

## Pantheon Report

Generated at 2019-03-19 04:50:39 (UTC).  
Data path: AWS India 1 on `ens5 (local)` → India on `em1 (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:

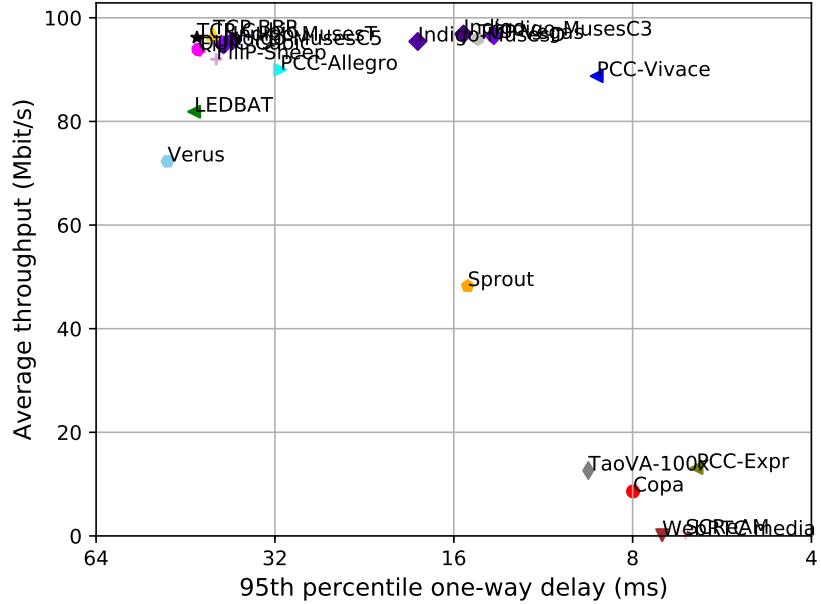
```
Linux 4.15.0-1033-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

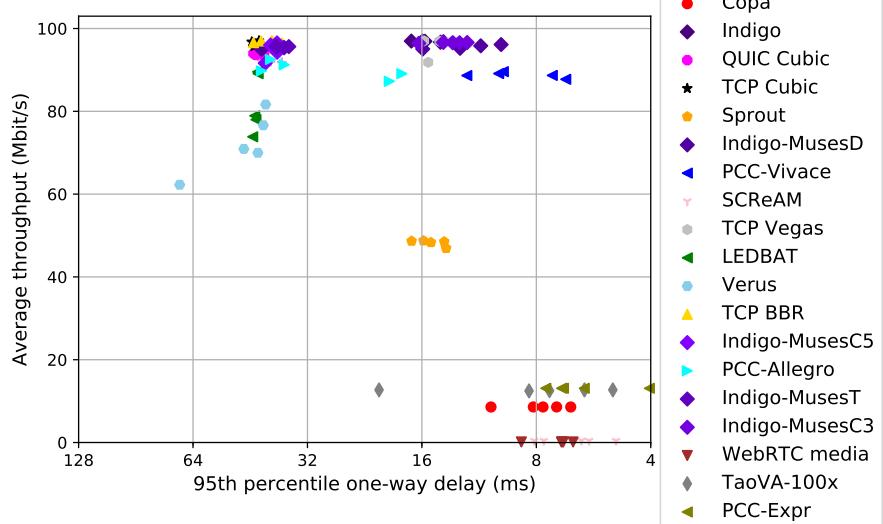
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d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



test from AWS India 1 to India, 5 runs of 30s each per scheme  
3 flows with 10s interval between flows



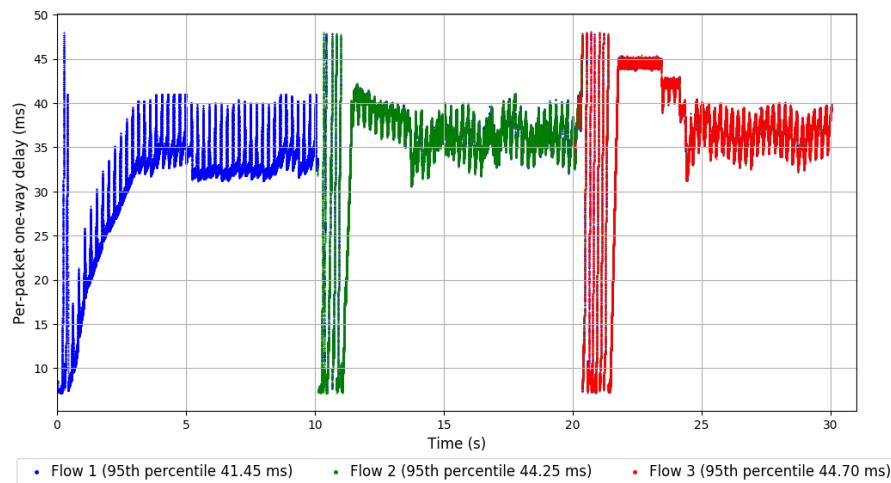
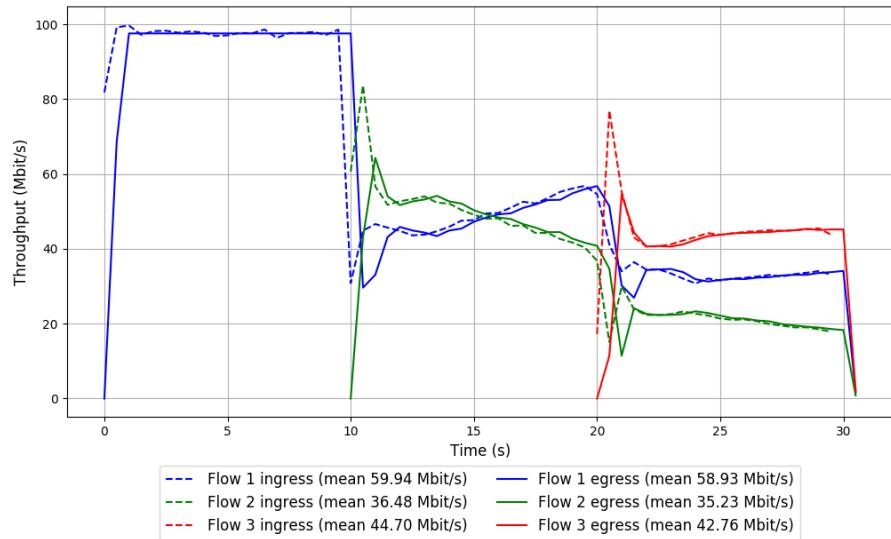
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	54.65	45.05	36.64	39.09	41.02	40.82	1.37	2.77	2.83
Copa	5	0.00	10.69	4.43	6.81	11.01	7.03	98.17	70.59	73.36
TCP Cubic	5	69.43	28.88	22.68	43.28	43.30	43.33	0.61	0.72	0.54
FillP	5	56.52	41.42	28.84	41.04	43.77	44.63	30.57	47.69	60.18
FillP-Sheep	5	56.28	38.33	30.97	37.91	41.40	43.06	4.67	8.80	16.34
Indigo	5	56.23	38.41	46.25	15.04	15.44	16.22	0.00	0.00	0.00
Indigo-MusesC3	5	45.47	49.65	62.31	13.19	13.96	13.86	0.03	0.00	0.00
Indigo-MusesC5	5	59.72	42.50	24.47	37.52	39.55	42.34	3.13	7.20	17.95
Indigo-MusesD	5	59.38	40.17	33.02	18.19	18.71	18.41	1.80	2.64	4.34
Indigo-MusesT	5	60.86	39.82	29.45	33.74	38.80	42.78	3.10	7.22	17.10
LEDBAT	5	49.22	34.78	29.07	43.64	43.81	44.16	0.31	0.38	0.52
PCC-Allegro	5	78.38	12.17	10.63	30.90	32.85	34.01	1.47	1.96	3.44
PCC-Expr	5	8.52	4.93	3.94	6.26	6.23	6.25	46.15	27.59	25.63
QUIC Cubic	5	66.54	30.96	20.74	43.04	43.18	43.46	1.41	1.77	1.79
SCReAM	5	0.21	0.21	0.22	6.53	6.43	6.43	0.00	0.00	0.00
Sprout	5	24.35	24.12	23.70	15.10	15.18	15.26	0.00	0.00	0.00
TaoVA-100x	5	8.38	6.97	6.59	7.37	10.26	9.73	87.66	89.03	95.77
TCP Vegas	5	56.19	39.28	40.87	15.58	12.49	9.44	0.36	0.00	0.00
Verus	5	54.02	20.61	17.67	48.10	46.20	43.51	47.43	41.07	41.51
PCC-Vivace	5	61.13	31.35	20.51	8.92	9.37	10.00	0.00	0.00	0.00
WebRTC media	5	0.05	0.05	0.05	7.03	7.13	7.17	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-03-19 02:33:10
End at: 2019-03-19 02:33:40
Local clock offset: 1.062 ms
Remote clock offset: -4.072 ms

# Below is generated by plot.py at 2019-03-19 04:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.59 Mbit/s
95th percentile per-packet one-way delay: 44.378 ms
Loss rate: 2.42%
-- Flow 1:
Average throughput: 58.93 Mbit/s
95th percentile per-packet one-way delay: 41.448 ms
Loss rate: 1.57%
-- Flow 2:
Average throughput: 35.23 Mbit/s
95th percentile per-packet one-way delay: 44.248 ms
Loss rate: 3.39%
-- Flow 3:
Average throughput: 42.76 Mbit/s
95th percentile per-packet one-way delay: 44.697 ms
Loss rate: 4.27%
```

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

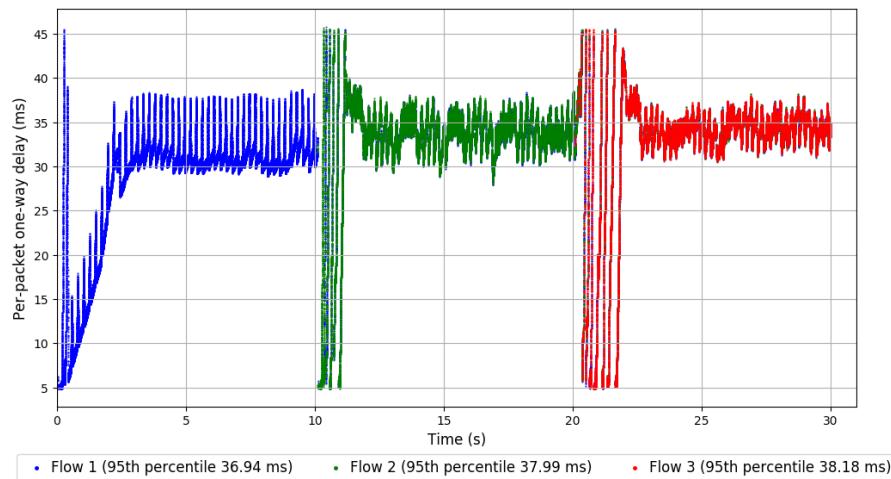
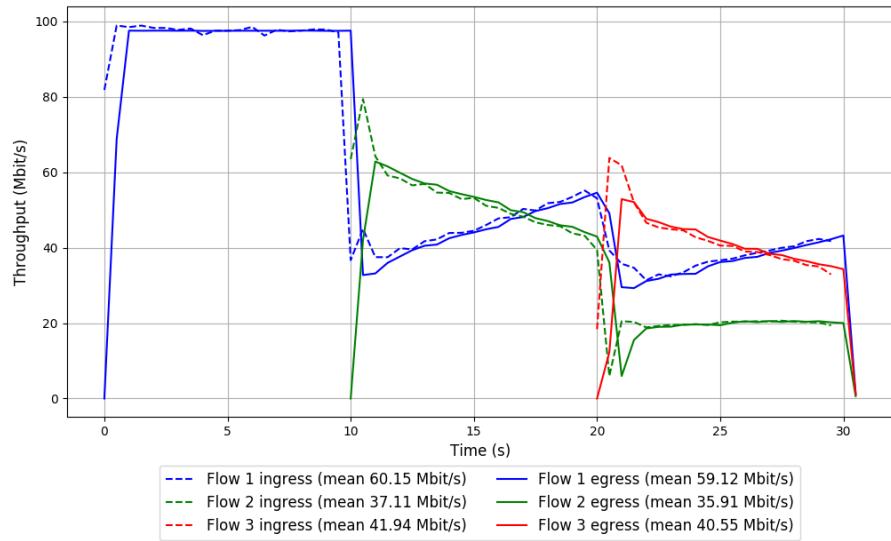


Run 2: Statistics of TCP BBR

```
Start at: 2019-03-19 02:58:27
End at: 2019-03-19 02:58:57
Local clock offset: 2.643 ms
Remote clock offset: -6.179 ms

# Below is generated by plot.py at 2019-03-19 04:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.49 Mbit/s
95th percentile per-packet one-way delay: 37.307 ms
Loss rate: 2.26%
-- Flow 1:
Average throughput: 59.12 Mbit/s
95th percentile per-packet one-way delay: 36.939 ms
Loss rate: 1.61%
-- Flow 2:
Average throughput: 35.91 Mbit/s
95th percentile per-packet one-way delay: 37.993 ms
Loss rate: 3.23%
-- Flow 3:
Average throughput: 40.55 Mbit/s
95th percentile per-packet one-way delay: 38.182 ms
Loss rate: 3.31%
```

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

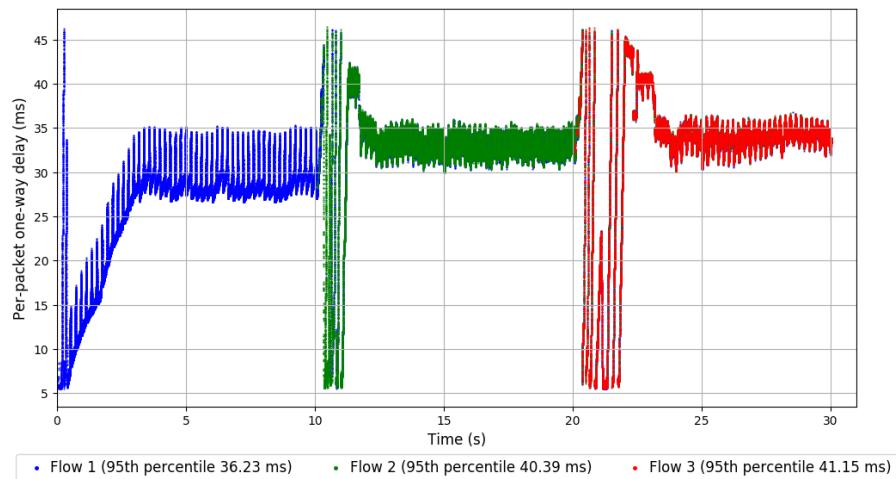
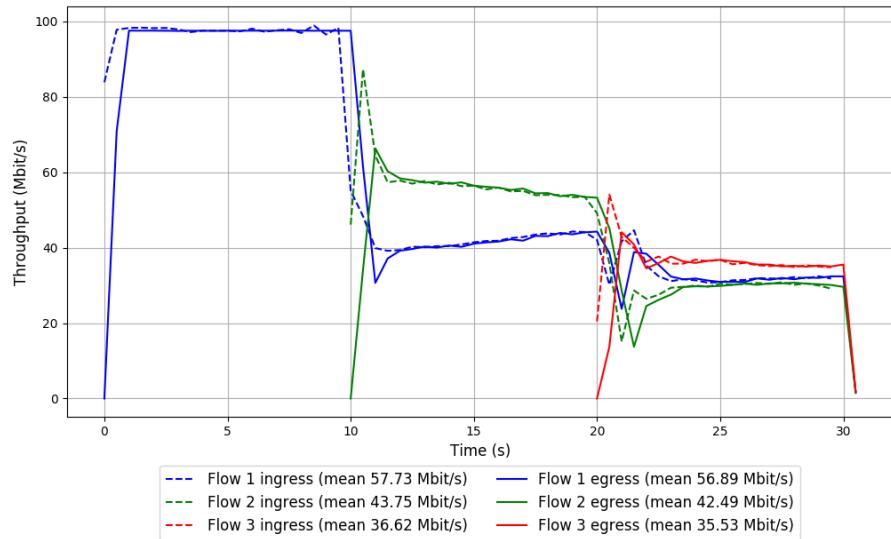


Run 3: Statistics of TCP BBR

```
Start at: 2019-03-19 03:24:06
End at: 2019-03-19 03:24:36
Local clock offset: 2.584 ms
Remote clock offset: -4.761 ms

# Below is generated by plot.py at 2019-03-19 04:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.97 Mbit/s
95th percentile per-packet one-way delay: 39.788 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 56.89 Mbit/s
95th percentile per-packet one-way delay: 36.232 ms
Loss rate: 1.37%
-- Flow 2:
Average throughput: 42.49 Mbit/s
95th percentile per-packet one-way delay: 40.387 ms
Loss rate: 2.88%
-- Flow 3:
Average throughput: 35.53 Mbit/s
95th percentile per-packet one-way delay: 41.153 ms
Loss rate: 2.95%
```

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

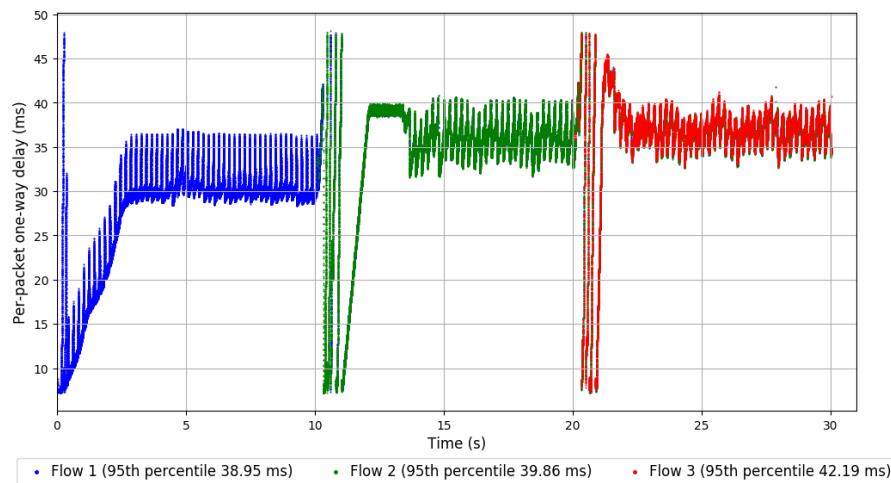
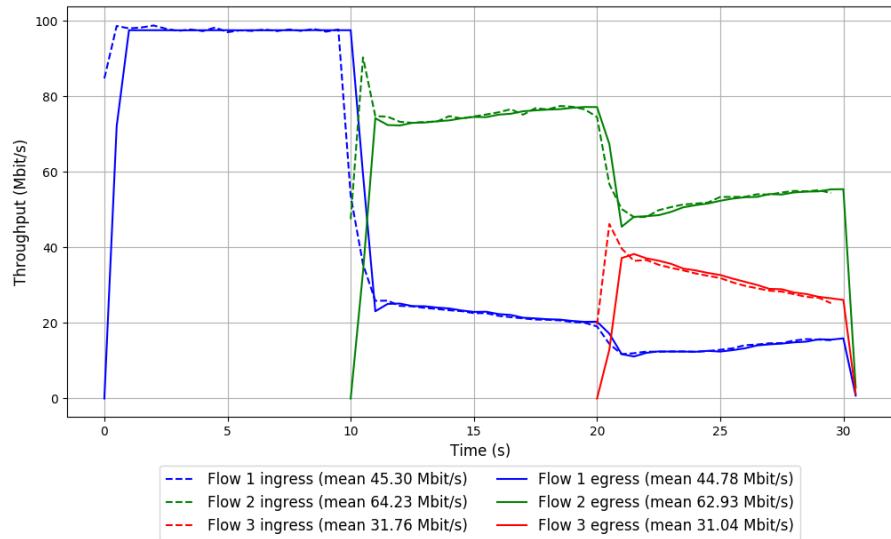


Run 4: Statistics of TCP BBR

```
Start at: 2019-03-19 03:49:13
End at: 2019-03-19 03:49:43
Local clock offset: 0.548 ms
Remote clock offset: -5.634 ms

# Below is generated by plot.py at 2019-03-19 04:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.97 Mbit/s
95th percentile per-packet one-way delay: 39.609 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 44.78 Mbit/s
95th percentile per-packet one-way delay: 38.946 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 62.93 Mbit/s
95th percentile per-packet one-way delay: 39.856 ms
Loss rate: 2.00%
-- Flow 3:
Average throughput: 31.04 Mbit/s
95th percentile per-packet one-way delay: 42.185 ms
Loss rate: 2.20%
```

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

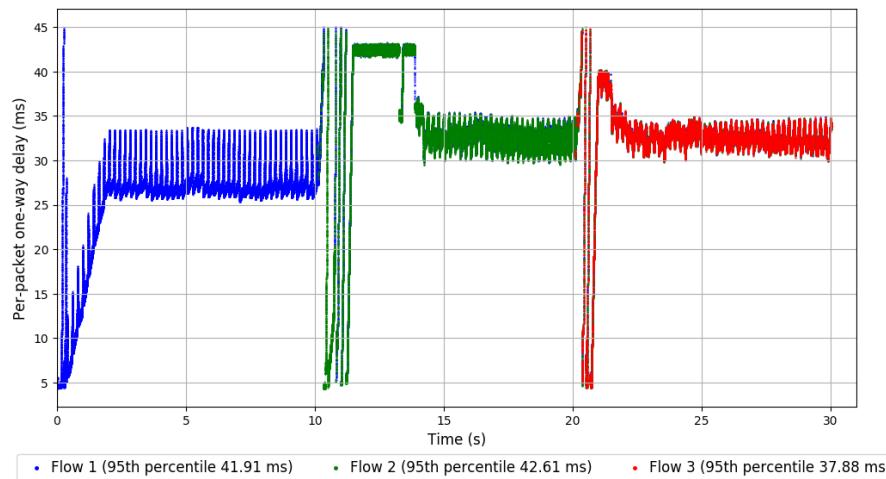
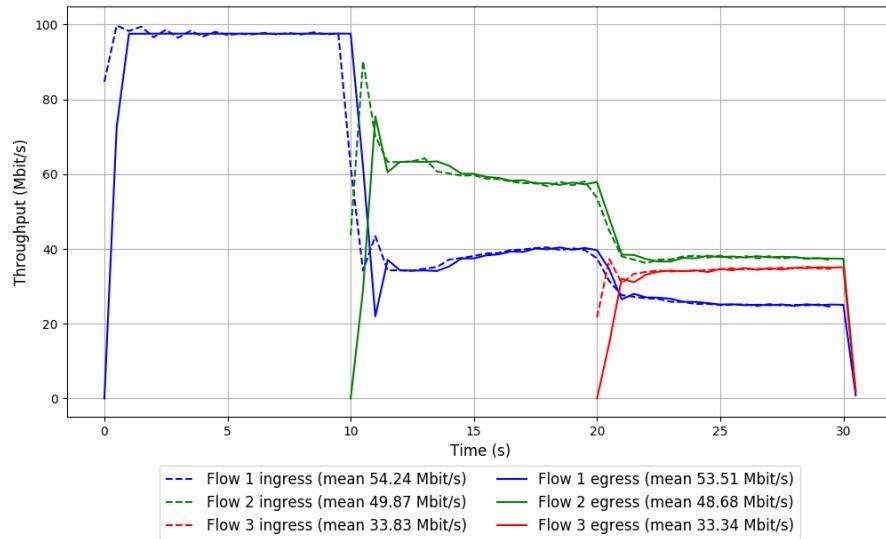


Run 5: Statistics of TCP BBR

```
Start at: 2019-03-19 04:14:07
End at: 2019-03-19 04:14:37
Local clock offset: 1.788 ms
Remote clock offset: -7.706 ms

# Below is generated by plot.py at 2019-03-19 04:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.00 Mbit/s
95th percentile per-packet one-way delay: 42.371 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 53.51 Mbit/s
95th percentile per-packet one-way delay: 41.909 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 48.68 Mbit/s
95th percentile per-packet one-way delay: 42.610 ms
Loss rate: 2.37%
-- Flow 3:
Average throughput: 33.34 Mbit/s
95th percentile per-packet one-way delay: 37.877 ms
Loss rate: 1.43%
```

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

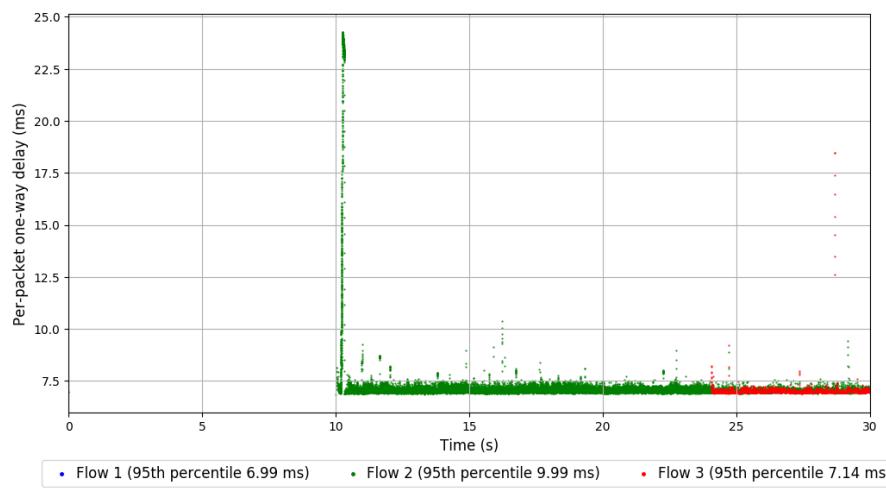
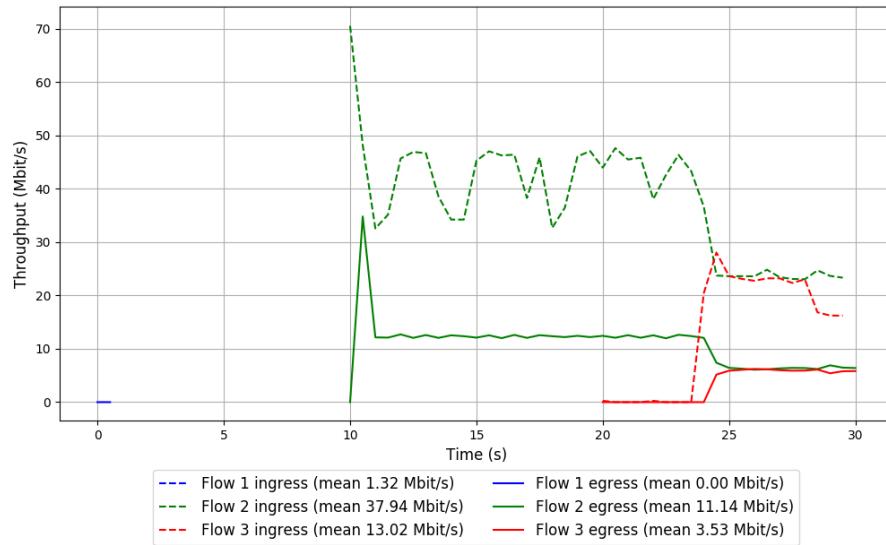


Run 1: Statistics of Copa

```
Start at: 2019-03-19 02:39:13
End at: 2019-03-19 02:39:43
Local clock offset: 2.255 ms
Remote clock offset: -3.886 ms

# Below is generated by plot.py at 2019-03-19 04:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 8.147 ms
Loss rate: 70.97%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6.989 ms
Loss rate: 97.24%
-- Flow 2:
Average throughput: 11.14 Mbit/s
95th percentile per-packet one-way delay: 9.992 ms
Loss rate: 70.65%
-- Flow 3:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 7.145 ms
Loss rate: 72.85%
```

## Run 1: Report of Copa — Data Link

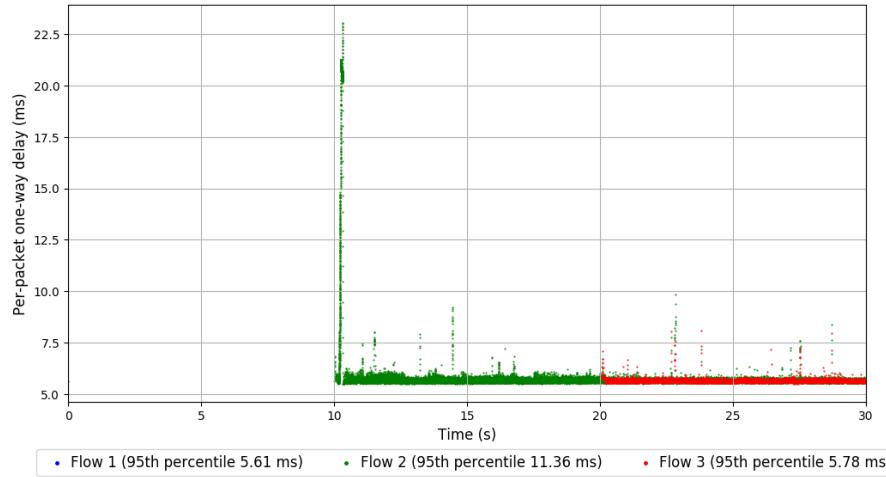
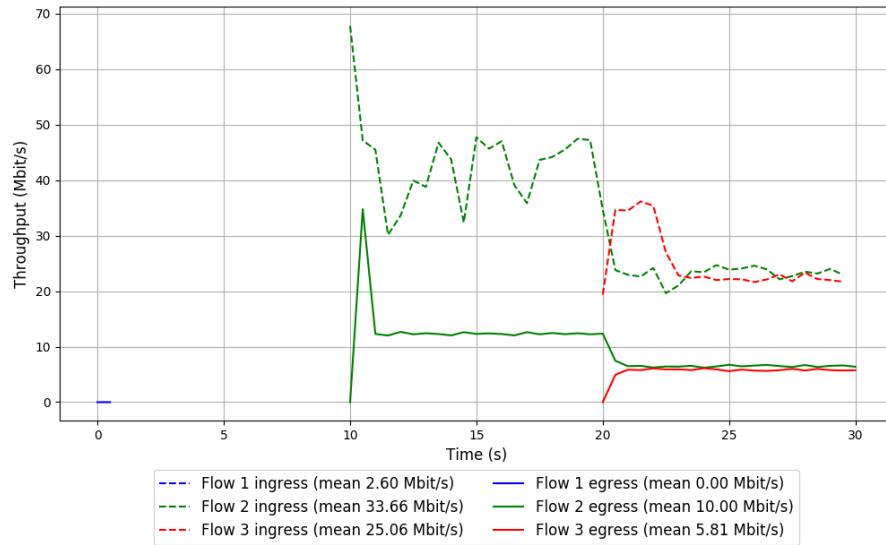


Run 2: Statistics of Copa

```
Start at: 2019-03-19 03:04:48
End at: 2019-03-19 03:05:18
Local clock offset: 2.009 ms
Remote clock offset: -6.304 ms

# Below is generated by plot.py at 2019-03-19 04:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 7.074 ms
Loss rate: 72.07%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5.612 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 10.00 Mbit/s
95th percentile per-packet one-way delay: 11.363 ms
Loss rate: 70.30%
-- Flow 3:
Average throughput: 5.81 Mbit/s
95th percentile per-packet one-way delay: 5.784 ms
Loss rate: 76.82%
```

## Run 2: Report of Copa — Data Link

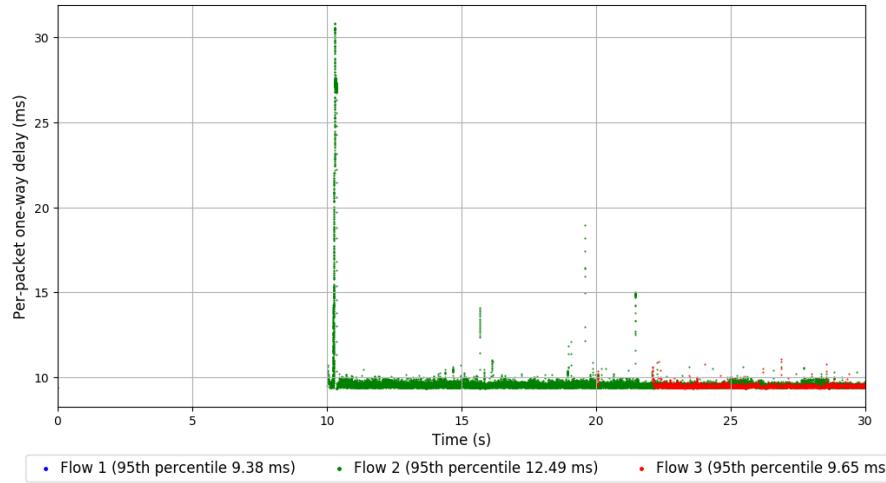
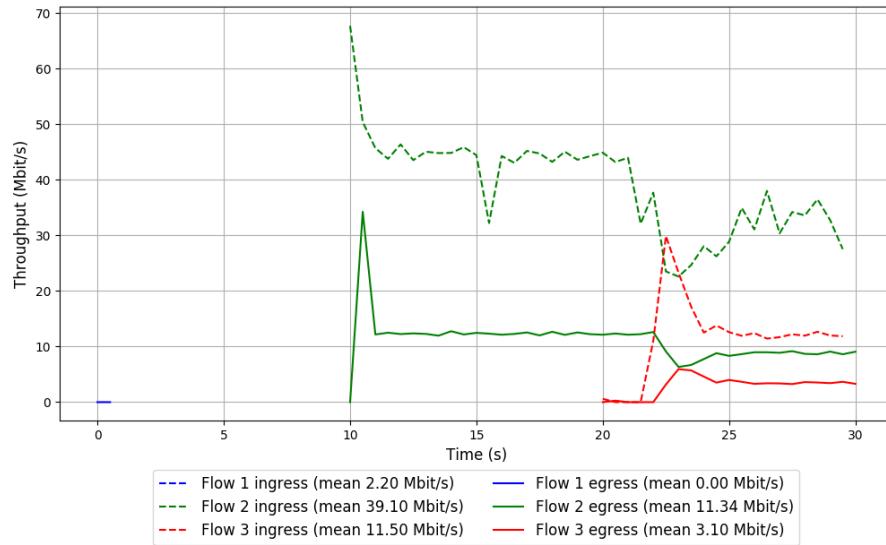


Run 3: Statistics of Copa

```
Start at: 2019-03-19 03:30:14
End at: 2019-03-19 03:30:44
Local clock offset: -1.083 ms
Remote clock offset: -4.571 ms

# Below is generated by plot.py at 2019-03-19 04:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.58 Mbit/s
95th percentile per-packet one-way delay: 10.529 ms
Loss rate: 71.27%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 9.380 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 11.34 Mbit/s
95th percentile per-packet one-way delay: 12.492 ms
Loss rate: 71.00%
-- Flow 3:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 9.655 ms
Loss rate: 73.07%
```

### Run 3: Report of Copa — Data Link

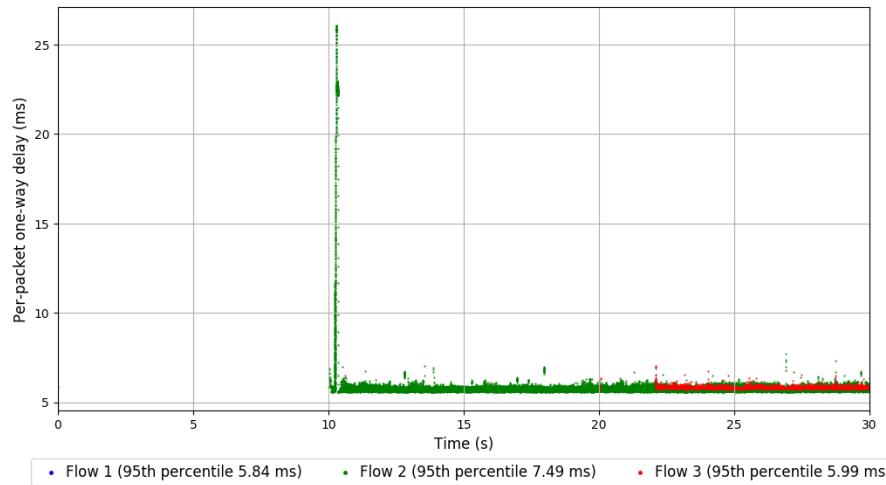
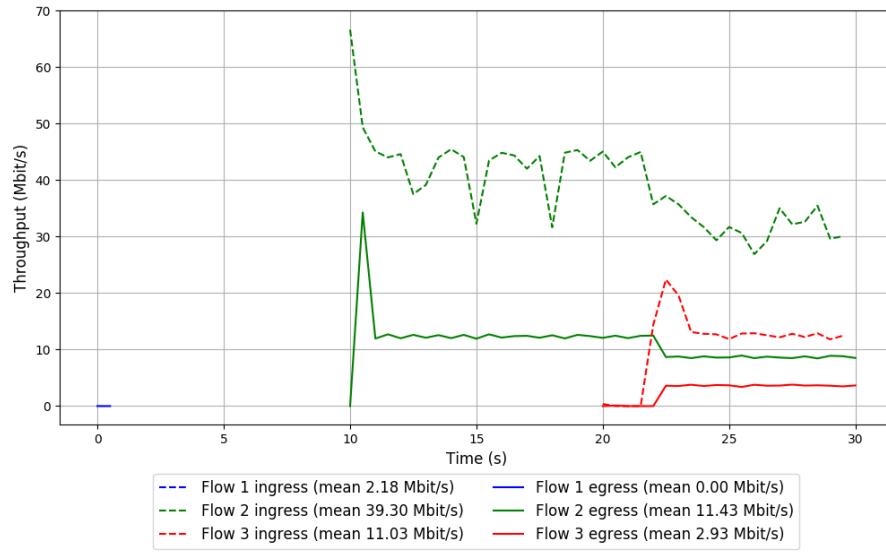


Run 4: Statistics of Copa

```
Start at: 2019-03-19 03:55:13
End at: 2019-03-19 03:55:43
Local clock offset: 0.575 ms
Remote clock offset: -7.465 ms

# Below is generated by plot.py at 2019-03-19 04:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.58 Mbit/s
95th percentile per-packet one-way delay: 6.495 ms
Loss rate: 71.24%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5.837 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 11.43 Mbit/s
95th percentile per-packet one-way delay: 7.491 ms
Loss rate: 70.93%
-- Flow 3:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 5.988 ms
Loss rate: 73.48%
```

## Run 4: Report of Copa — Data Link

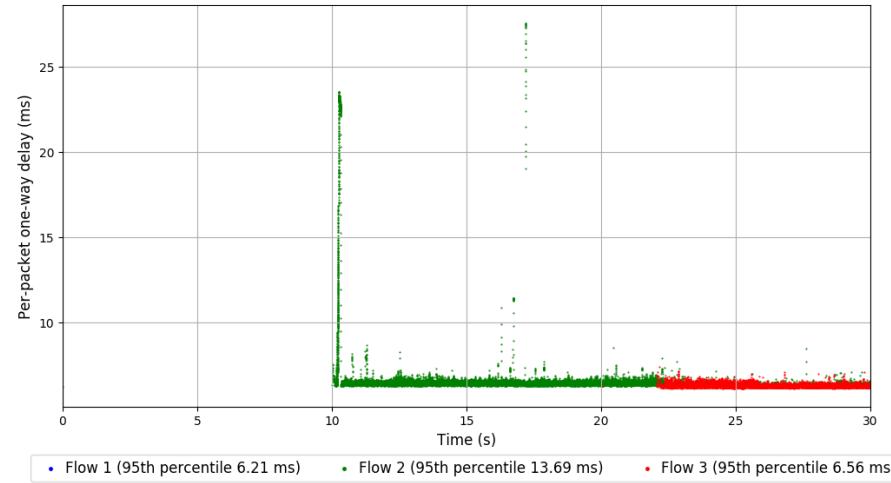
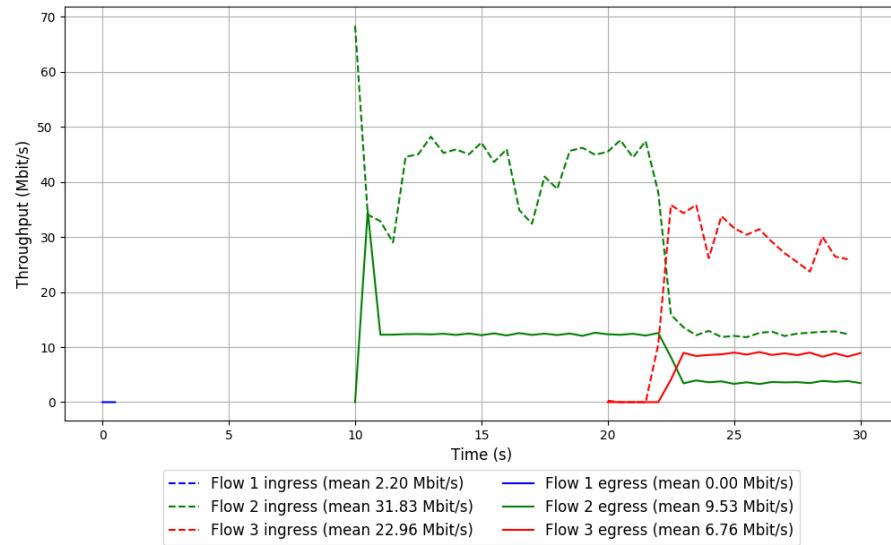


Run 5: Statistics of Copa

```
Start at: 2019-03-19 04:20:15
End at: 2019-03-19 04:20:45
Local clock offset: 0.783 ms
Remote clock offset: -6.714 ms

# Below is generated by plot.py at 2019-03-19 04:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 7.683 ms
Loss rate: 70.22%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 6.214 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 13.694 ms
Loss rate: 70.09%
-- Flow 3:
Average throughput: 6.76 Mbit/s
95th percentile per-packet one-way delay: 6.559 ms
Loss rate: 70.57%
```

## Run 5: Report of Copa — Data Link

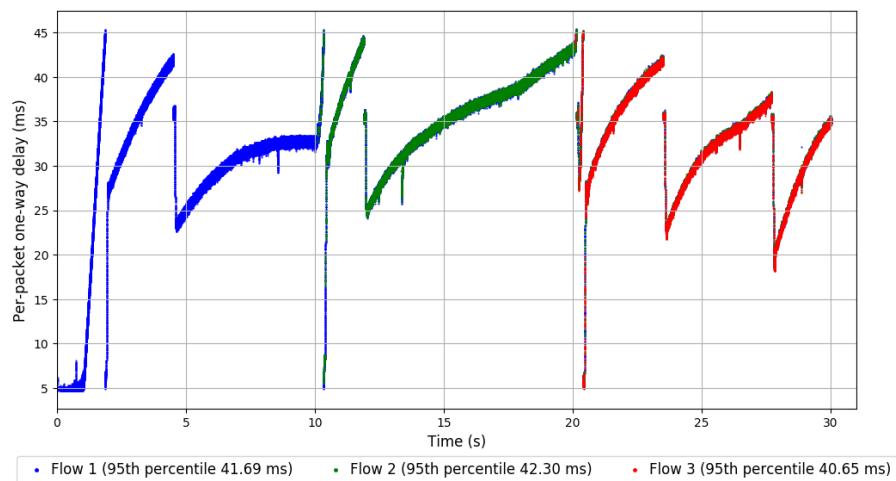
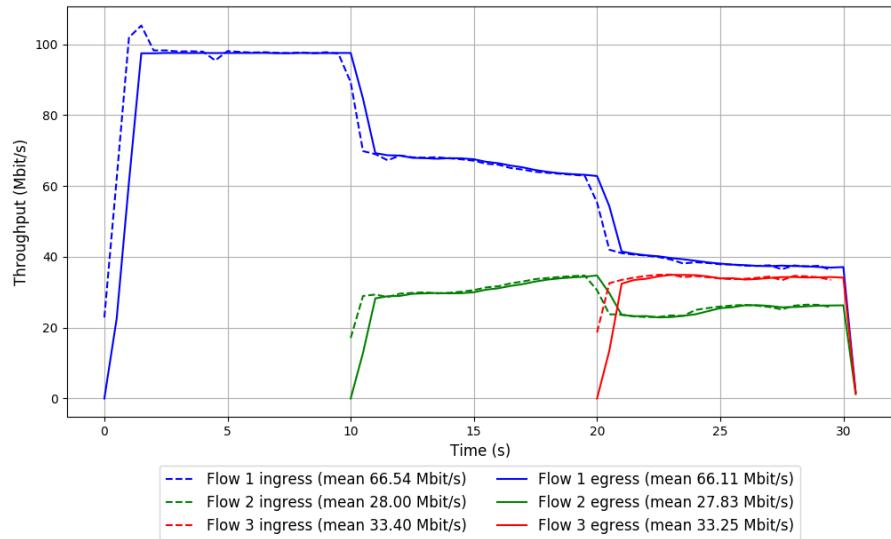


```
Run 1: Statistics of TCP Cubic

Start at: 2019-03-19 02:45:05
End at: 2019-03-19 02:45:35
Local clock offset: 3.873 ms
Remote clock offset: -4.977 ms

# Below is generated by plot.py at 2019-03-19 04:39:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.68 Mbit/s
95th percentile per-packet one-way delay: 41.711 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 66.11 Mbit/s
95th percentile per-packet one-way delay: 41.694 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 27.83 Mbit/s
95th percentile per-packet one-way delay: 42.299 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 33.25 Mbit/s
95th percentile per-packet one-way delay: 40.651 ms
Loss rate: 0.54%
```

Run 1: Report of TCP Cubic — Data Link

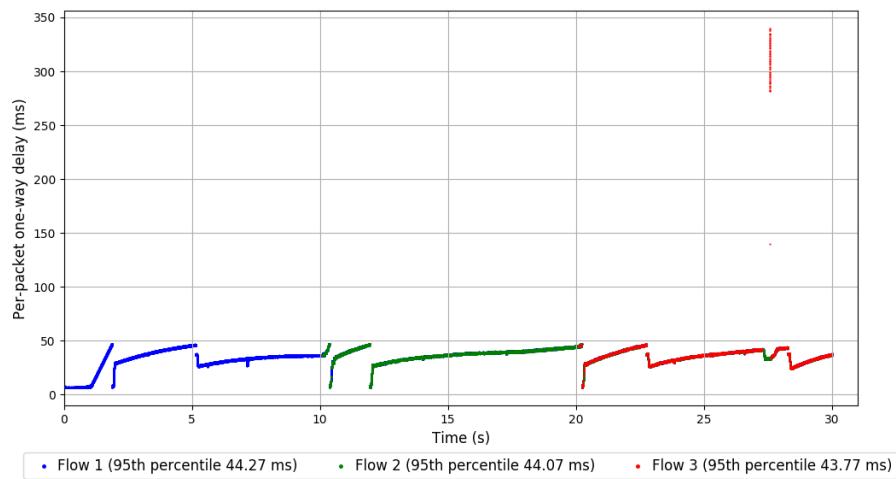
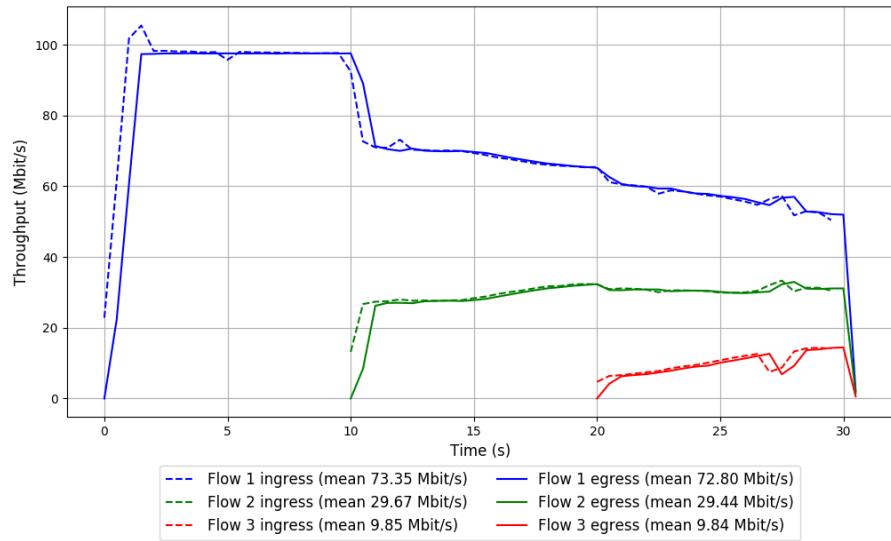


Run 2: Statistics of TCP Cubic

```
Start at: 2019-03-19 03:10:45
End at: 2019-03-19 03:11:15
Local clock offset: 1.649 ms
Remote clock offset: -5.63 ms

# Below is generated by plot.py at 2019-03-19 04:39:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.66 Mbit/s
95th percentile per-packet one-way delay: 44.231 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 72.80 Mbit/s
95th percentile per-packet one-way delay: 44.270 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 29.44 Mbit/s
95th percentile per-packet one-way delay: 44.068 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 9.84 Mbit/s
95th percentile per-packet one-way delay: 43.771 ms
Loss rate: 0.20%
```

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

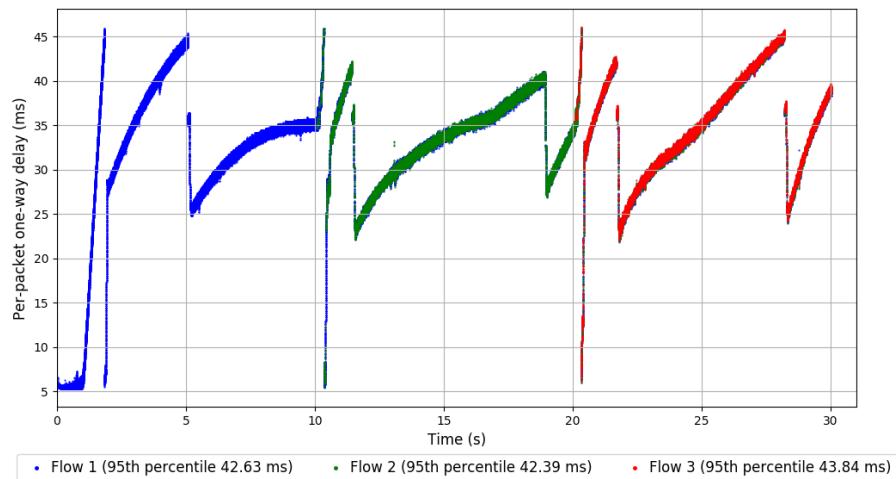
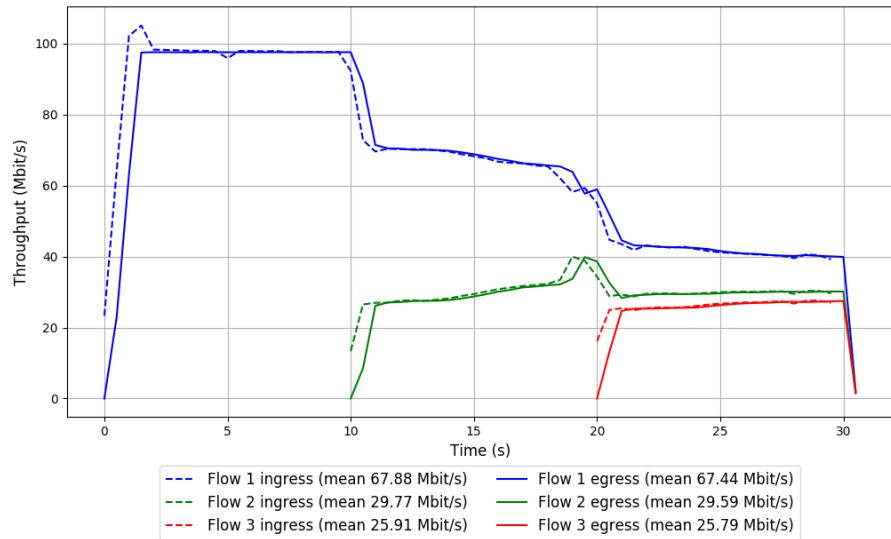


Run 3: Statistics of TCP Cubic

```
Start at: 2019-03-19 03:36:04
End at: 2019-03-19 03:36:34
Local clock offset: 1.494 ms
Remote clock offset: -6.042 ms

# Below is generated by plot.py at 2019-03-19 04:39:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.72 Mbit/s
95th percentile per-packet one-way delay: 42.754 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 67.44 Mbit/s
95th percentile per-packet one-way delay: 42.629 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 29.59 Mbit/s
95th percentile per-packet one-way delay: 42.386 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 25.79 Mbit/s
95th percentile per-packet one-way delay: 43.845 ms
Loss rate: 0.42%
```

Run 3: Report of TCP Cubic — Data Link

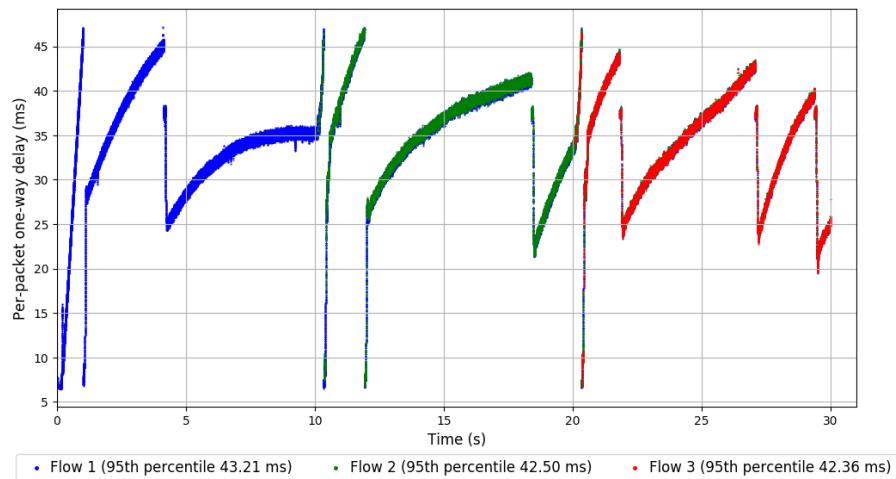
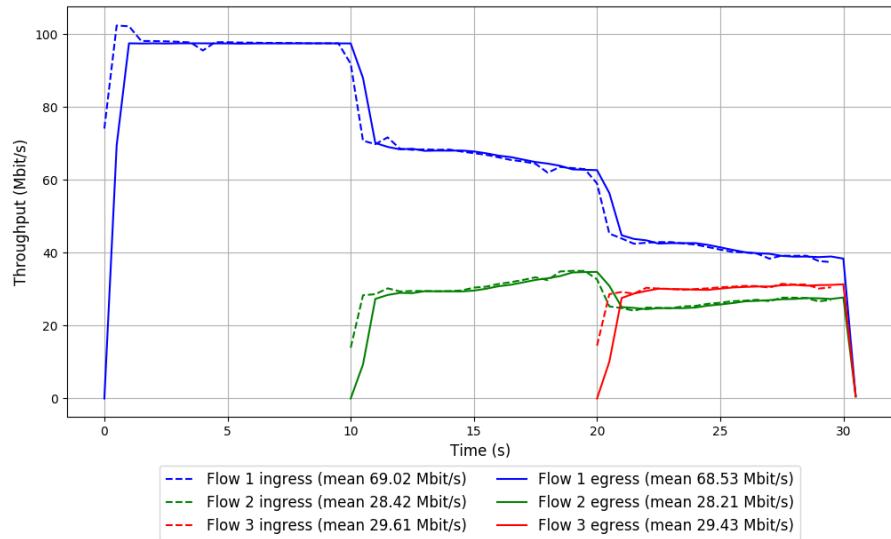


Run 4: Statistics of TCP Cubic

```
Start at: 2019-03-19 04:01:02
End at: 2019-03-19 04:01:32
Local clock offset: 0.318 ms
Remote clock offset: -7.021 ms

# Below is generated by plot.py at 2019-03-19 04:40:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.06 Mbit/s
95th percentile per-packet one-way delay: 42.932 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 68.53 Mbit/s
95th percentile per-packet one-way delay: 43.206 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 28.21 Mbit/s
95th percentile per-packet one-way delay: 42.504 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 29.43 Mbit/s
95th percentile per-packet one-way delay: 42.364 ms
Loss rate: 0.70%
```

Run 4: Report of TCP Cubic — Data Link

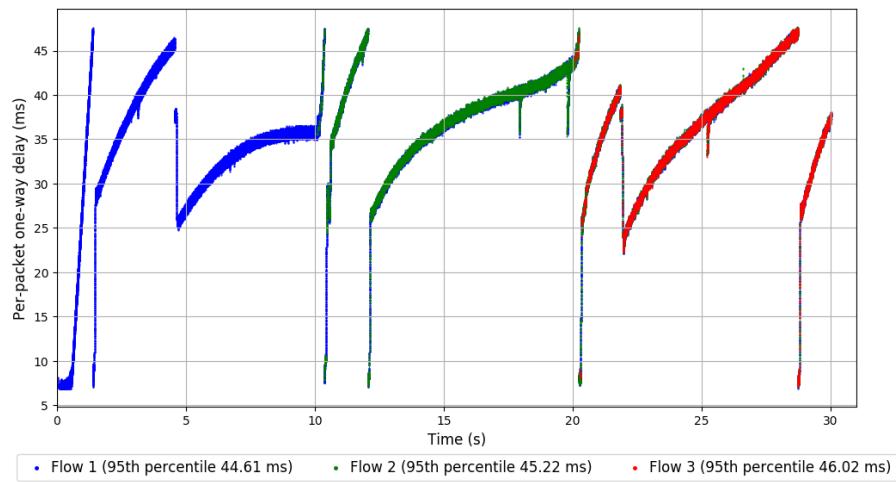
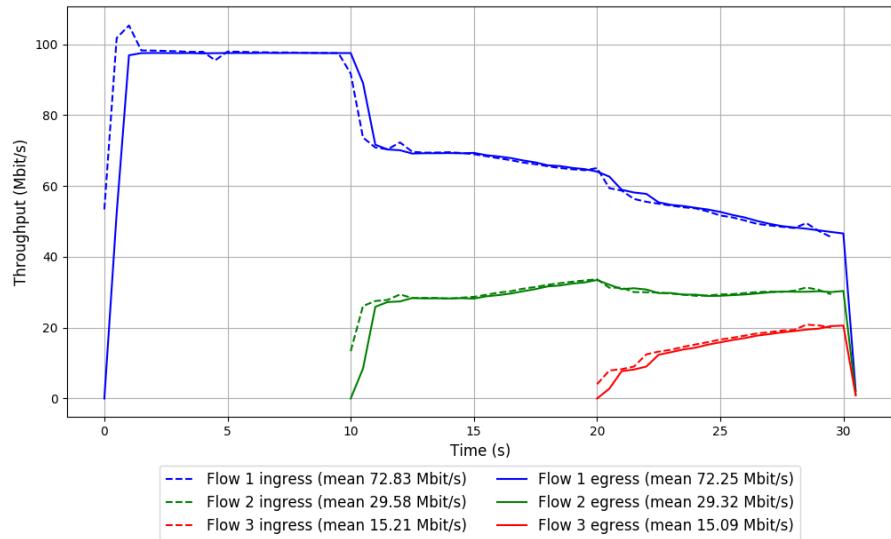


Run 5: Statistics of TCP Cubic

```
Start at: 2019-03-19 04:26:08
End at: 2019-03-19 04:26:38
Local clock offset: 0.541 ms
Remote clock offset: -6.258 ms

# Below is generated by plot.py at 2019-03-19 04:40:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.78 Mbit/s
95th percentile per-packet one-way delay: 44.853 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 72.25 Mbit/s
95th percentile per-packet one-way delay: 44.611 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 29.32 Mbit/s
95th percentile per-packet one-way delay: 45.220 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 15.09 Mbit/s
95th percentile per-packet one-way delay: 46.023 ms
Loss rate: 0.83%
```

Run 5: Report of TCP Cubic — Data Link

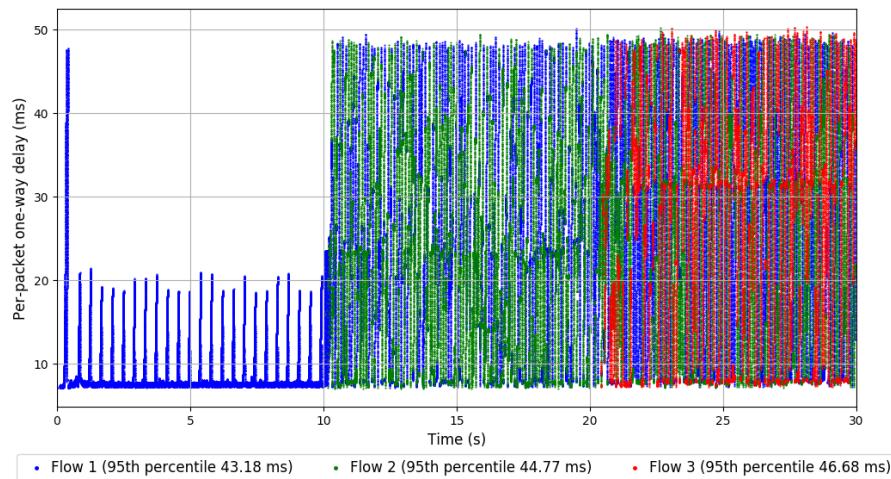
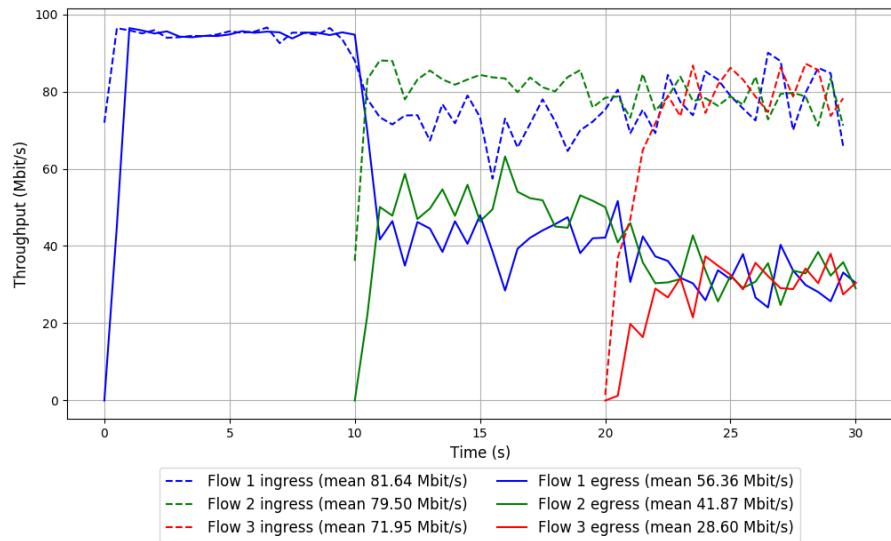


```
Run 1: Statistics of FillP

Start at: 2019-03-19 02:31:58
End at: 2019-03-19 02:32:28
Local clock offset: 1.383 ms
Remote clock offset: -3.534 ms

# Below is generated by plot.py at 2019-03-19 04:40:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.60 Mbit/s
95th percentile per-packet one-way delay: 44.379 ms
Loss rate: 40.90%
-- Flow 1:
Average throughput: 56.36 Mbit/s
95th percentile per-packet one-way delay: 43.177 ms
Loss rate: 30.98%
-- Flow 2:
Average throughput: 41.87 Mbit/s
95th percentile per-packet one-way delay: 44.774 ms
Loss rate: 47.41%
-- Flow 3:
Average throughput: 28.60 Mbit/s
95th percentile per-packet one-way delay: 46.676 ms
Loss rate: 60.38%
```

Run 1: Report of FillP — Data Link

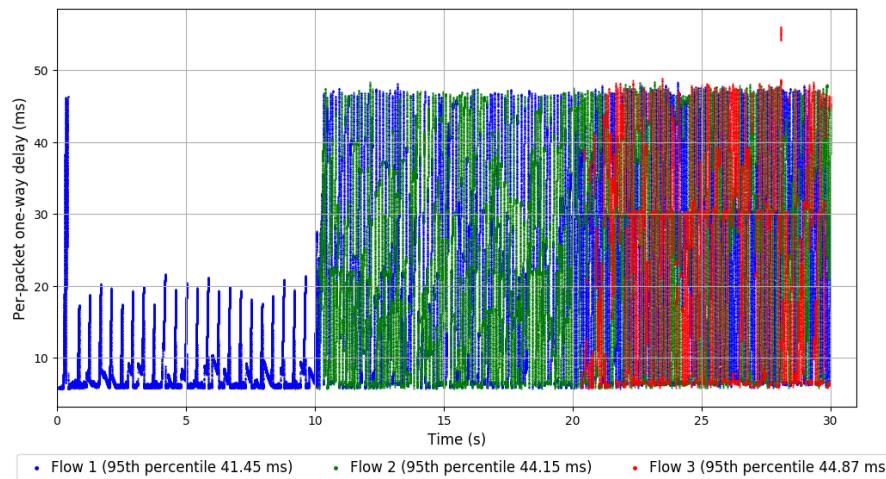
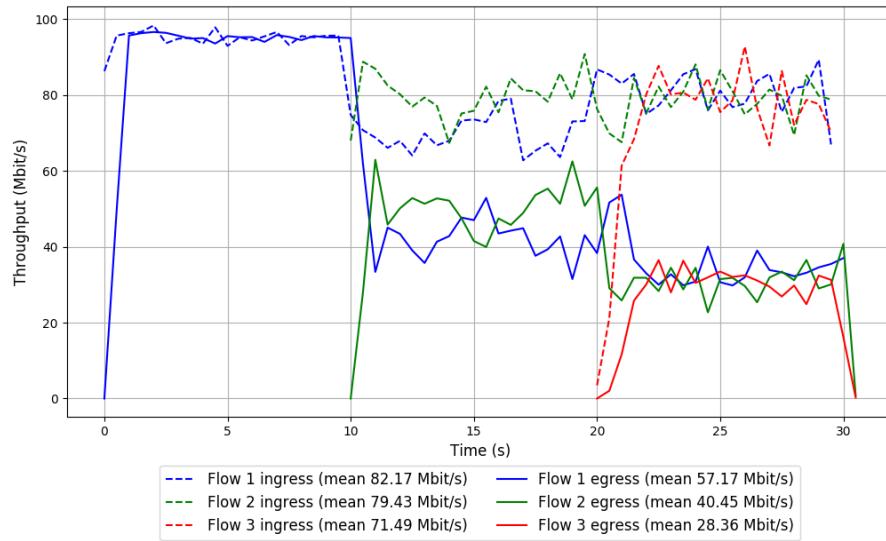


Run 2: Statistics of FillP

```
Start at: 2019-03-19 02:57:14
End at: 2019-03-19 02:57:44
Local clock offset: 1.418 ms
Remote clock offset: -6.403 ms

# Below is generated by plot.py at 2019-03-19 04:40:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.25 Mbit/s
95th percentile per-packet one-way delay: 43.107 ms
Loss rate: 41.18%
-- Flow 1:
Average throughput: 57.17 Mbit/s
95th percentile per-packet one-way delay: 41.452 ms
Loss rate: 30.39%
-- Flow 2:
Average throughput: 40.45 Mbit/s
95th percentile per-packet one-way delay: 44.147 ms
Loss rate: 49.00%
-- Flow 3:
Average throughput: 28.36 Mbit/s
95th percentile per-packet one-way delay: 44.870 ms
Loss rate: 61.09%
```

## Run 2: Report of FillP — Data Link

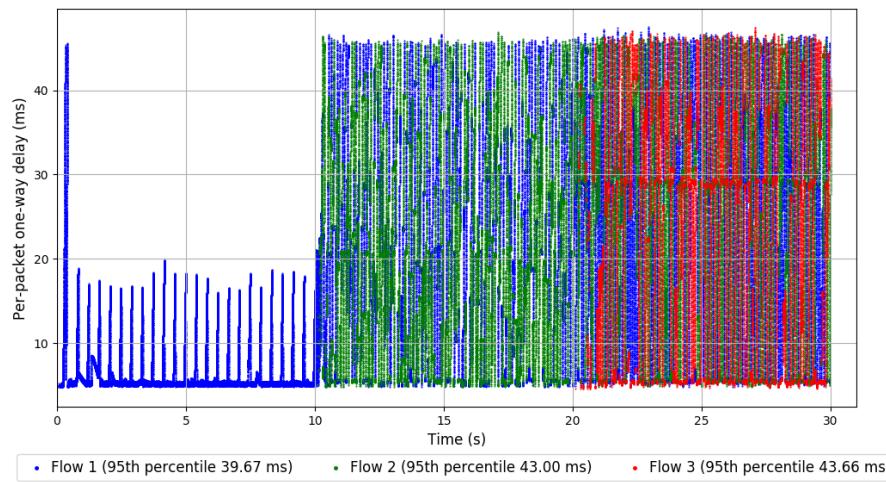
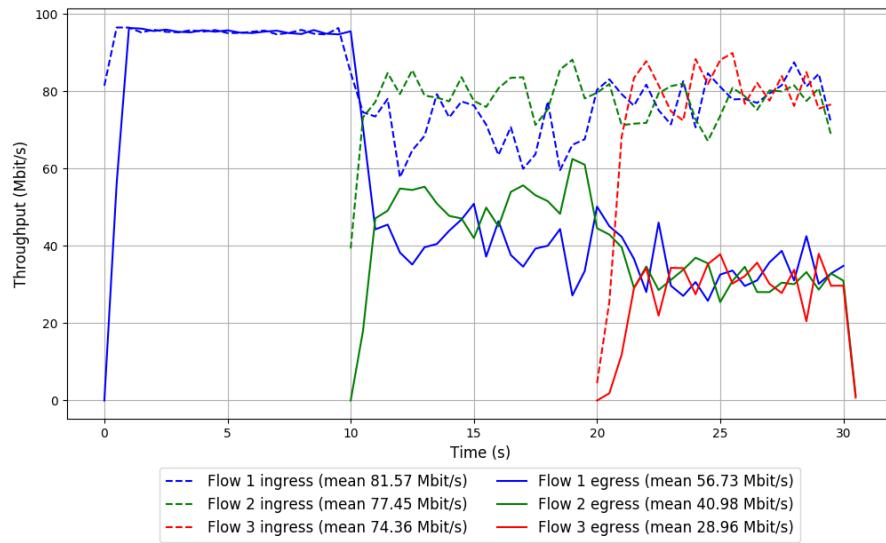


Run 3: Statistics of FillP

```
Start at: 2019-03-19 03:22:53
End at: 2019-03-19 03:23:23
Local clock offset: 1.092 ms
Remote clock offset: -6.882 ms

# Below is generated by plot.py at 2019-03-19 04:40:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.55 Mbit/s
95th percentile per-packet one-way delay: 41.694 ms
Loss rate: 40.64%
-- Flow 1:
Average throughput: 56.73 Mbit/s
95th percentile per-packet one-way delay: 39.668 ms
Loss rate: 30.45%
-- Flow 2:
Average throughput: 40.98 Mbit/s
95th percentile per-packet one-way delay: 42.998 ms
Loss rate: 47.00%
-- Flow 3:
Average throughput: 28.96 Mbit/s
95th percentile per-packet one-way delay: 43.664 ms
Loss rate: 61.03%
```

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

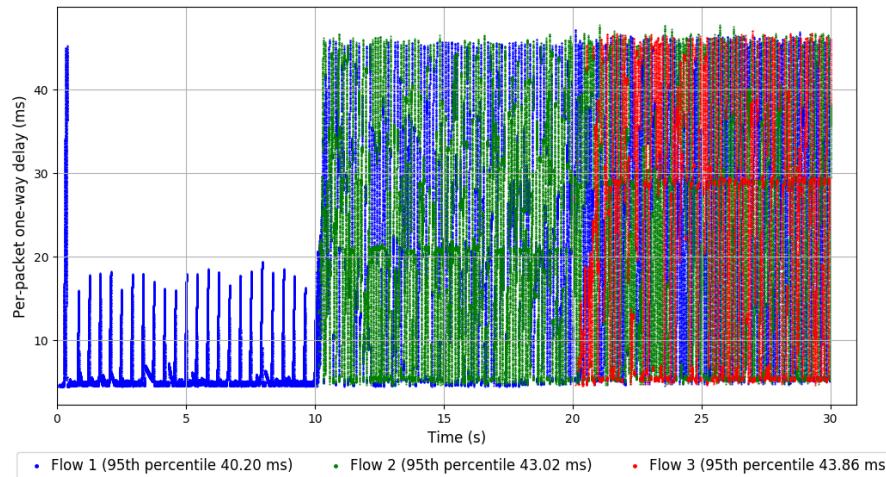
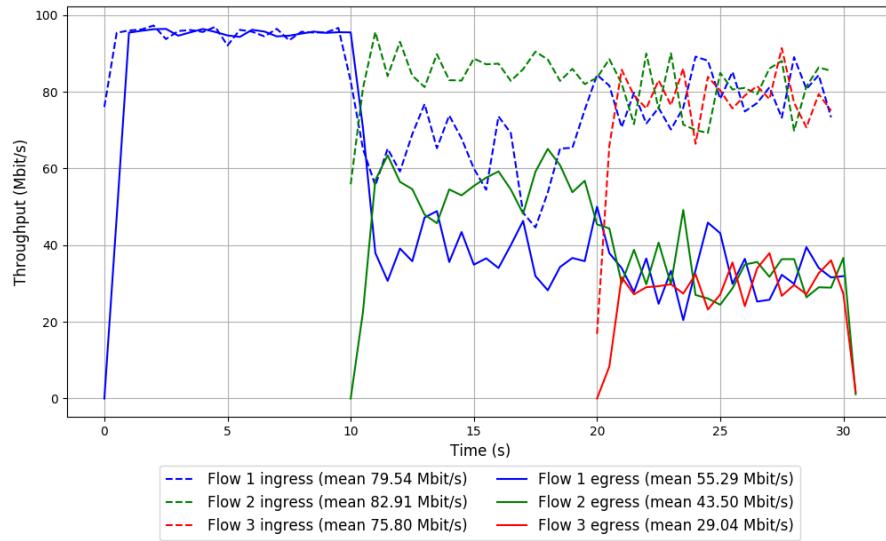


Run 4: Statistics of FillP

```
Start at: 2019-03-19 03:48:01
End at: 2019-03-19 03:48:31
Local clock offset: 2.053 ms
Remote clock offset: -6.686 ms

# Below is generated by plot.py at 2019-03-19 04:41:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.78 Mbit/s
95th percentile per-packet one-way delay: 42.047 ms
Loss rate: 41.25%
-- Flow 1:
Average throughput: 55.29 Mbit/s
95th percentile per-packet one-way delay: 40.197 ms
Loss rate: 30.49%
-- Flow 2:
Average throughput: 43.50 Mbit/s
95th percentile per-packet one-way delay: 43.023 ms
Loss rate: 47.47%
-- Flow 3:
Average throughput: 29.04 Mbit/s
95th percentile per-packet one-way delay: 43.860 ms
Loss rate: 61.64%
```

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

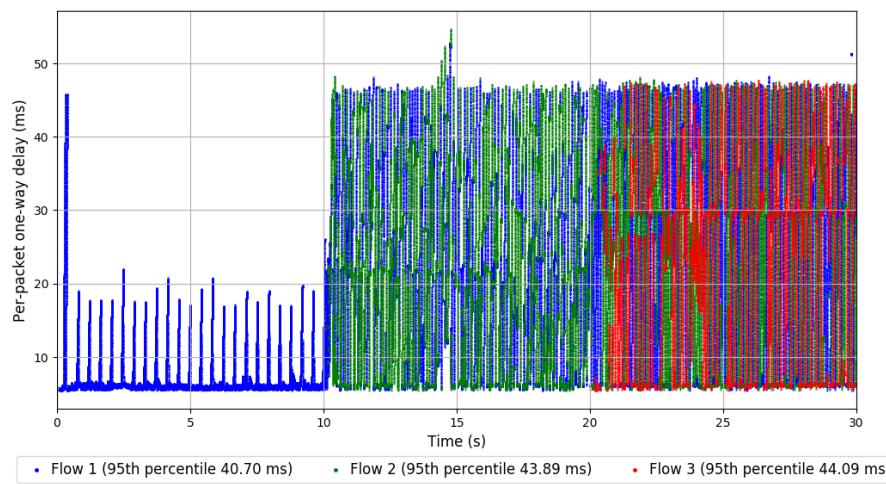
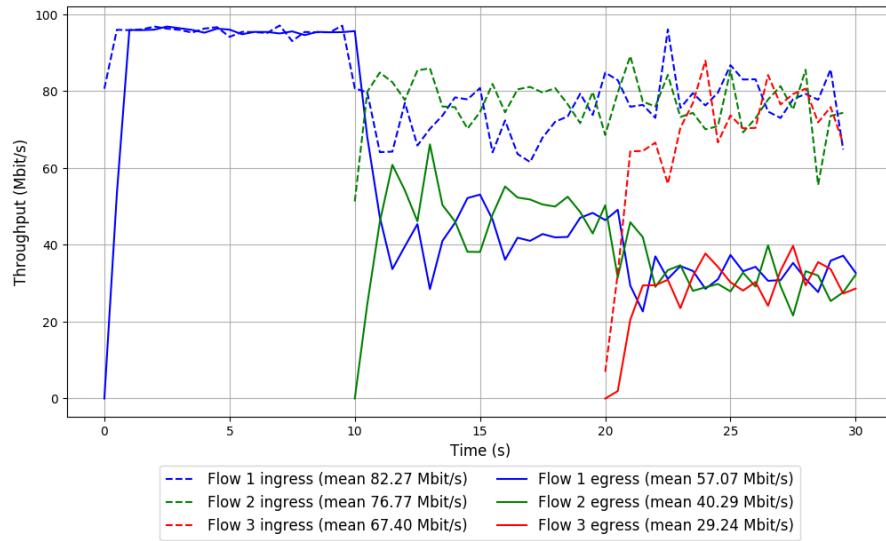


Run 5: Statistics of FillP

```
Start at: 2019-03-19 04:12:51
End at: 2019-03-19 04:13:21
Local clock offset: 1.591 ms
Remote clock offset: -6.655 ms

# Below is generated by plot.py at 2019-03-19 04:41:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.55 Mbit/s
95th percentile per-packet one-way delay: 42.721 ms
Loss rate: 39.90%
-- Flow 1:
Average throughput: 57.07 Mbit/s
95th percentile per-packet one-way delay: 40.703 ms
Loss rate: 30.54%
-- Flow 2:
Average throughput: 40.29 Mbit/s
95th percentile per-packet one-way delay: 43.888 ms
Loss rate: 47.57%
-- Flow 3:
Average throughput: 29.24 Mbit/s
95th percentile per-packet one-way delay: 44.093 ms
Loss rate: 56.77%
```

## Run 5: Report of FillP — Data Link

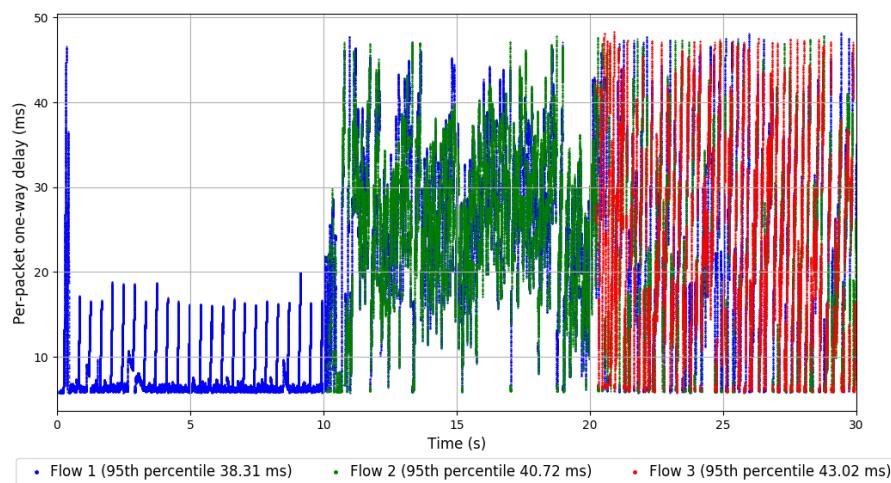
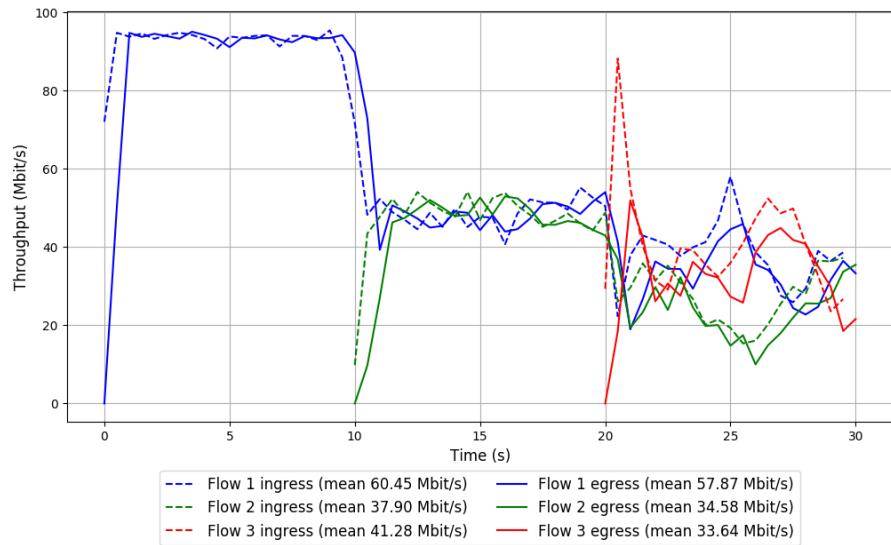


Run 1: Statistics of FillP-Sheep

```
Start at: 2019-03-19 02:35:34
End at: 2019-03-19 02:36:04
Local clock offset: 1.81 ms
Remote clock offset: -4.897 ms

# Below is generated by plot.py at 2019-03-19 04:41:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.99 Mbit/s
95th percentile per-packet one-way delay: 40.022 ms
Loss rate: 7.32%
-- Flow 1:
Average throughput: 57.87 Mbit/s
95th percentile per-packet one-way delay: 38.309 ms
Loss rate: 4.19%
-- Flow 2:
Average throughput: 34.58 Mbit/s
95th percentile per-packet one-way delay: 40.723 ms
Loss rate: 8.67%
-- Flow 3:
Average throughput: 33.64 Mbit/s
95th percentile per-packet one-way delay: 43.015 ms
Loss rate: 18.64%
```

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

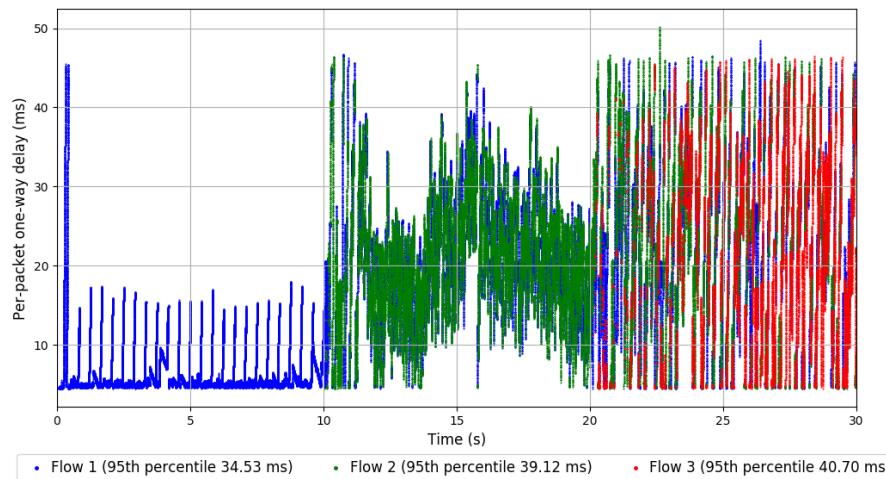
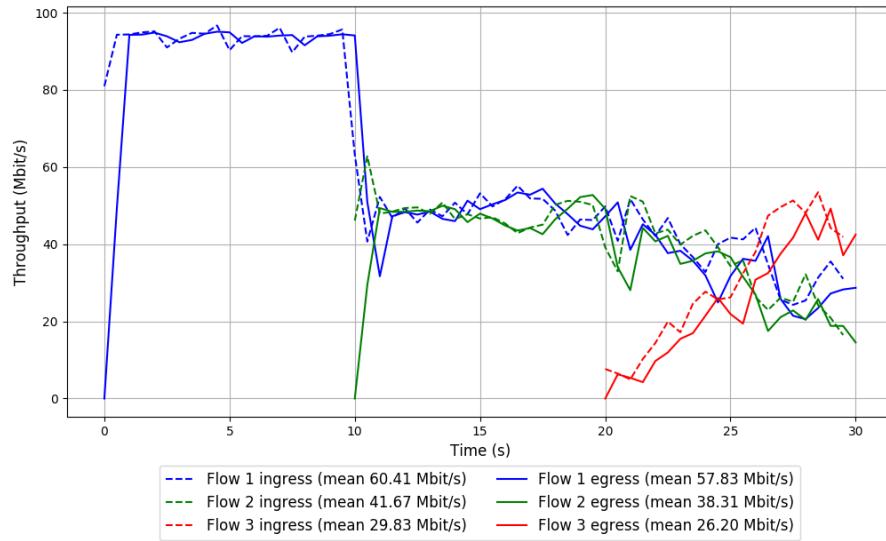


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-03-19 03:01:02
End at: 2019-03-19 03:01:32
Local clock offset: 2.108 ms
Remote clock offset: -7.004 ms

# Below is generated by plot.py at 2019-03-19 04:41:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.90 Mbit/s
95th percentile per-packet one-way delay: 37.387 ms
Loss rate: 6.16%
-- Flow 1:
Average throughput: 57.83 Mbit/s
95th percentile per-packet one-way delay: 34.535 ms
Loss rate: 4.28%
-- Flow 2:
Average throughput: 38.31 Mbit/s
95th percentile per-packet one-way delay: 39.122 ms
Loss rate: 8.11%
-- Flow 3:
Average throughput: 26.20 Mbit/s
95th percentile per-packet one-way delay: 40.705 ms
Loss rate: 12.17%
```

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

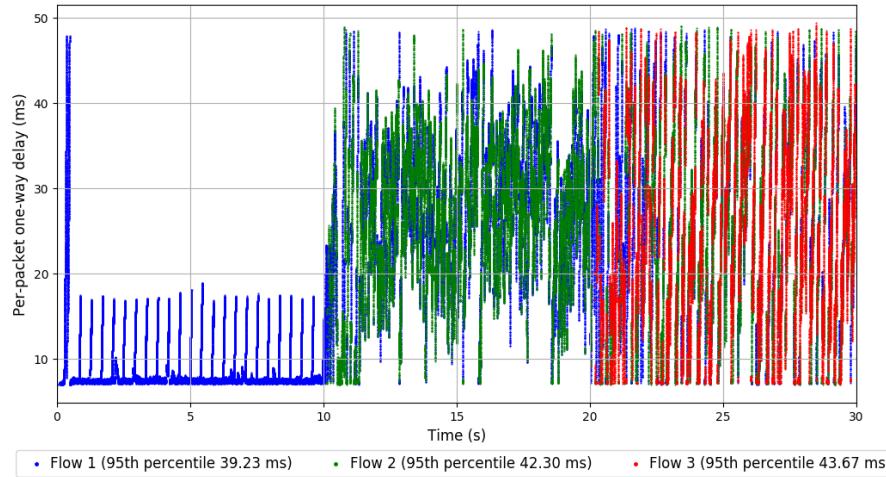
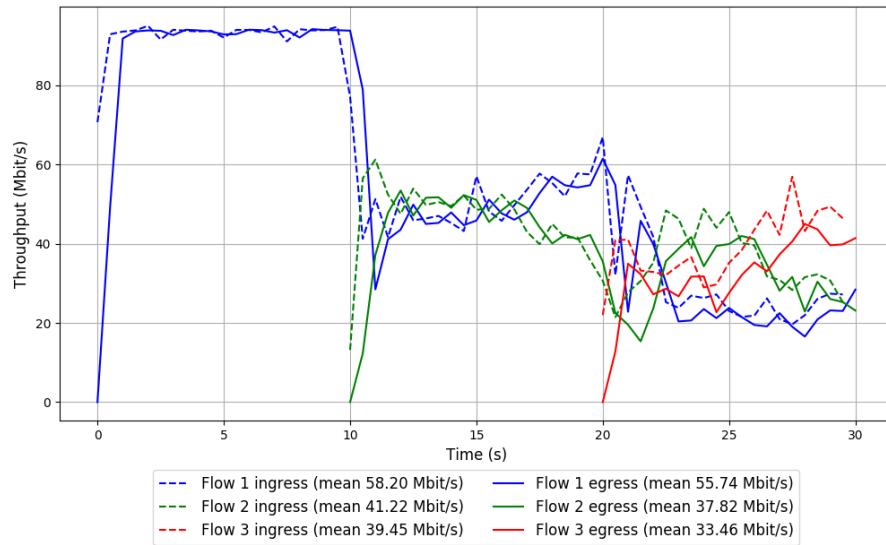


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-03-19 03:26:35
End at: 2019-03-19 03:27:05
Local clock offset: 0.517 ms
Remote clock offset: -5.154 ms

# Below is generated by plot.py at 2019-03-19 04:41:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.98 Mbit/s
95th percentile per-packet one-way delay: 41.197 ms
Loss rate: 6.77%
-- Flow 1:
Average throughput: 55.74 Mbit/s
95th percentile per-packet one-way delay: 39.234 ms
Loss rate: 4.20%
-- Flow 2:
Average throughput: 37.82 Mbit/s
95th percentile per-packet one-way delay: 42.295 ms
Loss rate: 8.15%
-- Flow 3:
Average throughput: 33.46 Mbit/s
95th percentile per-packet one-way delay: 43.666 ms
Loss rate: 15.27%
```

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

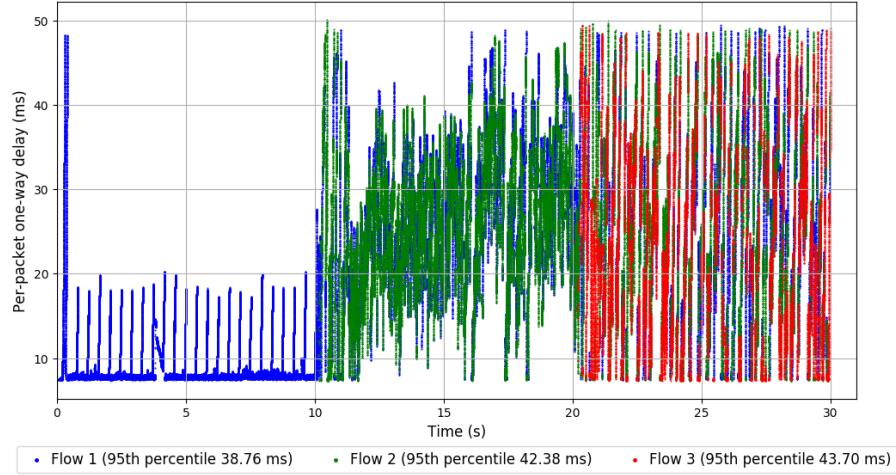
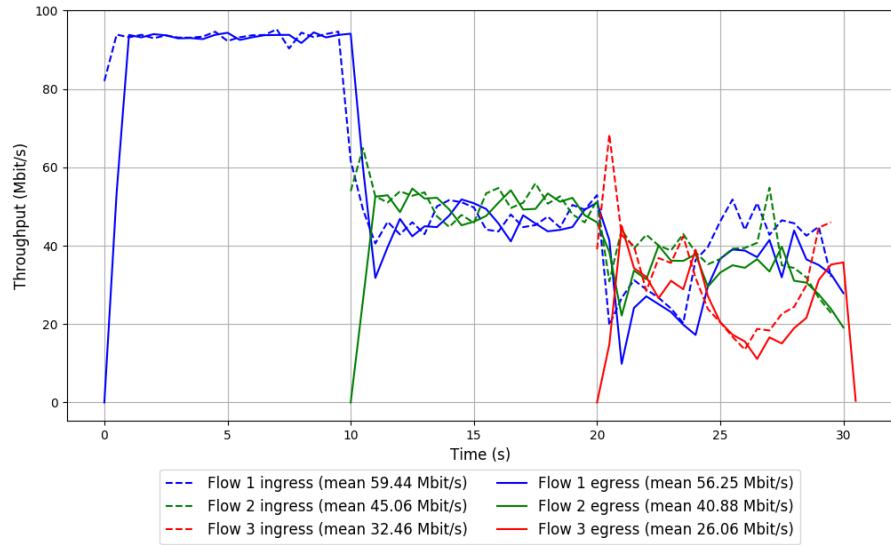


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-03-19 03:51:37
End at: 2019-03-19 03:52:07
Local clock offset: 0.319 ms
Remote clock offset: -5.825 ms

# Below is generated by plot.py at 2019-03-19 04:42:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.03 Mbit/s
95th percentile per-packet one-way delay: 40.941 ms
Loss rate: 8.03%
-- Flow 1:
Average throughput: 56.25 Mbit/s
95th percentile per-packet one-way delay: 38.756 ms
Loss rate: 5.36%
-- Flow 2:
Average throughput: 40.88 Mbit/s
95th percentile per-packet one-way delay: 42.384 ms
Loss rate: 9.18%
-- Flow 3:
Average throughput: 26.06 Mbit/s
95th percentile per-packet one-way delay: 43.696 ms
Loss rate: 19.58%
```

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

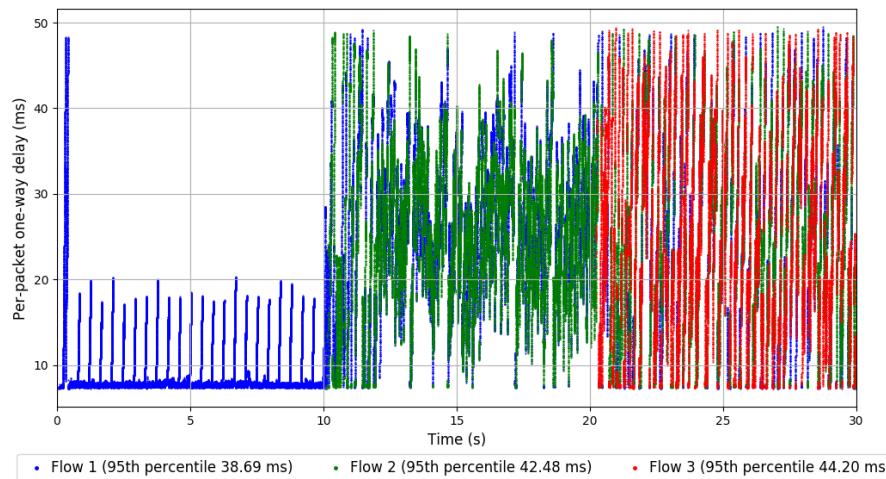
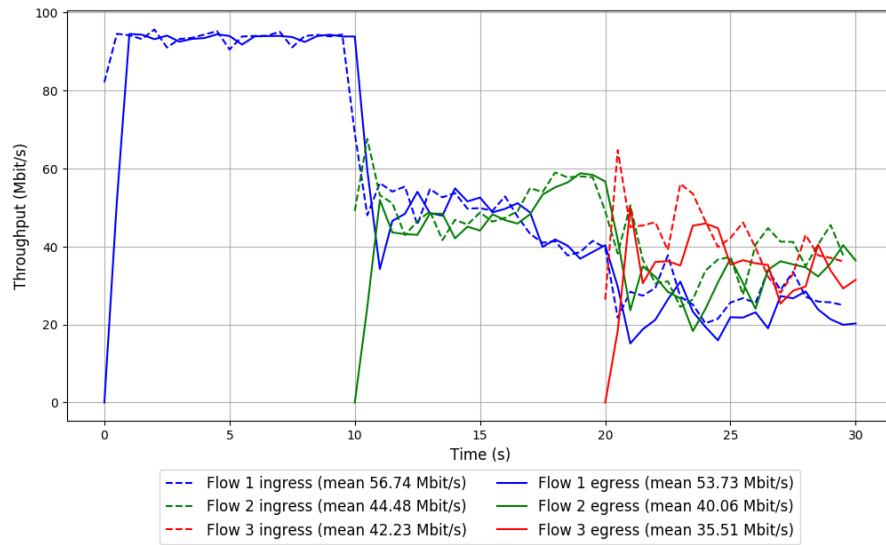


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-03-19 04:16:33
End at: 2019-03-19 04:17:03
Local clock offset: 0.63 ms
Remote clock offset: -5.742 ms

# Below is generated by plot.py at 2019-03-19 04:42:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.11 Mbit/s
95th percentile per-packet one-way delay: 41.286 ms
Loss rate: 8.15%
-- Flow 1:
Average throughput: 53.73 Mbit/s
95th percentile per-packet one-way delay: 38.691 ms
Loss rate: 5.30%
-- Flow 2:
Average throughput: 40.06 Mbit/s
95th percentile per-packet one-way delay: 42.481 ms
Loss rate: 9.90%
-- Flow 3:
Average throughput: 35.51 Mbit/s
95th percentile per-packet one-way delay: 44.202 ms
Loss rate: 16.03%
```

Run 5: Report of FillP-Sheep — Data Link

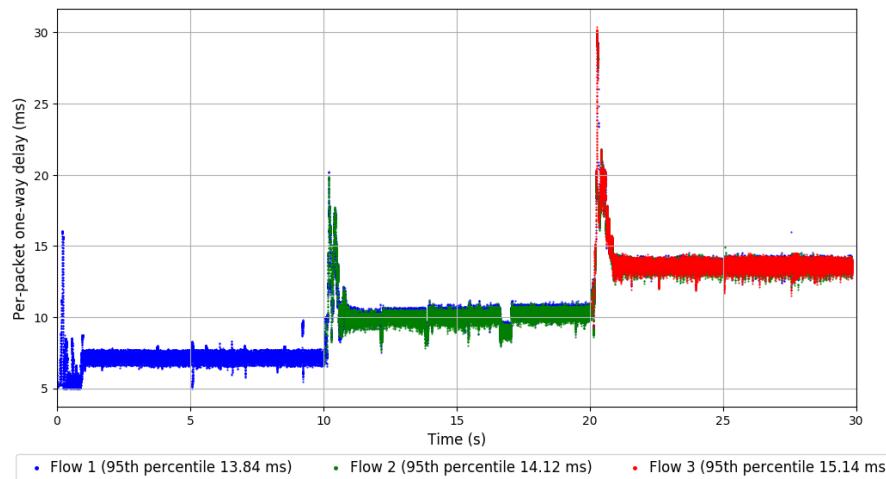
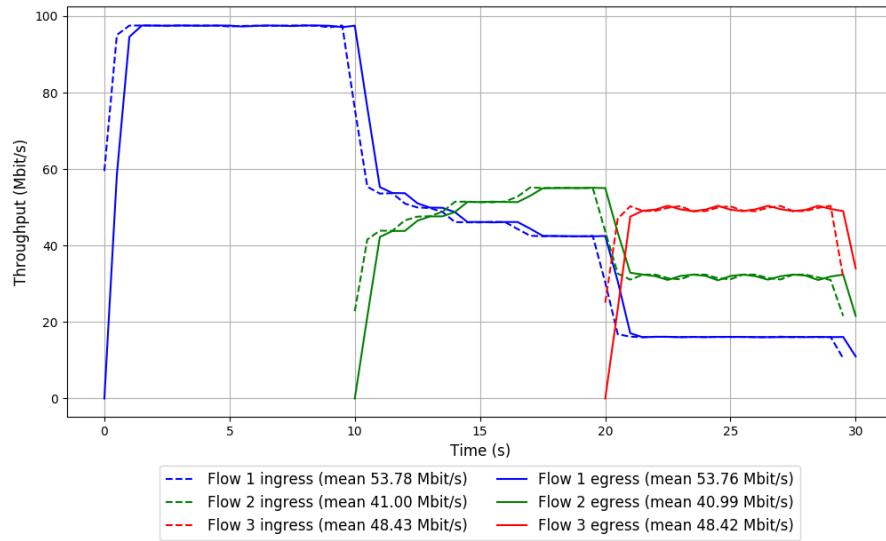


Run 1: Statistics of Indigo

```
Start at: 2019-03-19 02:52:22
End at: 2019-03-19 02:52:52
Local clock offset: 2.053 ms
Remote clock offset: -6.638 ms

# Below is generated by plot.py at 2019-03-19 04:42:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.82 Mbit/s
95th percentile per-packet one-way delay: 14.044 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.76 Mbit/s
95th percentile per-packet one-way delay: 13.835 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.99 Mbit/s
95th percentile per-packet one-way delay: 14.124 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 48.42 Mbit/s
95th percentile per-packet one-way delay: 15.138 ms
Loss rate: 0.00%
```

## Run 1: Report of Indigo — Data Link

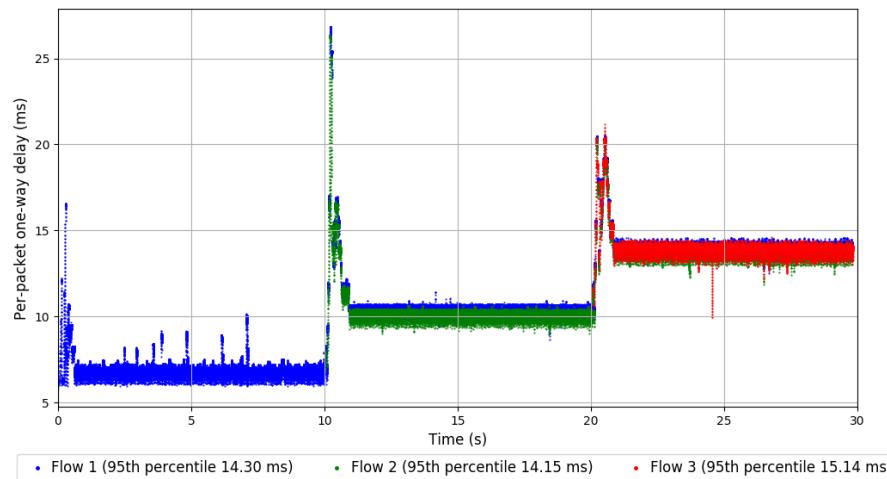
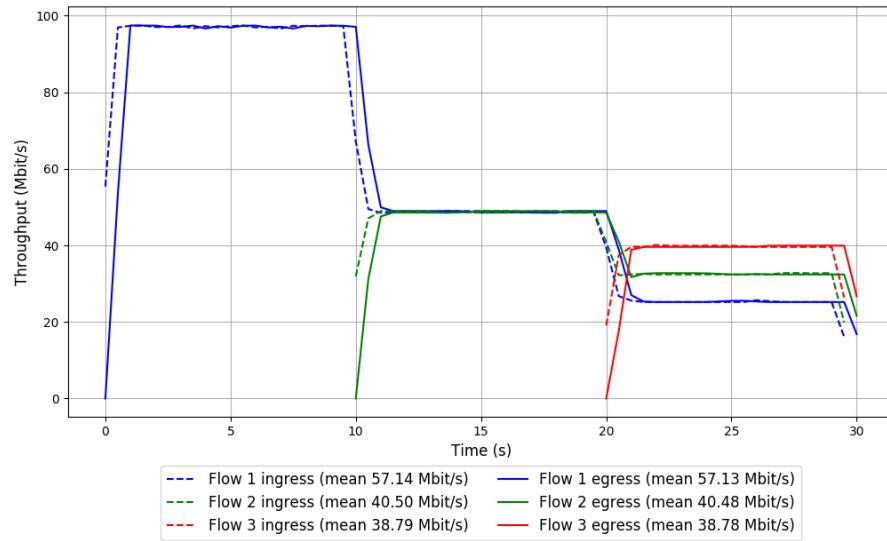


Run 2: Statistics of Indigo

```
Start at: 2019-03-19 03:18:05
End at: 2019-03-19 03:18:35
Local clock offset: 2.31 ms
Remote clock offset: -5.021 ms

# Below is generated by plot.py at 2019-03-19 04:42:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.69 Mbit/s
95th percentile per-packet one-way delay: 14.301 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.13 Mbit/s
95th percentile per-packet one-way delay: 14.298 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.48 Mbit/s
95th percentile per-packet one-way delay: 14.148 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 38.78 Mbit/s
95th percentile per-packet one-way delay: 15.137 ms
Loss rate: 0.00%
```

## Run 2: Report of Indigo — Data Link

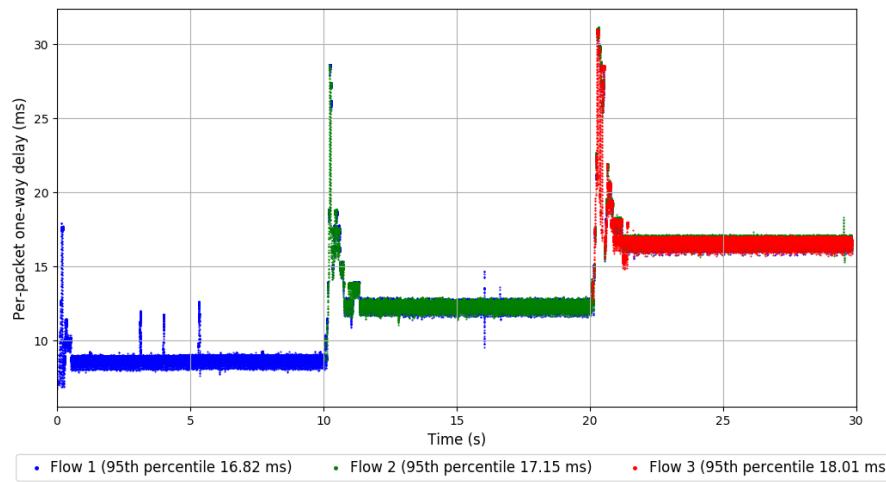
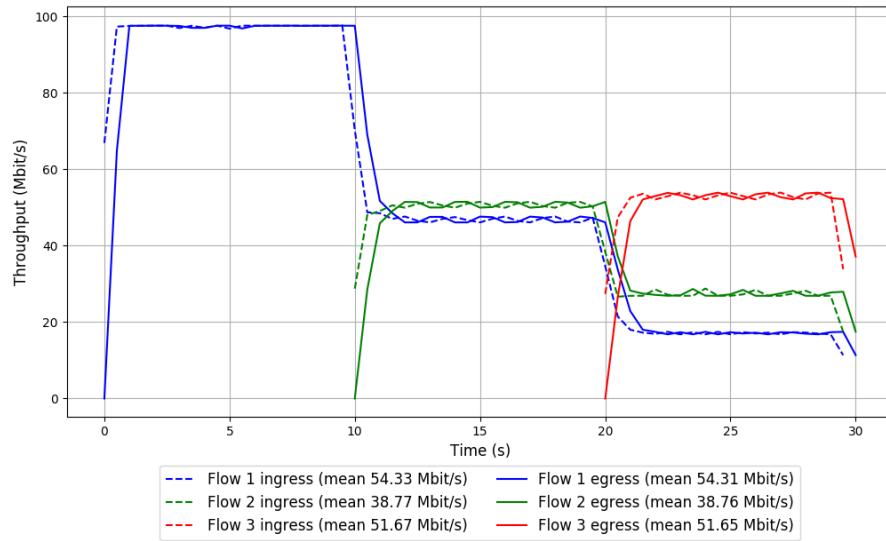


Run 3: Statistics of Indigo

```
Start at: 2019-03-19 03:43:17
End at: 2019-03-19 03:43:47
Local clock offset: 0.68 ms
Remote clock offset: -5.694 ms

# Below is generated by plot.py at 2019-03-19 04:42:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.97 Mbit/s
95th percentile per-packet one-way delay: 17.056 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.31 Mbit/s
95th percentile per-packet one-way delay: 16.822 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.76 Mbit/s
95th percentile per-packet one-way delay: 17.153 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.65 Mbit/s
95th percentile per-packet one-way delay: 18.009 ms
Loss rate: 0.00%
```

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

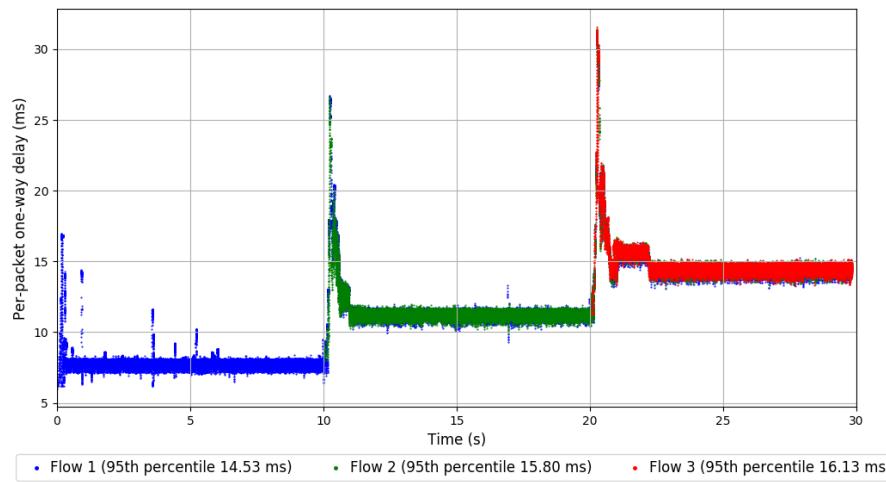
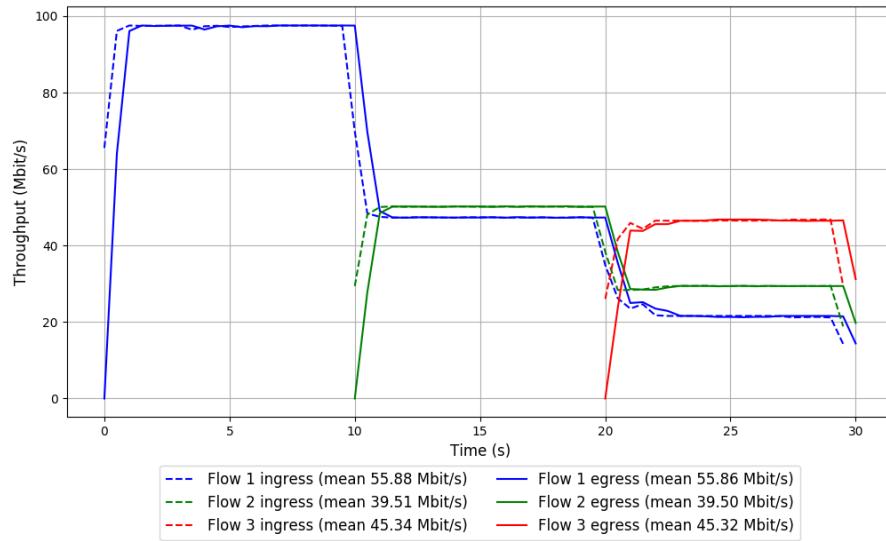


Run 4: Statistics of Indigo

```
Start at: 2019-03-19 04:08:07
End at: 2019-03-19 04:08:37
Local clock offset: 1.699 ms
Remote clock offset: -5.96 ms

# Below is generated by plot.py at 2019-03-19 04:42:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.92 Mbit/s
95th percentile per-packet one-way delay: 15.708 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.86 Mbit/s
95th percentile per-packet one-way delay: 14.525 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.50 Mbit/s
95th percentile per-packet one-way delay: 15.798 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.32 Mbit/s
95th percentile per-packet one-way delay: 16.130 ms
Loss rate: 0.00%
```

## Run 4: Report of Indigo — Data Link

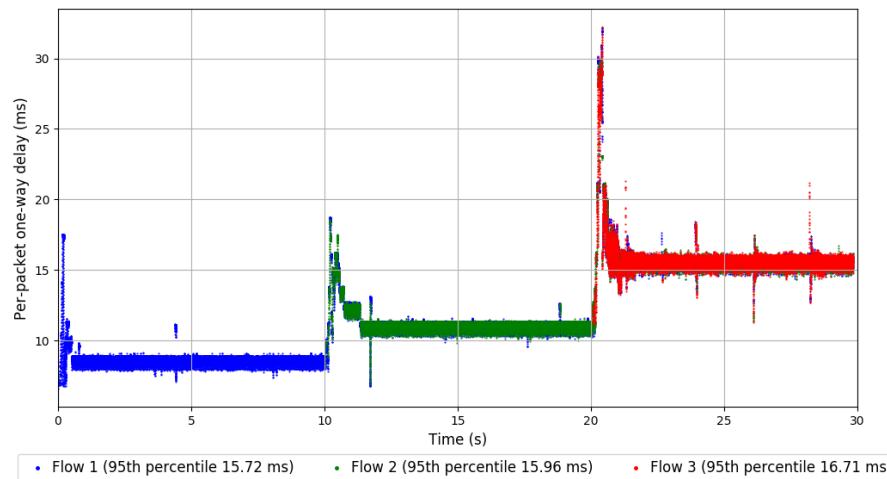
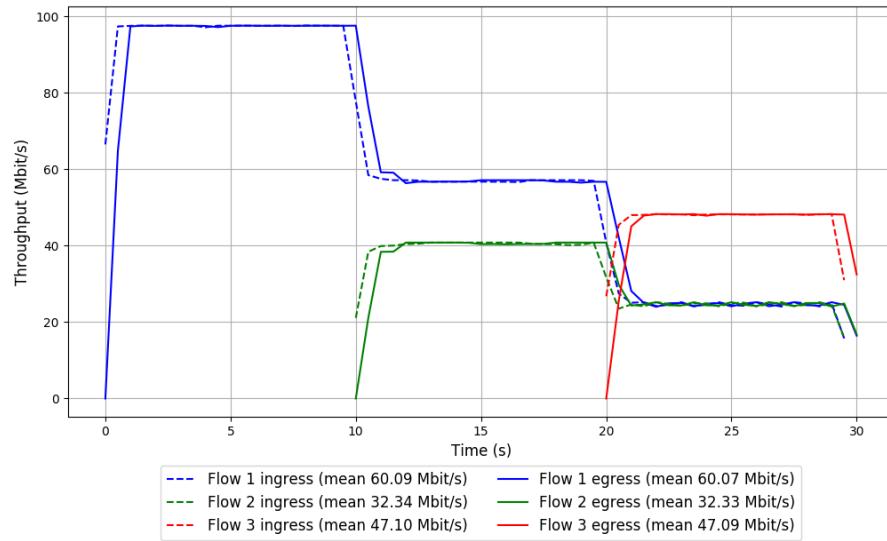


Run 5: Statistics of Indigo

```
Start at: 2019-03-19 04:33:18
End at: 2019-03-19 04:33:48
Local clock offset: 1.221 ms
Remote clock offset: -5.676 ms

# Below is generated by plot.py at 2019-03-19 04:42:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.96 Mbit/s
95th percentile per-packet one-way delay: 15.939 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.07 Mbit/s
95th percentile per-packet one-way delay: 15.725 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.33 Mbit/s
95th percentile per-packet one-way delay: 15.958 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 47.09 Mbit/s
95th percentile per-packet one-way delay: 16.708 ms
Loss rate: 0.00%
```

## Run 5: Report of Indigo — Data Link

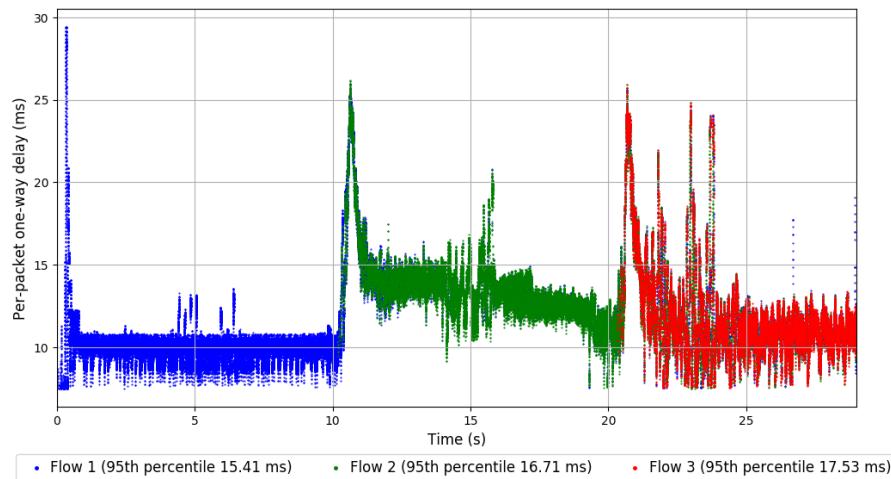
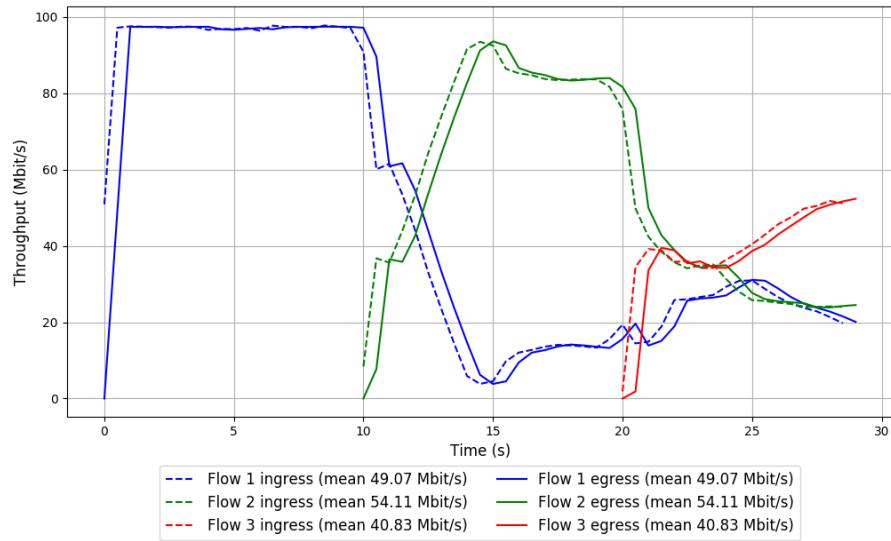


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 02:36:46
End at: 2019-03-19 02:37:16
Local clock offset: 1.325 ms
Remote clock offset: -3.918 ms

# Below is generated by plot.py at 2019-03-19 04:42:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.42 Mbit/s
95th percentile per-packet one-way delay: 16.304 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.07 Mbit/s
95th percentile per-packet one-way delay: 15.413 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 54.11 Mbit/s
95th percentile per-packet one-way delay: 16.715 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 40.83 Mbit/s
95th percentile per-packet one-way delay: 17.530 ms
Loss rate: 0.00%
```

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

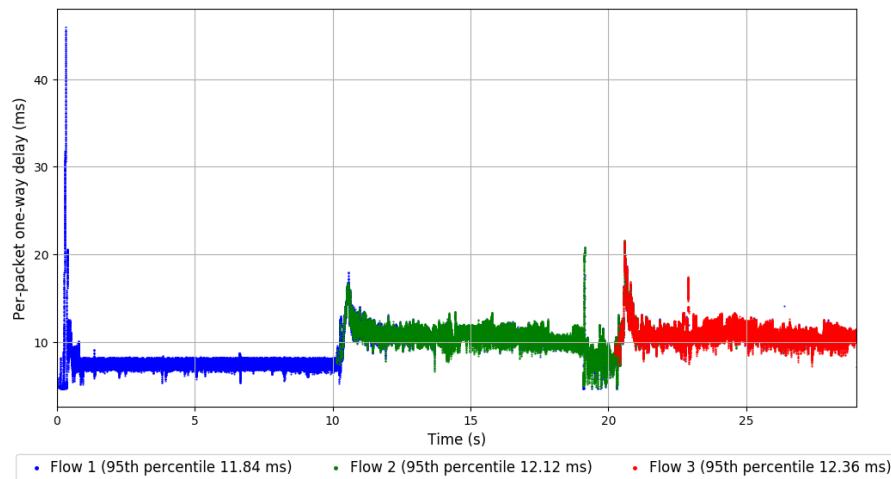
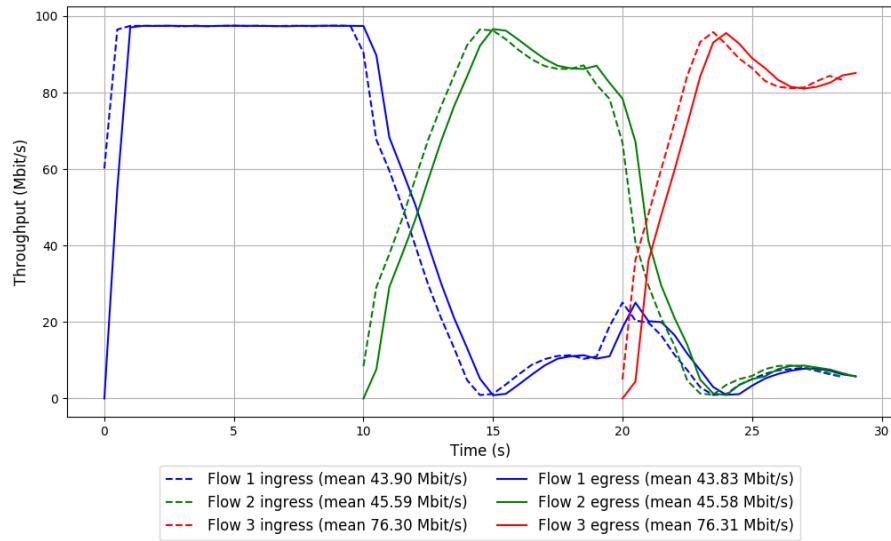


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 03:02:16
End at: 2019-03-19 03:02:46
Local clock offset: 2.816 ms
Remote clock offset: -6.298 ms

# Below is generated by plot.py at 2019-03-19 04:43:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.62 Mbit/s
95th percentile per-packet one-way delay: 12.161 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 43.83 Mbit/s
95th percentile per-packet one-way delay: 11.838 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 45.58 Mbit/s
95th percentile per-packet one-way delay: 12.119 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 76.31 Mbit/s
95th percentile per-packet one-way delay: 12.360 ms
Loss rate: 0.00%
```

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

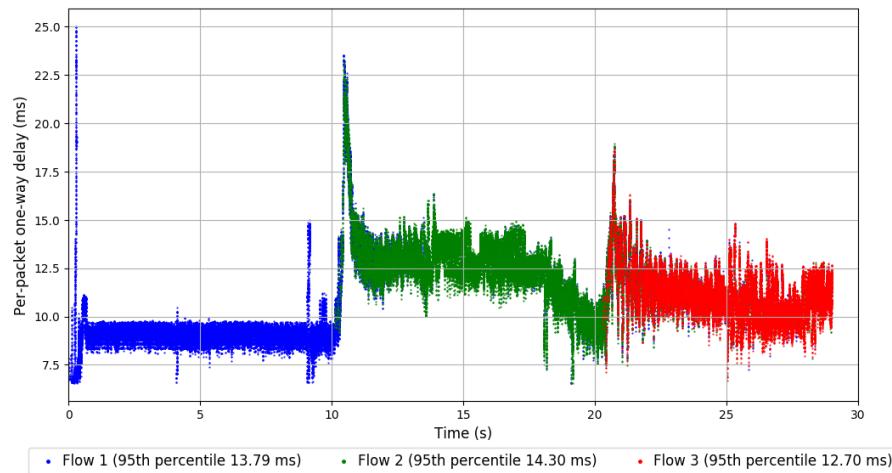
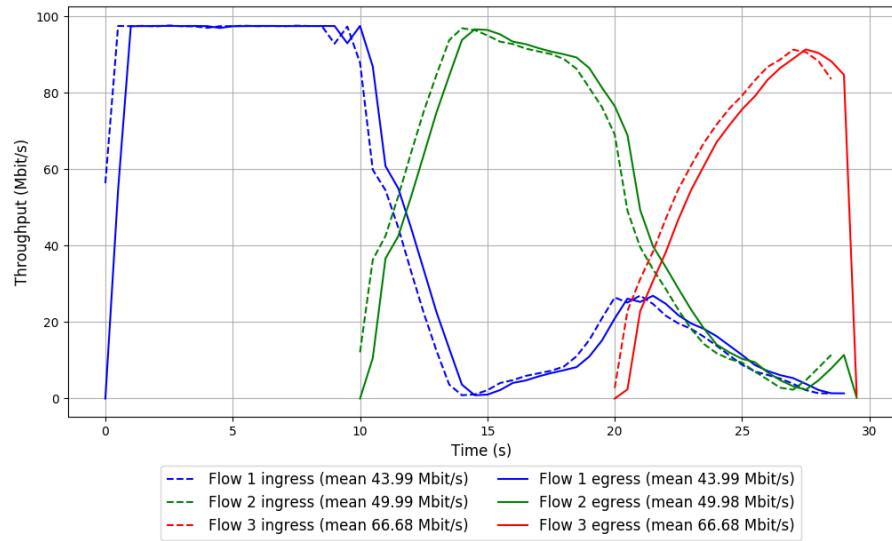


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 03:27:48
End at: 2019-03-19 03:28:18
Local clock offset: 0.415 ms
Remote clock offset: -5.858 ms

# Below is generated by plot.py at 2019-03-19 04:43:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.64 Mbit/s
95th percentile per-packet one-way delay: 14.053 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.99 Mbit/s
95th percentile per-packet one-way delay: 13.793 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.98 Mbit/s
95th percentile per-packet one-way delay: 14.302 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 66.68 Mbit/s
95th percentile per-packet one-way delay: 12.703 ms
Loss rate: 0.00%
```

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

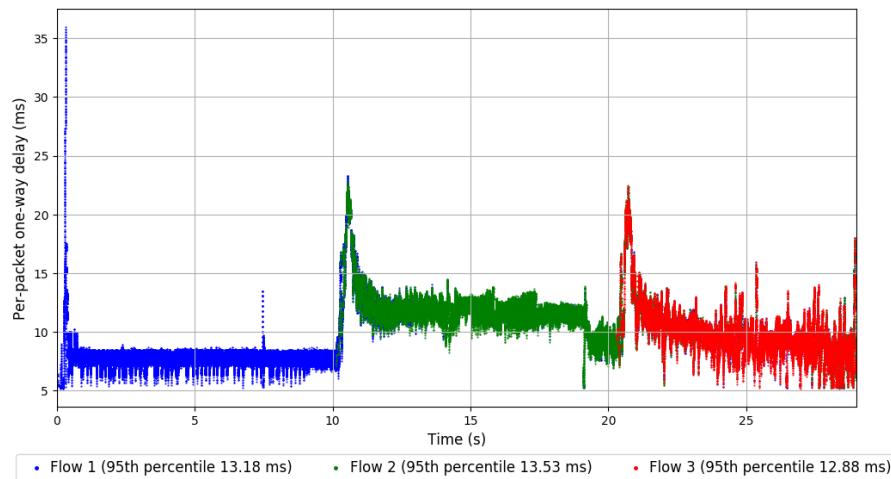
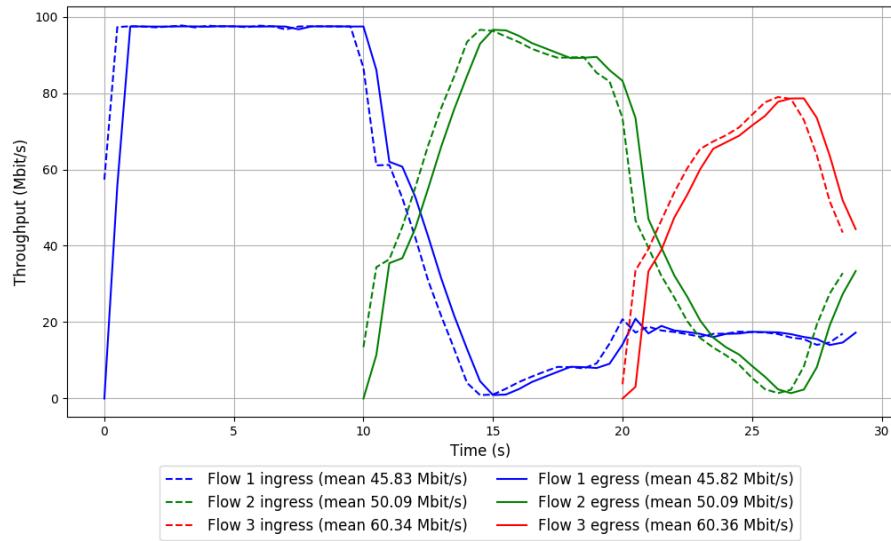


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 03:52:48
End at: 2019-03-19 03:53:18
Local clock offset: 0.574 ms
Remote clock offset: -7.899 ms

# Below is generated by plot.py at 2019-03-19 04:43:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.57 Mbit/s
95th percentile per-packet one-way delay: 13.278 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.82 Mbit/s
95th percentile per-packet one-way delay: 13.178 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.09 Mbit/s
95th percentile per-packet one-way delay: 13.529 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 60.36 Mbit/s
95th percentile per-packet one-way delay: 12.875 ms
Loss rate: 0.00%
```

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

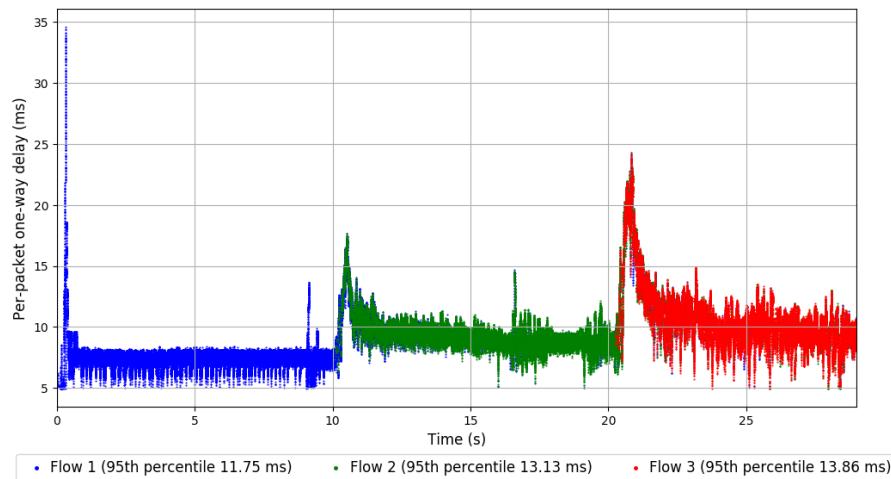
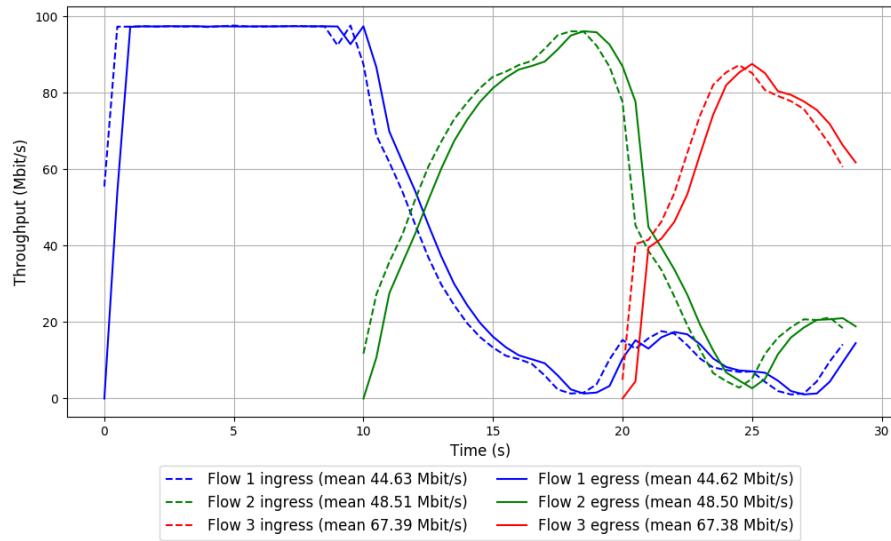


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 04:17:47
End at: 2019-03-19 04:18:17
Local clock offset: 2.128 ms
Remote clock offset: -6.701 ms

# Below is generated by plot.py at 2019-03-19 04:43:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.57 Mbit/s
95th percentile per-packet one-way delay: 12.735 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.62 Mbit/s
95th percentile per-packet one-way delay: 11.749 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.50 Mbit/s
95th percentile per-packet one-way delay: 13.131 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 67.38 Mbit/s
95th percentile per-packet one-way delay: 13.855 ms
Loss rate: 0.00%
```

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

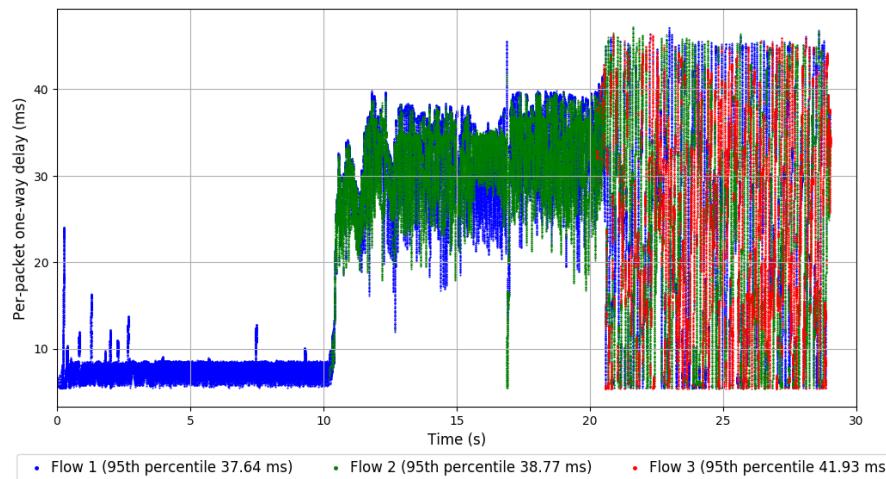
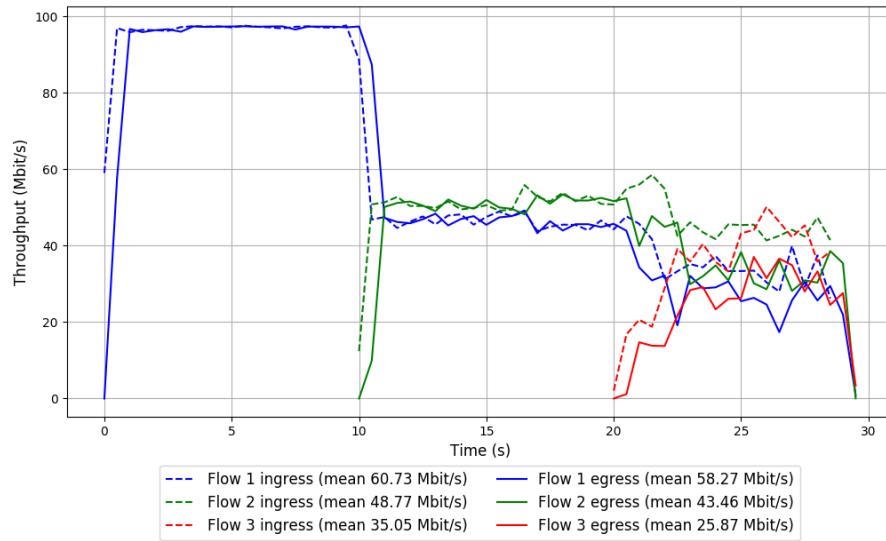


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 02:53:39
End at: 2019-03-19 02:54:09
Local clock offset: 2.39 ms
Remote clock offset: -5.886 ms

# Below is generated by plot.py at 2019-03-19 04:43:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.27 Mbit/s
95th percentile per-packet one-way delay: 38.458 ms
Loss rate: 8.35%
-- Flow 1:
Average throughput: 58.27 Mbit/s
95th percentile per-packet one-way delay: 37.638 ms
Loss rate: 3.96%
-- Flow 2:
Average throughput: 43.46 Mbit/s
95th percentile per-packet one-way delay: 38.768 ms
Loss rate: 10.77%
-- Flow 3:
Average throughput: 25.87 Mbit/s
95th percentile per-packet one-way delay: 41.931 ms
Loss rate: 26.23%
```

Run 1: Report of Indigo-MusesC5 — Data Link

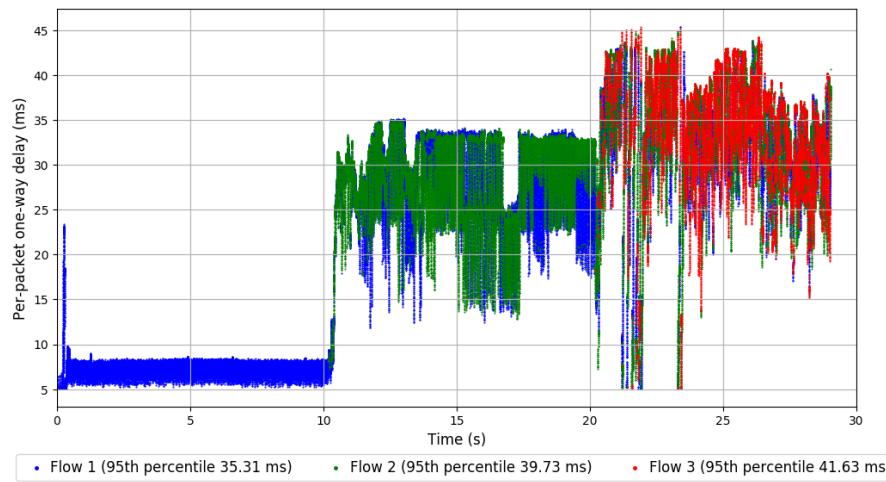
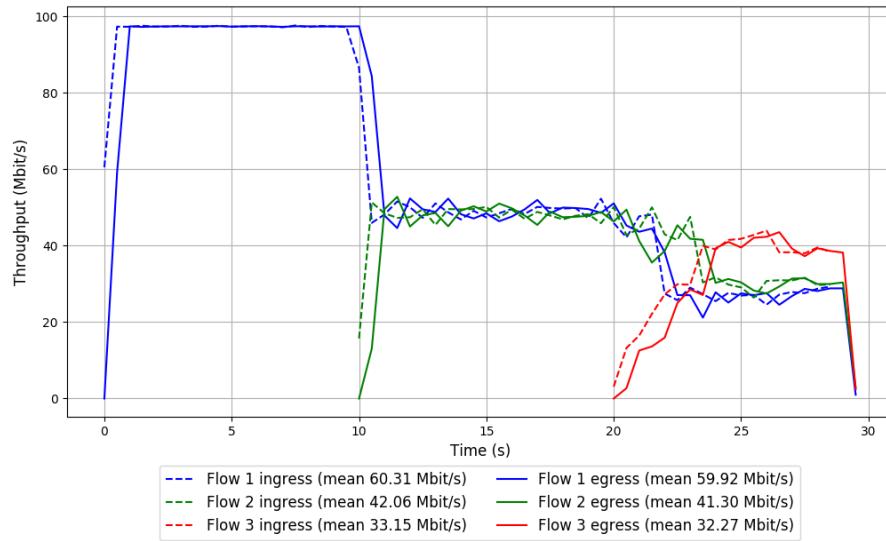


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 03:19:21
End at: 2019-03-19 03:19:51
Local clock offset: 2.019 ms
Remote clock offset: -6.024 ms

# Below is generated by plot.py at 2019-03-19 04:43:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.52 Mbit/s
95th percentile per-packet one-way delay: 38.478 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 59.92 Mbit/s
95th percentile per-packet one-way delay: 35.309 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 41.30 Mbit/s
95th percentile per-packet one-way delay: 39.730 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 32.27 Mbit/s
95th percentile per-packet one-way delay: 41.634 ms
Loss rate: 2.59%
```

Run 2: Report of Indigo-MusesC5 — Data Link

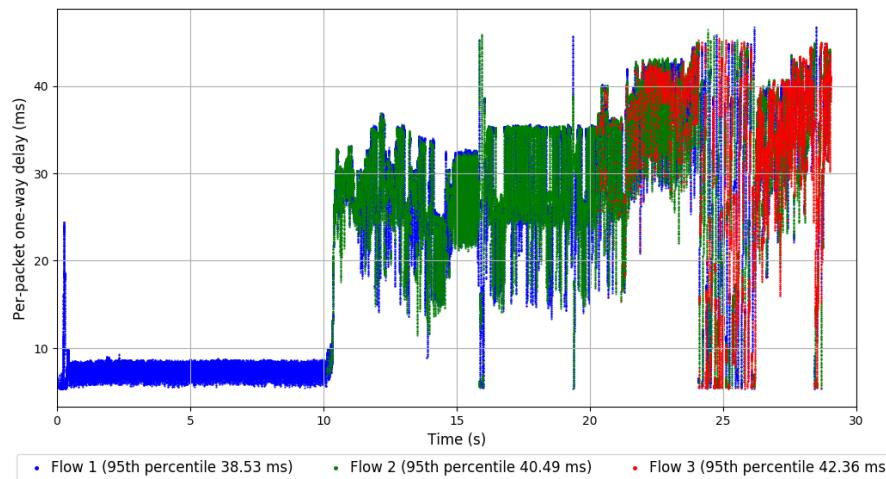
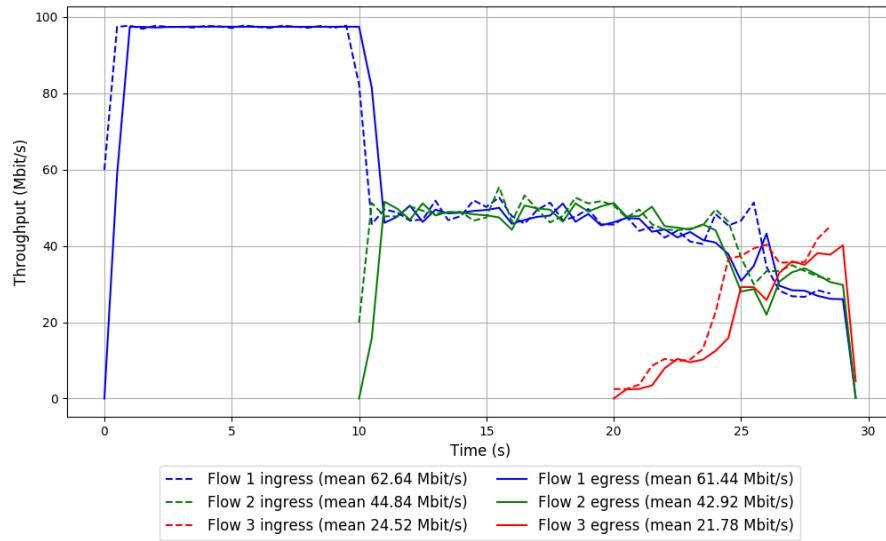


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 03:44:31
End at: 2019-03-19 03:45:01
Local clock offset: 1.797 ms
Remote clock offset: -6.163 ms

# Below is generated by plot.py at 2019-03-19 04:44:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 40.016 ms
Loss rate: 3.19%
-- Flow 1:
Average throughput: 61.44 Mbit/s
95th percentile per-packet one-way delay: 38.532 ms
Loss rate: 1.79%
-- Flow 2:
Average throughput: 42.92 Mbit/s
95th percentile per-packet one-way delay: 40.492 ms
Loss rate: 4.20%
-- Flow 3:
Average throughput: 21.78 Mbit/s
95th percentile per-packet one-way delay: 42.360 ms
Loss rate: 11.03%
```

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

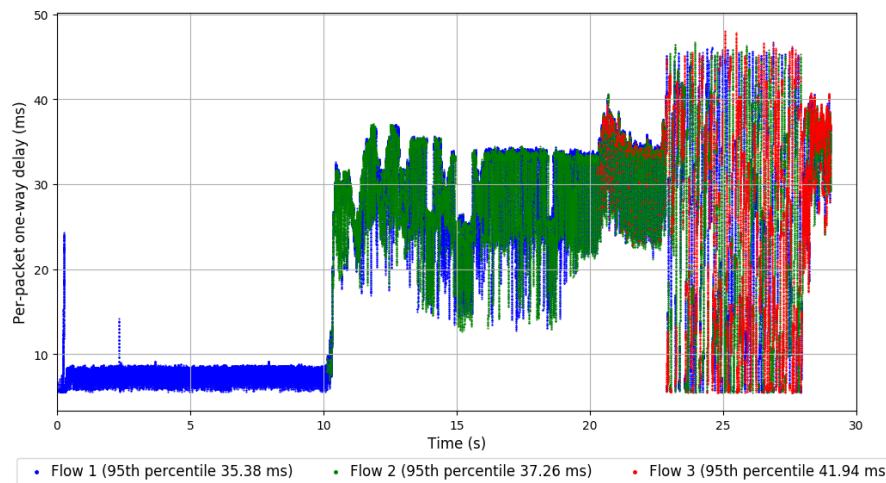
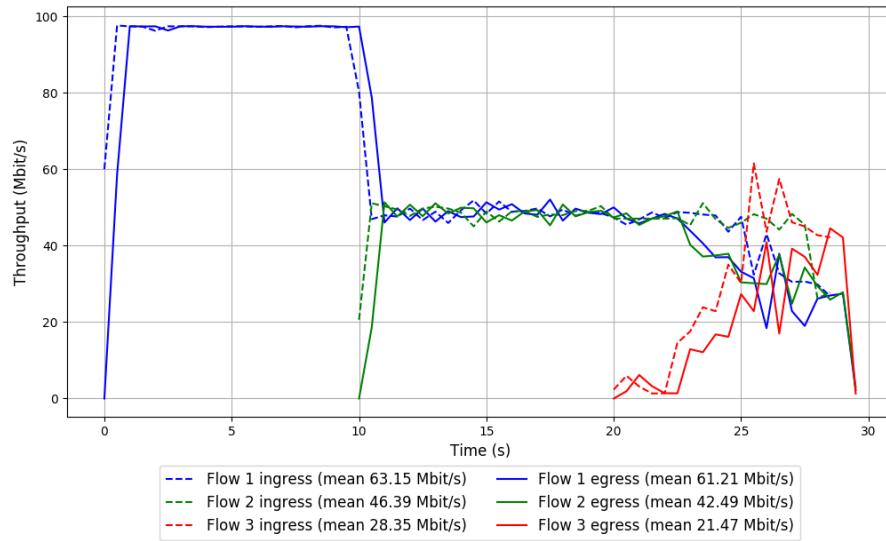


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 04:09:20
End at: 2019-03-19 04:09:50
Local clock offset: 1.863 ms
Remote clock offset: -6.449 ms

# Below is generated by plot.py at 2019-03-19 04:44:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.38 Mbit/s
95th percentile per-packet one-way delay: 36.921 ms
Loss rate: 6.32%
-- Flow 1:
Average throughput: 61.21 Mbit/s
95th percentile per-packet one-way delay: 35.382 ms
Loss rate: 2.96%
-- Flow 2:
Average throughput: 42.49 Mbit/s
95th percentile per-packet one-way delay: 37.258 ms
Loss rate: 8.28%
-- Flow 3:
Average throughput: 21.47 Mbit/s
95th percentile per-packet one-way delay: 41.944 ms
Loss rate: 24.18%
```

Run 4: Report of Indigo-MusesC5 — Data Link

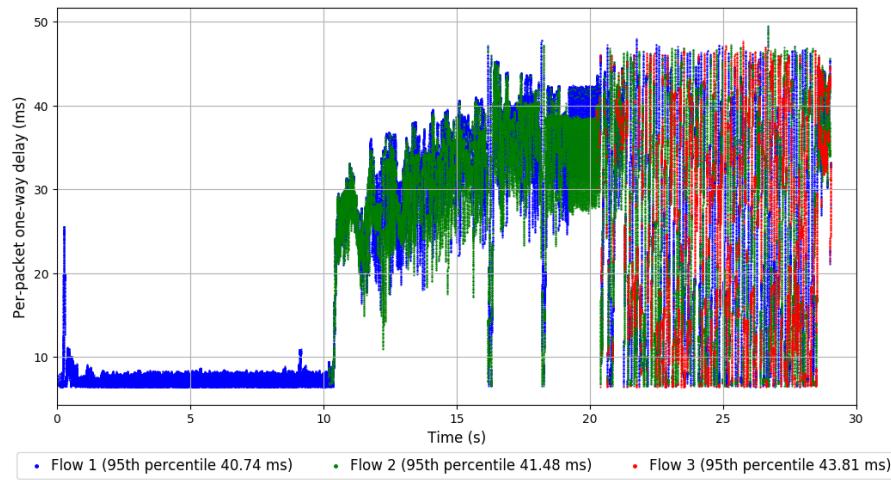
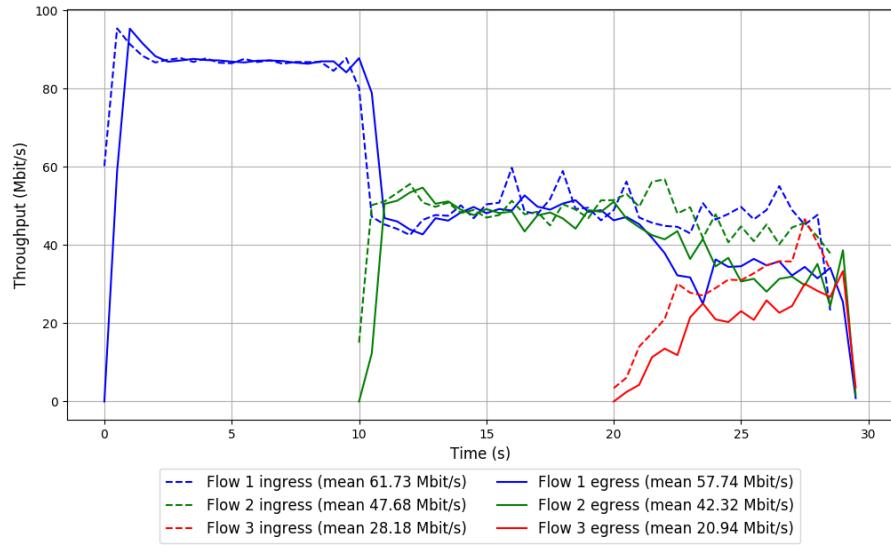


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 04:34:34
End at: 2019-03-19 04:35:04
Local clock offset: 1.502 ms
Remote clock offset: -5.645 ms

# Below is generated by plot.py at 2019-03-19 04:44:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.64 Mbit/s
95th percentile per-packet one-way delay: 41.331 ms
Loss rate: 9.47%
-- Flow 1:
Average throughput: 57.74 Mbit/s
95th percentile per-packet one-way delay: 40.742 ms
Loss rate: 6.38%
-- Flow 2:
Average throughput: 42.32 Mbit/s
95th percentile per-packet one-way delay: 41.483 ms
Loss rate: 11.11%
-- Flow 3:
Average throughput: 20.94 Mbit/s
95th percentile per-packet one-way delay: 43.812 ms
Loss rate: 25.71%
```

Run 5: Report of Indigo-MusesC5 — Data Link

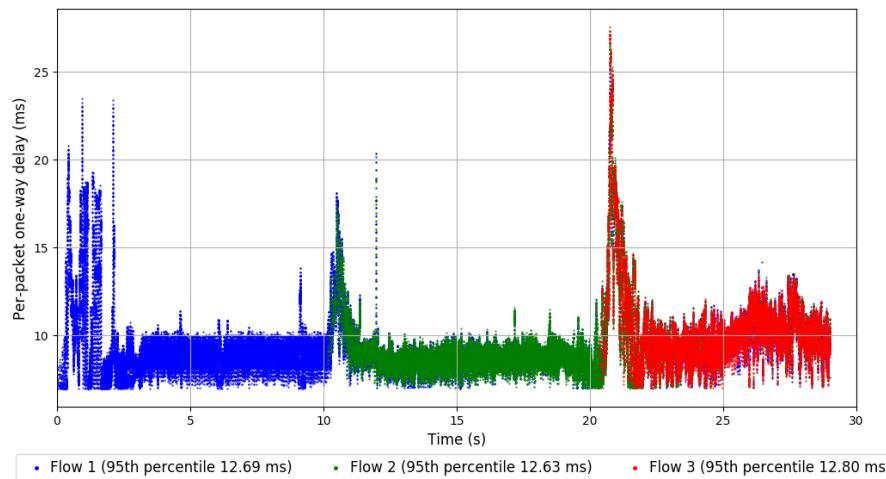
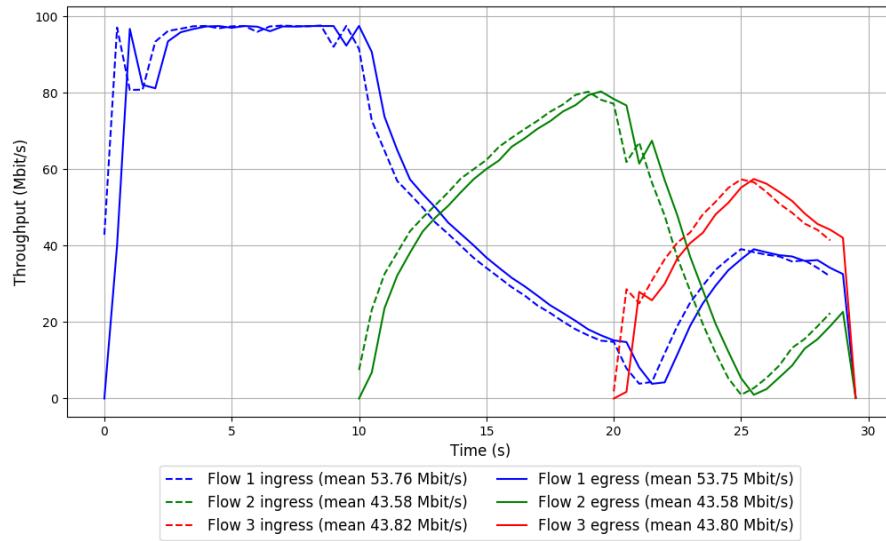


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 02:42:43
End at: 2019-03-19 02:43:13
Local clock offset: 1.682 ms
Remote clock offset: -4.707 ms

# Below is generated by plot.py at 2019-03-19 04:44:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.21 Mbit/s
95th percentile per-packet one-way delay: 12.697 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.75 Mbit/s
95th percentile per-packet one-way delay: 12.690 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.58 Mbit/s
95th percentile per-packet one-way delay: 12.634 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 43.80 Mbit/s
95th percentile per-packet one-way delay: 12.797 ms
Loss rate: 0.00%
```

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

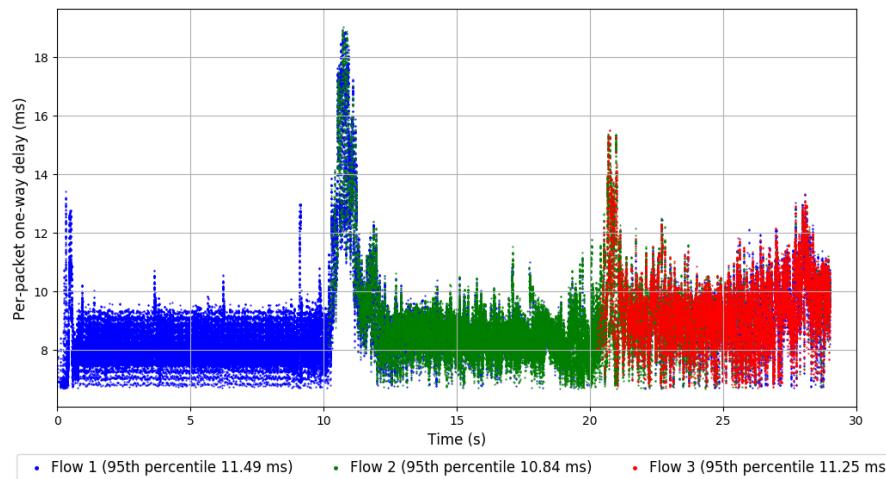
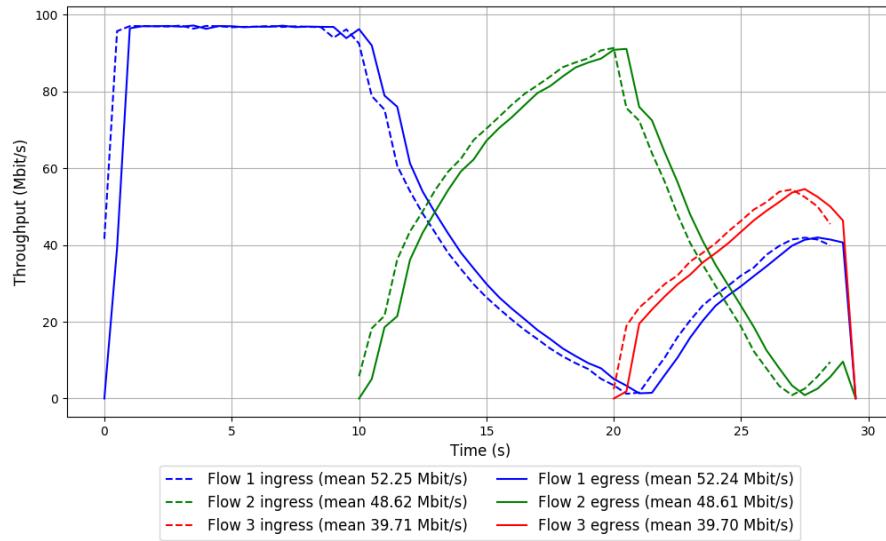


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 03:08:20
End at: 2019-03-19 03:08:50
Local clock offset: 1.504 ms
Remote clock offset: -5.539 ms

# Below is generated by plot.py at 2019-03-19 04:44:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.83 Mbit/s
95th percentile per-packet one-way delay: 11.202 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.24 Mbit/s
95th percentile per-packet one-way delay: 11.491 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.61 Mbit/s
95th percentile per-packet one-way delay: 10.837 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.70 Mbit/s
95th percentile per-packet one-way delay: 11.252 ms
Loss rate: 0.00%
```

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

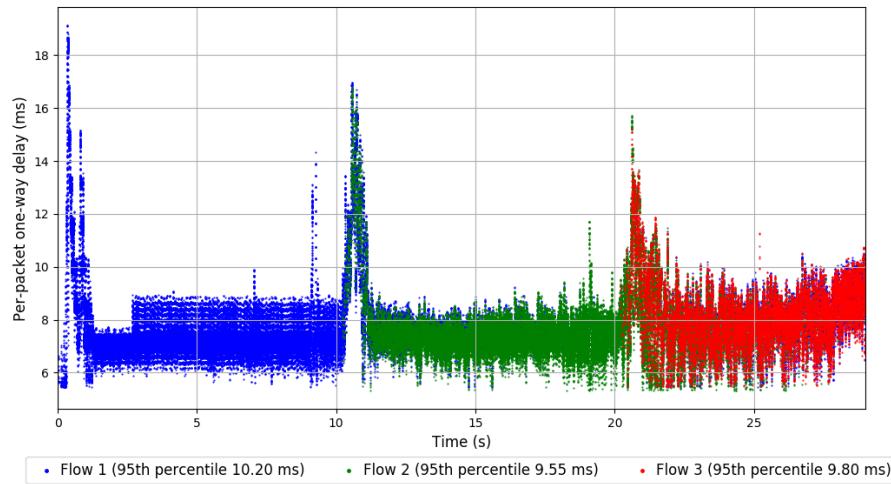
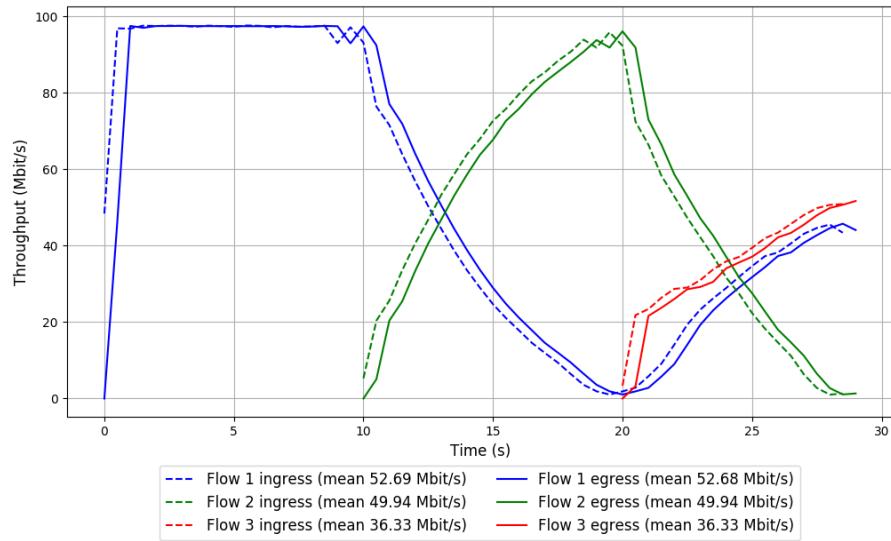


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 03:33:44
End at: 2019-03-19 03:34:14
Local clock offset: 0.222 ms
Remote clock offset: -7.211 ms

# Below is generated by plot.py at 2019-03-19 04:44:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.12 Mbit/s
95th percentile per-packet one-way delay: 9.902 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.68 Mbit/s
95th percentile per-packet one-way delay: 10.203 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.94 Mbit/s
95th percentile per-packet one-way delay: 9.547 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.33 Mbit/s
95th percentile per-packet one-way delay: 9.803 ms
Loss rate: 0.00%
```

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

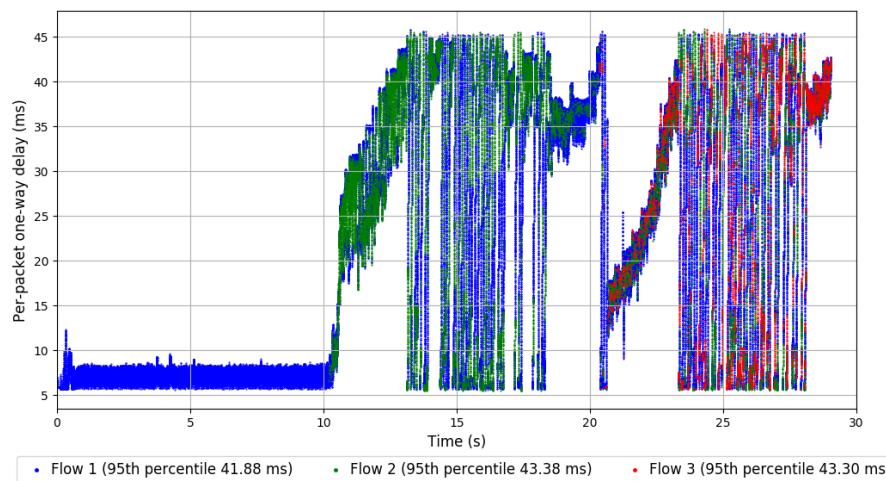
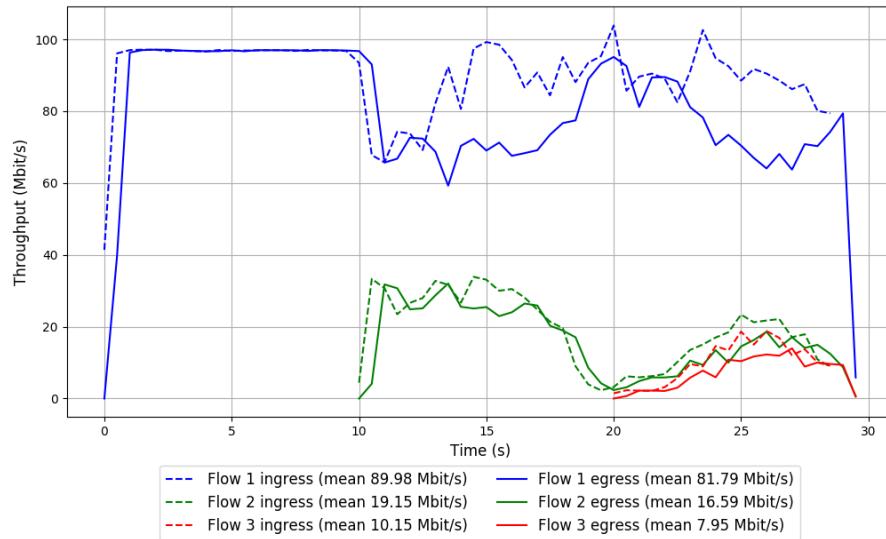


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 03:58:42
End at: 2019-03-19 03:59:12
Local clock offset: 1.13 ms
Remote clock offset: -7.062 ms

# Below is generated by plot.py at 2019-03-19 04:44:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.95 Mbit/s
95th percentile per-packet one-way delay: 42.258 ms
Loss rate: 9.85%
-- Flow 1:
Average throughput: 81.79 Mbit/s
95th percentile per-packet one-way delay: 41.876 ms
Loss rate: 8.99%
-- Flow 2:
Average throughput: 16.59 Mbit/s
95th percentile per-packet one-way delay: 43.377 ms
Loss rate: 13.18%
-- Flow 3:
Average throughput: 7.95 Mbit/s
95th percentile per-packet one-way delay: 43.300 ms
Loss rate: 21.68%
```

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

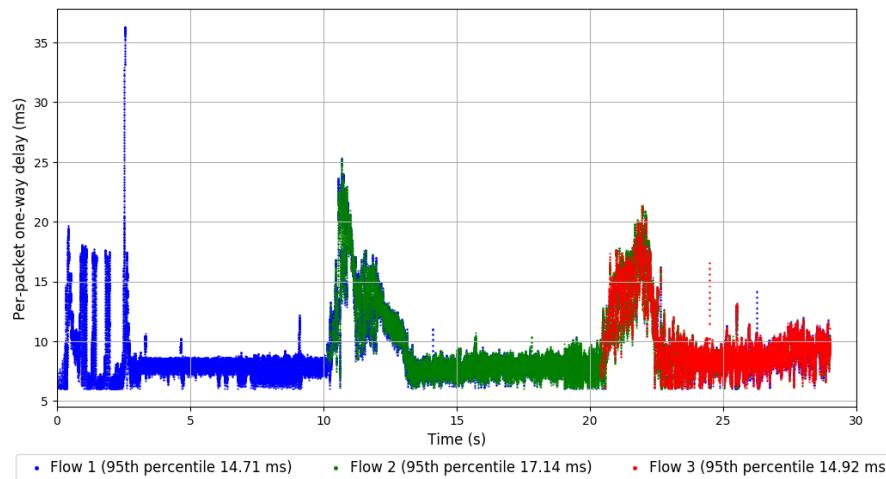
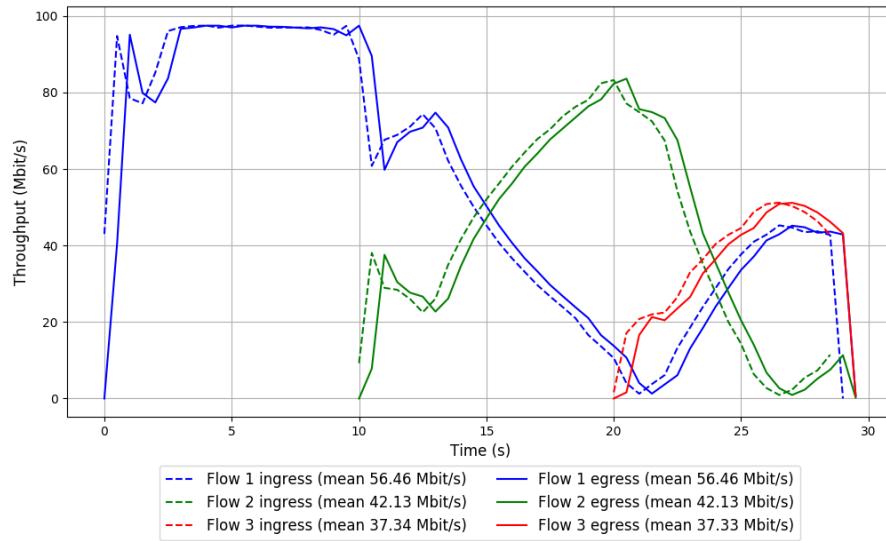


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 04:23:46
End at: 2019-03-19 04:24:16
Local clock offset: 1.432 ms
Remote clock offset: -6.244 ms

# Below is generated by plot.py at 2019-03-19 04:44:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.05 Mbit/s
95th percentile per-packet one-way delay: 15.920 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.46 Mbit/s
95th percentile per-packet one-way delay: 14.713 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.13 Mbit/s
95th percentile per-packet one-way delay: 17.141 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 37.33 Mbit/s
95th percentile per-packet one-way delay: 14.916 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesD — Data Link

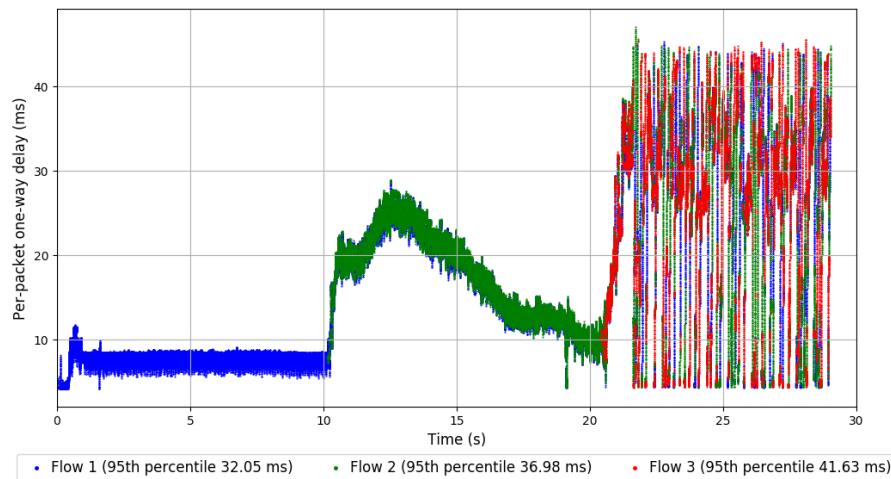
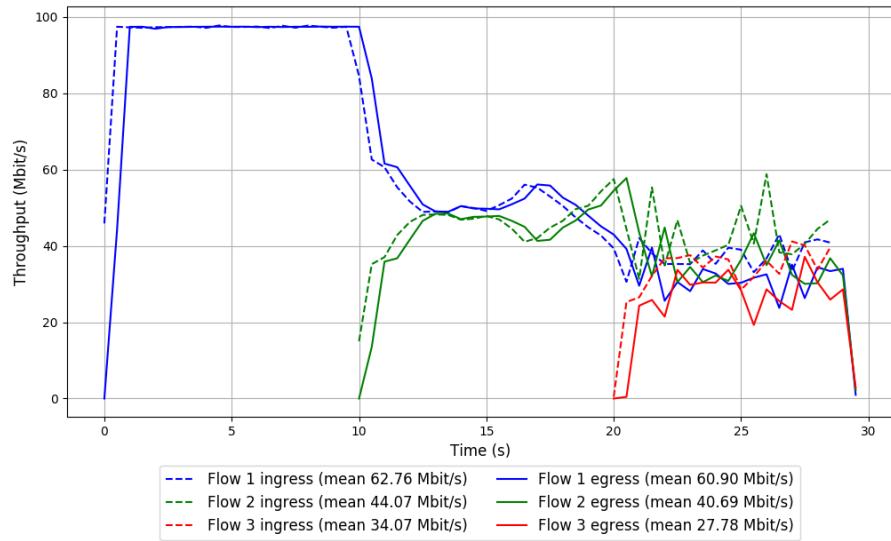


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 02:30:44
End at: 2019-03-19 02:31:14
Local clock offset: 3.081 ms
Remote clock offset: -4.746 ms

# Below is generated by plot.py at 2019-03-19 04:45:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.63 Mbit/s
95th percentile per-packet one-way delay: 35.824 ms
Loss rate: 5.75%
-- Flow 1:
Average throughput: 60.90 Mbit/s
95th percentile per-packet one-way delay: 32.048 ms
Loss rate: 2.93%
-- Flow 2:
Average throughput: 40.69 Mbit/s
95th percentile per-packet one-way delay: 36.975 ms
Loss rate: 7.50%
-- Flow 3:
Average throughput: 27.78 Mbit/s
95th percentile per-packet one-way delay: 41.628 ms
Loss rate: 18.25%
```

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

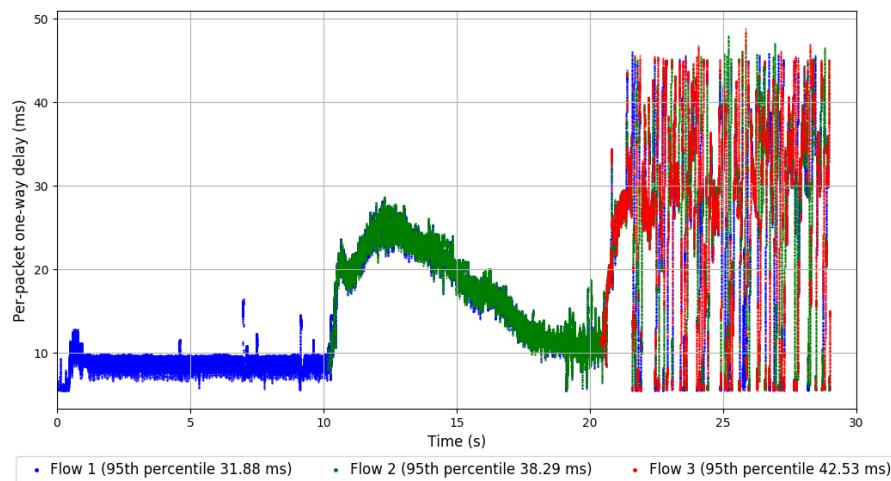
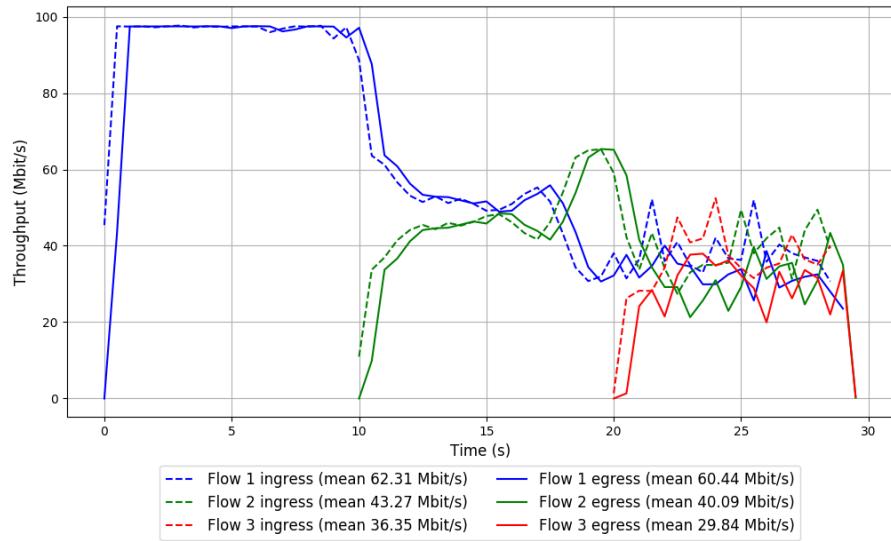


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 02:55:58
End at: 2019-03-19 02:56:28
Local clock offset: 2.42 ms
Remote clock offset: -5.766 ms

# Below is generated by plot.py at 2019-03-19 04:45:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.38 Mbit/s
95th percentile per-packet one-way delay: 36.851 ms
Loss rate: 5.80%
-- Flow 1:
Average throughput: 60.44 Mbit/s
95th percentile per-packet one-way delay: 31.878 ms
Loss rate: 3.00%
-- Flow 2:
Average throughput: 40.09 Mbit/s
95th percentile per-packet one-way delay: 38.290 ms
Loss rate: 7.34%
-- Flow 3:
Average throughput: 29.84 Mbit/s
95th percentile per-packet one-way delay: 42.534 ms
Loss rate: 17.87%
```

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

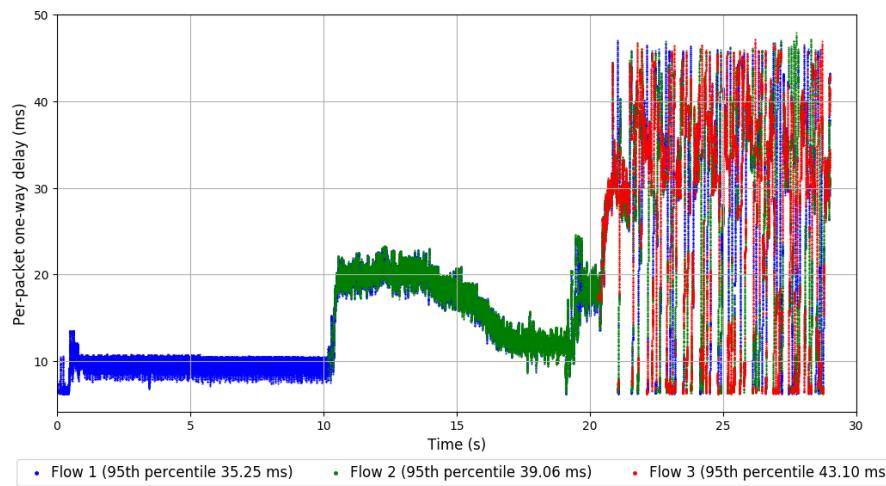
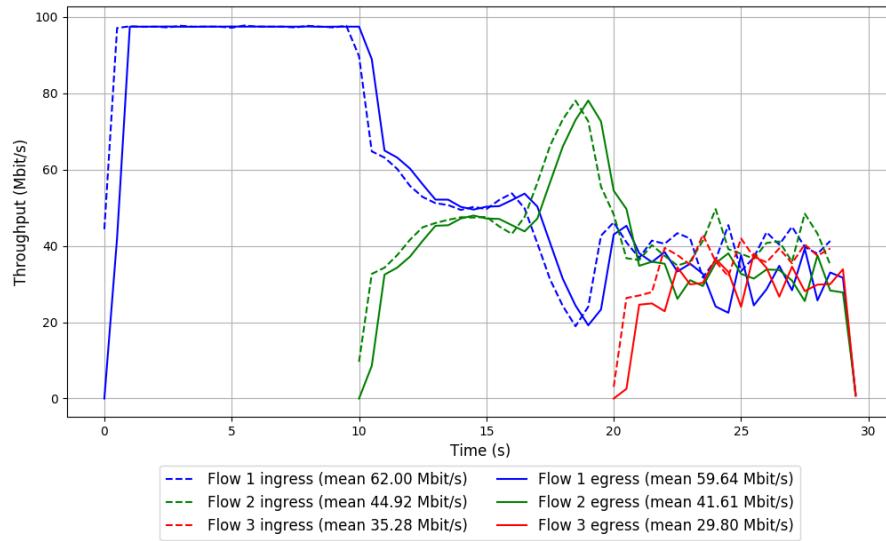


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 03:21:41
End at: 2019-03-19 03:22:11
Local clock offset: 1.107 ms
Remote clock offset: -5.603 ms

# Below is generated by plot.py at 2019-03-19 04:45:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.65 Mbit/s
95th percentile per-packet one-way delay: 38.568 ms
Loss rate: 5.96%
-- Flow 1:
Average throughput: 59.64 Mbit/s
95th percentile per-packet one-way delay: 35.249 ms
Loss rate: 3.73%
-- Flow 2:
Average throughput: 41.61 Mbit/s
95th percentile per-packet one-way delay: 39.061 ms
Loss rate: 7.26%
-- Flow 3:
Average throughput: 29.80 Mbit/s
95th percentile per-packet one-way delay: 43.096 ms
Loss rate: 15.40%
```

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

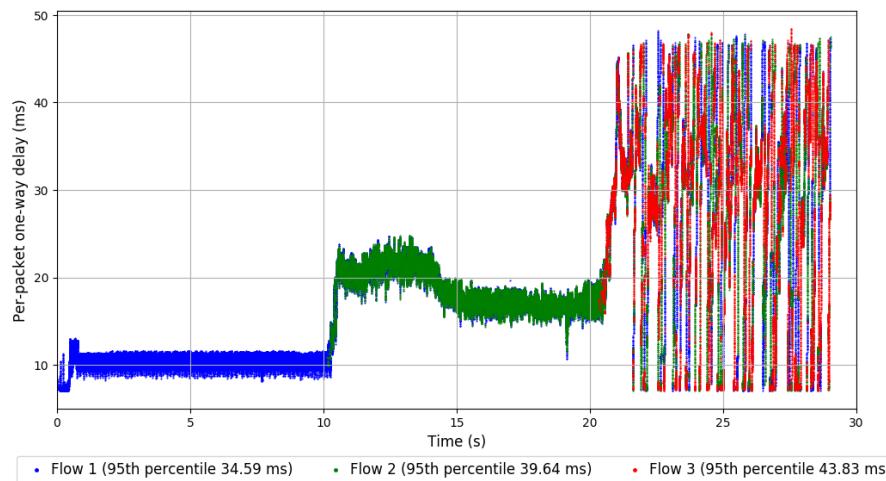
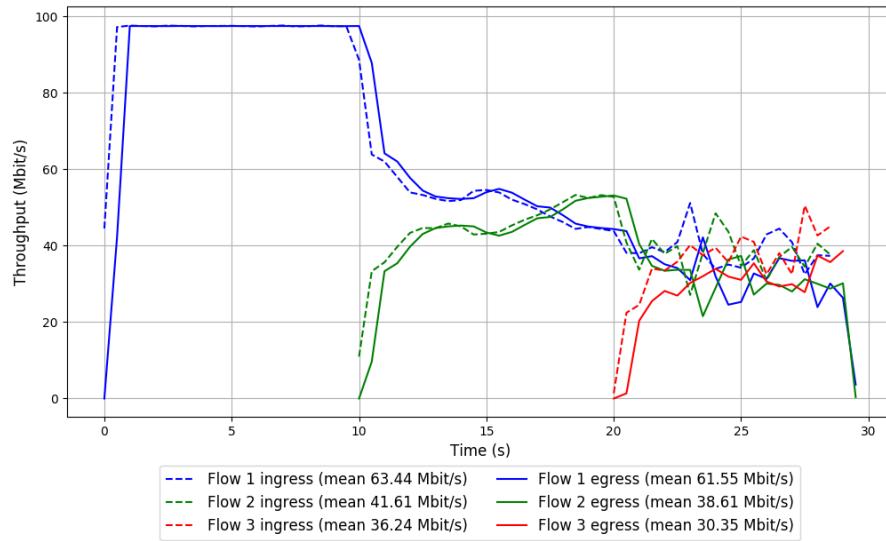


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 03:46:49
End at: 2019-03-19 03:47:19
Local clock offset: 1.118 ms
Remote clock offset: -5.251 ms

# Below is generated by plot.py at 2019-03-19 04:45:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 38.740 ms
Loss rate: 5.46%
-- Flow 1:
Average throughput: 61.55 Mbit/s
95th percentile per-packet one-way delay: 34.595 ms
Loss rate: 2.88%
-- Flow 2:
Average throughput: 38.61 Mbit/s
95th percentile per-packet one-way delay: 39.641 ms
Loss rate: 7.13%
-- Flow 3:
Average throughput: 30.35 Mbit/s
95th percentile per-packet one-way delay: 43.831 ms
Loss rate: 16.35%
```

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

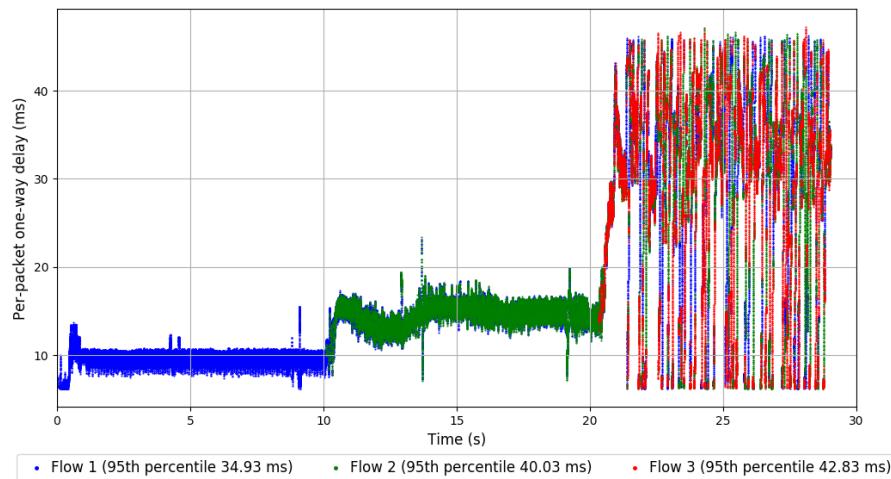
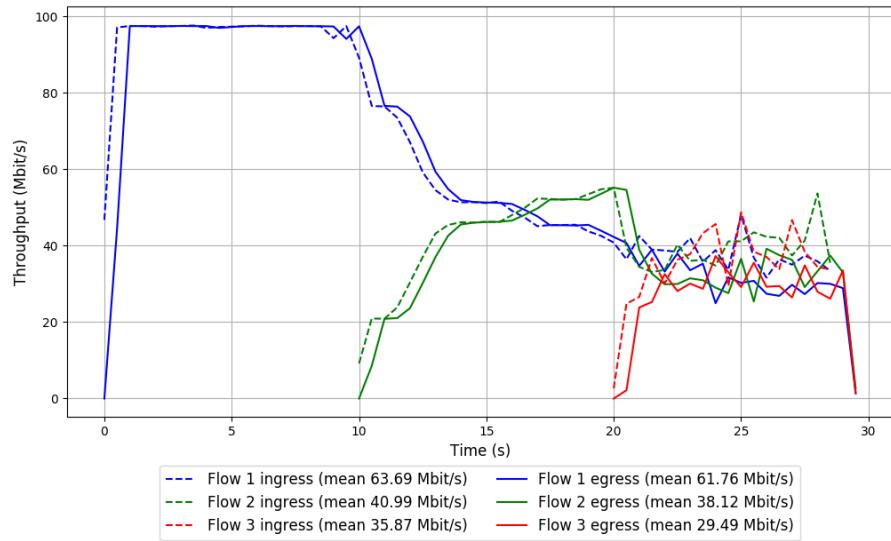


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 04:11:37
End at: 2019-03-19 04:12:07
Local clock offset: 0.484 ms
Remote clock offset: -7.117 ms

# Below is generated by plot.py at 2019-03-19 04:45:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.53 Mbit/s
95th percentile per-packet one-way delay: 38.607 ms
Loss rate: 5.55%
-- Flow 1:
Average throughput: 61.76 Mbit/s
95th percentile per-packet one-way delay: 34.926 ms
Loss rate: 2.94%
-- Flow 2:
Average throughput: 38.12 Mbit/s
95th percentile per-packet one-way delay: 40.032 ms
Loss rate: 6.88%
-- Flow 3:
Average throughput: 29.49 Mbit/s
95th percentile per-packet one-way delay: 42.832 ms
Loss rate: 17.62%
```

Run 5: Report of Indigo-MusesT — Data Link

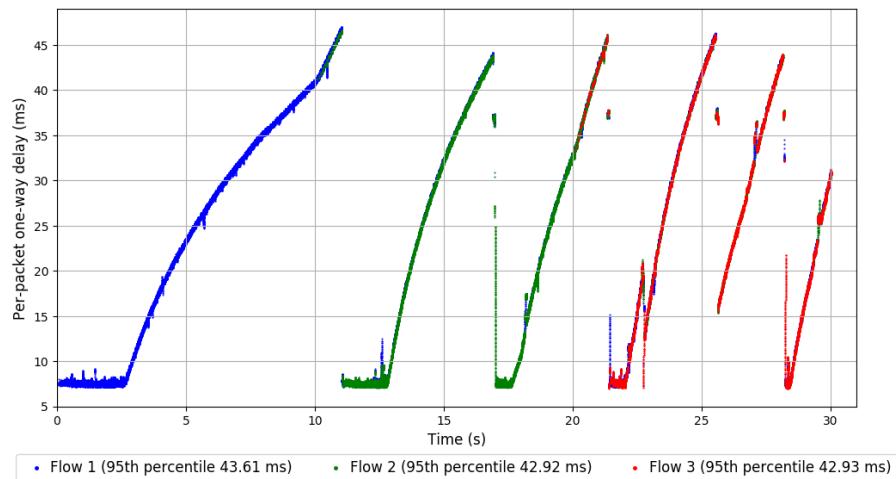
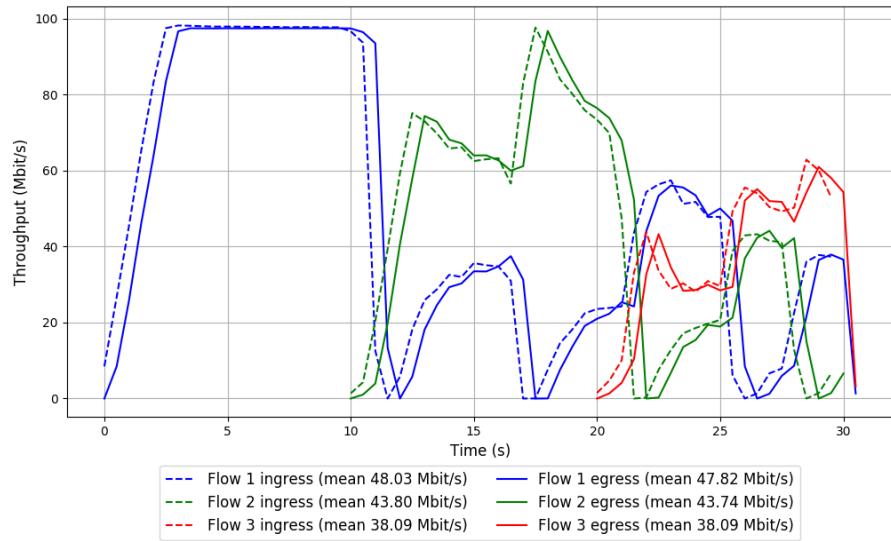


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2019-03-19 02:46:21
End at: 2019-03-19 02:46:51
Local clock offset: 1.668 ms
Remote clock offset: -4.842 ms

# Below is generated by plot.py at 2019-03-19 04:45:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.53 Mbit/s
95th percentile per-packet one-way delay: 43.310 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 47.82 Mbit/s
95th percentile per-packet one-way delay: 43.606 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 43.74 Mbit/s
95th percentile per-packet one-way delay: 42.921 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 38.09 Mbit/s
95th percentile per-packet one-way delay: 42.928 ms
Loss rate: 0.01%
```

Run 1: Report of LEDBAT — Data Link

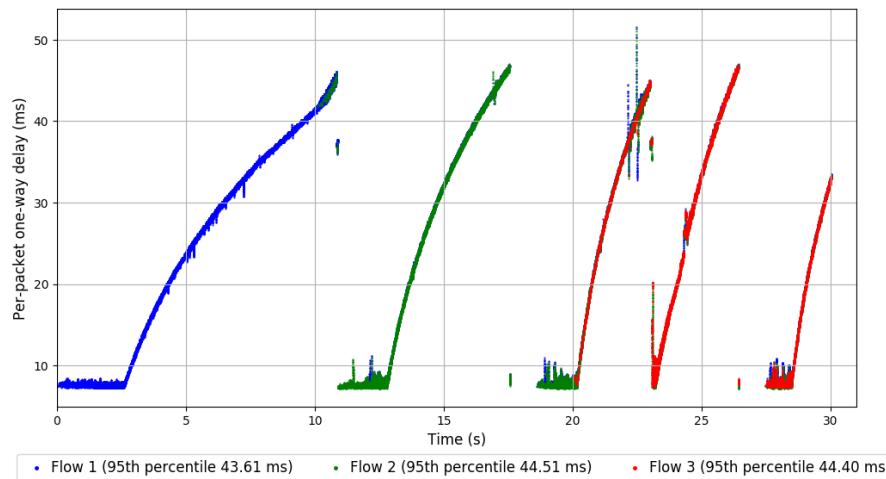
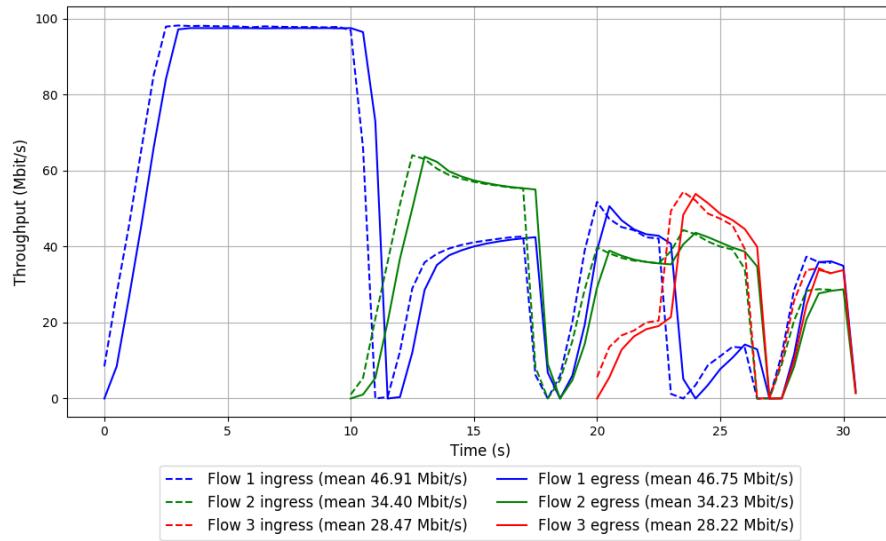


Run 2: Statistics of LEDBAT

```
Start at: 2019-03-19 03:12:01
End at: 2019-03-19 03:12:31
Local clock offset: 1.449 ms
Remote clock offset: -4.857 ms

# Below is generated by plot.py at 2019-03-19 04:45:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.92 Mbit/s
95th percentile per-packet one-way delay: 44.042 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 46.75 Mbit/s
95th percentile per-packet one-way delay: 43.607 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 34.23 Mbit/s
95th percentile per-packet one-way delay: 44.505 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 28.22 Mbit/s
95th percentile per-packet one-way delay: 44.402 ms
Loss rate: 0.64%
```

Run 2: Report of LEDBAT — Data Link

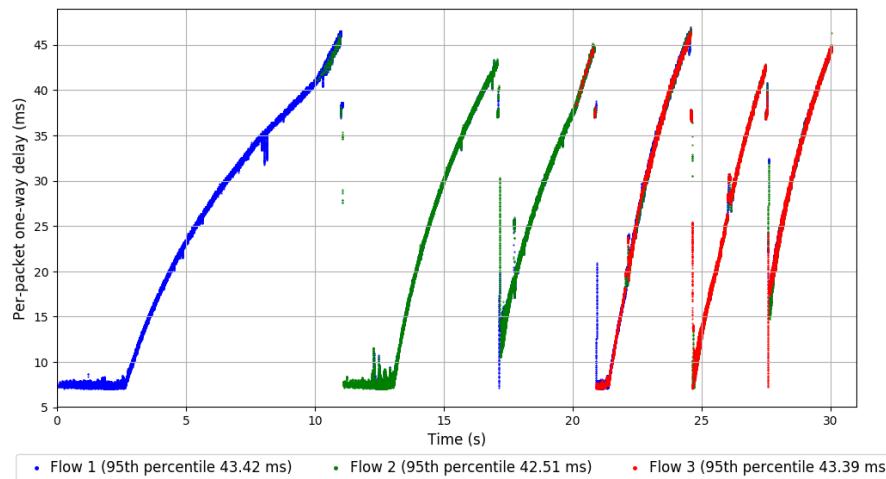
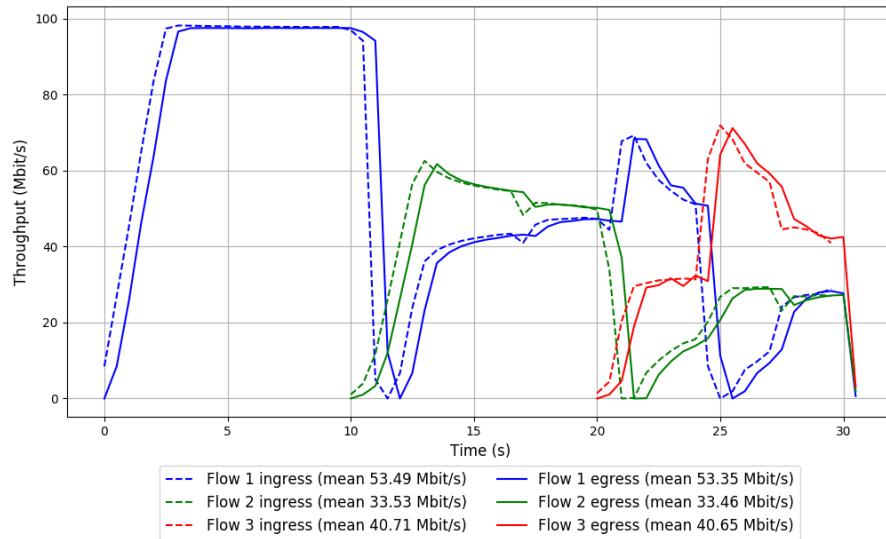


Run 3: Statistics of LEDBAT

```
Start at: 2019-03-19 03:37:18
End at: 2019-03-19 03:37:48
Local clock offset: 0.667 ms
Remote clock offset: -5.274 ms

# Below is generated by plot.py at 2019-03-19 04:45:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.09 Mbit/s
95th percentile per-packet one-way delay: 43.152 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 53.35 Mbit/s
95th percentile per-packet one-way delay: 43.422 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 33.46 Mbit/s
95th percentile per-packet one-way delay: 42.513 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 40.65 Mbit/s
95th percentile per-packet one-way delay: 43.389 ms
Loss rate: 0.10%
```

Run 3: Report of LEDBAT — Data Link

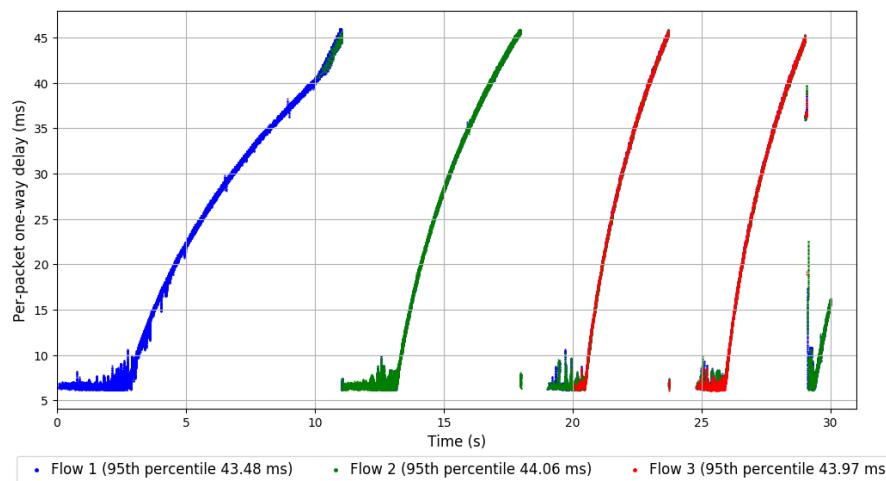
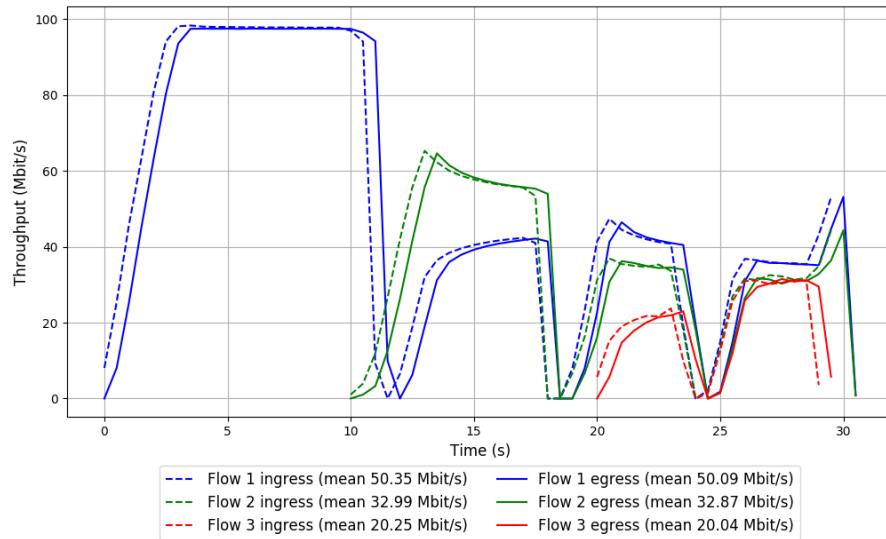


Run 4: Statistics of LEDBAT

```
Start at: 2019-03-19 04:02:14
End at: 2019-03-19 04:02:44
Local clock offset: 1.186 ms
Remote clock offset: -6.545 ms

# Below is generated by plot.py at 2019-03-19 04:46:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.00 Mbit/s
95th percentile per-packet one-way delay: 43.730 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 50.09 Mbit/s
95th percentile per-packet one-way delay: 43.482 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 32.87 Mbit/s
95th percentile per-packet one-way delay: 44.062 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 20.04 Mbit/s
95th percentile per-packet one-way delay: 43.973 ms
Loss rate: 0.90%
```

Run 4: Report of LEDBAT — Data Link

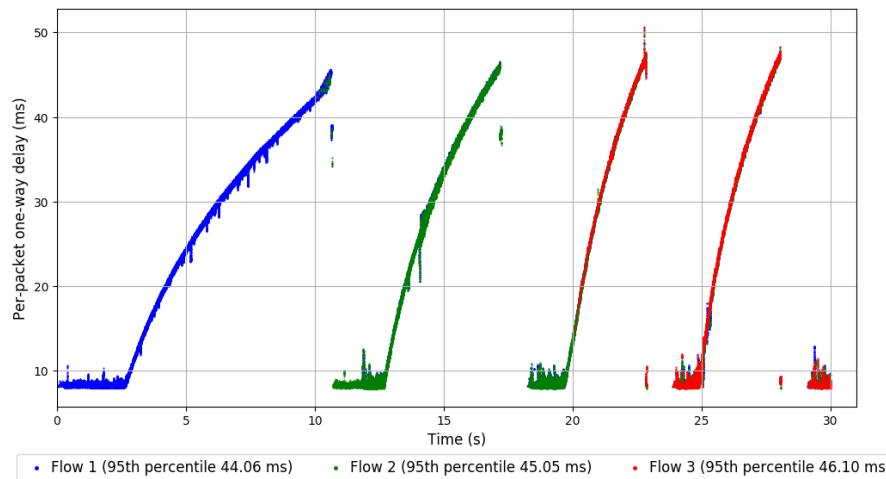
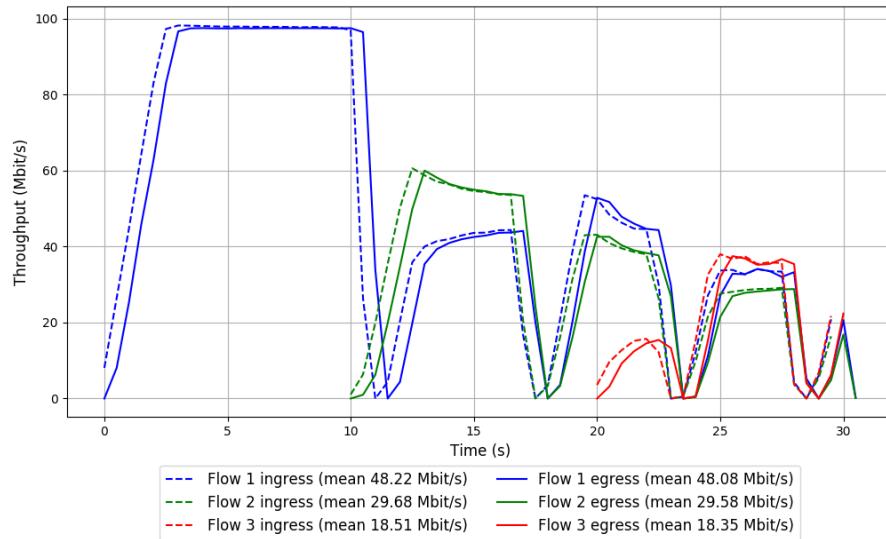


Run 5: Statistics of LEDBAT

```
Start at: 2019-03-19 04:27:22
End at: 2019-03-19 04:27:52
Local clock offset: 0.082 ms
Remote clock offset: -5.641 ms

# Below is generated by plot.py at 2019-03-19 04:46:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.85 Mbit/s
95th percentile per-packet one-way delay: 44.594 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 48.08 Mbit/s
95th percentile per-packet one-way delay: 44.060 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 29.58 Mbit/s
95th percentile per-packet one-way delay: 45.048 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 18.35 Mbit/s
95th percentile per-packet one-way delay: 46.097 ms
Loss rate: 0.97%
```

Run 5: Report of LEDBAT — Data Link

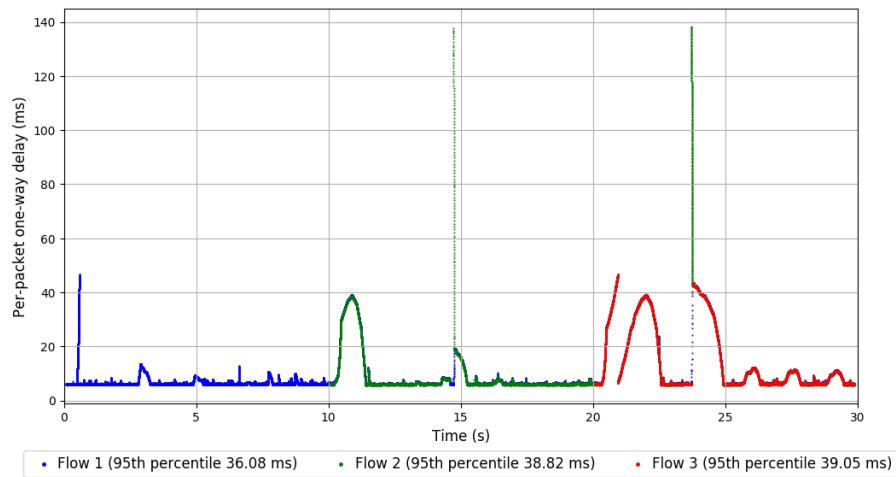
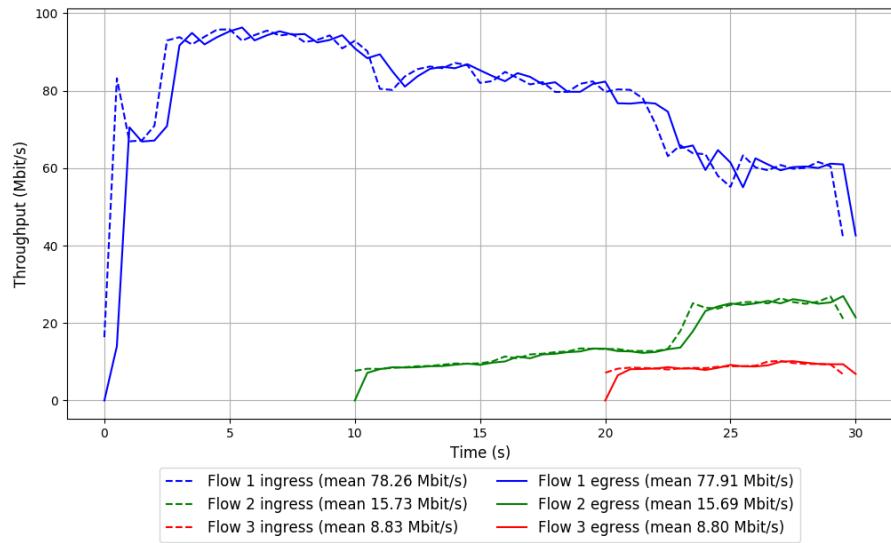


Run 1: Statistics of PCC-Allegro

```
Start at: 2019-03-19 02:47:37
End at: 2019-03-19 02:48:07
Local clock offset: 2.635 ms
Remote clock offset: -5.194 ms

# Below is generated by plot.py at 2019-03-19 04:46:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.25 Mbit/s
95th percentile per-packet one-way delay: 36.835 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 77.91 Mbit/s
95th percentile per-packet one-way delay: 36.083 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 15.69 Mbit/s
95th percentile per-packet one-way delay: 38.817 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 39.050 ms
Loss rate: 0.37%
```

Run 1: Report of PCC-Allegro — Data Link

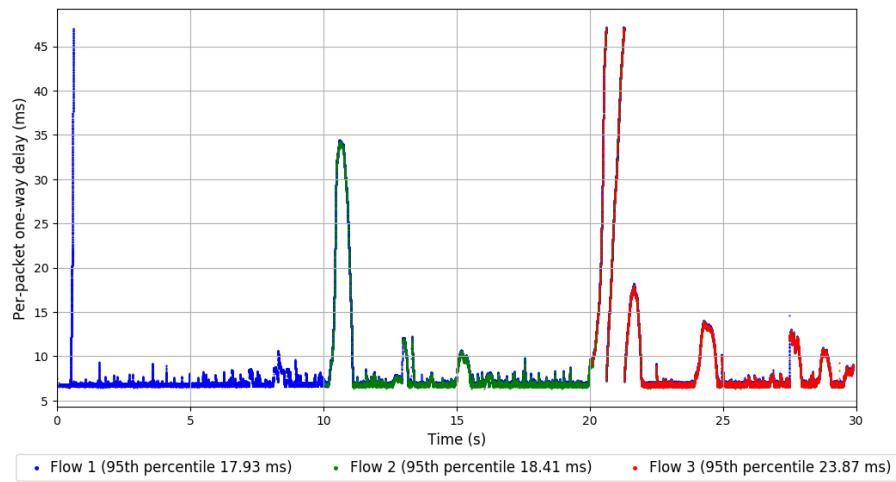
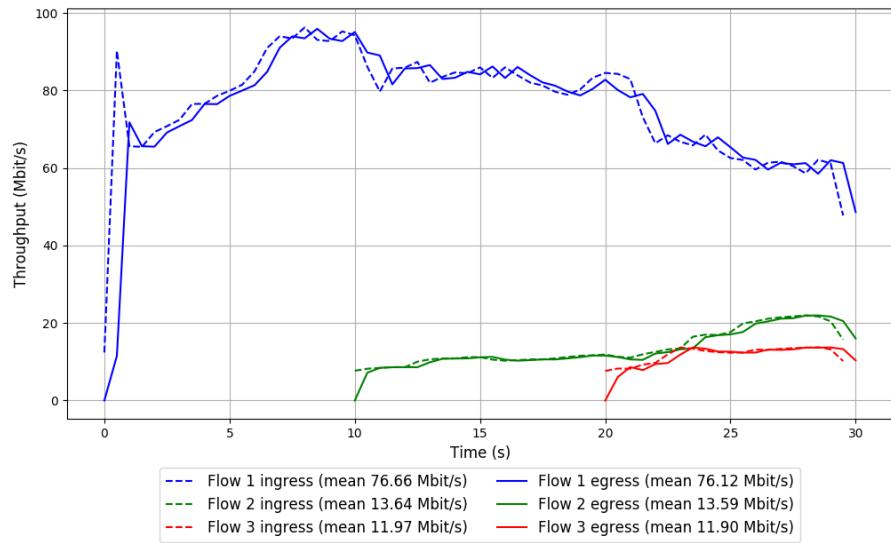


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-03-19 03:13:16
End at: 2019-03-19 03:13:47
Local clock offset: 2.082 ms
Remote clock offset: -5.023 ms

# Below is generated by plot.py at 2019-03-19 04:46:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.09 Mbit/s
95th percentile per-packet one-way delay: 18.062 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 76.12 Mbit/s
95th percentile per-packet one-way delay: 17.925 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 13.59 Mbit/s
95th percentile per-packet one-way delay: 18.412 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 11.90 Mbit/s
95th percentile per-packet one-way delay: 23.872 ms
Loss rate: 0.54%
```

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

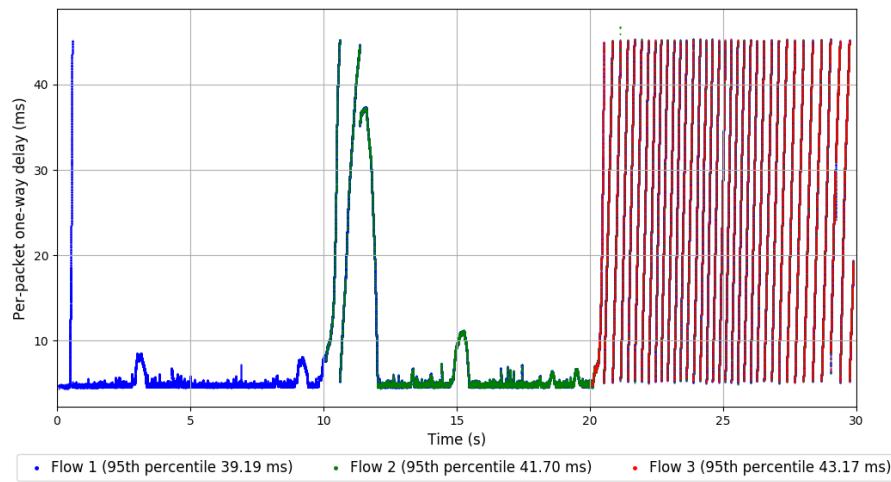
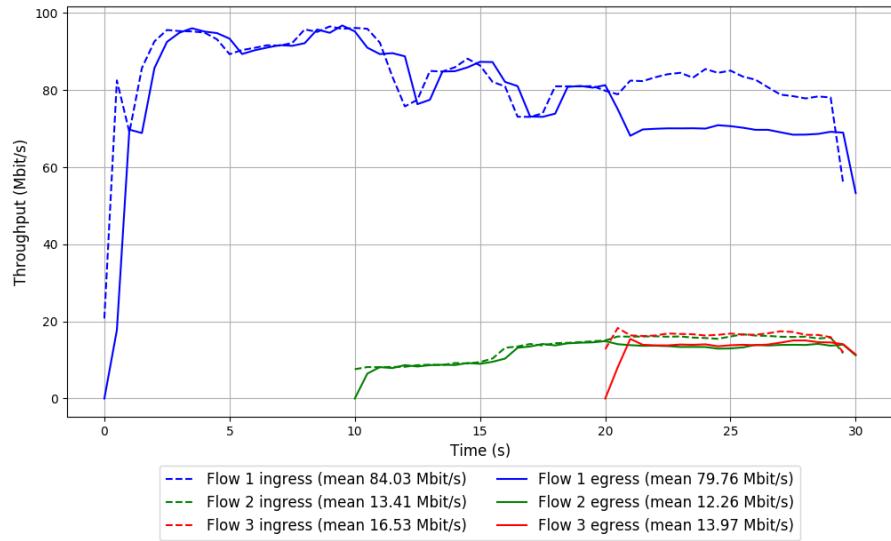


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-03-19 03:38:32
End at: 2019-03-19 03:39:02
Local clock offset: 0.98 ms
Remote clock offset: -7.499 ms

# Below is generated by plot.py at 2019-03-19 04:47:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.52 Mbit/s
95th percentile per-packet one-way delay: 40.033 ms
Loss rate: 5.93%
-- Flow 1:
Average throughput: 79.76 Mbit/s
95th percentile per-packet one-way delay: 39.185 ms
Loss rate: 5.04%
-- Flow 2:
Average throughput: 12.26 Mbit/s
95th percentile per-packet one-way delay: 41.705 ms
Loss rate: 8.51%
-- Flow 3:
Average throughput: 13.97 Mbit/s
95th percentile per-packet one-way delay: 43.173 ms
Loss rate: 15.41%
```

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

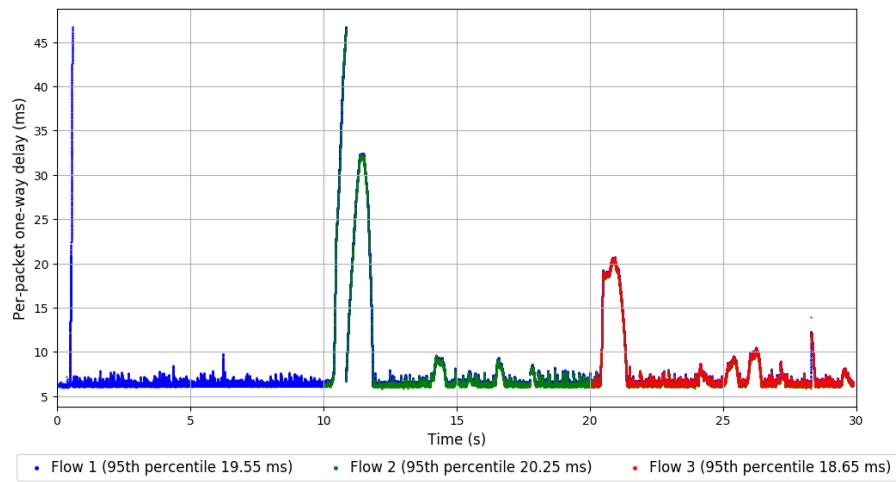
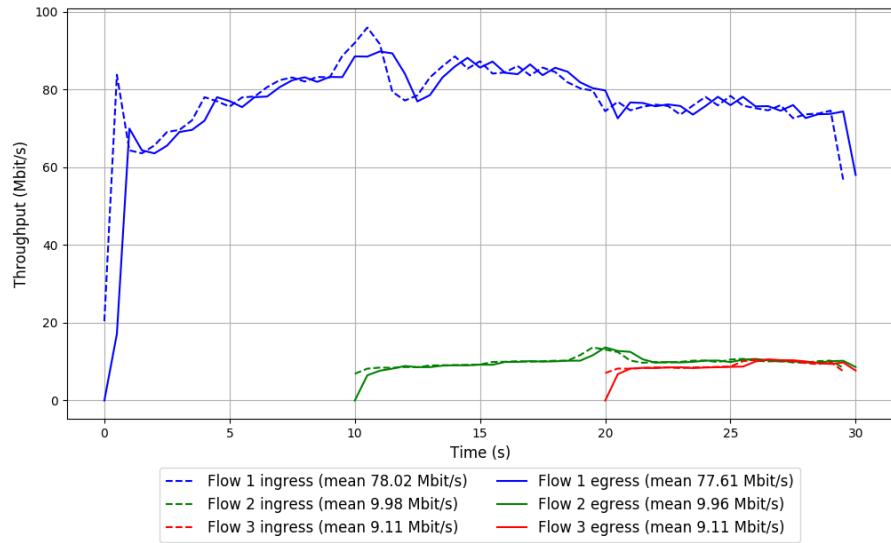


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-03-19 04:03:28
End at: 2019-03-19 04:03:58
Local clock offset: 0.625 ms
Remote clock offset: -7.053 ms

# Below is generated by plot.py at 2019-03-19 04:47:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.24 Mbit/s
95th percentile per-packet one-way delay: 19.494 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 77.61 Mbit/s
95th percentile per-packet one-way delay: 19.549 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 9.96 Mbit/s
95th percentile per-packet one-way delay: 20.253 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 9.11 Mbit/s
95th percentile per-packet one-way delay: 18.649 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Allegro — Data Link

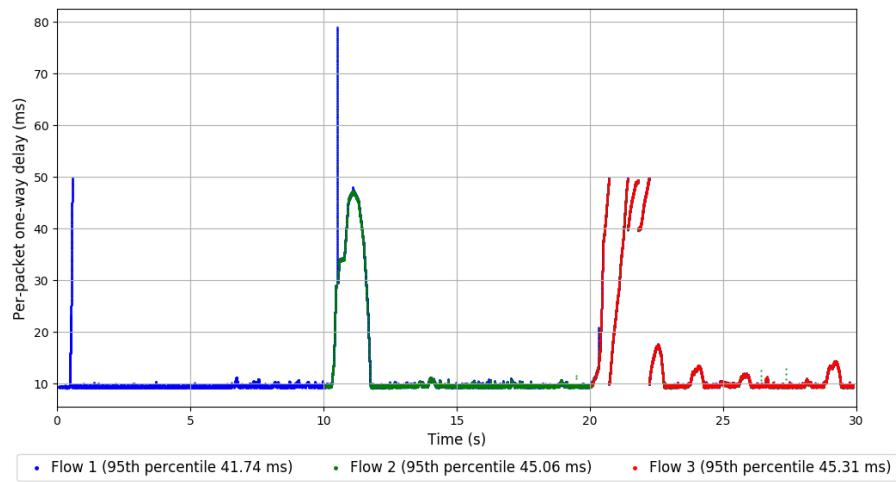
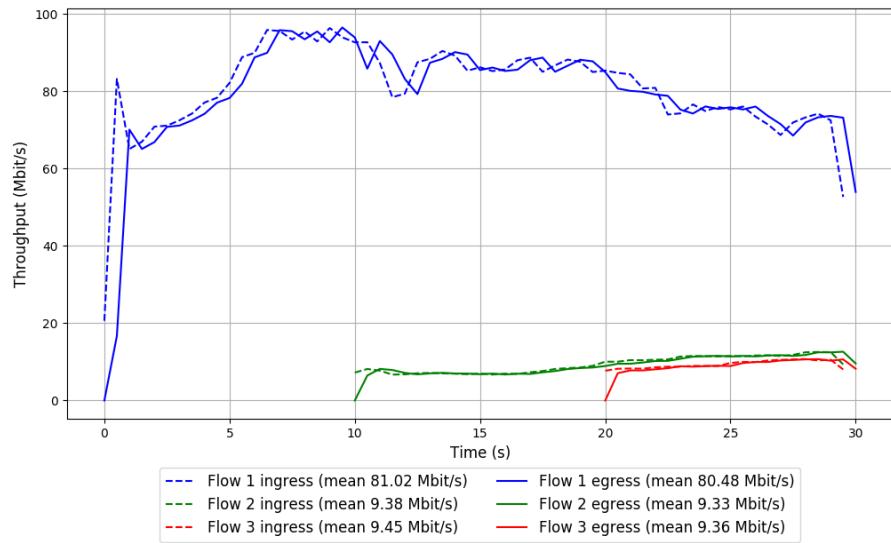


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-03-19 04:28:37
End at: 2019-03-19 04:29:07
Local clock offset: -0.003 ms
Remote clock offset: -4.527 ms

# Below is generated by plot.py at 2019-03-19 04:47:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.77 Mbit/s
95th percentile per-packet one-way delay: 42.284 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 80.48 Mbit/s
95th percentile per-packet one-way delay: 41.745 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 9.33 Mbit/s
95th percentile per-packet one-way delay: 45.063 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 9.36 Mbit/s
95th percentile per-packet one-way delay: 45.314 ms
Loss rate: 0.90%
```

Run 5: Report of PCC-Allegro — Data Link

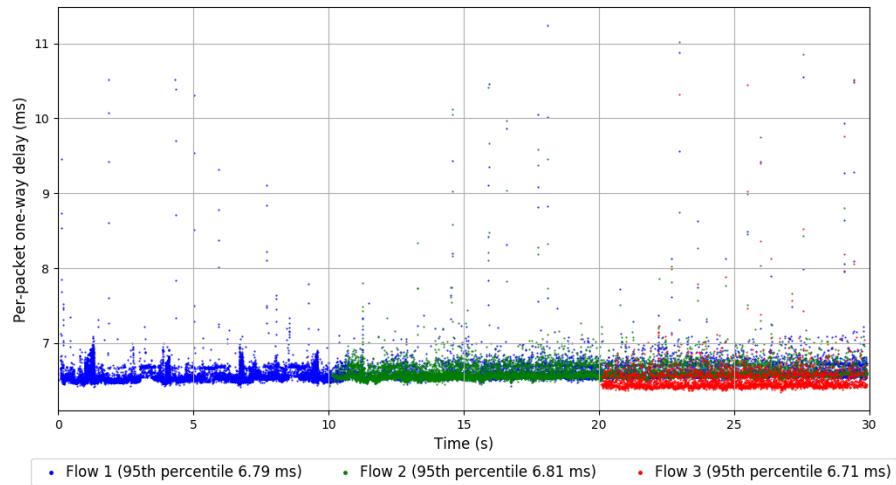
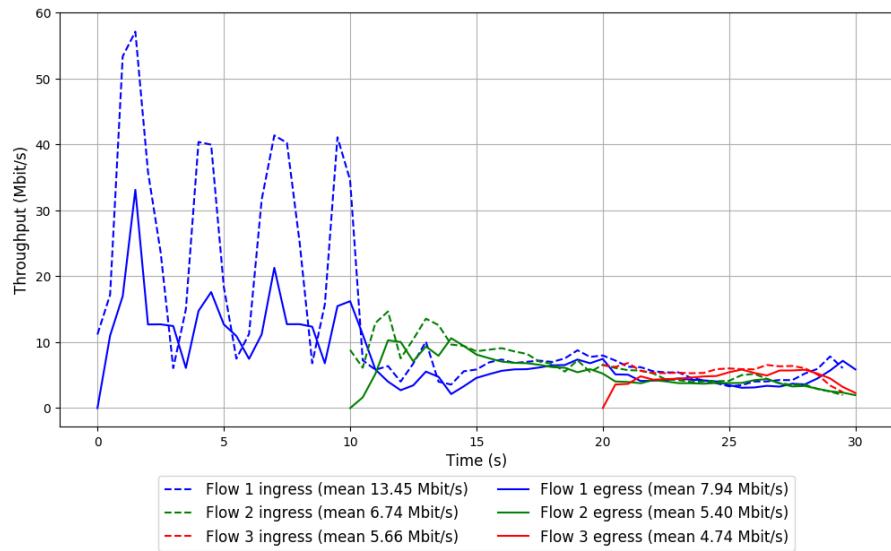


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-03-19 02:43:58
End at: 2019-03-19 02:44:28
Local clock offset: 2.572 ms
Remote clock offset: -4.437 ms

# Below is generated by plot.py at 2019-03-19 04:47:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.10 Mbit/s
95th percentile per-packet one-way delay: 6.788 ms
Loss rate: 33.86%
-- Flow 1:
Average throughput: 7.94 Mbit/s
95th percentile per-packet one-way delay: 6.787 ms
Loss rate: 40.98%
-- Flow 2:
Average throughput: 5.40 Mbit/s
95th percentile per-packet one-way delay: 6.807 ms
Loss rate: 19.84%
-- Flow 3:
Average throughput: 4.74 Mbit/s
95th percentile per-packet one-way delay: 6.708 ms
Loss rate: 16.31%
```

Run 1: Report of PCC-Expr — Data Link

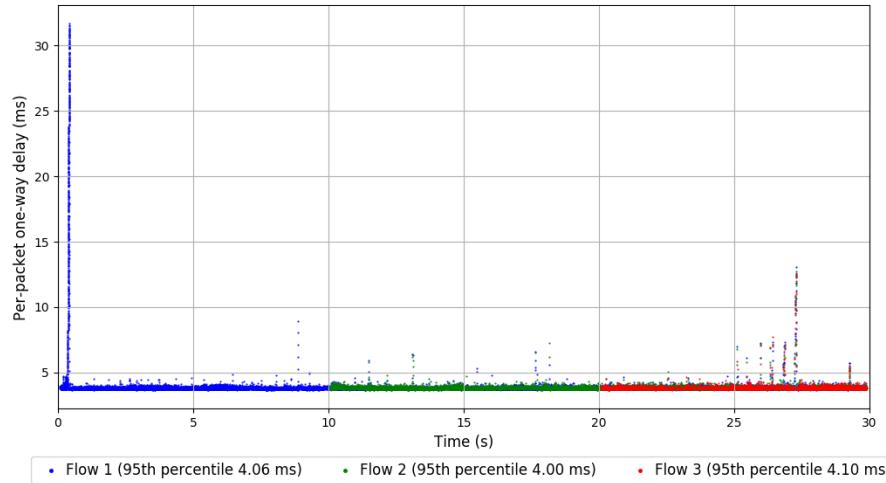
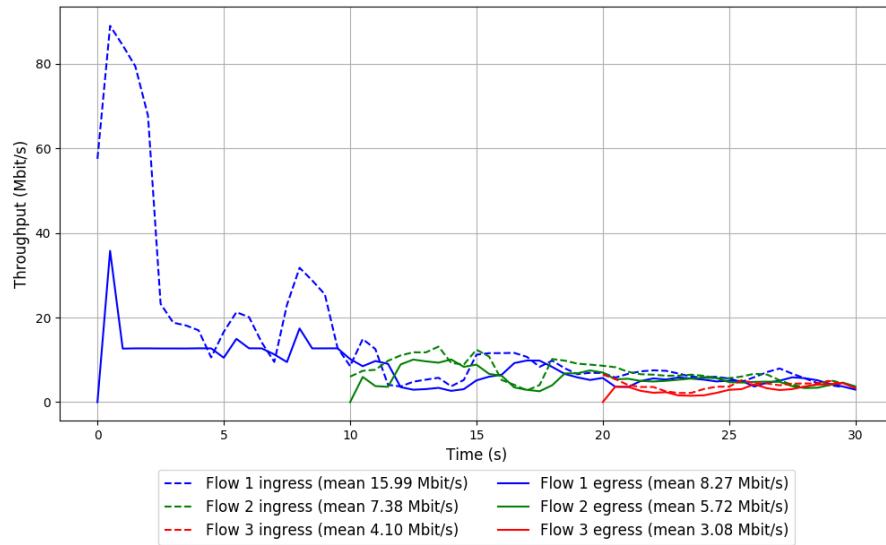


Run 2: Statistics of PCC-Expr

```
Start at: 2019-03-19 03:09:34
End at: 2019-03-19 03:10:04
Local clock offset: 2.905 ms
Remote clock offset: -6.995 ms

# Below is generated by plot.py at 2019-03-19 04:47:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.10 Mbit/s
95th percentile per-packet one-way delay: 4.034 ms
Loss rate: 41.14%
-- Flow 1:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 4.057 ms
Loss rate: 48.25%
-- Flow 2:
Average throughput: 5.72 Mbit/s
95th percentile per-packet one-way delay: 3.997 ms
Loss rate: 22.54%
-- Flow 3:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 4.096 ms
Loss rate: 24.74%
```

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

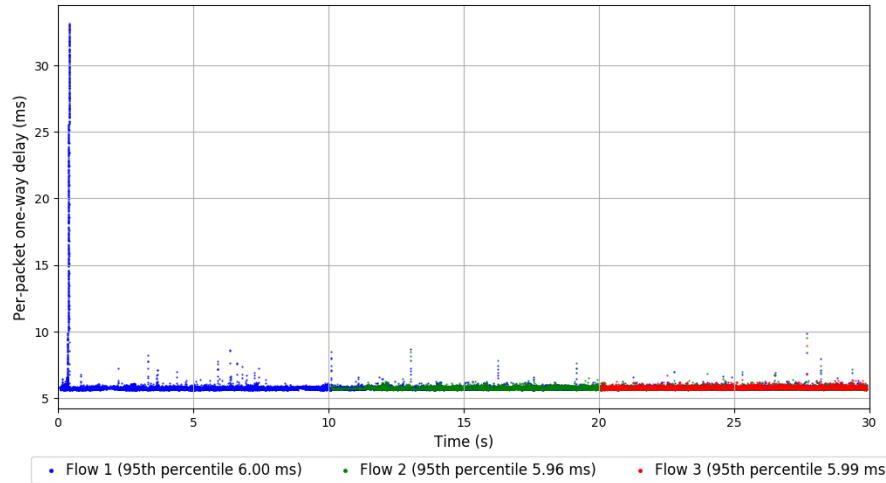
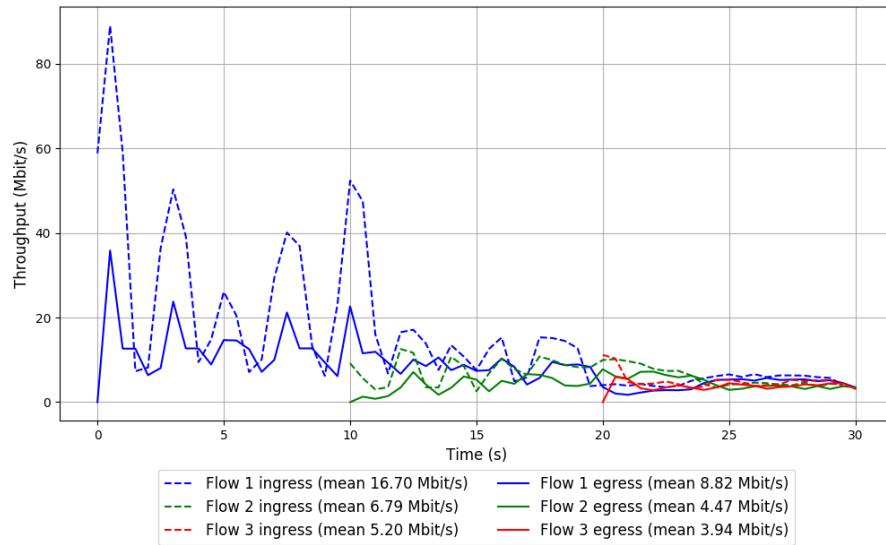


Run 3: Statistics of PCC-Expr

```
Start at: 2019-03-19 03:34:56
End at: 2019-03-19 03:35:26
Local clock offset: 2.197 ms
Remote clock offset: -4.999 ms

# Below is generated by plot.py at 2019-03-19 04:47:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.10 Mbit/s
95th percentile per-packet one-way delay: 5.985 ms
Loss rate: 42.87%
-- Flow 1:
Average throughput: 8.82 Mbit/s
95th percentile per-packet one-way delay: 6.003 ms
Loss rate: 47.16%
-- Flow 2:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 5.959 ms
Loss rate: 34.11%
-- Flow 3:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 5.990 ms
Loss rate: 24.17%
```

Run 3: Report of PCC-Expr — Data Link

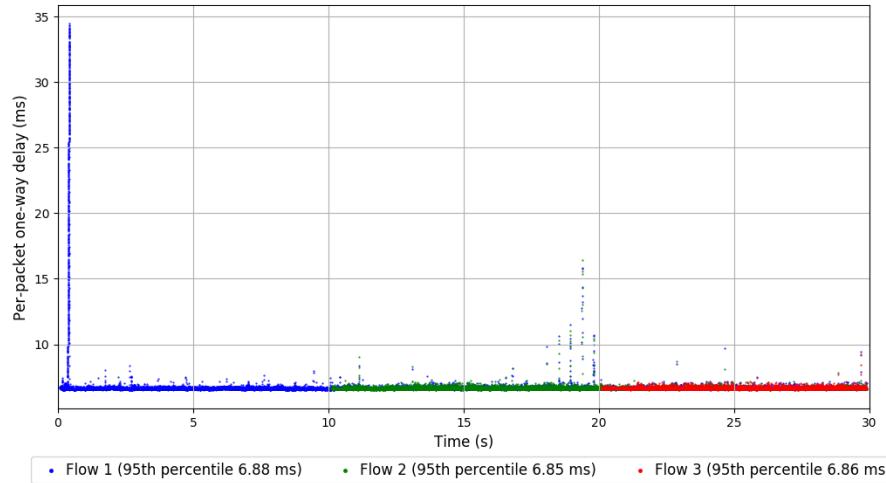
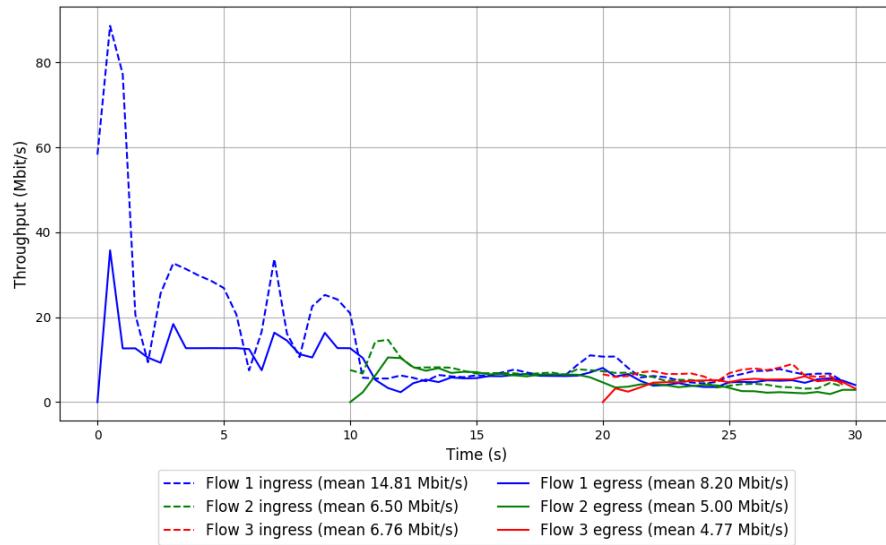


Run 4: Statistics of PCC-Expr

```
Start at: 2019-03-19 03:59:55
End at: 2019-03-19 04:00:25
Local clock offset: 0.978 ms
Remote clock offset: -6.187 ms

# Below is generated by plot.py at 2019-03-19 04:47:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.10 Mbit/s
95th percentile per-packet one-way delay: 6.865 ms
Loss rate: 38.69%
-- Flow 1:
Average throughput: 8.20 Mbit/s
95th percentile per-packet one-way delay: 6.879 ms
Loss rate: 44.63%
-- Flow 2:
Average throughput: 5.00 Mbit/s
95th percentile per-packet one-way delay: 6.849 ms
Loss rate: 23.11%
-- Flow 3:
Average throughput: 4.77 Mbit/s
95th percentile per-packet one-way delay: 6.862 ms
Loss rate: 29.44%
```

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

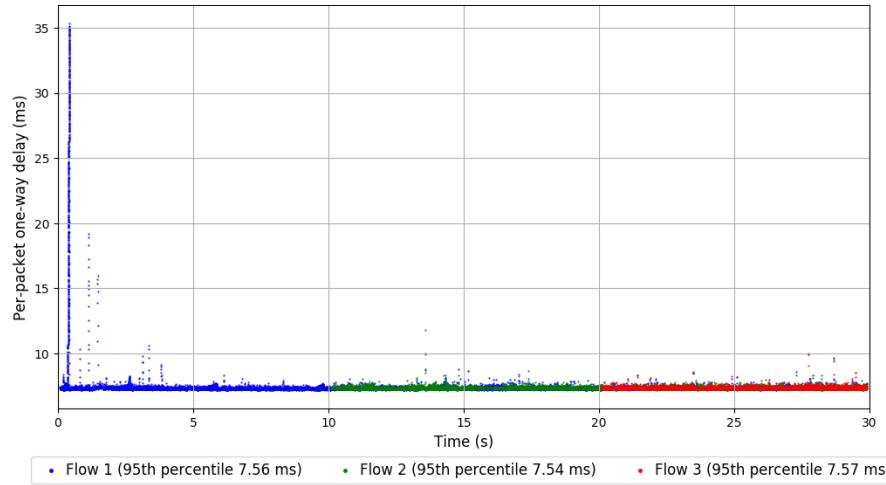
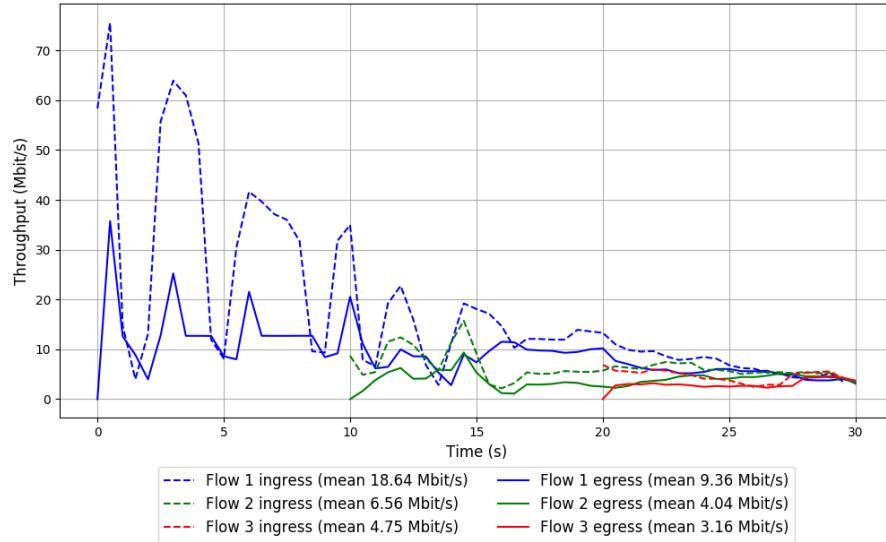


Run 5: Statistics of PCC-Expr

```
Start at: 2019-03-19 04:25:01
End at: 2019-03-19 04:25:31
Local clock offset: 0.042 ms
Remote clock offset: -6.335 ms

# Below is generated by plot.py at 2019-03-19 04:47:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.10 Mbit/s
95th percentile per-packet one-way delay: 7.555 ms
Loss rate: 46.69%
-- Flow 1:
Average throughput: 9.36 Mbit/s
95th percentile per-packet one-way delay: 7.560 ms
Loss rate: 49.75%
-- Flow 2:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 7.542 ms
Loss rate: 38.37%
-- Flow 3:
Average throughput: 3.16 Mbit/s
95th percentile per-packet one-way delay: 7.572 ms
Loss rate: 33.49%
```

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

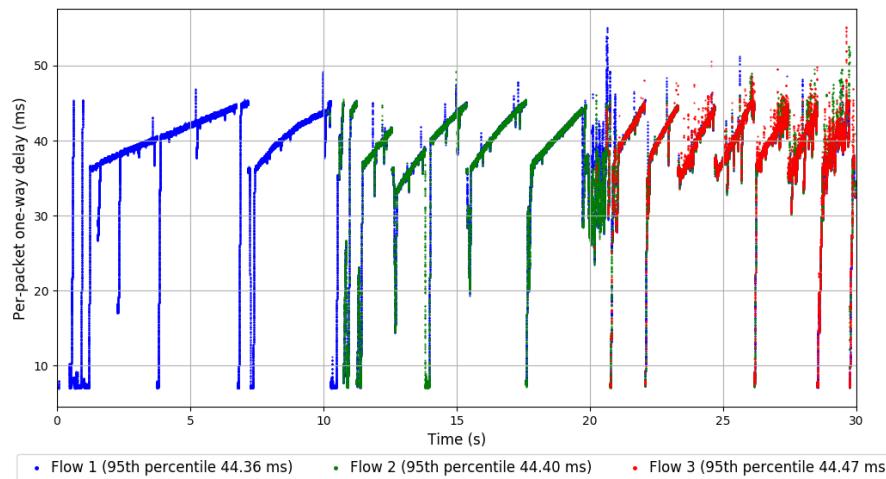
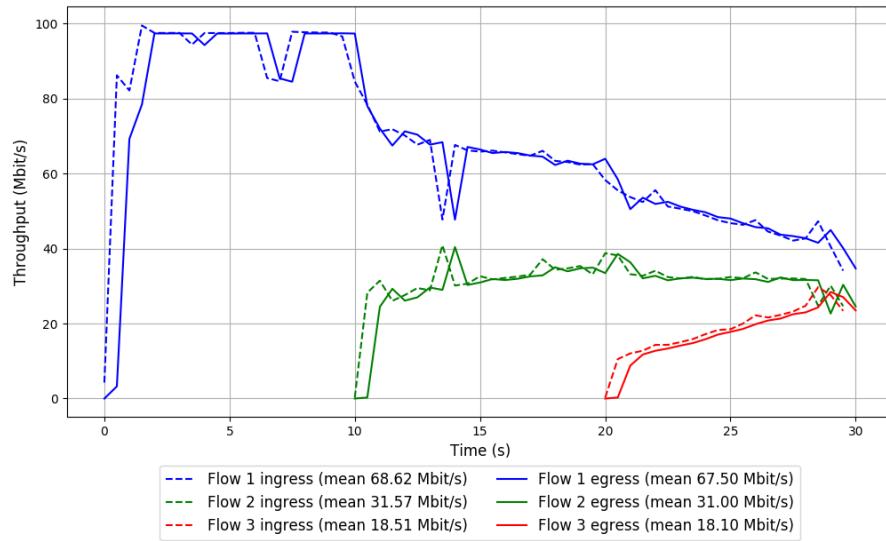


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-03-19 02:40:20
End at: 2019-03-19 02:40:50
Local clock offset: 1.256 ms
Remote clock offset: -4.824 ms

# Below is generated by plot.py at 2019-03-19 04:47:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.98 Mbit/s
95th percentile per-packet one-way delay: 44.386 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 67.50 Mbit/s
95th percentile per-packet one-way delay: 44.364 ms
Loss rate: 1.55%
-- Flow 2:
Average throughput: 31.00 Mbit/s
95th percentile per-packet one-way delay: 44.403 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 18.10 Mbit/s
95th percentile per-packet one-way delay: 44.466 ms
Loss rate: 2.23%
```

Run 1: Report of QUIC Cubic — Data Link

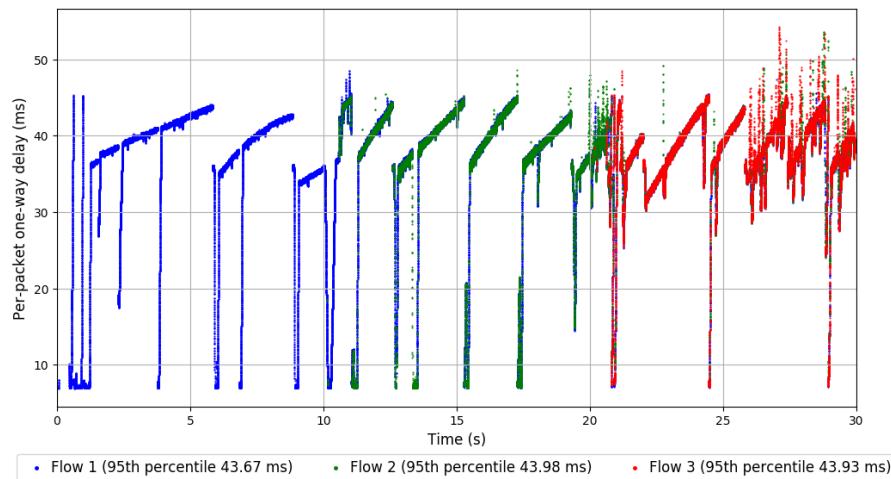
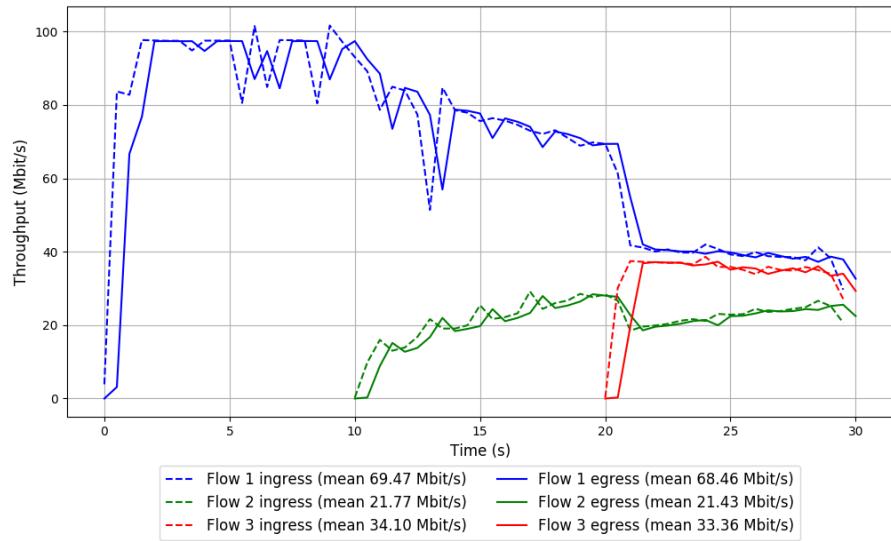


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-03-19 03:05:57
End at: 2019-03-19 03:06:27
Local clock offset: 1.526 ms
Remote clock offset: -5.3 ms

# Below is generated by plot.py at 2019-03-19 04:47:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.61 Mbit/s
95th percentile per-packet one-way delay: 43.718 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 68.46 Mbit/s
95th percentile per-packet one-way delay: 43.675 ms
Loss rate: 1.34%
-- Flow 2:
Average throughput: 21.43 Mbit/s
95th percentile per-packet one-way delay: 43.975 ms
Loss rate: 1.56%
-- Flow 3:
Average throughput: 33.36 Mbit/s
95th percentile per-packet one-way delay: 43.933 ms
Loss rate: 2.08%
```

Run 2: Report of QUIC Cubic — Data Link

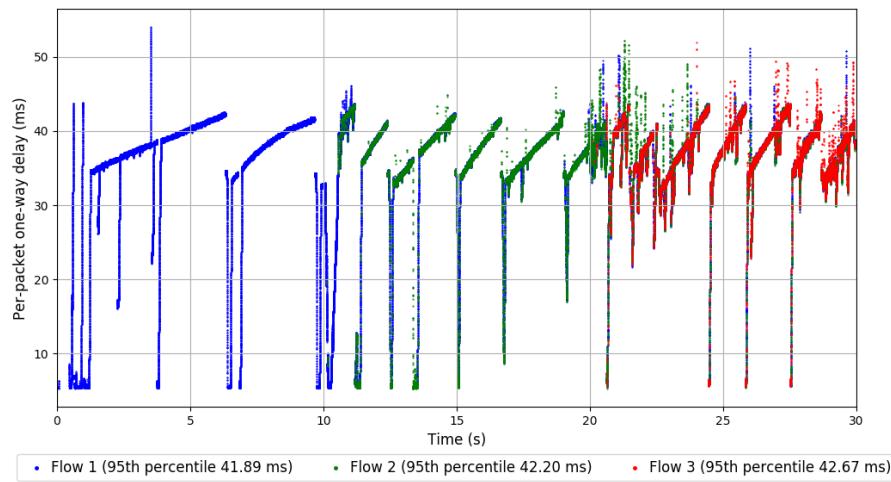
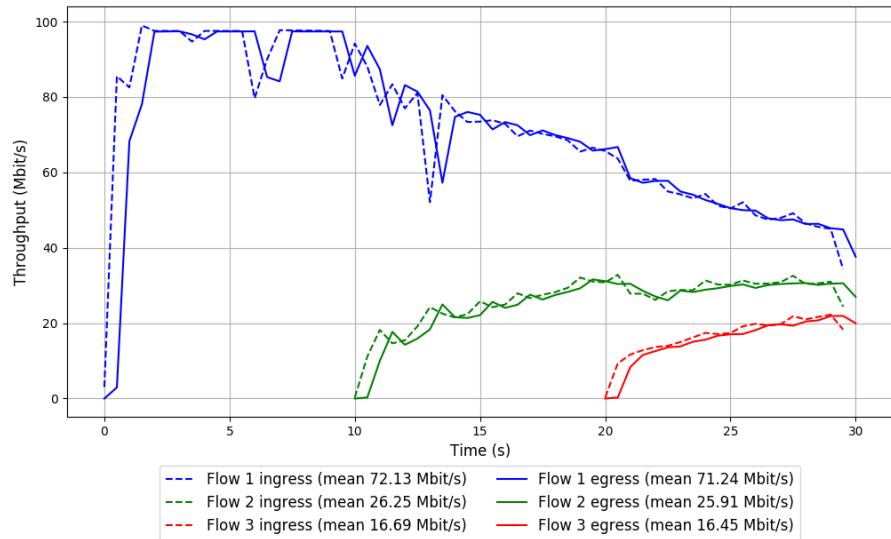


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-03-19 03:31:22
End at: 2019-03-19 03:31:52
Local clock offset: 0.504 ms
Remote clock offset: -6.98 ms

# Below is generated by plot.py at 2019-03-19 04:47:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.84 Mbit/s
95th percentile per-packet one-way delay: 41.987 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 71.24 Mbit/s
95th percentile per-packet one-way delay: 41.892 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 42.199 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 16.45 Mbit/s
95th percentile per-packet one-way delay: 42.671 ms
Loss rate: 1.44%
```

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

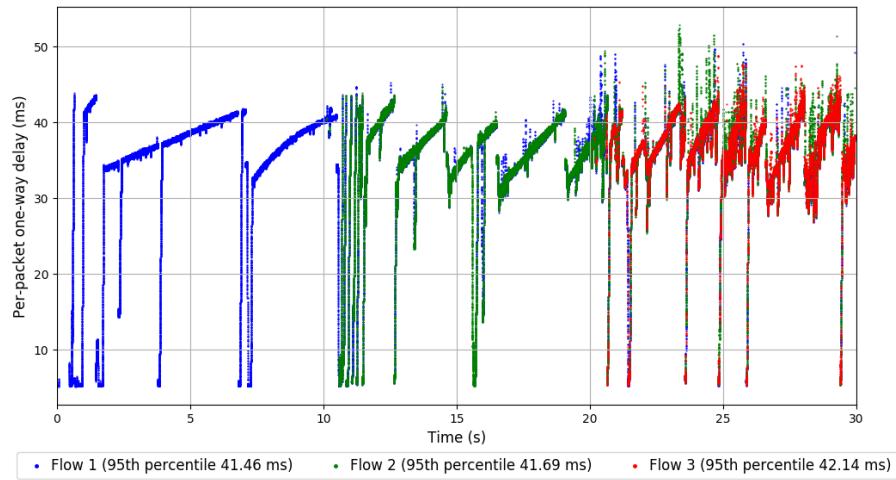
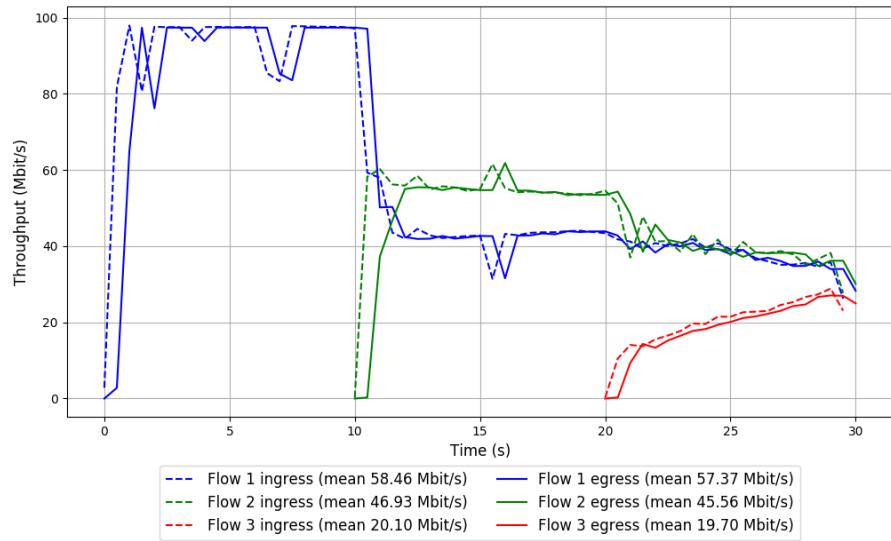


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-03-19 03:56:20
End at: 2019-03-19 03:56:50
Local clock offset: 1.529 ms
Remote clock offset: -6.996 ms

# Below is generated by plot.py at 2019-03-19 04:48:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.06 Mbit/s
95th percentile per-packet one-way delay: 41.590 ms
Loss rate: 2.12%
-- Flow 1:
Average throughput: 57.37 Mbit/s
95th percentile per-packet one-way delay: 41.462 ms
Loss rate: 1.72%
-- Flow 2:
Average throughput: 45.56 Mbit/s
95th percentile per-packet one-way delay: 41.686 ms
Loss rate: 2.89%
-- Flow 3:
Average throughput: 19.70 Mbit/s
95th percentile per-packet one-way delay: 42.143 ms
Loss rate: 1.98%
```

Run 4: Report of QUIC Cubic — Data Link

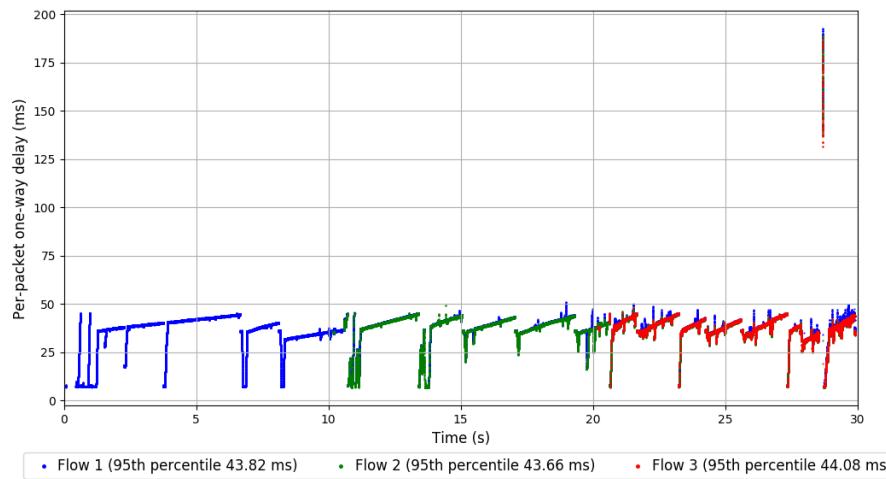
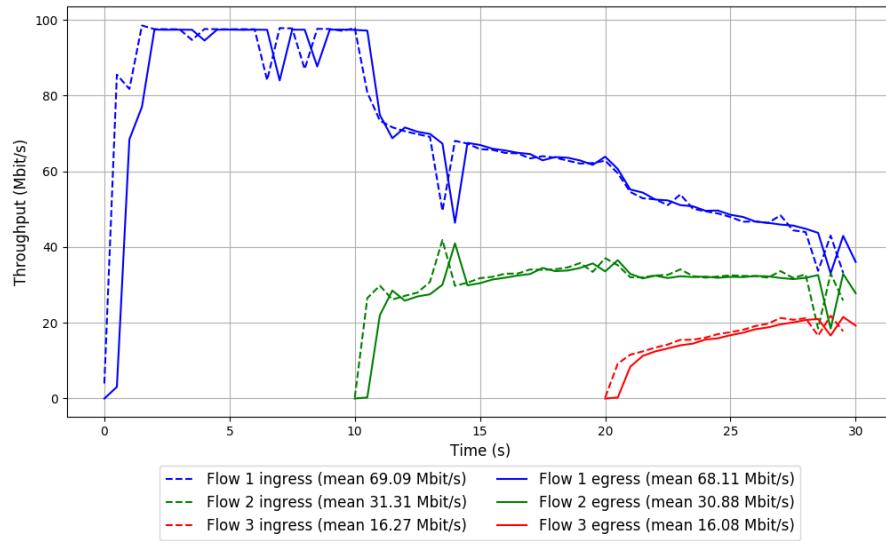


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-03-19 04:21:24
End at: 2019-03-19 04:21:54
Local clock offset: 0.539 ms
Remote clock offset: -6.268 ms

# Below is generated by plot.py at 2019-03-19 04:48:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.88 Mbit/s
95th percentile per-packet one-way delay: 43.805 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 68.11 Mbit/s
95th percentile per-packet one-way delay: 43.822 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 30.88 Mbit/s
95th percentile per-packet one-way delay: 43.658 ms
Loss rate: 1.37%
-- Flow 3:
Average throughput: 16.08 Mbit/s
95th percentile per-packet one-way delay: 44.075 ms
Loss rate: 1.20%
```

Run 5: Report of QUIC Cubic — Data Link

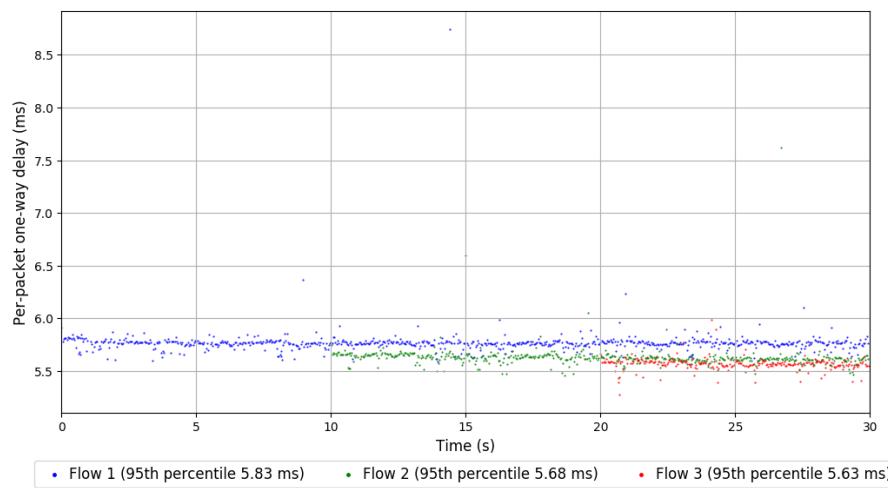
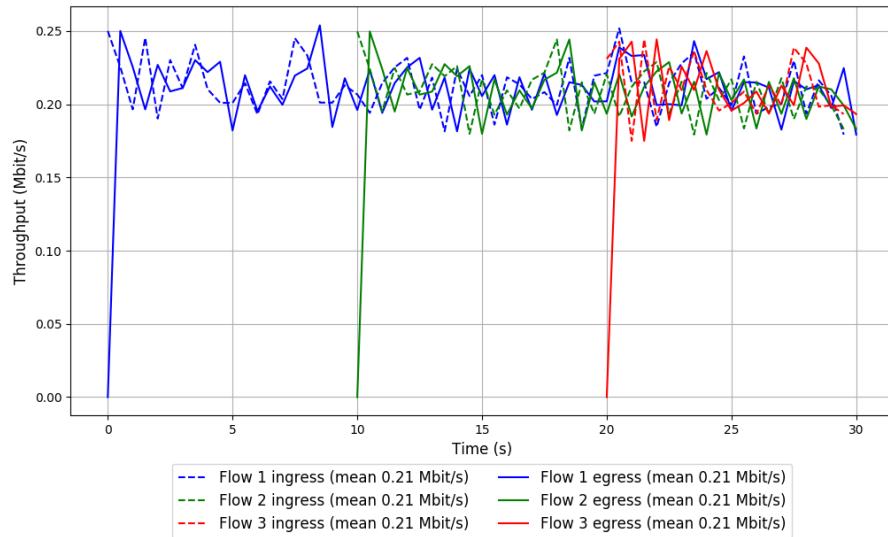


```
Run 1: Statistics of SCReAM

Start at: 2019-03-19 02:50:00
End at: 2019-03-19 02:50:30
Local clock offset: 2.691 ms
Remote clock offset: -5.378 ms

# Below is generated by plot.py at 2019-03-19 04:48:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 5.810 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 5.829 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 5.680 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 5.632 ms
Loss rate: 0.00%
```

## Run 1: Report of SCReAM — Data Link

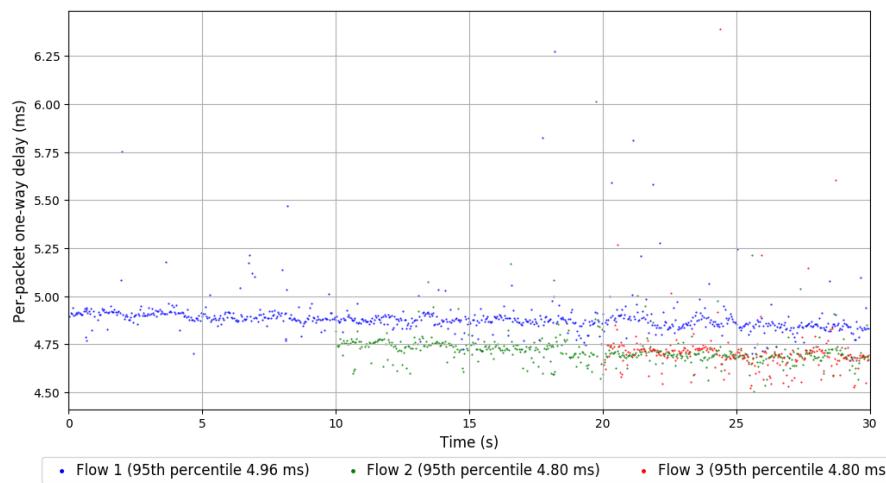
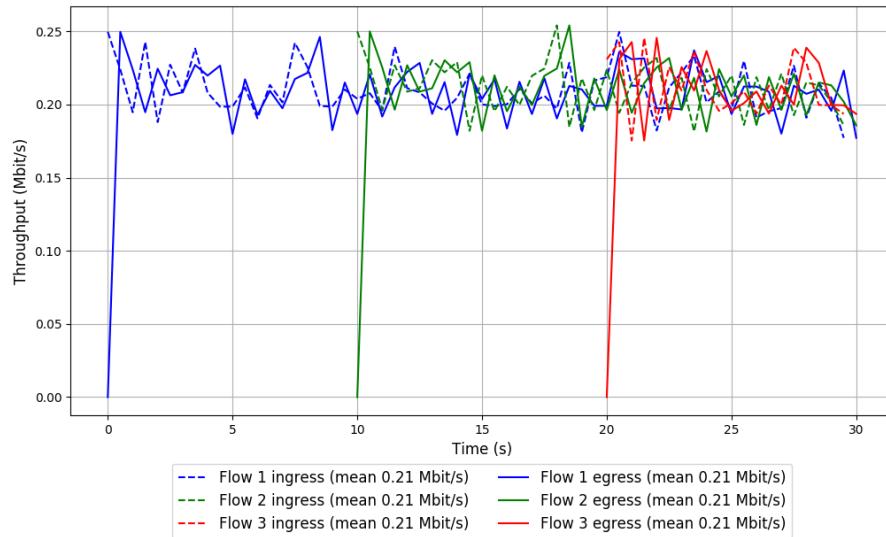


Run 2: Statistics of SCReAM

```
Start at: 2019-03-19 03:15:40
End at: 2019-03-19 03:16:10
Local clock offset: 3.811 ms
Remote clock offset: -5.04 ms

# Below is generated by plot.py at 2019-03-19 04:48:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 4.937 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 4.962 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 4.803 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 4.805 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

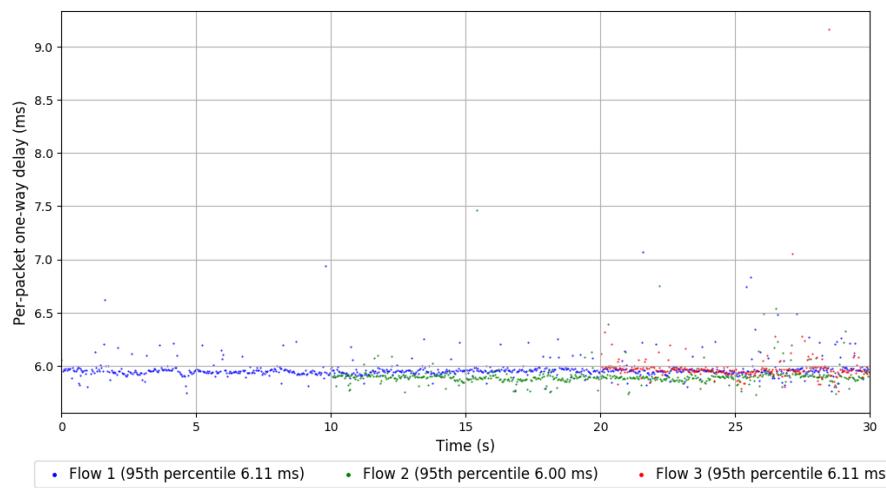
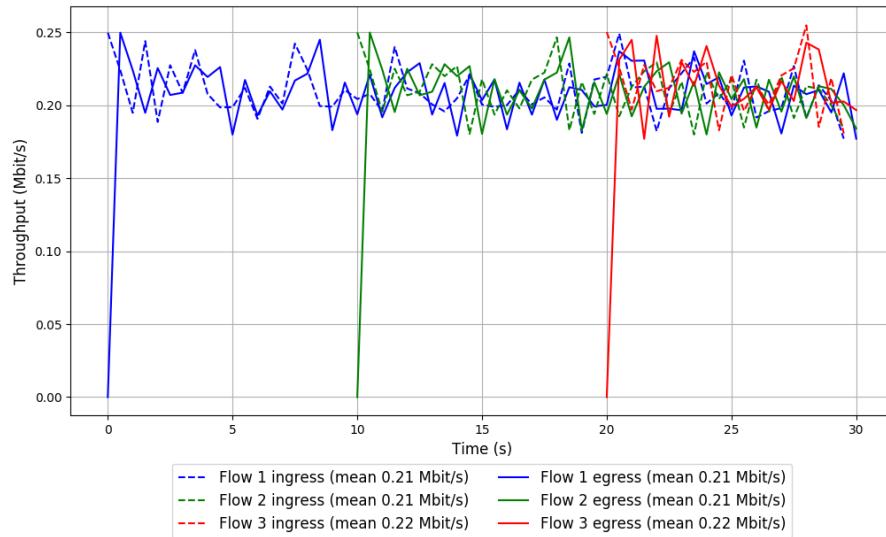


Run 3: Statistics of SCReAM

```
Start at: 2019-03-19 03:40:55
End at: 2019-03-19 03:41:25
Local clock offset: 0.789 ms
Remote clock offset: -6.633 ms

# Below is generated by plot.py at 2019-03-19 04:48:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 6.087 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 6.106 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 5.995 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 6.113 ms
Loss rate: 0.00%
```

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

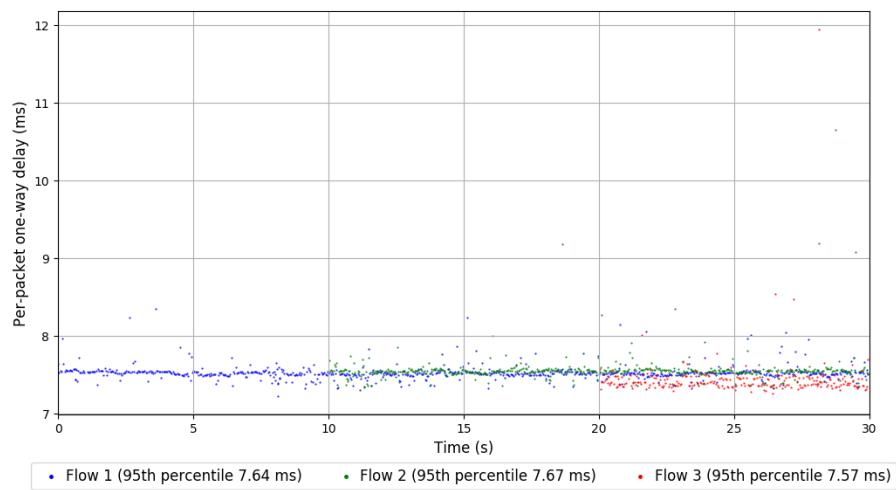
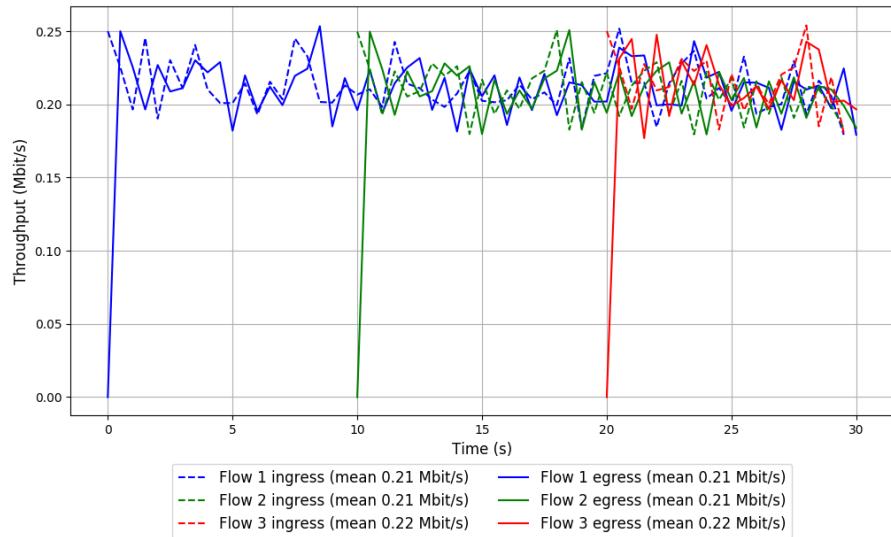


Run 4: Statistics of SCReAM

```
Start at: 2019-03-19 04:05:48
End at: 2019-03-19 04:06:18
Local clock offset: 0.907 ms
Remote clock offset: -5.611 ms

# Below is generated by plot.py at 2019-03-19 04:48:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 7.645 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 7.644 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 7.669 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 7.573 ms
Loss rate: 0.00%
```

## Run 4: Report of SCReAM — Data Link

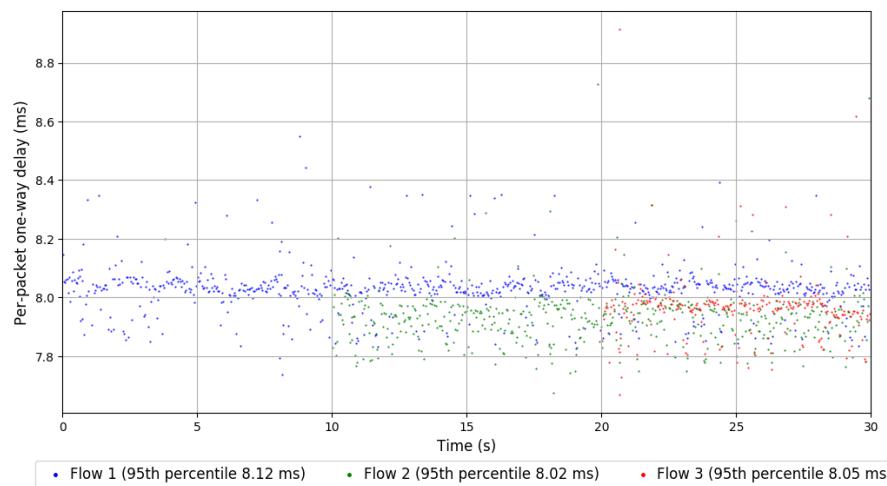
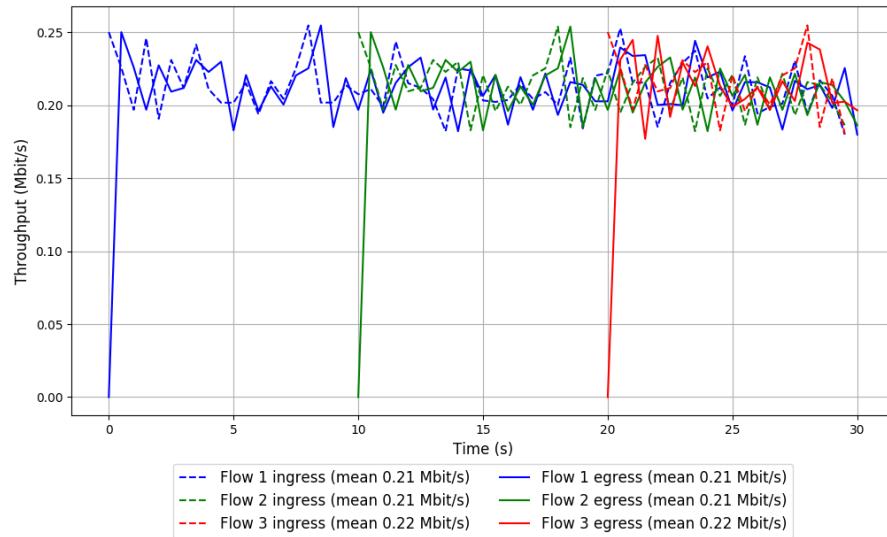


Run 5: Statistics of SCReAM

```
Start at: 2019-03-19 04:30:57
End at: 2019-03-19 04:31:27
Local clock offset: 1.644 ms
Remote clock offset: -4.202 ms

# Below is generated by plot.py at 2019-03-19 04:48:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 8.104 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 8.119 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 8.022 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 8.052 ms
Loss rate: 0.00%
```

## Run 5: Report of SCReAM — Data Link

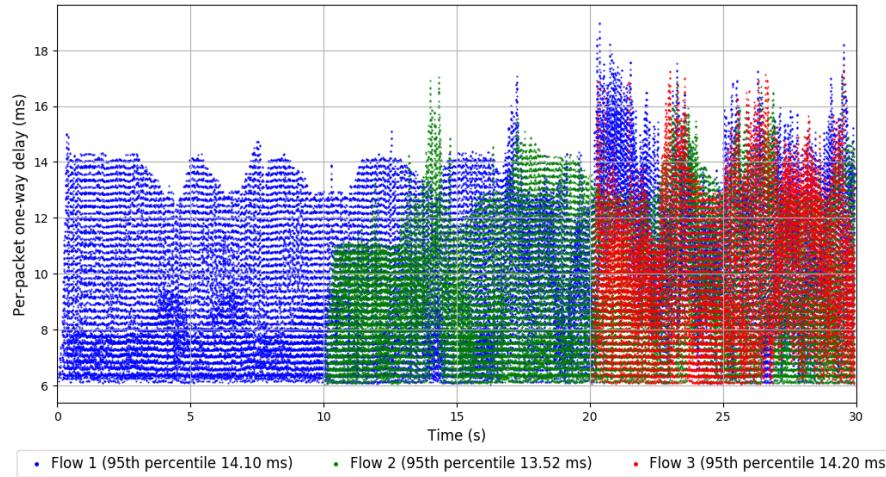
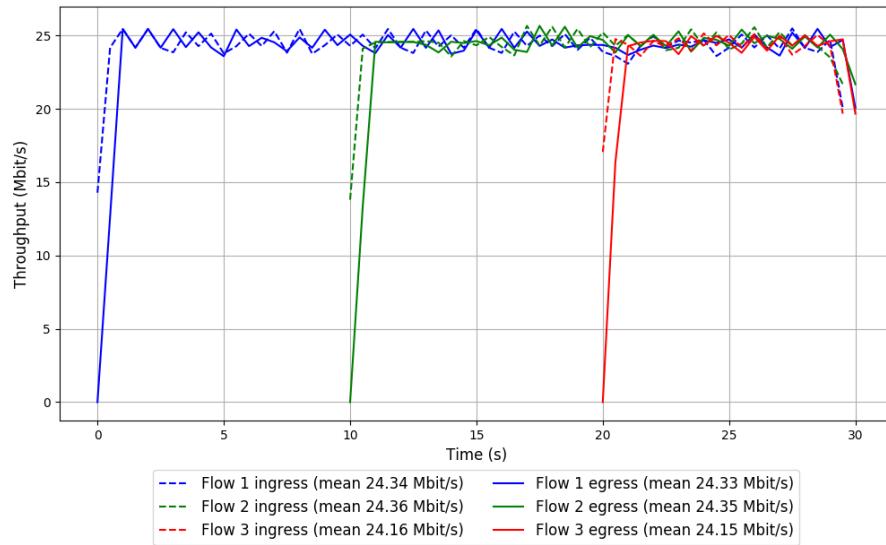


Run 1: Statistics of Sprout

```
Start at: 2019-03-19 02:48:51
End at: 2019-03-19 02:49:21
Local clock offset: 2.049 ms
Remote clock offset: -5.514 ms

# Below is generated by plot.py at 2019-03-19 04:48:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.50 Mbit/s
95th percentile per-packet one-way delay: 13.974 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.33 Mbit/s
95th percentile per-packet one-way delay: 14.103 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.35 Mbit/s
95th percentile per-packet one-way delay: 13.523 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.15 Mbit/s
95th percentile per-packet one-way delay: 14.204 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

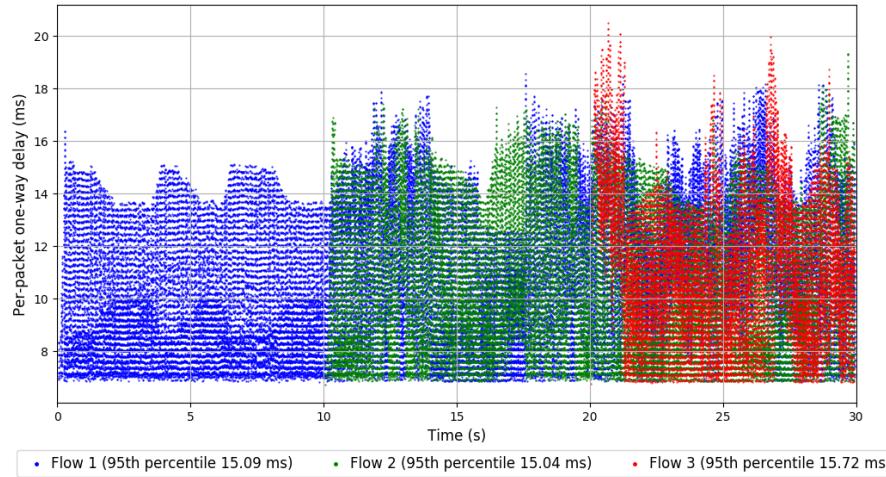
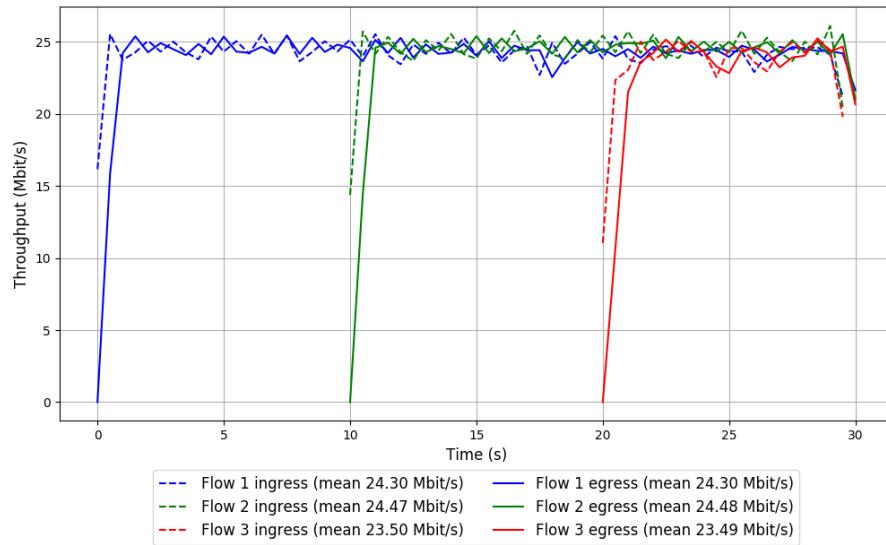


Run 2: Statistics of Sprout

```
Start at: 2019-03-19 03:14:30
End at: 2019-03-19 03:15:00
Local clock offset: 1.353 ms
Remote clock offset: -5.439 ms

# Below is generated by plot.py at 2019-03-19 04:48:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.33 Mbit/s
95th percentile per-packet one-way delay: 15.144 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.30 Mbit/s
95th percentile per-packet one-way delay: 15.086 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.48 Mbit/s
95th percentile per-packet one-way delay: 15.035 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.49 Mbit/s
95th percentile per-packet one-way delay: 15.718 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

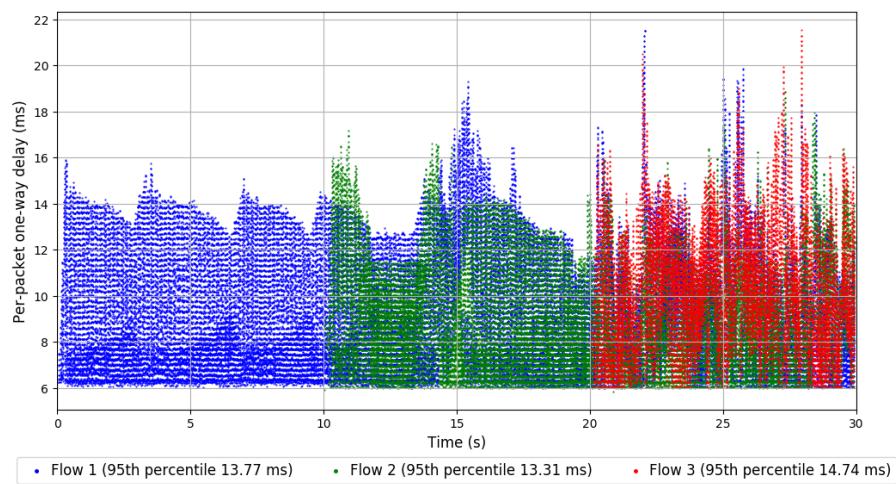
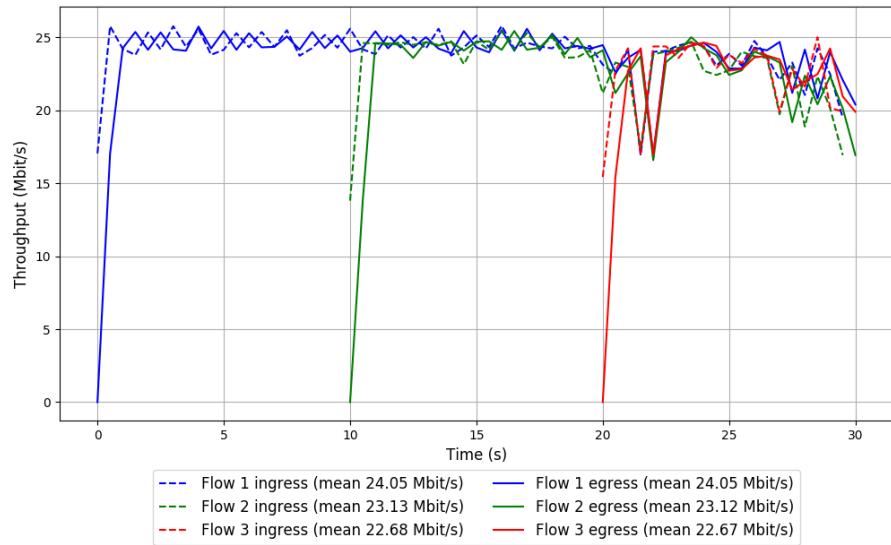


Run 3: Statistics of Sprout

```
Start at: 2019-03-19 03:39:43
End at: 2019-03-19 03:40:13
Local clock offset: 0.969 ms
Remote clock offset: -6.157 ms

# Below is generated by plot.py at 2019-03-19 04:48:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.92 Mbit/s
95th percentile per-packet one-way delay: 13.817 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.05 Mbit/s
95th percentile per-packet one-way delay: 13.771 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.12 Mbit/s
95th percentile per-packet one-way delay: 13.307 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.67 Mbit/s
95th percentile per-packet one-way delay: 14.739 ms
Loss rate: 0.00%
```

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

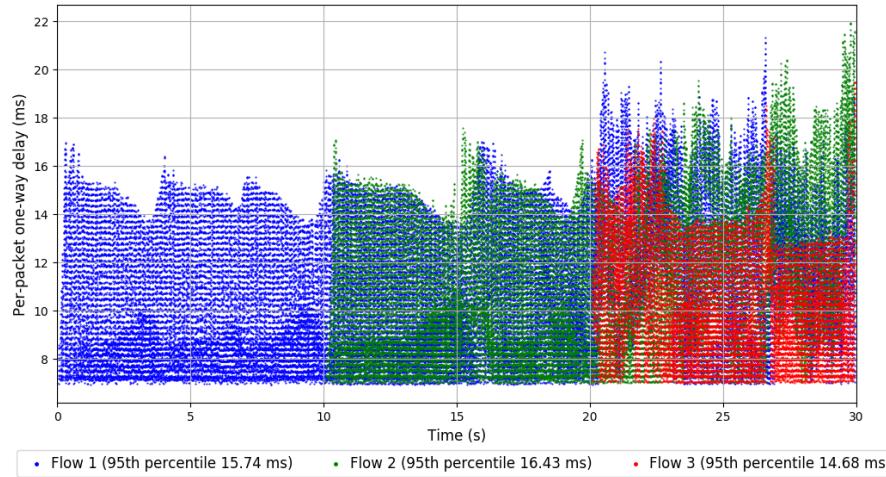
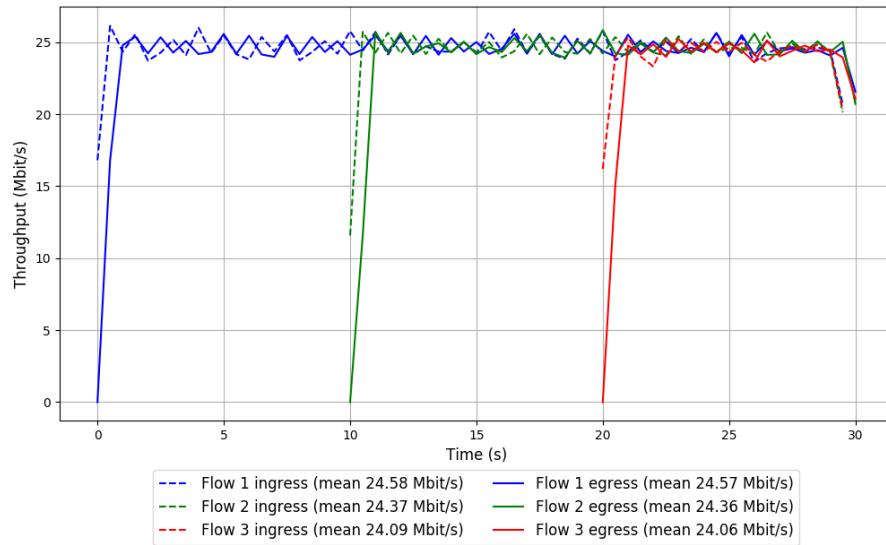


Run 4: Statistics of Sprout

```
Start at: 2019-03-19 04:04:38
End at: 2019-03-19 04:05:08
Local clock offset: 0.172 ms
Remote clock offset: -6.689 ms

# Below is generated by plot.py at 2019-03-19 04:48:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.74 Mbit/s
95th percentile per-packet one-way delay: 15.846 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 15.740 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.36 Mbit/s
95th percentile per-packet one-way delay: 16.429 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.06 Mbit/s
95th percentile per-packet one-way delay: 14.675 ms
Loss rate: 0.00%
```

## Run 4: Report of Sprout — Data Link

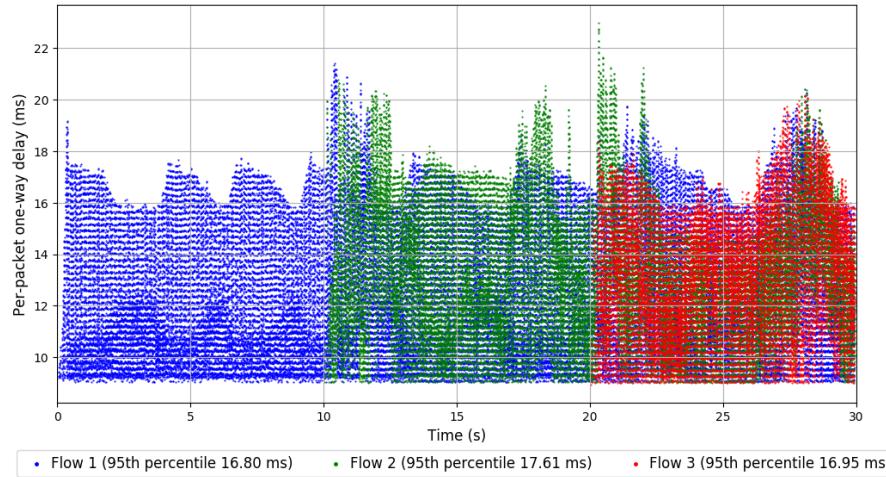
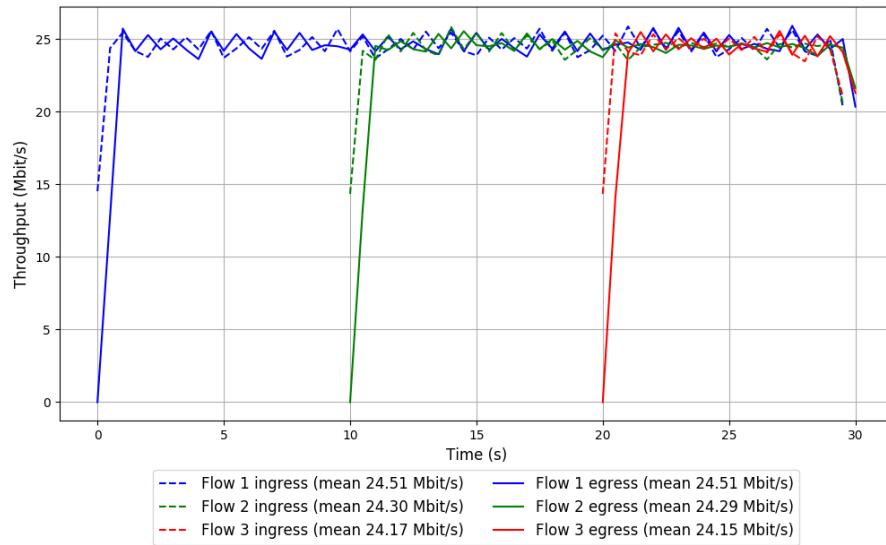


Run 5: Statistics of Sprout

```
Start at: 2019-03-19 04:29:48
End at: 2019-03-19 04:30:18
Local clock offset: -0.506 ms
Remote clock offset: -5.152 ms

# Below is generated by plot.py at 2019-03-19 04:48:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.65 Mbit/s
95th percentile per-packet one-way delay: 17.029 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.51 Mbit/s
95th percentile per-packet one-way delay: 16.796 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.29 Mbit/s
95th percentile per-packet one-way delay: 17.611 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.15 Mbit/s
95th percentile per-packet one-way delay: 16.949 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

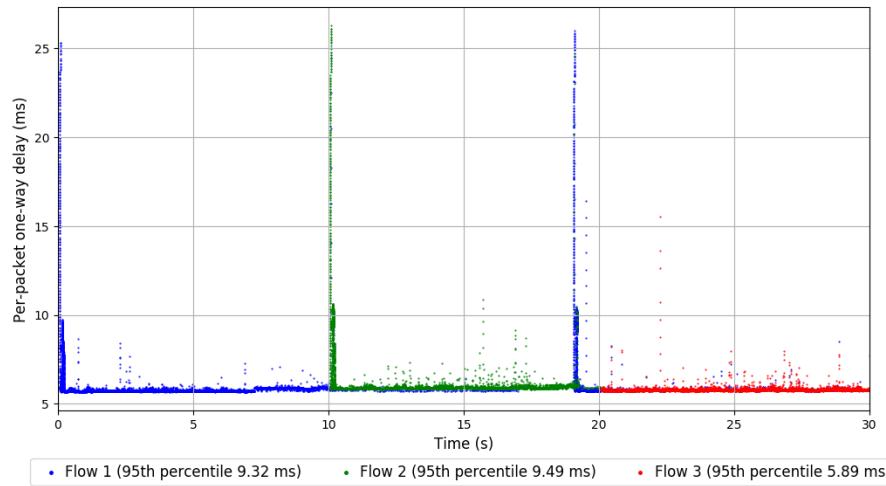
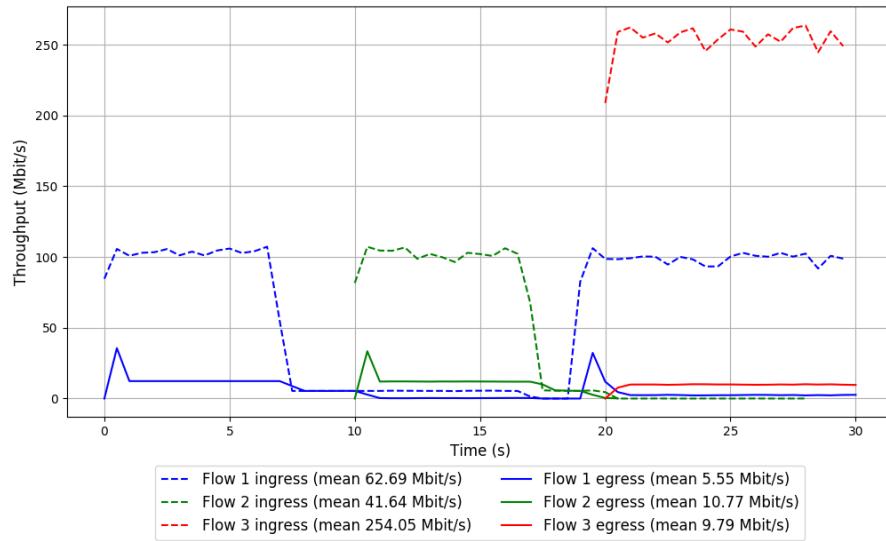


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-03-19 02:41:33
End at: 2019-03-19 02:42:03
Local clock offset: 1.643 ms
Remote clock offset: -5.789 ms

# Below is generated by plot.py at 2019-03-19 04:48:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 8.360 ms
Loss rate: 92.77%
-- Flow 1:
Average throughput: 5.55 Mbit/s
95th percentile per-packet one-way delay: 9.317 ms
Loss rate: 91.14%
-- Flow 2:
Average throughput: 10.77 Mbit/s
95th percentile per-packet one-way delay: 9.490 ms
Loss rate: 85.53%
-- Flow 3:
Average throughput: 9.79 Mbit/s
95th percentile per-packet one-way delay: 5.889 ms
Loss rate: 96.14%
```

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

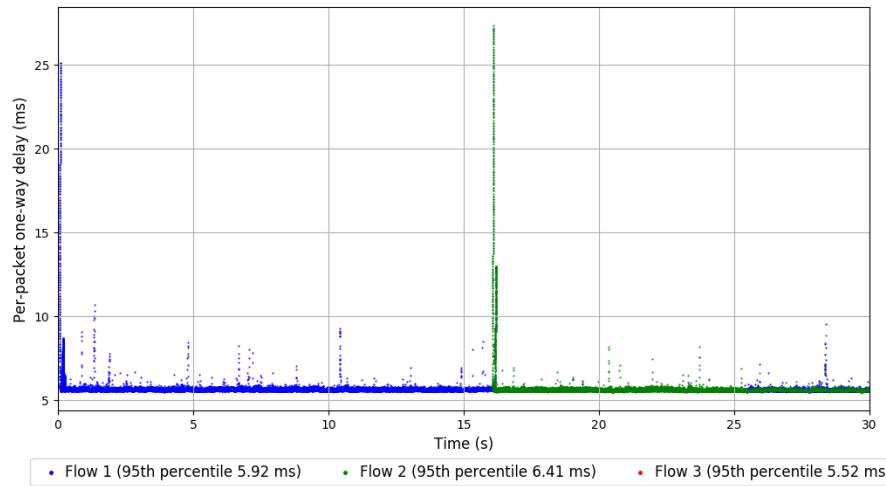
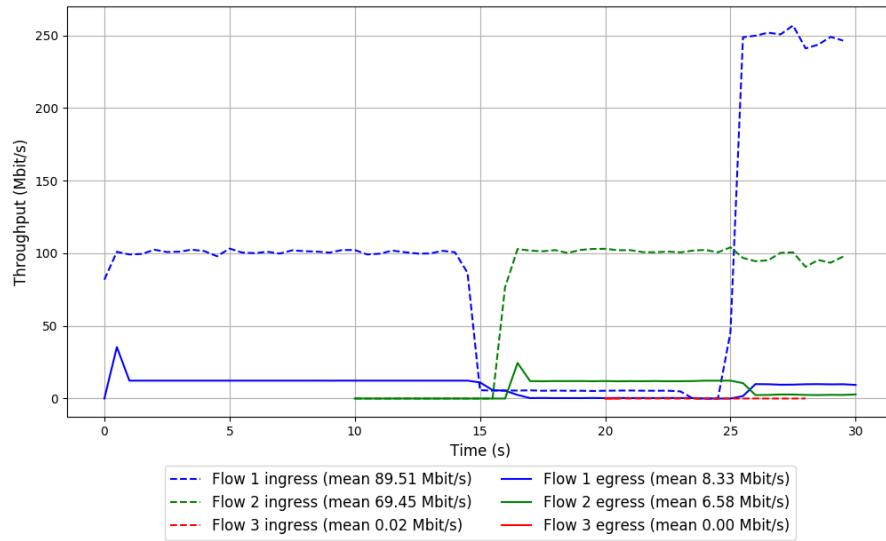


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-03-19 03:07:11
End at: 2019-03-19 03:07:41
Local clock offset: 2.894 ms
Remote clock offset: -5.41 ms

# Below is generated by plot.py at 2019-03-19 04:48:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.71 Mbit/s
95th percentile per-packet one-way delay: 5.976 ms
Loss rate: 90.64%
-- Flow 1:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 5.921 ms
Loss rate: 90.70%
-- Flow 2:
Average throughput: 6.58 Mbit/s
95th percentile per-packet one-way delay: 6.406 ms
Loss rate: 90.53%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5.523 ms
Loss rate: 99.16%
```

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

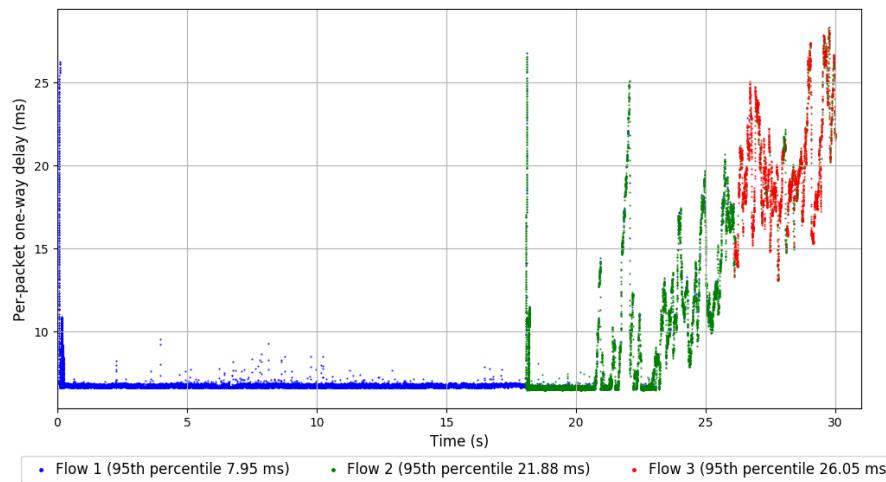
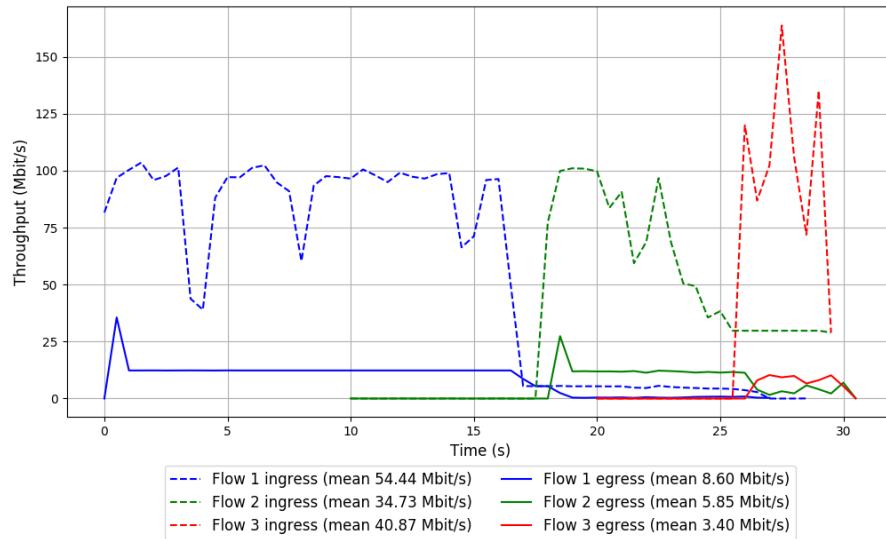


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-03-19 03:32:35
End at: 2019-03-19 03:33:05
Local clock offset: 1.209 ms
Remote clock offset: -5.057 ms

# Below is generated by plot.py at 2019-03-19 04:48:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.71 Mbit/s
95th percentile per-packet one-way delay: 20.739 ms
Loss rate: 85.72%
-- Flow 1:
Average throughput: 8.60 Mbit/s
95th percentile per-packet one-way delay: 7.954 ms
Loss rate: 85.32%
-- Flow 2:
Average throughput: 5.85 Mbit/s
95th percentile per-packet one-way delay: 21.878 ms
Loss rate: 83.14%
-- Flow 3:
Average throughput: 3.40 Mbit/s
95th percentile per-packet one-way delay: 26.050 ms
Loss rate: 91.67%
```

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

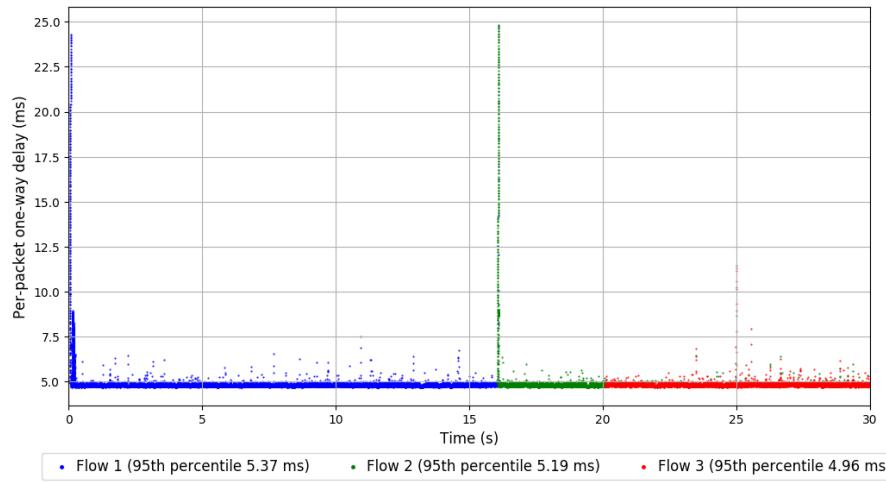
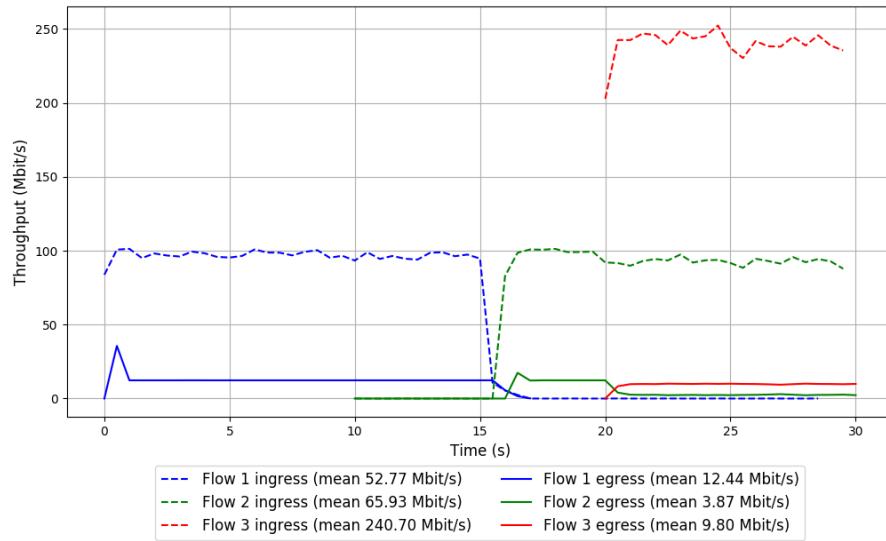


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-03-19 03:57:32
End at: 2019-03-19 03:58:02
Local clock offset: 2.17 ms
Remote clock offset: -6.783 ms

# Below is generated by plot.py at 2019-03-19 04:48:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.71 Mbit/s
95th percentile per-packet one-way delay: 5.033 ms
Loss rate: 92.71%
-- Flow 1:
Average throughput: 12.44 Mbit/s
95th percentile per-packet one-way delay: 5.371 ms
Loss rate: 86.34%
-- Flow 2:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 5.189 ms
Loss rate: 94.13%
-- Flow 3:
Average throughput: 9.80 Mbit/s
95th percentile per-packet one-way delay: 4.963 ms
Loss rate: 95.93%
```

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

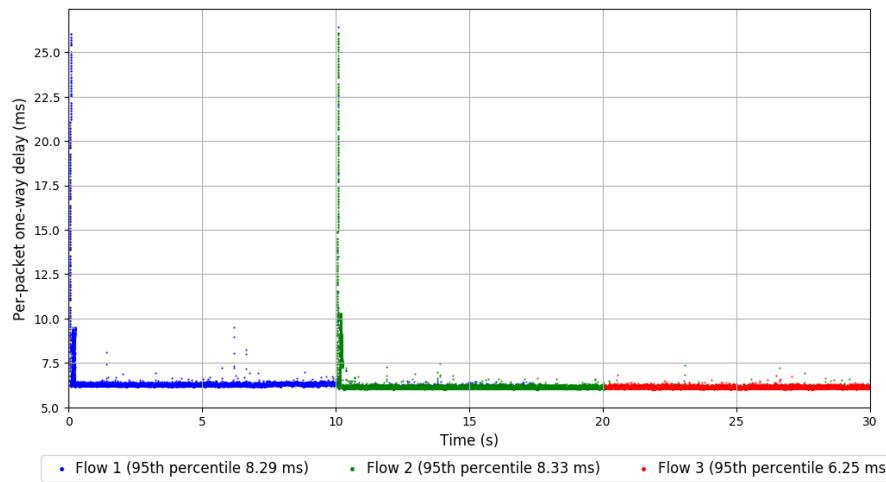
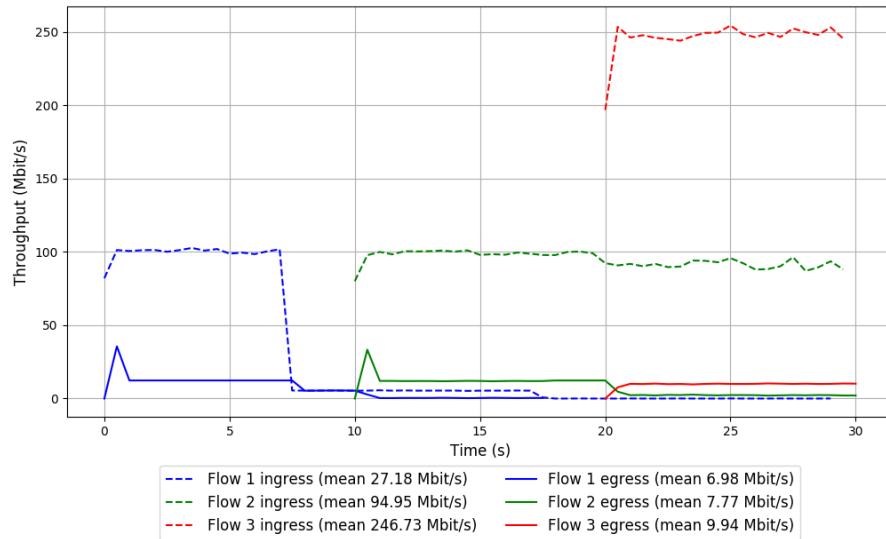


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-03-19 04:22:37
End at: 2019-03-19 04:23:07
Local clock offset: 1.148 ms
Remote clock offset: -6.428 ms

# Below is generated by plot.py at 2019-03-19 04:48:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.53 Mbit/s
95th percentile per-packet one-way delay: 7.386 ms
Loss rate: 92.71%
-- Flow 1:
Average throughput: 6.98 Mbit/s
95th percentile per-packet one-way delay: 8.293 ms
Loss rate: 84.81%
-- Flow 2:
Average throughput: 7.77 Mbit/s
95th percentile per-packet one-way delay: 8.331 ms
Loss rate: 91.82%
-- Flow 3:
Average throughput: 9.94 Mbit/s
95th percentile per-packet one-way delay: 6.248 ms
Loss rate: 95.97%
```

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

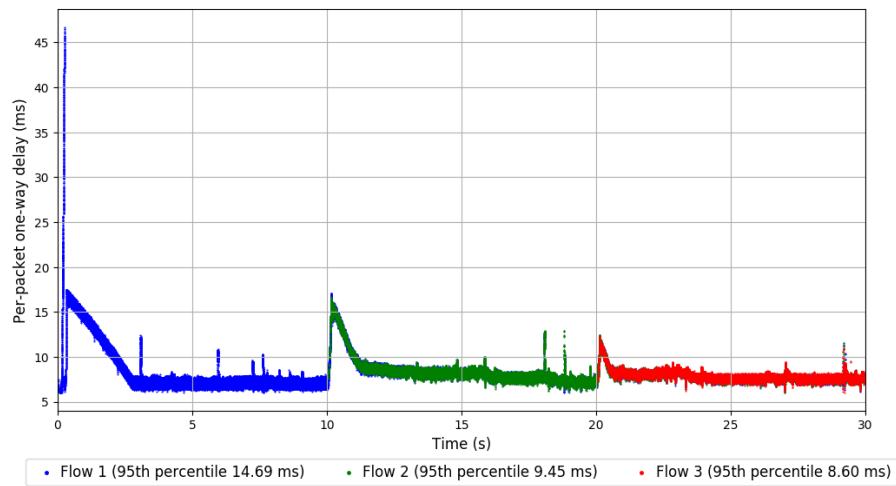
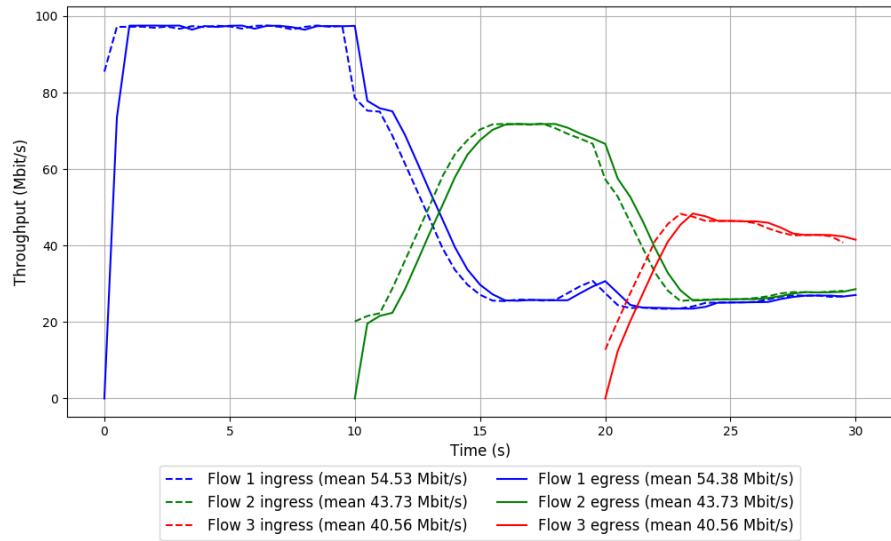


Run 1: Statistics of TCP Vegas

```
Start at: 2019-03-19 02:51:06
End at: 2019-03-19 02:51:36
Local clock offset: 2.28 ms
Remote clock offset: -5.354 ms

# Below is generated by plot.py at 2019-03-19 04:49:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.00 Mbit/s
95th percentile per-packet one-way delay: 13.242 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 54.38 Mbit/s
95th percentile per-packet one-way delay: 14.693 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 43.73 Mbit/s
95th percentile per-packet one-way delay: 9.450 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 40.56 Mbit/s
95th percentile per-packet one-way delay: 8.599 ms
Loss rate: 0.00%
```

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

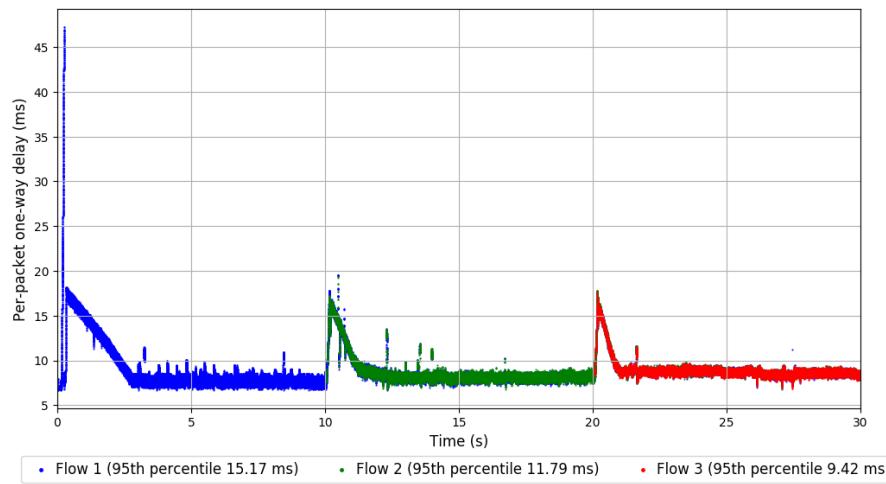
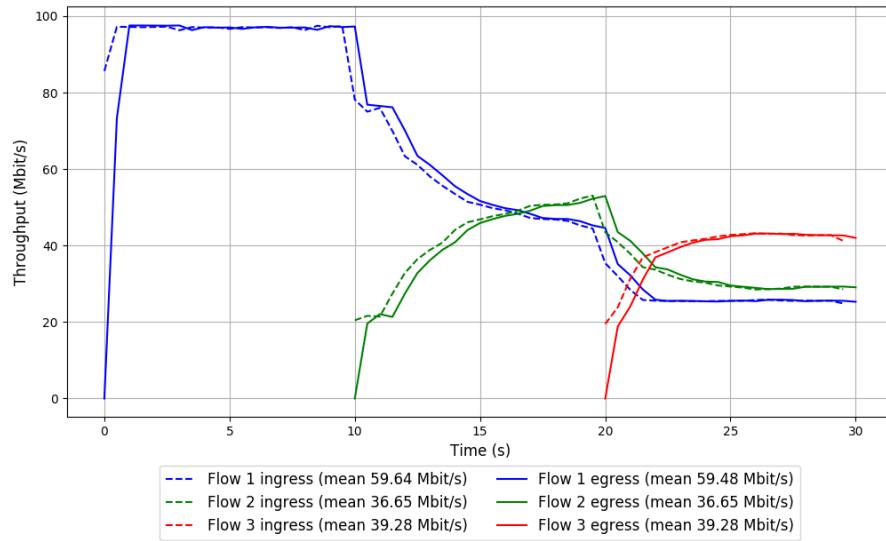


Run 2: Statistics of TCP Vegas

```
Start at: 2019-03-19 03:16:47
End at: 2019-03-19 03:17:17
Local clock offset: 1.261 ms
Remote clock offset: -5.53 ms

# Below is generated by plot.py at 2019-03-19 04:49:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.95 Mbit/s
95th percentile per-packet one-way delay: 14.404 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 59.48 Mbit/s
95th percentile per-packet one-way delay: 15.172 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 36.65 Mbit/s
95th percentile per-packet one-way delay: 11.786 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.28 Mbit/s
95th percentile per-packet one-way delay: 9.420 ms
Loss rate: 0.00%
```

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

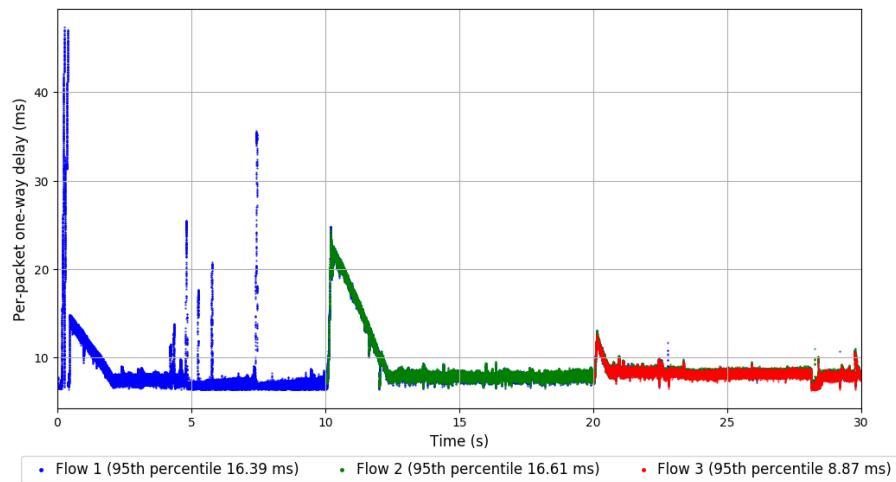
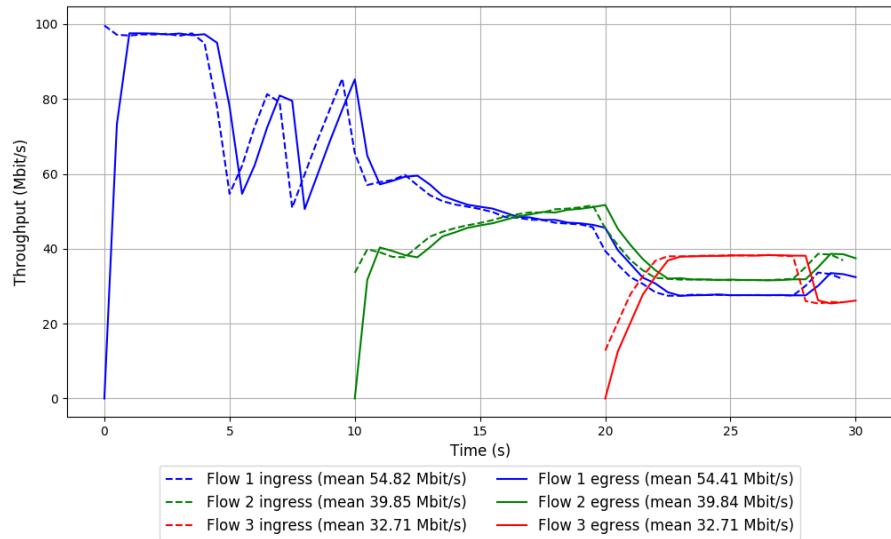


Run 3: Statistics of TCP Vegas

```
Start at: 2019-03-19 03:42:02
End at: 2019-03-19 03:42:32
Local clock offset: 1.255 ms
Remote clock offset: -5.495 ms

# Below is generated by plot.py at 2019-03-19 04:49:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.84 Mbit/s
95th percentile per-packet one-way delay: 15.400 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 54.41 Mbit/s
95th percentile per-packet one-way delay: 16.393 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 39.84 Mbit/s
95th percentile per-packet one-way delay: 16.610 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.71 Mbit/s
95th percentile per-packet one-way delay: 8.867 ms
Loss rate: 0.00%
```

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

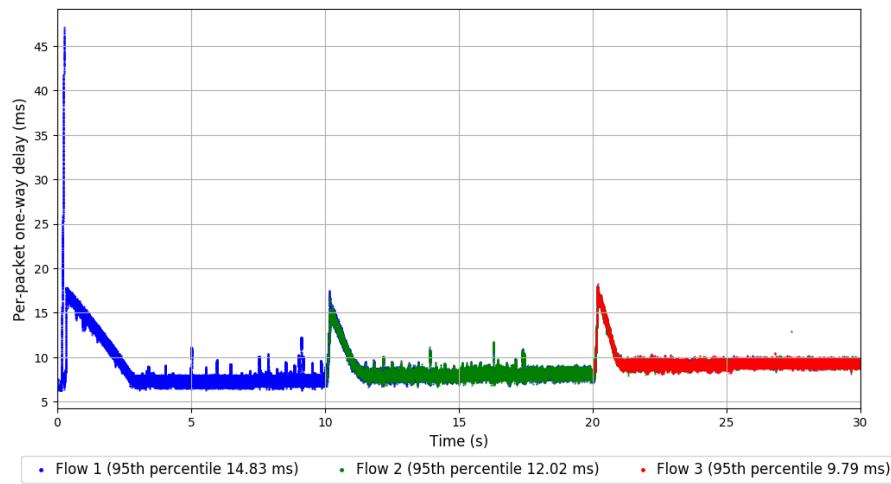
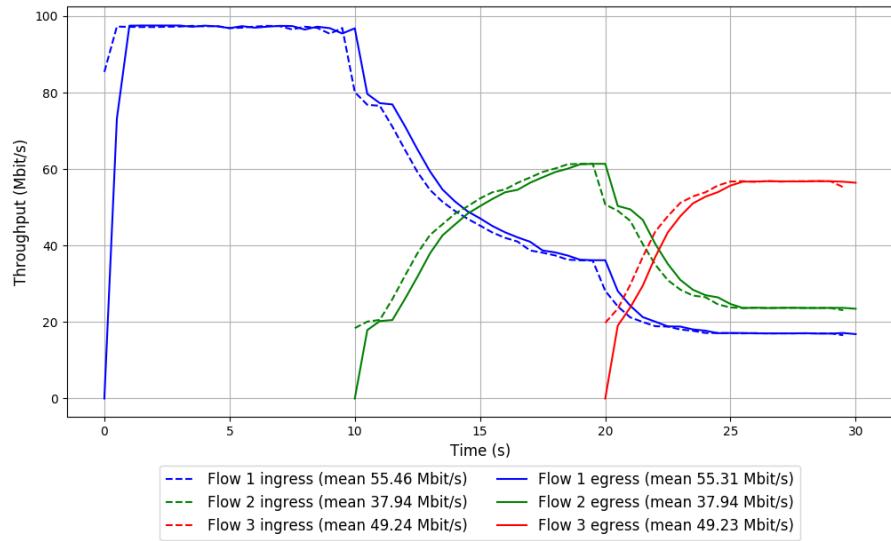


Run 4: Statistics of TCP Vegas

```
Start at: 2019-03-19 04:06:54
End at: 2019-03-19 04:07:24
Local clock offset: 0.785 ms
Remote clock offset: -6.744 ms

# Below is generated by plot.py at 2019-03-19 04:49:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.94 Mbit/s
95th percentile per-packet one-way delay: 14.061 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 55.31 Mbit/s
95th percentile per-packet one-way delay: 14.830 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 37.94 Mbit/s
95th percentile per-packet one-way delay: 12.019 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.23 Mbit/s
95th percentile per-packet one-way delay: 9.795 ms
Loss rate: 0.00%
```

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

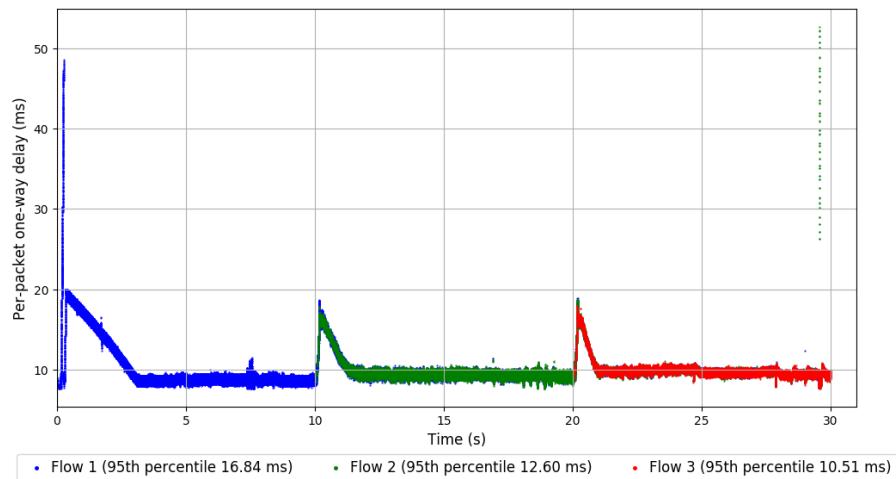
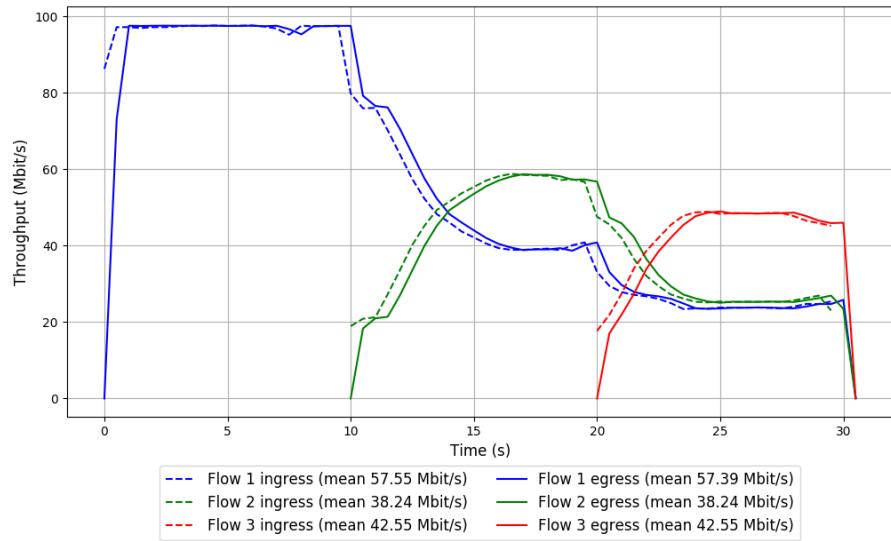


Run 5: Statistics of TCP Vegas

```
Start at: 2019-03-19 04:32:04
End at: 2019-03-19 04:32:34
Local clock offset: 0.387 ms
Remote clock offset: -5.573 ms

# Below is generated by plot.py at 2019-03-19 04:49:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.01 Mbit/s
95th percentile per-packet one-way delay: 15.791 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 57.39 Mbit/s
95th percentile per-packet one-way delay: 16.836 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 38.24 Mbit/s
95th percentile per-packet one-way delay: 12.603 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 42.55 Mbit/s
95th percentile per-packet one-way delay: 10.514 ms
Loss rate: 0.00%
```

Run 5: Report of TCP Vegas — Data Link

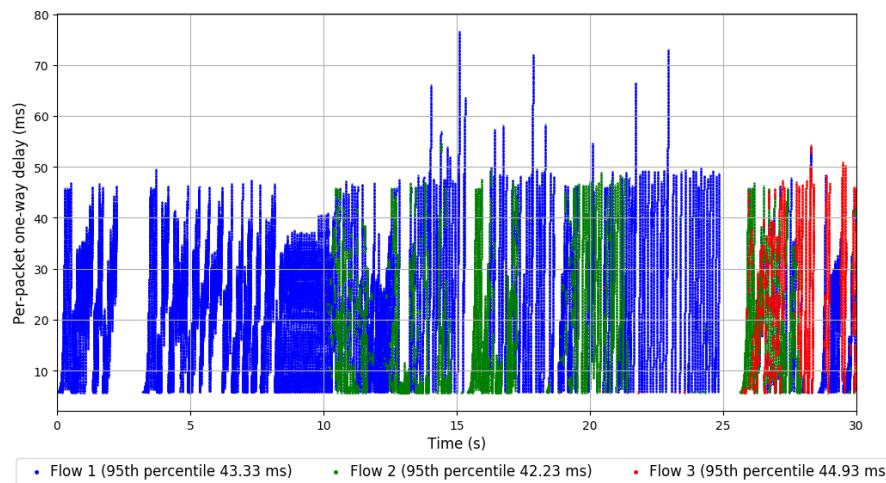
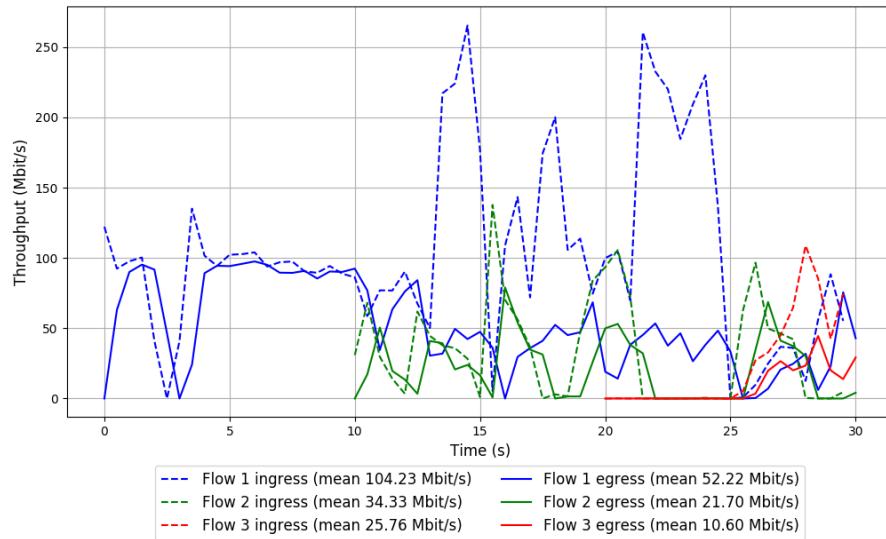


Run 1: Statistics of Verus

```
Start at: 2019-03-19 02:34:22
End at: 2019-03-19 02:34:52
Local clock offset: 2.407 ms
Remote clock offset: -4.442 ms

# Below is generated by plot.py at 2019-03-19 04:49:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.98 Mbit/s
95th percentile per-packet one-way delay: 43.210 ms
Loss rate: 48.16%
-- Flow 1:
Average throughput: 52.22 Mbit/s
95th percentile per-packet one-way delay: 43.334 ms
Loss rate: 49.84%
-- Flow 2:
Average throughput: 21.70 Mbit/s
95th percentile per-packet one-way delay: 42.226 ms
Loss rate: 36.72%
-- Flow 3:
Average throughput: 10.60 Mbit/s
95th percentile per-packet one-way delay: 44.932 ms
Loss rate: 58.68%
```

Run 1: Report of Verus — Data Link

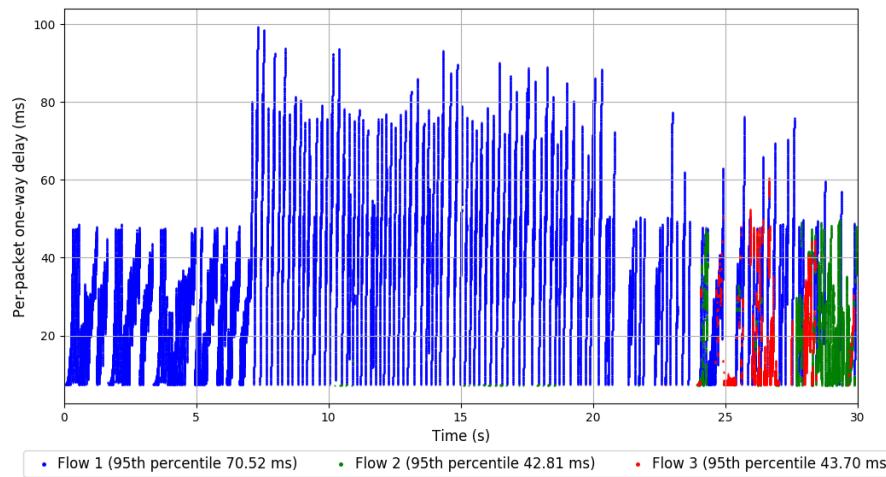
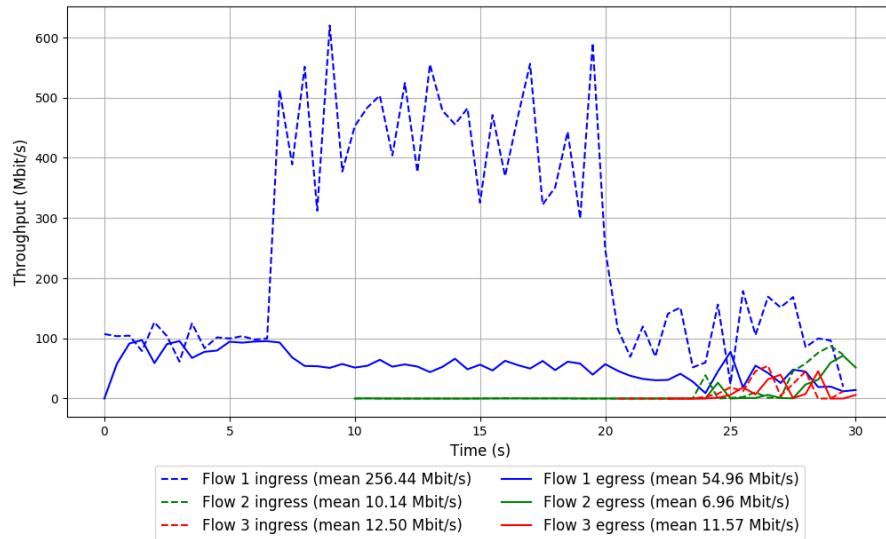


Run 2: Statistics of Verus

```
Start at: 2019-03-19 02:59:43
End at: 2019-03-19 03:00:13
Local clock offset: 1.266 ms
Remote clock offset: -5.115 ms

# Below is generated by plot.py at 2019-03-19 04:50:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.26 Mbit/s
95th percentile per-packet one-way delay: 69.400 ms
Loss rate: 76.66%
-- Flow 1:
Average throughput: 54.96 Mbit/s
95th percentile per-packet one-way delay: 70.521 ms
Loss rate: 78.57%
-- Flow 2:
Average throughput: 6.96 Mbit/s
95th percentile per-packet one-way delay: 42.808 ms
Loss rate: 31.26%
-- Flow 3:
Average throughput: 11.57 Mbit/s
95th percentile per-packet one-way delay: 43.700 ms
Loss rate: 28.00%
```

## Run 2: Report of Verus — Data Link

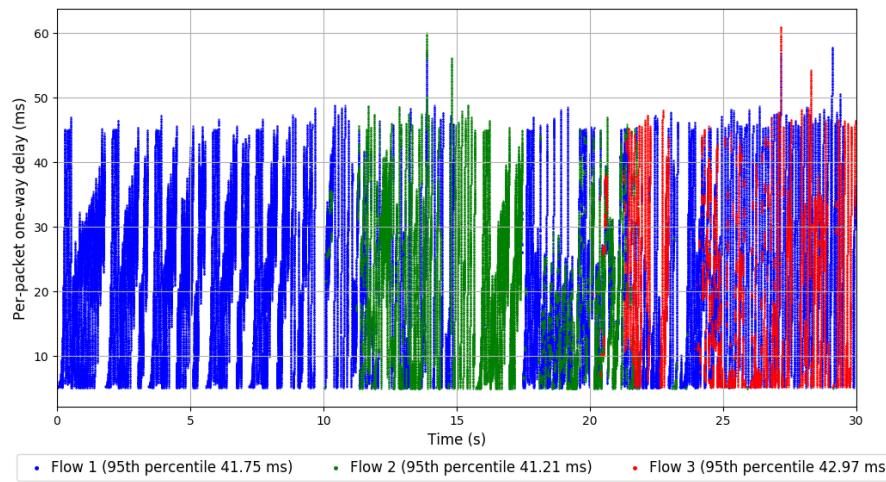
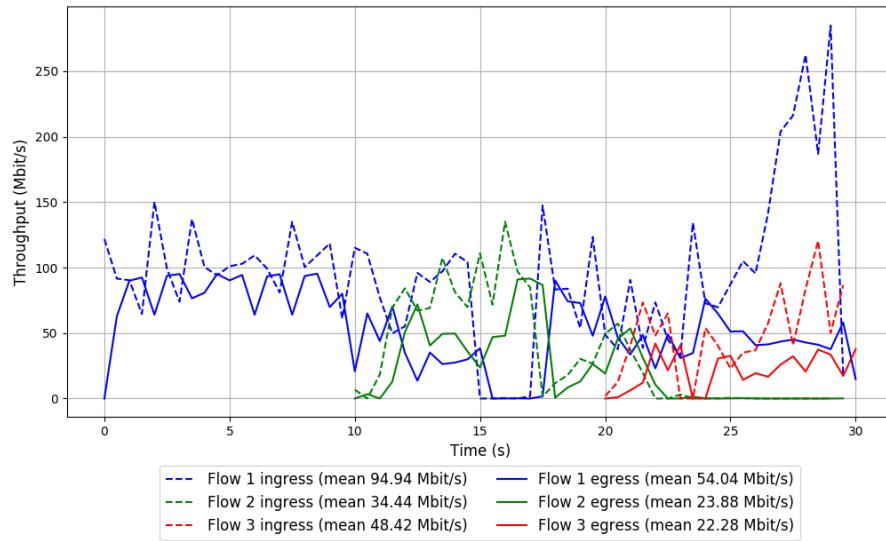


Run 3: Statistics of Verus

```
Start at: 2019-03-19 03:25:19
End at: 2019-03-19 03:25:49
Local clock offset: 2.258 ms
Remote clock offset: -5.482 ms

# Below is generated by plot.py at 2019-03-19 04:50:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.63 Mbit/s
95th percentile per-packet one-way delay: 41.816 ms
Loss rate: 42.41%
-- Flow 1:
Average throughput: 54.04 Mbit/s
95th percentile per-packet one-way delay: 41.747 ms
Loss rate: 43.07%
-- Flow 2:
Average throughput: 23.88 Mbit/s
95th percentile per-packet one-way delay: 41.214 ms
Loss rate: 31.30%
-- Flow 3:
Average throughput: 22.28 Mbit/s
95th percentile per-packet one-way delay: 42.971 ms
Loss rate: 53.90%
```

Run 3: Report of Verus — Data Link

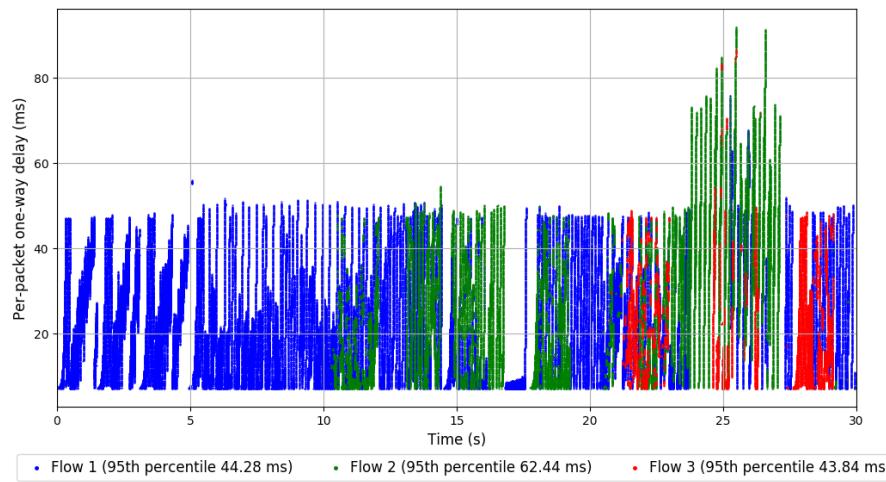
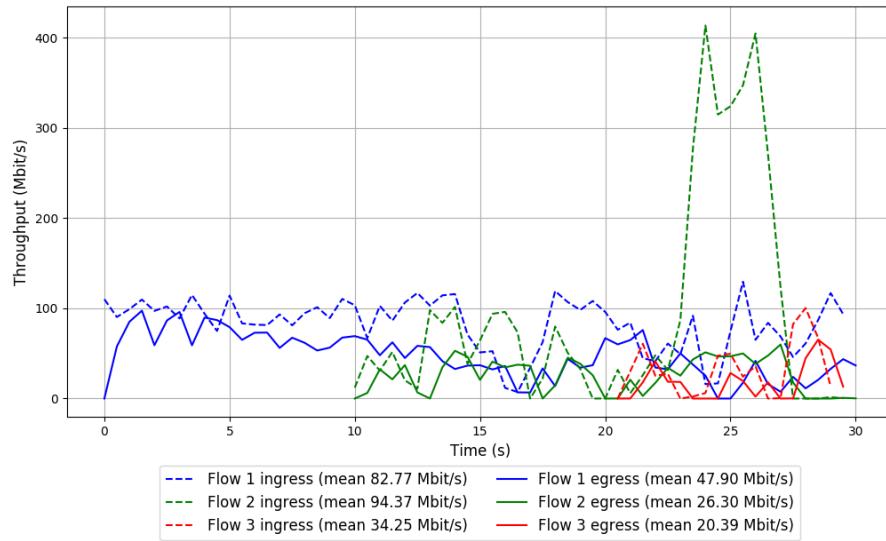


Run 4: Statistics of Verus

```
Start at: 2019-03-19 03:50:24
End at: 2019-03-19 03:50:54
Local clock offset: 1.22 ms
Remote clock offset: -5.268 ms

# Below is generated by plot.py at 2019-03-19 04:50:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.91 Mbit/s
95th percentile per-packet one-way delay: 47.037 ms
Loss rate: 54.08%
-- Flow 1:
Average throughput: 47.90 Mbit/s
95th percentile per-packet one-way delay: 44.282 ms
Loss rate: 42.13%
-- Flow 2:
Average throughput: 26.30 Mbit/s
95th percentile per-packet one-way delay: 62.436 ms
Loss rate: 72.13%
-- Flow 3:
Average throughput: 20.39 Mbit/s
95th percentile per-packet one-way delay: 43.843 ms
Loss rate: 40.34%
```

## Run 4: Report of Verus — Data Link

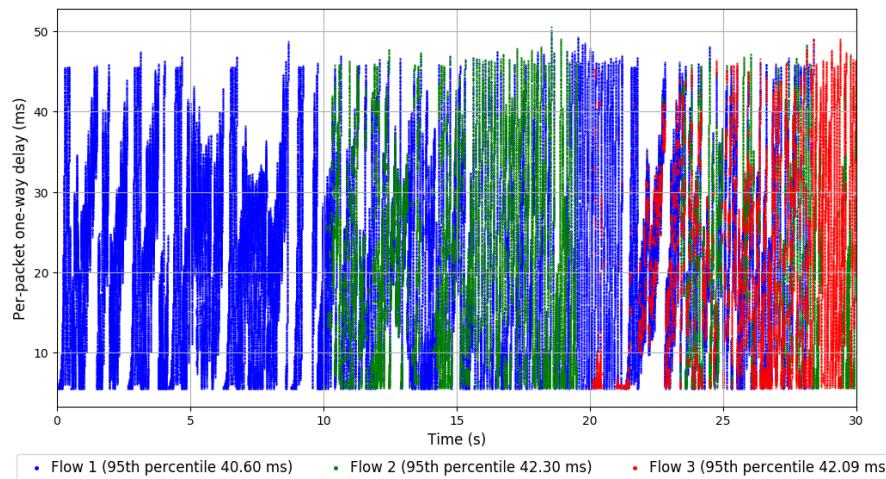
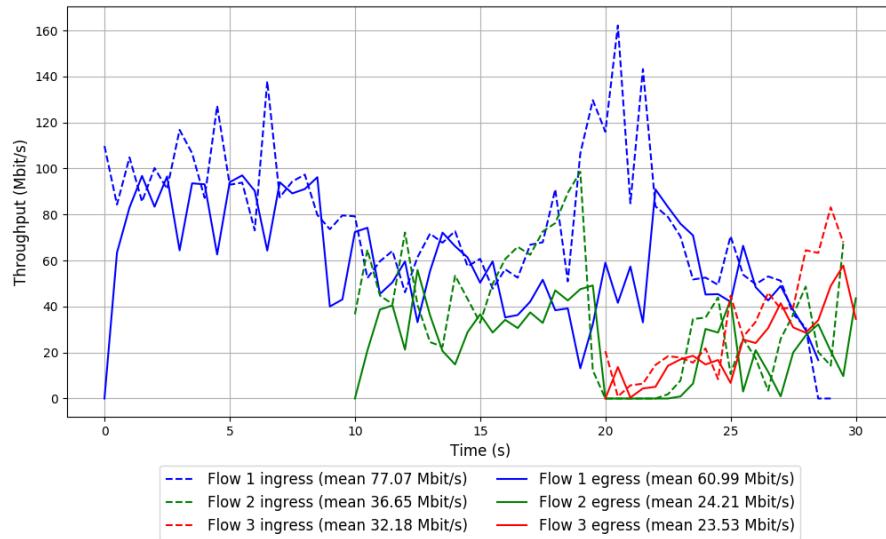


Run 5: Statistics of Verus

```
Start at: 2019-03-19 04:15:19
End at: 2019-03-19 04:15:49
Local clock offset: 0.212 ms
Remote clock offset: -7.915 ms

# Below is generated by plot.py at 2019-03-19 04:50:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.65 Mbit/s
95th percentile per-packet one-way delay: 41.213 ms
Loss rate: 26.11%
-- Flow 1:
Average throughput: 60.99 Mbit/s
95th percentile per-packet one-way delay: 40.600 ms
Loss rate: 23.52%
-- Flow 2:
Average throughput: 24.21 Mbit/s
95th percentile per-packet one-way delay: 42.298 ms
Loss rate: 33.92%
-- Flow 3:
Average throughput: 23.53 Mbit/s
95th percentile per-packet one-way delay: 42.090 ms
Loss rate: 26.61%
```

Run 5: Report of Verus — Data Link

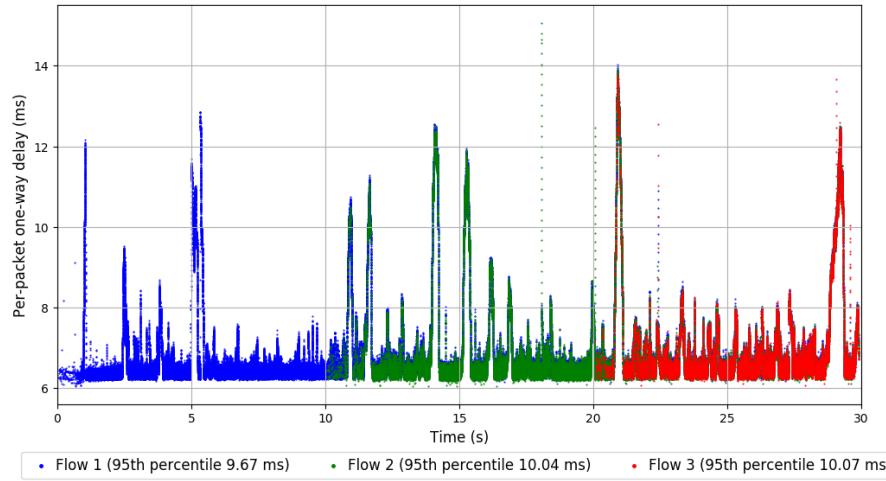
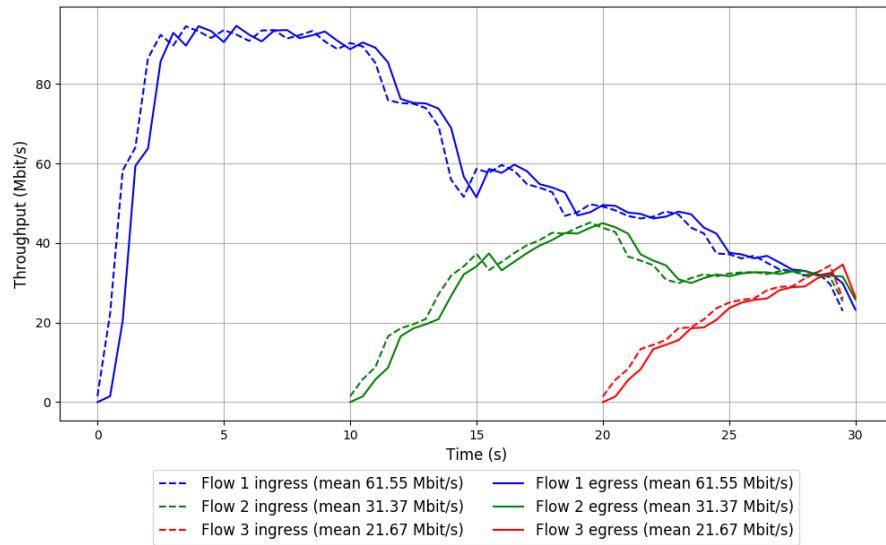


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-03-19 02:37:59
End at: 2019-03-19 02:38:29
Local clock offset: 2.086 ms
Remote clock offset: -4.617 ms

# Below is generated by plot.py at 2019-03-19 04:50:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.58 Mbit/s
95th percentile per-packet one-way delay: 9.772 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.55 Mbit/s
95th percentile per-packet one-way delay: 9.674 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.37 Mbit/s
95th percentile per-packet one-way delay: 10.037 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.67 Mbit/s
95th percentile per-packet one-way delay: 10.066 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Vivace — Data Link

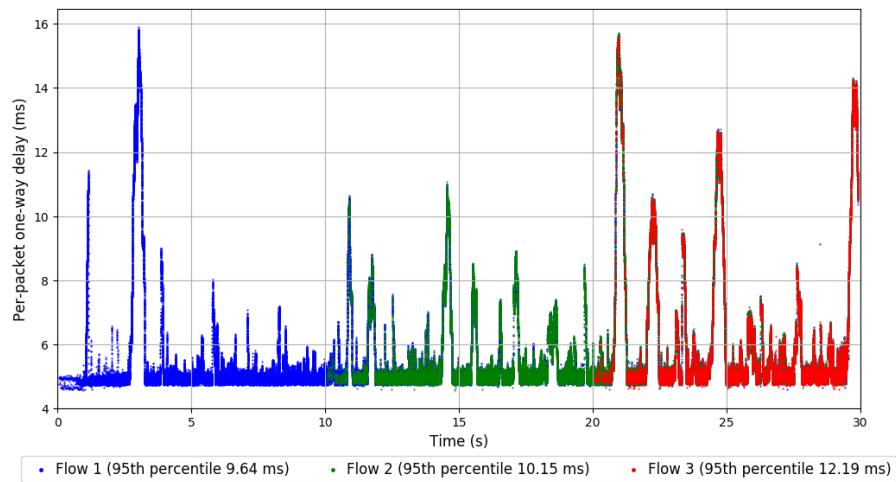
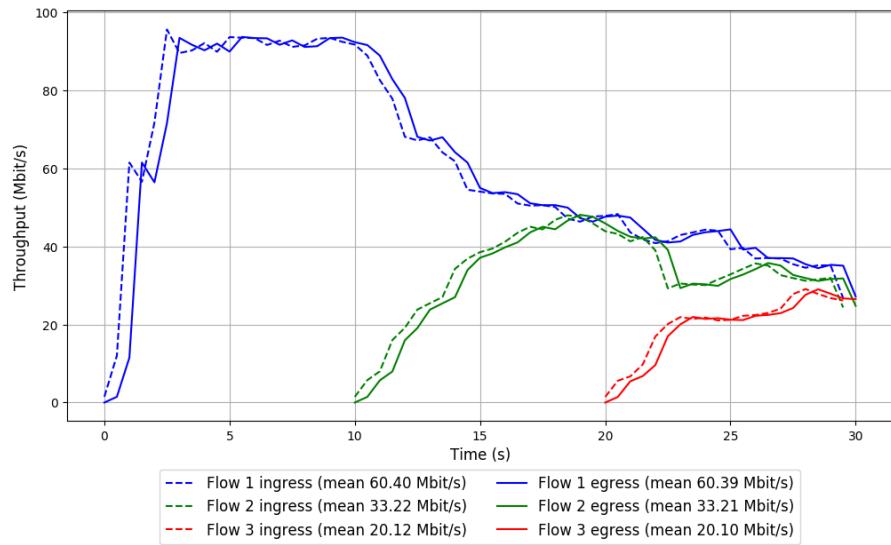


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-03-19 03:03:32
End at: 2019-03-19 03:04:02
Local clock offset: 1.904 ms
Remote clock offset: -7.171 ms

# Below is generated by plot.py at 2019-03-19 04:50:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.12 Mbit/s
95th percentile per-packet one-way delay: 10.052 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.39 Mbit/s
95th percentile per-packet one-way delay: 9.642 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 33.21 Mbit/s
95th percentile per-packet one-way delay: 10.148 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.10 Mbit/s
95th percentile per-packet one-way delay: 12.187 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

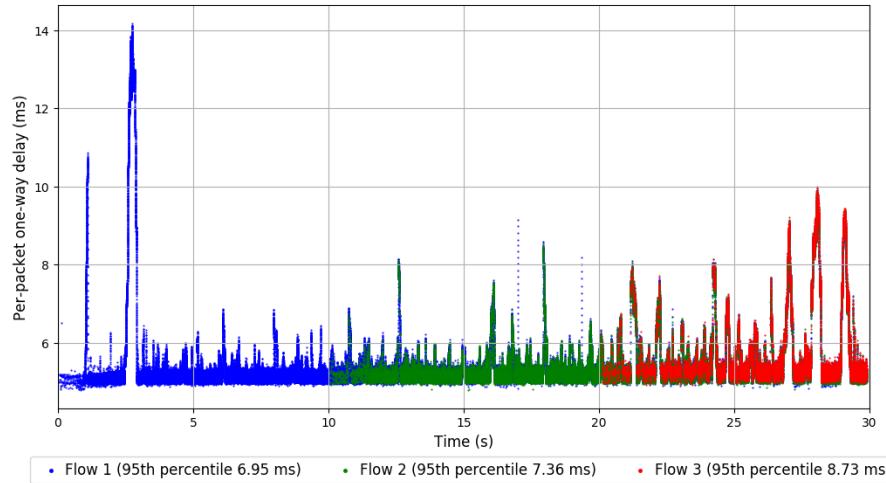
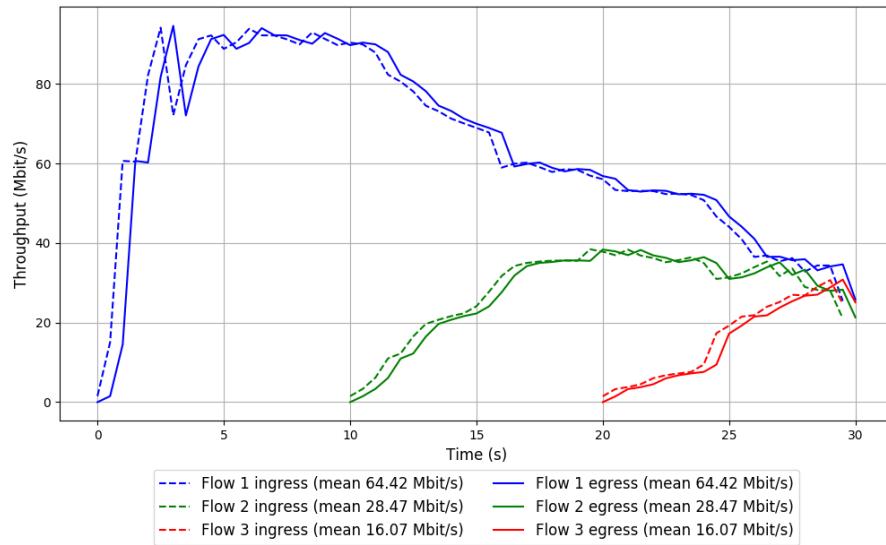


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-03-19 03:29:00
End at: 2019-03-19 03:29:30
Local clock offset: 0.876 ms
Remote clock offset: -7.009 ms

# Below is generated by plot.py at 2019-03-19 04:50:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.67 Mbit/s
95th percentile per-packet one-way delay: 7.264 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.42 Mbit/s
95th percentile per-packet one-way delay: 6.953 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.47 Mbit/s
95th percentile per-packet one-way delay: 7.358 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.07 Mbit/s
95th percentile per-packet one-way delay: 8.734 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Vivace — Data Link

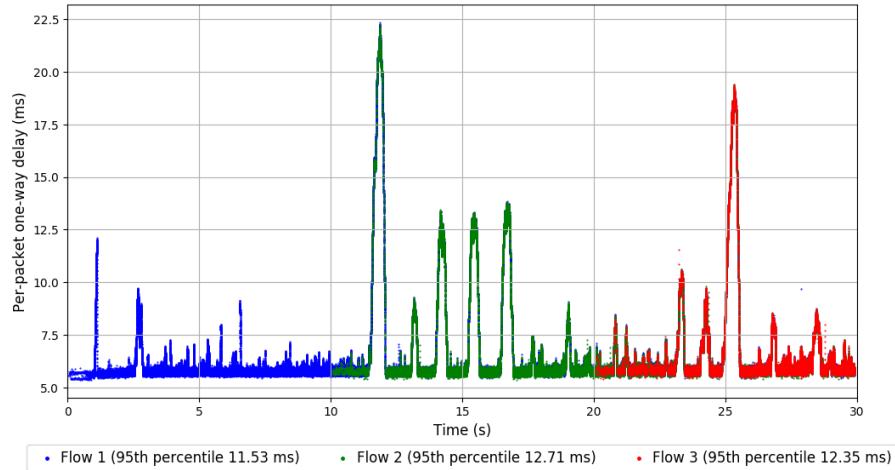
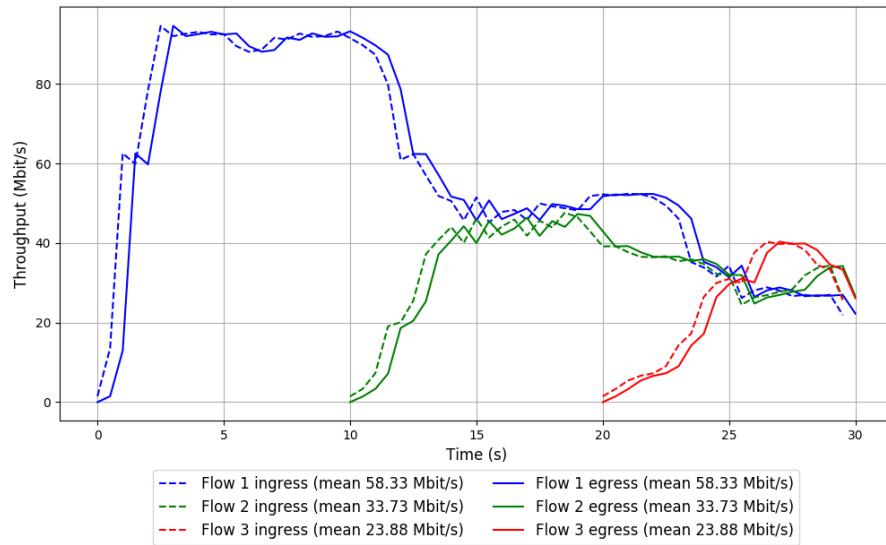


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-03-19 03:54:00
End at: 2019-03-19 03:54:30
Local clock offset: 2.033 ms
Remote clock offset: -6.161 ms

# Below is generated by plot.py at 2019-03-19 04:50:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.64 Mbit/s
95th percentile per-packet one-way delay: 12.190 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.33 Mbit/s
95th percentile per-packet one-way delay: 11.528 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 33.73 Mbit/s
95th percentile per-packet one-way delay: 12.715 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.88 Mbit/s
95th percentile per-packet one-way delay: 12.347 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

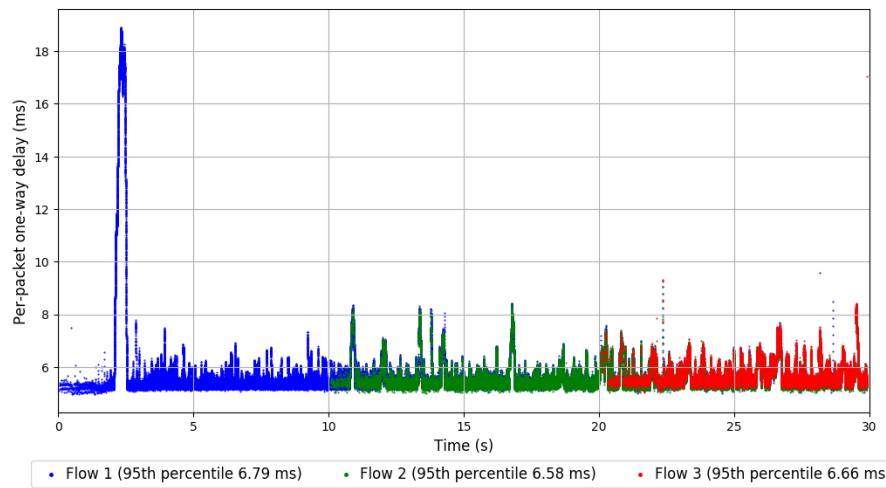
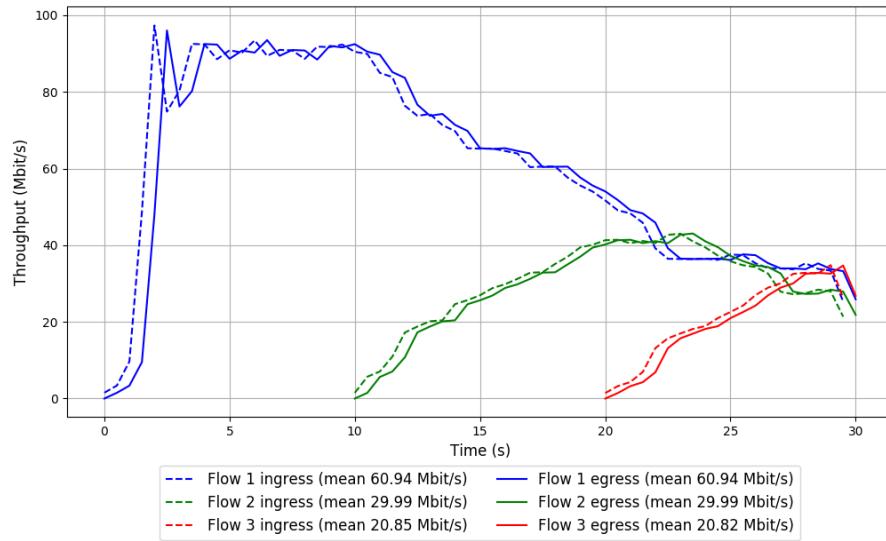


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-03-19 04:19:00
End at: 2019-03-19 04:19:30
Local clock offset: 0.482 ms
Remote clock offset: -8.166 ms

# Below is generated by plot.py at 2019-03-19 04:50:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.73 Mbit/s
95th percentile per-packet one-way delay: 6.696 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.94 Mbit/s
95th percentile per-packet one-way delay: 6.792 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.99 Mbit/s
95th percentile per-packet one-way delay: 6.575 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.82 Mbit/s
95th percentile per-packet one-way delay: 6.655 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Vivace — Data Link

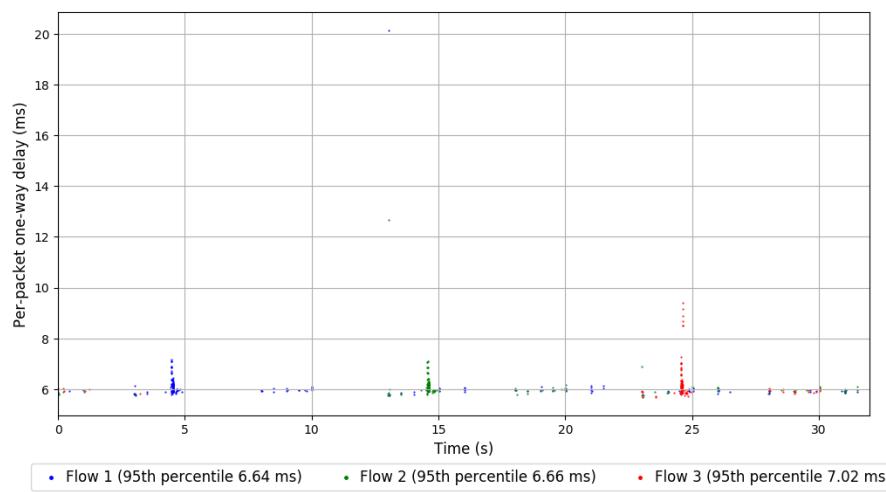
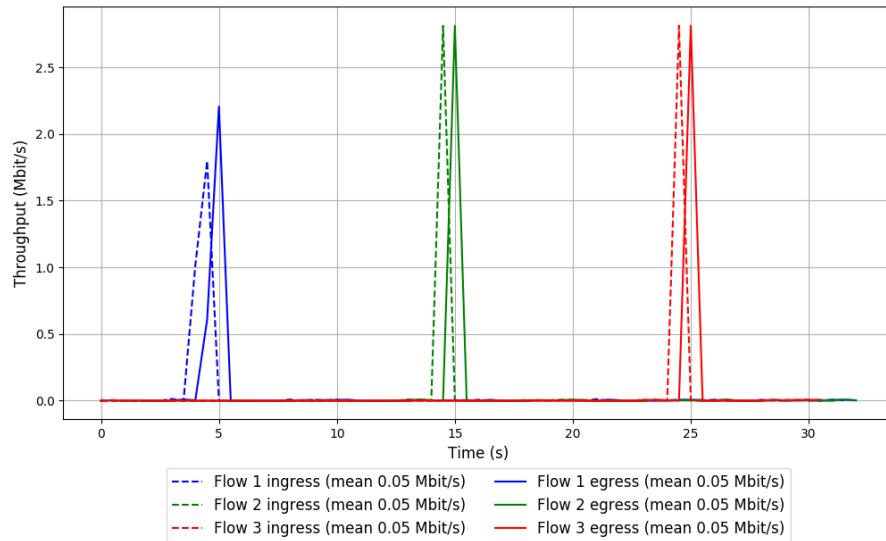


```
Run 1: Statistics of WebRTC media

Start at: 2019-03-19 02:54:52
End at: 2019-03-19 02:55:22
Local clock offset: 2.629 ms
Remote clock offset: -5.21 ms

# Below is generated by plot.py at 2019-03-19 04:50:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 6.845 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.643 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.658 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 7.024 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

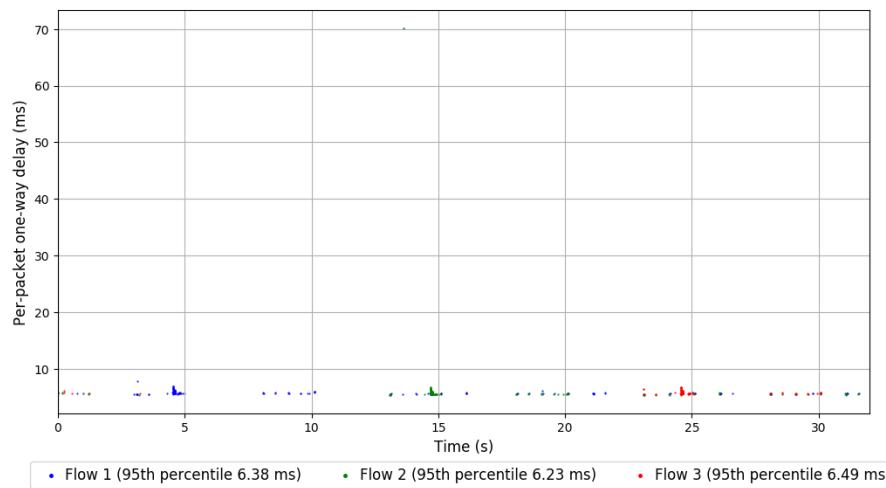
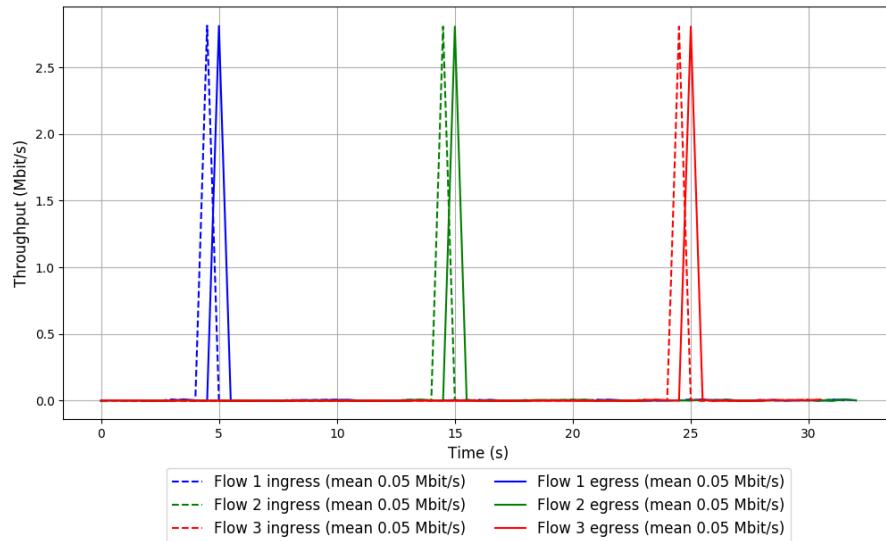


Run 2: Statistics of WebRTC media

```
Start at: 2019-03-19 03:20:35
End at: 2019-03-19 03:21:05
Local clock offset: 1.431 ms
Remote clock offset: -5.994 ms

# Below is generated by plot.py at 2019-03-19 04:50:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 6.403 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.375 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.232 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.491 ms
Loss rate: 0.00%
```

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

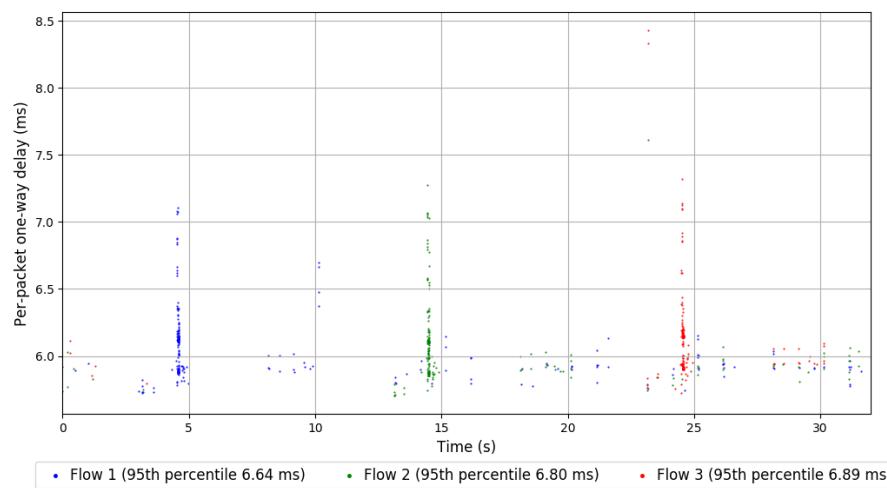
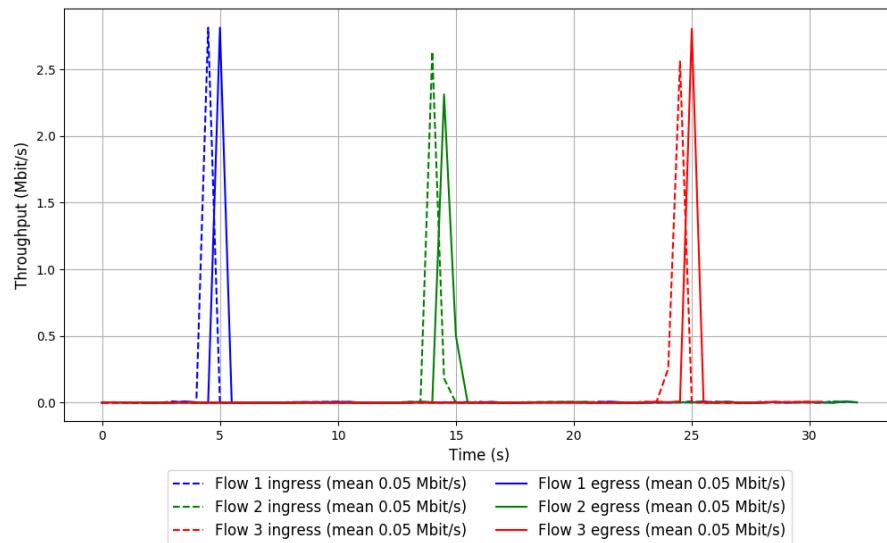


Run 3: Statistics of WebRTC media

```
Start at: 2019-03-19 03:45:43
End at: 2019-03-19 03:46:13
Local clock offset: 2.118 ms
Remote clock offset: -5.396 ms

# Below is generated by plot.py at 2019-03-19 04:50:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 6.798 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.641 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.798 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.891 ms
Loss rate: 0.00%
```

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

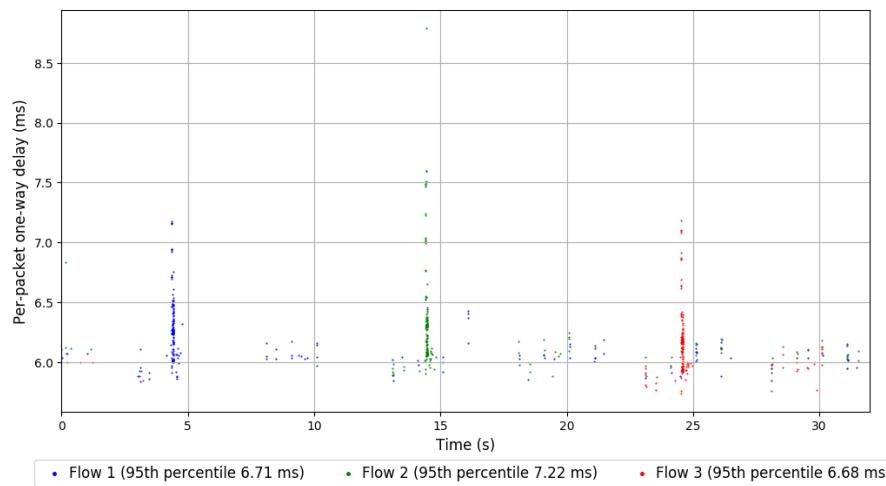
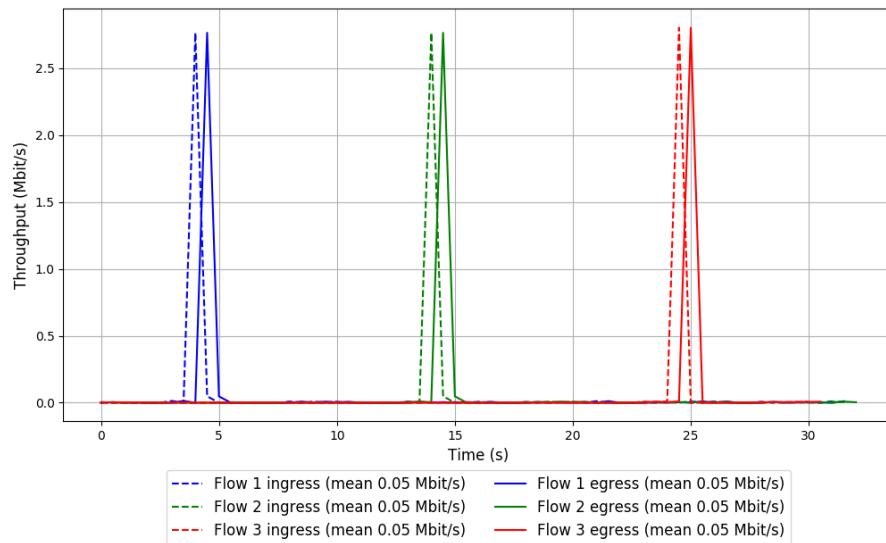


Run 4: Statistics of WebRTC media

```
Start at: 2019-03-19 04:10:31
End at: 2019-03-19 04:11:01
Local clock offset: 0.94 ms
Remote clock offset: -6.879 ms

# Below is generated by plot.py at 2019-03-19 04:50:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 6.872 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.710 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 7.225 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.685 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-03-19 04:35:48
End at: 2019-03-19 04:36:18
Local clock offset: 0.591 ms
Remote clock offset: -5.025 ms

# Below is generated by plot.py at 2019-03-19 04:50:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 8.759 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 8.759 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 8.734 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 8.759 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

