

## Pantheon Report

Generated at 2019-06-27 10:00:48 (UTC).  
Data path: AWS India 1 on `ens5` (*local*) → India on `em1` (*remote*).  
Repeated the test of 22 congestion control schemes 5 times.  
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.  
NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

System info:

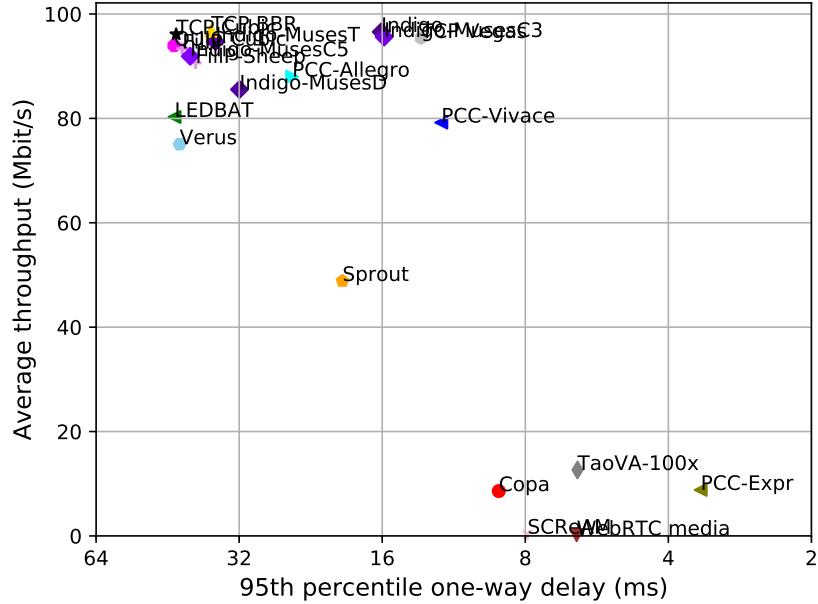
```
Linux 4.15.0-1039-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

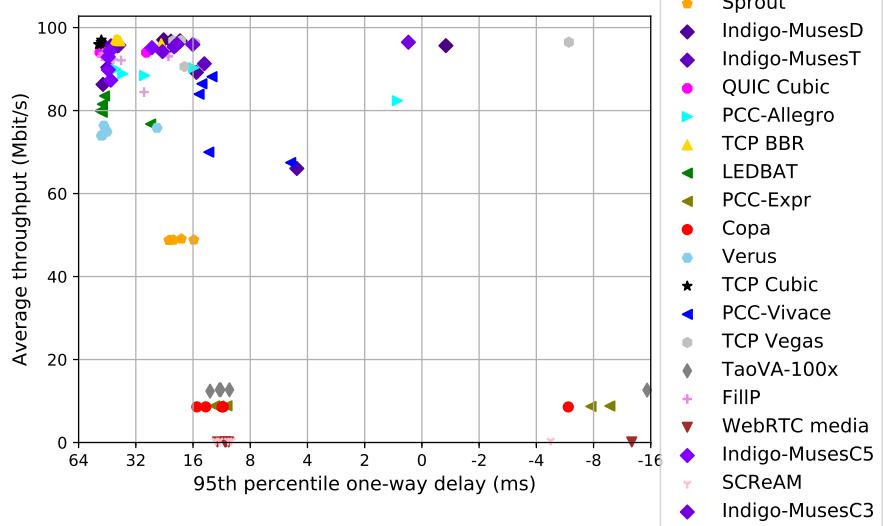
```
branch: muses @ c3953d08f32ec7ebbdede2d2f0cbdeed262571ef
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 11c9498ecb1596b02cc896791a02d03172af7ed
M helpers/__init__.pyc
M helpers/context.pyc
M helpers/utils.pyc
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
```

```
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS 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



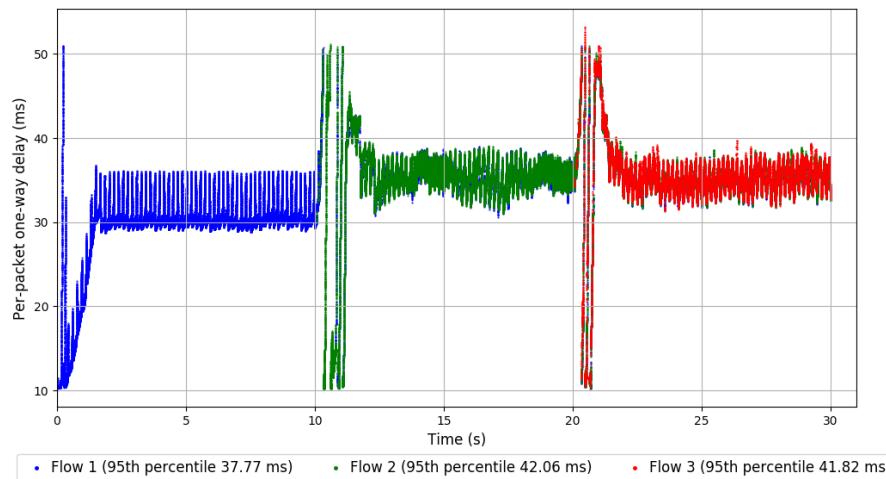
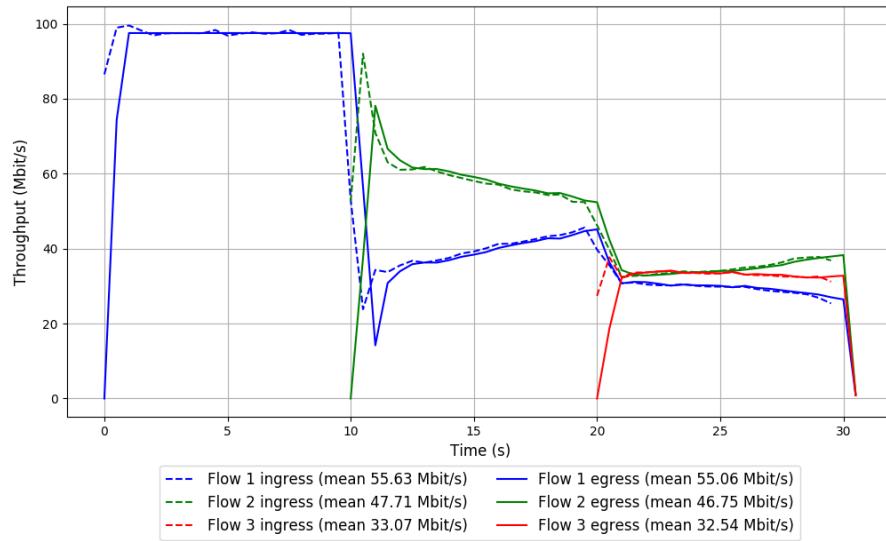
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	56.19	40.92	40.29	34.63	39.15	38.82	1.89	4.35	4.47
Copa	5	0.00	10.09	5.61	6.54	12.89	7.43	98.00	66.45	71.79
TCP Cubic	5	71.58	27.57	18.66	43.52	43.04	43.57	0.78	0.73	0.80
FillP	5	57.12	40.63	28.73	39.99	44.08	43.44	29.49	46.92	58.37
FillP-Sheep	5	58.04	34.35	29.48	36.29	41.56	43.92	3.87	11.99	14.83
Indigo	5	56.75	37.56	45.46	14.49	16.59	16.10	0.00	0.60	0.00
Indigo-MusesC3	5	44.97	58.24	42.65	13.46	16.91	16.02	0.00	0.00	0.00
Indigo-MusesC5	5	58.97	40.83	21.46	38.57	41.26	45.18	5.04	10.69	25.63
Indigo-MusesD	5	49.13	45.46	22.89	29.31	32.04	32.59	6.83	11.91	21.04
Indigo-MusesT	5	59.47	41.42	27.96	31.43	36.70	40.80	3.09	6.60	16.81
LEDBAT	5	49.04	32.75	28.99	43.56	44.09	44.14	0.43	0.58	0.87
Muses.DecisionTree	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCC-Allegro	5	72.24	16.76	13.97	23.55	28.71	30.41	1.18	1.92	1.68
PCC-Expr	5	0.08	10.26	6.00	2.35	3.54	3.19	85.71	36.79	25.56
QUIC Cubic	5	66.94	31.75	18.25	43.86	43.80	43.92	1.92	2.48	2.69
SCReAM	5	0.21	0.21	0.22	7.89	7.84	7.96	0.00	0.00	0.00
Sprout	5	24.57	24.46	24.24	18.58	19.70	19.81	0.00	0.00	0.00
TaoVA-100x	5	6.56	8.12	2.01	6.26	6.34	7.44	89.54	91.75	92.41
TCP Vegas	5	56.19	39.62	38.55	14.51	10.17	9.02	0.36	0.00	0.00
Verus	5	49.42	26.34	26.67	43.10	41.91	42.51	38.52	32.90	30.70
PCC-Vivace	5	50.82	33.16	19.17	11.95	11.39	11.47	0.05	0.00	0.00
WebRTC media	5	0.05	0.05	0.05	6.06	6.32	6.28	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-06-27 07:38:13
End at: 2019-06-27 07:38:43
Local clock offset: -1.027 ms
Remote clock offset: 2.971 ms

# Below is generated by plot.py at 2019-06-27 09:49:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.02 Mbit/s
95th percentile per-packet one-way delay: 39.756 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 55.06 Mbit/s
95th percentile per-packet one-way delay: 37.767 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 46.75 Mbit/s
95th percentile per-packet one-way delay: 42.060 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 32.54 Mbit/s
95th percentile per-packet one-way delay: 41.816 ms
Loss rate: 1.64%
```

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

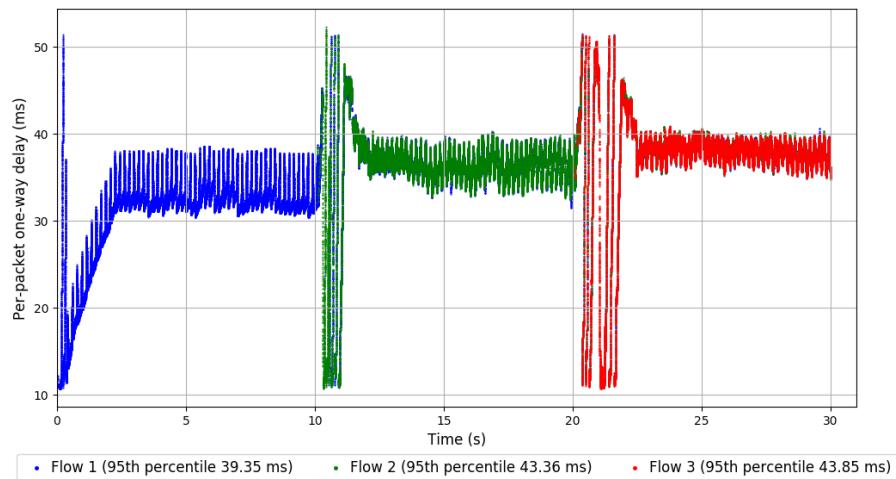
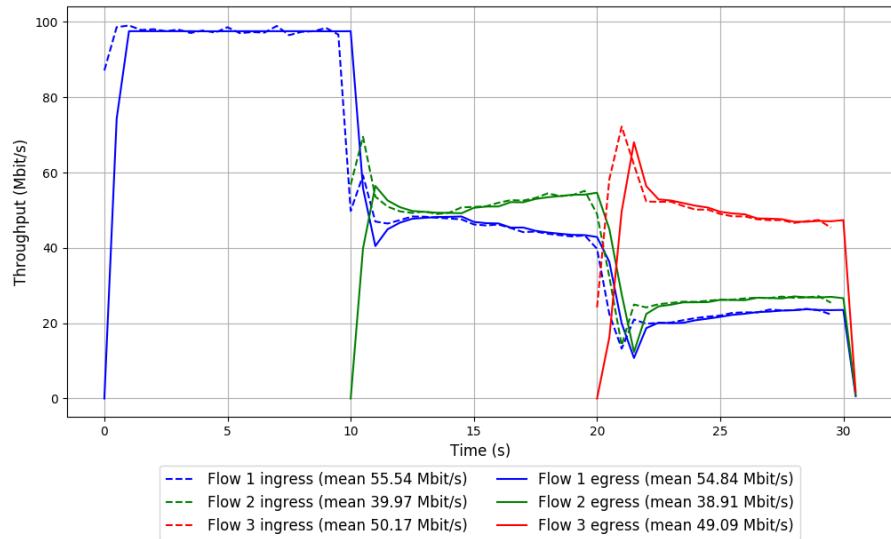


Run 2: Statistics of TCP BBR

```
Start at: 2019-06-27 08:04:22
End at: 2019-06-27 08:04:52
Local clock offset: -1.026 ms
Remote clock offset: 5.157 ms

# Below is generated by plot.py at 2019-06-27 09:49:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.03 Mbit/s
95th percentile per-packet one-way delay: 41.054 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 54.84 Mbit/s
95th percentile per-packet one-way delay: 39.355 ms
Loss rate: 1.18%
-- Flow 2:
Average throughput: 38.91 Mbit/s
95th percentile per-packet one-way delay: 43.363 ms
Loss rate: 2.64%
-- Flow 3:
Average throughput: 49.09 Mbit/s
95th percentile per-packet one-way delay: 43.850 ms
Loss rate: 2.19%
```

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

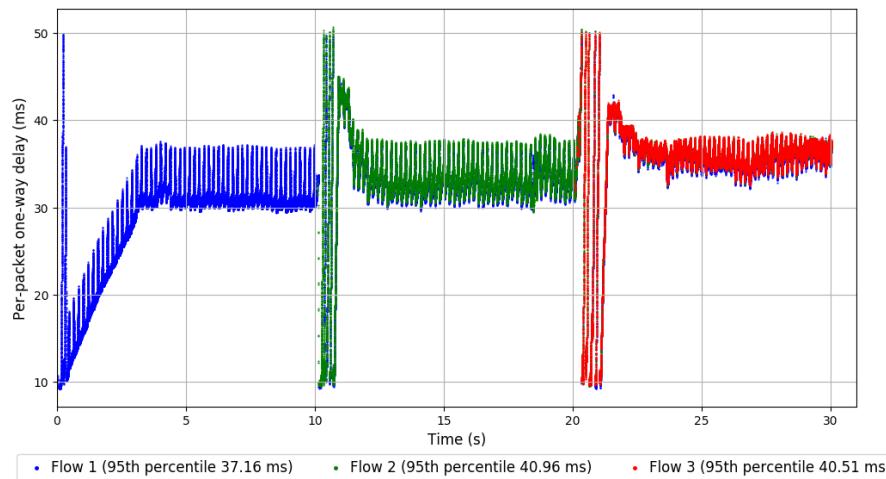
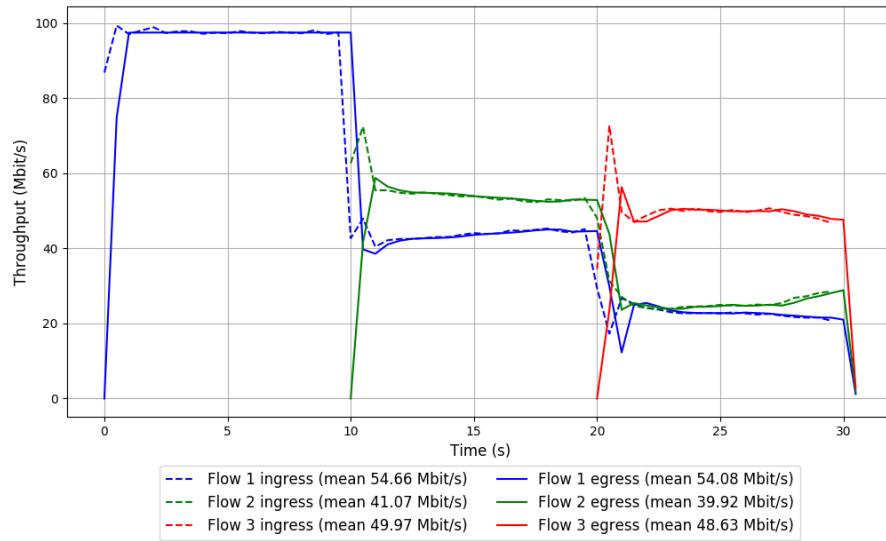


Run 3: Statistics of TCP BBR

```
Start at: 2019-06-27 08:30:45
End at: 2019-06-27 08:31:15
Local clock offset: 0.649 ms
Remote clock offset: 4.869 ms

# Below is generated by plot.py at 2019-06-27 09:49:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.82 Mbit/s
95th percentile per-packet one-way delay: 38.831 ms
Loss rate: 1.75%
-- Flow 1:
Average throughput: 54.08 Mbit/s
95th percentile per-packet one-way delay: 37.159 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 39.92 Mbit/s
95th percentile per-packet one-way delay: 40.964 ms
Loss rate: 2.77%
-- Flow 3:
Average throughput: 48.63 Mbit/s
95th percentile per-packet one-way delay: 40.513 ms
Loss rate: 2.62%
```

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

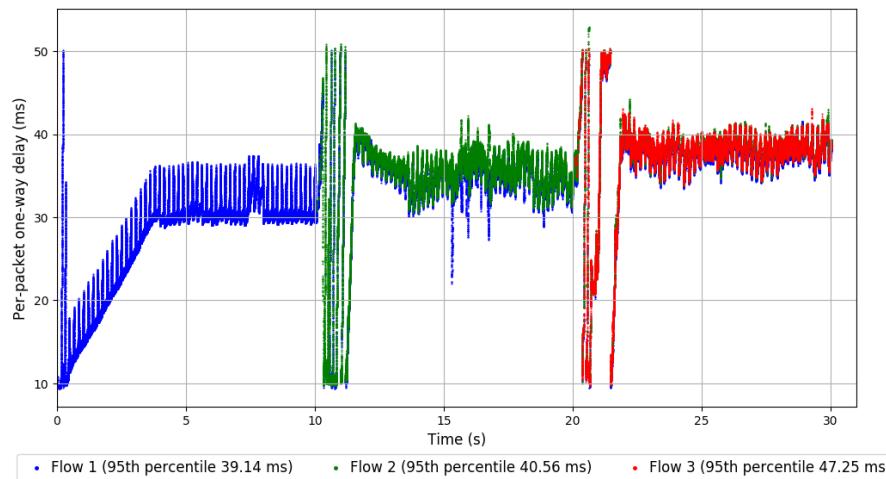
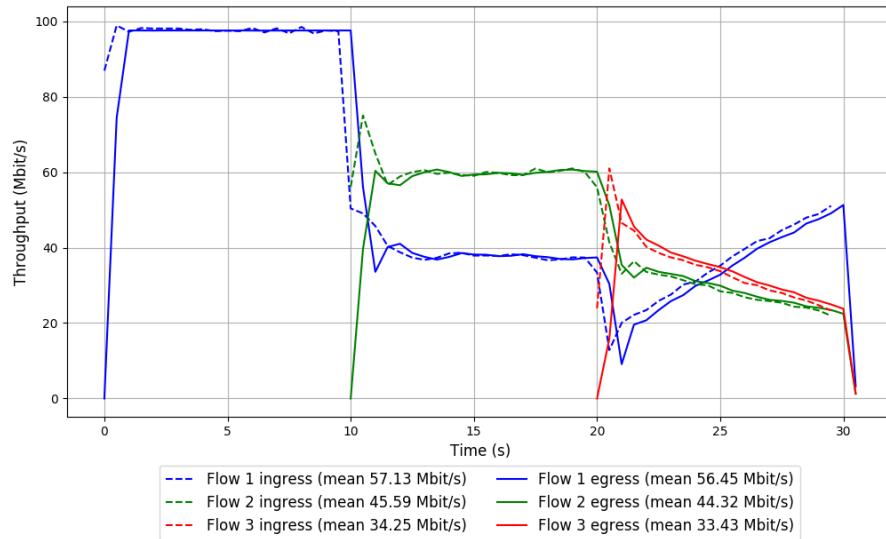


Run 4: Statistics of TCP BBR

```
Start at: 2019-06-27 08:56:36
End at: 2019-06-27 08:57:06
Local clock offset: -0.337 ms
Remote clock offset: 4.037 ms

# Below is generated by plot.py at 2019-06-27 09:49:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.07 Mbit/s
95th percentile per-packet one-way delay: 40.092 ms
Loss rate: 1.75%
-- Flow 1:
Average throughput: 56.45 Mbit/s
95th percentile per-packet one-way delay: 39.136 ms
Loss rate: 1.09%
-- Flow 2:
Average throughput: 44.32 Mbit/s
95th percentile per-packet one-way delay: 40.565 ms
Loss rate: 2.74%
-- Flow 3:
Average throughput: 33.43 Mbit/s
95th percentile per-packet one-way delay: 47.251 ms
Loss rate: 2.39%
```

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

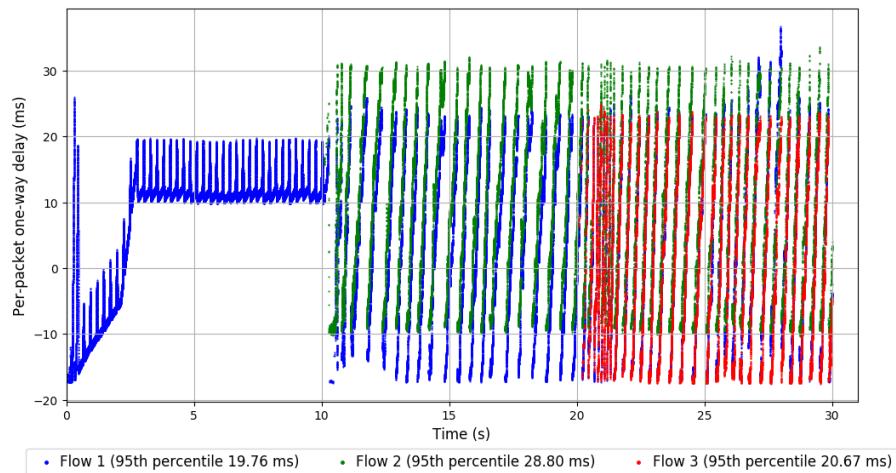
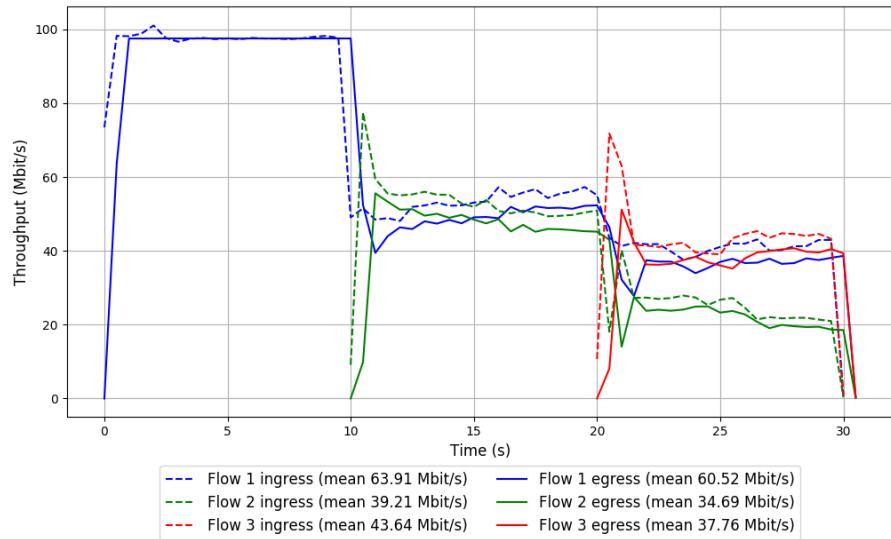


Run 5: Statistics of TCP BBR

```
Start at: 2019-06-27 09:22:55
End at: 2019-06-27 09:23:25
Local clock offset: -1.286 ms
Remote clock offset: -26.664 ms

# Below is generated by plot.py at 2019-06-27 09:49:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.12 Mbit/s
95th percentile per-packet one-way delay: 23.495 ms
Loss rate: 8.00%
-- Flow 1:
Average throughput: 60.52 Mbit/s
95th percentile per-packet one-way delay: 19.757 ms
Loss rate: 5.27%
-- Flow 2:
Average throughput: 34.69 Mbit/s
95th percentile per-packet one-way delay: 28.800 ms
Loss rate: 11.62%
-- Flow 3:
Average throughput: 37.76 Mbit/s
95th percentile per-packet one-way delay: 20.669 ms
Loss rate: 13.53%
```

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

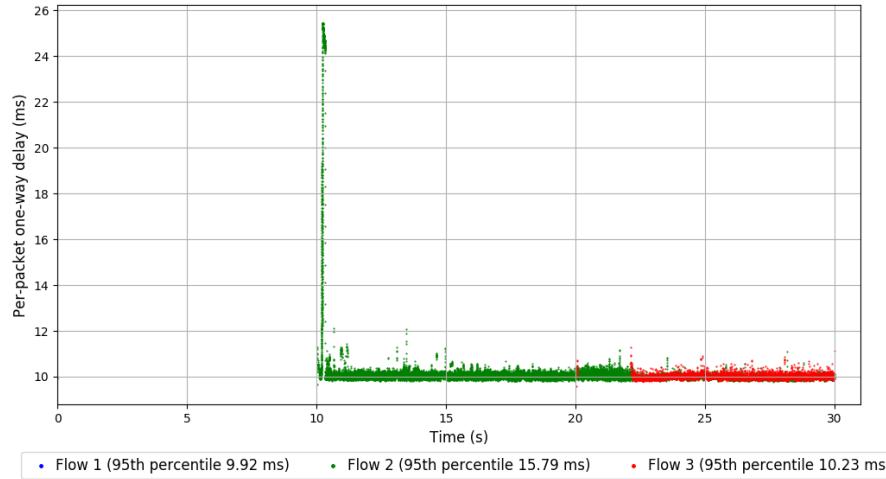
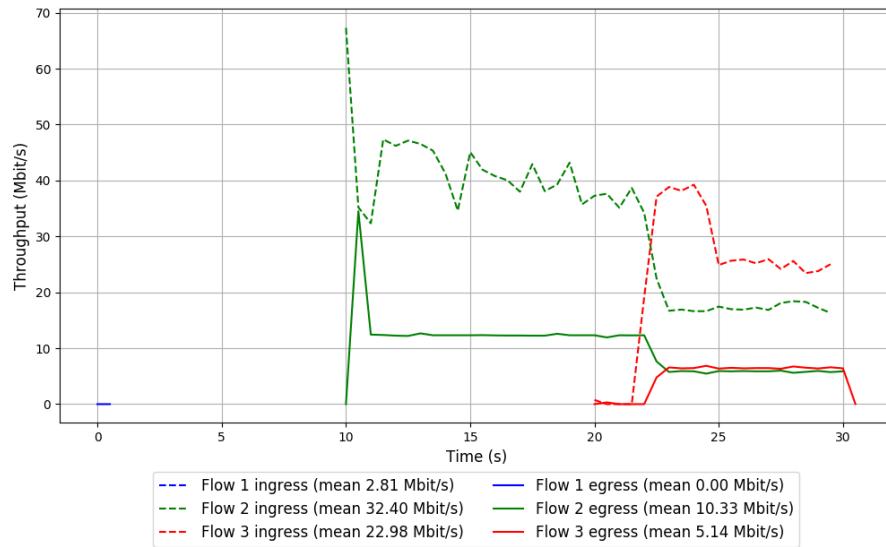


Run 1: Statistics of Copa

```
Start at: 2019-06-27 07:54:58
End at: 2019-06-27 07:55:28
Local clock offset: 0.479 ms
Remote clock offset: 5.374 ms

# Below is generated by plot.py at 2019-06-27 09:49:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 11.090 ms
Loss rate: 70.60%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 9.922 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 10.33 Mbit/s
95th percentile per-packet one-way delay: 15.793 ms
Loss rate: 68.11%
-- Flow 3:
Average throughput: 5.14 Mbit/s
95th percentile per-packet one-way delay: 10.229 ms
Loss rate: 77.63%
```

## Run 1: Report of Copa — Data Link

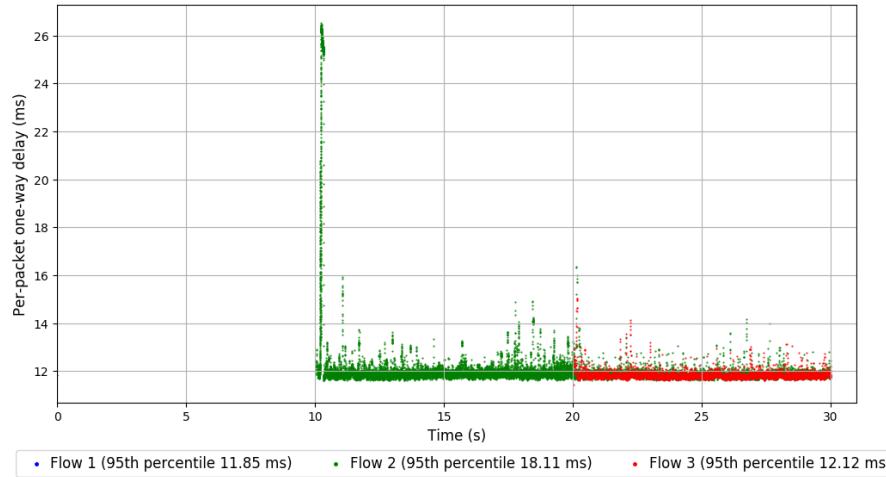
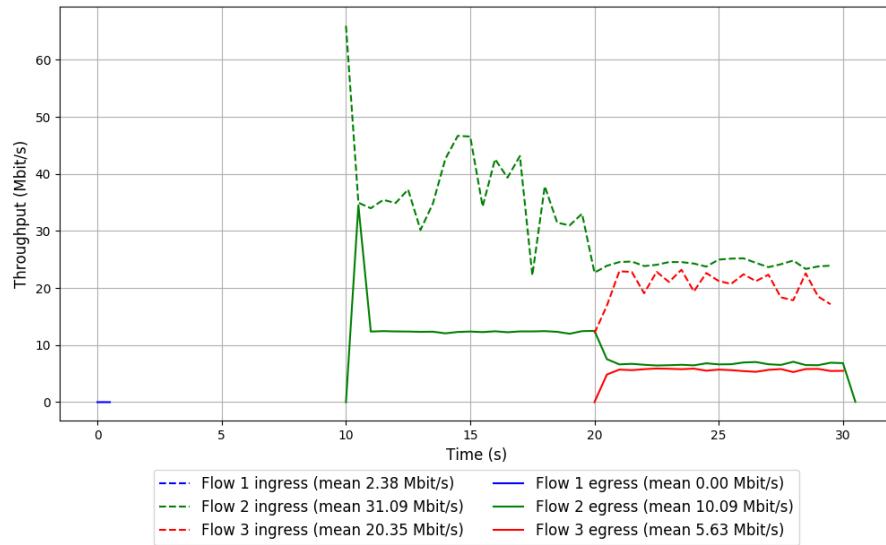


Run 2: Statistics of Copa

```
Start at: 2019-06-27 08:21:12
End at: 2019-06-27 08:21:42
Local clock offset: -0.097 ms
Remote clock offset: 6.465 ms

# Below is generated by plot.py at 2019-06-27 09:49:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 13.713 ms
Loss rate: 68.72%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 11.847 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 10.09 Mbit/s
95th percentile per-packet one-way delay: 18.107 ms
Loss rate: 67.54%
-- Flow 3:
Average throughput: 5.63 Mbit/s
95th percentile per-packet one-way delay: 12.123 ms
Loss rate: 72.32%
```

## Run 2: Report of Copa — Data Link

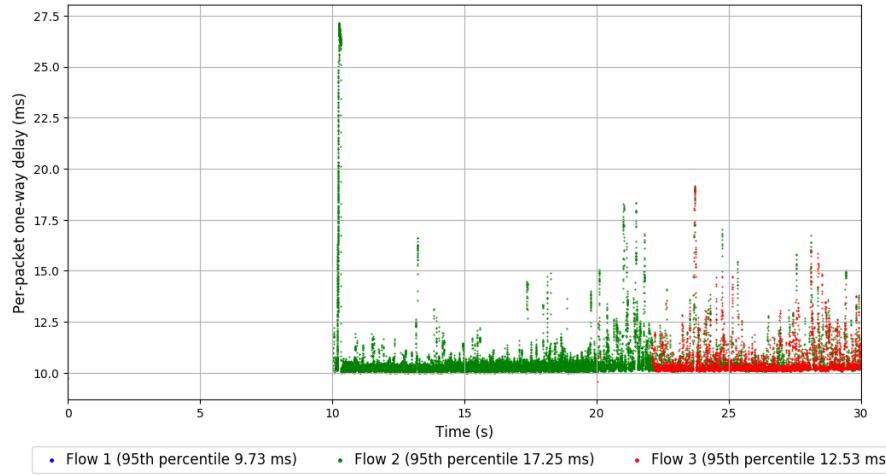
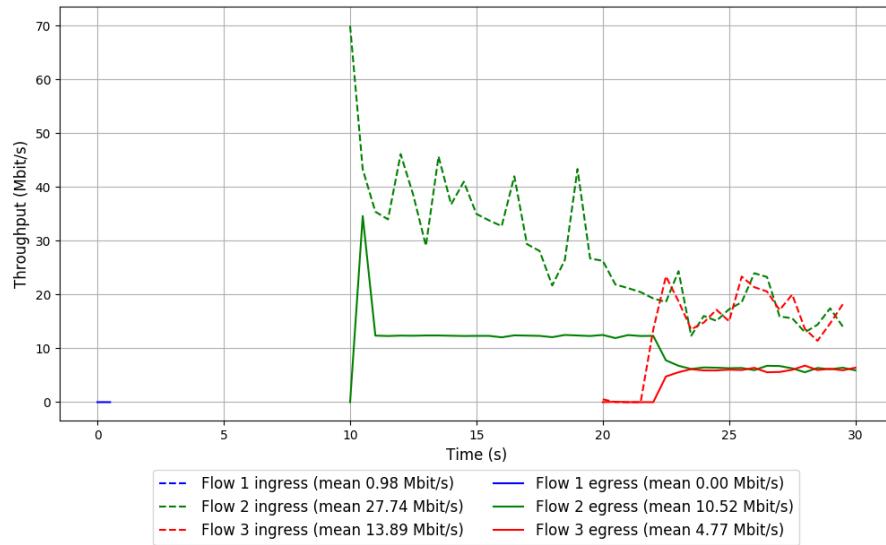


Run 3: Statistics of Copa

```
Start at: 2019-06-27 08:47:24
End at: 2019-06-27 08:47:54
Local clock offset: 1.134 ms
Remote clock offset: 4.834 ms

# Below is generated by plot.py at 2019-06-27 09:49:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 15.285 ms
Loss rate: 62.79%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 9.727 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 10.52 Mbit/s
95th percentile per-packet one-way delay: 17.248 ms
Loss rate: 62.07%
-- Flow 3:
Average throughput: 4.77 Mbit/s
95th percentile per-packet one-way delay: 12.526 ms
Loss rate: 65.64%
```

### Run 3: Report of Copa — Data Link

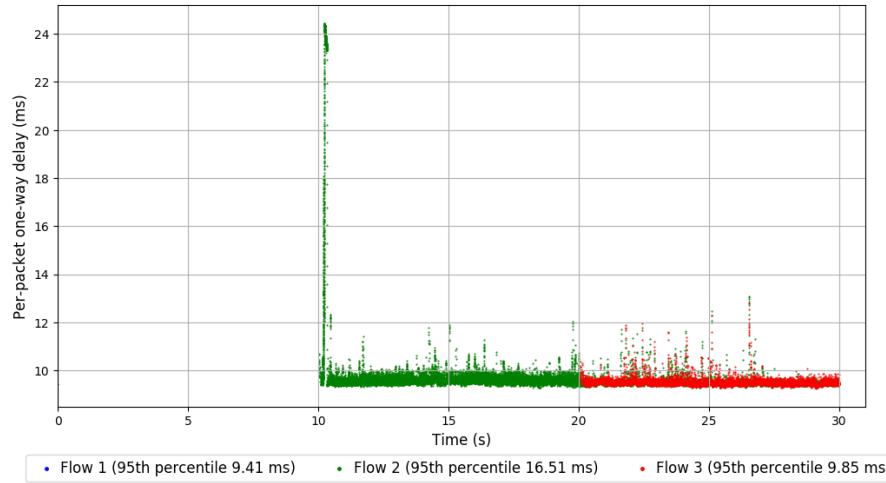
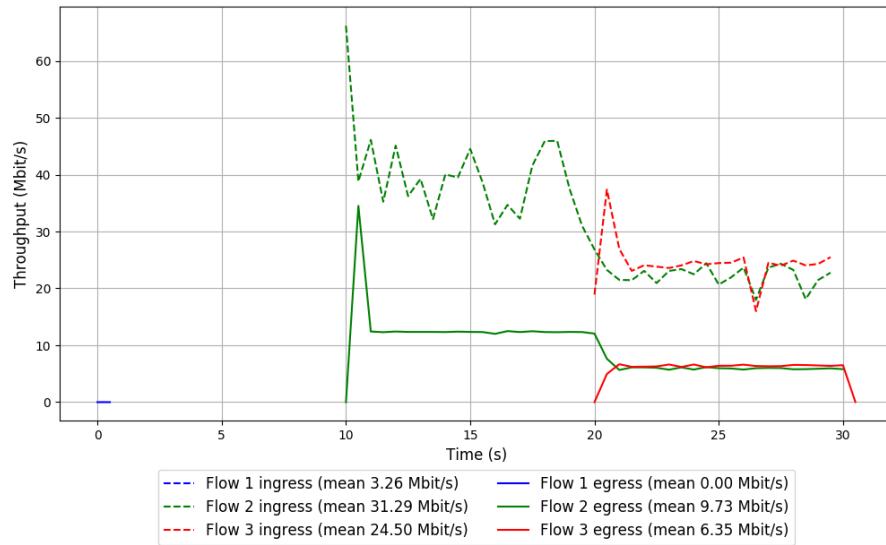


Run 4: Statistics of Copa

```
Start at: 2019-06-27 09:13:20
End at: 2019-06-27 09:13:50
Local clock offset: -0.526 ms
Remote clock offset: 4.834 ms

# Below is generated by plot.py at 2019-06-27 09:49:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 11.286 ms
Loss rate: 70.36%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 9.412 ms
Loss rate: 98.80%
-- Flow 2:
Average throughput: 9.73 Mbit/s
95th percentile per-packet one-way delay: 16.509 ms
Loss rate: 68.90%
-- Flow 3:
Average throughput: 6.35 Mbit/s
95th percentile per-packet one-way delay: 9.851 ms
Loss rate: 74.07%
```

## Run 4: Report of Copa — Data Link

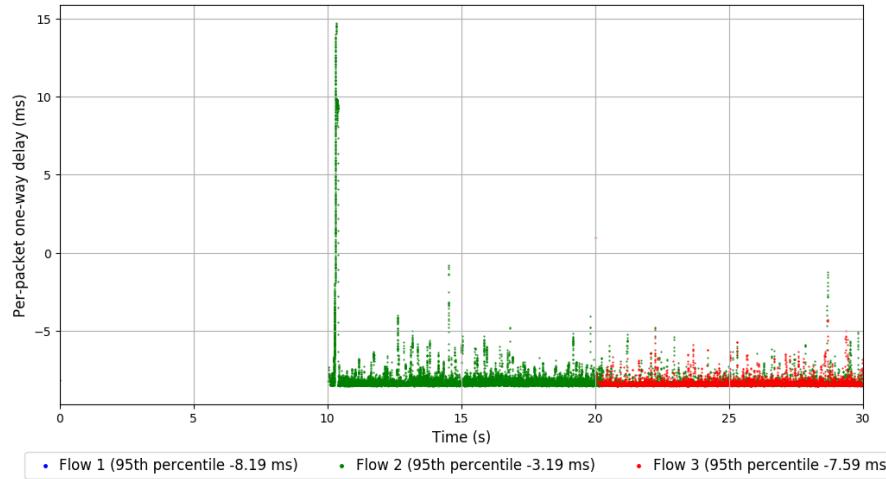
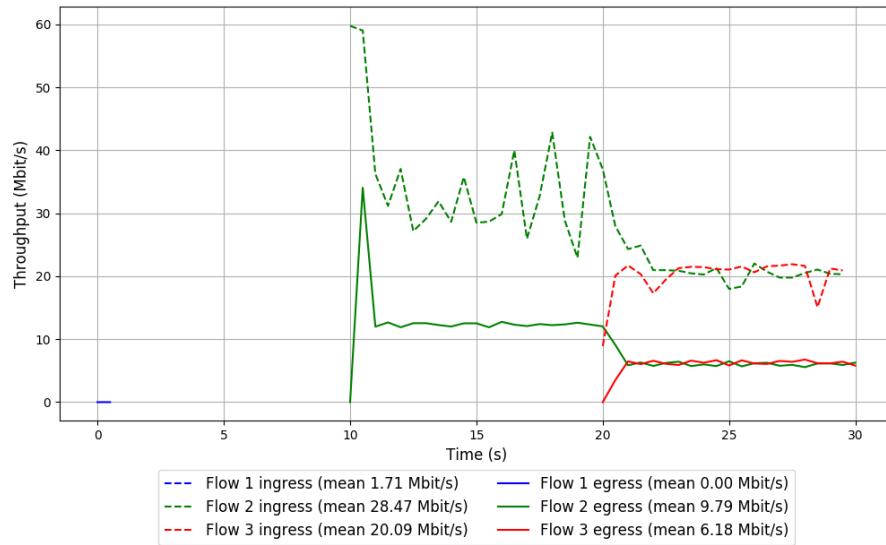


Run 5: Statistics of Copa

```
Start at: 2019-06-27 09:39:40
End at: 2019-06-27 09:40:10
Local clock offset: -1.225 ms
Remote clock offset: -17.488 ms

# Below is generated by plot.py at 2019-06-27 09:49:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.58 Mbit/s
95th percentile per-packet one-way delay: -5.890 ms
Loss rate: 66.56%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: -8.186 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 9.79 Mbit/s
95th percentile per-packet one-way delay: -3.186 ms
Loss rate: 65.61%
-- Flow 3:
Average throughput: 6.18 Mbit/s
95th percentile per-packet one-way delay: -7.592 ms
Loss rate: 69.27%
```

Run 5: Report of Copa — Data Link

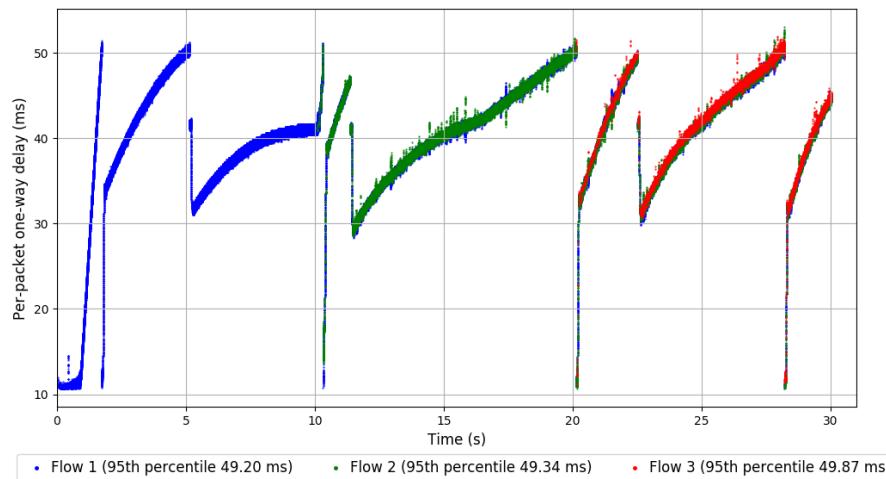
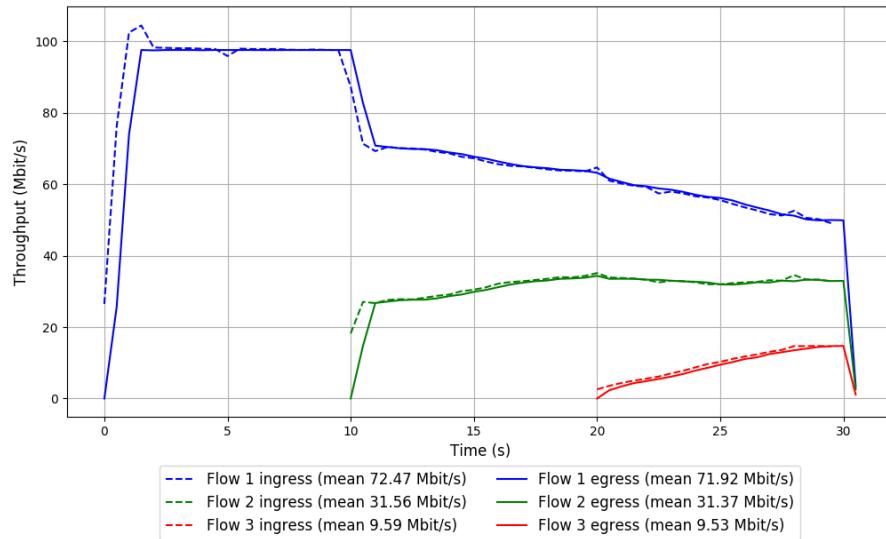


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-06-27 07:44:02
End at: 2019-06-27 07:44:32
Local clock offset: -0.677 ms
Remote clock offset: 4.192 ms

# Below is generated by plot.py at 2019-06-27 09:49:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.97 Mbit/s
95th percentile per-packet one-way delay: 49.245 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 71.92 Mbit/s
95th percentile per-packet one-way delay: 49.204 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 31.37 Mbit/s
95th percentile per-packet one-way delay: 49.345 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 49.868 ms
Loss rate: 0.69%
```

Run 1: Report of TCP Cubic — Data Link

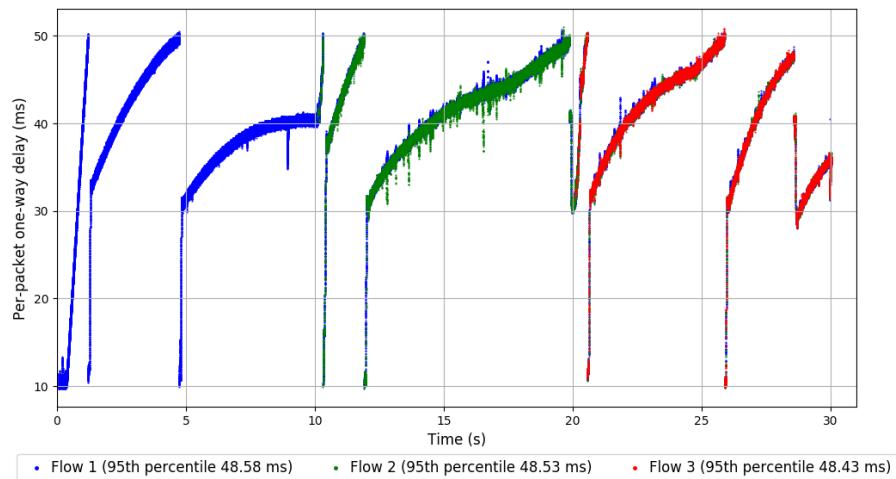
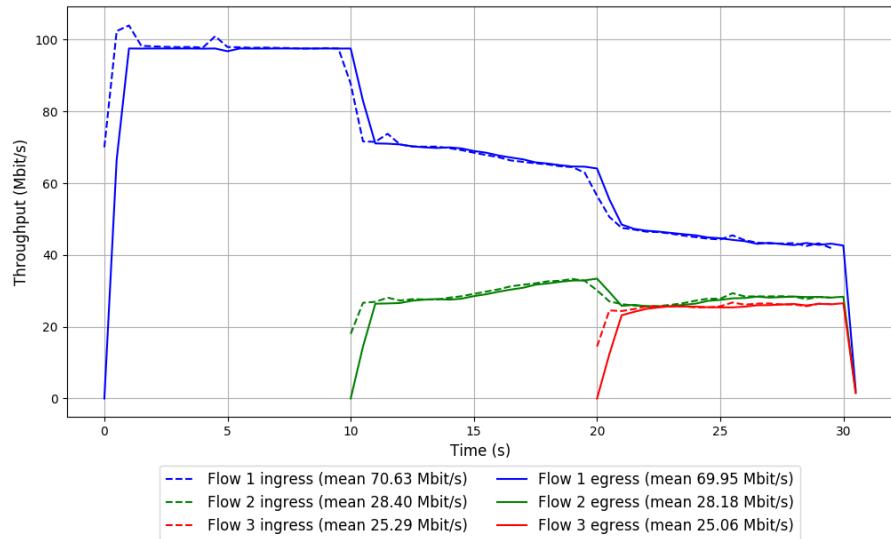


Run 2: Statistics of TCP Cubic

```
Start at: 2019-06-27 08:10:16
End at: 2019-06-27 08:10:46
Local clock offset: 0.285 ms
Remote clock offset: 5.242 ms

# Below is generated by plot.py at 2019-06-27 09:49:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.03 Mbit/s
95th percentile per-packet one-way delay: 48.555 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 69.95 Mbit/s
95th percentile per-packet one-way delay: 48.577 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 28.18 Mbit/s
95th percentile per-packet one-way delay: 48.535 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 25.06 Mbit/s
95th percentile per-packet one-way delay: 48.427 ms
Loss rate: 0.84%
```

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

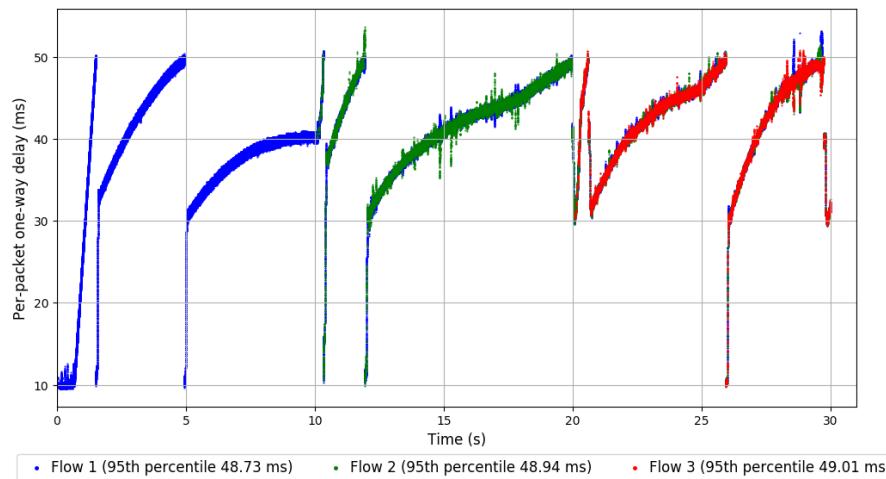
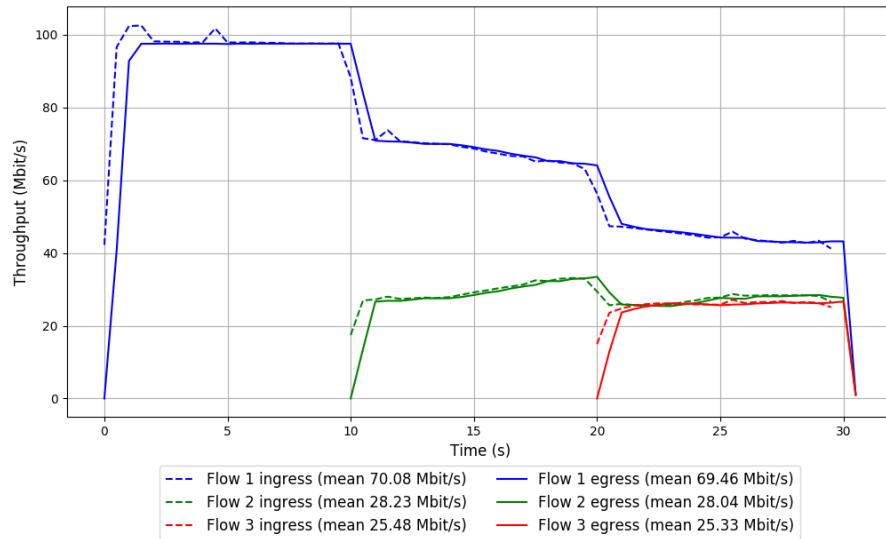


Run 3: Statistics of TCP Cubic

```
Start at: 2019-06-27 08:36:39
End at: 2019-06-27 08:37:09
Local clock offset: 0.857 ms
Remote clock offset: 4.864 ms

# Below is generated by plot.py at 2019-06-27 09:49:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.53 Mbit/s
95th percentile per-packet one-way delay: 48.771 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 69.46 Mbit/s
95th percentile per-packet one-way delay: 48.727 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 28.04 Mbit/s
95th percentile per-packet one-way delay: 48.938 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 25.33 Mbit/s
95th percentile per-packet one-way delay: 49.007 ms
Loss rate: 0.56%
```

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

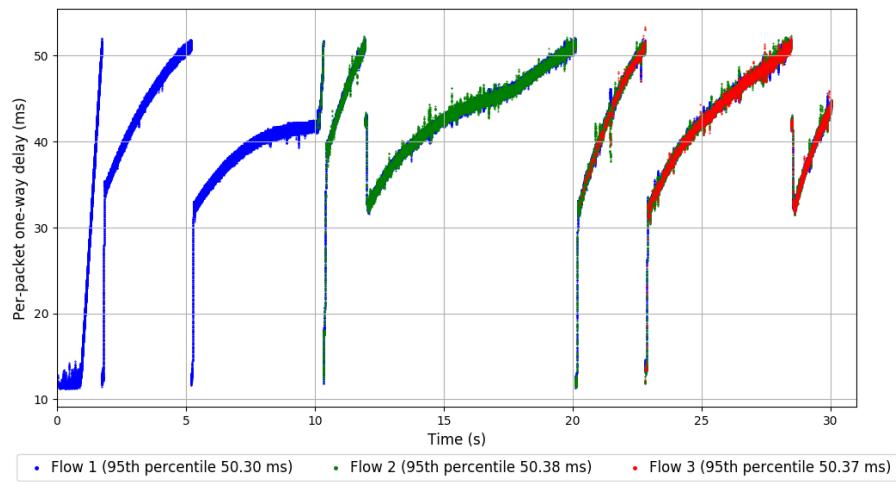
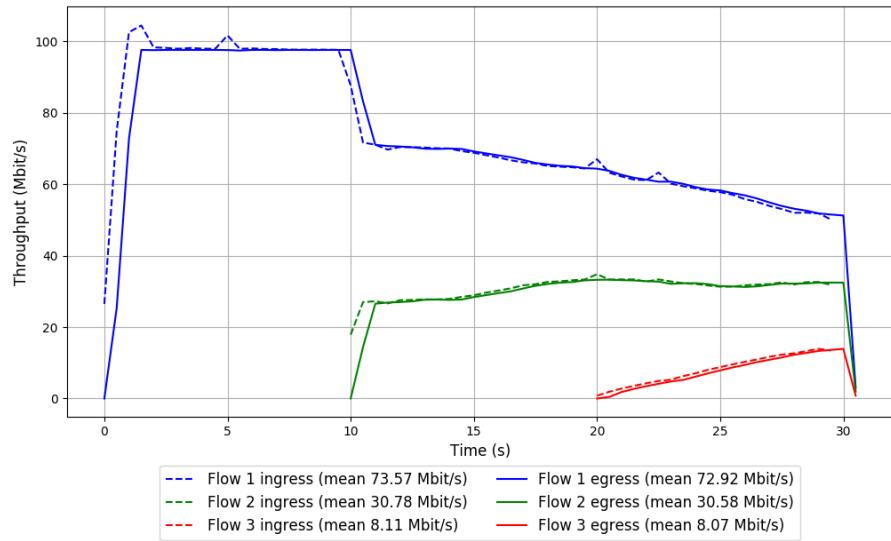


Run 4: Statistics of TCP Cubic

```
Start at: 2019-06-27 09:02:24
End at: 2019-06-27 09:02:54
Local clock offset: -1.054 ms
Remote clock offset: 5.745 ms

# Below is generated by plot.py at 2019-06-27 09:50:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.95 Mbit/s
95th percentile per-packet one-way delay: 50.314 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 72.92 Mbit/s
95th percentile per-packet one-way delay: 50.295 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 30.58 Mbit/s
95th percentile per-packet one-way delay: 50.383 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 8.07 Mbit/s
95th percentile per-packet one-way delay: 50.372 ms
Loss rate: 0.51%
```

Run 4: Report of TCP Cubic — Data Link

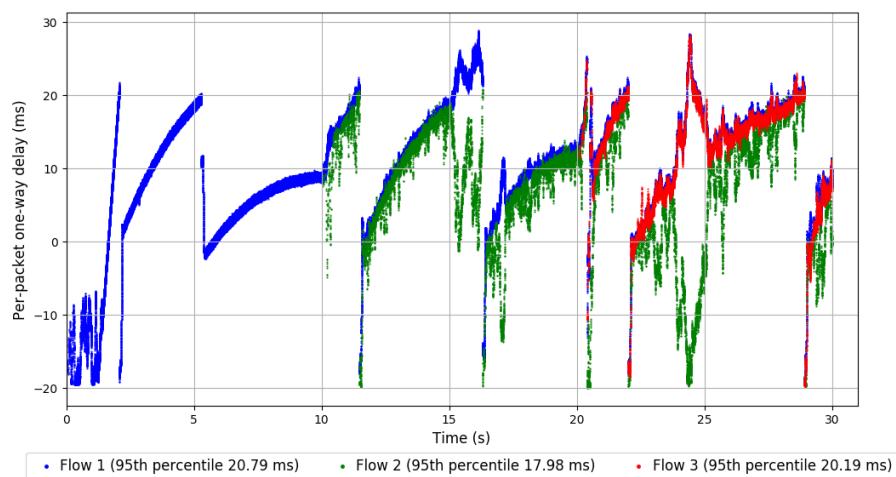
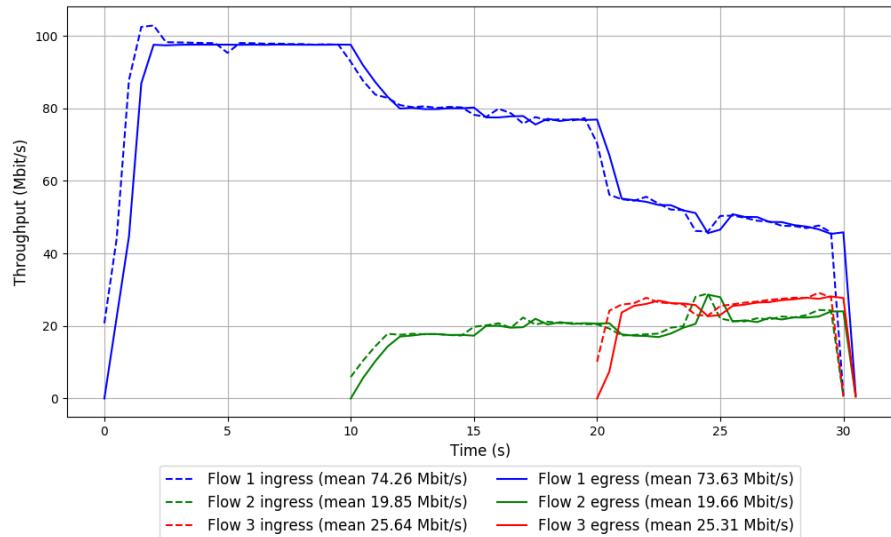


Run 5: Statistics of TCP Cubic

```
Start at: 2019-06-27 09:28:50
End at: 2019-06-27 09:29:20
Local clock offset: 0.133 ms
Remote clock offset: -27.365 ms

# Below is generated by plot.py at 2019-06-27 09:50:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.10 Mbit/s
95th percentile per-packet one-way delay: 20.257 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 73.63 Mbit/s
95th percentile per-packet one-way delay: 20.790 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 19.66 Mbit/s
95th percentile per-packet one-way delay: 17.977 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 25.31 Mbit/s
95th percentile per-packet one-way delay: 20.191 ms
Loss rate: 1.38%
```

Run 5: Report of TCP Cubic — Data Link

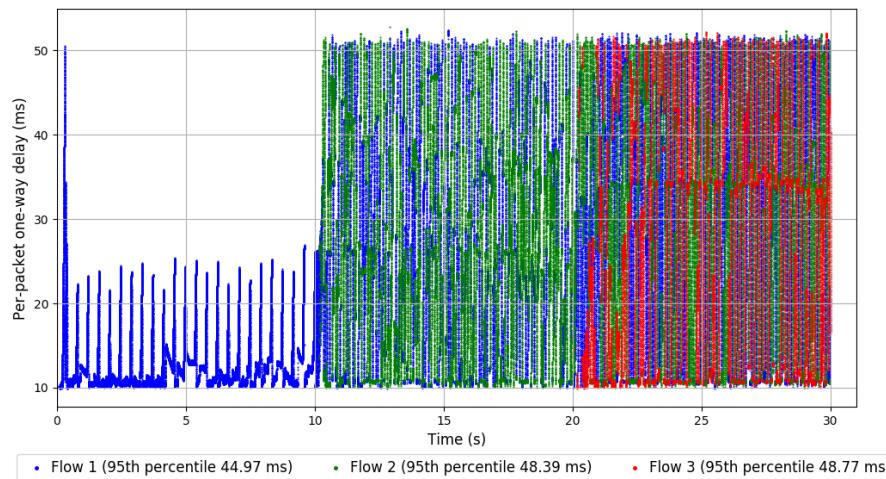
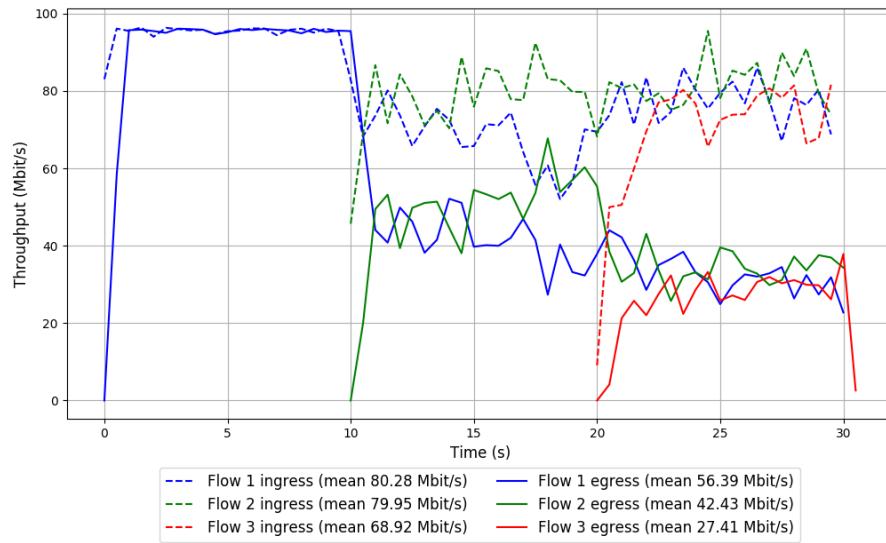


```
Run 1: Statistics of FillP
```

```
Start at: 2019-06-27 07:53:45
End at: 2019-06-27 07:54:15
Local clock offset: -0.831 ms
Remote clock offset: 4.206 ms

# Below is generated by plot.py at 2019-06-27 09:50:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.66 Mbit/s
95th percentile per-packet one-way delay: 47.093 ms
Loss rate: 40.04%
-- Flow 1:
Average throughput: 56.39 Mbit/s
95th percentile per-packet one-way delay: 44.968 ms
Loss rate: 29.74%
-- Flow 2:
Average throughput: 42.43 Mbit/s
95th percentile per-packet one-way delay: 48.387 ms
Loss rate: 46.93%
-- Flow 3:
Average throughput: 27.41 Mbit/s
95th percentile per-packet one-way delay: 48.772 ms
Loss rate: 60.16%
```

Run 1: Report of FillP — Data Link

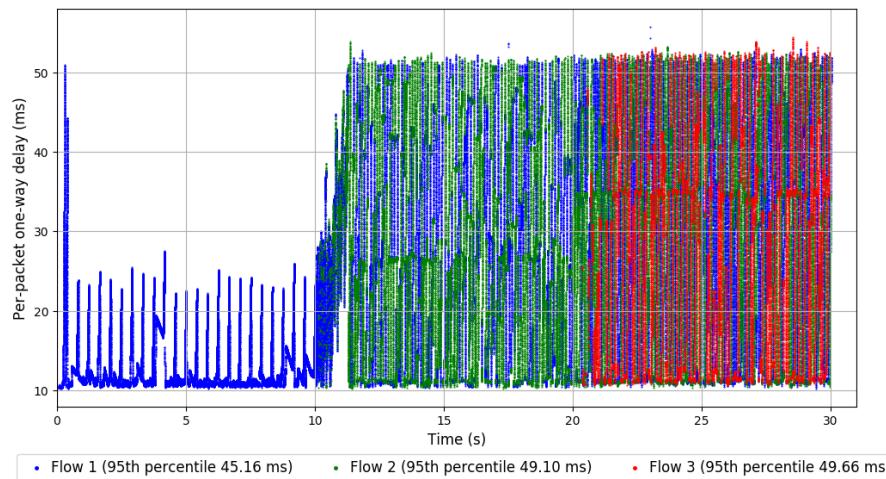
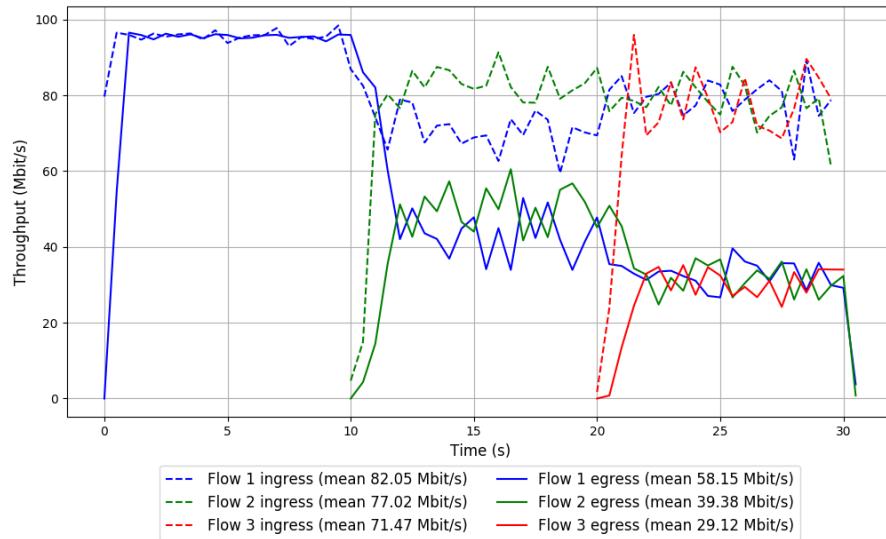


Run 2: Statistics of FillP

```
Start at: 2019-06-27 08:19:58
End at: 2019-06-27 08:20:28
Local clock offset: -0.095 ms
Remote clock offset: 5.709 ms

# Below is generated by plot.py at 2019-06-27 09:50:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 47.507 ms
Loss rate: 40.20%
-- Flow 1:
Average throughput: 58.15 Mbit/s
95th percentile per-packet one-way delay: 45.162 ms
Loss rate: 29.04%
-- Flow 2:
Average throughput: 39.38 Mbit/s
95th percentile per-packet one-way delay: 49.096 ms
Loss rate: 48.85%
-- Flow 3:
Average throughput: 29.12 Mbit/s
95th percentile per-packet one-way delay: 49.656 ms
Loss rate: 60.12%
```

## Run 2: Report of FillP — Data Link

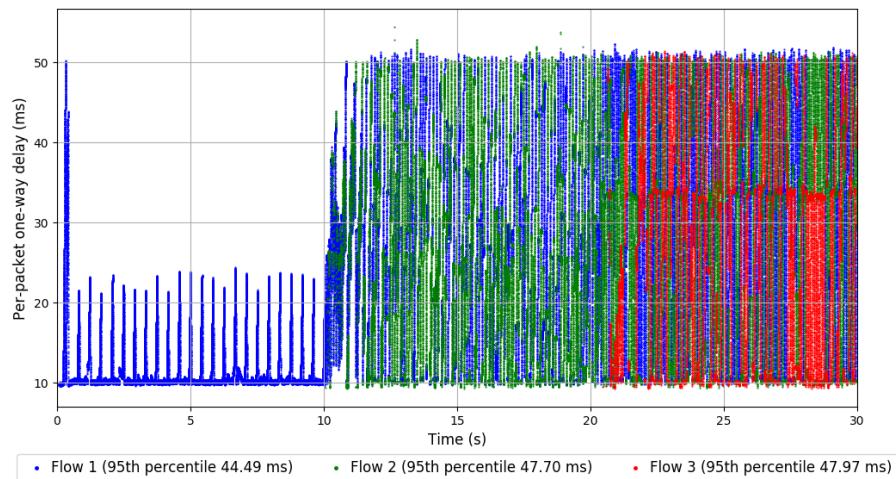
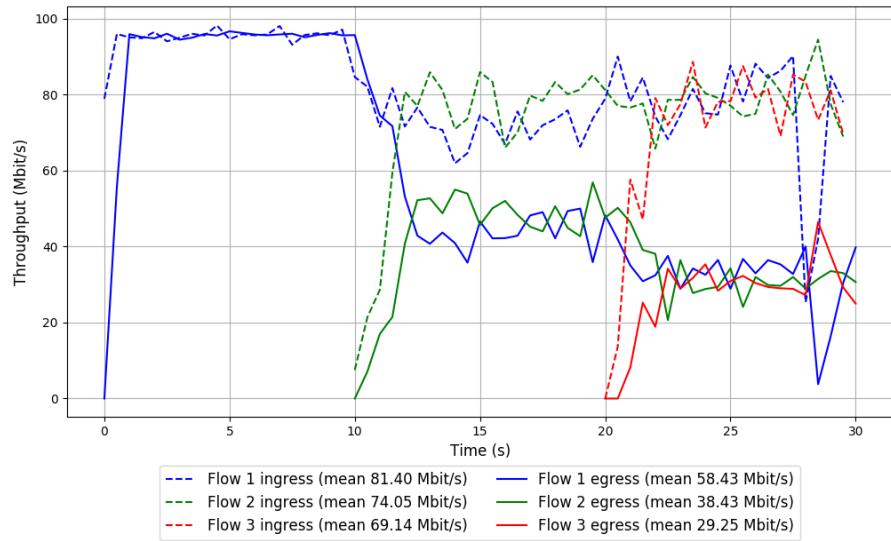


Run 3: Statistics of FillP

```
Start at: 2019-06-27 08:46:09
End at: 2019-06-27 08:46:39
Local clock offset: 0.458 ms
Remote clock offset: 4.023 ms

# Below is generated by plot.py at 2019-06-27 09:50:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.24 Mbit/s
95th percentile per-packet one-way delay: 46.332 ms
Loss rate: 39.25%
-- Flow 1:
Average throughput: 58.43 Mbit/s
95th percentile per-packet one-way delay: 44.494 ms
Loss rate: 28.25%
-- Flow 2:
Average throughput: 38.43 Mbit/s
95th percentile per-packet one-way delay: 47.701 ms
Loss rate: 48.05%
-- Flow 3:
Average throughput: 29.25 Mbit/s
95th percentile per-packet one-way delay: 47.974 ms
Loss rate: 59.41%
```

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

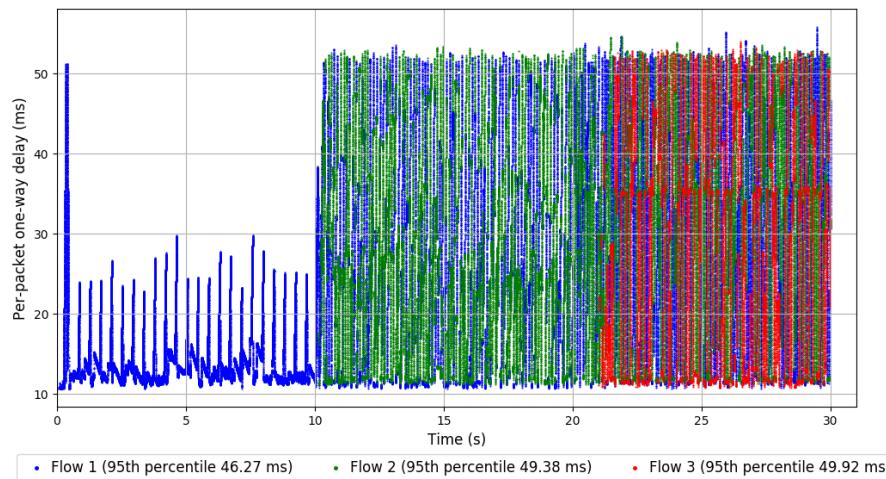
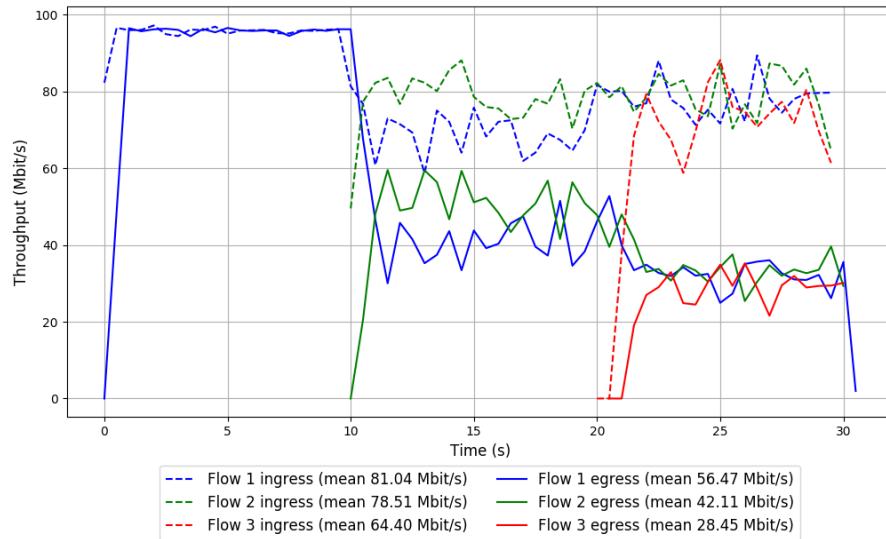


Run 4: Statistics of FillP

```
Start at: 2019-06-27 09:12:08
End at: 2019-06-27 09:12:38
Local clock offset: -1.136 ms
Remote clock offset: 6.119 ms

# Below is generated by plot.py at 2019-06-27 09:51:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.13 Mbit/s
95th percentile per-packet one-way delay: 48.294 ms
Loss rate: 39.73%
-- Flow 1:
Average throughput: 56.47 Mbit/s
95th percentile per-packet one-way delay: 46.266 ms
Loss rate: 30.24%
-- Flow 2:
Average throughput: 42.11 Mbit/s
95th percentile per-packet one-way delay: 49.385 ms
Loss rate: 46.29%
-- Flow 3:
Average throughput: 28.45 Mbit/s
95th percentile per-packet one-way delay: 49.919 ms
Loss rate: 59.65%
```

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

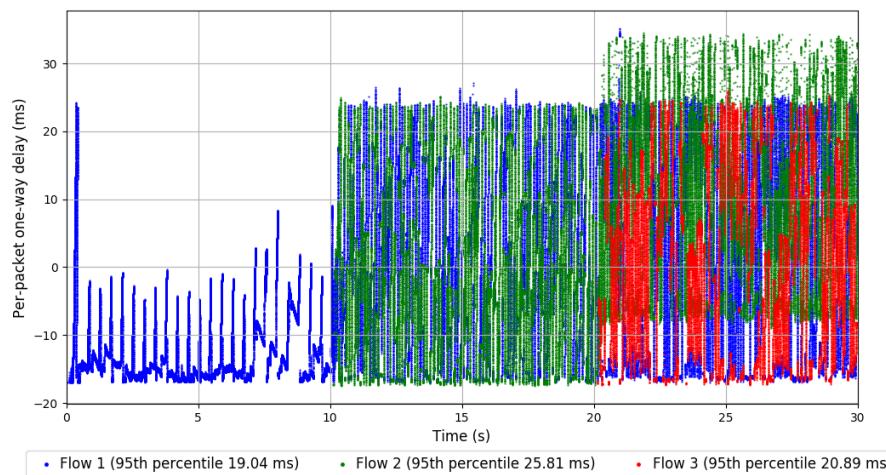
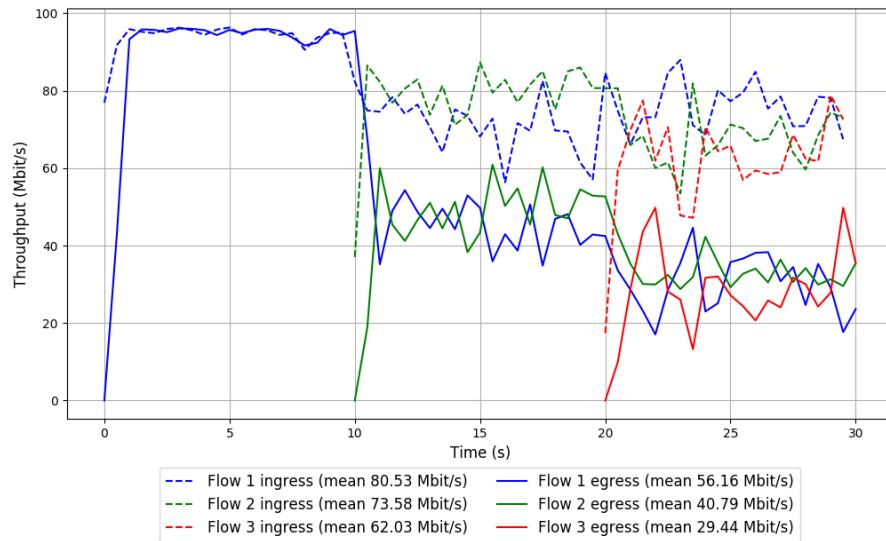


```
Run 5: Statistics of FillP
```

```
Start at: 2019-06-27 09:38:29
End at: 2019-06-27 09:38:59
Local clock offset: -0.829 ms
Remote clock offset: -25.658 ms

# Below is generated by plot.py at 2019-06-27 09:51:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.07 Mbit/s
95th percentile per-packet one-way delay: 21.551 ms
Loss rate: 37.91%
-- Flow 1:
Average throughput: 56.16 Mbit/s
95th percentile per-packet one-way delay: 19.039 ms
Loss rate: 30.19%
-- Flow 2:
Average throughput: 40.79 Mbit/s
95th percentile per-packet one-way delay: 25.810 ms
Loss rate: 44.48%
-- Flow 3:
Average throughput: 29.44 Mbit/s
95th percentile per-packet one-way delay: 20.885 ms
Loss rate: 52.50%
```

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

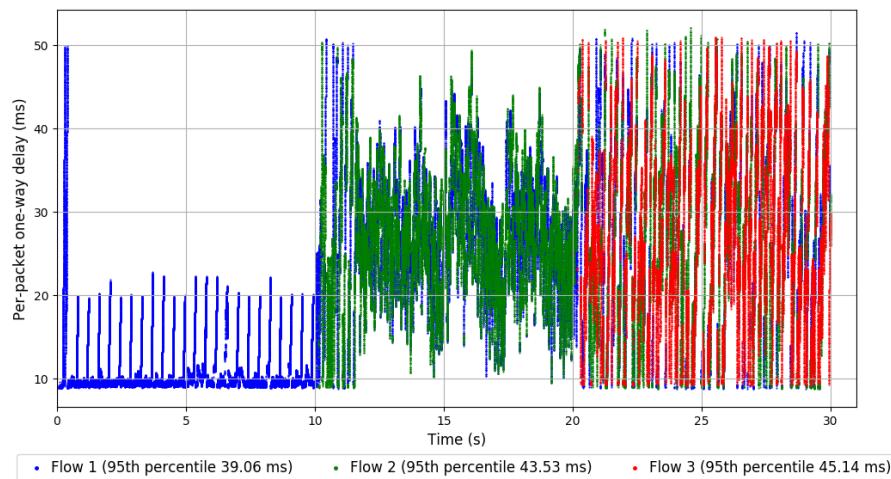
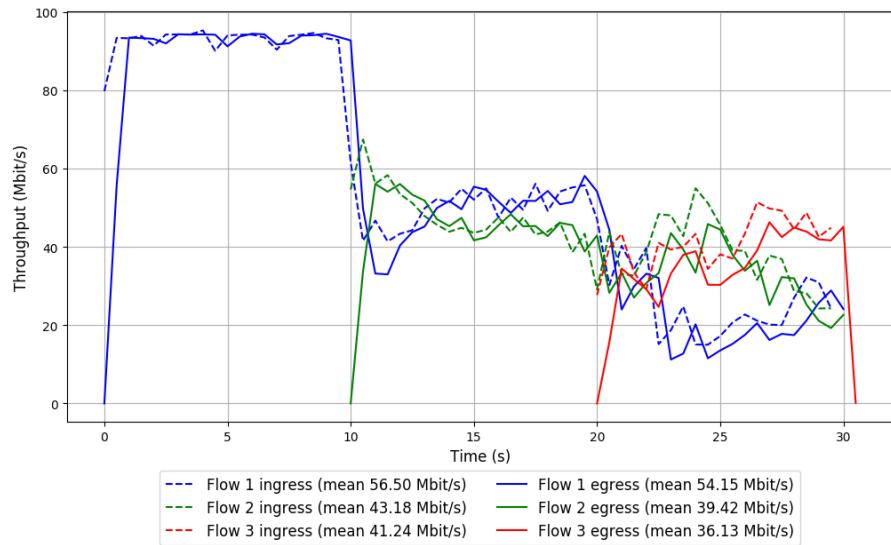


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-06-27 07:42:49
End at: 2019-06-27 07:43:19
Local clock offset: -0.752 ms
Remote clock offset: 2.32 ms

# Below is generated by plot.py at 2019-06-27 09:51:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.36 Mbit/s
95th percentile per-packet one-way delay: 42.010 ms
Loss rate: 6.56%
-- Flow 1:
Average throughput: 54.15 Mbit/s
95th percentile per-packet one-way delay: 39.056 ms
Loss rate: 4.09%
-- Flow 2:
Average throughput: 39.42 Mbit/s
95th percentile per-packet one-way delay: 43.529 ms
Loss rate: 8.63%
-- Flow 3:
Average throughput: 36.13 Mbit/s
95th percentile per-packet one-way delay: 45.136 ms
Loss rate: 12.38%
```

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

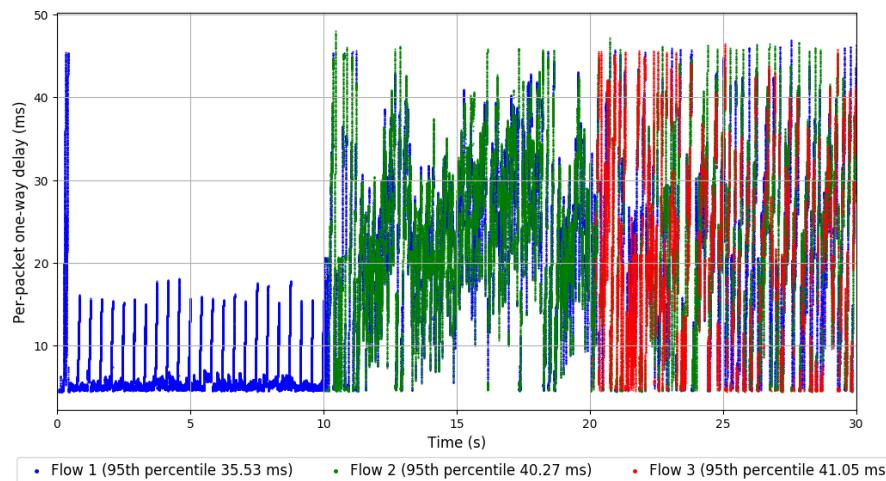
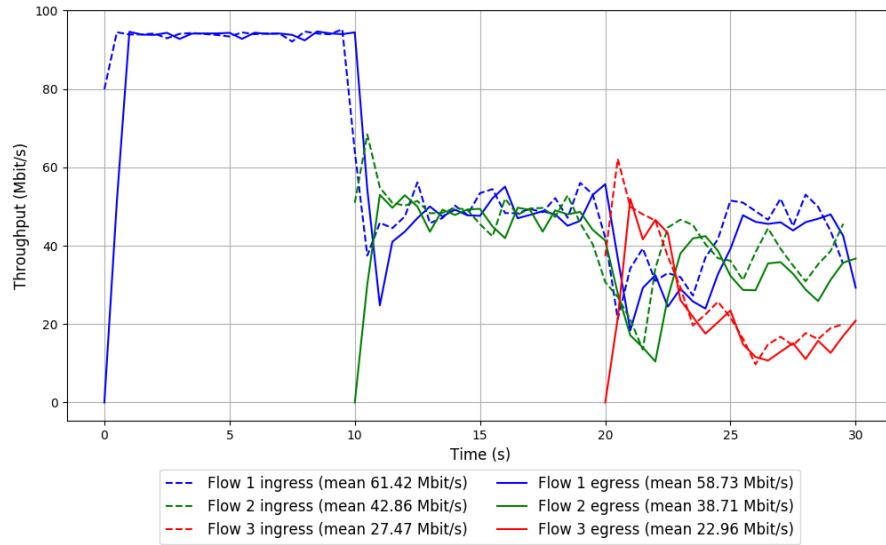


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-06-27 08:09:04
End at: 2019-06-27 08:09:34
Local clock offset: 0.524 ms
Remote clock offset: 0.858 ms

# Below is generated by plot.py at 2019-06-27 09:51:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.10 Mbit/s
95th percentile per-packet one-way delay: 38.246 ms
Loss rate: 6.91%
-- Flow 1:
Average throughput: 58.73 Mbit/s
95th percentile per-packet one-way delay: 35.531 ms
Loss rate: 4.25%
-- Flow 2:
Average throughput: 38.71 Mbit/s
95th percentile per-packet one-way delay: 40.273 ms
Loss rate: 9.69%
-- Flow 3:
Average throughput: 22.96 Mbit/s
95th percentile per-packet one-way delay: 41.050 ms
Loss rate: 16.14%
```

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

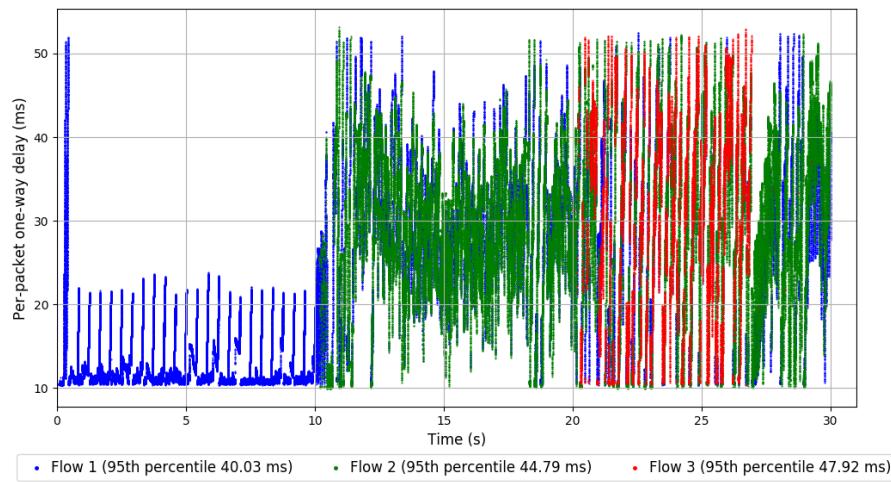
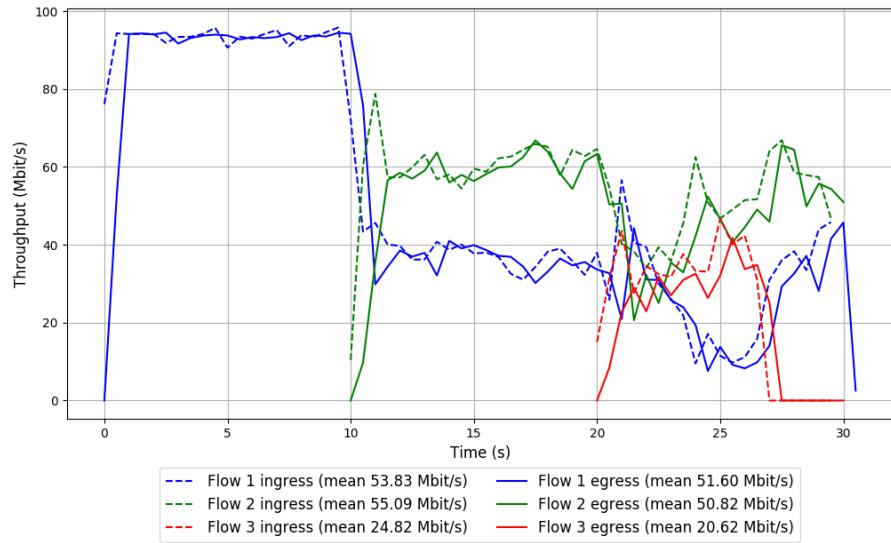


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-06-27 08:35:27
End at: 2019-06-27 08:35:57
Local clock offset: -0.254 ms
Remote clock offset: 4.754 ms

# Below is generated by plot.py at 2019-06-27 09:51:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.07 Mbit/s
95th percentile per-packet one-way delay: 43.495 ms
Loss rate: 6.44%
-- Flow 1:
Average throughput: 51.60 Mbit/s
95th percentile per-packet one-way delay: 40.028 ms
Loss rate: 4.06%
-- Flow 2:
Average throughput: 50.82 Mbit/s
95th percentile per-packet one-way delay: 44.789 ms
Loss rate: 7.64%
-- Flow 3:
Average throughput: 20.62 Mbit/s
95th percentile per-packet one-way delay: 47.922 ms
Loss rate: 16.94%
```

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

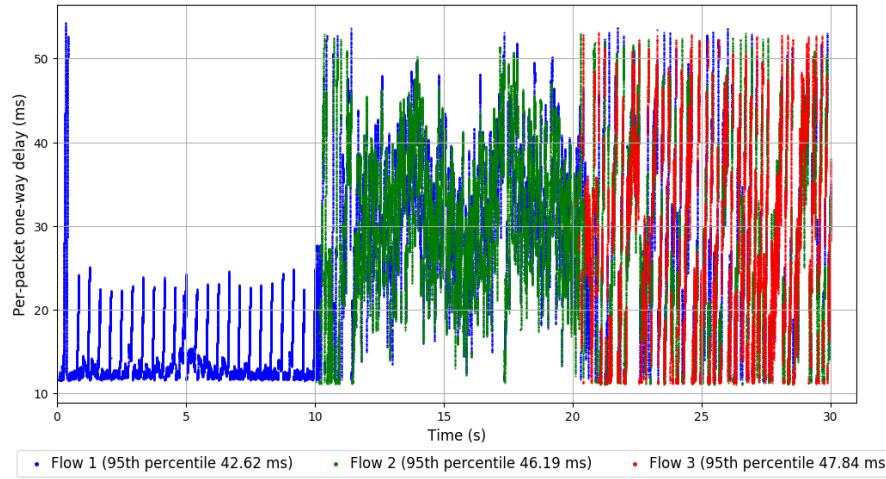
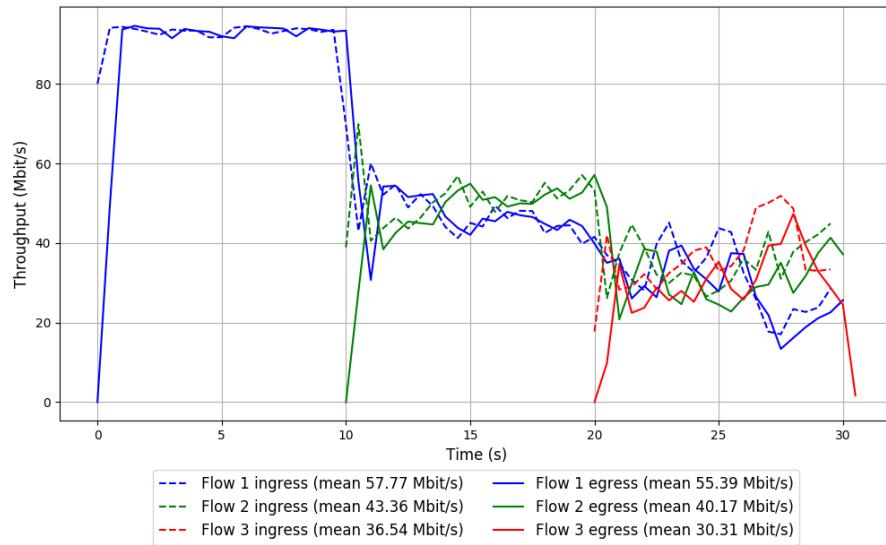


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-06-27 09:01:14
End at: 2019-06-27 09:01:44
Local clock offset: -1.067 ms
Remote clock offset: 6.042 ms

# Below is generated by plot.py at 2019-06-27 09:52:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.16 Mbit/s
95th percentile per-packet one-way delay: 44.948 ms
Loss rate: 6.58%
-- Flow 1:
Average throughput: 55.39 Mbit/s
95th percentile per-packet one-way delay: 42.620 ms
Loss rate: 4.05%
-- Flow 2:
Average throughput: 40.17 Mbit/s
95th percentile per-packet one-way delay: 46.185 ms
Loss rate: 7.26%
-- Flow 3:
Average throughput: 30.31 Mbit/s
95th percentile per-packet one-way delay: 47.835 ms
Loss rate: 17.02%
```

Run 4: Report of FillP-Sheep — Data Link

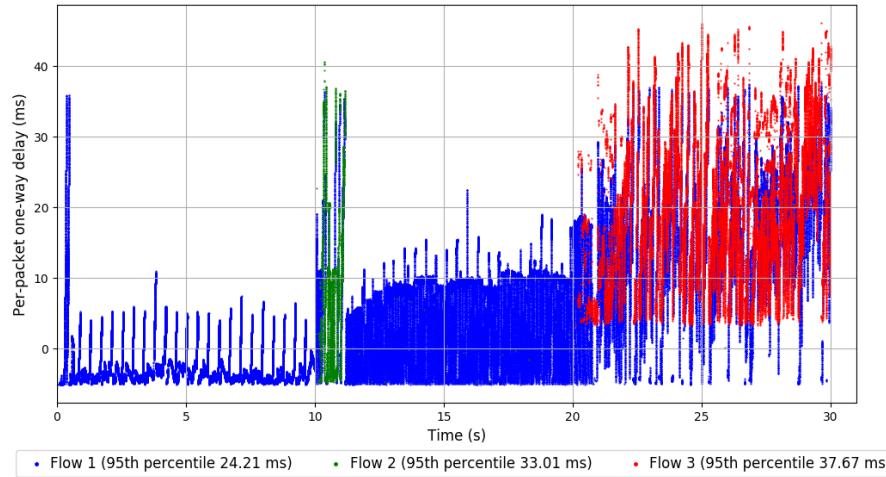
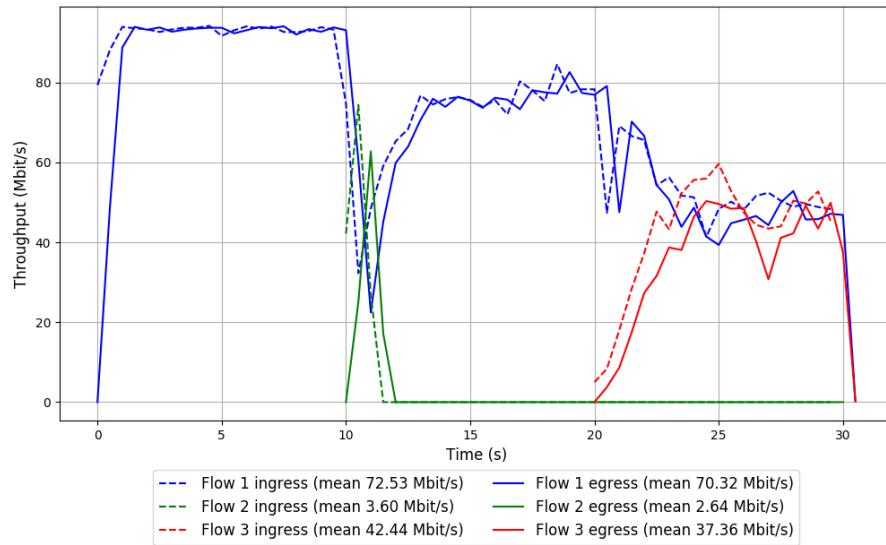


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-06-27 09:27:39
End at: 2019-06-27 09:28:09
Local clock offset: -0.638 ms
Remote clock offset: -13.208 ms

# Below is generated by plot.py at 2019-06-27 09:52:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.46 Mbit/s
95th percentile per-packet one-way delay: 28.946 ms
Loss rate: 4.94%
-- Flow 1:
Average throughput: 70.32 Mbit/s
95th percentile per-packet one-way delay: 24.215 ms
Loss rate: 2.92%
-- Flow 2:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 33.012 ms
Loss rate: 26.71%
-- Flow 3:
Average throughput: 37.36 Mbit/s
95th percentile per-packet one-way delay: 37.673 ms
Loss rate: 11.66%
```

Run 5: Report of FillP-Sheep — Data Link

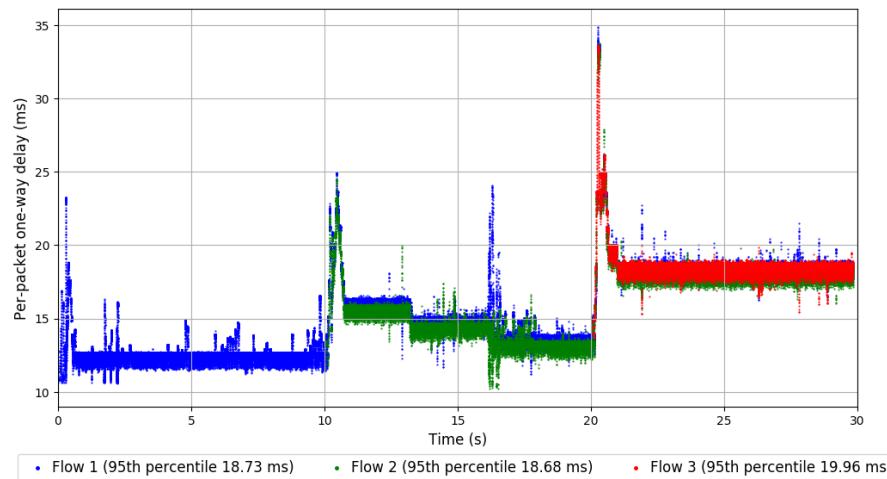
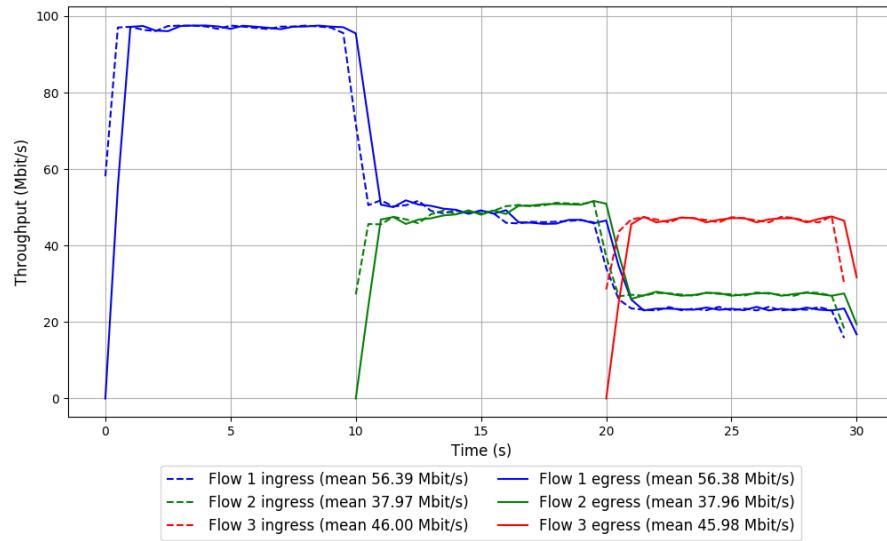


Run 1: Statistics of Indigo

```
Start at: 2019-06-27 07:39:23
End at: 2019-06-27 07:39:53
Local clock offset: -1.526 ms
Remote clock offset: 2.526 ms

# Below is generated by plot.py at 2019-06-27 09:52:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.62 Mbit/s
95th percentile per-packet one-way delay: 18.778 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.38 Mbit/s
95th percentile per-packet one-way delay: 18.731 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.96 Mbit/s
95th percentile per-packet one-way delay: 18.678 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.98 Mbit/s
95th percentile per-packet one-way delay: 19.960 ms
Loss rate: 0.00%
```

## Run 1: Report of Indigo — Data Link

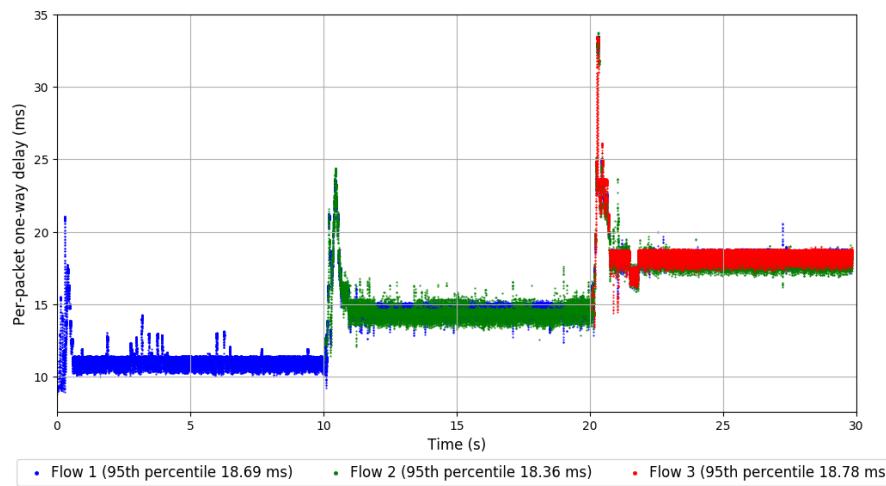
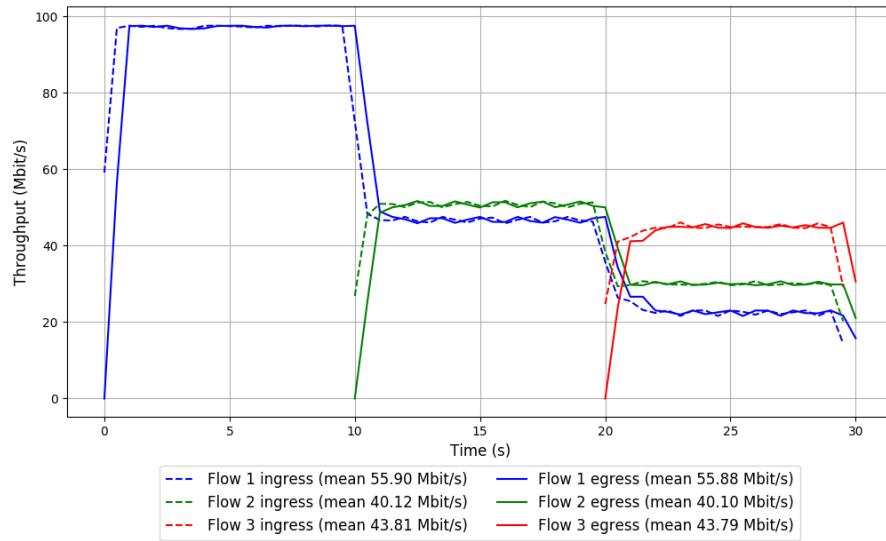


Run 2: Statistics of Indigo

```
Start at: 2019-06-27 08:05:34
End at: 2019-06-27 08:06:04
Local clock offset: 0.41 ms
Remote clock offset: 5.156 ms

# Below is generated by plot.py at 2019-06-27 09:52:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.80 Mbit/s
95th percentile per-packet one-way delay: 18.724 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.88 Mbit/s
95th percentile per-packet one-way delay: 18.688 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.10 Mbit/s
95th percentile per-packet one-way delay: 18.365 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 43.79 Mbit/s
95th percentile per-packet one-way delay: 18.778 ms
Loss rate: 0.00%
```

## Run 2: Report of Indigo — Data Link

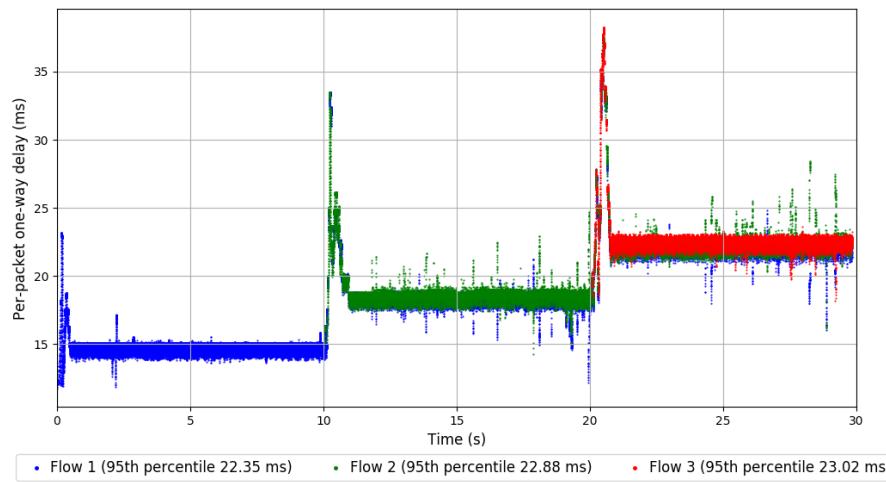
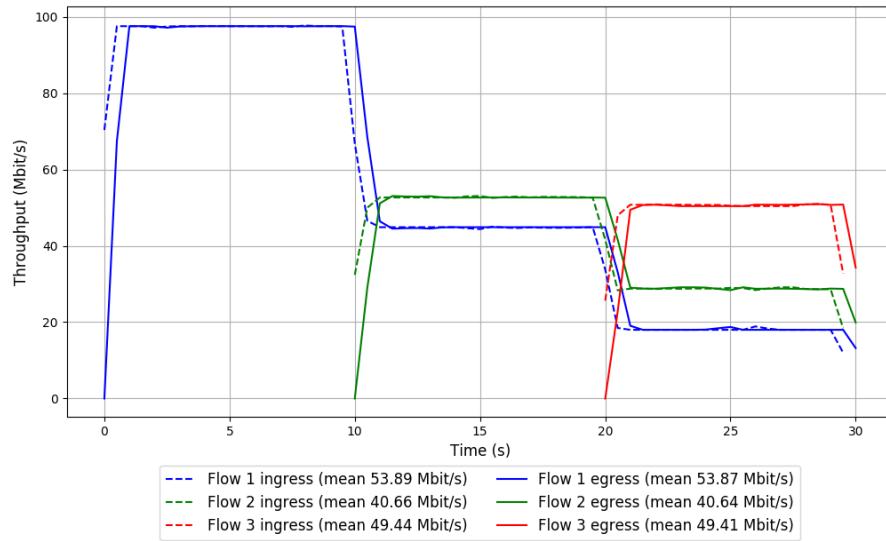


Run 3: Statistics of Indigo

```
Start at: 2019-06-27 08:31:57
End at: 2019-06-27 08:32:27
Local clock offset: -0.744 ms
Remote clock offset: 6.125 ms

# Below is generated by plot.py at 2019-06-27 09:52:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.05 Mbit/s
95th percentile per-packet one-way delay: 22.837 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.87 Mbit/s
95th percentile per-packet one-way delay: 22.346 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 22.876 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.41 Mbit/s
95th percentile per-packet one-way delay: 23.021 ms
Loss rate: 0.00%
```

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

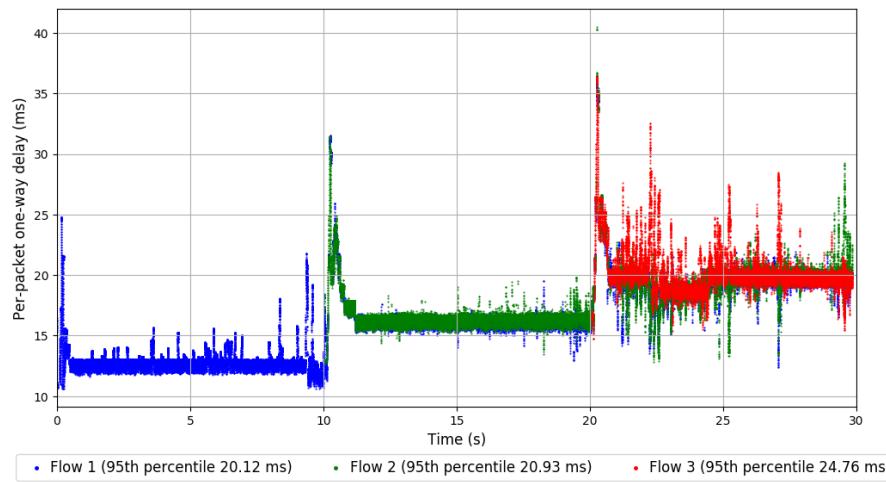
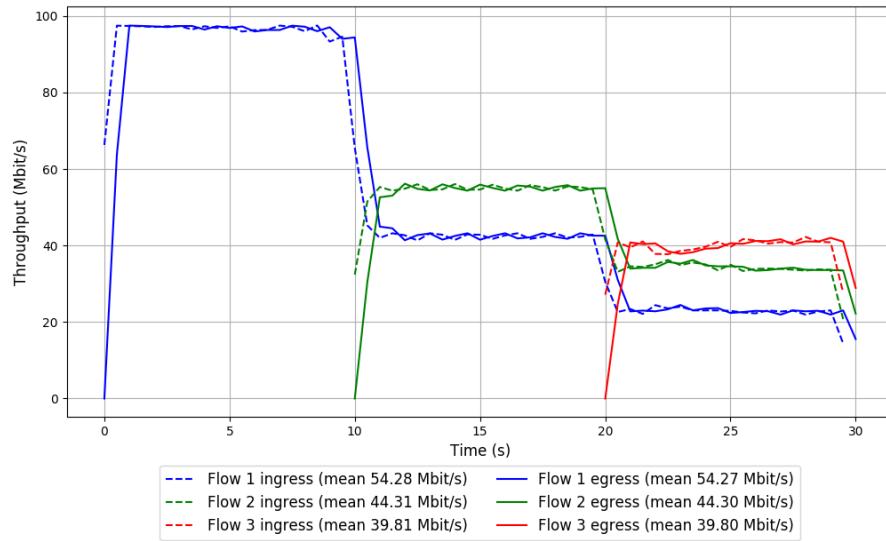


Run 4: Statistics of Indigo

```
Start at: 2019-06-27 08:57:47
End at: 2019-06-27 08:58:17
Local clock offset: -1.062 ms
Remote clock offset: 4.707 ms

# Below is generated by plot.py at 2019-06-27 09:52:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.72 Mbit/s
95th percentile per-packet one-way delay: 20.899 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.27 Mbit/s
95th percentile per-packet one-way delay: 20.123 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.30 Mbit/s
95th percentile per-packet one-way delay: 20.930 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.80 Mbit/s
95th percentile per-packet one-way delay: 24.761 ms
Loss rate: 0.00%
```

## Run 4: Report of Indigo — Data Link

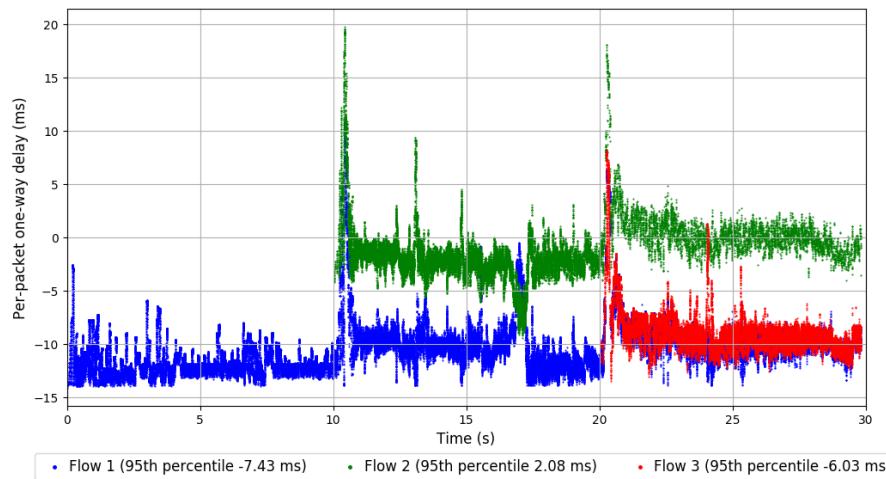
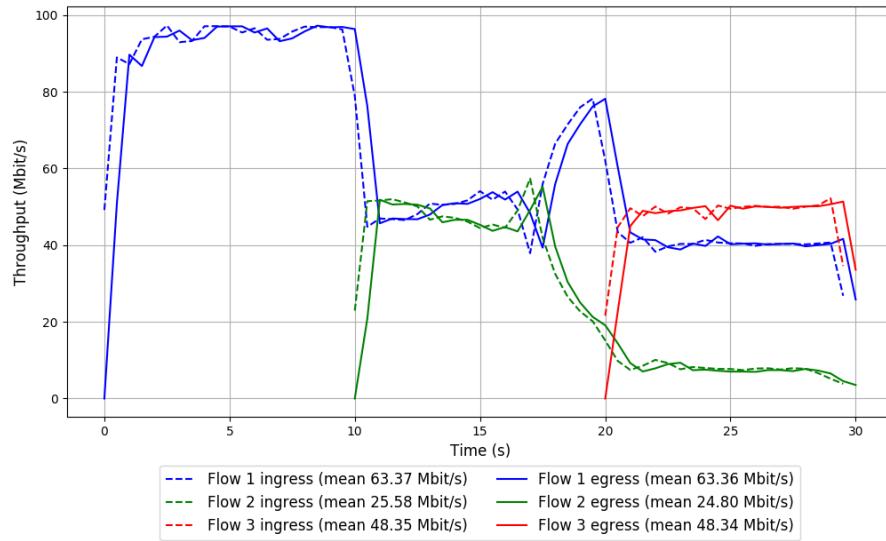


Run 5: Statistics of Indigo

```
Start at: 2019-06-27 09:24:09
End at: 2019-06-27 09:24:39
Local clock offset: -0.118 ms
Remote clock offset: -21.517 ms

# Below is generated by plot.py at 2019-06-27 09:52:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.65 Mbit/s
95th percentile per-packet one-way delay: -0.839 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 63.36 Mbit/s
95th percentile per-packet one-way delay: -7.426 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.80 Mbit/s
95th percentile per-packet one-way delay: 2.078 ms
Loss rate: 3.02%
-- Flow 3:
Average throughput: 48.34 Mbit/s
95th percentile per-packet one-way delay: -6.025 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo — Data Link

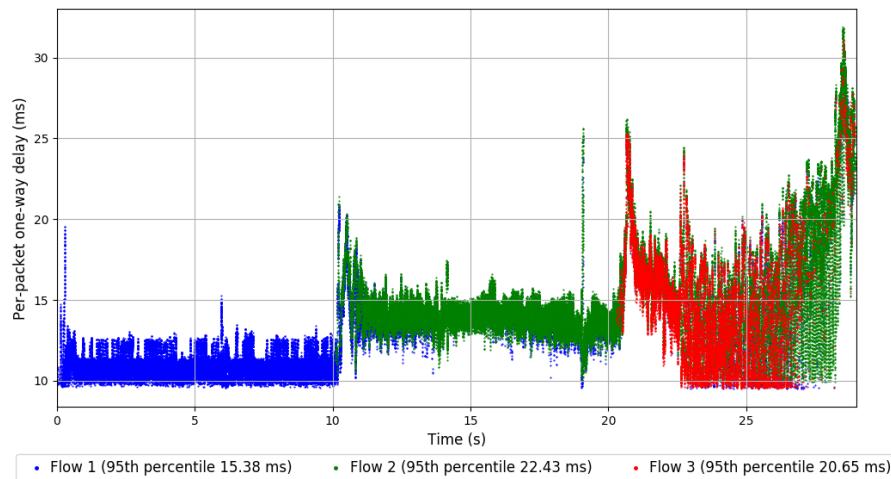
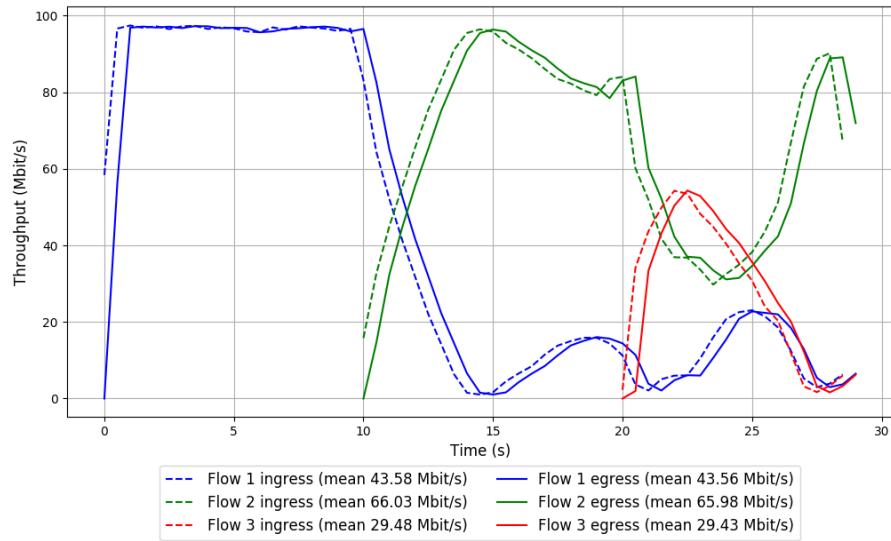


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 07:51:20
End at: 2019-06-27 07:51:50
Local clock offset: -0.587 ms
Remote clock offset: 4.108 ms

# Below is generated by plot.py at 2019-06-27 09:52:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.37 Mbit/s
95th percentile per-packet one-way delay: 20.125 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.56 Mbit/s
95th percentile per-packet one-way delay: 15.377 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 65.98 Mbit/s
95th percentile per-packet one-way delay: 22.428 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.43 Mbit/s
95th percentile per-packet one-way delay: 20.653 ms
Loss rate: 0.00%
```

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

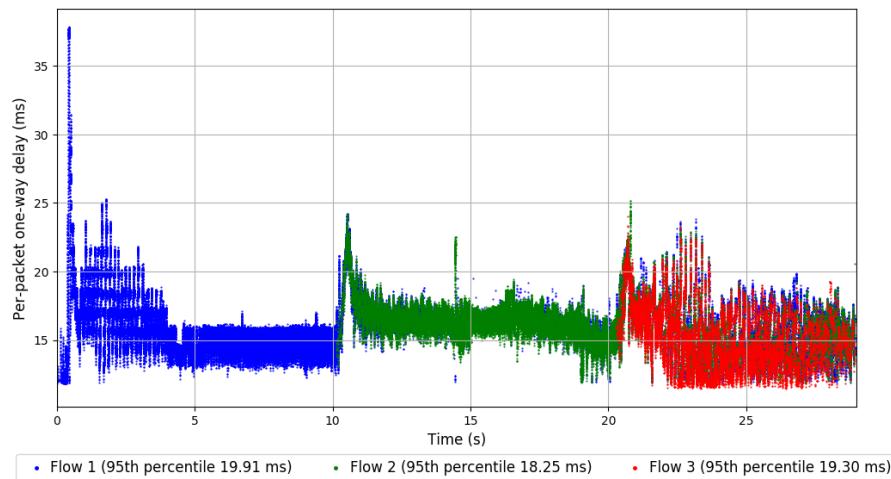
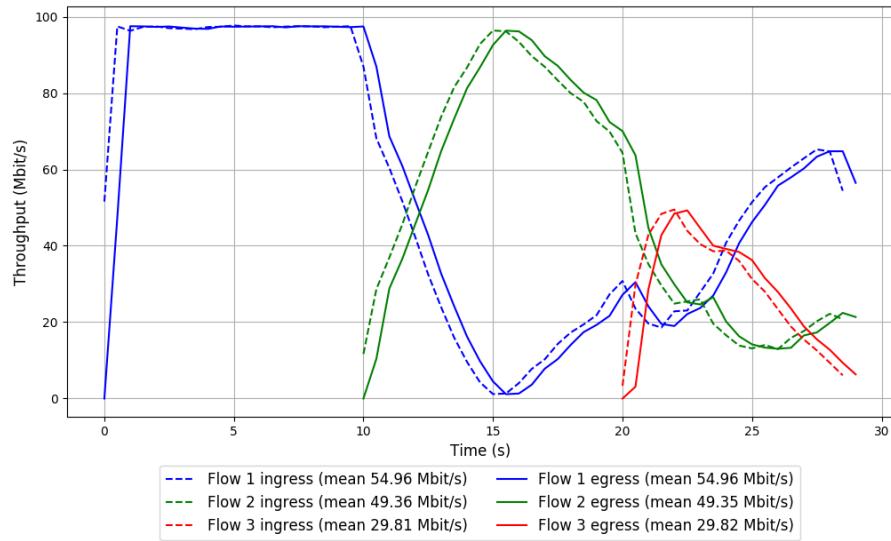


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 08:17:34
End at: 2019-06-27 08:18:04
Local clock offset: -0.835 ms
Remote clock offset: 6.076 ms

# Below is generated by plot.py at 2019-06-27 09:53:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 19.443 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.96 Mbit/s
95th percentile per-packet one-way delay: 19.906 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.35 Mbit/s
95th percentile per-packet one-way delay: 18.254 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.82 Mbit/s
95th percentile per-packet one-way delay: 19.301 ms
Loss rate: 0.00%
```

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

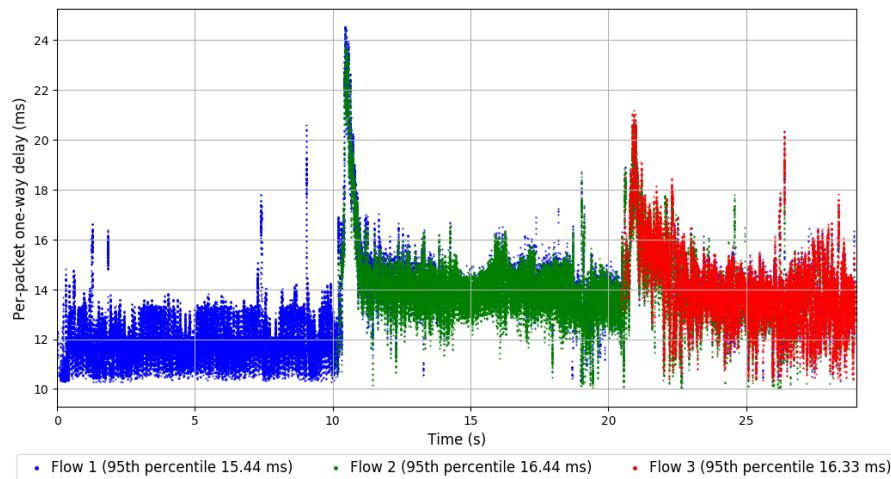
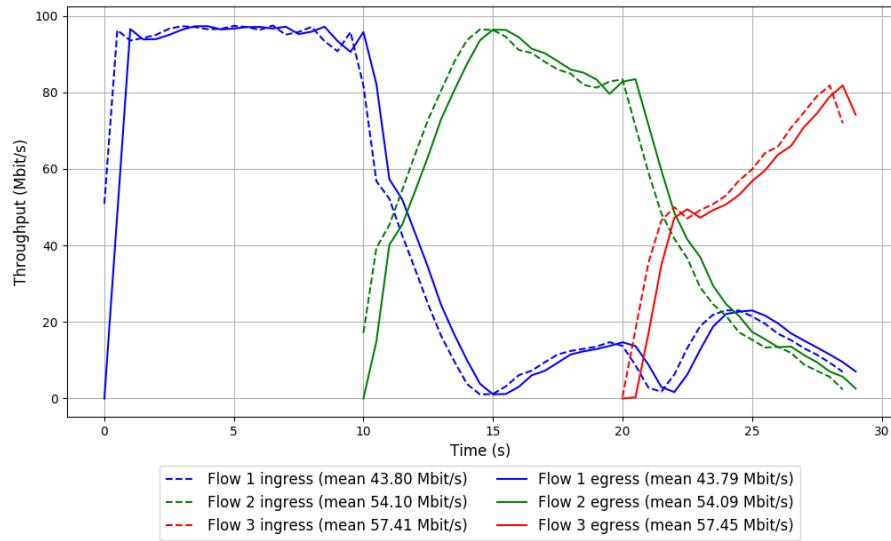


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 08:43:47
End at: 2019-06-27 08:44:17
Local clock offset: -0.268 ms
Remote clock offset: 3.984 ms

# Below is generated by plot.py at 2019-06-27 09:53:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.92 Mbit/s
95th percentile per-packet one-way delay: 16.051 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.79 Mbit/s
95th percentile per-packet one-way delay: 15.440 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 54.09 Mbit/s
95th percentile per-packet one-way delay: 16.440 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 57.45 Mbit/s
95th percentile per-packet one-way delay: 16.326 ms
Loss rate: 0.00%
```

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

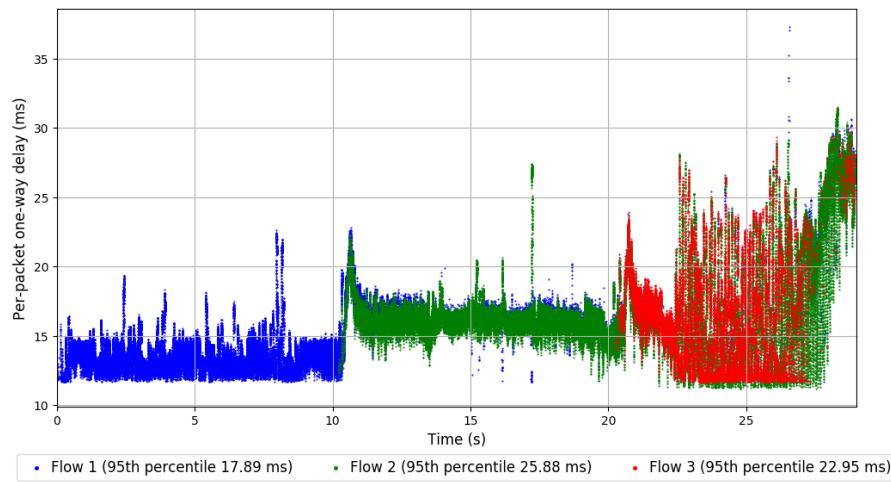
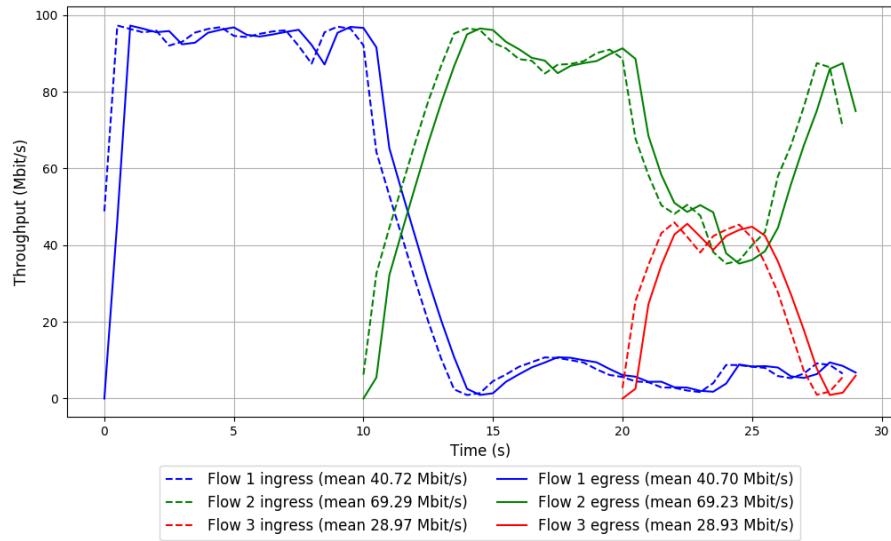


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 09:09:35
End at: 2019-06-27 09:10:05
Local clock offset: -1.842 ms
Remote clock offset: 5.714 ms

# Below is generated by plot.py at 2019-06-27 09:53:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.21 Mbit/s
95th percentile per-packet one-way delay: 23.162 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.70 Mbit/s
95th percentile per-packet one-way delay: 17.894 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 69.23 Mbit/s
95th percentile per-packet one-way delay: 25.875 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.93 Mbit/s
95th percentile per-packet one-way delay: 22.950 ms
Loss rate: 0.00%
```

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

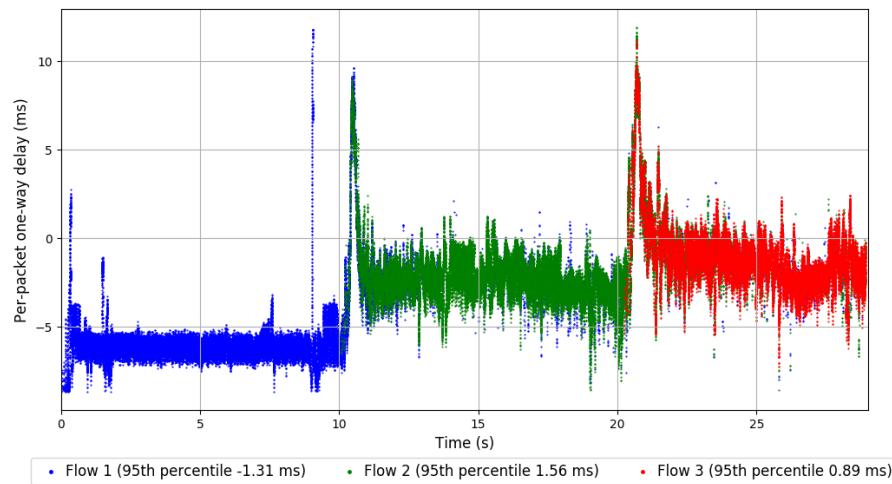
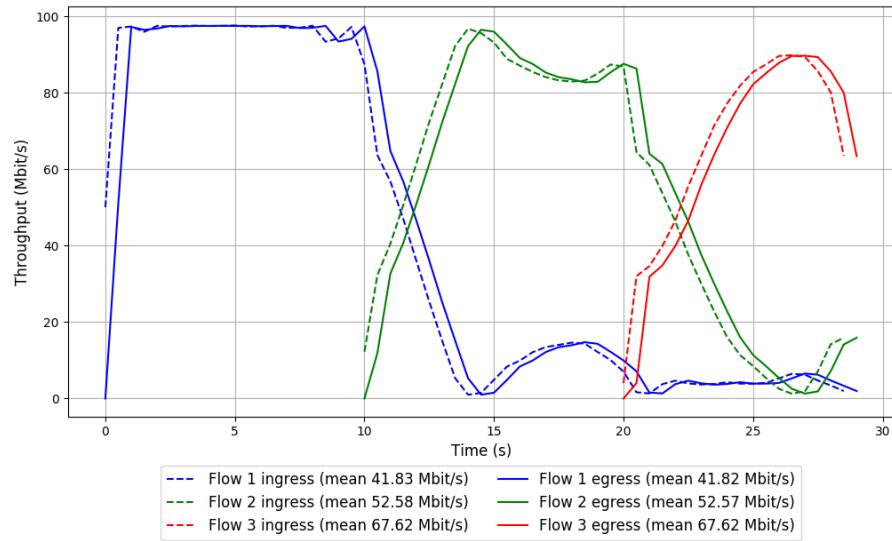


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-06-27 09:36:07
End at: 2019-06-27 09:36:37
Local clock offset: -0.915 ms
Remote clock offset: -17.2 ms

# Below is generated by plot.py at 2019-06-27 09:53:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.47 Mbit/s
95th percentile per-packet one-way delay: 0.472 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.82 Mbit/s
95th percentile per-packet one-way delay: -1.314 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 52.57 Mbit/s
95th percentile per-packet one-way delay: 1.562 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 67.62 Mbit/s
95th percentile per-packet one-way delay: 0.885 ms
Loss rate: 0.00%
```

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

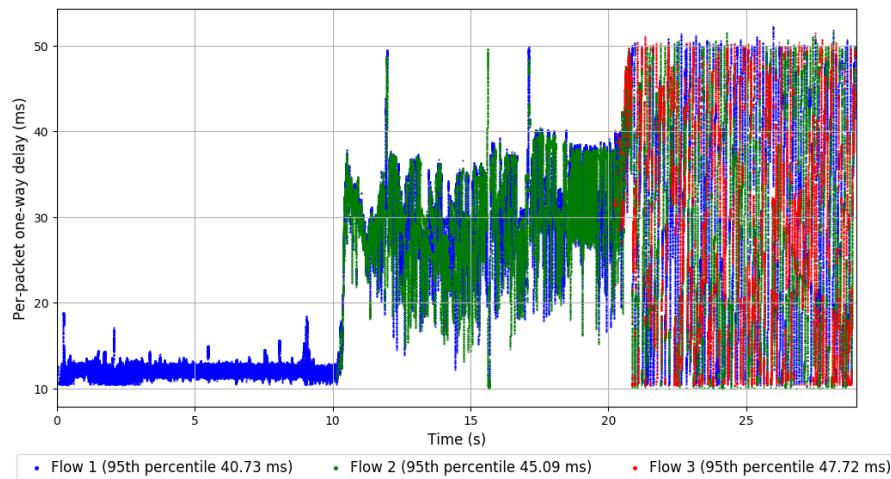
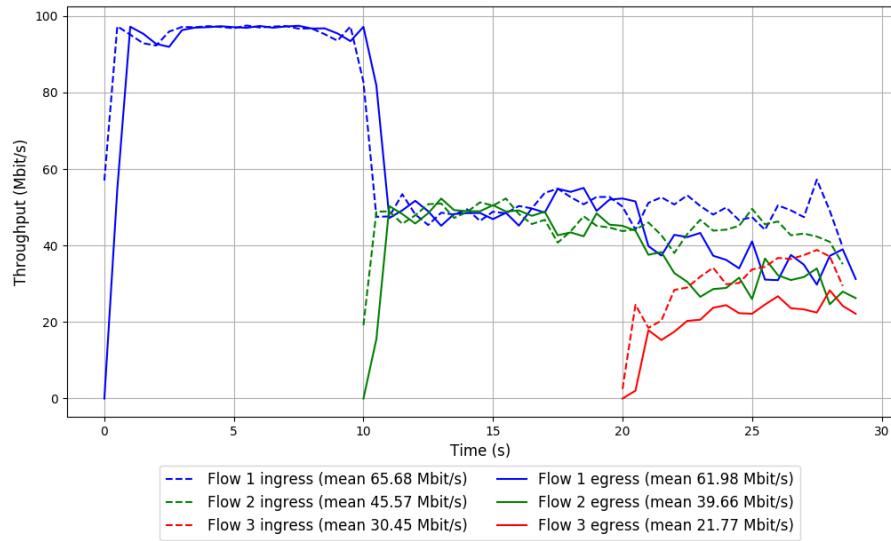


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 07:56:06
End at: 2019-06-27 07:56:36
Local clock offset: -0.267 ms
Remote clock offset: 5.381 ms

# Below is generated by plot.py at 2019-06-27 09:53:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.32 Mbit/s
95th percentile per-packet one-way delay: 43.800 ms
Loss rate: 9.66%
-- Flow 1:
Average throughput: 61.98 Mbit/s
95th percentile per-packet one-way delay: 40.727 ms
Loss rate: 5.60%
-- Flow 2:
Average throughput: 39.66 Mbit/s
95th percentile per-packet one-way delay: 45.095 ms
Loss rate: 12.79%
-- Flow 3:
Average throughput: 21.77 Mbit/s
95th percentile per-packet one-way delay: 47.721 ms
Loss rate: 28.51%
```

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

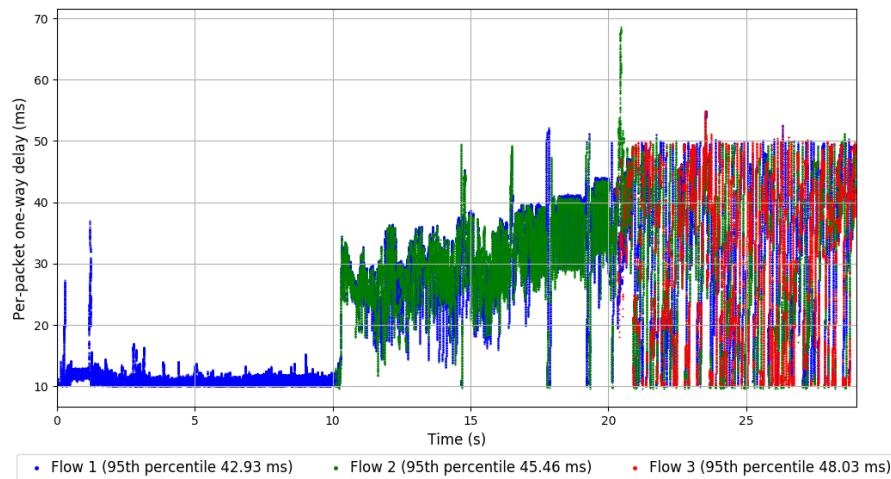
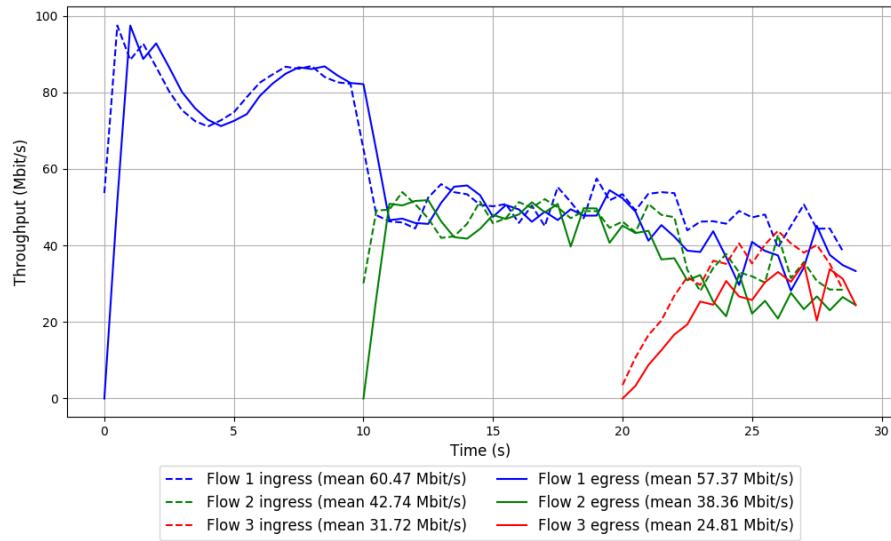


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 08:22:21
End at: 2019-06-27 08:22:51
Local clock offset: 0.48 ms
Remote clock offset: 5.365 ms

# Below is generated by plot.py at 2019-06-27 09:53:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.84 Mbit/s
95th percentile per-packet one-way delay: 44.684 ms
Loss rate: 8.09%
-- Flow 1:
Average throughput: 57.37 Mbit/s
95th percentile per-packet one-way delay: 42.929 ms
Loss rate: 5.02%
-- Flow 2:
Average throughput: 38.36 Mbit/s
95th percentile per-packet one-way delay: 45.459 ms
Loss rate: 10.08%
-- Flow 3:
Average throughput: 24.81 Mbit/s
95th percentile per-packet one-way delay: 48.028 ms
Loss rate: 21.74%
```

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

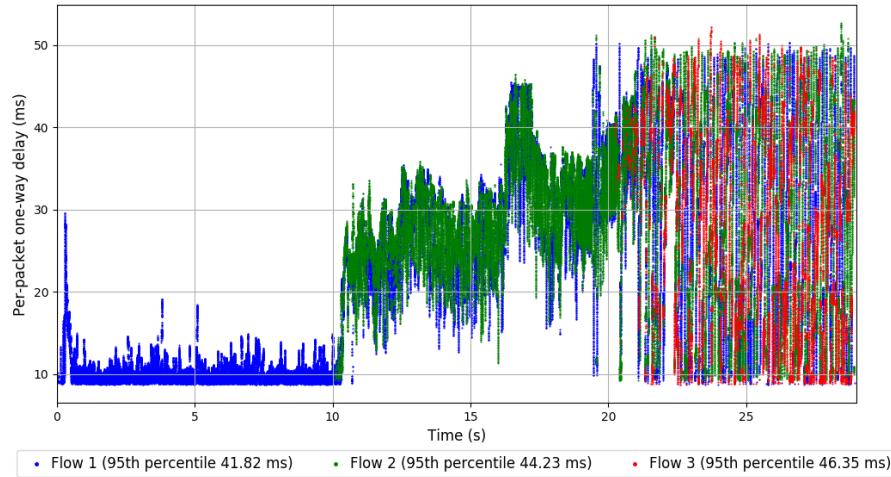
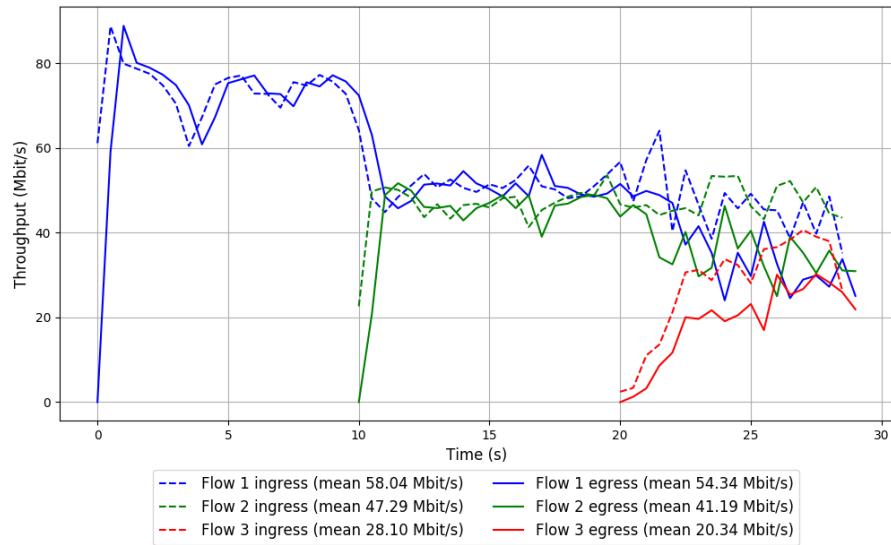


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 08:48:31
End at: 2019-06-27 08:49:01
Local clock offset: 1.078 ms
Remote clock offset: 3.969 ms

# Below is generated by plot.py at 2019-06-27 09:54:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.31 Mbit/s
95th percentile per-packet one-way delay: 43.352 ms
Loss rate: 10.33%
-- Flow 1:
Average throughput: 54.34 Mbit/s
95th percentile per-packet one-way delay: 41.819 ms
Loss rate: 6.39%
-- Flow 2:
Average throughput: 41.19 Mbit/s
95th percentile per-packet one-way delay: 44.229 ms
Loss rate: 12.91%
-- Flow 3:
Average throughput: 20.34 Mbit/s
95th percentile per-packet one-way delay: 46.348 ms
Loss rate: 27.89%
```

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

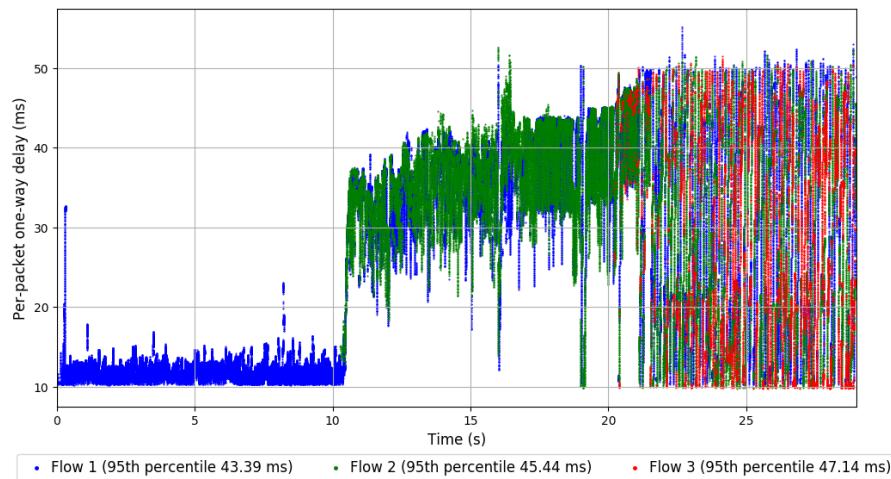
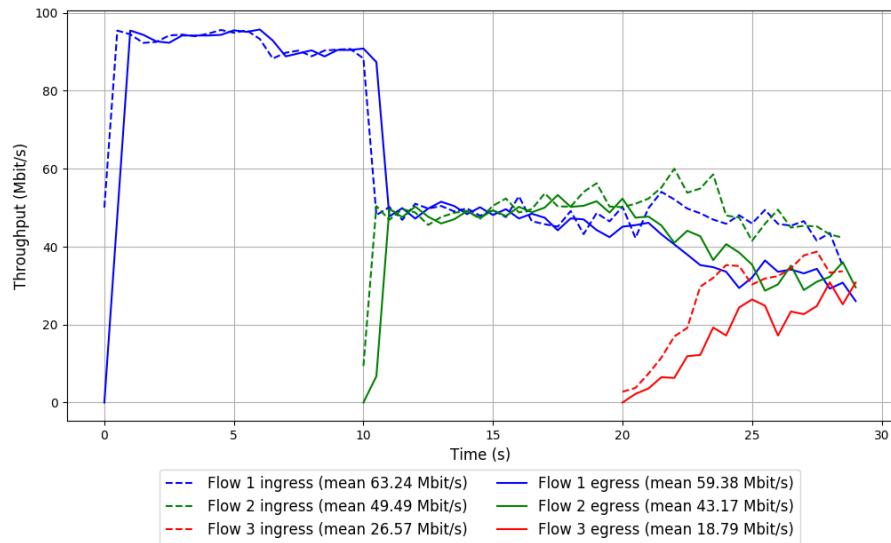


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 09:14:28
End at: 2019-06-27 09:14:58
Local clock offset: -1.374 ms
Remote clock offset: 4.996 ms

# Below is generated by plot.py at 2019-06-27 09:54:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.93 Mbit/s
95th percentile per-packet one-way delay: 44.651 ms
Loss rate: 9.86%
-- Flow 1:
Average throughput: 59.38 Mbit/s
95th percentile per-packet one-way delay: 43.392 ms
Loss rate: 6.01%
-- Flow 2:
Average throughput: 43.17 Mbit/s
95th percentile per-packet one-way delay: 45.439 ms
Loss rate: 12.60%
-- Flow 3:
Average throughput: 18.79 Mbit/s
95th percentile per-packet one-way delay: 47.136 ms
Loss rate: 29.25%
```

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

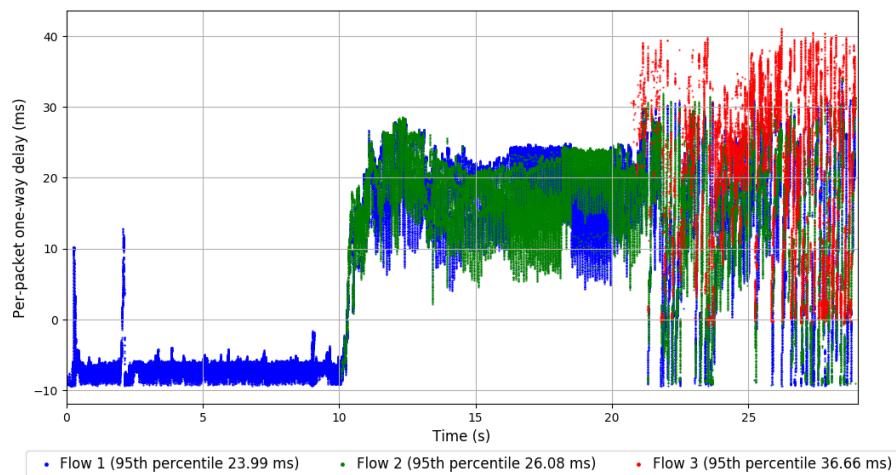
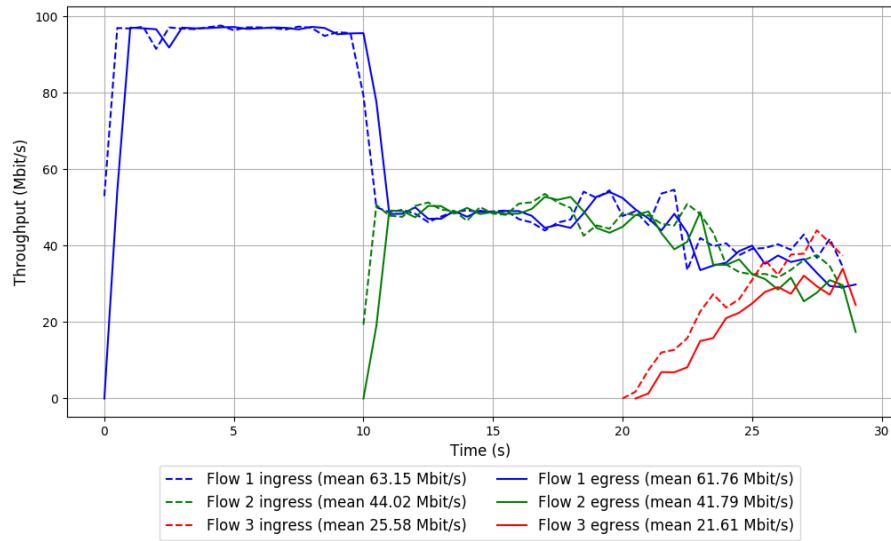


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-06-27 09:40:49
End at: 2019-06-27 09:41:19
Local clock offset: -1.047 ms
Remote clock offset: -18.174 ms

# Below is generated by plot.py at 2019-06-27 09:54:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.15 Mbit/s
95th percentile per-packet one-way delay: 26.341 ms
Loss rate: 4.47%
-- Flow 1:
Average throughput: 61.76 Mbit/s
95th percentile per-packet one-way delay: 23.990 ms
Loss rate: 2.19%
-- Flow 2:
Average throughput: 41.79 Mbit/s
95th percentile per-packet one-way delay: 26.080 ms
Loss rate: 5.08%
-- Flow 3:
Average throughput: 21.61 Mbit/s
95th percentile per-packet one-way delay: 36.661 ms
Loss rate: 20.77%
```

Run 5: Report of Indigo-MusesC5 — Data Link

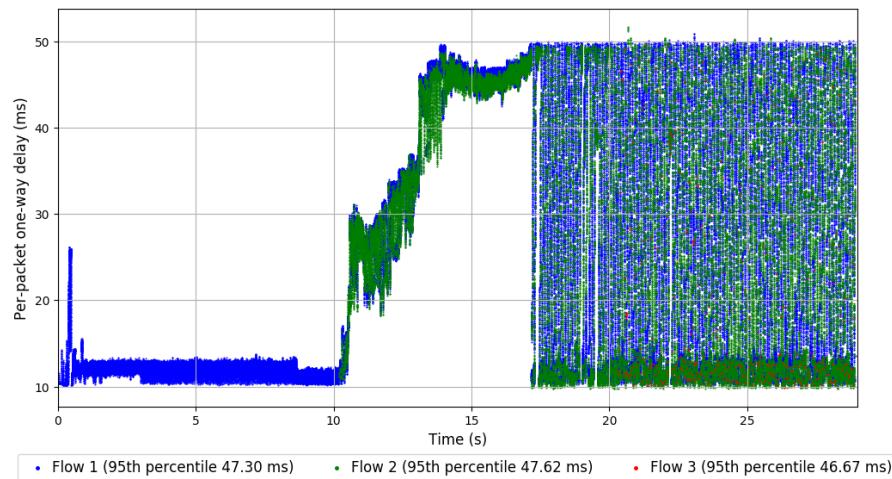
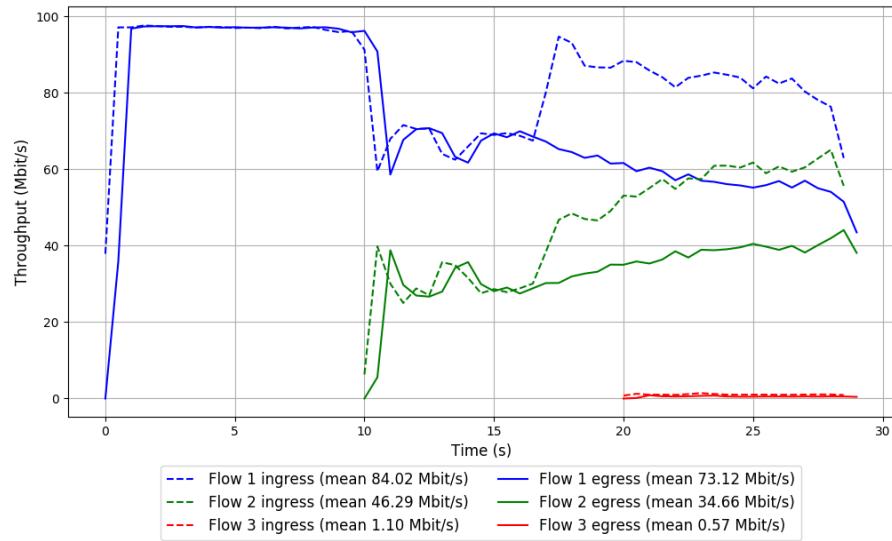


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 08:00:53
End at: 2019-06-27 08:01:23
Local clock offset: -0.11 ms
Remote clock offset: 5.729 ms

# Below is generated by plot.py at 2019-06-27 09:54:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.74 Mbit/s
95th percentile per-packet one-way delay: 47.335 ms
Loss rate: 16.25%
-- Flow 1:
Average throughput: 73.12 Mbit/s
95th percentile per-packet one-way delay: 47.297 ms
Loss rate: 12.96%
-- Flow 2:
Average throughput: 34.66 Mbit/s
95th percentile per-packet one-way delay: 47.617 ms
Loss rate: 25.12%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 46.669 ms
Loss rate: 47.97%
```

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

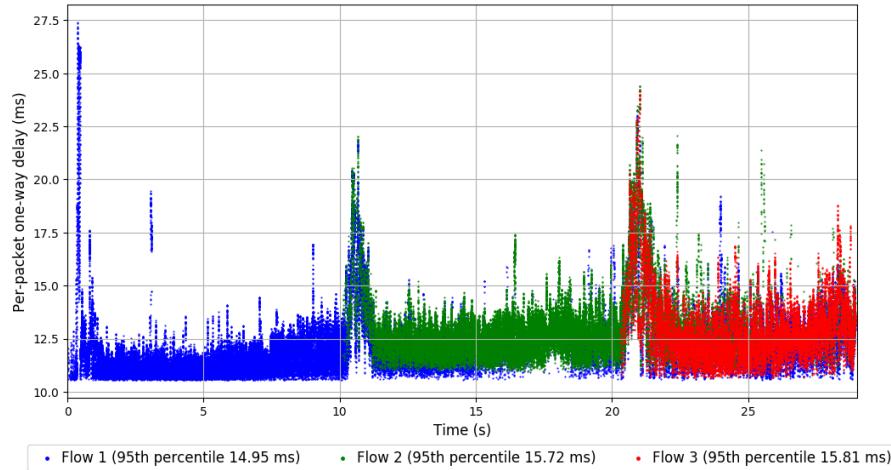
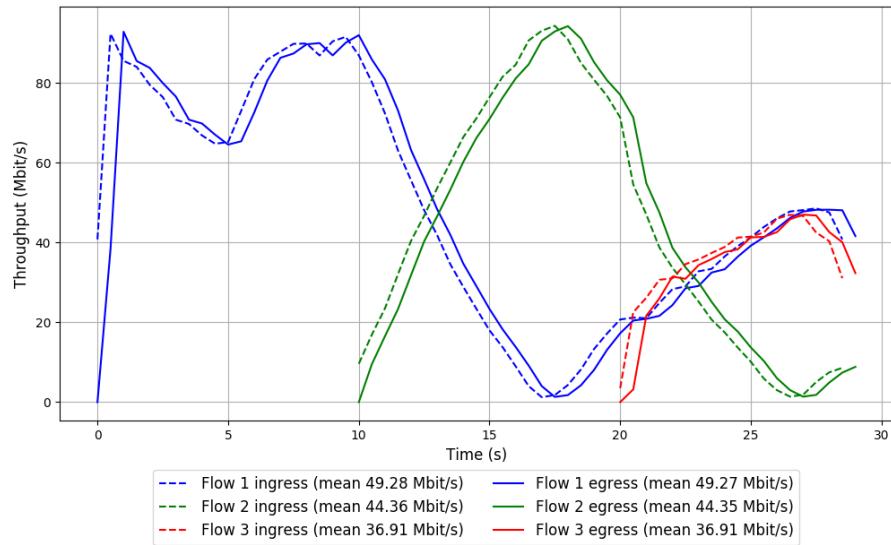


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 08:27:16
End at: 2019-06-27 08:27:46
Local clock offset: 0.671 ms
Remote clock offset: 6.43 ms

# Below is generated by plot.py at 2019-06-27 09:54:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.20 Mbit/s
95th percentile per-packet one-way delay: 15.359 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.27 Mbit/s
95th percentile per-packet one-way delay: 14.946 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.35 Mbit/s
95th percentile per-packet one-way delay: 15.724 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.91 Mbit/s
95th percentile per-packet one-way delay: 15.806 ms
Loss rate: 0.00%
```

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

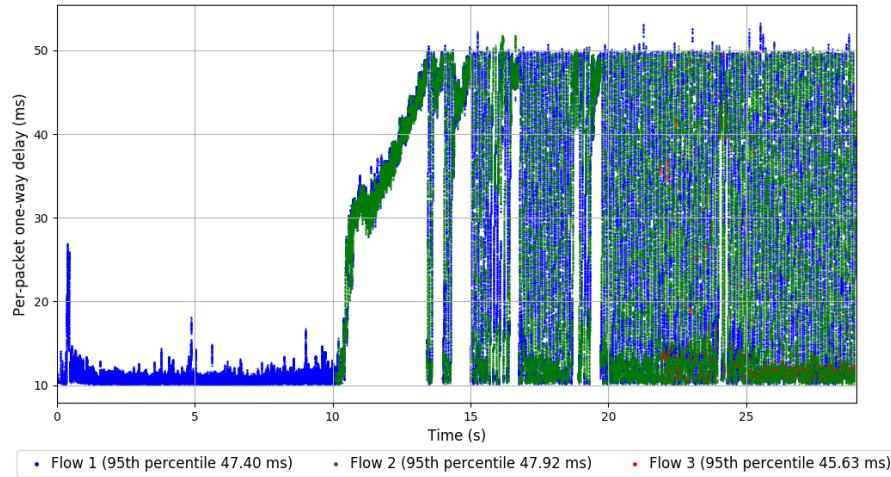
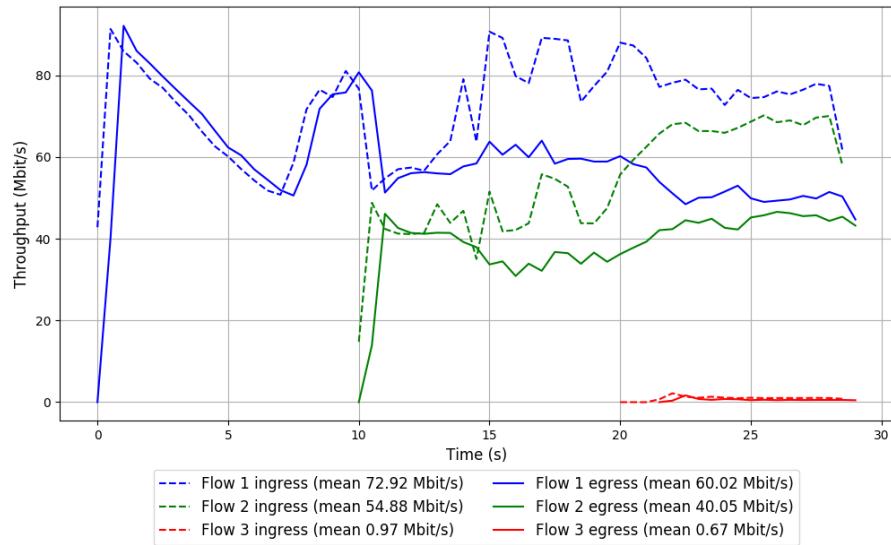


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 08:53:10
End at: 2019-06-27 08:53:40
Local clock offset: -0.003 ms
Remote clock offset: 4.539 ms

# Below is generated by plot.py at 2019-06-27 09:54:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.31 Mbit/s
95th percentile per-packet one-way delay: 47.612 ms
Loss rate: 20.72%
-- Flow 1:
Average throughput: 60.02 Mbit/s
95th percentile per-packet one-way delay: 47.400 ms
Loss rate: 17.60%
-- Flow 2:
Average throughput: 40.05 Mbit/s
95th percentile per-packet one-way delay: 47.916 ms
Loss rate: 26.90%
-- Flow 3:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 45.627 ms
Loss rate: 42.40%
```

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

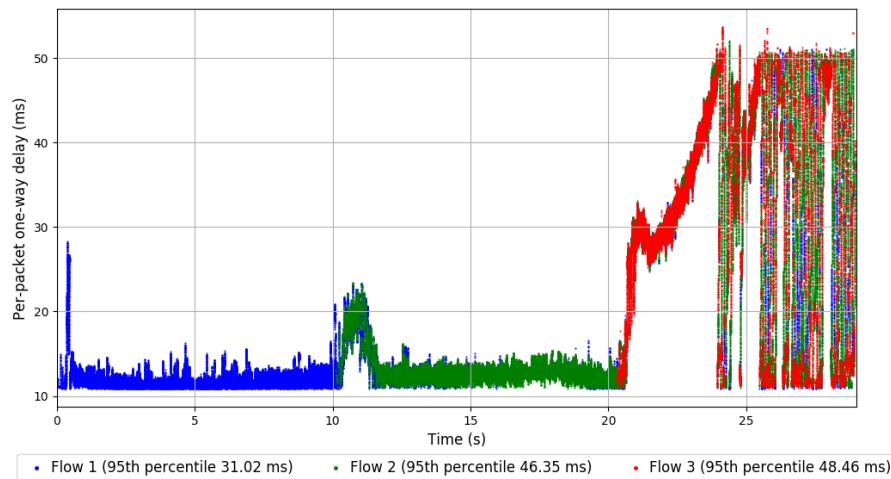
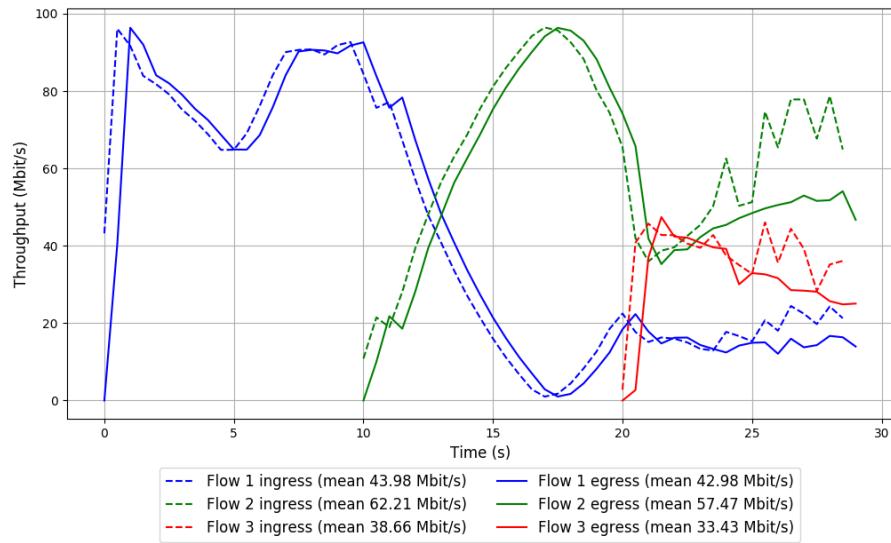


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 09:19:10
End at: 2019-06-27 09:19:40
Local clock offset: -1.293 ms
Remote clock offset: 5.953 ms

# Below is generated by plot.py at 2019-06-27 09:54:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.40 Mbit/s
95th percentile per-packet one-way delay: 44.915 ms
Loss rate: 5.76%
-- Flow 1:
Average throughput: 42.98 Mbit/s
95th percentile per-packet one-way delay: 31.024 ms
Loss rate: 2.18%
-- Flow 2:
Average throughput: 57.47 Mbit/s
95th percentile per-packet one-way delay: 46.347 ms
Loss rate: 7.51%
-- Flow 3:
Average throughput: 33.43 Mbit/s
95th percentile per-packet one-way delay: 48.456 ms
Loss rate: 13.28%
```

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

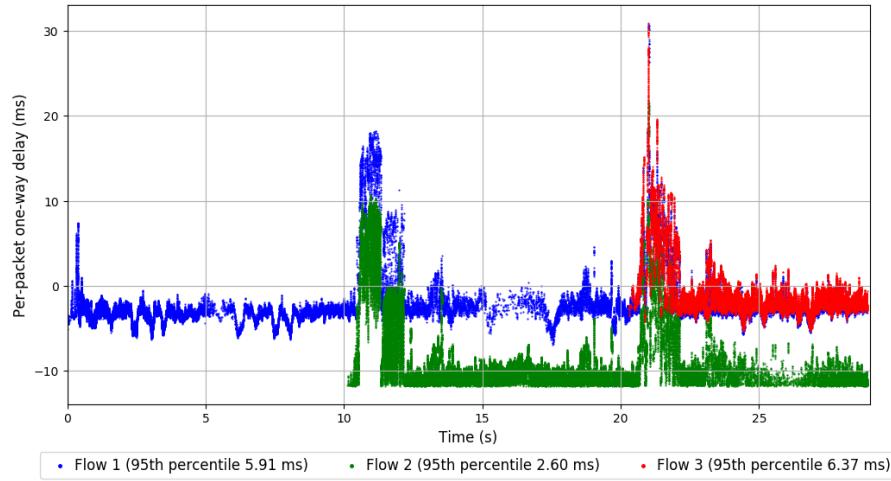
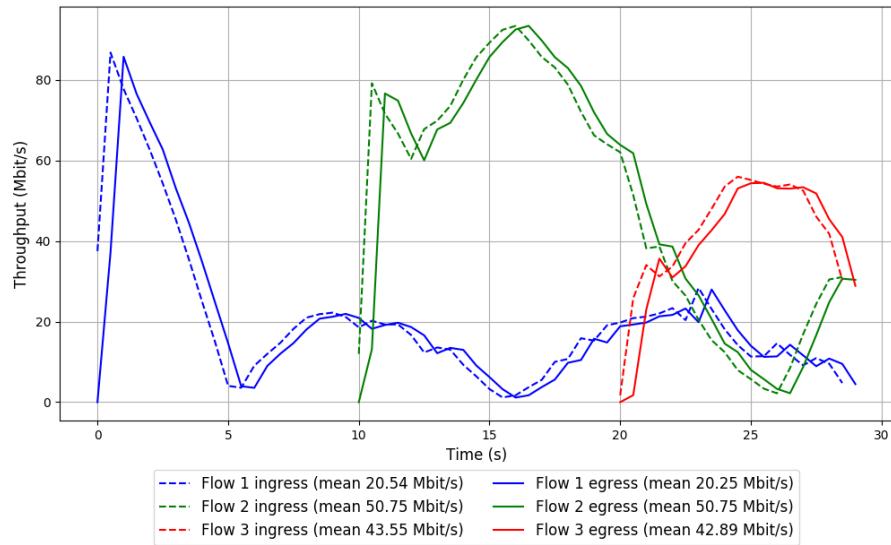


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-06-27 09:45:38
End at: 2019-06-27 09:46:08
Local clock offset: -0.783 ms
Remote clock offset: -20.314 ms

# Below is generated by plot.py at 2019-06-27 09:54:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.04 Mbit/s
95th percentile per-packet one-way delay: 4.550 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 20.25 Mbit/s
95th percentile per-packet one-way delay: 5.906 ms
Loss rate: 1.42%
-- Flow 2:
Average throughput: 50.75 Mbit/s
95th percentile per-packet one-way delay: 2.603 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 42.89 Mbit/s
95th percentile per-packet one-way delay: 6.368 ms
Loss rate: 1.57%
```

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

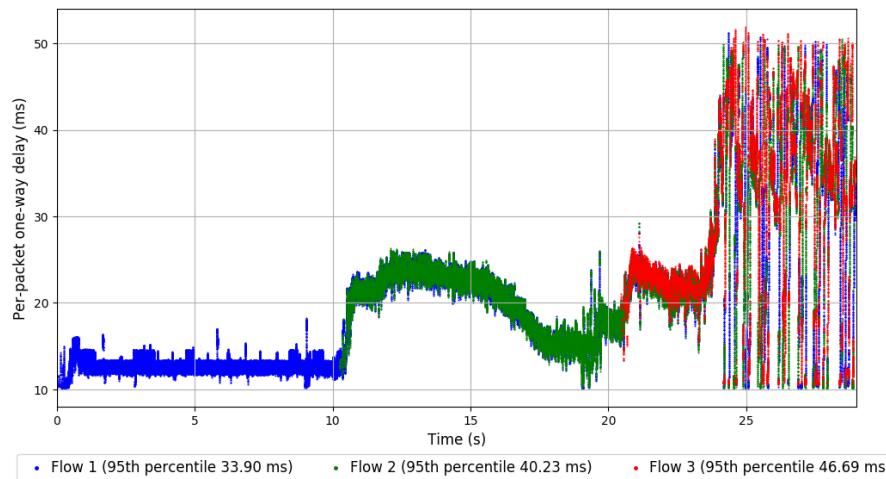
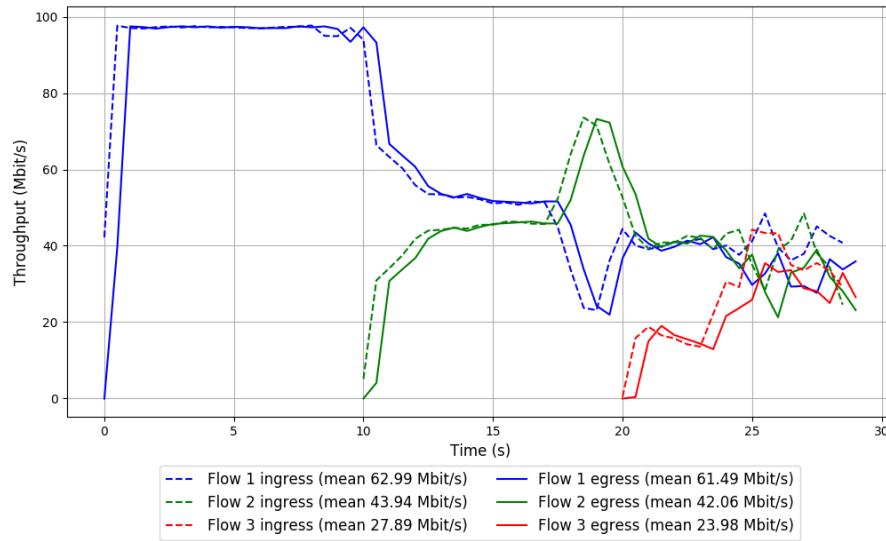


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 07:45:15
End at: 2019-06-27 07:45:45
Local clock offset: -1.517 ms
Remote clock offset: 3.11 ms

# Below is generated by plot.py at 2019-06-27 09:55:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.73 Mbit/s
95th percentile per-packet one-way delay: 39.329 ms
Loss rate: 3.80%
-- Flow 1:
Average throughput: 61.49 Mbit/s
95th percentile per-packet one-way delay: 33.904 ms
Loss rate: 2.32%
-- Flow 2:
Average throughput: 42.06 Mbit/s
95th percentile per-packet one-way delay: 40.231 ms
Loss rate: 4.15%
-- Flow 3:
Average throughput: 23.98 Mbit/s
95th percentile per-packet one-way delay: 46.686 ms
Loss rate: 13.87%
```

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

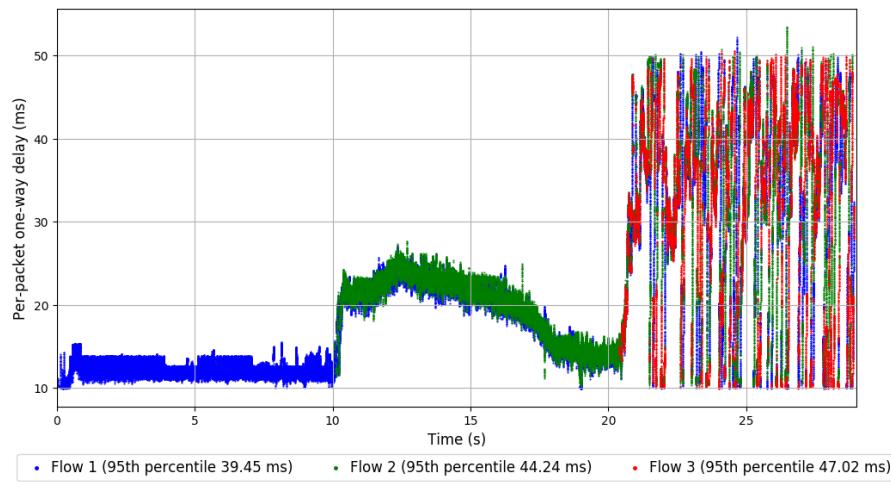
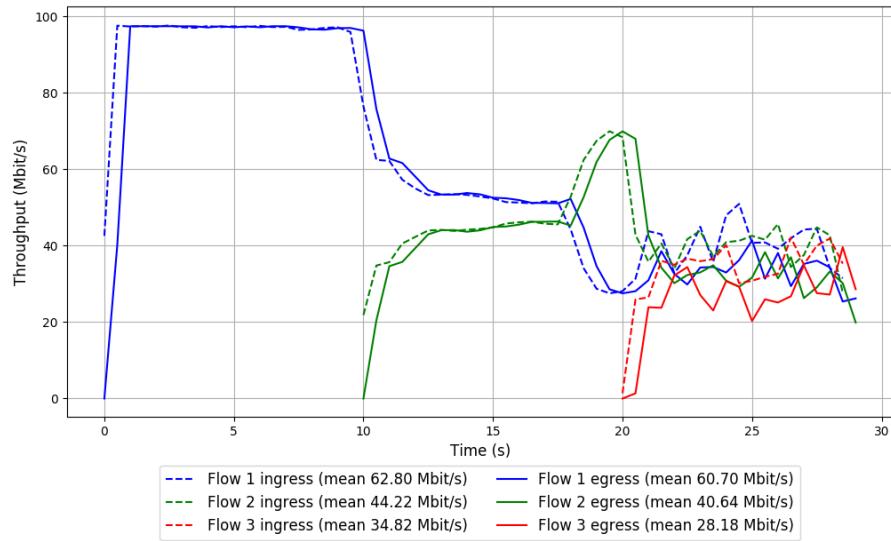


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 08:11:29
End at: 2019-06-27 08:11:59
Local clock offset: -0.081 ms
Remote clock offset: 5.465 ms

# Below is generated by plot.py at 2019-06-27 09:55:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 43.371 ms
Loss rate: 6.19%
-- Flow 1:
Average throughput: 60.70 Mbit/s
95th percentile per-packet one-way delay: 39.452 ms
Loss rate: 3.27%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 44.240 ms
Loss rate: 8.00%
-- Flow 3:
Average throughput: 28.18 Mbit/s
95th percentile per-packet one-way delay: 47.024 ms
Loss rate: 18.89%
```

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

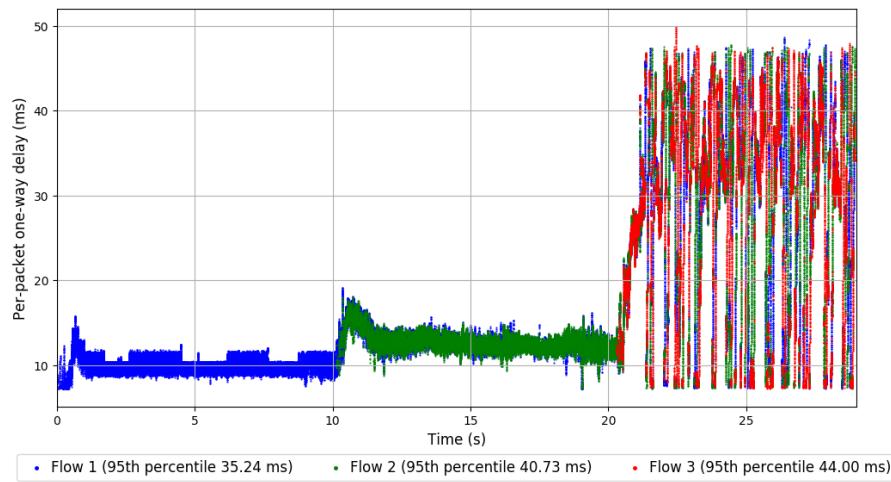
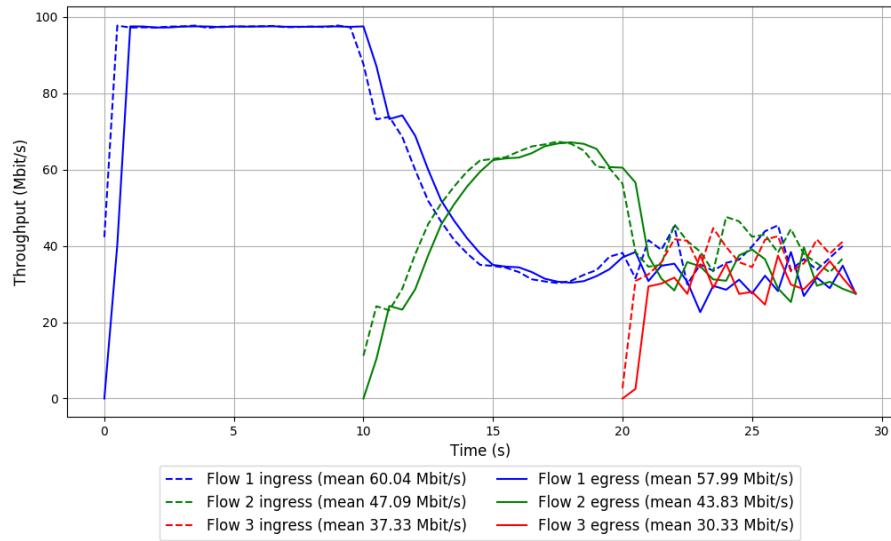


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 08:37:51
End at: 2019-06-27 08:38:21
Local clock offset: 0.087 ms
Remote clock offset: 2.081 ms

# Below is generated by plot.py at 2019-06-27 09:55:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.57 Mbit/s
95th percentile per-packet one-way delay: 39.968 ms
Loss rate: 6.11%
-- Flow 1:
Average throughput: 57.99 Mbit/s
95th percentile per-packet one-way delay: 35.240 ms
Loss rate: 3.42%
-- Flow 2:
Average throughput: 43.83 Mbit/s
95th percentile per-packet one-way delay: 40.732 ms
Loss rate: 6.78%
-- Flow 3:
Average throughput: 30.33 Mbit/s
95th percentile per-packet one-way delay: 43.996 ms
Loss rate: 18.71%
```

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

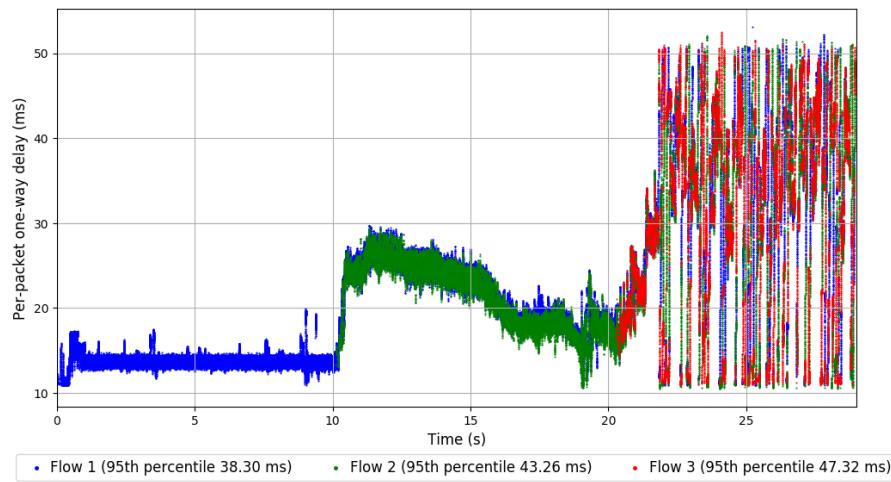
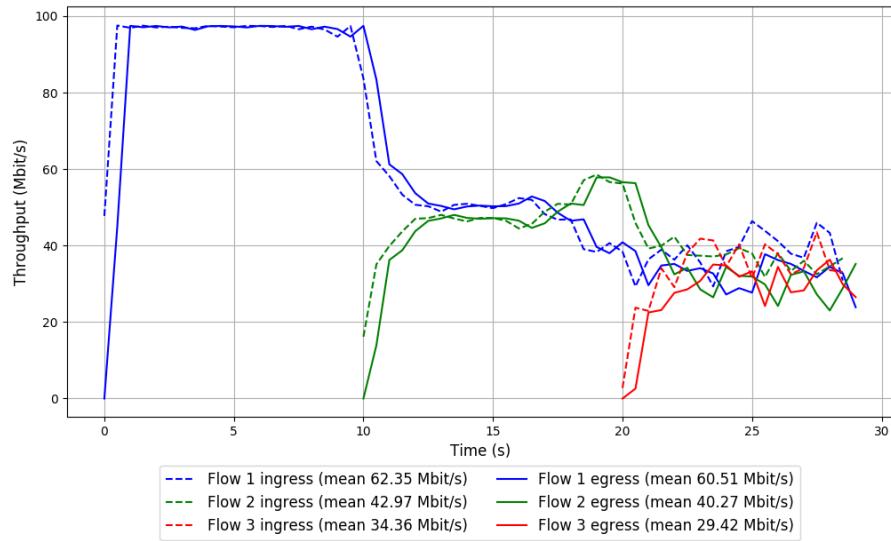


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 09:03:36
End at: 2019-06-27 09:04:06
Local clock offset: -1.363 ms
Remote clock offset: 5.218 ms

# Below is generated by plot.py at 2019-06-27 09:55:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 42.862 ms
Loss rate: 4.93%
-- Flow 1:
Average throughput: 60.51 Mbit/s
95th percentile per-packet one-way delay: 38.303 ms
Loss rate: 2.85%
-- Flow 2:
Average throughput: 40.27 Mbit/s
95th percentile per-packet one-way delay: 43.263 ms
Loss rate: 6.20%
-- Flow 3:
Average throughput: 29.42 Mbit/s
95th percentile per-packet one-way delay: 47.319 ms
Loss rate: 14.11%
```

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

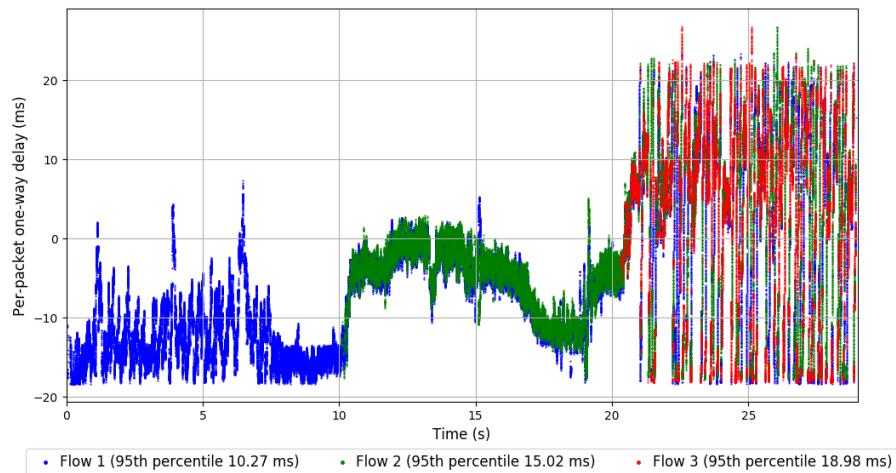
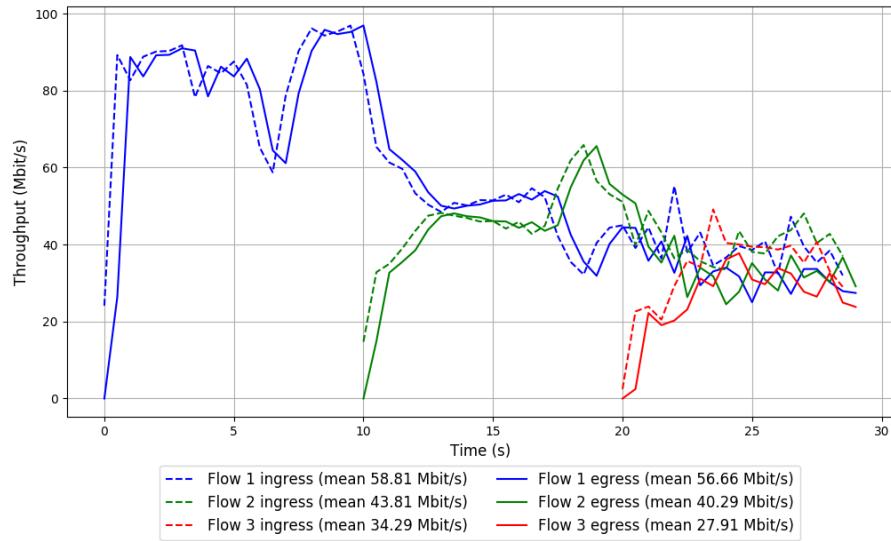


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-06-27 09:30:03
End at: 2019-06-27 09:30:33
Local clock offset: -0.789 ms
Remote clock offset: -26.565 ms

# Below is generated by plot.py at 2019-06-27 09:55:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.29 Mbit/s
95th percentile per-packet one-way delay: 13.950 ms
Loss rate: 6.40%
-- Flow 1:
Average throughput: 56.66 Mbit/s
95th percentile per-packet one-way delay: 10.270 ms
Loss rate: 3.57%
-- Flow 2:
Average throughput: 40.29 Mbit/s
95th percentile per-packet one-way delay: 15.019 ms
Loss rate: 7.88%
-- Flow 3:
Average throughput: 27.91 Mbit/s
95th percentile per-packet one-way delay: 18.982 ms
Loss rate: 18.47%
```

Run 5: Report of Indigo-MusesT — Data Link

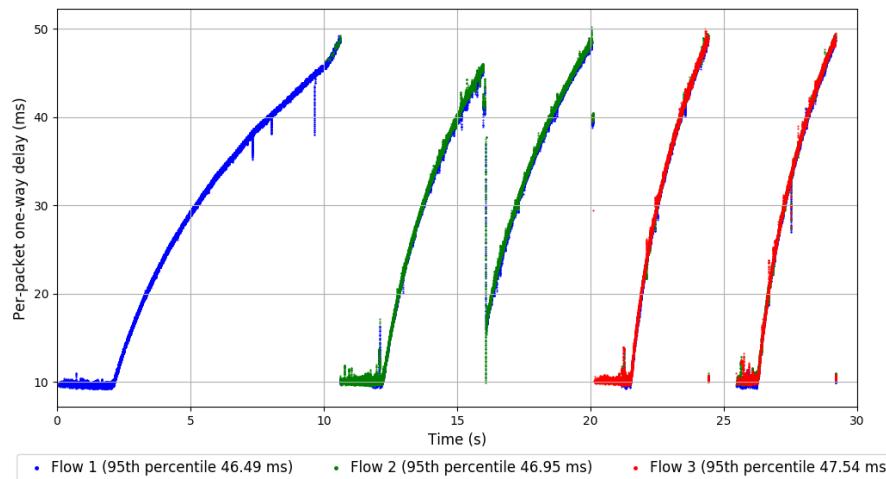
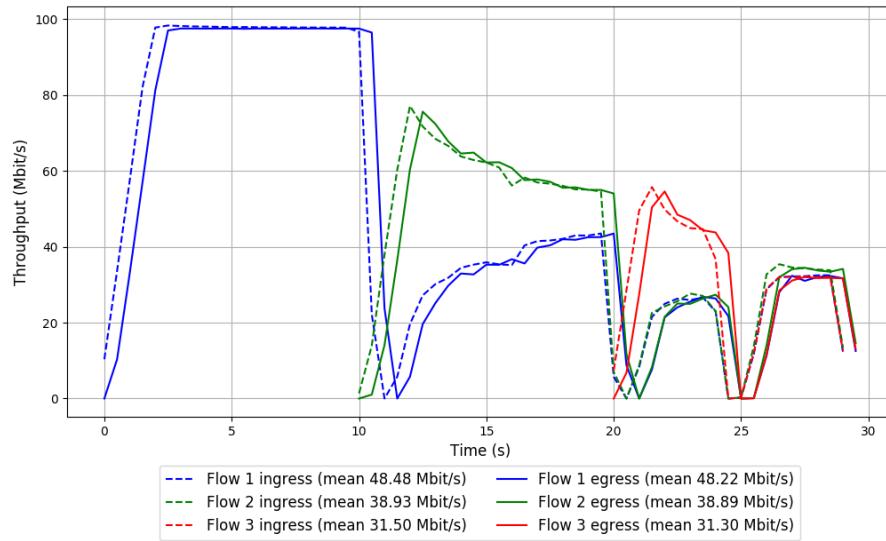


Run 1: Statistics of LEDBAT

```
Start at: 2019-06-27 07:57:21
End at: 2019-06-27 07:57:51
Local clock offset: -0.009 ms
Remote clock offset: 4.942 ms

# Below is generated by plot.py at 2019-06-27 09:55:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.52 Mbit/s
95th percentile per-packet one-way delay: 46.758 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 48.22 Mbit/s
95th percentile per-packet one-way delay: 46.490 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 38.89 Mbit/s
95th percentile per-packet one-way delay: 46.946 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 31.30 Mbit/s
95th percentile per-packet one-way delay: 47.537 ms
Loss rate: 0.94%
```

Run 1: Report of LEDBAT — Data Link

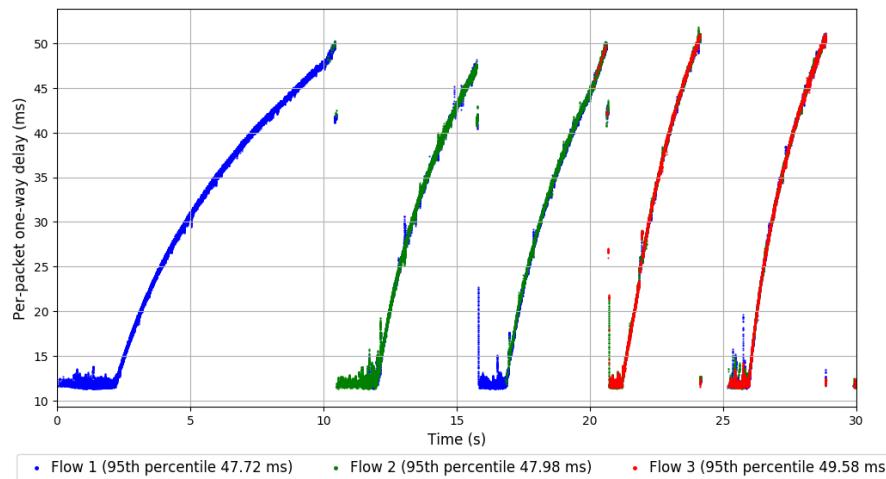
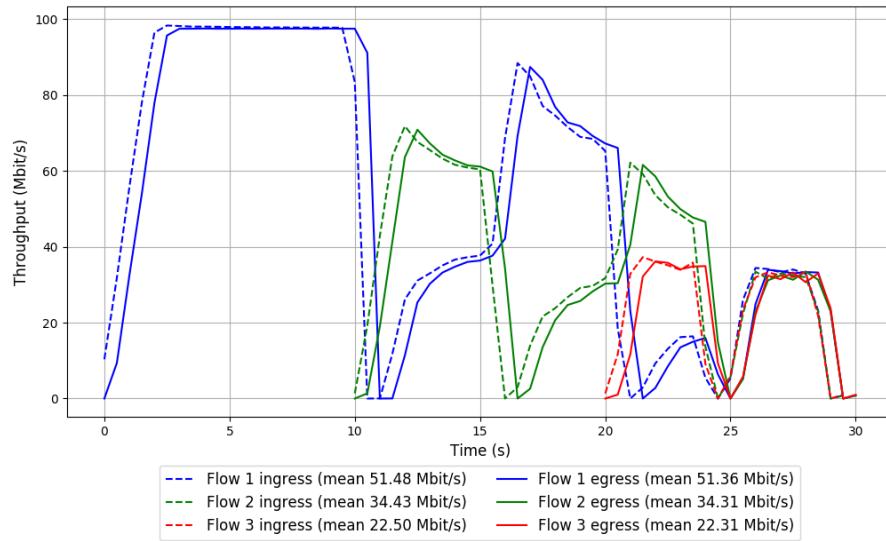


Run 2: Statistics of LEDBAT

```
Start at: 2019-06-27 08:23:43
End at: 2019-06-27 08:24:13
Local clock offset: -0.203 ms
Remote clock offset: 6.425 ms

# Below is generated by plot.py at 2019-06-27 09:55:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.55 Mbit/s
95th percentile per-packet one-way delay: 47.968 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 51.36 Mbit/s
95th percentile per-packet one-way delay: 47.717 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 34.31 Mbit/s
95th percentile per-packet one-way delay: 47.981 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 22.31 Mbit/s
95th percentile per-packet one-way delay: 49.576 ms
Loss rate: 1.18%
```

## Run 2: Report of LEDBAT — Data Link

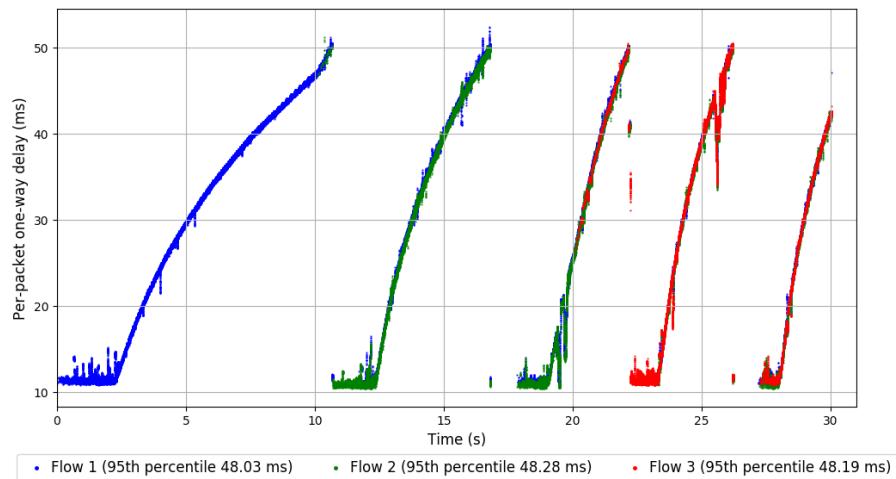
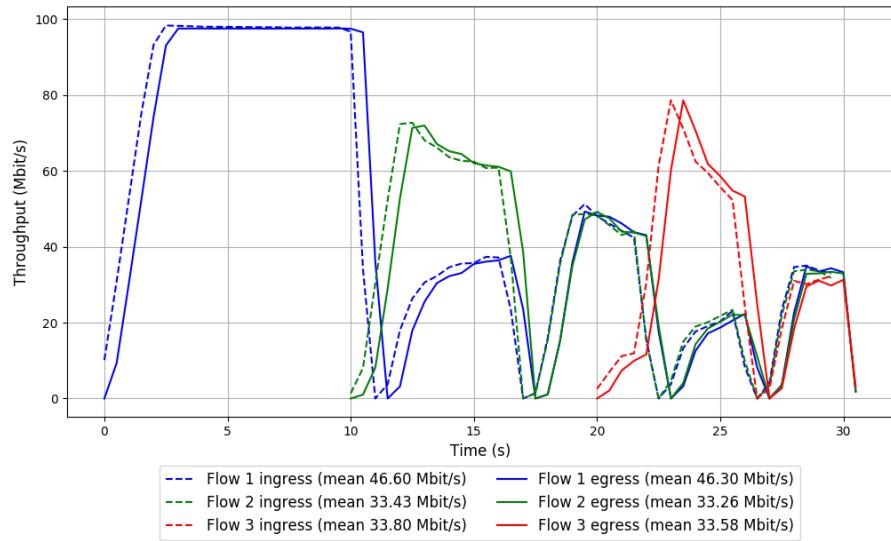


Run 3: Statistics of LEDBAT

```
Start at: 2019-06-27 08:49:43
End at: 2019-06-27 08:50:13
Local clock offset: -0.397 ms
Remote clock offset: 4.293 ms

# Below is generated by plot.py at 2019-06-27 09:55:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.60 Mbit/s
95th percentile per-packet one-way delay: 48.071 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 46.30 Mbit/s
95th percentile per-packet one-way delay: 48.035 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 33.26 Mbit/s
95th percentile per-packet one-way delay: 48.279 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 33.58 Mbit/s
95th percentile per-packet one-way delay: 48.193 ms
Loss rate: 0.49%
```

Run 3: Report of LEDBAT — Data Link

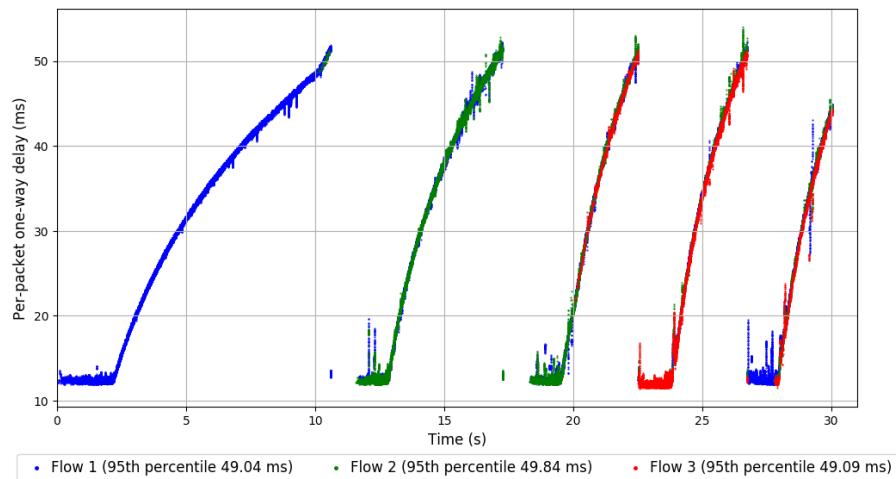
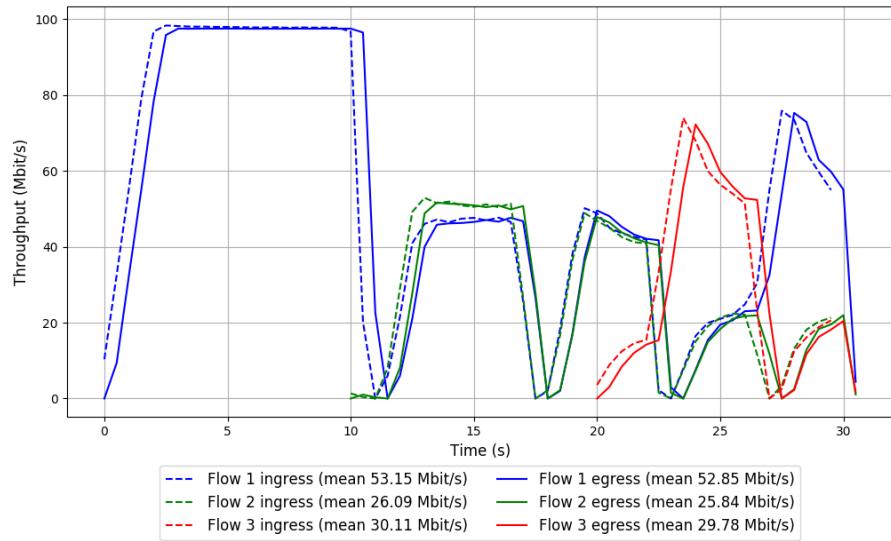


Run 4: Statistics of LEDBAT

```
Start at: 2019-06-27 09:15:39
End at: 2019-06-27 09:16:09
Local clock offset: -2.073 ms
Remote clock offset: 6.038 ms

# Below is generated by plot.py at 2019-06-27 09:56:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.95 Mbit/s
95th percentile per-packet one-way delay: 49.299 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 52.85 Mbit/s
95th percentile per-packet one-way delay: 49.039 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 25.84 Mbit/s
95th percentile per-packet one-way delay: 49.845 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 29.78 Mbit/s
95th percentile per-packet one-way delay: 49.088 ms
Loss rate: 0.90%
```

Run 4: Report of LEDBAT — Data Link

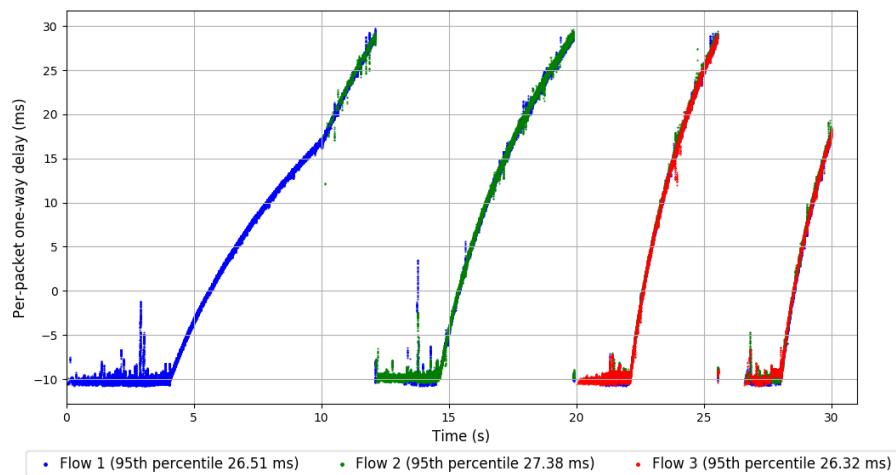
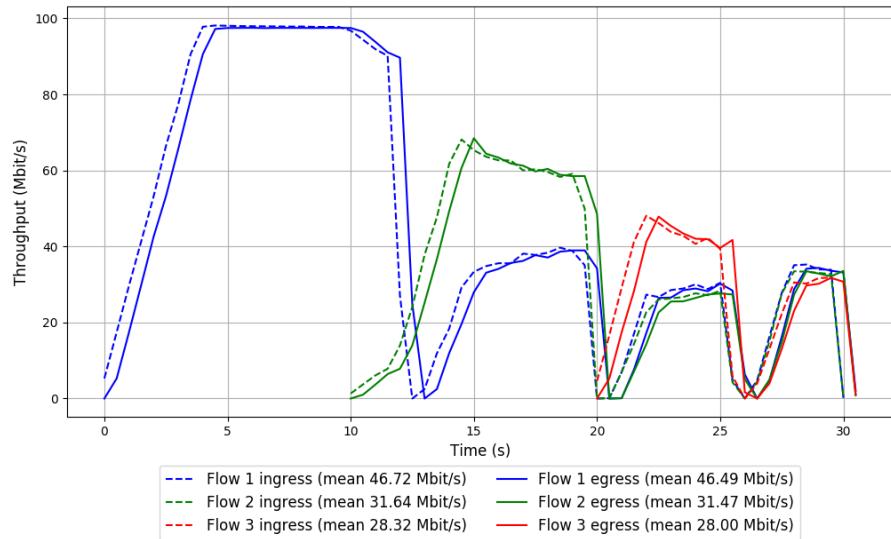


Run 5: Statistics of LEDBAT

```
Start at: 2019-06-27 09:42:07
End at: 2019-06-27 09:42:37
Local clock offset: -0.396 ms
Remote clock offset: -18.562 ms

# Below is generated by plot.py at 2019-06-27 09:56:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.75 Mbit/s
95th percentile per-packet one-way delay: 26.754 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 46.49 Mbit/s
95th percentile per-packet one-way delay: 26.513 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 31.47 Mbit/s
95th percentile per-packet one-way delay: 27.379 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 28.00 Mbit/s
95th percentile per-packet one-way delay: 26.323 ms
Loss rate: 0.86%
```

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 07:58:35

End at: 2019-06-27 07:59:05

Local clock offset: -0.727 ms

Remote clock offset: 5.459 ms

Run 1: Report of Muses\_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 08:24:59

End at: 2019-06-27 08:25:29

Local clock offset: 0.353 ms

Remote clock offset: 4.524 ms

Run 2: Report of Muses\_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 08:50:56

End at: 2019-06-27 08:51:26

Local clock offset: 0.003 ms

Remote clock offset: 3.383 ms

Run 3: Report of Muses\_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 4: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 09:16:52

End at: 2019-06-27 09:17:22

Local clock offset: -1.279 ms

Remote clock offset: 4.705 ms

Run 4: Report of Muses\_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 5: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 09:43:21

End at: 2019-06-27 09:43:51

Local clock offset: -0.83 ms

Remote clock offset: -17.45 ms

Run 5: Report of Muses\_DecisionTree — Data Link

Figure is missing

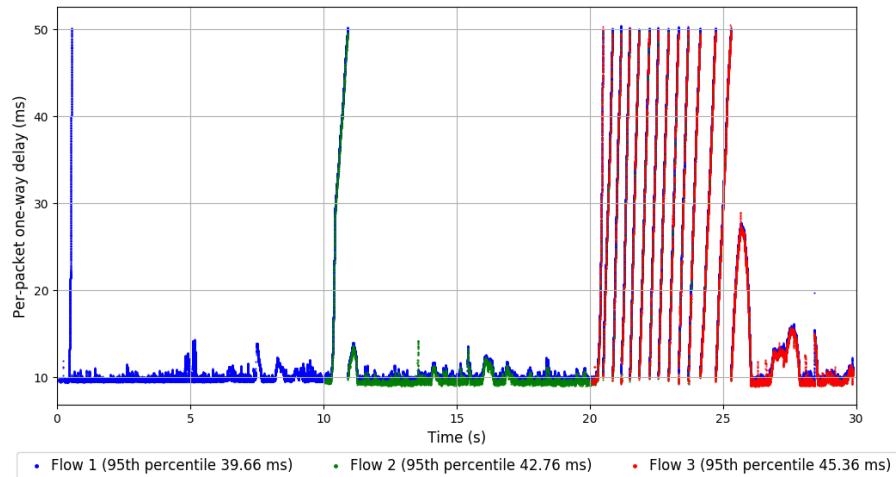
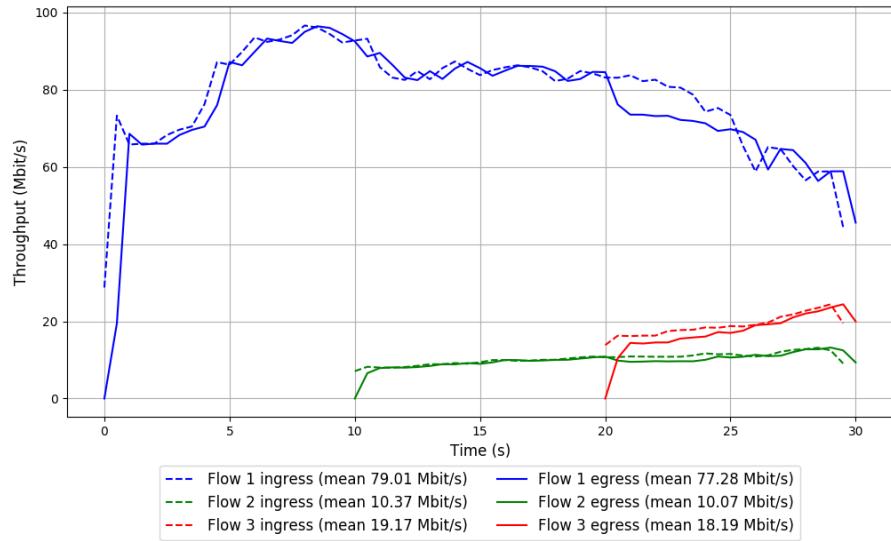
Figure is missing

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

```
Start at: 2019-06-27 07:48:52
End at: 2019-06-27 07:49:22
Local clock offset: -0.553 ms
Remote clock offset: 3.406 ms

# Below is generated by plot.py at 2019-06-27 09:56:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.98 Mbit/s
95th percentile per-packet one-way delay: 40.778 ms
Loss rate: 2.44%
-- Flow 1:
Average throughput: 77.28 Mbit/s
95th percentile per-packet one-way delay: 39.660 ms
Loss rate: 2.19%
-- Flow 2:
Average throughput: 10.07 Mbit/s
95th percentile per-packet one-way delay: 42.759 ms
Loss rate: 2.92%
-- Flow 3:
Average throughput: 18.19 Mbit/s
95th percentile per-packet one-way delay: 45.364 ms
Loss rate: 5.10%
```

Run 1: Report of PCC-Allegro — Data Link

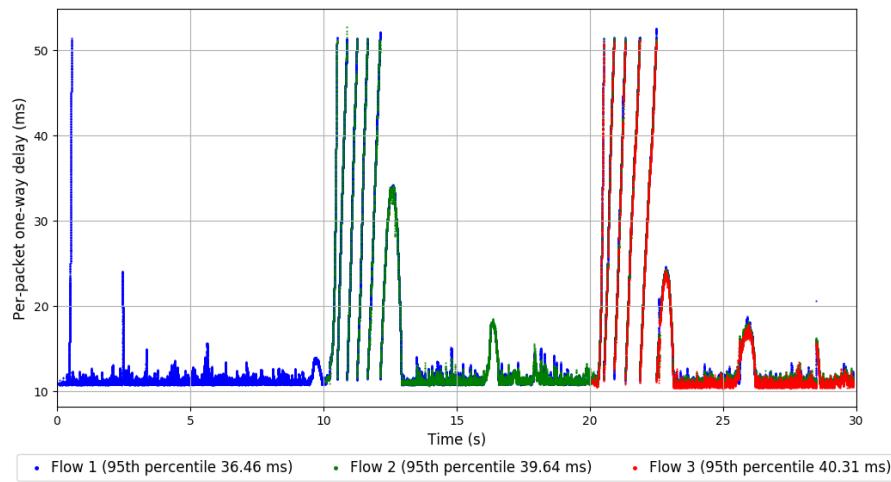
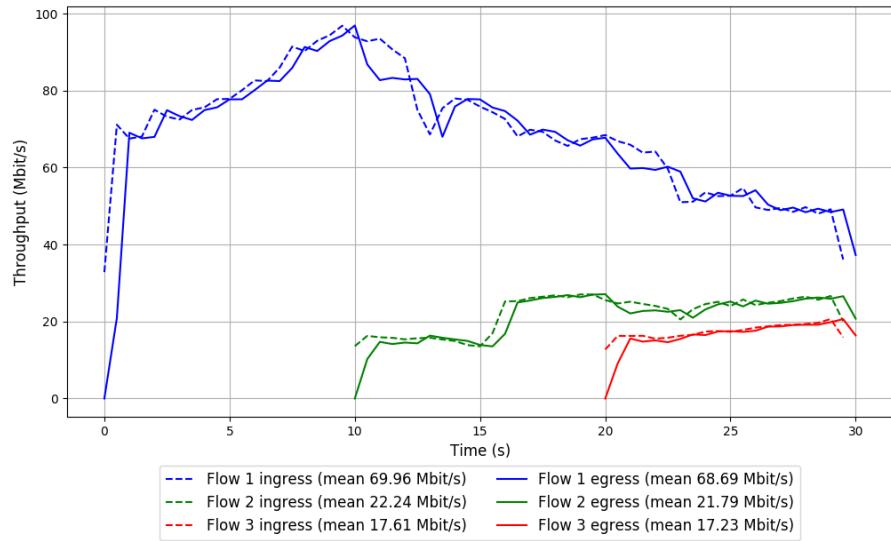


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-06-27 08:15:09
End at: 2019-06-27 08:15:39
Local clock offset: 0.094 ms
Remote clock offset: 5.959 ms

# Below is generated by plot.py at 2019-06-27 09:56:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.86 Mbit/s
95th percentile per-packet one-way delay: 37.492 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 68.69 Mbit/s
95th percentile per-packet one-way delay: 36.461 ms
Loss rate: 1.82%
-- Flow 2:
Average throughput: 21.79 Mbit/s
95th percentile per-packet one-way delay: 39.638 ms
Loss rate: 2.01%
-- Flow 3:
Average throughput: 17.23 Mbit/s
95th percentile per-packet one-way delay: 40.309 ms
Loss rate: 2.17%
```

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

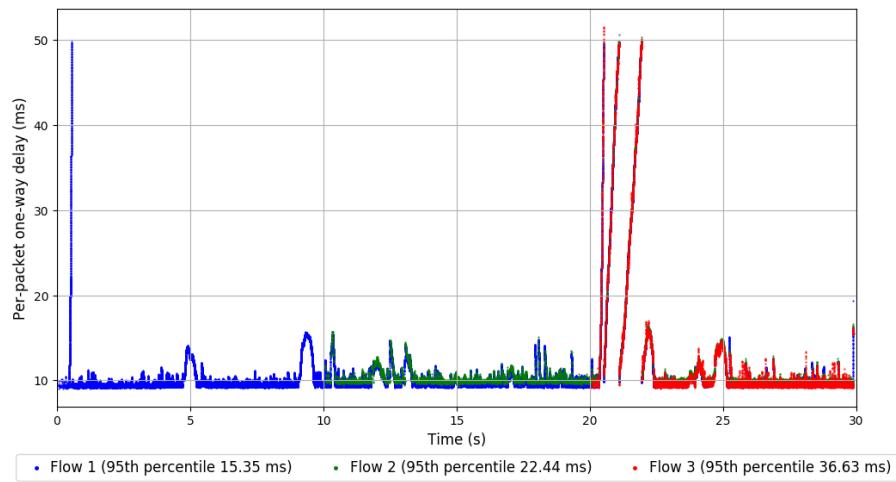
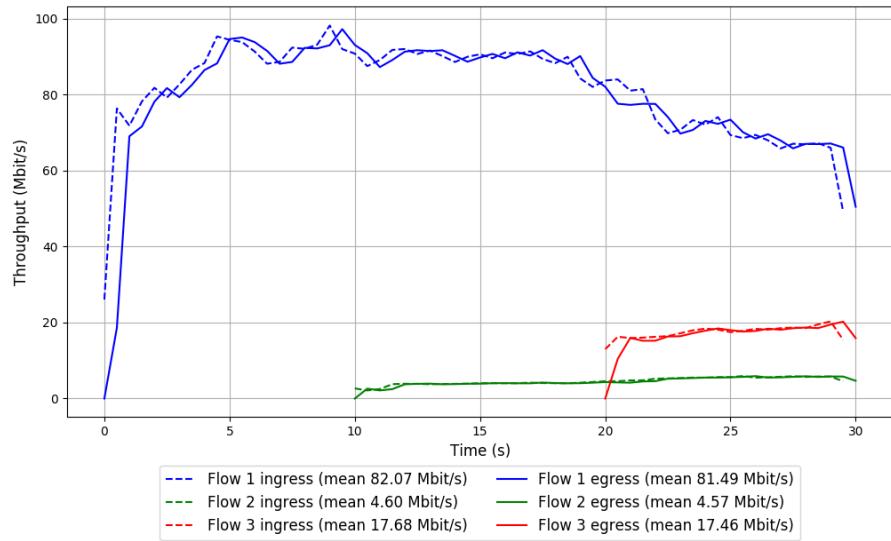


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-06-27 08:41:25
End at: 2019-06-27 08:41:55
Local clock offset: 1.202 ms
Remote clock offset: 4.819 ms

# Below is generated by plot.py at 2019-06-27 09:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.30 Mbit/s
95th percentile per-packet one-way delay: 15.873 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 81.49 Mbit/s
95th percentile per-packet one-way delay: 15.346 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 4.57 Mbit/s
95th percentile per-packet one-way delay: 22.443 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 17.46 Mbit/s
95th percentile per-packet one-way delay: 36.630 ms
Loss rate: 1.14%
```

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

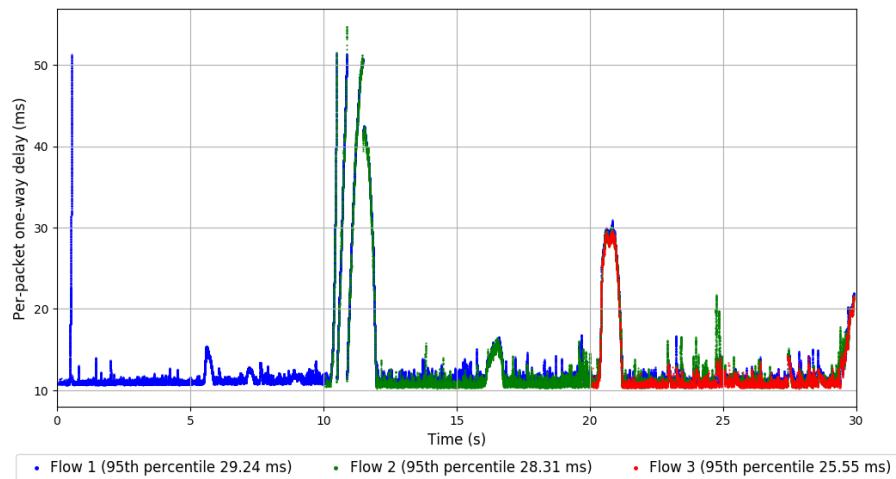
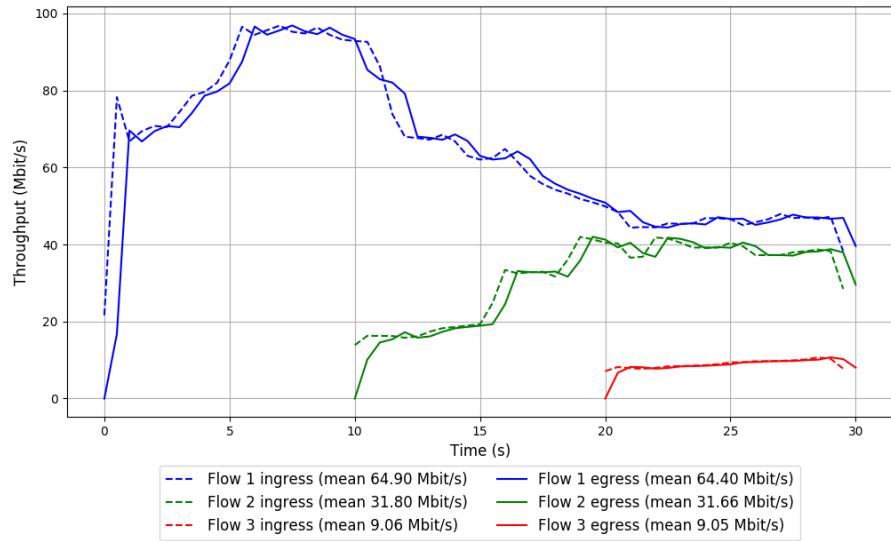


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-06-27 09:07:12
End at: 2019-06-27 09:07:42
Local clock offset: -0.273 ms
Remote clock offset: 6.269 ms

# Below is generated by plot.py at 2019-06-27 09:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.44 Mbit/s
95th percentile per-packet one-way delay: 28.736 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 64.40 Mbit/s
95th percentile per-packet one-way delay: 29.236 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 31.66 Mbit/s
95th percentile per-packet one-way delay: 28.306 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 9.05 Mbit/s
95th percentile per-packet one-way delay: 25.547 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Allegro — Data Link

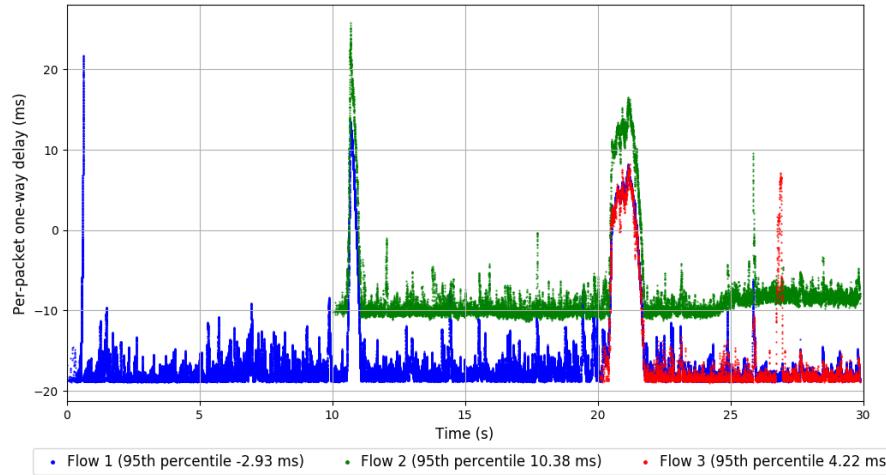
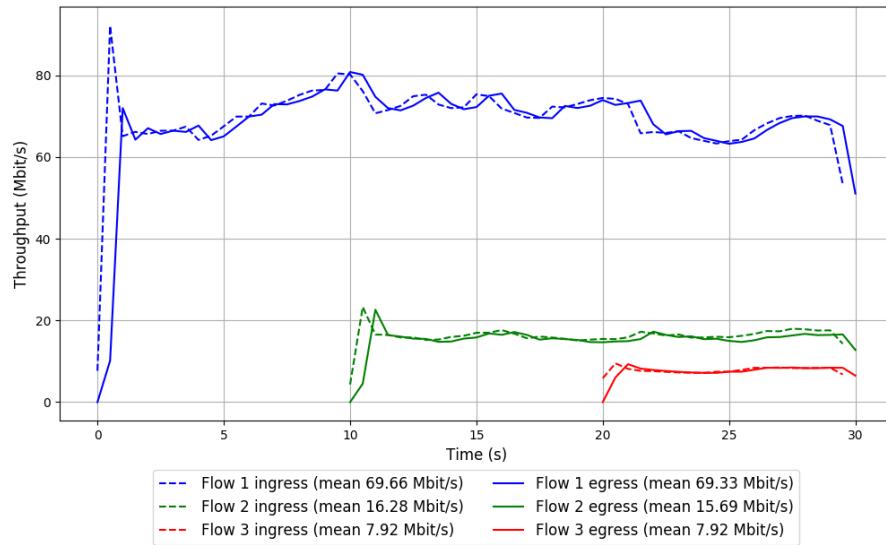


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-06-27 09:33:46
End at: 2019-06-27 09:34:16
Local clock offset: -0.608 ms
Remote clock offset: -27.051 ms

# Below is generated by plot.py at 2019-06-27 09:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.37 Mbit/s
95th percentile per-packet one-way delay: 0.856 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 69.33 Mbit/s
95th percentile per-packet one-way delay: -2.933 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 15.69 Mbit/s
95th percentile per-packet one-way delay: 10.385 ms
Loss rate: 3.65%
-- Flow 3:
Average throughput: 7.92 Mbit/s
95th percentile per-packet one-way delay: 4.224 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Allegro — Data Link

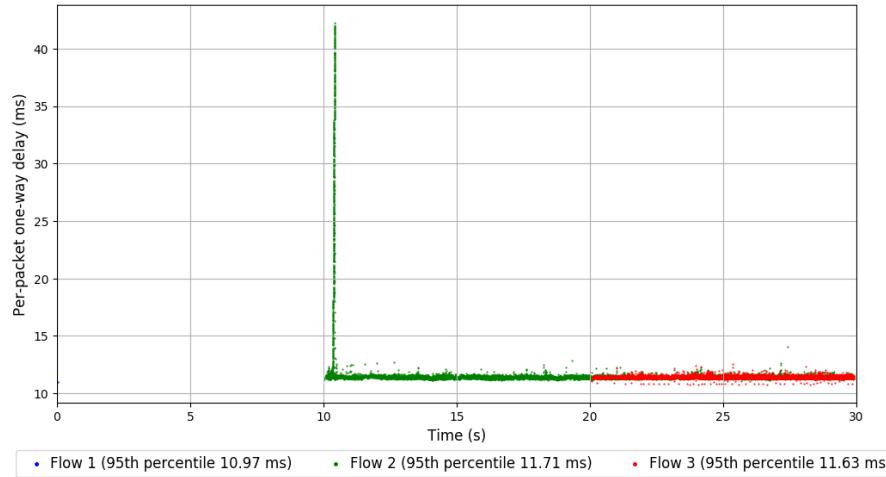
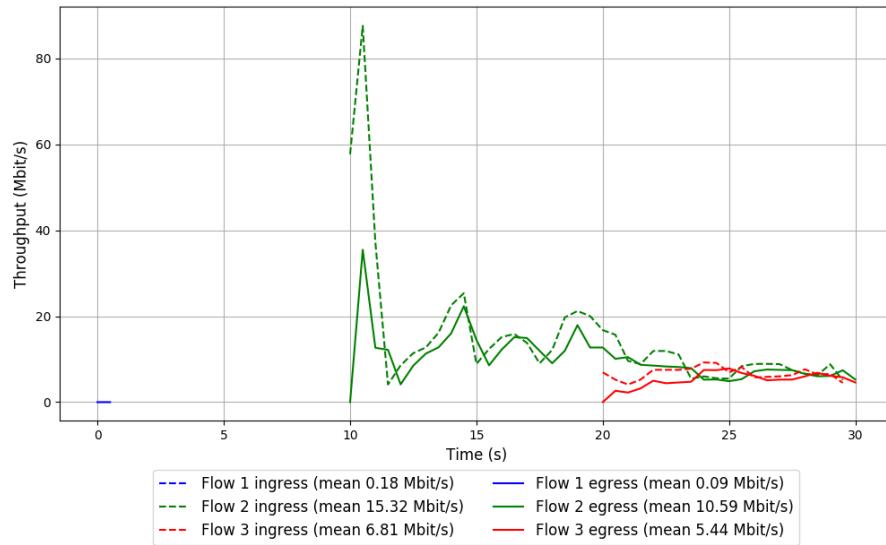


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-06-27 07:40:35
End at: 2019-06-27 07:41:05
Local clock offset: -1.004 ms
Remote clock offset: 3.723 ms

# Below is generated by plot.py at 2019-06-27 09:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.84 Mbit/s
95th percentile per-packet one-way delay: 11.677 ms
Loss rate: 28.95%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 10.970 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.59 Mbit/s
95th percentile per-packet one-way delay: 11.715 ms
Loss rate: 30.90%
-- Flow 3:
Average throughput: 5.44 Mbit/s
95th percentile per-packet one-way delay: 11.626 ms
Loss rate: 20.08%
```

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

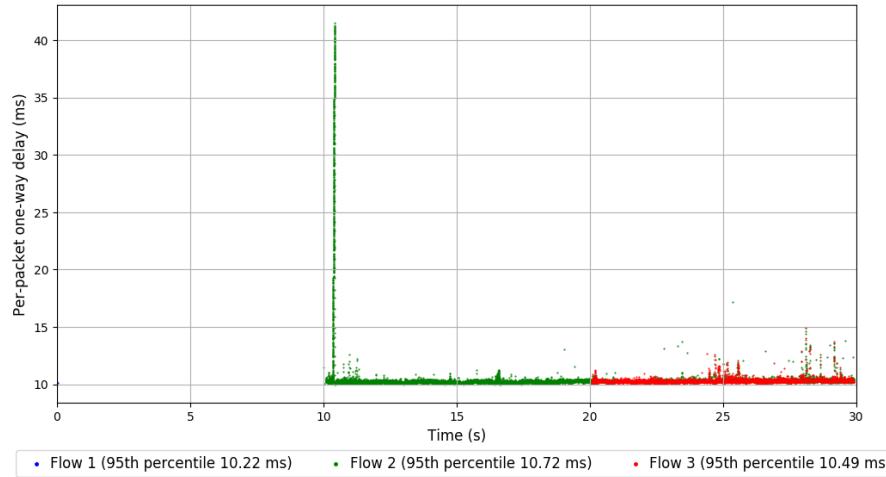
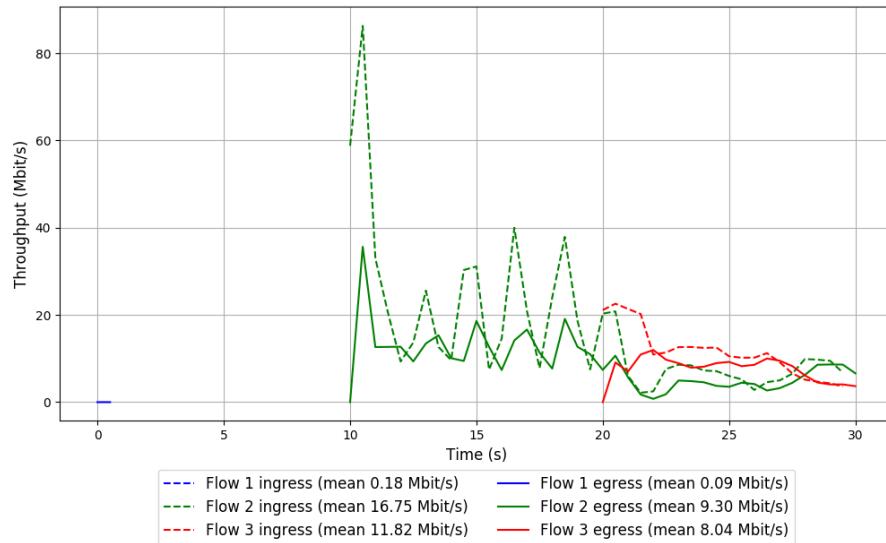


Run 2: Statistics of PCC-Expr

```
Start at: 2019-06-27 08:06:48
End at: 2019-06-27 08:07:18
Local clock offset: 0.308 ms
Remote clock offset: 5.712 ms

# Below is generated by plot.py at 2019-06-27 09:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.85 Mbit/s
95th percentile per-packet one-way delay: 10.604 ms
Loss rate: 41.24%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 10.217 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.30 Mbit/s
95th percentile per-packet one-way delay: 10.718 ms
Loss rate: 44.50%
-- Flow 3:
Average throughput: 8.04 Mbit/s
95th percentile per-packet one-way delay: 10.490 ms
Loss rate: 31.95%
```

Run 2: Report of PCC-Expr — Data Link

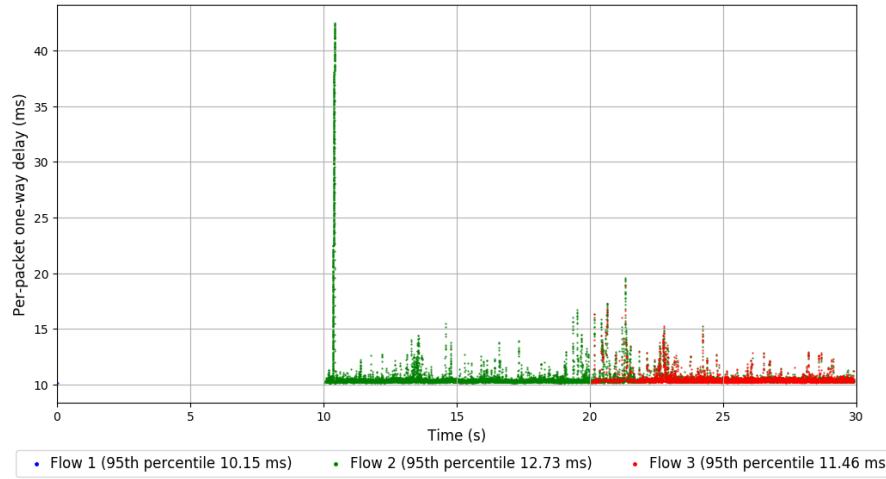
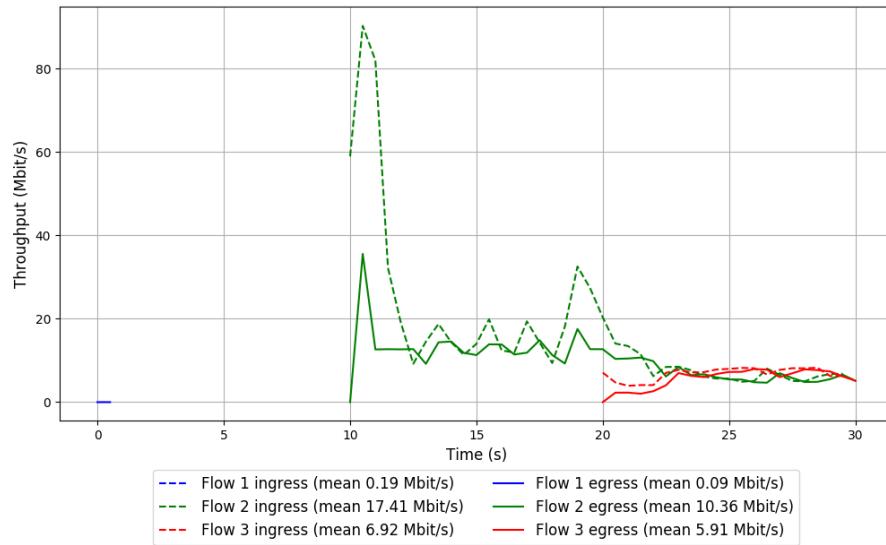


Run 3: Statistics of PCC-Expr

```
Start at: 2019-06-27 08:33:13
End at: 2019-06-27 08:33:43
Local clock offset: 0.594 ms
Remote clock offset: 5.371 ms

# Below is generated by plot.py at 2019-06-27 09:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.85 Mbit/s
95th percentile per-packet one-way delay: 12.323 ms
Loss rate: 36.21%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 10.146 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.36 Mbit/s
95th percentile per-packet one-way delay: 12.730 ms
Loss rate: 40.48%
-- Flow 3:
Average throughput: 5.91 Mbit/s
95th percentile per-packet one-way delay: 11.456 ms
Loss rate: 14.60%
```

Run 3: Report of PCC-Expr — Data Link

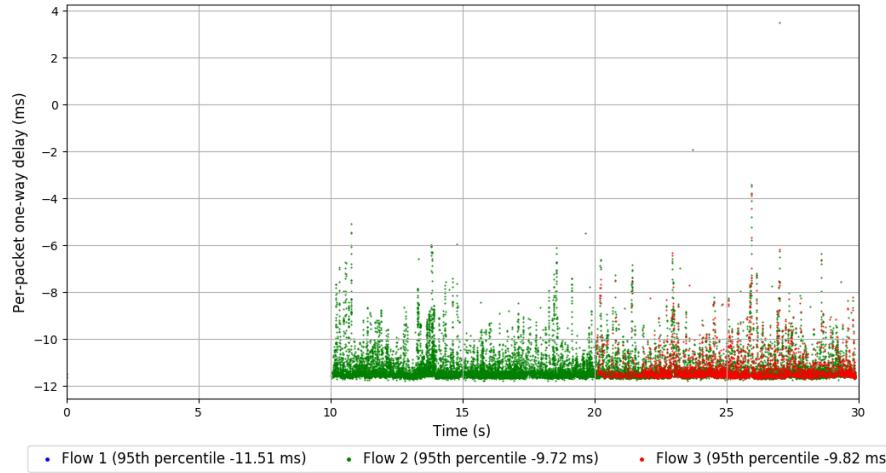
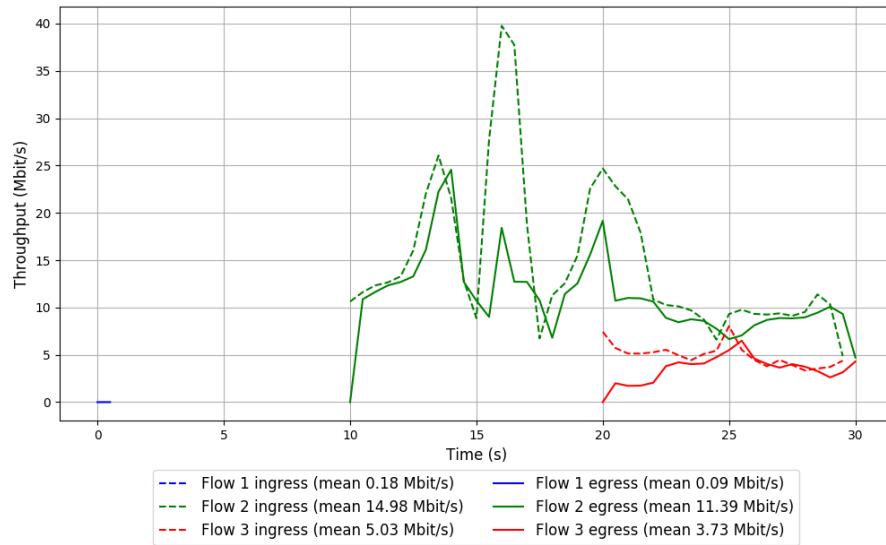


Run 4: Statistics of PCC-Expr

```
Start at: 2019-06-27 08:59:00
End at: 2019-06-27 08:59:30
Local clock offset: -0.587 ms
Remote clock offset: -17.28 ms

# Below is generated by plot.py at 2019-06-27 09:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.81 Mbit/s
95th percentile per-packet one-way delay: -9.747 ms
Loss rate: 24.26%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: -11.505 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 11.39 Mbit/s
95th percentile per-packet one-way delay: -9.725 ms
Loss rate: 24.00%
-- Flow 3:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: -9.822 ms
Loss rate: 25.76%
```

Run 4: Report of PCC-Expr — Data Link

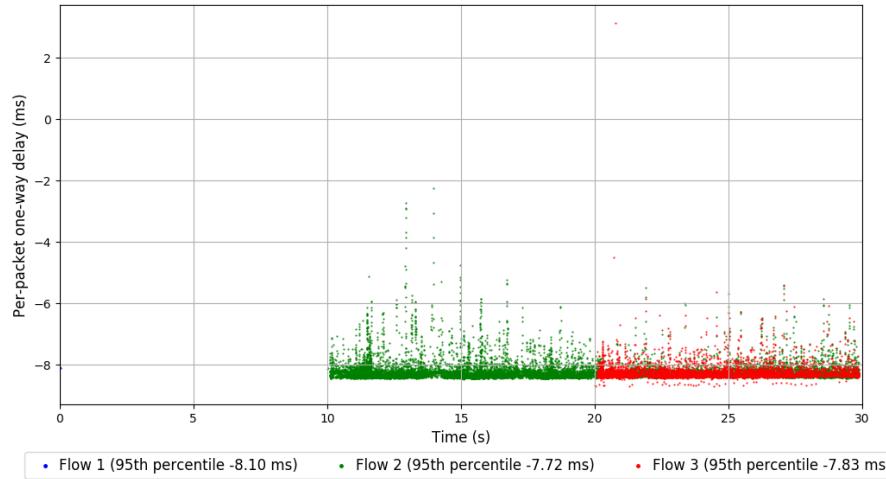
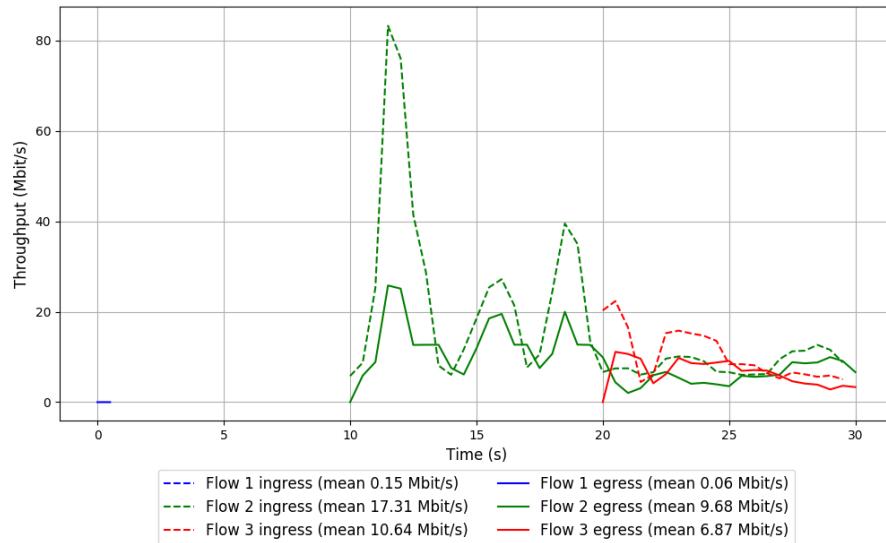


Run 5: Statistics of PCC-Expr

```
Start at: 2019-06-27 09:25:24
End at: 2019-06-27 09:25:54
Local clock offset: -0.168 ms
Remote clock offset: -16.364 ms

# Below is generated by plot.py at 2019-06-27 09:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.71 Mbit/s
95th percentile per-packet one-way delay: -7.755 ms
Loss rate: 42.06%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: -8.099 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.68 Mbit/s
95th percentile per-packet one-way delay: -7.724 ms
Loss rate: 44.09%
-- Flow 3:
Average throughput: 6.87 Mbit/s
95th percentile per-packet one-way delay: -7.825 ms
Loss rate: 35.40%
```

Run 5: Report of PCC-Expr — Data Link

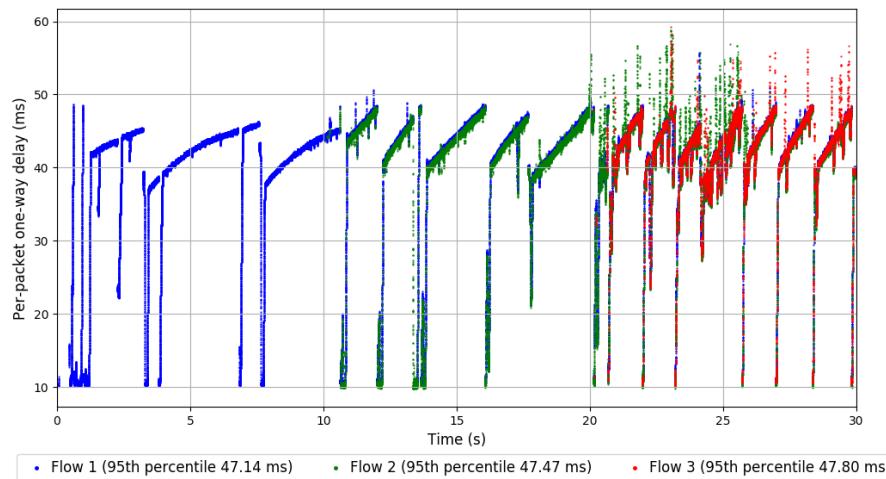
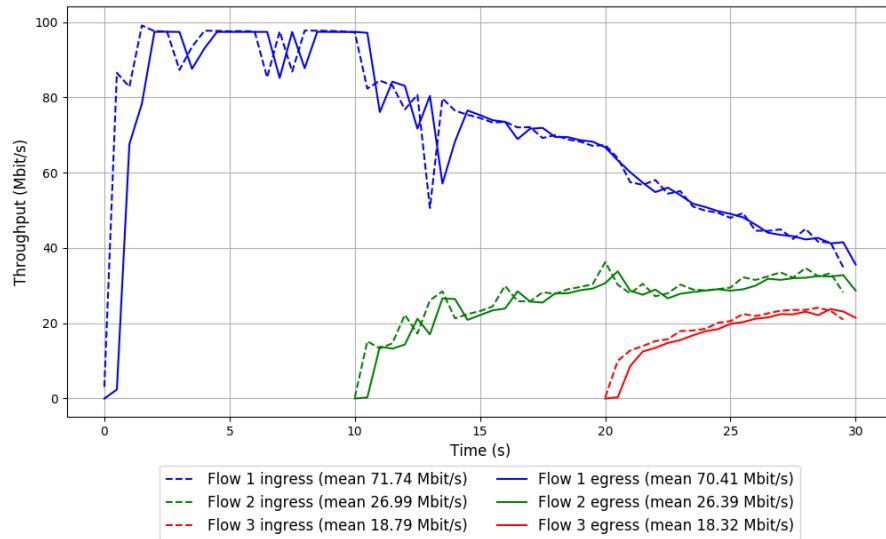


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-06-27 07:46:26
End at: 2019-06-27 07:46:56
Local clock offset: -0.38 ms
Remote clock offset: 4.056 ms

# Below is generated by plot.py at 2019-06-27 09:57:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.92 Mbit/s
95th percentile per-packet one-way delay: 47.295 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 70.41 Mbit/s
95th percentile per-packet one-way delay: 47.138 ms
Loss rate: 1.77%
-- Flow 2:
Average throughput: 26.39 Mbit/s
95th percentile per-packet one-way delay: 47.466 ms
Loss rate: 2.26%
-- Flow 3:
Average throughput: 18.32 Mbit/s
95th percentile per-packet one-way delay: 47.800 ms
Loss rate: 2.59%
```

Run 1: Report of QUIC Cubic — Data Link

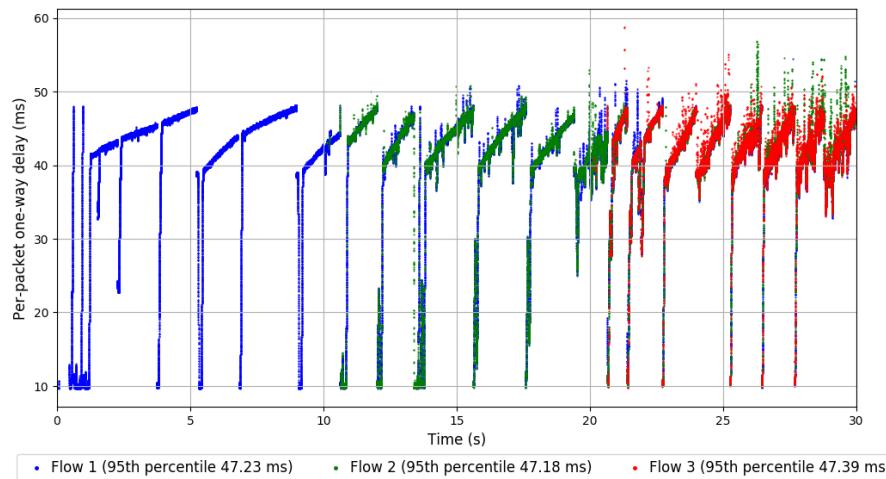
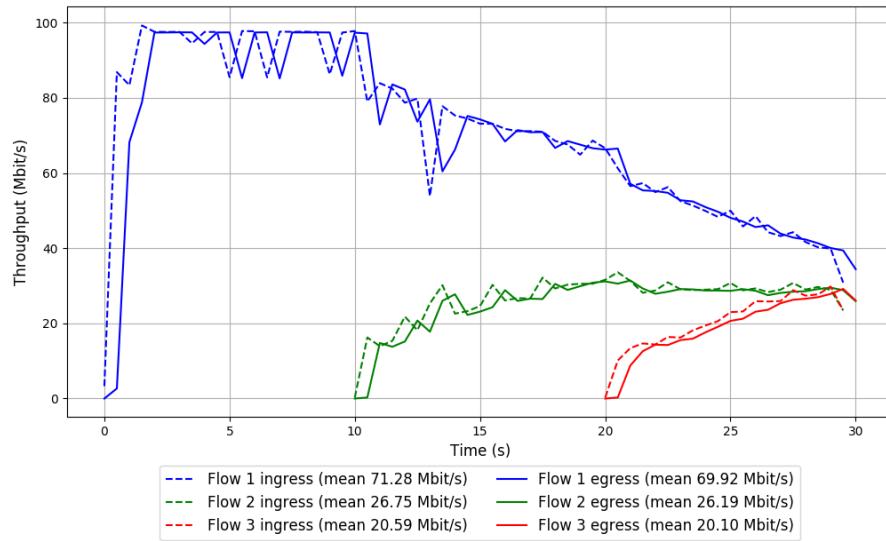


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-06-27 08:12:42
End at: 2019-06-27 08:13:12
Local clock offset: 0.493 ms
Remote clock offset: 5.395 ms

# Below is generated by plot.py at 2019-06-27 09:57:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.90 Mbit/s
95th percentile per-packet one-way delay: 47.227 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 69.92 Mbit/s
95th percentile per-packet one-way delay: 47.229 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 26.19 Mbit/s
95th percentile per-packet one-way delay: 47.180 ms
Loss rate: 2.05%
-- Flow 3:
Average throughput: 20.10 Mbit/s
95th percentile per-packet one-way delay: 47.388 ms
Loss rate: 2.31%
```

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

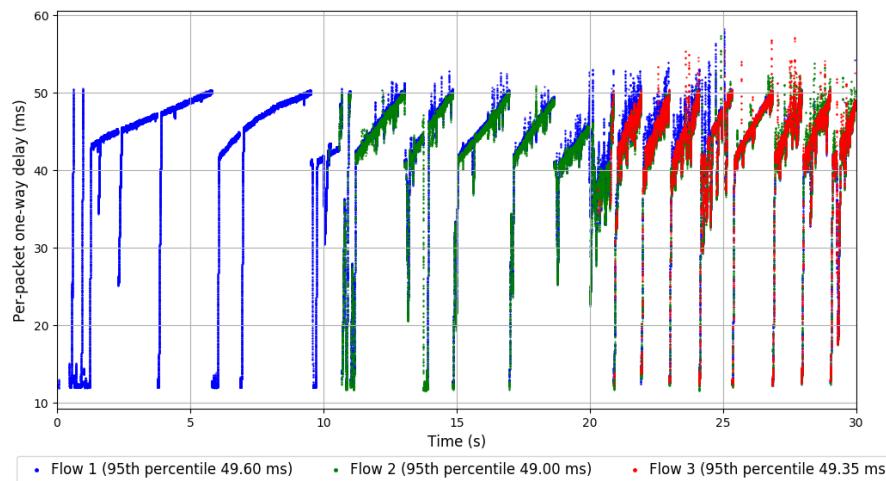
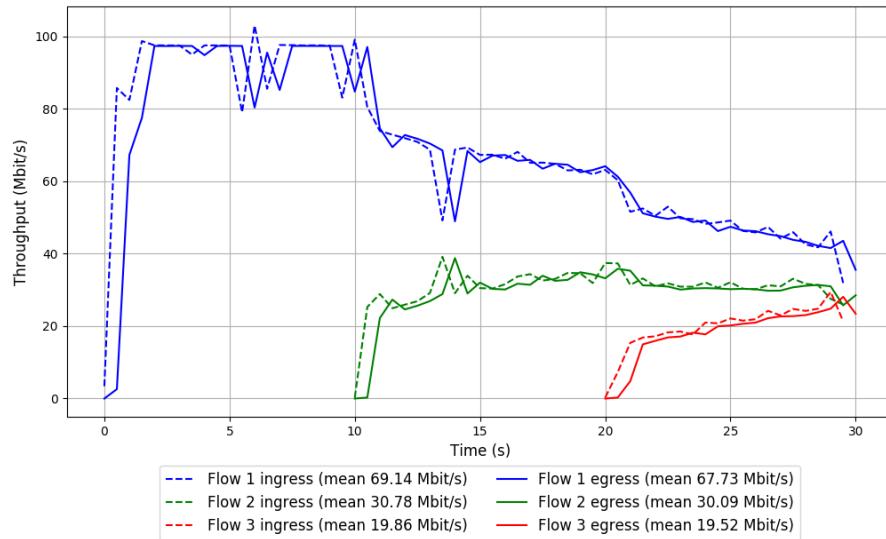


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-06-27 08:39:02
End at: 2019-06-27 08:39:32
Local clock offset: -0.889 ms
Remote clock offset: 5.329 ms

# Below is generated by plot.py at 2019-06-27 09:57:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.02 Mbit/s
95th percentile per-packet one-way delay: 49.486 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 67.73 Mbit/s
95th percentile per-packet one-way delay: 49.601 ms
Loss rate: 1.90%
-- Flow 2:
Average throughput: 30.09 Mbit/s
95th percentile per-packet one-way delay: 49.003 ms
Loss rate: 2.16%
-- Flow 3:
Average throughput: 19.52 Mbit/s
95th percentile per-packet one-way delay: 49.349 ms
Loss rate: 3.08%
```

Run 3: Report of QUIC Cubic — Data Link

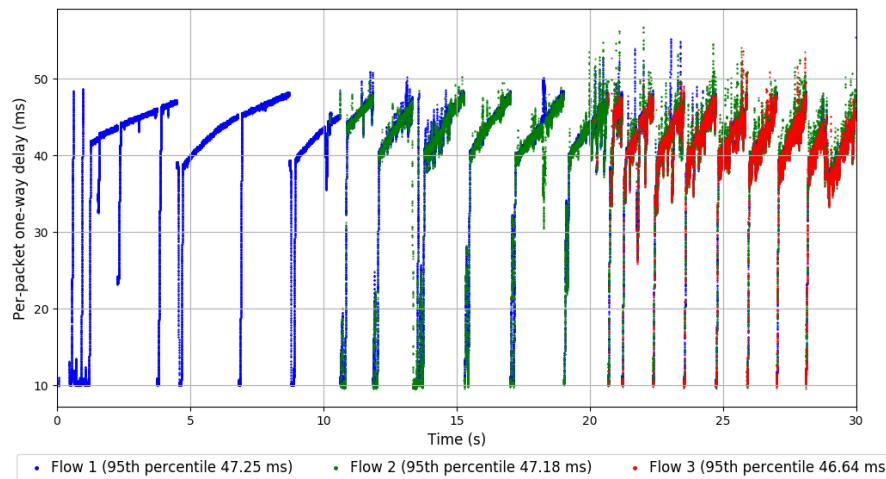
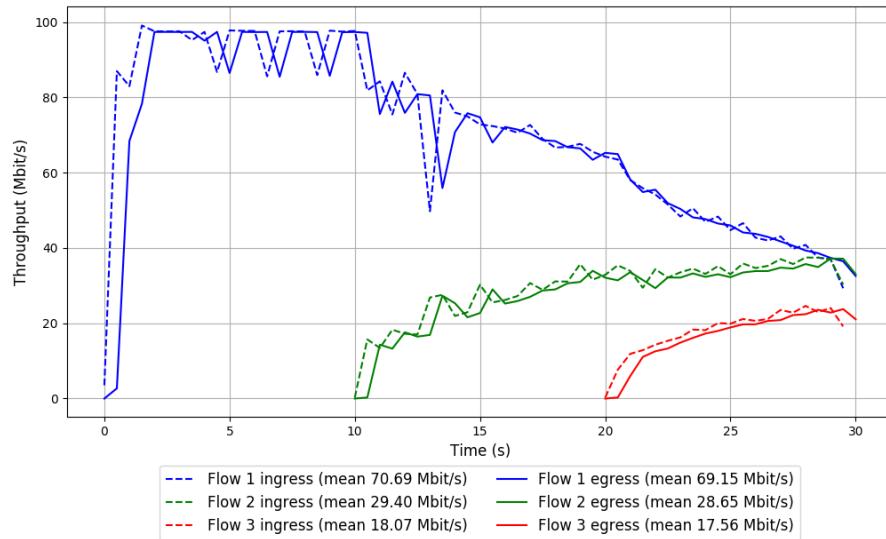


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-06-27 09:04:47
End at: 2019-06-27 09:05:17
Local clock offset: -0.372 ms
Remote clock offset: 5.346 ms

# Below is generated by plot.py at 2019-06-27 09:58:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.91 Mbit/s
95th percentile per-packet one-way delay: 47.212 ms
Loss rate: 2.18%
-- Flow 1:
Average throughput: 69.15 Mbit/s
95th percentile per-packet one-way delay: 47.249 ms
Loss rate: 2.02%
-- Flow 2:
Average throughput: 28.65 Mbit/s
95th percentile per-packet one-way delay: 47.178 ms
Loss rate: 2.55%
-- Flow 3:
Average throughput: 17.56 Mbit/s
95th percentile per-packet one-way delay: 46.643 ms
Loss rate: 2.84%
```

Run 4: Report of QUIC Cubic — Data Link

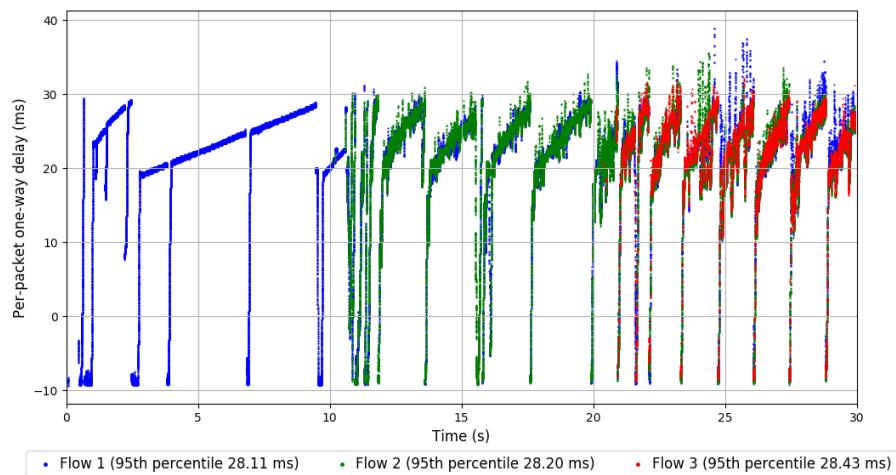
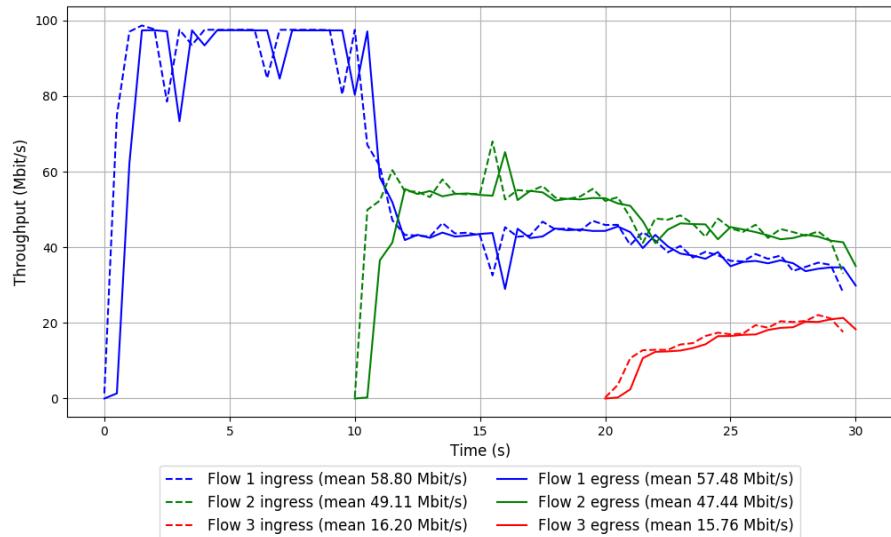


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-06-27 09:31:14
End at: 2019-06-27 09:31:44
Local clock offset: -0.119 ms
Remote clock offset: -16.91 ms

# Below is generated by plot.py at 2019-06-27 09:58:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.00 Mbit/s
95th percentile per-packet one-way delay: 28.160 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 57.48 Mbit/s
95th percentile per-packet one-way delay: 28.107 ms
Loss rate: 2.14%
-- Flow 2:
Average throughput: 47.44 Mbit/s
95th percentile per-packet one-way delay: 28.197 ms
Loss rate: 3.38%
-- Flow 3:
Average throughput: 15.76 Mbit/s
95th percentile per-packet one-way delay: 28.434 ms
Loss rate: 2.62%
```

Run 5: Report of QUIC Cubic — Data Link

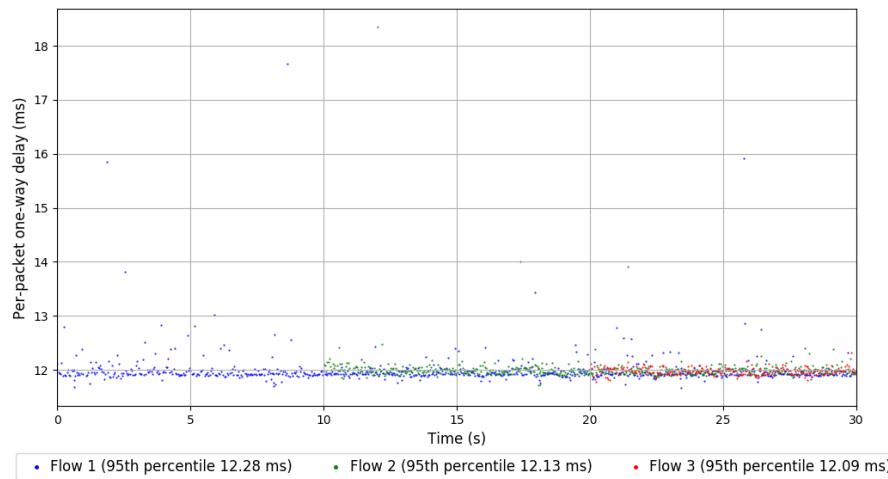
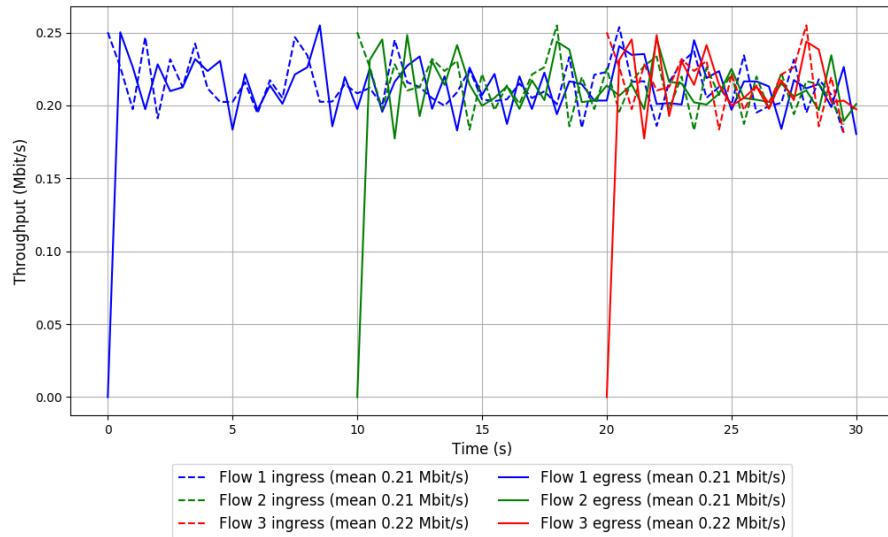


```
Run 1: Statistics of SCReAM

Start at: 2019-06-27 07:41:42
End at: 2019-06-27 07:42:13
Local clock offset: -1.73 ms
Remote clock offset: 3.621 ms

# Below is generated by plot.py at 2019-06-27 09:58:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 12.160 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 12.277 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 12.131 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 12.092 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

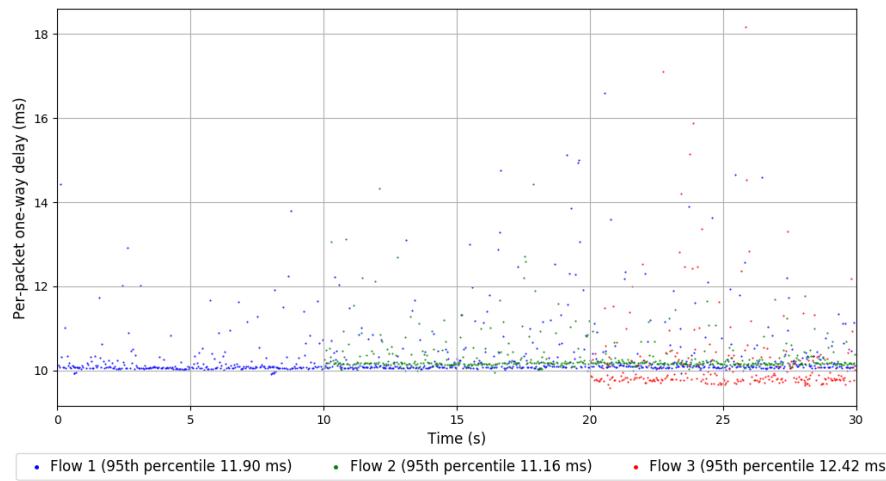
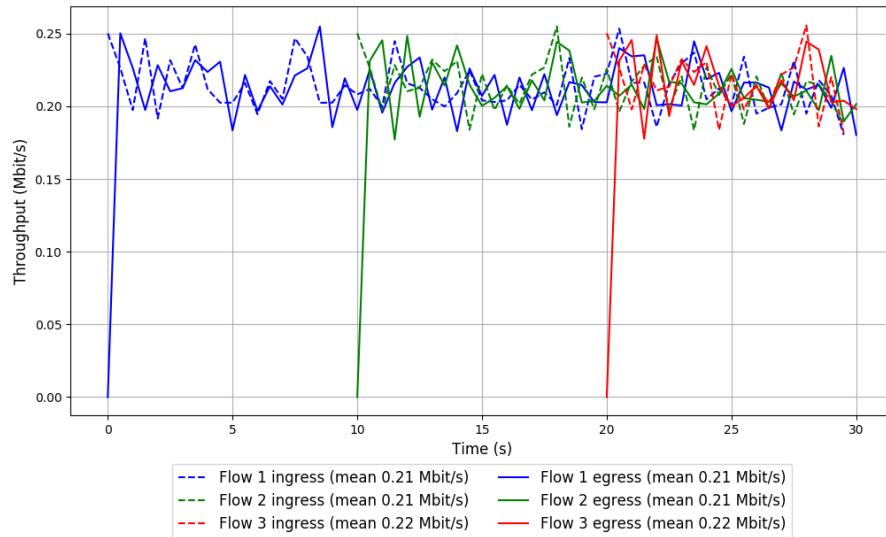


Run 2: Statistics of SCReAM

```
Start at: 2019-06-27 08:07:58
End at: 2019-06-27 08:08:28
Local clock offset: 0.543 ms
Remote clock offset: 5.806 ms

# Below is generated by plot.py at 2019-06-27 09:58:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 11.639 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 11.898 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 11.161 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 12.423 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

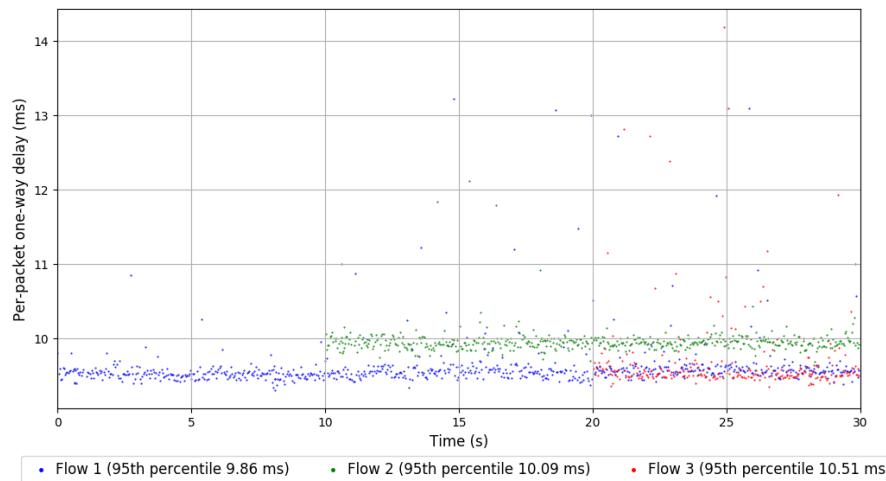
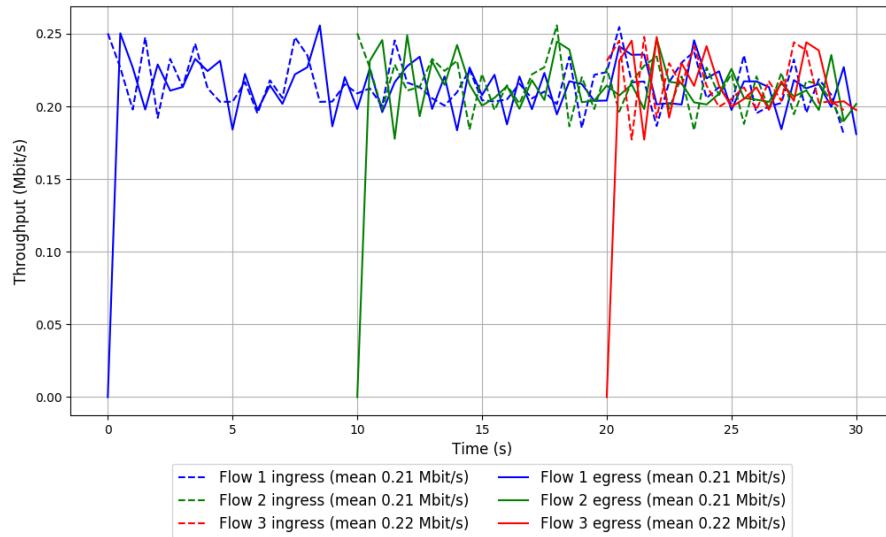


Run 3: Statistics of SCReAM

```
Start at: 2019-06-27 08:34:21
End at: 2019-06-27 08:34:51
Local clock offset: 0.47 ms
Remote clock offset: 4.726 ms

# Below is generated by plot.py at 2019-06-27 09:58:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 10.083 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 9.859 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 10.089 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 10.509 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

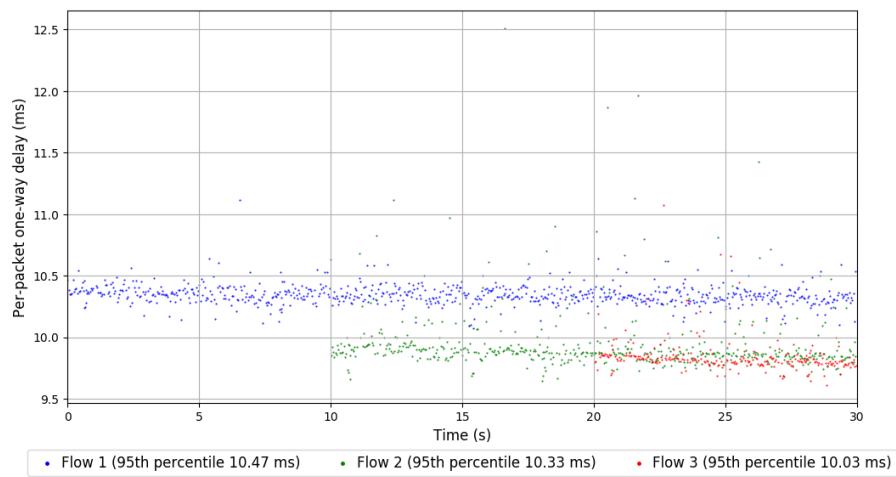
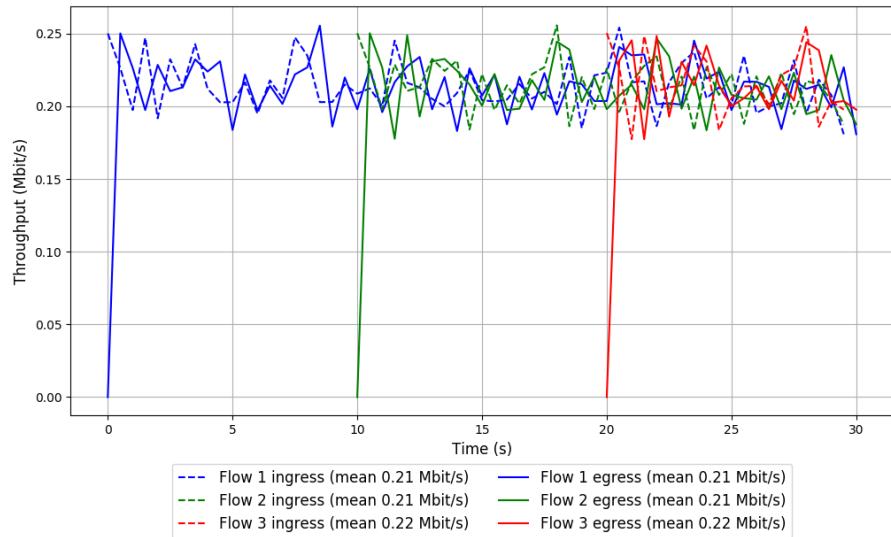


Run 4: Statistics of SCReAM

```
Start at: 2019-06-27 09:00:08
End at: 2019-06-27 09:00:38
Local clock offset: -0.194 ms
Remote clock offset: 5.134 ms

# Below is generated by plot.py at 2019-06-27 09:58:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 10.456 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 10.473 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 10.334 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 10.032 ms
Loss rate: 0.00%
```

## Run 4: Report of SCReAM — Data Link

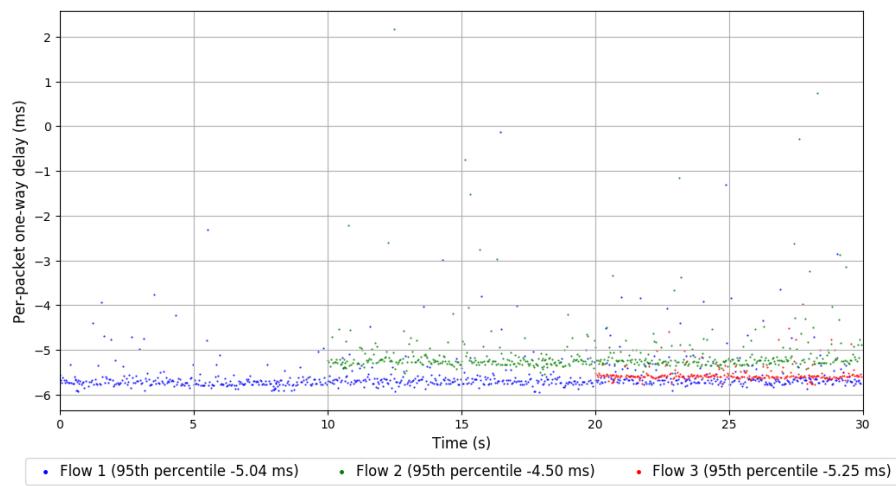
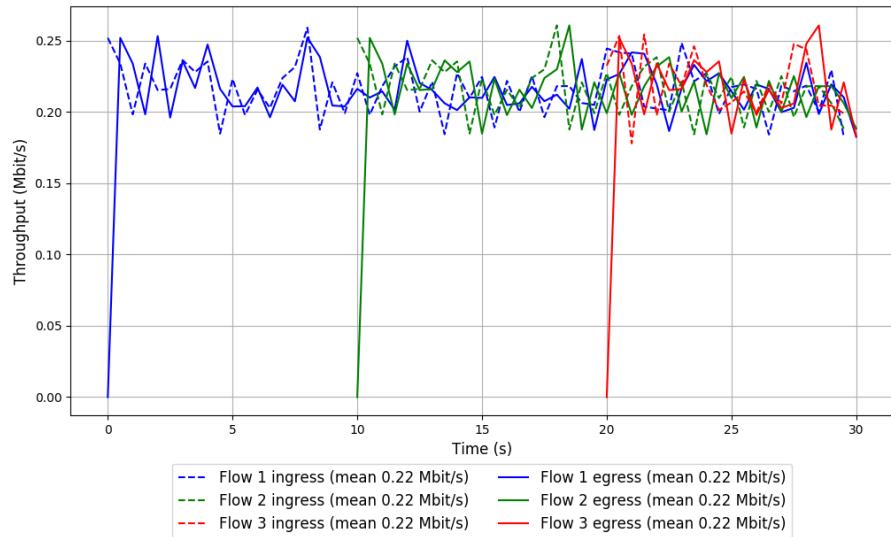


Run 5: Statistics of SCReAM

```
Start at: 2019-06-27 09:26:32
End at: 2019-06-27 09:27:02
Local clock offset: -0.472 ms
Remote clock offset: -13.853 ms

# Below is generated by plot.py at 2019-06-27 09:58:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: -4.758 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -5.040 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -4.499 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -5.249 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

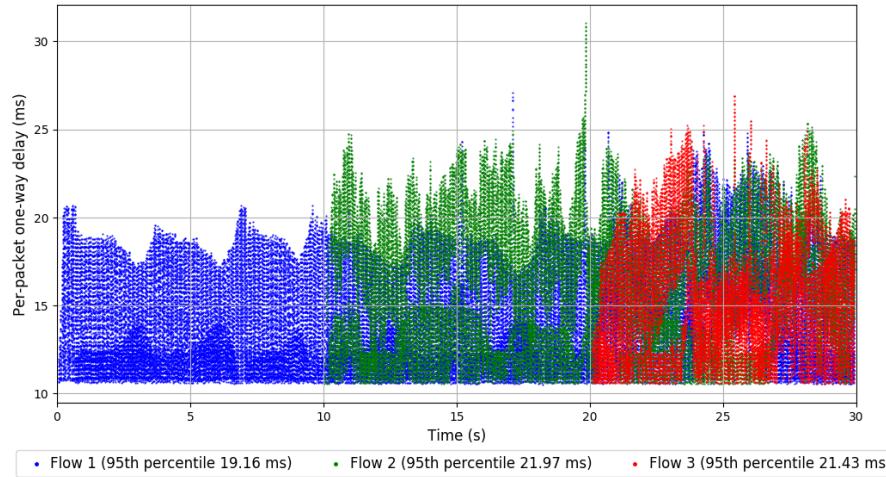
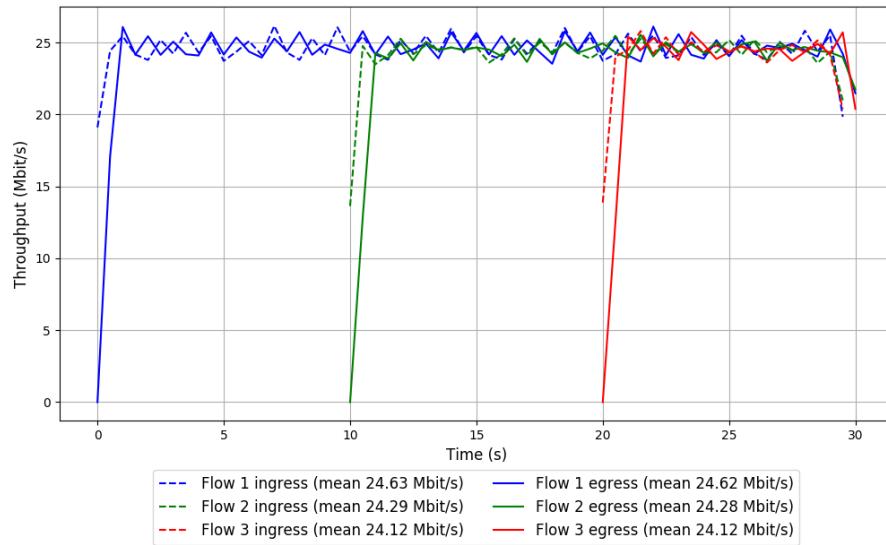


Run 1: Statistics of Sprout

```
Start at: 2019-06-27 07:35:58
End at: 2019-06-27 07:36:28
Local clock offset: -0.707 ms
Remote clock offset: 3.175 ms

# Below is generated by plot.py at 2019-06-27 09:58:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.73 Mbit/s
95th percentile per-packet one-way delay: 20.978 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 19.159 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.28 Mbit/s
95th percentile per-packet one-way delay: 21.969 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.12 Mbit/s
95th percentile per-packet one-way delay: 21.427 ms
Loss rate: 0.00%
```

## Run 1: Report of Sprout — Data Link

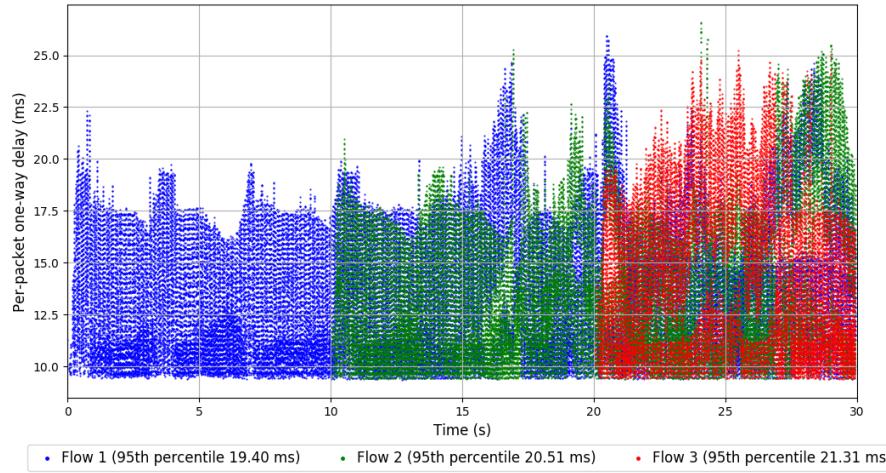
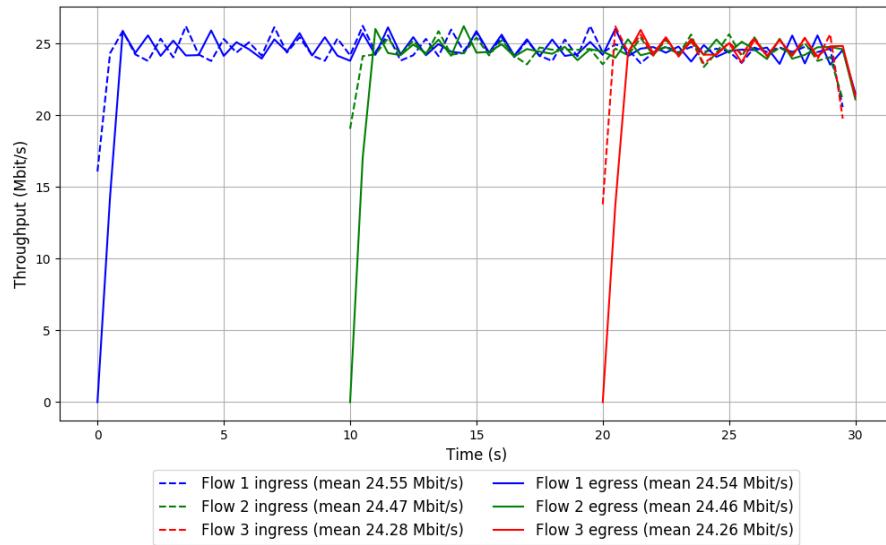


Run 2: Statistics of Sprout

```
Start at: 2019-06-27 08:02:06
End at: 2019-06-27 08:02:36
Local clock offset: 0.222 ms
Remote clock offset: 5.583 ms

# Below is generated by plot.py at 2019-06-27 09:58:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.84 Mbit/s
95th percentile per-packet one-way delay: 20.275 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.54 Mbit/s
95th percentile per-packet one-way delay: 19.398 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.46 Mbit/s
95th percentile per-packet one-way delay: 20.514 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.26 Mbit/s
95th percentile per-packet one-way delay: 21.310 ms
Loss rate: 0.00%
```

## Run 2: Report of Sprout — Data Link

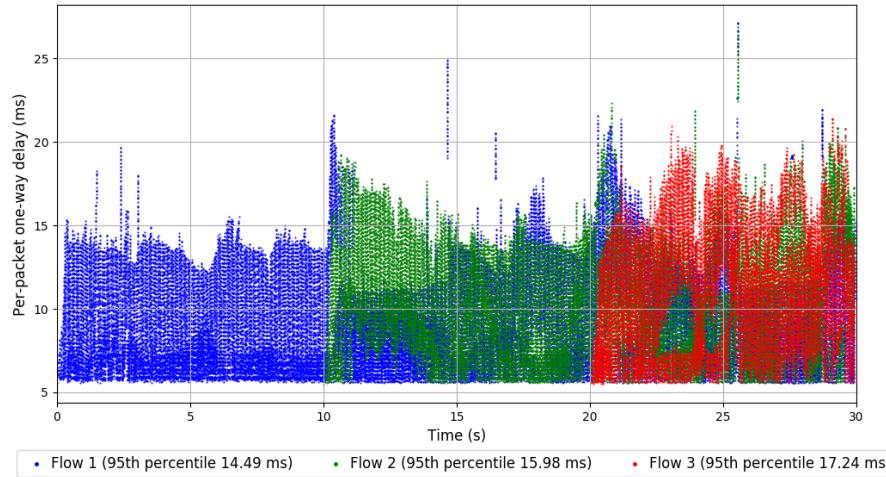
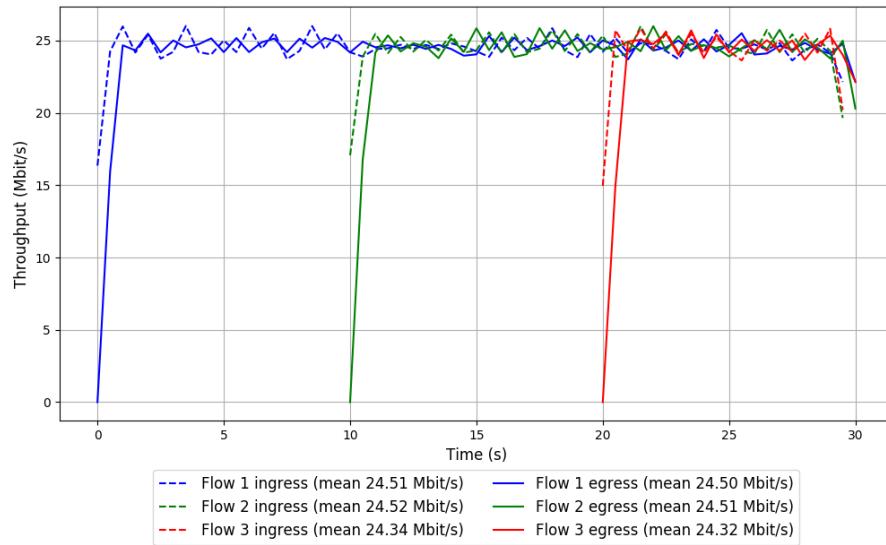


Run 3: Statistics of Sprout

```
Start at: 2019-06-27 08:28:30
End at: 2019-06-27 08:29:00
Local clock offset: -0.314 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2019-06-27 09:58:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.85 Mbit/s
95th percentile per-packet one-way delay: 15.849 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.50 Mbit/s
95th percentile per-packet one-way delay: 14.487 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.51 Mbit/s
95th percentile per-packet one-way delay: 15.984 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.32 Mbit/s
95th percentile per-packet one-way delay: 17.244 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

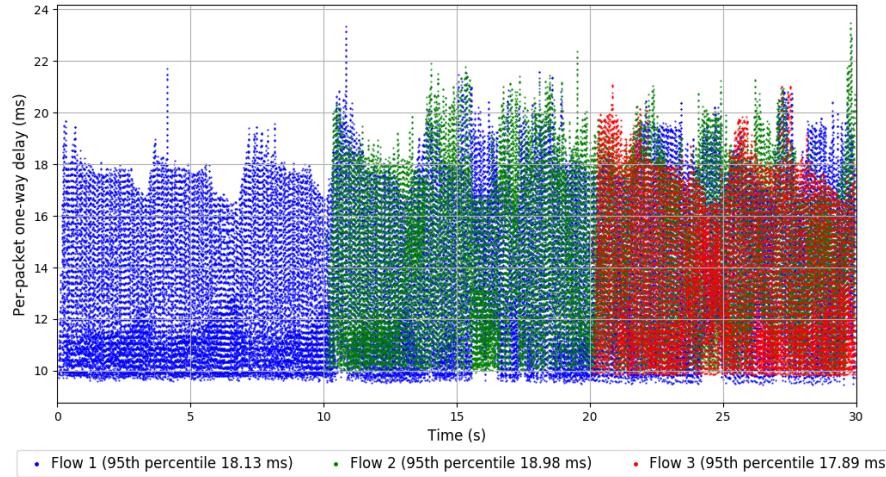
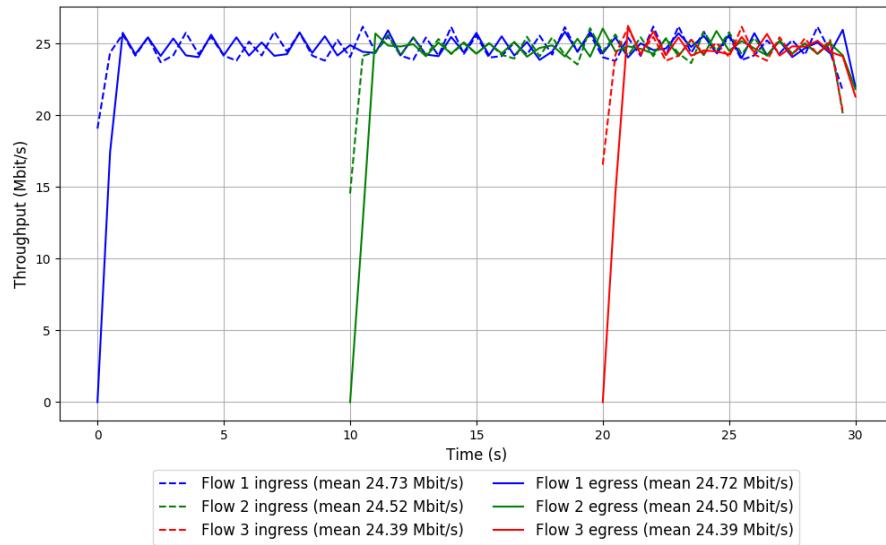


Run 4: Statistics of Sprout

```
Start at: 2019-06-27 08:54:22
End at: 2019-06-27 08:54:52
Local clock offset: 0.613 ms
Remote clock offset: 4.757 ms

# Below is generated by plot.py at 2019-06-27 09:58:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.08 Mbit/s
95th percentile per-packet one-way delay: 18.436 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.72 Mbit/s
95th percentile per-packet one-way delay: 18.132 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.50 Mbit/s
95th percentile per-packet one-way delay: 18.982 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.39 Mbit/s
95th percentile per-packet one-way delay: 17.895 ms
Loss rate: 0.00%
```

## Run 4: Report of Sprout — Data Link

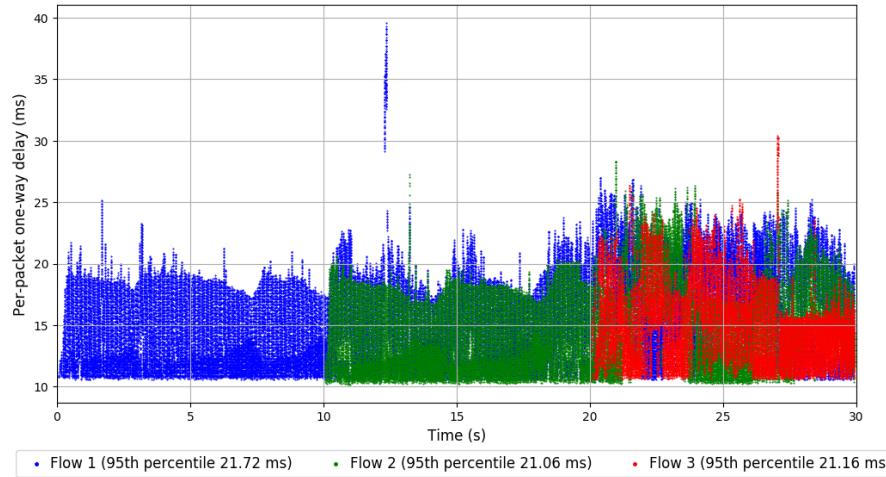
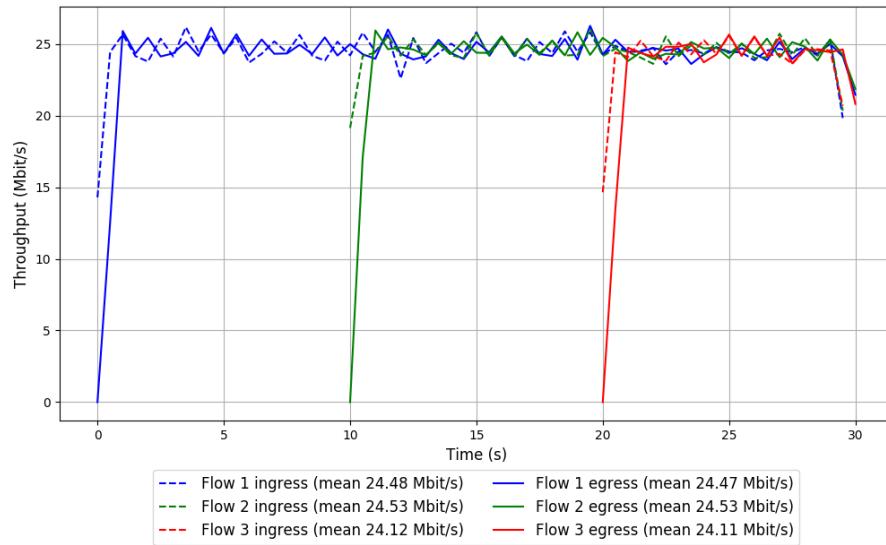


Run 5: Statistics of Sprout

```
Start at: 2019-06-27 09:20:23
End at: 2019-06-27 09:20:53
Local clock offset: -0.928 ms
Remote clock offset: 6.033 ms

# Below is generated by plot.py at 2019-06-27 09:58:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.75 Mbit/s
95th percentile per-packet one-way delay: 21.469 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.47 Mbit/s
95th percentile per-packet one-way delay: 21.722 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.53 Mbit/s
95th percentile per-packet one-way delay: 21.063 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.11 Mbit/s
95th percentile per-packet one-way delay: 21.156 ms
Loss rate: 0.00%
```

## Run 5: Report of Sprout — Data Link

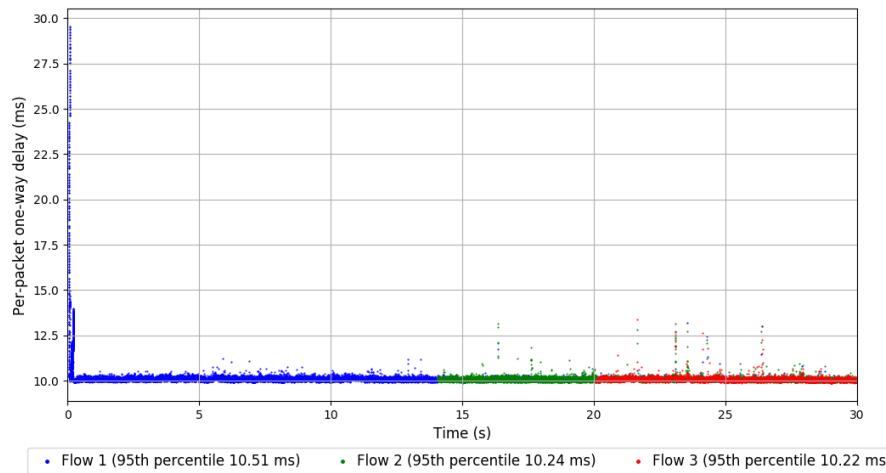
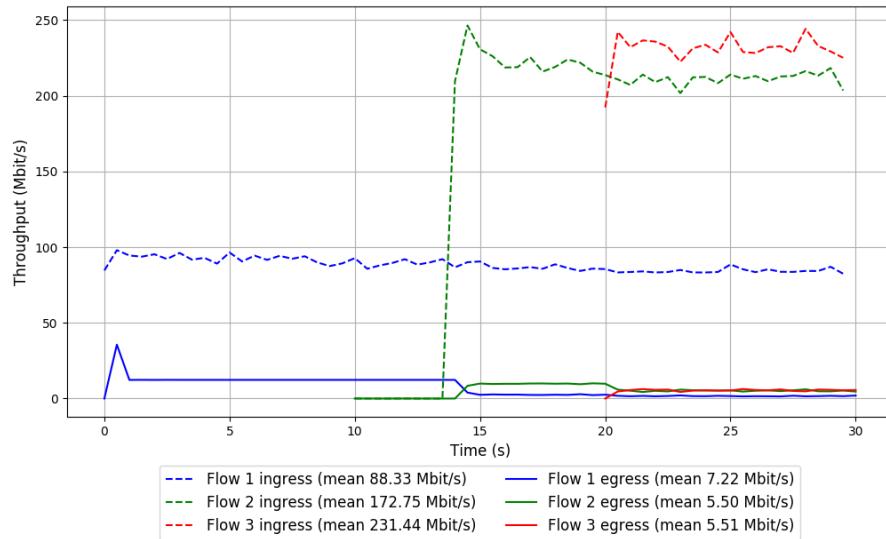


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-06-27 07:59:41
End at: 2019-06-27 08:00:11
Local clock offset: -0.464 ms
Remote clock offset: 5.002 ms

# Below is generated by plot.py at 2019-06-27 09:58:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.71 Mbit/s
95th percentile per-packet one-way delay: 10.292 ms
Loss rate: 95.46%
-- Flow 1:
Average throughput: 7.22 Mbit/s
95th percentile per-packet one-way delay: 10.514 ms
Loss rate: 91.83%
-- Flow 2:
Average throughput: 5.50 Mbit/s
95th percentile per-packet one-way delay: 10.236 ms
Loss rate: 96.81%
-- Flow 3:
Average throughput: 5.51 Mbit/s
95th percentile per-packet one-way delay: 10.224 ms
Loss rate: 97.62%
```

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

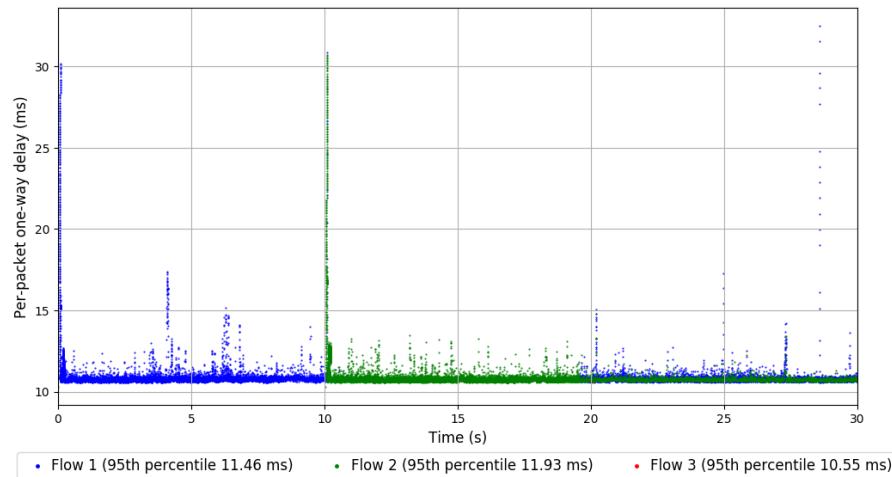
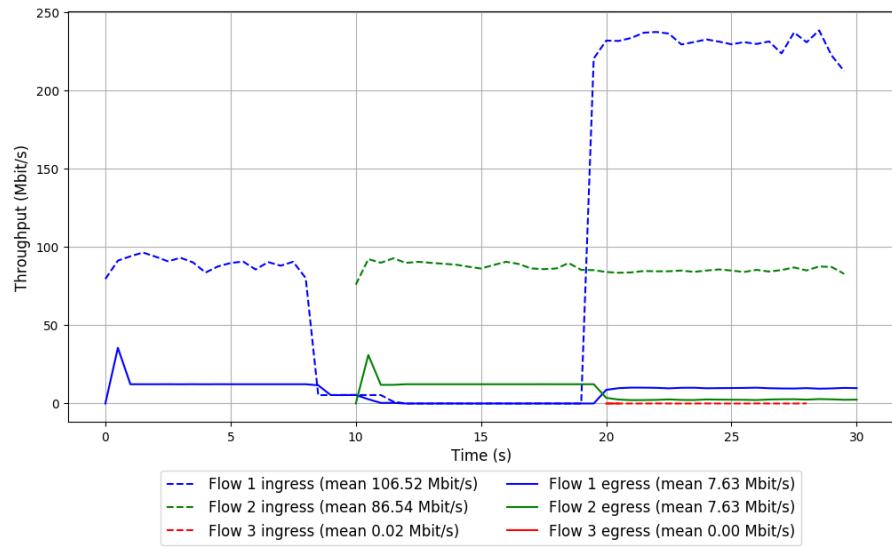


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-06-27 08:26:05
End at: 2019-06-27 08:26:35
Local clock offset: 0.245 ms
Remote clock offset: 5.632 ms

# Below is generated by plot.py at 2019-06-27 09:58:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.71 Mbit/s
95th percentile per-packet one-way delay: 11.610 ms
Loss rate: 92.26%
-- Flow 1:
Average throughput: 7.63 Mbit/s
95th percentile per-packet one-way delay: 11.463 ms
Loss rate: 92.84%
-- Flow 2:
Average throughput: 7.63 Mbit/s
95th percentile per-packet one-way delay: 11.930 ms
Loss rate: 91.19%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 10.550 ms
Loss rate: 99.16%
```

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

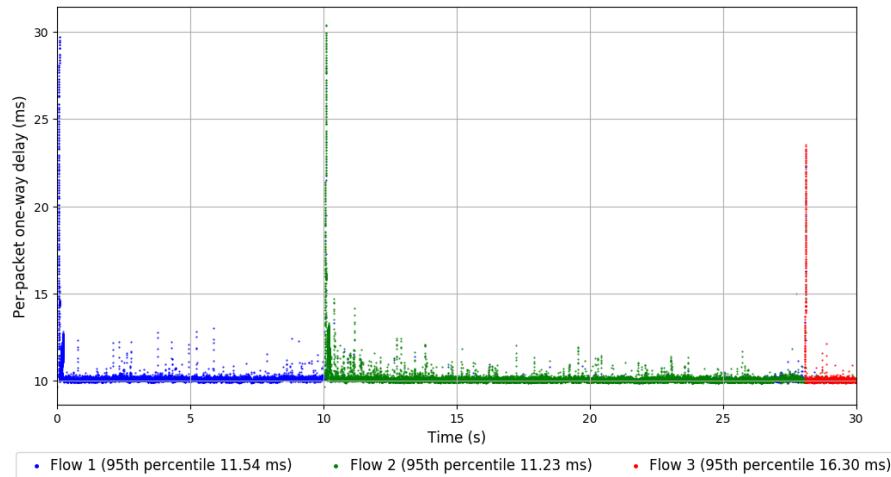
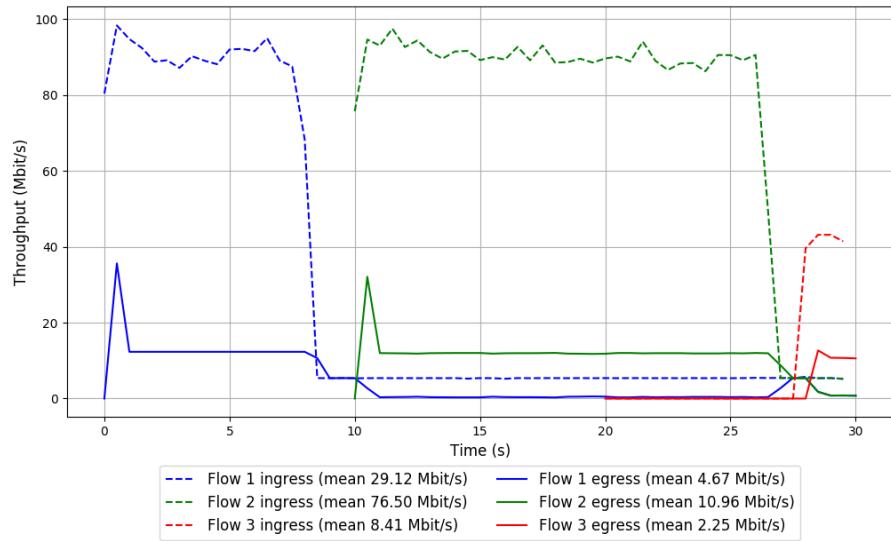


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-06-27 08:52:02
End at: 2019-06-27 08:52:32
Local clock offset: -0.124 ms
Remote clock offset: 3.728 ms

# Below is generated by plot.py at 2019-06-27 09:58:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.71 Mbit/s
95th percentile per-packet one-way delay: 11.455 ms
Loss rate: 84.66%
-- Flow 1:
Average throughput: 4.67 Mbit/s
95th percentile per-packet one-way delay: 11.536 ms
Loss rate: 83.96%
-- Flow 2:
Average throughput: 10.96 Mbit/s
95th percentile per-packet one-way delay: 11.230 ms
Loss rate: 85.68%
-- Flow 3:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 16.300 ms
Loss rate: 73.30%
```

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

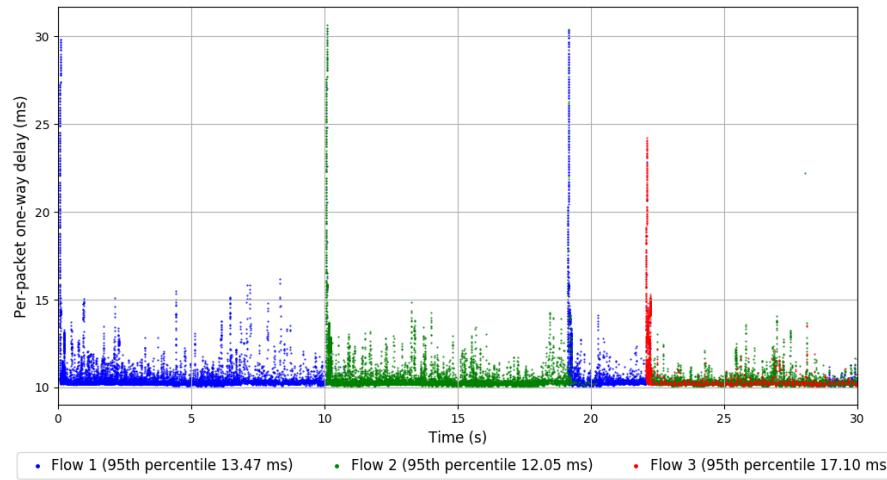
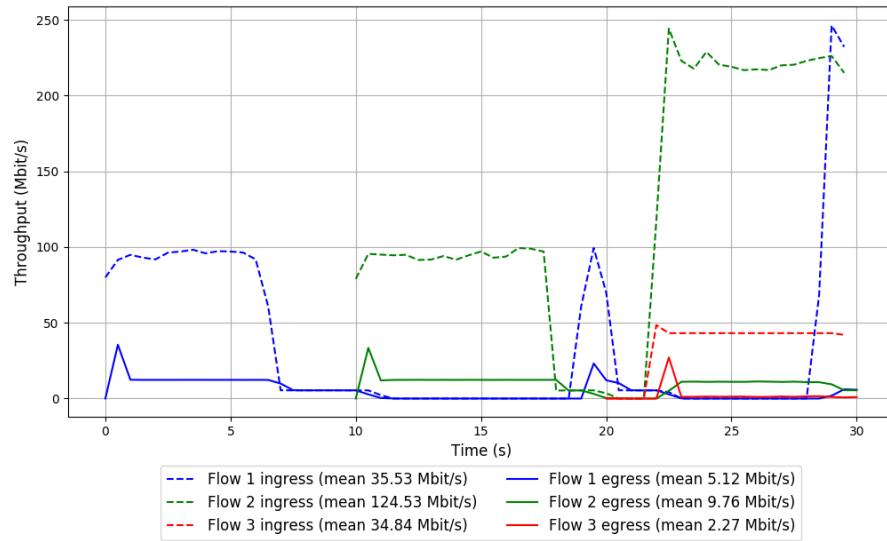


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-06-27 09:17:58
End at: 2019-06-27 09:18:28
Local clock offset: -1.659 ms
Remote clock offset: 4.745 ms

# Below is generated by plot.py at 2019-06-27 09:58:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.38 Mbit/s
95th percentile per-packet one-way delay: 13.015 ms
Loss rate: 90.49%
-- Flow 1:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 13.472 ms
Loss rate: 85.58%
-- Flow 2:
Average throughput: 9.76 Mbit/s
95th percentile per-packet one-way delay: 12.054 ms
Loss rate: 92.16%
-- Flow 3:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 17.099 ms
Loss rate: 93.52%
```

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

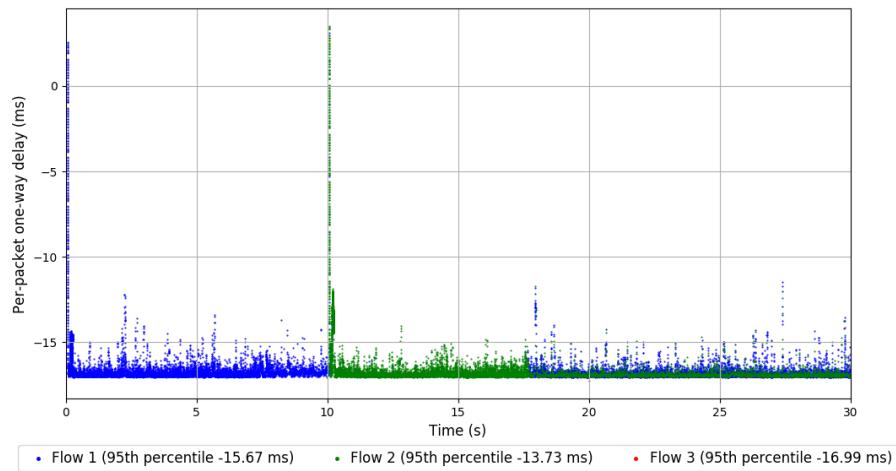
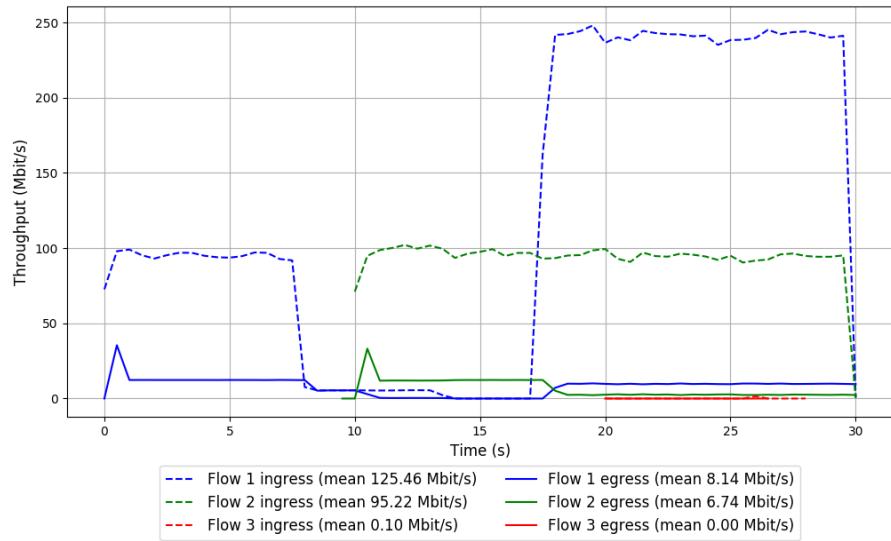


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-06-27 09:44:28
End at: 2019-06-27 09:44:58
Local clock offset: -0.527 ms
Remote clock offset: -25.268 ms

# Below is generated by plot.py at 2019-06-27 09:58:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.64 Mbit/s
95th percentile per-packet one-way delay: -15.309 ms
Loss rate: 93.31%
-- Flow 1:
Average throughput: 8.14 Mbit/s
95th percentile per-packet one-way delay: -15.666 ms
Loss rate: 93.51%
-- Flow 2:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: -13.735 ms
Loss rate: 92.92%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: -16.989 ms
Loss rate: 98.43%
```

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

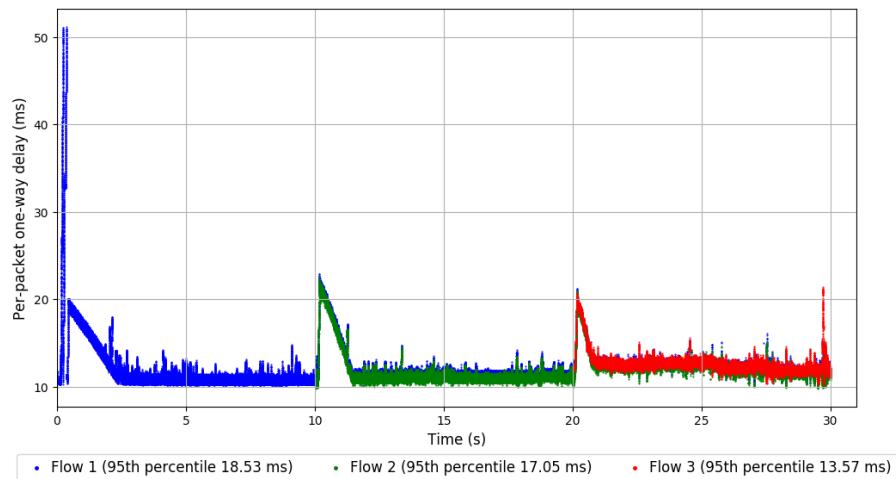
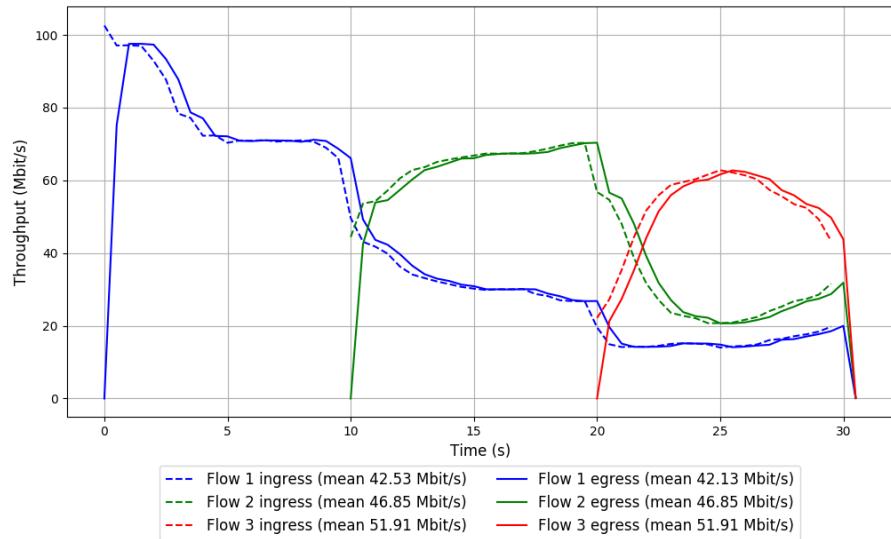


Run 1: Statistics of TCP Vegas

```
Start at: 2019-06-27 07:52:34
End at: 2019-06-27 07:53:04
Local clock offset: -0.855 ms
Remote clock offset: 4.239 ms

# Below is generated by plot.py at 2019-06-27 09:59:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.60 Mbit/s
95th percentile per-packet one-way delay: 17.753 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 42.13 Mbit/s
95th percentile per-packet one-way delay: 18.530 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 46.85 Mbit/s
95th percentile per-packet one-way delay: 17.054 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.91 Mbit/s
95th percentile per-packet one-way delay: 13.572 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Vegas — Data Link

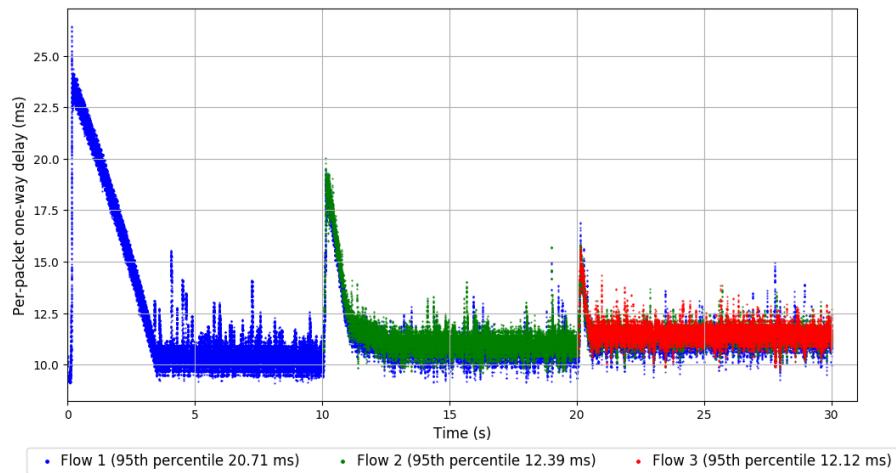
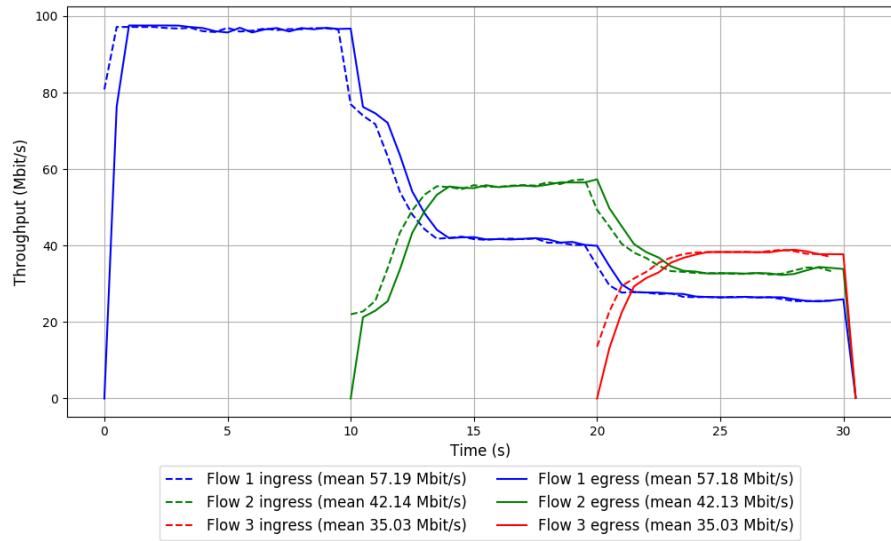


Run 2: Statistics of TCP Vegas

```
Start at: 2019-06-27 08:18:46
End at: 2019-06-27 08:19:16
Local clock offset: -0.191 ms
Remote clock offset: 4.344 ms

# Below is generated by plot.py at 2019-06-27 09:59:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.90 Mbit/s
95th percentile per-packet one-way delay: 18.521 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.18 Mbit/s
95th percentile per-packet one-way delay: 20.710 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.13 Mbit/s
95th percentile per-packet one-way delay: 12.394 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.03 Mbit/s
95th percentile per-packet one-way delay: 12.119 ms
Loss rate: 0.00%
```

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

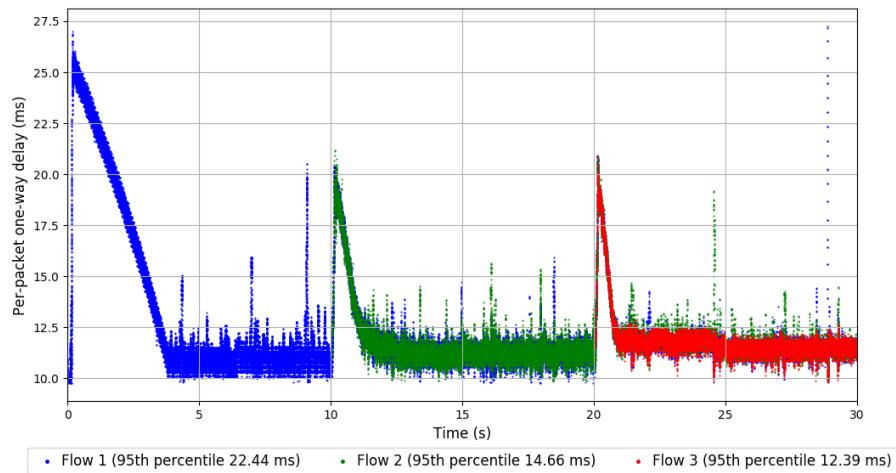
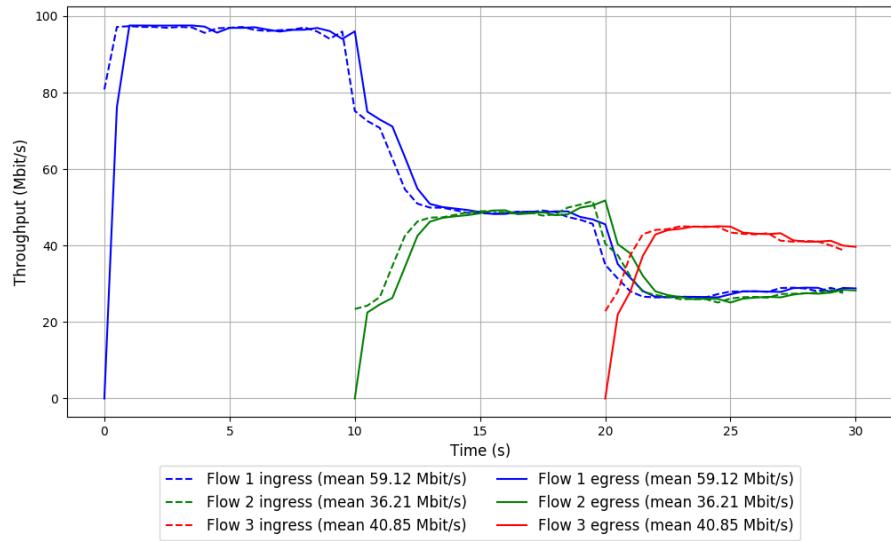


Run 3: Statistics of TCP Vegas

```
Start at: 2019-06-27 08:44:58
End at: 2019-06-27 08:45:28
Local clock offset: 0.42 ms
Remote clock offset: 4.45 ms

# Below is generated by plot.py at 2019-06-27 09:59:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.84 Mbit/s
95th percentile per-packet one-way delay: 20.351 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.12 Mbit/s
95th percentile per-packet one-way delay: 22.438 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.21 Mbit/s
95th percentile per-packet one-way delay: 14.663 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 40.85 Mbit/s
95th percentile per-packet one-way delay: 12.389 ms
Loss rate: 0.00%
```

Run 3: Report of TCP Vegas — Data Link

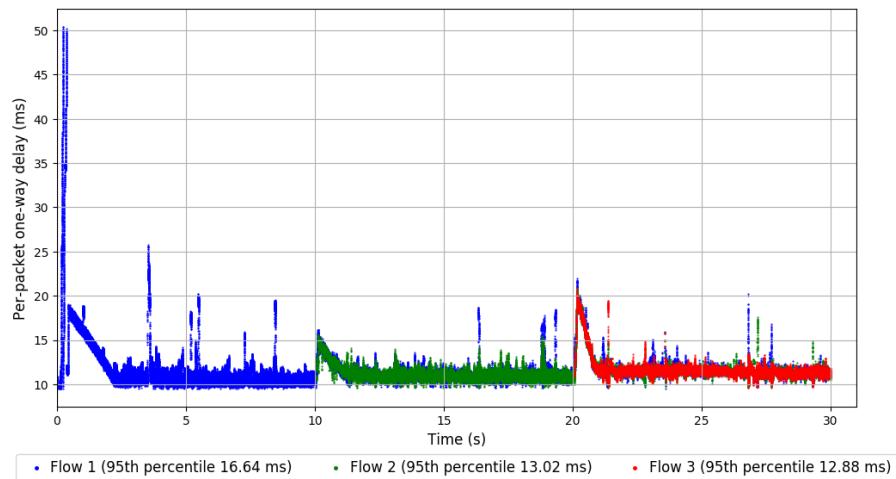
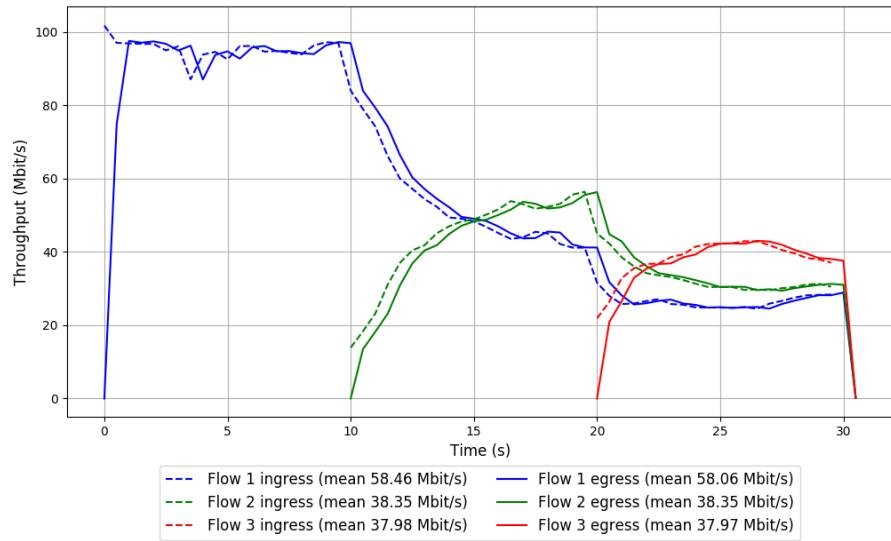


Run 4: Statistics of TCP Vegas

```
Start at: 2019-06-27 09:10:55
End at: 2019-06-27 09:11:25
Local clock offset: -0.459 ms
Remote clock offset: 5.022 ms

# Below is generated by plot.py at 2019-06-27 09:59:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.24 Mbit/s
95th percentile per-packet one-way delay: 15.588 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 58.06 Mbit/s
95th percentile per-packet one-way delay: 16.638 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 38.35 Mbit/s
95th percentile per-packet one-way delay: 13.016 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 37.97 Mbit/s
95th percentile per-packet one-way delay: 12.879 ms
Loss rate: 0.00%
```

Run 4: Report of TCP Vegas — Data Link

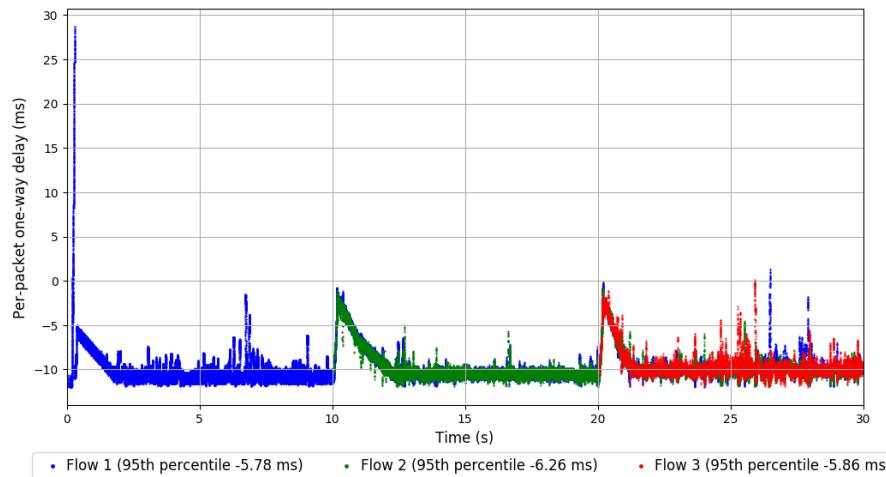
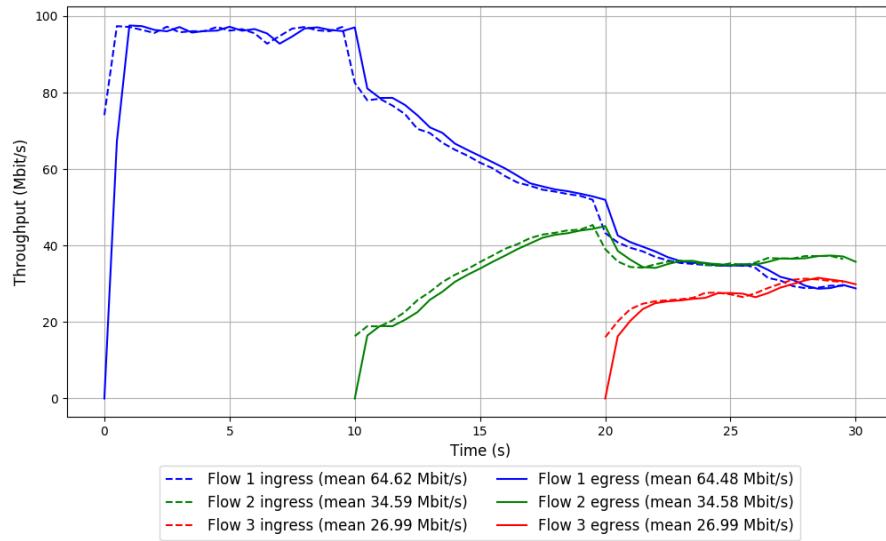


Run 5: Statistics of TCP Vegas

```
Start at: 2019-06-27 09:37:18
End at: 2019-06-27 09:37:48
Local clock offset: -1.193 ms
Remote clock offset: -20.783 ms

# Below is generated by plot.py at 2019-06-27 09:59:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.48 Mbit/s
95th percentile per-packet one-way delay: -5.934 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 64.48 Mbit/s
95th percentile per-packet one-way delay: -5.781 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 34.58 Mbit/s
95th percentile per-packet one-way delay: -6.264 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 26.99 Mbit/s
95th percentile per-packet one-way delay: -5.859 ms
Loss rate: 0.00%
```

Run 5: Report of TCP Vegas — Data Link

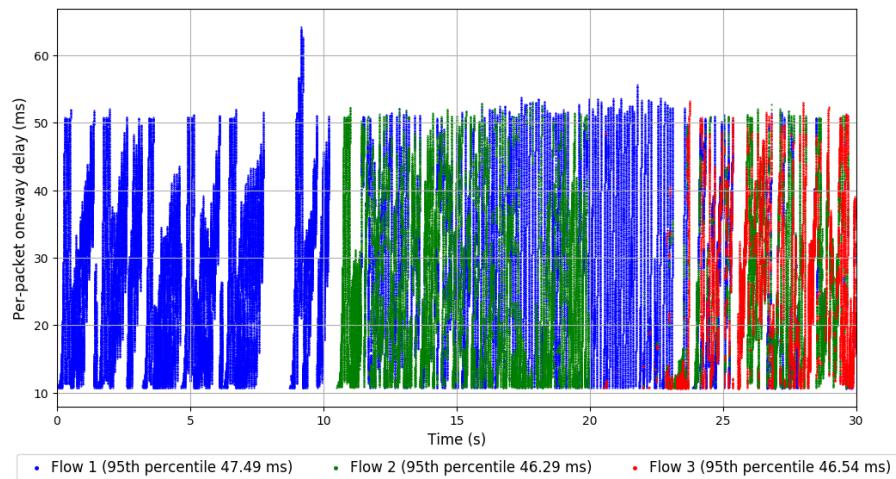
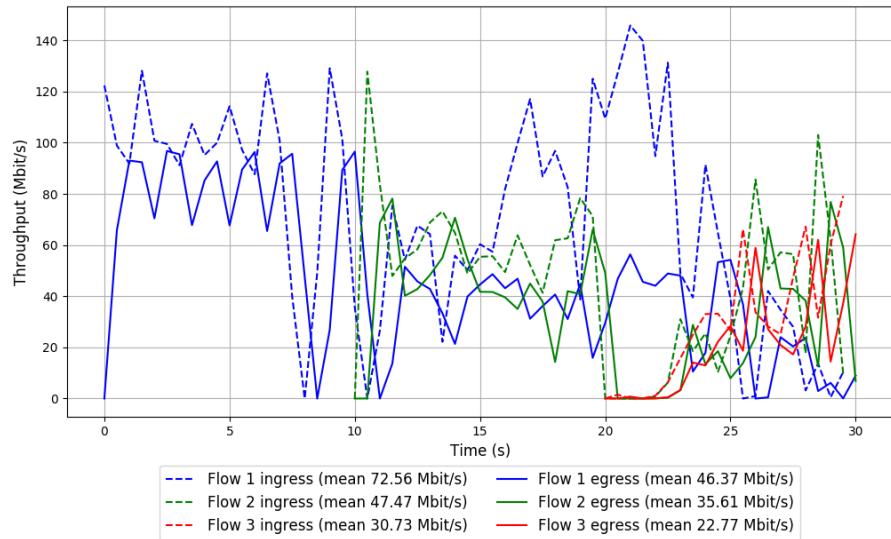


Run 1: Statistics of Verus

```
Start at: 2019-06-27 07:47:38
End at: 2019-06-27 07:48:08
Local clock offset: -0.472 ms
Remote clock offset: 4.668 ms

# Below is generated by plot.py at 2019-06-27 09:59:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.38 Mbit/s
95th percentile per-packet one-way delay: 47.082 ms
Loss rate: 32.20%
-- Flow 1:
Average throughput: 46.37 Mbit/s
95th percentile per-packet one-way delay: 47.493 ms
Loss rate: 36.09%
-- Flow 2:
Average throughput: 35.61 Mbit/s
95th percentile per-packet one-way delay: 46.291 ms
Loss rate: 24.96%
-- Flow 3:
Average throughput: 22.77 Mbit/s
95th percentile per-packet one-way delay: 46.541 ms
Loss rate: 25.82%
```

## Run 1: Report of Verus — Data Link

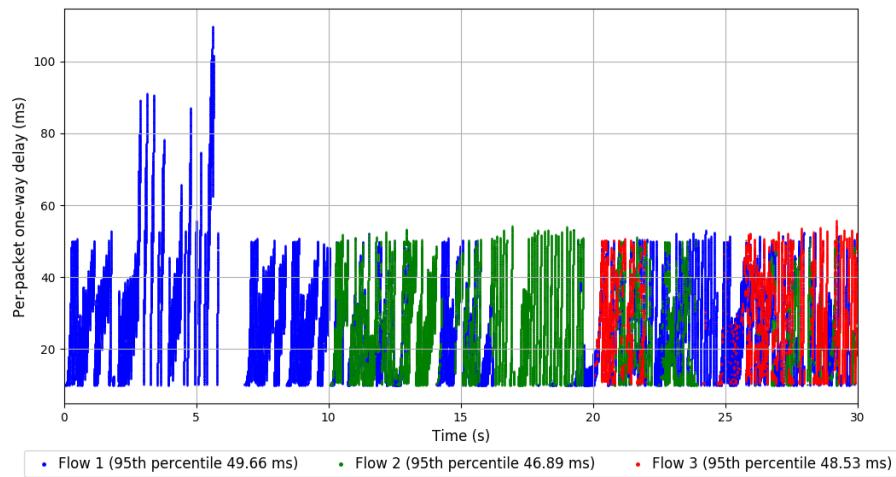
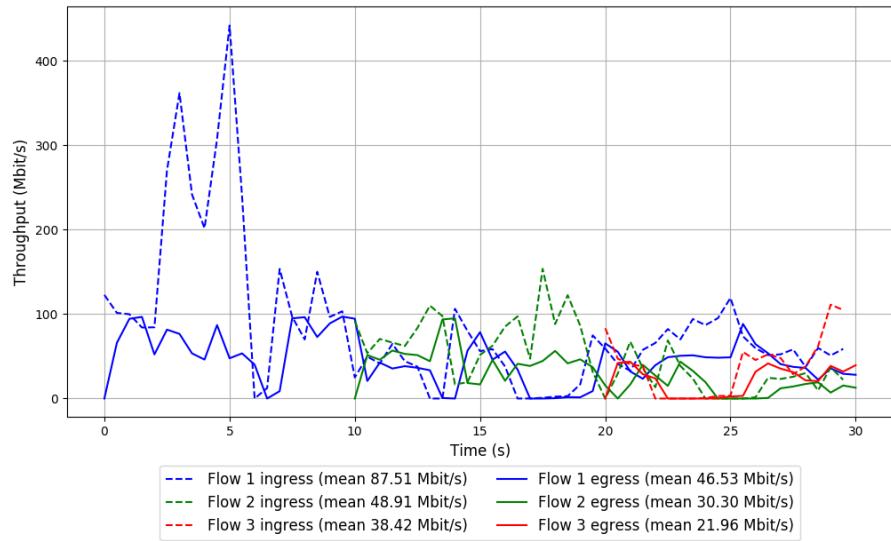


Run 2: Statistics of Verus

```
Start at: 2019-06-27 08:13:54
End at: 2019-06-27 08:14:24
Local clock offset: 0.108 ms
Remote clock offset: 5.45 ms

# Below is generated by plot.py at 2019-06-27 09:59:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.95 Mbit/s
95th percentile per-packet one-way delay: 48.565 ms
Loss rate: 44.27%
-- Flow 1:
Average throughput: 46.53 Mbit/s
95th percentile per-packet one-way delay: 49.659 ms
Loss rate: 46.82%
-- Flow 2:
Average throughput: 30.30 Mbit/s
95th percentile per-packet one-way delay: 46.893 ms
Loss rate: 38.01%
-- Flow 3:
Average throughput: 21.96 Mbit/s
95th percentile per-packet one-way delay: 48.533 ms
Loss rate: 42.74%
```

Run 2: Report of Verus — Data Link

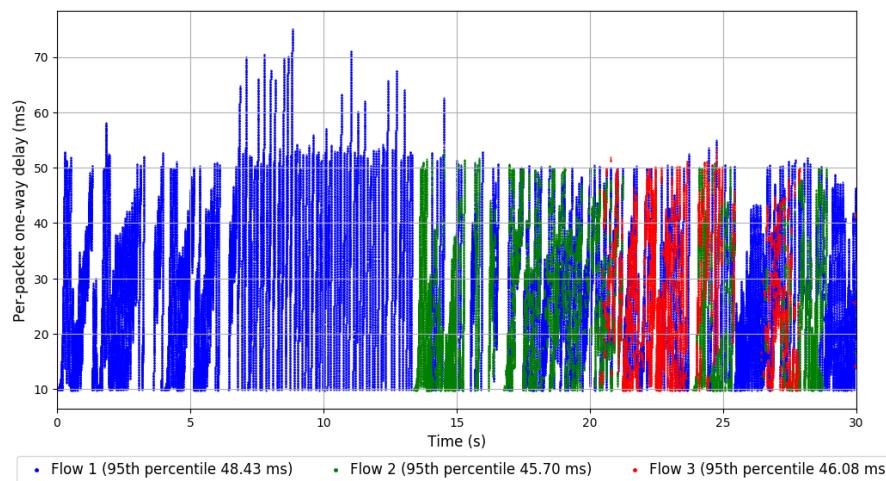
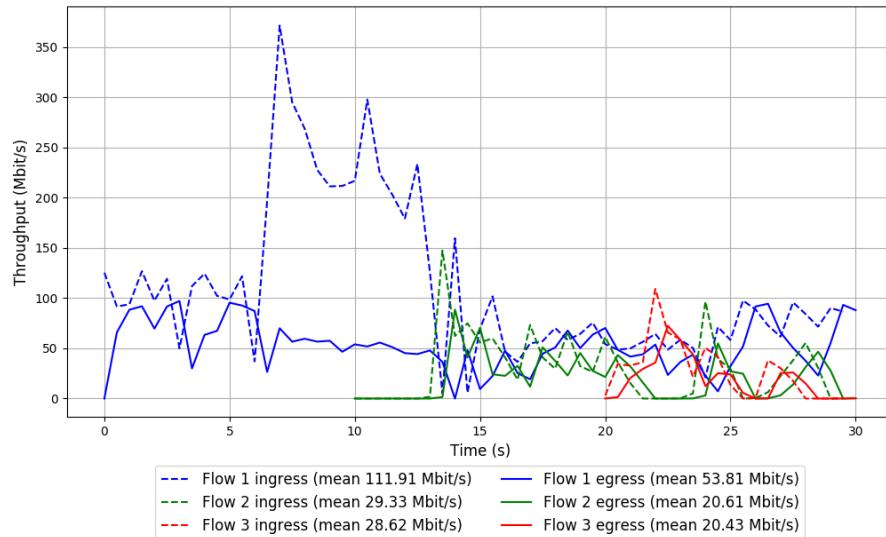


Run 3: Statistics of Verus

```
Start at: 2019-06-27 08:40:13
End at: 2019-06-27 08:40:43
Local clock offset: 0.89 ms
Remote clock offset: 4.851 ms

# Below is generated by plot.py at 2019-06-27 10:00:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.14 Mbit/s
95th percentile per-packet one-way delay: 47.668 ms
Loss rate: 47.23%
-- Flow 1:
Average throughput: 53.81 Mbit/s
95th percentile per-packet one-way delay: 48.427 ms
Loss rate: 51.86%
-- Flow 2:
Average throughput: 20.61 Mbit/s
95th percentile per-packet one-way delay: 45.695 ms
Loss rate: 29.61%
-- Flow 3:
Average throughput: 20.43 Mbit/s
95th percentile per-packet one-way delay: 46.078 ms
Loss rate: 28.47%
```

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

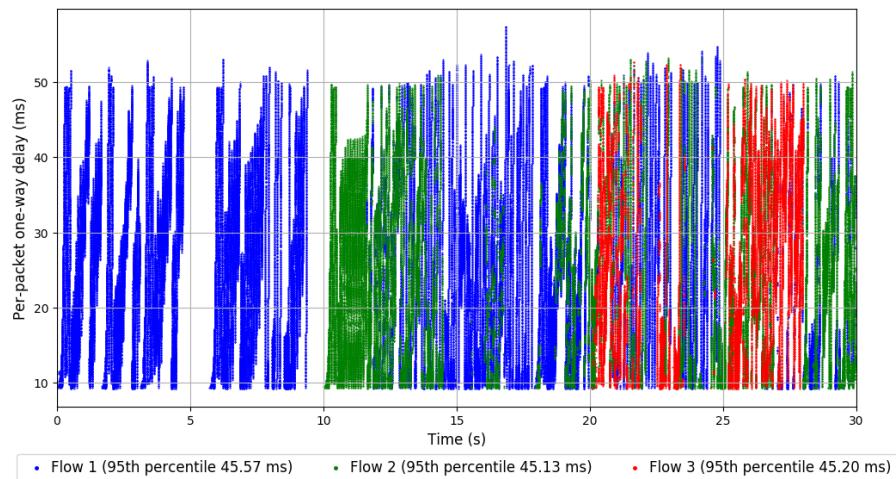
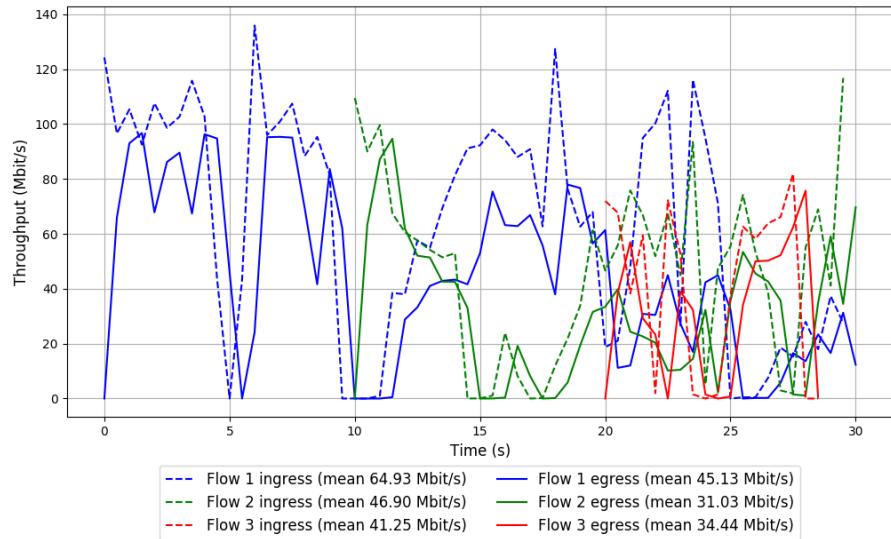


Run 4: Statistics of Verus

```
Start at: 2019-06-27 09:06:00
End at: 2019-06-27 09:06:30
Local clock offset: -0.568 ms
Remote clock offset: 4.485 ms

# Below is generated by plot.py at 2019-06-27 10:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.92 Mbit/s
95th percentile per-packet one-way delay: 45.407 ms
Loss rate: 30.92%
-- Flow 1:
Average throughput: 45.13 Mbit/s
95th percentile per-packet one-way delay: 45.566 ms
Loss rate: 30.48%
-- Flow 2:
Average throughput: 31.03 Mbit/s
95th percentile per-packet one-way delay: 45.133 ms
Loss rate: 33.82%
-- Flow 3:
Average throughput: 34.44 Mbit/s
95th percentile per-packet one-way delay: 45.204 ms
Loss rate: 25.83%
```

## Run 4: Report of Verus — Data Link

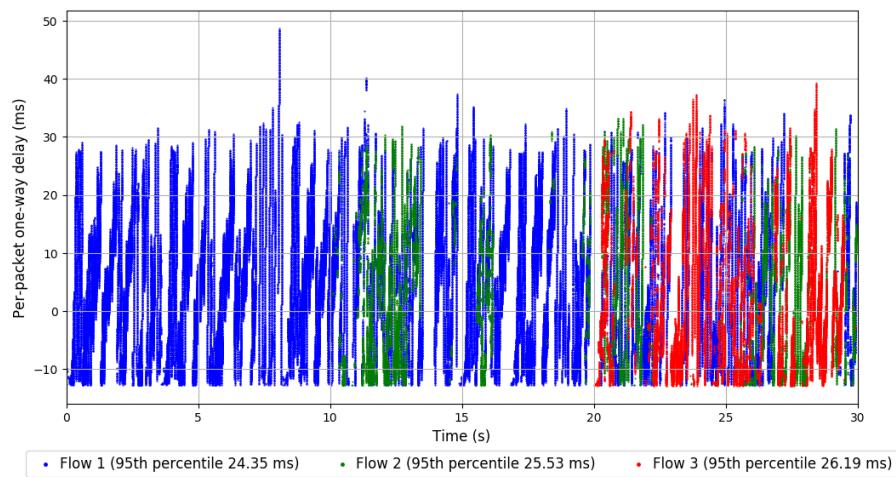
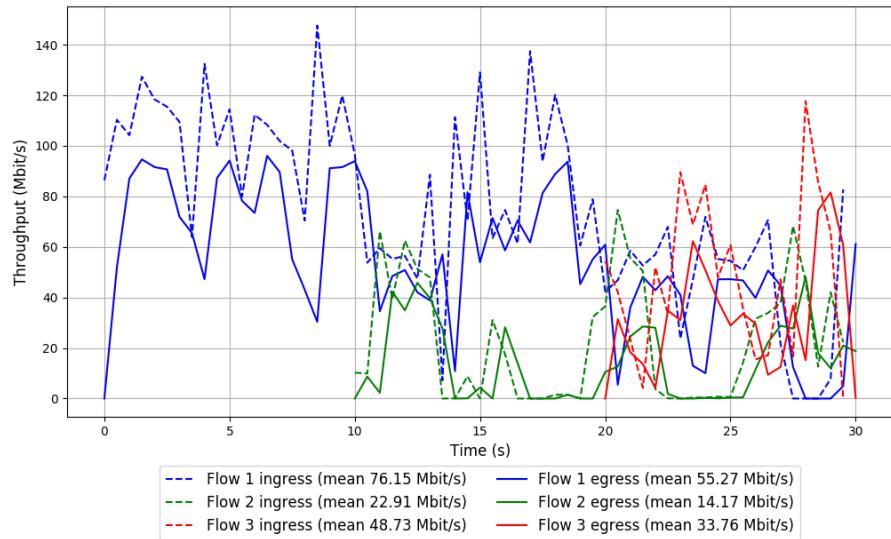


Run 5: Statistics of Verus

```
Start at: 2019-06-27 09:32:26
End at: 2019-06-27 09:32:56
Local clock offset: -1.215 ms
Remote clock offset: -22.022 ms

# Below is generated by plot.py at 2019-06-27 10:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.85 Mbit/s
95th percentile per-packet one-way delay: 24.759 ms
Loss rate: 29.36%
-- Flow 1:
Average throughput: 55.27 Mbit/s
95th percentile per-packet one-way delay: 24.348 ms
Loss rate: 27.34%
-- Flow 2:
Average throughput: 14.17 Mbit/s
95th percentile per-packet one-way delay: 25.527 ms
Loss rate: 38.09%
-- Flow 3:
Average throughput: 33.76 Mbit/s
95th percentile per-packet one-way delay: 26.191 ms
Loss rate: 30.64%
```

Run 5: Report of Verus — Data Link

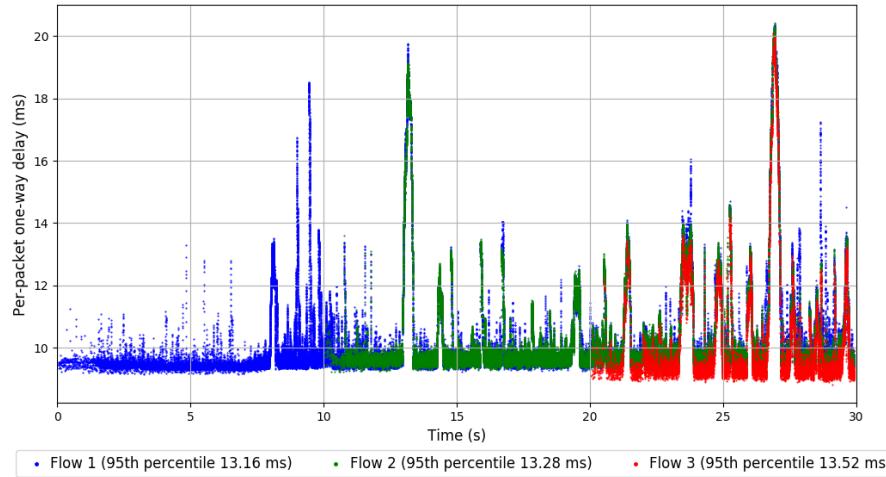
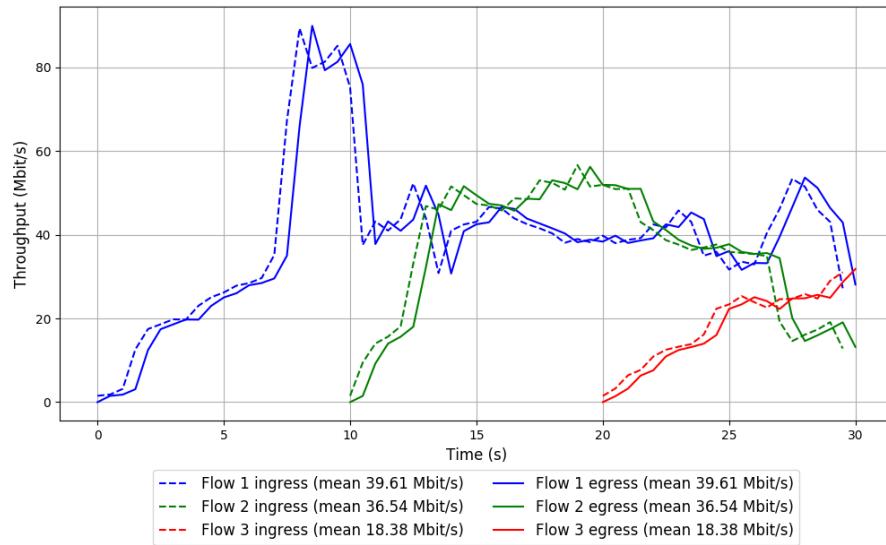


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-06-27 07:50:03
End at: 2019-06-27 07:50:33
Local clock offset: 0.261 ms
Remote clock offset: 4.222 ms

# Below is generated by plot.py at 2019-06-27 10:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.98 Mbit/s
95th percentile per-packet one-way delay: 13.222 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 39.61 Mbit/s
95th percentile per-packet one-way delay: 13.164 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.54 Mbit/s
95th percentile per-packet one-way delay: 13.277 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 18.38 Mbit/s
95th percentile per-packet one-way delay: 13.521 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Vivace — Data Link

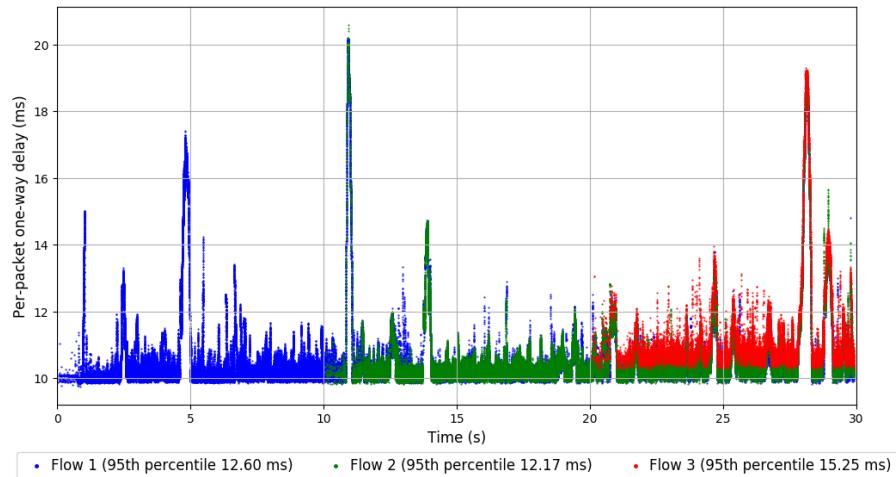
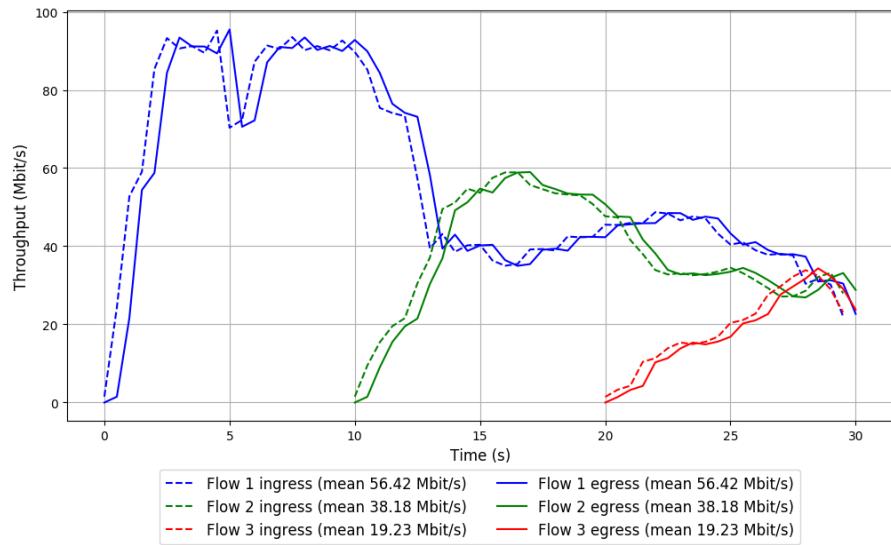


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-06-27 08:16:20
End at: 2019-06-27 08:16:50
Local clock offset: -0.093 ms
Remote clock offset: 5.259 ms

# Below is generated by plot.py at 2019-06-27 10:00:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.16 Mbit/s
95th percentile per-packet one-way delay: 12.719 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.42 Mbit/s
95th percentile per-packet one-way delay: 12.603 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.18 Mbit/s
95th percentile per-packet one-way delay: 12.167 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.23 Mbit/s
95th percentile per-packet one-way delay: 15.253 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

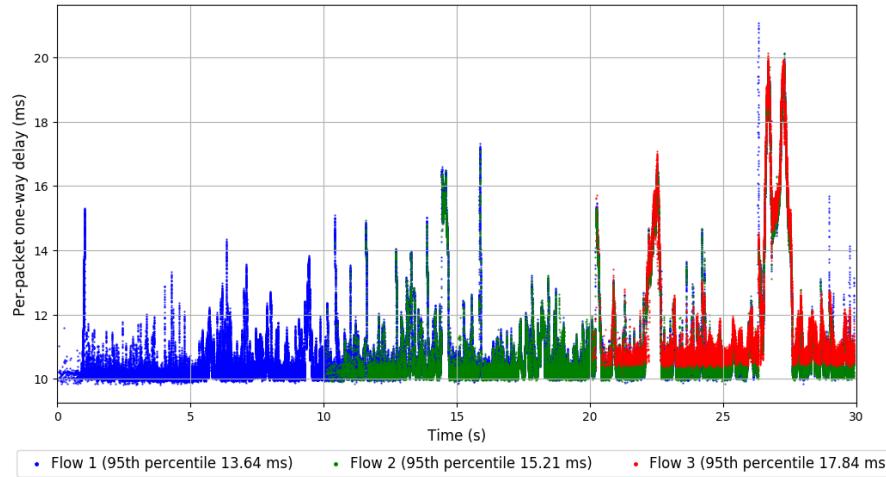
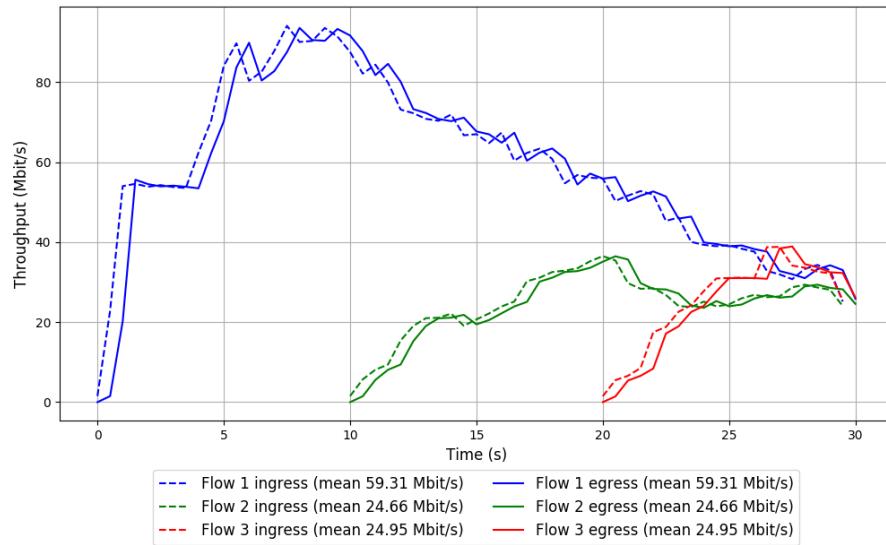


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-06-27 08:42:34
End at: 2019-06-27 08:43:04
Local clock offset: 0.329 ms
Remote clock offset: 4.701 ms

# Below is generated by plot.py at 2019-06-27 10:00:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.95 Mbit/s
95th percentile per-packet one-way delay: 14.876 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.31 Mbit/s
95th percentile per-packet one-way delay: 13.642 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.66 Mbit/s
95th percentile per-packet one-way delay: 15.214 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.95 Mbit/s
95th percentile per-packet one-way delay: 17.839 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Vivace — Data Link

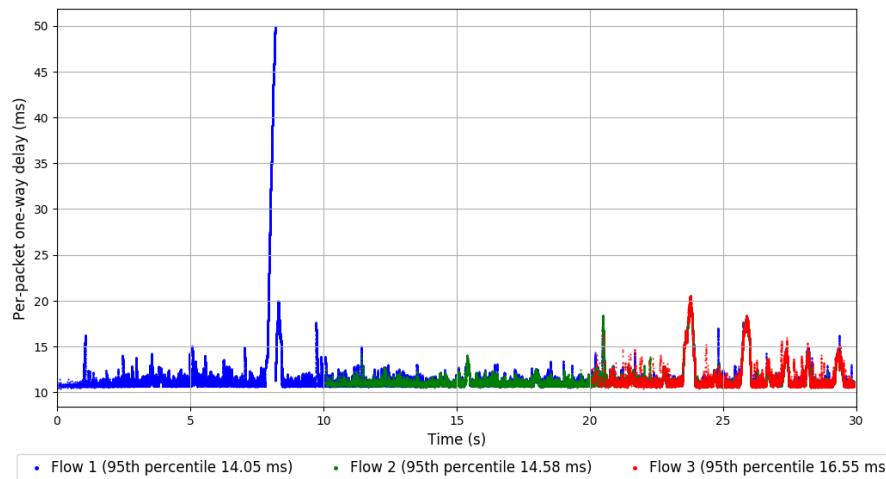
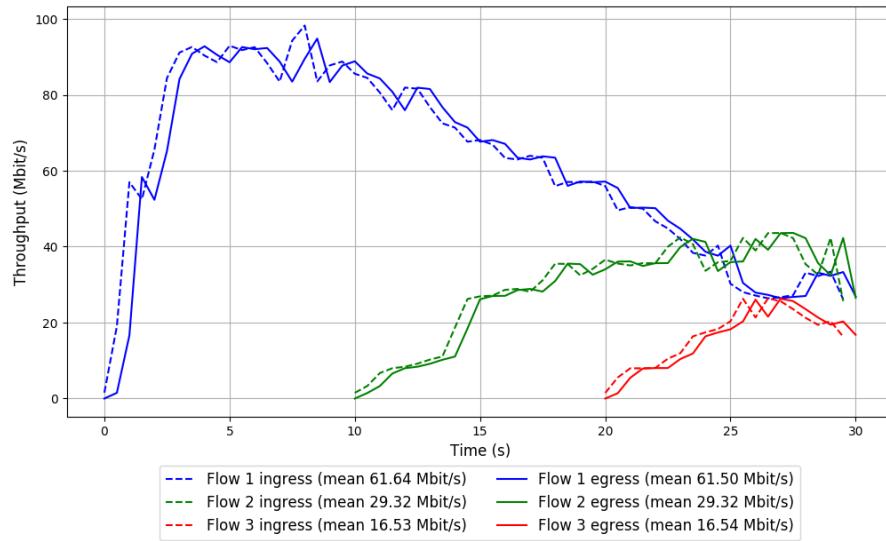


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-06-27 09:08:21
End at: 2019-06-27 09:08:51
Local clock offset: -1.233 ms
Remote clock offset: 5.191 ms

# Below is generated by plot.py at 2019-06-27 10:00:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.46 Mbit/s
95th percentile per-packet one-way delay: 14.369 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 61.50 Mbit/s
95th percentile per-packet one-way delay: 14.049 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 29.32 Mbit/s
95th percentile per-packet one-way delay: 14.576 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.54 Mbit/s
95th percentile per-packet one-way delay: 16.552 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

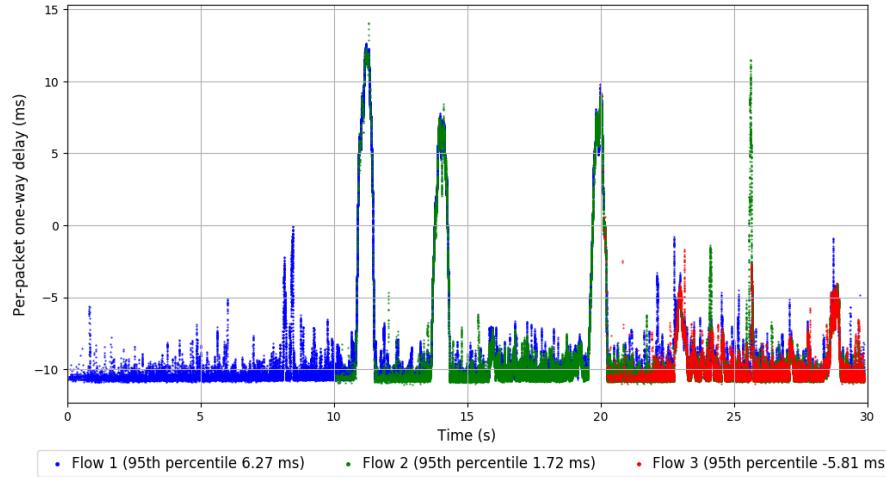
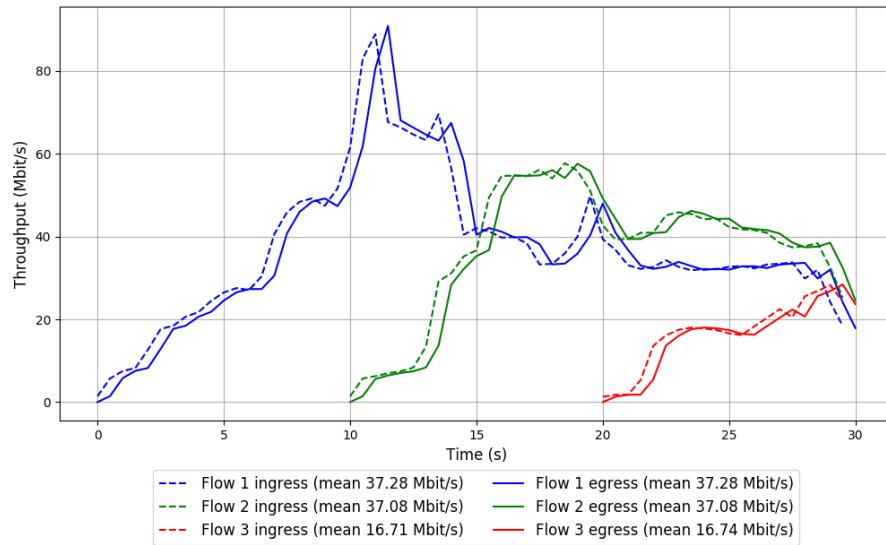


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-06-27 09:34:55
End at: 2019-06-27 09:35:25
Local clock offset: -1.534 ms
Remote clock offset: -19.796 ms

# Below is generated by plot.py at 2019-06-27 10:00:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.46 Mbit/s
95th percentile per-packet one-way delay: 4.902 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 37.28 Mbit/s
95th percentile per-packet one-way delay: 6.272 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.08 Mbit/s
95th percentile per-packet one-way delay: 1.722 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.74 Mbit/s
95th percentile per-packet one-way delay: -5.813 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Vivace — Data Link

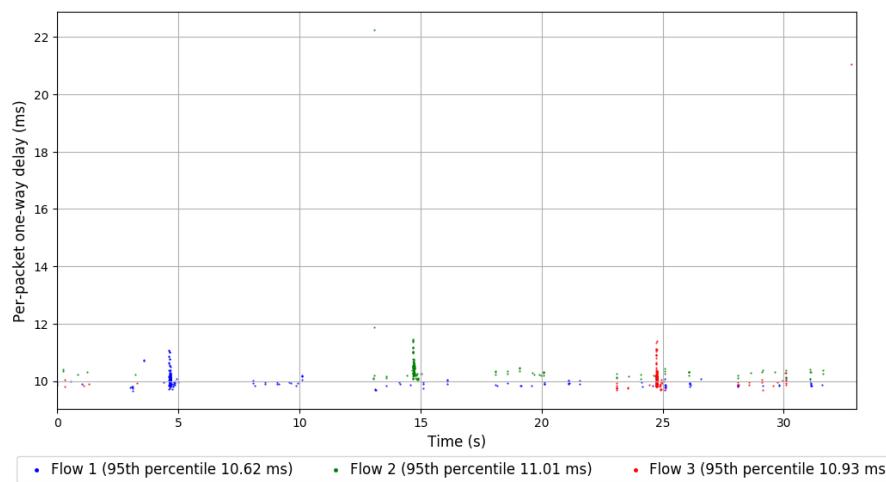
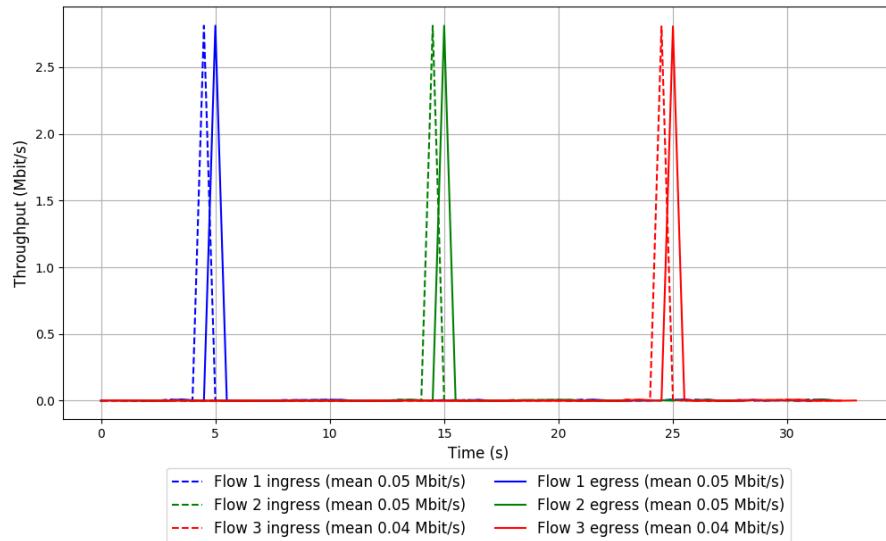


```
Run 1: Statistics of WebRTC media

Start at: 2019-06-27 07:37:06
End at: 2019-06-27 07:37:36
Local clock offset: -0.418 ms
Remote clock offset: 3.17 ms

# Below is generated by plot.py at 2019-06-27 10:00:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 10.859 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 10.624 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 11.011 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 10.927 ms
Loss rate: 0.00%
```

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

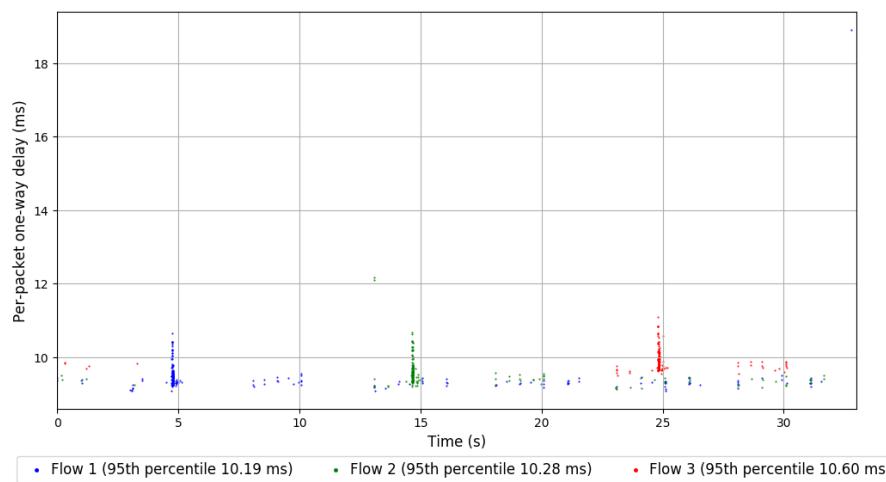
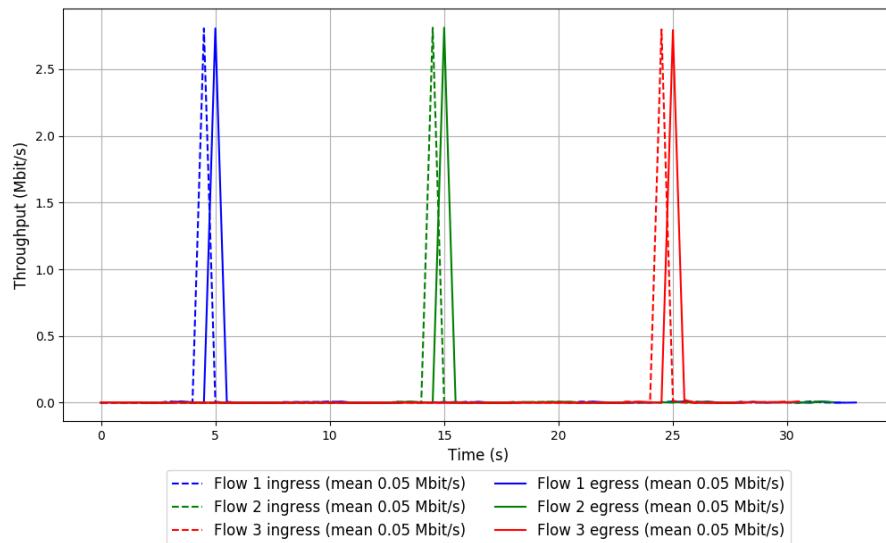


Run 2: Statistics of WebRTC media

```
Start at: 2019-06-27 08:03:15
End at: 2019-06-27 08:03:45
Local clock offset: 0.717 ms
Remote clock offset: 5.919 ms

# Below is generated by plot.py at 2019-06-27 10:00:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 10.384 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 10.188 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 10.276 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 10.595 ms
Loss rate: 0.00%
```

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

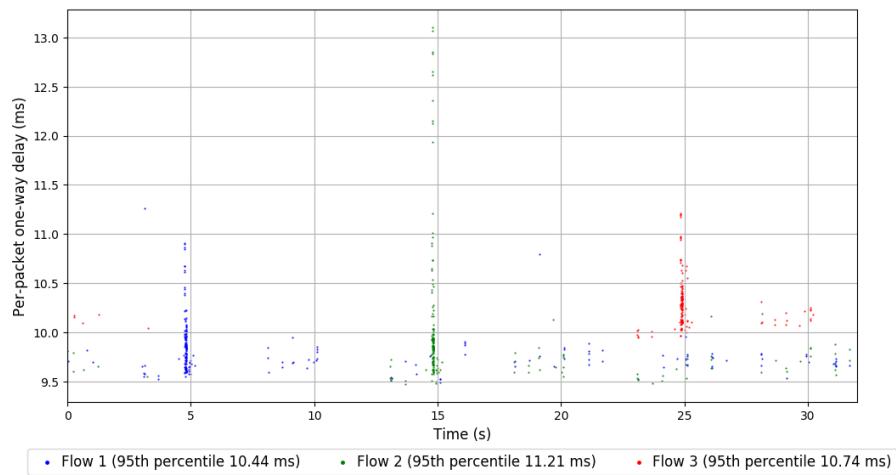
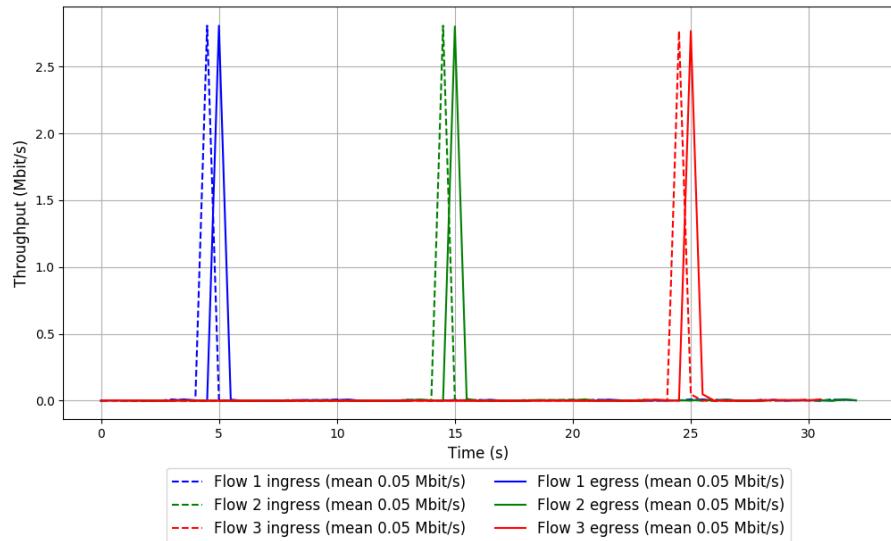


Run 3: Statistics of WebRTC media

```
Start at: 2019-06-27 08:29:39
End at: 2019-06-27 08:30:09
Local clock offset: 1.193 ms
Remote clock offset: 5.943 ms

# Below is generated by plot.py at 2019-06-27 10:00:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 10.745 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 10.441 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 11.213 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 10.745 ms
Loss rate: 0.00%
```

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

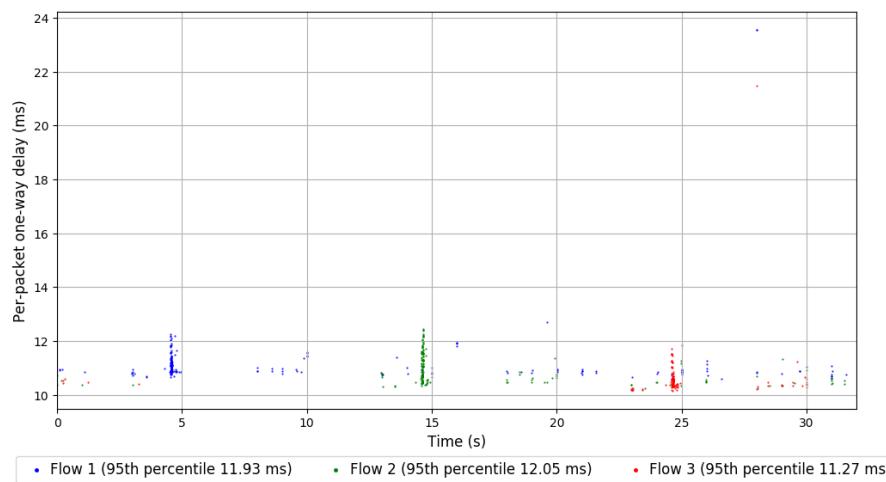
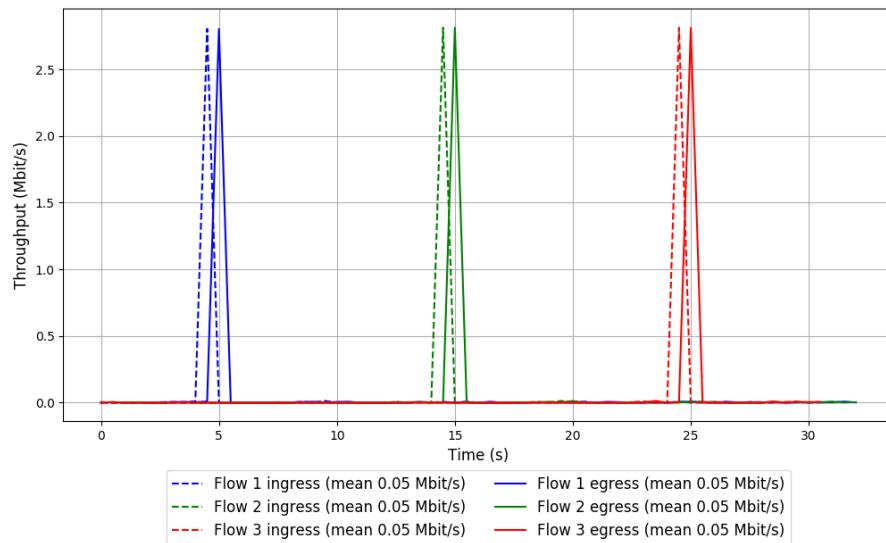


Run 4: Statistics of WebRTC media

```
Start at: 2019-06-27 08:55:30
End at: 2019-06-27 08:56:00
Local clock offset: -0.764 ms
Remote clock offset: 4.454 ms

# Below is generated by plot.py at 2019-06-27 10:00:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 11.910 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 11.931 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 12.049 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 11.266 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of WebRTC media

```
Start at: 2019-06-27 09:21:48
End at: 2019-06-27 09:22:18
Local clock offset: -1.83 ms
Remote clock offset: -23.773 ms

# Below is generated by plot.py at 2019-06-27 10:00:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: -12.710 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: -12.901 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: -12.938 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: -12.151 ms
Loss rate: 0.00%
```

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

