

## Pantheon Report

Generated at 2019-03-27 04:44:37 (UTC).  
Data path: AWS India 2 on `ens5` (*local*) → Saudi Arabia on `enp2s0` (*remote*).  
Repeated the test of 21 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 `nets.org.sg` and have been applied to correct the timestamps in logs.

System info:

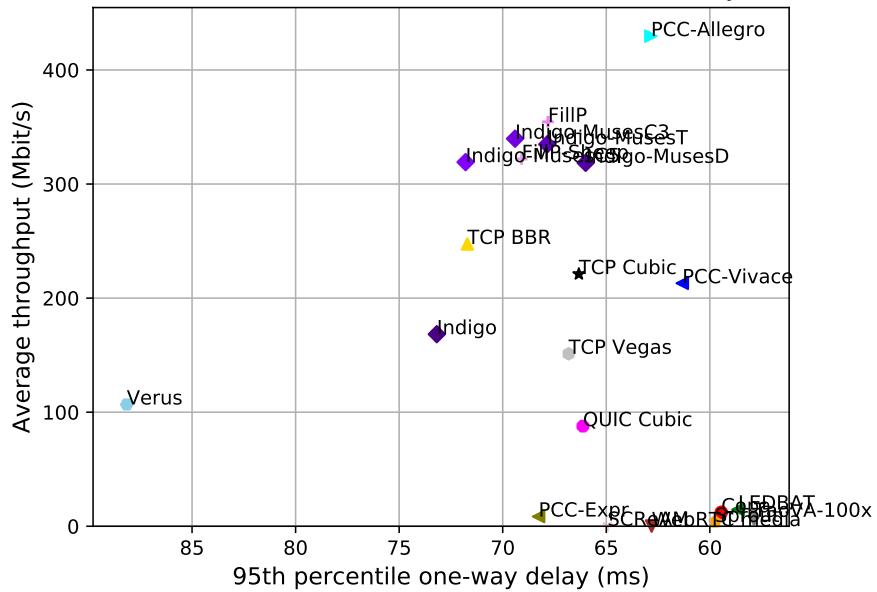
```
Linux 4.15.0-1034-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

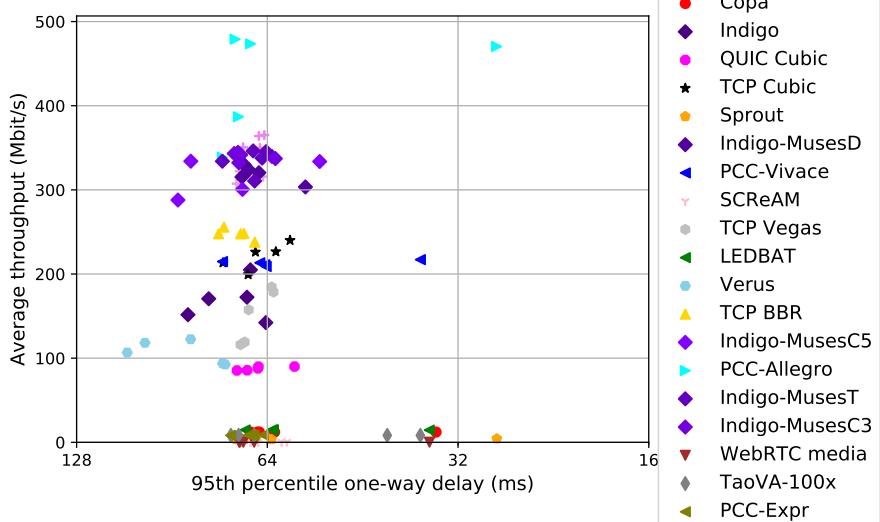
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ 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 India 2 to Saudi Arabia, 5 runs of 30s each per scheme  
3 flows with 10s interval between flows (mean of all runs by scheme)



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



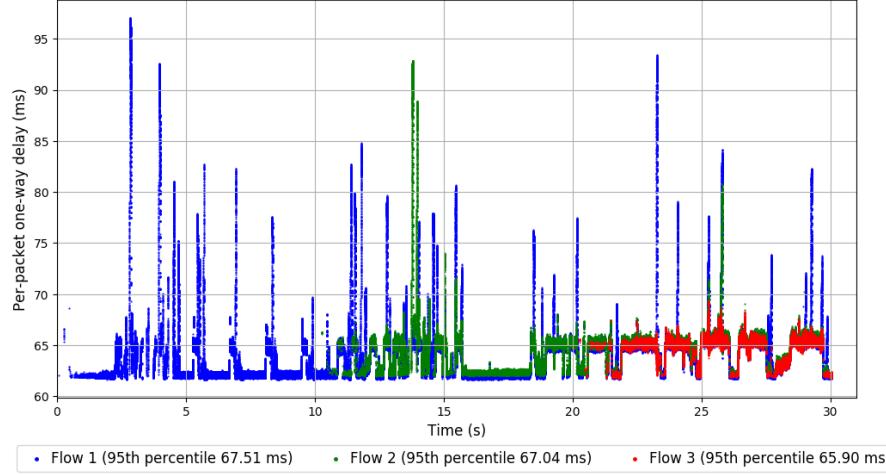
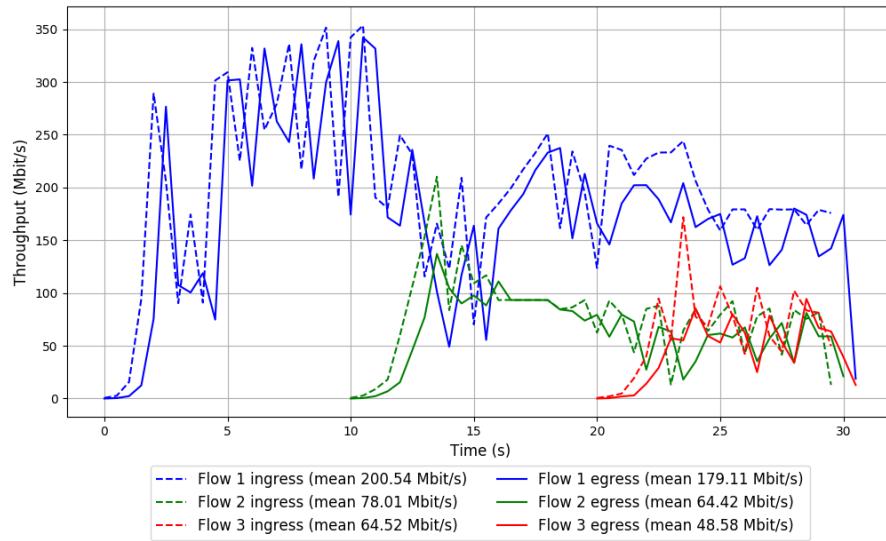
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	206.58	43.19	39.53	72.50	67.59	67.97	11.78	19.48	19.89
Copa		8.78	5.12	0.08	59.63	58.97	59.48	67.29	75.22	86.94
TCP Cubic		137.69	81.38	87.86	65.92	66.36	66.43	1.26	1.23	1.53
FillP		244.97	127.24	75.06	66.95	68.08	66.05	22.68	23.47	21.46
FillP-Sheep		234.33	87.79	88.40	68.89	68.66	67.64	14.44	11.70	10.92
Indigo		88.27	78.71	88.57	74.52	75.59	69.89	10.75	14.93	26.84
Indigo-MusesC3		306.41	45.12	13.34	68.99	68.76	67.19	13.84	10.22	9.09
Indigo-MusesC5		317.46	2.06	1.47	71.86	63.17	63.03	26.91	28.61	27.12
Indigo-MusesD		294.89	22.59	30.61	66.01	64.10	64.89	12.52	10.30	9.49
Indigo-MusesT		303.80	36.79	24.02	67.39	69.01	66.31	10.52	8.98	7.91
LEDBAT		9.49	6.32	3.06	58.58	57.69	58.06	0.00	0.00	0.00
PCC-Allegro		365.59	87.83	17.32	62.97	61.90	63.33	6.47	2.62	1.64
PCC-Expr		0.01	10.39	4.86	67.48	68.26	68.30	82.28	32.73	32.37
QUIC Cubic		53.53	38.02	27.81	65.60	66.83	68.51	0.00	0.00	0.01
SCReAM		0.22	0.22	0.22	64.39	64.41	64.45	0.00	0.00	0.00
Sprout		1.73	2.40	1.44	58.77	59.89	58.54	0.00	0.00	0.00
TaoVA-100x		0.00	9.07	6.73	51.43	59.88	52.83	95.92	30.01	36.58
TCP Vegas		81.02	65.99	78.75	66.99	65.62	67.31	1.71	2.10	2.98
Verus		73.23	30.78	43.91	84.24	77.94	80.31	55.43	36.93	37.31
PCC-Vivace		184.79	34.53	16.02	61.30	61.22	61.34	1.35	0.82	1.12
WebRTC media		0.05	0.05	0.05	63.47	62.09	63.36	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-03-27 01:04:46
End at: 2019-03-27 01:05:16
Local clock offset: 5.478 ms
Remote clock offset: -37.852 ms

# Below is generated by plot.py at 2019-03-27 04:18:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.90 Mbit/s
95th percentile per-packet one-way delay: 66.993 ms
Loss rate: 13.06%
-- Flow 1:
Average throughput: 179.11 Mbit/s
95th percentile per-packet one-way delay: 67.510 ms
Loss rate: 10.69%
-- Flow 2:
Average throughput: 64.42 Mbit/s
95th percentile per-packet one-way delay: 67.038 ms
Loss rate: 17.43%
-- Flow 3:
Average throughput: 48.58 Mbit/s
95th percentile per-packet one-way delay: 65.900 ms
Loss rate: 24.71%
```

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

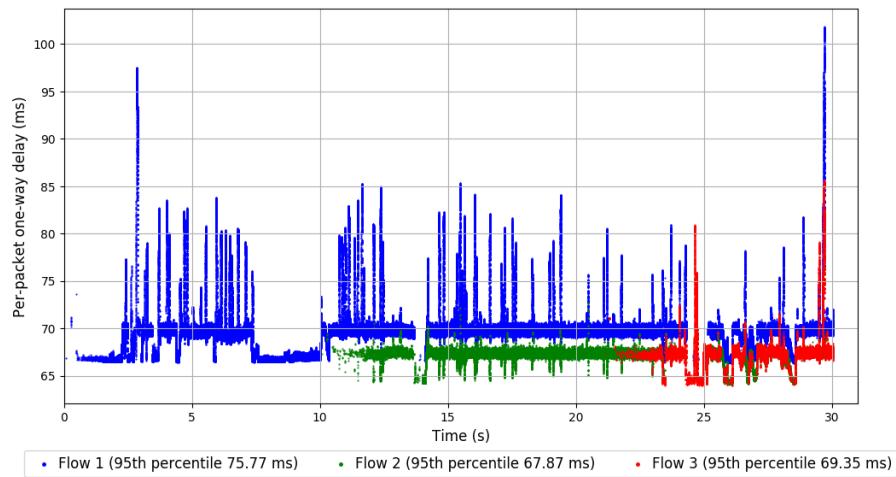
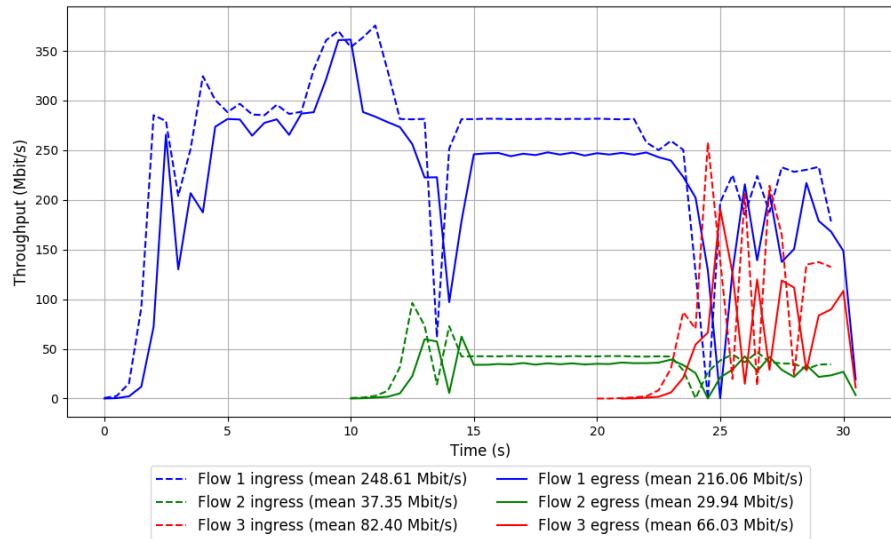


Run 2: Statistics of TCP BBR

```
Start at: 2019-03-27 01:40:57
End at: 2019-03-27 01:41:27
Local clock offset: 4.841 ms
Remote clock offset: -36.058 ms

# Below is generated by plot.py at 2019-03-27 04:18:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 255.72 Mbit/s
95th percentile per-packet one-way delay: 74.945 ms
Loss rate: 15.00%
-- Flow 1:
Average throughput: 216.06 Mbit/s
95th percentile per-packet one-way delay: 75.771 ms
Loss rate: 13.08%
-- Flow 2:
Average throughput: 29.94 Mbit/s
95th percentile per-packet one-way delay: 67.866 ms
Loss rate: 19.85%
-- Flow 3:
Average throughput: 66.03 Mbit/s
95th percentile per-packet one-way delay: 69.349 ms
Loss rate: 28.02%
```

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

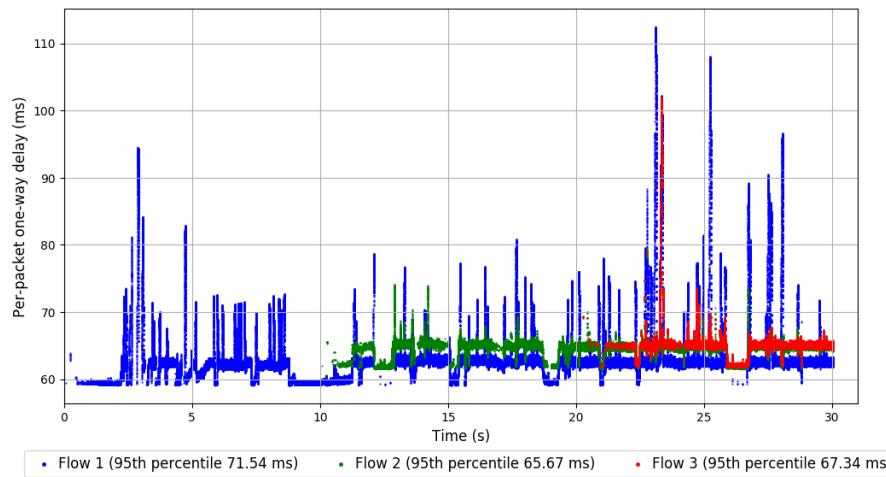
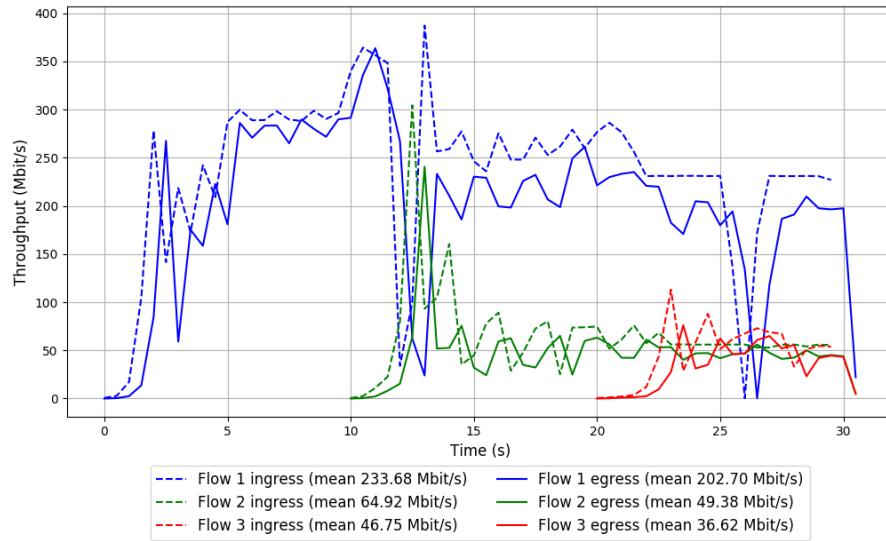


Run 3: Statistics of TCP BBR

```
Start at: 2019-03-27 02:23:07
End at: 2019-03-27 02:23:37
Local clock offset: 2.432 ms
Remote clock offset: -39.431 ms

# Below is generated by plot.py at 2019-03-27 04:18:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 247.77 Mbit/s
95th percentile per-packet one-way delay: 70.515 ms
Loss rate: 15.27%
-- Flow 1:
Average throughput: 202.70 Mbit/s
95th percentile per-packet one-way delay: 71.540 ms
Loss rate: 13.25%
-- Flow 2:
Average throughput: 49.38 Mbit/s
95th percentile per-packet one-way delay: 65.666 ms
Loss rate: 23.93%
-- Flow 3:
Average throughput: 36.62 Mbit/s
95th percentile per-packet one-way delay: 67.336 ms
Loss rate: 21.67%
```

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

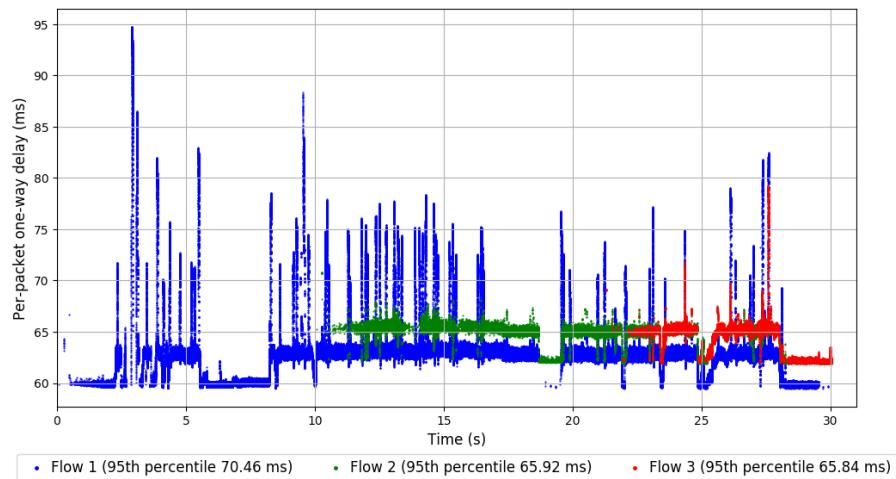
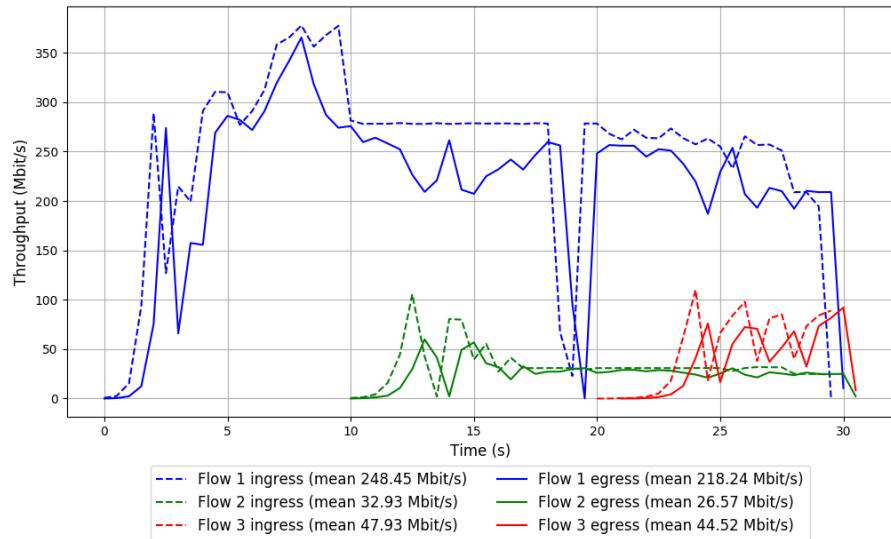


Run 4: Statistics of TCP BBR

```
Start at: 2019-03-27 02:59:19
End at: 2019-03-27 02:59:49
Local clock offset: -0.326 ms
Remote clock offset: -40.138 ms

# Below is generated by plot.py at 2019-03-27 04:18:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 248.23 Mbit/s
95th percentile per-packet one-way delay: 69.676 ms
Loss rate: 12.97%
-- Flow 1:
Average throughput: 218.24 Mbit/s
95th percentile per-packet one-way delay: 70.457 ms
Loss rate: 12.16%
-- Flow 2:
Average throughput: 26.57 Mbit/s
95th percentile per-packet one-way delay: 65.919 ms
Loss rate: 19.31%
-- Flow 3:
Average throughput: 44.52 Mbit/s
95th percentile per-packet one-way delay: 65.841 ms
Loss rate: 16.73%
```

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

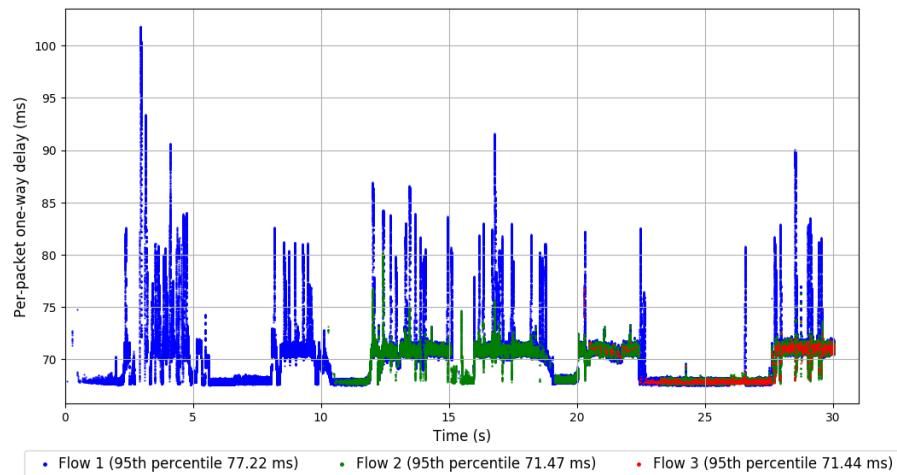
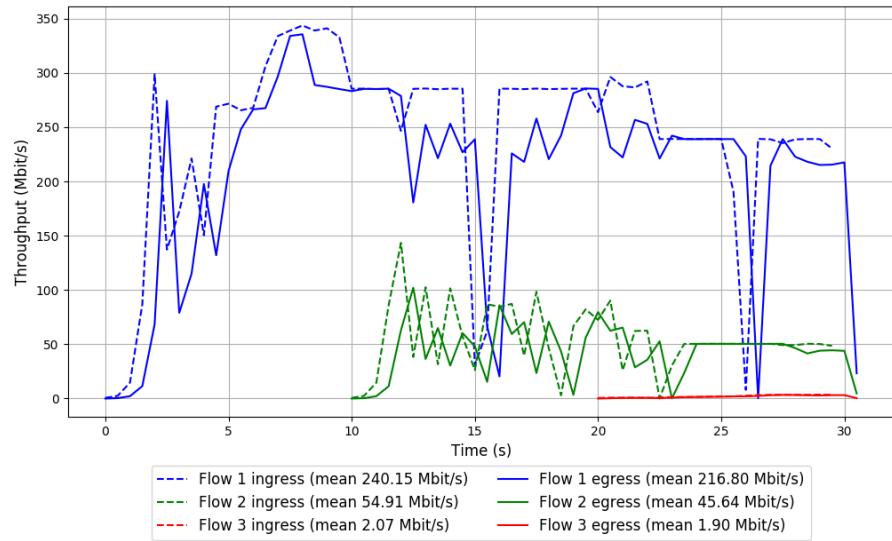


Run 5: Statistics of TCP BBR

```
Start at: 2019-03-27 03:40:51
End at: 2019-03-27 03:41:21
Local clock offset: 2.884 ms
Remote clock offset: -35.132 ms

# Below is generated by plot.py at 2019-03-27 04:18:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 247.83 Mbit/s
95th percentile per-packet one-way delay: 76.399 ms
Loss rate: 10.66%
-- Flow 1:
Average throughput: 216.80 Mbit/s
95th percentile per-packet one-way delay: 77.220 ms
Loss rate: 9.72%
-- Flow 2:
Average throughput: 45.64 Mbit/s
95th percentile per-packet one-way delay: 71.475 ms
Loss rate: 16.87%
-- Flow 3:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 71.435 ms
Loss rate: 8.30%
```

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

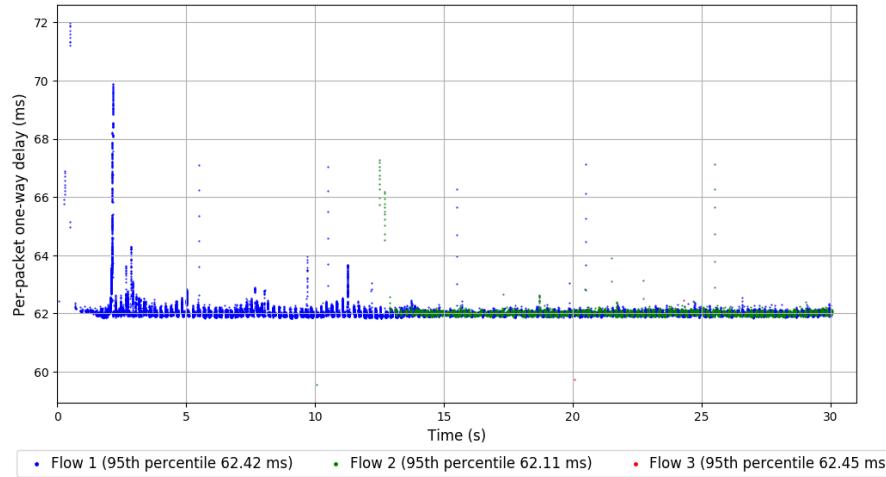
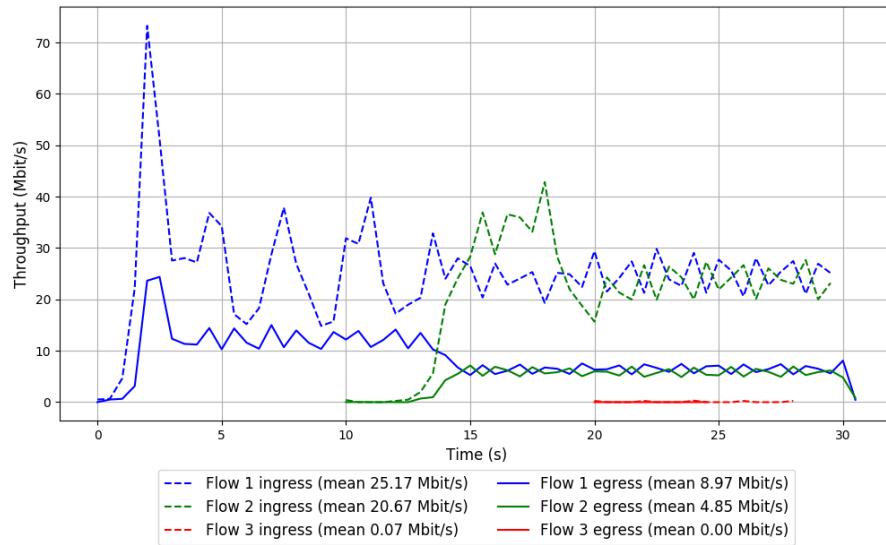


Run 1: Statistics of Copa

```
Start at: 2019-03-27 01:23:54
End at: 2019-03-27 01:24:24
Local clock offset: 5.035 ms
Remote clock offset: -41.354 ms

# Below is generated by plot.py at 2019-03-27 04:18:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.19 Mbit/s
95th percentile per-packet one-way delay: 62.329 ms
Loss rate: 68.68%
-- Flow 1:
Average throughput: 8.97 Mbit/s
95th percentile per-packet one-way delay: 62.419 ms
Loss rate: 64.36%
-- Flow 2:
Average throughput: 4.85 Mbit/s
95th percentile per-packet one-way delay: 62.111 ms
Loss rate: 76.53%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 62.455 ms
Loss rate: 97.92%
```

## Run 1: Report of Copa — Data Link

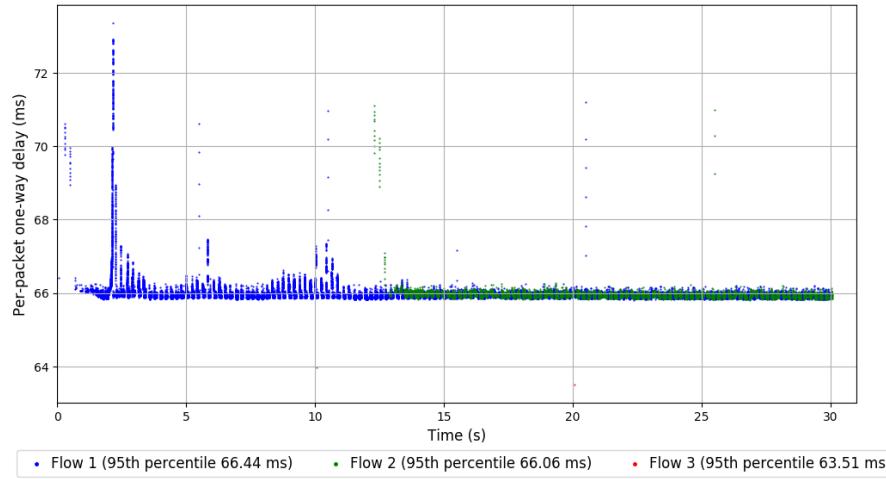
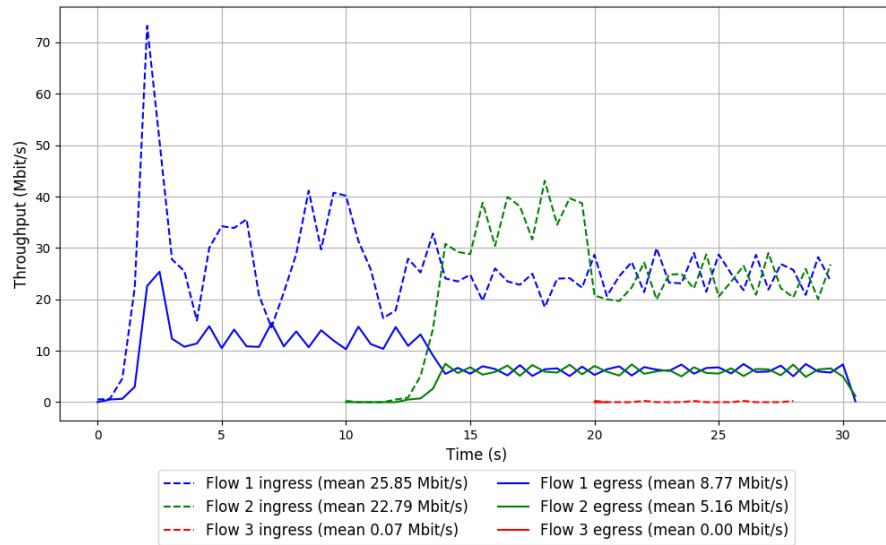


Run 2: Statistics of Copa

```
Start at: 2019-03-27 02:05:33
End at: 2019-03-27 02:06:03
Local clock offset: 0.863 ms
Remote clock offset: -35.122 ms

# Below is generated by plot.py at 2019-03-27 04:18:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.19 Mbit/s
95th percentile per-packet one-way delay: 66.319 ms
Loss rate: 70.28%
-- Flow 1:
Average throughput: 8.77 Mbit/s
95th percentile per-packet one-way delay: 66.445 ms
Loss rate: 66.08%
-- Flow 2:
Average throughput: 5.16 Mbit/s
95th percentile per-packet one-way delay: 66.060 ms
Loss rate: 77.38%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 63.507 ms
Loss rate: 99.83%
```

## Run 2: Report of Copa — Data Link

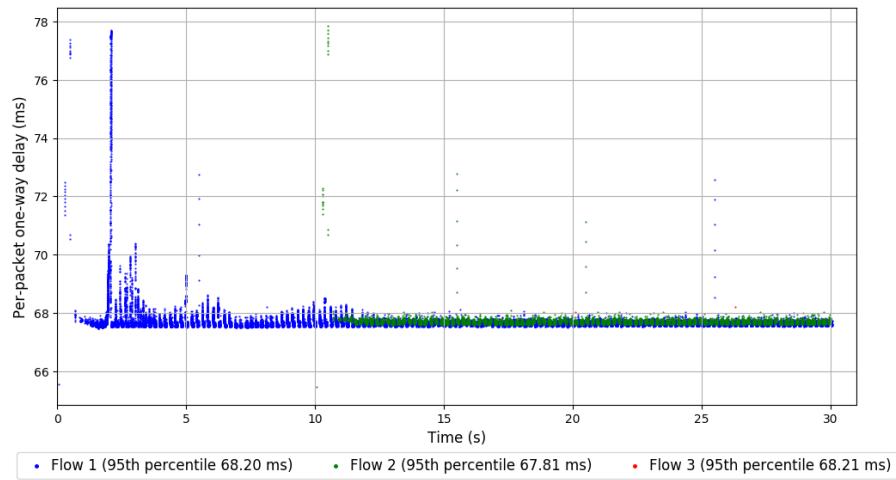
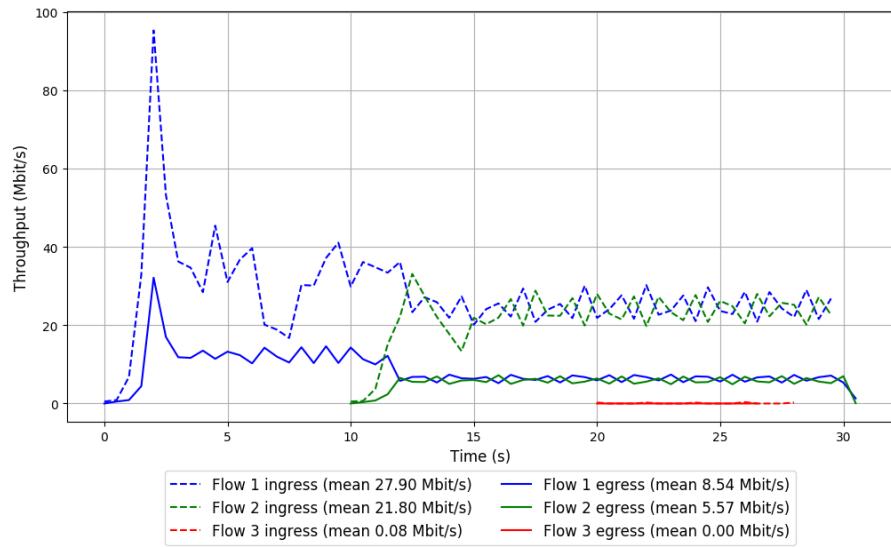


Run 3: Statistics of Copa

```
Start at: 2019-03-27 02:42:08
End at: 2019-03-27 02:42:38
Local clock offset: 3.73 ms
Remote clock offset: -33.749 ms

# Below is generated by plot.py at 2019-03-27 04:18:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 68.049 ms
Loss rate: 71.15%
-- Flow 1:
Average throughput: 8.54 Mbit/s
95th percentile per-packet one-way delay: 68.203 ms
Loss rate: 69.40%
-- Flow 2:
Average throughput: 5.57 Mbit/s
95th percentile per-packet one-way delay: 67.811 ms
Loss rate: 74.47%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 68.210 ms
Loss rate: 98.03%
```

### Run 3: Report of Copa — Data Link

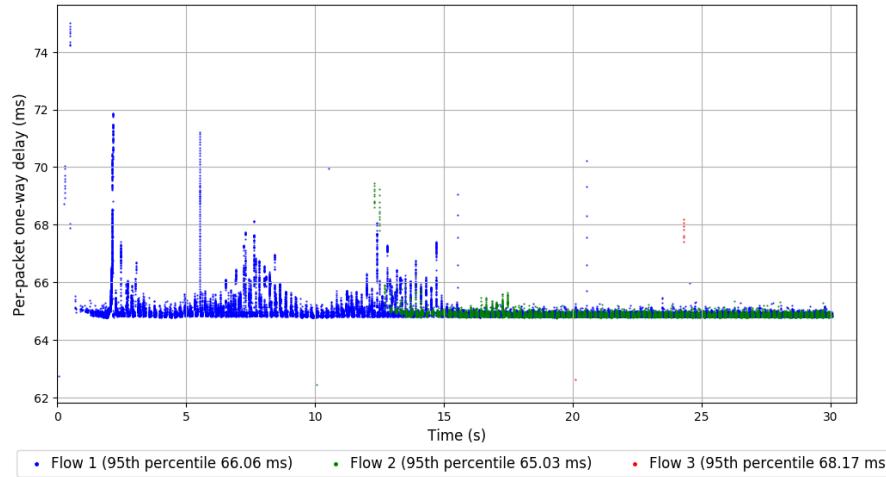
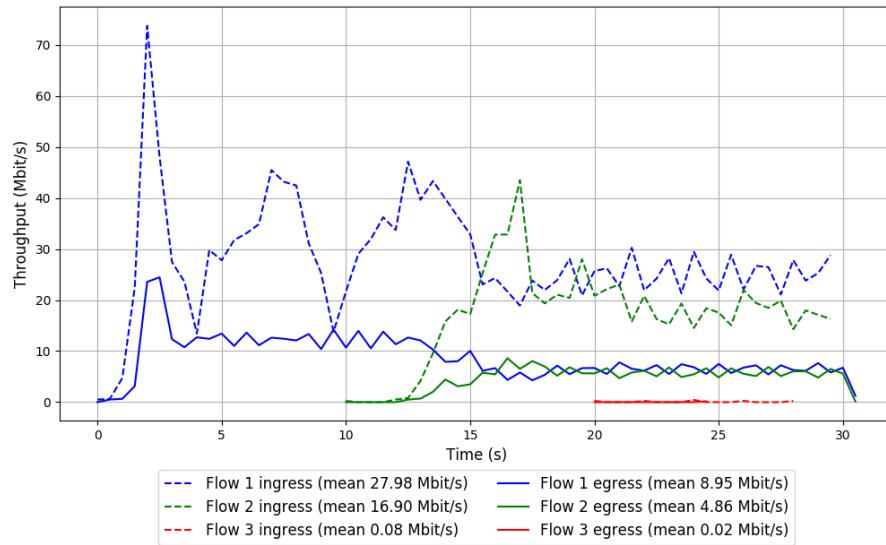


Run 4: Statistics of Copa

```
Start at: 2019-03-27 03:12:40
End at: 2019-03-27 03:13:10
Local clock offset: -0.452 ms
Remote clock offset: -36.449 ms

# Below is generated by plot.py at 2019-03-27 04:18:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.19 Mbit/s
95th percentile per-packet one-way delay: 65.876 ms
Loss rate: 68.95%
-- Flow 1:
Average throughput: 8.95 Mbit/s
95th percentile per-packet one-way delay: 66.063 ms
Loss rate: 68.01%
-- Flow 2:
Average throughput: 4.86 Mbit/s
95th percentile per-packet one-way delay: 65.029 ms
Loss rate: 71.24%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 68.175 ms
Loss rate: 87.80%
```

## Run 4: Report of Copa — Data Link

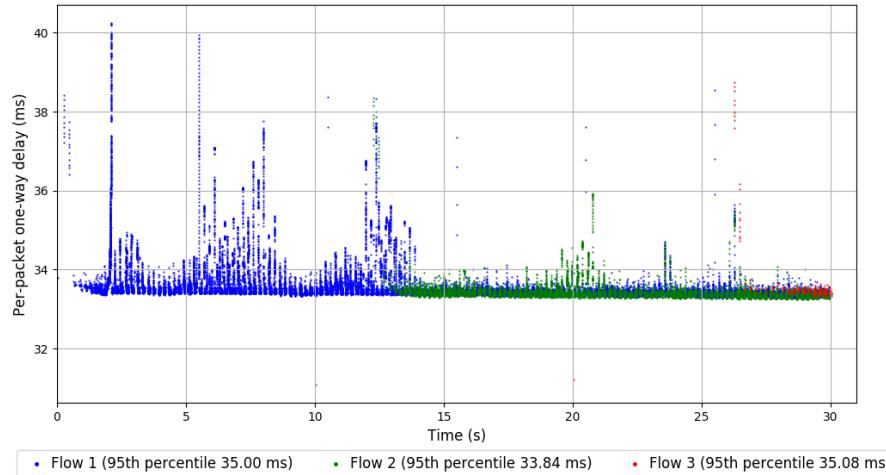
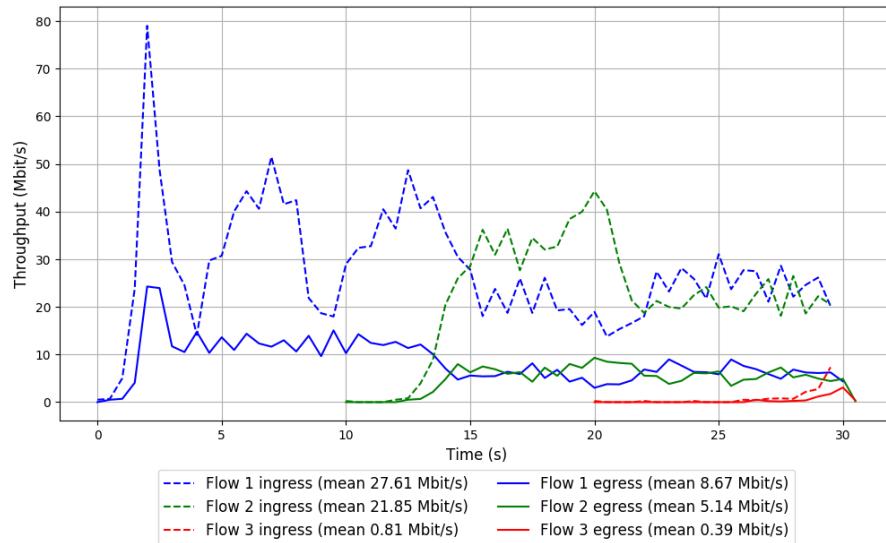


Run 5: Statistics of Copa

```
Start at: 2019-03-27 03:54:16
End at: 2019-03-27 03:54:46
Local clock offset: 35.482 ms
Remote clock offset: -33.573 ms

# Below is generated by plot.py at 2019-03-27 04:18:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.20 Mbit/s
95th percentile per-packet one-way delay: 34.662 ms
Loss rate: 71.19%
-- Flow 1:
Average throughput: 8.67 Mbit/s
95th percentile per-packet one-way delay: 35.000 ms
Loss rate: 68.59%
-- Flow 2:
Average throughput: 5.14 Mbit/s
95th percentile per-packet one-way delay: 33.839 ms
Loss rate: 76.49%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 35.075 ms
Loss rate: 51.11%
```

## Run 5: Report of Copa — Data Link

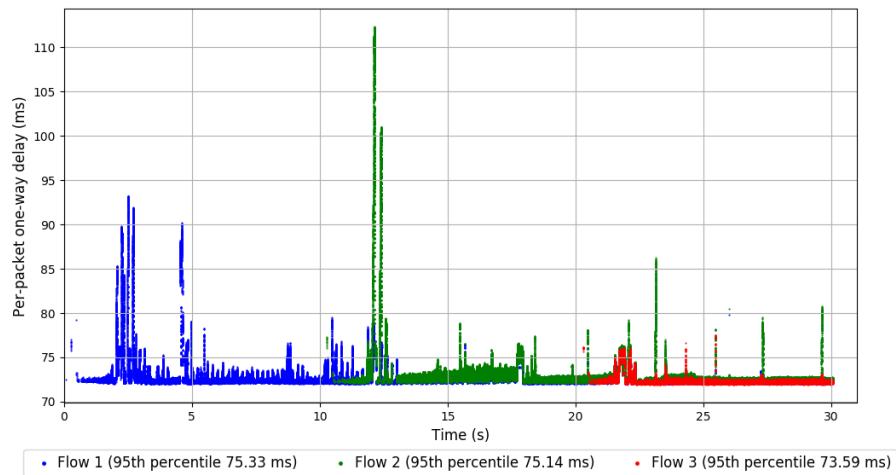
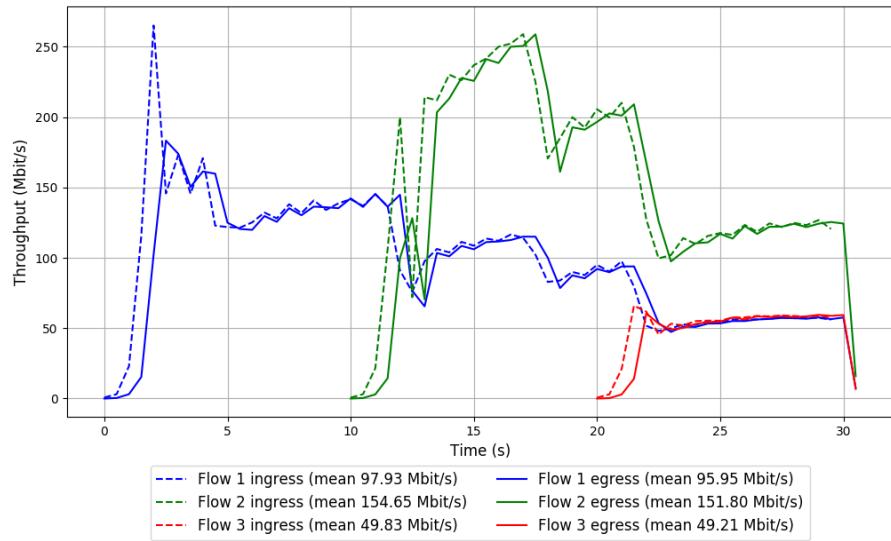


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-03-27 01:39:27
End at: 2019-03-27 01:39:57
Local clock offset: 5.203 ms
Remote clock offset: -30.197 ms

# Below is generated by plot.py at 2019-03-27 04:18:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 213.44 Mbit/s
95th percentile per-packet one-way delay: 75.195 ms
Loss rate: 1.88%
-- Flow 1:
Average throughput: 95.95 Mbit/s
95th percentile per-packet one-way delay: 75.328 ms
Loss rate: 2.03%
-- Flow 2:
Average throughput: 151.80 Mbit/s
95th percentile per-packet one-way delay: 75.143 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 49.21 Mbit/s
95th percentile per-packet one-way delay: 73.588 ms
Loss rate: 1.24%
```

Run 1: Report of TCP Cubic — Data Link

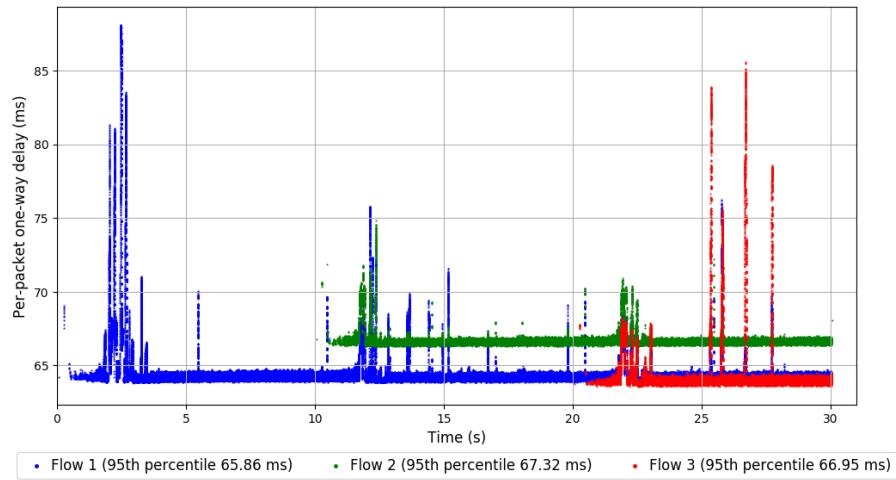
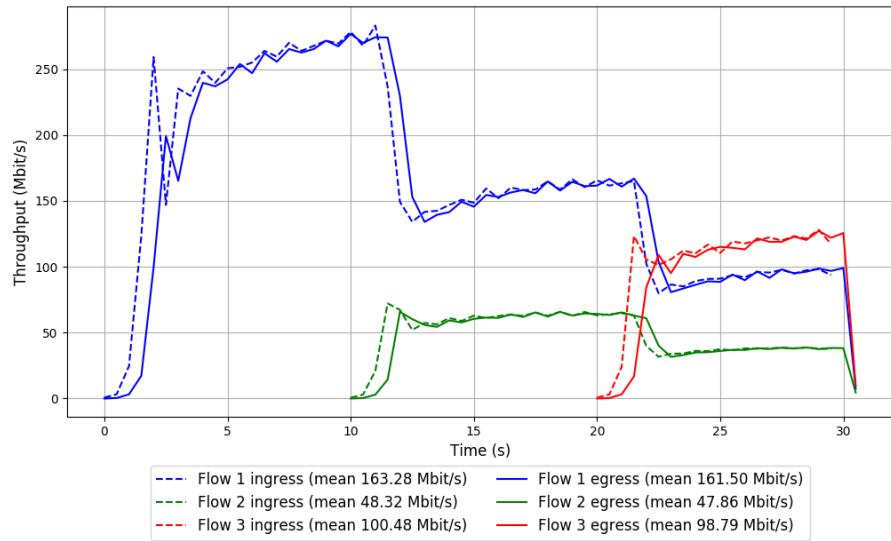


Run 2: Statistics of TCP Cubic

```
Start at: 2019-03-27 02:21:37
End at: 2019-03-27 02:22:07
Local clock offset: 1.853 ms
Remote clock offset: -34.833 ms

# Below is generated by plot.py at 2019-03-27 04:18:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 226.18 Mbit/s
95th percentile per-packet one-way delay: 66.818 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 161.50 Mbit/s
95th percentile per-packet one-way delay: 65.859 ms
Loss rate: 1.09%
-- Flow 2:
Average throughput: 47.86 Mbit/s
95th percentile per-packet one-way delay: 67.321 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 98.79 Mbit/s
95th percentile per-packet one-way delay: 66.952 ms
Loss rate: 1.68%
```

Run 2: Report of TCP Cubic — Data Link

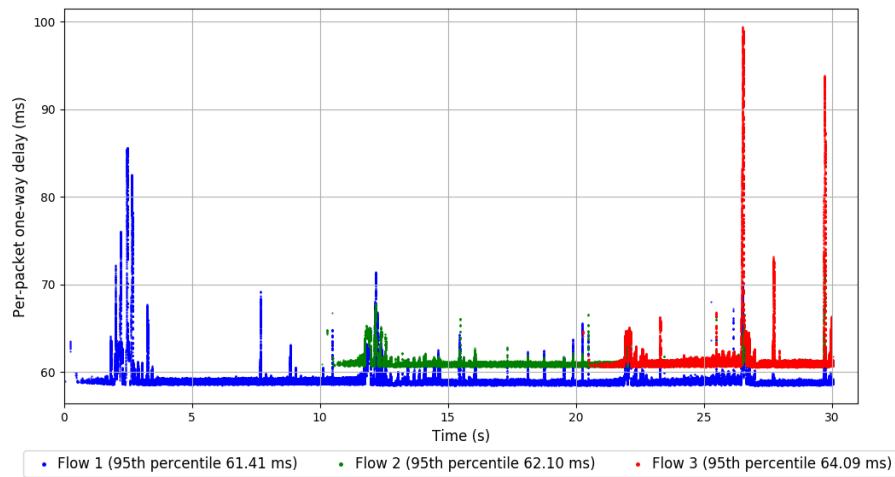
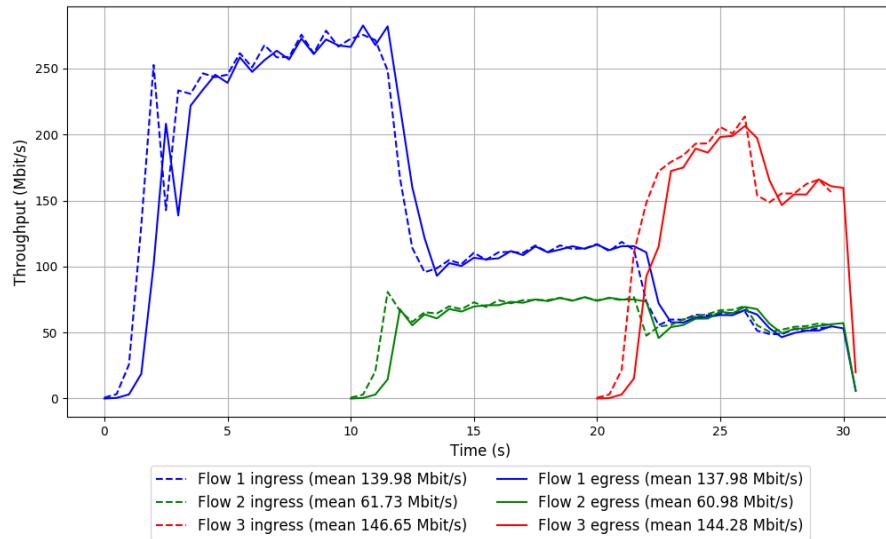


Run 3: Statistics of TCP Cubic

```
Start at: 2019-03-27 02:57:48
End at: 2019-03-27 02:58:18
Local clock offset: 0.904 ms
Remote clock offset: -40.455 ms

# Below is generated by plot.py at 2019-03-27 04:18:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 226.56 Mbit/s
95th percentile per-packet one-way delay: 62.050 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 137.98 Mbit/s
95th percentile per-packet one-way delay: 61.413 ms
Loss rate: 1.43%
-- Flow 2:
Average throughput: 60.98 Mbit/s
95th percentile per-packet one-way delay: 62.104 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 144.28 Mbit/s
95th percentile per-packet one-way delay: 64.087 ms
Loss rate: 1.61%
```

Run 3: Report of TCP Cubic — Data Link

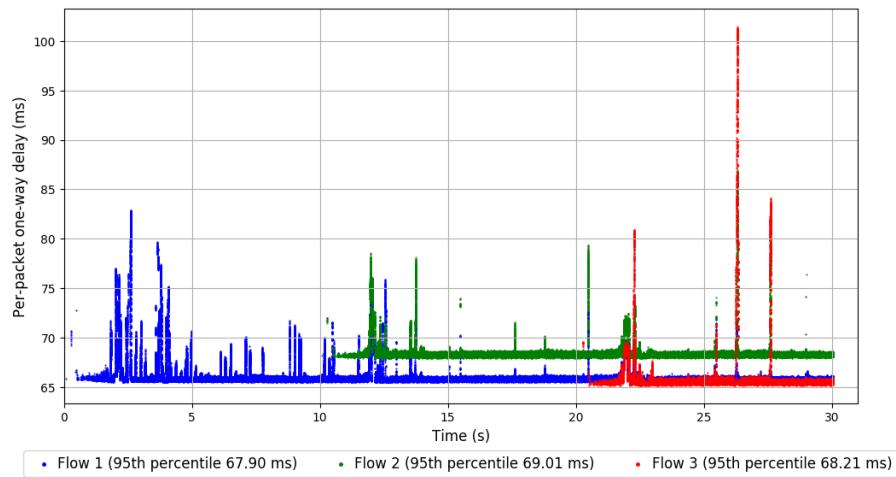
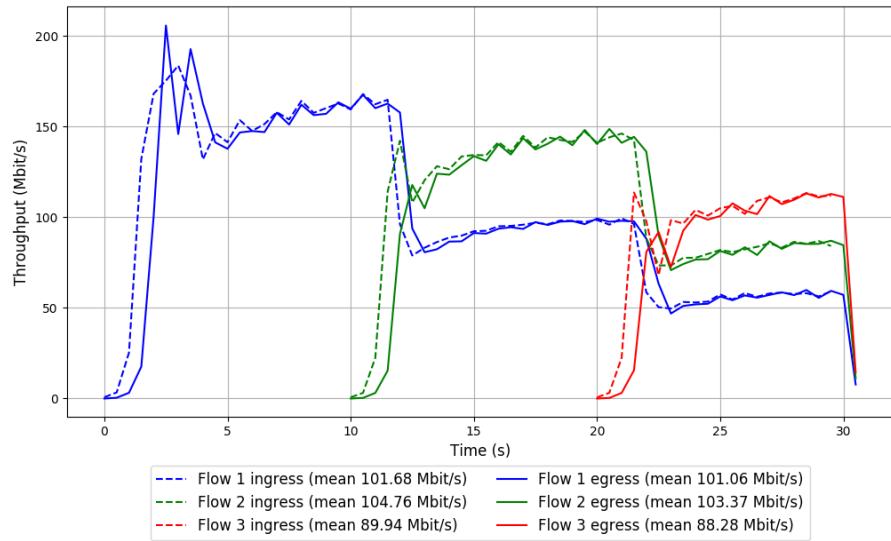


Run 4: Statistics of TCP Cubic

```
Start at: 2019-03-27 03:39:23
End at: 2019-03-27 03:39:53
Local clock offset: 2.506 ms
Remote clock offset: -35.045 ms

# Below is generated by plot.py at 2019-03-27 04:20:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 199.26 Mbit/s
95th percentile per-packet one-way delay: 68.631 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 101.06 Mbit/s
95th percentile per-packet one-way delay: 67.897 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 103.37 Mbit/s
95th percentile per-packet one-way delay: 69.009 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 88.28 Mbit/s
95th percentile per-packet one-way delay: 68.207 ms
Loss rate: 1.84%
```

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

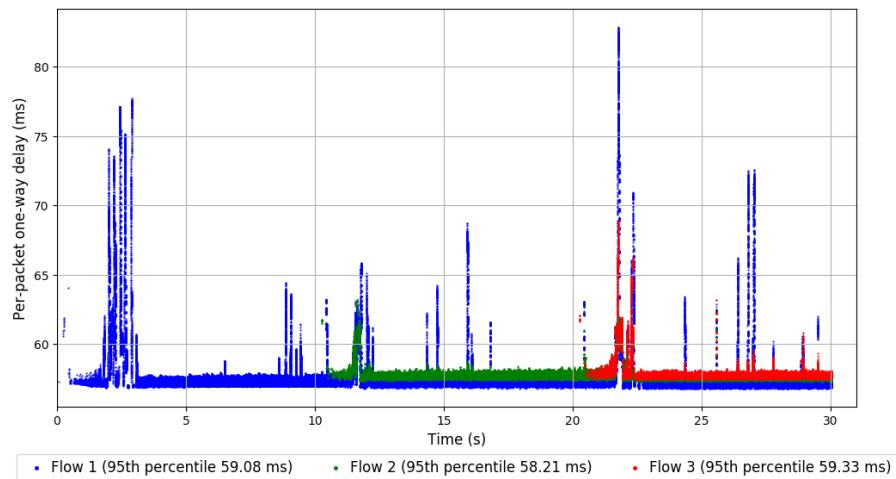
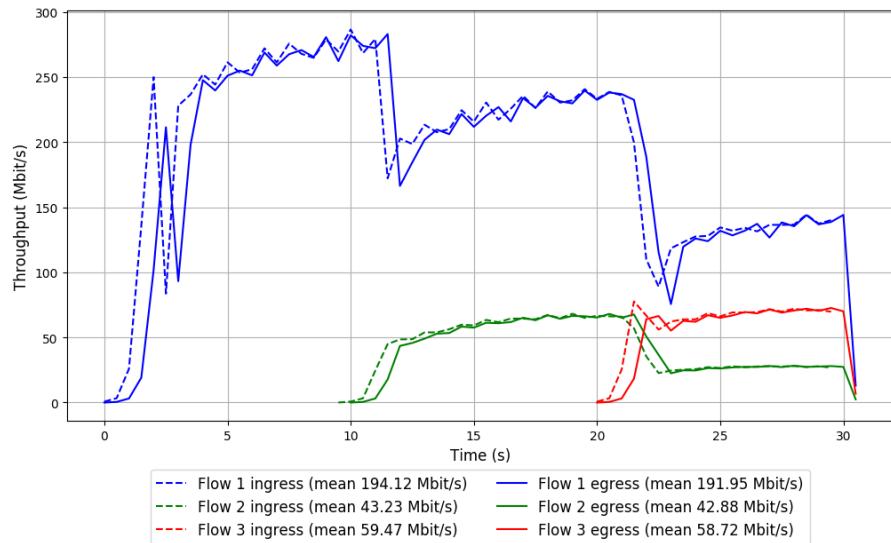


Run 5: Statistics of TCP Cubic

```
Start at: 2019-03-27 04:10:49
End at: 2019-03-27 04:11:19
Local clock offset: -1.338 ms
Remote clock offset: -41.621 ms

# Below is generated by plot.py at 2019-03-27 04:20:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 240.08 Mbit/s
95th percentile per-packet one-way delay: 58.929 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 191.95 Mbit/s
95th percentile per-packet one-way delay: 59.081 ms
Loss rate: 1.12%
-- Flow 2:
Average throughput: 42.88 Mbit/s
95th percentile per-packet one-way delay: 58.213 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 58.72 Mbit/s
95th percentile per-packet one-way delay: 59.327 ms
Loss rate: 1.26%
```

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

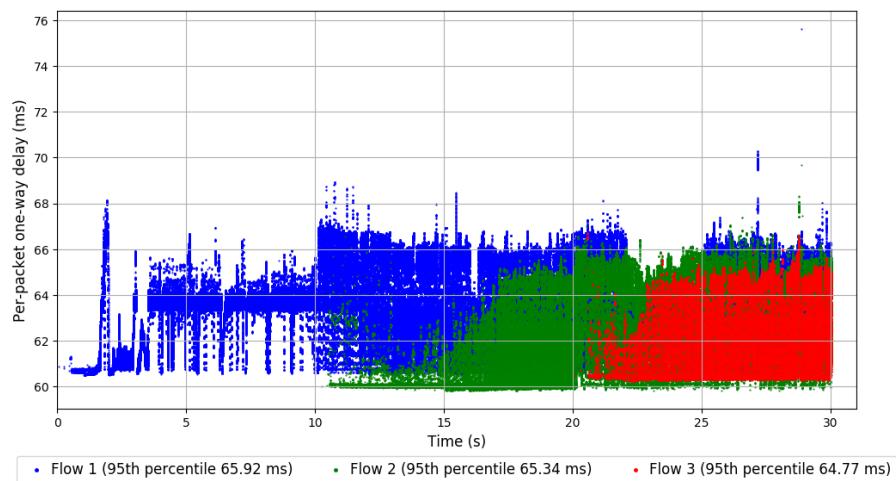
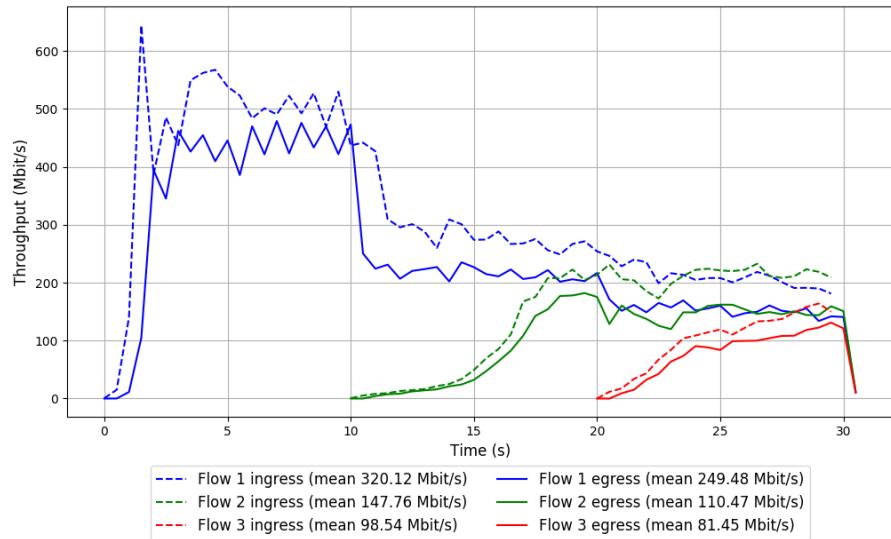


```
Run 1: Statistics of FillP
```

```
Start at: 2019-03-27 01:19:32
End at: 2019-03-27 01:20:02
Local clock offset: 5.121 ms
Remote clock offset: -40.458 ms

# Below is generated by plot.py at 2019-03-27 04:23:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 349.86 Mbit/s
95th percentile per-packet one-way delay: 65.728 ms
Loss rate: 22.42%
-- Flow 1:
Average throughput: 249.48 Mbit/s
95th percentile per-packet one-way delay: 65.924 ms
Loss rate: 22.07%
-- Flow 2:
Average throughput: 110.47 Mbit/s
95th percentile per-packet one-way delay: 65.343 ms
Loss rate: 25.24%
-- Flow 3:
Average throughput: 81.45 Mbit/s
95th percentile per-packet one-way delay: 64.772 ms
Loss rate: 17.34%
```

## Run 1: Report of FillP — Data Link

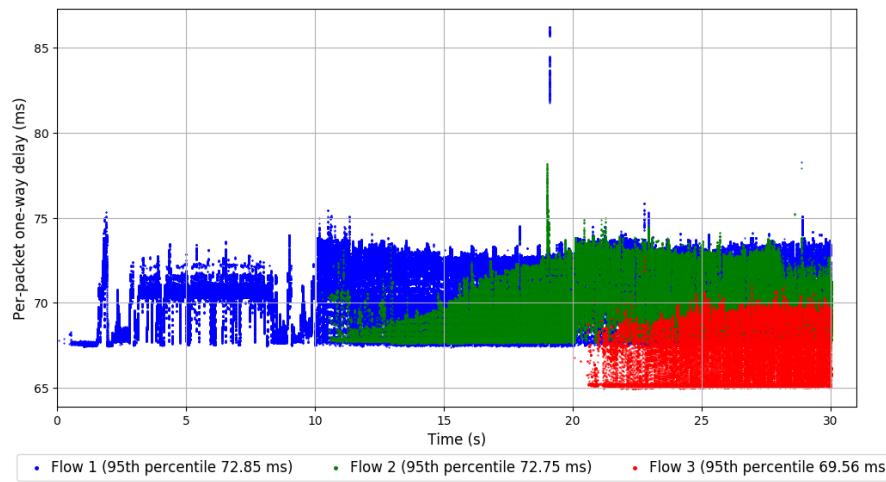
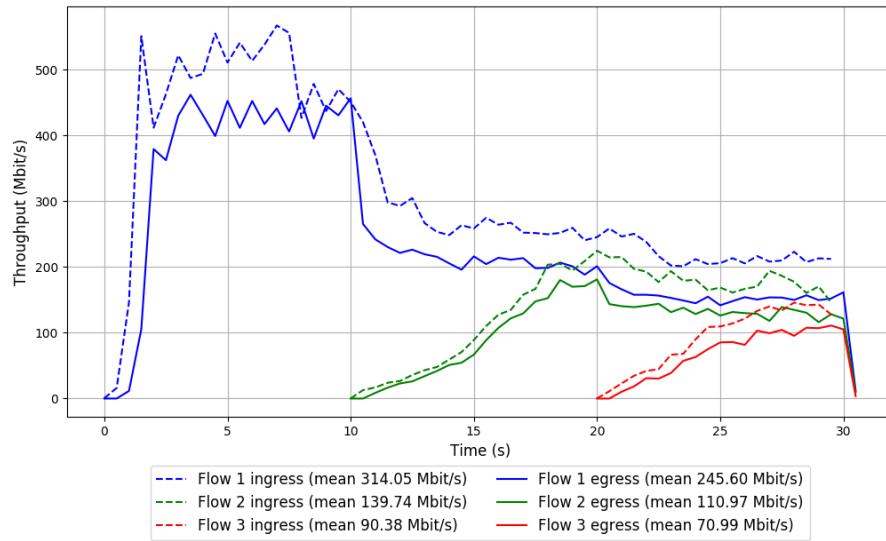


Run 2: Statistics of FillP

```
Start at: 2019-03-27 02:01:12
End at: 2019-03-27 02:01:42
Local clock offset: 0.074 ms
Remote clock offset: -34.563 ms

# Below is generated by plot.py at 2019-03-27 04:23:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 343.00 Mbit/s
95th percentile per-packet one-way delay: 72.780 ms
Loss rate: 21.51%
-- Flow 1:
Average throughput: 245.60 Mbit/s
95th percentile per-packet one-way delay: 72.852 ms
Loss rate: 21.79%
-- Flow 2:
Average throughput: 110.97 Mbit/s
95th percentile per-packet one-way delay: 72.752 ms
Loss rate: 20.58%
-- Flow 3:
Average throughput: 70.99 Mbit/s
95th percentile per-packet one-way delay: 69.556 ms
Loss rate: 21.46%
```

Run 2: Report of FillP — Data Link

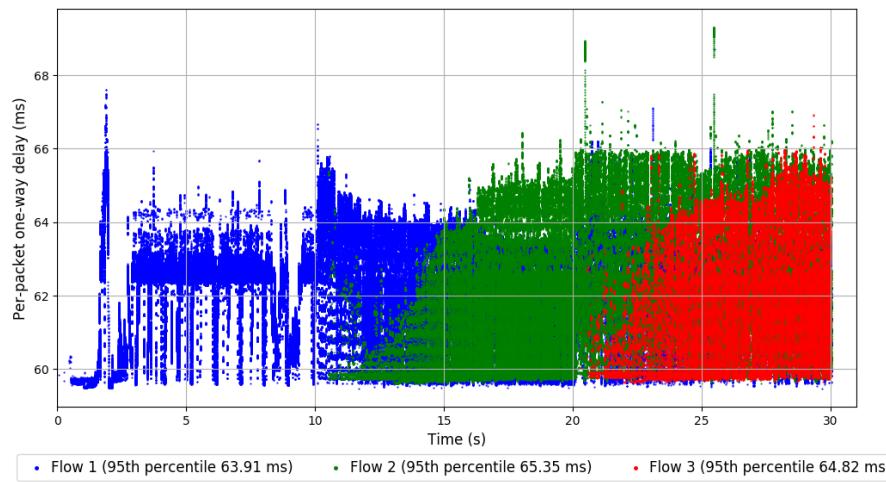
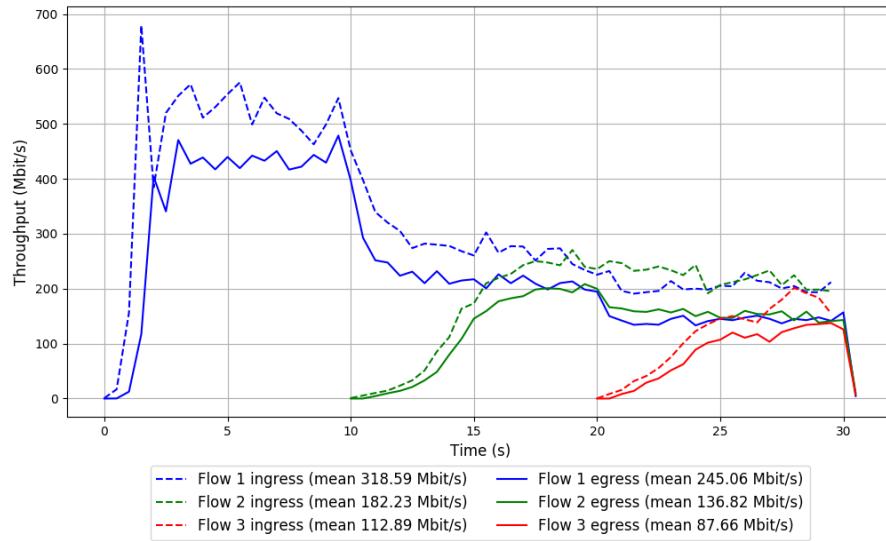


Run 3: Statistics of FillP

```
Start at: 2019-03-27 02:37:39
End at: 2019-03-27 02:38:09
Local clock offset: 2.274 ms
Remote clock offset: -40.2 ms

# Below is generated by plot.py at 2019-03-27 04:23:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.16 Mbit/s
95th percentile per-packet one-way delay: 64.689 ms
Loss rate: 23.49%
-- Flow 1:
Average throughput: 245.06 Mbit/s
95th percentile per-packet one-way delay: 63.909 ms
Loss rate: 23.07%
-- Flow 2:
Average throughput: 136.82 Mbit/s
95th percentile per-packet one-way delay: 65.352 ms
Loss rate: 24.93%
-- Flow 3:
Average throughput: 87.66 Mbit/s
95th percentile per-packet one-way delay: 64.824 ms
Loss rate: 22.35%
```

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

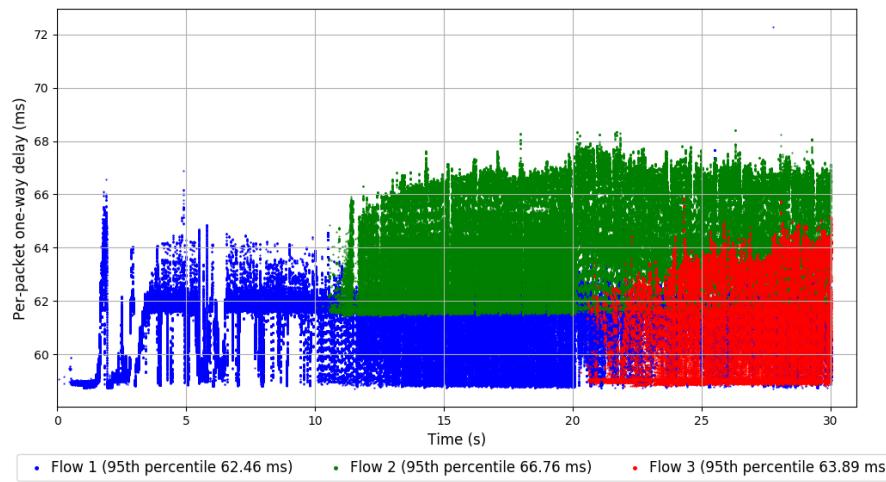
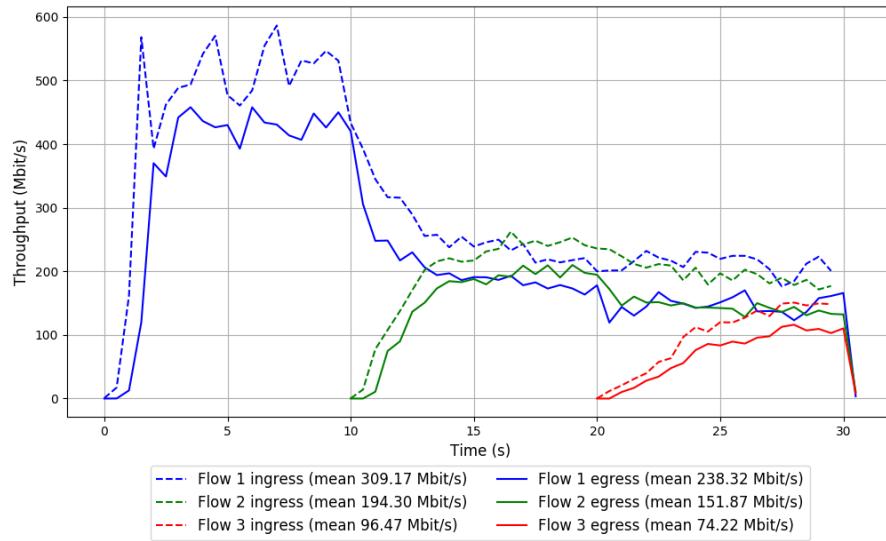


Run 4: Statistics of FillP

```
Start at: 2019-03-27 03:08:21
End at: 2019-03-27 03:08:51
Local clock offset: -0.701 ms
Remote clock offset: -40.135 ms

# Below is generated by plot.py at 2019-03-27 04:23:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 363.99 Mbit/s
95th percentile per-packet one-way delay: 66.015 ms
Loss rate: 22.63%
-- Flow 1:
Average throughput: 238.32 Mbit/s
95th percentile per-packet one-way delay: 62.460 ms
Loss rate: 22.92%
-- Flow 2:
Average throughput: 151.87 Mbit/s
95th percentile per-packet one-way delay: 66.758 ms
Loss rate: 21.82%
-- Flow 3:
Average throughput: 74.22 Mbit/s
95th percentile per-packet one-way delay: 63.889 ms
Loss rate: 23.07%
```

## Run 4: Report of FillP — Data Link

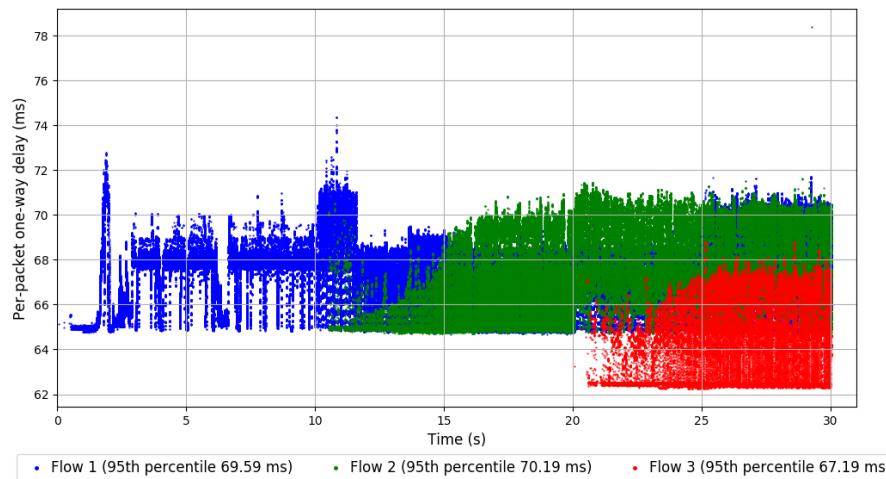
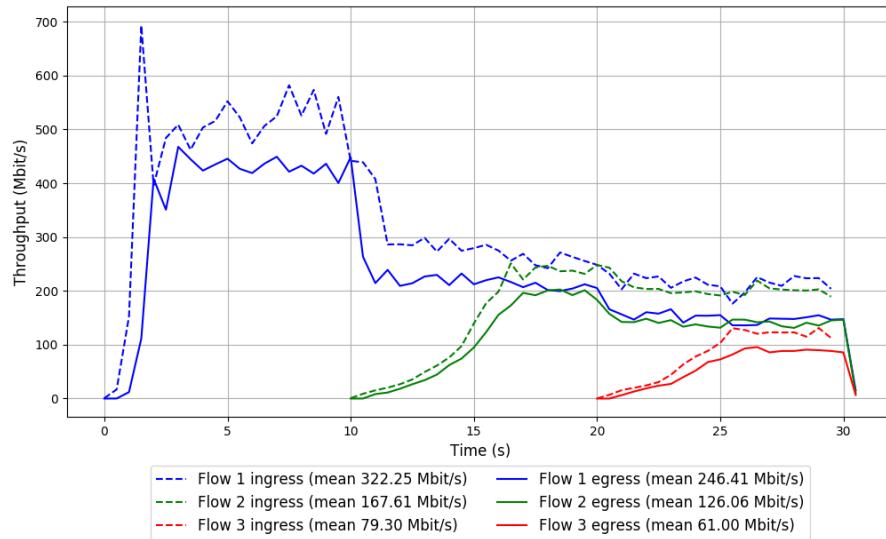


Run 5: Statistics of FillP

```
Start at: 2019-03-27 03:49:53
End at: 2019-03-27 03:50:23
Local clock offset: 1.775 ms
Remote clock offset: -37.026 ms

# Below is generated by plot.py at 2019-03-27 04:23:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 350.58 Mbit/s
95th percentile per-packet one-way delay: 69.875 ms
Loss rate: 23.81%
-- Flow 1:
Average throughput: 246.41 Mbit/s
95th percentile per-packet one-way delay: 69.593 ms
Loss rate: 23.53%
-- Flow 2:
Average throughput: 126.06 Mbit/s
95th percentile per-packet one-way delay: 70.194 ms
Loss rate: 24.79%
-- Flow 3:
Average throughput: 61.00 Mbit/s
95th percentile per-packet one-way delay: 67.193 ms
Loss rate: 23.08%
```

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

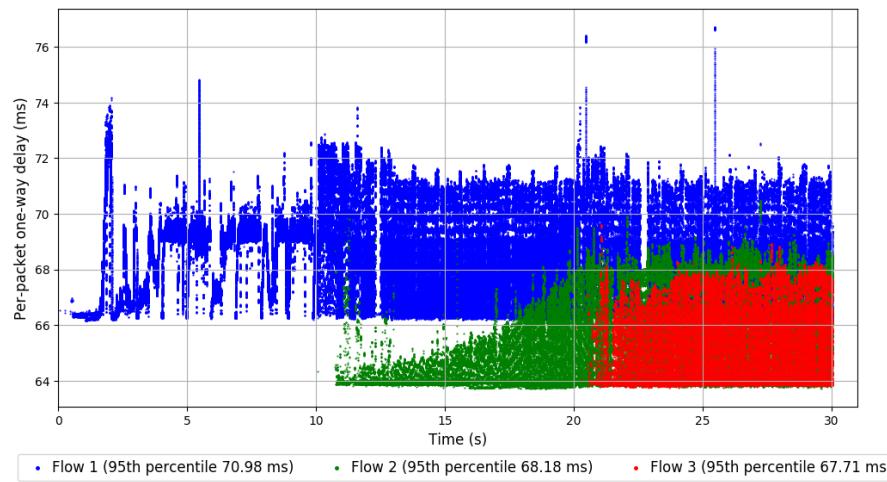
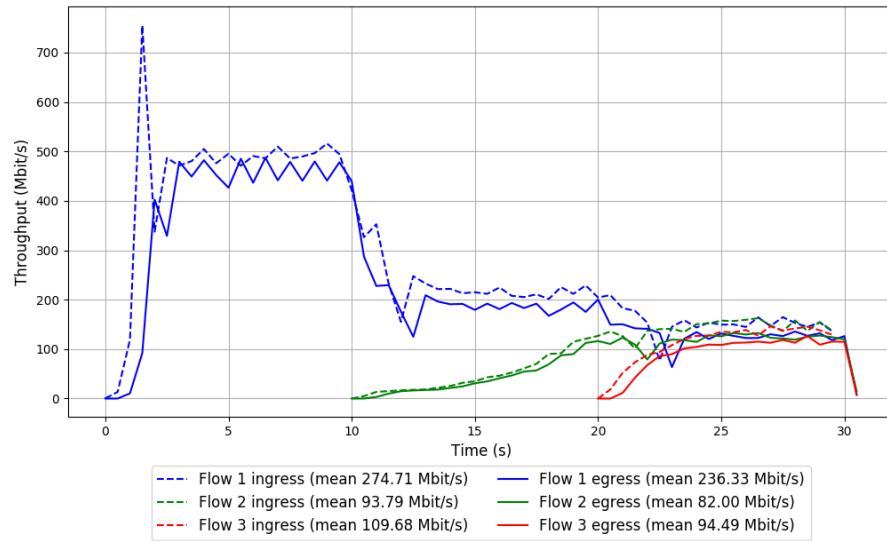


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-03-27 01:26:39
End at: 2019-03-27 01:27:09
Local clock offset: 5.307 ms
Remote clock offset: -36.367 ms

# Below is generated by plot.py at 2019-03-27 04:23:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 322.19 Mbit/s
95th percentile per-packet one-way delay: 70.772 ms
Loss rate: 13.72%
-- Flow 1:
Average throughput: 236.33 Mbit/s
95th percentile per-packet one-way delay: 70.983 ms
Loss rate: 13.96%
-- Flow 2:
Average throughput: 82.00 Mbit/s
95th percentile per-packet one-way delay: 68.179 ms
Loss rate: 12.56%
-- Flow 3:
Average throughput: 94.49 Mbit/s
95th percentile per-packet one-way delay: 67.708 ms
Loss rate: 13.87%
```

Run 1: Report of FillP-Sheep — Data Link

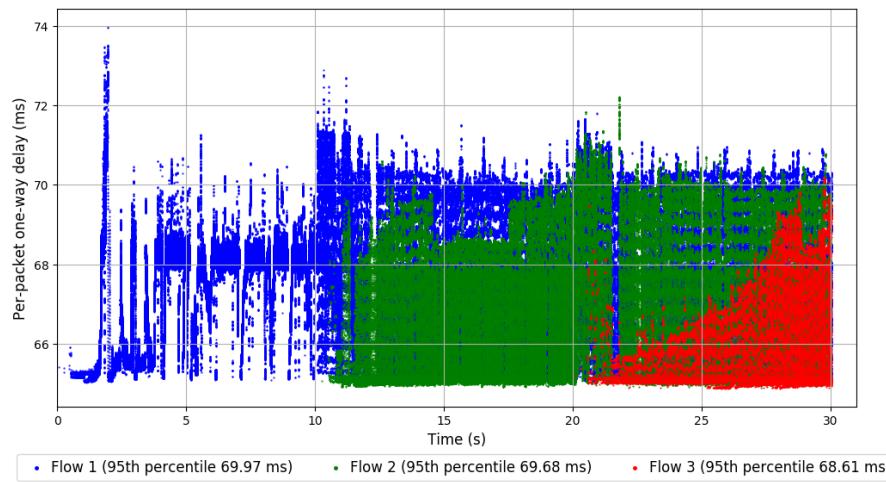
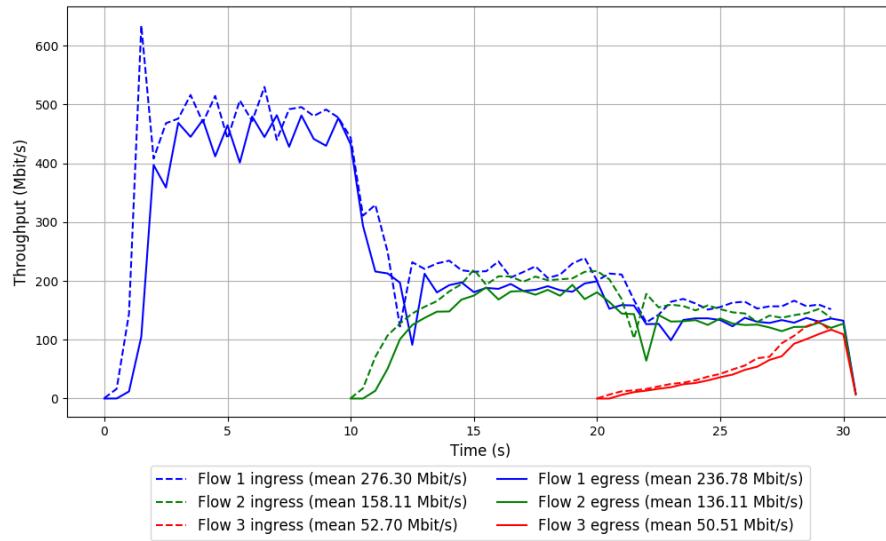


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-03-27 02:08:43
End at: 2019-03-27 02:09:13
Local clock offset: -0.331 ms
Remote clock offset: -34.18 ms

# Below is generated by plot.py at 2019-03-27 04:25:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 344.05 Mbit/s
95th percentile per-packet one-way delay: 69.854 ms
Loss rate: 13.76%
-- Flow 1:
Average throughput: 236.78 Mbit/s
95th percentile per-packet one-way delay: 69.965 ms
Loss rate: 14.30%
-- Flow 2:
Average throughput: 136.11 Mbit/s
95th percentile per-packet one-way delay: 69.684 ms
Loss rate: 13.93%
-- Flow 3:
Average throughput: 50.51 Mbit/s
95th percentile per-packet one-way delay: 68.607 ms
Loss rate: 4.16%
```

Run 2: Report of FillP-Sheep — Data Link

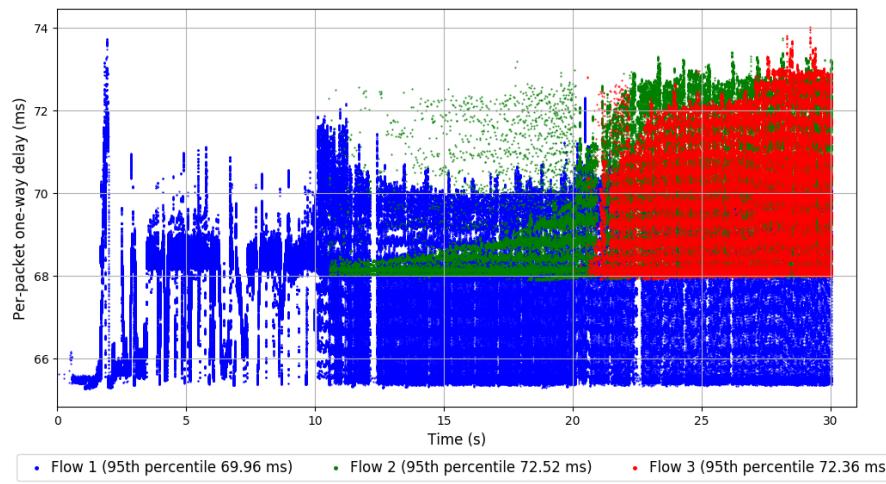
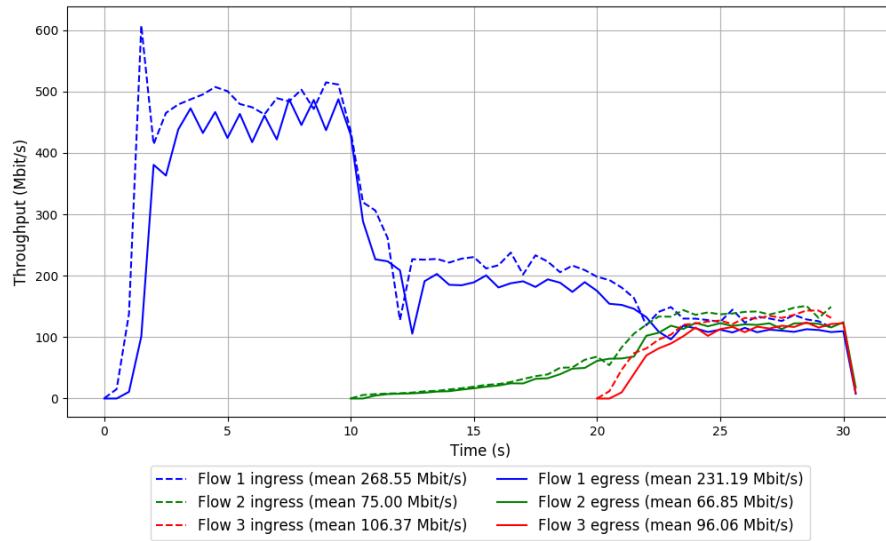


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-03-27 02:44:57
End at: 2019-03-27 02:45:27
Local clock offset: 3.222 ms
Remote clock offset: -33.733 ms

# Below is generated by plot.py at 2019-03-27 04:25:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.34 Mbit/s
95th percentile per-packet one-way delay: 71.569 ms
Loss rate: 13.06%
-- Flow 1:
Average throughput: 231.19 Mbit/s
95th percentile per-packet one-way delay: 69.960 ms
Loss rate: 13.91%
-- Flow 2:
Average throughput: 66.85 Mbit/s
95th percentile per-packet one-way delay: 72.518 ms
Loss rate: 10.86%
-- Flow 3:
Average throughput: 96.06 Mbit/s
95th percentile per-packet one-way delay: 72.364 ms
Loss rate: 9.69%
```

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

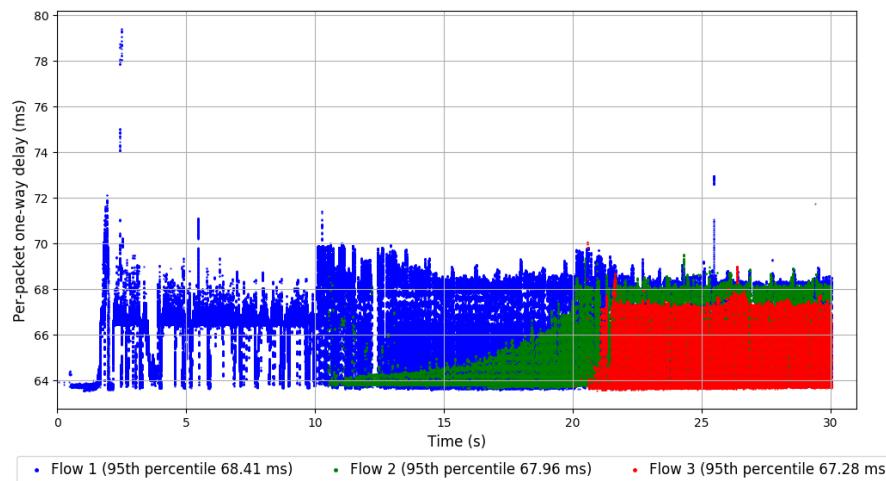
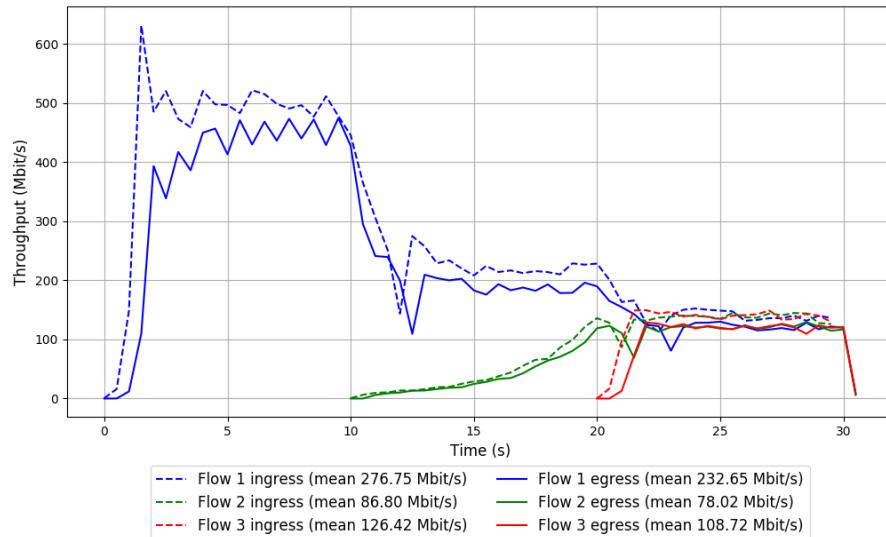


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-03-27 03:15:25
End at: 2019-03-27 03:15:55
Local clock offset: -5.527 ms
Remote clock offset: -39.756 ms

# Below is generated by plot.py at 2019-03-27 04:27:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.55 Mbit/s
95th percentile per-packet one-way delay: 68.226 ms
Loss rate: 14.83%
-- Flow 1:
Average throughput: 232.65 Mbit/s
95th percentile per-packet one-way delay: 68.409 ms
Loss rate: 15.93%
-- Flow 2:
Average throughput: 78.02 Mbit/s
95th percentile per-packet one-way delay: 67.963 ms
Loss rate: 10.13%
-- Flow 3:
Average throughput: 108.72 Mbit/s
95th percentile per-packet one-way delay: 67.276 ms
Loss rate: 14.00%
```

Run 4: Report of FillP-Sheep — Data Link

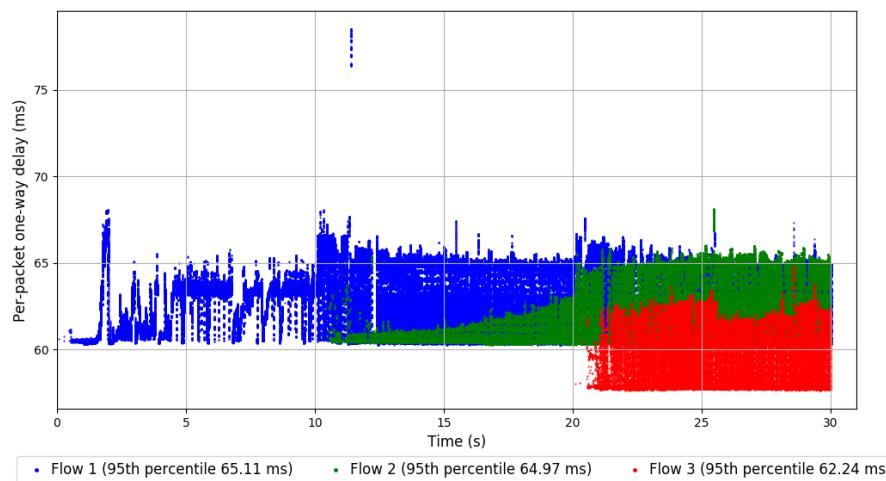
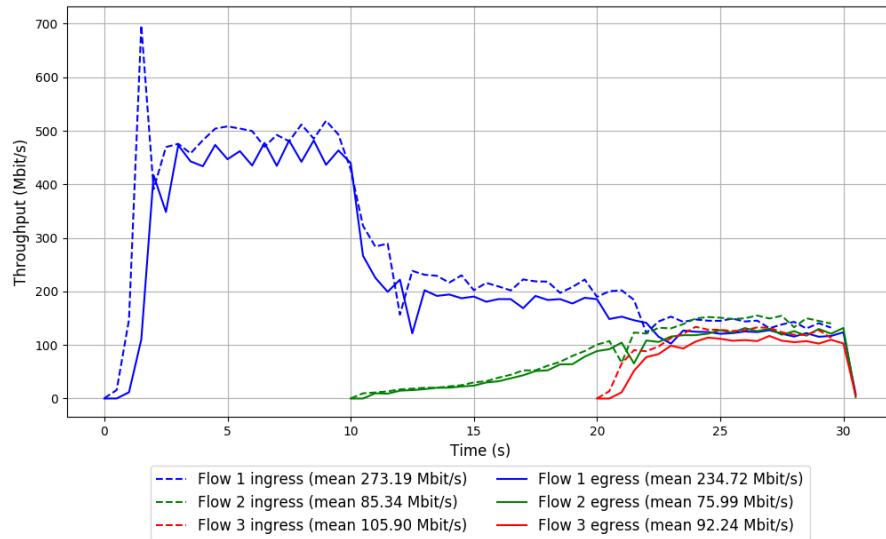


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-03-27 03:57:14
End at: 2019-03-27 03:57:44
Local clock offset: 0.771 ms
Remote clock offset: -40.464 ms

# Below is generated by plot.py at 2019-03-27 04:27:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 315.82 Mbit/s
95th percentile per-packet one-way delay: 65.002 ms
Loss rate: 13.49%
-- Flow 1:
Average throughput: 234.72 Mbit/s
95th percentile per-packet one-way delay: 65.110 ms
Loss rate: 14.08%
-- Flow 2:
Average throughput: 75.99 Mbit/s
95th percentile per-packet one-way delay: 64.970 ms
Loss rate: 11.03%
-- Flow 3:
Average throughput: 92.24 Mbit/s
95th percentile per-packet one-way delay: 62.242 ms
Loss rate: 12.90%
```

Run 5: Report of FillP-Sheep — Data Link

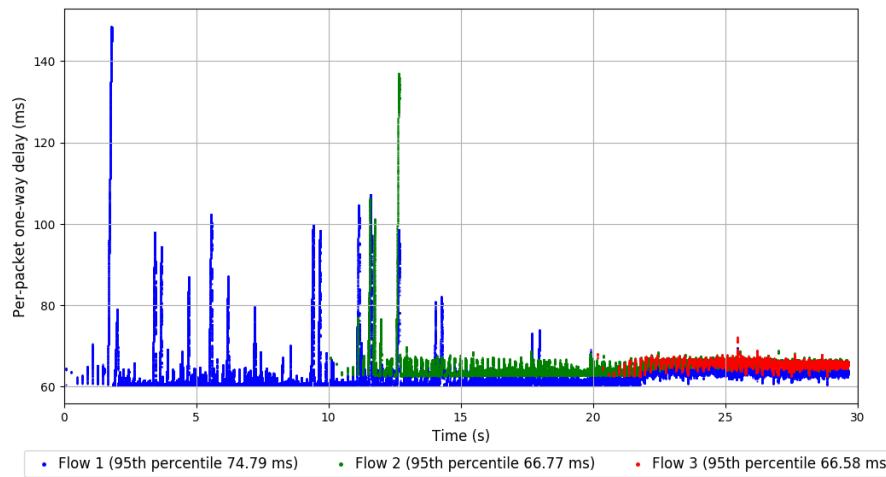
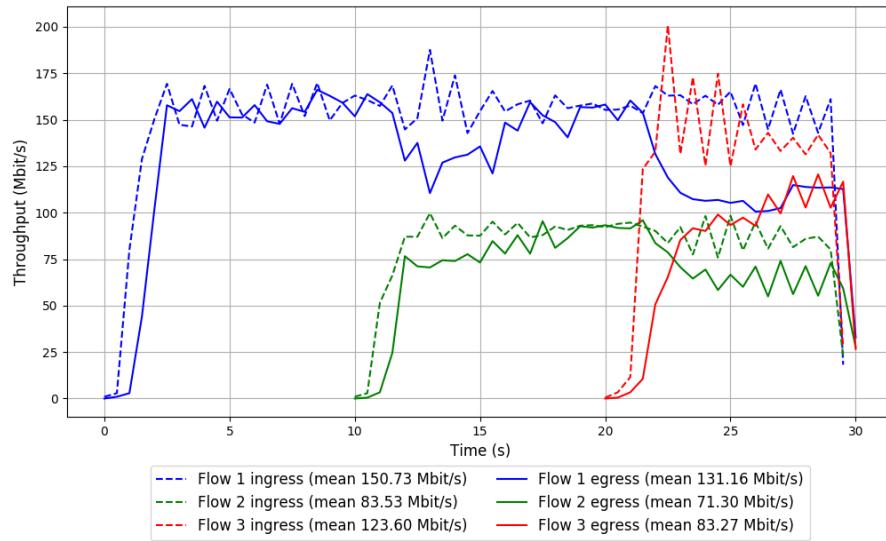


Run 1: Statistics of Indigo

```
Start at: 2019-03-27 01:17:51
End at: 2019-03-27 01:18:21
Local clock offset: 5.029 ms
Remote clock offset: -41.173 ms

# Below is generated by plot.py at 2019-03-27 04:27:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 204.95 Mbit/s
95th percentile per-packet one-way delay: 68.054 ms
Loss rate: 16.52%
-- Flow 1:
Average throughput: 131.16 Mbit/s
95th percentile per-packet one-way delay: 74.787 ms
Loss rate: 12.98%
-- Flow 2:
Average throughput: 71.30 Mbit/s
95th percentile per-packet one-way delay: 66.773 ms
Loss rate: 14.64%
-- Flow 3:
Average throughput: 83.27 Mbit/s
95th percentile per-packet one-way delay: 66.582 ms
Loss rate: 32.64%
```

## Run 1: Report of Indigo — Data Link

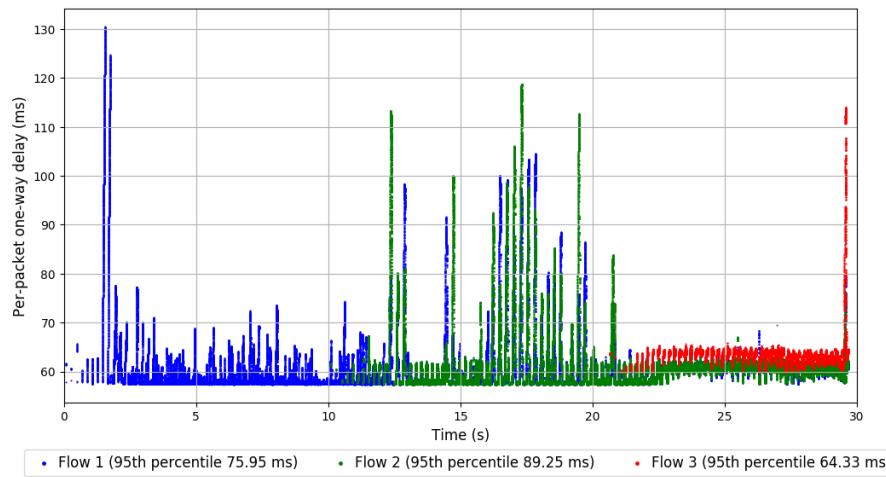
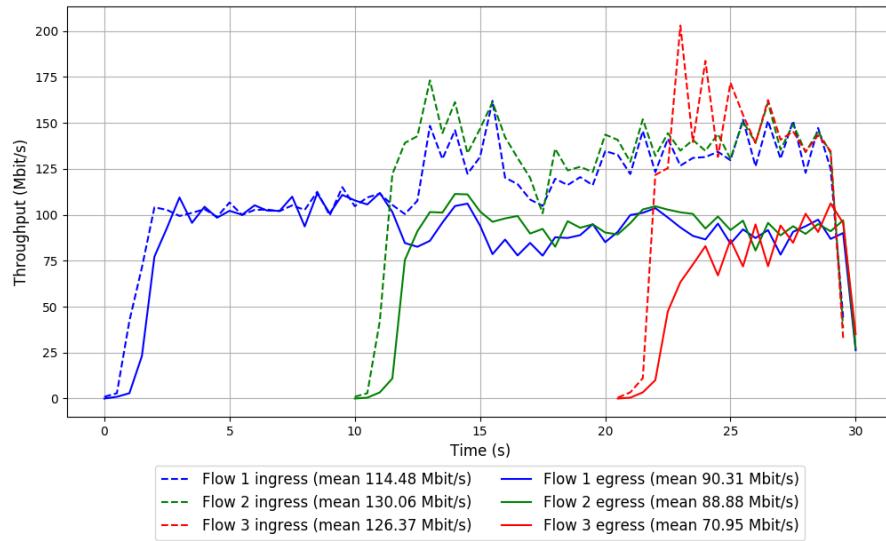


Run 2: Statistics of Indigo

```
Start at: 2019-03-27 01:59:41
End at: 2019-03-27 02:00:11
Local clock offset: 1.795 ms
Remote clock offset: -40.727 ms

# Below is generated by plot.py at 2019-03-27 04:27:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 170.61 Mbit/s
95th percentile per-packet one-way delay: 79.190 ms
Loss rate: 28.57%
-- Flow 1:
Average throughput: 90.31 Mbit/s
95th percentile per-packet one-way delay: 75.953 ms
Loss rate: 21.10%
-- Flow 2:
Average throughput: 88.88 Mbit/s
95th percentile per-packet one-way delay: 89.253 ms
Loss rate: 31.66%
-- Flow 3:
Average throughput: 70.95 Mbit/s
95th percentile per-packet one-way delay: 64.331 ms
Loss rate: 43.86%
```

## Run 2: Report of Indigo — Data Link

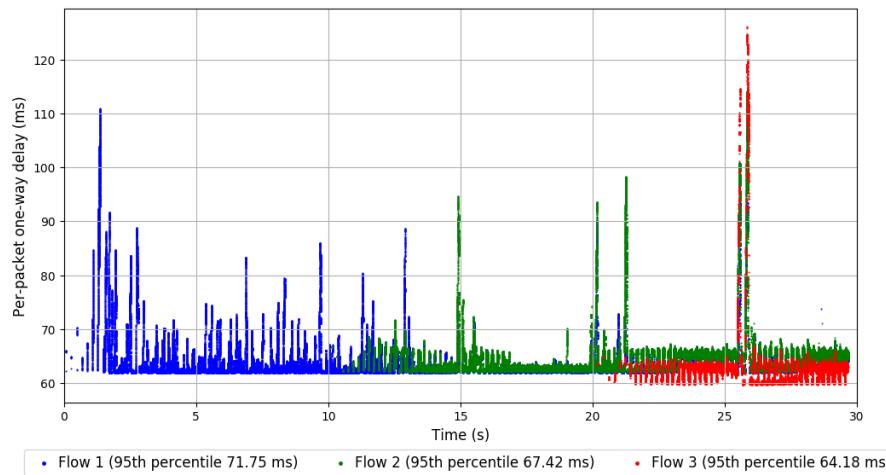
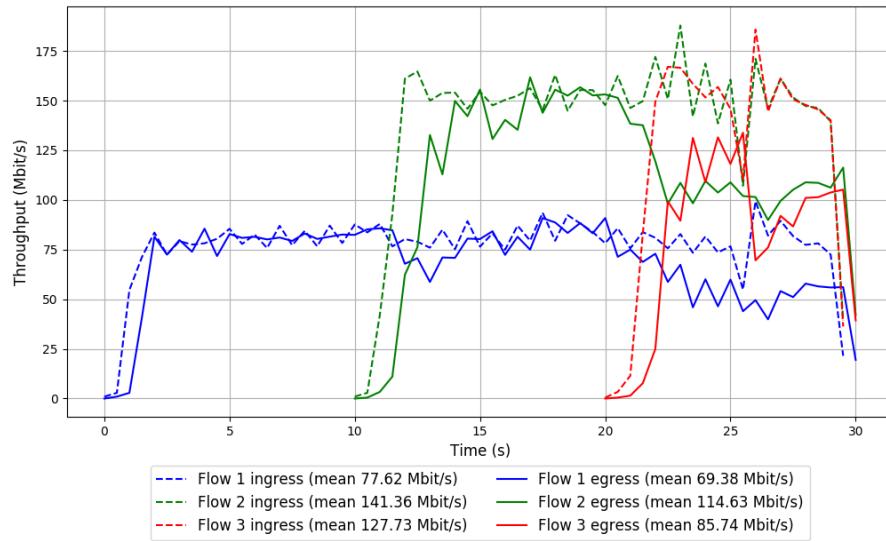


Run 3: Statistics of Indigo

```
Start at: 2019-03-27 02:30:43
End at: 2019-03-27 02:31:13
Local clock offset: 2.554 ms
Remote clock offset: -39.733 ms

# Below is generated by plot.py at 2019-03-27 04:27:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 172.44 Mbit/s
95th percentile per-packet one-way delay: 68.919 ms
Loss rate: 18.56%
-- Flow 1:
Average throughput: 69.38 Mbit/s
95th percentile per-packet one-way delay: 71.745 ms
Loss rate: 10.60%
-- Flow 2:
Average throughput: 114.63 Mbit/s
95th percentile per-packet one-way delay: 67.423 ms
Loss rate: 18.92%
-- Flow 3:
Average throughput: 85.74 Mbit/s
95th percentile per-packet one-way delay: 64.183 ms
Loss rate: 32.88%
```

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

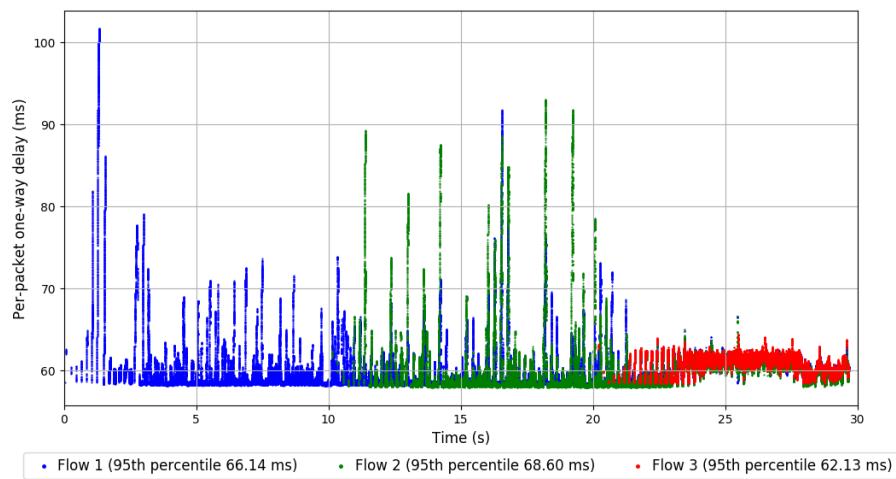
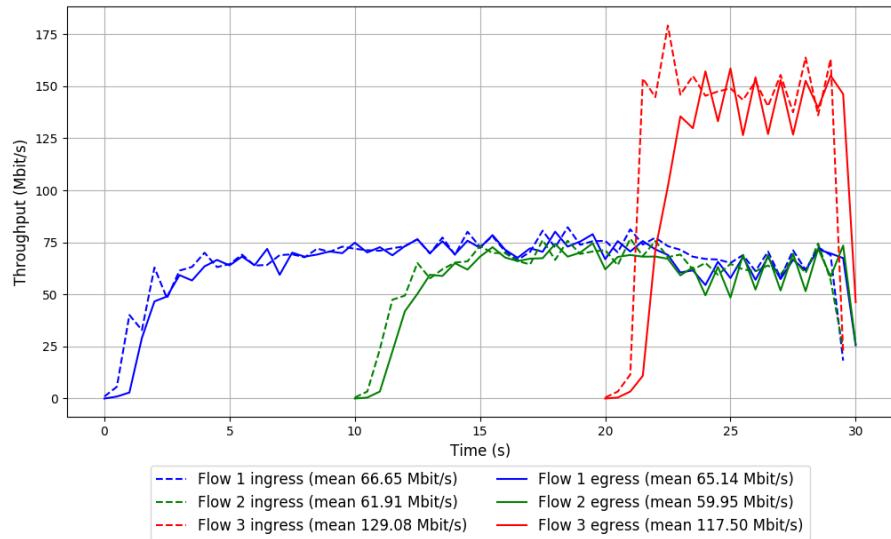


Run 4: Statistics of Indigo

```
Start at: 2019-03-27 03:06:54
End at: 2019-03-27 03:07:24
Local clock offset: 0.338 ms
Remote clock offset: -39.986 ms

# Below is generated by plot.py at 2019-03-27 04:27:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 142.25 Mbit/s
95th percentile per-packet one-way delay: 64.349 ms
Loss rate: 4.38%
-- Flow 1:
Average throughput: 65.14 Mbit/s
95th percentile per-packet one-way delay: 66.142 ms
Loss rate: 2.27%
-- Flow 2:
Average throughput: 59.95 Mbit/s
95th percentile per-packet one-way delay: 68.596 ms
Loss rate: 3.17%
-- Flow 3:
Average throughput: 117.50 Mbit/s
95th percentile per-packet one-way delay: 62.127 ms
Loss rate: 8.99%
```

## Run 4: Report of Indigo — Data Link

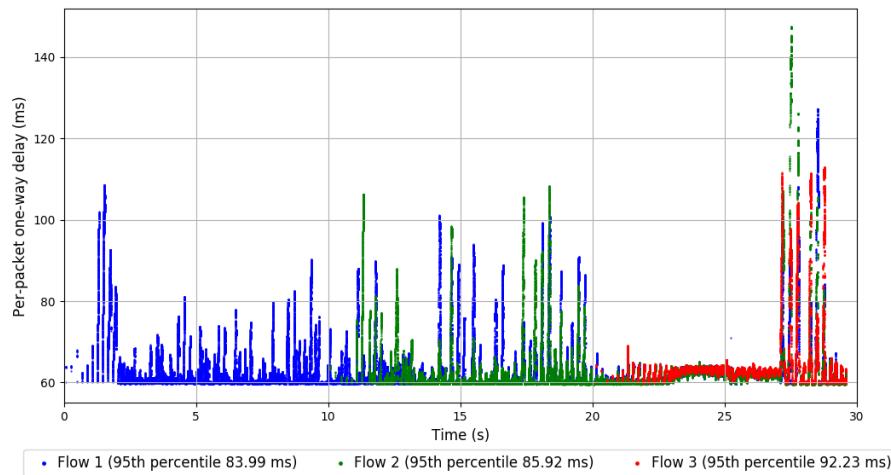
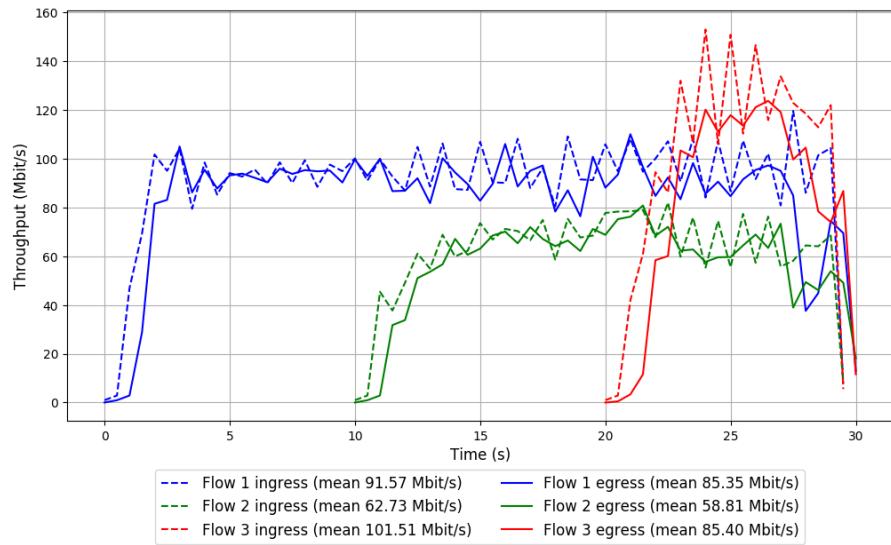


Run 5: Statistics of Indigo

```
Start at: 2019-03-27 03:48:24
End at: 2019-03-27 03:48:54
Local clock offset: 1.949 ms
Remote clock offset: -40.142 ms

# Below is generated by plot.py at 2019-03-27 04:27:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 151.63 Mbit/s
95th percentile per-packet one-way delay: 85.401 ms
Loss rate: 8.43%
-- Flow 1:
Average throughput: 85.35 Mbit/s
95th percentile per-packet one-way delay: 83.991 ms
Loss rate: 6.79%
-- Flow 2:
Average throughput: 58.81 Mbit/s
95th percentile per-packet one-way delay: 85.918 ms
Loss rate: 6.24%
-- Flow 3:
Average throughput: 85.40 Mbit/s
95th percentile per-packet one-way delay: 92.232 ms
Loss rate: 15.83%
```

## Run 5: Report of Indigo — Data Link

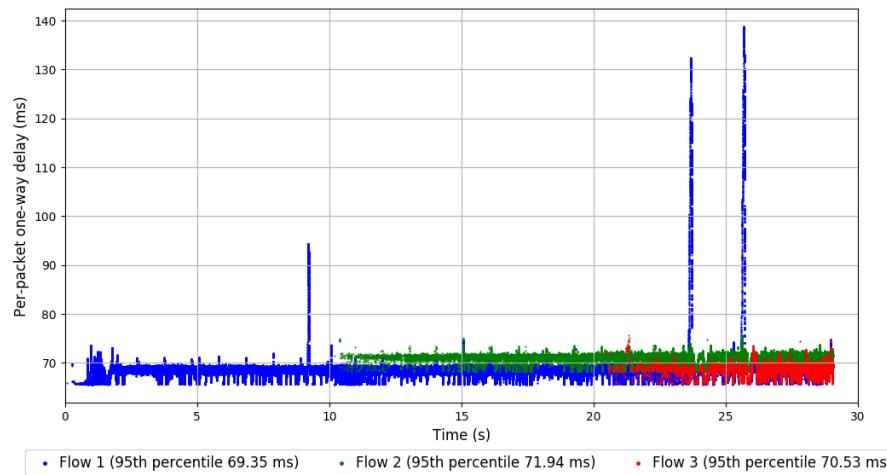
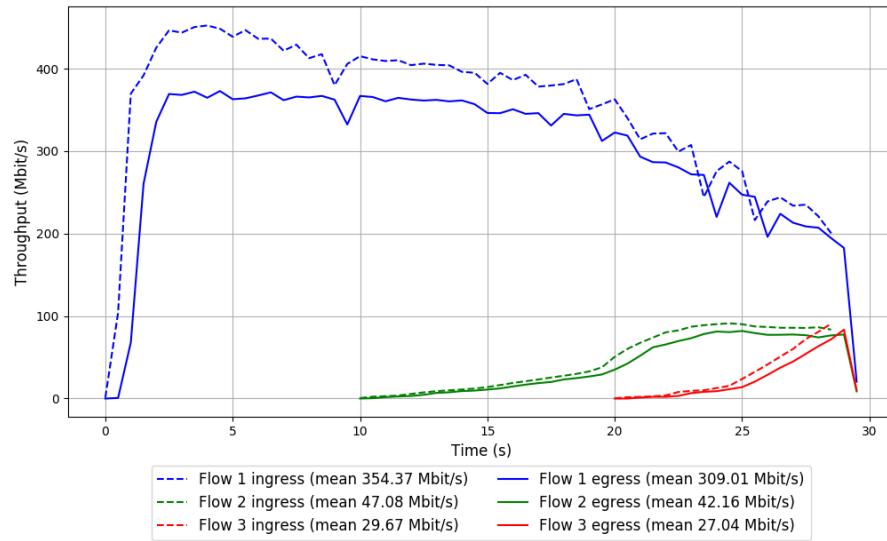


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-03-27 01:10:45
End at: 2019-03-27 01:11:15
Local clock offset: 6.13 ms
Remote clock offset: -34.229 ms

# Below is generated by plot.py at 2019-03-27 04:29:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 344.56 Mbit/s
95th percentile per-packet one-way delay: 71.218 ms
Loss rate: 12.52%
-- Flow 1:
Average throughput: 309.01 Mbit/s
95th percentile per-packet one-way delay: 69.349 ms
Loss rate: 12.79%
-- Flow 2:
Average throughput: 42.16 Mbit/s
95th percentile per-packet one-way delay: 71.937 ms
Loss rate: 10.46%
-- Flow 3:
Average throughput: 27.04 Mbit/s
95th percentile per-packet one-way delay: 70.529 ms
Loss rate: 8.86%
```

Run 1: Report of Indigo-MusesC3 — Data Link

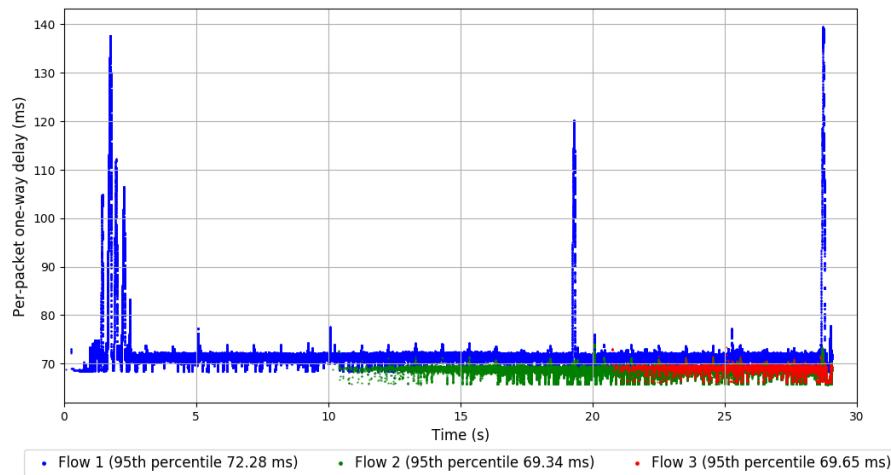
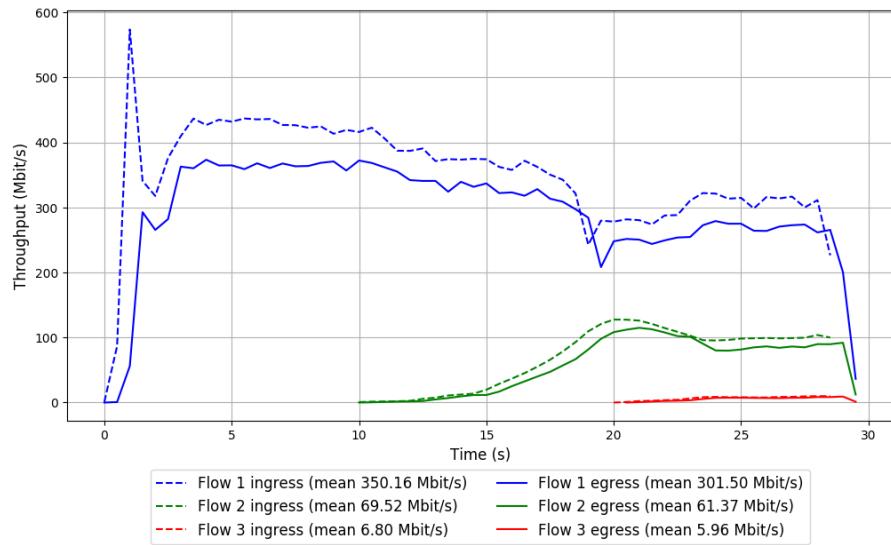


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-03-27 01:58:04
End at: 2019-03-27 01:58:34
Local clock offset: 1.764 ms
Remote clock offset: -32.767 ms

# Below is generated by plot.py at 2019-03-27 04:29:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 343.22 Mbit/s
95th percentile per-packet one-way delay: 72.160 ms
Loss rate: 13.64%
-- Flow 1:
Average throughput: 301.50 Mbit/s
95th percentile per-packet one-way delay: 72.275 ms
Loss rate: 13.90%
-- Flow 2:
Average throughput: 61.37 Mbit/s
95th percentile per-packet one-way delay: 69.341 ms
Loss rate: 11.71%
-- Flow 3:
Average throughput: 5.96 Mbit/s
95th percentile per-packet one-way delay: 69.652 ms
Loss rate: 12.39%
```

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

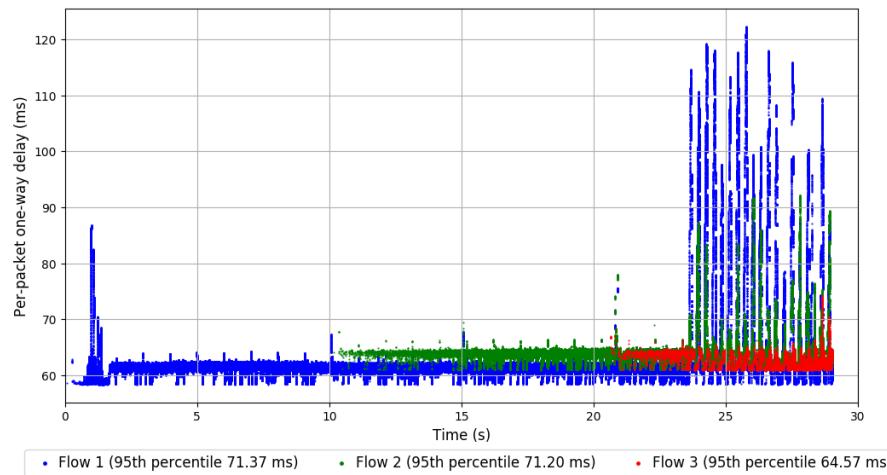
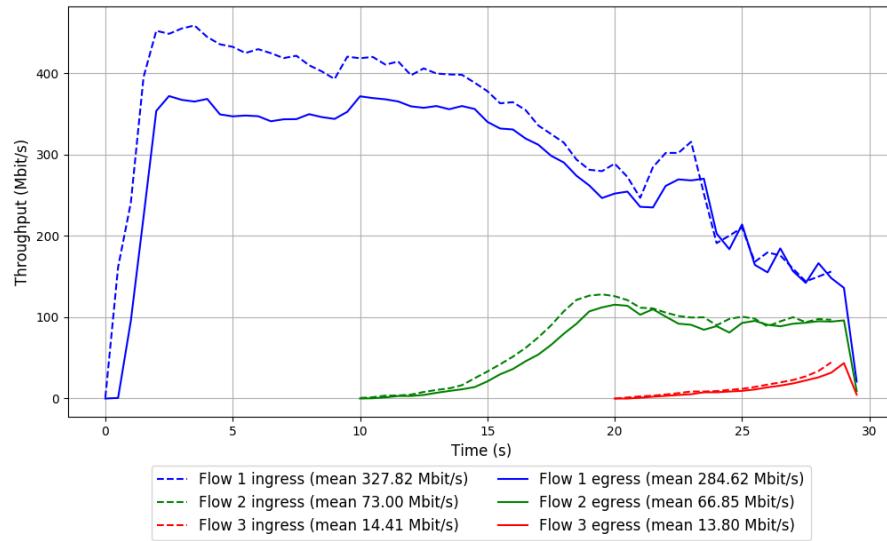


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-03-27 02:29:08
End at: 2019-03-27 02:29:38
Local clock offset: 2.87 ms
Remote clock offset: -40.383 ms

# Below is generated by plot.py at 2019-03-27 04:29:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.26 Mbit/s
95th percentile per-packet one-way delay: 70.995 ms
Loss rate: 12.48%
-- Flow 1:
Average throughput: 284.62 Mbit/s
95th percentile per-packet one-way delay: 71.371 ms
Loss rate: 13.17%
-- Flow 2:
Average throughput: 66.85 Mbit/s
95th percentile per-packet one-way delay: 71.197 ms
Loss rate: 8.43%
-- Flow 3:
Average throughput: 13.80 Mbit/s
95th percentile per-packet one-way delay: 64.572 ms
Loss rate: 4.27%
```

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

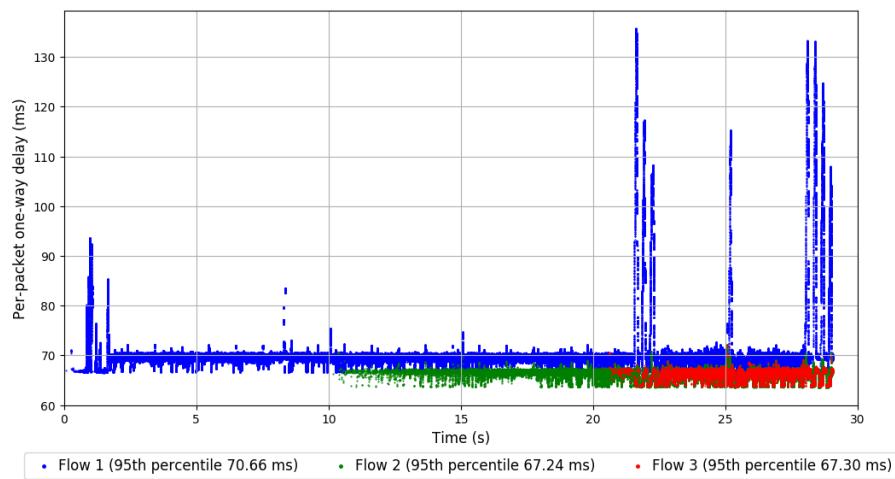
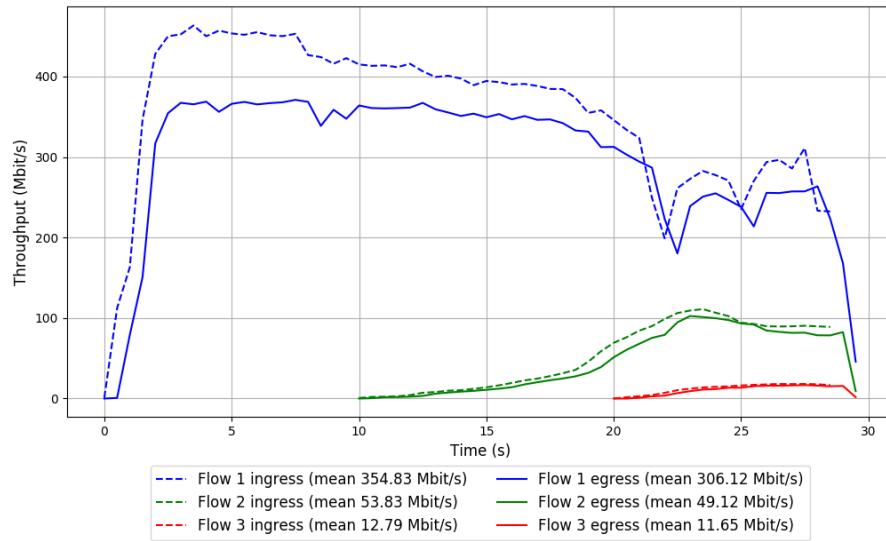


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-03-27 03:05:19
End at: 2019-03-27 03:05:49
Local clock offset: 0.91 ms
Remote clock offset: -33.97 ms

# Below is generated by plot.py at 2019-03-27 04:29:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 341.61 Mbit/s
95th percentile per-packet one-way delay: 70.499 ms
Loss rate: 13.23%
-- Flow 1:
Average throughput: 306.12 Mbit/s
95th percentile per-packet one-way delay: 70.656 ms
Loss rate: 13.72%
-- Flow 2:
Average throughput: 49.12 Mbit/s
95th percentile per-packet one-way delay: 67.239 ms
Loss rate: 8.75%
-- Flow 3:
Average throughput: 11.65 Mbit/s
95th percentile per-packet one-way delay: 67.299 ms
Loss rate: 8.90%
```

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

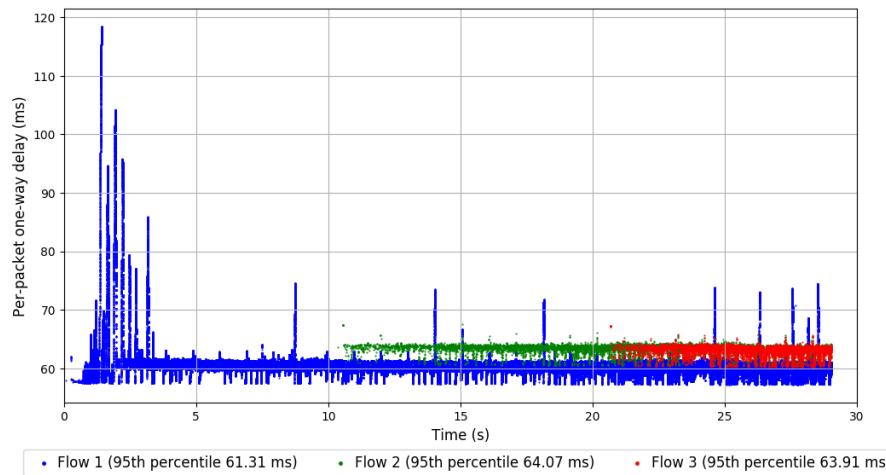
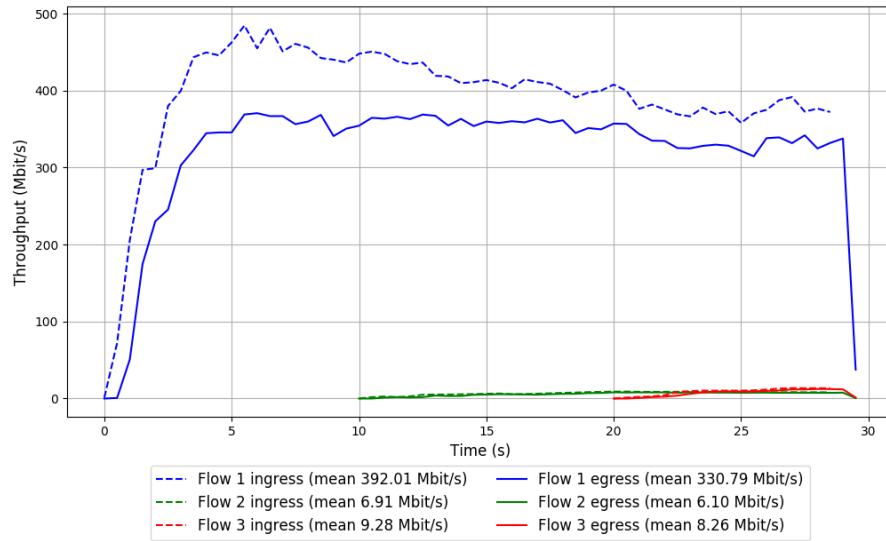


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-03-27 03:46:49
End at: 2019-03-27 03:47:19
Local clock offset: 4.015 ms
Remote clock offset: -40.809 ms

# Below is generated by plot.py at 2019-03-27 04:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 337.15 Mbit/s
95th percentile per-packet one-way delay: 62.146 ms
Loss rate: 15.53%
-- Flow 1:
Average throughput: 330.79 Mbit/s
95th percentile per-packet one-way delay: 61.315 ms
Loss rate: 15.61%
-- Flow 2:
Average throughput: 6.10 Mbit/s
95th percentile per-packet one-way delay: 64.068 ms
Loss rate: 11.77%
-- Flow 3:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 63.908 ms
Loss rate: 11.02%
```

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

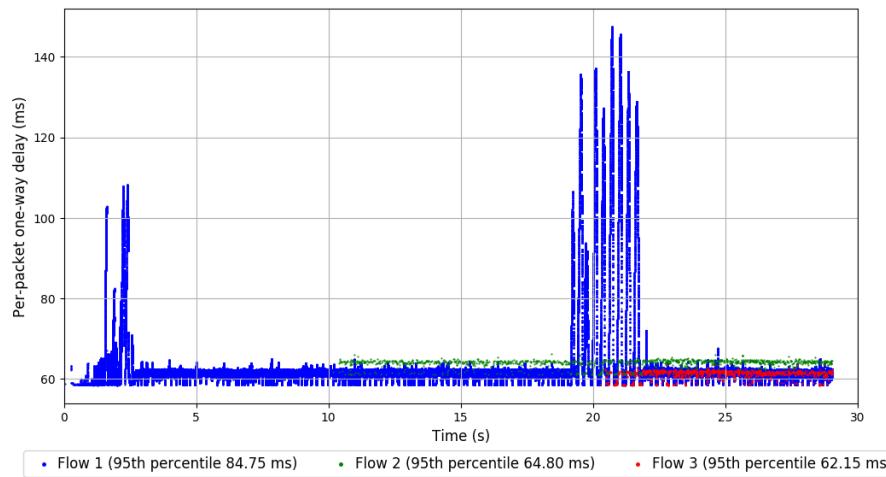
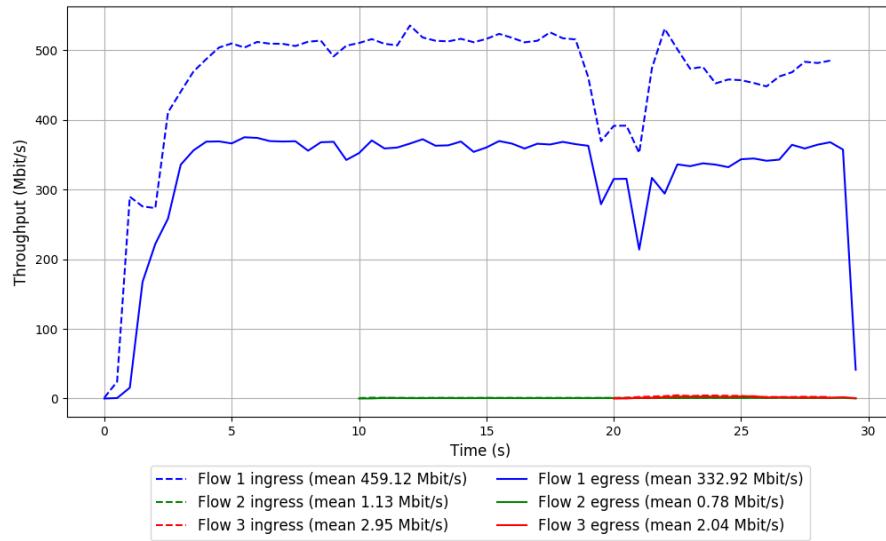


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-03-27 01:07:35
End at: 2019-03-27 01:08:05
Local clock offset: 5.744 ms
Remote clock offset: -41.345 ms

# Below is generated by plot.py at 2019-03-27 04:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.04 Mbit/s
95th percentile per-packet one-way delay: 84.514 ms
Loss rate: 27.49%
-- Flow 1:
Average throughput: 332.92 Mbit/s
95th percentile per-packet one-way delay: 84.747 ms
Loss rate: 27.48%
-- Flow 2:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 64.796 ms
Loss rate: 30.59%
-- Flow 3:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 62.149 ms
Loss rate: 30.90%
```

Run 1: Report of Indigo-MusesC5 — Data Link

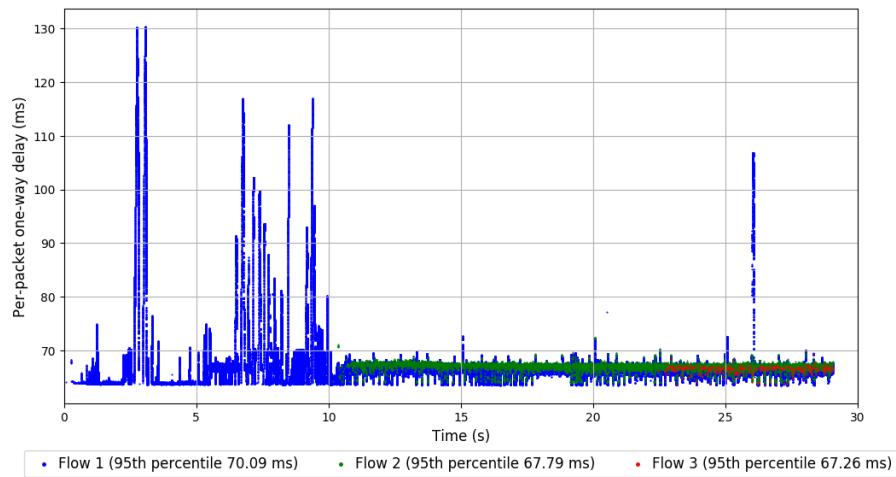
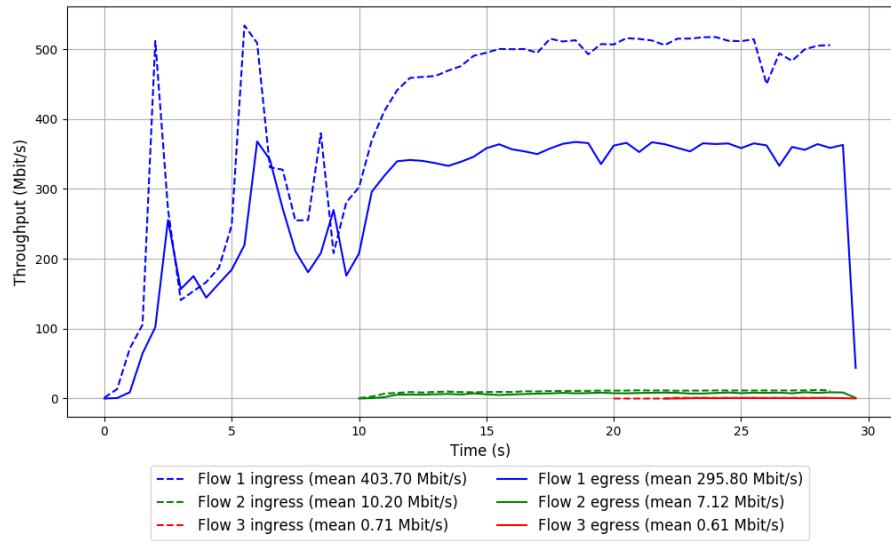


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-03-27 01:49:22
End at: 2019-03-27 01:49:52
Local clock offset: 4.148 ms
Remote clock offset: -34.829 ms

# Below is generated by plot.py at 2019-03-27 04:31:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 300.57 Mbit/s
95th percentile per-packet one-way delay: 70.039 ms
Loss rate: 26.78%
-- Flow 1:
Average throughput: 295.80 Mbit/s
95th percentile per-packet one-way delay: 70.089 ms
Loss rate: 26.72%
-- Flow 2:
Average throughput: 7.12 Mbit/s
95th percentile per-packet one-way delay: 67.792 ms
Loss rate: 30.21%
-- Flow 3:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 67.259 ms
Loss rate: 34.69%
```

Run 2: Report of Indigo-MusesC5 — Data Link

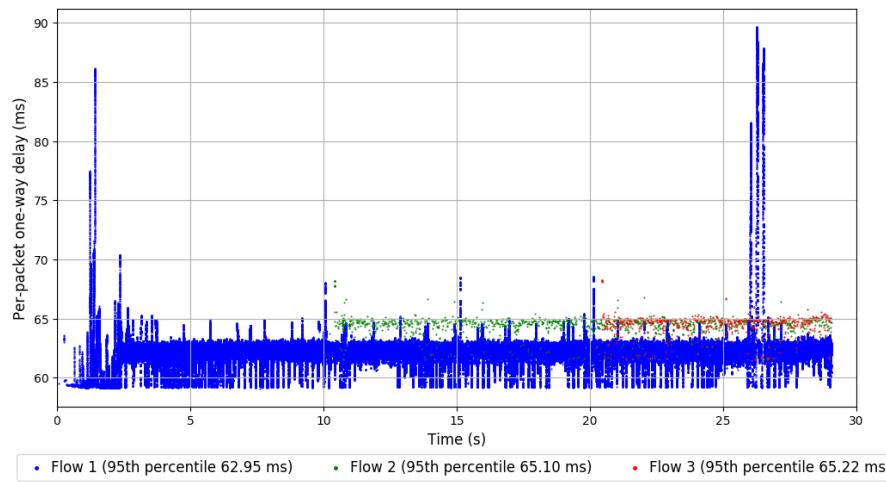
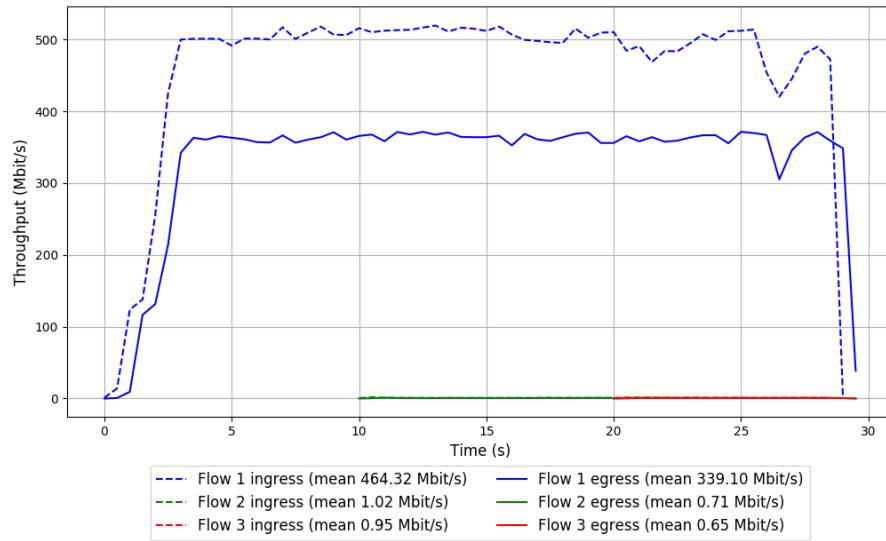


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-03-27 02:25:58
End at: 2019-03-27 02:26:28
Local clock offset: 2.028 ms
Remote clock offset: -40.408 ms

# Below is generated by plot.py at 2019-03-27 04:32:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 339.75 Mbit/s
95th percentile per-packet one-way delay: 62.954 ms
Loss rate: 26.97%
-- Flow 1:
Average throughput: 339.10 Mbit/s
95th percentile per-packet one-way delay: 62.945 ms
Loss rate: 26.96%
-- Flow 2:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 65.103 ms
Loss rate: 30.84%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 65.217 ms
Loss rate: 32.59%
```

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

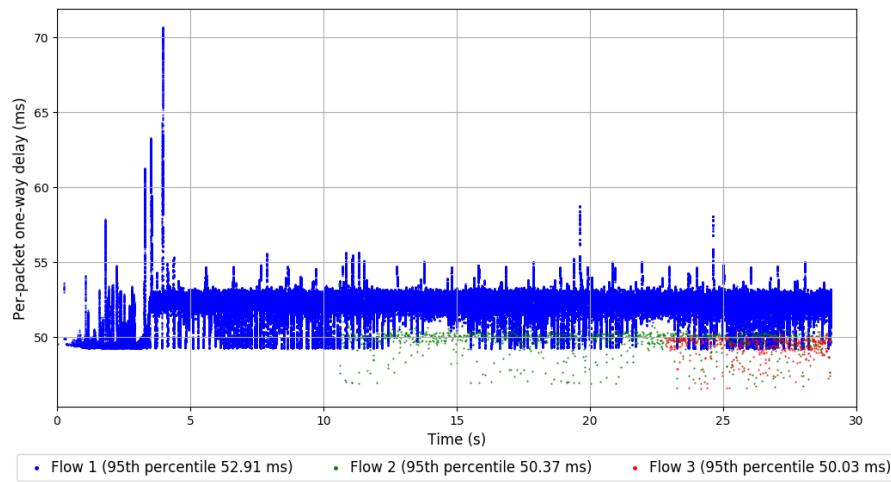
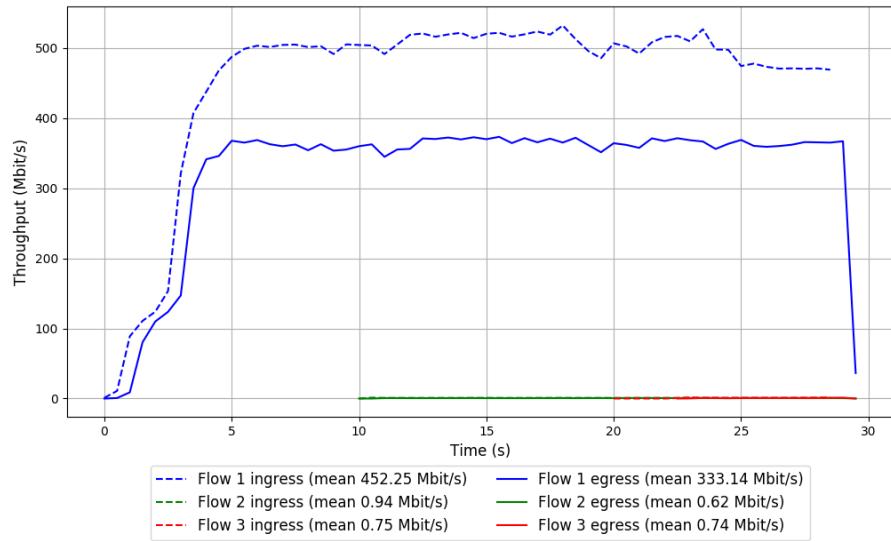


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-03-27 03:02:11
End at: 2019-03-27 03:02:41
Local clock offset: 17.629 ms
Remote clock offset: -34.755 ms

# Below is generated by plot.py at 2019-03-27 04:33:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.70 Mbit/s
95th percentile per-packet one-way delay: 52.907 ms
Loss rate: 26.34%
-- Flow 1:
Average throughput: 333.14 Mbit/s
95th percentile per-packet one-way delay: 52.907 ms
Loss rate: 26.33%
-- Flow 2:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 50.368 ms
Loss rate: 33.58%
-- Flow 3:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 50.034 ms
Loss rate: 29.00%
```

Run 4: Report of Indigo-MusesC5 — Data Link

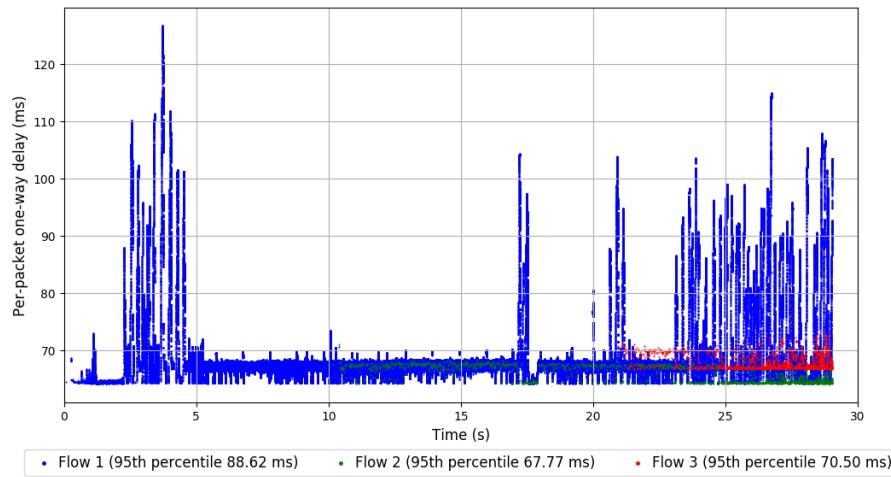
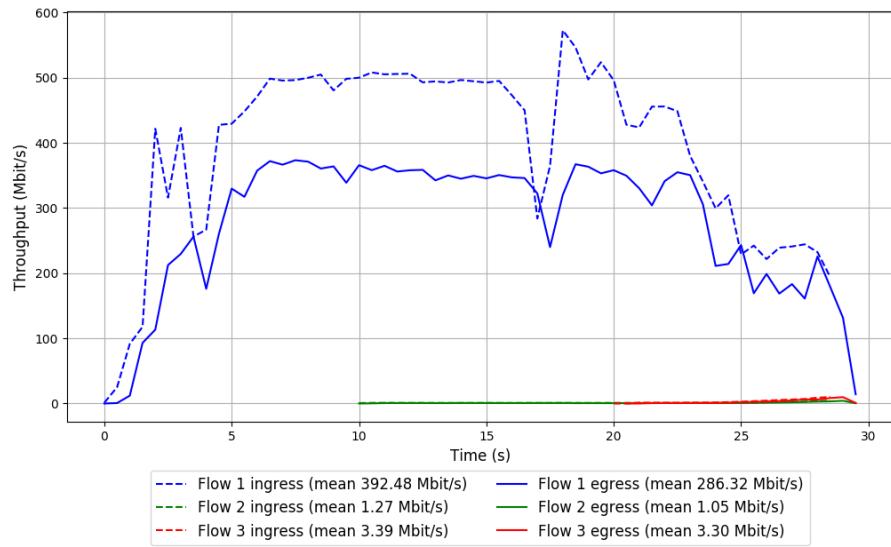


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-03-27 03:43:40
End at: 2019-03-27 03:44:10
Local clock offset: 4.213 ms
Remote clock offset: -34.866 ms

# Below is generated by plot.py at 2019-03-27 04:33:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 287.93 Mbit/s
95th percentile per-packet one-way delay: 88.554 ms
Loss rate: 26.97%
-- Flow 1:
Average throughput: 286.32 Mbit/s
95th percentile per-packet one-way delay: 88.618 ms
Loss rate: 27.04%
-- Flow 2:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 67.768 ms
Loss rate: 17.83%
-- Flow 3:
Average throughput: 3.30 Mbit/s
95th percentile per-packet one-way delay: 70.503 ms
Loss rate: 8.42%
```

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

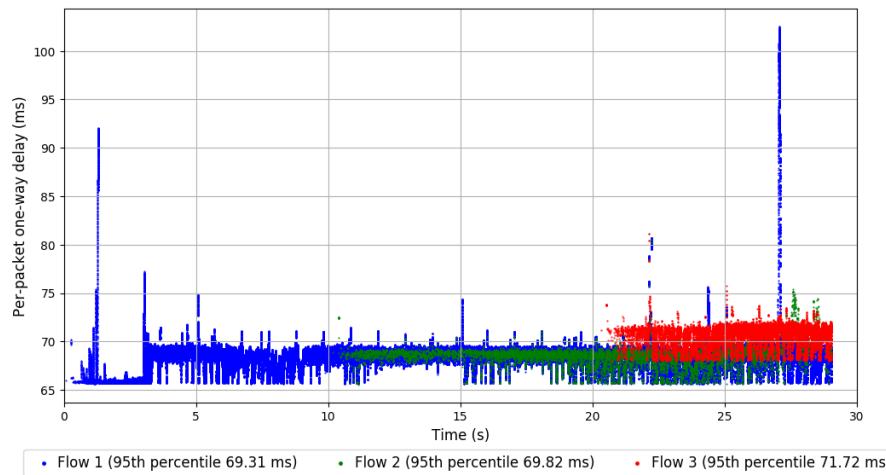
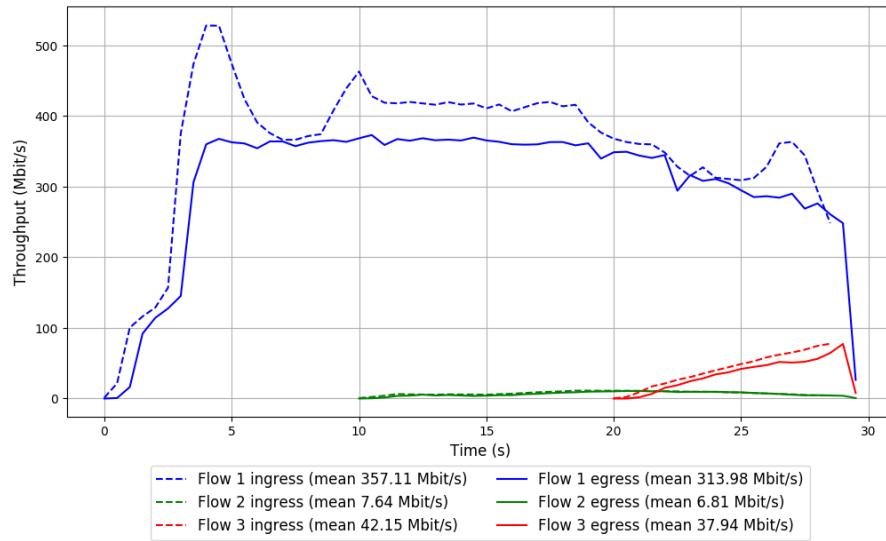


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-03-27 01:09:10
End at: 2019-03-27 01:09:40
Local clock offset: 5.727 ms
Remote clock offset: -34.538 ms

# Below is generated by plot.py at 2019-03-27 04:33:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.81 Mbit/s
95th percentile per-packet one-way delay: 69.603 ms
Loss rate: 11.98%
-- Flow 1:
Average throughput: 313.98 Mbit/s
95th percentile per-packet one-way delay: 69.315 ms
Loss rate: 12.07%
-- Flow 2:
Average throughput: 6.81 Mbit/s
95th percentile per-packet one-way delay: 69.817 ms
Loss rate: 10.93%
-- Flow 3:
Average throughput: 37.94 Mbit/s
95th percentile per-packet one-way delay: 71.715 ms
Loss rate: 10.02%
```

Run 1: Report of Indigo-MusesD — Data Link

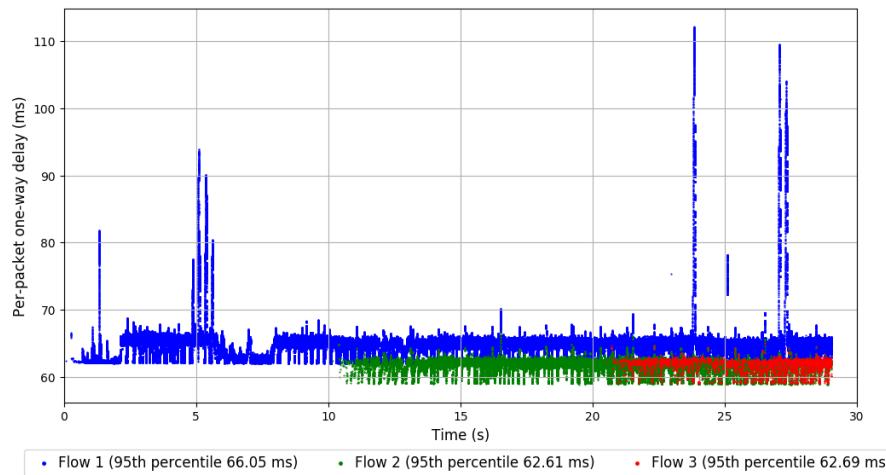
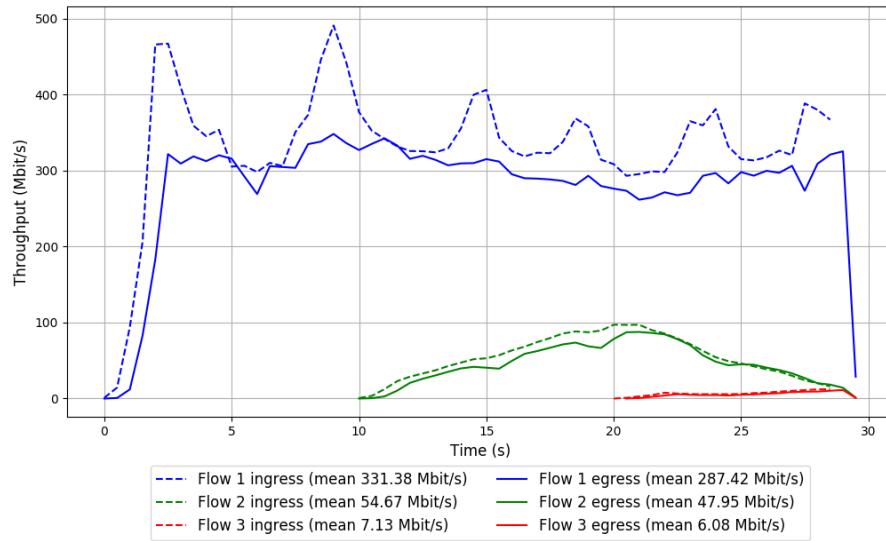


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-03-27 01:50:57
End at: 2019-03-27 01:51:27
Local clock offset: 2.935 ms
Remote clock offset: -40.137 ms

# Below is generated by plot.py at 2019-03-27 04:33:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.40 Mbit/s
95th percentile per-packet one-way delay: 65.988 ms
Loss rate: 13.18%
-- Flow 1:
Average throughput: 287.42 Mbit/s
95th percentile per-packet one-way delay: 66.047 ms
Loss rate: 13.26%
-- Flow 2:
Average throughput: 47.95 Mbit/s
95th percentile per-packet one-way delay: 62.612 ms
Loss rate: 12.30%
-- Flow 3:
Average throughput: 6.08 Mbit/s
95th percentile per-packet one-way delay: 62.690 ms
Loss rate: 14.80%
```

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

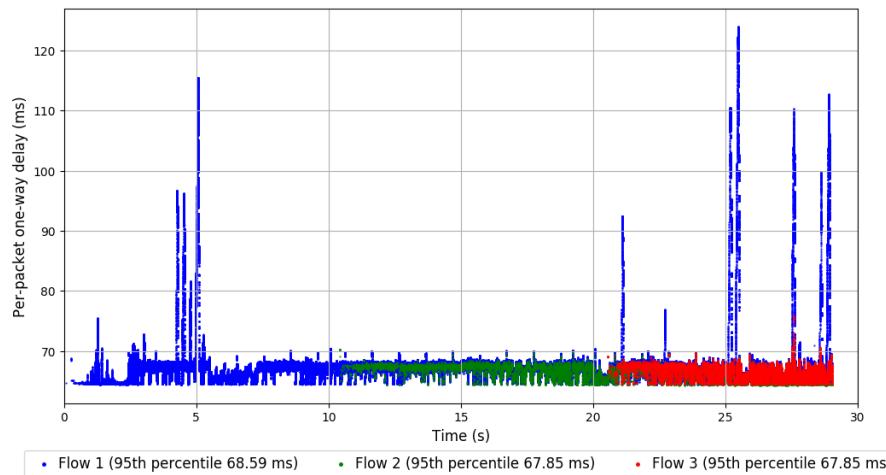
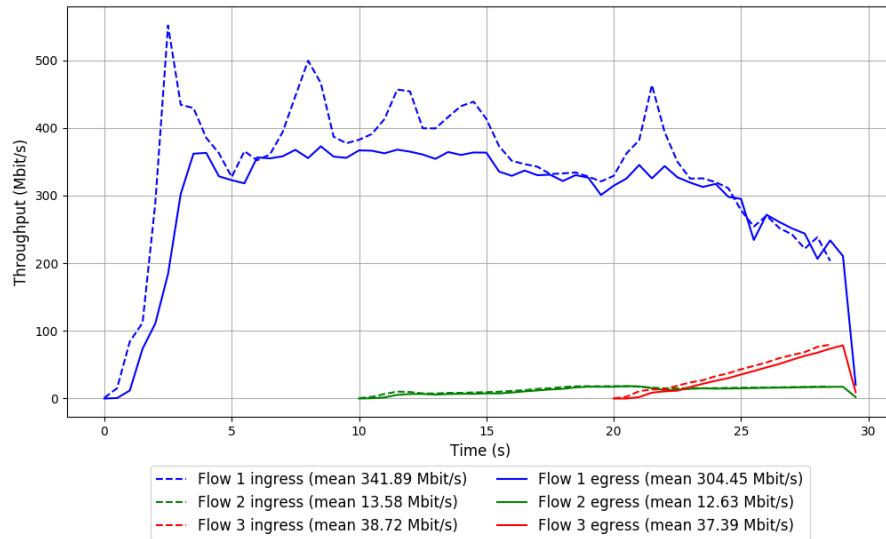


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-03-27 02:27:33
End at: 2019-03-27 02:28:03
Local clock offset: 1.835 ms
Remote clock offset: -35.223 ms

# Below is generated by plot.py at 2019-03-27 04:33:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 323.83 Mbit/s
95th percentile per-packet one-way delay: 68.483 ms
Loss rate: 10.61%
-- Flow 1:
Average throughput: 304.45 Mbit/s
95th percentile per-packet one-way delay: 68.590 ms
Loss rate: 10.95%
-- Flow 2:
Average throughput: 12.63 Mbit/s
95th percentile per-packet one-way delay: 67.850 ms
Loss rate: 6.99%
-- Flow 3:
Average throughput: 37.39 Mbit/s
95th percentile per-packet one-way delay: 67.854 ms
Loss rate: 3.45%
```

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

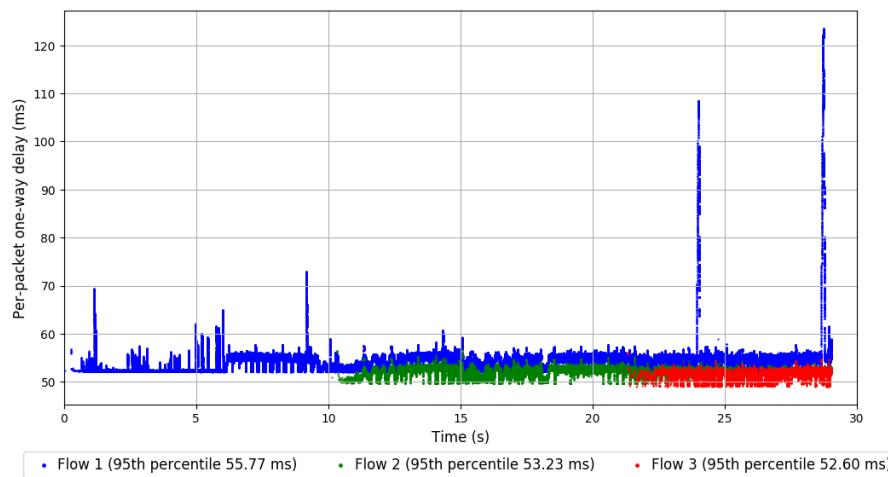
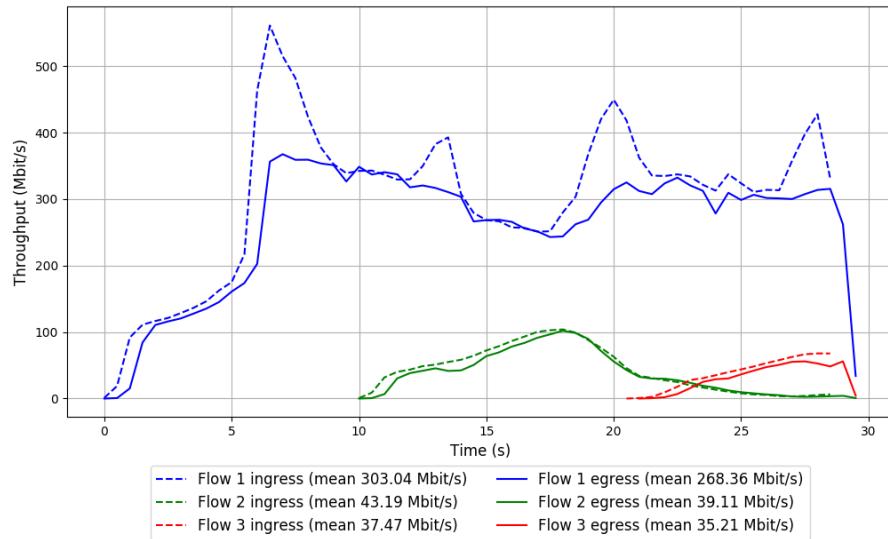


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-03-27 03:03:45
End at: 2019-03-27 03:04:15
Local clock offset: 15.21 ms
Remote clock offset: -34.119 ms

# Below is generated by plot.py at 2019-03-27 04:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 303.47 Mbit/s
95th percentile per-packet one-way delay: 55.726 ms
Loss rate: 11.28%
-- Flow 1:
Average throughput: 268.36 Mbit/s
95th percentile per-packet one-way delay: 55.766 ms
Loss rate: 11.44%
-- Flow 2:
Average throughput: 39.11 Mbit/s
95th percentile per-packet one-way delay: 53.234 ms
Loss rate: 9.42%
-- Flow 3:
Average throughput: 35.21 Mbit/s
95th percentile per-packet one-way delay: 52.599 ms
Loss rate: 11.61%
```

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

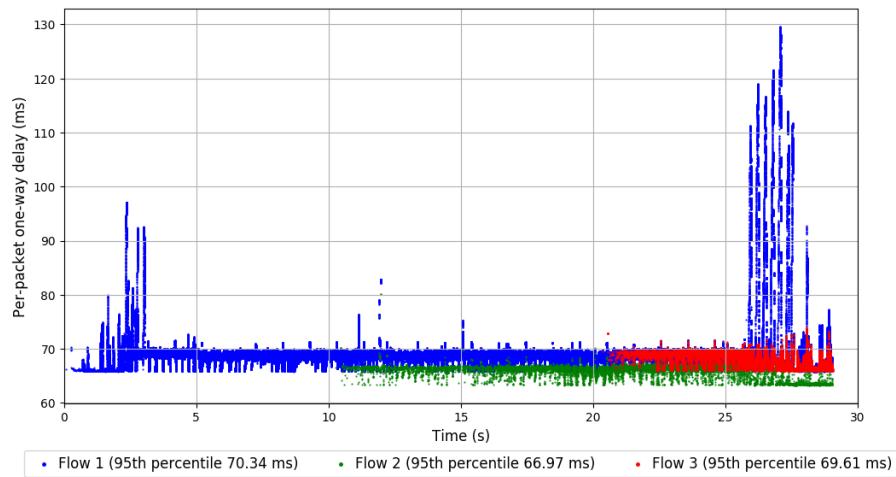
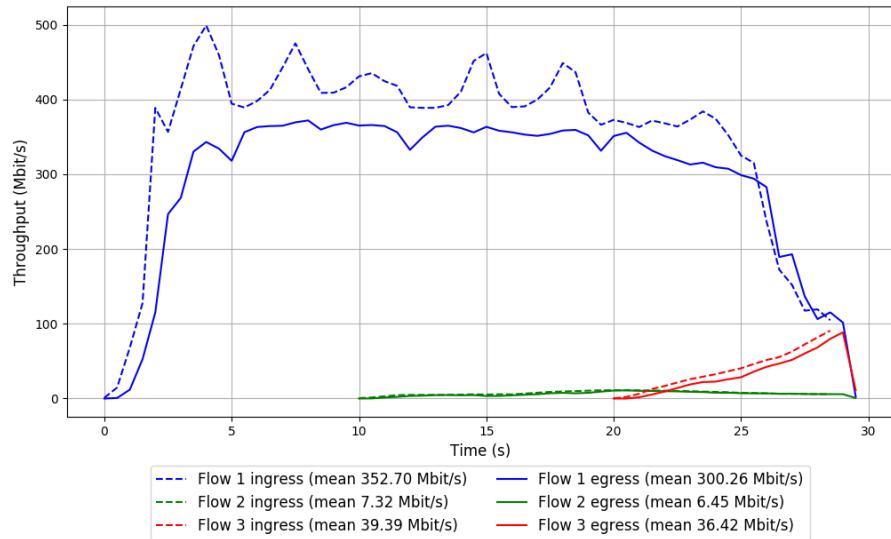


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-03-27 03:45:13
End at: 2019-03-27 03:45:43
Local clock offset: 4.151 ms
Remote clock offset: -35.755 ms

# Below is generated by plot.py at 2019-03-27 04:35:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 315.37 Mbit/s
95th percentile per-packet one-way delay: 70.180 ms
Loss rate: 14.60%
-- Flow 1:
Average throughput: 300.26 Mbit/s
95th percentile per-packet one-way delay: 70.337 ms
Loss rate: 14.87%
-- Flow 2:
Average throughput: 6.45 Mbit/s
95th percentile per-packet one-way delay: 66.971 ms
Loss rate: 11.85%
-- Flow 3:
Average throughput: 36.42 Mbit/s
95th percentile per-packet one-way delay: 69.611 ms
Loss rate: 7.56%
```

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

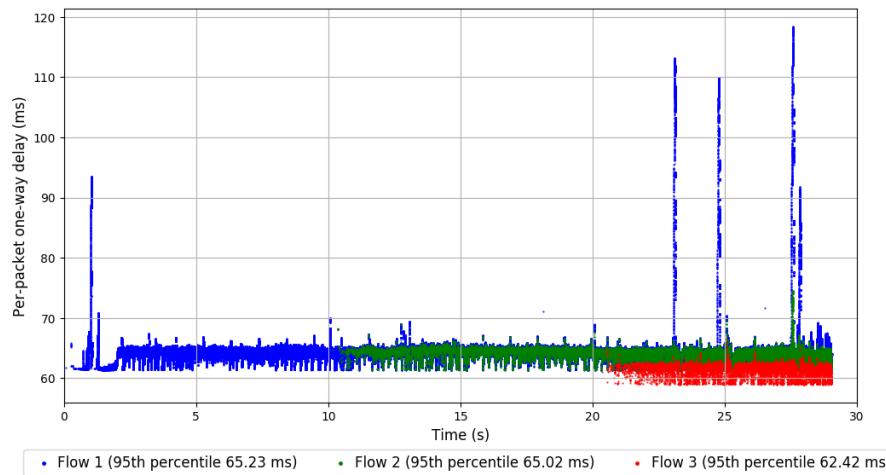
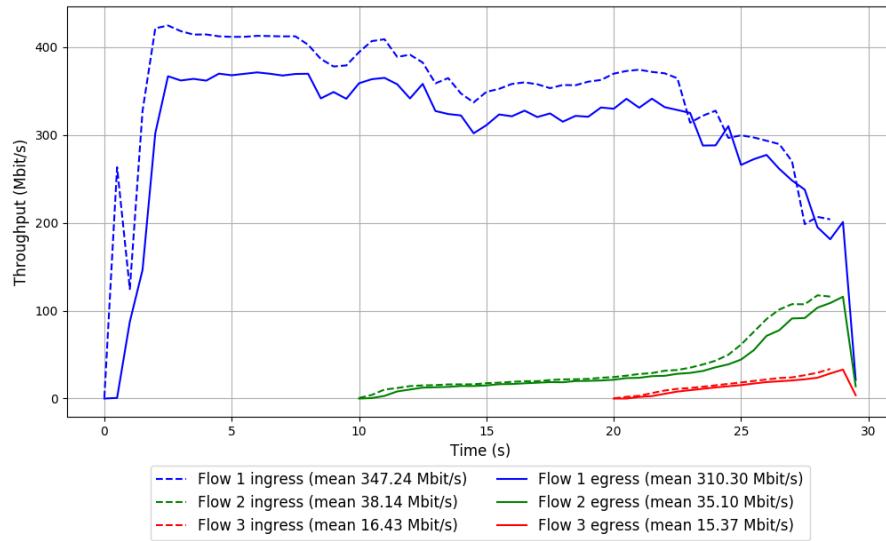


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-03-27 01:37:52
End at: 2019-03-27 01:38:22
Local clock offset: 5.388 ms
Remote clock offset: -40.75 ms

# Below is generated by plot.py at 2019-03-27 04:36:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 337.78 Mbit/s
95th percentile per-packet one-way delay: 65.217 ms
Loss rate: 10.40%
-- Flow 1:
Average throughput: 310.30 Mbit/s
95th percentile per-packet one-way delay: 65.234 ms
Loss rate: 10.63%
-- Flow 2:
Average throughput: 35.10 Mbit/s
95th percentile per-packet one-way delay: 65.019 ms
Loss rate: 7.97%
-- Flow 3:
Average throughput: 15.37 Mbit/s
95th percentile per-packet one-way delay: 62.417 ms
Loss rate: 6.48%
```

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

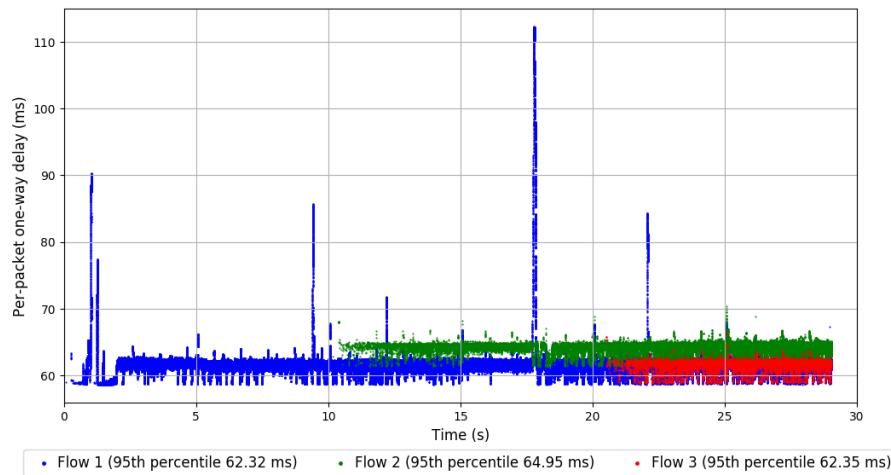
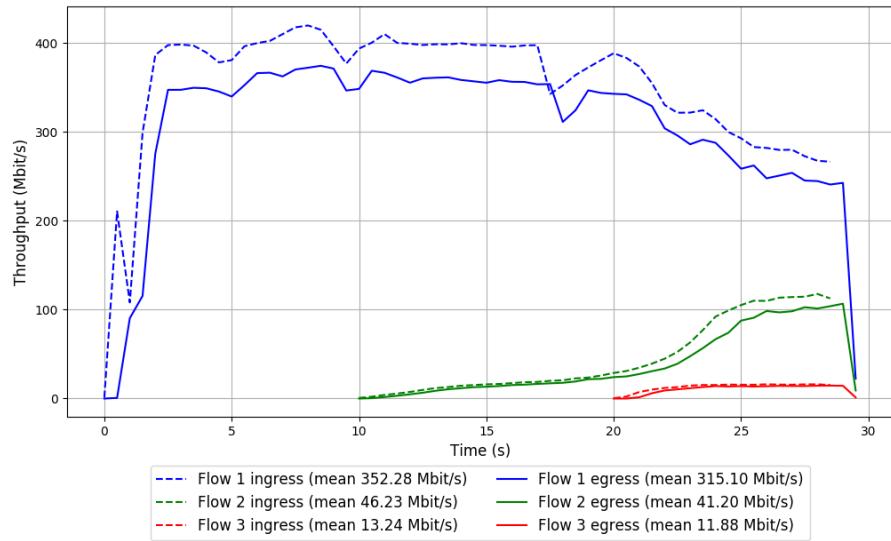


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-03-27 02:20:02
End at: 2019-03-27 02:20:32
Local clock offset: 1.182 ms
Remote clock offset: -40.265 ms

# Below is generated by plot.py at 2019-03-27 04:37:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 345.48 Mbit/s
95th percentile per-packet one-way delay: 64.283 ms
Loss rate: 10.57%
-- Flow 1:
Average throughput: 315.10 Mbit/s
95th percentile per-packet one-way delay: 62.323 ms
Loss rate: 10.54%
-- Flow 2:
Average throughput: 41.20 Mbit/s
95th percentile per-packet one-way delay: 64.949 ms
Loss rate: 10.87%
-- Flow 3:
Average throughput: 11.88 Mbit/s
95th percentile per-packet one-way delay: 62.346 ms
Loss rate: 10.31%
```

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

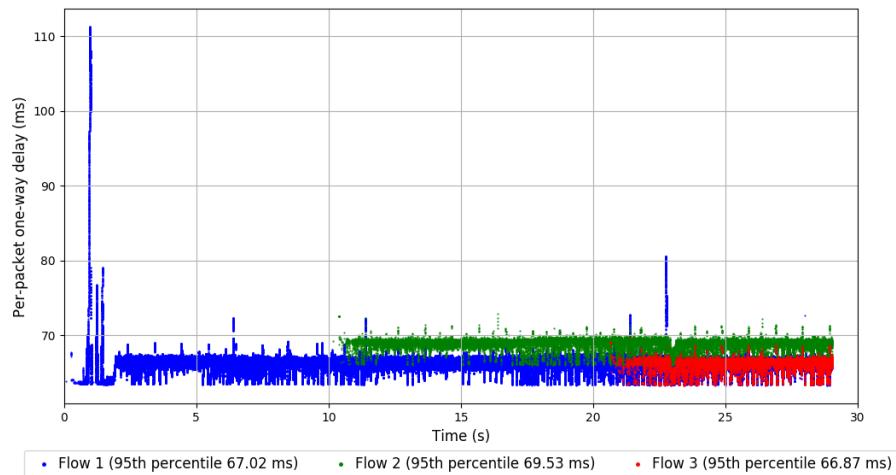
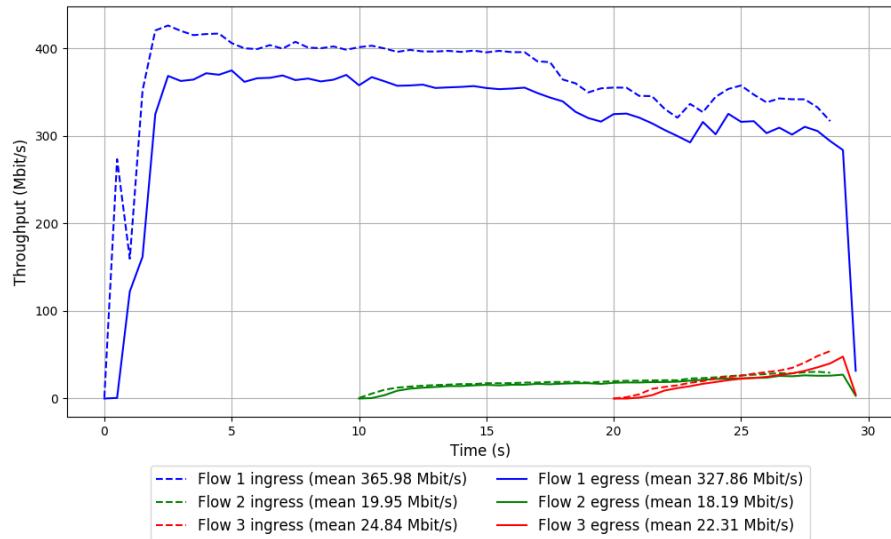


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-03-27 02:56:13
End at: 2019-03-27 02:56:43
Local clock offset: 1.526 ms
Remote clock offset: -34.872 ms

# Below is generated by plot.py at 2019-03-27 04:37:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 346.31 Mbit/s
95th percentile per-packet one-way delay: 67.375 ms
Loss rate: 10.35%
-- Flow 1:
Average throughput: 327.86 Mbit/s
95th percentile per-packet one-way delay: 67.020 ms
Loss rate: 10.41%
-- Flow 2:
Average throughput: 18.19 Mbit/s
95th percentile per-packet one-way delay: 69.529 ms
Loss rate: 8.83%
-- Flow 3:
Average throughput: 22.31 Mbit/s
95th percentile per-packet one-way delay: 66.872 ms
Loss rate: 10.16%
```

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

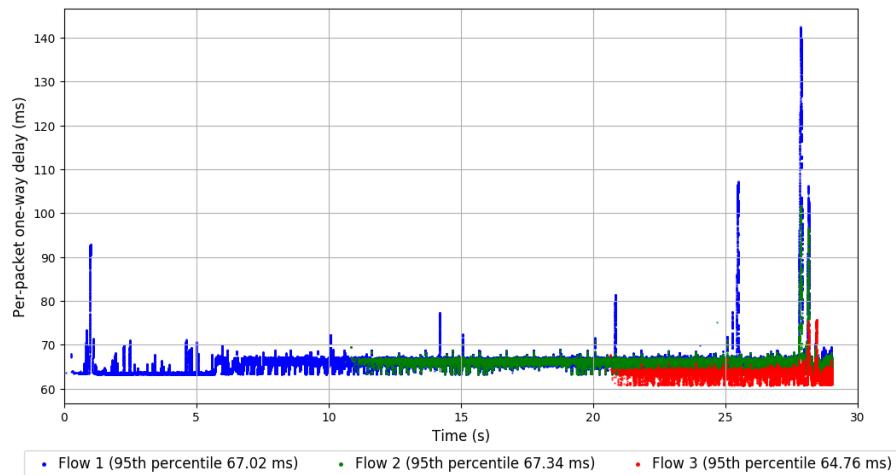
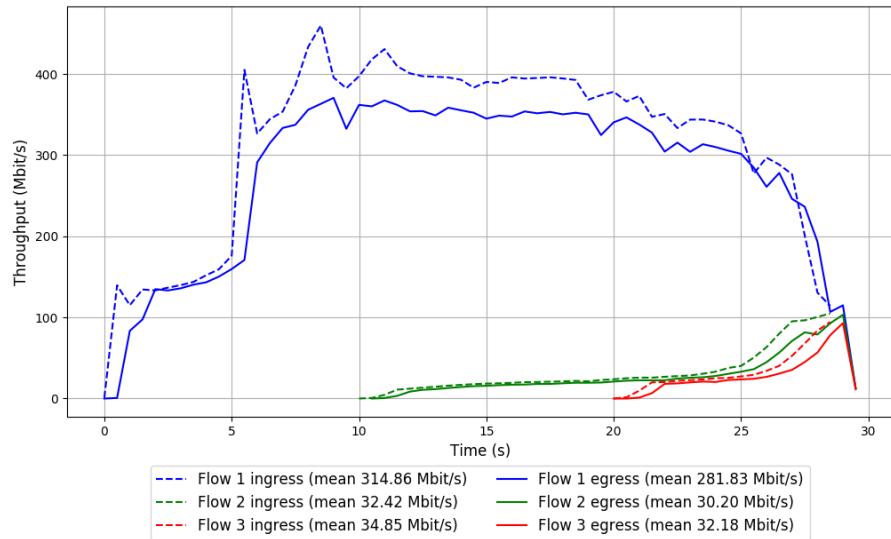


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-03-27 03:37:40
End at: 2019-03-27 03:38:10
Local clock offset: 1.532 ms
Remote clock offset: -40.503 ms

# Below is generated by plot.py at 2019-03-27 04:37:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 310.53 Mbit/s
95th percentile per-packet one-way delay: 67.026 ms
Loss rate: 10.33%
-- Flow 1:
Average throughput: 281.83 Mbit/s
95th percentile per-packet one-way delay: 67.023 ms
Loss rate: 10.48%
-- Flow 2:
Average throughput: 30.20 Mbit/s
95th percentile per-packet one-way delay: 67.343 ms
Loss rate: 9.31%
-- Flow 3:
Average throughput: 32.18 Mbit/s
95th percentile per-packet one-way delay: 64.763 ms
Loss rate: 7.67%
```

Run 4: Report of Indigo-MusesT — Data Link

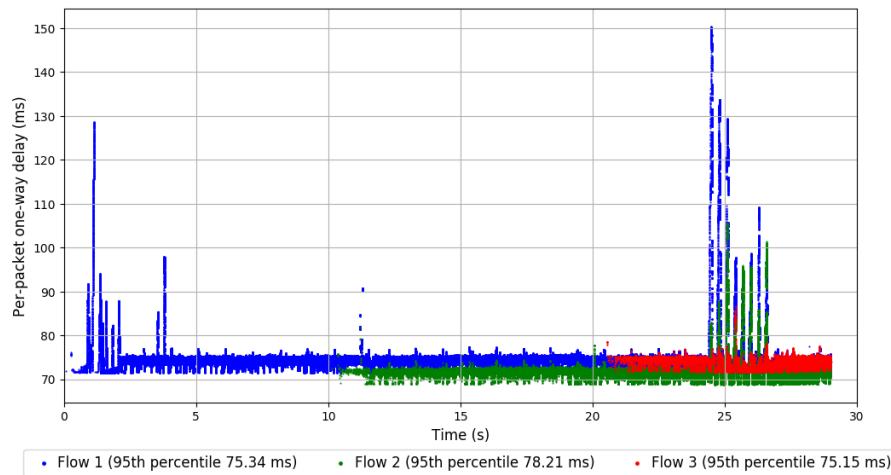
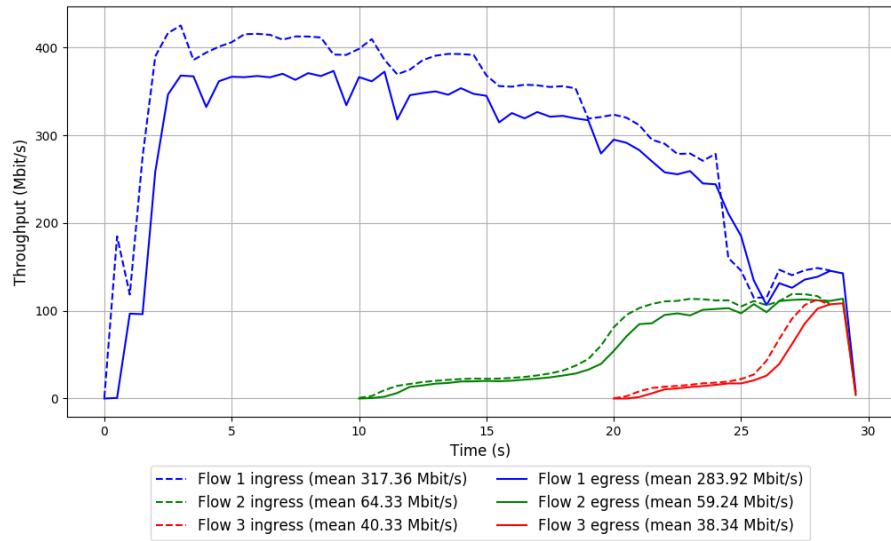


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-03-27 04:09:13
End at: 2019-03-27 04:09:43
Local clock offset: -2.373 ms
Remote clock offset: -31.117 ms

# Below is generated by plot.py at 2019-03-27 04:37:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.00 Mbit/s
95th percentile per-packet one-way delay: 75.354 ms
Loss rate: 10.06%
-- Flow 1:
Average throughput: 283.92 Mbit/s
95th percentile per-packet one-way delay: 75.338 ms
Loss rate: 10.53%
-- Flow 2:
Average throughput: 59.24 Mbit/s
95th percentile per-packet one-way delay: 78.207 ms
Loss rate: 7.91%
-- Flow 3:
Average throughput: 38.34 Mbit/s
95th percentile per-packet one-way delay: 75.148 ms
Loss rate: 4.94%
```

Run 5: Report of Indigo-MusesT — Data Link

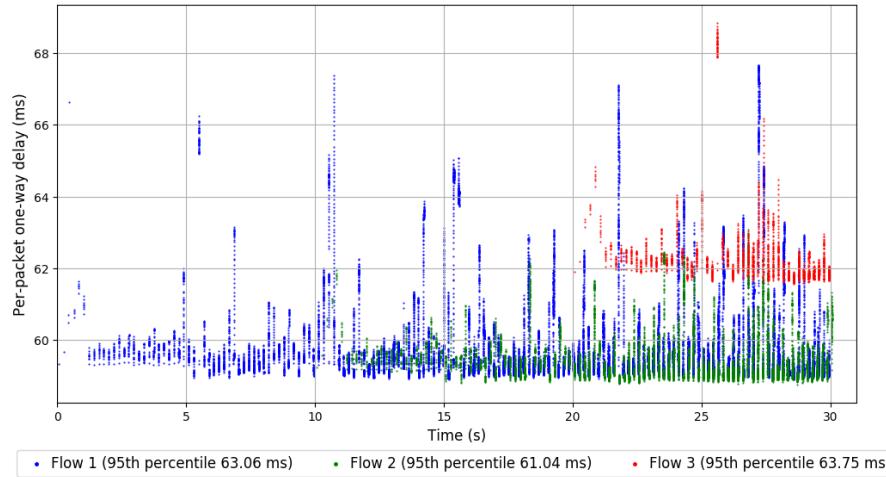
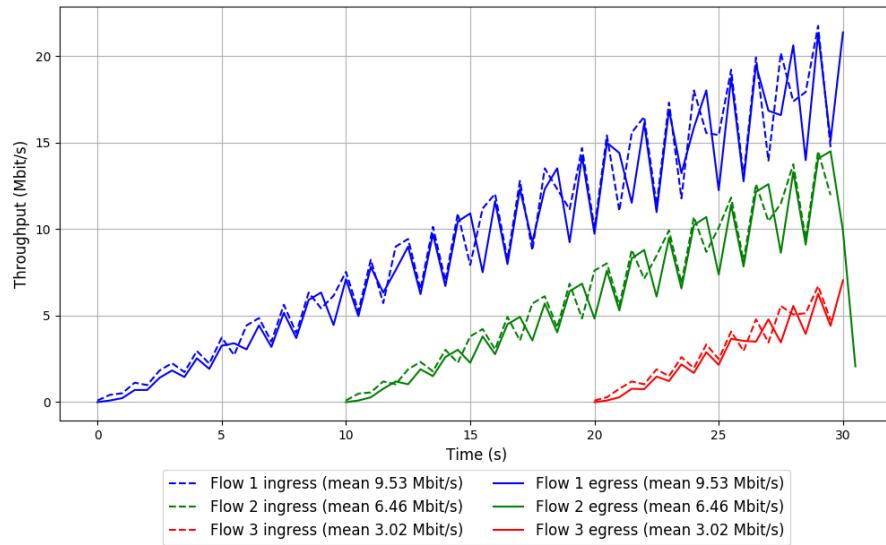


Run 1: Statistics of LEDBAT

```
Start at: 2019-03-27 01:33:41
End at: 2019-03-27 01:34:11
Local clock offset: 5.346 ms
Remote clock offset: -41.007 ms

# Below is generated by plot.py at 2019-03-27 04:37:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.79 Mbit/s
95th percentile per-packet one-way delay: 62.707 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 63.057 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.46 Mbit/s
95th percentile per-packet one-way delay: 61.043 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 63.753 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

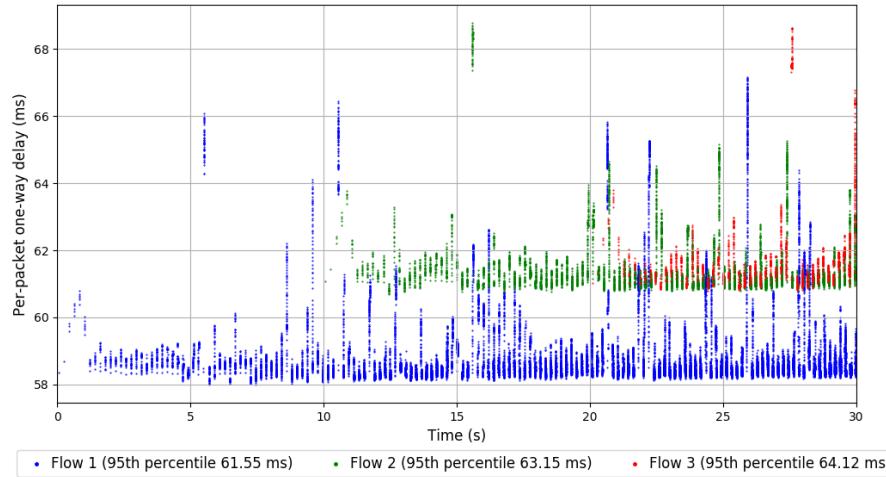
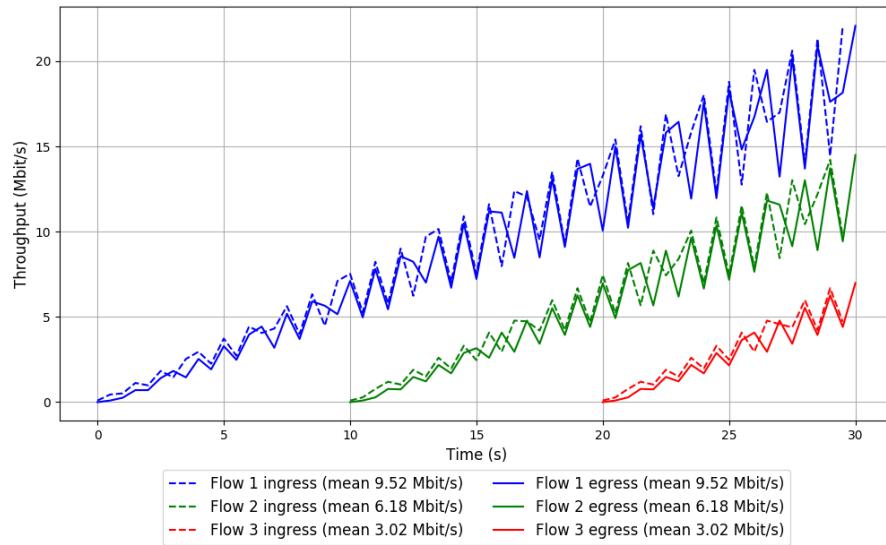


Run 2: Statistics of LEDBAT

```
Start at: 2019-03-27 02:15:47
End at: 2019-03-27 02:16:17
Local clock offset: 0.35 ms
Remote clock offset: -40.298 ms

# Below is generated by plot.py at 2019-03-27 04:37:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.62 Mbit/s
95th percentile per-packet one-way delay: 62.623 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.52 Mbit/s
95th percentile per-packet one-way delay: 61.548 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.18 Mbit/s
95th percentile per-packet one-way delay: 63.154 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 64.119 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

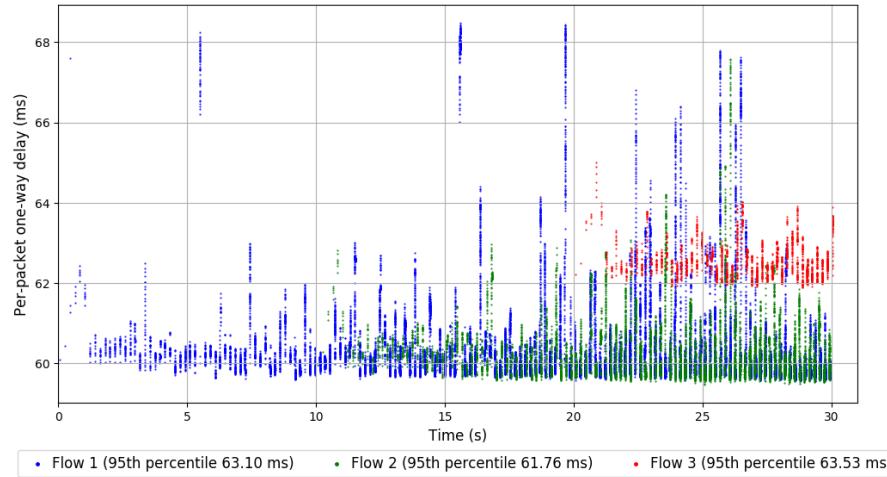
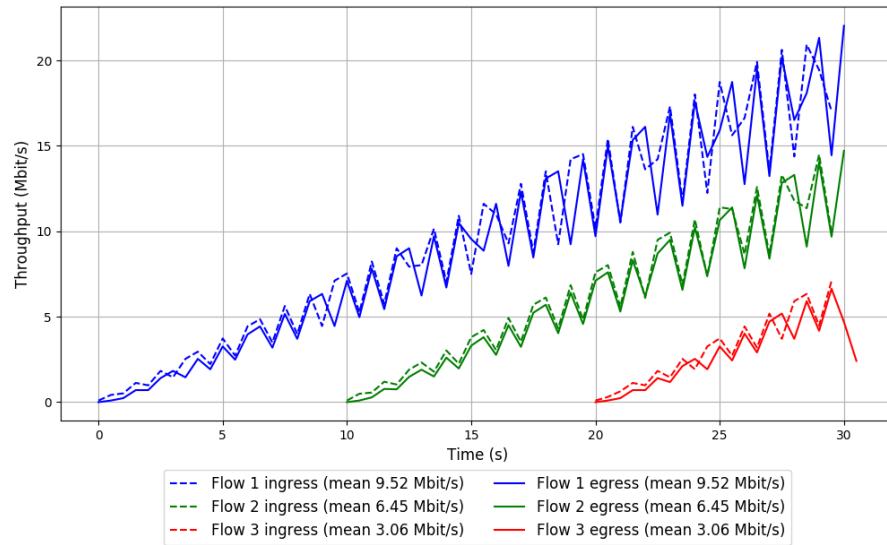


Run 3: Statistics of LEDBAT

```
Start at: 2019-03-27 02:51:59
End at: 2019-03-27 02:52:29
Local clock offset: 2.146 ms
Remote clock offset: -38.887 ms

# Below is generated by plot.py at 2019-03-27 04:37:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.79 Mbit/s
95th percentile per-packet one-way delay: 62.957 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.52 Mbit/s
95th percentile per-packet one-way delay: 63.099 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.45 Mbit/s
95th percentile per-packet one-way delay: 61.760 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 63.535 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

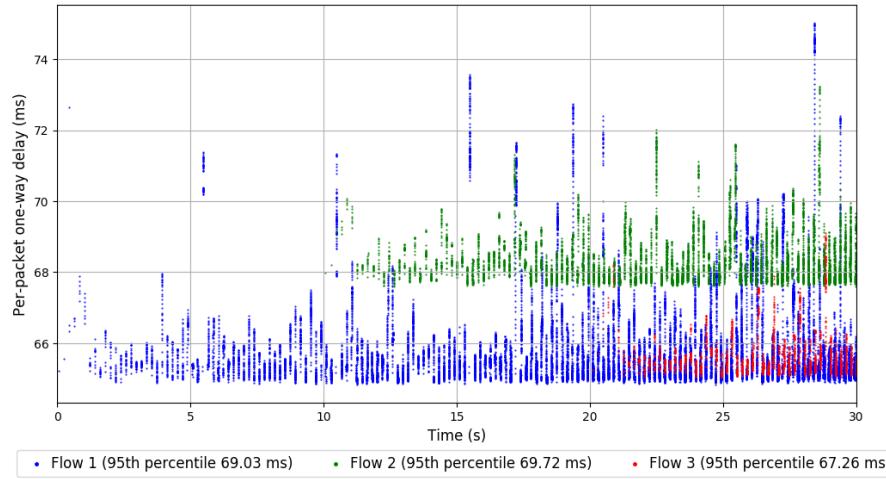
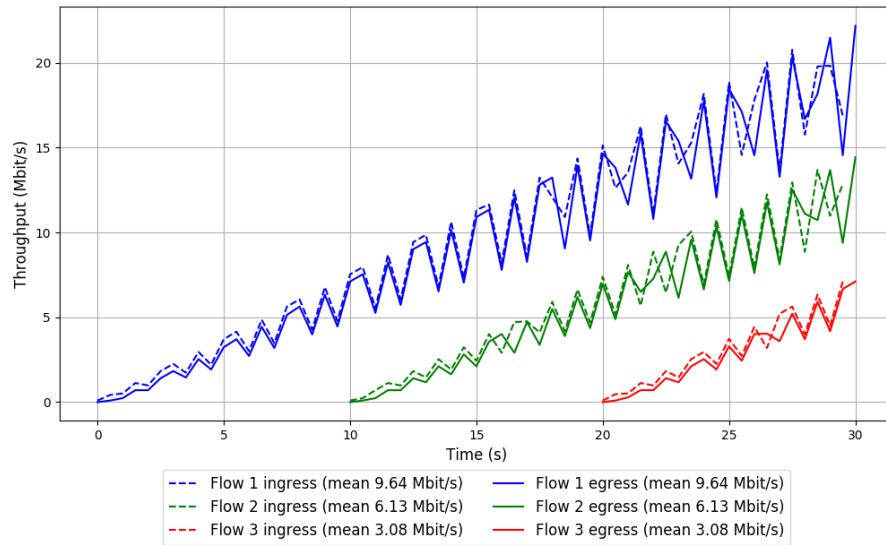


Run 4: Statistics of LEDBAT

```
Start at: 2019-03-27 03:28:01
End at: 2019-03-27 03:28:31
Local clock offset: 1.535 ms
Remote clock offset: -35.395 ms

# Below is generated by plot.py at 2019-03-27 04:37:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.72 Mbit/s
95th percentile per-packet one-way delay: 69.372 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.64 Mbit/s
95th percentile per-packet one-way delay: 69.028 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.13 Mbit/s
95th percentile per-packet one-way delay: 69.716 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 67.260 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

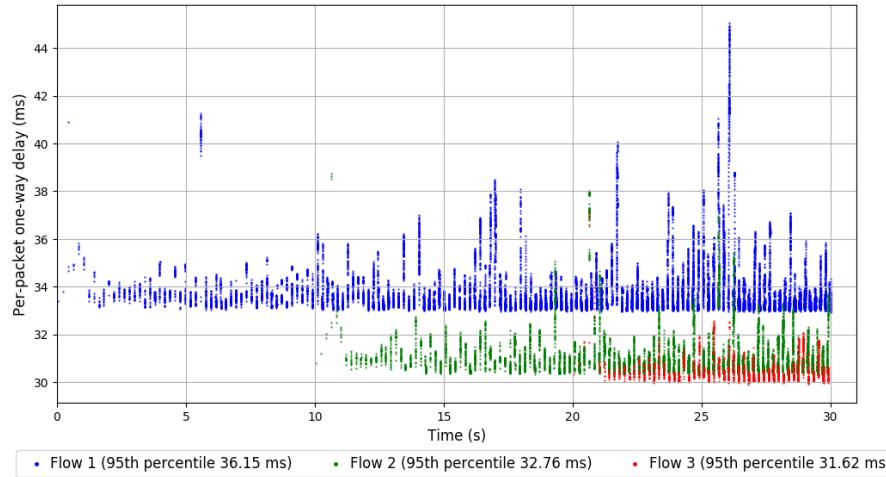
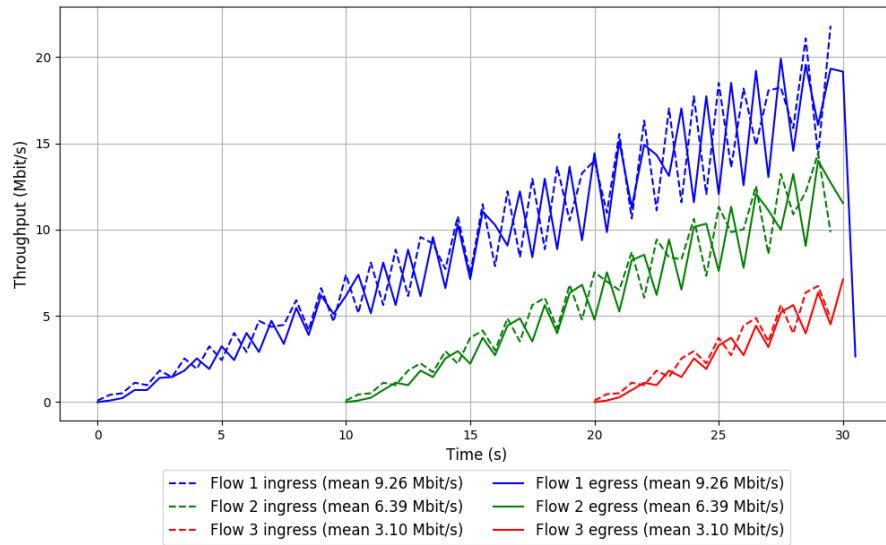


Run 5: Statistics of LEDBAT

```
Start at: 2019-03-27 04:04:27
End at: 2019-03-27 04:04:57
Local clock offset: 33.624 ms
Remote clock offset: -34.114 ms

# Below is generated by plot.py at 2019-03-27 04:37:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.51 Mbit/s
95th percentile per-packet one-way delay: 35.535 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.26 Mbit/s
95th percentile per-packet one-way delay: 36.148 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 32.757 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 31.616 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

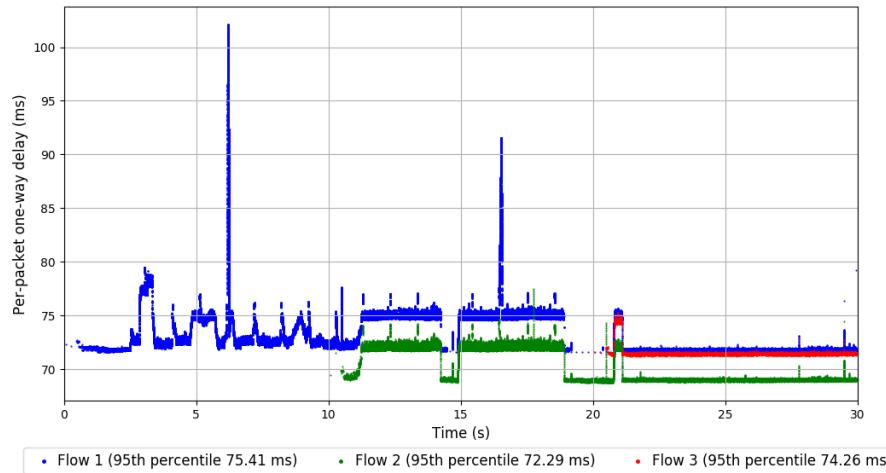
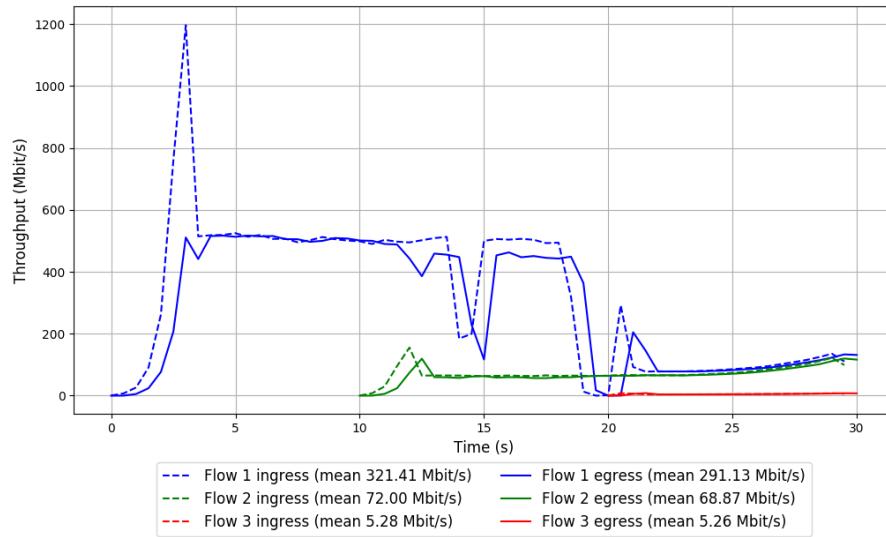


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-03-27 01:36:20
End at: 2019-03-27 01:36:50
Local clock offset: 5.413 ms
Remote clock offset: -30.641 ms

# Below is generated by plot.py at 2019-03-27 04:38:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.65 Mbit/s
95th percentile per-packet one-way delay: 75.341 ms
Loss rate: 8.70%
-- Flow 1:
Average throughput: 291.13 Mbit/s
95th percentile per-packet one-way delay: 75.414 ms
Loss rate: 9.40%
-- Flow 2:
Average throughput: 68.87 Mbit/s
95th percentile per-packet one-way delay: 72.288 ms
Loss rate: 4.34%
-- Flow 3:
Average throughput: 5.26 Mbit/s
95th percentile per-packet one-way delay: 74.259 ms
Loss rate: 0.45%
```

Run 1: Report of PCC-Allegro — Data Link

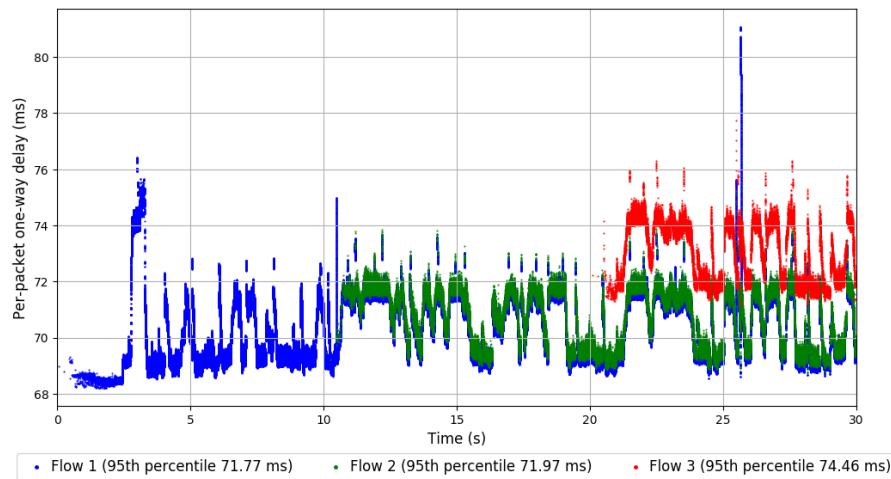
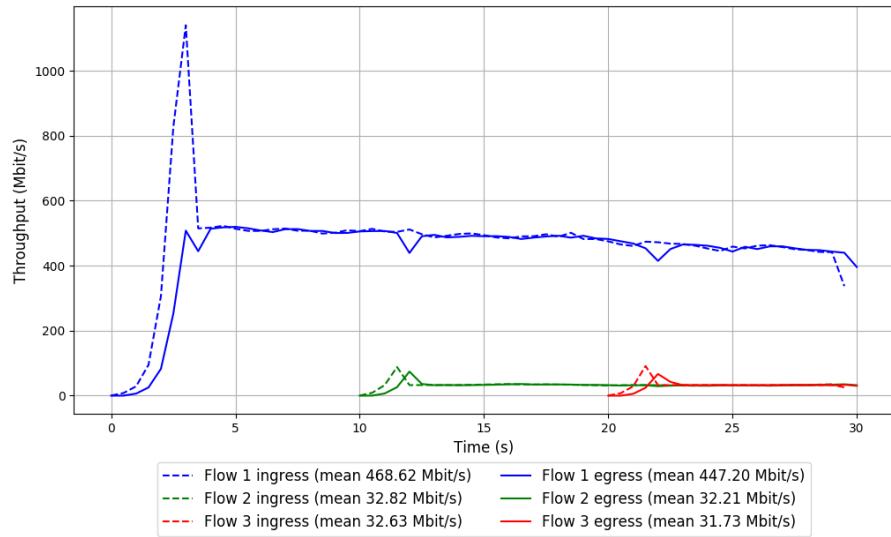


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-03-27 02:18:26
End at: 2019-03-27 02:18:56
Local clock offset: 1.374 ms
Remote clock offset: -29.778 ms

# Below is generated by plot.py at 2019-03-27 04:40:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 479.04 Mbit/s
95th percentile per-packet one-way delay: 71.947 ms
Loss rate: 4.41%
-- Flow 1:
Average throughput: 447.20 Mbit/s
95th percentile per-packet one-way delay: 71.769 ms
Loss rate: 4.57%
-- Flow 2:
Average throughput: 32.21 Mbit/s
95th percentile per-packet one-way delay: 71.971 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 31.73 Mbit/s
95th percentile per-packet one-way delay: 74.463 ms
Loss rate: 2.76%
```

Run 2: Report of PCC-Allegro — Data Link

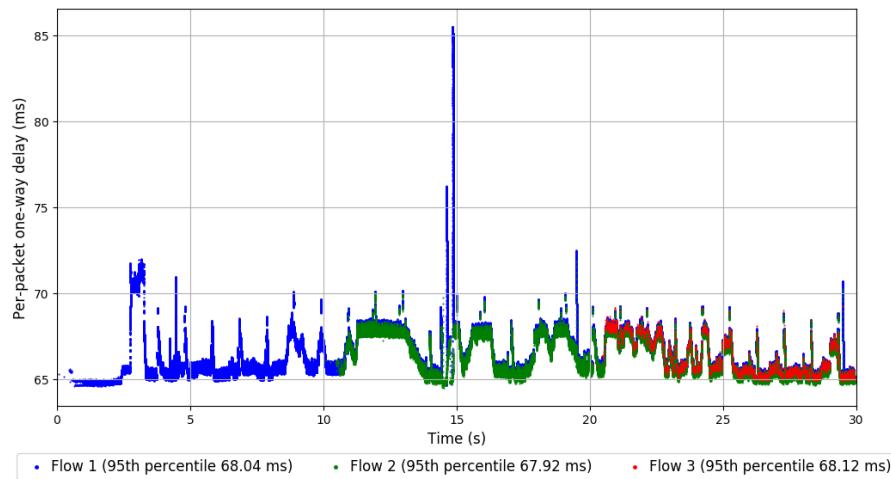
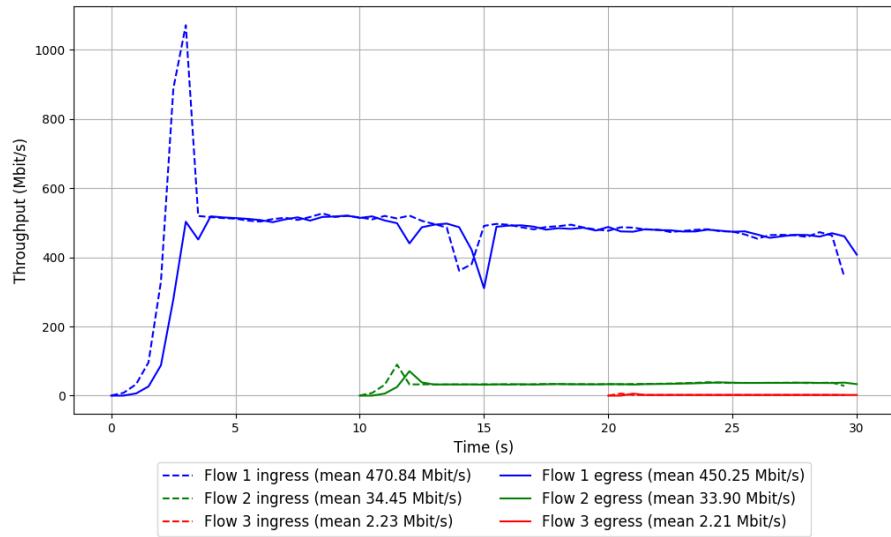


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-03-27 02:54:38
End at: 2019-03-27 02:55:08
Local clock offset: 1.786 ms
Remote clock offset: -33.393 ms

# Below is generated by plot.py at 2019-03-27 04:41:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 473.52 Mbit/s
95th percentile per-packet one-way delay: 68.033 ms
Loss rate: 4.24%
-- Flow 1:
Average throughput: 450.25 Mbit/s
95th percentile per-packet one-way delay: 68.039 ms
Loss rate: 4.37%
-- Flow 2:
Average throughput: 33.90 Mbit/s
95th percentile per-packet one-way delay: 67.922 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 68.120 ms
Loss rate: 0.64%
```

Run 3: Report of PCC-Allegro — Data Link

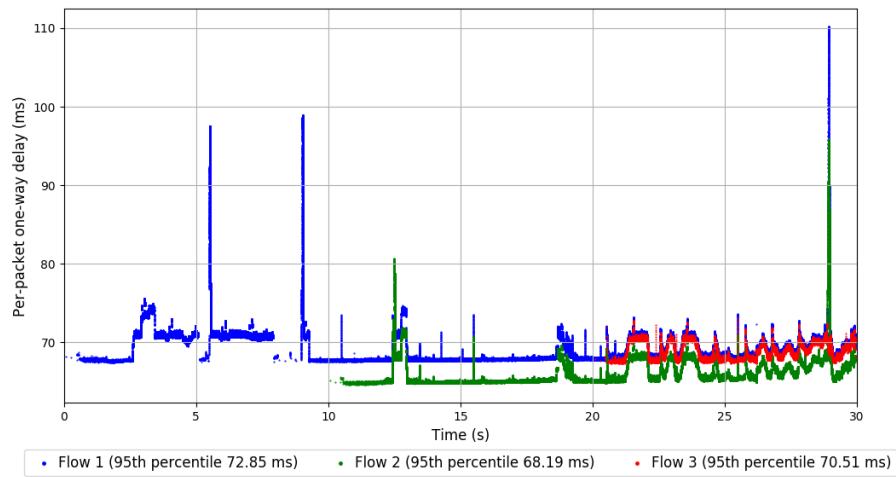
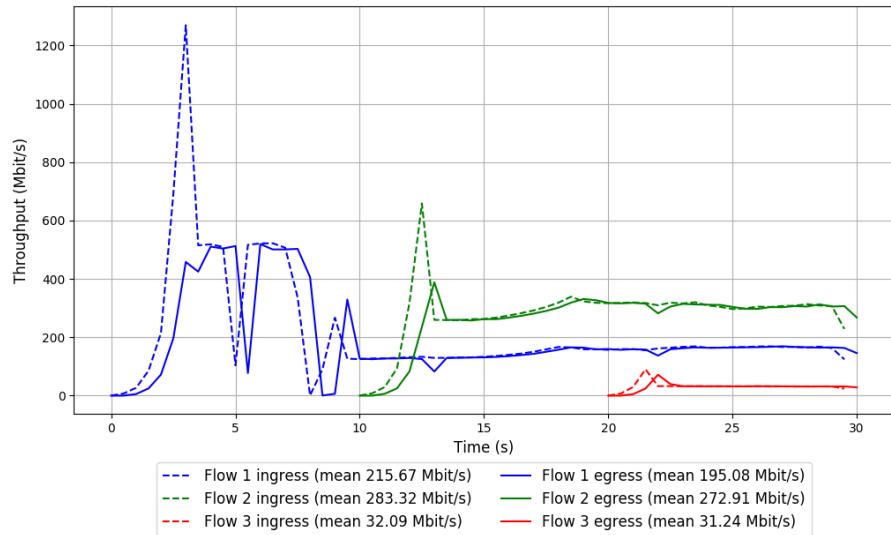


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-03-27 03:30:40
End at: 2019-03-27 03:31:10
Local clock offset: 2.834 ms
Remote clock offset: -34.684 ms

# Below is generated by plot.py at 2019-03-27 04:41:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 386.86 Mbit/s
95th percentile per-packet one-way delay: 71.083 ms
Loss rate: 6.70%
-- Flow 1:
Average throughput: 195.08 Mbit/s
95th percentile per-packet one-way delay: 72.849 ms
Loss rate: 9.55%
-- Flow 2:
Average throughput: 272.91 Mbit/s
95th percentile per-packet one-way delay: 68.190 ms
Loss rate: 3.66%
-- Flow 3:
Average throughput: 31.24 Mbit/s
95th percentile per-packet one-way delay: 70.507 ms
Loss rate: 2.63%
```

Run 4: Report of PCC-Allegro — Data Link

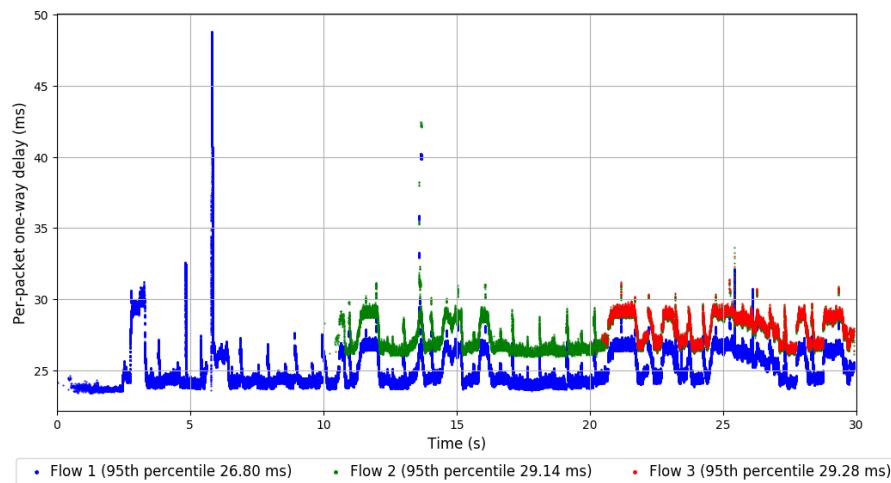
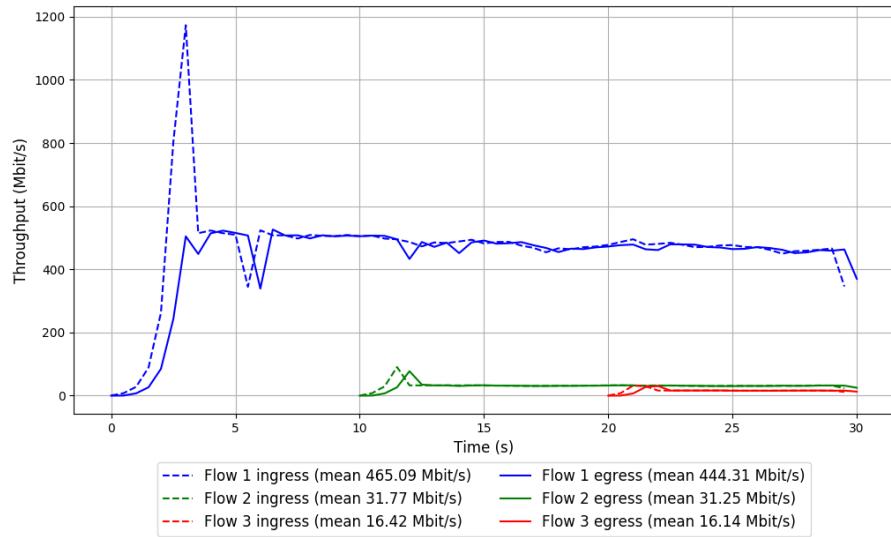


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-03-27 04:07:11
End at: 2019-03-27 04:07:41
Local clock offset: 34.161 ms
Remote clock offset: -40.275 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 470.40 Mbit/s
95th percentile per-packet one-way delay: 27.808 ms
Loss rate: 4.31%
-- Flow 1:
Average throughput: 444.31 Mbit/s
95th percentile per-packet one-way delay: 26.803 ms
Loss rate: 4.46%
-- Flow 2:
Average throughput: 31.25 Mbit/s
95th percentile per-packet one-way delay: 29.138 ms
Loss rate: 1.65%
-- Flow 3:
Average throughput: 16.14 Mbit/s
95th percentile per-packet one-way delay: 29.280 ms
Loss rate: 1.71%
```

Run 5: Report of PCC-Allegro — Data Link

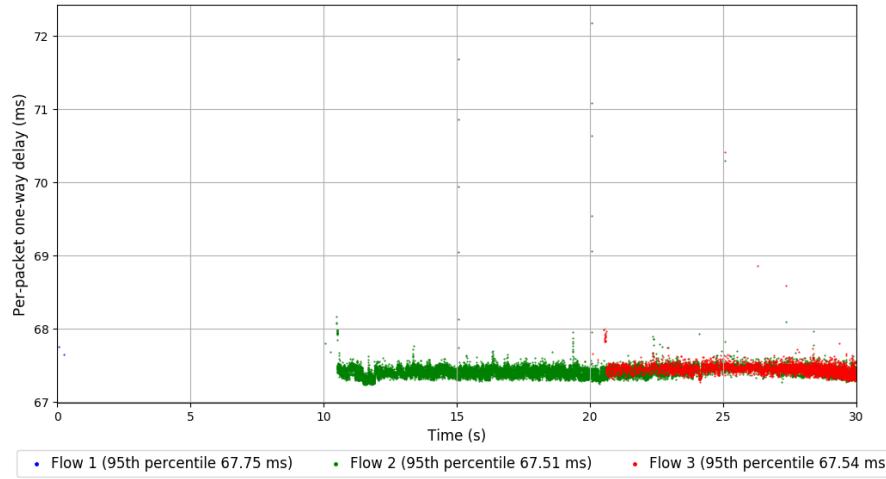
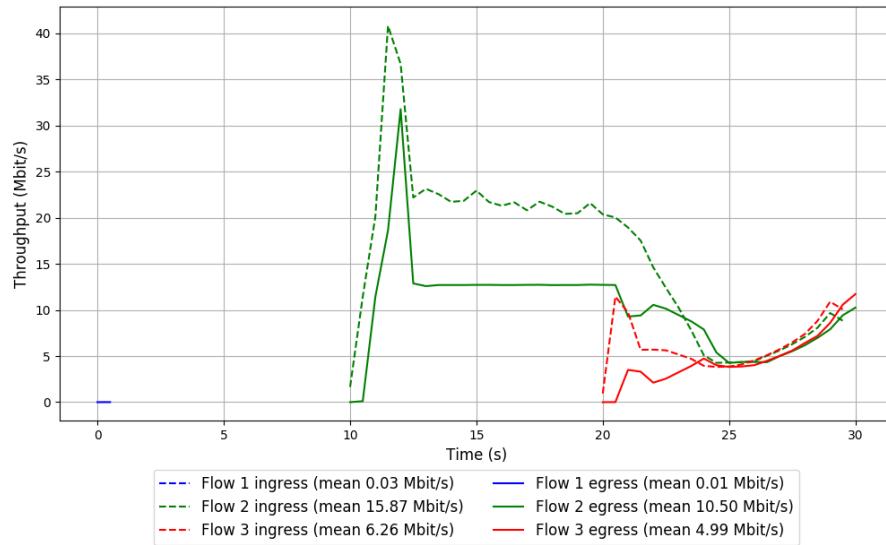


Run 1: Statistics of PCC-Expr

```
Start at: 2019-03-27 01:22:35
End at: 2019-03-27 01:23:05
Local clock offset: 5.813 ms
Remote clock offset: -35.23 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.63 Mbit/s
95th percentile per-packet one-way delay: 67.516 ms
Loss rate: 31.61%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 67.751 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.50 Mbit/s
95th percentile per-packet one-way delay: 67.508 ms
Loss rate: 33.84%
-- Flow 3:
Average throughput: 4.99 Mbit/s
95th percentile per-packet one-way delay: 67.541 ms
Loss rate: 20.23%
```

Run 1: Report of PCC-Expr — Data Link

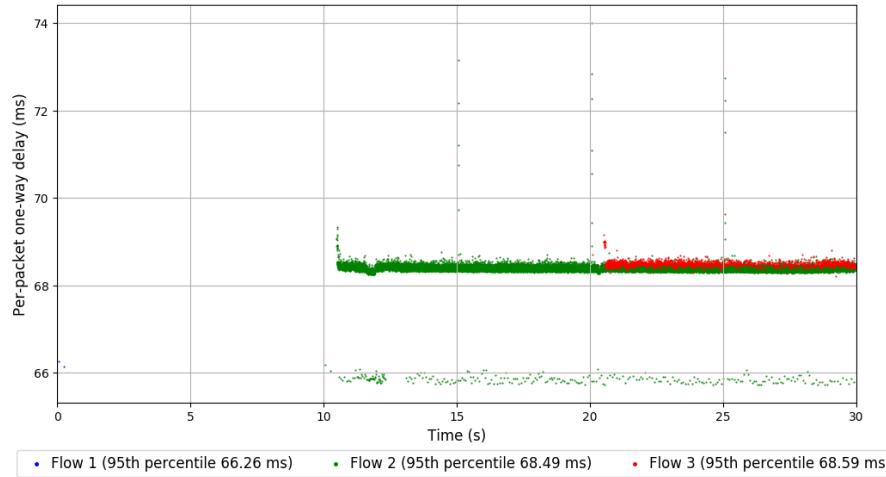
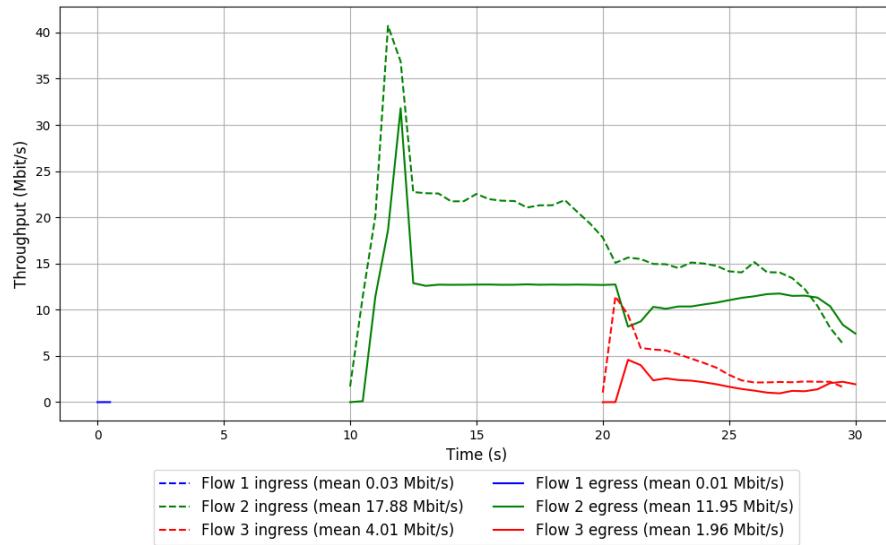


Run 2: Statistics of PCC-Expr

```
Start at: 2019-03-27 02:04:15
End at: 2019-03-27 02:04:45
Local clock offset: 0.408 ms
Remote clock offset: -33.214 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 68.515 ms
Loss rate: 34.96%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 66.258 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 11.95 Mbit/s
95th percentile per-packet one-way delay: 68.491 ms
Loss rate: 33.16%
-- Flow 3:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 68.586 ms
Loss rate: 51.16%
```

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

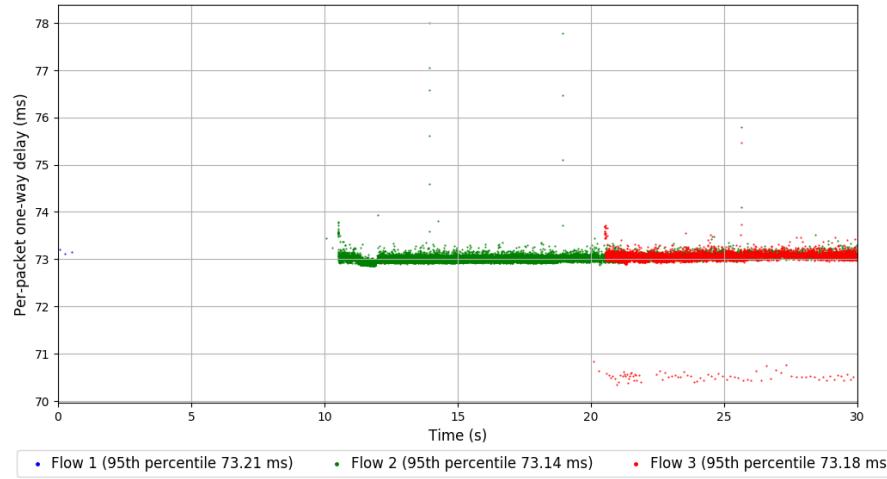
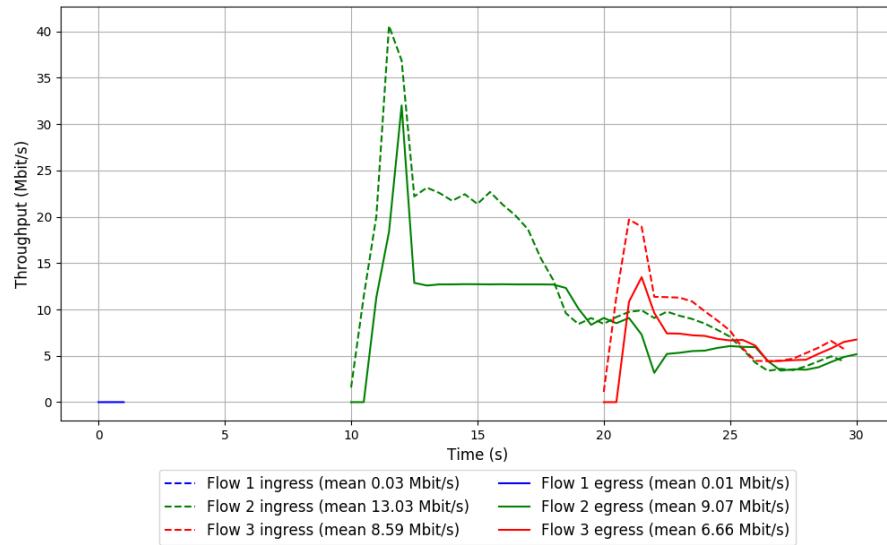


Run 3: Statistics of PCC-Expr

```
Start at: 2019-03-27 02:40:49
End at: 2019-03-27 02:41:19
Local clock offset: 1.906 ms
Remote clock offset: -30.158 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.23 Mbit/s
95th percentile per-packet one-way delay: 73.155 ms
Loss rate: 28.47%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 73.211 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 9.07 Mbit/s
95th percentile per-packet one-way delay: 73.142 ms
Loss rate: 30.44%
-- Flow 3:
Average throughput: 6.66 Mbit/s
95th percentile per-packet one-way delay: 73.181 ms
Loss rate: 22.42%
```

Run 3: Report of PCC-Expr — Data Link

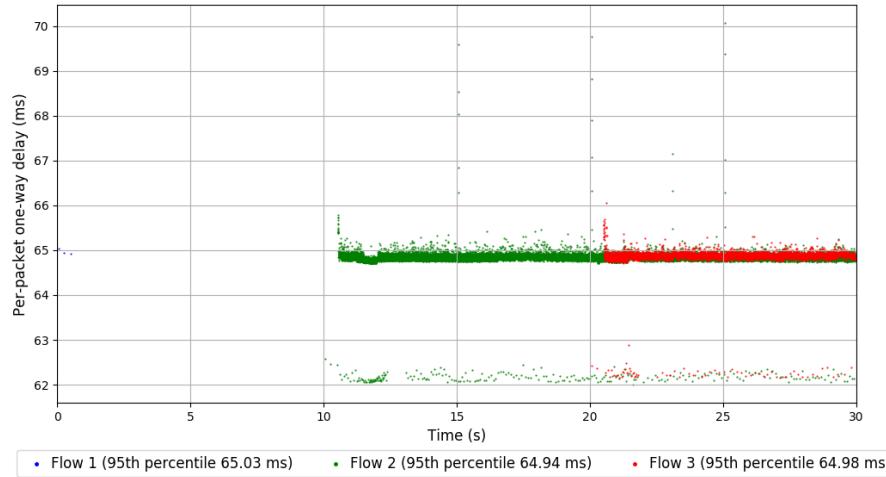
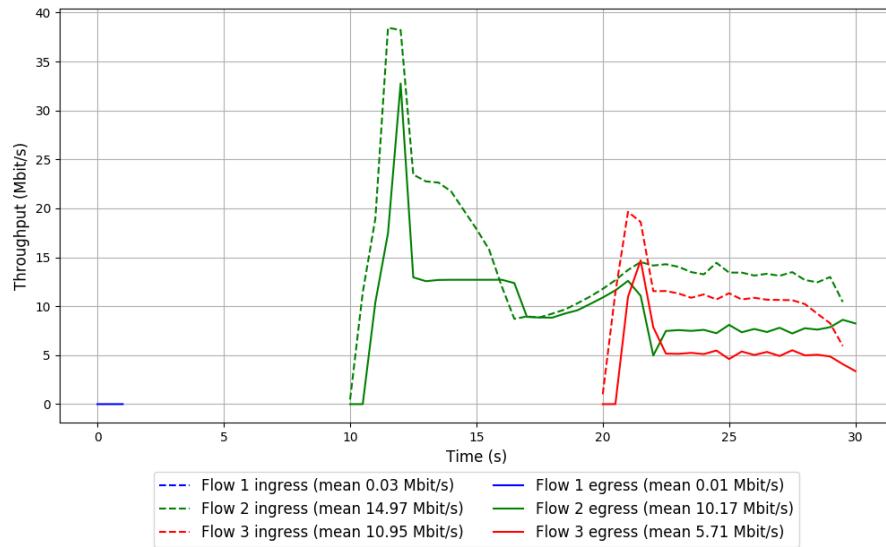


Run 4: Statistics of PCC-Expr

```
Start at: 2019-03-27 03:11:21
End at: 2019-03-27 03:11:51
Local clock offset: 1.738 ms
Remote clock offset: -34.38 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.65 Mbit/s
95th percentile per-packet one-way delay: 64.957 ms
Loss rate: 36.26%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 65.034 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 10.17 Mbit/s
95th percentile per-packet one-way delay: 64.945 ms
Loss rate: 32.03%
-- Flow 3:
Average throughput: 5.71 Mbit/s
95th percentile per-packet one-way delay: 64.976 ms
Loss rate: 47.87%
```

Run 4: Report of PCC-Expr — Data Link

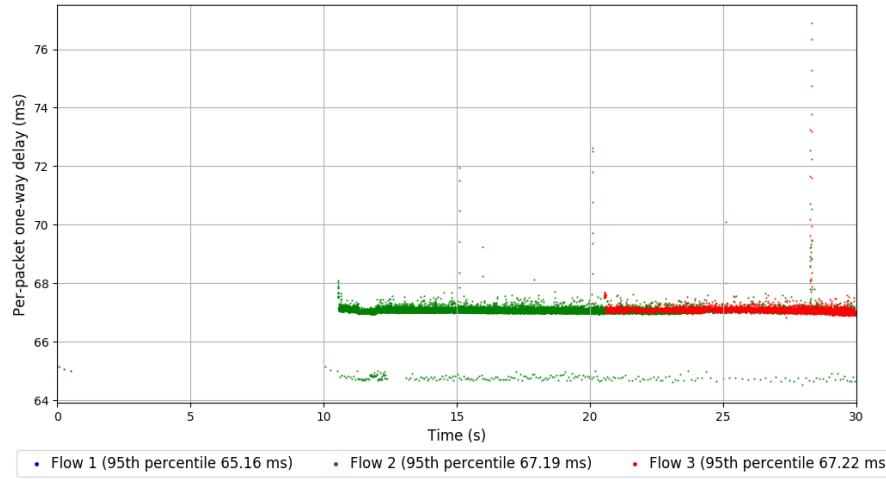
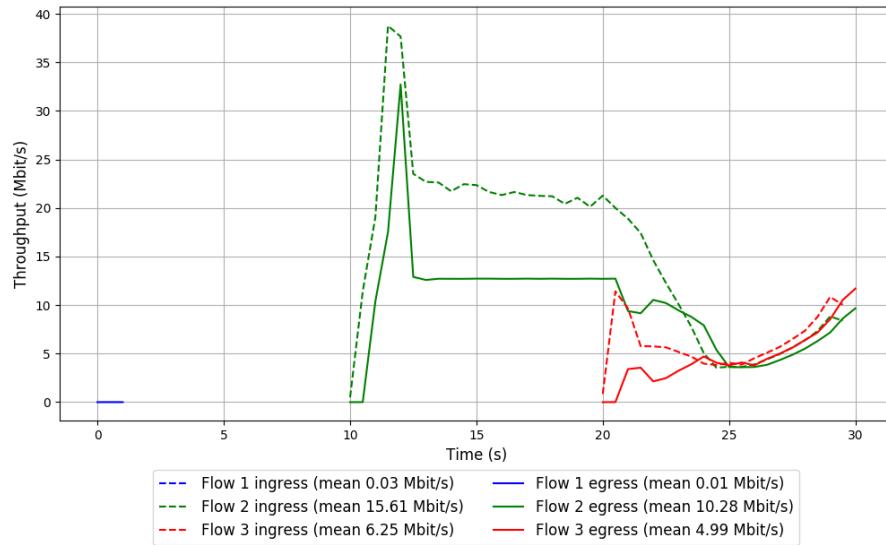


Run 5: Statistics of PCC-Expr

```
Start at: 2019-03-27 03:52:57
End at: 2019-03-27 03:53:27
Local clock offset: 0.744 ms
Remote clock offset: -35.023 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 67.199 ms
Loss rate: 31.84%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 65.162 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 10.28 Mbit/s
95th percentile per-packet one-way delay: 67.195 ms
Loss rate: 34.16%
-- Flow 3:
Average throughput: 4.99 Mbit/s
95th percentile per-packet one-way delay: 67.218 ms
Loss rate: 20.19%
```

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

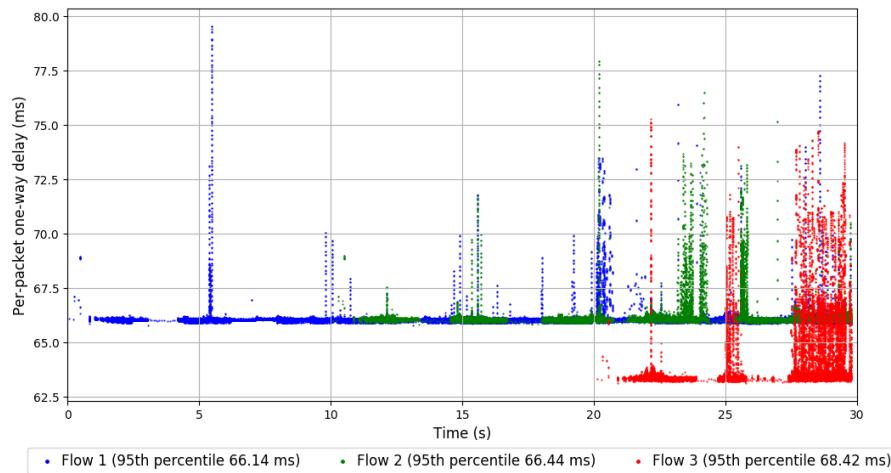
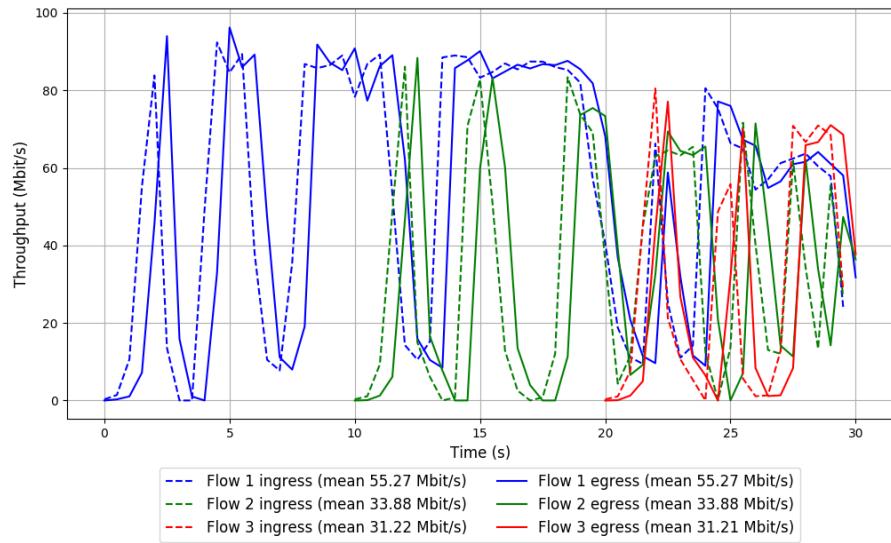


Run 1: Statistics of QUIC Cubic

```
Start at: 2019-03-27 01:29:26
End at: 2019-03-27 01:29:56
Local clock offset: 4.435 ms
Remote clock offset: -37.599 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.86 Mbit/s
95th percentile per-packet one-way delay: 66.235 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.27 Mbit/s
95th percentile per-packet one-way delay: 66.141 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 33.88 Mbit/s
95th percentile per-packet one-way delay: 66.441 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.21 Mbit/s
95th percentile per-packet one-way delay: 68.424 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link

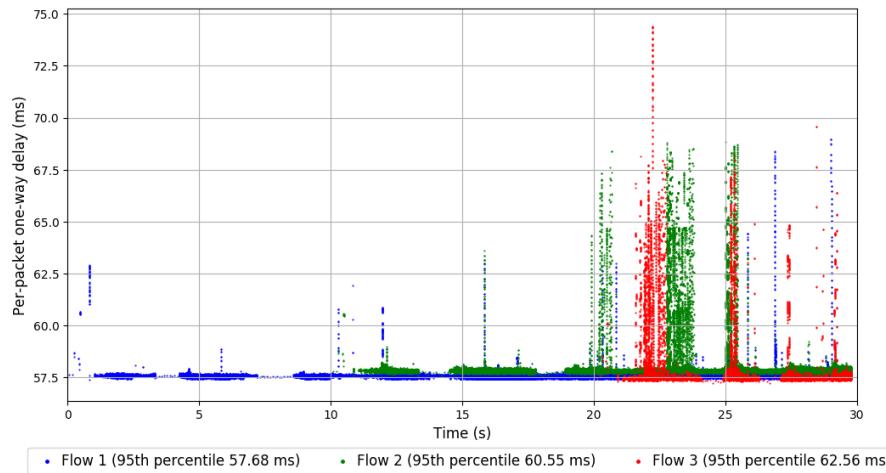
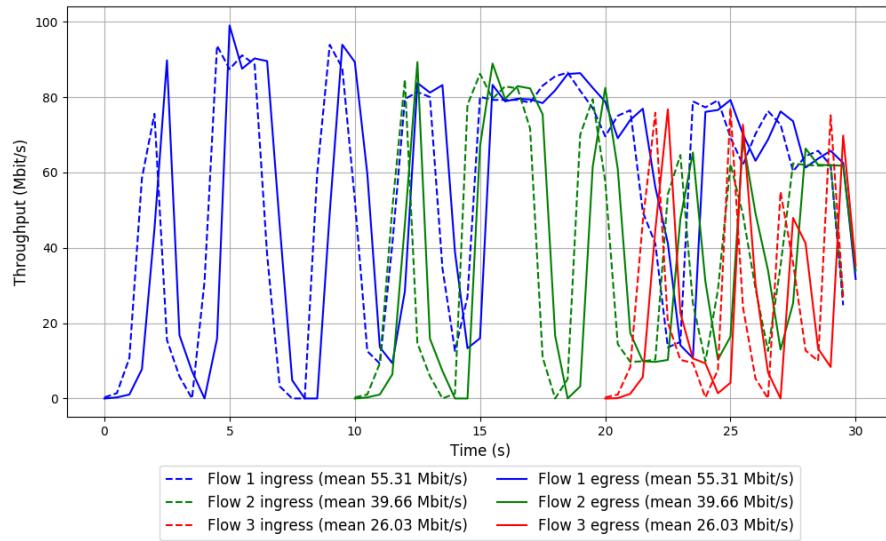


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-03-27 02:11:32
End at: 2019-03-27 02:12:02
Local clock offset: 1.596 ms
Remote clock offset: -39.874 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.05 Mbit/s
95th percentile per-packet one-way delay: 57.980 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.31 Mbit/s
95th percentile per-packet one-way delay: 57.680 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.66 Mbit/s
95th percentile per-packet one-way delay: 60.555 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 26.03 Mbit/s
95th percentile per-packet one-way delay: 62.559 ms
Loss rate: 0.00%
```

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

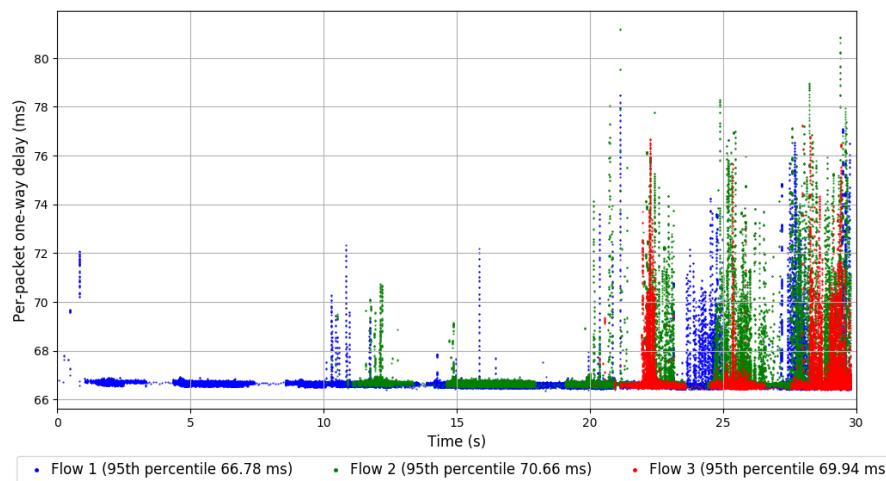
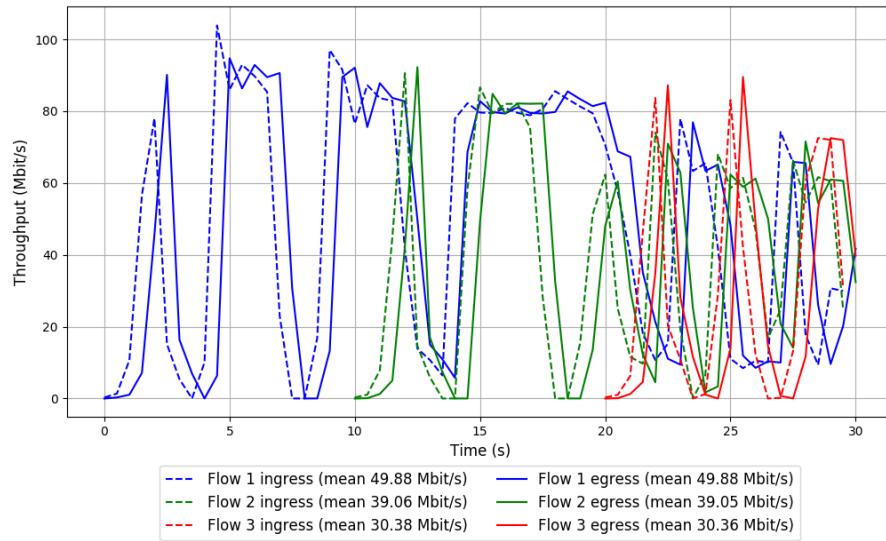


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-03-27 02:47:45
End at: 2019-03-27 02:48:15
Local clock offset: 2.922 ms
Remote clock offset: -34.691 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.60 Mbit/s
95th percentile per-packet one-way delay: 68.863 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 49.88 Mbit/s
95th percentile per-packet one-way delay: 66.777 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.05 Mbit/s
95th percentile per-packet one-way delay: 70.663 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 30.36 Mbit/s
95th percentile per-packet one-way delay: 69.937 ms
Loss rate: 0.07%
```

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

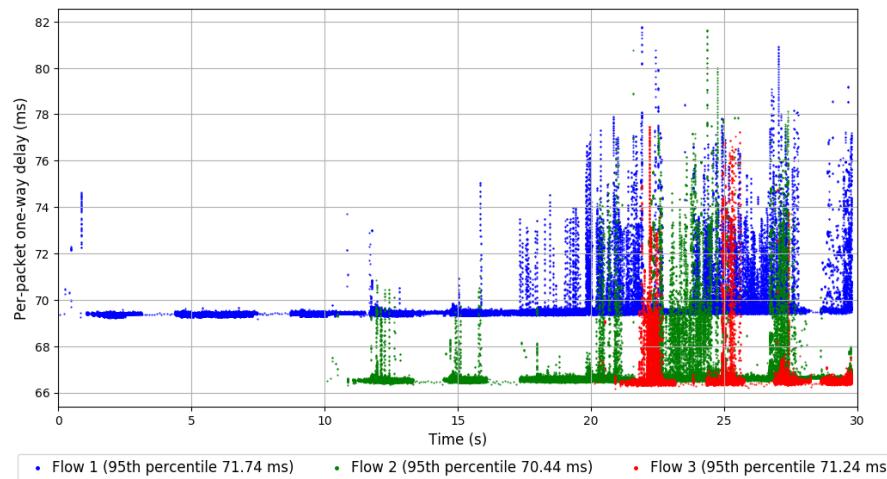
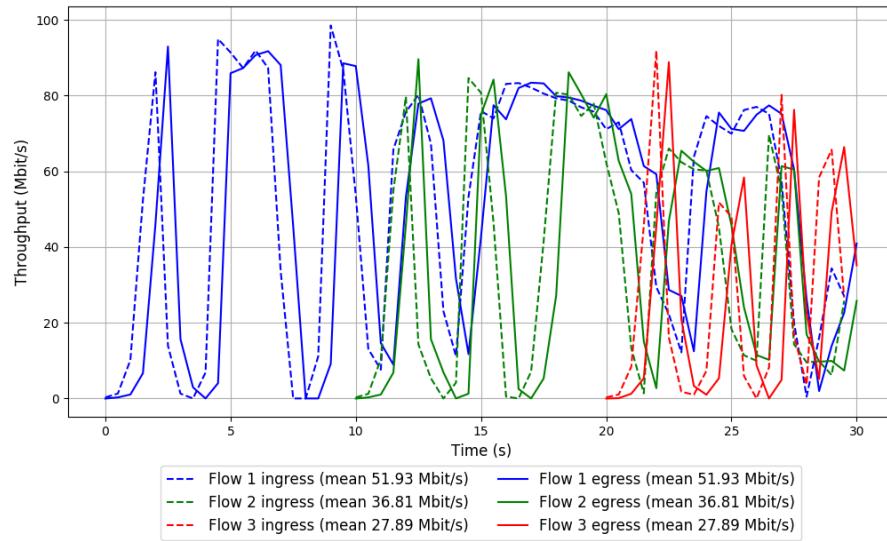


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-03-27 03:18:14
End at: 2019-03-27 03:18:44
Local clock offset: 0.296 ms
Remote clock offset: -32.463 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.40 Mbit/s
95th percentile per-packet one-way delay: 71.462 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.93 Mbit/s
95th percentile per-packet one-way delay: 71.742 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.81 Mbit/s
95th percentile per-packet one-way delay: 70.443 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.89 Mbit/s
95th percentile per-packet one-way delay: 71.236 ms
Loss rate: 0.00%
```

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

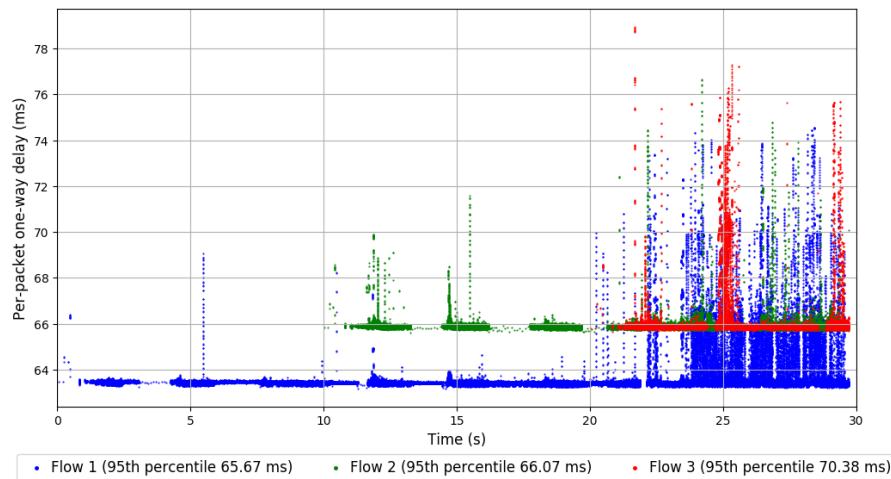
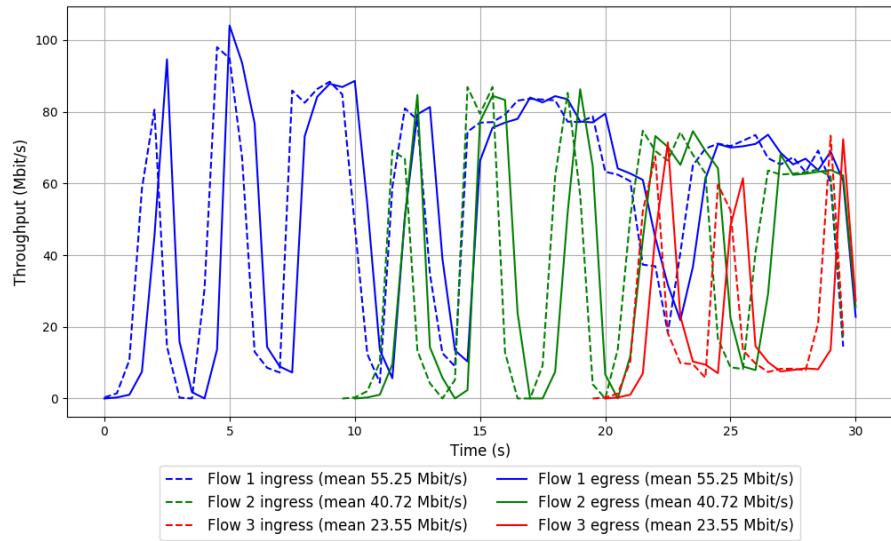


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-03-27 04:00:02
End at: 2019-03-27 04:00:32
Local clock offset: -0.104 ms
Remote clock offset: -35.498 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.96 Mbit/s
95th percentile per-packet one-way delay: 66.099 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.25 Mbit/s
95th percentile per-packet one-way delay: 65.665 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.72 Mbit/s
95th percentile per-packet one-way delay: 66.066 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.55 Mbit/s
95th percentile per-packet one-way delay: 70.377 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link

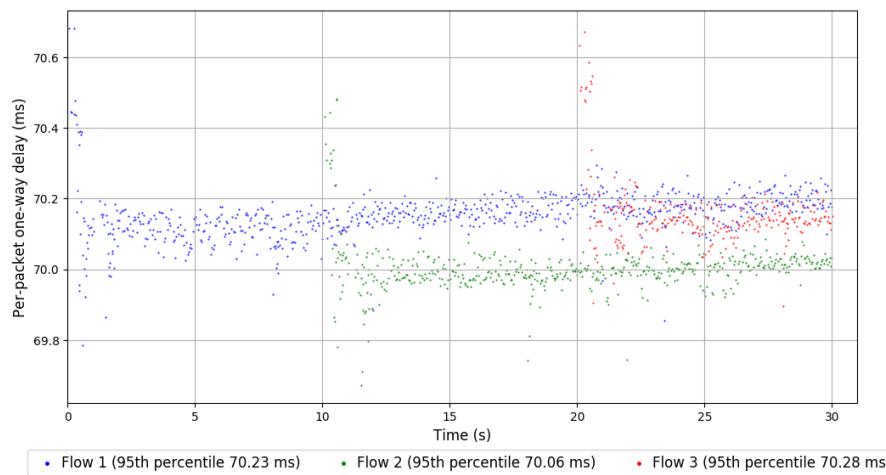
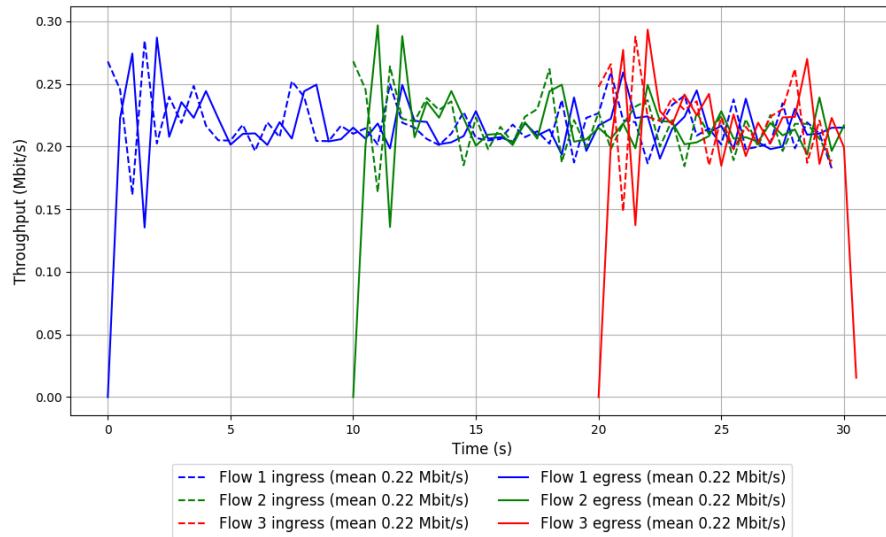


```
Run 1: Statistics of SCReAM

Start at: 2019-03-27 01:06:19
End at: 2019-03-27 01:06:49
Local clock offset: 4.527 ms
Remote clock offset: -31.004 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 70.227 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 70.230 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 70.060 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 70.283 ms
Loss rate: 0.00%
```

## Run 1: Report of SCReAM — Data Link

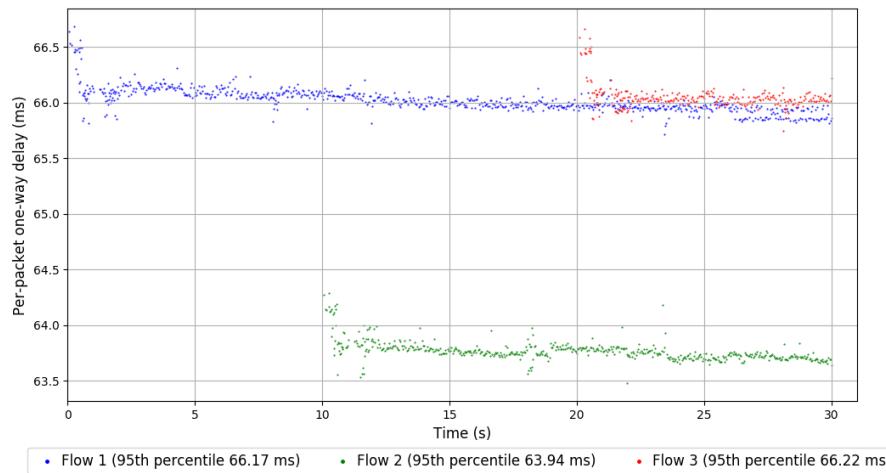
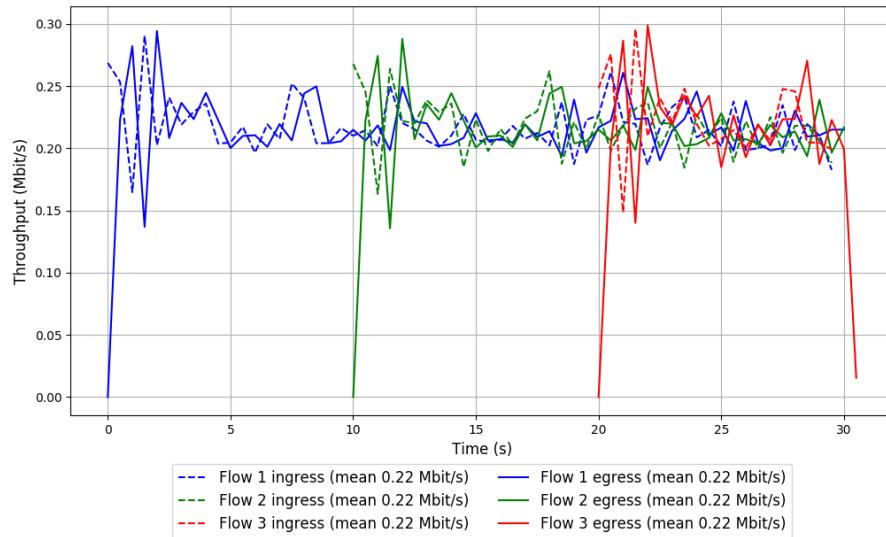


Run 2: Statistics of SCReAM

```
Start at: 2019-03-27 01:48:06
End at: 2019-03-27 01:48:36
Local clock offset: 3.861 ms
Remote clock offset: -36.205 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 66.144 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.167 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.941 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.224 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

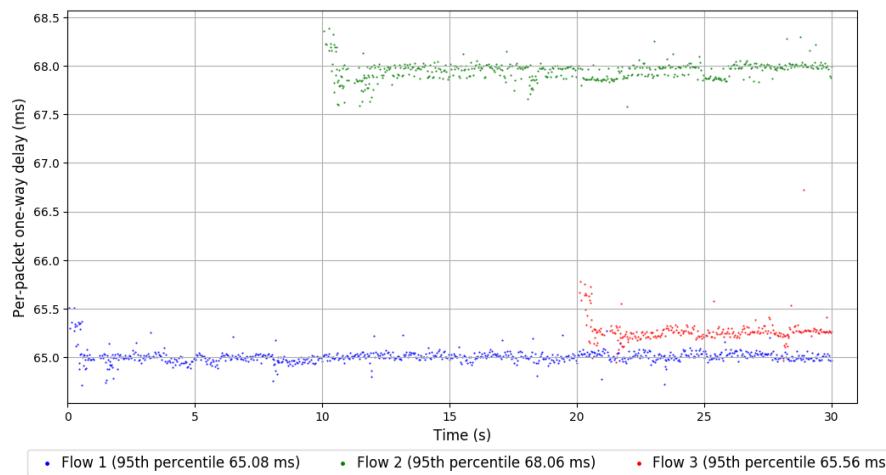
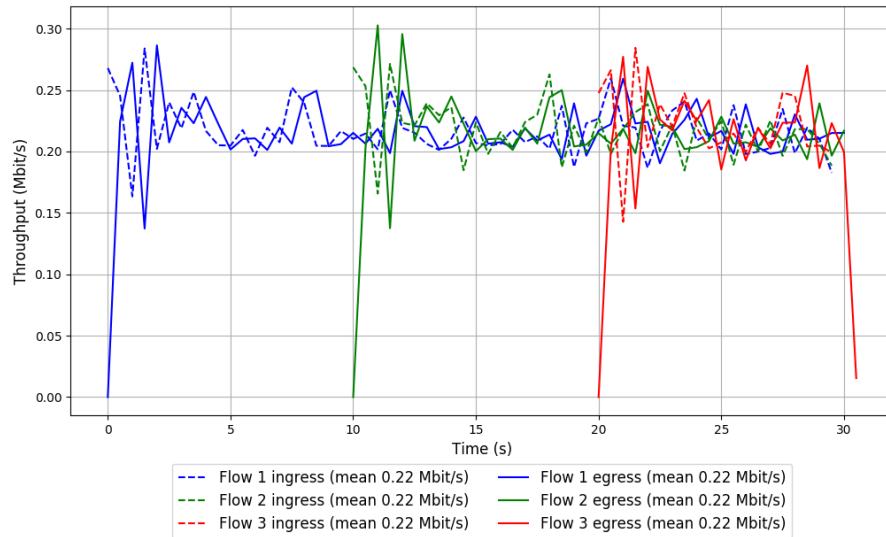


Run 3: Statistics of SCReAM

```
Start at: 2019-03-27 02:24:42
End at: 2019-03-27 02:25:12
Local clock offset: 1.384 ms
Remote clock offset: -34.74 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 68.010 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.083 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 68.055 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.555 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

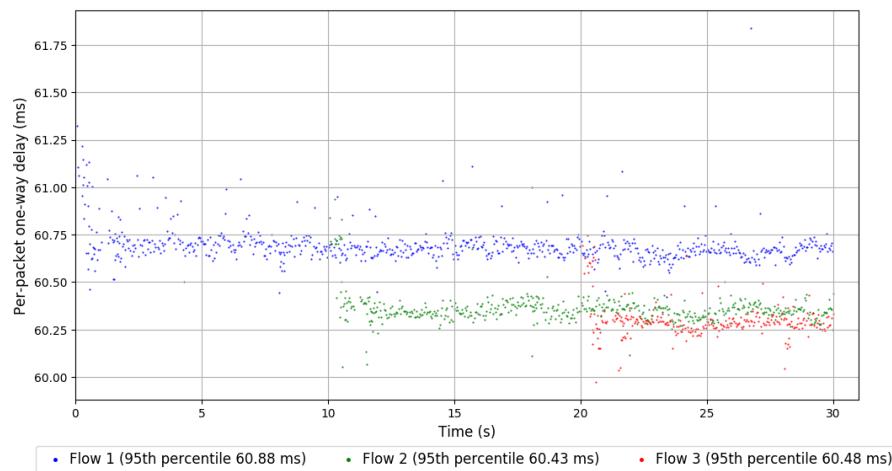
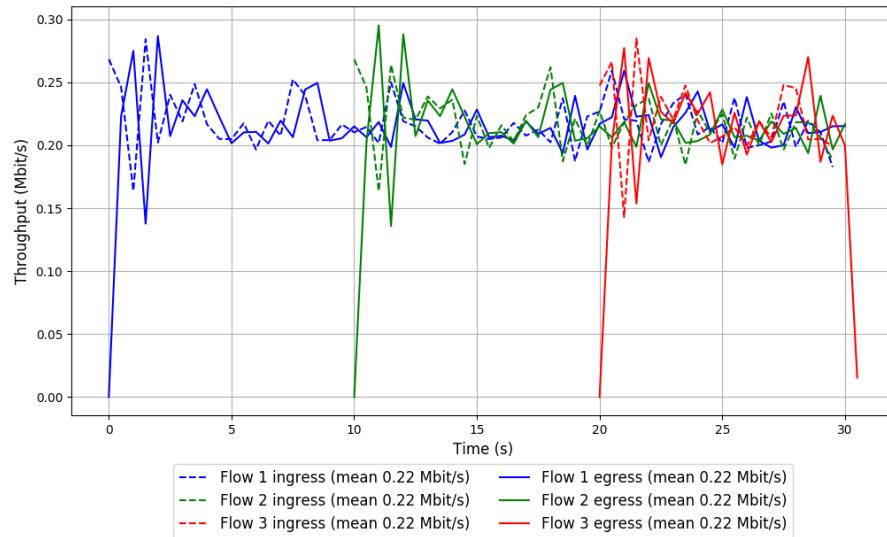


Run 4: Statistics of SCReAM

```
Start at: 2019-03-27 03:00:54
End at: 2019-03-27 03:01:24
Local clock offset: -0.522 ms
Remote clock offset: -39.503 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 60.748 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.885 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.431 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.481 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

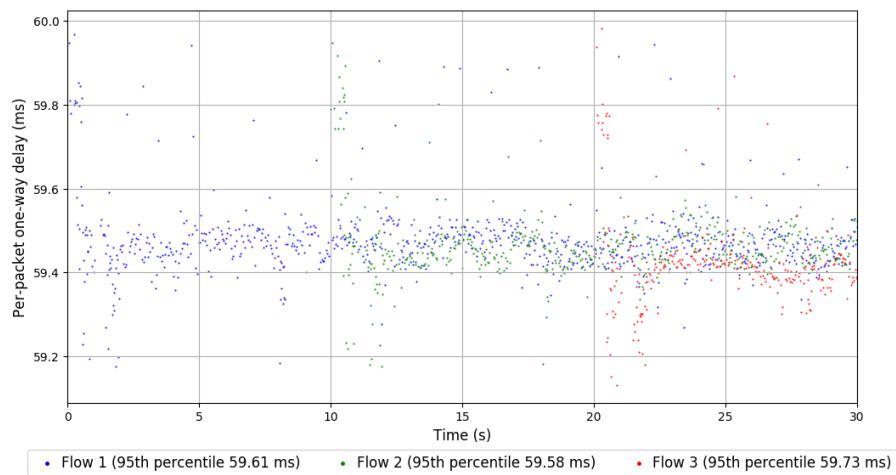
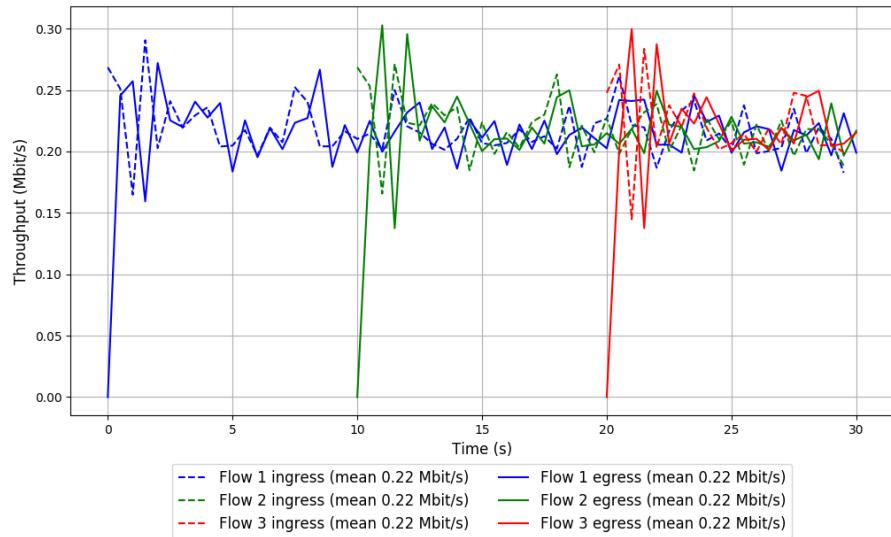


Run 5: Statistics of SCReAM

```
Start at: 2019-03-27 03:42:24
End at: 2019-03-27 03:42:54
Local clock offset: 3.766 ms
Remote clock offset: -42.721 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 59.597 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.606 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.580 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.728 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

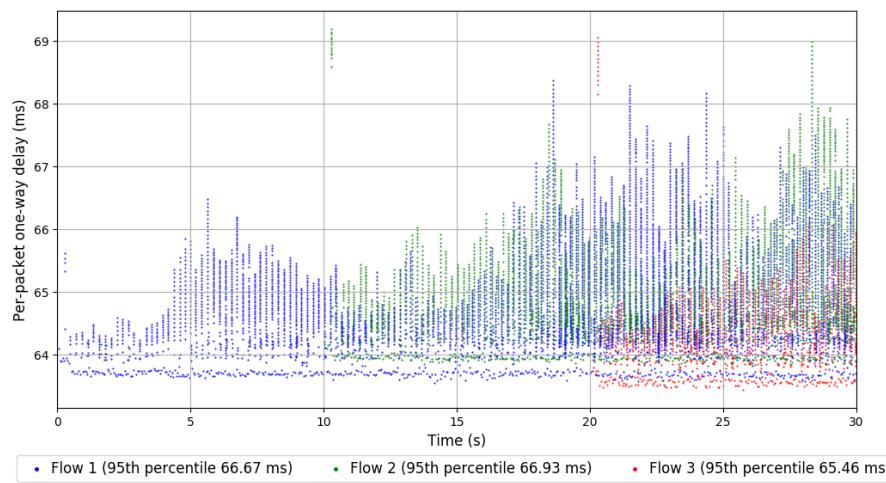
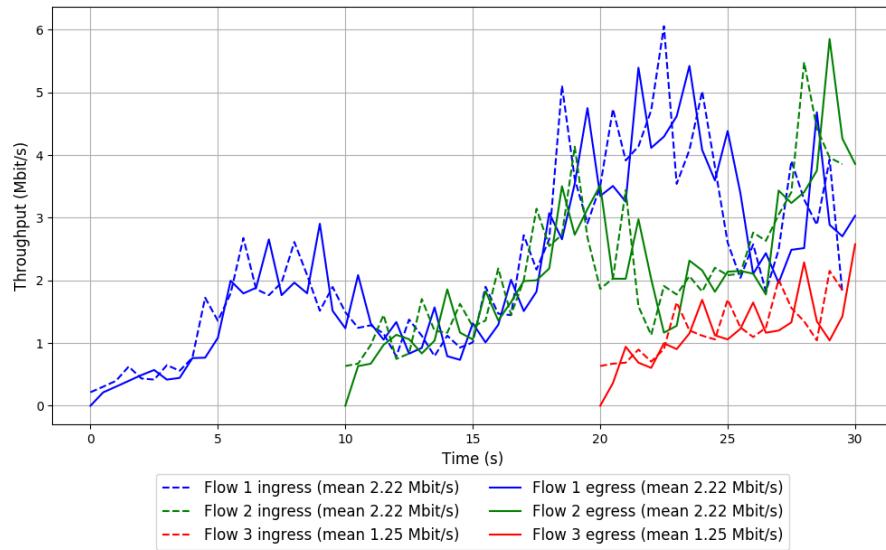


Run 1: Statistics of Sprout

```
Start at: 2019-03-27 01:30:50
End at: 2019-03-27 01:31:20
Local clock offset: 4.82 ms
Remote clock offset: -36.986 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 66.722 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 66.667 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 66.927 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 65.463 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

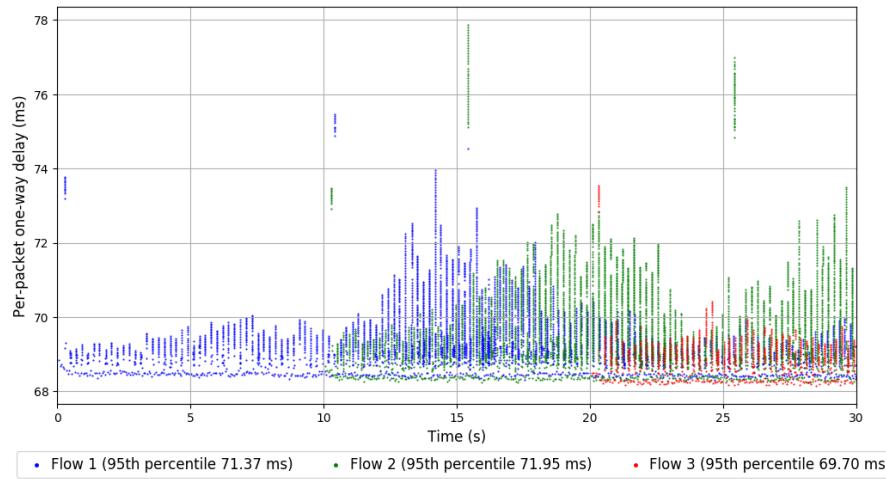
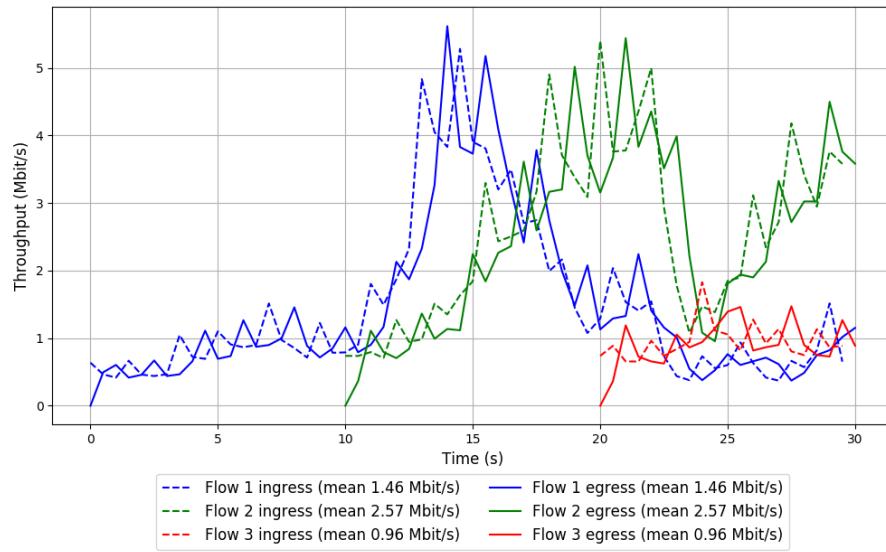


Run 2: Statistics of Sprout

```
Start at: 2019-03-27 02:12:56
End at: 2019-03-27 02:13:26
Local clock offset: -0.365 ms
Remote clock offset: -33.34 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 71.663 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 71.366 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 71.947 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 69.696 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

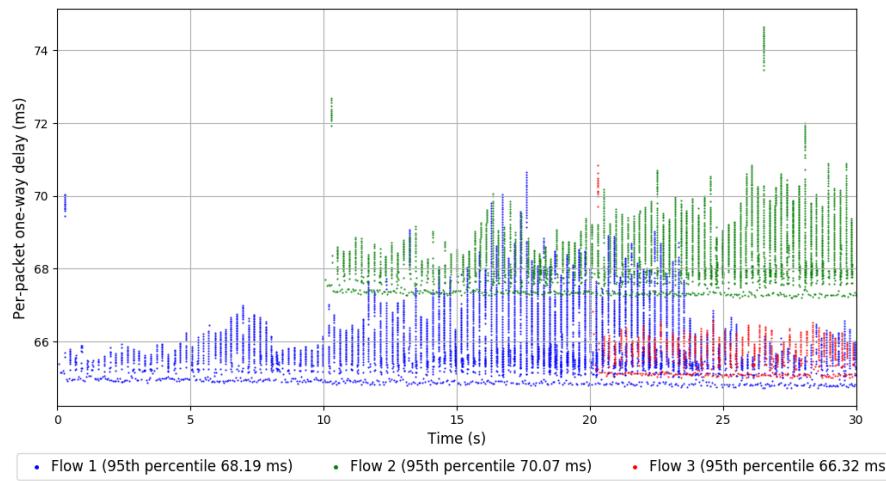
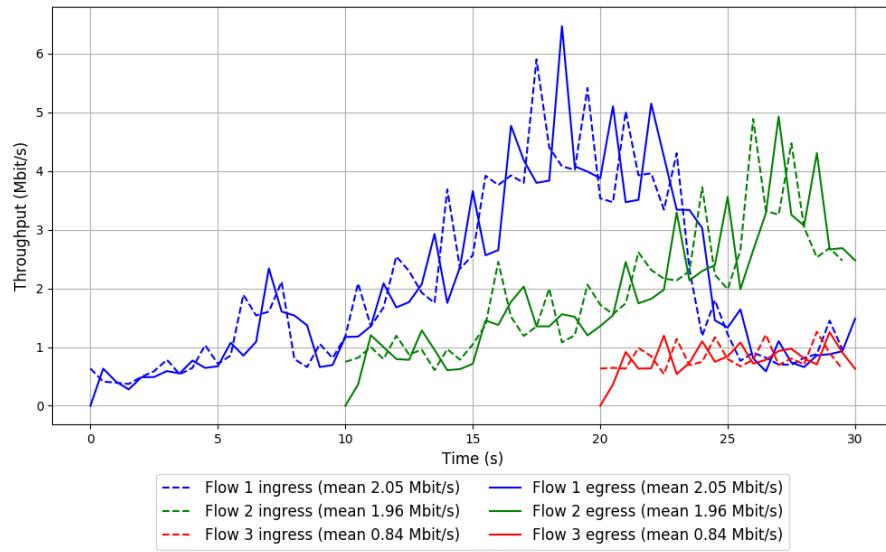


Run 3: Statistics of Sprout

```
Start at: 2019-03-27 02:49:08
End at: 2019-03-27 02:49:38
Local clock offset: 2.607 ms
Remote clock offset: -33.708 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.63 Mbit/s
95th percentile per-packet one-way delay: 69.545 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 68.189 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 70.071 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 66.320 ms
Loss rate: 0.00%
```

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

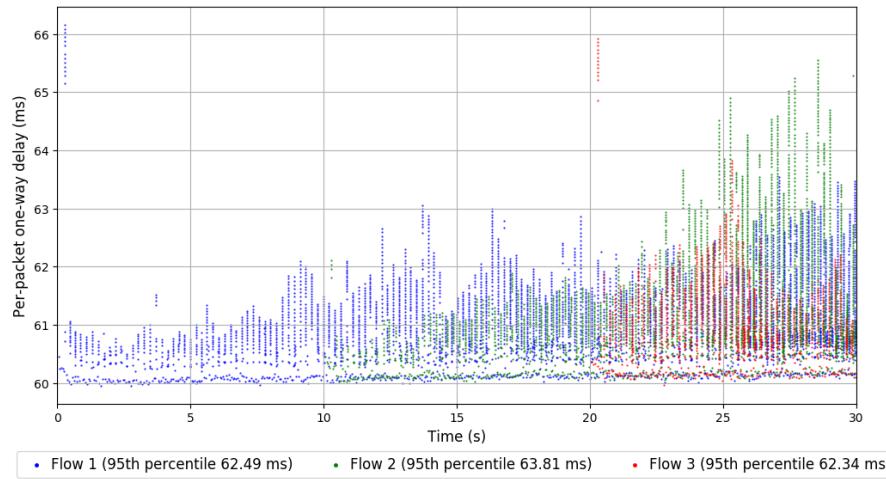
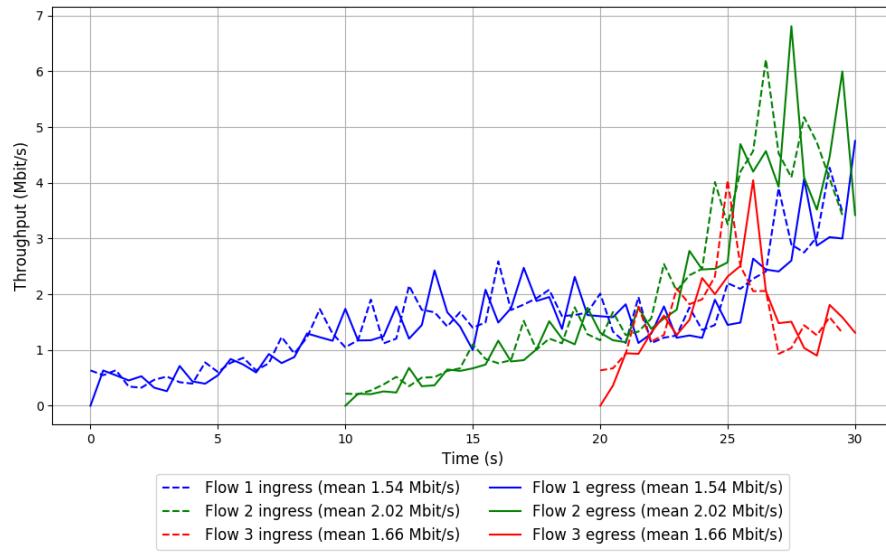


Run 4: Statistics of Sprout

```
Start at: 2019-03-27 03:19:37
End at: 2019-03-27 03:20:07
Local clock offset: -0.247 ms
Remote clock offset: -39.936 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.43 Mbit/s
95th percentile per-packet one-way delay: 63.040 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.54 Mbit/s
95th percentile per-packet one-way delay: 62.487 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 63.807 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 62.345 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

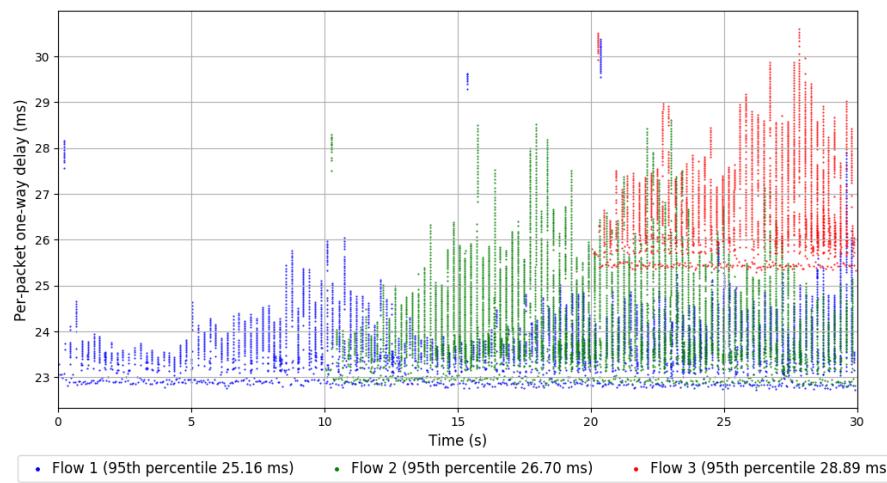
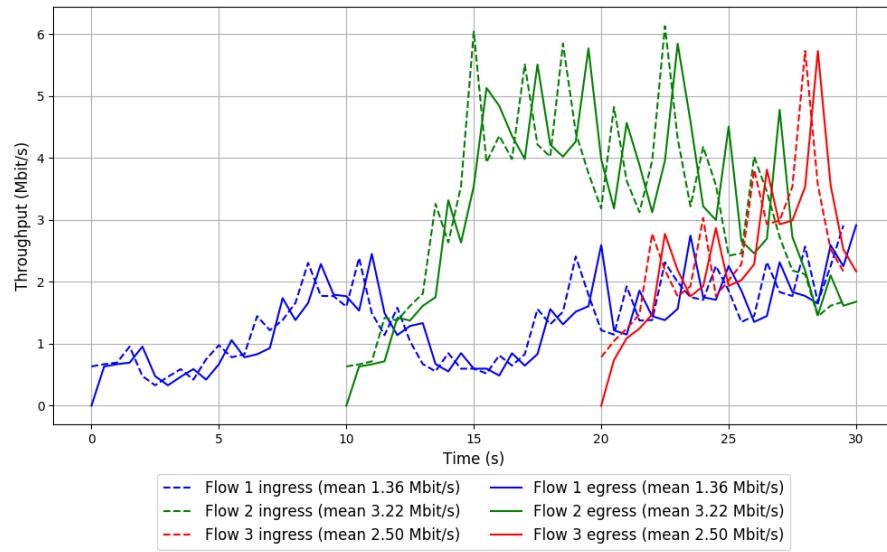


Run 5: Statistics of Sprout

```
Start at: 2019-03-27 04:01:26
End at: 2019-03-27 04:01:56
Local clock offset: 34.938 ms
Remote clock offset: -40.506 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 27.794 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 25.163 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.22 Mbit/s
95th percentile per-packet one-way delay: 26.696 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 28.890 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

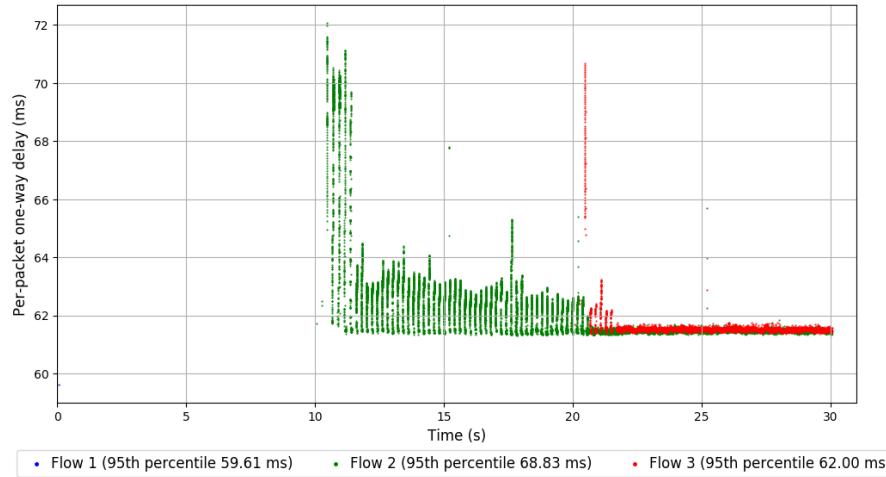
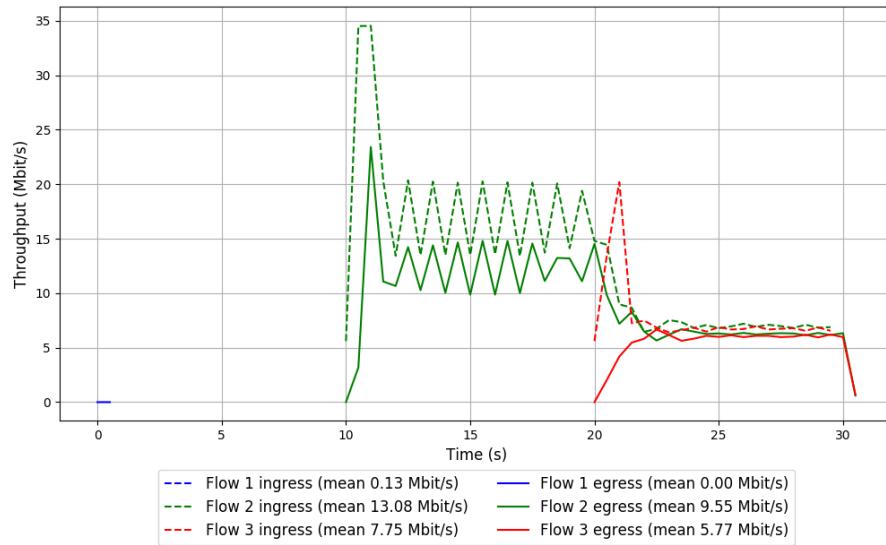


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-03-27 01:35:01
End at: 2019-03-27 01:35:31
Local clock offset: 5.093 ms
Remote clock offset: -41.344 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 67.120 ms
Loss rate: 26.68%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 59.609 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.55 Mbit/s
95th percentile per-packet one-way delay: 68.830 ms
Loss rate: 27.03%
-- Flow 3:
Average throughput: 5.77 Mbit/s
95th percentile per-packet one-way delay: 62.002 ms
Loss rate: 25.49%
```

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

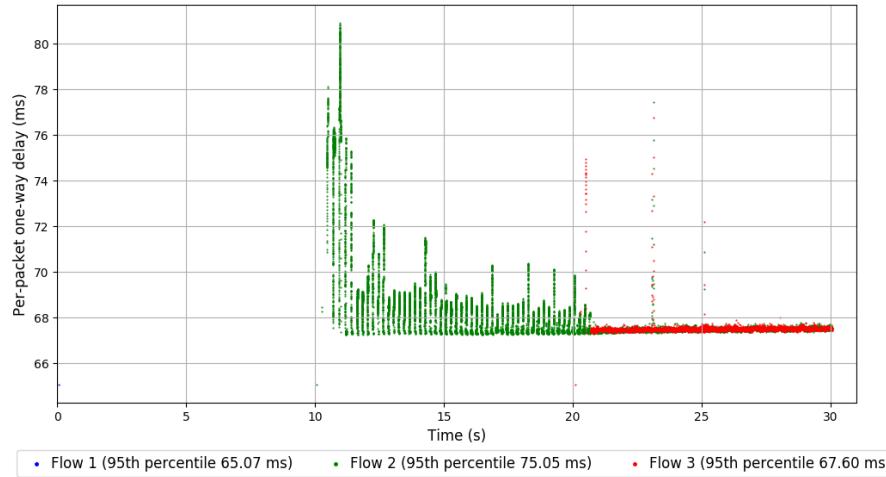
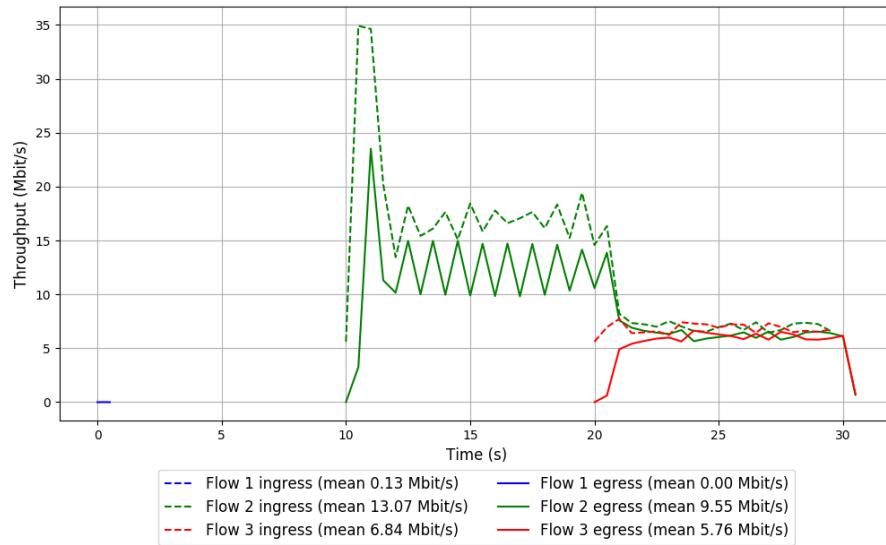


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-03-27 02:17:07
End at: 2019-03-27 02:17:37
Local clock offset: -0.03 ms
Remote clock offset: -34.768 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 73.060 ms
Loss rate: 24.59%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 65.067 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.55 Mbit/s
95th percentile per-packet one-way delay: 75.051 ms
Loss rate: 26.91%
-- Flow 3:
Average throughput: 5.76 Mbit/s
95th percentile per-packet one-way delay: 67.603 ms
Loss rate: 15.70%
```

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

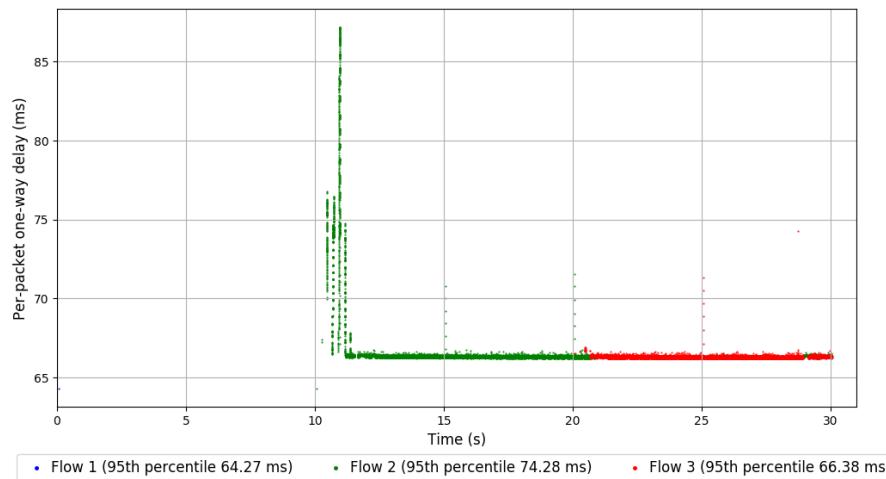
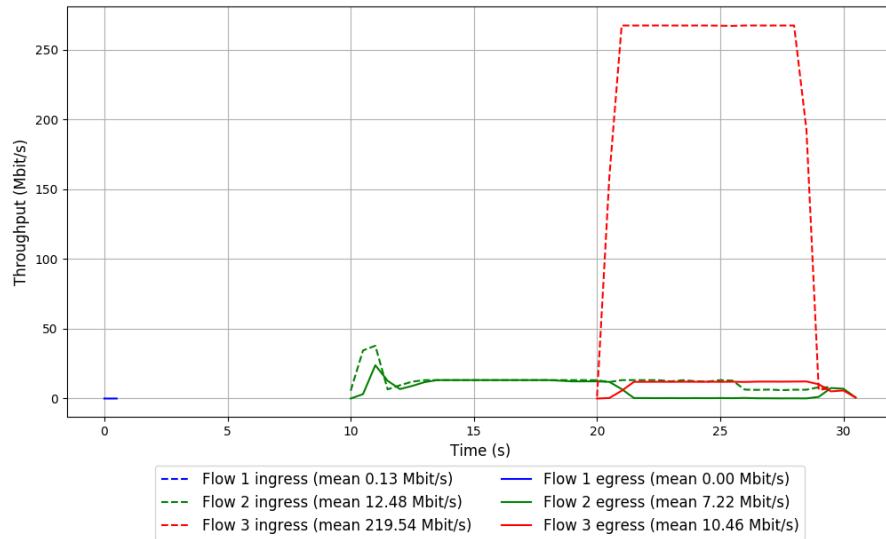


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-03-27 02:53:18
End at: 2019-03-27 02:53:48
Local clock offset: 1.099 ms
Remote clock offset: -35.556 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 71.054 ms
Loss rate: 89.81%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 64.266 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 7.22 Mbit/s
95th percentile per-packet one-way delay: 74.282 ms
Loss rate: 42.20%
-- Flow 3:
Average throughput: 10.46 Mbit/s
95th percentile per-packet one-way delay: 66.377 ms
Loss rate: 95.24%
```

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

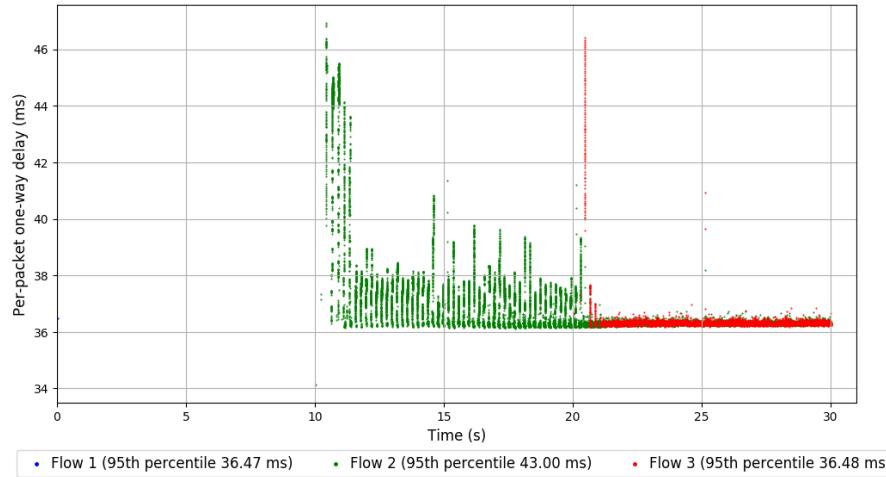
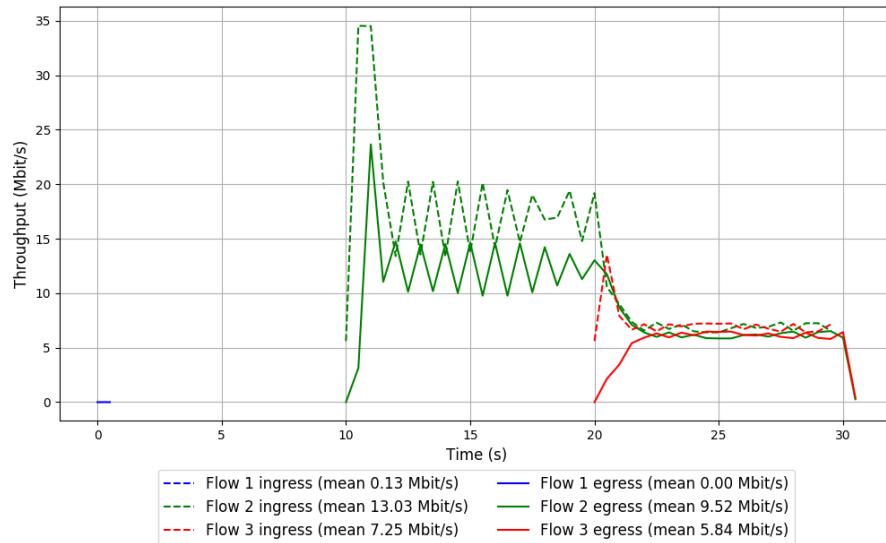


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-03-27 03:29:21
End at: 2019-03-27 03:29:51
Local clock offset: 28.054 ms
Remote clock offset: -40.466 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 41.390 ms
Loss rate: 25.30%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 36.472 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.52 Mbit/s
95th percentile per-packet one-way delay: 43.001 ms
Loss rate: 26.93%
-- Flow 3:
Average throughput: 5.84 Mbit/s
95th percentile per-packet one-way delay: 36.482 ms
Loss rate: 19.44%
```

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

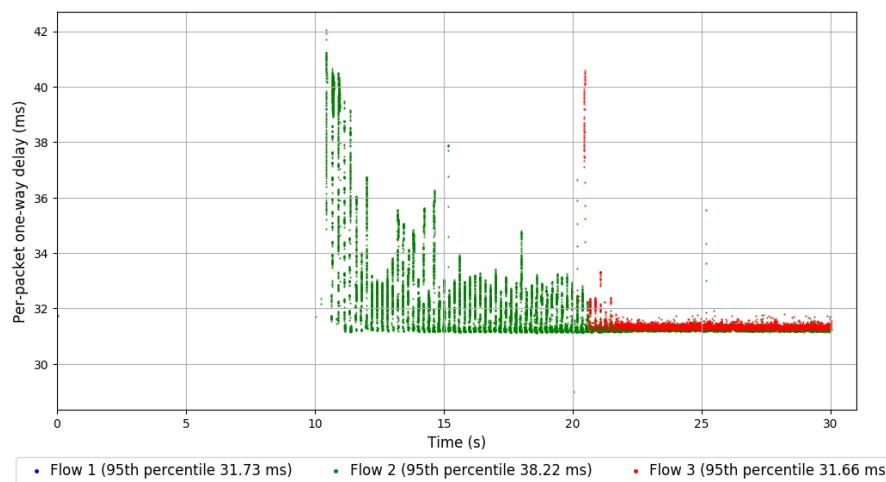
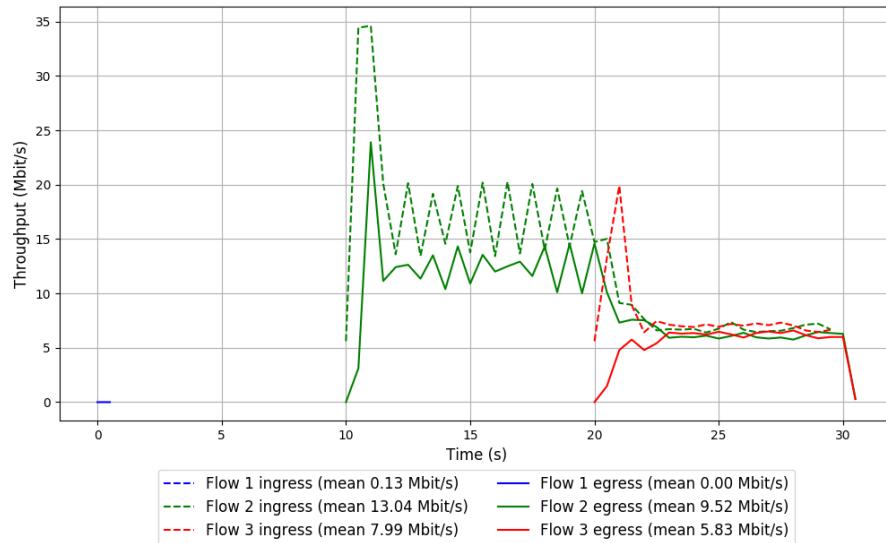


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-03-27 04:05:52
End at: 2019-03-27 04:06:22
Local clock offset: 33.836 ms
Remote clock offset: -35.54 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 36.702 ms
Loss rate: 26.97%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 31.734 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.52 Mbit/s
95th percentile per-packet one-way delay: 38.219 ms
Loss rate: 26.96%
-- Flow 3:
Average throughput: 5.83 Mbit/s
95th percentile per-packet one-way delay: 31.661 ms
Loss rate: 27.01%
```

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

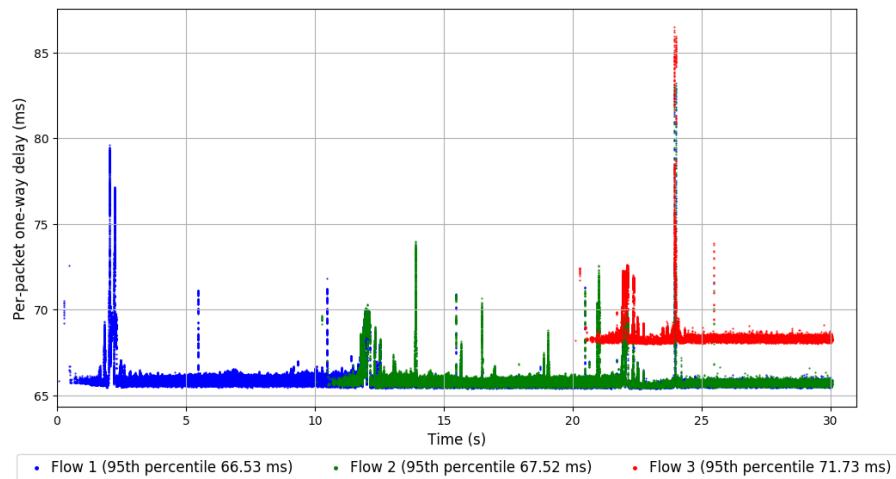
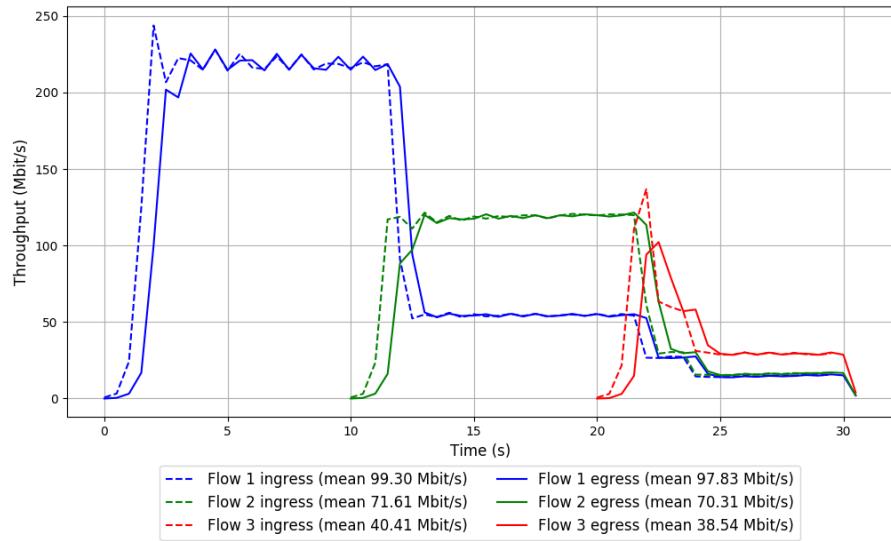


Run 1: Statistics of TCP Vegas

```
Start at: 2019-03-27 01:21:08
End at: 2019-03-27 01:21:38
Local clock offset: 4.908 ms
Remote clock offset: -35.327 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 157.48 Mbit/s
95th percentile per-packet one-way delay: 68.483 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 97.83 Mbit/s
95th percentile per-packet one-way delay: 66.526 ms
Loss rate: 1.47%
-- Flow 2:
Average throughput: 70.31 Mbit/s
95th percentile per-packet one-way delay: 67.524 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 38.54 Mbit/s
95th percentile per-packet one-way delay: 71.732 ms
Loss rate: 4.63%
```

Run 1: Report of TCP Vegas — Data Link

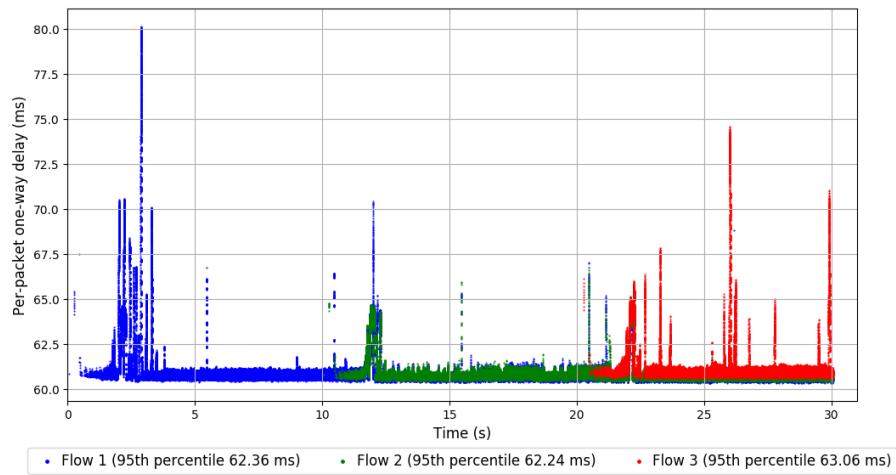
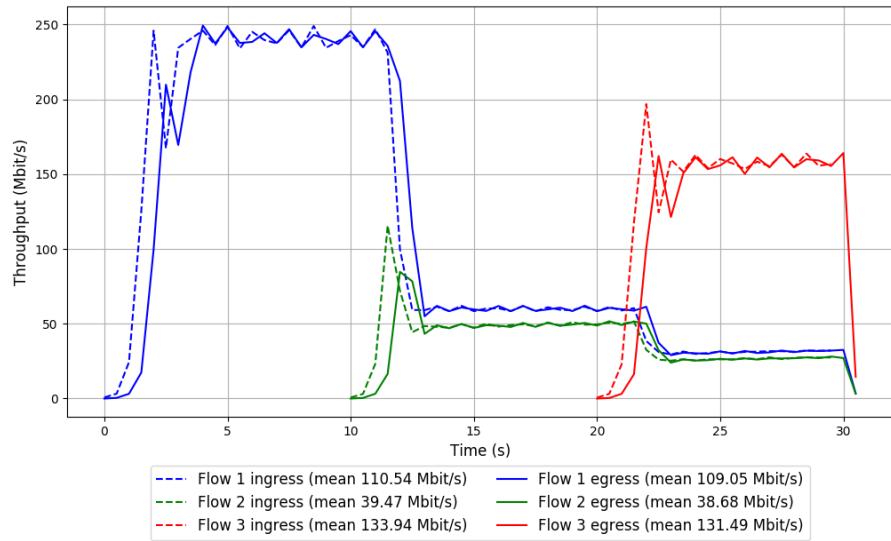


Run 2: Statistics of TCP Vegas

```
Start at: 2019-03-27 02:02:46
End at: 2019-03-27 02:03:16
Local clock offset: 0.71 ms
Remote clock offset: -38.281 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 178.55 Mbit/s
95th percentile per-packet one-way delay: 62.572 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 109.05 Mbit/s
95th percentile per-packet one-way delay: 62.359 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 38.68 Mbit/s
95th percentile per-packet one-way delay: 62.243 ms
Loss rate: 2.00%
-- Flow 3:
Average throughput: 131.49 Mbit/s
95th percentile per-packet one-way delay: 63.060 ms
Loss rate: 1.83%
```

Run 2: Report of TCP Vegas — Data Link

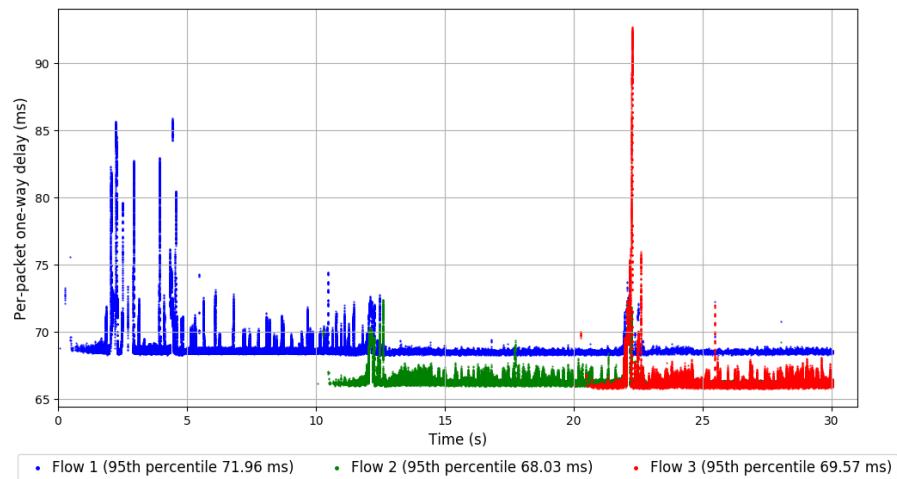
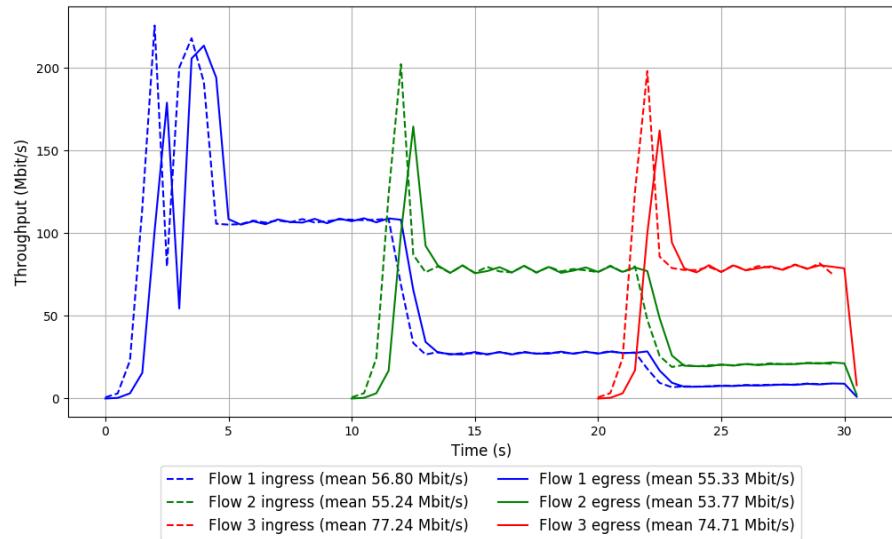


Run 3: Statistics of TCP Vegas

```
Start at: 2019-03-27 02:39:25
End at: 2019-03-27 02:39:55
Local clock offset: 3.501 ms
Remote clock offset: -32.929 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 116.04 Mbit/s
95th percentile per-packet one-way delay: 70.554 ms
Loss rate: 2.77%
-- Flow 1:
Average throughput: 55.33 Mbit/s
95th percentile per-packet one-way delay: 71.957 ms
Loss rate: 2.59%
-- Flow 2:
Average throughput: 53.77 Mbit/s
95th percentile per-packet one-way delay: 68.033 ms
Loss rate: 2.68%
-- Flow 3:
Average throughput: 74.71 Mbit/s
95th percentile per-packet one-way delay: 69.567 ms
Loss rate: 3.28%
```

Run 3: Report of TCP Vegas — Data Link

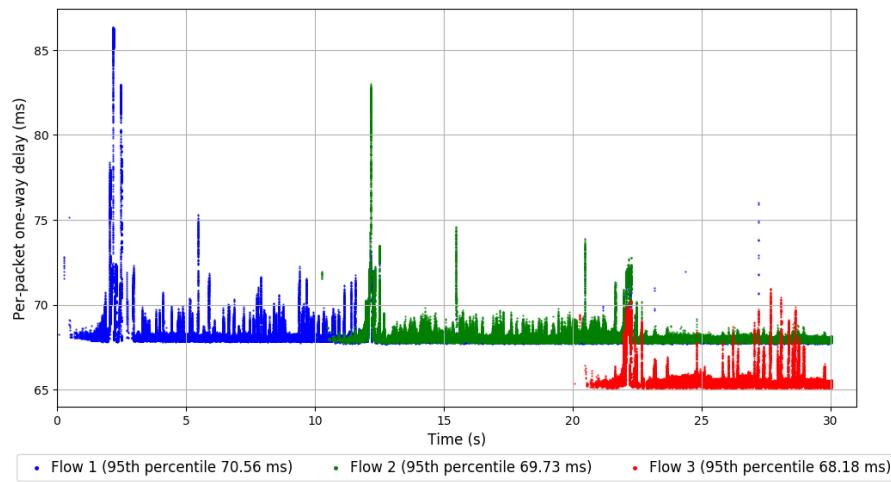
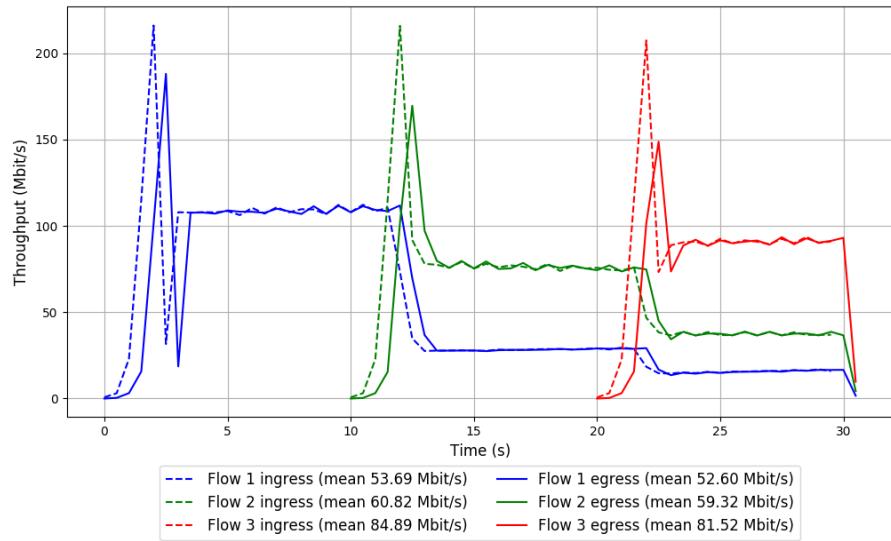


Run 4: Statistics of TCP Vegas

```
Start at: 2019-03-27 03:09:57
End at: 2019-03-27 03:10:27
Local clock offset: -0.441 ms
Remote clock offset: -33.509 ms

# Below is generated by plot.py at 2019-03-27 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 119.21 Mbit/s
95th percentile per-packet one-way delay: 69.499 ms
Loss rate: 2.62%
-- Flow 1:
Average throughput: 52.60 Mbit/s
95th percentile per-packet one-way delay: 70.557 ms
Loss rate: 2.02%
-- Flow 2:
Average throughput: 59.32 Mbit/s
95th percentile per-packet one-way delay: 69.734 ms
Loss rate: 2.48%
-- Flow 3:
Average throughput: 81.52 Mbit/s
95th percentile per-packet one-way delay: 68.182 ms
Loss rate: 3.98%
```

Run 4: Report of TCP Vegas — Data Link

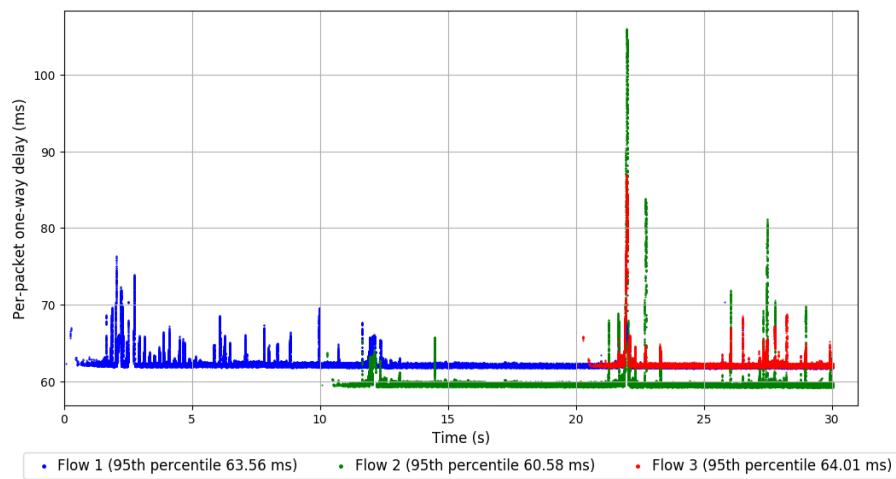
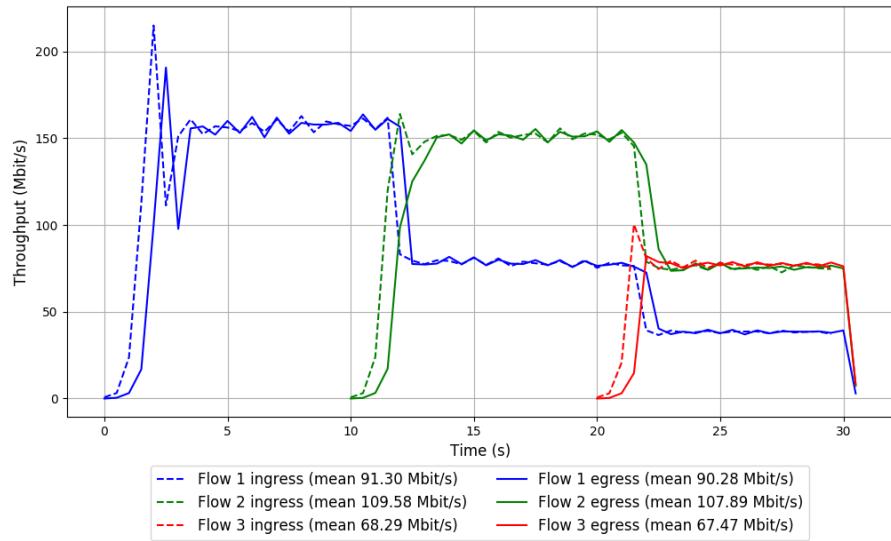


Run 5: Statistics of TCP Vegas

```
Start at: 2019-03-27 03:51:28
End at: 2019-03-27 03:51:58
Local clock offset: 1.066 ms
Remote clock offset: -40.097 ms

# Below is generated by plot.py at 2019-03-27 04:43:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 184.59 Mbit/s
95th percentile per-packet one-way delay: 62.989 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 90.28 Mbit/s
95th percentile per-packet one-way delay: 63.561 ms
Loss rate: 1.12%
-- Flow 2:
Average throughput: 107.89 Mbit/s
95th percentile per-packet one-way delay: 60.584 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 67.47 Mbit/s
95th percentile per-packet one-way delay: 64.007 ms
Loss rate: 1.20%
```

Run 5: Report of TCP Vegas — Data Link

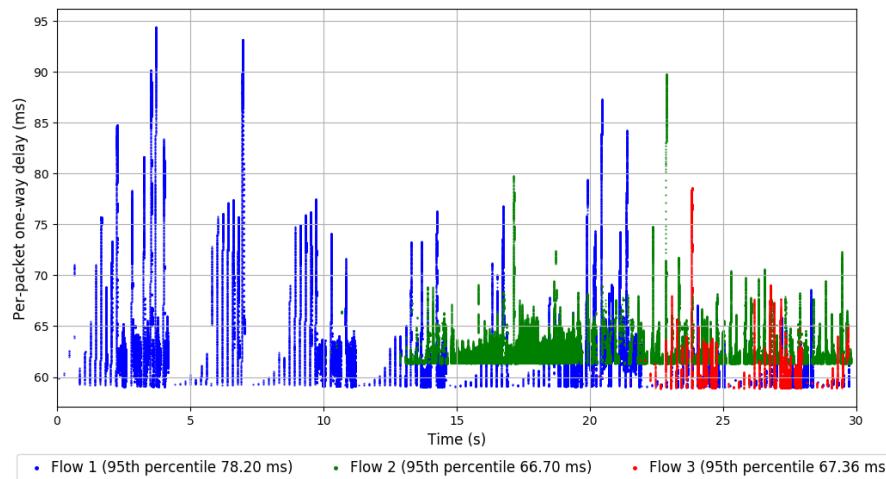
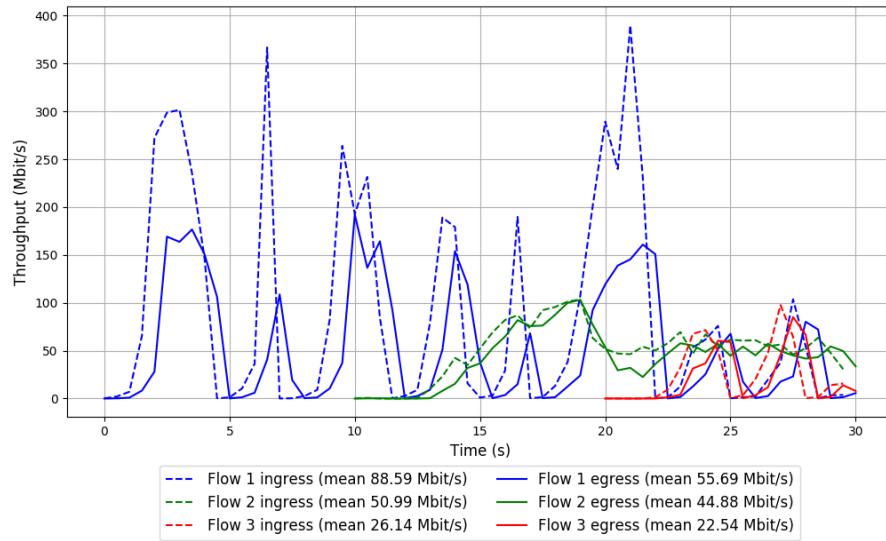


Run 1: Statistics of Verus

```
Start at: 2019-03-27 01:25:13
End at: 2019-03-27 01:25:43
Local clock offset: 6.047 ms
Remote clock offset: -40.656 ms

# Below is generated by plot.py at 2019-03-27 04:43:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.53 Mbit/s
95th percentile per-packet one-way delay: 74.577 ms
Loss rate: 29.11%
-- Flow 1:
Average throughput: 55.69 Mbit/s
95th percentile per-packet one-way delay: 78.197 ms
Loss rate: 37.13%
-- Flow 2:
Average throughput: 44.88 Mbit/s
95th percentile per-packet one-way delay: 66.698 ms
Loss rate: 11.99%
-- Flow 3:
Average throughput: 22.54 Mbit/s
95th percentile per-packet one-way delay: 67.364 ms
Loss rate: 13.74%
```

Run 1: Report of Verus — Data Link

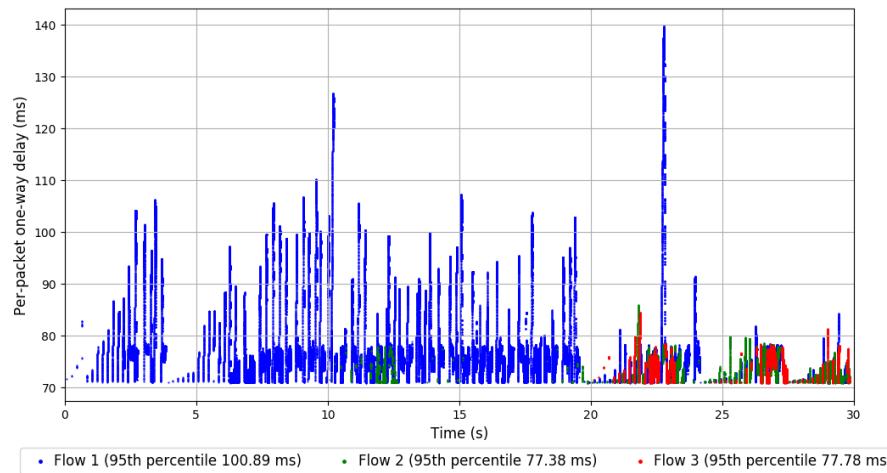
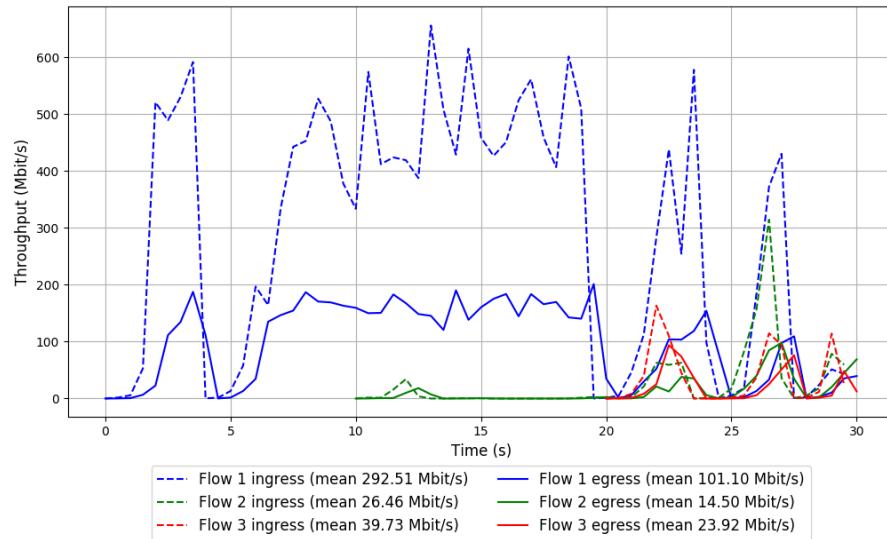


Run 2: Statistics of Verus

```
Start at: 2019-03-27 02:07:13
End at: 2019-03-27 02:07:43
Local clock offset: 0.266 ms
Remote clock offset: -27.97 ms

# Below is generated by plot.py at 2019-03-27 04:43:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 118.26 Mbit/s
95th percentile per-packet one-way delay: 99.837 ms
Loss rate: 63.30%
-- Flow 1:
Average throughput: 101.10 Mbit/s
95th percentile per-packet one-way delay: 100.892 ms
Loss rate: 65.43%
-- Flow 2:
Average throughput: 14.50 Mbit/s
95th percentile per-packet one-way delay: 77.381 ms
Loss rate: 45.19%
-- Flow 3:
Average throughput: 23.92 Mbit/s
95th percentile per-packet one-way delay: 77.780 ms
Loss rate: 39.78%
```

## Run 2: Report of Verus — Data Link

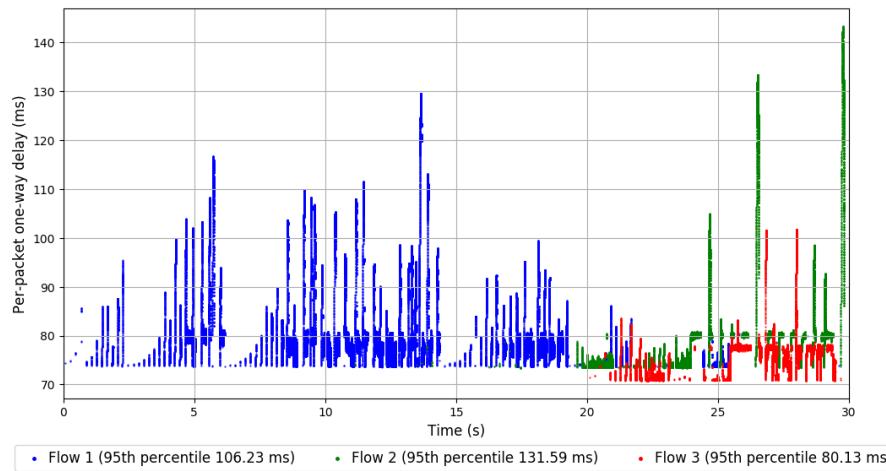
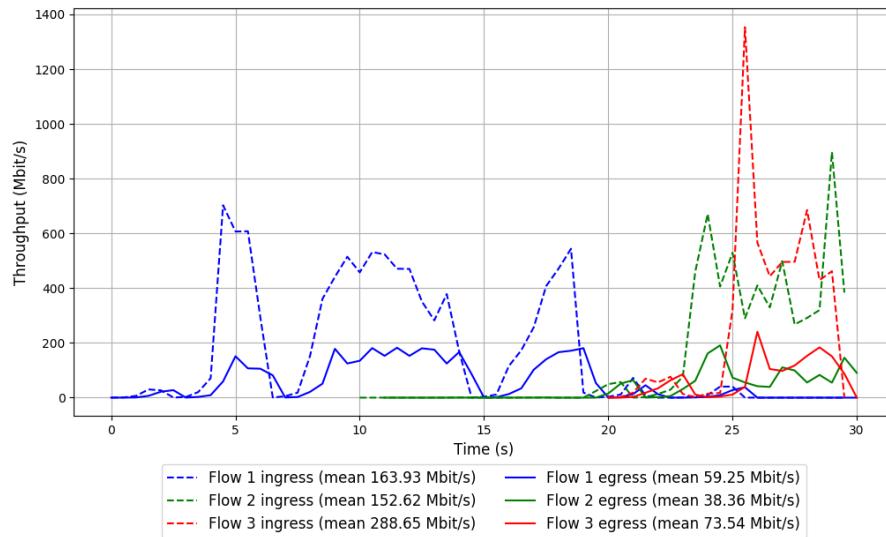


Run 3: Statistics of Verus

```
Start at: 2019-03-27 02:43:27
End at: 2019-03-27 02:43:57
Local clock offset: 3.422 ms
Remote clock offset: -28.242 ms

# Below is generated by plot.py at 2019-03-27 04:43:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 106.65 Mbit/s
95th percentile per-packet one-way delay: 106.492 ms
Loss rate: 70.10%
-- Flow 1:
Average throughput: 59.25 Mbit/s
95th percentile per-packet one-way delay: 106.226 ms
Loss rate: 63.86%
-- Flow 2:
Average throughput: 38.36 Mbit/s
95th percentile per-packet one-way delay: 131.589 ms
Loss rate: 76.12%
-- Flow 3:
Average throughput: 73.54 Mbit/s
95th percentile per-packet one-way delay: 80.126 ms
Loss rate: 74.52%
```

Run 3: Report of Verus — Data Link

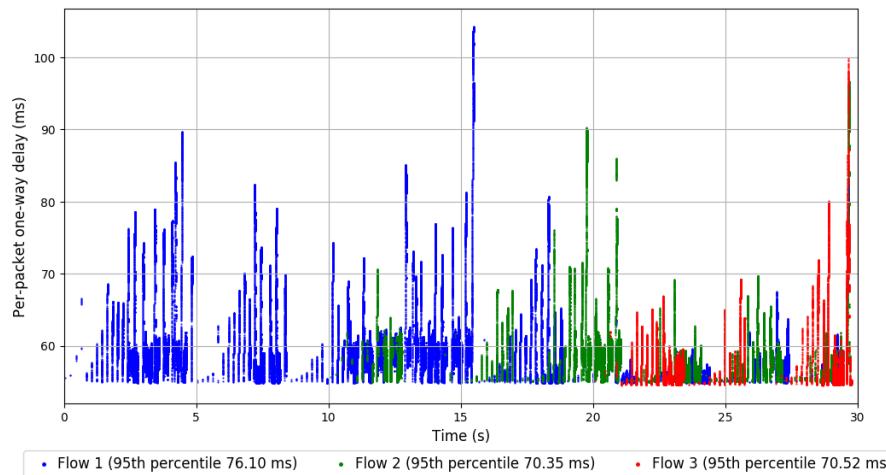
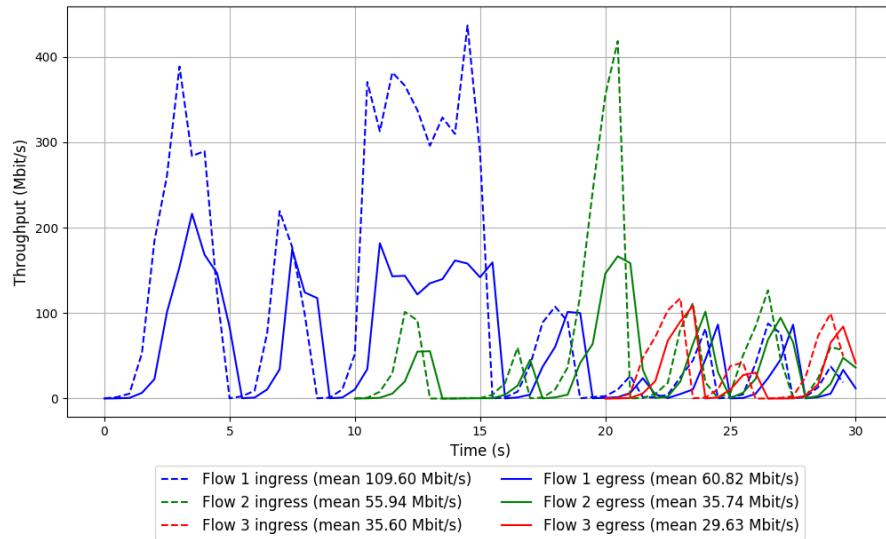


Run 4: Statistics of Verus

```
Start at: 2019-03-27 03:13:59
End at: 2019-03-27 03:14:29
Local clock offset: 10.278 ms
Remote clock offset: -33.224 ms

# Below is generated by plot.py at 2019-03-27 04:43:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.86 Mbit/s
95th percentile per-packet one-way delay: 75.293 ms
Loss rate: 40.46%
-- Flow 1:
Average throughput: 60.82 Mbit/s
95th percentile per-packet one-way delay: 76.098 ms
Loss rate: 44.46%
-- Flow 2:
Average throughput: 35.74 Mbit/s
95th percentile per-packet one-way delay: 70.346 ms
Loss rate: 36.10%
-- Flow 3:
Average throughput: 29.63 Mbit/s
95th percentile per-packet one-way delay: 70.519 ms
Loss rate: 16.76%
```

Run 4: Report of Verus — Data Link

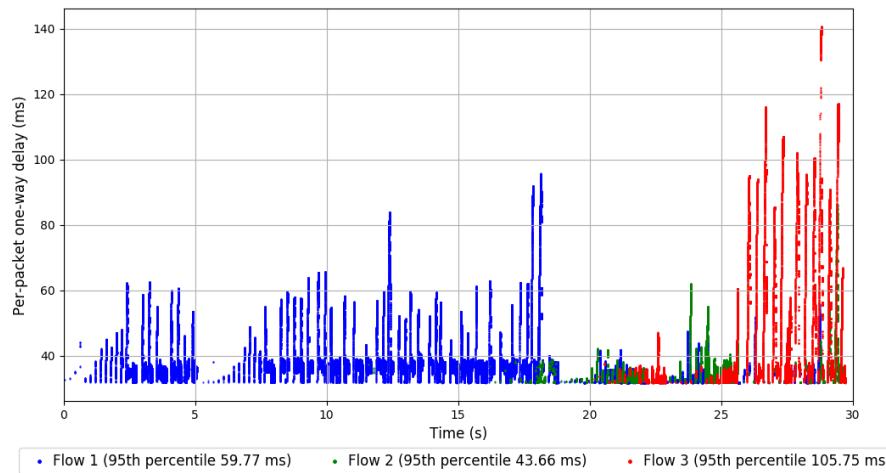
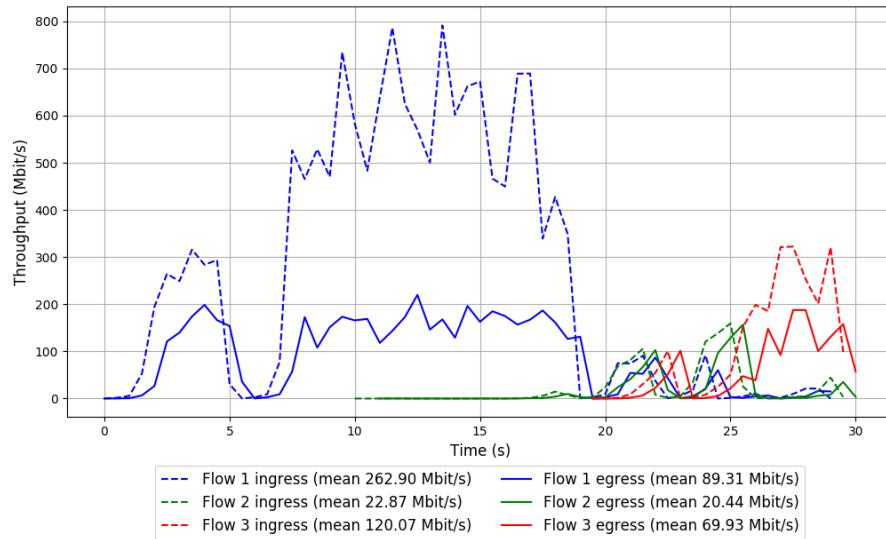


Run 5: Statistics of Verus

```
Start at: 2019-03-27 03:55:36
End at: 2019-03-27 03:56:06
Local clock offset: 34.881 ms
Remote clock offset: -32.555 ms

# Below is generated by plot.py at 2019-03-27 04:43:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.51 Mbit/s
95th percentile per-packet one-way delay: 84.570 ms
Loss rate: 60.74%
-- Flow 1:
Average throughput: 89.31 Mbit/s
95th percentile per-packet one-way delay: 59.765 ms
Loss rate: 66.26%
-- Flow 2:
Average throughput: 20.44 Mbit/s
95th percentile per-packet one-way delay: 43.664 ms
Loss rate: 15.27%
-- Flow 3:
Average throughput: 69.93 Mbit/s
95th percentile per-packet one-way delay: 105.754 ms
Loss rate: 41.75%
```

Run 5: Report of Verus — Data Link

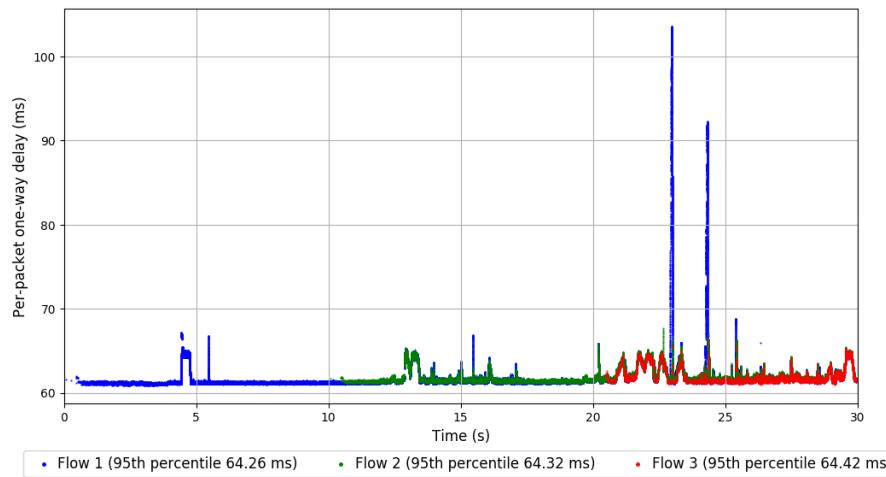
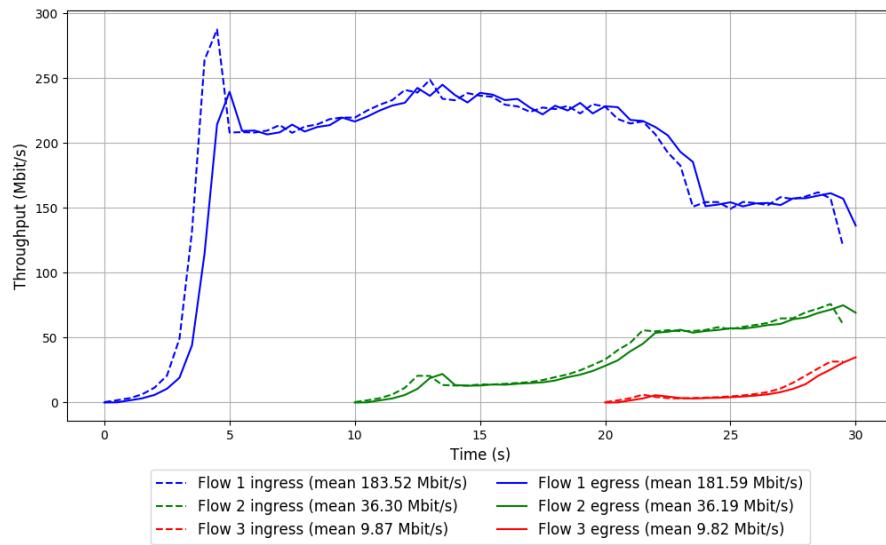


```
Run 1: Statistics of PCC-Vivace

Start at: 2019-03-27 01:32:08
End at: 2019-03-27 01:32:38
Local clock offset: 5.26 ms
Remote clock offset: -39.121 ms

# Below is generated by plot.py at 2019-03-27 04:43:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 208.90 Mbit/s
95th percentile per-packet one-way delay: 64.271 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 181.59 Mbit/s
95th percentile per-packet one-way delay: 64.256 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 36.19 Mbit/s
95th percentile per-packet one-way delay: 64.318 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 9.82 Mbit/s
95th percentile per-packet one-way delay: 64.415 ms
Loss rate: 0.51%
```

Run 1: Report of PCC-Vivace — Data Link

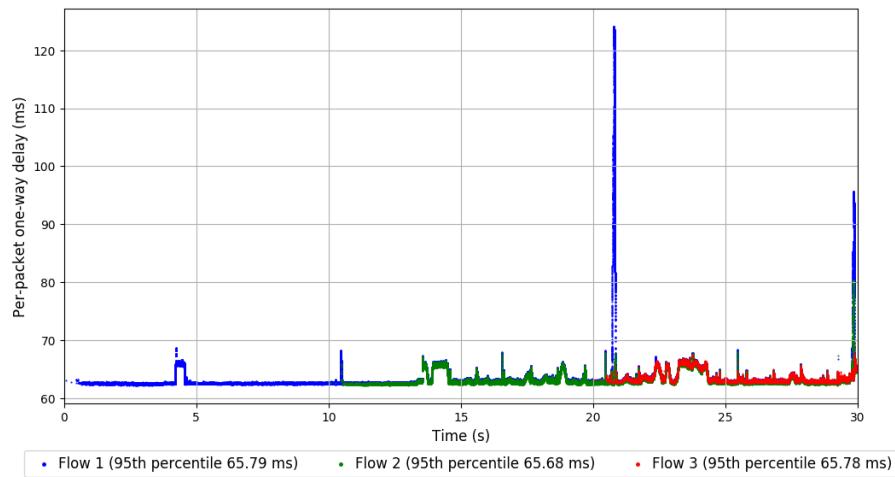
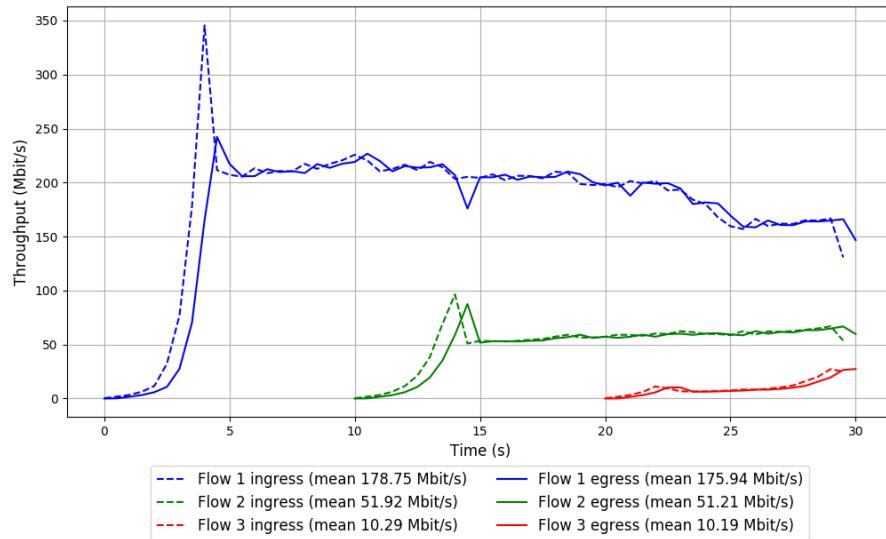


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-03-27 02:14:14
End at: 2019-03-27 02:14:44
Local clock offset: -1.027 ms
Remote clock offset: -37.388 ms

# Below is generated by plot.py at 2019-03-27 04:44:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 213.37 Mbit/s
95th percentile per-packet one-way delay: 65.775 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 175.94 Mbit/s
95th percentile per-packet one-way delay: 65.790 ms
Loss rate: 1.57%
-- Flow 2:
Average throughput: 51.21 Mbit/s
95th percentile per-packet one-way delay: 65.682 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 10.19 Mbit/s
95th percentile per-packet one-way delay: 65.782 ms
Loss rate: 0.93%
```

Run 2: Report of PCC-Vivace — Data Link

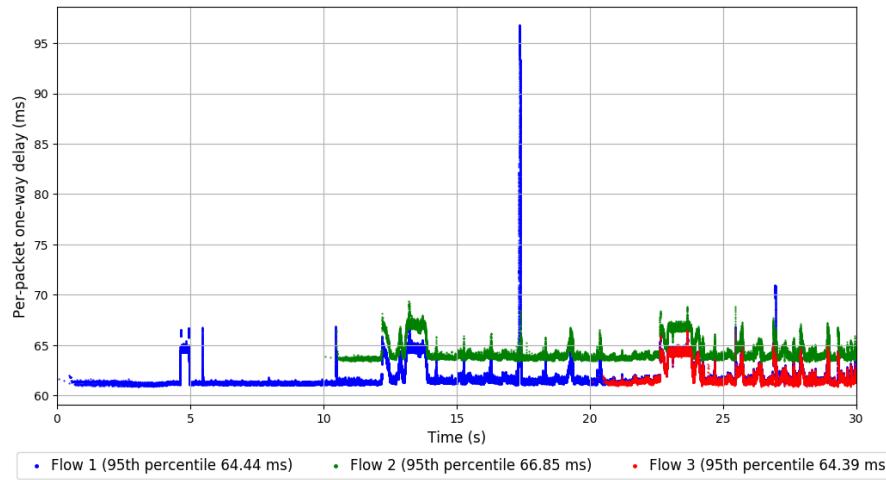
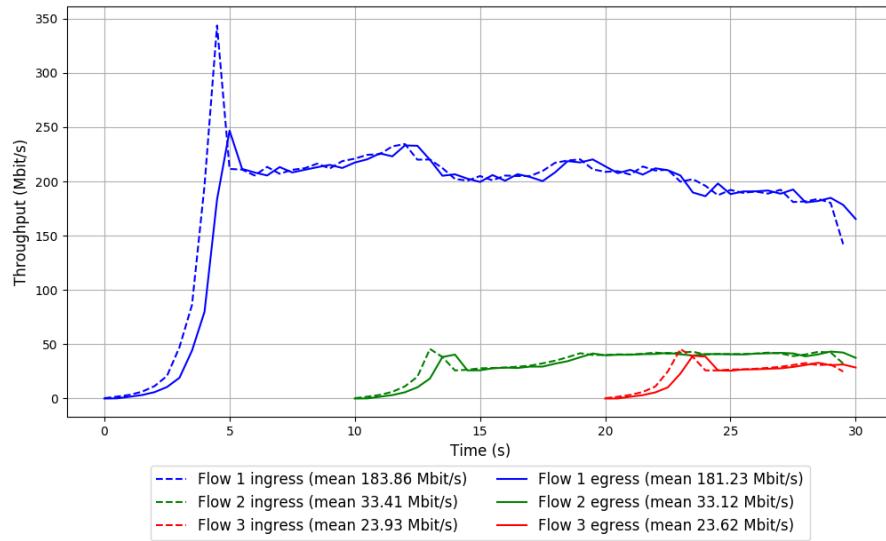


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-03-27 02:50:25
End at: 2019-03-27 02:50:55
Local clock offset: 3.061 ms
Remote clock offset: -36.815 ms

# Below is generated by plot.py at 2019-03-27 04:44:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 211.04 Mbit/s
95th percentile per-packet one-way delay: 64.579 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 181.23 Mbit/s
95th percentile per-packet one-way delay: 64.435 ms
Loss rate: 1.43%
-- Flow 2:
Average throughput: 33.12 Mbit/s
95th percentile per-packet one-way delay: 66.854 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 23.62 Mbit/s
95th percentile per-packet one-way delay: 64.386 ms
Loss rate: 1.33%
```

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

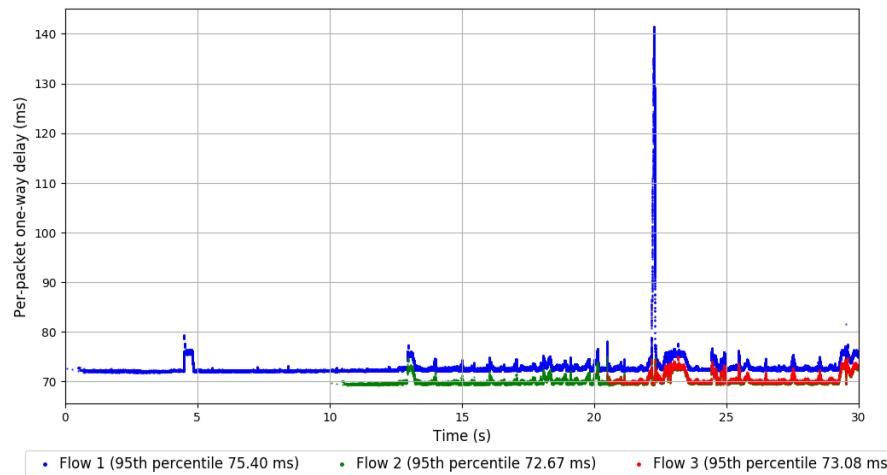
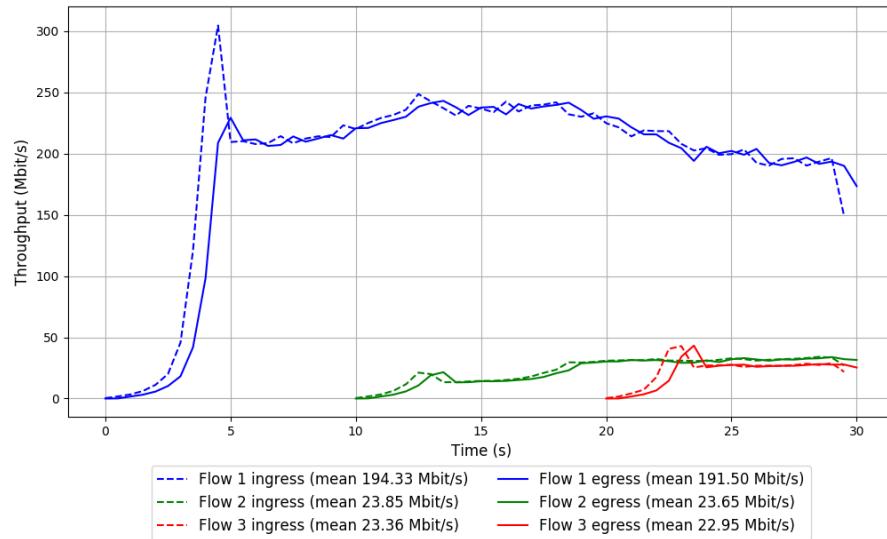


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-03-27 03:20:54
End at: 2019-03-27 03:21:24
Local clock offset: 0.632 ms
Remote clock offset: -30.237 ms

# Below is generated by plot.py at 2019-03-27 04:44:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 214.81 Mbit/s
95th percentile per-packet one-way delay: 75.326 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 191.50 Mbit/s
95th percentile per-packet one-way delay: 75.399 ms
Loss rate: 1.45%
-- Flow 2:
Average throughput: 23.65 Mbit/s
95th percentile per-packet one-way delay: 72.674 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 22.95 Mbit/s
95th percentile per-packet one-way delay: 73.083 ms
Loss rate: 1.73%
```

Run 4: Report of PCC-Vivace — Data Link

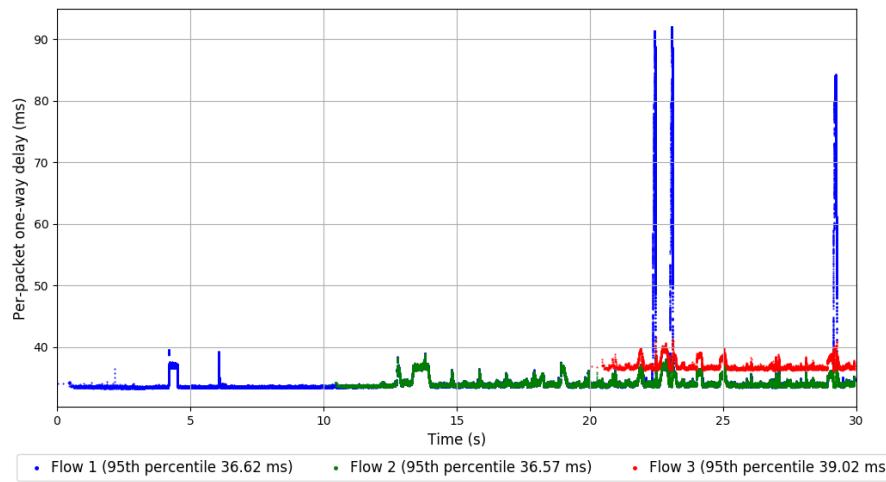
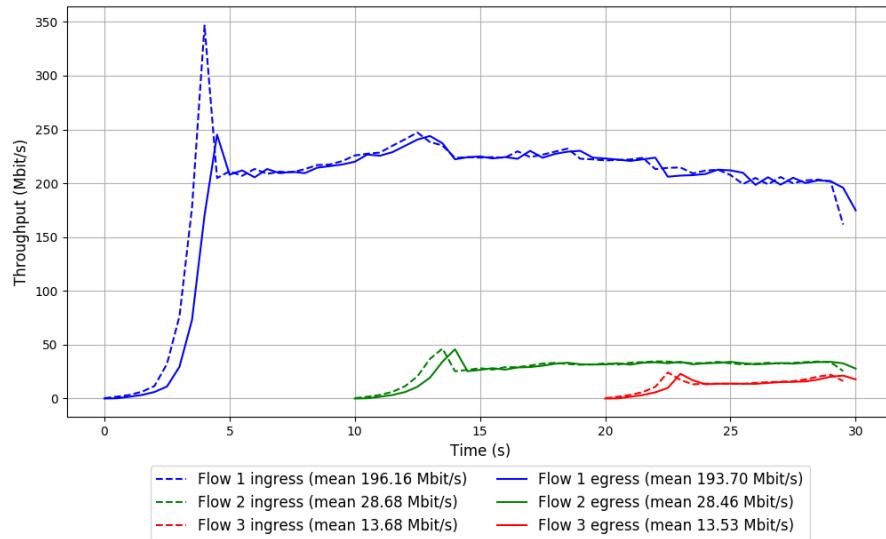


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-03-27 04:02:49
End at: 2019-03-27 04:03:19
Local clock offset: 34.581 ms
Remote clock offset: -30.129 ms

# Below is generated by plot.py at 2019-03-27 04:44:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 217.09 Mbit/s
95th percentile per-packet one-way delay: 36.699 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 193.70 Mbit/s
95th percentile per-packet one-way delay: 36.623 ms
Loss rate: 1.25%
-- Flow 2:
Average throughput: 28.46 Mbit/s
95th percentile per-packet one-way delay: 36.572 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 13.53 Mbit/s
95th percentile per-packet one-way delay: 39.022 ms
Loss rate: 1.09%
```

Run 5: Report of PCC-Vivace — Data Link

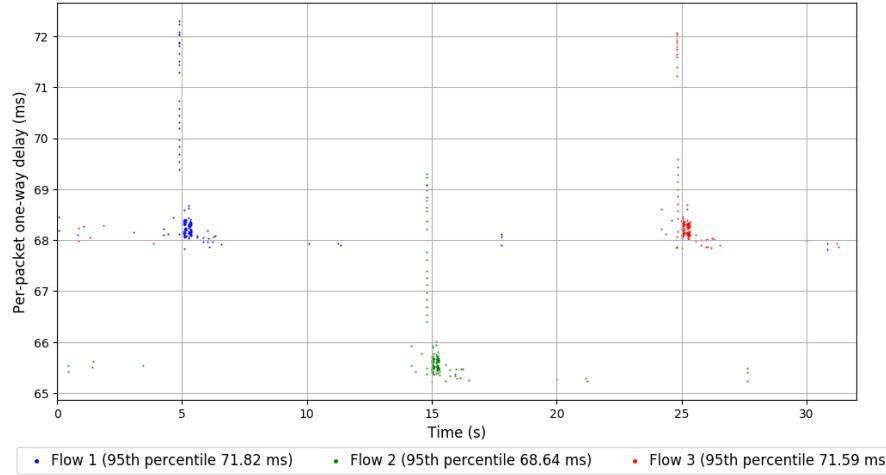
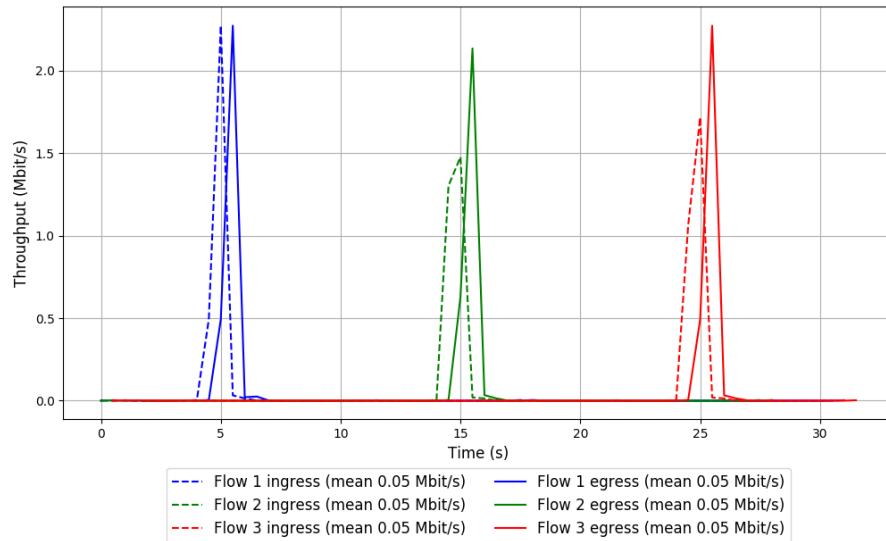


```
Run 1: Statistics of WebRTC media

Start at: 2019-03-27 01:28:11
End at: 2019-03-27 01:28:41
Local clock offset: 4.884 ms
Remote clock offset: -35.336 ms

# Below is generated by plot.py at 2019-03-27 04:44:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 70.727 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 71.821 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.643 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 71.591 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

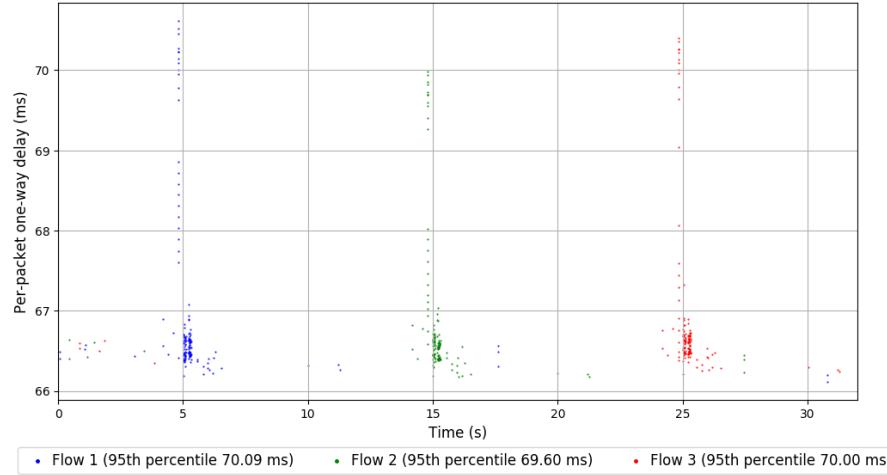
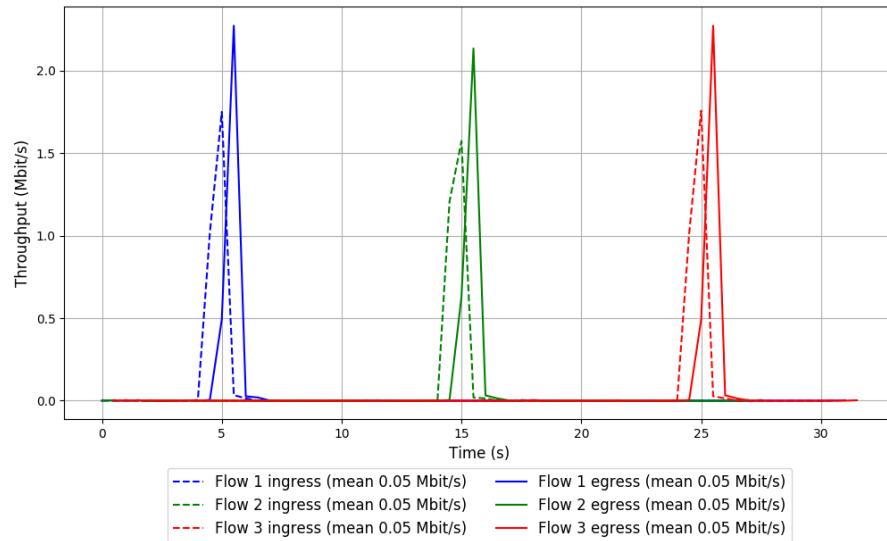


Run 2: Statistics of WebRTC media

```
Start at: 2019-03-27 02:10:17
End at: 2019-03-27 02:10:47
Local clock offset: 1.303 ms
Remote clock offset: -31.433 ms

# Below is generated by plot.py at 2019-03-27 04:44:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 69.816 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 70.089 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 69.600 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 70.001 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

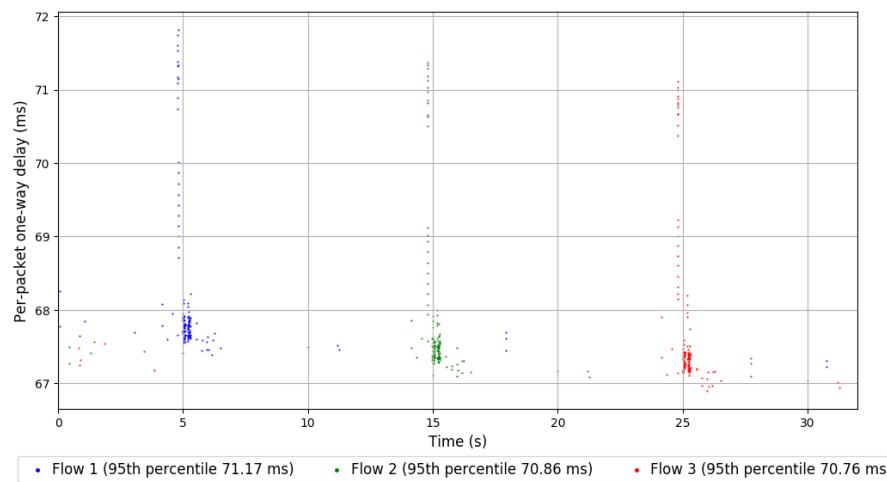
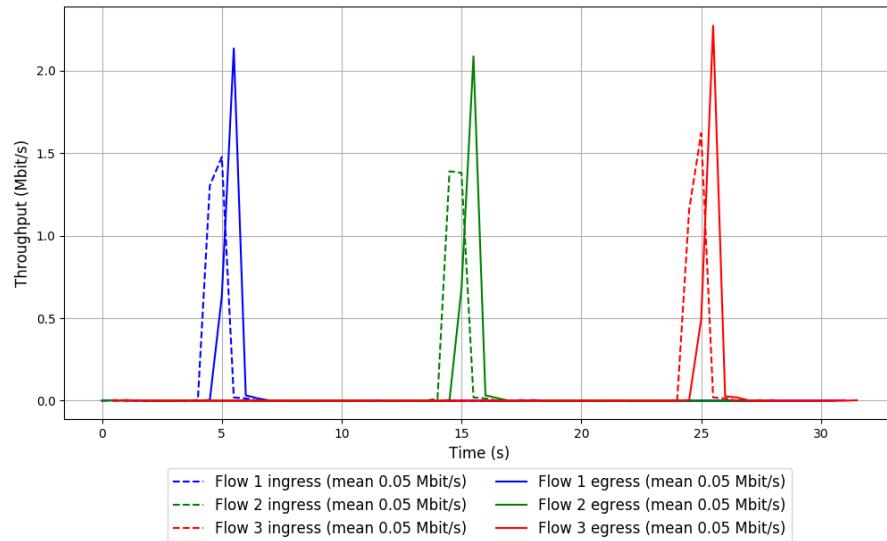


Run 3: Statistics of WebRTC media

```
Start at: 2019-03-27 02:46:29
End at: 2019-03-27 02:46:59
Local clock offset: 2.578 ms
Remote clock offset: -35.016 ms

# Below is generated by plot.py at 2019-03-27 04:44:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 70.873 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 71.169 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 70.857 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 70.756 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

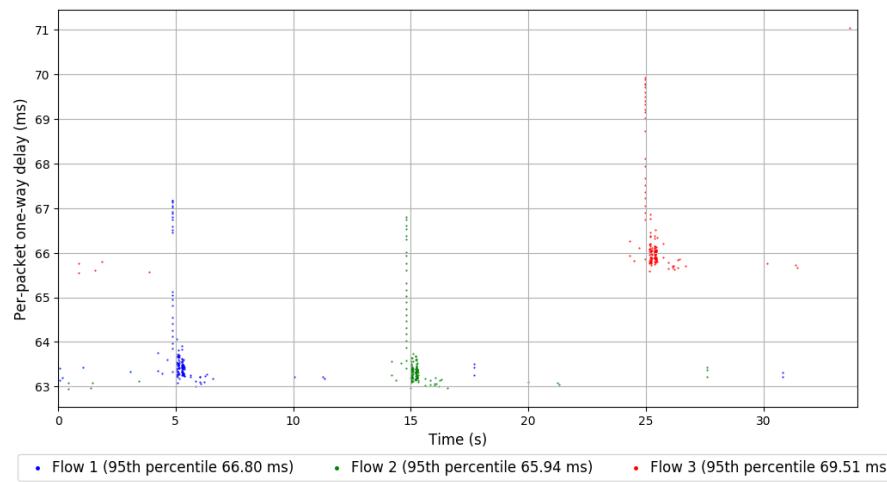
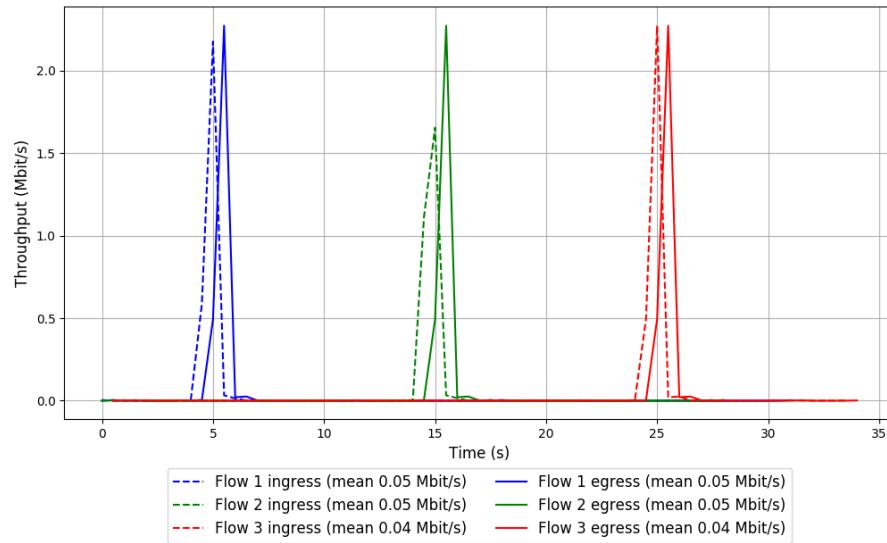


Run 4: Statistics of WebRTC media

```
Start at: 2019-03-27 03:16:57
End at: 2019-03-27 03:17:27
Local clock offset: 0.349 ms
Remote clock offset: -35.388 ms

# Below is generated by plot.py at 2019-03-27 04:44:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 67.138 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 66.795 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 65.938 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 69.509 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-03-27 03:58:47
End at: 2019-03-27 03:59:17
Local clock offset: 34.463 ms
Remote clock offset: -33.238 ms

# Below is generated by plot.py at 2019-03-27 04:44:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 35.501 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 37.464 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 35.388 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 34.942 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

