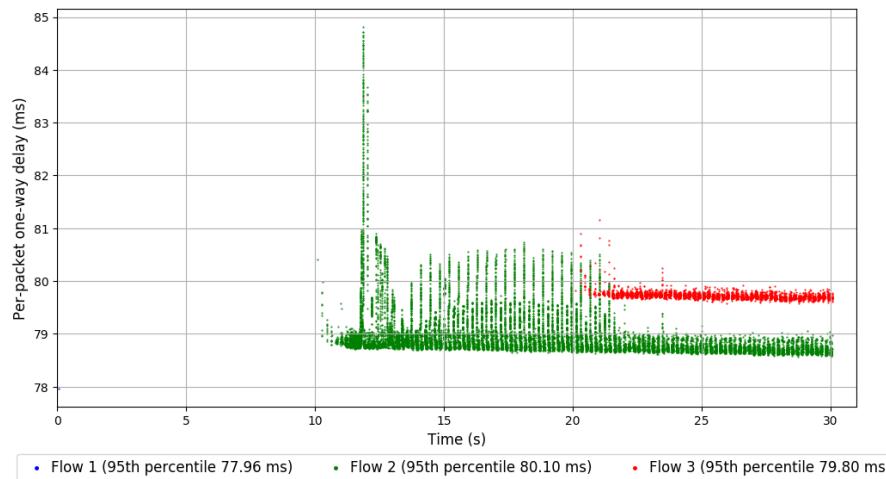
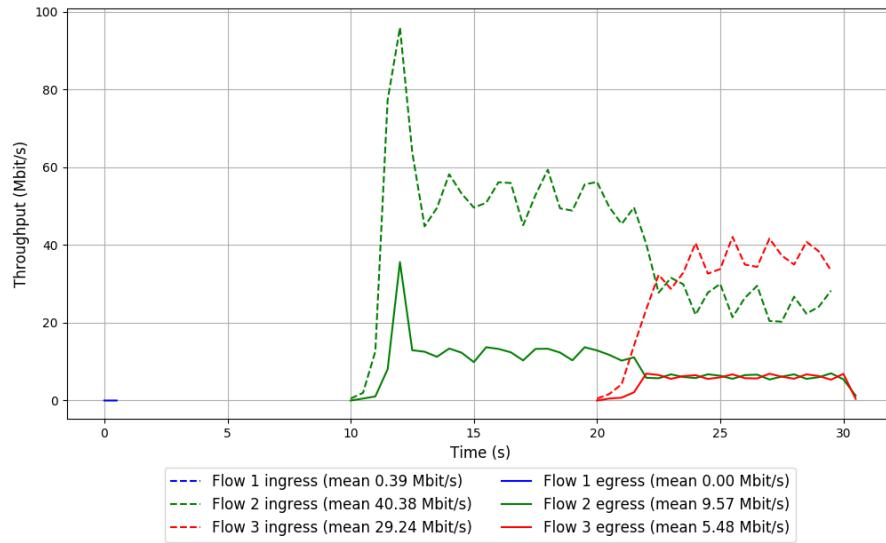


Run 4: Statistics of Copa

```
Start at: 2019-06-27 09:18:56
End at: 2019-06-27 09:19:26
Local clock offset: -3.699 ms
Remote clock offset: 65.966 ms

# Below is generated by plot.py at 2019-06-27 09:58:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 79.981 ms
Loss rate: 77.62%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 77.960 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 9.57 Mbit/s
95th percentile per-packet one-way delay: 80.100 ms
Loss rate: 76.30%
-- Flow 3:
Average throughput: 5.48 Mbit/s
95th percentile per-packet one-way delay: 79.802 ms
Loss rate: 81.26%
```

## Run 4: Report of Copa — Data Link

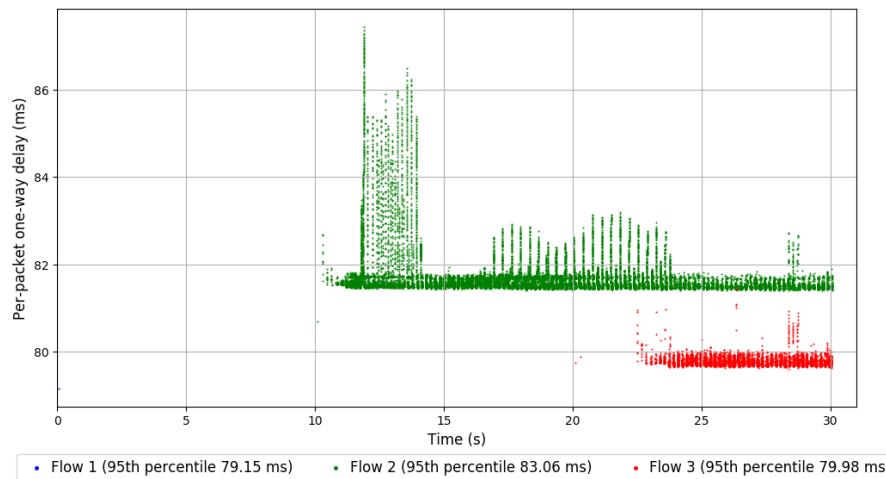
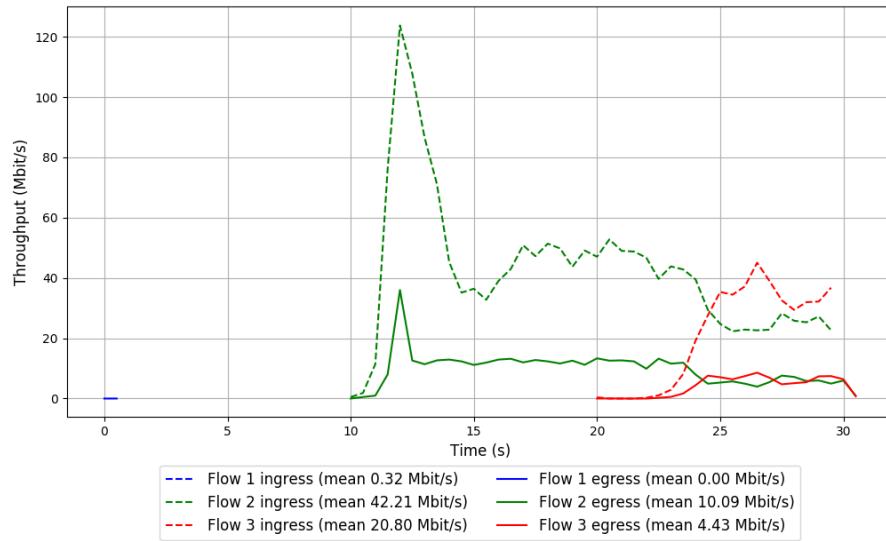


Run 5: Statistics of Copa

```
Start at: 2019-06-27 09:46:55
End at: 2019-06-27 09:47:25
Local clock offset: -8.233 ms
Remote clock offset: 69.391 ms

# Below is generated by plot.py at 2019-06-27 09:58:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 82.818 ms
Loss rate: 76.62%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 79.152 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 10.09 Mbit/s
95th percentile per-packet one-way delay: 83.063 ms
Loss rate: 76.10%
-- Flow 3:
Average throughput: 4.43 Mbit/s
95th percentile per-packet one-way delay: 79.976 ms
Loss rate: 78.71%
```

## Run 5: Report of Copa — Data Link

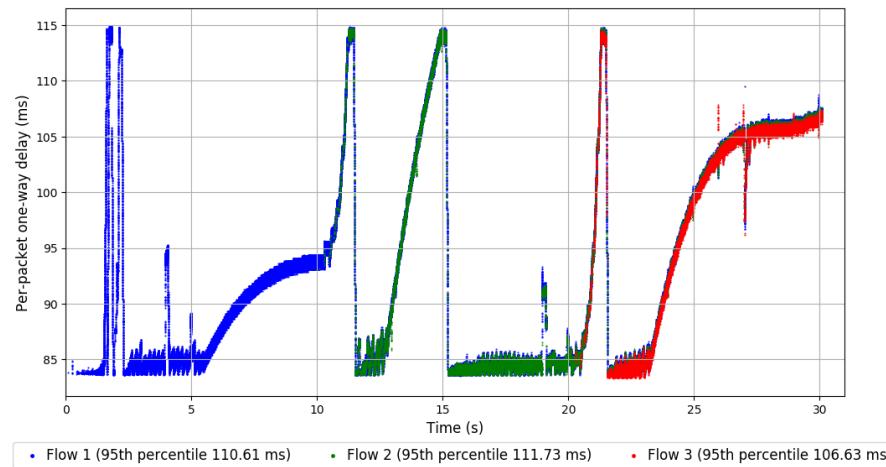
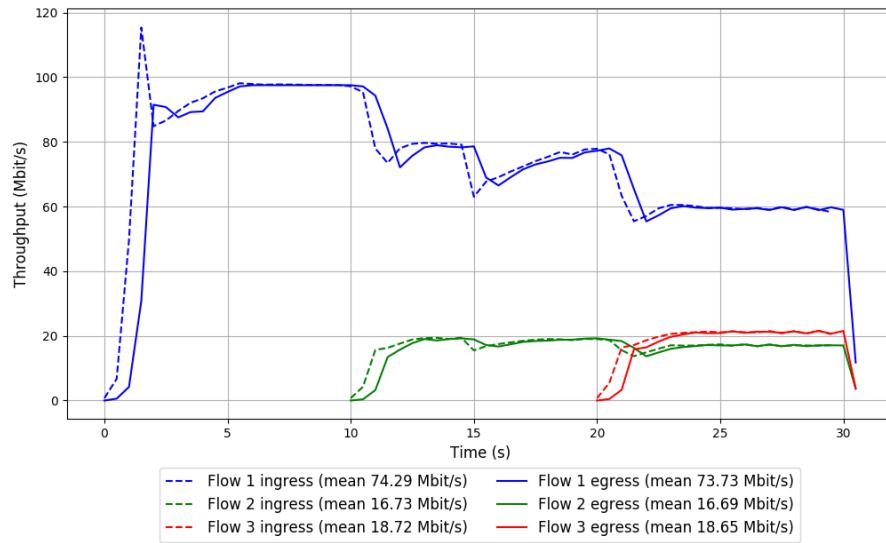


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-06-27 07:38:34
End at: 2019-06-27 07:39:04
Local clock offset: -8.01 ms
Remote clock offset: 57.486 ms

# Below is generated by plot.py at 2019-06-27 09:58:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.06 Mbit/s
95th percentile per-packet one-way delay: 110.519 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 73.73 Mbit/s
95th percentile per-packet one-way delay: 110.605 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 16.69 Mbit/s
95th percentile per-packet one-way delay: 111.735 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 18.65 Mbit/s
95th percentile per-packet one-way delay: 106.629 ms
Loss rate: 0.14%
```

Run 1: Report of TCP Cubic — Data Link

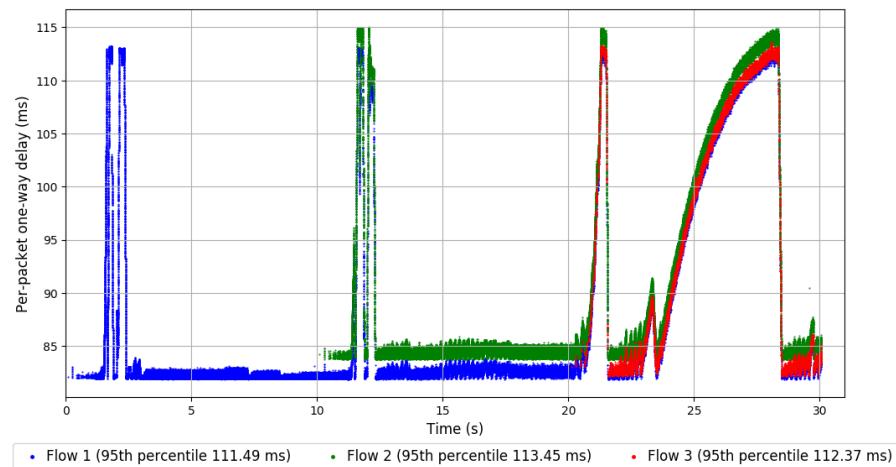
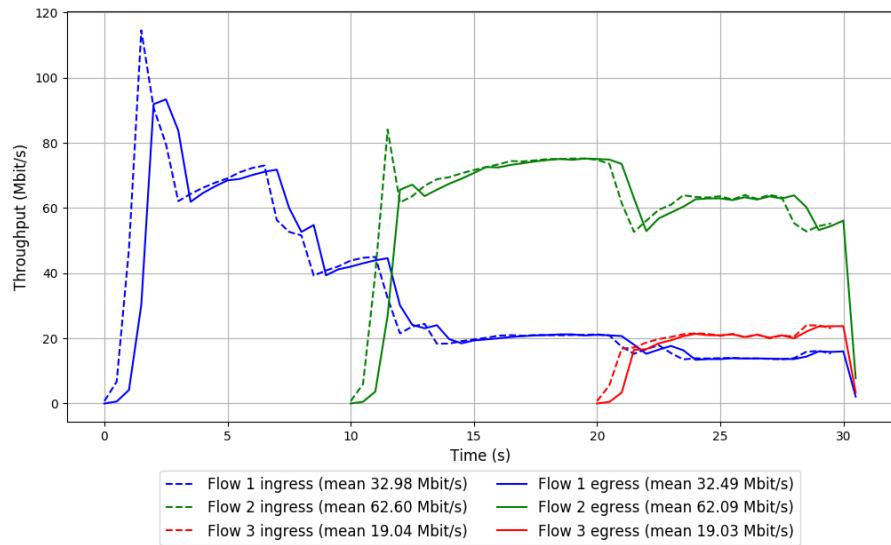


Run 2: Statistics of TCP Cubic

```
Start at: 2019-06-27 08:06:36
End at: 2019-06-27 08:07:06
Local clock offset: -6.925 ms
Remote clock offset: 59.877 ms

# Below is generated by plot.py at 2019-06-27 09:58:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.17 Mbit/s
95th percentile per-packet one-way delay: 112.622 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 32.49 Mbit/s
95th percentile per-packet one-way delay: 111.490 ms
Loss rate: 1.47%
-- Flow 2:
Average throughput: 62.09 Mbit/s
95th percentile per-packet one-way delay: 113.450 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 19.03 Mbit/s
95th percentile per-packet one-way delay: 112.366 ms
Loss rate: 0.08%
```

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

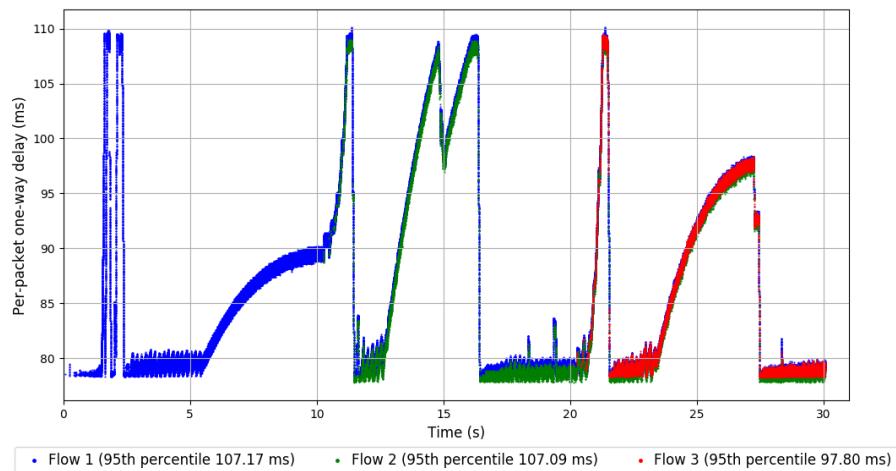
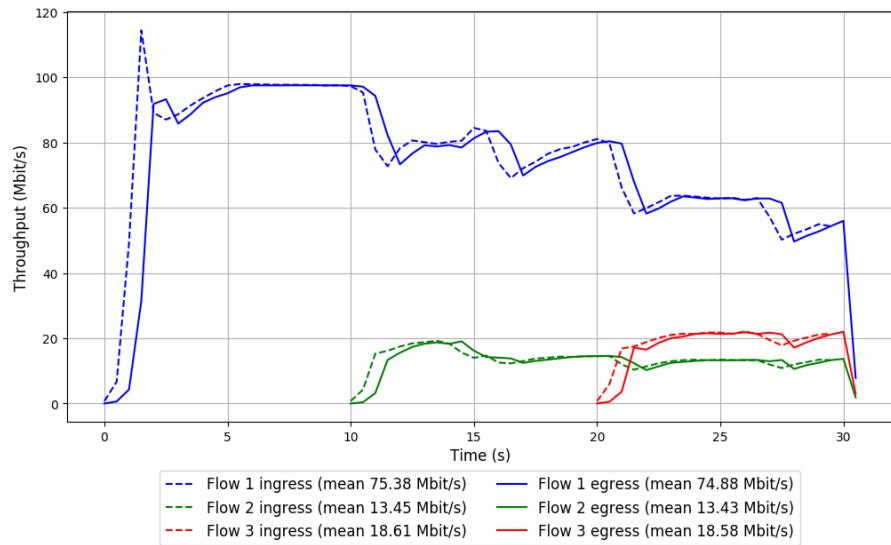


Run 3: Statistics of TCP Cubic

```
Start at: 2019-06-27 08:34:33
End at: 2019-06-27 08:35:03
Local clock offset: -5.587 ms
Remote clock offset: 59.304 ms

# Below is generated by plot.py at 2019-06-27 09:58:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.00 Mbit/s
95th percentile per-packet one-way delay: 107.067 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 74.88 Mbit/s
95th percentile per-packet one-way delay: 107.174 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 13.43 Mbit/s
95th percentile per-packet one-way delay: 107.089 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 18.58 Mbit/s
95th percentile per-packet one-way delay: 97.804 ms
Loss rate: 0.14%
```

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

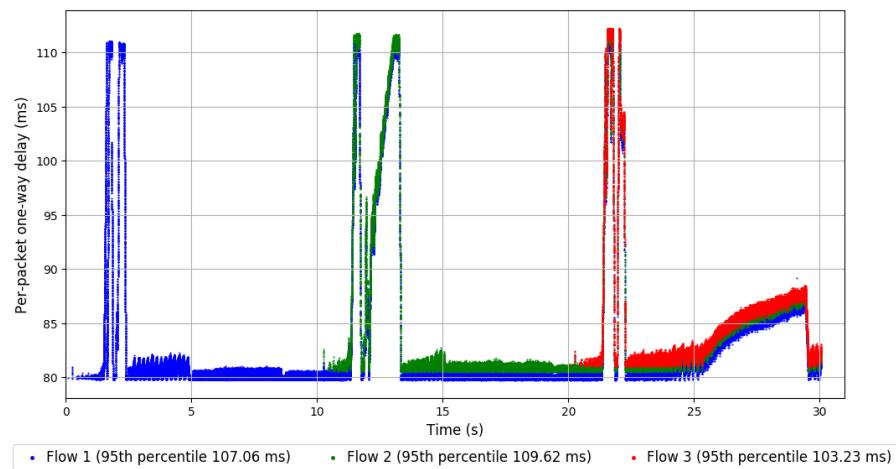
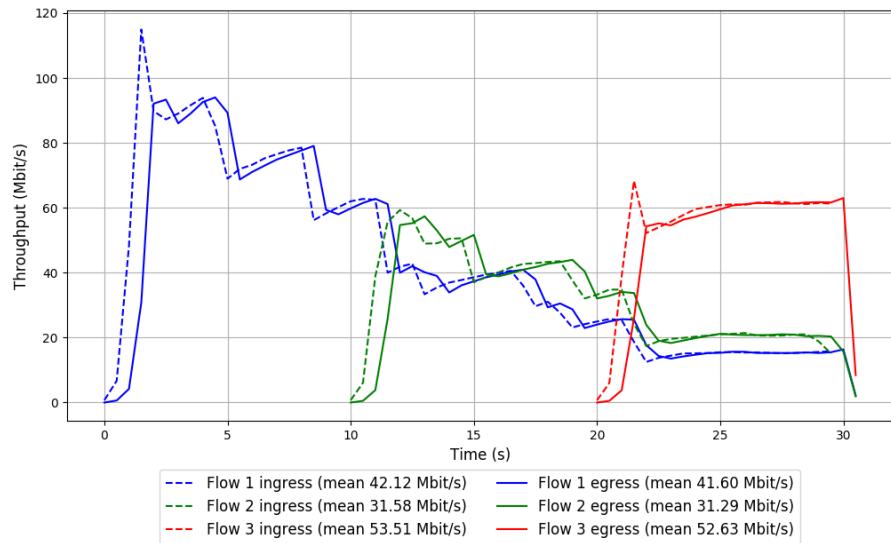


Run 4: Statistics of TCP Cubic

```
Start at: 2019-06-27 09:02:28
End at: 2019-06-27 09:02:58
Local clock offset: -4.942 ms
Remote clock offset: 64.038 ms

# Below is generated by plot.py at 2019-06-27 09:58:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.95 Mbit/s
95th percentile per-packet one-way delay: 107.182 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 41.60 Mbit/s
95th percentile per-packet one-way delay: 107.055 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 31.29 Mbit/s
95th percentile per-packet one-way delay: 109.616 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 52.63 Mbit/s
95th percentile per-packet one-way delay: 103.231 ms
Loss rate: 1.62%
```

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

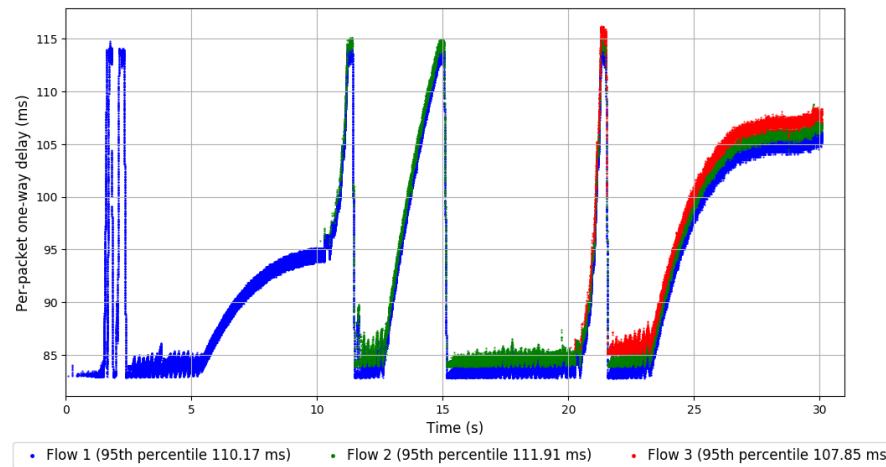
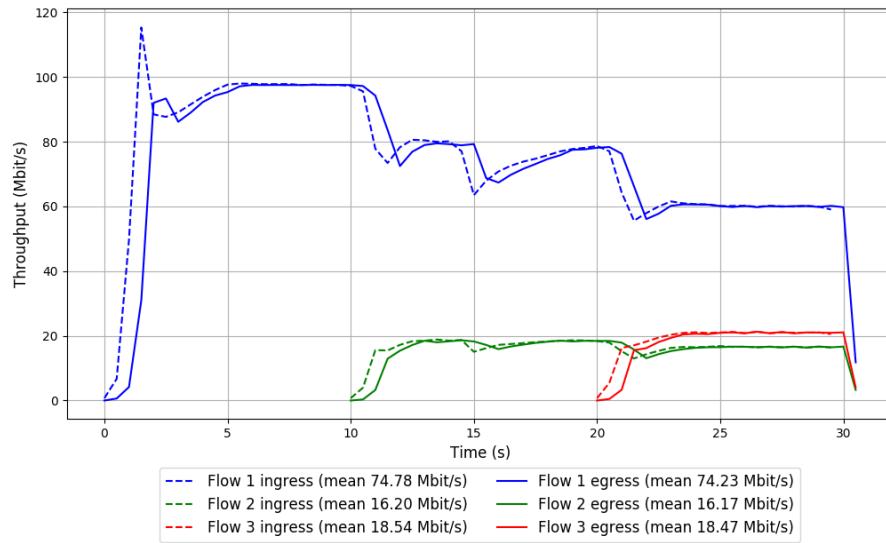


Run 5: Statistics of TCP Cubic

```
Start at: 2019-06-27 09:30:23
End at: 2019-06-27 09:30:53
Local clock offset: -6.997 ms
Remote clock offset: 71.396 ms

# Below is generated by plot.py at 2019-06-27 09:59:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.15 Mbit/s
95th percentile per-packet one-way delay: 110.157 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 74.23 Mbit/s
95th percentile per-packet one-way delay: 110.168 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 16.17 Mbit/s
95th percentile per-packet one-way delay: 111.910 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 18.47 Mbit/s
95th percentile per-packet one-way delay: 107.852 ms
Loss rate: 0.18%
```

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

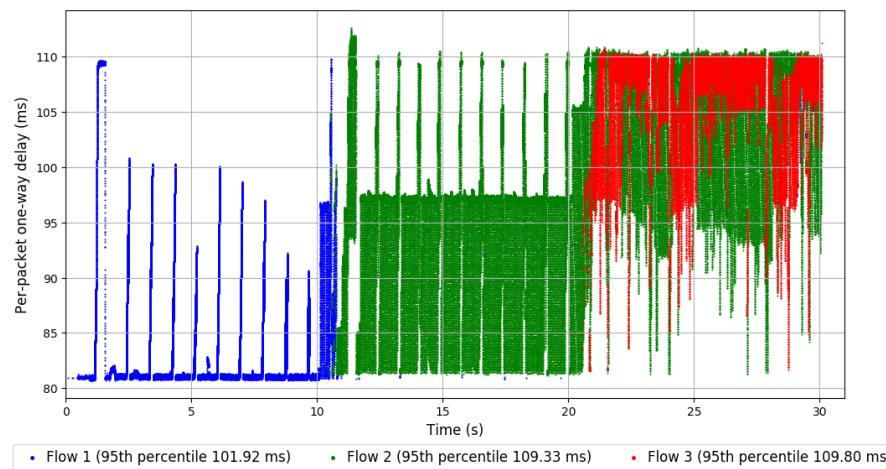
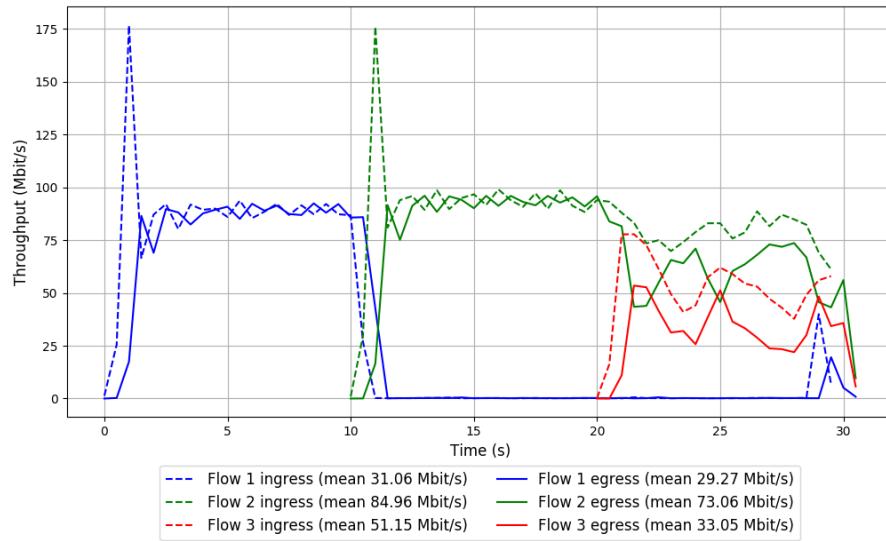


```
Run 1: Statistics of FillP
```

```
Start at: 2019-06-27 08:02:48
End at: 2019-06-27 08:03:18
Local clock offset: -7.92 ms
Remote clock offset: 56.302 ms

# Below is generated by plot.py at 2019-06-27 09:59:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.81 Mbit/s
95th percentile per-packet one-way delay: 109.349 ms
Loss rate: 14.95%
-- Flow 1:
Average throughput: 29.27 Mbit/s
95th percentile per-packet one-way delay: 101.921 ms
Loss rate: 5.72%
-- Flow 2:
Average throughput: 73.06 Mbit/s
95th percentile per-packet one-way delay: 109.334 ms
Loss rate: 13.92%
-- Flow 3:
Average throughput: 33.05 Mbit/s
95th percentile per-packet one-way delay: 109.797 ms
Loss rate: 35.21%
```

Run 1: Report of FillP — Data Link

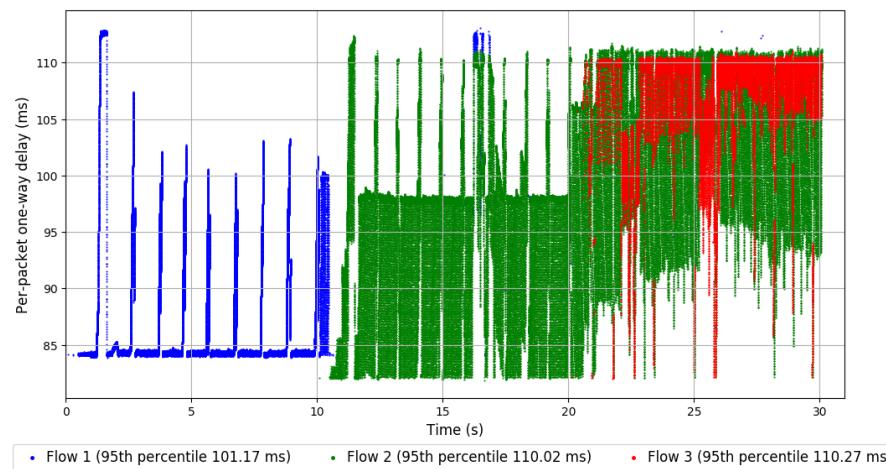
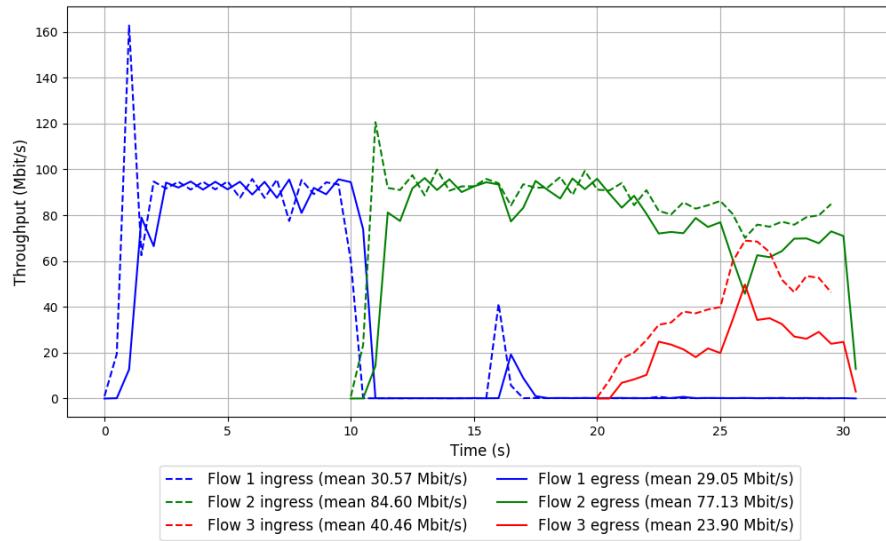


Run 2: Statistics of FillP

```
Start at: 2019-06-27 08:30:46
End at: 2019-06-27 08:31:16
Local clock offset: -5.935 ms
Remote clock offset: 62.686 ms

# Below is generated by plot.py at 2019-06-27 09:59:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.31 Mbit/s
95th percentile per-packet one-way delay: 110.018 ms
Loss rate: 11.83%
-- Flow 1:
Average throughput: 29.05 Mbit/s
95th percentile per-packet one-way delay: 101.172 ms
Loss rate: 4.89%
-- Flow 2:
Average throughput: 77.13 Mbit/s
95th percentile per-packet one-way delay: 110.019 ms
Loss rate: 8.70%
-- Flow 3:
Average throughput: 23.90 Mbit/s
95th percentile per-packet one-way delay: 110.265 ms
Loss rate: 40.80%
```

## Run 2: Report of FillP — Data Link

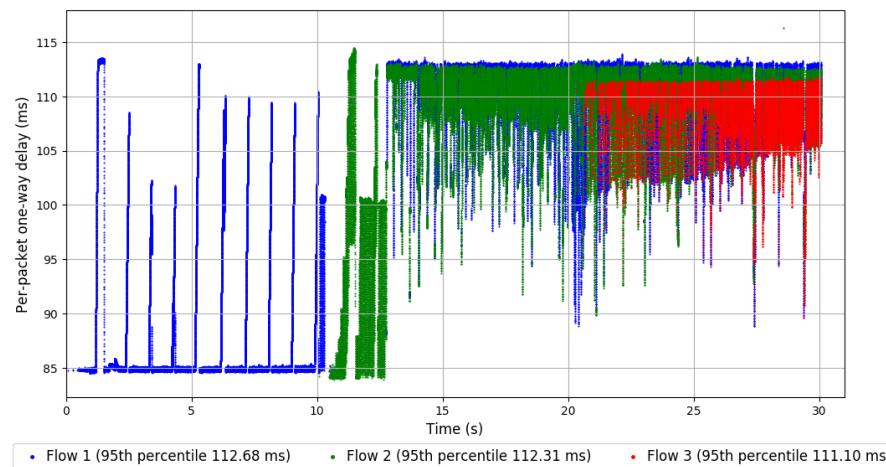
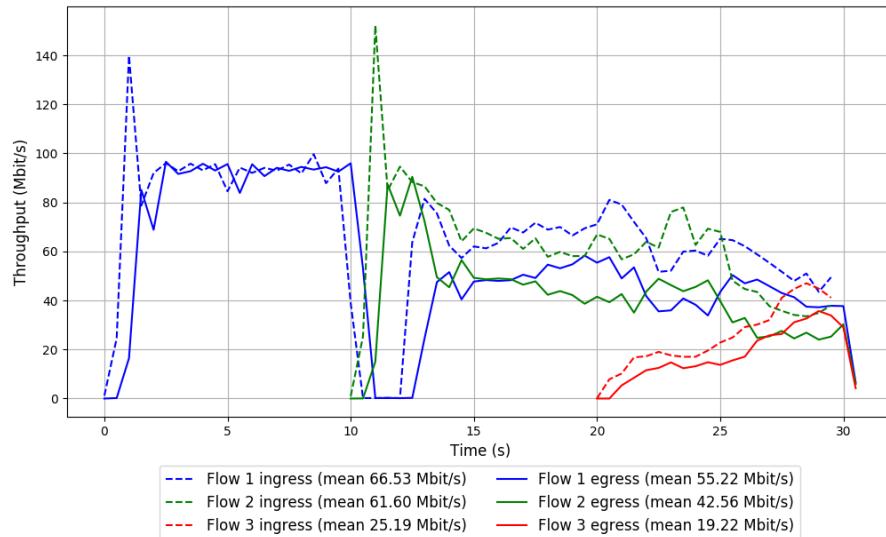


Run 3: Statistics of FillP

```
Start at: 2019-06-27 08:58:41
End at: 2019-06-27 08:59:11
Local clock offset: -4.974 ms
Remote clock offset: 67.179 ms

# Below is generated by plot.py at 2019-06-27 09:59:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.93 Mbit/s
95th percentile per-packet one-way delay: 112.551 ms
Loss rate: 22.34%
-- Flow 1:
Average throughput: 55.22 Mbit/s
95th percentile per-packet one-way delay: 112.683 ms
Loss rate: 16.93%
-- Flow 2:
Average throughput: 42.56 Mbit/s
95th percentile per-packet one-way delay: 112.309 ms
Loss rate: 30.82%
-- Flow 3:
Average throughput: 19.22 Mbit/s
95th percentile per-packet one-way delay: 111.098 ms
Loss rate: 23.74%
```

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

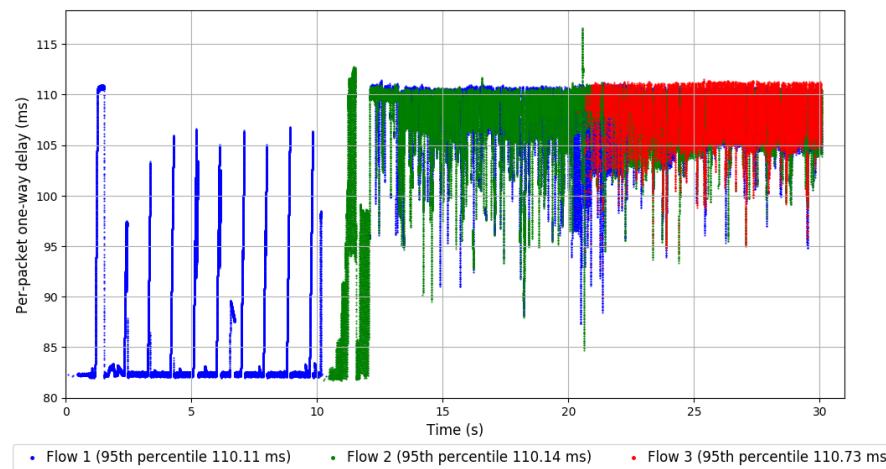
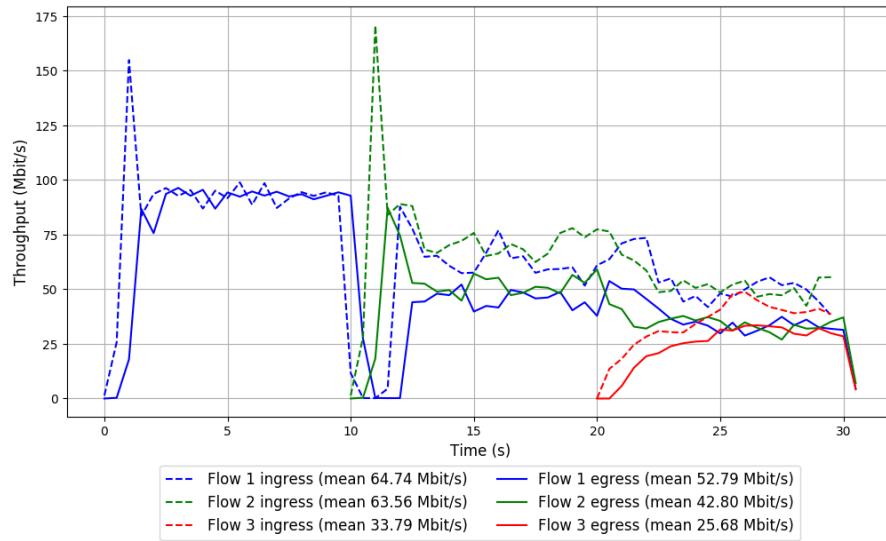


Run 4: Statistics of FillP

```
Start at: 2019-06-27 09:26:36
End at: 2019-06-27 09:27:06
Local clock offset: -5.626 ms
Remote clock offset: 70.78 ms

# Below is generated by plot.py at 2019-06-27 09:59:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.80 Mbit/s
95th percentile per-packet one-way delay: 110.204 ms
Loss rate: 24.00%
-- Flow 1:
Average throughput: 52.79 Mbit/s
95th percentile per-packet one-way delay: 110.113 ms
Loss rate: 18.39%
-- Flow 2:
Average throughput: 42.80 Mbit/s
95th percentile per-packet one-way delay: 110.145 ms
Loss rate: 32.58%
-- Flow 3:
Average throughput: 25.68 Mbit/s
95th percentile per-packet one-way delay: 110.734 ms
Loss rate: 23.96%
```

## Run 4: Report of FillP — Data Link

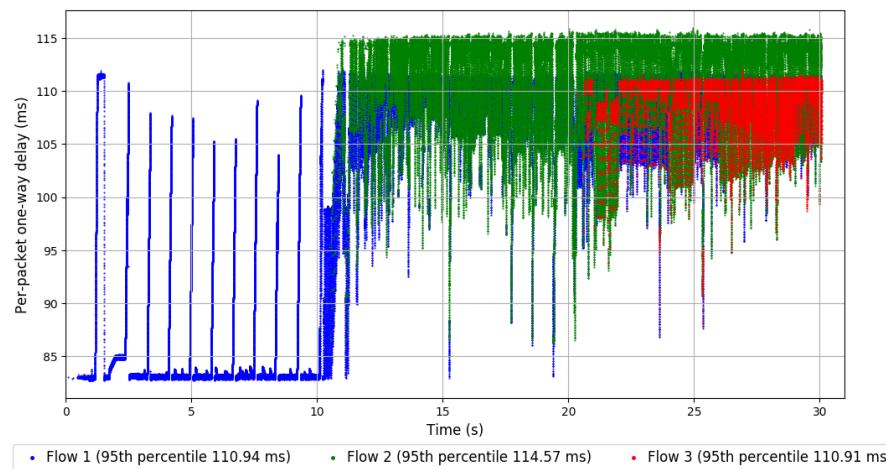
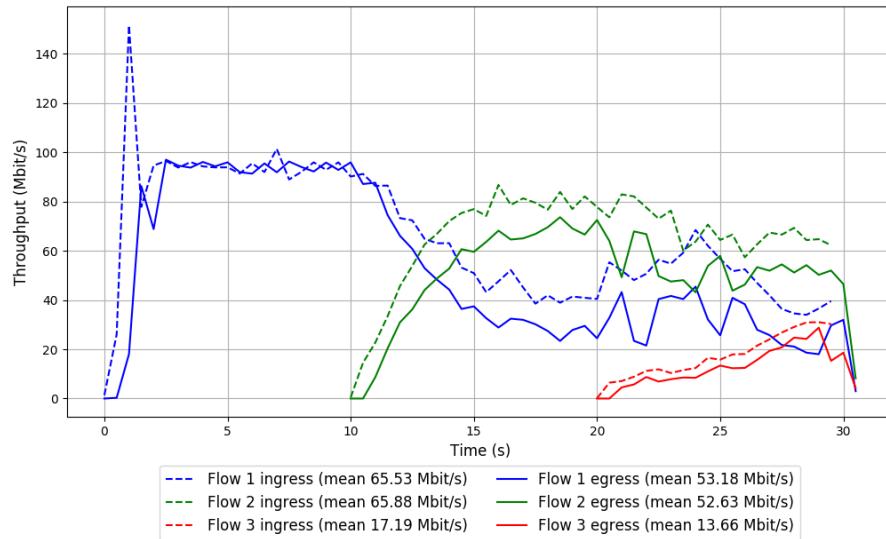


```
Run 5: Statistics of FillP
```

```
Start at: 2019-06-27 09:54:35
End at: 2019-06-27 09:55:05
Local clock offset: -7.954 ms
Remote clock offset: 74.406 ms

# Below is generated by plot.py at 2019-06-27 09:59:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.71 Mbit/s
95th percentile per-packet one-way delay: 114.308 ms
Loss rate: 19.34%
-- Flow 1:
Average throughput: 53.18 Mbit/s
95th percentile per-packet one-way delay: 110.935 ms
Loss rate: 18.79%
-- Flow 2:
Average throughput: 52.63 Mbit/s
95th percentile per-packet one-way delay: 114.567 ms
Loss rate: 20.01%
-- Flow 3:
Average throughput: 13.66 Mbit/s
95th percentile per-packet one-way delay: 110.913 ms
Loss rate: 20.56%
```

## Run 5: Report of FillP — Data Link

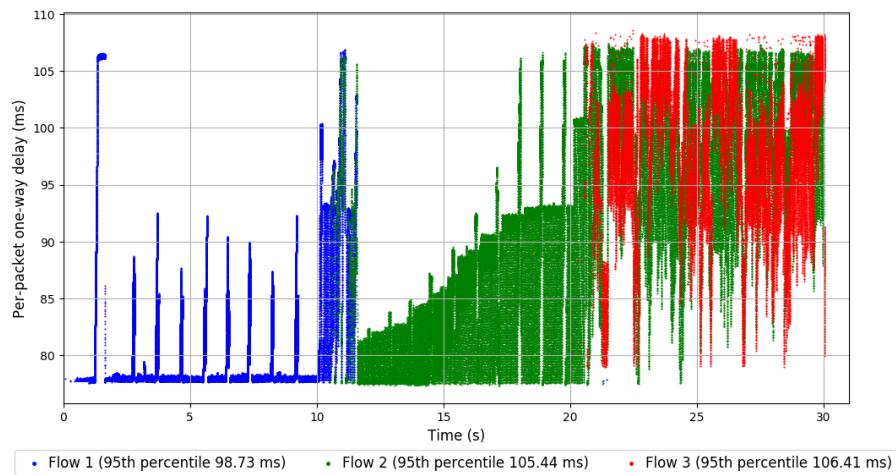
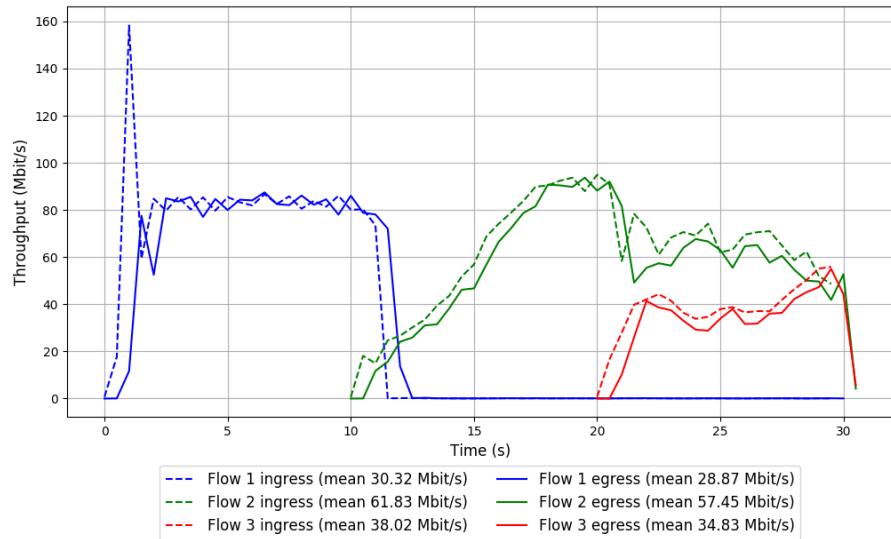


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-06-27 07:58:55
End at: 2019-06-27 07:59:25
Local clock offset: -7.155 ms
Remote clock offset: 54.737 ms

# Below is generated by plot.py at 2019-06-27 09:59:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.45 Mbit/s
95th percentile per-packet one-way delay: 105.462 ms
Loss rate: 6.36%
-- Flow 1:
Average throughput: 28.87 Mbit/s
95th percentile per-packet one-way delay: 98.729 ms
Loss rate: 4.70%
-- Flow 2:
Average throughput: 57.45 Mbit/s
95th percentile per-packet one-way delay: 105.438 ms
Loss rate: 6.98%
-- Flow 3:
Average throughput: 34.83 Mbit/s
95th percentile per-packet one-way delay: 106.413 ms
Loss rate: 8.31%
```

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

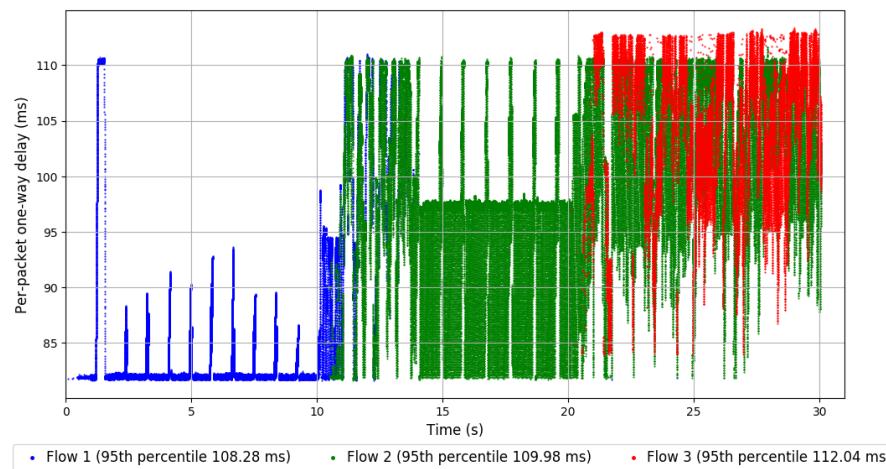
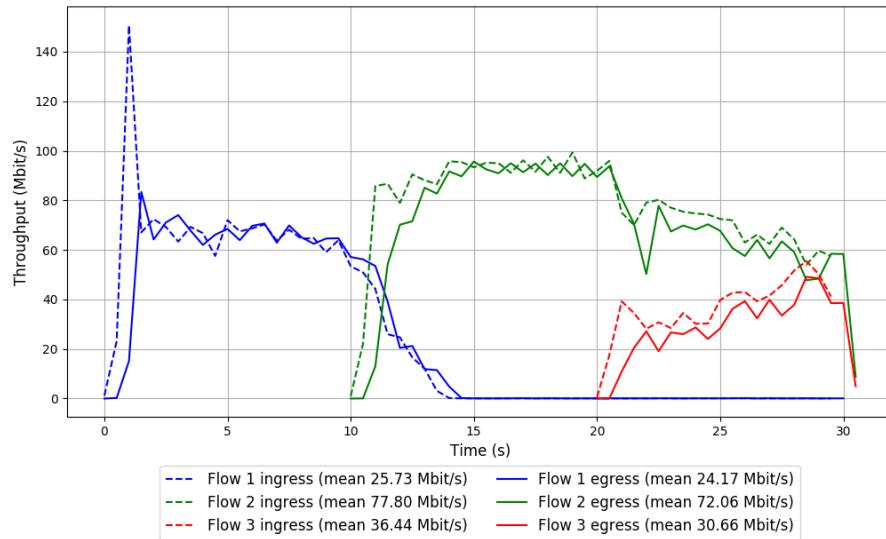


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-06-27 08:26:53
End at: 2019-06-27 08:27:23
Local clock offset: -5.487 ms
Remote clock offset: 62.241 ms

# Below is generated by plot.py at 2019-06-27 10:00:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.23 Mbit/s
95th percentile per-packet one-way delay: 110.124 ms
Loss rate: 8.07%
-- Flow 1:
Average throughput: 24.17 Mbit/s
95th percentile per-packet one-way delay: 108.275 ms
Loss rate: 5.98%
-- Flow 2:
Average throughput: 72.06 Mbit/s
95th percentile per-packet one-way delay: 109.981 ms
Loss rate: 7.30%
-- Flow 3:
Average throughput: 30.66 Mbit/s
95th percentile per-packet one-way delay: 112.043 ms
Loss rate: 15.82%
```

Run 2: Report of FillP-Sheep — Data Link

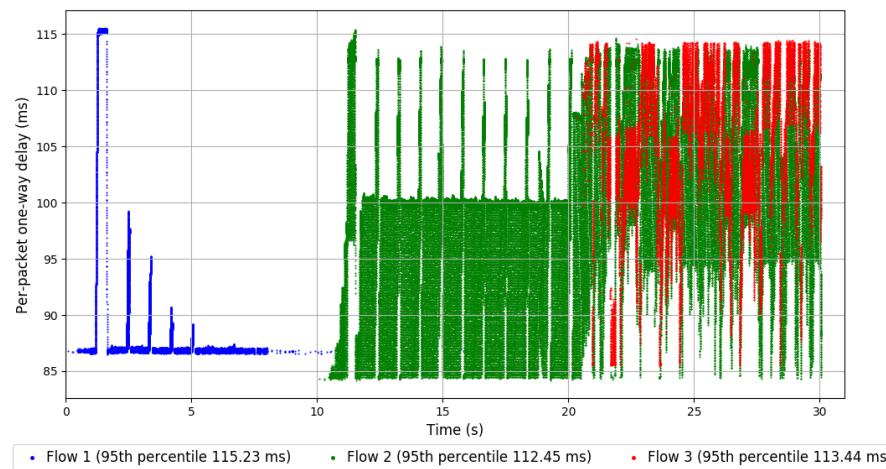
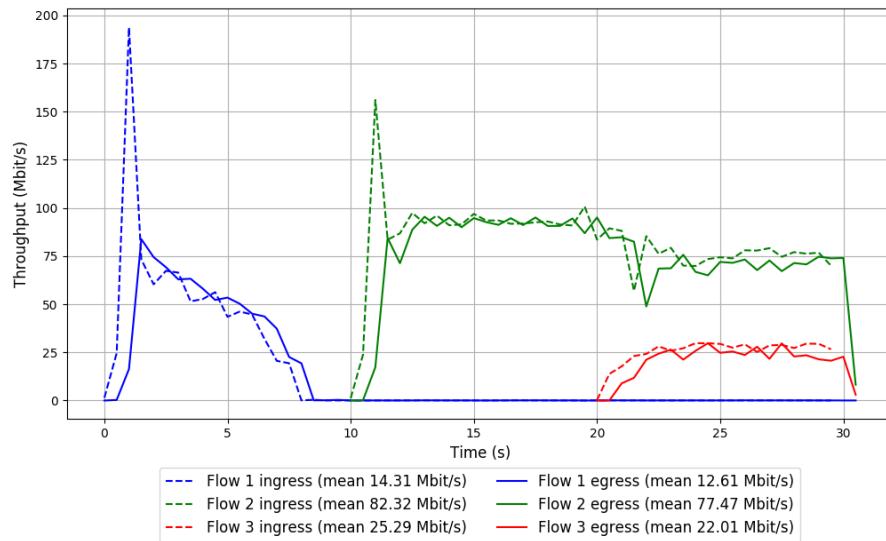


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-06-27 08:54:49
End at: 2019-06-27 08:55:19
Local clock offset: -5.126 ms
Remote clock offset: 67.855 ms

# Below is generated by plot.py at 2019-06-27 10:00:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.49 Mbit/s
95th percentile per-packet one-way delay: 112.596 ms
Loss rate: 7.74%
-- Flow 1:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 115.227 ms
Loss rate: 11.84%
-- Flow 2:
Average throughput: 77.47 Mbit/s
95th percentile per-packet one-way delay: 112.453 ms
Loss rate: 5.88%
-- Flow 3:
Average throughput: 22.01 Mbit/s
95th percentile per-packet one-way delay: 113.442 ms
Loss rate: 12.86%
```

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

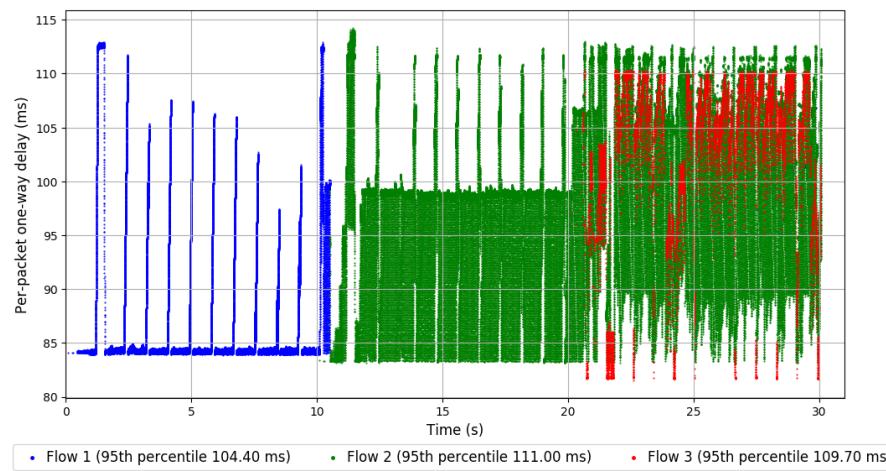
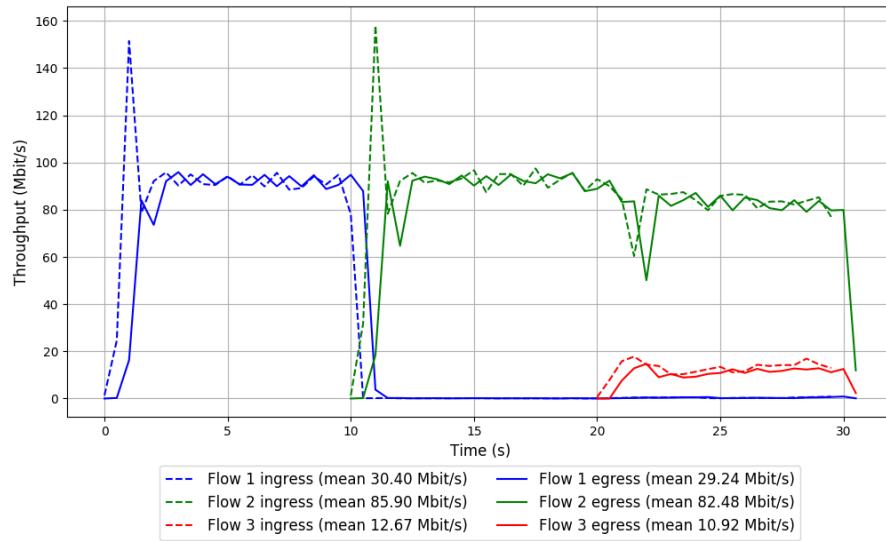


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-06-27 09:22:44
End at: 2019-06-27 09:23:14
Local clock offset: -5.067 ms
Remote clock offset: 69.288 ms

# Below is generated by plot.py at 2019-06-27 10:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.78 Mbit/s
95th percentile per-packet one-way delay: 110.459 ms
Loss rate: 4.27%
-- Flow 1:
Average throughput: 29.24 Mbit/s
95th percentile per-packet one-way delay: 104.403 ms
Loss rate: 3.75%
-- Flow 2:
Average throughput: 82.48 Mbit/s
95th percentile per-packet one-way delay: 111.004 ms
Loss rate: 3.85%
-- Flow 3:
Average throughput: 10.92 Mbit/s
95th percentile per-packet one-way delay: 109.702 ms
Loss rate: 13.86%
```

Run 4: Report of FillP-Sheep — Data Link

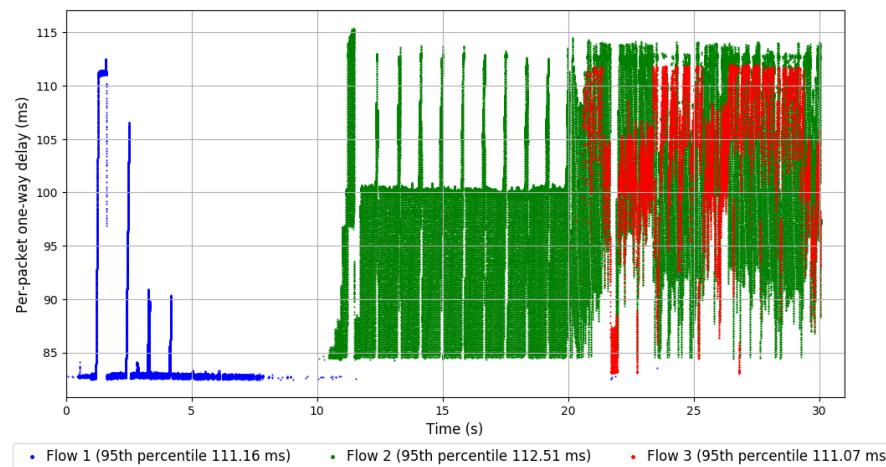
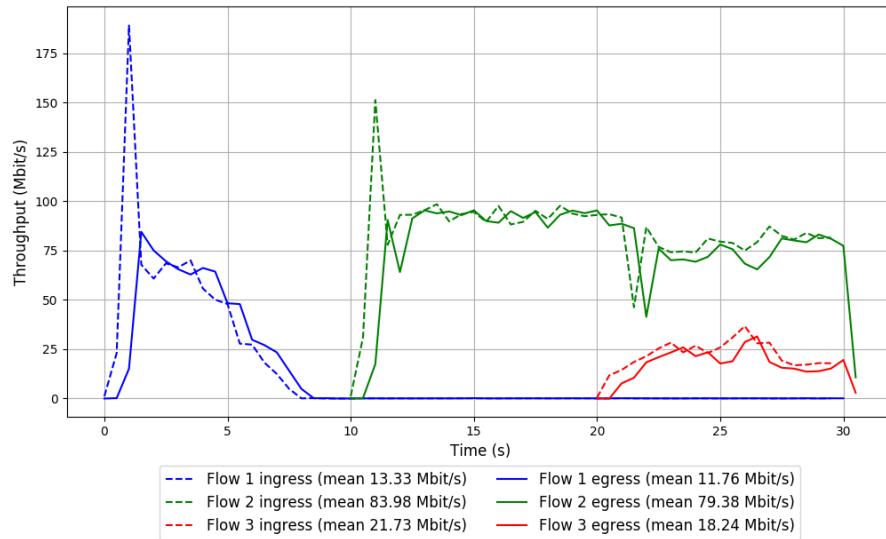


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-06-27 09:50:43
End at: 2019-06-27 09:51:13
Local clock offset: -7.285 ms
Remote clock offset: 73.74 ms

# Below is generated by plot.py at 2019-06-27 10:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.67 Mbit/s
95th percentile per-packet one-way delay: 112.237 ms
Loss rate: 7.51%
-- Flow 1:
Average throughput: 11.76 Mbit/s
95th percentile per-packet one-way delay: 111.158 ms
Loss rate: 11.66%
-- Flow 2:
Average throughput: 79.38 Mbit/s
95th percentile per-packet one-way delay: 112.512 ms
Loss rate: 5.42%
-- Flow 3:
Average throughput: 18.24 Mbit/s
95th percentile per-packet one-way delay: 111.072 ms
Loss rate: 16.10%
```

Run 5: Report of FillP-Sheep — Data Link

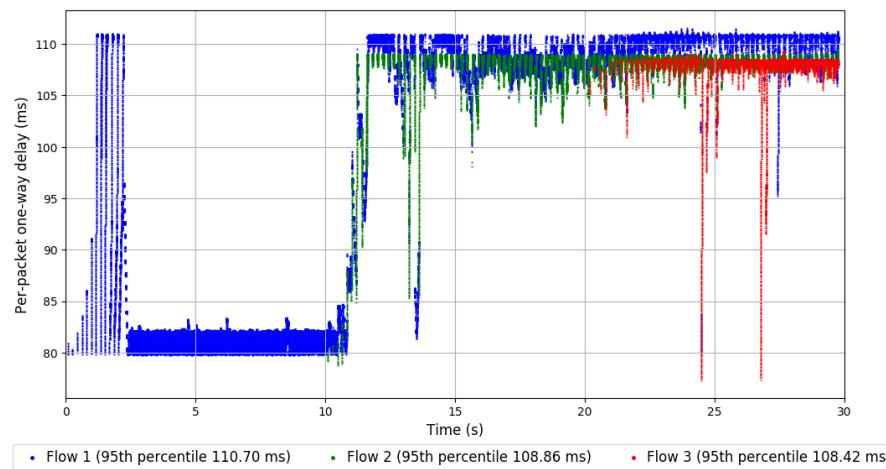
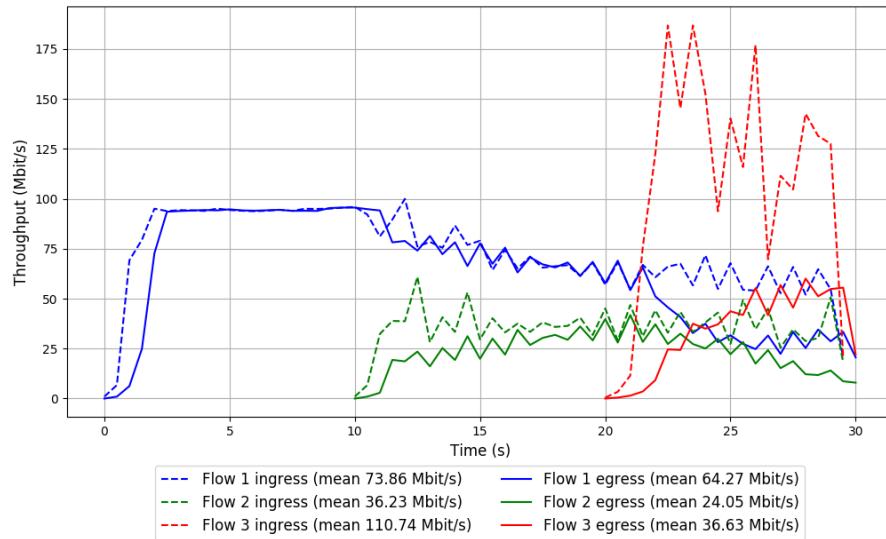


Run 1: Statistics of Indigo

```
Start at: 2019-06-27 07:57:35
End at: 2019-06-27 07:58:05
Local clock offset: -6.929 ms
Remote clock offset: 54.32 ms

# Below is generated by plot.py at 2019-06-27 10:00:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.01 Mbit/s
95th percentile per-packet one-way delay: 110.682 ms
Loss rate: 31.06%
-- Flow 1:
Average throughput: 64.27 Mbit/s
95th percentile per-packet one-way delay: 110.701 ms
Loss rate: 12.89%
-- Flow 2:
Average throughput: 24.05 Mbit/s
95th percentile per-packet one-way delay: 108.858 ms
Loss rate: 33.53%
-- Flow 3:
Average throughput: 36.63 Mbit/s
95th percentile per-packet one-way delay: 108.422 ms
Loss rate: 66.91%
```

Run 1: Report of Indigo — Data Link

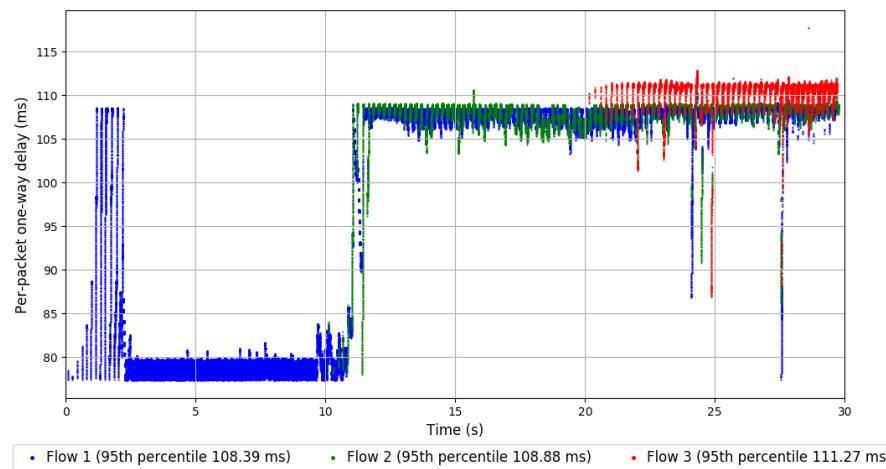
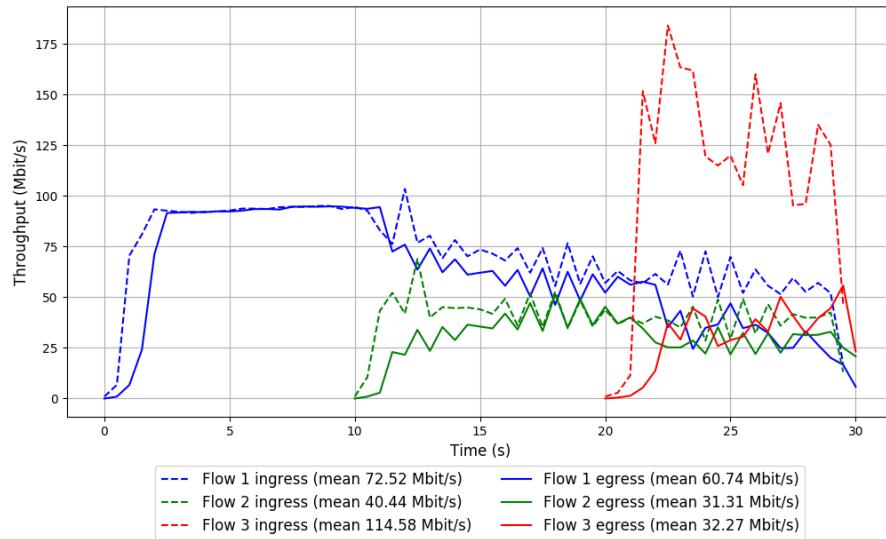


Run 2: Statistics of Indigo

```
Start at: 2019-06-27 08:25:33
End at: 2019-06-27 08:26:03
Local clock offset: -5.596 ms
Remote clock offset: 58.091 ms

# Below is generated by plot.py at 2019-06-27 10:00:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 111.053 ms
Loss rate: 32.49%
-- Flow 1:
Average throughput: 60.74 Mbit/s
95th percentile per-packet one-way delay: 108.385 ms
Loss rate: 16.15%
-- Flow 2:
Average throughput: 31.31 Mbit/s
95th percentile per-packet one-way delay: 108.880 ms
Loss rate: 22.46%
-- Flow 3:
Average throughput: 32.27 Mbit/s
95th percentile per-packet one-way delay: 111.265 ms
Loss rate: 71.83%
```

## Run 2: Report of Indigo — Data Link

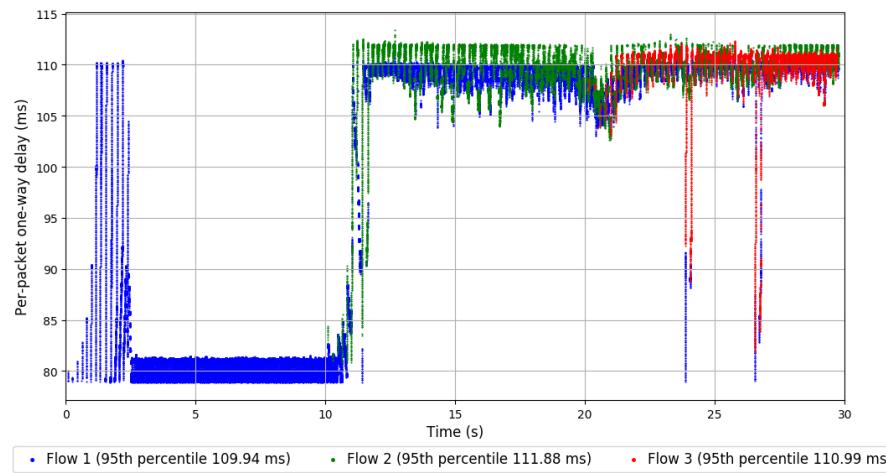
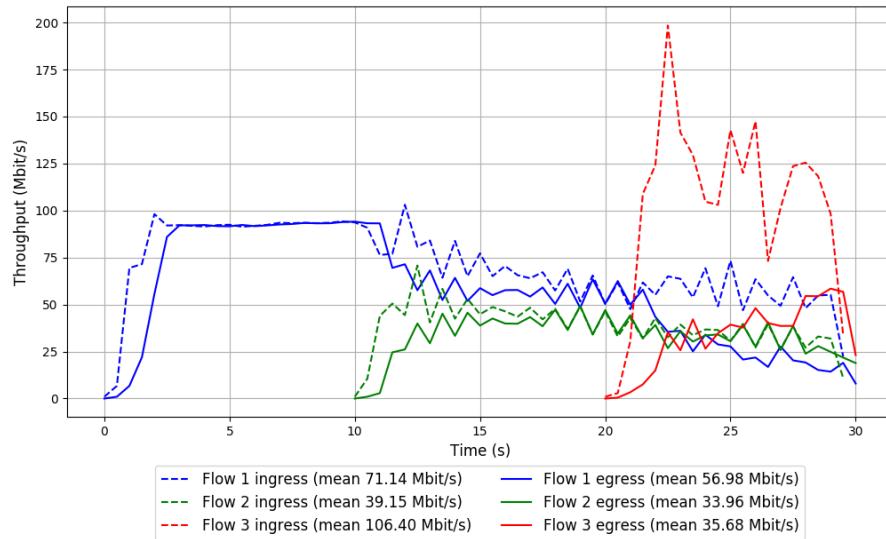


Run 3: Statistics of Indigo

```
Start at: 2019-06-27 08:53:29
End at: 2019-06-27 08:53:59
Local clock offset: -4.08 ms
Remote clock offset: 62.715 ms

# Below is generated by plot.py at 2019-06-27 10:00:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.92 Mbit/s
95th percentile per-packet one-way delay: 111.655 ms
Loss rate: 30.66%
-- Flow 1:
Average throughput: 56.98 Mbit/s
95th percentile per-packet one-way delay: 109.937 ms
Loss rate: 19.83%
-- Flow 2:
Average throughput: 33.96 Mbit/s
95th percentile per-packet one-way delay: 111.877 ms
Loss rate: 13.15%
-- Flow 3:
Average throughput: 35.68 Mbit/s
95th percentile per-packet one-way delay: 110.992 ms
Loss rate: 66.46%
```

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

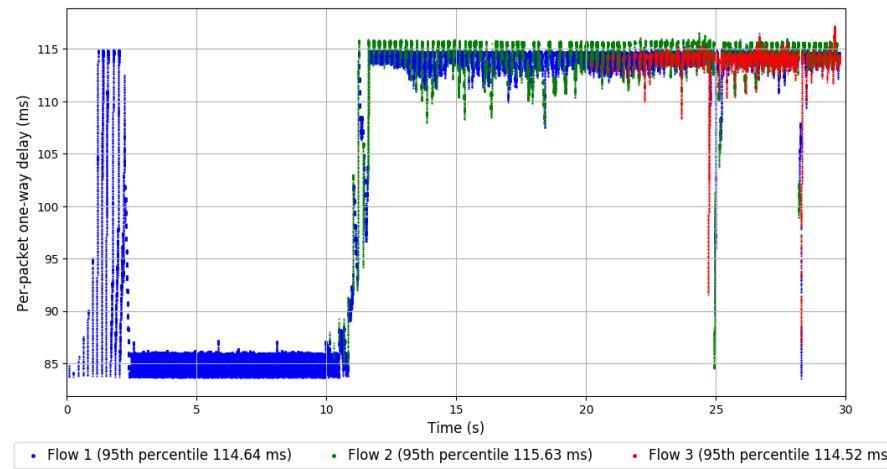
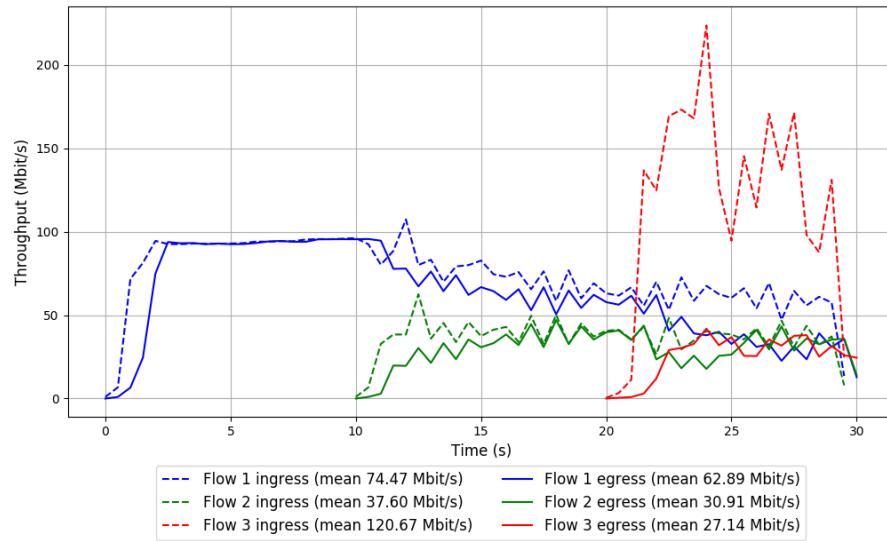


Run 4: Statistics of Indigo

```
Start at: 2019-06-27 09:21:24
End at: 2019-06-27 09:21:54
Local clock offset: -5.257 ms
Remote clock offset: 69.389 ms

# Below is generated by plot.py at 2019-06-27 10:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.00 Mbit/s
95th percentile per-packet one-way delay: 115.502 ms
Loss rate: 33.36%
-- Flow 1:
Average throughput: 62.89 Mbit/s
95th percentile per-packet one-way delay: 114.639 ms
Loss rate: 15.46%
-- Flow 2:
Average throughput: 30.91 Mbit/s
95th percentile per-packet one-way delay: 115.629 ms
Loss rate: 17.66%
-- Flow 3:
Average throughput: 27.14 Mbit/s
95th percentile per-packet one-way delay: 114.522 ms
Loss rate: 77.51%
```

Run 4: Report of Indigo — Data Link

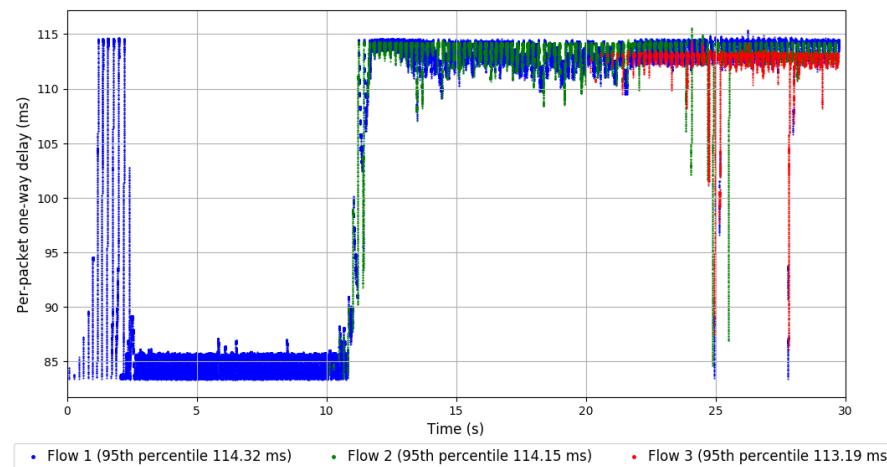
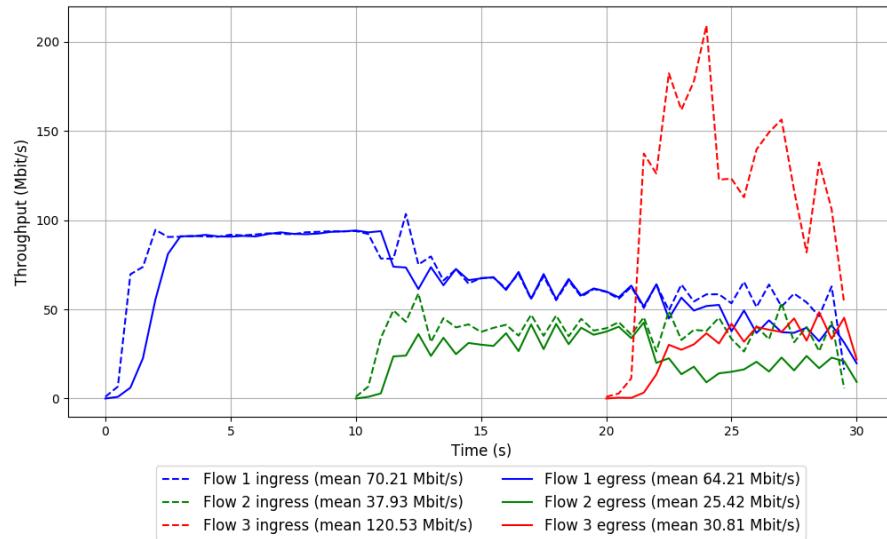


Run 5: Statistics of Indigo

```
Start at: 2019-06-27 09:49:23
End at: 2019-06-27 09:49:53
Local clock offset: -7.573 ms
Remote clock offset: 72.704 ms

# Below is generated by plot.py at 2019-06-27 10:01:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.86 Mbit/s
95th percentile per-packet one-way delay: 114.307 ms
Loss rate: 32.13%
-- Flow 1:
Average throughput: 64.21 Mbit/s
95th percentile per-packet one-way delay: 114.322 ms
Loss rate: 8.45%
-- Flow 2:
Average throughput: 25.42 Mbit/s
95th percentile per-packet one-way delay: 114.151 ms
Loss rate: 32.88%
-- Flow 3:
Average throughput: 30.81 Mbit/s
95th percentile per-packet one-way delay: 113.188 ms
Loss rate: 74.43%
```

Run 5: Report of Indigo — Data Link

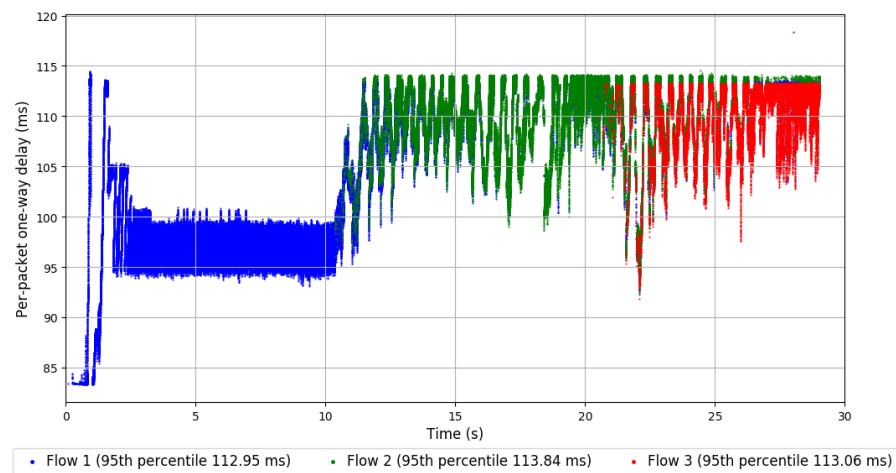
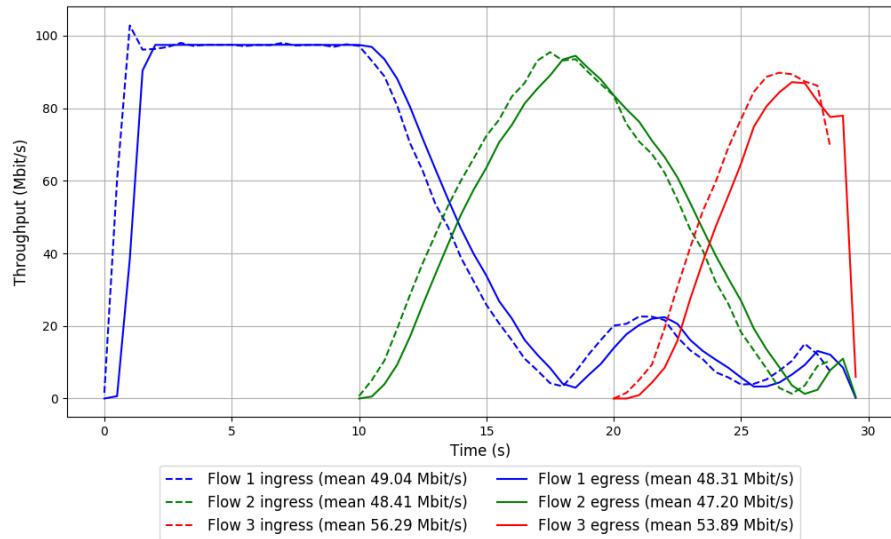


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 07:53:48
End at: 2019-06-27 07:54:18
Local clock offset: -7.776 ms
Remote clock offset: 57.762 ms

# Below is generated by plot.py at 2019-06-27 10:01:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.93 Mbit/s
95th percentile per-packet one-way delay: 113.505 ms
Loss rate: 2.20%
-- Flow 1:
Average throughput: 48.31 Mbit/s
95th percentile per-packet one-way delay: 112.947 ms
Loss rate: 1.39%
-- Flow 2:
Average throughput: 47.20 Mbit/s
95th percentile per-packet one-way delay: 113.837 ms
Loss rate: 2.41%
-- Flow 3:
Average throughput: 53.89 Mbit/s
95th percentile per-packet one-way delay: 113.058 ms
Loss rate: 4.22%
```

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

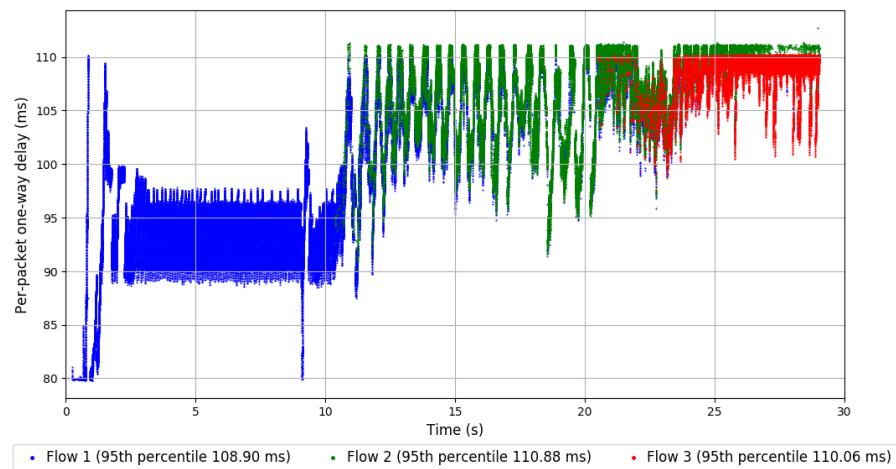
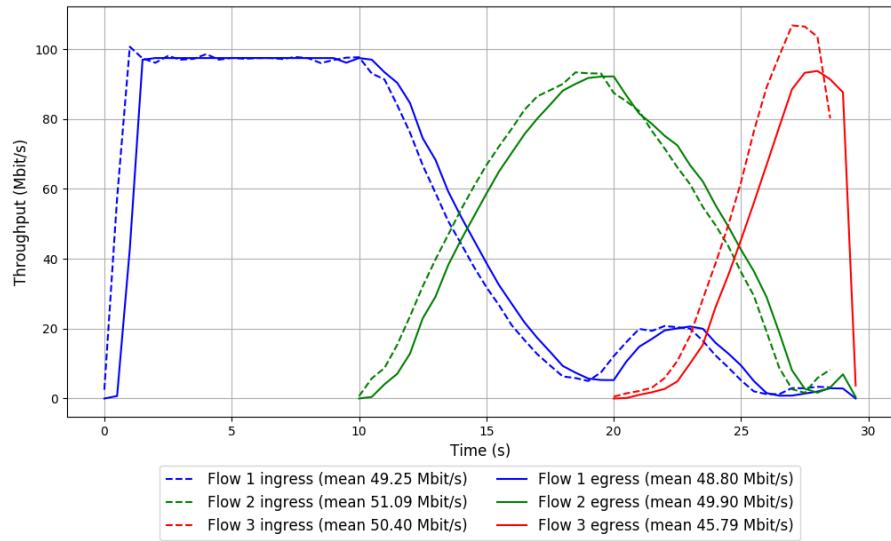


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 08:21:46
End at: 2019-06-27 08:22:16
Local clock offset: -6.159 ms
Remote clock offset: 58.534 ms

# Below is generated by plot.py at 2019-06-27 10:01:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.09 Mbit/s
95th percentile per-packet one-way delay: 110.466 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 48.80 Mbit/s
95th percentile per-packet one-way delay: 108.896 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 49.90 Mbit/s
95th percentile per-packet one-way delay: 110.879 ms
Loss rate: 2.23%
-- Flow 3:
Average throughput: 45.79 Mbit/s
95th percentile per-packet one-way delay: 110.063 ms
Loss rate: 9.01%
```

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

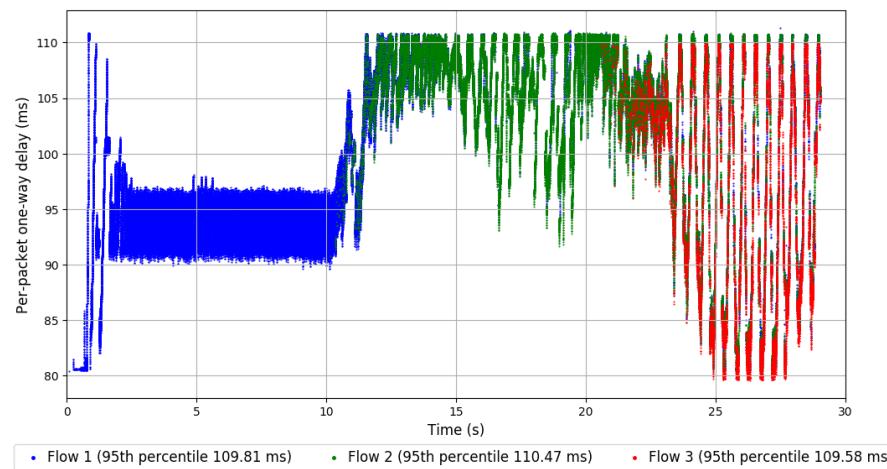
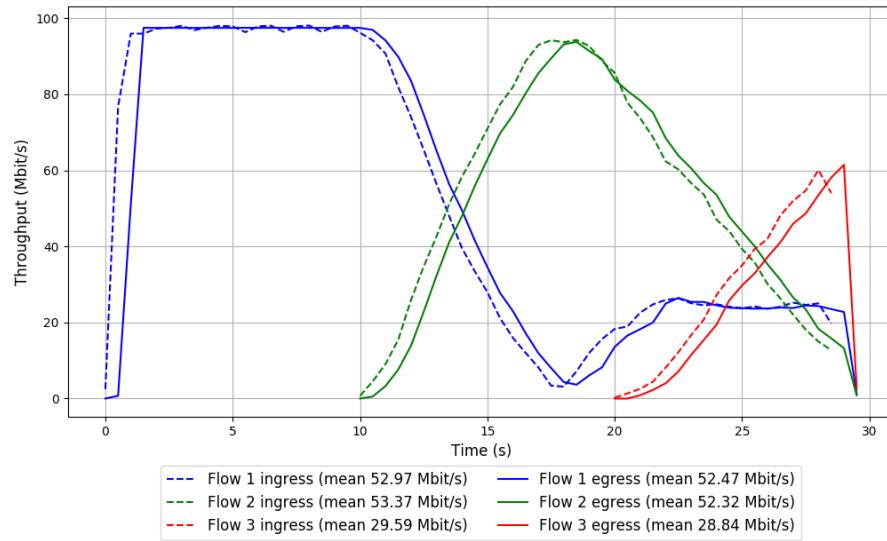


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 08:49:43
End at: 2019-06-27 08:50:13
Local clock offset: -4.99 ms
Remote clock offset: 61.225 ms

# Below is generated by plot.py at 2019-06-27 10:01:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.14 Mbit/s
95th percentile per-packet one-way delay: 110.301 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 52.47 Mbit/s
95th percentile per-packet one-way delay: 109.808 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 52.32 Mbit/s
95th percentile per-packet one-way delay: 110.475 ms
Loss rate: 1.91%
-- Flow 3:
Average throughput: 28.84 Mbit/s
95th percentile per-packet one-way delay: 109.581 ms
Loss rate: 2.53%
```

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

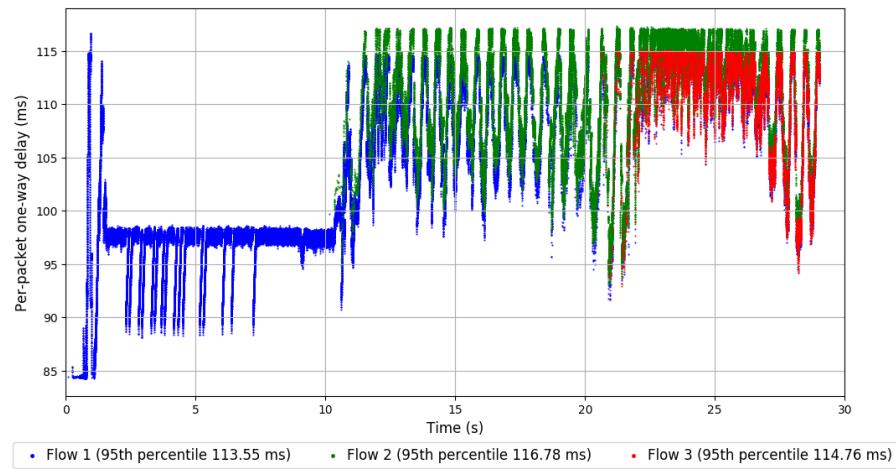
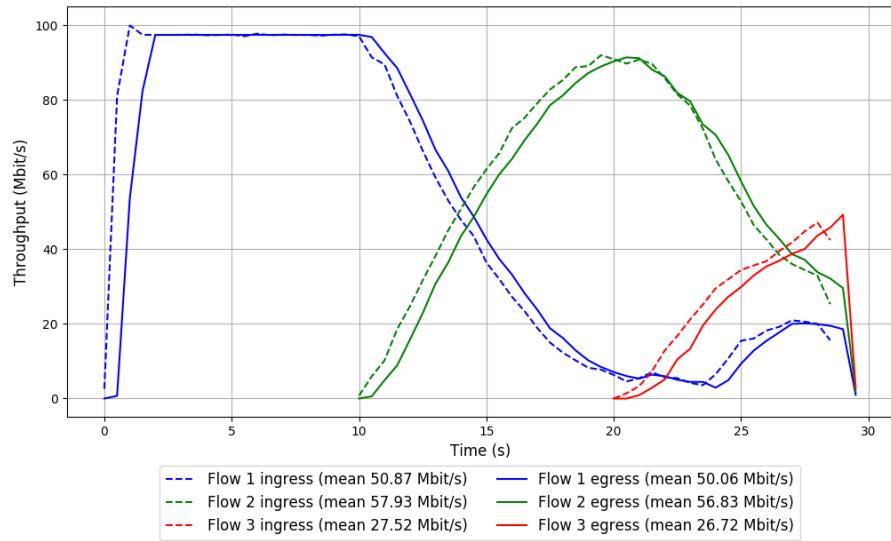


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 09:17:38
End at: 2019-06-27 09:18:08
Local clock offset: -4.293 ms
Remote clock offset: 70.883 ms

# Below is generated by plot.py at 2019-06-27 10:01:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.06 Mbit/s
95th percentile per-packet one-way delay: 116.383 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 50.06 Mbit/s
95th percentile per-packet one-way delay: 113.551 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 56.83 Mbit/s
95th percentile per-packet one-way delay: 116.779 ms
Loss rate: 1.82%
-- Flow 3:
Average throughput: 26.72 Mbit/s
95th percentile per-packet one-way delay: 114.757 ms
Loss rate: 2.80%
```

Run 4: Report of Indigo-MusesC3 — Data Link

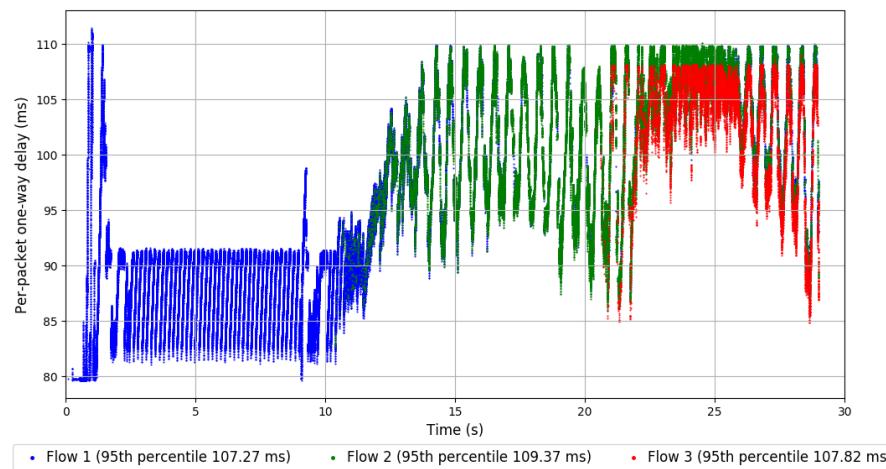
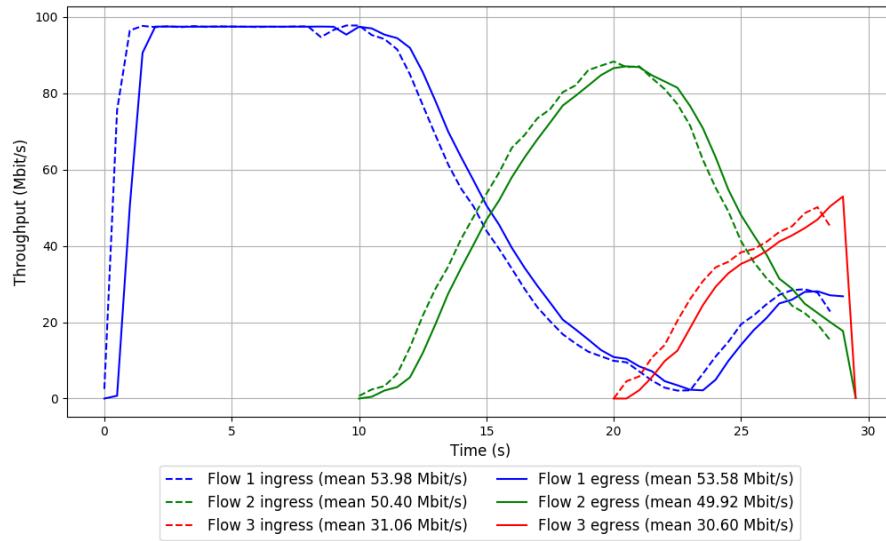


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 09:45:37
End at: 2019-06-27 09:46:07
Local clock offset: -7.287 ms
Remote clock offset: 69.024 ms

# Below is generated by plot.py at 2019-06-27 10:02:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.09 Mbit/s
95th percentile per-packet one-way delay: 108.637 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 53.58 Mbit/s
95th percentile per-packet one-way delay: 107.271 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 49.92 Mbit/s
95th percentile per-packet one-way delay: 109.368 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 30.60 Mbit/s
95th percentile per-packet one-way delay: 107.820 ms
Loss rate: 1.65%
```

Run 5: Report of Indigo-MusesC3 — Data Link

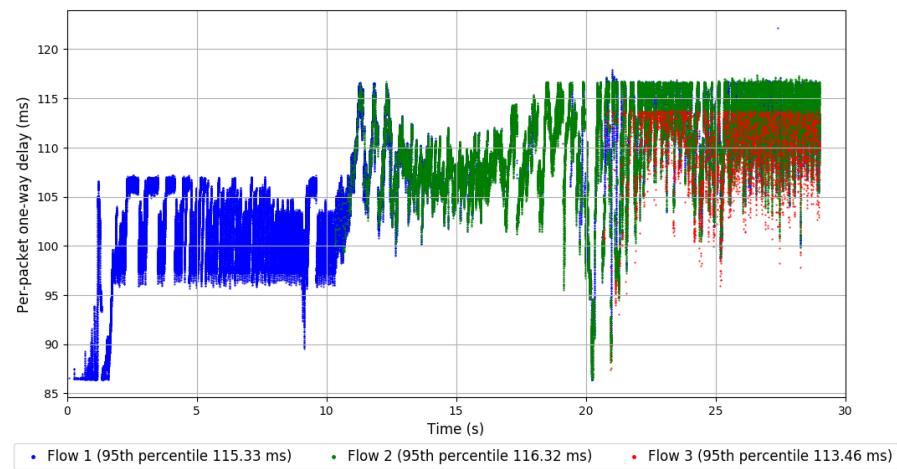
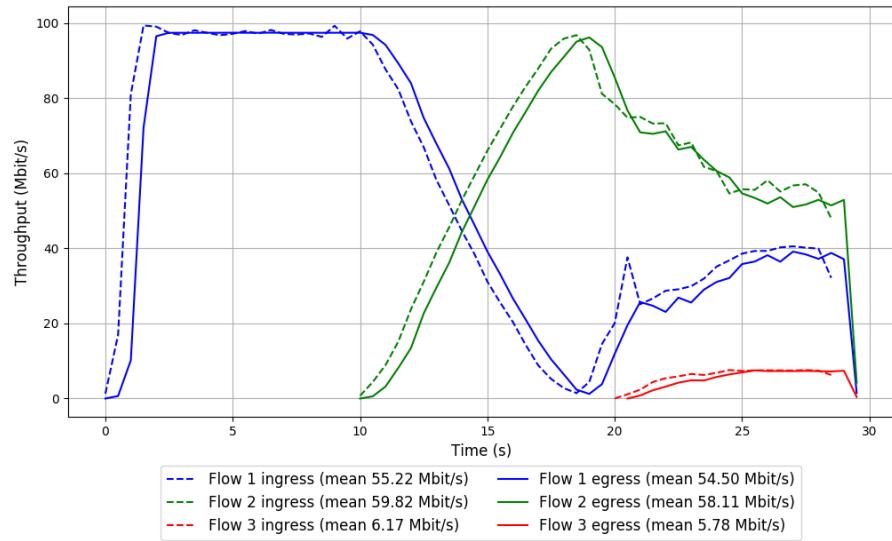


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 07:44:51
End at: 2019-06-27 07:45:21
Local clock offset: -7.293 ms
Remote clock offset: 59.157 ms

# Below is generated by plot.py at 2019-06-27 10:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.10 Mbit/s
95th percentile per-packet one-way delay: 116.066 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 54.50 Mbit/s
95th percentile per-packet one-way delay: 115.330 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 58.11 Mbit/s
95th percentile per-packet one-way delay: 116.319 ms
Loss rate: 2.79%
-- Flow 3:
Average throughput: 5.78 Mbit/s
95th percentile per-packet one-way delay: 113.463 ms
Loss rate: 6.40%
```

Run 1: Report of Indigo-MusesC5 — Data Link

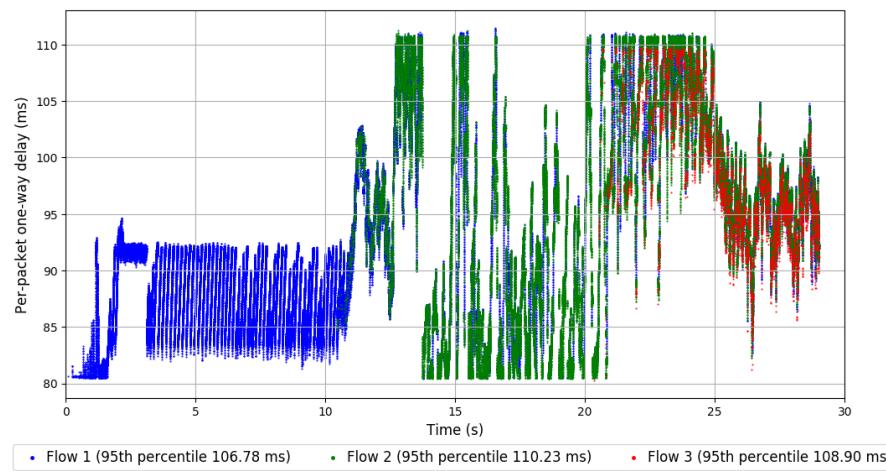
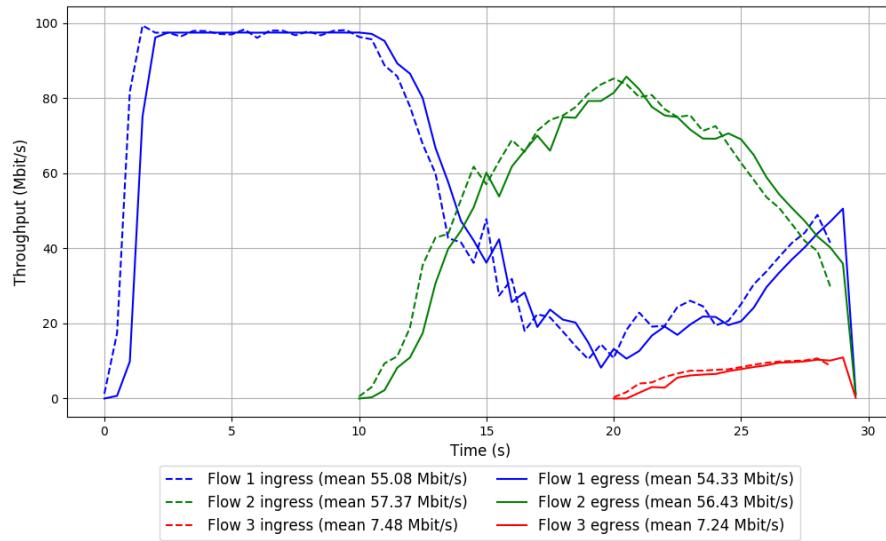


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 08:12:51
End at: 2019-06-27 08:13:21
Local clock offset: -7.7 ms
Remote clock offset: 57.403 ms

# Below is generated by plot.py at 2019-06-27 10:02:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.04 Mbit/s
95th percentile per-packet one-way delay: 109.311 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 54.33 Mbit/s
95th percentile per-packet one-way delay: 106.782 ms
Loss rate: 1.33%
-- Flow 2:
Average throughput: 56.43 Mbit/s
95th percentile per-packet one-way delay: 110.228 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 7.24 Mbit/s
95th percentile per-packet one-way delay: 108.898 ms
Loss rate: 3.18%
```

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

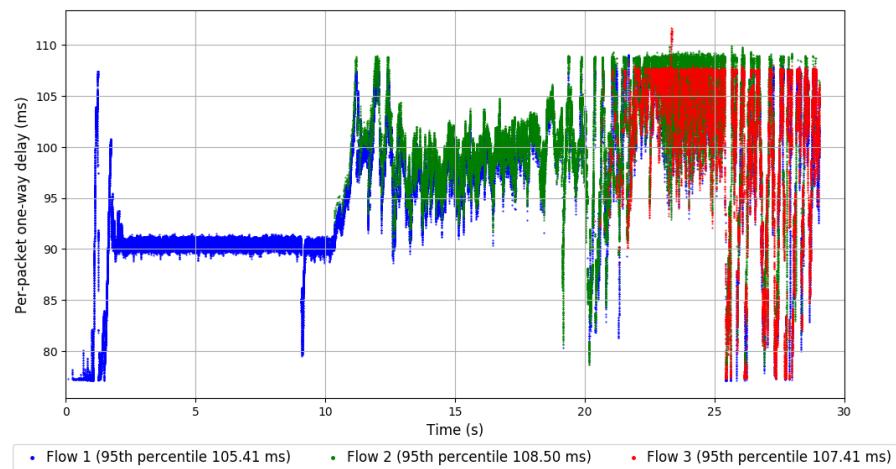
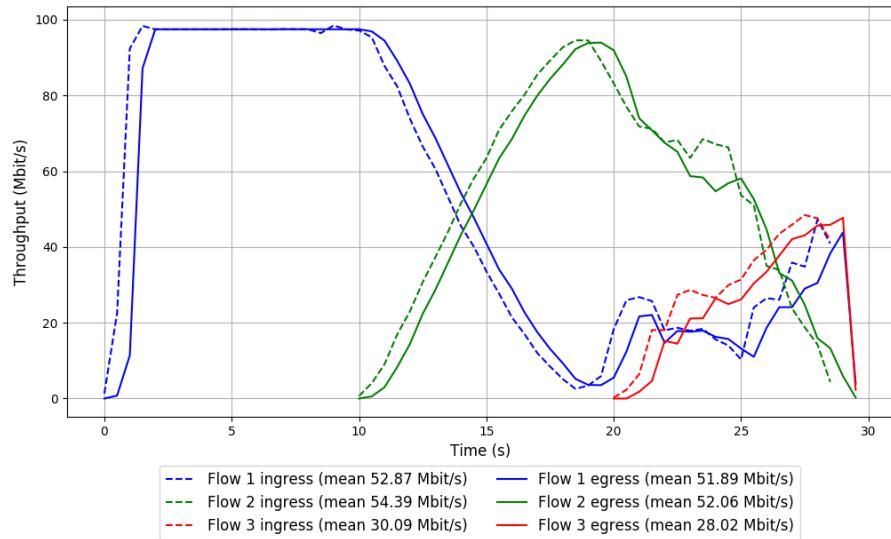


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 08:40:48
End at: 2019-06-27 08:41:18
Local clock offset: -4.485 ms
Remote clock offset: 60.153 ms

# Below is generated by plot.py at 2019-06-27 10:02:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 107.327 ms
Loss rate: 3.11%
-- Flow 1:
Average throughput: 51.89 Mbit/s
95th percentile per-packet one-way delay: 105.407 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 52.06 Mbit/s
95th percentile per-packet one-way delay: 108.502 ms
Loss rate: 4.21%
-- Flow 3:
Average throughput: 28.02 Mbit/s
95th percentile per-packet one-way delay: 107.410 ms
Loss rate: 6.75%
```

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

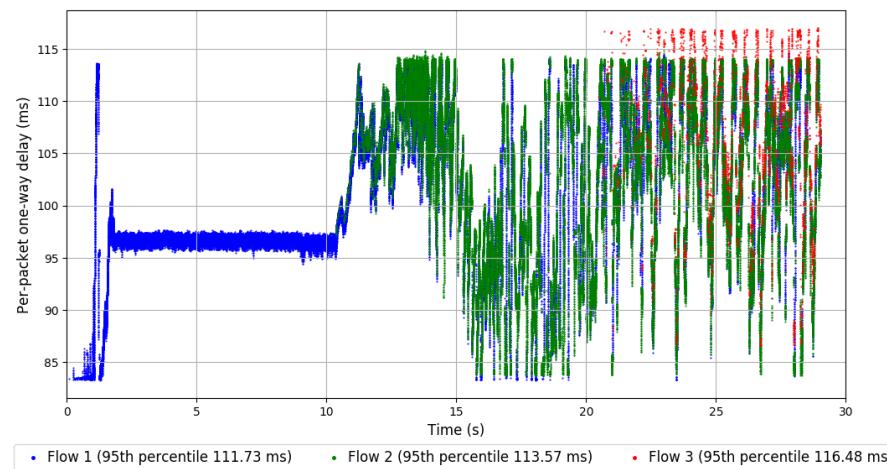
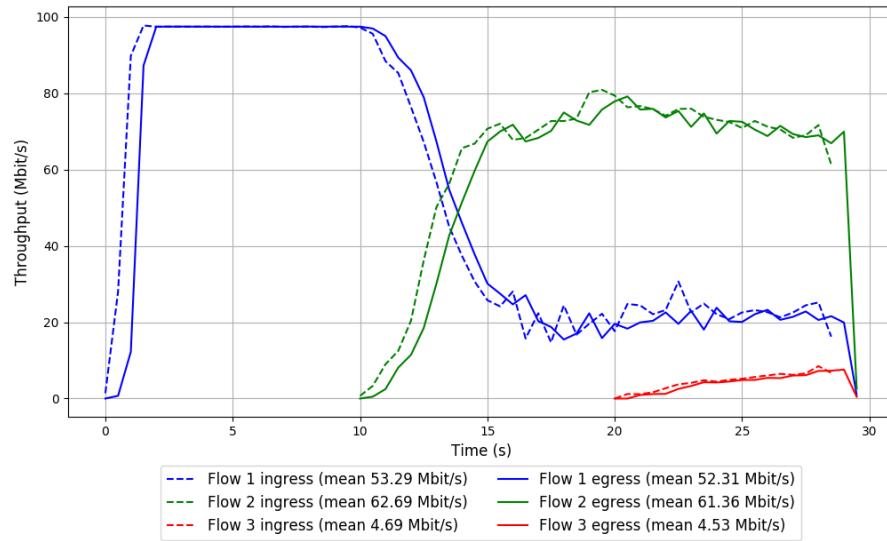


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 09:08:43
End at: 2019-06-27 09:09:13
Local clock offset: -4.53 ms
Remote clock offset: 68.787 ms

# Below is generated by plot.py at 2019-06-27 10:02:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.56 Mbit/s
95th percentile per-packet one-way delay: 113.100 ms
Loss rate: 1.92%
-- Flow 1:
Average throughput: 52.31 Mbit/s
95th percentile per-packet one-way delay: 111.732 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 61.36 Mbit/s
95th percentile per-packet one-way delay: 113.574 ms
Loss rate: 2.08%
-- Flow 3:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 116.476 ms
Loss rate: 3.36%
```

Run 4: Report of Indigo-MusesC5 — Data Link

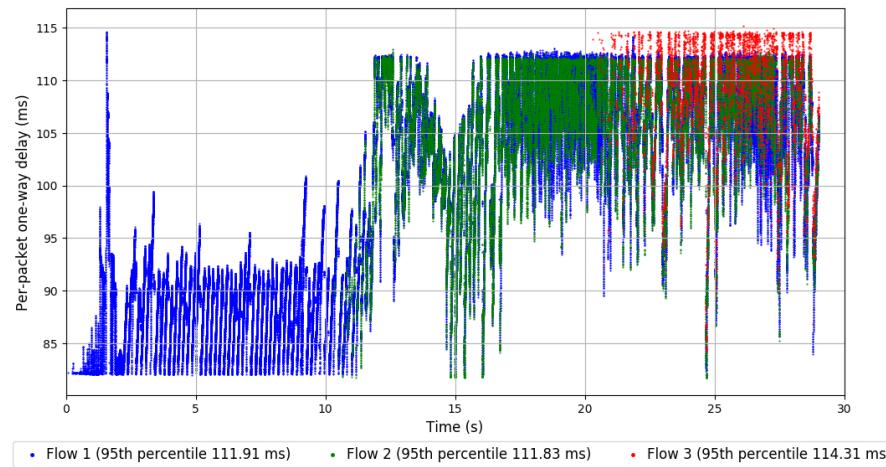
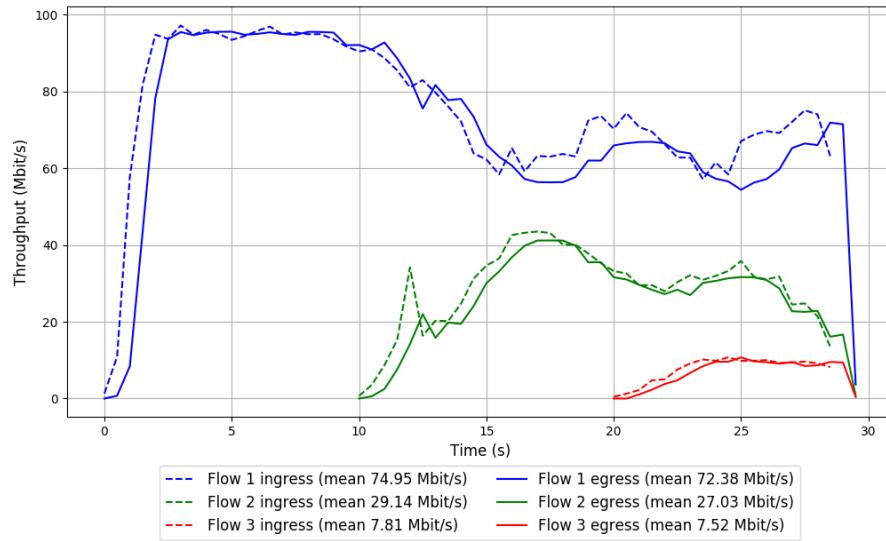


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 09:36:38
End at: 2019-06-27 09:37:08
Local clock offset: -7.554 ms
Remote clock offset: 71.07 ms

# Below is generated by plot.py at 2019-06-27 10:02:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.25 Mbit/s
95th percentile per-packet one-way delay: 111.918 ms
Loss rate: 4.10%
-- Flow 1:
Average throughput: 72.38 Mbit/s
95th percentile per-packet one-way delay: 111.905 ms
Loss rate: 3.34%
-- Flow 2:
Average throughput: 27.03 Mbit/s
95th percentile per-packet one-way delay: 111.830 ms
Loss rate: 7.12%
-- Flow 3:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 114.313 ms
Loss rate: 3.82%
```

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

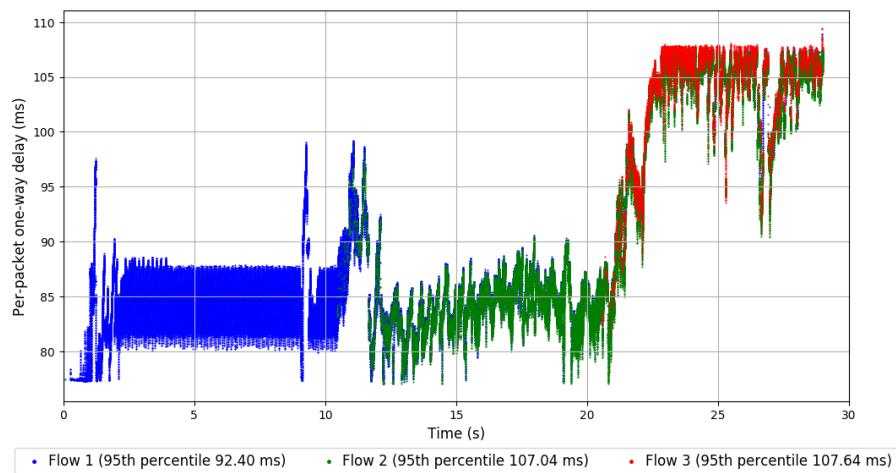
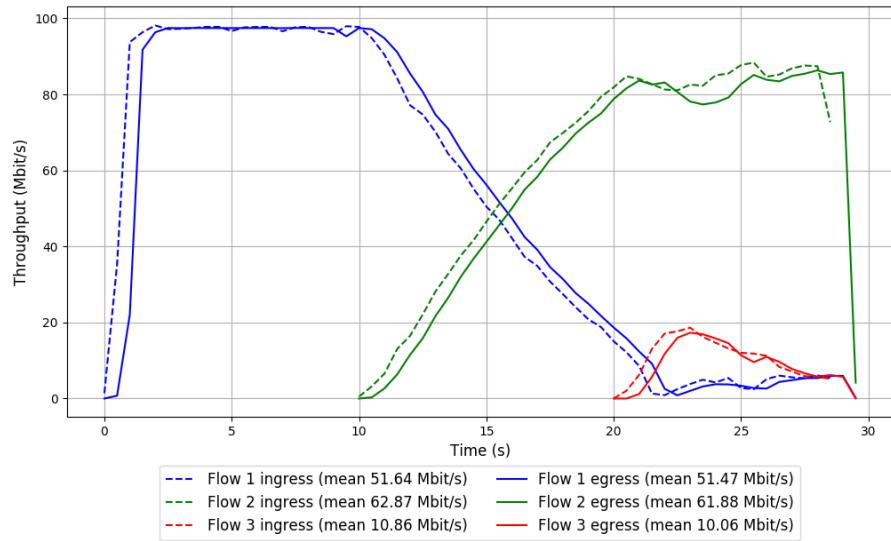


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 07:49:54
End at: 2019-06-27 07:50:24
Local clock offset: -7.083 ms
Remote clock offset: 53.374 ms

# Below is generated by plot.py at 2019-06-27 10:03:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.53 Mbit/s
95th percentile per-packet one-way delay: 106.831 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 51.47 Mbit/s
95th percentile per-packet one-way delay: 92.396 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 61.88 Mbit/s
95th percentile per-packet one-way delay: 107.043 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 10.06 Mbit/s
95th percentile per-packet one-way delay: 107.643 ms
Loss rate: 7.12%
```

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

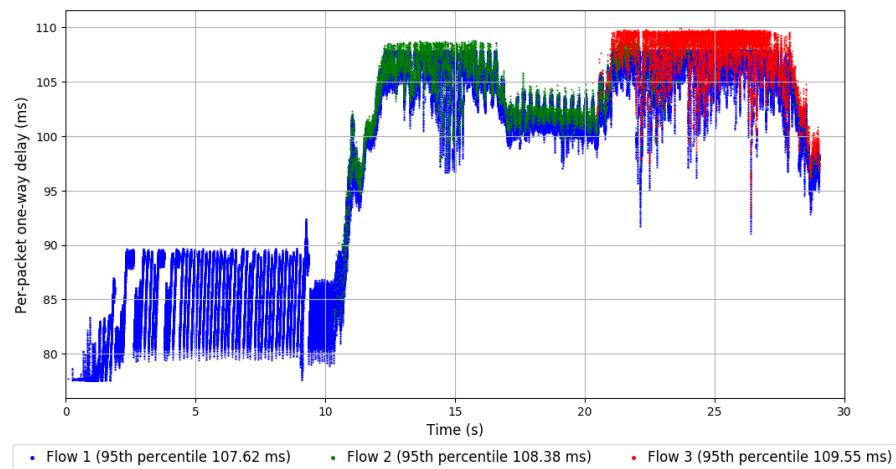
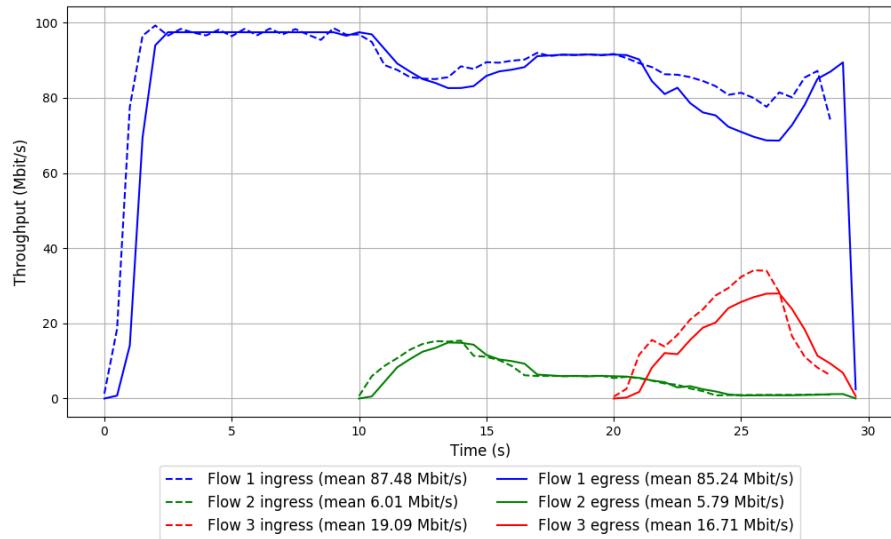


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 08:17:53
End at: 2019-06-27 08:18:23
Local clock offset: -6.945 ms
Remote clock offset: 57.161 ms

# Below is generated by plot.py at 2019-06-27 10:03:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.05 Mbit/s
95th percentile per-packet one-way delay: 107.780 ms
Loss rate: 3.13%
-- Flow 1:
Average throughput: 85.24 Mbit/s
95th percentile per-packet one-way delay: 107.618 ms
Loss rate: 2.49%
-- Flow 2:
Average throughput: 5.79 Mbit/s
95th percentile per-packet one-way delay: 108.380 ms
Loss rate: 3.54%
-- Flow 3:
Average throughput: 16.71 Mbit/s
95th percentile per-packet one-way delay: 109.551 ms
Loss rate: 12.54%
```

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

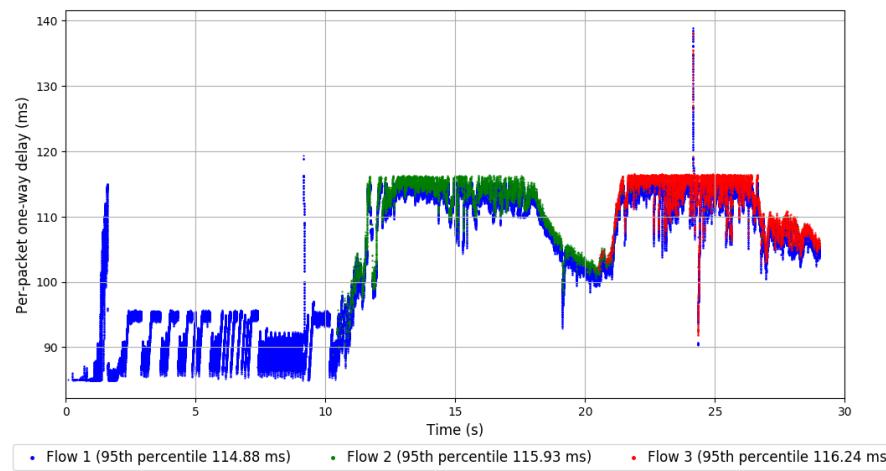
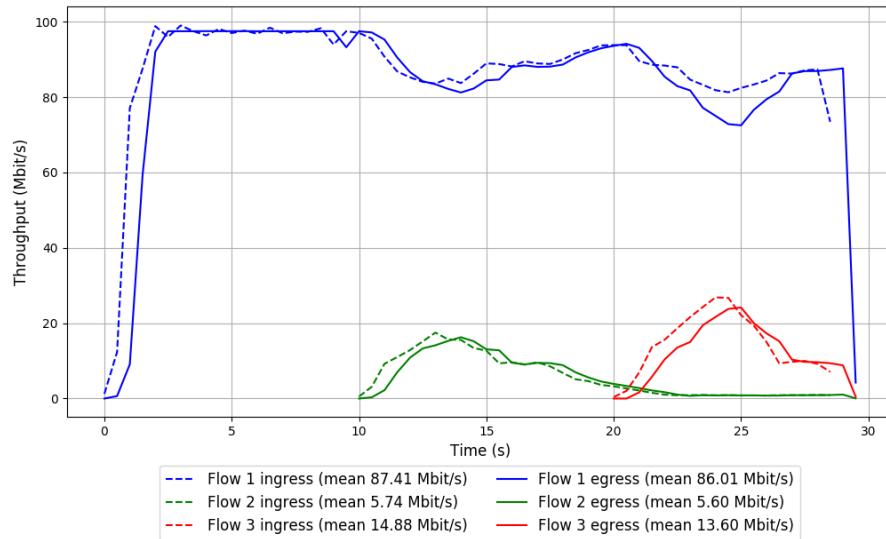


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 08:45:51
End at: 2019-06-27 08:46:21
Local clock offset: -5.385 ms
Remote clock offset: 65.719 ms

# Below is generated by plot.py at 2019-06-27 10:03:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.72 Mbit/s
95th percentile per-packet one-way delay: 115.007 ms
Loss rate: 1.90%
-- Flow 1:
Average throughput: 86.01 Mbit/s
95th percentile per-packet one-way delay: 114.875 ms
Loss rate: 1.54%
-- Flow 2:
Average throughput: 5.60 Mbit/s
95th percentile per-packet one-way delay: 115.930 ms
Loss rate: 2.42%
-- Flow 3:
Average throughput: 13.60 Mbit/s
95th percentile per-packet one-way delay: 116.237 ms
Loss rate: 8.59%
```

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

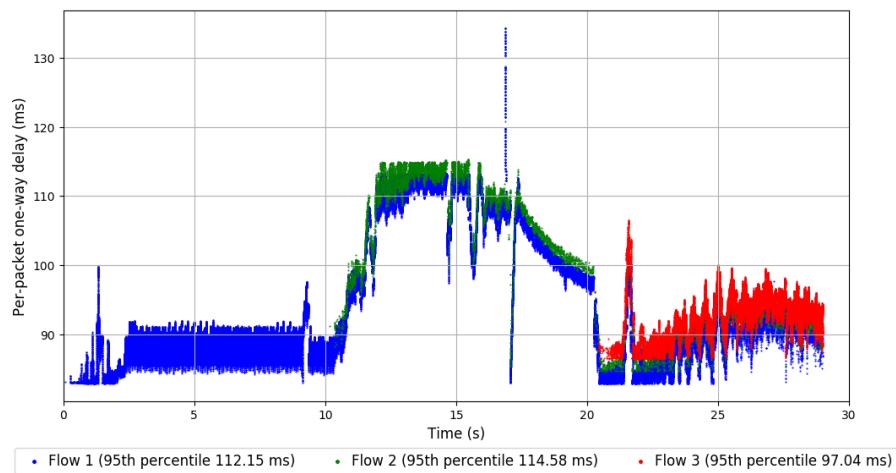
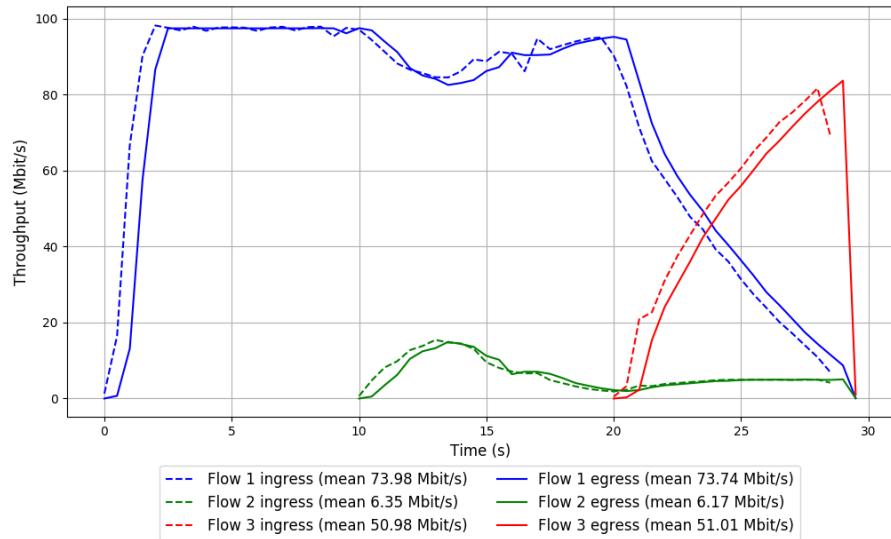


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 09:13:45
End at: 2019-06-27 09:14:15
Local clock offset: -4.396 ms
Remote clock offset: 69.271 ms

# Below is generated by plot.py at 2019-06-27 10:03:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.12 Mbit/s
95th percentile per-packet one-way delay: 112.222 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 73.74 Mbit/s
95th percentile per-packet one-way delay: 112.147 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 6.17 Mbit/s
95th percentile per-packet one-way delay: 114.579 ms
Loss rate: 2.78%
-- Flow 3:
Average throughput: 51.01 Mbit/s
95th percentile per-packet one-way delay: 97.037 ms
Loss rate: 0.02%
```

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

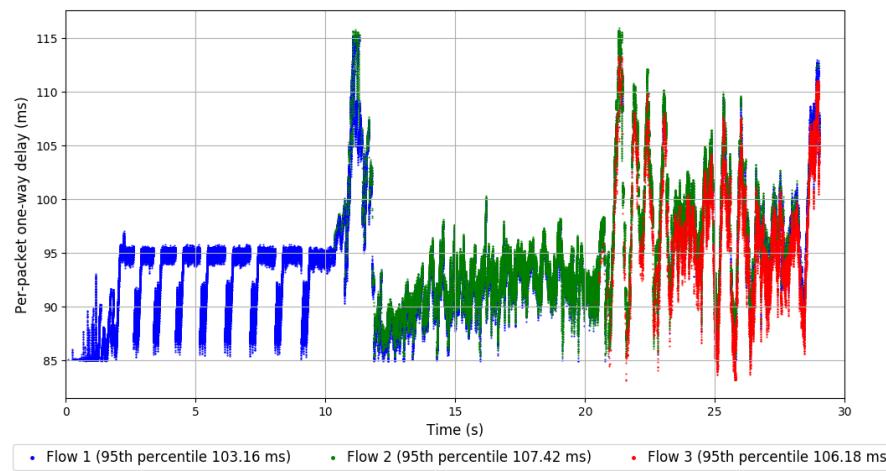
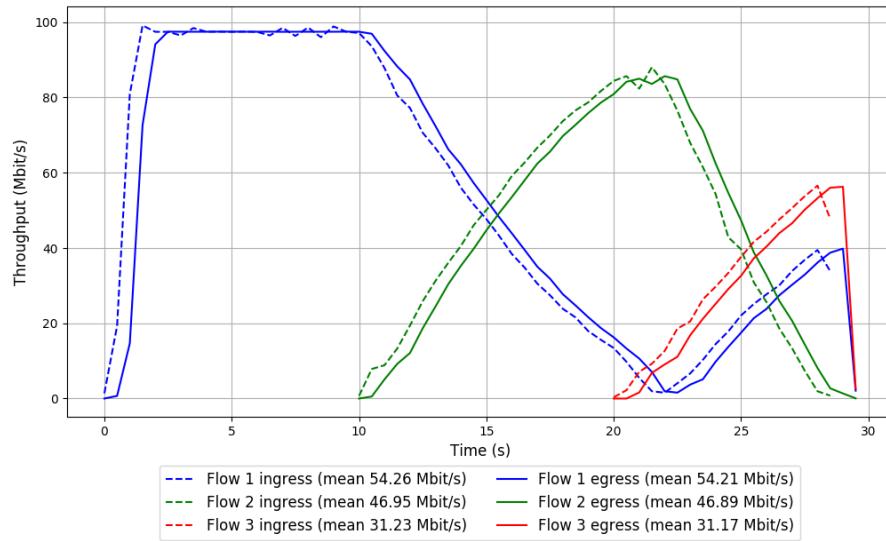


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 09:41:44
End at: 2019-06-27 09:42:14
Local clock offset: -7.891 ms
Remote clock offset: 73.109 ms

# Below is generated by plot.py at 2019-06-27 10:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.07 Mbit/s
95th percentile per-packet one-way delay: 105.534 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 54.21 Mbit/s
95th percentile per-packet one-way delay: 103.155 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 46.89 Mbit/s
95th percentile per-packet one-way delay: 107.420 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 31.17 Mbit/s
95th percentile per-packet one-way delay: 106.179 ms
Loss rate: 0.00%
```

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

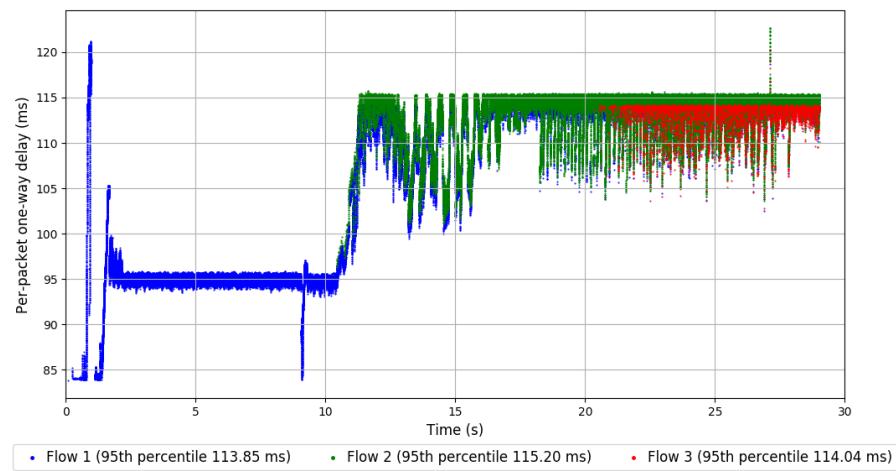
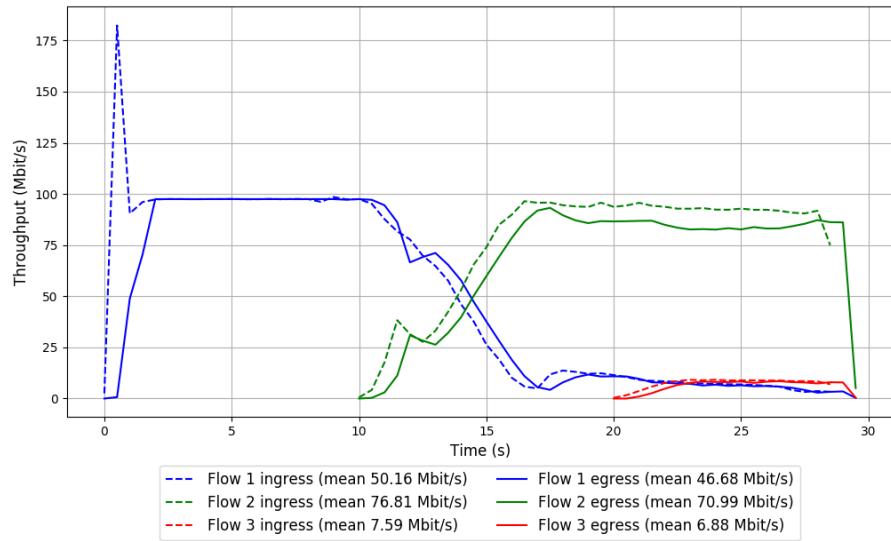


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 07:43:31
End at: 2019-06-27 07:44:01
Local clock offset: -7.042 ms
Remote clock offset: 57.897 ms

# Below is generated by plot.py at 2019-06-27 10:03:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.76 Mbit/s
95th percentile per-packet one-way delay: 115.137 ms
Loss rate: 7.22%
-- Flow 1:
Average throughput: 46.68 Mbit/s
95th percentile per-packet one-way delay: 113.849 ms
Loss rate: 6.83%
-- Flow 2:
Average throughput: 70.99 Mbit/s
95th percentile per-packet one-way delay: 115.203 ms
Loss rate: 7.51%
-- Flow 3:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 114.039 ms
Loss rate: 9.32%
```

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

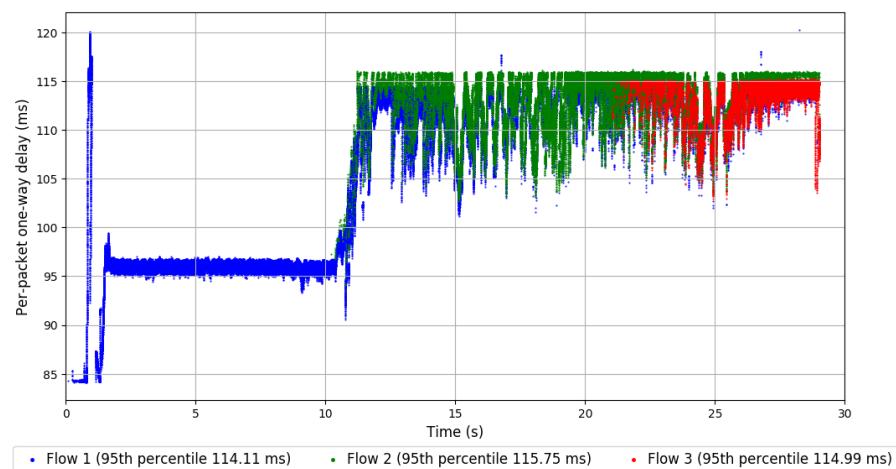
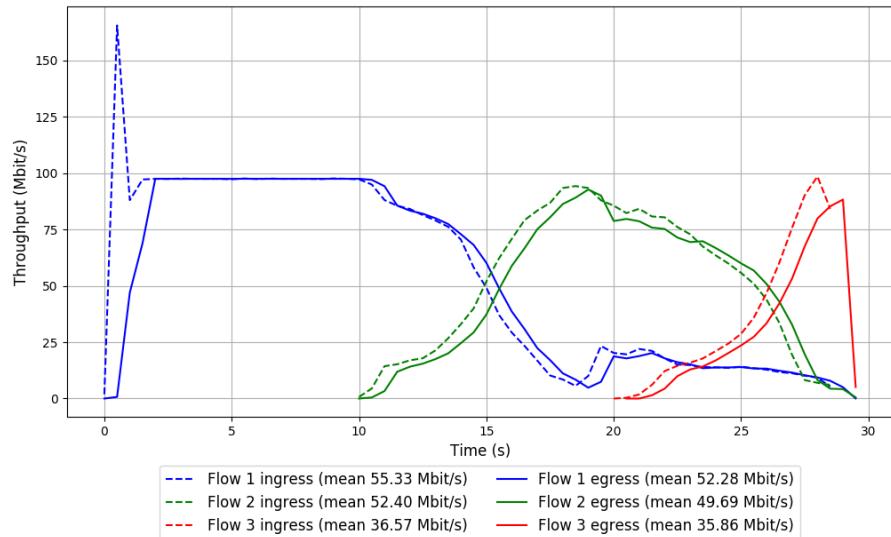


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 08:11:33
End at: 2019-06-27 08:12:03
Local clock offset: -6.958 ms
Remote clock offset: 62.337 ms

# Below is generated by plot.py at 2019-06-27 10:03:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.71 Mbit/s
95th percentile per-packet one-way delay: 115.579 ms
Loss rate: 5.56%
-- Flow 1:
Average throughput: 52.28 Mbit/s
95th percentile per-packet one-way delay: 114.107 ms
Loss rate: 5.44%
-- Flow 2:
Average throughput: 49.69 Mbit/s
95th percentile per-packet one-way delay: 115.753 ms
Loss rate: 5.10%
-- Flow 3:
Average throughput: 35.86 Mbit/s
95th percentile per-packet one-way delay: 114.986 ms
Loss rate: 7.64%
```

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

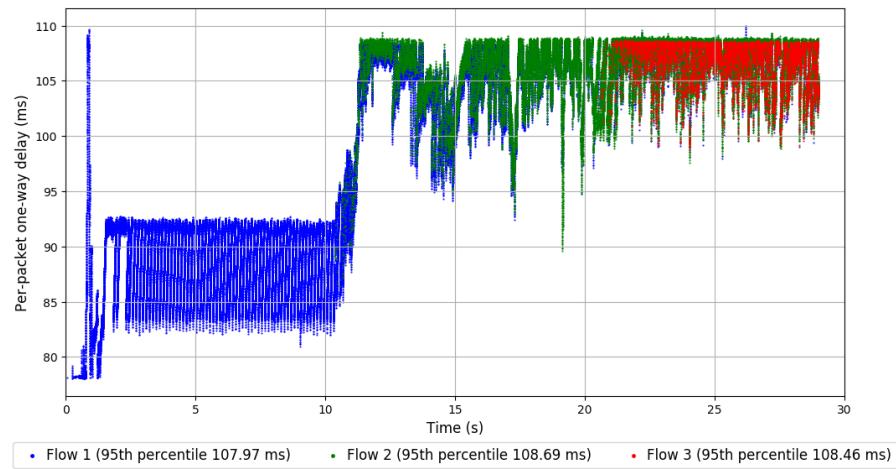
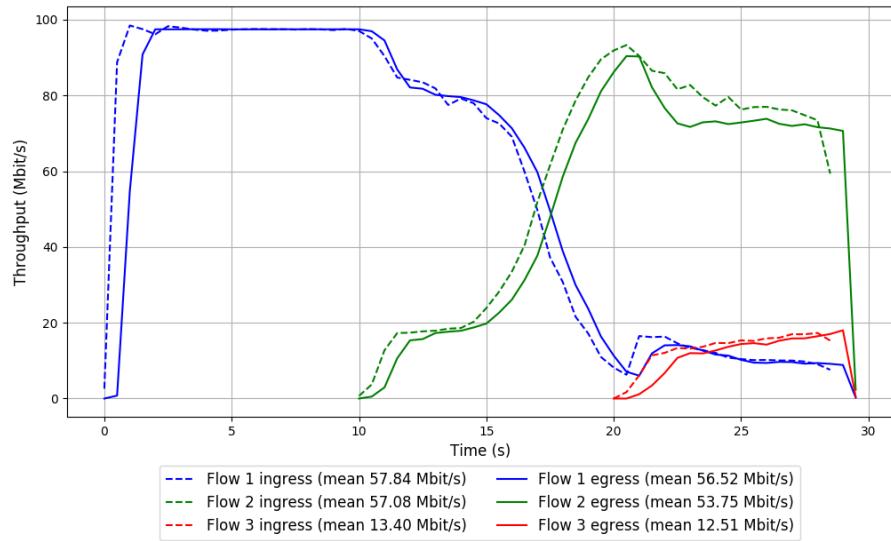


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 08:39:30
End at: 2019-06-27 08:40:00
Local clock offset: -5.605 ms
Remote clock offset: 59.862 ms

# Below is generated by plot.py at 2019-06-27 10:04:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.20 Mbit/s
95th percentile per-packet one-way delay: 108.530 ms
Loss rate: 3.70%
-- Flow 1:
Average throughput: 56.52 Mbit/s
95th percentile per-packet one-way delay: 107.970 ms
Loss rate: 2.19%
-- Flow 2:
Average throughput: 53.75 Mbit/s
95th percentile per-packet one-way delay: 108.685 ms
Loss rate: 5.72%
-- Flow 3:
Average throughput: 12.51 Mbit/s
95th percentile per-packet one-way delay: 108.459 ms
Loss rate: 6.63%
```

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

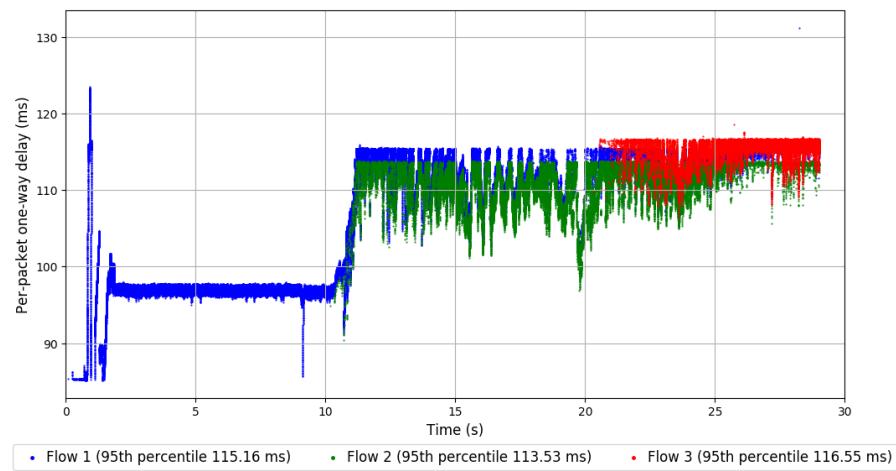
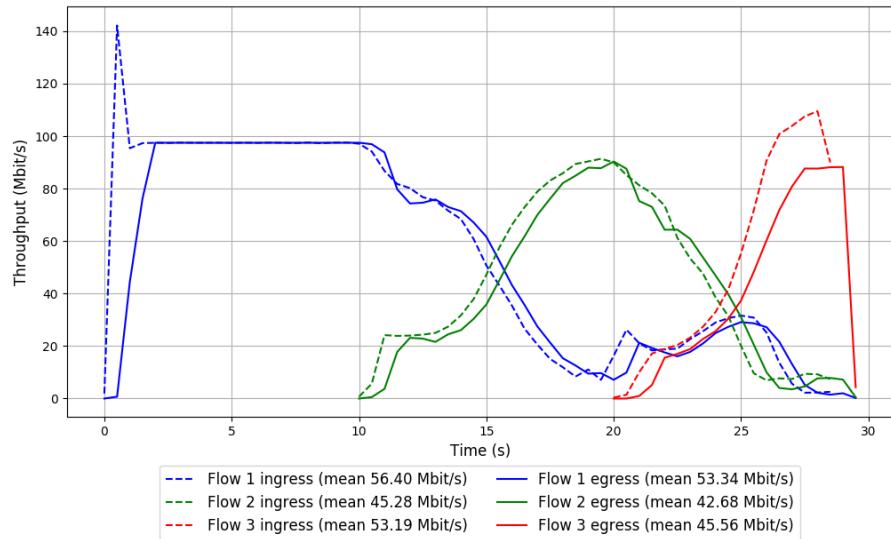


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 09:07:25
End at: 2019-06-27 09:07:55
Local clock offset: -4.77 ms
Remote clock offset: 68.781 ms

# Below is generated by plot.py at 2019-06-27 10:04:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.80 Mbit/s
95th percentile per-packet one-way delay: 116.308 ms
Loss rate: 6.82%
-- Flow 1:
Average throughput: 53.34 Mbit/s
95th percentile per-packet one-way delay: 115.159 ms
Loss rate: 5.32%
-- Flow 2:
Average throughput: 42.68 Mbit/s
95th percentile per-packet one-way delay: 113.528 ms
Loss rate: 5.66%
-- Flow 3:
Average throughput: 45.56 Mbit/s
95th percentile per-packet one-way delay: 116.545 ms
Loss rate: 14.30%
```

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

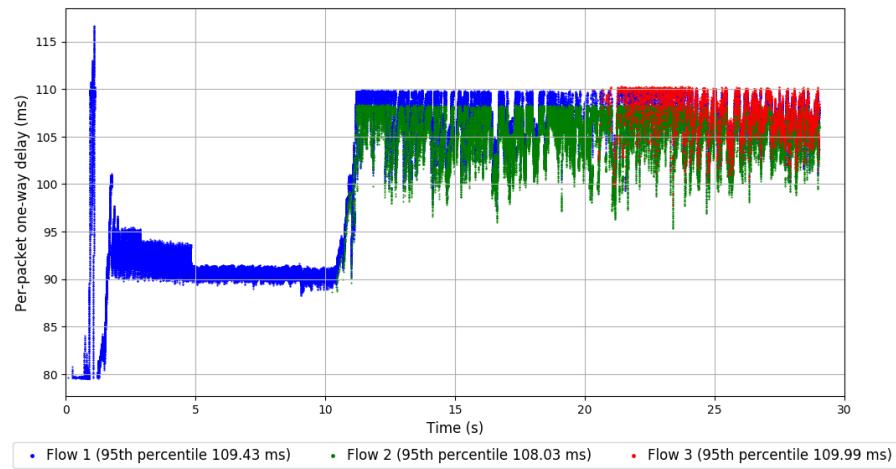
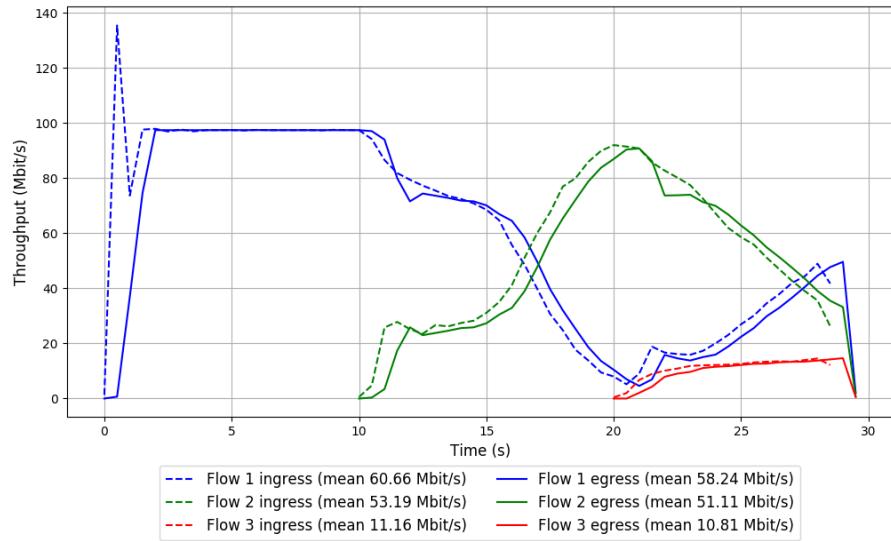


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 09:35:20
End at: 2019-06-27 09:35:50
Local clock offset: -7.437 ms
Remote clock offset: 66.878 ms

# Below is generated by plot.py at 2019-06-27 10:04:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.62 Mbit/s
95th percentile per-packet one-way delay: 109.313 ms
Loss rate: 3.86%
-- Flow 1:
Average throughput: 58.24 Mbit/s
95th percentile per-packet one-way delay: 109.431 ms
Loss rate: 3.91%
-- Flow 2:
Average throughput: 51.11 Mbit/s
95th percentile per-packet one-way delay: 108.028 ms
Loss rate: 3.83%
-- Flow 3:
Average throughput: 10.81 Mbit/s
95th percentile per-packet one-way delay: 109.993 ms
Loss rate: 3.21%
```

Run 5: Report of Indigo-MusesT — Data Link

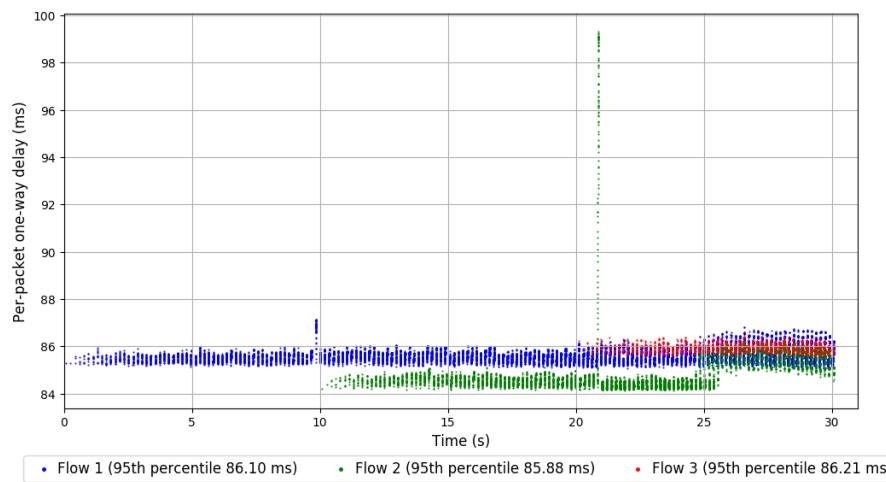
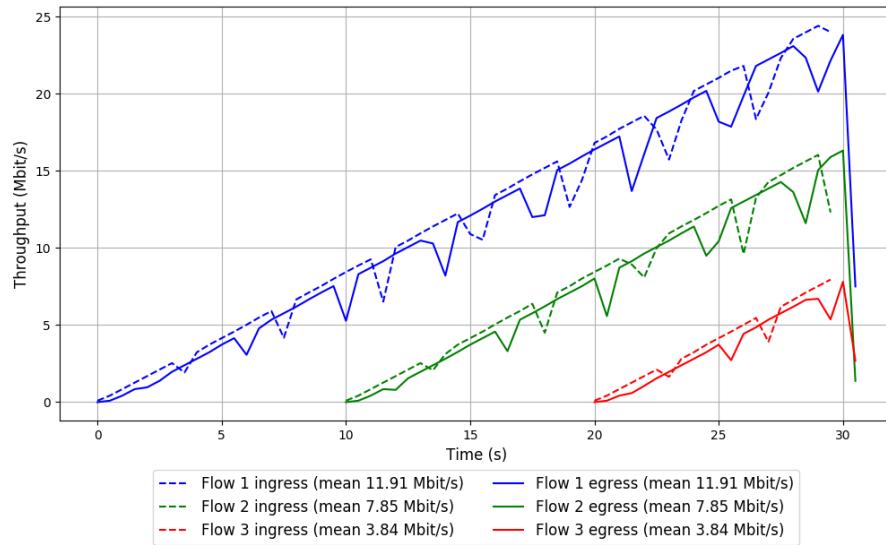


Run 1: Statistics of LEDBAT

```
Start at: 2019-06-27 07:47:27
End at: 2019-06-27 07:47:57
Local clock offset: -7.343 ms
Remote clock offset: 59.469 ms

# Below is generated by plot.py at 2019-06-27 10:04:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.41 Mbit/s
95th percentile per-packet one-way delay: 86.079 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.91 Mbit/s
95th percentile per-packet one-way delay: 86.097 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.85 Mbit/s
95th percentile per-packet one-way delay: 85.883 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.84 Mbit/s
95th percentile per-packet one-way delay: 86.211 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

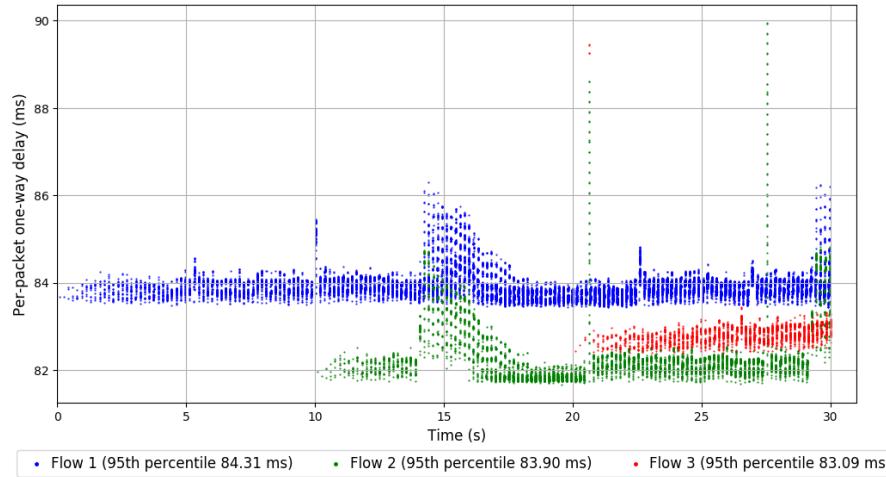
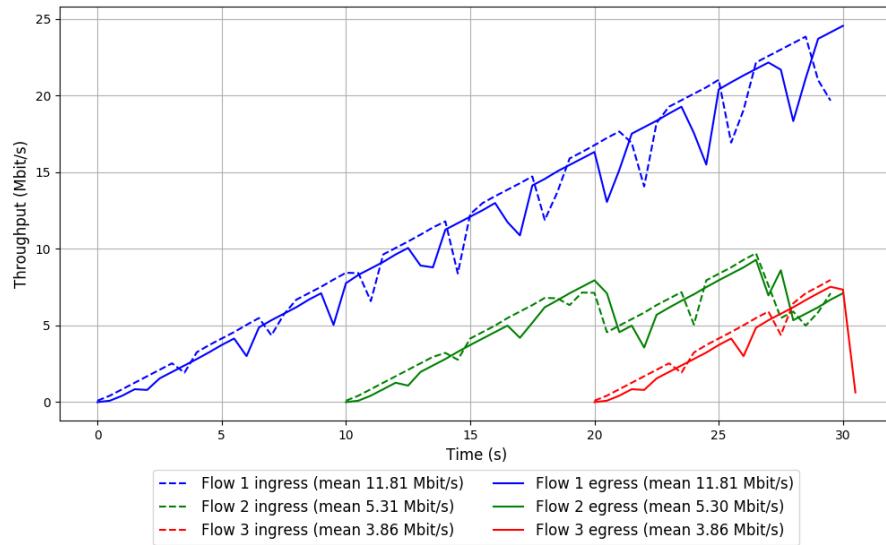


Run 2: Statistics of LEDBAT

```
Start at: 2019-06-27 08:15:26
End at: 2019-06-27 08:15:56
Local clock offset: -7.716 ms
Remote clock offset: 60.753 ms

# Below is generated by plot.py at 2019-06-27 10:04:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.59 Mbit/s
95th percentile per-packet one-way delay: 84.263 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.81 Mbit/s
95th percentile per-packet one-way delay: 84.310 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.30 Mbit/s
95th percentile per-packet one-way delay: 83.903 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 83.091 ms
Loss rate: 0.00%
```

## Run 2: Report of LEDBAT — Data Link

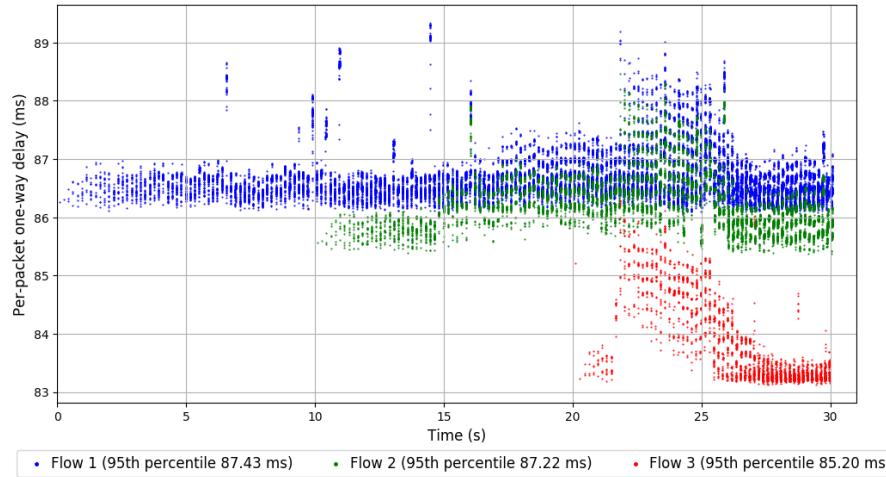
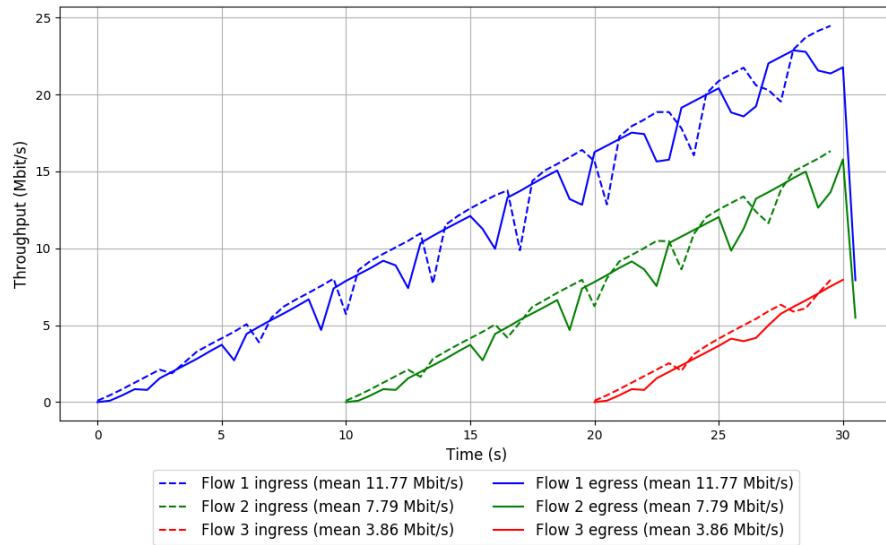


Run 3: Statistics of LEDBAT

```
Start at: 2019-06-27 08:43:23
End at: 2019-06-27 08:43:53
Local clock offset: -5.181 ms
Remote clock offset: 65.757 ms

# Below is generated by plot.py at 2019-06-27 10:04:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.22 Mbit/s
95th percentile per-packet one-way delay: 87.334 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 11.77 Mbit/s
95th percentile per-packet one-way delay: 87.433 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 7.79 Mbit/s
95th percentile per-packet one-way delay: 87.222 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 85.197 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

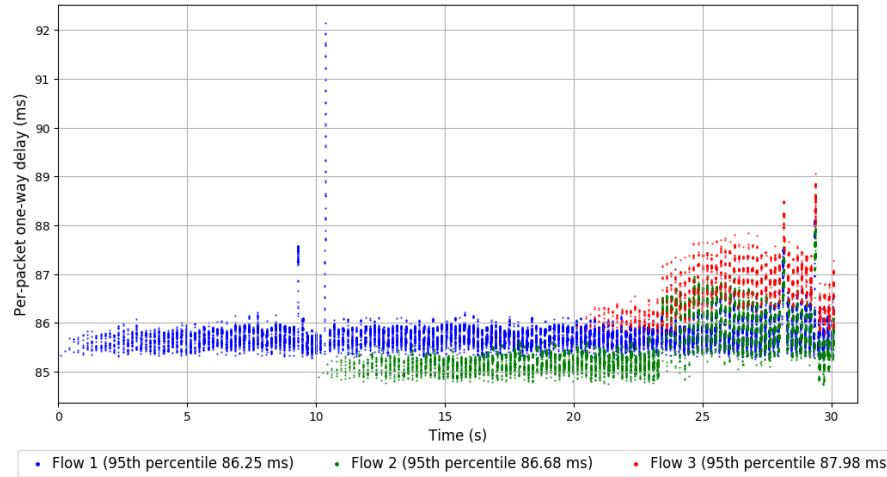
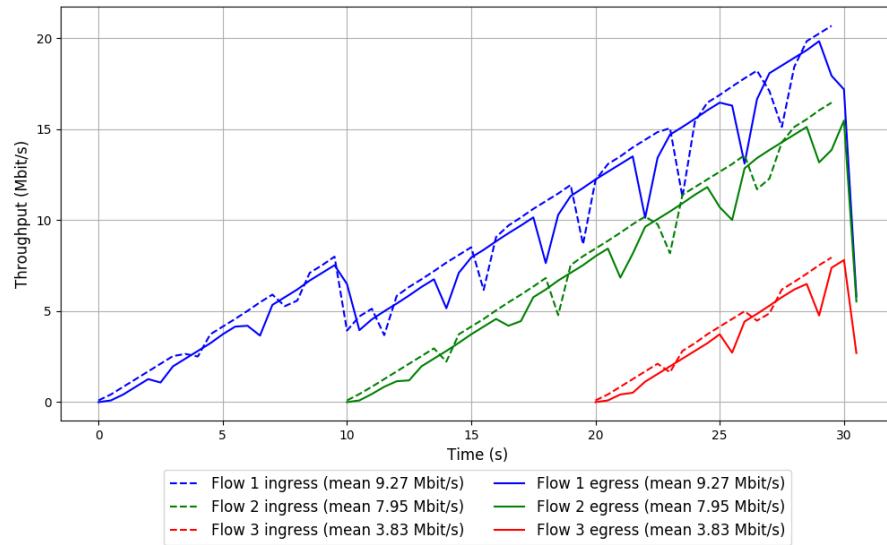


Run 4: Statistics of LEDBAT

```
Start at: 2019-06-27 09:11:18
End at: 2019-06-27 09:11:48
Local clock offset: -4.531 ms
Remote clock offset: 70.066 ms

# Below is generated by plot.py at 2019-06-27 10:04:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.82 Mbit/s
95th percentile per-packet one-way delay: 86.882 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.27 Mbit/s
95th percentile per-packet one-way delay: 86.245 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.95 Mbit/s
95th percentile per-packet one-way delay: 86.676 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.83 Mbit/s
95th percentile per-packet one-way delay: 87.981 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

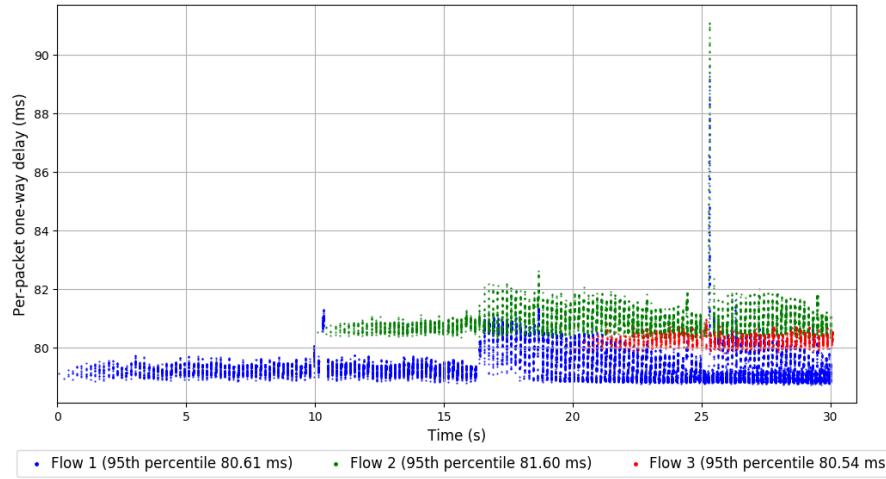
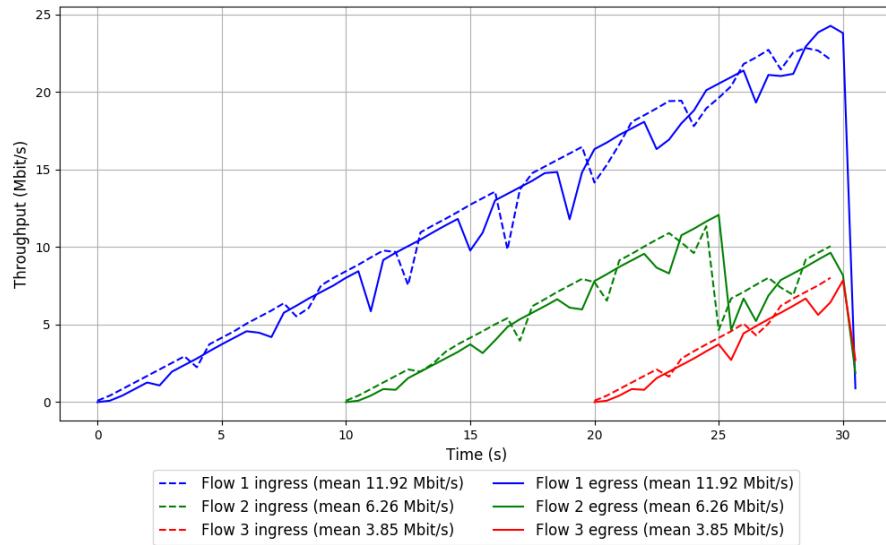


Run 5: Statistics of LEDBAT

```
Start at: 2019-06-27 09:39:12
End at: 2019-06-27 09:39:42
Local clock offset: -6.936 ms
Remote clock offset: 68.576 ms

# Below is generated by plot.py at 2019-06-27 10:04:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.34 Mbit/s
95th percentile per-packet one-way delay: 81.269 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.92 Mbit/s
95th percentile per-packet one-way delay: 80.613 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.26 Mbit/s
95th percentile per-packet one-way delay: 81.604 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 80.540 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 07:37:21  
End at: 2019-06-27 07:37:51  
Local clock offset: -7.739 ms  
Remote clock offset: 53.196 ms

Run 1: Report of Muses\_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 08:05:23

End at: 2019-06-27 08:05:53

Local clock offset: -7.895 ms

Remote clock offset: 61.606 ms

Run 2: Report of Muses\_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 08:33:21  
End at: 2019-06-27 08:33:51  
Local clock offset: -4.939 ms  
Remote clock offset: 59.185 ms

Run 3: Report of Muses\_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 4: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 09:01:15

End at: 2019-06-27 09:01:45

Local clock offset: -4.906 ms

Remote clock offset: 62.66 ms

Run 4: Report of Muses\_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 5: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 09:29:10

End at: 2019-06-27 09:29:40

Local clock offset: -6.026 ms

Remote clock offset: 67.352 ms

Run 5: Report of Muses\_DecisionTree — Data Link

Figure is missing

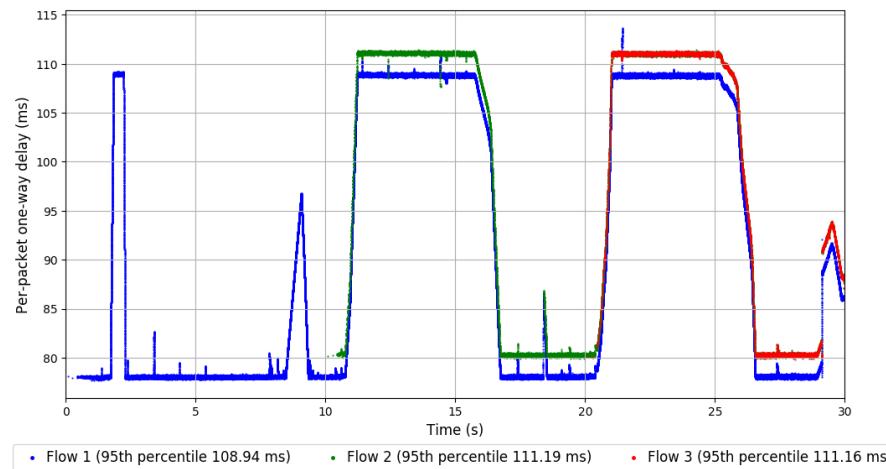
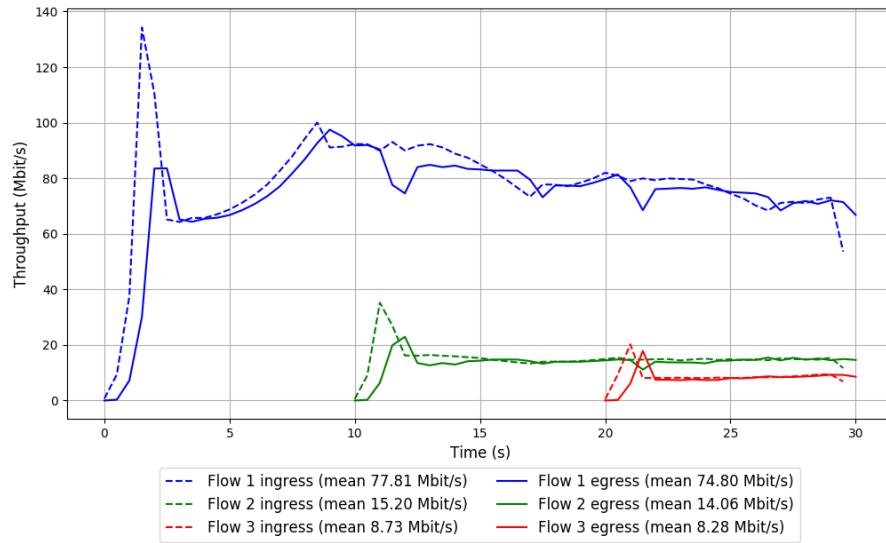
Figure is missing

Run 1: Statistics of PCC-Allegro

```
Start at: 2019-06-27 07:52:31
End at: 2019-06-27 07:53:01
Local clock offset: -8.015 ms
Remote clock offset: 53.76 ms

# Below is generated by plot.py at 2019-06-27 10:04:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.89 Mbit/s
95th percentile per-packet one-way delay: 110.954 ms
Loss rate: 4.28%
-- Flow 1:
Average throughput: 74.80 Mbit/s
95th percentile per-packet one-way delay: 108.936 ms
Loss rate: 3.84%
-- Flow 2:
Average throughput: 14.06 Mbit/s
95th percentile per-packet one-way delay: 111.191 ms
Loss rate: 7.46%
-- Flow 3:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 111.162 ms
Loss rate: 5.01%
```

Run 1: Report of PCC-Allegro — Data Link

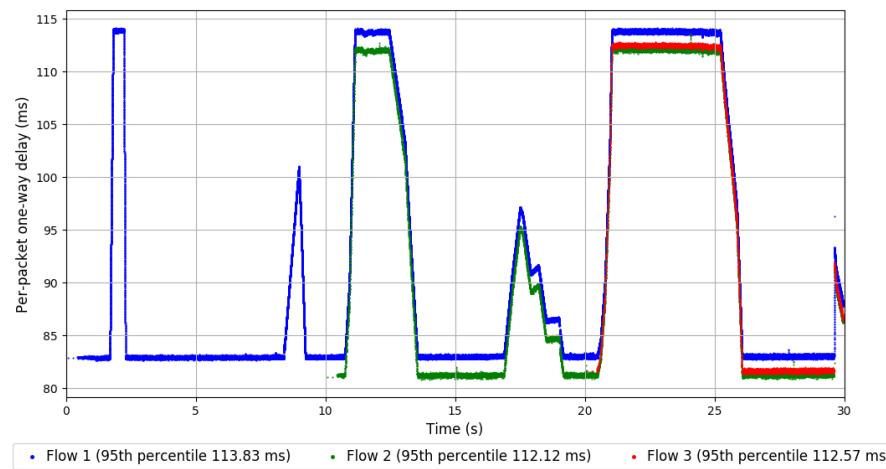
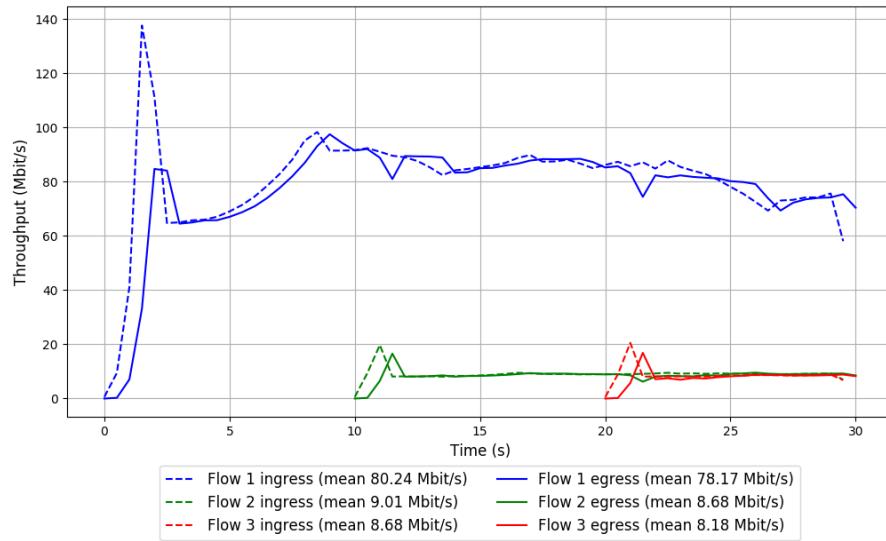


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-06-27 08:20:29
End at: 2019-06-27 08:20:59
Local clock offset: -7.312 ms
Remote clock offset: 58.662 ms

# Below is generated by plot.py at 2019-06-27 10:04:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.64 Mbit/s
95th percentile per-packet one-way delay: 113.826 ms
Loss rate: 2.73%
-- Flow 1:
Average throughput: 78.17 Mbit/s
95th percentile per-packet one-way delay: 113.835 ms
Loss rate: 2.56%
-- Flow 2:
Average throughput: 8.68 Mbit/s
95th percentile per-packet one-way delay: 112.121 ms
Loss rate: 3.59%
-- Flow 3:
Average throughput: 8.18 Mbit/s
95th percentile per-packet one-way delay: 112.573 ms
Loss rate: 5.73%
```

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

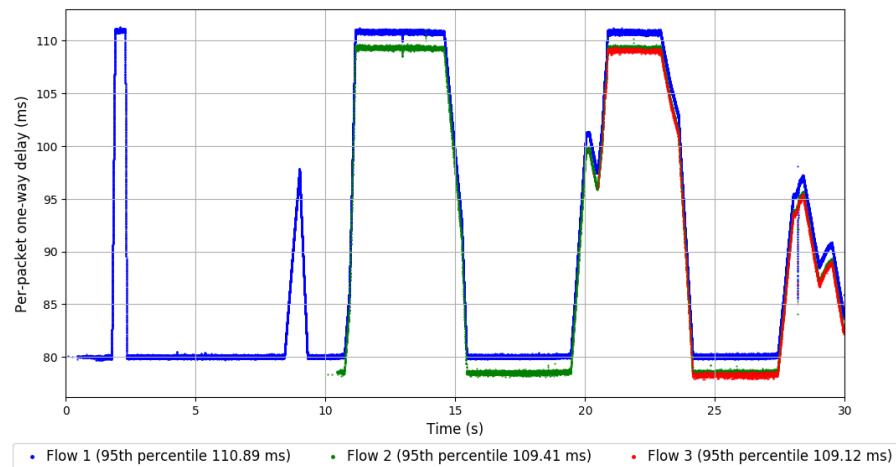
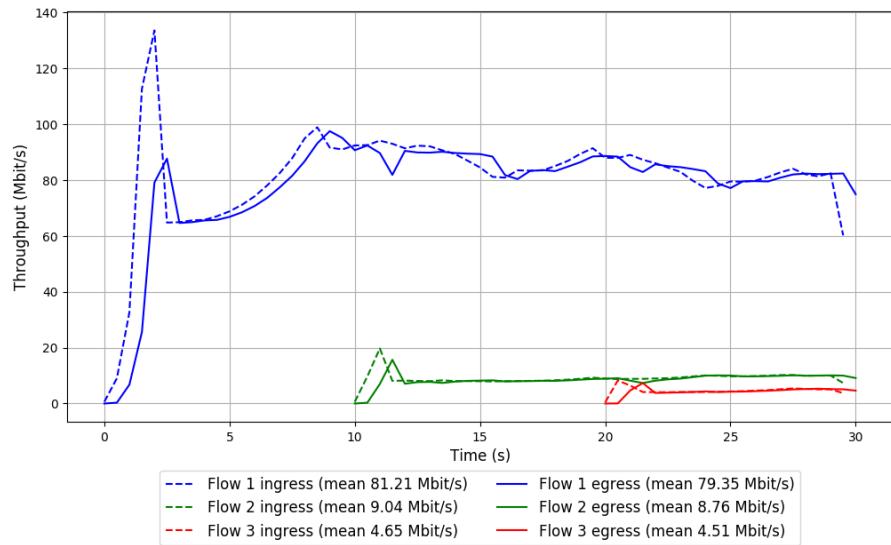


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-06-27 08:48:27
End at: 2019-06-27 08:48:57
Local clock offset: -4.281 ms
Remote clock offset: 62.056 ms

# Below is generated by plot.py at 2019-06-27 10:04:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.66 Mbit/s
95th percentile per-packet one-way delay: 110.886 ms
Loss rate: 2.33%
-- Flow 1:
Average throughput: 79.35 Mbit/s
95th percentile per-packet one-way delay: 110.894 ms
Loss rate: 2.26%
-- Flow 2:
Average throughput: 8.76 Mbit/s
95th percentile per-packet one-way delay: 109.406 ms
Loss rate: 3.12%
-- Flow 3:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 109.125 ms
Loss rate: 3.03%
```

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

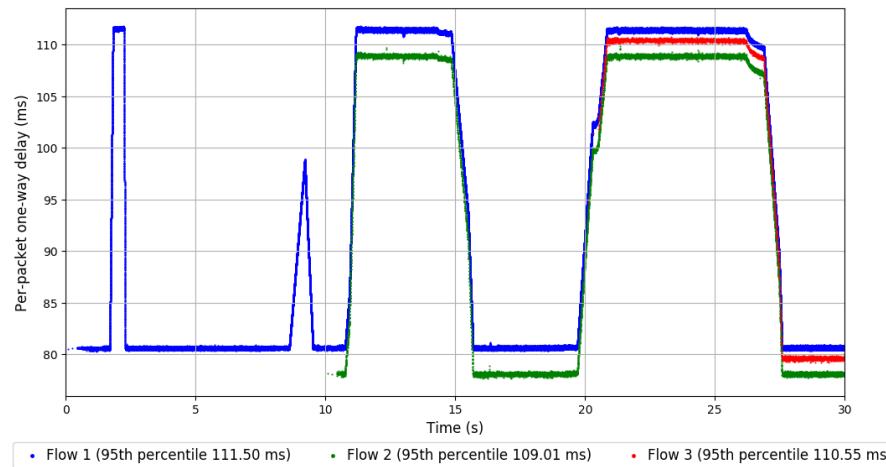
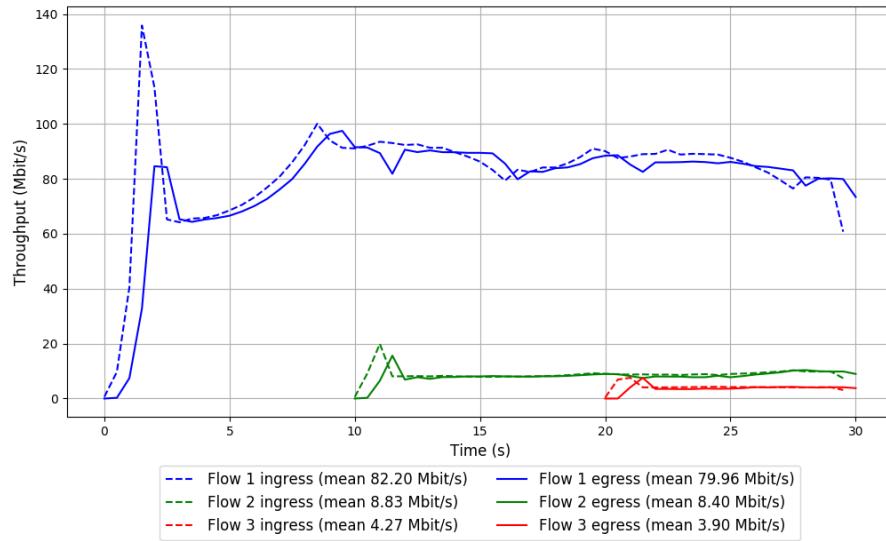


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-06-27 09:16:21
End at: 2019-06-27 09:16:51
Local clock offset: -4.343 ms
Remote clock offset: 64.383 ms

# Below is generated by plot.py at 2019-06-27 10:05:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.83 Mbit/s
95th percentile per-packet one-way delay: 111.499 ms
Loss rate: 2.96%
-- Flow 1:
Average throughput: 79.96 Mbit/s
95th percentile per-packet one-way delay: 111.504 ms
Loss rate: 2.73%
-- Flow 2:
Average throughput: 8.40 Mbit/s
95th percentile per-packet one-way delay: 109.010 ms
Loss rate: 4.85%
-- Flow 3:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 110.554 ms
Loss rate: 8.62%
```

Run 4: Report of PCC-Allegro — Data Link

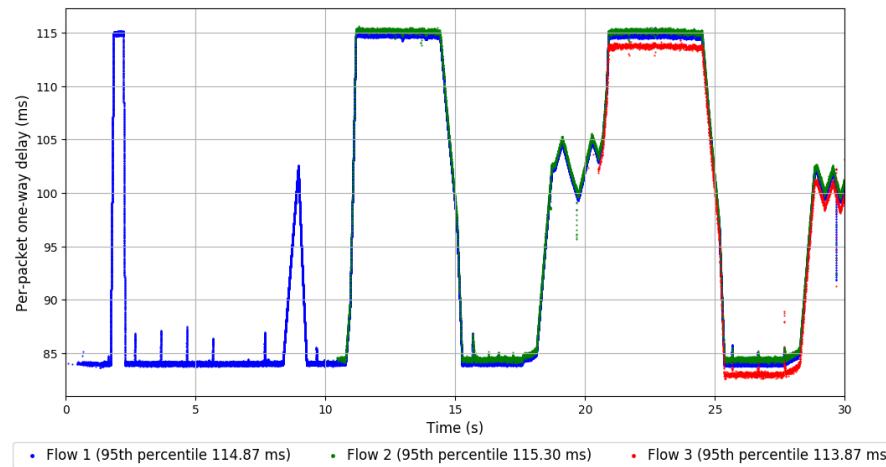
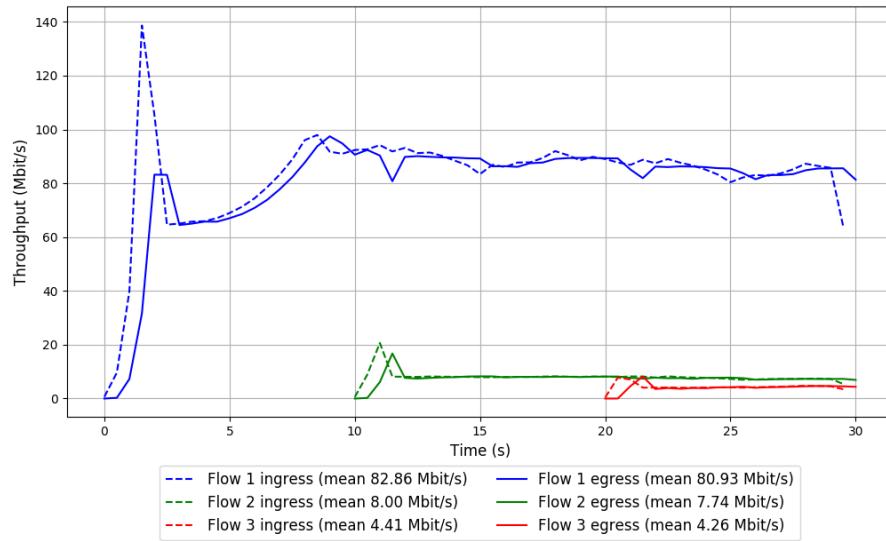


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-06-27 09:44:21
End at: 2019-06-27 09:44:51
Local clock offset: -7.23 ms
Remote clock offset: 73.086 ms

# Below is generated by plot.py at 2019-06-27 10:05:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.48 Mbit/s
95th percentile per-packet one-way delay: 114.905 ms
Loss rate: 2.34%
-- Flow 1:
Average throughput: 80.93 Mbit/s
95th percentile per-packet one-way delay: 114.873 ms
Loss rate: 2.27%
-- Flow 2:
Average throughput: 7.74 Mbit/s
95th percentile per-packet one-way delay: 115.295 ms
Loss rate: 3.23%
-- Flow 3:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 113.867 ms
Loss rate: 3.47%
```

Run 5: Report of PCC-Allegro — Data Link

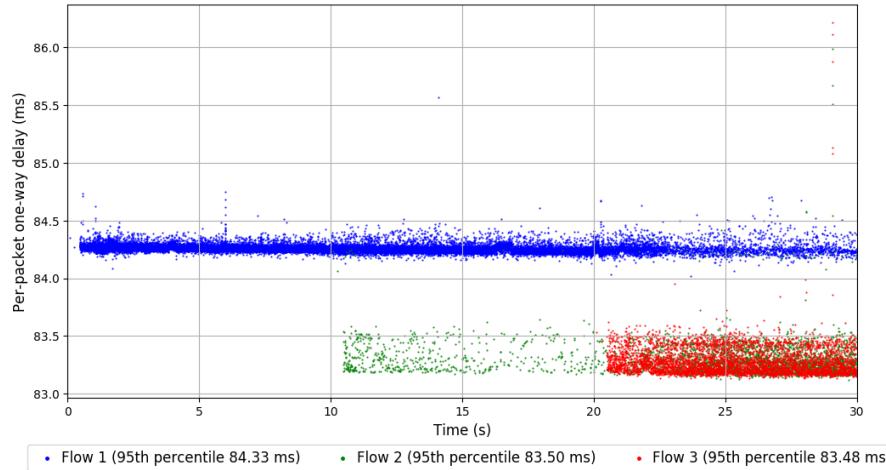
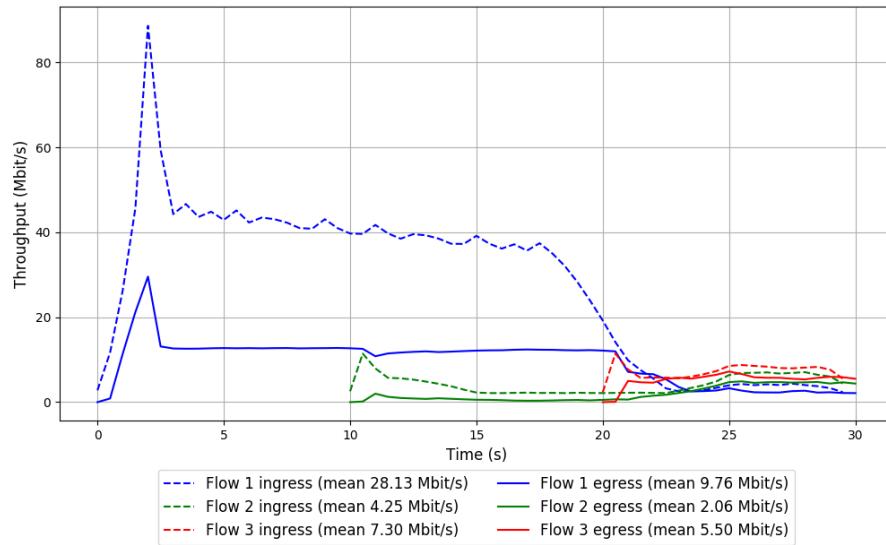


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-06-27 07:56:20
End at: 2019-06-27 07:56:51
Local clock offset: -7.177 ms
Remote clock offset: 59.507 ms

# Below is generated by plot.py at 2019-06-27 10:05:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.95 Mbit/s
95th percentile per-packet one-way delay: 84.313 ms
Loss rate: 61.19%
-- Flow 1:
Average throughput: 9.76 Mbit/s
95th percentile per-packet one-way delay: 84.325 ms
Loss rate: 65.30%
-- Flow 2:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 83.498 ms
Loss rate: 51.50%
-- Flow 3:
Average throughput: 5.50 Mbit/s
95th percentile per-packet one-way delay: 83.476 ms
Loss rate: 24.60%
```

Run 1: Report of PCC-Expr — Data Link

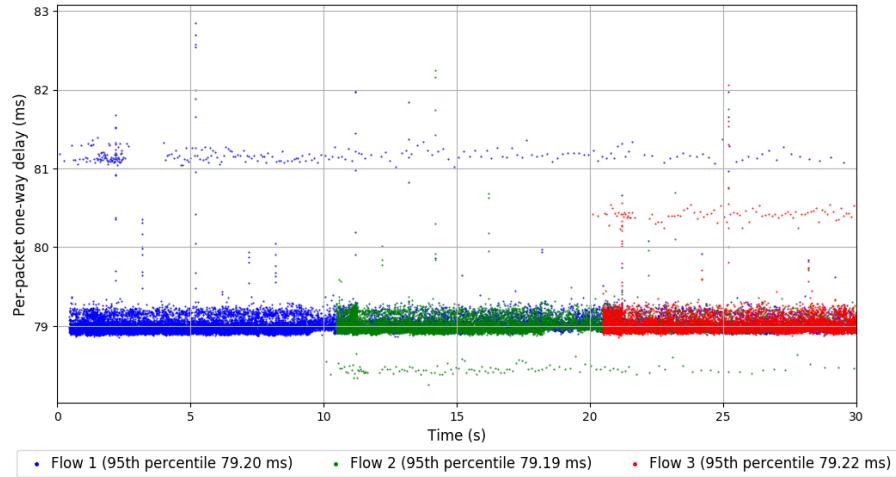
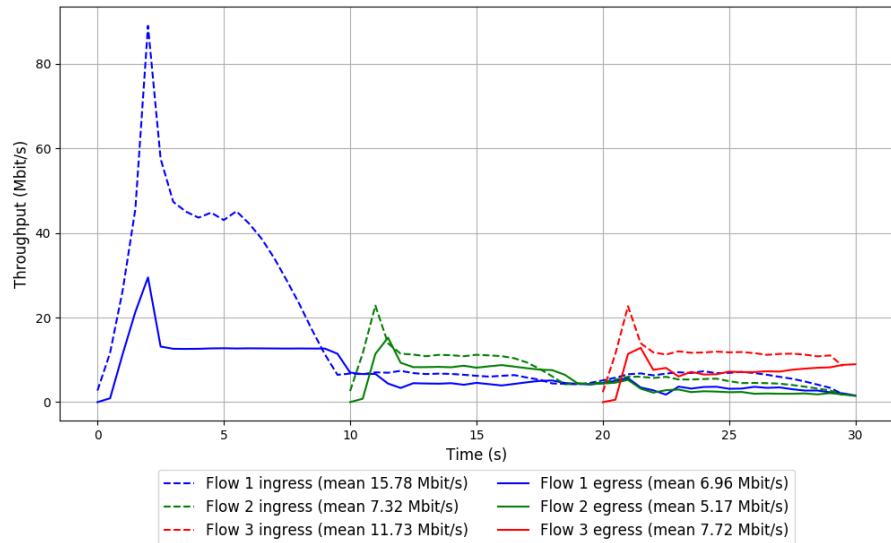


Run 2: Statistics of PCC-Expr

```
Start at: 2019-06-27 08:24:18
End at: 2019-06-27 08:24:48
Local clock offset: -5.727 ms
Remote clock offset: 58.942 ms

# Below is generated by plot.py at 2019-06-27 10:05:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.95 Mbit/s
95th percentile per-packet one-way delay: 79.204 ms
Loss rate: 47.20%
-- Flow 1:
Average throughput: 6.96 Mbit/s
95th percentile per-packet one-way delay: 79.205 ms
Loss rate: 55.92%
-- Flow 2:
Average throughput: 5.17 Mbit/s
95th percentile per-packet one-way delay: 79.195 ms
Loss rate: 29.30%
-- Flow 3:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 79.218 ms
Loss rate: 34.17%
```

Run 2: Report of PCC-Expr — Data Link

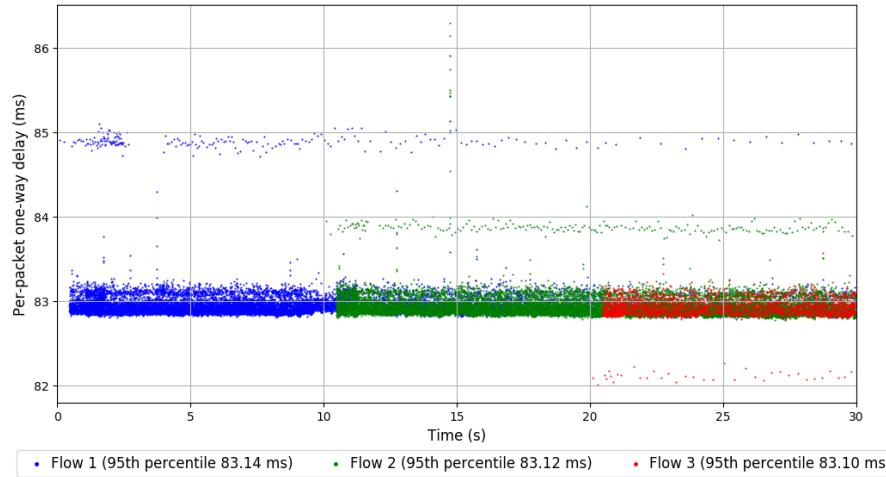
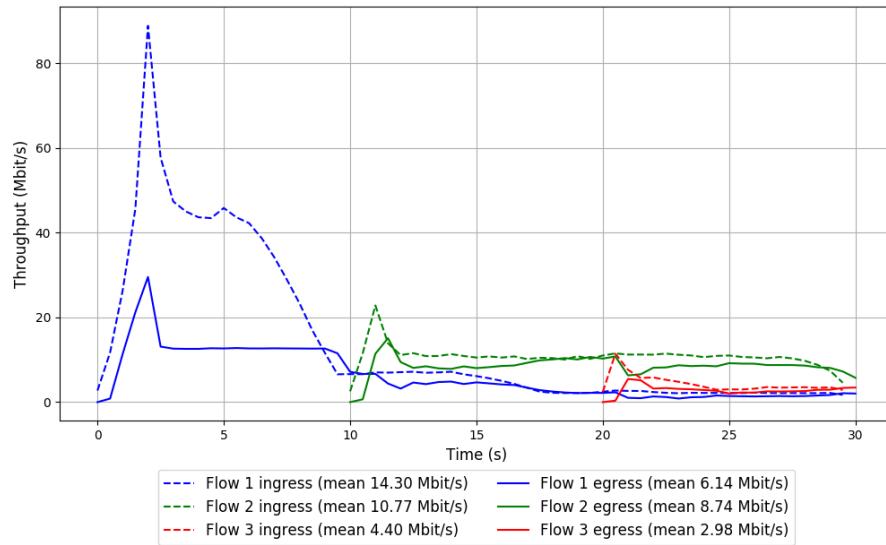


Run 3: Statistics of PCC-Expr

```
Start at: 2019-06-27 08:52:15
End at: 2019-06-27 08:52:45
Local clock offset: -5.136 ms
Remote clock offset: 65.478 ms

# Below is generated by plot.py at 2019-06-27 10:05:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.94 Mbit/s
95th percentile per-packet one-way delay: 83.130 ms
Loss rate: 43.54%
-- Flow 1:
Average throughput: 6.14 Mbit/s
95th percentile per-packet one-way delay: 83.139 ms
Loss rate: 57.06%
-- Flow 2:
Average throughput: 8.74 Mbit/s
95th percentile per-packet one-way delay: 83.124 ms
Loss rate: 18.79%
-- Flow 3:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 83.103 ms
Loss rate: 32.40%
```

Run 3: Report of PCC-Expr — Data Link

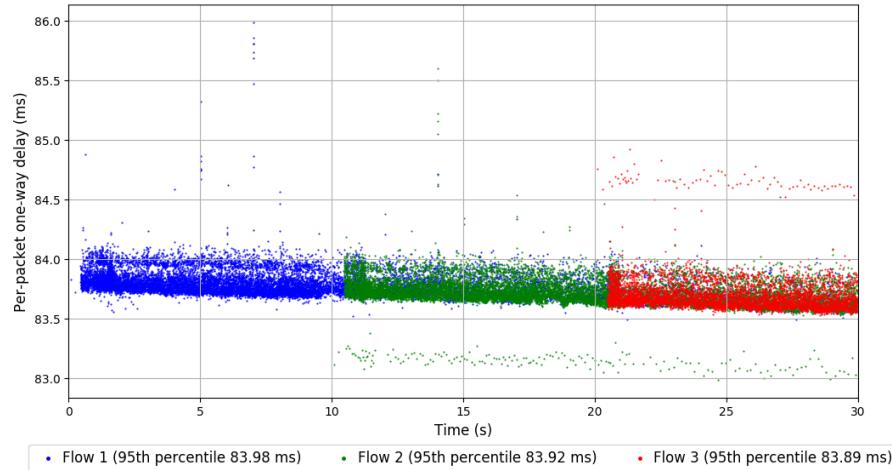
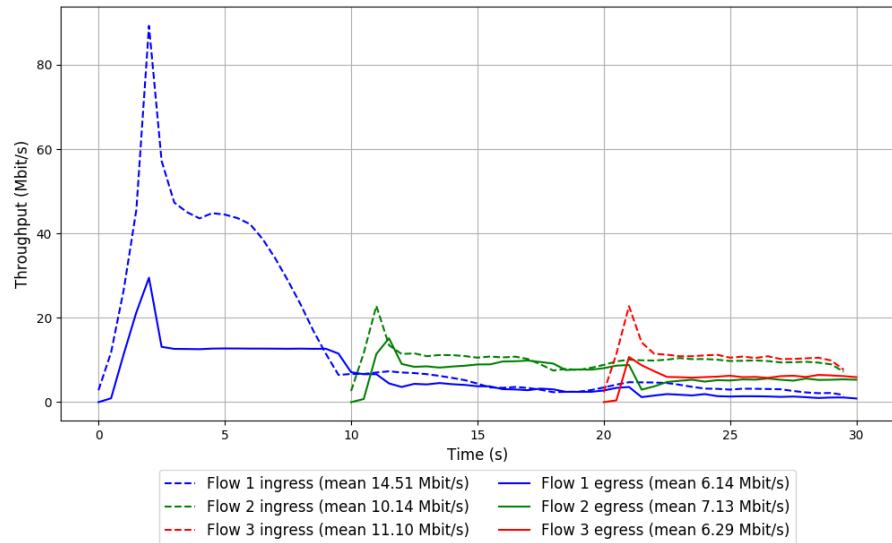


Run 4: Statistics of PCC-Expr

```
Start at: 2019-06-27 09:20:10
End at: 2019-06-27 09:20:40
Local clock offset: -5.069 ms
Remote clock offset: 70.069 ms

# Below is generated by plot.py at 2019-06-27 10:05:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.95 Mbit/s
95th percentile per-packet one-way delay: 83.959 ms
Loss rate: 48.04%
-- Flow 1:
Average throughput: 6.14 Mbit/s
95th percentile per-packet one-way delay: 83.985 ms
Loss rate: 57.75%
-- Flow 2:
Average throughput: 7.13 Mbit/s
95th percentile per-packet one-way delay: 83.918 ms
Loss rate: 29.70%
-- Flow 3:
Average throughput: 6.29 Mbit/s
95th percentile per-packet one-way delay: 83.887 ms
Loss rate: 43.35%
```

Run 4: Report of PCC-Expr — Data Link

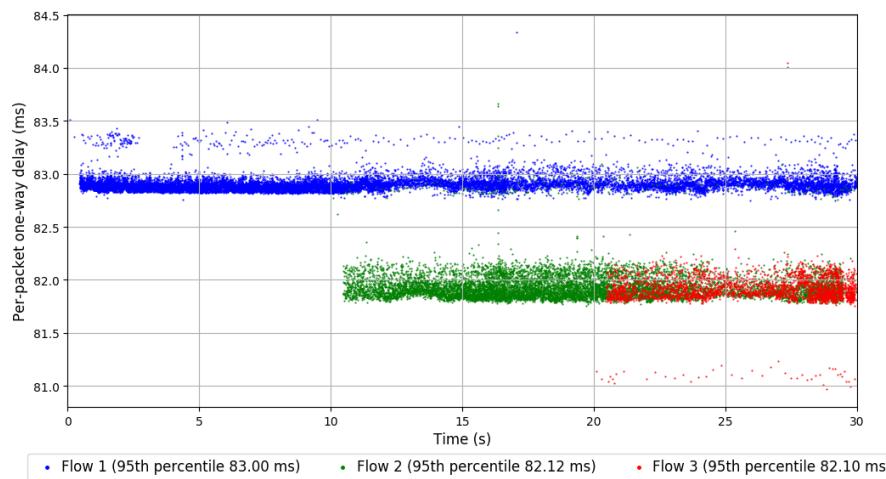
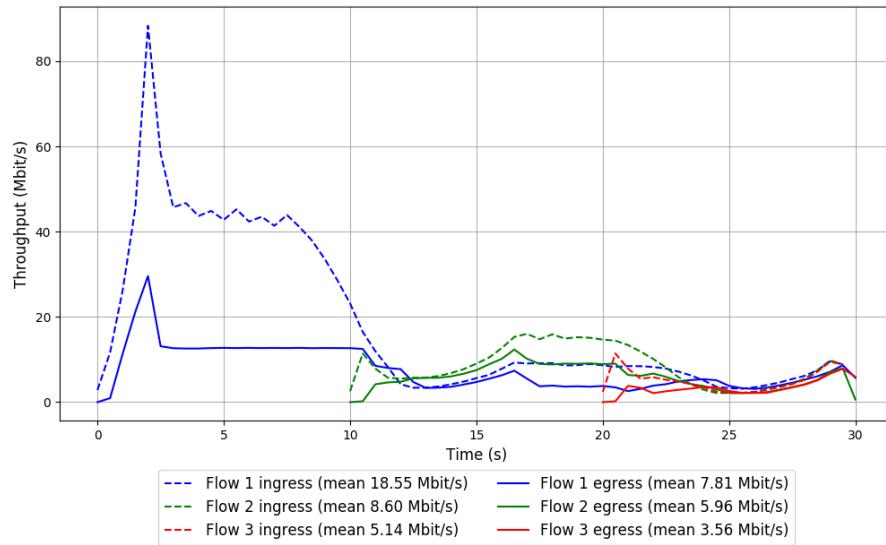


Run 5: Statistics of PCC-Expr

```
Start at: 2019-06-27 09:48:09
End at: 2019-06-27 09:48:39
Local clock offset: -7.636 ms
Remote clock offset: 72.249 ms

# Below is generated by plot.py at 2019-06-27 10:05:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.95 Mbit/s
95th percentile per-packet one-way delay: 82.968 ms
Loss rate: 50.10%
-- Flow 1:
Average throughput: 7.81 Mbit/s
95th percentile per-packet one-way delay: 83.002 ms
Loss rate: 57.87%
-- Flow 2:
Average throughput: 5.96 Mbit/s
95th percentile per-packet one-way delay: 82.125 ms
Loss rate: 30.67%
-- Flow 3:
Average throughput: 3.56 Mbit/s
95th percentile per-packet one-way delay: 82.096 ms
Loss rate: 30.66%
```

Run 5: Report of PCC-Expr — Data Link

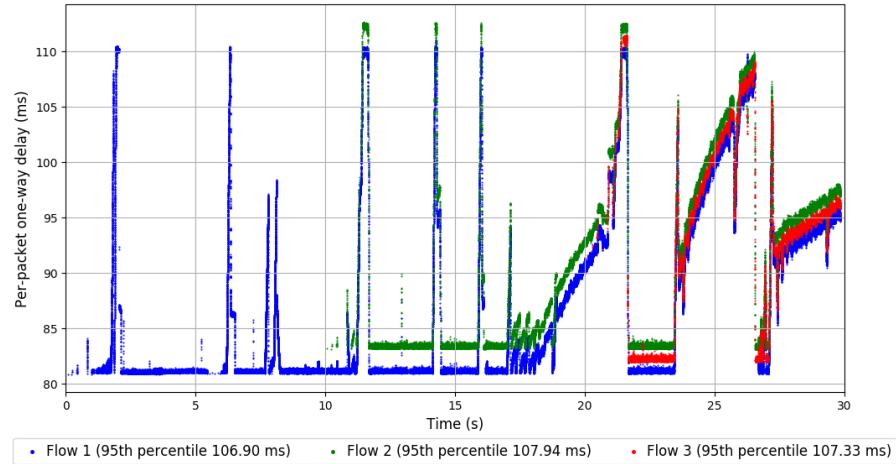
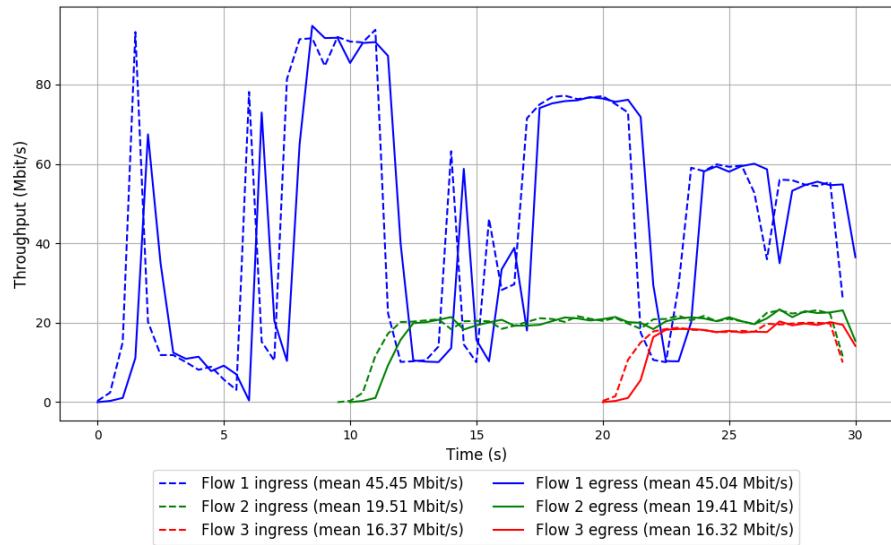


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-06-27 08:01:31
End at: 2019-06-27 08:02:01
Local clock offset: -7.123 ms
Remote clock offset: 58.767 ms

# Below is generated by plot.py at 2019-06-27 10:05:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.27 Mbit/s
95th percentile per-packet one-way delay: 107.148 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 45.04 Mbit/s
95th percentile per-packet one-way delay: 106.900 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 19.41 Mbit/s
95th percentile per-packet one-way delay: 107.935 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 16.32 Mbit/s
95th percentile per-packet one-way delay: 107.333 ms
Loss rate: 0.28%
```

Run 1: Report of QUIC Cubic — Data Link

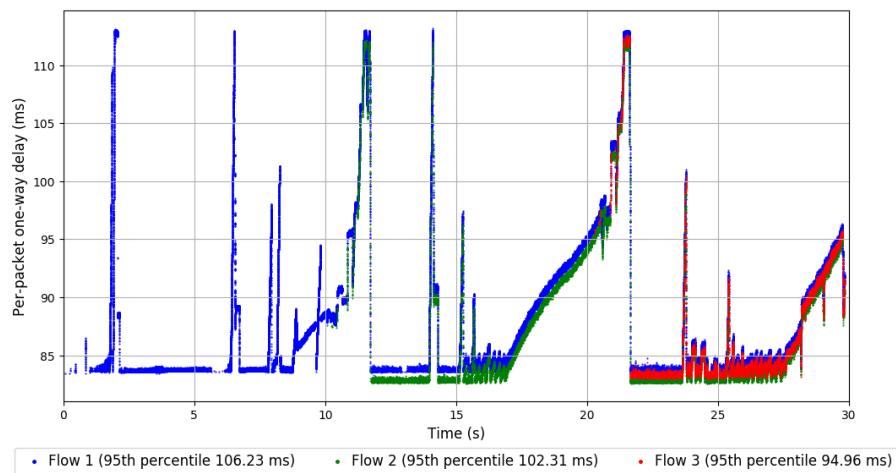
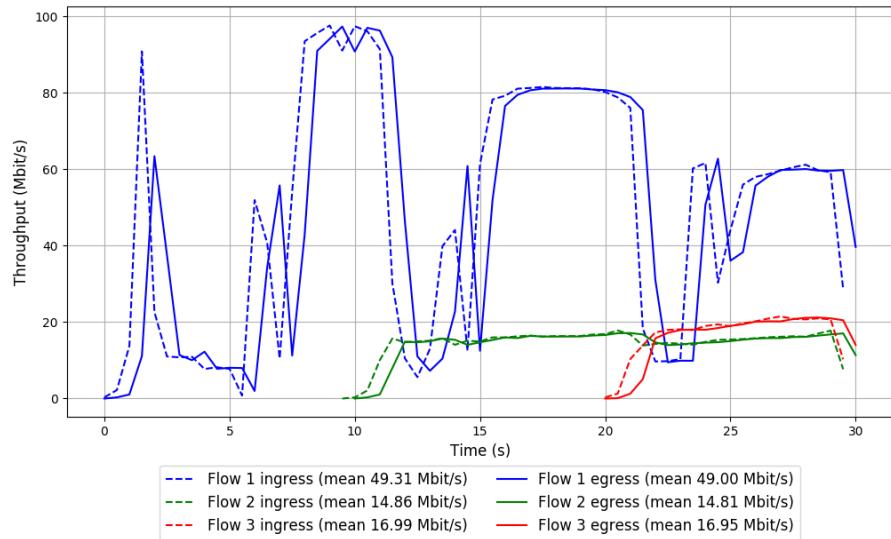


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-06-27 08:29:29
End at: 2019-06-27 08:29:59
Local clock offset: -6.237 ms
Remote clock offset: 62.293 ms

# Below is generated by plot.py at 2019-06-27 10:05:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.37 Mbit/s
95th percentile per-packet one-way delay: 105.491 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 49.00 Mbit/s
95th percentile per-packet one-way delay: 106.231 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 14.81 Mbit/s
95th percentile per-packet one-way delay: 102.312 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 16.95 Mbit/s
95th percentile per-packet one-way delay: 94.962 ms
Loss rate: 0.27%
```

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

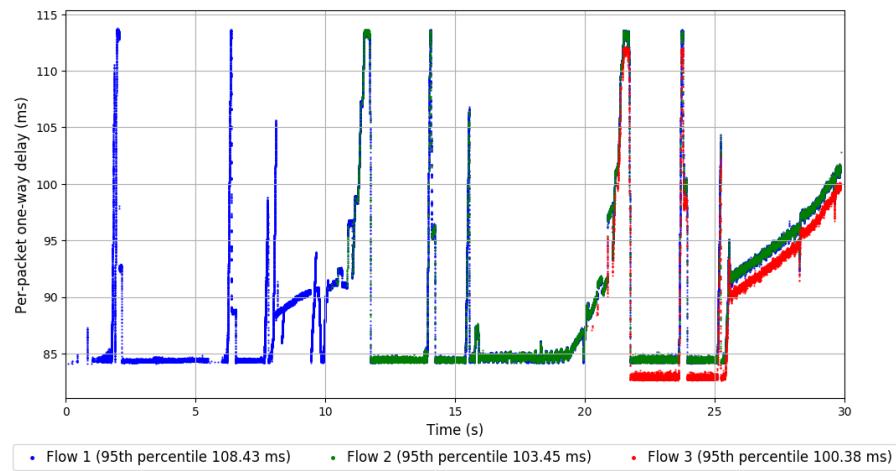
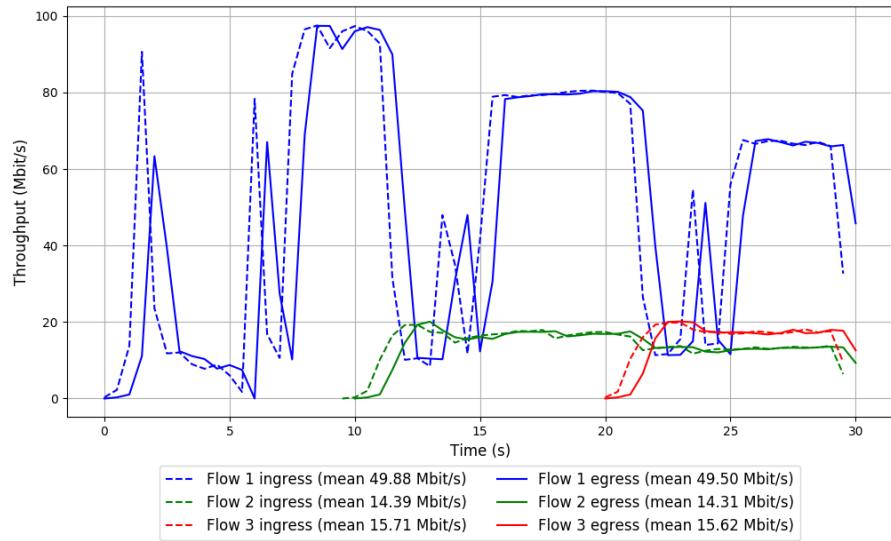


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-06-27 08:57:24
End at: 2019-06-27 08:57:54
Local clock offset: -5.001 ms
Remote clock offset: 66.095 ms

# Below is generated by plot.py at 2019-06-27 10:05:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.11 Mbit/s
95th percentile per-packet one-way delay: 107.229 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 49.50 Mbit/s
95th percentile per-packet one-way delay: 108.434 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 14.31 Mbit/s
95th percentile per-packet one-way delay: 103.455 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 15.62 Mbit/s
95th percentile per-packet one-way delay: 100.381 ms
Loss rate: 0.45%
```

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

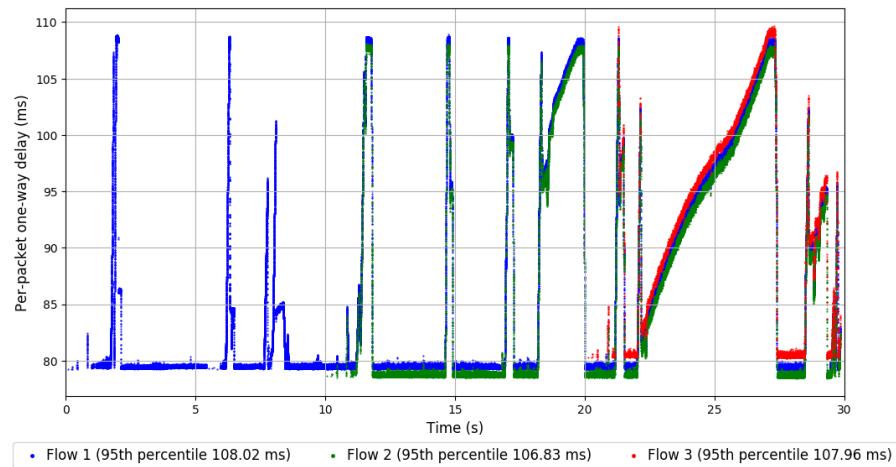
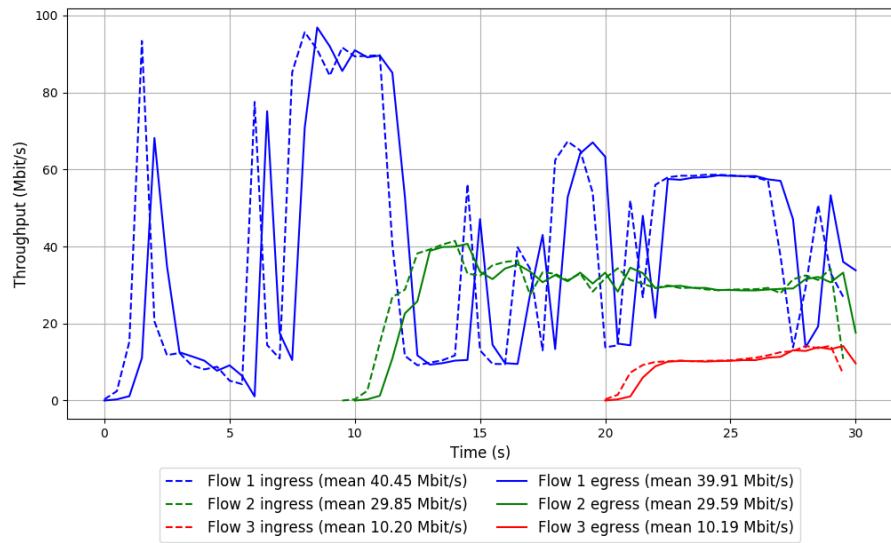


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-06-27 09:25:20
End at: 2019-06-27 09:25:50
Local clock offset: -6.191 ms
Remote clock offset: 66.52 ms

# Below is generated by plot.py at 2019-06-27 10:05:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.89 Mbit/s
95th percentile per-packet one-way delay: 107.587 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 39.91 Mbit/s
95th percentile per-packet one-way delay: 108.016 ms
Loss rate: 1.31%
-- Flow 2:
Average throughput: 29.59 Mbit/s
95th percentile per-packet one-way delay: 106.831 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 10.19 Mbit/s
95th percentile per-packet one-way delay: 107.957 ms
Loss rate: 0.07%
```

Run 4: Report of QUIC Cubic — Data Link

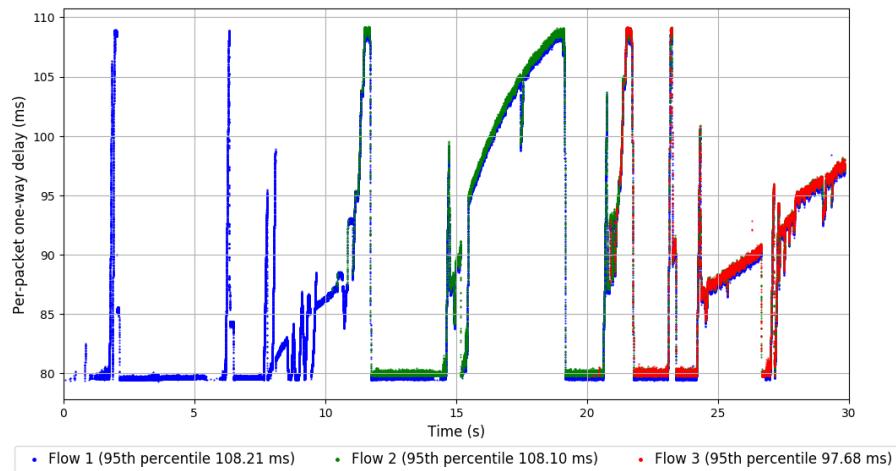
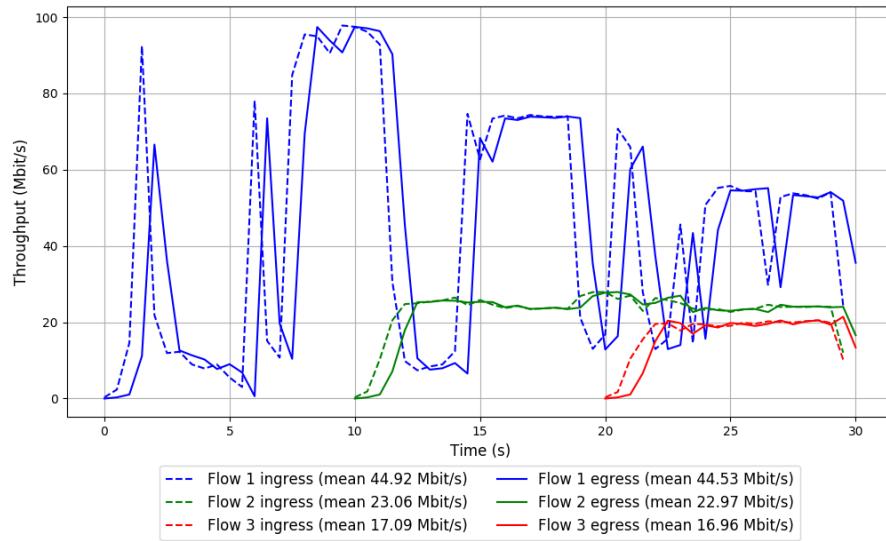


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-06-27 09:53:19
End at: 2019-06-27 09:53:49
Local clock offset: -7.204 ms
Remote clock offset: 70.152 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.33 Mbit/s
95th percentile per-packet one-way delay: 108.105 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 44.53 Mbit/s
95th percentile per-packet one-way delay: 108.214 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 22.97 Mbit/s
95th percentile per-packet one-way delay: 108.097 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 16.96 Mbit/s
95th percentile per-packet one-way delay: 97.681 ms
Loss rate: 0.58%
```

Run 5: Report of QUIC Cubic — Data Link

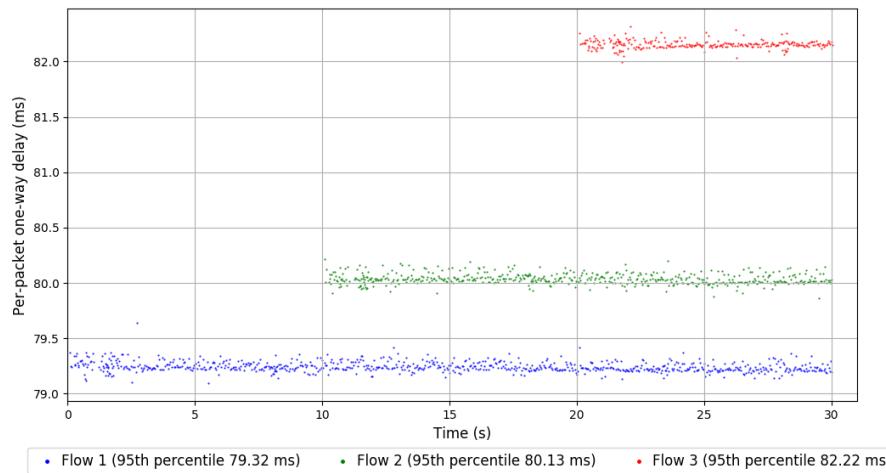
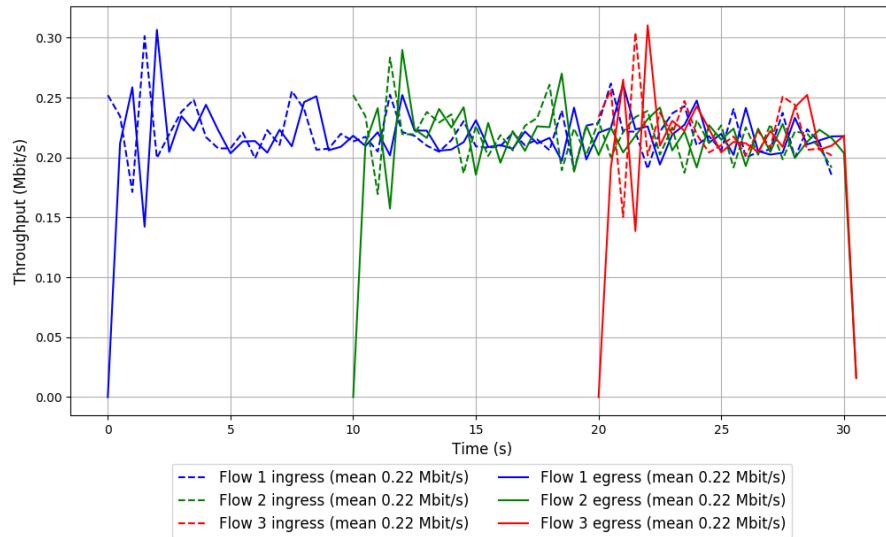


```
Run 1: Statistics of SCReAM

Start at: 2019-06-27 07:48:41
End at: 2019-06-27 07:49:11
Local clock offset: -8.144 ms
Remote clock offset: 54.51 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 82.170 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.322 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.128 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.219 ms
Loss rate: 0.00%
```

## Run 1: Report of SCReAM — Data Link

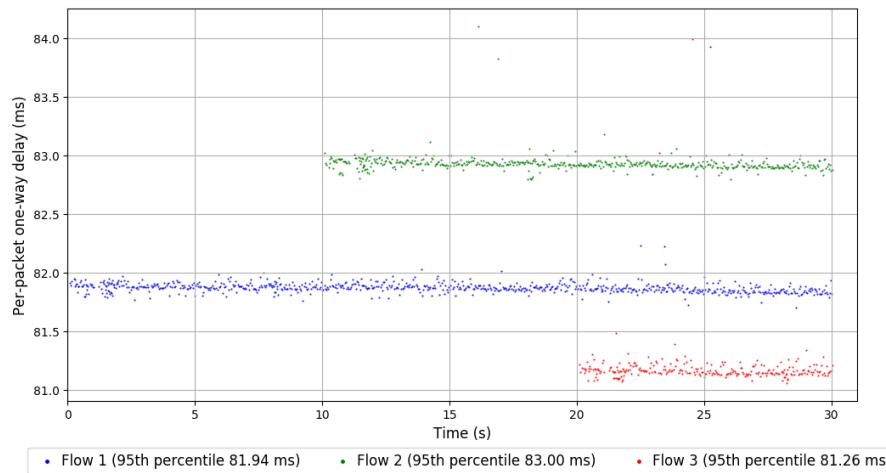
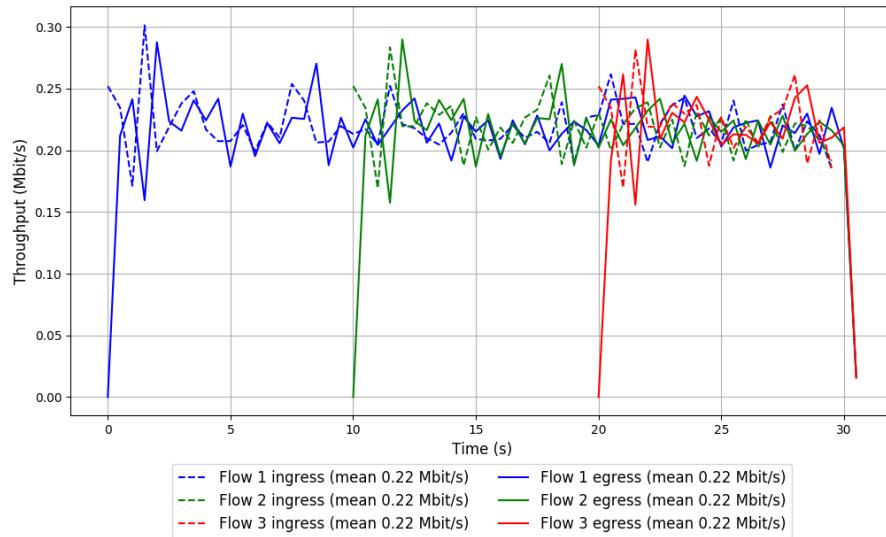


Run 2: Statistics of SCReAM

```
Start at: 2019-06-27 08:16:40
End at: 2019-06-27 08:17:10
Local clock offset: -7.152 ms
Remote clock offset: 60.814 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 82.963 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.941 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.995 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.258 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

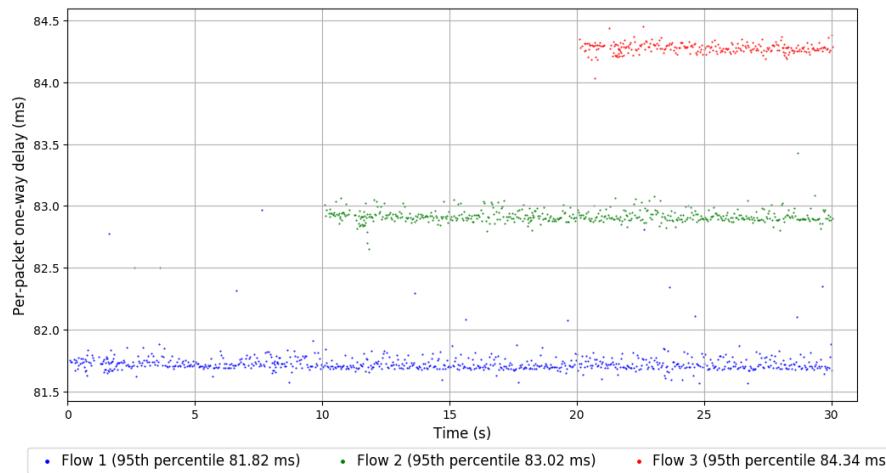
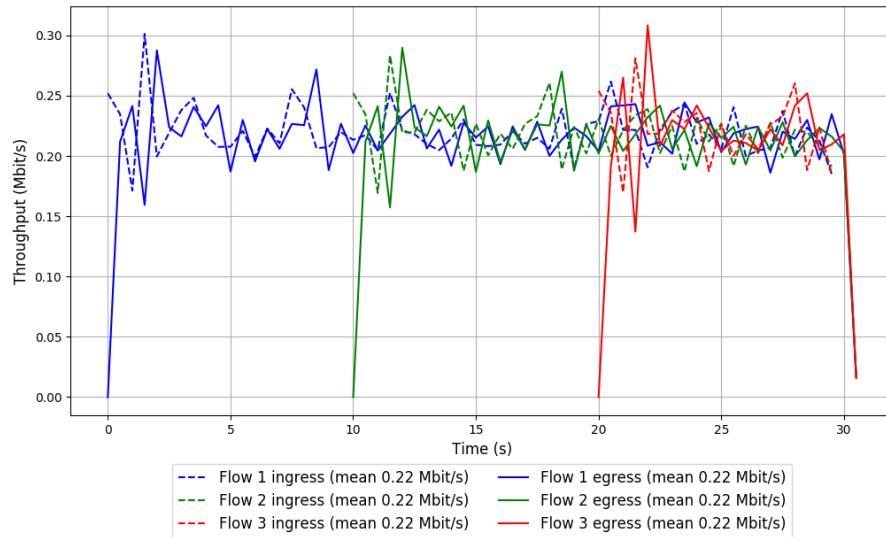


Run 3: Statistics of SCReAM

```
Start at: 2019-06-27 08:44:38
End at: 2019-06-27 08:45:08
Local clock offset: -5.154 ms
Remote clock offset: 64.332 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 84.299 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.819 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.019 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.343 ms
Loss rate: 0.00%
```

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

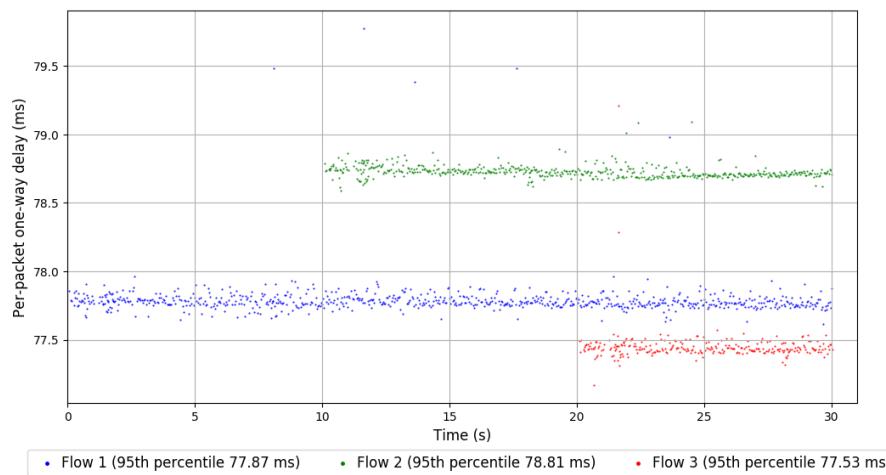
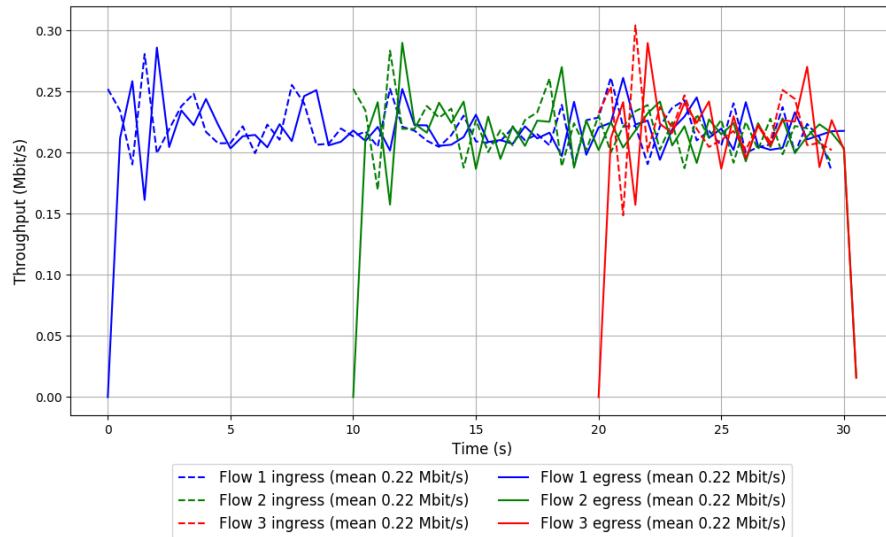


Run 4: Statistics of SCReAM

```
Start at: 2019-06-27 09:12:32
End at: 2019-06-27 09:13:02
Local clock offset: -3.634 ms
Remote clock offset: 63.884 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 78.765 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.873 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.809 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.529 ms
Loss rate: 0.00%
```

## Run 4: Report of SCReAM — Data Link

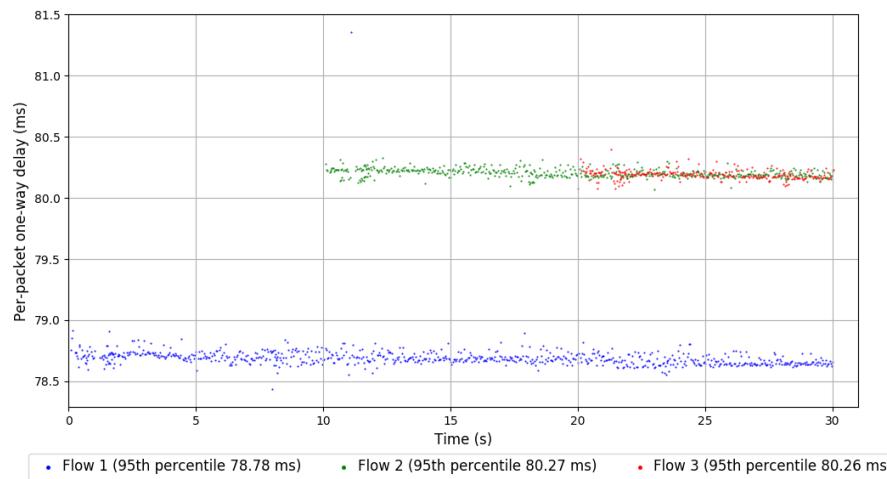
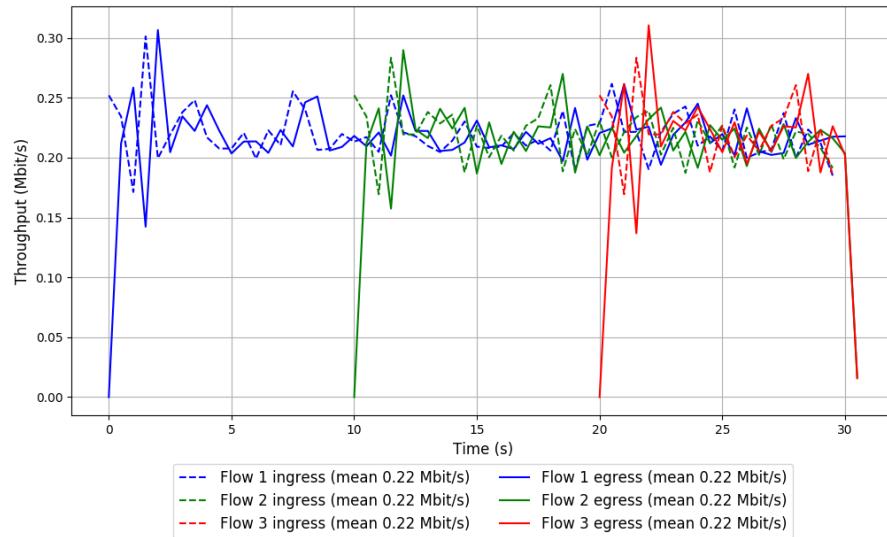


Run 5: Statistics of SCReAM

```
Start at: 2019-06-27 09:40:27
End at: 2019-06-27 09:40:57
Local clock offset: -7.228 ms
Remote clock offset: 68.724 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 80.247 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.776 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.271 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.256 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

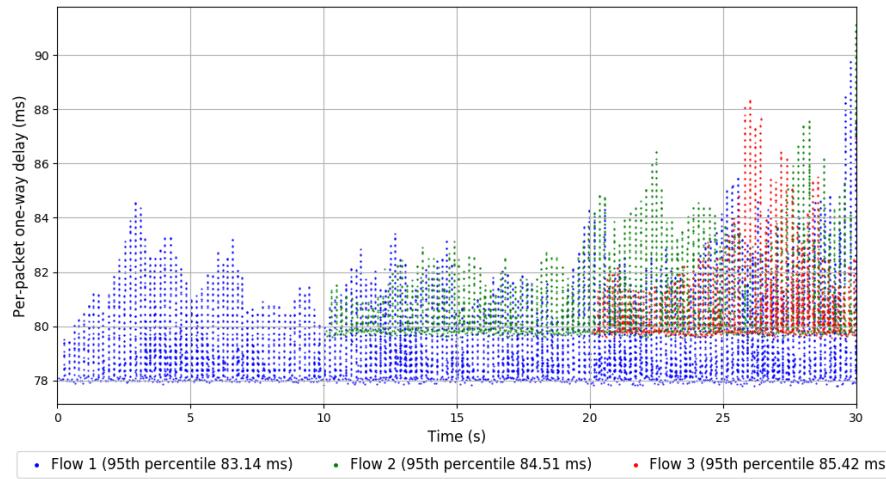
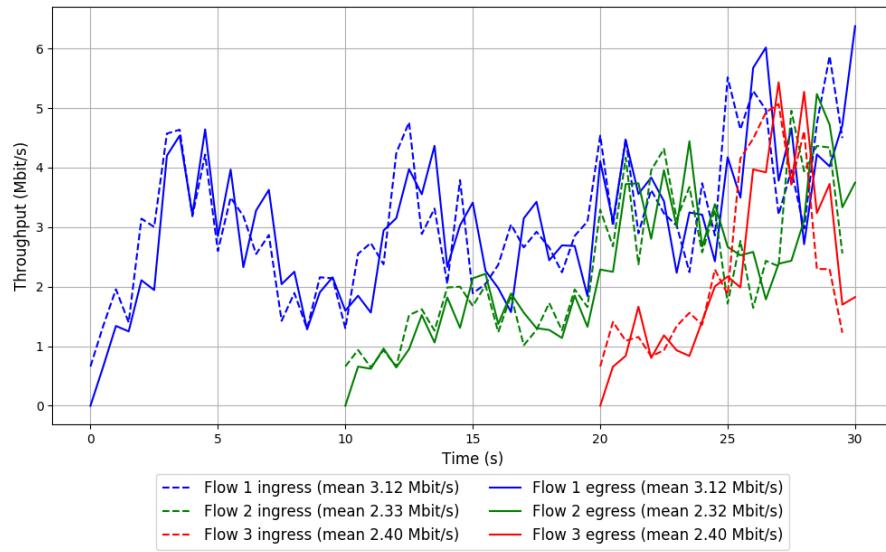


Run 1: Statistics of Sprout

```
Start at: 2019-06-27 07:39:52
End at: 2019-06-27 07:40:22
Local clock offset: -7.972 ms
Remote clock offset: 52.396 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.46 Mbit/s
95th percentile per-packet one-way delay: 84.079 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.12 Mbit/s
95th percentile per-packet one-way delay: 83.144 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 84.511 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 85.425 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

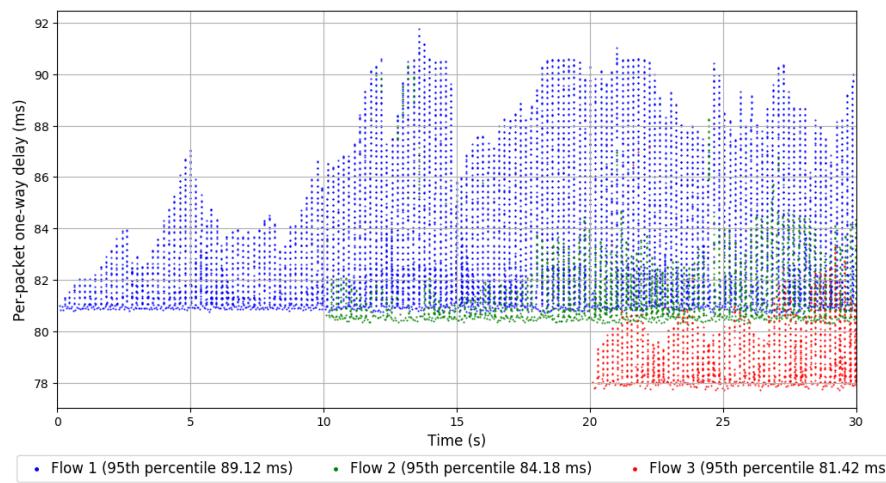
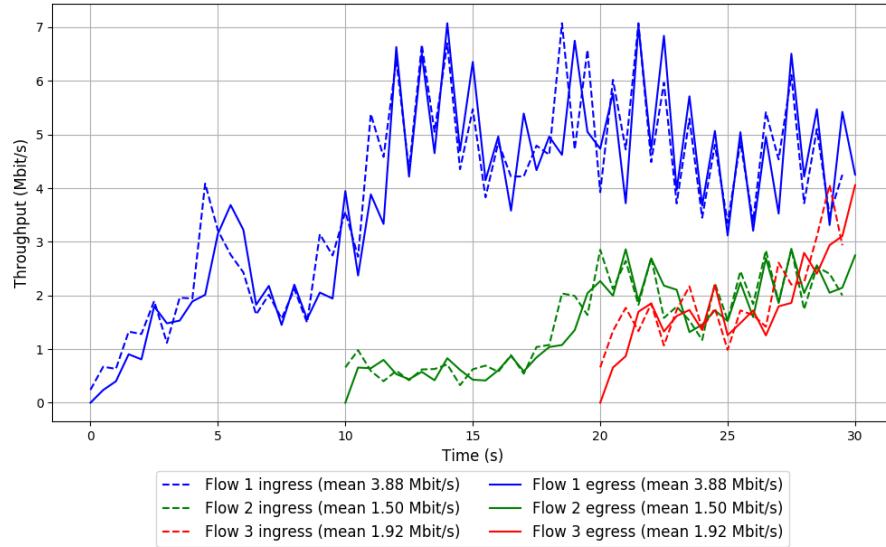


Run 2: Statistics of Sprout

```
Start at: 2019-06-27 08:07:53
End at: 2019-06-27 08:08:23
Local clock offset: -7.956 ms
Remote clock offset: 55.79 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.51 Mbit/s
95th percentile per-packet one-way delay: 88.656 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 89.121 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 84.182 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 81.420 ms
Loss rate: 0.00%
```

## Run 2: Report of Sprout — Data Link

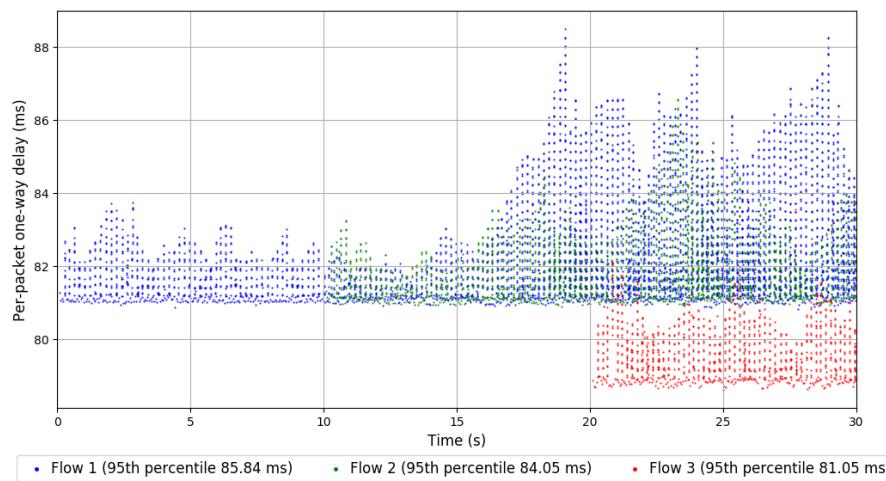
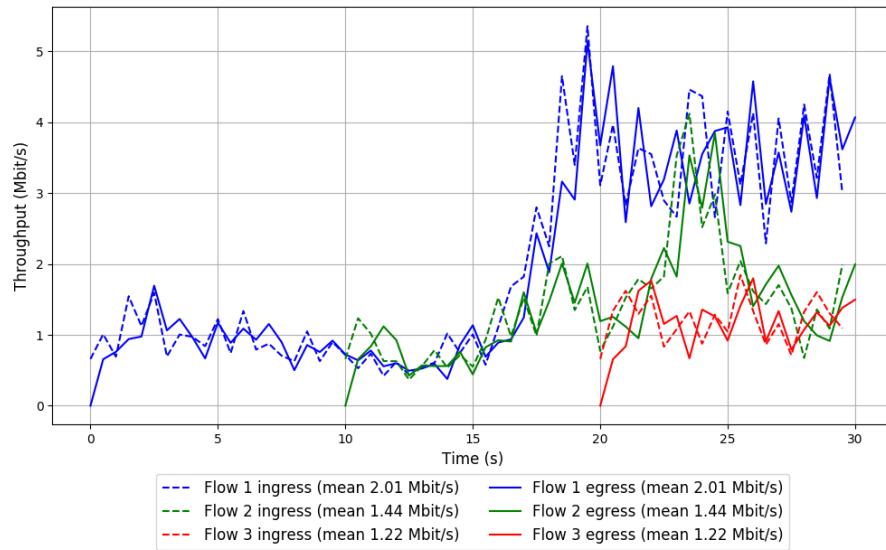


Run 3: Statistics of Sprout

```
Start at: 2019-06-27 08:35:51
End at: 2019-06-27 08:36:21
Local clock offset: -5.503 ms
Remote clock offset: 60.485 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.37 Mbit/s
95th percentile per-packet one-way delay: 85.352 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 85.836 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 84.053 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 81.049 ms
Loss rate: 0.00%
```

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

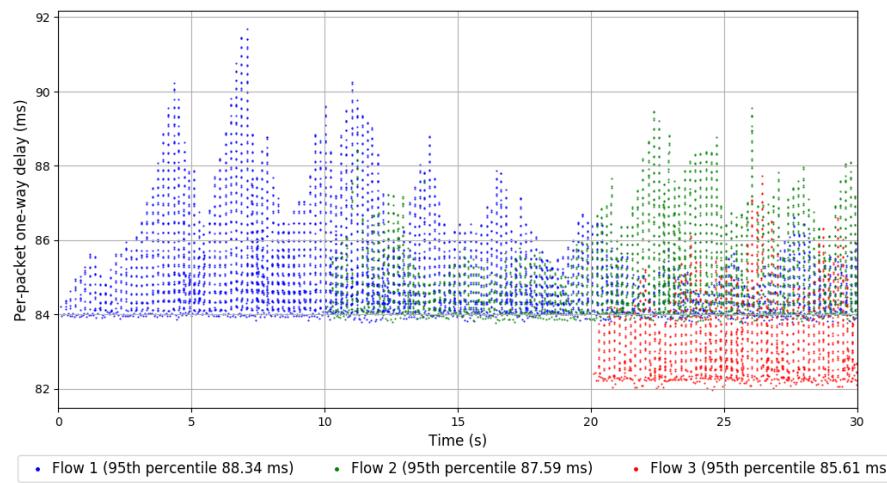
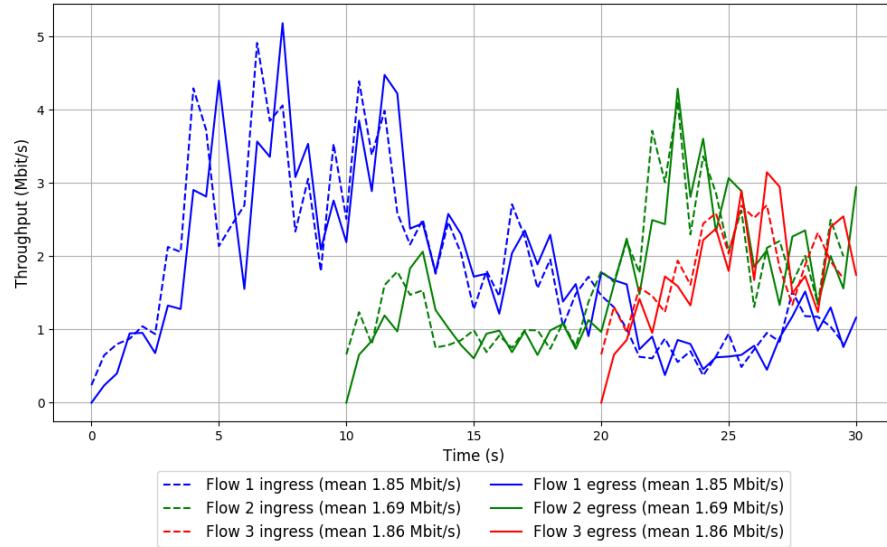


Run 4: Statistics of Sprout

```
Start at: 2019-06-27 09:03:45
End at: 2019-06-27 09:04:15
Local clock offset: -4.684 ms
Remote clock offset: 66.894 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 87.849 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.85 Mbit/s
95th percentile per-packet one-way delay: 88.339 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 87.588 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.86 Mbit/s
95th percentile per-packet one-way delay: 85.606 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

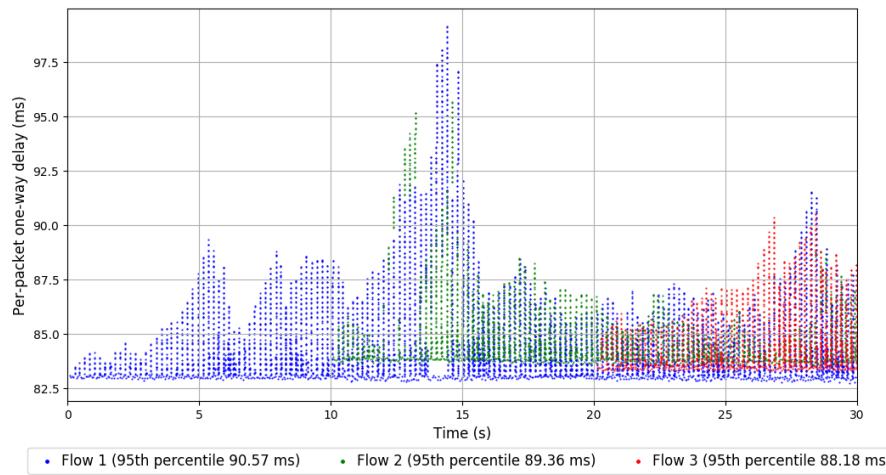
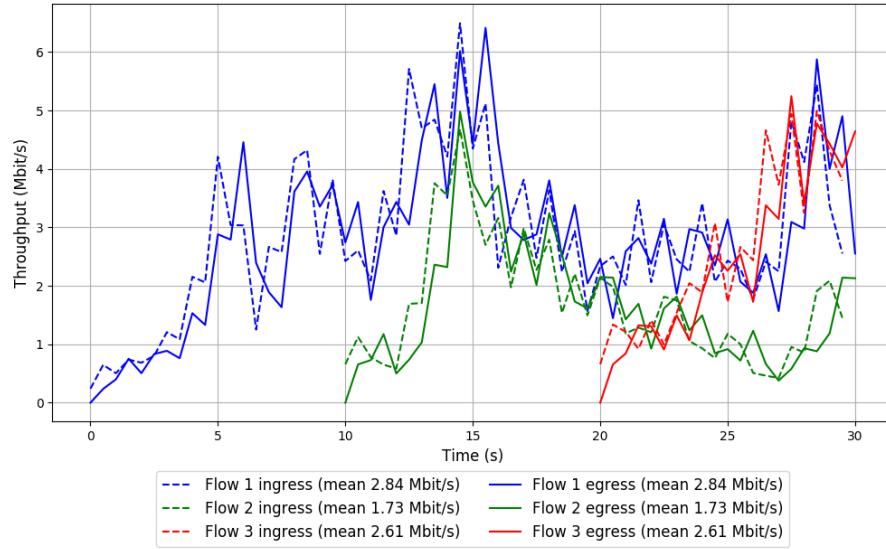


Run 5: Statistics of Sprout

```
Start at: 2019-06-27 09:31:41
End at: 2019-06-27 09:32:11
Local clock offset: -6.588 ms
Remote clock offset: 70.515 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.85 Mbit/s
95th percentile per-packet one-way delay: 89.796 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.84 Mbit/s
95th percentile per-packet one-way delay: 90.566 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 89.360 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 88.178 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

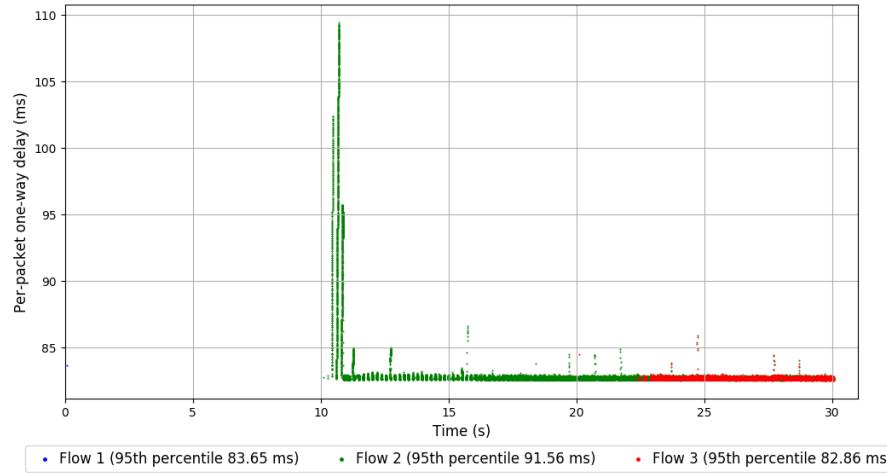
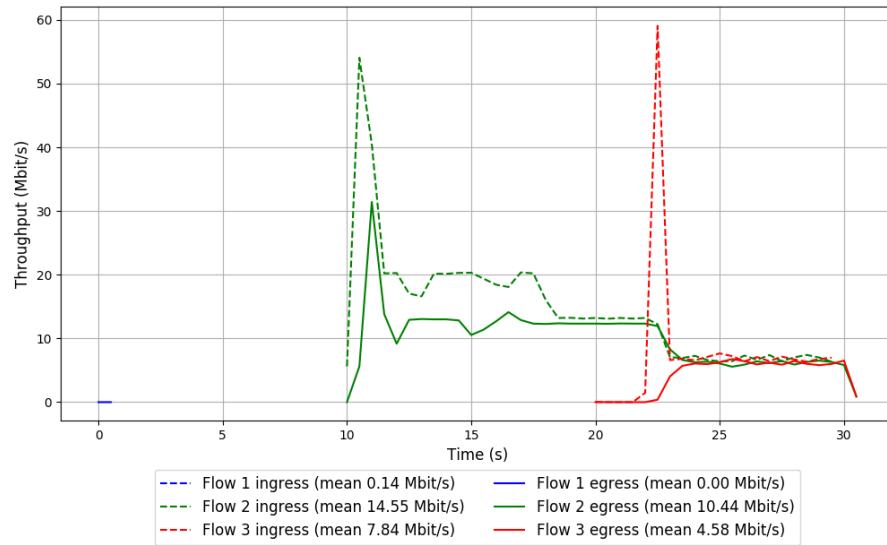


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-06-27 07:41:05
End at: 2019-06-27 07:41:35
Local clock offset: -7.784 ms
Remote clock offset: 56.521 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 88.666 ms
Loss rate: 31.09%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 83.647 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 10.44 Mbit/s
95th percentile per-packet one-way delay: 91.565 ms
Loss rate: 28.25%
-- Flow 3:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 82.855 ms
Loss rate: 41.62%
```

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

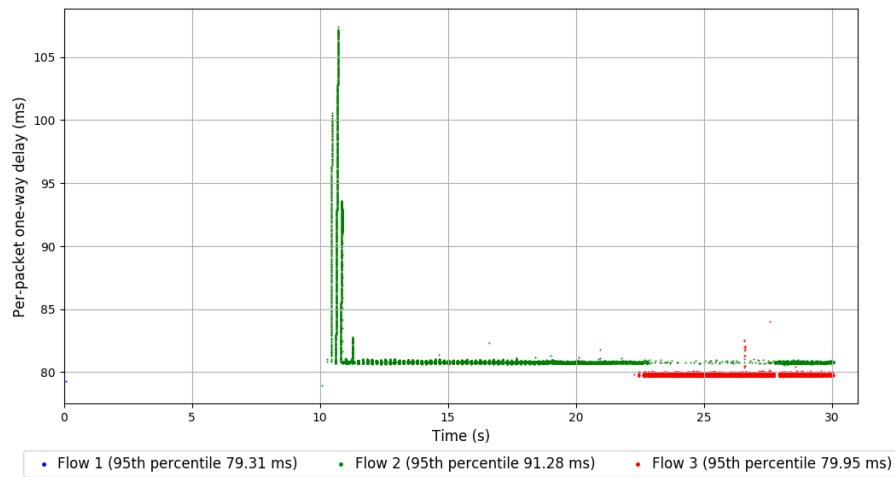
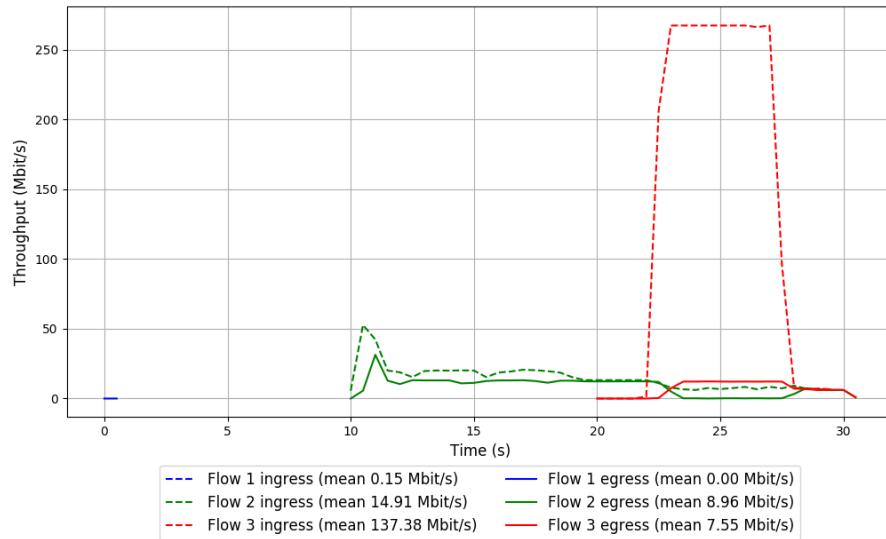


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-06-27 08:09:06
End at: 2019-06-27 08:09:36
Local clock offset: -7.766 ms
Remote clock offset: 57.057 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 86.633 ms
Loss rate: 84.75%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 79.306 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 8.96 Mbit/s
95th percentile per-packet one-way delay: 91.276 ms
Loss rate: 39.91%
-- Flow 3:
Average throughput: 7.55 Mbit/s
95th percentile per-packet one-way delay: 79.946 ms
Loss rate: 94.51%
```

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

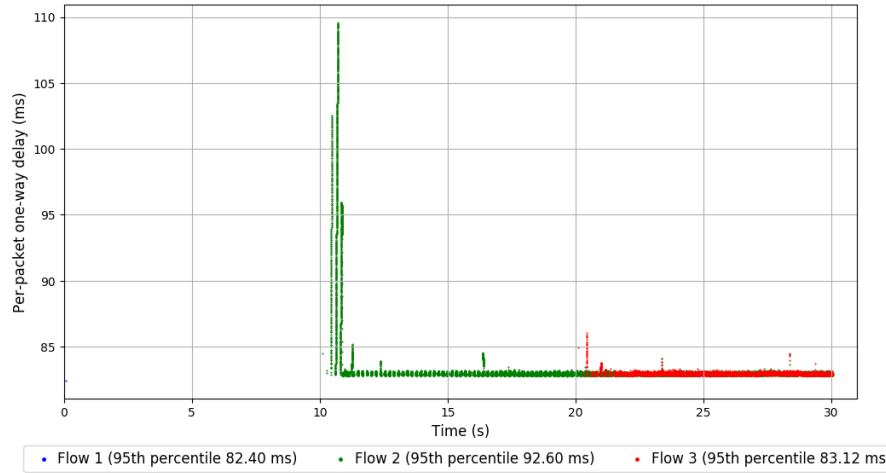
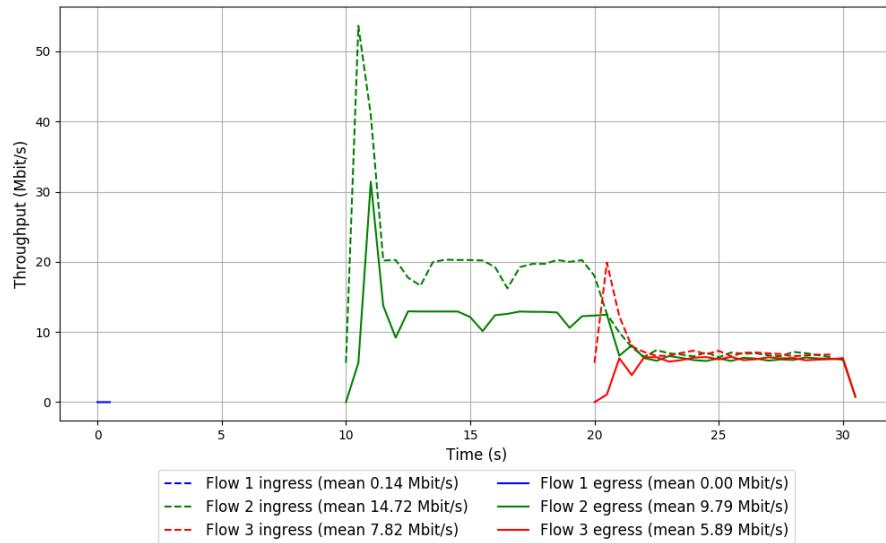


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-06-27 08:37:04
End at: 2019-06-27 08:37:34
Local clock offset: -4.714 ms
Remote clock offset: 64.515 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 88.789 ms
Loss rate: 31.68%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 82.400 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.79 Mbit/s
95th percentile per-packet one-way delay: 92.603 ms
Loss rate: 33.52%
-- Flow 3:
Average throughput: 5.89 Mbit/s
95th percentile per-packet one-way delay: 83.117 ms
Loss rate: 24.69%
```

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

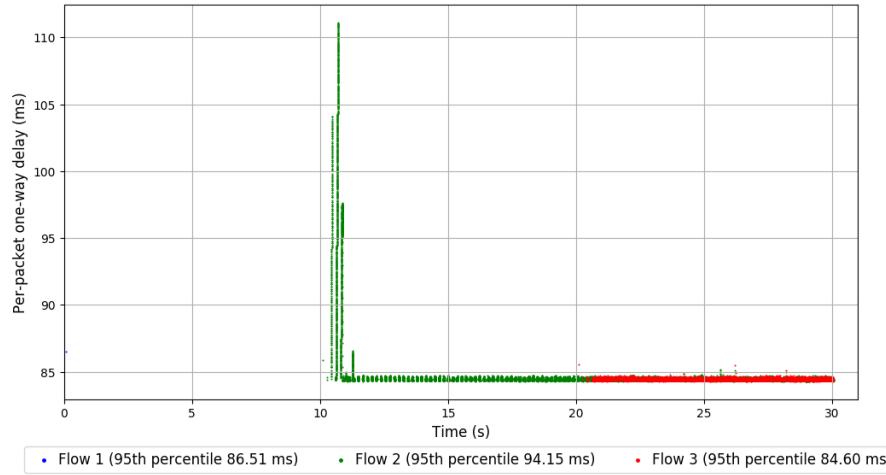
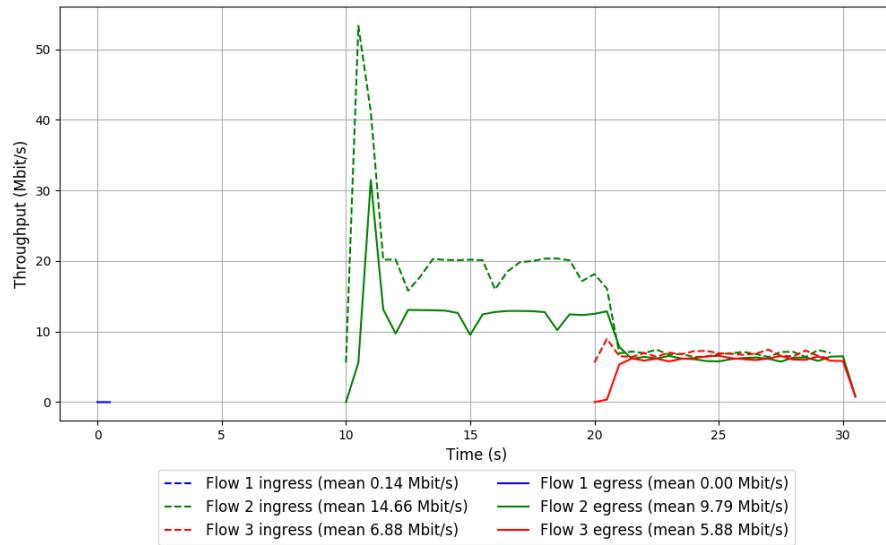


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-06-27 09:04:58
End at: 2019-06-27 09:05:28
Local clock offset: -3.819 ms
Remote clock offset: 69.642 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 90.402 ms
Loss rate: 29.66%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 86.514 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.79 Mbit/s
95th percentile per-packet one-way delay: 94.153 ms
Loss rate: 33.20%
-- Flow 3:
Average throughput: 5.88 Mbit/s
95th percentile per-packet one-way delay: 84.601 ms
Loss rate: 14.52%
```

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

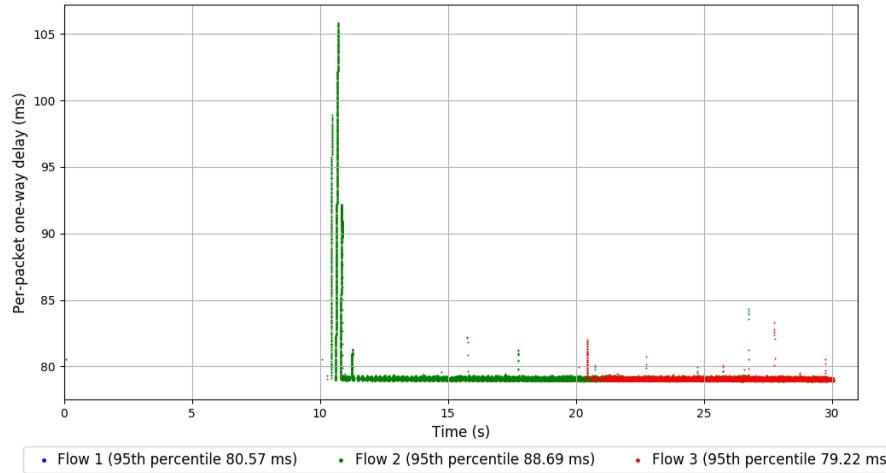
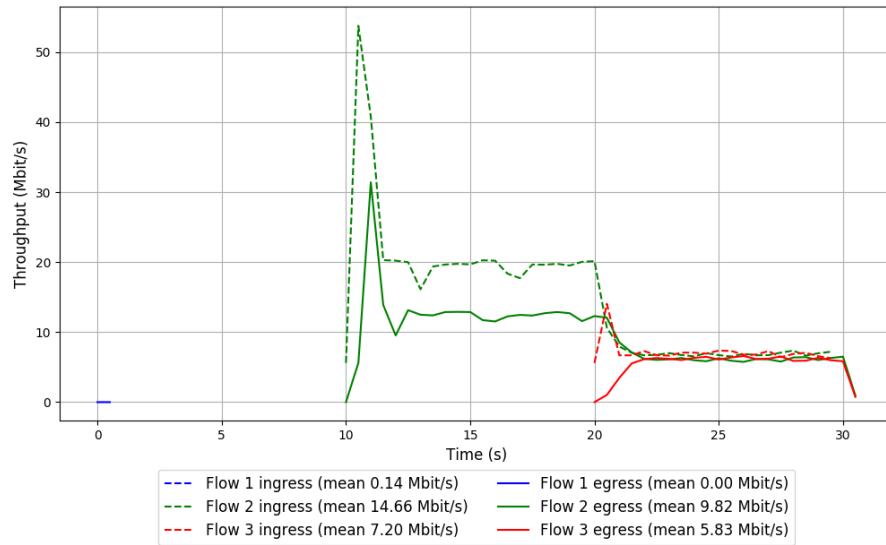


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-06-27 09:32:54
End at: 2019-06-27 09:33:24
Local clock offset: -6.434 ms
Remote clock offset: 67.84 ms

# Below is generated by plot.py at 2019-06-27 10:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 84.971 ms
Loss rate: 30.27%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 80.571 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.82 Mbit/s
95th percentile per-packet one-way delay: 88.688 ms
Loss rate: 33.01%
-- Flow 3:
Average throughput: 5.83 Mbit/s
95th percentile per-packet one-way delay: 79.220 ms
Loss rate: 19.06%
```

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

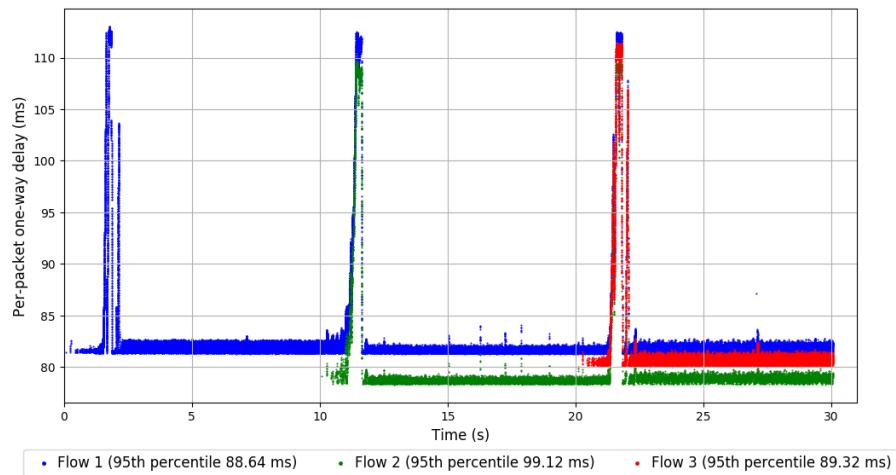
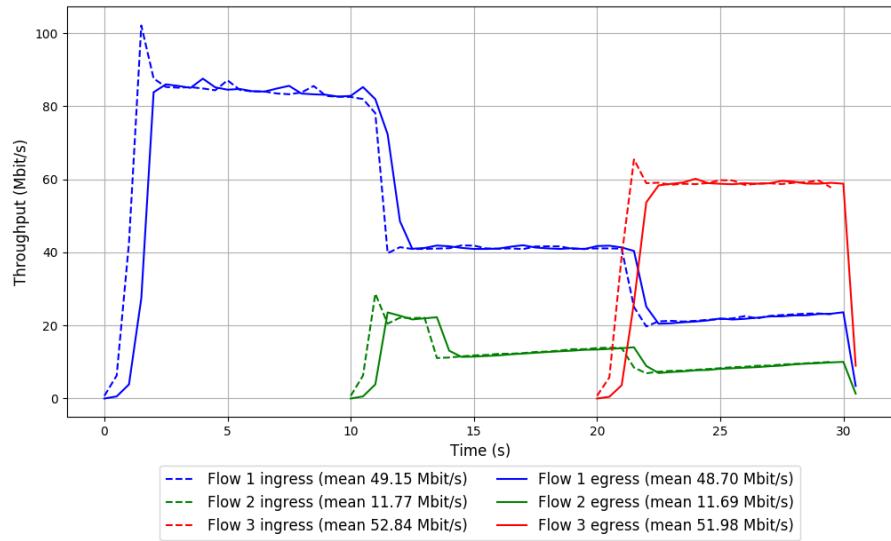


Run 1: Statistics of TCP Vegas

```
Start at: 2019-06-27 07:46:09
End at: 2019-06-27 07:46:39
Local clock offset: -7.314 ms
Remote clock offset: 54.293 ms

# Below is generated by plot.py at 2019-06-27 10:06:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.77 Mbit/s
95th percentile per-packet one-way delay: 89.742 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 48.70 Mbit/s
95th percentile per-packet one-way delay: 88.635 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 11.69 Mbit/s
95th percentile per-packet one-way delay: 99.123 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 51.98 Mbit/s
95th percentile per-packet one-way delay: 89.319 ms
Loss rate: 1.61%
```

Run 1: Report of TCP Vegas — Data Link

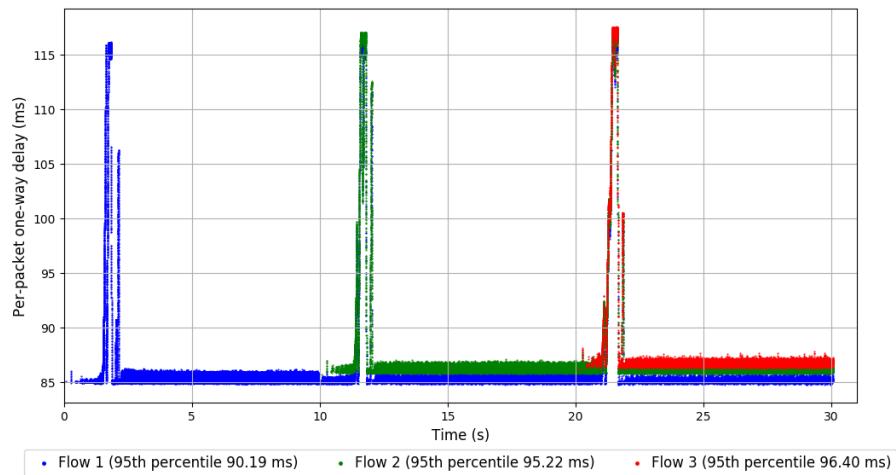
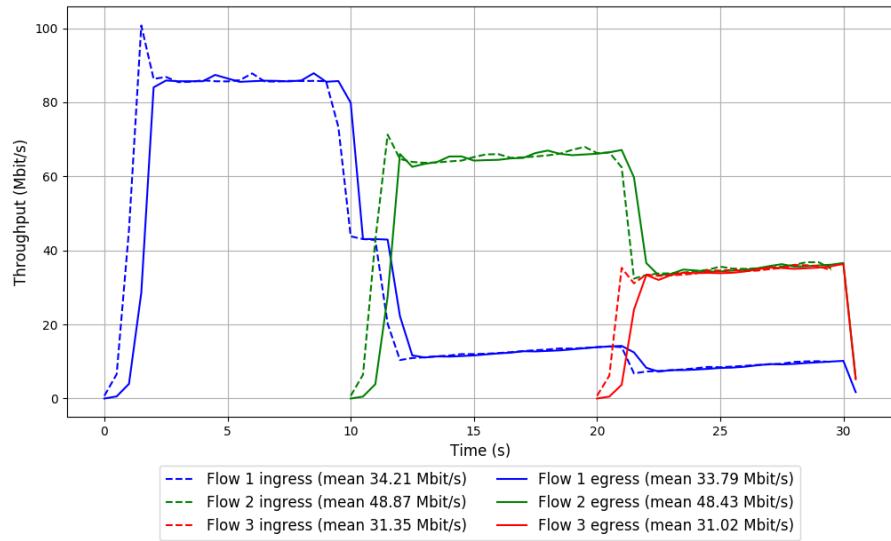


Run 2: Statistics of TCP Vegas

```
Start at: 2019-06-27 08:14:09
End at: 2019-06-27 08:14:39
Local clock offset: -7.127 ms
Remote clock offset: 63.064 ms

# Below is generated by plot.py at 2019-06-27 10:06:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.39 Mbit/s
95th percentile per-packet one-way delay: 92.190 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 33.79 Mbit/s
95th percentile per-packet one-way delay: 90.195 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 48.43 Mbit/s
95th percentile per-packet one-way delay: 95.218 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 31.02 Mbit/s
95th percentile per-packet one-way delay: 96.404 ms
Loss rate: 1.07%
```

Run 2: Report of TCP Vegas — Data Link

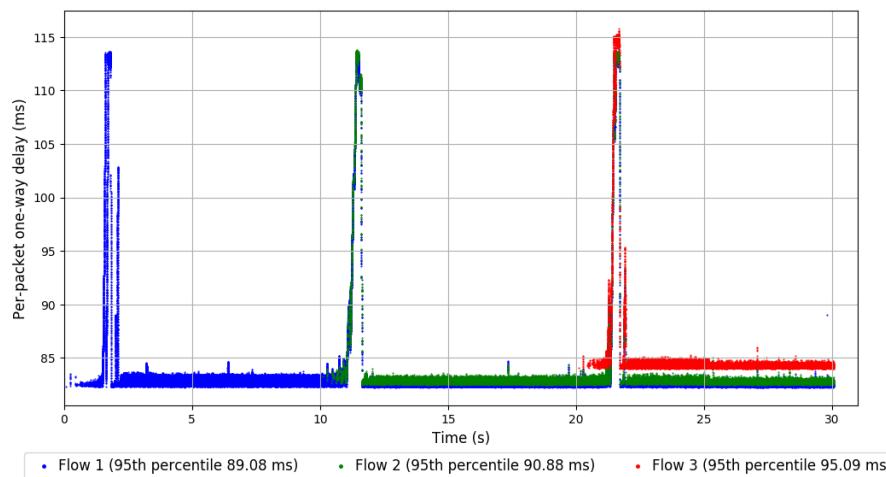
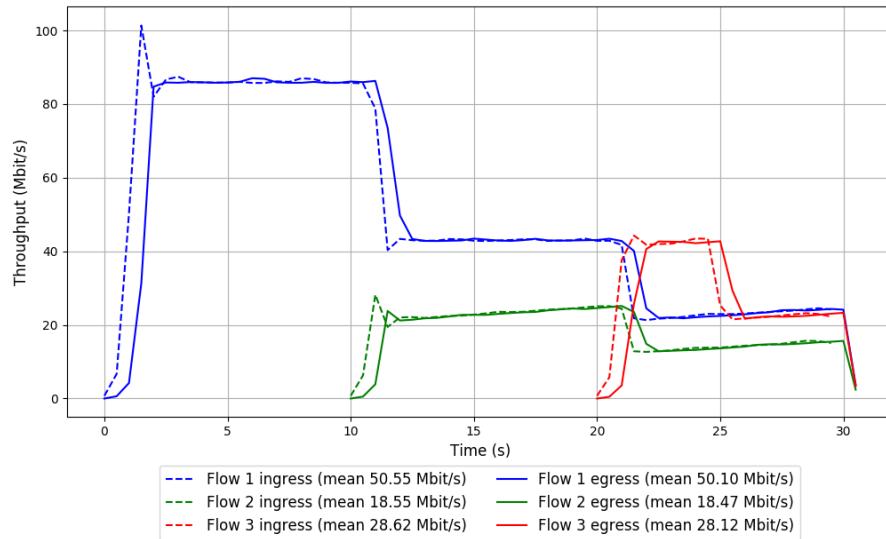


Run 3: Statistics of TCP Vegas

```
Start at: 2019-06-27 08:42:06
End at: 2019-06-27 08:42:36
Local clock offset: -4.51 ms
Remote clock offset: 65.418 ms

# Below is generated by plot.py at 2019-06-27 10:06:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.75 Mbit/s
95th percentile per-packet one-way delay: 89.702 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 50.10 Mbit/s
95th percentile per-packet one-way delay: 89.084 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 18.47 Mbit/s
95th percentile per-packet one-way delay: 90.884 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 28.12 Mbit/s
95th percentile per-packet one-way delay: 95.091 ms
Loss rate: 1.74%
```

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

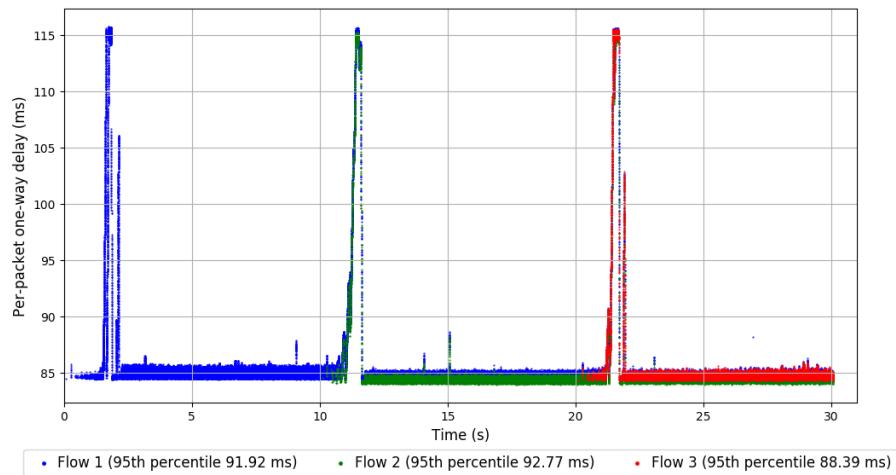
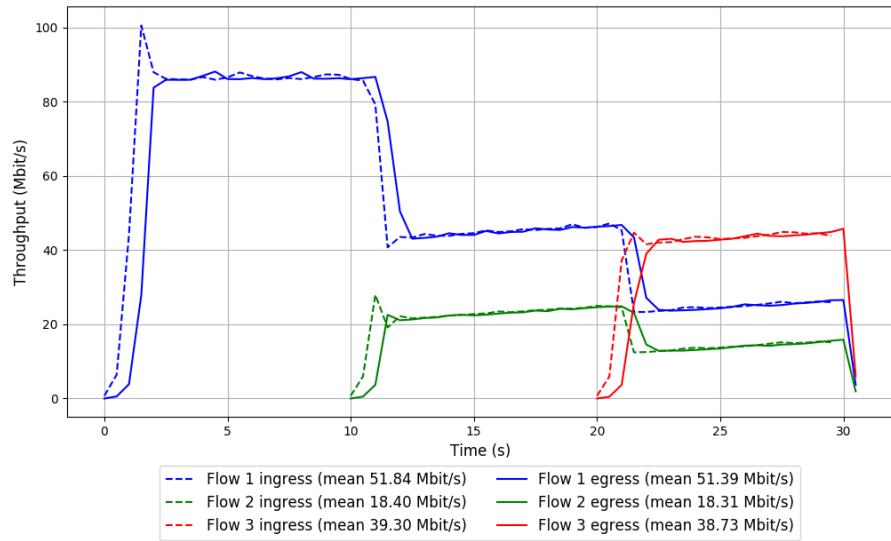


Run 4: Statistics of TCP Vegas

```
Start at: 2019-06-27 09:10:01
End at: 2019-06-27 09:10:31
Local clock offset: -3.923 ms
Remote clock offset: 69.093 ms

# Below is generated by plot.py at 2019-06-27 10:06:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.47 Mbit/s
95th percentile per-packet one-way delay: 91.394 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 51.39 Mbit/s
95th percentile per-packet one-way delay: 91.917 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 18.31 Mbit/s
95th percentile per-packet one-way delay: 92.774 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 38.73 Mbit/s
95th percentile per-packet one-way delay: 88.389 ms
Loss rate: 1.43%
```

Run 4: Report of TCP Vegas — Data Link

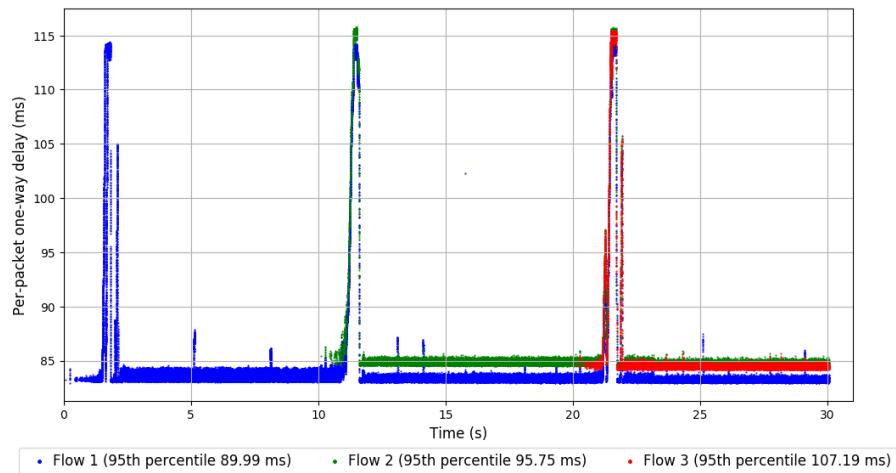
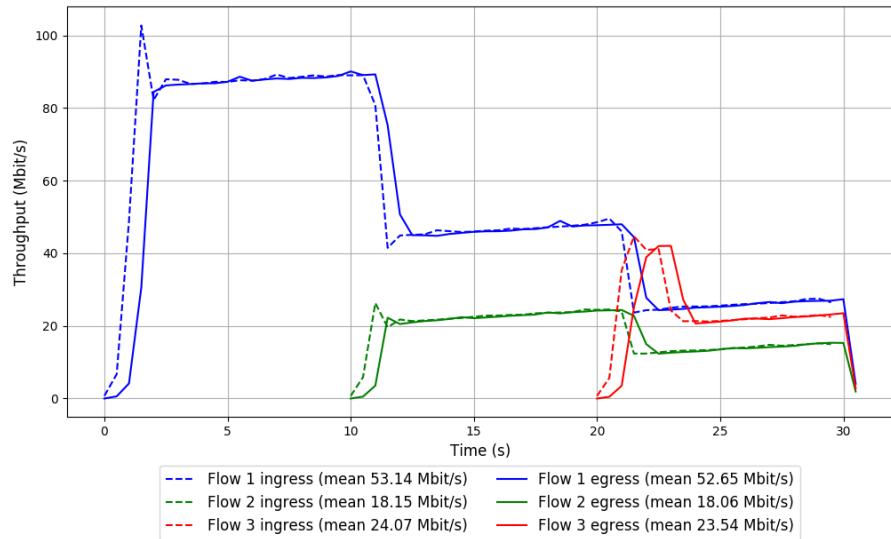


Run 5: Statistics of TCP Vegas

```
Start at: 2019-06-27 09:37:56
End at: 2019-06-27 09:38:26
Local clock offset: -7.634 ms
Remote clock offset: 72.293 ms

# Below is generated by plot.py at 2019-06-27 10:06:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.49 Mbit/s
95th percentile per-packet one-way delay: 92.787 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 52.65 Mbit/s
95th percentile per-packet one-way delay: 89.991 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 18.06 Mbit/s
95th percentile per-packet one-way delay: 95.748 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 23.54 Mbit/s
95th percentile per-packet one-way delay: 107.190 ms
Loss rate: 2.18%
```

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

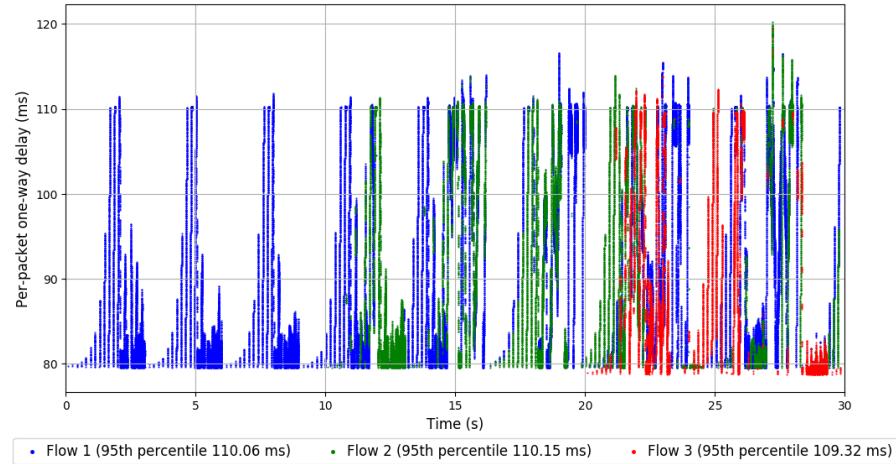
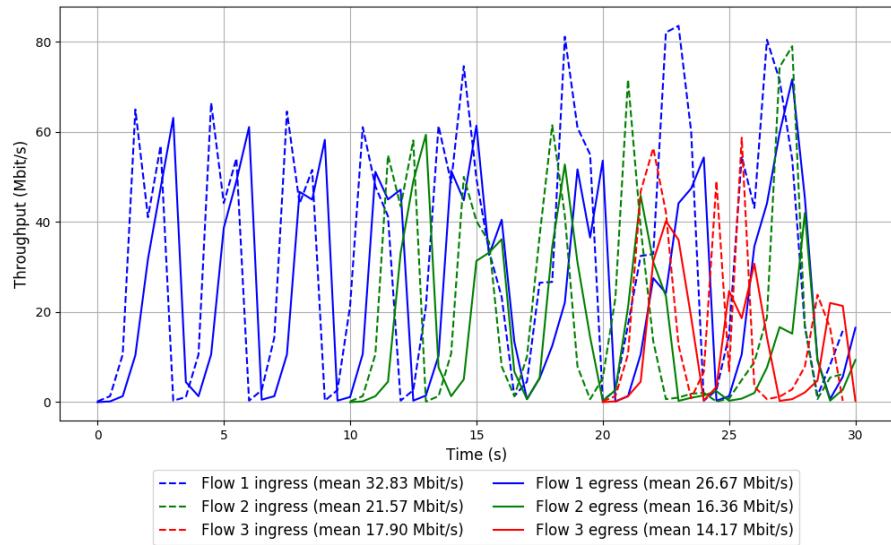


Run 1: Statistics of Verus

```
Start at: 2019-06-27 07:36:05
End at: 2019-06-27 07:36:35
Local clock offset: -7.636 ms
Remote clock offset: 51.94 ms

# Below is generated by plot.py at 2019-06-27 10:06:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.09 Mbit/s
95th percentile per-packet one-way delay: 110.058 ms
Loss rate: 20.38%
-- Flow 1:
Average throughput: 26.67 Mbit/s
95th percentile per-packet one-way delay: 110.061 ms
Loss rate: 18.69%
-- Flow 2:
Average throughput: 16.36 Mbit/s
95th percentile per-packet one-way delay: 110.149 ms
Loss rate: 24.08%
-- Flow 3:
Average throughput: 14.17 Mbit/s
95th percentile per-packet one-way delay: 109.317 ms
Loss rate: 20.88%
```

## Run 1: Report of Verus — Data Link

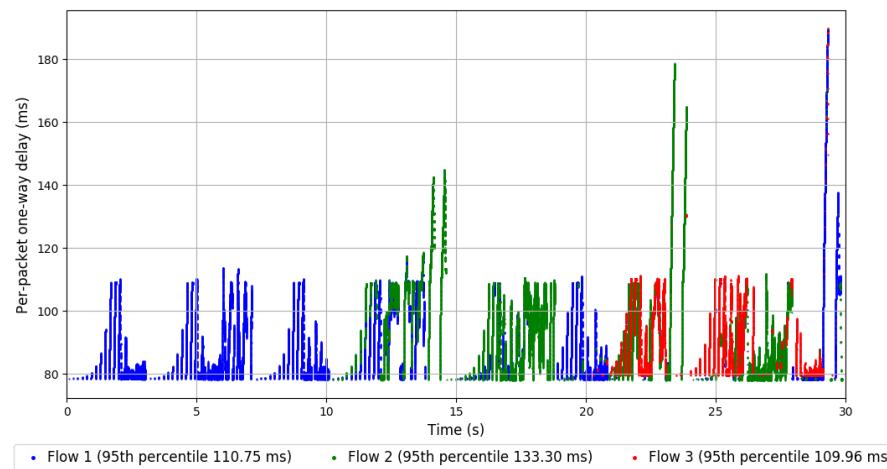
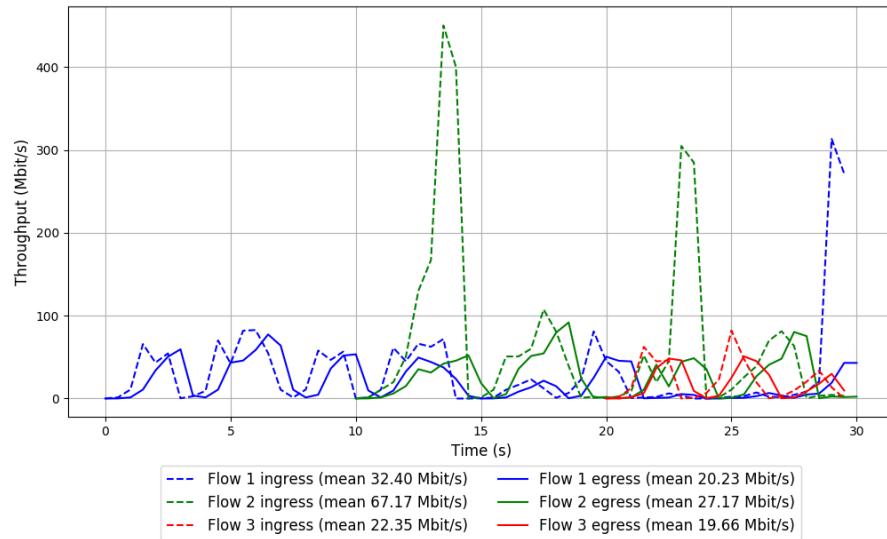


Run 2: Statistics of Verus

```
Start at: 2019-06-27 08:04:06
End at: 2019-06-27 08:04:36
Local clock offset: -7.918 ms
Remote clock offset: 55.401 ms

# Below is generated by plot.py at 2019-06-27 10:06:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.45 Mbit/s
95th percentile per-packet one-way delay: 119.606 ms
Loss rate: 47.15%
-- Flow 1:
Average throughput: 20.23 Mbit/s
95th percentile per-packet one-way delay: 110.752 ms
Loss rate: 37.49%
-- Flow 2:
Average throughput: 27.17 Mbit/s
95th percentile per-packet one-way delay: 133.297 ms
Loss rate: 59.55%
-- Flow 3:
Average throughput: 19.66 Mbit/s
95th percentile per-packet one-way delay: 109.964 ms
Loss rate: 13.63%
```

## Run 2: Report of Verus — Data Link

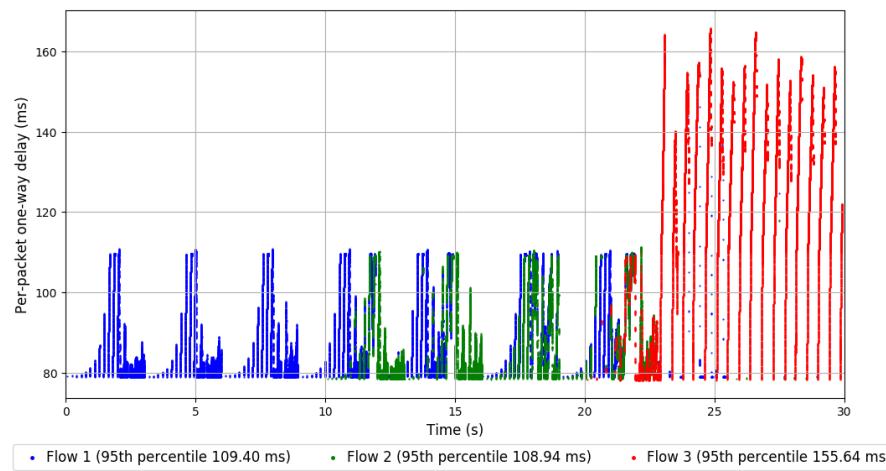
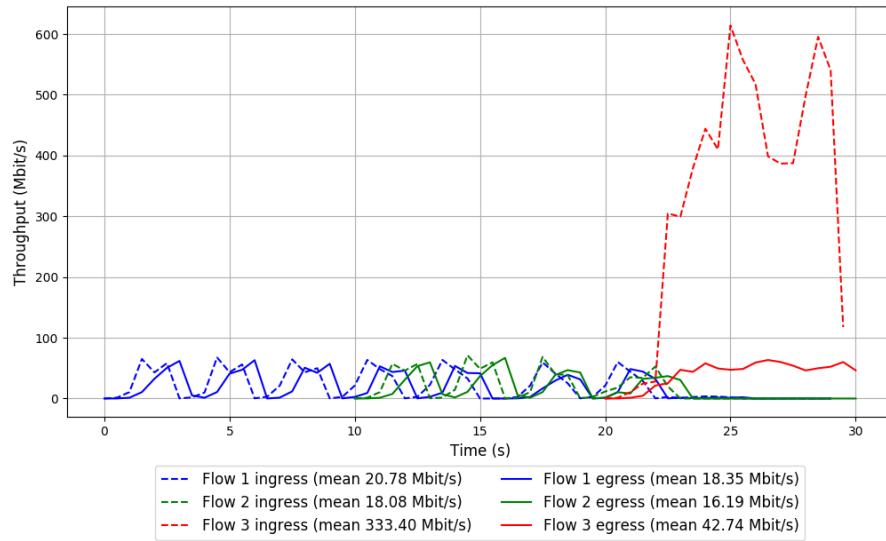


Run 3: Statistics of Verus

```
Start at: 2019-06-27 08:32:03
End at: 2019-06-27 08:32:33
Local clock offset: -4.939 ms
Remote clock offset: 60.107 ms

# Below is generated by plot.py at 2019-06-27 10:06:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.42 Mbit/s
95th percentile per-packet one-way delay: 149.129 ms
Loss rate: 69.96%
-- Flow 1:
Average throughput: 18.35 Mbit/s
95th percentile per-packet one-way delay: 109.401 ms
Loss rate: 12.20%
-- Flow 2:
Average throughput: 16.19 Mbit/s
95th percentile per-packet one-way delay: 108.937 ms
Loss rate: 10.10%
-- Flow 3:
Average throughput: 42.74 Mbit/s
95th percentile per-packet one-way delay: 155.641 ms
Loss rate: 87.12%
```

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

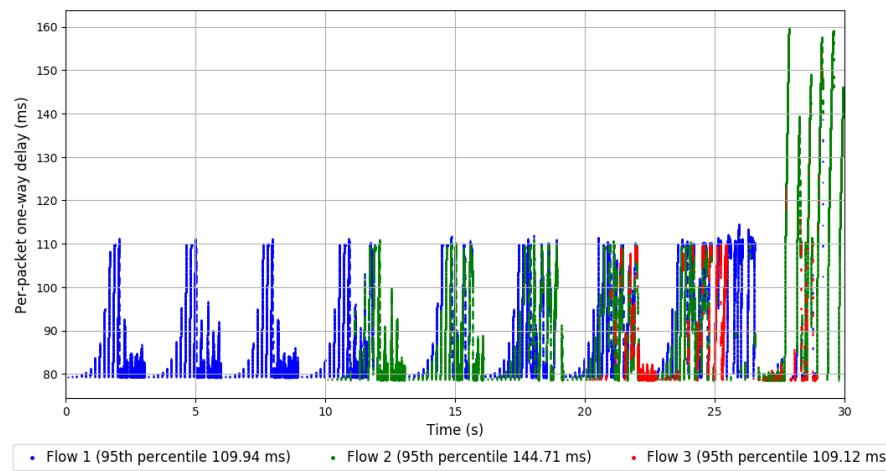
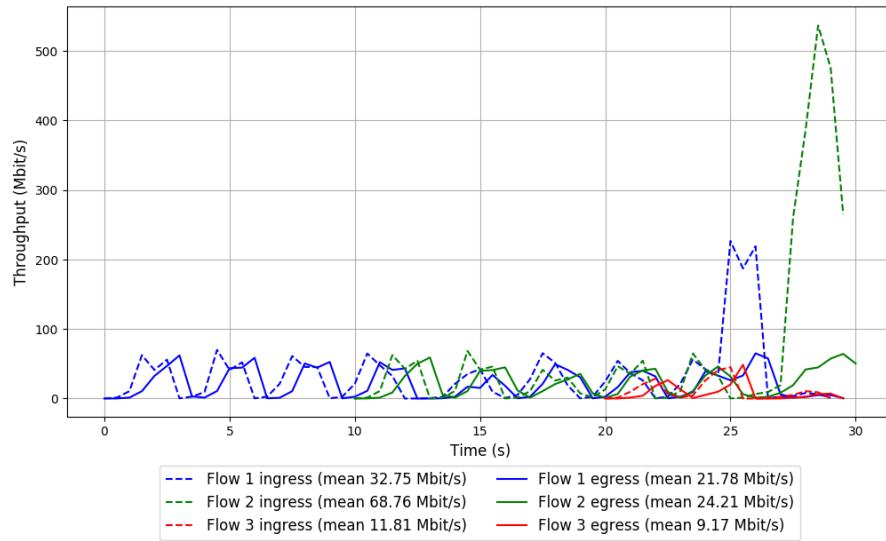


Run 4: Statistics of Verus

```
Start at: 2019-06-27 08:59:59
End at: 2019-06-27 09:00:29
Local clock offset: -4.009 ms
Remote clock offset: 63.531 ms

# Below is generated by plot.py at 2019-06-27 10:07:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.22 Mbit/s
95th percentile per-packet one-way delay: 126.532 ms
Loss rate: 50.60%
-- Flow 1:
Average throughput: 21.78 Mbit/s
95th percentile per-packet one-way delay: 109.941 ms
Loss rate: 33.88%
-- Flow 2:
Average throughput: 24.21 Mbit/s
95th percentile per-packet one-way delay: 144.710 ms
Loss rate: 64.67%
-- Flow 3:
Average throughput: 9.17 Mbit/s
95th percentile per-packet one-way delay: 109.119 ms
Loss rate: 22.25%
```

Run 4: Report of Verus — Data Link

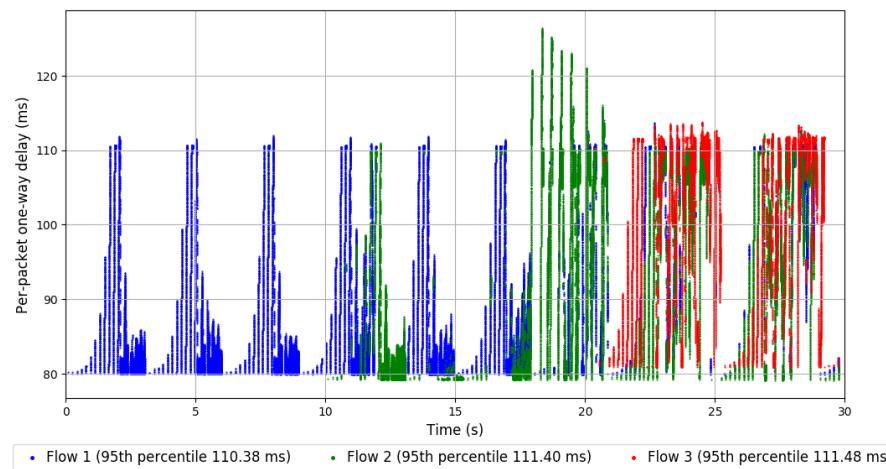
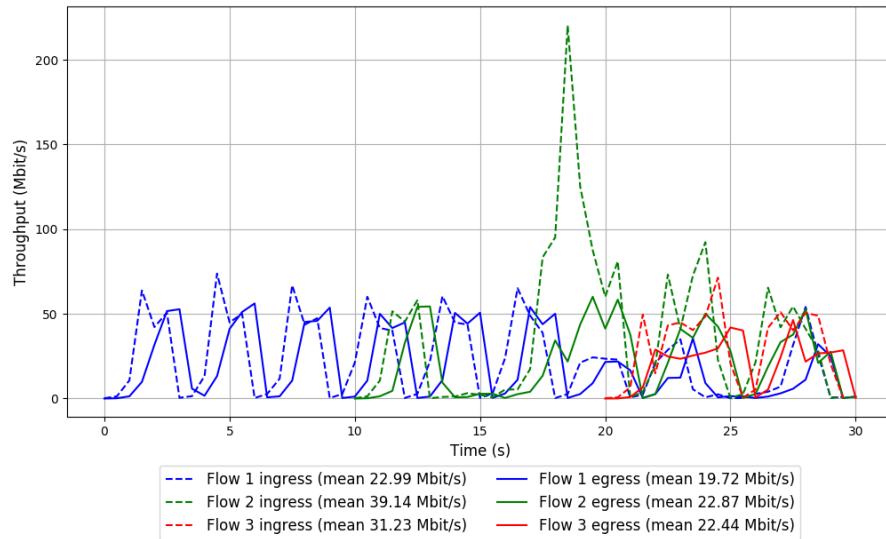


Run 5: Statistics of Verus

```
Start at: 2019-06-27 09:27:54
End at: 2019-06-27 09:28:24
Local clock offset: -5.829 ms
Remote clock offset: 67.195 ms

# Below is generated by plot.py at 2019-06-27 10:07:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.12 Mbit/s
95th percentile per-packet one-way delay: 110.743 ms
Loss rate: 28.65%
-- Flow 1:
Average throughput: 19.72 Mbit/s
95th percentile per-packet one-way delay: 110.381 ms
Loss rate: 14.22%
-- Flow 2:
Average throughput: 22.87 Mbit/s
95th percentile per-packet one-way delay: 111.398 ms
Loss rate: 41.56%
-- Flow 3:
Average throughput: 22.44 Mbit/s
95th percentile per-packet one-way delay: 111.485 ms
Loss rate: 28.36%
```

Run 5: Report of Verus — Data Link

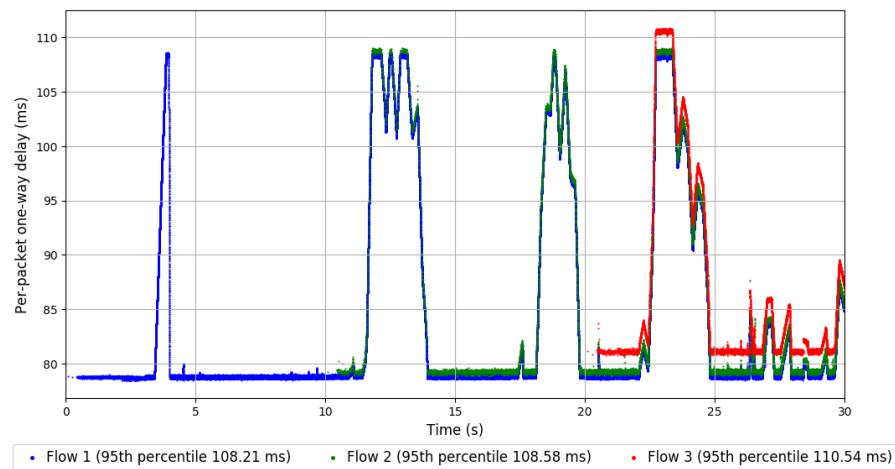
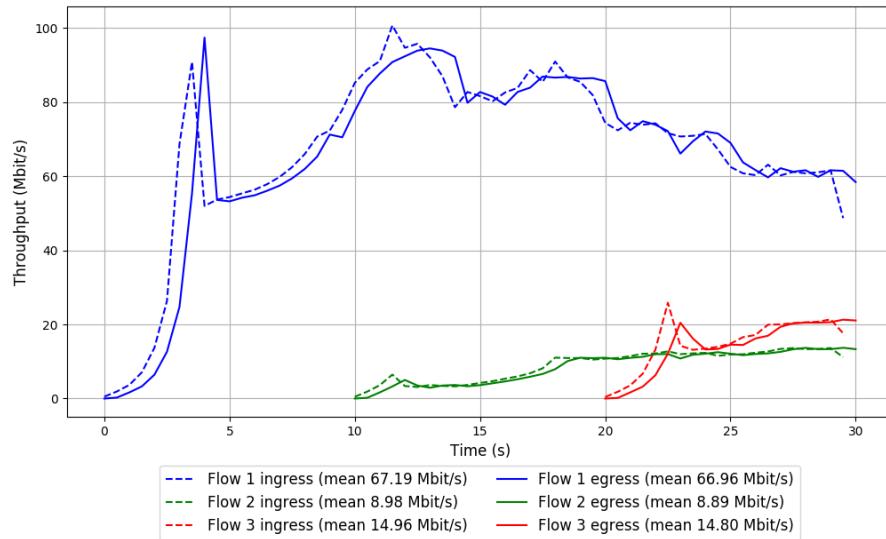


Run 1: Statistics of PCC-Vivace

```
Start at: 2019-06-27 07:51:12
End at: 2019-06-27 07:51:42
Local clock offset: -7.266 ms
Remote clock offset: 54.88 ms

# Below is generated by plot.py at 2019-06-27 10:07:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.75 Mbit/s
95th percentile per-packet one-way delay: 108.232 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 66.96 Mbit/s
95th percentile per-packet one-way delay: 108.211 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 8.89 Mbit/s
95th percentile per-packet one-way delay: 108.580 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 14.80 Mbit/s
95th percentile per-packet one-way delay: 110.544 ms
Loss rate: 1.03%
```

Run 1: Report of PCC-Vivace — Data Link

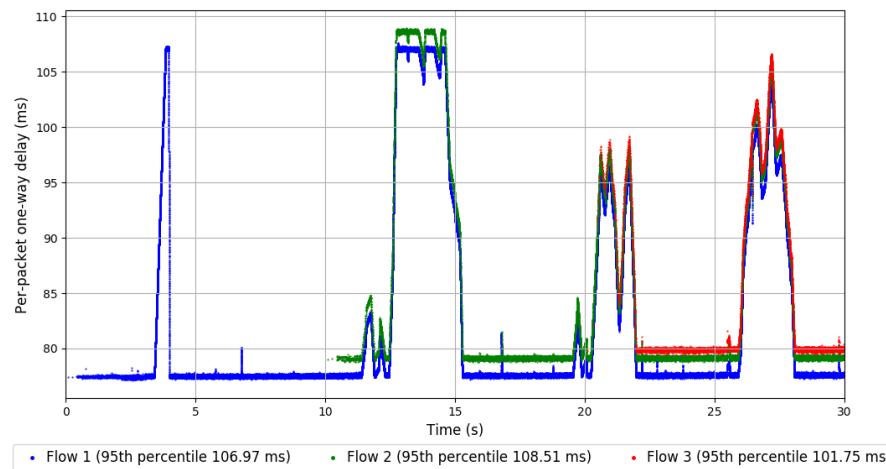
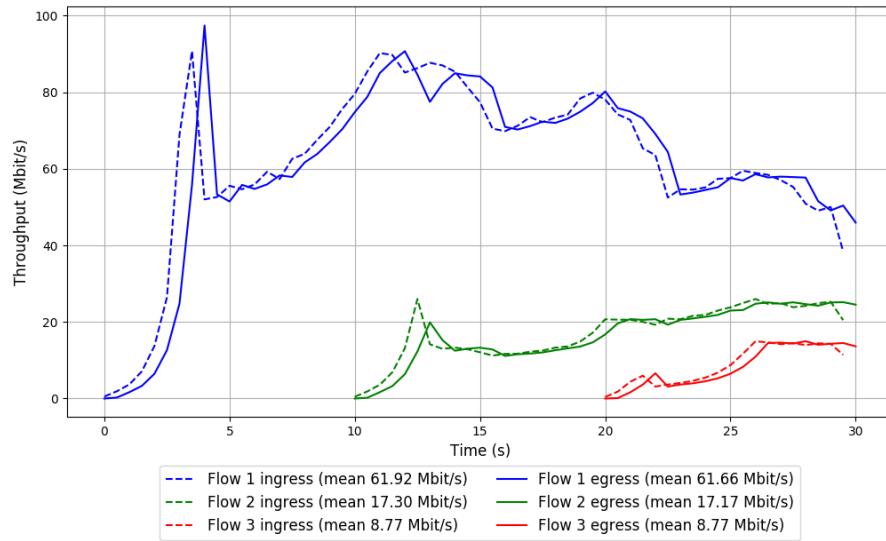


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-06-27 08:19:11
End at: 2019-06-27 08:19:41
Local clock offset: -6.754 ms
Remote clock offset: 57.233 ms

# Below is generated by plot.py at 2019-06-27 10:07:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.96 Mbit/s
95th percentile per-packet one-way delay: 106.977 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 61.66 Mbit/s
95th percentile per-packet one-way delay: 106.971 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 17.17 Mbit/s
95th percentile per-packet one-way delay: 108.511 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 8.77 Mbit/s
95th percentile per-packet one-way delay: 101.752 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

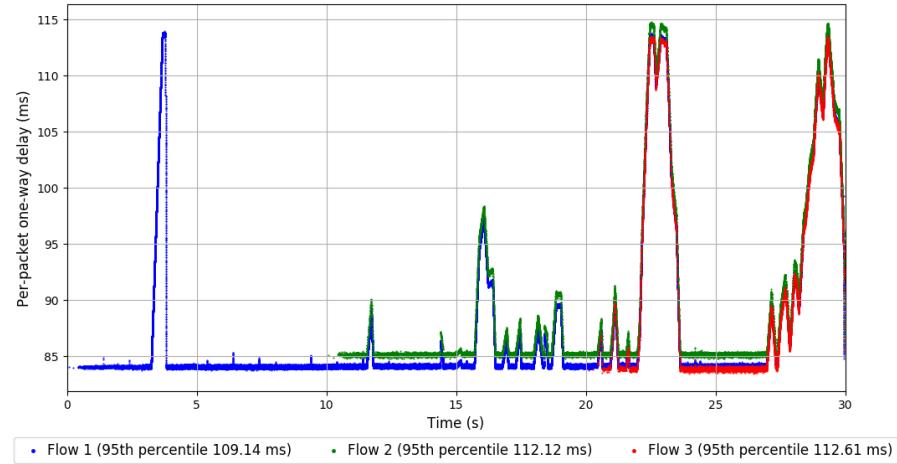
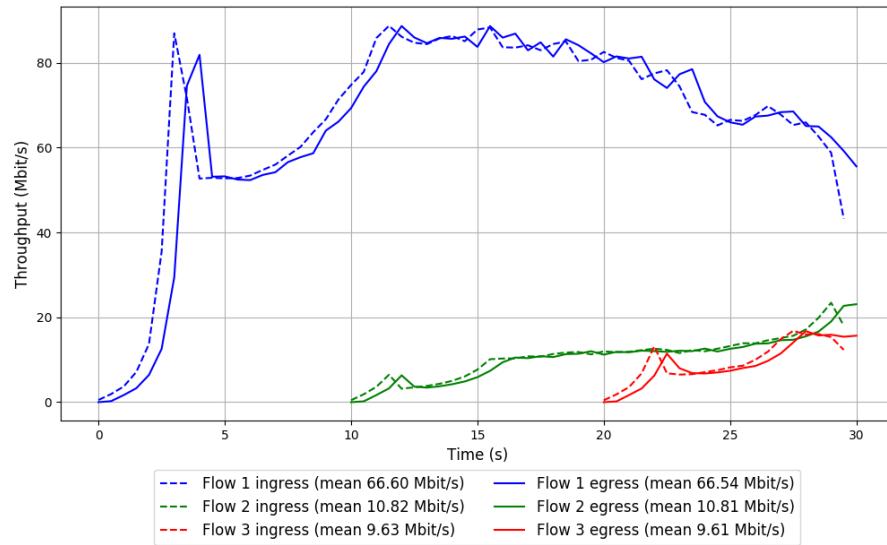


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-06-27 08:47:08
End at: 2019-06-27 08:47:38
Local clock offset: -5.347 ms
Remote clock offset: 65.949 ms

# Below is generated by plot.py at 2019-06-27 10:07:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.90 Mbit/s
95th percentile per-packet one-way delay: 109.935 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 66.54 Mbit/s
95th percentile per-packet one-way delay: 109.144 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 10.81 Mbit/s
95th percentile per-packet one-way delay: 112.120 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 9.61 Mbit/s
95th percentile per-packet one-way delay: 112.611 ms
Loss rate: 0.15%
```

Run 3: Report of PCC-Vivace — Data Link

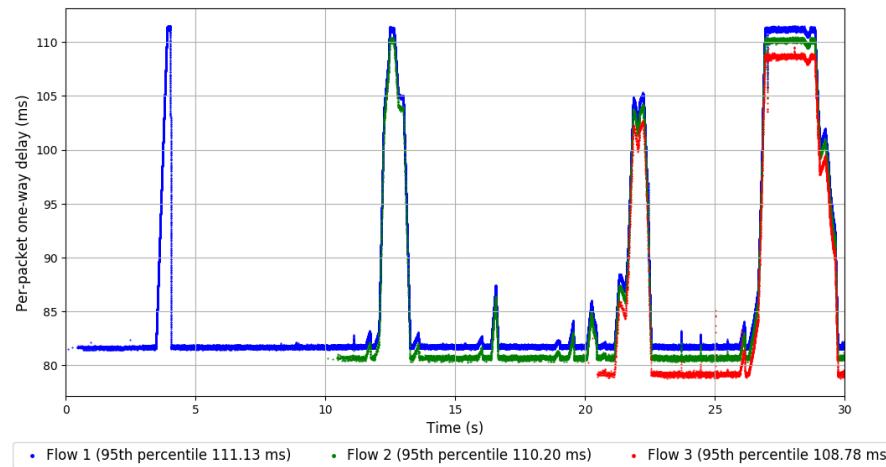
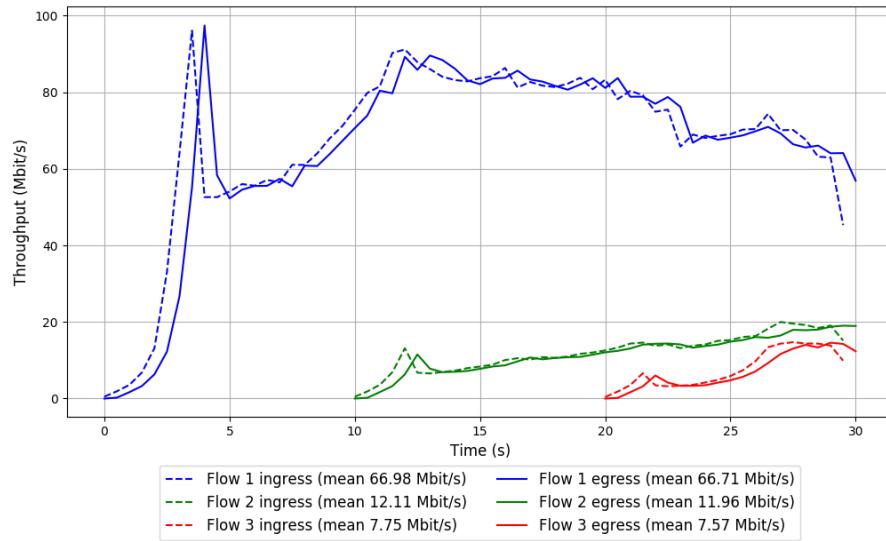


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-06-27 09:15:03
End at: 2019-06-27 09:15:33
Local clock offset: -4.353 ms
Remote clock offset: 65.338 ms

# Below is generated by plot.py at 2019-06-27 10:07:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.16 Mbit/s
95th percentile per-packet one-way delay: 111.089 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 66.71 Mbit/s
95th percentile per-packet one-way delay: 111.128 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 11.96 Mbit/s
95th percentile per-packet one-way delay: 110.197 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 7.57 Mbit/s
95th percentile per-packet one-way delay: 108.776 ms
Loss rate: 2.25%
```

Run 4: Report of PCC-Vivace — Data Link

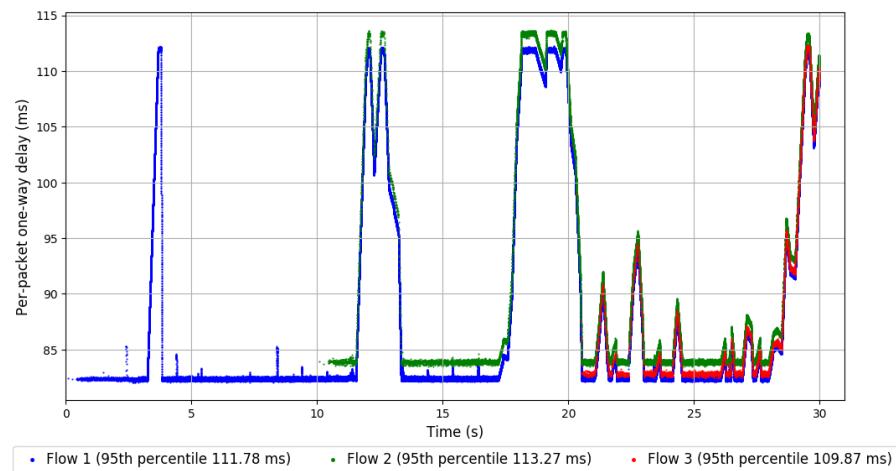
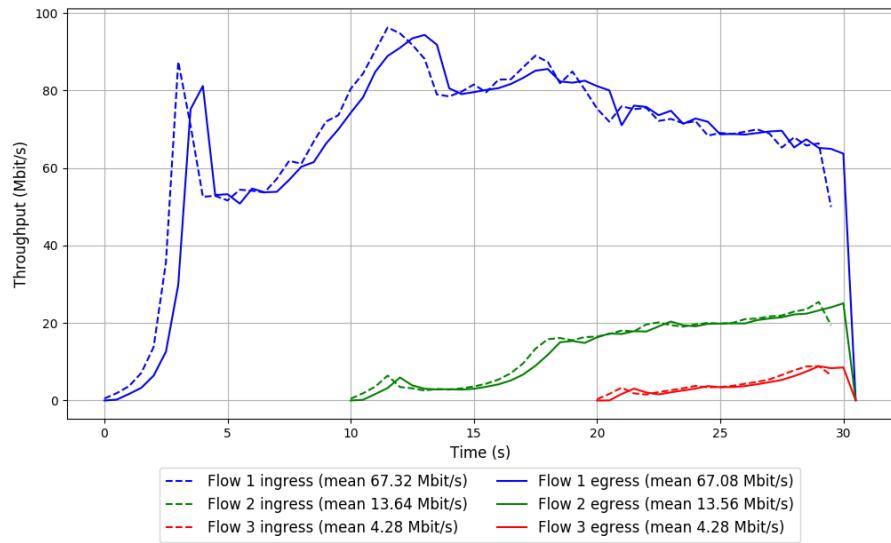


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-06-27 09:43:02
End at: 2019-06-27 09:43:32
Local clock offset: -8.174 ms
Remote clock offset: 71.858 ms

# Below is generated by plot.py at 2019-06-27 10:07:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.51 Mbit/s
95th percentile per-packet one-way delay: 111.815 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 67.08 Mbit/s
95th percentile per-packet one-way delay: 111.779 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 13.56 Mbit/s
95th percentile per-packet one-way delay: 113.269 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 4.28 Mbit/s
95th percentile per-packet one-way delay: 109.873 ms
Loss rate: 0.03%
```

Run 5: Report of PCC-Vivace — Data Link

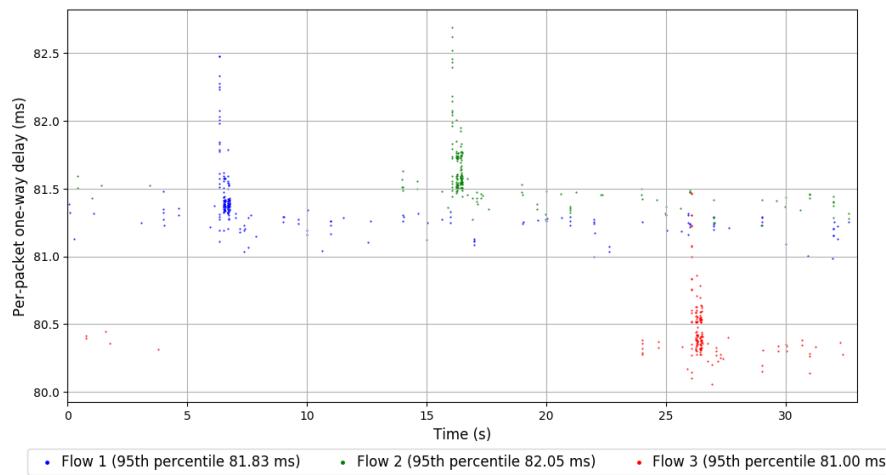
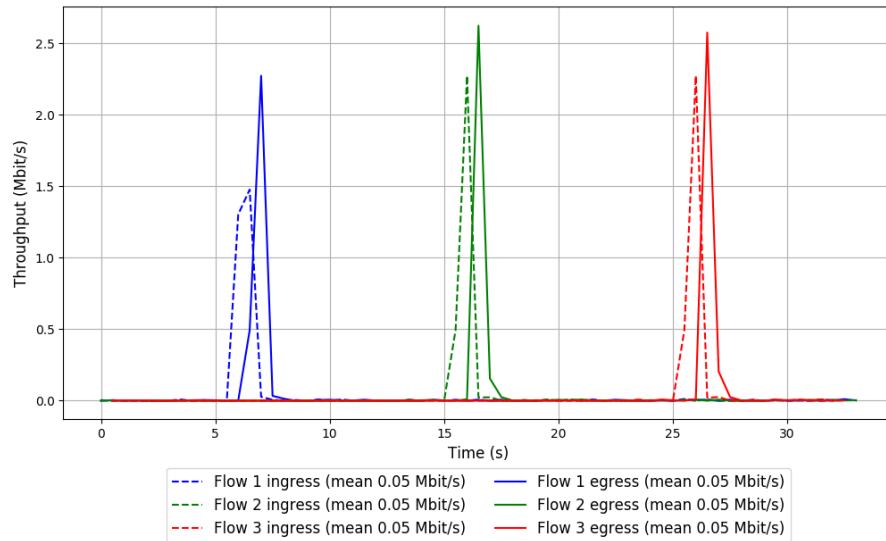


Run 1: Statistics of WebRTC media

```
Start at: 2019-06-27 07:42:19
End at: 2019-06-27 07:42:49
Local clock offset: -7.307 ms
Remote clock offset: 53.833 ms

# Below is generated by plot.py at 2019-06-27 10:07:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 81.830 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 81.830 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 82.047 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 80.999 ms
Loss rate: 0.00%
```

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

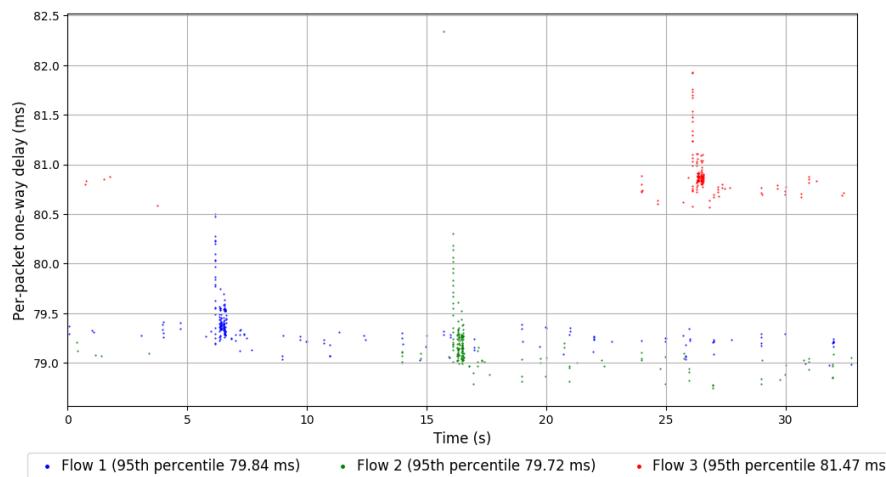
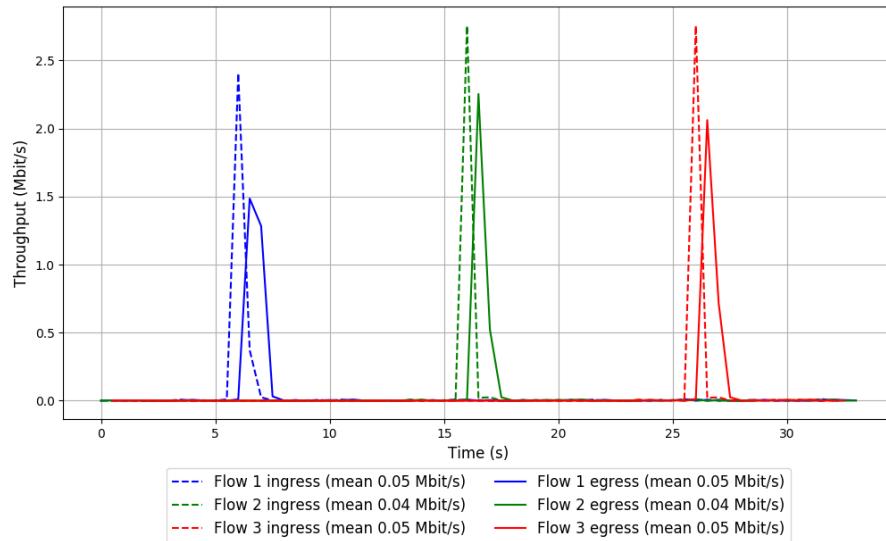


Run 2: Statistics of WebRTC media

```
Start at: 2019-06-27 08:10:20
End at: 2019-06-27 08:10:50
Local clock offset: -7.737 ms
Remote clock offset: 57.301 ms

# Below is generated by plot.py at 2019-06-27 10:07:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 80.986 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 79.839 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 79.715 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 81.472 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

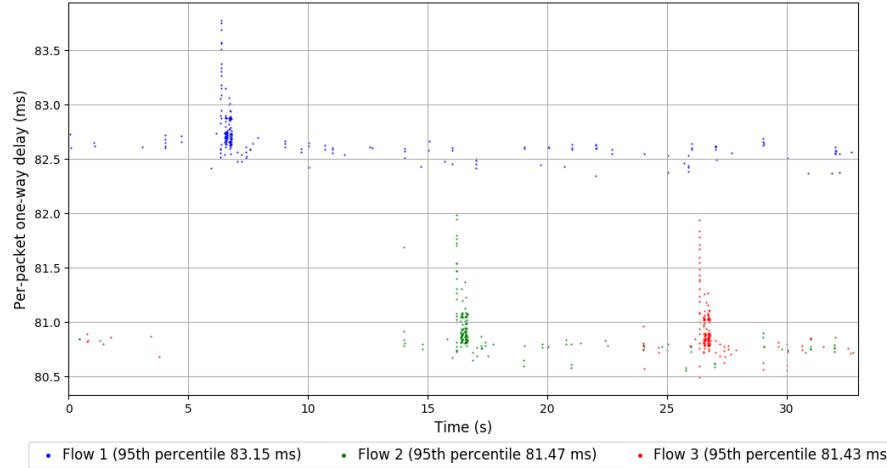
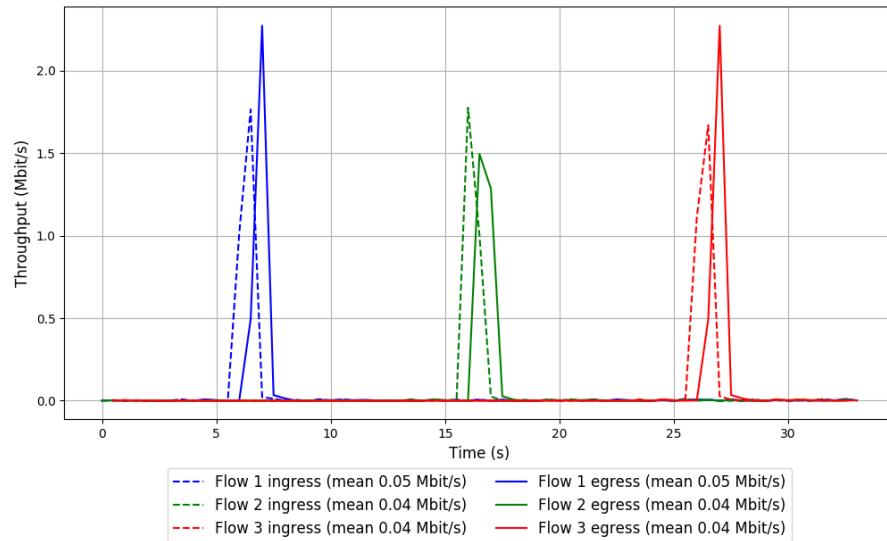


Run 3: Statistics of WebRTC media

```
Start at: 2019-06-27 08:38:18
End at: 2019-06-27 08:38:48
Local clock offset: -5.376 ms
Remote clock offset: 60.895 ms

# Below is generated by plot.py at 2019-06-27 10:07:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 82.875 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 83.148 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 81.467 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 81.426 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

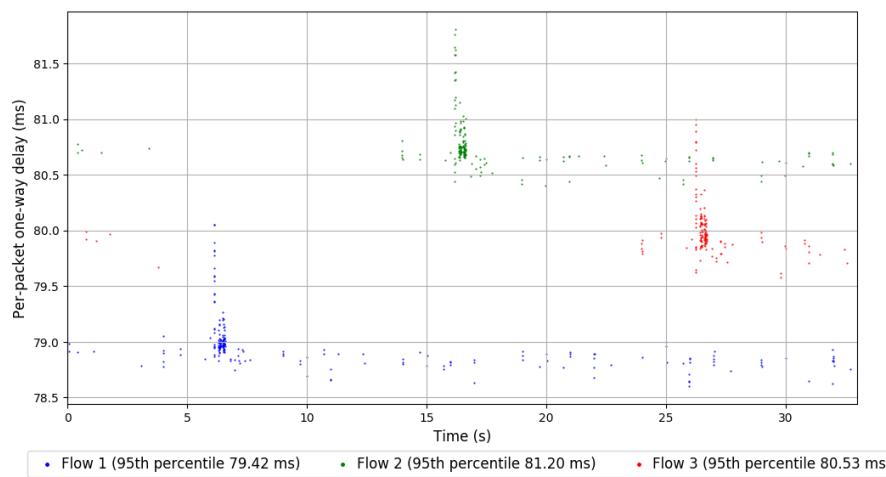
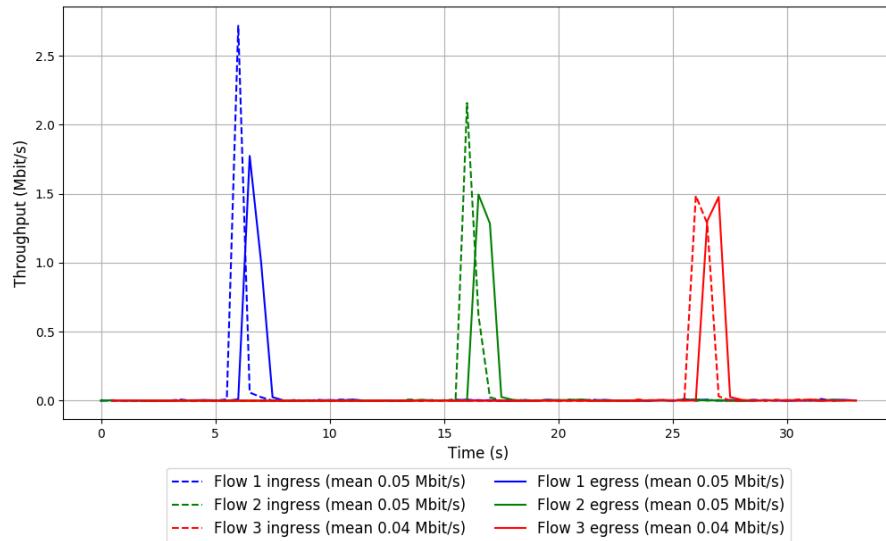


Run 4: Statistics of WebRTC media

```
Start at: 2019-06-27 09:06:12
End at: 2019-06-27 09:06:42
Local clock offset: -4.574 ms
Remote clock offset: 64.272 ms

# Below is generated by plot.py at 2019-06-27 10:07:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 80.898 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 79.423 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 81.196 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 80.535 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of WebRTC media

```
Start at: 2019-06-27 09:34:08
End at: 2019-06-27 09:34:38
Local clock offset: -6.551 ms
Remote clock offset: 67.671 ms

# Below is generated by plot.py at 2019-06-27 10:07:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 81.767 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 80.033 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 82.023 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 79.616 ms
Loss rate: 0.00%
```

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

